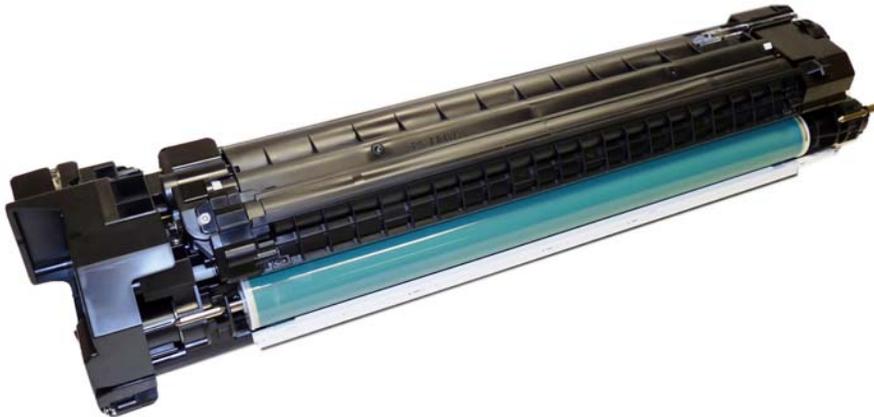


HP® CLJ CP6015

TONER & DRUM CARTRIDGE REMANUFACTURING INSTRUCTIONS



HP® CLJ CP6015 TONER CARTRIDGE



HP® CLJ CP6015 DRUM CARTRIDGE

REMANUFACTURING THE HP CLJ CP6015 TONER AND DRUM CARTRIDGES

By Mike Josiah and the technical staff at UniNet Imaging Inc.

The HP CLJ CP6015 printers were introduced in May 2009 and are based on a 40ppm, 600 DPI laser engine. The processor is rated at 835MHz, and the memory is fixed at 512Mb.

These printers are very large and very expensive. The cartridges are also, (large and expensive). These machines have separate toner and drum units. The good news is that the toner cartridges are very easy to remanufacture and quite profitable. The bad news is the drum units are a bit complicated. Parts tend to jump out as you take them apart. Not to worry though, we have all the parts in their correct places and show you how to put them back together in the proper order.

Both cartridges use chips that need to be replaced each cycle.

THE TONER CARTRIDGES USED IN THESE MACHINES ARE AS FOLLOWS:

Black	CB380A 16,500	\$298.31 list*
Cyan	CB381A 21,000	\$466.41 list*
Magenta	CB383A 21,000	\$466.41 list*
Yellow	CB382A 21,000	\$466.41 list*

*Price lists shown in U.S. dollar amounts.

THE DRUM UNITS USED ARE:

Black	CB384A 35,000	\$172.52 list*
Cyan	CB385A 35,000	\$485.31 list*
Magenta	CB387A 35,000	\$485.31 list*
Yellow	CB386A 35,000	\$485.31 list*

*Price lists shown in U.S. dollar amounts.

THE MACHINES CURRENTLY IN THIS SERIES ARE:

CP6015dn
CP6015de
CP6015x
CP6015xh

There are also some MFP machines in this series. They use the same color toner cartridges and all the same drum units, but have a different black toner cartridge, the CB390A. As this cartridge was just released, this cartridge is not covered here.

THE MFP MACHINES ARE:

CM6030 MFP
CM6030f MFP
CM6040f MFP



TONER CARTRIDGE REMANUFACTURING

Tools needed

1. Toner approved vacuum
2. A small common screwdriver
3. A Phillips head screwdriver
4. Modified soldering iron, or drill with 1/2" drill bit (see text & picture)
5. Hot glue gun or drill and self tapping screws (see text)

Supplies needed

1. HP CLP CP6015 toner
2. Replacement chip for toner cartridge
3. Toner magnet cloths



1. The toner cartridge does not have a fill plug or an opening large enough to clean or refill it through. Because of this, the cartridge needs to have a hole cut. This is best done with a soldering iron with a screw in tip and a 1/2" copper plumbing end cap drilled, filed and screwed on the iron. You can also drill the hole, but you must be very careful not to get plastic shavings inside the cartridge.

The soldering iron shown above was purchased at Radio Shack. The tip is not a common thread size, but a #8 screw can be forced in. If the screw is too long, use lock washer to take up the space.



2. The best place to do this is under the end cap. This way there is no chance the sealing label will be pulled off.

Carefully peel off the label on the end cap.



3. Remove the screw.



4. Slide the cover up and off of the cartridge.



5. Place the hole in the top left section as shown.

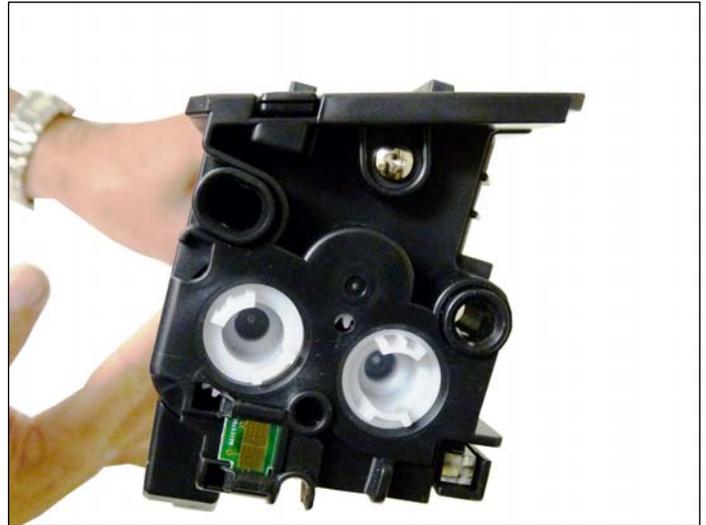
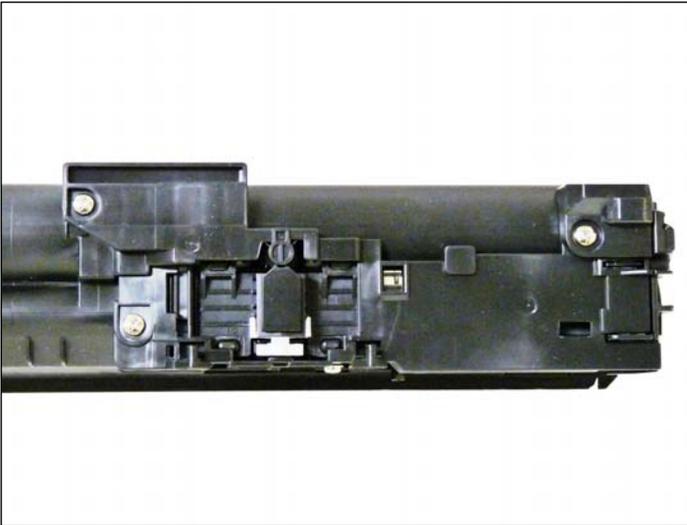


