

SAMSUNG® CLP-620 • 670

TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG CLP-620
HIGH YIELD TONER CARTRIDGE

REMANUFACTURING THE SAMSUNG CLP-620/670 TONER CARTRIDGE

By Javier Gonzalez and the Technical Staff at UniNet

First Released in March 2010, the Samsung CLP-620 based printers are built on a 21/25 ppm (color and monochrome) engine with a maximum resolution of 9400 x 600 dpi. These cartridges do not have drum covers, and come new with a piece of heavy paper taped around the cartridge.

There are both low yield and high yield cartridges available for these machines.
A list of the cartridges as well as their list pricing is as follows:

MLT-K508S	\$89.99*	2,500 pages
MLT-C508S	\$98.99*	2,000 pages
MLT-M508S	\$98.99*	2,000 pages
MLT-Y508S	\$98.99*	2,000 pages
MLT-K508L	\$119.99*	5,000 pages
MLT-C508L	\$139.99*	4,000 pages
MLT-M508L	\$139.99*	4,000 pages
MLT-Y508L	\$139.99*	4,000 pages

*Pricing in U.S. American Dollars, as of February 2011

PRINTERS BASED ON THE SAMSUNG CLP-620 ENGINE

CLP-620ND
CLP-670ND
CLX-6220FX
CLX-6250FX

REQUIRED TOOLS

1. Toner approved vacuum
2. A small common screwdriver
3. A Phillips screwdriver
4. Jewelers screwdriver set
5. Flush cutting wire cutters

REQUIRED SUPPLIES

1. New color toner for use in Samsung CLP-620/670
2. New replacement chip (LY, HY)
3. Conductive grease
4. 99% isopropyl alcohol
5. Drum lubricating powder

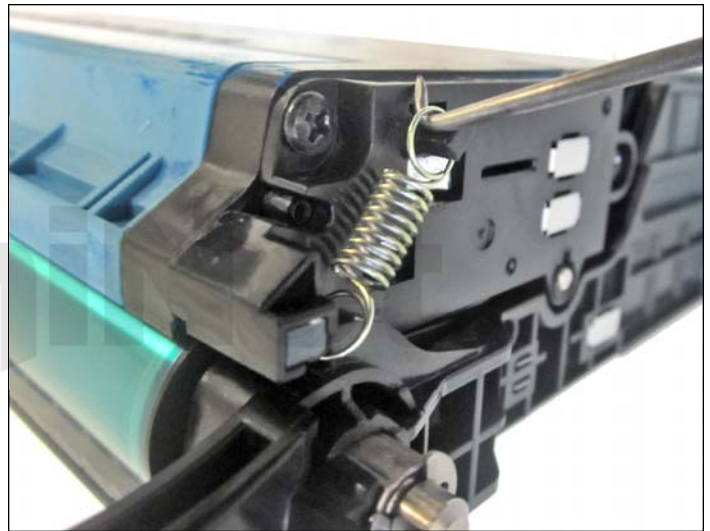
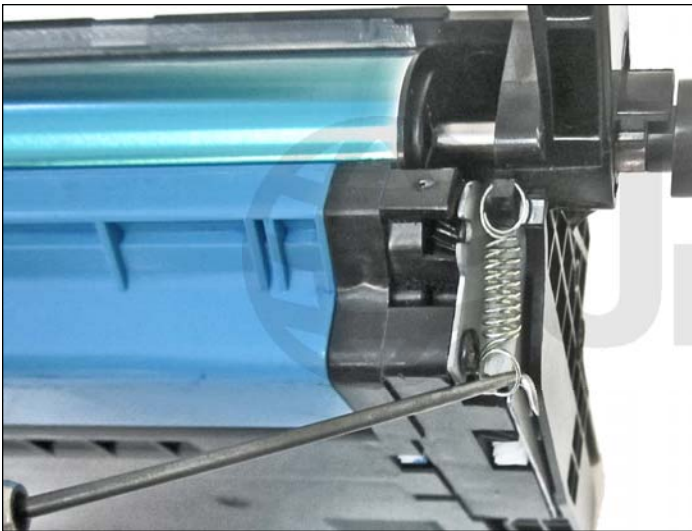


FRONT VIEW OF CARTRIDGE



BOTTOM VIEW

NOTE: All cartridges are color coded on the bottom portion of the cartridge to identify the color.



1. Remove the spring using your preferred hook tool.



2. Remove the long pin (gear side) by first prying the pin out using a rigid hook tool or a small jeweler's screwdriver.

Once you have enough surface area, grasp the pin using a set of pliers.



