

Section 75-SA-1 Slat Section



This manual has been prepared for assembly of the slat sections 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: 75S1-6
Corner Doubler

Mark a line 10mm from one end of the Corner Doubler.



P/N: 75S1-2
I/B Slat Skin

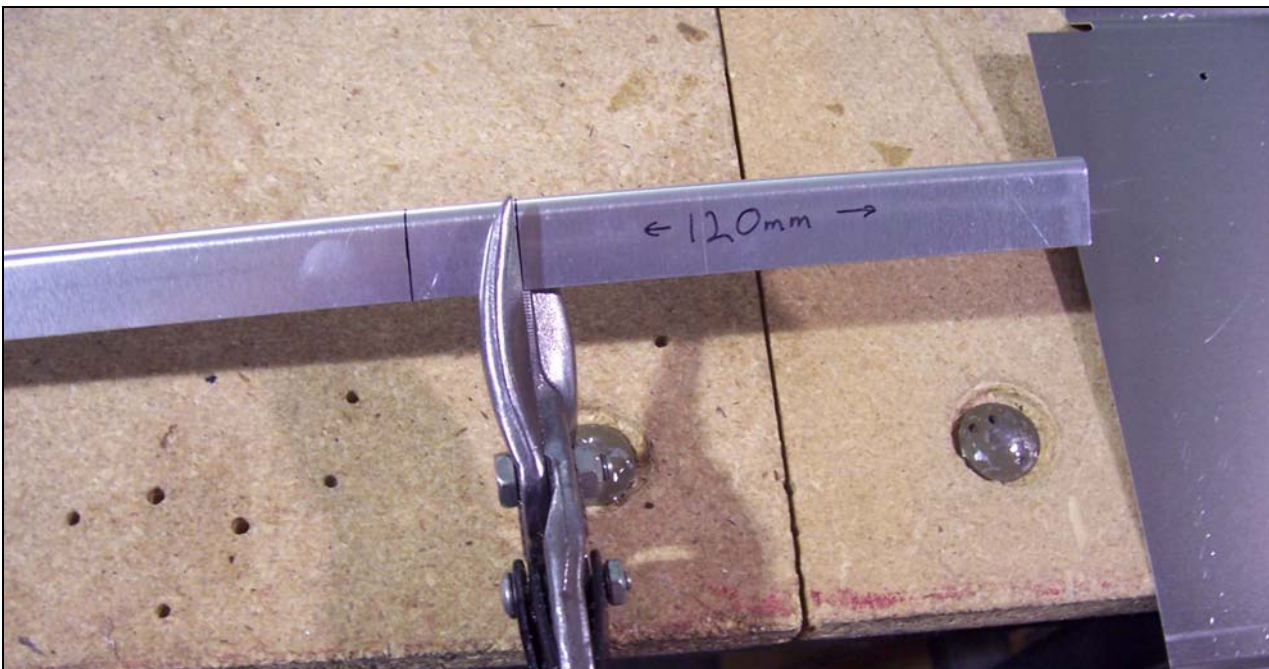
Or

P/N: 75S1-3
O/B Slat Skin

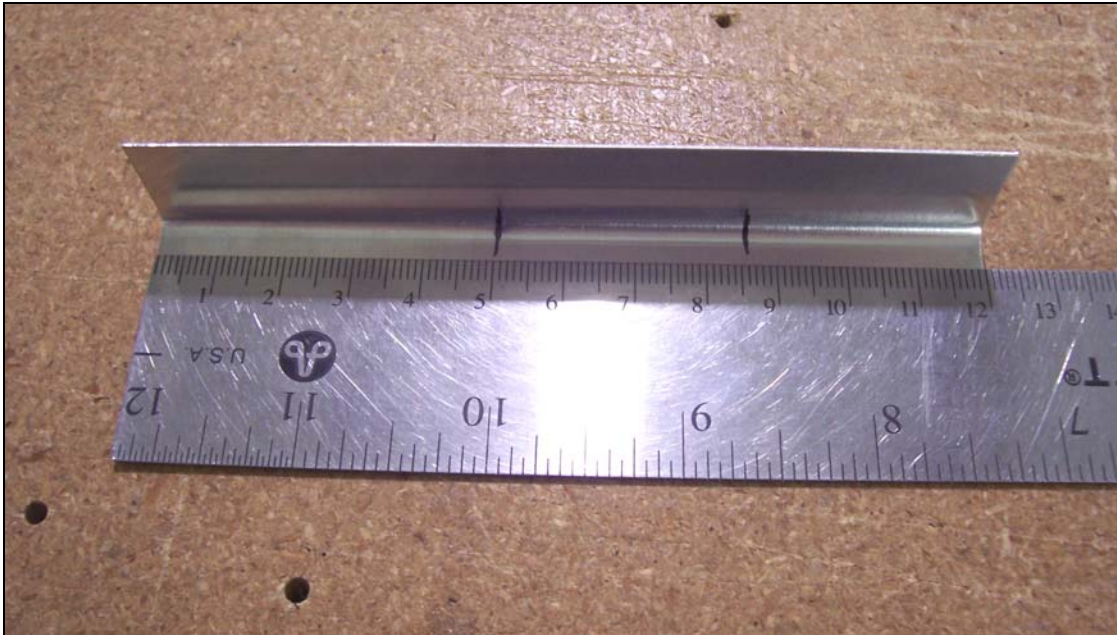


Set the Corner Doubler inside the Skin. Position the Corner Doubler so the line is visible through the hole that is common with the most outboard Slat Rib. With a #40 drill bit, back drill through the Skin into the Corner Doubler, Cleco as the holes are drilled. Wait to expand the holes till the Ribs are installed.

Reference: See drawing 75-SA-1 for dimensional location of the Corner Doublers.



Cut an L angle to 120mm long.



Place a mark in the radius of the L angle at 50mm from the end and 85mm from the end.



With a #20 drill bit, drill holes in the radius of the L angle on the marks. Cut the flange to the holes drilled to make reliefs to bend the L angle to match the curvature of the Ribs.

