TECHNICAL DOCUMENT

Canon NP-1500 Toner Cartridge

DOC-0173

OVERVIEW

These instructions cover the recharging of the Canon NP-1500 (Type D), toner cartridges used in the Canon NP-1500 copier. Although this cartridge looks similar to the PC-850 cartridge, they are not interchangeable. The NP-1500 cartridge has a handle built into it's shell, and uses a corona wire inside to charge the drum. The PC-850 cartridge has no handle, and uses a PCR. This cartridge is rated for 8,500 pages at 5% coverage.

This machine has a fairly heavy duty cycle of 10,000 pages/ month, and a copy speed of 12 cpm.

The actual Canon part number for the NP-1500 (Type D) cartridge, is F41-7601-000.

The purpose of this disassembly procedure is to vacuum out toner that will have spilled inside the cartridge during shipping and/ or rough handling, to clean the debris cavity, and to clean and fill the supply chamber with new toner. This disassembly procedure should also be used to examine the internal parts of the cartridge for possible damage, or wear should the printing of the cartridge be poor and not correctable by any other means.

NOTE: These Instructions should be read completely before proceeding with the recharge.

REQUIRED TOOLS

1. Phillips head screw driver

2. Small Common Screwdriver

3. Toner approved vacuum

4. Needle Nose Pliers

5. Safety goggles and breathing mask

SUPPLIES REQUIRED

1. Black Toner 500 Grams

2. Recovery Blade [optional]

3. Cotton Swabs (CT-100)

4. Lint Free Cotton Pads (PW-96)

5. Toner Magnet (TM-1)

6. 99% Isopropyl Alcohol (FR-8)

7. Clean compressed air

   WARNING: Always wear safety goggles and breathing mask when working with or around toner. Do not disperse the toner into the air. Use approved toner vacuums and filters at all times.

Approved Vacuum systems:
Toner approved vacuum. The Atrix HCTV canister type toner vac, OR the Atrix AAA portable style vacuum. Some type of approved toner vacuuming system is important because toner consists of very fine particles that will pass right through a normal vacuum filter, and blow out the exhaust.

PREPARE WORK AREA

1. Before proceeding with the following procedure you should have a work area available with approximately 4' x 3' clear space. It should be covered with some disposable paper since toner will spill on this area. It is recommended that brown craft paper be used and taped to the work area. This will hold the paper in place when trying to vacuum toner from the paper.

2. A garbage can with a strong plastic liner should be adjacent to the work area to empty used toner. It should be at least 2' deep to prevent toner from clouding up and over the top of the bag during disposal.

3. Have a few rags available and some disposable paper towels. TM-1 Toner Magnets are perfect for this.

4. The work area should be capable of being ventilated, if by accident toner becomes dispersed into the air. An exhaust fan in one window is recommended for ventilation.

   If the circulation of air in the work area room is combined with other rooms in the building, toner dust may be carried into the other rooms. A separate and isolated HVAC system is recommended for the work area room.

DISASSEMBLY

1. With the cartridge face down, (Drum side up) release the three plastic retaining Clips on the end cap.

2. Remove the side cover

3. Pry off the counter clip and remove the counter, place aside. It will be reset later. This is held on by 2 small clips, one on the top, one on the bottom.

4. Remove the small silver spring, and pull out the center pin.

5. Carefully turn the cartridge around and remove the silver spring

6. Separate the cartridge into two halves

REMOVE THE OPC DRUM

1. Take the drum section and turn it so that the counter side is facing you.

2. Remove the 2 screws on the drum axle pin, and the drum axle pin.

3. Carefully remove the OPC drum, being very careful not to scratch it. Vacuum any remaining toner and debris from the drum, being very careful not to come into contact with the drum surface. Do not polish or wipe the drum with a dry cloth, since this may scratch the drum. Blow off any remaining dust using a can of compressed clean air. Never use un-filtered compressed air for this as un-filtered air will have small dirt particles which blown at high speeds, will damage the drum.

