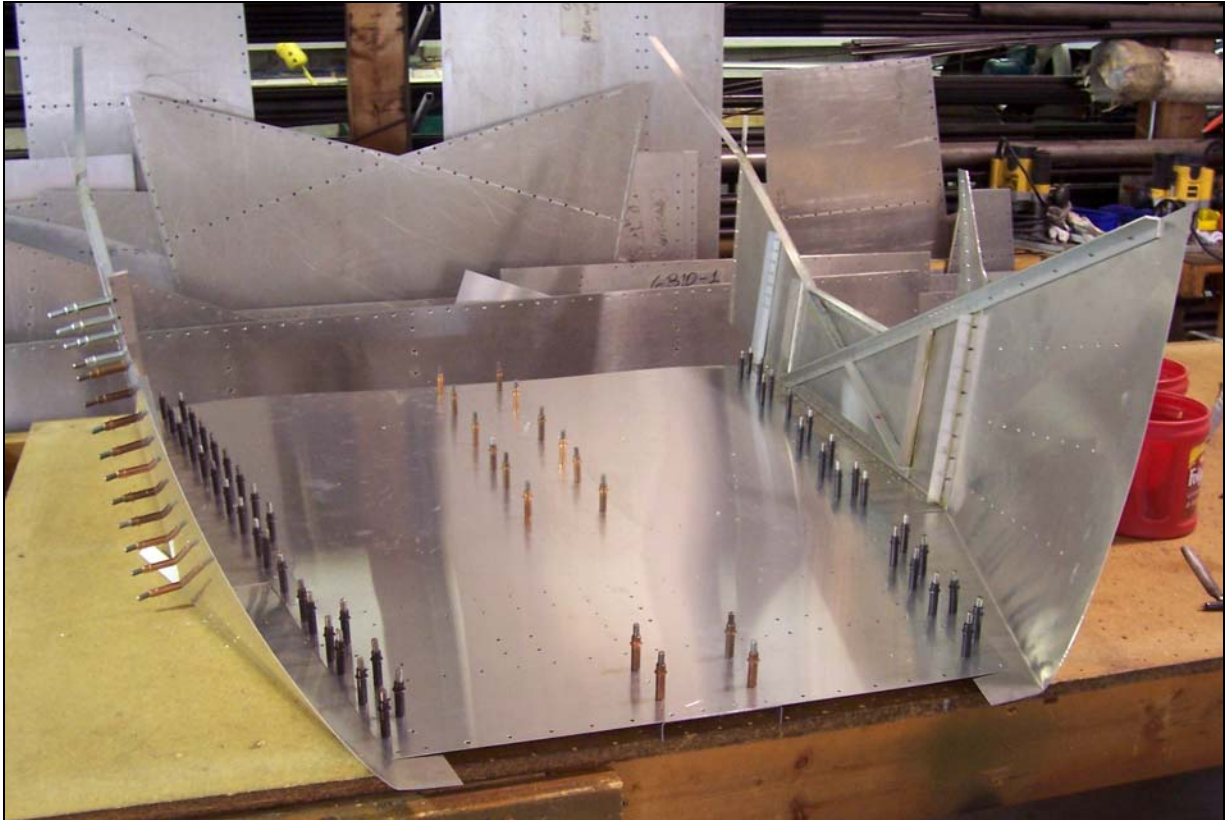


Section 75-FA-4 Forward Fuselage



This manual has been prepared for assembly of the forward fuselage skins supplied with match drilled parts. This photo assembly manual is intended as a supplement to the drawings. If there is any discrepancy between this manual and the drawings, the drawings supersede this manual. For more information on building standards and allowable tolerances see "Construction Standards for Zenair Light Aircraft" available from Zenith Aircraft Co.



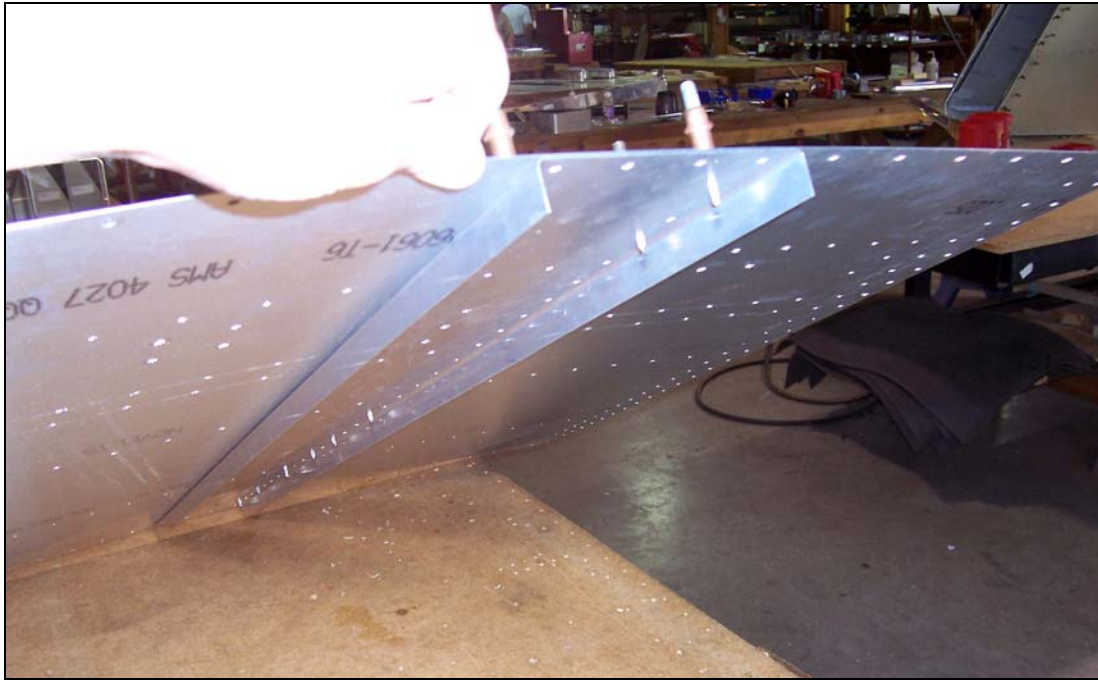
P/N: 75F10-3
Cabin Floor



P/N: 75F10-7
Pedal Bearing
Channel

Cleco the Pedal Bearing Channel to the Floor Skin. Wait to expand the holes until the rudder pedals are installed.

Note: The Pedal Bearing Channel will only Cleco to one side of the Cabin Floor, this will correctly orientate the Cabin Floor.



P/N: 75F10-4
Floor Stiffener

Cleco the Floor Stiffener to the Cabin Floor. Wait to expand the holes until after other channels are installed.



