# Multi-Folding Unit FD4000
# Machine Code: D615
# Field Service Manual
# Ver 1.01

**Latest Release: Jan, 2017**
**Initial Release: Oct, 2016**
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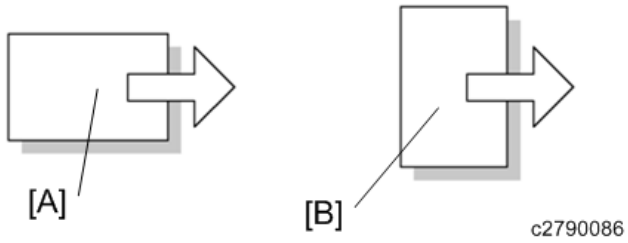
# Symbols, Abbreviations

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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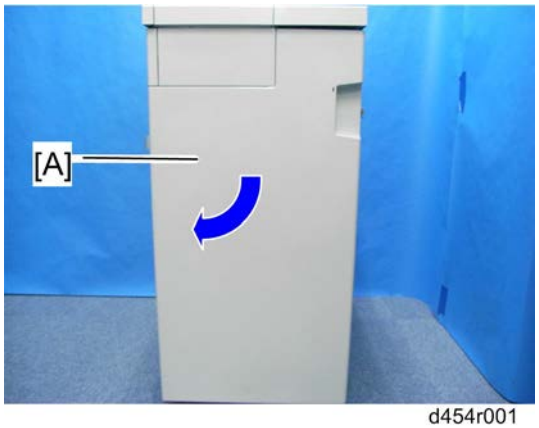
# 1. Replacement and Adjustment

## Covers

### Front Door Upper Cover

1. Open the front door [A].



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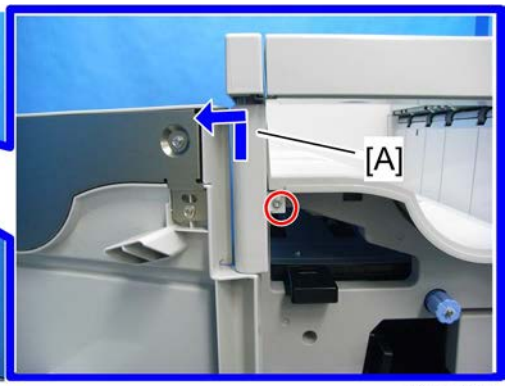
2. Hinge cover [A] ( x 1)

d454r002



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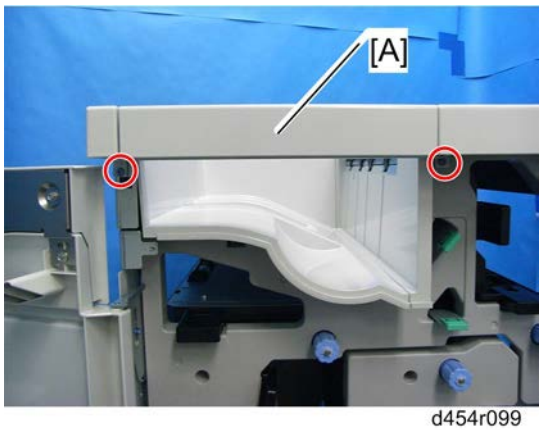
3. Cross-piece [A] ( x 2)



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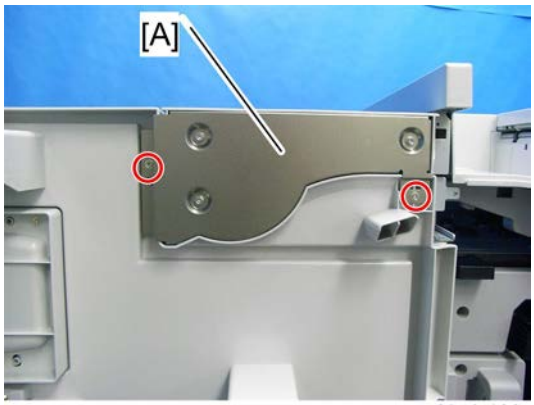
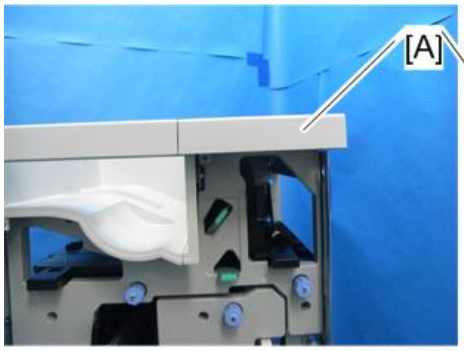
4. Front door upper cover [A] (x 2)



d454r100

## Top Cover

1. Open the front door.
2. Hinge cover (Front Door Upper Cover)
3. Cross-piece (Front Door Upper Cover)
4. Top cover [A] ( x 2)



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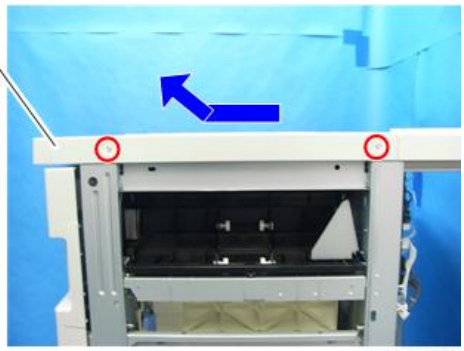
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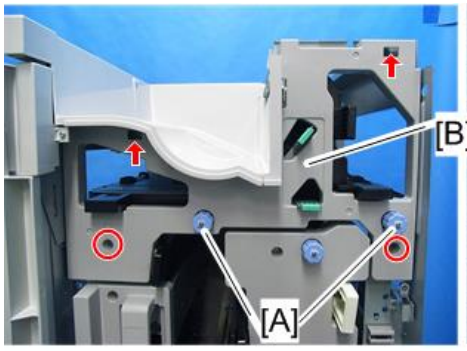
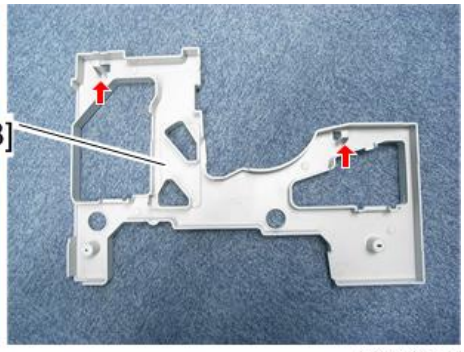
## Inner Upper Cover

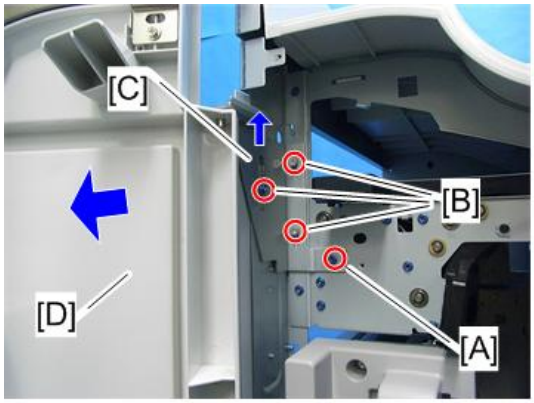
1. Top cover (Top Cover)
2. Remove the knobs [A] ( x 1 each).
3. Inner upper cover [B] ( x 2)





d454r036a

## Front Door

1. Top cover (Top Cover)
2. Inner upper cover (Inner Upper Cover)
3. Remove the screw [A].
4. Loosen three screws [B].
5. Lift up the hinge bracket [C].
6. Front door [D]



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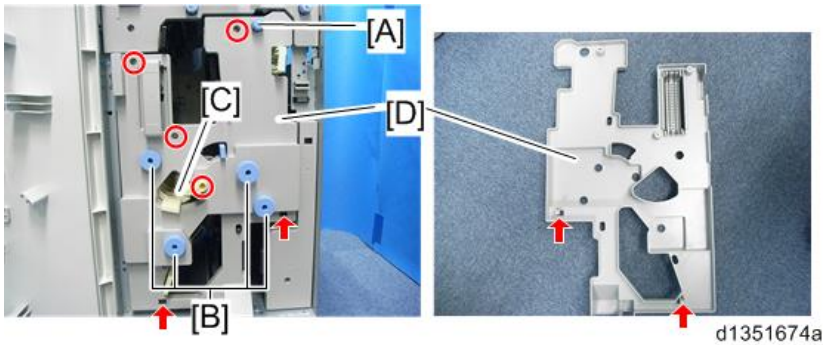
## Folding Unit Cover

1. Open the front door.
2. Remove the knob [A] ( x 1).
3. Remove four knobs [B] ( x 1 each).
4. Lever [C] ( x 1)
5. Folding unit cover [D] ( x 3, hook x 2)



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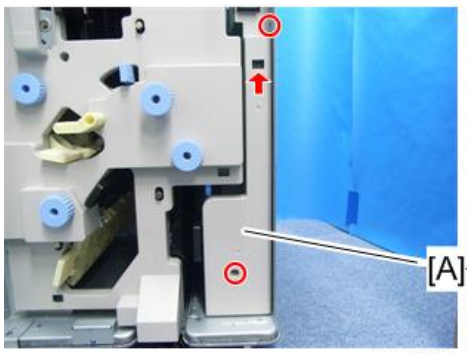
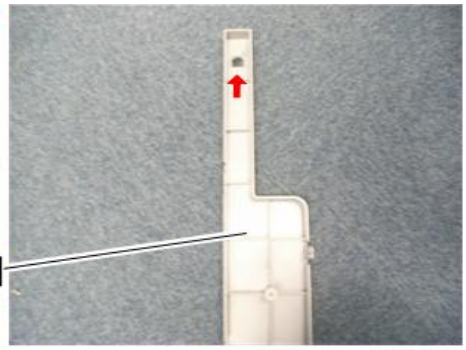
## Inner Lower Cover

1. Open the front door.

2. Inner lower cover [A] ( x 2, hook x 1)

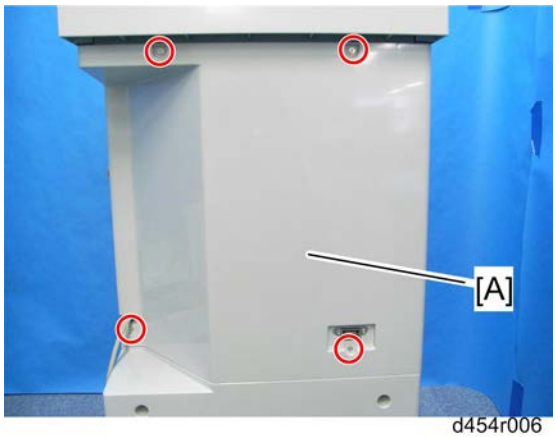


d454r092


d454r093

## Rear Upper Cover

1. Rear upper cover [A] ( x 4)



d454r006

## Rear Lower Cover

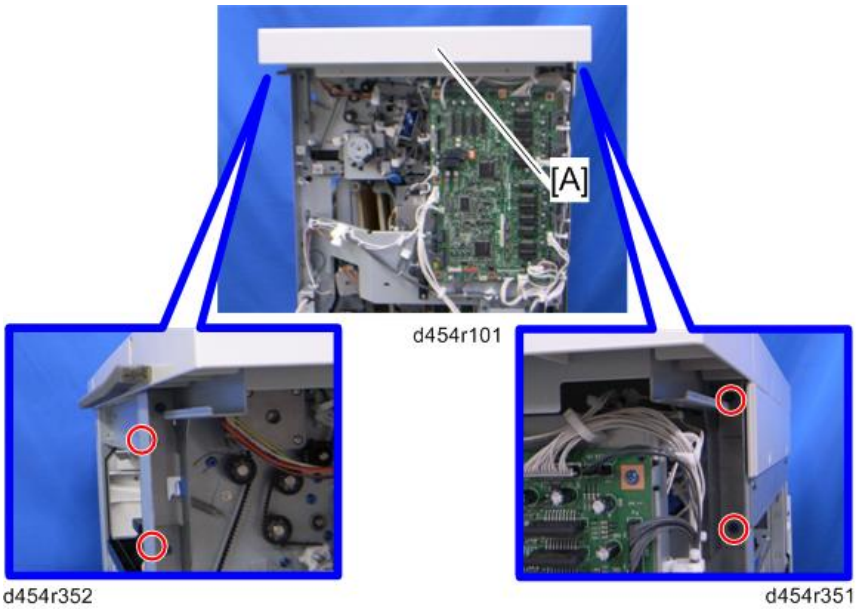
1. Rear lower cover [A] ( x 3)

d454r007

## Top Rear Cover

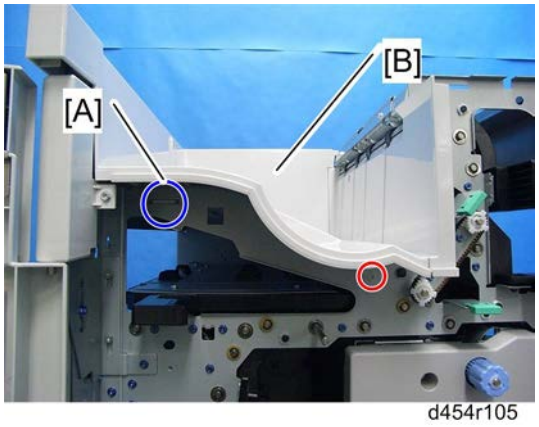
1. Rear upper cover (Rear Upper Cover)

2. Top rear cover [A] ( x 4)




## Top Tray

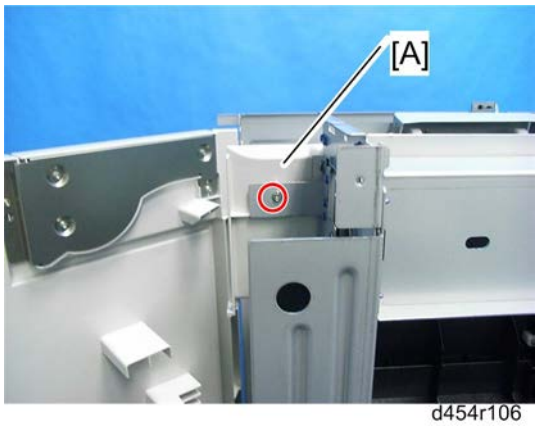
1. Top rear cover (Top Rear Cover)
2. Inner upper cover (Inner Upper Cover)
3. Release the hook [A], and remove the top tray [B] ( x 1).




## Top Tray Right Cover

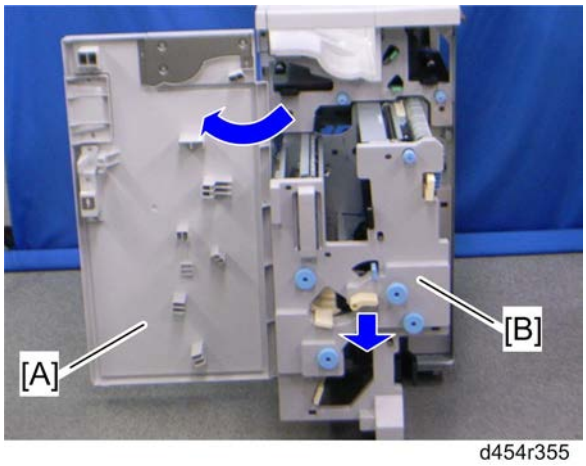
1. Top tray (Top Tray)

2. Top tray right cover [A] ( x 1)




## Pulling Out the Folding Unit Drawer

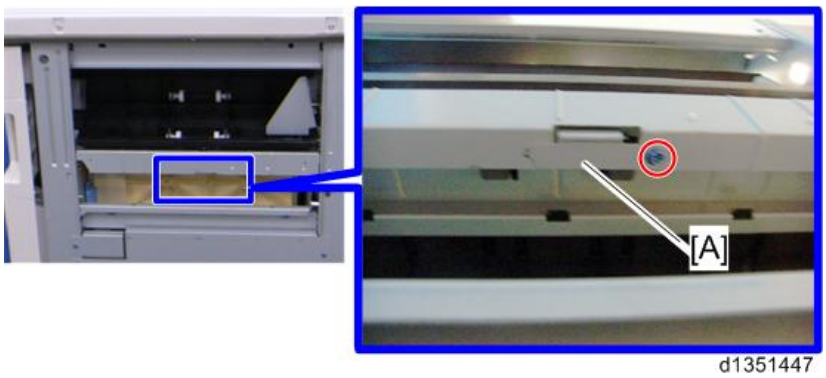
1. Open the front door [A]
2. Pull out the folding unit drawer [B].



# Paper Transport

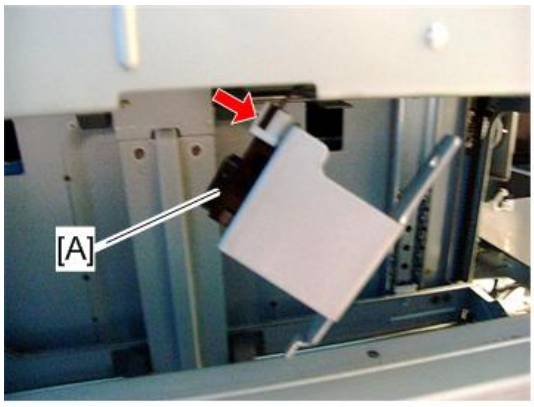
## Entrance Sensor

1. Entrance sensor bracket [A] ( x 1)



d1351447

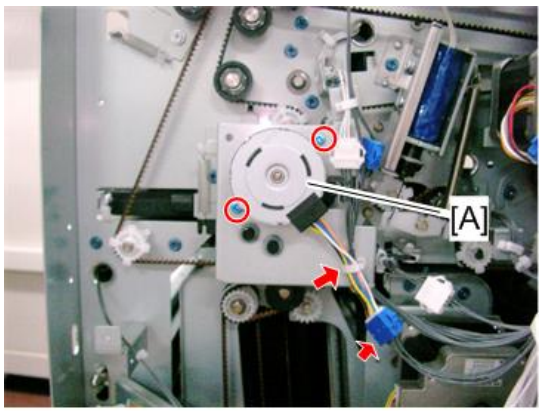
2. Entrance sensor [A] ( x 1)



d1351448

## Entrance JG (Junction Gate) Motor

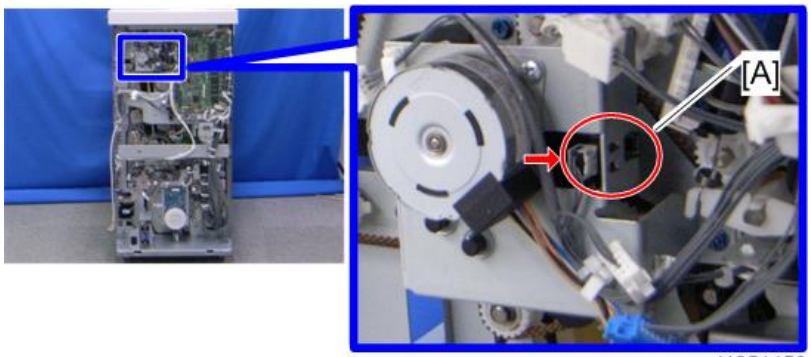
1. Rear upper cover (Rear Upper Cover)
2. Entrance JG motor [A] ( x 1, x 1, x 2)



d1351449

## Entrance JG (Junction Gate) HP Sensor

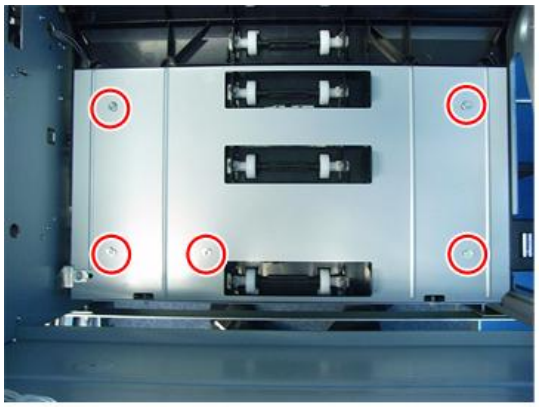
1. Rear upper cover (Rear Upper Cover)
2. Entrance JG HP sensor [A] ( x 1)



d1351450

## Vertical Path Paper Sensor

1. Top tray (Top Tray)
2. Remove the bracket ( x 5)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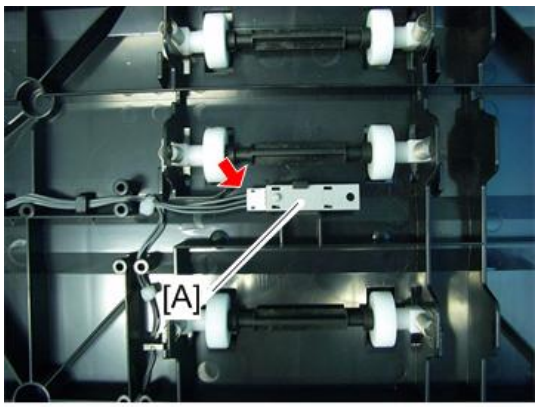
3. Vertical path paper sensor [A] ( x 1)



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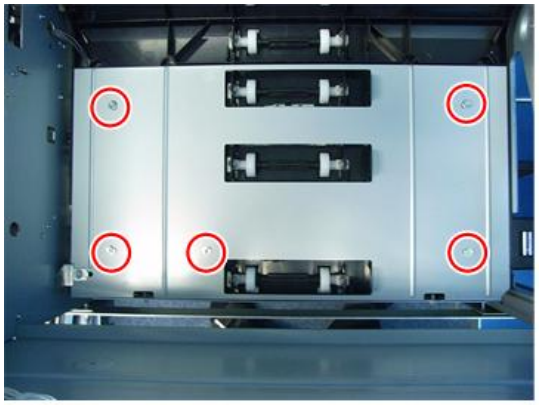
## Horizontal Path Exit Sensor

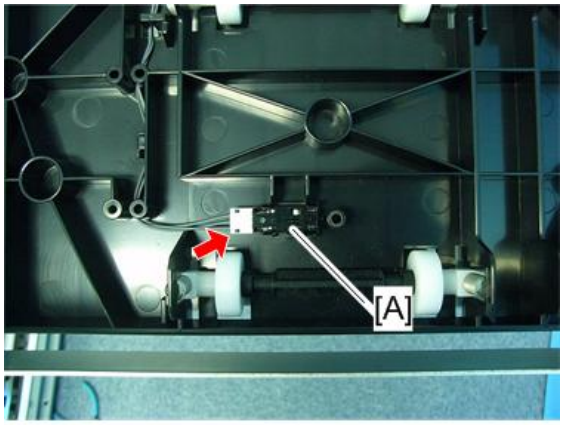
1. Top tray (Top Tray)

2. Remove the bracket ( x 5)



d1351451

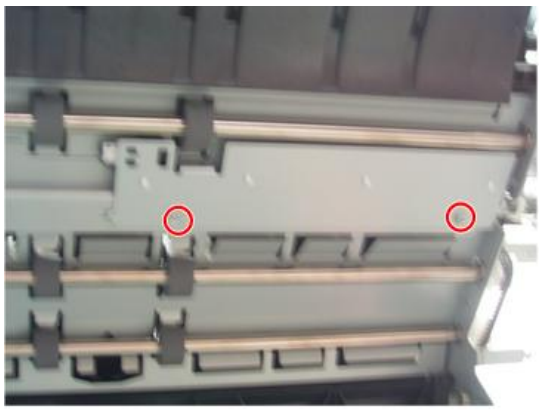
3. Horizontal path exit sensor [A] ( x 1)




d1351453

## Horizontal Path Paper Sensor

1. Top tray (Top Tray)
2. Remove the bracket ( x 2)



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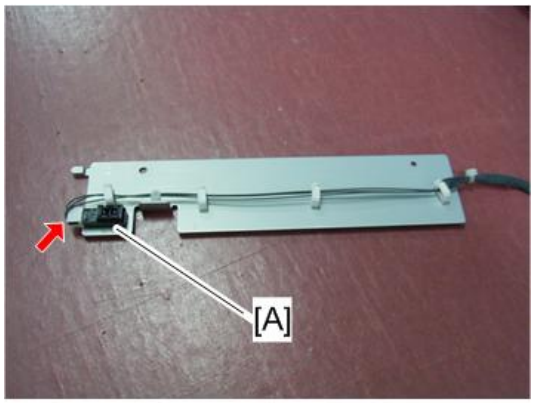
3. Horizontal path paper sensor [A] ( x 1)

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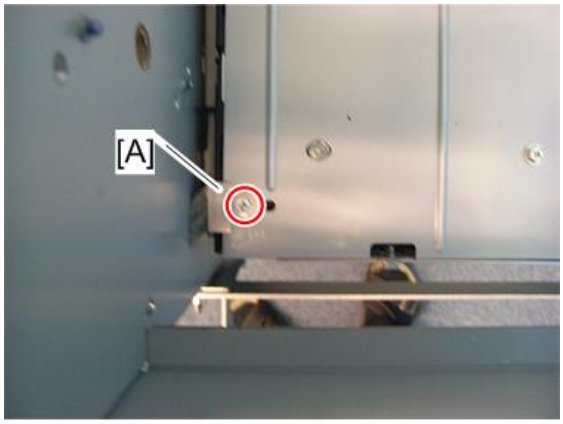
## Discharge Brush 2

1. Top tray (Top Tray)
2. Discharge brush 2 [A] ( x 1)

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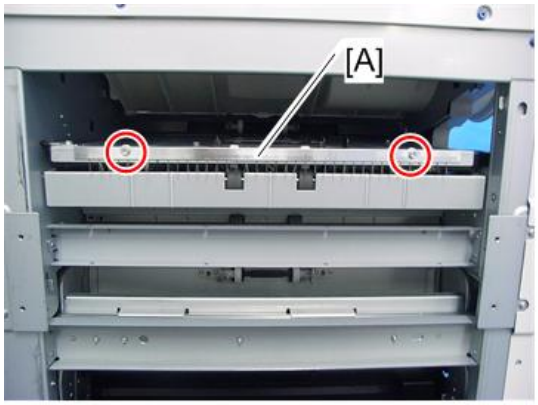
## Discharge Brush 3

1. Discharge brush 3 [A] ( x 2)

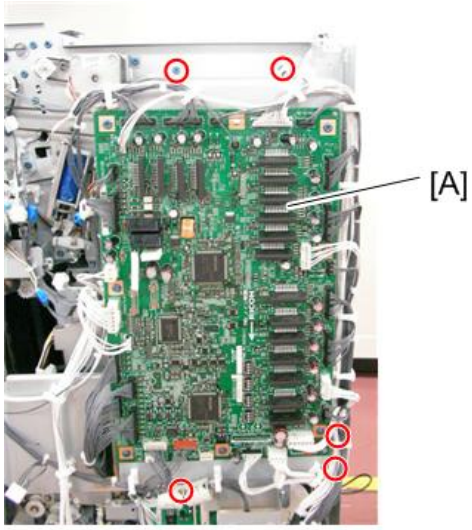



d1351457

# Paper Folding

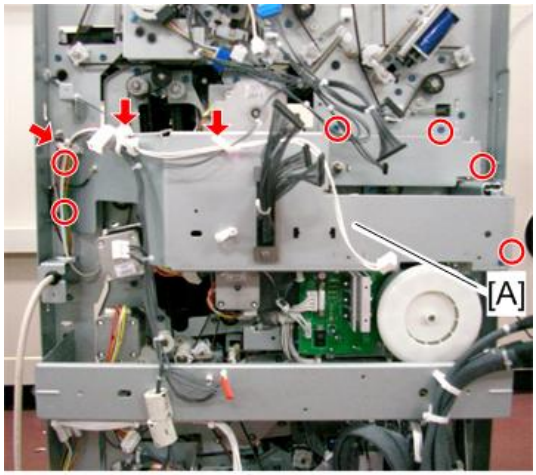
## Dynamic Roller Lift Motor

1. Rear upper cover (Rear Upper Cover)
2. Top rear cover (Top Rear Cover)
3. Main board bracket [A] ( x all, x all, x 5, ground cable x 1)



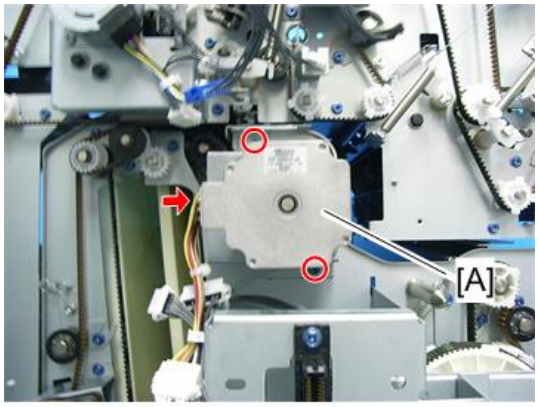

d1351595

4. Rear upper stay [A] ( x 3, x 6)



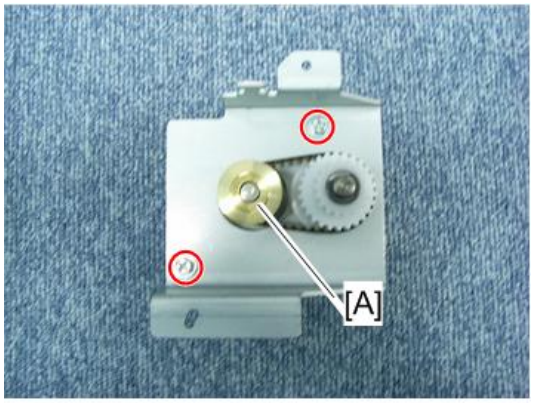

d1351458

5. Dynamic roller lift motor assembly [A] ( x 1, x 2)




d1351459

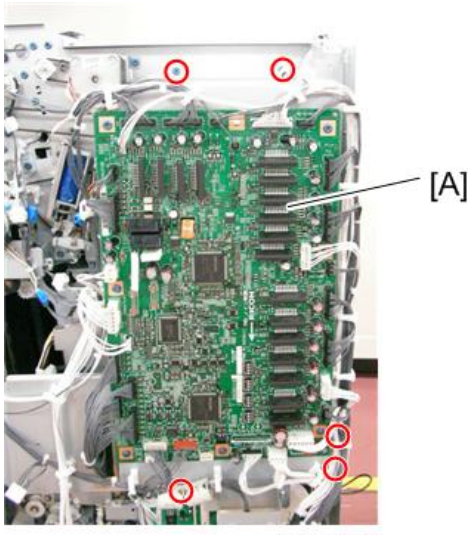
6. Dynamic roller lift motor [A] ( x 2)




d1351460

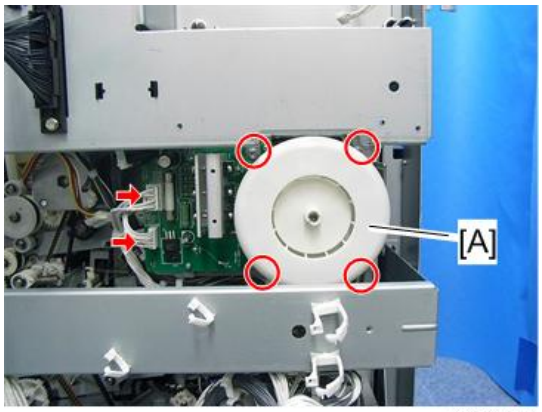
## Crease Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. Top rear cover (Top Rear Cover)
4. Main board bracket [A] ( x all, x all, x 5, ground cable x 1)




d1351595

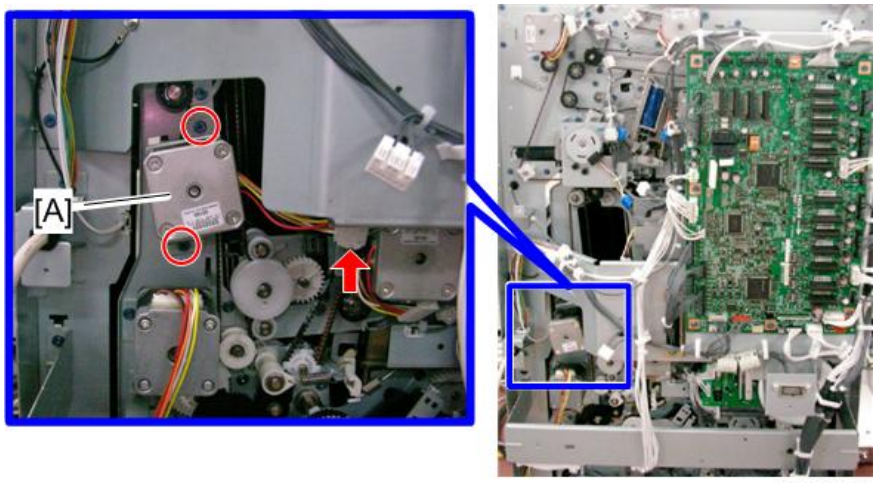
5. Crease motor [A] ( x 2, x 4)




d1351461

## Dynamic Roller Transport Motor

1. Rear upper cover (Rear Upper Cover)
2. Dynamic roller transport motor assembly [A] ( x 1, x 2)

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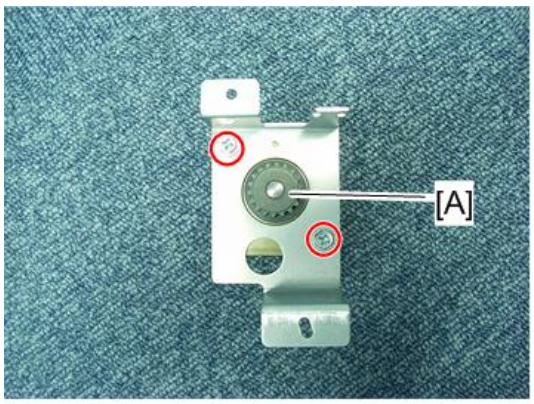
3. Dynamic roller transport motor ( x 2)

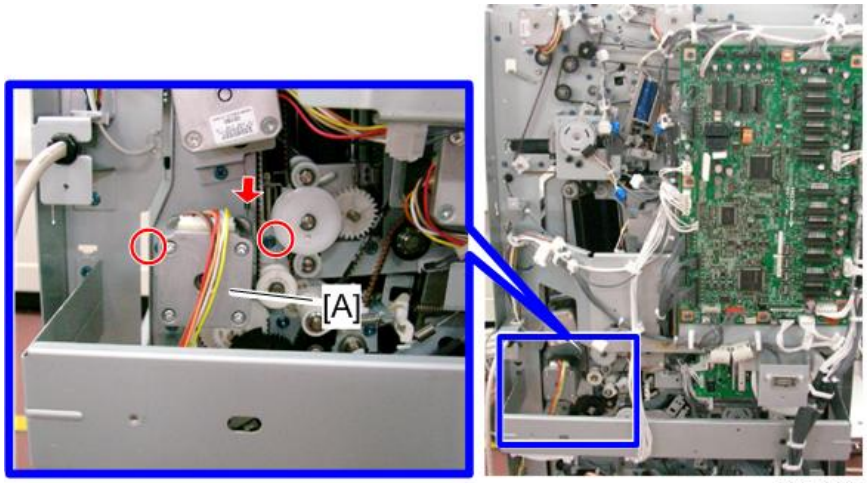



d1351463

## Registration Roller Release Motor

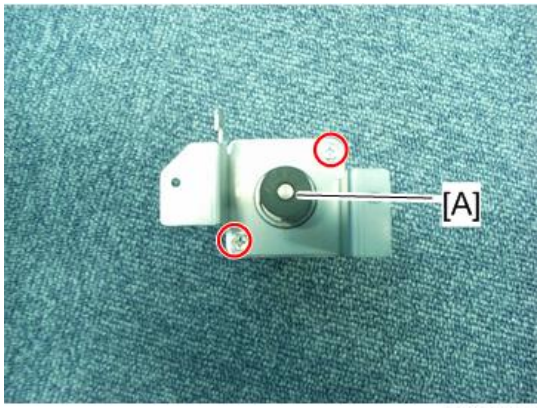
1. Rear upper cover (Rear Upper Cover)

