

# SAMSUNG® CLP-680 CLT-C/M/Y/K506S TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG CLT-C/M/Y/K506S TONER CARTRIDGE

# REMANUFACTURING THE SAMSUNG CLP-680 CLT-C/M/Y/K506S TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet

The Samsung CLP-680 series of color printers are based on a 25ppm, 600dpi engine (9600 x 600 enhanced). The first page out is rated under 17 seconds, and the monthly duty cycle is up to 40,000 pages.

The printers come with starter cartridges rated for 2,000 pages (black) and 1,500 pages (colors). The standard cartridges are rated for 6,000 pages (black), and 3,500 pages (colors). Each color cartridge has its own specific chip. There are also different regions. Make sure you have the correct chip for your region!

## PRINTERS THAT USE THIS ENGINE

**Samsung CLP-680ND**

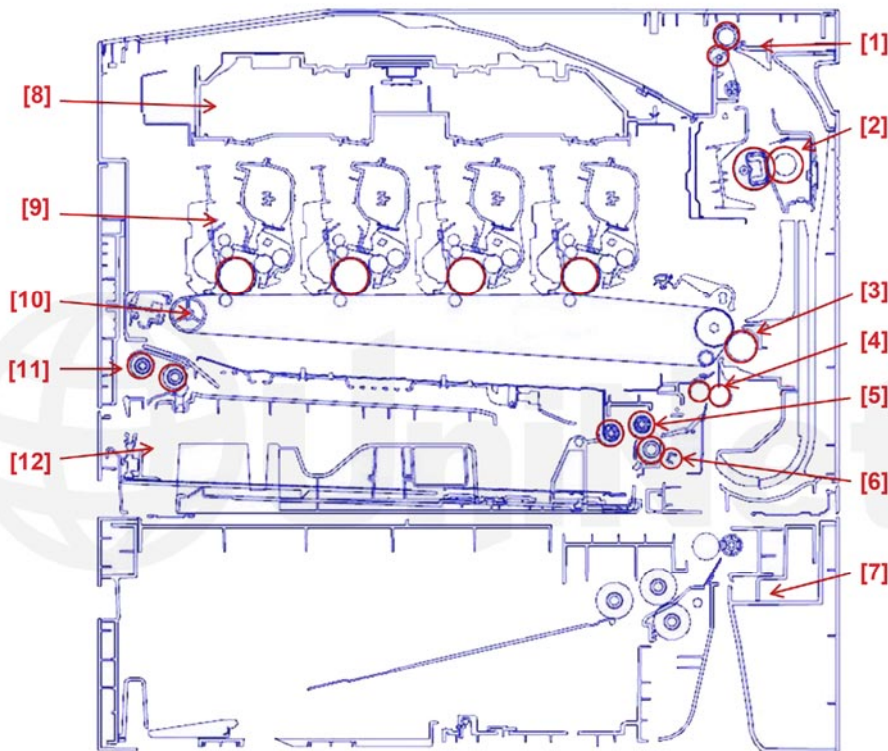
**Samsung CLP-680DW**

**Samsung CLX-6260FD**

The black cartridge CLT-K506L (6,000 pages) is listed for USD\$176.99, the color cartridges CLT-C/M/Y506L (3,500 pages) are listed for USD\$164.99\*.

**\*Pricing in U.S. American Dollars, as of July 1, 2014.**

Shown is an outline of the printer, toner cartridges, various major assemblies, and how they all fit in the machine...



**1. Exit Unit**

**5. Pick up roller**

**9. Toner Cartridge**

**2. Fuser Unit**

**6. Reverse roller**

**10. ITB Unit**

**3. T2 (Second Transfer) roller**

**7. SCF (Second Cassette Feeder)**

**11. MP Unit**

**4. Registration (Regi.) roller**

**8. LSU**

**12. Cassette**

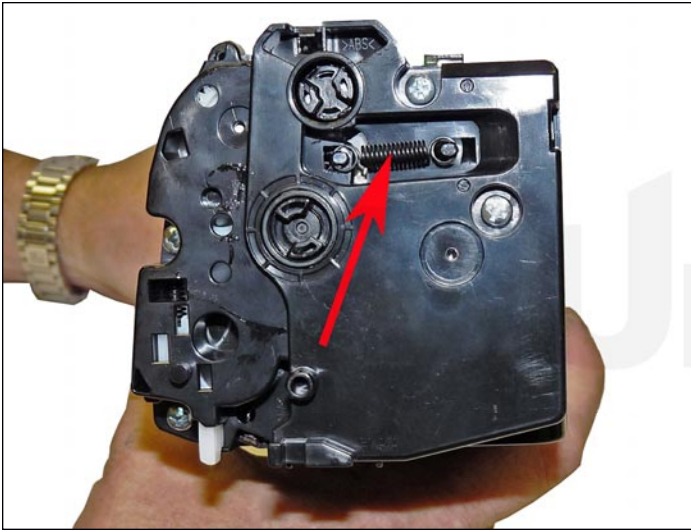
**REQUIRED TOOLS**

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 CLT-506 toner cartridge (make sure you use the correct color for your cartridge)
2. Replacement chip
3. Replacement drum (optional)
4. PCR (optional)
5. Conductive grease
6. Drum lubricating powder
7. Cotton swabs
8. Shipping lock

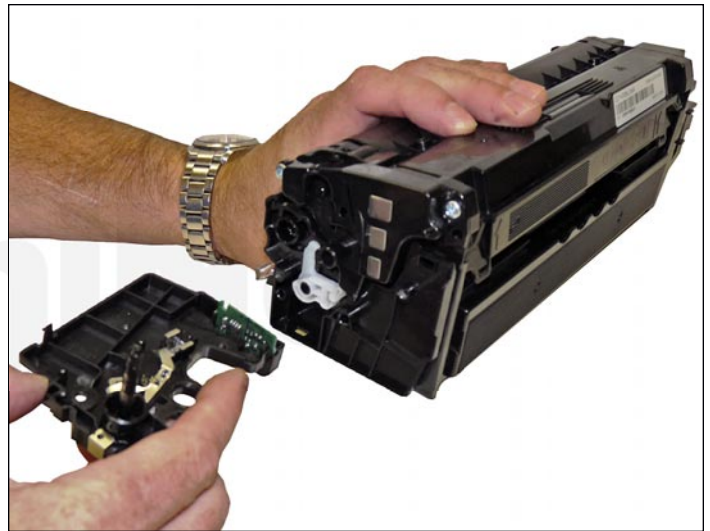
**NOTE:** All the screws that will be removed in this cartridge are the same size so they can all be grouped in one place if desired.



