

SAMSUNG® SCX-4725

TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



SAMSUNG SCX-4725 TONER CARTRIDGE

REMANUFACTURING THE SAMSUNG SCX-4725 TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet



First released in January 2008, the Samsung SCX-4725 multifunction printers are based on a 24-ppm, 1200 x 1200 DPI engine. Depending on the model, the machines are multifunction (MFP) that can print, copy, scan (color) and fax (SCX-4725FN only).

The cartridge is an All-in-one type that has a chip that must be replaced each cycle.

These cartridges do not have a built-in drum cover, but do come new with a plastic form-fitting drum cover. For these cartridges, Samsung has stopped using the heavy paper wrap.

While we will not be going into the printing theory on this cartridge, it should be noted that the printer uses a Pre-Transfer Lamp (PTL). This lamp basically shines a light onto the OPC drum which lowers the charge on the drum surface and improves the transfer efficiency.

Another interesting fact about these machines is that in addition to the normal "Toner Low" and "Toner Empty" messages, there is a "Drum Warning" message. This message first appears when a cartridge is nearing 14,000 pages. The service manual states that after 15,000 pages, the waste hopper may overflow. The cartridge will shut down at this point regardless of the amount of toner left. The high yield cartridges are rated for 3,000 pages, so reaching that point is doubtful. Once the "Toner Empty" state has been reached, the cartridge will shut down. So the only way for a cartridge to get that high a page count is if very little (if any) toner is used per page.

The high yield replacement cartridge is rated for 3,000 pages at 5% coverage (ISO 19752). The starter cartridge (SCX-4525FN) is rated for 1,000 pages.

We have listed the high yield cartridge with two different part numbers. The Samsung web site shows it as SCX-D4725A/XAA, while the service manual lists the SCX-4725D3 number. From what we can find, the SCX-D4725A is the correct number, but in case you come across the D3#, you know what it is.

MACHINES IN THIS SERIES SO FAR

SCX-4725FN

SCX-4725F

REQUIRED TOOLS

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

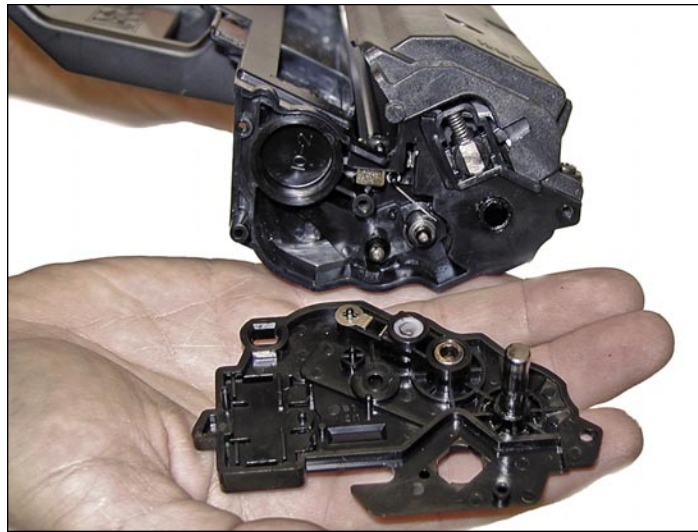
REQUIRED SUPPLIES

1. New replacement toner for use in Samsung SCX-4725 Toner (90g)
2. Conductive grease
3. Drum lubricating powder

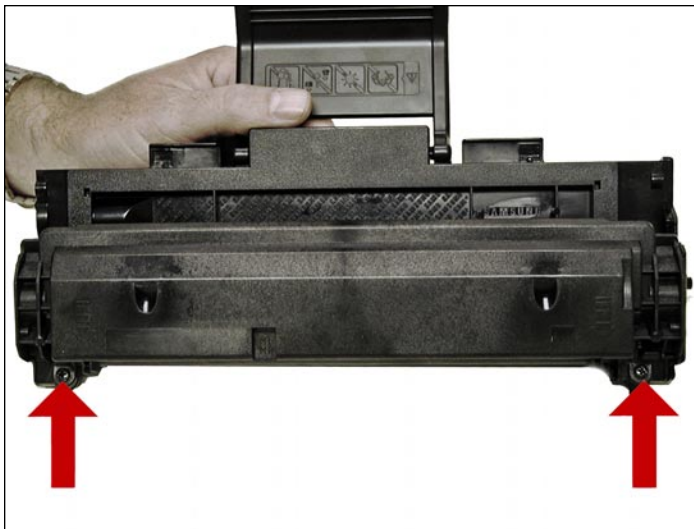


1. Place the cartridge with the handle facing away from you.

Remove the two screws on the left end cap.

