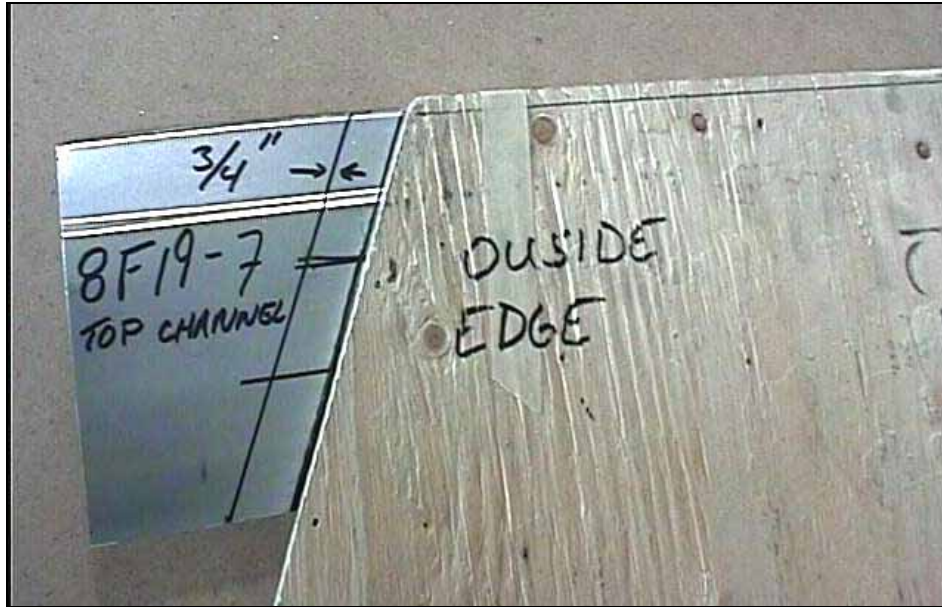


Section 4b: ASSEMBLY OF THE DOORS (continued from 4a)

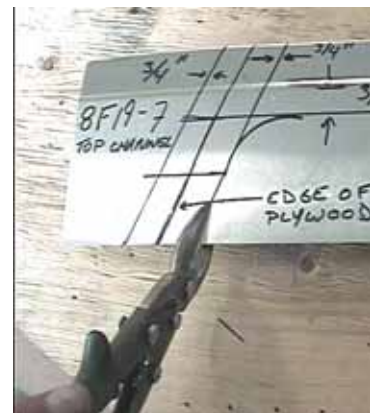
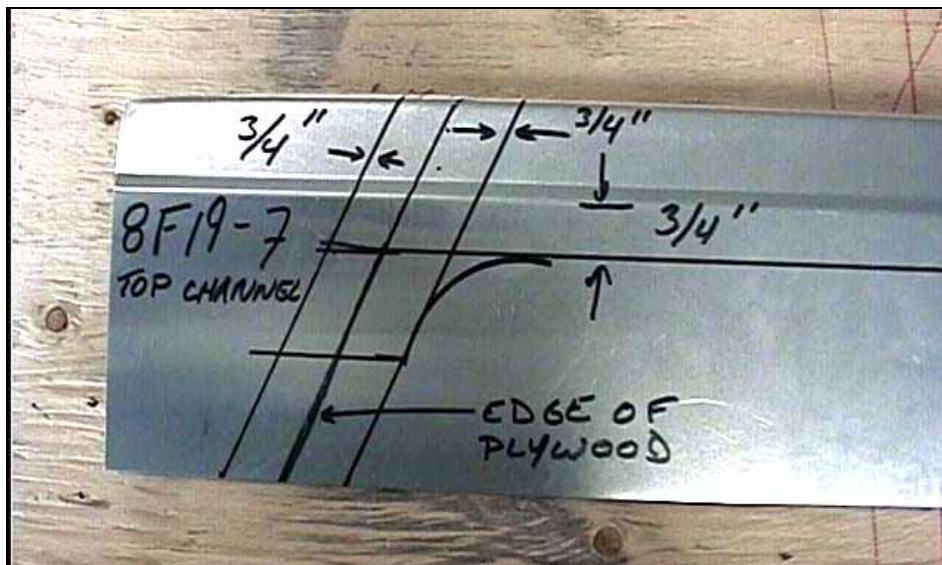


TOP FRONT CORNER OF DOOR.

