

5. Disassembly and Reassembly

5.1 General Precautions on Disassembly

When you disassemble and reassemble components, you must use extreme caution. The close proximity of cables to moving parts makes proper routing a must.

If components are removed, any cables disturbed by the procedure must be restored as close as possible to their original positions. Before removing any component from the machine, note the cable routing that will be affected.

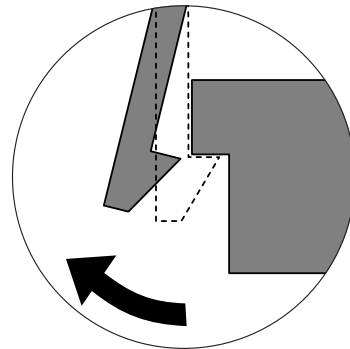
Whenever servicing the machine, you must perform as follows:

1. Check to verify that documents are not stored in memory.
2. Be sure to remove the toner cartridge before you disassemble parts.
3. Unplug the power cord.
4. Use a flat and clean surface.
5. Replace only with authorized components.
6. Do not force plastic-material components.
7. Make sure all components are in their proper position.

Releasing Plastic Latches

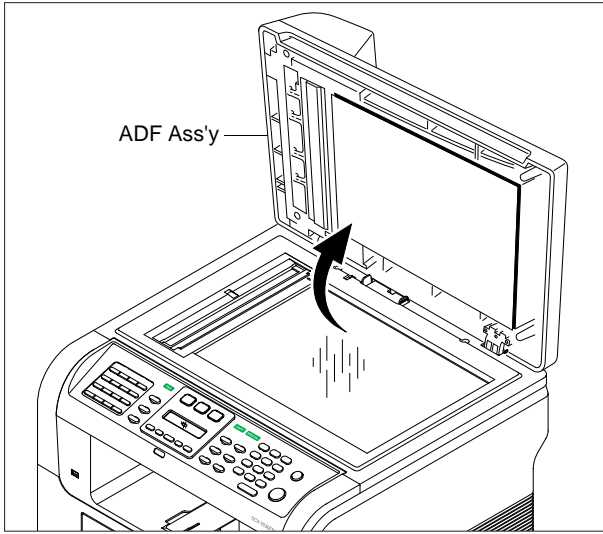
Many of the parts are held in place with plastic latches. The latches break easily; release them carefully.

To remove such parts, press the hook end of the latch away from the part to which it is latched.

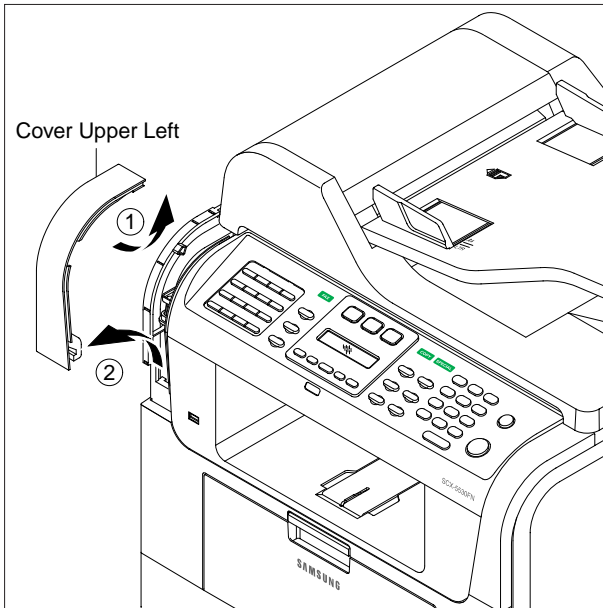


5.2 Cover Upper (Left, Right)

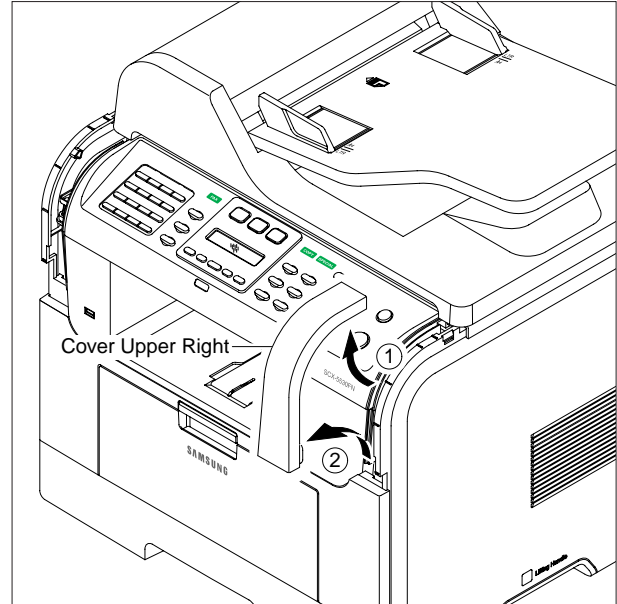
1. Open the ADF Ass'y.



2. Apply light pressure to the left side of the Cover Upper Left and pull it in the direction of arrow, as shown below.

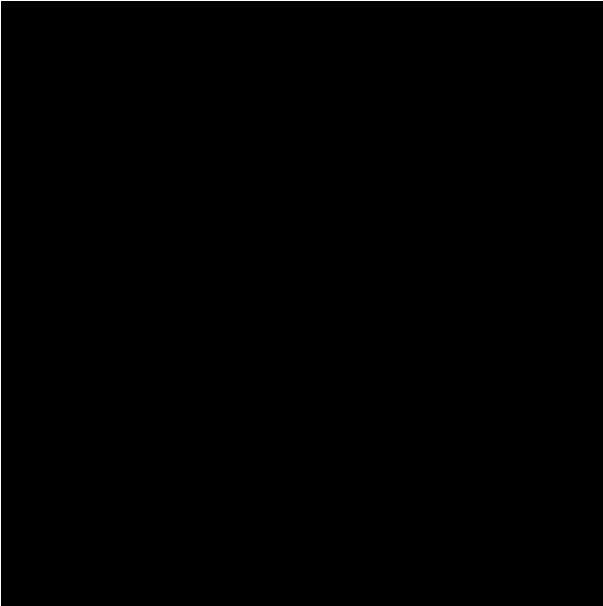


3. Apply light pressure to the right side of the Cover Upper Right and pull it in the direction of arrow, as shown below.



5.3 Front Cover

1. Take out the Cassette.



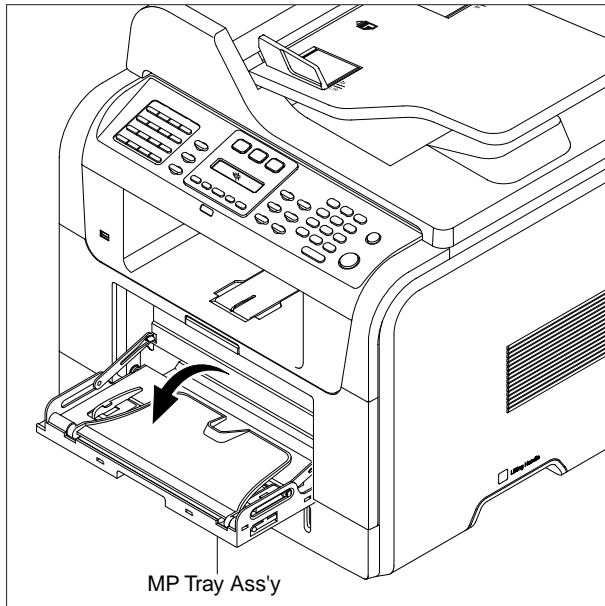
3. If necessary, remove the Toner Cartridge.

2. Open the Cover.

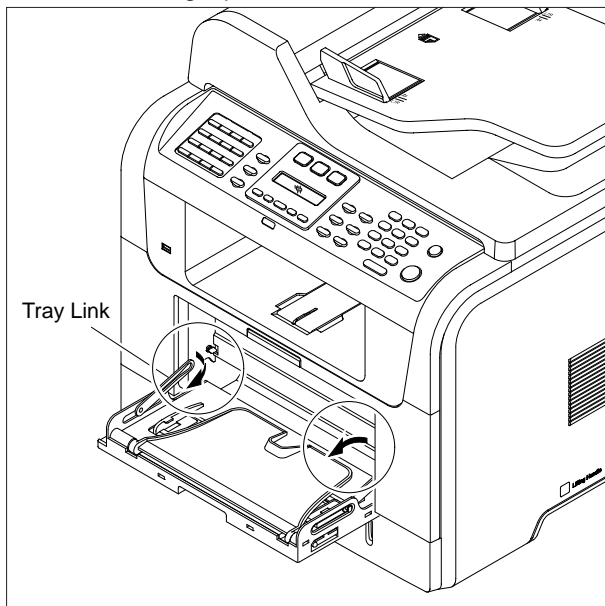
4. To remove the Front Cover, first pull the part below the both side of the Front Cover with a light pressure to the direction of arrow.

5.4 MP Tray Ass'y

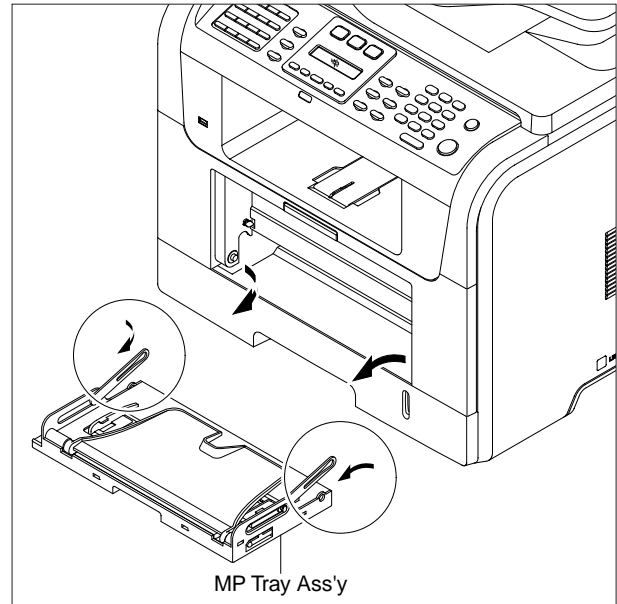
1. Open the MP Tray Ass'y



2. Pull the Tray Links from the both side of the Front Cover with a light pressure to the direction of arrow.

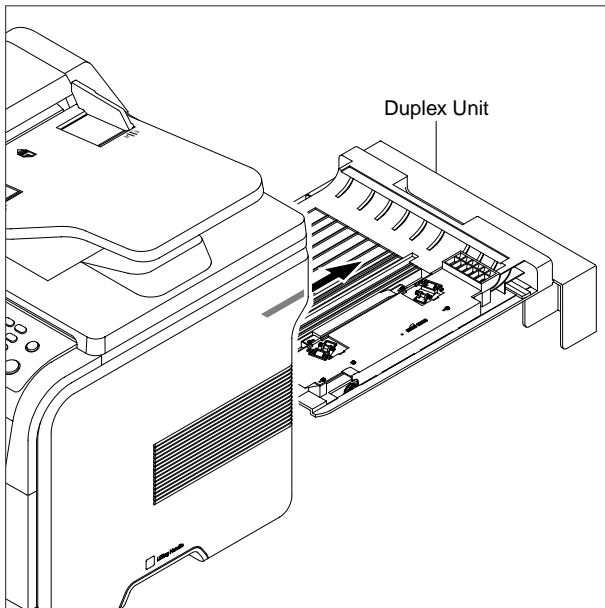


3. Apply light pressure to the both side of the MP Tray Ass'y and pull it in the direction of arrow, as shown below.

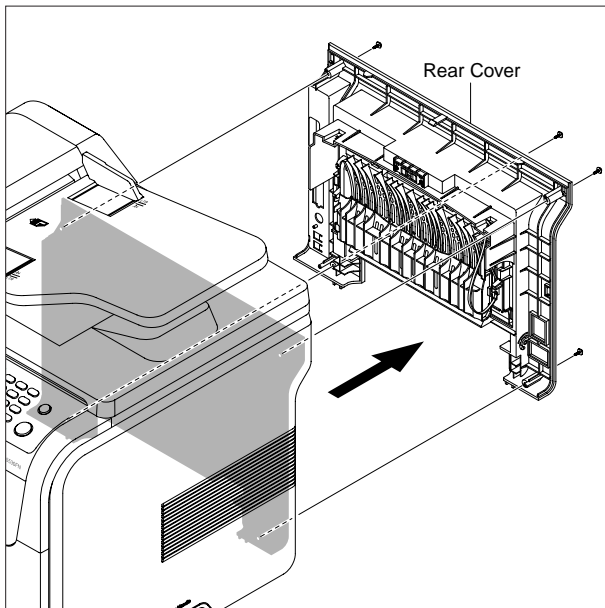


5.5 Rear Cover

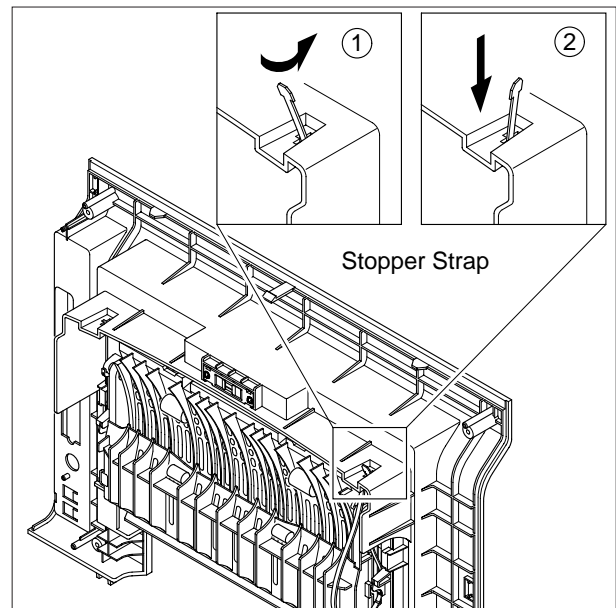
1. Take out the Duplex Unit.



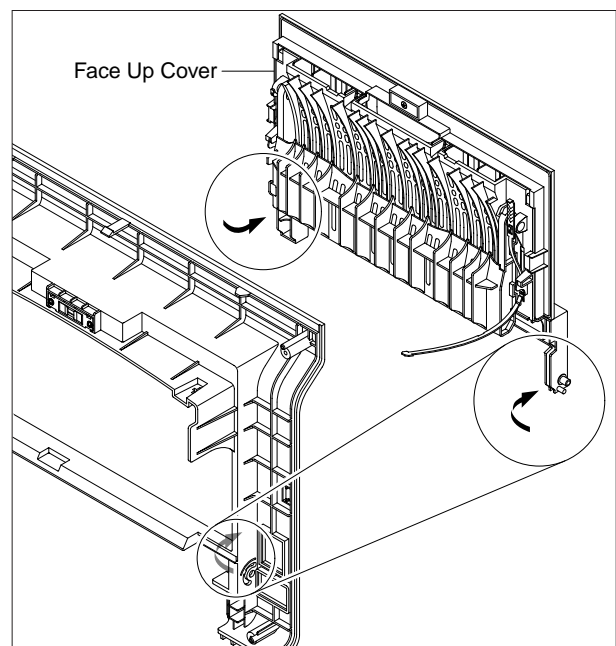
2. Remove the four screws securing the Rear Cover and then Release the Rear Cover from the Set.