1. With a spring hook, remove the springs on of both sides of the cartridge.

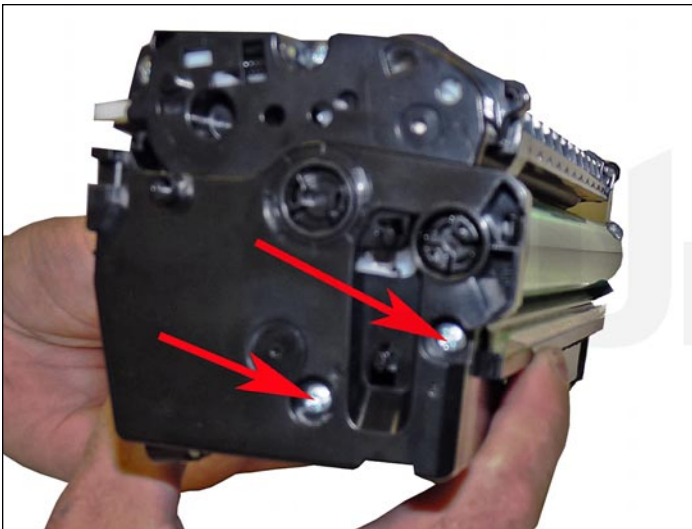


2. On the left side (non-contact) remove the two screws.



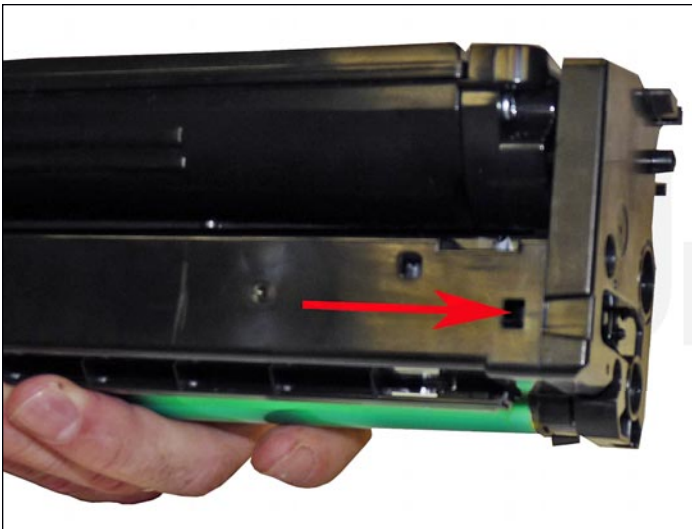
3. Press in on the two tabs and remove the end cap

Be careful! Both halves and possibly the chip will come loose!



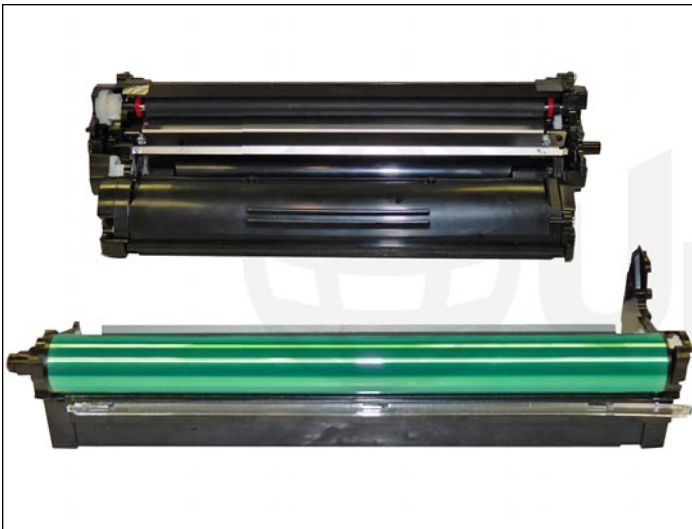
4. On contact side of the drum half, remove the two screws.





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

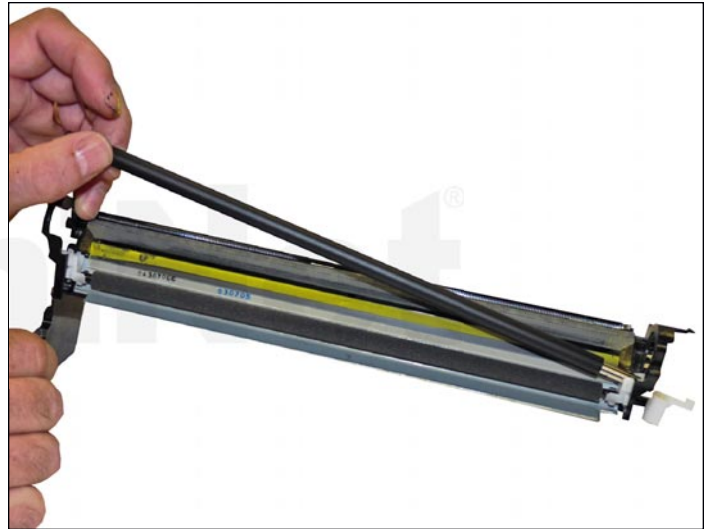
**CAUTION!** There is quite a bit of conductive grease on the axle!



6. Separate the two halves.



7. Remove the drum.



8. Remove the PCR.

Two white PCR stabilizers will come off.

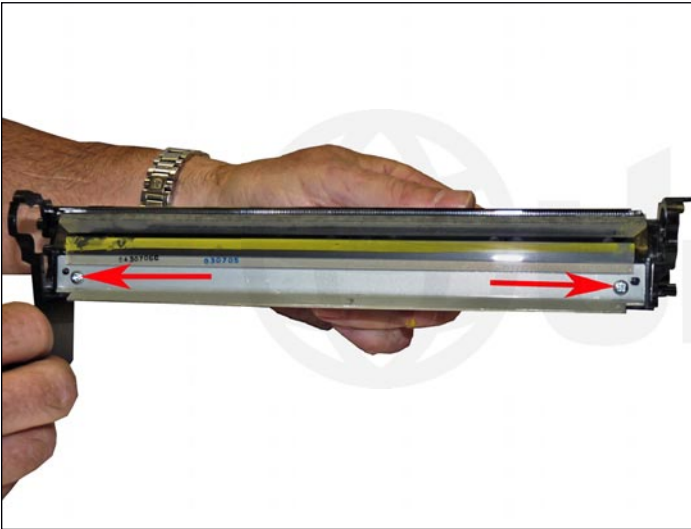
Place them aside.



