



### Step 1

Using a 3/32" drill bit, drill a small hole next to the metal cartridge pin.  
(See Photo 1)



### Step 2

Using needle nose pliers or diagonal cutters pull the metal pin from the contact side of the cartridge.  
(See Photo 2)



### Step 3

Using a pin removal tool, remove the plastic cartridge pin from the gear side of the cartridge.  
(See Photo 3)

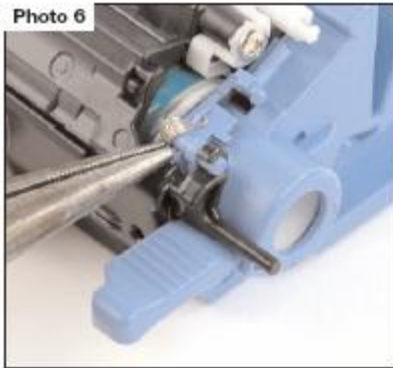


### Step 4

Remove the two cartridge springs from both sides of the cartridge.  
(See Photos 4 & 5)

**NOTE: Keep the cartridge springs separate because they are different.** The smaller spring is either marked with a black strip or a black anodized spring.





#### Step 5

Remove the drum shutter actuator spring.  
(See *Photo 6*)



#### Step 6

Remove the drum shutter from the shutter hinges on both sides of the cartridge.  
(See *Photo 7*)

Remove the drum shutter from the cradles on both toner hopper end caps.  
(See *Photo 8*)



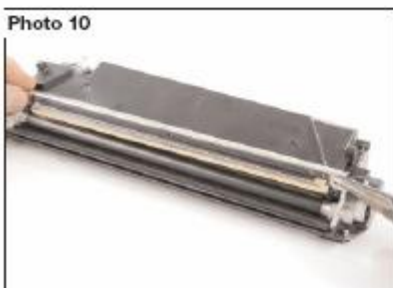
#### Step 7

Separate the toner hopper and waste hopper. Place the waste hopper aside out of the light. Place the toner hopper so the developer roller is facing up with the gears on the right.



#### Step 8

Remove the two screws holding the doctor blade. (See *Photo 9*)



#### Step 9

Carefully lift the doctor blade from the gear end of the toner hopper.  
(See *Photo 10*)

**NOTE:** The doctor blade is held in place by a tacky sealing material. Clean the doctor blade first using dry compressed air. Place the doctor blade into a cleaning fixture and clean the blade using a dry lint free cloth. If toner buildup is present on the blade, use a small amount of water to clean the blade.

Photo 11



#### Step 10

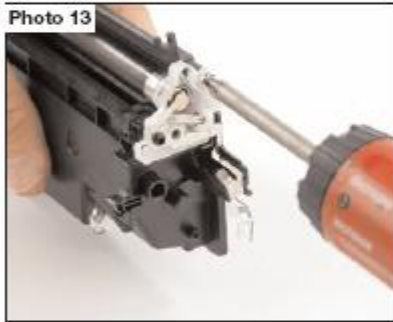
Remove the two screws holding the gear housing end cap.  
(See Photo 11)

Photo 12



Remove the end cap and the drive gears from the end of the toner hopper.  
(See Photo 12)

Photo 13



#### Step 11

Remove the two screws that hold the contact end cap to the toner hopper.  
(See Photo 13)

Photo 14



#### Step 12

Insert a small flat screwdriver behind the mag roller contact to release the metal tab that holds the contact in place.  
(See Photo 14)  
Remove the contact end cap.

**NOTE:** Clean the contact end cap using a cotton swab and alcohol. Apply new conductive grease on the two contacts (supply and developer roller contacts).

Photo 15



#### Step 13

Remove the screw that holds the developer roller end cap to the toner hopper.  
(See Photo 15)  
Remove the end cap.

**Step 14**

Lift out the developer roller. (See *Photo 16*) Remove the white developer roller bushing from the ends of the roller. Clean the developer roller using dry compressed air and a lint free cloth.

