

Section C75-AA-1 Flaperon Assembly



This manual has been prepared for assembly of the flaperons 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: C75A1-9
O/B flaperon skin

P/N: C75A1-3
Flaperon rear ribs

QTY=3

O/B flaperon



P/N: C75A-1-5
O/B spar



90 degrees = bottom

Position the ribs and spar on the skin to line up with the holes. Circle the holes for the rib on the spar web.



C75-A-2-4
O/B TOP SPAR
DOUBLER

C75-A-2-5
O/B BOTTOM SPAR
DOUBLER

First cleco the doublers to the spar, then add the ribs.





Mark a line at 26mm. Clamp the braret to the spar with the line even with the spar flange.



Back drill through the rib and the spar.

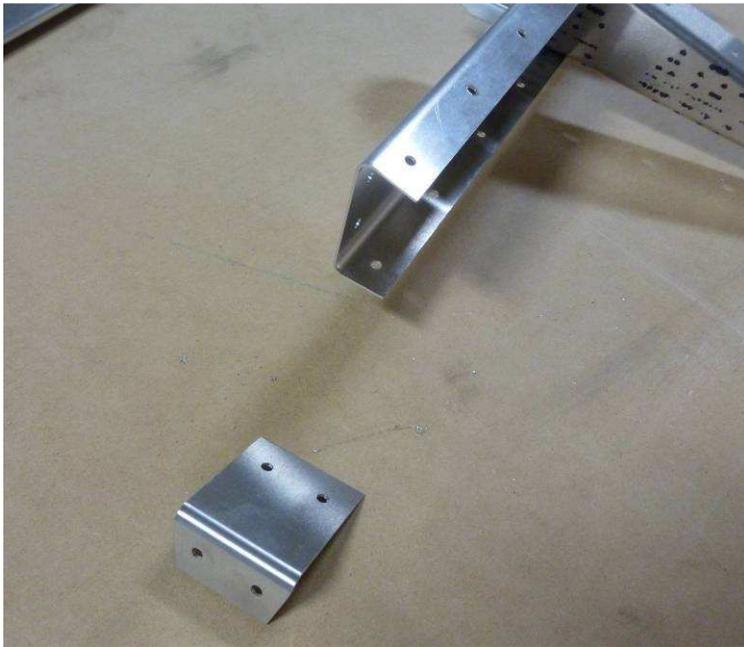


With the Hinge Bracket Clecoed to the Spar and Nose Rib, mark a diagonal line from the bottom of the Spar to the inside corner of the Hinge Bracket

Trim the Hinge Bracket on the line. This is most easily done with a band saw but can be cut with a hack saw as well. File the saw tooth marks smooth after cutting. Deburr and rivet the Hinge Bracket to the Spar and Nose Ribs.



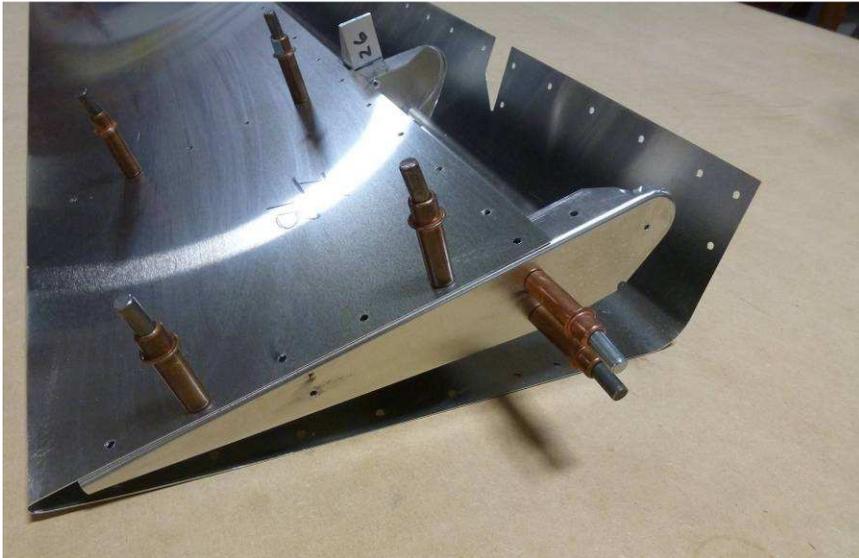
Rivet the skeleton with A5



P/N: C75A-2-3
Flaperon hinge angle



Cleco



P/N: C75A-1-1
Flaperon full rib



Cleco the rear ribs to the skin. Add weights on the skin to keep the assembly flat on the workbench.



Rivet the rear ribs to the skin.



