

# SAMSUNG® CLP-315

## TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG CLP-315 TONER CARTRIDGE

# REMANUFACTURING THE SAMSUNG CLP-315 TONER CARTRIDGE

By Enrique Stura and the Technical Staff at UniNet

The Samsung CLP-315 series are based on a 17ppm black and 4ppm color Samsung engine. It has a first page out in less than 14 seconds and an effective output of 2400 x 600 dpi.

## THERE ARE FOUR MACHINES BASED ON THIS ENGINE

**CLP-315**  
**CLP-315W**  
**CLX-3175FN**  
**CLX-3175FW**

## CARTRIDGES USED IN THIS SERIES

<b>CLT-K409S</b>	<b>Black</b>	<b>1,500 pages</b>
<b>CLT-C409S</b>	<b>Cyan</b>	<b>1,000 pages</b>
<b>CLT-M409S</b>	<b>Magenta</b>	<b>1,000 pages</b>
<b>CLT-Y409S</b>	<b>Yellow</b>	<b>1,000 pages</b>
<b>CLY-R409</b>	<b>Drum Unit</b>	<b>24,000 pages black, 6,000 color</b>
<b>CLT-W409</b>	<b>Waste Container</b>	<b>5,000 pages black, 1,250 pages color</b>

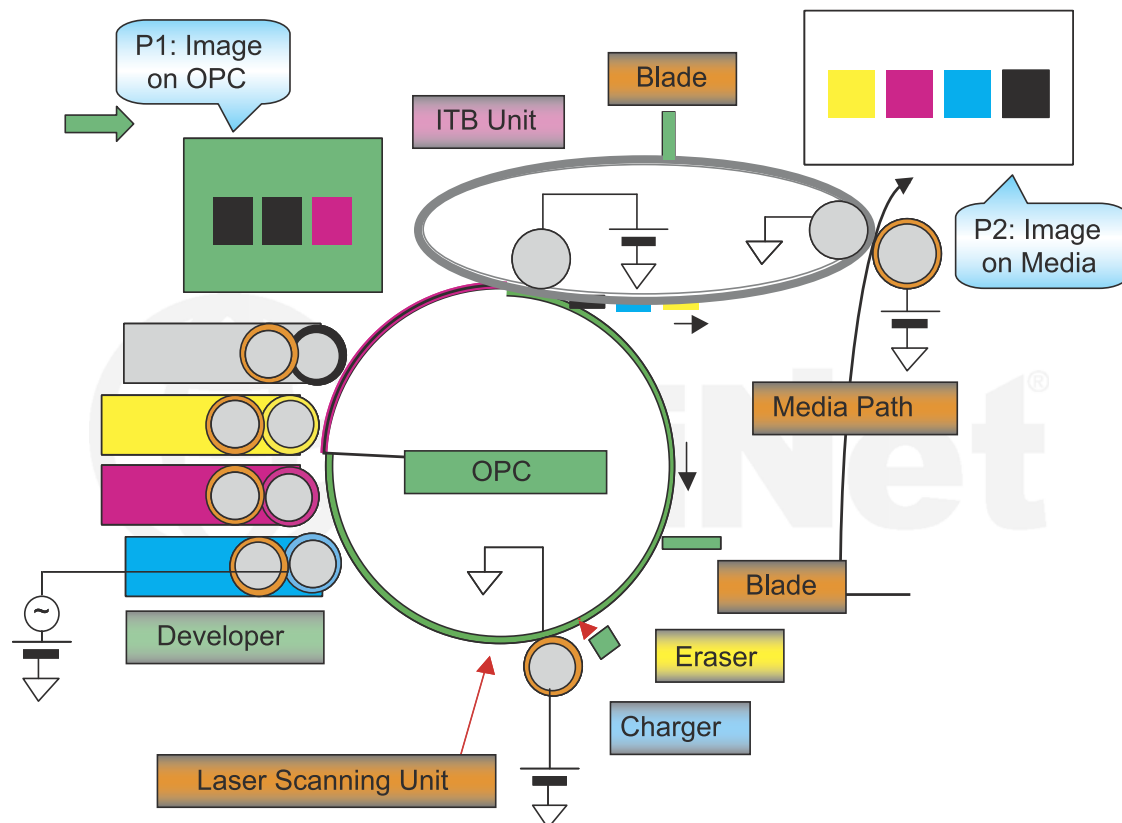


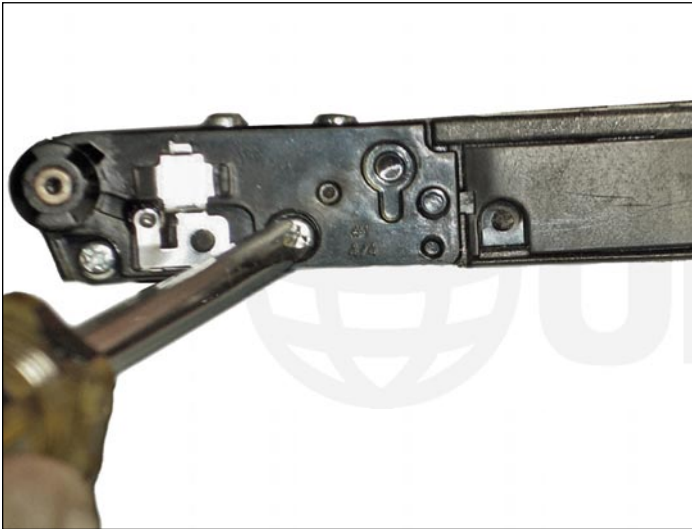
Image shows the complete printing process as it pertains to this engine.

**TOOLS NEEDED**

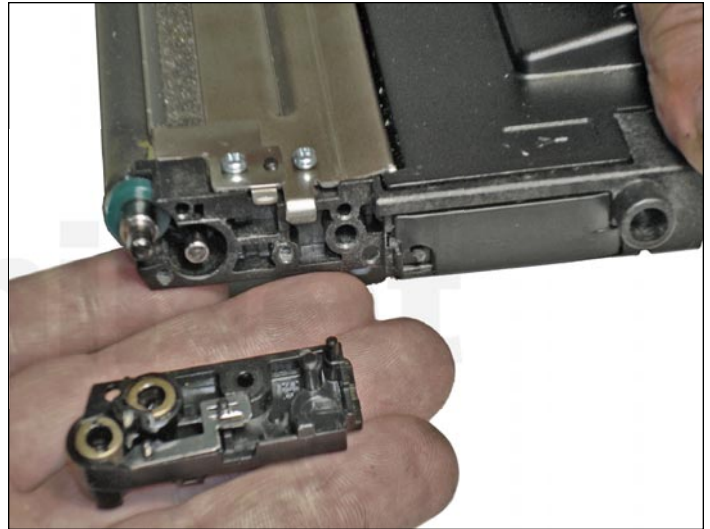
1. Phillips head screwdriver
2. Small common screwdriver
3. Conductive grease
4. Needle nose pliers
5. Razor knife
6. Toner approved vacuum
7. Hot glue gun

**SUPPLIES NEEDED**

1. Toner (K/C/M/Y) for use in Samsung CLP-315
2. Replacement chip
3. Cotton swabs



1. With the gear side of the cartridge on your the left side, remove the two Phillips screws holding the end cap.



2. Pry open the cover carefully with the small screwdriver and remove it. Clean the metal bushings with a cotton swab.

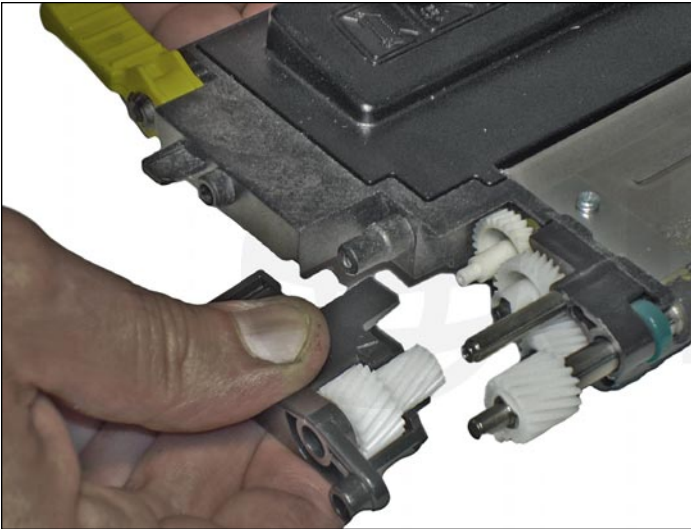


3. Remove the right side end cap in the same way.



4. Note that the screws removed are not identical.

The gear side screws are shorter and have a fine thread.



