



STANDARD REAR
CHANNEL 7V6-2SP

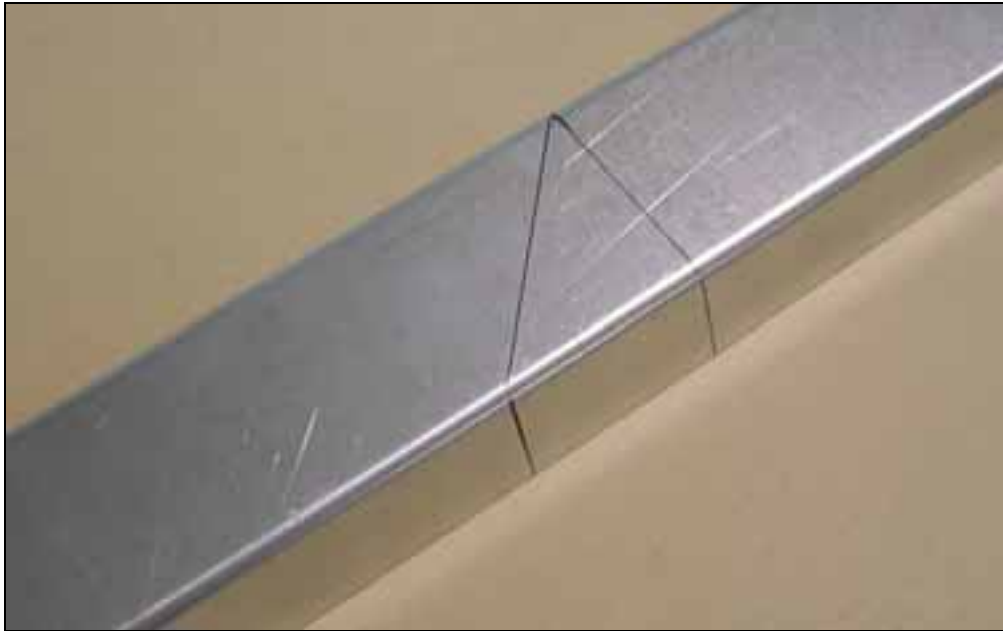
Channel riveted to
outboard side of RR#6

Instead of riveting a piece of rear rib angle 7V6-3 to the channel 7V6-1 it is acceptable to cut the top and bottom flanges and bend a flange.



Detail: inboard end of
channel.

Note: top and bottom flanges are cut-away on approximately 20mm to make room for the rib flange.



Detail: outboard end of standard rear channels 7V6-2SP

From the bend flange, mark a line at 425mm. Layout the 45degrees on the web. Use a square to mark across the top and bottom flange.

Note: The distance from the center of the rib to end of the channel is 415mm
Ref. lower rear skin 7V7-3



Detail of bottom flange, end is cut square to the aft edge.

Outboard channel



Right wing.

Detail to show cutout in top and bottom flange of channel to make room for the rib flange.

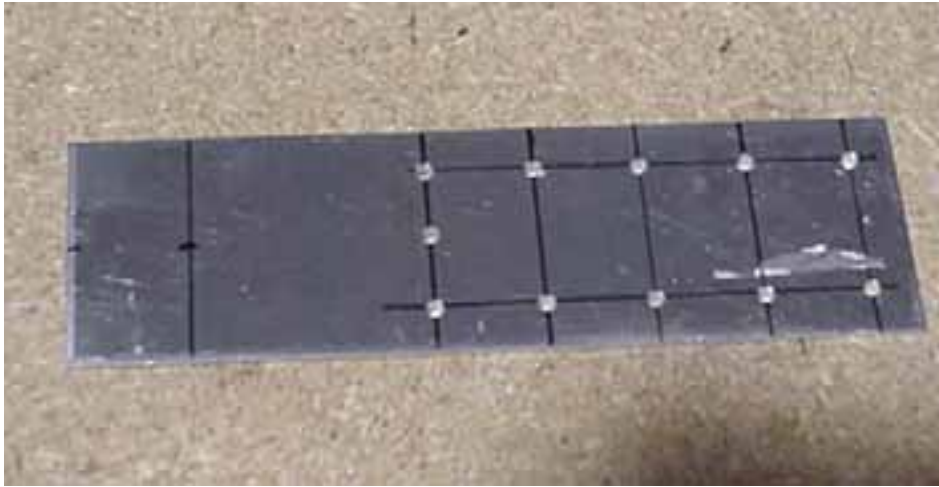


View from rear.



Looking back at the bottom flange of the tip.





7V4-3 Rear Root Doubler

Layout and predrill the rear root doubler.

