Booklet Finisher SR3290 / Finisher SR3280
Machine Code: D3FN / D3G4
Field Service Manual
Ver. 1.0

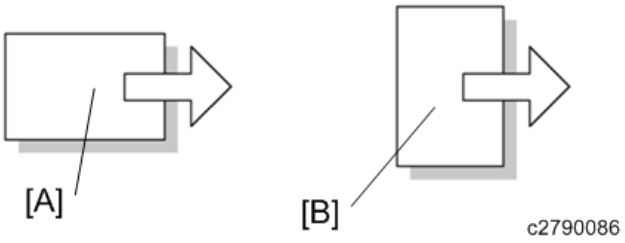
Latest Release: December, 2018
Initial Release: December, 2018

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] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

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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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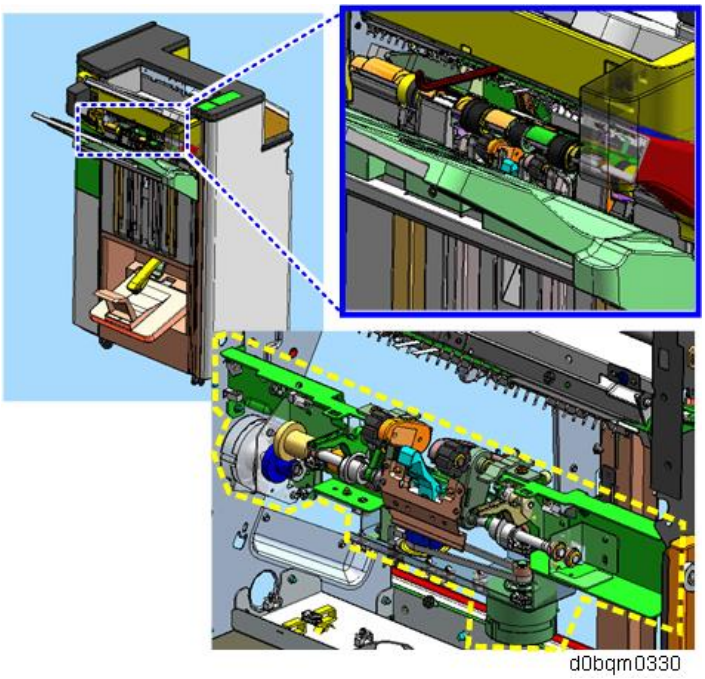
Table of Contents

1. Detailed Descriptions

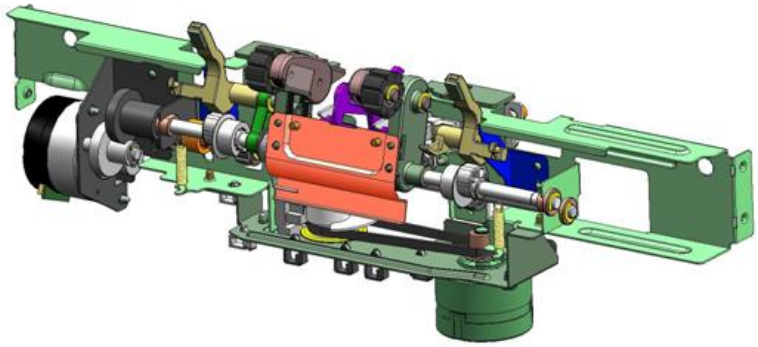
Changes from the Previous Machine

Improving Stackability of Stapled Sheets

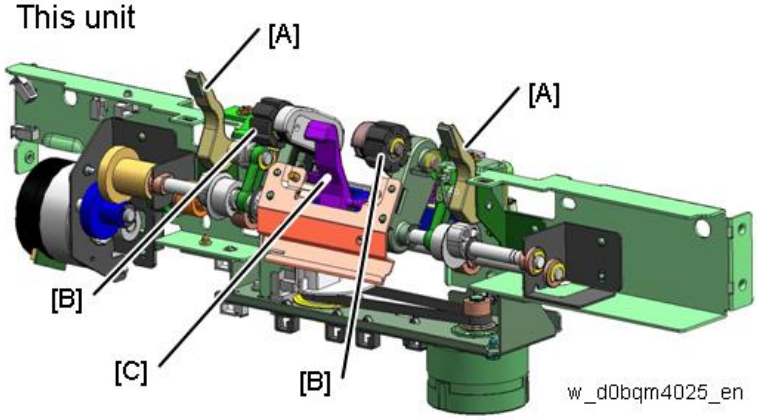
- **Retraction Mode for Stapled Job Delivery Added**
  To improve the stackability of stapled sheets, the trailing edge alignment unit (framed in yellow) now has a stapled job delivery control system.



Previous unit



This unit



[A]: Paper Stacking Holder

[B]: Stacking Sponge Roller

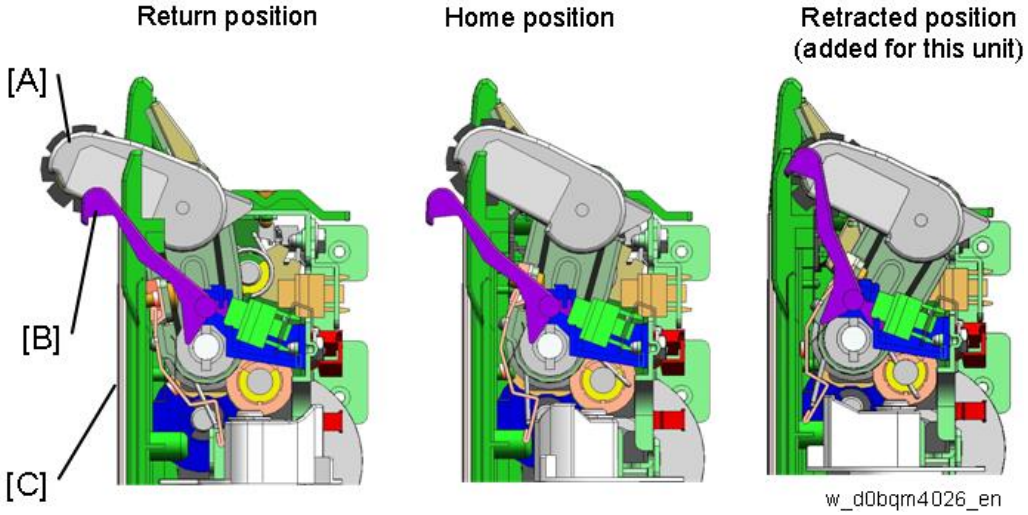
[C]: Actuator for the Shift Tray Paper Height Sensor (S35)

The stacking sponge roller [A] and actuator [B] move after the paper delivery (to the return position).

During paper delivery, these parts move to the home position and the stacking sponge roller is **a little bit** retracted within the end fence.

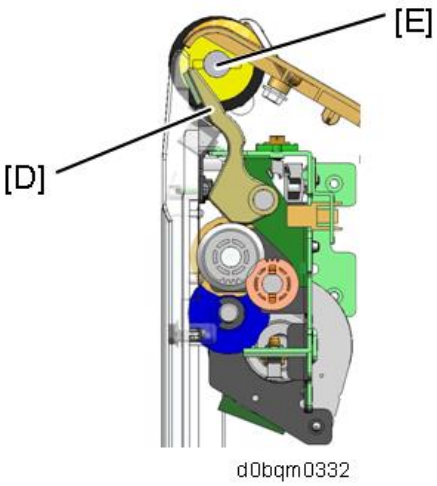
On this machine, the stacking sponge roller [A] and actuator [B] are **completely** retracted within the end fence when delivering stapled sheets to improve their stackability.

On the previous machine, the stapled jobs were also at the home position.



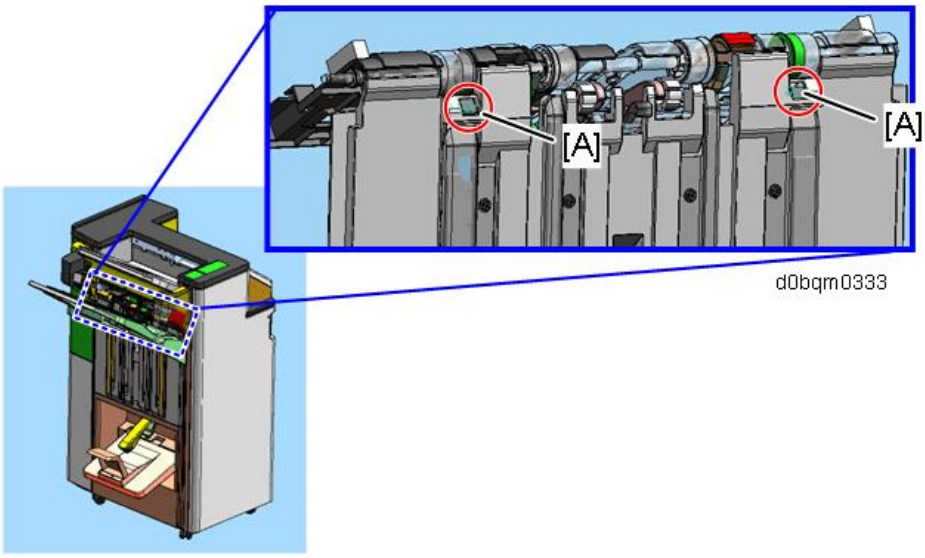
1.Detailed Descriptions

By making the leading edge of the paper stacking holder [D] thinner, a sufficient paper exit roller gap [E] is secured for retraction.



- **Sensors Added**

  Two sensors [A] (Sub Height Sensor (Front and Rear)) have been added to detect stapled sheets.

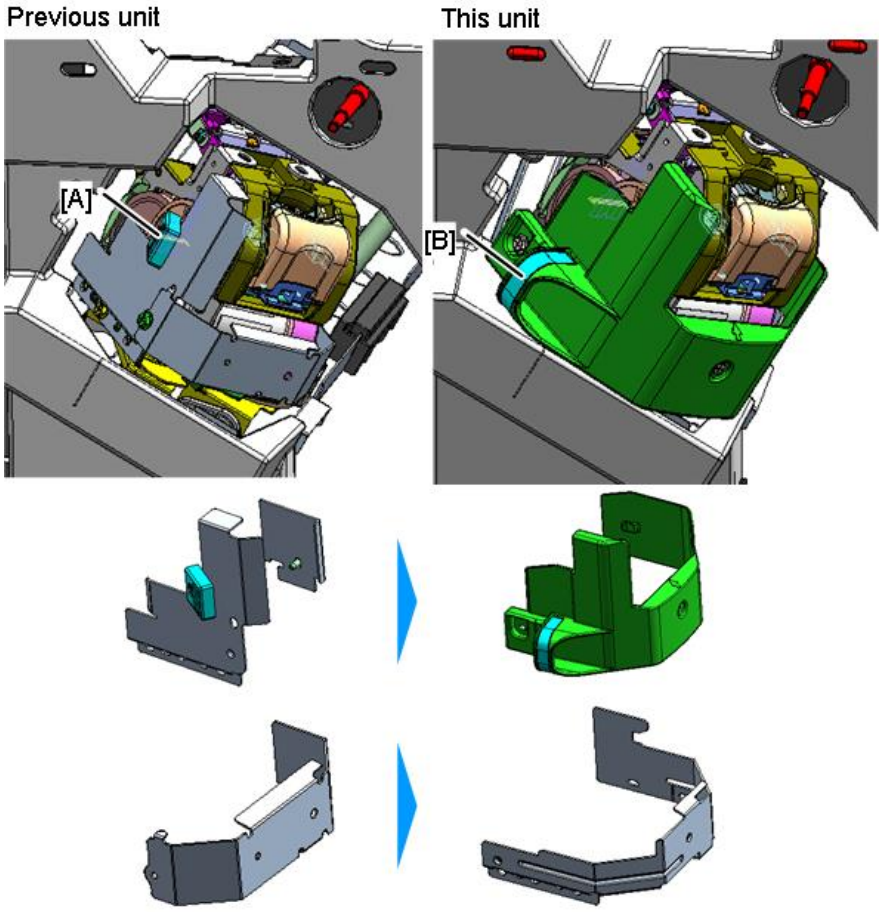


When sheets stapled at one point are stacked(corner stapling), this prevents the sheets from colliding with the paper guide, edge guide and other sheets because of the stapled points being stacked up. If one of the sensors detects sheets, the machine determines that the height limit has been reached and stops printing.

Improved Replaceability of Staple Cartridge

The exterior of the stapler unit has been changed from a bracket to a resin cover.

A handle [A] has been integrated into the cover and a decal [B] indicating the part for operation has been added.



w_d0bqm4028_en

Service for Staple Near-End Detection

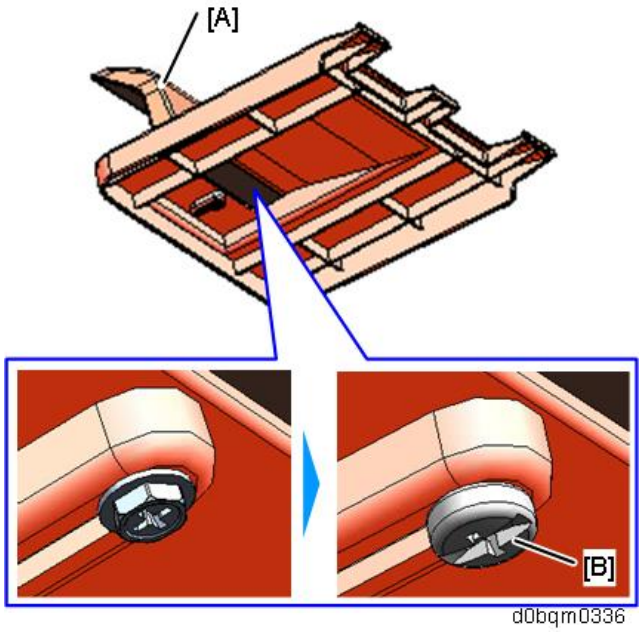
A holder for storing stock stapler cartridges has been added.

This stapler holder [A] is affixed to the back of the finisher's front door with double-sided tape.

d0bqm0068

Allowing the Customer to Detach and Reattach the End Fence of the Booklet Tray

The screw for securing the end fence [A] has been changed to a coin screw, allowing the customer to detach and reattach the end fence.



Staple Near-End Detection

For details about staple near-end detection, refer to "Staple Near-End Detection".

Specifications

Finisher SR3280

Item	Specifications
Paper size for the finisher upper tray:	A3 SEF, B4 JIS SEF, A4 SEF/LEF, B5 JIS SEF/LEF, A5 SEF/LEF, B6 JIS SEF, A6 SEF, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF, SRA3 SEF, SRA4 SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight for the finisher upper tray:	52–220 g/m^2 (14 lb. Bond–80 lb. Cover)
Stack capacity for the finisher upper tray (80 g/m^2, 20 lb. Bond):	250 sheets: A4, 8 1/2 x 11 or smaller 50 sheets: B4 JIS, 8 1/2 x 14 or larger
Paper size for the finisher shift tray:	A3 SEF, B4 JIS SEF, A4 SEF/LEF, B5 JIS SEF/LEF, A5 SEF/LEF, B6 JIS SEF, A6 SEF, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF, SRA3 SEF, SRA4 SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight for the finisher shift tray:	52–300 g/m^2 (14 lb. Bond–110 lb. Cover)
Paper sizes that can be shifted when delivered to the finisher shift tray:	A3 SEF, A4 SEF/LEF, A5 SEF/LEF, B4 JIS SEF, B5 JIS SEF/LEF, B6 JIS SEF, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF, SRA4 LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight that can be shifted when delivered to the finisher shift tray:	52–300 g/m^2 (14 lb. Bond–110 lb. Cover)
Stack capacity for the finisher shift tray (80 g/m^2, 20 lb. Bond):	• 3,000 sheets: A4 SEF, 8 1/2 x 11 SEF • 1,500 sheets: A3 SEF, B4 JIS SEF, A4 LEF, B5 JIS SEF/LEF, 12 x 18 SEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 LEF, SRA3LEF • 500 sheets: A5 SEF • 100 sheets: A5 LEF, B6 JIS SEF, A6 SEF, 5 1/2 x 8 1/2 SEF
Staple paper size:	A3 SEF, B4 JIS SEF, A4 SEF/LEF, B5 JIS SEF/LEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14LEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF/LEF, 7 1/4 x 10 1/2 SEF/LEF, 8 x 13 SEF, 8 1/2 x 13 LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 10

Item	Specifications
	SEF, 8K SEF, 16K SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Staple paper weight:	52–105 g/m² (14–28 lb. Bond) You can use two sheets of paper weighing up to 256 g/m² (140 lb. Index) per set as cover sheets.
Staple capacity (80 g/m², 20 lb. Bond):	• Without Mixed Size: **50 sheets:** A3 SEF, A4 SEF/LEF, B4 JIS SEF, B5 JIS SEF/LEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 x 13 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 x 10 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 11 x 15 SEF, 10 x 14 SEF, 8K SEF, 16K SEF/LEF, 8 1/2 x 13 2/5 LEF • With Mixed Size: **50 sheets:** A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS SEF, 11 x 17 SEF/8 1/2 x 11 SEF
Stack capacity after stapling (80 g/m², 20 lb. Bond):	**Without Mixed Size:** • 2–19 sheets: 150 sets (A4 LEF, 8 1/2 x 11 LEF) • 20–50 sheets: 150–46 sets (A4 LEF, 8 1/2 x 11 LEF) • 2–14 sheets: 100 sets (A4 SEF, B5 JIS SEF/SEF, 8 1/2 x 11 SEF) • 15–50 sheets: 100–23 sets (A4 SEF, B5 JIS SEF/SEF, 8 1/2 x 11 ;SEF) • 2–14 sheets: 100 sets (other size paper) • 15–50 sheets: 100–23 sets (other size paper) **With Mixed Size:** • 2–50 sheets: 23 sets (A3 SEF/A4 LEF, B4 JIS SEF/B5 JIS SEF, 11 x 17 SEF/8 1/2 x 11 SEF)
Staple position:	4 positions (Top, Top Slant, Bottom, 2 Staples)
Power consumption:	64 W or less (Power is supplied from the main unit.)
Dimensions (W x D x H):	• 657 × 613 × 960 mm (25.9 × 24.2 × 37.8 inches) (Tray is folded.) • 757 × 613 × 960 mm (29.9 × 24.2 × 37.8 inches) (Tray is extended.) (the height to reach the top board)
Weight:	• Approx. 36 kg (79.4 lb.) (without punch unit) • Approx. 39 kg (86.0 lb.) (with punch unit)

Booklet Finisher SR3290

Item	Specifications
Paper size for the	A3 SEF, B4 JIS SEF, A4 SEF/LEF, B5 JIS SEF/LEF, A5 SEF/LEF, B6 JIS

Item	Specifications
finisher upper tray:	SEF, A6 SEF, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF, SRA3 SEF, SRA4 SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight for the finisher upper tray:	52–220 g/m^2 (14 lb. Bond–80 lb. Cover)
Stack capacity for the finisher upper tray (80 g/m^2, 20 lb. Bond):	• 250 sheets: A4, 8 1/2 x 11 or smaller • 50 sheets: B4 JIS, 8 1/2 x 14 or larger
Paper size for the finisher shift tray:	A3 SEF 1, B4 JIS SEF, A4 SEF/LEF, B5 JIS SEF/LEF, A5, B6 JIS SEF, A6, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 SEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF, SRA3 SEF, SRA4 SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight for the finisher shift tray:	52–300 g/m^2 (14 lb. Bond–110 lb. Cover)
Paper sizes that can be shifted when delivered to the finisher shift tray:	A3 SEF, A4 SEF/LEF, A5 SEF/LEF, B4 JIS SEF, B5 JIS SEF/LEF, B6 JIS SEF, 12 x 18 SEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 13 LEF, 8 1/2 x 11 SEF/LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 13 SEF, 8 x 10 SEF, 5 1/2 x 8 1/2 SEF, 7 1/4 x 10 1/2 SEF/LEF, 8K SEF, 16K SEF/LEF SRA4 LEF, 8 1/2 x 13 2/5 LEF, custom size
Paper weight that can be shifted when delivered to the finisher shift tray:	52–300 g/m^2 (14 lb. Bond–110 lb. Cover)
Stack capacity for the finisher shift tray (80 g/m^2, 20 lb. Bond):	• 2,000 sheets: A4 LEF, 8 1/2 x 11 LEF • 1,000 sheets: A3 SEF, B4 JIS SEF, A4 SEF, B5 JIS SEF/LEF, 11 x 17 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF, 12 x 18 SEF, SRA3 SEF • 500 sheets: A5 LEF • 100 sheets: A5 SEF, B6 JIS SEF, A6 SEF, 5 1/2 x 8 1/2 SEF
Staple paper size:	A3 SEF, B4 JIS SEF, A4 SEF/LEF B5 JIS SEF/LEF, 11 x 17 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 1/2 x 14 SEF, 8 1/2 x 11 SEF/LEF, 7 1/4 x 10 1/2 SEF/LEF, 8 x 13 SEF, 8 1/2 x 13 LEF, 8 1/4 x 14 SEF, 8 1/4 x 13 SEF, 8 x 10 SEF, 8K SEF, 16K SEF/LEF, 8 1/2 x 13 2/5 LEF, custom size
Staple paper weight:	52–105 g/m^2 (14–28 lb. Bond) You can use two sheets of paper weighing up to 256 g/m^2 (140 lb. Index) per set as cover sheets.
Staple capacity (80	• Without Mixed Size:

Item	Specifications
g/m^2, 20 lb. Bond):	**50 sheets:** A3 SEF, A4 SEF/LEF, B4 JIS SEF, B5 JIS SEF/LEF, 11 x 17 SEF, 8 $^1/_2$ x 14 SEF, 8 x 13 SEF, 8 $^1/_2$ x 13 LEF, 8 $^1/_2$ x 11 SEF/LEF, 8 x 10 SEF, 7 $^1/_4$ x 10 $^1/_2$ SEF/LEF, 8 $^1/_4$ x 14 SEF, 8 $^1/_4$ x 13 SEF, 11 x 15v, 10 x 14 SEF, 8K SEF, 16K SEF/LEF, 8 $^1/_2$ x 13 2/5 LEF • With Mixed Size: **50 sheets:** A3 SEF /A4 LEF, B4 JIS SEF /B5 JIS SEF, 11 x 17 SEF /8$^1/_2$ x 11 SEF
Stack capacity after stapling (80 g/m^2, 20 lb. Bond):	**Without Mixed Size:** • 2–12 sheets: 150 sets (A4 LEF, 8$^1/_2$ x 11 LEF) • 13–50 sheets: 150–30 sets (A4 LEF, 8 $^1/_2$ x 11 LEF) • 2–9 sheets: 100 sets (A4 SEF, B5 JIS SEF/LEF, 8 $^1/_2$ x 11 SEF) • 10–50 sheets: 100–15 sets (A4 SEF, B5 JIS SEF/LEF, 8 $^1/_2$ x 11 SEF) • 2–9 sheets: 100 sets (other size paper) • 10–50 sheets: 100–15 sets (other size paper) **With Mixed Size:** • 2–50 sheets: 23 sets (A3 SEF /A4 LEF, B4 JIS SEF /B5 JIS SEF, 11 x 17 SEF /8 $^1/_2$ x 11 SEF)
Staple position:	4 positions (Top, Top Slant, Bottom, 2 Staples)
Saddle stitch paper size:	A3 SEF, B4 JIS SEF, A4 LEF, B5 JIS LEF, 11 x 17 SEF, 8 $^1/_2$ x 14 SEF, 8 $^1/_2$ x 11 LEF, 8 $^1/_4$ x 14 SEF, 8 $^1/_4$ x 13 SEF, 12 x 18 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 $^1/_2$ x 13 2/5 LEF, custom size
Saddle stitch paper weight:	64–105 g/m^2 (17–28 lb. Bond) You can use a sheet of paper weighing up to 216 g/m2 (80 lb. Cover) per set as a cover sheet.
Saddle stitch capacity (80 g/m^2, 20 lb. Bond):	1 set (20 sheets)
Stack capacity after saddle stitching (80 g/m^2, 20 lb. Bond):	• 2–5 sheets: approx. 30 sets • 6–10 sheets: approx. 15 sets • 11–15 sheets: approx. 10 sets • 16–20 sheets: approx. 5 sets
Saddle stitch position:	Center 2 positions
Types of folds:	Half Fold
Half fold paper size:	A3 SEF, A4 LEF, B4 JIS SEF, B5 JIS LEF, 11 x 17 SEF, 8 $^1/_2$ x 14 SEF, 8 $^1/_2$ x 11, 8 $^1/_4$ x 14 SEF, 8 $^1/_4$ x 13 SEF, 12 x 18 SEF, 11 x 15 SEF, 10 x 14 SEF, 8 $^1/_2$ x 13 2/5 LEF
Half fold paper weight:	• 1 sheet:

Item	Specifications
	64–216 g/m2 (17 lb. Bond–80 lb. Cover) • 2-5 sheets: 64–90 g/m2 (17–24 lb. Bond)
Power consumption:	64 W (Power is supplied from the main unit.)
Dimensions (W x D x H):	• 657 × 613 × 960 mm (25.9 × 24.2 × 37.8 inches) (Tray is folded.) • 757 × 613 × 960 mm (29.9 × 24.2 × 37.8 inches) (Tray is extended.) (the height to reach the top board)
Weight:	• Approx. 56 kg (123.5 lb.) (without punch unit) • Approx. 59 kg (130.1 lb.) (with punch unit)

Paper Specifications

Size	Normal	Thin (52-59)	Norm 1 (60-74)	Norm 2 (75-81)	Med Thk (82-105)	Thk 1 (160-169)	Thk 2 (170-220)	Thk 3 (221-256)	Thk 4 (257-300)
A3 SEF	◎	◎	◎	◎	◎	●	●	△	▲
B4 SEF	◎	◎	◎	◎	◎	●	●	△	▲
A4 SEF	◎	◎	◎	◎	◎	●	●	△	▲
A4 LEF	■	■	■	■	■	●	●	△	▲
B5 SEF	◎	◎	◎	◎	◎	●	●	△	▲
B5 LEF	■	■	■	■	■	●	●	△	▲
A5 SEF	●	●	●	●	●	●	●	△	▲
A5 LEF	●	●	●	●	●	●	●	△	▲
B6 SEF	◇	◇	◇	◇	◇	◇	◇	▲	▲
A6 SEF	◇	◇	◇	◇	◇	◇	◇	▲	▲
13”×19.2” SEF	-	◇	◇	◇	◇	◇	◇	▲	▲
12”×18” SEF	-	◇	◇	◇	◇	◇	◇	▲	▲
12.6”×17.7”(SRA3) SEF	-	◇	◇	◇	◇	◇	◇	▲	▲
11”×17” SEF	-	◎	◎	◎	◎	●	●	△	▲
8 1/2”×14” SEF	-	◎	◎	◎	◎	●	●	△	▲
8 1/2”×11” SEF	-	◎	◎	◎	◎	●	●	△	▲
$8^1/_2$”×11” LEF	-	■	■	■	■	●	●	△	▲
$5^1/_2$”×$8^1/_2$” SEF	-	●	●	●	●	●	●	△	▲

1.Detailed Descriptions

Size	Normal	Thin (52-59)	Norm 1 (60-74)	Norm 2 (75-81)	Med Thk (82-105)	Thk 1 (160-169)	Thk 2 (170-220)	Thk 3 (221-256)	Thk 4 (257-300)
5 1/2"×8 1/2" LEF	-	◇	◇	◇	◇	◇	◇	▲	▲

Here is the key for the symbols.

◎ Corner stapling, booklet stapling, paper shift, proof tray, punching possible

○ Booklet stapling, shift tray, proof tray

■ Corner stapling, shift tray, proof tray, punching possible

● Shift tray, proof tray, punching possible

△ Shift tray, punching possible

◇ Shift tray, proof tray possible

▲ Shift tray possible

x Cannot be used

- Incompatible

	Color	Translucent	Label SA	Postcard	Transparencies
A3 SEF	●	△	-	-	-
B4 SEF	●	△	△	-	-
A4 SEF	●	△	△	△	△
A4 LEF	◎	△	△	△	△
B5 SEF	●	△	-	-	△
B5 LEF	◎	△	-	-	△
A5 SEF	-	-	-	-	-
A5 LEF	-	-	-	-	-
B6 SEF	-	-	-	-	-
B6 LEF	-	-	-	-	-
12"×18" SEF	●*1	-	-	-	-
11"×17" SEF	●	△	-	-	-
8 1/2"×14" SEF	●	△	-	-	-
8 1/2"×11" SEF	●	△	-	-	-
8 1/2"×11" LEF	◎	△	-	-	-
5 1/2"×8 1/2" SEF	-	-	-	-	-
5 1/2"×8 1/2" LEF	-	-	-	-	-

*1 No corner stapling

Here is the key for the symbols.

◎ Corner stapling, booklet stapling, paper shift, proof tray, punching possible

● Shift tray, proof tray, punching possible

○ Booklet stapling, shift tray, proof tray

△ Shift tray, punching possible

◇ Shift tray, proof tray possible

x Cannot be used

- Incompatible

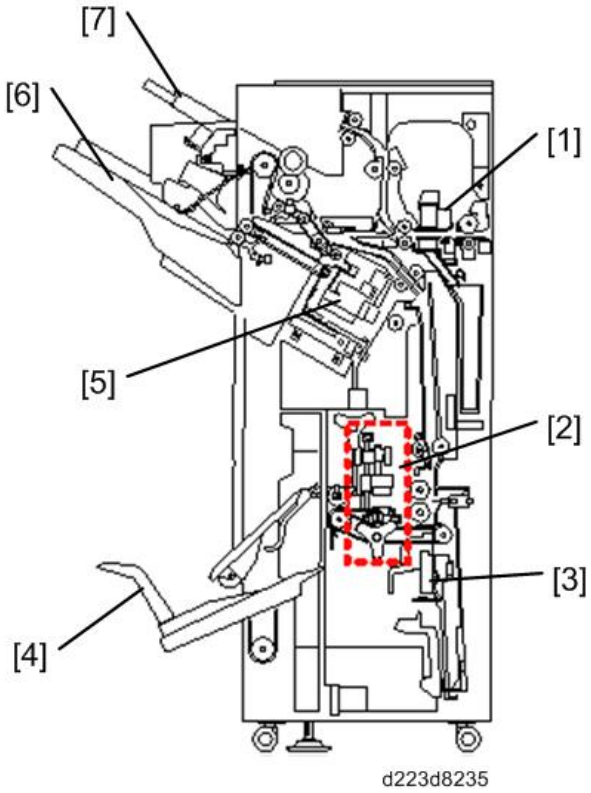
Punch Unit PU3090

Punch unit type	Paper size
2 & 4 holes type: 2 holes	SEF: A3, B4 JIS, A4, B5 JIS, A5, 11 x 17, 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, 8K, 16K, 8 1/4 x 14, 8 x 10, 11 x 15, 10 x 14, custom size
2 & 4 holes type: 2 holes	LEF: A4, B5 JIS, A5, 8 1/2 x 11, 7 1/4 x 10 1/2, 16K, custom size
2 & 4 holes type: 4 holes	SEF: A3, B4 JIS, 11 x 17, 11 x 15, 8K, custom size
2 & 4 holes type: 4 holes	LEF: A4, B5 JIS, 8 1/2 x 11,7 1/4 x 10 1/2, 16K, custom size
4 holes type: 4 holes	SEF: A3, B4 JIS, A4, B5 JIS, A5, 11 x 17, 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, 8K, 16K, 8 1/4 x 14, 8 x 10, 11 x 15, 10 x 14, custom size
4 holes type: 4 holes	LEF: A4, B5 JIS, A5, 8 1/2 x 11, 7 1/4 x 10 1/2, 16K, custom size
2 & 3 holes type: 2 holes	SEF: A3, B4 JIS, B5 JIS, A5, 11 x 17, 8 1/2 x 14, 8 1/2 x 11, 5 1/2 x 8 1/2, 7 1/4 x 10 1/2, 8 x 13, 8 1/2 x 13, 8 1/4 x 13, 8K, 16K, 8 1/4 x 14, 8 x 10, 11 x 15, 10 x 14, custom size
2 & 3 holes type: 2 holes	LEF: A4, B5 JIS, 8 1/2 x 11, 7 1/4 x 10 1/2, 16K, custom size
2 & 3 holes type: 3 holes	SEF: A3, B4 JIS, 11 x 17, 11 x 15, 10 x 14, 8K, custom size
2 & 3 holes type: 3 holes	LEF: A4, B5 JIS, 8 1/2 x 11,7 1/4 x 10 1/2, 16K, custom size

Paper weight:	52–256 g/m^2 (14 lb. Bond–140 lb. Index)