6. Clean all the remaining toner and fill with dedicated HP CLJ CP6015 toner.

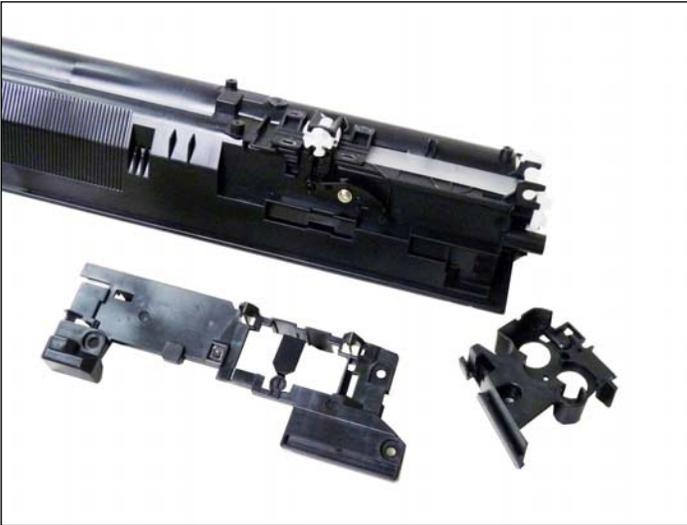


7. Cover the hole with a good quality label seal.

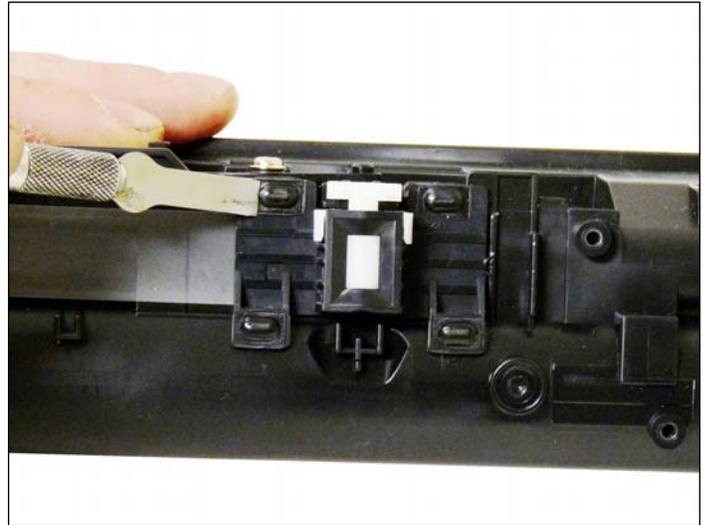
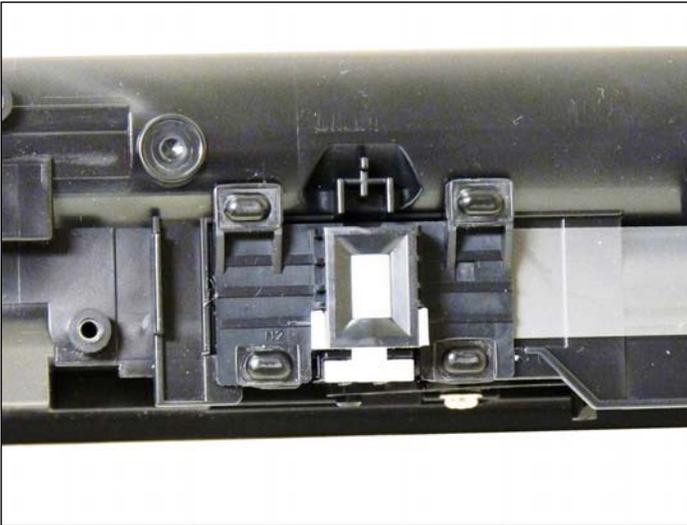
Check for leaks.



8. Once a seal is available, it will be installed by removing the three screws on the top of the seal assembly, and single screw on the side cover.



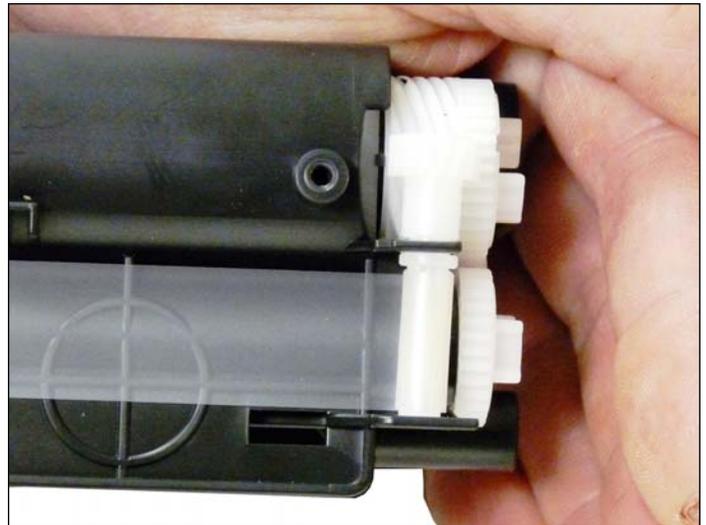
9. Remove the top cover and side cover.



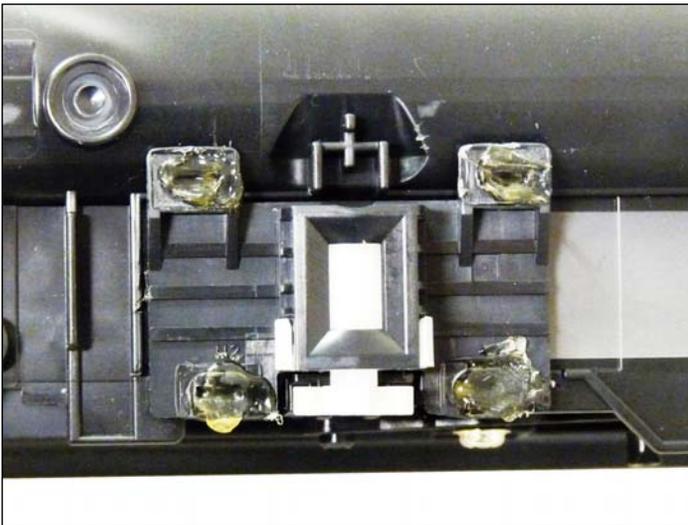
10. Slice the melted plastic off, and if using screws to re-attach the cover, drill four small holes in the areas indicated on the seal cover. The preferred and easier method is to use a hot glue gun to secure the cover when re-attaching it.



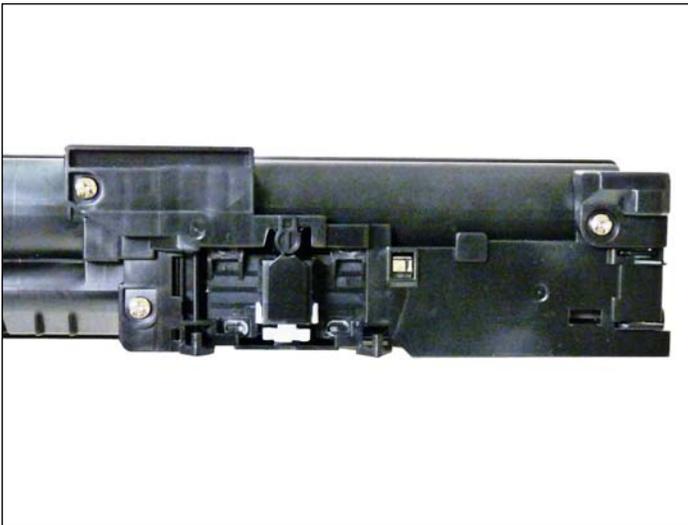
11. Remove the seal cover by carefully prying it off.



12. Install the new seal. Wrap the tail around the take up gear.



13. Place the seal cover back on and using a hot glue gun, glue the cover in place.



14. Install the top cover, side cover and four screws.



15. Slide the fill side end cap in place. Install the screw and replace the label (the label as you can see is easily torn).

16. Replace the chip.

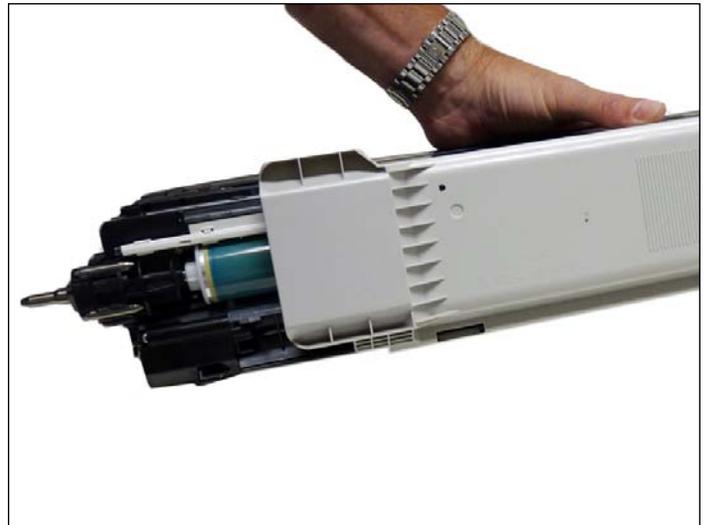
DRUM CARTRIDGE REMANUFACTURING

Tools Needed

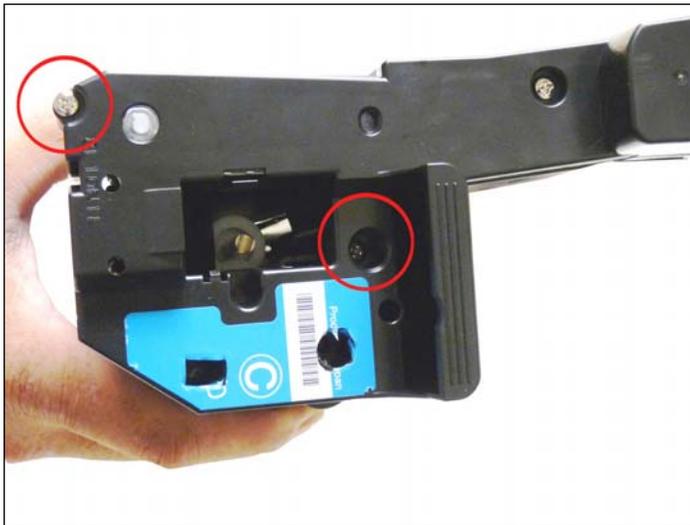
1. Toner approved vacuum
2. A small common screwdriver
3. A Phillips head screwdriver
4. Spring hook tool
5. Razor blade knife
6. 3/32" pin punch
7. 1/16" pin punch
8. Small tack hammer
9. Hot glue gun

