

SAMSUNG® ML-2855/SCX-4828

TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG ML-2855/SCX-4828 TONER CARTRIDGE

REMANUFACTURING THE SAMSUNG ML-2855/SCX-4828 TONER CARTRIDGE

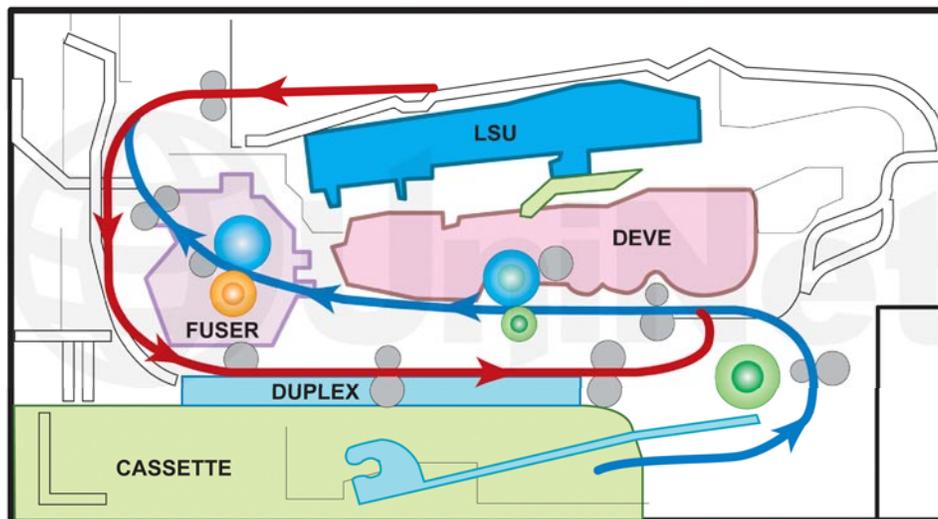
By Mike Josiah and the Technical Staff at UniNet



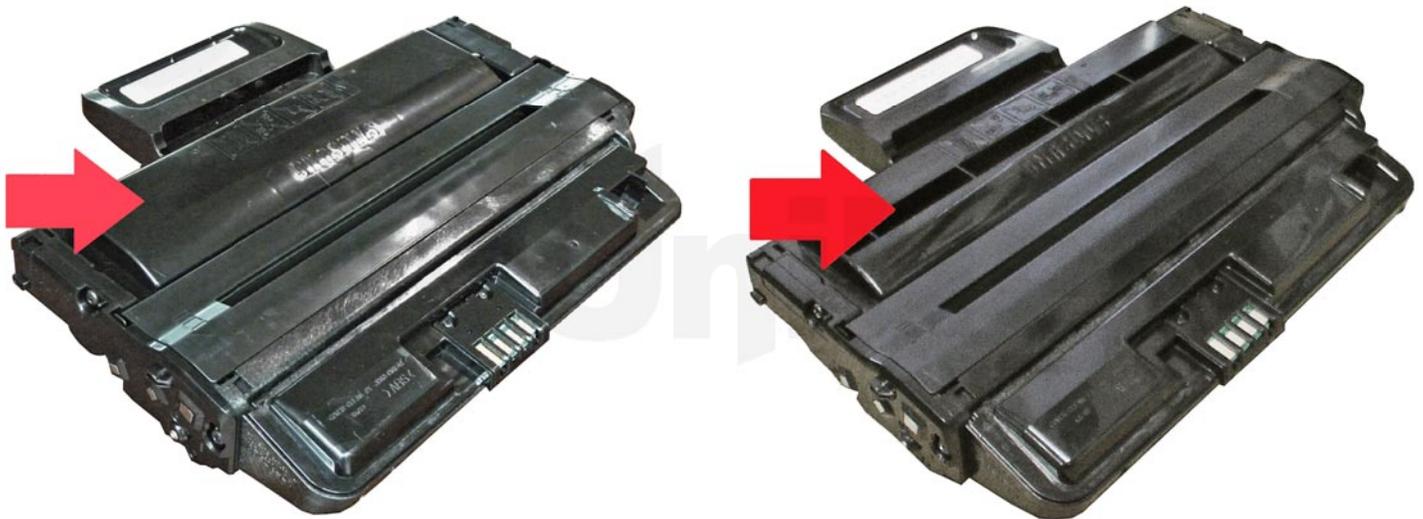
The Samsung ML-2855/SCX-4828 printers are based on a 30-ppm, 1200 dpi engine. The first page out is stated to be under 8.5 seconds, and the printer comes standard with 64MB of memory (expandable to 192MB). Duplexing is also built in. The SCX multifunction machines are print, copy, scan and fax-capable.

These cartridges do not have a drum cover, and come new with a piece of heavy paper taped around the cartridge. All new cartridges opened so far have shown some toner leakage on the drum that would have shown on any prints for at least a few pages.

