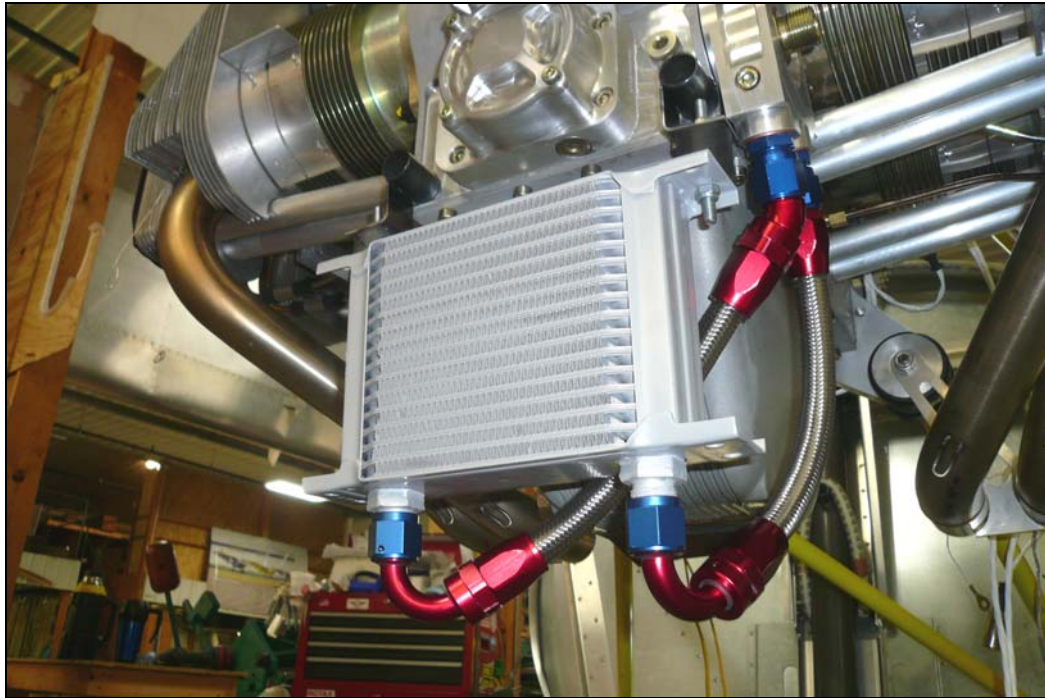


UL Power UL350 Series Engine Installation

Section 2 Oil Cooler Installation

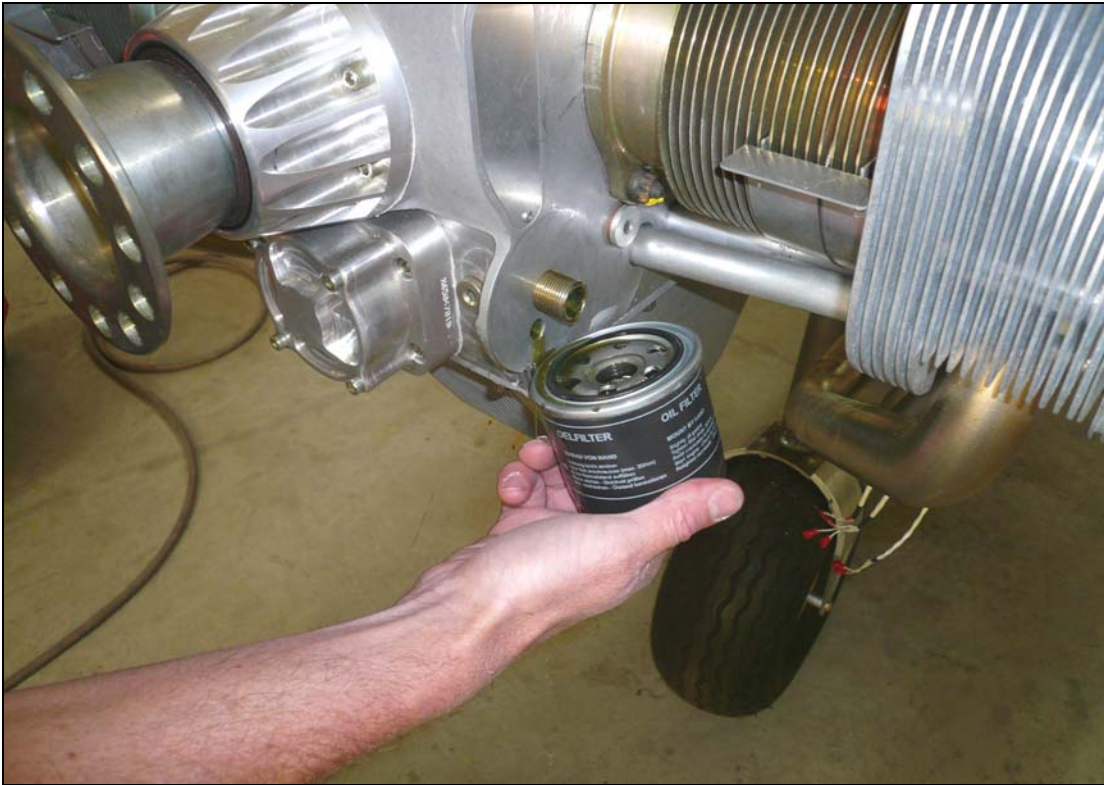


UL Power aircraft engines are manufactured and supported by UL Power Aero Engines of Belgium. Read and understand the UL Power manuals completely before starting with the engine installation, as they contain important engine installation, operation and maintenance information. Follow all of the important safety information provided in the UL Power manuals regarding the installation, operation and maintenance of the UL Power engine. Read and understand the UL Power Operating Manual before starting the engine.