2. Rear lower cover (Rear Lower Cover)
3. Registration roller release motor assembly [A] ( x 1, x 2)




d1351464

4. Registration roller release motor [A] ( x 2)

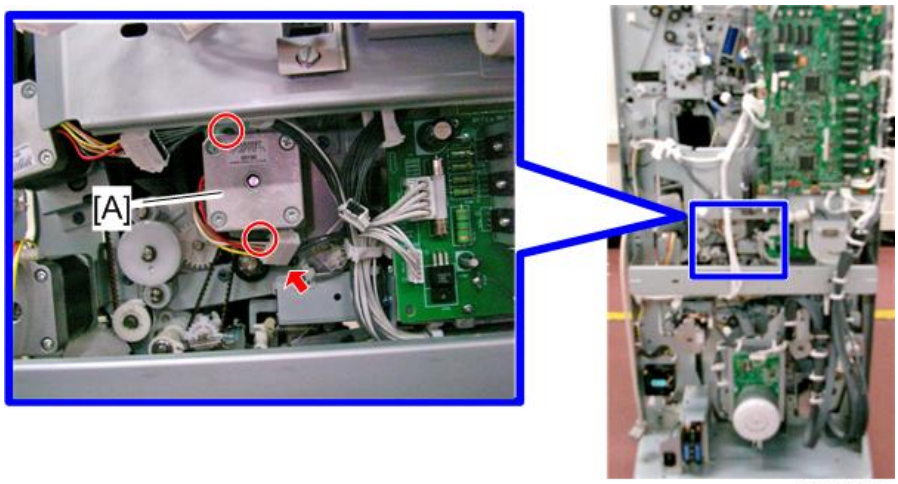



d1351465

## Registration Roller Transport Motor

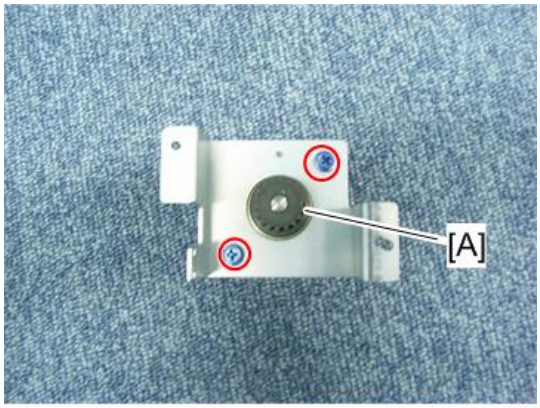
1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)

3. Registration roller transport motor assembly [A] ( x 1, x 2)




d1351466

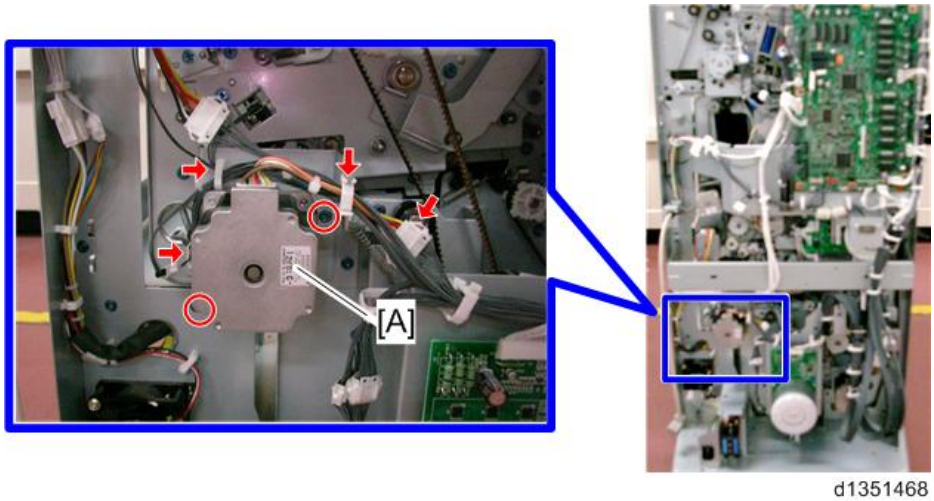
4. Registration roller transport motor [A] ( x 2)




d1351467

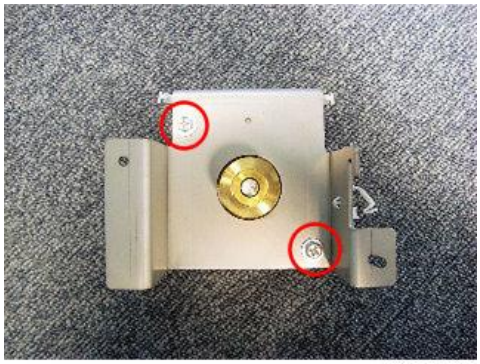
## Fold Plate Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. Fold plate motor assembly [A] ( x 3, x 1, x 2)




d1351468

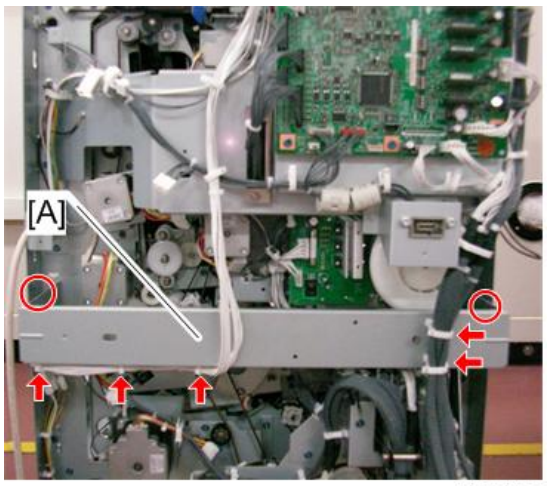
4. Fold plate motor [A] ( x 2)



d1351469

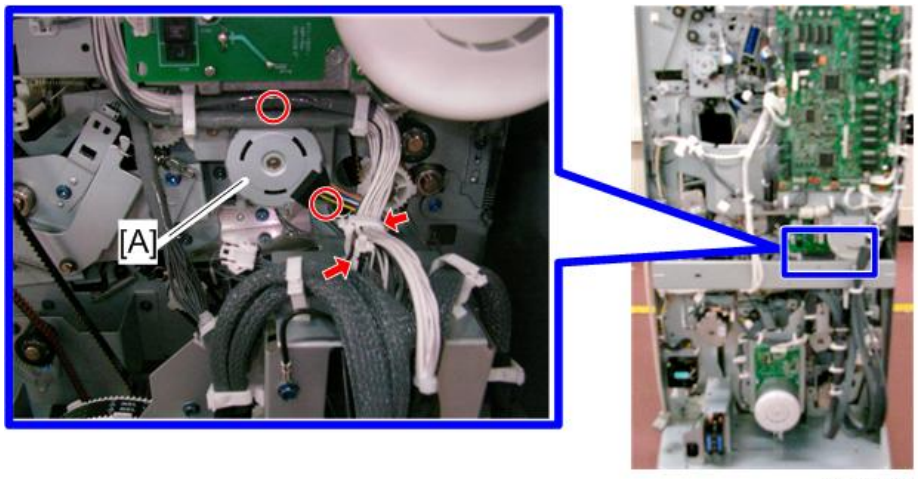
## Direct-Send JG Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. Rear lower stay [A] ( x 5, x 2)



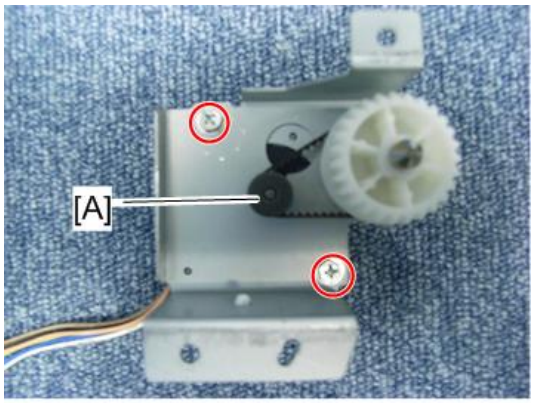

d1351470

4. Direct-Send JG motor assembly [A] ( x 1, x 1, x 2)




d1351471

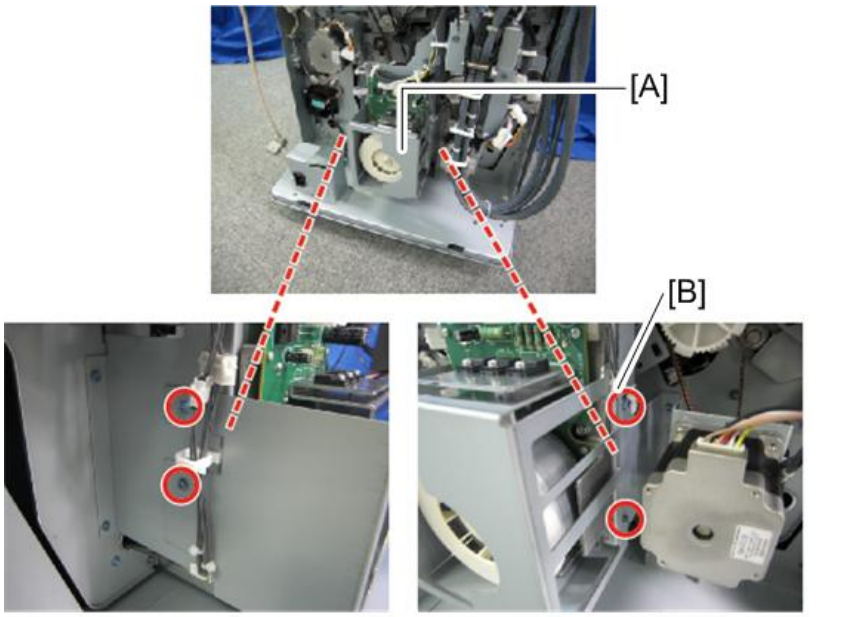
5. Direct-Send JG motor [A] ( x 2)




d1351472

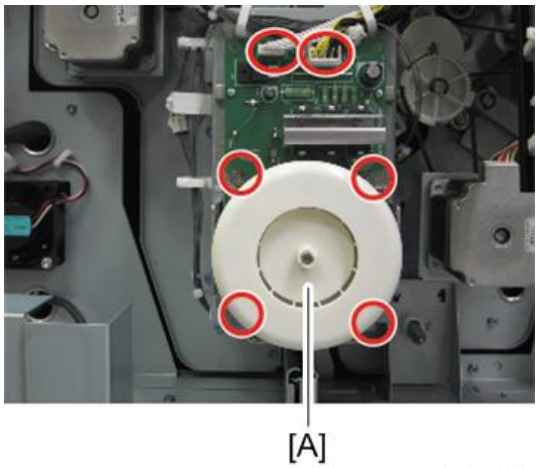
## 1st Fold Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. 1st Fold Motor cover [A] ( x 4, x 1)




d1351473

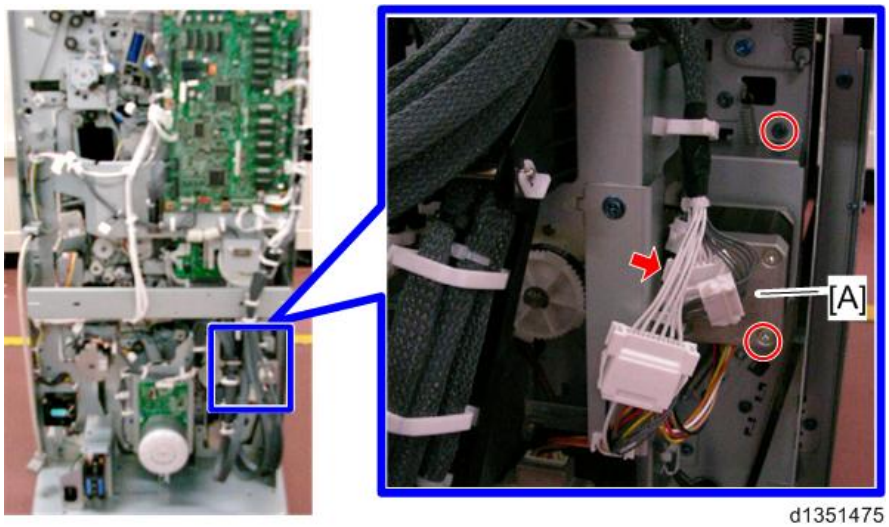
4. 1st fold motor [A] ( x 2, x 4)




d1351474

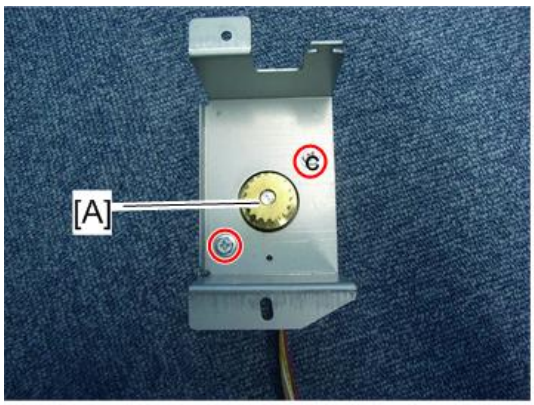
## FM6 Pawl Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. FM6 pawl motor bracket [A] ( x 1, x 1, x 2)




d1351475

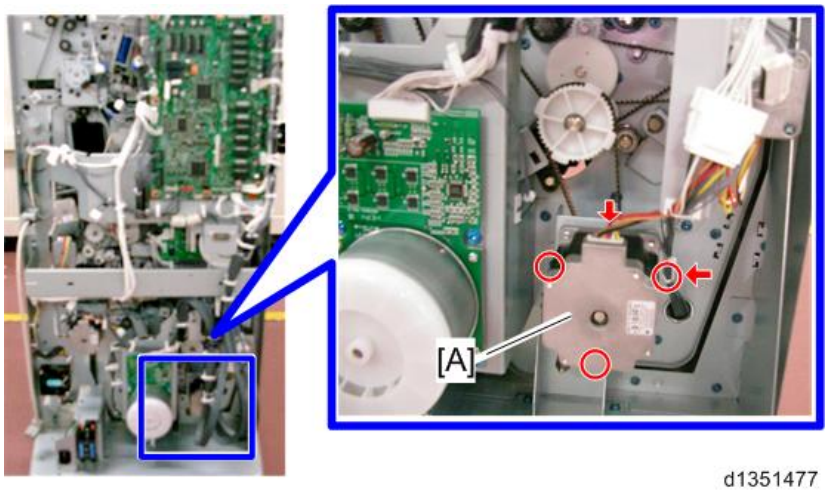
4. FM6 pawl motor [A] ( x 2)




d1351476

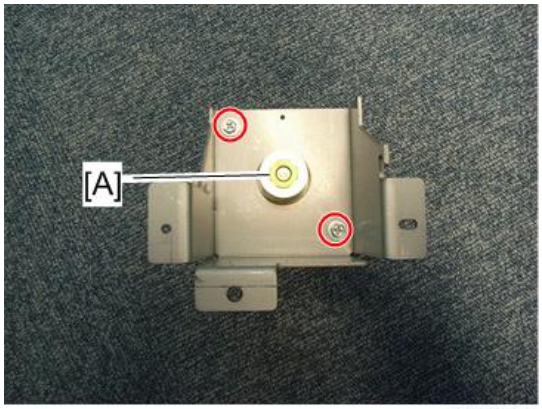
## 2nd Fold Motor

1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. 2nd fold motor assembly [A] ( x 1, x 1, x 3)




d1351477

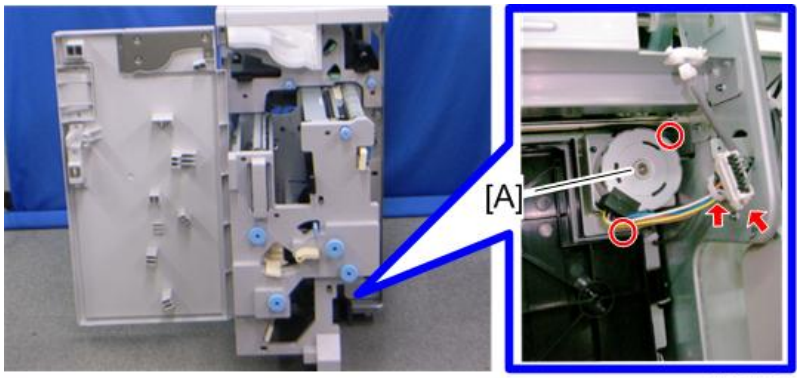
4. 2nd fold motor [A] ( x 2)




d1351478

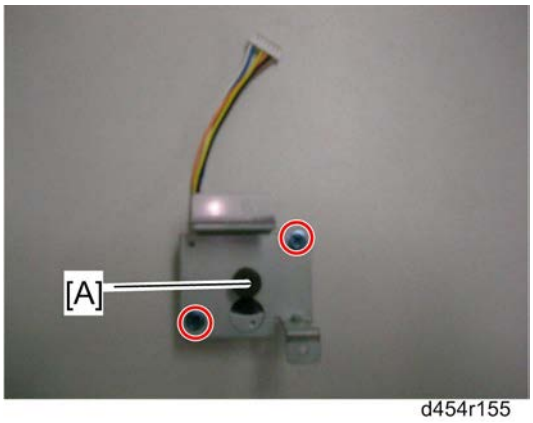
## Jogger Fence Motor

1. Pull out the folding unit drawer. (Pulling Out the Folding Unit Drawer)
2. Jogger fence motor assembly [A] ( x 1, x 1, x 2)



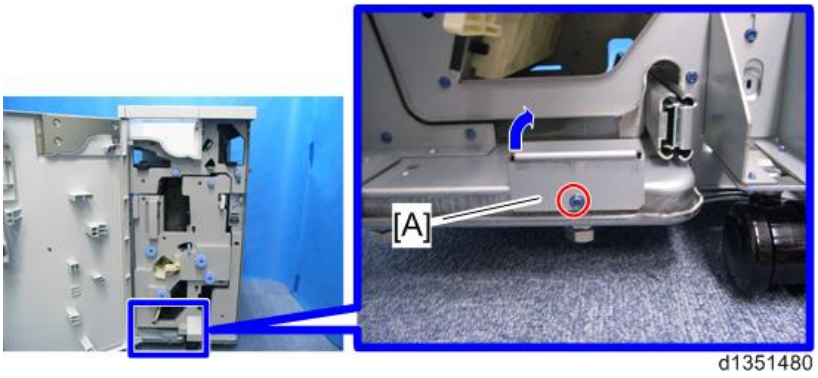

d1351479

3. Jogger fence motor [A] ( x 2)

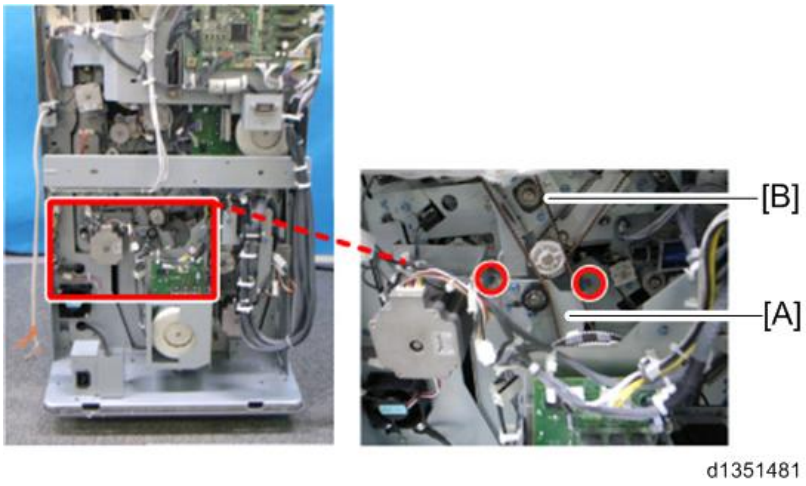



## 1st Stopper Unit

1. Folding unit cover (Folding Unit Cover)
2. Rear upper cover (Rear Upper Cover)
3. Rear lower cover (Rear Lower Cover)
4. Drawer stopper [A] ( x 1)

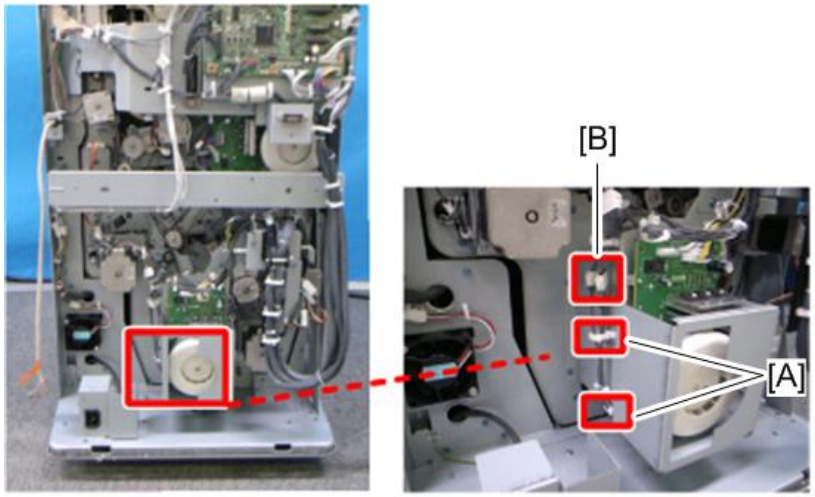



5. Belt tension bracket [A] ( x 2, timing belt [B])

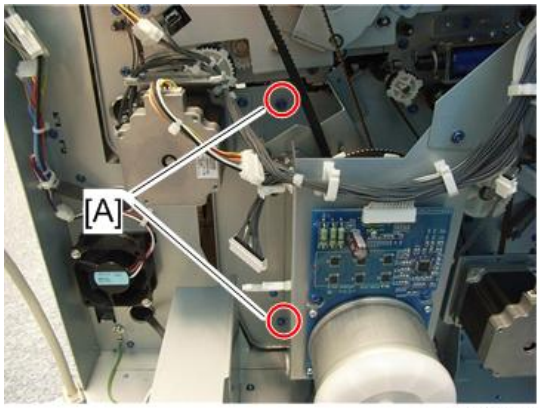



6. Release two clamps [A]. ( x2)

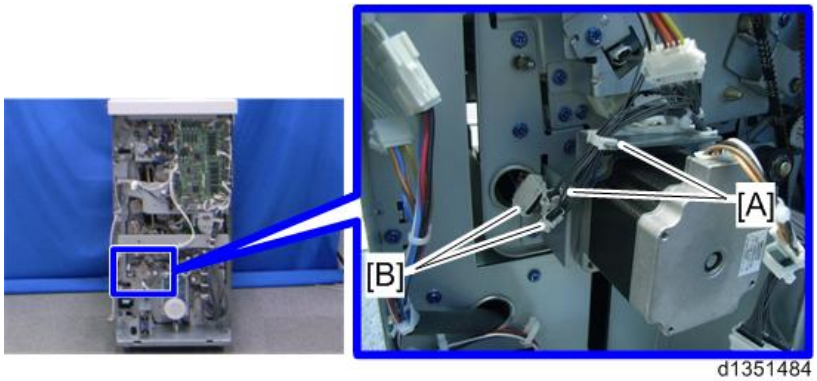
7. Disconnect two connectors [B].




8. Remove two screws [A].



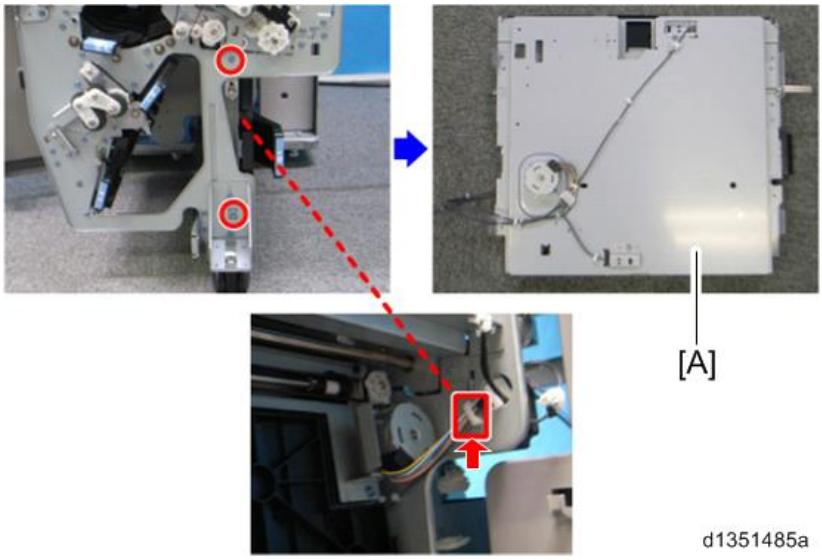

9. Release two clamps [A]. ( x2)
10. Disconnect two connectors [B].




11. Pull out the folding unit drawer (Pulling Out the Folding Unit Drawer).
12. Hold the 1st stopper unit [A], and then remove it ( x 2, x 1).

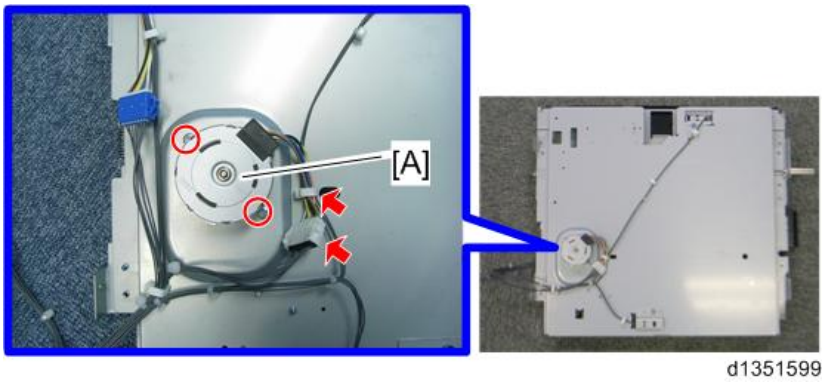
Note

- The 1st stopper unit cannot hang from the folding unit drawer without the two screws. If you remove the 1st stopper unit without any support, the 1st stopper unit can fall and be broken.



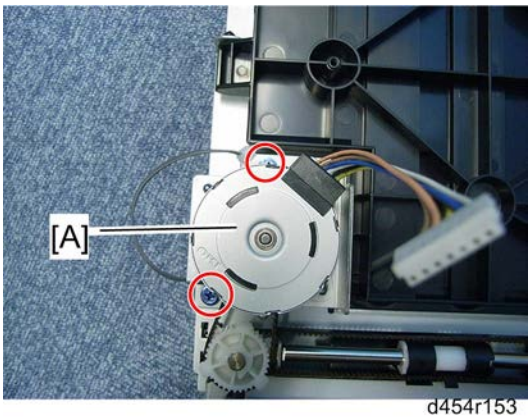

## 1st Stopper Motor

1. 1st stopper unit (1st Stopper Unit)
2. 1st stopper motor [A] ( x 1, x 1, x 2)

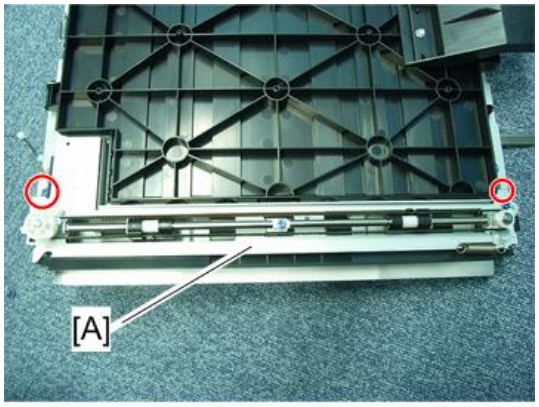



## Jogger Fence HP Sensor

1. 1st stopper unit (1st Stopper Unit)
2. Jogger fence motor assembly [A] ( x 2)

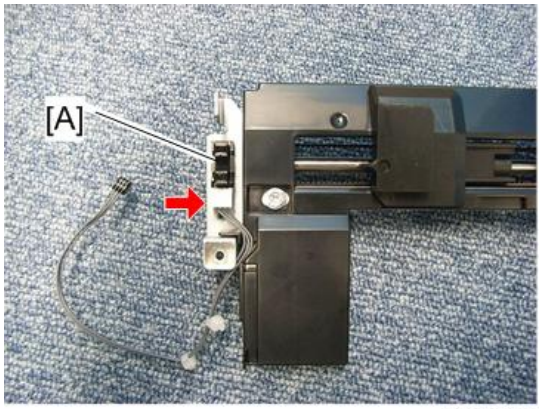


3. Jogger fence timing belt bracket [A] (x 2)




d1351486

4. Jogger fence HP sensor [A] (x 1)

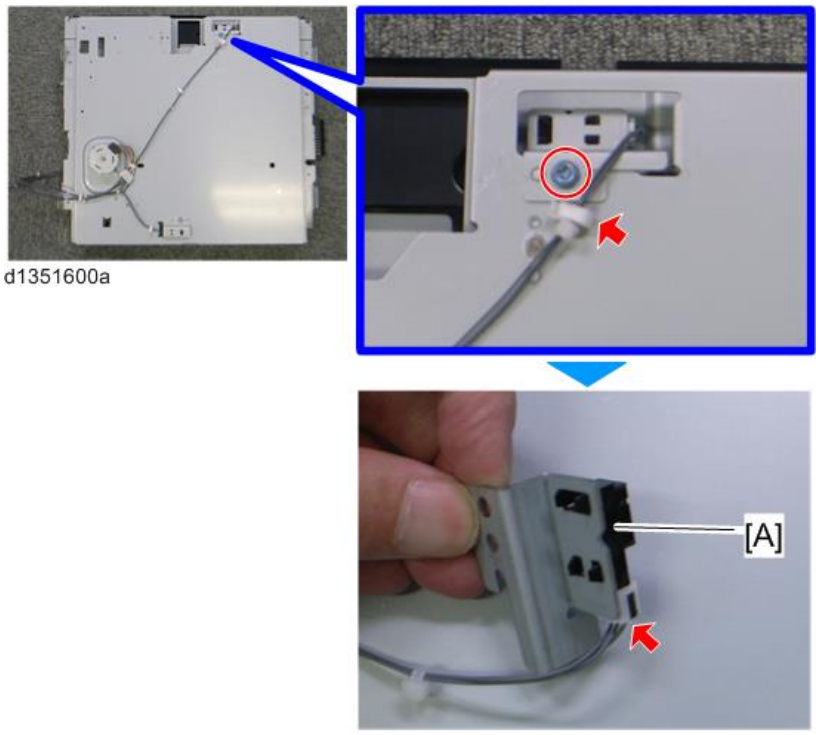



d1351487

## 1st Stopper Paper Sensor

1. 1st stopper unit (1st Stopper Unit)

2. 1st stopper paper sensor [A] (x 1, x 1, x1)

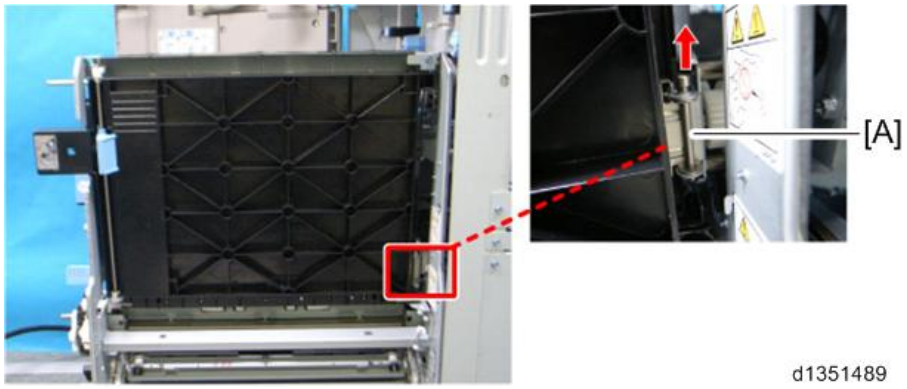



## 1st Stopper HP Sensor

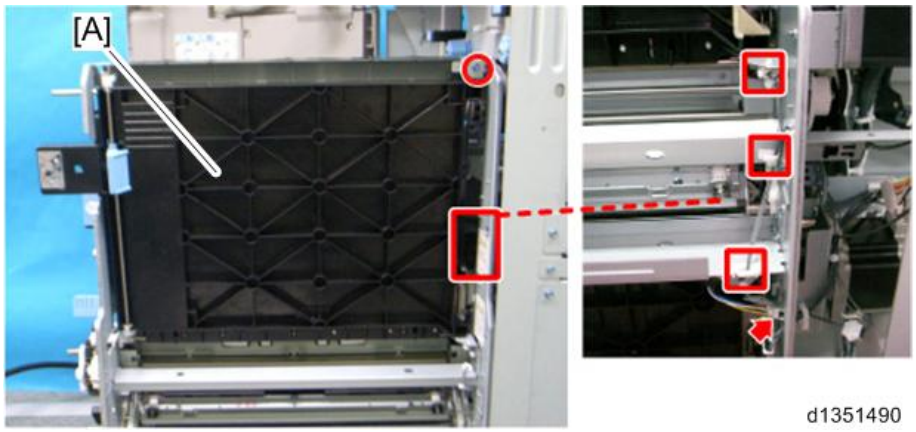
1. 1st stopper unit (1st Stopper Unit)
2. 1st stopper HP sensor [A] (x 1, x 1, x1)

## Registration Sensor

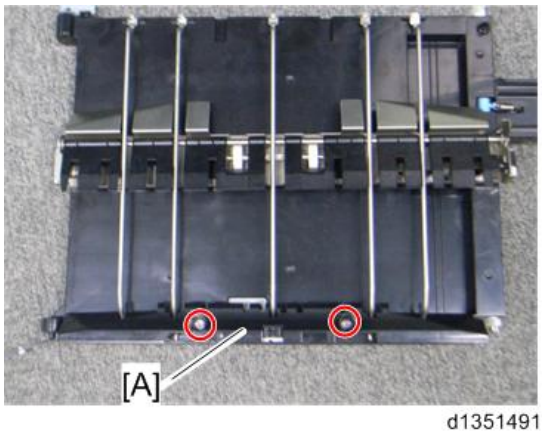
1. Pull out the folding unit drawer (Pulling Out the Folding Unit Drawer)
2. Pull out the pin [A] (x 1).



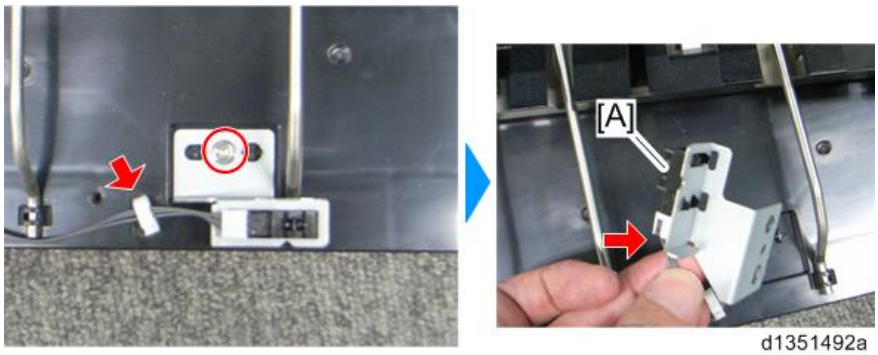

3. Jam removal door [A] ( x 3, x 1, x 1)




4. Dynamic roller bottom guide [A] ( x 2)

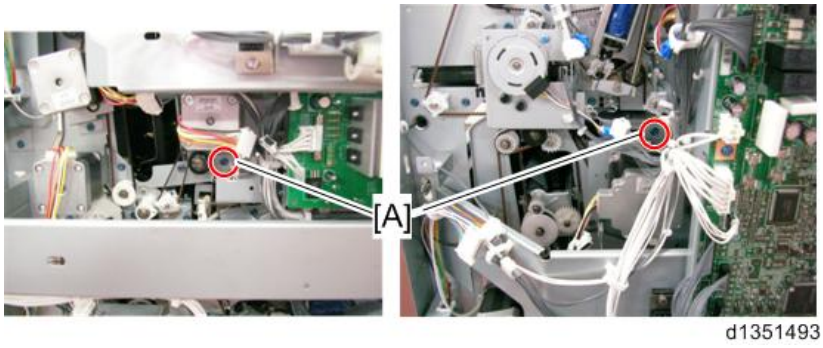


5. Registration sensor [A] ( x 1, x 1, x 1)

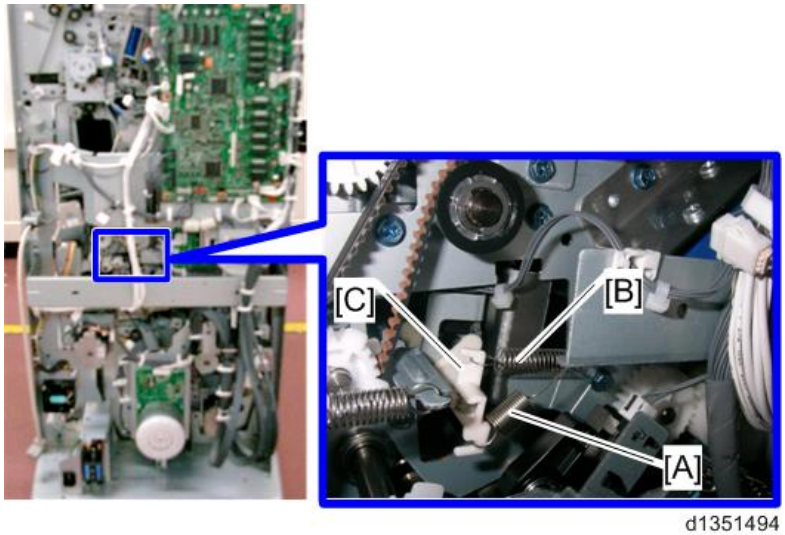



## 2nd Stopper Unit

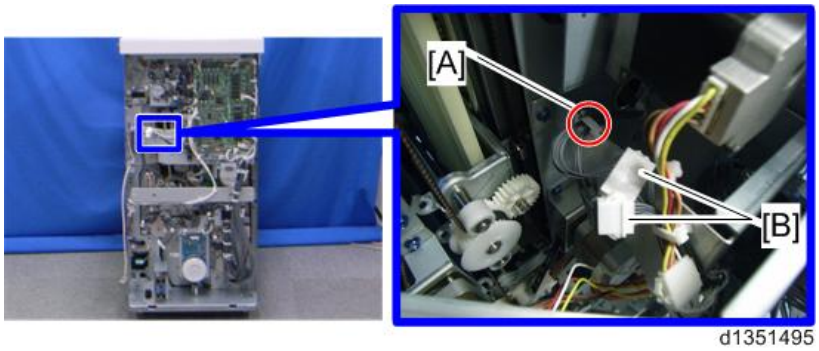
1. 1st stopper unit (1st Stopper Unit)
2. Jam removal door (Registration Sensor)
3. Remove two screws [A] at the rear side of the folding unit drawer.



