DISASSEMBLY/ASSEMBLY

This section explains how to disassemble and reassemble the machine. When disassembling and reassembling the machine, follow the precautions given below.

- 1. Be sure the power cord has been unplugged from the wall outlet.
- 2. The disassembled parts must be reassembled following the disassembly procedure in reverse unless otherwise specified.
- 3. Care should be taken not to lose small parts. Care should also be taken not to install small parts in wrong places.
- Do not operate the machine before installing all the disassembled parts completely.
- 5. Removal of some screws is prohibited in this section. Never loosen them.

EXTERNAL SECTION

⚠ Caution:

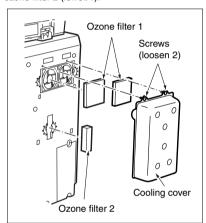
When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Replacing Ozone Filters

Caution: When replacing ozone filters, insert them in the openings in the main body as far as they will go.

a. Procedure

- Loosen the two screws to remove the cooling fan cover.
- (2) Replace two ozone filters 1 (upper/2) and one ozone filter 2 (lower/1).

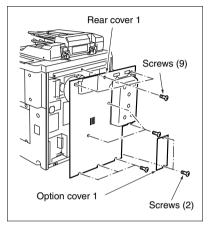


(3) Reinstall the above parts following the removal steps in reverse.

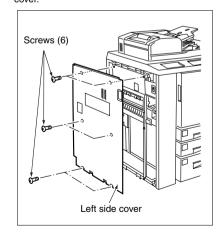
[2] Removing and Reinstalling the External Cover

a. Procedure

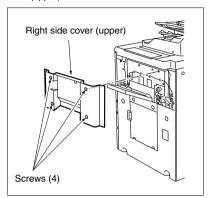
- Remove the two screws to detach the option cover.
- (2) Remove the nine screws to detach the rear cover.



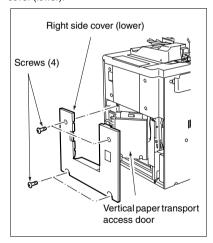
(3) Remove the six screws to detach the left side cover.



(4) Remove the four screws to detach the right side cover (upper).



- (5) Open the vertical paper transport jam access door.
- (6) Remove the four screws to detach the right side cover (lower).

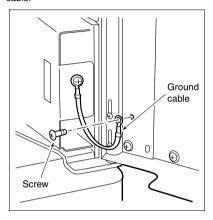


(7) Reinstall the above parts following the removal steps in reverse.

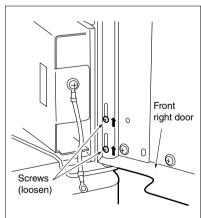
Caution: Covers can be detached separately.

[3] Removing and Reinstalling the Front Right Door

- a. Procedure
- (1) Open the front right door.
- (2) Remove the screw to disconnect the ground cable.



- (3) Loosen the two screws securing the hinge.
- (4) While holding the top of the front right door by hand so that it does not fall down, remove the door with the hinge pin held up.



(5) Reinstall the above parts following the removal steps in reverse.

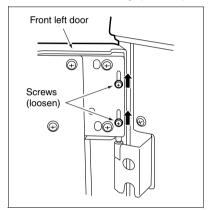
[4] Removing and Reinstalling the Front Left Door

a. Procedure

- (1) Open the front left door.
- (2) Loosen the two screws securing the hinge.

Caution: When loosening the screws, hold the top of the door by hand so that it does not fall down.

(3) Remove the door with the hinge pin held up.

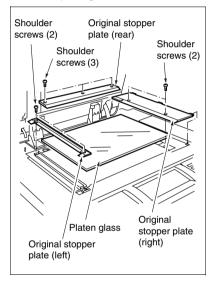


(4) Reinstall the above parts following the removal steps in reverse.

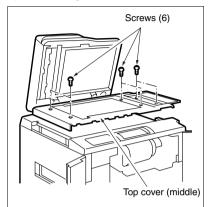
[5] Removing and Reinstalling the Operation Panel

a. Procedure

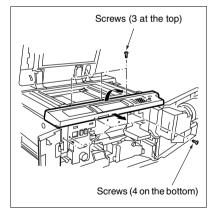
- (1) Open the RADF.
- (2) Remove the two shoulder screws to remove the original stopper plate (right).
- (3) Remove the three shoulder screws to remove the original stopper plate (rear).
- (4) Remove the two shoulder screws to remove the original stopper plate (left).
- (5) Remove the platen glass.



- (6) Remove the six screws to detach the top cover (middle).
- (7) Open the front right door and the front left door.

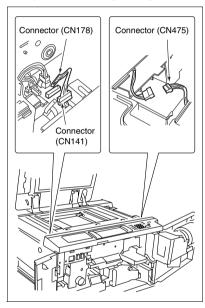


- (8) Draw out the toner supply unit. (See "TONER SUPPLY UNIT.")
- (9) Remove the seven screws (three at the top and four on the bottom).
- (10) Draw out the operation panel forward.



Caution: When removing the operation panel, pay attention to the following points:

- The operation panel and main body are connected with a wiring harness. Moving the operation panel too far away from the main body could break the wiring harness.
- Care should be taken not to damage the display section.
- (11) Disconnect the two relay connectors (CN178, CN475) and remove the operation panel.



(12) Reinstall the above parts following the removal steps in reverse.

DRIVE SECTION

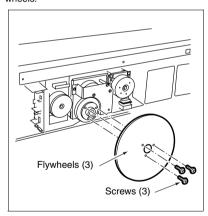
When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the Drum Motor

Caution: Be sure to draw the drum unit out of the main body before removing or reinstalling the drum drive motor. If you fail to draw out the drum unit, the cleaning blade may be damaged because the drum rotates when installing or removing the flywheel or gear.

a. Procedure

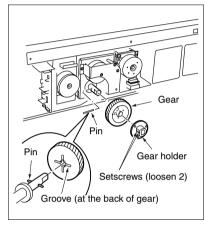
- (1) Draw the drum unit out of the main body. (See "DRUM UNIT.")
- (2) Remove the rear cover. (See "EXTERNAL SEC-TION.")
- (3) Remove the three screws to remove the three flywheels.



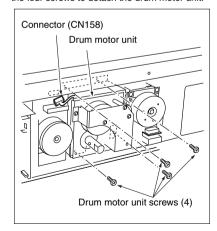
(4) Loose the two setscrews to remove the gear holder, gear, and pin from the shaft.

Caution1: Install the gear with the shaft pin fit into the groove at the back of the gear. As the pin inserted in the shaft moves freely, take care not to drop or lose it.

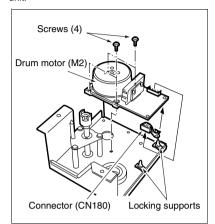
Caution2: Secure the gear holder with the setscrews while pressing the gear holder against the gear.



(5) Disconnect the connector (CN158) and remove the four screws to detach the drum motor unit.



(6) Disconnect the connector (CN180) and remove the four screws and two locking supports to remove the drum motor from the drum motor unit.

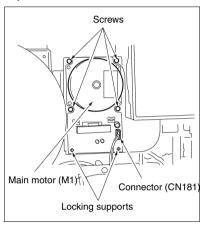


(7) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the gear holder, set it to fit to the gear, then secure it by the set screw.

[2] Removing and Reinstalling the Main Motor

- Remove the rear cover. (See "EXTERNAL SECTION.")
- (2) Disconnect the connector (CN181).
- (3) Remove the four screws to release the motor board locking supports.
- (4) Remove the main motor (M1) from the main body.



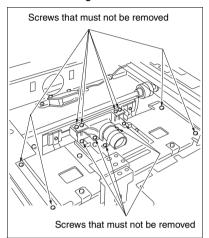
READ SECTION

♠ Caution:

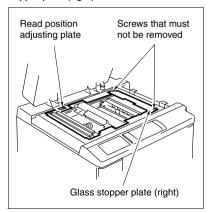
When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Screw that Must not be Removed/ Loosened

a. 13 screws securing the CCD unit



 One screw securing the read position adjusting plate and two screws securing the glass stopper plate (right)

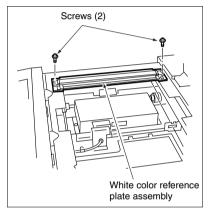


[2] Removing and Reinstalling the CCD Unit

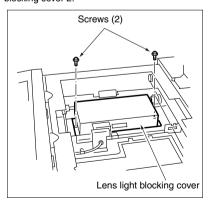
Caution: Be sure to perform image adjustment after installing the CCD unit. (See "ADJUSTMENT.")

a. Procedure

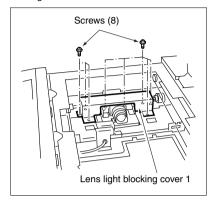
- (1) Remove the original stopper plates (right, rear, and left), platen glass, and top cover (middle). (See "EXTERNAL SECTION.")
- (2) Remove the two screws to detach the white color reference plate assembly.



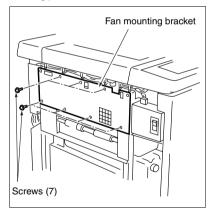
(3) Remove the two screws to detach the lens light blocking cover 2.



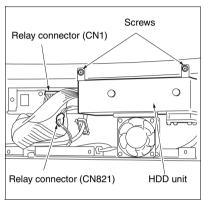
(4) Remove the eight screws to detach the lens light blocking cover 1.



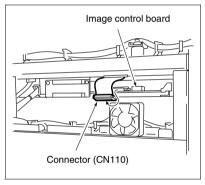
- (5) Remove the left side cover. (See "EXTERNAL SECTION.")
- (6) Remove the seven screws to detach the fan mounting plate.



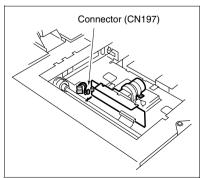
- (7) Remove two relay connectors (CN1, 821).
- (8) Remove two screws and detach the HDD unit.



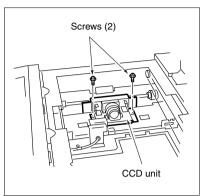
(9) Disconnect the connector (CN110) from the image control board.



(10) Disconnect the connector (CN197) from the CCD unit.



(11) Remove the two screws to detach the CCD unit.



(12) Reinstall the above parts following the removal steps in reverse.

[3] Replacing the Exposure Lamp

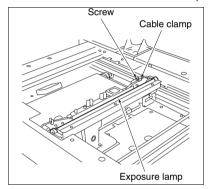
⚠ Caution: Do not touch the exposure lamp with bare hands.

Caution: Be sure to perform image adjustment after installing the exposure lamp.

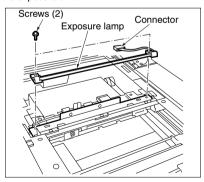
(See "ADJUSTMENT.")

a. Procedure

- Remove the original stopper plates (right, rear, and left), platen glass, and top cover (middle).
 See "EXTERNAL SECTION.")
- (2) Move the exposure unit to the notch in the main body frame on the paper exit side.
- (3) Remove one screw and detach the cable clamp.



(4) Remove the connector and two screws to detach the exposure unit.



(5) Reinstall the above parts following the removal steps in reverse.

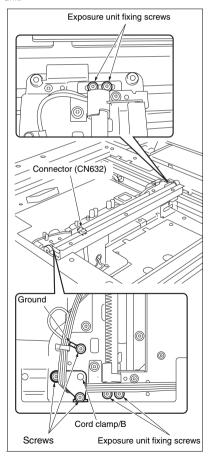
[4] Replacing and Reinstalling the Exposure Unit

Caution1: When installing the exposure unit, use the optical unit position adjusting jig.

Caution2: Be sure to perform image adjustment after installing the exposure lamp. (See "ADJUSTMENT.")

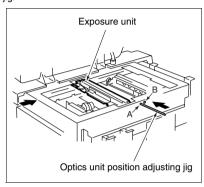
a. Removal procedure

- Remove the original stopper plates (right, rear, and left), platen glass, and top cover (middle). (See "EXTERNAL SECTION.")
- (2) Remove the operation panel. (See "EXTERNAL SECTION.")
- (3) Move the exposure unit to the notch in the main body frame on the paper exit side.
- (4) Remove the two screws to detach the cord clamp(B).
- (5) Remove the screw to remove the ground terminal
- (6) Disconnect the connector (CN632).
- (7) Remove the four screws to detach the exposure unit.



b. Installation procedure

- Insert the optics unit position adjusting jig in the hole at the exposure unit mounting position (exposure unit fixing hole A) from the front.
- (2) Slide the exposure unit to the paper feed side until it touches the optical unit position adjusting iia.



- (3) Secure the four screws to attach the exposure unit to the optics wire mounting bracket.
- (4) Remove the optics unit position adjusting jig.
- (5) After the procedure (4), reinstall the parts removed in "a. Removal procedure" following the removal steps in reverse.

[5] Installing the Optics Wire

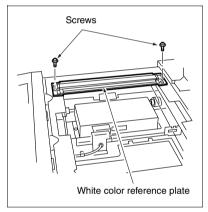
Caution1: When winding the optics wire around the pulley, be sure to run the wire tightly so that it does not ride on the side of the pulley.

Caution2: When re-tensioning or replacing the optics wire, be sure to use the optics position adjusting jig.

