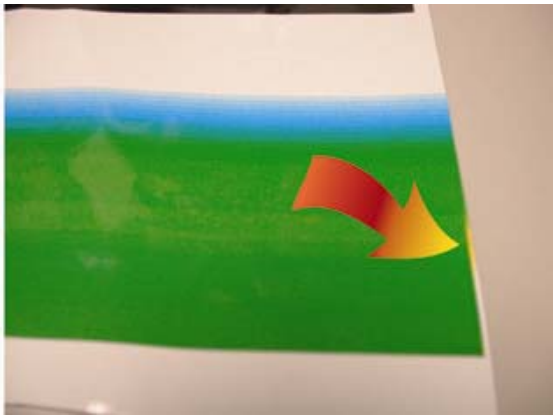
TECHNICAL BULLETIN 3
Revised 05/24/2005
6 Pages

Encoder Strip & Encoder Sensor Cleaning

For printers exhibiting image shift (see samples below) the encoder strip and encoder sensor should be thoroughly cleaned. US&C customers may order Cleaning Kit P/N 220970; International customers may order Cleaning Kit P/N 221191 (canned air not included).

NOTE: The primary purpose of this cleaning procedure is to help avoid observed image shift output problems and/or 'carriage axis error' messages caused by dirty assemblies. Refer to some typical problems pictured below. Both examples exhibit printed data shift at right side of media with severe bands across the image.



To help prevent these problems from occurring clean the encoder strip every 20 plot hours and clean the carriage encoder sensor every 200 plot hours or 3 months whichever comes first.

NOTE: Printer may need to be de-energized for up to one (1) hour following the encoder sensor cleaning procedure.

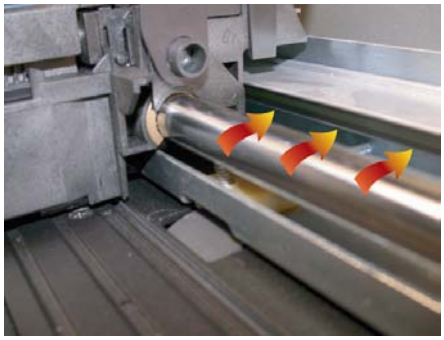
Perform the following steps:

1. Remove power from printer.

Clean Encoder Strip

2. Obtain the encoder strip cleaning tool and install one (1) unique cotton swab into the tool's groove. Apply Windex® solution (or an ammonia-based glass cleaner) to cotton swab and thoroughly clean the top and bottom surfaces of the encoder strip.

NOTE 1: The encoder strip, a linear plastic tracking strip, is located just below the aluminum bracket behind the carriage assembly and spans the entire printer length.

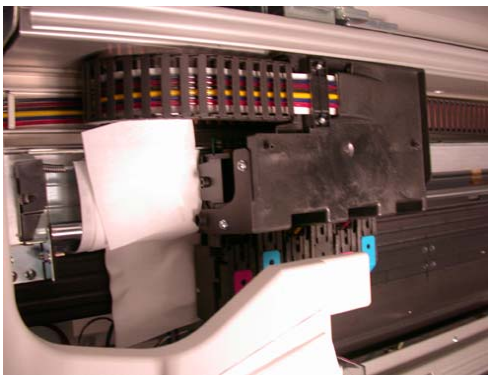


NOTE 2: ENCAD's NovaKlean solution (US&C Easy-Klean™ Kit P/N 216883; International Easy-Klean™ Kit P/N 218439) or distilled water may be used as a substitute. Replace the cotton swab when dirty. Repeat cleaning procedure a second time using isopropyl alcohol until no residue remains on strip surface.

Clean Encoder Sensor

3. Gently pull the carriage assembly free from service station area and remove the cutter from the carriage assembly.

4. Move carriage assembly to left side of printing surface and install several lint-free towels on left side of carriage assembly. Place additional towels below the aluminum bracket onto and around the encoder strip surface and base of Y-Arm (below carriage belt). Push the carriage assembly to left end of printing area as illustrated in the adjacent photo.



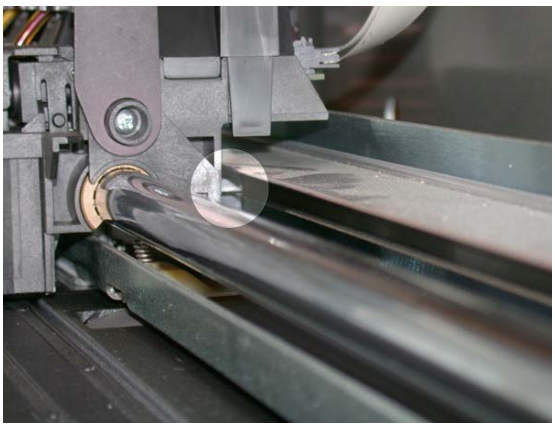
5. Obtain the suggested cleaning kit with recommended cleaning products. US&C customers may order Cleaning Kit P/N 220970; International customers may order Cleaning Kit P/N 221191 (canned air not included).

NOTE: Windex® or an ammonia-based glass cleaner is required to clean Qi-Pigment ink from sensor surfaces. Other solutions (i.e. NovaKlean/Distilled water) may be substituted for cleaning Qi-Dye ink from sensor surfaces.