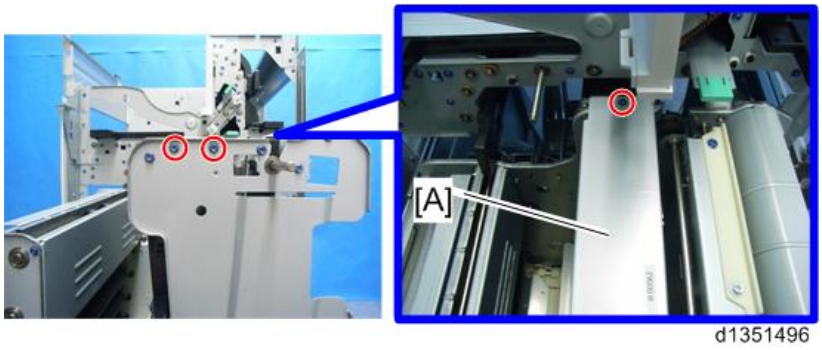

4. Remove the spring [A] and solenoid spring [B].
5. Remove the arm [C].



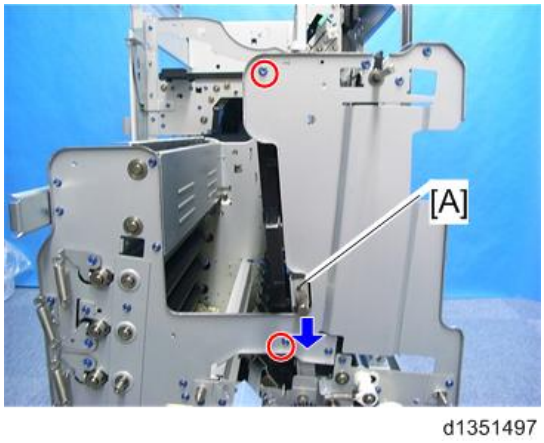
6. Release the clamp [A] and disconnect two connectors [B].




7. Pull out the folding unit drawer. (Pulling Out the Folding Unit Drawer)
8. Top stay [A] ( x 3)

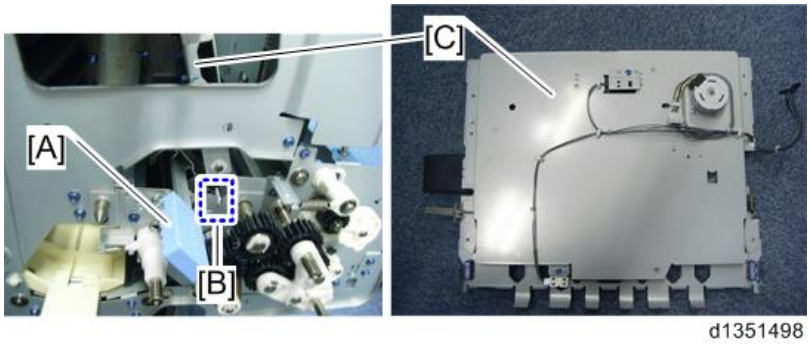



9. Move down the 2nd stopper unit [A] a little bit ( x 2).



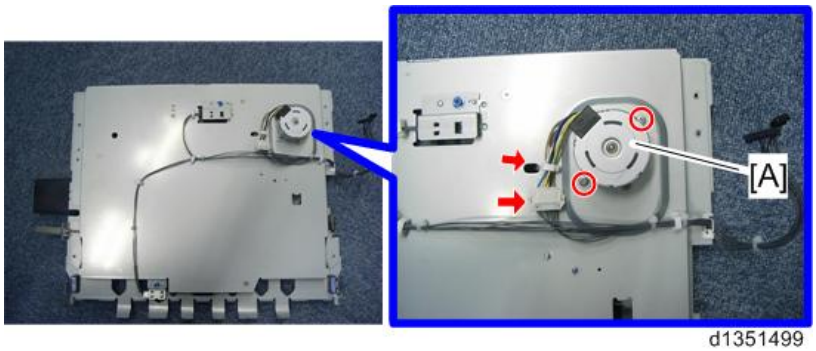

10. Open the jam removal door [A]. (hook [B])

11. Remove the 2nd stopper unit [C].




## 2nd Stopper Motor

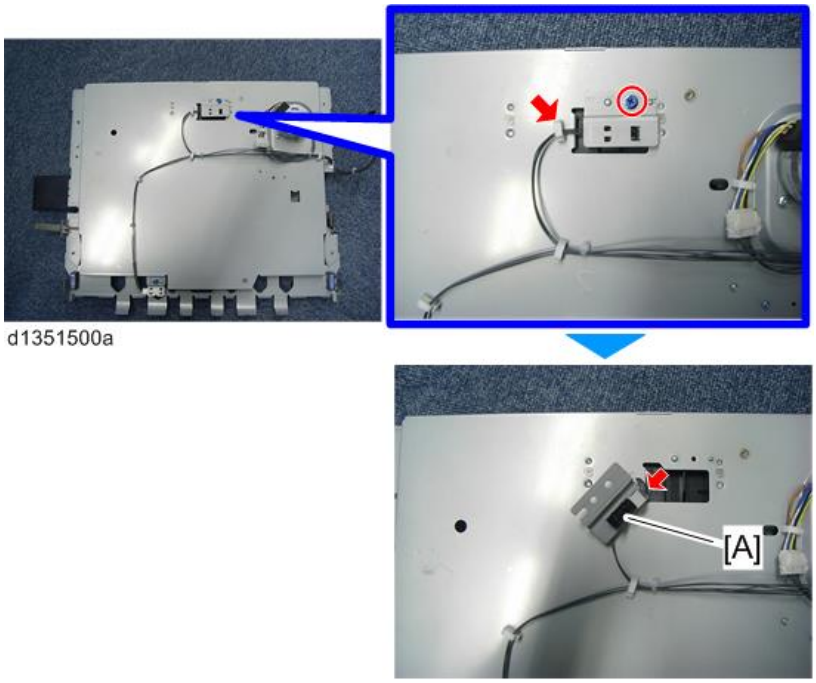
1. 2nd stopper unit (2nd Stopper Unit)
2. 2nd stopper motor [A] ( x 1, x 1, x 2)




## 2nd Stopper HP Sensor

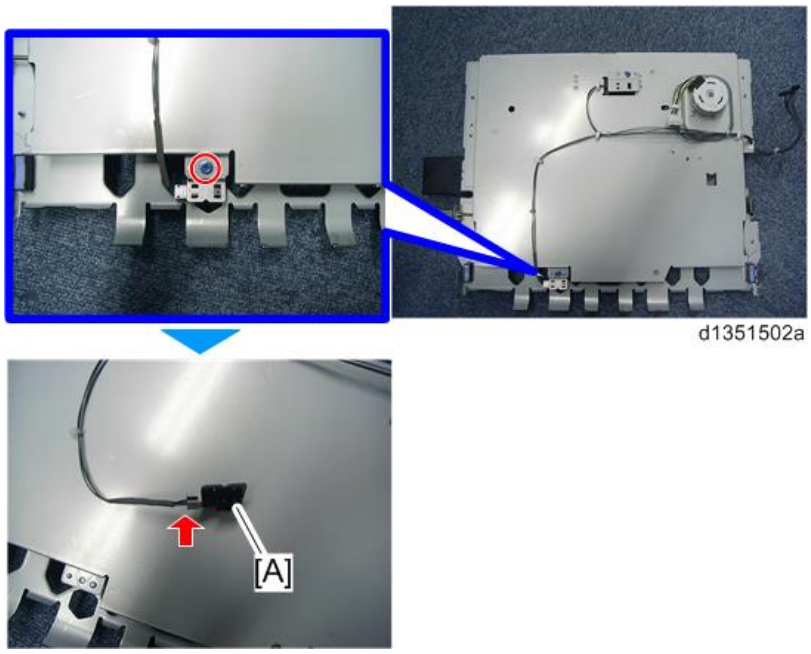
1. 2nd stopper unit (2nd Stopper Unit)

2. 2nd stopper HP sensor [A] ( x 1, x 1, x 1)




## 2nd Stopper Paper Sensor

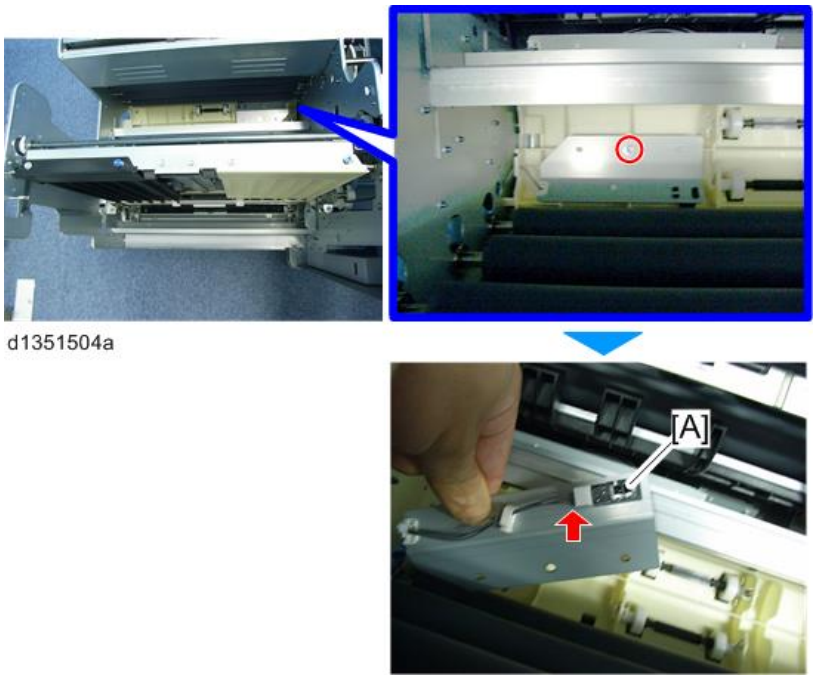
1. 2nd stopper unit (2nd Stopper Unit)
2. 2nd stopper paper sensor [A] ( x 1, x 1)




## Bypass Exit Paper Sensor

1. Pull out the folding unit drawer. (Pulling Out the Folding Unit Drawer)
2. 2nd stopper unit (2nd Stopper Unit)

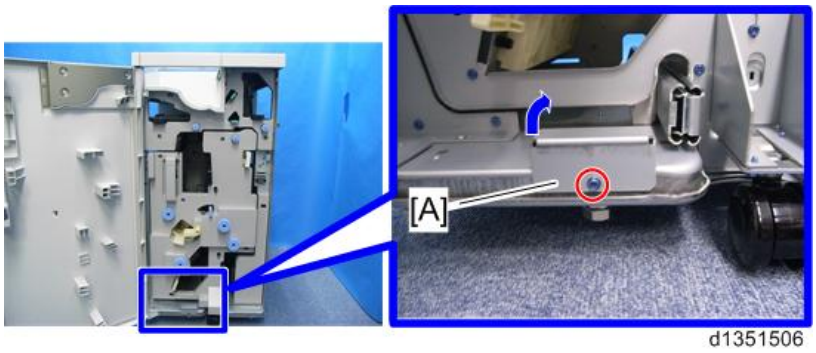
3. Bypass exit paper sensor [A] ( x 1, x 1)




d1351504a

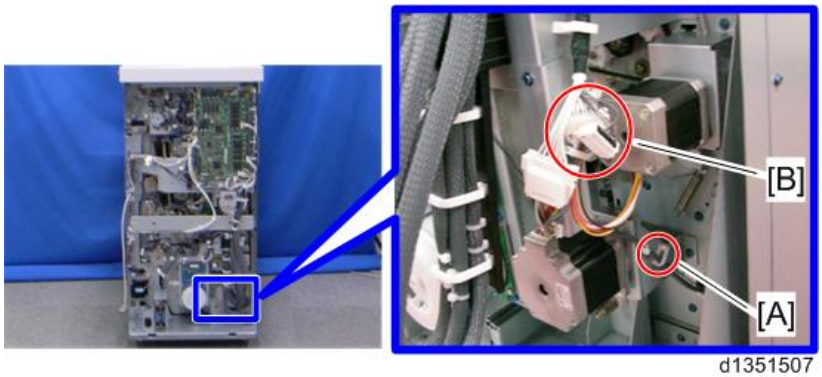
## 3rd Stopper Unit

1. Folding unit cover (Folding Unit Cover)
2. Rear upper cover (Rear Upper Cover)
3. Rear lower cover (Rear Lower Cover)
4. Drawer stopper [A] ( x 1)



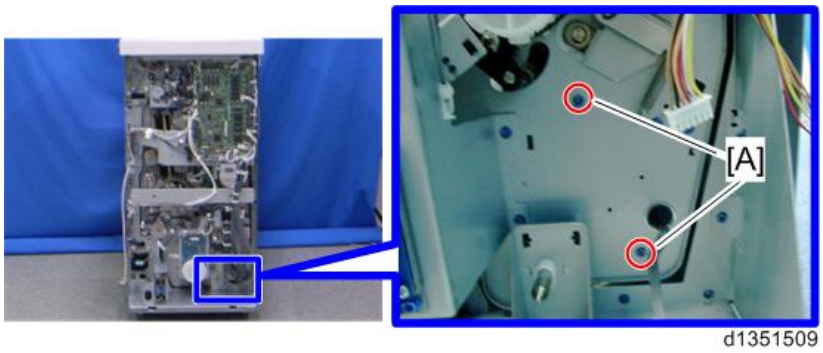

d1351506

5. Release the clamp [A].
6. Disconnect two connectors [B].




d1351507

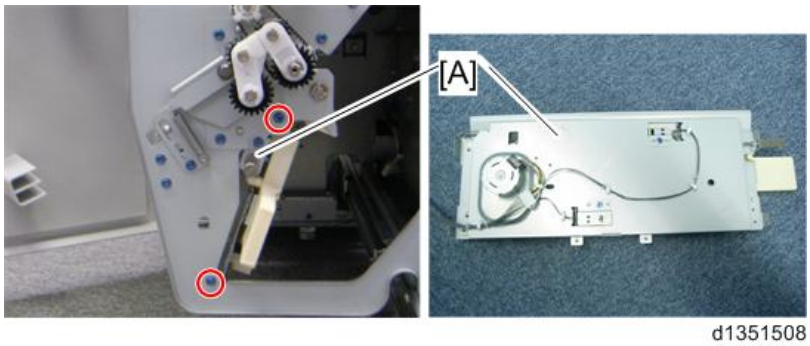
7. 2nd fold motor assembly (2nd Fold Motor)
8. Remove two screws [A].




9. Hold the 3rd stopper unit [A], and then remove it ( x 2).

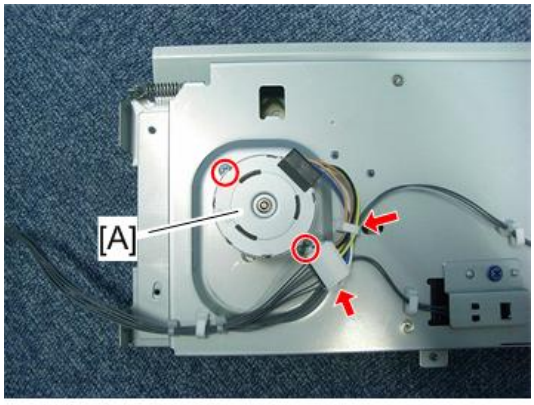
Note

- The 3rd stopper unit cannot hang from the folding unit drawer without the two screws. If you remove the 3rd stopper unit without any support, the 3rd stopper unit can fall and be broken.




## 3rd Stopper Motor

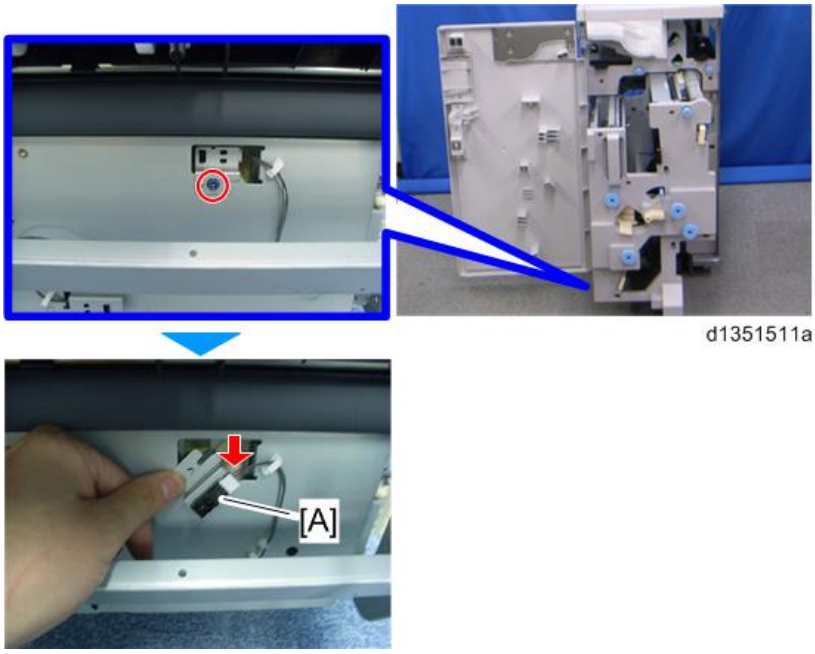
1. 3rd stopper unit (3rd Stopper Unit)
2. 3rd stopper motor [A] ( x 1, x 1, x 2)




## 3rd Stopper Paper Sensor

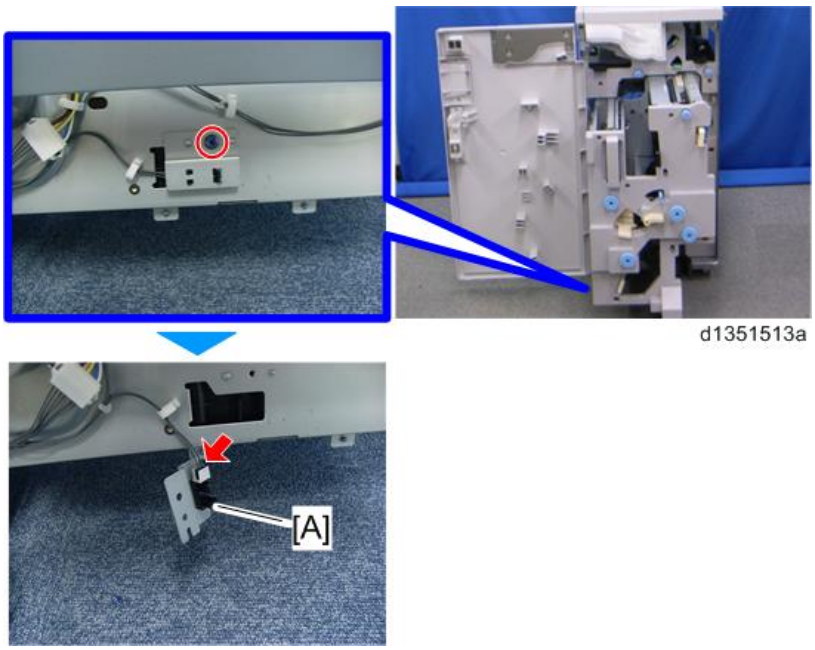
1. Pull out the folding unit drawer. (Pulling Out the Folding Unit Drawer)

2. 3rd stopper paper sensor [A] ( x 1, x 1)




## 3rd Stopper HP Sensor

1. Pull out the folding unit drawer. (Pulling Out the Folding Unit Drawer)
2. 3rd stopper HP sensor [A] ( x 1, x 1)

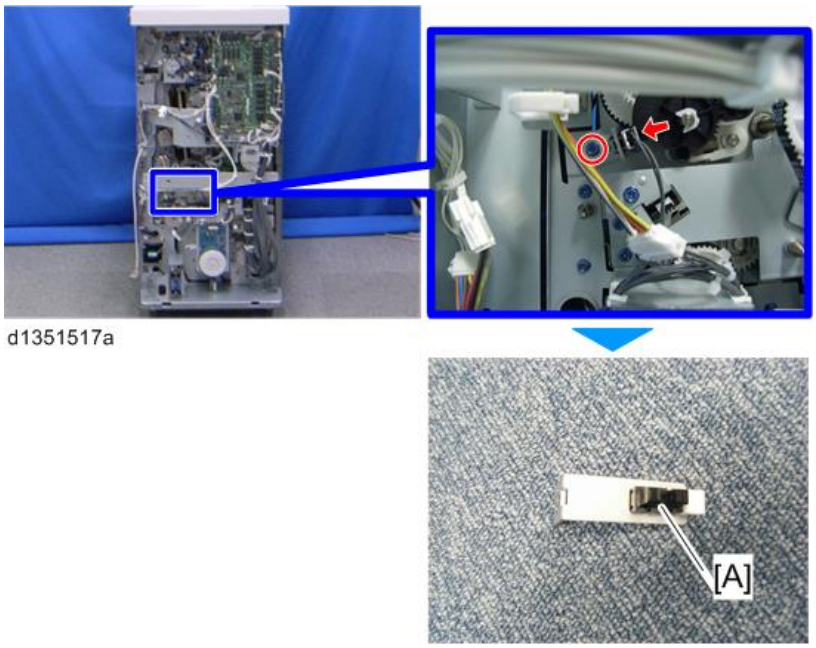



## Direct-Send JG (Junction Gate) HP Sensor

1. Rear lower cover (Rear Lower Cover)
2. Direct-Send JG HP sensor [A] ( x 1, x 1)

## Registration Roller HP Sensor

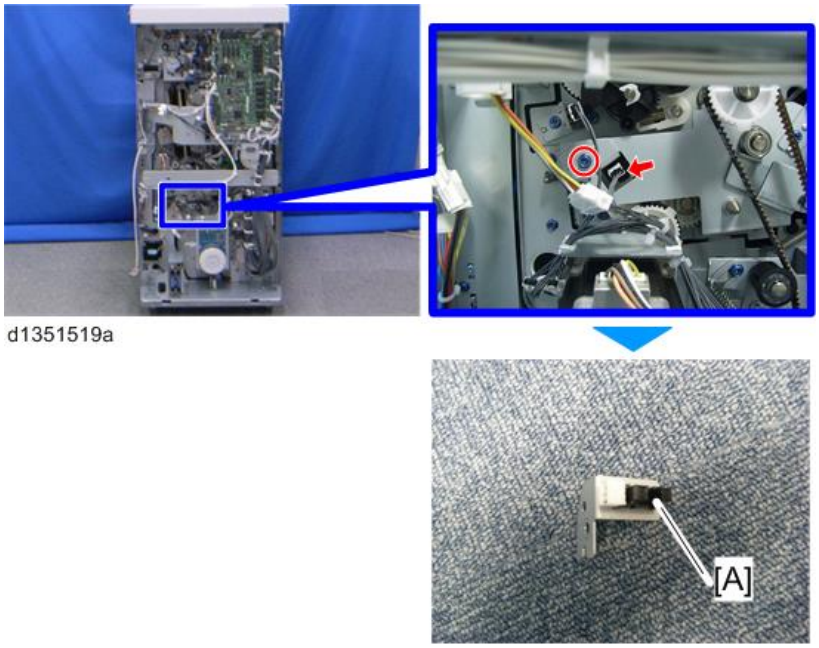
1. Rear lower cover (Rear Lower Cover)
2. Registration roller HP sensor [A] ( x 1, x 1)




## Fold Plate HP Sensor

1. Rear lower cover (Rear Lower Cover)

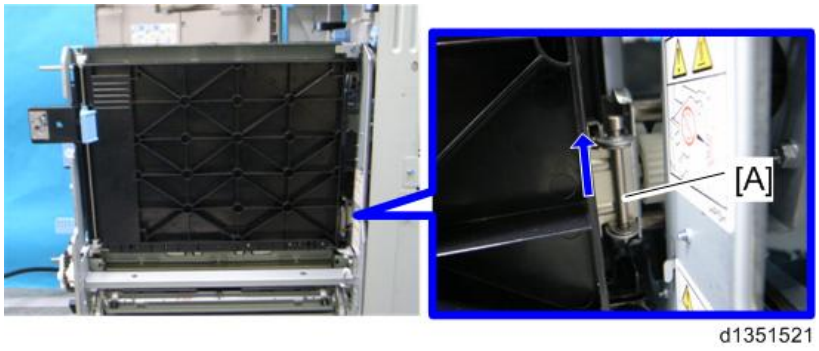
2. Fold plate HP sensor [A] ( x 1, x 1)




d1351519a

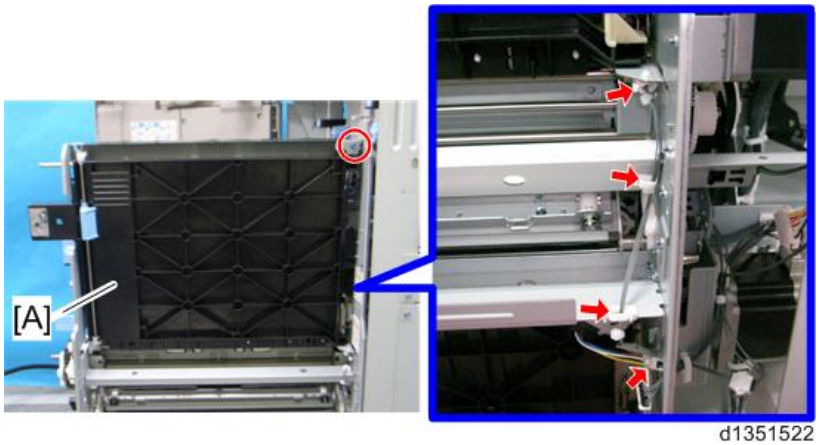
## First Fold Unit

1. 1st stopper unit (1st Stopper Unit)
2. Pull out the pin [A] ( x 1)



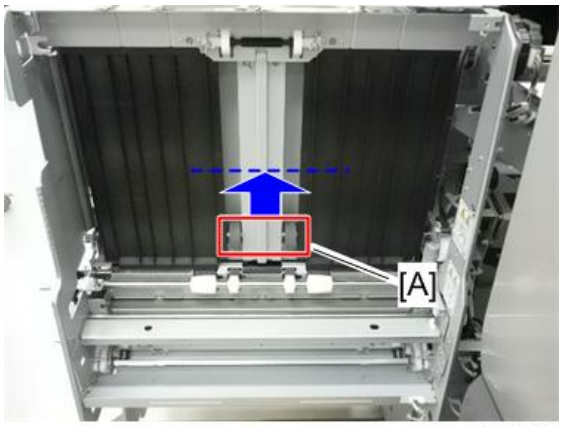

d1351521

3. Jam removal door [A] ( x 1, x 3, x 1)



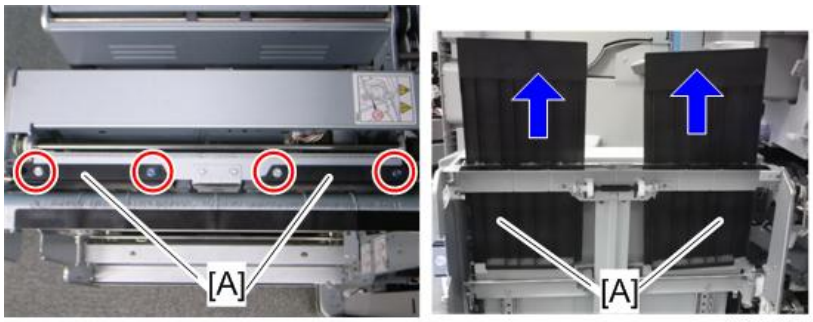

d1351522

4. Lift up the dynamic roller [A].



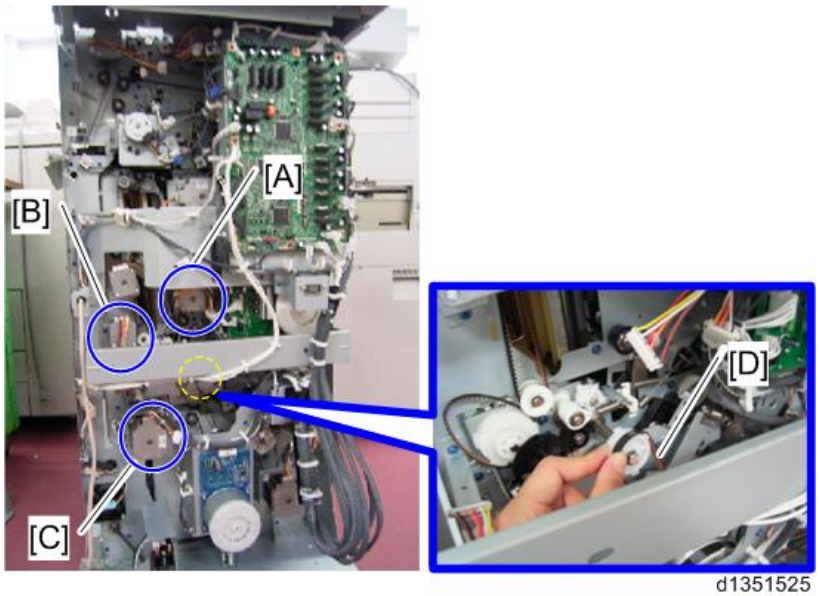

d1351523

5. Two guide plates [A] (each x 2).



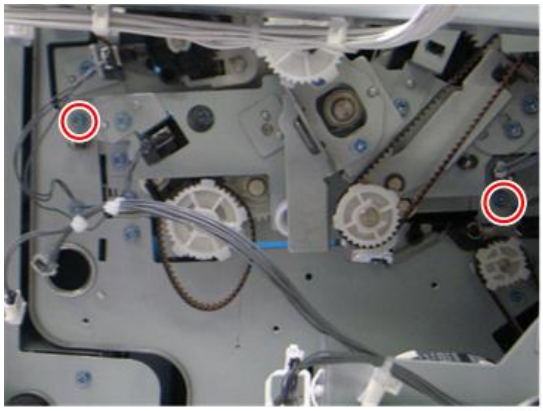

d1351524

6. Registration roller transport motor assembly [A] (☛Registration Roller Transport Motor)
7. Registration roller release motor assembly [B] (☛Registration Roller Release Motor)
8. Fold plate motor assembly [C] (☛Fold Plate Motor)
9. Timing belt of the 1st plate motor [D]



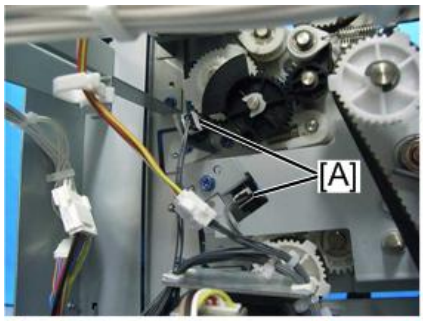

d1351525

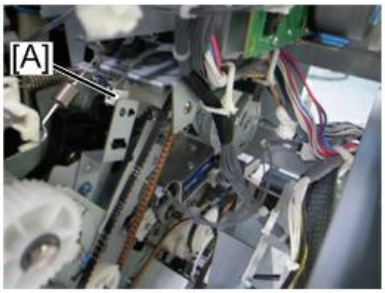
10. Remove two screws on the rear side.



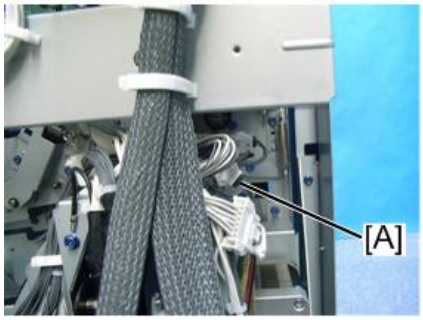
d1351526

11. Disconnect four harnesses [A] on the rear side.

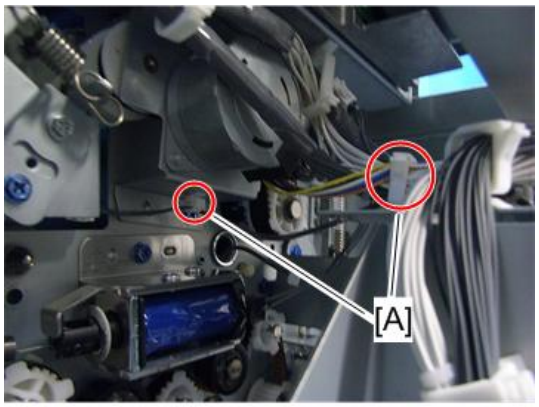



d1351527



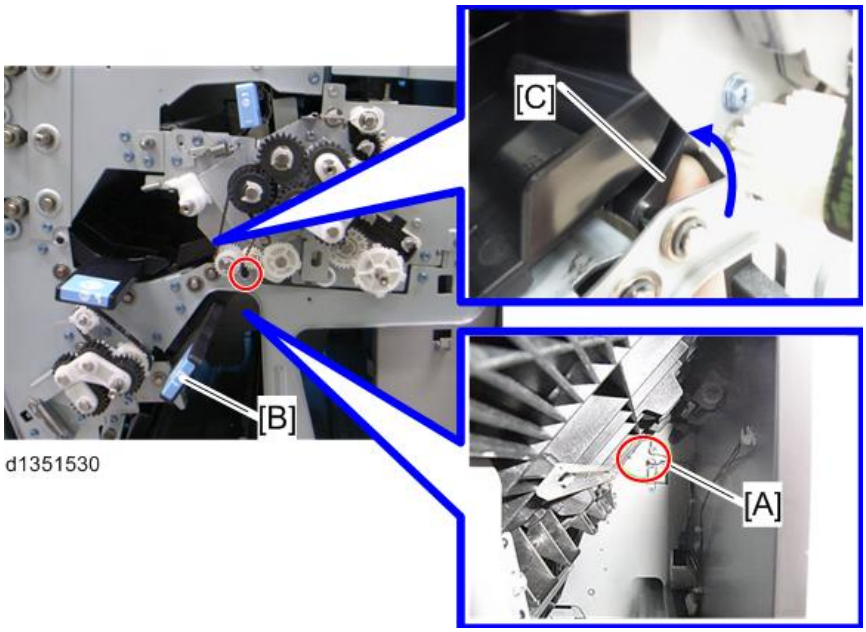

12. Release two clamps [A].




d1351528

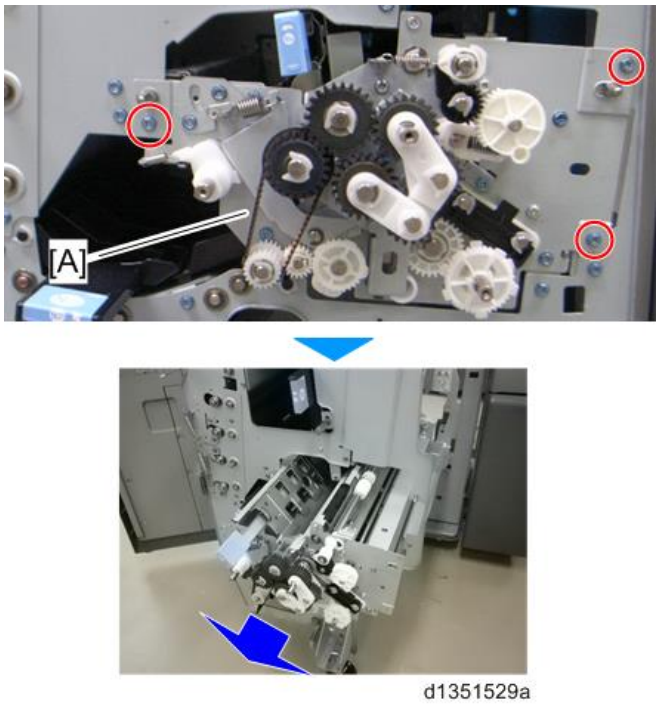
13. Remove the spring [A] at the rear frame of the folding unit drawer.
14. Remove the lower guide plate [B] ( x 1).
    - First, push the lower guide plate to the rear side while keeping the upper guide plate [C] open.