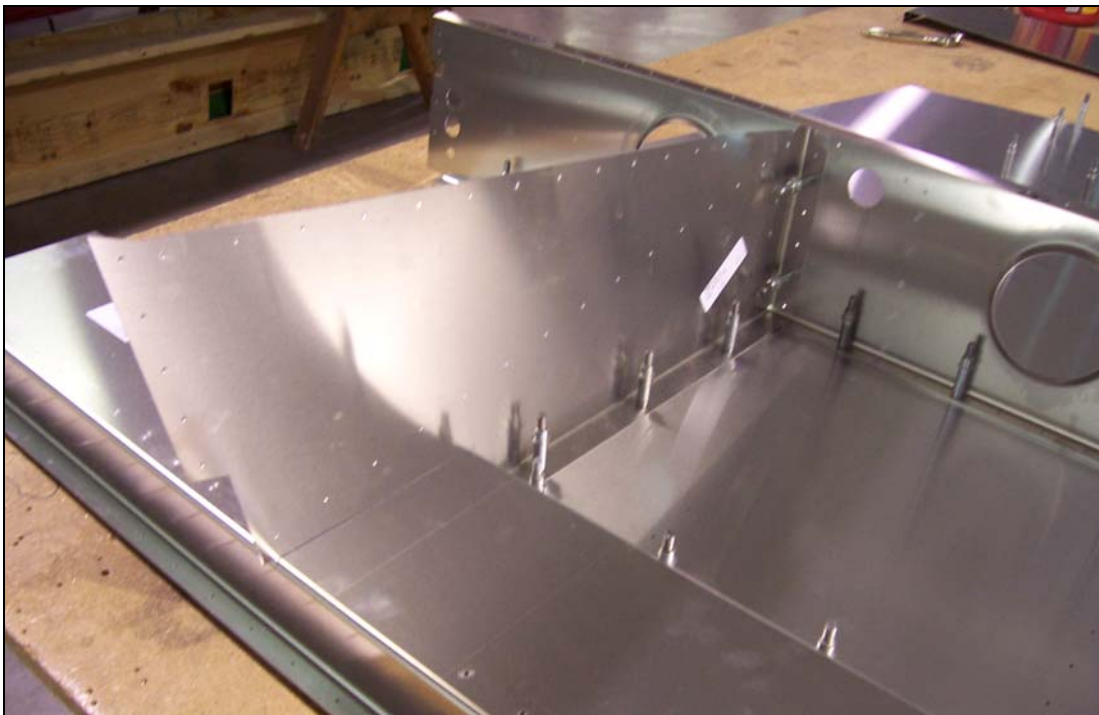
P/N: 75F11-1
Seat Channel

Cleco the Seat Channel to the Cabin Floor. With a #30 drill bit, expand the holes in the Seat Front through the Cabin Floor and Cleco.



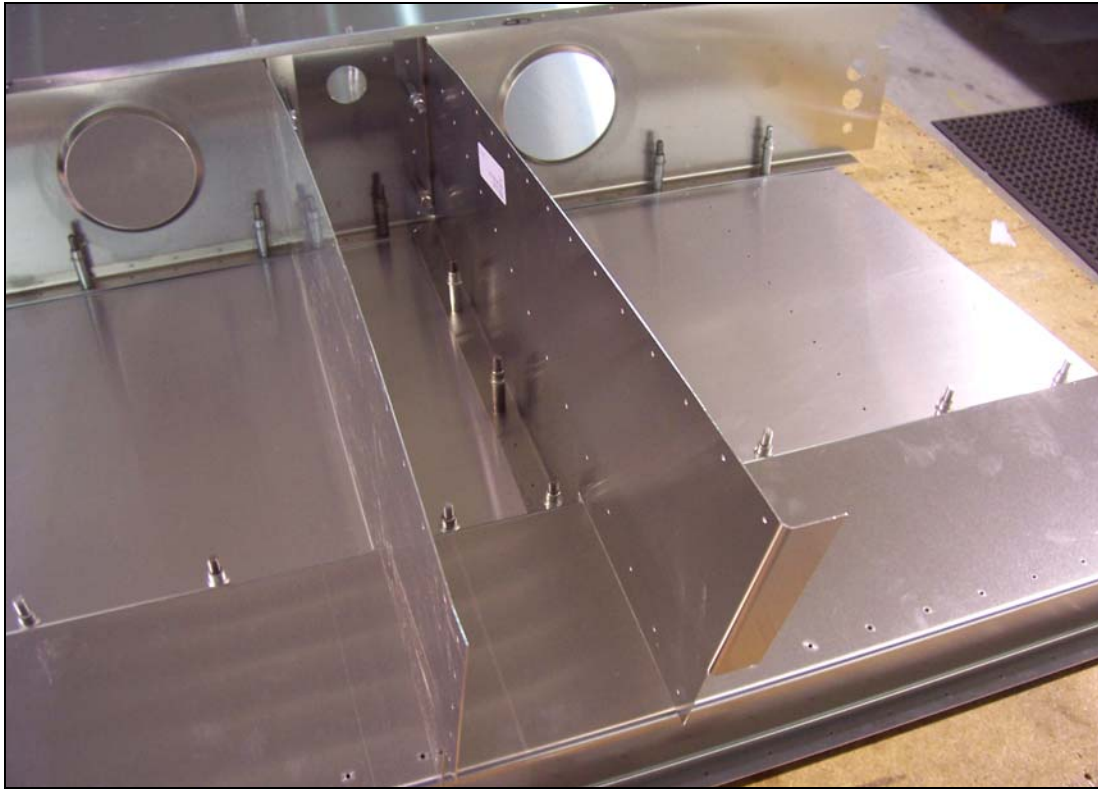
P/N: 75F10-1
Gear Channel

Cleco the Gear Channel to the Cabin Floor. With a #30 drill bit, expand the holes in the Gear Channel into the Cabin Floor and Cleco. With a #20 drill bit, expand the holes in the Gear Channel into Cabin Floor and Cleco.



P/N: 75F12-1
Left Arm Rest Side

Cleco the Left Arm Rest Side to the Cabin Floor. With a #30 drill bit, expand the holes in the Left Arm Rest Side through the Cabin Floor and the Floor Stiffener and Cleco.