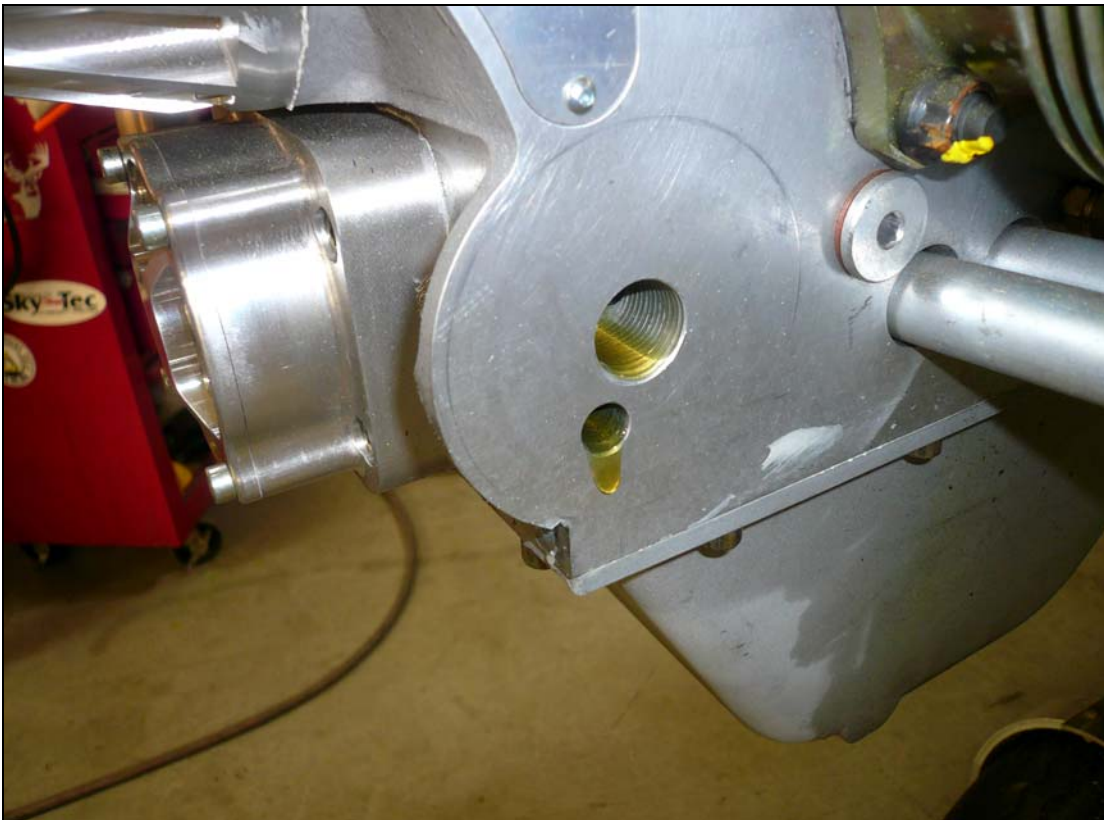
Make sure that your engine is registered with UL Power or an authorized distributor so that the factory warranty is in effect. In the United States, the UL Power distributor is UL Power North America: <http://www.ulpower.net>. Contact a UL Power distribution or service partner if you do not understand the instructions or if you have any additional questions. Maintain copies of the manuals with the aircraft in case of sale. Obtain current versions of the manuals from the official UL Power website, as well as current service and maintenance information: www.ulpower.com

If a discrepancy arises between the information provided by UL Power and the following pages, the UL Power manuals and/or service information and instructions take precedence. Zenith Aircraft Company does not manufacture or directly support engines.