**Photo 16****Step 15**

Remove the supply roller sealing end foams from the axle of the supply roller on each side of the toner hopper. (See *Photo 17*)

**Photo 17****Step 16**

Place the toner hopper into the toner hopper holding fixture. Push the red handle down to secure the toner hopper in the fixture. (See *Photo 18*)

**Photo 18**

### **Step 17**

Using the hole saw provided with the fixture begin drilling using light pressure to prevent the hole from grabbing and damaging the toner hopper. (See *Photo 19*)

**Photo 19**



### **Step 18**

Lift up the red handle to release the clamp, (See *Photo 20*) remove the toner hopper from the fixture.

**Photo 20**



### **Step 19**

Clean the fill hole to remove any burrs caused by the hole saw. (See *Photo 21*)

### **Step 20**

Clean the hopper using dry compressed air making sure the hopper is void of plastic shavings.

**Photo 21**





#### **Step 21**

Remove the seal exit port plug located opposite the gear side.  
(See Photo 22)



#### **Step 22**

Using an insertion seal, seal the toner hopper by inserting the seal through the seal exit port plug.  
(See Photo 23)



#### **Step 23**

Install the seal exit port plug.  
(See Photo 24)



#### **Step 24**

Fill the toner hopper through the hole on top of the hopper. Seal the hole using a fill plug.  
(See Photo 25)



#### **Step 25**

Install the toner supply roller end foams to the axle on each side of the hopper.  
(See Photo 26)



#### **Step 26**

Place the developer roller end cap onto the gear side of the toner hopper. Install the screw that holds the end cap in place.  
(See Photo 27)

Photo 28



#### Step 27

Install the developer roller bushings onto the developer roller. Slide the gear end of the developer roller through the end cap.  
(See Photo 28)

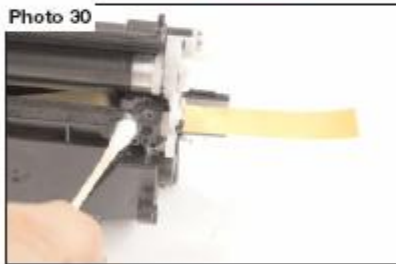
Photo 29



#### Step 28

Place the contact end cap onto the end of the toner hopper. Install the two screws that hold the end cap to the hopper.  
(See Photo 29)

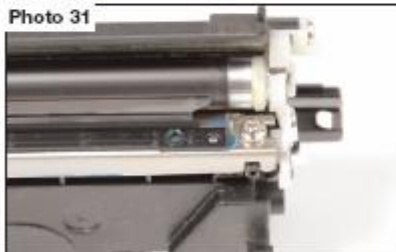
Photo 30



#### Step 29

Using a cotton swab and alcohol clean the OEM sealant where the ends of the doctor blade sit on the toner hopper.  
(See Photo 30)

Photo 31



#### Step 30

Place the toner hopper back into the Toner Hopper Holding Fixture. Place the doctor blade onto the toner hopper, install the two screws that hold the doctor blade but do not tighten them.  
(See Photo 31)

Photo 32



#### Step 31

Press down on the red handle until the clamp locks into place. Finish tightening down the doctor blade screws.  
(See Photo 32)

### Step 32

Place the waste hopper into the waste hopper holding fixture making sure the drive element is situated inside the fixture. (See Photos 33 & 34)

**NOTE:** Make sure the metal end stop on the fixture is located between the drum and cartridge handle. (See Photo 35)

Photo 33

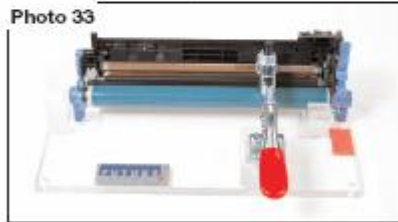


Photo 34



Photo 35



### Step 33

Secure the waste hopper by pushing the red handle down until the clamp locks into place. (See Photo 36)

Photo 36





### Step 34

Attach the drum hub cutting bit into the drill. Wearing safety glasses, place the drill into drum bearing end cap in alignment with the drum and begin drilling using light pressure.

(See Photo 36)

**NOTE:** Too much pressure could cause damage to the hopper. When the drill reaches the end, stop. Apply smooth added force until the front of the slide reaches the white mark.

(See Photos 37 & 38)

Pull the drill straight out to remove.

