

Decurl Unit DU5040
Machine Code: D3A4
Field Service Manual






November, 2014

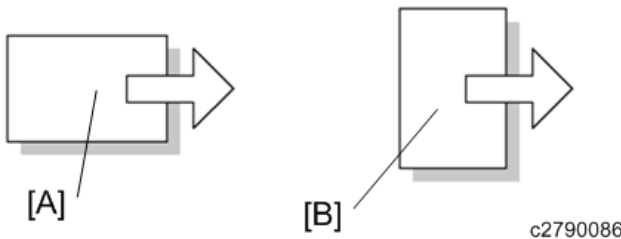
Safety, Conventions, Trademarks

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.

The Aim of Anti-tip Components and Precautions

The anti-tip components are necessary for meeting the requirements of IEC60950-1, the international standard for safety.

The aim of these components is to prevent the products, which are heavy in weight, from toppling as a result of people running into or leaning onto the products, which can lead to serious accidents such as persons becoming trapped under the product. (U.S.: UL60950-1, Europe: EN60950-1)

Therefore, removal of such components must always be with the consent of the customer.

Do not remove them at your own judgment.

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1. Replacement and Adjustment

Decurl Unit and Electrical Components

1

Decurl Unit

Removal Procedure

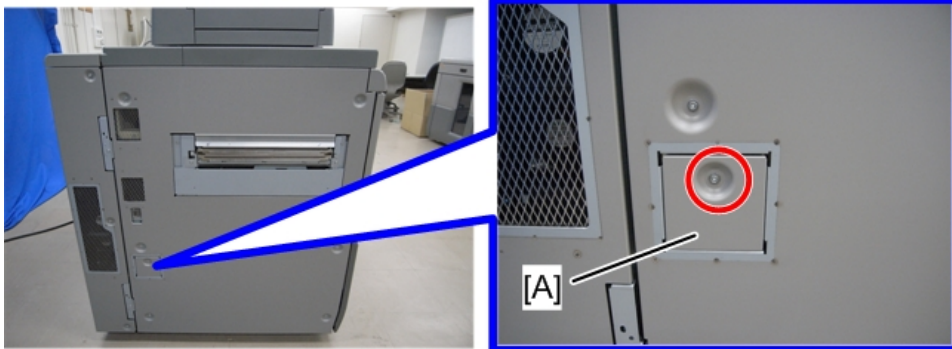
CAUTION

- Most parts in the decurl unit have been precisely adjusted at the factory. Do not remove the parts for which replacement procedures are not mentioned in this manual. Otherwise, adjustment for the decurl unit requires special tools.

Only the following parts can be replaced without decurler unit adjustment.

- DDRB (Decurler Drive Board)
- Decurl Unit Motor
- Decurl Feed Motor
- Decurl Unit HP and Limit Sensor

1. Remove the I/F cover [A] of the main machine (⌚ x1).

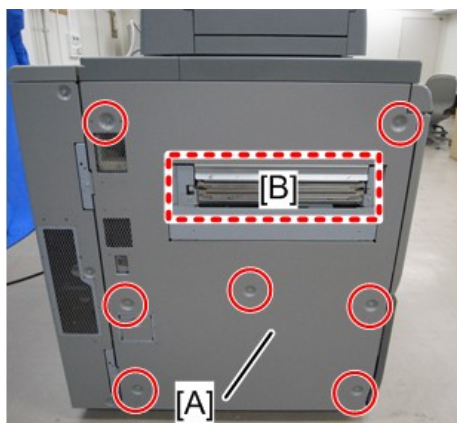


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2. Remove the left cover [A] of the main machine (⌚ x7).

