







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

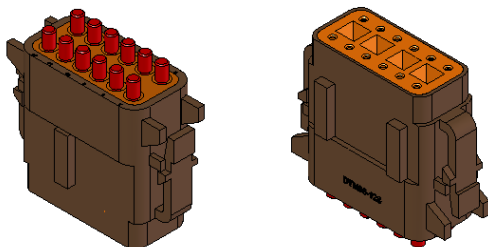
**Models: R43255 R52255 R53255 R59255 R68255 R69255 R82255**

*(Use on Powerstroke engines: 1993½ - 2003 7.3L, and 2003 - 2007 6.0L)*

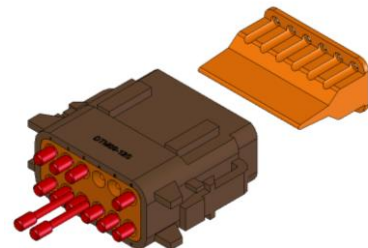
- 1**  Disconnect batteries. Do not reconnect battery power until system is fully configured to avoid risk of shock or fire.
- 2**  Install Electronic Signal Processor (ESP) and ESP harness according to instructions.
- 3**  Connect the Temperature Sensor Harness to the ESP Harness as follows:
  - a. Remove plugs from cavities 4 and 5 of the connector D (brown) of the ESP.
  - b. Using a pair of needle nose pliers, pull the orange wedge lock out of connector D.
  - c. Insert the terminal from the black wire (sensor supply ground) into cavity 4 of connector D on the ESP, pushing until it snaps into connector D.
  - d. Insert the terminal from the green wire into cavity 5 (sensor input) of connector D on the ESP, pushing it until it snaps in place.
  - e. Note: Terminals will be close to flush with the top of the connector when fully seated.
  - f. A firm pull of the wire will confirm whether they are properly seated.
  - g. Push orange wedge-lock back into position. If any of the wires are not fully seated, wedge-lock will not insert into position.
  - h. Reconnect connector D (brown) to the ESP.

ICON KEY	
	CAUTION
	Tools may be required
	Shown in picture




**Figure 1:** Connector D top and bottom view. Shown with plugs and wedge-lock installed.



**Figure 2:** Remove plugs and wedge-lock as shown. Wedge-lock is replaced once wires are positioned properly.



**Form No. IS148 (Rev. A 03/11/2008)**

- 4 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.
- 5 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 #4) 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.
- 6 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 ISSPRO ESP using ISSPRO harness P/N 9CAA607405 instead of the ISSPRO HPOP harness included with the gauge.
- 7  Connect HPOP pressure gauge to the ESP. (See ESP instructions for more details on how to do this). Note: If drilling a mounting hole in a panel to mount the gauge, the hole size should be 2.040".
- 8  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. IS148 (Rev. A 03/11/2008)**