

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.

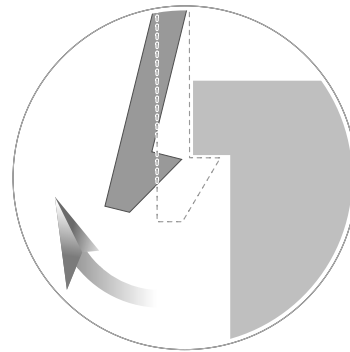
Whenever servicing the machine, you must perform as follows:

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.

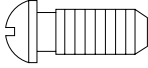
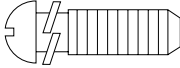
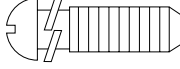
Releasing Plastic Latches

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.

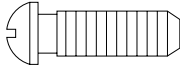
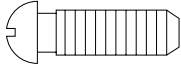


5.1.1 Screws used in the printer

No.	SEC_Code	Location	Description & Specification	QTY
S1 (BH Short) 	6001-000130	HDD	SCREW-MACHINE:BH,+,M3L6,ZPC(WHT), SWRCH 18A,-,-	4
S2 (~WH Long) 	6002-000440	GND EXIT ROLL	SCREW-TAPPING:PWH,+, -,2M3L8,ZPC(BLK), SWRCH 18A,-	1
		SENSOR	SCREW-TAPPING:PWH,+, -,2M3L8,ZPC(BLK), SWRCH 18A,-	1
S3 (~WH Long) 	6003-000196	BRACKET_JOINT+MAIN FRAME	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		FAN-DC INVERTER	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		GROUND_OPE SIDE	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		PBA SUB-AIR_TMP	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		PLATE-P_FEED UPPER	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		STOPPER_M FAN80	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		UNIT SUPPORT SCAN	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	4
		BRACKET-P_CHANNEL	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		BRACKET-P_SUP SCAN F	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	3
		CBF HARNESS_HVPS(3P	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		ELA HOU-CVR OPN	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		ELA HOU-TERMINAL	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	4
		FAN-DC LSU	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		FRAME-M_COVER REAR	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		GROUND-P_OPC CONTACT	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1
		HOLDER-M_DEVE CONN	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	4
		HOLDER-M_FUSER TERM	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		HOLDER-P_FUSER	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	2
		MEA UNIT-DAMPER,L	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	4
		MEA UNIT-F DR	SCREW-TAPTITE:PWH,+,B,M3L10NI PLT, SWRCH 18A	1

No.	SEC_Code	Location	Description & Specification	QTY
		MEA UNIT-REGI F	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		MEA UNIT-REGI R	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		HOLDER_CST_R	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		HOLDER_FEED_MP	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	1
		UNIT MP	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	4
		UNIT_BASE_PLATE_R	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	5
		UNIT_HOLDER_PAD	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	1
		BRACKET_ARM_FR	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	1
		GUIDE_PICKUP_BASE	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	3
		SPEAKER	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		HOUSING_BASE_LEFT:3	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	3
		PBA DADF	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		COVER-EXIT BRK	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		COVER-EXIT REAR	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
		COVER-FRONT ASSY	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	4
		COVER-PANEL MFP	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	1
		COVER-UPPER ASSY	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	5
		DRIVE-FUSER	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	4
		DRIVE-MAIN	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	7
		EXIT-ASSY	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	4
		LSU GND	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	1
		OPE ASSY	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	3
		SIDE-COVER ASSY	SCREW-TAPTITE: PWH,+,B,M3,L 10NI PLT, SWRCH 18A	2
S4 (BH Short) 	6003-000269	BASE FRAME+MANFRAME	SCREW-TAPTITE: BH, +,-,S,M3,L6,ZPC(YEL), SWRCH 18A, -	5
		CAP_INLET	SCREW-TAPTITE: BH, +,-,S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		GROUND_FUSER	SCREW-TAPTITE: BH, +,-,S,M3,L6,ZPC(YEL), SWRCH 18A, -	1

No.	SEC_Code	Location	Description & Specification	QTY
		GROUNDND_DRV	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		UNIT-SUPPORT	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	7
		VARIATOR	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		BASE PLATE_R	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		ELA FEED UPPER DP	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		GUIDE-P_SHIELD SMPS	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		GUIDE_FEED_UPPER	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	3
		HOUS_CST_SENSOR	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	3
		BRACKET_HANDLE_	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		BRACKET_HANDLE_L	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		GROUND_TOP	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		HOLDER_CST	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		BRACKET-P_JOINT BASE	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		HOUS_PICKUP	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	4
		PLATE_BEAM_BASE	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		CBF_HARNESS_GND	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		GROUND-P_SPRING SCAN	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		GUIDE_SHIELD_SMPS	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		PLATE_FINISHER_REAR	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	4
		SHIELD_MAIN LOWER	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	7
		(dadf motor)	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		duplex motor	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	2
		WHITE BAR	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		COVER-M BARRIER	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	1
		HVPS	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	4
		IH + SHIELD ASSY	SCREW-TAPTITE:BH, +, -, S,M3,L6,ZPC(YEL), SWRCH 18A, -	5

No.	SEC_Code	Location	Description & Specification	QT'y
		IH ASSY	SCREW-TAPTITE: BH, +, -, S, M3, L6, ZPC (YEL), SWRCH 18A, -	1
		MAIN BD	SCREW-TAPTITE: BH, +, -, S, M3, L6, ZPC (YEL), SWRCH 18A, -	5
		SMPS ASSY	SCREW-TAPTITE: BH, +, -, S, M3, L6, ZPC (YEL), SWRCH 18A, -	1
S5 (BH Long) 	6003-001256	PLATE-P_FINISH F	SCREW-TAPTITE: BH, +, B, M4, L 10, NI PLT, SWRCH 18A	2
		COVER-EXIT- BOTTOM	SCREW-TAPTITE: BH, +, B, M4, L 10, NI PLT, SWRCH 18A	2
		LSU ASSY	SCREW-TAPTITE: BH, +, B, M4, L 10, NI PLT, SWRCH 18A	4
		REAR COVER	SCREW-TAPTITE: BH, +, B, M4, L 10, NI PLT, SWRCH 18A	6
		SCAN-ASSY	SCREW-TAPTITE: BH, +, B, M4, L 10, NI PLT, SWRCH 18A	7
S6 (PH Long) 	6006-001078	SMPS	SCREW-TAPTITE: WSP, PH, +, M3, L 10, ZPC (YEL), SWRCH 18A	4

5.2 Customer Replaceable Units

There are 3 replaceable Customer Replaceable Units (CRUs) on the machine:

- **Toner Cartridge**
- **Drum Cartridge**
- **Staples**
- **Fuser Unit**

The machine will display a message on the touch screen when any of the above need to be reordered. This message is a warning that the unit is nearing the end of its life. Only replace the unit when a message actually instructs you to do so.

To replace a CRU, follow the instructions on the User Interface or refer to the relevant sections below.

CAUTION: When replacing consumables, DO NOT remove the covers or guards that are fastened with screws.



You cannot maintain or service any of the parts that are behind these covers and guards. DO NOT attempt any maintenance procedure unless specifically described in the documentation supplied with your machine.

5.2.1 Toner Cartridge

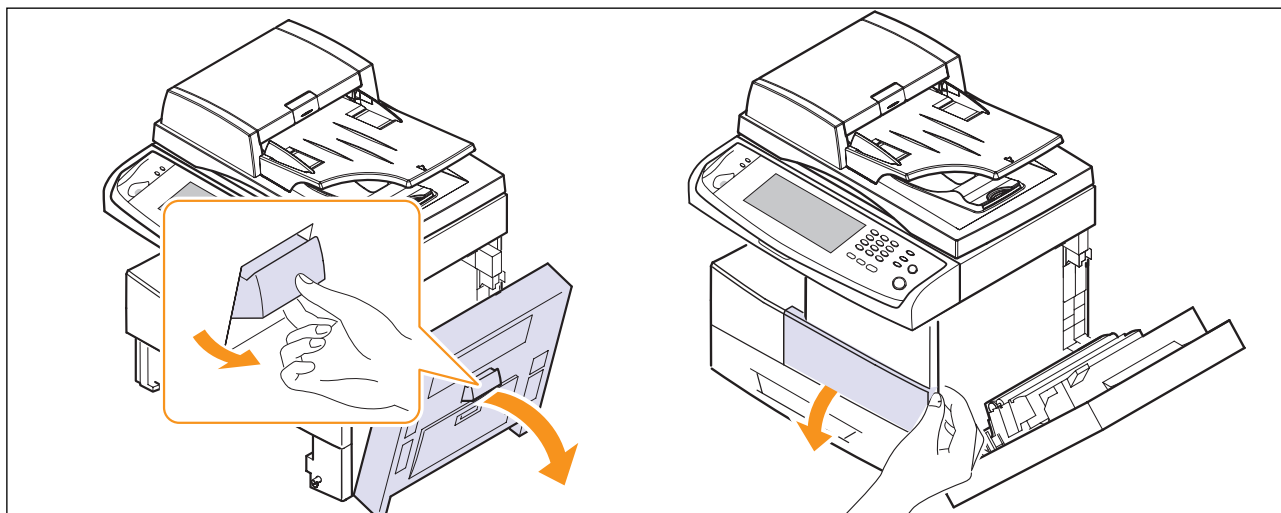
This procedure shows you how to remove a used toner cartridge and replace it with a new toner cartridge.

