

HP® 4100 Remanufacturing Instructions



Oasis Imaging Products, Inc. Technical Support: (888) 627-6555

Reference Information:

OEM Part Numbers:

C8061A

C8061X

OEM Yields:

(61A) 6000 pages @5%

(61X) 10000 pages @5%

Tools Required:

#2 Philips Screwdriver

#1 Flat Tip Screwdriver

1/8" Punch or smaller

Materials Needed:

Toner

Drum (if needed)

PCR (if needed)

Replacement Mylar's (if needed)

Wiper Blade (if needed)

Lint free, Wax free wipes

Cotton Swabs

99% Isopropyl Alcohol

Approximate Reman Time:

25 min.



Instructions:

The Hewlett Packard® LaserJet 4100 laser printer uses a typical HP cartridge in that the toner hopper and the waste hopper are located in one disposable unit. The toner hopper contains the toner reservoir, the doctor blade, the toner low sensors and the magnetic roller assembly. The waste hopper contains the OPC, the wiper blade, recovery blade and the waste bin. The retractable drum shutter is attached to the toner hopper and must be removed prior to disassembly to avoid damaging the OPC. The cartridge halves are held together by a pair of retaining pins; one on each end of the cartridge. The retaining pins are flared at the ends and will damage the PCR cradles if pushed into the cartridge. Therefore they must be removed from the inside and pushed out.

Separating Cartridge Halves:

1. Gently pry the drum shutter arm from the right side of the cartridge being careful not to lose the tension spring located in the receptacle at the top of the arm (Fig. 1). Now remove the silver retaining arm by gently pulling on the left side while rotating the arm back and upward.

Note: The left side of the silver retaining arm is keyed, and must be rotated in order to release the keyed portion (Fig. 1a).

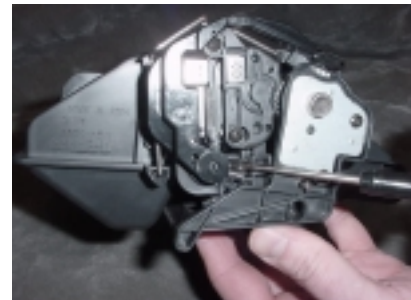


Fig. 1

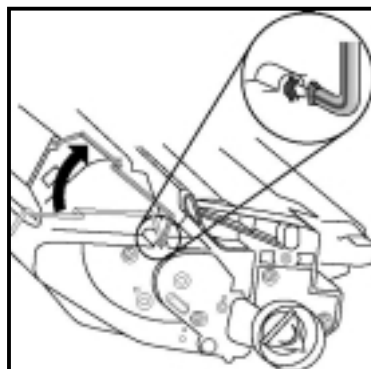


Fig. 1a

2. Remove the two screws securing the OPC retaining axle (Fig. 2). Remove two screws from the OPC stabilizer on the opposite side of the drum (Fig. 2a). Remove the OPC from the waste hopper. Clean, inspect and lubricate the drum; replace if necessary. Wrap the drum in a clean lint free cloth, or store in a drum case to minimize light exposure.



Fig. 2



Fig.2a

3. Remove the PCR from the waste hopper (Fig. 3) and inspect for excessive wear; replace if necessary. Clean the PCR with a damp lint free cloth. Make sure any residual toner and or cleaner is completely removed to ensure that proper voltage is maintained.



Fig. 3

4. A round plastic housing (Fig.4) conceals the cartridge pins. To remove the pins, first cover the mag roller with lint free wax free wipe to prevent damaging the mag roller. Next using a sharp tipped punch, create a small hole (Fig. 5) on the end of the plastic housing. Make the hole large enough to fit a 1/8" punch to push out the pin (Fig.6).



