

Cover Interposer CI4040
Machine Code: D3CN
Field Service Manual
1.01








Latest Release: Jan, 2017

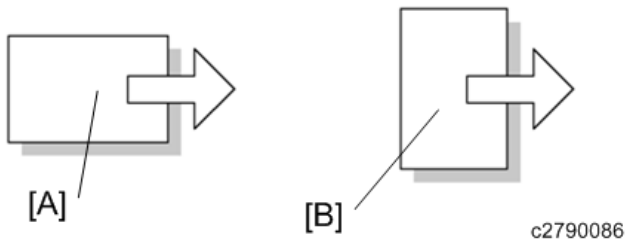
Initial Release: Oct, 2016

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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

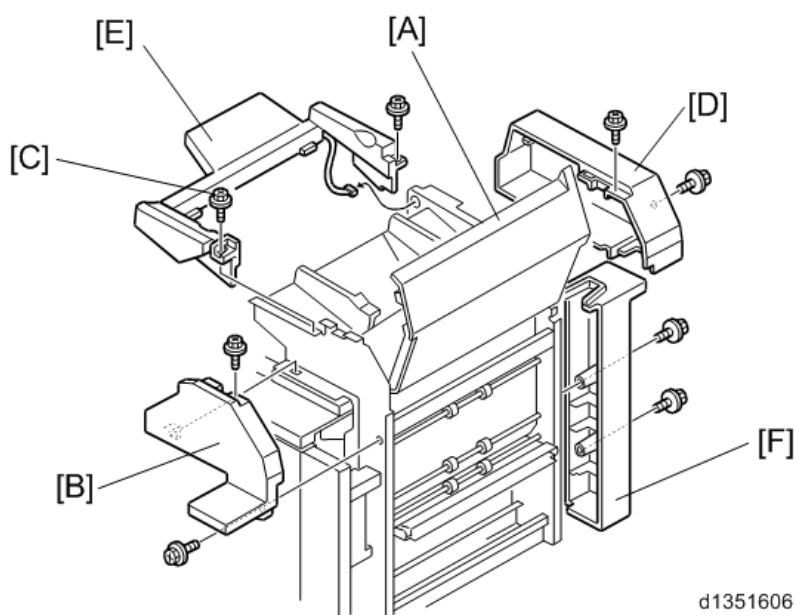
Covers

1. Open the feed cover [A].
2. Upper front cover [B] (🔩 x 2)

Note

- To remove the upper front cover, screw [C] must be removed.

3. Rear upper cover [D] (🔩 x 2)
4. Slip sheet tray [E] (🔩 x 2, 📦 x 1)
5. Rear middle cover [F] (🔩 x 2)



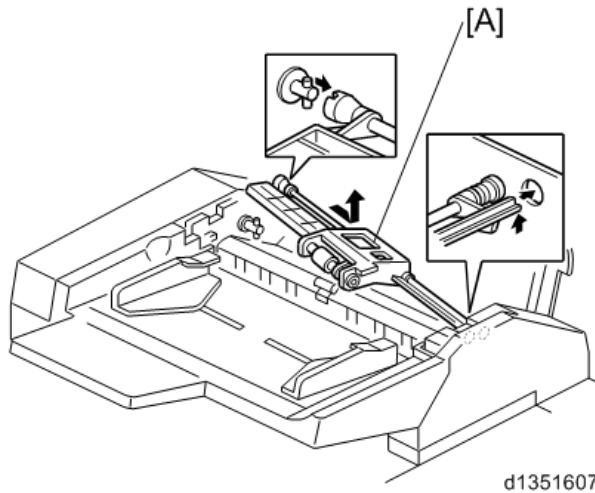
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Feed Unit, Pick-Up Roller

