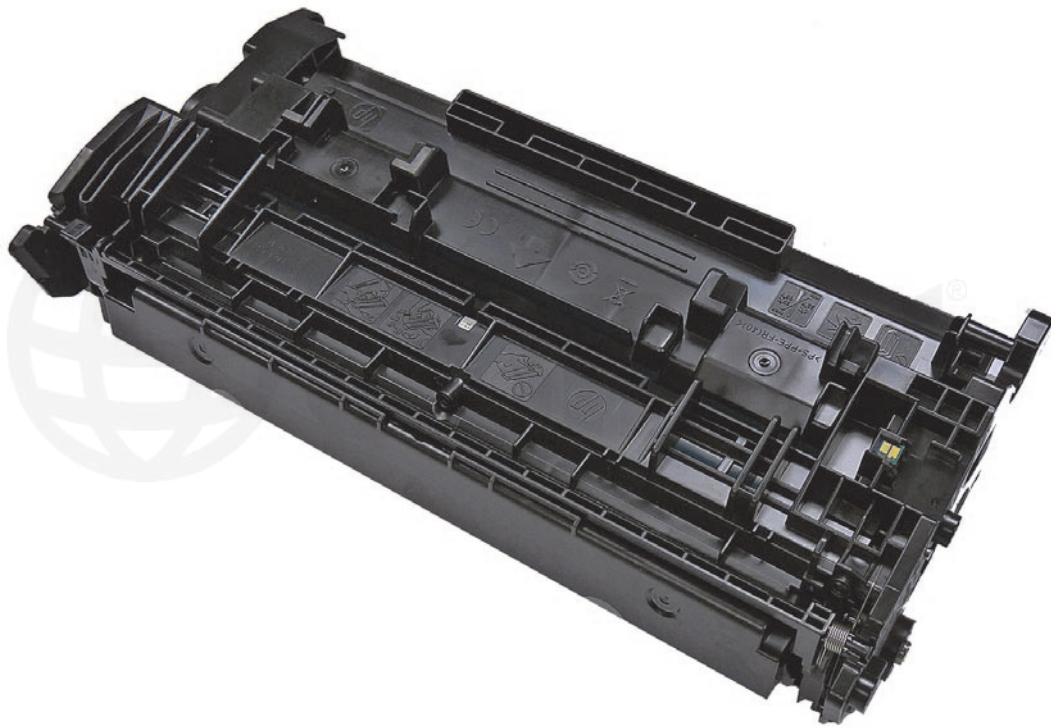


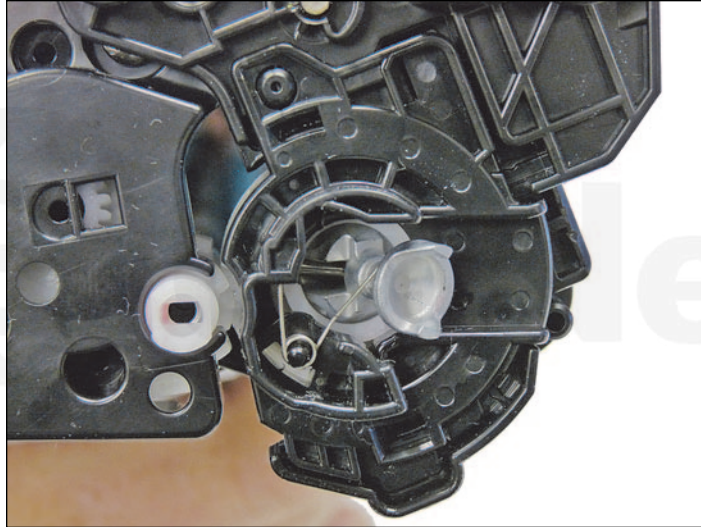
HP® PRO M402/MFP M426 CF-226A/X TONER CARTRIDGE REMANUFACTURING INSTRUCTIONS



HP PRO M402/M426 CF-226A/X TONER CARTRIDGE

REMANUFACTURING THE HP LASERJET PRO M402/MFP M426 (CF-226A/X) TONER CARTRIDGE

By Mike Josiah and the Technical Staff at UniNet



First introduced in September 2015, the LaserJet Pro M402 series of laser printers is based on 40ppm, 600dpi engine that comes standard with 128Mb memory (256Mb on the M426). The first page out is stated to be as fast as 5.4 seconds.

Two different cartridges are available for this series: the CF226A rated at 3,100 pages, and the CF226X rated for 9,000 pages.

The cartridges are similar in design to the P400 series, but are not interchangeable. There are some significant changes. The drum drive gear (shown) is a new very small type. They are both easier and a bit harder to take apart than previous versions.

PRINTERS RELEASED IN THIS SERIES SO FAR

LaserJet Pro M402dn

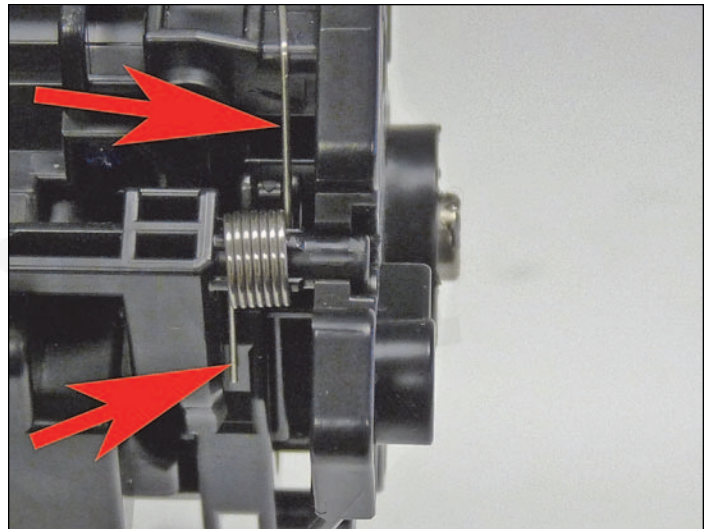
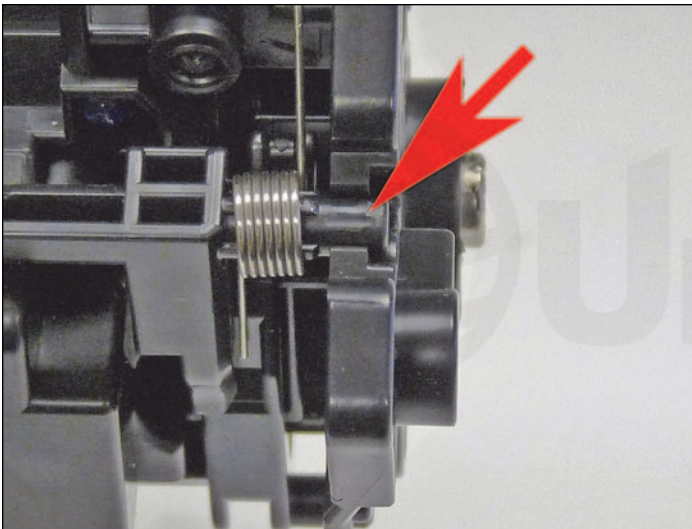
LaserJet Pro MFP M426