3. To remove the Face Up Cover, first release the Stopper Strap in the direction of arrow.

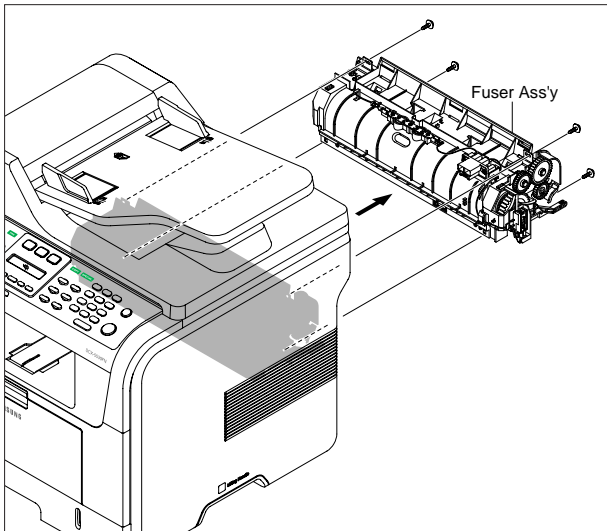


4. Unlatch the Face Up Cover from the Rear Cover and then release the Face Up Cover, as shown below.

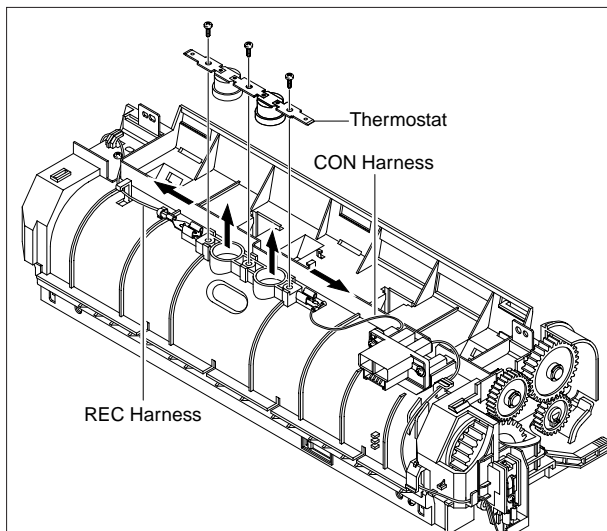


5.6 Fuser Ass'y

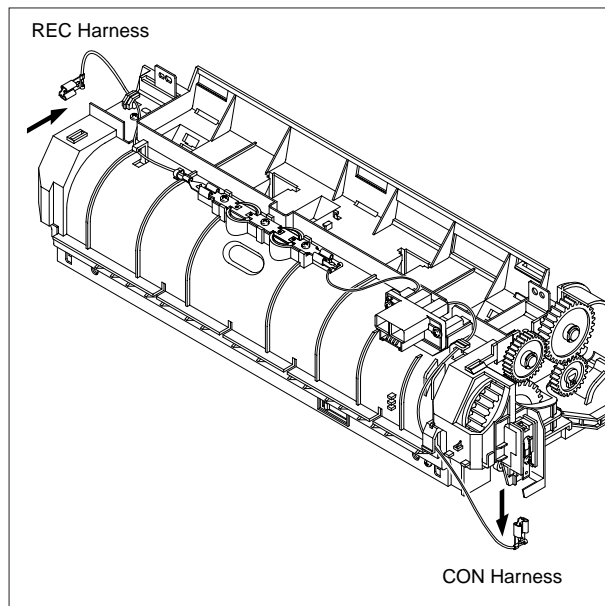
1. Before you remove the Fuser Ass'y, you should open the face up cover and open the guide output fuser.
- Rear Cover (Refer to 5.5)
2. Remove the four screws securing the Fuser Ass'y and then pull the Fuser Ass'y.



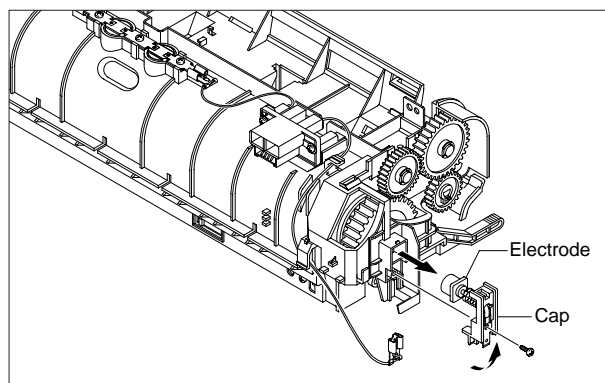
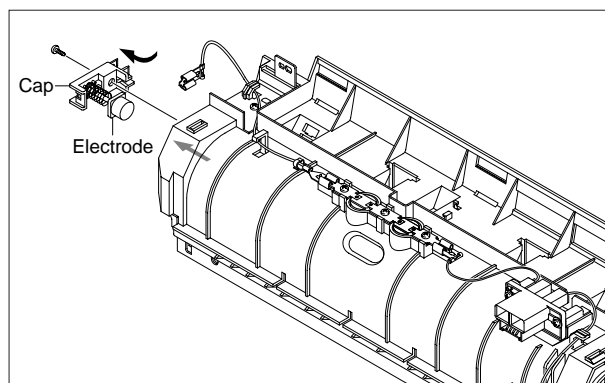
3. Release the CON Harness and REC Harness from the Thermostat and then remove the three screws securing the Thermostat and remove it.



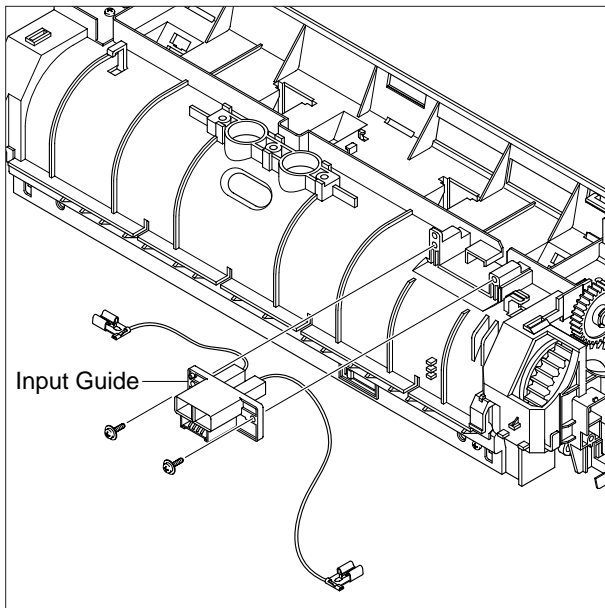
4. To remove the Electrodes, first release REC Harness from the left side of the Electrode and then release the CON Harness from the right side of the Electrode, as shown below.



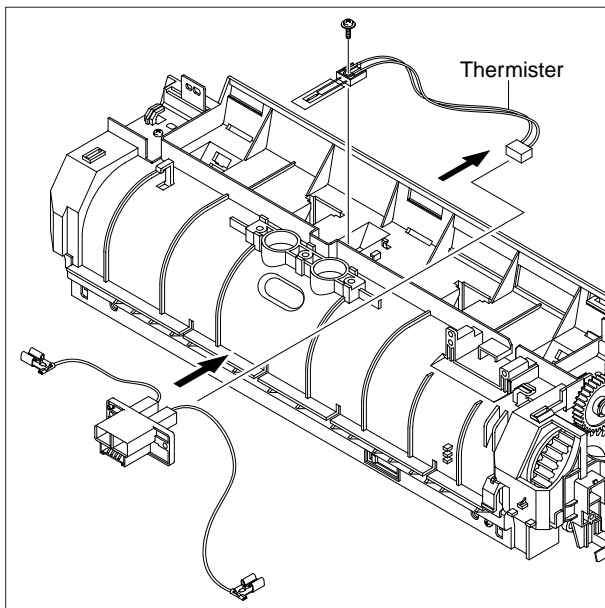
5. Remove the two screws securing the both side of the Electrode and then release the Caps and Electrodes in the direction of arrow, as shown below.



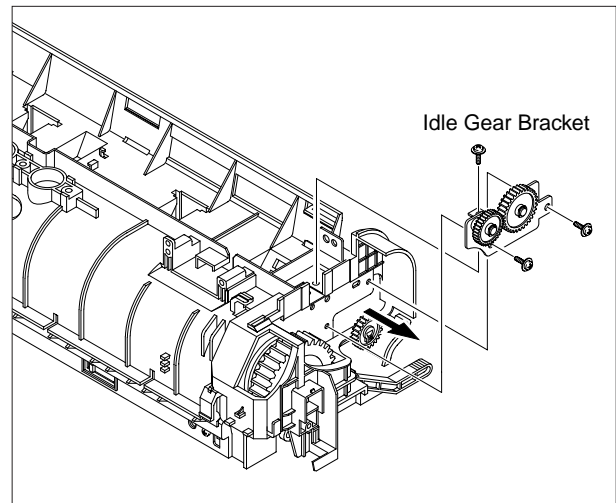
6. Remove the two screws securing the Input Guide and remove it.



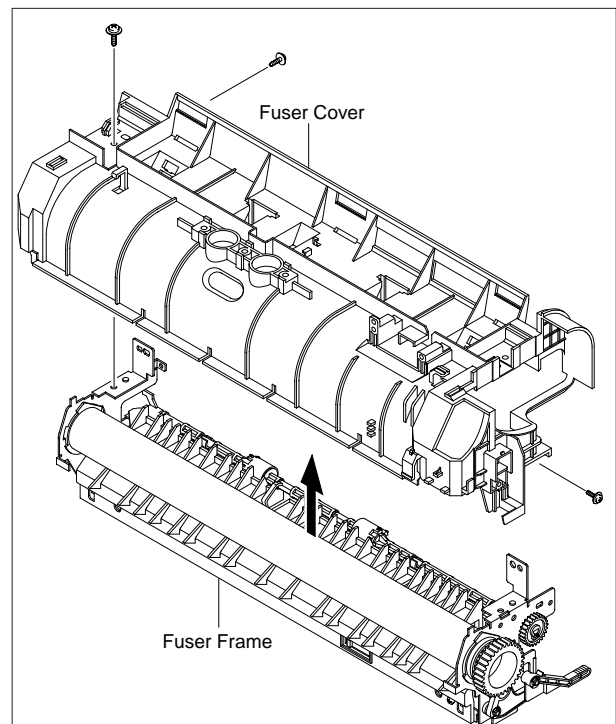
7. Unplug the connector from the Input Guide and remove the one screw securing the Thermistor and remove it.



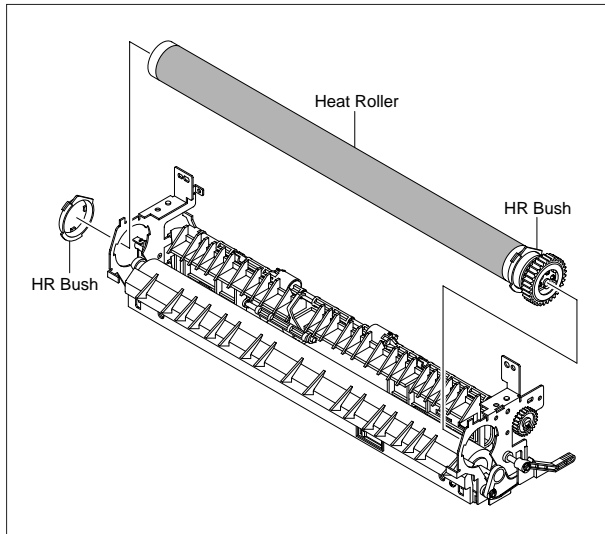
8. Remove the three screws securing the Idle Gear Bracket and remove it.



9. Remove the three screws securing the Fuser Cover and release the Fuser Cover from the Fuser Frame.

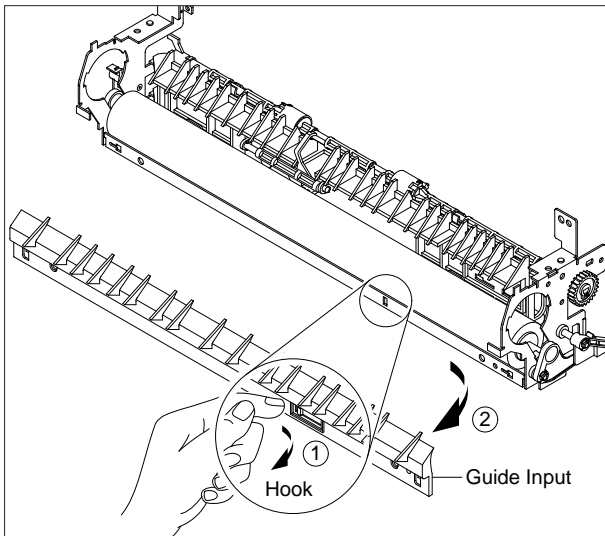


10. Release the HR Bush and then remove the Heat Roller, as shown below.



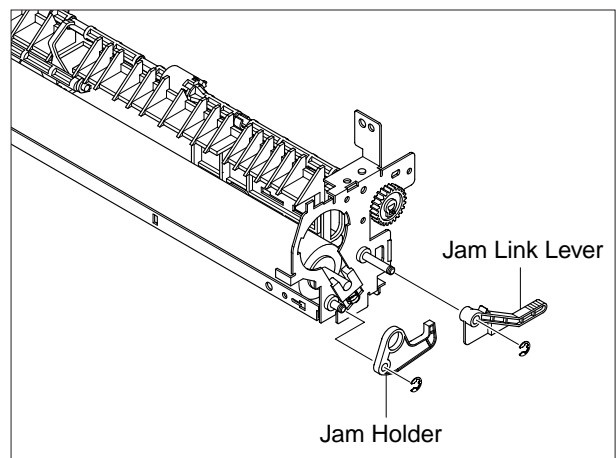
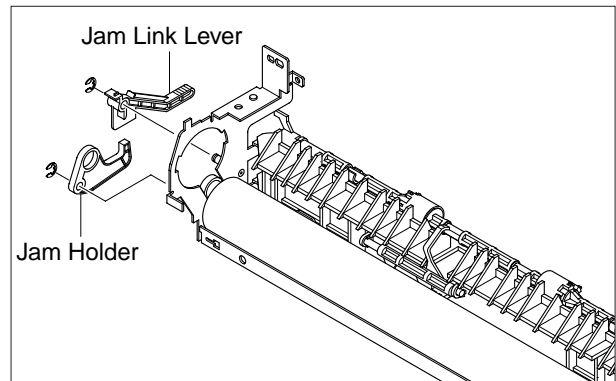
Notice: Be careful not to damage or contaminate the surface of the roller when assembling and disassembling the Heat Roller.

11. To remove the Guide Input, first unlatch the Hook and then release the Guide Input in the direction of arrow, as shown below.



Notice : You must remove the Guide Input before removing the Jam Holder so that you won't damaged Pressure Roller.

12. Remove the Jam Link Lever (L,R) and Jam Holder (L,R) and then remove the Pressure Roller, as shown below.

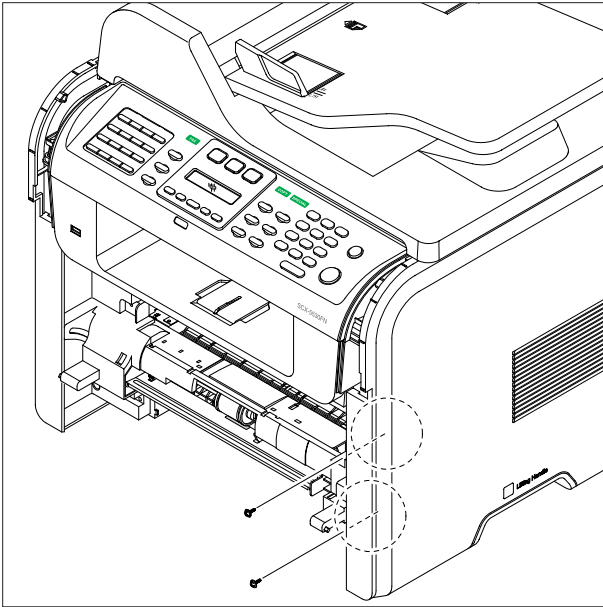


5.7 Side Cover (Left, Right)

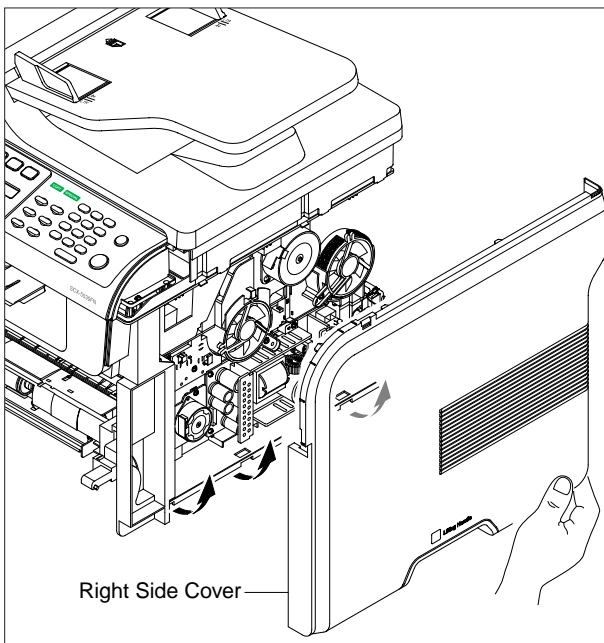
1. Before you remove the Side Cover (Left, Right), you should remove:

- Front Cover (Refer to 5.3)
- Rear Cover (Refer to 5.5)

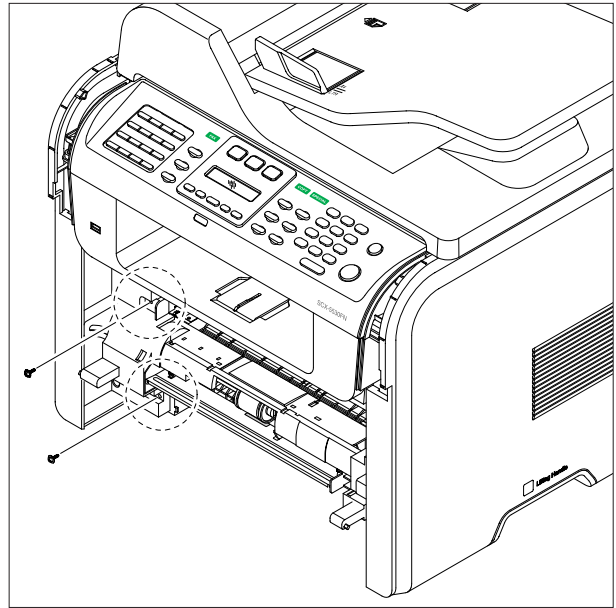
2. Remove the two screws securing the Right Side Cover, as shown below.