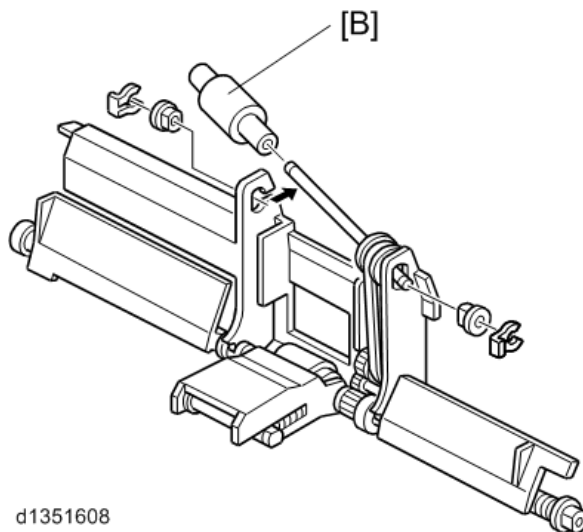
1. Open the feed cover.
2. Feed unit [A]

Note

- The unit is spring loaded. Push it to the right to release it, then lift it out.



3. Pick-up roller [B] (Ø x 2, bushings x 2)



1.Replacement and Adjustment

Feed Belt

1. Feed unit [Feed Unit, Pick-Up Roller](#)
2. Pick-up roller unit [A]

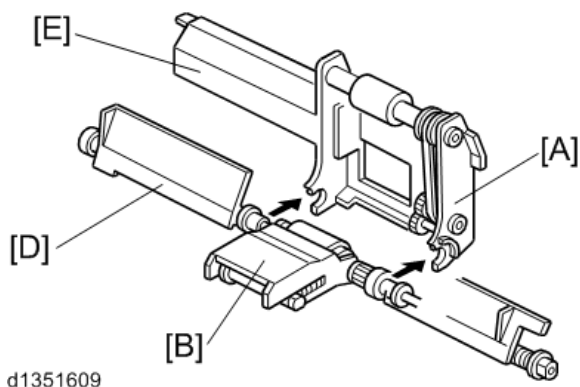
↓ Note

- Pull the unit away from the bushings in the direction of the arrow.

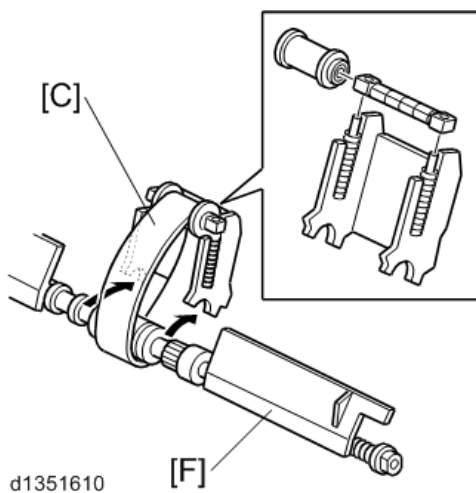
3. Feed belt holder [B]

↓ Note

- Hold the feed belt holder by the sides, then lift up to separate from the holder.
- Pull slowly to avoid losing the springs.



4. Feed belt [C]



Re-assembly

1. Position the pick-up roller unit [A] and feed belt holder [B] as shown above.
2. On the rear side, slide out the bushing, and rotate [D] until its flat side is parallel with [E], then snap it on.
3. On the front side, rotate [F] until its flat side is parallel with [D], then snap it on. Viewed from the bottom, the plates must be aligned.

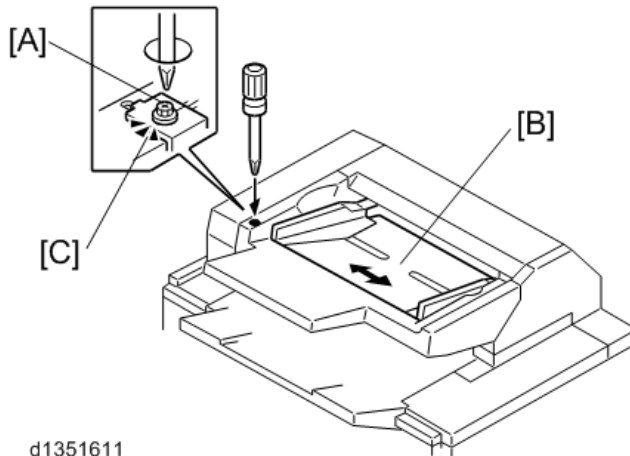
Guide Plate Adjustment

Adjust the guide plate if the holes punched in the covers or slip sheets are not correctly aligned with holes punched in the other sheets.

