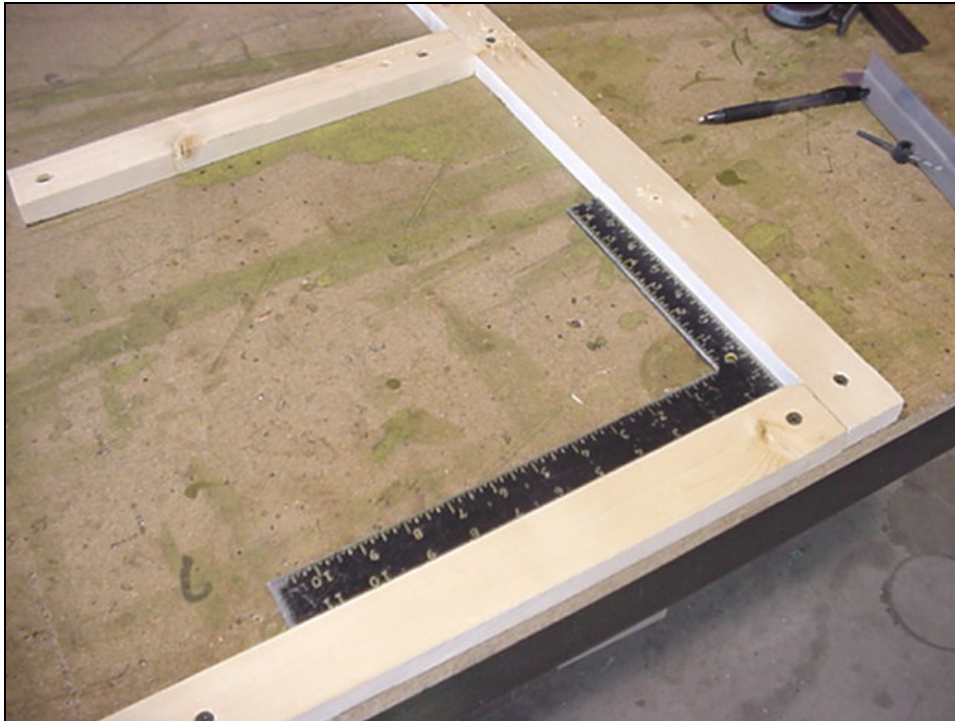
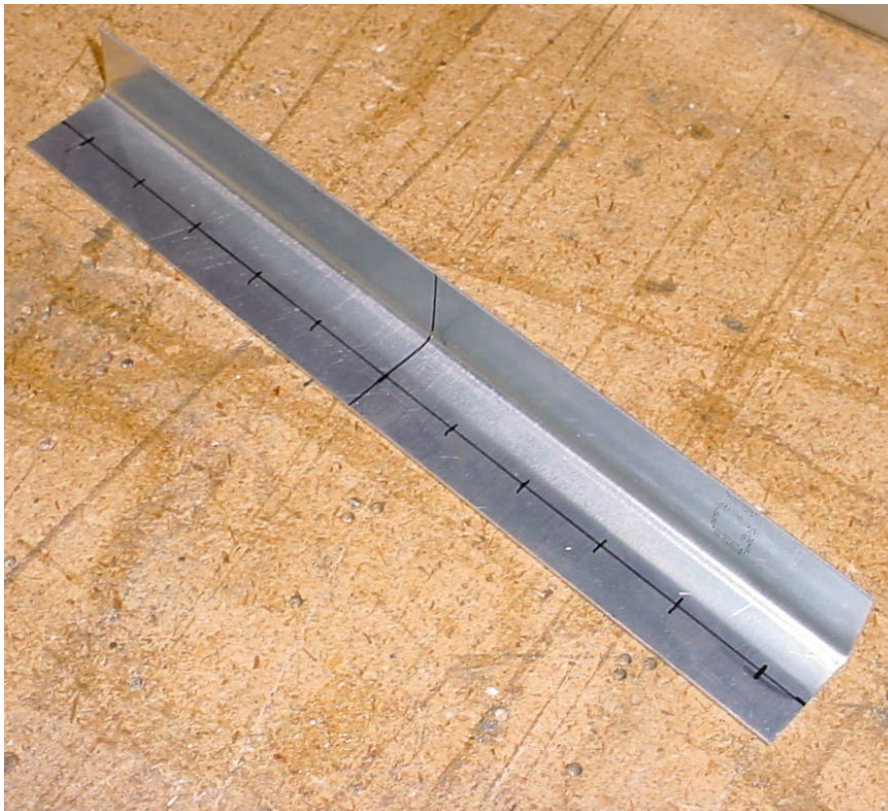


H.T. = Horizontal Tail

Installing the angle 6B1-5 at the bottom of the front H.T. frame 6B1-1

Make a simple jig by screwing 3 boards to the workbench. The first 2 boards (2x4 or 1x2 boards approximately 2ft long) are at 90 degree to each other (to butt up against the side and top flange of the H.T. Frame). Screw the third board at 376mm from the top, square to the side for the Front H.T. Frame 6B1-1.



