



Cartridge to Caddy Seal – De-Prime Notice

This bulletin applies to cartridges which demonstrate a sealing problem between the caddy and the cartridge. Symptoms may include larger than normal ink drops onto media, ink build-up in service station seals or complete pressure loss from the caddy (low caddy ink levels) and subsequent color dropout/starvation during printing.



T-200
Cartridge

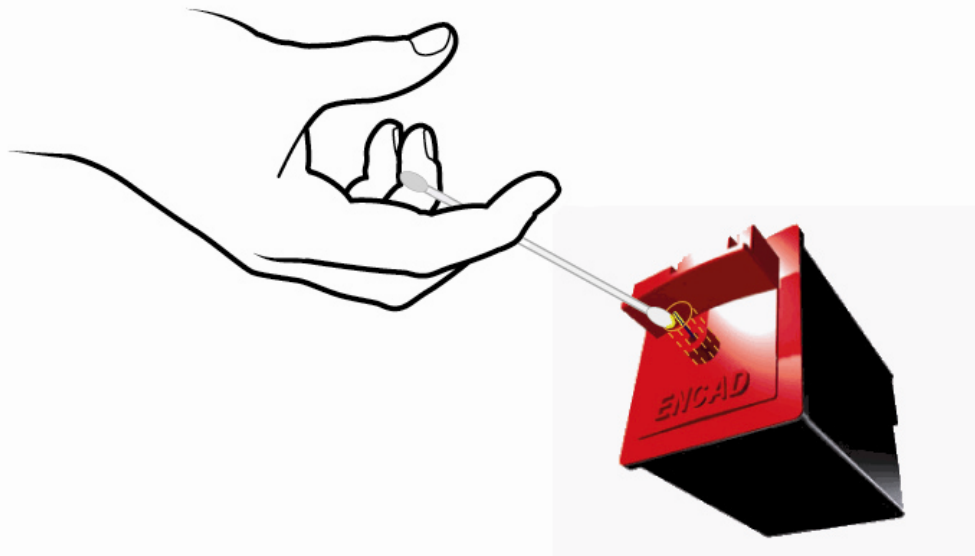
A. Cartridge De-prime Causes

- When a cartridge separates from the caddy, the ink replenishment cuts off. As the cartridge prints, the ink in the cartridge is eventually depleted and a cartridge de-prime occurs.
- 1 to 2 ml of ink is required to recover the negative pressure between caddy and cartridge during attachment. So if the operator reseats the caddy on a regular basis the cartridge can lose ink slowly resulting in a cartridge de-prime.
- Loss of negative pressure (internal accumulator ink separation) when the temperature quickly changes by ~ 8 C. The problem may occur overnight when temperatures drop.

B. Preventive Solution

To improve cartridge to caddy seal performance apply a light coat of Glycerin/PEG compound (*see page 3 for sample vendors*) to cartridge needle's exterior surface using a cotton swab. Only 4-5 mm of cartridge needle circumference needs to be covered; do not insert compound into needle opening/end.

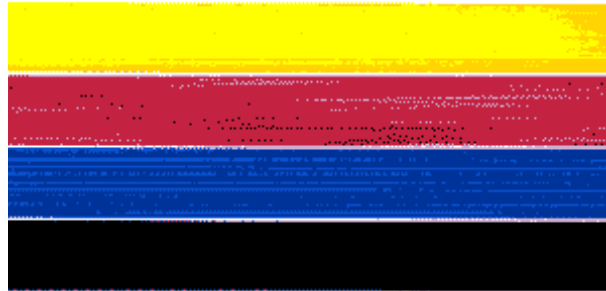
NOTE: Only a small amount of PEG compound is necessary to improve the cartridge to caddy seal.



C. Cartridge/Caddy Pressure Test

Reinstall caddy onto cartridge and run a 100% color test (or some other high saturation plot) that will consume ink to re-establish in flow and develop the required negative pressure between the cartridge and the caddy.

- select **Utility Menu** - Select - Down Arrow to **Service Menu** - Select - Down Arrow to **Diagnostics Menu** - Select - Down Arrow to **Color Test**, choose **100%** – press Select.



**Normal
Color Test
(4 color;
draft mode
shown)**

D. Advanced Cartridge Recovery

If a cartridge is deprived of too much ink (demonstrated by ink dropout or improper cartridge recovery) and it has not caused significant levels of air in the chimney then the following cartridge recovery process may be attempted:

1. Remove the caddy from the cartridge.
2. Unscrew the top cap with needle from the cartridge.
3. A normally filled cartridge weighs around 40 to 42 grams which implies approximately 20 ml of ink is in the cartridge.
4. If cartridge weight is low then install ink into cartridge using a syringe until it reaches the 40 to 42 gram value. When inserting the ink the needle of the syringe needs to push down on the foam and the ink needs to be inserted slowly.

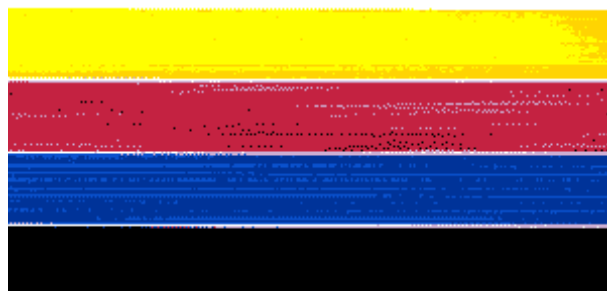


NOTE: Materials including the syringe and ink are not available from ENCAD.

5. After filling, the cap with the needle needs to be reinstalled and tightened.
6. Reinstall the caddy onto the cartridge.

NOTE: It may be necessary to wait a few hours following cartridge filling to allow time for the ink to be completely distributed in and around the foam (so that it surrounds the chimney).

7. Reinstall caddy onto the cartridge and run a 100% color test (or some other high saturation plot) that will consume ink to re-establish in flow and develop the required negative pressure between the cartridge and the caddy.



E. Sample Vendors (who sell Glycerin/PEG compound)

Food grade glycerin, pharmaceutical grade glycerin, or high purity scientific grade glycerin is preferred. Glycerin may be obtained from any of the online stores listed below:

- a. Value Nutrition Store
<http://shop.store.yahoo.com/valuenutritionstore>
Heritage Store Vegetable Glycerine, 4 oz
- b. Rockler
<http://www.rockler.com>
Glycerin – 4 oz bottle
- c. Kerekes
<http://kerekesequip.com>
Glycerin, Certified Kosher, 2 oz.
- d. The Heritage
<http://www.caycecures.com>
Heritage Store Vegetable Glycerin, 4 oz.
- e. MyVitaNet.com
<http://myvitagnet.com>
Heritage Store Vegetable Glycerin, 4 oz.
- f. Southnatural
<http://store.yahoo.com/southnatural>
Heritage Store Vegetable Glycerin, 4 oz.

