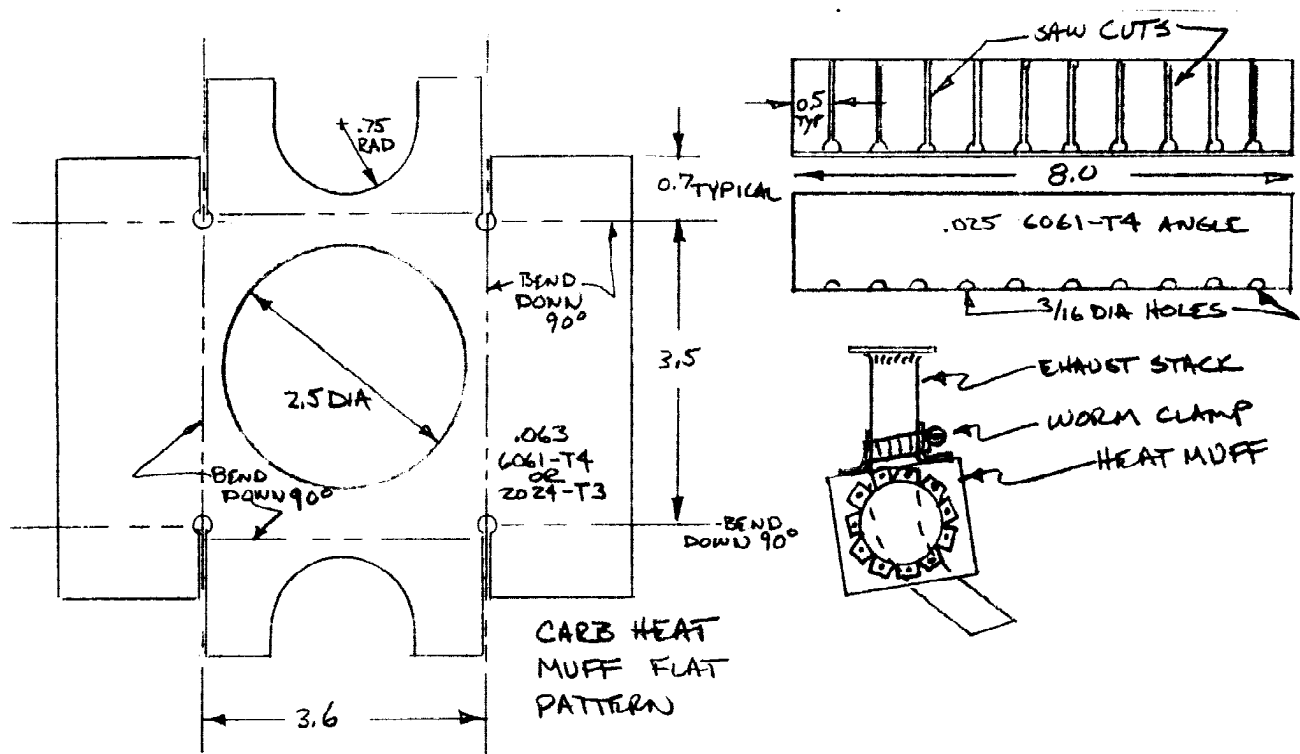




### HOT AIR MUFF INSTALLATION

Hot carburetor air is supplied through a bent up aluminum muff attached to the right rear exhaust stack. The muff is bent from .063 2024-T3 or 6061-T4 sheet aluminum so that the muff is a tight slip fit over the exhaust pipe. Two steel tabs made from leftover pieces of exhaust pipe tubing are pop riveted to the muff to provide mounting lugs. A worm clamp is used to clamp the lugs securely to the exhaust pipe. Use your hole saw to cut out a 2 1/2 inch diameter hole in the muff. Bend up an eight inch length of 1 inch X 1 inch X .025 6061-T4 aluminum angle and notch it as shown in the sketches below. Form the notched angle into a circular flange, drill and pop rivet to the heat muff. A piece of screen wire should be placed inside the muff and riveted in position over the opening to keep any large (nuts, bolts, screws, rocks, etc.) objects from passing into the carburetor intake. Keep all of the "upset" or "shop" heads of the pop rivets on the outside of the muff. This reduces the possibilities of a loose rivet mandrel getting into the intake.



This muff can be repeated on the left rear exhaust stack for cabin heat if so desired. If cabin heat is installed, also install a carbon monoxide warning dot in the cockpit.

### CARBURETOR AIR VALVE/FILTER ASSEMBLY INSTALLATION

The carb air valve/filter assembly is a standard part manufactured by Ken Brock Manufacturing for the VariEze. You can buy this unit or build up a comparable device of your own. In addition to the Brock valve assembly, you will need one Hastings AF24 air filter from your local auto parts store. A square sheet of .025 6061-T4 or 2024-T3 aluminum sheet 5.5 X 5.5 inches, and four tension springs Lee Spring P/N LE-037D-7 or equivalent.

First, assemble the square plate, filter, and air valve assembly by drilling a #40 hole in each corner of the square plate and sandwiching the filter between

the valve and plate. Use the four springs to attach each of the four corners of the plate to the four corners of the valve assembly. This complete assembly is mounted to the bottom cowling just forward of the mounting flange and to the left of the nose gear. A single Camloc is used to attach the assembly to the cowl and keep it from rattling around. The valve is positioned with the hot air inlet pointing straight up and the outlet aimed forward. Attach a length of CAT (black) Aeroduct hose to the carb air manifold, then make a gentle 90° turn aft to attach to the air valve. A length of SCAT (red) Aeroduct is used to connect the hot air muff to the valve assembly. The Aeroduct hose has a wire support inside and a string reinforcement outside. Both wire and string must be captured under the hose clamps at each end to avoid deterioration of the hose connection.

When you final install the air valve/filter assembly, use silicone RTV (bathtub caulk) sealant to seal the filter against the valve and plate surfaces.

Cut your carb heat cable and housing to length and attach to the air valve actuating arm with a bolt type connector. Use the housing clamp provided by Ken Brock.