Roll Unit RU6540
Machine Code: D3A2

SERVICE MANUAL

January, 2015

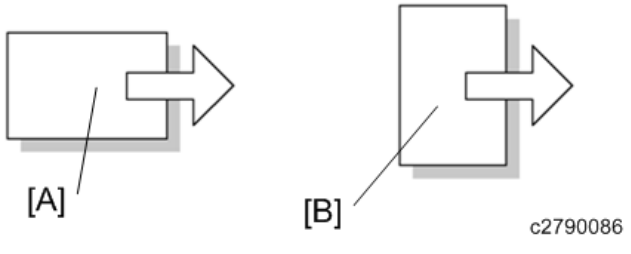
Safety, Conventions, Trademarks

Conventions

Common Terms

This is a list of symbols and abbreviations used in this manual.

Symbol	What it means
	Screw
	Connector
	E-ring
	Clip ring
	Harness clamp
FFC	Flexible Film Cable
JG	Junction Gate
LE	Leading Edge of paper
LEF	Long Edge Feed
SEF	Short Edge Feed
TE	Trailing Edge of paper



[A] Short Edge Feed (SEF)

[B] Long Edge Feed (LEF)

Warnings, Cautions, Notes

In this manual, the following important symbols and notations are used.

⚠WARNING

- A Warning indicates a potentially hazardous situation. Failure to obey a Warning could result in death or serious injury.

⚠CAUTION

- A Caution indicates a potentially hazardous situation. Failure to obey a Caution could result in minor or moderate injury or damage to the machine or other property.

Important

- **Obey these guidelines to avoid problems such as misfeeds, damage to originals, loss of valuable data and to prevent damage to the machine.**

Note

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

Responsibilities of the Customer Engineer

Reference Material for Maintenance

- Maintenance shall be done using the special tools and procedures prescribed for maintenance of the machine described in the reference materials (service manuals, technical bulletins, operating instructions, and safety guidelines for customer engineers).
- Use only consumable supplies and replacement parts designed for use of the machine.

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1. Replacement and Adjustment

Paper Cutter

Cutter Unit

Preparation

- Pull out the roll tray

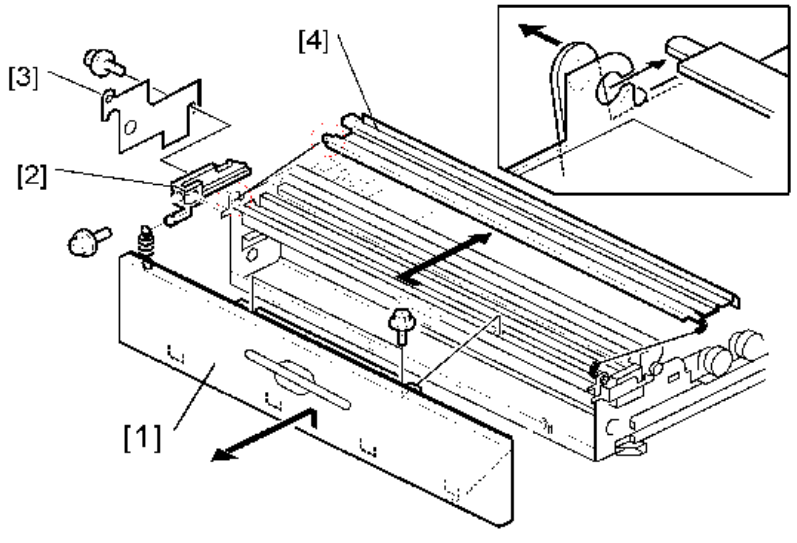
1. Remove

   [1] Roll tray cover (x2)

   [2] Left spring, hook (x1)

   [3] Side plate (x2)

   [4] Guide plate (pressure release).



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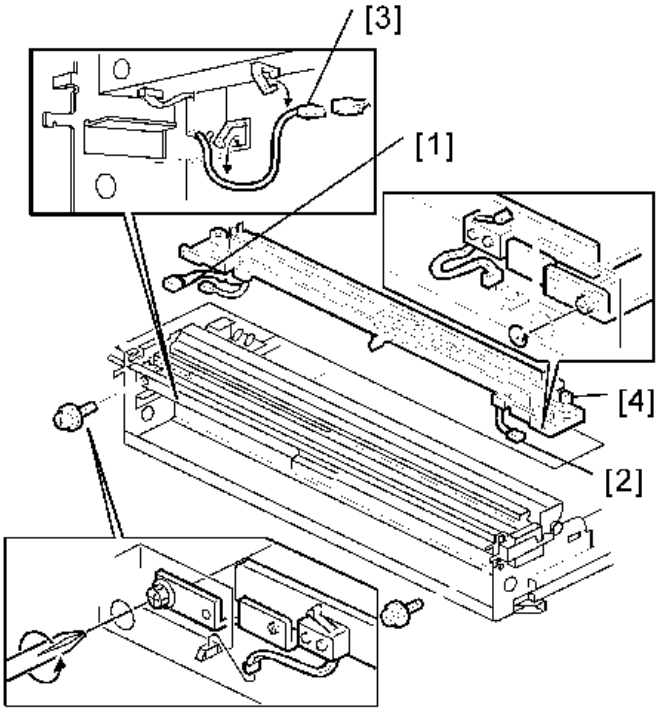
2. Remove:

   [1] Left cutter HP switch connector (x1)

   [2] Right cutter HP switch connector (x1)

   [3] Cutter motor connector (x2, x1)

   [4] Cutter unit (x2). (Slide out to the left.)



