



# REMANUFACTURING THE

**BROTHER HL-L 3290 SERIES** 

TONER CARTRIDGE TN-227





## Mike Josiah

# Remanufacturing the Brother HL-L 3290 Series Toner Cartridge TN-227

The Brother HL-L3290 printer engine is based on a color 25ppm, 2400 x 600 DPI laser engine. These machines have a first page out in less than 8.5 seconds, and come standard with 64Mb of memory. The HL-L3290 series also has duplexing built in. New printers in this series come with CMYK starter toner cartridges which are rated for 1000 pages.

There are two different toner cartridges available for these machines. The TN-223 cartridges are rated for 1,300 pages (1400 BK), and the TN-227 cartridges are rated for 2300 pages (3,000 pages BK). The drum unit (C,M,Y,BK) which will be covered in separate instructions is rated for 18,000 pages. There are different part numbers for these cartridges depending on your region. In North America they are as follows:

Cartridges	STD	HY	Drum
	TN223C,M,Y,BK	TN227C,M,Y,BK	DR233CL

Figure A shows the toner cartridge with the developer roller and chip covers.

## Current machines released so far for this series are:

HL-L3210CW	
HL-L3230CDW	
HL-L3270CDW	
HL-L3290CDW	
DCP-L3550CDW	
DCP-L3551CDW	
MFC-L3710DW	
MFC-L3750CDW	
MFC-L3770CDW	

There is a reset gear and a chip on these cartridges. Until a new chip is available, you can re-use the old chip.

#### **Required Tools**

- Toner approved vacuum.
- Phillips Head Screwdriver
- Small Common jewelers Screwdriver

#### **Required Supplies**

- Toner for use in the Brother HL-L3290 series of cartridges.
- Developer roller cover (Can re-use OEM if available)
- · Lint free cotton cloths
- · Toner magnet cloths
- · White Lithium Grease
- New Chip when available, (Can reuse OEM chip until then)



Vacuum the exterior of the cartridger.



On the GEAR/CHIP SIDE, (Left side with reset gear on opposite side), remove the two screws.







Remove the remaining screw and end cap.







Using a large flat head screwdriver, pry off the developer roller gear lock. Remove the gear.







Inspect the developer roller felts. If they are compressed, (shiny) rough them up with a small screwdriver.





On the reset gear side of the developer roller remove the 2 screws and remove the end cap. Note that the reset gear stays with the end cap!





Remove the two screws and Doctor Blade. Be careful not to damage the foam DB seal while cleaning.

Clean the developer roller with a lint free cloth. Do not use any harsh chemicals to clean this roller. Any type of alcohol cleaner will strip the conductive coating off the roller.



Fill the cartridge with toner for use in the Brother HL-L3290 series of toner cartridges. Make sure you use the correct color for your cartridge.



Remove the black inner end cap.



Clean out any remaining toner from the hopper. Pay special attention to the feed roller to make sure it's clean.



screws.



Remove the E ring from the developer roller shaft.



Vacuum the doctor blade clean. The doctor blade can be easily cleaned by blowing the excess toner off, and wiping down with a lint free cloth. Be very careful not to leave any lint behind!



the long shaft to the gear side.

### **LOOKING FOR STEP-BY-STEP GUIDES FOR CARTRIDGES?**



Mike Josiah's popular toner cartridge procedures are available in hardcopy format in some regions, and online to all regions as a library of cartridge models—sponsored by UniNet Imaging: www.uninetimaging.com



Clean the gears, making sure that they have no toner on them. This is a good time to also check the gear shafts to make sure there is enough grease. If the shafts appear dry, or the grease is contaminated with toner, clean the shaft and inside of the gear. Replace the grease with white lithium grease.



Install the white inner developer roller end cap and screw on the gear side.



Install the five gears as shown.



Install the small gear lock on the developer roller shaft.



Install the larger gear side end cap, and screw.



On the opposite side, install the black inner end cap.





Set the reset gear as shown. Install the end cap and two screws. The small tab on the reset gear must be seen in the top hole.



Install the reset gear end cap and two screws.



If available, replace the chip on the cartridge. (The chip can be re-used)





Install the chip Holder and two screws.

Wipe the cartridge down to remove any remaining toner dust. (Be careful not to touch the developer roller!)