The standard cartridge (Samsung part # MLT-D209S, MLT-D2092S EU) is rated for 2,000 pages. The high yield cartridge (Samsung part # MLT-D209L, MLT-D2092L EU) is rated for 5,000 pages. As with pretty much all cartridges these days the cartridge has a chip and it has to be replaced each cycle.



Shown is the basic machine/cartridge component layout, including the paper path with duplexing. The workings are pretty straightforward so we will not go into the theory here...



The high yield and low yield cartridges have different supply chambers.

The low yield cartridge has a hollow upper shell with less space for the toner inside and so cannot be made into a high yield.

MACHINES CURRENTLY BASED ON THIS ENGINE

ML-2855ND
SCX-4824FN
SCX-4825FN
SCX-4826FN
SCX-4828FN

Cartridge troubleshooting as well as common error messages will be listed at the end of the instructions.

REQUIRED TOOLS

1. Toner approved vacuum
2. A small common screwdriver
3. A Phillips head screwdriver
4. Needle-nose pliers

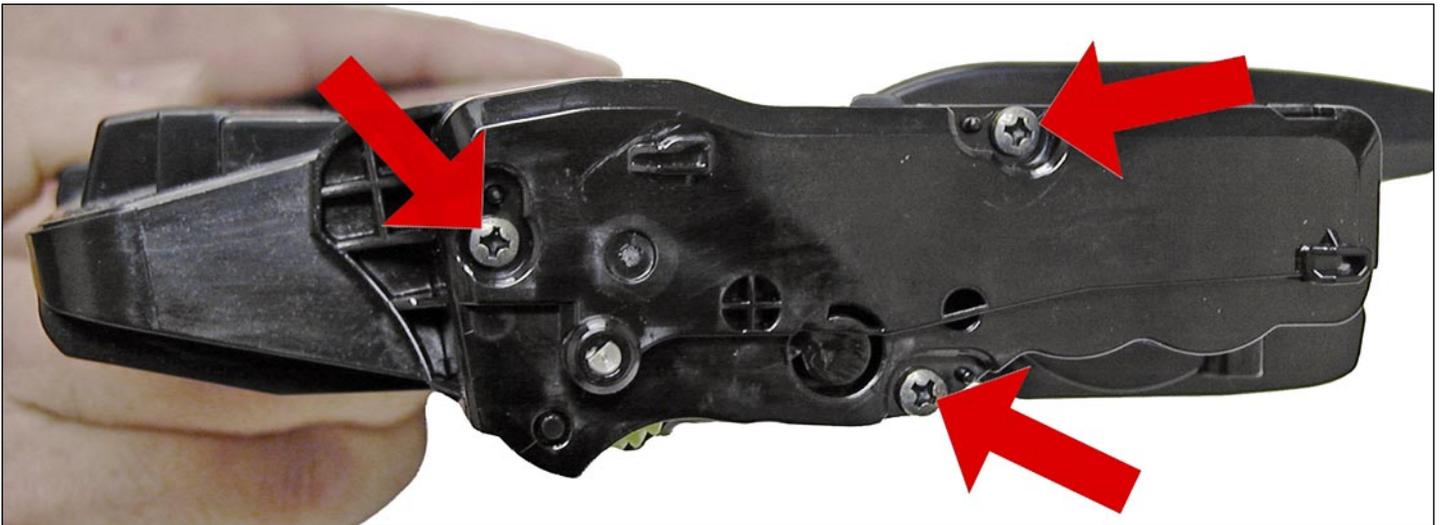
REQUIRED SUPPLIES

1. Toner for use in the Samsung ML-2855
2. Dedicated replacement chip
3. Conductive grease
4. 99% Isopropyl alcohol
5. Drum lubricating powder



1. Place the cartridge with the handle up, facing towards you.

Remove the three screws from the right side end cap.



2. On the left side end cap, remove the three screws.



3. While still on the left end cap, locate the top tab.

Press in on the tab, and remove the end cap.

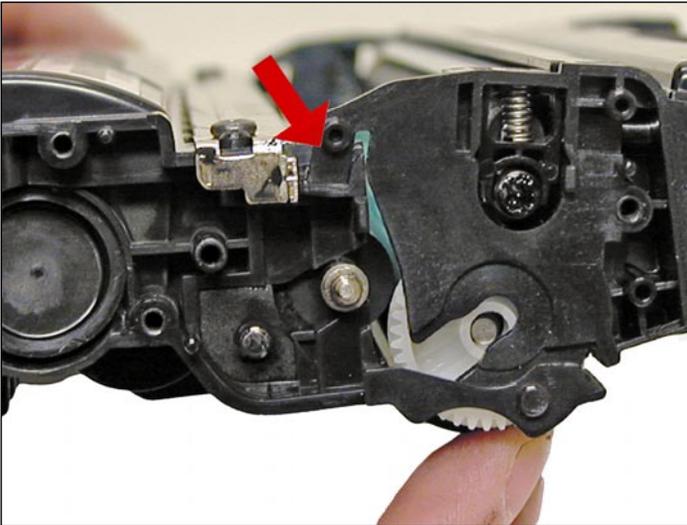
The drum axle may come out with the end cap. Separate the two.



