

# XEROX® PHASER 5400

## TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



XEROX PHASER 5400 TONER CARTRIDGE

# REMANUFACTURING THE XEROX PHASER 5400 TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet

First introduced in October 2001, the Phaser 5400 machine is based on a 40ppm, 1200dpi Fuji-Xerox laser printer engine. This engine is capable of printing on 11" x 17" paper. The exact engine number is not known, but if Fuji-Xerox has kept with past practices, it would be the XP-40 (40ppm). The cartridge itself (Xerox # 113R00495) is very easy to remanufacture, and with list prices above \$296.00 USD\* per cartridge, a nice profit maker as well.

The cartridge is rated for 20,000 pages and is loaded with 820g of toner. A complete line of supplies is available for these cartridges. 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. While this cartridge looks very similar to the Lexmark W812 from the outside, it is very different. This is especially true for the toner. It should also be noted that there is a chip, and it must be changed each cycle. The chip itself is an RF type and is a black round disk that fits into the fill plug.



The only real similarity to the Lexmark W812 is that 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 what looks like a one way screw head on them (see above photo). 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 and pull it out.

**\*Cartridge pricing as of June 2007**

## **MACHINES BASED ON THE XEROX 5400 ENGINE:**

**Phaser 5400**

**Phaser 5400 N**

**Phaser 5400 DT**

**Phaser 5400 DX**

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

**SUPPLIES REQUIRED:**

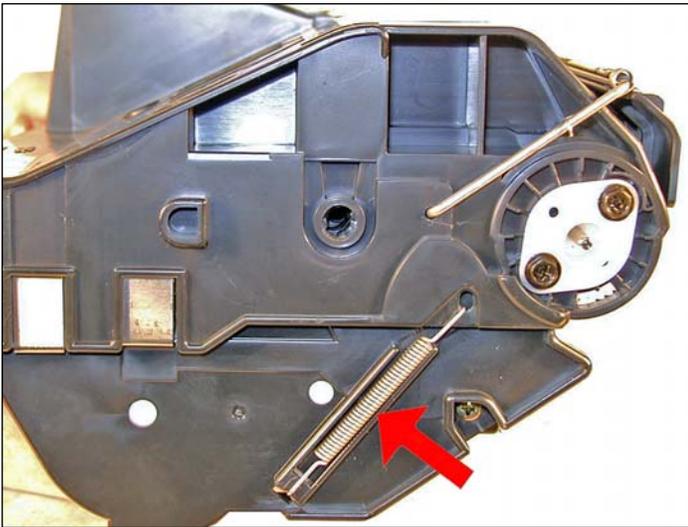
1. New toner (820g) for use in Phaser 5400
2. New drum for use in Phaser 5400
3. Replacement cartridge pins
4. New replacement chip
5. New doctor blade (optional)
6. New magnetic roller sleeve (optional)
7. Sealing strip
8. Cotton swabs
9. Isopropyl alcohol
10. Drum padding powder
11. Conductive grease
12. Dedicated magnetic roller cleaner

**TOOLS REQUIRED:**

1. Phillips head screwdriver
2. Small common screwdriver
3. Needle nose pliers
4. Spring hook
5. Vacuum approved for toner