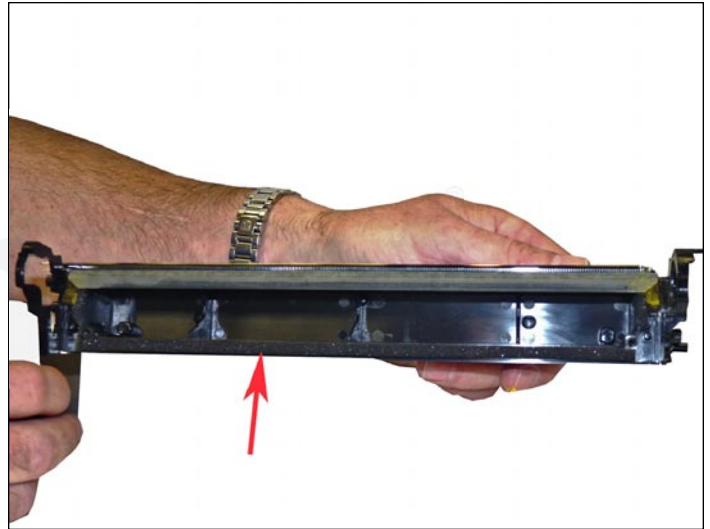
9. Remove the PCR cleaning roller.



10. Remove the two PCR holders.



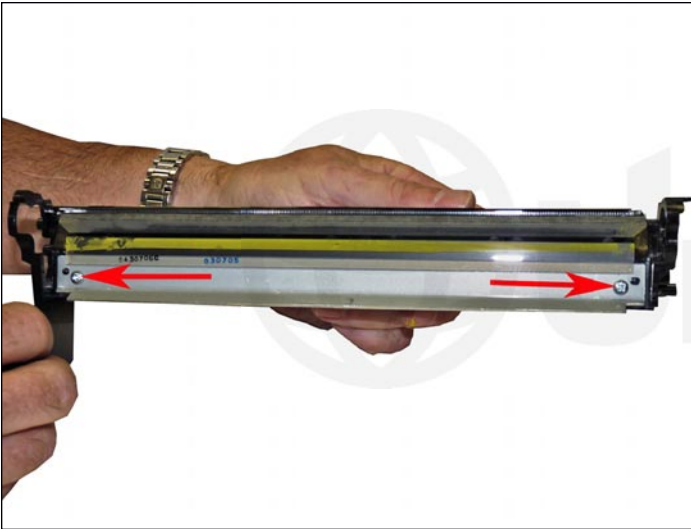
11. Remove the two wiper blade screws, and the wiper blade.



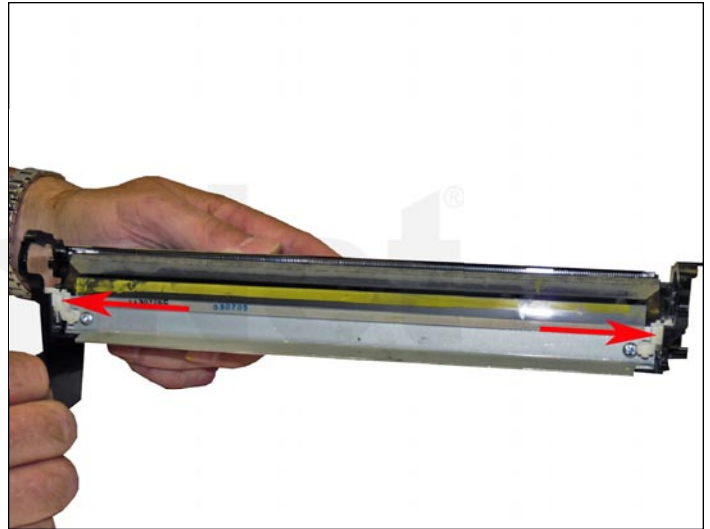
12. Clean out all waste toner.

Make sure the wiper blade seals are clean!

13. Lubricate the wiper blade with your favorite system.



14. Install the wiper blade and two screws.

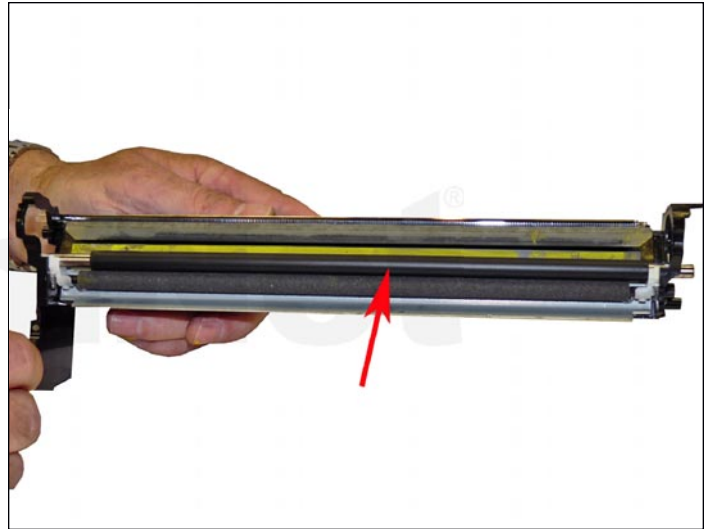


15. Install the two PCR holders.

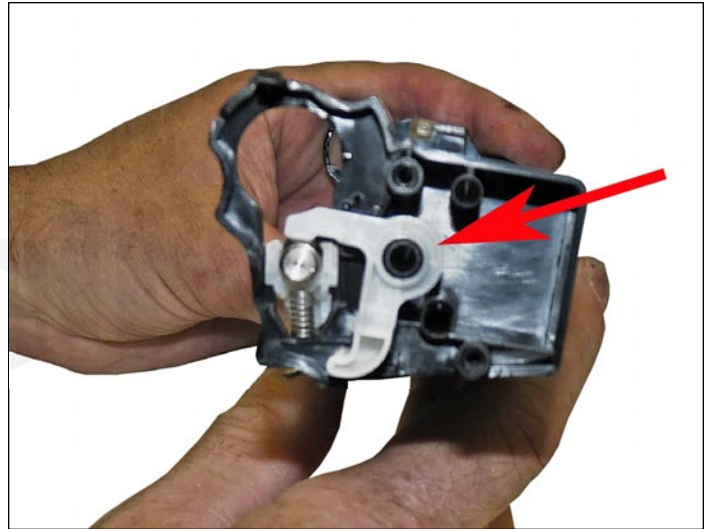
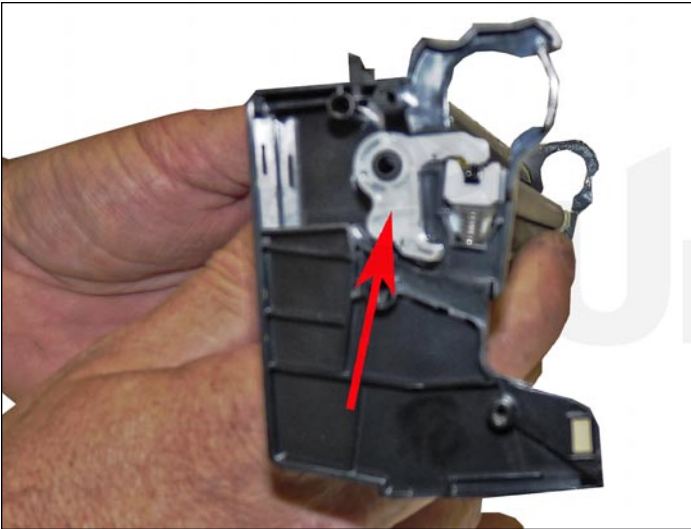
Make sure the springs are engaged properly.