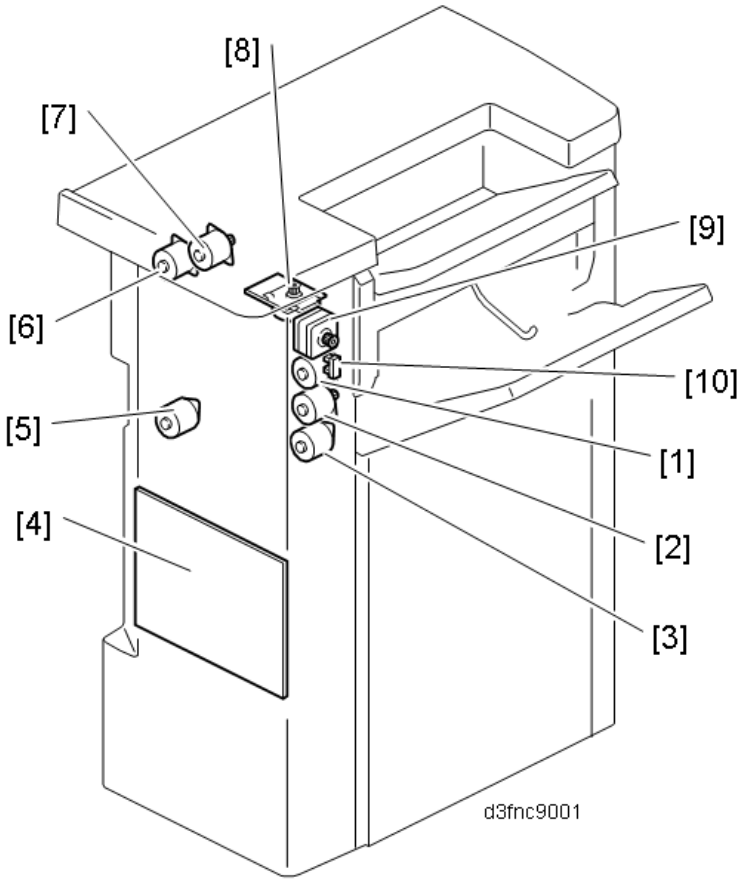
Layout

General Layout

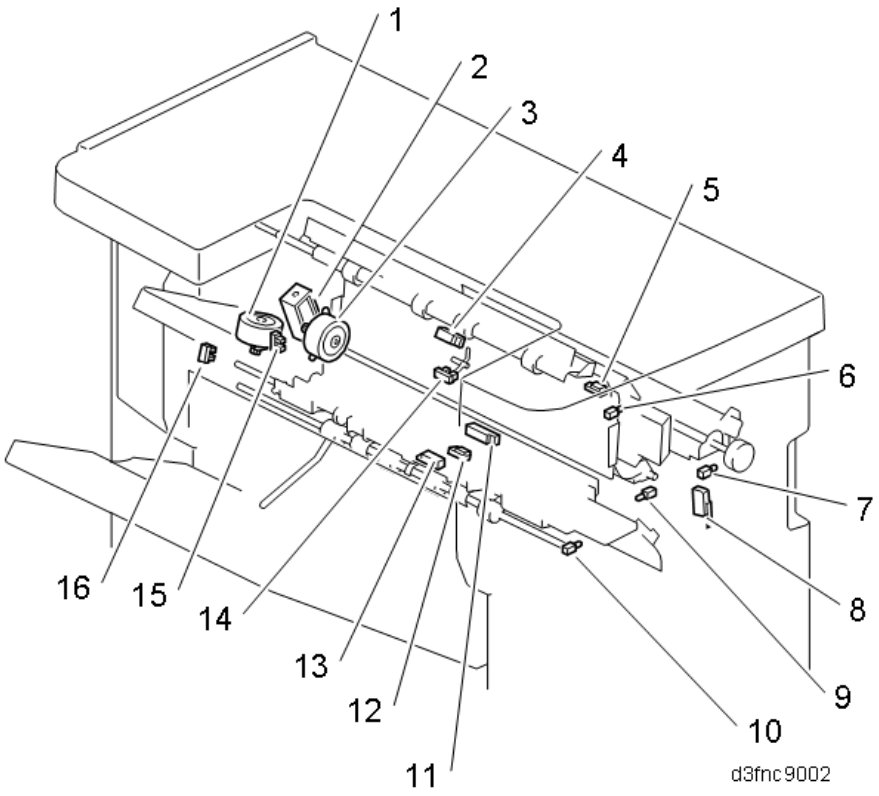


No.	Name	No.	Name
1	Punch Units	5	Corner Stapler
2	Side-to-Side Fold Roller	6	Shift Tray
3	Booklet Stapler	7	Proof Tray
4	Booklet Staple Tray	-	-

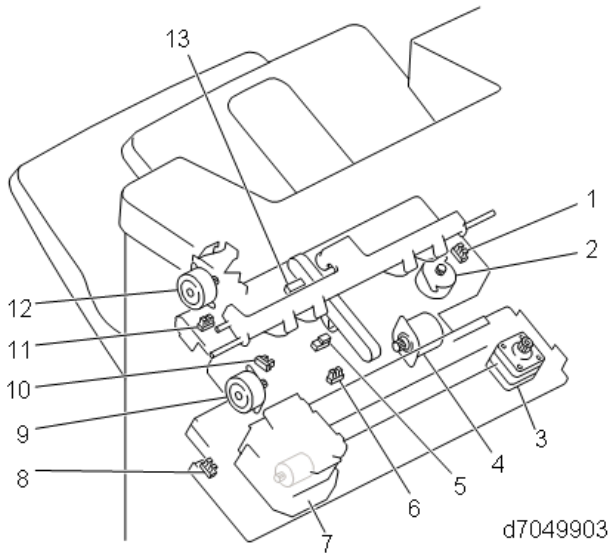
Electrical Component Layout



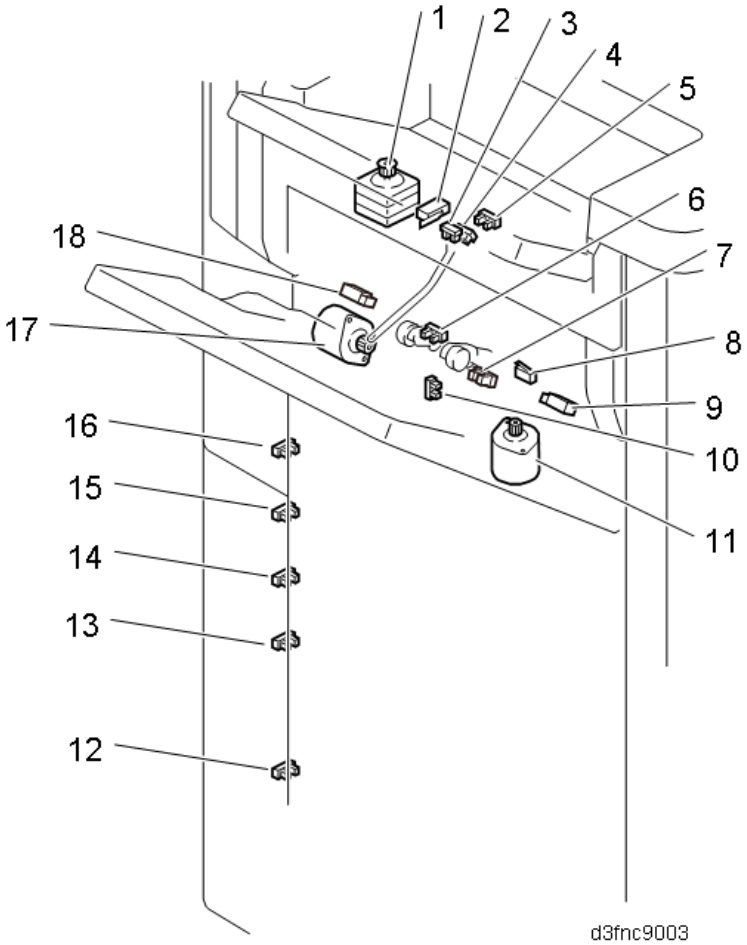
No.	Part
1	Exit Motor (DCM4)
2	Transport Motor (DCM3)
3	Positioning Roller Motor (DCM14)
4	Controller Board (PCB1)
5	Pre-stack Transport Motor (DCM5)
6	Entrance Transport Motor (DCM1)
7	Horizontal Transport Motor (DCM2)
8	Tray Lift Motor (DCM9)
9	Paper Guide Motor (STM18)
10	Paper Guide HP Sensor (S50)



No.	Part	No.	Part
1	Shift Motor (STM3)	9	LED 3 (LED3)
2	Upper Junction Gate Solenoid (SOL1)	10	LED 2 (LED2)
3	Lower Junction Gate Motor (STM2)	11	Horizontal Transport Sensor (S13)
4	Proof Tray Full Sensor (S21)	12	Switchback Transport Sensor (S14)
5	Entrance Sensor (S17)	13	Transport Path Paper Sensor (S15)
6	LED 1 (LED1)	14	Proof Tray Exit Sensor (S20)
7	LED 4 (LED4)	15	Lower Junction Gate JP Sensor (S18)
8	Front Door Switch (SW1)	16	Shift Roller HP Sensor (S19)



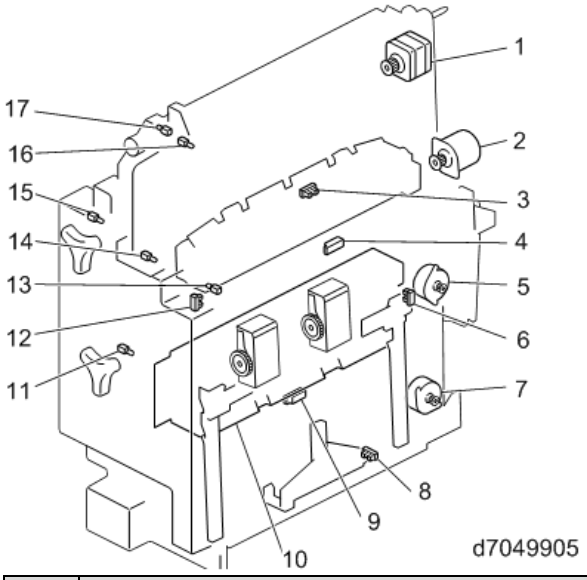
No.	Part	No.	Part
1	Jogger Fence HP Sensor (S25)	8	Stapler Move HP Sensor (S23)
2	Jogger Motor (STM1)	9	Leading Edge Guide Motor (STM6)
3	Corner Stapler Movement Motor (STM7)	10	Leading Edge Guide HP Sensor (S33)
4	Feed-out Belt Motor (DCM7)	11	Positioning Roller HP Sensor (S28)
5	Staple Tray Paper Sensor (S31)	12	Positioning Roller Shift Motor (STM5)
6	Feed-out Belt HP Sensor (S12)	13	Shift Tray Exit Sensor (S22)
7	Corner Stapler Unit	-	-



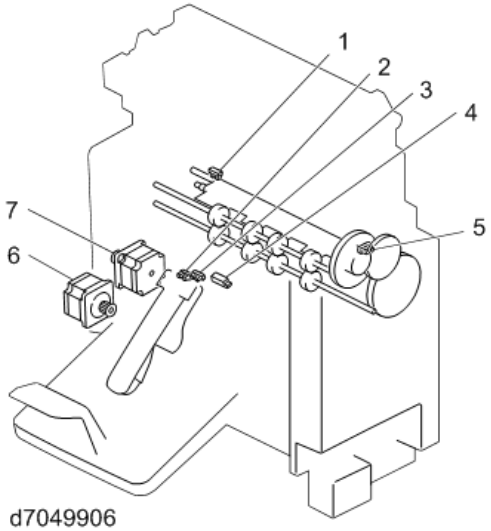
No.	Part	No.	Part
1	Paper Exit Guide Plate Motor (STM4)	10	Stacking Sponge Roller HP Sensor (S32)
2	Paper Exit Guide Plate Limit Switch (SW2)	11	Paper Stacking Holder Motor (DCM6)
3	Booklet Stack Height Sensor 1 (S26)	12	Shift Tray Lower Limit Sensor 5 (S37)
4	Booklet Stack Height Sensor 2 (S27)	13	Shift Tray Lower Limit Sensor 4 (S36)
5	Exit Guide Plate HP Sensor (S34)	14	Shift Tray Lower Limit Sensor 3 (S30)
6	Paper Stacking Holder HP Sensor (S24)	15	Shift Tray Lower Limit Sensor 2 (S29)
7	Shift Tray Paper Height Sensor (S35)	16	Shift Tray Lower Limit Sensor 1 (S16)
8	Upper Tray Height Limit Switch (SW3)	17	Paper Stacking Holder Motor (DCM8)
9	Sub Height Sensor (Front) (S51)	18	Sub Height Sensor (Rear) (S52)

Booklet Finisher SR3290 Electrical Components

1.Detailed Descriptions



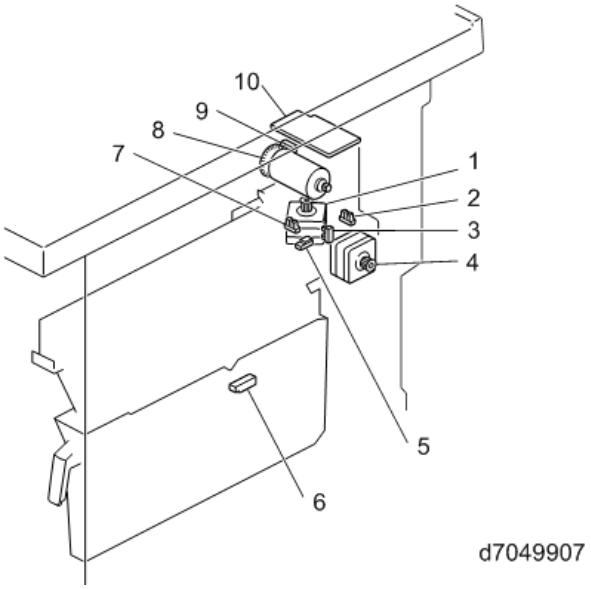
No.	Part	No.	Part
1	Booklet Jogging Pawl Movement Motor (STM8)	10	Booklet Stapler Unit
2	Shift Roller drive Motor (DCM11)	11	Booklet LED 1 (LED5)
3	Booklet Jogging Pawl HP Sensor (S3)	12	Booklet Guide Plate Sensor (S4)
4	Booklet Upper Transport Path Stack Sensor (S2)	13	Booklet LED 2 (LED6)
5	Booklet Jogger Motor (STM11)	14	Booklet LED 3 (LED7)
6	Booklet Jogging HP Sensor (S10)	15	Booklet LED 4 (LED8)
7	Booklet Bottom Fence Motor (STM12)	16	Booklet LED 5 (LED9)
8	Booklet Trailing Edge Bottom Fence HP Sensor (S5)	17	Booklet LED 6 (LED10)
9	Booklet Lower Transport Path Stack Sensor (S11)	-	-



No.	Part
1	Fold Plate HP Sensor (S1)
2	Booklet Tray Full Sensor 2 (S8)
3	Booklet Tray Full Sensor 1 (S7)

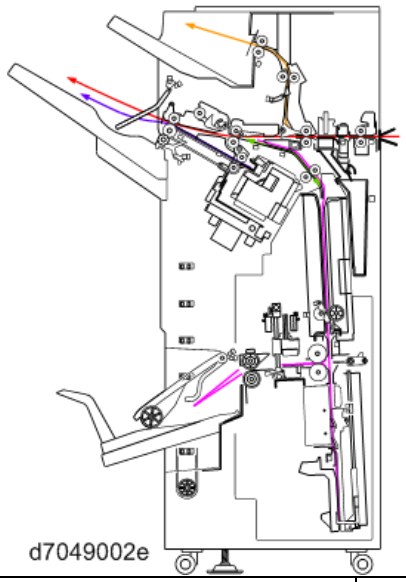
No.	Part
4	Booklet Exit Sensor (S6)
5	Fold Plate Cam HP Sensor (S9)
6	Fold Transport Motor (STM9)
7	Press Fold Motor (STM10)

Punch Unit (Option)



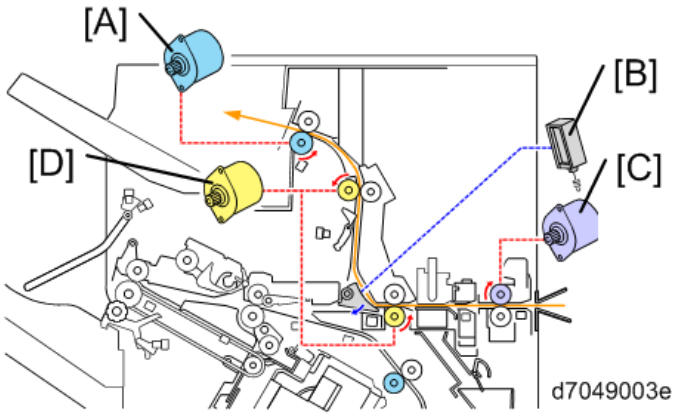
No.	Part
1	Punch Unit Movement Motor (STM13)
2	Punch Unit HP Sensor (S40)
3	Punch Registration HP Sensor (S41)
4	Punch Registration Motor (STM14)
5	Punch Registration Sensor (S43)
6	Punchout Hopper Full Sensor (S42)
7	Punch HP Sensor (S38)
8	Punch Drive Motor (DCM13)
9	Punch Motor Rotation Sensor (S39)
10	Punch Unit Controller Board (PCB2)

Transport Layout



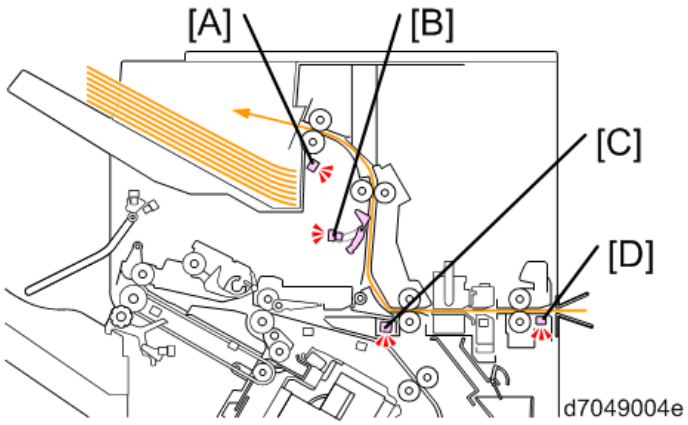
Red	Straight Through Path
Orange	Proof Path
Green	Pre-stack Path
Purple	Corner Staple Path
Pink	Booklet Staple Path

Proof Transport Layout (Drive)



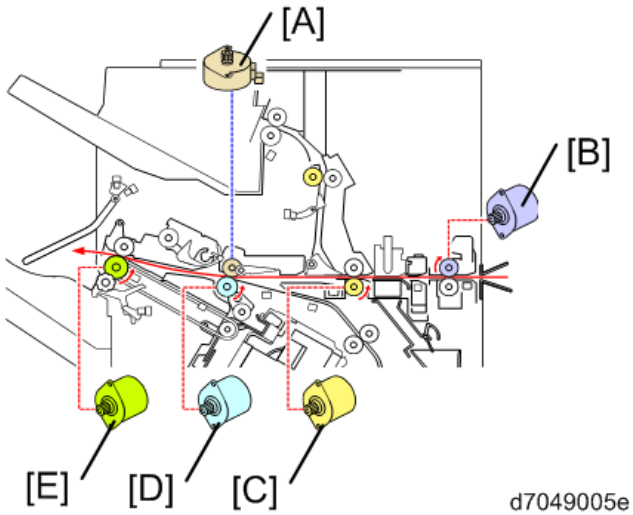
No.	Name	No.	Name
A	Exit Motor (DCM4)	C	Entrance Transport Motor (DCM1)
B	Upper Junction Gate Solenoid (SOL1)	D	Horizontal Transport Motor (DCM2)

Proof Transport Layout (Sensors)



No.	Name	No.	Name
A	Proof Tray Full Sensor (S21)	C	Horizontal Transport Sensor (S13)
B	Proof Tray Exit Sensor (S20)	D	Entrance Sensor (S17)

Shift Transport Layout (Drive)

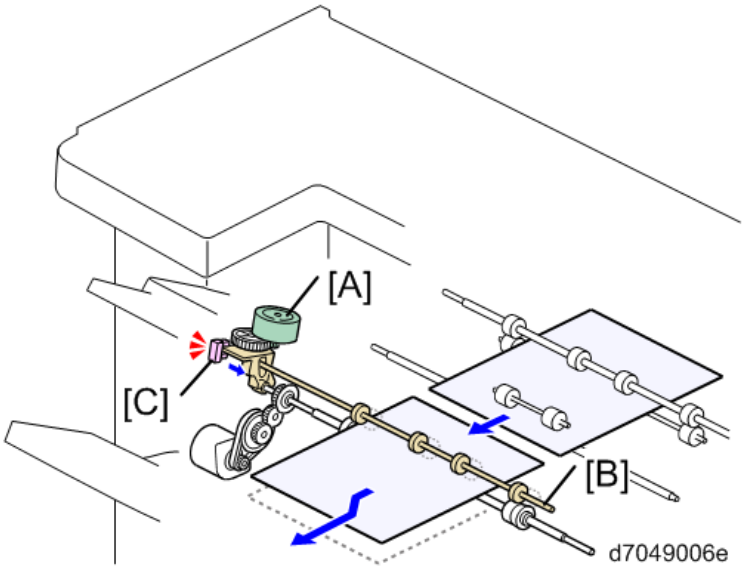


No.	Name	No.	Name
A	Shift Motor (STM3) (shift only)	D	Transport Motor (DCM3)
B	Entrance Transport Motor (DCM1)	E	Exit Motor (DCM4)
C	Horizontal Transport Motor (DCM2)	-	-

Operation Details

Shift Operation (Shift Transport)

To output paper, the Shift Motor (STM3) [A] moves the shift roller [B] side-to-side while the shift roller is driven. The Shift Roller HP Sensor (S19) [C] is used to control this mechanism.

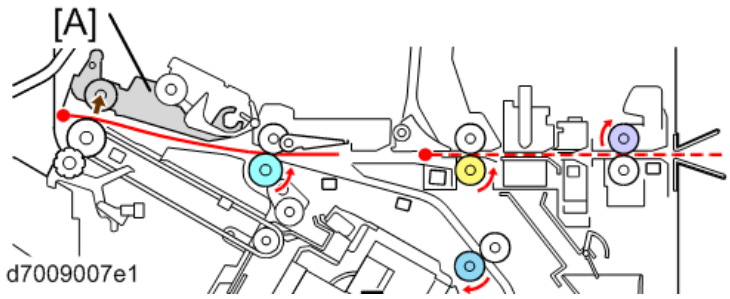


Pre-stack Operation (In Corner Stapling)

- **Pre-stack Capacity:** 1 sheet
- **Pre-stack Size:** A4 SEF/LEF, B5 SEF/LEF, LT SEF/LEF

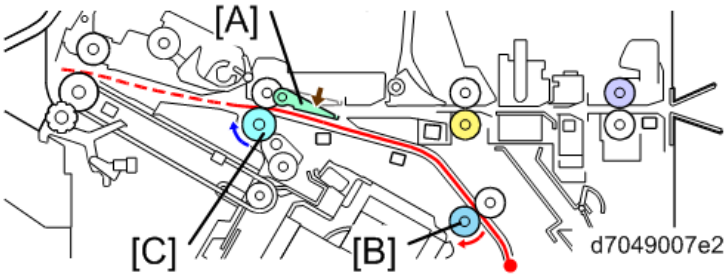
There are four steps as follows:

1. The upper tray exit guide plate [A] moves up (opens). Paper comes through the entrance transport path and reaches the relay transport path.

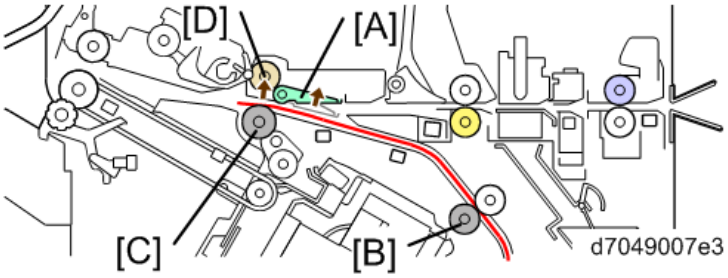


2. After paper passes the pre-stack junction gate [A], the pre-stack junction gate [A] moves down (closes) and the relay transport roller [C] rotates in reverse. The pre-stack roller [B] rotates to

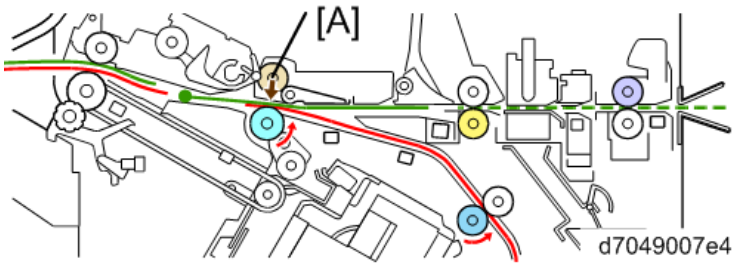
transport paper to the pre-stack position.



3. The rotation of the relay transport roller [C] and the pre-stack roller [B] stops, and the pre-stack junction gate [A] moves up (opens). The shift roller [D] also moves up to release the pressure between itself [D] and the relay transport roller [C].



4. The following sheet comes through the entrance and reaches the relay transport path. After that, the shift roller [A] drops to press the pre-stacked sheet and the following sheet. Then with the pre-stacked sheet, the following sheet goes to the next process (corner stapling).

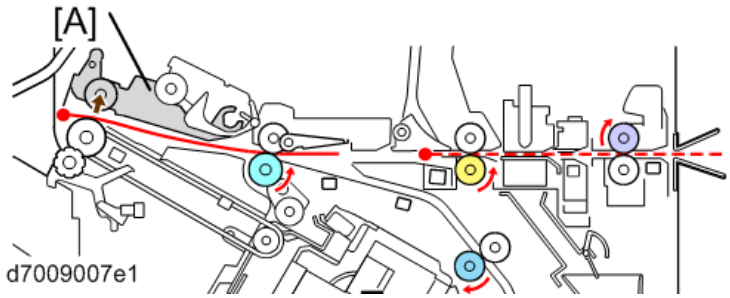


Pre-stack Operation (Booklet Stapling)

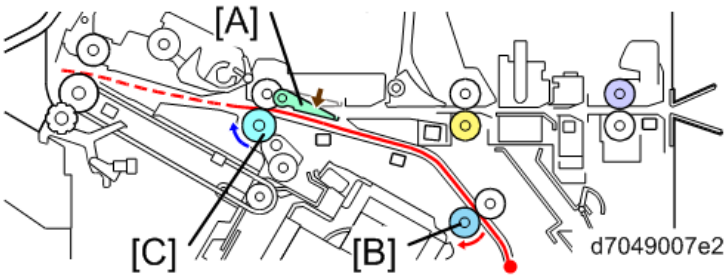
- **Pre-stack Capacity:** 2 sheets
- **Pre-stack Size:** All Sizes

There are five steps as follows:

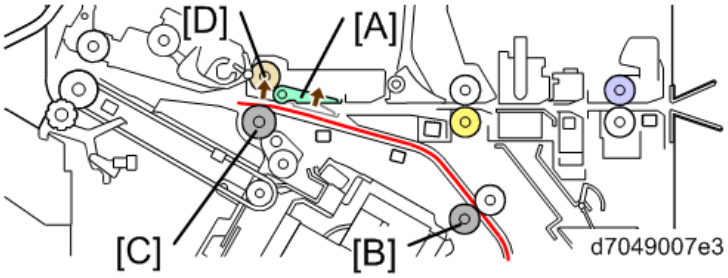
1. The upper tray exit guide plate [A] moves up (opens). Paper comes through the entrance transport and reaches the relay transport path.



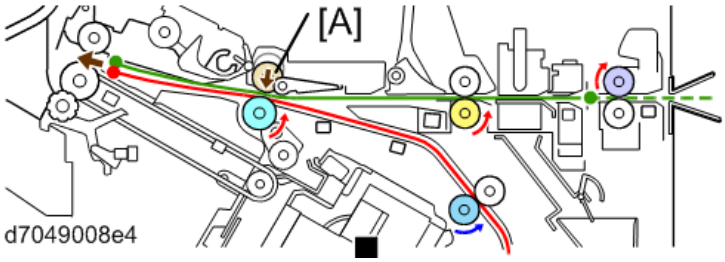
2. The pre-stack junction gate [A] drops (closes) and the relay transport roller [C] rotates in reverse. The pre-stack roller [B] rotates to transport paper to the pre-stack position.



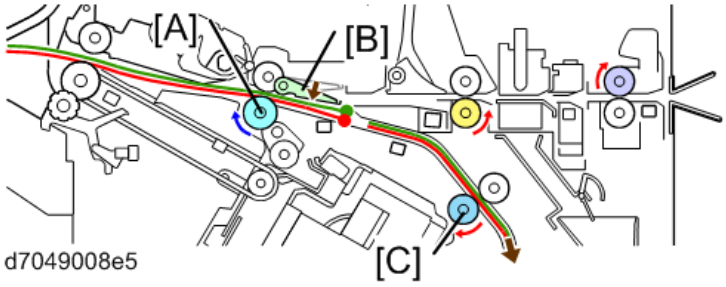
3. The rotation of the relay transport roller [C] and the pre-stack roller [B] stops, and the pre-stack junction gate [A] moves up (opens). The shift roller [D] moves up to release the pressure between itself [D] and the relay transport roller [C].



4. The following sheet comes thorough the entrance and reaches the relay transport path. After that, the shift roller [A] drops to press the pre-stacked sheet and the following sheet. With the pre-stacked sheet, the following sheet goes toward the exit (does not pass through completely).



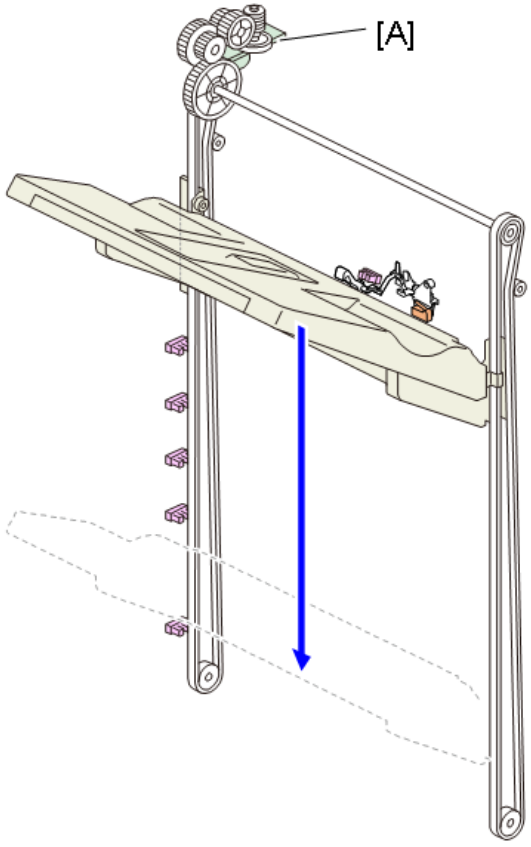
5. The pre-stack junction gate [B] drops (closes) again, and the relay transport roller [A] rotates in reverse and the pre-stack roller [C] rotates to send two sheets paper (pre-stacked sheet and the following sheet) to the booklet stapling path.



Upper Tray Shift Drive / Limit Sensor / Full Sensor

Upper Tray Shift Up/down

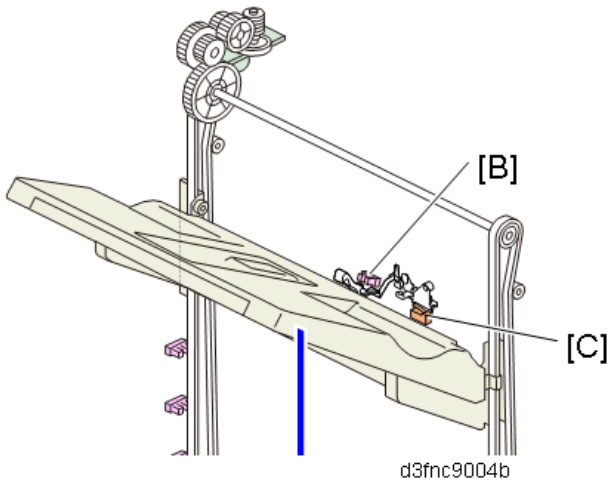
The Tray Lift Motor (DCM9) [A] moves the upper tray up/down.



d3fnc9004a

Upper-position Detection

With the actuator, the Shift Tray Paper Height Sensor (S35) [B] detects the upper position of the tray (without output paper). To prevent too much moving upward, the Upper Tray Height Limit Switch (SW3) (interlock switch) [C] is installed. When the upper tray moves up to the upper position but doesn't stop, the forced stop switch is pushed and the tray shift motor stops.



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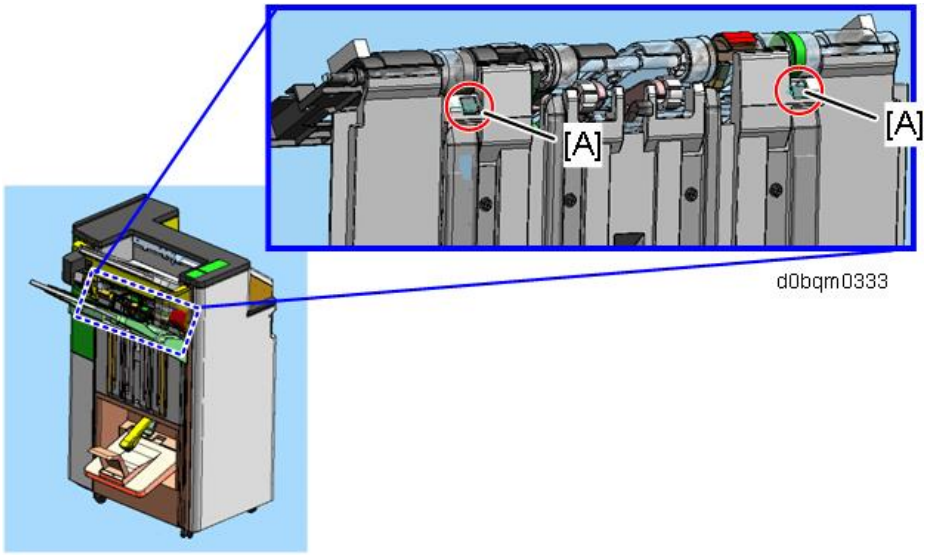
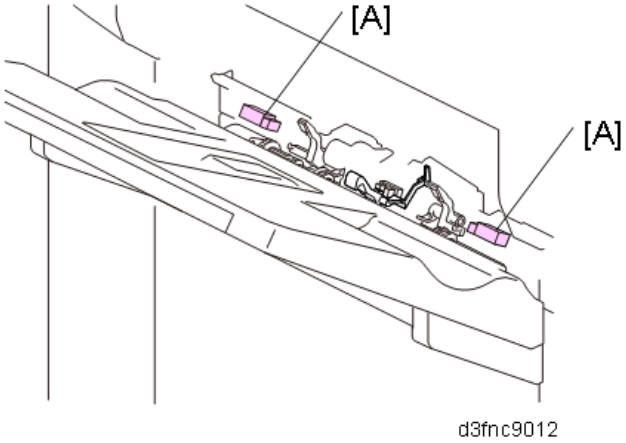
Sub Height Sensors

Two sensors (sub-height sensors [A]) have been added to detect stapled sheets.



