



## Developing printing plates for garment tag printing

### FILM EXPOSURE

*The First Exposure:*

1. Open the lid of the exposure unit and lift up the glass platen.
2. Remove the protective cover sheet from photopolymer plates
3. Inspect the surface of printing plates for spotting or other visual defects
4. Center the plate under the glass platen metal side down
5. Place the film positive (emulsion side down) centered on the plate
6. Close glass platen firmly on top of the polymer plate and film positive. Lock the glass down.
7. Close the UV exposure unit and set the exposure timer according to the Table below (Please note that exposure times will vary with different exposure units, these times are for our BPL-1220 or Autolight 1528 exposure units):

<b>Material:</b>					
<b>100x224</b>	<b>Film</b>	<b>200 line screen</b>	<b>Washout time</b>	<b>Bake time 170F</b>	<b>Post Cure</b>
W/W Orange	1 minute	20 seconds	1 minute	20 minutes	20 minutes
W/W Dark Green	1:30	1 minute	1 minute	20 minutes	20 minutes
W/W Light Green	1:30	1:30	1 minute	20 minutes	20 minutes
A/W Red	3 minutes	40 seconds	2 minutes	10 minutes	30 minutes
A/W Green	1 minute	40 seconds	1 minute	20 minutes	20 minutes
A/W Gray	1 minute	40 seconds	1 minute	20 minutes	20 minutes
<b>Material:</b>					
<b>160x360</b>	<b>Film</b>	<b>200 line screen</b>	<b>Washout time</b>	<b>Bake time 170F</b>	<b>Post Cure</b>
W/W Orange	1 minute	10 seconds	1:30	20 minutes	20 minutes
W/W Dark Green	1 minute	20 seconds	1:30	20 minutes	20 minutes
W/W Light Green					
A/W Red	3 minutes	30 seconds	2:30	10 minutes	30 minutes
A/W Green	1 minute	30 seconds	1:30	20 minutes	20 minutes
A/W Gray	1 minute	40 seconds	1:30	20 minutes	20 minutes

### SCREEN EXPOSURE

*Second Exposure*

8. After the timer has gone off, open the exposure unit and remove the film positive.
9. Place the screen film over the plate, emulsion side down.
10. Close the glass platen firmly on top of the plate and screen film and lock.
11. Close the exposure unit and start the timer for the specified time.
12. Once the timer has gone off, open the exposure unit and remove the screen film and the plate.



## **PLATE WASHOUT**

8. If using and ALCOHOL WASH PLATES, pour some plate developer in a small tub.
9. Place the plate in the tub and gently rub with a soft brush for the specified time. This will ensure all uncured material is washed out of the plate.  
**\*NOTE\* If using WATER WASH PLATES, substitute the plate developer for water.**
10. After the completion of the timed sequence, slide out the door (or open the lid)
11. If using ALCOHOL WASH PLATES, gently pour warm water over the plate in order to remove any plate developer and to neutralize the developing solution.
12. Gently blow-dry BOTH sides of the plate with clean, filtered air.

## **BAKE AT 170°F**

13. Place the plate in a pre-heated convection oven at 170°F for the specified amount of time.

## **POST CURING**

### *Third Exposure*

14. Return the plate to the exposure unit.
15. Firmly lock into place and close the exposure unit.
16. Set the timer to the specified time. This will post-cure the plate and will ensure its longevity.
17. Once the timer is up, open the exposure unit and remove the plate.

## **Important notes about making printing plates**

- The first exposure time on the film positive determines the overall depth of the ink well. The SHORTER the exposure time the deeper the printing plate.
- The second exposure on the line screen determines the amount of ink, the size of the dot and the spacing between the dots.
- You can control the printing effects by varying halftone screens:
  - A 300 line screen will print finer graphics with shallower printing plates.
  - A 200 line screen will print medium graphics.
  - A 150 line screen will print course graphics.

***Make a beautiful print!***