SUPPLIES REQUIRED

1. Low yield toner for use in HP M402 for the CF226A cartridge (3,100 pages, amount to be determined)
2. High yield toner for use in HP M402 for the CF226X cartridge (9,000 pages, amount to be determined)
3. Replacement chip
4. New drum (optional)
5. Wiper blade (optional)
6. Doctor blade (optional)
7. Magnetic roller (optional)
8. Sealing strip (optional)
9. Cotton swabs
10. Isopropyl alcohol
11. Drum padding powder

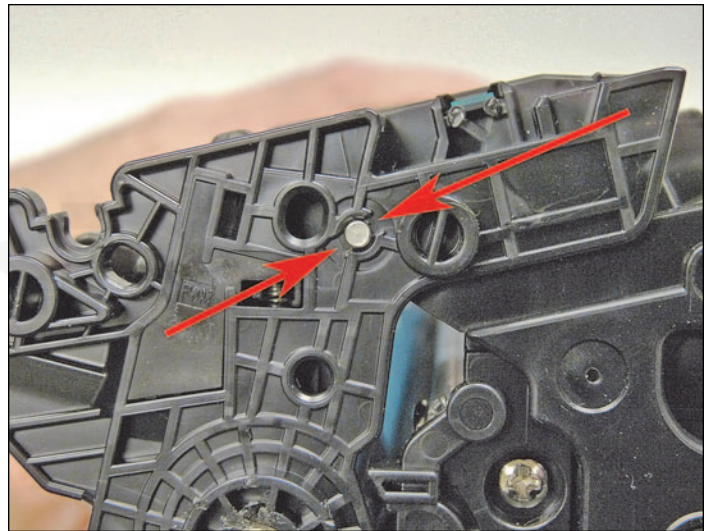
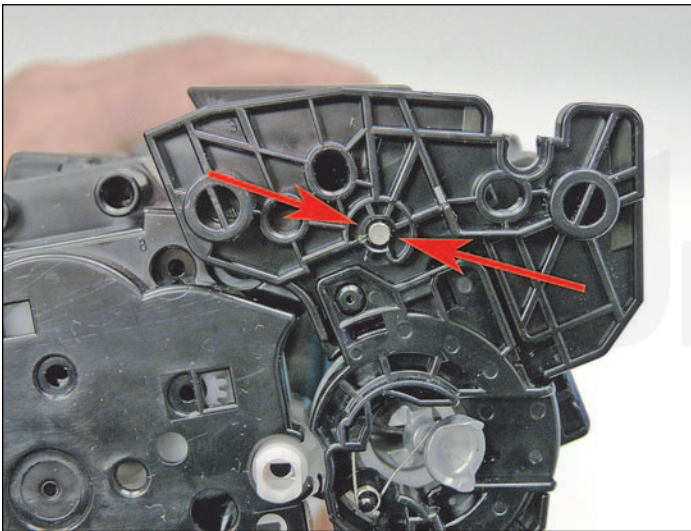
TOOLS REQUIRED

1. Jeweler's screwdriver
2. Phillips head screwdriver
3. Small common screwdriver
4. X-Acto type razor knife
5. Flush cutting wire cutters
6. Tools required to remove and install used OEM gears
7. Metal 1/16" rod about 18" long (from local hardware store)
8. Needle nose pliers
9. Super-glue or equivalent
10. Rubber mallet
11. Ohmmeter (continuity)

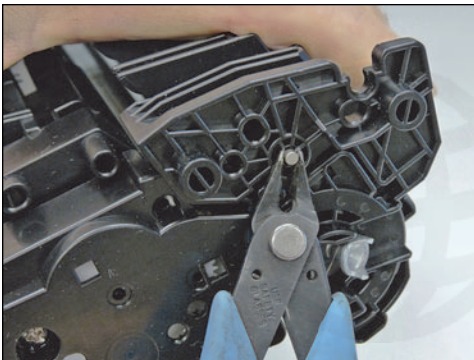


1. Remove the drum cover by prying up on each end.

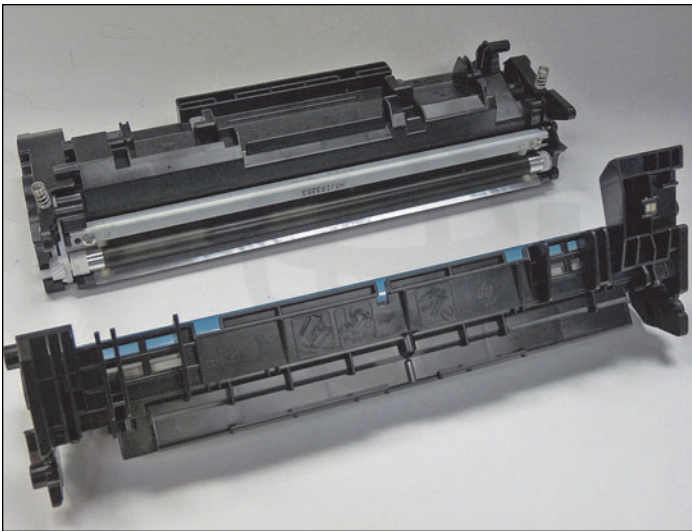
Note the spring position so that it can be replaced later.



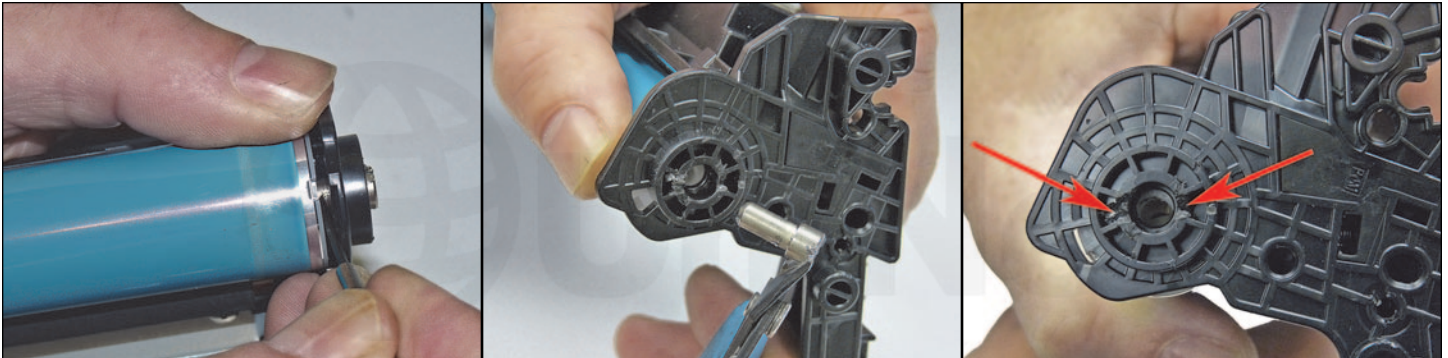
2. There are two pins that need to be removed to open the cartridge. The best and easiest way to remove them without damaging the cartridge is to cut two small slots in the plastic next to each of them. There are two small slots on opposite sides of each pin.