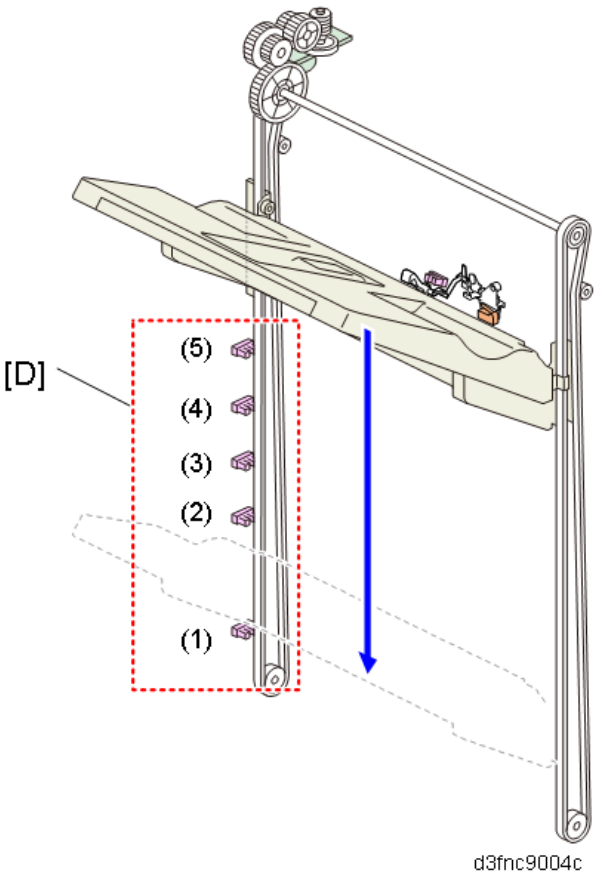


When sheets stapled at one point are stacked, this prevents the sheets from colliding with the paper guide, edge guide and other sheets because of the stapled points being stacked up. If one of the sensors detects sheets, the machine stops the job in progress.

Upper Tray Full Detection

Condition 1

Five shift tray lower limit sensors [D] are installed on the rear side of the machine.



Booklet Finisher SR3290: Three sensors to detect 500, 1000, 2000 sheets

Finisher SR3280: Three sensors to detect 500, 1500, 3000 sheets

Booklet Finisher SR3290

State	Sensors	Paper Size	Length
500 sheets	Shift Tray Lower Limit Sensor 5 (S37)	A5 SEF,A5 LEF, B6 SEF,HLT LEF, A6 SEF	148 to 182 mm
1,000 sheets	Shift Tray Lower Limit Sensor 4 (S36)	A3 .SEF, A4. SEF, B4 SEF, B5 SEF, B5 LEF, DLT SEF, LG, SEF, LT SEF, 12"x18" SEF, SRA3,13"x19.2" SEF	182 to 488 mm
2,000 sheets	Shift Tray Lower Limit Sensor 2 (S29)	A4 LEF, LT LEF	

Finisher SR3280

State	Sensors	Paper Size	Length
500 sheets	Shift Tray Lower Limit Sensor 5 (S37)	A5 SEF, A5 LEF, B6 SEF, HLT SEF, A6 SEF	148 to 182 mm
1,500 sheets	Shift Tray Lower Limit Sensor 3 (S30)	A3 SEF, A4 SEF, B4 SEF, B5 SEF, B5 LEF, DLT SEF, LG SEF, LT SEF, 12"x18" SEF, SRA3 SEF, 13"x19.2" SEF	182 to 488 mm

1.Detailed Descriptions

State	Sensors	Paper Size	Length
3,000 sheets	Shift Tray Lower Limit Sensor 1 (S16)	A4 LEF, LT LEF	

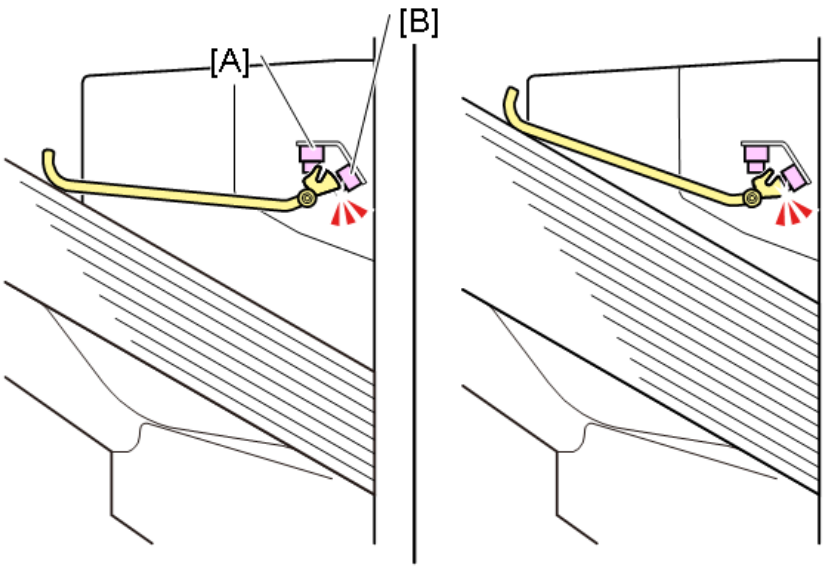
Condition 2

The feeler is raised.

- Booklet Stack Height Sensor 1 (S26) [A] (SP6-123-036 INPUT Check) : OFF
- Booklet Stack Height Sensor 2 (S27) [B] (SP6-123-037 INPUT Check) : ON

If the above condition continues for 13 seconds, the machine detects that the stacking limit has been reached.

The purpose is to accurately detect tray full for stacks of Z-folded paper, or incorrectly stacked documents.

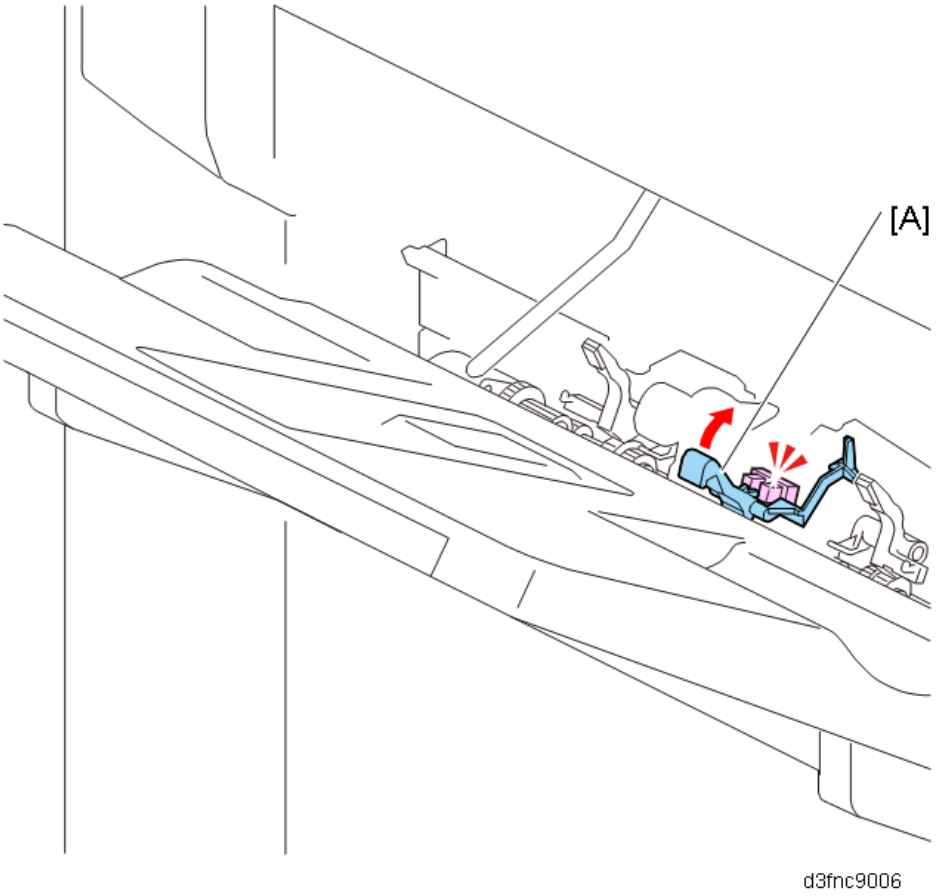


d3fnc9005

Condition 3

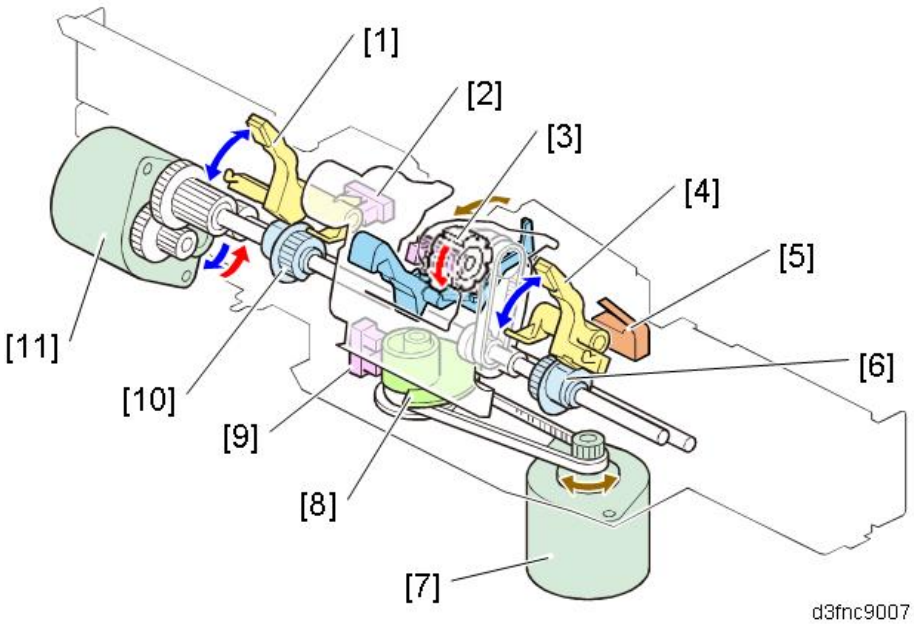
Shift tray detection input check: SP6-123-035 normally set to "0" (default), tray not full.

[A]: Shift Tray Paper Height Sensor (S35)



Pull-in Roller / Paper Stack Holder

Components



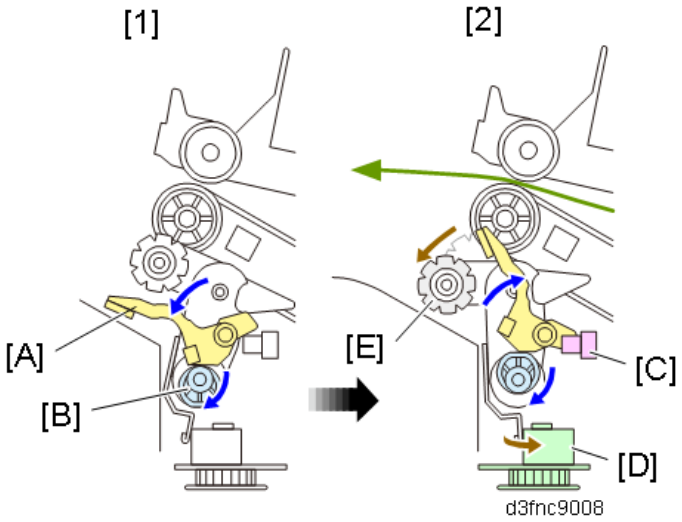
No.	Name	No.	Name
1	Paper Stacking Holder	7	Paper Stacking Holder Lift Motor

No.	Name	No.	Name
2	Paper Stacking Holder HP Sensor (S24)	8	Stacking Sponge Roller Cam
3	Stacking Sponge Roller	9	Stacking Sponge Roller HP Sensor (S32)
4	Paper Stacking Holder	10	Paper Stacking Holder Cam
5	Upper Tray Height Limit Switch (SW3) (Interlock Switch)	11	Paper Stacking Holder Motor (DCM8)
6	Paper Stacking Holder Cam	-	-

Operation

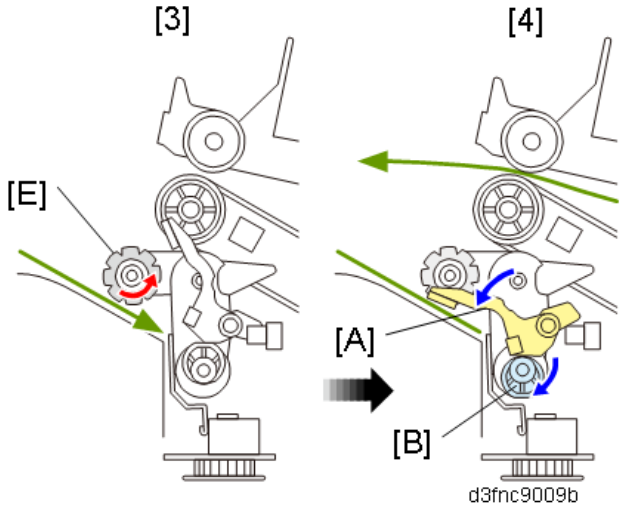
There are five steps in the operation:

1. When a job starts, the Paper Stacking Holder Motor (DCM8) rotates the paper stacking holder cam [B] to move the paper stacking holder [A] down.
2. The paper stacking holder lift motor [D] rotates the stacking sponge roller cam to move the stacking sponge roller [E] down. The Paper Stacking Holder Motor (DCM8) rotates the paper stacking holder cam [B] to lift the paper stacking holder [A] up to its HP (until the paper stacking holder interrupts the Paper Stacking Holder HP Sensor (S24) [C]).

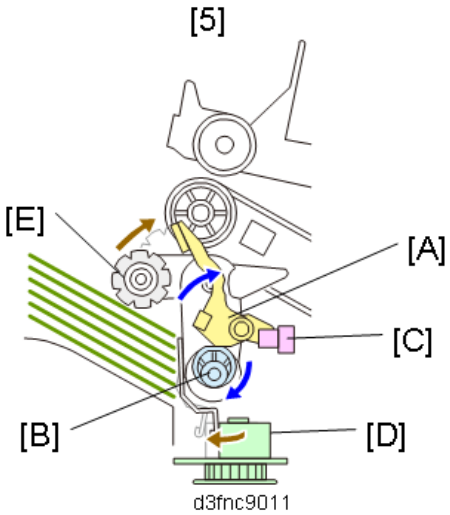


3. The Paper Stacking Holder Motor (DCM8) drives in reverse to let the stacking sponge roller [A] pull the output paper in.
4. The Paper Stacking Holder Motor (DCM8) rotates the paper stacking holder cam [C] to drop the

paper stacking holder [B] (until job end, the machine repeats step 3 and step 4).

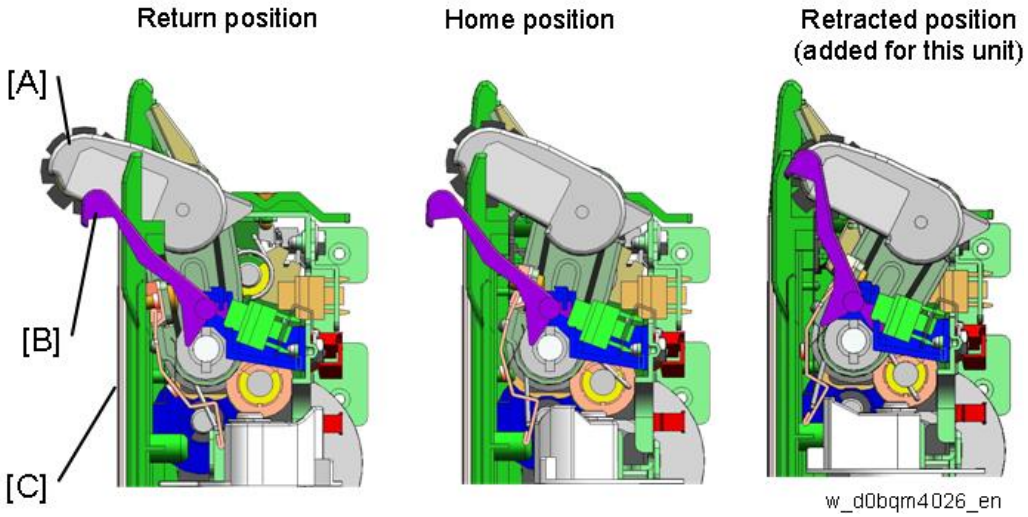


5. After job end, the paper stacking holder lift motor rotates the stacking sponge roller cam [D] to lift the stacking sponge roller [A] up to its HP position. At the same time, the Paper Stacking Holder Motor (DCM8) rotates the holder cam [E] to lift the paper stacking holder [B] up to its HP (until the Paper Stacking Holder HP Sensor (S24) [C] detects the end of the paper stacking holder [B]).



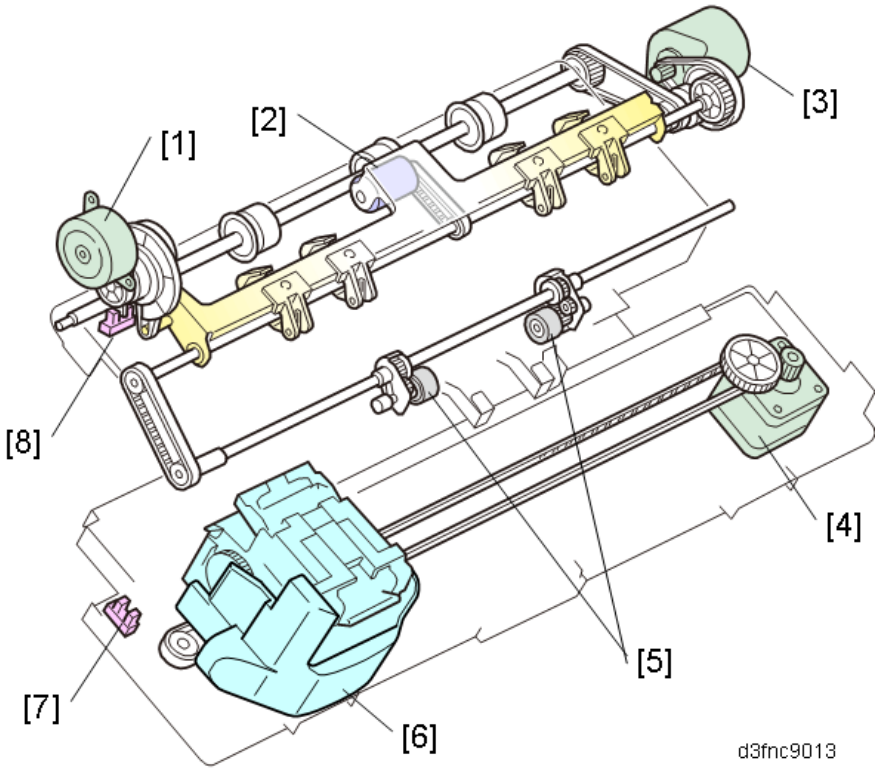
Staple Mode Operation

On this machine, the stacking sponge roller [A] and actuator [B] are completely retracted within the end fence [C] when delivering stapled sheets (staple job) to improve their stackability.

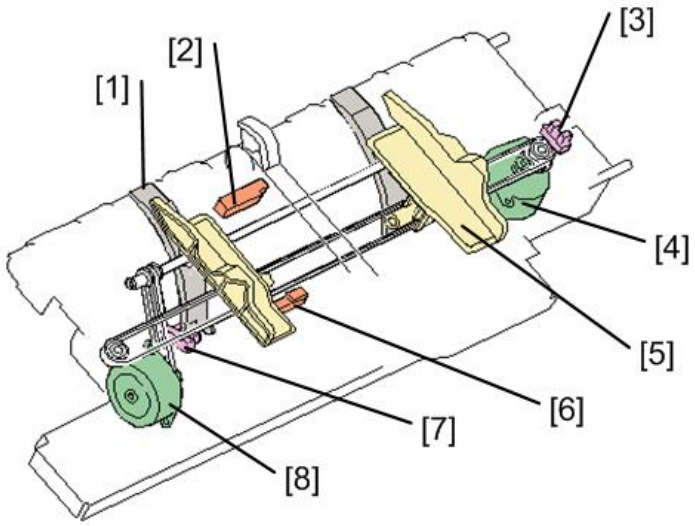


Corner Stapling

Components



No.	Name	No.	Name
1	Positioning Roller Shift Motor (STM5)	5	Drag Roller
2	Positioning Roller	6	Stapler
3	Exit Motor (DCM4)	7	Stapler Move HP Sensor (S23)
4	Corner Stapler Movement Motor (STM7)	8	Positioning Roller HP Sensor (S28)



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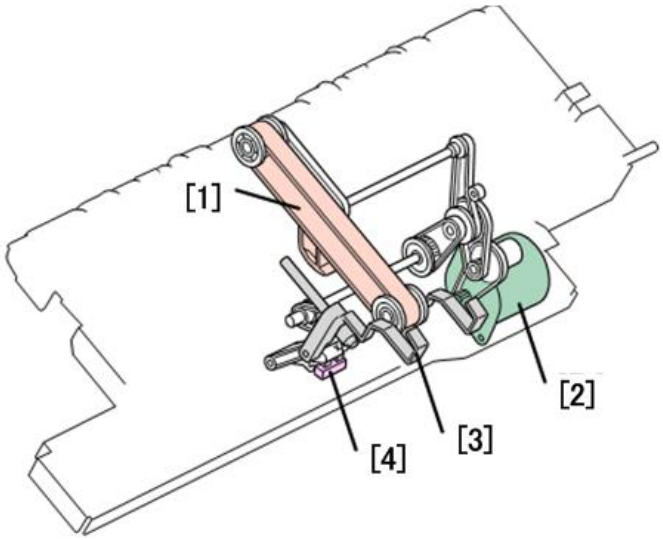
No.	Name	No.	Name
1	Edge Guide	5	Jogger Fence
2	Upper Tray Exit Sensor	6	Staple Tray Paper Sensor (S31)
3	Jogger Fence HP Sensor (S25)	7	Leading Edge Guide HP Sensor (S33)
4	Jogger Motor (STM1)	8	Leading Edge Guide Motor (STM6)



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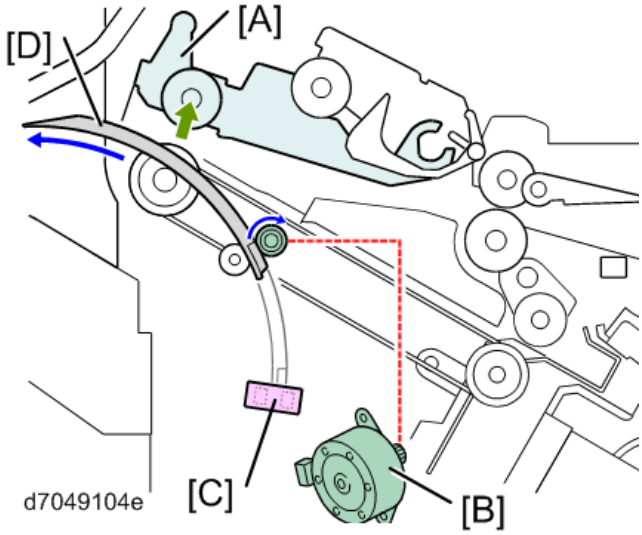
No.	Name	No.	Name
1	Feed-out Belt (with stack feed-out pawl)	3	Trailing Edge Fence
2	Feed-out Belt Motor (DCM7)	4	Feed-out Belt HP Sensor (S12)

Edge Guide

This machine applies a corner staple to the paper stack while it is hanging out of the exit. At this time, to prevent the paper stack from dropping to the upper tray, the edge guide [D] comes out of the unit. The edge guide operates as follows:

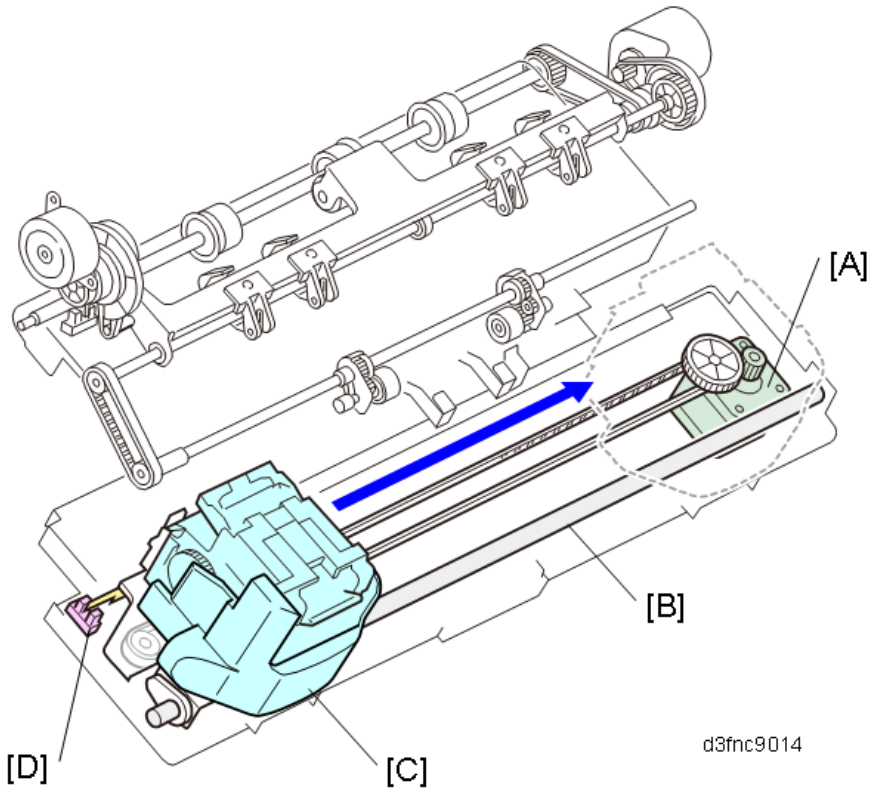
1. When a job starts, the upper tray guide plate [A] shifts up.

2. The Leading Edge Guide Motor (STM6) [B] drives to push the edge guide [D] out. The edge guide retreats into the machine when the last sheet of a job is output (the Leading Edge Guide HP Sensor (S33) [C] detects the edge guide).



Stapler Movement

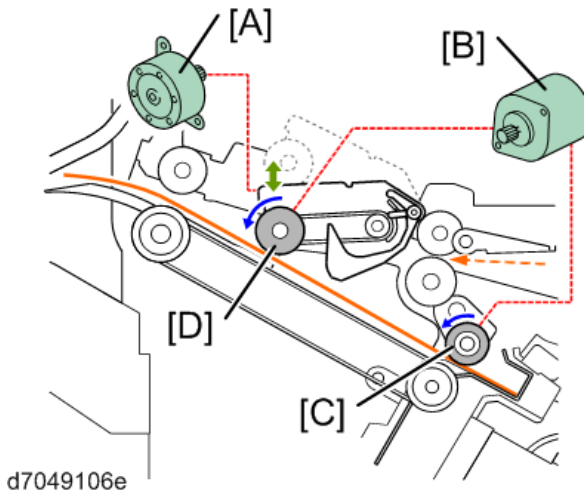
The Corner Stapler Movement Motor (STM7) [A] moves the stapler [C] along the guide rod [B]. After a job finishes, the stapler [C] returns to its HP (the Stapler Move HP Sensor (S23) [D] detects the base of the stapler).



Positioning Roller / Drag Roller

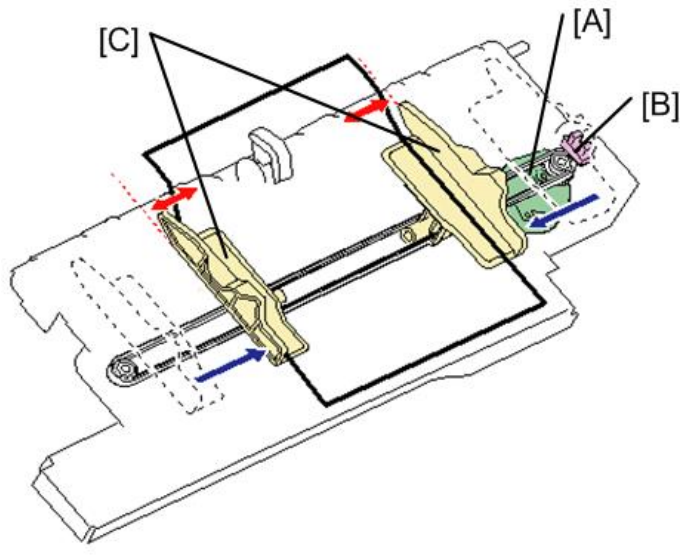
The positioning roller and drag roller operate as follows:

1. The Positioning Roller Shift Motor (STM5) [A] moves the positioning roller [D] down at the start of every job.
2. The Positioning Roller Motor (DCM14) [B] rotates the positioning roller [D] to transport paper to the staple tray.
3. The Positioning Roller Motor (DCM14) [B] also rotates the drag roller [C]. The drag roller [C] is a sponge roller that pushes paper against the trailing edge fence, in order to hold paper in the stapling position.



Jogger

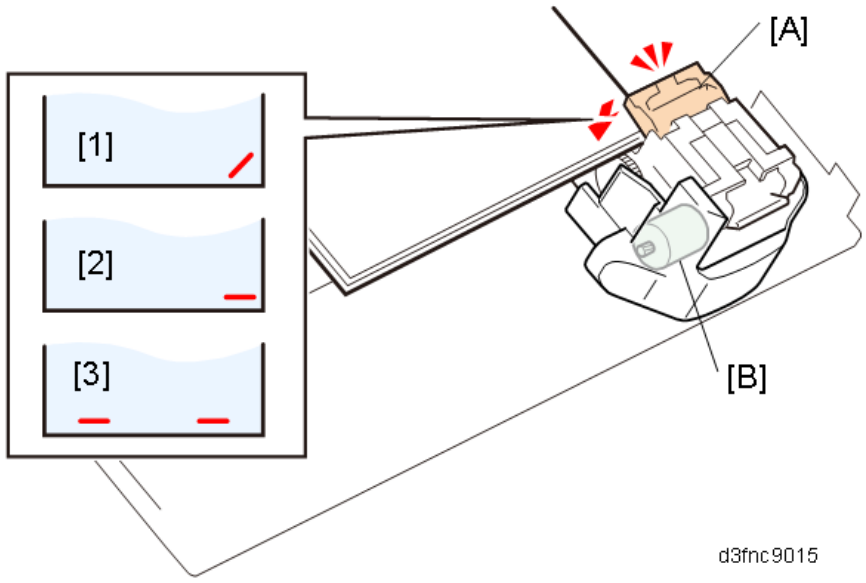
The Jogger Motor (STM1) [A] moves the jogger fences [C] to the ready position and wait for the first sheet. As each sheet enters, the jogger fences push toward the center. At the end of the job, the jogger fences return to their HP and stop. The Jogger Fence HP Sensor (S25) [B] detects the jogger fence at the home position.



Stapling

The corner staple motor [B] pushes the staple hammer [A] down in order to staple the paper stack. The stapling positions are as follows:

- **For oblique stapling:** [1]
- **For horizontal stapling:** [2]
- **For horizontal stapling at 2 points**: [3]



Feeding-out

The trailing edge fence [B] moves paper up to the proper position to output. Then the stack feed-out pawl [A] that is attached to the stack feed-out belt [C] pushes the paper out. The Feed-out Belt Motor (DCM7) [D] moves the stack feed-out pawl [A] and the trailing edge fence [B]. After a stack is output, both the trailing edge fence [B] and stack feed-out pawl [A] return to their HP.

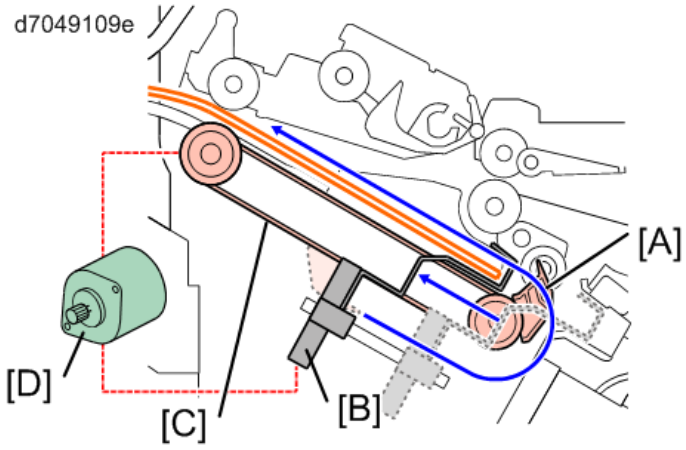
There are two types of stack output.

- 1. Pawl, exit roller: Small sizes (A4, LT, B4 SEF)
  Output is done by the exit roller as described above.
- 2. Roller exit: A4, LT, B5 LEF
  Only the exit roller is used to output the stack, without using the trailing edge fence and the stack feed-out pawl.

For Large Sizes (A3, B4, LG, DLT)

- 1 to 10 sheets: Roller exit method

- More than 11 sheets: Pawl, exit roller method



Staple Near-End Detection

A Staple Near-End Detection function has been added.
The finisher software counts the number of staples used. When the number of remaining staples drops below the near-end threshold, a Near-End notification is sent to the machine and a banner prompting staple replenishment appears on the operation panel.
You can check the remaining number of staples in [Mach./Applic. Stat] tab on the [Check Status] screen.

Staple Use Counter

- The staple use counter in the EEPROM counts the number of staples used. (Its initial value is 0.)
- After the counter has detected that the staples have run out (End), it is reset when it detects staples (= replenished).
- Staples used in the End status are not counted.

Number of Remaining Staples [Maximum number - Counted Number of Staples Used]

The remaining number of staples is logged in SP6-795-002 / SP6-796-002 (Staple N.E. Setting: Staple Remaining Setting). You can also change the remaining number of staples on this counter by changing the value.

Near-End Threshold

The near-end threshold can be changed in SP6-795-001 / SP6-796-001 (Staple N.E. Setting: Near-End Threshold). Depending on the model, the initial value is as follows:

- SR3280/SR3290: 800 corner staples and 300 booklet staples
- SR3270: 500 staples to be used for both corner and booklet stapling
- SR3260: 500 corner staples

Control

If the remaining number of staples (SP6-795-002/SP6-796-002) drops below the near-end threshold,

the near-end status is notified to the machine.