4. On the right side end cap, press in on the top tab and remove the end cap.



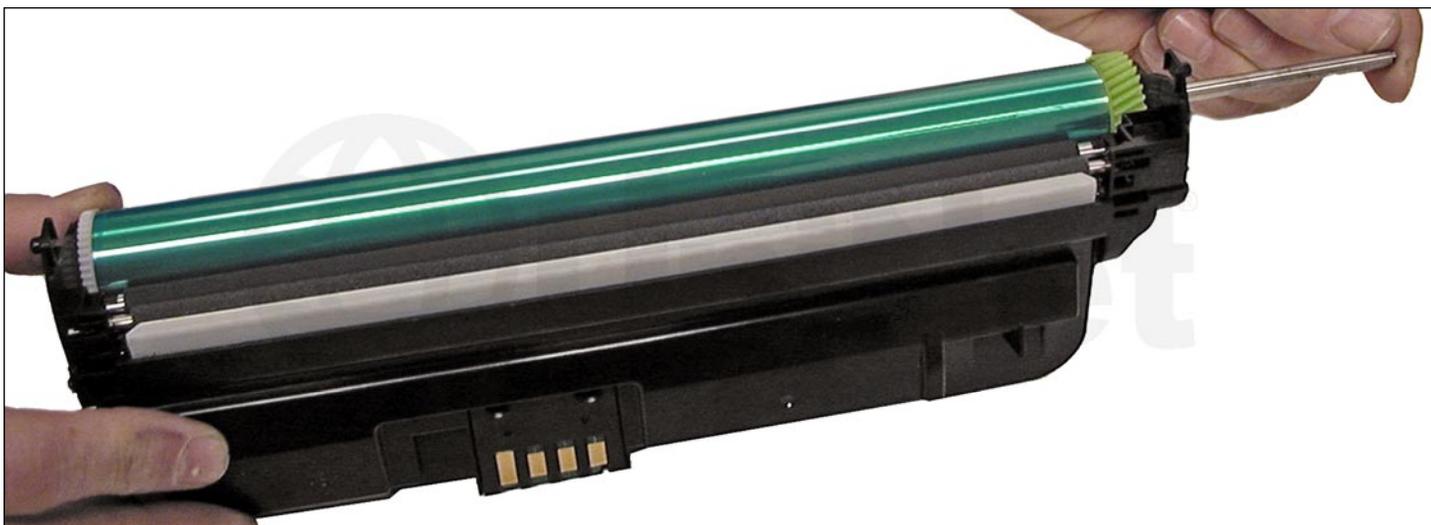
5. Separate the two halves slightly, and lift off the middle top cover.



6. Lift up on the drum/waste hopper and remove.

If the drum axle came loose, be careful to hold the drum so it does not become damaged.

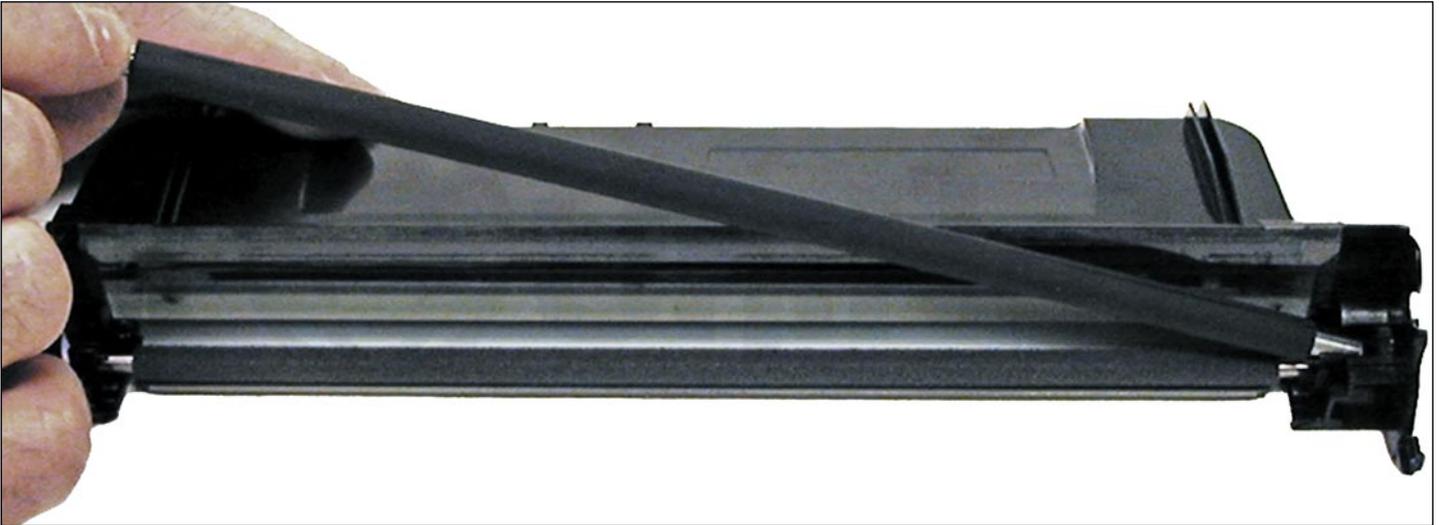
Remove the drum/waste assembly.



