



## **High performance cold air intake installation instructions**

The first step in installing the intake system is to remove the existing intake tubes and servo, then place the aluminum plenum in place on the sump using the supplied bolts using the 2 rearward bolts of the servo mount's 4 holes. The entire installation can easily be done while the engine is installed in the aircraft. In some cases you may need to re-locate or modify inverted system sump fittings.

The next step is installing the intake tubes, loosely test fit the tubes one at a time to make sure they line up with plenum tubes. After you have done this make sure the cylinder surfaces are clean and use new gaskets. Install the tubes by putting the rubber sleeves over the plenum tubes, you can use a light coat of Vaseline or a similar lubricant as long as it will not harm the rubber tubes to make installation easier, next push the tubes into the sleeve and put in place on the cylinder. Tighten the nuts to Lycoming's recommended torque, next center the rubber sleeves so that there is an equal amount of sealing surface on both the stainless and aluminum, then using the supplied clamps tighten them in place putting the clamps near the edges of the sleeves.

Next test fit the servo to check for any obstructions and adjust the throttle and mixture arms as necessary to allow the full movement and the best routing of the control cables, in most cases you will need new cables for proper operation. At this time make up a vertical support bracket that holds the servo to the engine case. Install the appropriate AN fitting and aluminum drain/vent line to the bottom rear of the plenum and run it down and outside of the cowling, face the line forward outside of the cowling as you would any fuel tank vent line.

The nose bowl can now be re-installed to fabricate the air intake tube, it can simply be a pc of aluminum that protrudes through the nose bowl, make sure to allow enough clearance around the tube for engine movement. You can also make it out of fiberglass and shaped as desired, it will need a flexible connection to allow for engine movement.

After this all done you can now proceed to re install the cowling and test run as required.