To correctly count the actual remaining number of staples, instruct the customer to do as follows:

- Replace the cartridge after the staples have completely run out (End).
- Replace the cartridge with the machine's power on (so that the device status can be monitored).

What if the counter does not match the actual remaining number of staples?

- After replacing the cartridge, set SP6-795-002 / SP6-796-002 (Staple N.E. Setting: Staple Remaining Setting) to the maximum value.
- If some degree of mismatch is tolerable, change the value according to the estimated number of remaining staples in the new cartridge.

Automatic Counter Reset

After reaching the near-end status, if the staples do not run out (End) even after the number of staples used exceeds 1.5 times that of the specified number of staples in the near-end status, the counter is automatically reset according to the determination that the staples have been replaced. The automatic counter reset function can be set on/off on the corresponding SP.

SP6-796-003/007 (Staple N.E. Setting: Anomaly Near-End Disp. Clear Setting)

0: Reset

1: Do not reset

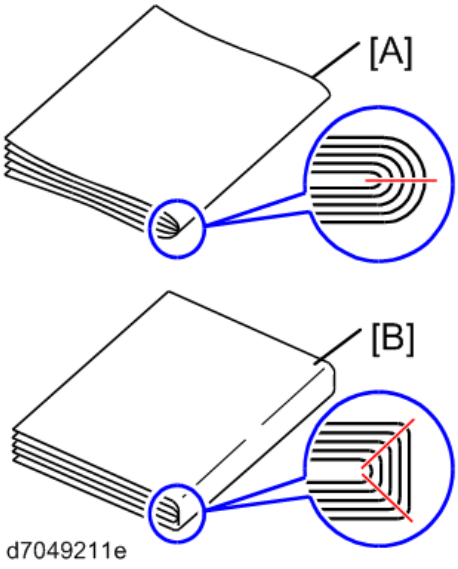
Saddle Stitching (Booklet Stapling)

A New Type of Saddle Stitching

Compared to normal center stapling, center stapling with this finisher can reduce the bulge at the center of the booklet.

[A] Common saddle stitching

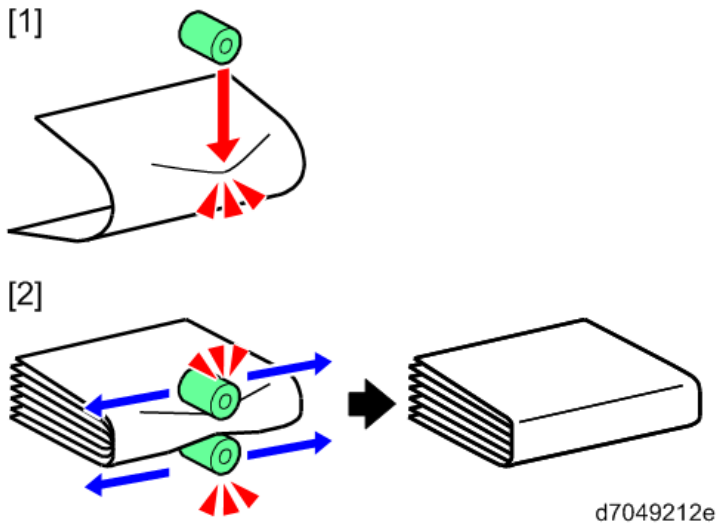
[B] Saddle stitching with this finisher



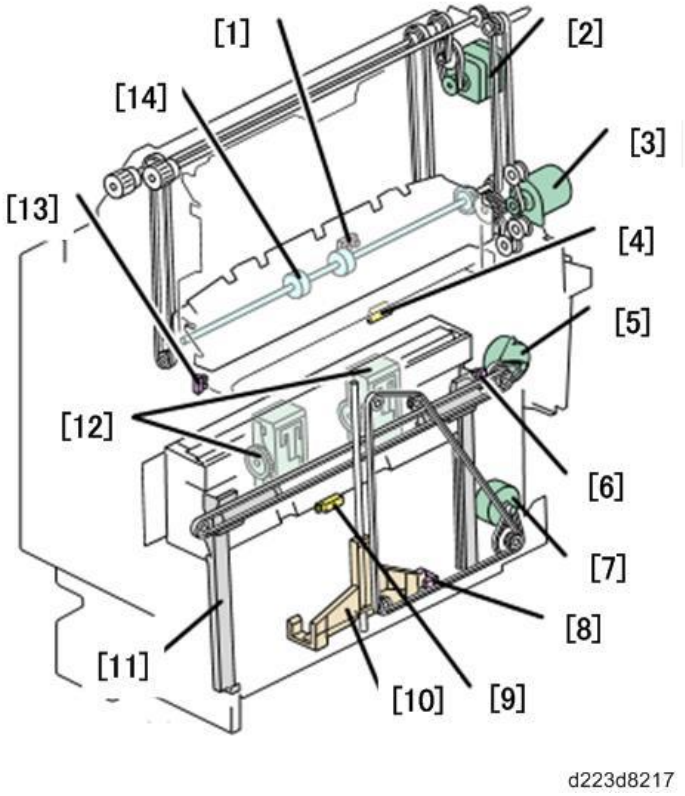
Saddle Stitching with This Finisher

Until now, very heavy pressure had to be applied in order to shape the saddle, and this could not be done unless the finisher was very large. This finisher, however, in spite of being very small, uses the device described below to achieve a better saddle shape.

1. Pressure is applied to the fold with a roller to form the saddle.
2. Pressure is applied while the paper is buckled at the top and bottom with two rollers to form the saddle. The rollers move to front and back to strengthen the crease with two folds, not just one fold.

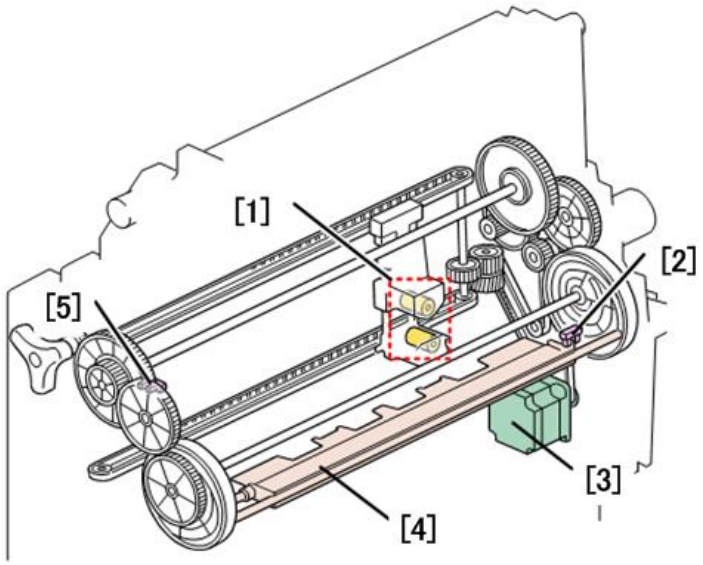


Components



1.Detailed Descriptions

No.	Name	No.	Name
1	Booklet Jogging Pawl HP Sensor (S3)	8	Booklet Trailing Edge Bottom Fence HP Sensor (S5)
2	Booklet Jogging Pawl Movement Motor (STM8)	9	Booklet Lower Transport Path Stack Sensor (S11)
3	Shift Roller drive Motor (DCM11)	10	Bottom Fence
4	Booklet Upper Transport Path Stack Sensor (S2)	11	Jogger Fence
5	Booklet Jogger Motor (STM11)	12	Booklet Stapler
6	Booklet Jogging HP Sensor (S10)	13	Booklet Guide Plate Sensor (S4)
7	Booklet Bottom Fence Motor (STM12)	14	Shift Roller



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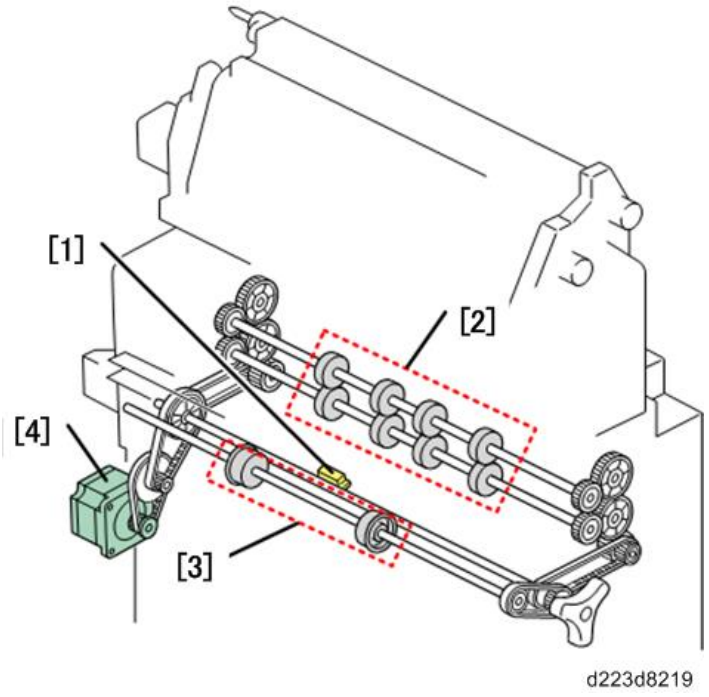
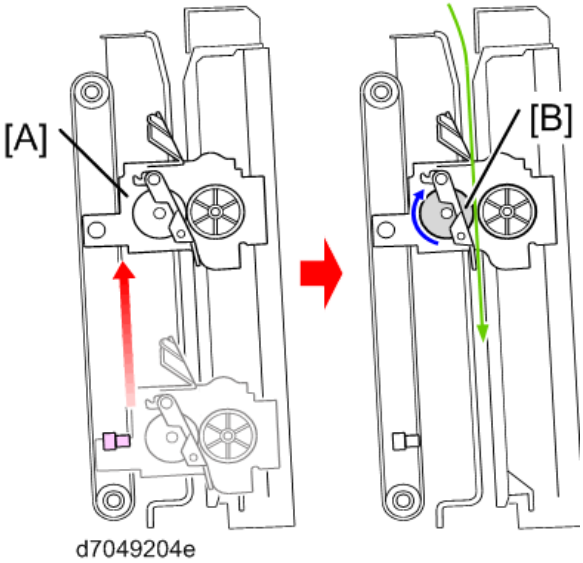
No.	Name	No.	Name
1	Side-to-side Shift Fold Roller	4	Fold Plate
2	Fold Plate HP Sensor (S1)	5	Fold Plate Cam HP Sensor (S9)
3	Press Fold Motor (STM10)		



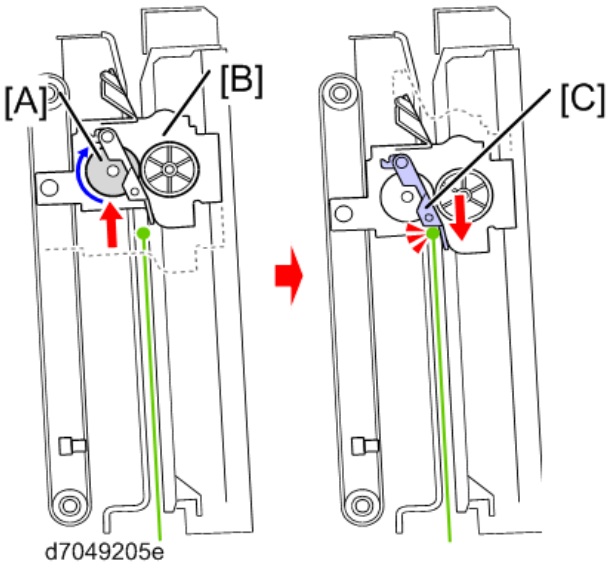
No.	Name	No.	Name
1	Booklet Exit Sensor (S6)	3	Fold Unit Exit Roller
2	Fold Roller	4	Fold Transport Motor (STM9)

Booklet Staple Transport

When paper begins to go through the booklet staple path, the shift roller unit [A] moves up to its operating position in order to be ready to transport paper. The shift roller lift motor moves the shift roller unit [A]. The Shift Roller drive Motor (DCM11) rotates the shift roller [B] to transport paper to the bottom.

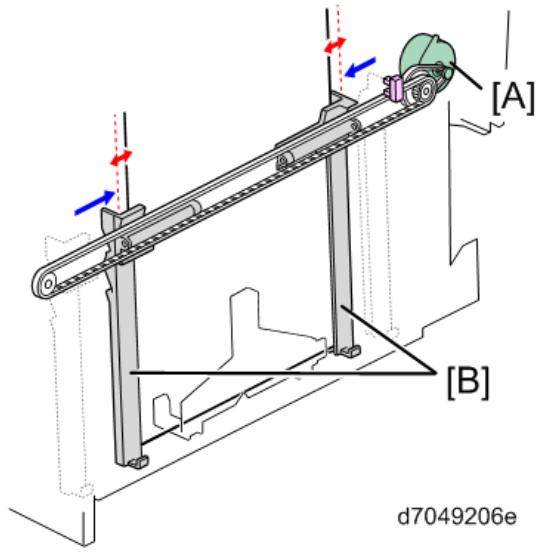


After the transportation has finished, the shift roller unit [B] moves up away from the paper face. While the shift roller unit moves up, the shift roller [A] rotates to feed paper out to the bottom. Then the shift roller unit drops to bump the stack junction gate [C] onto the edge of the paper stack. With this operation, the paper stack is aligned.



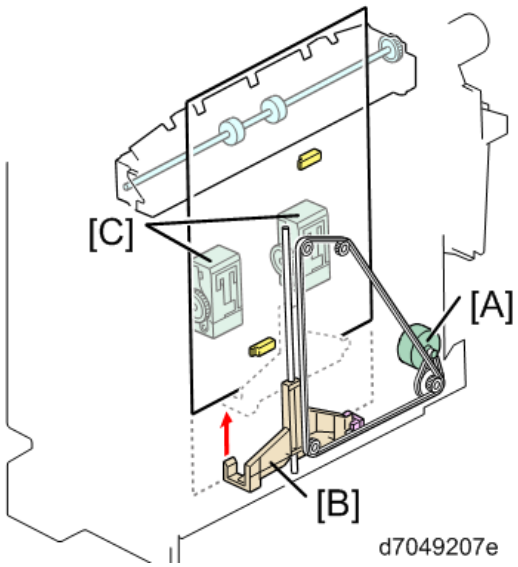
Jogger

The Booklet Jogger Motor (STM11) [A] moves the jogger fences [B] in to align the sides of each page. When a job starts, the jogger fences move to the ready position (this depends on the paper size).



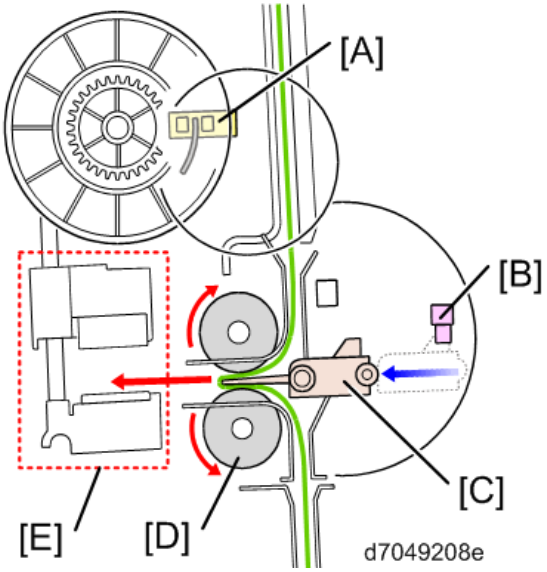
Bottom Fence Operation / Stapling

The stack that is pushed with the stack junction gate bumps against the bottom fence [B] in order to align the stack. Then the booklet staplers [C] staple at the middle points of the stack. After that, the Booklet Bottom Fence Motor (STM12) [A] moves the bottom fence [B] up to the position where the stack is folded with the fold plate.



Overview of Center Folding and Saddle Shaping

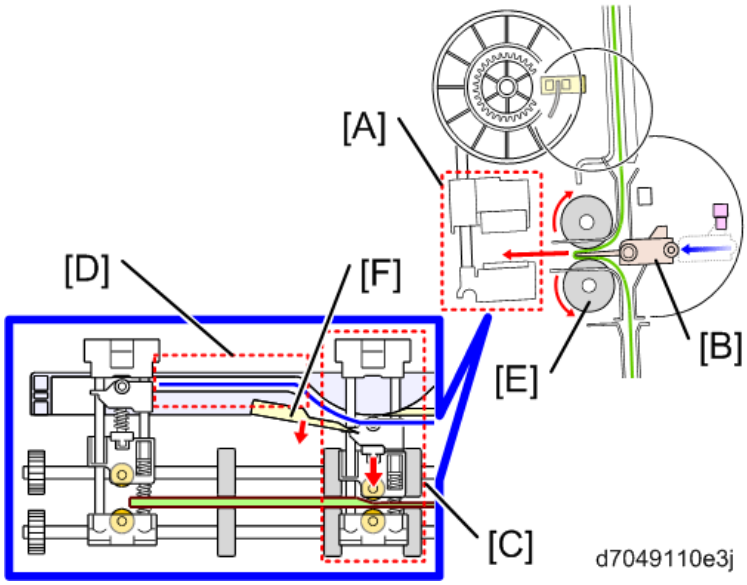
The fold plate [C] center folds the stack lifted to the fold position by the bottom fence with the pressure from the Fold Transport Motor (STM9) [D]. Next, the side-to-side fold roller unit [E] forms the saddle shape. The Press Fold Motor (STM10) drives both the fold plate [C] and the side-to-side fold roller [E]. This is so the fold plate [C] and side-to-side fold roller [E] can operate at the same time.
[A] is the Fold Plate Cam HP Sensor (S9).
[B] is the Fold Plate HP Sensor (S1).



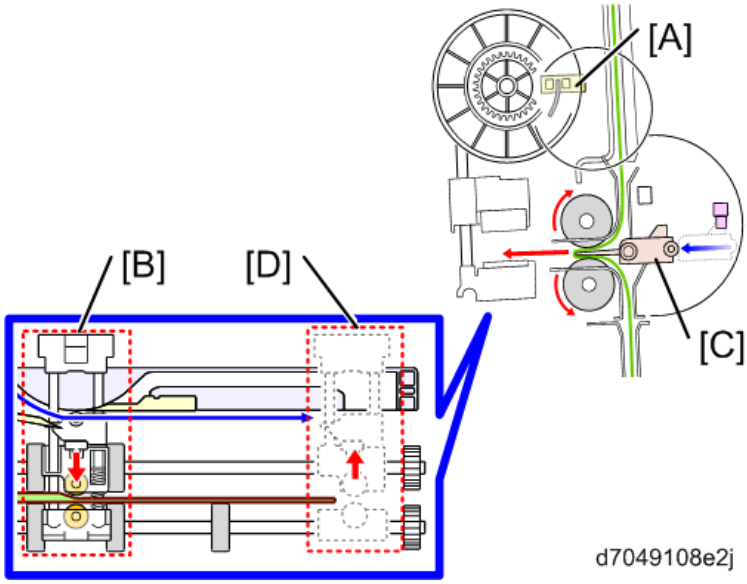
Center Folding and Saddle Shaping Operation

The operation of stack folding and saddle shaping is described below. Saddle shaping alone is described below under "Saddle Shaping Operation".
When the fold plate [B] pushes the center of the stack between the fold transport rollers [E], the side-to-side roller unit slides along the upper path [D]. Next, when the fold plate [B] has pushed the center of the stack completely between the fold rollers, the upper part of the fold roller unit, while pushing out

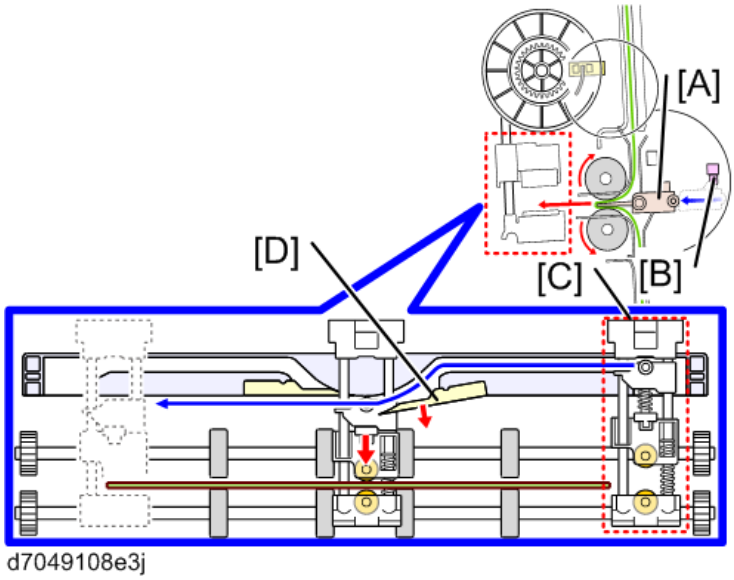
switch plate 1 [F], slides down onto the lower path. Next, the lowering of the top of the side-to-side roller unit presses in the center of the stack with pressure from a large spring, and then center folding begins when the fold plate [B] pushes into the center of the stack.



The movement of the fold plate cam stops the fold plate [C] and this holds the center of the stack out in the folded position. The fold roller [B] applies pressure to the protruding stack and moves it toward the left as shown below. Next, when Fold Plate Cam HP Sensor (S9) [A] goes on twice after the cam has rotated twice, the saddle shape operation is half finished, the fold roller unit is at position [D], and then the Press Fold Motor (STM10) switches into reverse. At the same time, in the upper path, the top of fold roller unit reverses, releasing pressure on the fold.



When the fold roller unit [C] releases pressure and starts to reverse, the top of the side-to-side fold roller presses on switch plate 2 [D] which directs it down into the lower path. When pressure is applied to the remaining part of the stack, fold roller [A] returns to the home position, detected by the Fold Plate HP Sensor (S1) [B].



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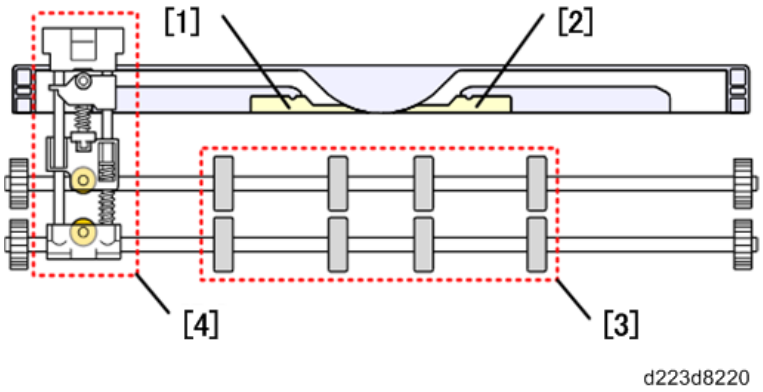
Saddle Shaping Operation



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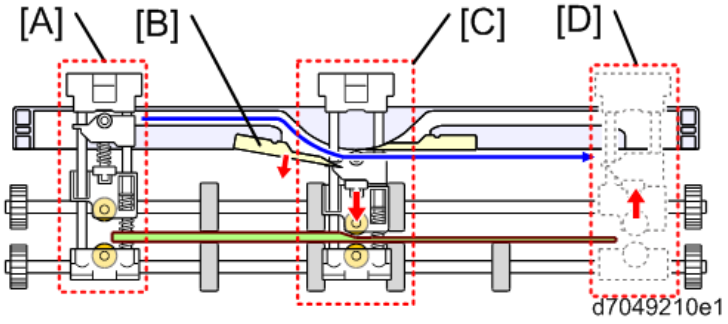
No.	Name	No.	Name
1	Guide Plate	3	Fold Transport Roller
2	Guide Plate 2	4	Side-to-Side Fold Roller Unit

The side-to-side fold roller unit in the center moves from [A] to [C].

It moves along a rail when it comes to the center, the upper fold (up) descends, and then pressure from a large spring folds the center of the stack.

With the pressure of the side-to-side fold roller applied, the unit moves forward from [C] to [D]. When the roller moves as far as [D], the upper roller of the roller unit ascends from the lower path to the upper path, releasing the pressure on the center of the stack.



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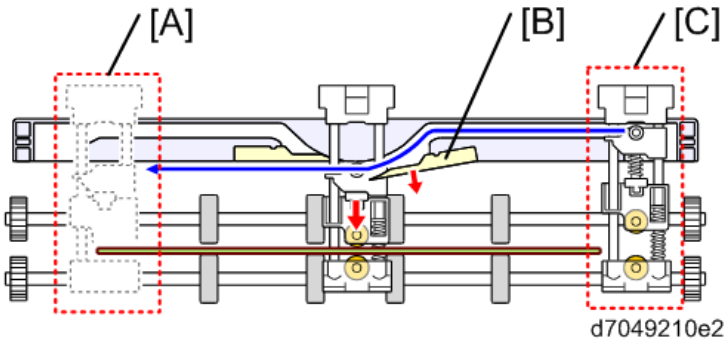
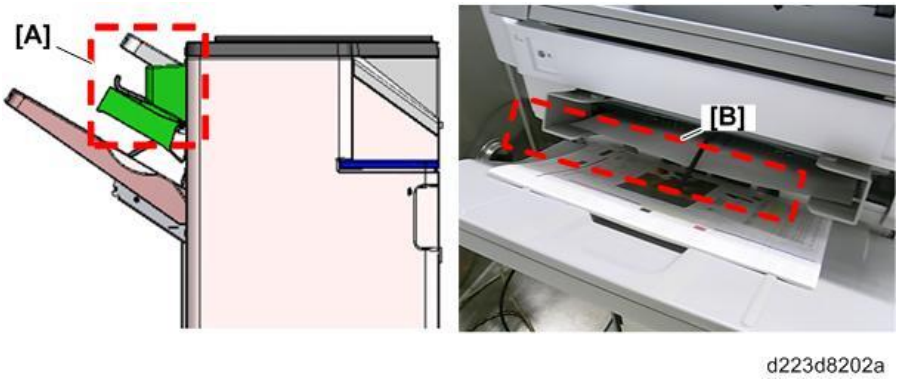
1.Detailed Descriptions

The Press Fold Motor (STM10) reverses, and the unit increases pressure on the stack as it moves and applies creasing on the remainder of the saddle shape as it moves from [C] to [A].
When the top of the side-to-side fold unit reaches the side-to-side fold unit HP sensor, the unit ascends to the upper path and releases pressure on the center of the stack.



Paper Guide Unit

As each stapled copy exits the finisher, it contacts the copy ahead of it already on the shift tray, and the paper guide unit [A] prevents the copies from becoming entangled on the shift tray.
The Paper Guide Motor (STM18) drives the paper guide cover to reduce the amount of curl and prevent the leading edges from curling and improve the output of stapled copies on the shift tray.



Related SP Codes

The paper guide mode for corner stapled copies does not operate for shift tray exit, booklet stapled copes, large paper sizes above 300 mm.

- SP6126-001 Use Paper Guide (Small sizes up to 300 mm)
- SP6125-001 Use Paper Guide (Large sizes large than 300 mm)

Paper Guide Removal

The paper guide unit is provided with the paper guide covers [A] at the initial position for users who want to take advantage of the improved stacking, but these covers can be removed. (Even with the covers removed, output will be done correctly even if the paper guides touch during operation.)

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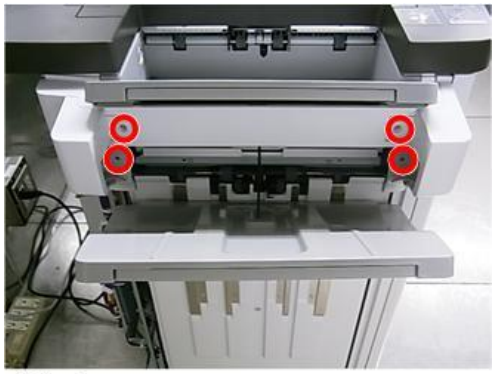

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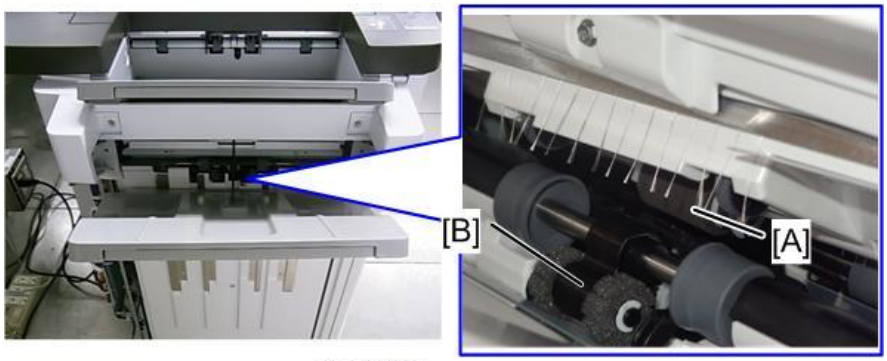
SP6-160-004 (Replacement Mode for Service)

It is easier to access the following parts after running SP-6-160-004.

- Positioning Roller [A]
  The paper exit guide plate moves upwards and the positioning roller pops up in front for easier access.
- Stacking Sponge Roller [B]
  The paper exit guide plate moves upwards and the reverse roller can be accessed.



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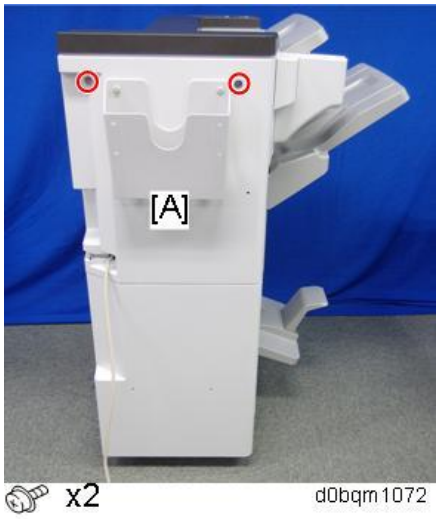
2. Replacement and Adjustment

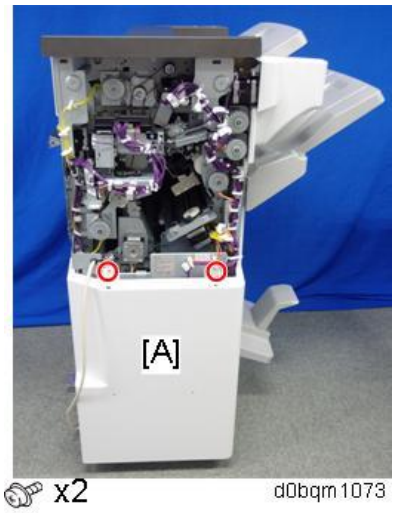
Covers

Rear Upper Cover, Rear Lower Cover

1. Remove the Rear upper cover [A].



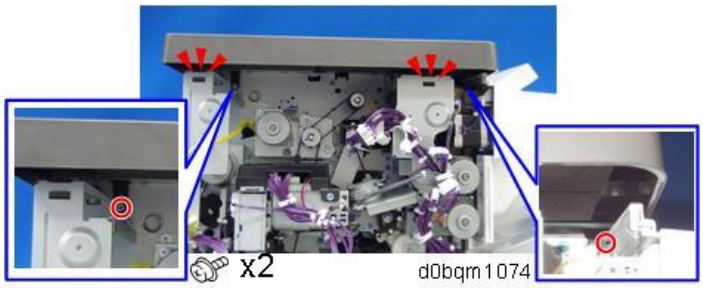
2. Remove the Rear lower cover [A].



Upper Cover

1. Remove the rear upper cover. (Rear Upper Cover, Rear Lower Cover)

2. Remove the 2 screws and release the 2 hooks.



3. Open the front cover [A] and remove the 2 screws.

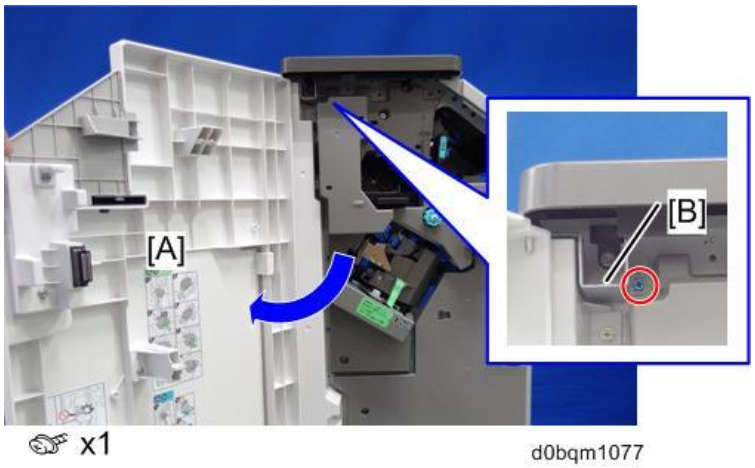
4. Remove the upper cover [A].

Note

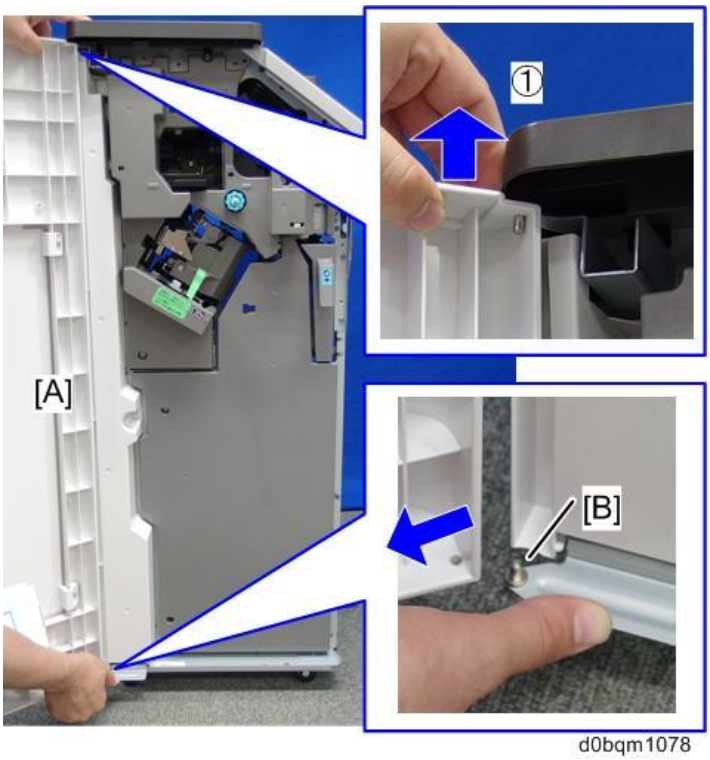
- When you detach or reattach the upper cover, be sure to check the locations of the hooks on the cover.