NOTE: 3 RIVETS through the rear rib angle 7V6-3

Cut the length of the heavy rear channel 7V6-1 at 296mm from the end flange.



Position doubler inside the channel, the inboard ends are flush. The doubler is centered up and down in the channel



If necessary, round off the top and bottom corner edge on the doubler to make room for the bend radius of the channel.



CHECK: 247mm from the rivet line for the root rib 7V4-2 to the

Clamp the rib angle 7V6-3 to the rib.



7V4-3 Rear Root Doubler
7V6-1 Heavy Rear Channel

Back drill and Cleco.



Extrusion or $\frac{3}{4}$ " spacer to hold the top of the template.

Position the template the same way. Since the upper spar cap 7V2-2 cannot be used to hold the template, use a $\frac{3}{4}$ " (19mm) between the front of the template and the spar web 7V2-1.

IMPORTANT: Check that the rear root doubler 7V4-3 is at 78 degrees when the spar web is vertical. Ref. top diagram on drawing 7-F-15



CHECK: When the spar root fitting 7V3-1SP is vertical, the rear root doubler 7V4-3 is at 12 degrees (90-78 degrees Ref. 7-V-6)

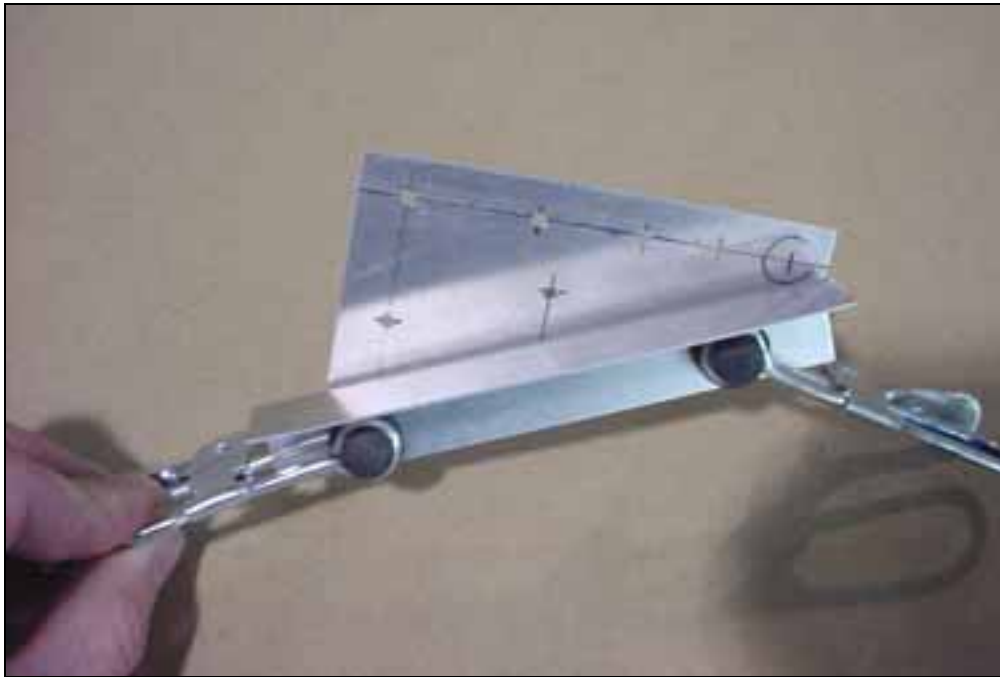
COMMENT: The angle between the front and rear wing attachment is critical for a good fit with the fuselage Ref. top diagram on drawing 7-F-15



FLAPERON BRACKETS 7V4-6

Use the bracket with the holes as a template to drill the remaining brackets. Clamp together and back drill with #40 holes.

Layout the rivets and pre-drill with #40 holes.
Wait to drill the last hole, the hole is not on the 8mm rivet line.



L angle is flush with bottom edge.

Clamp a piece of L angle flush to the bottom edge.



Clamp L angle to the rib flange.