Supplies Needed

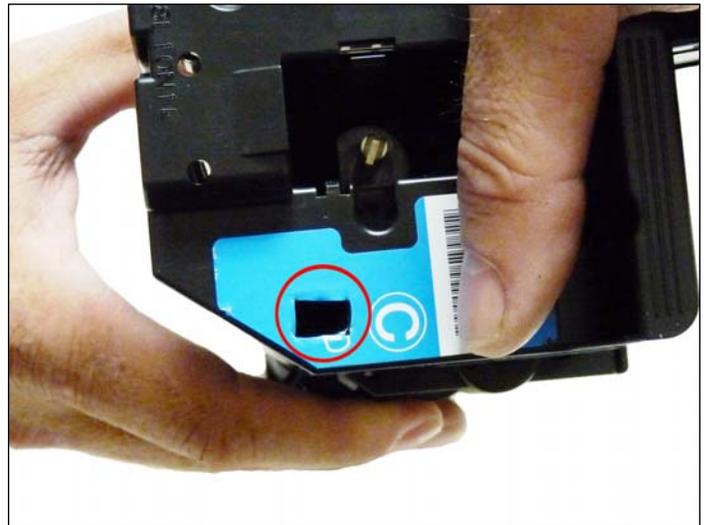
1. HP CLP CP6015 drum
2. New wiper blade
3. Replacement chip for drum cartridge
4. Drum cover
5. Toner magnet cloths



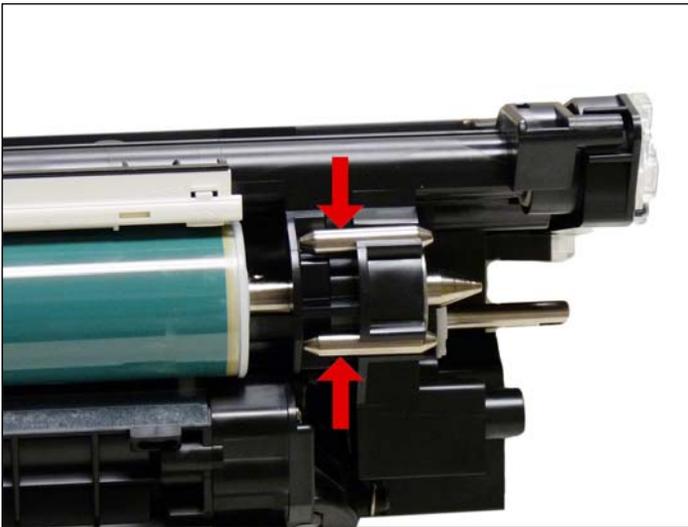
1. Slide the drum cover off (if installed). The cover slides off to the right side.



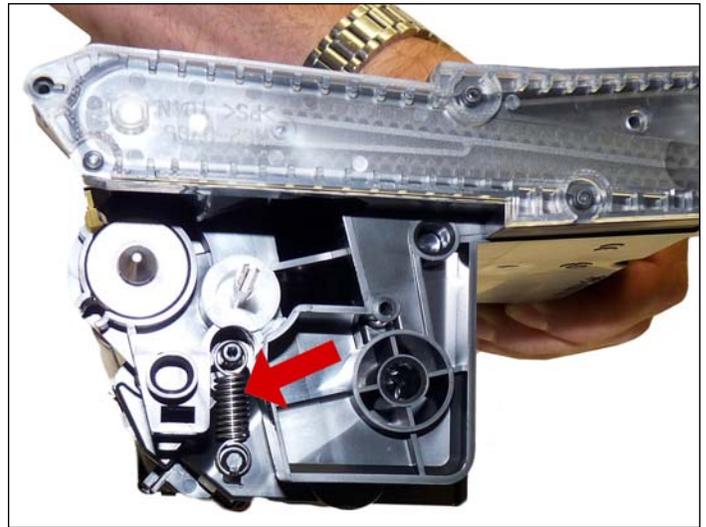
2. On the label side of the cartridge, remove the three screws. Note that the outside edge screw is large than the others.



3. Cut a rectangular hole in the label as shown and press down on the tab to release the end cap. A small metal pin may come with the end cap. Be careful not to lose it.



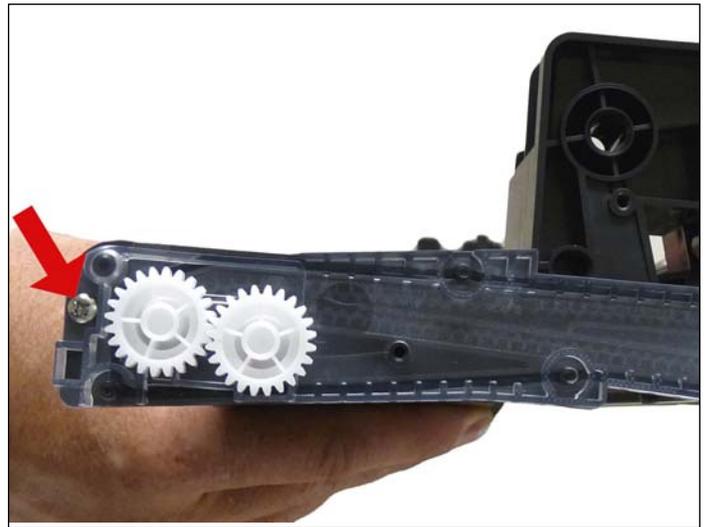
4. Remove the two loose metal pins.



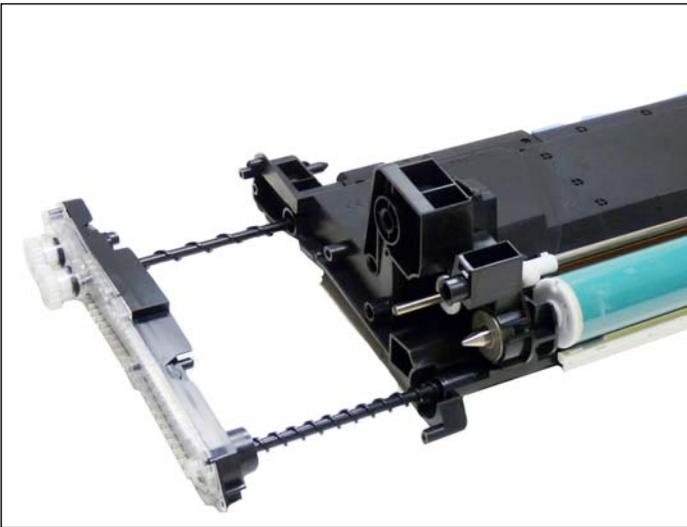
5. Remove the spring.



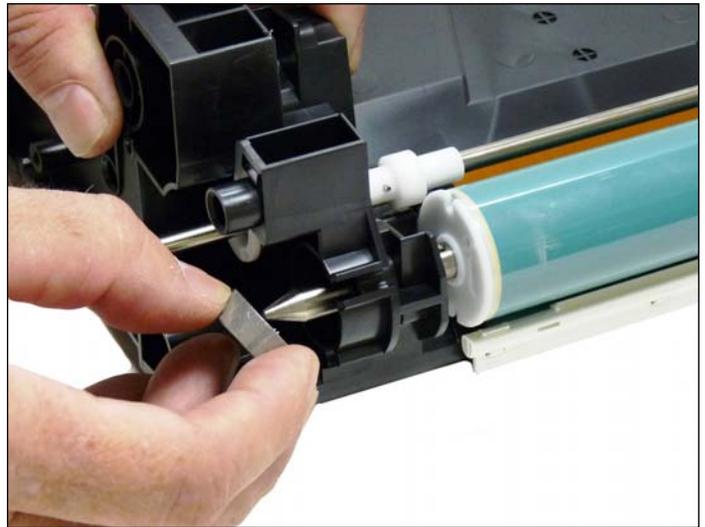
6. Lift the developer unit off the cartridge.



