

# THE RECYCLER

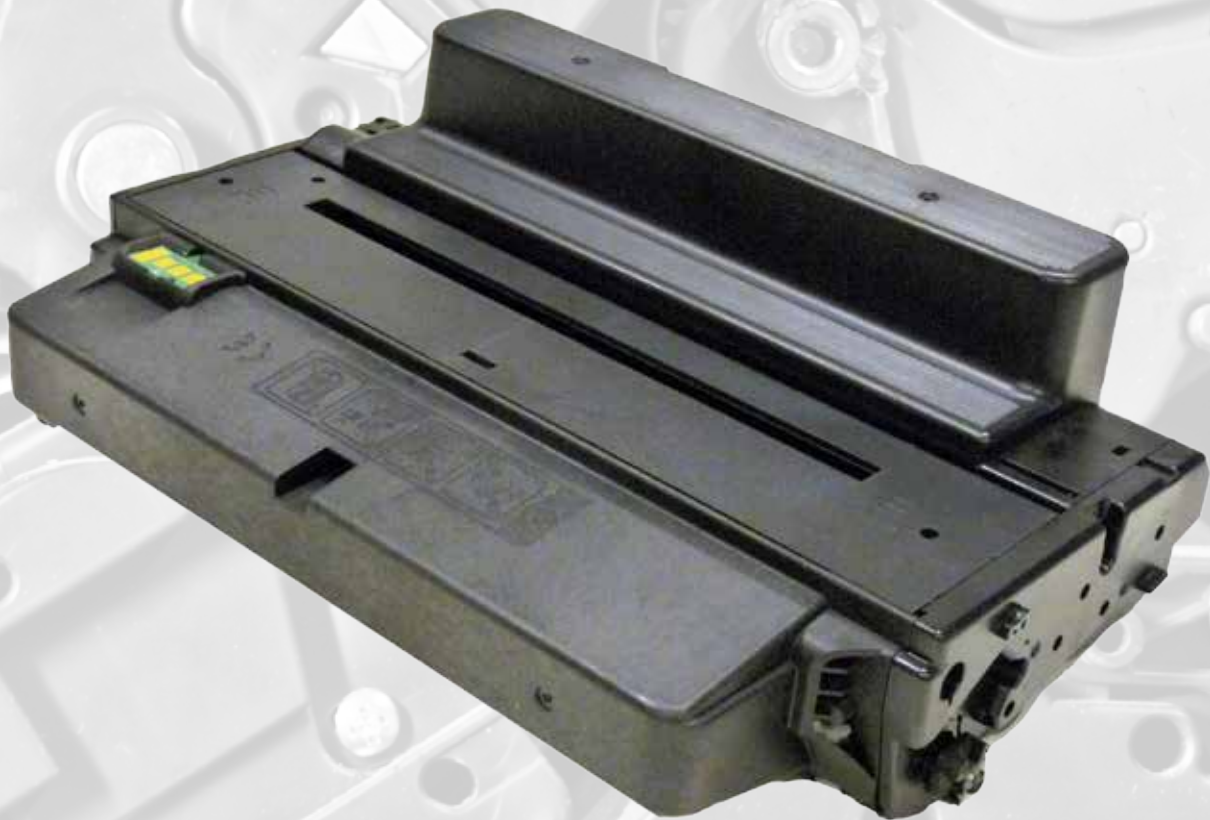
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MAGAZINE



# Technical Guide

## Remanufacturing the Xerox WorkCentre 3315 toner cartridge



By Mike Josiah and the Technical Staff at Uninet

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First released in November 2013, the Xerox WorkCentre 3315 series of printers are based on a 31 to 35ppm engine with a maximum resolution of 1,200 x 1,200dpi. The first page out is stated to be under 6.5 seconds. Depending on the model number, other options/specs are available including MFP versions and Wi-Fi connectivity.

The toner cartridges do not have a drum cover, and come as new with a piece of heavy paper with a thin sheet of foam on the inside taped around the cartridge.

These cartridges, just like most others these days, have plastic rivets that need to be cut off, holes drilled and screws installed to hold them back on. It's not a hard process, and it's covered completely in the instructions (see Figures 1 and 2).

Figure 1



Figure 2



The cartridges used in these machines are as follows:

WorkCentre 3315:		
106R02308	2,300 pages	\$119.75 (€110.17)*
106R02310	5,000 pages	\$192.95 (€177.52)*

WorkCentre 3325:		
106R02310	5,000 pages (3315 also)	\$192.95 (€177.52)*
106R02312	11,000 pages	\$332.65 (€306.05)*

Phaser 3320:		
106R02304	5,000 pages	\$221 (€203)*
106R02306	11,000 pages	\$339 (€311)*

\*Pricing as of June 2015

All the cartridges have a chip, and it has to be replaced each cycle. The OEM chips are regional, so be sure to get the proper chip for your region.



**IMPORTANT!** Besides different yields, there are two types of cartridges in the field. There are new and old styles. The main difference is the drum: the new style has 59 teeth, and the old style drum has 39. The gear trains are also different, but for ordering purposes you need to know which drum your cartridge has.