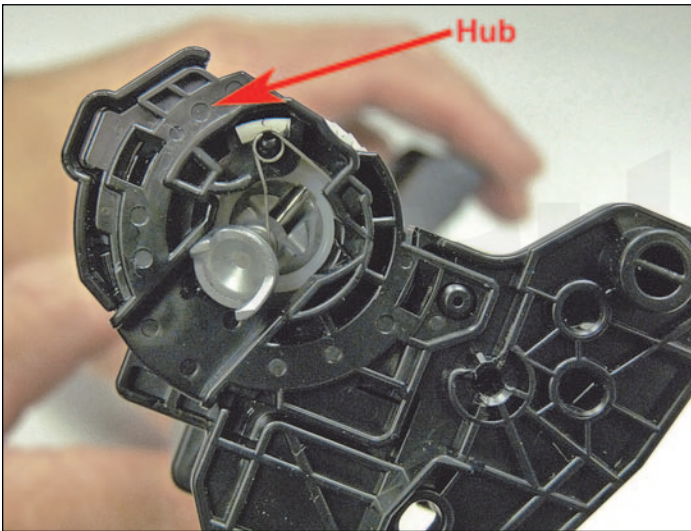
3. Grab the pins with a pair of pointed flush cutting wire cutters, and remove. Flush cutting wire cutters have blades that are flat on the bottom side. Normal wire cutters have curved blades. The flush cutting kind is better for grabbing recessed pins. Note that the pins for both sides are the same.



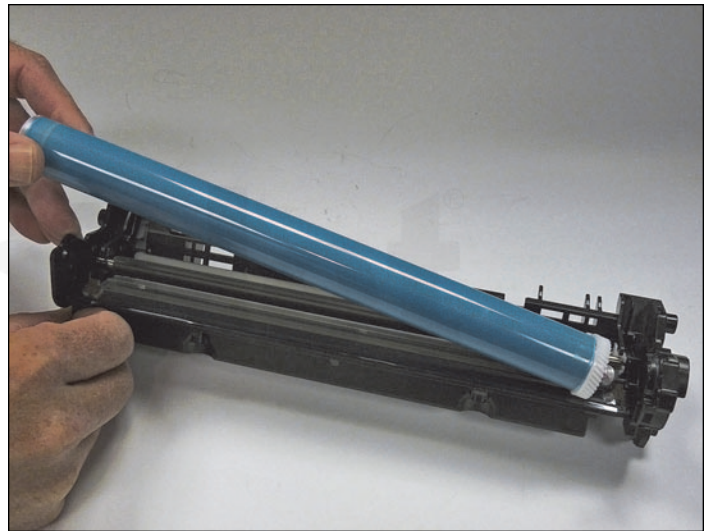
4. Separate the two halves.



5. With a flat head screwdriver, press the drum axle pin out from the inside of the cartridge wall as shown. There is NOT a small shoulder as in older versions. Press the axle out just enough so that you can grab it with the flush cutting wire cutters. You may have to make two small cuts on each dies of the pin from the outside in order for the cutters to be able to grab it.

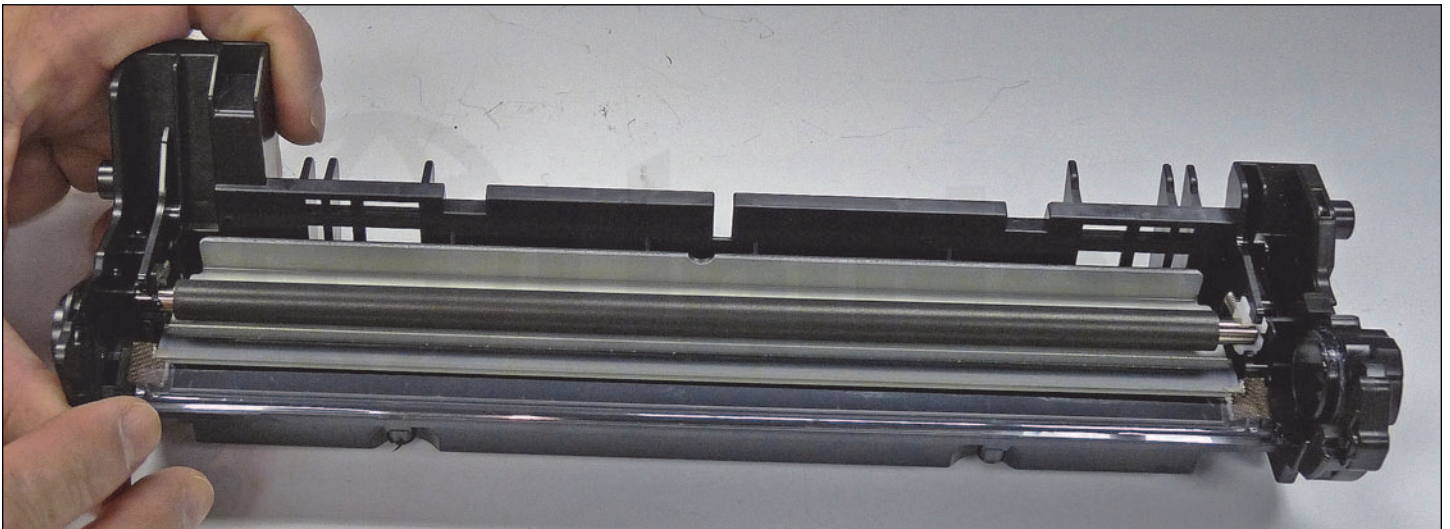


The drum hub (shown) on the opposite side is welded. The weld can be broken or drilled out, but there is a good chance that the hub will either warp if pried off, or will be hard to align if drilled out.