Front Cover

1. Open the front door [A], and then remove the screw fixing the bracket [B].

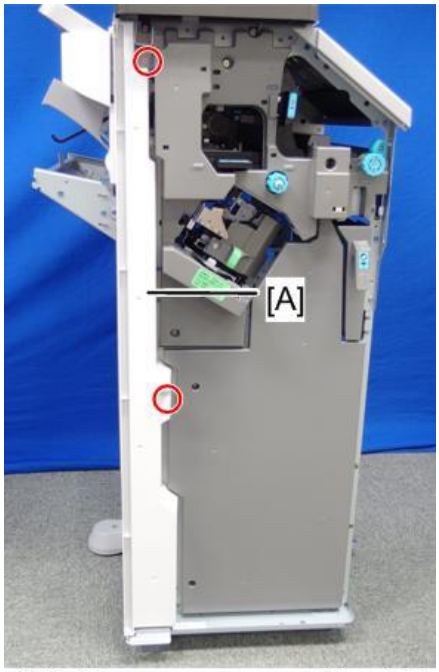


2. Remove the Front door [A].
   1. Holding the hinge at the upper part of the cover, raise the edge of the upper cover.
   2. Pull out the cover from the pin [B] at the bottom.



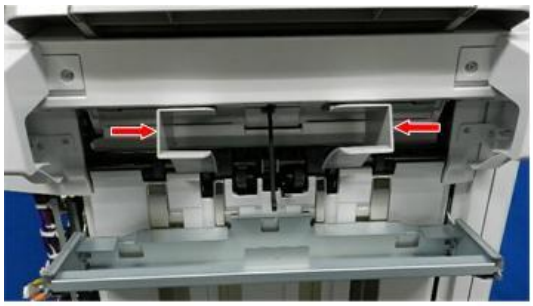
Front Left Side Cover

1. Remove the front cover. (Front Cover)
2. Remove the paper guide cover (front). (Paper Guide Cover)
3. Remove the front left side cover [A].

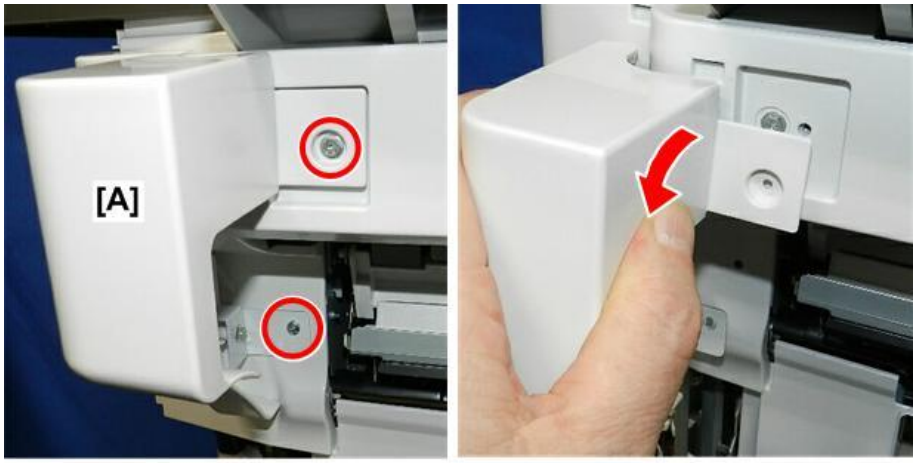


Paper Guide Cover

1. Remove the rear upper cover. (Rear Upper Cover, Rear Lower Cover)
2. Remove the shift tray. (Shift Tray (Upper Tray)).
3. Push the guides in to the center.



4. Remove the rear paper guide cover [A] (x2).



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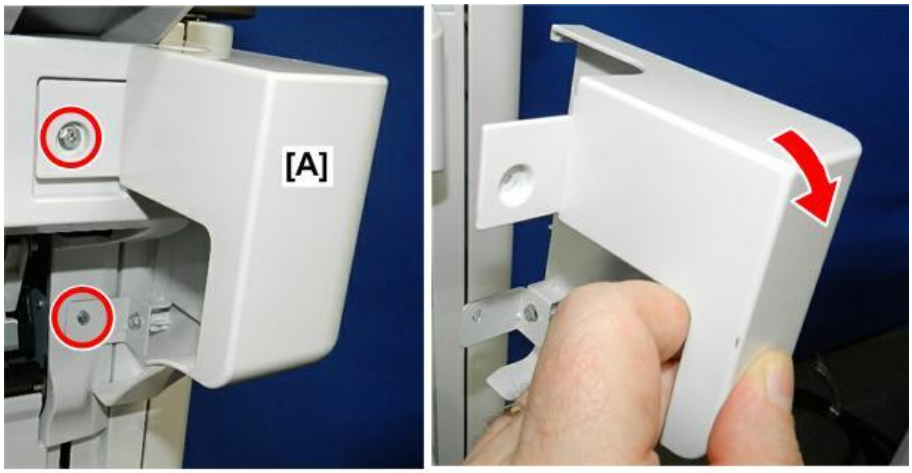
5. Remove the front paper guide cover [A] (x2).



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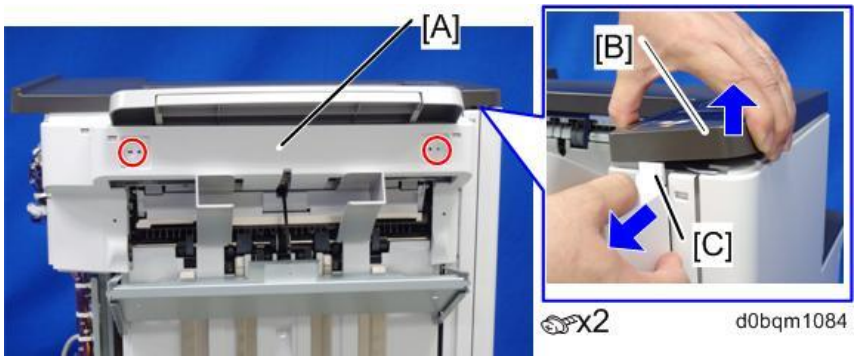
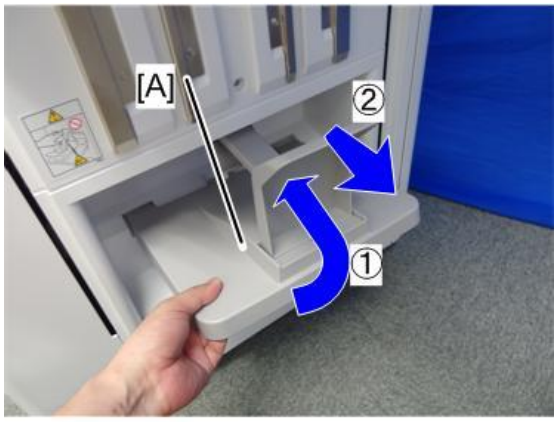
Left Upper Cover

1. Remove the rear upper cover. (Rear Upper Cover, Rear Lower Cover)
2. Remove the paper guide covers (front and rear). (Paper Guide Cover)
3. Lift the front left side [B] of the upper cover and disconnect the tab [C], and then remove the left upper cover [A].



Lower Tray

1. Remove the Lower tray [A].



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Proof Tray

1. Remove the following covers.
   - Upper cover (Rear Upper Cover, Rear Lower Cover)
   - Left upper cover (Left Upper Cover)
2. Remove the Proof tray [A] .

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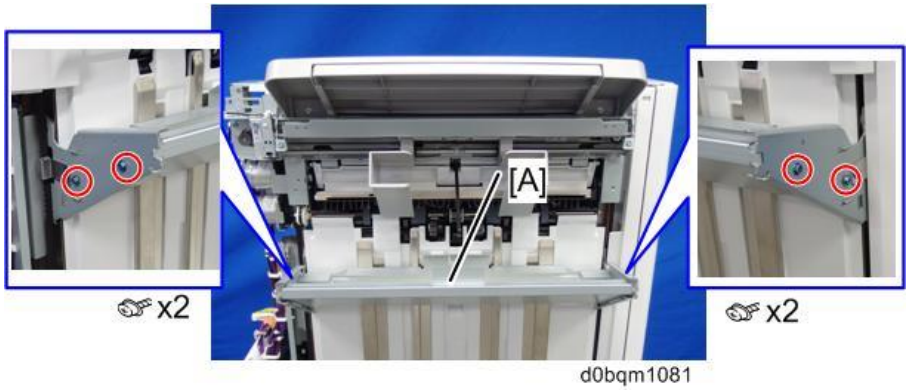
Shift Tray (Upper Tray)

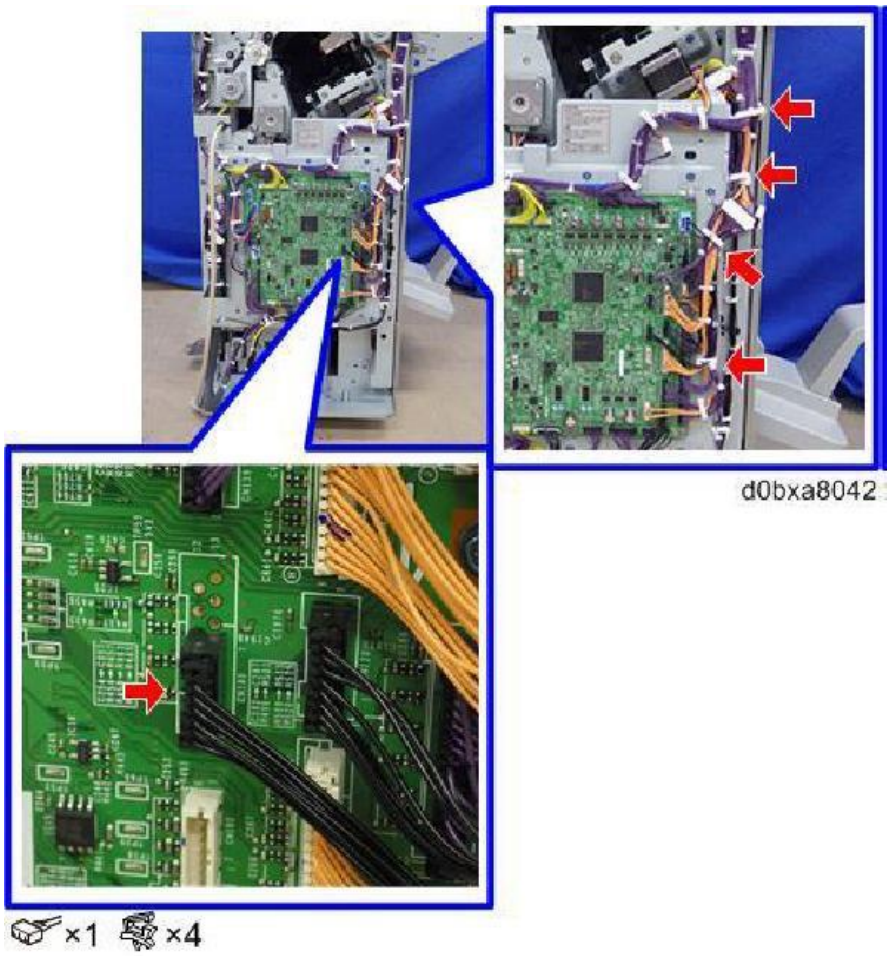
1. Remove the shift tray [A].

End Fence

1. Remove the left upper cover. (Left Upper Cover)
2. Remove the rear lower cover (SR2380 only). (Rear Upper Cover, Rear Lower Cover)
3. Remove the shift tray. (Shift Tray (Upper Tray))
4. Remove the shift tray bracket [A].



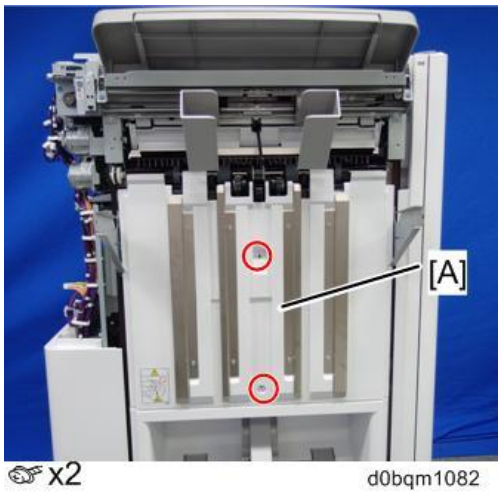
5. Disconnect the connector (CN180) and release the harness.

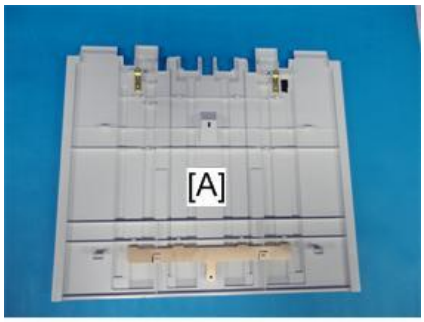


6. Remove the end fence [A].

When you remove the end fence, be careful with the harness beneath it.

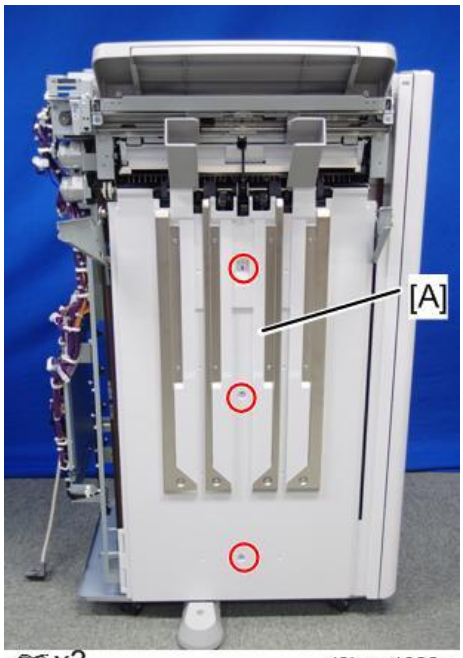
Booklet Finisher SR3290





d0bqm1083a

Finisher SR3280



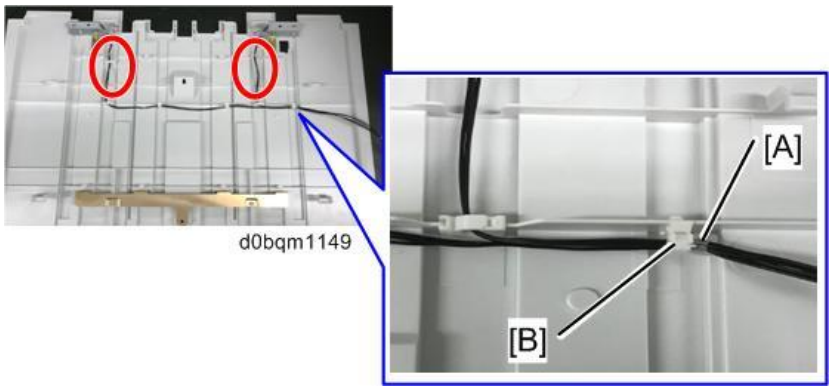
x3 d0bqm1082a

d0bqm1083b

Notes on Detaching/Reattaching/Replacing the End Fence

There is a harness routed beneath the end fence. Take the following precautions.

- If the cable clamp for securing the harness has come off the end fence, reattach it.
- Be careful that no slack is left in the harness, otherwise, the harness may come into contact with the machine's roller shaft and become worn out.
- Be careful not to leave any slack, especially at the parts framed in red as shown. To prevent slack, make sure that the cable tie [A] on the harness is located at the right side of the clamp [B].

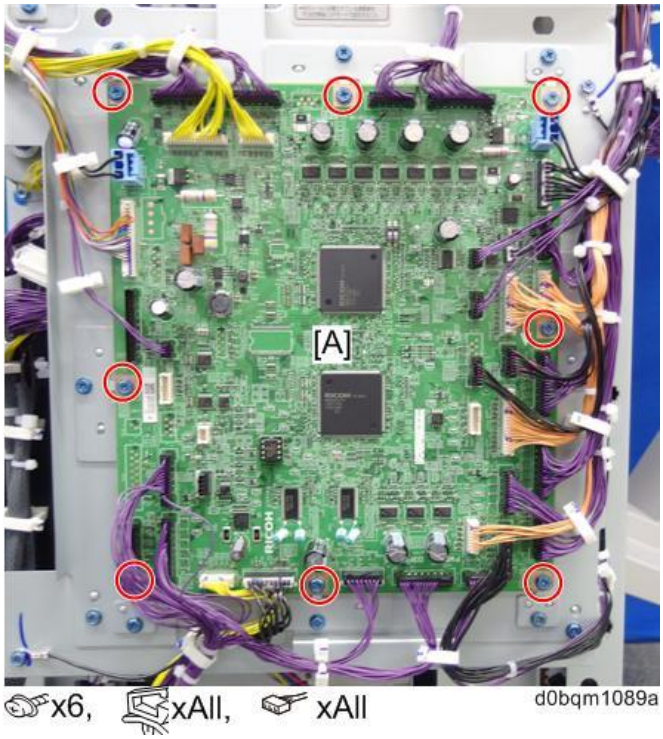


Boards

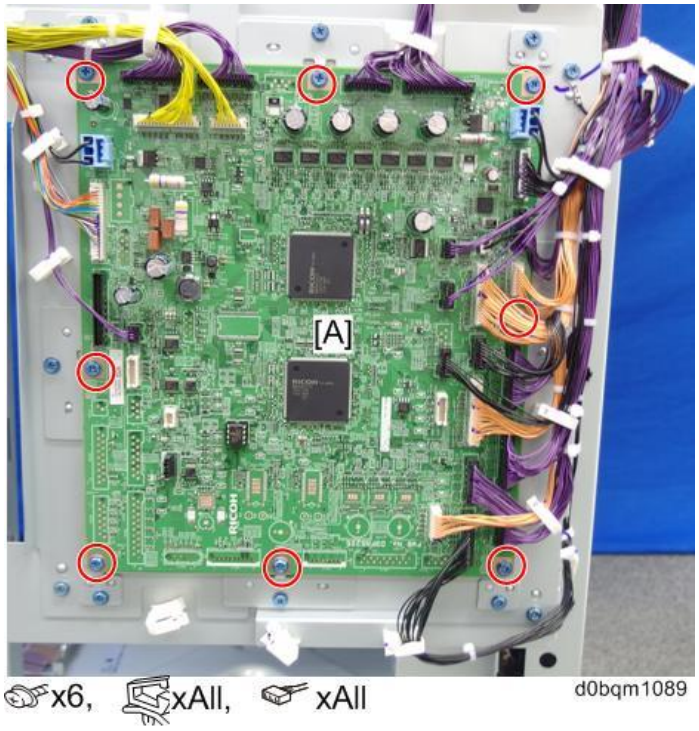
Controller Board (PCB1)

1. Remove the following covers.
   - Rear upper cover (Rear Upper Cover, Rear Lower Cover)
   - Rear lower cover (Rear Upper Cover, Rear Lower Cover)
2. Remove the Controller Board (PCB1) [A].

Booklet Finisher SR3290



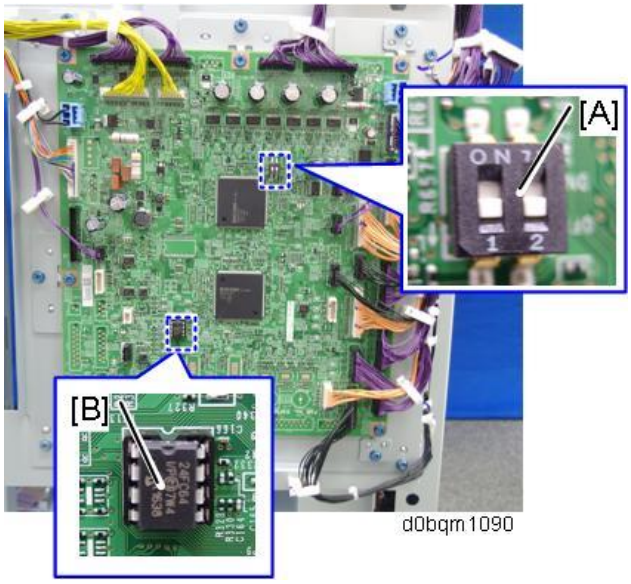
Finisher SR3280



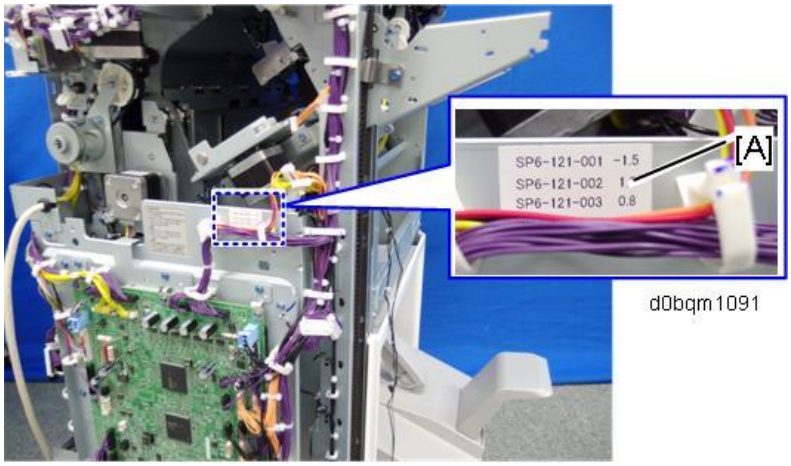
When Replacing the Controller Board

This board has a dip switch. When you reinstall the controller board, follow the procedure below regarding the dip switch settings.

1. Check the settings of dip switch [A] on the old main board.
2. Replace the controller board.
3. Change the settings of dip switch [A] on the new controller board to match the settings on the old controller board.
4. Remove the EEPROM [B] from the old controller board and install it on the new controller board.



5. Locate the label [A] attached near the right corner of the board.



6. Go into the SP mode, open these SP codes, and then enter the numbers you see on the label.

- SP6-121-001 NV Adj. Data: Jog Position: Factory Adj.
- SP6-121-002 NV Adj. Data: Fold Position: Factory Adj.
- SP6-121-003 NV Adj. Data: Staple Stacking Fence Pos. Factory Adj.

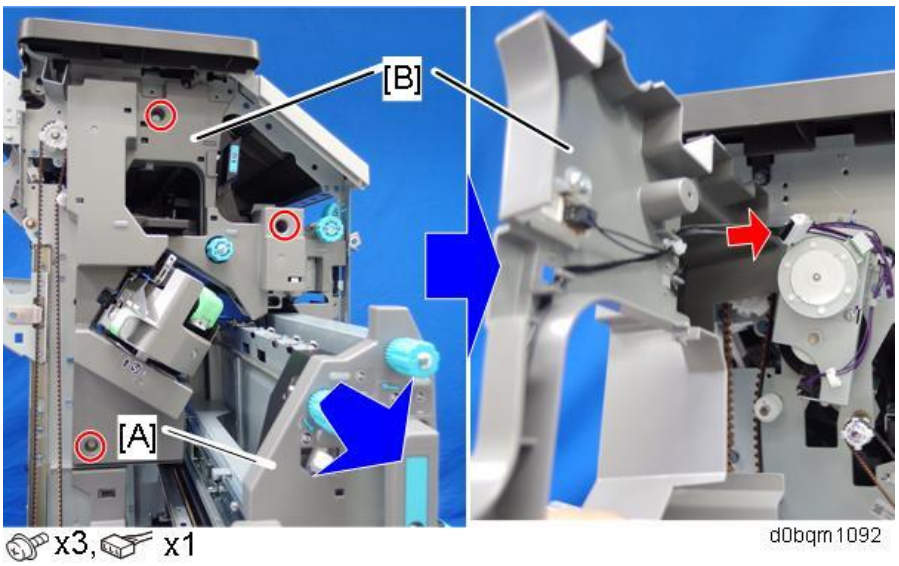
Corner Stapling Unit, Trailing Edge Alignment Unit

Corner Stapling Unit

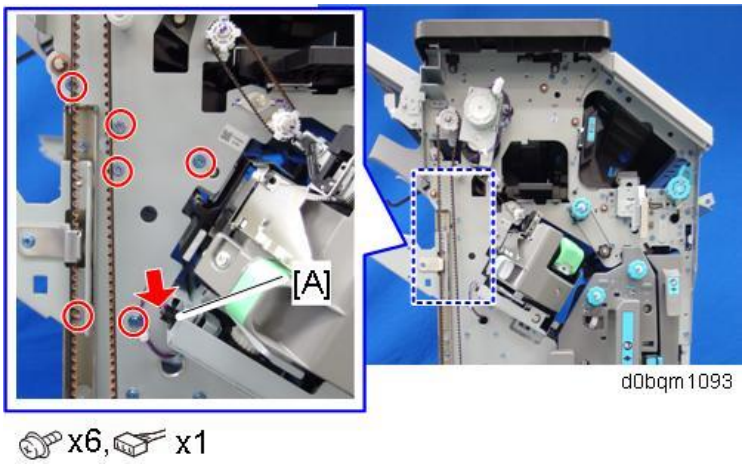
1. Remove the following covers.
   - Front left side cover (Front Left Side Cover)
   - End fence (End Fence)
   - Rear lower cover (Rear Upper Cover, Rear Lower Cover)
2. Pull out the saddle stitch unit [A], and remove the inner upper cover [B].

Note

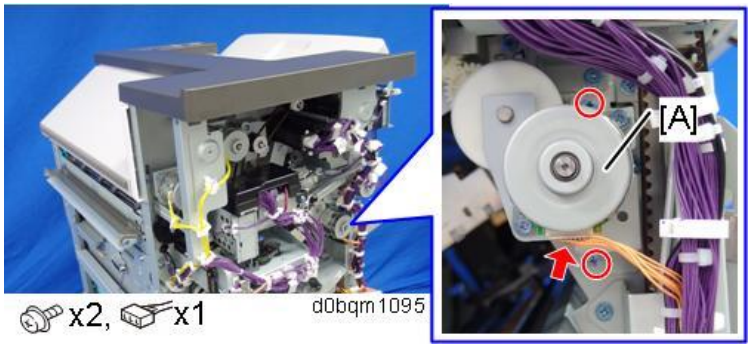
- Disconnect the harness from the back side of the inner upper cover when you remove the inner upper cover.



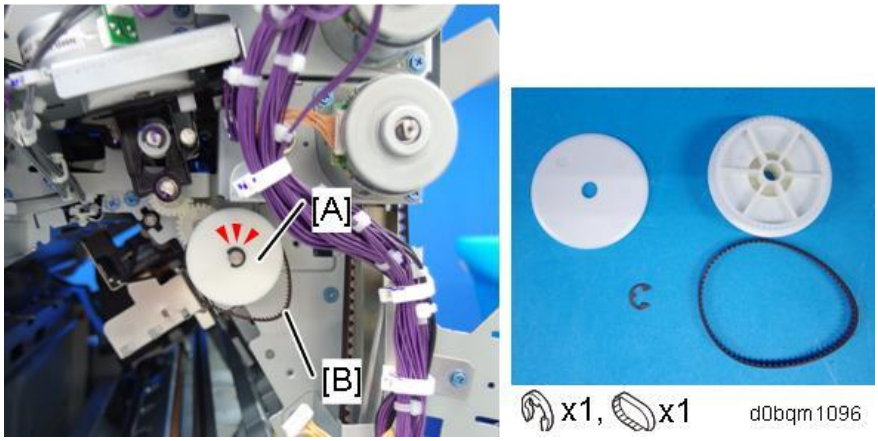
3. Disconnect the staple move HP sensor [A], and then remove the screws from the front side cover.



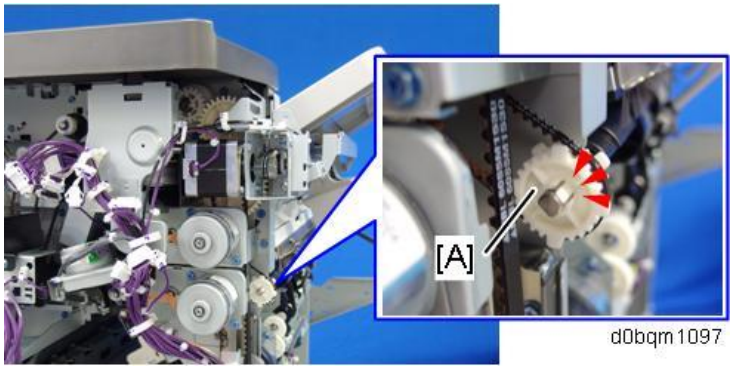
4. Remove the pressure release motor bracket [A] from the rear side of the finisher.



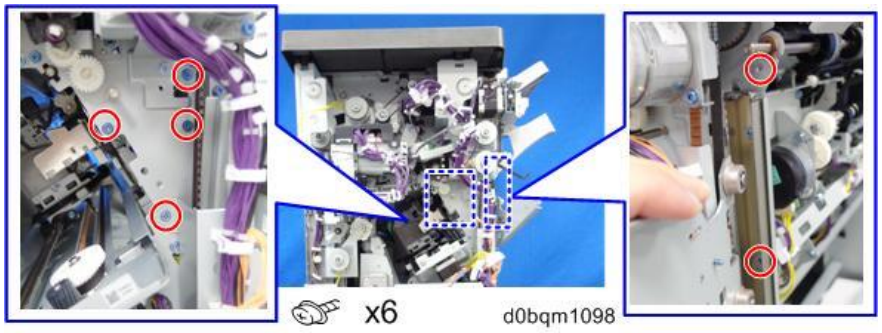
5. Remove the gear [A] and timing pulley [B] from the rear side of the finisher.



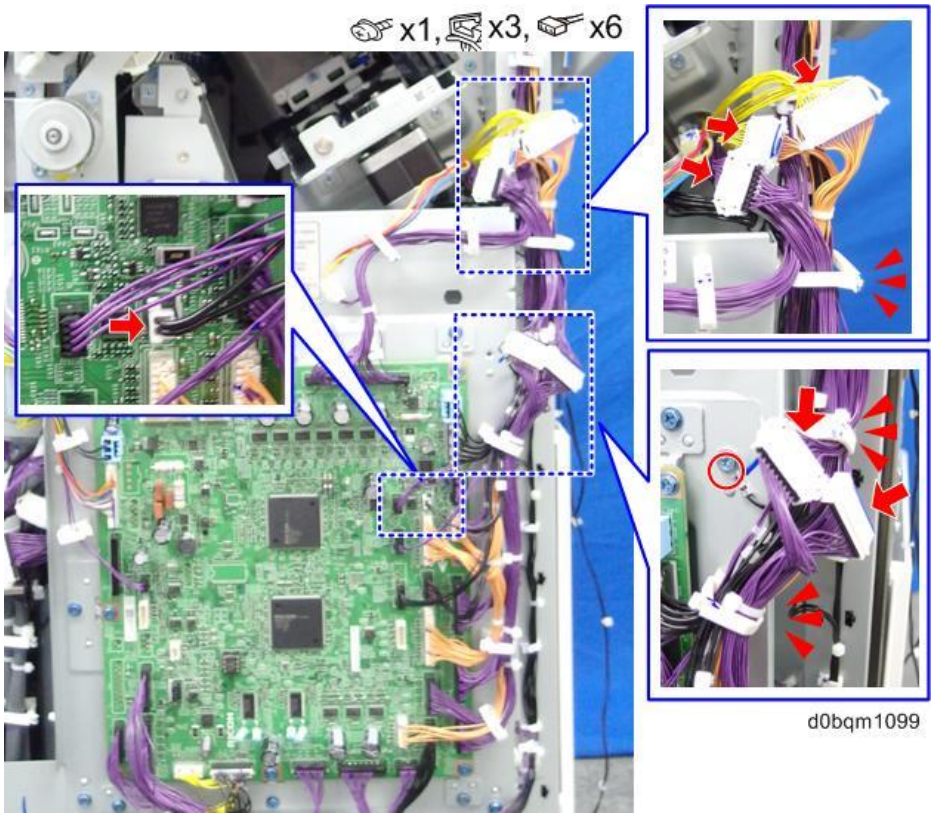
6. Remove the pulley [A] from the rear side of the finisher.



7. Remove 6 screws from the rear side of the finisher.

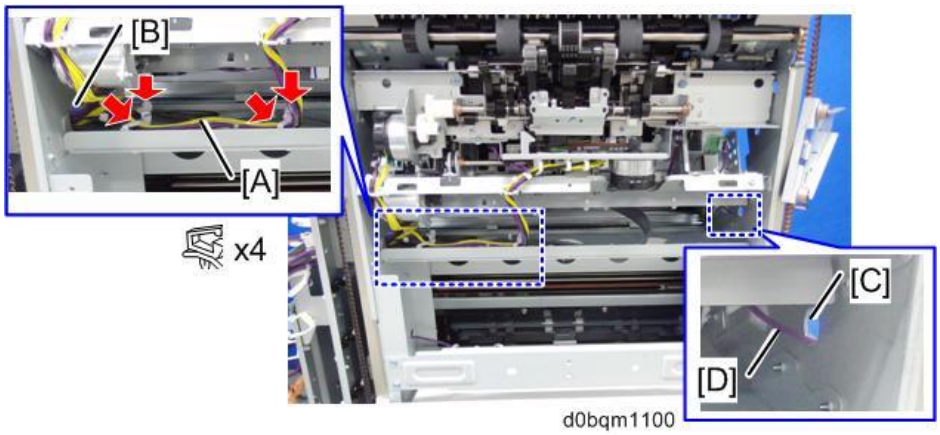


8. Remove the main board, ground wire, connectors, and clamps.



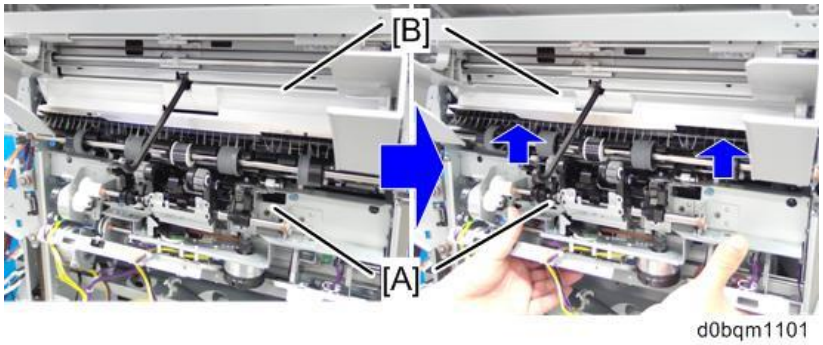
9. Remove the 4 clamps, and then pull the harness [A] out through the hole [B] on the left side of the finisher.

