



Reference top flange: Line up the top flanges flush.

Spar web is supplied pre-drilled with #40 pilot holes through the Spar Tip 6W5-1.

Position the Spar Tip 6W5-1 on the backside of the Spar.
Spar tip overlaps spar web, Ref. drawing 6-W-5



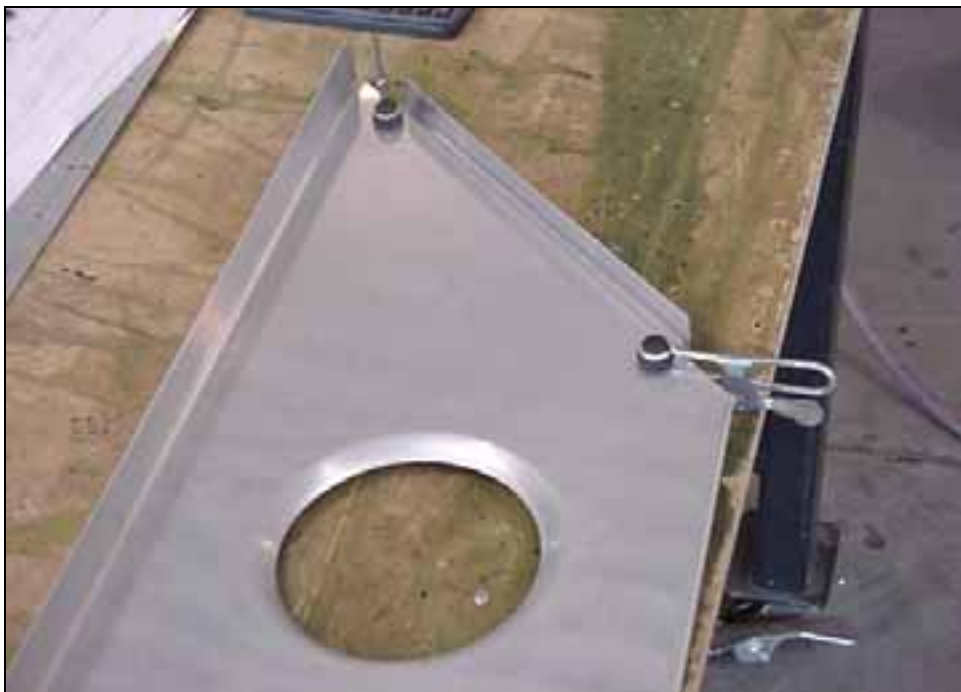
Clamp top and bottom.



CHECK: The top flange of the Spar tip is in line with the top of the spar.

**7 RIVETS A5
(6W5-1 to 6W3-1)**

Turn the spar over and back drill through the pilot holes in the spar web.



“Handi-clamp”
(Cam level action clamp)

Avery tools
P/N 42100
<http://www.averytools.com>

U.S. Industrial Tool & Supply
TP640HC
<http://www.ustool.com>

Drill and Cleco a length of ‘L’ angle (230mm) along the 45-degree edge of the Spar Tip (overlap the L angle on the front face of the Spar Tip; the other flange points towards the rear). Center the L angle with equal distance to the top and bottom corners (approximately 30mm). Line up the edge of the 45 degree Spar Tip on the bend tangent line of the L angle. A4 pitch 35.



Even Rivet Fan Spacing
Or
Rivet Fan Spacing tool

Avery tools
Tool P/N #81
<http://www.averytools.com>

U.S. Industrial Tool & Supply
TP621
<http://www.ustool.com>

L angle clecoed to spar tip.



Looking at the front side of the spar assembly.



6 RIVETS A5
(RR#9 to 6W5-1)

Layout the rivet line for RR #9
Pre-drill the holes in the Spar Tip for the RR #9 with #30 or #40 drill bit.
Cleco and rivet the Spar Tip 6W5-1 to the Spar Web 6W3-1
total 7 rivets A5.



If necessary, debur the edge of the flanged lightening holes.

NOTE: the hole at the back of the ribs indicates the BOTTOM side of the rib.
Nose ribs do not have a rear flange.

Photo of nose rib as supplied without the top and bottom cutout to clear the spar caps



Use snips to cut the corner (including side flange).

Layout a parallel line to the aft edge of the rib at 8mm.
Mark the location of the corner relief hole



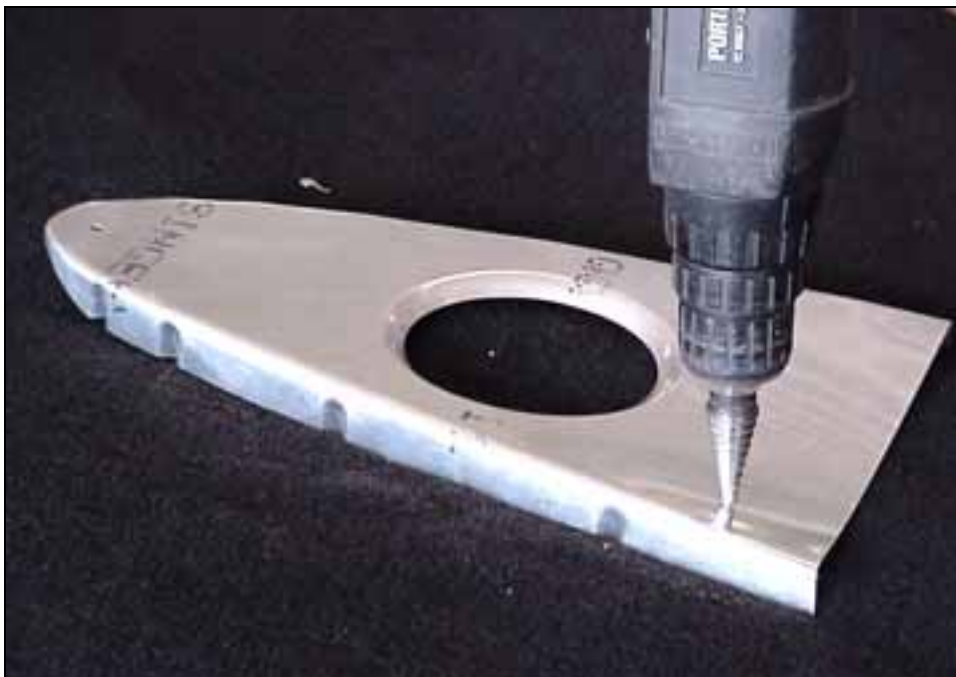
Corner relief hole.

Layout the cutout on Nose Ribs 1 to #3; the cutout is to make room for the front upper and lower spar doublers 6W3-2 and 6W3-3. Cut with snips, and then use a chainsaw file (round file) to file a corner relief hole in the corner. An alternative method is to drill 3/16" then snip into the corner relief hole.



Nose Ribs 1, 2 and 3
See 6-W-7 for flange
directions.

Cutout to make room for the front upper and lower spar doubler 6W3-2 and 6W3-3



A step drill or "Unibit" works very well to drill larger holes in thin material.

U.S. Industrial Tool & Supply
TPA5612
(3/16" to 1/2")
<http://www.ustool.com>

GROMMETS

MS35589-14
(AN931-8-13)
1/2" ID (fits in 13/16" hole)
Qty=4 (see 6-K-1)

Drill the 13/16" hole in the ribs for the **fuel line**. Refer to the text at the bottom right on drawing 6-W-5 for the vertical location of the hole. Only the hole in NR#3 is centered on tooling hole "C". Only in NR# 3 drill a 1-1/4" for the fitting out of the tank (a grommet is not required).