5.2 Print Quality Issues

The following article provides examples of common print quality issues and solutions.

Ink Marking/Scuffing on Envelopes:

If you get ink marking or scuffing on envelopes when printing, the height might be too close to the media or ink might have built up on the crash plate. Scuffing occurs when excess ink is deposited on either the top or bottom of the media being printed.

To fix scuffing, first determine if the scuffing occurs on the top or bottom of the media.

1) If scuffing occurs on **top** of the media: Raise the printhead up to 2in (see Section 3.5 Setting the Lift Height) and turn on the blue belt and feeder.
   a) *Printhead/Crash Plate Issue:* If the envelopes come out without scuffing, the printhead/bottom crash plate is the issue. Clean the bottom of the black crash plate that sits above the blue belt. The plate can be cleaned with a cloth and water.
      i) If the crash plate is clean and scuffing only occurs when the printhead is down and printing, try raising the head to 0.07in. Printing at 0.07in helps prevent media from touching the printhead.

   b) *Non Printhead/Crash Plate Issue:* If the media runs through and scuffing occurs, the printhead/crash plate is not the issue. Remove and clean the metal fingers which hold the media flat against the blue belt. The fingers can be cleaned with a cloth and water.
      i) When reinstalling the metal fingers: Ensure that they sit near the black print platen but do not cover any part of it. Covering the print platen results in print voids.

   c) Clean the blue wheels (located where the green and blue belts join) and the silver wheels (located at the end of the blue belt).
      i) If the wheels have ink on them, the ink will be deposited on anything passing below them. You can move the wheels off the blue belt completely when testing for scuffing.

2) If scuffing occurs on the **bottom** of the media:

Raise the printhead up to 2in (see Section 3.5 Setting the Lift Height), remove the black zig-zag print platen located in the middle of the blue belt, and silver catch tray located below.

a) The print platen is held in by a 1/16in hex key located on the front of the black tabletop. You will want to clean the print platen and ink catch try by running it under water. Dry and reinstall.

Clean the blue belt and any ink deposited on it.

b) Turn the blue belt on speed 1. Using a lint free cloth and water or a non-abrasive cleaner, clean the blue belt as it runs. It is easiest to access the blue belt when running from the exit side.

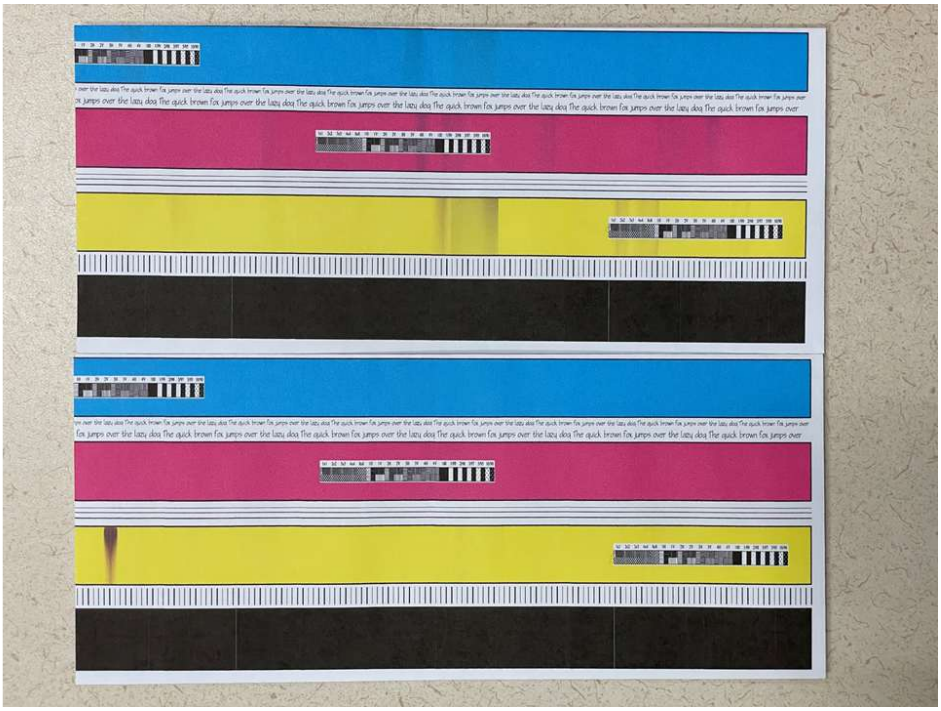
Dirty Print/Printhead Contamination Example:

Dirty Print/Printhead Contamination Example

You may experience dirty prints when a cleaning ends up putting ink back onto the head instead of taking it off. This can happen if the service station does not have clean cloth when performing a cleaning.

