## Section 75-ZA-1 Horizontal Stabilizer Mounting

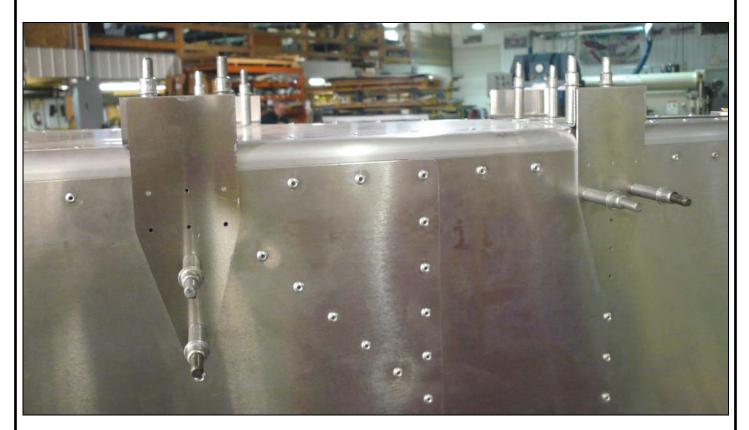


This manual has been prepared for installation of the Horizontal Stabilizer. This photo assembly manual is intended as a supplement to the drawings. If there is any discrepancy between this manual and the drawings, the drawings supersede this manual. For more information on building standards and allowable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



**P/N:** 75F2-5 H.T. Attachment Gusset

**P/N:** 75F2-6 H.T. Attachment Bracket



Cleco the HT Attachment Brackets to the Fuselage at the HT Frames. Use a #20 drill bit to expand the holes through the Attachment Brackets.

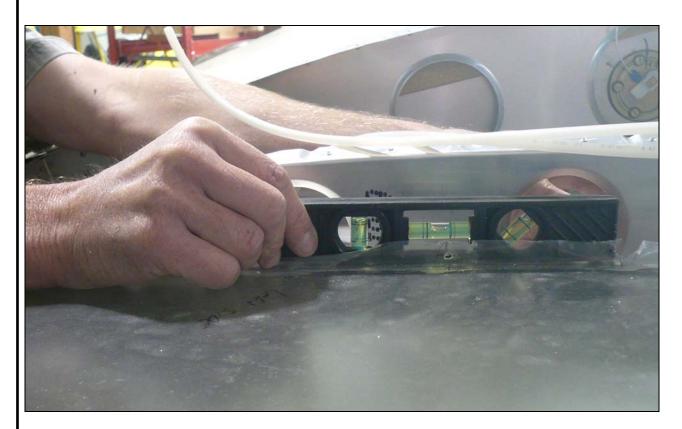


Set the Horizontal Stabilizer on top of the Rear Fuselage. Set the Stabilizer back until the brackets on the Stabilizer make contact with all four Attachment Brackets.

Note: The Brackets on the Stabilizer will NOT be centered on the Attachment Brackets.



Level the Spar Carry Through tube on the Cabin Frame.



Level the Top Tubes on the Cabin Frame..



To square the Stabilizer to the Fuselage, measure the distance between the Stabilizer tip and the center point of the Rear Fuselage at the front of the Rear Fuselage. Adjust the Stabilizer to equalize the distance between the right tip and left tip.



Use a digital level or a gravity protractor to set the Horizontal Stabilizer incidence angle. The Stabilizer should be level on top to the top tubes of the Cabin Frame and Clamp the Stabilizer to the Attachment Brackets.

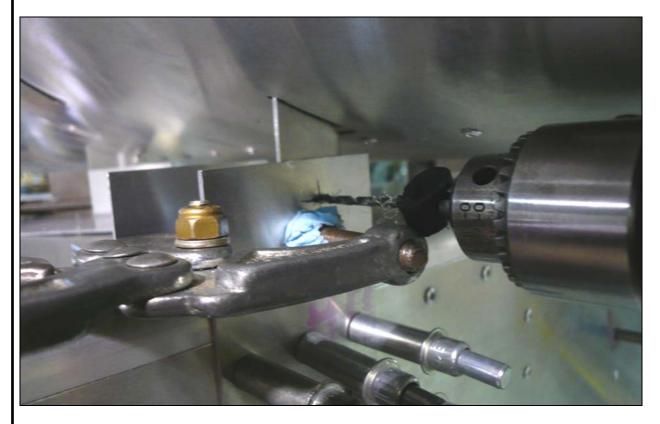


Set the Gusset in against the Bracket at the front of the Stabilizer. Measure the distance between the attachment holes in the Fuselage Top Skin to the holes in the Gusset. Mark a line that distance from the edge of the Gusset. Trim the vertical flange of the Gusset to fit. Cleco the Gusset to the Skin.

**Note:** The Gusset is installed inboard of the Stabilizer Brackets, sandwiching the Stabilizer Bracket between the Gusset and the Attachment Bracket.



Mark a hole location on the Attachment Brackets 10mm from the top of the Bracket. Center the hole on the Stabilizer Bracket. Check the Brackets and Gussets to ensure there is sufficient edge distance on all the parts the hole is going through before drilling.



Clamp the Gusset, Stabilizer Brackets, and Attachment Brackets together. Use a #40 drill bit to drill the bolt hole location. Expand the hole to 3/16" in steps and Cleco. Wait to rivet on the Attachment Brackets and the Gussets until after the Fins are installed.