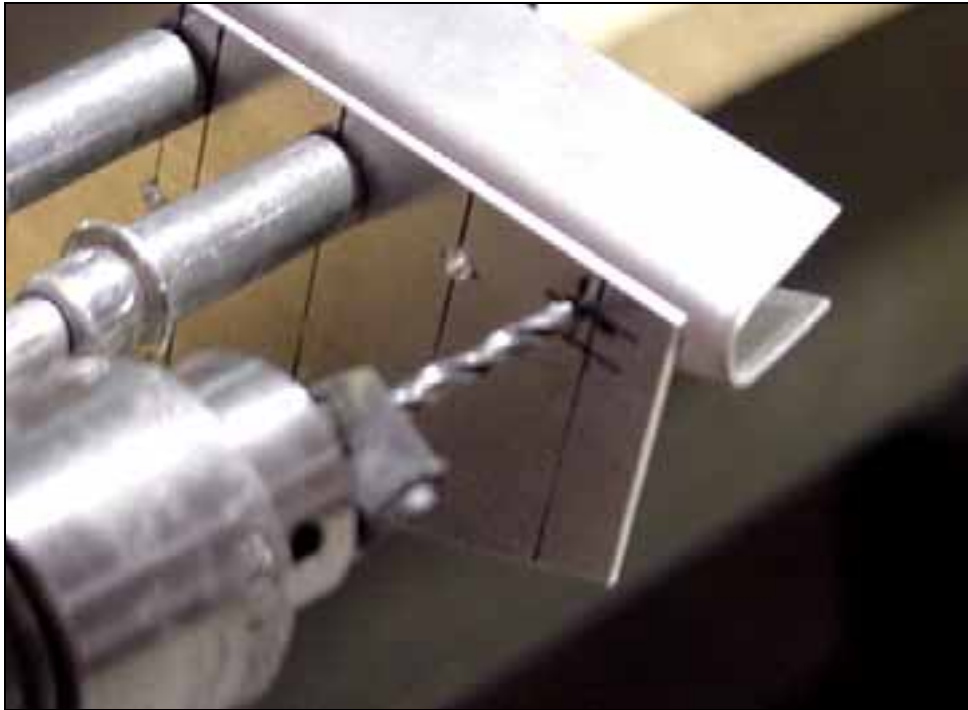
CHECK: The top of the bracket does not stick up above the rib flange. If necessary add a shim between the L angle and the rib flange.

Position the bracket 7V4-6 behind the channels 7V6-1 and 7V6-2SP.
Installed on RR #1, #3, #4 and #6 Ref. top diagram on drawing 7-V-6



7V4-7 Flaperon Bracket
7V1-2 Rear Rib
'L' Angle

Note: The 'L' clamped to the bracket is also shown on drawing 7-V-5. On the final installation there is a piece of .025" between the L angle and the rib flange for the trailing edge skin 7V7-4 and 7V7-5



7V4-6 Flaperon Brackets

Adjusting the height of the last hole for proper edge distance on the rib.



Use a hack saw to shape the part. File the edge to remove all the saw marks.

Rear upper strut fitting 7V4-4 (part shows as supplied)
 First layout the location of the of the 5/16" hole 16mm from the end (draw a line square to the bottom edge).
 Layout the 115mm along the bottom edge. From the 115mm line layout 15 and 41, use a square to extend the line to the top. Connect with the 27mm mark. Check, angle between the two lines is 90 degrees.



Layout the rivet pattern.
Pre-drill with pilot holes.

Top line, horizontal dis.
9, 18, 18

Outboard vertical:
7, 10.5, 10.5

Middle vertical spacing:
7, 14, 14

diagonal line is on a 7mm
offset from the edge.

On the bottom line, add an extra rivet underneath the middle hole on the diagonal (in the middle of the 30mm interval).



Cut and layout the rivet holes in the strut fitting. Before drilling, clamp and check to the rear channel.

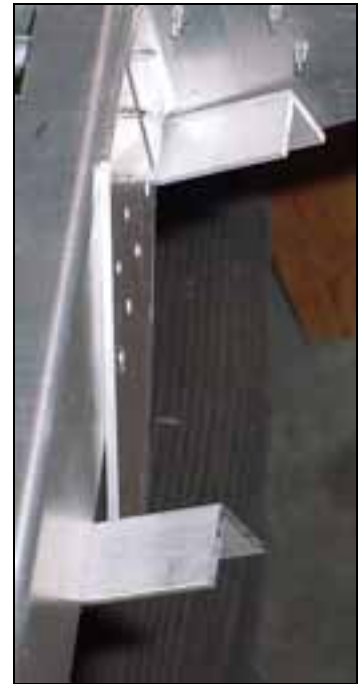
7V4-4 Rear Upper Strut
Fitting



3 RIVETS A5
(each flange of the L
angle)



Clamp 2 pieces of extrusion (or other flat surface) to the bottom flange of the channel on the inboard and outboard sides of the strut fitting 7V4-4.



