

# SAMSUNG® ML-2955

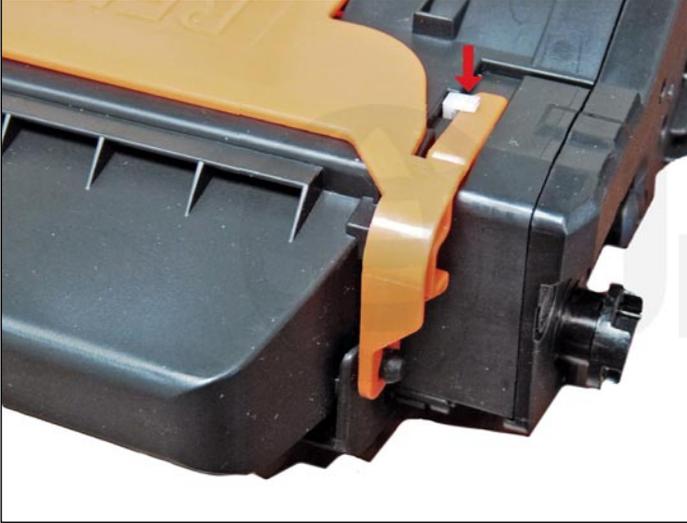
## TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG ML-2955 TONER CARTRIDGE

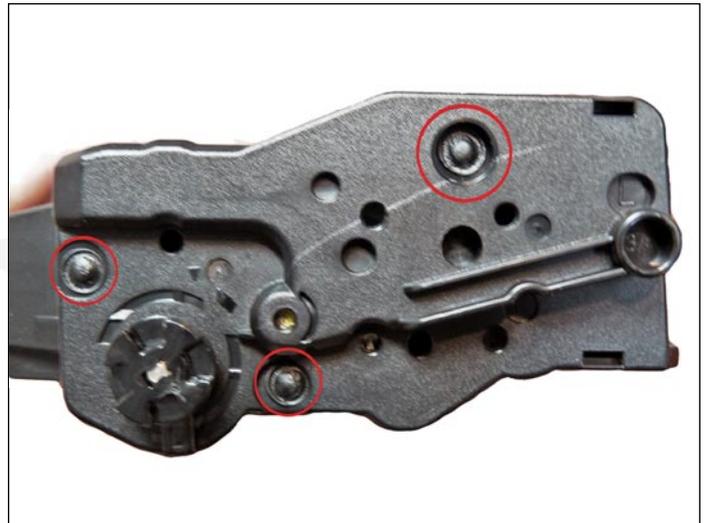
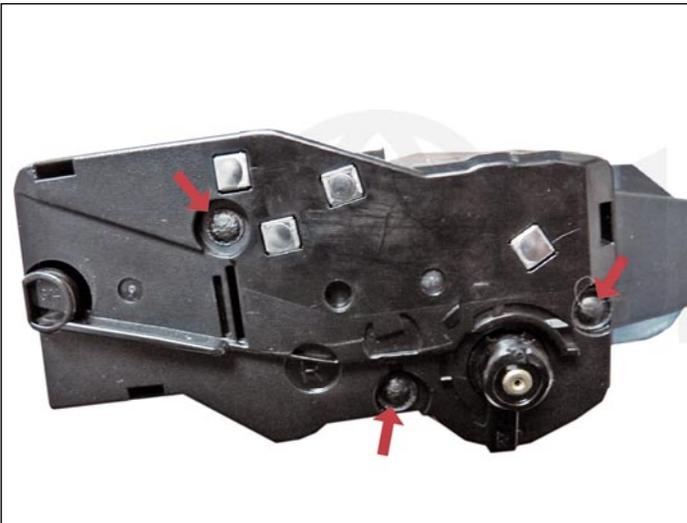
# REMANUFACTURING THE SAMSUNG ML-2955 TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet



First released in January 2012, the **Samsung ML-2955** series of printers are based on a 29-ppm engine with a maximum resolution of 1200 x 1200 dpi. The first page out is stated to be under 8.5 seconds. Depending on the model number, other options/specs are available.

The MLT-D103L/S cartridges do not have a built in drum cover. They come new with a special removable 2-piece plastic drum cover/shield. This is a change for Samsung in that they normally use heavy paper with foam glued to it to protect the drum. This new cover also clips into the base of the PCR holders so that during storage, the PCR is not touching the drum. This will help prevent flat spots on the PCR.



These cartridges have plastic rivets that need to be cut off, holes drilled, and screws installed to hold them back on.

It is not a hard process and is covered completely in the instructions.

The standard cartridge (Samsung part number: MLT-D103S) is rated for 1,500 pages. The high yield cartridge (Samsung part number: MLT-D103L) is rated for 2,500 pages. As with pretty much all cartridges these days the cartridge has a chip that has to be replaced each cycle. The OEM chips are regional, so be sure to get the proper chip for your region. These machines when new ship with a 1,000-page starter cartridge.

The MLT-D103S has a list price of \$54.99 USD\* and the MLT-D103L has a list price of \$69.99 USD\*.

**\*Pricing as of February 2012, in U.S. American Dollars.**

### **THESE ARE QUITE A FEW MACHINES THAT USE THIS CARTRIDGE**

**ML-2950ND**

**ML-2951ND**

**ML-2955ND**

**ML-2955DW**

**SCX-4728FD**

**SCX-4729FD**

**SCX-4729FW**

One interesting note about this series is they have a user setting for altitude adjustment. There are four different settings, depending on the altitude the device is to be used in. They are also capable of poster printing where you can scale a picture over 4, 9, or 16 pages.