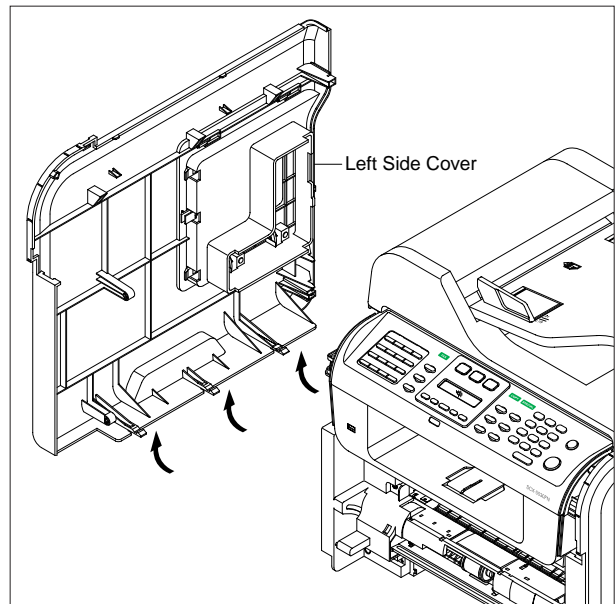
3. Apply light pressure to the bottom of the Right Side Cover and pull it to the right side in the direction of arrows, as shown below.



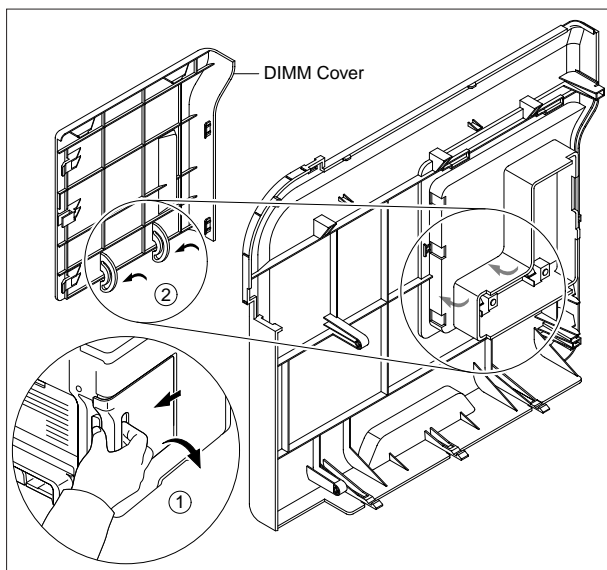
4. Remove the two screws securing the Left Side Cover, as shown below.



5. Apply light pressure to the bottom of the Left Side Cover and pull it to the left side in the direction of arrows, as shown below.



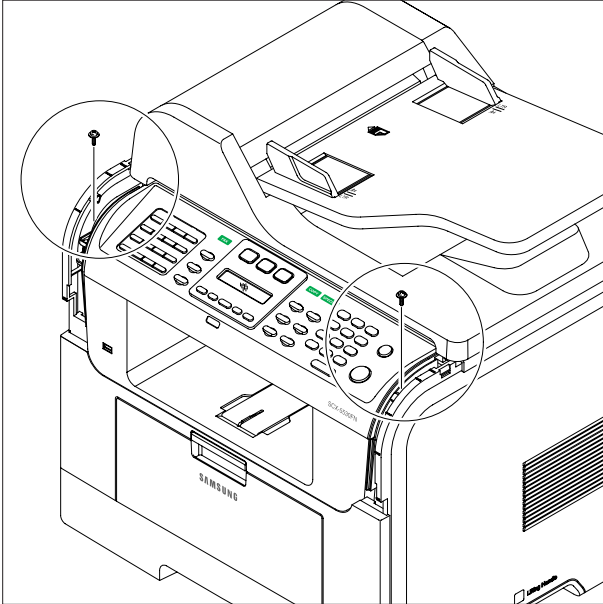
6. To remove the DIMM Cover, first open the DIMM Cover in the direction of arrow and then release the DIMM Cover, as shown below.



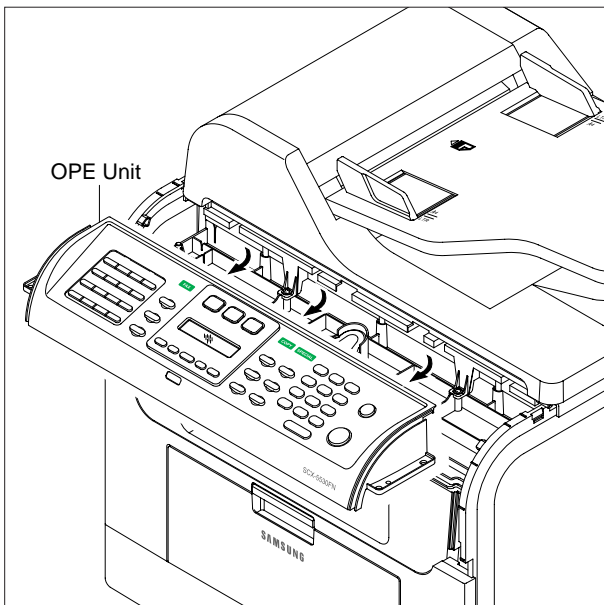
5.8 OPE Unit

1. Before you remove the OPE Unit, you should remove:
- Cover Upper L, R (Refer to 5.2)

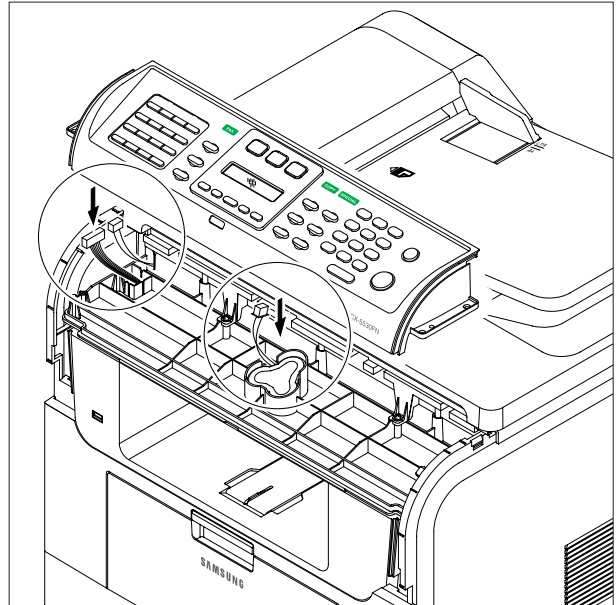
2. Remove the two screws securing the OPE Unit to the Platen Ass'y.



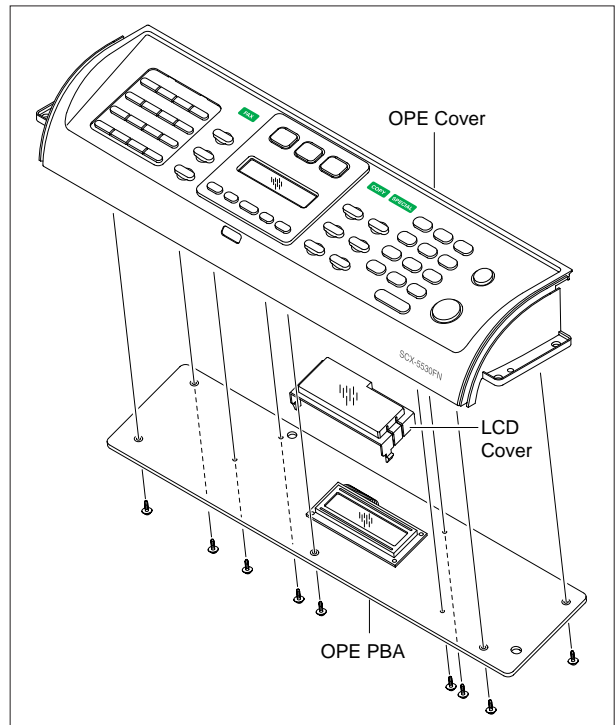
3. Apply light pressure to the front of the OPE Unit and pull it in the direction of arrow, as shown below.



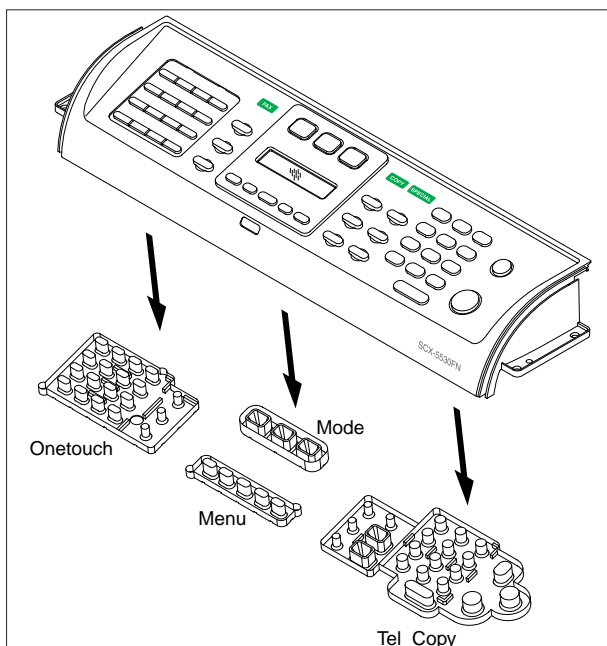
4. Unplug the three connectors from the OPE PBA, as shown below.



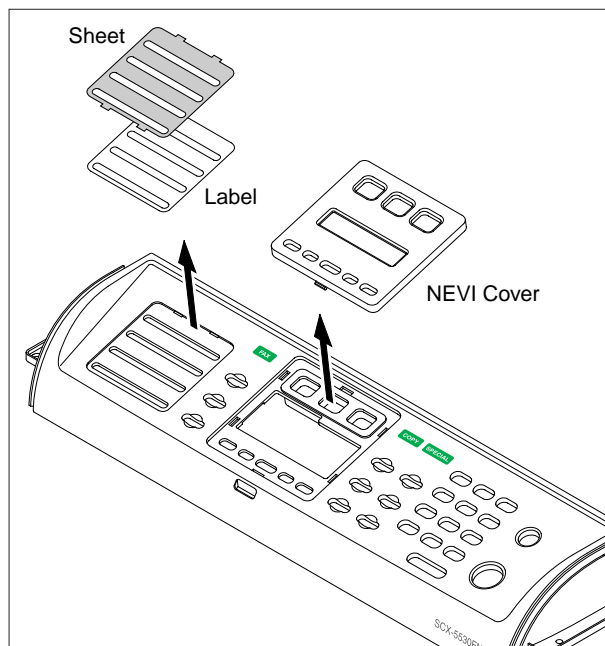
5. Remove the nine screws securing the OPE PBA to the OPE Cover.



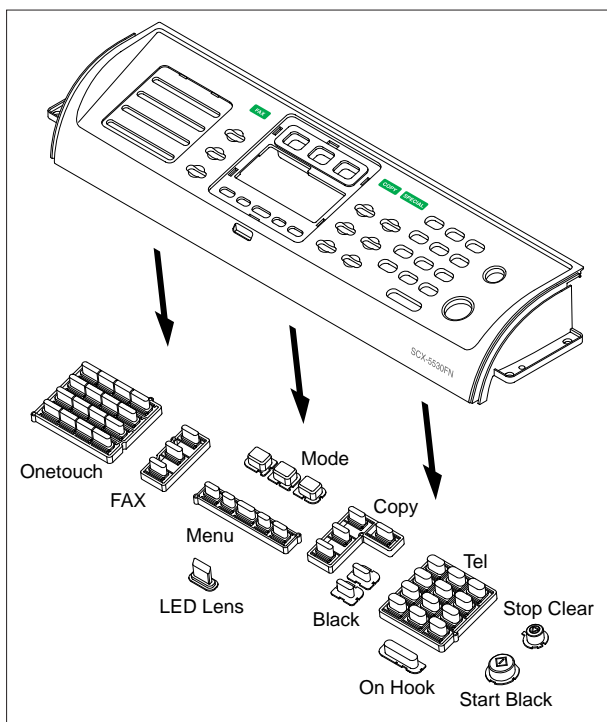
6. Remove the Contact Rubbers from the OPE Cover.



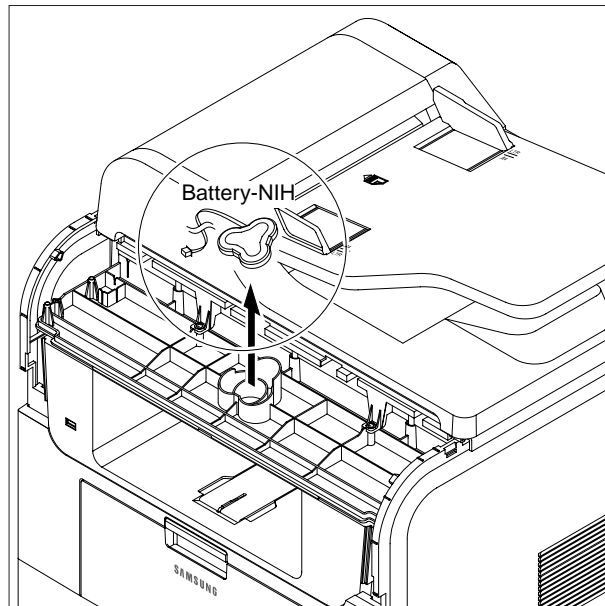
8. If necessary, remove the NEVI Cover.



7. Remove the Lens and Keys from the OPE Cover.

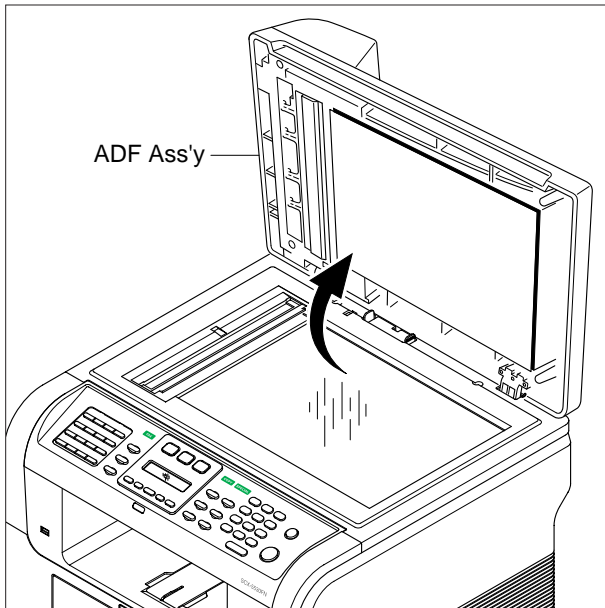


9. For easy disassembly, release the Battery-NIH.

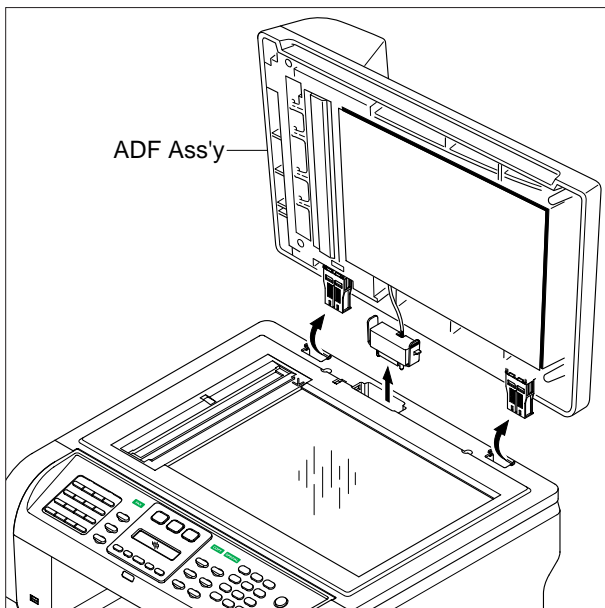


5.9 ADF Ass'y

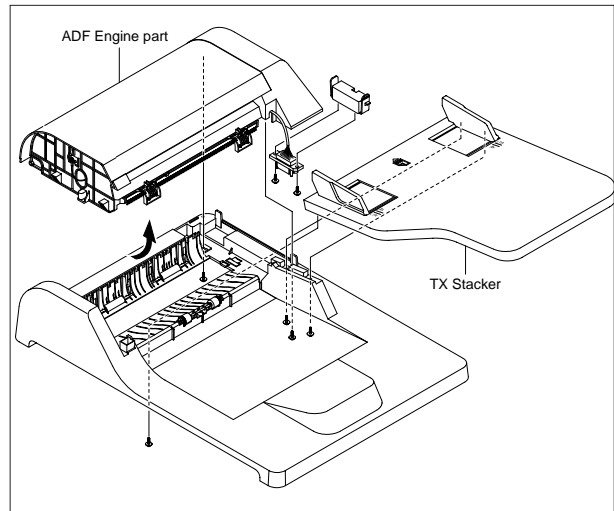
1. Open the ADF Ass'y



2. First remove the ADF Harness from the Platen Ass'y and then pull the ADF Ass'y upward in the direction of arrow, as shown below.

