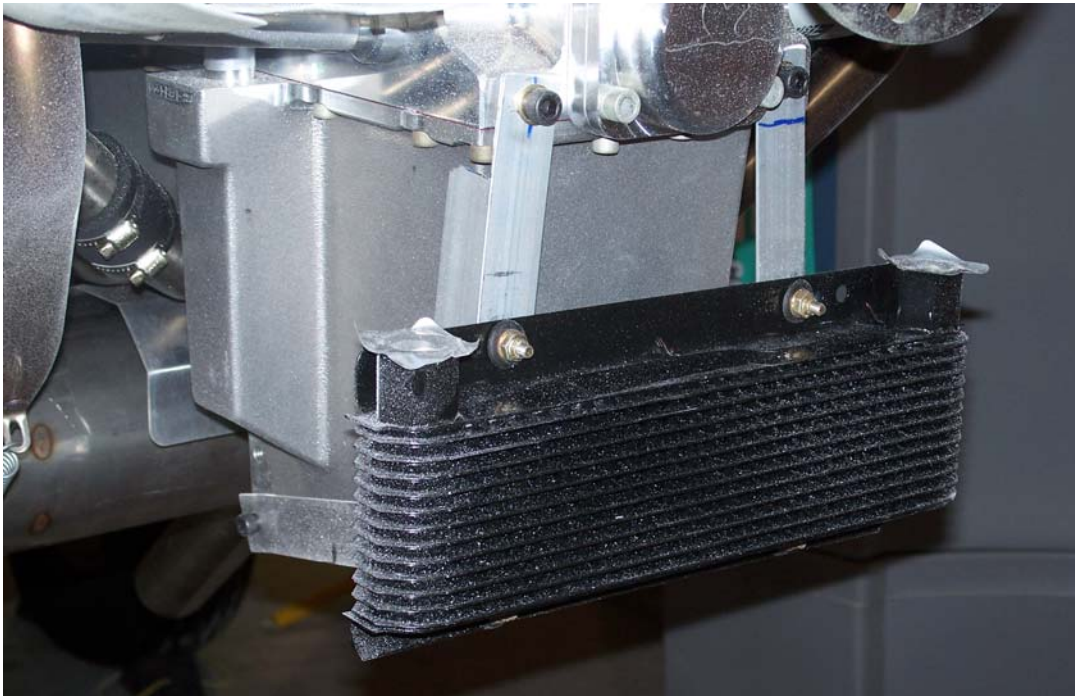


Mount the oil cooler to the front of the engine by fabricating mounting brackets as shown in the photos from the aluminum angle and aluminum flat stock provided.

Start by trimming two pieces of angle for the front vertical brackets. Trim one edge of the angle so that it will fit on the front of the engine. Drill a 1/4 inch hole at the end of each piece as shown in the photo and attach to the front of the engine with the 5/16 x 3/4 SHCS bolts. Do not loctite at this point as this is a temporary attachment.



Install the lower cowl. With the cowl in place reach in and put the cooler radiator in place so that it falls in the center of the lower cowl opening and clamp the cooler in place (or mark the location on the vertical brackets. Remove the lower cowl.

With the cooler still clamped in place adjust the vertical brackets so that they angle toward the outboard side of the engine slightly. Angle one at a time and do not change the location of the cooler. When satisfied with the angle, drill through the cooler flange and vertical bracket with a 1/8 bit and cleco in place. Drill both the top and bottom cooler flange.

Now remount the lower cowl and make sure there is clearance between cowl opening and cooler. 1/8 inch is minimum. It may be necessary to bend the vertical brackets to the rear slightly if you cannot trim enough off the rim of the lower cowl opening.

When mounting the vertical brackets to the engine make sure to use only the 5/16 x 3/4 inch bolts. Do not use longer bolts as they will protrude into the oil passageway at the front of the engine. Use a AN960-516 washer on each side of the vertical bracket.



Install with Loctite 242 and torque to 15 ft lbs.

Now fabricate the horizontal brackets from the aluminum flat material. Use the photos as a guide. Placement of the horizontal brackets is not critical. The left side horizontal will have to be trimmed around the oil temp probe for clearance.

On 3300 installations the flat stock will have to be riveted to the fin on the bottom of the sump.

When happy with the fit permanently attach the cooler to the vertical brackets. Enlarge the holes in the cooler flange to $\frac{3}{8}$ inch and insert a rubber grommet in each hole (4 holes). Enlarge the holes in the vertical bracket to $\frac{3}{16}$.

Attach the cooler to the vertical bracket with an AN3 bolt. Use a #10 Tinnerman washer on each side of the rubber grommet and install the bolt through the vertical bracket, tinnerman washer, grommet, tinnerman washer and flat washer. The grommet will help insulate the cooler from vibration.

