

Hoses, Instrument Panels, Custom Products and Accessories

FOR EXPERIMENTAL AIRCRAFT



## ROTAX 912 REMOTE OIL SENDER Installation Manual

The Rotax 912 engine has a history of Oil Pressure Transducer Vibration Induced failures. The way to greatly increase longevity on the oil pressure transducer is to remotely mount it away from engine components and isolate it from the vibration associated with a case mounted transducer.

This kit was designed to be fit onto the RV-12 Aircraft. However, the hose length should work for pretty much any Rotax 912 powered aircraft. Up until now, all Rotax engines have had an NPT port for the oil pressure port. We have heard that Rotax is changing this on brand new engines. (See note below).

**IMPORTANT NOTE FOR THOSE WHO HAVE A NEW ENGINE WITH METRIC THREAD FOR THE OIL PRESSURE PORT: Rotax is swapping new engines over to metric adapters at the engine. Their new transducer is a metric thread. This creates an issue where they ask owners of older engines to re drill and tap the port on the engine. BEFORE YOU DO THIS, contact us. We have adapters that don't require drilling a hole in your engine. If you already have a metric thread, we have adapters for that also.**

This kit includes the following components:

1. Pressure Tested and Fire sleeved Conductive Teflon hose with 10 year warranty.
2. Adapter fitting to convert 1/8 NPT male port on sender into a -4 Flare Fitting.
3. NPT 45 degree angle restrictor to mount into the engine port. This fitting is restricted so that even a failure or leak at the sender will not allow the engine to expel all its oil. This is an added safety feature of our kit, versus a direct mounted transducer.



**NOTE:** It may be easiest to perform this installation after an engine run so that the oil is warm and easier to purge as noted later in this manual.

**Step 1:**

Remove your oil pressure transducer and replace with the 45 degree angled restrictor fitting provided in this kit. Because it is an NPT fitting, please use some sort of thread sealant on the threads during installation. An example of this is Permatex.



**Step 2:**

Attach the Transducer adapter to your oil pressure transducer. This is an NPT thread again and requires the use of a thread sealant such as Permatex.

**Step 3:** Find a mounting location near the firewall for your pressure transducer and secure it.



**Step 4:**

Attach your hose to the engine fitting and route your oil lines similar to the picture shown. Please ensure that the line is protected against abrasion, or from touching engine components that could cause premature failure.



**Step 5:**

It is important to purge your oil line of air before attaching it to the pressure transducer at the firewall. One of our customers did it in the following manner...

“Purge the air out of the oil line before connecting to the oil pressure sensor. With the engine oil warm, engage the starter for 15 seconds with the ignition off.”

Please notice the plastic bag to prevent oil from flowing all over your engine compartment.



**Step 6:**

Attach oil line to Oil pressure Transducer.



**Step 7:**

Perform a test run and leak check the installation.

**INFORMATION REGARDING METRIC INSTALLATION COMPONENTS**

This picture shows the metric adapter that fits into the engine, and then the black restrictor fittings screws into it. For those with a metric port on the engine, these are the components that will be included. Please note that no thread sealant is utilized on the metric threads. The washers provide the sealing surface. However, thread sealant is required on NPT threads.



