



**AERO PLASTICS INC.**

**Heavy Gauge Windshield Installation**

**Report No. 329/CON**

**Installation Drawing List**

**Applicable Aircraft Models**

<b>Cessna 177 through 177B</b>	<b>S/N 17700001 through 17702752</b>
<b>177RG</b>	<b>S/N 177RG0001 through 177RG1366</b>
<b>Reims</b>	
<b>Aviation F177RG</b>	<b>S/N F177RG0001 through F177RG0177</b>

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## **INSTALLATION INSTRUCTIONS FOR WINDSHIELDS .250" THICKNESS**

Applicable to: Cessna 177 through 177B, 177RG and Reims Aviation F177RG

### **REMOVAL OF THE WINDSHIELD**

1. Remove the front retainer strip from around the bottom of the windshield by drilling out the rivets or by removing the screws which secure it in place. (Fig. 1, items 2 & 3)
2. Remove the outside air temperature gauge. Remove and tape the compass clear of the work area. The electrical wiring need not be removed.
3. Drill out and remove the rivets which hold the upper retainer in place, except for the center 6 rivets. Mark the position of each aluminum support bracket for the trim so that they may be replaced in the same position. (Fig. 1, item 5)
4. Carefully remove the windshield from the frame by lifting the lower portion and pulling it out and down to disengage it from the top and side retainers.
5. Remove all tape and sealant residue from the windshield frame and retainers.

### **INSTALLATION OF THE WINDSHIELD**

1. The standard thickness on all models of the Cessna 177 series aircraft is .187" thickness. The windshield which you are installing is manufactured in .250" thickness. The inside edges of the windshield are milled to a thickness of approximately .187" around the entire perimeter. (Fig. 1, item 1) This milling allows the windshield to be installed in the same way as the original thickness windshield. All edges which fit into channels or must engage a retainer are milled to the thickness of the original windshield. The windshields are trimmed to fit and in most cases should require no additional trimming.
2. Test fit the windshield by placing it in position in the airframe. If any minor adjustments are necessary, the edges of the acrylic may be filed or sanded. When fitting is completed, sand smooth all saw and router marks and break all sharp edges using 220 grit sandpaper. This will help prevent any cracks or breaks originating along the edges of the windshield. **"An ounce of prevention is worth a pound of cure."**
3. Before proceeding with the final installation, the windshield should be peeled and inspected for any defects or damage incurred during fitting, handling or shipping. The windshield may be recovered with the Spraylat protective coating or may be recovered using a cling type food wrap to protect the windshield during final installation.
4. Consult the Cessna Service Manual windshield installation instructions or proceed to step 5.
5. Apply the felt stripping and sealing compound or sealing tape to all edges of the windshield. The felt stripping is folded over the edges of the windshield in a "U" shape. (Fig. 1, item 1) Use sealants - Presstite 579.6 (LP p/n SP-5796), Cessna - U000926 (LP p/n SP-EP7191T), or Dow Corning - RTV-732 (LP p/n SP-R732C)



