

Dodge 5.9L Injector Installation Tips



DT590001R

An Employee Owned Company

12693 Old Virginia Road
Reno, NV 89521
800.648.4720

DIPACODTECH.com

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 90 volts. Make sure the engine is off, the high-pressure has bleed down and the engine has cooled off prior to working on the fuel system.
2. The Powertrain Control Module (PCM) should be updated to the latest calibration as part of the diagnostic and repair process.
3. 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.
4. Install a new fuel filter and do not fill it with fuel prior to installation.
5. Check the return back-pressure valve located in the injector return line connection banjo bolt located at the rear of the cylinder head for contamination, replace or clean as needed.
6. Replacement of the high-pressure inlet connector is highly recommended. Prior to reuse of a connector, inspect the inlet edge filter for contamination; replace if any is present. Inspect the inlet connector's outlet sealing surface for wear, uneven seating area or small erosion lines in the sealing area; replace if any are present. Install a new o-ring on the inlet connector.
7. Make sure that the injector bore is clean and that the old nozzle-sealing washer has been removed.
8. Lubricate the injector body o-ring with clean engine oil and install the injector into the cylinder head with the fuel inlet facing the high-pressure inlet connector bore in the cylinder head. Seat the injector by pushing down on the injector mounting flange.
9. Install the hold-down bolts but do not tighten.
10. Install the high-pressure inlet connector aligning the guide ball with the slot in the cylinder head making sure it registers with the injector inlet. Install the retaining nut and torque to 133 in-lb.
11. Evenly run the hold-down bolts down by hand to insure that the hold-down clamp is evenly spaced around the injector body.
12. Tighten the hold-down bolts by alternately tightening each until the final torque of 89 in-lb is reached.
13. Tighten the high-pressure inlet connector nut to 41 ft-lb.
14. Tighten the coil wires to 13 in-lb. Do not over tighten the nuts or the terminal post will break.

(Continued on back side.)

DIPACO PRODUCT INFORMATION

(Continued from front side.)

15. Tighten the injection line nuts to 22 ft-lb.

Additional resources listed below can be found at dipacodtech.com/DTech-Product-Information-Bulletins

Troubleshooting Information

Dodge 5.9L Basic Troubleshooting + Diagnostic Information

Factory Bulletins

TSB 14-004-11A - Updated fuel filtration to provide improved injector life.

Product Information Bulletins

FI-264 - Why Common Rail Injectors Fail

FI-276 - Issues With High-Pressure Connectors When Replacing A 5.9L Injector

FI-284 - Common Rail High-Pressure Pump Basic Operation + Troubleshooting

Notice: Injectors submitted for warranty that are damaged by contamination or with combustion blow-by are not covered by the DTech warranty.

DTech injectors are covered by a two year, unlimited mileage warranty. Complete warranty information can be found at dipacodtech.com/Warranty.

DIESEL FUEL PUMPS, INJECTORS AND ACCESSORIES

Supplying The Diesel Aftermarket Since 1948