Fig. 4



Fig. 5

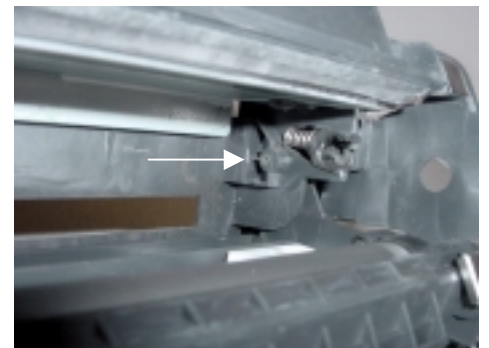


Fig. 6

5. Using a punch, push the pin out of the housing (Fig. 7). **Note: Stand the cartridge on end to get better leverage, you may have to tap the pin with a small hammer.** Once the pinhead is free of the plastic housing, use pliers to remove it from the cartridge (Fig. 8). Repeat these steps to remove opposite cartridge pin.

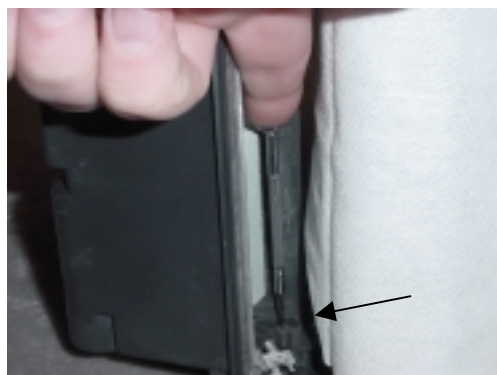


Fig. 7



Fig. 8

6. When both pins are removed, separate the cartridge halves (Fig. 9).



Fig. 9

OPC/Waste Hopper

1. Remove the two screws securing the wiper blade (Fig.10). Clean the waste bin with compressed air or vacuum (Fig.11). Inspect the recovery Mylar to ensure that it is not damaged. If the Mylar is damaged, remove and clean all adhesives from the recovery-mounting surface, and carefully apply a new recovery blade.

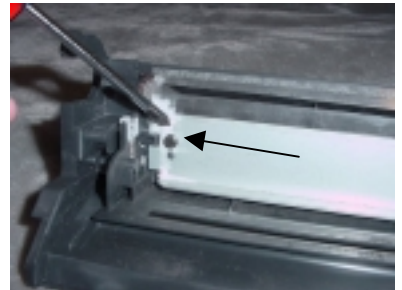


Fig. 10

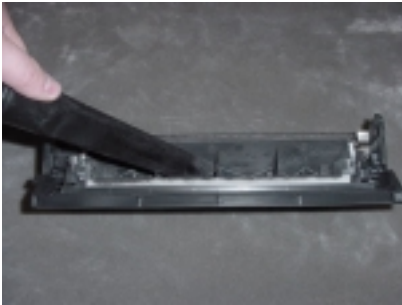


Fig. 11

2. Waste bin re-assembly (Fig. 12). Inspect clean and lubricate the wiper blade; replace if necessary. Inspect the PCR for excessive wear; apply a small amount of a quality PCR cleaner to a clean lint free cloth and gently wipe the entire surface of the PCR. Make sure any residual toner and or PCR cleaner is completely removed to ensure that the proper voltage is maintained. Clean the black PCR saddle clip with a cotton swab and 99% IPA. This clip is conductive and supplies the current to the PCR. Clean and inspect the OPC (or replace), lubricate the drum with padding powder. Re-install the PCR and OPC, rotate the OPC against the wiper blade and then remove residual lubricant from the PCR with a clean lint free cloth. Set the drum unit aside and cover it with a clean cloth to protect it from light and physical damage.