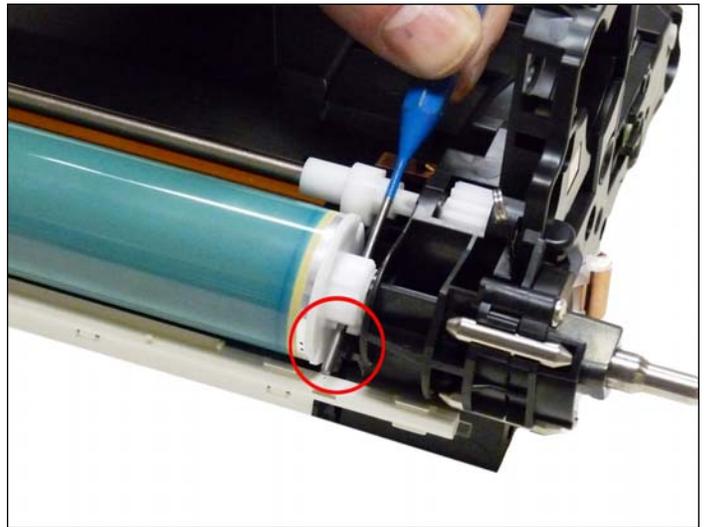
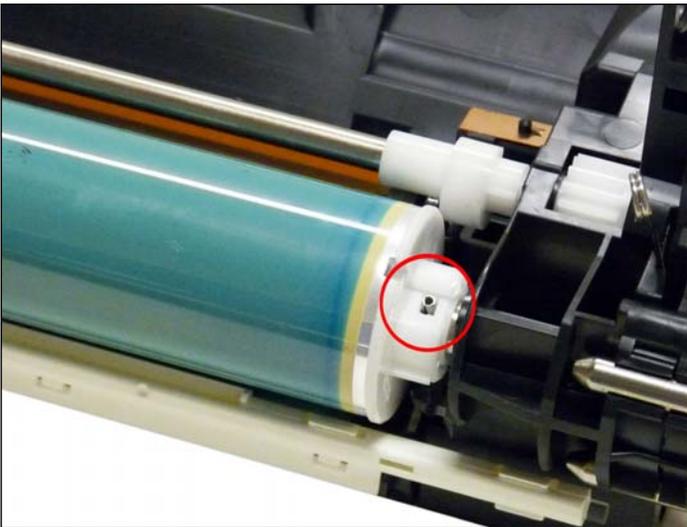
7. Remove the single screw and belt/gear train.



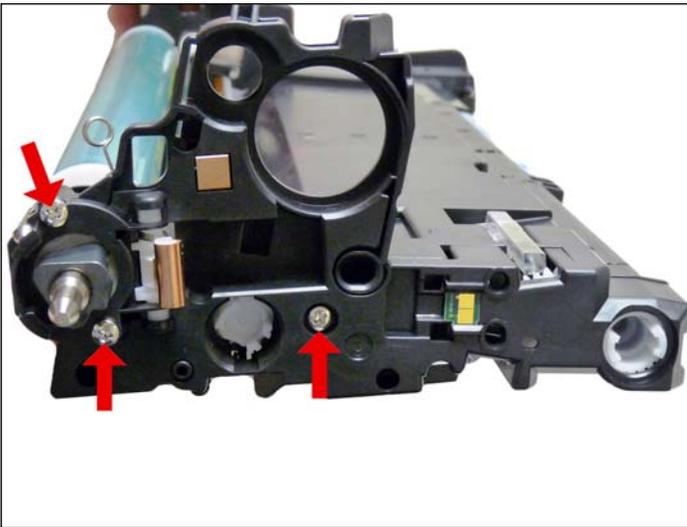
8. Remove the belt/gear train and two augers. Vacuum out all the remaining waste toner from the augers, chambers and belt/gear train.



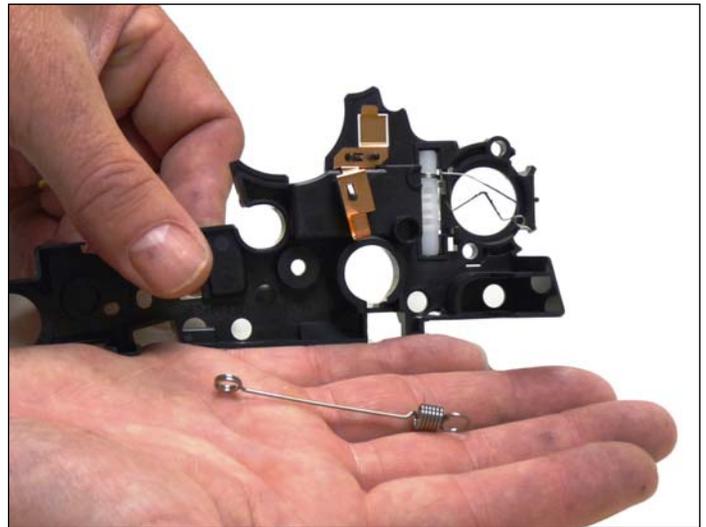
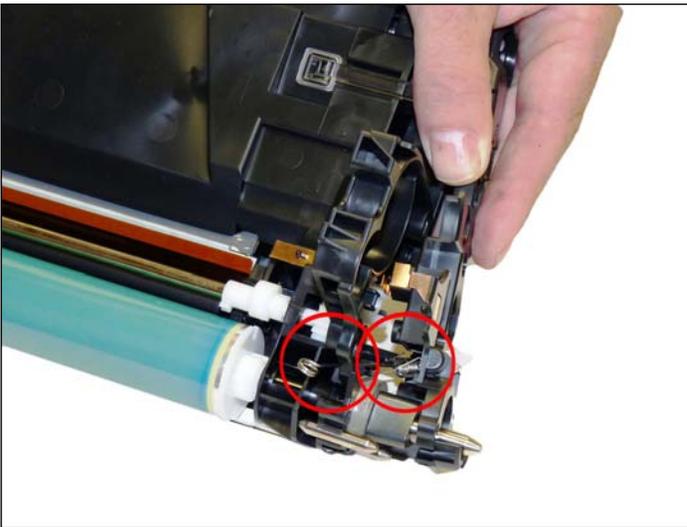
9. Slide the bearing off the drum shaft on the contact side.



10. With the small 3/32" punch, and the pin angles so the bottom clears the cartridge, knock out the pin from the drum axle. Be sure to knock it all the way out. If you try to pry it out the pin will be ruined and will not fit any more in the shaft. If you do not angle the pin it can become jammed in the cartridge wall and will be very difficult to remove.