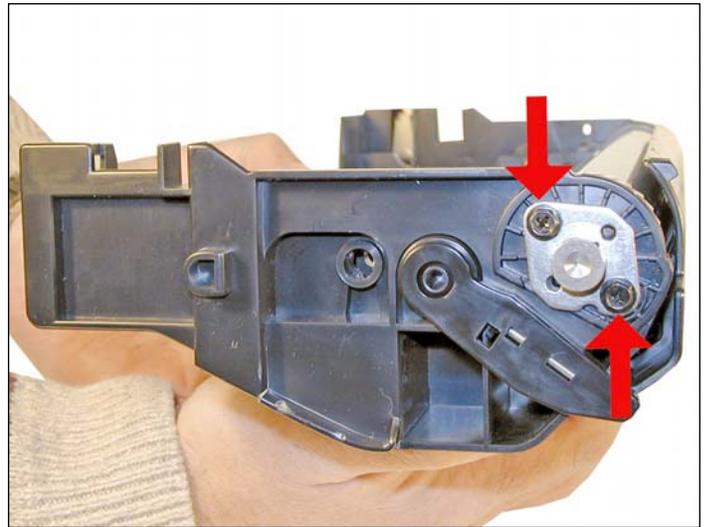


1. Turn the cartridge so that the handle is towards you (spring on the right). On either side of the cartridge is a white plastic pin with one way screw heads. These pins are what hold and lock both halves together. Specialty drivers to remove them are not available (at the time of this writing) so the only way to remove them (at the time of this writing), is to insert a 1" long or #8 woodscrew into the center of the pin. Pull/pry out to remove. Leave the screws in so they can easily be installed.

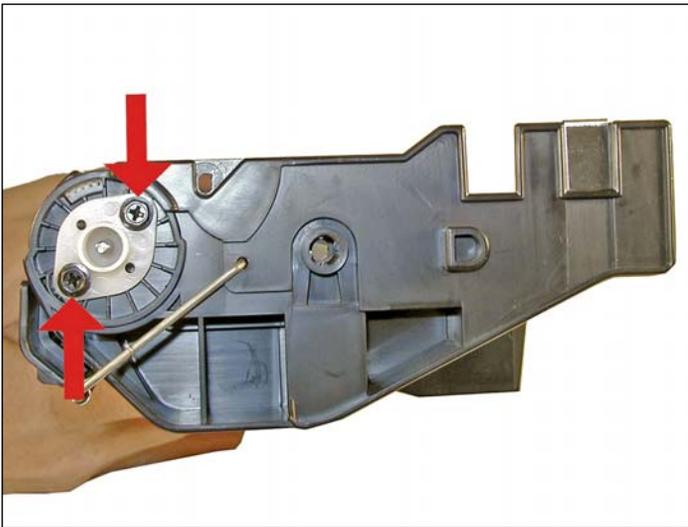


2. Remove the spring from the right side of the cartridge.

Separate the two halves.



3. Remove the two screws and metal drum axle pin from the double gear side of the drum.



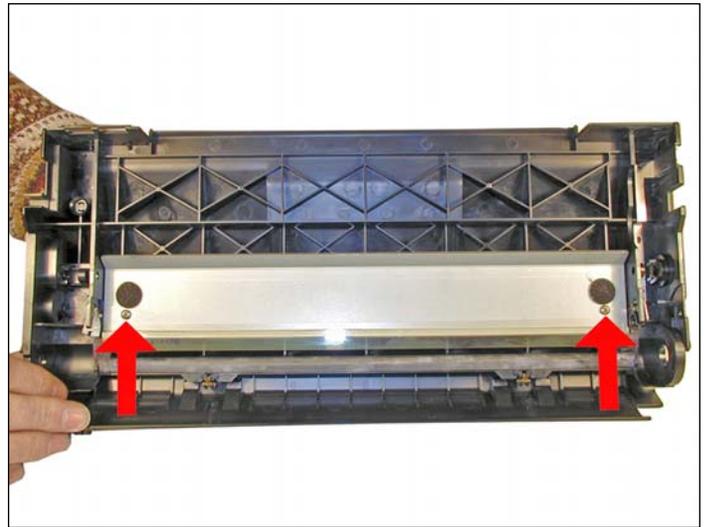
4. Remove the two screws and white plastic drum axle pin from the single gear side of the drum.



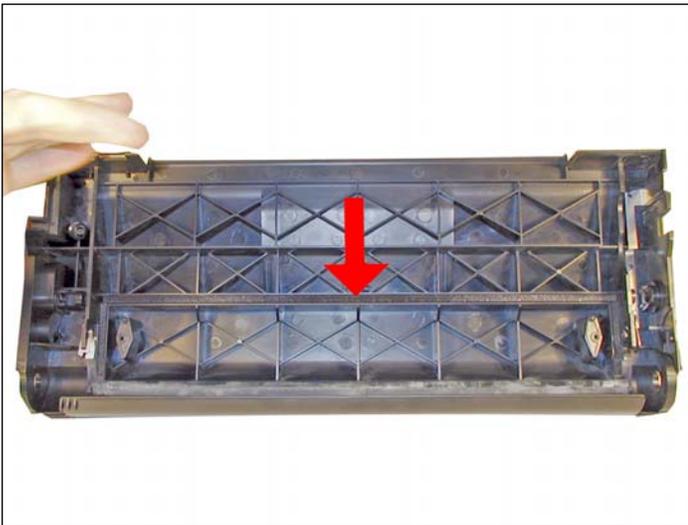
5. Remove the drum.



