



HP1160/1320/P2015TECH

Technical Instructions	Supplies		Tools	1
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99% Alcohol
Conductive Grease
Cotton Swab
Drum

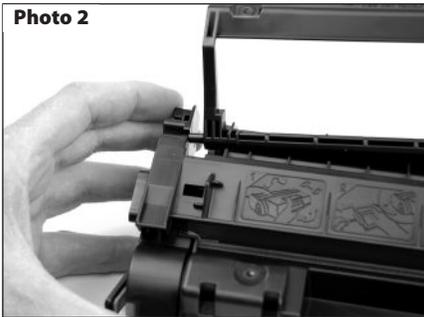
Lint-free Cloth
Toner
Wiper Blade

Drill
3/32-inch Drill Bit
Needle-nose Pliers
Small, Flat-blade Screwdriver
Phillips-head Screwdriver
Utility Knife



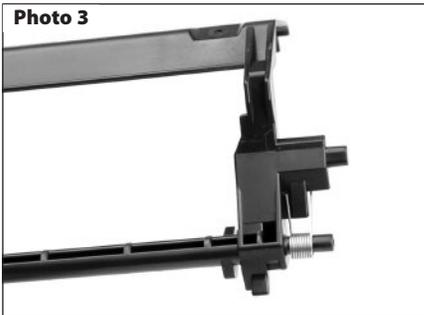
Step 1

Place the cartridge on the workbench with the toner hopper toward you. Open the drum shutter and lift the right side of the shutter. This will dislodge the drum shutter from its cradle. (See Photo 1)



Step 2

Slide the shutter to the right to remove the shutter post from the cradle. (See Photo 2) Set the drum shutter aside. Do not lose the tension spring found on the end of the shutter. (See Photo 3)



Step 3

Flip the cartridge over so the drum is facing up. (See Photo 4)

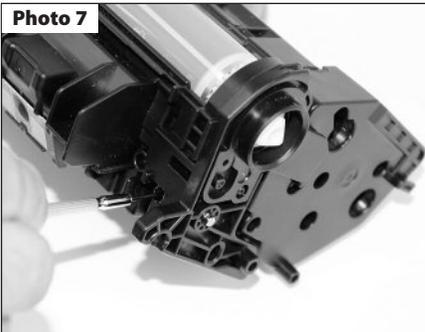


Step 4

Using a 3/32-inch drill bit, drill a hole into the square holes on the back of the waste hopper. (See Photos 5 & 6)

Photo 5**Photo 6****Step 5**

If the cartridge pins are not pushed out the ends of the cartridge, use a small, flat-blade screwdriver to push the pins out the end of the cartridge. (See Photo 7) Grab the pins using needlenose pliers and remove the pins.

Photo 7**Photo 8****Step 6**

Separate the two sections of the cartridge. (See Photo 8)

Photo 9**Step 7**

Using a utility knife, cut two small notches in the plastic that surrounds the drum contact axle. Photo 9 and Photo 10

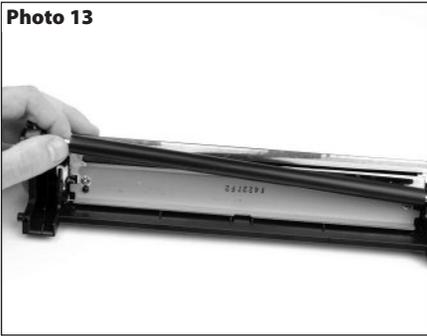
Photo 10**Photo 11****Step 8**

With needlenose pliers, grab the drum contact axle and pull the axle out from the end of the waste hopper. (See Photos 11)

Photo 12**Step 9**

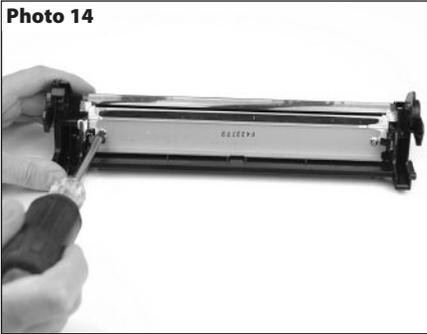
Carefully lift up on the non-gear end of the drum and slide the drum out of the bearing end cap. (See Photos 12) If the drum is going to be reused, place it in a protected area away from the light.