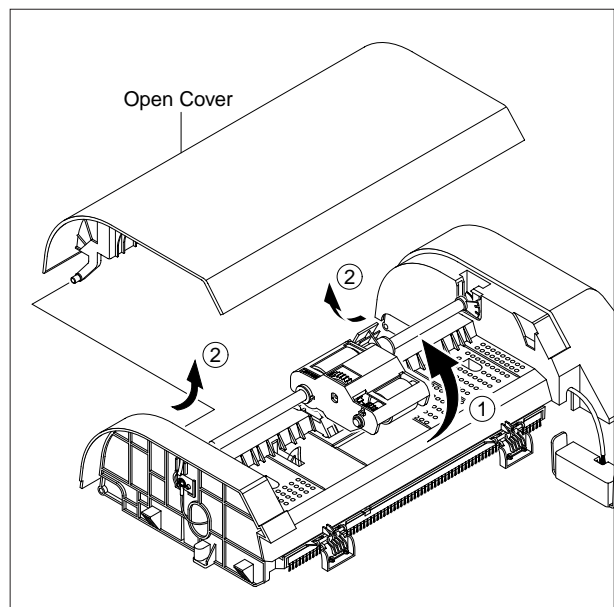


3. To remove the ADF Engine part, first remove the seven screws securing the ADF Engine part to the Cover Platen and then release the ADF Engine part in the direction of arrow, as shown below.



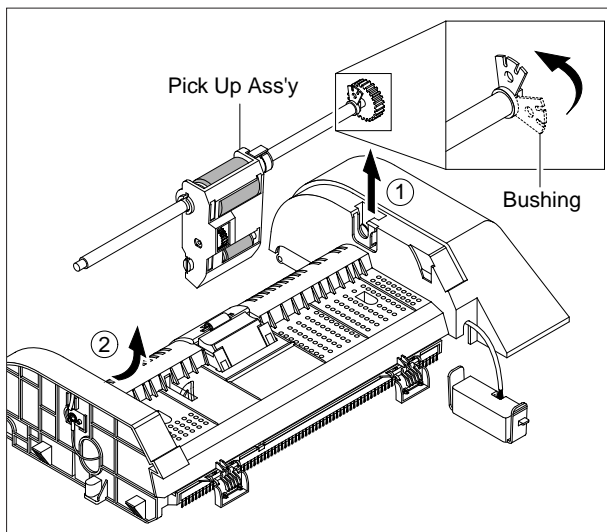
Notice : Take care to thread the ADF Harness through the Cover Platen.

4. Remove the Open Cover, as shown below.

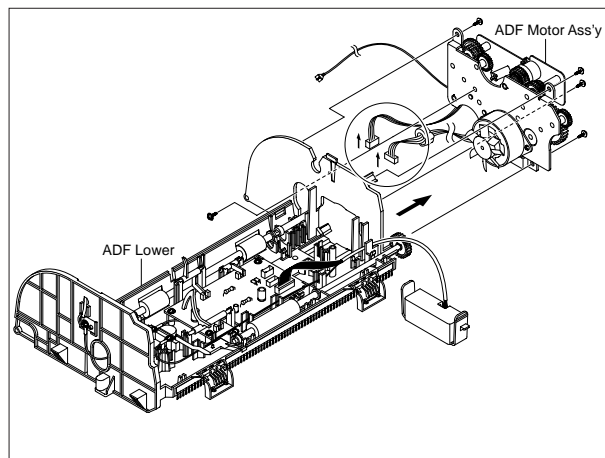


Notice : When working on the ADF Motor Ass'y take care not to contaminate any of the rubber surfaces with grease.

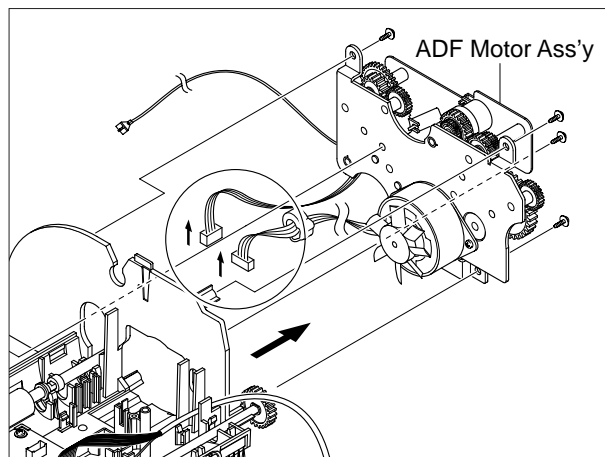
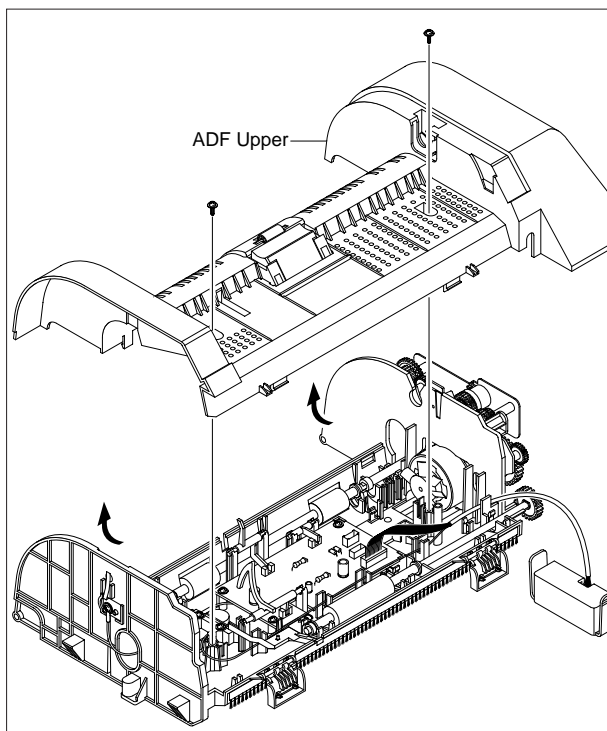
5. Release the Bush and rotate it until it reaches the slot, as shown below. Then lift the Pick Up Ass'y out.



7. Unplug the two connector and remove four screws securing the ADF Motor Ass'y and then remove the receptacle of the Ground Cable, as shown below. Then take out the ADF Motor Ass'y.



6. Remove the two screws securing the ADF Upper and remove it, as shown below.



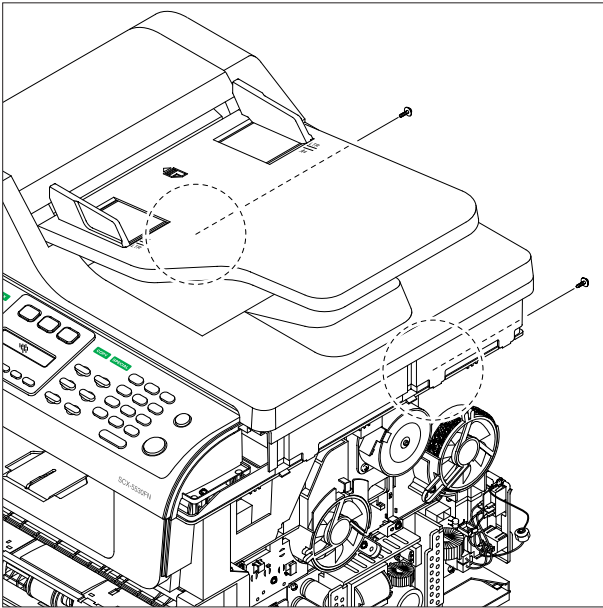
Notice : Before removing the ADF Engine part take great care to note the position of the Ferrite Core and the Motor Harness routing. When refitting the ADF Engine part ensure that the Harness and Ferrite are properly located and are clear of the Motor Fan and White Bar Clip.

5.10 Platen Ass'y

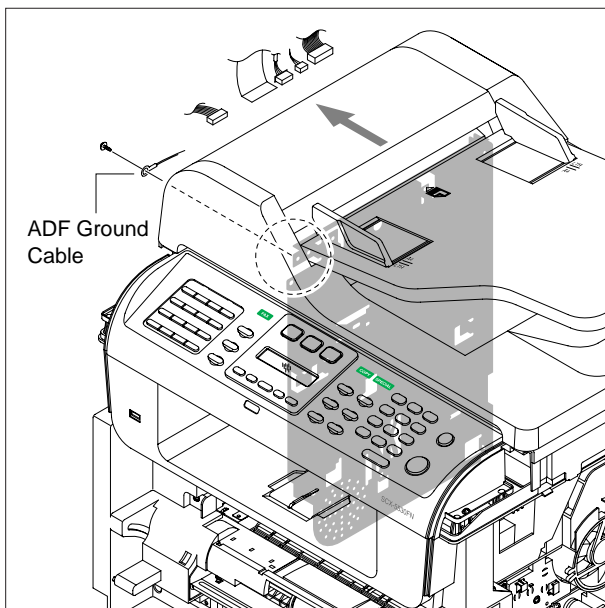
1. Before you remove the Platen Ass'y, you should remove:

- Side Cover Left, Right (Refer to 5.7)
- OPE Unit (Refer to 5.8)
- ADF Ass'y (Refer to 5.9)

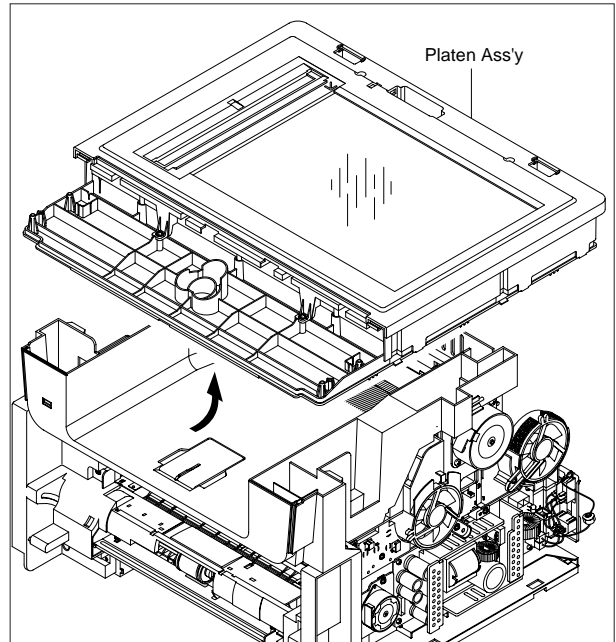
2. Remove the two screws securing the Platen Ass'y, as shown below.



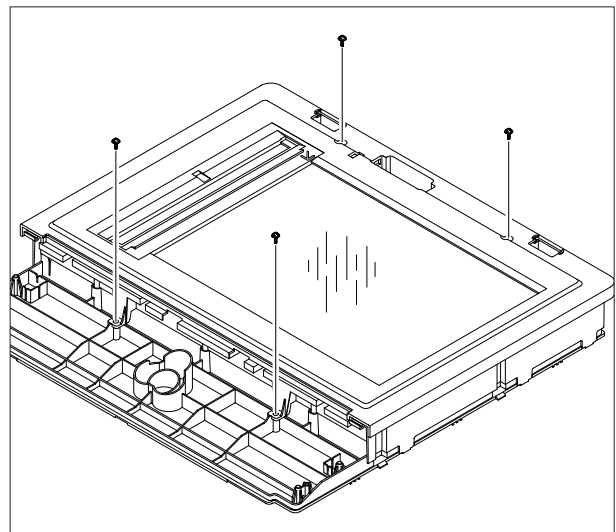
3. Remove the one screw securing the Ground Cable and unplug the four connectors and CCD Cable.



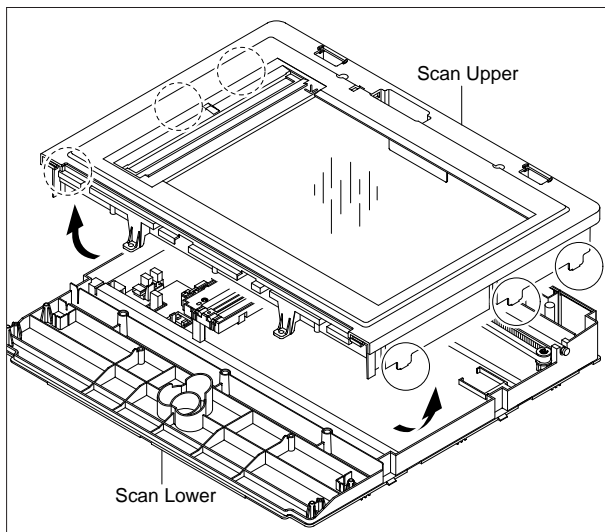
4. Lift the Platen Ass'y in the direction of arrow, as shown below.



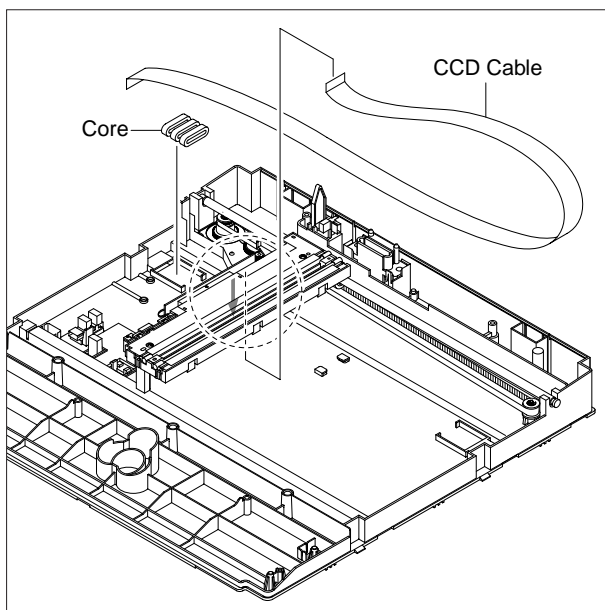
5. Remove the four screws securing the Scan Upper.



6. Release the six hooks securing the Scan Upper to the Scan Lower and remove it, as shown below.

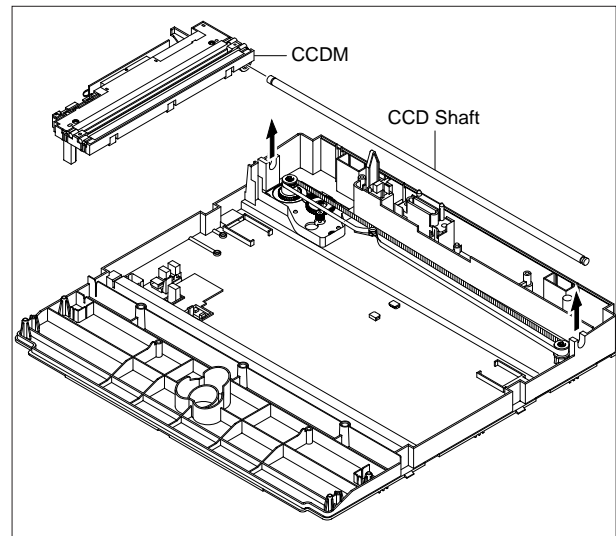


7. Remove the CCD Cable, as shown below.

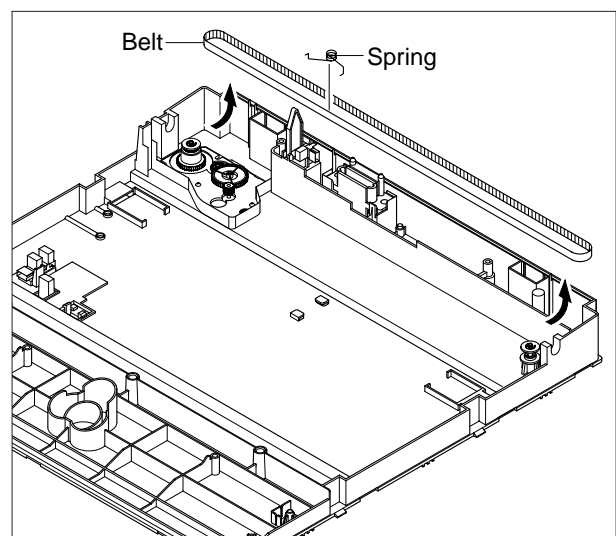


Notice: You should connector remove the CCD Cable vertically to avoid the CCD Cable pin damage.

