



HP4200TECH

Technical Instructions	Machine Compatibility		OEM Info	Tools	1
<p>CORPORATE LOS ANGELES, USA US 1 800 394.9900 Int'l +1 818 837.8100 FAX 1 800 394.9910 Int'l +1 818 838.7047</p> <p>ATLANTA, USA US 1 877 676.4223 Int'l +1 678 919.1189 FAX 1 877 337.7976 Int'l +1 770 516.7794</p> <p>KANSAS CITY, USA US 1 913 871.1700 FAX 1 913 888.0626</p> <p>NEW YORK, USA US 1 800 431.7884 Int'l +1 631 588.7300 FAX 1 800 431.8812 Int'l +1 631 588.7333</p> <p>MIAMI, USA US 1 800 595.4297 Int'l +1 305 594.3396 FAX 1 800 522.8640 Int'l +1 305 594.3309</p> <p>TORONTO, CAN CAN 1 877 848.0818 Int'l +1 905 712.9501 FAX 1 877 772.6773 Int'l +1 905 712.9502</p> <p>MELBOURNE, AUS AUS 1 800 003. 100 Int'l +62 03 9561.8102 FAX 1 800 004.302 Int'l +62 03 9561-7751</p> <p>SYDNEY, AUS AUS 1 800 003.100 Int'l +62 02 9648.2630 FAX 1800 004.302 Int'l +62 02 9548.2635</p> <p>BUENOS AIRES, ARG ARG 0810 444.2656 Int'l +011 4583.5900 FAX +011 4584.3100</p> <p>SÃO PAULO, BRAZIL Int'l +55 11 5524.8000</p> <p>BOGOTÁ, COLOMBIA Int'l +57 1410.8842</p> <p>CALI, COLOMBIA Int'l +57 2661.1166</p> <p>MONTERREY, MEXICO Int'l +52 55 5333.9800</p> <p>JOHANNESBURG, S.A. S.A. +27 11 974.6155 FAX +27 11 974.3593</p> <p>ZHUHAI, PR CHINA Int'l +86 756 3359608 FAX +86 756 3359681</p>	<p>Q1338A Q1339A 4200 4300 4200n 4300n 4200tn 4300tn 4200dtn 4300dn 4200dtns 4300dtns 4200dtnsI 4300dtnsI</p>	<p>HP4200 Part Number: Q1338A OEM Gram Load: 690 grams Yield @ 5%: 12,000 pgs Pages/Min.: 35 Resolution: 300/600/1200dpi</p>	<p>HP4300 Part Number: Q1339A OEM Gram Load: 1025 grams Yield @ 5%: 18,000 pgs Pages/Min.: 45 Resolution: 300/600/1200dpi</p>	<p>Phillips Screwdriver, Diagonal Cutters, Dremel Tool with cutting bit, Small flat blade Screwdriver, Needle-nose Pliers, HP4200PINGUIDE2, 3/32 inch drill bit</p> <p>Supplies Required: Padding Powder, Soft Lint Free Cloth, Swabs, Toner, Drum, Doctor Blade, Wiper Blade, Expanding Foam, HP4200PIN, High Temperature Grease (Dow Corning 44® recommended)</p>	

Photo 1

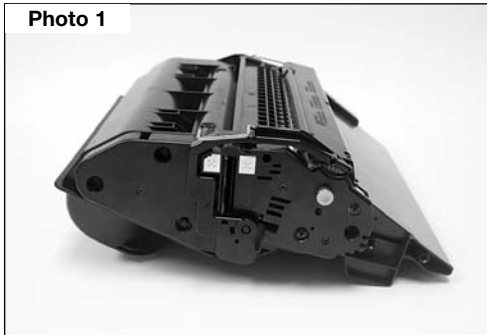


Photo 2

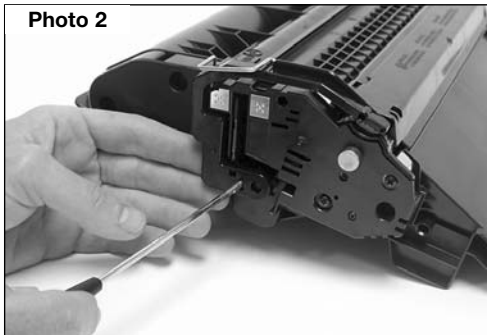


Photo 3



Step 1

Place the cartridge on the workbench with the drum up and the drum shutter arm towards you. (See Photo 1)

Step 2

Using a small flat blade screwdriver release the clip that holds the drum shutter arm to the cartridge. (See Photo 2)

Step 3

Pull the shutter arm from the drum shutter and slide the shutter arm from its positioning post. (See Photo 3 and Photo 4)

NOTE: Do not lose the tension spring that fits inside the drum shutter arm. Place the tension spring back into the shutter arm as shown in photo 5.

