

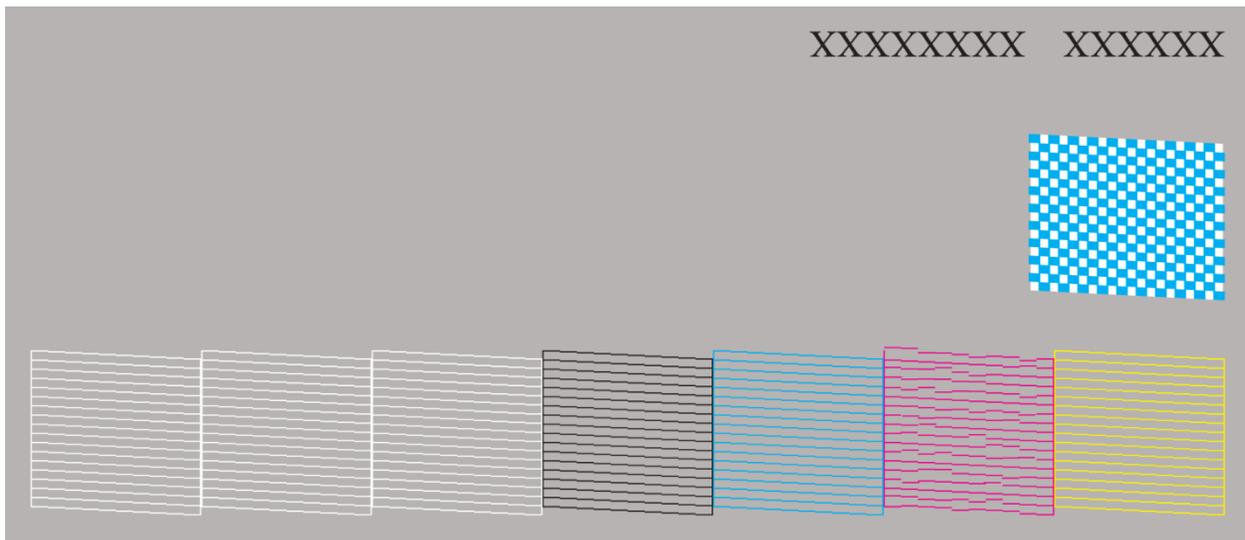
### Wavy Nozzle Deflection

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**Applicable Models:** AnaJet FP-125 & AnaJet Sprint

**Diagnosis:** An example nozzle check is shown below. If you are using white ink, print the nozzle check directly on the print table to see the white channels. The example nozzle check shows a so called “wavy” nozzle check. Notice that the nozzles are still firing ink, but they are not in the usually stair step patterns. This can occur in any color but is often more evident in magenta.



**Background:** Deflection is the technical term for this occurrence. The nozzles are firing, but the droplets are being deflected from their standard path causing the pattern to appear “wavy” or out of place. Generally a wavy magenta nozzle check does not affect images in normal printing. Often with even severely deflected magenta nozzles, adequate prints can be achieved without any compensation, but if you do notice banding in magenta prints from wavy nozzle checks please follow the below guide.

**Cause:** Overwhelmingly the cause of this is due to improper cleaning of the Wiper blade and Printhead. Individuals must be diligent and thorough when performing the required maintenance.

**Resolution:** Make sure your Wiper blade and Maintenance Station are thoroughly clean. Next, is to print using the Super Fine Image Quality settings in EKPrint studio. Using Super Fine will cause the printer to take shorter steps while printing and compensate for the wavy nozzles. Note that you will want to reduce your ink level by half compared to Speed; this is because Super Fine will put out twice as

much ink as Speed at the same ink level. Example: if you were printing at Level 4 at Speed you will want to print at Level 2 in Super Fine to get the same amount of ink on your garments. With the correct settings the effect on the time of printing will be nominal. You may also attempt to soak the nozzle plate to attempt to remove any dried ink residing on the surface. (See TD&R document 667 – Soaking the nozzle plate).

**Are there other compensations that I can do?** Yes there are a number of changes you can make to artwork settings that will also help.

1. Add more yellow: The more yellow you can add to your reds will reduce the appearance of banding.
2. Reduce your white ink: The more white ink that you put down, the more likely you are to see banding in magenta. If you can reduce your amount of white ink used, you can also reduce the amount of magenta banding.
3. Adding pattern: With all ink jet printers the toughest thing to print is large areas of solid color; the more pattern you can add to the design the easier it will be to print.