Fig. 12

Toner Hopper

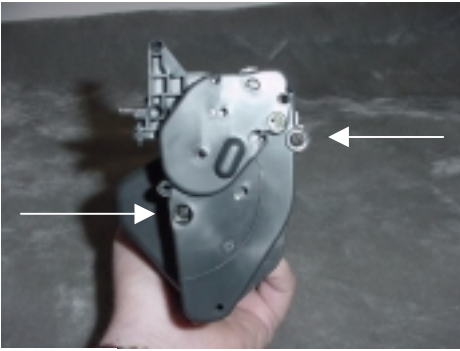


Fig. 13

1. Remove the two screws that hold the (gear plate) end cap to the toner hopper (Fig. 13).

1a. On the opposite side of the hopper remove the two screws that hold the (contact plate) end cap to the toner hopper (Fig. 14).

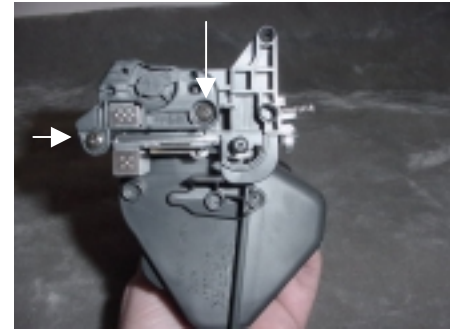


Fig. 14

2. Carefully remove the magnetic roller by lifting the roller from the toner hopper section (Fig.15). Note the location of all peripheral components on the mag roller (bushings,etc). Use compressed air to remove all residual toner from the surface of the sleeve and inspect for damage.



Fig. 15

3. Remove the two screws that hold the doctor blade in place (Fig. 16). Use compressed air or a vacuum to remove residual toner from the blade; replace if necessary. Inspect the mag roller Mylar for damage; replace if necessary. Clean the hopper with compressed air or a vacuum, clean the hopper of all residual toner. Fill the toner hopper with the required gram load and prepare for re - assembly.



Fig. 16

4. Clean the bias charge contact with a cotton swab and alcohol (Fig.17). Be sure to remove all residual toner and conductive grease.

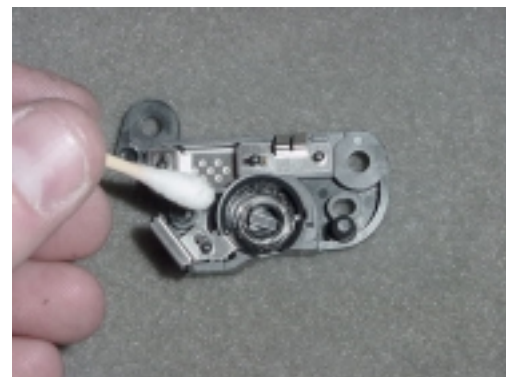


Fig. 17

5. Reassemble the toner hopper in reverse order of the disassembly. Clean and inspect all components and replace if necessary (Fig. 18). Place the cartridge halves together and avoid damaging the springs on the top of the toner hopper. Align the pinholes on each side and insert the cartridge pins to hold the halves together.



Fig.18

6. Install the left and right ends of the silver shutter-retaining arm (Note: the keyed tip on the left end). Now align the tension spring in the receptacle of the drum shutter arm; the far side of the spring must press down into the shutter arm and the near side must rest on the notch on the right side of the receptacle (Fig. 19). Affix the drum shutter arm onto the right side of the cartridge ensuring the exposed end of the spring sits on the notch indicated (Fig. 20). Pull the arm back slightly and slowly release the arm.



Fig. 19

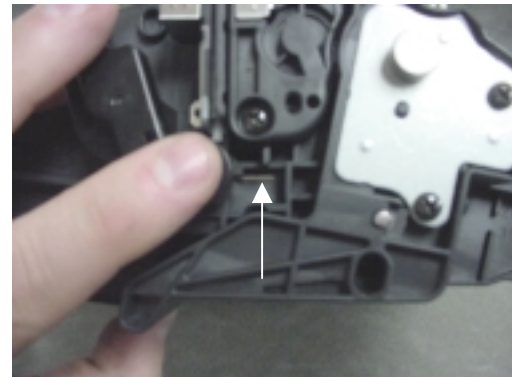


Fig. 20