New toner cartridges have a capacity of approximately 20,000 images with an average area coverage of ISO19752 Std.. The machine will indicate the percentage of toner used and the number of days remaining. When the notification message is enabled, the machine will tell you when you will need to order a new cartridge and when to fit it.

If the feature is enabled, a message will appear on the display screen advising you to replace the toner cartridge. If you want to replace the toner cartridge now, open the front door. The instructions on the screen will tell you how to fit a new cartridge.

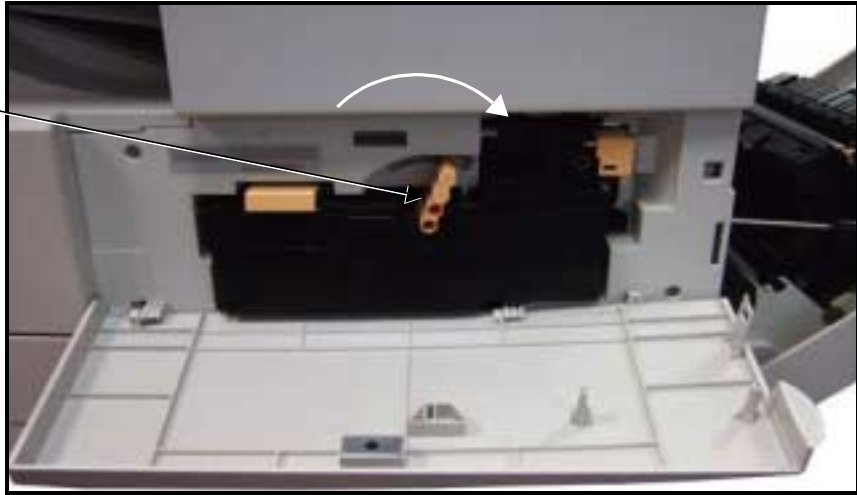
If you do not want to replace the toner cartridge now you can select the Abort button. The machine will continue to operate but will NOT make copies or prints.

1. Open the right side cover



2. Open the front cover.
3. Turn the locking lever clockwise

Locking lever



4. Lift the latch to release the toner cartridge and remove the used toner cartridge.

Latch



The instructions that are packed with the new toner cartridge will tell you how to dispose of the used toner cartridge.

⚠ WARNING: Only install the correct samsung Toner Cartridge in the machine.

5. Before unpacking the new toner cartridge, shake well to distribute the toner. Remove from packaging.

6. To fit the new toner cartridge, slide the top of the cartridge into the grooves at the top of the cartridge slot.

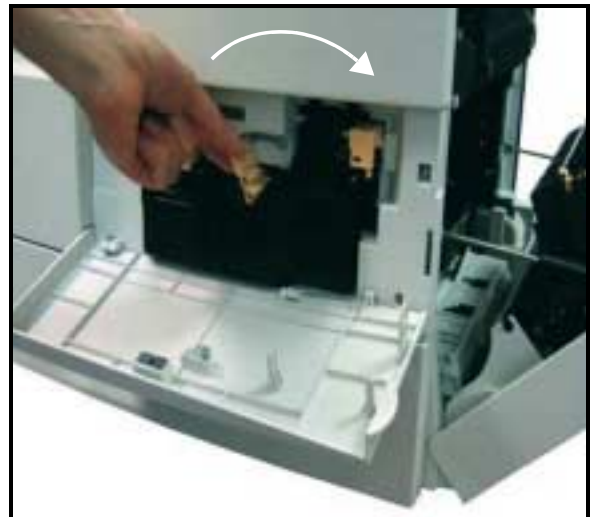


7. Turn the locking lever counter-clockwise.

8. Close the front cover.

9. Close the right side door.

10. Press the Confirm button on the machine display.



i If after fitting a new toner cartridge the front door will not close, check that the toner cartridge is positioned and latched correctly.

If you have replaced the toner cartridge as a result of a "Replace the Toner Cartridge" message on the machine display, the machine will assume that you have fitted a new cartridge and reset the toner usage counters and messages.

If, however, you have fitted a new toner cartridge without being instructed to do so by the machine display, the toner usage counters will need to be reset manually. This is done in the Access tools mode using the Supplies Management - Toner Cartridge Re-order Notification feature.

5.2.2 Replacing the Drum Cartridge

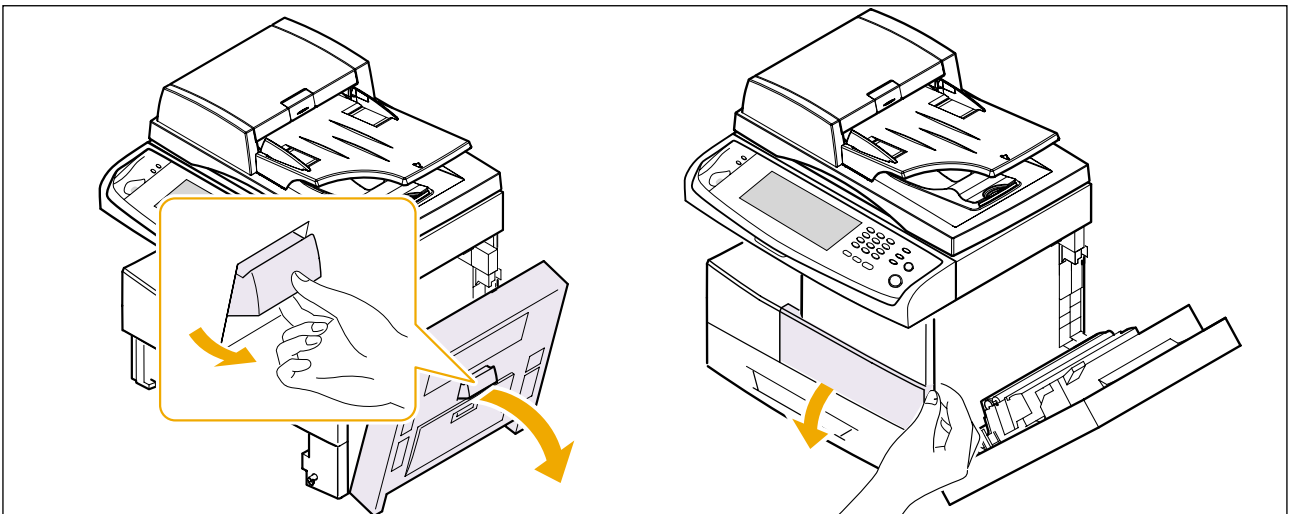
This procedure shows you how to remove a used Drum Cartridge and replace it with a new one.

Depending on the type of Drum Cartridge, approximately 60,000 images are provided. The machine will tell you when you need to order a new cartridge and when to replace the cartridge.

The Drum Cartridge can be recycled so please follow the disposal instructions you receive with the new items.

