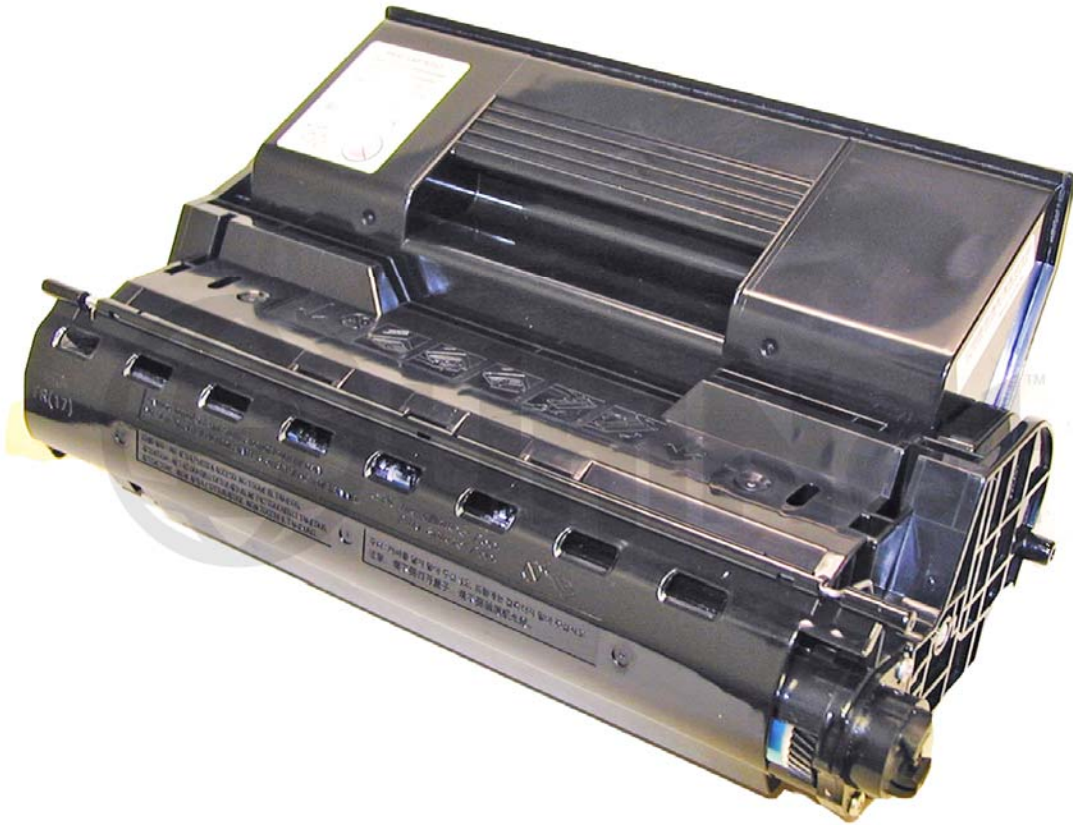


XEROX® PHASER 4510

TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



XEROX® PHASER 4510 TONER CARTRIDGE

REMANUFACTURING THE XEROX PHASER 4510 TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet

First introduced in April 2007, the Phaser 4510 machine is based on a 45ppm, 1200dpi Fuji-Xerox laser printer engine. There are two cartridges available the low yield 113R00711 is rated for 10,000 pages, and the HY 113R00712 is rated for 19,000 pages. The first page out is stated to be under 8 seconds. The processor is 533Mhz, and they all come standard with 128Mb ram max 512Mb. These machines tend to be used as workgroup printers, so if you have a customer that has one, the cartridge volume will be on the high side.

With the list prices of these cartridges at \$159.99 USD for the LY and \$224.99 USD for the HY, they are a nice profitable cartridge to do. Though they are a bit unique in their construction, they are fairly easy to remanufacture.

While this cartridge looks very similar to the Phaser 4500 from the outside, it is very different. This is especially true for the toner and chips. The chip itself is an RF type and is a black round disk that fits into the side of the cartridge.



Like the Phaser 4500, they both use white plastic pins located on each side of the cartridge that lock the two halves of the cartridge in place. The heads of these pins have a one way screw head on them (pictured). We have contacted multiple specialty screw manufacturers to see if a special tool is available, but were not able to find one. They can be removed by inserting a 1" long #6 or #8 wood screw into the center of the pin. You can then twist the pin to release the two small tabs and pull it out. The text below will go more into detail on this.