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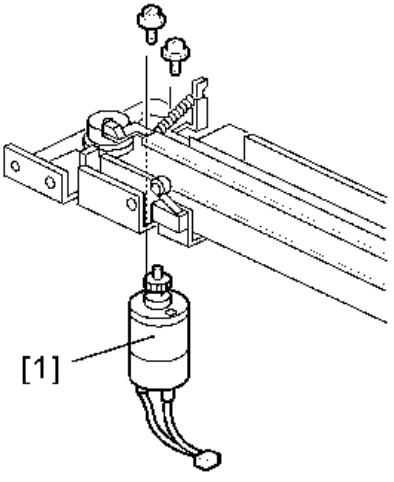
Cutter Motor, Cutter HP Switches

Preparation

- Remove the cutter unit ☛Cutter Unit (Main Service Manual)

1. Remove:

   [1] Cutter motor (x2, x1)



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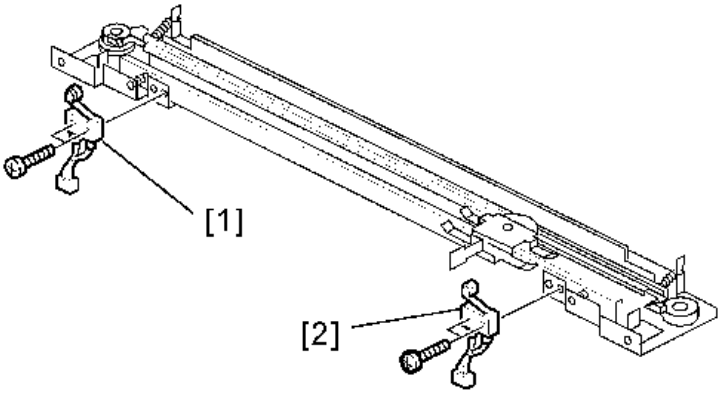
2. Remove:

   [1] Left cutter HP switch (x2, x1)

   [2] Right cutter HP switch (x2, x1)



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Cutting Sensor, Feed Exit Roller

Preparation

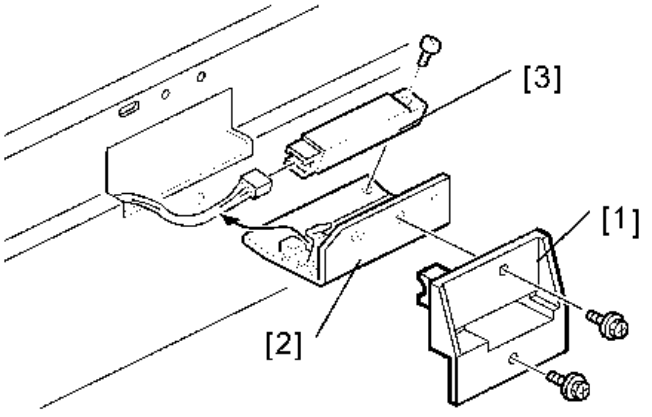
- Pull out the roll tray drawer.
- Remove the left and right inner cover. (Inner Covers (Main Service Manual))

1. Remove

   [1] Lock plate (x2)

[2] Sensor bracket

[3] Cutting sensor (x1, x1)



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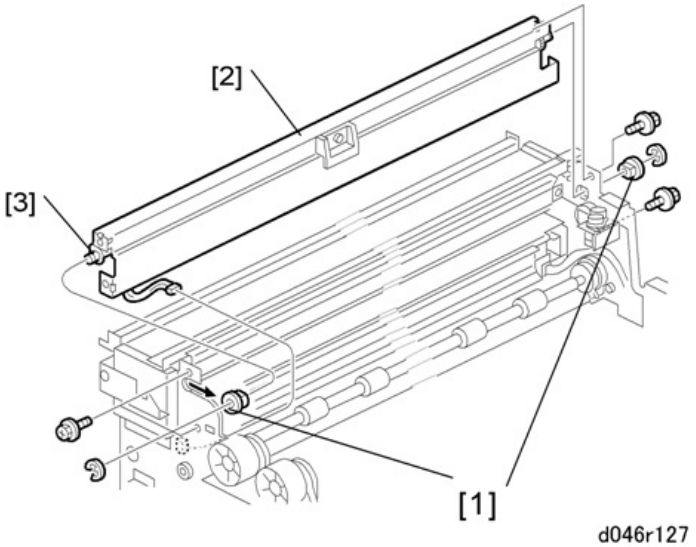
2. Remove:

[1] Bushings (x2)

[2] Guide plate (x4)

[3] Feed exit roller



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Reinstallation

- Re-install the left end first (viewed from the front).