- Secondly, take out the lower guide plate [B].



d1351530

15. Pull the first fold unit [A] until it stops ( x 3).

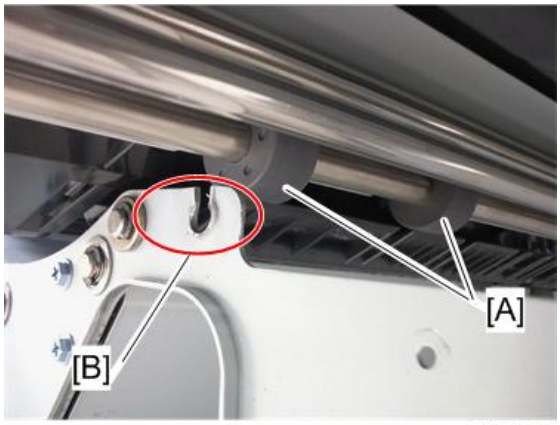


d1351529a

16. Lift the first fold unit a little bit, and then remove it.

Note

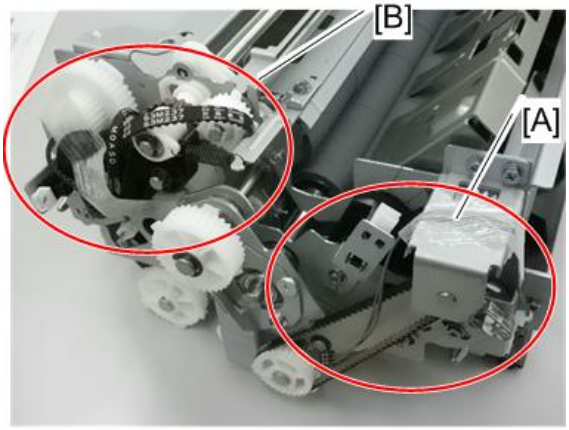
- At this time, one of the transport rollers [A] at the bottom of the first fold unit is caught in the frame [B] of the fold unit drawer.




d1351531

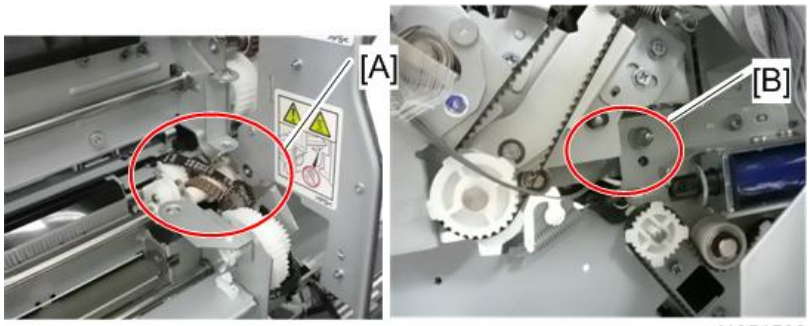
Note

- When installing the first fold unit:
- Attach the harness [A] and timing belts [B] tightly to the first fold unit with tapes so that the harness and timing belts are not caught in any parts when installing the first fold unit in the fold unit drawer.




d1351532

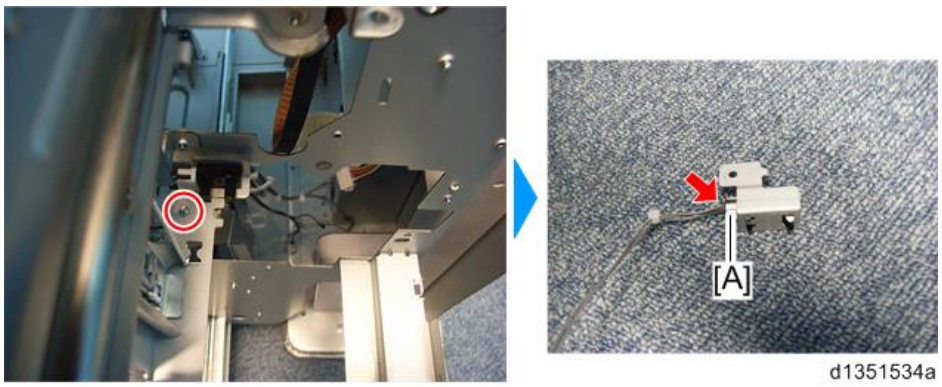
- If the first fold unit is not completely installed in the fold unit drawer, check the following:
- The timing belts are not caught [A] between the rear frame of the fold unit drawer and the frame of the first fold unit.
- The harness of the first fold unit is not pinched [B] between the rear frame of the fold unit drawer and the frame of the first fold unit.




d1351533

## Dynamic Roller HP Sensor

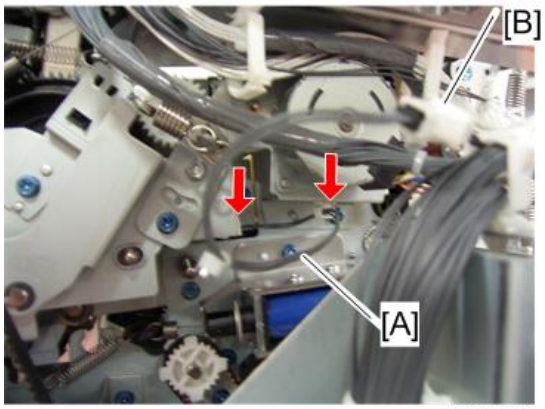
1. First fold unit (First Fold Unit)
2. Dynamic roller HP sensor [A] ( x 1, x 1)



d1351534a

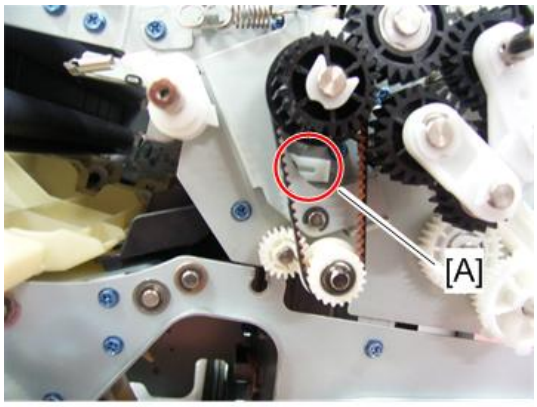
## Bypass Entrance Paper Sensor

1. Folding unit cover (Folding Unit Cover)
2. Rear upper cover (Rear Upper Cover)
3. Rear lower cover (Rear Lower Cover)
4. Disconnect the bypass entrance paper sensor harness [A] from the connector [B] ( x 1, x 2).



d1351536

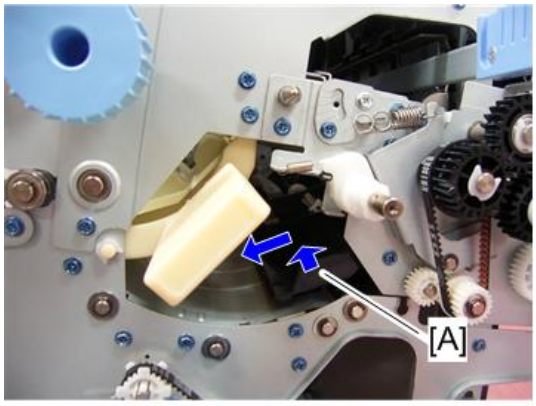
5. Remove the clip [A] for the bypass entrance guide plate.



d1351537

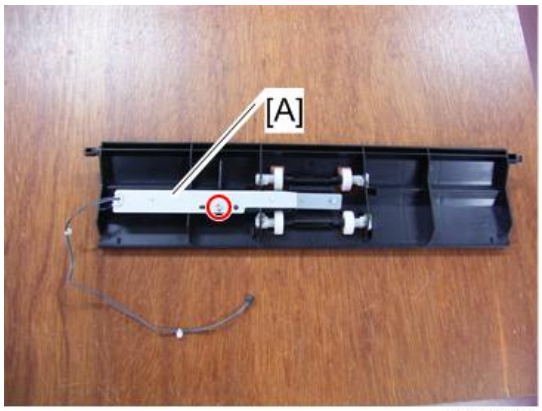
6. Remove the guide plate [A].

- Remove the embossed part at the front by pushing the guide plate to the rear.
- Remove the embossed part at the rear by sliding the guide plate to the left.



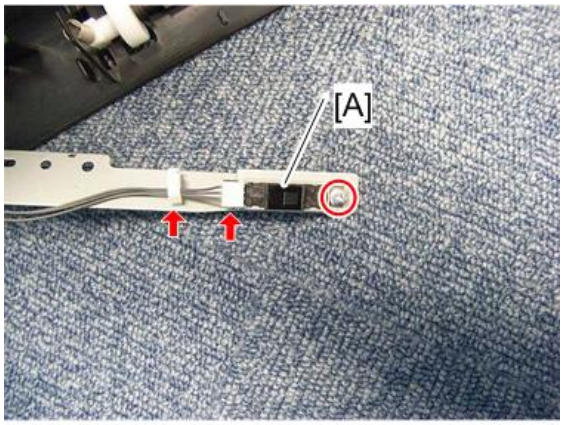

d1351538

7. Bypass entrance paper sensor bracket [A] ( x 1)




d1351539

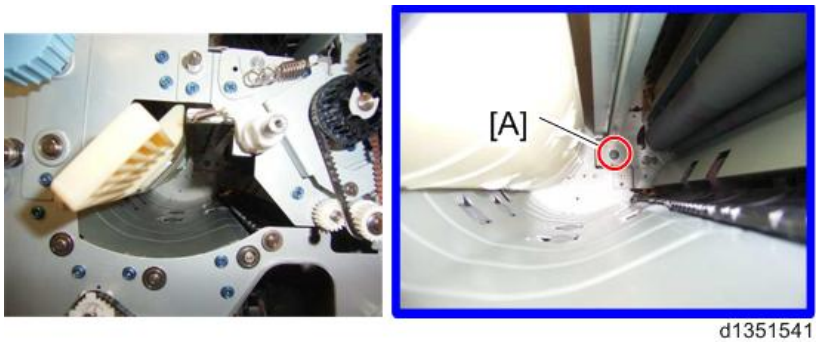
8. Bypass entrance paper sensor [A] ( x 1, x 1, x 1)




d1351540

Note

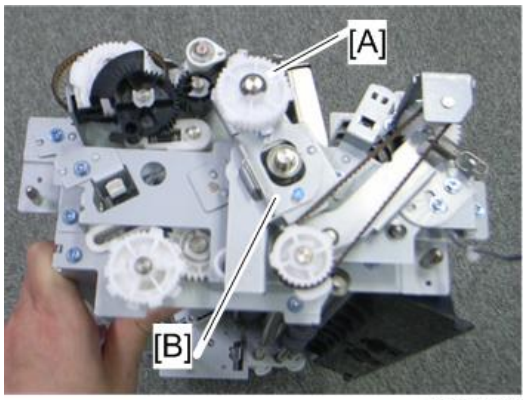
- Reinstalling the bypass entrance paper sensor:
- Put the harness of the bypass entrance paper sensor through the hole [A] in the rear frame of the drawer.



d1351541

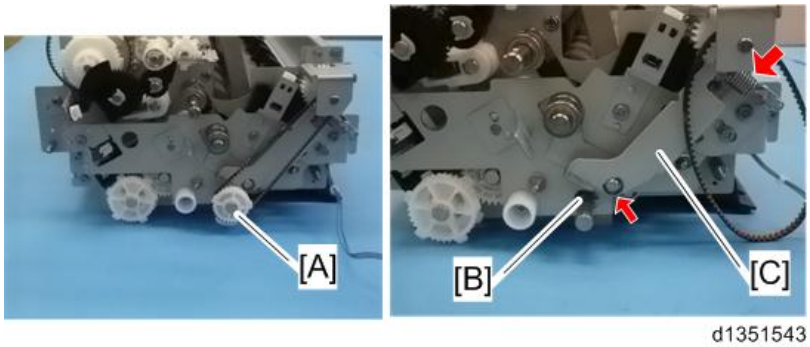
## First, Second, Third Fold Rollers

1. First fold unit (First Fold Unit)
2. First fold roller gear [A] ( x 1, pin x 1, spacer x 1)
3. Pressure release bracket [B]



d1351542

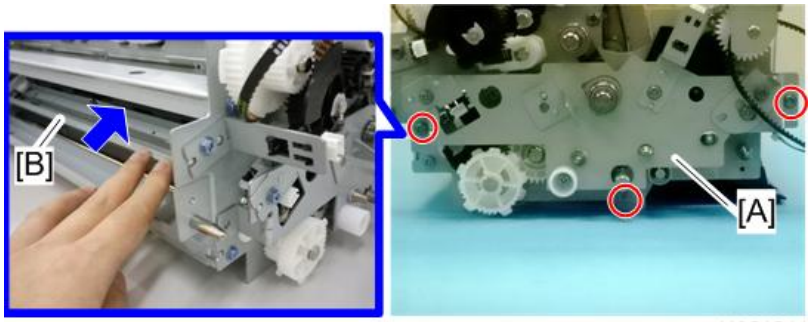
4. Rear cam gear [A] ( x 1, timing belt x 1)
5. Bushing [B] ( x 1)
6. Rear tension bracket [C] (spring x 1, x 1)



d1351543

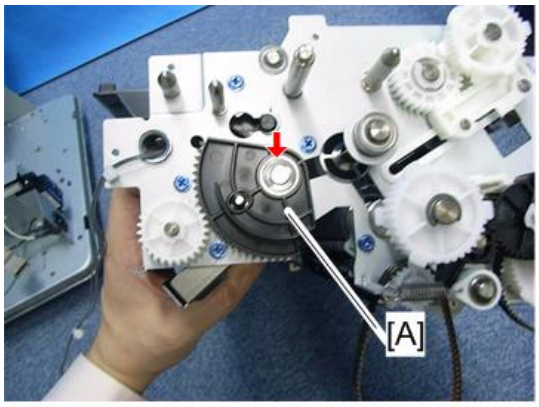
7. Rear bracket [A] ( x 3)

8. When removing the rear bracket, slide the fold assist plate [B] in the arrow direction.



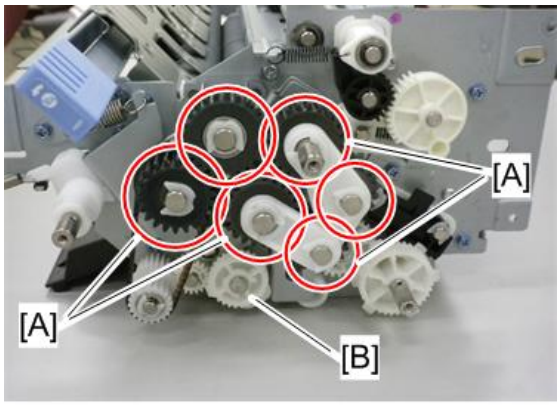
d1351544

9. Remove the gear [A] ( x 1)



d1351546

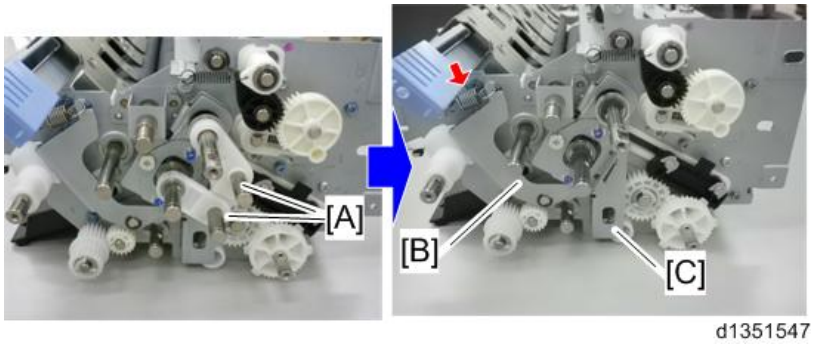
10. Remove six gears (clip x 6, pin x 1 each for four gears [A]).
11. Cam gear [B] ( x 1, pin x 1)



d1351545

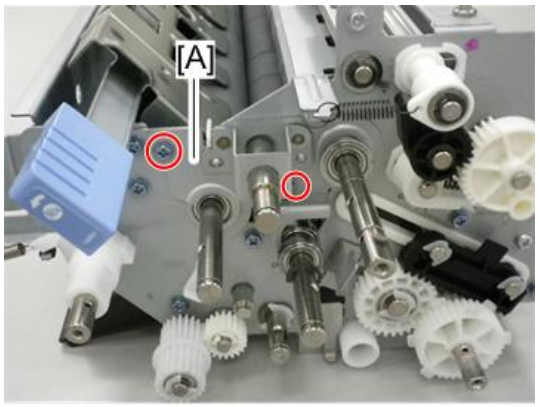
12. Remove the gear links [A].
13. Front tension bracket [B] (spring x 1, x 1)

14. Front shaft holder bracket [C] ( x 1, bushing x 1, spacer x 1)



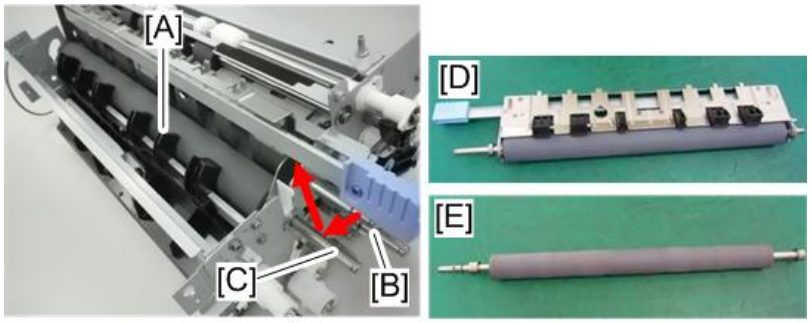
d1351547

15. Front bracket [A] ( x 2)



d1351548

16. Third fold roller [A] with the guide plate and direct send junction gate [B].
17. Second fold roller [C]

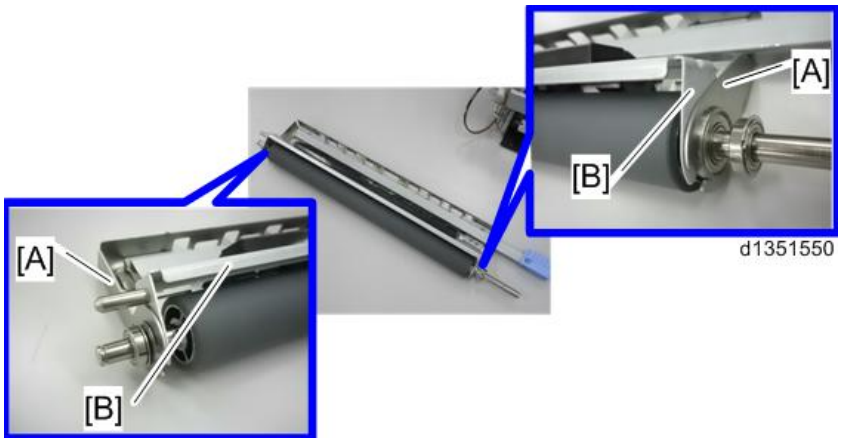


d1351549

- [D]: Third fold roller with the guide plate and direct send junction gate
- [E]: Second fold roller

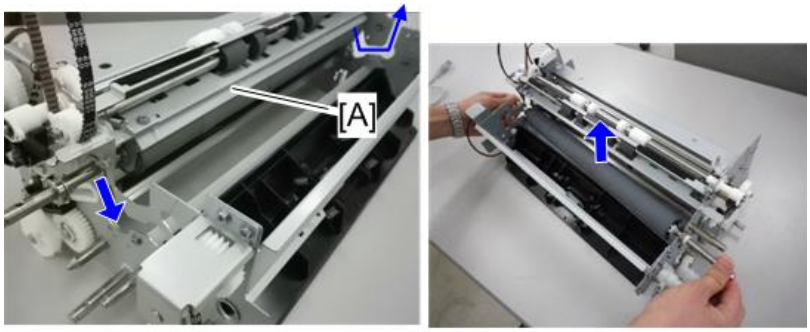
Note

- When re-assembling the third fold roller with the direct send junction gate and guide plate, install the guide plate [A] and direct send junction gate [B] in the third fold roller unit as shown below. (The arms of the guide plate should be placed on the outer side of the arms of the direct send junction gate.)



d1351550

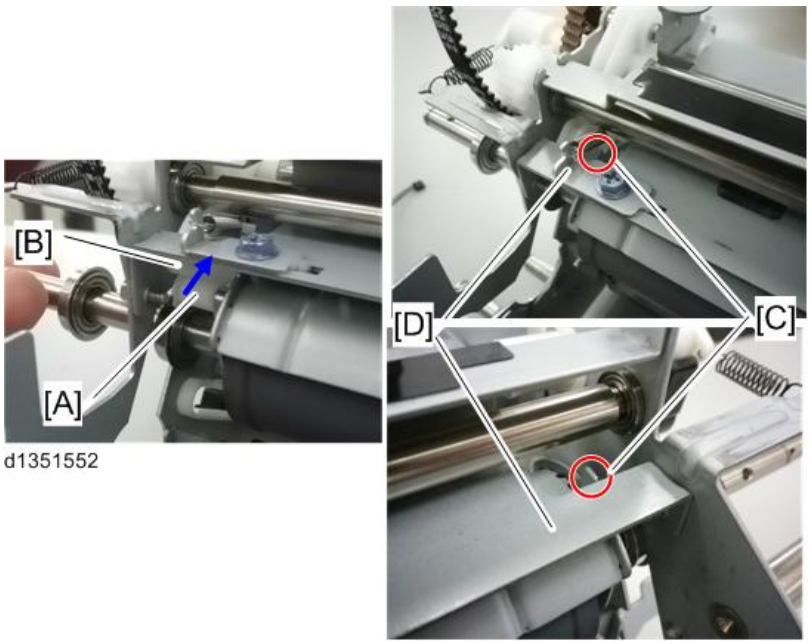
18. First fold roller with roller bracket [A]



d1351551

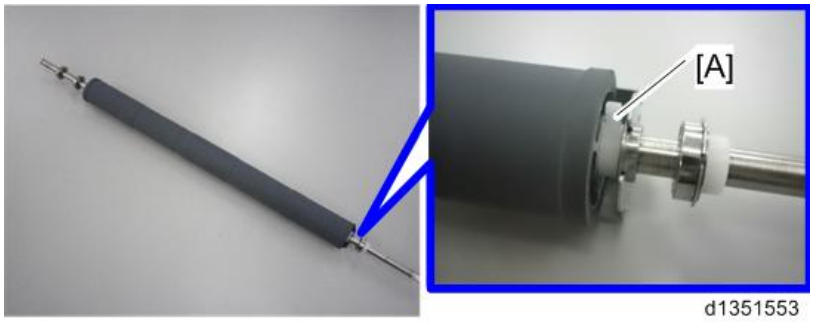
Note

- When reinstalling the first fold roller, insert the white pivot [A] in the rail [B].
- Make sure that two projections [C] hook onto the stay bracket [D].

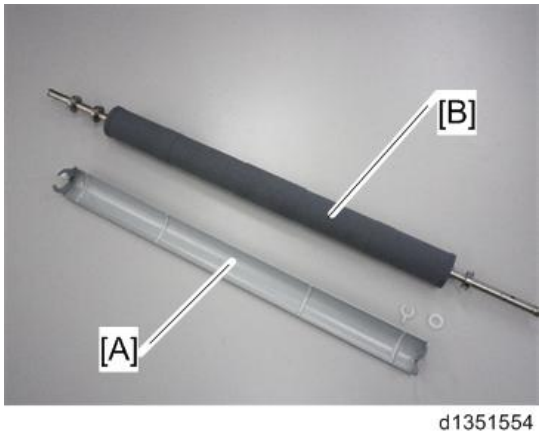


d1351552

19. Roller stopper [A]




20. Roller bracket [A]
21. First fold roller [B] (spacer x 1)

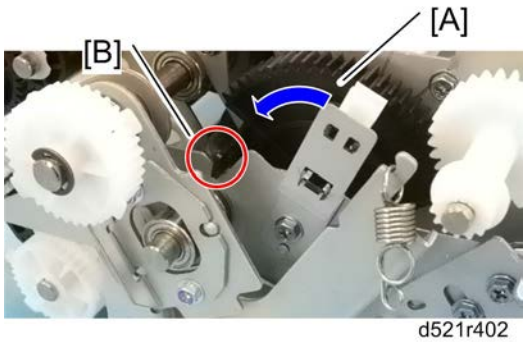



## When reinstalling the first, second and third fold rollers

The rear cam gear (removed in step 11) must be adjusted when reinstalling the first, second and third fold rollers. Do the following procedure.

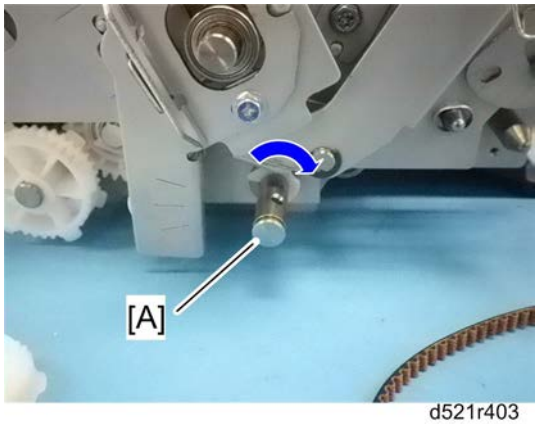
1. Remove the rear idle gear holder [A] ( x 2).

2. Turn the direct send junction gate gear [A] to the left until it stops at the edge [B] of the frame.



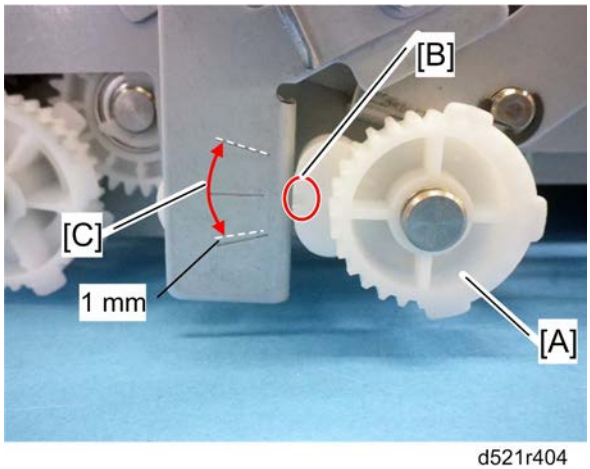
d521r402

3. Turn the cam gear shaft [A] clockwise until it is stopped.



d521r403

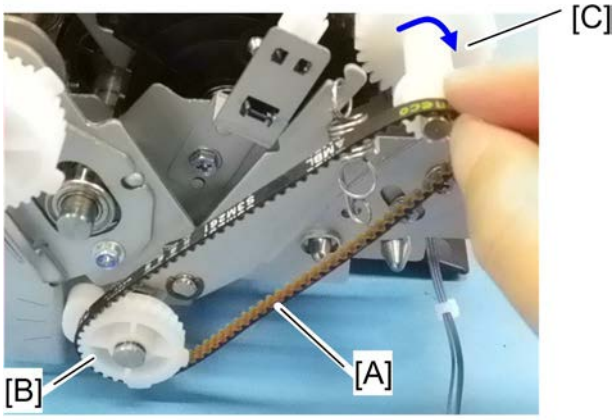
4. Set the rear cam gear [A] (with its pin) on the cam gear shaft.
   - Make sure that the notch [B] in the rear cam gear is positioned within the proper range [C]. The lowest position is 1 mm above the lowest of the three lines.



d521r404

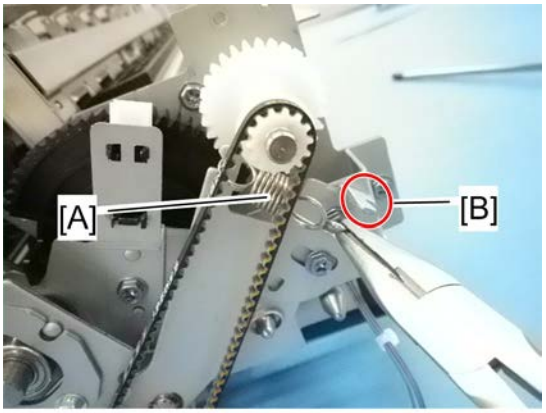
5. Hook the timing belt [A] over the rear cam gear [B] first, and then hook the timing belt over the idle gear [C]

while rotating the idle gear clockwise.



d521r405

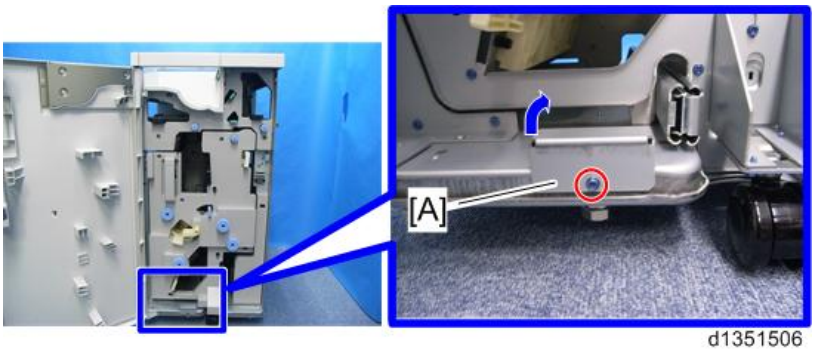
6. Check if the notch position of the rear cam gear is positioned within the proper range again.
7. Attach the clip to the rear cam gear shaft ( x 1).
8. Attach the rear idle gear holder ( x 2).
9. Hook the tension spring [A] onto the notch [B].



d521r406

## Fourth, Fifth Fold Rollers

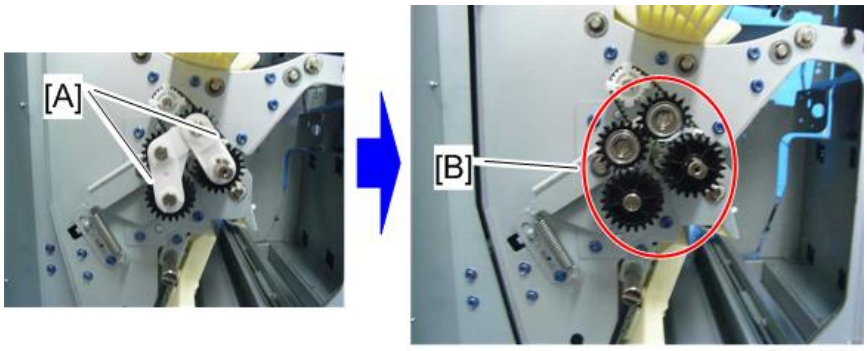
1. Rear upper cover (Rear Upper Cover)
2. Rear lower cover (Rear Lower Cover)
3. Drawer stopper [A] ( x 1)



d1351506

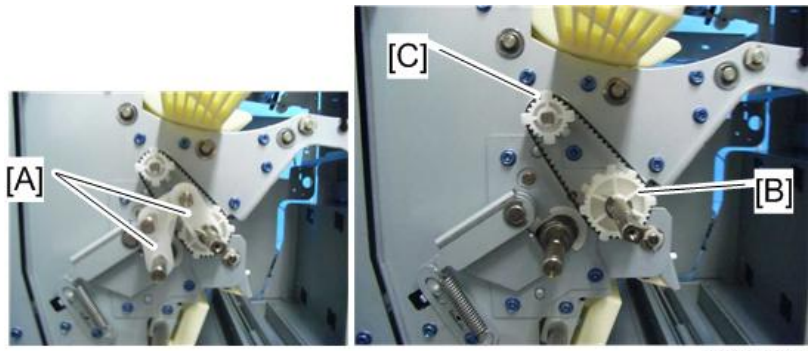
4. Remove the links [A] on the front side.