First layout the aircraft center line across the flanges.

Layout the rivet spacing on the angle 6B1-1 across the 23mm flange.

A5 PITCH 20
through 6B1-5 to 6B1-1.



Mark the aircraft center line
on the H.T Frame 6B1-1
Line up the aircraft center
lines.

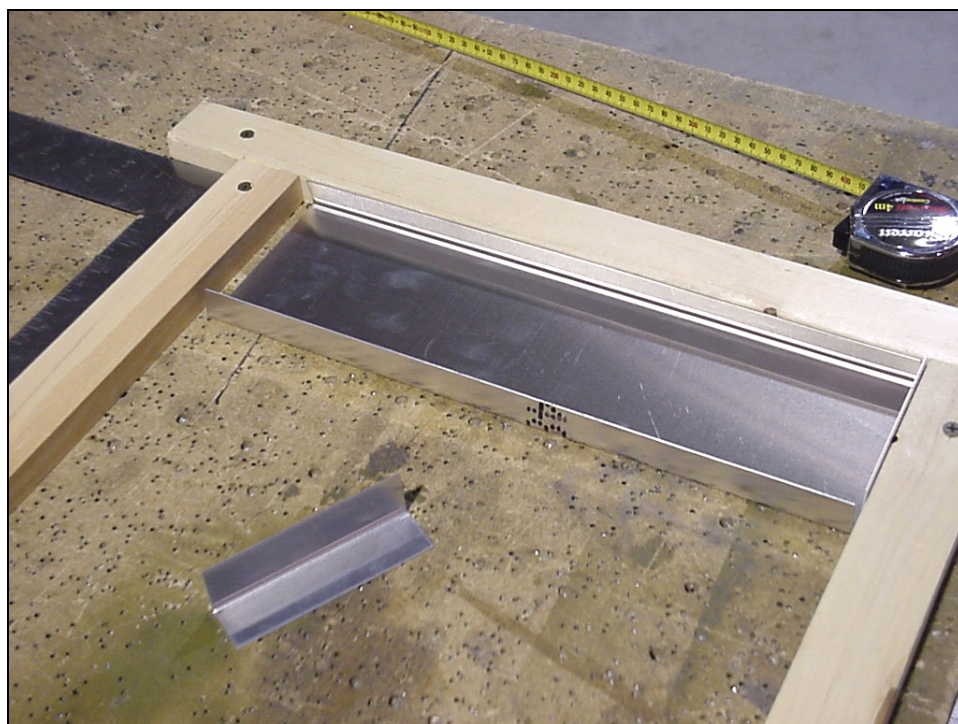
Make sure that 23mm flange
on 6B1-5 overlaps the H.T.
Frame 6B1-1

CHECK: The bottom flange of the angle is square with the side flanges of
the H.T. Frame.
Drill and Cleco.



FRONT H.T. FRAME assembly
Ref. 6-B-1

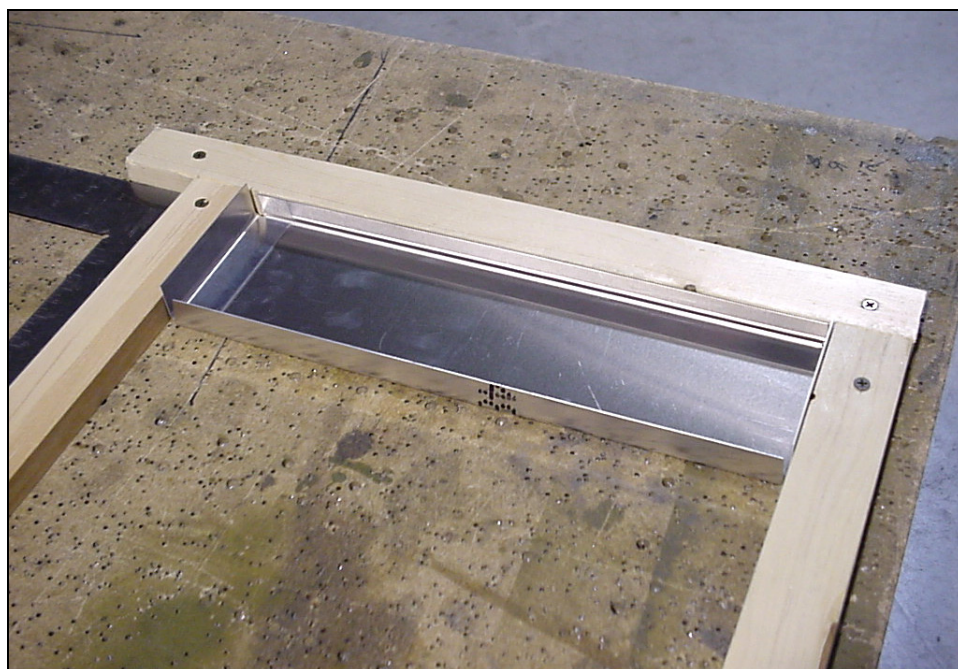
Edge marker block
P/N # 6352
www.averytools.com