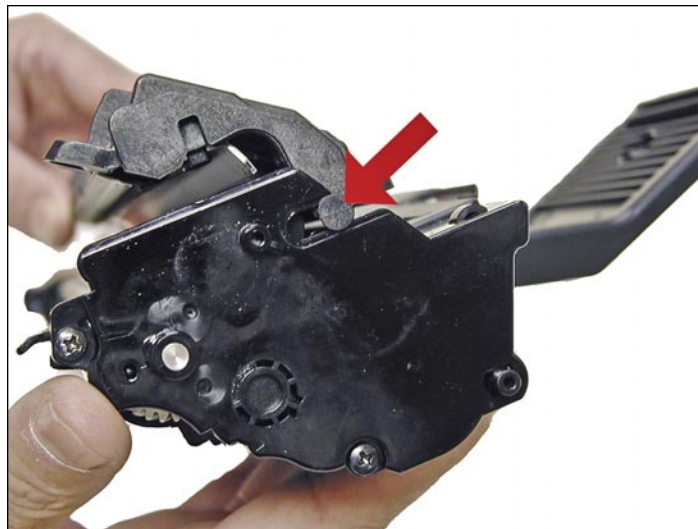


2. Gently pry off the left end cap.



3. In the front edge of the cartridge, there are two screws.

Remove them.



4. Lift up and remove the waste chamber from the cartridge. Make sure the tabs on the left and right sides slide out of the slot. If you try to lift the cover off without sliding the tab out, they will break off.



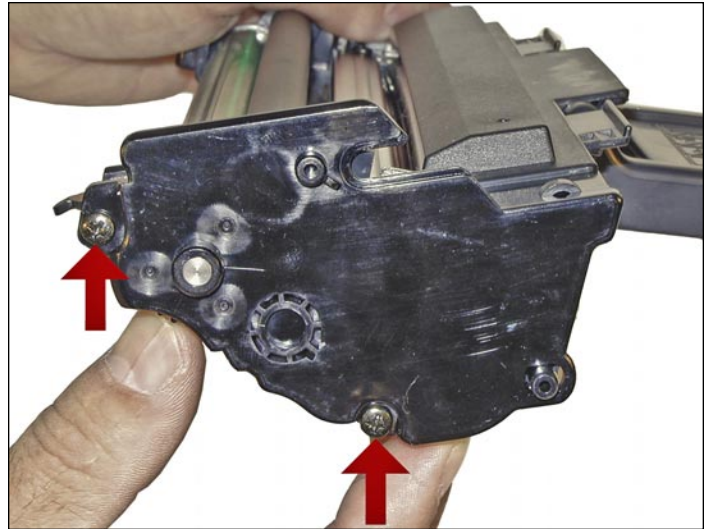
5. Remove the two screws and wiper blade from the waste chamber.

Clean out any remaining toner from the waste chamber.



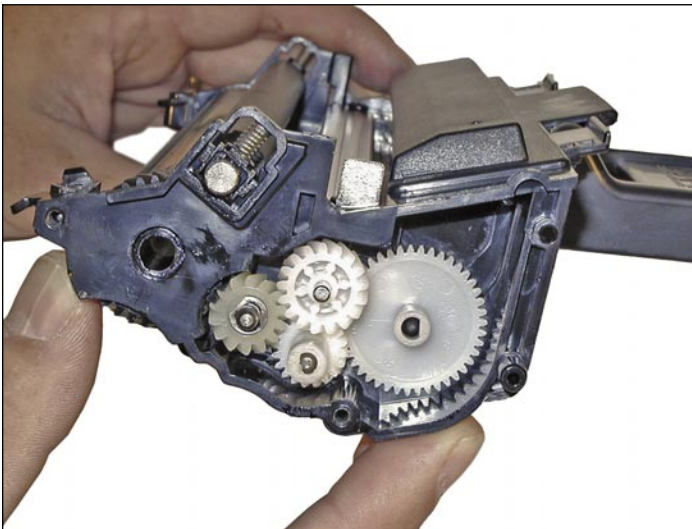
6. Re-install the wiper blade and two screws.

Place the waste chamber aside.



