



Gentle method - HP Photosmart Plus B210a Printhead Cleaning

If your HP B210a has a clogged printhead, this...

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INTRODUCTION

If your HP B210a has a clogged printhead, this guide can be used to try and clear the clog.

- **IMPORTANT:** *This does not fix every printer. These steps will not work on failed hardware!*
- **Note:** *If the problem persists, it IS due to a hardware problem with the printhead in many cases. I am noticing more HW failures with these than I did at the time I published this guide where it was usually due to ink, so keep this in mind. Don't feel discouraged but it is beginning to happen more often. Time is not kind to entry-level printers, especially inkjets. This was originally published in 2010, hence the failure rate has increased over the years.*

Guide Notes

- **WARNING:** *THIS PROCEDURE MAY DAMAGE PRINTHEADS WITH EXISTING DEFECTS! Use caution if you suspect an HW issue that could be made worse and finish off the machine, or write it off before trying! I am noticing more and more attempts fail so it is likely many of these are now having a hardware issue with the printhead. If you keep having problems the printhead is likely bad.*
- This guide is primarily made for the HP Photosmart Plus B210a and other REMOVABLE PRINTHEAD "564" printers.
- *Non-removable printhead models (Ex: Photosmart 6520) require special attention to preserve the calibration. These may not survive a lost calibration if SETUP cartridges are required.*
 - *If I have not tested your printer, I cannot guarantee the calibration preservation procedure will work.*
 - **WARNING: IF YOU TAKE AN INTEGRATED HEAD PRINTER APART, YOU MUST KNOW HOW TO GO INTO THE SERVICE MODE AND BYPASS THE SETUP INK REQUIREMENT (trade ink disable) OR BE PREPARED TO THROW IT OUT! NOT ALL UNITS HAVE THIS!**

Tested models for head setup bypass

- Photosmart C6380
- Photosmart Premium C309g
- Photosmart Plus B209a
- Photosmart Plus B210a
- **Note:** This procedure should work on MOST of these, but getting it wrong nukes the stored alignment (and you will need new ink). Pay close attention unless you can buy a set of ink if you miss it.

🔧 TOOLS:

Extra ink cartridges (1)

ONLY NEEDED in two situations: "risky" ink (i.e. "depleted" HP chip, not reset or replaced with a virgin chip) or non-XL ink (prone to being consumed if prep occurs).

Shop Towels (1)

Can be substituted with paper towels, but will leave lint behind

Can also be purchased at most hardware stores and car part sellers.

Distilled Water (1)

Printhead cleaning

Source of heat (1)

While a coffee maker was used at the time, I no longer recommend this. an electric kettle with distilled water is a better choice.

⚙️ PARTS:

Small bowl (1)

Single use containers preferred as the bowl will likely be permanently stained!

High Content Rubbing Alcohol (1)

ONLY USE THIS ON DIFFICULT CLOGS OR SURFACE CLEANING.

Also available for purchase in most drug stores

Alcohol wipes (1)

Can be substituted with high percentage isopropyl alcohol and a napkin or shop towel

Also available for purchase in most drug stores

Step 1 — Gather your supplies



- In addition to the parts listing, these items are highly recommended:
 - **Ink protection:** Plastic bag or ink caps
 - **Only needed in specific cases:** Replacement ink for preparation process after cleaning (3rd party ink works, but will nag you).
 - ⚠️ **This is only needed if your current ink set is risky to use in the event of a lost calibration (i.e. refilled with a used HP chip); RECOMMENDED if you use non-XL carts.**
 - **Optional (Stubborn clogging):** Gloves and 91% alcohol

Step 2 — Heating up water



⚠ *If possible, use hot distilled water.*

⚠ *If the water is dirty, get a fresh bowl - especially with sources like a coffee maker.*

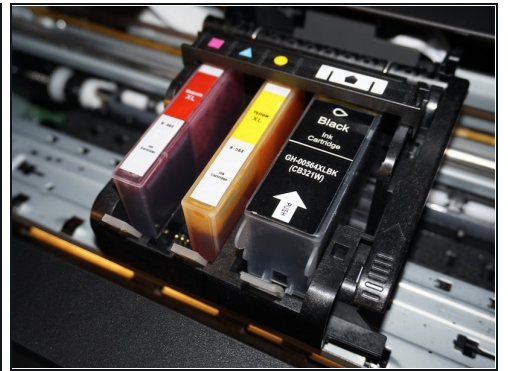
- Before removing the printhead, hot water is needed. Remove the K-Cup holder and get a bowl of water.

