

Trouble Shooting and Tips

Fujipla LPE-6510 Laminator



Wrinkling in Film

- Is one of the most common problems reported
- It is important to understand the type of wrinkle and where the wrinkle occurs to diagnose the problem and possible solution.

➤ **Types of Wrinkles:**

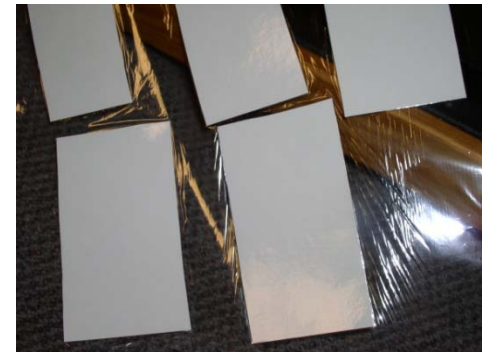
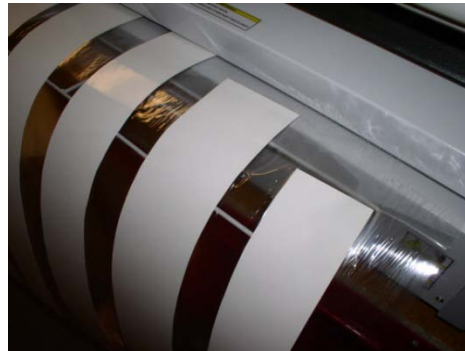
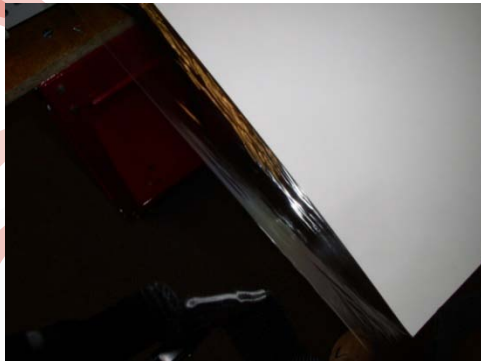
Off sheet or off item wrinkles, occurs between the items being laminated, laminated items have no wrinkles.

Wide Coverage Wrinkles, occurs all the way across the web, on laminated items and between the items being laminated.

Spot wrinkles, occurs sporadically, and in isolated areas.

Off sheet or off Item Wrinkles

- **These are normal, and not a problem with the laminator.**
- Typically occurs when laminating thicker items like poster board, layered items, or an array of various items fed through across the web.
- Although wrinkling occurs between the item or adjacent to the laminated item, no wrinkles occur on the item itself.
- Thin film of 1.3-1.5 mil stretches around the thicker or layered items and causes this normal effect.
- Use of 3 mil film can improved the off item wrinkling, but may not eliminate it completely.
- Sheets can be cut out and trimmed out flush to the edge of the laminated item so the wrinkled areas off the sheet can be discarded. Film will stick and not delaminate.



Wide Coverage Wrinkles

- **Wrinkles are constant and occur all the way across the web and continually as the web advances.**

Can be caused by numerous things:

- Incorrect film unwind tensions
 - Brake tension not set
 - Film is spinning on the supply shaft
- Incorrect temperature
 - Can be either too high or too low
- Out of spec laminating film
 - Laminating film must shrink slightly when it is heated, film that does not shrink properly in spec can wrinkle and no adjustments will get rid of the wrinkles.
- Improper threading path of film
 - Can create incorrect unwind tensions



Wide Coverage Wrinkles

- **Procedure for isolating cause and correcting problem**
 - Check brake tension
 - Adjust set screws on film shaft holders to add more unwind tension.
 - Check temperature setting
 - On LPE 6510 normal operating temperature is 9 on the dial which equates to 290-310 degrees.
 - Check for film roll slipping on supply shaft
 - Core clips in center of shaft must make contact and bite into the core. If they don't, film will spin freely on shaft and no brake tension can be applied.
 - Adjust core clip by loosening set screw with Phillips screwdriver, then slide clip outward to accommodate a loose fitting roll.



Wide Coverage Wrinkles

- **Insure proper film threading path**
 - Over top idler bar, under bottom idler bar.
 - Missing bottom idler bar can create wrinkling in film as film is not getting a good exposure to the heat shoe.



Wide Coverage Wrinkles



- If film is threaded properly, temperature set correctly, and unwind tension properly set, but all over wrinkles are still present, the laminating film may be out of spec.
 - Laminating film must shrink slightly as it hits the heat source. If the laminating material is out of spec, it will not shrink and wrinkles will be present on the heat shoes and in the film exiting the laminator at the back.
- **To Correct this problem:**
- Change rolls of film.
 - Film should smooth as it contacts the heat shoes and disappear completely going into the nip/seal rollers.
 - Film exiting the rear should be smooth and free of wrinkles.

Spot Wrinkles



➤ **Wrinkles isolated to specific spots or areas are typically caused by the following:**

- Defect in the item being laminated
 - Water spots
 - Staples
 - Wrinkle in item
- Improper feeding of item
 - Item must lay flat on table and enter nip of laminator completely flat
 - Items not flat or bowed on the table will be flattened and wrinkled by the pressure of the laminator

Laminator not pulling film through



➤ **If the laminator will not pull film through check the following:**

- IF Roll Pressure lever on side of laminator is in “Open” position
- Rotate lever to “laminates” position by rotating counter clockwise until arm is nearly straight down.



Recommendations

➤ Laminate with 2 People

- One person feeds the items to be laminated, the second person makes sure items are exiting at the rear of the laminator. With thick items, it may be necessary to occasionally tug on the exiting web slightly to insure items exit properly.

➤ Before starting to laminate, check the following:

- temperature setting at “9”
- film unwind brake tension is not too loose or too tight
- pressure roller arm rotated down or laminate position