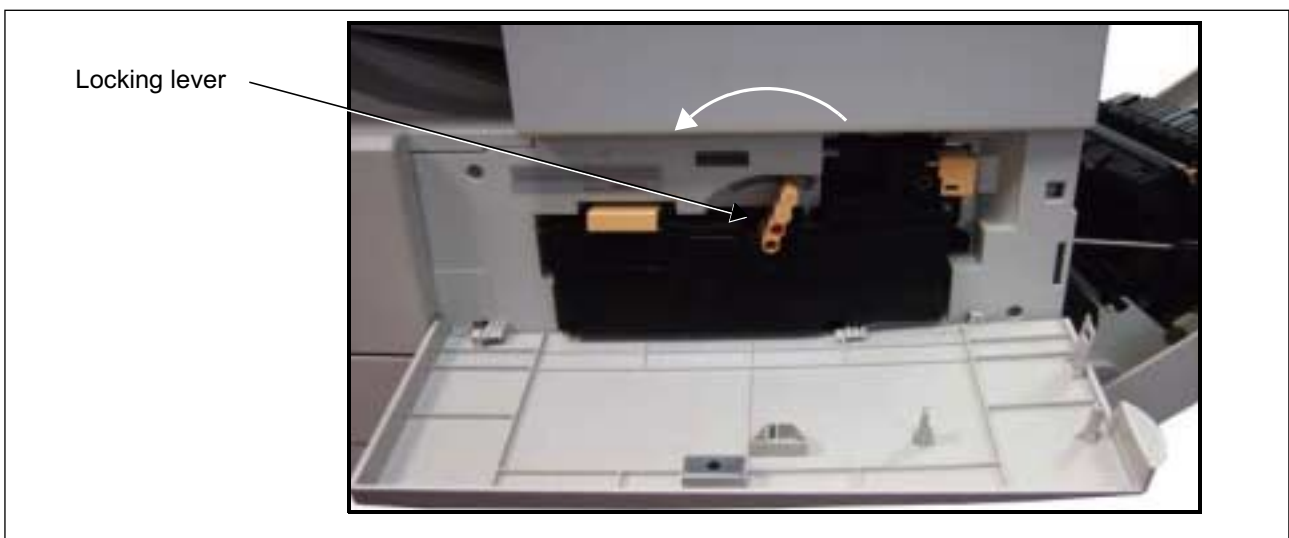
⚠ WARNING: Remove the toner cartridge before attempting to remove the ^M Drum Cartridge.

1. Open the right side cover.

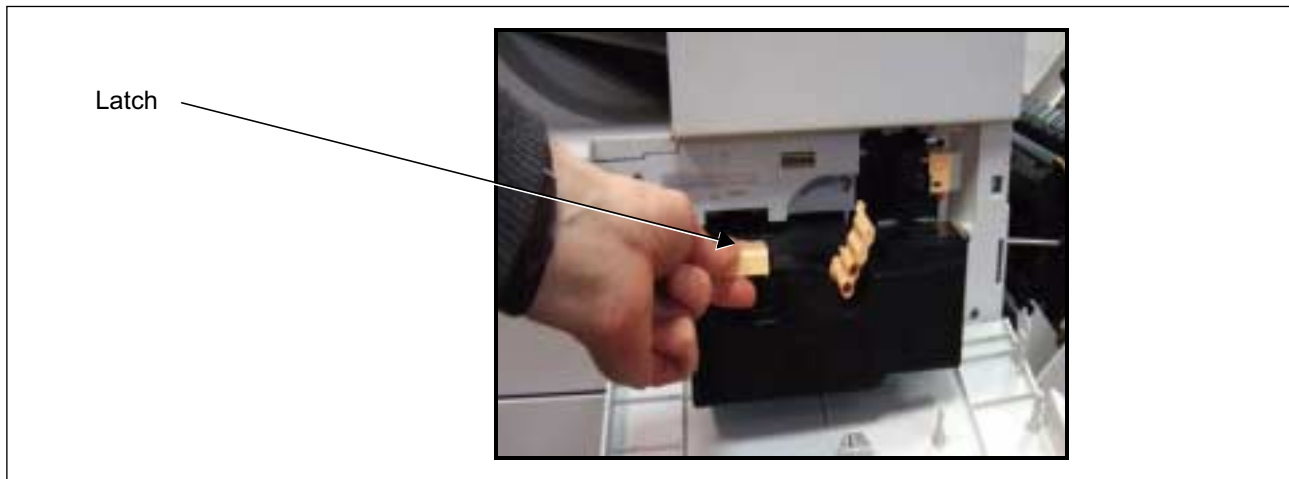


2. Open the front cover.

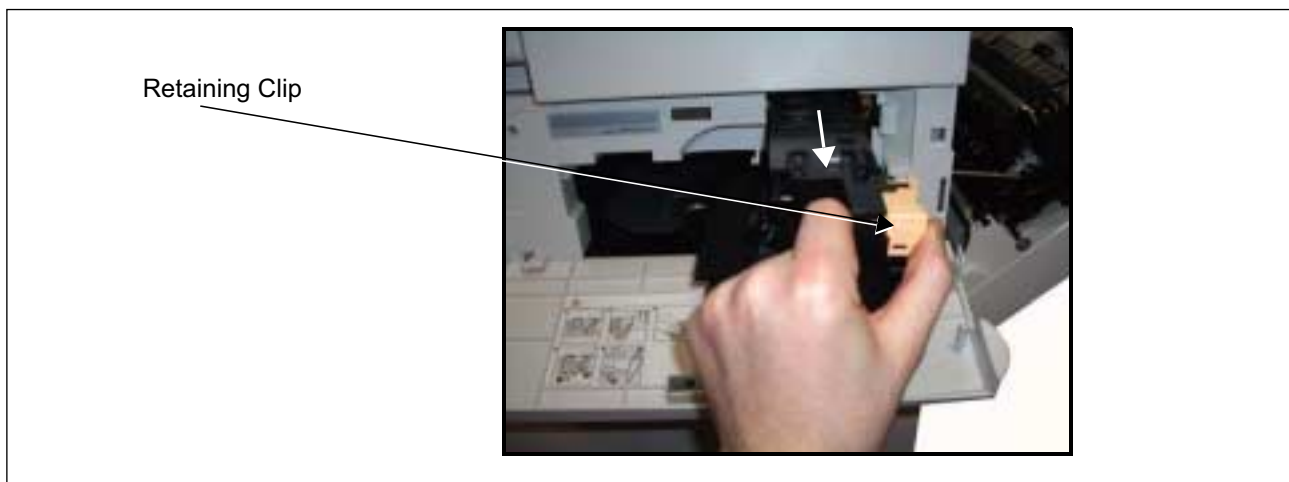
3. Turn the locking lever clockwise.



4. Lift the latch to release the toner cartridge and remove the toner cartridge.



5. Squeeze the retaining clip and remove the used SMart Kit™ Drum Cartridge.



6. Hold the empty Drum Cartridge away from you to avoid spilling any toner residue and dispose of it according to the instructions contained in the new Drum Cartridge box.

⚠ WARNING: Only install the correct samsung Drum Cartridge in the machine.

7. Unpack the new Drum Cartridge.

8. Remove the protective paper and seal tape from the cartridge.

9. Slide the Drum Cartridge into the frame in the machine.

10. Replace the toner cartridge (see above).

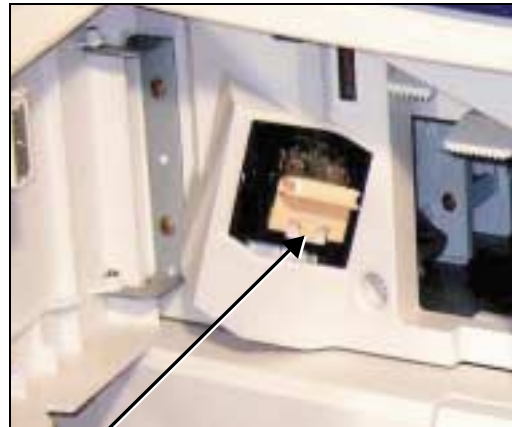


11. Rotate the latch to lock the cartridge in place. Close the front door. If the front door will not close, check that the Drum Cartridge is positioned and latched correctly.
12. Close the side door.
13. Press the Confirm button on the machine display.

5.2.3 Staples

This procedure shows you how to remove a used staples unit and replace it with a new staples unit. The machine will tell you when you need to order a new cartridge and when to replace the cartridge.

1. Open front left cover.



Staples Unit

2. Use the latch to pull out the staples unit. Remove the staples unit.



3. Lift the empty staple pack from the staple unit.

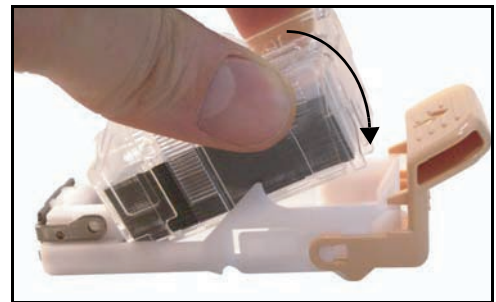
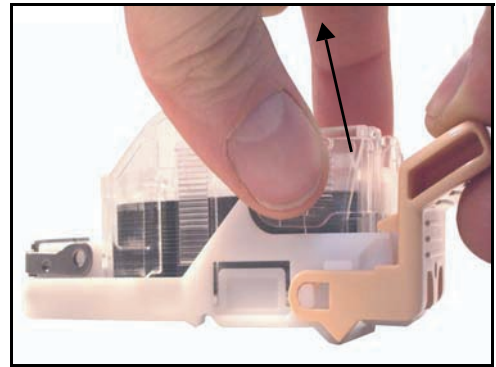
⚠ WARNING: Ensure that you have the correct Staples unit for your machine. This is for similar Samsung machines may look the same but WILL NOT WORK.