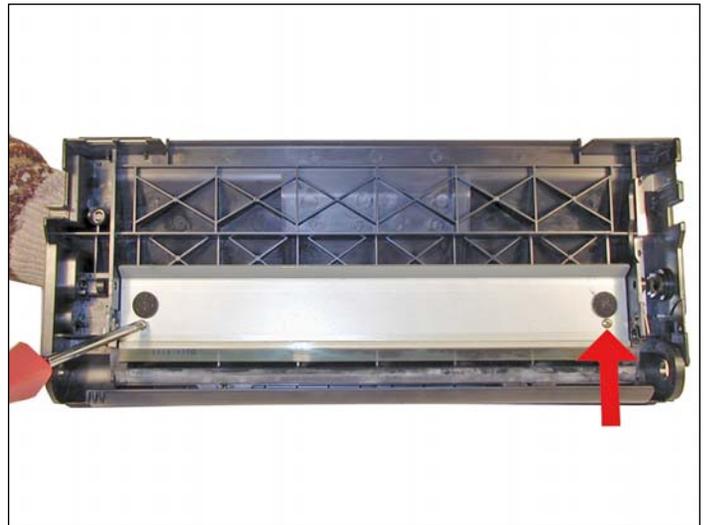
6. Remove the PCR from its holders.



7. Remove the two screws and wiper blade.



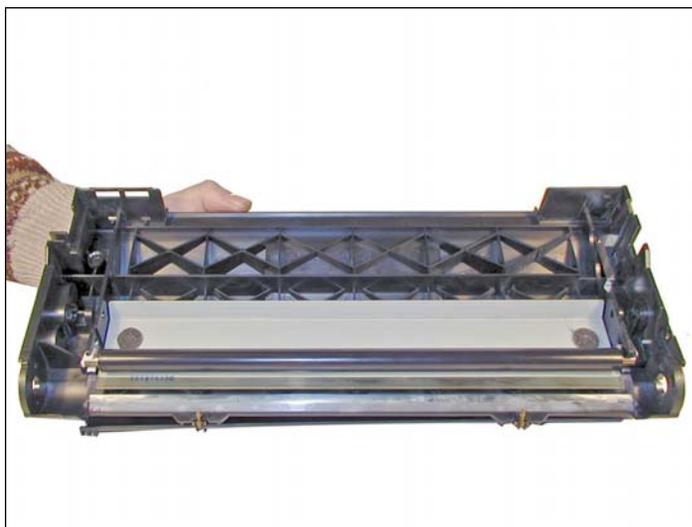
8. Clean out the waste chamber. Be very careful not to lose or damage the foam wiper blade seal. This seal is very fragile and a vacuum/compressed air cleaning system will damage it if you are not careful.



9. Coat the wiper blade with your preferred lubricant, and install in the cartridge. Install the two (gold) long screws, the four short screws are for the drum axle pins only.



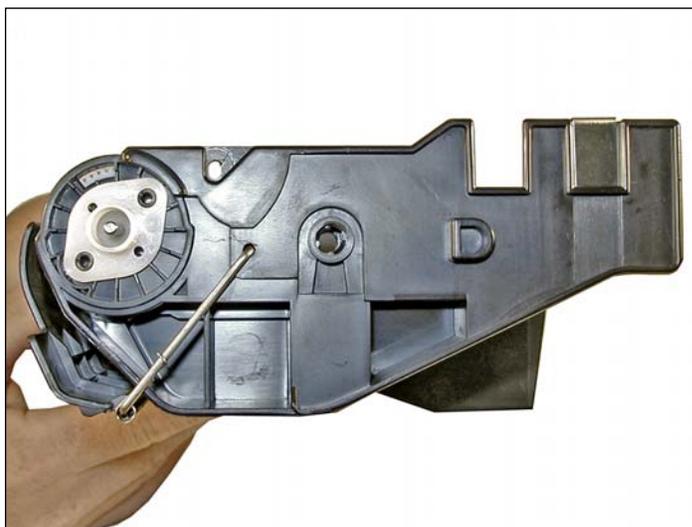
10. Clean the PCR contacts with a cotton swab and alcohol.