16. Clean and install the PCR cleaning roller.



17. Clean and install the PCR.

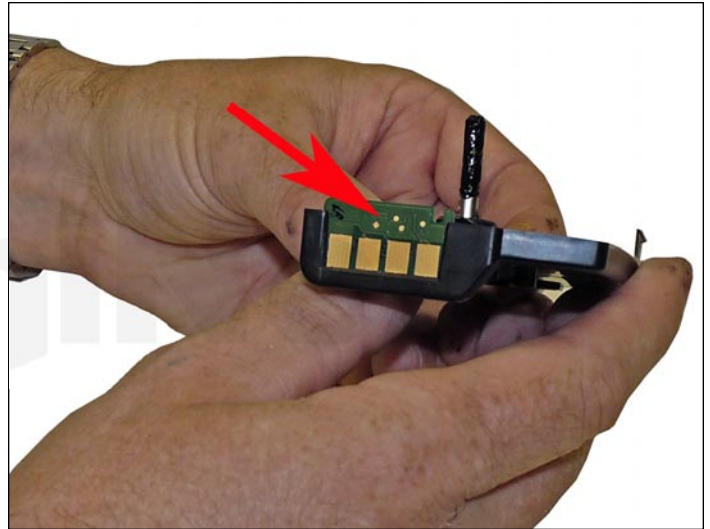


18. Re-install the two white PCR stabilizers as shown.





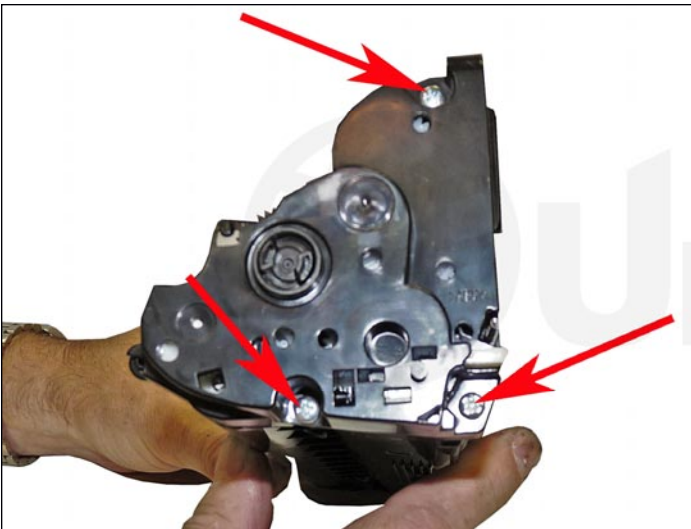
19. Clean, lubricate and install the drum (long gear to the right side).



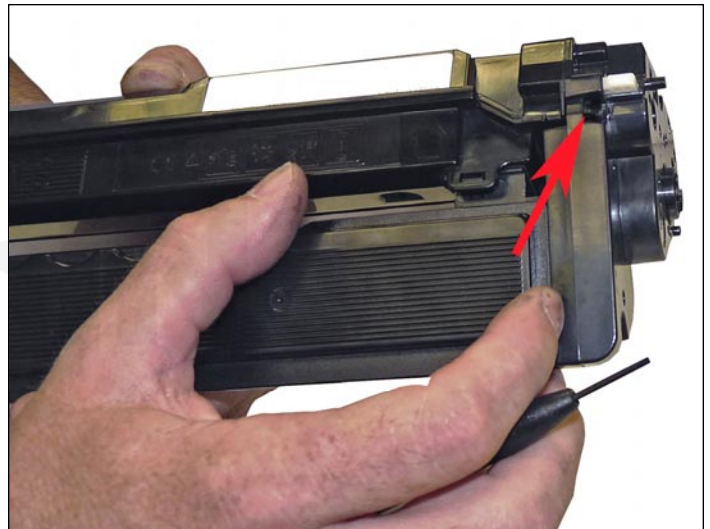
20. Replace the chip on the drum axle's end cap.

21. Do not install the drum axle's end cap just yet.

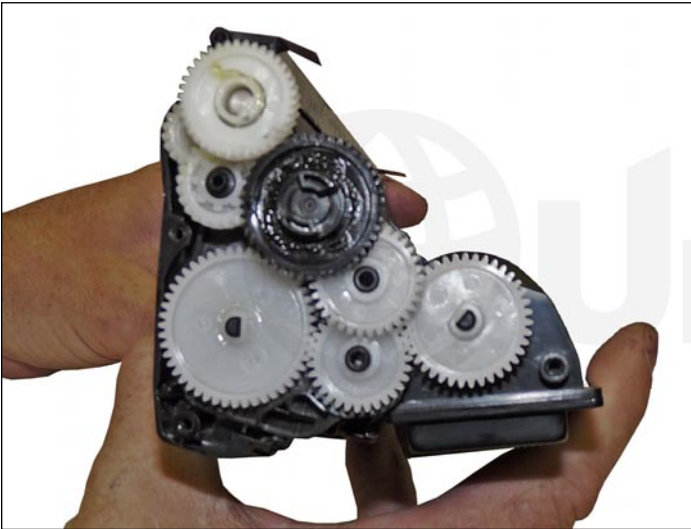
It needs to be off when attaching the supply chamber.



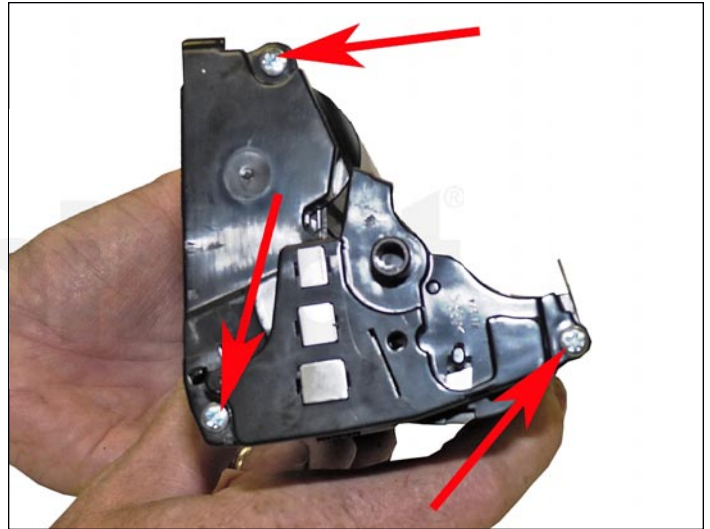
22. On the toner hopper, remove the three screws from the gear side end cap.