4. Unpack the new staples pack.

5. Place staples pack back into the staples unit.

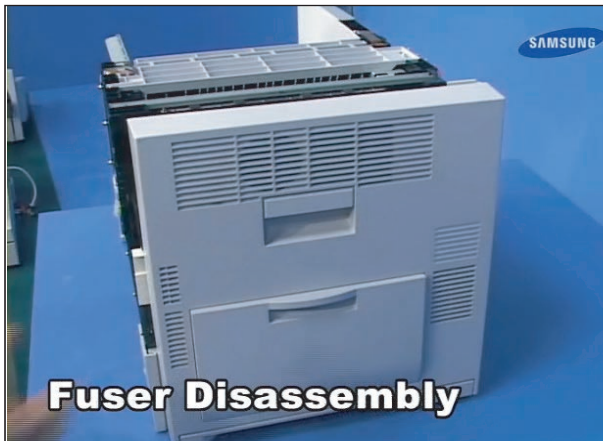
6. Ensure the unit is the correct way up. Slide the staples unit securely into the machine.

7. Close the front left cover.

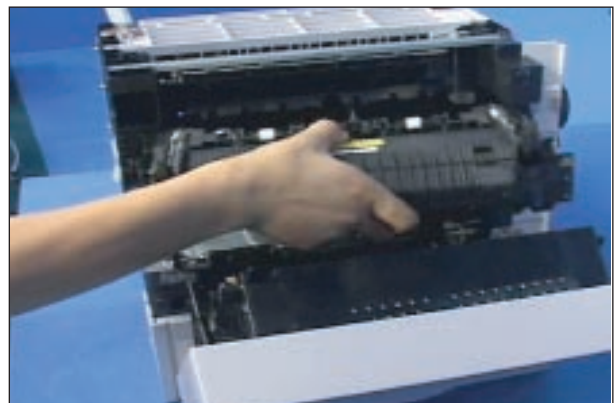
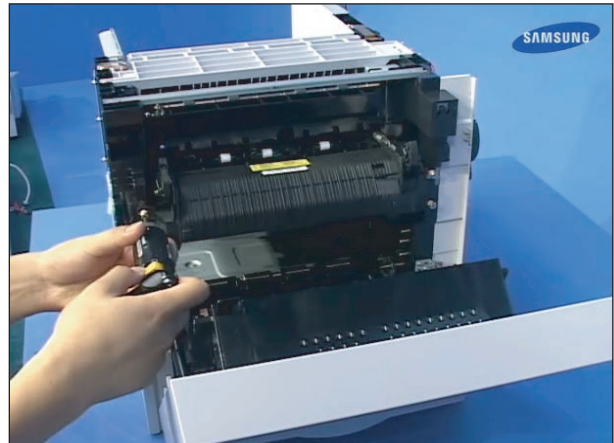


5.2.4 Fuser Unit

1. Open the side door.



2. Remove the four screw and take out Fuser Unit.



5.3 General Disassembly

5.3.1 Cover



1. Unplug the finisher harness connector.



2. Open front left cover.



3. Remove the finisher on machine.



4. Remove the screw cap of the side cover.



6. Take out the frame case.



5. Remove the screw of the side cover.



7. Frame to the case, shown below.



8. Open the side duplex cover.



10. Remove the two screws securing the front cover ass'y.



9. Remove the cassette tray.



11. Remove the two screws securing the Deve cover.



12. Frame to the case, shown below.



13. Remove the two screws.



14. Remove the two screws of the stand base by hand.



15. Remove the five screws securing the rear cover ass'y.



16. Take off the rear cover ass'y.



17. Frame to the case, shown below.



5.3.2 Finisher Ass'y

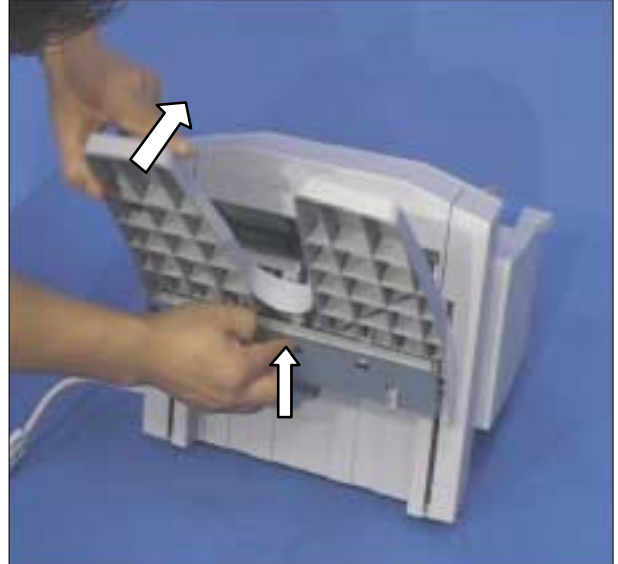
1. Pull the connector from the SET.



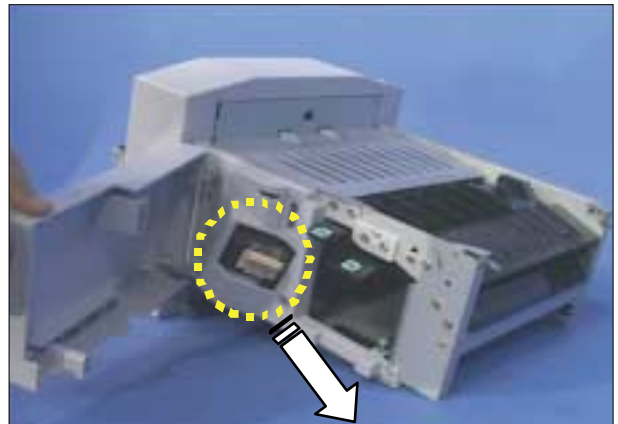
2. Pull the Finisher carefully from the SET with pushing the latch.



3. Release the stacker from the Finisher in the direction of arrow.

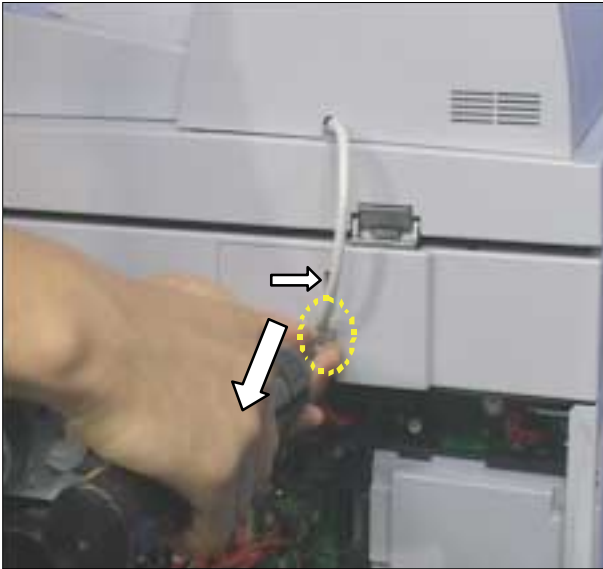


4. Use the latch to replace the staple unit

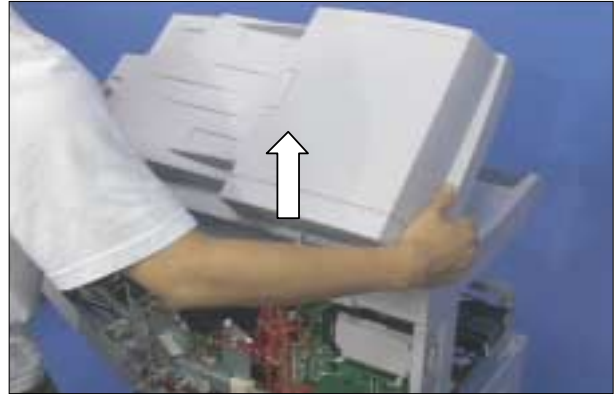


5.3.3 DADF Ass'y

1. Remove the one screw, and pull the cover in the direction of big arrow with releasing the hook in the direction of small arrow.