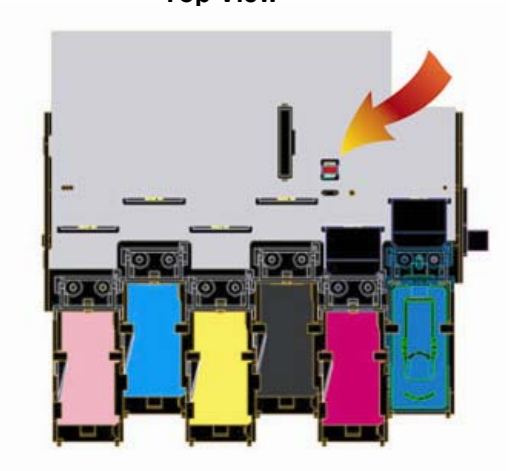
6. Remove nozzle/tube from Windex® bottle and cut tube in half with a pair of wire cutters or similar. This will allow bottle inversion during application. Reinstall the nozzle/tube and tighten securely.

7. Visually locate the encoder sensor behind the carriage assembly – use flash light if necessary. The sensor is located directly behind the Magenta stall position. A cleaning solution may be sprayed directly onto sensor from right side of carriage assembly.

Right Side View



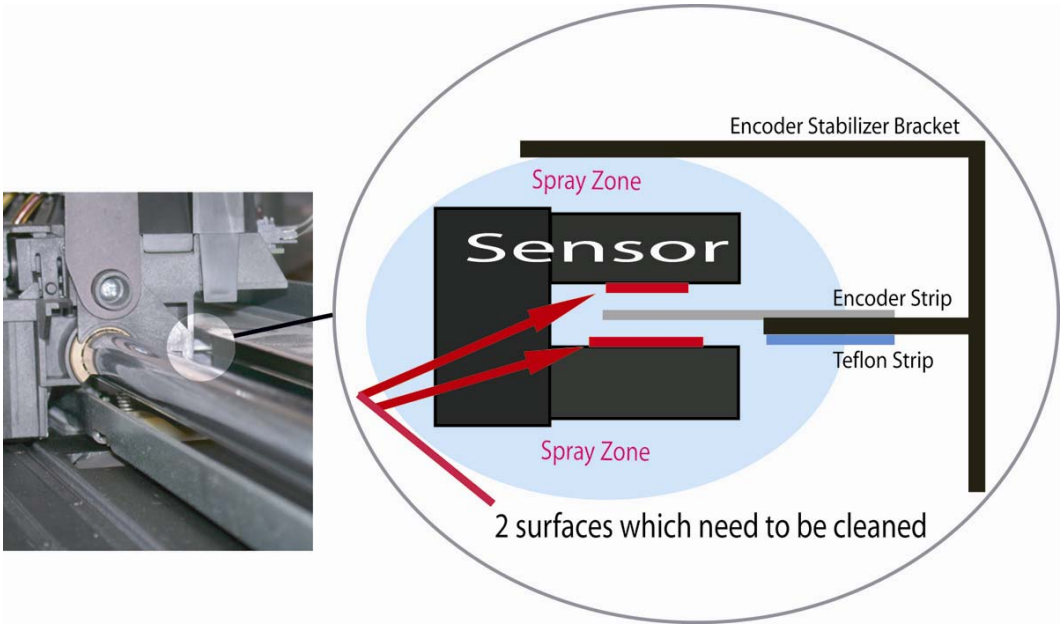
Top View



CAUTION

Ensure power is off to printer
prior to performing step 8.

8. Invert the Windex® bottle and aim the nozzle directly at the encoder sensor (below encoder stabilizer bracket shelf), firmly spray the sensor assembly 4-6 times. Refer to the suggested 'Spray Zone' pictured below.



CAUTION

A 'fine' jet spray setting should only be used;
do not 'over saturate' the encoder sensor
or the adjacent carriage housing/electronics.

CAUTION

Ensure power is off to printer
prior to performing step 9.

9. Attach extension tube to canned air and thoroughly spray air to remove all cleaning solution/ink residues from sensor assembly and rear of carriage assembly area.

NOTE: Perform this step within 1 minute following step 8 above (application of cleaning solution).

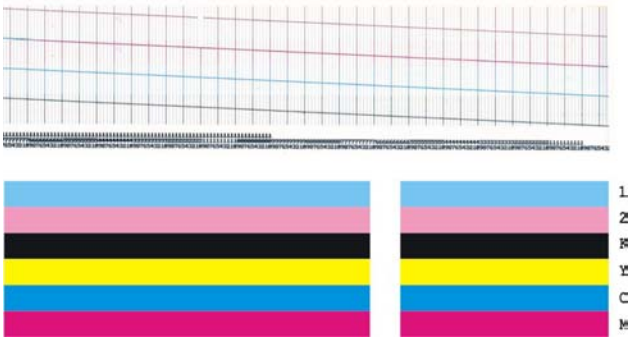
10. Clean residues from all surfaces using the lint-free towels including the encoder strip, bracket, and Y-Arm. Clean the inside surface (flat side) of carriage belt. Remove all lint-free towels and re-install the cutter.

11. Wait 10 minutes and then apply printer power. Verify printer initializes normally.

CAUTION

If Windex® solution
was not used then
wait **60 minutes** prior to
initializing the printer.

12. Activate a prime pattern and verify data is printed properly and no data/image shift is observed. Select **Utility Menu – Prime Menu – Prime All.**



NOTE: If images continue to shift or errors occur following the completion of this procedure then contact technical support for assistance.