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



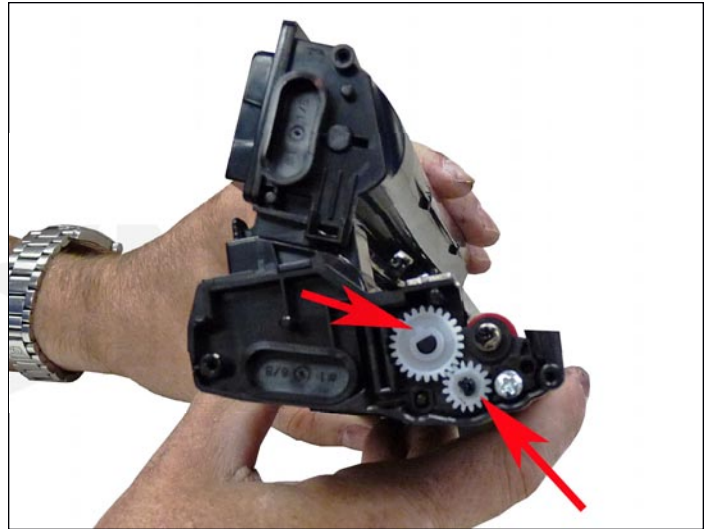
24. Remove the eight gears.



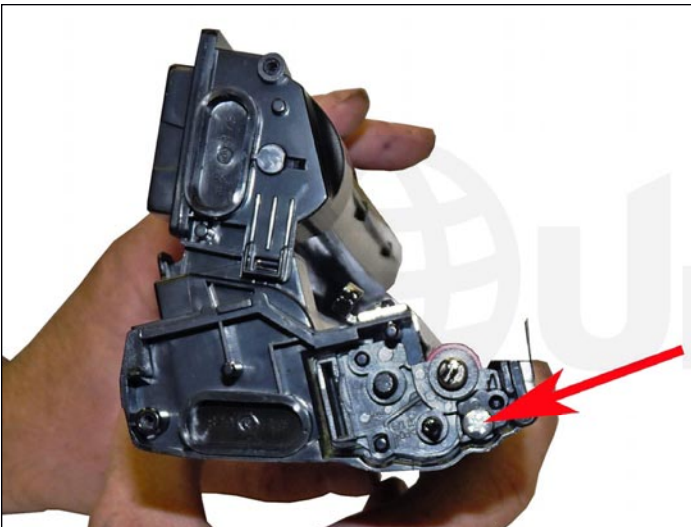
25. On the contact side, remove the three screws.



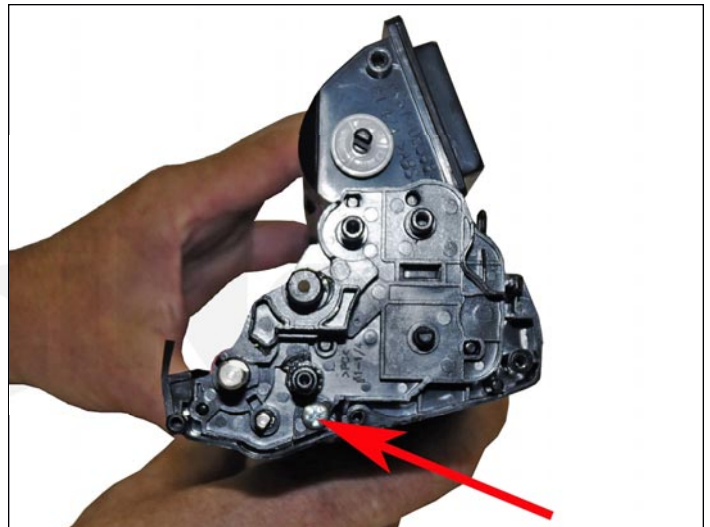
26. Press in on the tab, and remove the end cap.



