

Fitting the Cowl

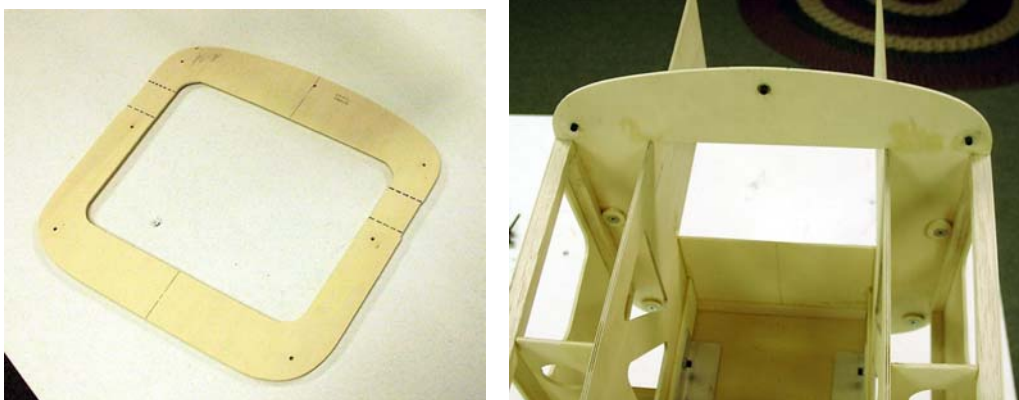
With a sanding block, true the edges of the cowl so that the parts have a good fit. We found that the Aeroglass cowls are very good and require only a light amount of sanding to make the parts square and perfect.

Tape the two halves together. With a compass, mark a line on the cowl former approximately $1/32$ " (.030") from the outside and carefully sand off material a little at a time, checking cowl fit as you go. The idea is to get the cowl to fit flush with the fuse sides and F1.



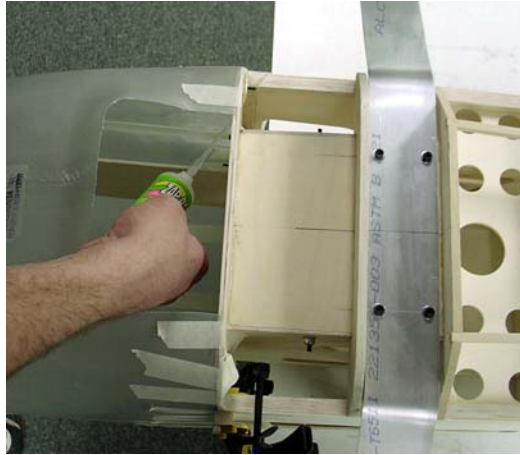
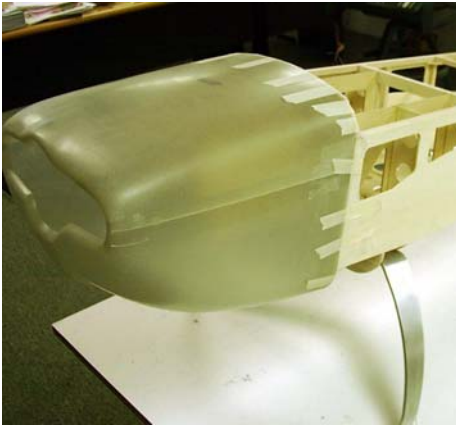
Once you're satisfied with the fit, mark the former to be cut at the cowl seam. Place the marks approximately 1" apart, centered on the $1/2$ " overlapping seam. *Do not cut at this time.* Bolt the cowl former in place with 4-40 cap screws and blind nuts. Use four in the bottom half, accessed from inside the cowl, and three for the top half, accessed from inside the hatch.

We made small doublers from $1/8$ th light ply for the blind nuts. Do a final fit check and correct any imperfections with the fit.



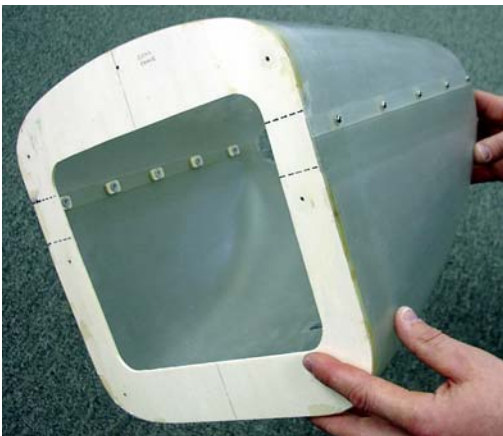
To prevent getting glue on F1, separate the cowl former from F1 with wax paper and bolt the cowl former back on to F1. Tape the cowl into place and glue it to the former with medium Zap. Be careful not to get any glue between the cut marks that you just made.

After the cowl is secure, remove it from the fuse and add a fine fillet of Plexus mathacrylate or similar adhesive over the Zap.



With the cowl halves together, mark and drill five holes on each side for the 4-40x 1/4" button head screws. Back the holes up with a small piece of 1/8" light ply and install small 4-40 blind nuts. We used nylon washers on the outside of the cowl to be a little kinder to the paint.

Cut the ring just about 1/4" on either side of the cowl half overlaps. We made our marks a little too large in the photo. Sand a nice beveled edge in the cowl ring to finish it off and add a bead of mathacrylate to any part of the ring that is not fully glued to the cowl.



Sheet the area between F1 and LG1 with 1/16" balsa. The sheeting will glue to the inside of F1 and lay over the top of LG1. First sand a bevel on LG1 to line up with F1 (ensuring that the sheeting will lay flat on LG1).

We made a 1/4" wide 1/8" balsa lip on the inside of F1 to give the sheeting something to lie on while being glued. Preglue the sheets together to do half the area at a time. One stringer in the center between LG1 and F1 will give you an area from which to start.

Use a paper template to get the shape just right, and trial fit before gluing. Perform this procedure with the cowl in place to ensure proper alignment.