2. Pull the Scanner from the SET in the direction of arrow.



5.3.4 Platen Cover Ass'y

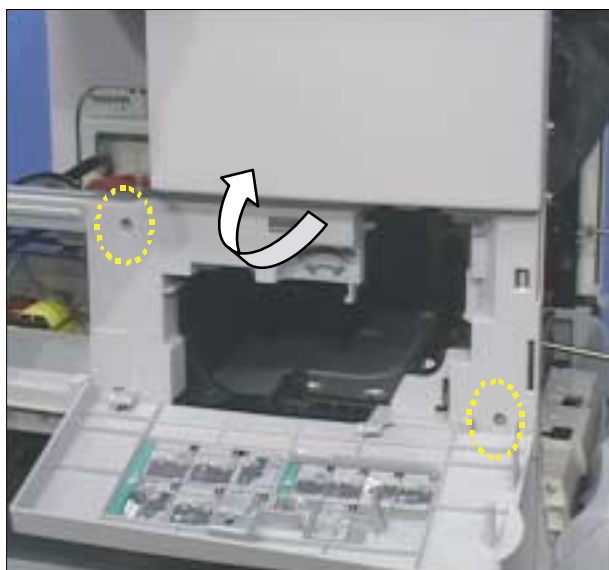
1. Remove the two screws, and pull the stacker cover.



2. Remove the two screws after pulling the Cassette.



3. Open the front cover and remove the two screws.



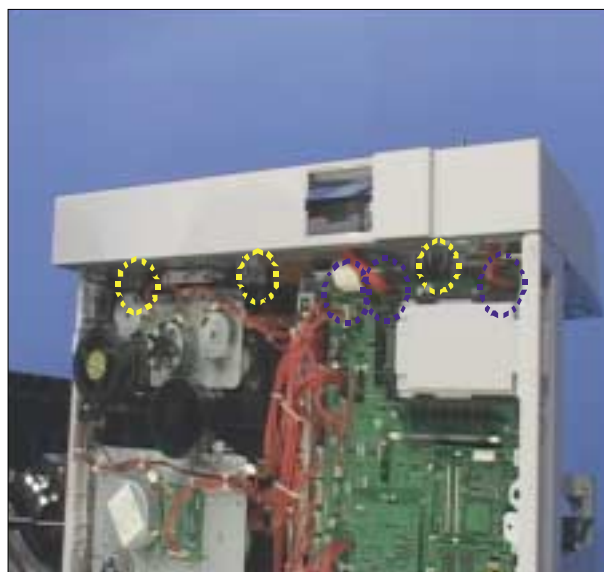
5. Remove the two pins and six screws.



4. Remove the four screws.

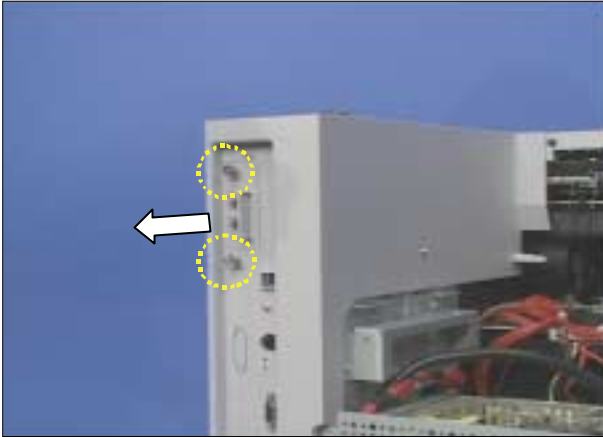


6. Remove the three screws and unplug the three connectors.



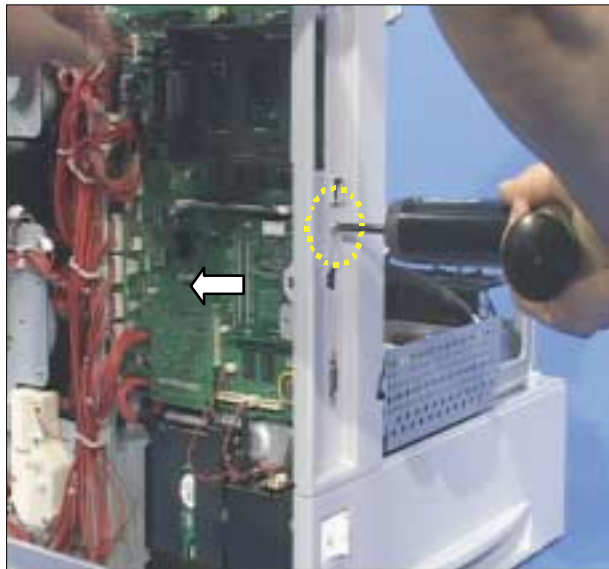
5.3.5 Fax Unit

1. Remove the two screws, and pull the FAX from the SET.

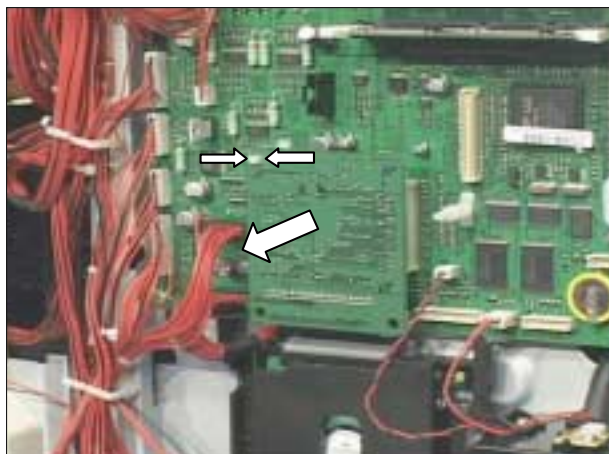


5.3.6 PBA(Main BOARD)

1. Remove the one screw and pull the USB board.



2. Unplug the hook and pull the sub board.



3. Unplug the connectors from the main board and remove five screws.

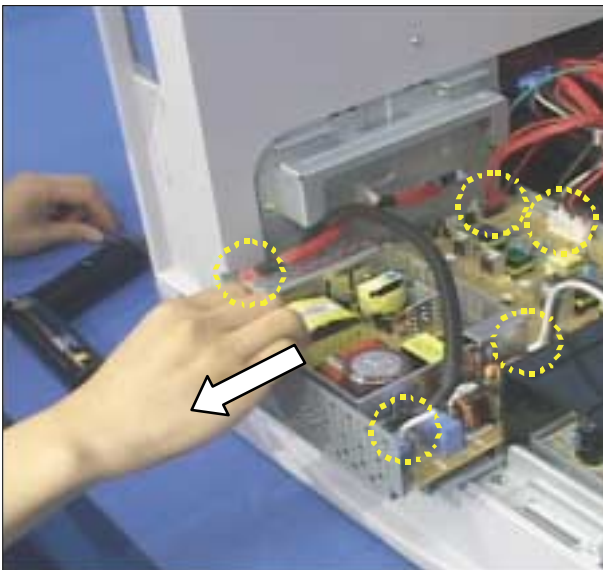


5.3.7 PBA(SMPS & IH board)

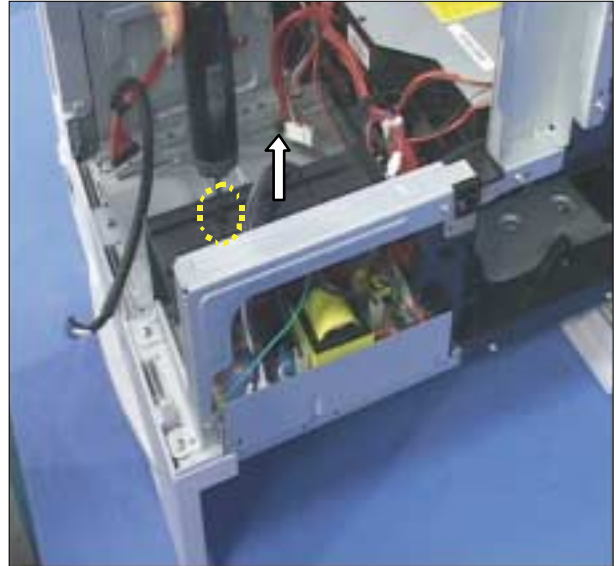
1. Remove the one screw.



