Health and Safety Information
Read all health hazard, precautionary, and first aid statements found in the Material Safety Data Sheet, and/or product label of chemicals prior to handling or use.

Follow the Instructions
3M recommends only the standard practice outlined in this Information Folder. Procedures and materials which do not conform to these instructions are excluded. See Terms and Conditions of Sale.

**Important:** Read this Information Folder completely before operation and follow the instructions for proper results.

The 3M motorized squeeze roll applicator is designed for continuous machine application of 3M™ Scotchlite™ Sheetings and 3M™ Scotchcal™ Films with pressure sensitive adhesive to flat panels. Essentially it is a 48" HSRA with an air cylinder kit, which has been converted to a motorized applicator. The motorized applicator includes both an unwind roll and a take-up roll.

A. Operating Instructions
1. Open both guards to expose both mandrels, as shown in Figure 1:

![Figure 1: Covers lifted](image1)

2. Remove the brake clamps from both sides of the unwind mandrel, and lift out the mandrel (see Figure 2):

![Figure 2: Removing brake clamps](image2)
3. Loosen one collar and remove it from the mandrel, and if necessary, loosen the second collar (see Figure 3).

4. Slide the roll of sheeting onto the mandrel, and replace the collar.

5. Set the mandrel back on the applicator, and replace the brake clamps (see Figure 4).

6. Center the roll of sheeting on the mandrel and tighten the collars with an Allen wrench (see Figure 5).

7. Remove the drive pin and bearing cap on the liner take-up mandrel. Lift the mandrel out of the applicator.

8. Slide an empty core onto the mandrel and center it. Place the mandrel back on the applicator and re-install the drive pin and bearing cap. Tighten both cap bolts finger tight.

9. Carefully feed enough sheeting under the stripper roll to reach the liner take-up mandrel (see Figure 6).

**NOTE:** DO NOT secure it with tape at this time.
10. Tighten the 4 brake screws on the stock roll mandrel, so that the sheeting is held in place for thread-up (see Figure 4: Replacing the brake clamps).

11. Lower the top nip roll, using the air control lever (see Figure 7).

12. Insert the sheeting into the gap between the feed table and the lower nip roll (See Figure 8).

13. Center a sign blank with the sheeting, and square it up with the nip (see Figure 9).

14. Slide the edge guides to the sign blank, leaving approximately 1/16” clearance on one side, to allow for size variations. Secure the edge guides with the wing nuts below the feed table (see Figure 10).
15. Pull the sheeting from the gap, and while keeping it taut, tape the liner to the core on the liner take-up mandrel (see Figure 11).

Figure 11: Taping liner to the take-up mandrel

16. Using the control valve, raise the top nip roll (see Figure 12).

17. Feed a starter panel into the applicator under the top nip roll.

Figure 12: Raising the top nip roll

18. Peel the sheeting back from the liner, and feed it between the nip rolls (see Figure 13). **Caution:** Take care to keep the sheeting adhesive from coming in contact with the bottom nip roll.

Figure 13: Feeding sheeting between nip rolls

19. Lower the top nip roll so that the sheeting is pressed onto the starter roll (see Figure 7: Lowering top nip roller).

20. Loosen the brake screws on the stock roll mandrel, so that the mandrel turns but has some resistance.

21. Lower the plastic guards and engage both interlock keys (see Figure 14).

Figure 14: Lowering and locking guards
22. Place a sign blank in position behind the starter panel (see Figure 15).

23. Turn the “Main Power” switch ON, and check to make sure that the “Direction” switch is in the forward position (see Figure 16).

24. Step on the air pressure foot switch to apply air pressure to the nip (See Figure 17).

25. Using the regulator, set this pressure to 80 psi (see Figure 18).
26. Start the applicator by stepping on the motor activating foot switch (see Figure 19).

![Figure 19: Motor activating foot switch](image)

27. Adjust the motor speed to a comfortable application speed, and the liner take-up speed to a rate at which the liner winds up smoothly (see Figure 16: Main power, direction switches).

**NOTE:** If the liner is separating from the sheeting in front of the stripper roll while the sheeting is feeding off of the stock roll, tighten the brake clamps until the liner splits from the sheeting at the stripper roll instead of in front of it.

28. Use the side adjustment knob on the end of the stock roll mandrel to make small lateral adjustments to center the sheeting if it is running slightly off to one side or the other.

29. If everything seems to be in order, continue to feed blanks.

30. If the entire roll of sheeting is not used when the job is finished, finish with a starter panel.

31. Raise the feed side guard, and cut the sheeting above the top nip roll (see Figure 20).

**NOTE:** Do not cut against the nip roll.

32. Lower the guard, and finish the application using either the motor activating foot switch, or the manual motor switch. The manual switch allows motor operation without operating the liner take-up air motor.

**B. Using Sign Blanks Narrower than 12"**

For sign blanks narrower than 12", the top roller may not rest squarely on the blank when running the blank in the center. This is because the electric motor adds more weight to one end of the roll. Offset the sign where it enters the nip toward the electric motor end, as follows:

1. Remove the wing nuts and reinforcing bar from the left edge guide, and move it to the slots on the right.
2. Reinstall the wing nuts and bar.
3. Place a blank between the upper and lower nip rolls.
4. Lower the top nip roll onto the sign blank, and apply air pressure to the roll.
5. Make sure that the nip roll is resting squarely on the sign blank. If not, shift the sign blank one way or the other, and check it again. Repeat this step until the roll is square with the blank. The adjustment is complete, and the sheeting may be applied.
Trouble Shooting

**Condition**

A. Machine will not turn on.

- Power plug disconnected.
- Plastic guard(s) not closed and interlock key(s) not engaged.

B. Panels will not remain aligned as they pass through the machine.

- Edge guides not properly aligned; see Fig. 10.
- Panel not centered in the applicator.
- Stock roll not centered on mandrel.
- Incorrect top roller pressure; see Fig. 18.
- Stock mandrel misaligned with liner mandrel. Minor lateral adjustments may be made with lateral adjustment knobs.
- Warped or bowed rubber rollers. Replace roller or have roller professionally resurfaced.
- Panels not square. Check panels with carpenter square.

C. Sheeting tracks off panels or wrinkles during application.

- “Telescoped” stock roll. Remove stock roll. Stand on end and rewind sheeting into alignment.
- Stock roll and liner roll misaligned. Minor lateral adjustments may be made with the Lateral Adjustment Knobs. Excessive lateral adjustments in either direction will cause mandrels to bind. For major adjustments, cut liner and re-attach to liner roll in proper position.
- Locking collar set screws loose.

D. Sheeting cracks after application of screen process colors.

- Reduce unwind and rewind tensions.
- Increase air flow through drying racks.
- Use recommendation ink series.
3M assumes no responsibility for any injury, loss or damage arising out of the use of a product that is not of our manufacture. Where reference is made in literature to a commercially available product, made by another manufacturer, it shall be the user's responsibility to ascertain the precautionary measures for its use outlined by the manufacturer.

**Important Notice**

All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and the following is made in lieu of all warranties, express or implied. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.

Statements or recommendations not contained herein shall have no force or effect unless in an agreement signed by officers of seller and manufacturer.

**3M**

**Traffic Control Materials Division**
3M Center, Building 225-5S-08
P.O. Box 33225
St. Paul, MN 55133-3225

**3M Canada**
P.O. Box 5757
London, Ontario N6A 4T1

**3M Mexico, S.A. de C.V.**
Apartado Postal 14-139
Mexico, D.F. 07070

Printed on recycled paper
75-0380-4995-2