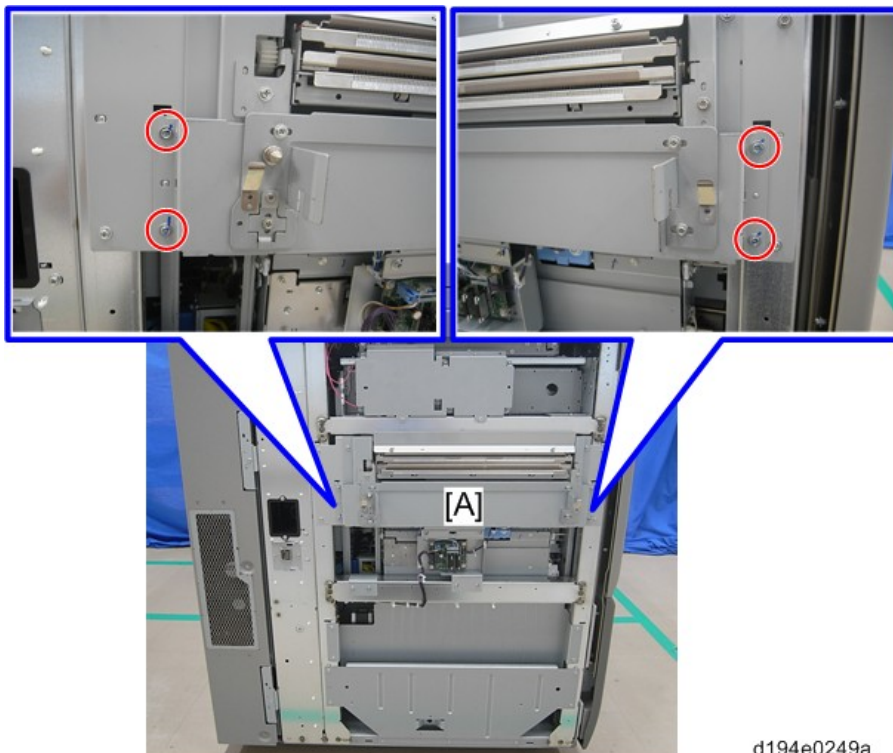
[B]: Decurl Unit

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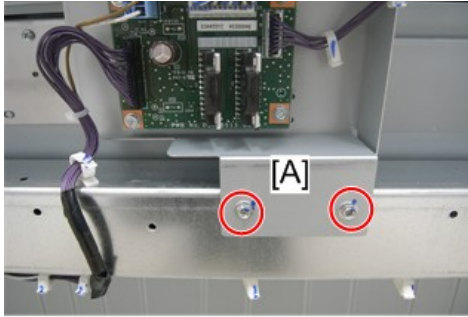
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3. Disconnect the stay [A] of the main machine (⚙️ x4).



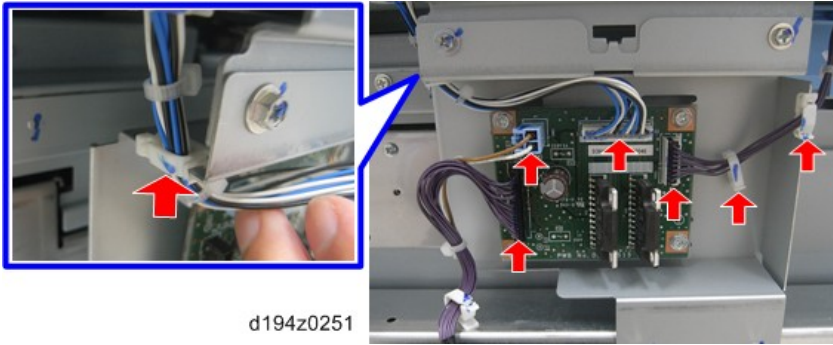
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4. Disconnect the DDRB bracket [A] (⚙️ x2).

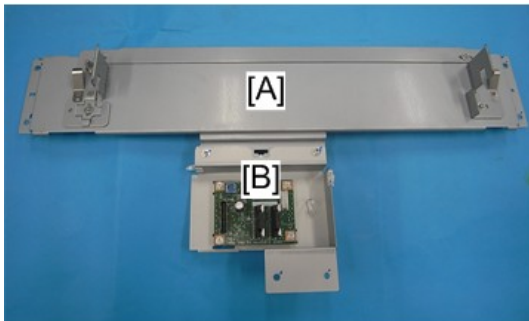


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5. Remove the stay [A] with the DDRB bracket [B] (🔑 x4, 🛠 x3).

