HPOP (HIGH PRESSURE OIL PUMP) PRESSURE GAUGE AND WIRE HARNESS INSTALLATION INSTRUCTIONS



Models: R11255 R12255 R13255 R14255 R15255 R16255 R17255 (Use on Powerstroke engines: 1993½ - 2003 7.3L, and 2003 - 2007 6.0L)



- 1 Disconnect batteries. Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.
- 2 Find the factory Injection Control Pressure (ICP) sensor and disconnect its harness connector. On 7.3L engines, The ICP sensor should be mounted into the driver's side head near the fuel bowl, in the "V" portion of the engine. On 6.0L engines, it is on the passenger's side valve cover.
- Route the ISSPRO HPOP Harness up to the ICP sensor. One end of the ISSPRO HPOP Harness will have a connector similar to the one you just unplugged from the ICP sensor. Plug this connector into the ICP sensor, and plug the truck harness connector (which you disconnected in step #2) into the remaining connection on the HPOP harness.
 - The ICP sensor is critical to engine operation. If wire insulation is damaged and sensor wires shorted out, engine damage can result. Retain and protect all wiring.
- If installing other items that connect to the ICP sensor (such as a power adding module), connect the ISSPRO HPOP Harness directly to the ICP sensor, then connect the power module's harness between the ISSPRO harness and the truck harness. If using a purely resistive load to modify the output of the ICP sensor (known commonly as a "10K Mod"), the ISSPRO HPOP gauge will display the same modified (incorrect) output that the PCM is seeing. If a true HPOP reading is desired while using a 10K Mod, install a second ICP sensor on the engine, and connect it to the gauge using ISSPRO harness P/N 9CAA607589 instead of the ISSPRO HPOP harness included with the gauge, with the red/yellow wire in position #4 on the connector.
- 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:
- Trim wires to desired length. The green and black wires are the sensor and ground connection, and connect to cavities 5 and 6 of the orange connector respectively (see Figure 1).
 - Install the two 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.

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- 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.

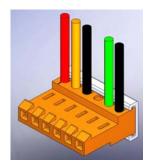


Figure 1: Connector.

1	Red	Ignition
2	Orange	Dimmer
3	Black	Ground
4	Empty	
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 EV²TM 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.

- Install the connector onto the back of the gauge (angled portion on end of connector pointing up as in Figure 1), 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.

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