Figures A to F (**see Page 14**) show the new and old-style drum gears and the associated internal gears.

## The machines in this series are:

WorkCentre 3315

WorkCentre 3325

Phaser 3320

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

## REQUIRED TOOLS

- Toner-approved vacuum
- A small common screw driver
- A Phillips head screwdriver
- Needle nose pliers
- Chisel blade knife

## REQUIRED SUPPLIES

- Toner for use in the Xerox WC 3315 series
- New replacement chip (check for the right cartridge # and the proper region)
- New OPC drum (optional) - make sure you have the correct drum (see note above)!
- New developer roller (optional)
- New PCR (optional)
- New wiper blade (optional)
- New doctor blade (optional)
- Conductive grease
- 99 percent Isopropyl alcohol
- Drum-lubricating powder
- Small tube of silicone caulk

## STEP ONE

On the contact side of the cartridge, 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.



## STEP TWO

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



## STEP THREE

The drum axle arms on both sides of the cartridge stay with the end cap. There is no need to remove them.



## STEP FOUR

Remove the drum drive gear.





## STEP FIVE

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 (see Figure 5A, 5B and 5C).



## STEP SIX

On the right side end cap, press in on the three tabs and remove the end cap (see Figure 6A, 6B, 6C and 6D).



## STEP SEVEN

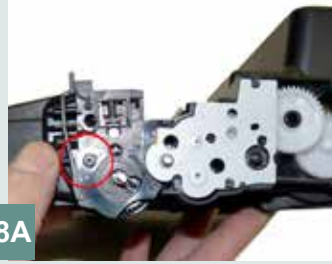
Separate the two halves slightly, and lift off the middle top cover.



## STEP EIGHT

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 (see Figure 8A, 8B and 8C).

8A



8B



8C



## STEP NINE

Remove the drum.



## STEP TEN

Remove the PCR from the assembly.



## STEP ELEVEN

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 PCR, follow the cleaning methods recommended by the manufacturer. If the PCR is an OEM PCR, we recommend it be cleaned with your standard PCR cleaner.

## STEP TWELVE

Remove the two screws from the wiper blade, and remove the blade. It's easy to remove if you slide it out from under the PCR holders.



## STEP THIRTEEN

Clean out all the waste toner from the hopper. Make sure the seals are clean.



## STEP FOURTEEN

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



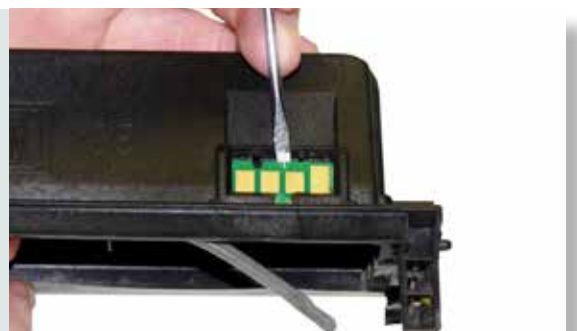
## STEP FIFTEEN

Pry up the chip cover.



## STEP SIXTEEN

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



## STEP SEVENTEEN

Replace the chip.



## STEP EIGHTEEN

Replace the chip cover.



## STEP NINETEEN

Re-install the wiper blade seal. Use 100 percent silicon if the seal tore to prevent any leaks. Just like the OEM did, 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).



## STEP TWENTY

Install the new wiper blade and two screws. It is easier to install if you slide it in under the PCR holders.



## STEP TWENTY-ONE

Place a small amount of conductive grease in the holders, and install the PCR with the long shaft side to the gear or non-chip side.



## STEP TWENTY-TWO

Install the drum with the large gear to the gear or non-chip side of the drum into the waste hopper.



## STEP TWENTY-THREE

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.



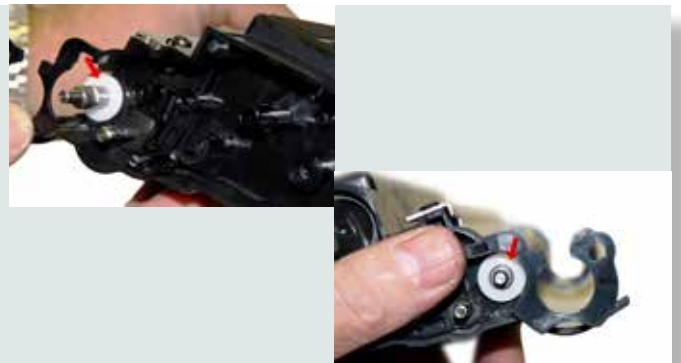
## STEP TWENTY-FOUR

Pry off the gear plate, and remove the gears.



## STEP TWENTY-FIVE

Remove the developer roller bushings from both sides.



## STEP TWENTY-SIX

Remove the developer roller.





## STEP TWENTY-SEVEN

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



## STEP TWENTY-EIGHT

Clean out all the remaining toner from the hopper.

## STEP TWENTY-NINE

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



## STEP THIRTY

Clean the doctor blade edge so there is no evidence of build-up along the edge. If any build-up exists, the cartridge will streak. No chemicals should be used. We have found using a clean ice cream type wooden stick works great for scraping the blade clean without damaging it.