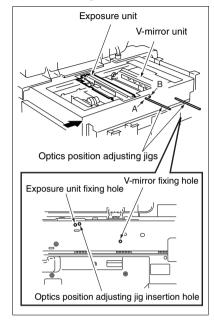
Caution3: Be sure to perform image adjustment after replacing or re-installing the wire. (See "ADJUSTMENT.")

a. Procedure

- (1) Remove the exposure unit.
- (2) Remove the two screws to detach the white color reference plate.



(3) Move the V-mirror unit toward the paper feed side, then insert the optics position adjusting jigs to the V-mirror fixing holes from the front to secure the V-mirror unit. Ensure that the optics position adjusting jigs pass through the V-mirror unit. (4) Insert the optics unit position adjusting jigs in the hole at the exposure unit mounting position (exposure unit fixing hole A) from the front.

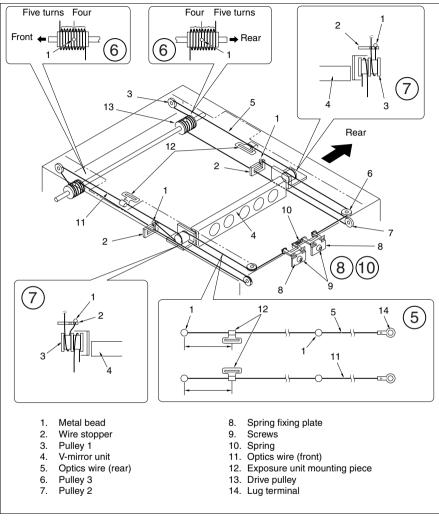


(5) The exposure unit mounting plate is installed on each optics wire. The position of mounting plate differs depending on whether it is installed on the front or rear wire. Use the wire on which the mounting plate is installed nearer to the metal bead at the end, at the rear. (6) Place the metal bead at the midpoint of each optics wire in the mounting hole in the drive pulley. Starting at this point, wind the optics wire five turns to the outside and four times to the inside on the drive pulley.

Caution1: Ensure that there is a metal bead at the end of the outer wire, and a wire terminal at the end of the inner wire.

Caution2: Pull out the outer wire from above the drive pulley in the paper exit direction, and the inner wire from under the drive pulley in the paper feed direction.

(7) After winding the outer wire, secure it to the wire stopper via the outside of pulley 1 and V-mirror pulley.

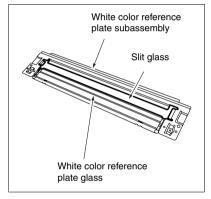


Caution: There are two grooves in the wire stopper. Ensure that the outer groove is at the rear and the inner groove is at the front.

- (8) Pass the inner wire through the notch in the wire stopper, reverse it at pulley 2, pass it along the inside of the V-mirror pulley and pulley 3, then attach the wire terminal to the spring fixing plate.
- At this time, secure the spring fixing plate temporarily with one screw.
- (9) Install the other wire following the same procedure.
- (10) Loosen each screw that was tightened temporarily, install the spring on the spring fixing plate, and tighten each screw.

[6] Cleaning the Slit Glass and White Color Reference Plate Glass

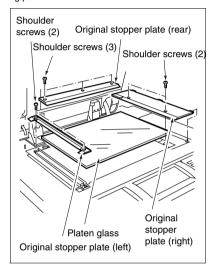
- (1) Open the RADF.
- (2) Remove the original stopper plates (right, rear, and left) and platen glass. (See "EXTERNAL SECTION.")
- (3) Remove the two screws to detach the white color reference plate subassembly.
- (4) Clean the slit glass portions of the removed white color reference plate subassembly and the glass surface of the white color reference plate, using drum cleaner and cleaning pad.



(5) Reinstall the above parts following the removal steps in reverse.

[7] Cleaning the Platen Glass

- (1) Open the RADF.
- (2) Remove the original stopper plates (right, rear, and left) and platen glass. (See "EXTERNAL SECTION.")
- (3) Place the removed platen glass on the towel or rags and clean it using drum cleaner and cleaning pad.



(4) Reinstall the above parts following the removal steps in reverse.

WRITE SECTION

↑ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

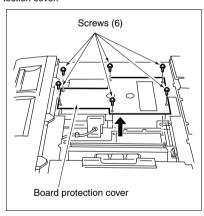
[1] Removing and Reinstalling the Write Unit

⚠ Warning:

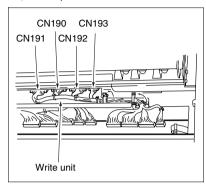
- (1) Do not energize the write unit when it is not in the correct position.
- (2) Never remove the write unit cover and the polygon unit cover. If the laser beam gets into your eyes, you may lose your sight.
- (3) Never remove the write unit for at least two minutes after turning OFF the main switch.

a. Procedure

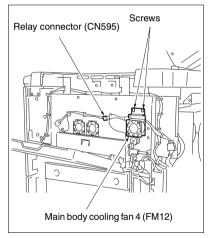
- Remove the original stopper plates (right/rear/ left) and platen glass. (See "EXTERNAL SEC-TION.")
- Remove the six screws to detach the board protection cover.



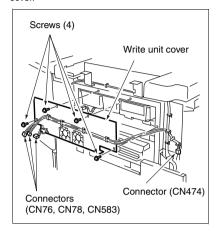
(3) Disconnect the four connectors (CN190, 191, 192, and 193) from the write unit.



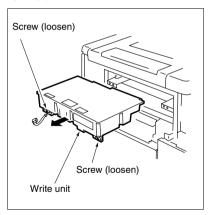
- (4) Remove the right side cover (upper) (by removing the four screws).
- (5) Remove one relay connector (CN595).
- (6) Remove two screws and detach the main body cooling fan 4 (FM12).



- (7) Disconnect the four connectors (CN76, 78, 471 and 583).
- (8) Remove the four screws to detach the write unit cover.



(9) Loosen the two screws to draw out and remove the write unit.

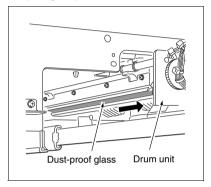


(10) Reinstall the above parts following the removal steps in reverse.

[2] Cleaning the Dust-proof Glass

a. Procedure

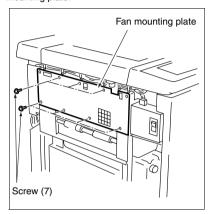
- (1) Draw out the drum unit. (See "Drum Unit.")
- Remove the dust-proof glass assembly by drawing it out forward.
- (3) Using a cleaning pad and blower brush, clean the dust-proof glass portions.



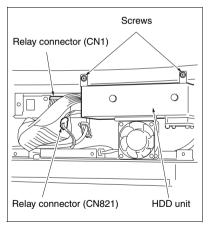
(4) Reinstall the above parts following the removal steps in reverse.

[3] Removing and Reinstalling the Image Control Board

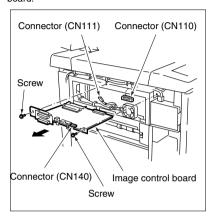
- a. Procedure
- (1) Remove the left side cover. (See "EXTERNAL SECTION.")
- (2) Remove the seven screws to detach the fan mounting plate.



- (3) Remove two relay connectors (CN1, 821).
- (4) Remove two screws and detach the HDD unit.



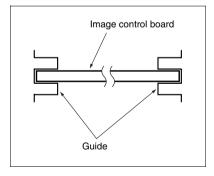
- (5) Remove the CCD flat cable connector (CN110), Ethernet cable connector (CN111), and connector (CN140).
- (6) Remove the two screws and the image control board.



(7) Reinstall the above parts following the removal steps in reverse.

Caution1: Insert the board along the guides in the main body.

Caution2: Be sure the connector of the board is inserted securely.



DRUM UNIT

⚠ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the Drum Unit

Caution1: Be sure to put a drum cover over the removed drum unit and store the drum unit in a dark place.

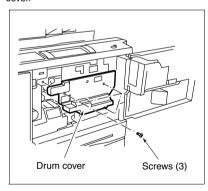
Caution2: When installing or removing the drum unit, do not rotate it in the direction opposite to the specified one.

Rotating the drum unit in the opposite direction during copy operation could damage the cleaning blade.

Caution3: When installing or removing the drum unit, take care not to touch the separation claw.

a. Procedure

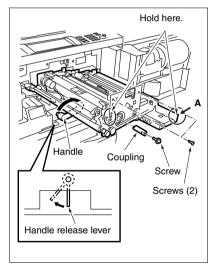
- Open the front right door to draw out the toner supply unit completely. (See "TONER SUPPLY UNIT")
- (2) Loosen three screws and remove the drum cover.



- (3) With the solenoid release lever under the ADU frame held down to the left, turn down the ADU frame drawing lever.
- (4) Remove the two screws securing the drum unit.
- (5) Remove the screw securing the coupling to detach the coupling.
- (6) Supporting the drum unit by hand at the two positions shown below, draw out the drum unit.

Caution1: When drawing out the drum unit, do not grip the pipe in the toner recycle section.

Caution2: When installing and removing the drum unit, perform gripping casing section (following figure A section) hold drum unit at the points indicated in the illustration below.



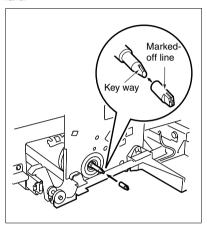
(7) Reinstall the above parts following the removal steps in reverse.

Caution: For how to install the coupling, see "[2] Installing the Coupling."

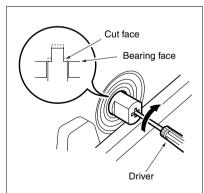
[2] Cleaning and Installing the Coupling

a. Procedure

- Clean the outer surface of the coupling with drum cleaner.
- (2) Aligning the line marked on the coupling with the key way in the drum shaft, push in the coupling by hand.



(3) While pressing the standard screwdriver tip against the coupling, turn the coupling clockwise until the cut face of the coupling is flush with the bearing face.

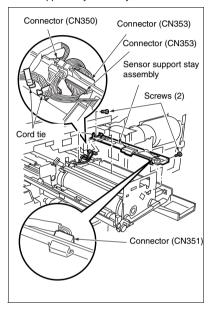


(4) Tighten the screws.

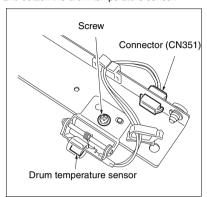
[3] Removing and Reinstalling the Drum Temperature Sensor Board

a. Procedure

- (1) Draw the drum unit out of the main body.
- (2) Disconnect the three connectors (CN350, 351, and 353) and loosen two screws to detach the sensor support stay assembly.



(3) Remove one connector (CN351) and one screw, and detach the drum temperature sensor.



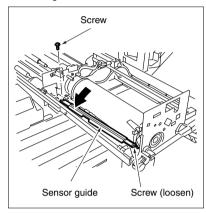
(4) Reinstall the above parts following the removal steps in reverse.

Caution: After reinstalling the drum temperature sensor board, visually check that the drum temperature sensor is in good contact with the drum.

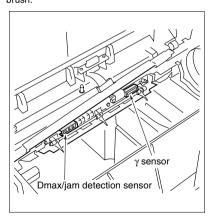
[4] Cleaning the Toner Control Sensor Board

a. Procedure

- (1) Draw the drum unit out of the main body.
- (2) Remove the drum cleaning unit. (See "CLEAN-ING/TONER RECYCLE UNIT.")
- (3) Remove the screw at the back of the sensor guide and loosen the screw at the front to move the sensor guide.



(4) Clean the sensors on the toner control sensor board (the Dmax/jam detection sensor at the front and the γ sensor at the back) using a blower brush.



[5] Removing, Cleaning and Reinstalling the Drum

Caution1: Be careful not to touch the drum or the cleaning blade with bare hands, or damage these parts.

Caution2: When leaving the drum to stand, be sure to put a drum cover over the drum and store it in a dark place.

Caution3: When reinstalling the drum, cleaning blade and toner guide brush, apply setting powder to the entire surface of the drum and also to the cleaning blade regardless of whether the parts are new or old.

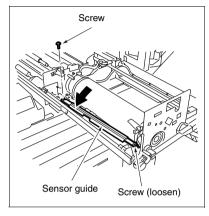
Caution4: After applying setting powder to the drum, carry out the following work before installing the drum unit in the main body.

- (1) With the charging corona unit and developing unit removed, turn the drum once (to prevent setting powder from scattering onto the charging corona unit, and to prevent image defects).
- (2) When installing a new drum, be sure to enter the 25 mode and select "Copy Count by Parts to be Replaced" to reset drum counter. (See "ADJUSTMENT.")

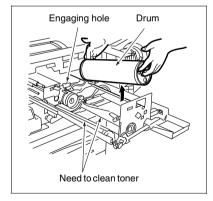
a. Procedure

- (1) Draw the drum unit out of the main body.
- (2) Remove the charging corona unit, developing unit, developing suction assembly drum temperature sensor board, and cleaning unit. (See "CORONA UNIT SECTION," "DEVELOPING UNIT," and "CLEANING/TONER RECYCLE UNIT.")

(3) Remove the screw at the back of the sensor guide and loosen the screw at the front to move the sensor guide (to prevent the drum from being damaged during reinstallation).