1. Open the feed cover.
2. Loosen the screw [A].
3. Push the table [B] left or right to change its position, then tighten the screw.

Note

- If you want to see the scale [C], you must remove the rear upper cover and the slip sheet tray.

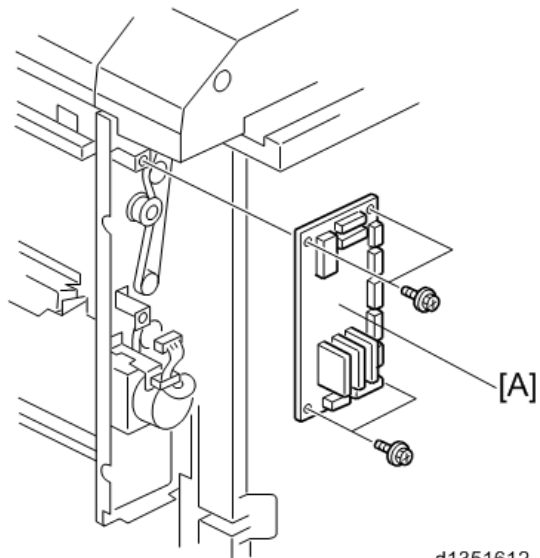


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1.Replacement and Adjustment

Main Board

1. Open the top cover.
2. Rear cover (🔩 x 1)
3. Main board [A] (🔩 x 9, 🔩 x 4)



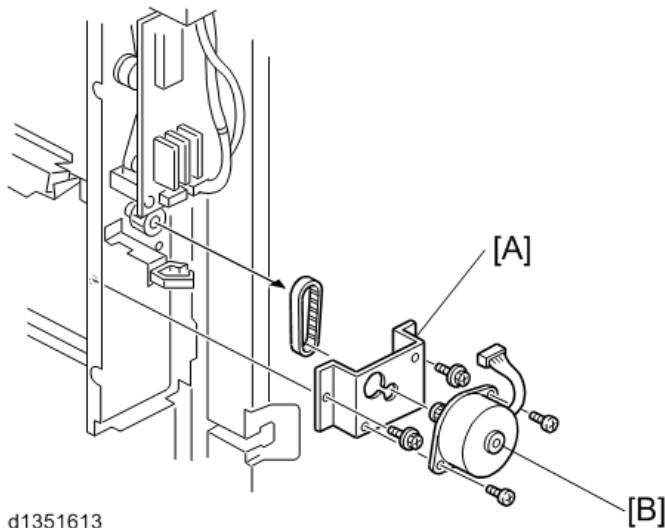
↓ Note

- All DIP switch settings on the main board of the cover sheet unit should be set to OFF.

Motor Replacement

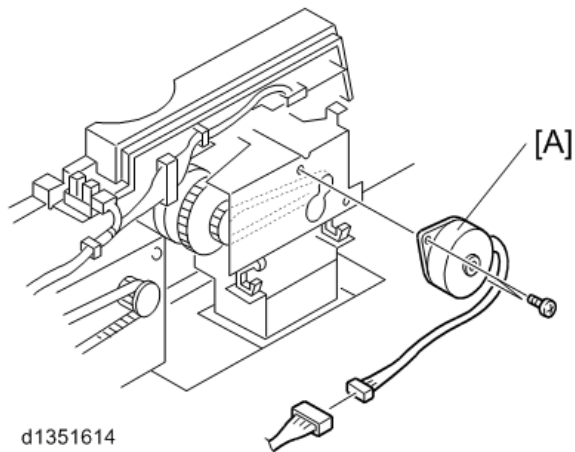
Vertical Transport Motor

1. Open the top cover.
2. Rear middle cover (⌀ x 1) [Covers](#)
3. Motor bracket [A] (⌀ x 1, harness x 1, ⌀ x 2, timing belt x 1)
4. Motor [B] (⌀ x 2)



