

## INSTALLATION INSTRUCTIONS FOR RV-10 ENGINE INTAKE SYSTEM

*Installation of the engine intake system can only be accomplished after the engine cowling installation has been completed.*

Fit and trim the fuel servo intake plenum to provide adequate clearance from the lower cowling with engine movement. Depending on the prop/spinner combo and fuel servo this will vary by installation, trim mounting flange as needed (servo plenum has been fabricated with extra material in this area). Attach servo plenum using a large hose clamp, refer to FIG 2. Cut a 2 7/8" hole in each of the left and right intake plenum caps. Slid a cap and air filter on each side of servo plenum, install the lower cowl and insure there is plenty of clearance refer to FIG 1.

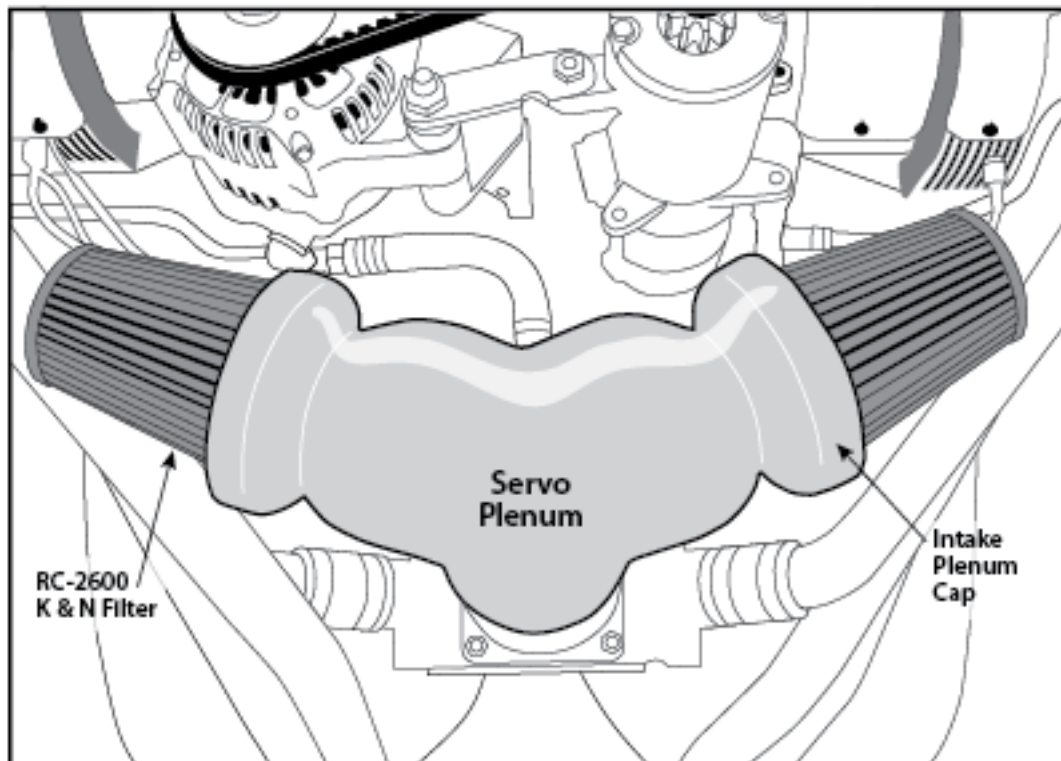


FIG.1

Each intake plenum has extra material length on it and will need to be trimmed as required to fit the installation. Trial fit the left and right intake plenums, trim as needed for proper fit (using the RV-10 standard baffle kit install the CB-1009A & CB1003A baffles, CB1010-B & CB-1002B stiffener for plenum attachment) refer to FIG 2 & 4. Depending on the installation you may have to cut material off the intake plenum where it attaches to the cap and or slide the cap and filter in or out on the servo plenum. It may also be necessary to trim the aft edge of the lower cowling intake and or the front side of each intake plenum for correct fit (1/8" clearance should be provided between plenum intake and cowl for engine movement, refer to FIG 5).