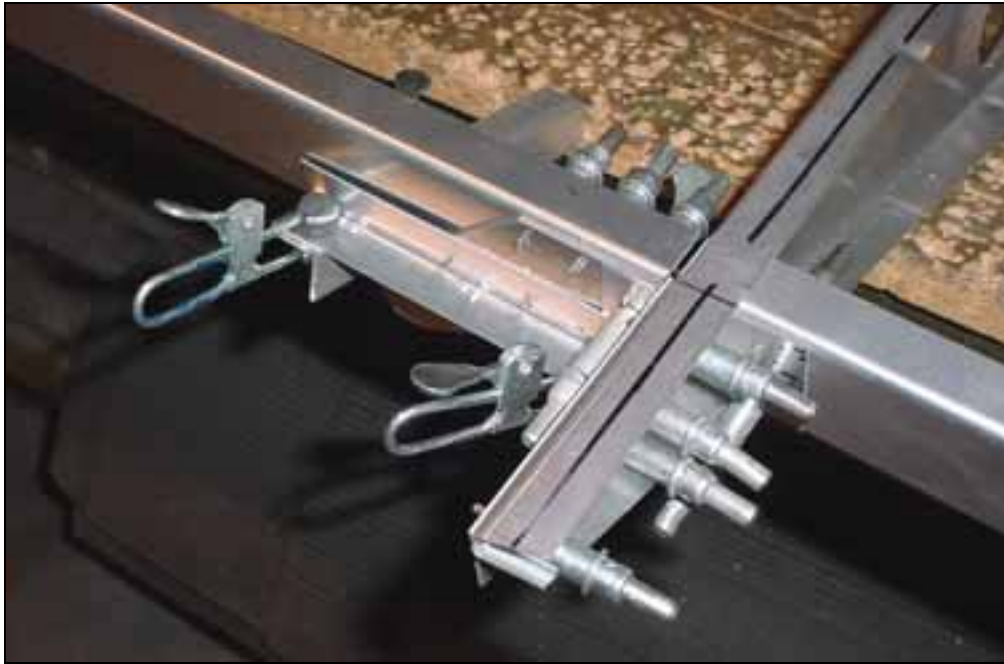
Let the aft end of the extrusion overhang approximately 30mm past the back side of the channel.



Cut an L angle 120mm long (long enough to fit over the 2 extrusions). Position the L angle on top of the extrusions. Adjust the angle of the L angle to match the angle of the rear channel (21 degrees closed).

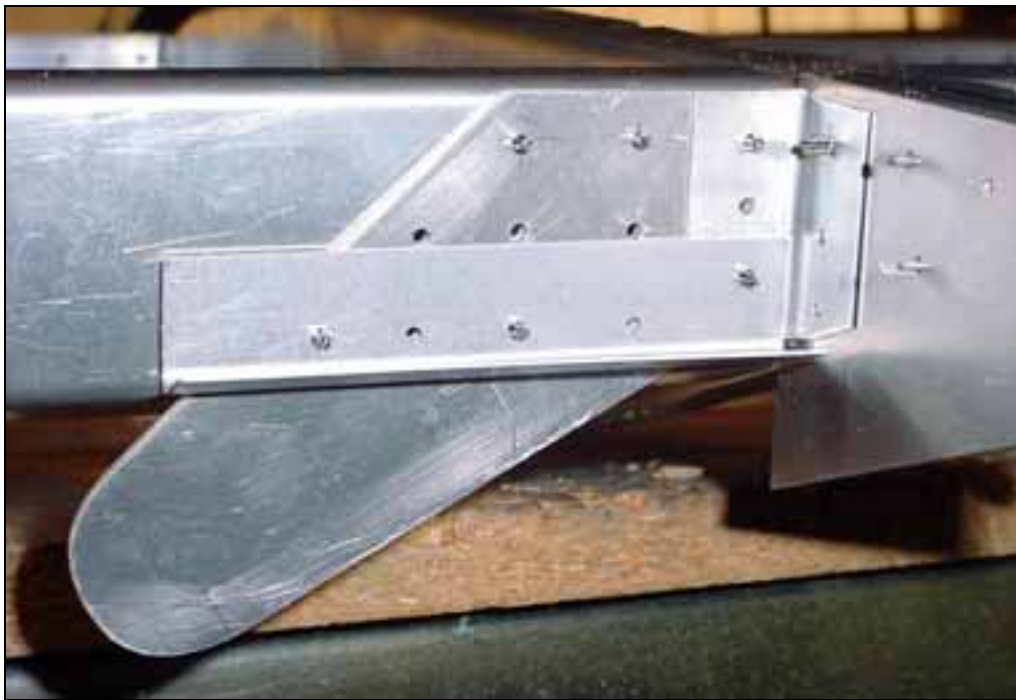


top view



L angle overlaps corner L angle.

Back drill and Cleco from the front side.



Remove the L angle and trim I/B end to 95mm
 Ref. bottom middle diagram on drawing 7-V-5 (text just above section B-B)

Purpose of the L angle is to support the wing skin behind the cutout for the strut fitting 7V4-4