

# INSTALLATION INSTRUCTIONS SENSOR MODULE KIT



#### THESE INSTRUCTIONS COVER THE INSTALLATION REQUIREMENTS OF THE FOLLOWING SENSOR MODULE KIT MODELS:

Note: A Sensor Module Kit contains a harness and sensor, and any additional basic hardware that can be used during installation. The harness is used to make electrical connections to an Expansion Module or AirDrive Gauge Dongle with Sensor Module Ports.	Model	Description	Section
	6050	Fluid Temp Sensor, 100°-340° F, Sensor Module Kit	A
	6051	Pressure Sensor, 0-15 PSI, Sensor Module Kit	В
	6052	Pressure Sensor, 0-100 PSI, Sensor Module Kit	В
	6053	Battery Voltage Module, 0-25V, Sensor Module Kit	E
	6055	Fuel Level Adapter Harness, Sensor Module Kit	С
	6056	Boost Pressure Sensor, 0-45 PSI, Sensor Module Kit	D
	6057	Boost Pressure Sensor, 0-115 PSI, Sensor Module Kit	В
	6058	Pressure Sensor, 0-250 PSI, Sensor Module Kit	В
	6059	Pressure Sensor, 0-1600 PSI, Sensor Module Kit	В

**NOTE:** Some late model vehicles use electronic sensors in their pressure and temperature senders for engine control functions. Before removing the original sender, we recommend that you contact your automotive dealer to be sure no critical functions will be disrupted.

## **A - FLUID TEMPERATURE SENSOR AND CABLE**



- 1. Check that you have all parts required for installation, and the engine is cool.
- 2. If necessary, drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided. (Grommet will require slit.)
- 3 Install temperature sender:
  - a. Water Temp: Install temperature sender.
  - NOTE: Included sender is 1/8" NPT.
  - b. Trans. Temp: Hole may have to be drilled, and adapter nut welded or brazed in pan. Be sure there is adequate internal clearance for nut and sender. Recommend 2287, 5/8" OD line adapter or 2286, 3/8" OD line adapter.
- 4. Cut end of included dielectric grease packet, and squeeze grease into connector of temperature sender prior to connecting harness.
- (Important: This will protect connection from dirt and moisture.)
- 5. Connect the harness to the sensor and the sensor module.
- NOTE: Test all fittings and connections for leaks. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.
- NOTE: Do not remove factory temp sender to install temp sender. If no location found, a hose adapter can be used.





- 1. Check that you have all parts required for installation, and the engine is cool.
- 2. If necessary, drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided. (Grommet will require slit.)
- 3. For oil pressure gauge installation, install pressure sender into engine oil passage port. For fuel pressure gauge, install the 1/8" NPT pressure sender into the fuel system (See caution below). For Ford fuel injected applications with a Schrader valve in the fuel rail, use adapter 3280 between the fuel rail and pressure sender.
- 4. Connect the harness to the sensor and the sensor module.

If unit is to be installed on a high vibration application such as a race engine or engine capable of high RPM, it is strongly recommended that the sender be remote mounted to either the fender well or firewall, to insulate from vibration. Failure to remote-locate pressure senders on such an application could result in potential damage to vehicle and/or operator injury. Braided stainless steel lines are sold separately by Auto Meter, and can be used to accomplish this.

**NOTE**: Test all fittings and hoses for any leakage. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.

ATTENTION DODGE DIESEL OWNERS: If using on '98-'02 (some '03) Cummins diesel fuels PSI, you MUST use #3227 Line Kit and #3279 restrictor to prevent premature failure of sender. Failure to do so will void warranty.



#### **INSTALLATION - NITROUS PRESSURE**

- 1. Check that you have all parts required for installation, and the engine is cool.
- 2. If necessary, drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided.
- 3. Make sure the nitrous bottle valve is closed and there is no pressure in the system.
- 4. Remove the main nitrous feed line from the bottle or the nitrous solenoid. Install the in-line gauge adapter (e.g. NOS part #16103 or Edelbrock #76512) either on the nitrous bottle or nitrous solenoid. Re-install the main nitrous feed line. Install pressure sender and wiring harness. For mounting off bottle in rear of car, use 20' sender harness model 5223.
- 5. Open the nitrous bottle valve.
- 6. Connect the harness top to the sensor and the sensor module.

**NOTE**: Test all fittings and hoses for any leakage. If any leaks are detected, determine the cause of the leak and repair. Do not operate vehicle if any leaks are detected.



#### **INSTALLATION - BRAKE PRESSURE**

- 1. Check that you have all parts required for installation, and the engine is cool.
- 2. If necessary, drill 1" diameter hole where wires pass through sheet metal (such as firewall) and install rubber grommet provided.
- 3. If you are not familiar with proper brake system bleeding procedures, do not install this sender. Have a qualified mechanic do it for you.
- 4. Locate a 1/8"-27 NPT port in your brake system in a location where you would like to measure brake pressure. If no port is available, you will need to install a tee fitting in the brake line you want to measure. Only use fittings that are approved for use in brake systems.
- 5. Install the pressure sensor in the 1/8"-27 NPT port using a Teflon thread sealing compound.
- Bleed the brake system using standard brake bleeding procedures.

If you are not familiar with proper brake system bleeding procedures, do not install this sender. Have a qualified mechanic do it for you.

Note: Install sensor with electrical connector facing down to allow any air in the sensor to escape during bleeding.

### WEATHER PROOF SENDER CONNECTOR BLEEDING

The connector supplied on your wire harness is a weather sealed connector. When plugging in this connector, it creates a temporary air lock which can cause the sender to read low for a short amount of time. This is due to the pressure created in the connector chamber with plugging in the connector. Over time this pressure bleeds off through the wiring. For immediate accuracy you may either remove the purple weather seal from the connector, or simply vent the connector by using a small tool, such as a pick or screwdriver and momentarily push the orange weather seal aside. (See Picture)



## **C - FUEL LEVEL ADAPTER HARNESS**

The Fuel Level adapter harness is a pigtail harness that connects to the fuel level sender (i.e. model 3262 Universal Fuel Level Sender) mounted in the fuel tank or cell. The harness will generally need to be extended to reach the sender. The harness consists of black and orange wires and a connector. The black wire is to be connected to either one of the sender's mounting screws, or if present the ground tab on the sender. The orange wire is to be connected to the signal terminal on the sender.





## **E - BATTERY VOLTAGE MODULE, 0-25V**

The Battery Voltage Monitor is a pigtail harness that connects to the vehicle system voltage. The harness is best connected to a switched Accessory power circuit in the vehicle.