P/N: 75F11-6
Right Arm Rest Side

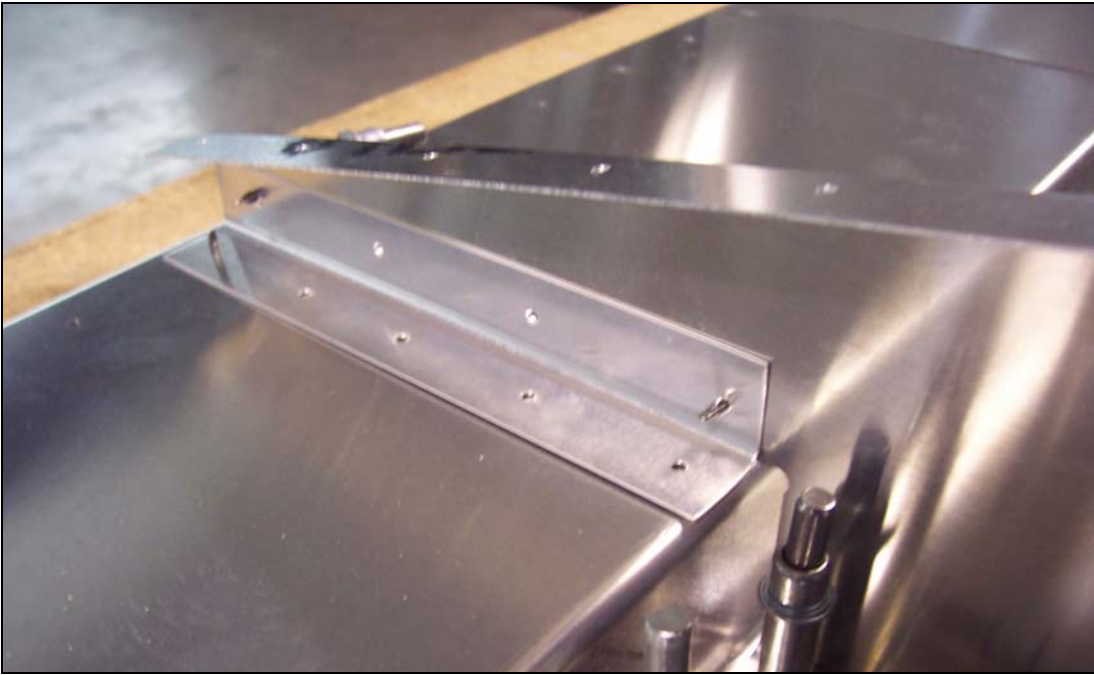
Cleco the Right Arm Rest Side to the Cabin Floor. With a #30 drill bit, expand the holes in the Right Arm Rest Side through the Cabin Floor and the Floor Stiffener and Cleco.



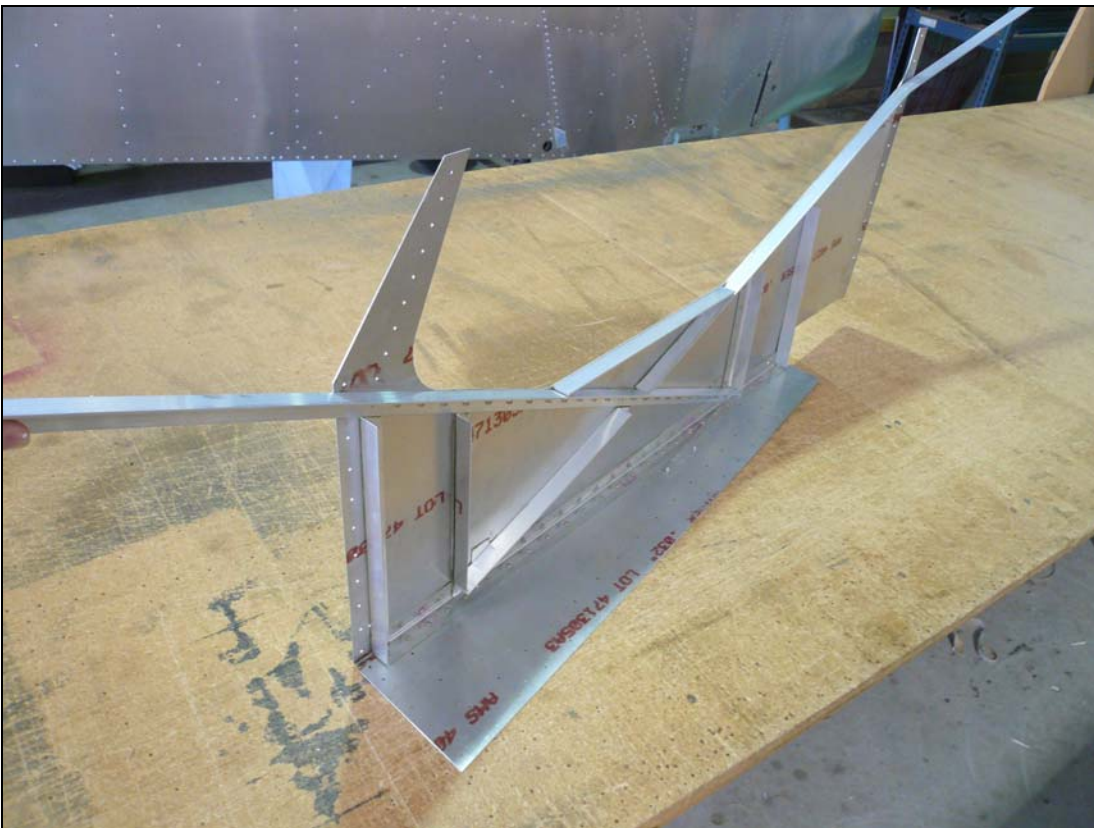
P/N: 75F11-2
Seat Support

Cleco the Seat Support to the Cabin Floor and Seat Channel. With a #30 drill bit, expand the holes in the Seat Support through the Cabin Floor and Seat Channel and Cleco.

Note: The flanges point outboard on the Seat Support.



Cut two pieces of L angle 150mm long. Position the L angle flush with the front of the Gear Channel against the Seat Support and clamp the L angle to the Seat Support. With a #40 drill bit back drill through the Seat Support into the L angle and Cleco. Then back drill through the intersecting hole in the Gear Channel for the L angle and the Rear Seat Channel. Remove the L angle and layout 4 additional rivets on the L angle. Cleco the L angle in place and back drill through the L angle into the Gear Channel. With a #30 drill bit, expand the holes in the L angle and Cleco.