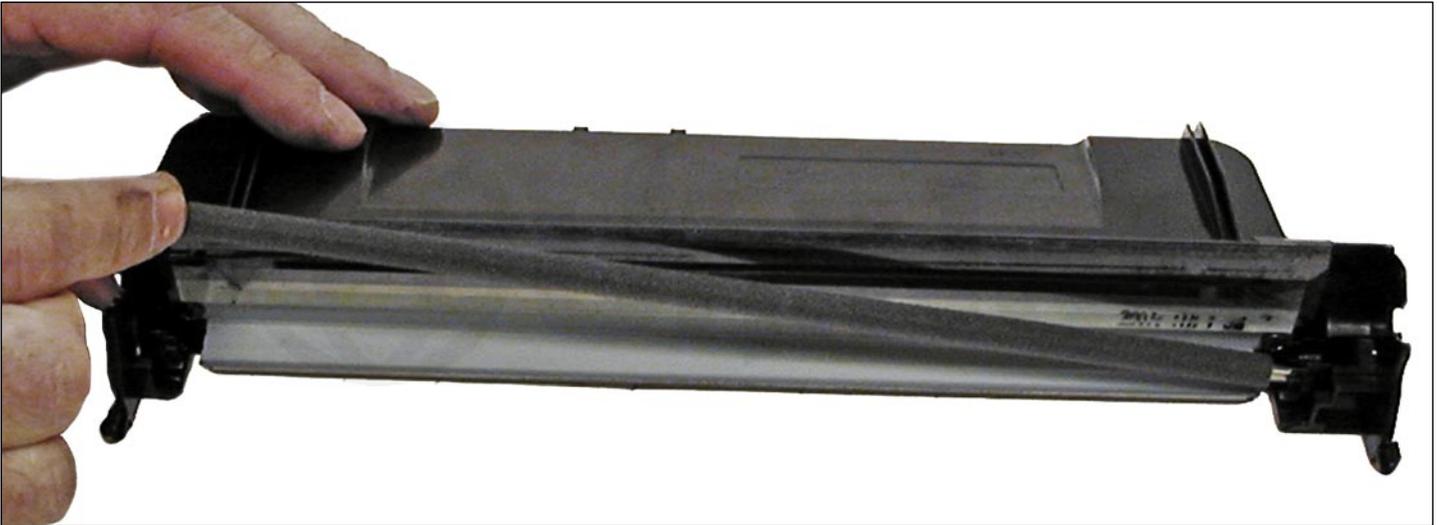
7. Remove the drum axle from the large gear side of the waste assembly.



Remove the drum.



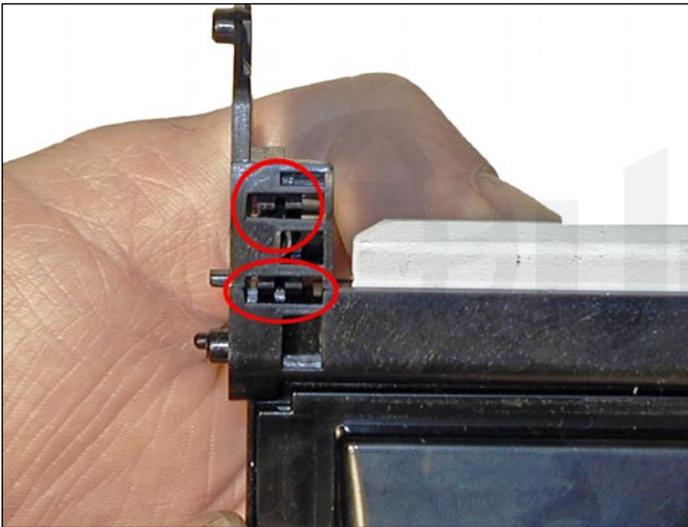
8. Remove the PCR from the assembly.