7. Remove the two screws from the right side end cap.

Carefully pry off the end cap.



8. Remove the four gears, and place aside.



9. Slide the Primary Charge Roller (PCR) away from the contact side, lift up and remove. Clean the PCR with your normal PCR cleaner.

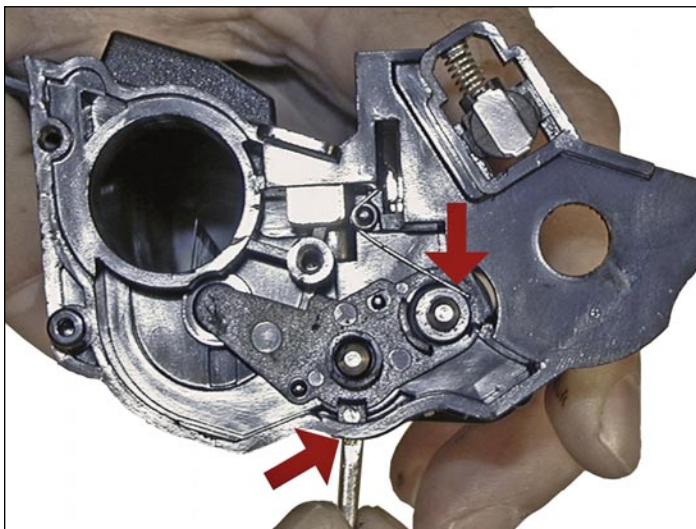
WARNING: Do not clean the OEM PCR with alcohol, as this will remove the conductive coating from the roller. If the PCR is an aftermarket, follow the cleaning methods recommended by the manufacturer. If the PCR is an OEM, we recommend it be cleaned with your standard PCR cleaner



10. Remove the OPC drum.



11. Carefully pry out the fill plug. It fits tight and is easily damaged. Work a small jeweler's screwdriver around the edge until the plug comes free. Clean out any remaining toner from the hopper.



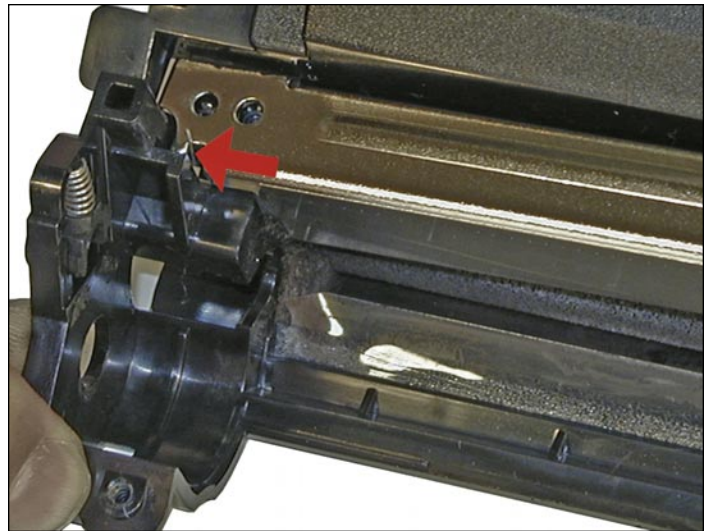
12. Gently pry out the roller plate from the cartridge by pressing in on a tab located on the bottom of the cartridge.

There is a spring that is in contact with the developer roller shaft.

Move the tail of the spring up, so that as the plate is lifted out, it will fall behind it.



