Installation Manual v1.1:
705-050-4290:
Fuel Rail Pressure Plug
2005+ Duramax

Please read all instructions before installation.

**Caution:** Cleanliness cannot be overemphasized when handling or replacing diesel fuel system components. This especially includes the fuel injectors, high-pressure fuel lines and fuel injection pump. Very tight tolerances are used with these parts. Dirt contamination could cause rapid part wear and possible plugging of the fuel injector nozzle tip holes. This in turn could lead to possible engine misfire. Always wash/clean any fuel system component thoroughly before disassembly and the air dry. Cap or cover any open part after disassembly. Before assembly, examine each part for dirt, grease or other contaminants and clean if necessary. When installing new parts, lubricate them with clean engine or clean diesel fuel only.

Note: The images included in this manual show the LBZ glow plug controller and bracket. Later models are different, however the procedure is the same.
1. Disconnect the negative battery cables.
2. Disconnect the positive battery cable (1) from the glow plug control module.
3. Disconnect the engine wiring harness electrical connector (2) from the glow plug control module.
4. Remove the glow plug control module bolts and module.
5. Remove the fuel return pipe clamp bolt (1).

6. Remove the glow plug control module protector bolts and protector (1).
7. Remove the glow plug control module bracket and bolts (2).
8. Remove the fuel pressure relief valve from the backside of the driver side fuel rail.

Please note that this can be very difficult to remove as the hex portion of the fitting is very short. A closed end 18mm wrench typically works best. Our version of the fitting has an additional 1/8" on the hex to make installation much easier.

9. Lubricate the o-ring, threads and seal surface with clean engine oil. Install the new fitting and torque to **70 ft-lbs (95 Nm)**.

10. Reinstall the glow plug module and bracket reversing the steps above.

11. Reconnect the power wire to the GPC module and the negative battery terminals.

12. Prime the fuel system.

13. Check for leaks.

14. If no leaks are present, the vehicle is ready to drive.
Have Any Questions?

Thank you for purchasing the Fuel Rail Pressure Plug. Please check our website at http://www.atsdiesel.com for technical support and other performance products such as the 5-Star™ torque converter, ATS High Performance Valve Body and ATS High Performance Transmission. Please call or e-mail our Technical Service Department, 8:00am to 5:30pm Mountain Standard Time, Monday through Friday.

Contact Information

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We strive to make our instructions as clear and complete as possible. To achieve this, our instructions are under constant construction. We encourage you to visit our website to check for the most up-to-date manuals and diagrams as well as other information. If you have any suggestions as to how we can improve this installation manual, let us know at mailto:Suggestions@ATSDiesel.com.

Bill of Materials

1. Pressure Relief Blockoff Fitting..........................................................705-050-6000
2. O-Ring, 18mm ID x 2mm CS (installed)