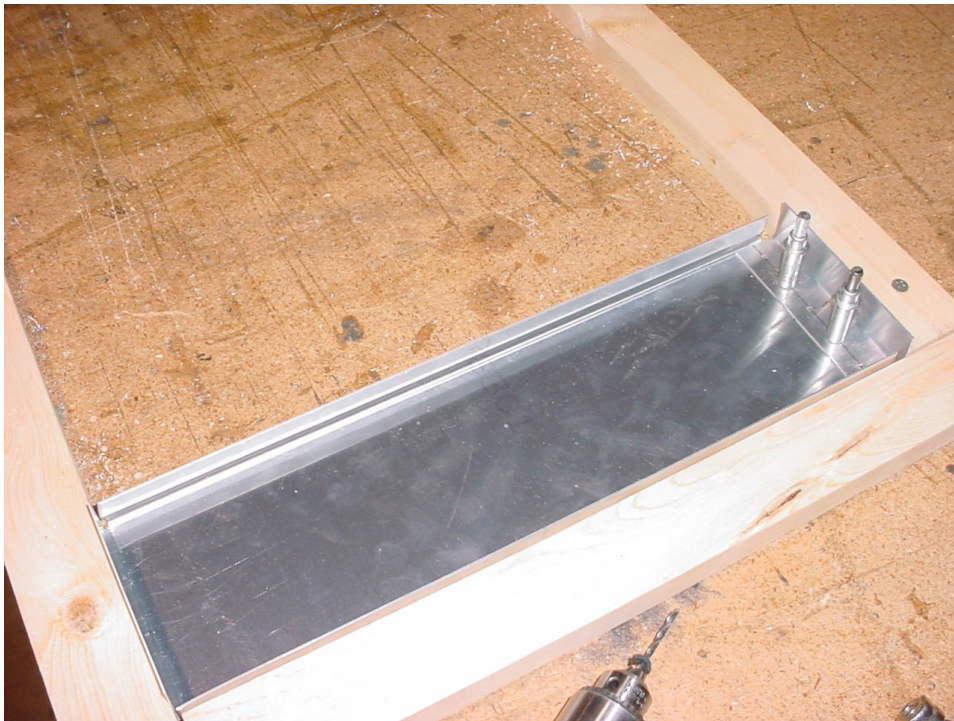
**REAR H.T. FRAME
6B1-2**

**ANGLE
6B1-6**

Readjust the position of the bottom board at 362mm to Cleco the Angle 6B1-6 to the Rear H.T. Frame. The 25mm flange is drilled to the H.T. Frame.



Layout the rivet line.
Mark the aircraft centerline on the top and bottom flange of each H.T. Frame.

