

Revision #	Date	Detail of changes
1	4-9-2009	Original
2	4-23-2012	Addition revision page and document number.

3. Quarter Window

Arion Aircraft LLC



Date
Completed

Section Objective: Trim, fit and install the rear quarter windows.

Required Parts: Preformed left and right quarter windows ALC-0011L and ALC-0011R, 3/4" wide 1/8" thick aluminum bar stock (not included to fabricate window clamps),

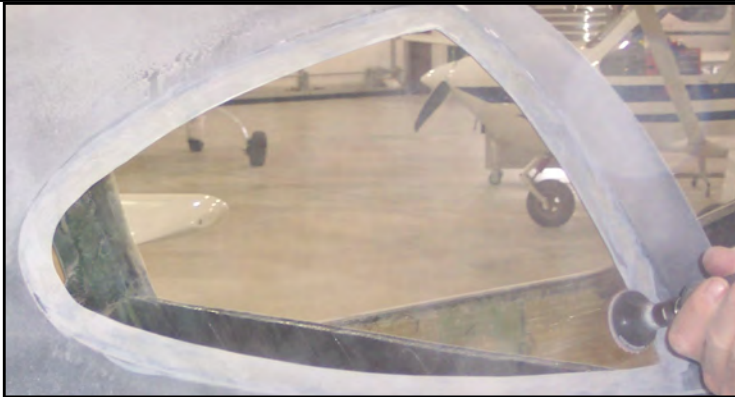
Required Hardware: #6 self tapping sheet screws (for temporary install only). Aeropoxy resin PR2032, Aeropoxy hardener PH3660, cotton flock.

Required Tools: 3/32" bit, 60 grit sand paper, razor knife, sanding block, masking tape, digital scale, mixing cups, popsicle sticks, electric drill.

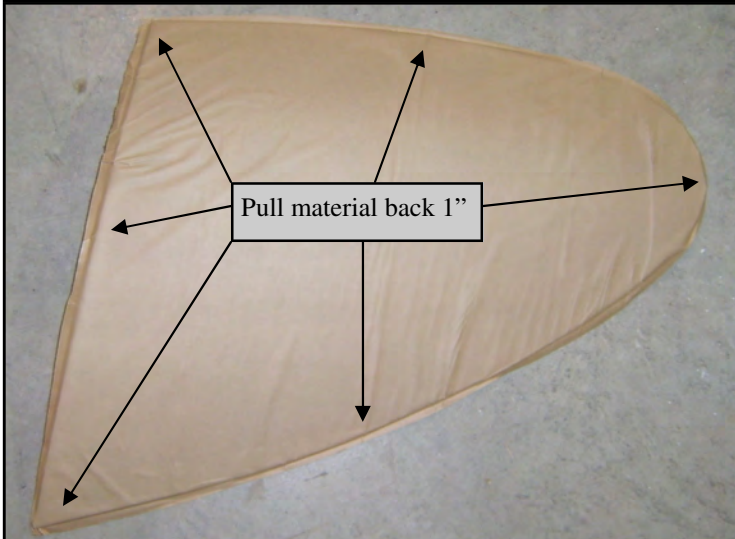
Required Conditions: Air temperature above 60 degrees for at least 24 hours.

Required skills or Training: Hand tool use, ability to correctly mix epoxy.

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1. If not already accomplished from section 1, cut the quarter window out as described in section 1 and sand the gel-coat off of the bonding flange.



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2. Remove the protective material from the window within 1" of the edge on both sides of the window. It is acceptable to measure in 1" and mark this then cut on the line to remove the material. Your paint edge will be inside of the line and the small score left from the blade will not show.



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3. Place the quarter window in the molded pocket on the fuselage, mark and trim the window if needed to fit in the molded pocket with about a 1/16" gap between the window and pocket edges. This gap can be larger up to 3/32". It will not be seen as it will get filled in before painting.

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4. When the fit is good place the window back in the pocket. Trace the flange on the inside of the window.

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5. Pull the protective coat back from this line about another 1/2".

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6. Place back and retrace.

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7. Run masking tape along this line up on to the protective material, this will prevent glue from seeping under while drying. Do the same on the outside of the window as well.

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8. Sand the exposed acrylic with 60 grit sand paper until frosty in color, leave no shiny spot, the glue won't stick there!



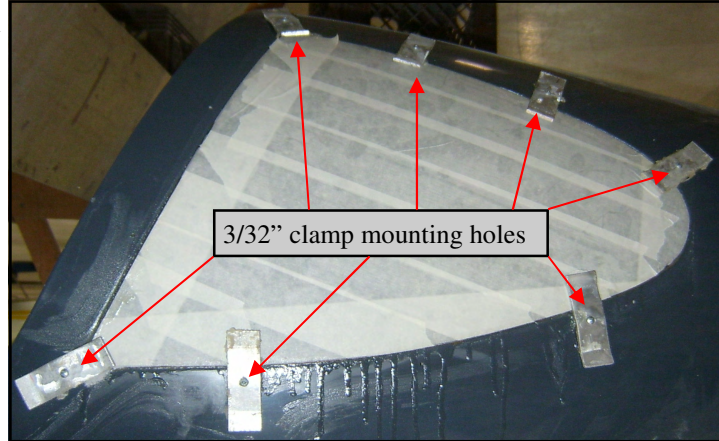
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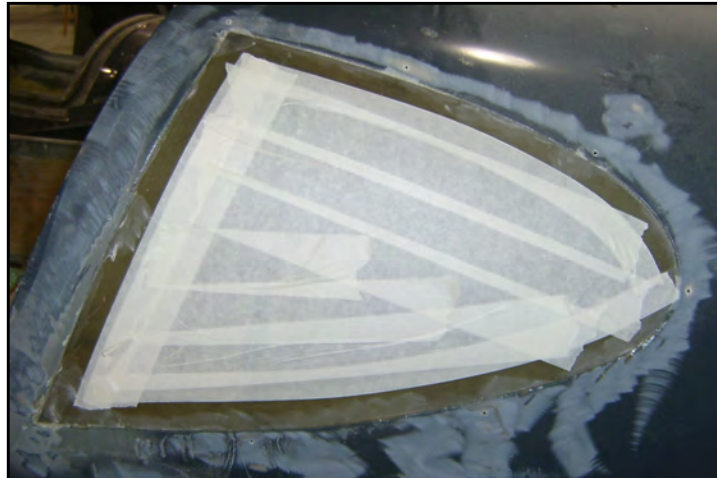
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- 9. Measure out onto the fuselage 1/2" from the window pocket the entire way around.
- 10. On this line drill a 3/32" hole in the front corners, a few around the back and a few on the top and bottom of the window. Use the picture as a reference.
- 11. Using the drawing the back of this section to fabricate about a dozen window clamps.
- 12. Clean the joggle and the window with solvent.
- 13. Mix up about 2.5 oz glue per window to be installed.