9. Remove the PCR cleaning roller.

Clean the PCR with your normal PCR cleaner.

WARNING: Do not clean the OEM PCR with alcohol, as this will remove the conductive coating from the roller. If the PCR is an aftermarket, follow the cleaning methods recommended by the manufacturer. If the PCR is an OEM, we recommend it be cleaned with your standard (non-petroleum based) PCR cleaner.



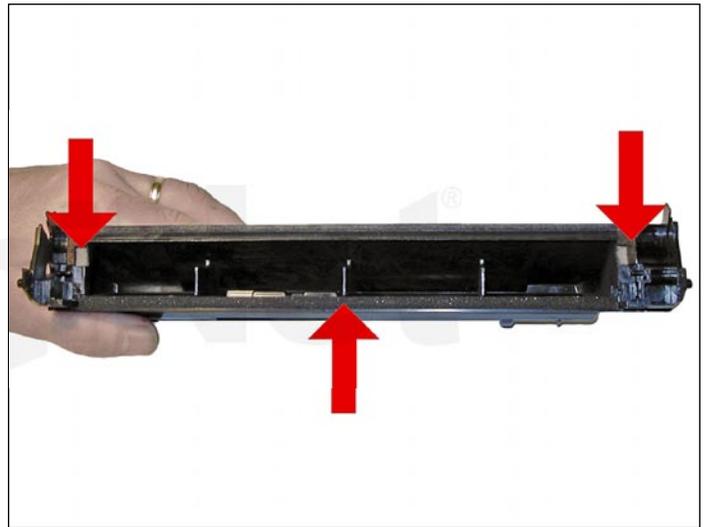
10. Remove both the PCR holders by pressing in on the tabs at the bottom of the holder.

These holders need to be removed to allow access to the wiper blade.



11. Remove the two screws from the wiper blade.

Remove the blade.

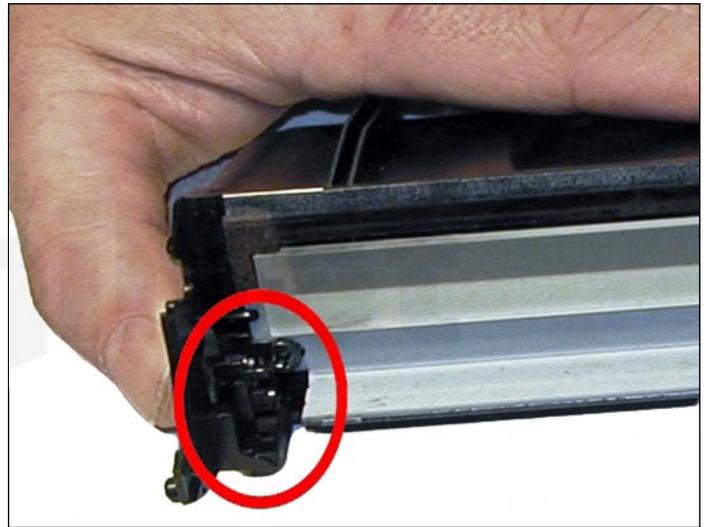


12. Clean out all the waste toner from the hopper.

Make sure the seals are clean.



13. Install the cleaned or new wiper blade and two screws.



14. Install the two PCR holders.

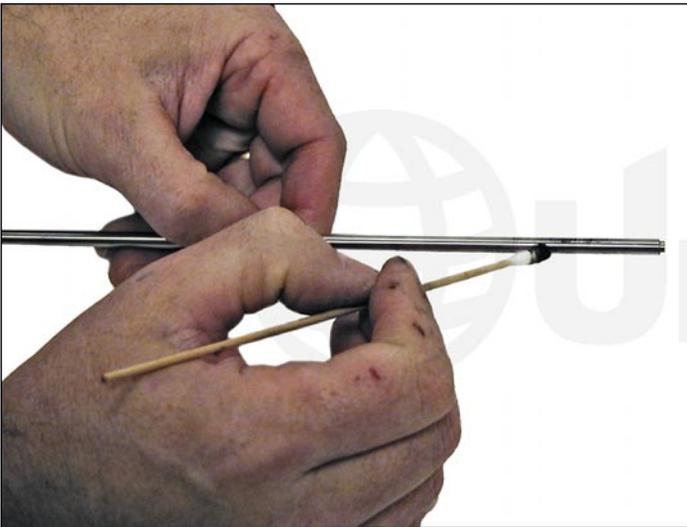


15. Blow off or vacuum the PCR cleaning roller.

Install in the waste hopper.