Mark a trim line on the upper channel part 8F19-7 20mm past the front and rear edge of the template board.

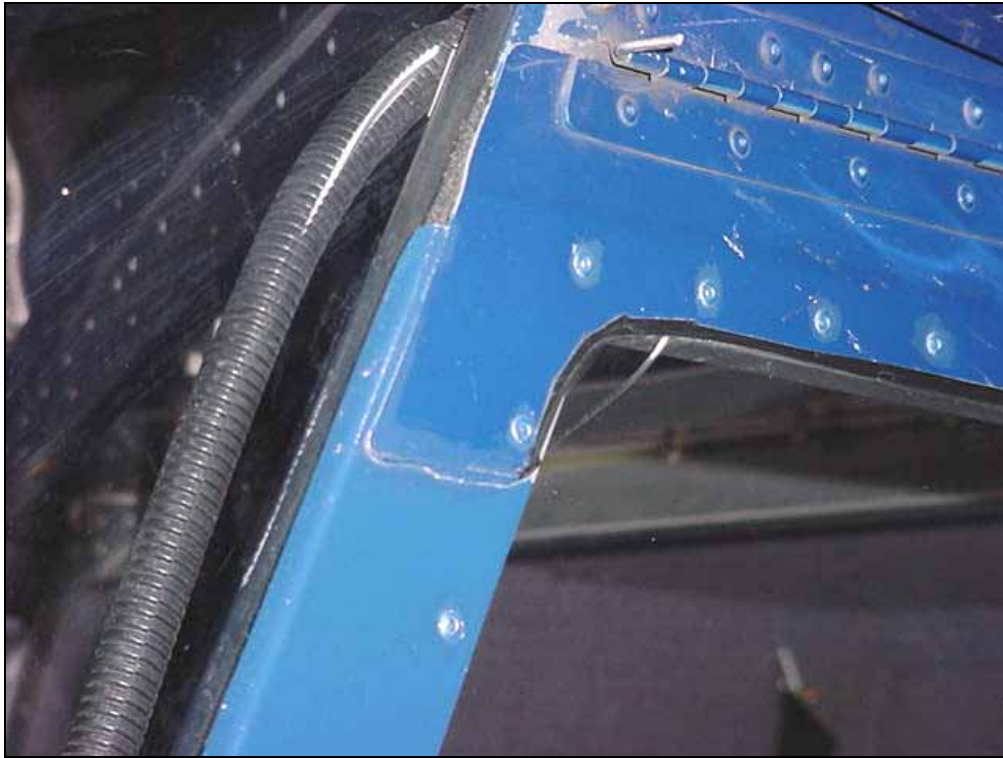


side view, layout is on the O/B side  
(short flange is I/B)



Trim it to size. Deburr all parts; finish all edges and re-assemble and cleco

Remove 8F19-7 and layout the inside trim line front and rear.



The front edge of the Outside Channel 8F19-7 overlaps the side tubes of the cabin frame.

