

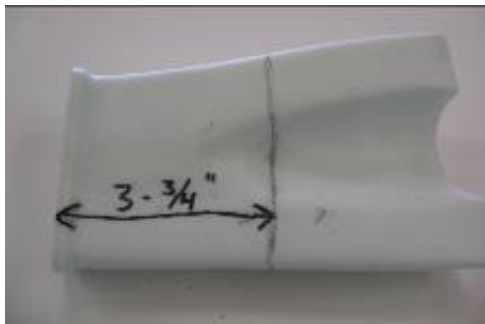
## INLETS AND FAN MOUNT- Electra Addendum (August-2015)

Note: The proper fits of the inlet duct to the molded lips on the fuse and into the recessed lip on the EVF shroud are important to efficient fan jet propulsion.

To proceed with the installation of the inlets and fan mount, the EVF unit must be on hand. The fan mount was designed to act as a positioning fixture for the inlets during installation.  
NOTE: Centering the EVF in the fuselage is important for proper fit of the BVM Saddle Cells™

- Scuff the exterior of the intakes with #80 grit sandpaper

NOTE: It is very important to wrap each of the intakes with carbon BEFORE the two halves are joined.



- Use a scuff board to sand the seam on the inlets 5/16" from the rear edge to achieve a good inlet to shroud fit.

Fan powered jets must have properly designed and fitted inlet ducts to allow air to get smoothly (without separation) to the fan. The handwork and techniques described here are important.

- Trim the aft ends of the ducts per the molded lines on the inside surfaces. Cut first with a Dremel #409 disc, then sand forward to remove the molded lines with a BVM scuff board or similar sanding tool.



**CAUTION:** The following step should be done out of doors to avoid fume exposure.

- ❑ Apply thin CA to saturate the carbon fiber cord. Rotate the ducts to keep the CA flowing in the cord and not all over the fiberglass ducts.
- ❑ Apply a very thin mist of kicker to complete the cure. Scuff any loose ends with #80 grit for easier handling.

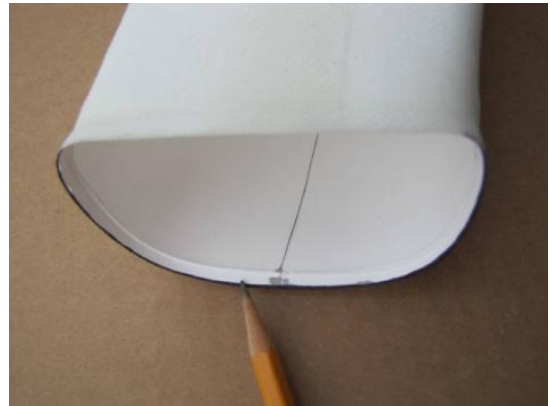


**NOTE:** Too much kicker will weaken the bond.

**NOTE:** These photos depict E Bandit inlet ducts but the procedures are the same for the Electra.

- ❑ Trim 1/8" from the front overlap flanges, except on the straight vertical legs, to allow the ducts to fit onto the fuselage inlet lips.
- ❑ Trial fitting of the ducts to the fuse lips will show you how much to trim and chamfer the edges for the best fit possible.
- ❑ Fine adjustments to the fuse lip with a #80 grit sanding block on the back side may be necessary to allow a perfect fit of the inlet ducts. Accept only a 1/32" or less gap anywhere on the periphery.

Install and tape the ducts to the fuselage lip as shown after the proper fit is achieved , including the EVF mounts, glue the inlet ducts to the fuselage lips.



- Trim away the aft inside edge of each of the inlets; there is a scribe line for this on the inside of the inlet lip. Be sure to cut the deeper recess into the spinner cavity as shown at right.



- Use a belt sander or Dremel Rotary Tool to trim the EVF mount rails as shown from this top view. Bevel also the rear bottom corner to allow 2s2p battery installation (see later in this installation or on website).
- Trial fit the inlet ducts onto their respective fuselage-intake lips and place the fan mount over the inlets at the rear. It may help to use strips of masking tape to help hold the inlet sections to the intakes.
- Bolt the fan into position on the rails of the fan mount and over the inlets. Notice that it will slide .3" before the inlets hit the molded inside edge of the EVF shroud. This is the correct position for the EVF.

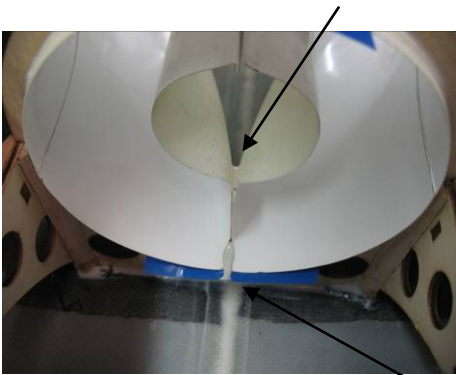


- Install the EVF centering patterns as shown in this photo.
- Place a straight piece of wood on the back edges of the EVF unit, check that the aft flange of the EVF shroud is 90 degrees to the fuse hatch flange.

- With the EVF shroud into position, slide the mount back until it just touches the shroud. Hold in place and double check the gaps of the inlet-to-intake lips. Use thin CA to tack the intakes to the inlets and medium CA to tack the fan mount to the inlets. In these two cases the CA will not affect the visible surfaces of the model.



- Use Slo-Zap and small clamps or clothes pins to join the duct at the aft vertical members.
- Use a Dremel Rotary Tool to remove the turned in edges as shown.
- Use plastic tape on the outside of the inlets where we just used the Dremel tool. Now, apply BVM Aeropoxy here to fill these gaps. Also, make a small fillet of glue anywhere the two inlets contact each other.
- Apply BVM Aeropoxy to the EVF mount-to-fuse joint and inlet-to-motor mount ring joint.



“Turned in edges”

- The foam block supplied with the kit will sit beneath the EVF unit and acts as a “shock” mount. Upon final mounting of the EVF, fit the block under the EVF. The block may need to be sanded slightly for a good fit. It should be just snug under the EVF. It can be spot glued in with 5 – minute epoxy.

