

SAMSUNG® SCX 4300

CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG® SCX 4300 MULTIFUNCTION PRINTER
WITH TONER CARTRIDGE

REMANUFACTURING THE SAMSUNG SCX-4300 TONER CARTRIDGES

By Mike Josiah and the Technical Staff at UniNet

First introduced in August 2008, the Samsung SCX-4300 engine is a 19 ppm, 600 dpi laser based fax engine. The stated monthly duty cycle is 10,000 pages per month. These machines are true multifunction in that they print, scan, copy and fax. They also come with a new cartridge, the MLT-D109S.

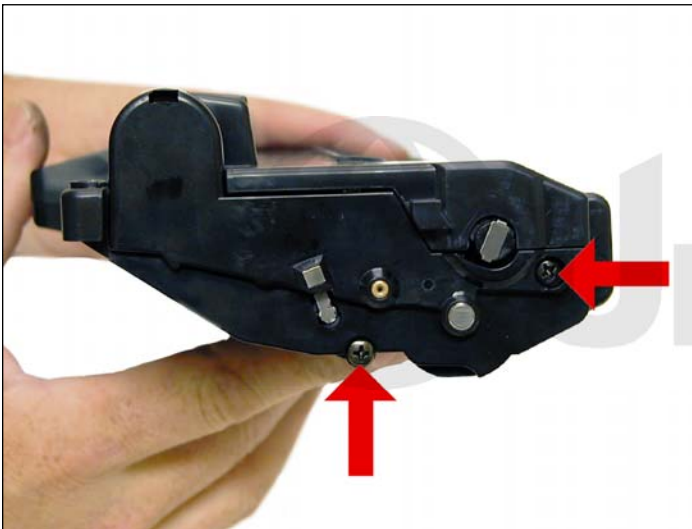
As with most Samsung cartridges, these do not have a drum cover, and come new with a piece of heavy paper taped around the cartridge. The standard cartridge (Samsung part# MLT-D109S) comes new with 55g toner, and is rated for 2,000 pages at 5% coverage. The starter cartridges that come with the machines however are only rated for 1000 pages. They are simple cartridges to remanufacture. They do use a chip that must be replaced each cycle.

REQUIRED TOOLS

Toner approved vacuum
Small common screwdriver
Phillips head screwdriver
Needle nose pliers

REQUIRED SUPPLIES

75 grams toner for use in Samsung SCX-4300
Replacement chip
New OPC drum
Developer roller
Cleaning blade
Doctor blade
PCR
Conductive grease
Drum lubricating powder

