

HP 21-58 Problem Resolution

Select the topic you would like assistance with:

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[Print or Color Quality Issues](#)



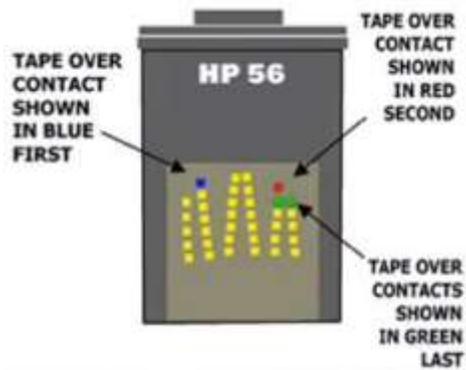
No...your cartridge is not empty since it was just refilled. A few HP printer alert messages can be overcome using the steps provided below, however in some cases, a marginally performing cartridge might be considered faulty by the printer (i.e. cartridge internal micro-electronics damage).

HP 21-22-27-28-56-57 Ink Monitor Reset Procedure

1. Tape cartridge's rear contacts to restore ink level monitoring

NOTE: This procedure applies to HP #21, #22, #27, #28, #56, & #57 ink cartridges only.

- Tape over Blue contact point (see diagram below), install into printer, allow printer to print alignment/test page. Remove tape.

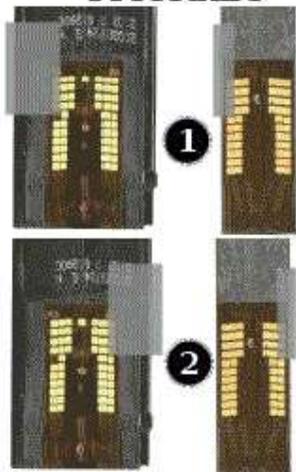


- Tape over Red contact point, install into printer, allow printer to print alignment/test page. Remove tape.
- Tape over both Green contact points, install into printer, allow printer to print alignment/test page. Remove tape.
- Printer should return to normal operation.

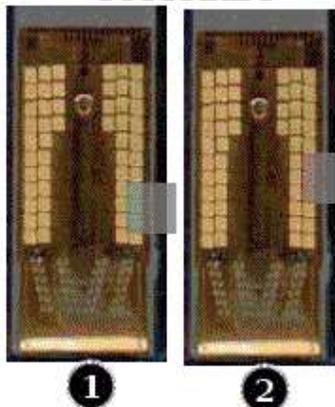
HP 15/17/23/41/45/78 Ink Level Reset Procedure

Ink level monitoring can be reset with select early generation HP ink cartridges. Two procedures are provided below.

Primary Procedure



Alternate Procedure



Resetting Ink levels in HP printers

Hewlett-Packard: 15•17•23•41•45•78

Most printers have “memory” that recalls only the last two cartridges of each color used in the printer. One method of resetting the ink level counter in your printer is to install two extra cartridges (these can be old and non-functional), one after another, and then re-install the refilled cartridge. The printer should then read the refilled cartridge ink level at 100%.

If extra cartridges are unavailable, most printers can be reset to 100% ink levels by following the procedure below:

1. Place tape over the appropriate cartridge contacts shown on line 1 (cover four contacts on the top left side of the cartridge).
2. Re-install the cartridges with the tape in place. Close the printer and wait approximately five to ten seconds.
3. Open the printer and wait for the printer carriage to present the cartridges. This may take some time, and the printer lights may flash indicating an error. This is normal.
4. Remove the cartridges and move the tape as shown on line 2 (cover four contacts on the top right side of the cartridge).
5. Repeat steps 2 - 3.
6. Remove the cartridges and remove all the tape. Be sure the contacts are clean.
7. Re-install the cartridges. Ink levels should now read 100%. If they do not, repeat the procedure, covering only the top three contacts. If ink levels still do not read 100%, repeat the procedure, covering only the top two contacts.

Alternate Procedure

If the above steps do not work for your printer, repeat the steps using tape to cover the contacts as indicated in the alternate procedure illustration at left.

Print or Color Quality Issues

1. HP Cartridge / Printer Cleaning Procedure

If intermittent cartridge error messages persist or you have poor print quality ensure the cartridge's electrical contacts are completely clean of all ink and paper fiber residues. Follow the procedure below if you have streaks or smudges in your printed output and you have already performed all three cleaning levels in the Clean Print Cartridges utility.

a. Obtain cleaning supplies:

Clean distilled, filtered, or bottled water. Tap water may contain contaminants which could damage the cartridge. Clean cotton swabs or any soft, lint-free material that will not stick to the cartridges (i.e. coffee filters). Paper towel to rest the cartridge(s) on during cleaning.

b. Remove the cartridge and place it on a piece of paper with the nozzle plate facing up. If you see any debris or ink buildup, clean the cartridge as follows:

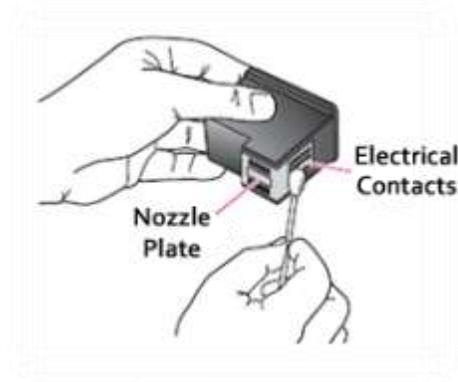
c. Lightly moisten the lint-free cleaning material with clean water. Use the swab to wipe clean the faces and edges around the nozzle plate. The area to be cleaned is cross-hatched in the picture. Replace the cleaning material if it gets dirty.

Cleaning the cartridge:

(1) – Clean in the cross-hatched area (pictured above).

(2) – Only clean the nozzle plate (#2) if saturated/covered with ink; gently blot nozzle plate area to remove residue buildup.

(3) – Only clean the copper-colored contacts (#3) if dirty (pictured below).



CAUTION: Unless dirty, do not touch either the nozzle plate or the copper-colored contacts. Touching these parts can cause clogs, ink failure, and bad electrical connections.

d. Examine both cartridges. Even if the streaks are only visible in one color (streaks in black ink are commonly caused by fibers and debris stuck to the bottom of the tri-color print cartridge). Thoroughly clean the cartridge if you see any debris or buildup.



NOTE: A pencil eraser may also be used to clean the cartridges rear electrical contacts.

- e. Allow cartridge to sit for five minutes and/or use a new swab to dry the cleaned areas before you reinsert the cartridges into the printer.

NOTE 1: Do not touch the electrical contacts/surfaces with your bare fingers as there are oils in your skin which can interfere with proper cartridge connectivity and subsequent printer operations.

NOTE 2: Do not leave the print cartridges outside the printer for longer than 30 minutes. If a cartridge is left outside of the printer for too long, the ink will dry out and the cartridge will become unusable.



- f. Gently blot the cartridge Nozzle Plate with a damp lint-free towel/wipe – a small amount of ink should be dispensed, and be visible, on the towel (all 3 colors should be present for a Tri-color cartridge).



- g. If no ink is dispersed from nozzle plate (i.e. visible on towel) or ink cartridge completely fails to print on paper after installed in printer, then more drastic cartridge and printer cleaning steps will likely need to be performed to resume printer operations.

- 1) Clean printer carriage flexible cable contacts using isopropyl alcohol (99%) on damp cloth (or cotton swab). Ensure no fibers remain on contact surfaces.

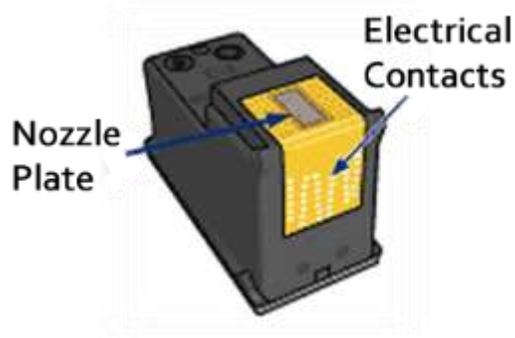


- 2) Immerse cartridge base (lower ¼ inch) in **very hot**, near boiling, distilled or de-ionized water for 2-4 minutes (**CAUTION!**).

CAUTION



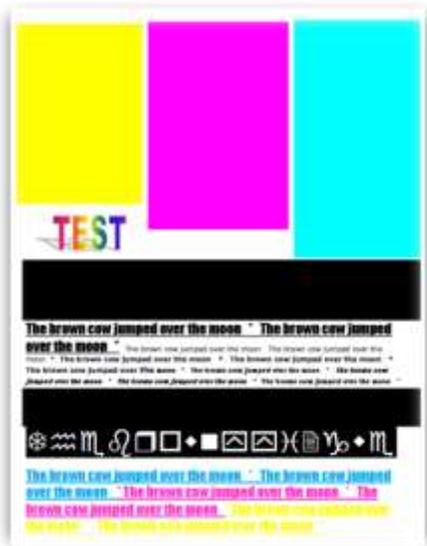
- 3) A few table spoons of Isopropyl rubbing alcohol may be added to water to help break down the dried ink within the nozzle plate. Do not leave cartridge in water more than 20 minutes.
- 4) Completely dry the ink cartridge with a lint-free towel. Ensure the electrical contacts are thoroughly clean and dry. Blot cartridge nozzle plate to check for ink flow (i.e. commonly referred to “wetted” or “flowing”).



- 5) Reinstall cartridge into the printer and retest. If the cartridge fails to print then obtain a new ink cartridge.

NOTE: If the printer/cartridge is rarely used, or old, there is the possibility the internal foam has hardened (dried) to a point where the ink will not absorb properly into the foam and flow down to the nozzle plate (often cartridges may experience severe ink pooling or leaking at the bottom when this occurs). If this is the case then the cartridge will need to be replaced.