MACHINES BASED ON THE XEROX 4510 ENGINE

Phaser 4510

Phaser 4510 B

Phaser 4510 N

Phaser 4510 DT

Phaser 4510 DX

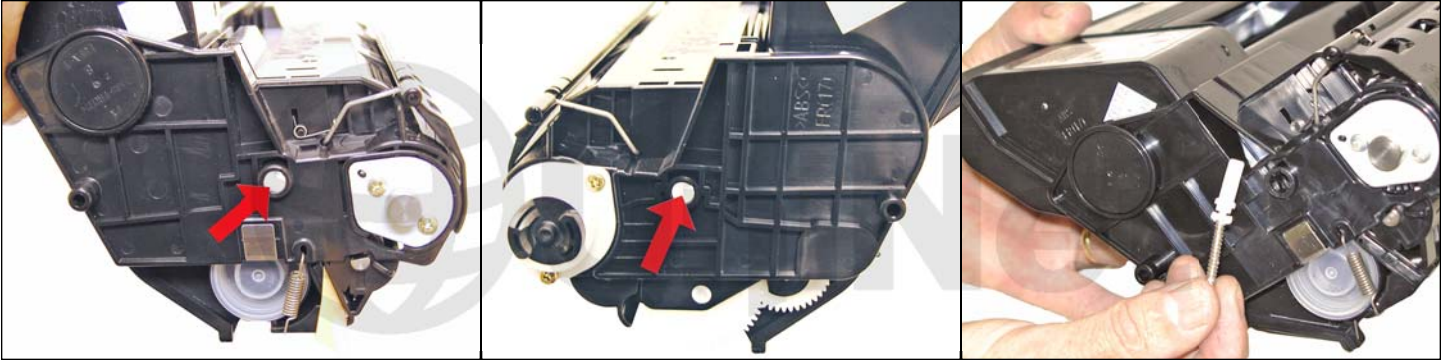
How to run test prints as well as printer error codes will be discussed at the end of this article.

SUPPLIES REQUIRED

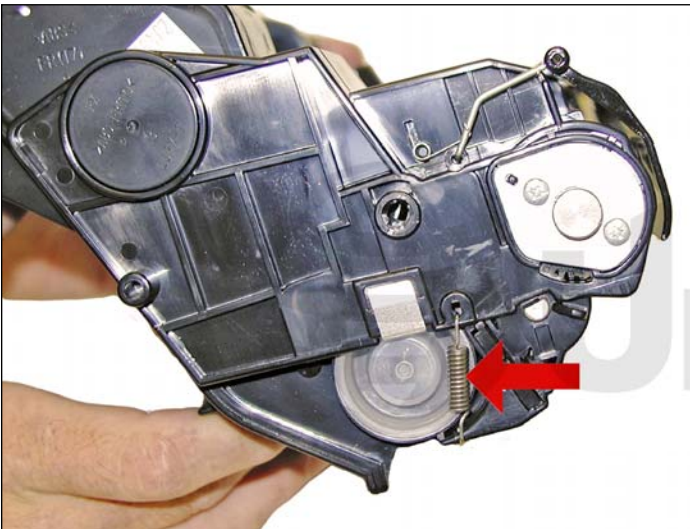
1. 820g Phaser 4510 toner for the HY cartridge or 410g 4510 toner for the LY cartridge
2. Replacement plastic cartridge pins (if available)
3. New replacement chip
4. Sealing strip
5. New drum (optional)
6. New doctor blade (optional)
7. New mag roller sleeve (optional)
8. Cotton swabs
9. Isopropyl alcohol
10. Drum padding powder
11. Conductive grease
12. Dedicated magnetic roller cleaner

TOOLS REQUIRED

1. Phillips head screw driver
2. Small common screwdriver
3. A 1" long #6 or #8 wood screw
4. Needle nose pliers
5. Spring hook
6. Vacuum approved for toner

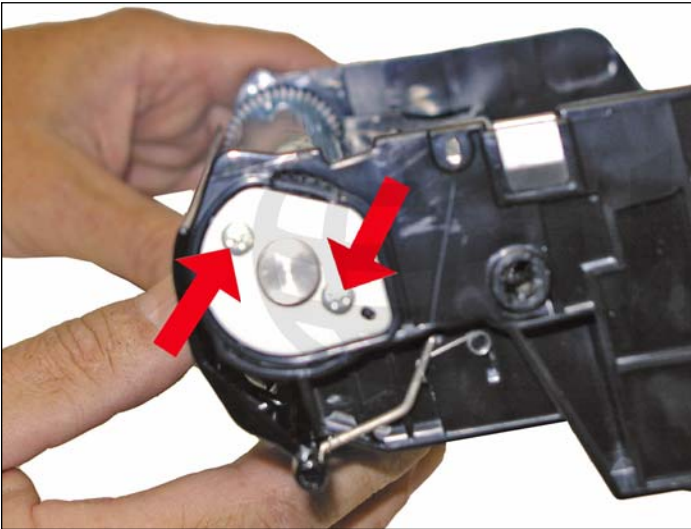


1. On either side of the cartridge is a white plastic pin with one way screw heads. These pins are what hold and lock both halves together. Specialty drivers to remove them are not available, so the only way as of now to remove them is to insert a 1" long #6 or #8 wood screw into the center of the pin. Once the screw has been inserted, turn the pin/screw so that the two small tabs in the pin are free. Remove the pin.