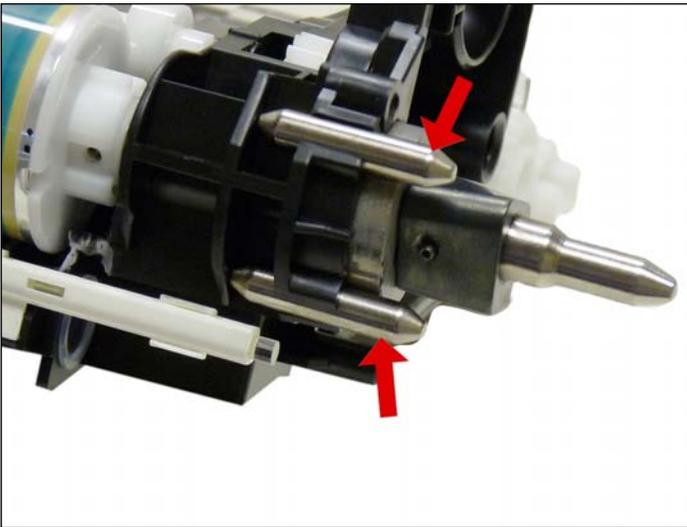


11. Remove the three screws from the contact side end cap.

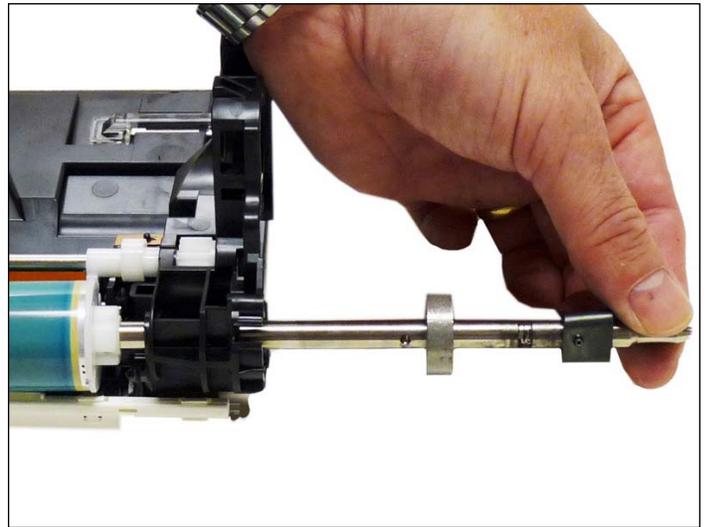


12. Pull the drum axle and end cap out together approximately 2". Note the location of the springs.

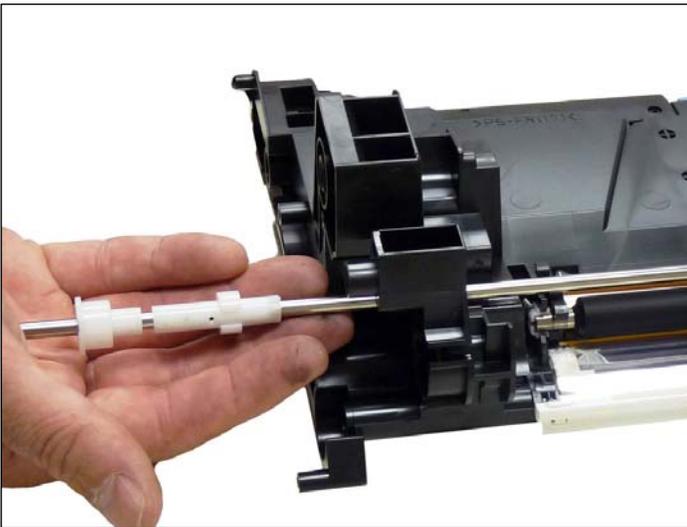
They must go back this way when you re-install the end cap! Remove the end cap. Be careful not to lose the two springs.



13. Remove the two metal pins.



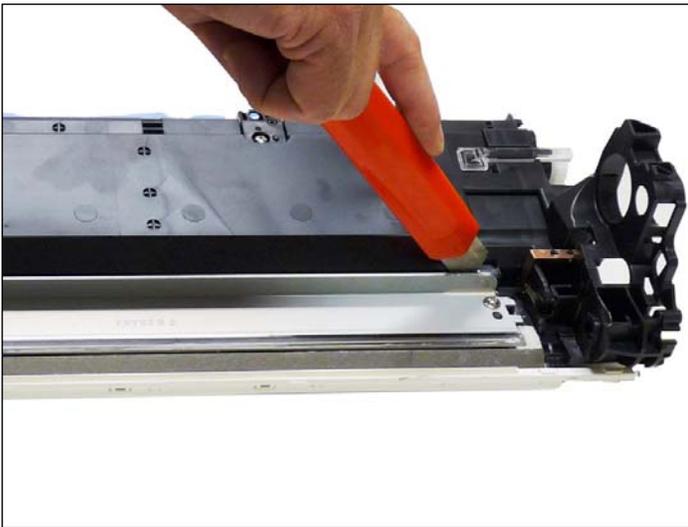
14. Remove the drum axle the rest of the way and remove the drum.



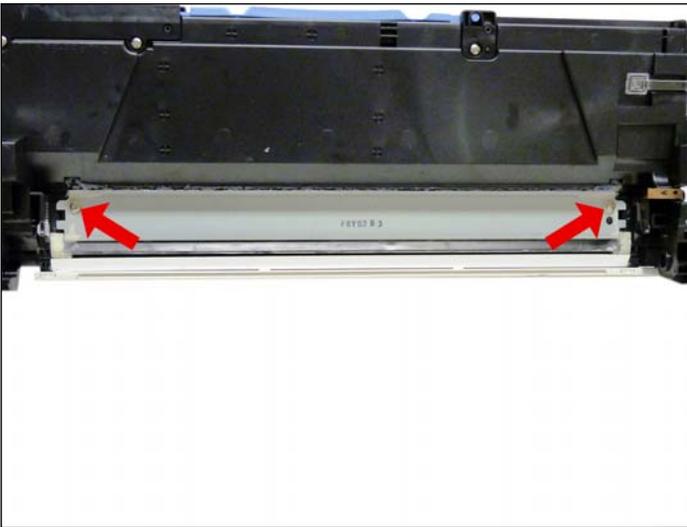
15. Rotate and slide the metal bar out from the non-contact side. The right gear will come loose.



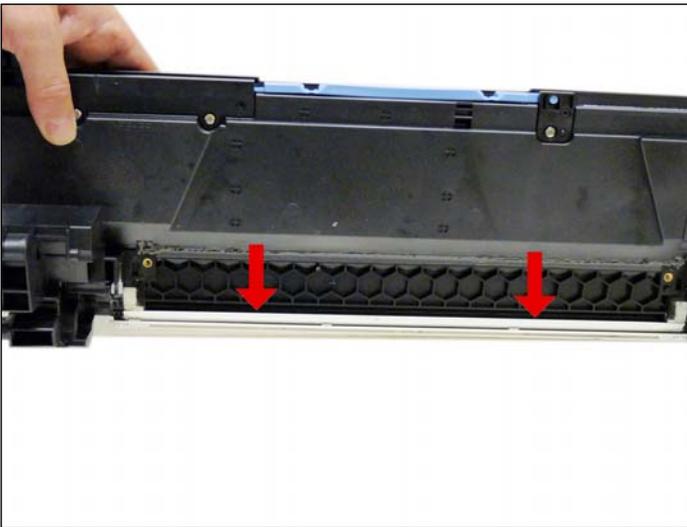
16. Remove the PCR assembly. The film will come with it.



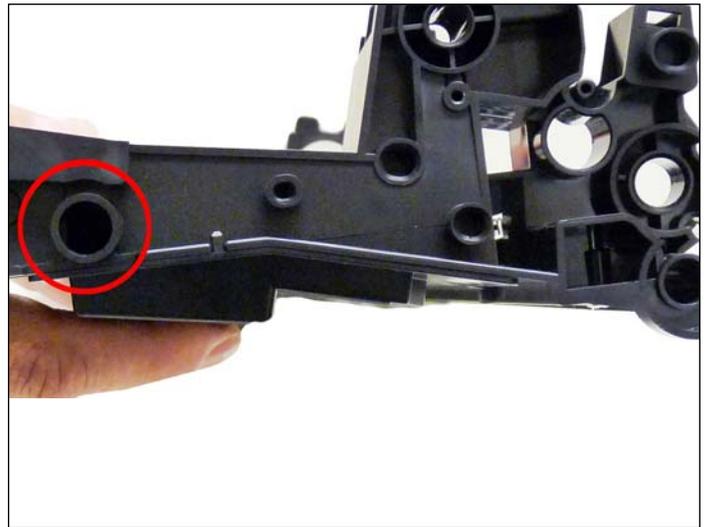
17. With a razor blade knife, slice the seal along the back edge of the wiper blade.



18. Remove the two screws on the wiper blade. Carefully pry up the blade carefully cutting the wiper blade seal as you go.



19. Clean out the waste toner from the wiper blade area and auger area. Make sure the felt seals are clean.



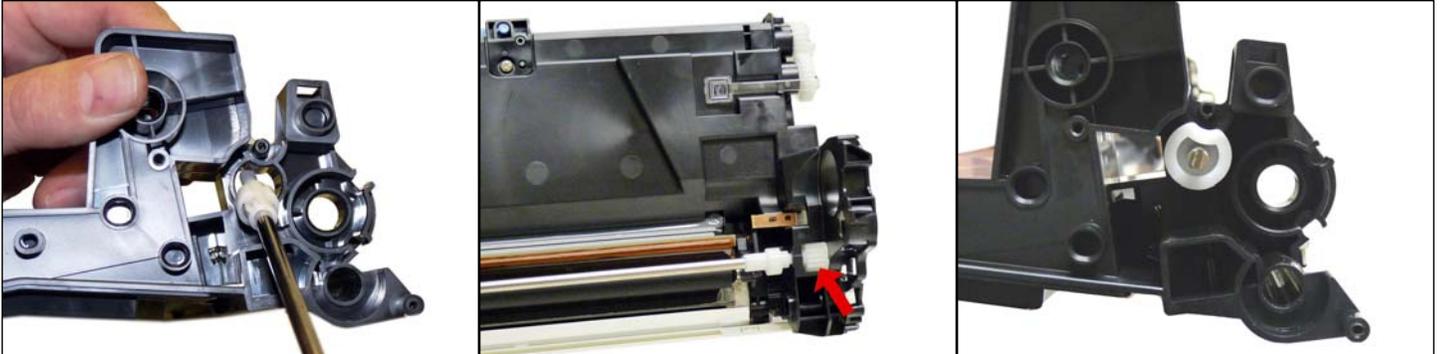
20. Finish cleaning out any remaining waste toner from the rear auger chamber hole. Vacuum this chamber out. Do not use compressed air, or you may damage the internal seals.