## STEP THIRTY-ONE

Install the seal when available through the developer roller opening.



## STEP THIRTY-TWO

Pull the tail of the seal through the seal port.



## STEP THIRTY-THREE

Install the doctor blade and two screws.



## STEP THIRTY-FOUR

Clean the developer roller with a dedicated DVR 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.



## STEP THIRTY-FIVE

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



## STEP THIRTY-SIX

Fill the hopper with toner for use in the WC 3315 series, replace the fill plug and check for leaks.



## STEP THIRTY-SEVEN

Replace the bushings on both side of the developer roller.



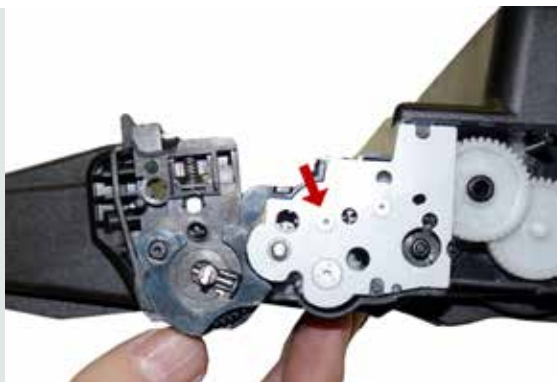
## STEP THIRTY-EIGHT

Install the gears in the order as shown.



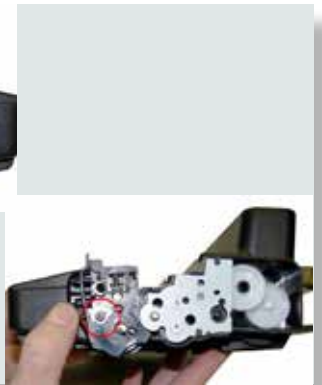
## STEP THIRTY-NINE

Install the gear axle plate.



## STEP FORTY

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



## STEP FORTY-ONE

Slide the cleaned middle top cover/PCR cleaner assembly into place. Make sure the centre tab fits under the edge of the doctor blade (see Figure 41A, 41B and 41C).

41A



41C



41B



## STEP FORTY-TWO

Clean the contacts on the left side end cap, and replace the conductive grease. Snap the end cap into place.



## STEP FORTY-THREE

Drill three small holes that correspond to the screw size you're using. Install the three screws into the end cap.





## STEP FORTY-FOUR

Clean the hubs on the gear or right side end cap. Snap the end cap into place.



## STEP FORTY-FIVE

Drill three small holes that correspond to the screw size you're using. Install the three screws into the end cap



## STEP FORTY-SIX

Install the drum drive gear.



## STEP FORTY-SEVEN

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.



## REPETITIVE DEFECT CHART:

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

Figure A - Full gear train old style



Figure B - Full gear train new style



Figure C - old cartridge gears



Figure D - New cartridge gears



Figure E - Three old gears



Figure F - three new gears



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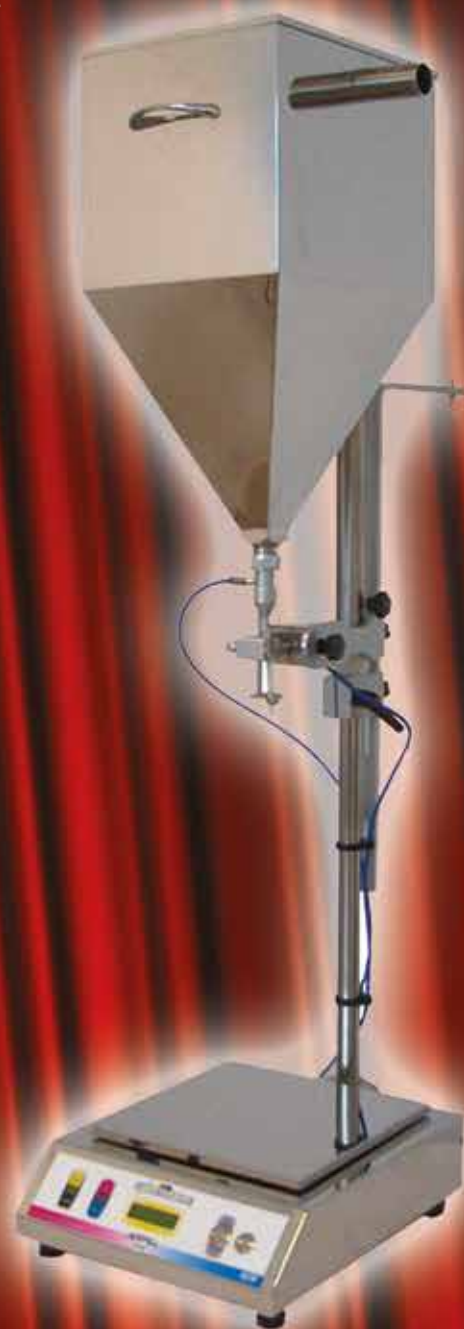
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