27. Remove the two small white gears.

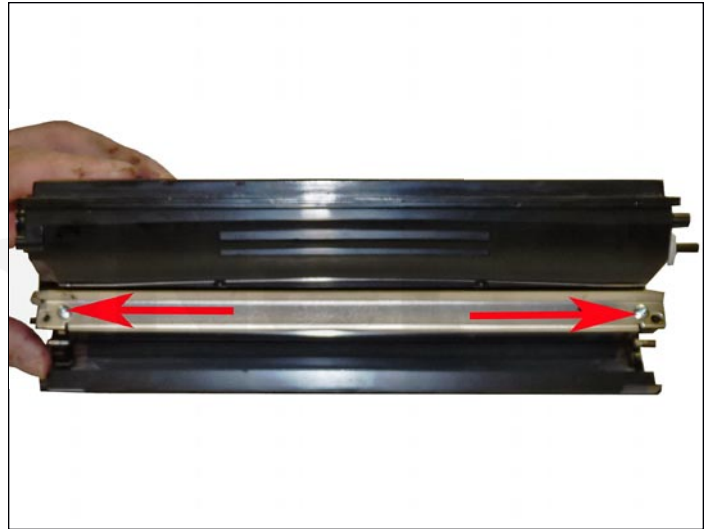


28. Remove the screw and bushing from both sides of developer roller.

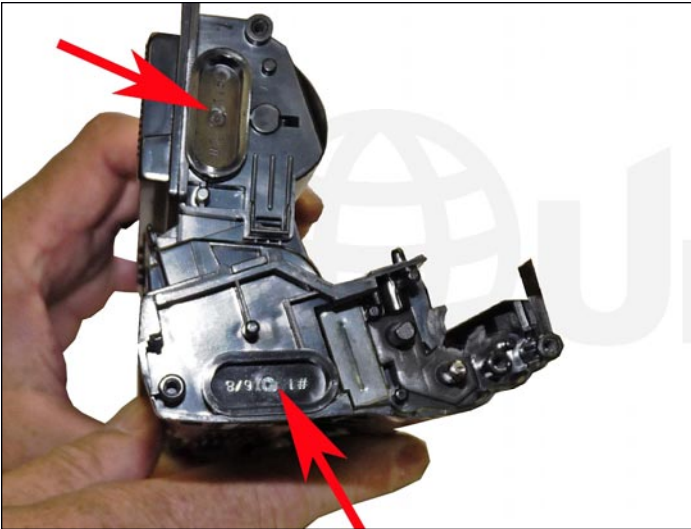




29. Remove the developer roller.



30. Remove the doctor blade and two screws.



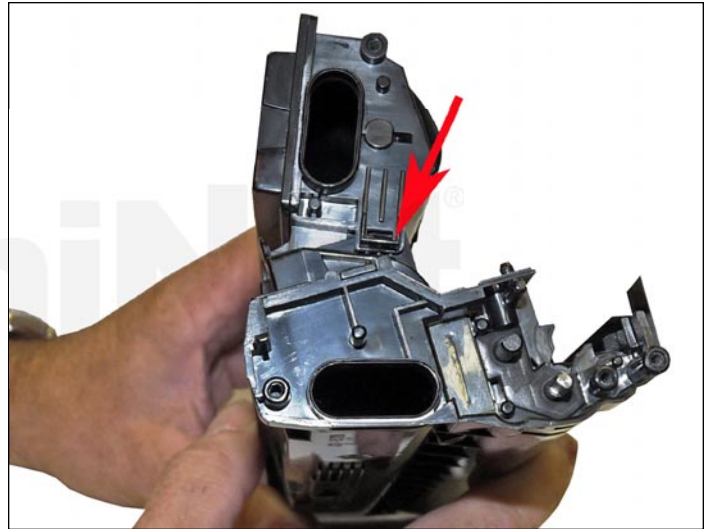
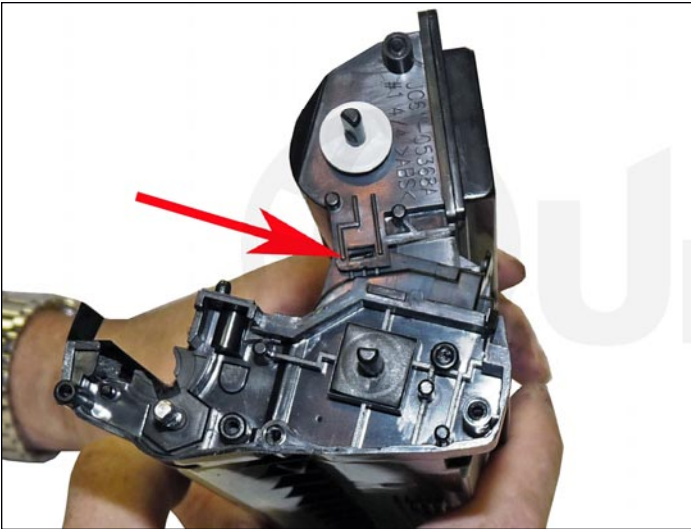
**NOTE:** The high yield black cartridge has two toner chambers: one on top of the other.

**Steps 32 & 35** cover the high yield black only. If you are remanufacturing a standard or color cartridge, skip these steps.

31. Remove the two fill plugs (upper and lower chamber).

32. Clean out all the remaining toner.



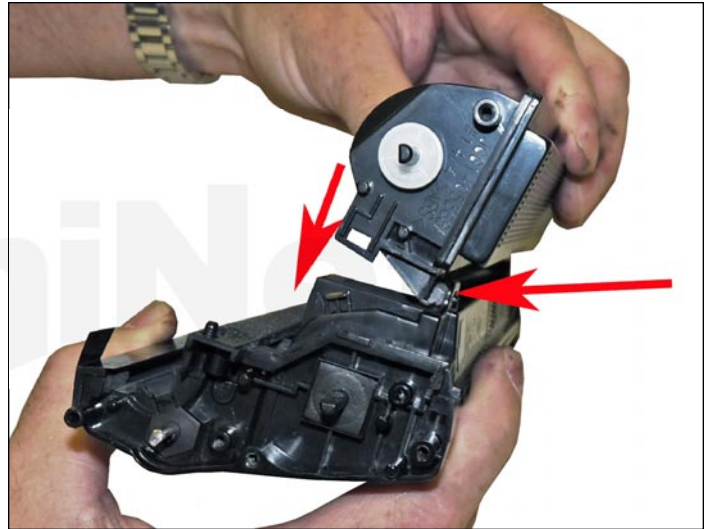


**33. HIGH YIELD BLACK ONLY:** To make sure all the remaining toner has been removed, pry out the back two tabs on the upper chamber. Lift up on the chamber slightly so the tabs do not re-engage. On the gear side of the upper chamber, pry up on the side tab. Lift the upper chamber off.





34. Clean all the toner out of both chambers and make sure the foam seals are clean and undamaged.



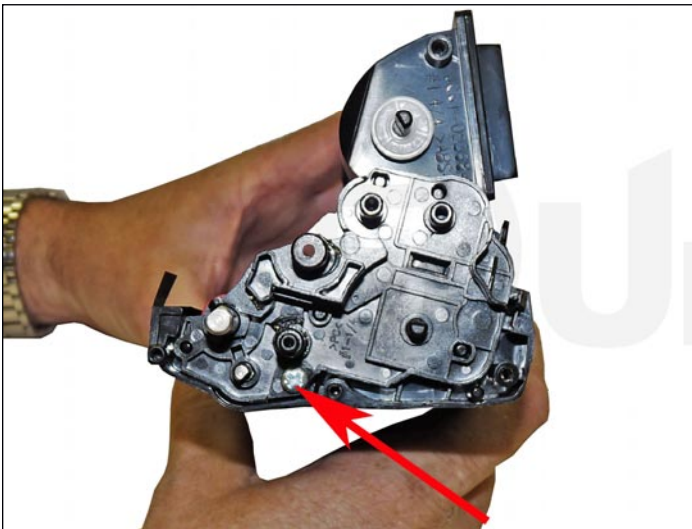
35. **HIGH YIELD BLACK ONLY:** Install the upper chamber by placing it so the back two tabs lock, and rolling it back until the side tabs lock the chamber in place.



