

Revision #	Date	Detail of changes
1	4-9-2009	Original
2	6-14-2012	Addition of Revision page

Section objective: This section is a broad over view to help you get most of the dirty dust producing stuff out of the way. This section will refer to other sections possibly fro direction , pay attention to this. Also take not that when told to sand off the gel coat this is should be done with care not to cut into the fiberglass under it

Required parts: Fuselage.

Required hardware: None

Required Tools: Ruler, carpenters square, dremel tool or air-powered tool, assorted bits; cut-off wheel, small drum sander, plunge bit, scotch-brite wheel with medium git pad, 80 grit sandpaper, different colored and size sharpies (markers)

Required conditions: N/A

Required skills or training: Simple knowledge of hands tools and use.

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1. Using some 80 grit sand paper, sand over the inside of the cockpit area to remove the sharp ends of the fiberglass cloth. Removing these sharp needles now will avoid blood & fiberglass splinters later on. Do not sand into the fiberglass cloth this is to only make a smooth surface.



2. Use the rotary cutter to cut out the window area for installation of the opera windows. The bonding flange is pre-marked and should be 1" wide. Take care to cut it out. Use various files and sanders to create a good clean edge that is uniform in curve and straight corners. This edge can be seen form the inside.



3. Use sandpaper or scotchbrite wheel to remove gel coat from the window joggle joint bonding area. Be careful not to sand into the glass fiber. Remember—in any procedure— do not cut glass when sanding off the gel coat.



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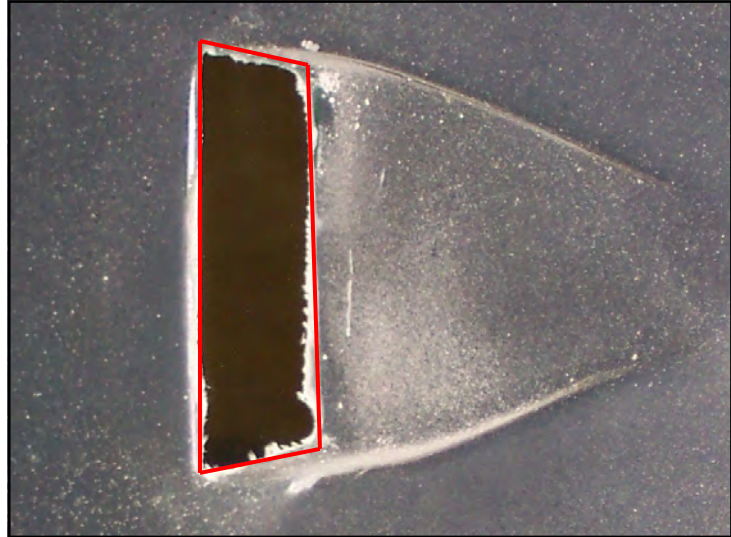
Completed

1. Fuselage Prep

Arion Aircraft

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4. Use the rotary cutter to open the NACA inlet for cockpit ventilation. The edges should be smooth and straight these edges will be seen forever. Each corner should have a very small radius in them to prevent stress risers from forming.



5. Use the Scotchbrite wheel or sandpaper to remove the mold flange in the canopy seal area to create a smooth surface for the canopy seal. The flange should have a pre-marked line scribed from the mold, however if not this flange should be 1/2" in width.



6. Use the Scotchbrite wheel or sandpaper or a file to remove the mold flange at the front of the fuselage so that the stainless firewall will mate smoothly to the firewall. While you are at it lightly scuff the entire firewall flange, you are done when all the gloss is gone from the gel-coat, do not take the gel-coat off. This provides a better seal with the fire seal RTV latter on.



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7. Check the location of the pre-marked rectangle cutout in the wing root for the spars by following the next few steps.

NOTE: Spar Box install is Critical, so take time to make the cut outs for the spars carefully. Although possible to add glass later this is very time consuming.

8. Measure From the leading edge of the **left wing** to the front face of the spar, subtract 1/8" from this measurement. This will be the measurement for the **front** cut line of the box, this applies to both left and right side wing roots.

9. Measure from the leading edge of the **right wing** to the front face of the spar, Add 1.125" to this measurement. This is the measurement for the **rear** cut line of the box and applies to both left and right wing roots.