Roll Tray

Roll Tray Removal

Preparation

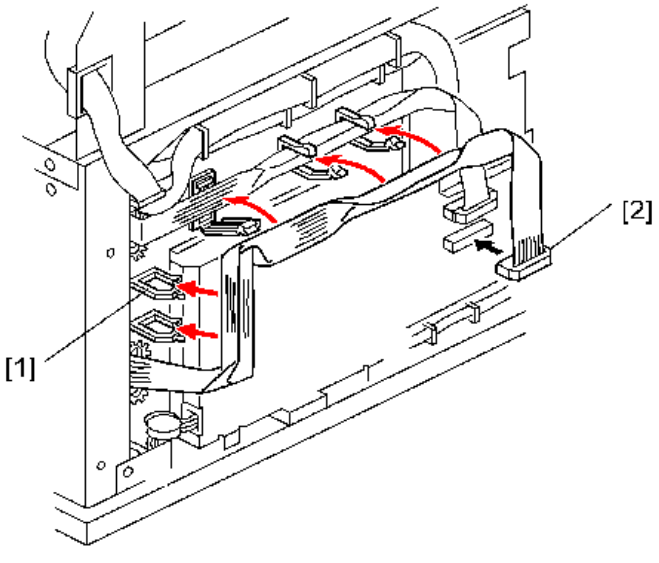
⚠CAUTION

- The roll tray weighs 36 kg (80 lb.) At least two technicians are needed to remove it and re-install it.
- Prepare a clean flat surface to set the unit on after removal. The paper feed motor is mounted under the roll tray. A strong table, or four blocks, to raise the roll tray slightly, is ideal and will make it easier to service.
- Main machine right rear cover, right front cover
- Main machine rear cover
- Main machine controller box cover

1. Remove:

   [1] Open the harness clamps (x6)

   [2] Connectors (x)2



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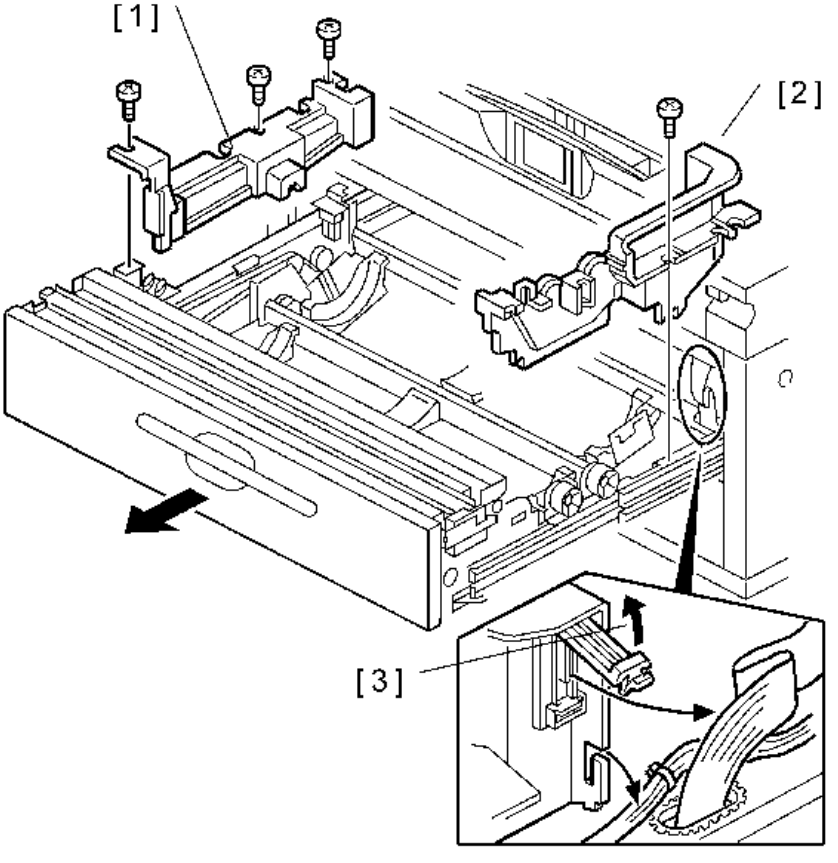
2. Remove:

   [1] Left inner cover (x3)

[2] Right inner cover (x2)

[3] Harness clamp at the corner of the right inner cover



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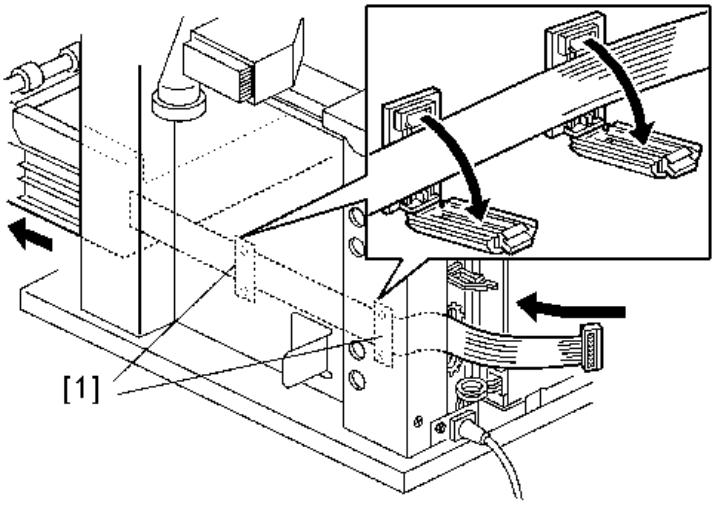
3. Remove harness clamps [1] inside the machine (x2).



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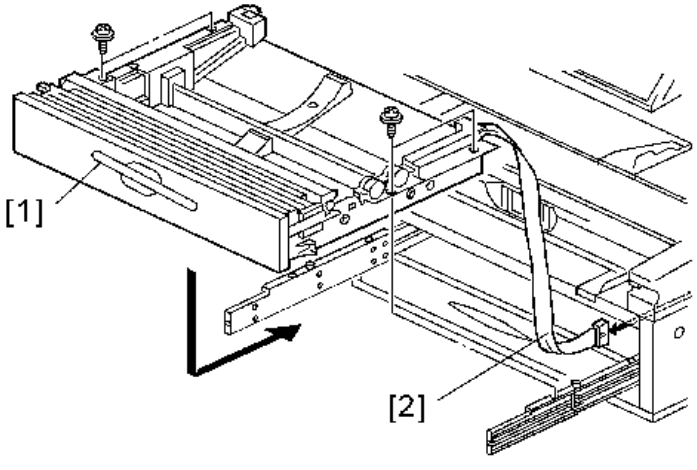
4. Remove the roll tray [1] (x4 with washers).
5. Pull the flat connector [2] from the back to the front of the machine.