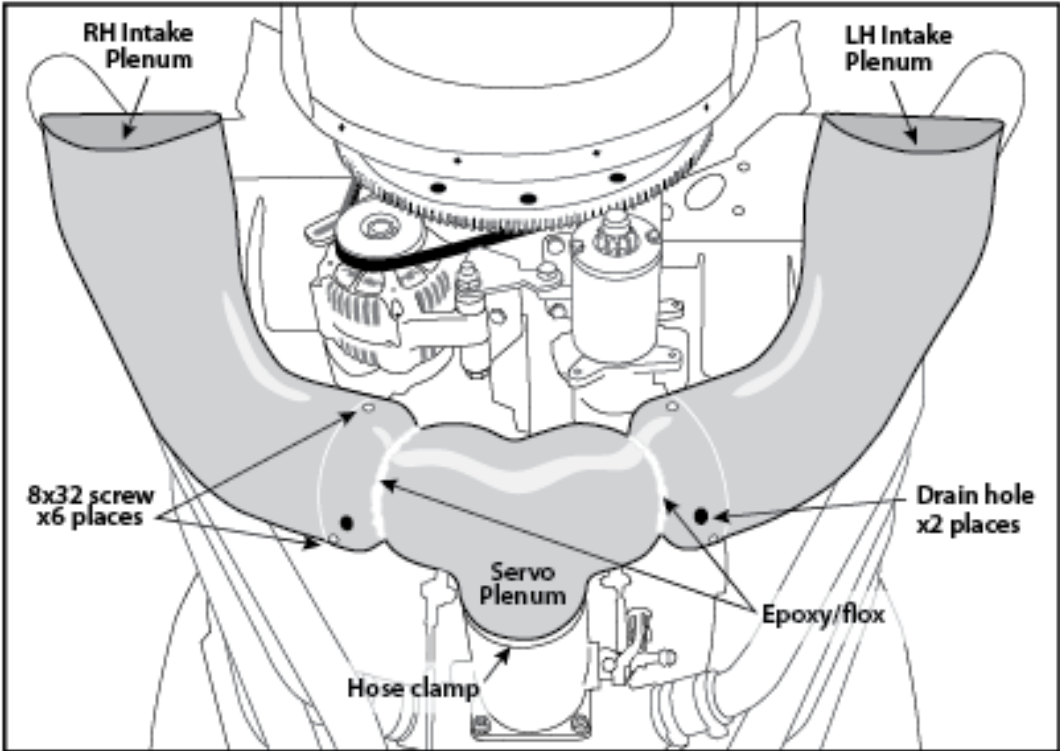


FIG.2

Depending on the exhaust system used the right intake plenum may need to be cut and re-glassed to not make contact with the # 1 exhaust pipe, refer to FIG 3. Correct installation is when the intake plenums have clearance from the lower cowling for engine movement and fit evenly to the back of the lower cowling intake holes.