Step 3 — Print a baseline image



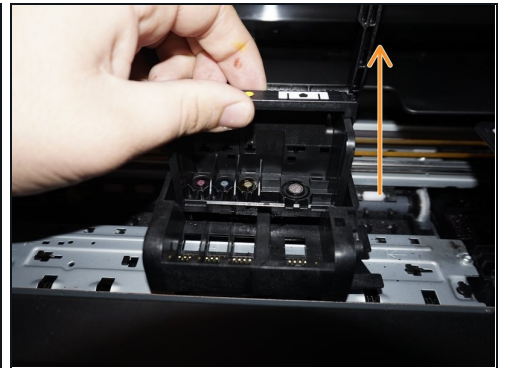
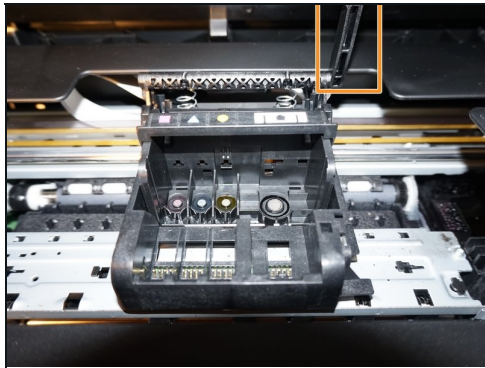
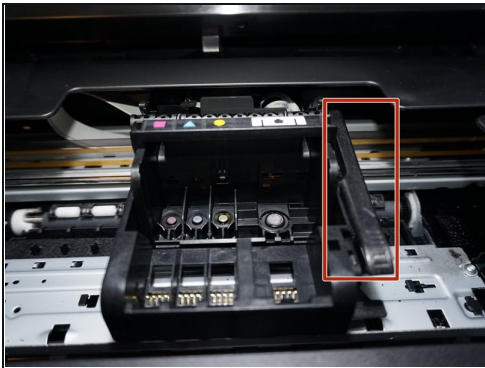
- Print a test image as a baseline.
A good image can be found here:
[SMPTE color bars](#).

Step 4 — Remove the ink tanks



- Remove the ink cartridges from the printer. Install the shipping caps or put them in a plastic bag.

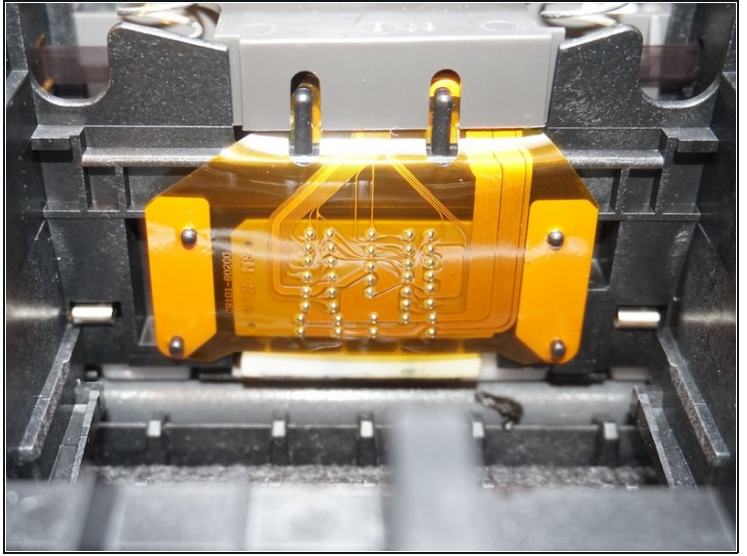
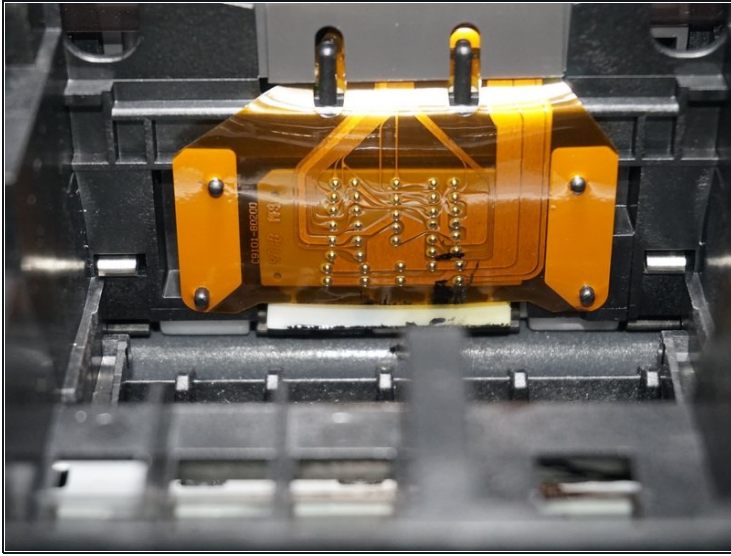
Step 5 — Remove the printhead (See calibration warning)



⚠ If the printer is plugged in while the printhead is removed, the calibration data may be erased. Verify the printer is unplugged FIRST!