5. Remove four gears [B]. ( x 1)



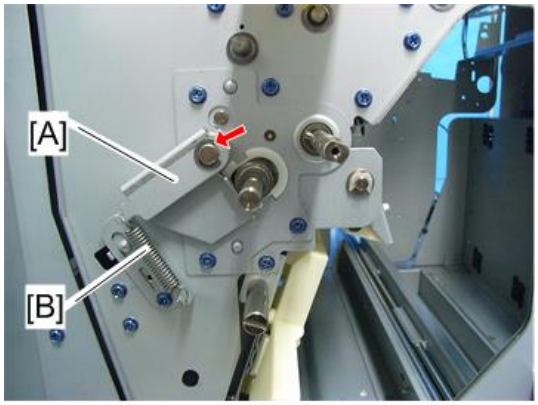
d1351555

6. Remove the links [A] (pin x 1 each)
7. Remove the gears [B] and [C] ( x 1, timing belt x 1).



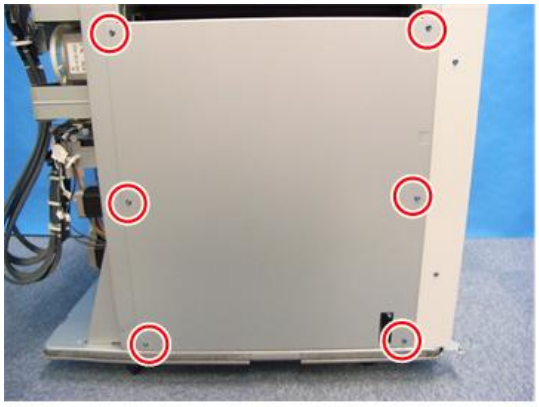
d1351556

8. Remove the tension bracket [A] (spring [B] x 1, x 1).

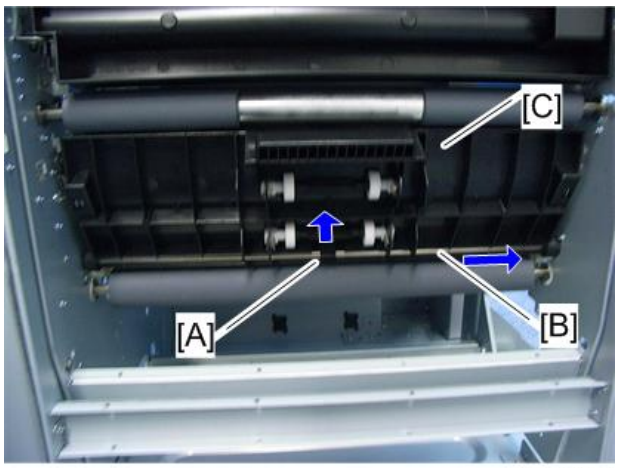


d1351557a

9. Left lower bracket ( x 6)

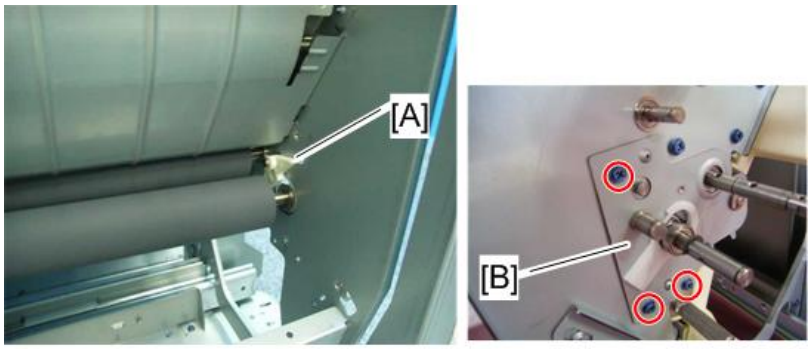

d1351558

10. Lift up the hook [A] to release the guide plate shaft [B].
11. Move the guide plate shaft [B] to the front (arrow direction), and then remove the guide plate [C].



d1351559

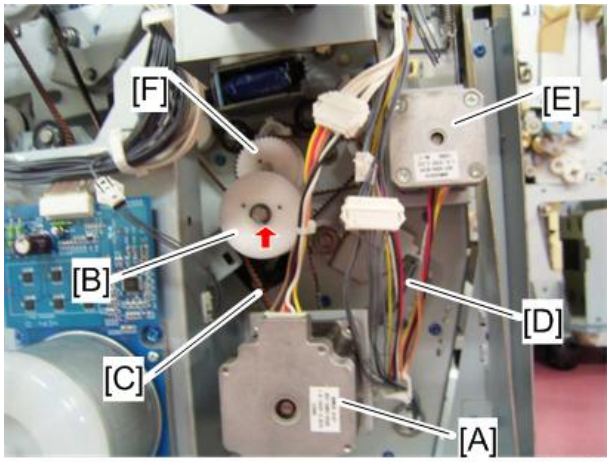
12. Remove the cam [A] on the front.
13. Fold roller fixing front plate [B] ( x 3)



d1351561

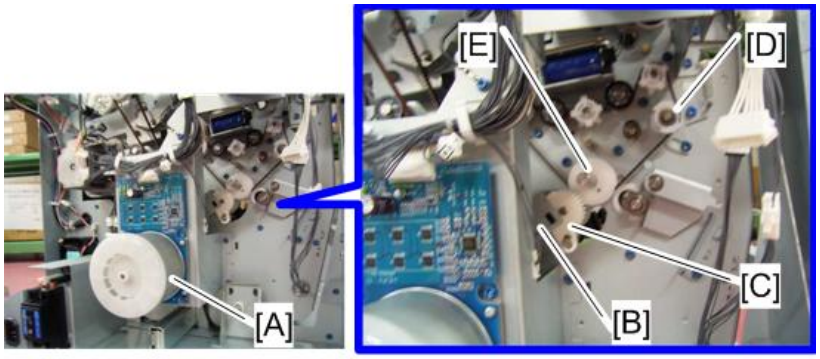
14. 2nd fold motor [A] (2nd Fold Motor)
15. 2nd fold pulley gear [B] ( x 1) and idle gear
16. Timing belt [C]
17. Spring [D]
18. FM6 pawl motor [E] (FM6 Pawl Motor)

19. Pulley gear [F]



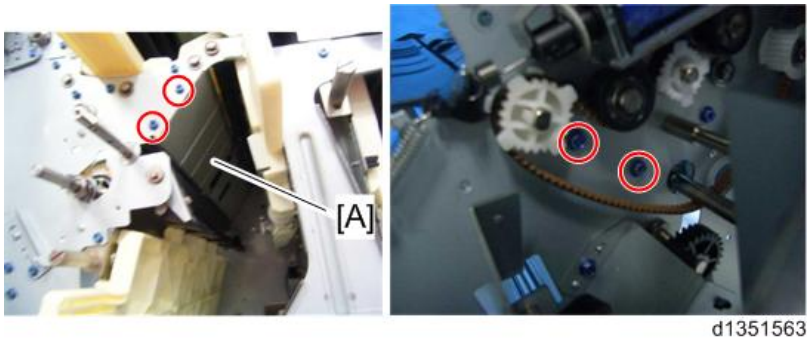
d1351560

20. 1st fold motor [A] (1st Fold Motor)
21. FM6 pawl HP sensor bracket [B]
22. FM6 pawl cam gear [C]
23. Release the tension bracket [D], and then remove the transmission pulley gear [E] (pin x 1)



d1351562

24. Remove the entrance guide plate [A] at the 2nd fold unit ( x 4).

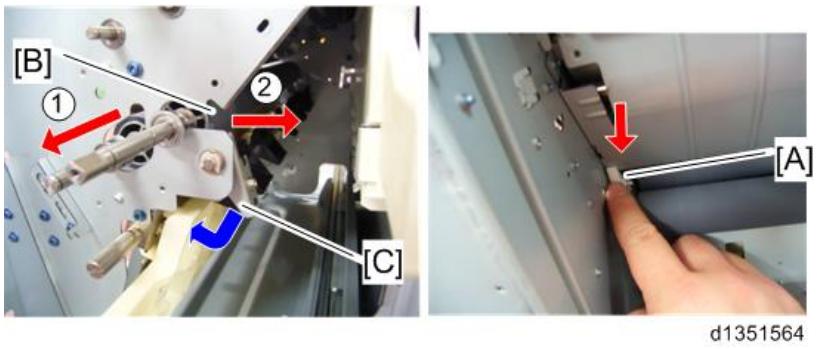


d1351563

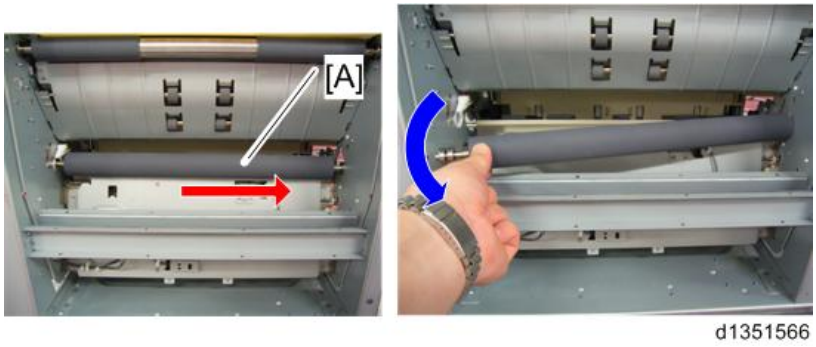
25. Hold the fourth fold roller cam [A] at the rear of the drawer unit.
26. Pull the fourth fold roller [B] to the front ①.
27. Keep the FM6 pawl [C] open, and then remove the fourth fold roller ②.

Note

- Hold the holder [A] when pulling the fourth fold roller [B] in the ① direction.

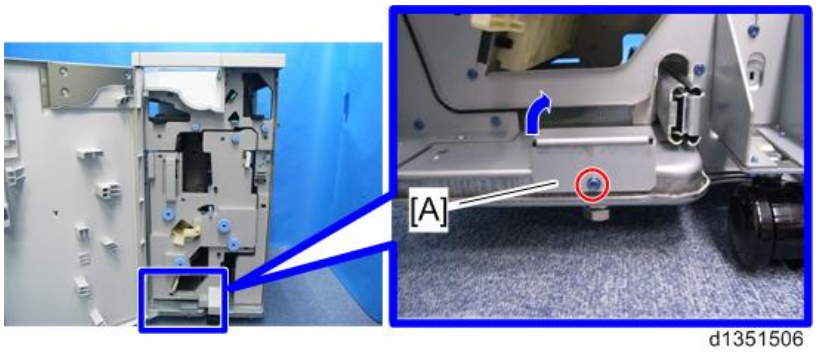



28. Remove the fifth fold roller [A].

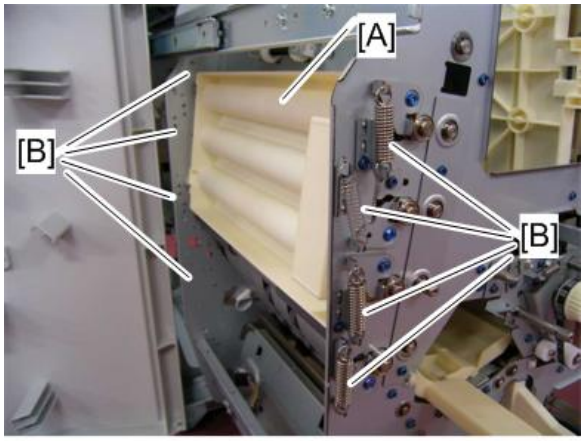



## Crease Rollers: Idle Rollers

1. Folding Unit Cover (Folding Unit Cover)
2. Drawer stopper [A] ( x 1)

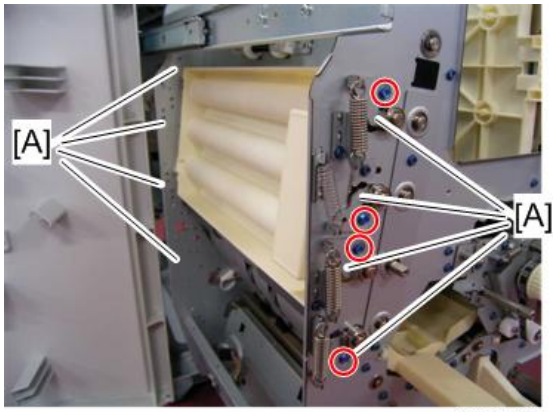



3. Pull out the folding unit drawer fully.
4. Crease jam removal door [A]
5. Tension springs [B] (front: 4, rear: 4)
   - The lowest springs (front and rear) should be a black one when reinstalling the springs.



d1351565

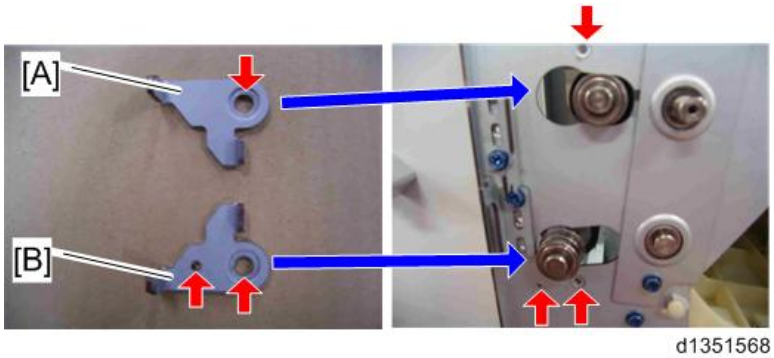
6. Tension brackets [A] ( x 1 each/ front: 4, rear: 4)



d1351567

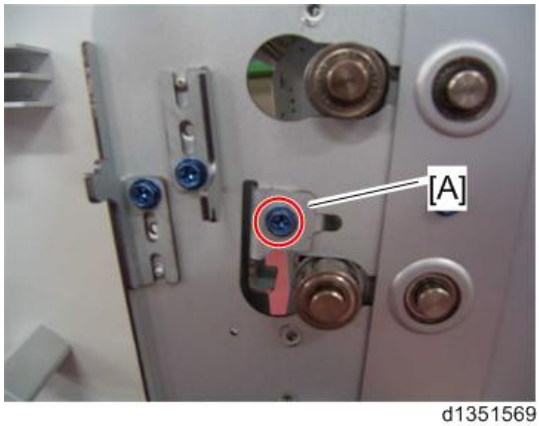
Note

- There are two types of tension brackets at the crease roller area. The difference between these brackets is the number of screw holes ([A]: one hole, [B]: two holes).
- Attach a bracket [A] with one hole to the crease roller frame with one hole.
- Attach a bracket [B] with two holes to the crease roller frame with two holes.



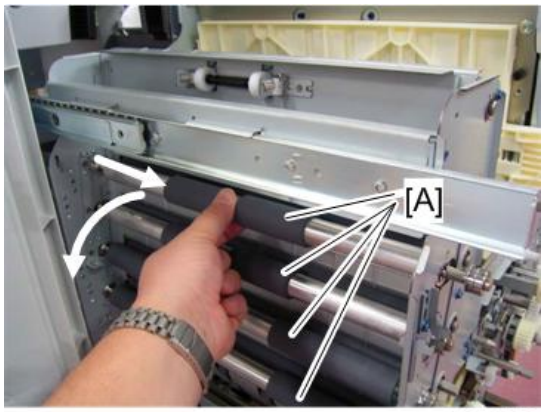
d1351568

7. Magnet attachment bracket [A] (x 1)




d1351569

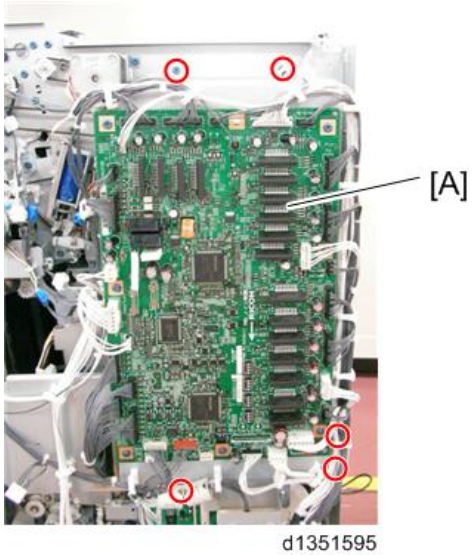
8. Four crease rollers: idle rollers [A]




d1351570

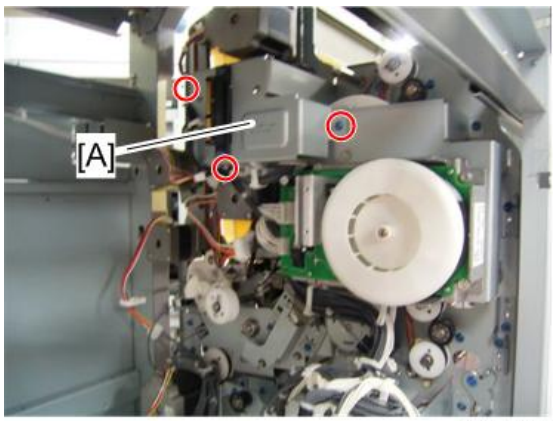
## Crease Rollers: Drive Rollers

1. Crease Rollers: Idle Rollers (Crease Rollers: Idle Rollers)
2. Rear upper cover (Rear Upper Cover)
3. Rear lower cover (Rear Lower Cover)
4. Main board bracket [A] ( x all, x all, x 5, ground cable x 1)



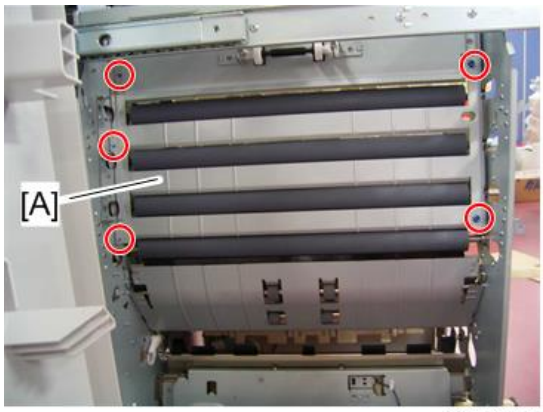

d1351595

5. Rear upper stay (Dynamic Roller Lift Motor)
6. Drawer connector bracket [A] ( x 3)



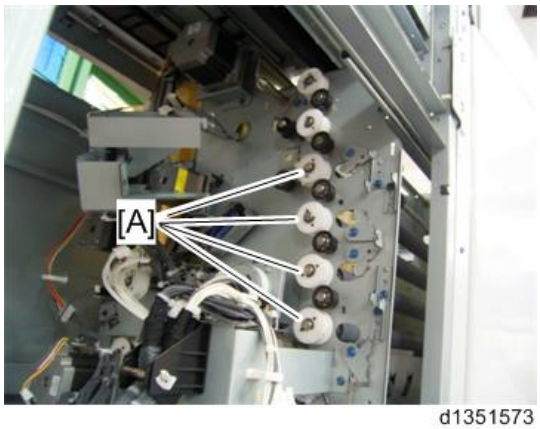

d1351571

7. Crease motor (Crease Motor)
8. Crease path guide plate [A] ( x 5)



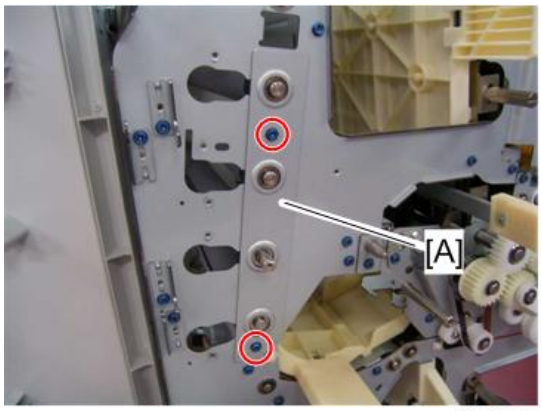

d1351572a

9. Crease roller pulley gears [A] ( x 1 each)



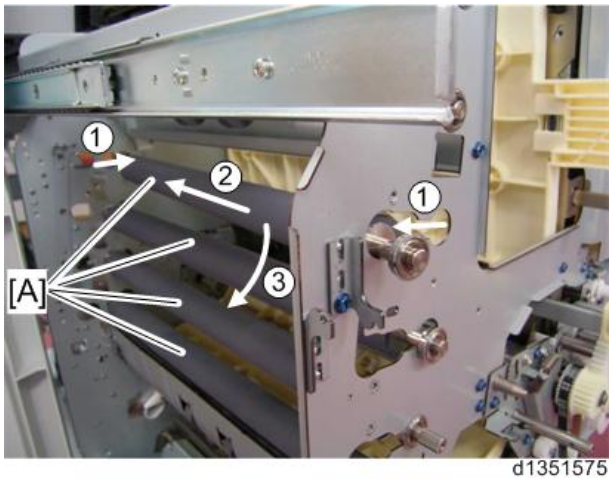

d1351573

10. Crease roller fixing plate [A] ( x 2)




d1351574

11. Crease rollers: drive rollers [A]

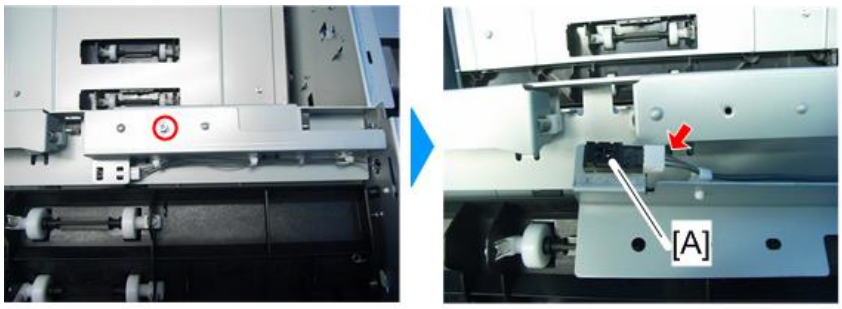



d1351575

# Paper Exit

## Top Tray Exit Sensor

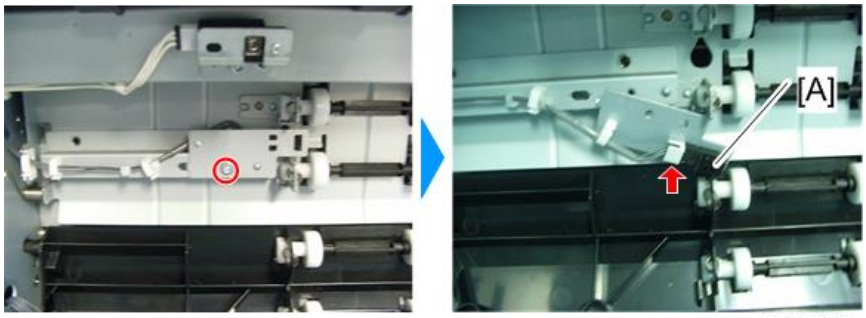
1. Top cover (Top Cover)
2. Top tray exit sensor [A] ( x 1, x 1)




d1351576a

## Top Tray Paper Path Sensor

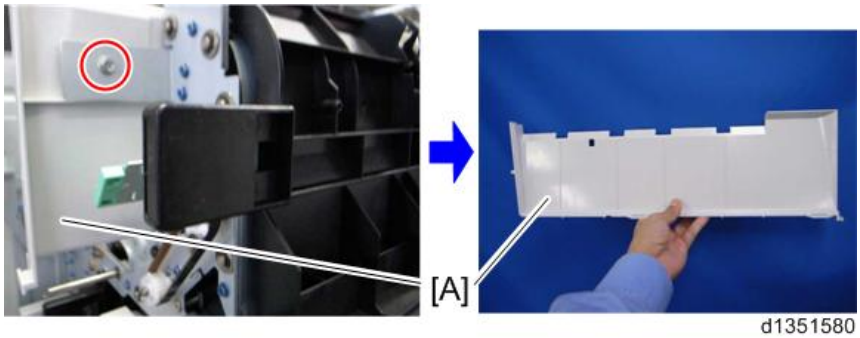
1. Top tray right cover (Top Tray Right Cover)
2. Top tray paper path sensor [A] ( x 1, x 1)




d1351578a

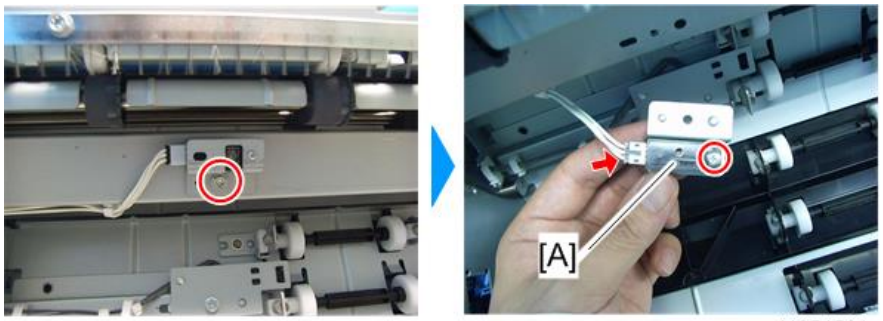
## Top Tray Full Sensor (E)

1. Top tray (Top Tray)
2. Paper exit cover [A] ( x 1)




d1351580

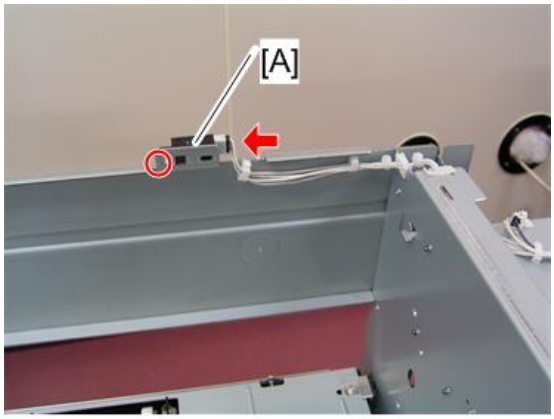
3. Top tray full sensor (E) [A] ( x 2, x 1)



d1351581a

## Top Tray Full Sensor (R)

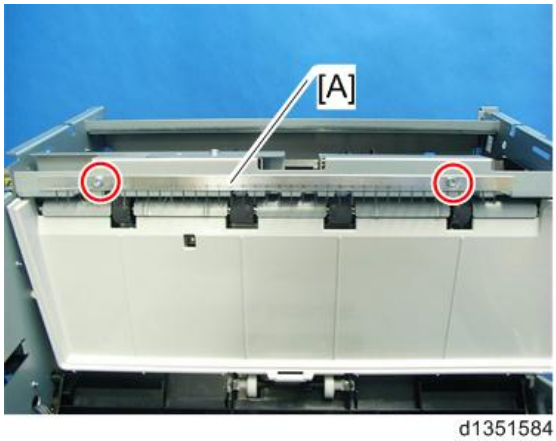
1. Top tray (Top Tray)
2. Top tray full sensor (R) [A] ( x 1, x 1)



d1351583

## Discharge Brush 1

1. Top tray (Top Tray)
2. Discharge brush 1 [A] ( x 2)

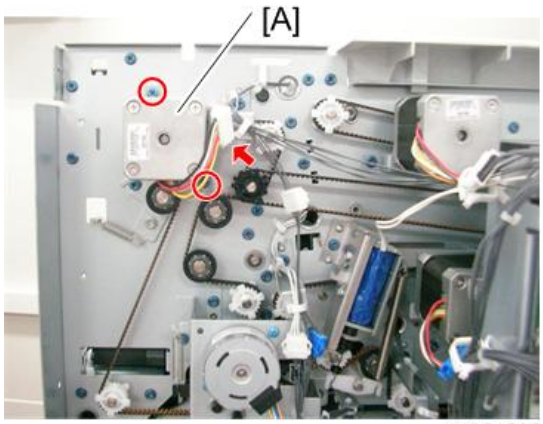


d1351584

# Drive Area

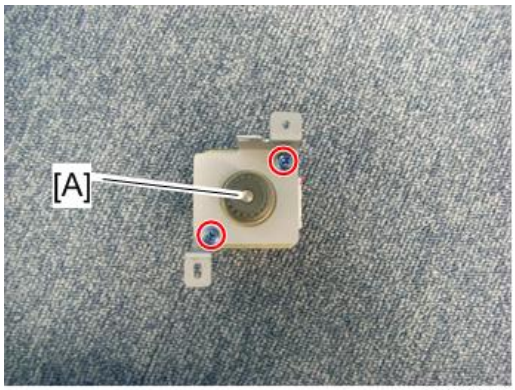
## Horizontal Transport Motor

1. Rear upper cover (Rear Upper Cover)
2. Top rear cover (Top Rear Cover)
3. Horizontal transport motor assembly [A] ( x 1, x 2)



d1351585

4. Horizontal transport motor [A] ( x 2)

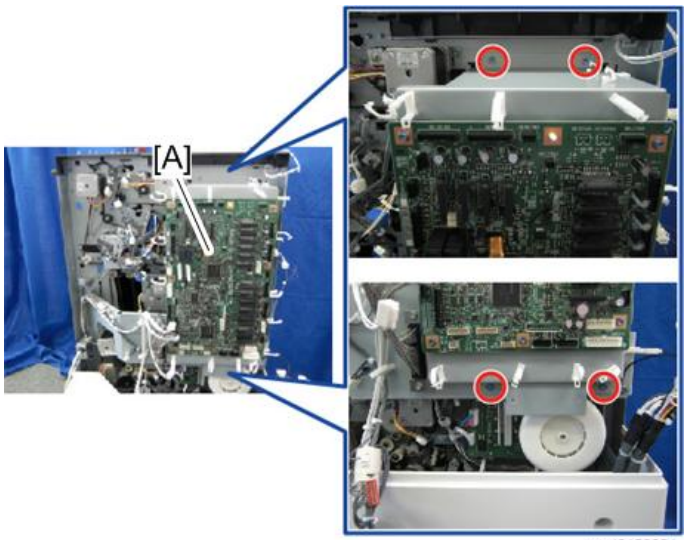


d1351586

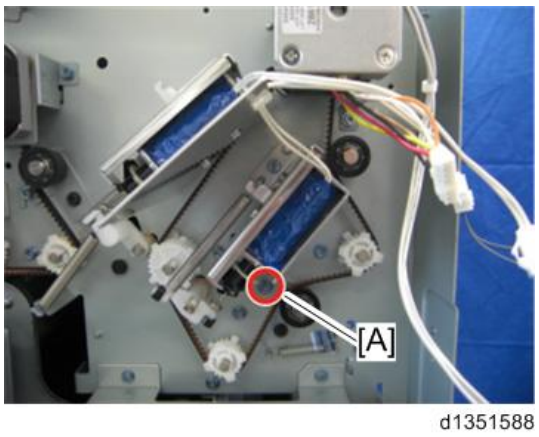
## Horizontal Transport Exit Motor

1. Rear upper cover (Rear Upper Cover)
2. Top rear cover (Top Rear Cover)

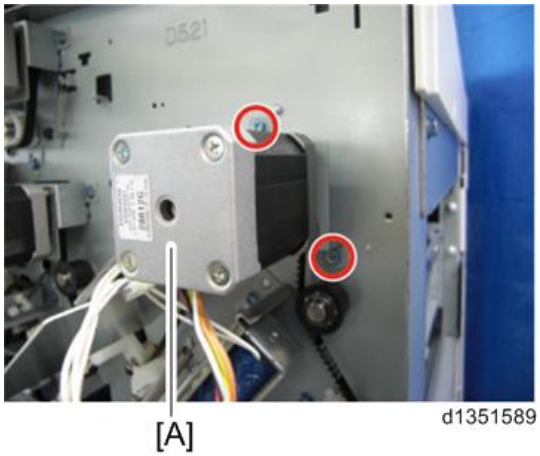
3. Main board with bracket [A] ( x 4, x all)



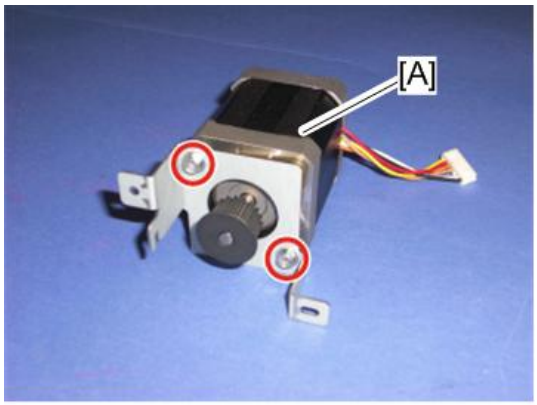

4. Loosen the screw [A] to loosen the timing belt.




5. Horizontal transport motor assembly [A] ( x2)



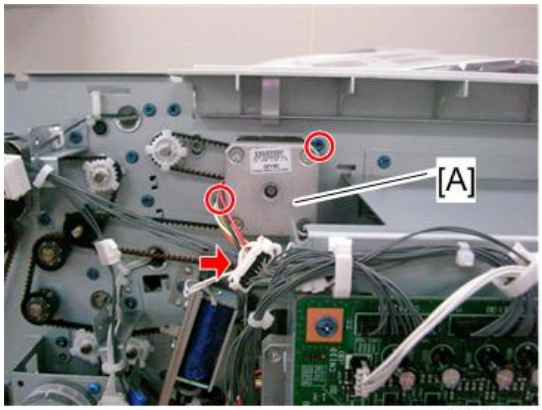
6. Horizontal transport motor [A] ( x2)




d1351590

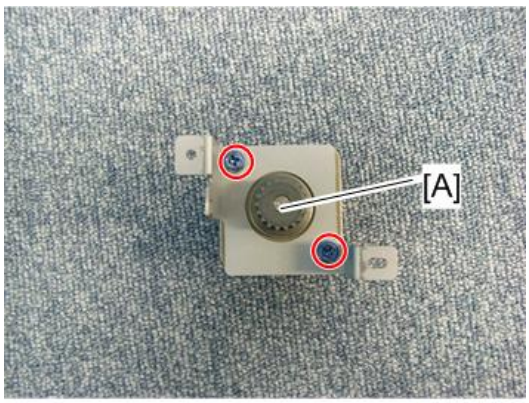
## Top Tray Exit Motor

1. Rear upper cover (Rear Upper Cover)
2. Top rear cover (Top Rear Cover)
3. Top tray exit motor assembly [A] ( x 1, x 1, x 2)




d1351591

4. Top tray exit motor [A] ( x 2)

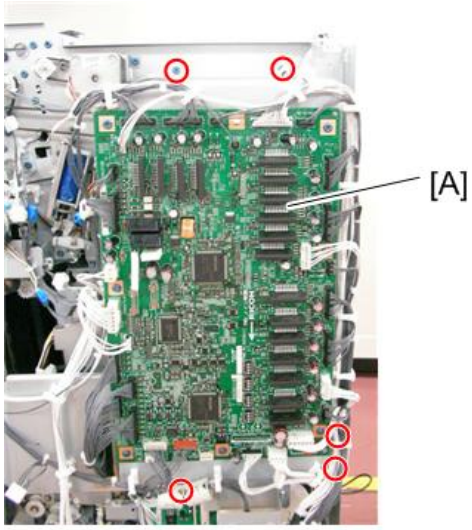



d1351592

## Top Tray Transport Motor

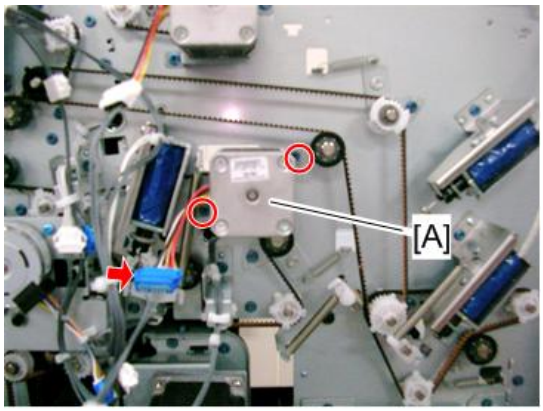
1. Rear upper cover (Rear Upper Cover)
2. Top rear cover (Top Rear Cover)

3. Main board assembly [A] ( x all, x all, x 5, ground cable x 1)



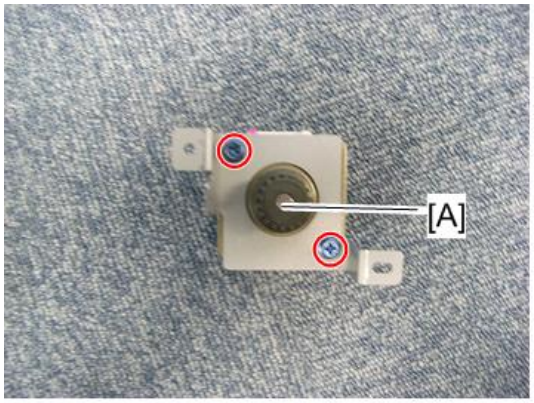

d1351595

4. Top tray transport motor bracket [A] ( x 1, x 2)




d1351593

5. Top tray transport motor [A] ( x 2)

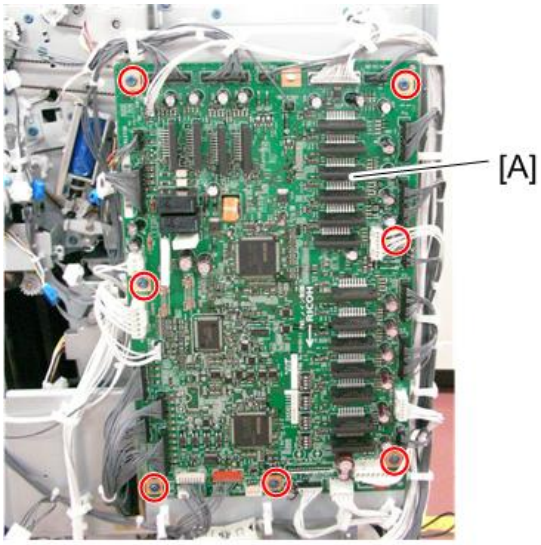



d1351594

# Electrical Components

## Main Board

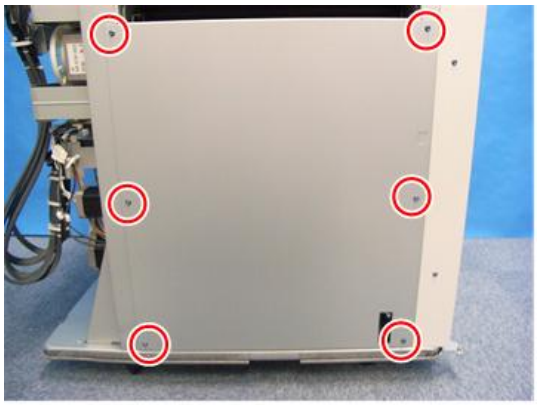
1. Rear upper cover (Rear Upper Cover)
2. Main board [A] ( x all, x 7)




d1351596

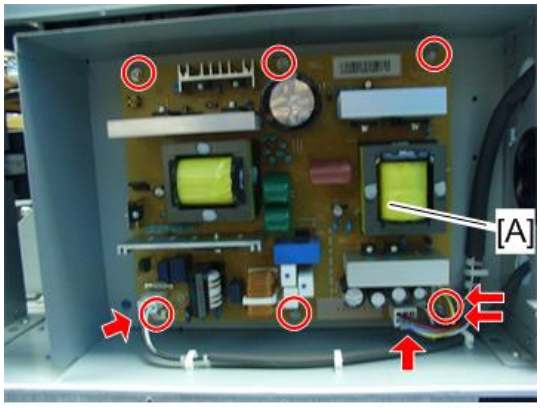
## PSU

1. Left lower plate ( x 6)



d1351597

2. PSU [A] ( x 6, x 4)



# Fold Adjustments

## Before You Begin

Before performing the adjustment, check the following.

- The multi-folding unit is leveled to match the front-to-back and side-to-side measurements of the main machine.
- There is no paper skew or shift in side-to-side registration.

The fold positions can be adjusted in the User Tools (Operators and Skilled Operators), the engine SP mode and Advanced Settings.

- Administrator Log-in is required to adjust Advanced Settings.
- Advanced Settings is enabled only for Custom Paper.
- Advanced Settings should be specified for each Custom Paper Profile.

### Advanced Settings

| Mode | Fold | Advanced Settings*[1] | SP |
|---|---|---|---|
| FM1 | 1st | 103 Z-fold Position 1 | - |
| | 2nd | 104 Z-fold Position 2 | - |
| FM2 | 1st | 105 Half Fold Position: 1 sheet Fold | - |
| FM3 | 1st | 106 Letter Fold-out Position 1: 1 sheet Fold | - |
| | 2nd | 107 Letter Fold-out Position 2: 1 sheet Fold | - |
| FM4 | 1st | 108 Letter Fold-in Position 1: 1 sheet Fold | - |
| | 2nd | 109 Letter Fold-in Position 2: 1 sheet Fold | - |
| FM5 | 1st | 110 Double Parallel Fold Position 1 | - |
| | 2nd | 111 Double Parallel Fold Position 2 | - |
| FM6 | 1st | 112 Gate Fold Position 1 | - |
| | 2nd | 113 Gate Fold Position 2 | - |
| | 3rd | 114 Gate Fold Position 3 | - |

*[1]: These numbers are the same for the advanced settings of Administrator. These settings can be adjusted for each paper profile.