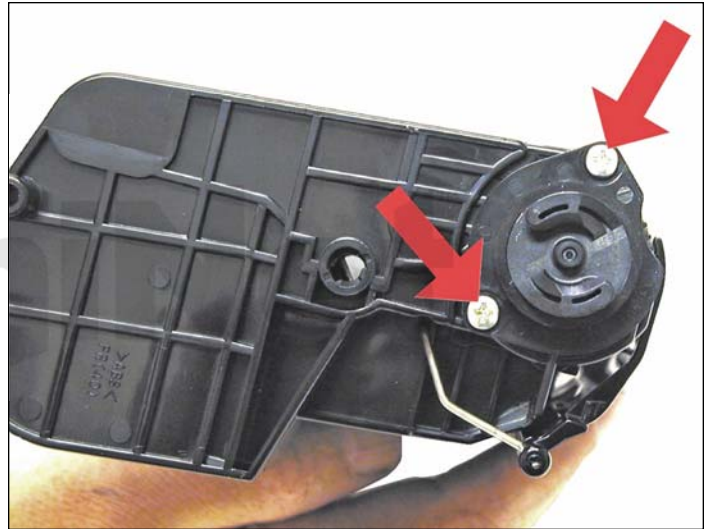


2. Remove the spring from the right (fill plug) side of the cartridge.

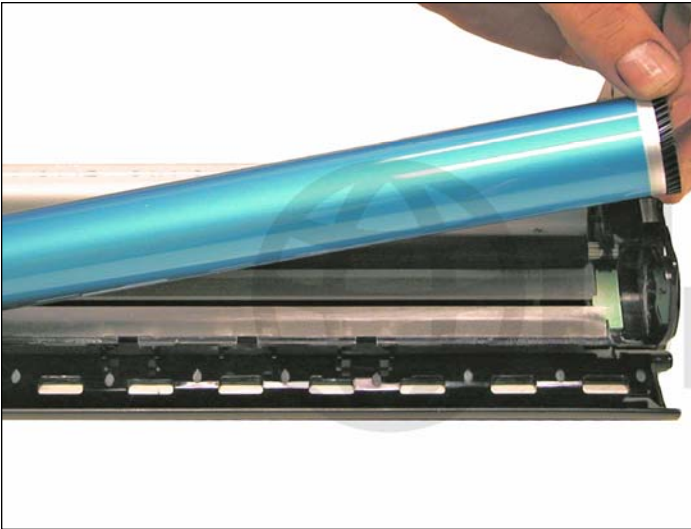
Separate the two halves by lifting the waste chamber straight up off the supply chamber



3. Remove the two screws and metal drum axle pin from left side of the cartridge.



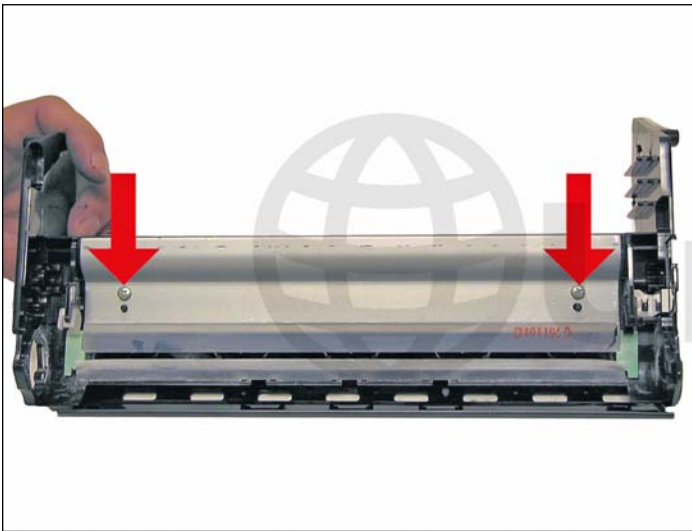
4. Remove the two screws and plastic drum bushing from the right side of the cartridge.



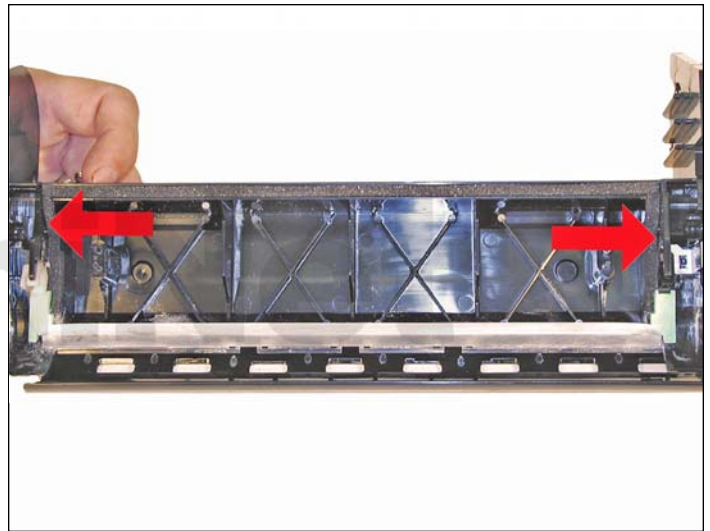
5. Remove the drum.