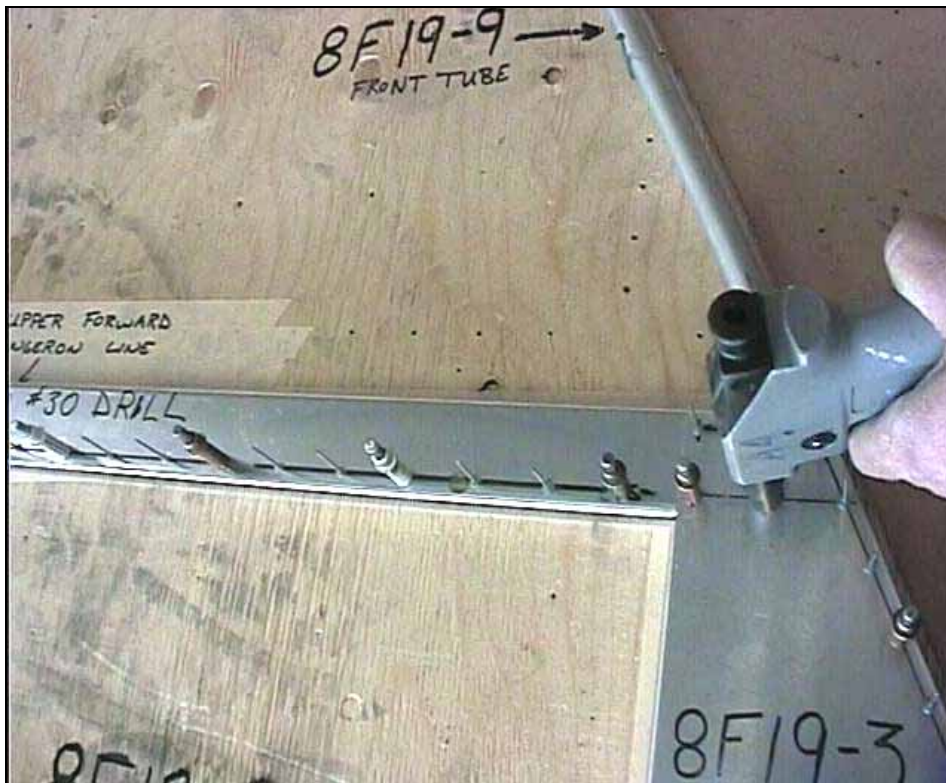


8F22-9 DOOR FRONT & BACK TRIM

8F19-7 Top outside channel



Detail of top aft corner of LEFT door. 8F19-7 and 8F22-9 overlap the fuselage skin approximately on 20mm



WAIT: Wait to rivet the Bottom Forward Gusset 8F19-3 to the door frame until after the exterior door handle is screwed in place.

After re-clecoing all the parts in place proceed to rivet them together. All rivets are A4's. Remove the assembly from the template board.



Inside view of top left door.



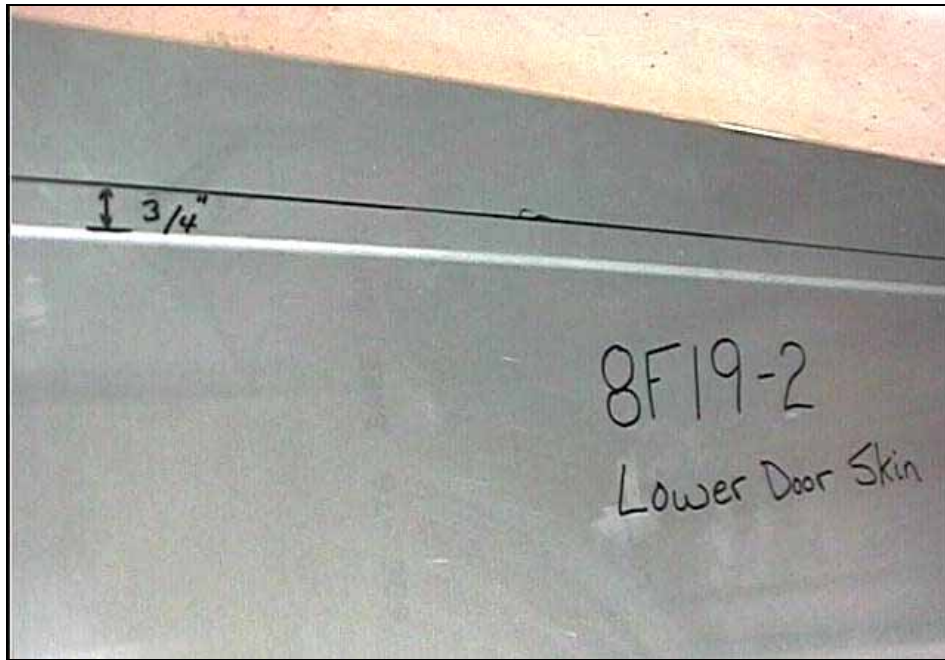
Detail: top aft corner.