5. Remove the gear cover. Note that the large double gear comes out together with the cover.

#### **RECOMMENDATIONS FOR THE FOLLOWING STEPS**

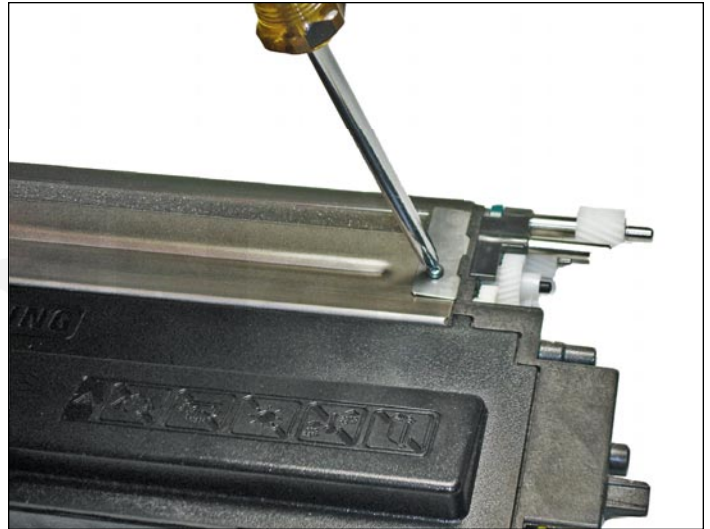
Practical experiences in disassembling these cartridges have shown that the adjustment of the cover/doctor blade position thereafter can be rather troublesome.

However the care in putting the cover/doctor blade back in same exact position problems can arise with print quality including background mid-page, at edges or cases of uneven density.

The above does not exclude chances of bad seal compression at ends of developer roller causing small leakages of toner and the repeated attempts needed to vary the pressure on the small metal plates.

For this reason and due to lack of a definite method to adjust the cover/doctor blade that we recommend the cover not be removed in spite of the inconvenience it represent for the fast cleaning of the hopper. However alternative cleaning via filling hole is quite feasible.

Non-removal of the cover, skipping step 6 does not impede dismount of components such as developer roller, bushings, etc.

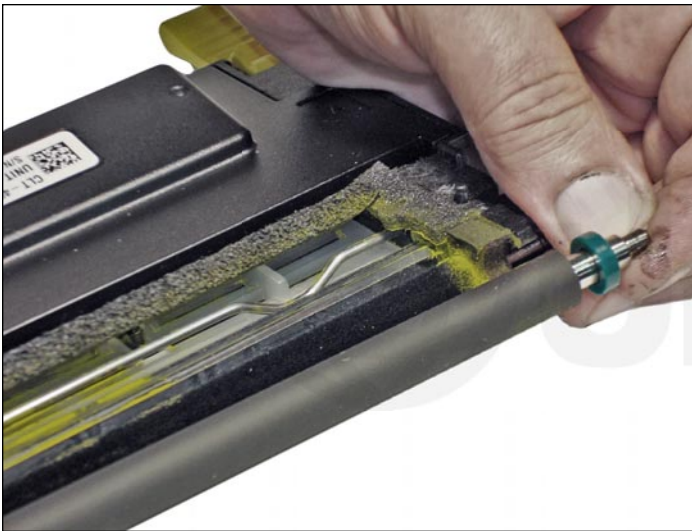


6. Remove the four screws from the top of the metal cover. The cover also acts as a doctor blade for the roller. Note the two seal-presses on each side; the one on the left side is larger than the other.

**NOTE:** Use utmost care to remove the cover to protect the integrity of the edge of the doctor blade. Any dent or mark on the doctor blade edge will seriously affect the quality of the print and possibly ruin the cartridge.



7. Lift the cover/doctor blade from the left side to allow the right side to slide out first before taking it off the cartridge.

