## XEROX® PHASER 3320 TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



### XEROX PHASER 3320 TONER CARTRIDGE



### REMANUFACTURING THE XEROX PHASER 3320 TONER CARTRIDGE

### By Mike Josiah and the Technical Staff at UniNet

First released in July 2012, the Xerox Phaser 3320 series of printers are based on a 37-ppm engine with a maximum resolution of 1200 x 1200 dpi. The first page out is stated to be under 6.5 seconds. The monthly duty cycle is rated at 80,000 pages per month, and they come standard with a 600Mhz processor. The Phaser 3320 has a standard memory of 128 MB, which is upgradeable to 384 MB. They also have Wi-Fi connectivity built in.

The Phaser 3320 cartridges do not have a drum cover, and come new with a piece of heavy paper with a thin sheet of foam on the inside, taped around the cartridge. The foam cover also has a thin plastic shipping lock that separates the two halves, so that no flat spots occur on the developer roller during storage.





As with most cartridges these days there are no screws in the outside of the cartridge at all.

There are plastic rivets that need to be cut off, holes drilled and screws installed to hold them back on.

The standard cartridge (Xerox part #106R02305) is rated for 5,000 pages. The high yield cartridge (part #106R02307) is rated for 11,000 pages.

The cartridge has a chip that needs to be replaced each cycle. The OEM chips are regional, so be sure to get the proper chip for your region. The 3320 machines, when new, ship with a 5,000-page starter cartridge, which can be made into a high yield by increasing the toner load and using the correct chip during remanufacturing.

The 106R02305 has a list price of USD\$162.99\* and the 106R02307 lists for USD\$249.99.\* **\*Pricing in U.S. American Dollars, as of July 2013.** 

There are two models in the Phaser 3320 engine: the Phaser 3320DN, and Phaser 3320DNI.

Cartridge troubleshooting will be listed at the end of these instructions.



### **REQUIRED TOOLS**

- 1. Toner approved vacuum
- 2. A small common screwdriver
- 3. A Phillips head screwdriver
- 4. Needle nose pliers

### **REQUIRED SUPPLIES**

- 1. New replacement toner for use in the Xerox Phaser 3320 (145g for the 5k, and 285g for the 11k cartridge)
- 2. New replacement chip for Phaser 3320 (check for the proper cartridge part number and/or region)
- 3. New OPC drum (optional)
- 4. New developer roller (optional)
- 5. New PCR (optional)
- 6. New wiper blade (optional)
- 7. New doctor blade (optional)
- 8. Sealing strip
- 9. Shipping lock
- 10. Conductive grease
- 11.99% isopropyl alcohol
- 12. Drum lubricating powder
- 13. Small tube of silicone caulk



1. On the contact side of the cartridge, slice off the slice off the heads of the three plastic rivets with a chisel blade knife. If your knife is too wide, you may find it necessary to drill out the upper recessed rivets on both sides. Leave the end cap on for now.



2. On the opposite side end cap, take the chisel blade knife and slice off the heads of the three plastic rivets. See Step 1 regarding recessed rivets. Leave the end cap on for now.





3. The drum axle arms on both sides of the cartridge stay with the end cap.

There is no need to remove them.

4. Remove the drum drive gear.



5. While still on the same side, locate the two tabs.

Press in on each tab, and remove the end cap.

The drum axle arm will come off with the end cap.





6. On the right side end cap, press in on the three tabs and remove the end cap.

![](_page_4_Picture_3.jpeg)

![](_page_5_Picture_1.jpeg)

7. Separate the two halves slightly and lift off the middle top cover.

![](_page_5_Picture_3.jpeg)

8. Gently pry up on the tabs on both sides of the cartridge, and remove the waste hopper.

Be careful to hold the drum so it does not become damaged.

Remove the drum/waste assembly.

![](_page_5_Picture_7.jpeg)

![](_page_6_Picture_1.jpeg)

9. Remove the drum.

10. Remove the PCR from the assembly.

11. Clean the PCR with your normal PCR cleaner. **WARNING**: Do not clean the OEM PCR with alcohol, as this will remove the conductive coating from the roller. If the PCR is an aftermarket, follow the cleaning methods recommended by the manufacturer. If the PCR is an OEM, we recommend it be cleaned with your standard PCR cleaner.

![](_page_6_Picture_5.jpeg)

12. Remove the two screws from the wiper blade, and remove the blade

It is easy to remove if you slide it out from under the PCR holders.

![](_page_6_Picture_8.jpeg)

![](_page_7_Picture_1.jpeg)

13. Clean out all the waste toner from the hopper.

Make sure the seals are clean.

![](_page_7_Picture_4.jpeg)

14. Carefully remove the wiper blade seal from the right (chip) side. Peel the seal back, around three inches.

![](_page_7_Picture_6.jpeg)

15. Pry up the chip cover.

![](_page_7_Picture_8.jpeg)

16. Lift up on the tab as shown, and press the chip out through the opening.

![](_page_7_Picture_10.jpeg)

![](_page_8_Picture_1.jpeg)

17. Replace the chip.

![](_page_8_Picture_3.jpeg)

18. Replace the chip cover.

![](_page_8_Picture_5.jpeg)

19. Re-install the wiper blade seal. Use 100% silicon if the seal is torn, to prevent any leaks. Just as the OEM has done, be careful not to use any silicon on the chip cover area, otherwise it will be very difficult to replace the chip on the next cycle.

![](_page_8_Picture_7.jpeg)

20. Install the new wiper blade and two screws.

It is easier to install if you slide it in under the PCR holders.