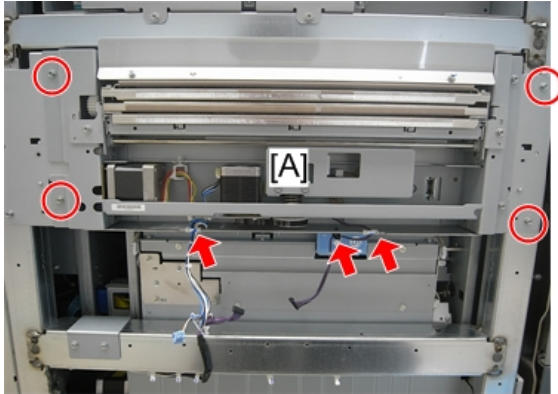


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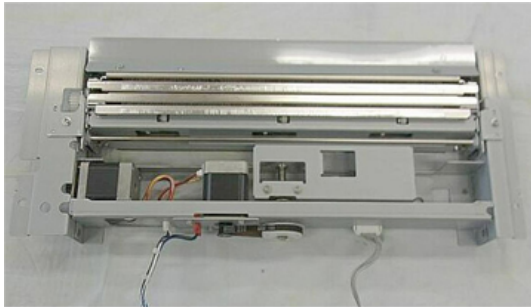


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6. Remove the decurl unit [A] from the left side of the main machine (🔑 x4, 🛠 x3).



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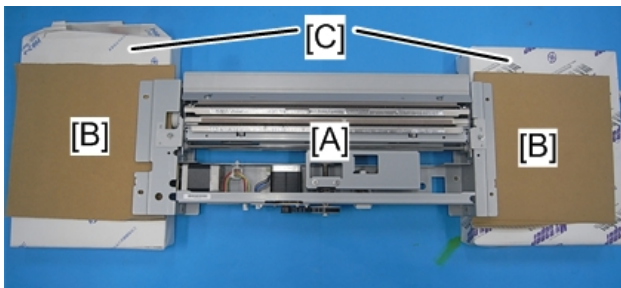
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7. Keep the decurl unit in the "Maintenance Position" as described below.

Maintenance Position

Lay the decurler unit [A] on temporary supports [C] as shown below. The entrance guide of the decurl unit must not touch the floor or any object. Otherwise, the sheets on the entrance gate may be bent or folded.

- Keep this position during maintenance.
- Place an object like a sheet of cardboard [B] on the supports so that the frame projection does not damage the supports.



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Side View

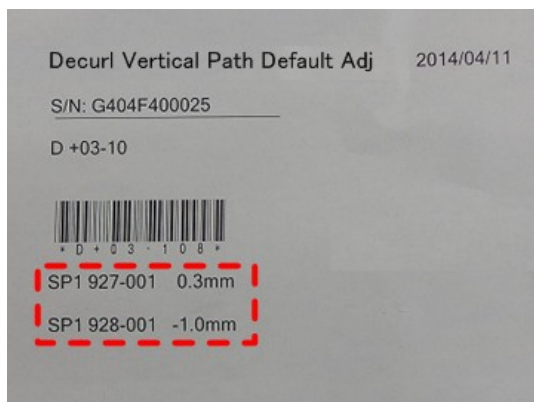


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SP Settings After Installing a New Decurler Unit

1. Turn on the main machine and then enter the SP mode.
2. Refer to the accessory sheet and enter the settings for SP1927-001 and SP1928-001.

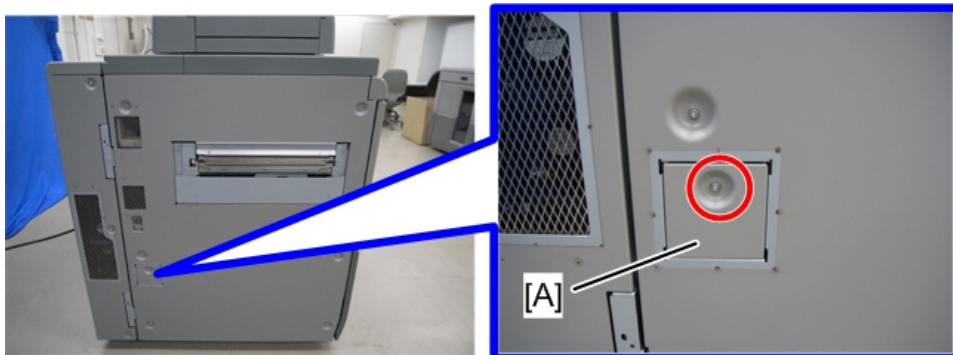


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3. Exit SP mode and turn off the main machine.