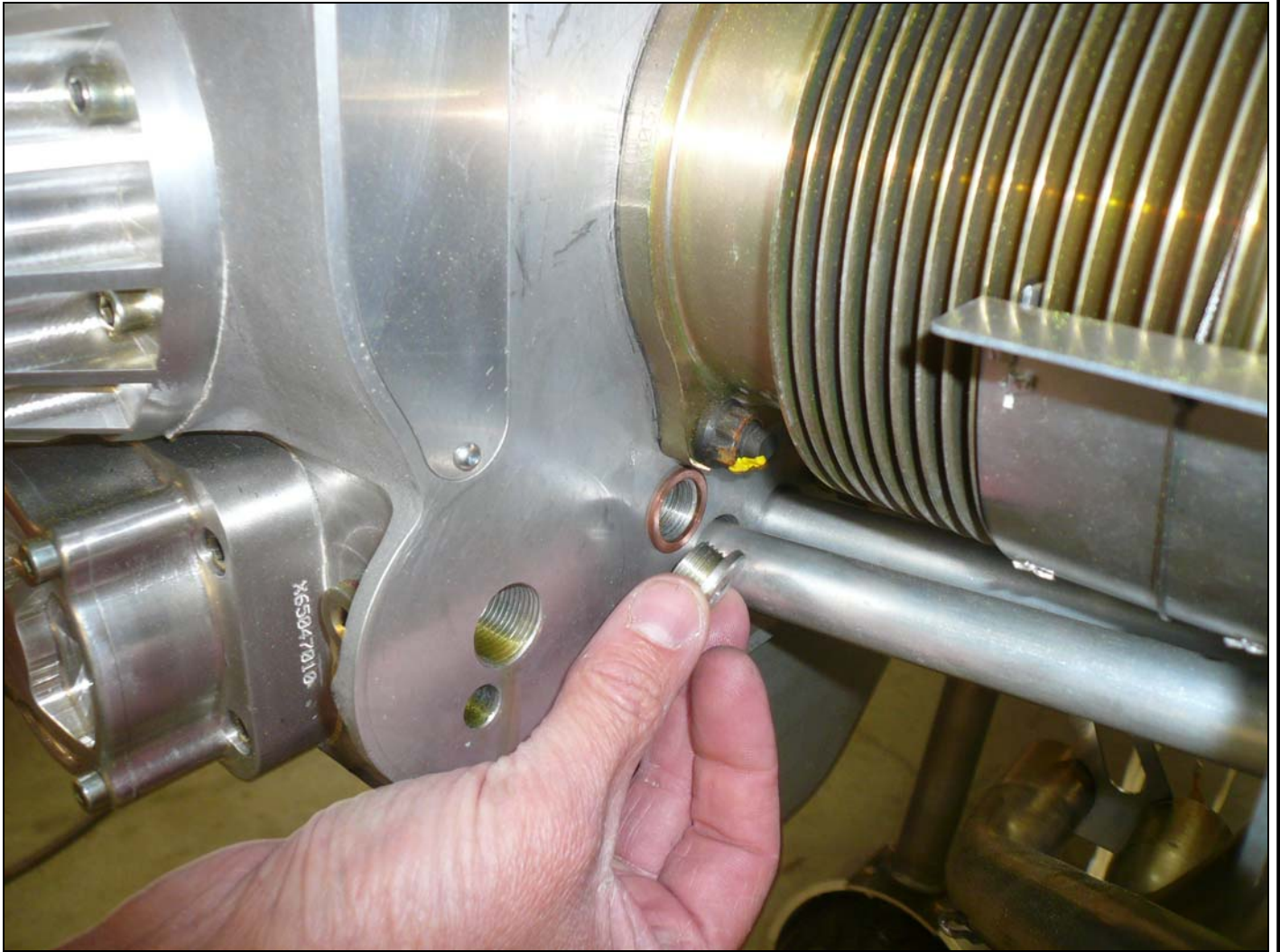
Note: Different engines will affect performance, specifications, and flight characteristics of the aircraft. Also, the weight and balance of the aircraft will be affected by different engines and the fuel system per the drawings may not be adequate or suitable for some engines.



Remove the Oil Filter from the Engine.



Remove the Oil Filter Screw from the Engine.



Remove the plug covering the hole for the Oil Temperature Sensor located next to the Oil Filter under the cylinder.

