

Remanufacturing the Samsung CLP-500/550

The Samsung CLP-500, CLP-500N, CLP-550 and CLP-550N are color laser printers designed for businesses in the small- to medium-size range. The printers offer up to 5 ppm color and 21 ppm black and white with print resolution up to 1,200 dpi. The printers feature automatic built-in duplexing, high-speed USB connectivity and options such as 500-sheet paper handling and network connectivity.

Supplies for the printers come with starter toners. The black cartridge prints 2,000 pages, and the color produces 1,500 pages. Included are the waste toner container (3,000 pages), imaging unit (50,000 pages) and the transfer belt (50,000 pages). Replacement black toner cartridges are rated at 7,000 pages and color cartridges at 5,000 pages, with a footnote stating that “usage conditions and print patterns may cause results to vary.”

Cartridge Information:

Black Toner	CLP-500D7K/XAA
Cyan Toner	CLP-500D5C/XAA
Magenta Toner	CLP-500D5M/XAA
Yellow Toner	CLP-500D5Y/XAA

Tools & Supplies Needed:

Tools Required:

Needle-nose Pliers
Phillips Screwdriver
Small, Flat-blade Screwdriver
Vacuum

Supplies Required:

Cotton Swabs
Soft, Dry Cloth



Remanufacturing Instructions

Step 1:

With the cartridge and developer roller facing towards you with the cartridge label up, remove the four Phillip screws from the top cover. See **Photo 1**.

Step 2:

Rotate the cartridge to the right so that the larger developer roller drive gear faces you. Remove the Phillip screw located in the right bottom. Gently pry up and remove the cover. See **Photo 2**.



Photo 1



Photo 2

Imaging industry veteran **Chris Howard**, Future Graphics' technical service manager, brings 12 years of industry experience, including six years with NuKote International as a product manager and two years with Delacamp as a technical support manager.





Photo 3

Step 3:

Turn the cartridge so that the fill cap end is facing you. Pry off the black developer gear end cap. Remove all three white gears and the developer gear spacer, taking note of their orientation. See **Photo 3**.

Step 4:

Remove the “e” clip from the developer roller shaft and the bushing insert. See **Photo 4**.



Photo 4

Step 5:

Rotate the cartridge to the opposite side with the developer bias circuit board facing you. Remove the three Phillip screws on the circuit board and remove both the contact and circuit board. See **Photo 5**.

Step 6:

Remove the two Phillip screws that hold the gear train plate in place. The gears are now easily removed. Only the gear closest to the developer roller needs to be removed in order to remove the developer roller drive gear. See **Photo 6**.



Photo 5



Photo 6



Step 7:

Pry off the black developer roller gear end cap. Remove the small flat washer, white developer roller drive gear and developer gear spacer. See **Photo 7**.

Step 8:

Rotate the cartridge so that the developer roller is facing you. Carefully pull the left side of the developer roller shaft outward, enough to clear the housing. Once clear, pull the developer roller towards the left and remove it, being careful not to scratch the developer roller surface. See **Photo 8**.

Note: There are thin Mylar-type washers on both sides of the developer roller shaft. Do not lose them.

Step 9:

Remove the two Phillip screws on the metal plate above the toner adder roller. Gently flip up this plate, being careful not to damage the clear Mylar strip along the length of the facing edge. Notice the foam strips that are attached to the plate for proper sealing. Replace with appropriate foam if damaged. See **Photo 9**.

Step 10:

Using compressed air, clean the adder roller and toner reservoir area. Be careful not to damage the thin metal developer roller charge blade or foam surrounding the area. See **Photo 10**.





Photo 11

Step 11:

Rotate the cartridge so that the fill plug is facing you and remove the plug. Clean out any remaining toner from the reservoir. See **Photo 11**.



Photo 12

Step 12:

Rotate the cartridge so that the developer roller area is facing you. Reinstall the metal plate above the toner adder roller using two Phillip screws. Inspect for proper sealing of the attached foam and check that the clear Mylar is not damaged. See **Photo 12**.

Step 13:

Reinstall the cleaned developer roller with the longer shaft towards the gear set keeping it level. Take care that the thin Mylar washers set properly and do not get damaged. See **Photo 13**.



Photo 13

Step 14:

Turn the cartridge so that the gear train side is facing you. Reinstall the developer roller gear spacer, white developer roller drive gear and washer. Press on the black developer roller gear end cap. See **Photo 14**.



Photo 14



Photo 15

Step 15:

Replace the one white gear that was removed from the gear train, the gear train plate, and the developer bias circuit board and contact. The gear train plate requires two Phillip screws, and the developer bias board and contact require three Phillip screws. See **Photo 15**.

Step 16:

Rotate the cartridge to the opposite end and reinstall the bushing, “e” clip, developer roller gear spacer and the three white gears. Press on the black developer gear end cap. See **Photo 16**.

Step 17:

Fill the cartridge with toner and replace the fill cap. See **Photo 17**.

Steps 18 and 19:

Replace the cover back onto the cartridge and reinstall the five Phillip screws. See **Photos 18 and 19**. ❄

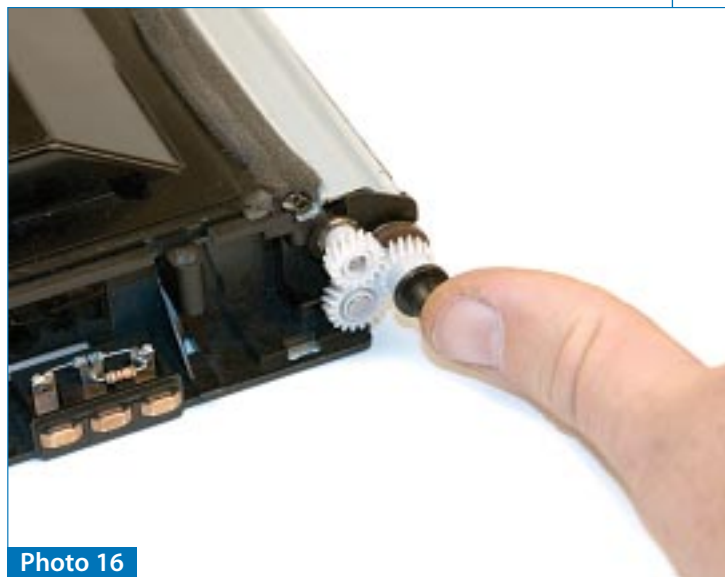


Photo 16



Photo 17



Photo 18



Photo 19