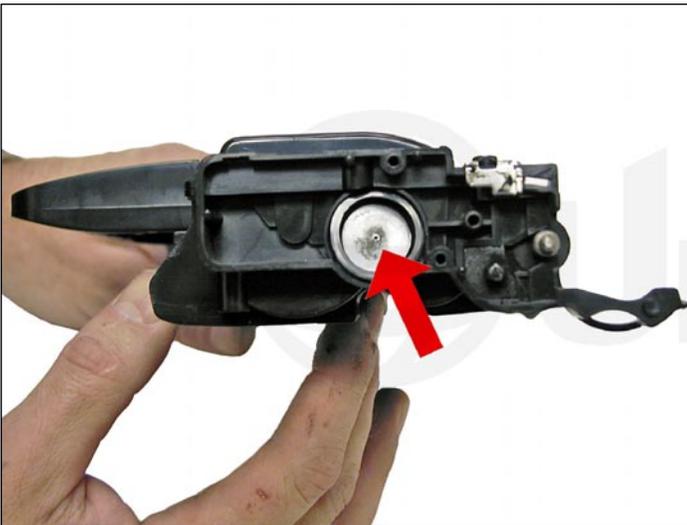
16. Place a small amount of conductive grease in the holders, and install the PCR.



17. The large gear side of the drum axle shaft has conductive grease on it. Regardless of whether you are replacing the drum or not, clean the old grease off, and replace with new.



18. Install the drum and axle from the small gear side of the drum into the waste hopper. Make sure the keyed end of the shaft is on the large gear side.



19. On the supply hopper, carefully pry out the fill plug and dump out any remaining toner. The fill plug can be difficult to remove as it is recessed. Take a small common screwdriver and maneuver it around the edge, lifting slightly until it comes loose.



20. Remove the developer roller.



21. Remove the two screws from the doctor blade, and remove the blade.

22. Clean out all the remaining toner from the hopper.



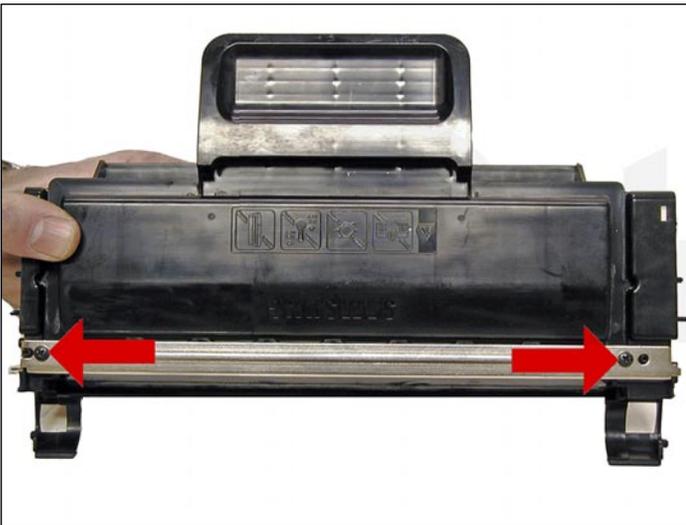
23. Make sure the doctor blade sealing foam and the developer rollers seals are clean and intact.



24. Clean the edge of the doctor blade, so there is no evidence of build up along the edge.

If any buildup exists, the cartridge will streak.

This blade can be cleaned with your preferred Samsung doctor blade cleaner.



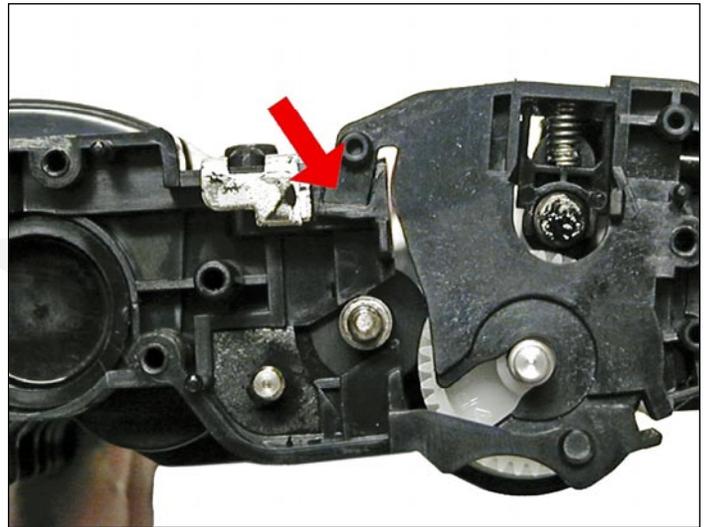
25. Install the doctor blade and two screws.