- (4) Supporting the drum at both ends with your fingers so that the drum surface is not damaged, slowly remove it upward (front side first).
- (5) Clean the hole (that engages with the bearing on the rear end of the drum shaft) on the rear side of the drum cartridge with drum cleaner.
- (6) Clean toner scattered around the drum installation area using a blower brush.



(7) Reinstall the above parts following the removal steps in reverse.

[6] Removing and Reinstalling the Separation Claws

Caution1: Take care not to damage the drum when removing the separation claws.

Caution2: Pay attention to the orientation and position of the separation claws when reinstalling them.

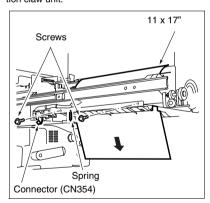
Caution3: Do not touch the cleaning blade and drum with bare hands.

a. Procedure

- (1) Draw the drum unit out of the main body.
- (2) Remove the cleaning/toner recycle unit. (See "CLEANING/TONER RECYCLE UNIT.")
- (3) To protect the drum surface, set 11 x 17" paper as shown below.

Caution: After installing the separation claw, remove the 11 x 17" paper by pulling it down as shown below.

(4) Disconnect the connector (CN354), and remove the spring and two screws to detach the separation claw unit.

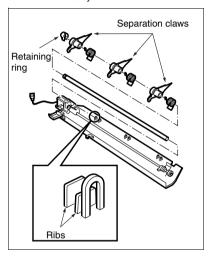


(5) Remove the retaining ring and slide the shaft to remove the three separation claws.

Caution1: Clean the separation claw drive shaft with alcohol when installing it.

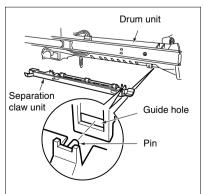
Caution2: Must insert the retaining ring between the ribs.

Caution3: After reinstalling the separation claws, make sure they move smoothly.



(6) Reinstall the above parts following the removal steps in reverse.

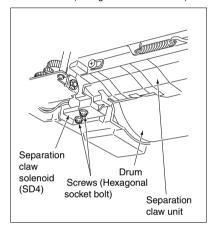
Caution: When installing the separation claw unit, be sure to fit the pin in the guide hole as shown below.



[Reference]

When you removed the separation claw unit (you need not remove it usually but you need to remove it only when replacing the solenoid), install it in the following manner:

- Install the separation claw unit in the drum cartridge.
- (2) Tighten the solenoid screw when one of the separation claws, which is closest to the drum, contacts the drum. (Hexagonal socket bolt M3)



(3) Set the drum cartridge in the main body and check the tips of the separation claws are off the drum surface.

Standard value of clearance: More than 0 mm up to 1 mm inclusive

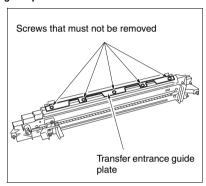
CORONA UNIT SECTION

↑ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Screws that Must not be Removed/ Loosened

a. Five screws securing the transfer entrance guide plate



Caution1: Do not strain the transfer entrance guide plate and guide rollers, for example, pressing down on them strongly, when removing the charging corona unit.

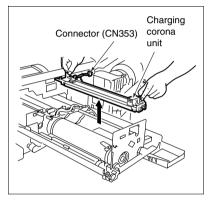
Caution2: Take care not to damage the edge of the transfer entrance guide plate since it is deformed easily.

[2] Removing and Reinstalling the Charging Corona Unit

Caution: When removing the charging corona unit, do not touch the mesh of the charge control plate.

a. Procedure

- (1) Remove the drum unit from the main unit. (See "DRUM UNIT.")
- (2) Disconnect the connector (CN353). Holding the charging corona unit at the positions shown below with both hands, remove it.



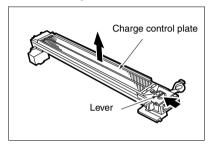
(3) Reinstall the above parts following the removal steps in reverse.

[3] Removing and Reinstalling the Charge Control Plate

a. Procedure

- (1) Remove the charging corona unit.
- (2) Press the lever in the direction of the arrow to release the lock, then remove the charge control plate.

Caution: Do not loosen or tighten the screws securing the lever.



(3) Reinstall the above parts following the removal steps in reverse.

[4] Replacing the Charging Wires

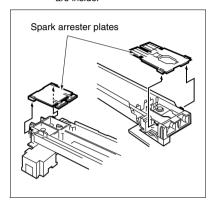
a. Procedure

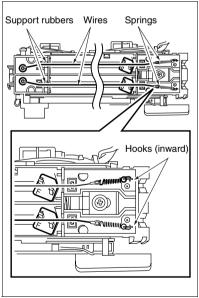
- (1) Remove the charging corona unit.
- (2) Remove the charge control plate.
- (3) Remove the spark arrester plates (front and rear).

(4) Remove the springs of wires (one each) to remove the wires.

Caution1: Do not drop or lose the support rubbers when removing wires.

Caution2: Reinstall wires so that their hooks are inside.





(5) Reinstall the above parts following the removal steps in reverse.

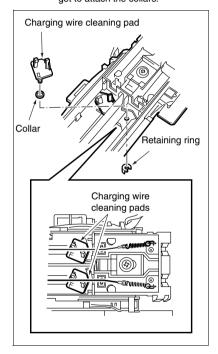
[5] Removing and Reinstalling the Charging Wire Cleaning Pad

a. Procedure

- (1) Remove the two charging wires.
- (2) Remove the two retaining rings to remove the charging wire cleaning pads.

Caution1: Take care not to drop or lose the lower collars when removing the charging wire cleaning pads.

Caution2: When reinstalling the charging wire cleaning pads, pay attention to the orientation shown below. Do not forget to attach the collars.

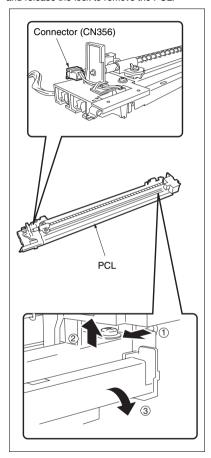


(3) Reinstall the above parts following the removal steps in reverse.

[6] Removing and Reinstalling the PCL

a. Procedure

- (1) Remove the charging corona unit.
- (2) Disconnect the connector (CN356) of the PCL and release the lock to remove the PCL.



(3) Reinstall the above parts following the removal steps in reverse.

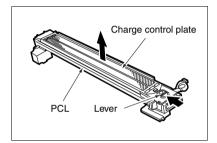
[7] Cleaning the Charging Corona Unit/ PCL

a. Procedure

- (1) Remove the charging corona unit.
- (2) Remove the charge control plate and PCL.
- (3) Place the charge control plate on a flat place and clean its surface with light taps of the cleaning pad moistened with drum cleaner. Next, remove any remaining dirt with a blower brush.

Caution: Take care not to damage the mesh of the charge control plate during cleaning.

(4) Clean the PCL with a cleaning pad moistened with drum cleaner.

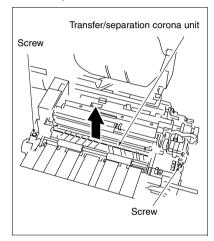


[8] Removing and Reinstalling the Transfer/Separation Corona Unit

a. Procedure

- (1) Open the toner supply unit. (See "TONER SUP-PLY UNIT.")
- (2) Detach the ADU cover. (See "ADU UNIT.")
- (3) Loosen the two screws to remove the transfer/ separation corona unit.

Caution: Hold the block section of the transfer/ separation corona unit.

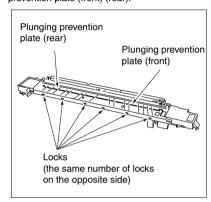


(4) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the transfer/separation corona unit, make sure the cleaning gear coupling is engaged properly.

[9] Removing and Reinstalling the Plunger Prevention Plate

- a. Procedure
- (1) Open the toner supply unit. (See "TONER SUP-PLY UNIT.")
- (2) Draw the ADU frame out of the main body. (See "ADU UNIT.")
- (3) Remove the transfer/separation corona unit.
- (4) Release the six locks and detach the plunger prevention plate (front) (rear).

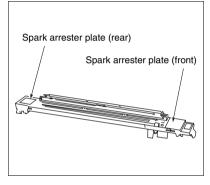


(5) Reinstall the above parts following the removal steps in reverse.

Caution: Make sure that the locking claws are securely fit into the backplate holes.

[10] Replacing the Transfer/Separation Wires, Transfer/Separation Wire Cleaning Block and Support Rubbers

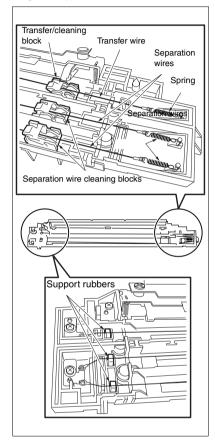
- a. Procedure
- Open the toner supply unit. (See "TONER SUP-PLY UNIT.")
- (2) Draw the ADU frame out of the main body. (See "ADU UNIT.")
- (3) Remove the transfer/separation corona unit.
- (4) Remove the plunger prevention plate.
- (5) Remove the spark arrester plates (front and rear).



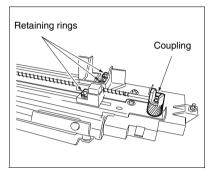
(6) Remove the springs of wires (one each) to remove the wires.

Caution: When installing the springs, bend the edge of each spring in side.

(7) Remove the three wires from cleaning blocks along with support rubbers.



(8) Turn the transfer/separation corona unit upside down, remove the three retaining rings, and remove the transfer wire cleaning block and two separation wire cleaning block from the front side.

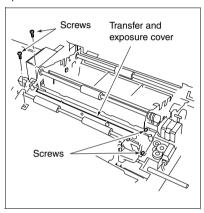


(9) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the transfer/separation wires, check the coupling of the cleaning pad drive gear is engaged correctly.

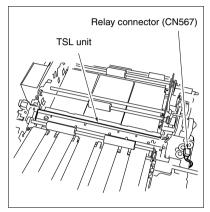
[11] Removing and Reinstalling the TSL Unit

- a. Procedure
- Open the toner supply unit. (See "TONER SUP-PLY UNIT.")
- (2) Draw the ADU frame out of the main body. (See "ADU UNIT.")
- (3) Remove the transfer/separation corona unit.
- (4) Remove the ADU cover. (See "ADU UNIT")
- (5) Remove the four screws to remove the transfer exposure cover.



(6) Disconnect the relay connector (CN567) to remove the TSL unit.

Caution: Each relay connector consists of a male side and a female side. Be sure to remove only the male side (shown below) of the CN567 connector.



(7) Reinstall the above parts following the removal steps in reverse.

DEVELOPING UNIT

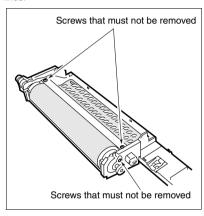
⚠ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Screws that must not be Removed/ Loosened

a. Procedure

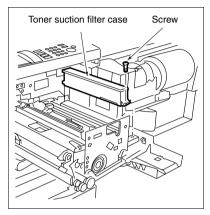
- Two screws securing the toner transfer regulation plate.
- (2) One screw securing the magnet angle adjusting knob.



[2] Removing and Reinstalling the Developing Unit

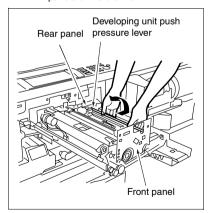
a. Procedure

- Draw out the drum unit from the main body. (See "DRUM UNIT.")
- (2) Remove the screw to remove the toner suction filter case.

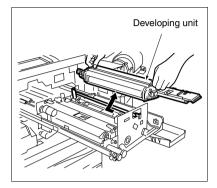


(3) Release the developing unit push pressure lever.

Caution: When releasing the push pressure lever, do not touch the front and rear panels of the drum unit.



(4) Supporting the developing unit at the positions shown below with both hands, remove it from the drum unit.



(5) Reinstall the above parts following the removal steps in reverse.

Caution1: When installing the developing unit, assure that the toner transfer sleeve does not contact with the front panel of the drum unit.

Caution2: Never rotate the developing gear clockwise.

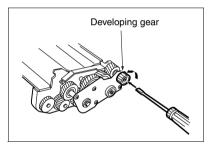
[3] Replacing the Developer

Caution1: When replacing the developer in the developing unit, take care not to allow dirt to get into it.

Caution2: To rotate the developing sleeve, rotate the developing gear counterclockwise using a standard screwdriver.

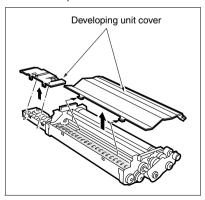
Caution3: Never rotate the developing gear clockwise.

Caution4: When replace the developing, be sure to enter the 25 mode and select "Copy Count by Parts to be Replaced" to reset developer counter.

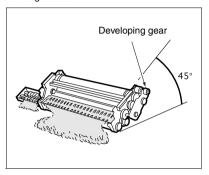


a. Procedure

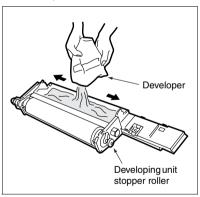
- Draw out the drum unit from the main body. (See "DRUM UNIT.")
- (2) Remove the developing unit from the drum unit.
- (3) Release the hooks of the developing unit cover and remove it upward.