3. Remove the short pin (contact side) by first prying the pin out using a rigid hook tool or a small jeweler's screwdriver.

Once you have enough surface area, grasp the pin using a set of pliers.



4. Separate the two halves.



DRUM SECTION

5. Remove the E-ring from the drum axle by prying it off. Be careful as it can spring out of the axle. We suggest that you place your hand over it to keep it from shooting out.



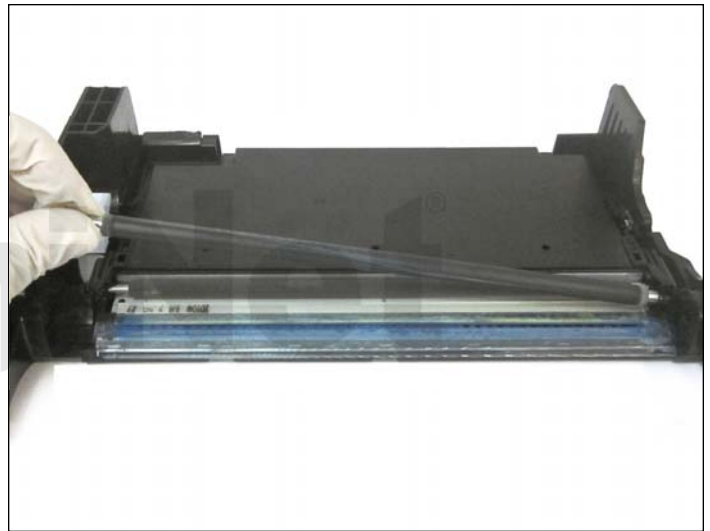
6. Align the drum locking pin with the cartridge cavity (as shown). This will allow the drum axle to slide out.



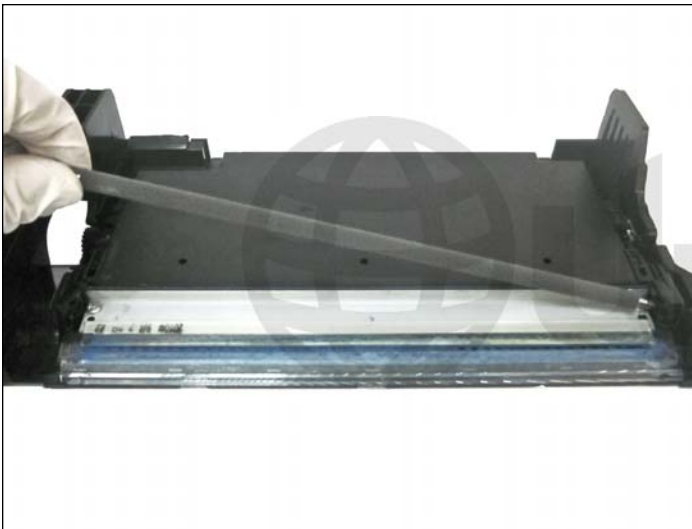
7. Pull the drum axle completely out. You may need to jiggle the axle as it tends to jam on the drum contact.



8. Remove the drum and set aside.



9. Remove the PCR roller.



10. Remove the PCR cleaning roller (foam).

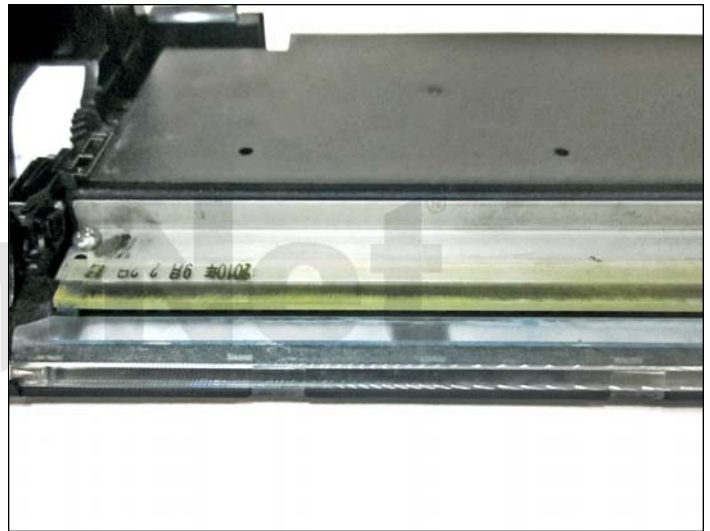
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11. Remove the two screws and wiper blade.



