



**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.



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

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

STOL<br/>CH 701Zenith Aircraft Company<br/>www.zenithair.comRevision 2.01 (7/17/2007)<br/>© 2005 Zenith Aircraft Co.WING NOSE SKIN<br/>SECTION 4B - Page 1 of 12





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	Zenith Aircraft Company	Revision 2.01 (7/17/2007)	WING NOSE SKIN
CH 701	www.zenithair.com	© 2005 Zenith Aircraft Co.	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

STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co.

WING NOSE SKIN SECTION 4B - Page 3 of 12



COMMENT: The template can be made from any suitable material, it does not have to be made from <sup>3</sup>/<sub>4</sub>"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

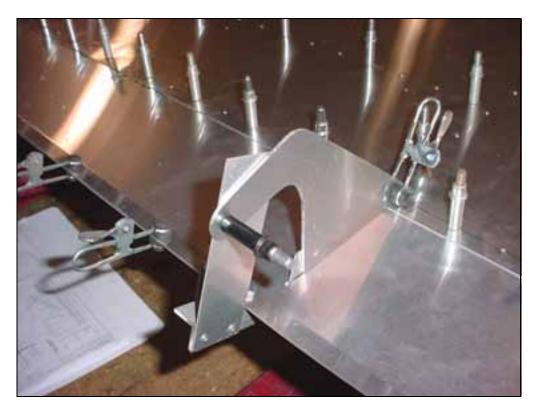




To position the flaperon arms you need to make the flaperon template.

7V5 Flaperon Template 7V4-7 Flaperon Arms

Cleco the flaperon arm to the template.





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.

STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 5 of 12





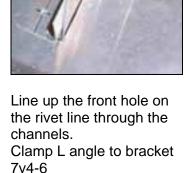


A scrap piece of metal under the drill chuck will prevent damage to the wing. Drill through the predrilled holes in the flaperon arms and through 7V4-7.

ORIENTATION: Ribs #1 and #4, arms are installed on the I/B side of the brackets. At ribs #3 and #6 the arms are installed on the O/B side of the bracket. Ref. sections A-A middle diagram on drawing 7-V-5



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



STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 6 of 12





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.

STOL CH 701

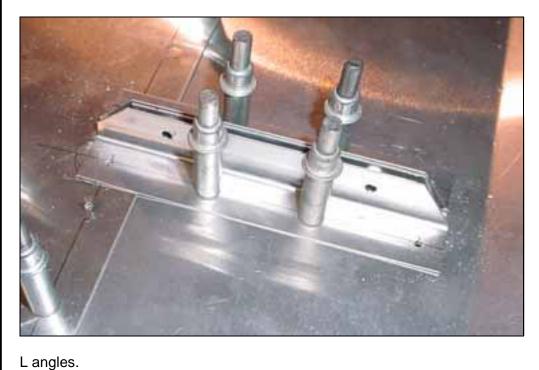
Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 7 of 12





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

Trim the ends of the L angles.





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

STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 8 of 12





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

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



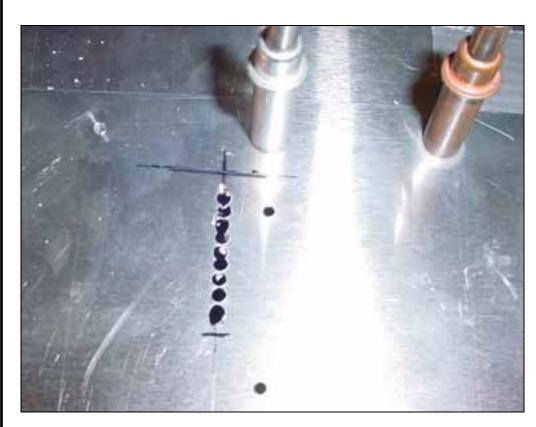


Check to make sure the location of the cutout is in front of the spar.

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

STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 9 of 12





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

STOL	Zenith Aircraft Company	Revision 2.01 (7/17/2007)	WING NOSE SKIN
CH 701	www.zenithair.com	© 2005 Zenith Aircraft Co.	SECTION 4B - Page 10 of 12





Detail of the 40mm reference line even with the skin

Tie down ring on the bottom side of the wing.



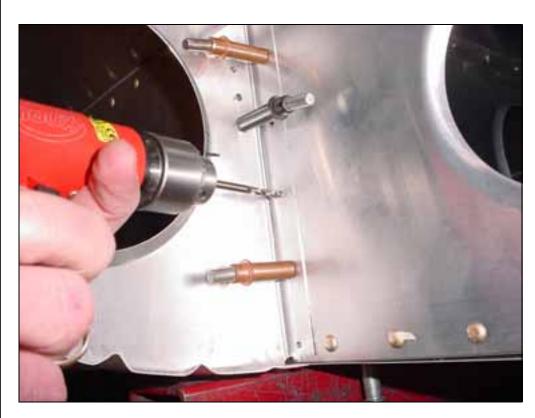


Check that the size of the slot is big enough (skin does not touch the tie down ring).

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

STOL CH 701

Revision 2.01 (7/17/2007) © 2005 Zenith Aircraft Co. WING NOSE SKIN SECTION 4B - Page 11 of 12



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

STOL CH 701

WING NOSE SKIN SECTION 4B - Page 12 of 12