- h. Print a test print from either the printer’s control panel (i.e. Self-Test Report) or from the www.Inkjet411.com website (> **Test Prints**) to verify all colors are firing properly.



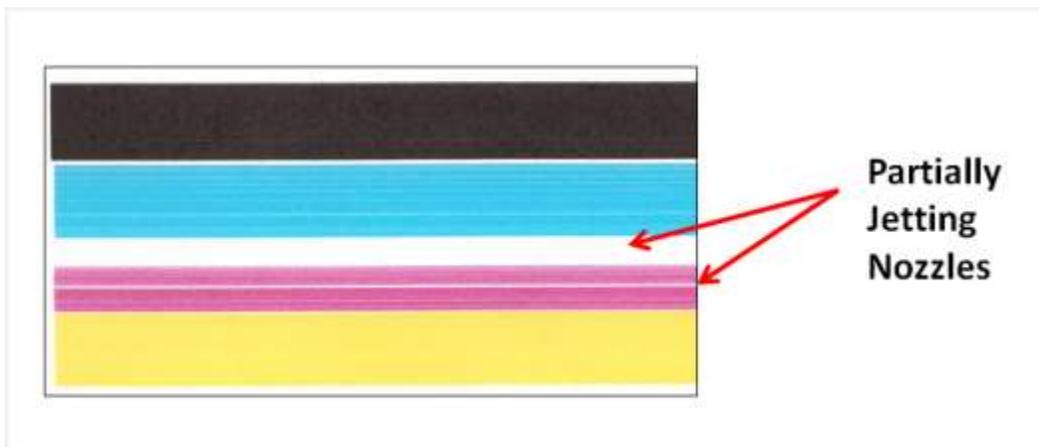
Test Print_CMYK.pdf (test file)



4-Color Test Print_CMYK.pdf (test file)

2. Service Station Caps - Cleaning Procedure

If printed output appears to be smeared with multiple colors* then the service station or parking pad is likely dirty (i.e. full of residual ink buildup) and will need to be cleaned. In the example below the yellow ink is contaminated with magenta ink (“cross contamination”).



NOTE: Ensure that paper thickness/paper weight does not exceed manufacturers suggested printer specifications...the majority of consumer inkjet printers can only handle up to 24 lb plain paper thickness or up to 260 gsm photo paper weight.**

General service station cleaning procedure:

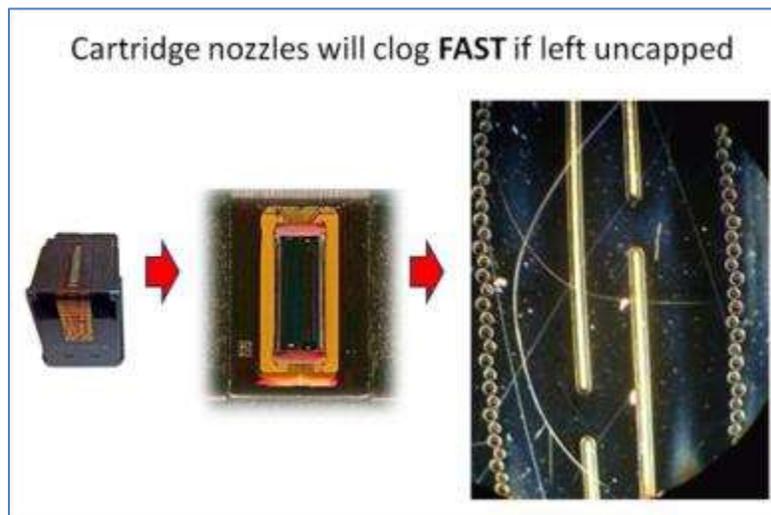
The maintenance station is located at either right or left side of printer.

- With power on, open cartridge access door, cartridges will move away from service station (parking pad) area.
- Dampen a lint free cotton swab with distilled water. Gently clean both service station caps (cartridge parking pads) until thoroughly clean of ink residue / debris build-up.
- Inspect to ensure no fibers remain on station caps, if present.



- * Storing ink cartridges upside down may also cause cross contamination or smearing of printed output.
- ** Repeated 'head strikes' with the paper surface can cause cartridge failure and/or print head leaking.

NOTE: Random droplets of ink on your paper are normally caused by contaminants on the printhead nozzle plate area such as a fiber, hair, built up dust, dried ink. The smallest fiber on the printhead can act as a wick and collect ink from the head until it is oversaturated and therefore drip. In many cases both the service station cap and both ink cartridges will need to be cleaned to correct this issue.



HP Printhead Nozzle Plate
(under 10X magnification)

REFILLED CARTRIDGE TIPS: Always store cartridges in the protective storage caps, NEVER place tape onto the ink cartridge nozzle plate and always use refilled cartridges within 90 days.