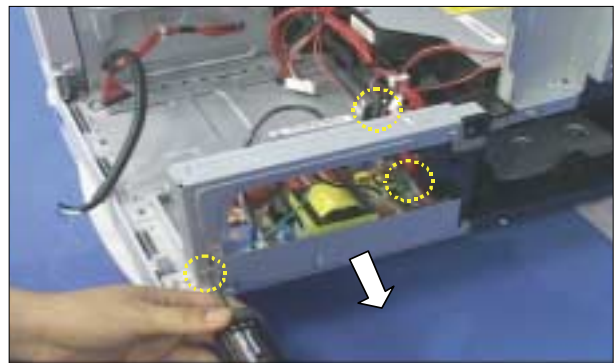
2. Pull the SMPS and unplug the connectors.



3. Remove the one screw, and pull the cover in the direction of arrow.

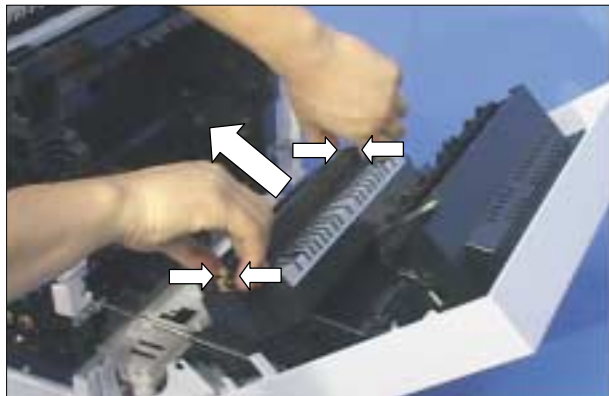


4. Remove the one screw, unplug the connectors and pull the IH board.



5.3.8 Transfer Roller

1. Push the latch in the two directions and pull the Transfer Roller.

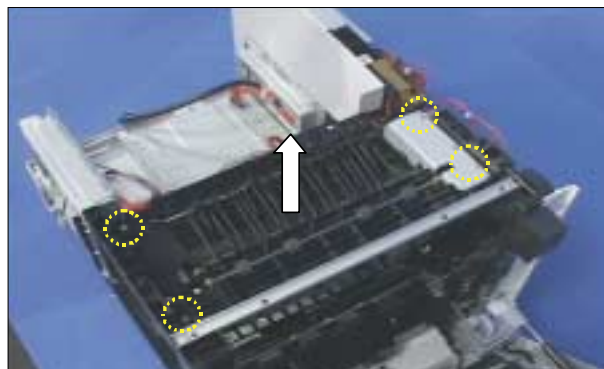


5.3.9 Exit Roller

1. Remove the five screws and the exit cover.

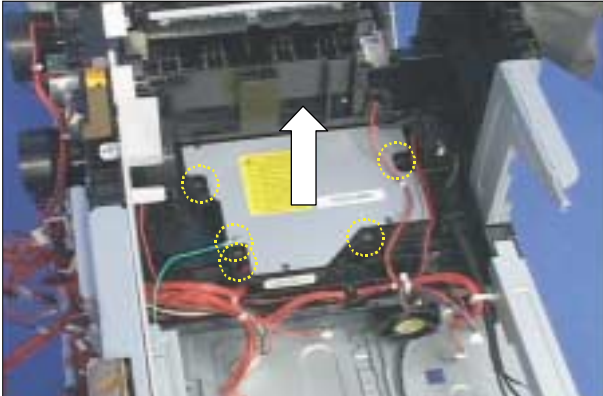


2. Remove the four screws and pull the Exit Ass'y in the direction of arrow.



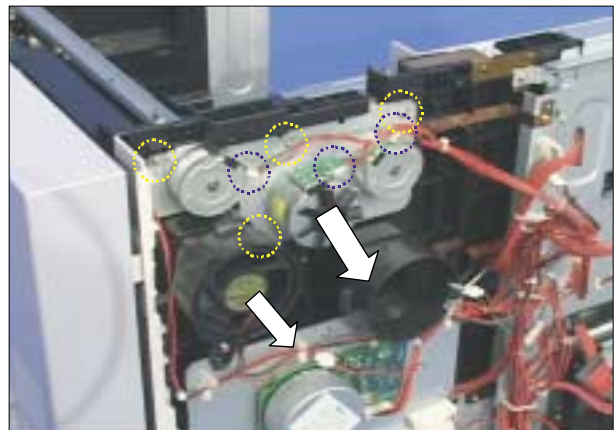
5.3.10 LSU Unit

1. Remove the six screws (including one ground screw) and pull the LSU in the direction of arrow.



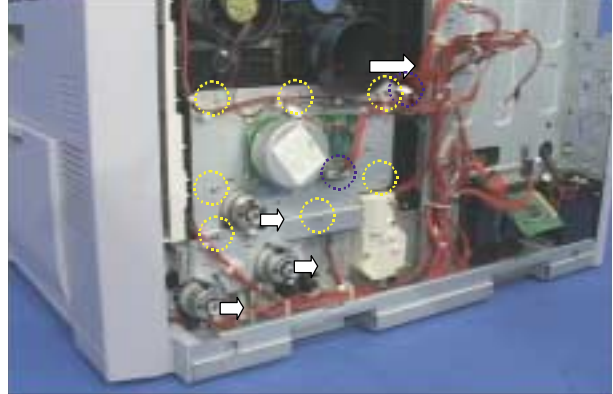
5.3.11 Drive-Exit Ass'y

1. Pull the fan in the direction of arrow.
2. Remove the four screws and unplug the throw connector from the motors.
3. Pull the Drive-Exit Ass'y in the direction of arrow.



5.3.12 Drive-Main Ass'y

1. Unplug the mold e-ring and pull the three clutch.
2. Remove the duct and unplug the two connectors (main motor, dc motor).
3. Remove the seven screws and pull the Drive-Main Ass'y in the direction of arrow.

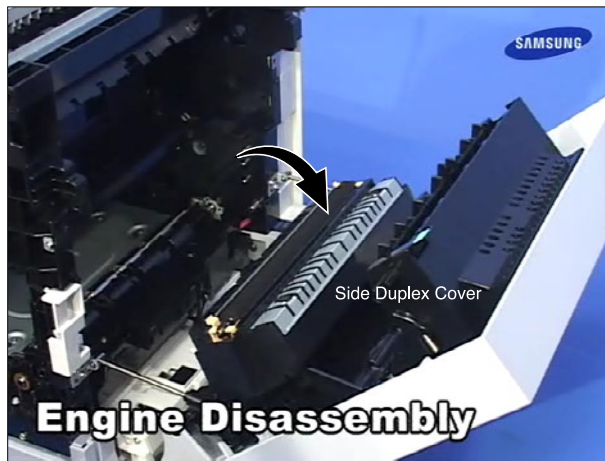


5.3.14 Engine Parts

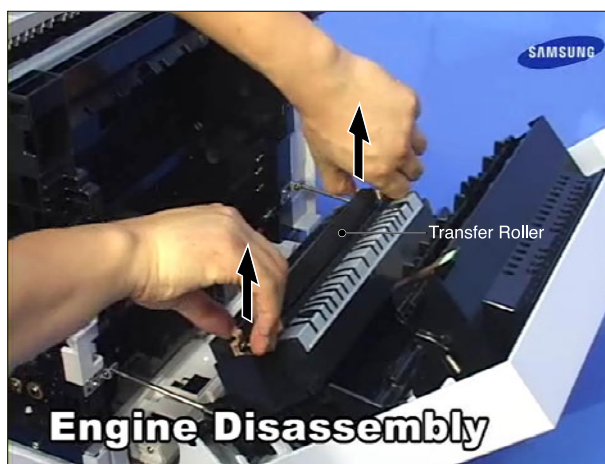
1. Before you remove the Engine Parts, you should remove:

- Cover Parts (Refer to 5.3.1)

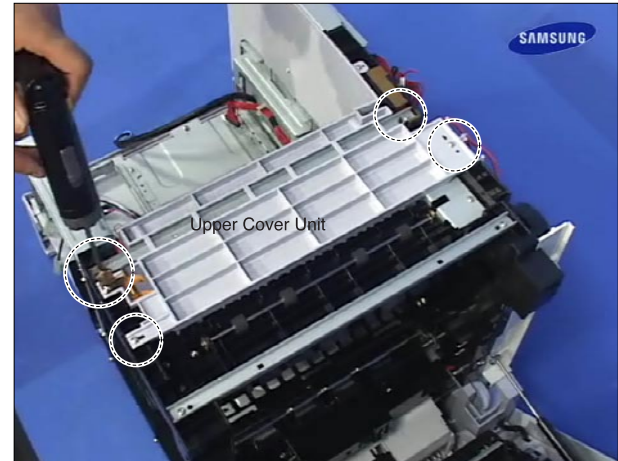
2. Open the Side Duplex Cover.