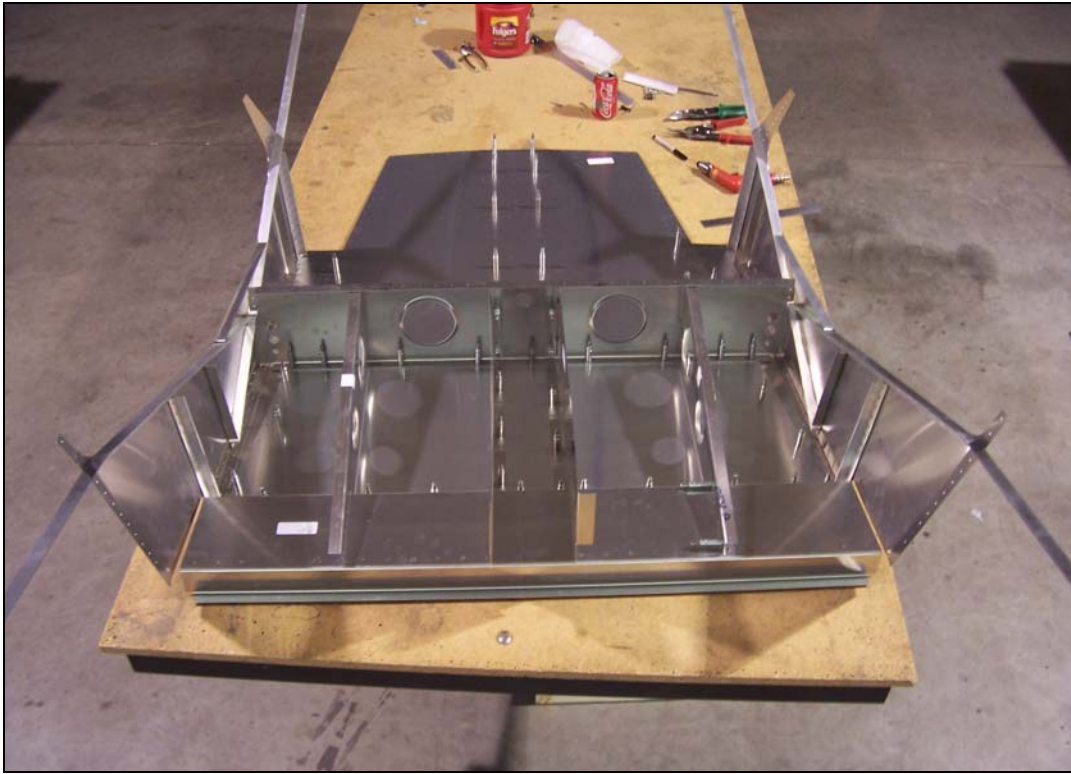
P/N: 75-F-7
Cabin Side Assembly



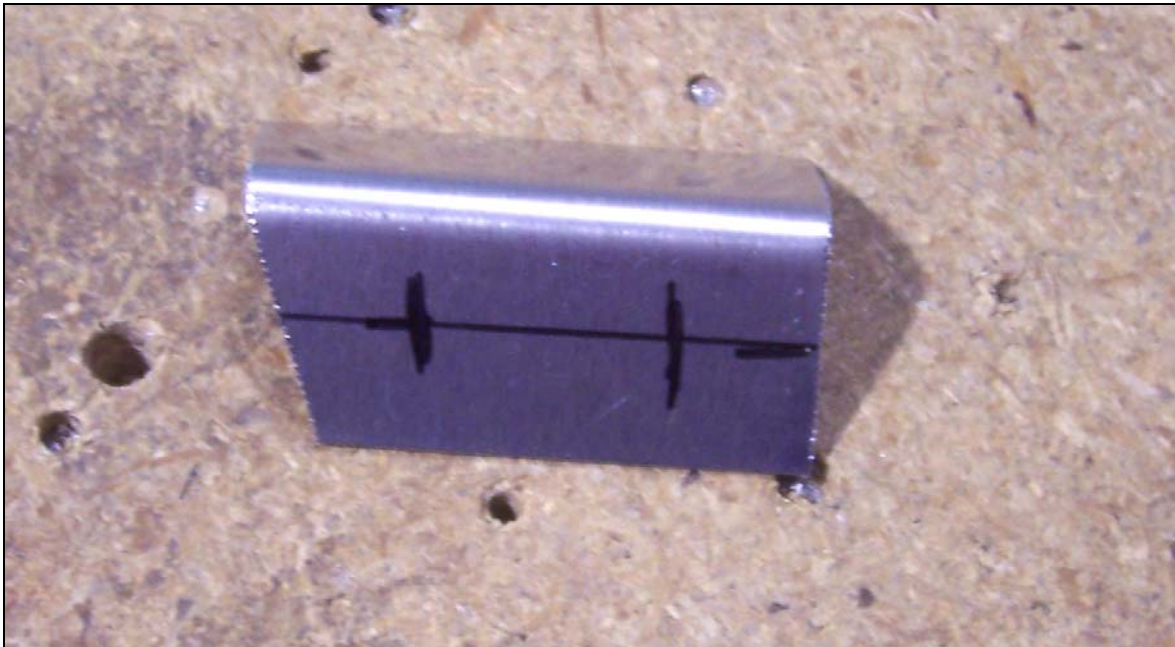
Position the Cabin Side on the Rear Fuselage. Cleco the rear rivet line to the Side Skin. Wait to expand the holes until later.



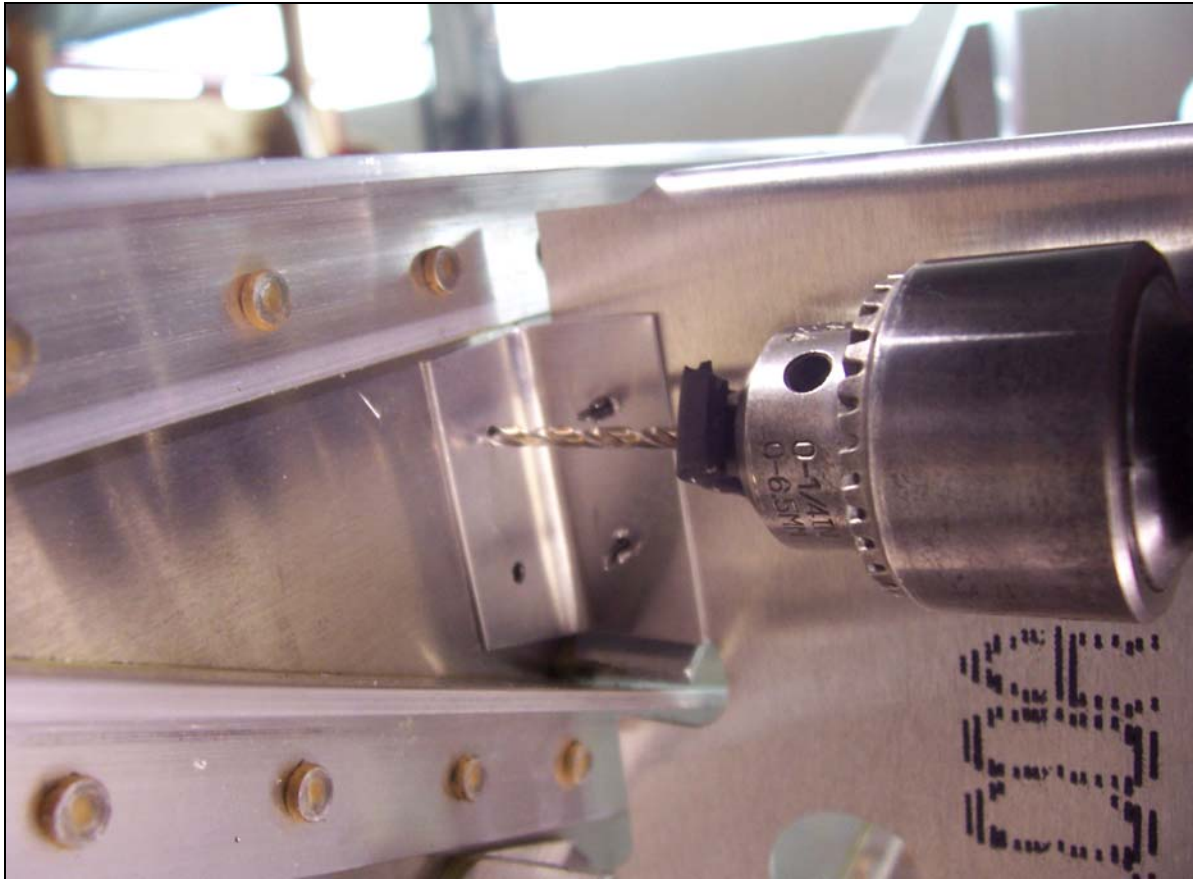
Check the length of the Longerons at the Baggage Back. If required, trim the Longerons to fit against the Baggage Back.