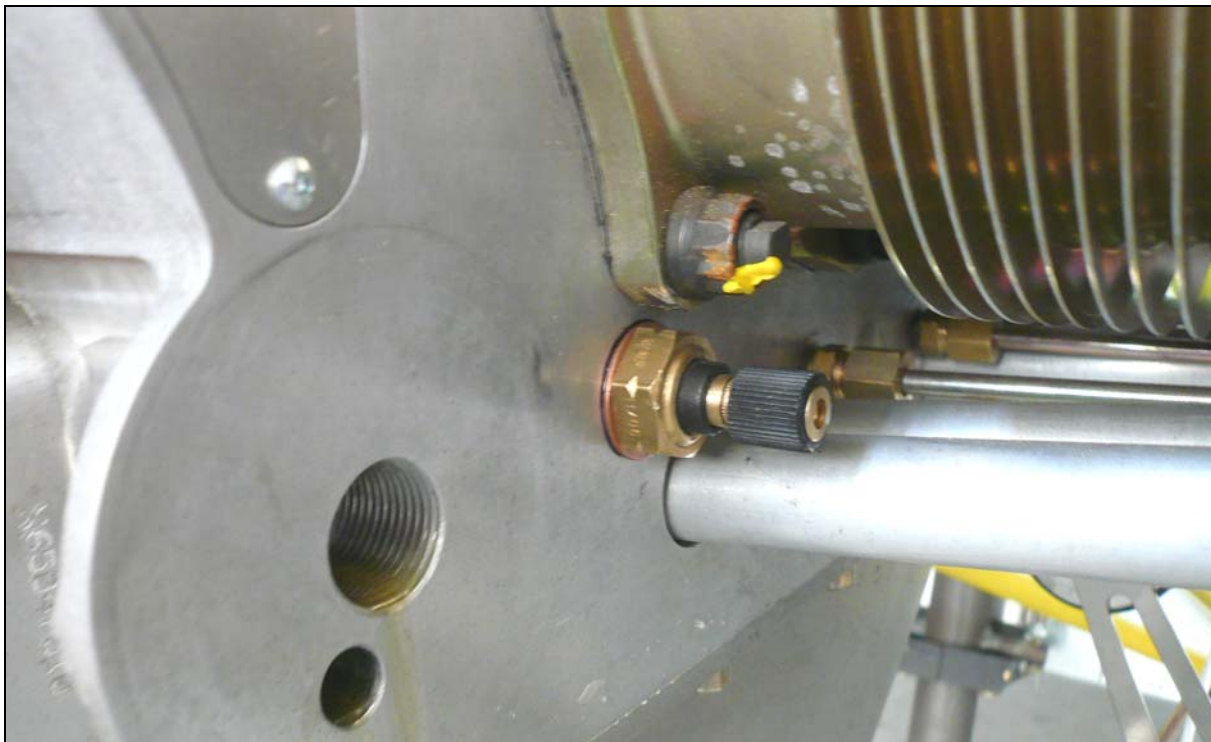


P/N: S3212615
Copper Sealing Ring

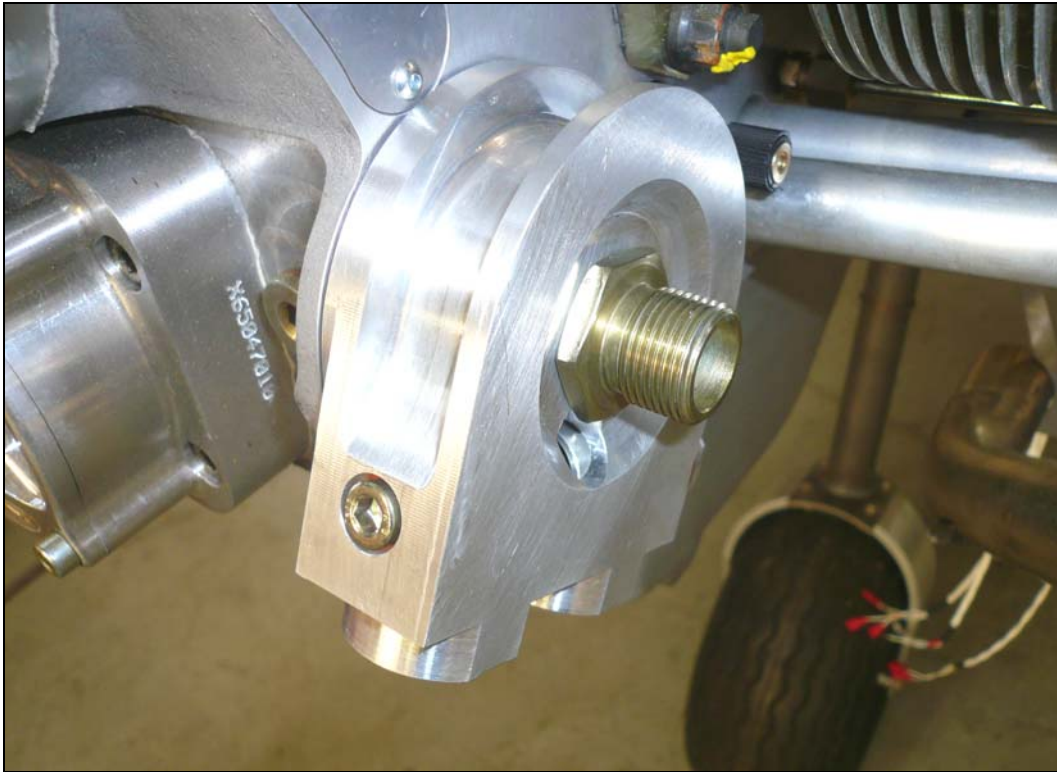
P/N:
Oil Temperature
Sensor



Apply a thread sealer to the threads of the Oil Temperature Sensor.



Install the Copper Seal Ring and Oil Temperature Sensor on the Engine.