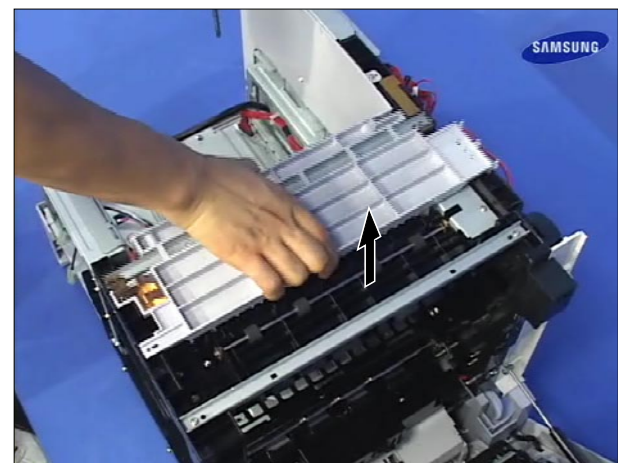
3. Release the Transfer Roller, as shown below.



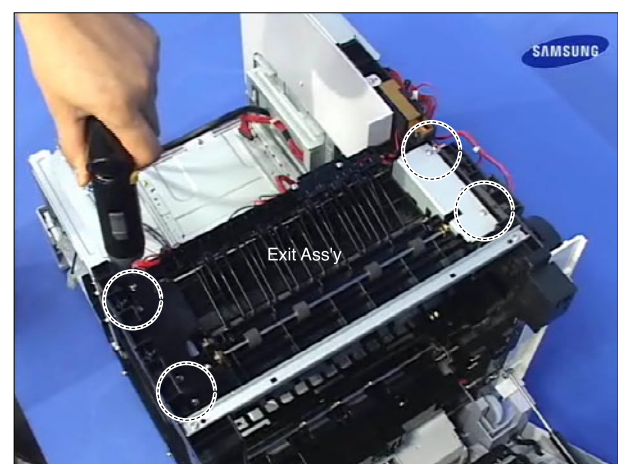
4. Remove the five screws securing the Upper Cover Unit, as shown below.



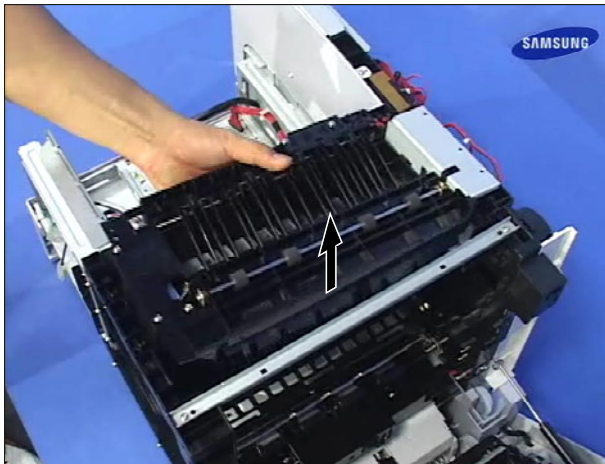
5. Lift the Upper Cover Unit.



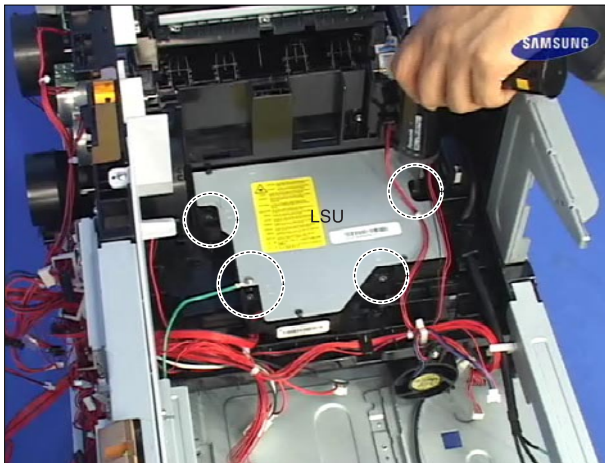
6. Remove the four screws securing the Exit Ass'y, as shown below.



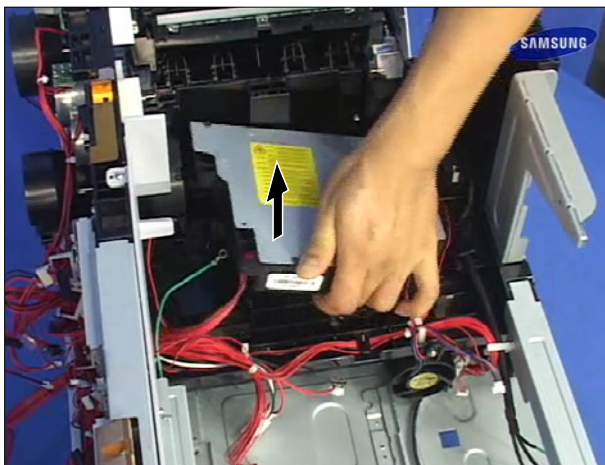
7. Lift the Exit Ass'y.



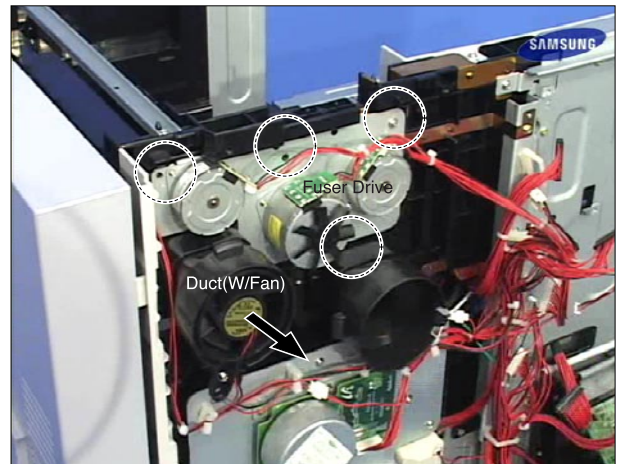
8. Remove the four screws securing the LSU and then remove the one screw securing the Ground Cable, as shown below.



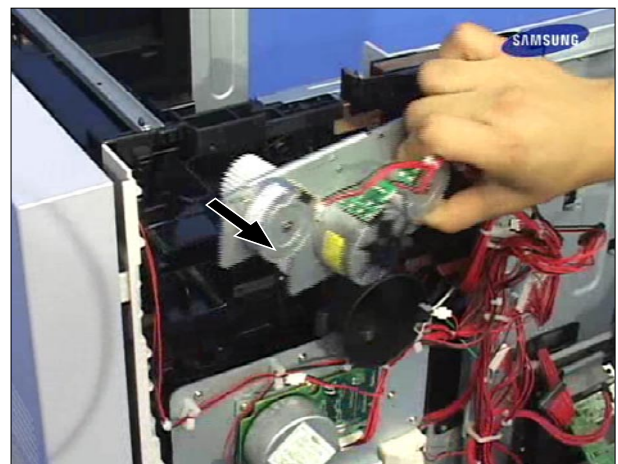
9. Lift the LSU.



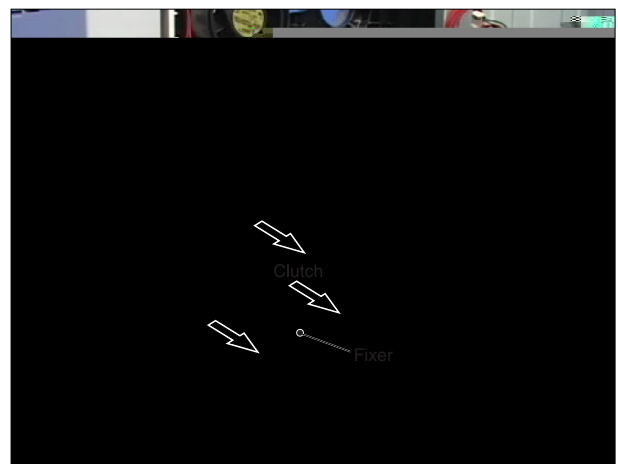
10. Remove the four screws securing the Fuser Drive and then pull the Duct(with Fan), as shown below.