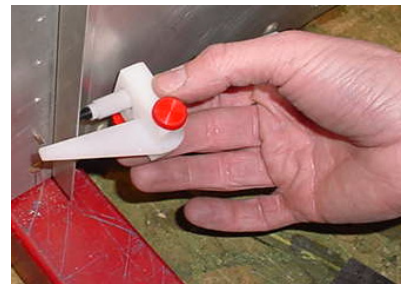


A5 PITCH 20
6B1-6 to 6B1-2

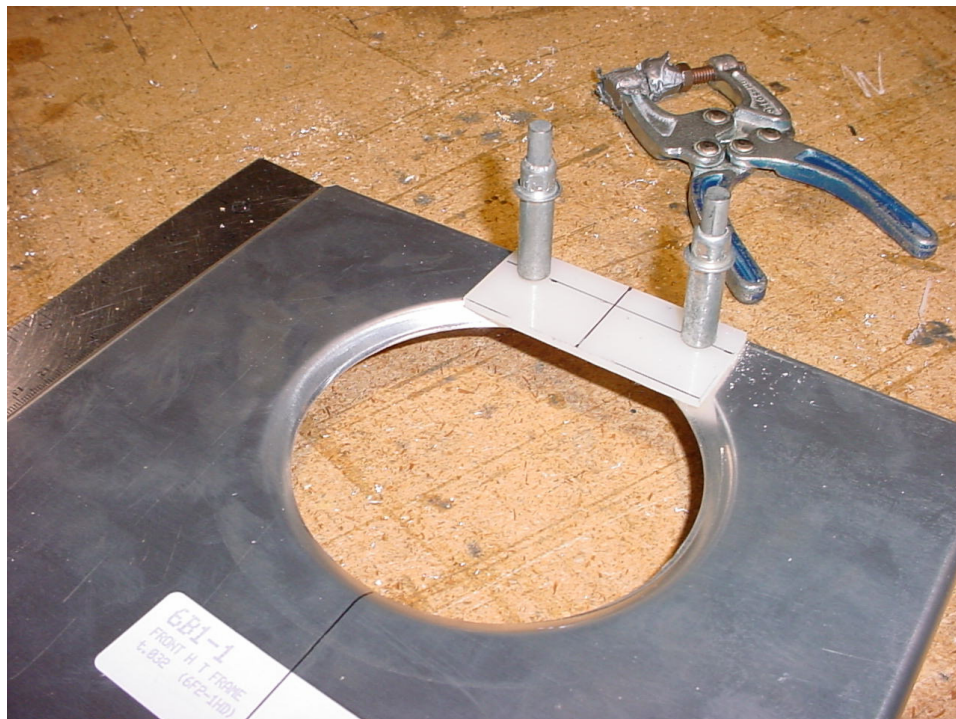
Drill and cleco



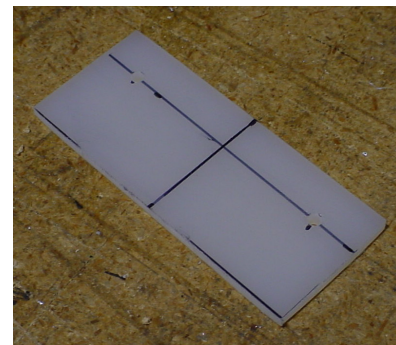
Rear H.T. frame assembly 6B1-2



Mark the rivet line on the
bottom and side flanges.



Cable Fairlead (1/8 plastic material). Positioned on the front side of the Front H.T. Frame 6B1-1.
Back drill to the H.T frame.



Nylon 66 t=1/8"
Cable Fairlead

Layout the center line, top line at 10mm from the edge. Layout the 2 rivets 10mm from the ends. Drill with pilot holes.

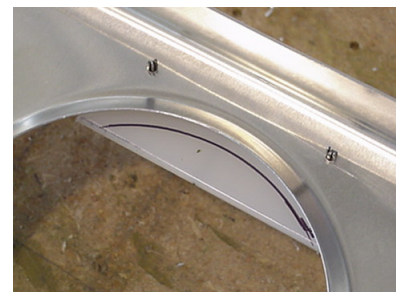
2 RIVETS A5
Fairlead to 6B1-1



Contour the bottom of the fairlead to match the curvature of lighting hole.



Trace around edge of flange lighting hole.



Uncleco and cut.