Check: The cut flange will rivet to the web of the Ribs, but sure that you make a total of 4 lefts and 4 rights.



P/N: 75S1-1SS
Slat Rib (predrilled
for the slat support)



Bend the L angle to match the bottom curvature of the Rib. The L angle is positioned with the 50mm section of the L angle towards the aft end of the Rib. The L angle should be flush with the bottom and aft edge of the Rib. With a #40 drill bit, back drill through the Rib into the L angle and Cleco the L angle to the Rib.

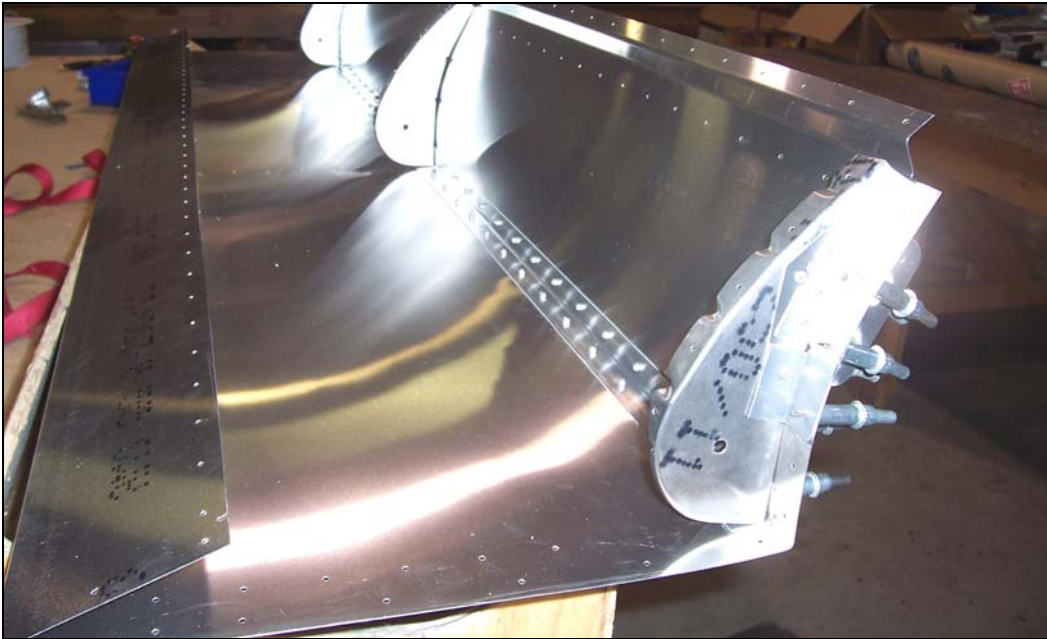


P/N: 75S1-4
Slat Support

Cleco the Slat Support between the L angle and the Rib. With a #30 drill bit expand the holes. Disassemble, deburr, and rivet the L angle and Slat Support to the Rib.



P/N: 75S1-1
Slat Rib



Cleco the Ribs to the bottom of the skin. Back drill through the Skin into the L angles with a #40 drill bit and Cleco. With a #30 drill bit, expand the holes through the Skin on the bottom into the Ribs, L angles, and Corner Doubler. Remove the Ribs and Corner Doubler from the Skin, deburr, and rivet the Corner Doubler and Ribs to the bottom of the Skin.

