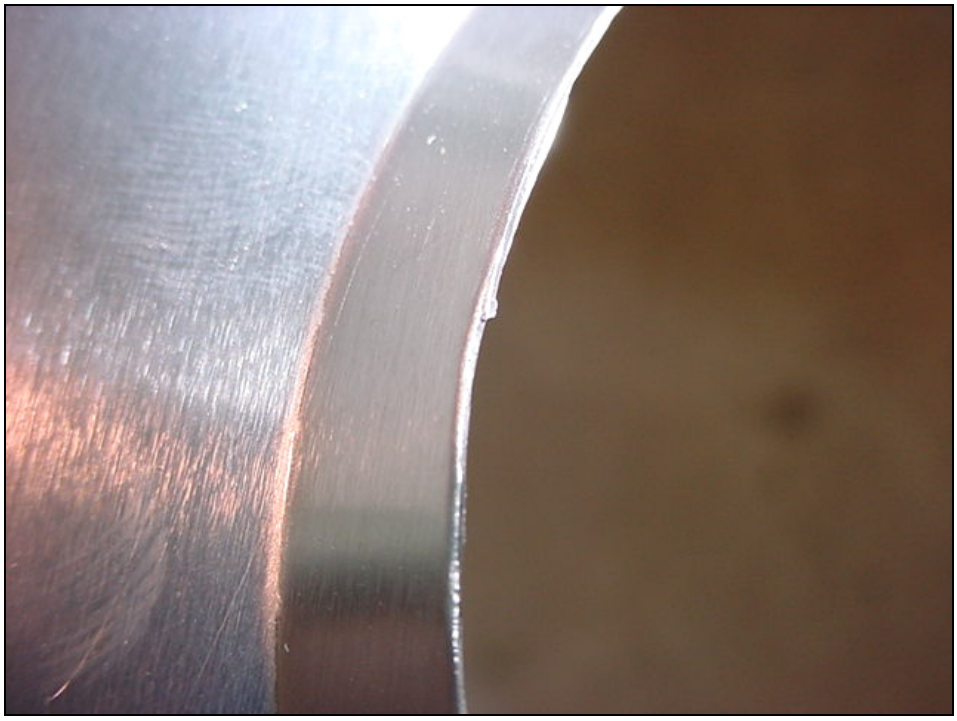
REAR RIBS
6W6-1 to 6W6-9

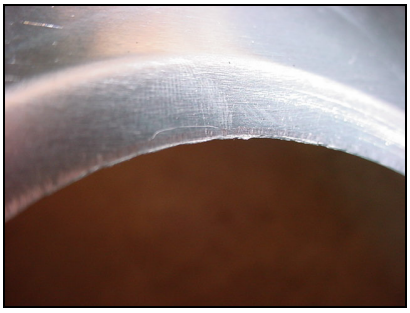
Reference to drawing 6-W-00 for orientations of ribs flanges.

Rear ribs are tapered: rib #9 is the shortest.

Right wing

Zodiac CH 601 XL



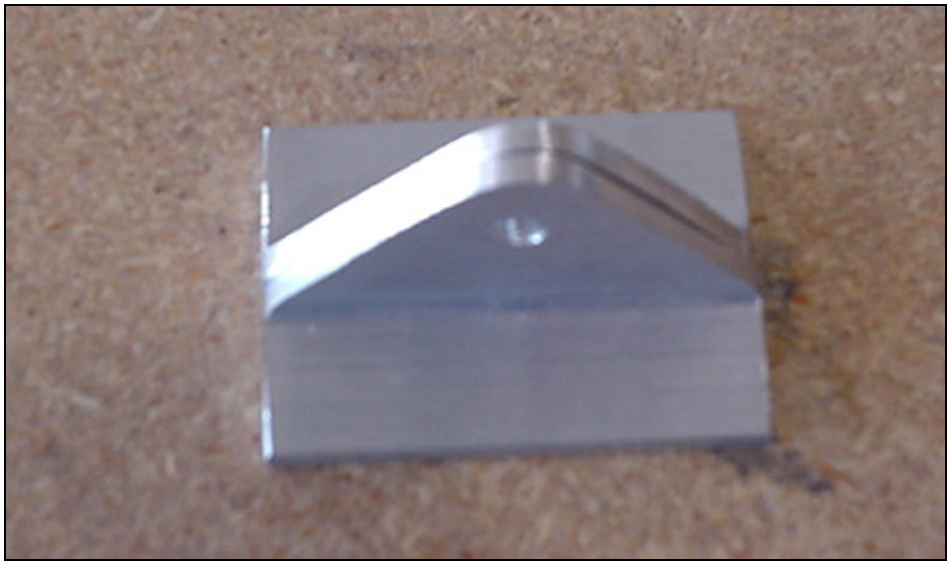


Burr on edge of flanged lightening hole.