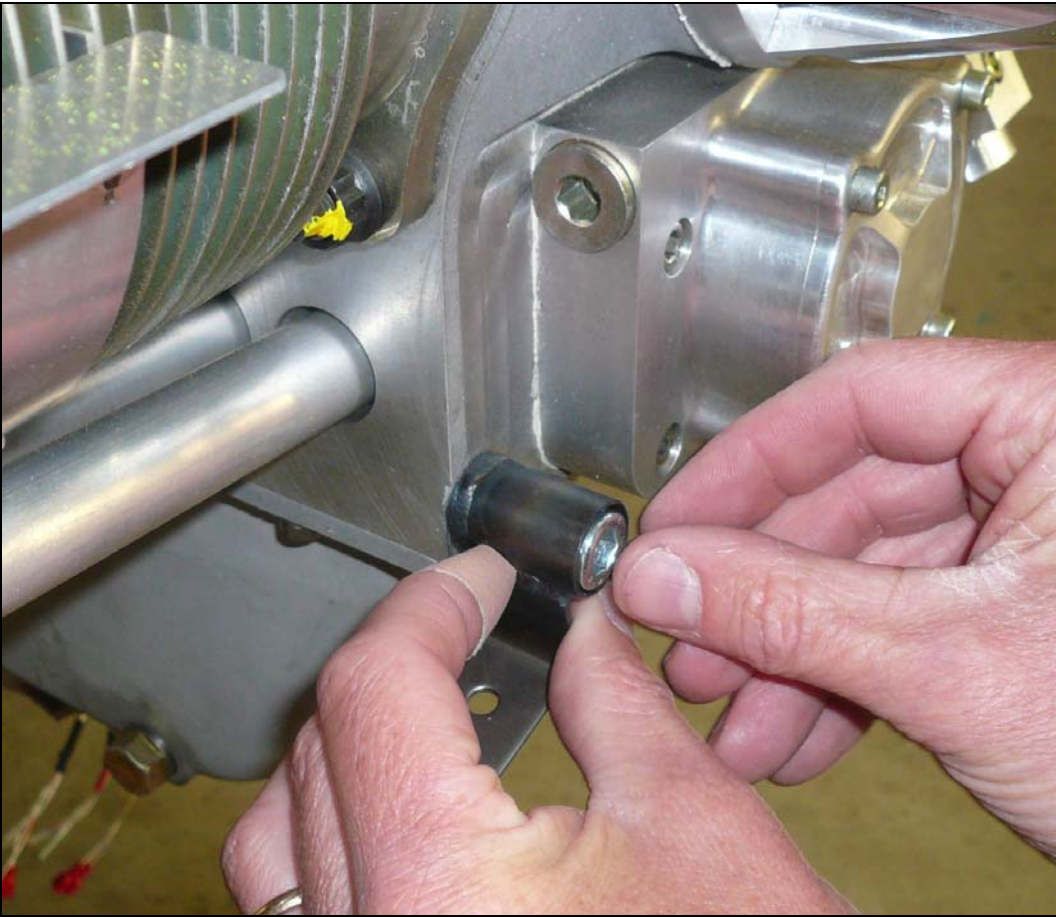
P/N: E042007A
Oil Filter Adaptor
Screw

P/N: E042501A
Oil Filter Sandwich
Plate w/Thermostat

Install the Oil Filter Sandwich Plate with the O-Ring towards the Engine with the Oil Filter Adaptor Screw. Wait to tighten the Screw until the Oil Cooler Hoses are installed.



Apply a "threadlocker" to the M6 bolt that was removed from the front of the Engine for the shipping plate. Above Permatex Medium Strength Blue was used. Check to be sure the threadlocker used is rated for temperatures that will be seen in normal Engine operation.



P/N: ULOCB-R
Oil Cooler Bracket
(right)

P/N: ULOCB-L
Oil Cooler Bracket (left)

The flanges of the Oil Cooler Brackets will point outboard when installed. Insert the Bolts with threadlocker in the Oil Cooler Brackets and install the Brackets on the front of the Engine.



P/N: 316-070
Vibro Stop Rubber

Install the Vibro Stop Rubber on the Oil Cooler Brackets.