12. The wiper blades is pressured against the foam seal and the alignment tabs. Using a small jeweler's screwdriver, pry up the wiper blade from the edge by the foam seal over the alignment tabs. The blade should come off fairly easy. Clean out all remaining toner from waste section.



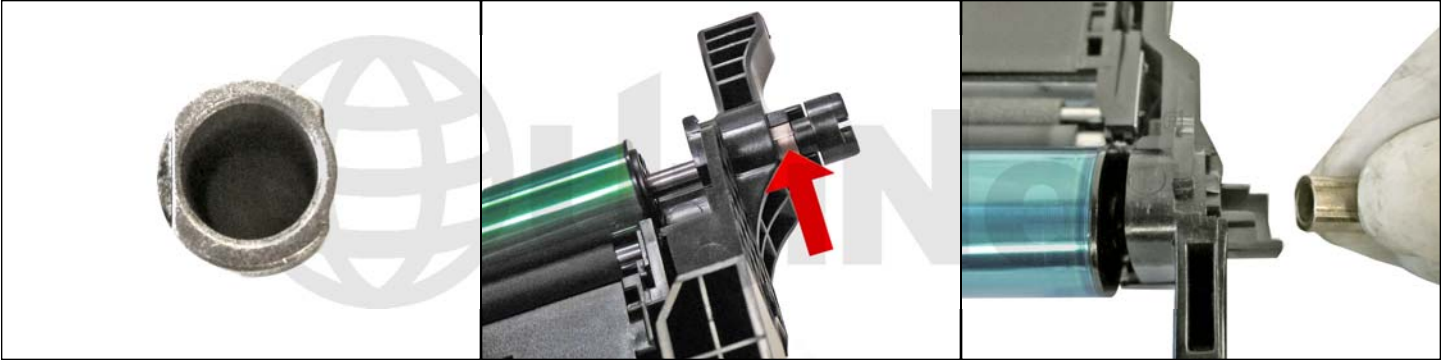
13. Coat the wiper blade with your preferred lubricant and install in the cartridges. Press the blade down firmly to seat it. Install the two screws.



14. Install the PCR cleaning roller (foam) and PCR roller. Make sure that the contact plate is touching the end of the PCR by inserting the contact side first.



15. If you plan on reusing the drum that came with the cartridge, make sure the drums inner contact is in a good position where it can contact the drum axle. If this contact is not contacting the drum axle, the prints will come out blank for the corresponding color.



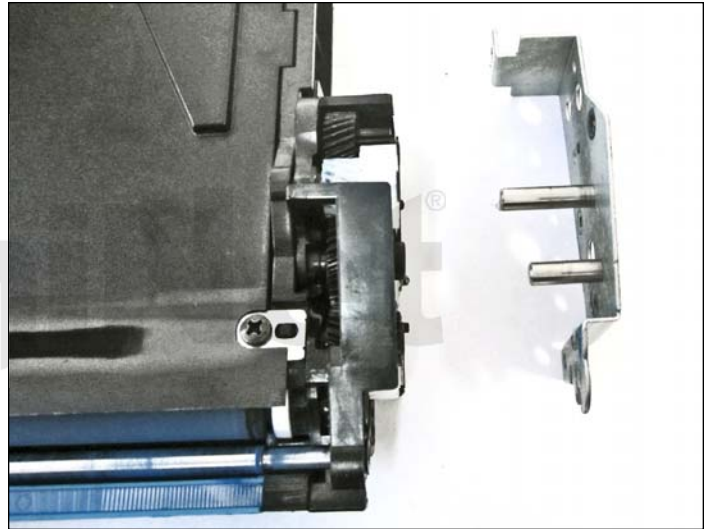
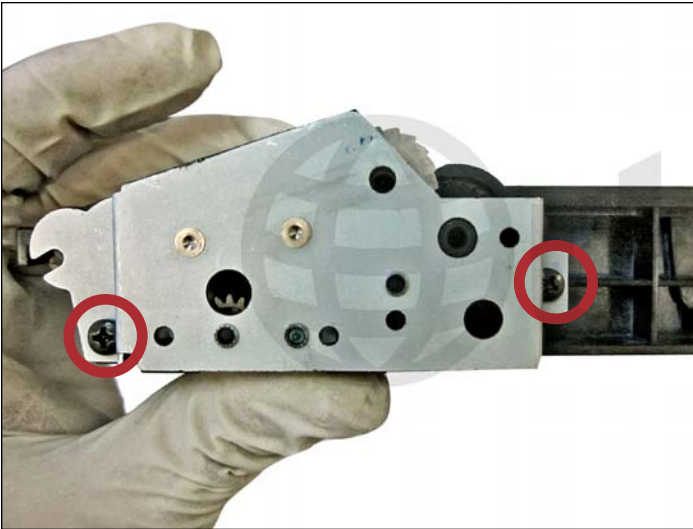
16. Install the metal bushing.