Ref.6-B-23

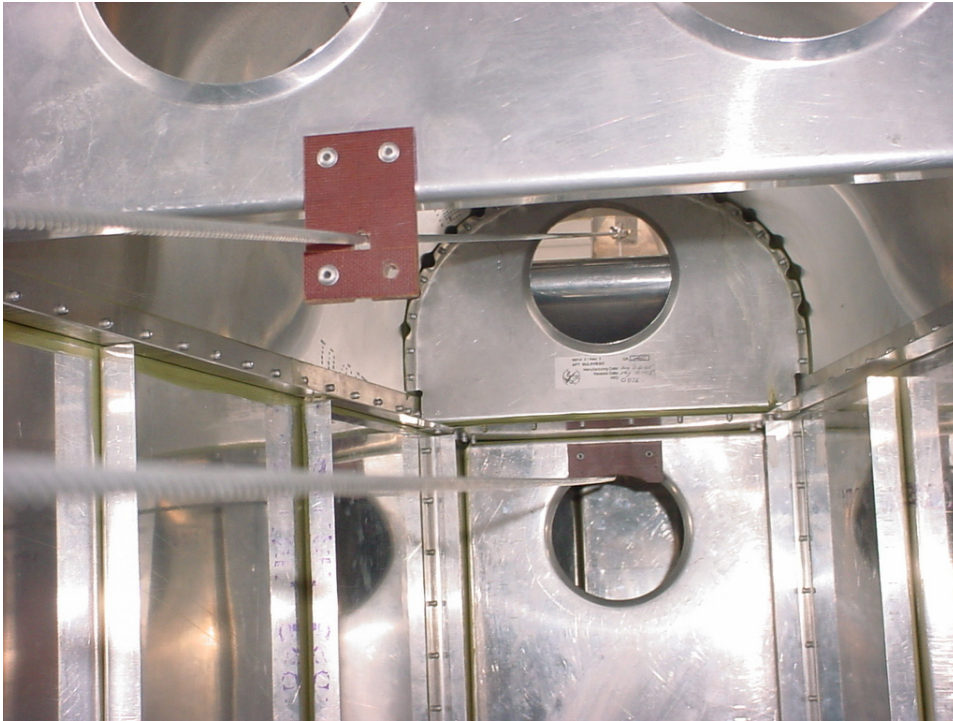
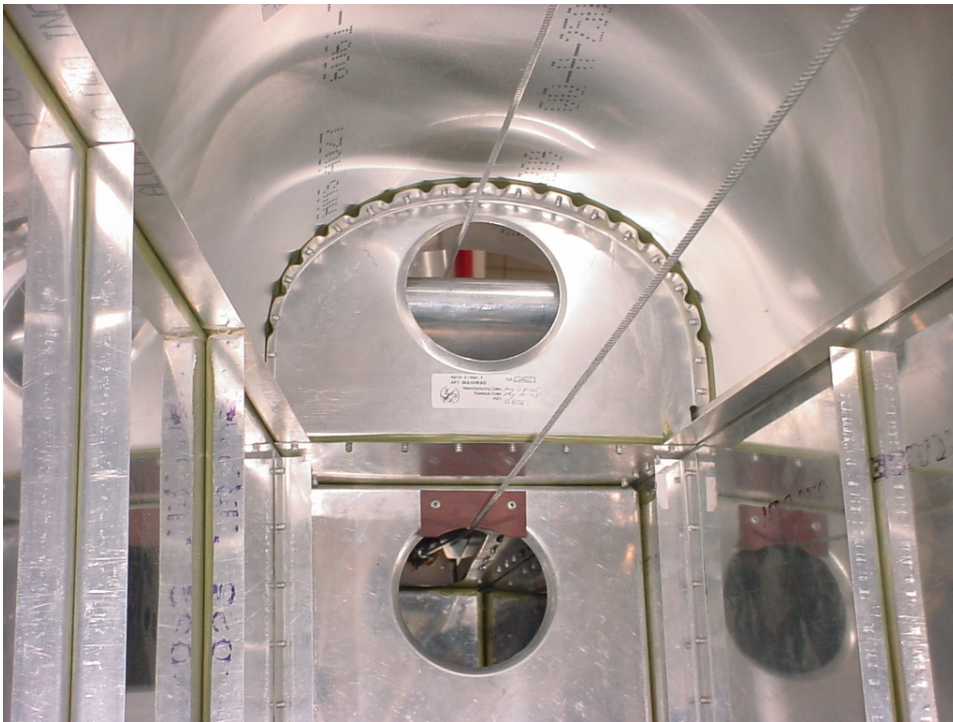


Photo showing the elevator cable and fairleads.



Lower elevator cable on fairlead.



One piece bottom skin 6B1-4, length = 3085mm



BOTTOM SKIN 6B1-4

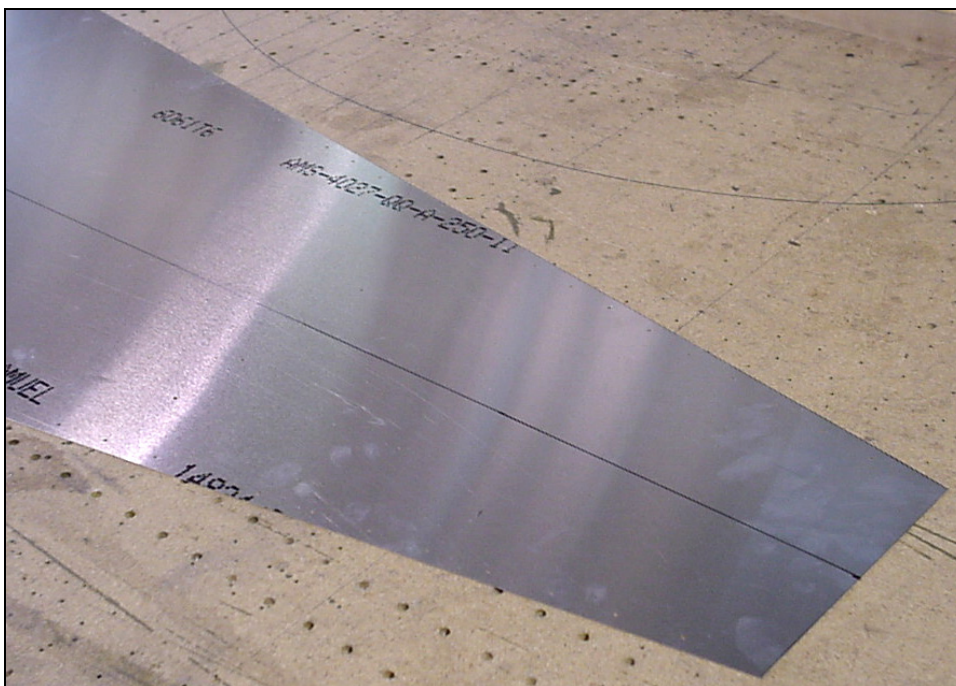
Edge distance = $3d$
(three times the hole
diameter)

Trim the sides on the bottom skin 6B1-4. The front portion of the skin is curved.