Bottom Plate Lift Motor

1. Rear upper cover [Covers](#)
2. Bottom plate lift motor [A] (harness x 2, ⌀ x 1, ⌀ x 2)



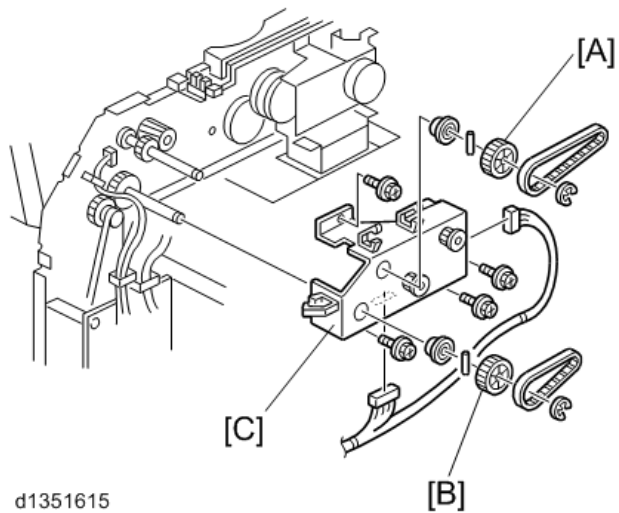
Feed Motor, Transport Motor

Note

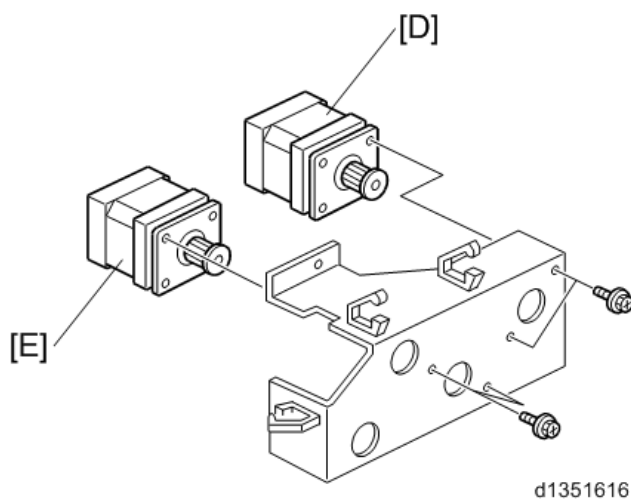
- When removing the feed gear and transport gear, hold one hand under the gear to catch the pin as it falls from the hole in the shaft.

1.Replacement and Adjustment

1. Rear upper cover [Covers](#)
2. Feed gear [A] (⚙️ x 1, pin x 1, timing belt x 1, bushing x 1)
3. Transport gear [B] (⚙️ x 1, pin x 1, timing belt x 1, bushing x 1)
4. Motor bracket [C] (harness x 5, ⚙️ x 4)