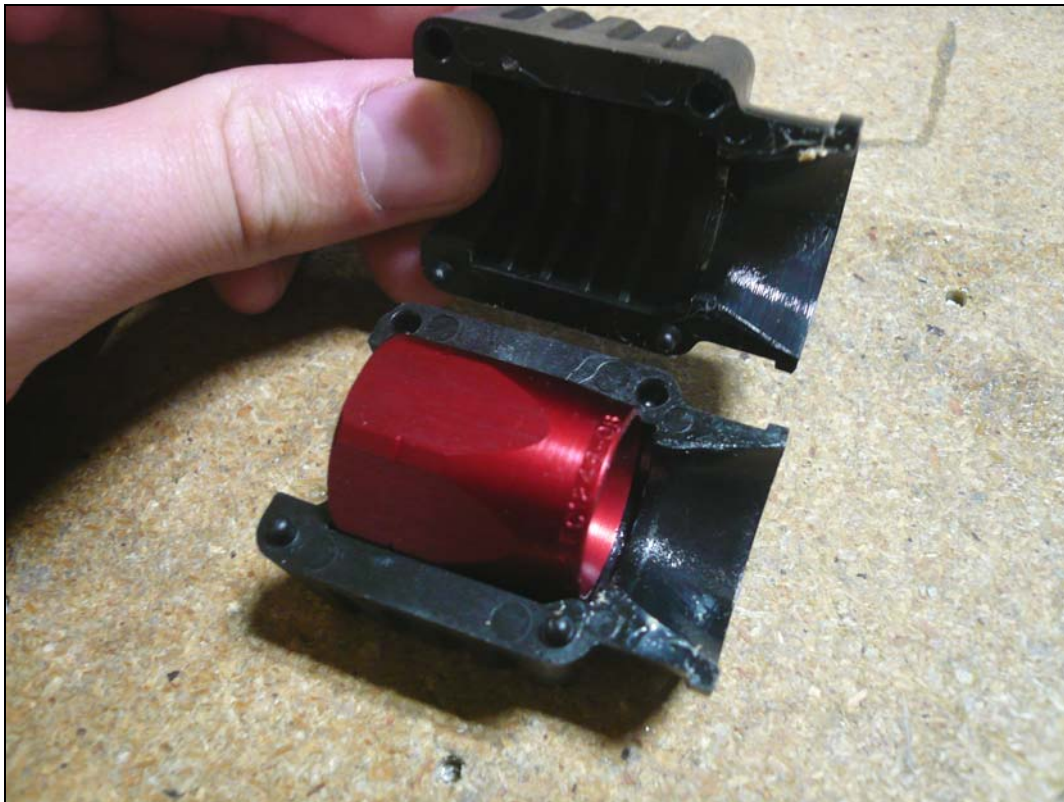
P/N: E0426116
Oil Cooler

Install the Oil Cooler on the Vibro Stop Rubbers.



P/N: F255001
Stainless Braid Hose

Cut the end of the Stainless Braid Hose to clean up the stray wires.



P/N: F3008000
Straight AN-8JIC



KOUL tools LLC
P/N: 468
Stainless Braided Hose
Assembly Tool

Remove the Nut from the Straight AN-8JIC fitting. Set it in the Braided Hose Assembly Tool and put a little grease on the cone of the tool.



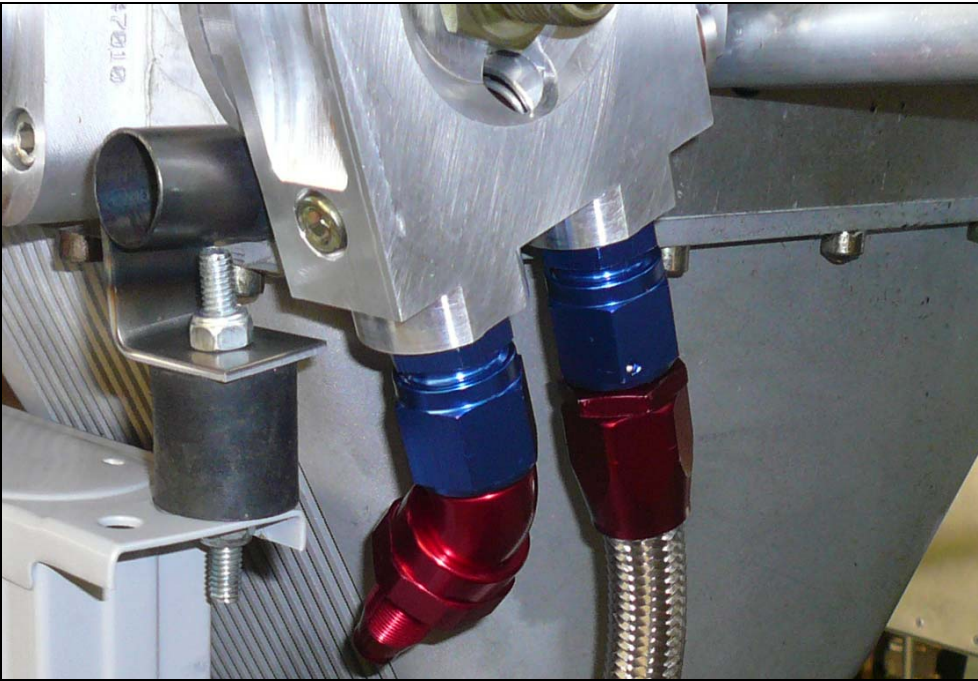
Insert the Braided Hose in the cone end of the Assembly Tool and “screw” the Braided Hose in until the Braided Hose is fully inserted in the Nut, a vise is useful to keep the Assembly Tool and Nut from turning as the Braided Hose is inserted.



Mark the end of the Nut on the Braided Hose, tape is used in the photo above, to be sure the Hose doesn't push out when the Fitting is threaded on the Nut.

