

T-51 Operational Procedures.

INK AND MOISTURE SET-UP PROCEDURES.

• When printing a job which contains areas of overprinting (direct color on color), three procedures should be observed:

- 1) Run the dark color ink in the T-51 and the light color in the parent press.
- 2) Use a fully transparent color in the parent press.



Good Overprint.



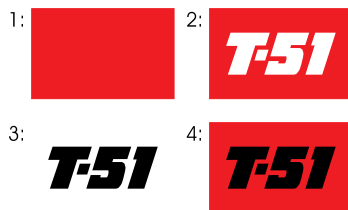
Bad Overprint.

Semi-transparent or opaque ink in the parent press will not provide a good overprinted image. Pantone Matching System (PMS) colors having black or more than 25 percent mixing white in their makeup may not be fully transparent.

- 3) The ink in the T-51 should have less tack than the ink in the parent press. If necessary, reduce the ink in the T-51 with a paste tack reducer.

If a problem is anticipated because of the amount of overlay involved, a printer should drop out the background of the underlying color by reversing it and fitting the other color in. This eliminates the overlay. Because of the single blanket principle, a perfect fit presents no problem. This procedure is also recommended when the printer is restricted to using an opaque ink.

• A combination of "one-step" solution and water should be used for the best possible printing results. It is recommended that 30 parts water be mixed with 1 part solution for rubber-base inks; 15 parts water to 1 part solution for oil-base inks.



- 1: 100% color.
- 2: Reverse type out of color
- 3: Black type.
- 4: Black type dropped into reverse.

Should ink emulsification occur, the solution should be diluted by adding water.

PLATE SET-UP PROCEDURES.

- Follow all normal plate set-up procedures for the parent plate.
- Before the plates are attached, they should always be checked for extra marks such as punch holes or a corner that may not have been covered when the plate was made. If left on the plate, these marks will build up a heavy ink deposit on the blanket, causing color contamination.
- The T-Head plate is attached to the cylinder either with the pins or the straight edge clamp. Care must be taken to keep the plate snug against the cylinder until the trailing edge is secured. This will protect the plate from scratches and creases.

RUNNING PROCEDURES.

• Before running a two-color job, it should always be remembered that moisture should be kept to a minimum--in keeping with good offset printing practices. The operator should note, however, that moisture on the plate is essential to the single-blanket principle. So if

either plate becomes too dry, it will pick up ink from the blanket.

• To begin printing, a press operator should follow this sequence to avoid ink transfer from the T-51 to the parent press:

- 1) Turn on the main press power switch.
- 2) Contact the T-51 water form roller to the plate.
- 3) Engage the parent press's ink rollers.
- 4) Engage the T-51's ink rollers.
- 5) Check both plates to make sure they're running clean. The press should not idle too long with the ink and water systems operating since ink emulsification may occur.
- 6) Turn on the paper feed.
- 7) The T-51 plate may be engaged by applying the plate-to-blanket pressure handle.
- 8) When stopping the press, the entire sequence should be reversed.

• Should coverage problems occur, the operator should look at the water and ink systems. Washed out copy or ink emulsification are usually caused by too much moisture. Mottling and ghosting are often the result of overly tacky ink, too much moisture, not enough plate-to blanket pressure, or uneven impression cylinder pressure. Light or washed out image on T-51 may be caused by excessive moisture on the blanket from the parent press.

• If the images are not registering properly, the operator should follow these guidelines, in order, until the situation is corrected:

- 1) First, attempt to register the plates by using the T-51's three micro-adjustments.
- 2) Second, check the original artwork and negatives.
- 3) Third, check to see that the two plate cylinders are parallel and level by referring to the targeting procedure in the T-51 installation manual.



When targets line up on the non-operator side, but are off an equal amount on the operator side, the T-51 needs to be leveled with the duplicator.

- 4) If, after following the targeting procedure with a service person, the operator notices that the targets are in alignment at the top of the sheet, yet do not fit vertically at the bottom (one image looks longer than the other), it will be necessary to use packing under the plate which is printing the longer image. In most cases, a sheet of .001 or .002 mylar will be sufficient to correct this situation.



Image length differences may be corrected by packing the longer image with a sheet of mylar.