

## GM 6.6L Duramax LB7 Injector Installation Tips



Perform a fuel system inspection prior to installation of replacement injectors. If rust, contamination, or metal particles are found the fuel system must be cleaned including the tank, filter housing, supply lines, and the high-pressure system. **Failure to completely clean the complete fuel system can result in immediate or repeated short-term injector failures.**

### INSTALLATION TIPS

1. Use caution when working on the fuel system to prevent injury. The high-pressure side of the fuel system is pressurized up to 23,200 PSI and the injector wiring high voltage is 93 volts. Make sure the engine is off, the high-pressure has bled down, and the engine has cooled off prior to working on the fuel system.
2. The Engine Control Module (ECM) should be updated to the latest calibration as part of the diagnostic and repair process.
3. Before performing an injector balance test check that the actual rail pressure and the desired rail pressure match by performing a fuel pressure regulator graphing test. Unstable rail pressure will cause inaccurate injector balance rate results.
4. DTech fuel injectors have tolerances measured in microns. It is important to work in a clean manner to prevent contamination of the fuel system to prevent premature failures. Clean the engine area around the fuel system prior to removing any fuel system components. Before assembly inspect each component for dirt, grease, or other contaminants and clean as necessary.
5. The high-pressure injection lines from the rail to the injectors must be cleaned per GM bulletin 03-06-04-036B or replaced with new lines to prevent debris from entering the DTech injector fuel inlet.
6. Install a new fuel filter and do not fill it with fuel prior to installation.
7. Replace any injector sleeves that lift upwards during the injector removal.
8. Make sure that the injector bore is clean and that the old nozzle-sealing washer has been removed.
9. Install the new nozzle-sealing washer into the injector bore in the cylinder head.
10. Lubricate the injector body o-ring with clean engine oil and install the injector into the cylinder head.
11. Use shop air to blow any oil and debris from the hold down bolt hole in the cylinder head.
12. Install the hold-down bracket pin and hold down bracket.
13. Install the hold-down bracket bolt and torque it to 33 ft-lb (50 Nm).
14. Install the injector return pipe assembly.
15. Install the injector return banjo bolts and washers. Lubricate the washers with diesel fuel prior to installation.
16. Torque the injector return pipe banjo bolts to 12 ft-lb (16 Nm).
17. Install the injector return pipe cylinder head banjo bolt and washer. Lubricate the washer with diesel fuel prior to installation.
18. Torque the cylinder head return pipe banjo bolt to 12 ft-lb (16 Nm).

*(Continued on reverse side.)*

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12693 Old Virginia Road  
Reno, NV 89521  
800.648.4720

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## **PRODUCT INFORMATION**

*(Continued from front side.)*

19. Install the lower rocker cover. Torque the bolts to 89 in-lb (10 Nm) in the correct sequence.
20. Tighten the coil wires to 17 in-lb (2 Nm). Do not over tighten the nuts or the terminal post will break.
21. Install the upper rocker cover and torque the bolts to 71 in-lb (8 Nm) in the correct sequence. Re-torque the bolts to the same value.
22. Tighten the injection line nuts to 30 ft-lb (41 Nm).

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