

Addendum A: ProSeries Printhead Print Restoration Procedure

Purpose: This procedure is designed to remove minor print fractures and trailing satellite dots caused by debris on the CP/OP and/or air in the print engine.

When: This procedure should be completed when print is determined to be unsatisfactory. It is also a good practice to perform at regular shift maintenance and system startup. This procedure should be performed before any factory repair is attempted.

Applies to: All ProSeries Printheads except the ProSeries NP192.

Precautions:



N-Propanol is a flammable substance!



Wear safety goggles and gloves when working with industrial inks or solutions.

Additional materials that MAY be required during procedure:

Part Number	Description	
X30001-001	Lint-free Wipes, 9" x 9", 300/Pack	(USE WIPE ONLY ONE TIME)
5760832	Lint-free Swabs, 100/Pack	(USE SWAB ONLY ONE TIME)
9001-0183-01	Maintenance Spray, Versaprint Inks, 4 oz., 4/Pack	
9001-0443-01	Maintenacne Spray, ScanTrue II Inks, 4 oz., 4/Pack	
5760695	Cleaning Spray, N-Propanol, 2/Pack	
S30002-001	External Prime Bulb, Black	
X40008-001	Reservoir Ship Cap, V300 – Shipped with head, available as a spare part	
X40008-002	Reservoir Ship Cap, AM – Shipped with head, available as a spare part	
5760536	Reservoir Ship Cap, STII – Shipped with head, available as a spare part	

Procedure:



NOTE: For non-APS style printheads, instead of initiating an automatic prime cycle by momentarily pressing the purge button, you will need to hold the purge button for 3-5 seconds. In addition, you must collect the expelled ink with a lint-free wipe.

1. Press and release the purge button to initiate an automatic prime/purge cycle. Observe that the ink is vacuumed off the CP/OP properly. Run a print sample to ensure all the channels are printing and producing good print quality. If there is unsatisfactory print, please move onto the next step.
2. Press and hold the purge button for three to five seconds to prime the system and purge air from the printhead. Following the end of the vacuum cycle, press and release the purge button to initiate an automatic prime/purge cycle. Run a print sample to ensure all the channels are printing and producing good print quality. If there is unsatisfactory print, please move onto the next step.
3. Press and hold the purge button on the rear of the printhead for longer than 1 second to start the flow of ink out the orifices. While the ink is flowing (maximum of 5 seconds), lightly wipe the CP/OP with a lint-free swab in a top to bottom motion. Do not wipe the CP/OP when there is no ink flow out of the orifices. You may need to release the purge button at the rear of the printhead and start at the beginning of this step again to completely wipe the CP/OP properly. During this step, it is possible that the vacuum may not completely collect all ink. Catch any extra ink with a lint-free wipe. In addition, use a lint-free wipe to clean off the front rub plate of the printhead ensuring that debris and stagnant ink are not pushed into the CP/OP area of the

printhead. Be sure to wipe across the short distance of the CP/OP in one direction. Do not wipe the CP/OP top to bottom, which increases the likelihood of debris being pushed into the orifices. After the excess ink and debris is wiped away press and release the purge button to initiate an automatic prime/purge cycle. Run a print sample to ensure all channels are printing and producing good print quality. If there is unsatisfactory print, please move onto the next step.



NOTE: For ProSeries AC **AlphaMark** printheads, do NOT perform steps 4, 5 and 6 – skip to step 7.

4. Spray the proper maintenance spray (either 9001-0183-01 for VersaPrint or 9001-0443-01 for ScanTrue II) on the CP/OP to help loosen any excess ink or debris that may be bonded onto the CP/OP. Let the head sit for approximately 30 seconds.
5. After 30 seconds, spray the front of the CP/OP again with maintenance spray and inspect it to ensure all the debris is removed, if not repeat step 4 up to 5 times.
6. Perform the procedure in Step 3, then if needed move onto the next step.
7. Leave the printhead attached to the system in an idle state for 1 hour to allow the head to heat. After 1 hour, run a print sample to ensure all the channels are printing and producing good print quality. If there is unsatisfactory print, please move onto the next step.
8. Place a lint-free wipe under the printhead CP/OP area to collect purged ink. **REMOVE THE INK BOTTLE** and install the reservoir ship cap that shipped with the printhead. Failure to remove the ink bottle and install the reservoir ship cap will result in an unstable pressure situation causing a release of ink into the immediate area. Place thumb over the release vent on top of the External prime bulb. Place tip of purge bulb into reservoir vent and squeeze purge bulb for 3 to 5 seconds. Remove excess ink off the printhead rub plate with a lint-free wipe. After the excess ink and debris are wiped away press and release the purge button to initiate an automatic prime/purge cycle. Run a print sample to ensure all the channels are printing and producing good print quality. Repeat this step up to 3 times. Remove the reservoir ship cap and retain for future use. Replace the ink bottle. If there is unsatisfactory print, please move onto the next step.



Steps 9 through 11 are indented to remove debris that may be bonded to the CP/OP using N-Propanol Cleaning Spray. This Spray may cause some Ink to dry in the chamber of the print engine if left on the CP/OP for prolonged periods of time. Always flush Ink through the print engine after using N-Propanol. After cleaning the CP/OP with N-Propanol, it is possible that a purge cycle could cause the printhead to spray a small burst of ink from the printhead. It is recommended that you catch this with a lint-free wipe.

9. Spray the front of the printhead with N-Propanol cleaning spray starting at the top of the printhead and going down, Press and hold the purge button on the rear of the printhead for longer than 1 second to start the flow of ink out the orifices. While the ink is flowing (maximum of 5 seconds), lightly wipe the CP/OP with a lint-free swab in a top to bottom motion. Do not wipe the CP/OP if there is no ink flow out of the orifices. You may need to release the purge button at the rear of the printhead and start at the beginning of this step again to completely wipe the CP/OP completely. During this step, it is possible that the vacuum may not completely collect all ink. Catch any extra ink with a lint-free wipe.
10. Perform the procedure in Step 3, then if needed move onto the next step.
11. Inspect the orifice strip for debris. If debris is still present, repeat steps 8 - 10 as necessary or up to 5 times. If after 5 times of utilizing the N-Propanol cleaning solution, leave the printhead attached to the system in an idle state for up to 24 hours to allow the head to heat. During this period, set the APS to fire at 1 hour intervals. After 24 hours, run a print sample to test whether all the channels are printing and producing good print quality.
12. If there is still unsatisfactory print, the printhead will likely need to be distributor and/or factory serviced.