Note: DO NOT drill the most aft hole for the Rib in the Skin; this hole is common with a rivet line on the other section of the Skin.

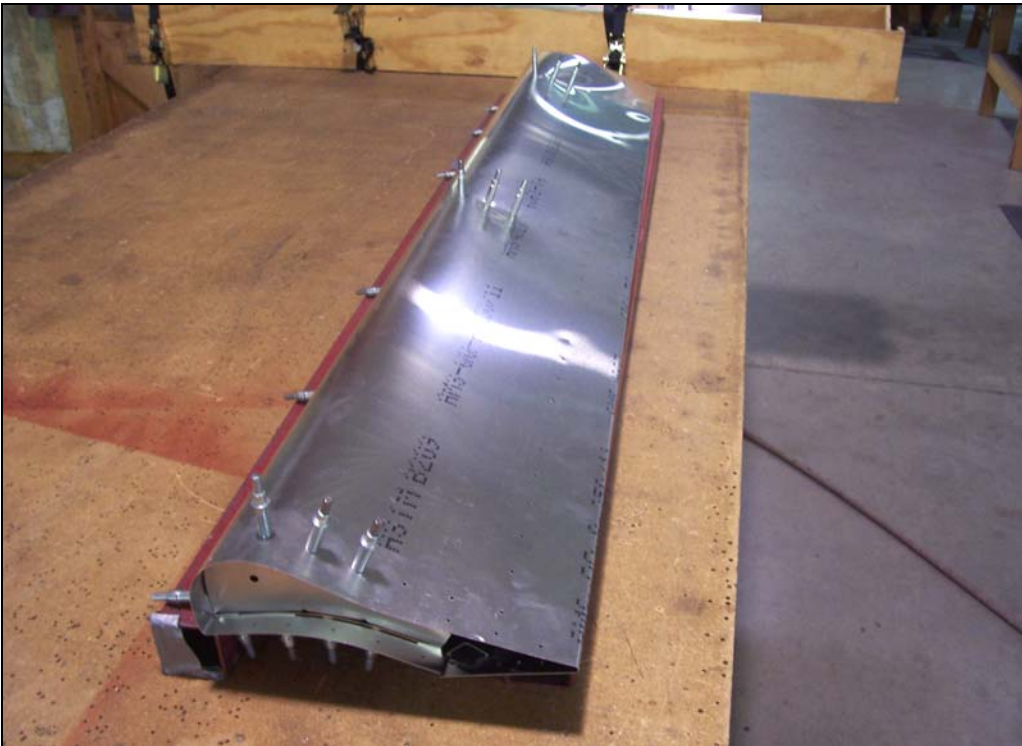


Deburr the edges of the Skin well. Carefully push the bottom of the Slat Skin over towards the top of the Skin. With your free hand pull the top of the Skin open and push the bottom of the skin under the top of the Skin.

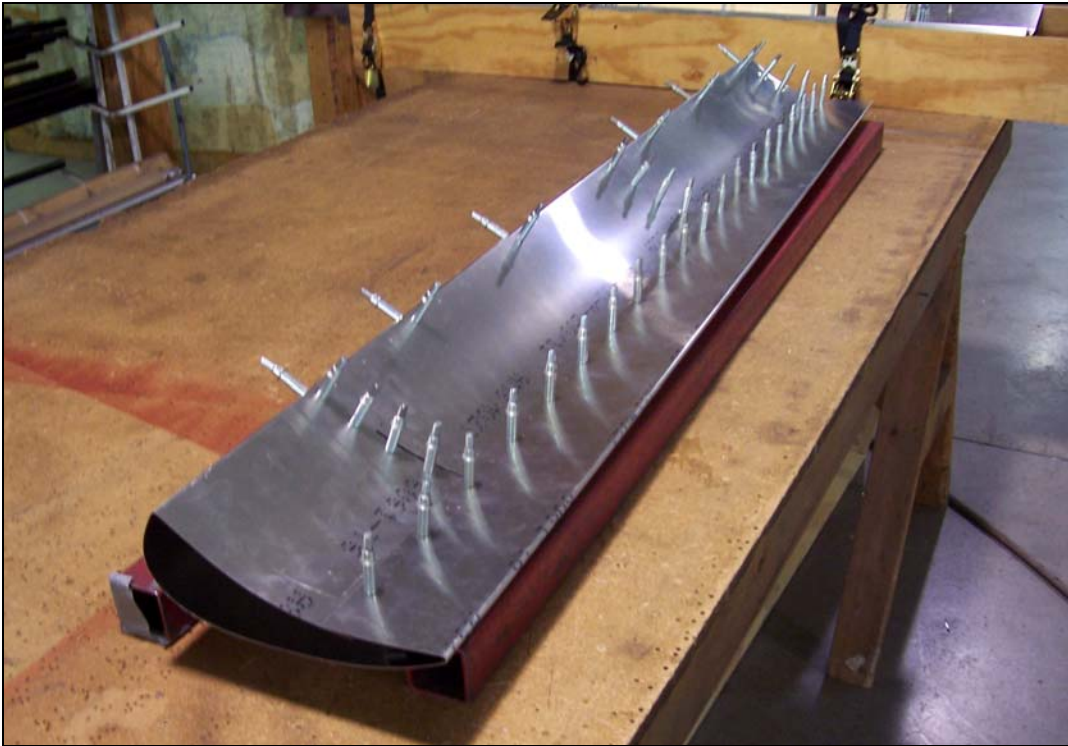
Note: The beams are in the way to do this step in the above picture.