6. Remove the PCR from its holders.



7. Remove the two screws and wiper blade. This blade has a very tight fit. Be careful not to break the alignment pins.



8. Clean out the waste chamber. Be very careful not to lose or damage the foam wiper blade seal.



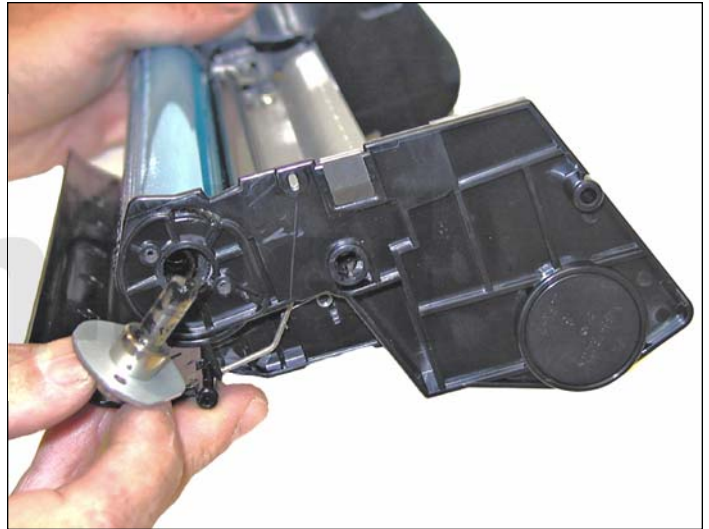
9. Coat the wiper blade with your preferred lubricant, and install in the cartridge. As stated previously, this blade has a very tight fit. Be careful not to break the alignment pins. Install the two long screws the four short screws are for the drum axle pins only.



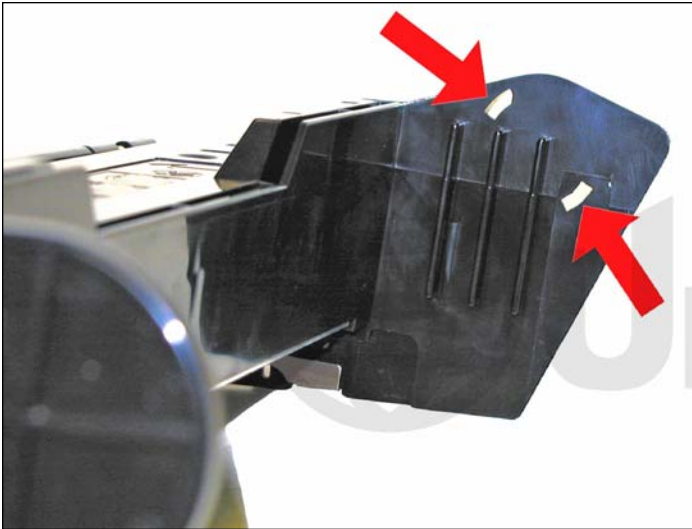
10. Clean the PCR contacts with a cotton swab and alcohol. Place a small amount of conductive grease on the black PCR holder.



11. Clean the PCR with your preferred PCR cleaner and install in the holders.



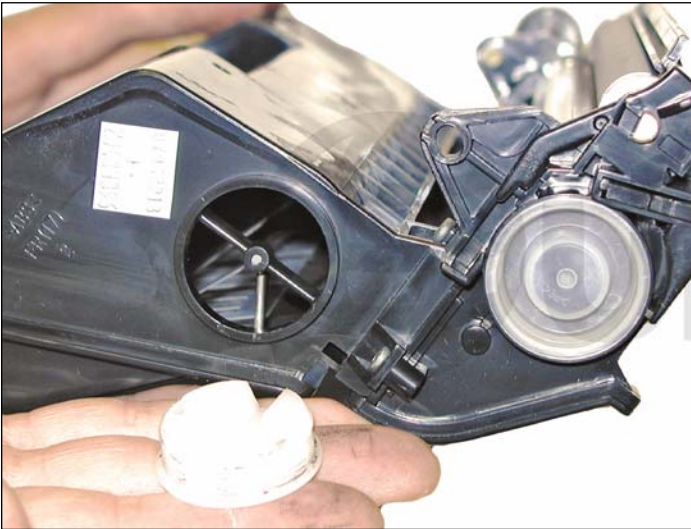
12. Install the drum, axle pins and screws. Make sure that there is clean conductive grease on the drum axle pin shaft.



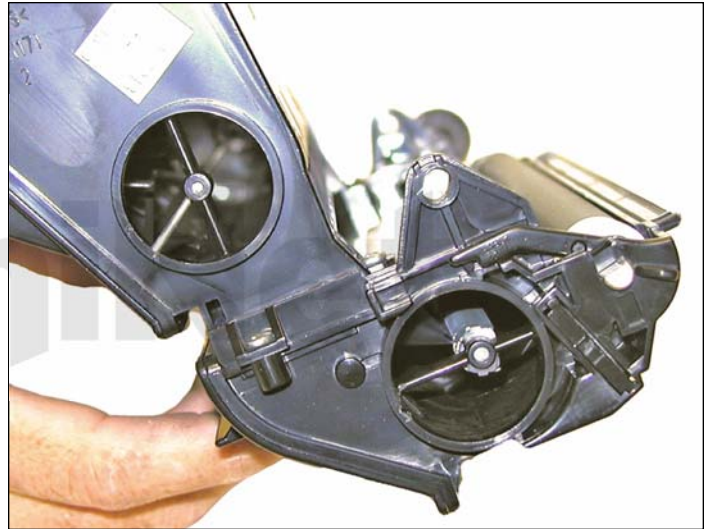
13. While the cartridge is apart, this is the best time to remove the old chip.