Make sure both the bushings on each side are in their respective slots.



17. Install the E-ring using a pair of needle nose pliers.

Set the drum unit aside.

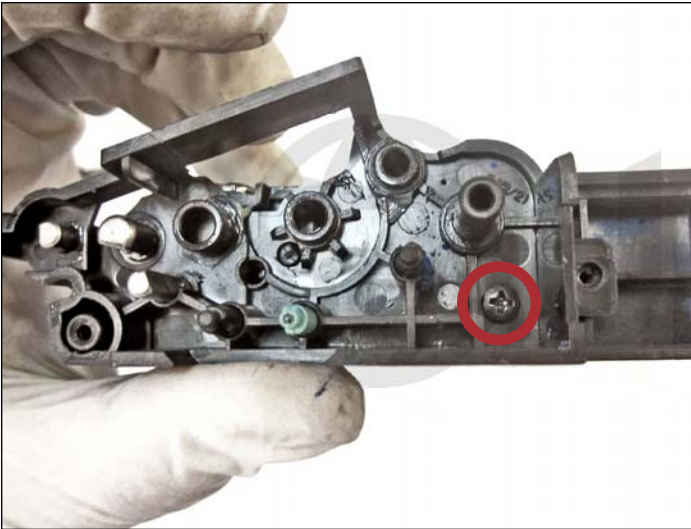


SUPPLY HOPPER

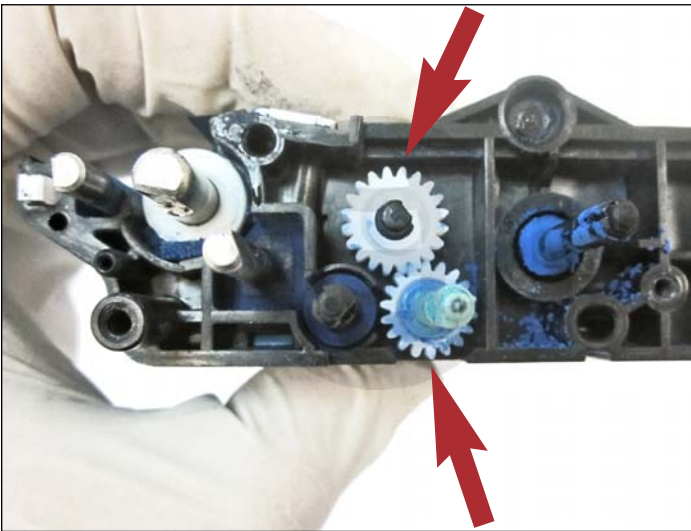
18. Remove the two screws on the metal gear train cover.



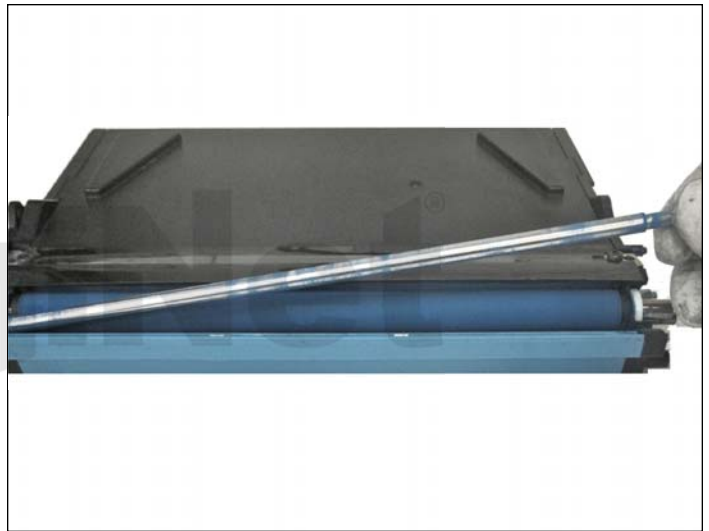
19. Remove the gears.