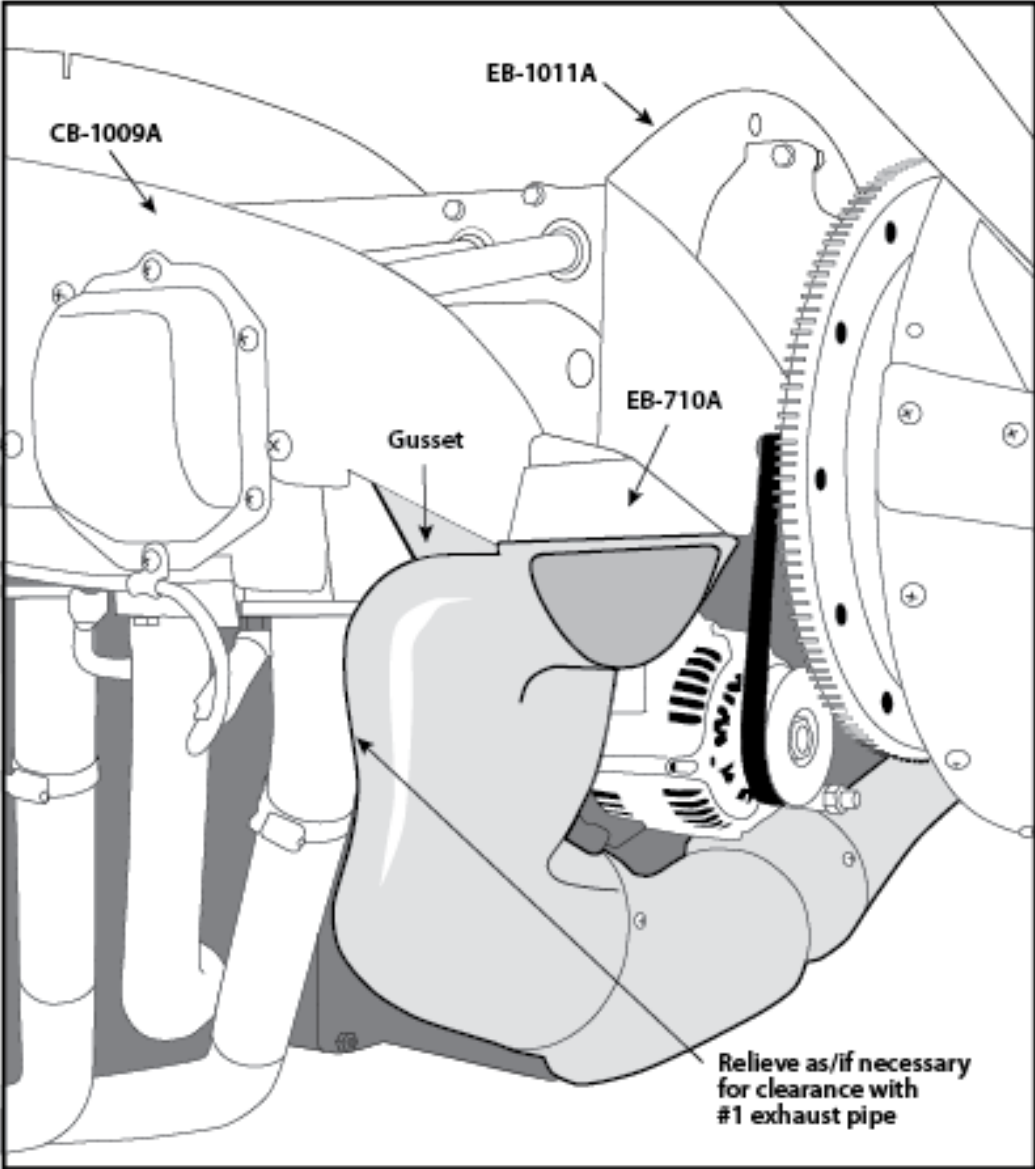


FIG.3

Once you have the plenums located (adequate clearance from lower cowling) use a piece of the provided flanged sheet stock to attach the plenum from the fwd baffle CB1010-B & CB-1002B stiffener (remove the forward portion of the CB-710A & CB-1002A air ramps that extend beyond the CB-1010B & CB-1002B stiffener) to the back of the plenum, refer to FIG 4. The flange of the sheet stock will attach under the baffle stiffener temporarily with 1/8" clecos and angle down and forward to the back of the plenum. Use additional sheet stock to gusset the corners of the L & R plenums, refer to FIG 3. Epoxy/flox mixture is used to glue the gussets to the plenum. When intake plenum bracing is cured add two 8/32 nutplates (8/32 screws will fasten plenum at the cleco locations) for attachment to the baffle stiffener refer to FIG 4.