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 the metal axle pin is on the double gear side, and the white plastic pin is on the single gear side. Although the toner hopper can be cleaned and filled through the fill plug, it is recommended that the magnetic roller be removed and cleaned. This will also be necessary to do once a seal is available. The fill plug has a black cover in the center that is held on by double sided tape. This cover is actually the chip, which must be replaced for the cartridge to work.

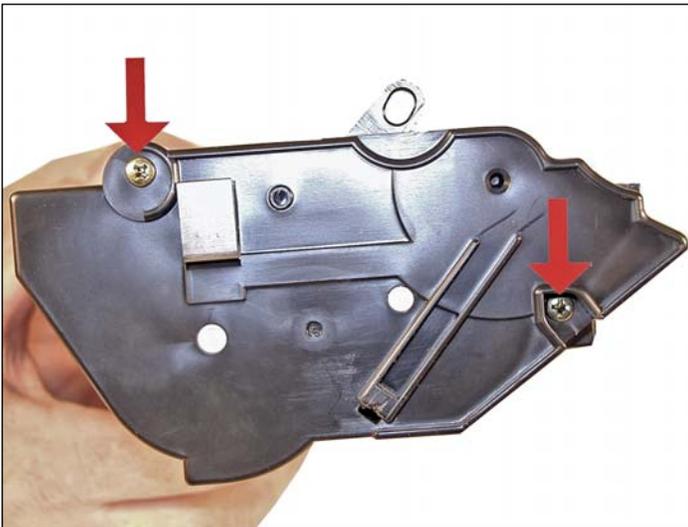




13. With a small jeweler's screwdriver, pry the black cover off the fill plug.



14. With the pair of needle nose pliers, pull the fill plug out. Grasp the plug by the small cross braces, and pull. This method does not damage the plug seal. Dump out any remaining toner from the hopper.



15. On the side opposite the fill plug, remove the two screws and end cap.



16. Press in and lift up the locking tab 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 tab. Pull the entire magnetic roller assembly free.



17. Remove the two screws and doctor blade.

Clean out any remaining toner.



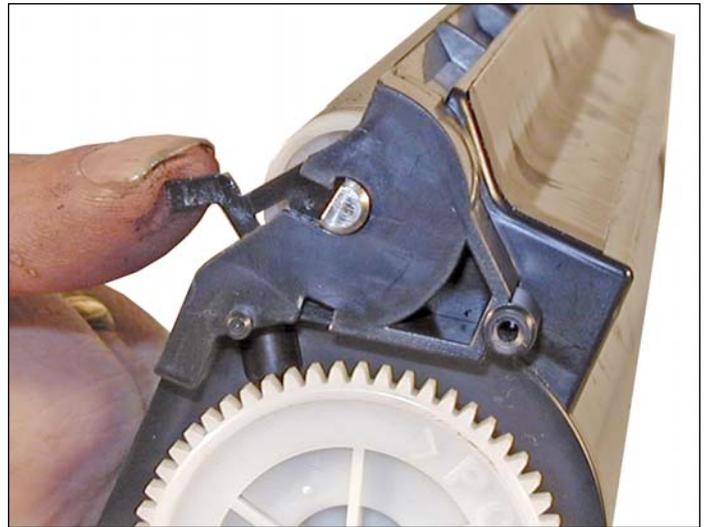
18. Install the seal.