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6. Coil the flat connector and then place it inside the roll tray.
7. With a technician on each side of the roll tray, lift it off the rail and set it down on a clean flat surface.

Rollers, Clutches

1st/3rd Feed Roller and Clutch

Preparation

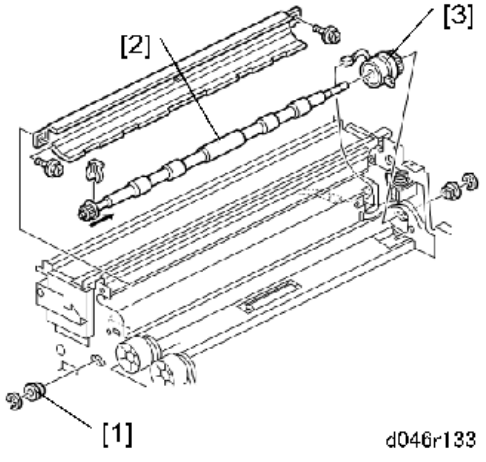
- Remove the roll tray from the main machine. (Roll Tray (Field Service Manual))

1. Remove:

   [1] Bushings (x2)

   [2] First feed roller (x1)

   [3] Paper feed clutch (x2, x1)



2. After replacement, do the SP codes for the roller which you replaced, to adjust the cut length.

SP1920-021 - 253	Cut Length Adjustment

2nd/4th Feed Roller and Clutch

Preparation

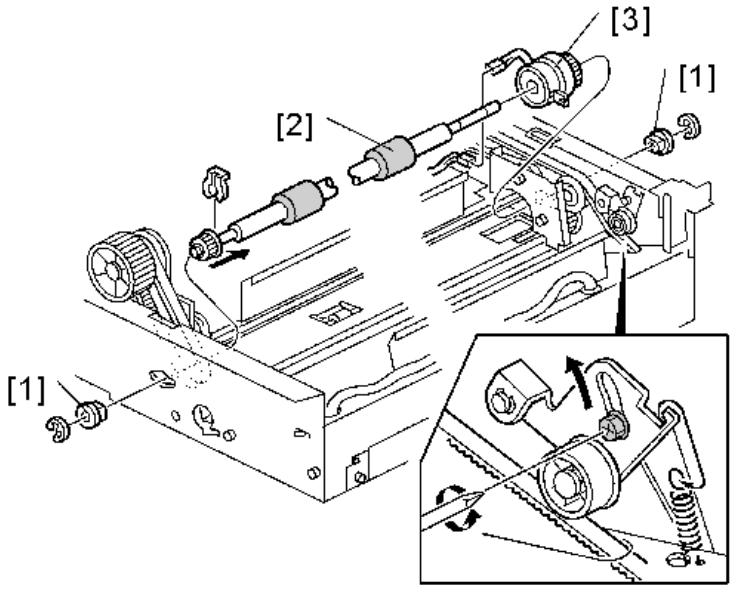
- Remove the roll tray. (Roll Tray (Field Service Manual))

1. Remove:

   [1] Bushings (x2, x2)

   [2] Second feed roller (x1)

   [3] Paper feed clutch (x2, x1)



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2. After replacement, do these SP codes for the roller which you replaced, to adjust the cut length.

SP1920-021 - 253	Cut Length Adjustment

Registration Roller

Note

- The following cross references refer to sections in the Field Service Manual for the main machine.

Preparation

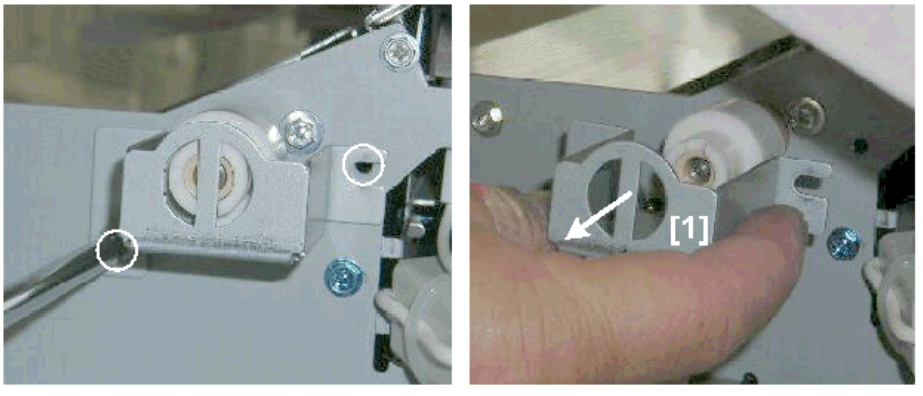
1. Raise the upper unit.
2. On the left, remove:
    - Upper unit left cover (Upper Unit Covers)
    - Left front cover (Left Covers)
    - Left inner cover (Upper Unit Covers)
    - Registration motor (Registration Motor)
    - Registration clutch (Registration Clutch)
3. On the right, remove:
    - Upper unit right cover (Upper Unit Covers)
    - Right front cover (Right Covers)