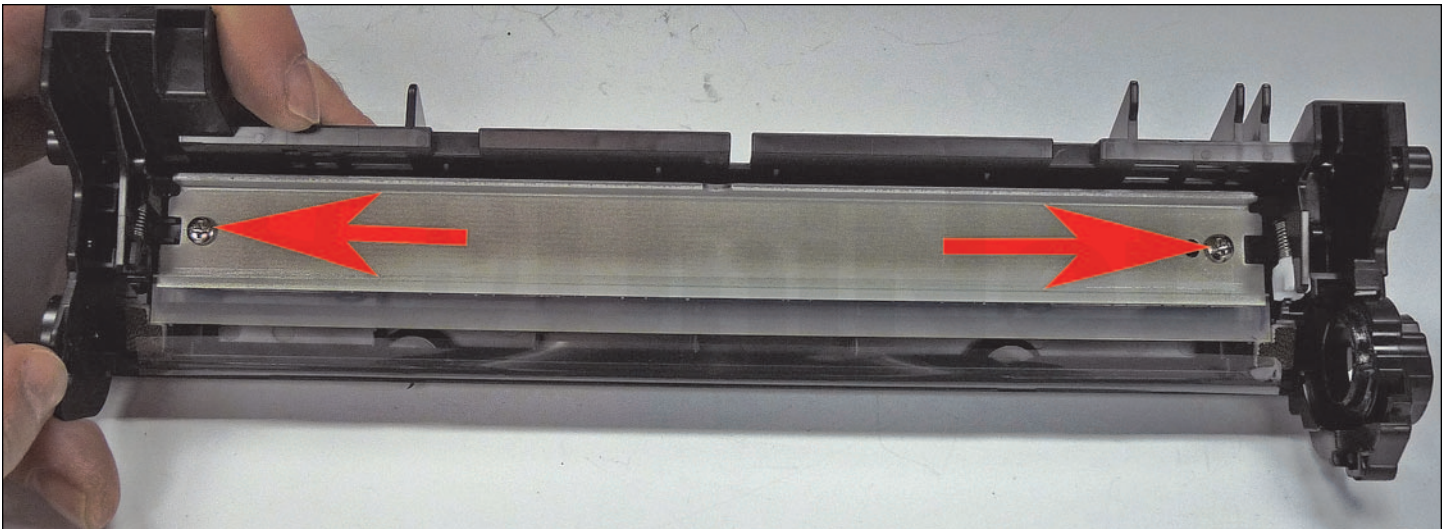


6. The drum dongle gear has a spring that holds it off to one side (necessary for it to engage the printer).

Release the tail of the spring off the gear and remove the drum.



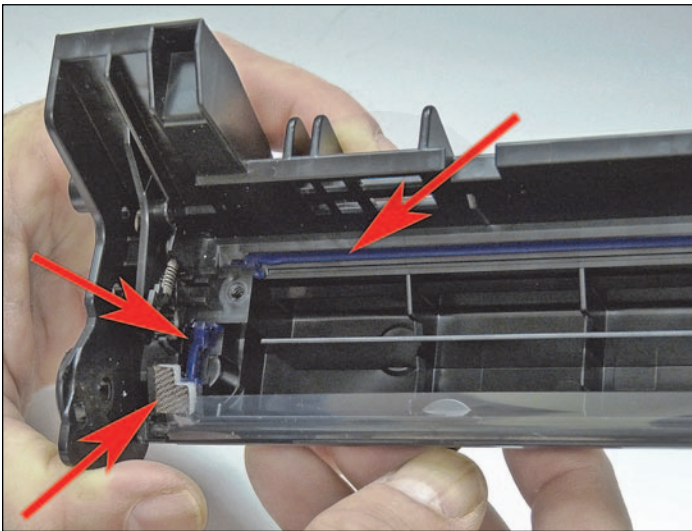
7. Remove the PCR and clean with your standard PCR cleaner.



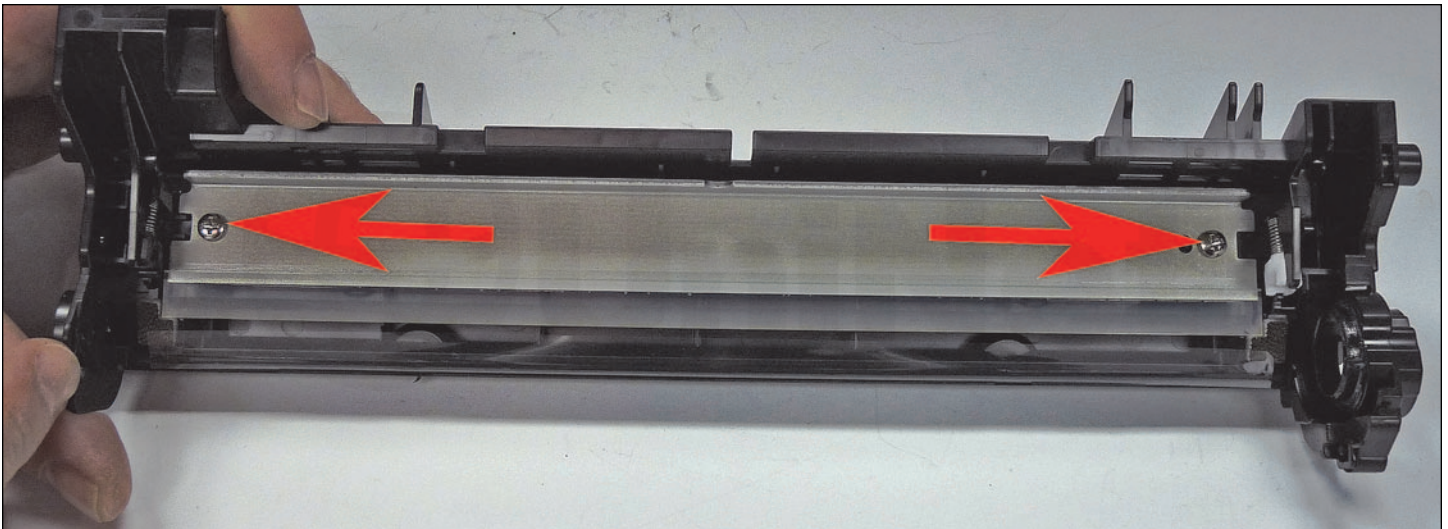
8. Remove the two screws and the wiper blade.

There is an adhesive seal that holds the blade in place.

Carefully lift it up.

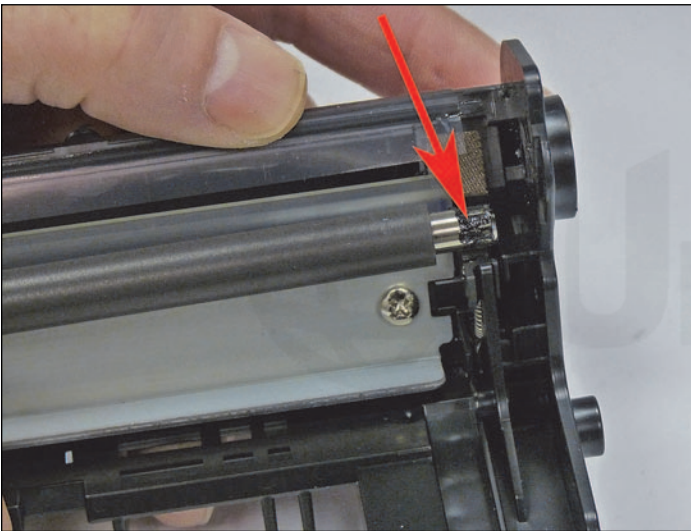


9. Clean out the waste toner, make sure the seals are clean. If toner gets on the blade seal it can be cleaned with alcohol to activate the adhesive again.