Press in on the two tabs from the inside wall of the cartridge and remove the chip.





14. With a small jewelers screwdriver, pry out the upper fill plug. Dump out any remaining toner from the upper hopper.

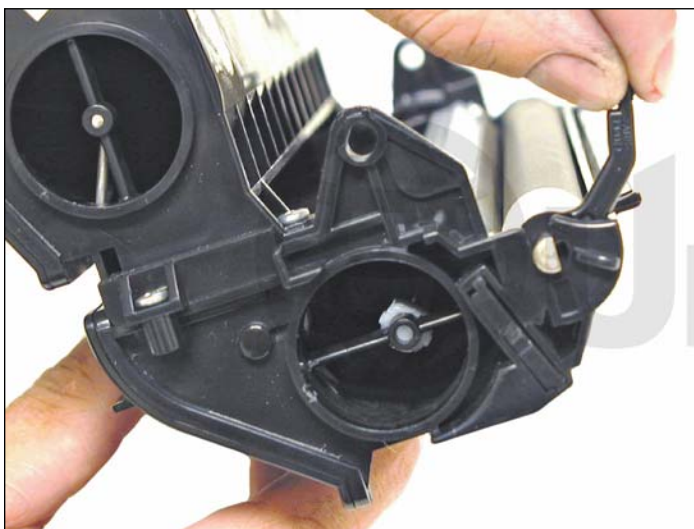


15. With the same jeweler's screwdriver, pry out the lower fill plug, and dump out any remaining toner from the lower section.



16. On the side opposite the fill plug, remove the two screws and end cap and gears as shown.

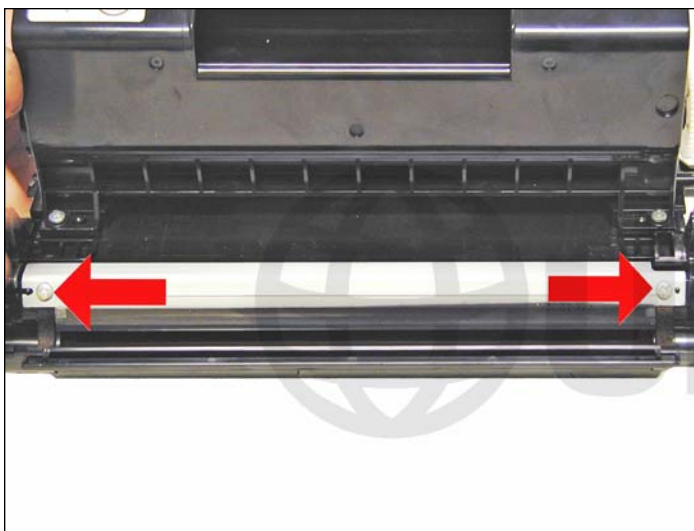
Leave the top large white gear in place.



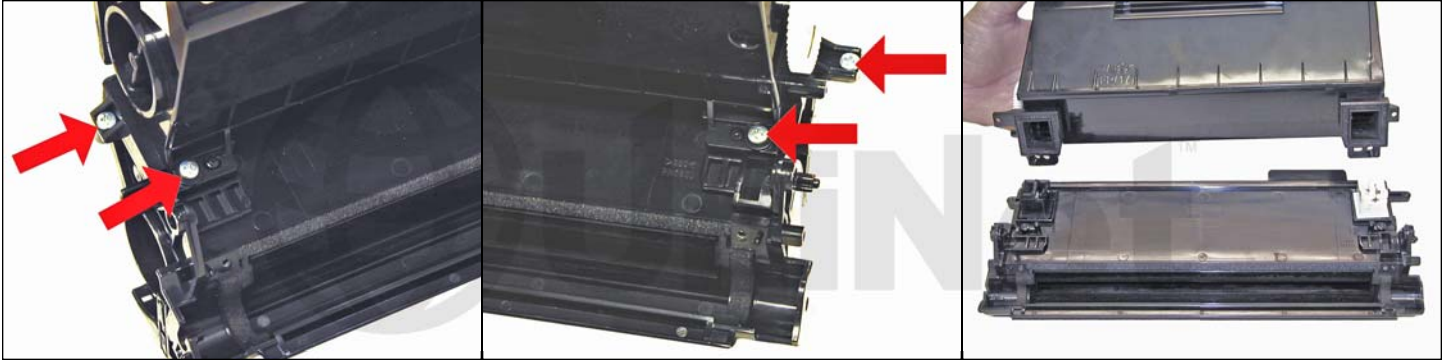
17. Lift up the locking arm on the right side of the magnetic roller.

With the keyed shaft of the magnetic roller free, lift up on the keyed end by the locking arm.

Pull the entire magnetic roller assembly free.



