

Compensator Installation

GUIDE

Tools needed for installation:

- Steel Tape Measure
- Adhesive Tape
- Two Heavy Duty C-Clamps

Contents of Compensator Carton:

- Compensator Main Support Frame
- Compensator Clamping Hub
- Compensator Follower Roll Assembly
- 2 Allen Head Wrenches (One large & One small)
- 2 C-Clamps (If purchased with Compensator)

When the Compensator is Properly Installed:

- 1. It will be C-clamped to the frame of the laminating station. After testing a number of times, it may be bolted on to the press.
- 2. The main support of the Compensator will be positioned so that the center of the large hole in the Compensator will be approximately 9 ½" from the center of the laminate core holder shaft.
- 3. The laminate will make a 180° turn over the Compensator roller bar before going to the first idler or nip roller on the press.
- 4. There will be a gap of ½" between the laminating tape being pulled off a 16" diameter roll and the laminate roll itself. The laminate should not drag on face of the roll as it unwinds. This will prevent excessive tension on the roll.

Installing the Compensator on Your Press: (For laminating stations with flat surface to clamp onto.)

Step One: Determine the best position for the Compensator Main Support Frame on the laminating station

- A. Identify the path of the overlam from the roll to the first idler roller or nip roller.
 - 1. This will help you determine the proper positioning of the Compensator Main Support Frame on to the laminating station frame on your press. You will be clamping the Compensator Main Support Frame so that the center of the large hole in the Compensator is about 9 ½" from the center of the laminate core holder shaft.
 - 2. Hold a steel tape measure body on the first roller. Extend the end of the tape measure to 9 ½" past the center of the laminating station support shaft.
 - 3. Use adhesive tape to hold the end of the tape measure in place on the laminating station support shaft.
 - 4. The extended end of the tape measure will be in the approximate location for the hole in the Compensator Main Support Frame.
- B. Determine Position Across Web to Establish Location of Compensator Clamping Hub
 - 1. Put a die in a nearby die station. Use the C-Clamps to hold the Compensator Main Support Frame on to the laminating station frame. Measure the distance from the front of the Compensator Main Support Frame to the front edge of the back bearer of the die. This is to determine the location of the back edge of the widest web.
 - 2. The ideal distance is 3".
- C. Mount the Compensator Clamping Hub on the Compensator Main Support Frame
 - 1. If the distance measured in Step 2 above is over 3", mount the Compensator Clamping Hub on the front of the Compensator Main Support Frame.
 - 2. If the distance measured in Step 2 above is less than 3", mount the Compensator Clamping Hub on the back of the Compensator Main Support Frame.

Step Two: Installation on the press

- A. Use two heavy duty C-clamps to mount the Compensator Main Support Frame to the frame of the laminating station.
 - 1. Be sure that the large hole of the Compensator™ is centered on the end of the steel tape measure that you taped to the laminating station support shaft in Step A 3 above.
 - 2. Make sure that the clamps are tightened to hold Compensator Main Support Frame securely.
- B. Install the Compensator Follower Roll Assembly
 - 1. Slide the Compensator Follower Roll Assembly into the Compensator Clamping Hub until the Compensator Follower Roll Assembly is centered over the web or until the back arm clears the front of the clutch flange by 1/8".
 - 2. Use the large (5/16") Allen Head Wrench to tighten the clamping collar bolts.
- C. Adjust the Compensator Main Support Frame
 - 1. Put the largest diameter laminate roll that you use (up to 16" diameter) on the laminate core holder.
 - 2. Thread the laminate over the Compensator Follower Roller Bar and on to the press, but remove or bypass the idlers mounted to laminate unwind frame. The ideal distance from point of unwind to first roller in press is about 3 feet.
 - 3. Loosen the C-Clamps holding the Compensator Main Support Frame to the laminating station. Rotate the position of the Compensator until the laminate going in to the press is almost dragging on roll of laminate. Maintain the 9 ½" center to center distance established in Step One A. Retighten the C-Clamps.
 - a. Note: If the first roller on the press is to the right of the laminate roll, you may need to mount the Compensator on the right side of the laminate roll.
 - b. The holes in the Compensator Main Support Frame are off to ∙one side so that you can flip the frame over and remount the fixed shaft clamp collar to the other side to accommodate your press.
 - 4. Remove the large laminate roll from the press. Install an almost empty roll of laminate and thread it over the Compensator Follower Roller Bar and into the press.
 - 5. Loosen the clamp end of the Compensator Aluminum Spring Arm. Rotate it so that the spring is pulling the roller against the laminate roll. Relax the spring and note the position of the arm. Then tension the spring about 1 ½" and lock the arm in position.
 - 6. Remove all laminate unwind tension and run the press. Observe to see if the Compensator Follower Roller Bar lifts off the laminate master. Some lifting may occur on presses with a short distance between the laminate pull off and the first roller in the press. Lifting can be reduced or eliminated by repositioning the center to center distance from 9 ½" to 9". Now the Compensator can be rotated a little further so that the 16" diameter roll almost drags on the laminate headed to the press. With the 16" diameter roll in place, increase the spring tension until a safe distance short of pulling the wrong direction.
- D. Align the Compensator Follower Roller Bar with the laminate core holder.
 - 1. Remove the laminate roll and allow the Compensator Follower Roller Bar to lay against the laminate core holder.
 - 2. If the contact area of the two rolls is not even, loosen one of the Compensator Follower Roller Bar support arm clamps with the small alien wrench. Move the Compensator Follower Roller Bar until it is parallel with the laminate core holder. Tighten the arm clamp securely.

Step Three: Testing your installation

- A. Make sure the unit is held securely with the C-Clamps.
- B. Use the Compensator for a number of jobs to make sure that the mounting is correct. The mounting can be adjusted at any time.
- C. Once you are absolutely certain that the Compensator is mounted properly and functioning suitably, you may wish to permanently mount it on the overlaminating station. Then you can drill through the frame and bolt the Compensator Main Support Frame to the overlaminating station. Use a minimum of two ¾" bolts. Three or four bolts is recommended.