

SAMSUNG MLT-D115L TONER CARTRIDGE



# REMANUFACTURING THE SAMSUNG XPRESS SL-M2620 MLT-D115L TONER CARTRIDGE

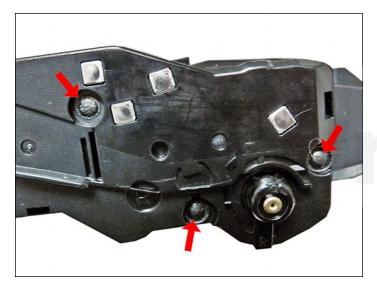
By Mike Josiah and the Technical Staff at UniNet

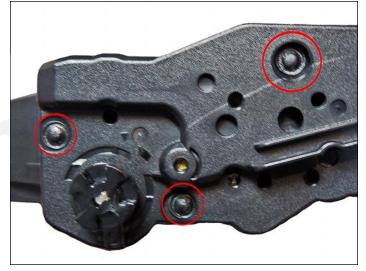




The Samsung Xpress M2620 series of printers are based on a 27-29 ppm engine (depending on the printer) with a maximum resolution of  $4800 \times 600$  dpi. The first page out is stated to be under 8.5 seconds.

The MLT-D115L cartridges do not have a built in drum cover. They come new with a special removable two-piece plastic drum cover/shield. This seems to be the new norm for Samsung in that they used to use a heavy paper with foam glued to it to protect the drum. This new cover also clips into the base of the PCR holders so that during storage, the PCR is not touching the drum. This will help prevent flat spots on the PCR.





These cartridges 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.

The toner cartridge (Samsung part # MLT-D115S) is rated for 3,000 pages. There is not a low yield cartridge available for this series. As with pretty much all cartridges these days, the cartridge has a chip that has to be replaced each cycle. The OEM chips are regional, so be sure to get the proper chip for your region.

The MLT-D115S has a list price of USD\$89.99\*.

#### MACHINES THAT CURRENTLY USE THIS CARTRIDGE

 Xpress SL-M 2620
 Xpress SL-M 2670

 Xpress SL-M 2671
 Xpress SL-M 2820DW

 Xpress SL-M 2870FW
 Xpress SL-M 2880

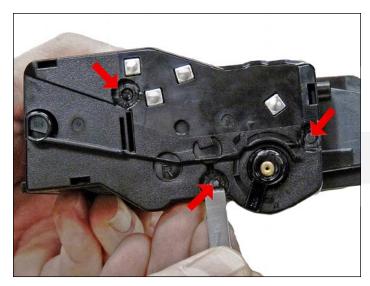
\*Pricing in U.S. American Dollars, as of April 2015

#### **REQUIRED TOOLS**

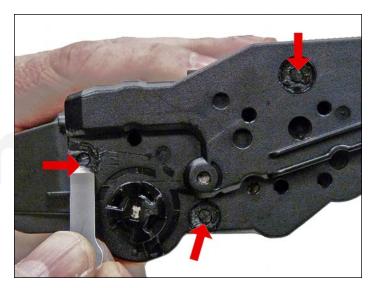
- 1. Toner approved vacuum
- 2. A small common screwdriver
- 3. A Phillips head screwdriver
- 4. Needle nose pliers

#### **REQUIRED SUPPLIES**

- 1. Replacement toner for use in the Samsung Xpress SL-M2620 Series
- 2. Replacement chip for Xpress M2620 (check for the proper region)
- 3. New OPC drum
- 4. New developer roller (when available)
- 5. New PCR
- 6. New wiper blade (when available)
- 7. New doctor Blade (when available)
- 8. Conductive grease
- 9. 99% isopropyl alcohol
- 10. Drum lubricating powder
- 11. Small tube of silicone caulk

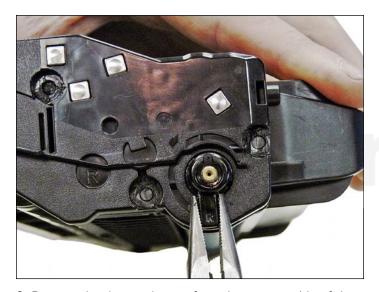


1. Place the cartridge with the handle up and the contact side facing towards you. With the chisel blade knife, slice off the heads of the three plastic rivets. Leave the end cap and arm in place for now. You may have to custom-grind your chisel blade to get into the small areas of the rivets. You can also use a small common screwdriver if the edge is sharp.



