TURBO BOOST PRESSURE GAUGE AND SENSOR INSTALLATION INSTRUCTIONS

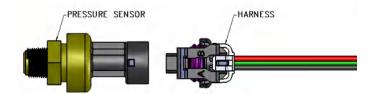
Models: R11133 R11233 R11333 R11433 R11633 R11733 R12133 R12233 R12333 R12433 R12633 R12733 R13133 R13233 R13333 R13433 R13633 R13733 R14133 R14233 R14333 R14433 R14633 R14733 R15133 R15233 R15333 R15433 R15633 R15633 R15733 R16133 R16233 R16333 R16433 R16633 R16733 R17133 R17233 R17333 R17433 R17633 R17733 R18233 R18333





- Disconnect batteries. Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.
- Find a location where boost pressure can be measured such as an existing port on the intake, or cut the MAP (Manifold Absolute Pressure) line and insert a Tee fitting (obtain from your local automotive supply store). If there is an M8 x 1.25 intake bolt exposed to intake pressure, it can be replaced with R7741, a hollow boost bolt for 1998.5 2006 Dodge models. Alternatively, drill and tap the intake elbow for ½" NPTF.
- 2 Install the new sensor. Pressure sensor threads are 1/8" NPTF.
 - Many Emission Control Devices are connected to OEM sensors or switches. Be careful not to disable these when installing a sensor.
- If leakage occurs at the sensor, tighten one-quarter turn at a time until leakage stops. If necessary, thread sealant such as Teflon tape may be used.
 - When using a torque wrench, tighten approximately 20nm/15 lb-in. or slightly more, if leakage occurs. Do not use the body of the sensor to tighten! Use only the hex and the correct wrench. Do not over tighten!
- 5 Connect the pressure sensor to the pressure sensor harness by pressing the connector into the slot.

Figure 1: Pressure sensor and harness.



Route the sensor harness to the intended gauge mounting location, using grommets as appropriate when passing through the firewall. Connect the sensor harness to the gauge connector as follows:

Form No. IS172 (Rev. D 8/27/09)

- 7 Trim wires to desired length. The red/yellow, green, and black wires are the +5V, sensor, and ground connection, and connect to cavities 4, 5, and 6 of the orange connector respectively (see Figure 2).
 - Install the three wires into the insulation displacement connector (orange connector). Carefully lay the wires across the connector cavities, hold the connector steady with a vice or pliers and press the wires into each cavity with a small screwdriver. Each wire must be pushed completely to the bottom of its groove in the connector, to ensure a good electrical connection.
- An optional wiring harness is available (ISSPRO P/N R72022) to simplify wiring and provide a potentiometer for reducing the brightness of the gauge lights while still following the vehicle dimmer level. If this dimming function is not required, you can substitute your own 18 gauge wires in place of the harness, using a single wire in place of the orange and orange/black wires. Connect one end of each of these wires as follows:
 - Ground The black wire should connect to a clean ground on the vehicle such as the battery negative terminal or a factory ground bolt.
 - *Ignition* The red wire should be connected to a circuit that switches on with the key switch.
 - Wire should be fused so as not to exceed 3 amps. If the circuit does not have a fuse, or the existing fuse is higher than 3 amps, use an inline fuse.



Figure 2: Connector.

1	Red	Ignition
2	Orange	Dimmer
3	Black	Ground
4	Red/Yellow	+5V
5	Green	Sensor
6	Black	Ground

• *Dimmer* – Connect the orange/black wire to the factory gauge dimmer circuit by either tapping into the in-cab fuse block or by connecting directly to the wire running from the dimmer on the headlight switch.

Connect the red, orange and black wires to the orange connector as described above, in positions 1, 2, and 3 respectively. Slide the white dust cover over the orange connector once the wires are securely installed. **NOTE**: The gauge backlighting will only illuminate if both the ignition supply AND the backlighting circuits are on.

The lighting harness is designed to be used with Performax EV^{2TM} gauges. DO NOT attempt to use this harness and potentiometer with any other gauge types.

OPTIONAL: Daisy Chain Your Gauges – If multiple Performax EV^{2TM} gauges are being installed in one location (such as a pod), you may use a single set of the Ignition, Ground, and Dimmer wires to connect all of the gauges. Simply pass the wires from one orange connector to the next one in a "daisy chain" configuration.

- 9 Install the connector onto the back of the gauge (angled portion on end of connector pointing up as in Figure 2), and then secure the gauge in its mounting location. If drilling a mounting hole in a panel to mount this gauge, the hole size should be 2.040". Mounting Kit R19999 is available for larger mounting holes up to 2.200".
- Secure all wiring so that it does not interfere with moving parts or chafe on sharp edges. This may be accomplished by routing the wiring within the factory wire harness sheath, using wire ties and sheathing, and using appropriate grommets when passing through the firewall.

Form No. IS172 (Rev. D 8/27/09)

www.isspro.com