Green snips (left)

First make a rough cut, and then cut along the line and file.

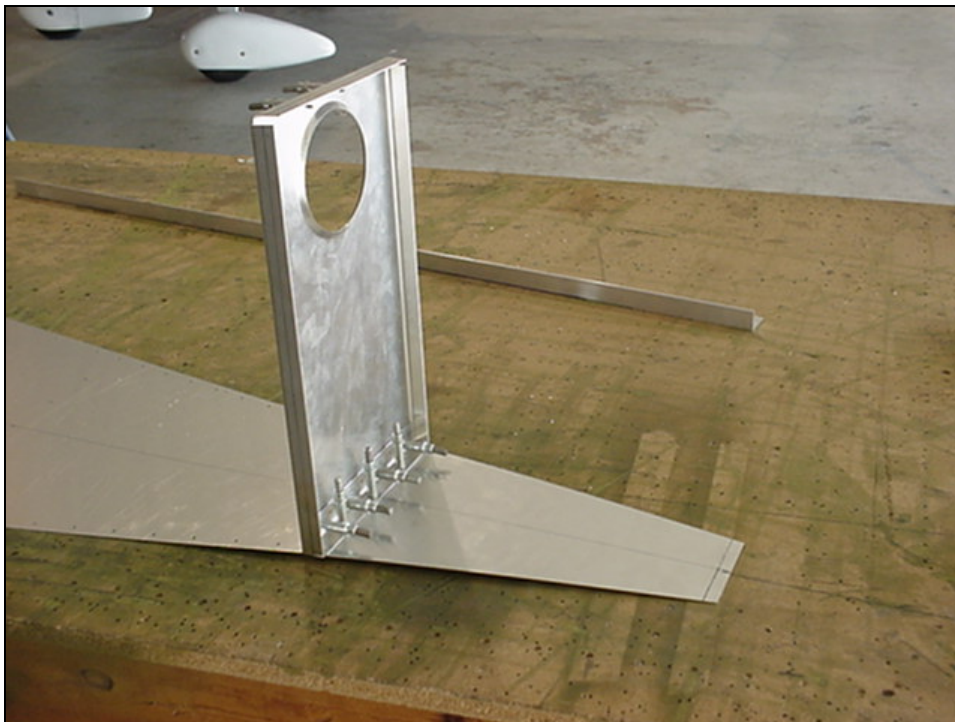


Longitudinal axis = aircraft center line

Lateral axis = span-wise (wings)

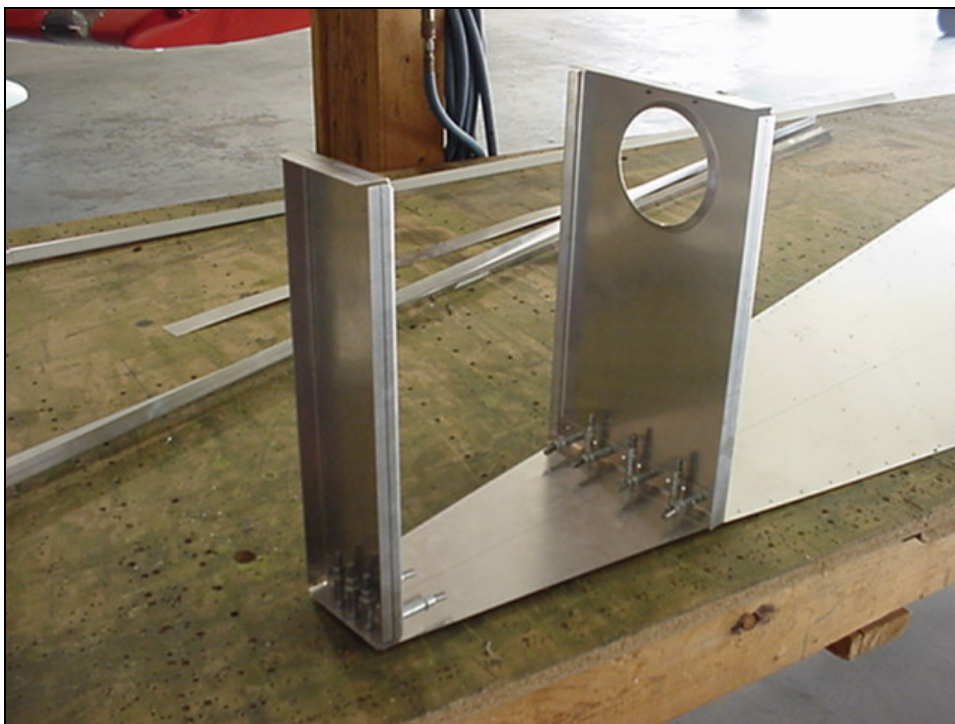
The fuselage is symmetrical along the aircraft centerline (longitudinal axis). Mark the centerline on the Bottom Skin 6B1-4 on both sides of the sheet.

