



1998 ½ -2007 Dodge Ram 5.9L Cummins **LOW FUEL PRESSURE ALARM LIGHT**

- Installation Manual -

Part Number Sequence:

1081130	Red
1081133	Amber

PLEASE READ ALL INSTRUCTIONS BEFORE INSTALLATION.
Please read the disclaimer before proceeding to install this unit.

BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: www.bd-power.com

Introduction

The purpose of this kit is to indicate to the driver with the red/amber LED, if the supply fuel pressure of the VP44 injection pump is dropping below 5psi. Also note that damage may result to the VP44 if it is starved for fuel. If you are finding that your existing setup cannot supply enough fuel for the VP44, you may want to look at some additional kits to protect your system.

On newer ISBe engines the purpose of the kit is to alarm the driver once the fuel pressure drops below 5psi, indicating that an auxiliary pusher pump is needed. For safety anything over about 400 HP will need an auxiliary pusher pump.

Reasons For Low Supply Pressures

- *Plugged filter*
- *Plugged fuel tank pickup*
- *Weak or dead factory lift pump*
- *Too much demand and not enough supply (High horsepower)*

Available Accessories

- *BD High flow banjo bolts (gains of > psi fuel pressure)*
- *BD High flow auxiliary lift pump kit (gains of 15psi, supports +500HP)*

Kit Contents

Part Number	Description	Qty.
1801135	5psi Pressure Switch	1
108112x *	LED Assembly w/ 2 pc. Bezel	1
1300353	Female Blade Connector	1
1300337	Mini-Fuse Tapper	1
2-520334-2	Flag Connector (for use with mini-fuse tapper)	1
1502017-Z	Tapped Banjo Bolt (2000+ <i>Dodges only</i>)	1
1502019	Sealant Washer	2

**Depending on which color LED you have, the "x" in the LED number will be "1" – Red or "3" – Amber*

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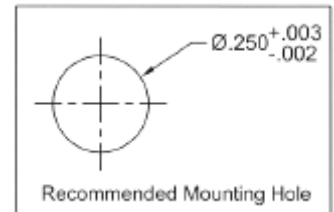
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Installation

1. Disconnect the battery terminals before starting installation.
2. Find an installation point for the LED and bezel assembly. Typically, a close proximity to the optional X Monitor or auxiliary gauges is a good idea or even somewhere visible. Use a 1/4" drill bit to drill a hole for the bezel and LED to fit into.



IT IS CRITICAL THAT YOU CORRECTLY DRILL THE 1/4" PERFECTLY 90° OR PERPENDICULAR TO THE DRILLING SURFACE.

3. Insert LED & wiring assembly through the 1/4" hole, route the black and red wire first and pull the entire six feet through. Before inserting and locking the LED bezel in the hole, place a small amount of silicone on the bezel. Now firmly insert the LED bezel as it should lock in place. The silicone should lock the bezel in place and resist any movement from vibration.
4. Route the Red 18ga wire to 12V switched power, a supplied fuse tapper is provided for easy installation in the factory fuse panel. An accessory fuse is adequate, as the LED will draw less than 0.5 Amp. Use a 90° pink flag connector (supplied) for a much easier installation.
5. You will need to locate the appropriate fuel port for your application. Please note that closer to the actual injection or high pressure pump the better. Use the new supplied sealing washer to ensure a tight seal and eliminate any fuel leaks. Note factory torque specs are 18 ft-lbs for the banjo bolt.
 - a. On 1998-99 model year ISB trucks, there will be a 1/8" NPT test port located on the fuel filter cap. Unscrew the cap closest to the engine and thread in the pressure switch.