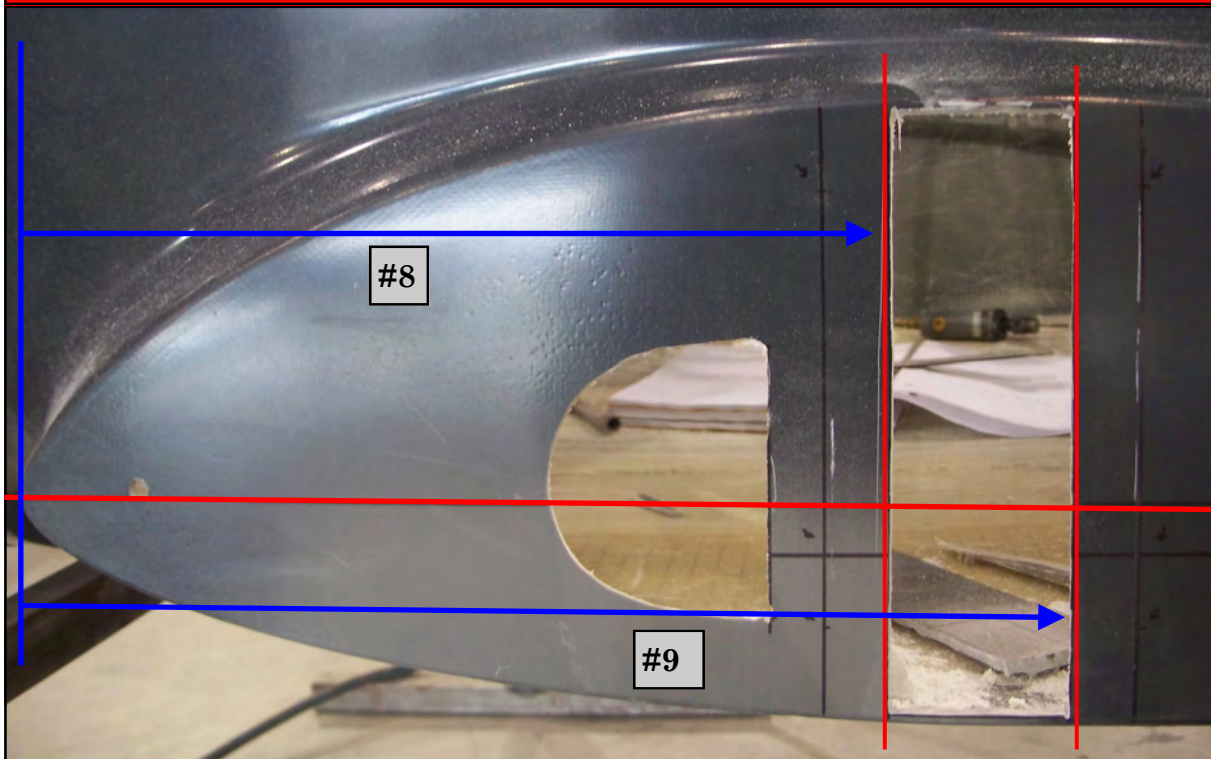
10. To ensure that the cuts are square, Draw the cord line from L.E. to the T.E. Than extend a line vertically from your fore and aft marks that is square to the cord line.

11. The lower cut must be flush with the inside of the aircraft, cut this opening slightly high than sand flush.

12. The upper cut can be made 1/8" below the wing root join line.

13. Use the picture below and measurements as a reference.

NOTE: Further installation of the spar-box is continued in section 5 and in section 11.



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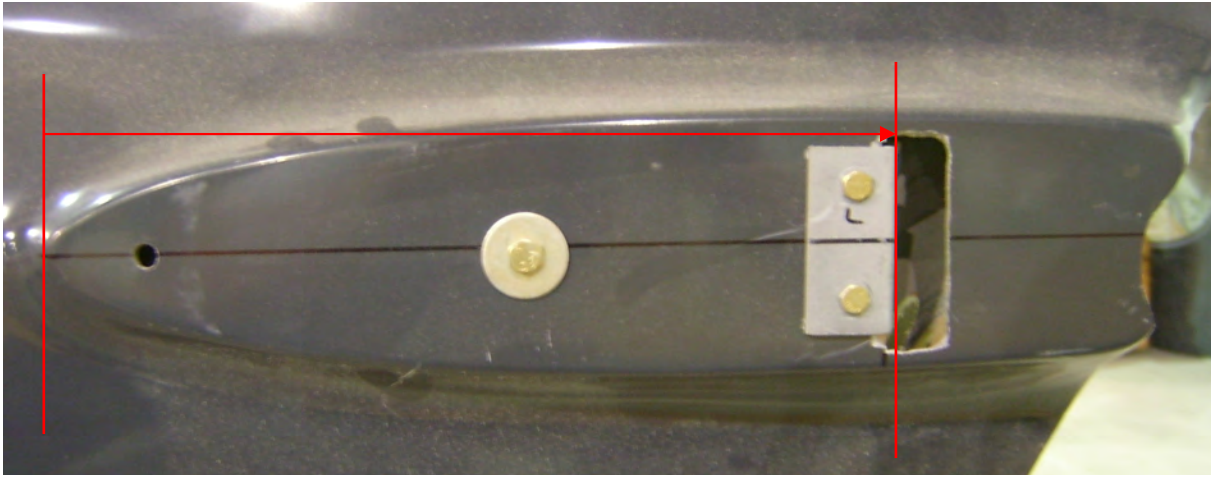
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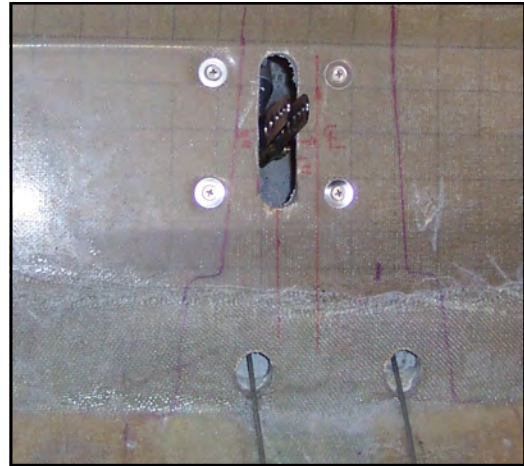
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14. To cut out the slot for the horizontal tail spar, go to **Section 20 horizontal tail installation**, pages 1-2 for the measurements.



15. See **Section 2 Seat bulkhead assembly**, for prep work to the bulk head.

16. Picture at right for intermediate bell crank.



17. Picture at left of clearance made for flap push rods, also section 2.

18. Follow the directions in **section 22 vertical tail prep**, for the cut outs in the vertical spar.