- Right inner cover (Inner Covers)
- Separation Power Pack (Separation Power Pack)

4. At the front, remove the bypass feed table.

Torque Limiter

1. On the right side, remove the torque limiter bracket [1] (x2).



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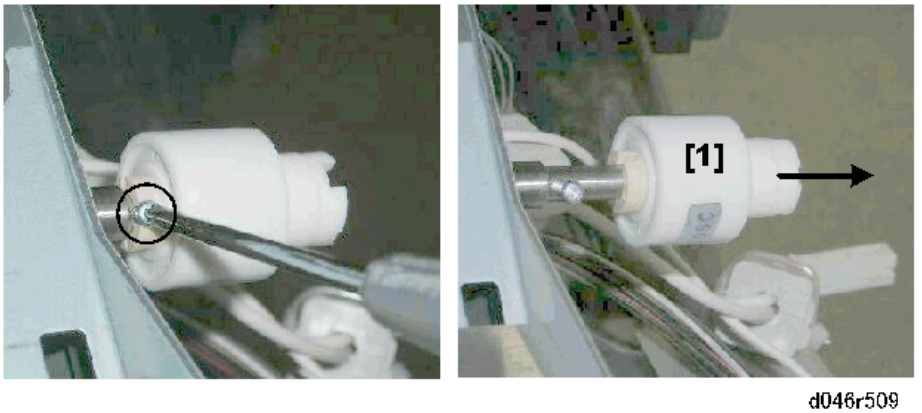
2. Remove the torque limiter [1] from the right end of the roller (x1).



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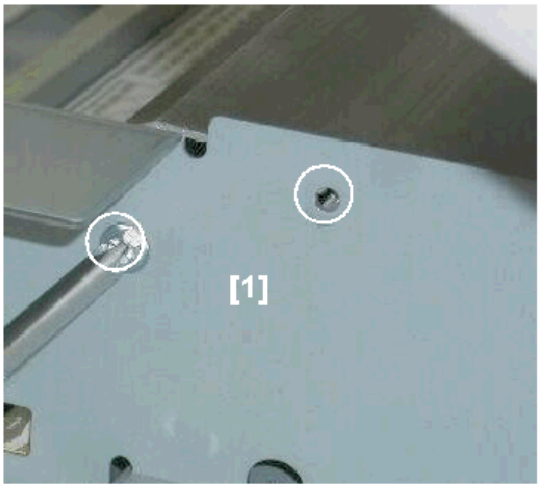
Aluminum Guide Plate

1. On the right [1], remove the screws (x2)



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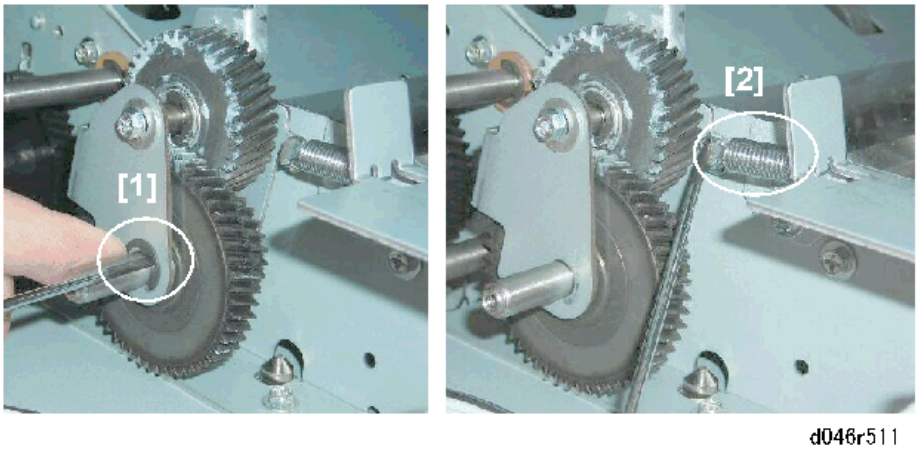
2. On the left, remove:
   [1] E-ring (x1)
   [2] Spring (x1)



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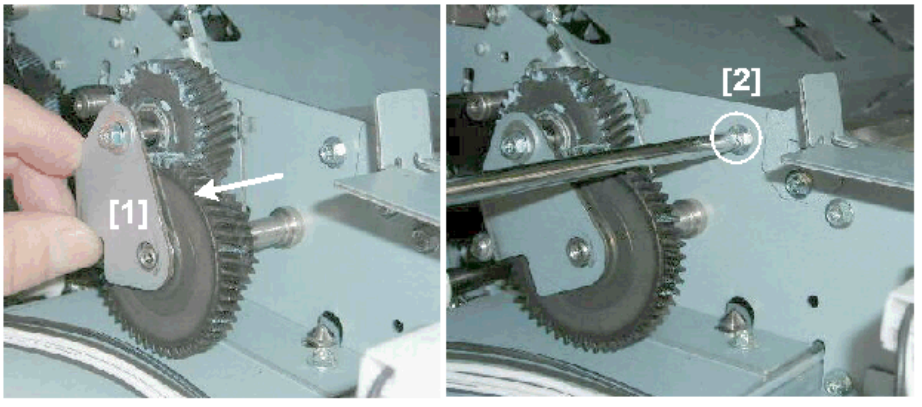
3. Slide the gear [1] out slightly (do not remove it).
4. Remove the screw [2] (x1).