   CAUTION: When using the Compressed clean air, be very careful not to tilt or shake the can while spraying, as the propellant may spray out of the can and possibly ruin the drum.

4. Place the OPC Drum in a soft lint free cloth and then into a dark colored bag, or cover from bright light by some other suitable means. Again, do not rub or wipe the OPC Drum with a dry cloth as this may scratch its surface. If there is any matter left on the drum that must be cleaned off, use 99% pure Isopropyl Alcohol (FR-8), and a soft lint free cotton pad (PW-96) to lightly wipe the drum surface. Vacuum and then blow off the Drum using the Compressed Air. Always handle the OPC drum with the utmost caution, since if damaged it cannot be replaced.

CLEANING THE DEBRIS CAVITY

1. Remove the Corona Wire Assembly by prying out the two black tabs located on the side with the metal drum axle plate. Clean the corona wire and cage with a cotton swab dipped in 99% pure Isopropyl alcohol

2. To remove the Waste Chamber cover, apply a small amount of pressure against the opposite side of the spring, and lift the cover off.

3. Remove the two large Phillips head screws on either end of the Wiper Blade, and carefully pry off the alignment holders Remove the four small Phillips head screws, or a strip of black tape (depending on the cartridge version you have), and pry the blade off. Wipe the blade off with a toner magnet when removed.

   WARNING: Be very careful not to bend or otherwise damage the small thin recovery blade located next to the Wiper Blade. If this blade is bent down lower than the height of the wiper blade, toner will accumulate on top of the blade and spill into the printer. If the blade does get bent, it may be possible to carefully bend the blade to a height equal to, or slightly higher than the Wiper Blade. Make sure that the edge of this blade is even across its entire length. If the blade cannot be repaired, replace it with our part # RB-1585.

4. Remove the packing blade assembly by prying the top blade up with a small common screwdriver, the bottom blade will come up with the top. Vacuum the waste area clean, being careful of the recovery blade.

5. Re-install the packing blade assembly, wiper blade, alignment pins, all screws. Make sure that the small tab end of the packing blade is set into the white gear.

6. Clean and re-install the Corona Wire Assembly.

7. Re-install the tan cover.

CLEANING THE TONER SUPPLY HOUSING

1. Pry out the fill plug located on the side of the toner supply. Dump out any remaining toner and vacuum clean.

   NOTE: Before vacuuming, rotate the magnetic roller and, observe the layer of toner on the roller surface. The toner should form an even consistent layer with no clumps or lumps showing. Should the layer of toner be thicker in some areas, the Magnetic Roller should be cleaned using a dedicated magnetic roller cleaner (MRC-16) or 99% Pure Isopropyl Alcohol. Always remove the roller before cleaning and make sure it is completely dry before re-installing it.
2. To remove the Magnetic Roller, take off the gear assembly on the side of the hopper, and lift out the magnetic roller..

3. Once a seal becomes available, it can be inserted through the fill plug side. Until then we recommend that this cartridge be hand delivered only.

4. Fill the supply with toner and check for leaks.

RE-ASSEMBLE THE CARTRIDGE

Reset the counter by turning the small white gear closest to the color wheel clockwise until it stops, and install on the waste Chamber.

Coat the OPC drum with Padding Powder (DPP), and install in the cartridge. Install the drum axle pin, and 2 screws.

Install the two springs.

Place the two halves together, and re-install the end cap with the three plastic clips.

Test and box the cartridge.

This cartridge does not use a felt wand.

RECOMMENDED SUPPLIES

Microsoft OLE DB Provider for ODBC Drivers error '80004005'

[Microsoft][ODBC Microsoft Access Driver]General error Unable to open registry key 'Temporary (volatile) Jet DSN for process 0x3464 Thread 0x954 DBC 0x8437024 Jet'.

/script/catSearch.asp, line 58