13. Remove the developer roller by lifting it out.

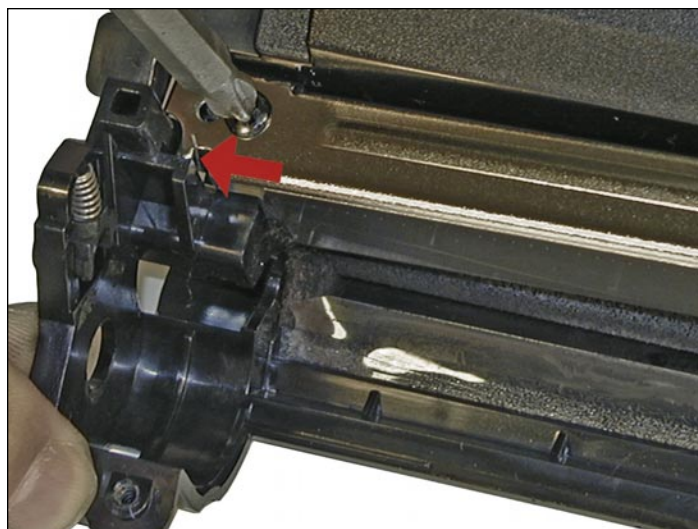
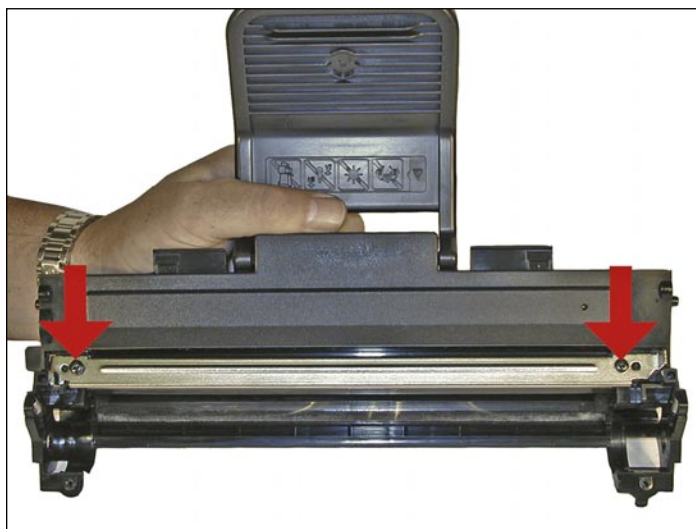


14. Remove the two screws on the doctor blade. On the fill plug side of the blade, there is the other tail of the spring. Lift it up while removing the doctor blade so it is not damaged.

NOTE: It is highly recommended that the doctor blade be cleaned. Failure to do so will cause streaking. Dampen a cotton swab with alcohol, and clean the blade. Be careful not to press too hard and damage the blade. If the blade has a heavy build-up of toner on it, clean it with acetone, and then alcohol.



15. Clean the feed roller and any remaining toner from the hopper.

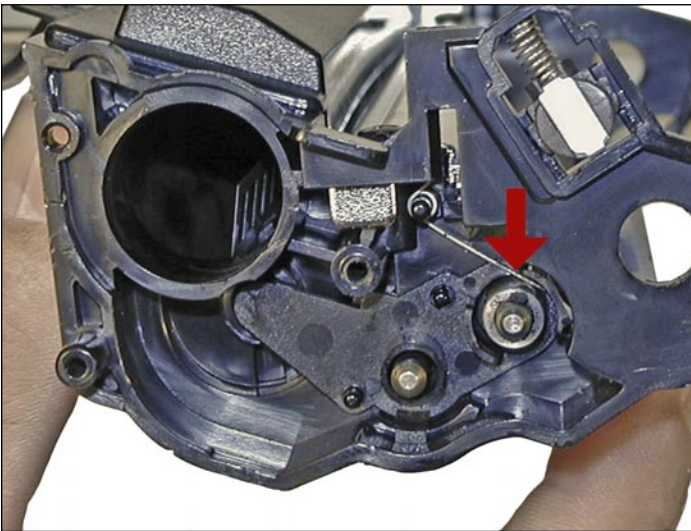


16. Re-install the doctor blade and two screws.

Make sure the tail of the spring fits into the proper slot.