Photo 4

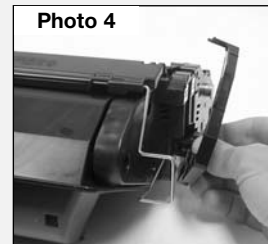
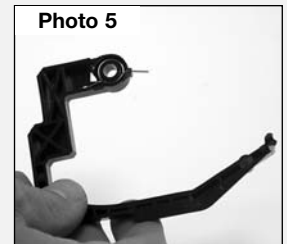
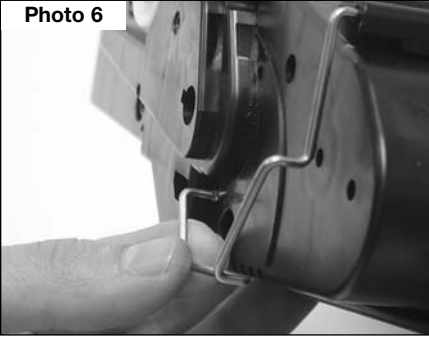


Photo 5

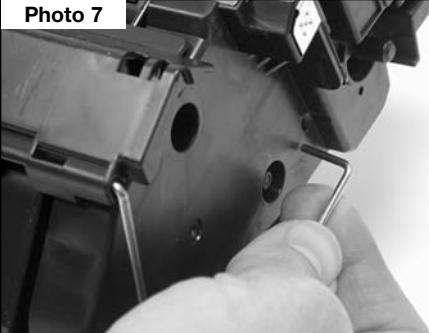
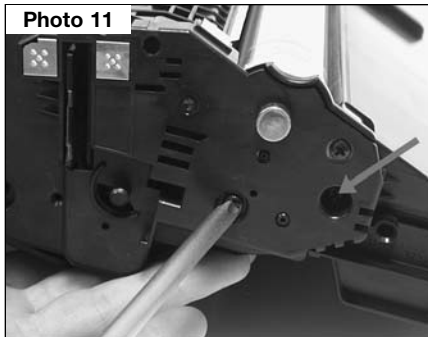


Step 4

Open the drum shutter, exposing the drum. The drum shutter bar is keyed on the non-contact side of the cartridge. Slide the shutter bar back until the bar can be removed from the cartridge end cap. (See *Photo 6*)

Photo 6**Step 5**

Pull the drum shutter bar from the cartridge contact end cap. (See *Photo 7*) Set the drum shutter aside.

Photo 7**Photo 8****Photo 9****Photo 10****Photo 11****Photo 12****Step 6**

Place the Side Plate Drill Guide onto the bottom of the toner hopper. The Side Plate Drill Guide has three alignment pins. (See *Photo 8*) The large alignment pin fits into the square notch on the bottom of the contact end cap, the smaller alignment pin located next to the large pin fits just over the first supporting rib next to the end cap. The last alignment pin will fit over the fourth supporting rib. (See *Photo 9*)

Step 7

Using the provided .136 (#29) drill bit, drill a hole through the contact end cap. (See *Photo 10*)

Step 8

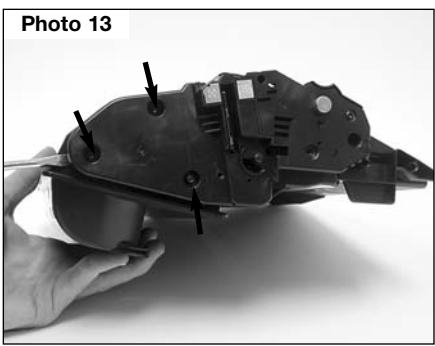
Remove the Drill Guide.