Left door.



Detail: Top front corner



The exterior skin 8F19-2 is the next part to be fitted.  
 ORIENTATION: Jogged flange is towards the top (the purpose of the joggle is to make room for the thickness of the window).  
 Layout a reference line on 8F19-2

The joggle is O/B  
 Photo on the left is the layout on the left side of above photo



**8F19-2  
 LOWER DOOR SKIN**

Place the template board on top of the skin with the reference line aligned with the horizontal line drawn earlier.

Make sure the orientation of the skin is correct: The joggle is the gap between the tube frame and the skin.

When placed against the door channel 8F19-6. The bend along the top edge of the 8F19-2 forms a groove to accept the window material.



A piece of  $\frac{3}{4}$  wood makes an excellent gauge to layout the 20mm distance.

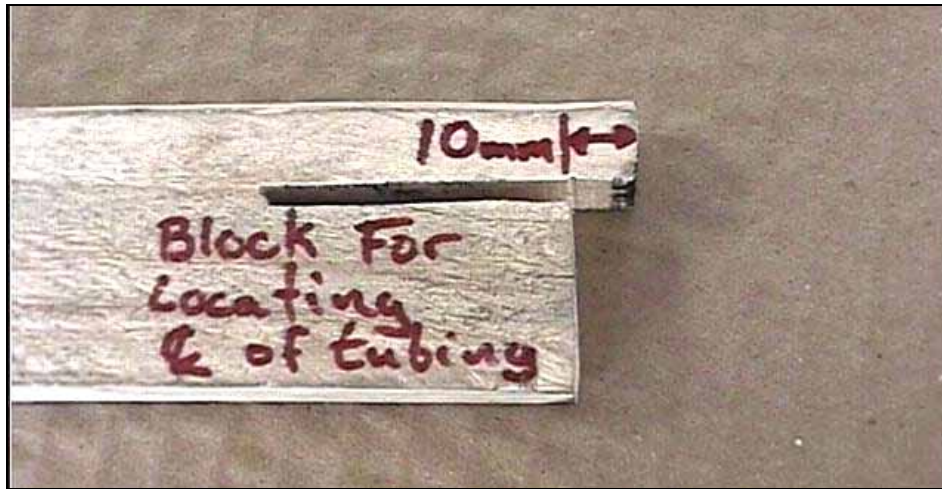
Layout a trim line 20mm larger than the template board.



Layout on the O/B side (left side on above photo)

Plot a nice radius in each corner. This builder used a roll of tape as a template.

Layout the inside trim lines as illustrated. The inside lines are 20mm to the inside of the line traced from the template and 20mm above the reference line drawn horizontally.



## GAUGE BLOCK

Placed in position with largest end against the tube, this gage will locate the center of the tubes for drilling the rivet holes.

