HP2300 TECHNICAL INSTRUCTIONS

Soft Lint Free Cloth



Tools

Needle-nose Pliers

Technical Instructions

GRAPHICS

Supplies

Anhydrous Isopropyl Alcohol

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Website:







Photo 7





Photo 8





Step 4

With your left hand press the waste hopper and toner hopper together, while lifting the small gear end of the drum out from the cartridge. (See Photos 5)

Step 5

Using needle nose pliers, grasp the PCR by the metal shaft and remove. (See Photos 6)

NOTE: Clean the PCR using a mild soap and water.

Step 6

Locate the cartridge pins on each side of the cartridge next to the metal stamping of the wiper blade. Using a screwdriver press the in towards the outside of the cartridge. (See Photo 7 and 8).

Step 7

Using diagonal cutters remove the cartridge pins from the both sides of the cartridge. (See Photo 9 and 10).

Step 8

Separate the two sections of the cartridge

Step 9

Using a Phillips screwdriver remove the two screws holding the wiper blade to the waste hopper (*See Photo 11*). Remove the wiper blade.

Step 10

Dump the waste toner from the hopper. Using a vacuum or dry compressed air, clean the waste hopper.

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Step 11

Apply padding powder to the wiper blade. Place the wiper blade onto the waste hopper. Install the two screws that hold the wiper blade in place. (See Photo 12)

FUTURE GRAPHICS

Step 17

Photo 17

Pull the gear housing end cap from the end of toner hopper. (See Photo 17)



Photo 14

Step 12

Clean the PCR saddles using a swab and alcohol, and apply new conductive grease to the black conductive saddle. Install the cleaned PCR. (See Photo 13)

Step 13

Apply padding powder to the drum. Install the drive gear side of the drum into the bearing hub. Slide the drum axle pin into the small gear side of the drum. (See Photo 14)

Step 18

Carefully rotate the cartridge 180°, remove the two Phillip screws from the contact mag roller contact end cap. (See Photo 18)







Step 14

Set the waste hopper section of the cartridge aside and cover.

Step 15

Remove the drum shutter bar from each side of the toner hopper and remove the shutter. (See Photo 15)

Step 16

Using a Phillips screwdriver, remove the two screws that hold the toner hopper gear housing end cap to the hopper. (See Photo 16)



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Step 19

Using a small flat blade screwdriver press down on the locking clip that holds the contact end cap to the toner hopper (*See Photo 19*). Remove the end cap. NOTE: Do not lose the white bearing that sits inside the contact end cap. (*See Photo 20*)









Photo 24



Photo 25

HP 2300 Technical Instructions

Step 20

Lift the mag roller out from the toner hopper. Remove the black drive gear, the stabilizing bar and the mag roller bushings from the ends of the mag roller (*See Photo 21*). Using dry compressed air or a vacuum, clean the toner off the mag roller. Clean the roller using a lint-free cloth and a mag roller cleaner. The mag roller bushings should be cleaned using a lint-free cloth and alcohol.

NOTE: Do not lose the C-bearing that sits inside the stabilizing bar. Using a vacuum or dry compressed air, clean the mag roller.

Step 21

Remove the two screws holding the doctor blade to the toner hopper (*See Photo* 22). **NOTE:** The two screws used to hold the doctor blade are longer than the normal cartridge screws. Make sure the correct screws are used when reassembling the toner hopper.

Step 22

Remove both mag roller scrapers from each end of the mag roller. (See Photo 23)

Step 23

Lift out the doctor blade (*See Photo 24*). Clean the doctor blade first using compressed air or a vacuum, then using a lint free cloth and alcohol

Step 24

Remove the mylar spacers that sit behind the doctor blade on each end of the toner hopper. (See Photo 25)

Step 25

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

Step 26

Fill the toner hopper using the correct gram fill.

Step 27

Install the two mylar shims that sit under the doctor blade.

Step 28

Place the doctor blade onto the toner hopper.









Step 29

Set the mag roller scrapers onto each end of the doctor blade and install the two large screws that hold the doctor blade in place. (See Photo 26)

Step 30

Slide the black mag roller bushing onto the contact side of the mag roller, and the green bushing onto the drive gear side of the roller. Install the stabilizing bar onto the mag roller with the C-bear facing towards the mag roller bushing. The mag roller drive gear will fit onto the mag roller either way, however the flat side of the drive gear needs to face the mag roller-stabilizing bar and the side of the gear that has the dimples faces outward. (See Photo 27)

Step 31

Place the mag roller into the toner hopper. (See Photo 28)

Step 32

Press the mag roller contact end cap onto the toner hopper. Install the two screws that hold the end cap. (See Photo 29)



Step 33

Slide the gear housing end cap onto the toner hopper. Install the two screws that hold the end cap to the hopper. (See Photo 30)



Step 34

Install the drum shutter bar into the slots on each end of the toner hopper. (See Photo 31)





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ENGINE COMPATIBILITY:

2300/ 2300n/ 2300d/ 2300dn/ 2300dtn: 25 ppm, Duty Cycle 50,000 pages **2300L:** 20 ppm, Duty Cycle 30,000 pages

Released in March 2003, the HP2300 series of printers are the first new HP laser printers to hit the market this year. Designed around an improved version of the HP2200 engine, the performance of the HP2300 rivals that of the HP4100 more than it does the HP2200. The HP2300 features 1200 x 1200 dpi resolution, has a print speed of 25 pages per minute (except the HP2300L, which can only print 20ppm) and can deliver the first page in just 10 seconds. At an estimated starting price of \$600 for the base model HP2300L, which is lower than the price of the HP2200 and \$700 for the HP2300, which is about \$300 less then the HP4100.

Like the machine the toner cartridge looks very similar to the HP2200, the most notable changes being the design of the toner hopper and the green chip that is on the top left side of the waste hopper. The same style chips as found on the HP4200 and HP4300, are used to store information such as the cartridge serial number, the cartridge manufacturing date, the number of pages printed using that cartridge, as well as "toner low" and "toner out" status. All this information can be viewed by running a Printer Supplies Status Page. The HP2300 will run with a used or "spent" chip, or with no chip at all, however steps must be taken and messages must be overlooked to run the cartridge.

Without a chip the machine will display a "10.10.00 Supplies Memory Error". To use the cartridge without the chip the green button with the check on it must be pressed. The machine will then display "Non HP Cartridge Detected" before going to ready. There are two other disadvantage to using the cartridge without the chip. The first is that the machine will never display toner low (the cartridge will continue to run until it is stopped by the user). The second problem is with the Supplies Status Page. All the information that is normally displayed, estimated pages remaining, toner low reached, toner out reached, etc., are replaced by a warning. " A non Hewlett-Packard supply had been detected. Certain features (such as remaining toner value data) may not be available as a result of using this non Hewlett-Packard supply".

The use of a cartridge with a used or "spent" chip has disadvantages as well. The first being that the display will continually flash "Replace Cartridge". The biggest problem being the information on the supply status page will be incorrect. The toner gauge will read 0% or 1%, the estimated pages remaining will always read 0, and the toner low and toner out message will always read reached. The only information that may be useful will be the pages printed with this supply, however it will continue adding to the previous total, having not been reset.

The cartridge itself (Q2610A) holds approximately 360 grams of toner and yields an estimated 6,000 pages @ 5% coverage, that is 1,000 pages more than the HP2200. The estimated street price of this cartridge is around \$128. Since the cartridge is similar to the HP2200 some of the same components can be used, testing is underway to ensure optimal print performance.

FUTURE GRAPHICS PRODUCTS AVAILABLE:

Wiper Blade	.HP2100WBLADEK
PCR	.HP4000PCREQ
Doctor Blade Mylar Shims	.HP4100
Doctor Blade Scarpers	.HP4100
Mag Roller Contact	.EXCONTACT
Mag Roller Bushings	.HP4000BUSHIING
Toner Hopper Retaining Blade	.HP4000RBLADET
Waste Hopper Recovery Blade	.HP4000RBLADEW

Fill Plug	.HP2100FILLPLUG
Onyx Seal	.HP4100SEALONYX
Perimeter Sealing Foam	.HP4000PERIMETER
Toner Hopper Clips	.EXCLIP4MM

PRINTER MODEL COMPATIBILITY

GRAPHICS

PRINTER MODEL	OEM NUMBER
HP LaserJet 2300	Q2610A
HP LaserJet 2300dn	Q2610A
HP LaserJet 2300dn	Q2610A
HP LaserJet 2300dtn	Q2610A
HP LaserJet 2300L	Q2610A
HP LaserJet 2300n	Q2610A

FUTURE GRAPHICS PRODUCT LISTING

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Product	Description	Item Number	Pack Qty.
Drum	AEG	HP2100AEGNT	5/60
Hopper Cap	Fill Hole Plug	HP2100FILLPLUG	100
Hopper Rail Clip	4mm Metal Sure-Grip, Use 10 per cartridge	EXCLIP4MM	500
Mag Roller Bushing	Small/Short and Large/Long, Set of Two, Sold per Set	HP4000BUSHING	100
Mag Roller Contact	Two-Piece Floating Style	EXCONTACT	100
PCR	New, Soft Foam Type, Extra Quiet (Works with HP4500 Color Cartridge)	HP4000PCREQ	10
Retaining Blade	.002 x .400 x 9.63, Fits Under Mag Roller)	HP4000RBLADET	100
Seal	Metalized, Heat-Sealed to Plastic Support, Adhesive, Onyx	HP4100SEALONYX	50
Seal Perimeter Foam, Onyx	One-Piece Full Perimeter Seal Channel Foam, Adhesive, Black	HP4000PERIMETER	50
Wiper Blade	Kuroki	HP2100WBLADEK	10/200

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