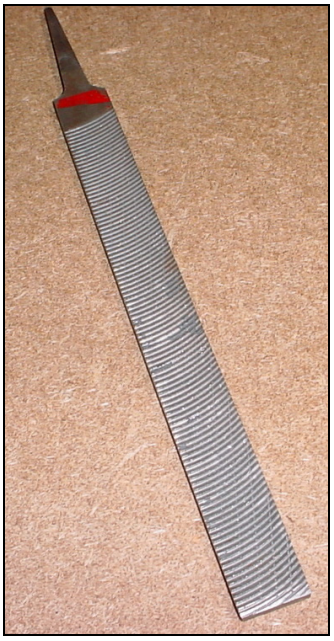
Check if there are rough edge on the edge of the lightening holes.

Remove burr.

File any rough edge and finish with emery cloth.



Clamp the 2 angles back to back to drill the 3/16” hinge hole.



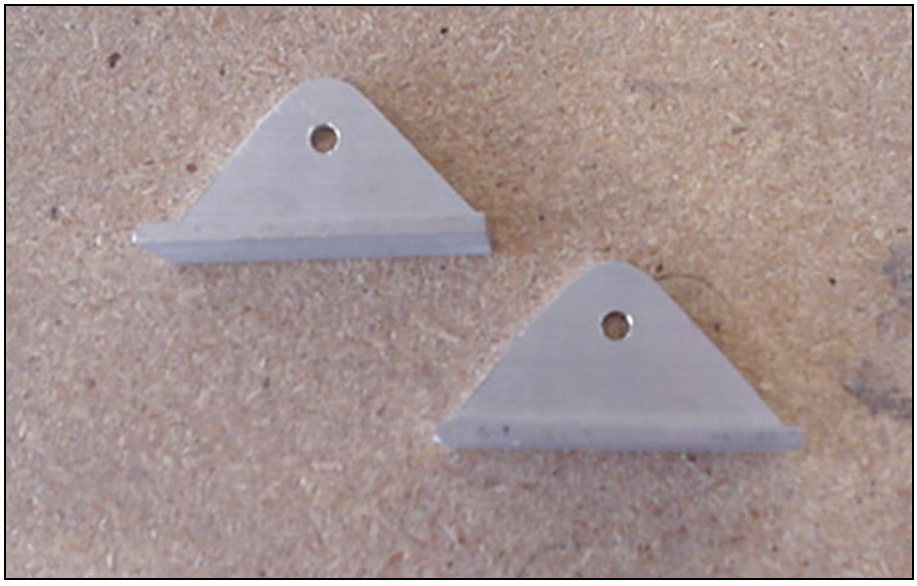
Sykes-Pickavant Body Flades
(Body file or Vixen file)

U.S. Industrial Tool & Supply
P/N TP579F
http://www.ustool.com

Aileron Bellcrank Support 6W6-11. Locate the center of the 3/16” hole in the 1-1/2” long flange. Clamp the two pieces together back to back to first drill a pilot hole then the 3/16”: use a drill press. Keep the pair for the left and right wings separate. Either with a band saw or a hacksaw, finish cutting the flanges: keep a minimum 10mm radius from the center of the 3/16” hole to the edge of the cutout. Cut the 1” flange to 20mm. Use a body or vixen file to remove the saw marks, a fine file for a smooth finish.

Mark the centerline of the 20mm flange, layout the 3 rivets: the middle hole is in the middle. Pre-drill with #30 pilot holes.

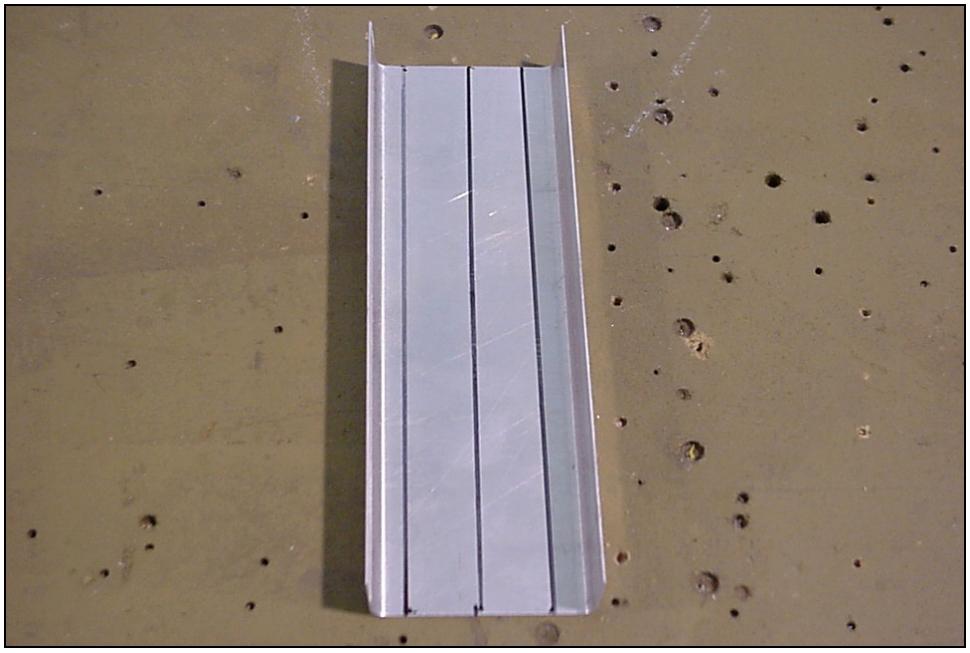
Bolt the Bushing 6W10-3 between the two Bellcranks with the AN3-12A bolt.