20. Remove the inner plastic gear plate and screw.



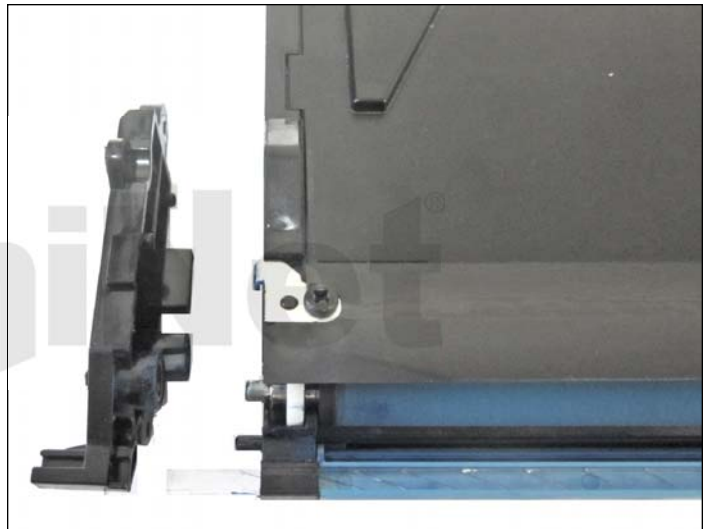
21. Remove the two remaining screws as they can fall off during the cleaning phase.



22. Remove toner charge roller.



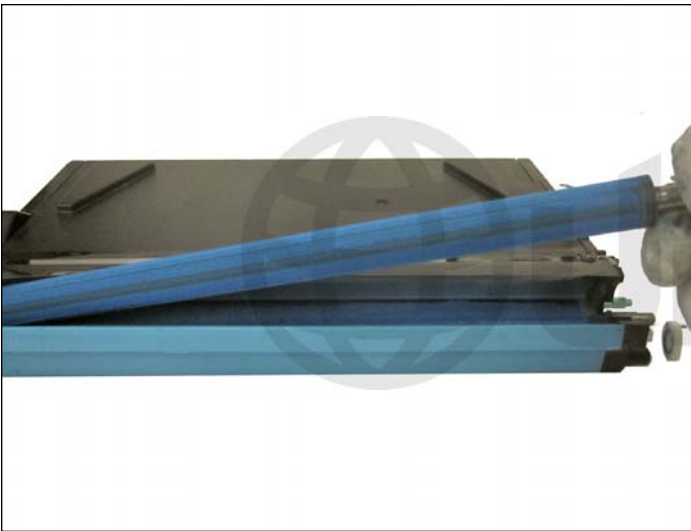
23. Remove the two screws from the contact end plate.





24. Remove the developer roller bushings.

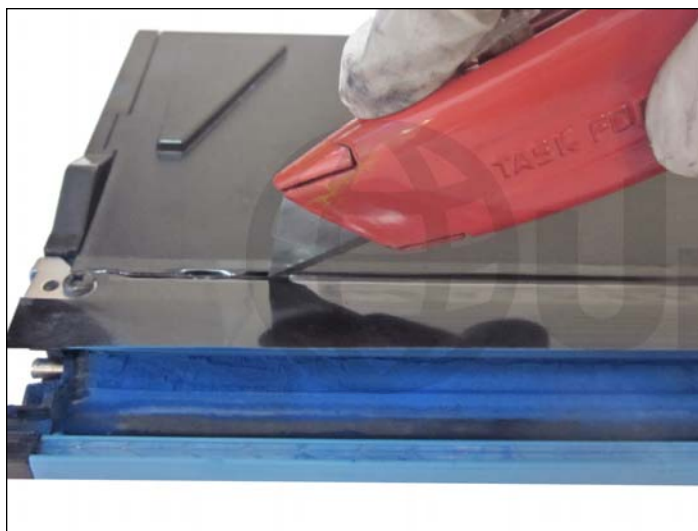
NOTE: Make sure you remove the supply roller bearing.



