



# Brother

## HL-4040CN

### TECHNICAL INSTRUCTIONS

HL4040TECH

<b>Technical Instructions</b>	<b>Printers</b>	<b>Cartridge Info</b>	<b>Tools</b>	<b>1</b>
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HL-4040CN 21 PPM  
HL-4070CDW 21 PPM  
MFC-9440CN 21PPM  
MFC-98CDW 21PPM  
DPC-9040 21PPM  
DCP-9045CDN 21PPM

**TN-110BK** 2500 pages at 5% cover  
**TN-110C** 1500 pages at 5% cover  
**TN-110M** 1500 pages at 5% cover  
**TN-110Y** 1500 pages at 5% cover  
  
**TN-115BK** 5000 pages at 5% cover  
**TN-115C** 4000 pages at 5% cover  
**TN-115M** 4000 pages at 5% cover  
**TN-115Y** 4000 pages at 5% cover

Phillips screwdriver  
Small flat blade screwdriver  
Needle nose pliers

Pliers  
**Supplies Required:**  
Toner  
BR1240FILLCAP



**Step 1**  
Set the hopper on a work bench with the toner hopper handle facing towards you. Take a flat blade screwdriver and remove the handle hinges that hold the toner hopper handle onto the toner hopper (See photos 1 & 2).



**Step 2**  
Using a Phillips screwdriver, remove the two screws that hold the gear housing end cap to the toner hopper (See photo 3).

**Step 3**

Holding the toner hopper so the top is facing you, use a flat blade screwdriver to release the gear end cap tab that holds the end cap to the side of the hopper (See photo 4). Remove gear end cap (See photo 5).

PHOTO 4

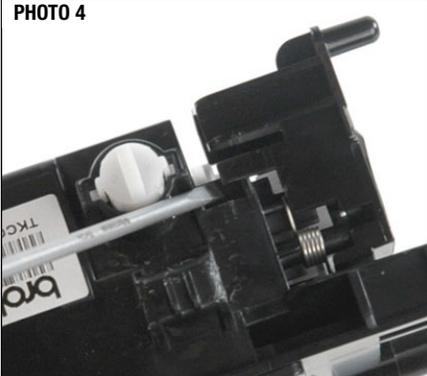


PHOTO 5



PHOTO 6

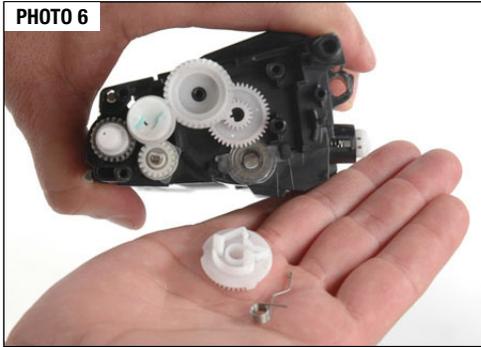


PHOTO 7



PHOTO 8



PHOTO 9



PHOTO 10

**Step 4**

Remove the reset spring, gears and the developer roller support hub from the side of the toner hopper (See photo 6).

**Step 5**

Using a flat blade screwdriver, remove the "E" clip from the developer roller drive gear shaft (See photo 7).

**Step 6**

Remove the drive gear from the end of the developer roller gear shaft (See photo 8).

**Step 7**

Insert a small flat blade screwdriver between the side wall of the toner hopper and the white bearing tab. Rotate the white bearing tab upward to unlock the developer roller from the toner hopper (See photo 9).

**Step 8**

Rotate the cartridge 180°. Using a small flat blade screwdriver, pry off the white plastic alignment hub from the non-gear side of the developer roller (See photo 10).

**NOTE: Do not lose the tension spring that sits behind the white plastic alignment hub.**

PHOTO 11



**Step 9**

Using a Phillips screwdriver, remove the screw that holds the developer roller bearing end cap (See photo 11).

PHOTO 12



**Step 10**

Using a small flat blade screwdriver, pry off the developer roller bearing end cap from the developer roller axle (See photo 12).

PHOTO 13



**Step 11**

Lift the developer roller from the toner hopper (See photo 13). Slide out the white bearing tab from the developer roller shaft (See photo 14).

PHOTO 14



PHOTO 15



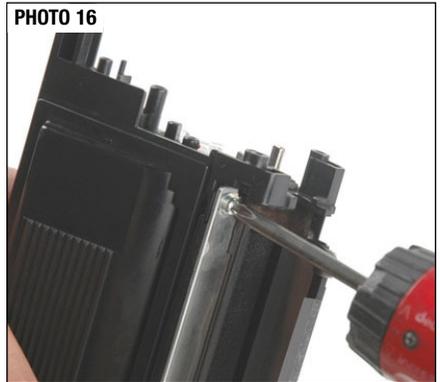
**Step 12**

Clean the developer roller using a dry, lint-free cloth and set it aside (See photo 15).