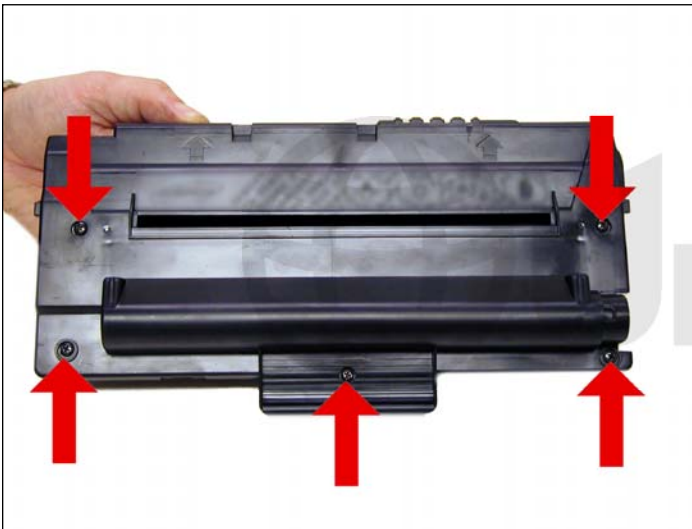


DISASSEMBLY

1. Remove the two screws on the right side end cap.

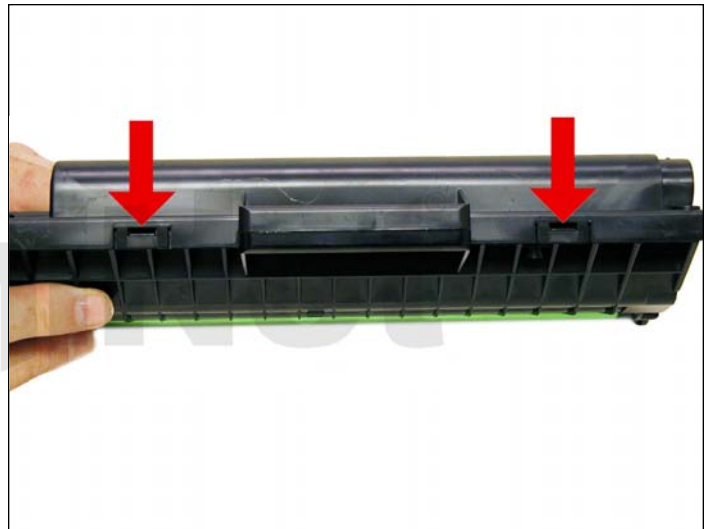


2. Pry up on the fill plug cover with a small jeweler screwdriver. Remove the end cap.

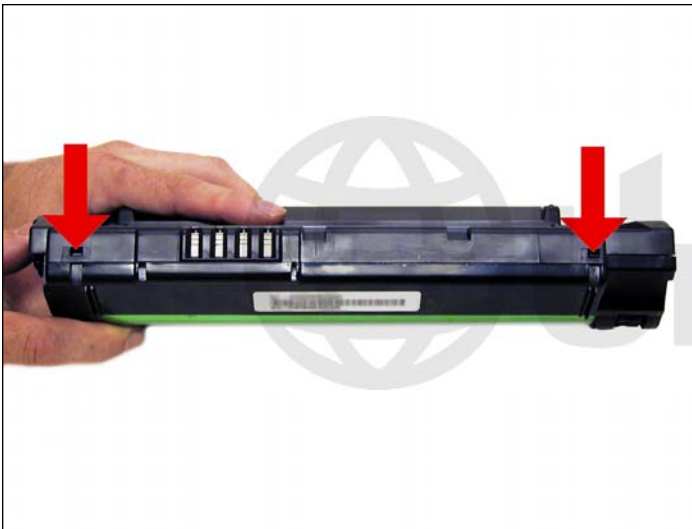


3. Place the cartridge with the handle facing up.

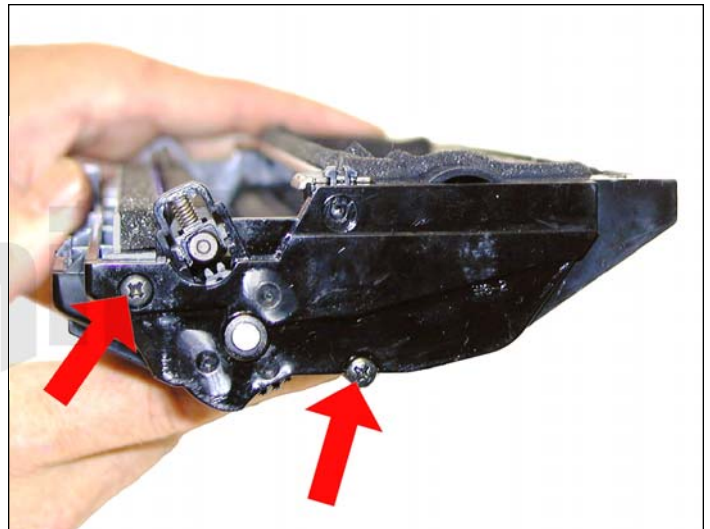
Remove the five top cover screws.



4. Underneath the handle of the cartridge to the right and left, there are two plastic tabs GENTLY pry them up, and lift the back side of the cover up.