Photo 13

**Step 10**

Lift out the PCR. (See Photo 13) Clean the PCR using mild soap and water.

Photo 14

**Step 11**

Remove the two screws holding the wiper blade. (See Photo 14)

Photo 15

**Step 12**

Remove the wiper blade. (See Photo 15) Clean the waste hopper using dry, compressed air or a vacuum.

Photo 16

**Step 13**

Apply padding powder to the wiper blade. Place the blade onto the waste hopper and install the two screws that hold the blade in place. (See Photo 16)

Photo 17

**Step 14**

Clean the PCR saddles using a cotton swab and alcohol. Apply new conductive grease to the black conductive saddle and put the clean PCR into place. (See Photo 17)

Step 15

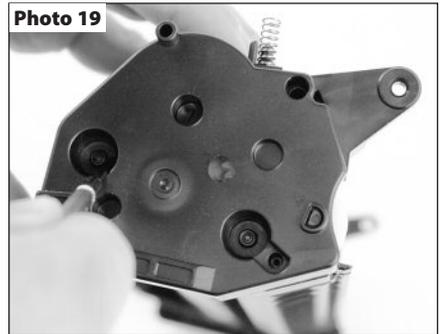
Apply padding powder to the drum. Install the drive gear into the bearing end cap. Slide the drum's contact axle into the end of the waste hopper. (See Photo 18) Rotate the drum to ensure that the drum and wiper blade are properly lubricated. Clean the padding powder off the PCR using a lint-free cloth. Set the waste hopper aside in a protected area away from the light.

Photo 18

**Step 16**

The gear housing end cap on the toner hopper is sonically welded to the toner hopper. Place a small, flat-blade screwdriver at the base of each plastic weld and carefully pry up. (See Photo 19)

Photo 19



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Step 17

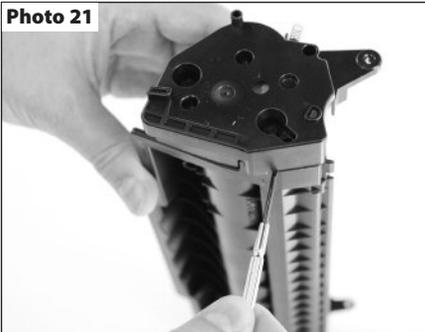
Using a 3/32 inch drill bit, drill a hole into the gear housing end cap where the two plastic welds hold the end cap to the toner hopper.

(See Photo 20)

Photo 20**Step 18**

Insert a small, flat-blade screwdriver between the toner hopper and the gear housing end cap next to the sonic welds. Carefully pry the end cap away from the toner hopper.

(See Photo 21)

Photo 21**Photo 22****Step 19**

Before the end cap can be removed, Hewlett-Packard has also sonically welded the alignment pin that holds the mag roller stabilizing bar in place. This weld has to be broken as well. Insert a flat-blade screwdriver between the stabilizing bar and the toner hopper. (See Photo 22) Carefully pry the gear housing end cap away from the toner hopper. Remove the end cap.

Photo 23**Step 20**

Remove the three gears from the end of the cartridge, leaving the toner agitator gear. (See Photo 23)

Photo 24**Step 21**

Rotate the cartridge 180°. Remove the two screws holding the contact end cap to the toner hopper.