18. Remove the two screws and doctor blade. Watch out for the alignment pins! Clean out any remaining toner.



19. Remove the four screws that hold the upper supply section to the lower.

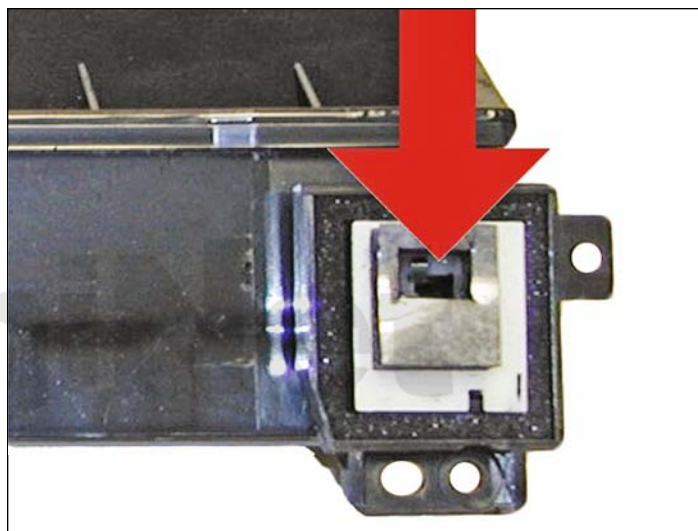
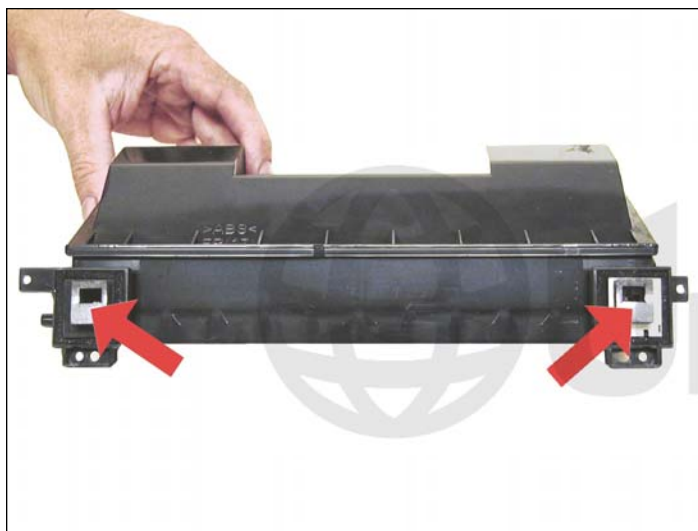
Remove the upper section.



20. Remove the two agitators from the lower hopper and clean them off.

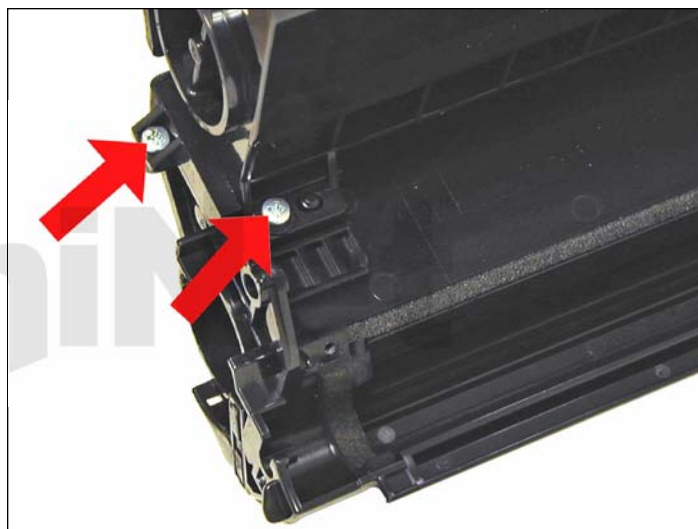


21. Thoroughly clean out both the lower and upper chambers. Be careful not to lose or damage the square foam seals on the lower chamber.

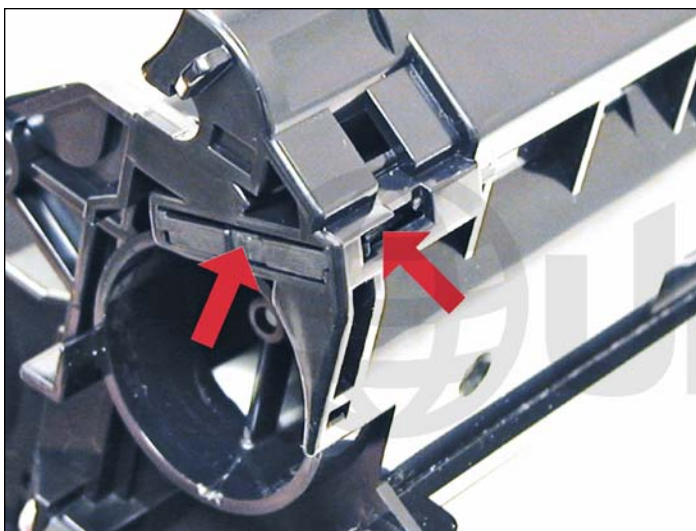


22. Install the two agitators.

Make sure the rectangle hole is towards the top of the cartridge.