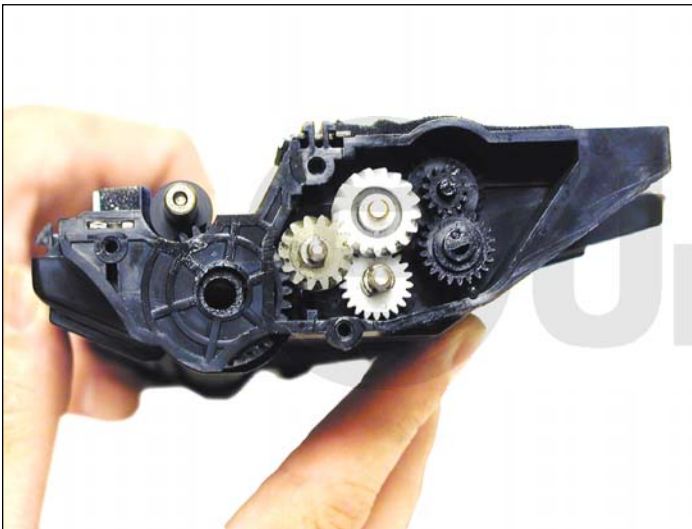


5. On the front edge of the cartridge, there are two more tabs. Press these two tabs in, and lift the cover off. **CAUTION:** The upper half of the toner hopper is being removed. If there is a lot of toner left in the hopper, it can dump out all over! Vacuum the hopper clean.



6. On the remaining end cap, remove the two screws.

Remove the end cap.



7. On the right side there is a series of gears under the end cap. Make a note of the location of each gear, and remove them.

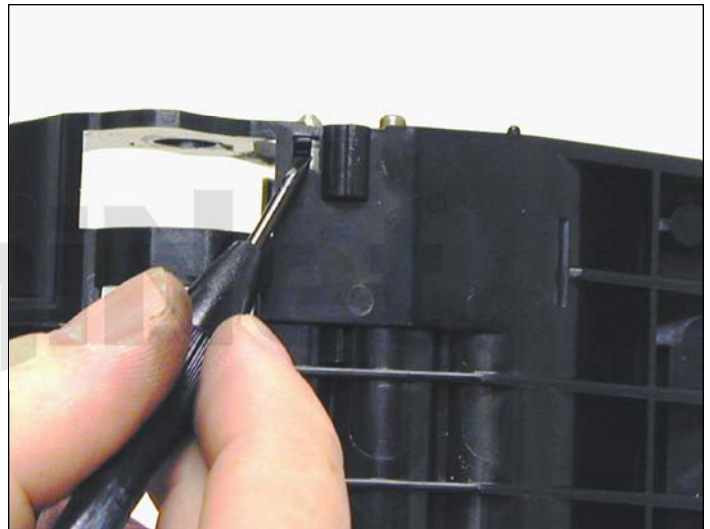


8. Remove the PCR. Clean the PCR with your normal PCR cleaner. **WARNING:** Do not clean the OEM PCR with alcohol, as this will remove the conductive coating from the roller. If the PCR is an aftermarket, follow the cleaning methods recommended by the manufacturer. If the PCR is an OEM, we recommend it be cleaned with your standard PCR cleaner.

