



Photo-Guide

(ZE-2009-07)*

The following photo-guide is for educational purposes only. It is intended to assist owners and/or aircraft mechanics with the installation of elements from from 6Z-4G as part of Service Letter ZE-2009-07 for the ULM version of the Zenair CH 601 XL/650.

The methods, sequences and tools proposed in this guide are suggestions only. Other methods, techniques and/or tools may be used if the same (or better) results are achieved.

If variations and/or discrepancies are found between the photos and the drawings, the drawings take precedence and should be followed.

A note about the parts: Parts supplied in the Zenair kits are of correct material, have all the necessary bends (with grain in proper direction), and are of approximate size to ensure proper fit. Installer needs to fit and trim as necessary and file & finish all sharp edges and corners. Also, remember to de-burr all holes prior to final assembly. Application of Zinc chromate (or similar) is optional.

Tools needed: Drill, drill bits (#30 & #20), drill stop, center-punch and hammer, tin-snips, files, measuring tape, marker(s), clecos, cleco-pliers, clamps, vacuum cleaner (to clean up inside fuselage prior to final installation)...

To better serve aircraft builders and owners everywhere, Zenair reserves the right to modify and/or update its photo-guides at any time and without notice. Check website for latest edition of guides.

ZODIAC
601 XL/650

ZE-2009-07
***Drwg. 6Z-4G**

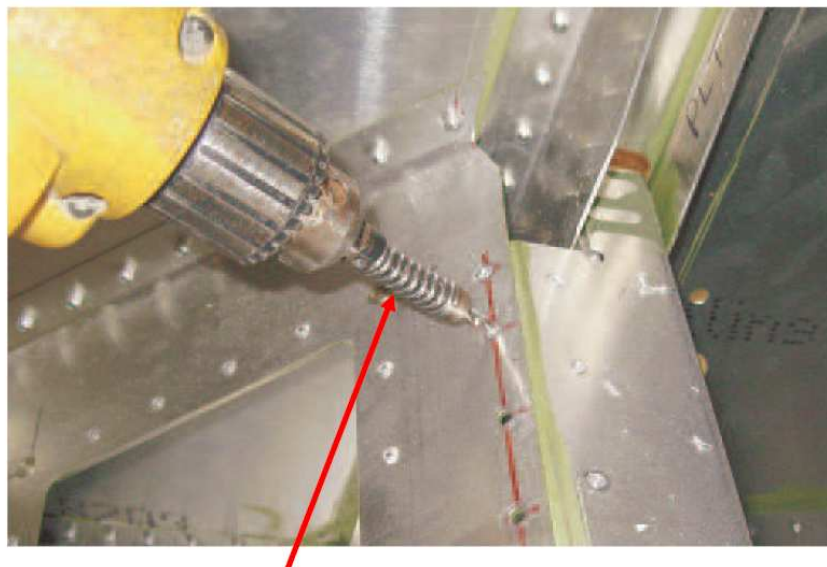
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www.zenairulm.com

AIRFRAME UPGRADE
Page 1 of 7.



Open the access panels underneath the seat cushions.

Remove the center console to drill out the top rivets on the center spar section (photo of cabin with dual stick option)



Drill stop

Install a drill stop on the drill bit.
CAUTION: Do not let the drill bit touch the spar web.



Drill out the 2 rivet lines in the spar.



Cut two notches in the front flange of Doubler 6Z-4G-2 to make room for the ends of the extrusion uprights riveted to the front side of the spar (see photos on page 7)



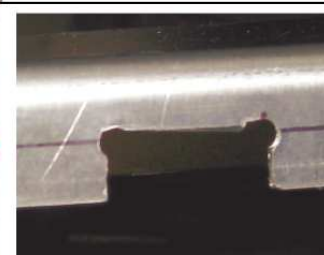
Drilling out rivets:

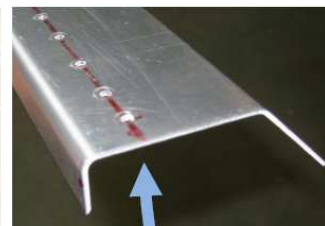


First remove the head.

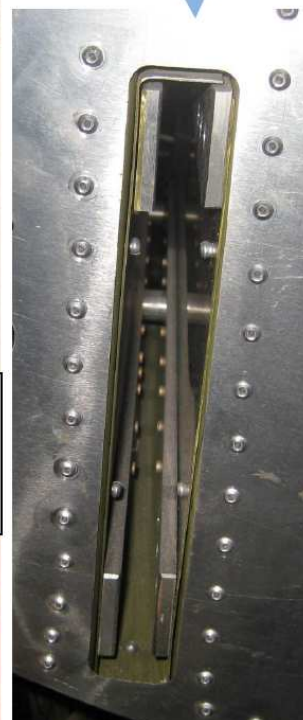


Drive the rivet out (use hammer if necessary).





CENTER SPAR TOP
DOUBLER
6Z-4G-1



Locate the rivet line midway between the spar caps (photo to the right shows the spar caps - with the wings removed- for illustrations purposes only). Hook the end of the tape measure over the front flange of the doubler and measure back 17mm to set the rivet line. A5 pitch 30



With a soft felt tip marker, trace through the existing holes in the top flange of the rear spar web.