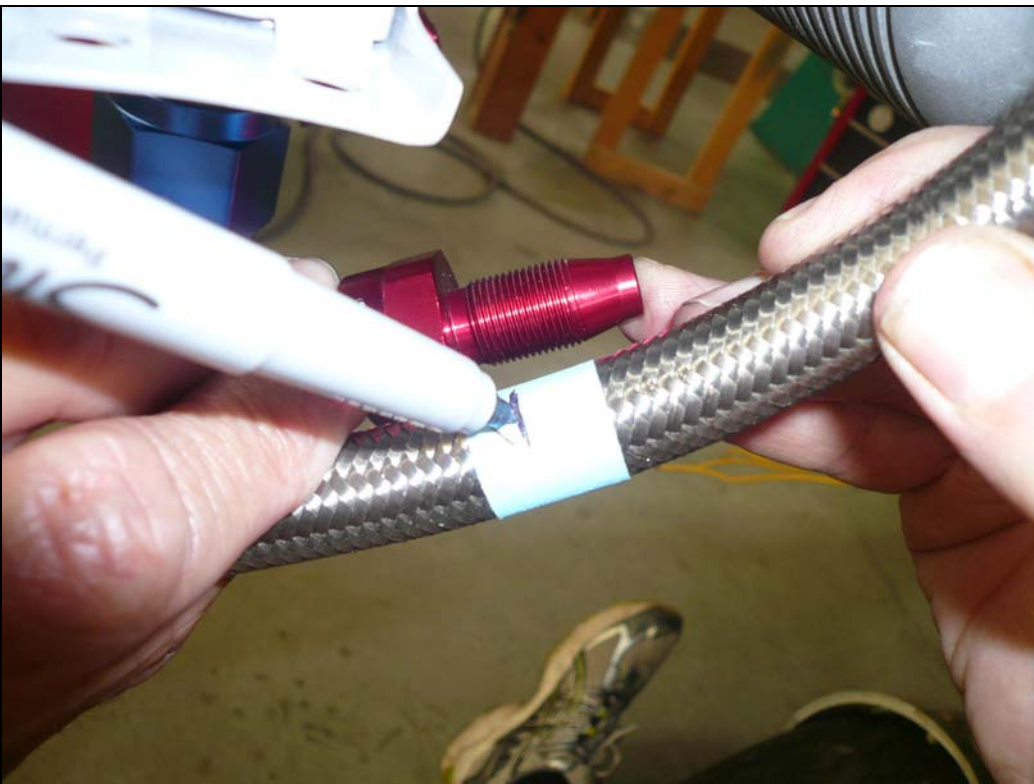


Thread the Fitting onto the Nut and tighten. Check the mark or tape is still at the edge of the Nut on the Hose to be certain it did not push out when the Fitting was installed. If the Hose pushed out, start over installing the Hose in the Nut.



P/N: F2560001
Adapter M16 - AN-8JIC

Apply thread sealer on the threads of the Adapters and install the Adapters on the Oil Filter Adapter Plate. Thread the Straight Fitting on the aft Adapter.

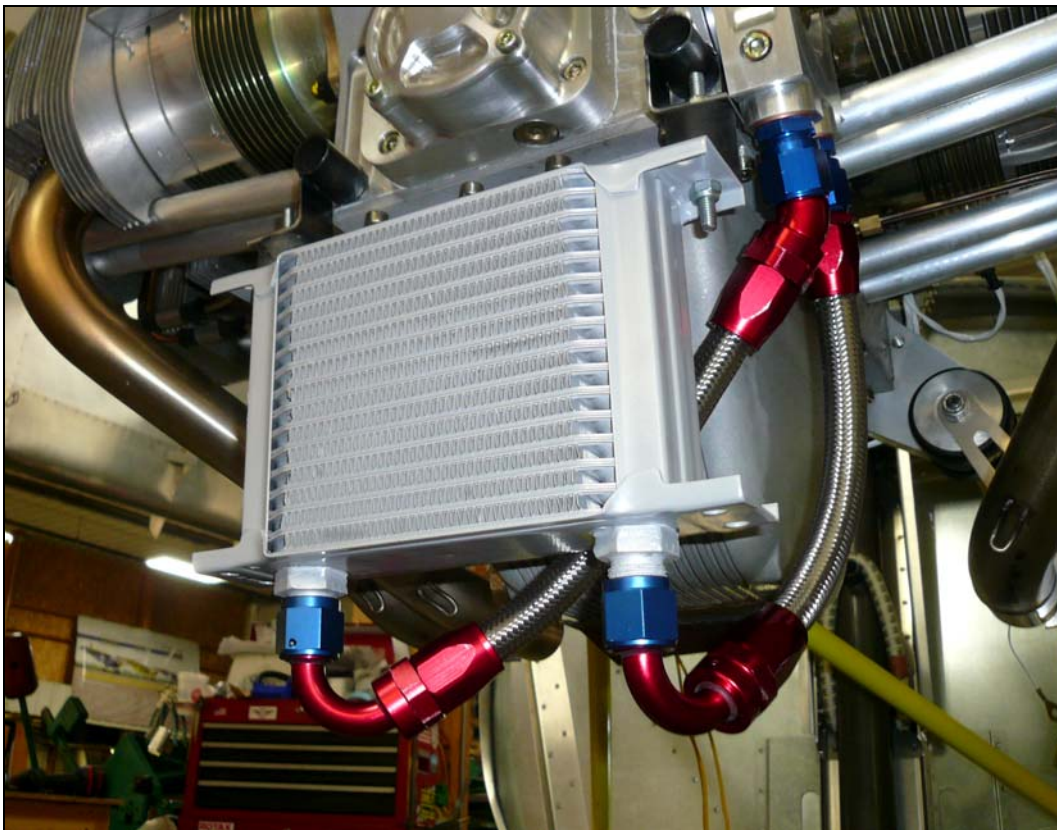


P/N: F3008150
150 Degree Swivel
AN-8JIC

Install the 150 degree Swivel Fittings on the Oil Cooler. Use masking tape on the Braided Hose to make marking the length easier. Pull the Braided Hose over to the pilot side 150 degree Swivel Fitting on the Oil Cooler and mark the length on the Hose.