21. Install the new wiper blade and two screws.

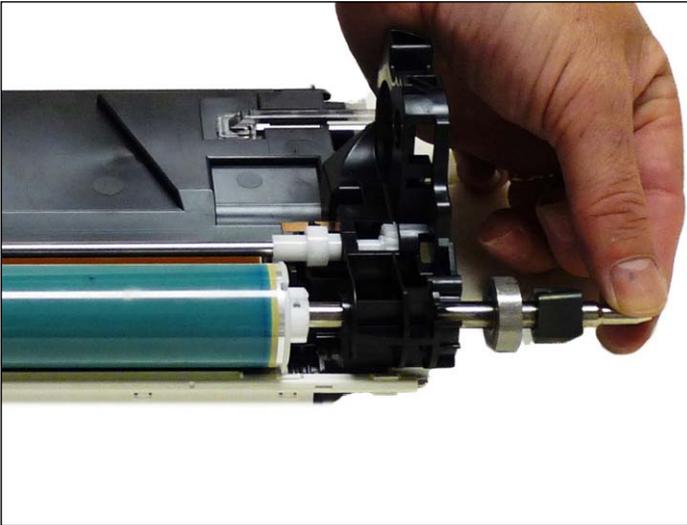


22. Clean the PCR and install the PCR assembly. Be careful not to damage the film. Replace the conductive grease on the black holder side of the PCR.

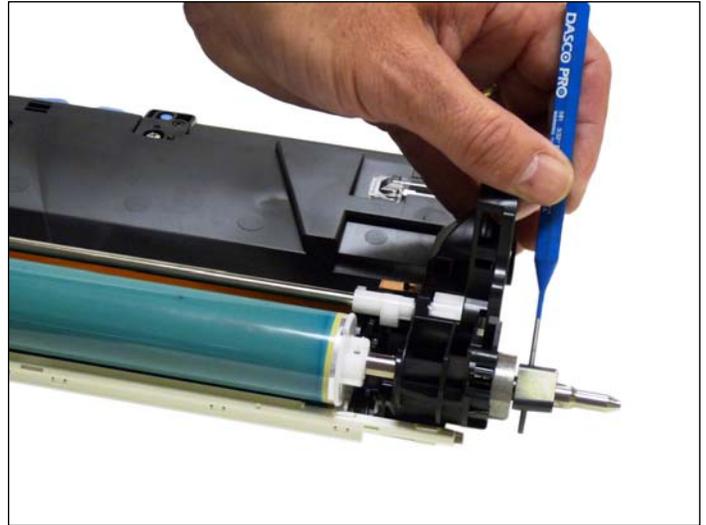


23. Install the metal bar and gear. You have to rotate the bar to get the various bushings through the shaped hole.

Make sure the last bushing is seated in the cartridge.



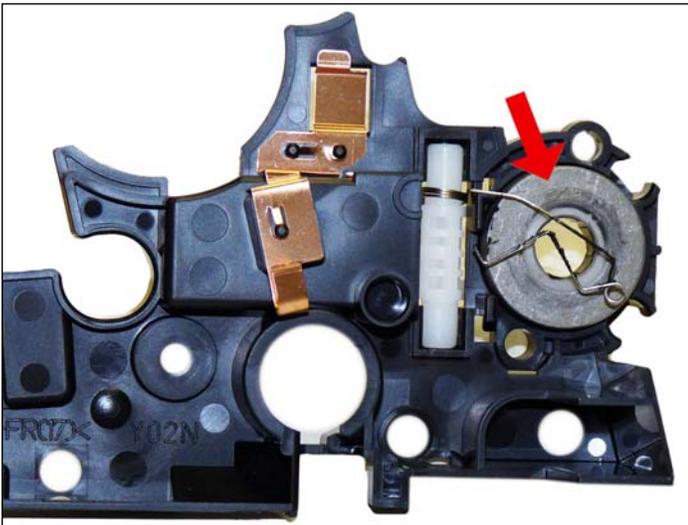
24. Install the drum large hub side to the gear side of the cartridge. Slide the drum axle in from the gear side.



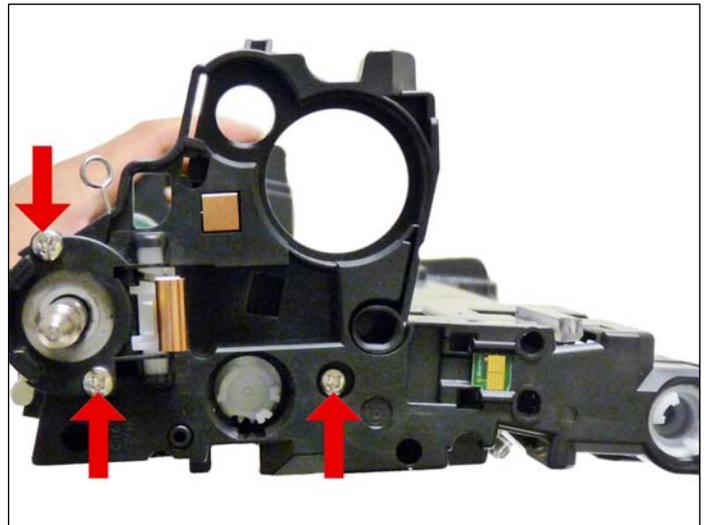
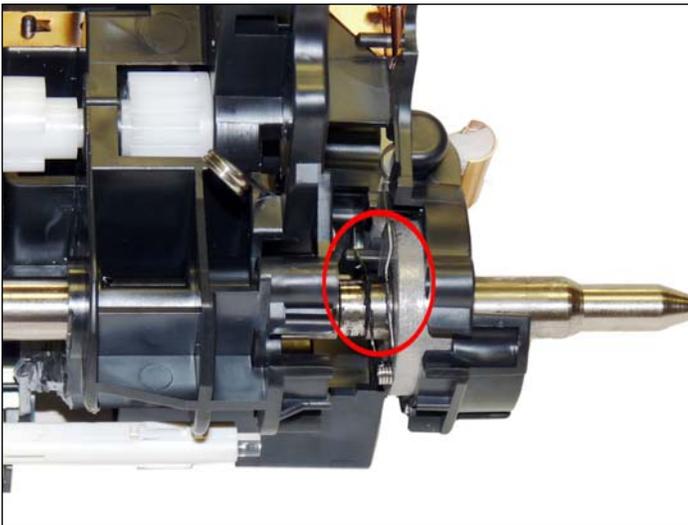
25. Knock the pin out from the metal drive gear on the drum axle. Remove the gear.



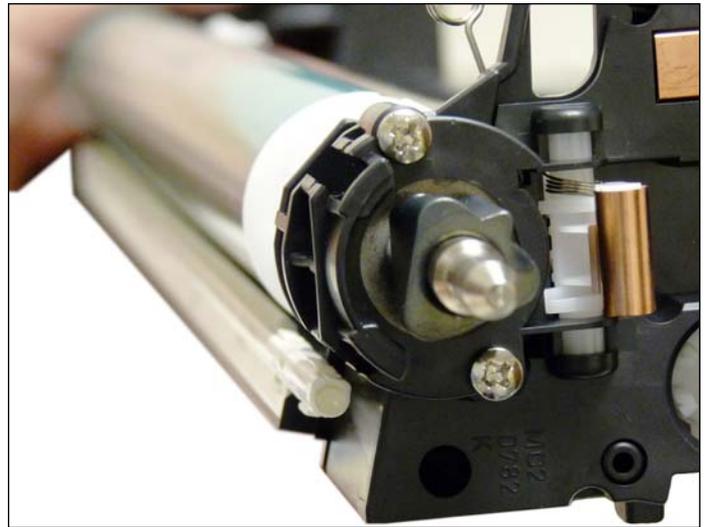
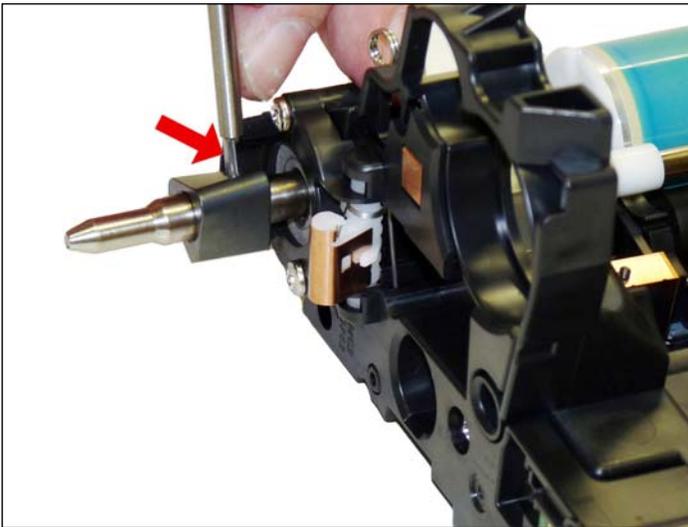
26. Install the long spring so the base fits on the post and the tail fits through the hole as shown.