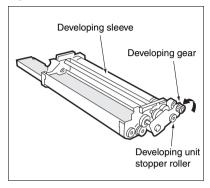
(4) Tilt the developing unit about 45° and rotate the developing gear counterclockwise using a standard screwdriver to discharge all of the developing adhering to the inside of the developing unit and magnet roller.



- (5) Supply fresh developer evenly from the top of the agitator screws.
- (6) Rotate the developing gear until the developer enters the developing unit.
- (7) Perform steps (5) and (6) repeatedly to supply all of the developer.



(8) Rotate the developing gear counterclockwise to check that the developer bristles along the entire length of the toner transfer sleeve.

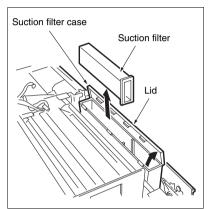


(9) Install the developing unit cover, then install the developing unit in the drum unit.

Caution: After installing the developing unit in the drum unit, make sure the developing unit stopper roller is in contact with the developing unit stopper plate (Define of DSD).

[4] Removing and Reinstalling the Developing Suction Filter

- a. Procedure
- (1) Draw out the drum unit from the main body. (See "DRUM UNIT.")
- (2) Open the lid of the developing suction filter case and remove the suction filter.



(3) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the developing suction filter, assure that the lid of developing suction filter is closed completely.

TONER SUPPLY UNIT

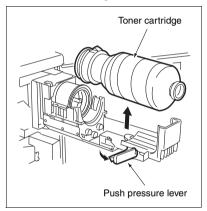
⚠ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Replacing and Cleaning the Toner Cartridge

a. Procedure

- (1) Open the front left and right doors to pull forward the toner supply unit.
- (2) Pull out the toner cartridge locking lever to remove the toner cartridge.



- (3) After removing the toner cartridge, clean the area around the toner cartridge insertion hole with a cleaning pad.
- (4) Reinstall the above parts following the removal steps in reverse.

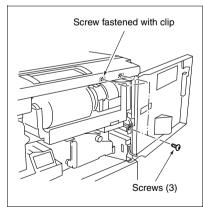
[2] Drawing out the Toner Supply Unit

- ⚠ Warning: The hinge used in the toner supply unit mounting section moves in two steps. Take care not to get your finger caught in the hinge when drawing out the toner supply unit.
- - 2. After removed the screws, make sure that the shutter of the supply hole is open.
 - Before setting the toner supply unit (supply hole joint), be sure to tighten the two screws other than the screw fastened with clip.

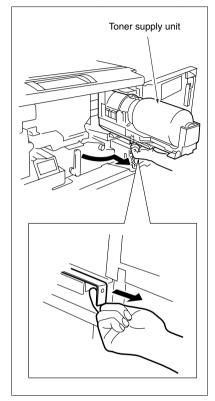
a. Procedure

- (1) Open the front left and right doors.
- (2) Remove the three screws.

Caution: The upper left (rear) screw is not removed because it is fastened with a clip. Loosen it completely.



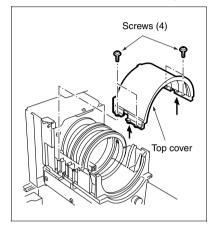
(3) Pull forward the toner supply unit. Gripping the portion shown below, pull out the unit completely.



(4) Reinstall the above parts following the removal steps in reverse.

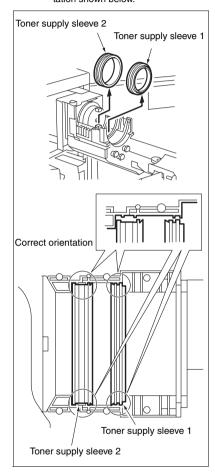
[3] Removing and Reinstalling the Toner Supply Sleeves 1 and 2

- a. Procedure
- (1) Pull out the toner supply unit completely.
- (2) Remove the toner cartridge.
- (3) Remove the four screws to detach the top cover.



(4) Remove toner supply sleeves 1 and 2.

Caution: Toner supply sleeves 1 and 2 must be installed observing the correct orientation shown below.



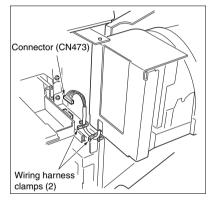
(5) Reinstall the above parts following the removal steps in reverse.

[4] Removing and Reinstalling the Toner Supply Unit

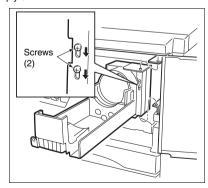
a. Procedure

- (1) Pull out the toner supply unit completely.
- (2) Remove the toner cartridge.
- (3) Disconnect the connector (CN473) and remove the wiring harness from the four wiring harness clamps.

Caution: Route the wiring harness carefully when reinstalling the toner supply unit, because it is a movable component.



(4) Loosen the two screws to remove the toner supply unit.



(5) Reinstall the above parts following the removal steps in reverse.

CLEANING/TONER RECYCLE UNIT

⚠ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the Cleaning/Toner Recycle Unit

Caution1: Do not touch the edges of the cleaning blade with bare hands.

Caution2: Before reinstalling the cleaning unit, clean the cleaning/toner recycle unit with a blower brush and cleaning pad.

Caution3: When reinstalling the cleaning unit, apply setting powder to the entire surface of the drum and cleaning blade regardless of whether the drum and cleaning blade are new or old

Caution4: When you have applied setting powder to the drum, carry out the following work before installing the drum unit on the main body:

- To ensure accurate toner concentration, wipe scattered setting powder off the γ and Dmax sensors on the toner control sensor board with a rag moistened with alcohol.
- (2) With the charging corona unit and developing unit removed, turn the drum once (to prevent setting powder from scattering onto the charging corona unit, and to prevent image defects).

. Procedure

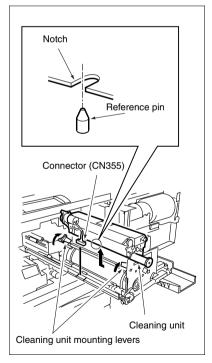
(1) Manually turn the drum once.

Caution: Must turn the drum once to prevent toner on the brush falling.

- (2) Draw out the drum unit from the main body. (See "DRUM UNIT.")
- (3) Release cleaning unit release levers (on both sides).
- (4) Disconnect one connector (CN355) and remove the cleaning unit.

Caution1: Remove the cleaning unit with its rear surface aligned with the ribs of the drum cartridge. (Tilt the cleaning unit approximately 15 degree.)

Caution2: Remove the cleaning unit with drum cartridge reference pin in line with the notch of the cleaning unit.

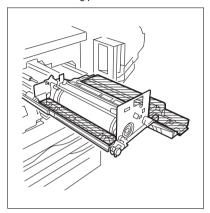


(5) Reinstall the above parts following the removal steps in reverse.

[2] Cleaning the Cleaning/Toner Recycle Unit

a. Procedure

- (1) Remove the cleaning unit.
- (2) Clean the areas shown below with a blower brush and cleaning pad.



[3] Removing and Reinstalling the Cleaning Blade

Caution1: Be sure to replace the following parts at the same time:

- Toner cleaning blades 1 and 2
- Toner guide brush/plunging prevention felt

Caution2: Do not touch the edges of the cleaning blade with bare hands.

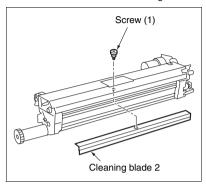
Caution3: When reinstalling the cleaning bade, apply setting powder to the entire surface of the drum and cleaning blade regardless of whether the drum and cleaning blade are new or old.

Caution4: When you have applied setting powder to the drum, carry out the following work before installing the drum unit on the main body:

- (1) To ensure accurate toner concentration, wipe scattered setting powder off the γ and Dmax sensors on the toner control board with a rag moistened with alcohol.
- (2) With the charging corona unit and developing unit removed, turn the drum once (to prevent setting powder from scattering onto the charging corona unit, and to prevent image defects).

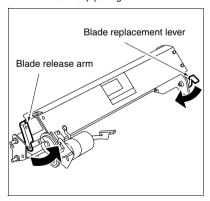
a. Procedure

- (1) Remove the cleaning unit.
- (2) Remove one screw to detach cleaning blade 2.



- (3) Clean the inside of the cleaning unit with a cleaning pad and blower brush.
- (4) Install two new cleaning blades.
- (5) Pull the blade release arm in the direction as indicated by arrow in the following figure.
- (6) Rotate the blade replacement lever all the way in the direction as indicated by arrow in the following figure, and then rotate the Cleaning blade.

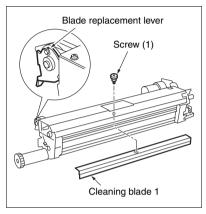
Caution: Do not release the blade release arm. Must keep pulling it.



(7) Pull down the blade release arm.

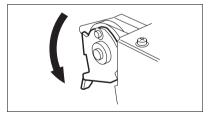
Caution: Must keep the blade replacement lever being rotated in the arrow direction by hand.

- (8) Release the blade replacement lever.
- (9) Remove one screw to detach cleaning blade 1.



- (10) Clean the inside of the cleaning unit with a cleaning pad and blower brush.
- (11) Install new cleaning blade 1.
- (12) Reinstall other parts following the removal steps in reverse.

Caution1: After replacing cleaning blades 1 and 2, make sure that the blade replacement lever has been pulled to stretch the wire.



Caution2: After replacing cleaning blades, make sure to perform Blade Setting Mode Adjustment in the 36 mode to prevent the blades from peeling.

Caution3: When replacing cleaning blades, be sure to enter the 25 mode and select "Copy Count by Parts to be Replaced" to reset cleaning blade.

[4] Removing and Reinstalling the Toner Guide Brush and Plunger Prevention Felt

Caution1: Be sure to replace the following parts at the same time:

- Toner cleaning blades 1 and 2
- Toner guide brush/plunging prevention felt

Caution2: Do not touch the edges of the cleaning blade with bare hands.

Caution3: When reinstalling the cleaning blade, apply setting powder to the cleaning blade and the drum whole circumference regardless of whether the parts are new or old.

Caution4: When you have applied setting powder to the drum, carry out the following work before installing the drum unit on the main body:

- To ensure accurate toner concentration, wipe scattered setting powder off the γ and Dmax sensors on the toner control sensor board with a rag moistened with alcohol.
- (2) With the charging corona unit and developing unit removed, turn the drum once (to prevent setting powder from scattering onto the charging corona unit, and to prevent image defects).

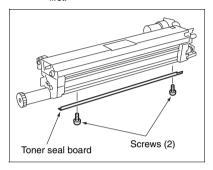
Caution5: When installing the toner guide brush, apply an even coat of setting powder to the toner guide brush with it removed from the cleaner unit.

Caution6: Do not touch the toner guide brush with bare hands. Do not allow the brush to come into direct contact with other objects.

a. Procedure

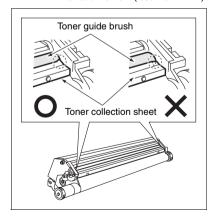
- (1) Remove the cleaning unit.
- (2) Remove the two screws to detach the toner seal plate.

Caution: When installing the toner seal plate, must start securing the front screw first.

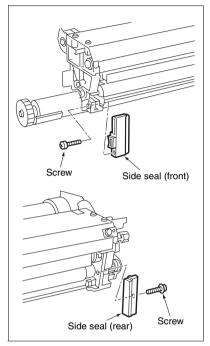


Caution: If the toner collection sheet on both ends of cleaner unit are bent over to the toner guide brush side, toner may be spilled from the toner collection unit. If this happens, correct bent sheet as follows

 Correct bent toner collection sheet as it is in parallel with the toner guide brush or is slightly bent toward the front (less than 1 mm).

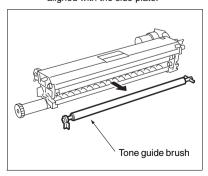


(3) Remove the two screws to detach the two side seals (front/rear).

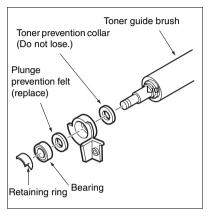


(4) Remove one retaining ring to detach the toner guide brush.

Caution: Pull the toner guide brush leftward, then remove it forward with the gap between the brush and the bearing aligned with the side plate.



(5) Remove one retaining ring and one bearing, then the plunging prevention felt from the toner guide brush shaft.



(6) Reinstall the above parts following the removal steps in reverse.

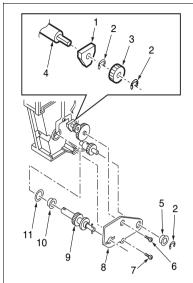
[5] Replacing Guide Plate Assembly

a. Procedure

- (1) Remove the toner guide brush.
- (2) Remove one E-ring, and one cleaning unit mounting lever collar.
- (3) Remove two screws to detach the drive shafts support plate.
- (4) Remove the cleaner drive gear A assembly.
- (5) Remove the cleaner drive bearing and the plunging prevention felt.

Caution: Once the plunging prevention felt is removed, replace it.

- (6) Remove one E-ring from the toner guide shaft, then the cleaner drive gear B.
- (7) Remove one E-ring from the toner guide shaft, then the paper feed bearing.