DDRB

1. Remove the I/F cover [A] of the main machine (⌀ x1).

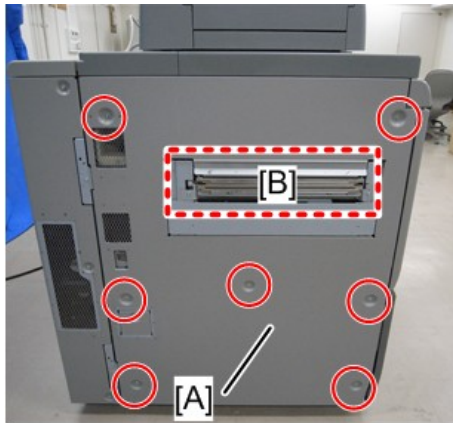


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2. Remove the left cover [A] of the main machine (⌀ x7).

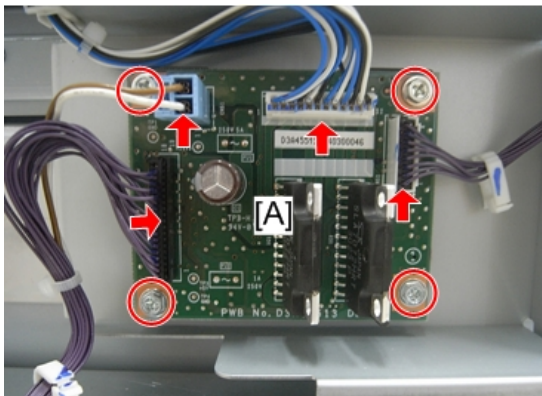
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[B]: Decurl Unit



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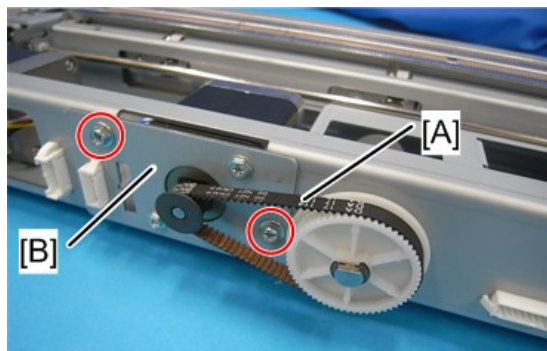
3. DDRB [A] (🔩 x4, 🛡️ x4)



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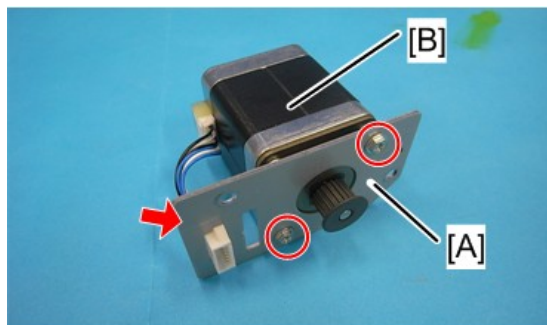
Decurl Unit Motor

1. Decurl unit (page 5 "Decurl Unit")
2. Remove the timing belt [A] and then remove the motor bracket [B] (🔩X1, 🛡️X2).



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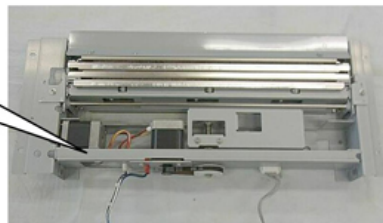
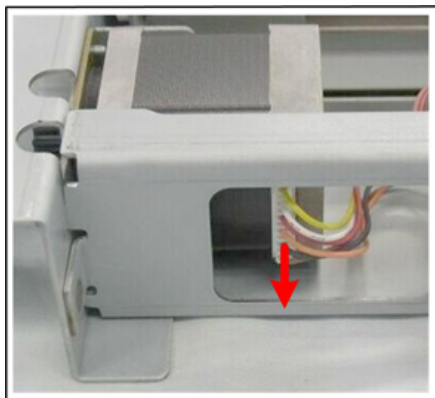
3. Separate the bracket [A] and decurl unit motor [B] (⚙️ x2, 📦 x1).