27. Remove the metal bushing from the drum axle and place it in the end cap behind the spring.

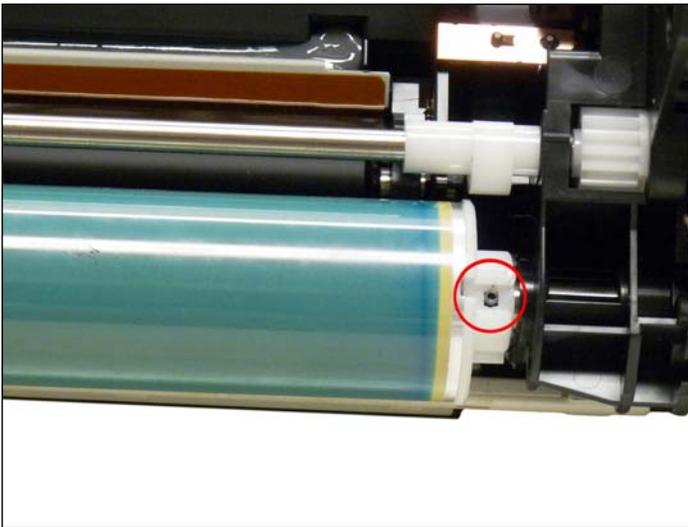


28. Start to install the end cap. Make sure the spring fits in the groove on the drum axle. Install the three screws.

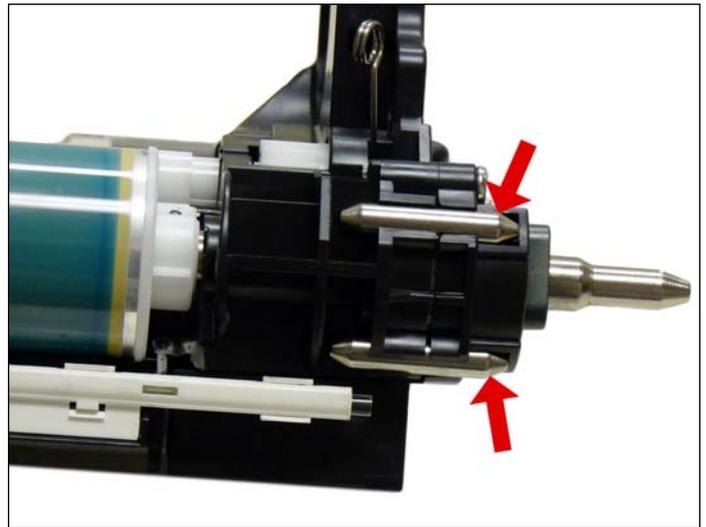


29. Install the drive gear onto the drum axle, and insert the pin by tapping it in with a larger punch and small hammer.

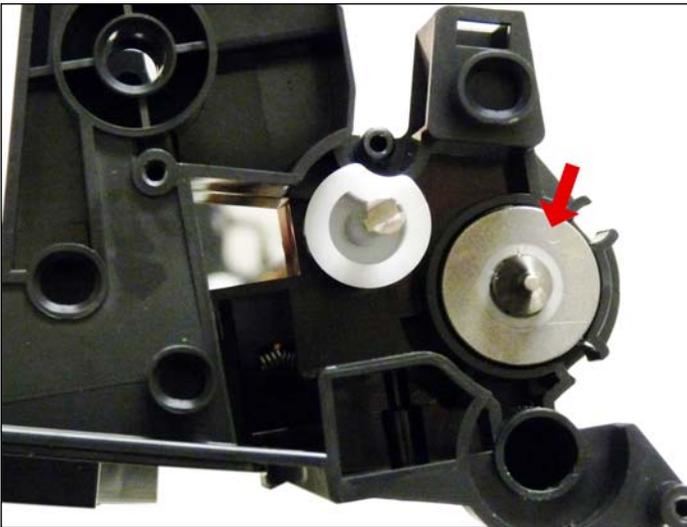
Make sure you have installed the gear properly.



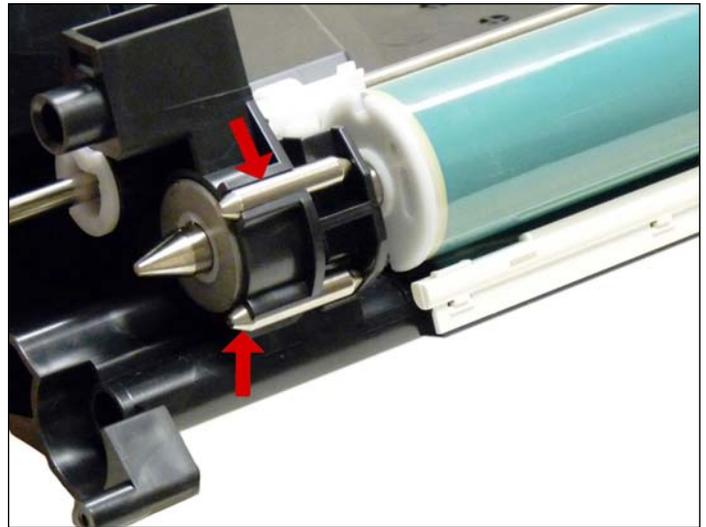
30. Align the hole in the drum hub to the hole in the drum axle and insert the pin.



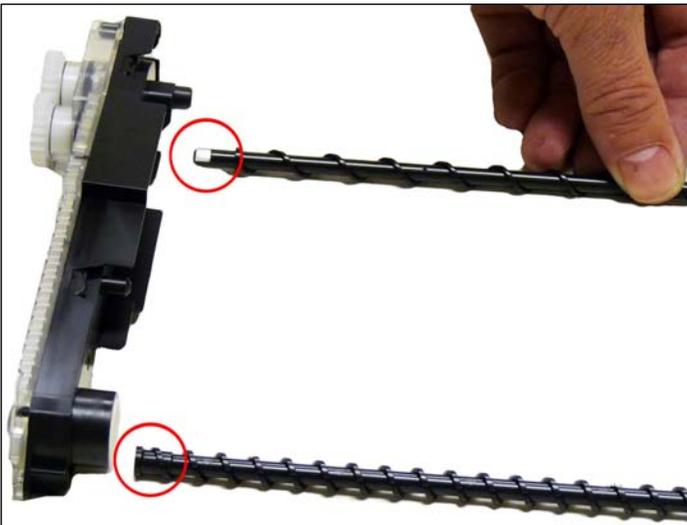
31. Snap in the large metal pins on the gear side.



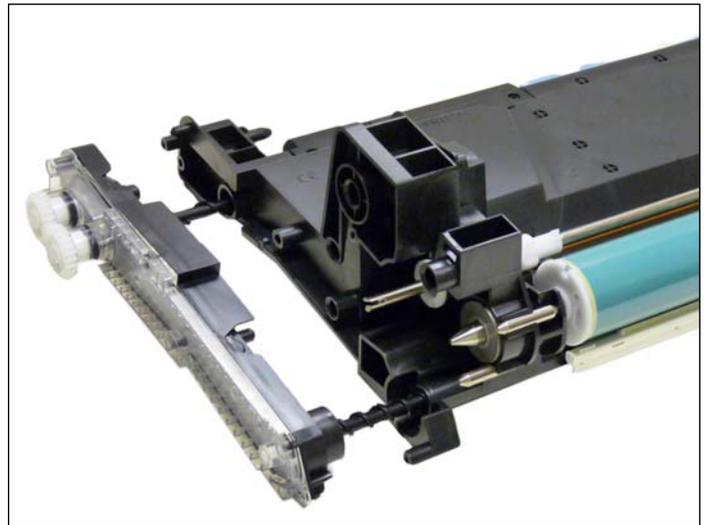
32. Install the metal bushing on the opposite side of the drum axle.