Solution: Run a "Check Service Sled" several times or until clean cloth advances on the Service Station. Then run a Midjob Service.

Note: If contamination is bad enough, you may have to run around 25-50 prints of heavy coverage to flush the nozzles.



To clean up dirty prints, advance the service station until you get to clean cloth using the "Check Service Sled" command and run a "Midjob Service". Both commands are found in the HP Advanced DFE Settings.

White/Dark lines in Print Example:

Lines in print are generally an indication of clogged nozzles or misconfigured die gaps. To determine if the lines you see are clogged nozzles or die gap lines, you can print the “Die Adjustment Test Page” found in C:\iJetColor\Test Images. You can print the Die Adjustment Test Page on the same media as your current print job and overlay the two envelopes to see where the white/dark lines align. If they line up with a number on the Die Adjustment Test Page, they are die gaps and you need to use the Print Quality Optimizer (see Section 3.9 Print Quality Optimizer). If the lines do not align with a number, then the printhead nozzles are clogged in that area. To clear clogged nozzles, run the “Check Service Sled” command found in the DFE settings under HP Advanced until the service station sled has advanced to clean pinkish-white cloth. If the service station sled never advances to clean cloth, replace the sled (see Section 3.8 Replacing the Service Station Sled). Once clean cloth is available, run the “Midjob Service” command found under HP Advanced. Repeat if necessary.

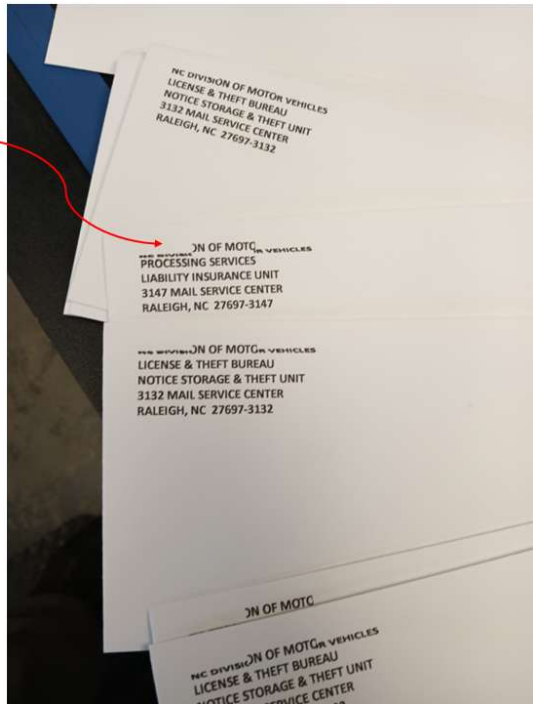
Stair Stepping/ Zig-Zag Print Issue:

Stair Stepping/ Zig-Zag Print Issue

Stair stepping is typically caused by the media catching or pausing under the head momentarily. As a result, the print appears in a zig-zagged pattern.

To fix stair stepping try the following:

1. Raise the printhead to 2in.
2. Manually feed envelopes and check if they feed smoothly.
   - If they catch, you should be able to see the issue.
   - If they look good, proceed to 3.
3. Set printhead height to 0.07in and test.
   - If they look good, problem solved.
   - Otherwise, proceed to 4.
4. Set Pen to Paper Spacing to 5050 and test.
   - Issue should be solved. If not, proceed to 5.
5. Remove print platen and test print without the platen installed.
   - If removing the platen does not help, contact support.