R10 = radius from the center of the 3/16” hinge hole to edge of extrusion.

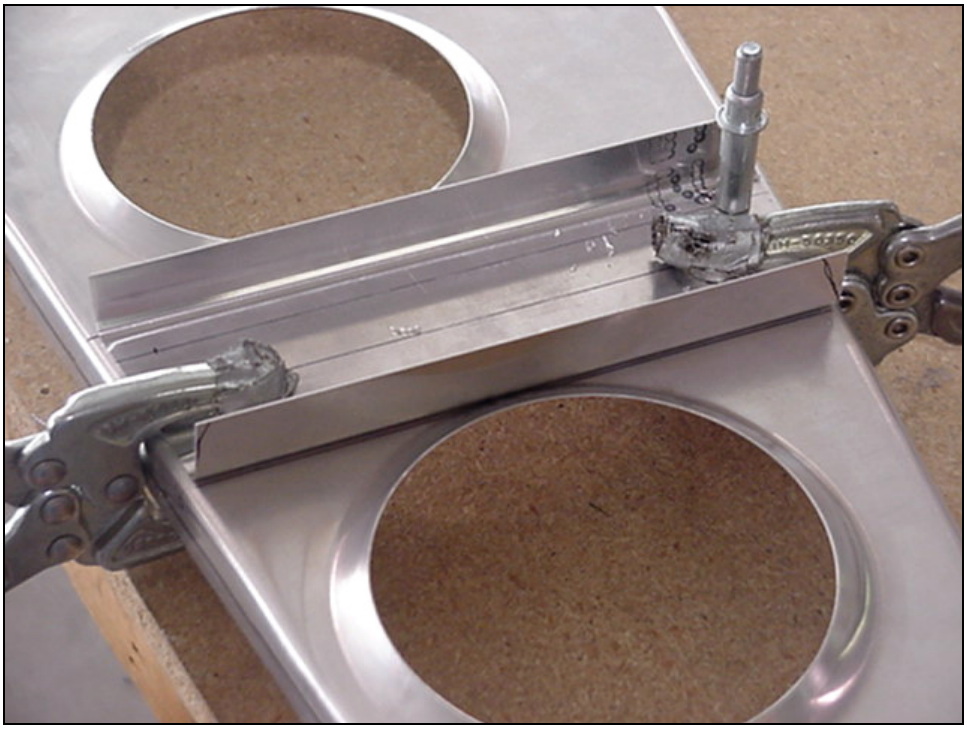
RR #7

Mark the location of the Bellcrank Support Channel 6W6-10 between the lightening holes in RR7 (Rear Rib #7 has the lightening holes flanged opposite to the rib flange, the spar flange is bent the same as the rib flange). Mark the position line on both sides of the rib: the Channel 6W6-10 is on the inboard side and the Aileron Bellcrank Support 6W6-11 goes on the outboard side.



Center line &
Two parallel rivet lines.

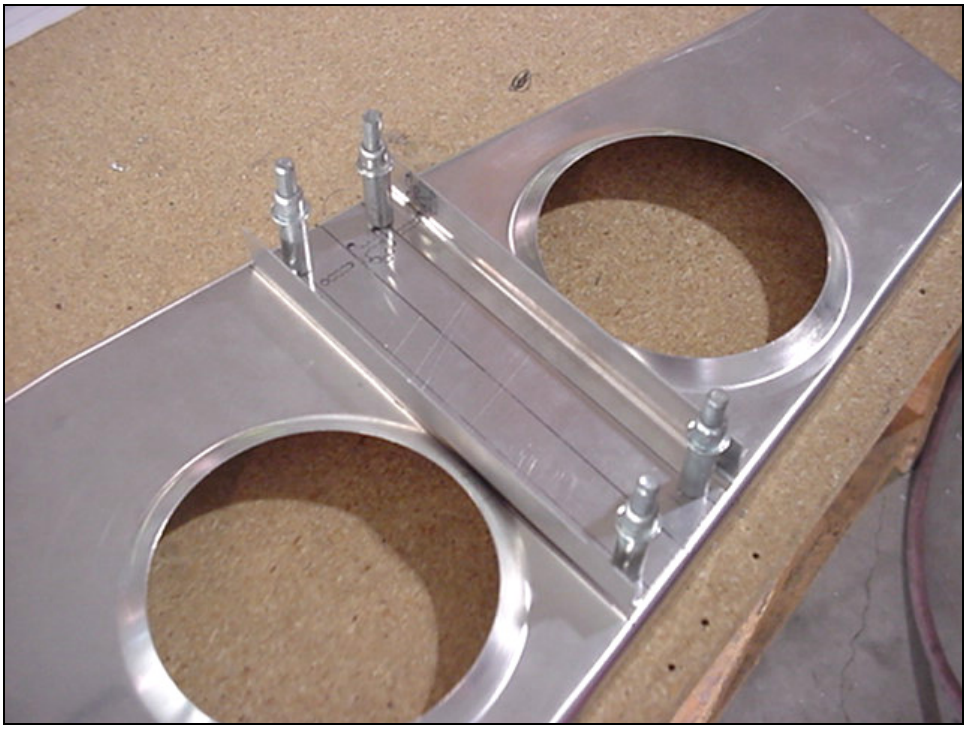
Mark the centerline and the two parallel rivet lines inside the Channel 6W6-10. Rivet spacing: The end holes are at 10mm from the edge; the second row is spaced midway between the end holes and the holes in the Aileron Bellcrank Support 6W6-11.



