

# Troubleshooting for Sublimation

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#### **Discussion topics:**

- Banding
  - White lines through the printed transfer
- Color Shifting
  - Reds turning pink; colors not as vibrant
- Printer Adjustments
  - Paper feed adjustments
- Color Settings
  - Colors differ if color management settings are not correct
- Transfer Paper
  - Wrong paper, moist paper, dry paper
- Heat Pressing Products



#### **HORIZONTAL BANDING**

Light colored lines caused by clogged nozzle

Perform a nozzle check, then possibly a head cleaning or print a full page of color or a manual cleaning

BANDING CAUSED BY A CLOGGED NOZZLE



#### **NOZZLE CHECK**

#### **Good Nozzle Check**

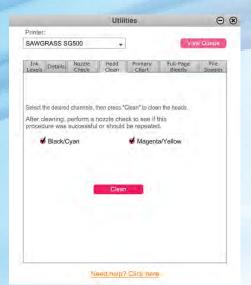
#### **Bad Nozzle Check**





#### **HEAD CLEANING**

#### Print Manager Utilities



#### **Windows Driver Utilities**



#### **Mac Driver Utilities**





# **AFTER HEAD CLEANING**

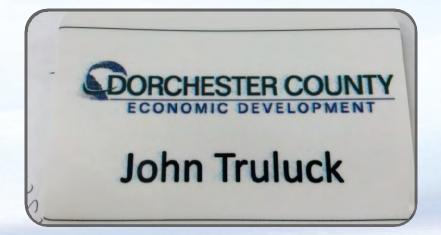




#### **PARTIAL CLOG**

If a nozzle is partially clogged, "Ink Spitting" can occur

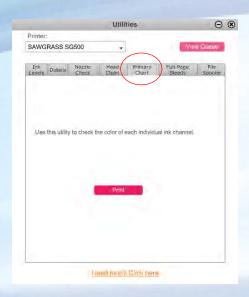






#### **PARTIAL CLOG**

- May not show up on a nozzle check
- Perform a Print Primary to determine which color is clogged



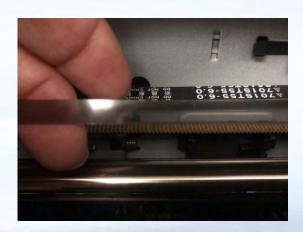




#### **VERTICAL BANDING**

- Caused by dirty encoder strip SG400/SG800
- Clean with a soft cloth with denatured alcohol







## **AFTER CLEANING**

AFTER CLEANING ENCODER STRIP

#### **PREVENTING BANDING**

- Print with some frequency
- Leave the Sawgrass printer powered on. It will do its own maintenance with less ink.
- Try to use the inks within 6 months of installing







#### **REDS TURNING PINK**







#### **OLD INK**

RGB Palette with 2 year old ink





RGB Palette with new ink



#### **SHADES OF GRAY**

new inks old yellow old cyan old magenta

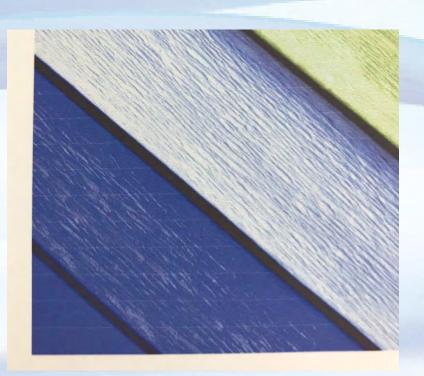
black black black

20% black 20% black 20% black 20% black



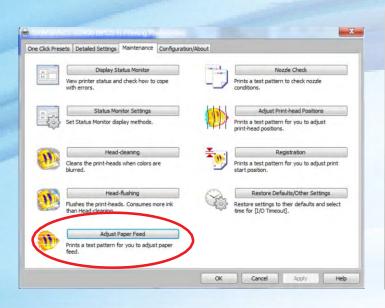
#### **PAPER FEED ISSUE**

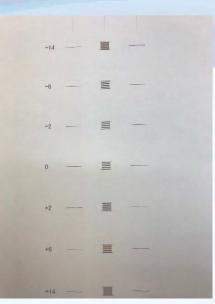
- Often mistaken as a banding issue
- Evenly spaced lines through entire print
- Not able to fix with a head cleaning
- Requires a paper feed adjustment





#### **ADJUSTING PAPER FEED**





- Print out a test pattern
- The goal is to have the 0 section have the straightest horizontal lines and the lightest box between those lines. If that is not the case then an adjustment needs to be made.





#### **ADJUSTING PAPER FEED**





or

- The adjustment can be entered either on the computer or through the menu on the printer itself
- Enter the value on the test pattern that has the straightest horizontal lines and the faintest box between the lines



#### **AFTER ADJUSTMENT**



 Once the adjustment is back to 0, print the job again to make sure the lines are gone.