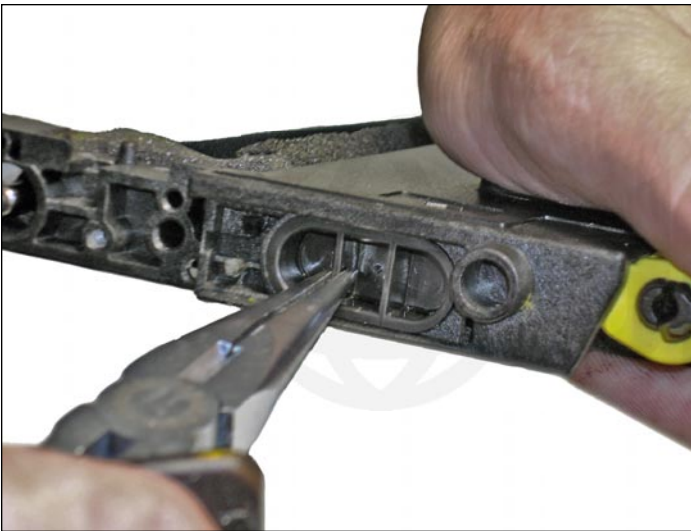


8. Remove the green separator bushing on the right side of the developer roller, and slide the roller out. Be careful not to lose the gear from the opposite side of the roller, as it will become loose as also will the remaining green bushing.



9. Clean the developer roller with your favorite cleaner and wipe it down with a soft lint-free cloth. Vacuum the entire developing area including the seals of the cover/doctor blade.

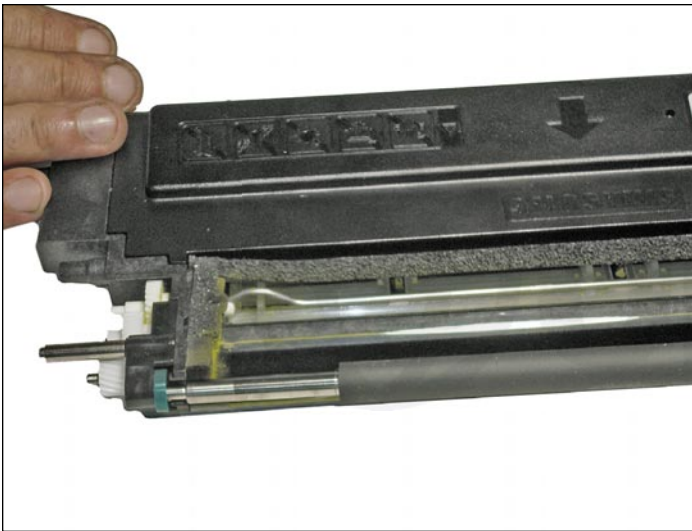
10. On the right side of the cartridge pry open the lid of the toner load port.



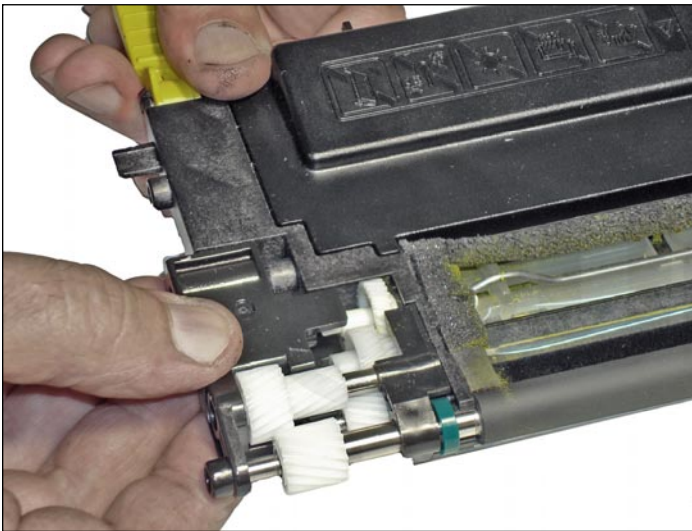
11. Remove the plug of the loading port with needle nose pliers.



12. Vacuum the chamber clean.



13. Install the developer roller with the respective green separation bushing in position and insert the shaft through the support, then lock the other end in place.