Step 9

Remove the 2 screws holding the cartridge contact end cap to the cartridge. (See *Photo 11*)

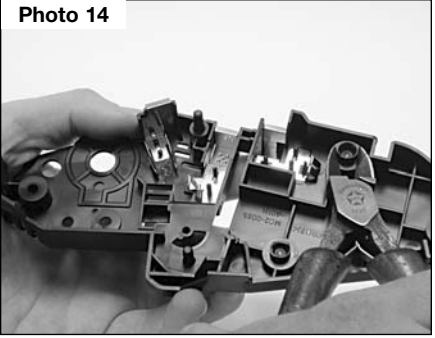
Step 10

Place a small flat blade screwdriver at the base of the three plastic welds that hold the end cap to the toner hopper. Pry up on the screwdriver to break the welds. (See *Photo 12*)



Step 11
Insert a flat blade screwdriver between the toner hopper and the contact end cap, next to the plastic welds that hold the end cap to the toner hopper. Carefully pry the end cap away from the toner hopper. (See Photo 13) Remove the end cap.

Step 16
Lift the drum by the small gear and pull the drum from the bearing hub. (See Photo 18)



Step 12
Using diagonal cutters cut the 3 plastic welds flush with the contact end cap. (See Photo 14)

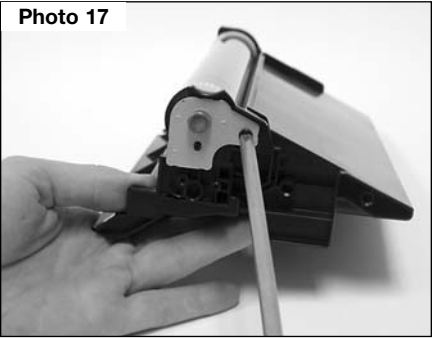


Step 13
Rotate the cartridge 180°. Remove the 4 screws holding the gear housing end cap. (See Photo 15)

Notes



Step 14
While holding the opposite end of the cartridge, remove the gear assembly end cap from the cartridge. (See Photo 16) Separate the two sections and set the toner hopper aside.



Step 15
Remove the screw holding the drum axle. (See Photo 17) Remove the axle.

Notes

Photo 19

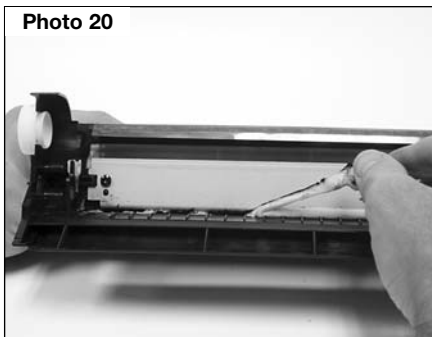


Step 17

Remove the PCR from the PCR saddles. (See Photo 19)

NOTE: If you are going to reuse the PCR clean the roller using a lint free cloth and DI water.

Photo 20



Step 18

In order to remove the wiper blade, pull the OEM sealing foam material away from the wiper blade. (See Photo 20)

NOTE: The OEM sealing foam material is sticky and is not easily removed.

Photo 21

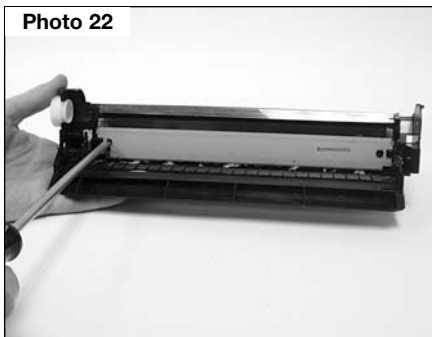


Step 19

NOTE: This step is only for the HP4300. Using a Dremel with a cutting bit cut away the retaining wall that prevents the wiper blade from being removed.

(See Photo 21)

Photo 22



Step 20

Remove the 2 screws holding the wiper blade. (See Photo 22) Remove the blade.

Step 21

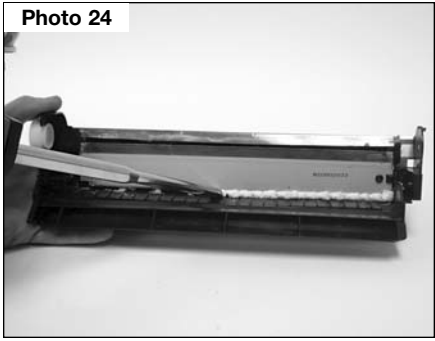
Dump the waste toner from the hopper. Clean the hopper using dry compressed air or a vacuum.