23. Place the upper chamber onto the lower and install the four screws.



24. If you are installing a seal, on the lower section, remove the seal plug by pressing in on the side tab.

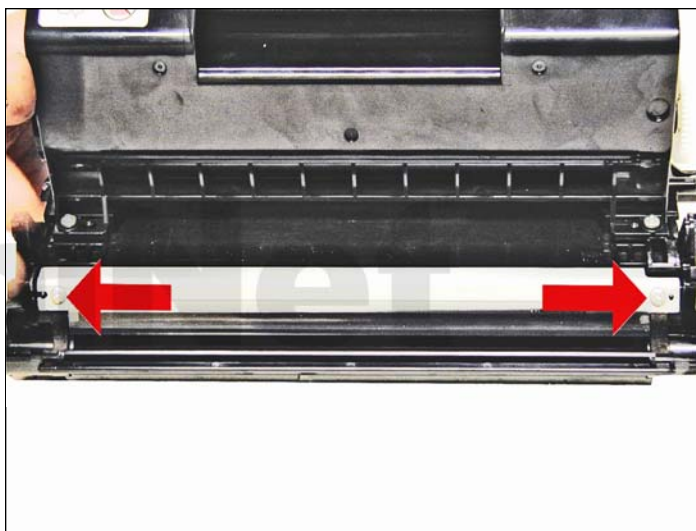


25. Install the seal.

Make sure the seal tab is slid into the seal tab slot.



26. Install the seal plug.



27. Install the cleaned doctor blade and two screws.

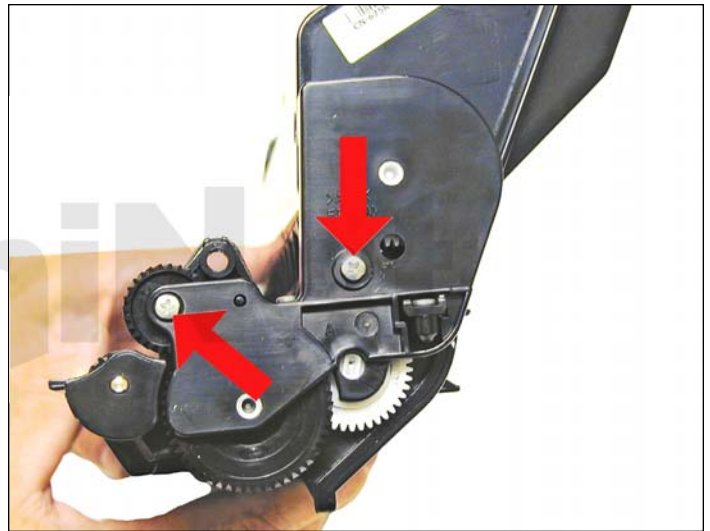
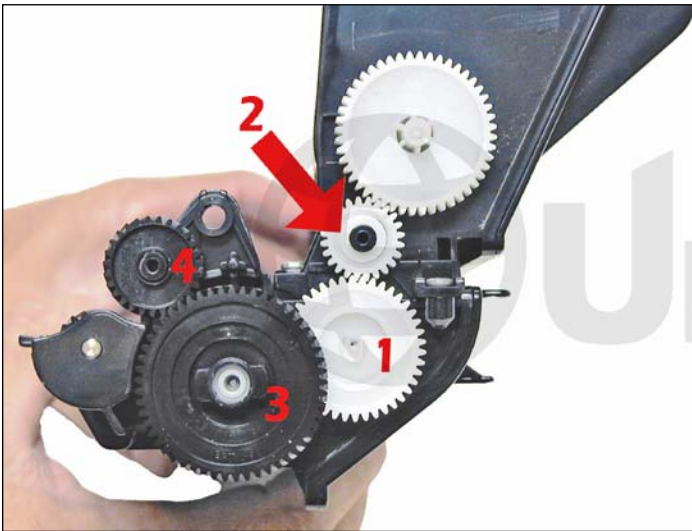
Be careful not to damage the alignment pins.



28. Clean the magnetic roller assembly with a dedicated magnetic roller cleaner.

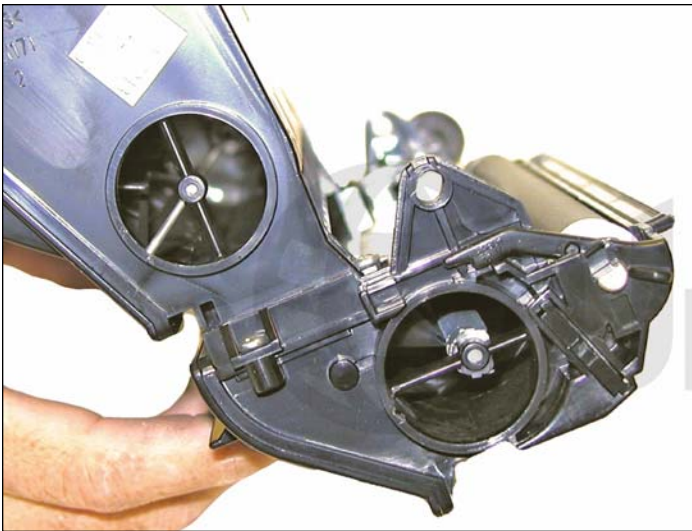


Install the assembly left side (round shaft) first. Make sure the locking arm is firmly locked in place.



