



Location of instrument panel measured along fuselage sides.

OBJECTIVE: Set the instrument panel to hold the width across the top of the fuselage.

Clamp a piece of extrusion angle (or other straight edge) across the left and right longerons on the 475 mark. Set the width of the fuselage. Locate the midpoint. With a plumb bob check alignment with center line on bottom skin.



PANEL GUSSET 6B12-5

1 RIVETS A5 6B12-5 to 6B12-4 Drill the aft hole in the gusset and longeron.

Wait to drill the other holes in the longerons through 6C2-2

Edge distance = 9.5mm

Aft edge of gusset is approximately 2mm forward of clamped extrusion. Ref top right diagram on drawing 6-B-12





**INSTRUMENT PANEL** 6B12-4

Lay out the center line (square to the bottom edge).

Line up center line. Face of instrument panel against clamped extrusion.





3 Rivets A4 6B12-4 into 6B12-5

Check: 36mm from the side of the fuselage to side flange of the instrument panel, Ref 6C1-1



Plumb center lines.



Aircraft center line on cabin floor.



Clamp the top edge of the skin flush with the longeron.



FORWARD SIDE SKINS 6B11-2

Aft edge of the skin against the attach plate 6B5-4.





Detail of left overlap. Skins overlapped approximately 24mm

Clamp the top edges flush with the top of the Upper Front Longeron 6B11-1



Note: keep the instrument panel clecoed in place. Clamp the top edge of the skin to the longeron. Check that the longeron is level.



Detail of right side. Overlap is the same along the length of the overlap.

Note: The front angle of the fuselage rear side skin 6B3-1 is cut on the same angle as the aft edge of the forward side skins 6B11-2.





Trace around the spar.



Trace around the gear channel.

Make the cutout in the side skin for the spar and gear channel. Remove the skin to make the cutouts.



Reinstall the side skins. Cutout for gear channel 6B5-5: height =30mm length=205mm.



COMMENT: Wait to trim the bottom edge of the side skin until after the side skin is drilled to the cabin floor skin.



MAIN GEAR ATTACHMENT 6B11-4 (Steel welded assembly Qty: 1L + 1R)

**5 RIVETS A5** 6B11-4 to 6B11-2

Lay out and pre-drill pilot holes between the  $\frac{1}{2}$ " gear bolts, edge distance = 10mm from the top.



POSITION: The steel flange overlap on the bottom side of the Gear Channel.
Do not use the bottom edge of the side skins as a reference.

Lay out the 9 rivets on the bottom flange, Ref. bottom left diagram on drawing 6-B-14 Edge distance =9mm



CHECK: that the front and rear gear bolts are centered on the Gear Channel.

CHECK: The bottom flange must be level.

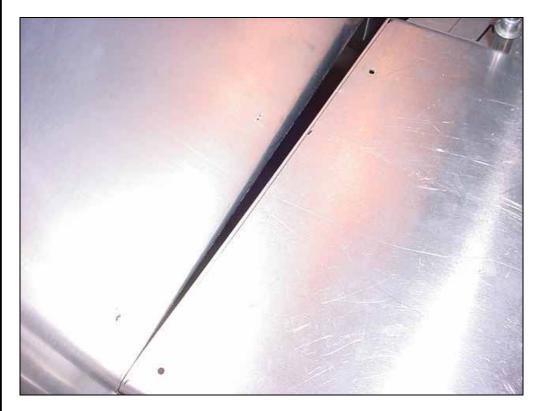
Drill and cleco 6B11-4 to 6B11-2.



Ref. Bottom left diagram on 6-B-14

**9 RIVETS A5** 6B11-4 to 6B5-5.

The Gear attachments overlap on the underside of the gear channel.

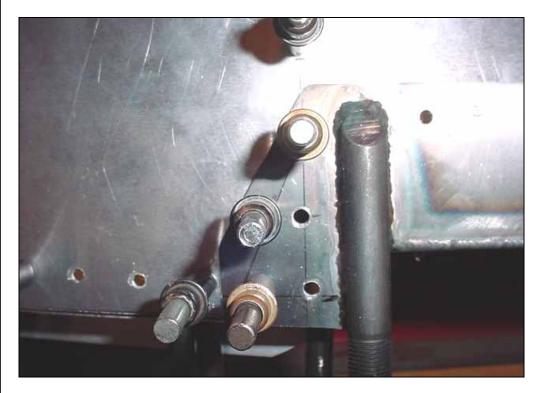


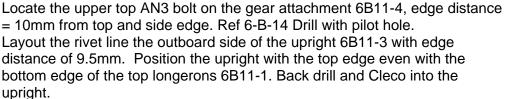
Along the top edge of the gear channel 6B5-5, trim back approximately 2 to 3mm to make room for the weld on the main gear attachment 6B11-4.



Drill and cleco 6B11-4 to 6B5-5.

Check that the outboard edge of the gear channel does not sit on top of weld. If necessary, trim the skin to make room for the weld.



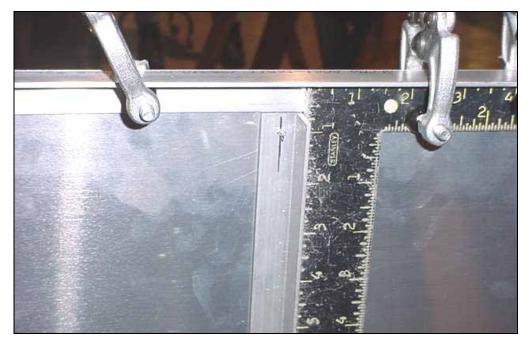




Inside view.

## **GEAR UPRIGHT** 6B11-3

Wait to drill the bottom holes through gusset 6B10-4.



Hold the top of the upright square to the longeron, drill and cleco the top hole 10mm down from the end of the upright 6B11-3. On the outboard side of the skin, lay out the rivet line between the top and bottom cleco.



Rear upright, inside view of left side.





Rivet lines on outboard side of skin.

For side skins 6B11-2 supplied with pre-drilled pilot holes, locate the AN3 bolts by extending the rivet line to the bottom of the gear attachment. Locate the upper AN3 bolts on the line at the point where edge distance is 10mm from top and side edge of gear attachments. Back drill into 6B11-3.



## GUSSET 6B14-1

Lay out the 2 rivet lines on the gusset.

Edge distance = 9.5mm on extrusion

**4 RIVETS A5** 



Install the front and rear gear upright 6B11-3 and Upright Gusset 6B14-1.

Photo of left side



**A5 PITCH 30** 6B11-2 to 6B11-3 Ref 6-B-14 Side skin to Upright.

A4 PITCH 40 Ref 6-B-11 6B11-2 to 6B11-1 Side Skin to Longeron (between the Upright Gussets 6B14-1).

Finish drilling the skin to the uprights.

Drill and cleco top rivet line through the longeron 6B11-1.





From inside the fuselage, drill the bottom bolt hole in the uprights 6B11-3

Inside view of the rear uprights.



Drill the two aft bottom AN3 holes through the bottom longerons 6B2-3