Photo 23



Step 22

Apply padding powder to the new wiper blade and place the blade onto the waste hopper. Install the 2 screws that hold the blade in place. (See Photo 23)



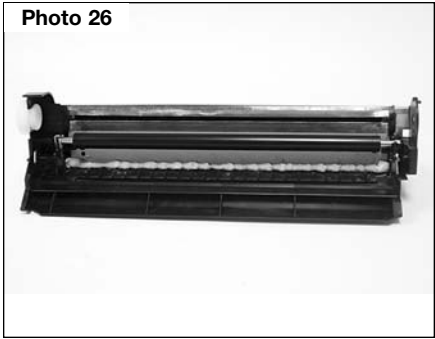
Step 23

To seal the area around the wiper blade use an expanding foam with an adjustable bead. Apply the foam along the edge of the blade and in the square holes on the ends. (See Photo 24)



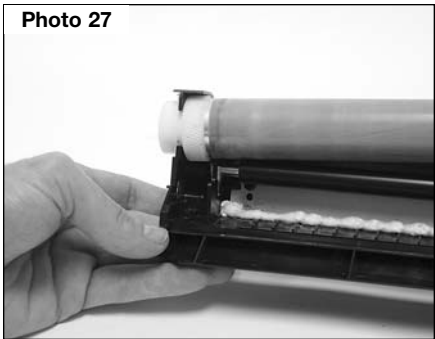
Step 24

Clean the PCR saddles using a swab and alcohol. (See Photo 25)



Step 25

Apply new conductive grease to the black contact saddle. Install the cleaned PCR. (See Photo 26)



Step 26

Apply high temperature grease to the bearing hub before installing the drum. Apply padding powder to the drum. Slide the drive gear into the bearing hub. (See Photo 27)



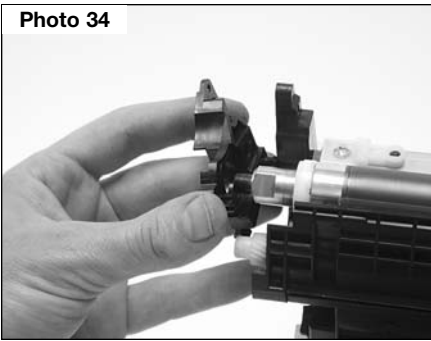
Step 27

Install the contact end plate. (See Photo 28)
NOTE: Make sure the contact plate sits flush with the end of the waste hopper.

Notes

Series of horizontal lines for taking notes.

Photo 34



Step 34

Pull the mag roller end plate from the toner hopper. (See *Photo 34*)

NOTE: Do not lose the bearing that sits inside the mag roller end plate. (See *Photo 35*)

Photo 35



Step 35

Lift the free end of the mag roller, slide the roller out of the mag roller end plate on the opposite side of the toner hopper. (See *Photo 36*)

NOTE: Do not lose the bearing that sits inside the mag roller end plate. (See *Photo 37*)

Photo 36



Photo 37



Photo 38



Step 36

Remove the mag roller bearings from the each end of the roller. (See *Photo 38*) Clean the mag roller using dry compressed air or a vacuum, then using a lint free cloth and a mag roller cleaner. Clean the mag roller bearings using alcohol and a lint free cloth.

Notes

Notes

Photo 39



Step 37

Remove the 2 screws holding the doctor blade.
(See Photo 39)

Photo 40



Step 38

Lift the plastic scrapers and mylar shims off each end of the doctor blade.
(See Photo 40)

Photo 41



Step 39

Lift the doctor blade from the toner hopper. (See Photo 41) If you plan on using the doctor blade again, clean the doctor blade using dry compressed air or a vacuum, then using a lint free cloth and alcohol.

Step 40

Dump the old toner out of the toner hopper. Using dry compressed air or a vacuum, clean out the hopper.

Step 41

Fill the toner hopper with the correct amount of toner depending on the cartridge type you are building.