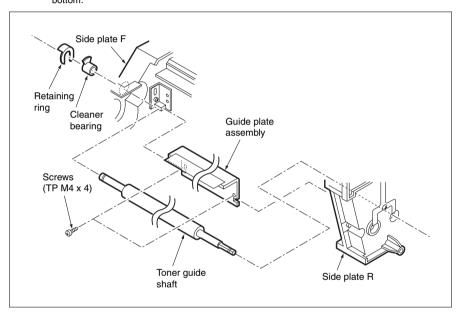
- . Paper feed bearing
- 2. E-ring
- 3. Cleaner drive gear B
- 4. Toner guide shaft
- 5. Cleaning unit mounting lever collar
- 6. Screw (TP M3x6)
- 7. Screw (B tight M3x8)
- 8. Drive shaft support plate
- 9. Cleaner drive gear A assembly
- 10. Cleaner bearing
- 11. Plunging prevention felt

- (8) Remove one retaining ring from the toner guide shaft, then the cleaner bearing.
- (9) Remove the toner guide shaft.

Caution: When removing the toner guide shaft, remove it from the side plate R first, then from the side plate F.

(10) Remove two screws to detach the guide plate assembly.

Caution: When installing the guide plate assembly, secure it as it touches the bottom.



(11) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the drive reinforcing plate, do not confuse the B tight screw with the TP screw. After securing the cleaning lever collar with the E-ring, secure the drive reinforcing plate by tightening the B tight screw first and the TP screw next.

PAPER FEED UNITS OF TRAYS 1 AND 2

↑ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

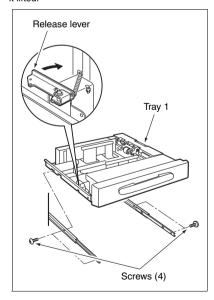
Caution: The shape and mechanism of tray 1 is the same as those of tray 2. The procedure for removing and reinstalling tray 1 is explained below.

[1] Removing and Reinstalling Paper Feed Trays 1 and 2

Marning:When removing the tray, stand in a proper position so that you do not hurt your back and waist. If the tray contains paper, remove all paper before removing the tray.

a. Procedure

- (1) Open the front left and right doors.
- (2) While pressing the tray release lever (at the left) inward, draw out the tray.
- Remove the four screws and remove tray 1 with it lifted.



(4) Reinstall the above parts following the removal steps in reverse.

[2] Removing and Reinstalling the Front Covers of Trays 1 and 2

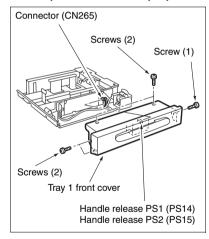
a. Procedure

- (1) Draw out paper feed tray 1.
- Remove the five screws to remove the front cover of tray.

Caution: The front cover and main body of the tray are connected with a wiring harness of the handle release PS1 (PS14), handle release PS2 (PS15). Remove the front cover from the main body carefully so as not to break the wiring harness.

 Disconnect the handle detection PS connector (CN265).

Caution: When reinstall the front cover, connect the handle detection PS connector without fail. If you forget to connect it, you cannot draw out any tray.

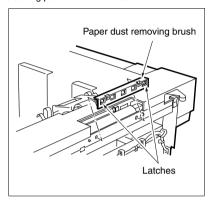


(4) Reinstall the above parts following the removal steps in reverse.

[3] Cleaning the Paper Dust Removing Brush

a. Procedure

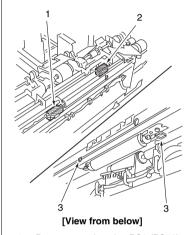
- (1) Draw out paper feed tray 1.
- (2) Release the two latches to detach the paper dust removing brush.
- (3) Clean the paper dust removing brush with a cleaning pad and blower brush.



[4] Cleaning the Paper Pre-registration PS/Paper Feed PS

a. Procedure

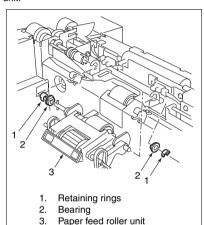
- (1) Draw out paper feed tray 1.
- (2) Clean the paper pre-registration PS1 (PS48) / the paper pre-registration PS2 (PS50) and the paper feed PS1 (PS47) / the paper feed PS2 (PS49) with a blower brush.



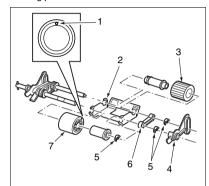
- 1. Paper pre-registration PS1 (PS48) Paper pre-registration PS2 (PS50)
- Paper feed PS1 (PS47) Paper feed PS2 (PS49)
- 3. Clean these sensor.

[5] Removing and Reinstalling the Paper Feed Roller and the Feed Roller

- a. Procedure
- (1) Draw out paper feed tray 1.
- (2) Remove the two retaining rings and slide the two bearings outward to detach the paper feed roller unit.



- (3) Remove the following parts from the paper pickup roller unit to remove individual rollers:
 - · Retaining rings (three)
 - · Bearing (one)
 - · Paper feed reference actuator
 - · Shafts (two)
 - Fixing plate



- 1. Painting mark
- 2. Fixing plate
- 3. Feed roller
- 4. Paper pick-up reference actuator
- 5. Retaining rings
- 6. Bearing
- 7. Paper feed roller
- (4) Reinstall the above parts following the removal steps in reverse.

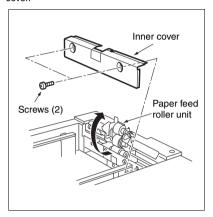
caution1: When reinstalling rollers, pay attention to their orientation.

Caution2: Check whether grease or the like remains on each roller. If it does, wipe it.

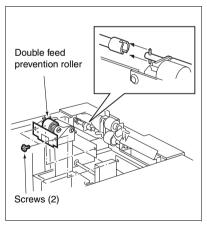
[6] Removing and Reinstalling the Double Feed Prevention Roller

a. Procedure

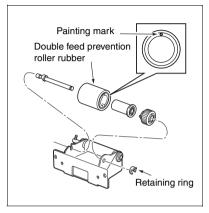
- (1) Draw out paper feed tray 1.
- (2) Raise the paper feed roller unit straight up.
- (3) Remove the two screws to detach the inner cover.



(4) Remove the two screws to detach the double feed prevention roller.



- (5) Remove the retaining ring to detach the double feed prevention shaft with roller.
- (6) Slide the double feed prevention roller out of the shaft.



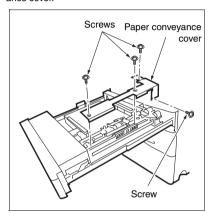
(7) Reinstall the above parts following the removal steps in reverse.

Caution1: When reinstalling the double feed prevention roller, pay attention to their orientation.

Caution2: Check whether grease or like remains on the double feed prevention roller. If it does, wipe it.

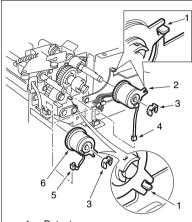
[7] Replacing the Pre-registration and the Feed Clutches (MCs)

- a. Procedure
- (1) Draw out paper tray 1.
- (2) Remove four screws to detach the paper conveyance cover.



(3) Disconnect the two connectors (CN261, CN260).

(4) Remove the retaining ring to detach the pre-registration MC1 (MC4) / the pre-registration MC2 (MC6) and the feed MC1 (MC3) / the feed MC2 (MC5).



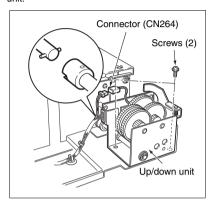
- 1. Detent
- 2. Feed MC1 (MC3) Feed MC2 (MC5)
- 3. Retaining ring
- 4. Connector (CN260)
- 5. Connector (CN261)
- Pre-registration MC1 (MC4) Pre-registration MC2 (MC6)
- (5) Reinstall the above parts following the removal steps in reverse.

Caution: When reinstalling each MC, fit the detent in the slit in the MC.

[8] Removing and Reinstalling the Up/ Down Unit

a. Procedure

- (1) Draw out paper feed tray 1.
- (2) Remove the front cover of the tray.
- (3) Disconnect the connector (CN264).
- (4) Remove the two screws to detach the up/down unit.



(5) Reinstall the above parts following the removal steps in reverse.

[9] Replacing the Up/Down Plate Wires

Caution1: This section explains how to replace the rear wires. To replace the front wires, remove the front cover of tray and paper up/down unit. The replacement procedure is the same as that for the rear wires

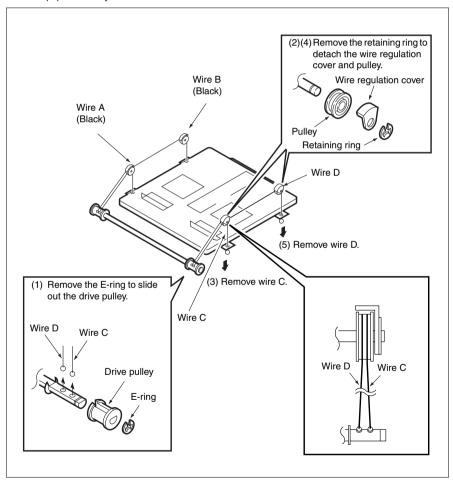
Caution2: When replacement or reinstallation of the wires is complete, check whether the up/down plate moves up and down smoothly by rotating the up/down plate drive pulley by hand.

Caution3: Be sure to install wires so that they do not cross nor ride over each other.

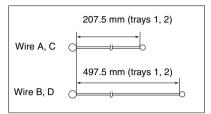
Caution4: After installing the wires, adjust inclination of the up/down plate.

<Removing Wires>

- (1) Remove the up/down unit.
- (2) Draw out paper feed tray 1/2.

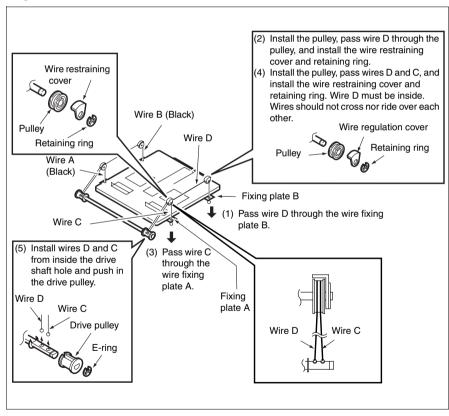


<Wire Lengths>



Wire A, C: 207.5±1 mm Wire B, D: 497.5±1 mm

<Installing Wires>



TRAY 3 PAPER FEED UNIT

♠ Caution:

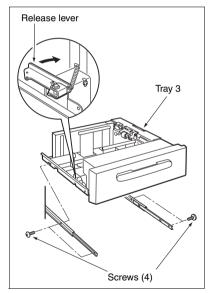
When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the Paper Feed Trav 3

in a proper position so that you do not hurt your back and waist. If the tray contains paper, remove all paper before removing the tray.

Procedure

- (1) Open the front left and right doors.
- (2) While pressing the tray release lever (at the left) inward, draw out the tray.
- (3) Remove the four screws and remove the tray with it lifted.



(4) Reinstall the above parts following the removal steps in reverse.

Removing and Reinstalling the Front **Cover of Paper Tray 3**

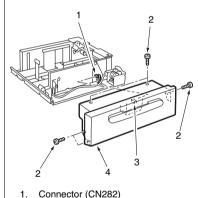
Procedure

- (1) Draw out paper feed trav 3.
- (2) Remove the five screws to remove the front cover of tray.

Caution: The front cover and main body of the tray are connected with a wiring harness of the handle release PS3 (PS16). Remove the tray front cover from the main body carefully so as not to break the wiring harness.

(3) Disconnect the handle detection PS connector (CN282).

Caution: When reinstalling the front cover, connect the handle detection PS connector without fail. If you forget to connect it, you cannot draw out any tray.

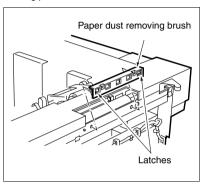


- Screws
- Handle release PS3 (PS16) 3.
- Tray front cover
- (4) Reinstall the above parts following the removal steps in reverse.

[3] Cleaning the Paper Dust Removing Brush

a. Procedure

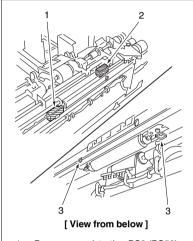
- (1) Draw out paper feed tray 3.
- (2) Release the two latches to detach the paper dust removing brush.
- (3) Clean the paper dust removing brush with the cleaning pad and blower brush.



[4] Cleaning the Paper Pre-registration PS/the Paper Feed PS

a. Procedure

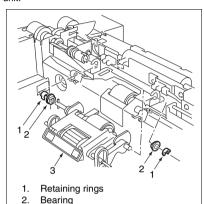
- (1) Draw out paper feed tray 3.
- (2) Clean the paper pre-registration PS3 (PS52) / the paper feed PS3 (PS51) with a blower brush.



- 1. Paper pre-registration PS3 (PS52)
- 2. Paper feed PS3 (PS51)
- Clean these sensor.