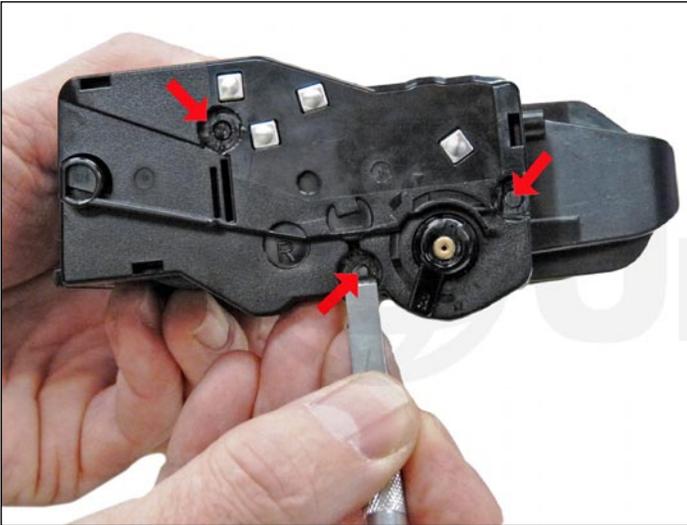
Cartridge troubleshooting will be listed at the end of these instructions.

### **REQUIRED TOOLS**

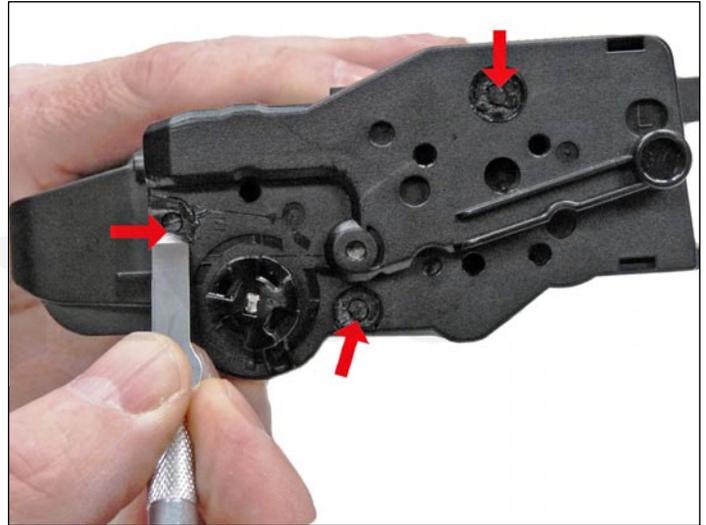
1. Toner approved vacuum
2. A small common screwdriver
3. A Phillips head screwdriver
4. Needle nose pliers

### **REQUIRED SUPPLIES**

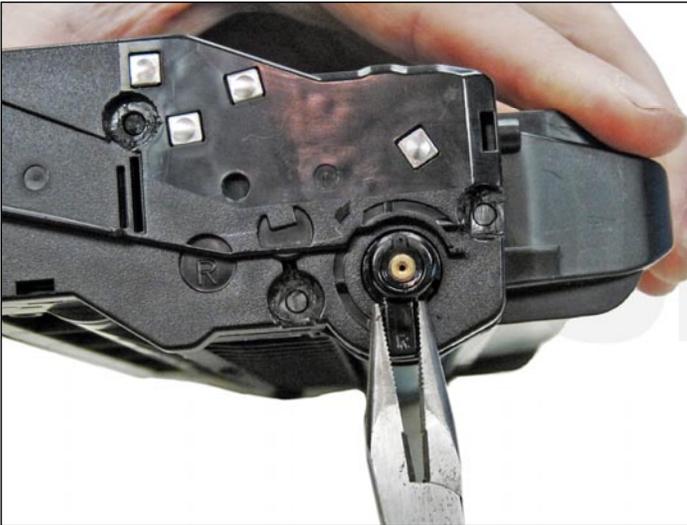
1. Replacement toner for use in the Samsung ML-2955
2. Replacement chip (check for the proper region)
3. New replacement OPC drum (when available)
4. New replacement developer roller (when available)
5. New replacement primary charge roller or PCR (when available)
6. New replacement wiper blade (when available)
7. New replacement doctor blade (when available)
8. Conductive grease
9. 99% isopropyl alcohol
10. Drum lubricating powder
11. Small tube of silicone caulk



1. Place the cartridge with the handle up and the contact side facing towards you. With the chisel blade knife, slice off the heads of the three plastic rivets. Leave the end cap and arm in place for now. You may have to custom-grind your chisel blade to get into the small areas of the rivets. You can also use a small common screwdriver if the edge is sharp.



2. On the drum gear-side end cap, take the chisel blade knife and slice off the heads of the three plastic rivets as was done on the contact side.



3. Remove the drum axle arm from the contact side of the cartridge. To remove it, turn the arm so it is facing straight down, then pull the arm straight out to remove. There are small tabs on the back of the arm that are freed and the arm is straight down. Note that the arm is stamped with the letter "R" to indicate the right side of the cartridge.



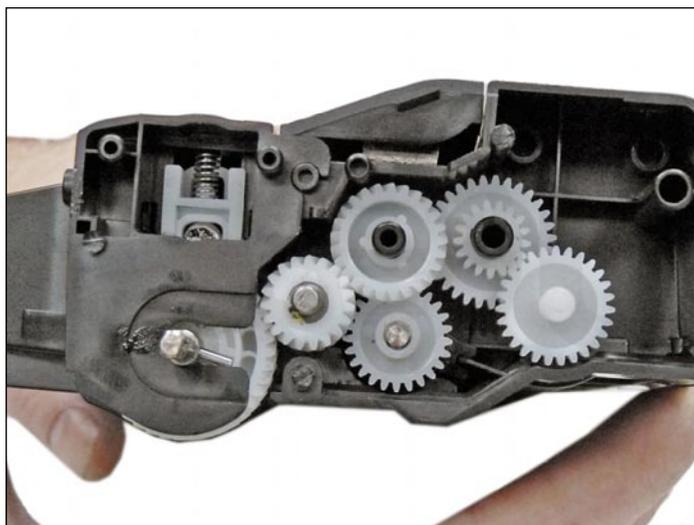


4. While still on the contact-side end cap, locate the top, bottom, and front tabs.

Press in on the tabs and remove the end cap.