Photo 42



Step 42

Place the new or cleaned doctor blade onto the toner hopper. Place the mylar shims and the plastic scrapers on each end of the doctor blade. Install the 2 screws holding the blade in place.
(See Photo 42)

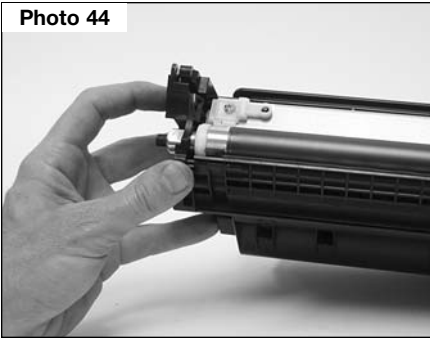
Photo 43



Step 43

Slide the black mag roller bearing onto the contact end and the white bearing onto the drive gear end of the mag roller. Slide the mag roller contact hub into the mag roller bearing plate on the toner hopper. (See Photo 43)

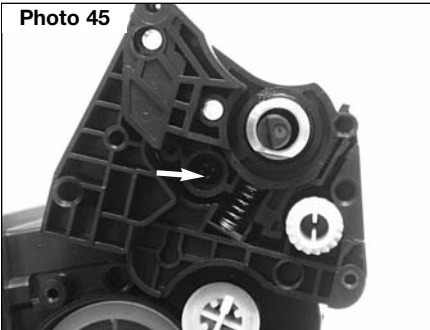
Photo 44



Step 44

Align the mag roller bearing end plate to the toner hopper and slide the end plate onto the toner hopper. (See Photo 44)

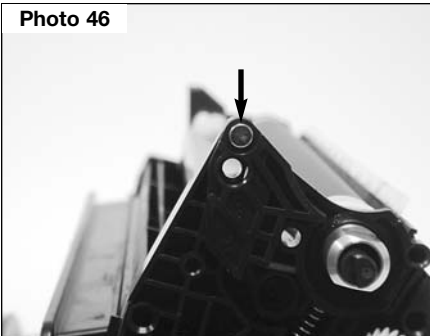
Photo 45



Step 45

Install the mag roller tension spring and the screw into the mag roller bearing end plate. (See Photo 45)

Photo 46



Step 46

Install the hinge pin into the mag roller bearing end plate. (See Photo 46)

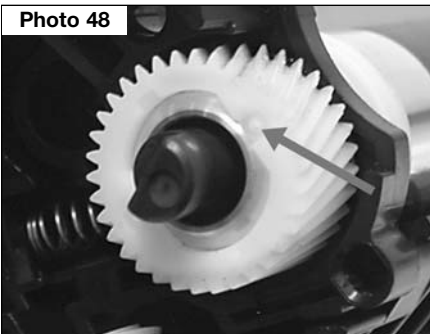
Photo 47



Step 47

Slide the mag roller drive gear onto the mag roller. (See Photo 47) **NOTE:** Make sure the two injection molding points on the mag roller drive gear face outward. (See Photo 48)

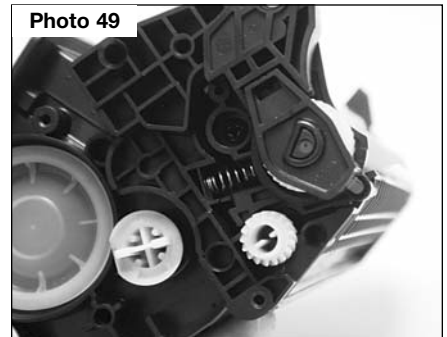
Photo 48



Step 48

Place the mag roller drive gear housing onto the end of the mag roller, making sure the keyed end of the magnet fits into the gear housing. (See Photo 49)

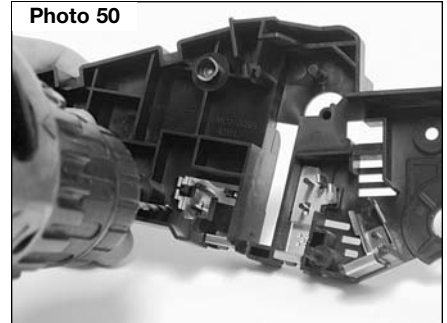
Photo 49



Step 49

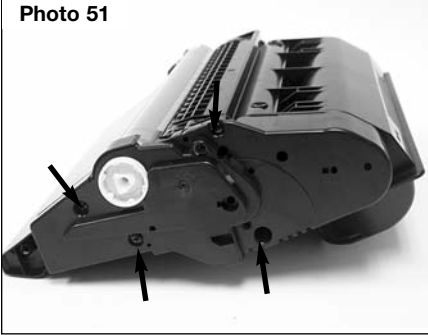
Using a 3/32-drill bit, drill a hole next to the toner sensing contact on the cartridge contact end cap as shown in photo 50.