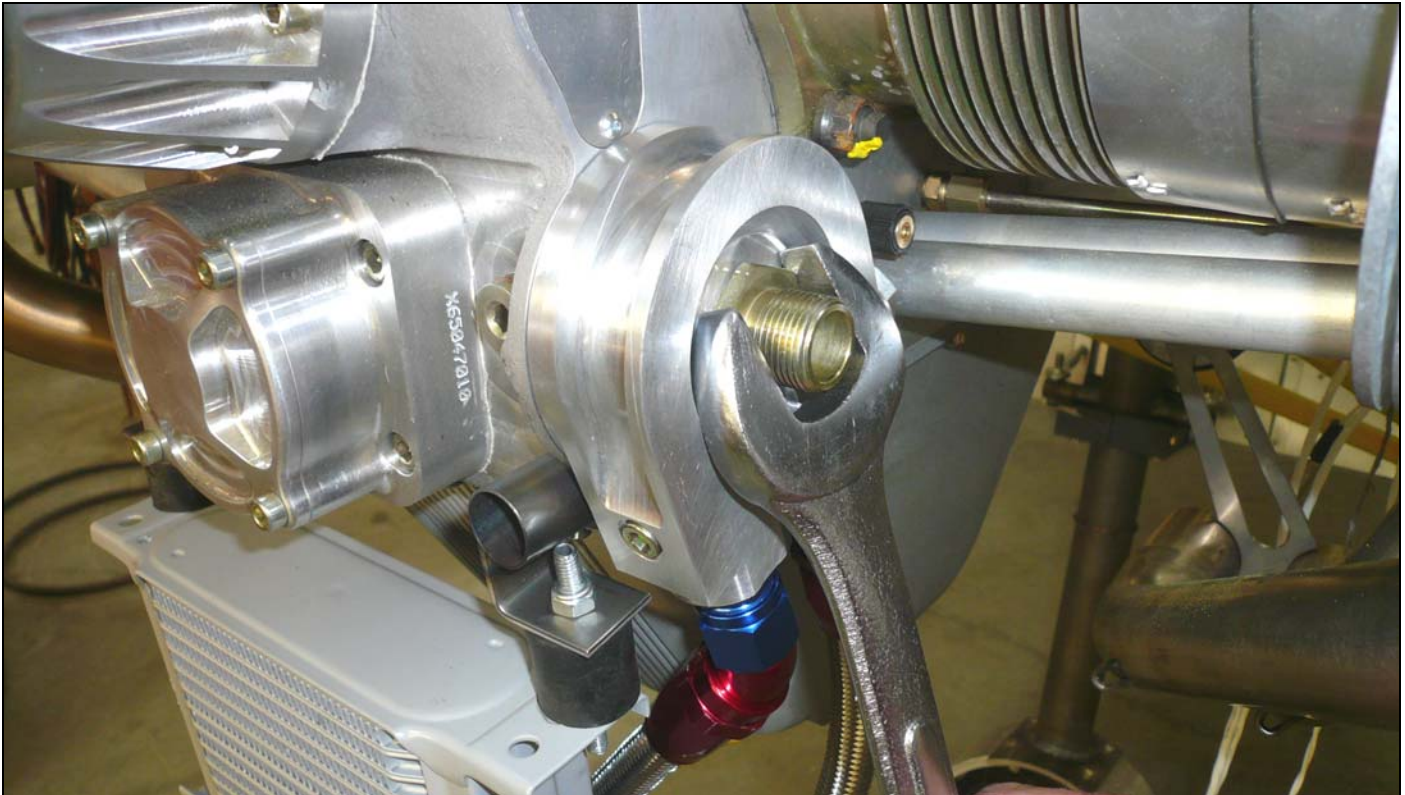


Remove the 150 degree Swivel Fitting from the Oil Cooler. Cut the Braided Hose on the mark and install the 150 degree Swivel Fitting on the Hose following the same procedures used to install the Hose on the Straight Fitting. Reinstall the Hose to the Oil Filter Adapter Plate and the Oil Cooler.



P/N: F3008045
45 Degree Swivel
AN-8JIC

Follow the same procedure to make a Hose for the fittings and install the Hose on the Oil Cooler and Oil Filter Adapter Plate.



Tighten the Oil Filter Adapter Screw. The Oil Filter Adapter Screw should be torqued to 30Nm.



Reinstall the Oil Filter on the Oil Filter Adapter Screw.