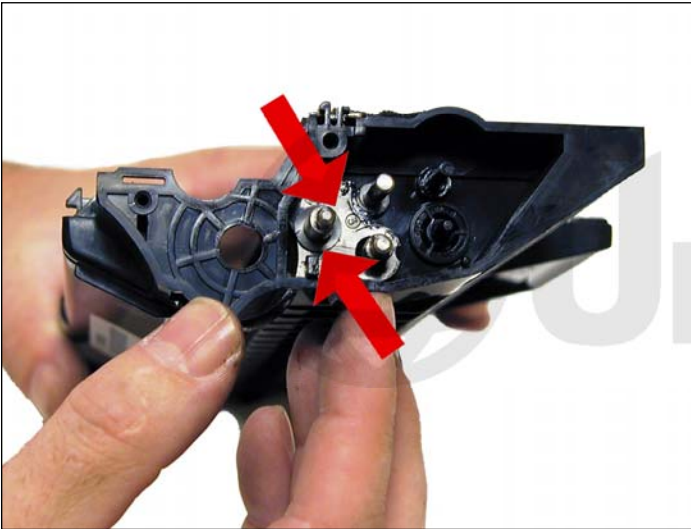


9. Lift the drum out from the cartridge.

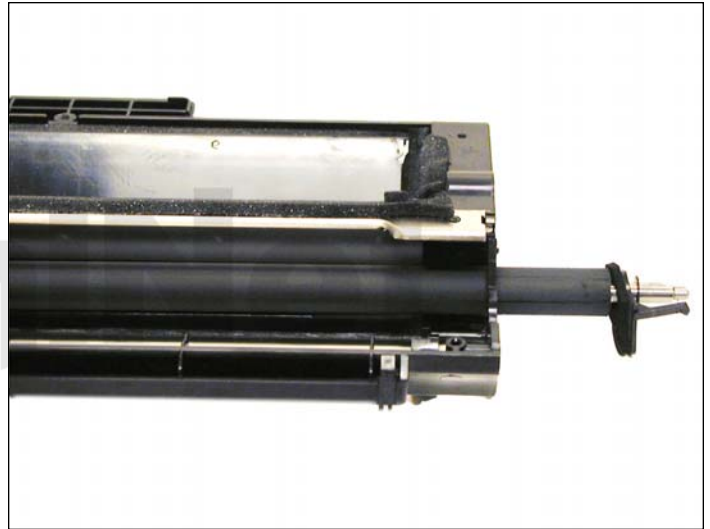
Clean out any remaining toner from the cartridge.



10. Press in on the bottom tab of the developer roller plate (right side) to release it.



11. Slide the entire plate towards the edge of the developer roller cavity, and lift up. The plate should come loose. You may have to remove the metal washer on the developer roller shaft to remove the plate. You can also just leave the washer and plate on the roller shaft if that's easier for you.



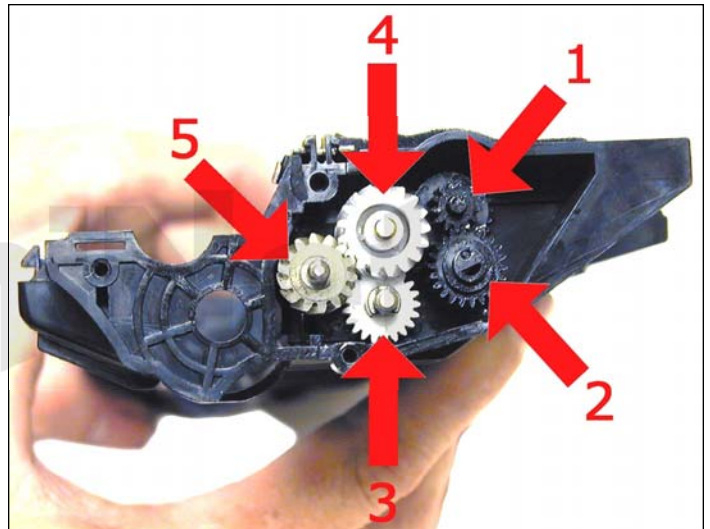
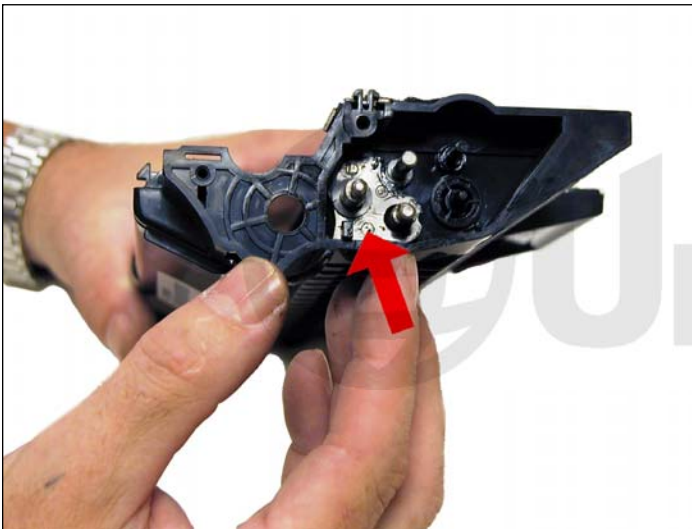
12. Remove the developer roller. Be careful not to damage or lose the flat washers on the roller. I left the plate and washer on the roller shaft here.