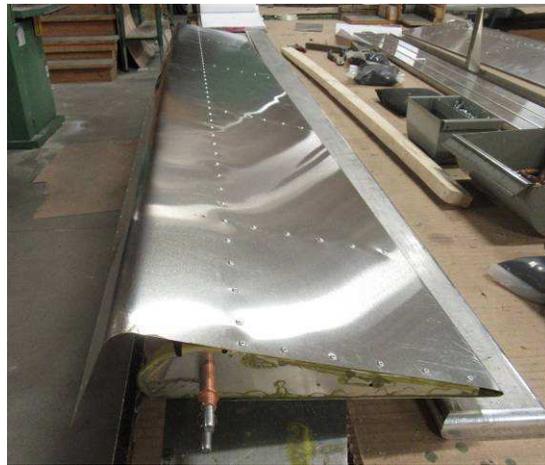
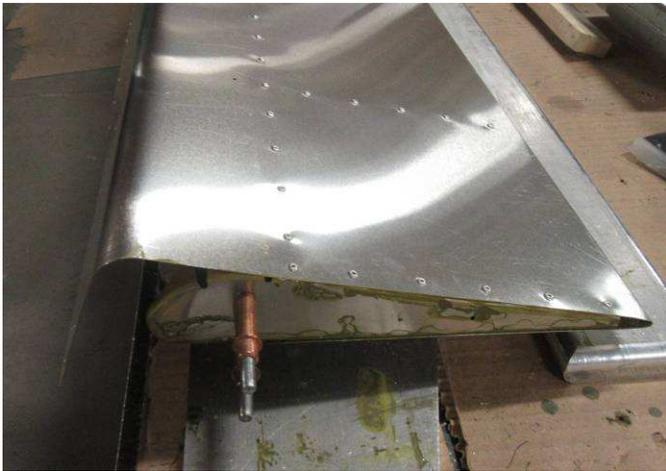
Position the assembly on beams (with clecoes in the bottom side) or on a flat workbench (without any clecoes in the bottom side as shown in the next photo)



Cleco the top side of the skin to the skeleton. Let the assembly rest on the workbench



Weight down the skin to keep the trailing edge flat on the workbench.



Rivet the ribs and spar.



Turn the assembly over and cleco the skin to the rear ribs.



Use a furring strip to bring the Skin around the Nose Ribs and Cleco the Skin to the Spar. This is best done with one person pushing on the furring strip and one person Clecoing the holes. Alternatively, ratchet straps can be used.



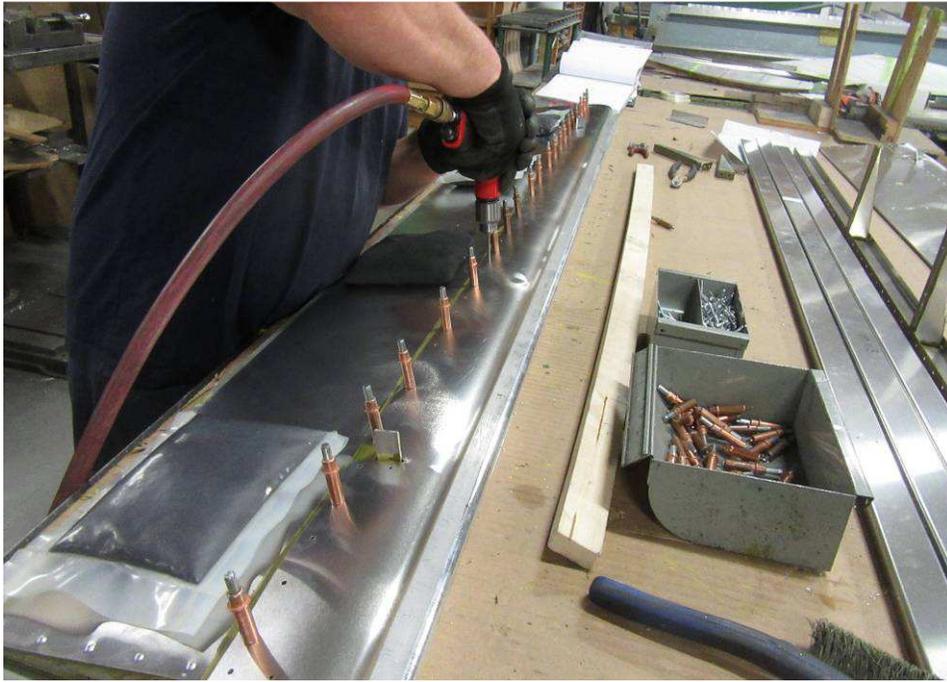
Cleco at least every other hole.