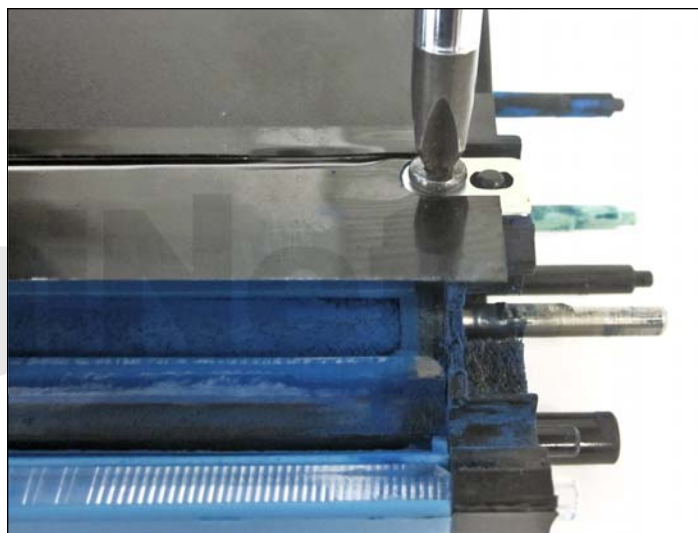
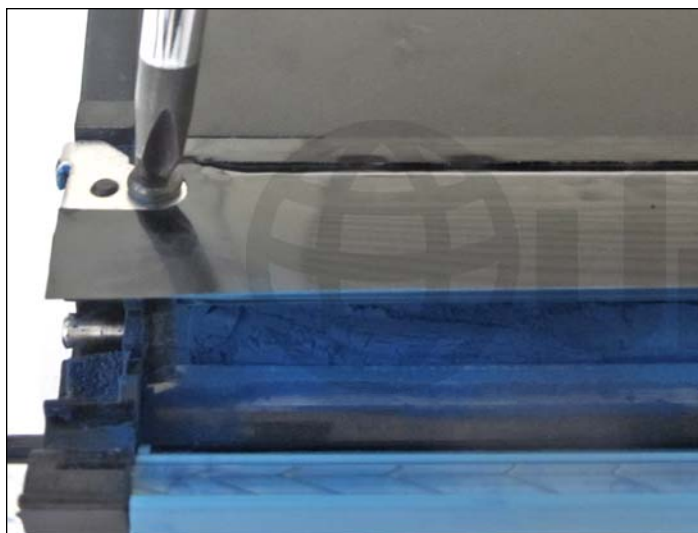
25. Remove the developer roller.



26. It is recommended to remove the doctor blade. First using a small screwdriver, run it between the doctor blade and cartridge rail. This will reveal the gap between the doctor blade and cartridge.



27. Using a utility blade, cut the sealing tape. This will prevent any warps on the doctor blade caused by removal.



28. Remove the two screws and doctor blade.

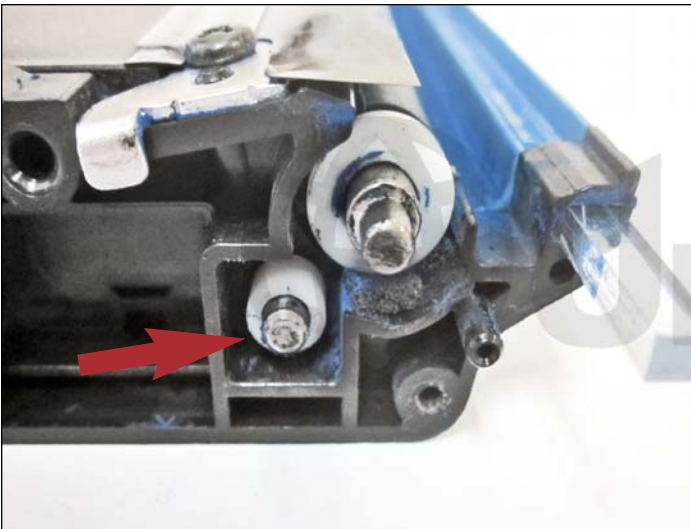


29. Remove the fill plug and clean out all remaining toner.



30. Install the cleaned doctor blade.

To prevent any seepage, use adhesive tape of your preference.