Seat front angle
6Z-4G-2

Position the angle underneath the top flange of the spar, hold it in place and drill down through the existing holes.

Remove the doubler 6Z-4G-1 to install the seat front angle 6Z-4G-2

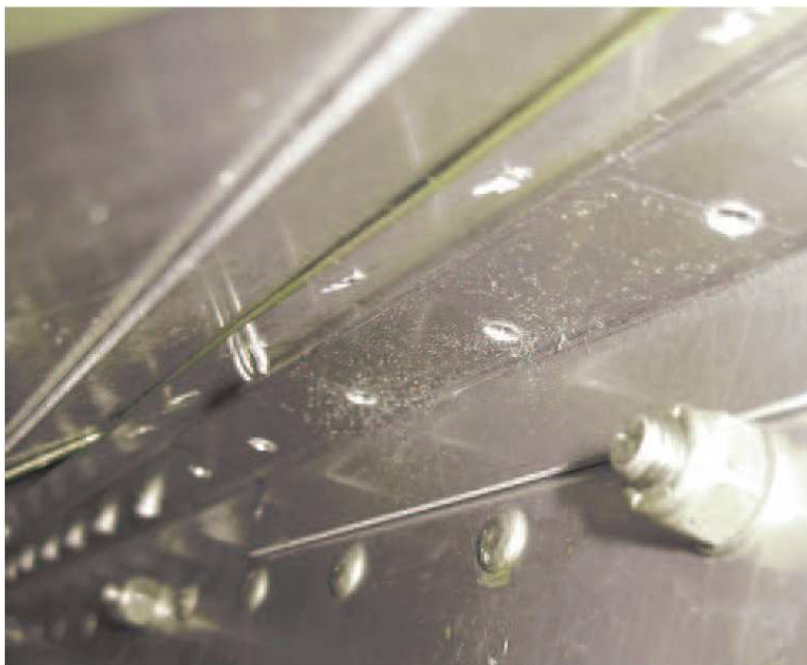


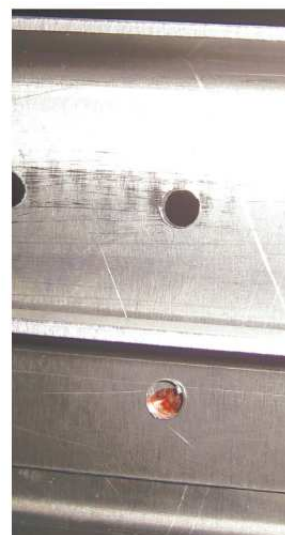
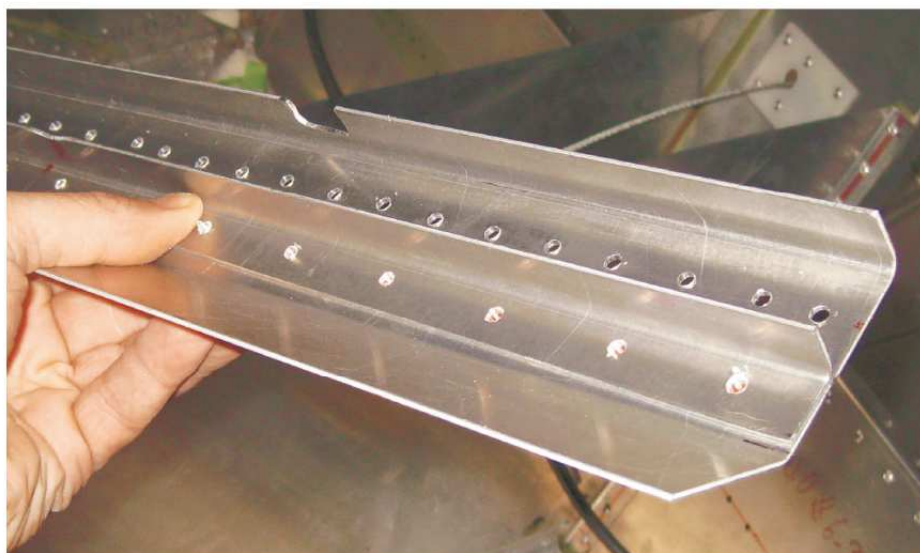
Photo looking up at the back side of the spar through the access panel. Drilled holes in the top flange of the seat front angle 6Z-4G-2



Remove the channel and check that the marks are visible.



Lay the angle on top of the doubler.



Carefully line up the marks through the drilled holes. Clamp in place and drill.





Reinstall on the spar. Use a drill stop to drill through the existing holes in the seat into the doubler. See page 1 for drill stop info.



Cleco together.

A5 pitch 20, add a hole between the existing rivets.



Notch in the front flange of the doubler 6Z-4G-1 to make room for the end of extrusion upright riveted to the front side of the spar (for dual stick option).

Check that the bottom edge of the flange does not touch the AN4 bolts, if necessary use a half round file to file a relief notch.



Notches in the front flange of the doubler 6Z-4G-1 to make room for the uprights 6W4-4 (extrusion to hold the front bearing for the torque tube).