14. Install the gear cover making sure the gears fit properly on their respective shafts.



15. Install the cover with the short one with fine threaded screw in the center of the gear as shown.

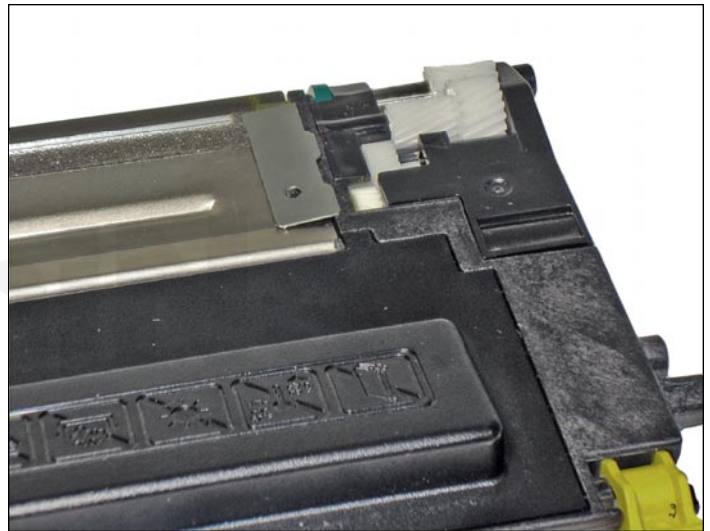
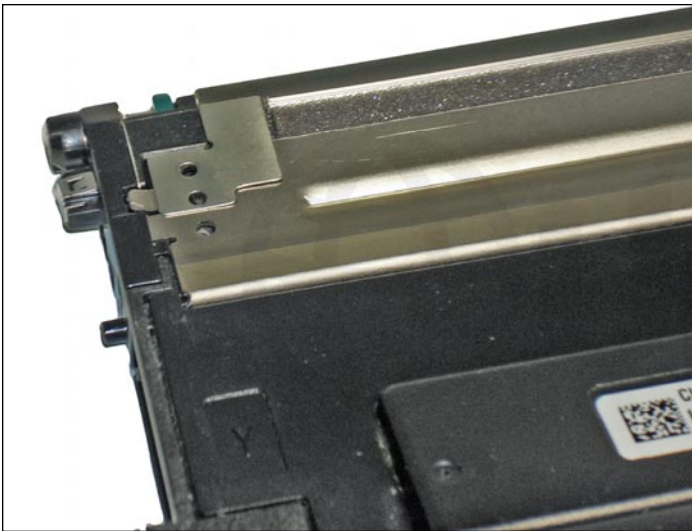




16. Install the opposite side cover with the larger screw as shown.



17. On the left side of the cartridge install the cover with the metal bushings properly lubricated with a small quantity of conductive grease and tighten with the screw.



18. Carefully clean the cover/doctor blade and position it in an angle to insert it in the slot at the right, and then drop it in place at the left. Fit the individual seal presses in the proper places and secure with the four screws.



19. Fill the cartridges with dedicated toner for use in the CLP-315.

Install the fill plug and install the cover in place.



#### REPLACING THE CHIP

20. With a clean swab, remove any toner that may have wandered onto the surface of the OEM chip (starter or standard chip).

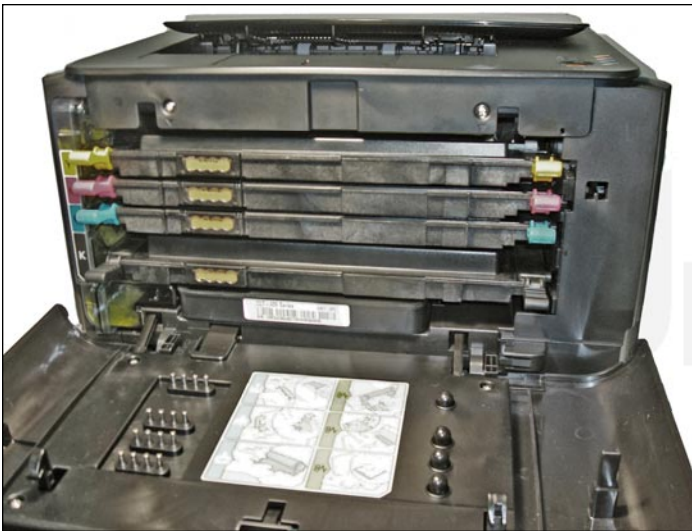
Peel off the adhesive backing from the new aftermarket chip and place it on top of the OEM chip.



21. Shown is the Image unit installed in the printer.



22. Shown is the waste hopper installed (left side). The waste hopper is the left side support for the toner cartridges.



23. Shown are the toner cartridges in the proper order

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