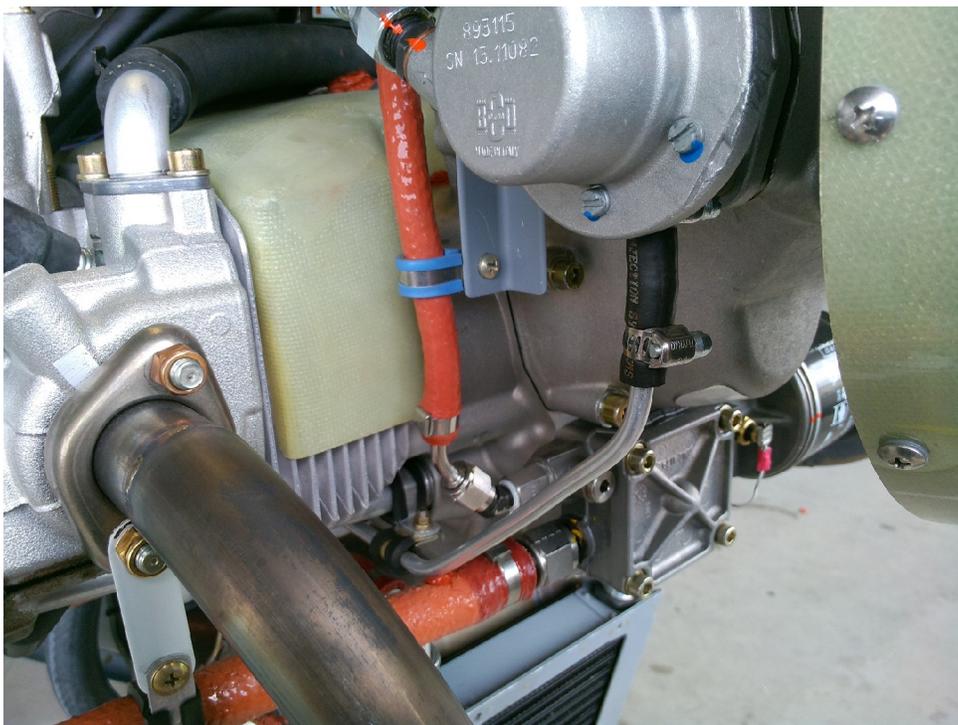
Below is a picture of a metric oil pressure transducer. If you select a metric transducer, please note that you will be given a convex metric adapter fitting and some additional copper washers. Please utilize washers to ensure that the fitting is tight up against the washers to seal. No thread sealant is required or used on Metric fittings. It is required on NPT fittings.



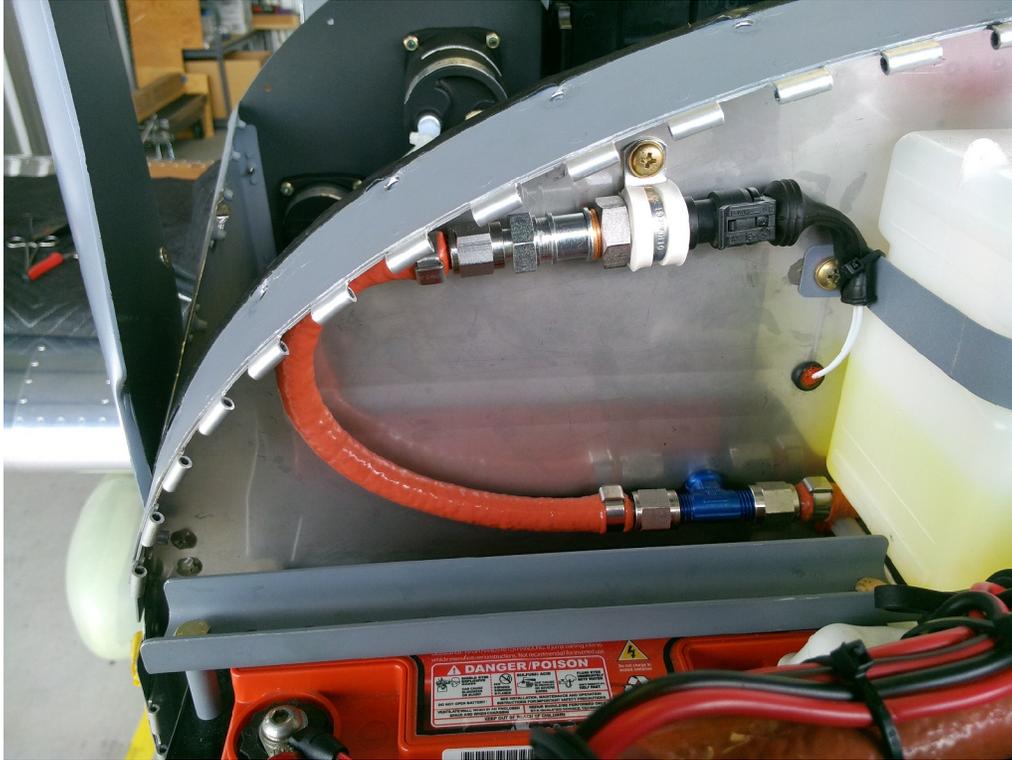
#### INFORMATION REGARDING SECONDARY REMOTE OIL PRESSURE BACKUP GAUGE

We worked with an RV-12 installation to bring this unique solution to those who are looking for a secondary backup gauge in addition to their EFIS oil pressure system. The dimensions on this system are RV-12 specific....However, for builders of other aircraft, this system is easily adaptable with the proper hose length measurements.