Photo 36



Photo 37

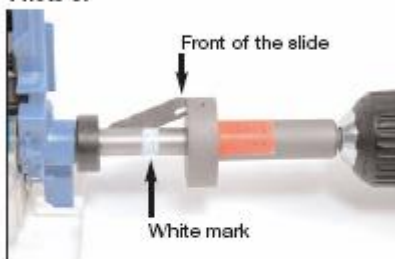


Photo 38



Photo 39



### Step 35

Lift up the red handle to release the clamp, (See *Photo 39*), remove the waste hopper from the fixture.

Photo 40



### Step 36

Lift out the cut end of the drum. (See *Photo 40*) Remove the drum hub from inside the drum bearing end cap.

Photo 41



### Step 37

Remove the PCR from the waste hopper. (See *Photo 41*) Clean the PCR using a dry soft cloth while rotating the drum. Make sure the PCR is totally clean.

Photo 42



### Step 38

Remove the two screws holding the wiper blade. (See *Photo 42*) Lift out the wiper blade. Clean the waste hopper using dry compressed air.

Photo 43



### Step 39

Apply DRUMPOWDERCPT to the wiper blade, place the wiper blade onto the waste hopper. (See *Photo 43*)

Photo 44



Install the two screws that hold the wiper blade. (See *Photo 44*)

Photo 45



#### Step 40

Put a small amount of conductive grease onto the black contact PCR saddle.  
(See Photo 45)

Place the clean PCR into the saddles.

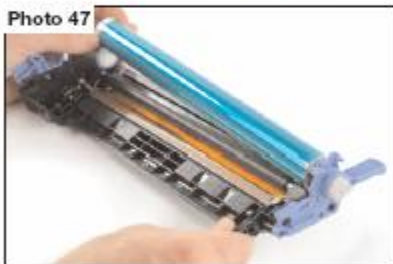
Photo 46



#### Step 41

Place the drum non-gear insert into the drum bearing end cap on the contact side of the waste hopper (the side with the black PCR saddle).  
(See Photo 46)

Photo 47



#### Step 42

Apply yellow toner to the drum. Slide the drive hub end of the drum into the drum bearing end cap on the gear side of the waste hopper.  
(See Photo 47)

Photo 48



#### Step 43

Push the drum non gear insert axle into the drum non gear body to lock the insert and drum body together.  
(See Photo 48)

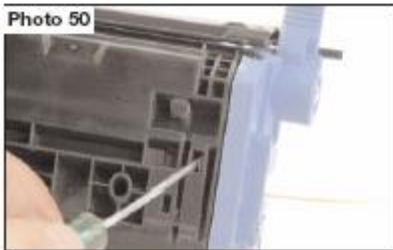
Photo 49



#### Step 44

Align the toner hopper and waste hopper. Marry the two halves together. Insert the metal cartridge pin on the contact side of the cartridge.  
(See Photo 49)

Photo 50



#### Step 45

Using a small flat screwdriver, make sure that the ground plate is flush against the housing so the plate is in contact with the PCR saddle spring.  
(See Photo 50)

#### **Step 46**

Insert the plastic pin into the smaller handle. If using a new waste hopper, use the plastic cartridge pin that came with the hopper.  
(See *Photo 51*)

**Photo 51**



#### **Step 47**

Place the two cartridge springs on each end of the cartridge. The smaller spring, either the all black or the spring with the black mark on it, goes on the side of the cartridge with the larger handle.  
(See *Photos 52 & 53*)

**Photo 52**



**Photo 53**



Photo 54



#### Step 48

Reassemble the drum shutter and attach the shutter to the toner hopper cradle and the waste hopper hinge. Place the drum shutter spring onto the cartridge.  
(See Photo 54)

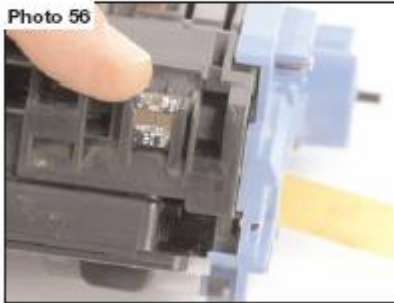
Photo 55



#### Step 49

Using diagonal cutters or a utility knife partially remove the top part of the plastic that locks the chip in place. Remove the chip by sliding it up and out.  
(See Photo 55)

Photo 56



#### Step 50

Place a new chip onto the waste hopper.  
(See Photo 56)