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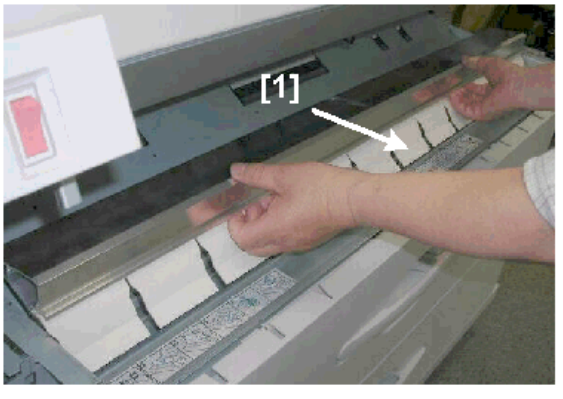
5. Remove the aluminum guide plate [1].



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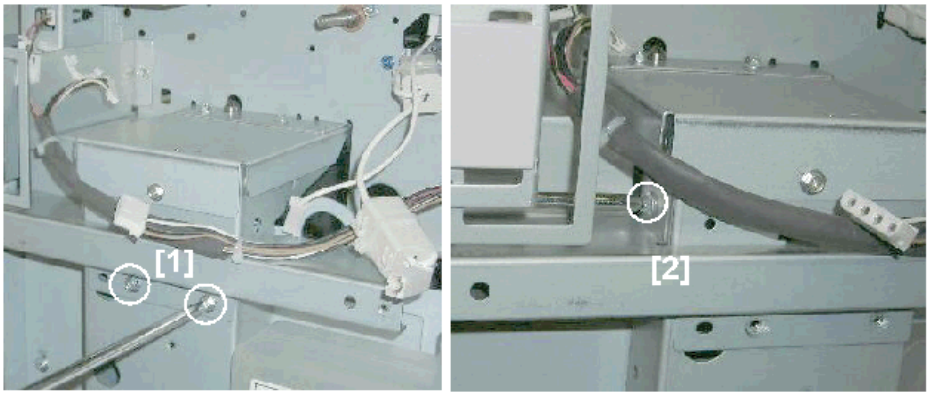
Main Guide Plate

1. On the left, remove screws [1] and [2] (x3).



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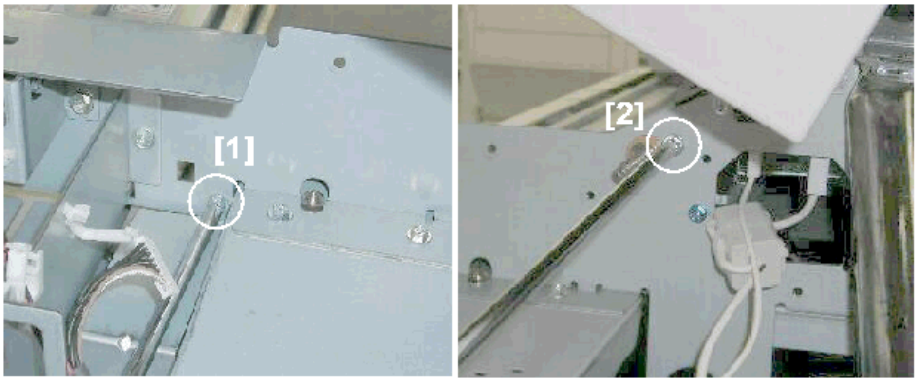
2. On the right, remove screws [1] and [2] (x2).



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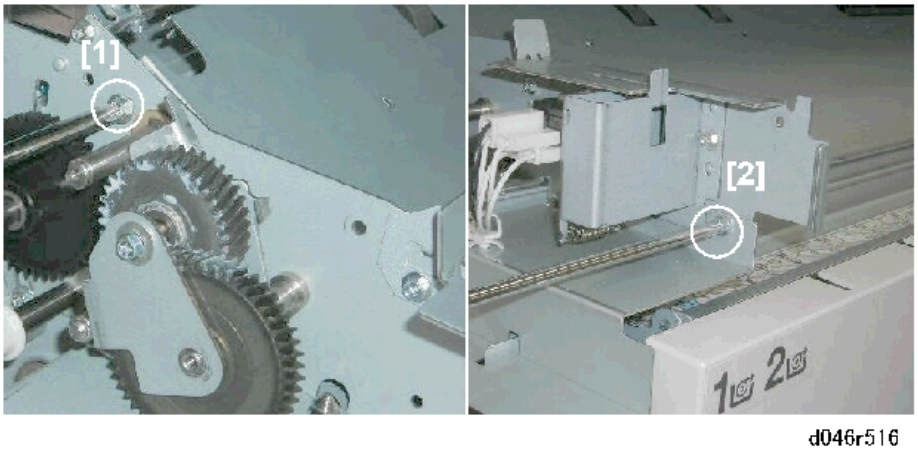
3. On the left, remove screws [1] and [2] (x2).



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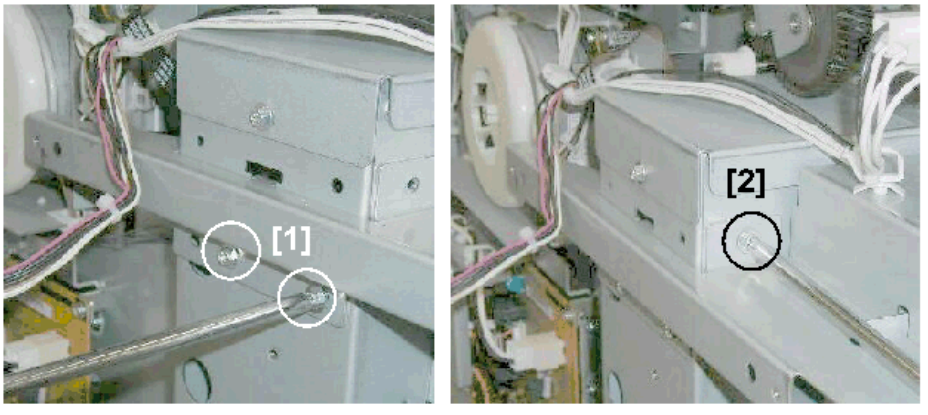
4. Remove screws [1] and [2] (x3).