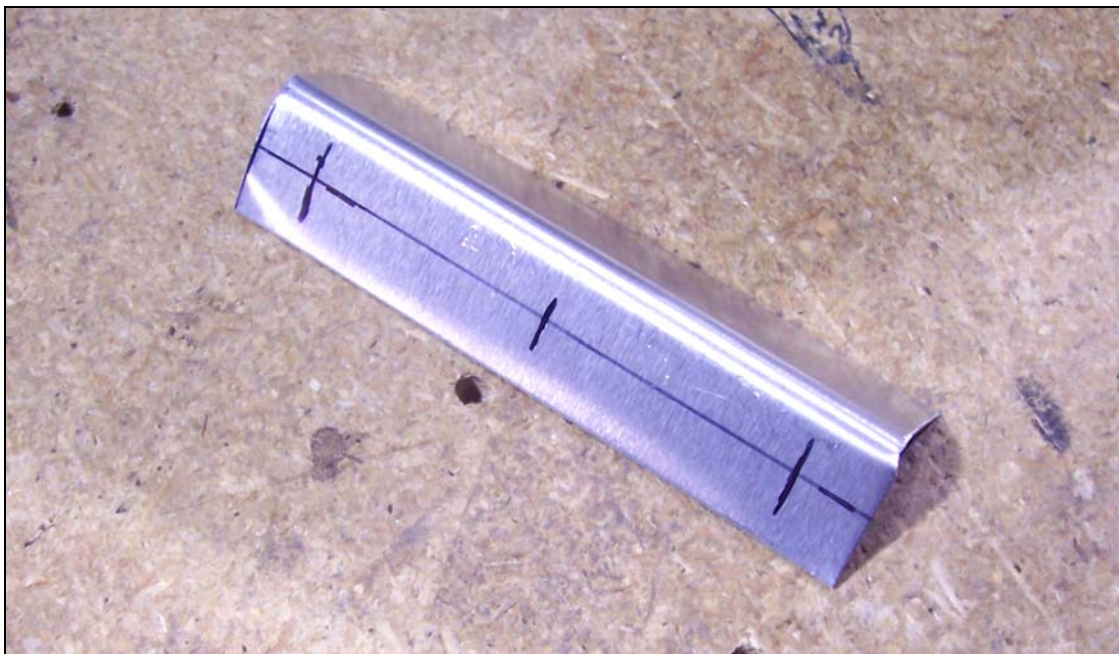
Remove the Cabin Sides from the Rear Fuselage. Cleco the Cabin Sides to the Floor Skin. Wait to expand the holes until after the Lower Longerons are installed.



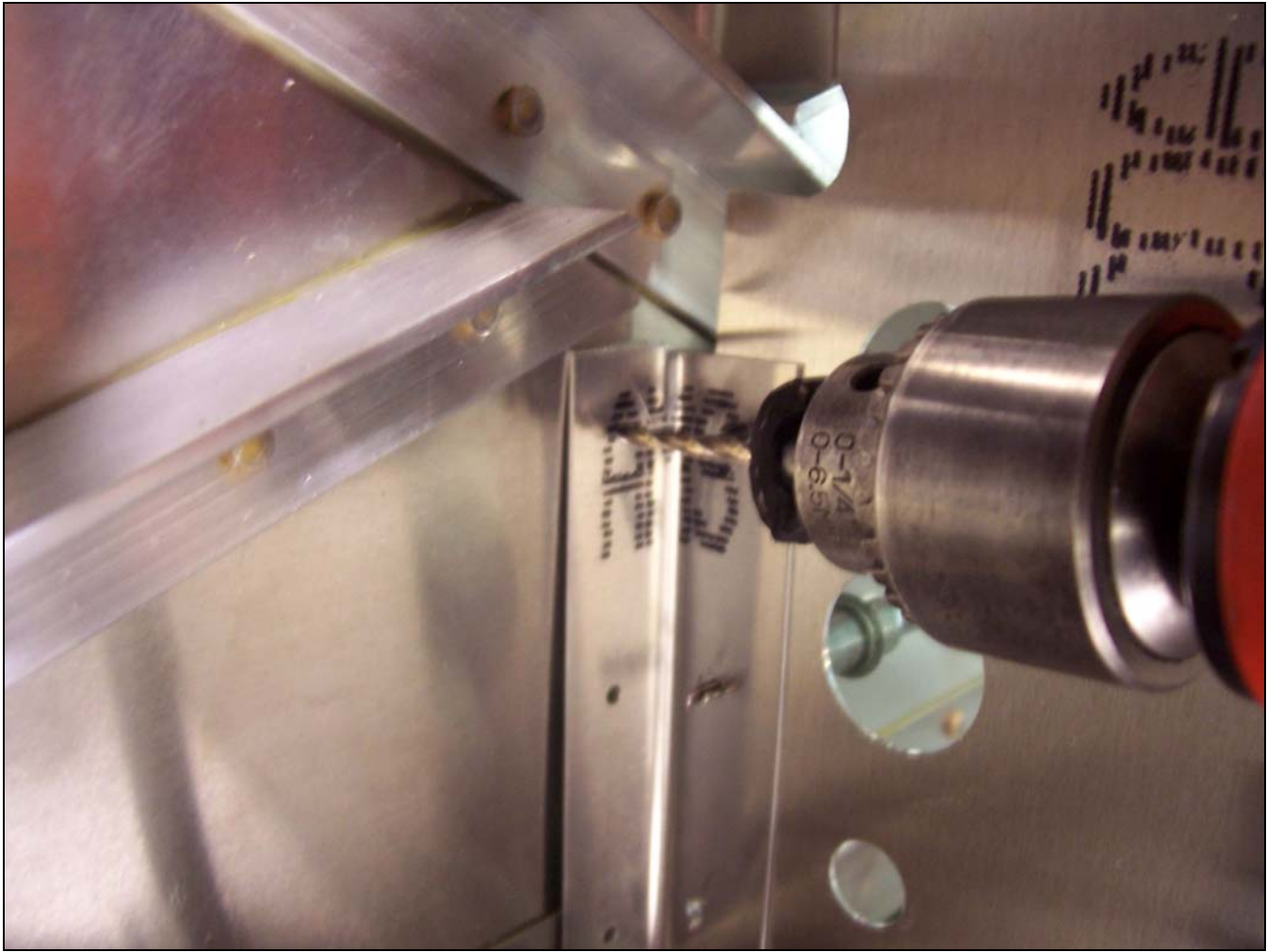
Trim two pieces of L angle 40mm long. Mark the center line on one flange and layout two rivet locations 10mm from each end. With a #40 drill bit, predrill the holes in the L angle.