Reminder: never use a scribe to layout lines, it is best to use a soft tip marker.



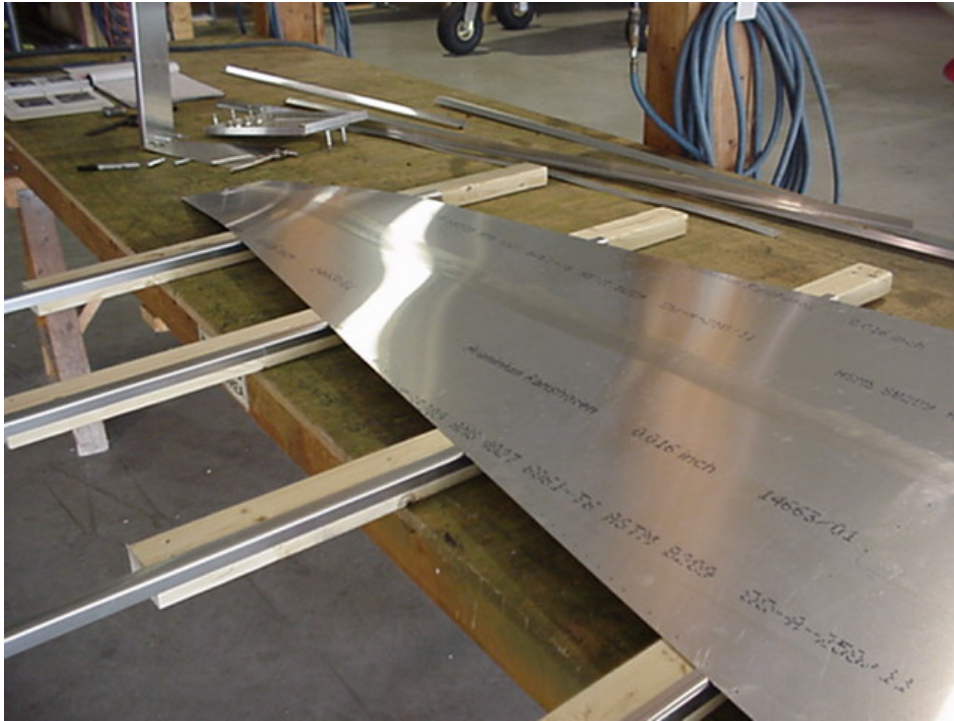
CHECK: The rivet line in the side flange of the HT frames is in line with the rivet line in the bottom skin.

Carefully locate and drill the hole on the A/C center line in the bottom flange of the H.T. frame angles 6B1-5 and 6B1-6. Cleco the H.T. Frame to their respective center holes.



Distance between the rivet lines of the HT frames:
340 measured on the aircraft center line, Ref. 6-B-3
346 measured along the edge of the skin, Ref. 6-B-4

The HT frames are square to the aircraft center line.
Back drill & Cleco.



L ANGLES

END HOLE: Drill one end hole 20mm from the end with #40 drill bit. Position under the skin and Cleco through the skin.
Ref 6-B-1 the bend is towards the front.

Back drill the L angles and Z angles 6B1-7 to the bottom skin. First mark the rivet line on the flange, drill one end hole in the L angle approximately 20mm from the end. Then place the L angle over the side of a 2 x 4 board, slide it under the skin and Cleco through the corresponding end hole. Back drill when the flange centerline is visible.