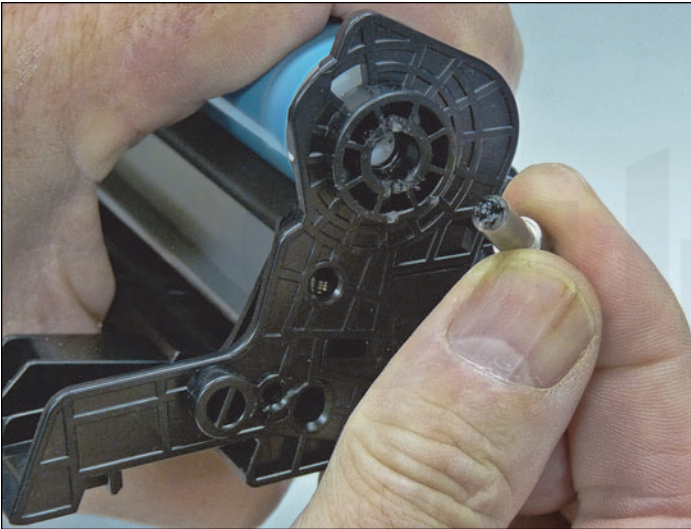


10. Coat the wiper blade with your preferred lubricant.

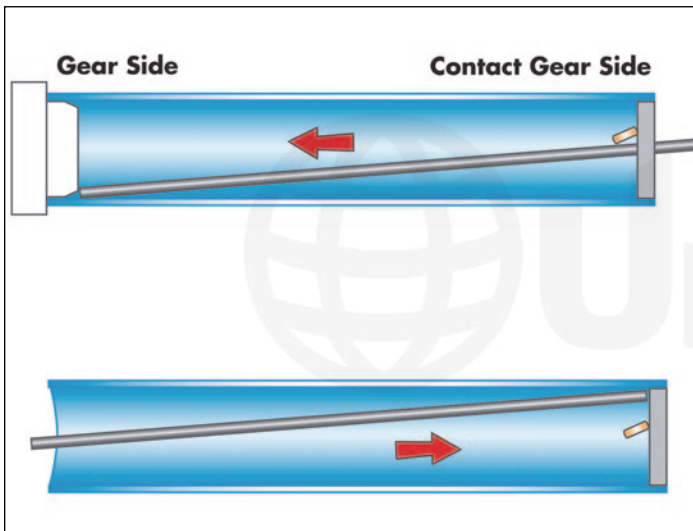
Install the blade and two screws.



11. Re-install the cleaned PCR. Note that a new OEM PCR has a small amount of conductive grease on the black (contact) side.

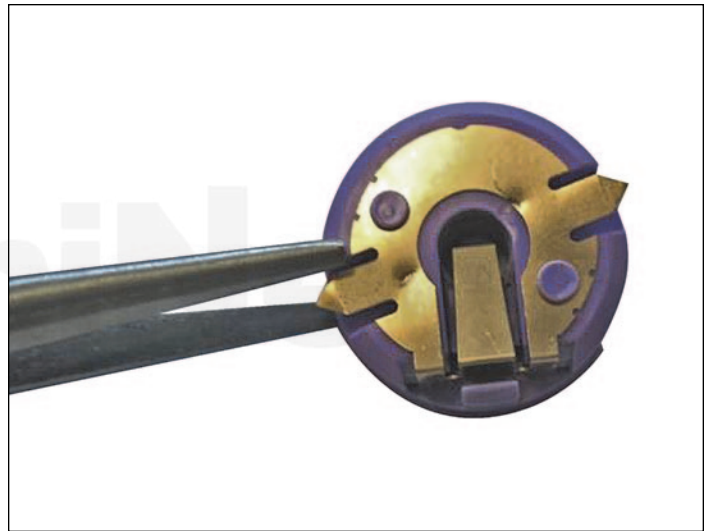


12. Re-Install the OEM OPC drum and metal axle pin. The metal axle pin should have a small amount of conductive grease on the tip. Remove the old grease and replace before inserting the pin. Make sure the axle pin is fully inserted.



If you are replacing the OEM drum, follow this procedure to remove the gears and install them on the new drum.

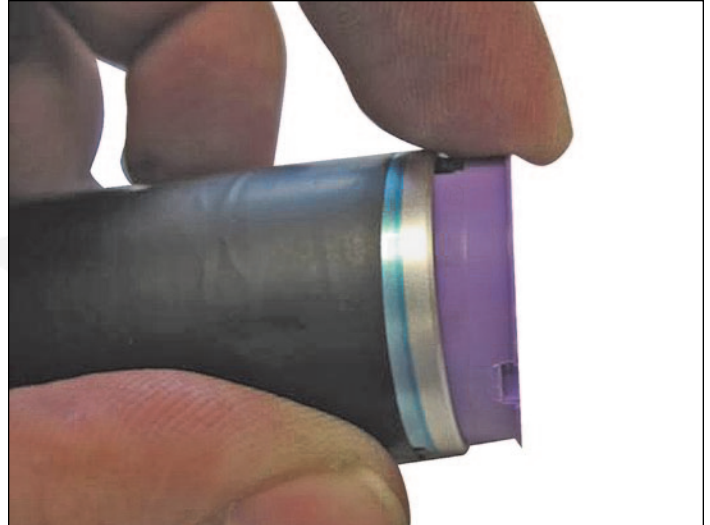
13. Slide a 1/16" metal rod about 18" long along the drum wall until it meets the sidewall of the dongle gear. Lightly tap the rod a few times with a hammer, rotate the drum, do the same until it comes loose. Normally it will take three to four taps for the gear to come loose. Do the same for the contact side taking care not to place the rod anywhere near the copper contacts that bite into the drum.



14. Straighten out the contacts on the contact gear.



15. Lightly sand the inside of the new drum where you will be installing the contact gear. This will help ensure good electrical contact.



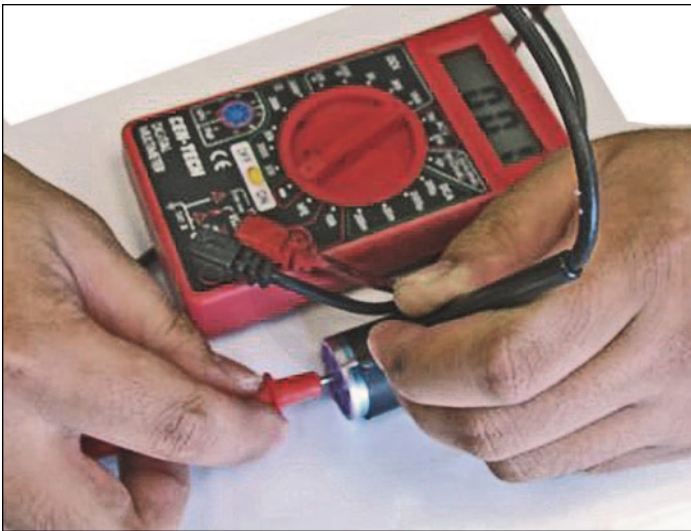
16. Apply a few drops of super glue around the inside of the new drum about 1/8" in from the edge. Make sure you leave space with no glue present for the contacts to touch the metal drum wall. These contacts must be metal to metal with no glue in between them. If any glue is in between the contacts and drum wall, there will be drum ground issues (solid black pages). Install the contact gear.