#### **COLOR SETTINGS**

 Having the correct color management settings in the design software will make a big difference in the colors that are sublimated.







#### **COLOR SETTINGS**

 When working with photos, not only does your document settings need to be correct, the color mode of the photo also needs to be correct.

**Document Color Mode - RGB Photo Color Mode - CMYK** 

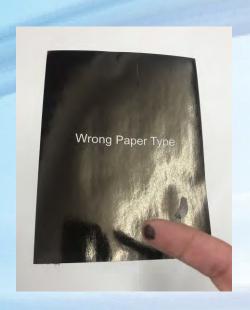


**Document Color Mode - RGB Photo Color Mode - RGB** 





 Using the correct brand of paper for your brand of printer makes a difference in how the ink is laid down on the paper.





TexPrint XP paper (for Epson) used in a Sawgrass/Ricoh printer

Ink remains wet and will leave streaks

Can get the rollers wet and leave track marks on the paper



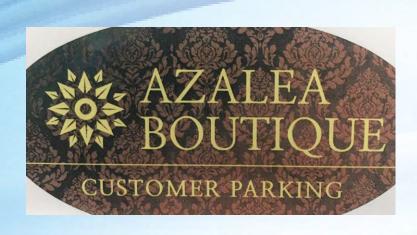
 Be sure to print on the correct side of the paper. Some papers have a watermark on the back where others do not. If unsure, the brightest white side will be placed face down in the printer.







Some people try to use plain copy paper instead of sublimation paper. The ink reacts
differently on plain paper. More ink will be left on the paper and on the press compared
to using sublimation paper.



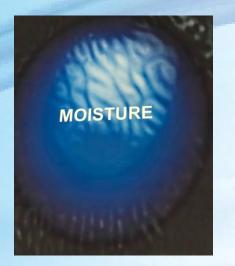


Paper towel on the bottom of the press. With plain paper, more ink will go through the paper onto the paper towel.



• Moisture, or even the lack of moisture, can cause issues with the transfer and the product

#### **Too Much Moisture**



#### **Too Dry**



Supported Environmental Conditions			
	Operating	Storage	Shipping**
Temperature (°F)	59° - 77°	59° - 77°	40° - 100°
Temperature (°C)	15° - 25°	15° - 25°	4° - 38°
Rel. Humidity (No Condensation)	Above 35%	n/a	n/a
**Shipping temperatu	res are only acceptab	le for limited exp	osure



#### **GHOSTING**

- Ghosting (double image) happens at the moment the pressure is released from the press.
- Softer items (apparel, beverage insulators, etc.) are more apt to move.





#### PREVENTING GHOSTING

- Use heat tape (H107) for hard substrates or spray adhesive for soft substrates.
- Use non-stick sheets when applicable to prevent items from sticking the platen.
- Pre-pressing some substrates (beverage insulators) can help prevent "bounciness".
- Follow step-by-step instructions (how the press is layered will make a difference).
- Release the pressure slowly and remove the transfer quickly.









#### **UNEVEN PRESSURE**

- The printed transfer needs to make direct contact with the product.
- The image below is identifying a contact issue. In this case, the heat press
  was uneven. Notice that lighter areas on the metal correspond with dark areas
  on the finished transfer. The transfer often offers clues to resolving issues.





#### **TOO MUCH PRESSURE**

- Some sublimation metals have a softer poly-coating, which can allow the paper to embed itself into the coating when it gets soft.
- Settings: 390°, 40 seconds, very light pressure. Layer the press using soft paper towels (no printing or texture) on the bottom followed by the transfer then the metal.





#### IT'S ABOUT TIME

- The more dense the product, the longer the dwell time needs to be.
- More dwell time is needed if the image areas appears light/faded and the transfer will still have a significant amount of ink left on it. 90% of the ink should be transferred off evenly.
- On the flip side, if the dwell time is too long, then the colors will shift and the product will scorch and the image will begin to blur.

**TOO LITTLE** 



**TOO MUCH** 



**JUST RIGHT** 





#### **LINES ON APPAREL AND MORE**

- Causes and solutions
- Time and Temp









#### WHICH FABRIC IS BEST?

100% Spun Poly After Sublimating







#### WHICH FABRIC IS BEST?

100% Micro-Fiber Polyester

After Sublimating







#### WHICH FABRIC IS BEST?

100% Polyester Dry-Fit

After Sublimating







#### WHICH FABRIC IS BEST?

65% Polyester 35% Cotton

After Sublimating







#### WHICH FABRIC IS BEST?

100% Cotton

After Sublimating







# Troubleshooting for Sublimation

# Thank You for Attending!

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