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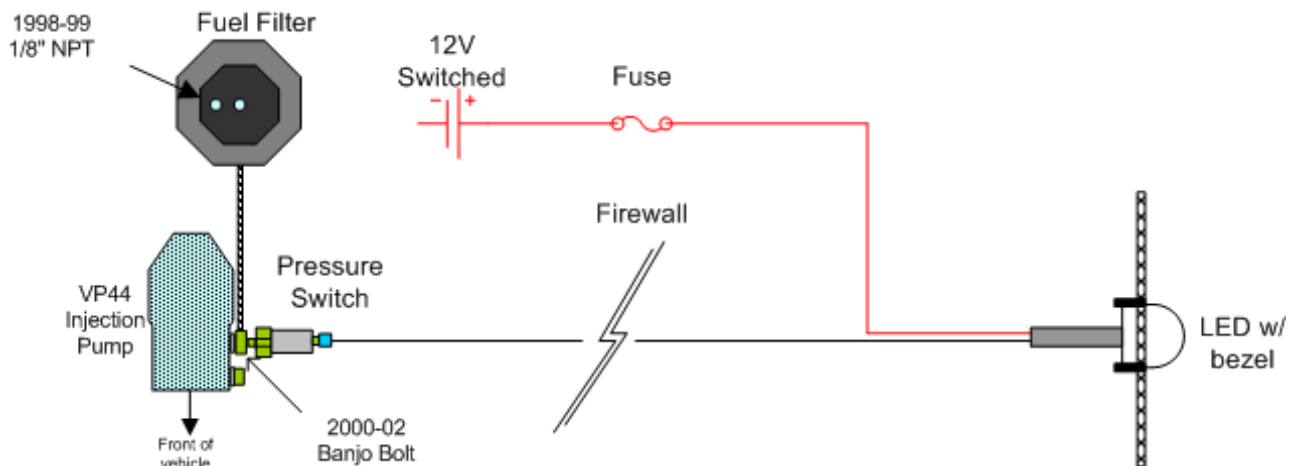
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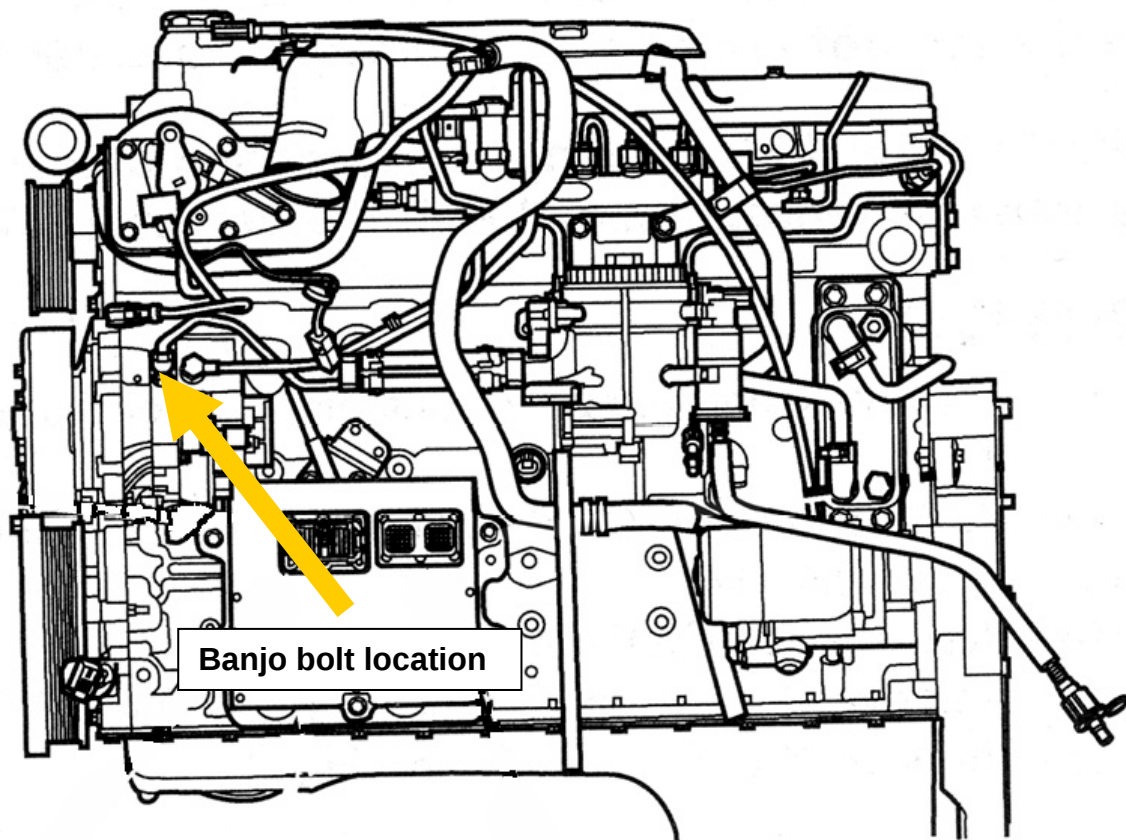
- b. On later 2000-2002 ISB trucks, thread the supplied banjo bolt into the inlet of the VP44; you'll need to remove the factory Schrader valve.
 - c. On 2003+ ISBe HPCR engines you will need to use the supplied banjo bolt to replace the factory front most banjo bolt located directly on the side of the CP3 pump. To locate this bolt just follow the larger fuel supply line from the fuel filter.
- 6. With the supplied 5psi pressure switch, coat the threads with liquid pipe sealant or Teflon tape and install into the fuel pressure port. Be careful not to contaminate the fuel system with using too much tape or sealant.
 - 7. Now route the black 18 AWG wire through the firewall into the engine compartment and attach the supplied female blade connector. Slide the blade connector onto the male blade connector on the back of the pressure switch.
 - 8. Start the truck and check for leaks around the pressure switch.
 - 9. To verify operation the LED should light for a brief second before the truck is started.

The theory behind the unit is that the pressure switch will provide a ground when the fuel pressure drops below 5 psi. With 12 volts supplied through the LED, a ground now supplied, the LED will illuminate warning the driver.

1998½-2002 VP44 Engines



2003-2007 HPCR Engines



If you have any technical problems or concerns, please give our Technical Support hotline a call at (800) 887-5030, Monday to Friday, 8:30am-4:30pm, Pacific Standard Time (PST).

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