



Tagless Pad Printing Manual

INK MIXING RULES

- A scale must always be used to measure ink, hardener and thinner before mixing.
- Ink must be mixed well when new ink can is opened.
- Use only non-wax paper cups, Teflon or polypropylene containers and wood or steel stir sticks to mix ink. Other substrates may contaminate ink.

INK MIXING STEPS

Ink must be mixed with Hardener, only then Thinner can be added:

- 1) Weigh the INK, add weighed HARDENER
- 2) Mix well
- 3) Only then add weighed THINNER
- 4) Mix again
- 5) Pour premixed ink into Ink Cup

INK MIXING FORMULA

SB INK (100 parts) + 1000 H HARDENER (10 parts) + SB-T or SB-M THINNER (20 parts)

Examples (Grams)		
SB Ink	1000 H Hardener	SB-T or SB-M Thinner
50	5	10
100	10	20
150	15	30



PLATE AND CUP SETUP

1. THOROUGHLY CLEAN all the three plates - the Steel Sub-plate, the Polymer Sub-plate and the etched Cobalt Ultra plate. Dried ink or debris caught between the plates will result in ink cup damaging the plate.

Note: if printing with Etched Thick Steel plate, sub-plates are not used.

2. Place Polymer Sub-plate onto Steel Sub-plate. The steel back of the Polymer Plate should be on the outside.
3. Place etched Cobalt Ultra plate over Polymer Sub-plate. Tighten set screws at the ends of the Steel Sub-plate.
4. Place plate assembly on top of Ink Cup filled with ink. The plates should fully cover the Cup to prevent ink leakage. Turn the plate and cup assembly over.
5. Place plate and cup assembly onto Pad Printer and lock in place using knobs at front and side of plate.
6. Drop plunger pin into ink cup hole and lock.
7. Install Transfer Pad and lock.
8. Close Guards and start printing.

PAD SETUP

1. Mount pad using wood screws to the front/back dovetail.
2. Press FRONT/REAR button on the machine panel to position the pad over the image.
3. Wipe plate with thinner to make it slightly wet and press the pad UP/DOWN button the front of the machine.
4. Evaluate pad's "ghost" impression on the plate and make adjustments:
 - A) Is pad well-centered on the plate? - To center the pad use the handle on dovetail pad mount.
 - B) Is pressure on plate sufficient to compress the pad just beyond the etched area? – Pressure on plate is adjusted by a knob at the side of the machine.
5. Adjust the forward pad knob on the side of the machine down. It will make pad over-compress on fabric, increasing image opacity.



PRINTING TIPS

- In general, harder pads will provide the best quality images – especially for the small text.
- 70 to 75 Durometer pads are recommended, provided pad printer's air pressure is set to 80-100 PSI.
- The forward pad pressure should be set to over-compress pad on fabric. Over-compression forces ink into fabric and increases image opacity.
- When mounting thick steel plates to the machine, make sure the knobs are snug to the plate but *not over-tightened*. If over-tightened, the steel plate will not seat properly and rise up.
- If plate is scratched or bent, it must be replaced. A damaged plate will cause unwanted ink transfer or smudge.
- If a misprint occurs, clean the pad with clear adhesive tape before continuing.
- To preserve ink and hardener always close their containers tightly.
- Never stack plates. Lay plates on flat dry clean surface.

CLEANING RULES

- Clean pad printing machines and parts only with cleaning solutions approved by your company. Alternatively, use ink thinner.
- Always use lint free towels to clean plates on or off machine.
- Ink cups must be cleaned well before pouring ink into them.
- Always clean up ink spills on machine.