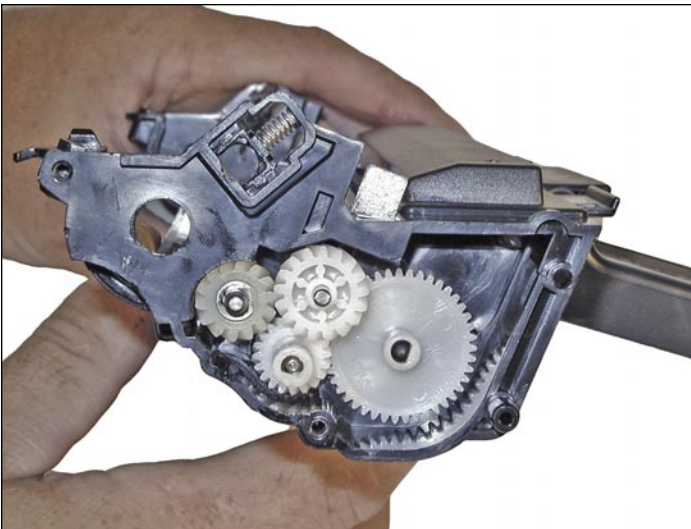
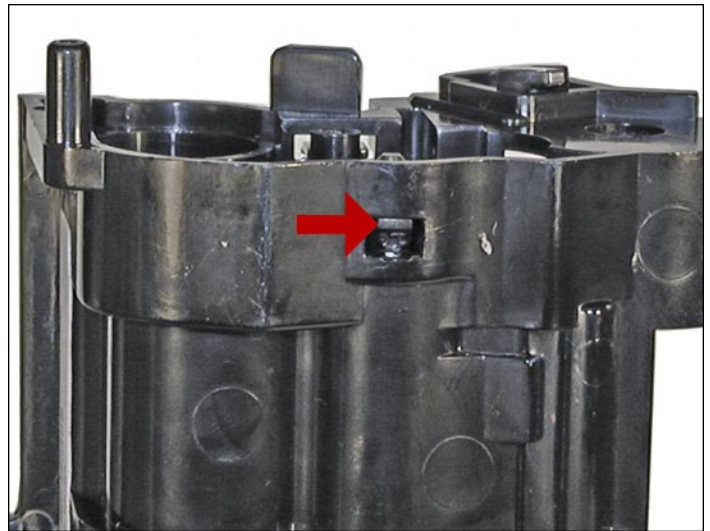
17. Install the developer roller, keyed end to the gear side of the cartridge.



18. Install the roller plate.

Route the tail of the spring so that it sits on top of the plate and is in contact with the shaft of the developer roller.

Lock the plate in place with the tab.



19. Install the 4 gears as shown.



20. Install the drum in place.



21. Clean out the old conductive grease from the PCR contact-hub and replace with new. A small amount of grease is fine; more is not better when it comes to conductive grease.



22. Install the PCR by sliding it through the non contact side, and into the contact-hub.

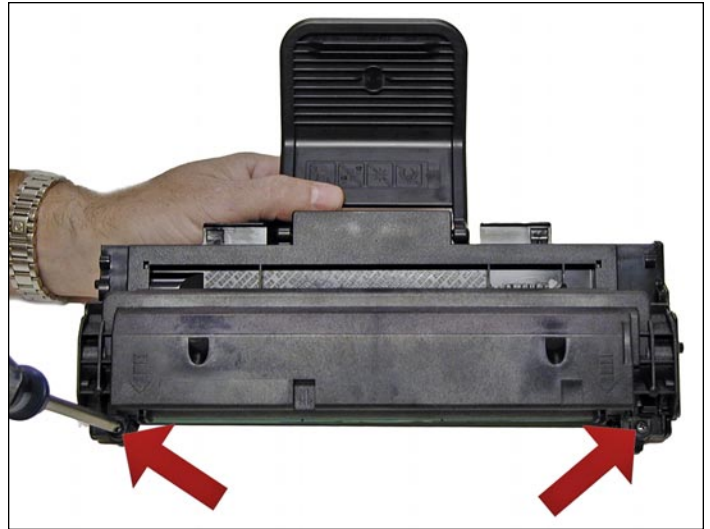
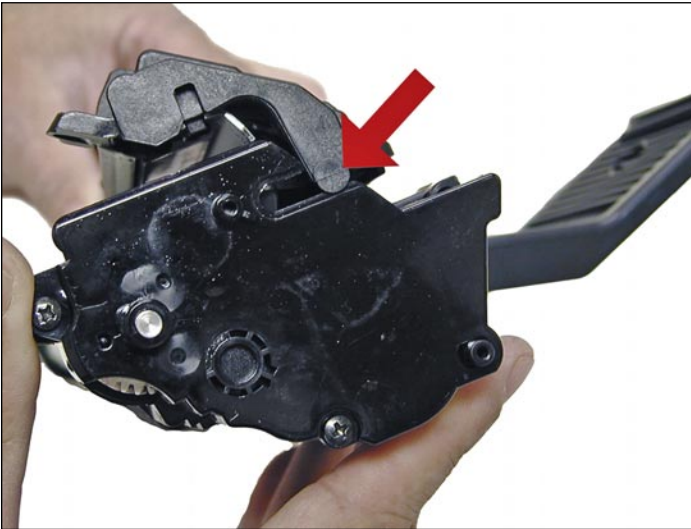


23. Fill the hopper with the appropriate toner.

Replace the fill plug, and check for leaks.