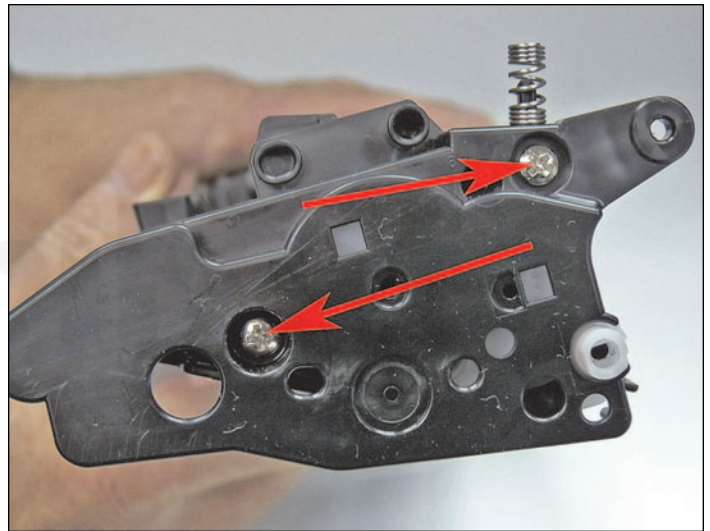
17. On the opposite side, place a few drops of medium or thick super glue on the inside wall of the drum about 1/8" in from the edge. This will prevent the glue from overflowing into the drum coating when the drive gear is installed.



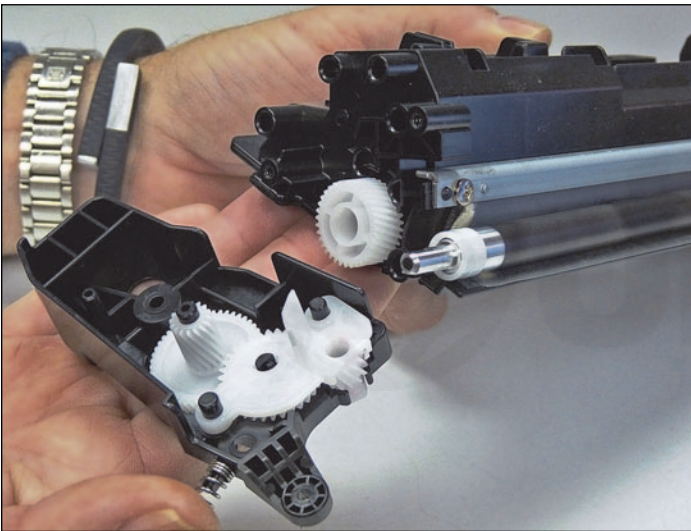
18. Install the drive gear. Place the drum onto a flat surface and gently tap the gear with a rubber mallet until the gears sit flush. Do not hit the dongle gear!



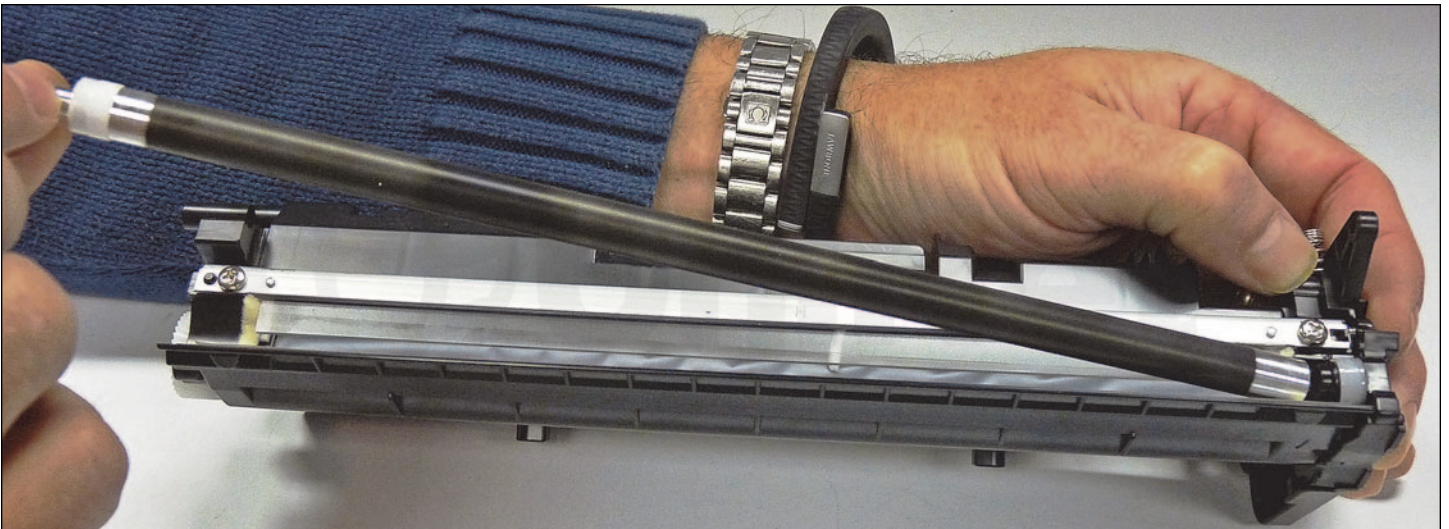
19. Check the drum ground with an ohmmeter. Place the probes into the drum contact and drum (very edge on the drum where there is no coating), and check for continuity. Be very careful to keep the one lead on the edge of the drum. The top metal part has a clear protective coating on it and is easily scratched. Do not press in hard or the lead will slide across the drum ruining it. Allow the glue to dry for about a couple of minutes and the drum should be ready to use.



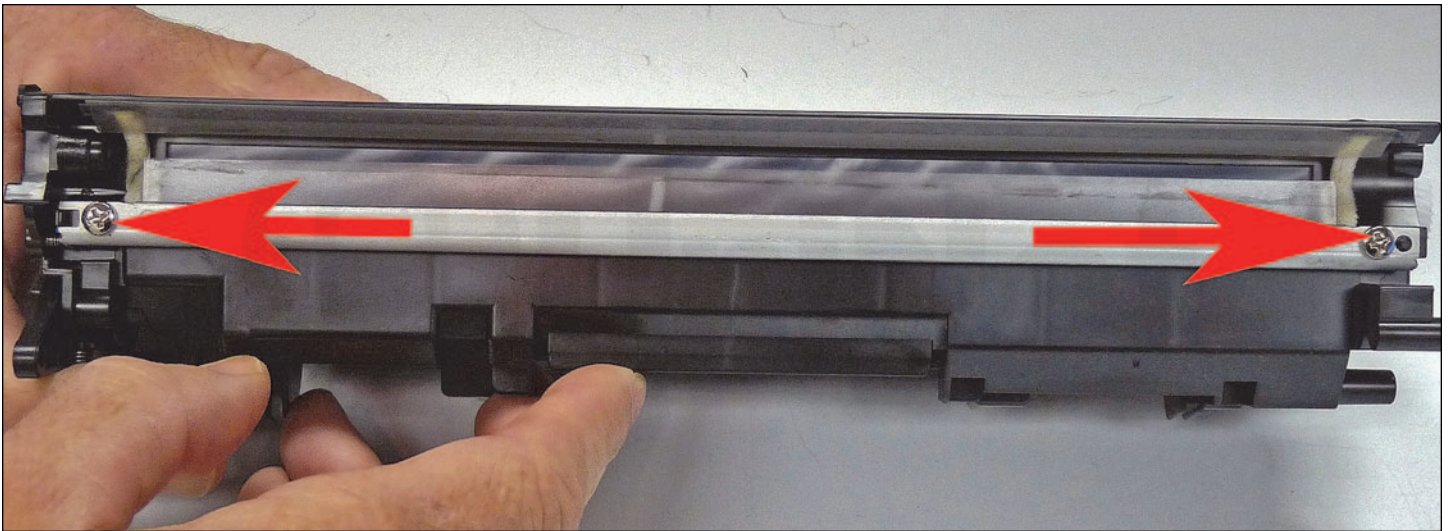
20. On the supply chamber, remove the two screws from the end cap on the gear side of the cartridge.



