

2. Install the Fuel Flow Transducer

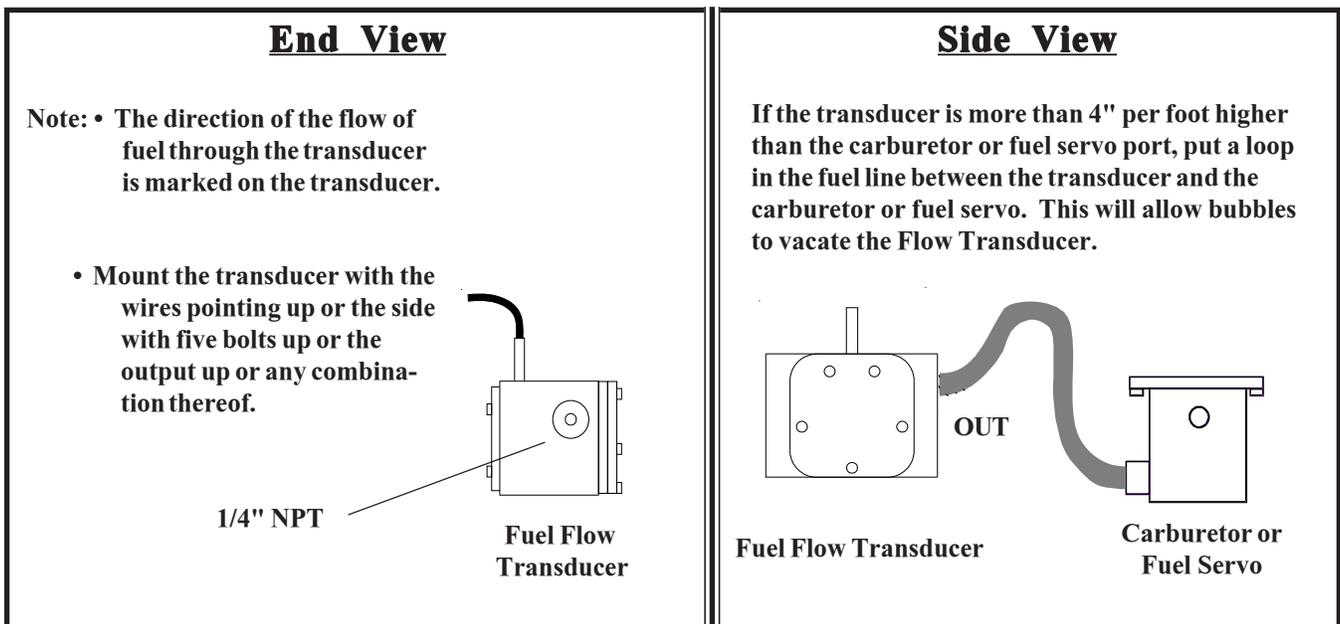
Mount the Fuel Flow Transducer using the appropriate drawing at the back of this manual.

<i>Aircraft Configuration</i>	<i>Drawing #</i>	<i>Page</i>
Fuel injected engine without a fuel return line from the fuel servo (most Lycomings).	1229932 or 1229931	21 or 24
Fuel injected engine with a fuel return line from the fuel servo (most Continentals).	0415941	22
Carbureted engine with a fuel pump and no fuel return line.	1229932 or 1229931	21 or 24
Carbureted engine with a fuel pump and a fuel return line (requires an FFDM-1 Module).	1229932 or 1229931, and 1015941	21 or 23 or 24
Carbureted engine with a gravity feed fuel system (requires an FT-90 Flow Transducer).	1229932 or 1229931	21 or 24

The instructions listed below must be followed when installing a Fuel Flow Transducer.

Note: If your engine is equipped with a Pressure Carburetor with a fuel return line from the carburetor back to the fuel tank, you will need to install two flow transducers: one in the feed line from the fuel pump to the carburetor and one in the return line from the carburetor back to the fuel tank. Also, a Fuel Flow Differential Module (FFDM-1) will need to be installed. See drawings 1229932 and 1015941 at the back of this manual.

- A. The transducer output port should be mounted lower, even or no more than 4" per foot higher than the carburetor inlet port (or fuel servo on a fuel injected engine). If this is not possible, a loop should be put in the fuel line between the Fuel Flow Transducer and the carburetor or fuel servo (see diagram below).



- B. Do not remove the debris caps on the flow transducer until the fuel hoses are ready to be installed.

- C. The flow of fuel through the transducer must follow the direction marked on the transducer.

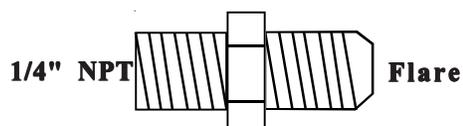
D. The flow transducer must be mounted so the wires exiting the transducer are pointing up or the side with five bolts are pointing up or the output port is pointing up or any combination thereof..

E. Before connecting any hoses, thoroughly clean them and insure they are free of any loose material. High air pressure may be used, however, **do not allow high air pressure to pass through the flow transducer.**

F. When mounting a Fuel Flow Transducer make provisions for the Fuel Pressure Transducer as necessary.

You may want to consider using some Fittings and Hoses shown below. Note: **DO NOT EXCEED a torque of 15 ft. lbs. or screw the fittings tighter than two full turns past hand tight, whichever happens first.**

Fittings:



#4 Straight - AN816-4-4D

#6 Straight - AN816-6D

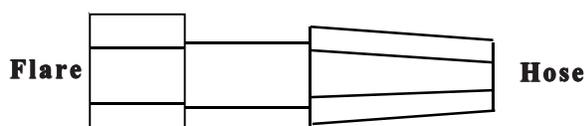
#8 Straight - AN816-7D

#6 45° - MS20823-6D

#4 90° - MS20822-4-4D

#6 90° - MS20822-6D

Hose Fittings:



Straight - MS24587-XX, Stratoflex 300-, Aeroquip 400-

45° - MS27226-XX, Stratoflex 646- and 640, Aeroquip 980006

90° - MS27224-XX, Stratoflex 649- and 643, Aeroquip 980005

NOTE: The Stratoflex teflon hose can be much more flexible and easier to route than most existing hoses. If you have a hard to fit installation, consider this hose.

3. Install the D-Sub Connector Wire Harness

Starting from under the instrument panel, route the D-Sub connector wire harness up to the instrument mounting location. (See the Wiring Diagram at the back of this manual). Place the D-Sub connector about one inch back from the panel. Tie wrap the harness in place approximately one foot back from the D-Sub connector. This will allow the harness to be flexible and accommodate varying lengths in the wiring. **Be sure these wires do not obstruct the freedom of travel of any controls.**

4. Route the Power and Ground Wires

In the wire harness are two sets of red and black 8' wire bundles used for the fuel pressure transducer and the fuel flow transducer. Also, there are red and black 3' wires used for instrument power and ground. Route the 3' red wire in the harness to the aircraft's 12 or 24 volt main or emergency bus as applicable via an independent circuit breaker (five amps or less). An alternate method would be to route the red lead to the bus via a one amp in-line fuse. **With this method a spare fuse must be kept in the aircraft.** Route the 3' black wire in the harness to a good ground. **Tie wrap these wires so they do not obstruct the freedom of travel of any controls.**