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



19. Install the cleaned doctor blade and two screws.

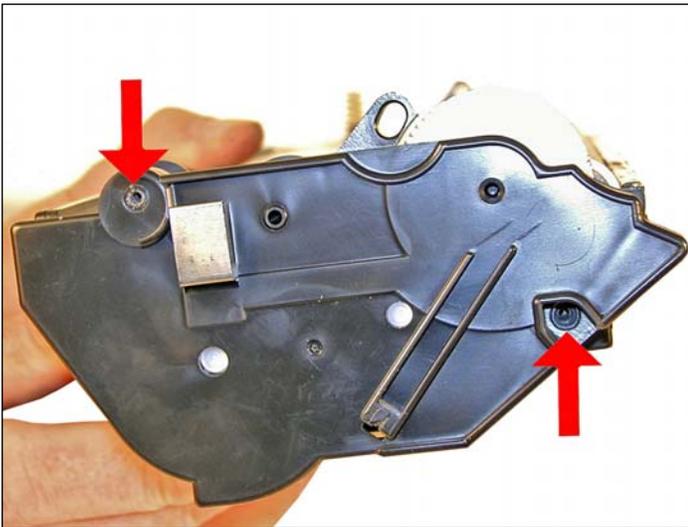
Be careful not to damage the alignment pins.



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

Install the assembly left side (round shaft) first.

Make sure the locking tab is firmly locked in place.



21. Install the end cap.

The gear posts must also align to the end cap holes.

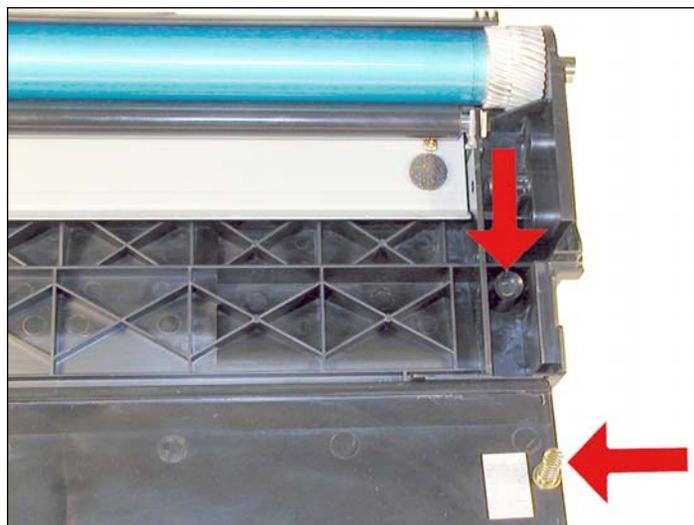
Install the two screws.



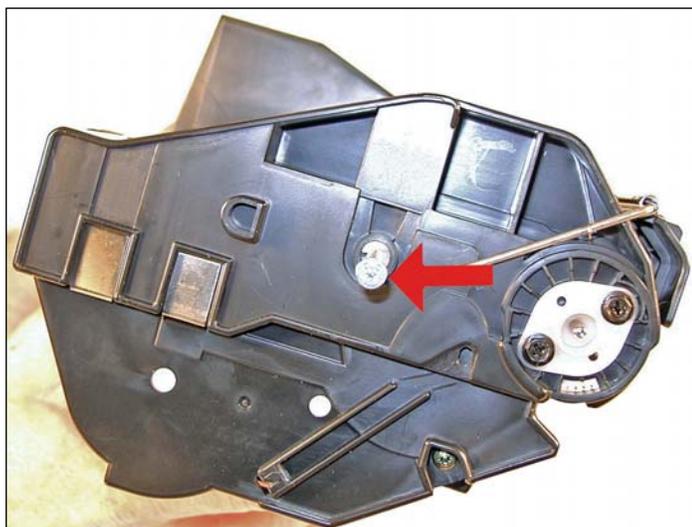
22. Fill with 820g toner for Phaser 5400.



23. Install the fill plug, check for leaks. If the round chip fell off, just throw it away. A new chip will be installed later in the instruction.



24. 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.



25. Install the two white plastic locking pins.



26. Remove the two screws from the white pins.



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



28. Replace the RF chip.

#### 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:

<b>OPC drum</b>	<b>95 mm</b>
<b>PCR</b>	<b>45 mm</b>
<b>Magnetic roller</b>	<b>58 mm</b>

#### RUNNING TEST PAGES:

1. Press the MENU button (#1 or #5) until "PRINT MENU" is displayed.
2. Press the ITEM button (#2 or #6) until "TEST PRINT" is displayed.
3. Press the ENTER button (#4).
4. 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.