

Front strut fitting doubler 7V8-1SP
Layout the rivet line 9mm from the bottom edge.
End holes are 10mm in from the ends.



7 RIVETS A5 Drill with #40 pilot holes.

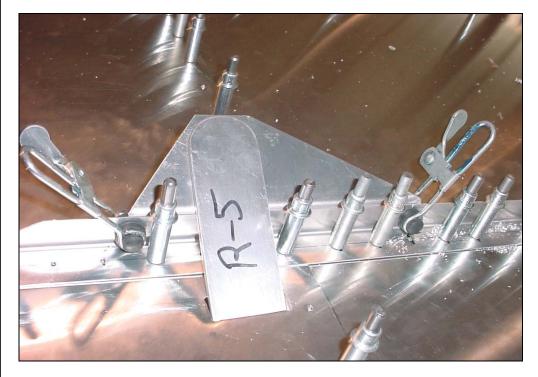


ORIENTATION: The short sloped side is towards the front. ReF. 7-V-8 Position 7V8-1SP under the upper strut fitting. CLAMP: Along the top, clamp to the strut fitting 7V2-5





CLAMP: Clamp the sides to the L angle. CHECK: The end of the doubler is flush with the rounded end of the strut fitting





CHECK: There is no gap between the top surface of the doubler and the strut fitting 7V2-5

Photo of the outboard side of the doubler 7V8-1SP



IMPORTANT: Lay a scrap piece of material on top of the skin, this will prevent the drill chuck from marking the skin when drilling.

Drill: drill and Cleco through the pre-drilled holes, first drill the two end holes, then drill the middle holes with #30 pilot holes. 7V8-1SP to the side of the L angle.



Detail of the pre-drilled holes in the doubler.

7V8-1SP Front Strut Fitting Doubler



PIECE OF SCRAP MATERIAL

STOL CH 701

Zenith Aircraft Company www.zenithair.com

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 2 of 12





7V2-5 7V8-1SP

Layout the location of the A5 rivets from the end of the strut fitting 7F2-5



Before drilling, clamp the parts together.

7V2-5 7V8-1SP

Drill and Cleco



COMMENT: The template can be made from any suitable material, it does not have to be made from 3/4"x3/4" .094" extrusion 6061-T6

The template can be made out of wood or alum but make sure it is accurate and made to the drawing 7-V-5

Make the flaperon support positioning template as shown in the top right diagram on drawing 7-V-5. The two critical dimensions are the location of the hole at 67 and 32mm

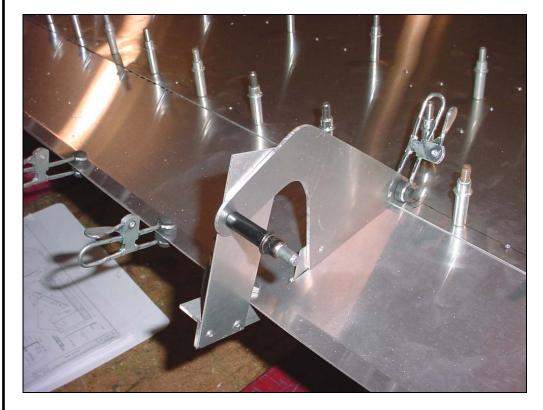


Cleco the flaperon arm to the template.



To position the flaperon arms you need to make the flaperon template.

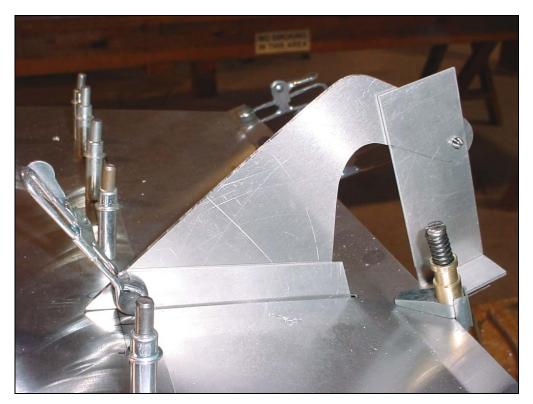
7V5 Flaperon Template 7V4-7 Flaperon Arms





The top of the template overlaps underneath the top surface of the wing.

Clamp the flaperon arm assembly to the flaperon brackets on the wing



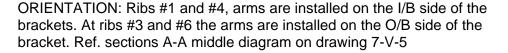


7V4-7 Flaperon Arms

Position the template and arm on the wing and clamp the template to the trailing edge.



A scrap piece of metal under the drill chuck will prevent damage to the wing. Drill through the predrilled holes in the flaperon arms and through 7V4-7.