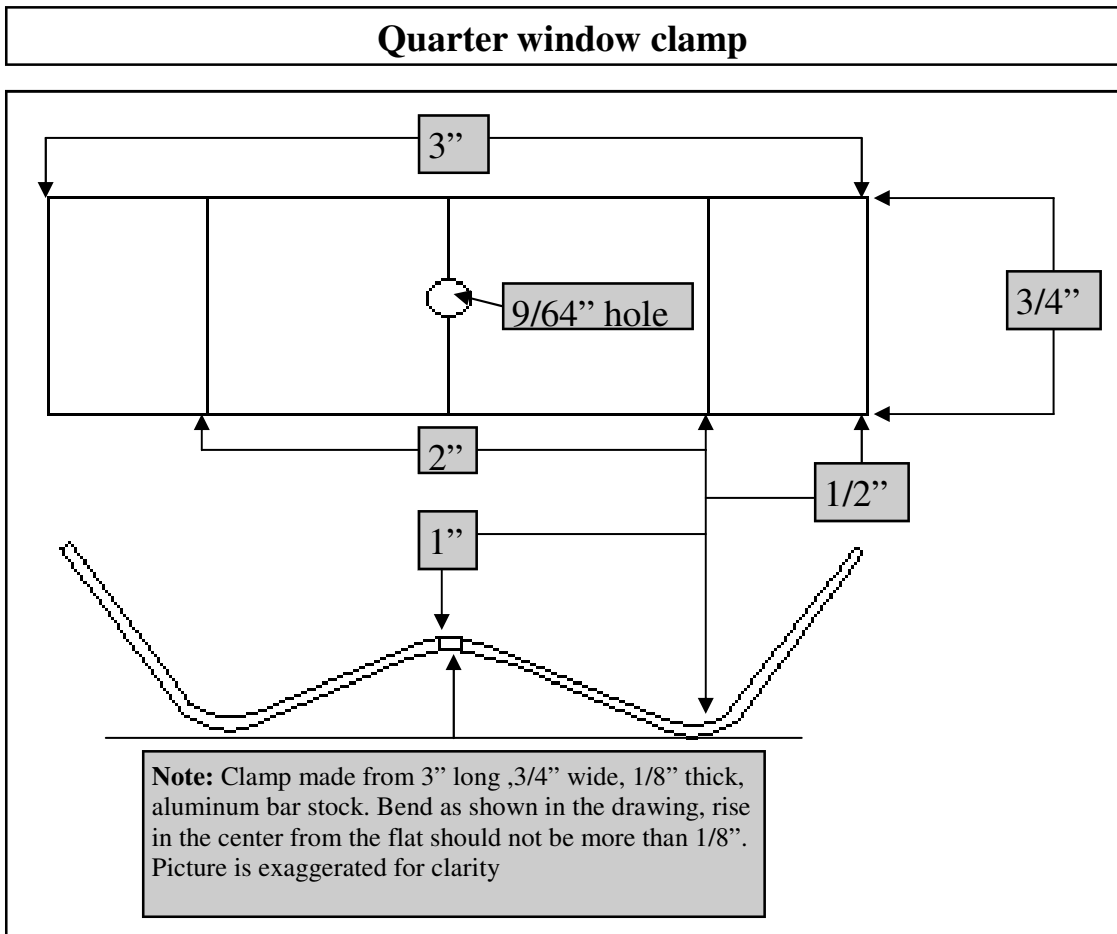
- 14. Wet out the window and the joggle in the fuselage.
- 15. Mix the rest of the glue with flock.
- 16. Put a 1/8" thick bed of flock on the entire flange in the fuselage.
- 17. Gently press the window into the joggle until flush with the out side skin.
- 18. Place a window clamp at each pre-drilled hole around the flange and gently tighten down with a #6 sheet screw in the middle, part of the clamp with press on the window while the other presses on the fuselage.
- 19. Clean up all glue from the out side of the window as well as the inside. If the glue dries on the out side with out clean up sanding it off later is relatively easy but the inside is almost impossible.

- 20. When the epoxy has cured (about 24 hours), remove the screws and clamps.
- 21. Use a sanding wheel to smooth up any left over dried glue chunks.



- 22. Fill in the gap between the window and fuselage with filler and sand flush.
- 23. For a good finish when painting come in about 1/8" from the glue line to hide and imperfections.





Finished quarter window clamp