10. Pull the harness [C] out through the hole [D] on the left side of the finisher.



11. Remove the stapler unit. (Stapler Unit)

12. Lifting the corner stapling unit [A], push up the paper exit guide unit [B].



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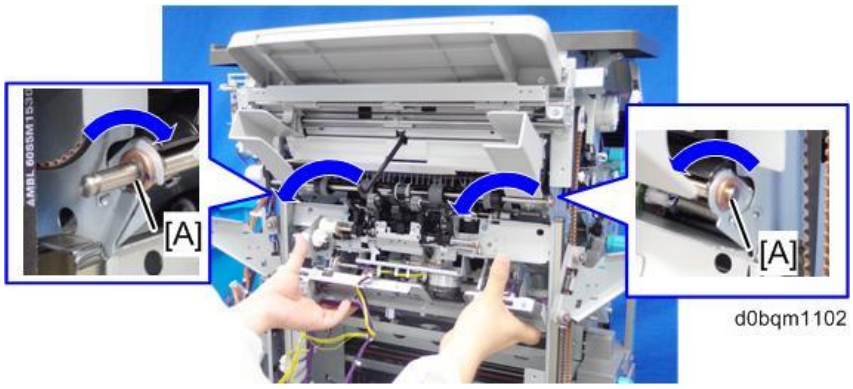
13. Remove the bearings on the sides [A] from the cutouts on the metal plate.



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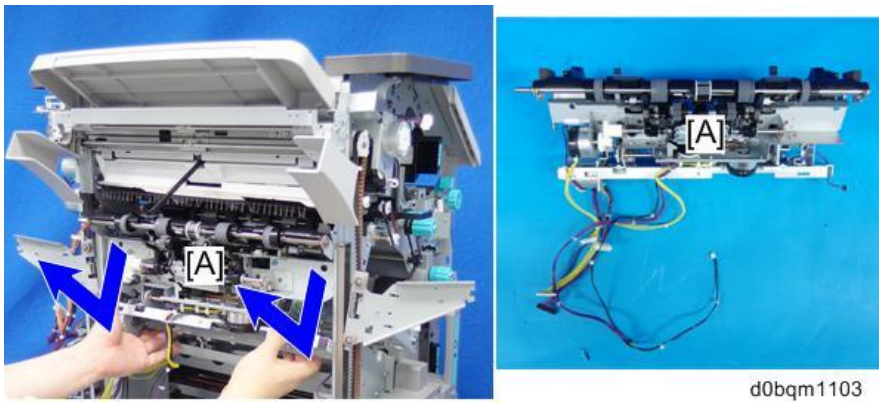
14. Remove the corner stapling unit [A].



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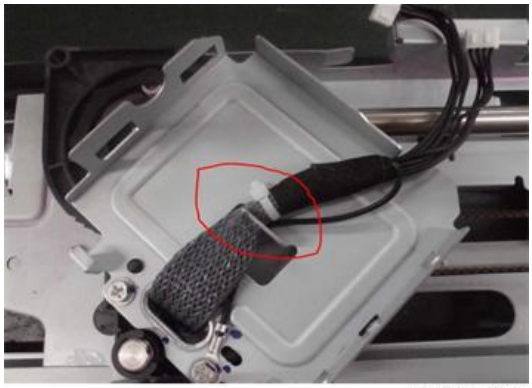
Important

When removing the stapler unit, make sure to leave the harness of stapler unit is hooked at the position with red circle as shown below.



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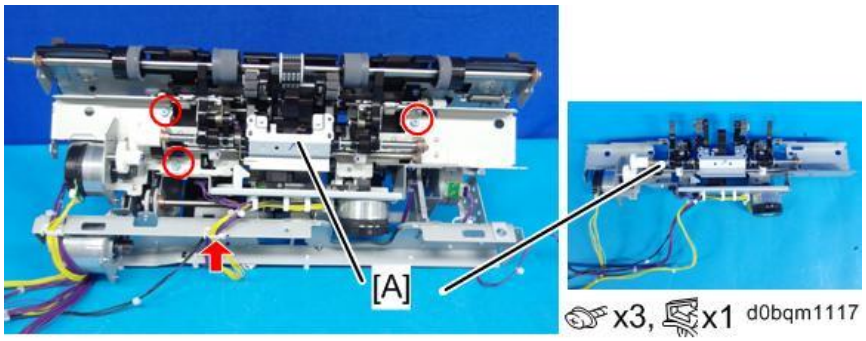
Trailing Edge Alignment Unit

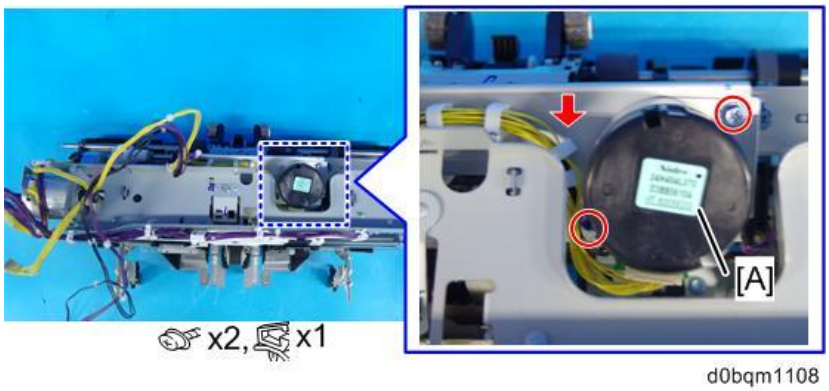
1. Remove the corner stapling unit. (Corner Stapling Unit)
2. Remove the trailing edge alignment unit [A].



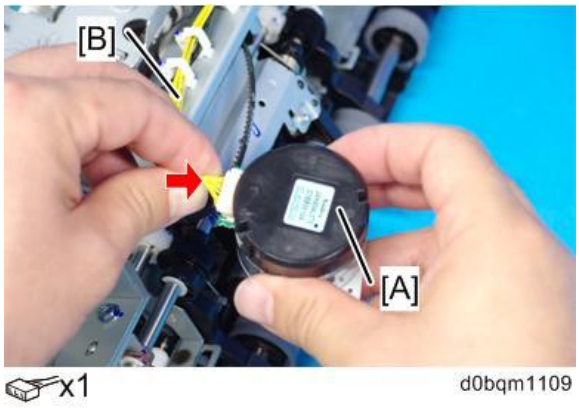
Main Unit (Motors)

Stacking Sponge Roller Lift Motor (DCM6)

1. Remove the trailing edge alignment unit from the corner stapling unit (Trailing Edge Alignment Unit).
2. Remove the Stacking Sponge Roller Lift Motor (DCM6) [A].



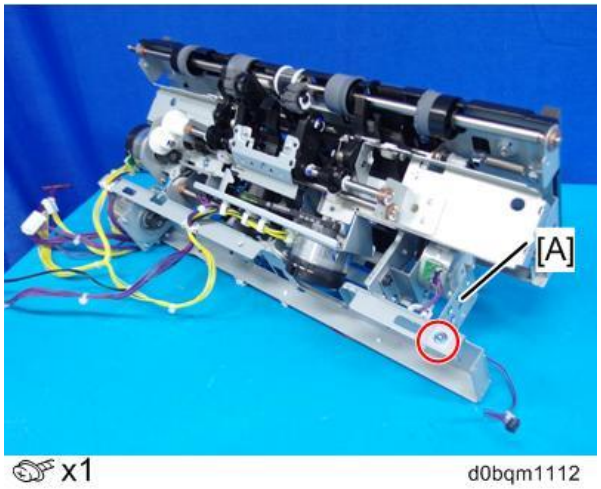
3. Disconnect the harness [B] from the Stacking Sponge Roller Lift Motor (DCM6) [A].



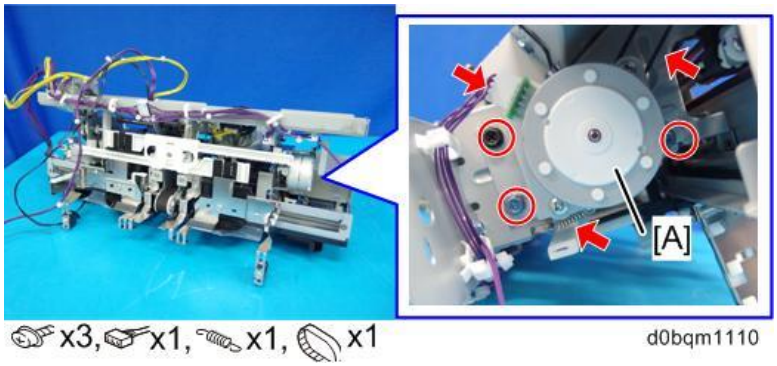
Leading Edge Guide Motor (STM6)

1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).

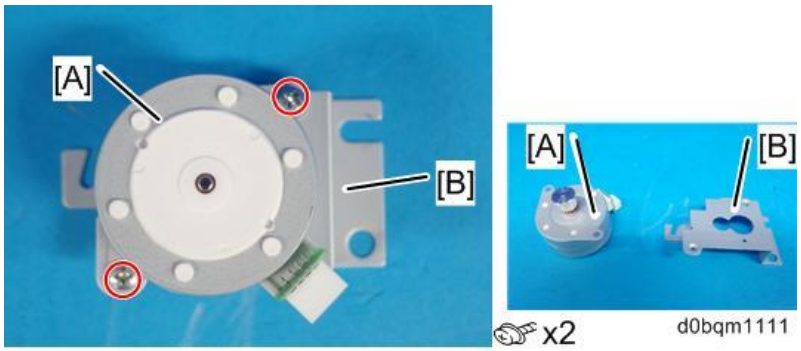
2. Remove the bracket [A].



3. Remove the Leading Edge Guide Motor (STM6) [A] with bracket.



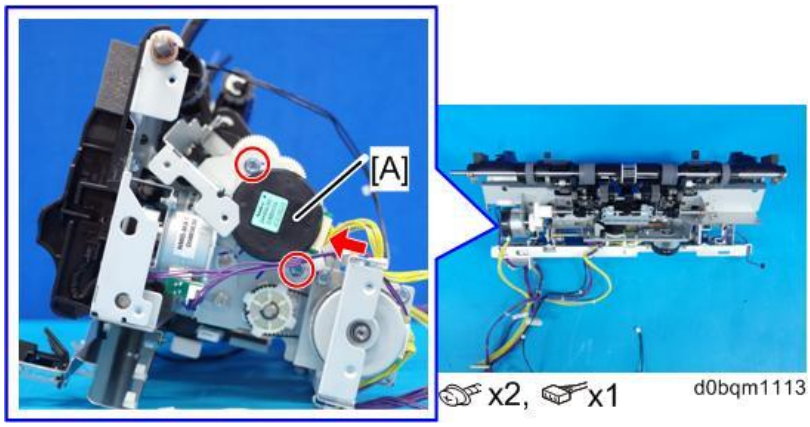
4. Remove the Leading Edge Guide Motor (STM6) [A] from the bracket [B].



Paper Stacking Holder Motor (DCM8)

1. Remove the corner stapling unit (Corner Stapling Unit).

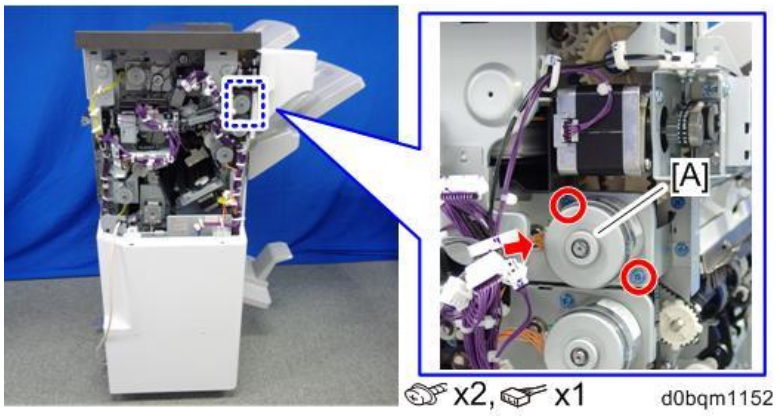
2. Remove the Paper Stacking Holder Motor (DCM8) [A].



Exit Motor (DCM4)

1. Remove the rear upper cover (Rear Upper Cover, Rear Lower Cover).

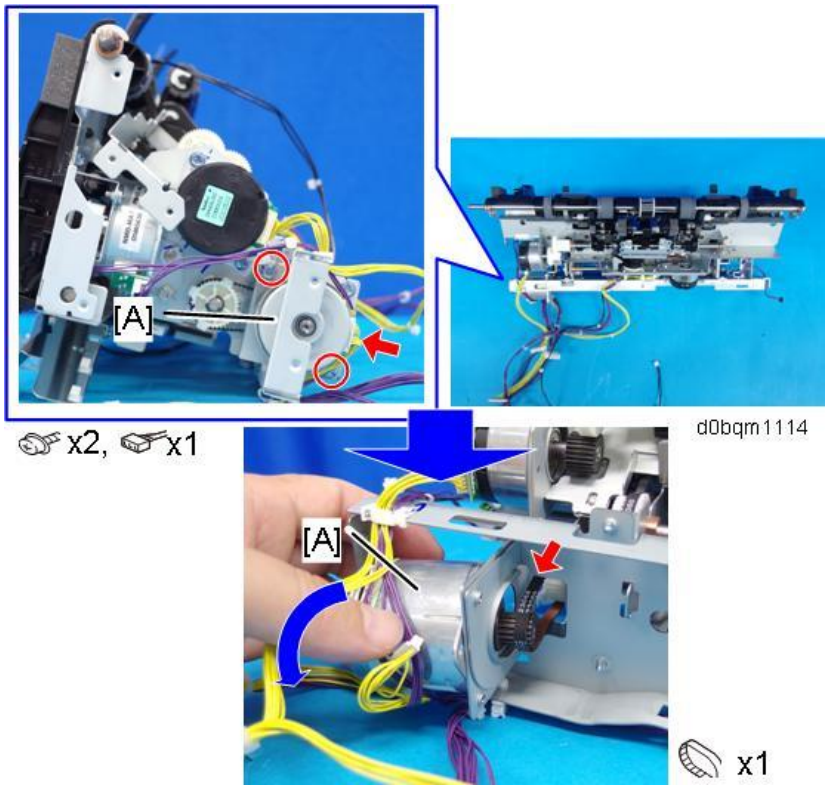
2. Remove the Exit Motor (DCM4) [A].



Feed-out Belt Motor (DCM7)

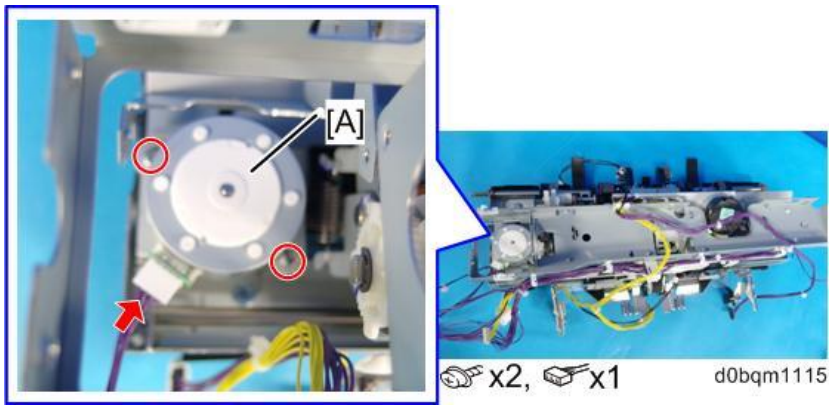
1. Remove the corner stapling unit (Corner Stapling Unit).

2. Remove the Feed-out Belt Motor (DCM7) [A].



Jogger Motor (STM1)

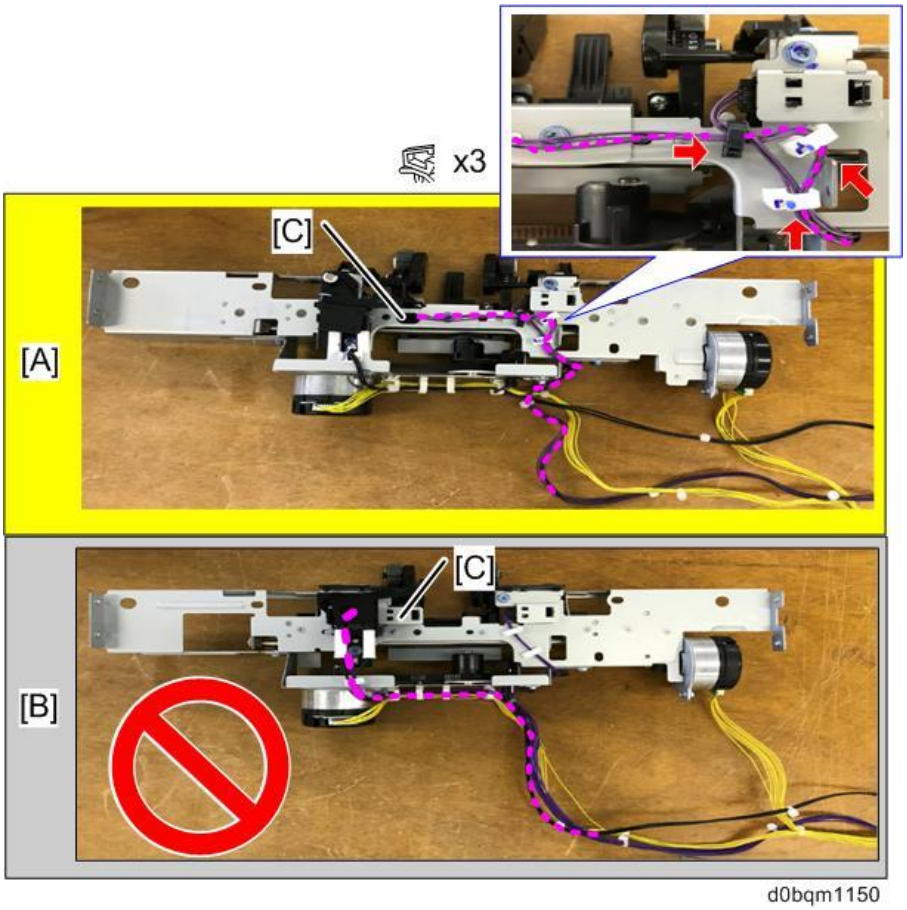
1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).
2. Remove the feed out motor (Feed-out Belt Motor (DCM7)).
3. Remove the Jogger Motor (STM1) [A].



Main Unit (Sensors)

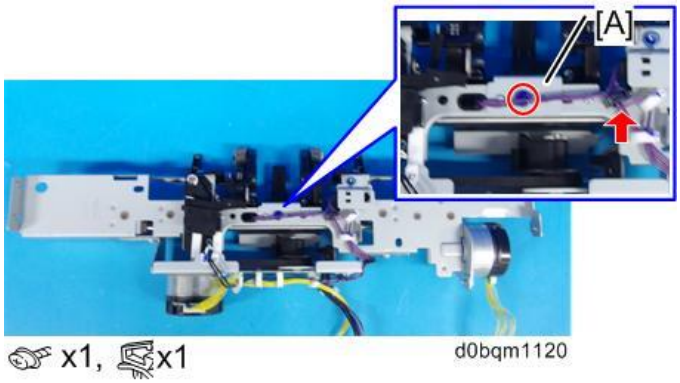
Important

- When you release the harness around the shift tray paper sensor [C] for replacing parts such as the sensors on the trailing edge alignment unit, be sure to route the harness as shown in the following figure [A]. (The sensor layout and harness routing has changed from the previous machine [B], so be careful not to route the harness as shown in the following figure [B].)

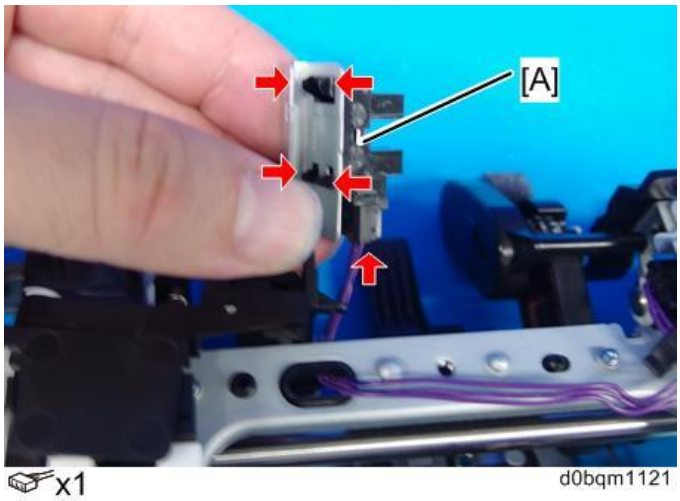


Shift Tray Paper Height Sensor (S35)

1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).
2. Turn over the trailing-edge alignment unit, and then remove the shift paper height sensor together with the bracket [A].

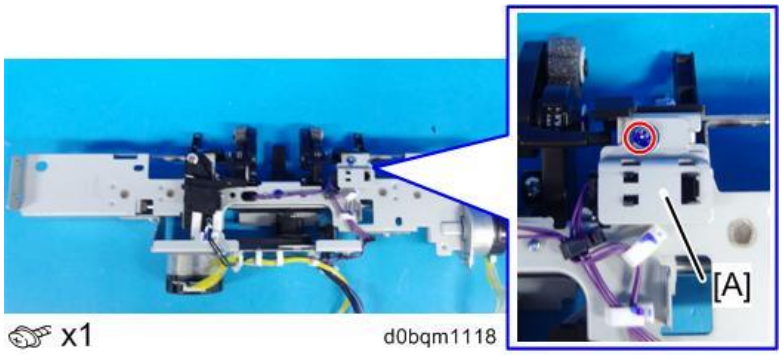


3. Remove the shift paper height sensor (S35) [A].

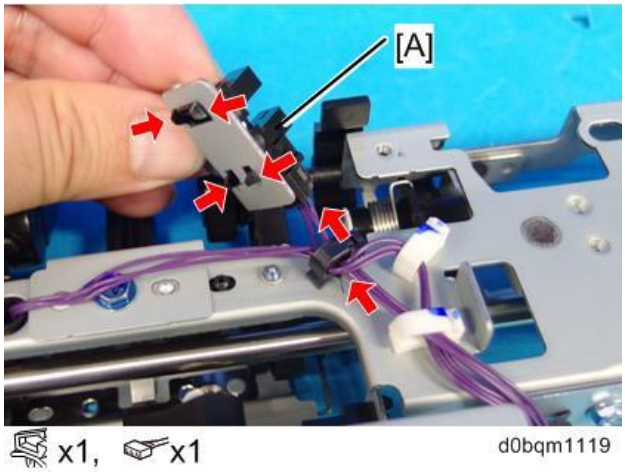


Paper Stacking Holder HP Sensor (S24)

1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).
2. Turn over the trailing-edge alignment unit, and then remove the Paper Stacking Holder HP Sensor (S24) together with the bracket [A].



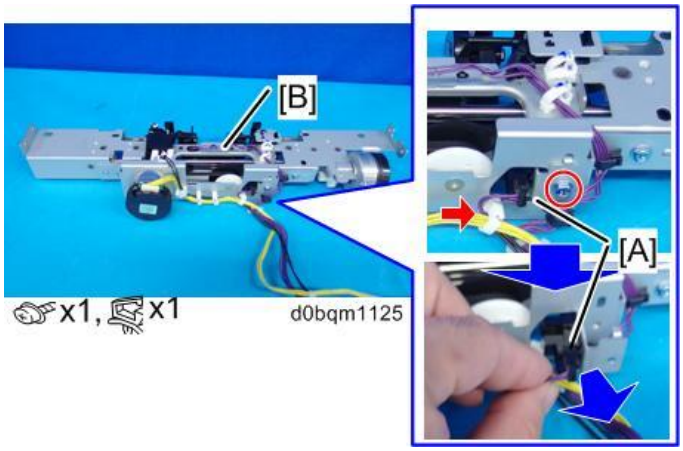
3. Remove the Paper Stacking Holder HP Sensor (S24) [A].



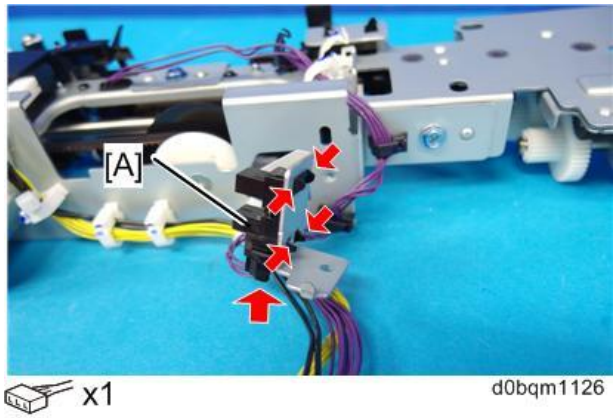
Stacking Sponge Roller HP Sensor (S32)

1. Remove the corner stapling unit (Corner Stapling Unit).

2. Remove the Stacking Sponge Roller HP Sensor (S32) together with the bracket [A] from the corner stapling unit [B].

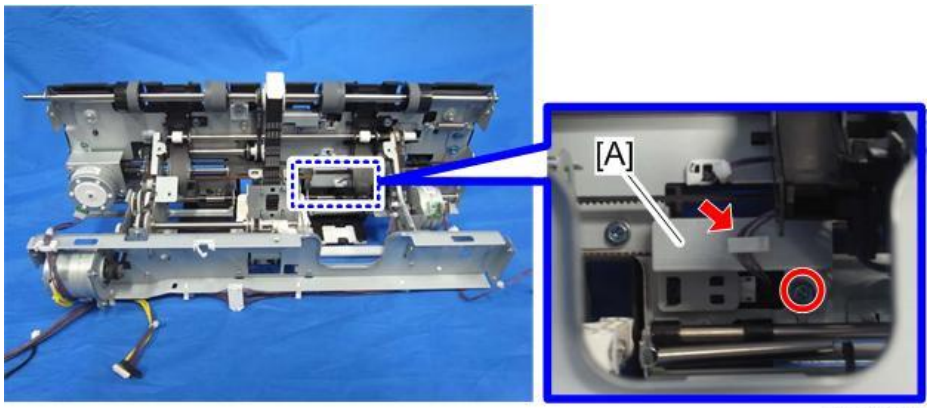


3. Remove the Stacking Sponge Roller HP Sensor (S32) [A] from the bracket.



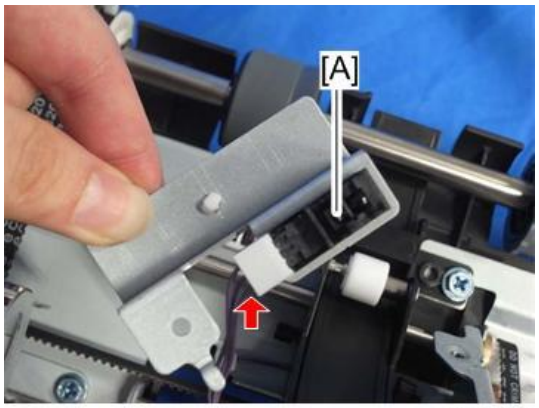
Staple Tray Paper Sensor (S31)

1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).
2. Remove the Staple Tray Paper Sensor (S31) together with the bracket [A] from the part with the trailing-edge alignment unit (x 1, x 1).



d1351295

3. Remove the Staple Tray Paper Sensor (S31) [A] (x 1).

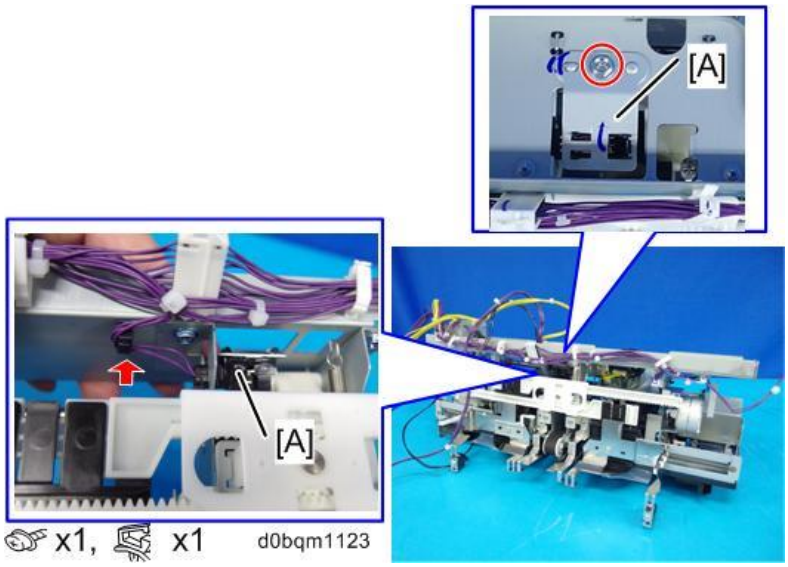


d1351296

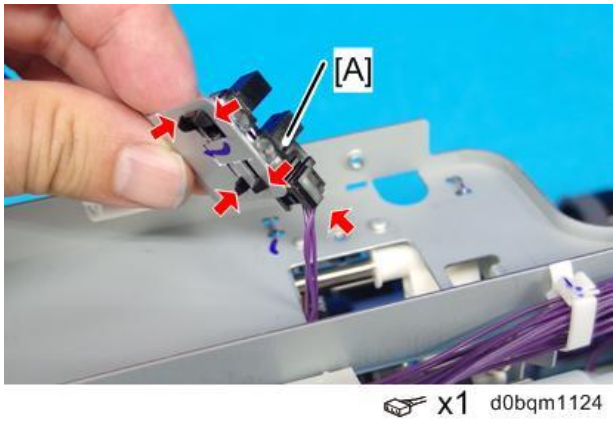
Feed-out Belt HP Sensor (S12)

1. Remove the corner stapling unit (Corner Stapling Unit).

2. Remove the bracket with the Feed-out Belt HP Sensor (S12) [A].



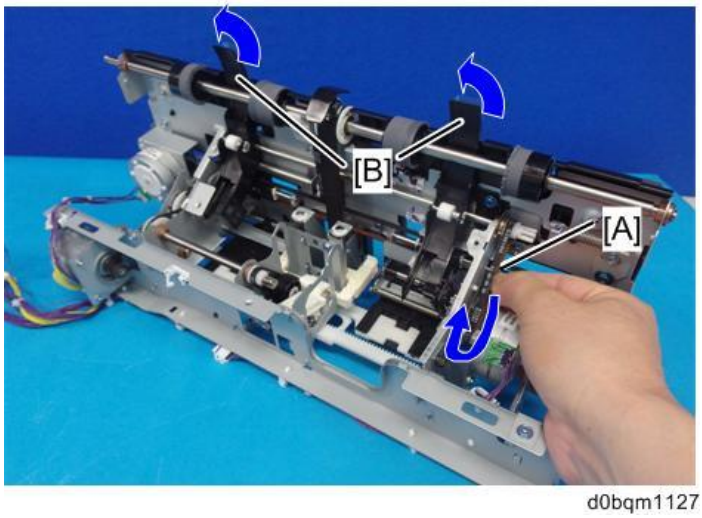
3. Remove the Feed-out Belt HP Sensor (S12) [A] from the bracket.



Leading Edge Guide HP Sensor (S33)

1. Remove the trailing edge alignment unit (Trailing Edge Alignment Unit).

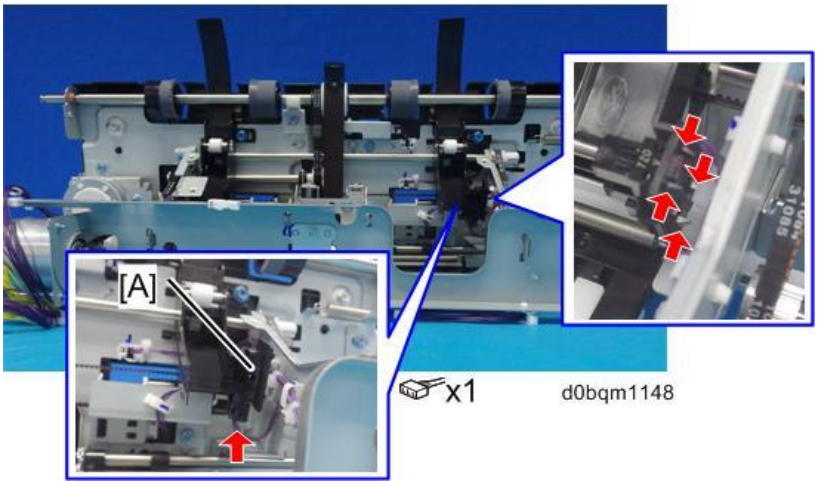
2. On the part with the corner stapling unit, rotate the belt [A] of the leading-edge guide motor until the leading-edge guide [B] is revealed.