29. Install the gears in the order shown.

Install the end cap and two screws.



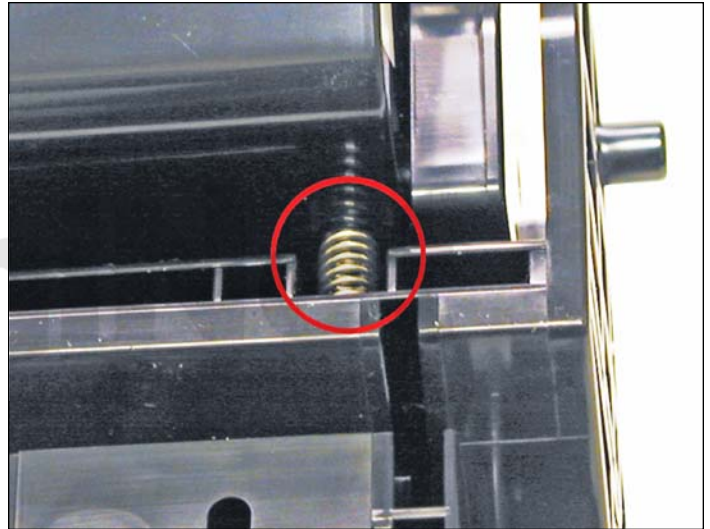
30. Fill with 820g Phaser 4510 toner into both the upper and lower chambers. We recommend filling around 1/4 of the toner in the lower chamber and the rest in the upper chamber.

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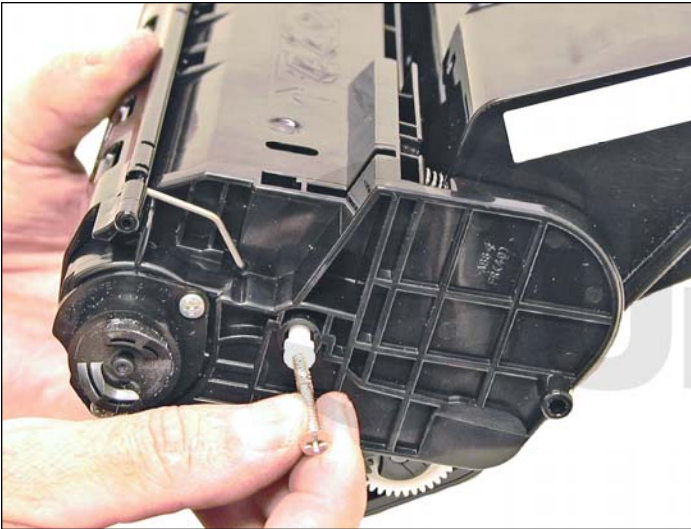


31. Install the fill plugs.

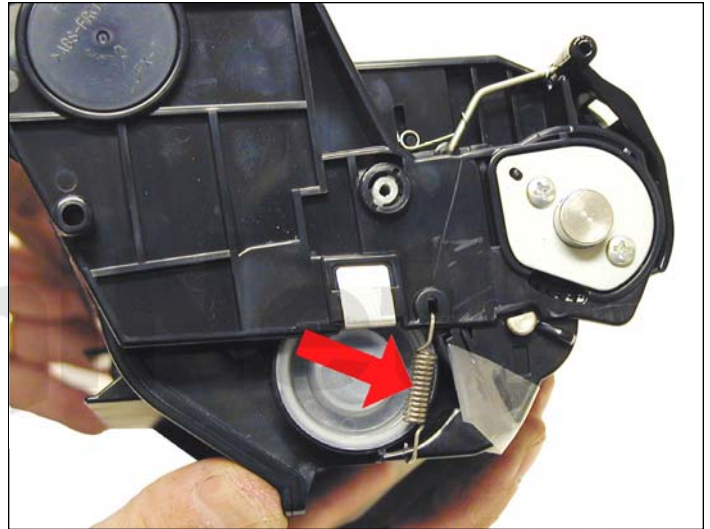
Check for leaks.



32. Install the toner supply section onto the waste chamber. Make sure the spring on the supply hopper fits into the plastic ring on the waste hopper.



33. Install the two white plastic locking pins.



34. Install the spring onto the outside of the cartridge.



35. Replace the RF chip. Line the two tabs on the back of the chip with the slots, and snap into place.

CARTRIDGE DEFECT LISTING

We have found no strange defects related to these cartridges.

The following is a list of repetitive defects for the more common failures:

94.4 mm	OPC Drum
94.2 mm	Fuser Assembly
52 mm	Magnetic Roller
51 mm	Transfer Roller
38 mm	PCR

RUNNING TEST PAGES

1. Press the MENU button until TROUBLESHOOTING is displayed.
2. Press the OK button
3. Select PRINT QUALITY PROBLEMS.
4. Press the OK button
5. Select TEST PRINTS.
6. Press the OK button
7. A series of test pages will then print out.

MACHINE ERROR CODES

The error codes in these machines follow the trend of using all English messages (No number codes). There is no need to list them here. It should be noted however that for many errors there are two levels of error codes. If there is a secondary code, the primary will tell you which button to press to get the second. Usually it is the HELP button.