

Xerox DC 212/214 ... Knocking at your Door (Part 2) FIXING THE COPY CARTRIDGES.

Last month's article covered the DocumentCentre 212/214 Copier / Printer... Getting our feet wet on the basics of the machine itself (diagnostics, etc.). Now lets tear into the Copy Cartridge to refill the toner & fix it so it will run another cycle. Think of the Copy Cartridge as being a part of the machine instead of a separate unit... Remember that this is the part of the machine which will require the most frequent fixing, so don't leave it out of your repair business. These cartridges new, sell for close to \$400.- retail, so there's plenty of room to turn a tidy profit while still saving your customer some bread.

Basically all that's involved is; emptying the waste toner, cleaning up the cartridge, inspecting the drum & blade, pouring in some new toner, reassembling the cartridge... and, of course, replacing the connector on the cartridge (to reset the copy cartridge count & clear the "J7" code).

There are 2 "types" of these cartridges sold in the US which are different only because of the version of the Connector which they carry... After the procedure, we'll go over the 'types' & revisit the diagnostic codes (from last month's article) which read & program the Copy Cartridge type which the machine will accept.

Here's the procedure:

1.) First remove the one screw holding the front drum spindle in place (don't remove the spindle yet). This is important because one of the contacts on the Waste Toner Container is trapped under the plastic drum spindle. Now you can remove the Waste toner Container from the front of the cartridge (2 screws). *Be particularly gentle with the electrical contacts on the Waste Container... they look really delicate.* Empty out the Waste Container.

2.) Here's the second important "Trick" you'll need to know: Push the 2 pins (*one front & one rear, see illustration #3 & #4*) all the way in (you'll need a long narrow tool such as an alan key)... This will allow you to separate the 'Drum / Cleaning Section' from the 'Toner Dispense Section' (remove & keep the 2 pins for

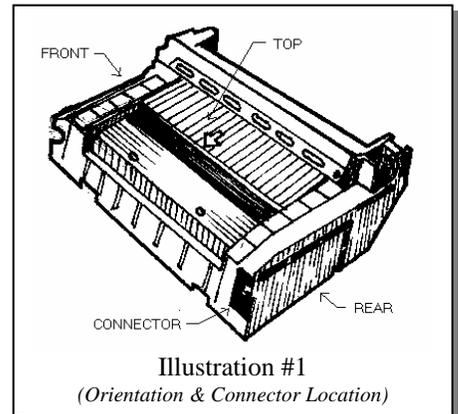


Illustration #1
(Orientation & Connector Location)



Illustration #2
(Waste Container)

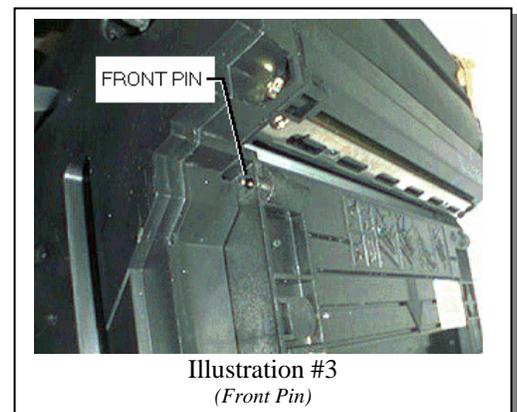
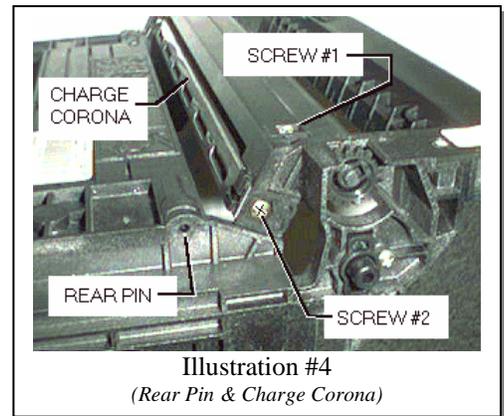


Illustration #3
(Front Pin)

reassembly later). *Put the Toner Dispense Section aside for now.*

3.) Remove the plastic drum “Spindle” from the front end of the drum (held by 1 screw), this allows you to raise the drum up & out. *Inspect the drum... put it aside where it will be protected from light.*

4.) To get to the Cleaning Blade, you must first remove the Charge Corona Assembly. This is done by removing one screw on the top / rear of the cartridge (*See Illustration #4*). Loosen a 2nd screw at the rear end to release tension on the corotron so that it can be lifted out. *That screw also releases tension on the scorotron grid, so don't be alarmed if the grid seems loose once you get the corona assembly out.*



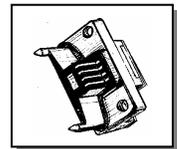
5.) Inspect the cleaning blade. The blade is held in by 3 screws, replace it if needed (*the blades may be another month or 2 before they become available in the market*).

6.) Now take the ‘Toner Dispense Section’ in hand. Remove the plug from the Toner Fill Hole and vacuum out the remaining toner. *Take care not to touch the Toner Dispense Roll (Fingerprints or scuffs will pretty much guarantee you poor copy quality).*

7.) Use a funnel to pour in the refill toner.

8.) Clean up both sections of the cartridge and reassemble. Remember that the drum ground contact (which is on the Waste Toner Container) needs to be trapped under the conductive plastic Front Drum Hub... so put the waste container on before you install the front drum hub.

9.) Install a new Connector on the cartridge (held on by 2 screws) to reset the Copy Cartridge Count.



Done deal!

Here's the scoop once again on the Cartridge ‘Types’.

There are 2 versions of the Copy Cartridges available here in the US (& several other versions offered internationally) which are not interchangeable because of the ‘Type’ of connector on the cartridge. The machine checks the connector to make sure the cartridge is of the Type appropriate to the market through which the machine was originally sold. You can overcome this potential stumbling block if you know how to tell which cartridge a machine needs & how to change the machine to accept the type of cartridge which you have available to you.

The machines sold through “USCO”(US Customer Operations, or in other words Dealers) are set up to look for a “type 1” cartridge sold under the reorder #'s 113R180 or 113R181. Machines sold through “Channel Group” (Retail Outlet Stores) require a ‘type 5’ cartridge sold under part # 113R287. If the wrong cartridge ‘Type’ is installed in a

machine, the J8 code (improper copy cartridge) will show up. If you get a J8, enter diagnostics (hold down '0' while turning on the power, then press the 'Stop/Clear' button and wait till the optics finish initializing before doing anything further). Then enter '202' followed by 'Print'. The 1st 3 digit number which appears tells you which 'type' the machine is currently set up to accept, a 2nd 3 digit number which flashes tells you the 'type' of the cartridge which is in the machine.

Changing the 'Type' of cartridge which the machine will accept:

First, with the power off, remove the Copy Cartridge, close the Door Transport, and hold the '0' while turning on the power to enter Diagnostic Mode. Wait for the optics to finish initializing. Press 'Stop/Clear', then enter code '406' followed by 'Print'. Turn off the power and install the intended Copy Cartridge. Turn on the machine, from now on it will expect the 'type' of cartridge which is currently in the machine.

Happy repairs to All!