(See Photo 24)

Photo 25**Step 22**

The alignment pin that holds the contact end plate is sonically welded to the toner hopper. Insert a small, flat-blade screwdriver between the contact plate and the toner hopper. Carefully pry the contact plate away from the toner hopper. (See Photo 25)

Photo 26**Step 23**

Carefully remove the mag roller from the toner hopper. (See Photo 26)

Photo 27

**Step 24**

Remove the mag roller stabilizing bar, and the mag roller bushings from the ends of the mag roller. (See Photo 27) Clean the mag roller first with compressed air or a vacuum, then use a mag roller cleaner. Clean the mag roller bushings using alcohol and a lint-free cloth.

Photo 28

**Step 25**

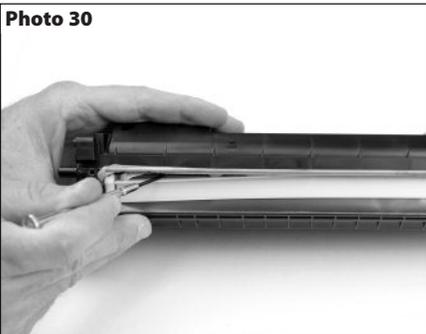
Remove the two screws holding the doctor blade. (See Photo 28)

Photo 29

**Step 26**

Remove the plastic scrapers from the ends of the doctor blade and remove the blade. (See Photo 29) Clean the doctor blade using alcohol and a lint-free cloth. Empty the remaining toner from the toner hopper. Clean the toner hopper using dry, compressed air or a vacuum.

Photo 30

**Step 27**

Remove the white plastic wall that is stuck to the top of the mag roller opening using a flat-blade screwdriver or a utility knife. (See Photo 30)

Photo 31

**Step 28**

Remove the doctor blade end foams from each side of the toner hopper. (See Photo 31) Fill the hopper with toner.

Step 29

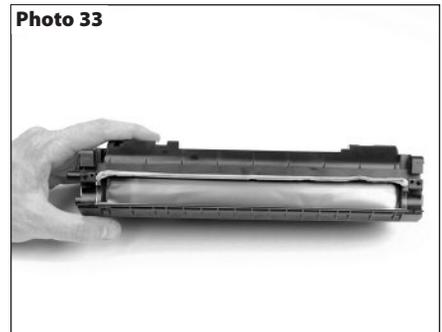
Using a small, flat-blade screwdriver, push the seal exit port plug from the end of the toner hopper. (See Photo 32) Carefully clean the seal area. Once most of the toner is removed from the seal area, clean again using a cotton swab and alcohol.

Photo 32

**Step 30**

Remove the seal liner from the back of the seal and adhere the seal to the toner hopper. Slide the tail of the seal through the seal exit port and reinstall the seal exit port plug. (See Photo 33)

Photo 33



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Step 31

Install the doctor blade end foams onto each side of the toner hopper. (See Photo 34)

Photo 36**Step 33**

Place the clean mag roller bushings onto the end of the mag roller. The white bushing goes on the gear end and the black bushing goes on the contact end. Install the mag roller stabilizing bar onto the gear end of the mag roller and set the mag roller into the toner hopper. (See Photo 36)

Photo 37**Step 34**

Slide the tail of the seal through the contact end cap and place the end cap into position. Install the two screws that hold the end cap in place. (See Photo 37)

Photo 34**Photo 38****Step 35**

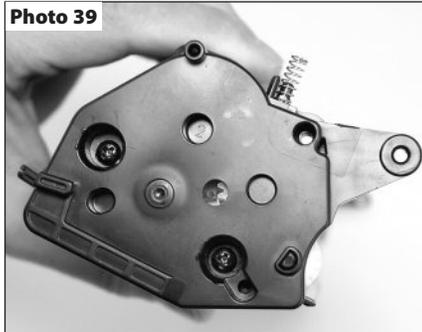
Place the three gears onto the end of the cartridge. (See Photo 38)

Step 32

Install the clean or new doctor blade onto the hopper. Place the scrapers on each end of the doctor blade and install the two screws that hold the blade in place. (See Photo 35)