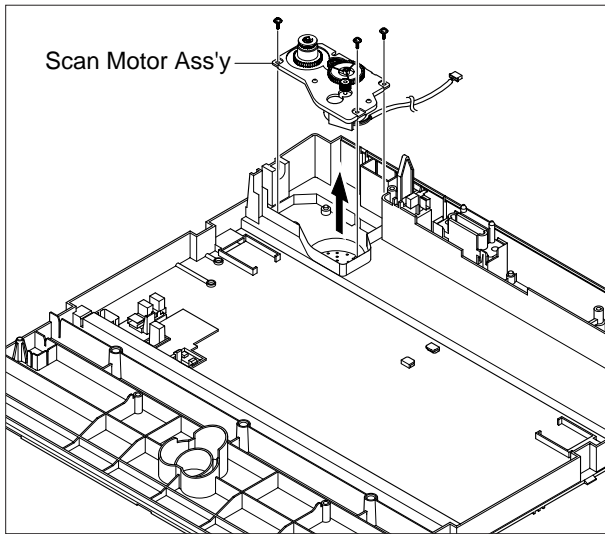
8. Pull up the CCD Shaft and take out the CCDM.



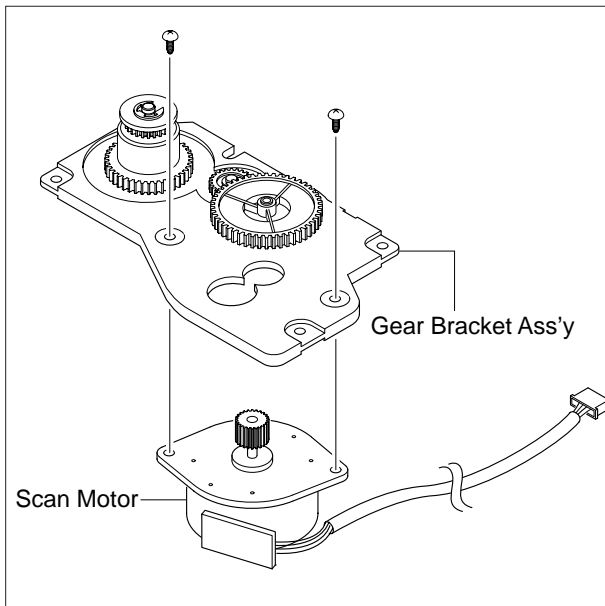
9. Squeeze the spring to release the tension in the Belt and lift from the pulleys, as shown below.



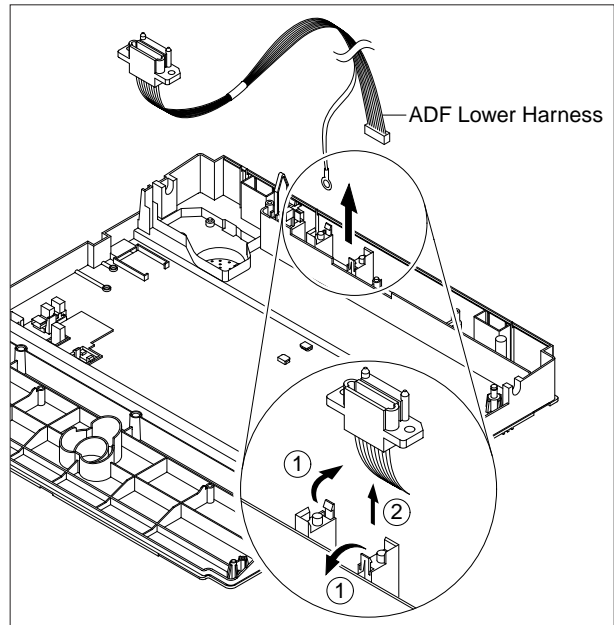
10. Remove the three screws securing the Scan Motor Ass'y and remove it.



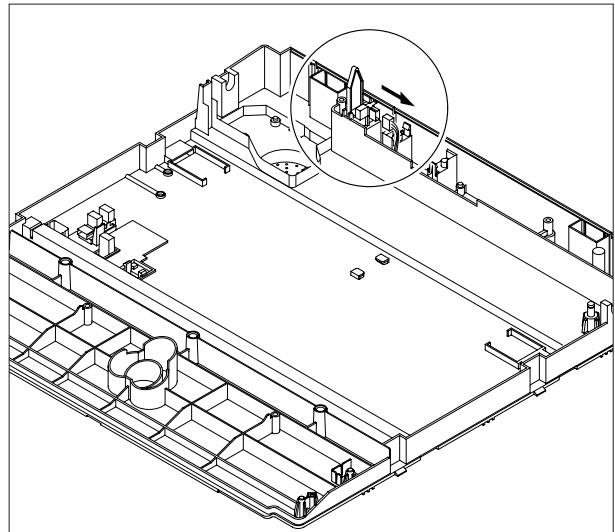
11. If necessary, remove the two screws securing the Scan Motor and remove it, as shown below.



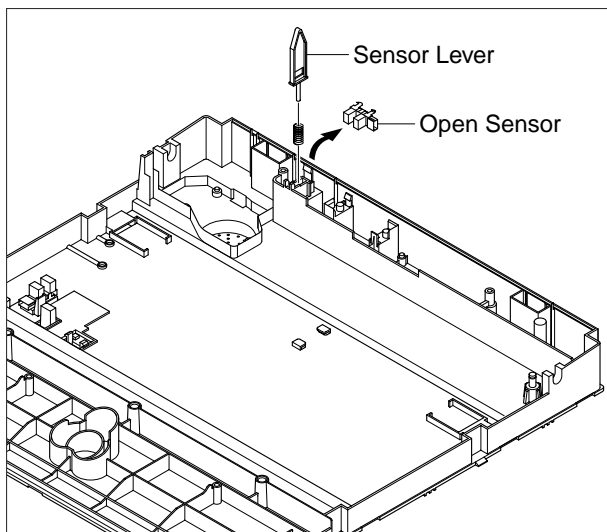
12. To remove the ADF Lower Harness, first unlatch the Hooks in the direction of arrow and then carefully release the ADF Lower Harness from the Scan Lower, as shown below.



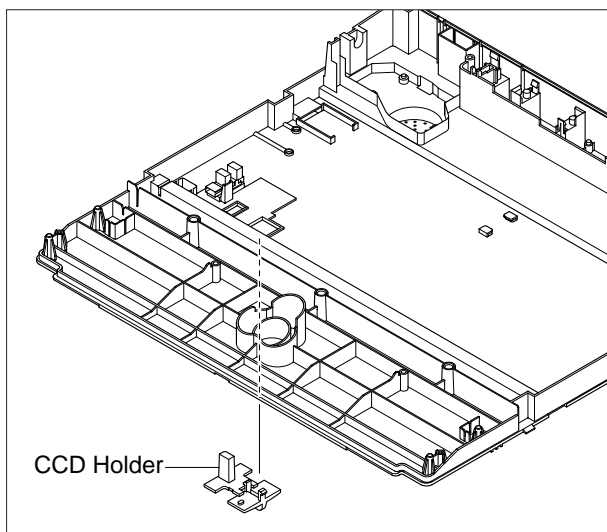
13. Unplug the connector from the Open Sensor Ass'y.



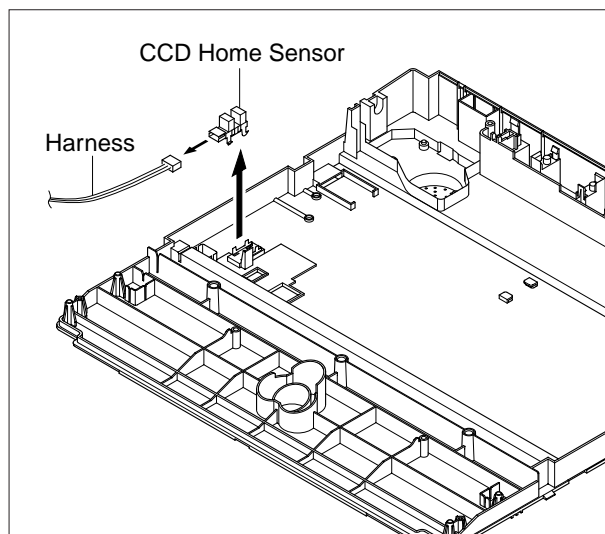
14. Unlatch the Open Sensor and remove it, as shown below.



15. Remove the CCD Holder.

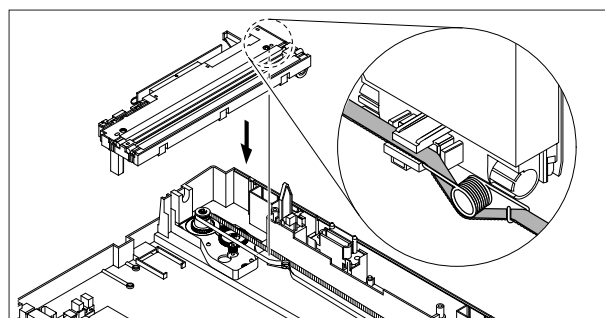


16. Unplug the Harness from the CCD Home Sensor and release the CCD Home Sensor, as shown below.



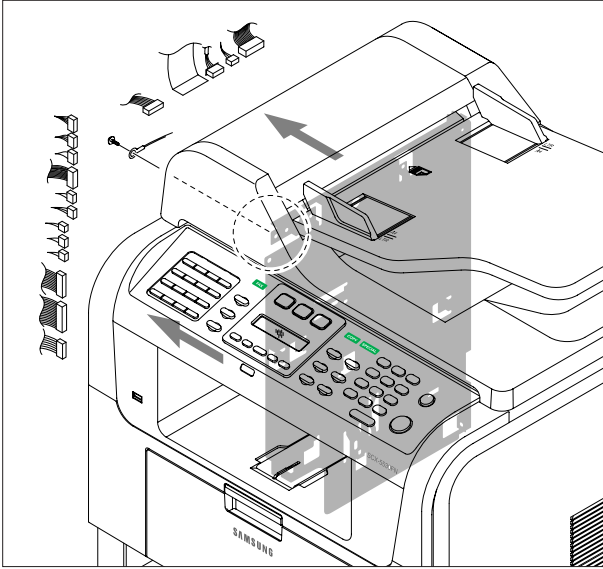
Caution : Reassembling CCDM

- 1) When refitting the Scanner Belt and Belt Spring take care to relocate the tension spring as close to the right side of the CCDM as is possible, as shown below.
- 2) When refitting the Scan Upper Cover take care to ensure that the Cover Open Switch is not trapped.

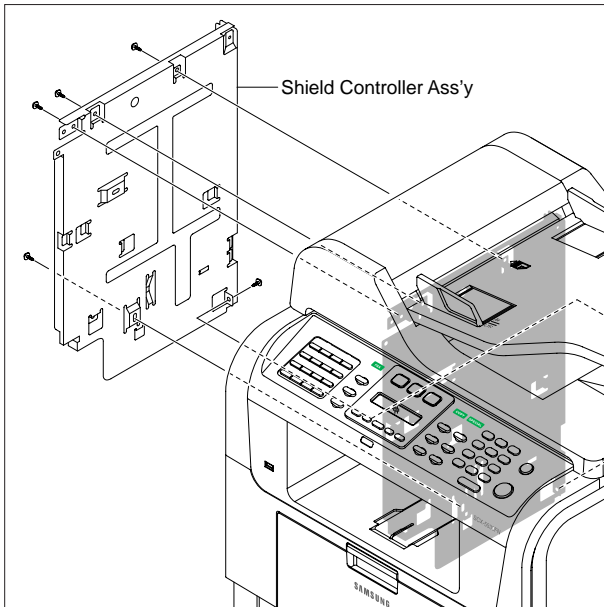


5.11 Shield Controller Ass'y

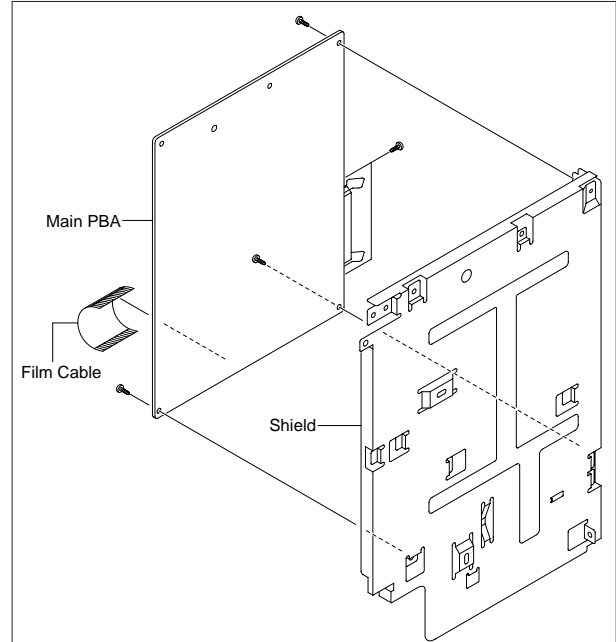
- Before you remove the Shield Controller Ass'y, you should remove:
 - Side Cover Left (Refer to 5.7.4)
- Unplug the all connectors and remove the one screw securing the Ground Cable.



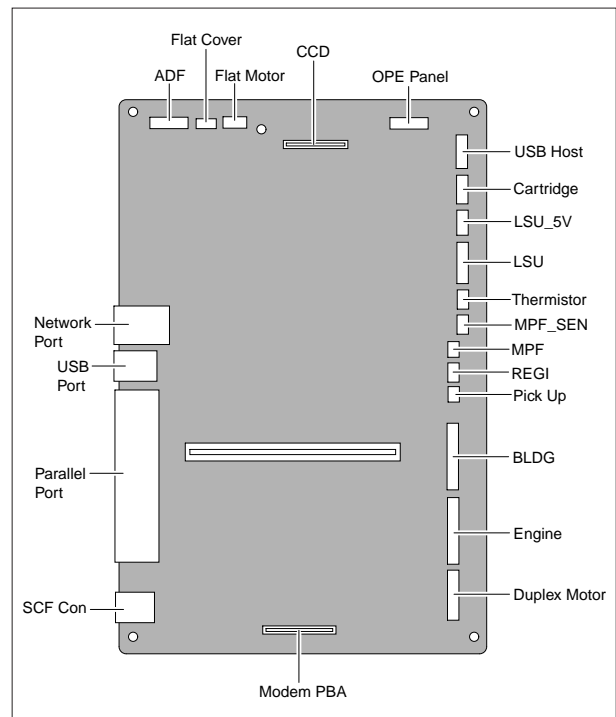
- Remove the five screws securing the Shield Controller Ass'y and remove it.



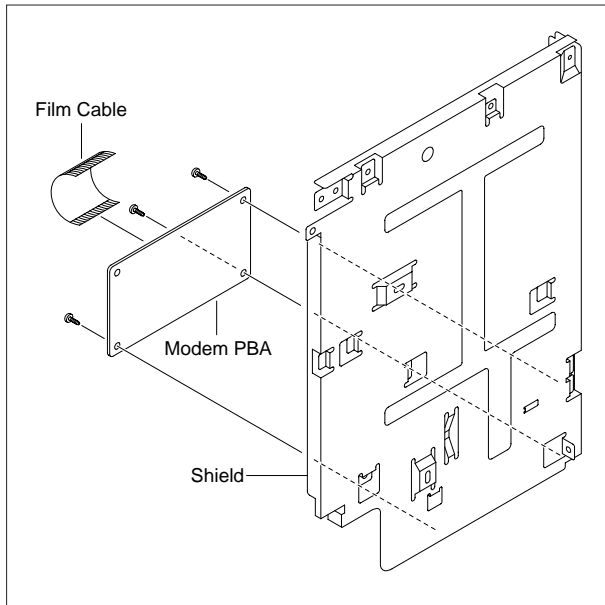
- Remove the five screws securing the Main PBA to the Shield and unplug the Film Cable and then remove the Main PBA.



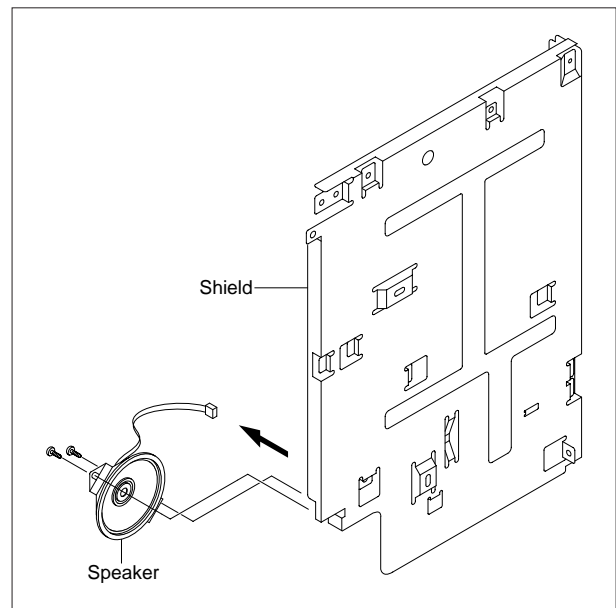
- The connectors are located, as shown below.