Photo 50



Step 50

Join the toner hopper and waste hopper together. Place the cartridge gear housing end cap onto the side of the cartridge. Install the 4 screws that hold the end cap in place. (See *Photo 51*)

Photo 51

Step 51

Place the contact end cap onto the end of the cartridge. Install the 2 screws that hold the end cap in place. (See *Photo 52*)

Photo 52

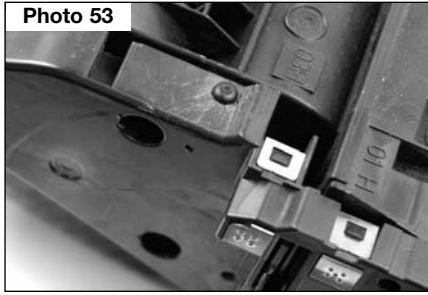
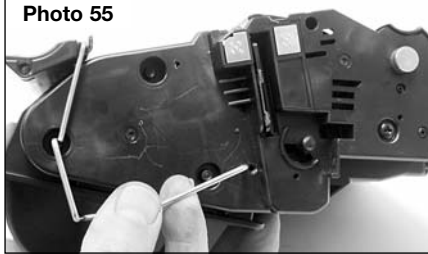
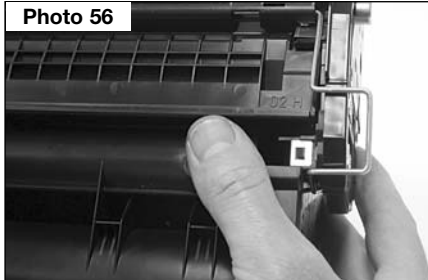
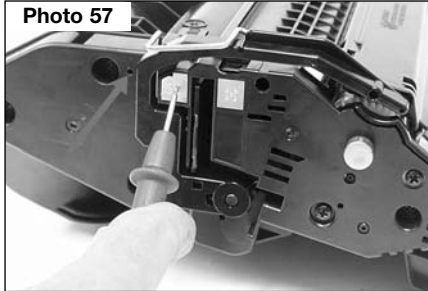
Photo 53

Photo 54

Photo 55

Photo 56

Photo 57

Photo 58

Step 52

Insert the HP4200PIN into the drilled hole in the bottom of the contact end cap. (See *Photo 53*)

Step 53

Install the keyed end of the drum shutter bar into the gear housing end cap. (See *Photo 54*)

Step 54

Install the non-keyed end of the drum shutter bar into the contact end cap. (See *Photo 55*)

Step 55

Slide the drum shutter arm onto the positioning post. Push the drum shutter arm into the drum shutter. (See *Photo 56*) Slide open the drum shutter to engage the tension spring.

Step 56

Place one probe of an Ohmmeter on the toner sensor contact and place the other probe into the hole that was drilled next to the contact. (See *Photo 57*) Locate the sensor bar that comes out from the toner hopper through the hole drilled in the end cap, making sure you have a low resistance connection. (See *Photo 58*)

NOTE: If contact is not made between the sensor bar and the contact on the end plate this will result in an error "54.1 Remove Sealing Tape" or if contact is lost during usage a premature toner low can occur.

Step 57

Test cartridge.



PRINTER MODEL COMPATIBILITY

PRINTER MODEL	OEM NUMBER
HP LaserJet 4200	Q1338A
HP LaserJet 4200 dtn	Q1338A
HP LaserJet 4200 dtns	Q1338A
HP LaserJet 4200 dtnsl	Q1338A
HP LaserJet 4200 n	Q1338A
HP LaserJet 4200 tn	Q1338A