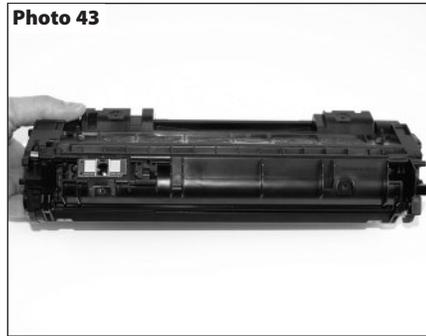
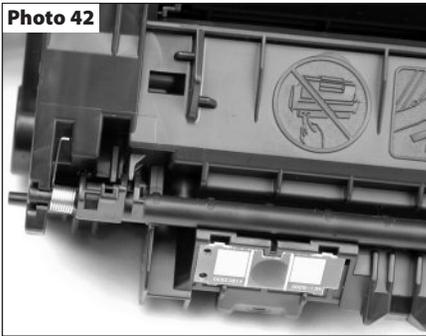
Step 36

Install the gear housing end cap onto the end of the toner hopper. Secure the end cap with two screws. (See Photos 39)

Photo 39**Step 37**

Join the toner hopper and waste hopper together. Install the two cartridge pins that hold the cartridge together. (See Photos 40 & 41)

Photo 35**Photo 40****Photo 41**



Step 38

Place the drum shutter onto the waste hopper so that the tension spring fits into its slot. (See *Photo 42*) Press down on each end to lock the drum shutter posts into position. (See *Photo 43*)

Test the cartridge.

A First Look at the HP LaserJet 1160/1320/P2015

In September 2004, Hewlett-Packard (HP) released two new, entry-level monochrome printers based on the same Canon print engine. The LaserJet 1160 (Q5933A), which is the base model, is a non-networking machine capable of printing 20 pages per minute at 600 x 600 dpi with HP REt and FastRes 1200 technology. The LaserJet 1160 sells for \$329.99 on HP's website.

The HP LaserJet 1320 is available in four different models. The LaserJet 1320 (Q5927A) is the base model which that sells for \$389. The networked LaserJet 1320n (Q5928A) has a list price of \$500. HP's LaserJet 1320nwn (Q5929A) is a wireless network-ready printer that features Bluetooth technology and sells for \$450. Lastly, the LaserJet 1320tn (Q5930A), which is network ready and supports a second 250-sheet paper tray,



sells at for \$104. The whole LaserJet 1320 family prints at 22 pages per minute at 1200 x 1200 dpi.

The LaserJet 1160 and LaserJet 1320 feature a 133 MHz Motorola V4 Coldfire processor, and each machine comes standard with 16MB of RAM. Additional memory can be added to the LaserJet 1320, up to 144MB. Both printer models have instant-on fuser technology that can deliver the first page out in 8.5

seconds, which is .5 seconds slower than the LaserJet 1300.

Both the LaserJet 1160 and LaserJet 1320 series printers have a monthly duty cycle of 10,000 pages. Each machine ships with a standard yield cartridge (Q5949A) that prints 2,500 pages at 5% coverage. The standard yield cartridge sells for \$103.40. A high yield cartridge (Q5949X) is also available from HP. The high yield cartridge sells for \$189.20, yields 6,000 pages and can only be used in the LaserJet 1320 series printers.

This How To article is a first look at the new HP LaserJet 1160 and HP LaserJet 1320 cartridges. Products for this new engine are still in development, but this will give you a good look at indication of what you remanufacturers are up against.

Cross Reference:

HP LaserJet 1160
HP LaserJet 1320
HP LaserJet 1320n
HP LaserJet 1320nw
HP LaserJet 1320tn

Supplies Part Number:

Q5949A 2,500pgs (for both LaserJet 1160 and 1320)
Q5949X 6,000pgs (only for the LaserJet 1320)

Cross Reference:

HP LaserJet P2015 Printer
HP LaserJet P2015d Printer
HP LaserJet P2015dn Printer
HP LaserJet P2015x Printer

Supplies Part Number:

Q7553A 3000 pgs
Q7553X 7000 pgs

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