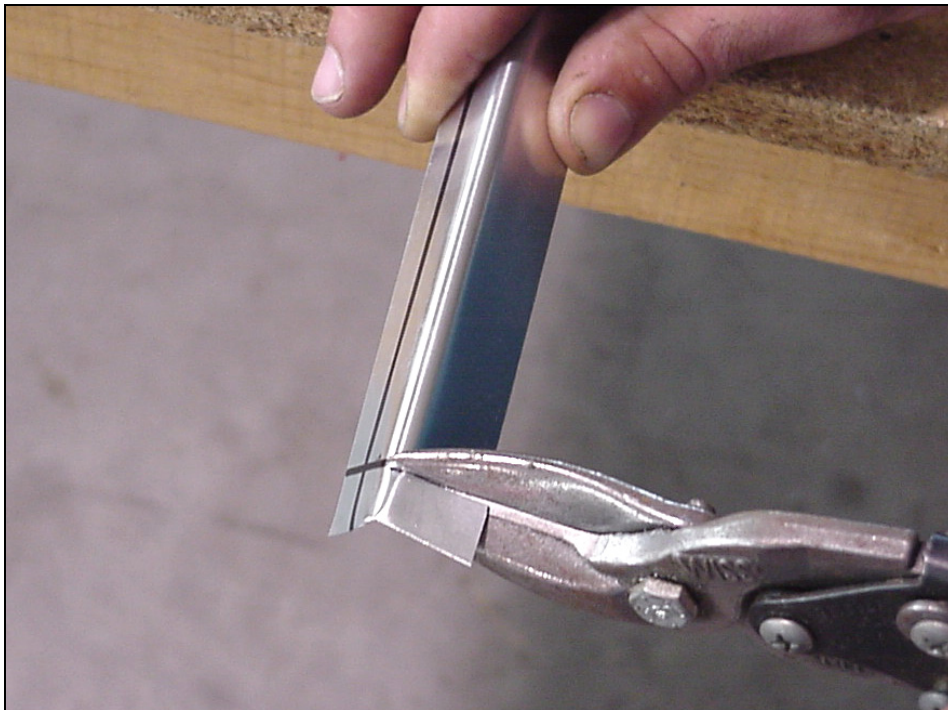
Clearly label the side of the skin that will be on the outside and inside.

Keep the manufacture ink on the inside.



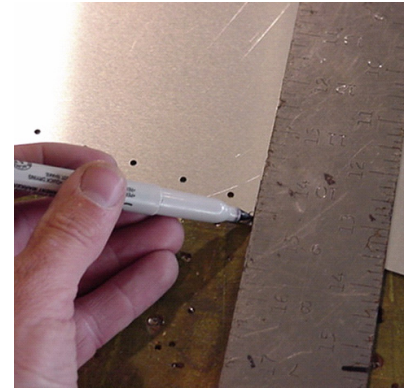
Cutting L angles without distorting the flange.

Trace the edge of the skin on the stiffeners, and remove stiffeners before cutting. TO CUT: first do a rough cut approximately 10mm from the line, snip in from both flanges and crack angle apart to make the final cut.



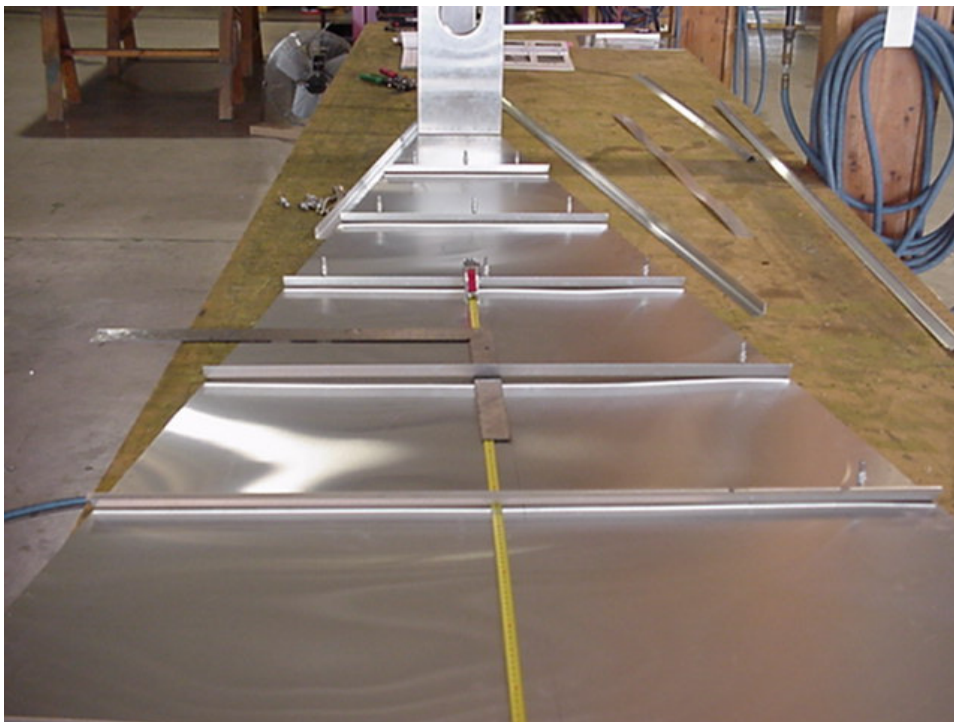
Note: the bottom jaw is on the same side as the cut-off.

For the final cut, snip in one continuous motion: start with either flange, as you approach the radius take small bits and continue cutting through the radius to finish across the other flange.



Ref. 6-B-2

Layout 1335mm on the centerline from the front edge of the bottom skin. With a square mark the edge of the skin: This marks the front edge of the rear bottom longerons 6B2-1 and the aft edge of the bottom longeron 6B2-3



If necessary adjust the position of the line for equal distance to the center of the pre-drilled holes.