- When the printer is unplugged, lift the lever up and remove the printhead.
- Remove the printhead as shown. **IMPORTANT: Leave the scanner lid open, or put a note near the printer.**

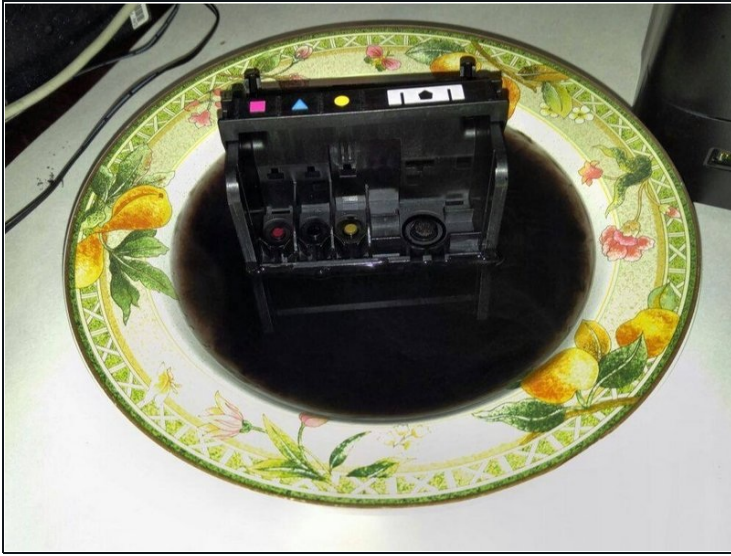
Step 6 — Clean the printer contacts



⚠ Failure to clean this area may result in a *Ink System Failure* warning, and a lost calibration.

- Using an alcohol wipe, clean the printhead interface to clear the ***Ink System Failure*** error.

Step 7 — Clean the printhead

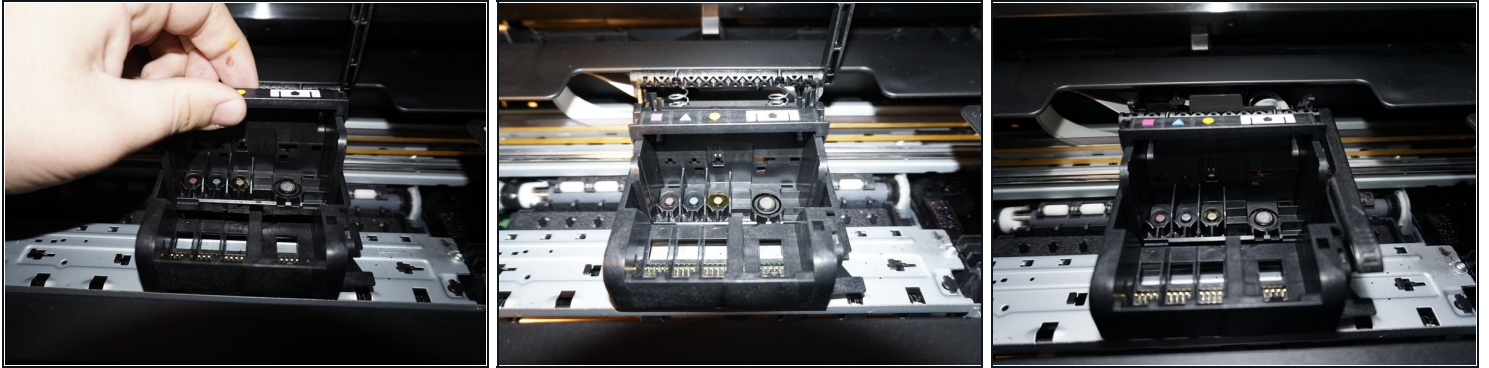


⚠ Only use alcohol as a final option. It may damage the printhead seals! IF USED, FLUSH WITH CLEAN WATER 3 TIMES.

★ Recommended circulation times: Alcohol: 5-10 minutes. Without alcohol: 15 minutes.

- ⓘ The water will get lighter as the ink breaks down. *An ultrasonic cleaner may help break stubborn clogs.***
- Put the printhead in hot water. Repeat until the printhead is reasonably clean. *Change the cleaning water frequently.***
- *Wipe the printhead contacts and nozzles by hand to ensure these areas are dry.***
- Before reinstalling the printhead, let it air dry for ~3-4 hours. *Using a fan may speed this step up.***

Step 8 — Reinstall the printhead and ink



⚠ Wait until the printhead is bone dry to install it, or the calibration is lost if it errors out. IF THIS HAPPENS, THE INITIAL PREPARATION PROCESS WASTES A LOT OF INK (Non-XL: 1/2, XL: 1/4)!

★ A mini "Printhead Preparation" step will occur and is unavoidable and happens when power is applied. However, this wastes far less ink.

- Once the printhead is satisfactorily dry, reinstall the printhead and ink in the printer. Plug the printer in.

Step 9 — Test the printer



⚠ All ink cartridges must have ink left.

★ If you still have issues, try adding ink with the cleaning utility. A new printhead is ~\$80.

i If you have a 5-color "photo" printer (C/M/Y/K/PK), print a photo from your phone or camera if you print photos regularly or run the SMPTE bar test as a photo.

- After replacing the printhead, test the printer. Match the previous settings and check for improvement.

If your printer is working correctly, it was just a clog. Persistent issues usually total out the printer as a unit.