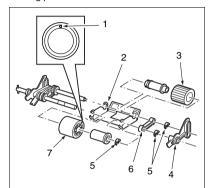
[5] Removing and Reinstalling the Paper Feed Roller and the Feed Roller

- a. Procedure
- (1) Draw out trav 3.
- (2) Remove the two retaining rings and slide the two bearings outward to detach the paper feed roller unit.



paper feed roller unit

- (3) Remove the following parts from the paper feed roller unit to remove individual rollers:
 - Retaining rings (3)
 - Bearing (1)
 - · Paper feed reference actuator
 - Shafts (2)
 - Fixing plate



- 1. Painting mark
- 2. Fixing plate
- 3. Feed roller
- 4. Paper pick-up reference actuator
- 5. Retaining rings
- 6. Bearing
- 7. Paper feed roller
- (4) Reinstall the above parts following the removal steps in reverse.

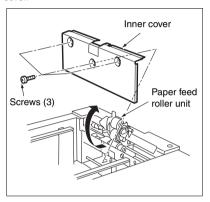
Caution1: When reinstalling rollers, pay attention to their orientation.

Caution2: Check whether grease or like remains on each roller. If it does, wipe it.

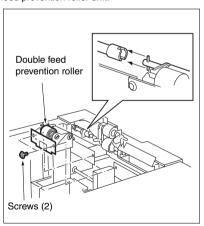
[6] Removing and Reinstalling the Double Feed Prevention Roller

a. Procedure

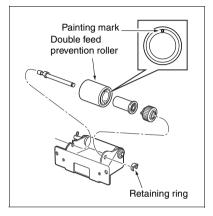
- (1) Draw out paper feed tray 3.
- (2) Raise the paper feed roller unit straight up.
- (3) Remove the three screws to detach the inner cover.



(4) Remove the two screws to detach the double feed prevention roller unit.



- (5) Remove the retaining ring to detach the double feed prevention roller shaft with roller.
- (6) Slide the double feed prevention roller out of the shaft.



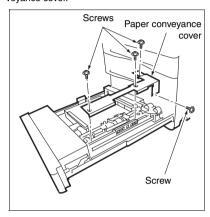
(7) Reinstall the above parts following the removal steps in reverse.

Caution1: When reinstalling the roller, pay attention to its orientation.

Caution2: Check whether grease or the like remains on double feed prevention roller. If it does wipe it.

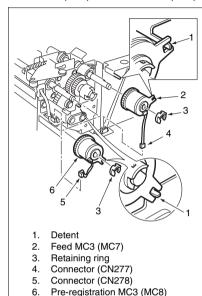
[7] Replacing the Pre-registration MC3 (MC8) and the Feed MC3 (MC7)

- a. Procedure
- (1) Draw out paper tray 3.
- (2) Remove the four screws to detach the paper conveyance cover.



(3) Disconnect the two connectors (CN278, CN277).

(4) Remove the retaining ring to detach the pre-registration MC3 (MC8) and the feed MC3 (MC7).



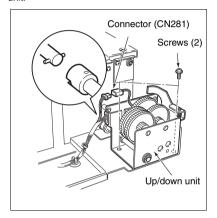
(5) Reinstall the above parts following the removal steps in reverse.

Caution: When reinstalling each MC, fit the detent in the slit in the MC.

[8] Removing and Reinstalling the Up/ Down Unit

a. Procedure

- (1) Draw out paper feed tray 3.
- (2) Remove the front cover of the tray.
- (3) Disconnect the connector (CN281).
- (4) Remove the two screws to detach the up/down unit.



(5) Reinstall the above parts following the removal steps in reverse.

[9] Replacing the Up/Down Plate Wires

Caution1: This section explains how to replace the rear wires. To replace the front wires, remove the front cover of tray and paper up/down unit. The replacement procedure is the same as that for the rear wires

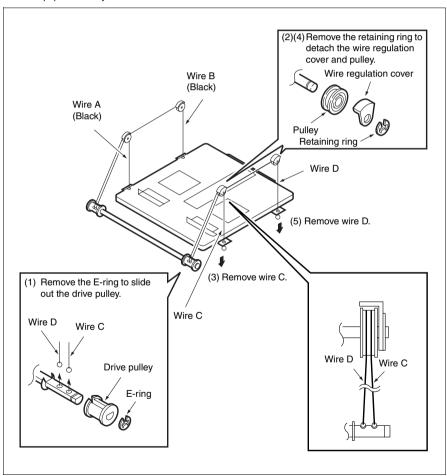
Caution2: When replacement or reinstallation of the wires is complete, check whether the up/down plate moves up and down smoothly by rotating the up/down plate drive pulley by hand.

Caution3: Be sure to install wires so that they do not cross nor ride over each other.

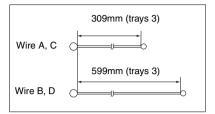
Caution4: After installing the wires, adjust inclination of the up/down plate.

<Removing Wires>

- (1) Remove the up/down unit.
- (2) Draw out paper feed tray 3.

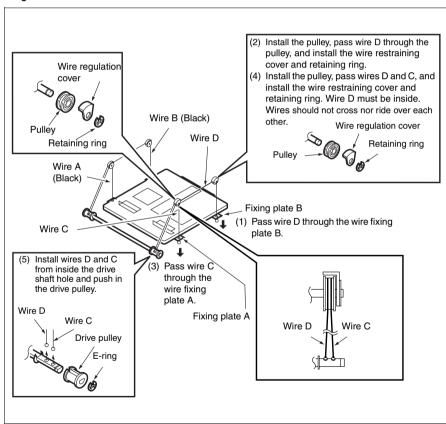


<Wire Lengths>



Wire A, C: 309±1 mm Wire B, D: 599±1 mm

<Installing Wires>



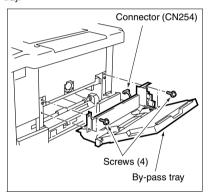
BY-PASS TRAY

⚠ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the By-pass Tray

- a. Procedure
- (1) Remove the right side cover (upper). (See "EXTERNAL SECTION.")
- (2) Detach the main body cooling fan 4 (FN12). (See "WRITE SECTION.")
- (3) Disconnect the connector (CN254).
- (4) Remove the four screws to remove the by-pass tray.

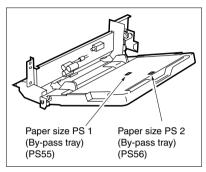


(5) Reinstall the above parts following the removal steps in reverse.

[2] Cleaning the Paper Size Detection Sensors

a. Procedure

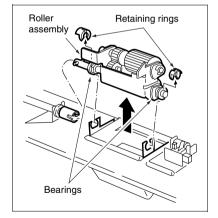
- (1) Open the by-pass tray.
- (2) Clean the two paper size sensors (PS55, PS56) with a blower brush.



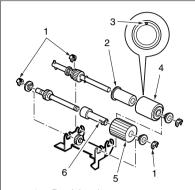
[3] Replacing the Paper Feed Roller/the Feed Roller Rubbers

a. Procedure

- (1) Remove the by-pass tray.
- (2) Remove the two retaining rings and slide the two bearings outward to remove the roller assembly.



(3) Remove the three retaining rings from the roller subassembly to remove rollers.



- 1. Retaining rings
- 2. Paper feed roller
- Painting mark
- 4. Paper feed roller rubber
- Feed roller rubber
 - . Feed roller
- (4) Reinstall the above parts following the removal steps in reverse.

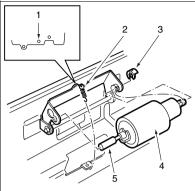
Caution: When reinstalling the rollers, pay attention to their orientation and position.

[4] Replacing the Double Feed Prevention Roller Rubber

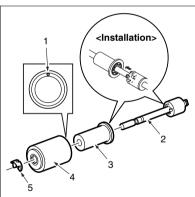
a. Procedure

- Remove the by-pass tray and place the tray upside down.
- (2) Remove the spring and retaining ring to remove the double feed prevention roller together with the shaft.

Caution: There are three spring mounting holes. Engage the spring with the hole at the center.



- 1. Spring mounting hole
- 2. Spring
- Retaining ring
- 4. Double feed prevention roller
 - 5. shaft
- (3) Remove the retaining ring to pull the double feed prevention roller from the shaft.



- 1. Painting mark
- 2. Shaft
- 3. Double feed prevention roller
- 4. Double feed prevention roller rubber
- 5. Retaining ring
- (4) Reinstall the above parts following the removal steps in reverse.

Caution: When reinstalling the roller, pay attention to its orientation.

VERTICAL CONVEYANCE SECTION

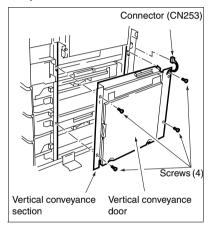
↑ Caution:

When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Removing and Reinstalling the **Vertical Convevance Section**

a. Procedure

- (1) Remove the right side cover (lower). (See "EXTERNAL SECTION.")
- (2) Disconnect the connector (CN253).
- (3) Remove the four screws to remove the vertical conveyance section.



(4) Reinstall the above parts following the removal steps in reverse.

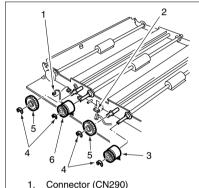
Caution: When installing the vertical conveyance section, secure the section by four screws with its door closed.

[2] Removing and Reinstalling the Vertical Conveyance MC (MC9, MC10)

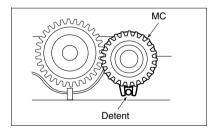
Procedure

- (1) Remove the vertical conveyance section.
- (2) Remove two retaining rings to detach two gears.
- (3) Disconnect the two connectors (CN290, CN291) to remove the wiring harness from the wring harness auide.
- (4) Remove the two retaining rings to detach clutches.

Caution: When reinstalling the vertical conveyance MCs clutches, be sure to fit the detent in the slit in the clutch.



- 2. Connector (CN291)
- Vertical Conveyance MC2 (MC10) 3.
- 4. Retaining rings
- 5.
 - Vertical Conveyance MC1 (MC9)

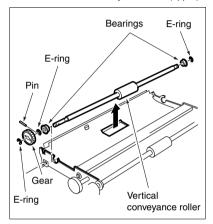


(1) Reinstall the above parts following the removal steps in reverse.

[3] Replacing the Vertical Conveyance Roller (Upper)

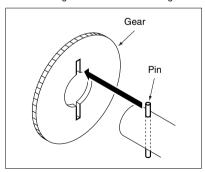
a. Procedure

- (1) Remove the vertical conveyance section.
- (2) Remove the E-ring to remove the gear and pin.
- (3) Remove the two E-rings to move the bearing outward.
- (4) Remove the vertical conveyance roller (upper).



(5) Reinstall the above parts following the removal steps in reverse.

Caution: Install the gear with the shaft pin fit into the groove at the back of the gear.

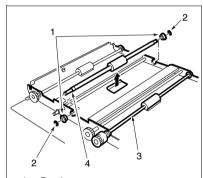


[4] Removing and Reinstalling the Vertical Conveyance Rollers (Middle/Lower)

a. Procedure

- (1) Remove the vertical conveyance section.
- (2) Remove vertical MCs 9 and 10.
- (3) Remove the two E-rings to move the bearing.
- (4) Remove the vertical conveyance rollers (middle/ lower) together with the shaft.

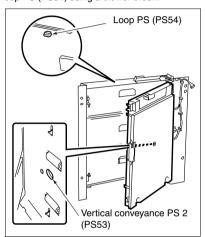
Caution: This illustration shows how to remove the vertical conveyance roller (middle). Remove the vertical conveyance roller (lower) in the same manner.



- 1. Bearings
- E-rina
- 3. Vertical conveyance roller (lower)
- 4. Vertical conveyance roller (middle)
- (1) Reinstall the above parts following the removal steps in reverse.

[5] Cleaning the Vertical Conveyance PS/Loop PS

- a. Procedure
- (1) Remove the vertical conveyance unit.
- (2) Clean the vertical conveyance PS (PS53) and loop PS (PS54) using a blower brush.



(3) Reinstall the above parts following the removal steps in reverse.

ADU UNIT

⚠ Caution:

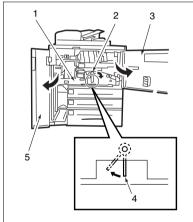
When disassembling and reassembling the machine, Be sure the power cord has been unplugged from the wall outlet.

[1] Drawing out and Reinstalling the ADU Stand

Marning:The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Open the front right and left doors.
- (2) With the solenoid release lever under the ADU stand pushed to the left, turn down the ADU drawing lever to the right.
- (3) Gripping the ADU stand drawing lever, draw out the ADU stand.

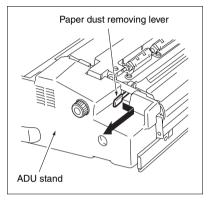


- 1. ADU stand
- 2. ADU stand drawing lever
- 3. Front right door
- 4. Solenoid release lever
- Front left door
- (4) To reinstall the ADU stand, push in the ADU stand and then turn the ADU stand drawing lever upright.

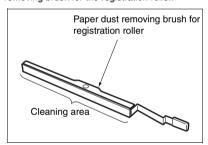
[2] Cleaning the Paper Dust Removing Brush for Registration Roller

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Slide the paper dust removing lever to the right, then pull it out to detach the paper dust removing brush.



(3) Using a blower brush, clean the paper dust removing brush for the registration roller.



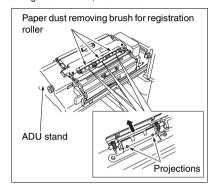
(4) Reinstall the above parts following the removal steps in reverse.