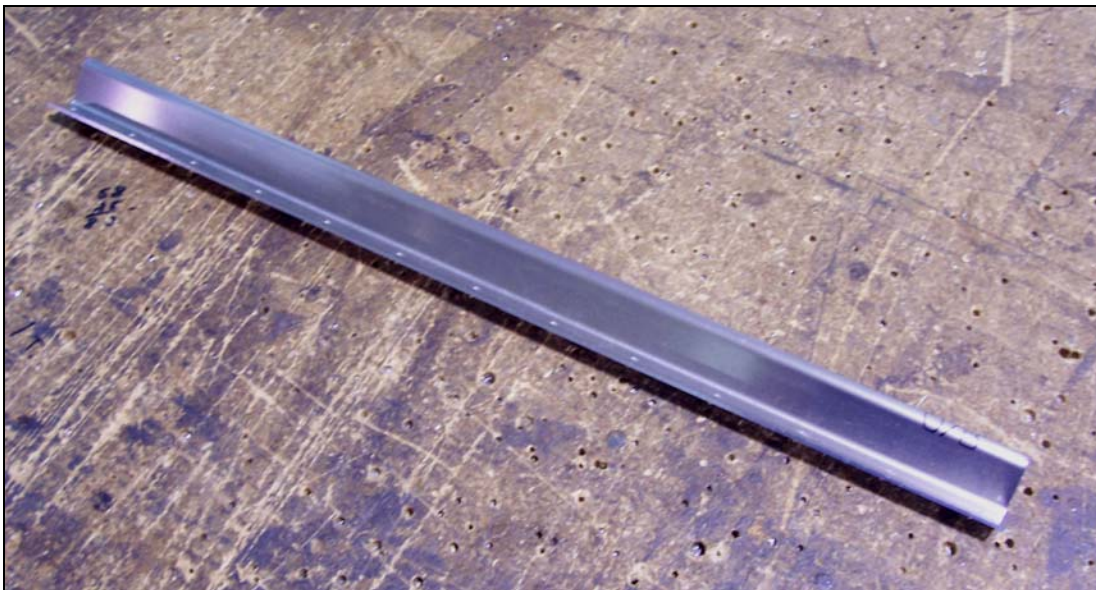
Clamp the L angle to the Seat Front. With a #40 drill bit back drill through the Seat Front into the L angle and Cleco. Then back drill through the L angle into the Cabin Side and Cleco. With a #30 drill bit, expand the holes and Cleco.



Cut two pieces of L angle 90mm long. Mark the center line on one flange and layout a rivet location 10mm from each end and one in the center. With a #40 drill bit, predrill the rivet locations.



Position the L angle on the Seat Front. With a #40 drill bit, back drill through the Seat Channel into the L angle and Cleco. Then back drill through the L angle into the Cabin Side and Cleco. With a #30 drill bit, expand the holes and Cleco.



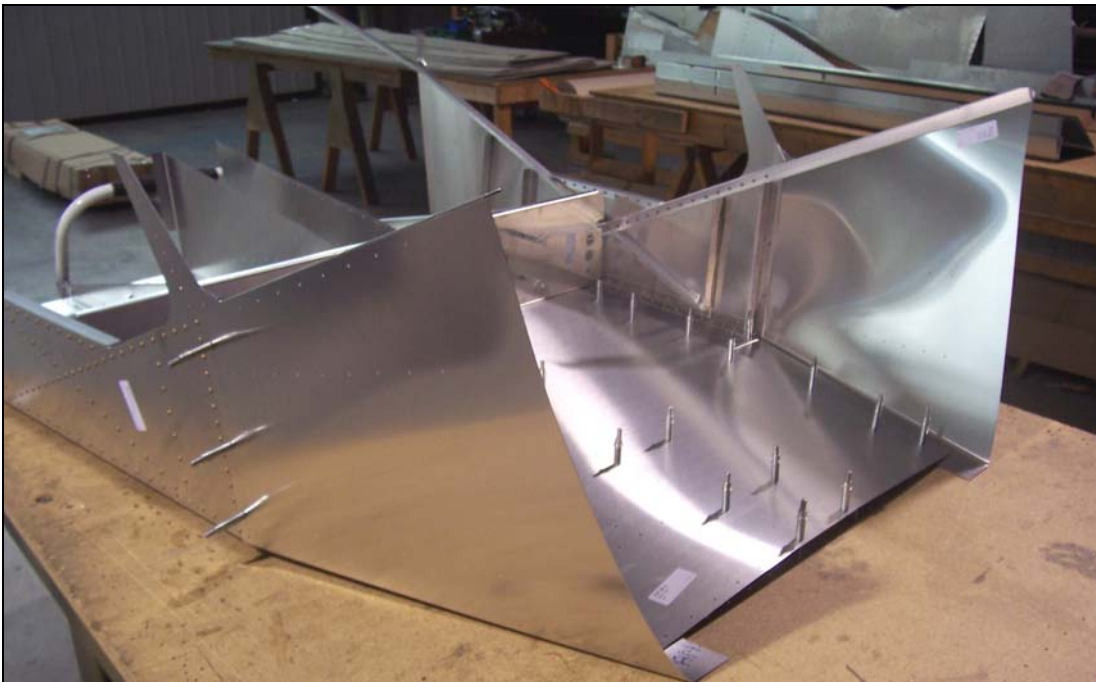
P/N: 75F11-3
Rear Seat Channel



Note: The O/B end has been marked on the part for easy identification.