13. It is highly recommended that the doctor blade be cleaned. Failure to do so can cause streaking. The doctor blade can be cleaned without removing it. Dampen a cotton swab with alcohol, and clean the blade. Be careful not to press too hard and damage the blade. If the blade has a heavy buildup of toner on it, clean it with Acetone, and then alcohol. Replacement doctor blades are available if your blade is damaged or worn.



14. Replace the developer roller, and flat washers. If no grease is left on the gears and gear shafts, or it is contaminated with toner clean it all off. Replace it with white lithium grease. Be sure to clean and grease the gear shafts, and inside the gear.



15. Replace the roller plate and five gears. When installing the plate, do the opposite of how it came out. Keep it towards the front edge so that the small tab on top fits behind the wall of the cartridge. Look carefully at the picture of the gears. Each gear must fit in this exact way. The gears labeled in order of installation.



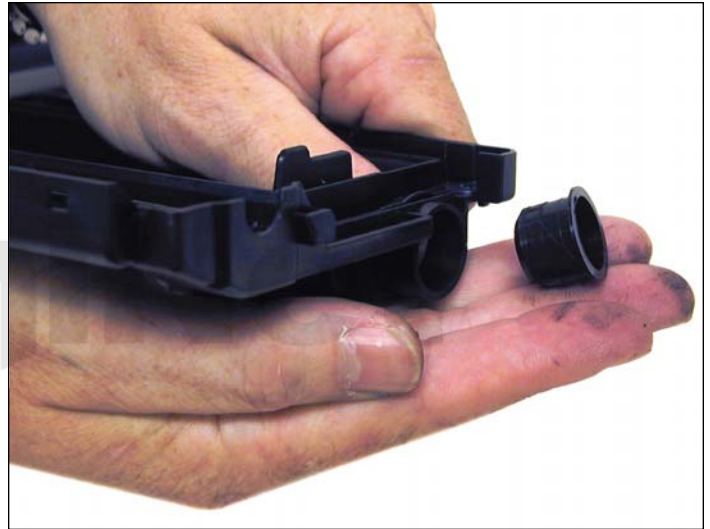
16. Install the new drum in place.



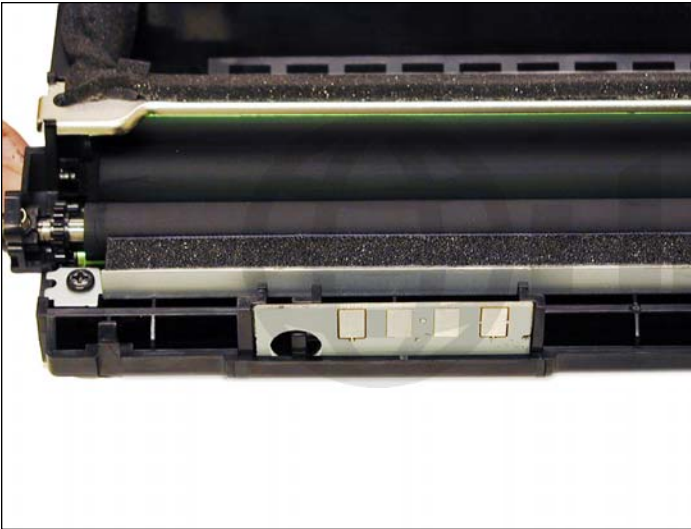
17. Clean the conductive grease off the left side end cap and replace with fresh grease. Install the end cap, make sure the PCR fits correctly in its holder, and all the gears are aligned. Replace the two screws.