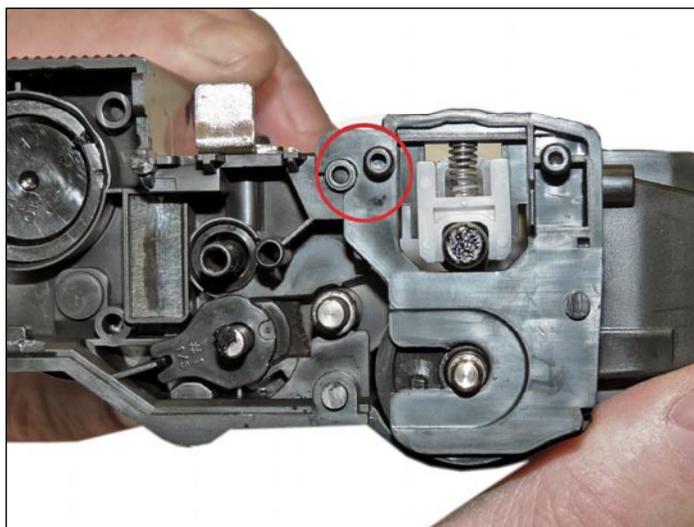
5. On the drum gear-side end cap, remove the drum drive-gear and the remaining arm the same way as the right side. Turn it to be straight down, and pull it straight out. Press in on the top tab and bottom tabs and remove the end cap. Note that the arm is stamped with the letter "L" to indicate the left side of the cartridge.



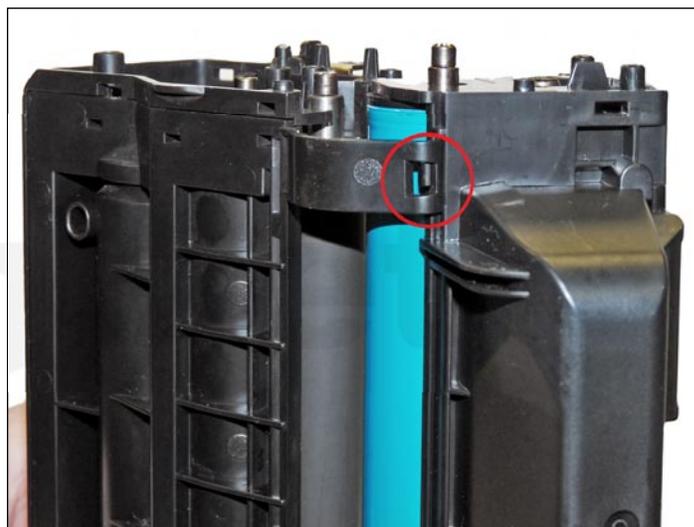
6. Remove the gears.



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



8. Lift up on the drum/waste hopper and loosen each side from the side tabs. Rotate the waste section so that the curved bottom clips on each side come free. Be careful to hold the drum so it does not become damaged. Remove the drum/waste assembly.