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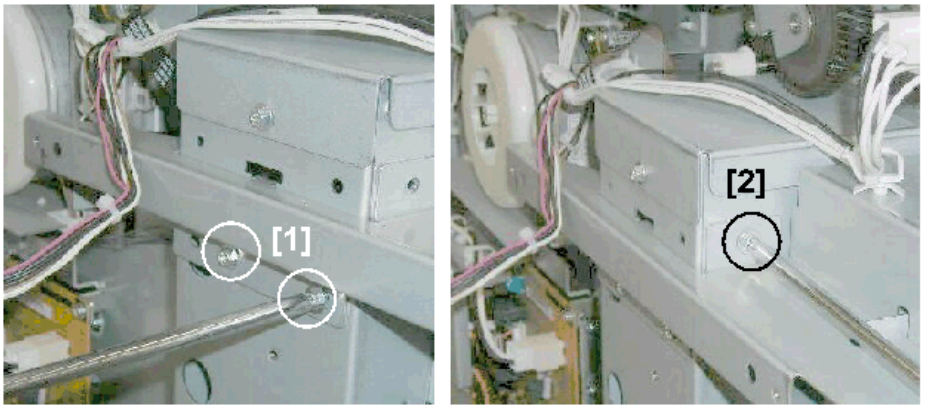
5. While pressing down plate [1], remove screw [2] (x1).



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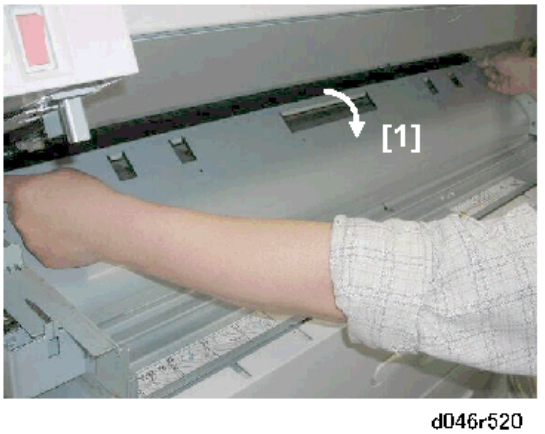
6. Grasp the main guide plate at each corner and remove it [1].



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Roller Removal

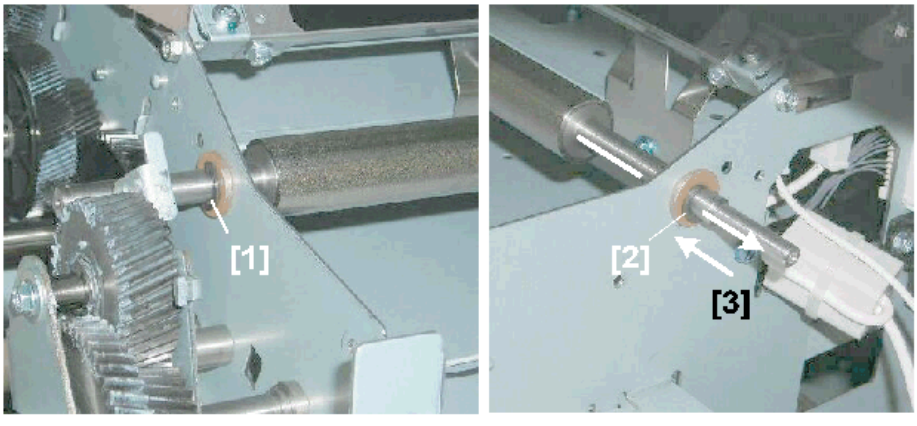
1. Disconnect the roller:

   [1] Left end (x1, x1)

   [2] Right end (x1, x1)

2. Slide the right end of the roller [3] to the right until the left end of the roller shaft clears its hole on the left.

3. Pull the roller to the left and remove it.



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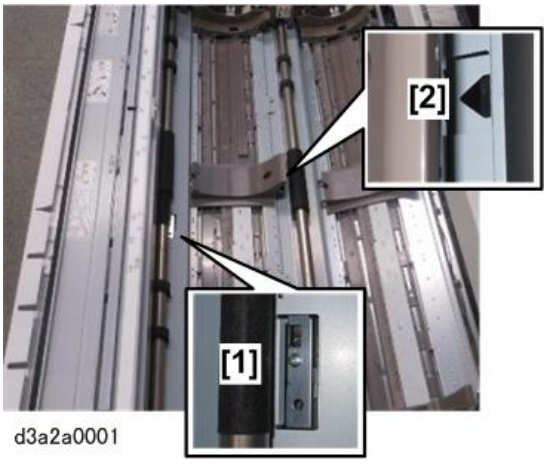
Sensors