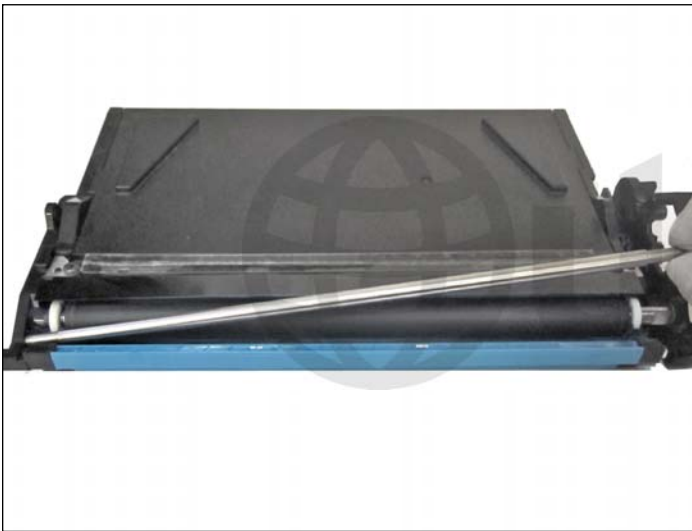


31. Install the developer roller.



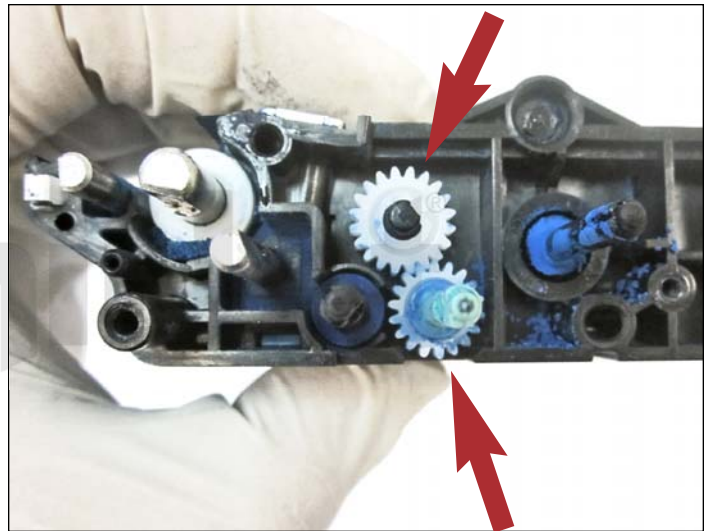
32. Install the contact end plate and screws.

NOTE: When installing the developer roller bushings, make sure the supply roller bearing is in place.

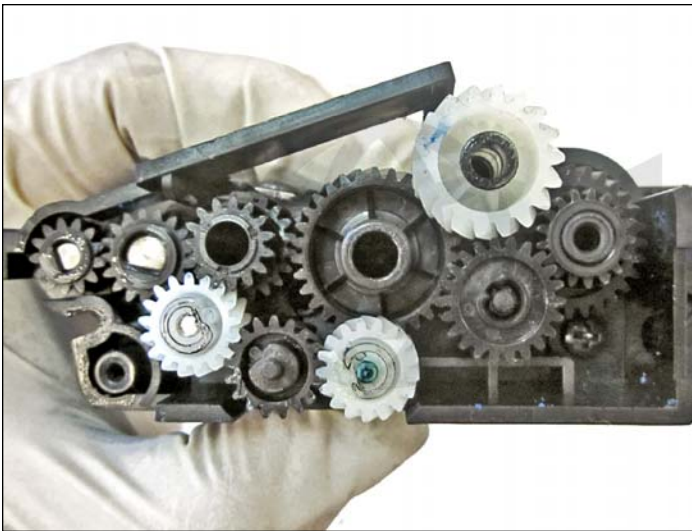


33. Install the cleaned toner charge roller.

NOTE: It can be cleaned with isopropyl alcohol.