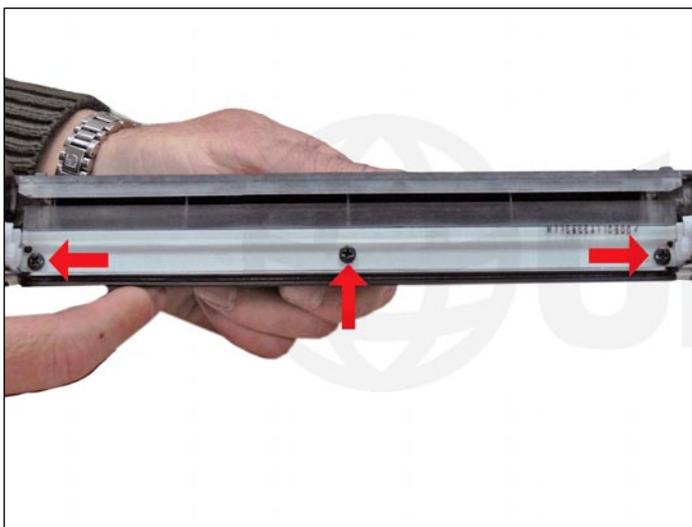


9. Remove the drum.

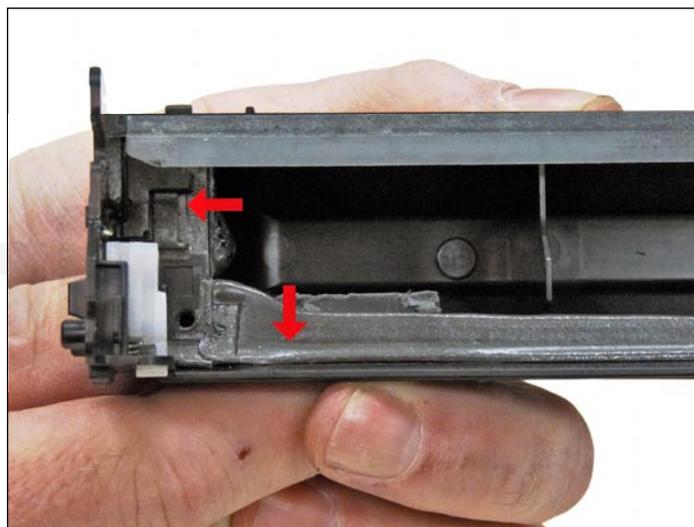


10. Remove the primary charge roller (PCR) from the assembly. Clean the PCR with your normal PCR cleaner.

**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.

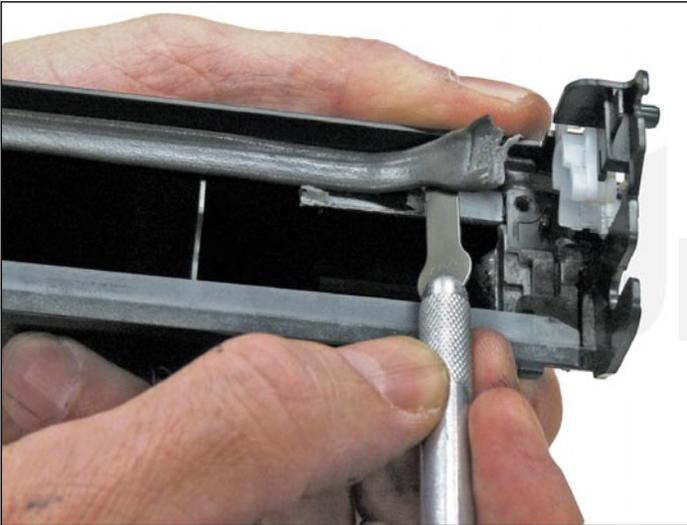


11. Remove the three screws from the wiper blade. Remove the blade by lifting it up slightly, and sliding it out from underneath the PCR holders. Be careful not to damage the alignment pins!

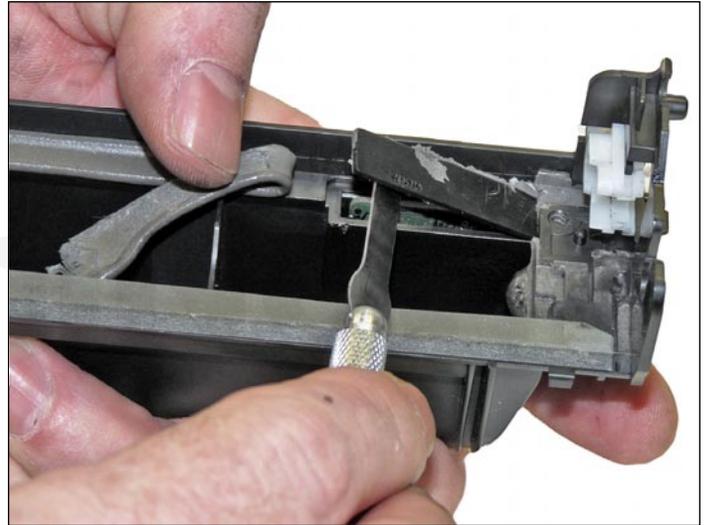


12. Clean out all the waste toner from the hopper.

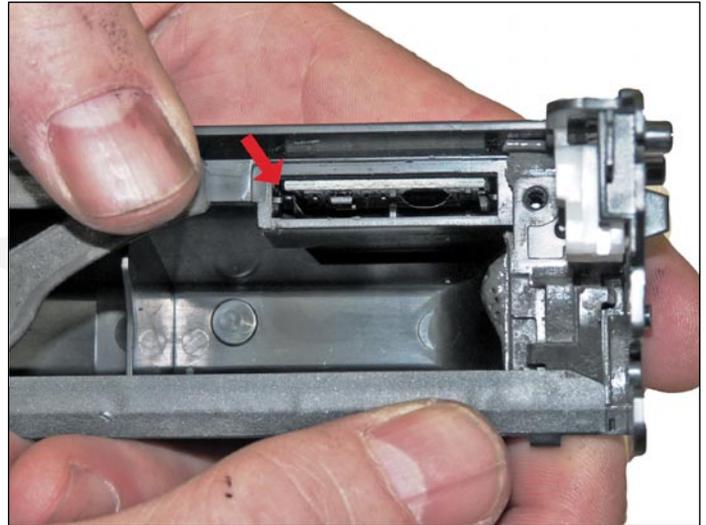
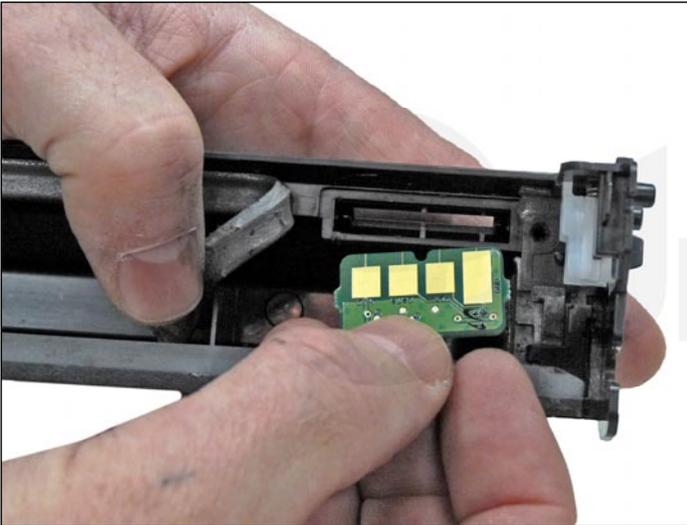
Make sure the seals are clean.