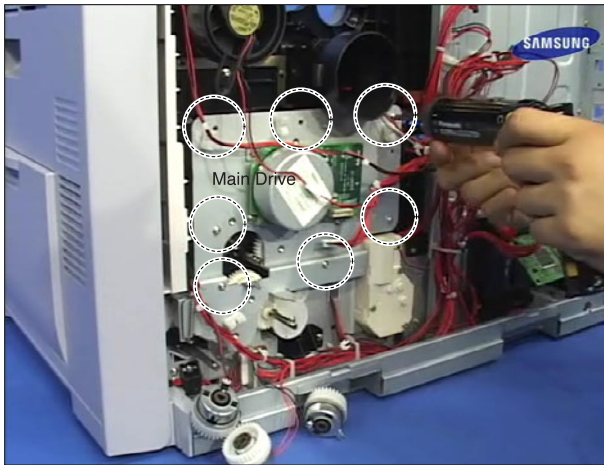
11. Remove the Fuser Drive.



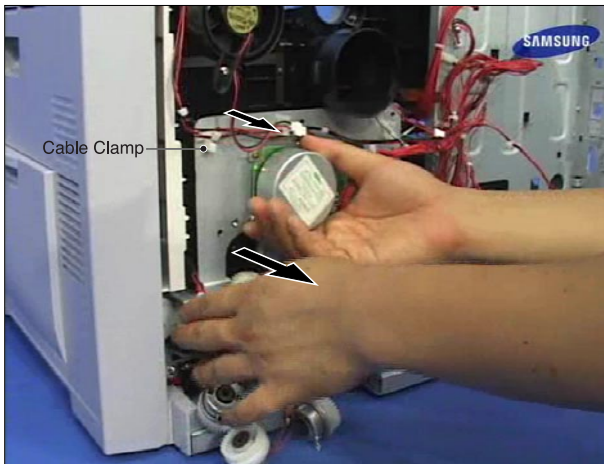
12. Remove the three Fixer securing the Clutches and then pull the all Clutches, as shown below.



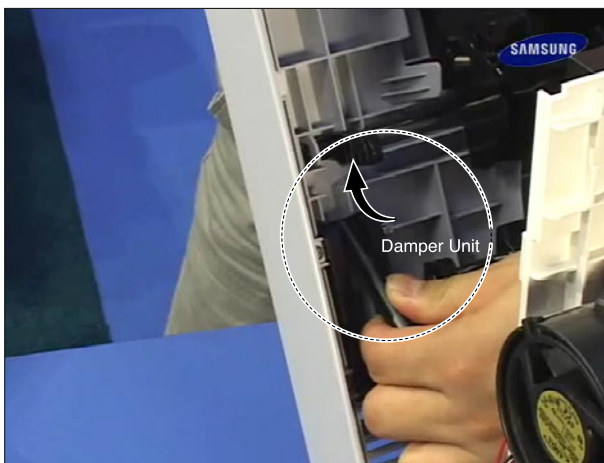
13. Remove the seven screws securing the Main Drive, as shown below.



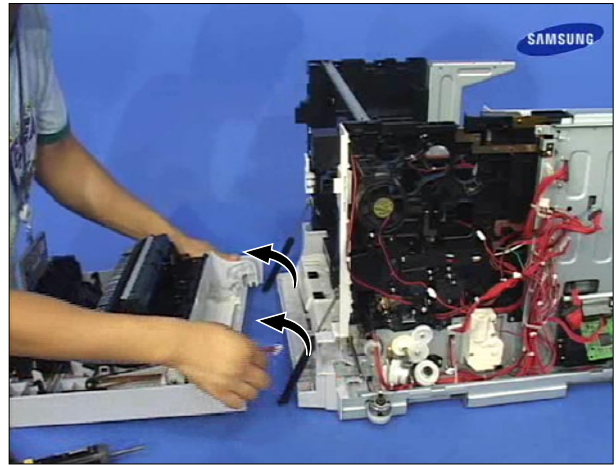
14. First release the Harness from the Cable Clamp, and then remove the Main Drive, as shown below.



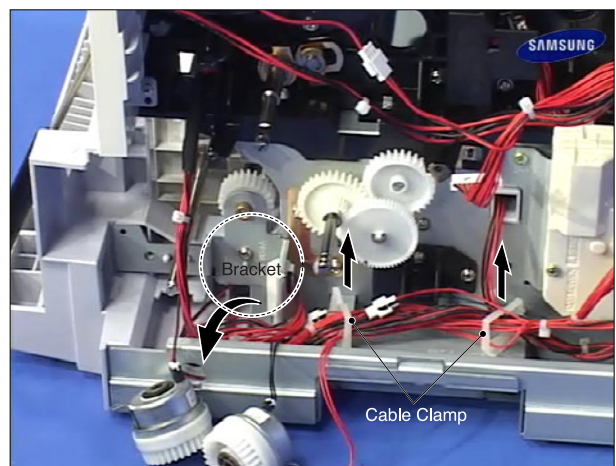
15. Pull the Damper Units securing the both side of the Side Duplex Cover in the direction of arrow, as shown below.



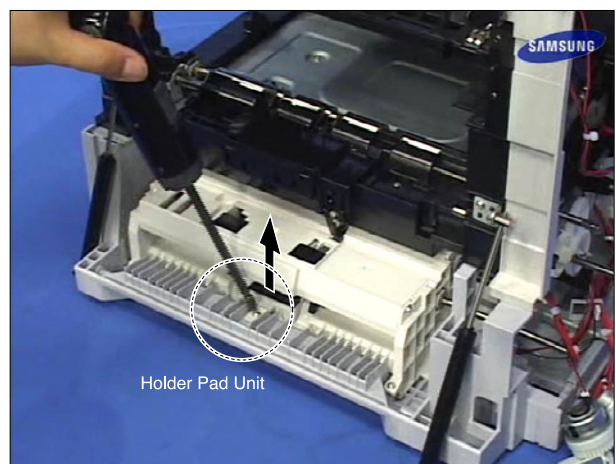
16. Apply light pressure to the both side of the Side Duplex Cover and pull it in the direction of arrow, as shown below.



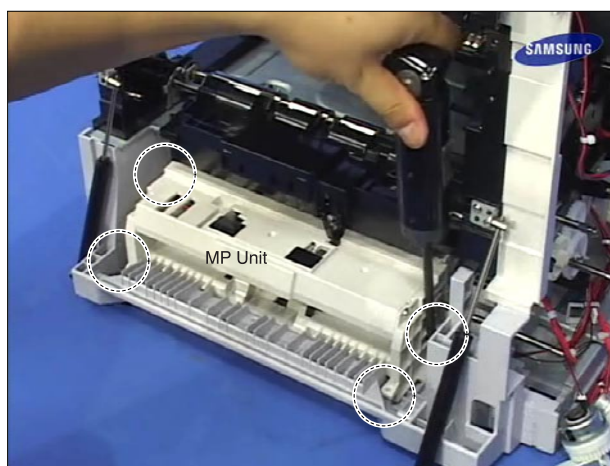
17. Remove the one screw securing the Bracket and remove it. Then release the Harness from the Cable Clamp.



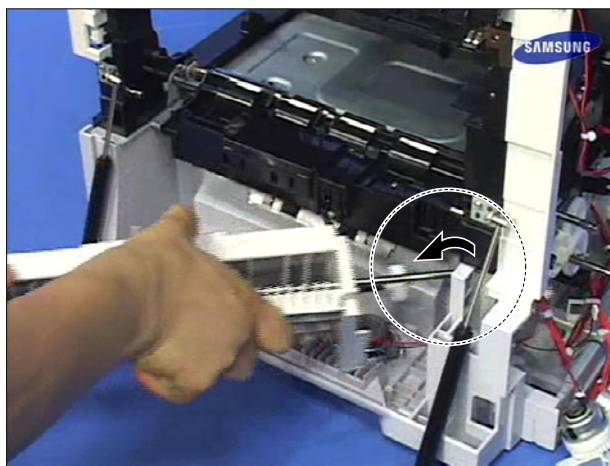
18. Remove the one screw securing the Holder Pad Unit and remove it.



19. Remove the four screws securing the MP Unit.



20. First lift the MP Unit, and then pull it in the direction of arrow, as shown below.



21. First turn over the frame, and then release the three Rollers, as shown below.