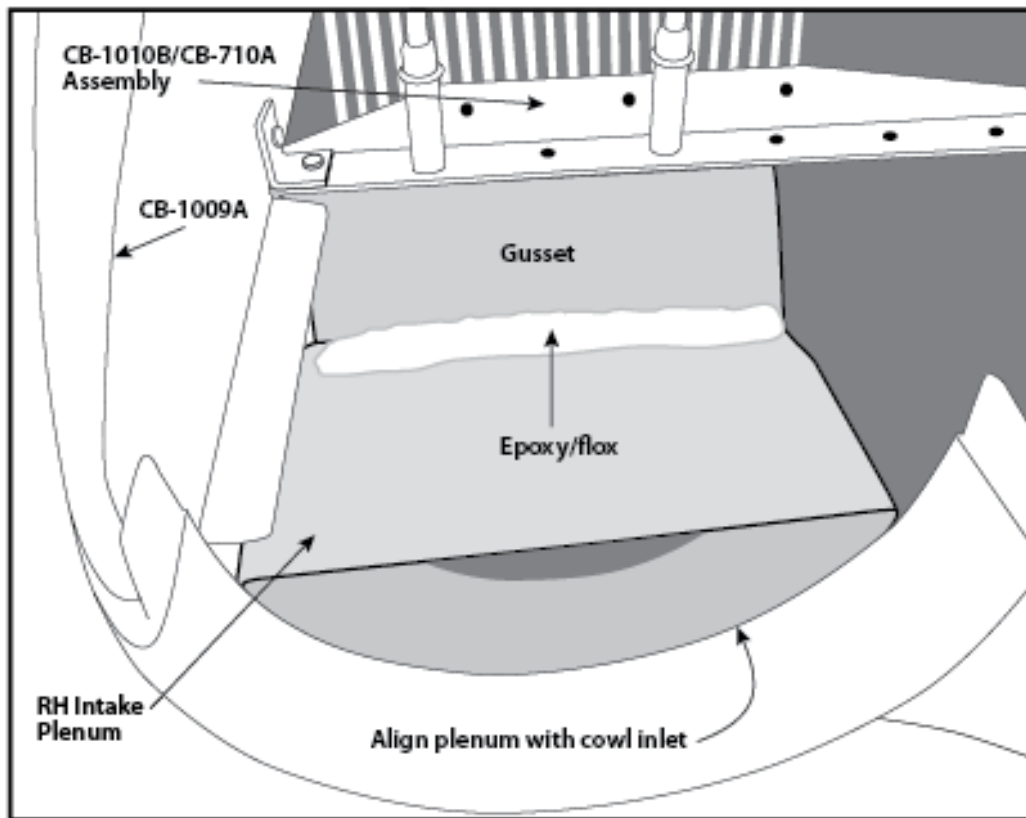


FIG. 4

Attach the intake plenum caps to the servo plenum using epoxy/flox mixture when location is finalized, refer to FIG 2. After the glue has cured remove any extra unneeded filter flange as necessary, attach filter with provided hose clamp. When the plenum bracing is complete, build and install replacement forward portions of the CB-710A & CB-1002A air ramps. Add a strip of fiberglass sheet stock on top of the plenum (fwd of the new EB-710A air ramp and between the CB-1009A & EB-1011A baffle), this will allow a smooth transition from cowl inlet to air ramp and block air loss. Complete the left plenum in the same manner. Make sure when completed with the intake system you have adequate clearance from the lower cowling while engine operation.

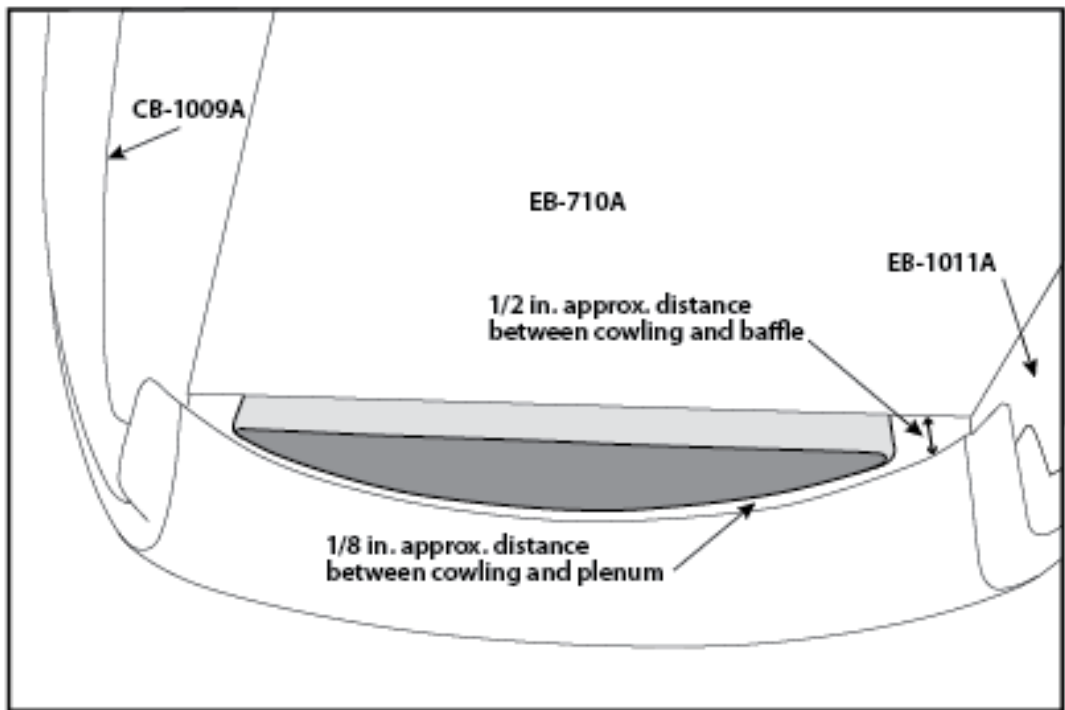


FIG.5