6. Remove the three screws securing the Modem PBA to the Shield and unplug the Film Cable and then remove the Modem PBA.

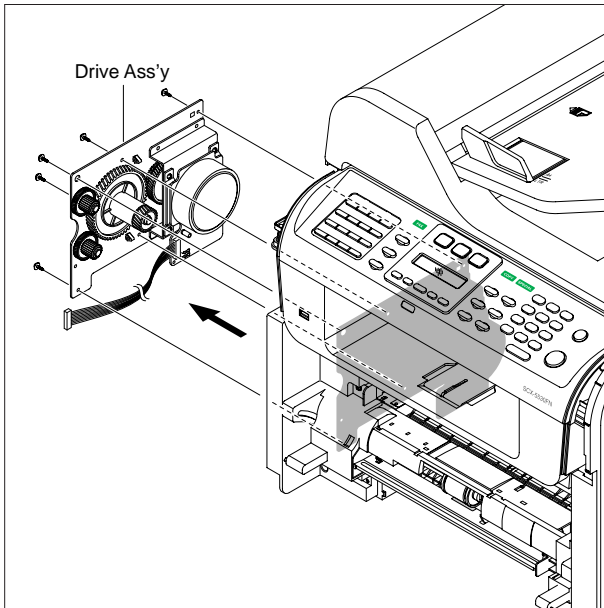


7. Remove the two screws securing the Speaker to the Shield and unplug the connector from the Modem PBA and then remove the Speaker.



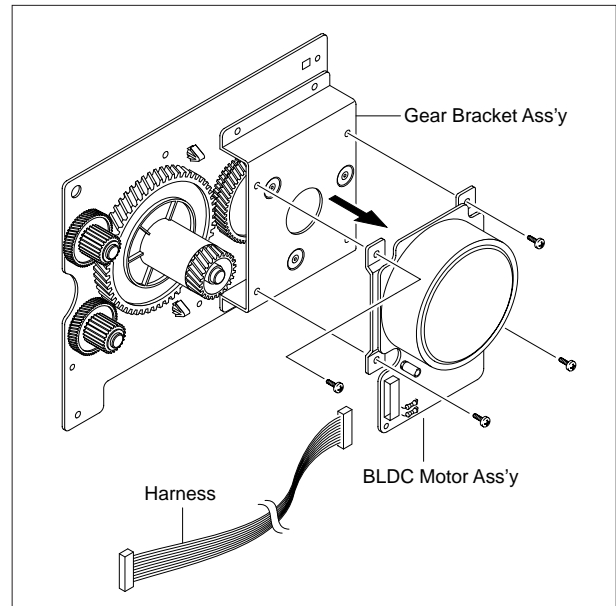
5.12 Drive Ass'y

- Before you remove the Drive Ass'y, you should remove:
 - Side Cover Left (Refer to 5.7.4)
 - Shield Controller Ass'y (Refer to 5.11)
- Remove the five screws securing the Drive Ass'y and remove it.



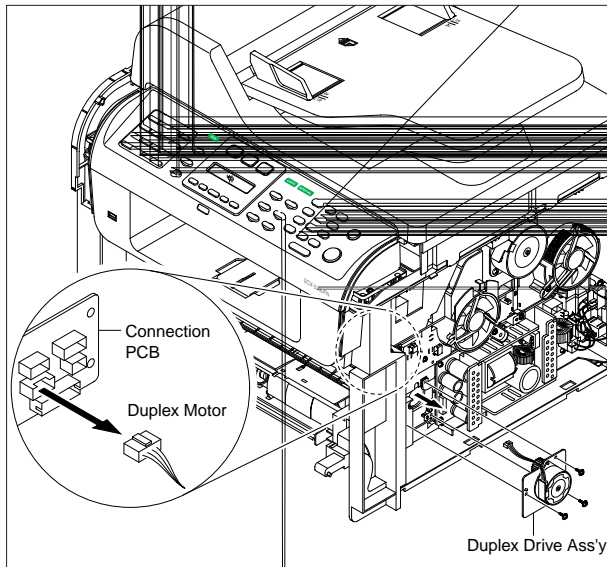
Notice : The six screws have numbers stamped into the Drive Ass'y base plate. When refitting the Drive Ass'y tighten the screws the order they are numbered. Only screws numbered 1 to 5 are fitted at this stage. Screw 6 is fitted when the Shield Controller Ass'y is refitted.

- If necessary, remove the four screws securing the BLDC Motor Ass'y and remove it.

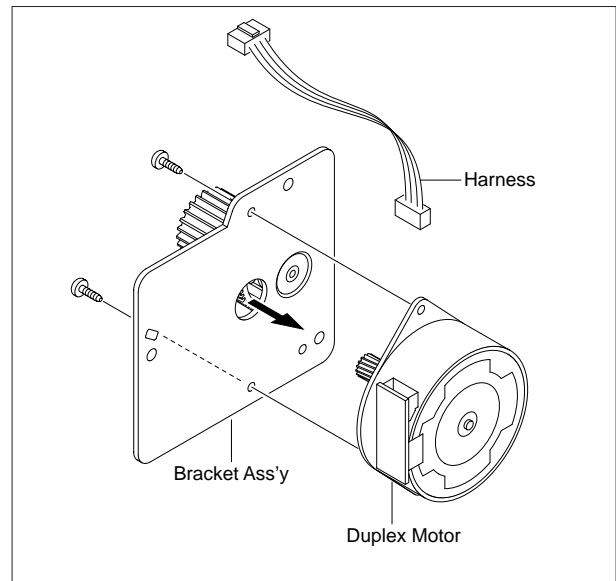


5.13 Duplex Drive Ass'y

1. Before you remove the Duplex Drive Ass'y, you should remove:
 - Side Cover Right (Refer to 5.7.3)
2. Unplug the connector from the Connection PCB and remove the three screws securing the Duplex Drive Unit and remove it.



3. If necessary, remove the two screws securing the Duplex Motor and remove it.

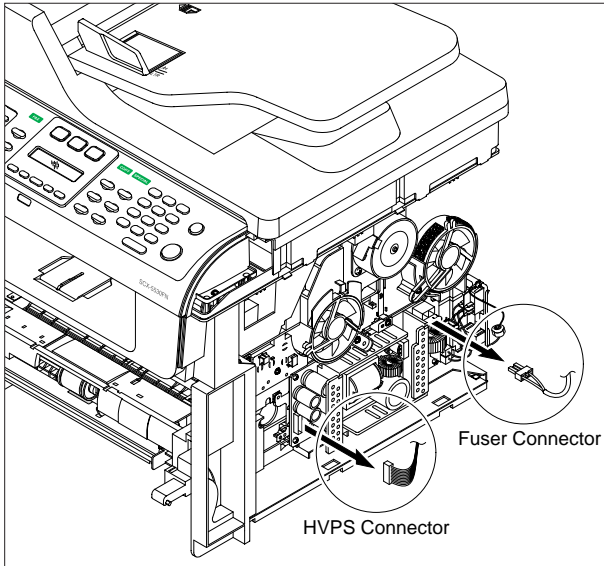


5.14 Shield SMPS Ass'y

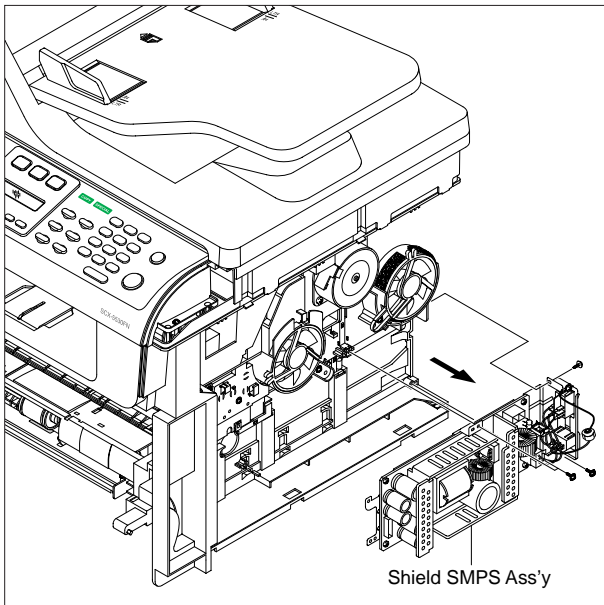
1. Before you remove the Shield SMPS Ass'y, you should remove:

- Side Cover Right (Refer to 5.7.3)
- Duplex Drive Ass'y (Refer to 5.13)

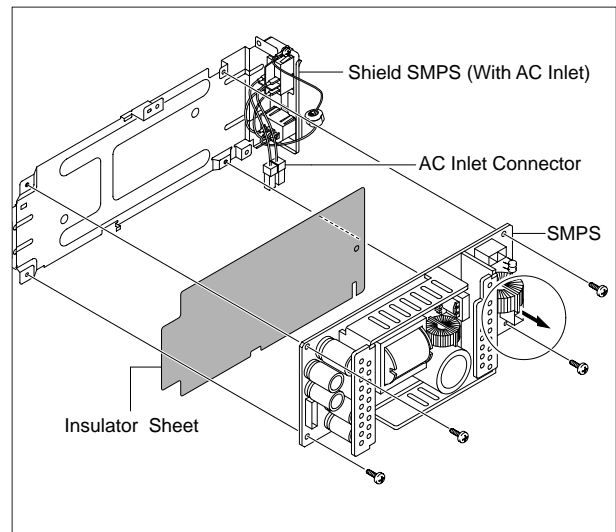
2. Unplug the two connectors (HVPS, Fuser).



3. Remove the three screws securing the Shield SMPS Ass'y and remove it.



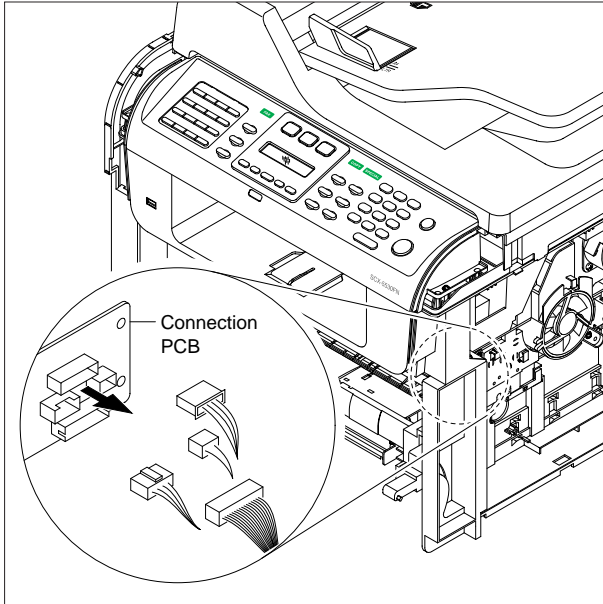
4. Unplug the connector (AC Inlet) and remove the four screws securing SMPS and remove it.



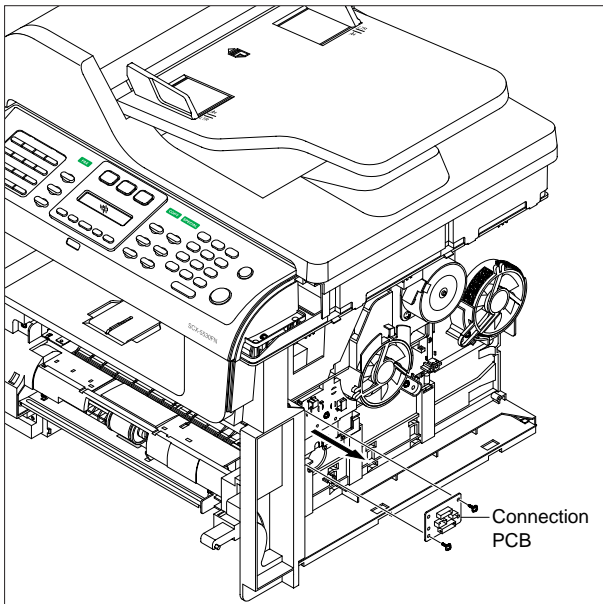
5.15 Connection PCB

1. Before you remove the Connection PCB, you should remove:
 - Side Cover Right (Refer to 5.7.3)

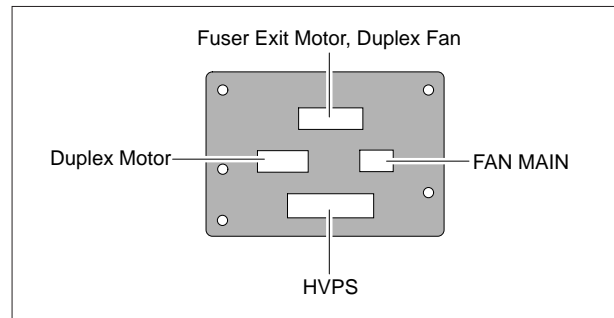
2. Unplug the all connectors.



3. Remove the two screws securing the Connection PCB and remove it.

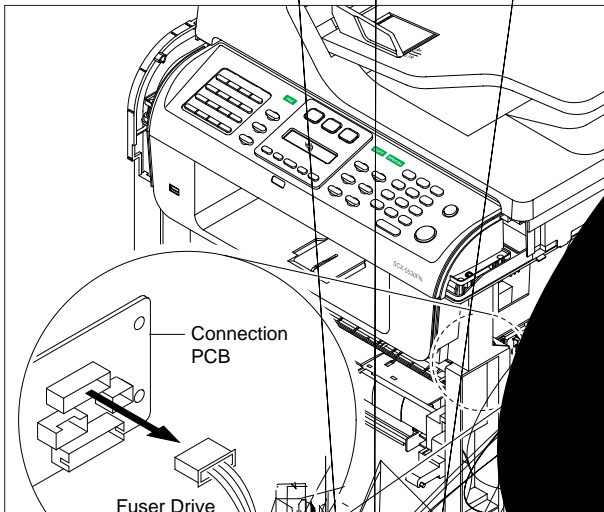


4. The connectors are located, as shown below.



1. Before you remove the Fuser Drive Ass'y, you should remove:
 - Side Cover Right (Refer to 5.7.3)

2. Unplug the connector from the Connection PCB.

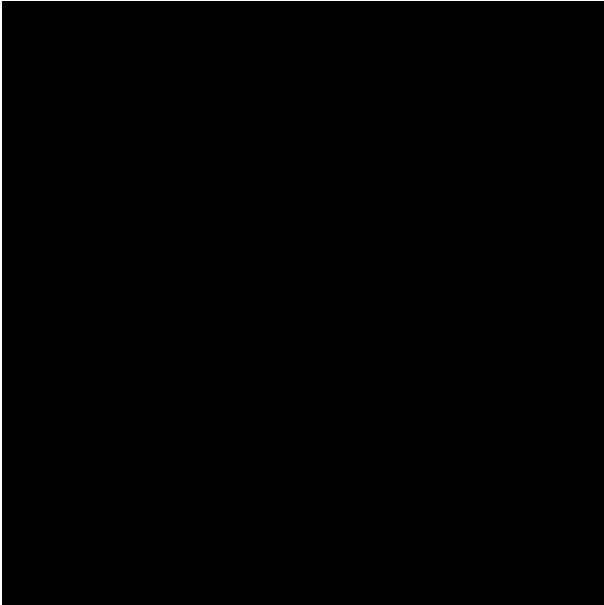


4. If necessary, remove the two screws securing the Step Motor and remove it.

Step-Moto

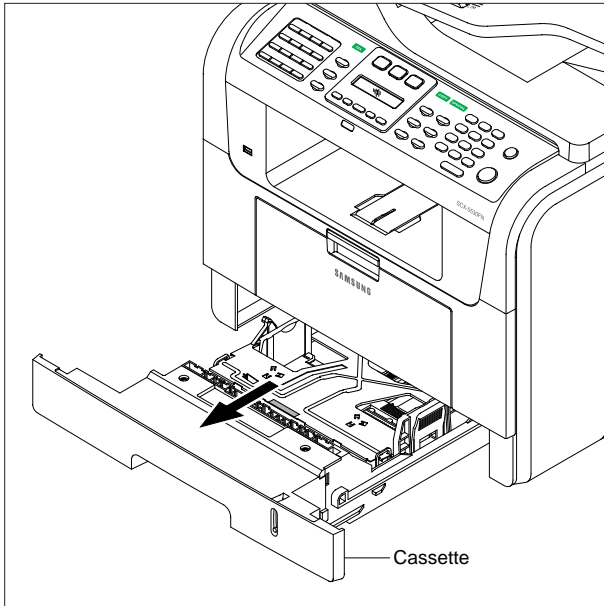
5.17 Fan

1. Before you remove the Fan, you should remove:
 - Side Cover Right (Refer to 5.7.3)
2. Unplug the two connectors from the Connection PCB, as shown below.
3. Remove the two screws securing the Fans and then pull the Fans (Main, Duplex).