2. On the drum gear side end cap, take the chisel blade knife and slice off the heads of the three plastic rivets as was done on the contact side.







3. Remove the drum axle arm from the contact side of the cartridge. To remove it, turn the arm so it is facing straight down, and pull the arm straight out to remove. There are small tabs on the back of the arm that are freed and the arm is straight down. Note that the arm is stamped with an "R" for the right side.

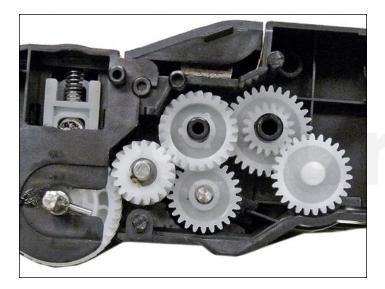


4. While still on the contact side end cap, locate the top, bottom and front tabs.

Press in on the tabs and remove the end cap.



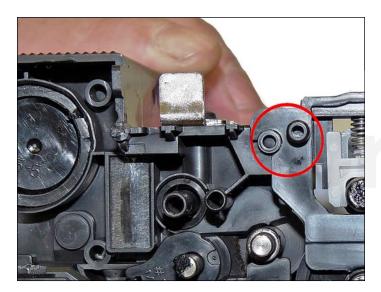
5. On the drum gear end cap, remove the drum drive gear and the remaining arm the same way as the right side. Turn it to be straight down, and pull it straight out. Press in on the top tab and bottom tabs, and remove the end cap. Note that the arm is stamped with an "L" for the left side.



6. Remove the gears.

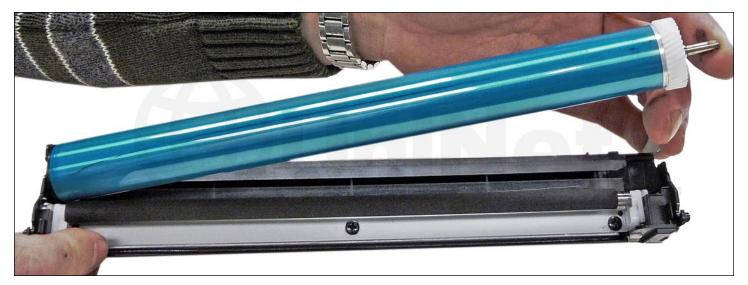


7. Separate the two halves slightly, and lift off the middle top cover.





8. Lift up on the drum/waste hopper and free up each side from the side tabs. Rotate the waste section so that the curved bottom clips on each side come free. Be careful to hold the drum so it does not become damaged. Remove the drum/waste assembly.

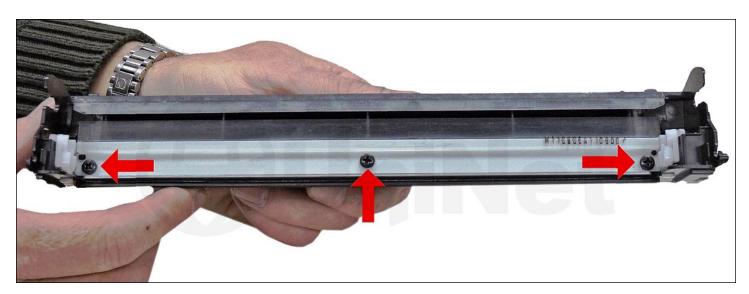


9. Remove the drum.



- 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.

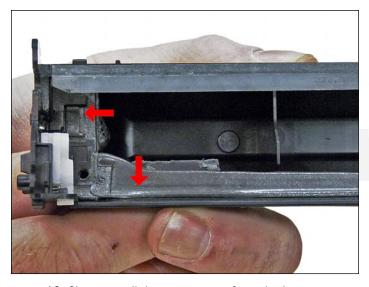


12. Remove the three screws from the wiper blade.

Remove the blade by lifting it up slightly and sliding it out from underneath the PCR holders.