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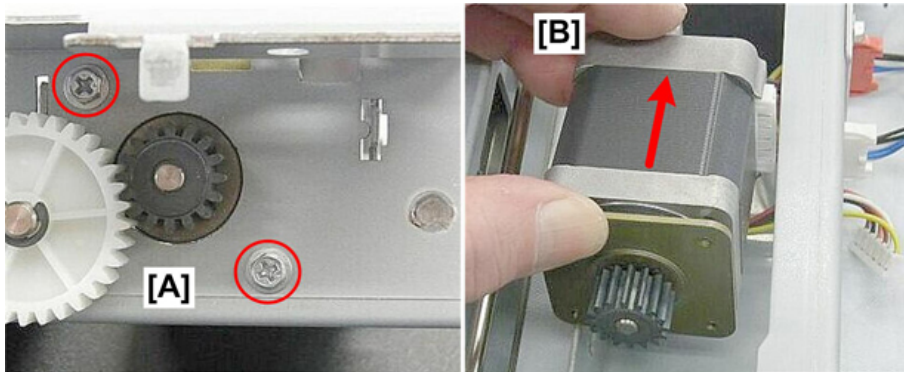
Decurl Feed Motor

1. Decurl unit (page 5 "Decurl Unit")
2. On the rear side, disconnect the motor (📦 x1).



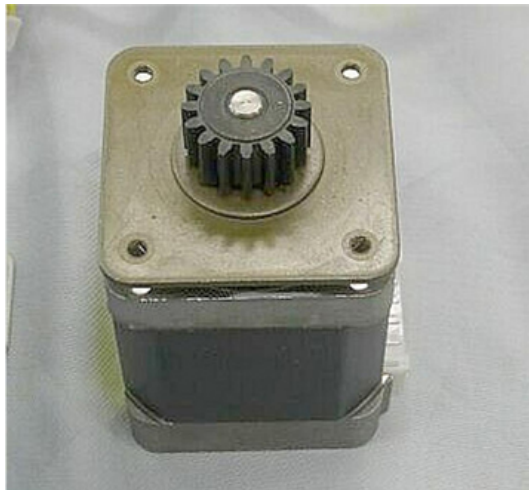
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3. At the rear side of the unit [A], disconnect the motor (⚙️ x2).
4. Pull the motor [B] out from rear to front.



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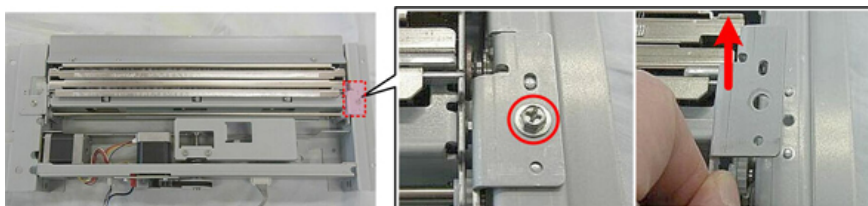
5. Remove the motor.



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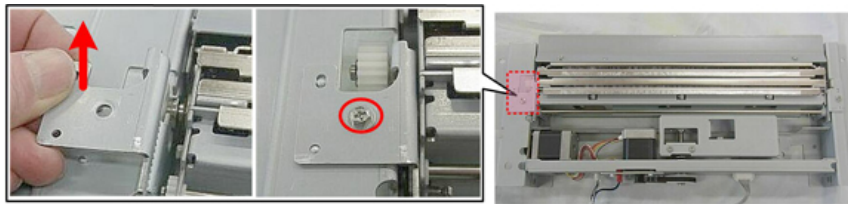
Decurl Unit HP and Limit Sensor