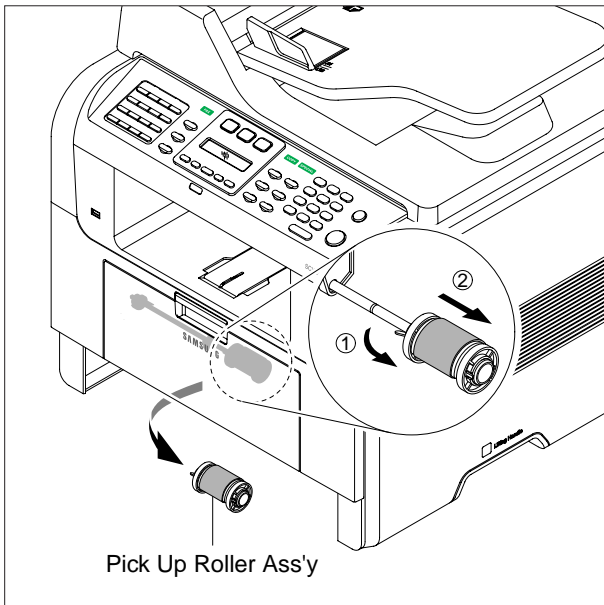


5.18 Pick Up Roller Ass'y

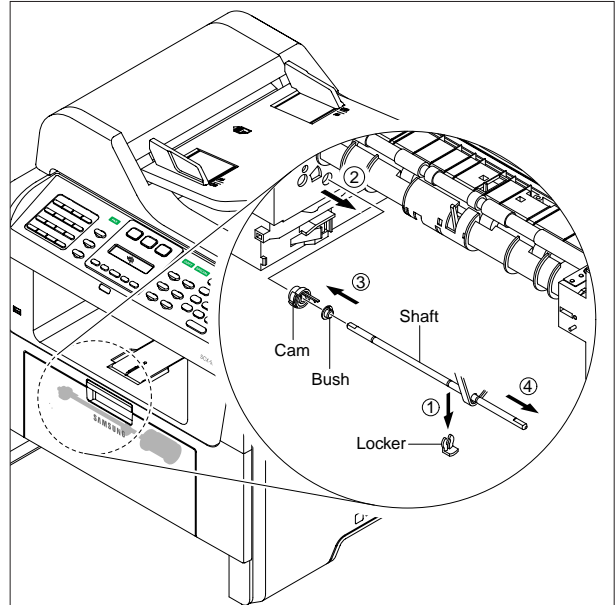
1. Take out the Cassette.



2. To remove the Pick Up Roller Ass'y, first lift the notch attached to the Pick Up Roller Ass'y from the Shaft, then slide the Pick Up Roller Ass'y from left to right and it will be released completely, as shown below.



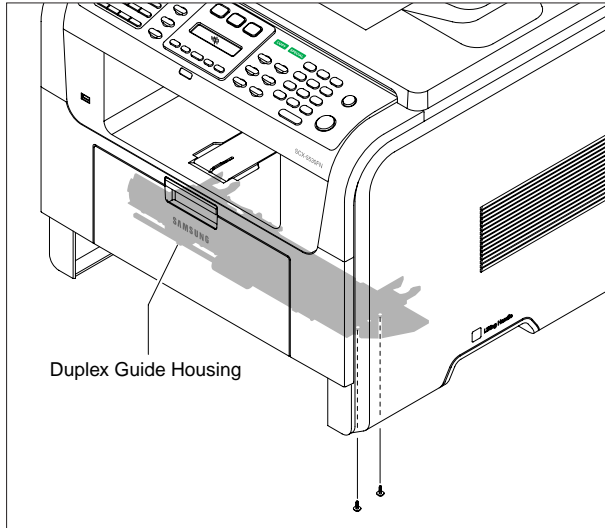
3. To remove the Shaft, first release the locker and slide the Shaft from left to right, then lift the notch attached to the Cam so that it's released from the Shaft. Then release the Bush from the Shaft and remove the Shaft from the Duplex Guide Housing, as shown below.



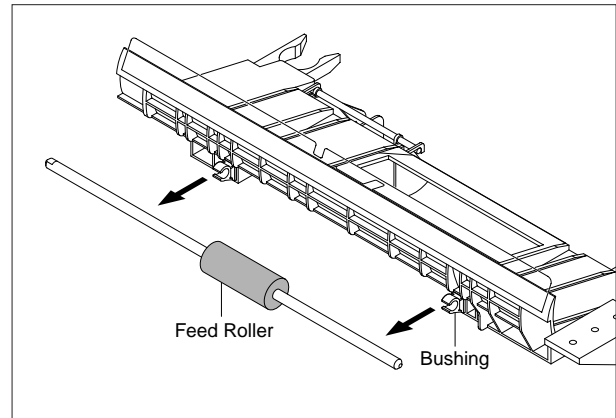
5.19 Duplex Guide Housing (With Feed Roller)

1. Before you remove the Duplex Guide Housing, you should remove:
 - Pick Up Roller Ass'y (Refer to 5.18)

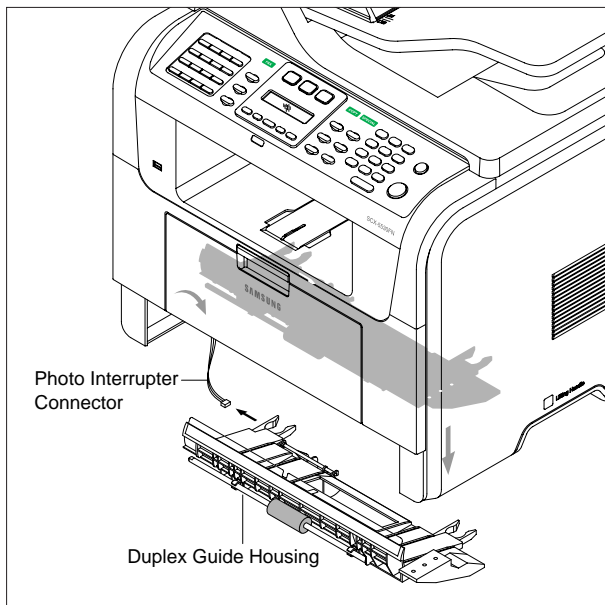
2. Remove the two screws securing the Duplex Guide Housing.



4. Pull the Feed Roller from the Bushing.

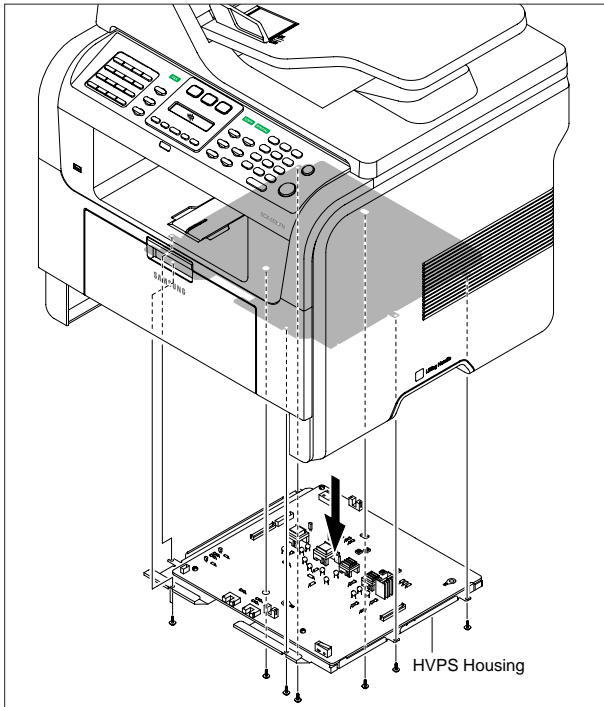


3. Unplug the one connector (Photo Interrupter) and remove the Duplex Guide Housing (with Feed Roller), as shown below.

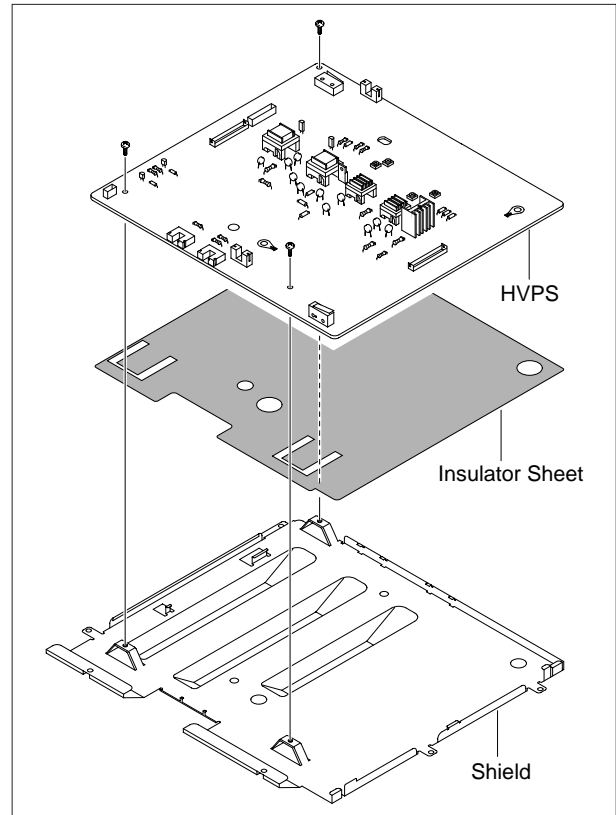


5.20 HVPS Housing

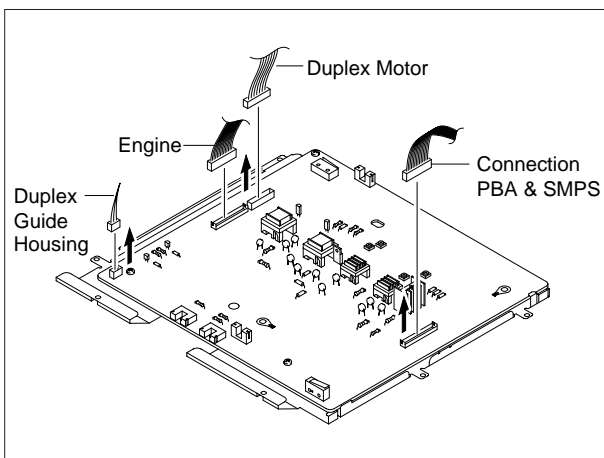
- Before you remove the HVPS Housing, you should remove:
 - Duplex Drive Ass'y (Refer to 5.13)
 - Unplug the HVPS Connector (Refer to 5.14)
 - Pick Up Roller Ass'y (Refer to 5.18)
 - Duplex Guide Housing (Refer to 5.19)
- Remove the eight screws securing the HVPS Housing, as shown below.



- If necessary, remove the three screws securing the HVPS and remove it.

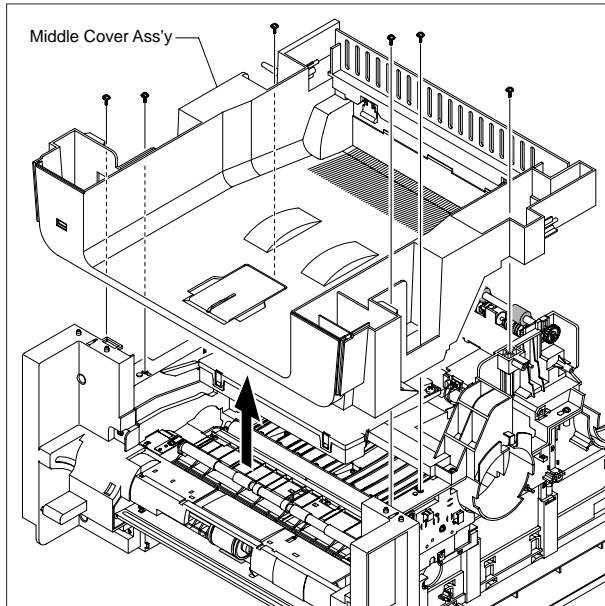


- Unplug the connector for connector PBA and SMPS first. Unplug the other Connections.

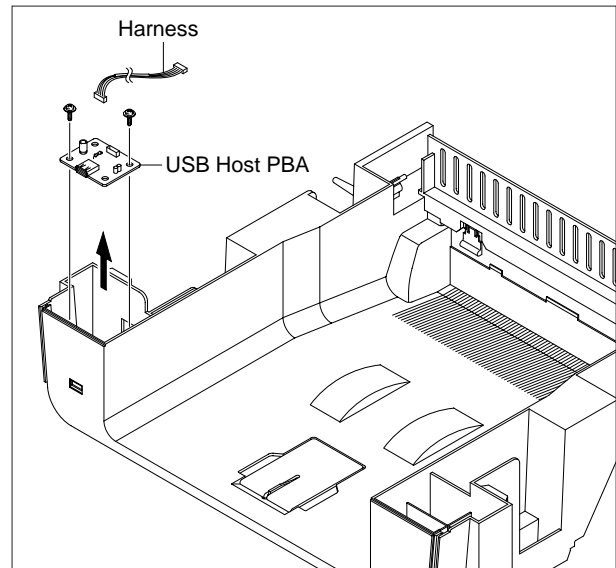


5.21 Middle Cover Ass'y

- Before you remove the Middle Cover Ass'y, you should remove:
 - Side Cover (Left, Right) (Refer to 5.7)
 - Scanner Ass'y (Refer to 5.10)
 - Shield Controller Ass'y (Refer to 5.11)
- Remove the six screws securing the Middle Cover Ass'y and remove it.



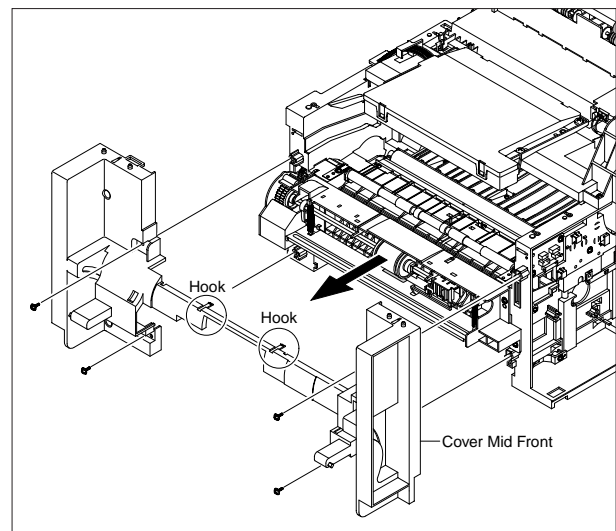
- If necessary, remove the two screws securing the USB Host PBA and remove it.



5.22 Cover Mid Front

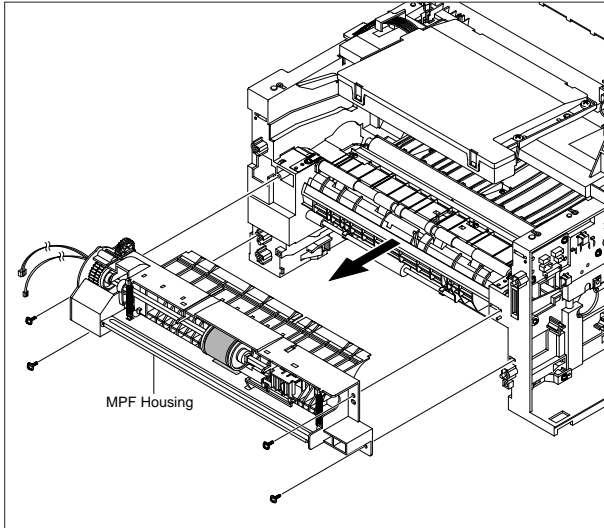
- Before you remove the Cover Mid Front, you should remove:
 - Middle Cover Ass'y (Refer to 5.21)

- Remove the four screws securing the Cover Mid Front and release two hooks in the center. This cover is fragile take care when removing it.

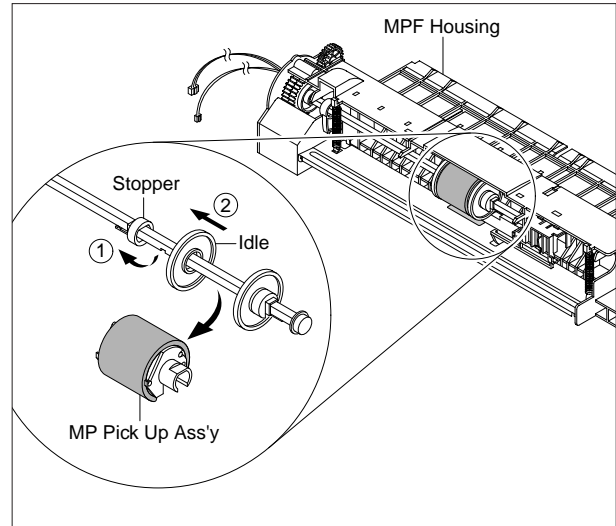


5.23 MPF Housing

- Before you remove the MPF Housing, you should remove:
- Cover Mid Front (Refer to 5.22)
- Remove the four screws securing the MPF Housing and remove it.



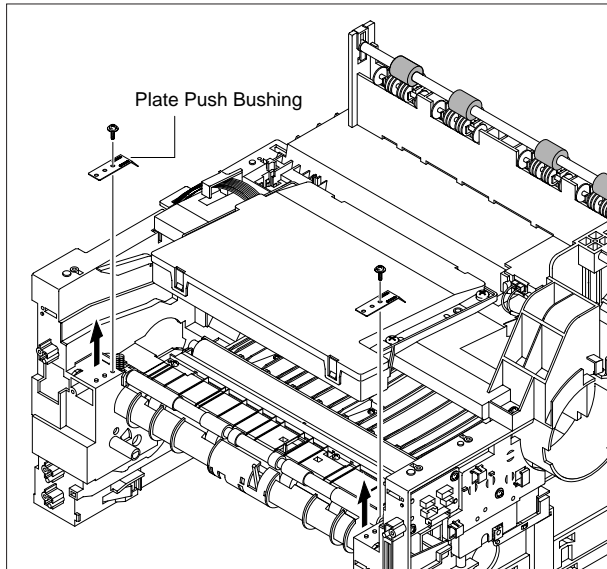
- To remove the MP Pick Up Ass'y, first lift the notch attached to the left side Stopper so that it's slide the right to left from the Shaft, then left side Idle slid the right to left from the Shaft and take out the MP Pick Up Ass'y, as shown below.