13. Carefully pry off the seal above the chip holder, in the right side of the waste chamber.

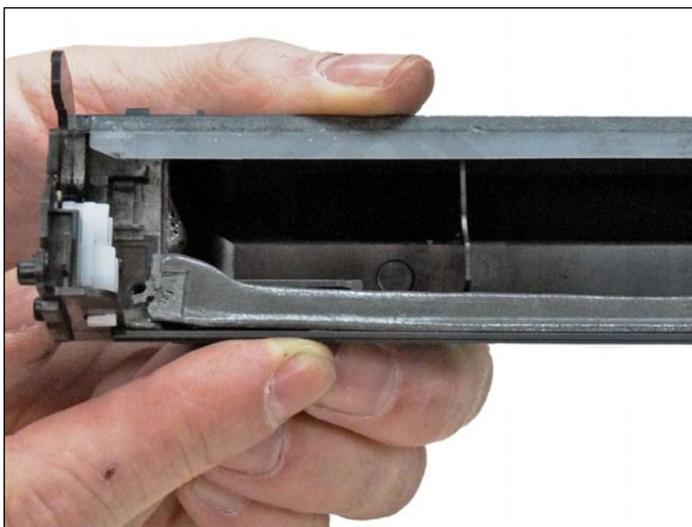


14. Pry off the plastic chip cover with a small screwdriver or chisel.

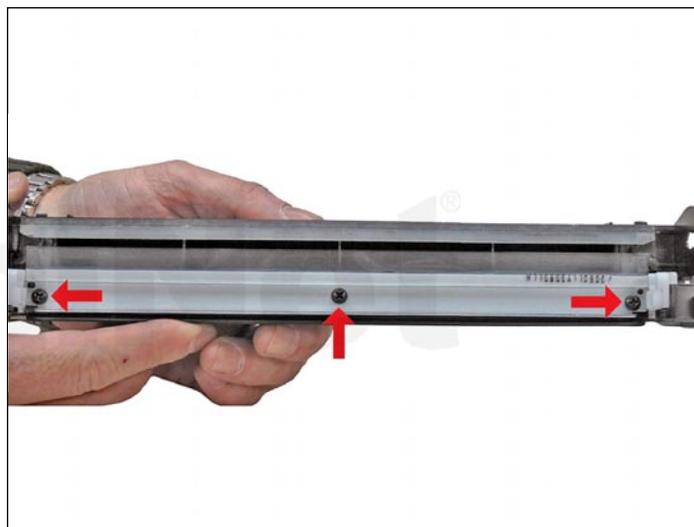


15. Remove the old chip and install the new replacement chip.

Make sure the chip fits into the top slot, and that the contacts are facing out and towards the edge of the chamber.



16. Install the plastic chip cover. If it is not sticking well, you can use double-sided tape to hold it in place. Set the wiper blade seal back in place. We recommend that you glue it back down with a small amount of 100% silicone caulk or adhesive (Phenoseal or GE work best in our tests).



17. Install the cleaned or new wiper blade and three screws.



18. Place a small amount of conductive grease in the PCR holders, and install the PCR. Note that there is a place on the holders for a PCR-cleaning roller. It is not used in the cartridge. Samsung seems to be using parts from other cartridges for the D103.



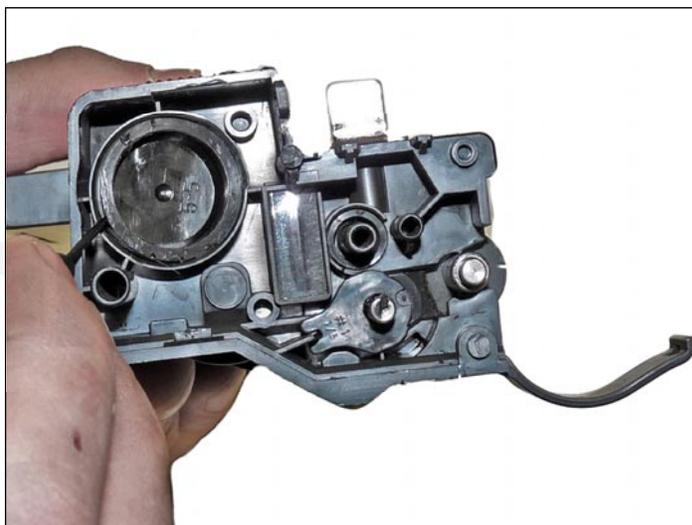
19. The drum axle shaft, on the large gear-side of the drum, has conductive grease on it. Regardless if you are replacing the drum or not, clean the old grease off, and replace with new.



20. Install the drum into the waste hopper.

The axle should click into place.

Make sure the gear-side of the drum is on the correct side.



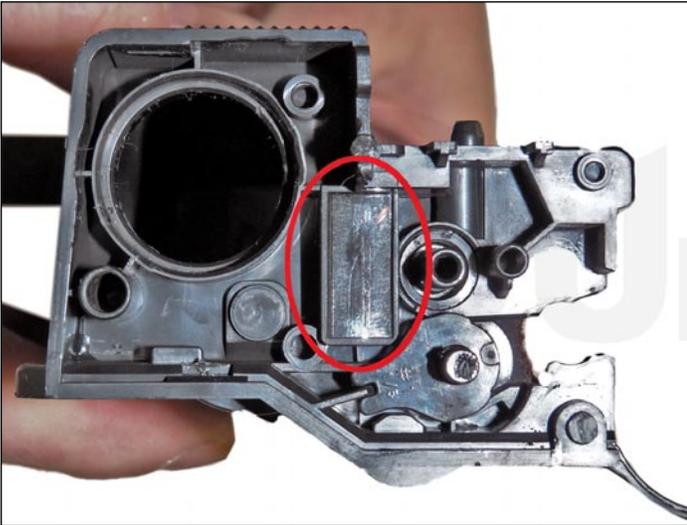
21. On the supply hopper, carefully pry out the fill plug and dump out any remaining toner. The fill plug can be difficult to remove as it is recessed. Take a small common screwdriver and work it around the edge, lifting slightly until it comes loose.



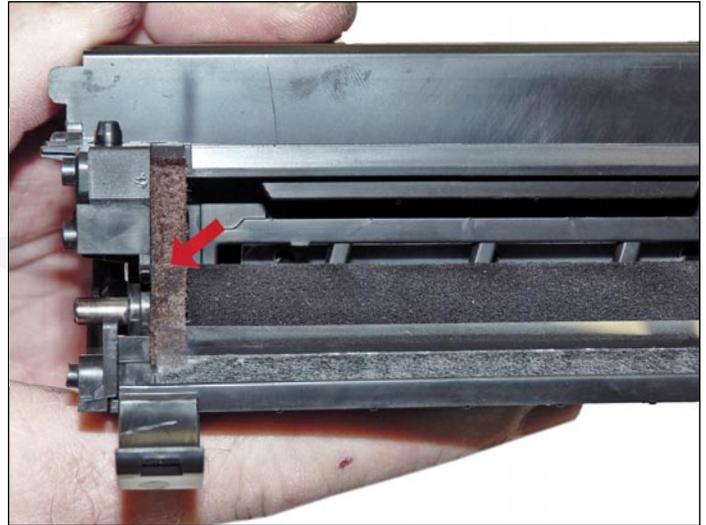
22. Remove the developer roller.