Toggle clamps

U.S. Industrial Tool & Supply
P/N TP176A
http://www.ustool.com

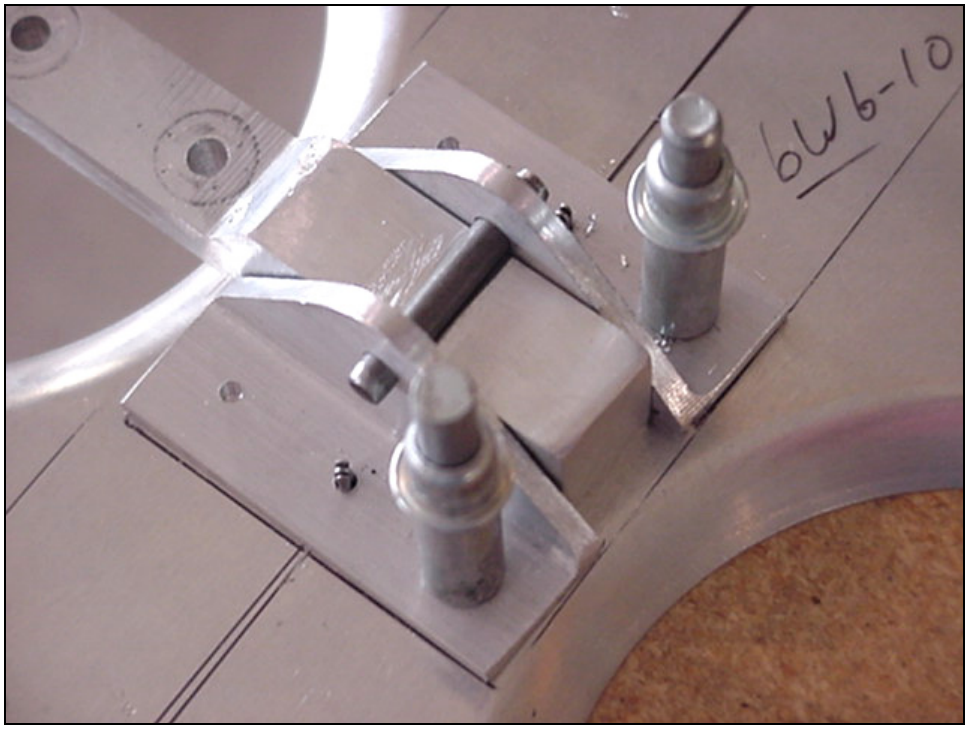
Overlap the centerline of the Channel with the position line marked on the Rear Rib.
Cut the length of the Channel approximately 4mm shorter than the rib flange.
Clamp the Channel to the Rib.



#40 pilot holes use
3/32" SILVER CLECOES

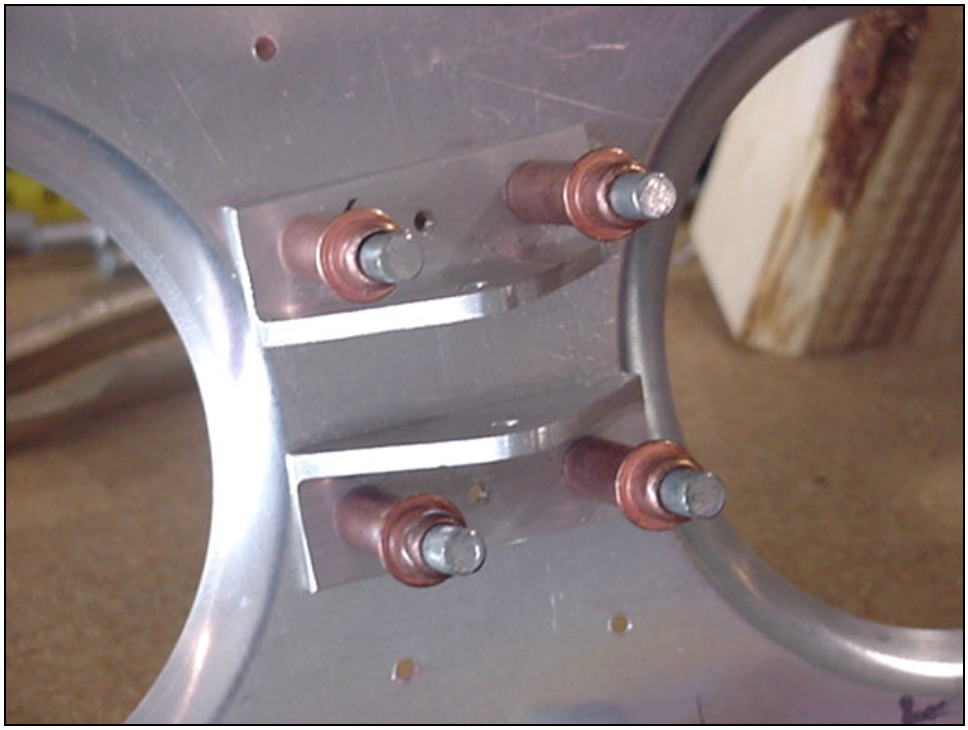
Note: for A5 rivets, it is quite common to drill #30 pilot holes (1/8" Clecos)

Drill and Cleco the 4 end holes.