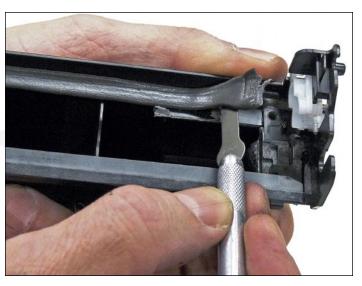
Be careful not to damage the alignment pins!



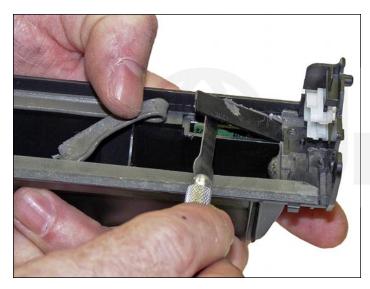


13. Clean out all the waste toner from the hopper.

Make sure the seals are clean.

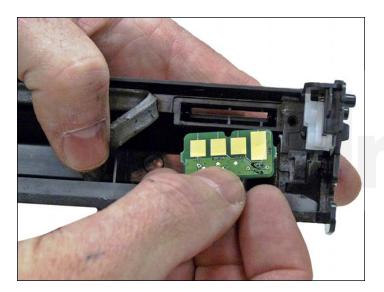


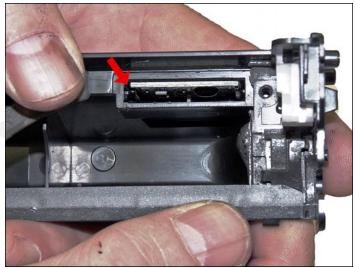
14. Carefully pry off the seal above the chip holder in the right side of the waste chamber.



15. Pry off the plastic chip cover with a small screwdriver or chisel.

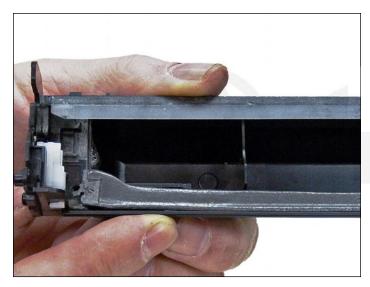






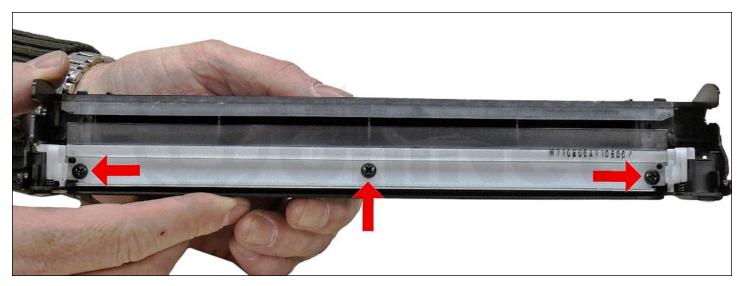
16. Remove the old chip and install the new one.

Make sure the chip fits into the top slot, and that the contacts are facing out and towards the edge of the chamber.



17. Install the plastic chip cover. If it is not sticking well, you can use double-sided tape to hold it in place. Set the wiper blade seal back in place. We recommend that you glue it back down with a small amount of 100% silicone caulk or adhesive. (Phenoseal or GE works best in our tests).





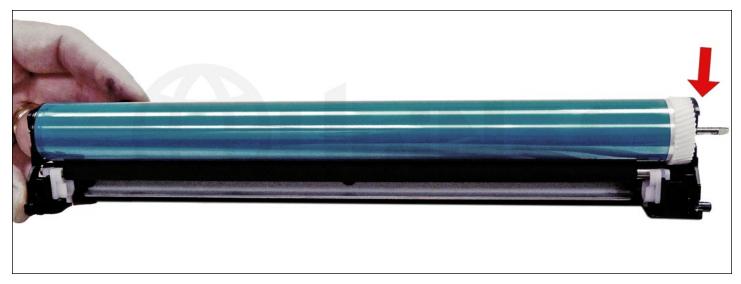
18. Install the cleaned or new wiper blade and three screws.