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



24. Clean out all the remaining toner from the hopper. Be careful not to lose the seal-port plug from the side of the cartridge. No seals are used in this cartridge, but the seal-port is there. Samsung has installed a foam/plastic seal to cover the port.



25. Make sure the doctor blade sealing-foam, and the seals for the developer rollers are clean and intact.



26. Clean the edge of the doctor blade, so there is no evidence of build up along the edge. If any build up exists, the cartridge will streak. No chemicals should be used. We have found that using a clean ice cream-type wooden stick works great for scraping the blade clean without damaging it.



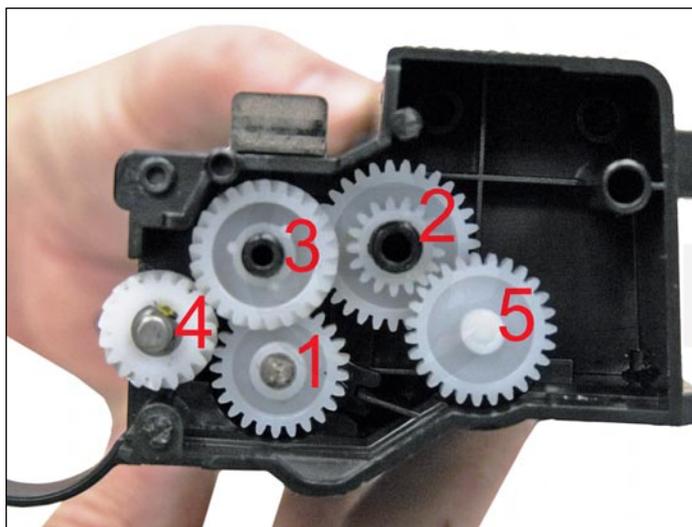
27. Install the doctor blade and two screws.



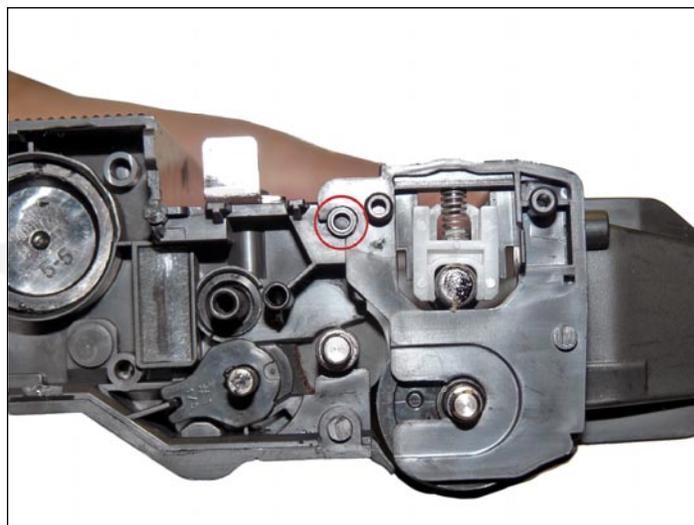
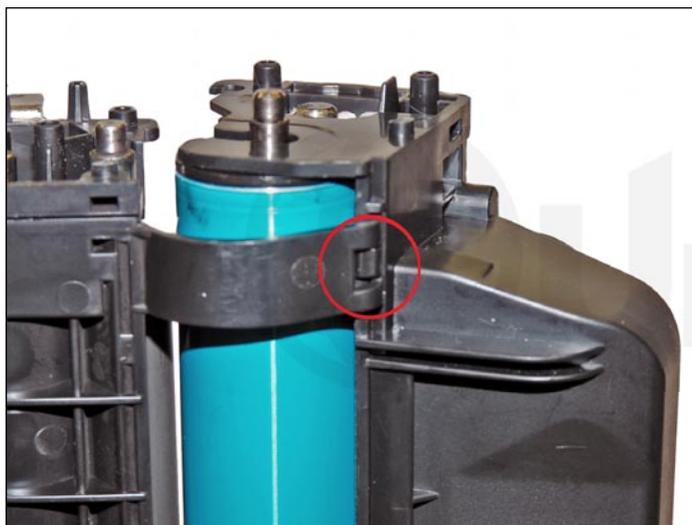
28. Clean the developer roller (DVR) with a dedicated DVR cleaner, and replace into the hopper. Place the long-shaft side to the gear-side of the cartridge.



29. Fill the hopper with new replacement toner for use in the Samsung ML-2955. Replace the fill plug and check for leaks.