1. Decurl unit (page 5 "Decurl Unit")
2. On the front side, remove the rack of the front pinion gear (⚙️ x1).



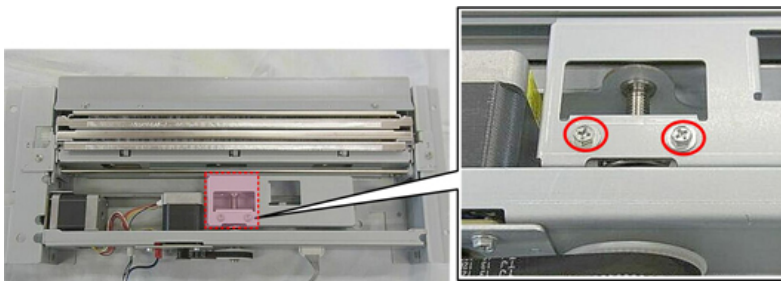
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3. On the rear side, remove the rack of the rear pinion gear (⚙️ x1).



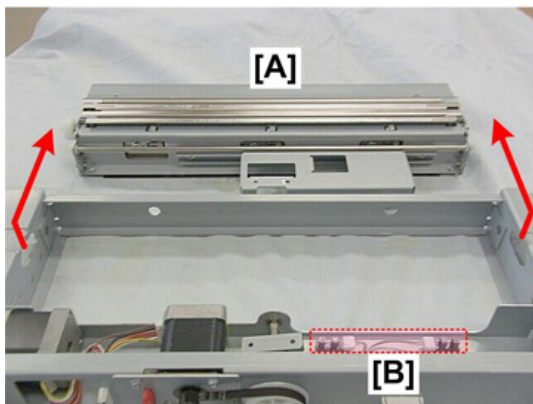
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4. In the center, disconnect the tongue bracket (⚙️ x2).



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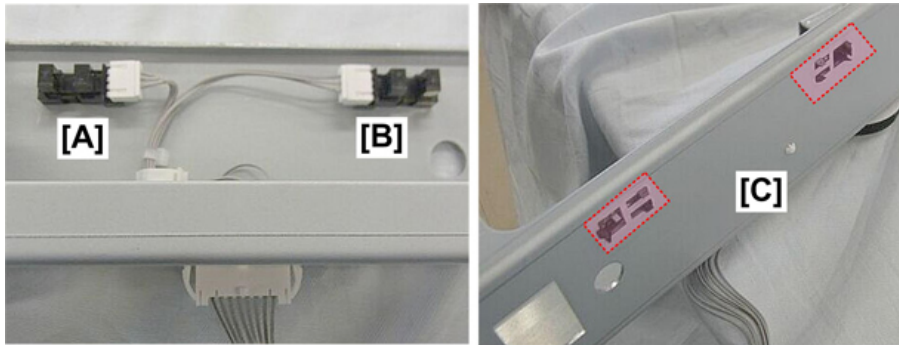
5. Remove the decurl unit assembly [A] so that you can see both sensors [B].



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↓ Note

- [A] is the decurl unit HP sensor and [B] is the decurl unit limit sensor.

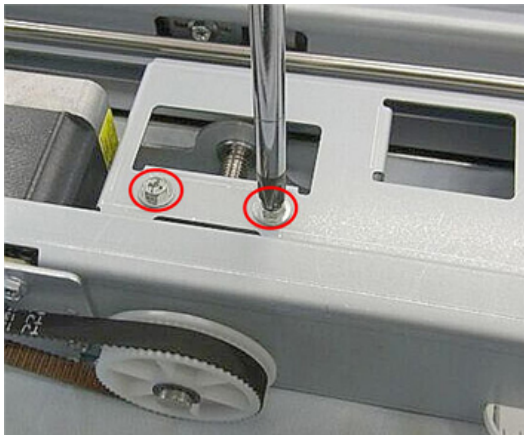


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6. Disconnect a sensor (🔌 x1).
7. On the other side [C] (shown above) of the unit, release the sensor (🔌 x3).

Re-installation

1. Set the decurl unit assembly in the frame.
2. Fasten the tongue bracket before you attach the front and rear racks (🔩 x2).
 - This ensures that the assembly is perfectly aligned so that the front and rear racks will mesh correctly with the front and rear pinion gears below.
 - When you re-attach the front and rear rack, make sure that the racks are flat and meshed with the pinion gears below before you re-fasten the screws.



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