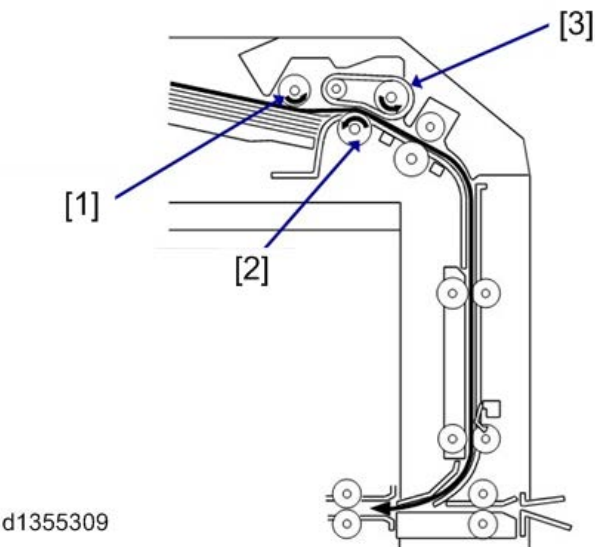
5. Feed motor [D] (⚙️ x 1, ⚙️ x 2)
6. Transport motor [E] (⚙️ x 1, ⚙️ x 2)



2. Detailed Descriptions

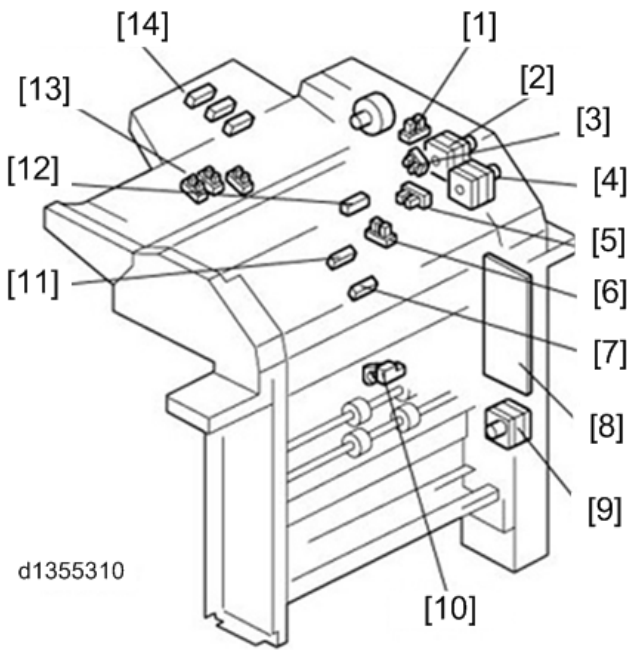
Main Components

Side View



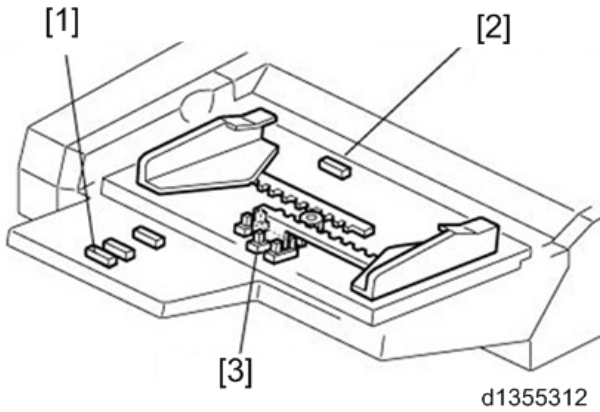
| No. | Part |
|-----|----------------|
| 1 | Pick-up Roller |
| 2 | Reverse Roller |
| 3 | Feed Belt |

