

17. Horizontal Stabilizer Prep

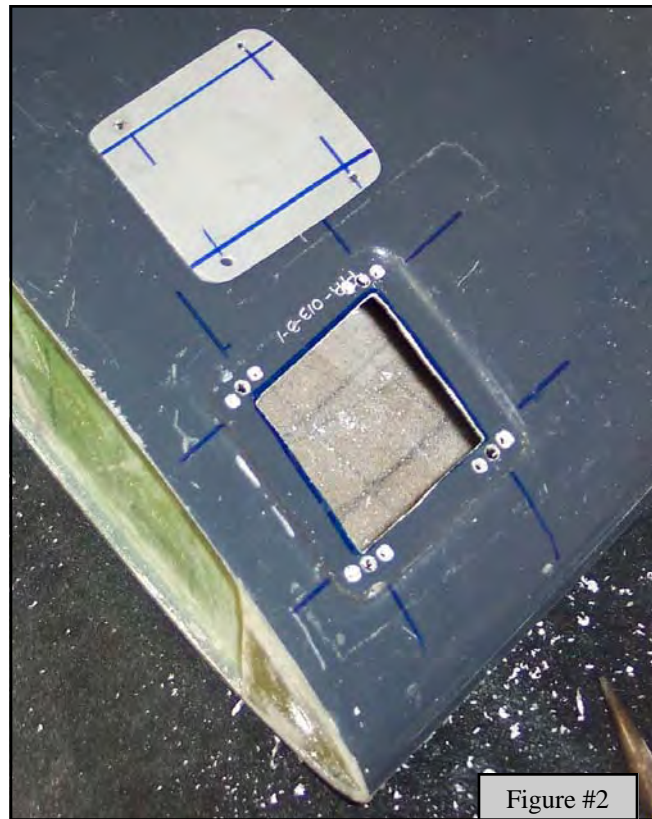
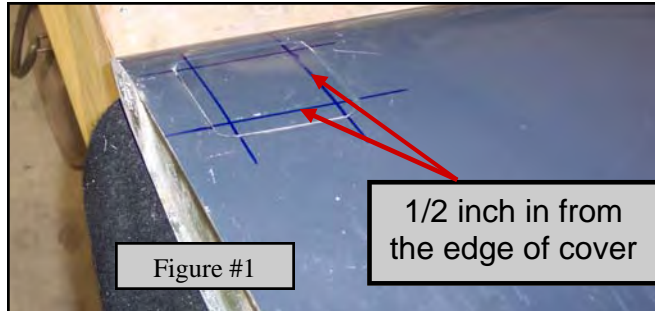


Required items and tools: Left and Right horizontal tails, Inspection covers, AN6 spar bolts, #6 corner nut plates, 3/32" rivets, cut off tool, block sander, 8' straight edge, 3/32" bit, 9/64" bit, rivet puller, #6 nut plate guide (not needed but nice to use).

Date
Completed

Horizontal tail inspection covers

1. With the inspection cover in place, measure and mark parallel lines 1/2" in from the edges of the cover. The line should extend out onto the tail. (figure #1)
2. Remove the cover and transfer these lines onto the recess for the inspection hole.
3. Cut out the center of the inspection hole on the lines you have drawn. The corners should be rounded slightly and not sharp.
4. Place the cover back over the hole. The line draw earlier will serve as a reminder where not to drill. Drill a 9/64" hole in each corner, place the hole so that it has good edge distance. (figure #2)
5. To install the nut plates use a #6 nut plate guide, or complete the following: Put a #6 screw thru the hole from inside of the tail out. Thread a nut plate down on the screw to hold it in place. Position the nut plate so the ears have adequate edge distance. Match drill the 3/32" holes in the nut plates to the flange.
6. Counter sink the holes for the nut plates.
7. Install the nut-plates to the back of the flange using 3/32" counter sunk screws.
8. Repeat for the other horizontal tail.



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Horizontal tail Trailing Edge Prep

1. The width of the fuselage at the leading edge of the tail root must be measured. (figure #3)
2. To do this us a wood dowel and pass it thru the leading edge bolt holes.
3. Mark each side and remove.
4. Measure this distance, it will be important when the horizontal tail are bolted together to square up the trailing edges.
5. Bolt the horizontal tails together on flat bench.
6. Using the measurement you got earlier from the fuselage width, make sure that the horizontal tails leading edge is the same width. The width should be very close.
7. Clamp a 8' straight edge between the tail tips. Block sand the trailing edge of the horizontal tails.
8. Take care to sand this straight, as this will set the hinge line for the elevators.