36. Install the doctor blade and two screws.

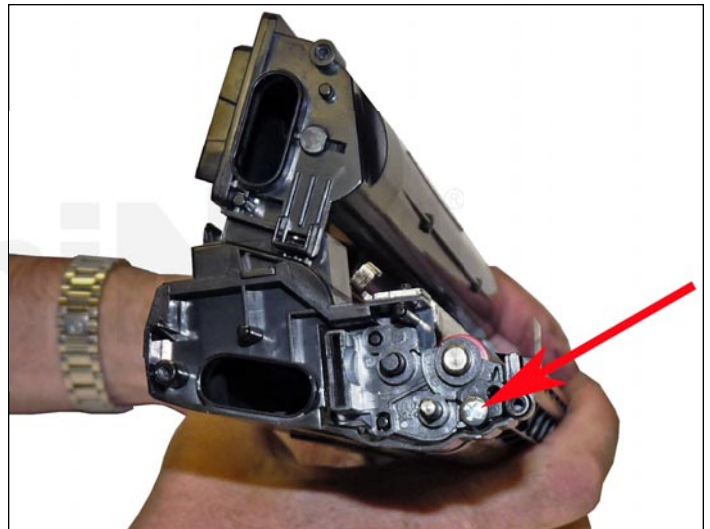


37. Install the developer roller and two red bushings (long keyed end to the gear side).

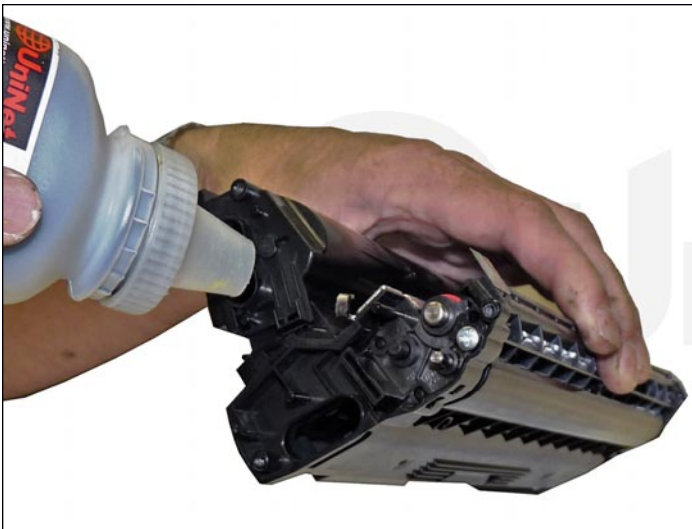


38. Install the right side (large) bushing and screw.

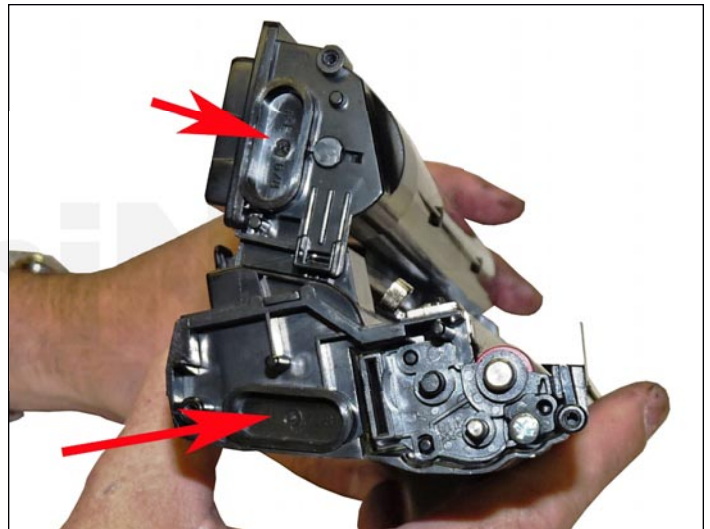
When a seal is available, install it now.



39. Install the left side bushing and screw.



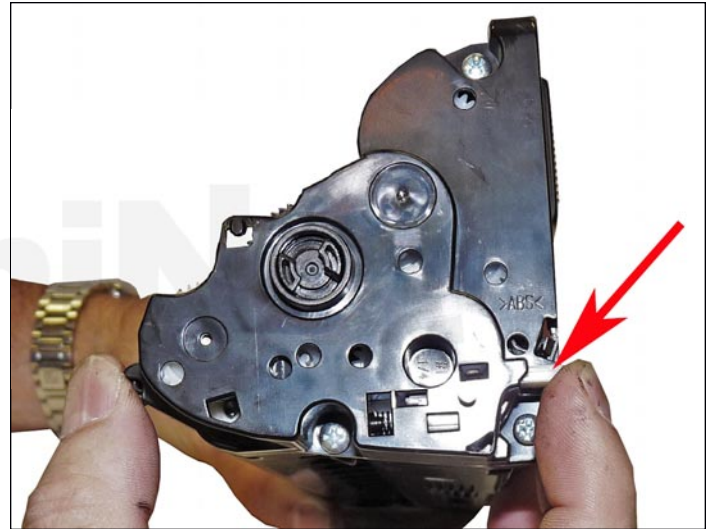
40. Fill with replacement toner for use in the Samsung CLT-506 cartridge. Use the correct color toner for each cartridge. If you are remanufacturing a high yield black cartridge, fill approximately 100g in the lower chamber, and 55g in the upper. For all the single chamber cartridges, fill the entire bottle into the single chamber.



41. Replace the fill plug(s) and check for leaks.



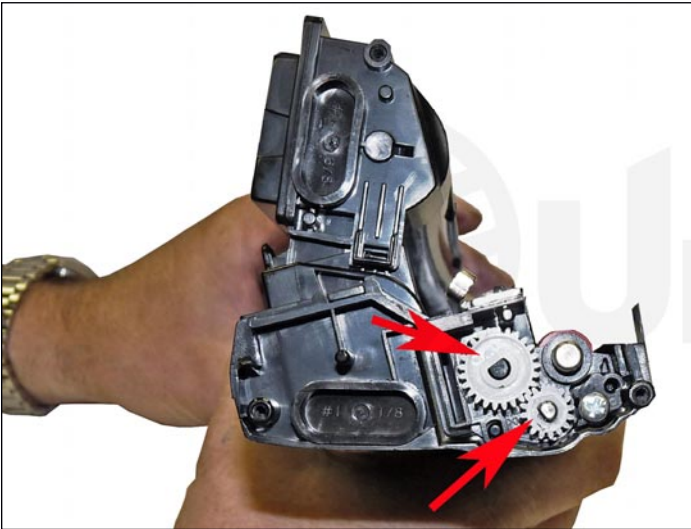
42. Install the eight gears as shown.



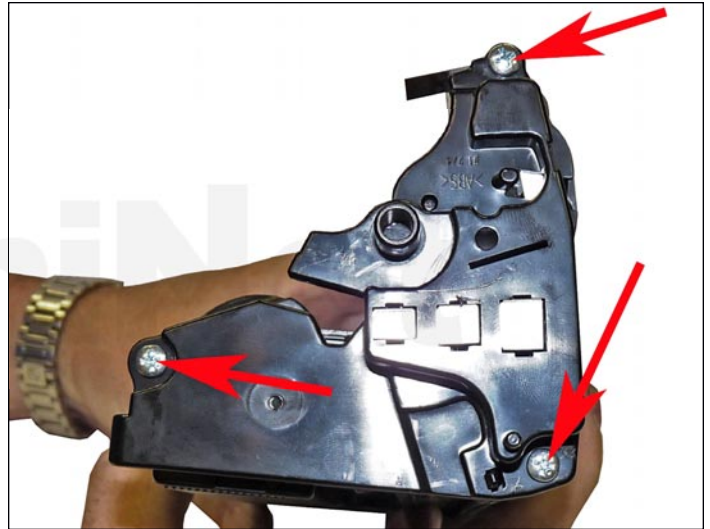
43. Install the gear side end cap and three screws.