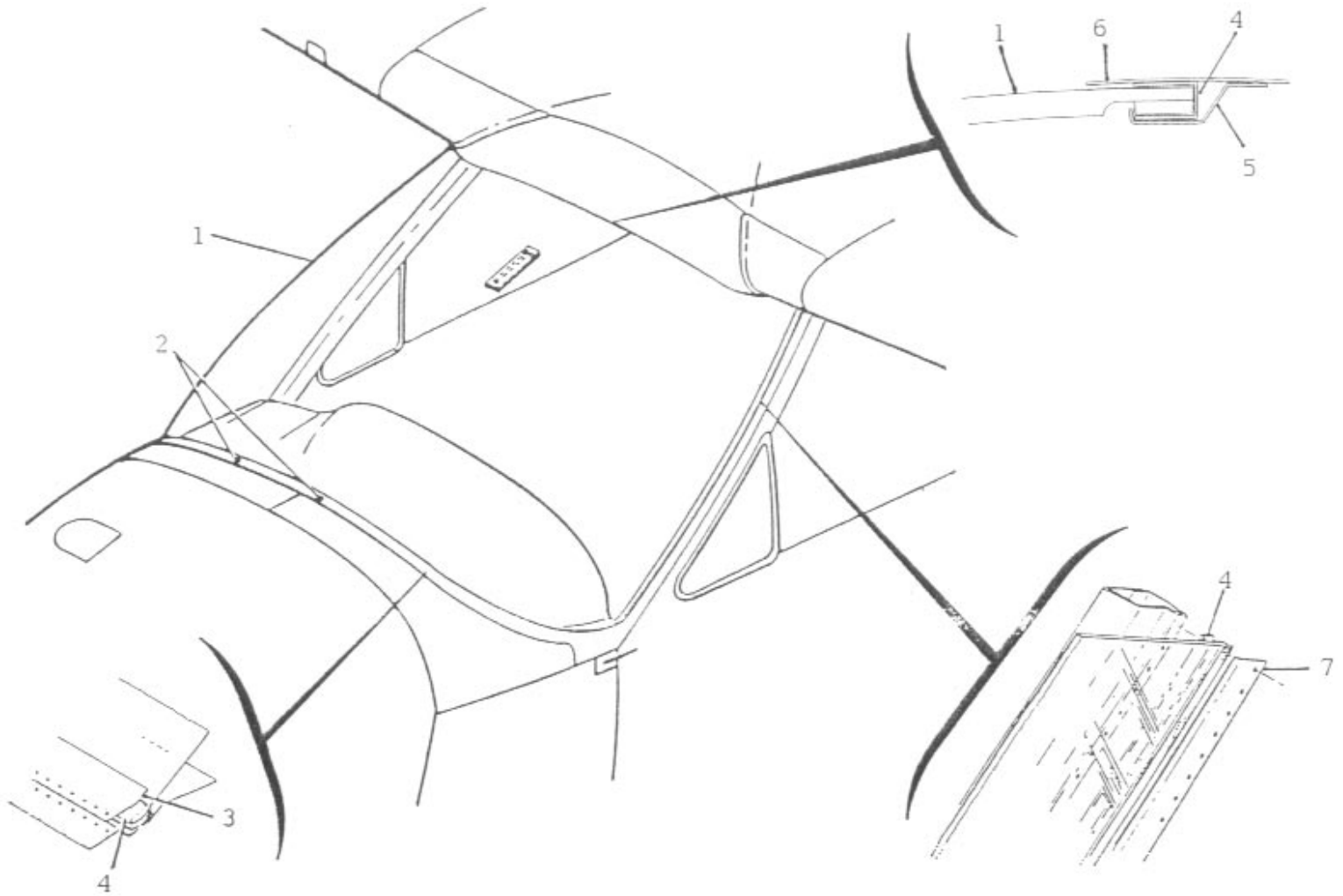
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6. Insert the windshield into the frame and install the retainer moldings. These retainers will not need to be repositioned to accommodate the thicker windshield. Secure the windshield retainers with rivets or they may be replaced with a minimum size #6 machine screws (MS24693, AN526R-632 or equivalent) (Fig. 1, item 2) as the attachment screws. No loss of strength will occur.
7. Remove any of the excess sealant or tape.
8. Drill hole for outside air temperature gage using an acrylic drill bit. This may be done either before or after the windshield has been installed into the airframe.
9. Reattach the compass and outside air temperature gauge.
10. Complete 337 form and perform weight and balance computations. The original .187" windshield weighs approximately 16 lb. 5 oz. and the .250" windshield weighs approximately 21 lb. 13 oz..
11. Follow the guidelines on acceptable maintenance procedures in the FAA Advisory Circular AC 43.13-2A, or latest revision, in completing all phases of the installation.



Windshield Installation

- 1 - Windshield p/n 329.250
- 2 - Retainer mounting screws
- 3 - Front retainer
- 4 - Felt seal
- 5 - Upper locking retainer
- 6 - Top skin
- 7 - Side retainer

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 Figure 1  
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