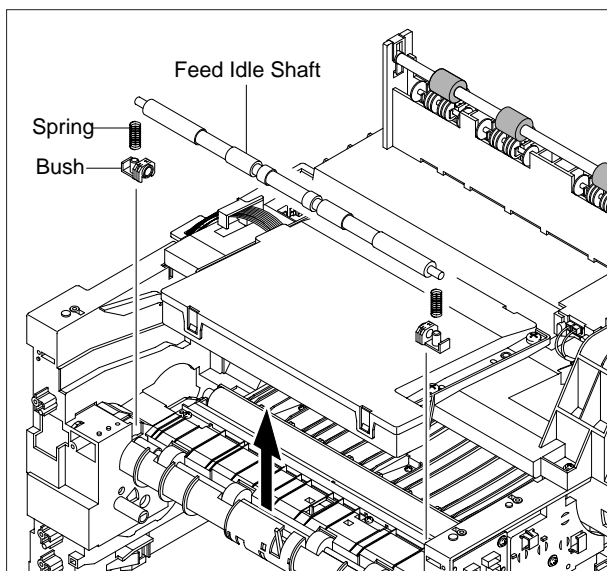
Notice : Do not grab the rubber part of the Feed1 Roller, it may cause a malfunction due to a foreign object.

5.24 Feed Roller Parts

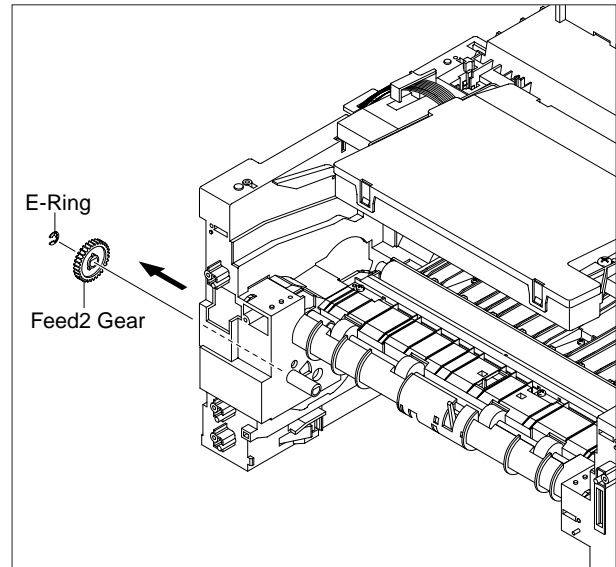
- Before you remove the Feed Roller Parts, you should remove:
 - Pick Up Roller Ass'y (Refer to 5.18)
 - Duplex Guide Housing (Refer to 5.19)
 - Middle Cover Ass'y (Refer to 5.21)
 - MPF Housing (Refer to 5.23)
- Remove the two screws securing the both side of the Plate Push Bushing and then remove the Guides.



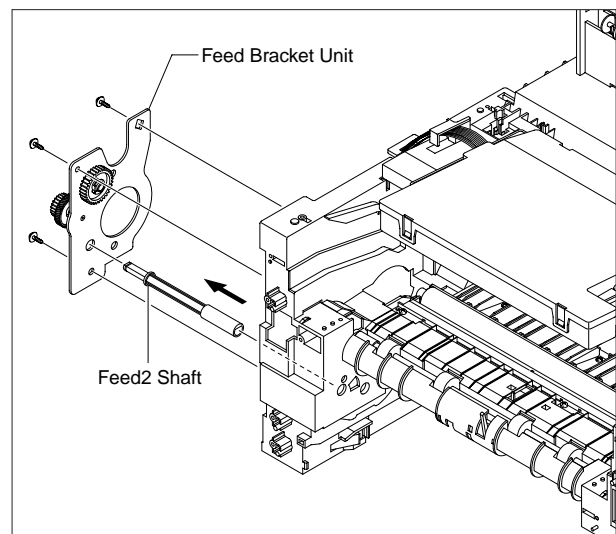
- Pull up the Feed Idle Shaft and the Bushs (with Spring).



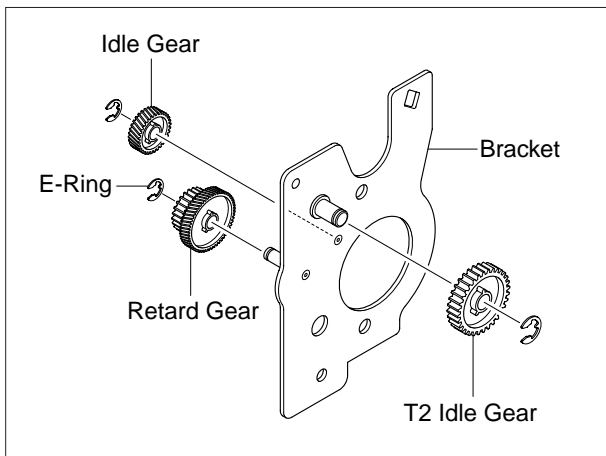
- Release the E-Ring securing the Feed2 Gear and remove it.



- Remove the three screws securing the Feed Bracket Unit and then remove the Feed Bracket Unit and Feed2 Shaft.

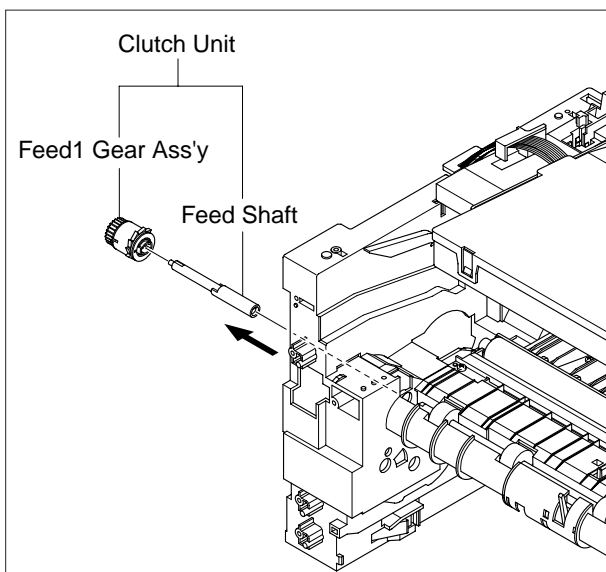


6. If necessary, release the three E-Rings securing the Gears (T2 Idle, Retard, Idle) and then remove the Gears from the Feed Bracket, as shown below.

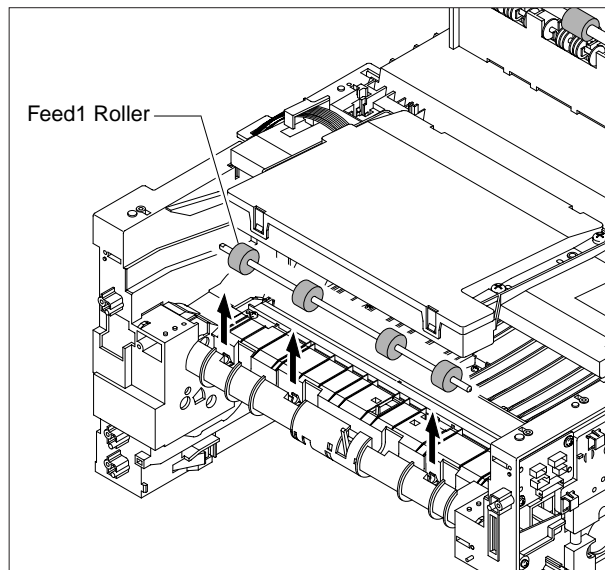


Notice : Be aware of the E-Rings to ensure they are not lost.

7. Remove the Clutch Unit, as shown below.



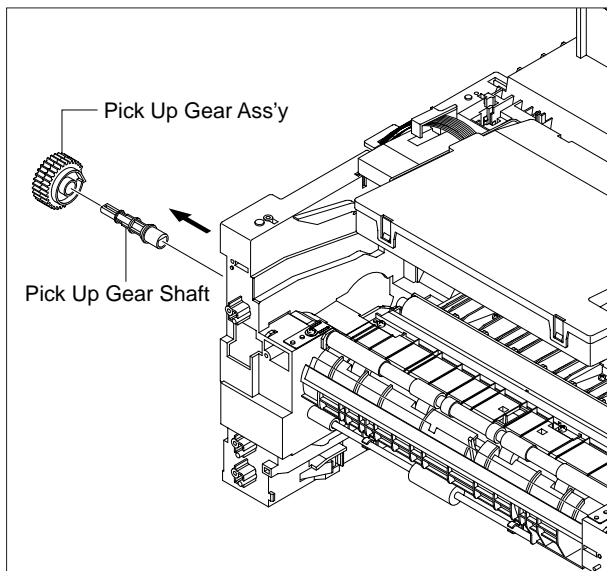
8. Pull up the Feed1 Roller from the Bushing, as shown below.



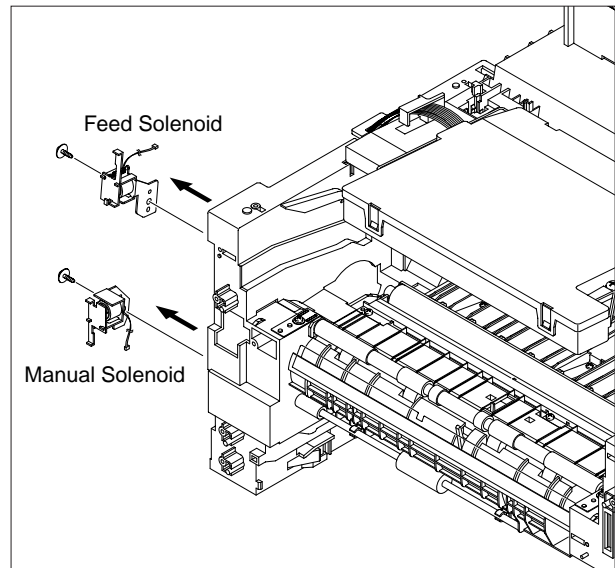
Notice : Do not grab the rubber part of the Feed1 Roller, it may cause a malfunction due to a foreign object.

5.25 Pick Up Gear Ass'y & Solenoids

- Before you remove the Pick Up Gear Ass'y & Solenoids, you should remove:
 - Duplex Guide Housing (Refer to 5.19)
 - Feed Bracket Unit (Refer to 5.24.5)
- Release the Pick Up Gear Ass'y and Pick Up Gear Shaft, as shown below.

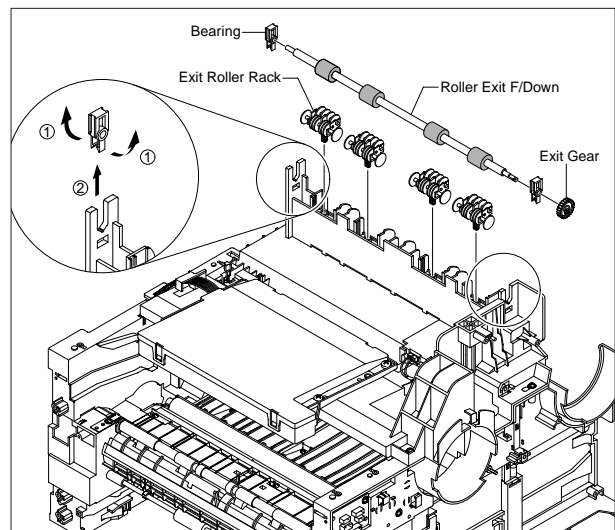


- Remove the two screws securing the Manual Solenoid and Feed Solenoid and then remove the Solenoids, as shown below.



5.26 Exit Roller

- Before you remove the Exit Roller, you should remove:
 - Fuser Drive Ass'y (Refer to 5.16)
 - Middle Cover Ass'y (Refer to 5.21)
- Remove the Exit Gear, and release the Bearing at one end then remove the Roller Exit F/Down and Exit Roller Rack, as shown below.

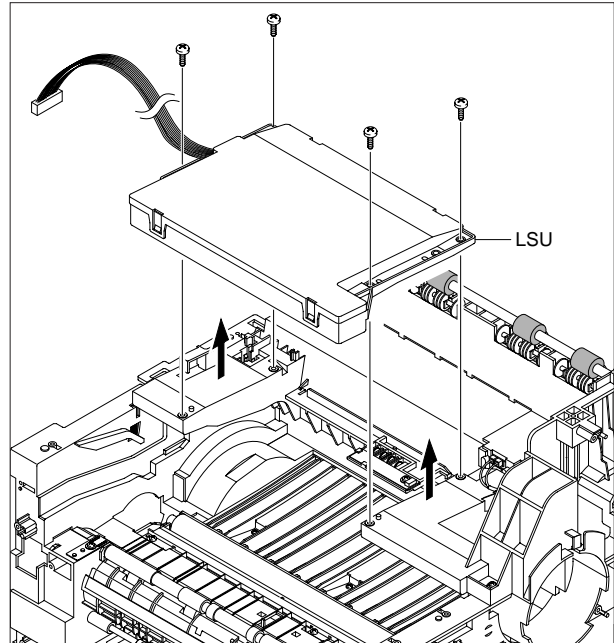


Notice : Do not grab the rubber part of the Feed1 Roller, it may cause a malfunction due to a foreign object.

5.27 LSU

1. Before you remove the LSU, you should remove:
 - Middle Cover Ass'y (Refer to 5.21)

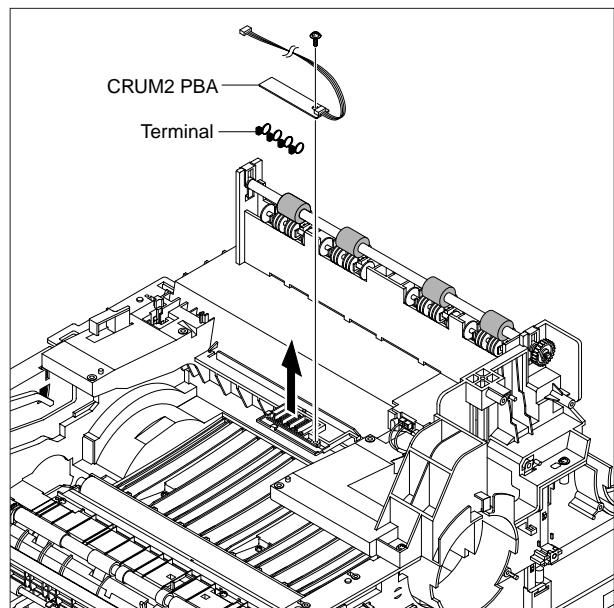
2. Remove the four screws securing the LSU and remove it.



5.28 CRUM2 PBA

1. Before you remove the CRUM2 PBA, you should remove:
 - Middle Cover Ass'y (Refer to 5.21)
 - LSU (Refer to 5.27)

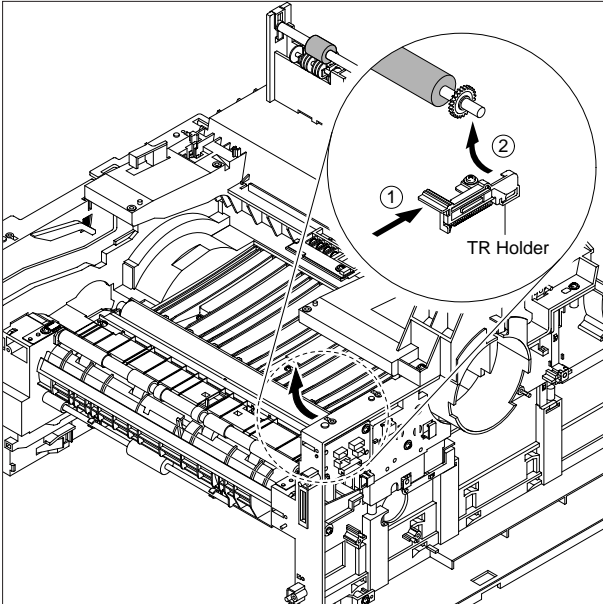
2. Remove the one screw securing the CRUM2 PBA and remove it and then release the four Terminals, as shown below.



Notice : Be aware of the Terminals to ensure they are not lost.

5.29 Transfer Roller Parts

1. To remove the Transfer Roller, first pull the TR Holder and then take out the Transfer Roller, as shown below.



Notice : Do not grab the rubber part of the Transfer Roller, it may cause a malfunction due to a foreign object. Hold the both side of the Transfer Roller when replacing it.