3. Remove the Leading Edge Guide HP Sensor (S33) [A].

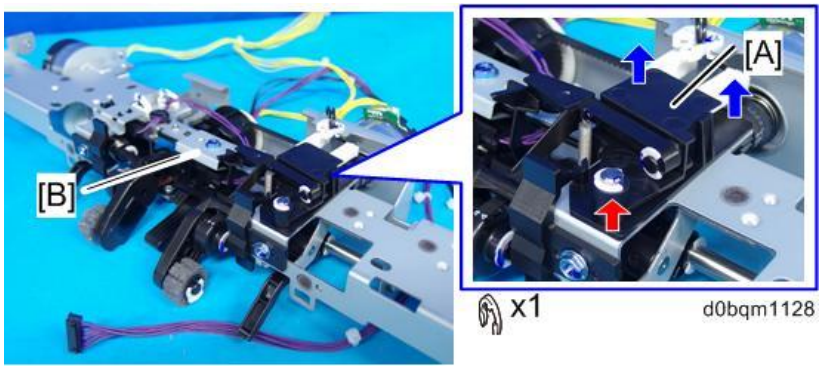
Note

- When you remove the sensor, be sure to release the hook with a tool such as a ratchet screwdriver.

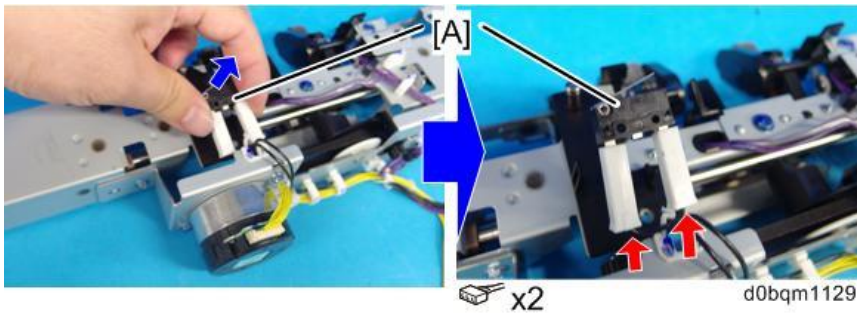


Upper Tray Height Limit Switch (SW3)

1. Remove the corner stapling unit (Corner Stapling Unit).
2. Remove the bracket [B], and then remove the lever unit [A].



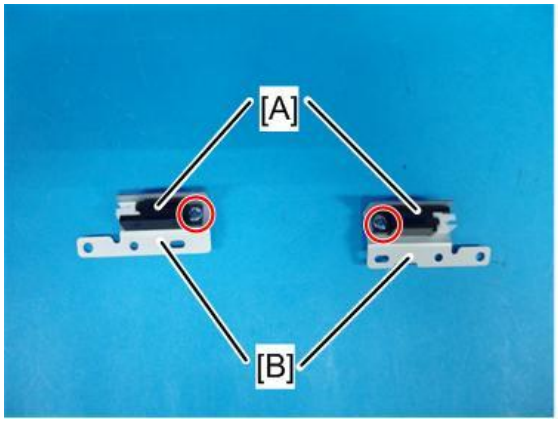
3. Remove the Upper Tray Height Limit Switch (SW3) [A].



Sub Height Sensor (S51) (S52)

1. Remove the end fence. (End Fence)

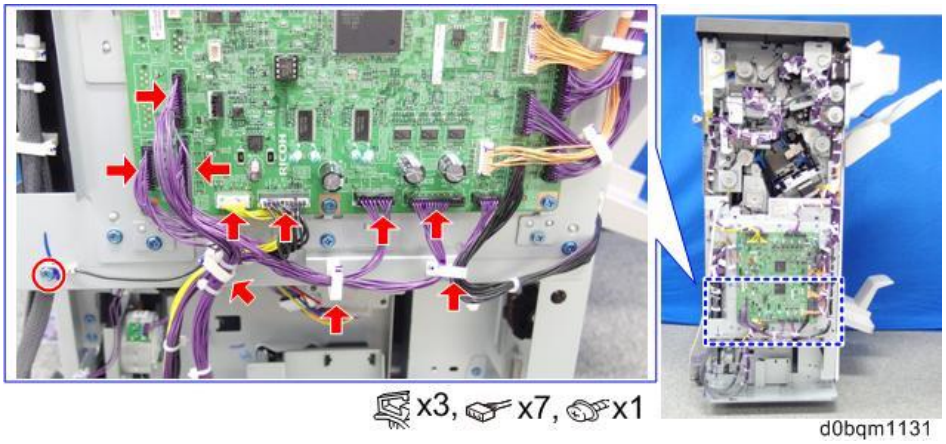
2. Remove the brackets [B] from the sub-height sensors (S51) (S52)[A] beneath the end fence.



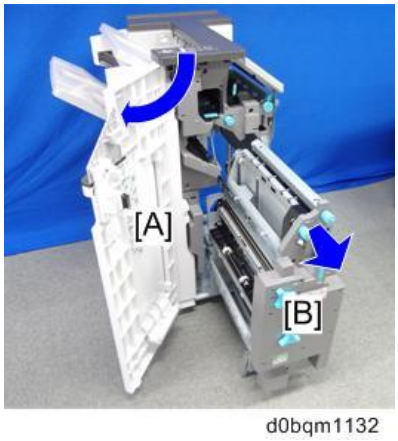
Saddle Stitch Unit (Motors)

Saddle Stitch Unit

1. Remove the following covers.
   - Rear Upper Cover (Rear Upper Cover, Rear Lower Cover)
   - Rear Lower Cover (Rear Upper Cover, Rear Lower Cover)
2. Remove the harnesses and ground wire from the saddle stich unit.



3. Open the front door [A] and pull out the saddle stitch unit [B].



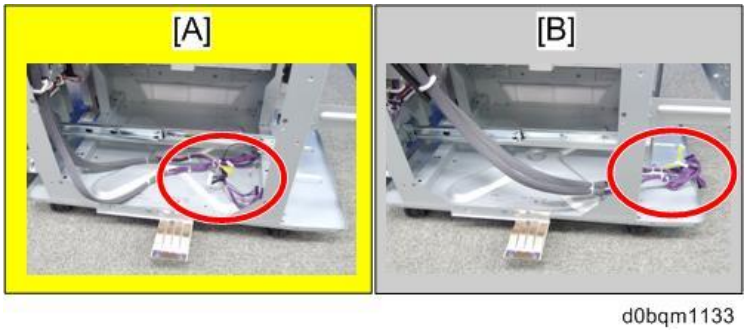
Note

After pulling out the saddle stitch unit, be sure to keep the harnesses within the interior of the finisher.

If the harnesses protrude, the connectors may become caught between metal plates when removing the saddle stitch unit.

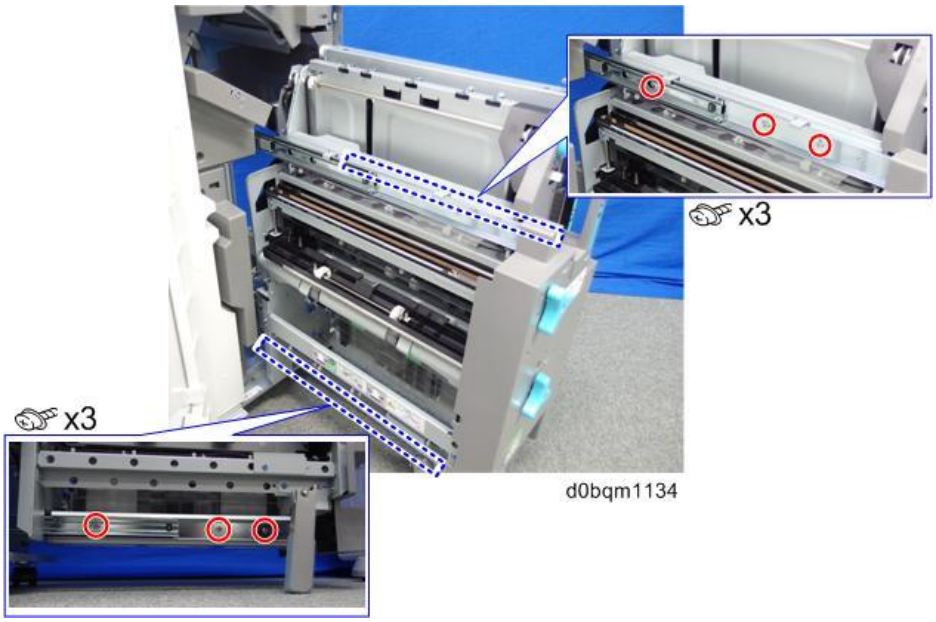
[A]: Harnesses stowed in finisher (correct)

[B]: Harnesses protruding (incorrect)



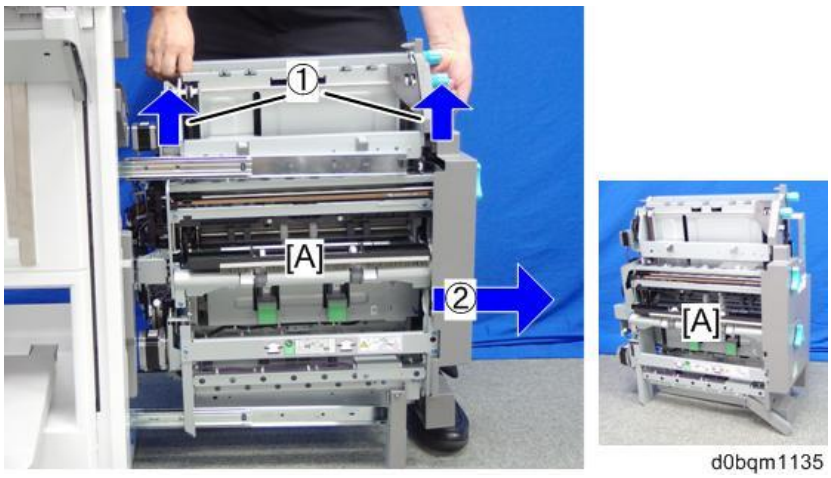
d0bqm1133

4. Remove the screws securing the finisher and saddle stitch unit.



d0bqm1134

5. Lift up to remove the saddle stitch unit [A].

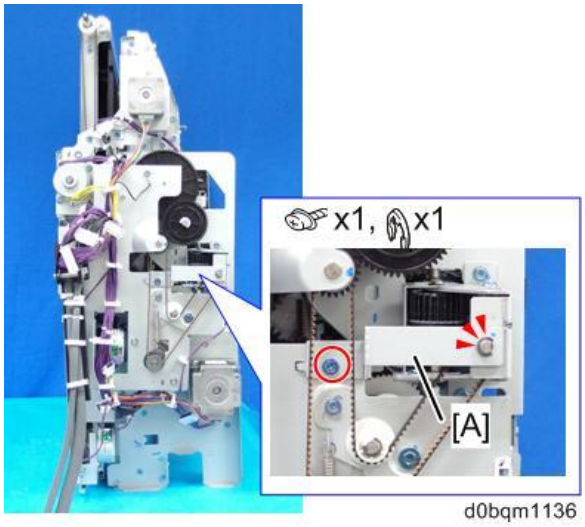


d0bqm1135

Press Fold Motor (STM10)

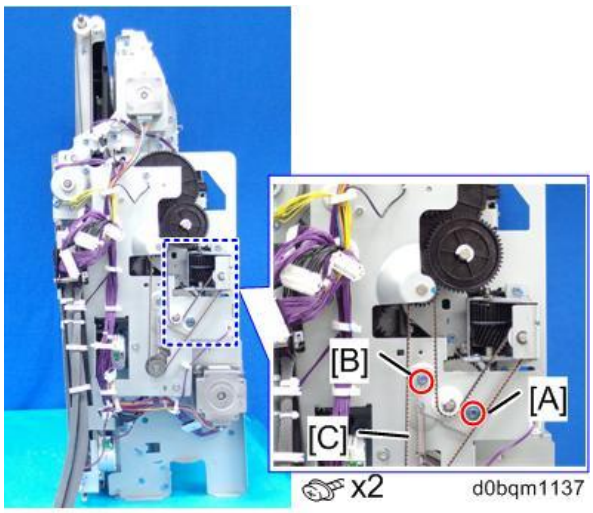
1. Remove the saddle stitch unit (Saddle Stitch Unit).

2. Remove the fixing bracket [A] on the saddle stitch unit.

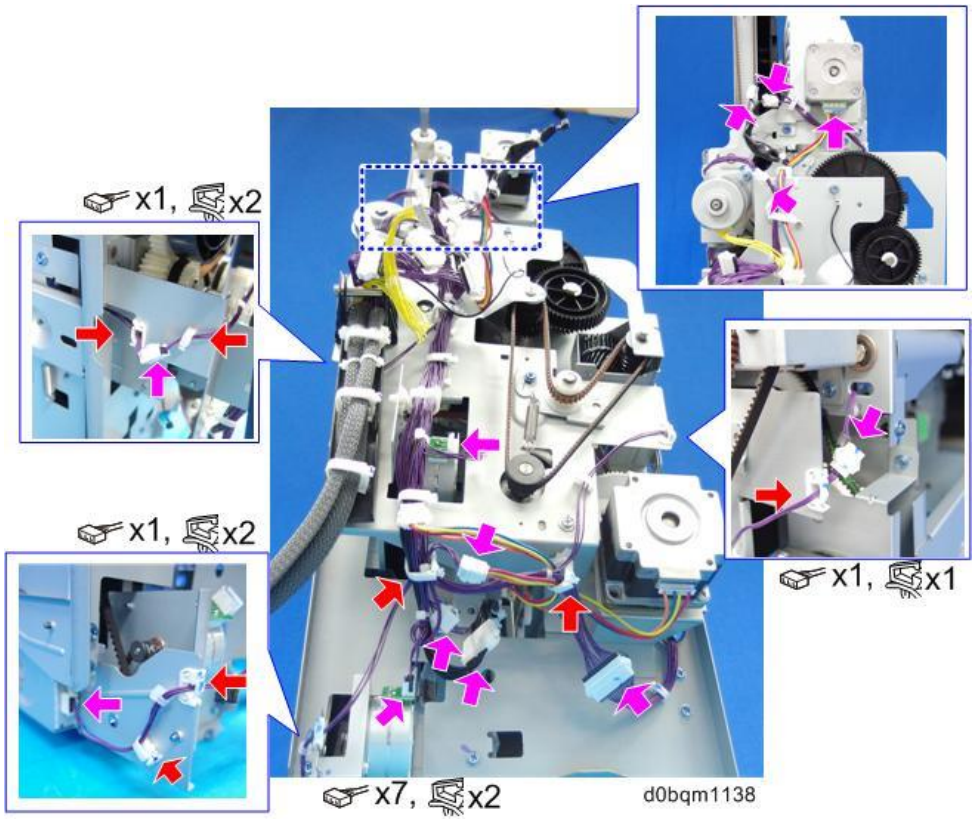


3. Remove the screw [A] shown in the photo below.

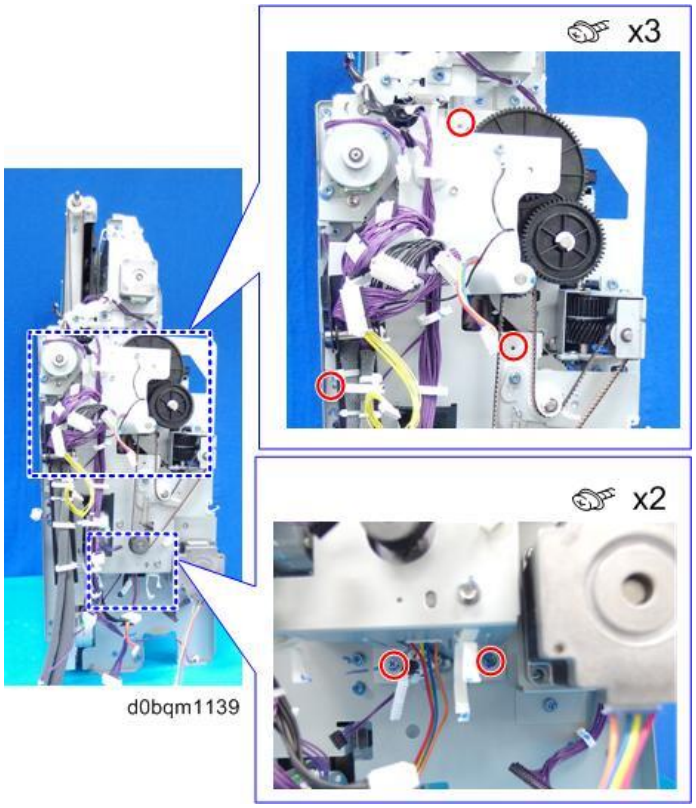
4. Loosen the screw [B] to loosen the Press Fold Motor (STM10) belt [C].



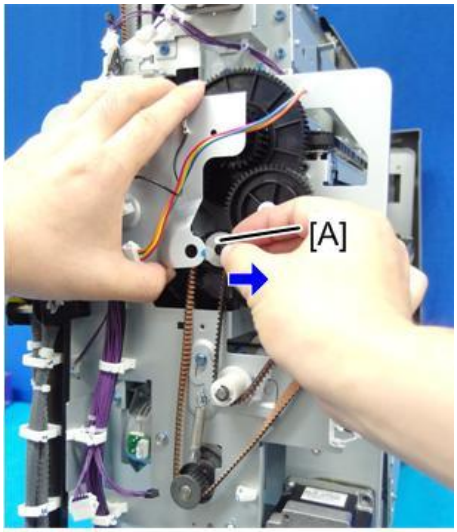
5. Remove the clamps (indicated by red arrows) and connectors (pink arrows) from the Press Fold Motor (STM10) unit.



6. Remove the screws on the Press Fold Motor (STM10) unit [A].



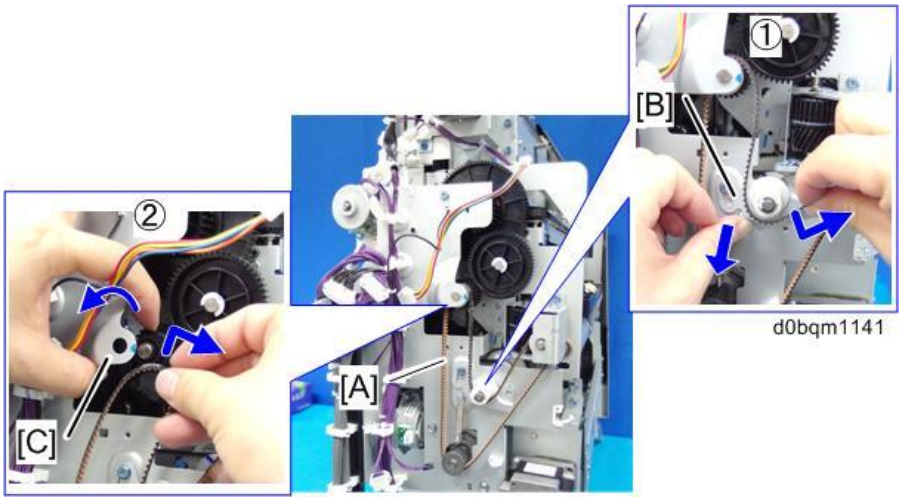
7. Remove the spacer [A] between the gears, taking care not to touch the bracket.



d0bqm1140

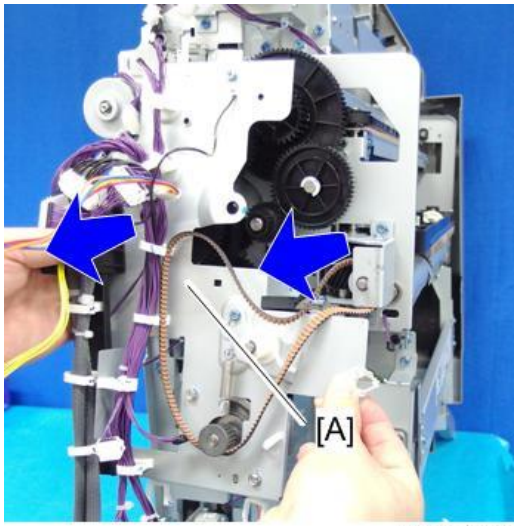
8. Remove the belt [A].

- Pulling down the bracket [B] securing the belt, remove the belt from the gear.
- Remove the belt from the gear, making sure not to touch the bracket [C].



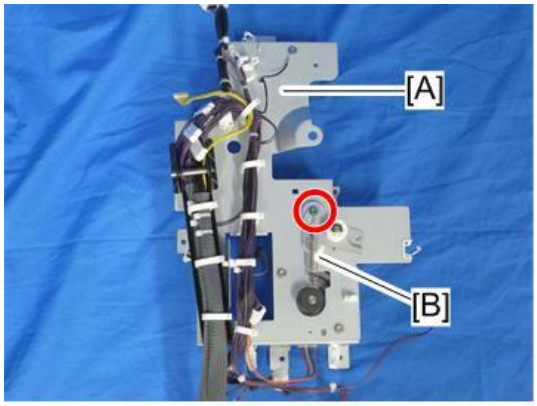
d0bqm1141

9. Remove the Press Fold Motor (STM10) unit [A].



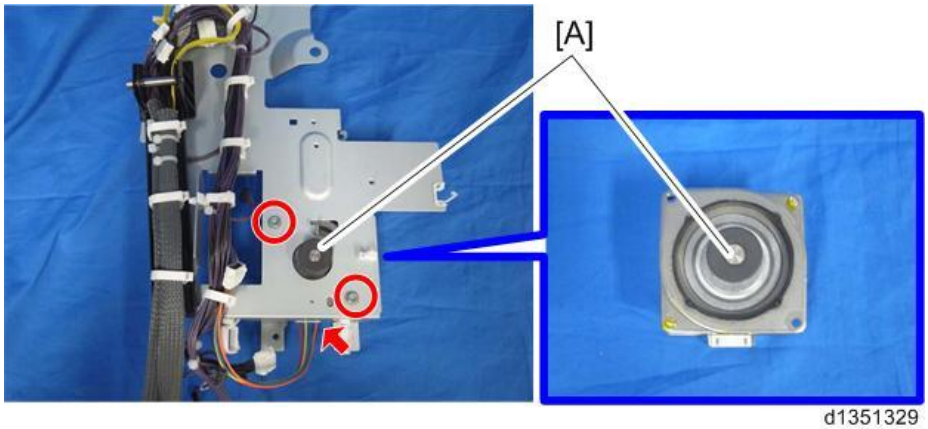
d0bqm1142

10. Remove the spring [B] from the Press Fold Motor (STM10) bracket [A] (x 1, spring x 1).



d1351328

11. Remove the Press Fold Motor (STM10) [A] (x 2, x 1).



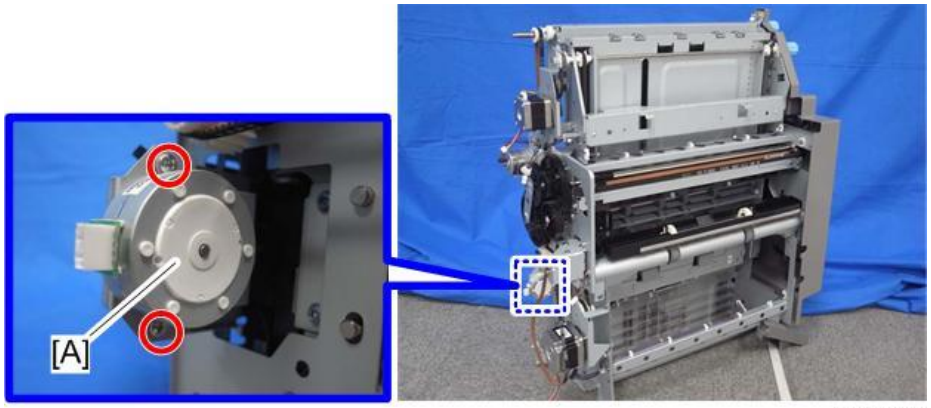
d1351329

Booklet Jogger Motor (STM11)

1. Remove the saddle stitch unit (Saddle Stitch Unit).

2. Remove the press folding motor bracket (Press Fold Motor (STM10)).

3. Remove the Booklet Jogger Motor (STM11) [A] (x 2).

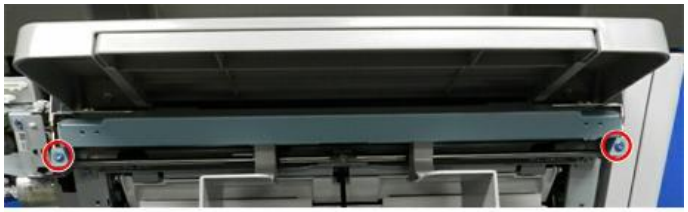


d1351330

Paper Guide Unit

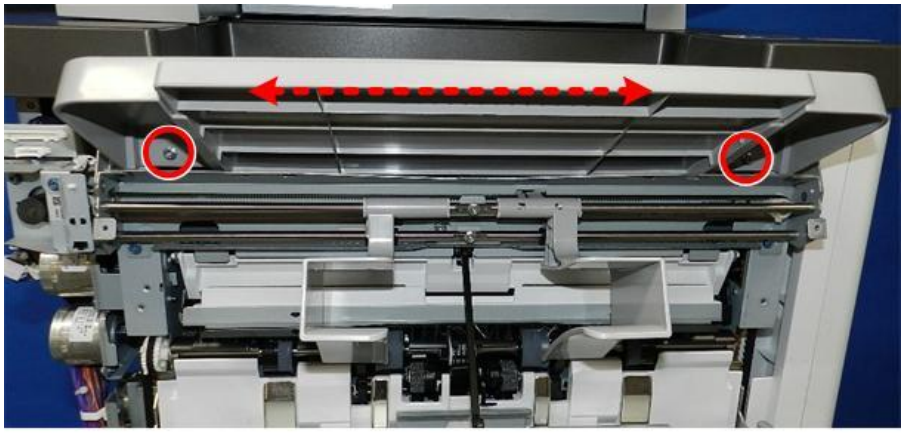
Paper Guide Unit

1. Remove the paper guide covers (Paper Guide Cover)
2. Disconnect the cover support bracket.



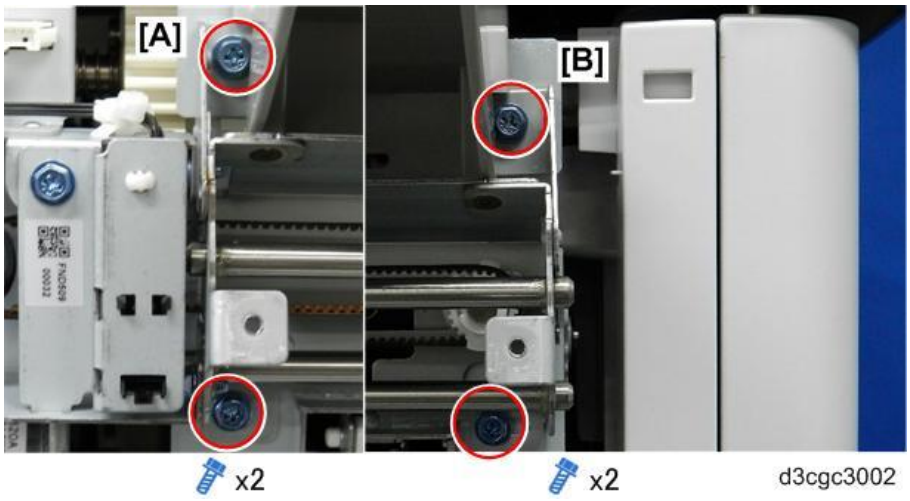
3. Remove the cover support bracket.

4. **Loosen** (do not remove) the screws on both ends of the paper exit. This will loosen the tray so you can move the tray slightly side-to-side in order to remove the bracket screws more easily.

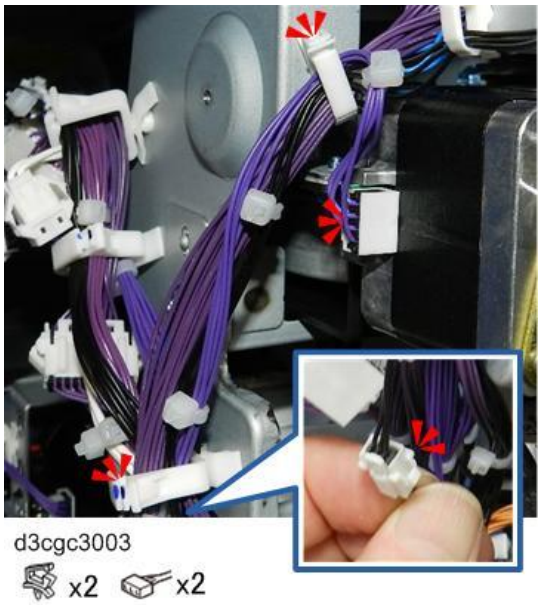


5. Disconnect the rear end of the paper guide unit bracket [A].

6. Disconnect the front end of the paper guide unit bracket [B].

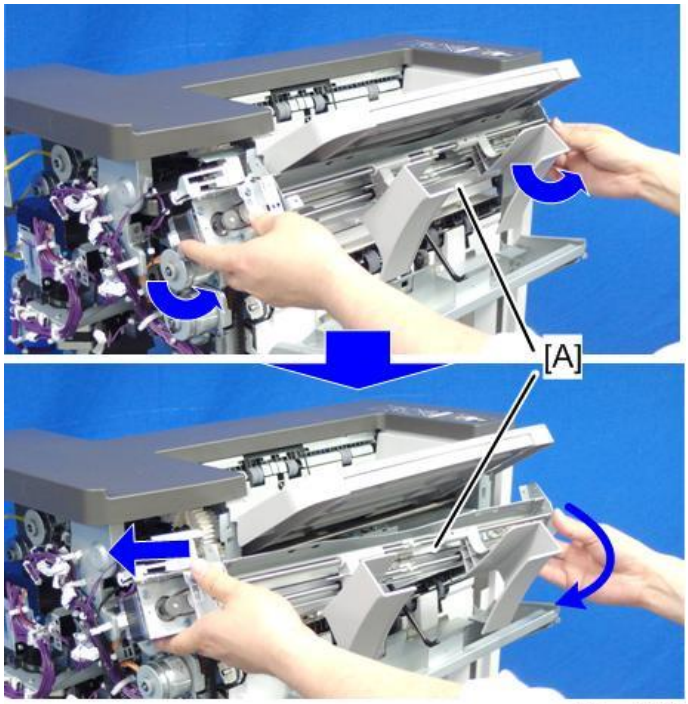


7. At the rear, open the clamps and disconnect the motor and sensor harnesses.

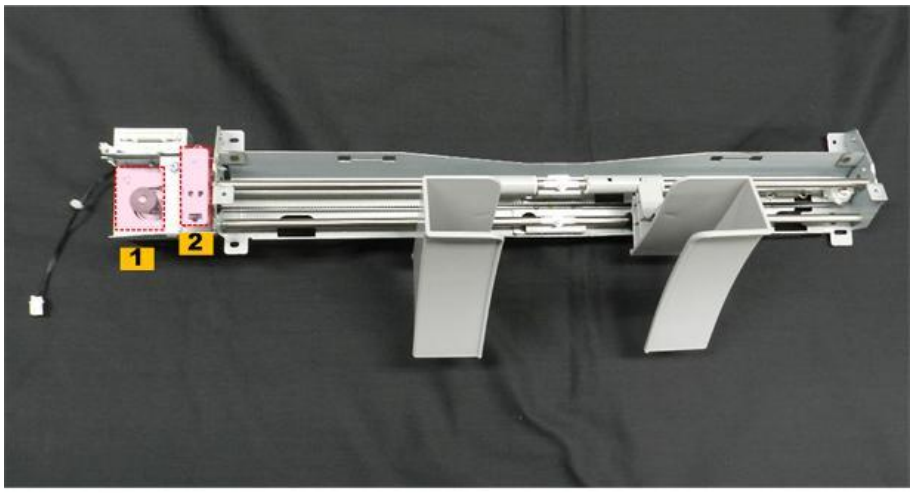


8. Lay the unit [A] on flat clean surface so you can see the paper guide motor [1] and paper guide

position sensor bracket [2].



d0bqm1116

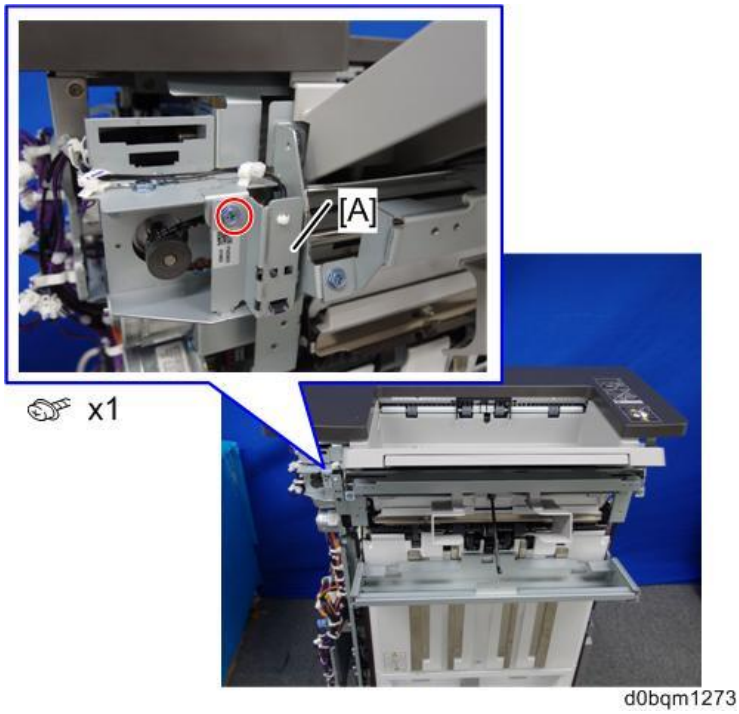


d3cgc3005

Paper Guide HP Sensor (S50)

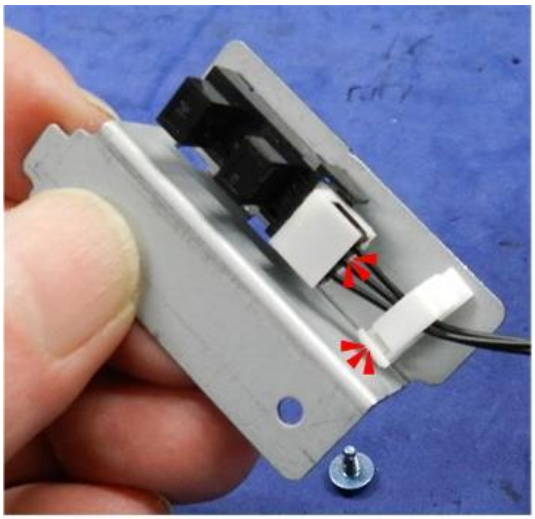
1. Remove the left upper cover. (Left Upper Cover)