Electrical Component Layout



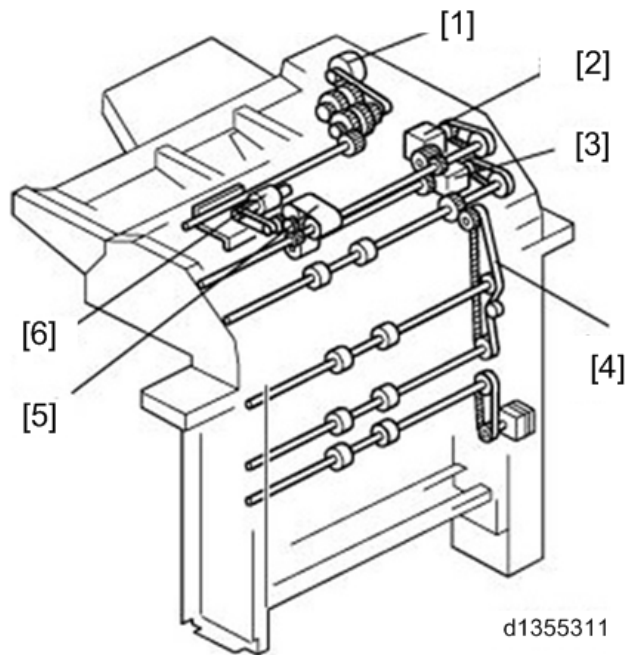
2.Detailed Descriptions

| No. | Part | No. | Part |
|-----|------------------------|-----|----------------------|
| 1 | Feed Cover Set Sensor | 8 | Controller Board |
| 2 | Feed Motor | 9 | Exit Motor |
| 3 | Bottom Plate Sensor | 10 | Exit Sensor |
| 4 | Transport Roller | 11 | Feed Sensor |
| 5 | Near End Sensor | 12 | Paper Set Sensor |
| 6 | Bottom Plate HP Sensor | 13 | Width Sensors 1 to 3 |
| 7 | Pick-up Sensor | 14 | Length Sensor 1 to 3 |



| No. | Part |
|-----|----------------------|
| 1 | Length Sensor 1 to 3 |
| 2 | Paper Set Sensor |
| 3 | Width Sensor 1 to 3 |

Drive Layout

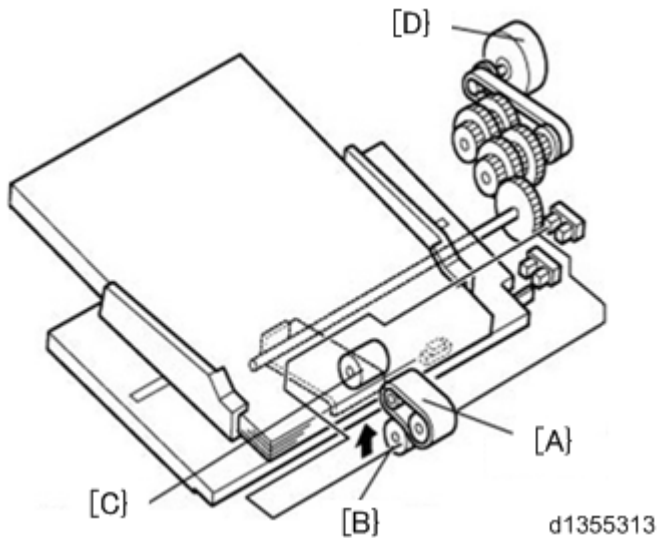


2.Detailed Descriptions

| No. | Part |
|-----|--------------------|
| 1 | Bottom Plate Motor |
| 2 | Feed Motor |
| 3 | Transport Motor |
| 4 | Timing Belt |
| 5 | Feed Belt |
| 6 | Pick-up Roller |

Tray Mechanism

Paper Feed



| No. | Part |
|-----|--------------------|
| [A] | Feed Belt |
| [B] | Reverse Roller |
| [C] | Pick-up Roller |
| [C] | Bottom Plate Motor |

- This machine has a feed belt and reverse roller (FRR method).
- The direction that the reverse roller turns depends on the frictional forces acting on it. When there is a single sheet of paper between the feed belt and reverse roller, the friction between the feed belt and the paper is greater than the reverse force from the reverse roller. So, the reverse roller turns in the direction of paper feed.
- If two or more sheets are fed between the belt and roller, the forward force on the second sheet becomes less than reverse force from the reverse roller because of the low friction between the two sheets. So, the reverse roller drives the second sheet back to the tray.
- Finally, the feed belt and the reverse roller feed the paper into the machine.