21. Remove the end cap.



22. Remove the magnetic roller assembly.

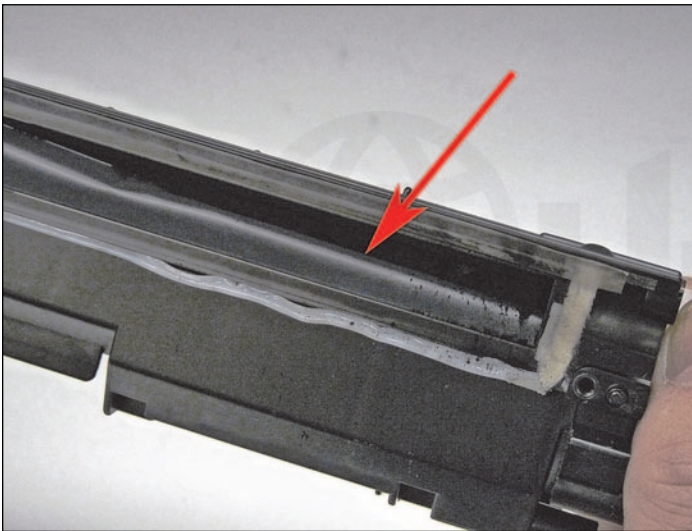


23. Remove the doctor blade and two screws.

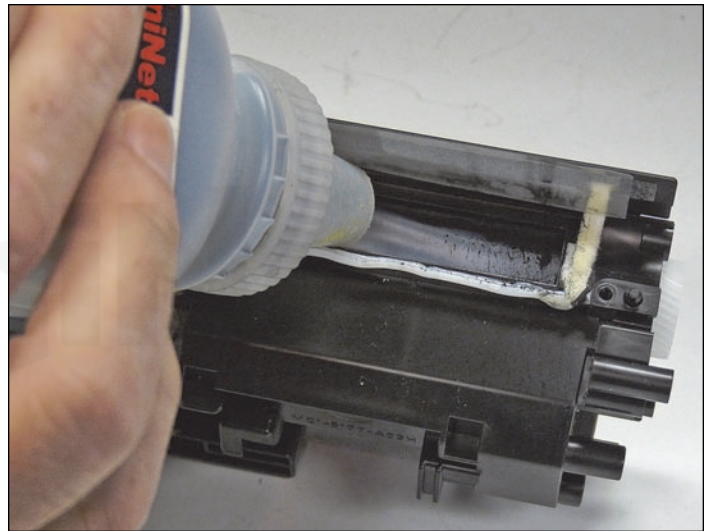


24. Clean out any remaining toner from the hopper. Note the doctor blade seal. It is a sticky substance that can be clean with alcohol if toner gets on it. If this seal becomes damaged, replace it with 100% silicon caulk.

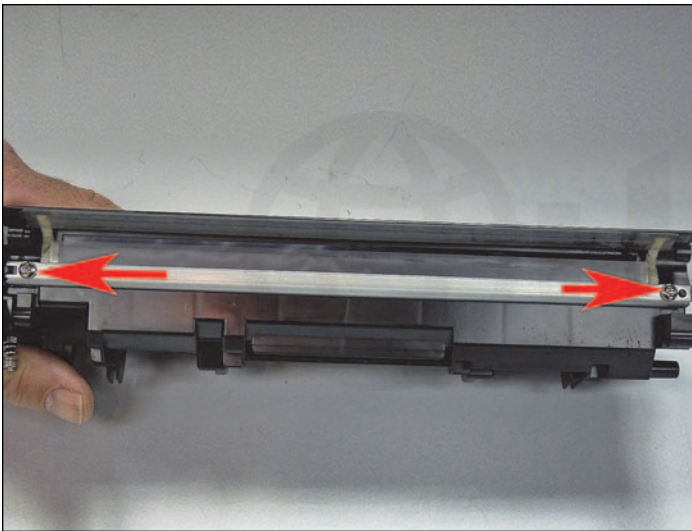
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25. Remove the remnants of the old seal. These cartridges use a self-removing seal system. This picture shows a new cartridge with the seal starting to remove, from right to left. At this time no new seals are available.



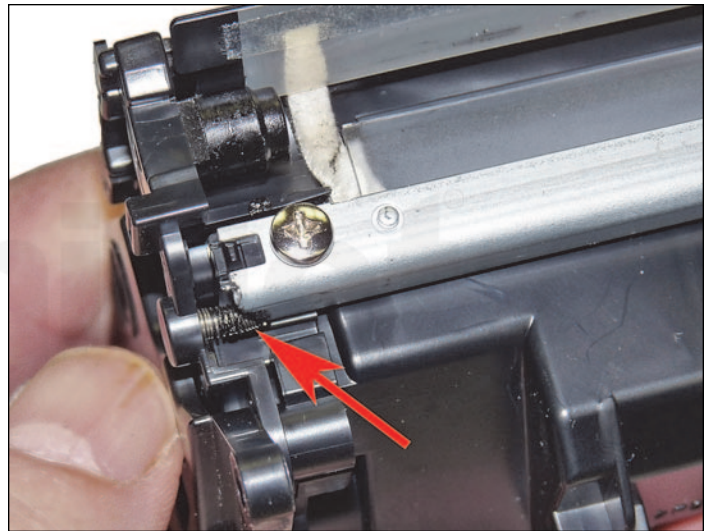
26. Fill through the magnetic roller opening with the appropriate amount of toner for use in the HP CF226A or X series toner cartridges. There is not a fill plug in these cartridges.



27. Re-install the doctor blade and two screws.

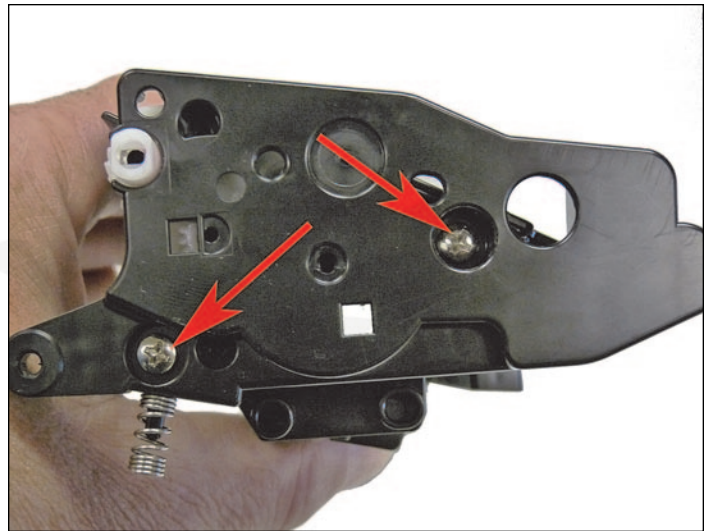
Make sure the contact sprint is touching the blade!

