Section 75-ZA-4 and 75-ZA-5 B Jury Strut Installation



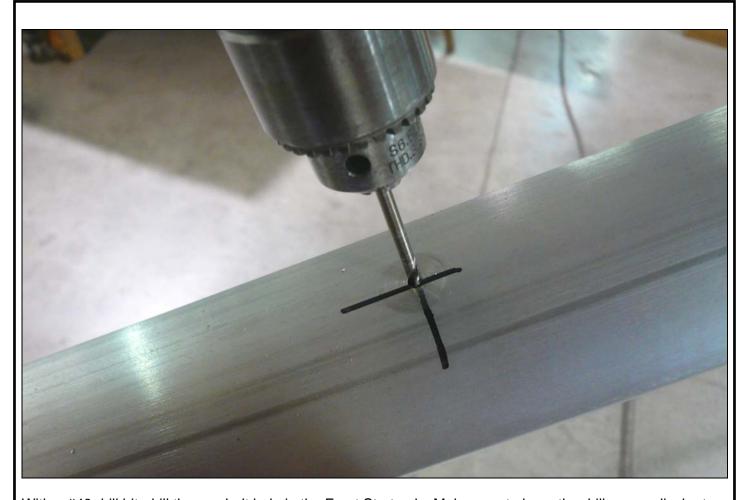
This manual has been prepared for installation of the Wings, Struts, and Jury Struts. This photo assembly manual is intended as a supplement to the drawings. If there is any discrepancy between this manual and the drawings, the drawings supersede this manual. For more information on building standards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



Measure the distance between the bottom AN6 attachment bolt and the top AN6 attachment bolt. Mark a line half way between the bolts on the Struts.



Use a square to measure from the leading edge of the Struts on the Strut center point. Mark a line on the Front Strut 31mm and on the Rear Strut 26mm from the leading edge for the Jury Strut eye bolt hole.



With a #40 drill bit, drill the eye bolt hole in the Front Strut only. Make sure to keep the drill perpendicular to the Strut when drilling through the Strut. Expand the hole to 1/4" in steps.



P/N: 75W8-7 Front Strut Bushing



Insert the Bushing in the Strut and install the AN43 eye bolt in the Bushing. The eye bolt should clamp on the Bushing and not compress the Strut.



P/N: 75W7-9 Lower Jury Strut

Mark the center of the U fitting on the Lower Jury Strut for the eye bold. Drill the hole in the FRONT U fitting only. Expand the hole to 3/16". If needed, grind the U fitting so the eye bolt will fit.



Mark hole locations in the center of the angled tabs. Use a #40 drill bit to drill the holes. Expand the holes to 3/16" in steps.



Install the Lower Jury Strut on the Front Strut.



Check the aft U fitting on the Jury Strut will be centered on the eye bolt on the Rear Strut. If needed, adjust the hole location for the eye bolt before drilling into the Strut. Drill the hole for the eye bolt with a #40 drill bit. Make sure the drill is perpendicular to the Strut before drilling through the bottom. Expand the hole in steps to 1/4".

Note: The AN43 eye bolt is already install in the photo above, this is done in the following step.



P/N: 75W8-8 Rear Strut Bushing



Install the AN43 eye bolt with the Bushing. The eye bolt should clamp on the Bushing and not compress the Strut. Check the hole in the eye bolt will be centered on the U fitting. If needed, grind the bottom of the U fitting on the Lower Jury Strut to center the hole. Back drill through the eye bolt into the Jury Strut.



Install an AN3 bolt on the aft U fitting through the eye bolt.



P/N: 75W7-2 I/B Front Jury Strut Angle

P/N: 75W7-3 O/B Front Jury Strut Angle

P/N: 75W7-6 I/B Rear Jury Strut Angle

P/N: 75W7-7 O/B Rear Jury Strut Angle



Cleco the Jury Strut Angles on the Wing. Use a #30 drill to expand the holes and Cleco.



Remove and deburr the Jury Strut Angles. Cleco on the O/B Jury Strut Angles first. Rivet the line closest to the flange first. Then cleco I/B Jury Strut Angles on and rivet them to the Wing.

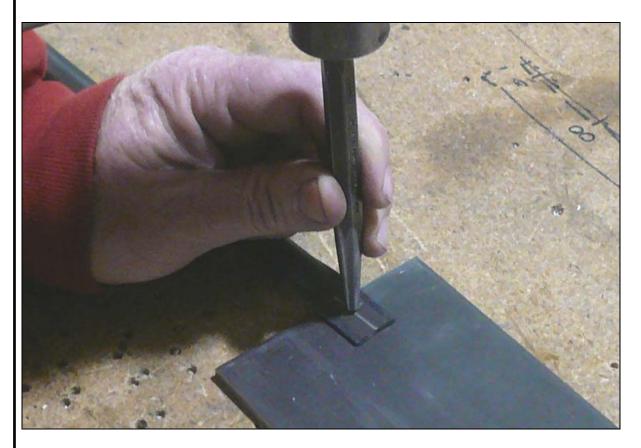


P/N: 75W7-4 Front Jury Strut

P/N: 75W7-5 Rear Jury Strut

P/N: 75W7-10 Diagonal Jury Strut

Mark a hole location centered on the flat portion of the Jury Struts.



Use a center punch to prevent the drill from walking. Drill a hole with a #40 drill bit on the center punched mark. Expand the hole to 3/16" in steps.



Cleco the Front Jury Strut to the Lower Jury Strut front tab. Mark the Front Jury Strut to trim it to fit. Use a grinder or sander to cut away the excess material.



Position the Front Jury Struts in the Front Strut Angles. The Front Jury Strut may need to the trimmed to be centered on the hole in the Jury Strut Angles. Clamp the Front Jury Struts between the Jury Strut Angles and back drill through the Angles into the Jury Strut with a #40 drill bit. Expand the hole to 3/16" in steps. Bolt the Front Jury Strut to the Front Jury Strut Angles.



Remove the Front Jury Strut. Cleco on the Diagonal Jury Strut and mark it to cut away the excess material in the way. Use a grinder or sander to remove the excess material.



Position the Diagonal Jury Strut between the Rear Strut Angles on the front hole. The Diagonal Jury Strut may have to be trimmed to be centered on the bolt hole in the Angles. Mark the hole location on the Jury Strut and drill the hole with a #40 drill bit. Expand the hole to 3/16" in steps. Bolt the Diagonal Jury Strut to the Rear Strut Angles.



Bolt the Front Jury Strut and Diagonal Jury Struts to the Lower Jury Strut.



Cleco the Rear Jury Strut to the aft tab of the Lower Jury Strut. Mark the excess tab on the Rear Jury Strut. Use a grinder or sander to remove the excess material.



Position the Rear Jury Strut between the Angles. The Rear Jury Strut may need to be trimmed to length to center the hole on the tube. Mark the hole location on the Rear Jury Strut. Use a #40 drill bit to drill the hole. Expand the hole to 3/16" in steps.



Bolt the Jury Struts to the Wing and Struts.