Roll Paper End Sensors

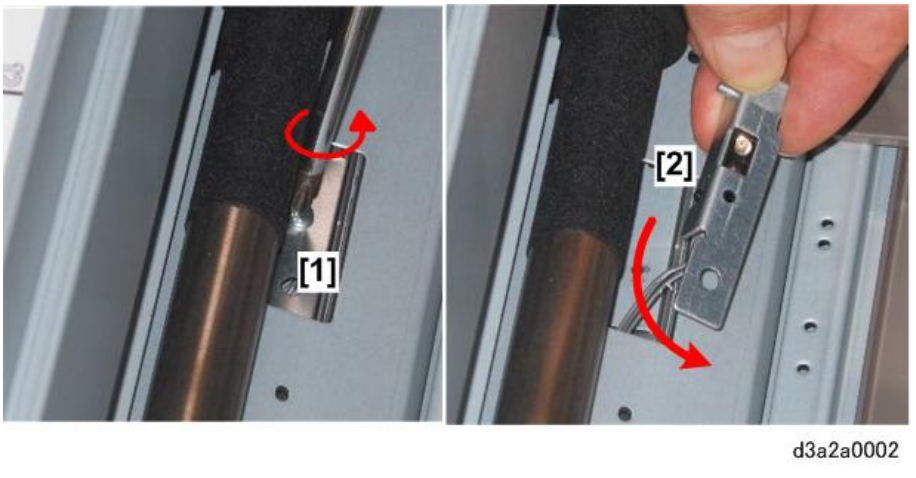
Preparation

- Open the roll feeder drawer.
- There are two roll paper end sensors: the front end sensor [1] for Roll 1, the rear end sensor for Roll 2.

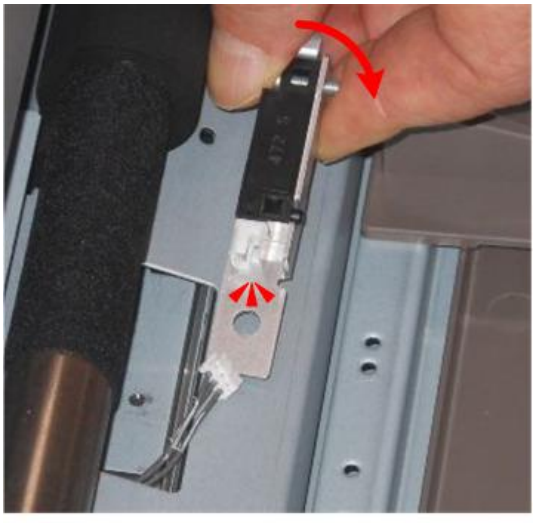


Roll End Sensor 1

1. Open the roll feeder drawer.
2. Detach the sensor bracket [1] (x1).
3. Push the bracket [2] toward the right and then pull it out slightly with the sensor attached.



4. Disconnect the sensor (x1).



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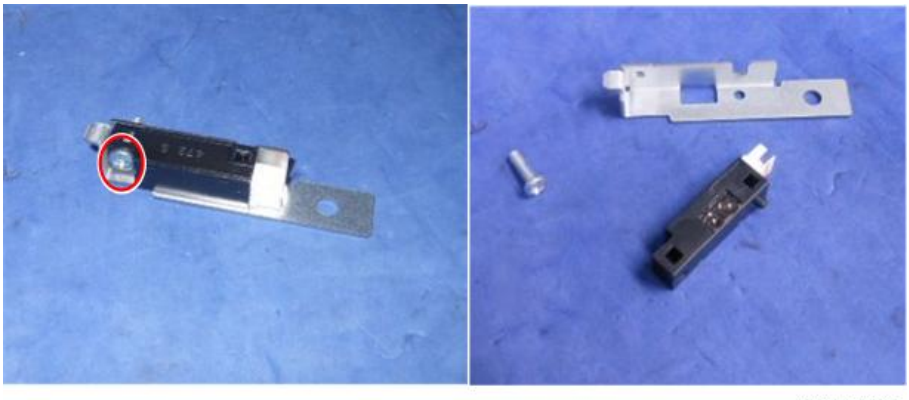
5. Separate the sensor and bracket (x1).



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Roll End Sensor 2

1. Open the roll feeder drawer.
2. This sensor is located on the bottom plate under the roll feeder.

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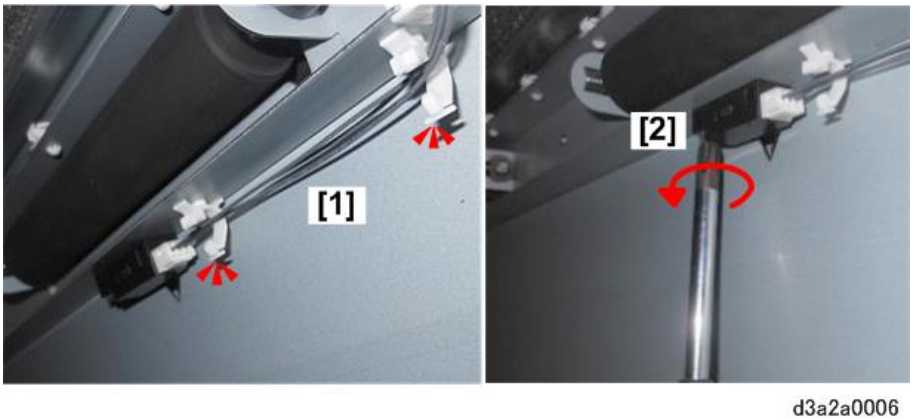
3. While lying flat on your back and looking up at the bottom of the roll feeder, free the sensor harness [1] (x2).
4. Detach the sensor [2] (x1).



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5. Disconnect the sensor (x1).

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