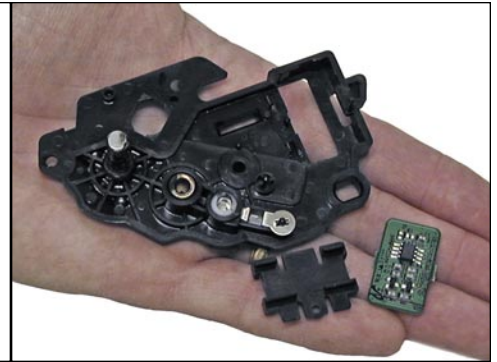
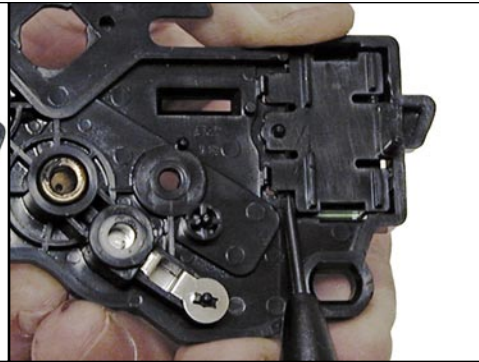
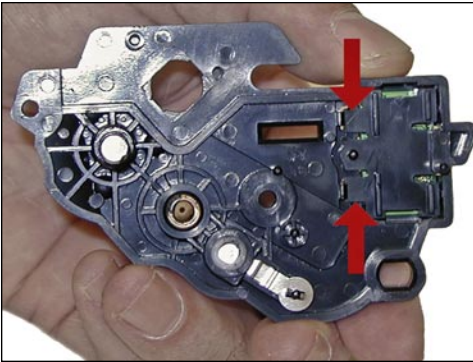


24. Install the gear side end cap, and two screws. Make sure the PCR fits correctly in its holder, and all the gears are aligned.



25. Install the waste chamber by sliding the tab through the slot in the end cap.

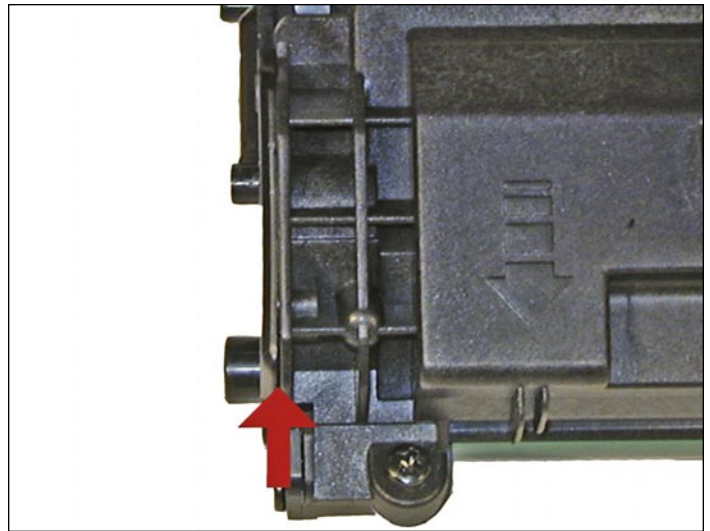
Rotate it down, and install the two screws.



26. On the non-gear end cap, the chip needs to be replaced before it is installed back on the cartridge.

There are two tabs that lock the chip housing in. Carefully pry up the two tabs.

Remove and replace the chip. Snap the chip housing back in place.



27. Install the non-gear end cap and two screws.

Make sure the end cap sits flush with the rest of the cartridge.

PRINTING TEST PAGES

As these machines are also copiers, a simply copy of a good test page should be all you need.

RUNNING THE DRUM CLEANING PAGE

1. Press the MENU button until MAINTENANCE appears on the display.
2. Press ENTER.
3. Press the LEFT or RIGHT arrows until CLEAN DRUM appears on the display.
4. Press ENTER.
5. Press the LEFT or RIGHT arrows until YES appears on the display.
6. Press ENTER.

REPETITIVE DEFECT CHART

OPC drum:	75.5 mm
Lower fuser roller:	75.4 mm
Upper fuser roller:	63.9 mm
Supply roller:	47.5 mm
Transfer roller:	46.2 mm
PCR:	37.7 mm
Developer roller:	35.2 mm

MACHINE ERROR CODES

These machines use plain English error messages, so there is no need to go into them here.