Bolt the two Supports 6W6-11 together separated by a 16.5mm spacer block.

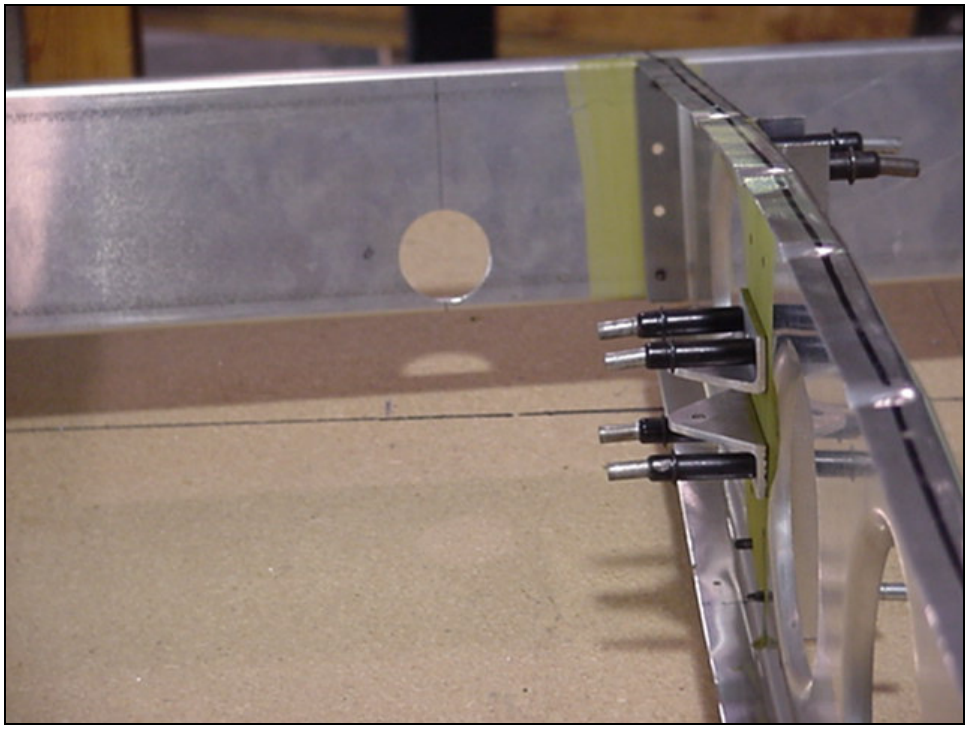
Position the centerline of the Aileron Bellcrank Support on the rib: the top surface of the lower support is 70mm up from the bottom of the rib.
Check: Edge of the Support is at 90 degrees to the position line, the Bellcrank Supports are parallel to each other.



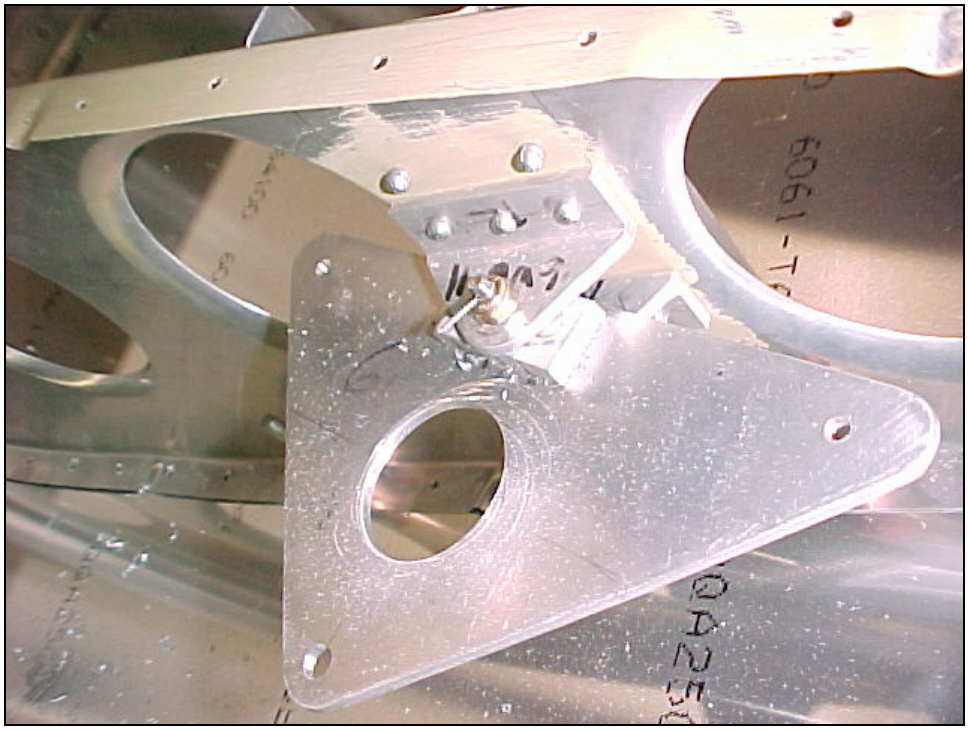
Drill & Cleco the Bellcrank Support to RR#7