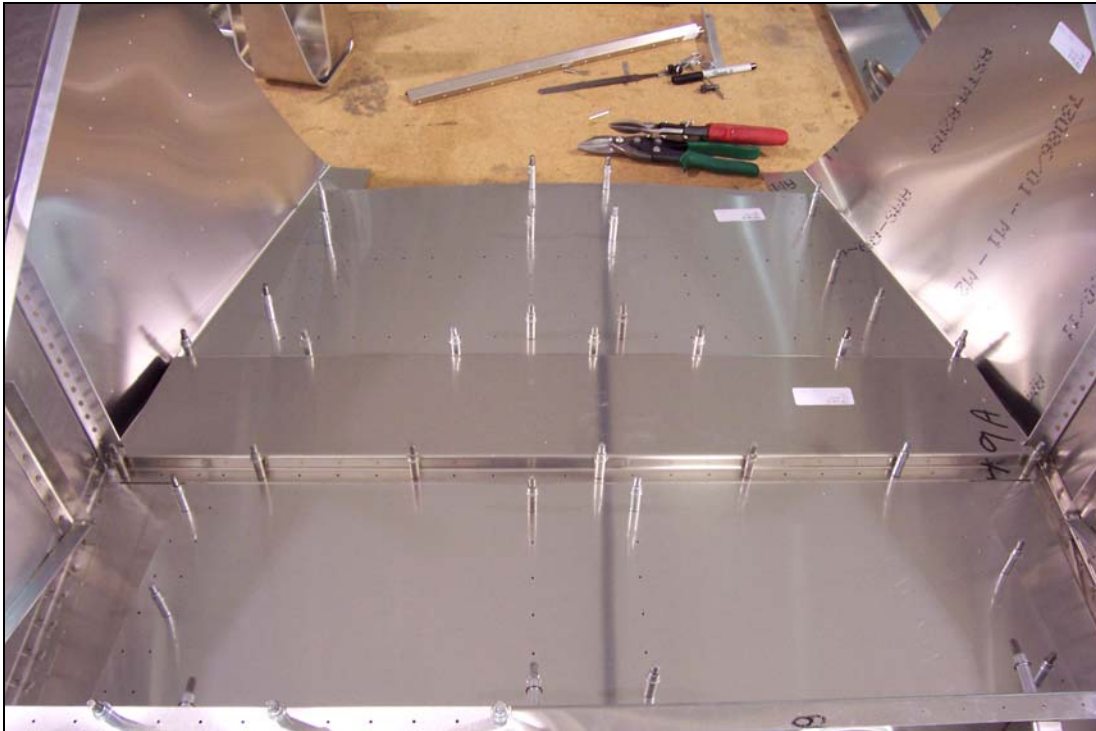


Cleco the Rear Seat Channel to the Gear Channel. With a #30 drill bit, back drill through the holes in the Rear Seat Channel into the Gear Channel. After the holes have been expanded, Cleco the Rear Seat Channel to the Gear Channel from under the Gear Channel.



P/N: 75F12-2
Forward Side Skin

Cleco the Forward Side Skins to the Cabin Floor and Cabin Sides. With a #30 drill bit, expand the holes through the Forward Side Skins into the Cabin Sides and Cleco. **Wait** to expand the holes through the Cabin Floor into the Forward Side Skins.



P/N: 75F10-5
Heal Support



Note: The notch in the Heal Support should align with the vertical stiffener on the Cabin Side.

Cleco the Heal Support to the Cabin Floor. With a #30 drill bit, expand the holes through the Heal Support in the Cabin Floor and Cleco.



P/N: 75F10-6
Heal Support Gusset

Draw a center line on the bottom flange of the Heal Support Gusset. Layout a rivet location 10mm from each end of the Gusset and evenly space 2 more between. With a #40 drill bit, predrill the holes in the Gusset. Draw a center line on the other side of the top flange of the Gusset.

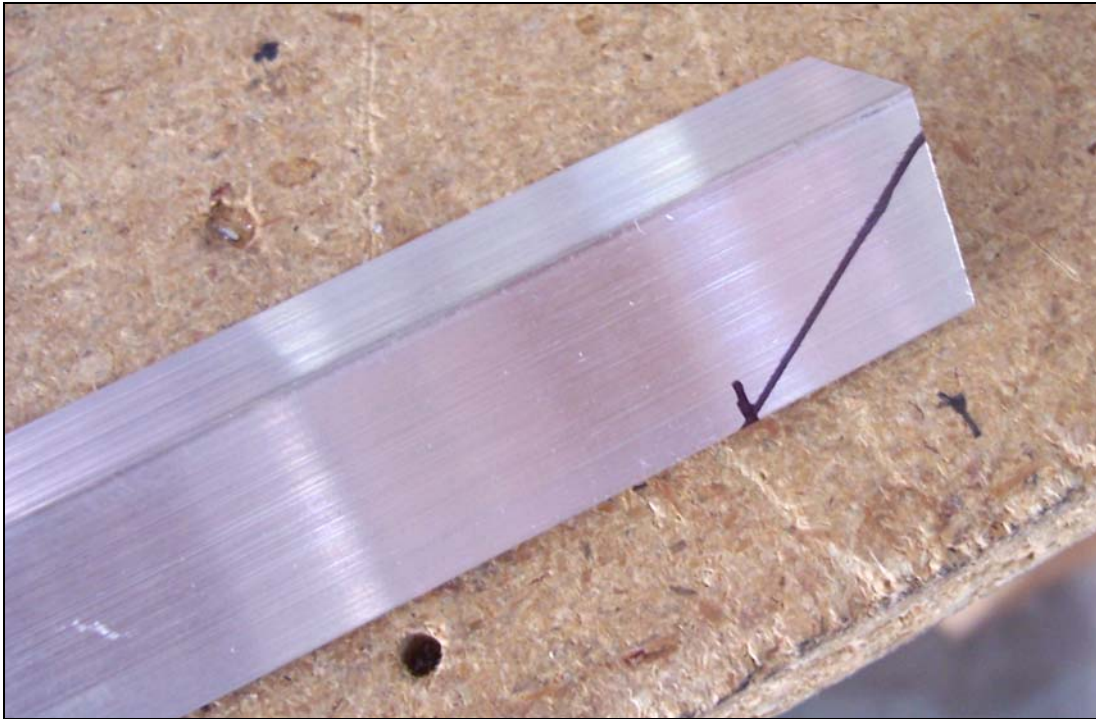


Position the Gusset on the Heal Support against the Forward Side Skin. When the top flange center line is visible through the predrilled holes in the Forward Side Skin back drill through the Forward Side Skins into the Gusset with a #40 drill bit and Cleco. Then back drill through the Gusset into the Heal Support and Cleco. With a #30 drill bit expand the hole in the **BOTTOM** flange only and Cleco.