Make sure the spring-loaded arm is functioning properly.

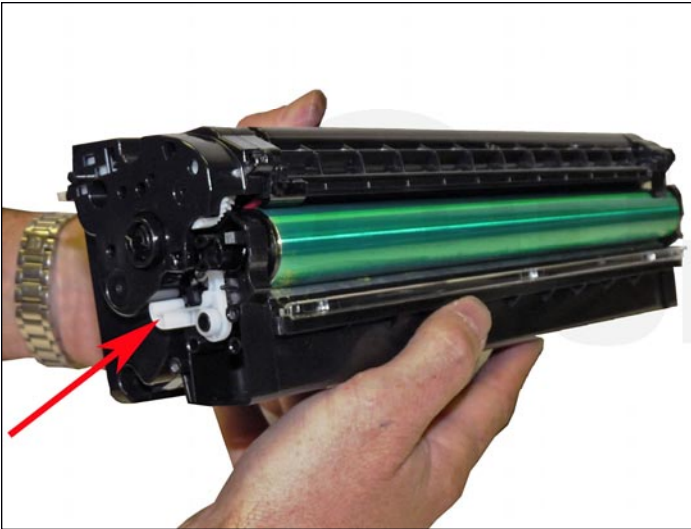




44. On the contact side, install the two small white gears.

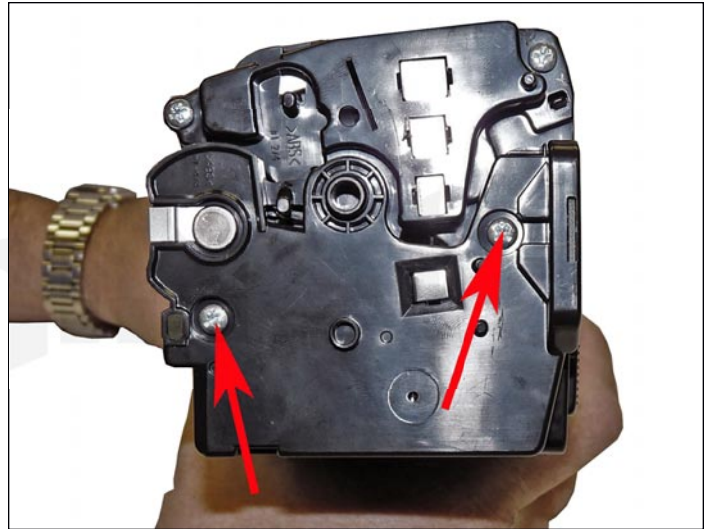


45. On the contact side end cap, clean and replace the conductive grease on the contacts. Install the end cap and three screws.



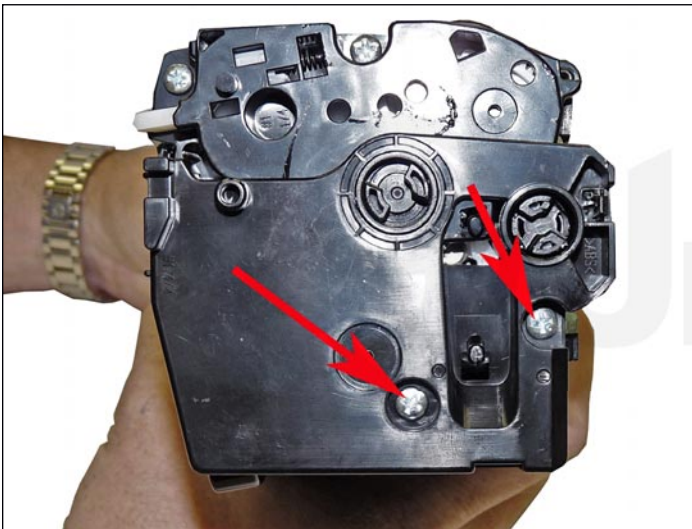
46. Carefully place the two halves together.

Make sure the PCR stabilizers stay in place!

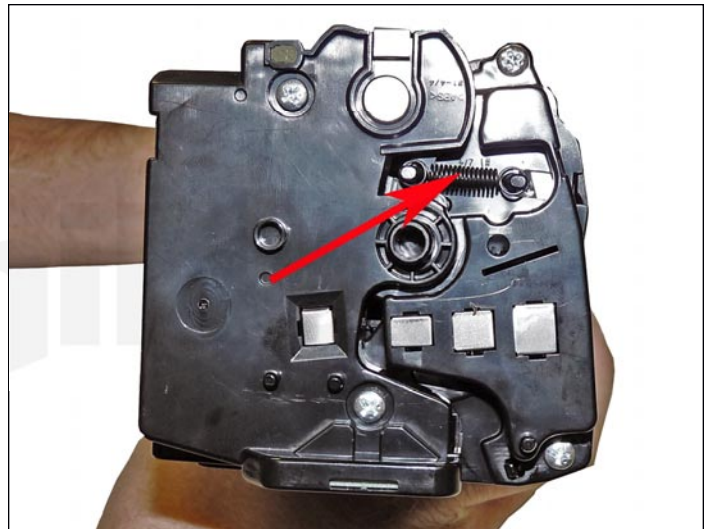
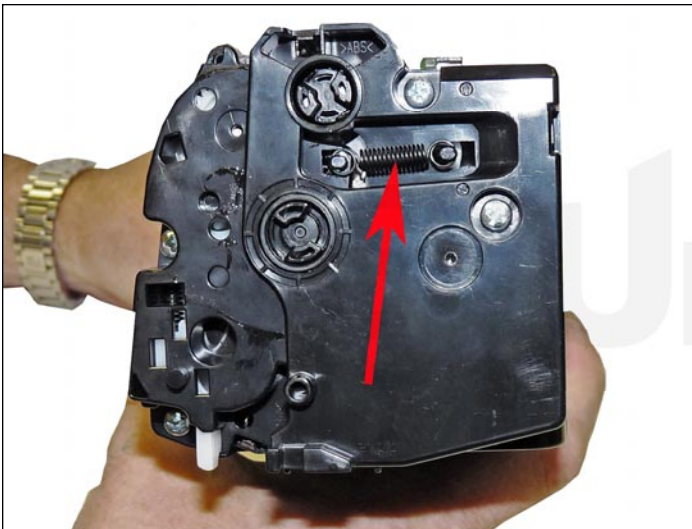


47. Install the drum section's contact end cap, and two screws.





48. Install the end cap and two screws.



49. Install the two springs (one on each side).



50. Install the shipping lock.

#### REPETITIVE DEFECT CHART

Upper fuser roller:	76.9 mm
OPC drum:	75.4 mm
Lower fuser roller:	69.1 mm
Developer roller:	37.7 mm
Toner feed roller:	35.5 mm
PCR:	26.7 mm
Transfer roller:	25.1 mm