Three #20 holes in each flange (black Clecos)

Note: Aileron Bellcrank Support 6W6-11 is on the opposite side of the Bellcrank Support Channel 6W6-10



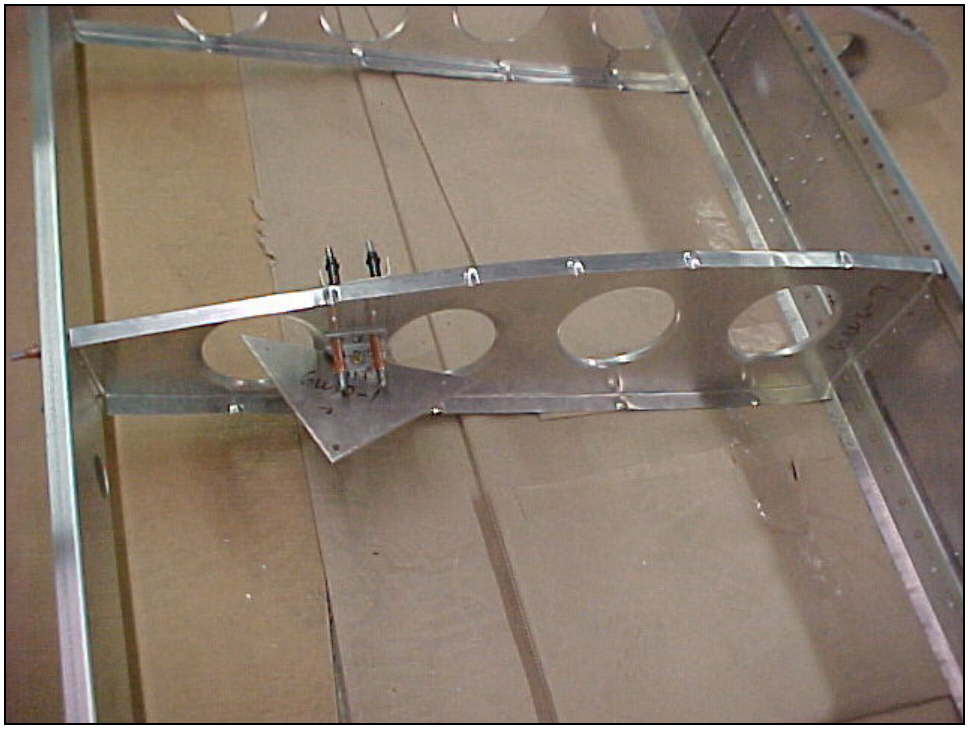
REMARK: Ref. 6-W-0 the 1-1/2” hole is on the outboard side of the aileron bellcrank supports 6W1-6

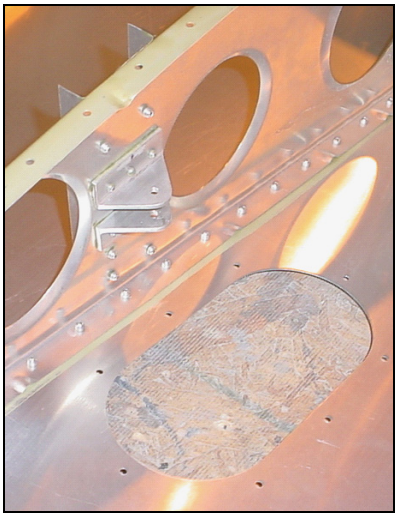


REMARKS: The bellcrank assembly 6-W-10 and bushing 6W10-3 bolts between the aileron bellcrank supports 6W6-11

A5 RIVETS, Rivet heads set (pulled) from channel side.

REMARK: Control cable and shackles are included in the controls kit.