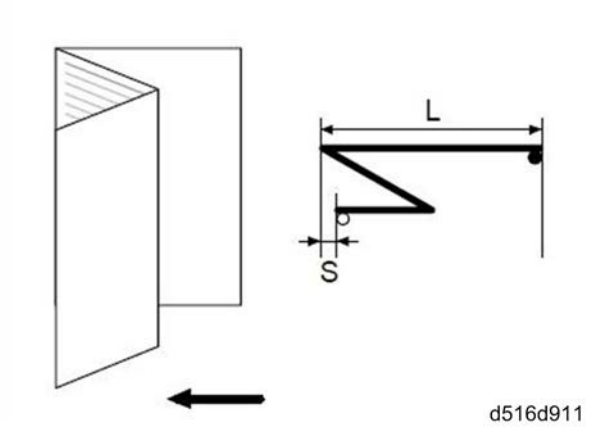
### Adjustment Settings for Skilled Operators and Engine SP modes

| Mode | Fold | User Tools | SP |
|---|---|---|---|
| FM2 | 1st | 0601 Half Fold Position: Multi-sheet Fold | 6-314-021 to -039 |
| FM3 | 1st | 0602 Letter Fold-out Position 1: Multi-sheet Fold | 6-315-022 to -039 |
| | 2nd | 0603 Letter Fold-out Position 2: Multi-sheet Fold | 6-316-022 to -039 |
| FM4 | 1st | 0604 Letter Fold-in Position 1: Multi-sheet Fold | 6-317-021 to -039 |
| | 2nd | 0605 Letter Fold-in Position 2: Multi-sheet Fold | 6-318-021 to -039 |

## FM1 Z-Folding

**103: Z-fold Position 1**

Adjusts the width of the bottom end segment (S) of Z-folded sheets when using the multi-folding unit.



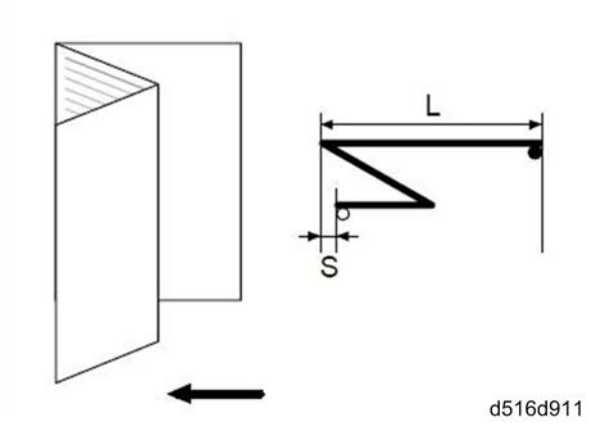

Press [+] to increase and [-] to reduce (S).

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S | 0 mm | -4 to 4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

**104: Z-fold Position 2**

Adjusts the overall fold size (L) of Z-folded sheets when using the multi-folding unit. Press [+] to increase and [-] to reduce (L).




The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

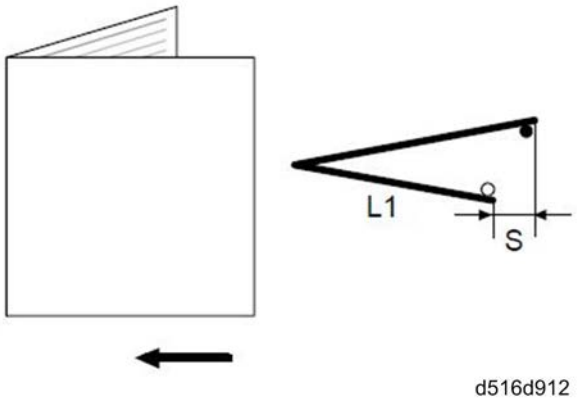
| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | L | 0 mm | -4 to 4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

## FM2 Half Fold: Single-sheet Fold and Multi-sheet Fold

**105: Half Fold Position: 1 sheet Fold**

Adjusts the fold position (S) of half folded sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (S).

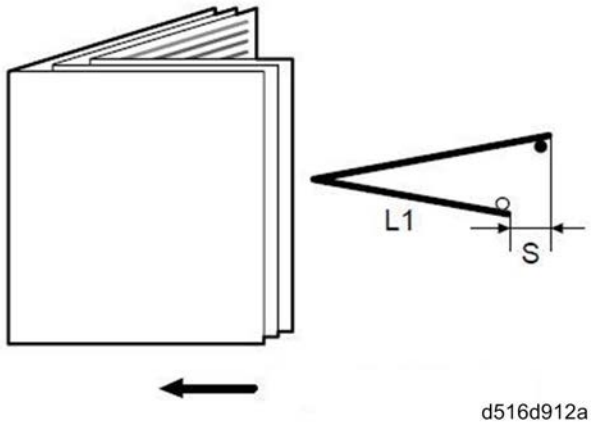
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | L1 | 0 mm | -4 to 4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

**0601: Half Fold Position: Multi-sheet Fold) SP6-314-021 to -039**

Adjusts the folded position (S) of half folded sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (S).

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| A3 SEF | S | 0 mm | ±4 mm | 6-314-021 |

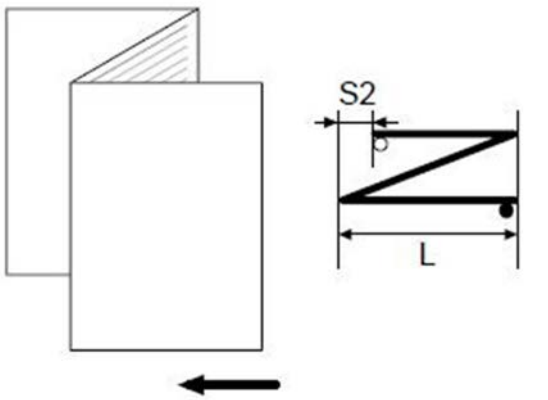
| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| B4 SEF | S | 0 mm | ±4 mm | 6-314-022 |
| A4 SEF | S | 0 mm | ±4 mm | 6-314-023 |
| B5 SEF | S | 0 mm | ±4 mm | 6-314-029 |
| 12”x18” SEF | S | 0 mm | ±4 mm | 6-314-027 |
| 11”x17” SEF (DLT SEF) | S | 0 mm | ±4 mm | 6-314-024 |
| 8 1/2"x14" SEF (LG SEF) | S | 0 mm | ±4 mm | 6-314-025 |
| 8 1/2"x11" SEF (LT SEF) | S | 0 mm | ±4 mm | 6-314-026 |
| 8K (8-Kai) | S | 0 mm | ±4 mm | 6-314-028 |
| Other (Custom) | S | 0 mm | ±4 mm | 6-314-039 |
| **Unit of Adjustment** | **0.2 mm** | | | |

## FM3 Letter Fold-out: Single-sheet Fold and Multi-sheet Fold

**106: Letter Fold-out Position 1: 1 sheet Fold**

Adjusts the fold position for the bottom segment (S2) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.




d516d913

Press [+] to increase and [-] to reduce (S2).

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

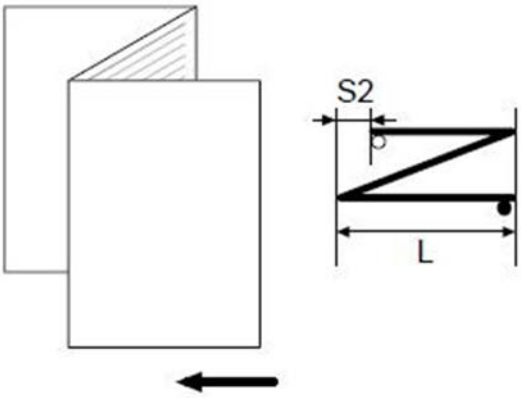
| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S2 | 0 mm | ±4 mm*1 |
| **Unit of Adjustment** | **0.2 mm** | | |

*1: B5 (SEF) is ±3 mm

**107: Letter Fold-out Position 2: 1 sheet Fold**

Adjusts the overall fold size (L) of letter fold-out sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.




d516d913

Press [+] to increase and [-] to reduce (L).

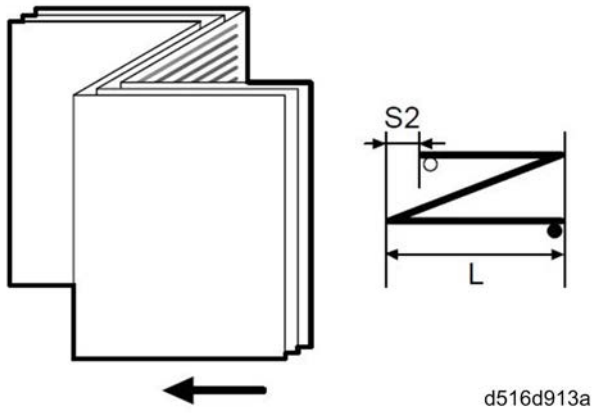
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | L | 0 mm | ±4 mm*1 |
| **Unit of Adjustment** | **0.2 mm** | | |

*1: B5 (SEF) is ±3 mm

**0602: Letter Fold-out Position 1: Multi-sheet Fold / SP6-315-022 to -039**

Adjusts the fold position for the bottom segment (S2) of letter fold-out sheets when using the multi-folding unit. This setting will be applied if the multi-sheet fold function is enabled.




d516d913a

Press [+] to increase and [-] to reduce (S2).

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

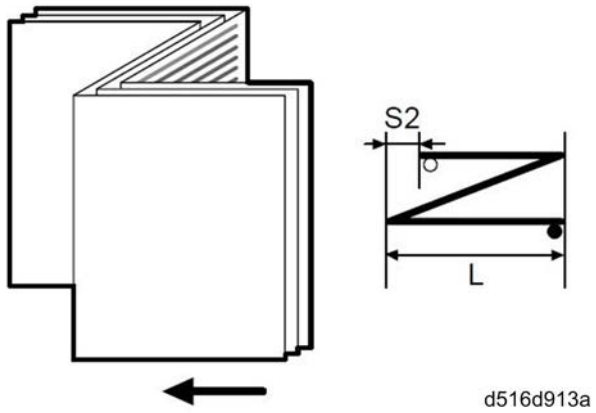
| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| B4 SEF | S2 | 0 mm | ±4 mm | 6-315-022 |
| A4 SEF | S2 | 0 mm | ±4 mm | 6-315-023 |
| B5 SEF | S2 | 0 mm | ±3 mm | 6-315-029 |
| 8 1/2"x14" SEF (LG SEF) | S2 | 0 mm | ±4 mm | 6-315-025 |

| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| 8 1/2"x11" SEF (LT SEF) | S2 | 0 mm | ±4 mm | 6-315-026 |
| Other (Custom) | S2 | 0 mm | ±4 mm | 6-315-039 |
| **Unit of Adjustment** | **0.2 mm** | | | |

**0603: Letter Fold-out Position 2: Multi-sheet Fold / SP6-316-022 to -039**

Adjusts the overall fold size (L) of letter fold-out sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (L).

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

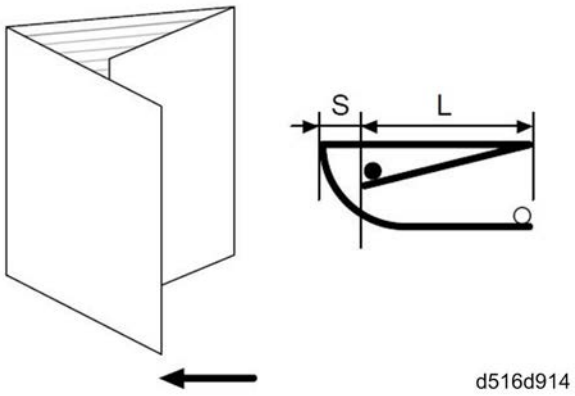
| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| B4 SEF | L | 0 mm | ±4 mm | 6-316-022 |
| A4 SEF | L | 0 mm | ±4 mm | 6-316-023 |
| B5 SEF | L | 0 mm | ±3 mm | 6-316-029 |
| 8 1/2"x14" SEF (LG SEF) | L | 0 mm | ±4 mm | 6-316-025 |
| 8 1/2"x11" SEF (LT SEF) | L | 0 mm | ±4 mm | 6-316-026 |
| Other (Custom) | L | 0 mm | ±4 mm | 6-316-039 |
| **Unit of Adjustment** | **0.2 mm** | | | |

## FM4 Letter Fold-in: Single-sheet Fold and Multi-sheet Fold

**108: Letter Fold-in Position 1: 1 sheet Fold**

Adjusts the fold position of the bottom segment (S) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (S).

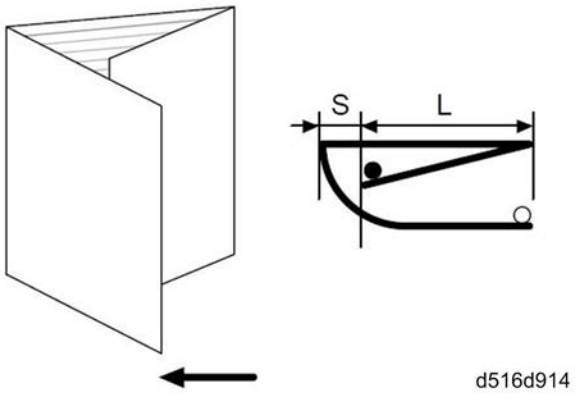
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

**109: Letter Fold-in Position 2: 1 sheet Fold**

Adjusts the overall fold size (L) of letter fold-in sheets when using the multi-folding unit.

This setting will not be applied when the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (L).

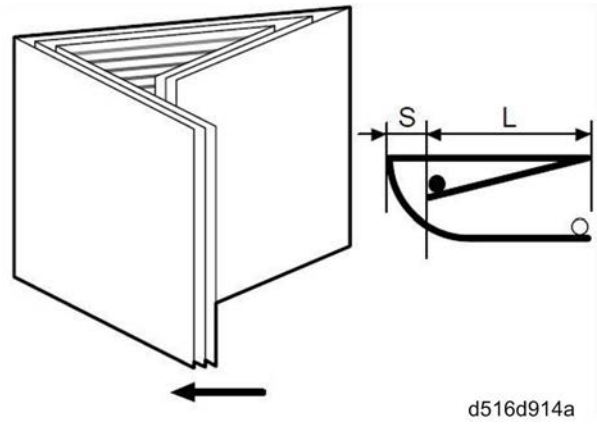
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | L | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

**0604: Letter Fold-in Position 1: Multi-sheet Fold / SP6-317-021 to -039**

Adjusts the fold position of the bottom segment (S) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.




Press [+] to increase and [-] to reduce (S).

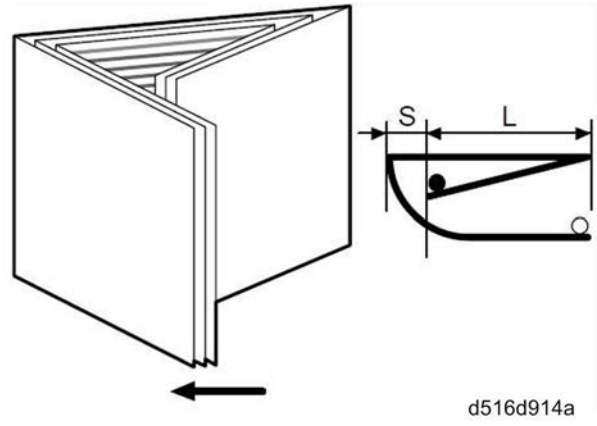
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| A3 SEF | S | 0 mm | ±4 mm | 6-317-021 |
| B4 SEF | S | 0 mm | ±4 mm | 6-317-022 |
| A4 SEF | S | 0 mm | ±4 mm | 6-317-023 |
| B5 SEF | S | 0 mm | ±4 mm | 6-317-029 |
| 12”x18” SEF | S | 0 mm | ±4 mm | 6-317-027 |
| 11”x17” SEF (DLT SEF) | S | 0 mm | ±4 mm | 6-317-024 |
| 8 1/2"x14" SEF (LG SEF) | S | 0 mm | ±4 mm | 6-317-025 |
| 8 1/2"x11" SEF (LT SEF) | S | 0 mm | ±4 mm | 6-317-026 |
| 8K (8-Kai) | S | 0 mm | ±4 mm | 6-317-028 |
| Other (Custom) | S | 0 mm | ±4 mm | 6-317-039 |
| **Unit of Adjustment** | **0.2 mm** | | | |

**0605: Letter Fold-in Position 2: Multi-sheet Fold / SP6-318-021 to -039**

Adjusts the fold position (L) of letters fold-in sheets when using the multi-folding unit.

This setting will be applied if the multi-sheet fold function is enabled.



Press [+] to increase and [-] to reduce (L).

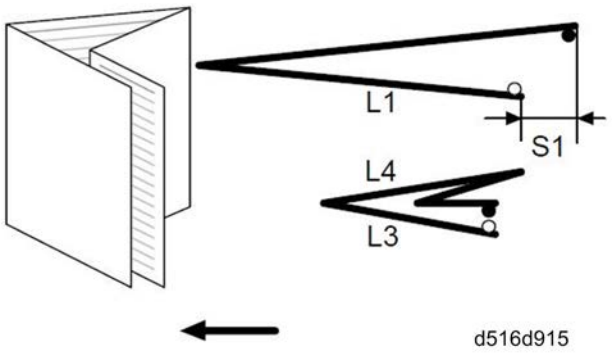
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range | SP |
|---|---|---|---|---|
| A3 SEF | L | 0 mm | ±4 mm | 6-318-021 |
| B4 SEF | L | 0 mm | ±4 mm | 6-318-022 |
| A4 SEF | L | 0 mm | ±4 mm | 6-318-023 |
| B5 SEF | L | 0 mm | ±4 mm | 6-318-029 |
| 12”x18” SEF | L | 0 mm | ±4 mm | 6-318-027 |
| 11”x17” SEF<br>(DLT SEF) | L | 0 mm | ±4 mm | 6-318-024 |
| 8 1/2"x14" SEF<br>(LG SEF) | L | 0 mm | ±4 mm | 6-318-025 |
| 8 1/2"x11" SEF<br>(LT SEF) | L | 0 mm | 0 to 4 mm | 6-318-026 |
| 8K (8-Kai) | L | 0 mm | ±4 mm | 6-318-028 |
| Other (Custom) | L | 0 mm | ±4 mm | 6-318-039 |
| **Unit of Adjustment** | **0.2 mm** | | | |

## FM5 Double Parallel Fold

**110: Double Parallel Fold Position 1**

Adjusts the fold position of the bottom segment 1 (S1) of double parallel-folded sheets when using the multi-folding unit.




Press [+] to increase and [-] to reduce (S1).

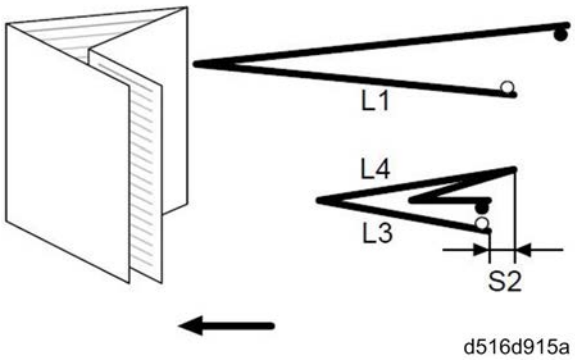
The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S1 | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

**111: Double Parallel Fold Position 2**

Adjusts the fold position of the bottom segment 2 (S2) of double parallel-folded sheets when using the multi-folding unit.




Press [+] to increase and [-] to reduce (S2).

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

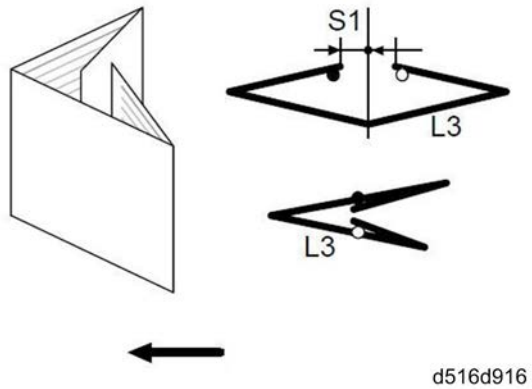
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S2 | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

## FM6 Gate Fold

**112: Gate Fold Position 1**

Adjusts the fold width of the bottom segment 1 (S1) of gate folded sheets when using the multi-folding unit.



Press [+] to increase and [-] to reduce (S1).

The upper right illustration shows a partly opened, gate folded sheet, and the lower right illustration shows a fully folded sheet.

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

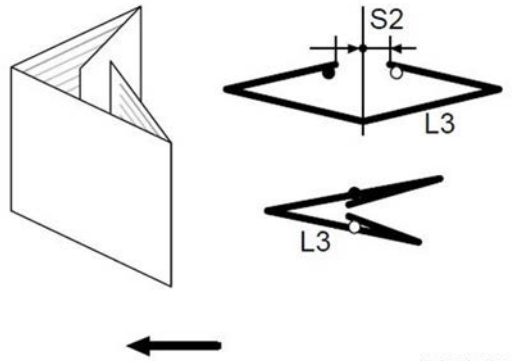
| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S1 | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

Note

- You cannot specify this setting when using 12"x 18" SEF paper.

**113: Gate Fold Position 2**

Adjusts the fold width of the bottom segment 2 (S2) of gate folded sheets when using the multi-folding unit.




Press [+] to increase and [-] to reduce (S2).

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

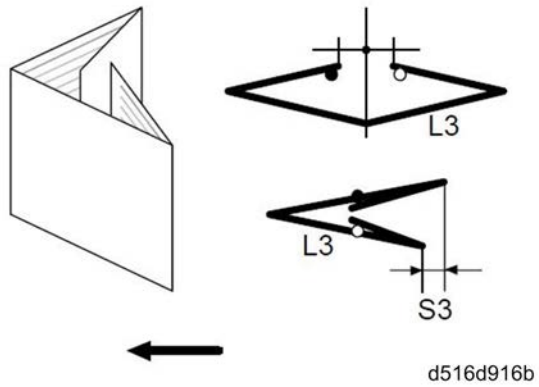
| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S2 | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

Note

- You cannot specify this setting when using 12"x 18" SEF paper.

**114: Gate Fold Position 3**

Adjusts the fold position of the bottom segment 3 (S3) of gate folded sheets when using the multi-folding unit.




Press [+] to increase and [-] to reduce (S3).

The upper right illustration shows a partly opened, double parallel-folded sheet (folded in half), and the lower right illustration shows a fully folded sheet.

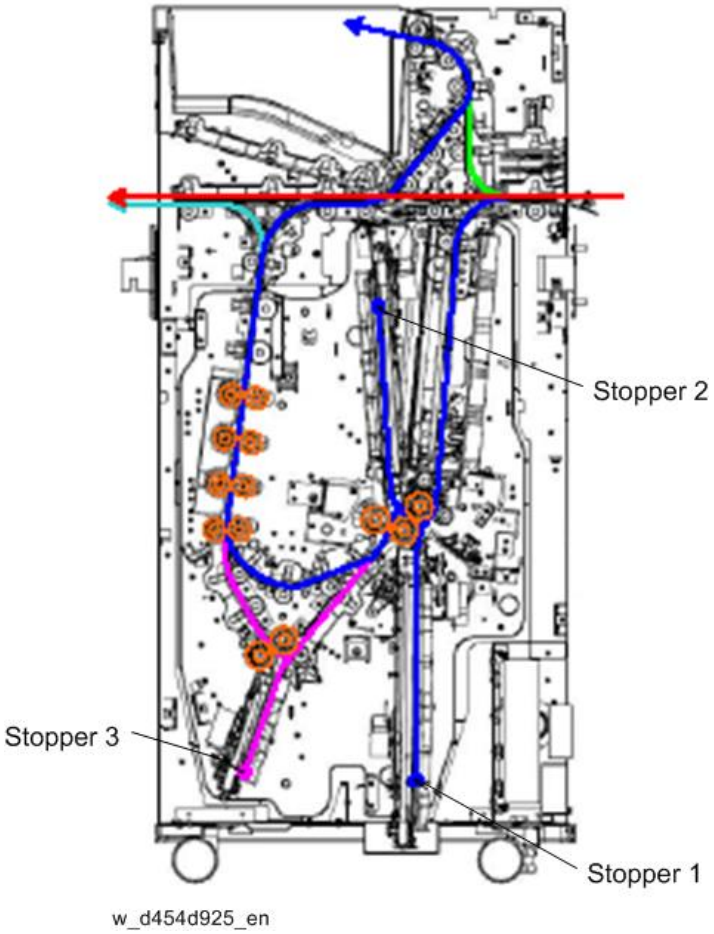
The mark ○ indicates the leading edge (relative to the paper feed direction), and the mark ● indicates the trailing edge.

| Size | Setting | Default | Range |
|---|---|---|---|
| All Supported Sizes | S3 | 0 mm | ±4 mm |
| **Unit of Adjustment** | **0.2 mm** | | |

# Skew Adjustment

## Before You Begin

These adjustments can be done by the service technician adjusting the set and adjustment screws on the multi-folder unit.



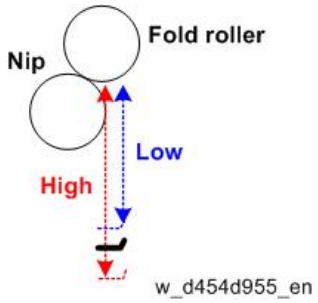

The illustration above shows the positions of the three stoppers inside the machine. The positioning of the stoppers is critical because this determines the types of folding.

## Front and Rear

The terms "Front" and "Rear" are critical to understanding how paper is skewing during folding. These terms are defined relative to the positioning of the paper in the paper path as it feeds and exits.

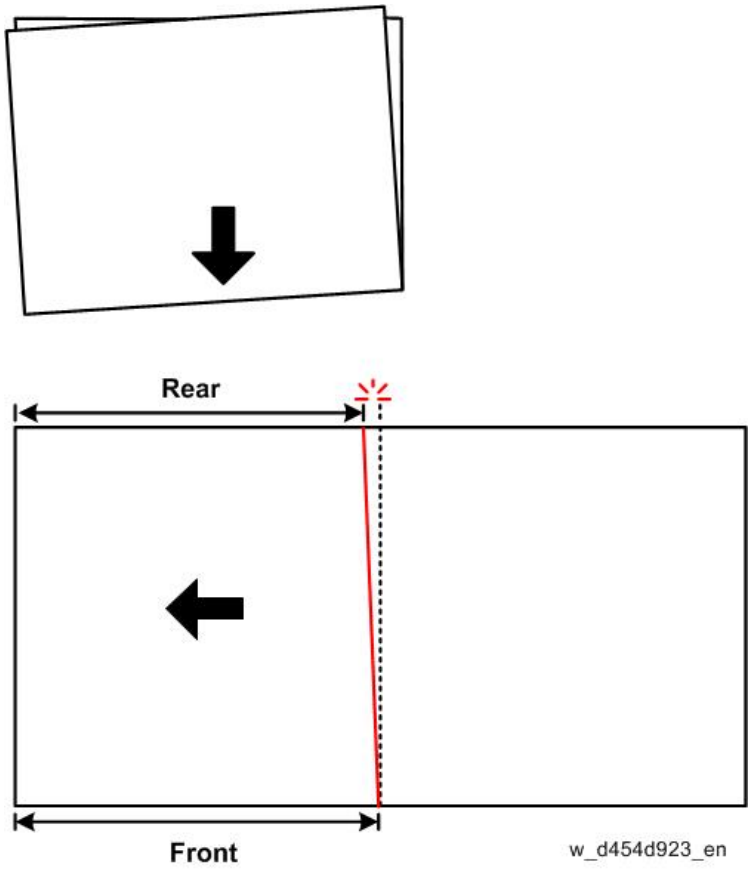
- "High" means the distance from the nip of the fold roller to the stopper is too far on one end of the fence.

- "Low" means the distance from the nip of the fold roller to the stopper is too short.



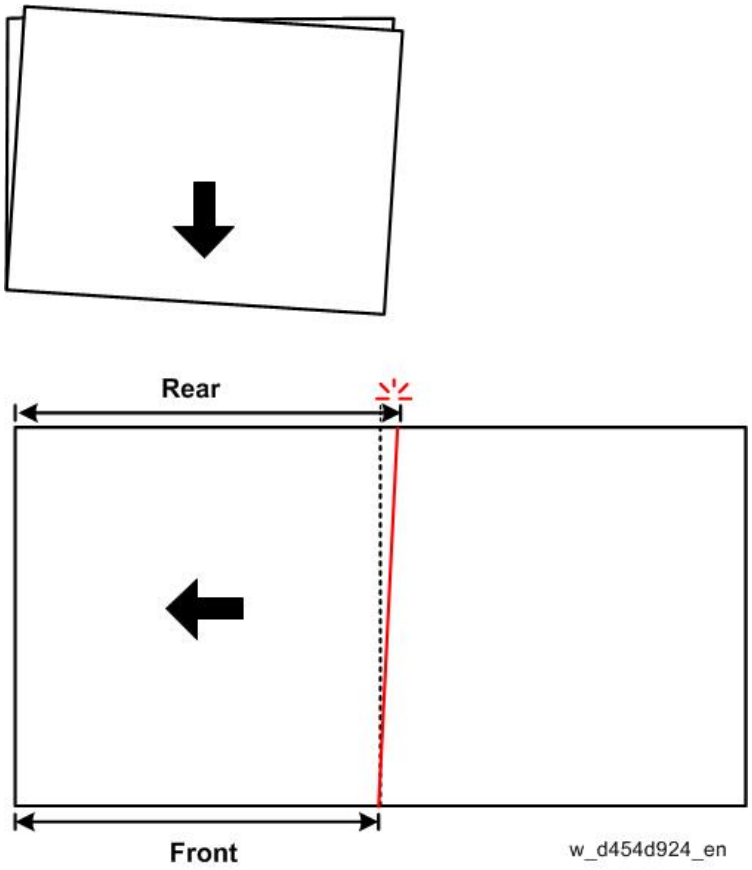

Two examples are shown below.

**Example 1: High (Stopper Too Far From The Nip)**




The black arrow shows the direction of paper feed from right to left. When the skewed sheet is opened, the **Front** edge is **longer** than the **Rear** edge.

**Example 2: FM2: Low (Stopper too Close to the Nip)**



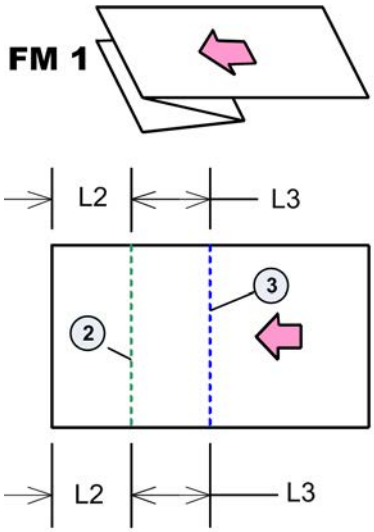

The black arrow shows the direction of paper feed from right to left. When the skewed sheet is opened, the **Front** edge is **shorter** than the **Rear** edge.

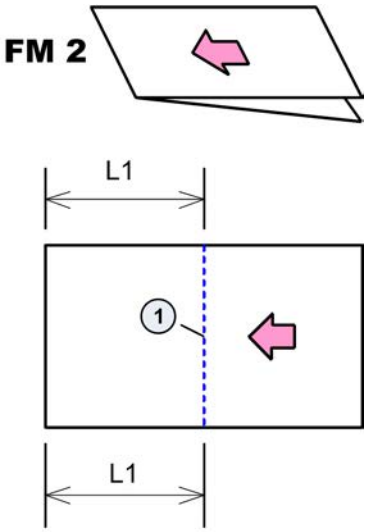
## Skew Correction Reference Diagrams and Table

**Skew Correction Reference Diagrams**

**Key**

| Symbol/Color | What It Means |
|---|---|
| ① | Stopper 1 needs adjustment |
| ② | Stopper 2 needs adjustment |
| ③ | Stopper 3 needs adjustment |
| **Blue line** | Peak fold (points left) |
| **Green line** | Valley fold (points right) |

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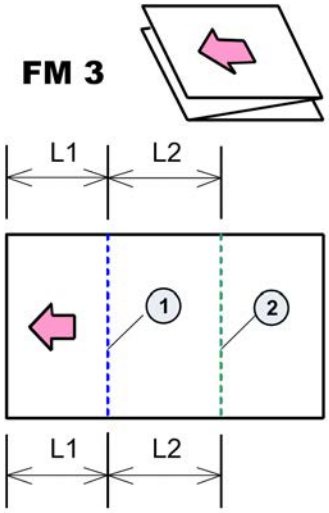


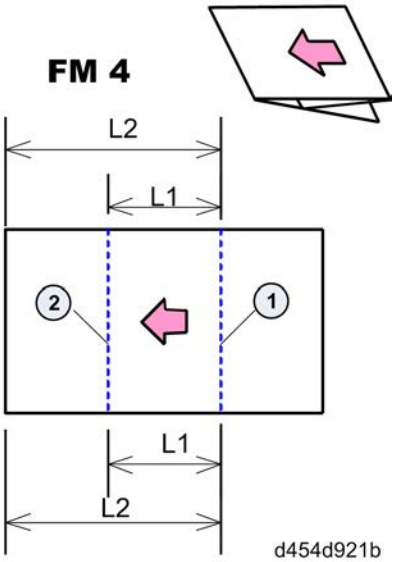


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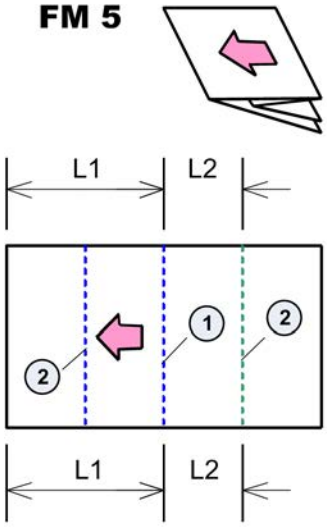


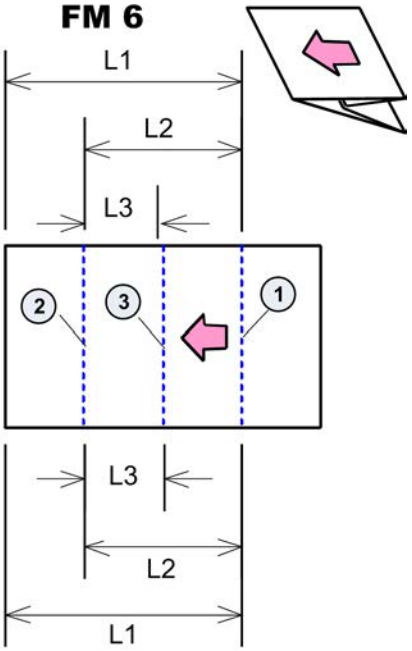


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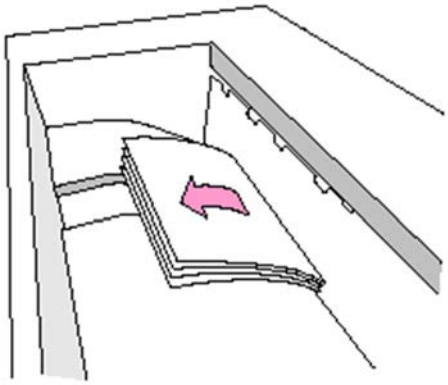
## General Procedure



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1. Retrieve the first folded sheet of paper from the top of the multi-folder. The first sheet is on the bottom of the stack.
2. If a fold is skewed, spread the paper out in the direction of paper feed shown in the diagrams above.
3. Carefully measure the distances between the folds (between L1, L2, L3).
4. Compare the **Front** and **Rear** measurements.
5. Refer to the table below to determine where the paper is skewing and what type of adjustment is required.