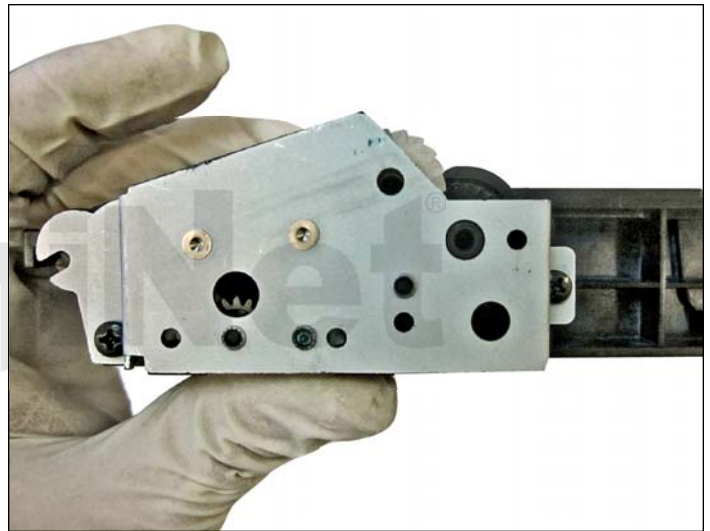


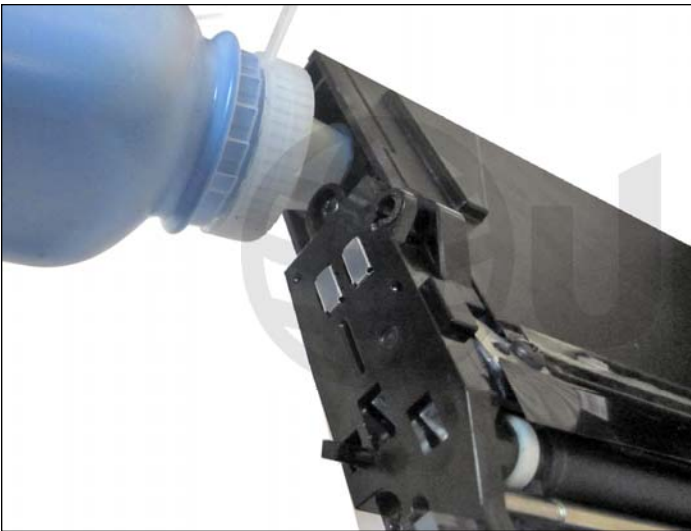
34. Install the two gears as shown.



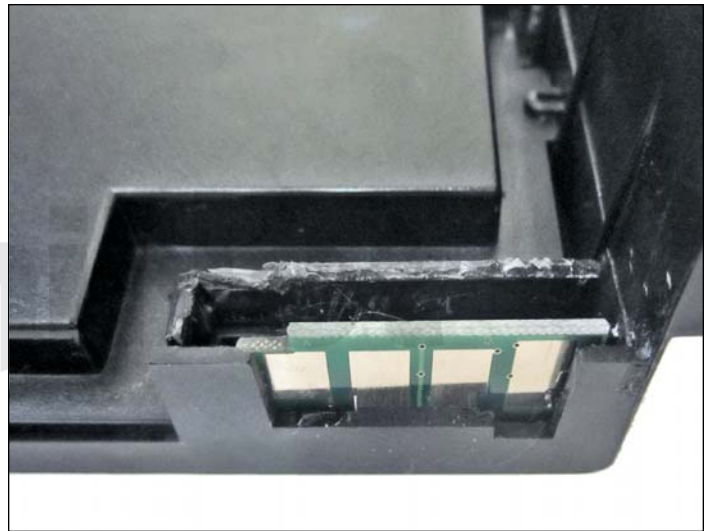
35. Install the inner support plate and screw.

Install the gear train and metal cover as shown.





36. Fill the cartridge the appropriate amount of toner for the specified yield.



REPLACING THE SMARTCHIP

37. Using wire cutters, cut the plastic that encloses the chip.

Using a hot glue gun, add a couple of drops of glue on the ends and install the chip.

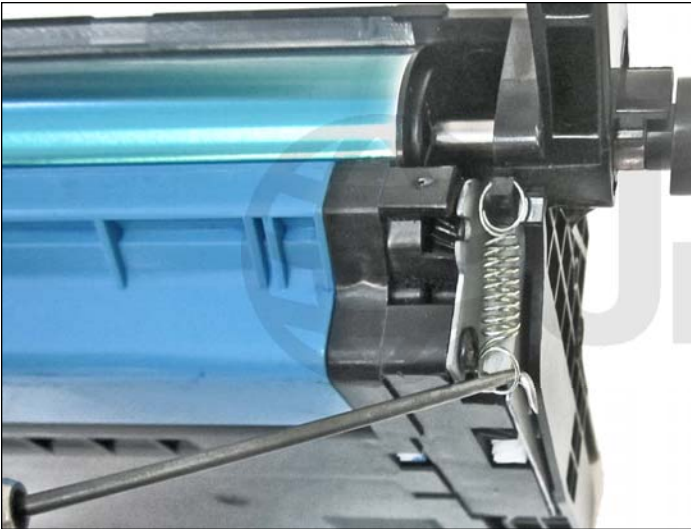
The glue will keep it in place.



38. Place the two cartridge halves together.

Install the two metal hinge pins.

Long pin goes to the drive gear side.



39. Install the two springs across the two halves.

Place the OEM heavy paper around the cartridge to protect the drum.

If not available, a piece can easily be cut from a shirt size gift box.

REPETITIVE DEFECT CHART:

Upper fuser belt:	125.7 mm
Fuser pressure roller:	91 mm
OPC drum:	75.4 mm
Color developer roller:	36.1 mm
Black developer roller:	32.6 mm
Color supply roller:	48.2 mm
Black supply roller:	43.4 mm
Transfer roller:	44 mm

PRINTER ERROR MESSAGE

All the error codes are self-explanatory, so there is no need to explain them here.