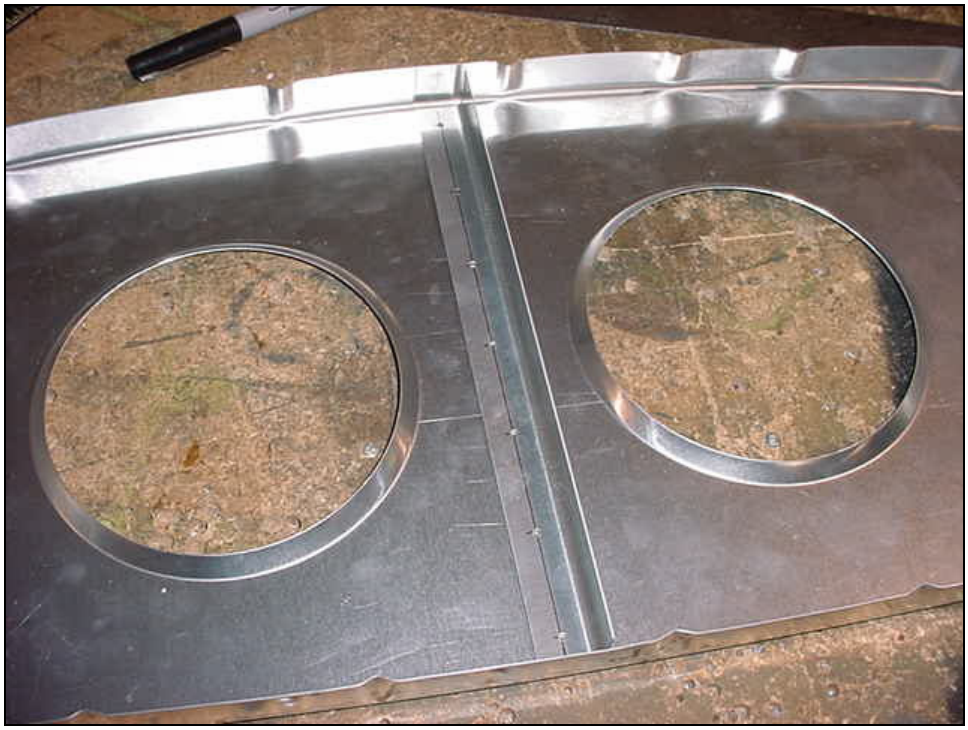


Ref. 6-W-9 Aileron bellcrank will be installed through the access hole in the bottom skin, 6-W-9

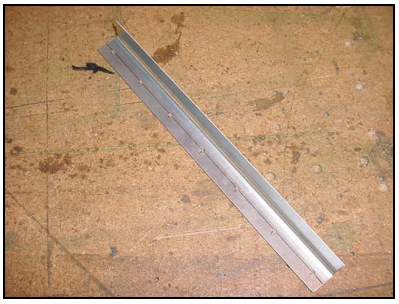
REMARK: Control cable and shackles are included in the controls kit.

Mid-point between the flanged lightening hole.

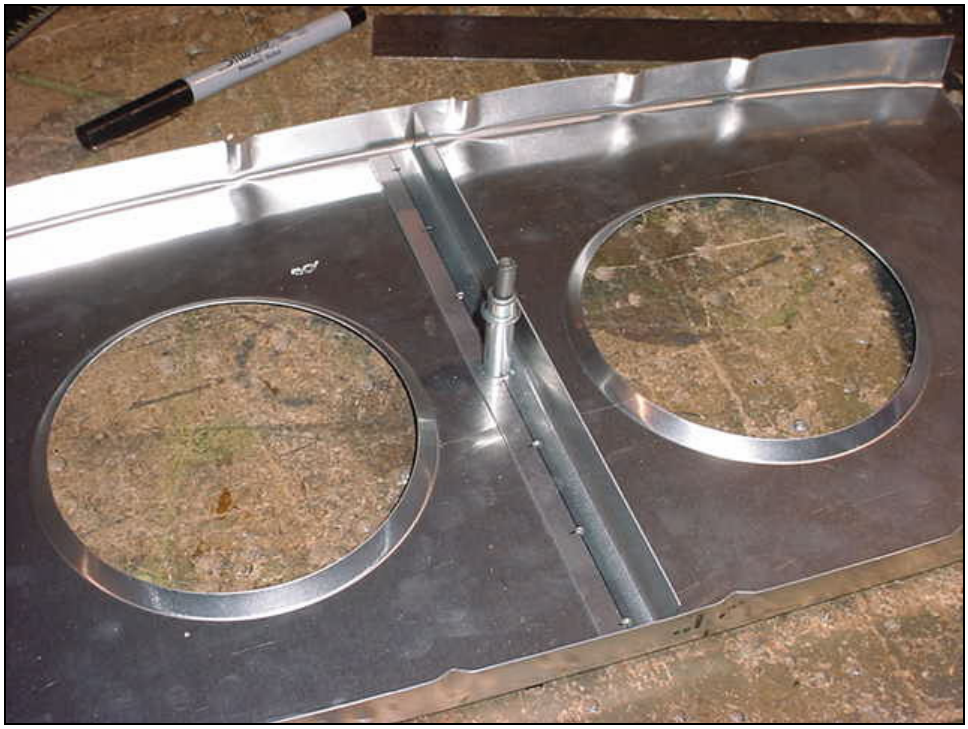
Layout the midpoint between the lightening holes.