19. Place a small amount of conductive grease in the PCR holders, and install the PCR. Note that there is a spot on the holders for a PCR cleaning roller. They are not used in the cartridge.



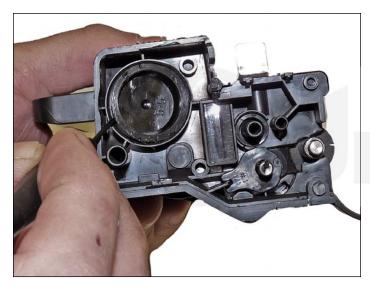
20. The large gear side of the drum axle shaft has conductive grease on it. Regardless if you are replacing the drum or not, clean the old grease off and replace with new.



21. Install the drum into the waste hopper.

The axle should click into place.

Make sure the gear side of the drum is on the correct side.



22. 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.

We have seen both black and orange fill plugs. Both are the same, just different colors.

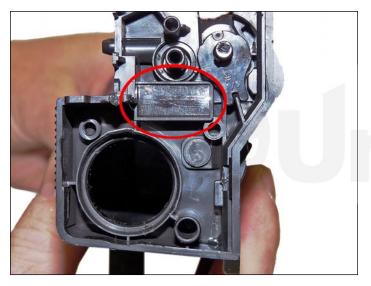
Take a small common screwdriver and maneuver it around the edge, lifting slightly until it comes loose.



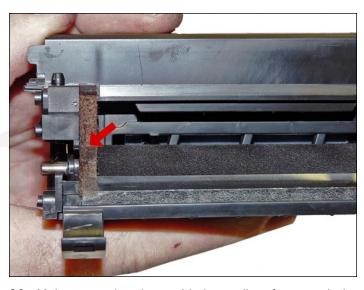
23. Remove the developer roller.



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



25. Clean out all the remaining toner from the hopper. Be careful not to lose the seal port plug from the side of the cartridge. No seals are used in this cartridge, but the seal port is there. Samsung has installed a foam/plastic seal to cover the port.



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



27. Clean the doctor blade edge, so there is no evidence of build up along the edge. If any buildup 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. Keep the edge of the blade on a flat surface so you don't bend it while cleaning.



28. Install the doctor blade and two screws.



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

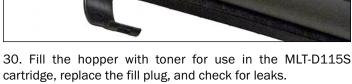
Place the long shaft side to the gear side of the cartridge.

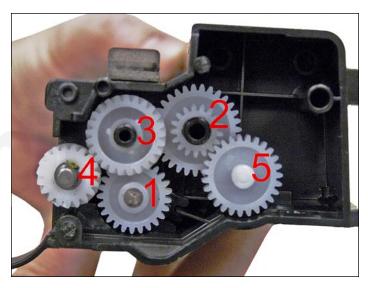


cartridge, replace the fill plug, and check for leaks.

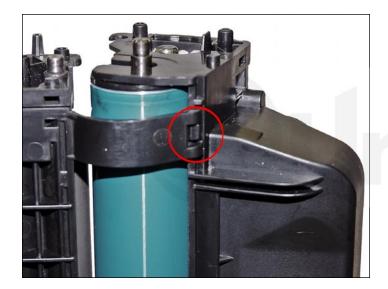
Some fill plugs are orange in color. They are same plug, just a

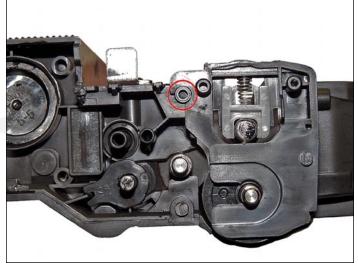
different color.