![](_page_8_Picture_10.jpeg)

![](_page_9_Picture_1.jpeg)

21. Place a small amount of conductive grease in the holders, and install the PCR. The long shaft side goes to the gear (non-chip) side.

![](_page_9_Picture_3.jpeg)

22. Install the drum, with the large gear to the gear (non-chip) side of the drum, into the waste hopper.

![](_page_9_Picture_5.jpeg)

23. On the supply hopper, carefully pry out the fill plug and dump out any remaining toner. The fill plug can be difficult to remove as it is recessed. Take a small common screwdriver and work it around the edge lifting slightly until it comes loose.

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![](_page_9_Picture_8.jpeg)

![](_page_10_Picture_1.jpeg)

24. Pry off the gear plate, and remove the gears.

![](_page_10_Picture_3.jpeg)

25. Remove the developer roller bushings, from both sides.

![](_page_10_Picture_5.jpeg)

![](_page_11_Picture_1.jpeg)

26. Remove the developer roller.

![](_page_11_Picture_3.jpeg)

27. Remove the two screws from the doctor blade, and remove the blade.

![](_page_11_Picture_5.jpeg)

28. Clean out all the remaining toner from the hopper.

29. Make sure the doctor blade sealing foam and the developer roller seals are clean and intact.

30. Clean the doctor blade edge, so there is no evidence of buildup along the edge. If any buildup exists, the cartridge will streak. No chemicals should be used. We have found using a clean wooden ice cream-type stick (from a craft store) works great for scraping the blade clean without damaging it. Make sure you have the blade supported properly when cleaning, so it does not bend.

![](_page_11_Picture_9.jpeg)

![](_page_12_Picture_1.jpeg)

31. Install the seal (when available) through the developer roller opening.

![](_page_12_Picture_3.jpeg)

32. Pull the tail of the seal through the seal port.

![](_page_12_Picture_5.jpeg)

33. Install the doctor blade and two screws.

![](_page_12_Picture_7.jpeg)

34. Clean the developer roller with a dedicated developer roller cleaner, and replace into the hopper.

Place the long shaft side to the gear side of the cartridge. It should snap in place if installed correctly.

![](_page_12_Picture_10.jpeg)

![](_page_13_Picture_1.jpeg)

35. Clean and replace the conductive grease on the short shaft side of the roller.

![](_page_13_Picture_3.jpeg)

36. Fill the hopper with toner for use in the Xerox Phaser 3320 (145g for the 5k cartridge, and 285g for the 11k cartridge). Replace the fill plug and check for leaks.

![](_page_13_Picture_5.jpeg)

37. Replace the bushings on both sides of the developer roller.

![](_page_13_Picture_7.jpeg)

![](_page_14_Picture_1.jpeg)

![](_page_14_Picture_2.jpeg)

38. Install the gears in the order as shown.

![](_page_14_Picture_4.jpeg)

39. Install the gear axle plate.

![](_page_14_Picture_6.jpeg)

![](_page_15_Picture_1.jpeg)

40. Fit both sides of the waste hopper tabs into the toner hopper.

![](_page_15_Picture_3.jpeg)

41. Slide the cleaned middle top cover/PCR cleaner assembly into place.

Make sure the center tab fits under the edge of the doctor blade.

![](_page_15_Picture_6.jpeg)

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![](_page_16_Picture_1.jpeg)

42. Clean the contacts on the left side end cap, and replace the conductive grease.

Snap the end cap into place.

![](_page_16_Picture_4.jpeg)

43. Drill three small holes that correspond to the screw size you are using.

Install the three screws into the end cap.

We used a  $\#8 \times 1/4$ -inch self-tapping screw and a #29 drill bit.

![](_page_16_Picture_8.jpeg)

![](_page_17_Picture_1.jpeg)

44. Clean the hubs on the gear or right side end cap.

Snap the end cap into place.

![](_page_17_Picture_4.jpeg)

45. Drill three small holes that correspond to the screw size you are using.

Install the three screws into the end cap.

![](_page_17_Picture_7.jpeg)

### XEROX PHASER 3320 TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS

![](_page_18_Picture_1.jpeg)

46. Install the drum drive gear.

![](_page_18_Picture_3.jpeg)

47. The drum separators are fixed to the end caps.

They should be set as shown.

These arms keep the drum and developer rollers separated until the cartridge is installed in the printer.

![](_page_18_Picture_7.jpeg)

![](_page_19_Picture_1.jpeg)

48. Install the protective cover around the cartridge.

The two tabs of the shipping lock are inserted on each side of the cartridge as shown.

#### **REPETITIVE DEFECT CHART**

Upper heat roller:	77.5 mm
OPC drum:	75.6 mm
Lower pressure roller:	75.4 mm
Supply roller:	49.0 mm
Transfer roller:	47.0 mm
PCR:	37.5 mm
Developer roller:	35.0 mm

### **PRINTING TEST PAGES**

- 1. Select the MENU button on the control panel
- 2. Press the up or down arrow until INFORMATION appears on the display. Press OK.
- 3. Press the up or down arrow until the report you want to print appears on the display. Press OK.
- 4. The report choices are as follows: Menu Map

monu mup
Supplies Info
PCL Font
Epson Font
Usage Counters (machine status)

Configuration Demo PS Font Stored Jobs

### **CHANGING THE DENSITY OR RESOLUTION**

- 1. Select the MENU button on the control panel
- 2. Press the up or down arrow until GRAPHICS appears on the display. Press OK
- 3. Press the up or down arrow until either RESOLUTION OR DARKEN TEXT appears on the display. Press OK.
- 4. You can then change the resolution from 600 DPI to 1200, or the density from NORMAL to LIGHTER, DARKER or OFF.

![](_page_19_Picture_18.jpeg)