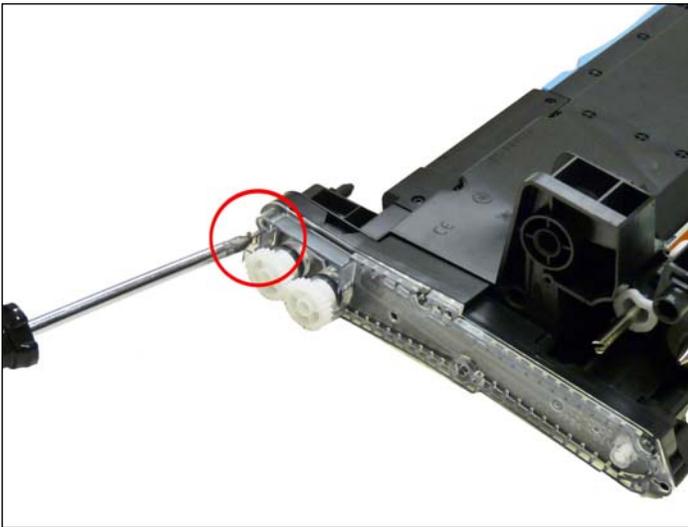


33. Install the two remaining large metal pins.

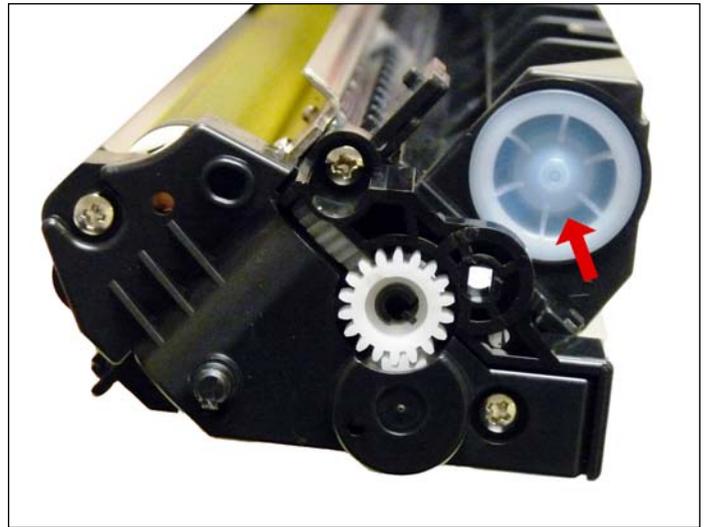


34. Install the two augers into the belt/drive assembly as shown. The keyed end of the shorter auger fits into the gear hub, and the flat end of the larger into the other. Install the augers and belt assembly. Turn the gears until the augers are seated in the opposite hubs. You will hear them click into place.

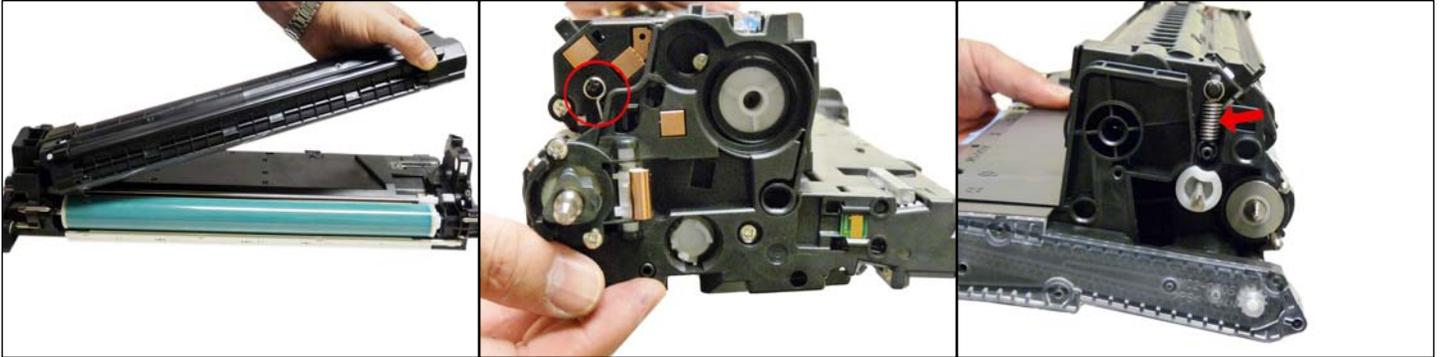




35. Install the single screw on the belt/drive assembly.

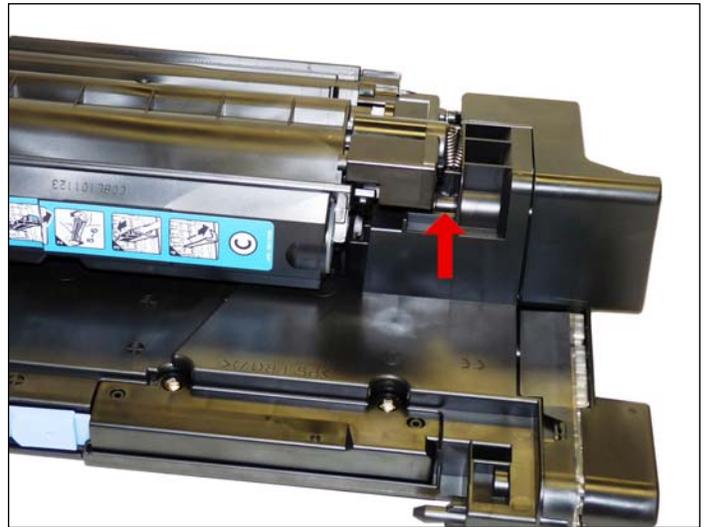


36. When developer is available, remove the fill plug, dump the old developer vacuum the chamber out and install the new developer. At this time we do not recommend the doctor blade be disturbed.



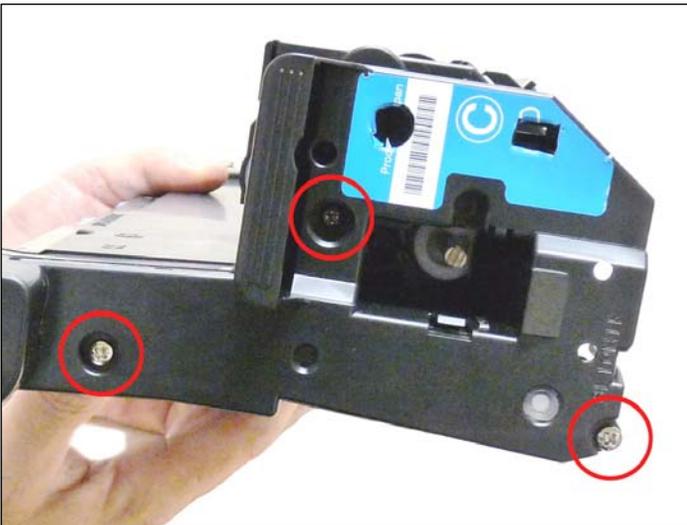
37. Install the developer unit onto the drum unit.

Make sure you set the tail of the long spring onto the tab and then install the short spring as shown.



38. On the gear side, install the small metal pin in the end cap.

Install the end cap while rocking the developer unit back and forth until the metal pin fits into the developer unit.



39. Install the three screws. Place the larger screw into the outer edge hole.



40. Replace the chip by slicing the melted plastic from the top edge. Slide the chip out and replace. Lock the replacement chip in with two small dots of hot glue.



41. Slide the drum cover in place.

PRINTING A TEST PAGE

Press MENU and then select INFORMATION.

There are multiple test pages that can be run:

Menu Map
Configuration
Supplies Status
Usage page
Color Usage
Demo
RGB Samples
CMYK Samples
Various fonts

There are also PRINT QUALITY troubleshooting pages that can be run:

1. Press MENU
2. Press the down arrow until DIAGNOSTICS appears on the display
3. Press the “Check” button
4. Press the down arrow until PQ TROUBLESHOOTING
5. Press the “Check” button
6. A series of pages will print out. Follow the instructions on the pages.

ADJUSTING THE COLOR

1. Press MENU
2. Select CONFIGURE DEVICE
3. Then select PRINT QUALITY

You can then change the Highlights, mid-tones and shadows for all 4 colors.

There is also a handy “RESTORE COLOR VALUES” selection just in case.

REPETITIVE DEFECT CHART

There is a 36mm developer roller in drum unit; the color of the defect will determine the faulty drum unit.

40 mm	PCR in OPC drum unit.
50 mm	Transfer roller #1
71 mm	Transfer roller #2
82 mm	Tension in the transfer unit
94 mm	OPC Drum. Color of defect will determine the faulty drum.
144 mm	Pressure roller in fuser
148 mm	Heat roller in fuser