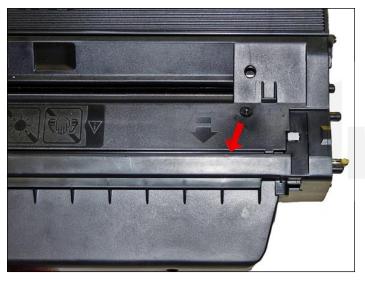
31. Install the gears in the order shown.



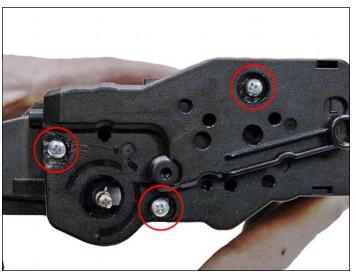


32. Place the two halves together by setting the curved bottom clips into the toner hopper.

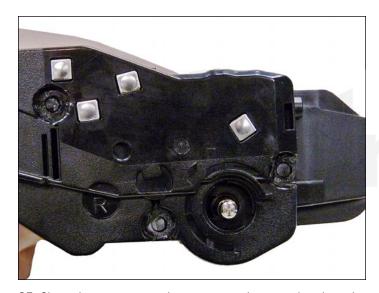
Roll the hopper up, so that both sides of the waste hopper snap into the toner hopper.



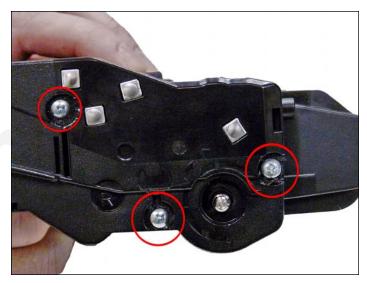
33. Slide the middle top cover. Make sure the long lower edge of the cover fits under the edge of the waste hopper.



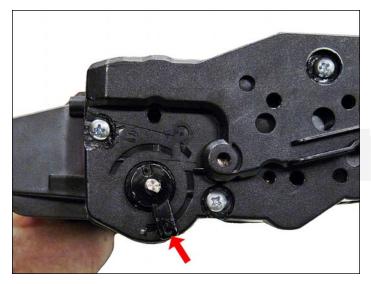
34. Install the gear side end cap. Drill three small holes that correspond to the screw size you are using in the three plastic rivets that you removed at the start of these instructions. Install the three screws into the end cap.

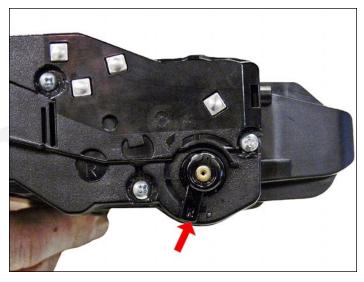


35. Clean the contacts on the contact end cap, and replace the conductive grease. Snap the end cap into place.

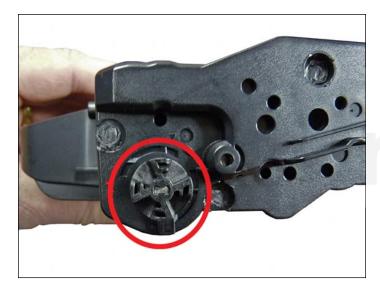


36. Install the contact side end cap and drill three small holes that correspond to the screw size you are using in the plastic rivet posts. Install the three screws into the end cap.





37. Install the two drum axle arms as shown. Make sure you place the two arms on their correct sides: "L" to the contact side, and "R" to the gear side. They should be installed just as they were removed. Press them in straight up and down, and turn them slightly towards the back of the cartridge as shown.



38. Install the drum drive gear on the gear side of the cartridge.



39. Install the drum cover assembly by sliding the bottom black part of the drum cover over the drum, and sliding the orange top part, so that the two small tabs on each side fit under the white locking tabs located on each side of the cartridge.

#### REPETITIVE DEFECT CHART

Upper heat roller: 77.6 mm
OPC drum: 75.49 mm
Lower pressure roller: 75.4 mm
Supply roller: 63.22 mm
Transfer roller: 47.12 mm
Developer roller: 36.75 mm
PCR: 26.7 mm