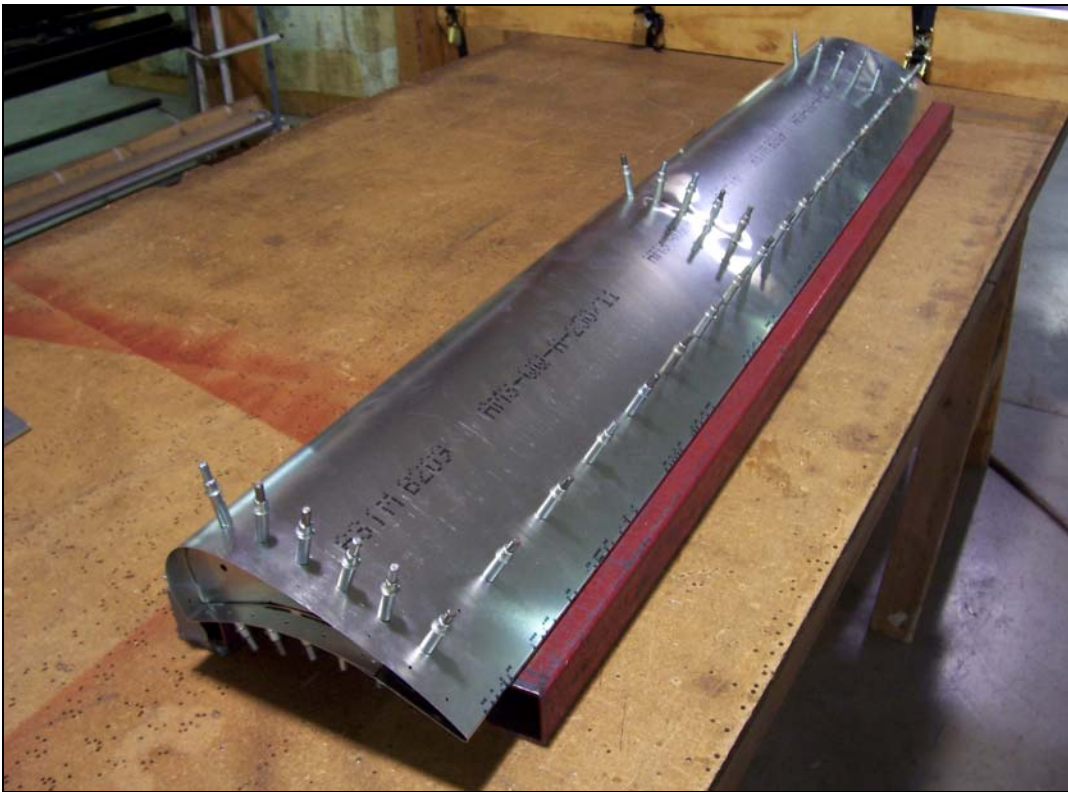
Slide a thin piece of scrap or a ruler between the skins to help push the bottom of the Skin inside the top.



Flip the Slat over and set it on the beams. Cleco the Ribs to the top of the Skin. Start at the leading edge and work towards the trailing edge. Cleco the Ribs evenly across the span, DON'T Cleco one entire Rib then the next in line.



Flip the Slat over and Cleco every other hole for the aft rivet line on the Skin. This will align the holes for the aft line on the top of the Skin.



Flip the Slat over and Cleco every other hole for the aft rivet line on the Top of the Skin.



P/N: 75S1-5
Fiberglass Slat Tip

Position the Tip for the best appearance in the end of the Skin. With a #30 drill bit back drill through the predrilled holes in the Skin into the Slat Tip and Cleco as the holes are drilled.

Reference: See page 75-SA-1 for information about which ends have Fiberglass Tips installed in them.

Disassemble the Slat, deburr, and rivet the Slat section together.