This is a new type of contact for HP to use on this blade.

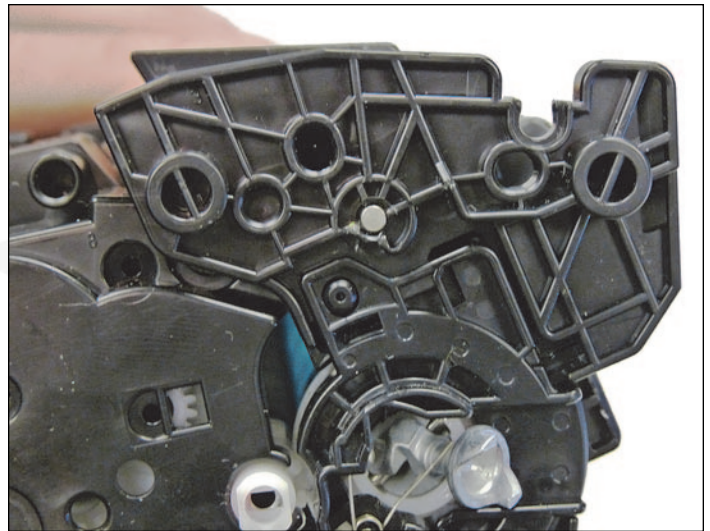
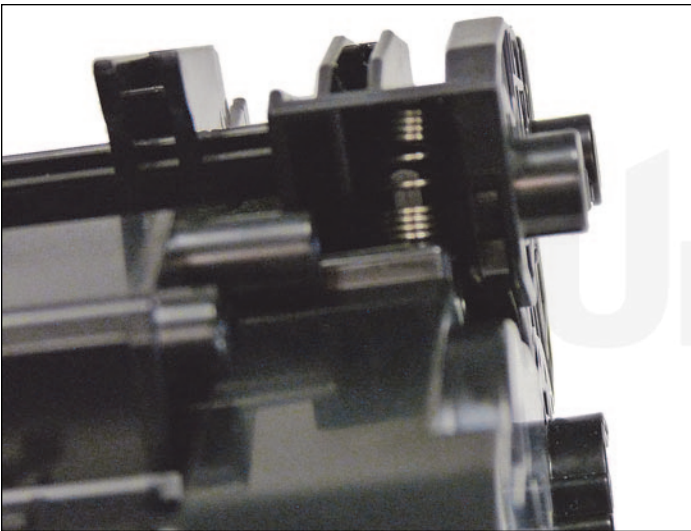




28. Install the magnetic roller. Turn the roller until the keyed end fits into the keyed slot in the end cap. This can be tricky to do until you get the hang of it. The keyed magnet is shown extended from the sleeve. The proper orientation for the keyed side is facing down.

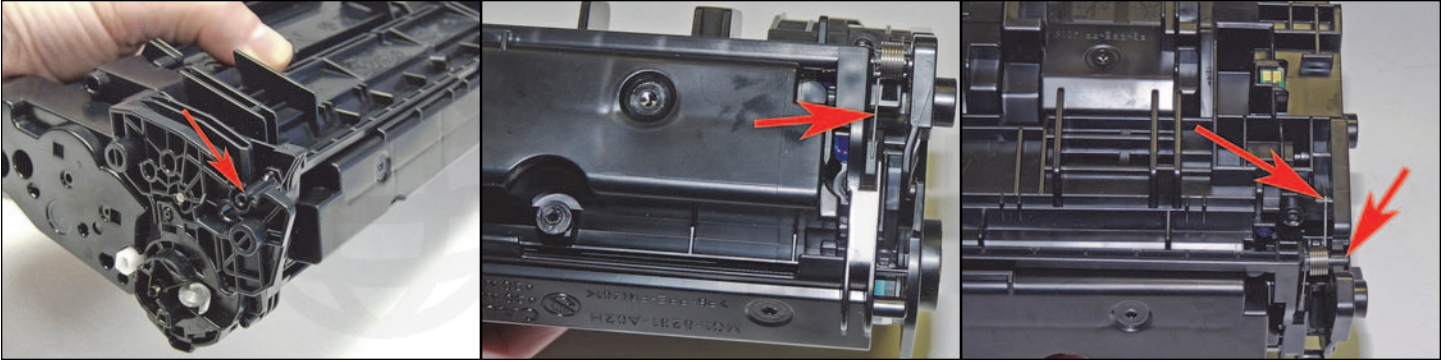


29. Install the end cap and two screws.

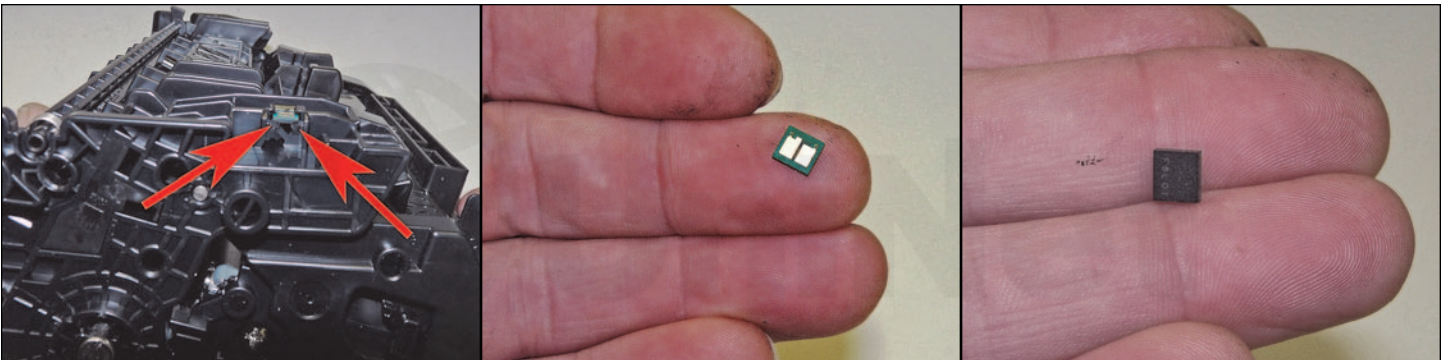


30. Place the two halves together, make sure that the two springs are aligned, and insert the two pins.

Make sure that the pins are slightly pushed in so that they do not interfere with installing the cartridge in the printer.



31. Install the drum cover; make sure the spring is situated correctly, and the slot on the cover fits into the tab on the cartridge.



32. Replace the chip by slicing off the top two corners of melted plastic and sliding the chip out. After replacing the chip if it seems a little loose in the slot, place a dab of hot glue on each of the corners that you sliced off. The hot glue is easily removed when recycling the cartridge again, but will firmly hold the chip in place.