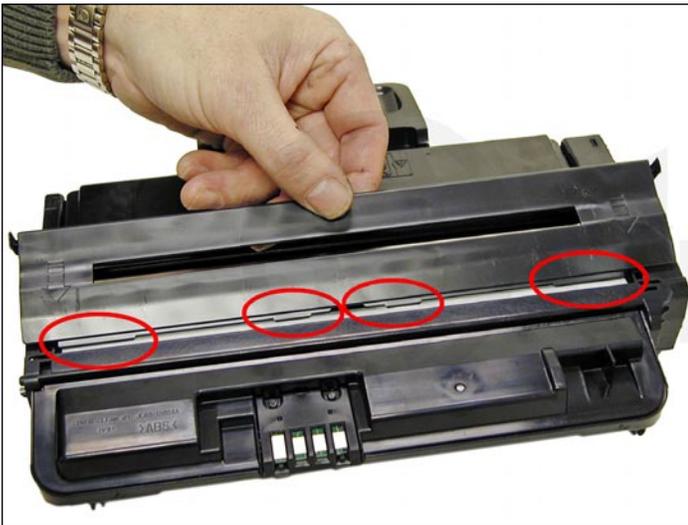
26. Clean the developer roller with a dedicated developer roller cleaner, and replace into the hopper.



27. Fill the hopper with toner for use in the MLT-D209 toner cartridge, replace the fill plug, and check for leaks.

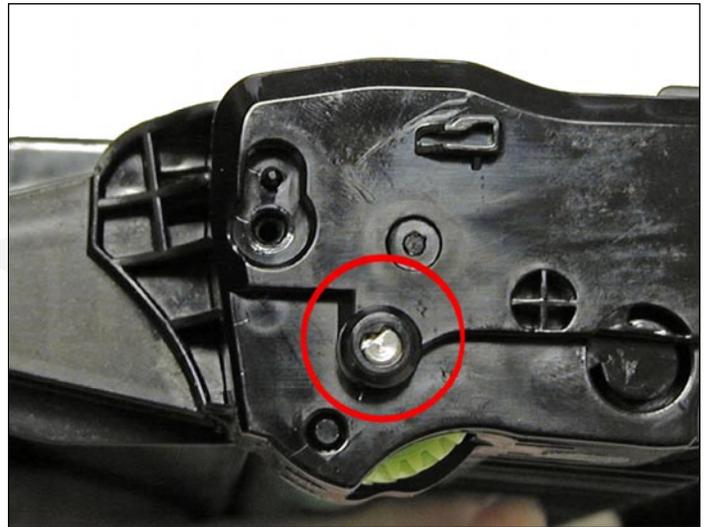
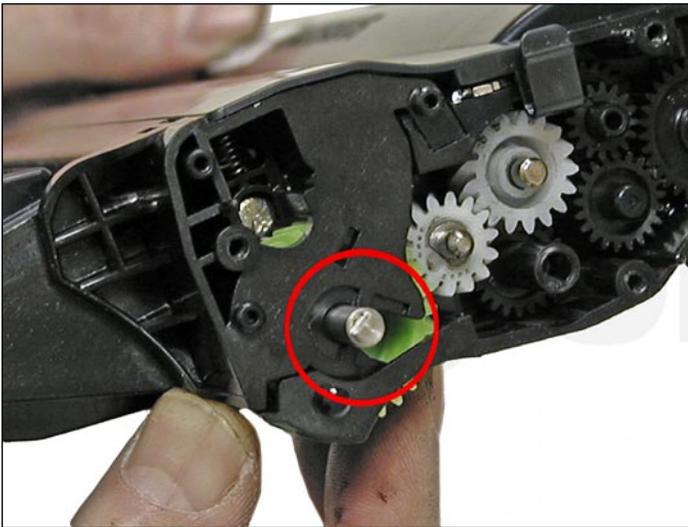


28. Fit both sides of the waste hopper tabs into the toner hopper.



29. Slide the middle top cover/PCR assembly into place.

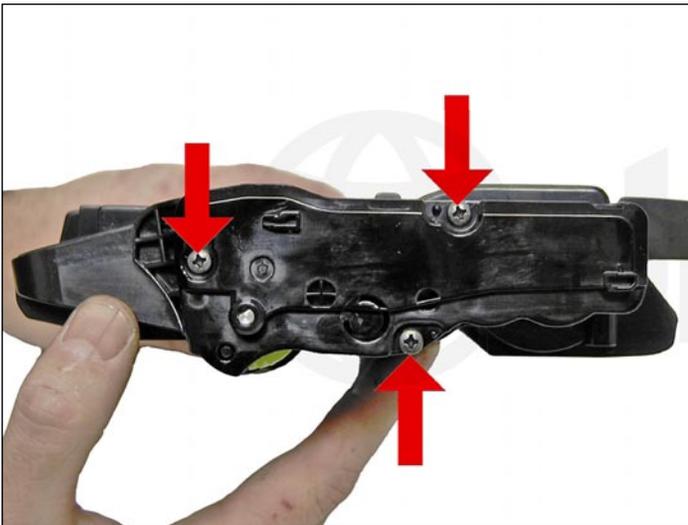
Make sure all the middle tabs fit under the edge of the waste hopper.