Cleco at least every other hole.



Position the weights beside the rear ribs.
There should be no twist: the assembly sits flat on the workbench.



Run a #30 drill through the holes and rivet.



P/N: C75A2-4
Flaperon Tip

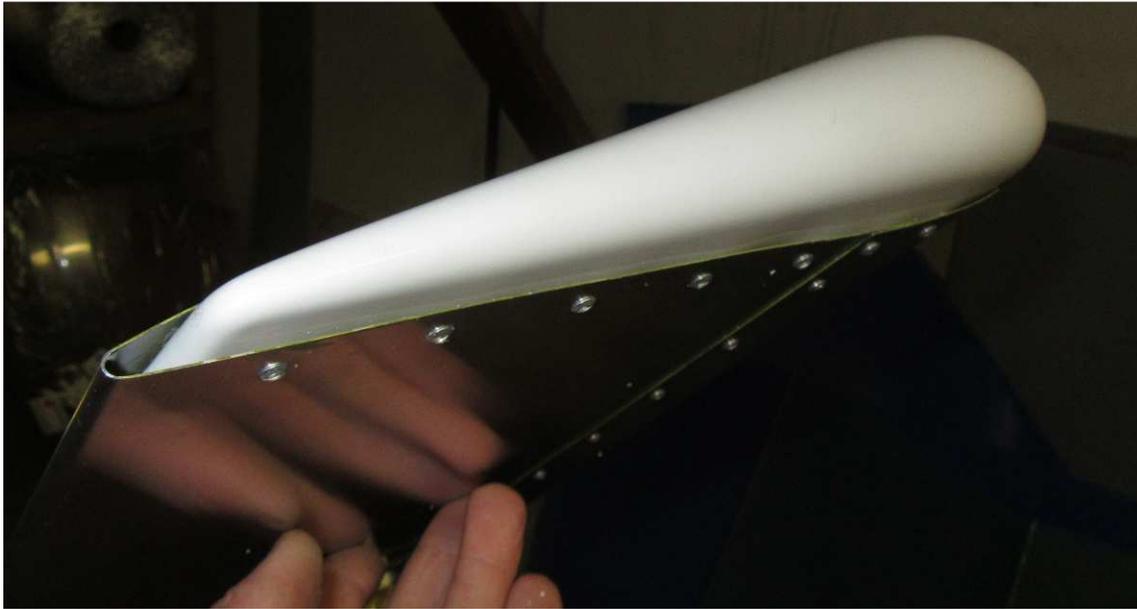
For the outboard section only.



The skin will overlap the flaperon tip on 20mm. Use tape to represent the edge of the skin and trim the nose of the tip approximately 3mm inside the skin.



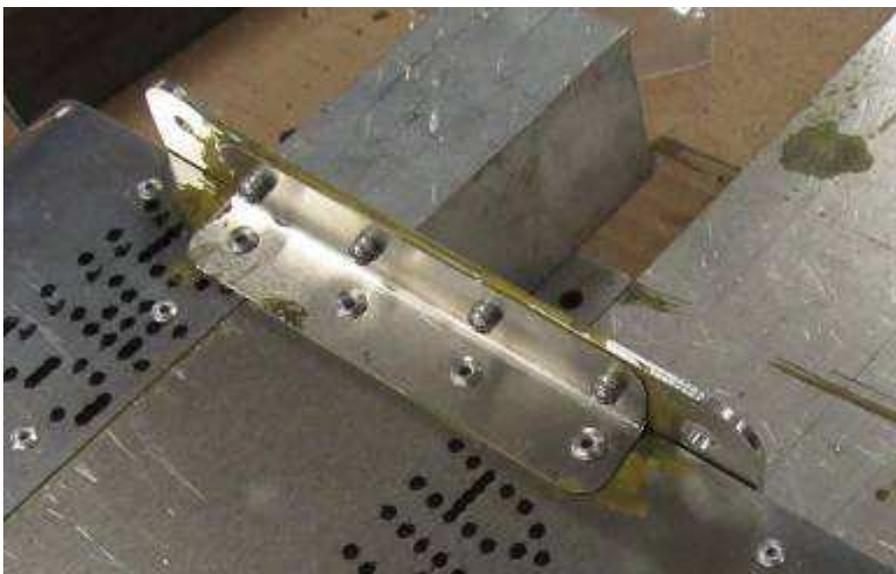
Position for the best fit by closing the gap at the front.



A gap at the back is normal.



P/N: C75A1-6
Flaperon control horn



P/N: L angle
Installed on the
bottom side

I/B end of I/B flaperon section