

# **INSTALLATION MANUAL**

# Flex Fuel Sensor Adaptor

## PFEFS650-10

Included Items	QTY
PFEFS650-10 Flex Fuel Sensor Adaptor + Bracket	1
M5 x 35mm Socket Head Cap Screw	4
M6 x 15mm Socket Head Cap Screw	2
M6 x 10mm Countersunk Head Cap Screw	2
ISO #12 Viton O-Ring	8

<u>WARNING</u>: PLEASE READ ALL INSTRUCTIONS BEFORE PROCEEDING. PROFLOW WILL NOT BE RESPONSIBLE FOR ANY DAMAGE AS A RESULT OF THE INCORRECT INSTALLATION OF THIS PRODUCT. IT IS RECOMMENDED THAT A QUALIFIED AUTOMOTIVE TECHNICIAN PERFORMS THIS INSTALLATION.

This flex fuel sensor adapter splits fuel flow into a bypass valve parallel to the sensor inlet. As the flex fuel sensor is directly in-line with the fuel flow path, it will read the ethanol content of the incoming fuel at high and low engine speeds. Traditionally this could be done using a variety of fittings and Y-adapters. However, this compact adapter simplifies plumbing and is much less complicated to install, less restrictive, and will fit many GM flex fuel sensors such as GM #13577429 (in-built mounting solution), 13577379 and 13577394 (both use its own mounting tabs).

#### TYPICAL INSTALLATION

# GM #13577429 & #13577379 Sensors

1. Begin by removing one of the end pieces by unscrewing the two M5 x 35mm socket head cap screws.



Figure 1

2. Slide one side of the flex fuel sensor inlets into the bore with the 2x internal o-rings as shown in figure 2. Ensure these internal o-rings are lubricated prior.



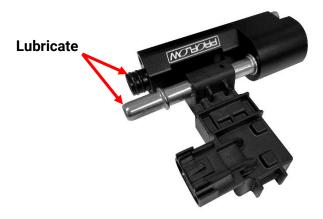


Figure 2

- **3.** Push on the adaptor end previously removed over the outlet of the sensor and into the centre section of the adaptor (figure 3). Ensure all o-rings are lubricated.
- **4.** Re-fasten the M5 x 35mm socket head cap screws and torque all screws to 5 Nm.



Figure 3

**5.** Using the supplied M6 socket head cap screws, mount the assembly using the sensor's mounting points to a secure spot on the vehicle with the appropriate nuts and washers.

#### #13577429 Sensor ONLY

**6.** Mount the bracket to the bottom of the centre section using the supplied M6 countersunk screws. This provides a mounting solution for this specific sensor.

## GM # 13577394 Sensor

- **1.** For this flex fuel sensor, the width of the SAE quick connect tubes are too wide. The required width must be 3.75" (95mm).
- 2. Measure and mark the correct width on the sensor inlets. The SAE bead locks will be removed in this process.
- **3.** Use a hacksaw or equivalent method to cut the ends of the tube off. Please ensure to deburr the inner and outer diameter of the tube before proceeding.
- **4.** The sensor is now ready to be assembled with the billet adaptor as per instructions of GM #13577379.