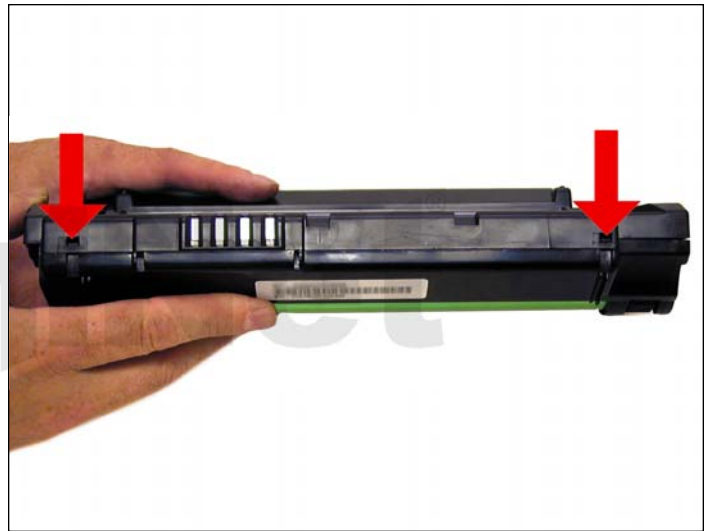
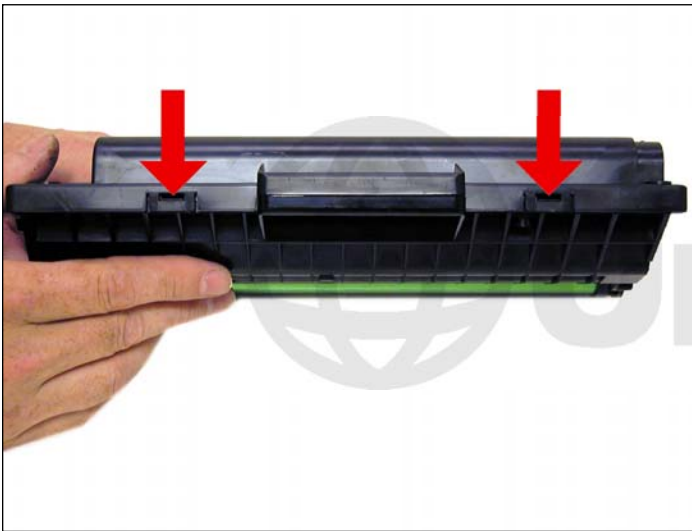
18. Install the PCR.



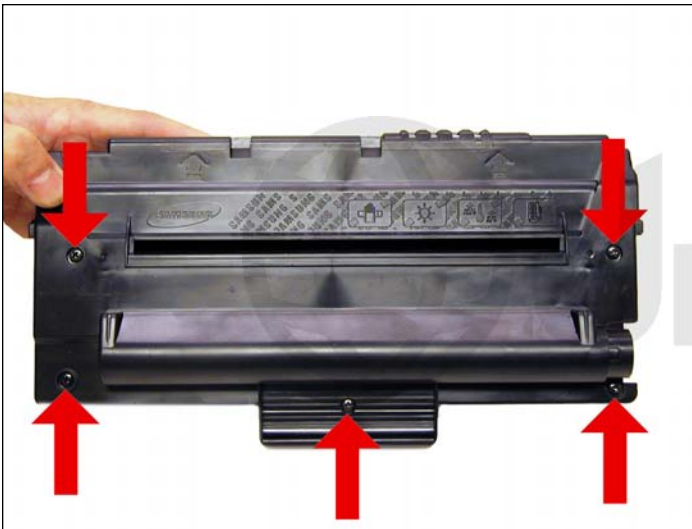
19. Remove the fill plug from the top cover.



20. Replace the chip inside the top cover.



21. Carefully snap the cover on making sure all the tabs lock in place.



22. Install the five screws in the top cover.



23. Fill the hopper with toner for SCX-4300.



24. Install the fill plug.

Check for leaks.



25. Install the remaining end cap and two screws.

Make sure the top of then end cap snaps into place over the fill plug

PRINTING A TEST PAGE

The best way to run test pages is simply to make a copy. Take a printed page with both text and graphics, and run a few copies.

MACHINE ERROR CODES

As with most of the newer Samsung models, the error codes are all in English and are self-explanatory. The biggest problems you will run into are paper jams, and a dirty scanner. Keeping the machine clean with periodic maintenance will take care of most of them.

REPETITIVE DEFECT CHART

OPC Drum	78.0 mm
Developer roller	45.0 mm
PCR	40.0 mm