[3] Cleaning the Paper Dust Removing Brushes for the Registration Roller

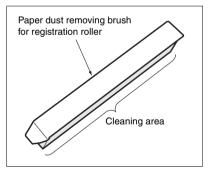
Marning:The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Press the projections (two for each brush) to release the paper dust removing three brushes for registration roller, then detach them.



(3) Clean the paper dust removing brushes for registration roller using a blower brush.



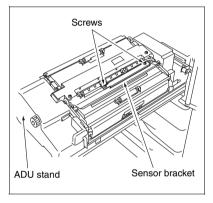
(4) Reinstall the above parts following the removal steps in reverse.

[4] Cleaning PS44 (Registration PS)

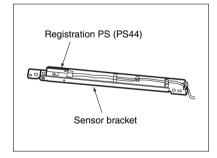
Marning: The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- Remove the two screws to release the sensor bracket.



(3) Turn the sensor bracket upside down and clean registration PS (PS44) with a drum cleaner or cleaning pad.



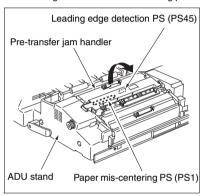
(4) Reinstall the above parts following the removal steps in reverse.

[5] Cleaning Paper Mis-centering PS (PS1)/Leading Edge Detection PS (PS45)

Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Open the pre-transfer jam handler. Clean paper mis-centering PS (PS1) and leading edge detection PS (PS45) at the rear of the pre-transfer jam handler using a drum cleaner or cleaning pad.



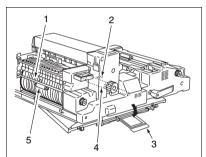
(3) Reinstall the above parts following the removal steps in reverse.

[6] Cleaning Paper Reverse PS (PS57)/ ADU Deceleration PS (PS59)

⚠ Warning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Using a blower brush, clean the paper reverse PS (PS57) through the sensor window at the top of paper reverse paper exit roller 1.
- (3) Open the ADU conveyance unit guide A.
- (4) Using a drum cleaner or cleaning pad, clean the ADU deceleration PS (PS59) through the sensor window at the right of ADU horizontal conveyance roller 2.



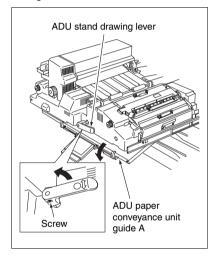
- 1. Window for paper reverse PS (PS57)
- 2. Window for ADU deceleration PS (PS59)
- 3. Movable guide A
- 4. ADU horizontal conveyance roller 2
- Reverse paper exit roller 1
- (5) Reinstall the above parts following the removal steps in reverse.

[7] Removing and Reinstalling the ADU Cover

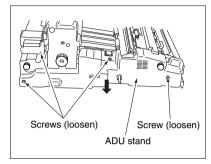
Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Open the ADU paper conveyance unit guide A.
- (3) Remove the screw to remove the ADU stand drawing lever.



(4) Loosen the four screws to detach the ADU cover.



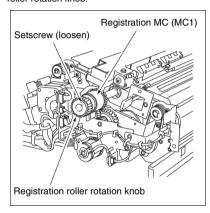
(5) Reinstall the above parts following the removal steps in reverse.

[8] Removing and Reinstalling Registration MC (MC1)

off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Detach the ADU cover.
- (3) Loosen the setscrew to remove the registration roller rotation knob.

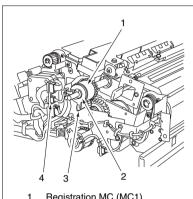


(4) Disconnect the relay connector (CN565).

Caution: Each relay connector consists of two plugs and one socket. Be sure to remove only one plug (shown below) of the CN565 connector.

(5) Remove the retaining ring to detach registration MC (MC1).

Caution: When reinstalling MC1, pay attention to the position of the stopper.



- Registration MC (MC1)
- Retaining ring
- Stopper
- Relay connector (CN565)
- (6) Reinstall the above parts following the removal steps in reverse.

[9] Removing and Reinstalling ADU Pre-registration MC (MC2)

 Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

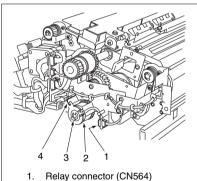
a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Detach the ADU cover.
- (3) Disconnect the relay connector (CN564).

Caution: Each relay connector consists of two plugs and one socket. Be sure to remove only one plug (shown below) of the CN564 connector.

(4) Remove the retaining ring to detach ADU preregistration MC (MC2).

Caution: When reinstalling MC2, pay attention to the position of the stopper.



- ADU pre-registration MC (MC2)
- Retaining ring
- Stopper
- (5) Reinstall the above parts following the removal steps in reverse.

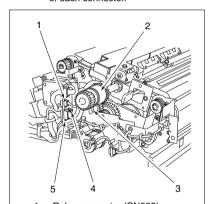
[10] Removing and Reinstalling the Second Paper Feed Unit

Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Detach the ADU cover.
- (3) Disconnect the three relay connectors (CN565, 568, 569).

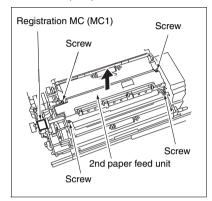
Caution: Each relay connector consists of two plugs and one socket. Be sure to remove only one plug (shown below) of each connector.



- Relay connector (CN565)
- Registration MC (MC1)
- 3. Stopper
- Relay connector (CN569)
- Relay connector (CN568)

(4) Remove the four screws to remove the second paper feed unit.

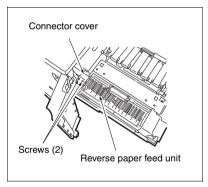
Caution: When reinstalling the second paper feed unit, pay attention to the position of the stopper of second paper feed MC (MC1).



(5) Reinstall the above parts following the removal steps in reverse.

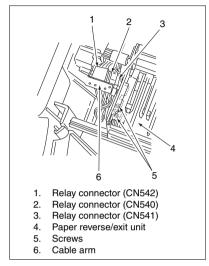
[11] Removing and Reinstalling the ADU Stand

- Marning 1:The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.
- (1) Draw out the ADU stand from the main body.
- (2) Remove the fixing unit. (See "FIXING UNIT.")
- (3) Remove the transfer/separation corona unit. (See "CORONA UNIT SECTION.")
- (4) Remove the second paper feed unit.
- (5) Remove the two screws to detach the connector cover.

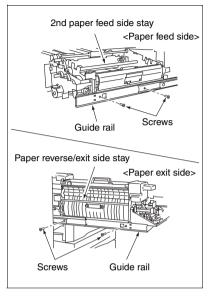


(6) Disconnect the three relay connectors (CN540, 541, 542).

Caution: Each relay connector consists of two plugs and one socket. Be sure to remove only one plug (shown below) of each connector. (7) Remove the two screws to remove the cable arm from the ADU stand.



- (8) Remove the two screws securing the guide rail on the paper feed side and remove the two screws securing the guide rails on the paper exit side.
- (9) Remove the ADU stand upward with the second paper feed side stay held by one worker and the paper reverse/exit side stay held by the other worker.



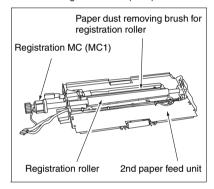
(10) Reinstall the above parts following the removal steps in reverse.

[12] Removing and Reinstalling the Registration Roller

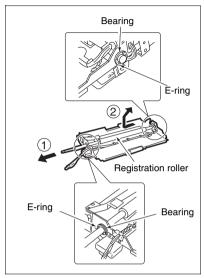
Marning:The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the second paper feed unit.
- (3) Remove the paper dust removing brush for registration roller.
- (4) Remove the registration MC (MC1).



(5) Remove the two E-rings (one at the left and the other at the right) and one bearing from the registration roller. (6) Slide the registration roller to the front, then remove it by lifting its rear end.



(7) Reinstall the above parts following the removal steps in reverse.

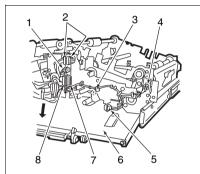
[13] Removing and Reinstalling the Registration Motor (M12) Assembly

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the second paper feed unit. See [10] Removing and Reinstalling the Second Paper Feed Unit.
- (3) Remove ADU pre-registration MC (MC2).

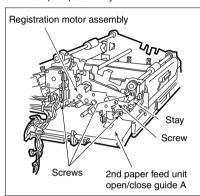
(4) Disconnect eight relay connectors (CN557, 564, 565, 568, 569, 575, 577).

Caution: Each relay connector consists of two plugs and one socket. For CN564, 565, 568, and 569, one plug of each relay connector has already been disconnected when removed the second paper feed unit. At this point, disconnect the other plug of these connectors. For CN557, remove two plugs. For CN575 and 577, disconnect one plug shown below.



- 1. Relay connector (CN565)
- Relay connector (CN557)
- 3. Relay connector (CN575)
- 4. Relay connector (CN577)
- 5. Relay connector (CN564)
- 6. Movable guide A
- Relay connector (CN569: Opposite side)
- Relay connector (CN568)

- (5) Release the wiring harness from the registration motor assembly and stay.
- (6) Remove one screw to detach the stay.
- (7) Remove the three screws to detach the registration motor (M12) assembly.



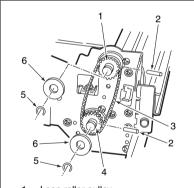
(8) Reinstall the above parts following the removal steps in reverse.

[14] Removing and Reinstalling the Loop Roller, ADU Paper Exit Roller, and Pre-registration Roller

Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

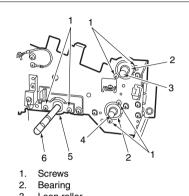
a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the registration motor assembly. See [13] Removing and Reinstalling the Registration Motor (M12) Assembly.
- (3) Open the second paper feed unit open/close guide A.
- (4) Remove the E-ring and spacer from each gear.
- (5) Detach the timing belt.
- (6) Remove the loop roller pulley and pull the pin from the shaft.
- (7) Remove the ADU paper exit roller pulley and pull the pin from the shaft.

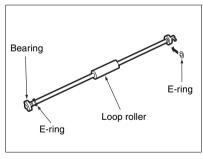


- 1. Loop roller pulley
- 2. Pin
- 3. Timing belt
- 4. ADU paper exit roller pulley
- 5. E-ring
- 6. Spacer

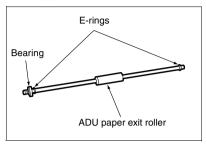
- (8) Remove the two screws to slide the loop roller and ADU paper exit roller bearings to the front.
- (9) Remove the two screws to release the bearing
- (10) Pull out the loop roller, ADU paper exit roller, and pre-registration roller.



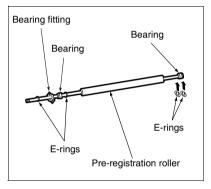
- Loop roller
- ADU paper exit roller
- Bearing fitting
- Pre-registration
- (11) Remove the two E-rings and one bearing from the loop roller.



(12) Remove the two E-rings and one bearing from the ADU paper exit roller.



(13) Remove the four E-rings, two bearings and one bearing fitting from the pre-registration roller.



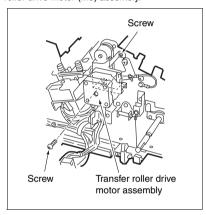
(14) Reinstall the above parts following the removal steps in reverse.

[15] Removing and Reinstalling the Pre-transfer Roller and Pre-registration Loop Roller

⚠ Warning: The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

a. Procedure

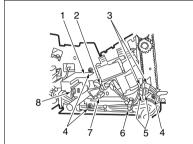
- (1) Draw out the ADU stand from the main body.
- (2) Remove the registration motor assembly. See [13] Removing and Reinstalling the Registration Motor (M12) Assembly.
- (3) Remove the two screws to detach the transfer roller drive motor (M9) assembly.



(4) Disconnect eight relay connectors (CN561, 567, 574, 576, 587, 593).

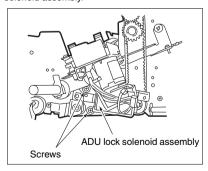
Caution: Each relay connector (CN567, 574, 576, 593) consists of two plugs and one socket. For CN576 and 593, disconnect two plugs from each connector. For other connectors, disconnect one plug from each connector as shown below.

- (5) Release the wiring harness from the stay.
- (6) Remove the three screws to detach the stay.

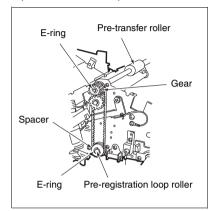


- Stay
- Relay connector (CN567)
- 3. Relay connectors (CN576)
- 4. Screws
- 5. Relay connectors (CN593)
- Relay connector (CN561)
- 7. Relay connector (CN574)
- 8. Relay connector (CN587)

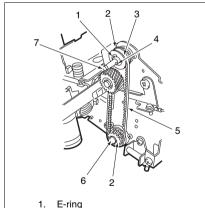
(7) Remove the two screws to remove the ADU lock solenoid assembly.



- (8) Remove one E-ring from the pre-transfer roller to detach the gear.
- (9) Remove one E-ring from the pre-registration loop roller to detach one spacer.