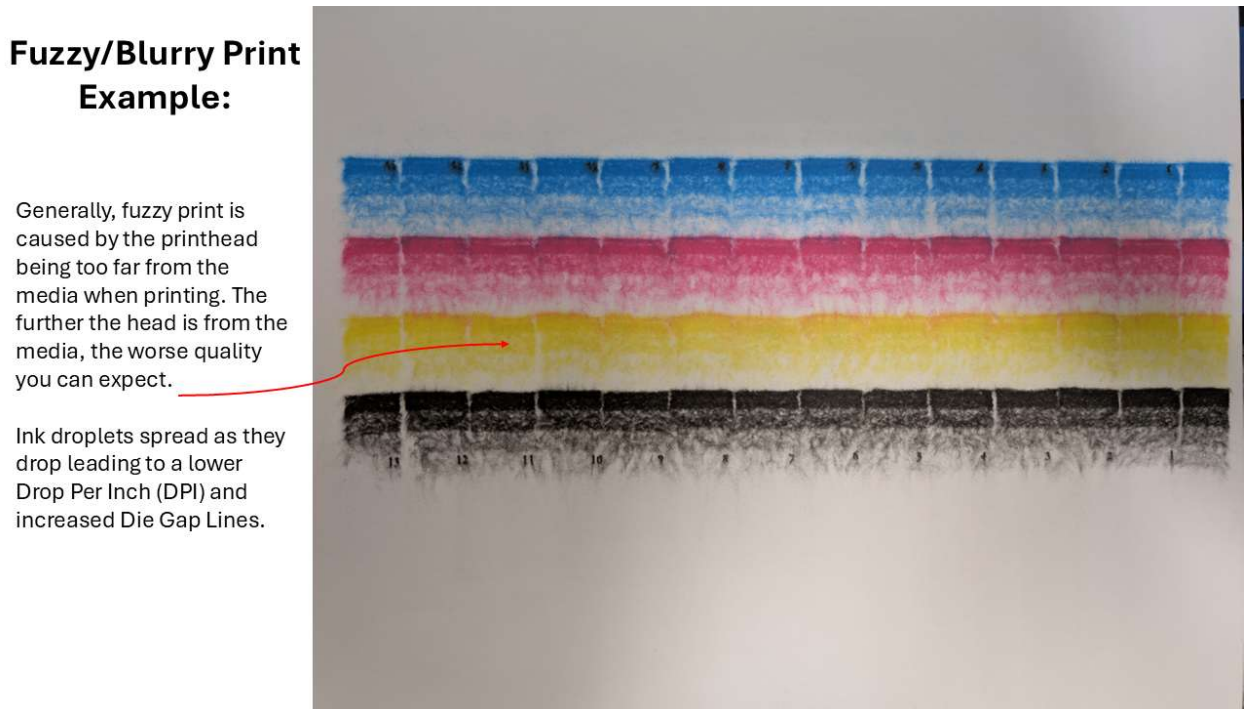


Stair stepping, where one part of the image prints lower or higher than the rest, is typically caused by the media catching or pausing under the head momentarily. As a result, the print appears in a zig-zag pattern.

For advanced troubleshooting, try the following:

- Clean the blue belt with a lint free cloth and water.
- Ensure the blue wheels and metal fingers (where the green belts switch to blue belt) are spaced evenly on the media. Ensure the blue wheels are equally spring tensioned. You can tension by tightening the thumbscrew onto the top of the bar.
- Turn the vacuum on. That can help hold the envelopes straight.
- Check the set screw on the collar of the encoder. The encoder is located on the front of the machine near the middle, below the blue belt. The set screw can be tightened with a 7/64th Allen Key.

Fuzzy/Blurry Print Example:



If your print quality appears fuzzy or distorted there are a few things you can try:

- The lift height might be set too high causing the quality to drop. Try setting your lift height to 0.00in (see Section 3.5 Setting the Lift Height).
- The Pen to Paper Spacing might be set incorrectly and the printhead is too far from the media. Try setting the Pen to Paper Spacing to 5100 (see Section 3.1.9 DFE Settings: FI-1000 Tab).
- Check the quality of file being printed. Open the PDF and zoom in on the artwork. If the quality is poor in the file, the quality will be poor when printed.