**Skew Correction Reference Table**

| | L1 | L2 | L3 | S1 | S2 | S3 |
|---|---|---|---|---|---|---|
| FM1 | --- | **F** Long | **F** Long | --- | Lower **F** | Raise **F** |
| | --- | **F** Short | **F** Short | --- | Raise **F** | Lower **F** |
| FM2 | **F** Long | --- | --- | Raise **F** | --- | --- |
| | **F** Short | --- | --- | Lower **F** | --- | --- |
| FM3 | **F** Long | **F** Long | --- | Raise **F** | Lower **F** | --- |
| | **F** Short | **F** Short | --- | Lower **F** | Raise **F** | --- |
| FM4 | **F** Long | **F** Long | --- | Raise **F** | Lower **F** | --- |
| | **F** Short | **F** Short | --- | Lower **F** | Raise **F** | --- |
| FM5 | **F** Long | **F** Long | --- | Raise **F** | Lower **F** | --- |
| | **F** Short | **F** Short | --- | Lower **F** | Raise **F** | --- |
| FM6 | **F** Long | **F** Long | **F** Long | Lower **F** | Lower **F** | Raise **F** |
| | **F** Short | **F** Short | **F** Short | Raise **F** | Raise **F** | Lower **F** |

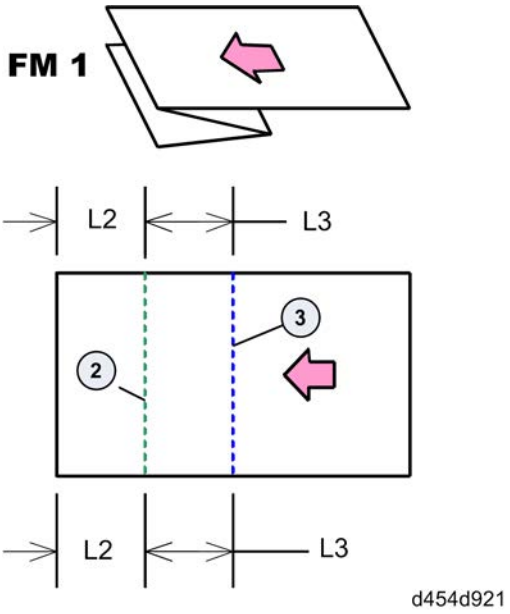
**Table Key**

You must refer to the "Skew Correction Reference Diagrams". The following abbreviations are used in the table above.

| Term | What It Means |
|---|---|
| **F** Long | **Front** measurement of L1, L2, or L3 is **longer** than **Rear**. |
| **F** Short | **Front** measurement of L1, L2, or L3 is **shorter** than **Rear**. |
| **S1, S2, S3** | Refers to Stopper 1, Stopper 2, Stopper 3. In the diagrams these are annotated as:①, ②, ③ respectively. |

| Term | What It Means |
|---|---|
| | For a problem with the L1 fold, we adjust stopper 1.<br>For a problem with the L2 fold, we adjust stopper 2.<br>For a problem with the L3 fold, we adjust stopper 3. |
| Raise **F** | Raise the front end of the stopper fence. For more, see below. |
| Lower **F** | Lower the front end of the stopper fence. For more, see below. |

**Example: FM1 (Z-fold)**




First, compare the L2 measurements.

- In this example, imagine that L2 is longer at the front than at the rear.
- Look at the table, in the row for FM1, and the column for L2.
  - ‘F Long’ means Front measurement longer than Rear
  - ‘F Short’ means Rear measurement longer than Front
- L2 is longer at the front, so we have an ‘F Long’ situation.
- Then, on the same row of the table, look at the S2 column. It says ‘Lower F’.
- This means you must lower the front end of stopper 2.

Then, compare the L3 measurements.

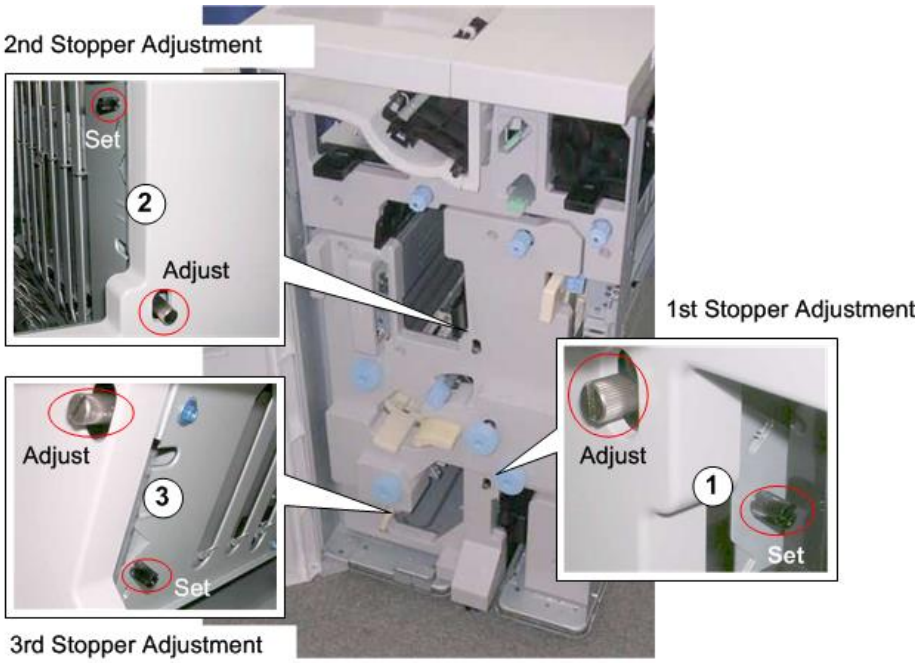
- In this example, imagine that L3 is longer at the front than at the rear.
- Look at the table, in the row for FM1, and the column for L3.
  - ‘F Long’ means Front measurement longer than Rear
  - ‘F Short’ means Rear measurement longer than Front
- L3 is longer at the front, so we have an ‘F Long’ situation again.
- Then, on the same row of the table, look at the S3 column. It says ‘Raise F’.
- This means you must raise the front end of stopper 3.

## Stopper Adjustment Procedures

1. Use the "Skew Correction Reference Diagrams" and "Skew Correction Reference Table" in the previous

section to determine the location of the skew and which stopper needs adjustment.

2. Now you are ready to do the adjustment on the multi-folder unit.

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3. The illustration above shows the location for each stopper adjustment.
   - Each stopper is equipped with two screws.
   - The black plastic screw is the set screw and the metal silver screw is the adjustment screw.
   - Before the adjustment, mark the location of each adjustment screw.

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4. Remove the set screw.

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5. Turn the adjustment screw to do the adjustment for the stopper.

**1st, 3rd Stopper**

- Turn the Adjustment screw **clockwise** to **lower** the front end of the fence.

  -or-

- Turn the Adjustment screw **counter-clockwise** to **raise** the front of the fence.

**2nd Stopper**

- Turn the Adjustment screw **clockwise** to **raise** the front end of the fence.

  -or-

- Turn the Adjustment screw **counter-clockwise** to **lower** the front of the fence.

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6. Fasten the set screw in the hole of the diagonal cutout near the hole where you removed it.

Note

- The diagonal cut may be above or below the original hole, depending on which stopper you are adjusting.
- The photo above shows the set screw for Stopper 2.

7. Tighten the set screw so that the plate holds the adjustment.

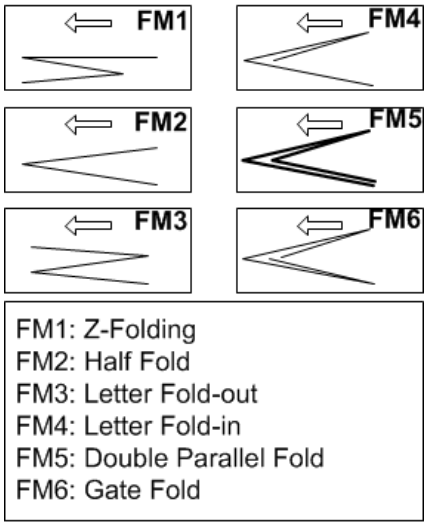
# 2. Detailed Descriptions

## Overview

### Specifications

General

| | | |
|---|---|---|
| Dimensions (W × D × H) | 470 × 980 × 730 mm (18.6 × 38.6 × 28.8 in.) | |
| Weight | Approx. 92 kg (202.9 lb.) | |
| Power Consumption | Maximum 270 W (A separate power source is required.) | |
| Power Source | 220 - 240 V, 50/60 Hz, 1.2 A | |
| Operating Environment | Temperature and humidity ranges: Same as main machine. | |
| Paper Weight | Single sheet mode:<br>64 to 103 g/m$^2$ (17 lb. Bond - 28 lb. Bond)<br>Multiple sheets mode:<br>64 to 80 g/m$^2$ (17 lb. Bond - 20 lb. Bond) | |
| Folding Methods | 6 (see below) | |
| Speed | Straight-Through | 100 to 700 mm/s |
| | Folding | 270 to 700 mm/s |
| Straight-Through Feed | Size | Postcard to 13x19.2" |
| | Type | Used paper: A3, A4, B4, B5<br>OHP: A4, B5<br>Tap paper: A4 LEF, LT LEF |
| Folding Methods | 6 (FM1 to FM6) | |

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| | | |
|---|---|---|
| Paper Sizes (Folding) | FM1 | A3, B4, DLT, LG, A4, LT, 12x18", 8-kai |

| | | |
|---|---|---|
| | FM2 | A3, B4, DLT, LG, A4, B5, LT 12x18", 12.6x18.5", 12.6x19.2", 13x18", 13x19", 13x19.2", 226x310 mm, 310x432 mm, SRA3, SRA4, 8-kai |
| | FM3 | A3, B4, DLT, LG, A4, LT, B5, 12x18", 8-kai |
| | FM4 | |
| | FM5 | |
| | FM6 | |
| Paper Weights (Folding) | FM1 | 64 to 105 g/m$^2$ |
| | FM2 | |
| | FM3 | |
| | FM4 | |
| | FM5 | |
| | FM6 | |
| Multiple Folding | FM1 | Not allowed |
| | FM2 | Max. 3 (64 to 80 g/m$^2$ only) |
| | FM3 | Max. 3 (64 to 80 g/m$^2$ only) |
| | FM4 | Max. 3 (64 to 80 g/m$^2$ , B4, A4, LT, B5 only) |
| | FM5 | Not allowed |
| | FM6 | |
| Line Speed (Only FM1 Z-Folded paper can exit downstream) | | |
| No Fold | 350 mm/sec. to top tray<br>To downstream: Same as main machine. | |
| FM1 | 700 mm/sec. to top tray (paper ≦ 355.6 mm long)<br>450 mm/sec. to top tray (paper < 355.6 mm long)<br>To downstream: Same as main machine. | |
| FM2 | 1 Sheet: Same as main machine<br>2-3 Sheets: 454 mm/sec.<br>700 mm/sec. to top tray (paper ≦ 355.6 mm long)<br>350 mm/sec. to top tray (paper ≦ 279.4 <355.6 mm long)<br>250 mm/sec. to top tray (paper < 279.4 mm long) | |
| FM3<br>FM4 | 1 Sheet: Same as main machine<br>2-3 Sheets: 454 mm/sec. to top tray<br>350 mm/sec. to top tray (paper ≦ 420 mm long)<br>250 mm/sec. to top tray (paper < 420 mm long) | |
| FM5 | 1 Sheet: Same as main machine<br>350 mm/sec. to top tray (paper ≦ 420 mm long)<br>250 mm/sec. to top tray (paper < 420 mm long) | |
| FM6 | 1 Sheet: Same as main machine as far as 3rd Stopper. At 3rd stopper feeds 50 mm at 100 | |

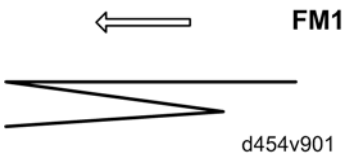
| | | | |
|---|---|---|---|
| | mm/sec.<br>350 mm/sec. to top tray (paper ≦ 420 mm long)<br>250 mm/sec. to top tray (paper < 420 mm long) | | |
| Power Supply | NA | AC 120V 60 Hz, 15A | |
| | EU | AC 220 to 240V, 50/60 Hz 10A | |
| Power Consumption | 270 W | | |
| Size (w x d x h) | 466 x 980 x 730 mm (18.4 x 38.6 x 28.7 in.) | | |
| Level | Less than 5 mm deviation at front/back, left/right | | |
| Weight | 92 kg (203 lb) | | |
| Noise Level (dB A) | Mode | Alone | System |
| | No Folding | < 76 dB | --- |
| | Folding | < 78 dB | < 83 dB |

## Tray Capacity

The capacity of the tray on top of the unit for folded paper is determined by these variables:

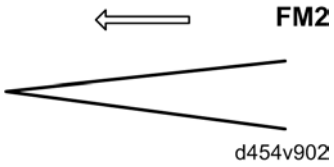
- Folding Methods (FM1 to FM6)
- Paper size
- Paper weight

**Folding Mode FM1**



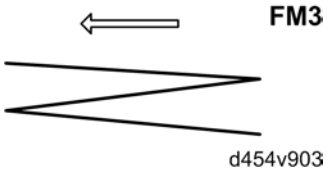

| Size | Weight (Standard)<br>64 to 80 g/m$^2$ | Weight (Heavy)<br>64 to 80 g/m$^2$ |
|---|---|---|
| 8-kai | 35 | 20 |
| 12x18" | 35 | 20 |
| A3 SEF | 35 | 20 |
| DLT | 35 | 20 |
| B4 SEF | 35 | 20 |
| LG SEF | 35 | 20 |
| A4 SEF | 30 | 20 |
| LT SEF | 30 | 20 |

**Folding Mode FM2**




| Size | Weight (Standard)<br>64 to 80 g/m² | Weight (Heavy)<br>64 to 80 g/m² |
|---|---|---|
| 13x19.2" | 40 | 25 |
| 13x19" | 40 | 25 |
| 12.6x19.2" | 40 | 25 |
| 12.6x18.5" | 40 | 25 |
| 13x18" | 40 | 25 |
| SRA3 (320x450 mm) | 40 | 25 |
| SRA4 (225x320 mm) | 40 | 25 |
| 226x310 mm | 40 | 25 |
| 310x432 mm | 40 | 25 |
| 8-kai | 40 | 25 |
| 12x18" | 40 | 25 |
| A3 SEF | 40 | 25 |
| DLT | 40 | 25 |
| B4 SEF | 40 | 25 |
| LG SEF | 40 | 25 |
| A4 SEF | 50 | 50 |
| LT SEF | 50 | 50 |
| B5 SEF | 50 | 50 |

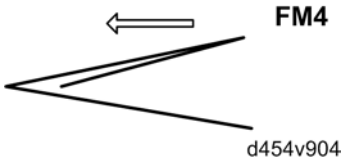
**Folding Mode FM3**




| Size | Weight (Standard)<br>64 to 80 g/m² | Weight (Heavy)<br>64 to 80 g/m² |
|---|---|---|
| 8-kai | 30 | 20 |
| 12x18" | 30 | 20 |
| A3 SEF | 30 | 20 |
| DLT | 30 | 20 |
| B4 SEF | 30 | 20 |
| LG SEF | 30 | 20 |
| A4 SEF | 40 | 30 |

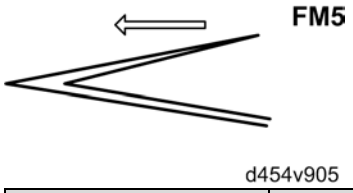
| Size | Weight (Standard)<br>64 to 80 g/m² | Weight (Heavy)<br>64 to 80 g/m² |
|---|---|---|
| LT SEF | 40 | 30 |
| B5 SEF | 40 | 30 |

**Folding Mode FM4**



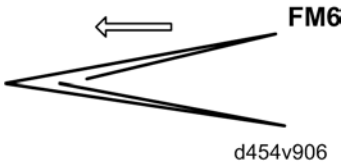

| Size | Weight (Standard)<br>64 to 80 g/m² | Weight (Heavy)<br>64 to 80 g/m² |
|---|---|---|
| 8-kai | 40 | 20 |
| 12x18" | 40 | 20 |
| A3 SEF | 40 | 20 |
| DLT | 40 | 20 |
| B4 SEF | 40 | 20 |
| LG SEF | 40 | 20 |
| A4 SEF | 50 | 40 |
| LT SEF | 50 | 40 |
| B5 SEF | 50 | 40 |

**Folding Mode FM5**



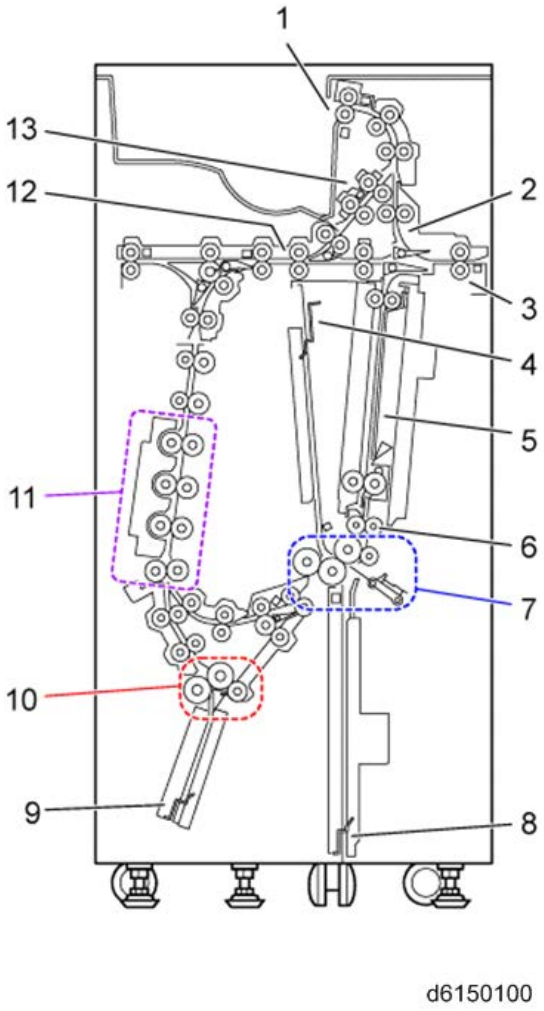

| Size | Weight (Standard)<br>64 to 80 g/m² | Weight (Heavy)<br>64 to 80 g/m² |
|---|---|---|
| 8-kai | 30 | 20 |
| 12x18" | 30 | 20 |
| A3 SEF | 30 | 20 |
| DLT | 30 | 20 |
| B4 SEF | 30 | 20 |
| LG SEF | 30 | 20 |
| A4 SEF | 30 | 30 |
| LT SEF | 30 | 30 |
| B5 SEF | 30 | 30 |

**Folding Mode FM6**



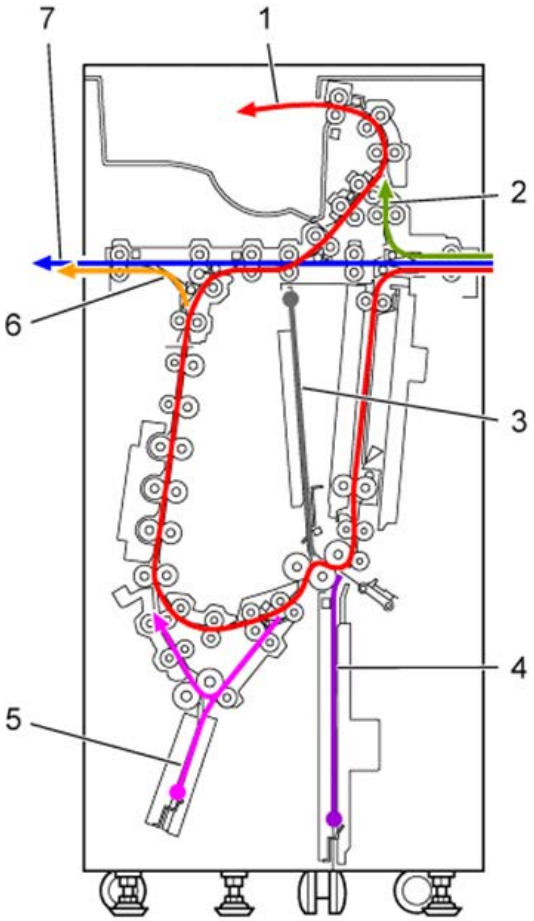

| Size | Weight (Standard)<br>64 to 80 g/m$^2$ | Weight (Heavy)<br>64 to 80 g/m$^2$ |
|---|---|---|
| 8-kai | 50 | 20 |
| 12x18" | 50 | 20 |
| A3 SEF | 50 | 20 |
| DLT | 50 | 20 |
| B4 SEF | 50 | 20 |
| LG SEF | 50 | 20 |
| A4 SEF | 30 | 30 |
| LT SEF | 30 | 30 |
| B5 SEF | 30 | 30 |

## General Layout



| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Top Tray Exit | 8 | 1st Stopper |
| 2 | Mixed-Size Flat Paper Path | 9 | 3rd Stopper |
| 3 | Entrance Transport Mechanism | 10 | 2nd Fold Mechanism |
| 4 | 2nd Stopper Part | 11 | Crease Mechanism |
| 5 | Vertical Transport | 12 | Horizontal Transport |
| 6 | Registration Transport | 13 | Top Tray Transport |
| 7 | 1st Fold Mechanism | | |

## Paper Path

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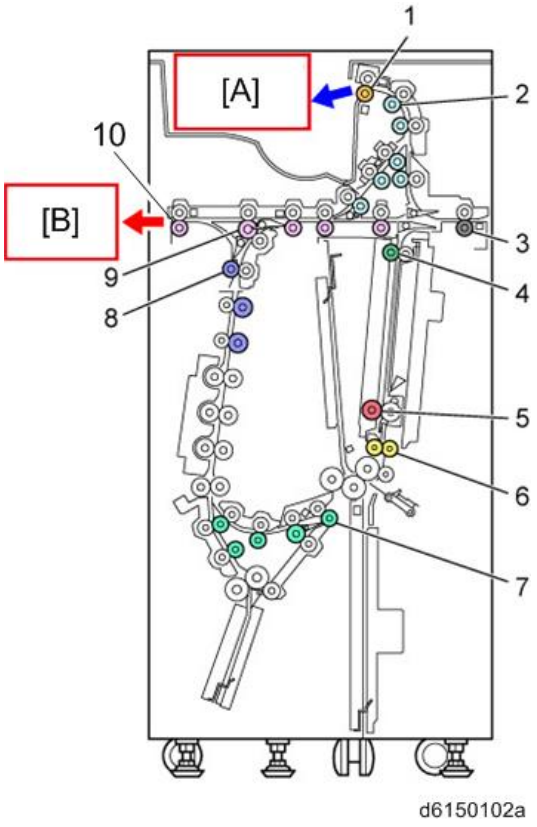
| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Folded Paper Path 1 (Top Tray Output) | 5 | 3rd Stopper Transport Path |
| 2 | Mixed-Size Flat Paper Path | 6 | Folded Paper Path 2 (to downstream-process [optional finisher]) |
| 3 | 2nd Stopper Transport Path | 7 | Straight-through Path |

| No. | Part | No. | Part |
|---|---|---|---|
| 4 | 1st Stopper Transport Path | | |

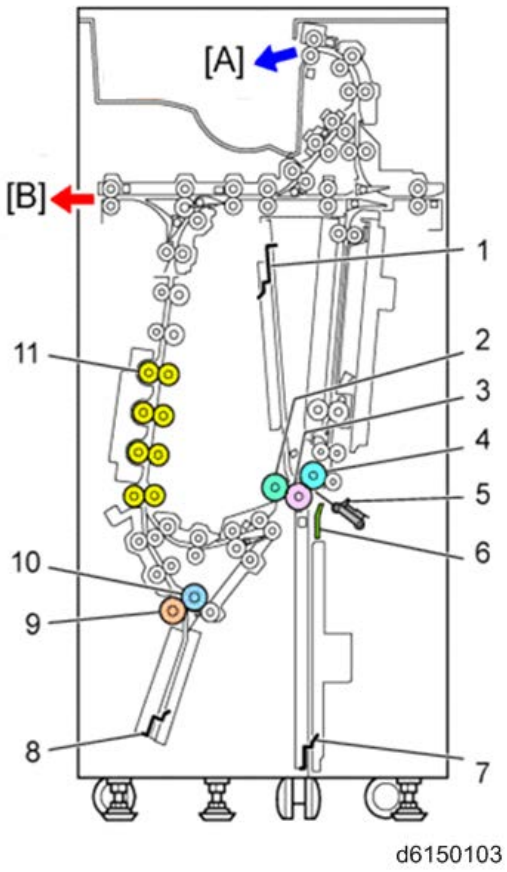
## Rollers




A: Top Tray

B: To Downstream-process (optional finisher)

| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Top Tray Exit Roller | 6 | Registration Transport Roller |
| 2 | Top Tray Transport Roller | 7 | Bypass Transport Roller |
| 3 | Entrance Transport Roller | 8 | 3rd Vertical Transport Roller |
| 4 | 1st Vertical Transport Roller | 9 | Horizontal Transport Roller |
| 5 | 2nd Vertical Transport Roller | 10 | Folder Unit Exit Roller |

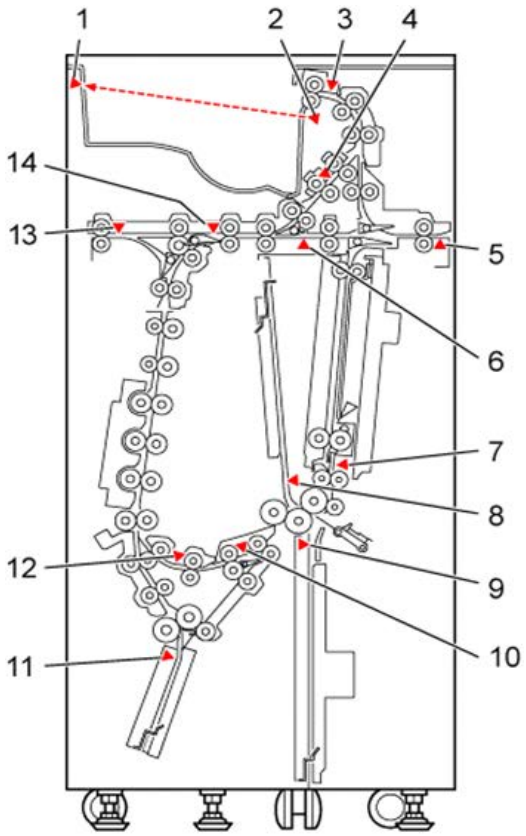



A: Top Tray

B: To Downstream-process (optional finisher)

| No. | Part | No. | Part |
|---|---|---|---|
| 1 | 2nd Stopper | 7 | 1st Stopper |
| 2 | 3rd Fold Roller | 8 | 3rd Stopper |
| 3 | 2nd Fold Roller | 9 | 5th Fold Roller |
| 4 | 1st Fold Roller | 10 | 4th Fold Roller |
| 5 | Fold Plate | 11 | Crease Roller x 4 |
| 6 | Jogger Fence | | |

## Sensor Layout

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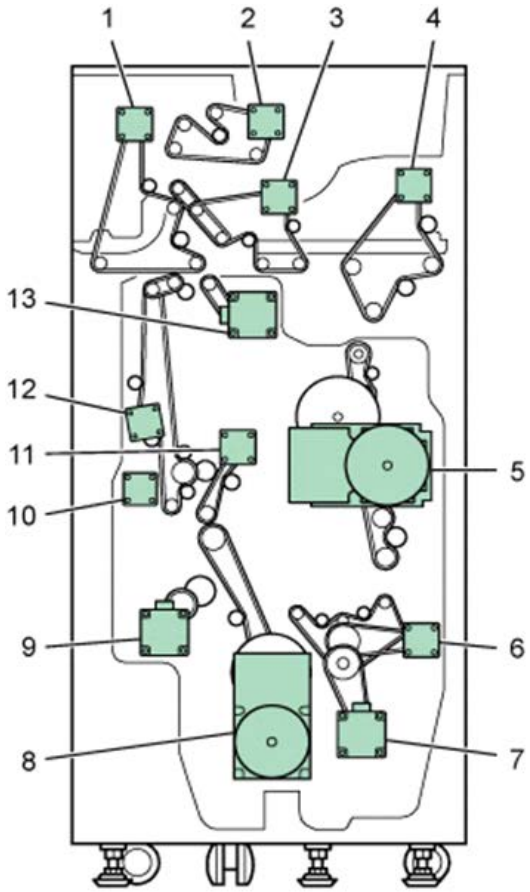
| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Top Tray Full Sensor (R) | 8 | 2nd Stopper Paper Sensor |
| 2 | Top Tray Full Sensor (E) | 9 | 1st Stopper Paper Sensor |
| 3 | Top Tray Exit Sensor | 10 | Bypass Entrance Paper Sensor |
| 4 | Top Tray Paper Path Sensor | 11 | 3rd Stopper Paper Sensor |
| 5 | Entrance Sensor | 12 | Bypass Exit Paper Sensor |
| 6 | Horizontal Path Paper Sensor | 13 | Horizontal Path Exit Sensor |
| 7 | Registration Sensor | 14 | Horizontal Path Paper Sensor |

## Motors, Solenoids

### Main Motors

The illustration below shows drive layout viewed from rear side of the multi-folding unit.

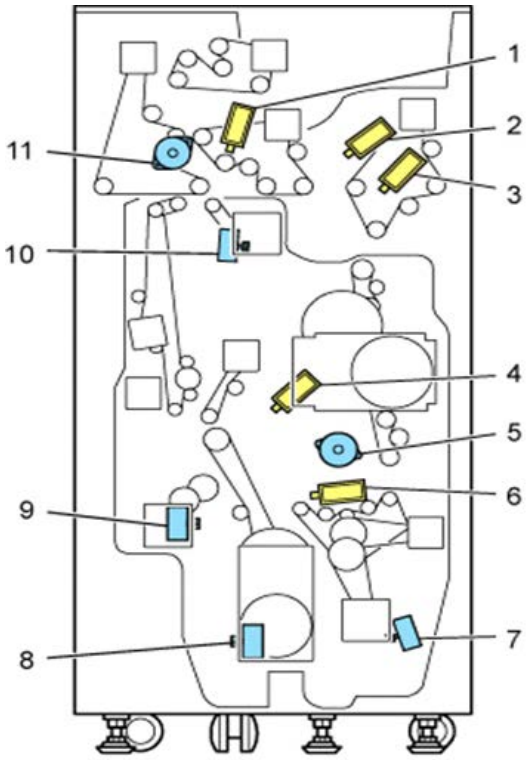



d6150105

| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Horizontal Transport Motor | 8 | 1st Fold Motor |
| 2 | Top Tray Exit Motor | 9 | Fold Plate Motor |
| 3 | Top Tray Transport Motor | 10 | Registration Roller Transport Motor |
| 4 | Horizontal Transport Exit Motor | 11 | Registration Roller Release Motor |
| 5 | Crease Motor | 12 | Dynamic Roller Transport Motor |
| 6 | FM6 Pawl Motor | 13 | Dynamic Roller Transport Motor |
| 7 | 2nd Fold Motor | | |

## Solenoids, Motors

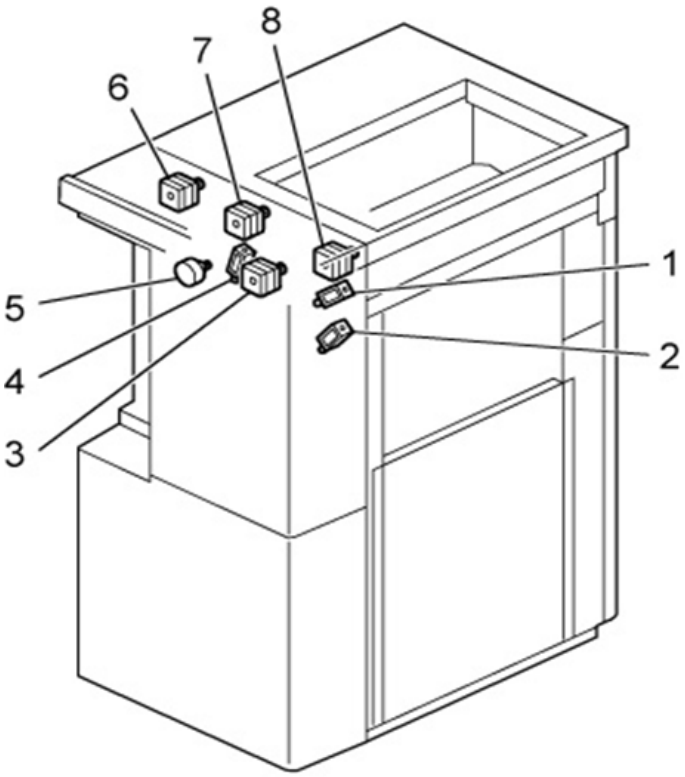
The illustration below shows solenoid/drive layout viewed from rear side of the multi-folding unit.




d6150106

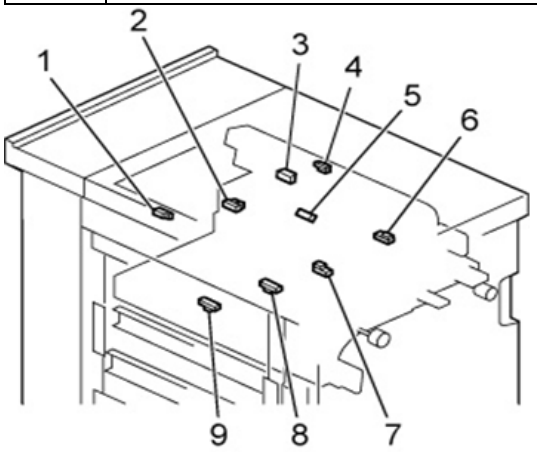
| No. | Part | No. | Part |
|---|---|---|---|
| 1 | TopTray Junction Gate Solenoid | 7 | 3rd Stopper Motor |
| 2 | Reverse-Trasport Pawl Solenoid | 8 | 1st Stopper Motor |
| 3 | Exit JG Pawl Solenoid | 9 | Jogger Fence Motor |
| 4 | Leading Edge Stopper Pawl Solenoid | 10 | 2nd Stopper Motor |
| 5 | Direct Send JG Motor | 11 | Entrance JG (Junction Gate) Motor |
| 6 | Bypass JG Pawl Solenoid | | |

## Electrical Components: Transport




d6150901

| No. | Part | No. | Part |
|---|---|---|---|
| 1 | Reverse JG Pawl Solenoid | 5 | Entrance JG (Junction Gate) Motor |
| 2 | Exit JG Pawl Solenoid | 6 | Horizontal Transport Motor |
| 3 | Top Tray Transport Motor | 7 | Top Tray Exit Motor |
| 4 | Top Tray JG Solenoid | 8 | Horizontal Transport Exit Motor |

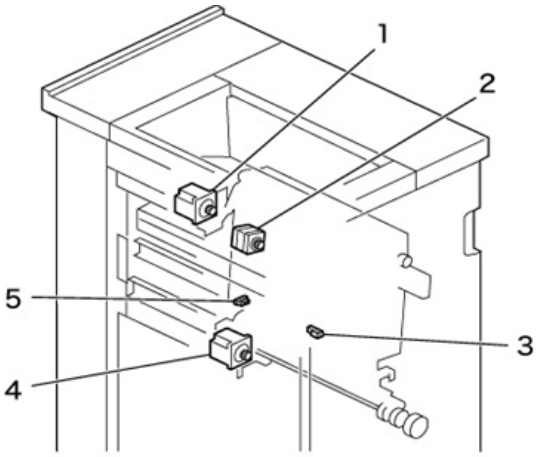



d6150902

| No. | Part |
|---|---|
| 1 | Top Tray Full Sensor (R) |

| No. | Part |
|---|---|
| 2 | Entrance JG (Junction Gate) HP Sensor |
| 3 | Top Tray Exit Sensor |
| 4 | Top Tray Paper Path Sensor |
| 5 | Top Tray Full Sensor (E) |
| 6 | Entrance Sensor |
| 7 | Horizontal Transport Paper Path Sensor |
| 8 | Horizontal Path Paper Sensor |
| 9 | Horizontal Path Exit Sensor |

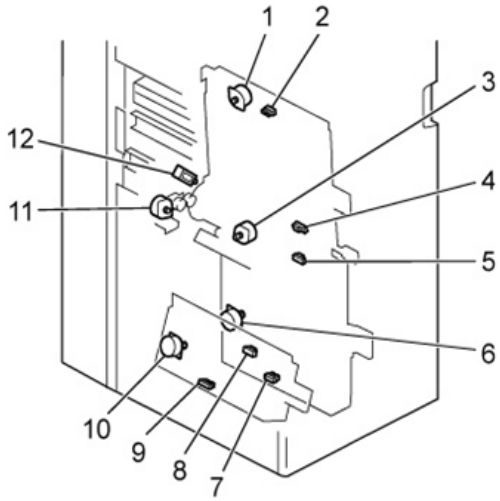
## Electrical Components: Vertical Transport




d6150904

| No. | Part |
|---|---|
| 1 | Dynamic Roller Lift Motor |
| 2 | Dynamic Roller Transport Motor |
| 3 | Registration Sensor |
| 4 | Fold Plate Motor |
| 5 | Dynamic Roller HP Sensor |