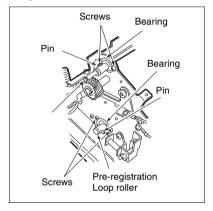


- (10) Remove one pin, one E-ring, and one spacer from the pre-transfer roller.
- (11) Detach the timing belt.
- (12) Remove the pre-transfer roller pulley and preregistration loop roller pulley.

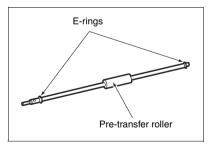


- Pulley
- 3. Spacer
- Pin 4.
- Timing belt
- 6. Pre-registration loop roller
- Pre-transfer roller 7.

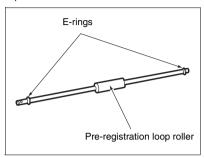
- (13) Pull one pin from each roller.
- (14) Remove the two screws to slide the pre-transfer roller bearing to the front, and remove the two screws to slide the pre-registration loop roller pulley to the front.
- (15) Slide the pre-transfer roller shaft toward the front side, and release the shaft's rear side first, then hold and pull out the shaft's front side by sliding its rear side upward.
- (16) Remove the pre-registration loop roller shaft by pulling it out from the mount bracket.



(17) Remove the two E-rings from the pre-transfer roller.



(18) Remove the two E-rings from the pre-registration loop roller.



(19) Reinstall the above parts following the removal steps in reverse.

[16] Removing and Reinstalling the ADU Reverse Roller

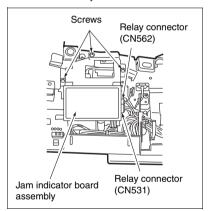
Marning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Disconnect the two relay connectors (CN531, 562).

Caution: Each relay connector consists of two plugs and one socket. Disconnect one plug from each connector as shown below.

(3) Remove the three screws to detach the jam indicator board assembly.

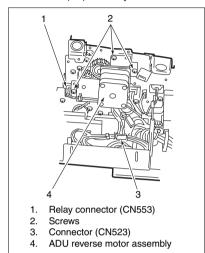


(4) Disconnect one relay connector (CN553) and one connector (CN523).

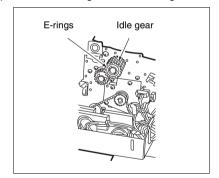
Caution: The relay connector (CN553) consists of two plugs and one socket.

Disconnect one plug shown below.

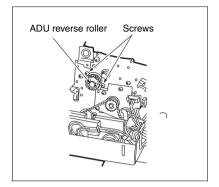
(5) Remove the three screws to detach the ADU reverse motor (M7) assembly.



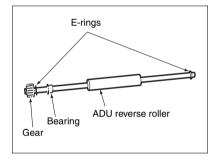
(6) Remove one E-ring to detach the idle gear.



(7) Remove the two screws, and release the bearing. (8) Pull out the ADU reverse roller.



(9) Remove the two E-rings from the ADU reverse roller.



(10) Reinstall the above parts following the removal steps in reverse.

[17] Removing and Reinstalling the ADU Stand Drive Board Assembly

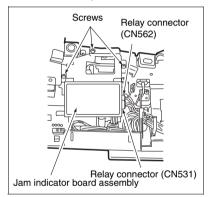
Marning:The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- Disconnect the two relay connectors (CN531, 562).

Caution: Each relay connector consists of two plugs and one socket. Disconnect one plug from each connector as shown below.

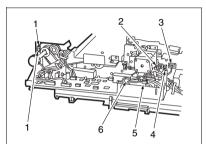
(3) Remove the three screws to detach the jam indicator board assembly.



(4) Disconnect the five relay connectors (CN523, 525, 559, 572, 573).

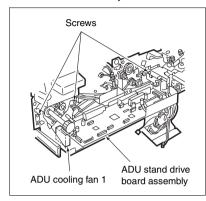
Caution: Each relay connector consists of two plugs and one socket. For CN525, disconnect two plugs. For other relay connectors, disconnect one plug from each connector as shown below.

(5) Disconnect all the 11 connectors on the ADU stand drive board.



- 1. Relay connector (CN525)
- Relay connector (CN559)
- 3. Relay connector (CN573)
- Relay connector (CN572)
- 5. Relay connector (CN523)
- ADU stand drive board
- (6) Release the wiring harness from the ADU stand drive board assembly.

(7) Remove the three screws to detach the ADU stand drive board assembly.



(8) Reinstall the above parts following the removal steps in reverse.

[18] Removing and Reinstalling the ADU Horizontal Conveyance Rollers 1 and 2

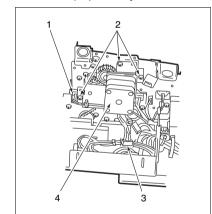
⚠ Warning: The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the ADU stand drive board assembly.
- Disconnect relay connector (CN553) and connector (CN523).

Caution: The relay connector (CN553) consists of two plugs and one socket. Disconnect one plug shown below.

(4) Remove the three screws to detach the ADU reverse motor (M7) assembly.

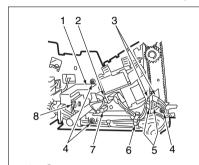


- 1. Relay connector (CN553)
- 2. Screws
- 3. Connector (CN523)
- 4. ADU reverse motor (M7) assembly

(5) Disconnect eight relay connectors (CN561, 567, 574, 576, 587, 593).

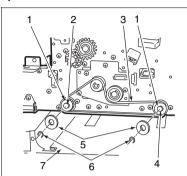
Caution1: Each relay connector (CN567, 574, 576, 593) consists of two plugs and one socket. For CN576 and 593, disconnect two plugs from each connector. For other connectors, disconnect one plug from each connector as shown below.

- (6) Release the wiring harness from the stay.
- (7) Remove the three screws to detach the stay.

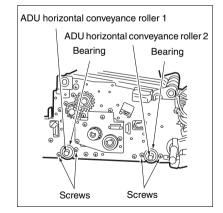


- Stay
- 2. Relay connector (CN567)
- 3. Relay connectors (CN576)
- 4. Screws
- 5. Relay connectors (CN593)
- 6. Relay connector (CN561)
- 7. Relay connector (CN574)
- 8. Relay connector (CN587)
- (8) Open ADU horizontal conveyance unit open/ close cover A.
- (9) Remove one E-ring and one spacer from each of ADU horizontal conveyance rollers 1 and 2.
- (10) Detach the timing belt.

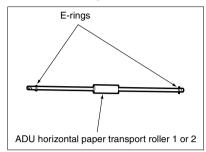
(11) Remove pulley from each of ADU horizontal conveyance rollers 1 and 2.



- 1. Pulley
- 2. ADU horizontal conveyance roller 1
- Timing belt
- 4. ADU horizontal conveyance roller 2
- 5. Spacers
- 6. E-rings
- Movable cover A
- (12) Remove the two screws and slide each bearing forward to remove it.
- (13) Pull out each roller.



(14) Remove the two E-rings from each roller.



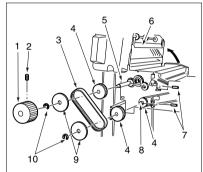
(15) Reinstall the above parts following the removal steps in reverse.

[19] Removing and Reinstalling the Paper Reverse/Exit Rollers 1, 2, and 3

⚠ Warning:The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

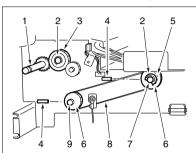
a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the ADU stand drive board assembly.
- (3) Open the paper reverse/exit unit.
- (4) Loosen one setscrew to detach the reverse paper exit roller rotation knob.
- (5) Remove one E-ring and one spacer from each of paper reverse/exit rollers 1 and 2.
- (6) Detach the timing belt.
- (7) Remove one pulley from each roller.
- (8) Pull one pin out of each roller.



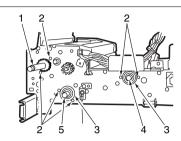
- 1. Paper reverse/exit roller rotation knob
- 2. Setscrew
- 3. Timing belt
- 4. Pulley
- 5. Paper reverse/exit roller 1
- 6. Paper reverse/exit unit
- 7. Pins
- Paper reverse/exit roller 2
- 9. Spacers
- 10. E-rings

- (9) Remove one E-ring to detach the idle gear.
- (10) Remove one E-ring from paper reverse/exit roller 3 and remove one spacer.
- (11) Detach the timing belt.
- (12) Remove one pulley from each of paper reverse/ exit rollers 2 and 3 and remove one pin.

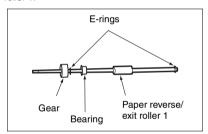


- 1. Paper reverse/exit roller 1
- 2. E-rina
- 3. Idle gear
- 4. Pin
- 5. Spacer
- 6. Pulley
- 7. Paper reverse/exit roller 3
- 8. Timing belt
- 9. Paper reverse/exit roller 2
- (13) Remove two screws, and release the bearing.
- (14) Remove two screws and slide the bearing to the front to remove it.

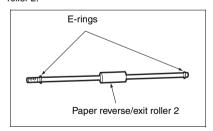
(15) Pull out each roller.



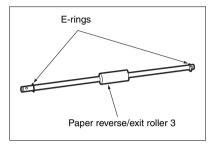
- 1. Paper reverse/exit roller 1
- 2. Screws
- 3. Bearing
- 4. Paper reverse/exit roller 3
- 5. Paper reverse/exit roller 2
- (16) Remove the two E-rings from paper reverse/exit roller 1.



(17) Remove the two E-rings from paper reverse/exit roller 2.



(18) Remove the two E-rings from paper reverse/exit roller 3.



(19) Reinstall the above parts following the removal steps in reverse.

[20] Removing and Reinstalling the Paper Reverse/Exit Unit Entrance Roller

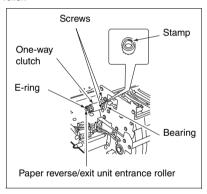
Marning:The interlock which is turned off when the front right or left door opens/closes, should never been turned on forcibly with the ADU stand drawn out.

a. Procedure

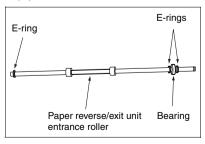
- (1) Draw out the ADU stand from the main body.
- (2) Hold the paper reverse/exit unit down toward left.
- (3) Remove one E-ring to detach the one-way clutch.

Caution: When reinstalling the one-way clutch, pay attention to the marking.

- (4) Remove the two screws to slide one bearing to the rear side.
- (5) Pull out the paper reverse/exit unit entrance roller.



(6) Remove the three E-rings and one bearing from the paper reverse/exit unit entrance roller.



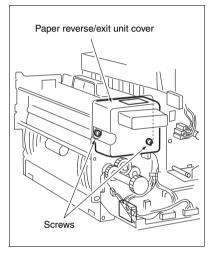
(7) Reinstall the above parts following the removal steps in reverse.

[21] Removing and Reinstalling the Paper Reverse/Exit Switchover Gate

Marning: The interlock which is turned OFF when the front right or left door opens/closes, should never been turned ON forcibly with the ADU stand drawn out.

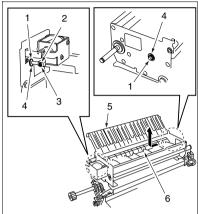
a. Procedure

- (1) Draw out the ADU stand from the main body.
- (2) Remove the two screws to detach the paper reverse/exit unit cover.



- (3) Remove one screw to release the gate drive fitting.
- (4) Remove each E-ring and bearing from the front and rear.

(5) Open the jam access guide plate to remove the paper reverse/exit switchover gate.

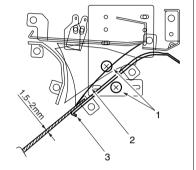


- 1. E-ring
- 2. Gate drive fitting
- 3. Screw
- 4. Bearing
- 5. Movable guide plate
- 6. Paper reverse/exit switchover gate

(6) Reinstall the above parts following the removal steps in reverse.

Caution: When installing the paper reverse/exit switchover gate, must perform the following adjustment.

Loosen the two paper reverse/exit switchover gate installation adjustment screws. Stack fifteen plain papers (64g/m²) and insert them between the gate and the paper guide plate, then tighten the adjustment screws.



- 1. Gate installation adjustment screws (2)
- 2. Reversal/paper exit switchover
- 3. Paper guide plate

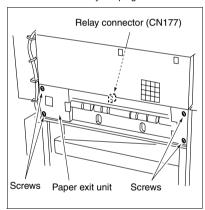
[22] Removing and Reinstalling the Paper Exit Roller

Marning:The interlock which is turned
OFF when the front right or left
door opens/closes, should
never been turned ON forcibly
with the ADU stand drawn out.

a. Procedure

- Remove the left side cover. (See "EXTERNAL SECTION.")
- (2) Draw out the ADU stand from the main body.
- (3) Remove the four screws to detach the paper exit unit.
- (4) Disconnect one relay connector (CN177) in the paper exit unit.

Caution: Each relay connector consists of two plugs and one socket. For CN177, disconnect only the plug shown below.

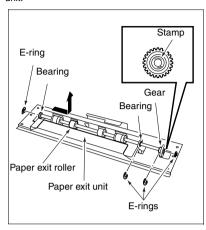


(5) Remove one E-ring to detach the gear.

Caution: When installing the gear, pay attention to the orientation of the marking on the gear.

(6) Remove the three E-rings to detach the left bearing and right bearing.

(7) Remove the paper exit roller from the paper exit unit.



(8) Reinstall the above parts following the removal steps in reverse.