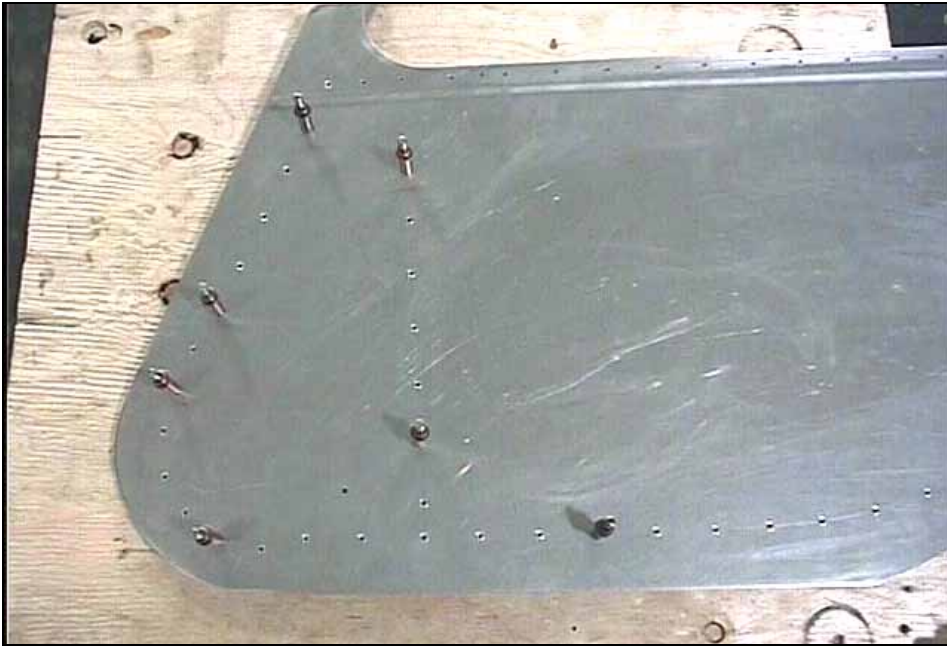
Make up a gauge block as shown above.



Tape the skin to the door frame.

Layout the rivet lines:  
Use the Gauge Block to mark the rivet line over the center of the tube frame. The critical dimension is the 10mm, the cutout slot is to make room for the edge of the skin.

Trim the skin to size. Remember, when the door is closed the skin will overlap the fuselage (cabin sides) on 20mm all around.



**A4 PITCH 40**  
For straight lines.

**A4 PITCH 30**  
Around front curvature.

Position the skin on the door frame assembly and drill the rivet holes into the gussets and tubes. Use the gauge to assist in locating the rivet holes.



Keep the skin located flush with the top of the center door channels as illustrated. The joggle and top row of holes will secure the window material later.





Rivet the outer skin to the door frame. Do not rivet the top edge of the center channel or the outside edge of the upper channel just yet.



**8F22-3**  
**DOOR WINDOW**

**8F22-9**  
**DOOR FRONT &  
REAR TRIM**

**A4 PITCH 40**  
Rivet line though the  
front and rear tube  
8B22-9

Install the window material, trim it to size, drill and rivet it in place.



Right door – standing under the leading edge of the wing looking up at the door in the open position



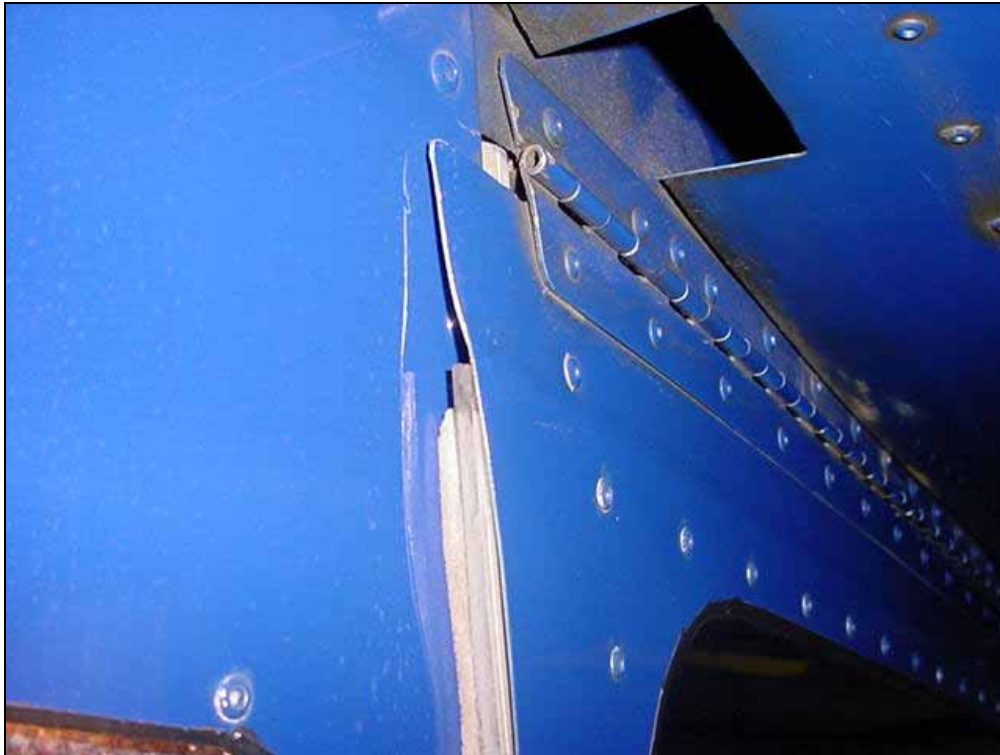
Front right detail, in the closed position the front trim covers up the screws through the windshield.