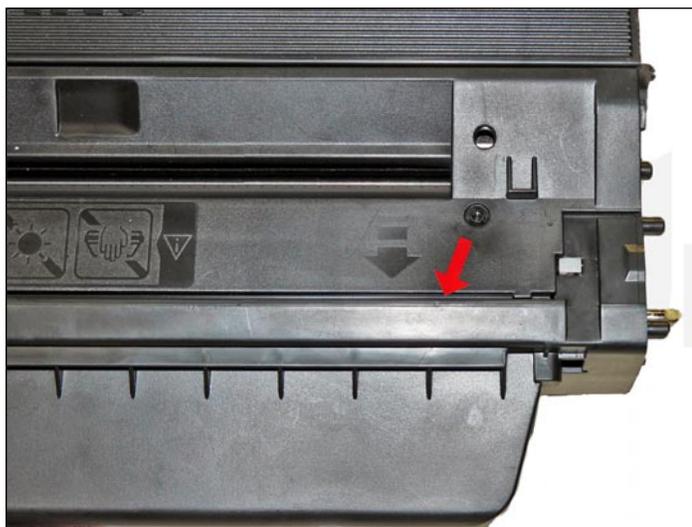


30. Install the gears in the order shown.

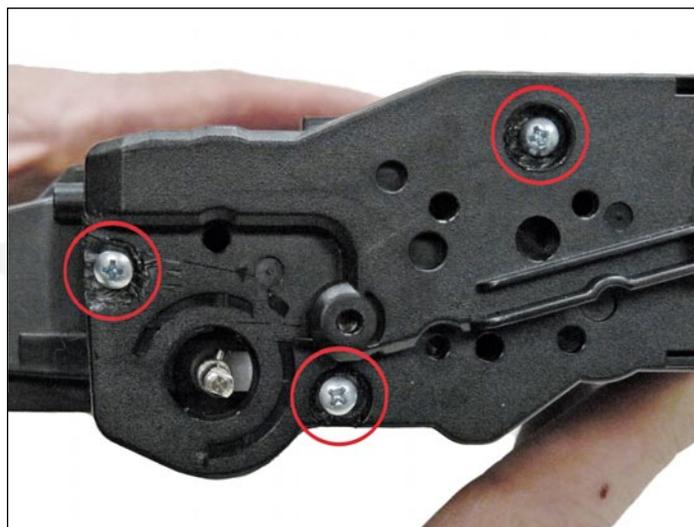


31. Place the two halves together by setting the curved bottom clips into the toner hopper.

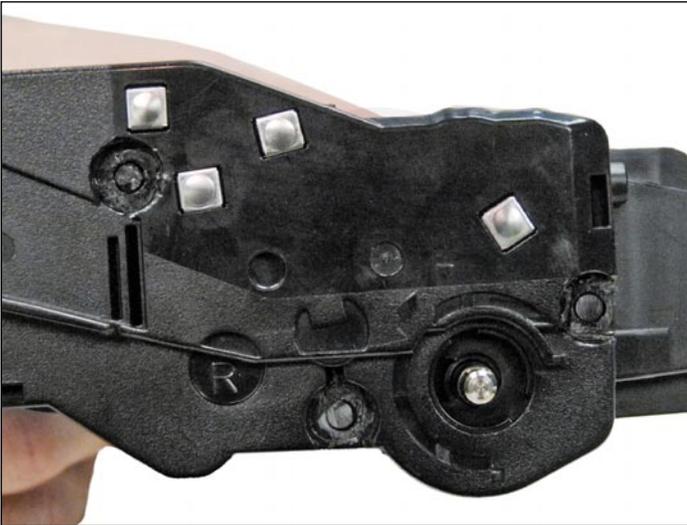
Roll the hopper up so that both sides of the waste hopper snap into the toner hopper.



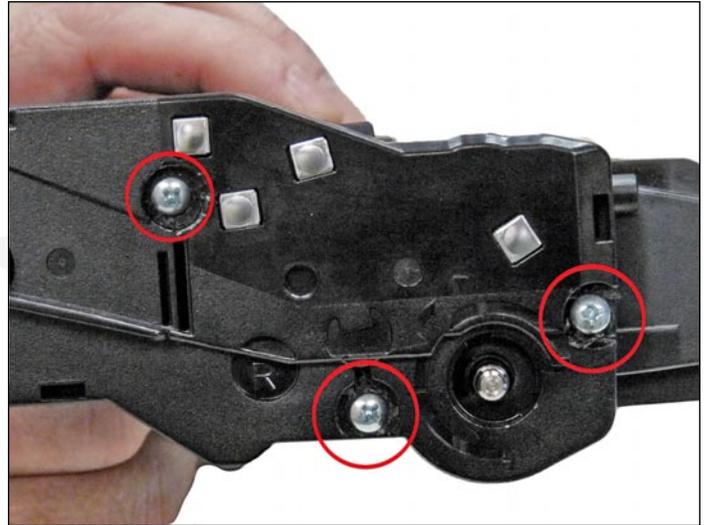
32. Slide the middle top cover. Make sure the long lower edge of the cover fits under the edge of the waste hopper.



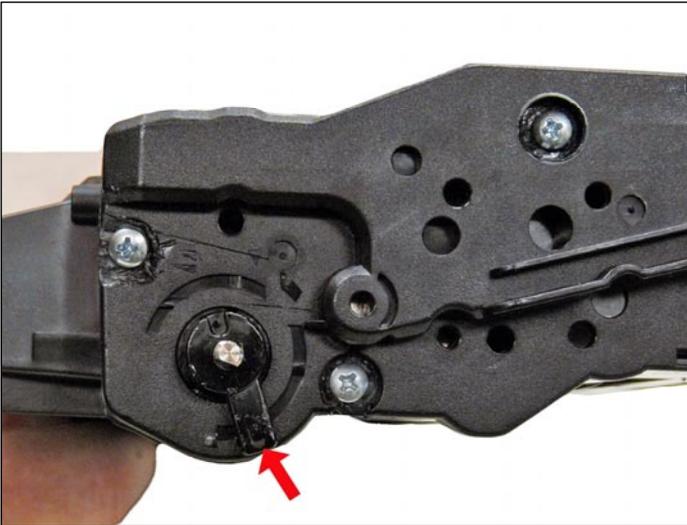
33. Install the gear-side end cap. Drill three small holes that correspond to the screw size you are using in the three plastic rivets that you removed at the start of these instructions. Install the three screws into the end cap.