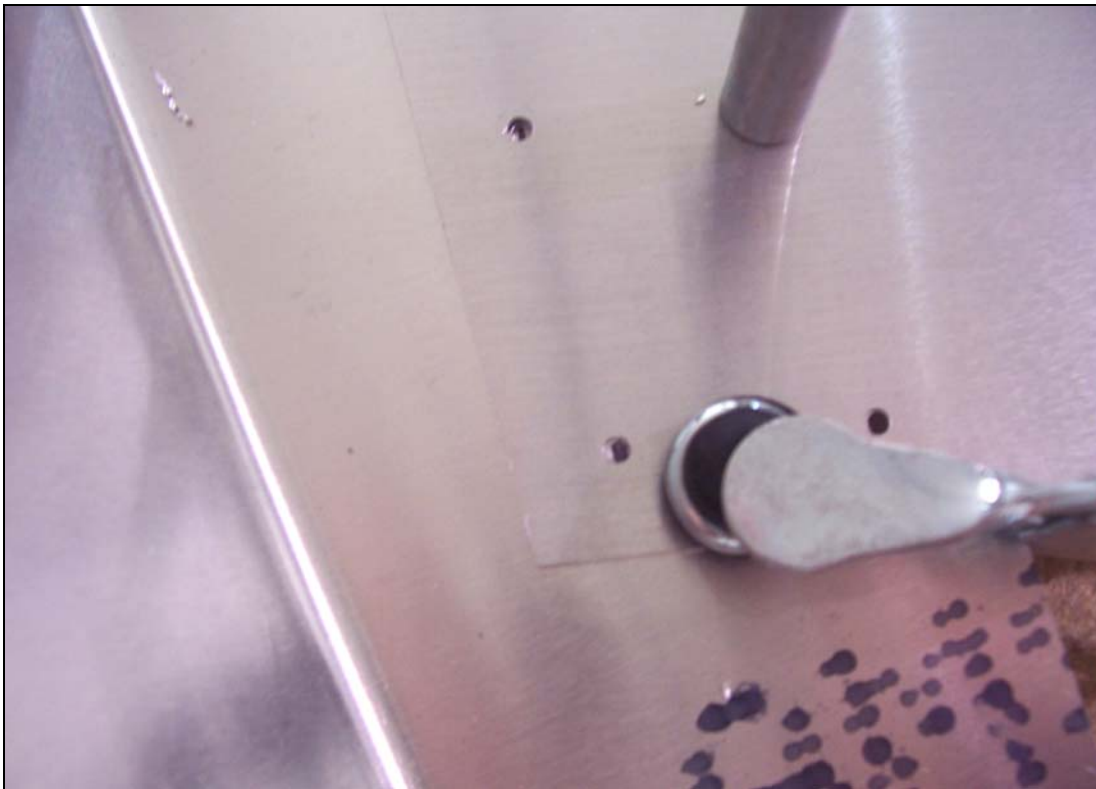


P/N: 75F13-1
Lower Longeron

Place a mark 120mm from the end of the Lower Longeron on the flange that points down when installed. Mark a line from the 120mm mark to the end of the Lower Longeron. Trim the Lower Longeron along this line.



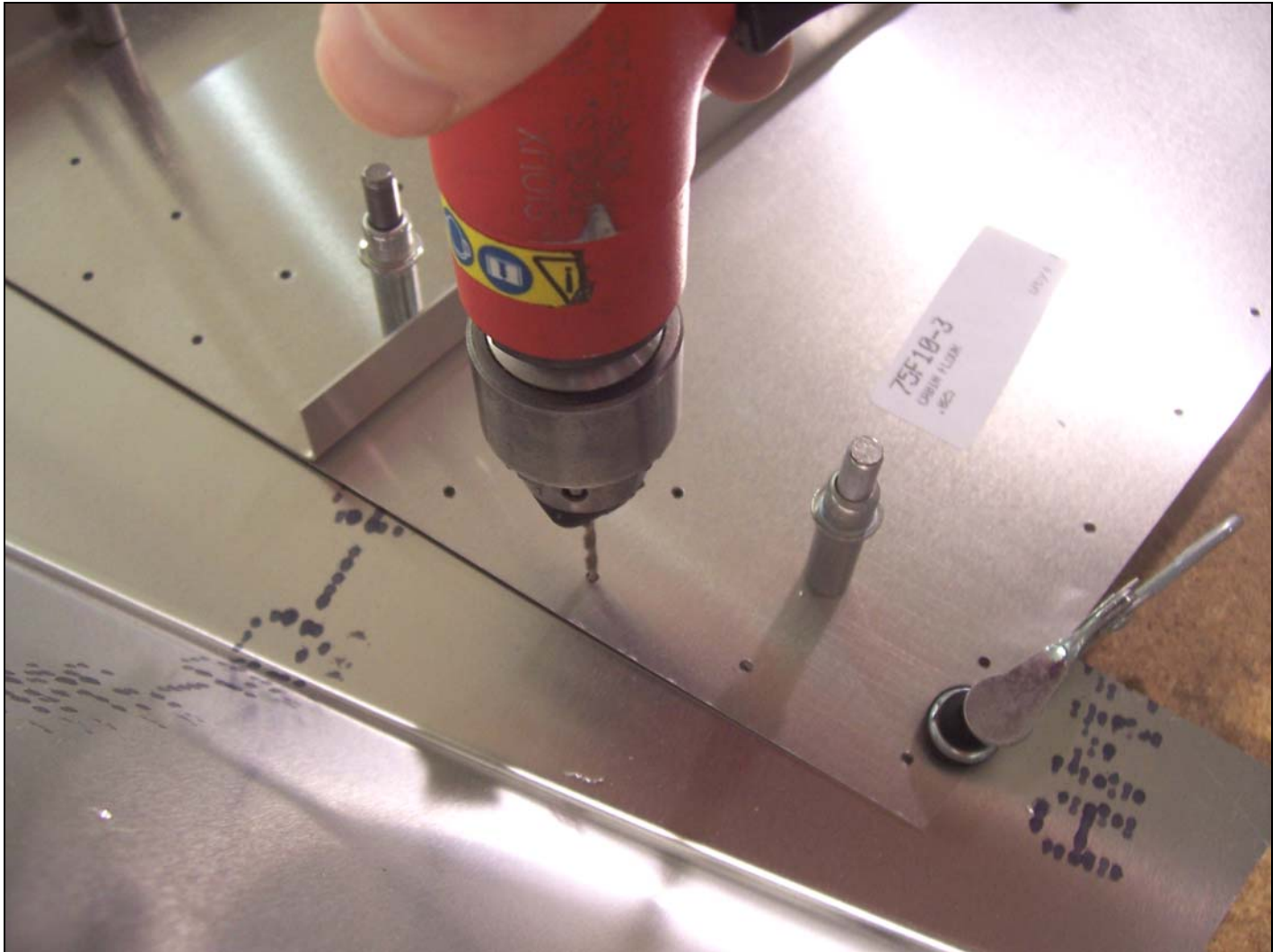
Place a mark 20mm from the front edge of the Lower Longeron on the same flange as previously done. Mark a line from the front edge to the 20mm mark. Trim the Lower Longeron along this line.



Lower Longeron clamped in place.

Note: The Lower Longeron hasn't been trimmed in the above photo.

Mark a center line on the top flange of the Lower Longeron. Position the Lower Longeron under the Cabin Floor. The Lower Longeron should be positioned on the outboard set of holes in the Cabin Floor. Clamp the Lower Longeron in place.



With a #40 drill bit, back drill through the Cabin Floor into the Lower Longeron and Cleco. With a #30 drill bit, expand the holes and Cleco. Then expand the holes with a #20 drill bit and Cleco. Also expand the inboard set of holes in the Cabin Floor with a #20 drill bit at this time and Cleco.