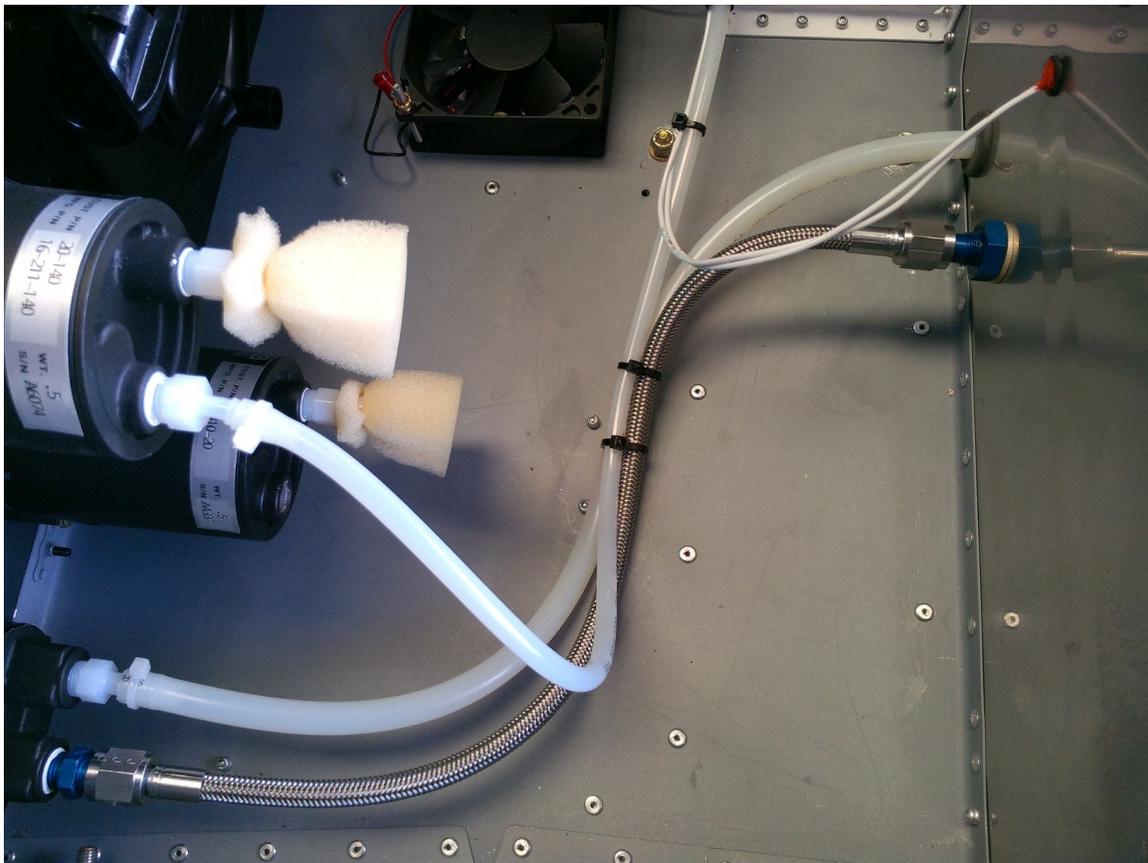
The part # for the gauge that was utilized in this installation is a UMA gauge with P/N 10-22242 from Aircraft Spruce. Below is a picture at the engine oil pressure port.



Pictured Below is the Firewall mounting location for the transducer as well as the bulkhead tee fitting (included)



Pictured below is the cabin oil line that runs from the bulkhead tee to the backup oil pressure gauge. AN fittings for gauge are included. You will notice plastic overflow tubing. This is not part of the package and is detailed in the installation manual for the remote backup gauge.



**Below is pictured the completed cabin panel installation with the remote backup gauge.**



Thank you for your purchase, and as always, we are available to help you with any questions that you may have.