2. Remove the bracket [A] with the Paper Guide HP Sensor (S50).



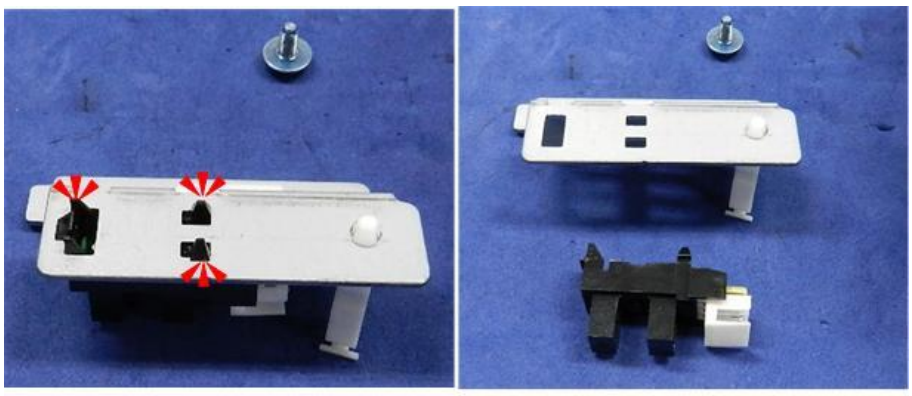
d0bqm1273

3. Open the clamp and disconnect the sensor (x1, x1).



d3cgc3007a

4. Separate the sensor and bracket (x3).



d3cgc3008a

Paper Guide Motor (STM18)

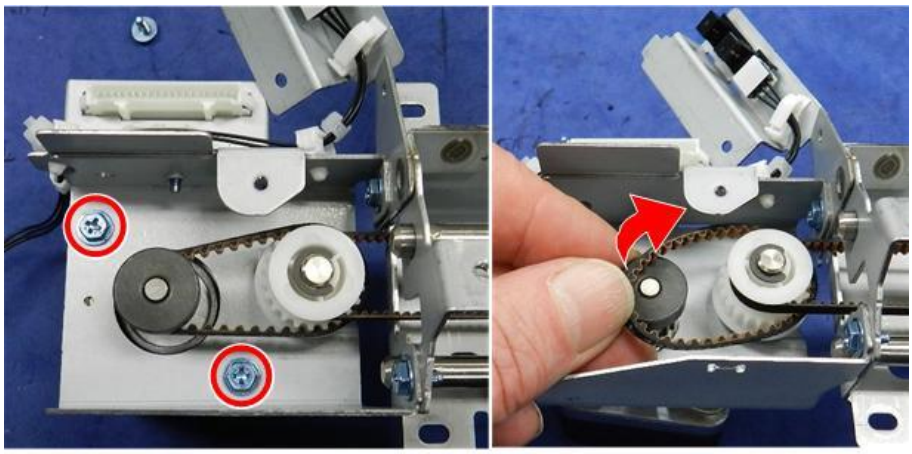
The Paper Guide Motor (STM18) is at [A].

d3cgc3005c

1. Remove the paper guide unit. (Paper Guide Unit)
2. Remove sensor bracket (x1).

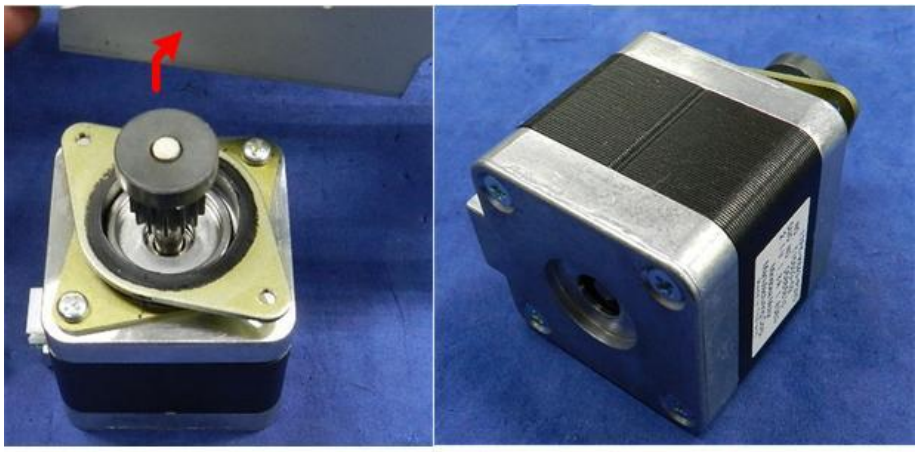
d3cgc3006a

3. Unfasten the motor, and disconnect the belt (x2, x1).



d3cgc3010a

4. Remove the Paper Guide Motor (STM18).



d3cgc3011

Note

- When you re-install the motor, make sure that the connector is pointing to the back of the unit.

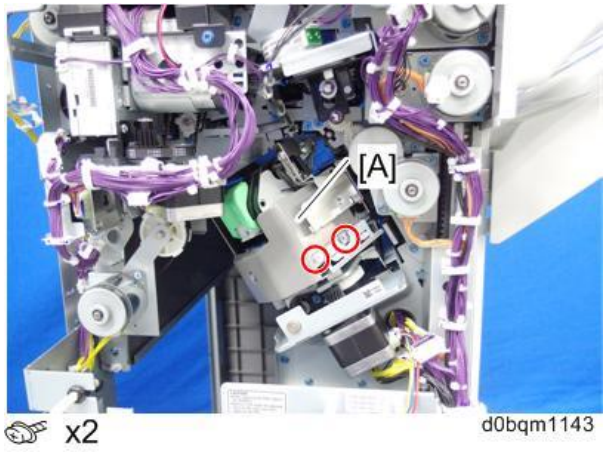
d3cgc3012

Stapler Unit

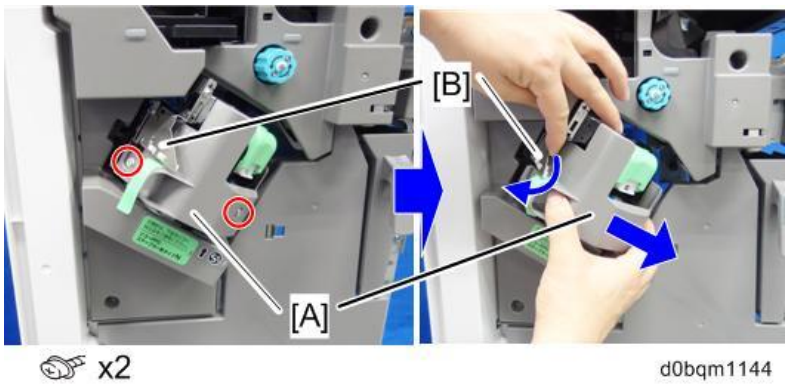
Stapler Unit

1. Remove the rear upper cover. (Rear Upper Cover, Rear Lower Cover)
2. Open the front door and push the stapler [A] to the rear side of the finisher.

3. At the rear side, remove the screw circled in the photo below from the stapler [A].

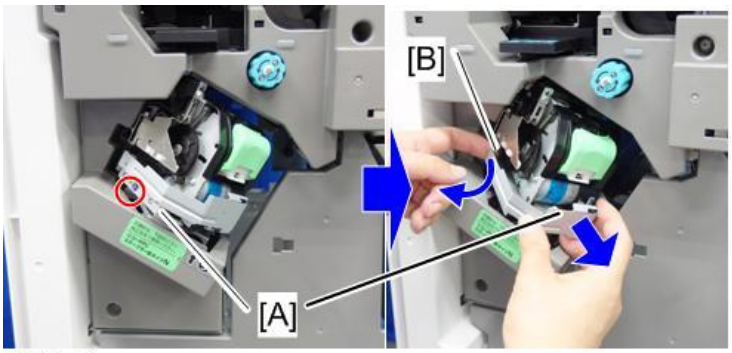


4. Push the stapler to the front side of the finisher.
5. Remove the inner upper cover [A].
   Be sure to open the paper guide [B] and release its catches on the cover.



6. Remove the fixing bracket [A] of the stapler unit.
   - Opening the trailing edge of the bracket [B], pull it out to the front while releasing the catch of the boss.

- When attaching the stapler unit, make sure that the hook on the back of the cover is inserted to the cutout of the frame firmly.



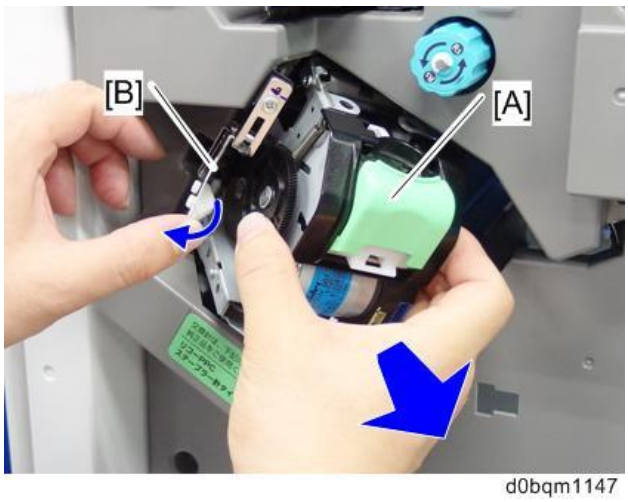
x1 d0bqm1145

7. Release the clamp, and then remove the 2 connectors.

x1, x1 d0bqm1146

8. Remove the stapler unit [A].

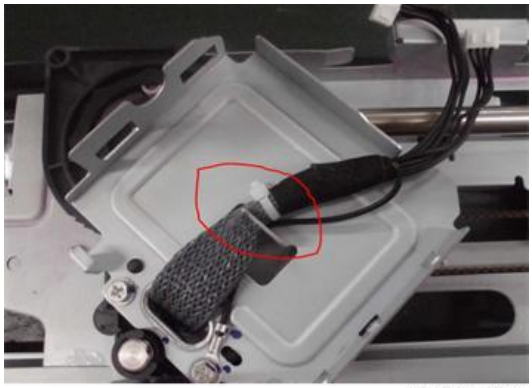
Be sure to open the paper guide [B] and its catches on the unit.



d0bqm1147

Important

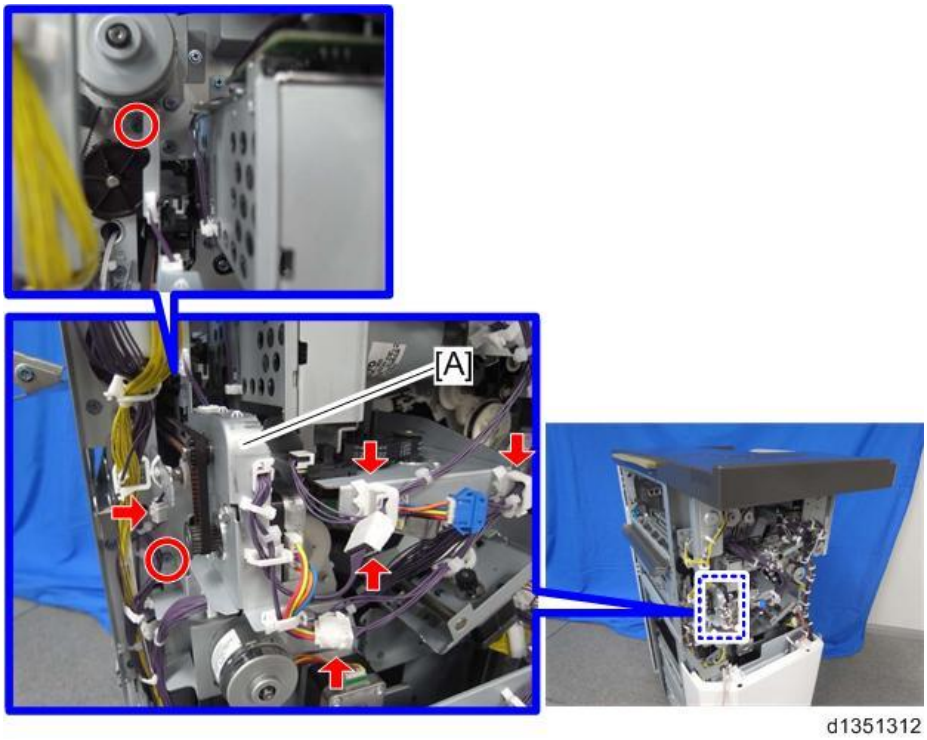
When removing the stapler unit, make sure to leave the harness of stapler unit is hooked at the position with red circle as shown below.



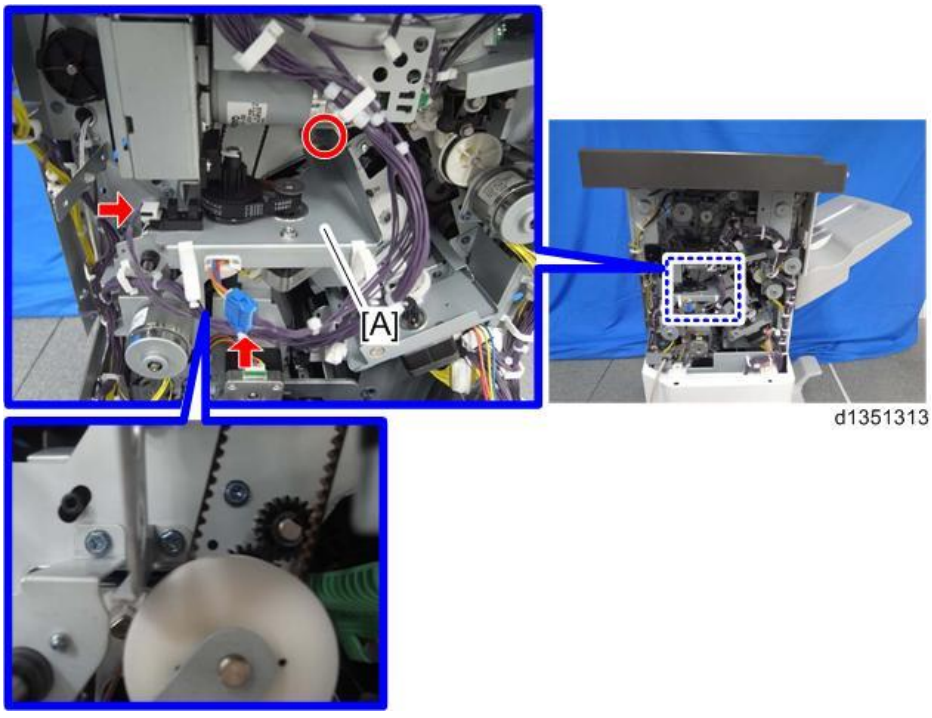
d0bqm0545

Punch Unit

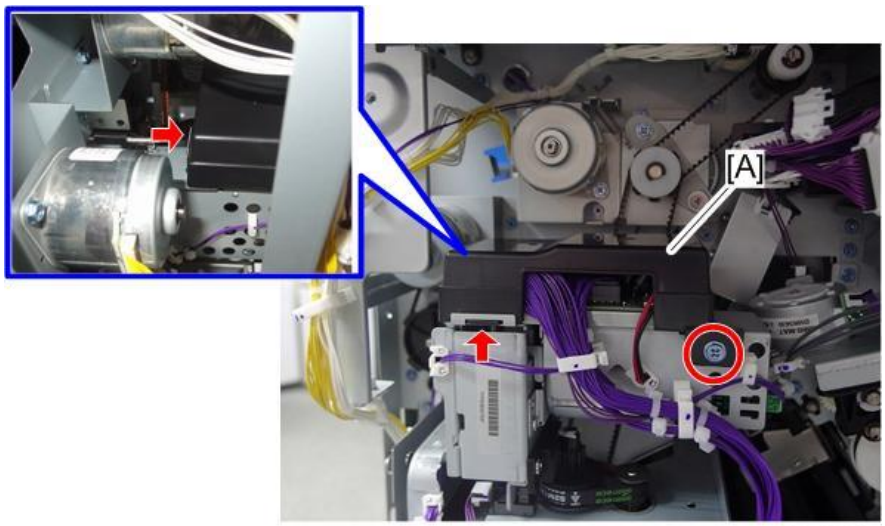
1. Remove the following covers.
   - Rear Upper Cover (Rear Upper Cover, Rear Lower Cover)
   - Rear Lower Cover (Rear Upper Cover, Rear Lower Cover)
2. Remove the side-to-side detection unit [A] (x 2, x 3, x 2).



3. Stepper motor bracket [A] (x 1, x 2)



4. Remove punch unit controller board cover [A] (x1, x2).



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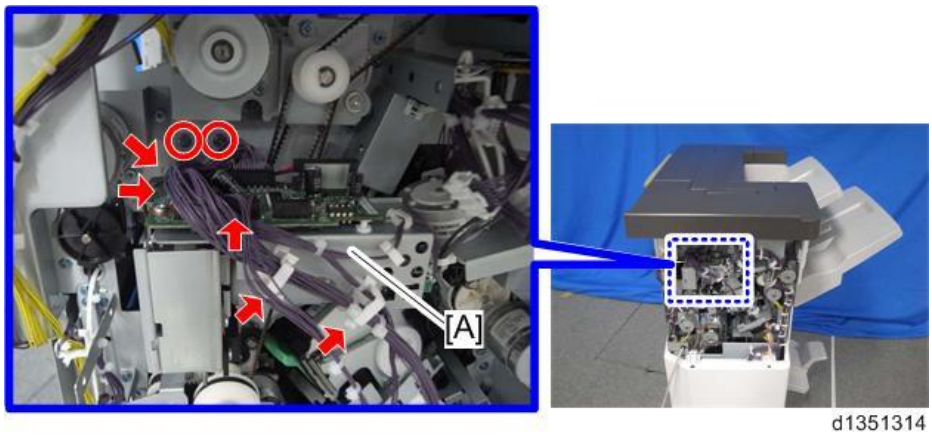
5. Pull out the punch unit [A] (x 2, x 3, x 2).



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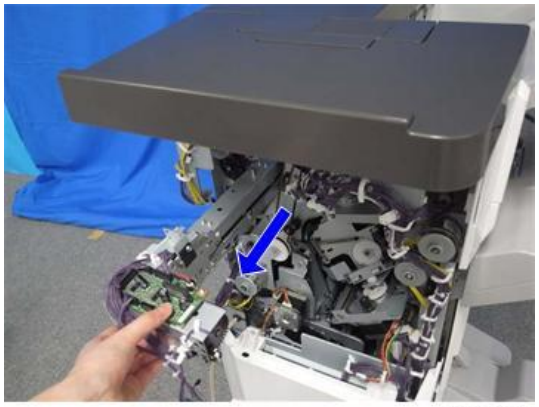

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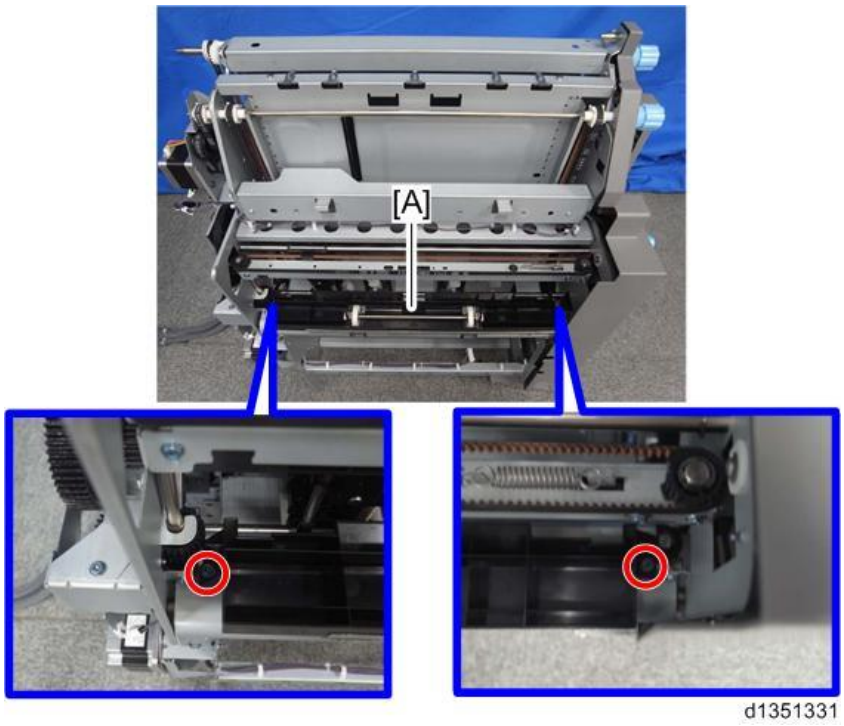
Fold Adjustments

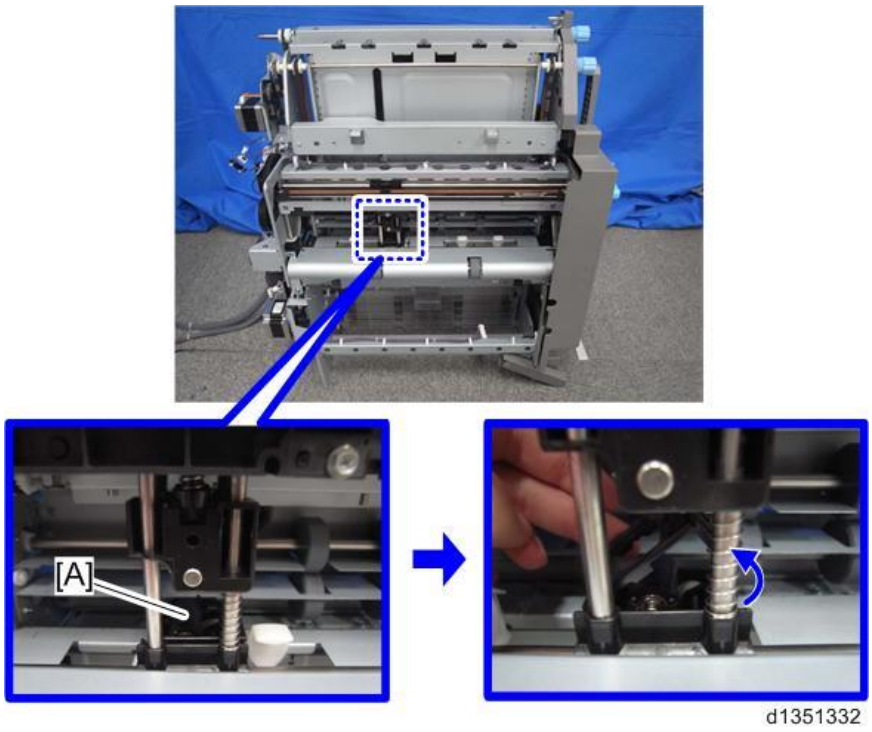
Adjusting the Alignment of the Flat Fold Rollers

To adjust the folding strength, adjust the difference in vertical alignment between the flat fold rollers.

1. Remove the saddle stitch unit (Saddle Stitch Unit).
2. Remove the fold plate bracket [A] (x 2)

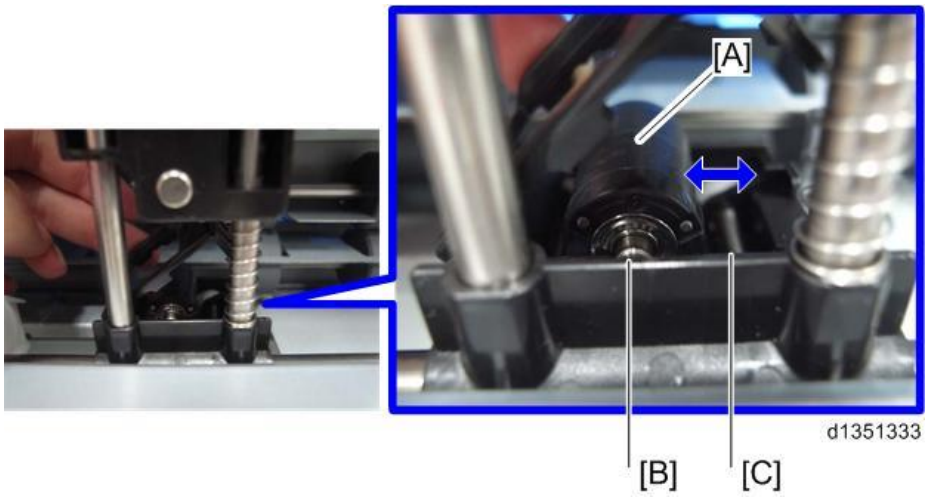


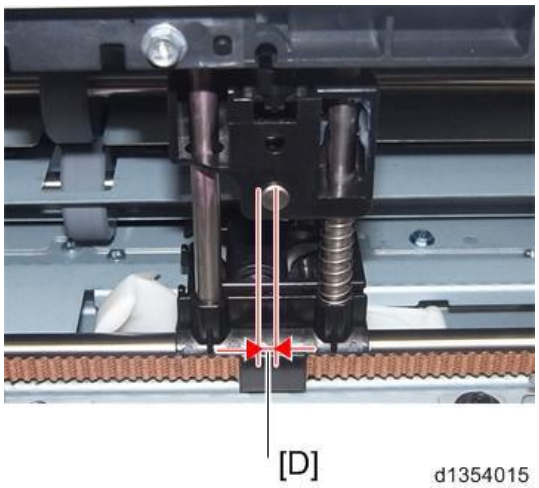
3. Open the bracket [A] of the flat fold roller.



4. Adjust the position of the flat fold lower roller [A] to adjust the difference in alignment between the

upper and lower rollers of the flat fold booklet unit.





Note

- With the factory default, the upper and lower rollers of the flat fold booklet unit are not aligned vertically. There is a 3mm difference [D] between the upper and lower rollers. However, you can change the lower roller position from [B] (factory default) to [C]. If you change the lower roller position to [C], the difference becomes 0mm. In this condition, the upper and lower rollers are aligned vertically.
- If the toner does not stick well to the folding line of the booklet due to excessive folding strength, change the lower roller position to [C]. In this position, the booklet will be thicker than the factory default position.
- If you want increase the folding strength, the lower roller position should be [B] (factory default position). In addition, this will make the booklet thinner.
  If you want to reduce the folding strength, the lower roller position should be [C] (the difference in alignment is 0mm). In addition, this will make the booklet thicker.

Difference in Alignment and Folding Strength

Difference in Alignment	Folding Strength	Thickness of the booklet	The amount of toner sticking to the folding line
3mm (default)	Strong	Thin	OK
0mm	Weak	Thick	Good

5. Close the bracket after the adjustment.
6. Reassemble the machine.

Adjusting the Folding Speed

You can adjust the thickness of the booklet by adjusting the moving speed of the flat fold booklet unit. If you want to make the booklet thinner, set a slower speed. If you want to make the booklet thicker, set a faster speed.

1. Enter the SP mode.
2. Set the moving speed of the flat fold booklet unit for each paper size with SP6-114-001 to 010 (Fold Speed Adj.: 2K/3K FIN).

SP	Setting Items	Selection	Default Value
SP6-114-001	Fold Speed Adj.: 2K/3K FIN: A3 SEF	0: Standard 1: Middle 2: Low Note • [0: Standard] is faster than [1: Middle].	0: Standard
SP6-114-002	Fold Speed Adj.: 2K/3K FIN: B4 SEF		
SP6-114-003	Fold Speed Adj.: 2K/3K FIN: A4 SEF		
SP6-114-004	Fold Speed Adj.: 2K/3K FIN: B5 SEF		
SP6-114-005	Fold Speed Adj.: 2K/3K FIN: DLT SEF		
SP6-114-006	Fold Speed Adj.: 2K/3K FIN: LG SEF		
SP6-114-007	Fold Speed Adj.: 2K/3K FIN: LT SEF		
SP6-114-008	Fold Speed Adj.: 2K/3K FIN: 12"x18"		
SP6-114-009	Fold Speed Adj.: 2K/3K FIN: 8K SEF		
SP6-114-010	Fold Speed Adj.: 2K/3K FIN: Other		

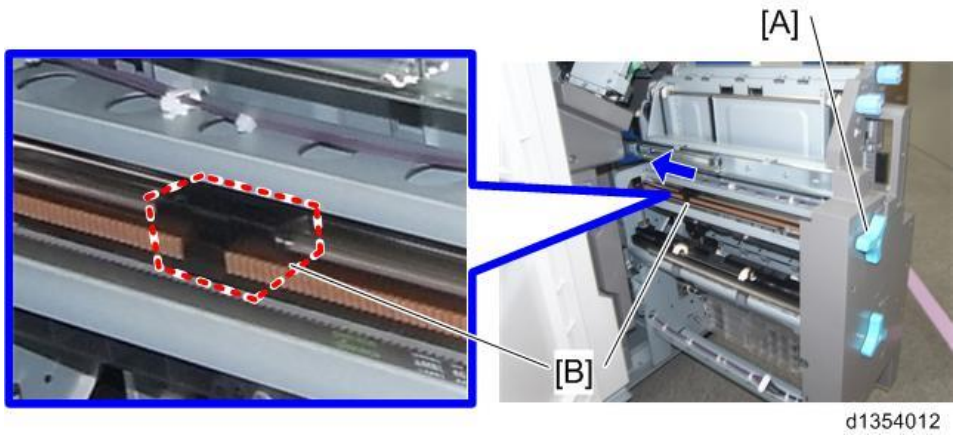
3. Exit the SP mode.

Flat Fold Booklet Unit Home Position Adjustment

1. Pull out the saddle stitch unit [A].

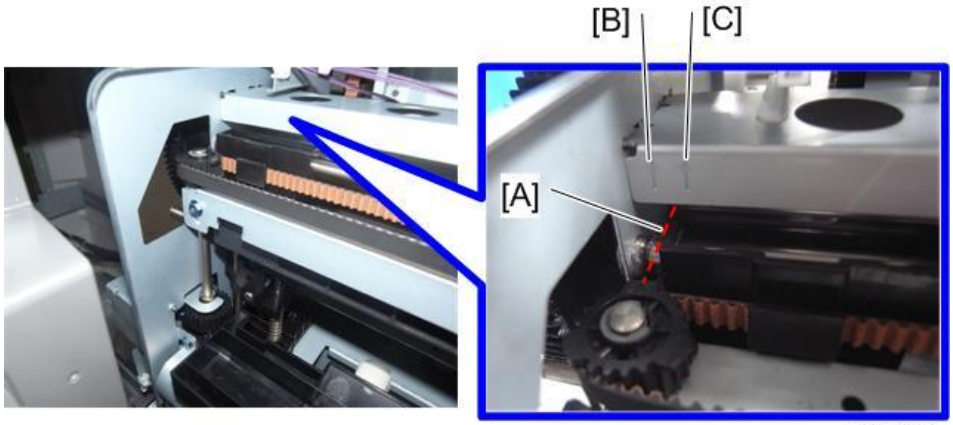
2. Remove the timing gear [A] (x 1).

3. Turn the knob [A] clockwise to move the flat fold roller unit [B] in the direction of the arrow.

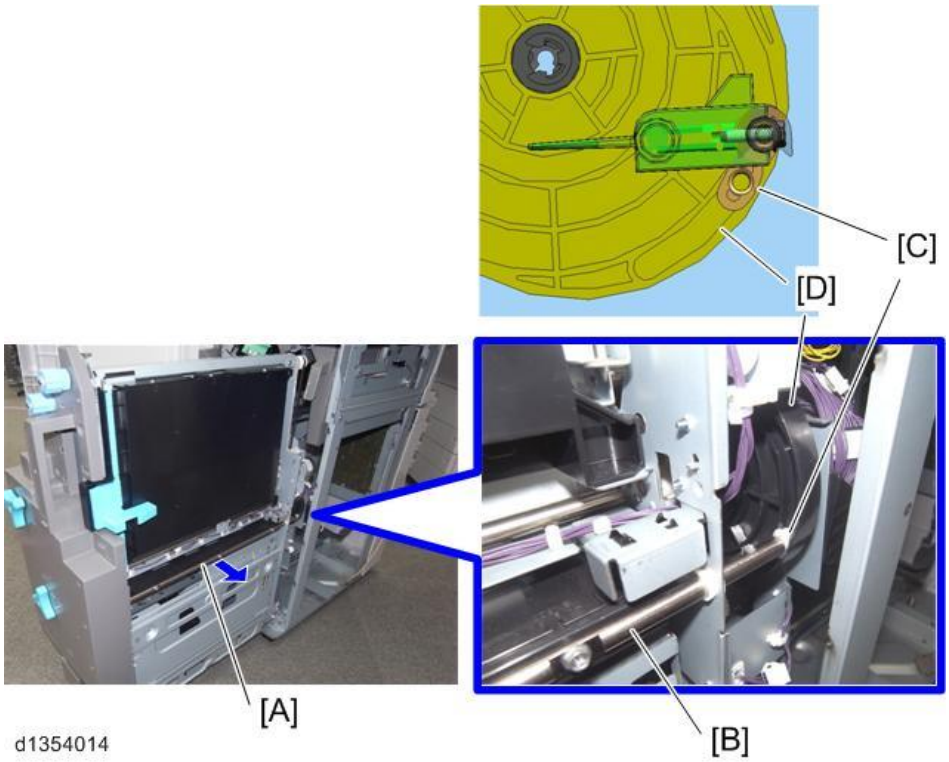


4. Move the flat fold roller unit until the edge of the unit [A] is between the guide lines [B] and [C]

inscribed on the bracket.



5. Check that the fold plate [A] has been moved in the direction of the arrow as far as it can go and the bushing [C] on the rear end of the fold plate shaft [B] is aligned with the fold plate positioning cam [D].



6. Re-attach the timing gear [A] (x 1).

7. Reassemble the finisher and connect it to the copier.

8. Turn on the copier.

9. After the finisher initialization is complete, check that the flat fold roller unit, fold plate and the cam are positioned as described in steps 4 and 5.