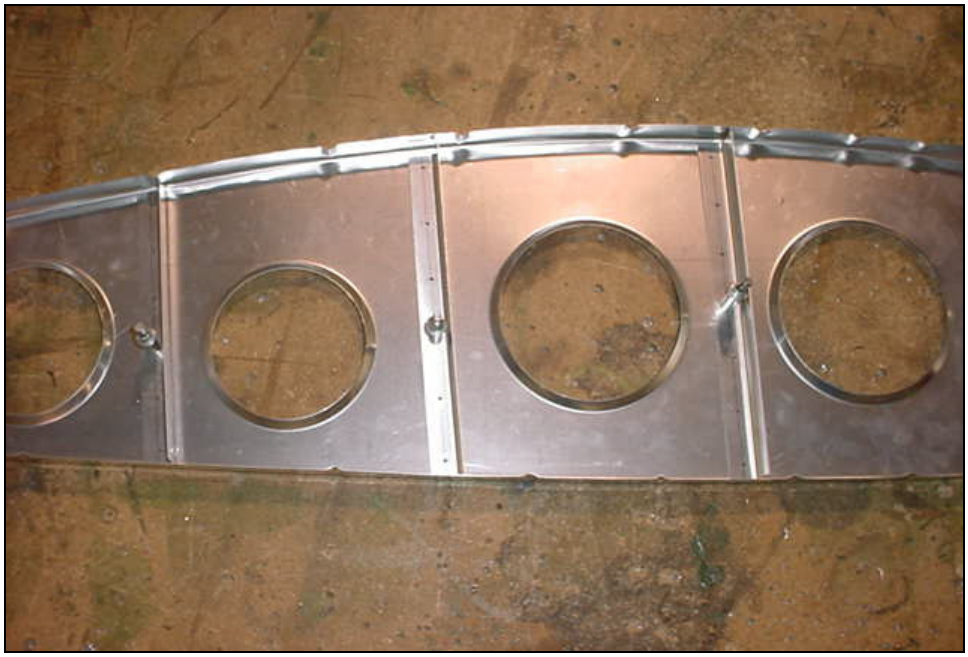
Cut L angle to fit between top and bottom flange.
See middle right diagram on drawing 6-W-6 for length.

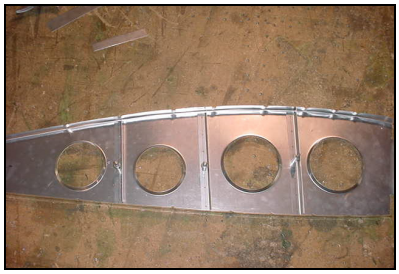


Pre-drill the L angles with #40 pilot holes.



Drill and cleco the middle hole





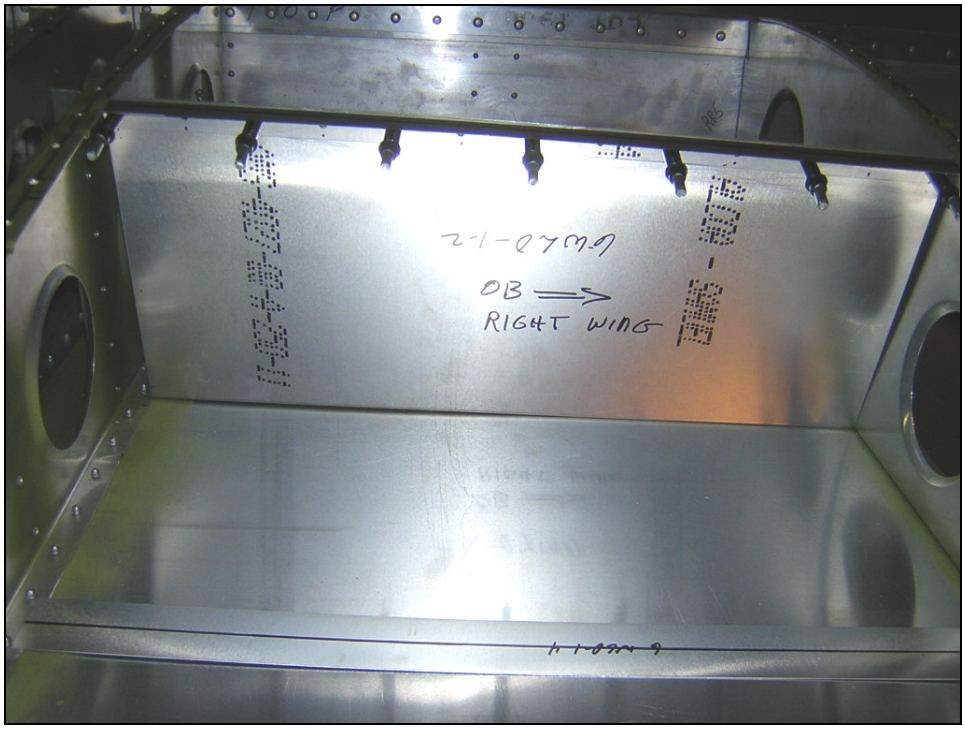
3 L angles on ribs 1 to 3

For Rear Ribs #1 to #3 only (walkway reinforcement). Cut from supplied 4 ft length standard L angle Ref drawing 6-T-1

Rear rib #4
L angle is installed on outboard side of rib. L angle is replace with L angle for wing locker.

Ref drawing 6-WLO-1
L angle for the wing locker is installed on the outboard side of rear rib #4

Reference is the spar web, layout the top and bottom distance (to front edge of L angle.



Wing locker option
6-WLO-1

Locker rear panel 6WLO-1-2

Cutout in rear top skin

Cover plate 6WLO-1-1