Cut 2 pieces of "L" angles 125mm long. Evenly space four holes in the "L" and drill. Remove the flaperon arms 7V4-7



Line up the front hole on the rivet line through the channels. Clamp L angle to bracket 7v4-6





Back drill through the #20 in the bracket.

Drill and Cleco.





7V4-7 Flaperon Arms Std "L" Angle

Cleco the arm and back drill through the second L angle.



Trim the ends of the L angles.



Aft detail: Trim L angle flush with the ends of the bracket 7V4-6



L angles.



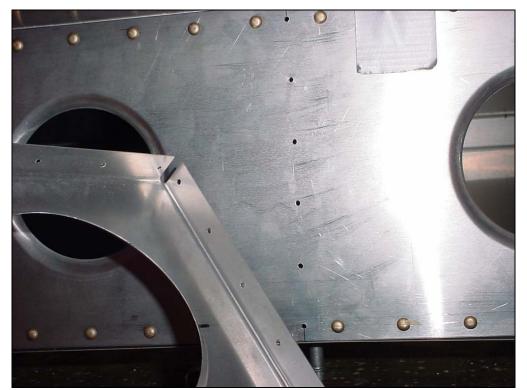
Detail of the front corner. Trimmed flush with the front edge of the arm 7V4-7



LAYOUT: Layout the location of the slot for the cutout for the tie down ring 6W9-1



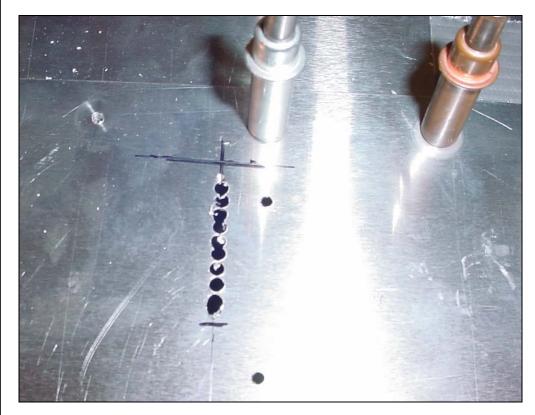
Cutout on the I/B side of nose rib #5



From underneath the skin, remove nose rib #6 to make the cutout for the tied down ring.



Check to make sure the location of the cutout is in front of the spar.



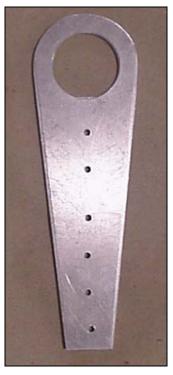


Filled slot. Re-install the nose rib.

Drill a series of holes to cut the slot.



From the end of the tie down ring, layout the 40mm reference mark. Position the tie down ring through the slot in the nose skin. Line up the 40mm mark with the skin and clamp to the rib.



OPTION TIE DOWN RING P/N 6W9-1



Tie down ring on the bottom side of the wing.



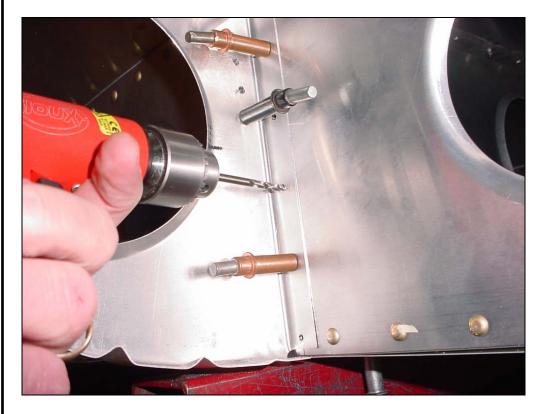
Detail of the 40mm reference line even with the skin



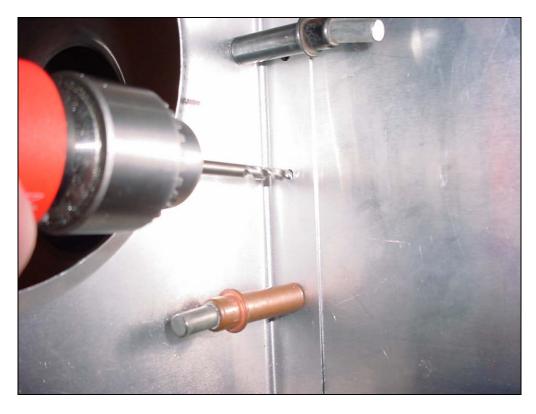
Drill and cleco 6 RIVETS A5 Ref. bottom diagram on drawing 7-V-8



Check that the size of the slot is big enough (skin does not touch the tie down ring).



Back drill the rivets in the nose ribs and spar (with rear rib) to A5



6 RIVETS A5

Ref. drawing 7-V-8

Ref. drawing 7-V-2 bottom right diagram in box, rib at station 2480