Right door – top aft corner door open

**SUGGESTION:**  
Hammer the edge of the channel over the round tube.

**FOAM WEATHER STRIPPING** – self adhesive type (not supplied in kit). Add a strip on the I/B side of the door where it will overlap with the fuselage skin.



On this door the aft edge of the Plexiglas window is set flush with the aft edge of the trim. The self adhesive side of a thin strip of foam weather stripping is applied on the I/B side of the window. c

Right door – top aft corner door closed.



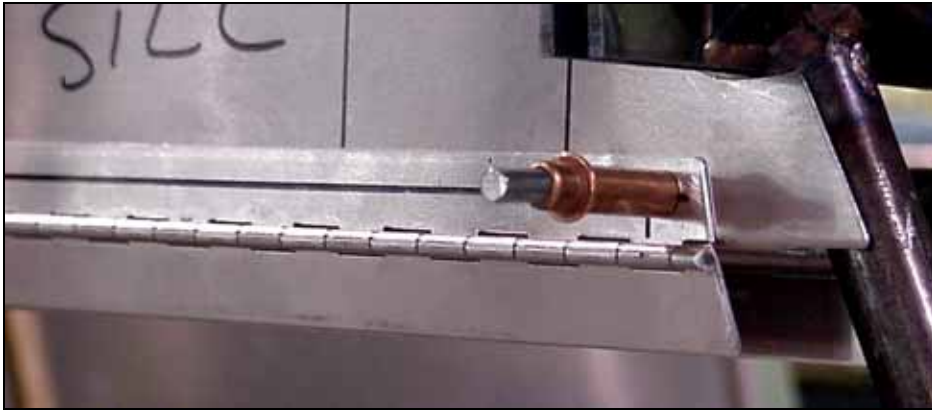
Photo of left door, notice the cutout in the flaperon bracket. See section 4c page 12

COMMENT: The Plexiglas window can be cut back to avoid overlap with the fuselage side skin.

On our demo, the trim 8F22-9 extends back to cover the front rivet line in the fuselage side skin.

SUGGESTION: Add a piece of weather striping (foam material with self adhesive) to the inside of the trim

IMPORTANT: Make sure that when the door is close the edge of the short flange on the trim 8F22-9 does not touch the fuselage side skin. If necessary cut the flange shorter.



**8F19-23  
UPPER DOOR PIANO  
HINGE**

Hold the door hinge in position and drill the hinge to the top door sill 8F19-5

Detail view – front of door



**3 RIVETS A5**

First locate 3 rivets each steel plate welded on the cabin frame.

**A5 PITCH 40**

Remember to provide a means of locking the hinge pin in place.

Cleco the door in place.