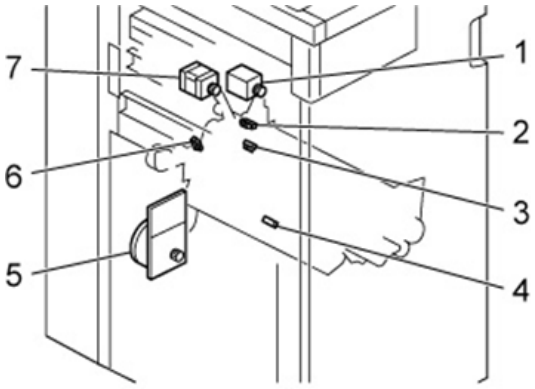
## Electrical Components: 1st, 2nd, 3rd Stoppers




d6150903

| No. | Part | No. | Part |
|---|---|---|---|
| 1 | 2nd Stopper Motor | 7 | 1st Stopper HP Sensor |
| 2 | 2nd Stopper HP Sensor | 8 | 3rd Stopper Paper Sensor |
| 3 | Jogger Fence Motor | 9 | 3rd Stopper HP Sensor |
| 4 | 2nd Stopper Paper Sensor | 10 | 3rd Stopper Motor |
| 5 | 1st Stopper Paper Sensor | 11 | Direct Send JG HP Sensor |
| 6 | 1st Stopper Motor | 12 | Leading Edge Stopper Pawl Solenoid |

## Electrical Components: Registration, 1st Fold

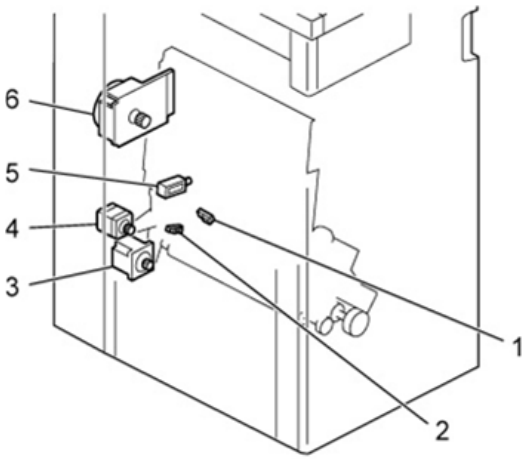



d6150905

| No. | Part |
|---|---|
| 1 | Registration Roller Release Motor |
| 2 | Registration Roller HP Sensor |
| 3 | Fold Plate HP Sensor |
| 4 | Bypass Entrance Paper Sensor |

| No. | Part |
|---|---|
| 5 | 1st Fold Motor |
| 6 | Direct-Send JG (Junction Gate) HP Sensor |
| 7 | Registration Roller Transport Motor |

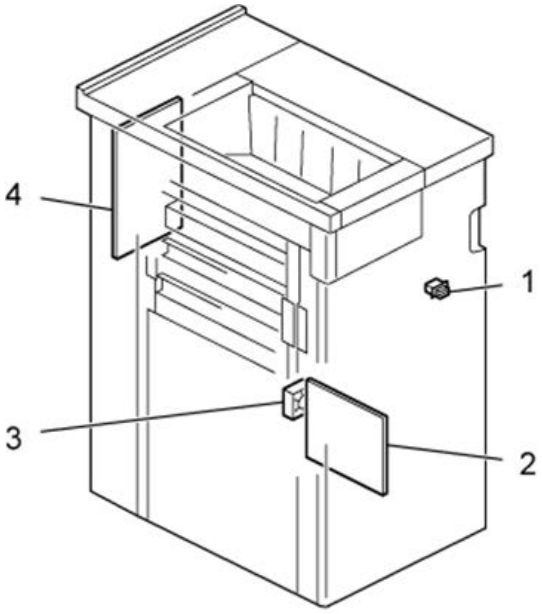
## Electrical Components: 2nd Fold, Crease




d6150906

| No. | Part |
|---|---|
| 1 | Bypass Exit Paper Sensor |
| 2 | FM6 Pawl HP Sensor |
| 3 | 2nd Fold Motor |
| 4 | FM6 Pawl Motor |
| 5 | Bypass Junction Gate Solenoid |
| 6 | Crease Motor |

## Electrical Components: Switch, Board, Fan




d6150907

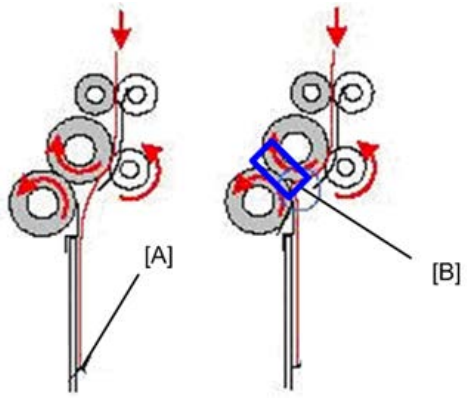
| No. | Part |
|---|---|
| 1 | Front Door Switch |
| 2 | PSU |
| 3 | PSU Fan |
| 4 | Main Board |

# Fold Mechanisms

## Fold Process

### Single-sheet Fold Mode

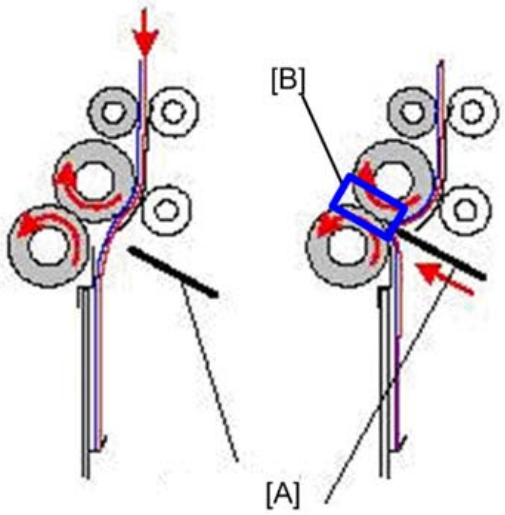
The leading edge of the paper bumps against the stopper pawl [A] but is fed a bit further to make an arch in the paper. Then the arched part is fed into the fold roller nip [B] and the fold is formed.




d6150601

### Double-sheet Fold Mode

One, two, or three sheets of paper are stacked in the pre-stack area. At this time, the transport roller that normally makes an arch in the paper is moved away, so no arch is made. The fold plate [A] moves forward to press the paper into the roller nip [B]. The paper goes into the roller nip while being folded.



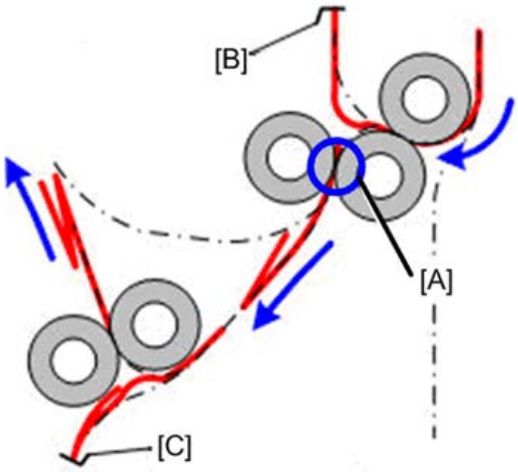

d6150602

## Fold Operations

### Z-Fold

Paper passes through the 1st folding area [A] without any treatment and bumps agianst the 2nd stopper [B] to make an arch in the paper. With this arch, the paper is fed into the 2nd-fold roller nip and the 1st fold is made.

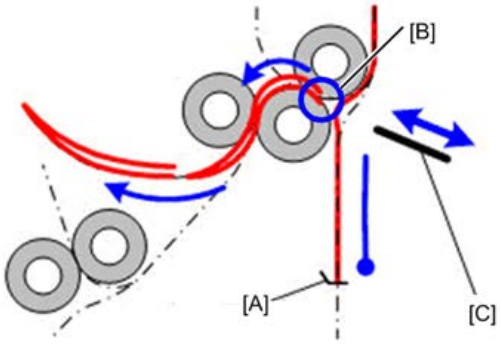
Then the paper bumps against the 3rd stopper [C] where paper is fed into to form the 2nd fold. As a result, a Z-fold is formed.




d6150603

Half-fold

- **Single-sheet Fold**: The paper bumps against the 1st stopper [A] and makes an arch in the paper near the 1st fold nip [B]. With this arch, paper is fed into the 1st fold nip [B] to be half-folded.
- **Double-sheet Fold**: 1 to 3 sheets of paper are pre-stacked while bumping against the 1st stopper [A]. The fold plate [C] presses the paper into the 1st fold nip [B] and the paper is folded into a double-sheet half-fold.

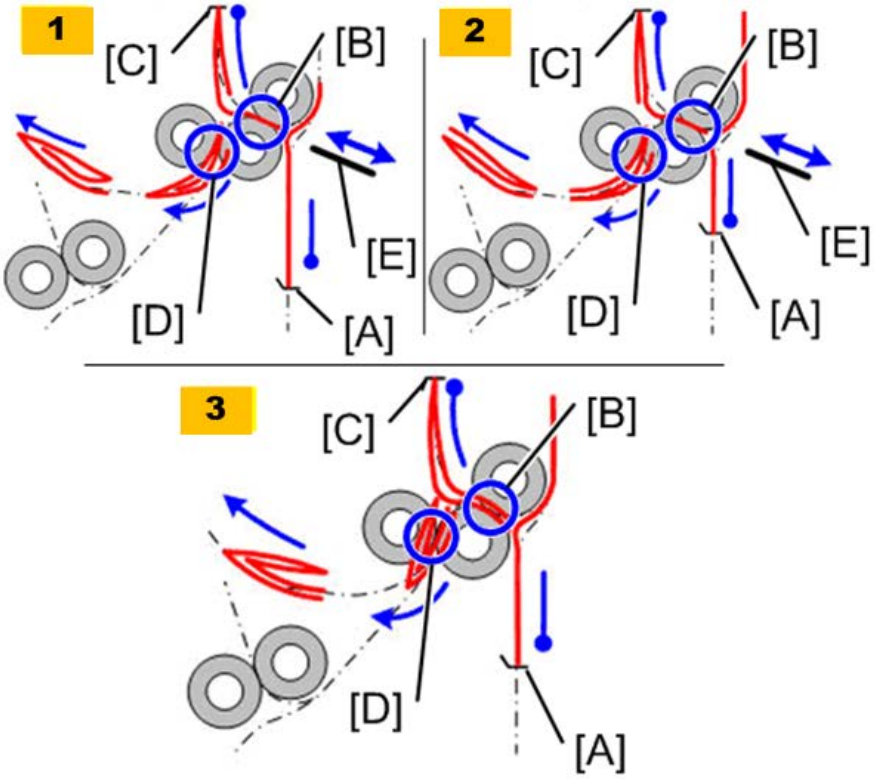



d6150604

Letter Fold-in [1], Letter Fold-out [2], Double-parallel Fold [3]

- **Single-sheet Fold:** The paper bumps against the 1st stopper [A] to make an arch in the paper near the 1st fold nip [B]. With this arch, paper is fed into the 1st fold nip [B] and the 1st fold is formed. Then the paper bumps against the 2nd stopper [C] and the 2nd fold is formed at the 2nd fold nip [D]. At this time, the locations of the 1st stopper [A] and the 2nd stopper [C] vary depending on the mode: Letter Fold-in, Letter Fold-out, Double-parallel Fold.
- **Double-sheet Fold:** 1 to 3 sheets of paper are pre-stacked while bumping against the 1st stopper [A]. The fold plate [E] presses the paper into the 1st fold nip [B] and the 1st fold is formed. The following steps are

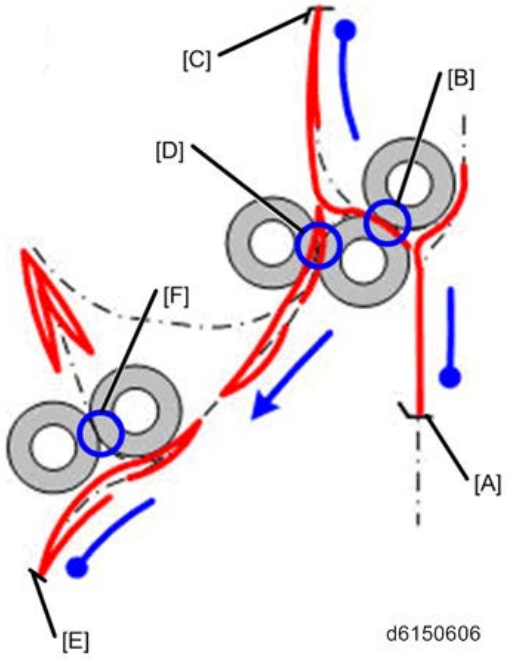
the same as for single-sheet folding.




d6150605

## Gate Fold

Paper bumps against the 1st stopper [A] to make an arch in the paper near the 1st fold nip [B]. With this arch, the paper is fed into the 1st fold nip [B] and the 1st fold is formed. After that, the paper bumps against the 2nd stopper [C] and the 2nd fold is made at the 2nd fold nip [D]. After passing through the 2nd fold nip, the paper bumps against the 3rd stopper [E] and the 3rd fold is made at the 3rd fold nip [F] and the double gate-fold is formed.

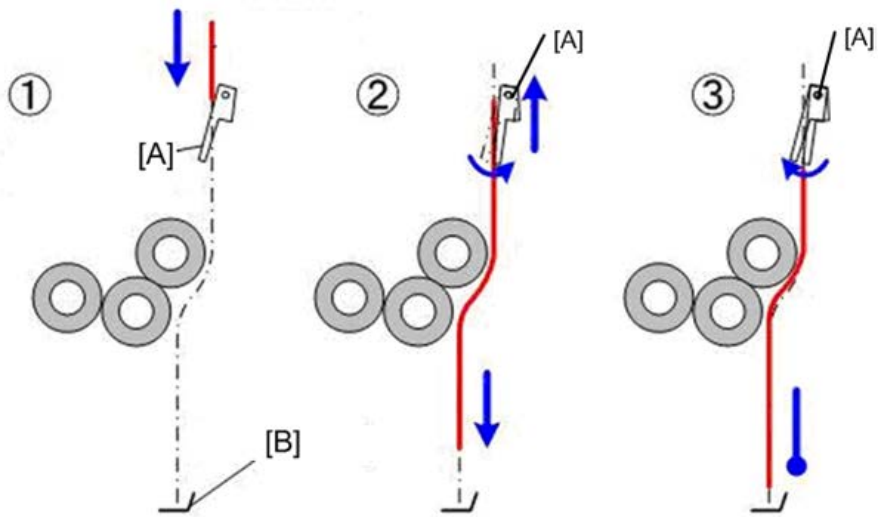



d6150606

Double Fold

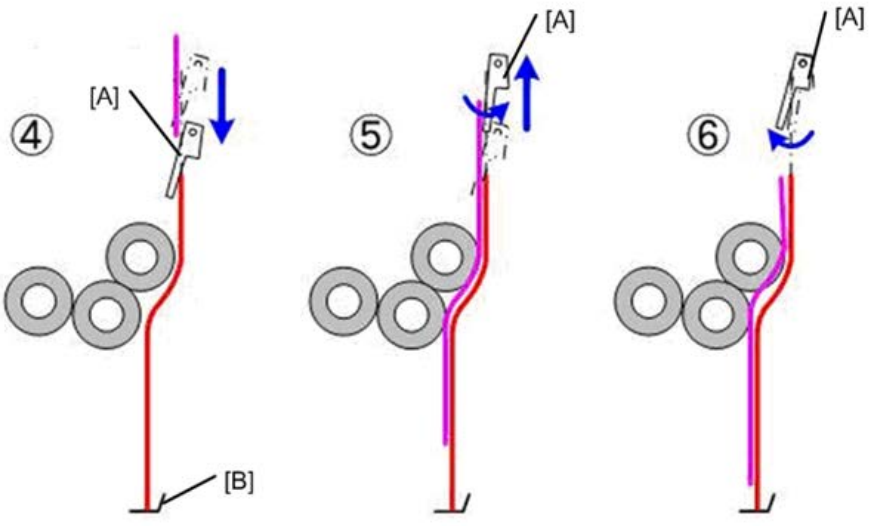
Mixed loading is allowed for paper of 64.0 to 81.5 gsm.

1. The 1st sheet of paper goes into the pre-stack area which includes the TE stopper pawl [A] and the 1st stopper [B].
2. The paper pushes the TE stopper pawl [A] aside and opens it to pass by. The pawl [A] moves up when the paper has passed through a certain amount.
3. When the trailing edge of the paper leaves the TE stopper pawl [A], the pawl [A] closes.



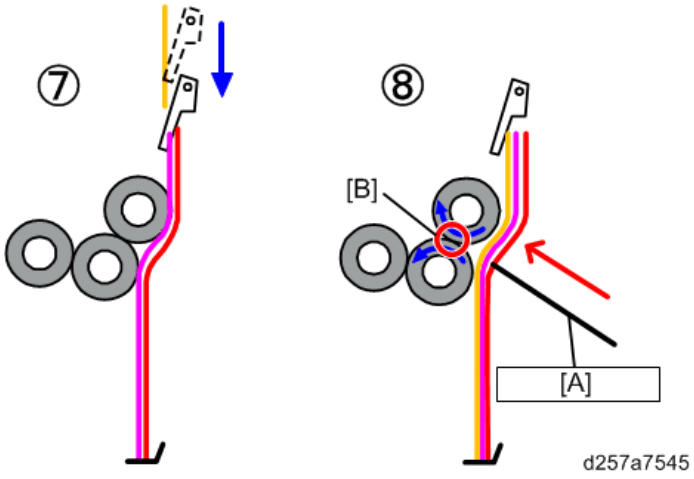

d6150607

4. The leading edge of the 1st sheet reaches the 1st stopper [B], and the TE stopper pawl [A] closes so that the leading edge of the 2nd sheet does not bump into the trailing edge of the 1st sheet. The 2nd paper goes into the pre-stack area.
5. As in “Step 2”, the 2nd sheet begins to go into the pre-stack area while pushing the TE stopper pawl [A] out. Then the pawl [A] moves up when a certain amount of the 2nd sheet has fed through.
6. As in “Step 3”, when the trailing edge of the 2nd sheet leaves the TE stopper pawl [A], the pawl [A] closes.




d6150608

7. The 3rd sheet comes and the same operation (Steps 4 ~ 6) is applied to it.
8. After 1 to 3 sheets of paper are stacked in the pre-stack area, the fold plate [A] moves forward to press the paper in the direction of the roller nip [B] to fold the stack.

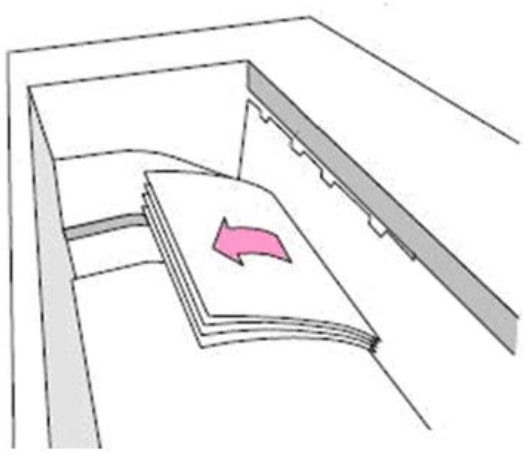


# Fold Adjustment

## Fold Measurement Location

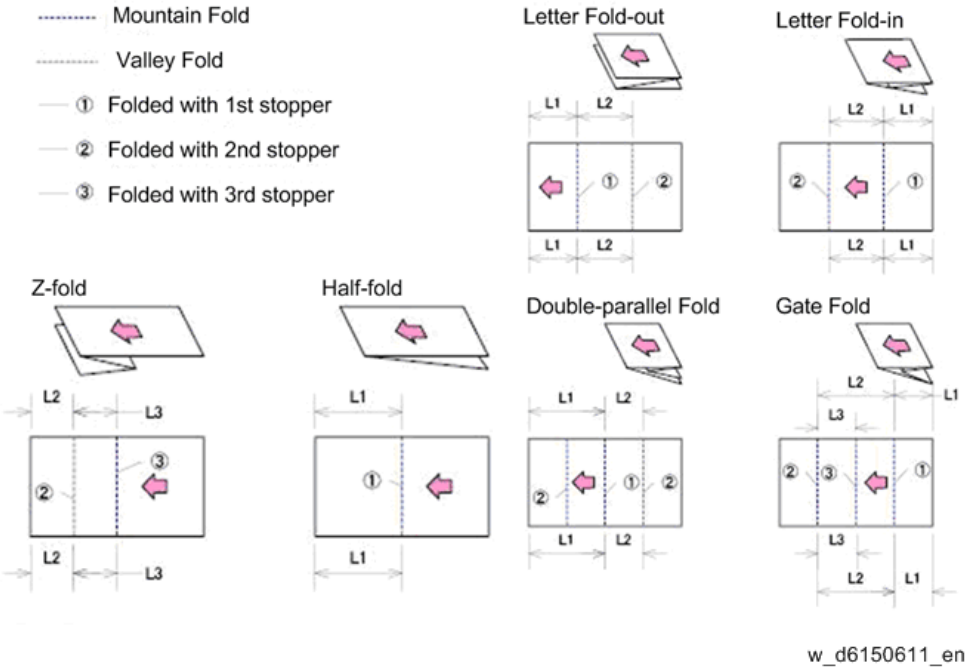
Mark the top face of the folded stack on the top exit tray. Then unfold the paper to measure the length of L1, L2, and L3. If there is an error, correct the skew at the 1st, the 2nd, and the 3rd stopper.

- Direction of a folded sheet stack on the top tray



d6150610

- Definition of the areas you should measure




w_d6150611_en

- Adjustment List Categorized by Fold Type

| | L1 | L2 | L3 | 1st Stopper | 2nd Stopper | 3rd Stopper |
|---|---|---|---|---|---|---|
| Z-Fold | - | F Long | F Long | - | F Lower | F Raise |
| | - | F Short | F Short | - | F Raise | F Lower |
| Half-fold | F Long | - | - | F Raise | - | - |
| | F Short | - | - | F Lower | - | - |

| | L1 | L2 | L3 | 1st Stopper | 2nd Stopper | 3rd Stopper |
|---|---|---|---|---|---|---|
| Letter Fold In | F Long | F Long | - | F Raise | F Lower | - |
| | F Short | F Short | - | F Lower | F Raise | - |
| Letter Fold Out | F Long | F Long | - | F Lower | F Lower | - |
| | F Short | F Short | - | F Raise | F Raise | - |
| Double-Parallel Fold | F Long | F Long | - | F Raise | F Lower | - |
| | F Short | F Short | - | F Raise | F Raise | - |
| Gate Fold | F Long | F Long | F Long | F Lower | F Lower | F Raise |
| | F Short | F Short | F Short | F Raise | F Raise | F Lower |

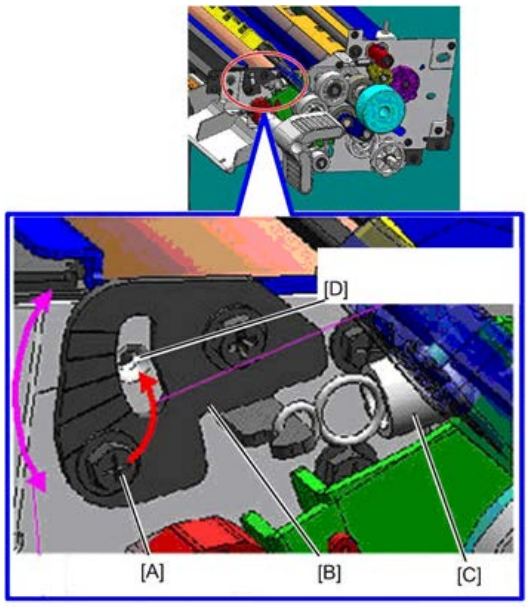
- When the fold operation finishes, it is difficult to determine which stopper needs adjustment even if you measure the skew at the end of a fold (excluding the half-fold case). So check the direction of skew by measuring the length of each fold while the paper is spread out.
- Except in the case of half-fold mode, you need to determine which stopper needs adjustment from the length of the 1st fold that affects the following folds.

## Crease Roller Adjustment

Detach the screw [A] to move the pressure adjustment bracket [B] that affects the length of the pressure spring [C].

- **To strengthen the pressure:** Move the bracket [B] up
- **To weaken the pressure:** Move the bracket [B] down

After the adjustment, attach the screw in the other hole [D] to fix the location of the pressure adjustment bracket [B].




d6150612

## Fold Area Adjustment

### 1) Z-Fold

User Tool Setting

Input the change value (S) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S | 0mm | ±10mm |
| B4 SEF | S | 0mm | ±10mm |
| A4 SEF | S | 0mm | ±10mm |
| DLT | S | 0mm | ±10mm |
| LG | S | 0mm | ±10mm |
| LT SEF | S | 0mm | ±10mm |
| Others | S | 0mm | ±10mm |
| Unit of Adjustment | 1mm | | |

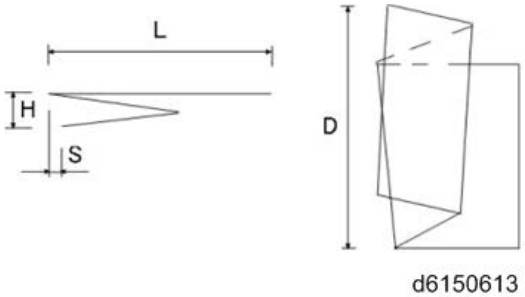
Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the adjustment value for the fold size (L, S) with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S | 0mm | ±4mm |
| B4 SEF | S | 0mm | ±4mm |
| A4 SEF | S | 0mm | ±4mm |
| DLT | S | 0mm | ±4mm |
| LG | S | 0mm | ±4mm |
| LT SEF | S | 0mm | ±4mm |
| 12"×18" | S | 0mm | ±4mm |
| 8k | S | 0mm | ±4mm |
| 13"×19" | S | 0mm | ±4mm |
| Others | S | 0mm | ±4mm |
| Adjustment Pitch | 0.2mm | | |

*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




d6150613

2) Half-fold

User Tool Setting

Input the change value (S) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S | 0mm | ±10mm |
| B4 SEF | S | 0mm | ±10mm |
| A4 SEF | S | 0mm | ±10mm |
| B5 SEF | S | 0mm | ±10mm |
| DLT | S | 0mm | ±10mm |
| LG | S | 0mm | ±10mm |
| LT SEF | S | 0mm | ±10mm |
| 12×18 | S | 0mm | ±10mm |
| 8K | S | 0mm | ±10mm |
| Others | S | 0mm | ±10mm |
| Unit of Adjustment | 1mm | | |

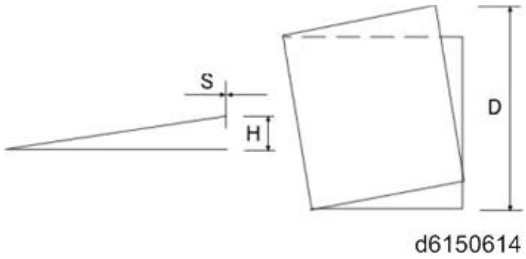
Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the adjustment value for the fold size (S) with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| 13×19.2 | S | 0mm | - |
| 13×19 | S | 0mm | - |
| 12.6×19.2 | S | 0mm | - |
| 12.6×18.5 | S | 0mm | ±5mm |
| 13×18 | S | 0mm | ±10mm |
| SRA3 | S | 0mm | ±10mm |
| SRA4 | S | 0mm | ±10mm |
| 226×310 | S | 0mm | ±10mm |
| 310×432 | S | 0mm | ±10mm |
| A3 SEF | S | 0mm | ±10mm |
| B4 SEF | S | 0mm | ±10mm |
| A4 SEF | S | 0mm | ±10mm |
| B5 SEF | S | 0mm | ±10mm |
| DLT | S | 0mm | ±10mm |
| LG | S | 0mm | ±10mm |
| LT SEF | S | 0mm | ±10mm |
| 12×18 | S | 0mm | ±10mm |
| 8K | S | 0mm | ±10mm |
| Others | S | 0mm | ±10mm |
| Unit of Adjustment | 0.2mm | | |

*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




3) Letter Fold-in

User Tool Setting

Input the change value (S1) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S1 | 4mm | ±10mm |
| B4 SEF | S1 | 4mm | ±10mm |
| A4 SEF | S1 | 4mm | ±10mm |
| DLT | S1 | 4mm | ±10mm |
| LG | S1 | 4mm | ±10mm |
| LT SEF | S1 | 4mm | ±10mm |
| 12×18 | S1 | 4mm | ±10mm |
| 8K | S1 | 4mm | ±10mm |
| Others | S1 | 4mm | ±10mm |
| Unit of Adjustment | 1mm | | |

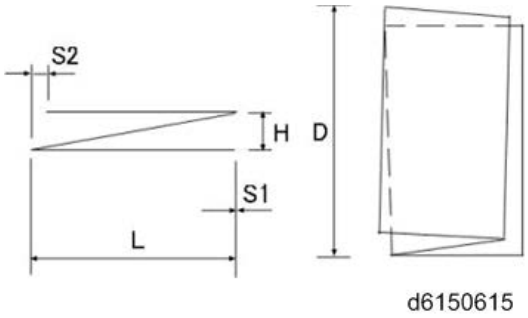
Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the adjustment value for the fold area (L, S2) with the operation panel.

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|
| A3 SEF | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| B4 SEF | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| A4 SEF | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| DLT | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| LG | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| LT SEF | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| 12×18 | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| 8K | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| Others | L | 0mm | ±4mm | S2 | 0mm | ±4mm |
| Unit of Adjustment | 0.2mm | | | | | |

*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




4) Letter Fold-in

User Tool Setting

Input the change value (S1) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S1 | 2mm | 2 to 7mm |
| B4 SEF | S1 | 2mm | 2 to 7mm |
| A4 SEF | S1 | 2mm | 2 to 7mm |
| B5 SEF | S1 | 2mm | - |
| DLT | S1 | 2mm | 2 to 7mm |
| LG | S1 | 2mm | 2 to 7mm |
| LT SEF | S1 | 2mm | 2 to 7mm |
| 12×18 | S1 | 2mm | 2 to 7mm |
| 8K | S1 | 2mm | 2 to 7mm |
| Others | S1 | 2mm | 2 to 7mm |
| Unit of Adjustment | 1mm | | |

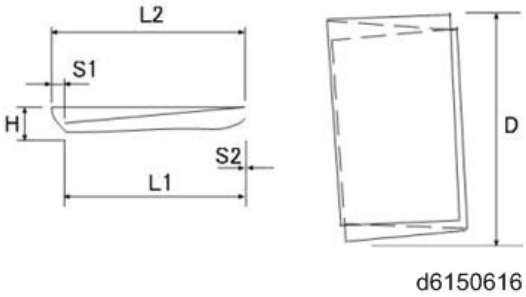
Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the adjustment value for the fold area (L1, L2) with the operation panel.

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|
| A3 SEF | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| B4 SEF | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| A4 SEF | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| B5 SEF | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| DLT | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| LG | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| LT SEF | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| 12×18 | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| 8K | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| Others | L1 | 0mm | ±4mm | L2 | 0mm | ±4mm |
| Unit of Adjustment | 0.2mm | | | | | |

*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




5) Double-parallel Fold

User Tool Setting

Input the change value (S1, S2) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|
| A3 SEF | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| B4 SEF | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| A4 SEF | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| B5 SEF | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| DLT | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| LG | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| LT SEF | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| 12×18 | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| 8K | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| Others | S1 | 0mm | ±10mm | S2 | 0mm | ±10mm |
| Unit of Adjustment | 1mm | | | | | |

Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the adjustment value for the fold area (S1, S2) with the operation panel.

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|
| A3 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| B4 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| A4 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| B5 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| DLT | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| LG | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| LT SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| 12×18 | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| 8K | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |
| Others | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm |

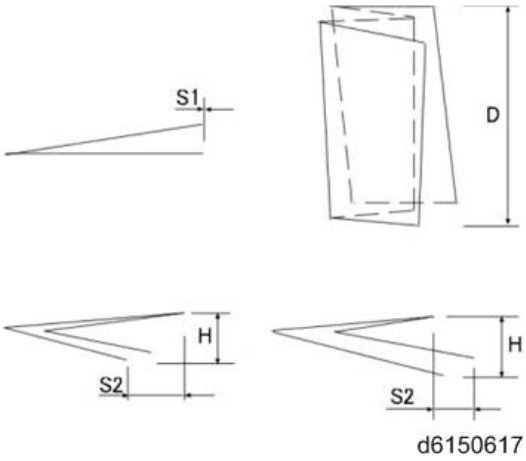
2.Detailed Descriptions

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|
| Unit of Adjustment | 0.2mm | | | | | |

*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




6) Gate Fold

User Tool Setting

Input the change value (S1, S2) for the fold area with the operation panel.

| Size | Set Area | Default | Value Range |
|---|---|---|---|
| A3 SEF | S1(S2) | 2mm | 2 to 12mm |
| B4 SEF | S1(S2) | 2mm | 2 to 12mm |
| A4 SEF | S1(S2) | 2mm | 2 to 12mm |
| B5 SEF | S1(S2) | 2mm | 2 to 12mm |
| DLT | S1(S2) | 2mm | 2 to 12mm |
| LG | S1(S2) | 2mm | 2 to 12mm |
| LT SEF | S1(S2) | 2mm | 2 to 12mm |
| 12×18 | S1(S2) | 2mm | - |
| 8K | S1(S2) | 2mm | 2 to 12mm |
| Others | S1(S2) | 2mm | 2 to 12mm |
| Unit of Adjustment | 1mm | | |

Adjust with SP mode (*1, *3), user setting (*2), operator adjustment (*3), special operator adjustment (*3). Input the ± adjustment value for the fold area (S1, S2, S3) with the operation panel.

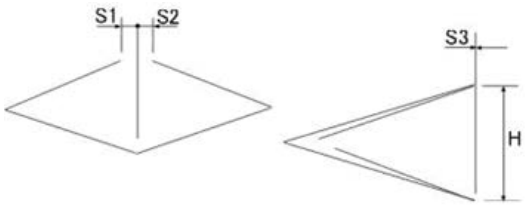
| Size | Set Area | Default | Value Range | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|---|---|---|
| A3 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| B4 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| A4 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |

| Size | Set Area | Default | Value Range | Set Area | Default | Value Range | Set Area | Default | Value Range |
|---|---|---|---|---|---|---|---|---|---|
| B5 SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| DLT | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| LG | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| LT SEF | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| 12×18 | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| 8K | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| Others | S1 | 0mm | ±4mm | S2 | 0mm | ±4mm | S3 | 0mm | ±4mm |
| Unit of Adjustment | 0.2mm | | | | | | | | |

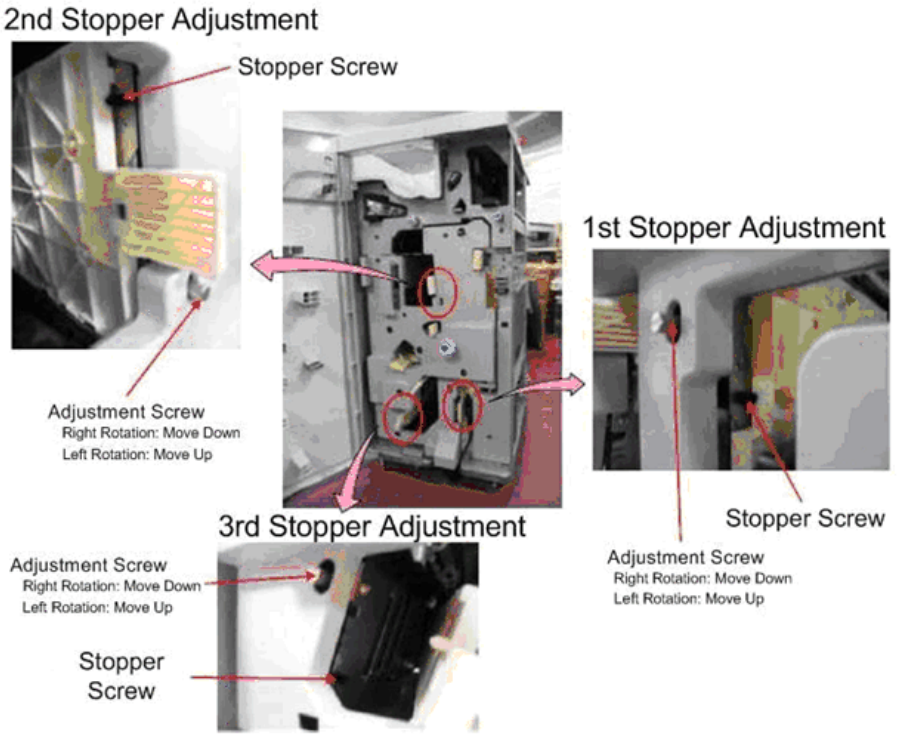
*1 FD4000

*2 FD5010: For single fold

*3 FD5010: For double fold




Detach the stopper screw and then relocate it to the screw hole for adjustment before fixing it loosely. After that, move the adjustment screw to adjust the tilt and then fasten the stopper screw to fix the location.The location of each stopper screw and adjustment screw is shown below:

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