**Step 13**

Using a Phillips screwdriver, remove the two screws that hold the doctor blade onto the toner hopper (See photo 16). Remove and clean the doctor blade by using dry compressed air and then a dry lint-free cloth. Set doctor blade aside.

PHOTO 16



**Step 14**

Remove the toner fill plug with a pair of pliers (See photo 17). Dump out the toner from the toner hopper and clean it with dry compressed air or a vacuum.

**NOTE: OEM fill plugs get damage most of the time and may need to be replaced.**

PHOTO 17



**Step 15**

Set the doctor blade onto the toner hopper and install the two screws that hold the doctor blade in place (See photo 18).

**Note:** To prevent toner leaks from the sides of developer roller, the felts must be fluffy.

PHOTO 18



PHOTO 19

**Step 16**

Slide in the white bearing tab to the developer roller drive shaft (See photo 19). Place the developer onto the toner hopper and rotate the white bearing tab until it locks into its position (See photo 20).

PHOTO 20



PHOTO 21

**Step 17**

Install the developer roller bearing end cap onto the side of the toner hopper and install the Phillips screw that holds it in place (See photo 21).

PHOTO 22

**Step 18**

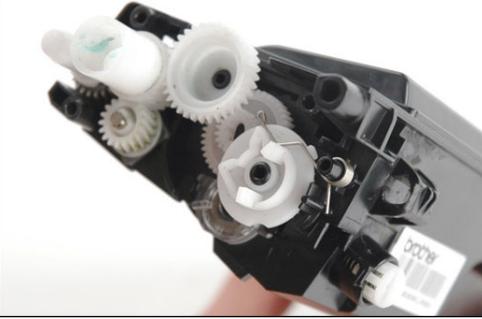
Install the tension spring and the white plastic alignment hub to the developer roller shaft (See photo 22).

PHOTO 23

**Step 19**

Install the developer roller drive gear to the driver shaft of the developer roller. Place the "E" clip onto the drive shaft of the developer roller. Use a needle-nose pliers to snap the "E" clip back into place (See photo 23).

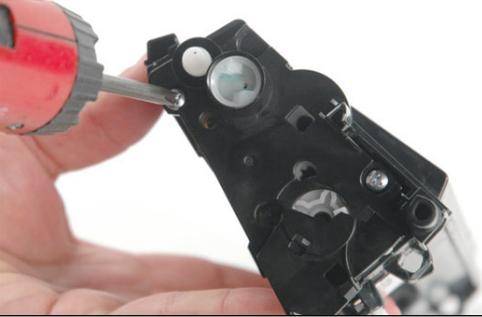
PHOTO 24



**Step 20**

Reinstall the train drive gears and the developer roller support hub. Install the 'toner out' reset gear and the tension spring. The long part of the spring attaches to the top of the reset flag and the short part to the back support post (See photo 24).

PHOTO 25



**Step 21**

Place the gear end cap onto the toner hopper and install the two Phillips screws (See photo 25).

PHOTO 26



**Step 22**

Fill the toner hopper and install a new toner fill plug (See photos 26 & 27).

PHOTO 27

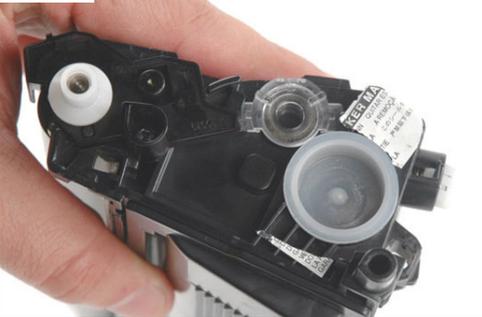


PHOTO 28



**Step 23**

Install the cartridge handle and secure the cartridge handle hinges into place (See photos 28 & 29).

PHOTO 29



**Step 24**

Install developer roller cover (See photo 30).

**NOTE:** If cartridge is post tested the reset gear must be reset after post test.

PHOTO 30





**TECHNICAL TIPS:**

Do not mix TN-110 and TN-115 end caps and gears. End caps and gears are distinctive for each model. See photos 31 for TN-110 and 32 for TN-115.



**DEFECT CHART**

OPC Drum .....5mm  
Developer Roller .....42.7mm

**COMPOTES APPROXIMATE LIFE**

Drum Unit .....17,000 pages  
Waste toner box .....20,000 pages  
Belt unit .....50, 000 pages  
Laser unit .....100,000 pages  
Paper feeding kit .....100,000 pages  
Paper feeding kit MP .....50,000 pages