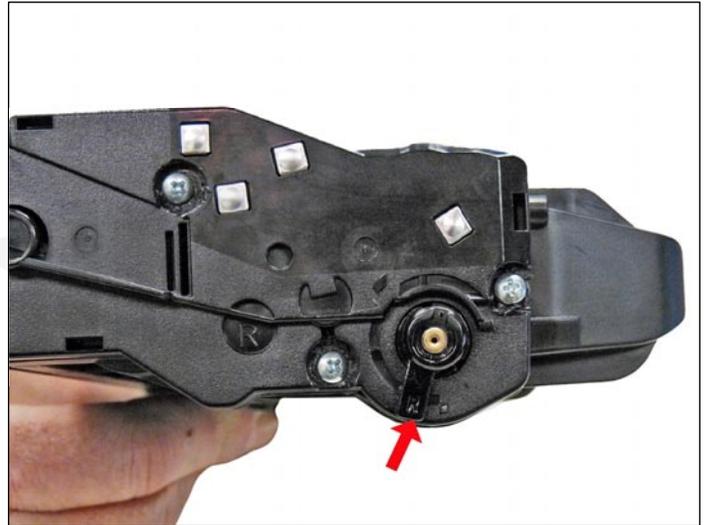
34. Clean the contacts on the contact end cap, and replace the conductive grease. Snap the end cap into place.

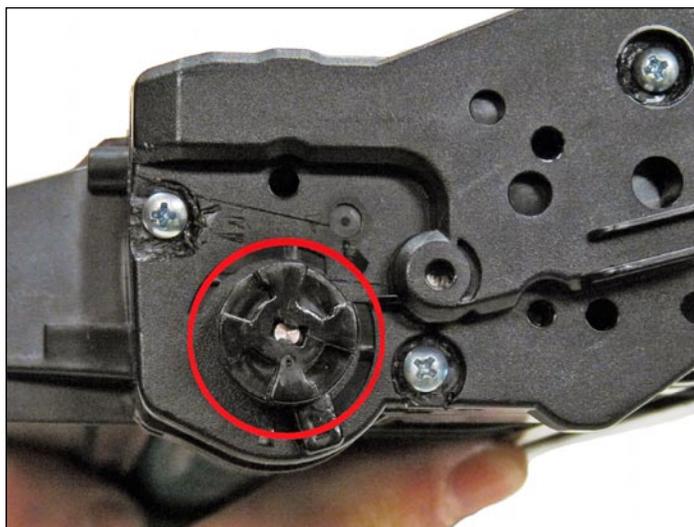


35. Install the contact-side end cap and drill three small holes that correspond to the screw size you are using in the plastic rivet posts. Install the three screws into the end cap.

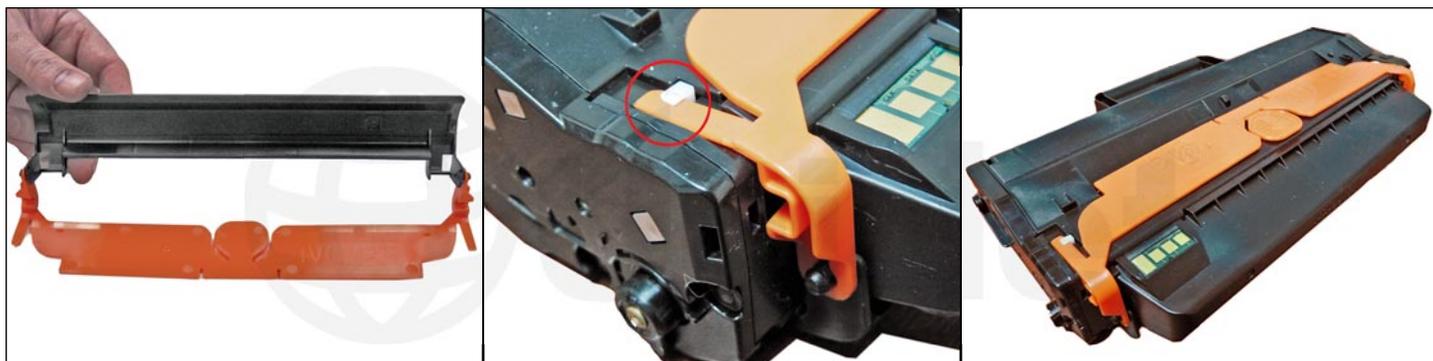


36. Install the two drum-axe arms as shown. Make sure you place the two arms on their correct sides (letter "L" to the contact side and "R" to the gear side). They should be installed just as they were removed. Press them in straight, up and down, and then turn them slightly towards the back of the cartridge as shown.





37. Install the drum drive gear on the gear side of the cartridge.



38. Install the drum-cover assembly by sliding the bottom black piece of the drum cover over the drum, and sliding the orange top piece, so that the two small tabs on each side fit under the white locking-tabs located on each side of the cartridge.

**REPETITIVE DEFECT CHART**

<b>Upper heat roller:</b>	<b>77.6 mm</b>
<b>OPC drum:</b>	<b>75.49 mm</b>
<b>Lower pressure roller:</b>	<b>75.4 mm</b>
<b>Supply roller:</b>	<b>63.22 mm</b>
<b>Transfer roller:</b>	<b>47.12 mm</b>
<b>Developer roller:</b>	<b>36.75 mm</b>
<b>PCR:</b>	<b>26.7 mm</b>

**PRINTER ERROR CODES**

Here are a few of the more common error codes (for SCX machines):

<b>C2-1410:</b>	<b>Install new toner cartridge</b>
<b>C2-1510:</b>	<b>Toner cartridge is not compatible</b>
<b>M1-1010:</b>	<b>Paper Jam in tray 1</b>
<b>S2-4110:</b>	<b>Door open</b>

**PRINTING TEST PAGE - DEMO PAGE**

1. With the printer in the READY state, press and hold the "Cancel" button for about two seconds until the status LED light blinks slowly.
2. Release the button.
3. For SCX machines you can just make a copy of a test page.