FUTURE GRAPHICS PRODUCT LISTING

Product	Description	Item Number	Pack Qty.
Chip	Compatible Replacement	HP42/4300CHIP	10/240
Doctor Blade	Kuroki	HP4200DRBLADEK	5/50
Drum	Sinonar	HP4200SNR	5/60
Drum	AEG, DuraTek Drum Coating Technology	HP4200AEGDT	10
Drum Kit	Compatible Replacement Chip, AEG Drum, 750gm Onyx Toner, Kuroki Wiper Blade	HP4200KITA	10
Drum Kit	Compatible Replacement Chip, AEG Drum, 750gm FG Toner, Kuroki Wiper Blade	HP4200KITD	10
Drum Kit	Replacement Chip, Sinonar Drum, 750gm Onyx Toner, Kuroki Wiper Blade	HP4200KITB	10
Drum Kit	Compatible Replacement Chip, Sinonar Drum, 750gm FG Toner, Kuroki Wiper Blade	HP4200KITC	10
Drum Kit	15mm Metal	WXCLIP15MM	10
Hopper Rail Clip	New	HP4200MAG	500
Mag Roller Sleeve	Mag Roller Sleeve with Hub and Contact	HP4200MAGONYXK	10
Mag Roller Kit	Cartridge Assembly Pin	HP4200PIN	10
Pin	Adhesive Gold Seal	HP4200GOLDSEAL	100
Seal	Adhesive, Aluminim, OEM Style	HP4200SEALONYX	50
Seal	For Use with OEM or Onyx Aluminum Seal, 10"	HP4200RAILFOAM2	50
Seal	Expanding Foam, Foam Applicator/Dispenser, and Cleaner	EXPANDFOAMKIT	100
Seal Channel Rail Foam	Cartridge Remanufacturing Instructions	HP4200TECH	100
Sealant	750 GM Bottle	HP4200TNR750	1 kit
Technical Guide	Onyx, 750gm Bottle	HP4200ONYX750	1
Toner	Bulk Bag, 22 lb Per-Fil - Box of 1, ONYX, Sold per box	HP4200ONYX10KG	10
Toner	Bulk Bag, 22 lb Per-Fil - Box of 1, Sold per box	HP4200TNR10KG	10
Toner	HP4200 - 650gm Bottle, Onyx Toner	HP4200MICR6500	1
Toner	Bulk Bag, 22 lb Per-Fil - Box of 1, Sold per box	HP4200MICR10KG	1
Toner	Kuroki	HP4200WBLADEK	1
Toner			10
Toner			1
Wiper Blade			10/200



Hewlett Packard's LaserJet 4200 and the LaserJet 4300 series of printers were first released in November 2002. They were designed to replace the now discontinued HP4100 printer. Based on a new print engine, the 4200 and 4300 have increased print speeds of 35 ppm for the 4200 and 45 ppm for the 4300 with an improved first page out time of less than 9 seconds. At a starting cost of about \$1,000 for the base model 4200 and \$1,399 for the base model 4300, these new printers are priced at the same cost as the HP4100.

Differences in the molding of cartridges prevent them from being interchangeable. One notable difference is in the design of the toner hopper. The toner hopper on the HP4300 is larger and holds 1050 grams of toner for an estimated yield of 18,000 pages @ 5% coverage. The smaller toner hopper on the HP4200 holds only 690 grams of toner and yields 12,000 pages @ 5% coverage. Another notable difference is in the



waste section. The waste hopper of the HP4300 is larger to hold the extra waste produced by the higher fill weight. The HP4200 waste hopper also has a fin sticking up on the left side of the hopper that prevents the cartridge from fitting into the HP4300 printer.

Because the 4200 and the 4300 use the same engine, the components that make up the cartridges are the same. The cartridge chips located on the top right side of the waste hopper however, are in fact different. A slight difference in programming prevents one chip from being used on both cartridges, so it's important to use the correct chip when remanufacturing the cartridge. Though the chip is physically different than that of the HP4100, the information the chip stores is almost the same. A few additional items like First Installed Date and Last Date Used are now stored in the chips. This information is displayed at the bottom of the

Supplies Status Page. Like the HP4100, the 4200 and 4300 can be run with a spent chip or with no chip installed at all.

Our testing shows that the chip can be run again in the printer it was used in originally. Running the used chip causes a "Replace Cartridge" message and the loss of the toner low warning. Usage of the chip in a machine other than the one it was previously run in will result in a "Non HP Cartridge Detected" message and the loss of all the information on the Supplies Status Page.

Running the cartridge without the chip will result in a "10.10.00 Supplies Memory Error" when the cartridge is first installed. After pressing the Select button a "Non HP Cartridge Detected" message will appear before the machine goes to ready. All the information stored in the chip will not be available and a "Warning" message is all you will find on the Supplies Status Page.



HP4300 (Q1339A)



HP4200 (Q1338A)