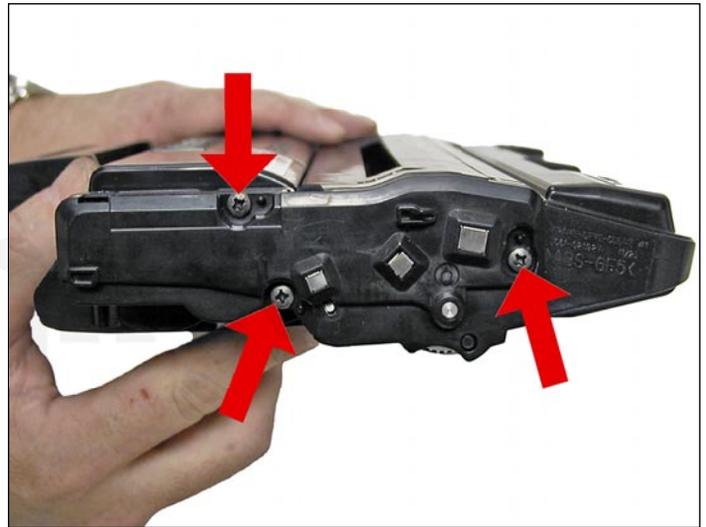
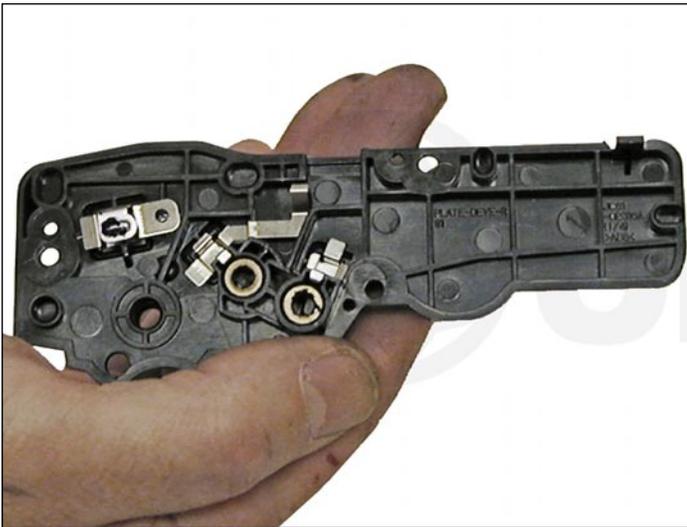
30. Clean the contacts on the left side end cap, and replace the conductive grease.

Align the drum axle keyed end, so it will fit into the keyed slot of the end cap.

Snap the end cap into place.



31. Install the three screws into the end cap.

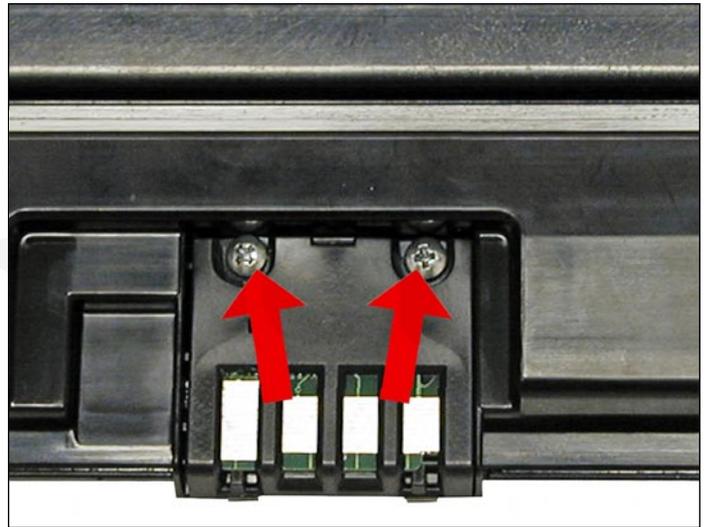


32. Clean the contacts on the right side end cap, and replace the conductive grease.

Snap the end cap into place, and replace the three screws.



33. To replace the chip, drill out the two plastic rivets with a small drill, remove the cover, and chip.



34. Install the new chip and cover.

Insert two small screws that correspond to the holes drilled to hold everything in place.

COMMON CARTRIDGE PROBLEMS

Repetitive Defect Chart:

Upper heat roller:	77.8 mm
OPC drum:	75.5 mm
Lower pressure roller (1st):	62.8 mm
Lower pressure roller (2nd):	37.7 mm
Supply roller:	47.1 mm
Transfer roller:	47.0 mm
Developer roller:	35.2 mm
PCR	26.7 mm