



DTech 5.9L Injector Installation Information

Read Before Installing This Injector

Most common rail injector problems are caused by diesel fuel contamination. The effects of fuel contamination accumulate over time, but can also be sudden if the contamination of the fuel is severe enough. It is important you understand why you are replacing your current injector(s). Small particles or water in the fuel will quickly damage the internal parts. Operation with old fuel, poor quality fuel, bio diesel or the use of some additives can cause fuel deposits to form on the internal parts preventing their freedom of movement.

Common rail diesel fuel injectors are very different from traditional diesel fuel injectors. The DTech 5.9L injector contains internal parts with stringent tolerances, clearances measured in microns, orifices as small as 0.0065", operates under fuel pressures up to 23,000 PSI and must respond to the PCM commands in as little as 160 millionths of a second. During the remanufacturing process each DTech injector meets a rigorous calibration test standard to insure its proper operation.

Always install a new fuel filter and do not fill it with fuel prior to installation. The fuel filter has been updated to provide improved filtration and injector life. Be sure to update the vehicle to the latest filtration system. For more information refer to Dodge service bulletins 14-003-9 and 14-004-11A.

An injector sticking open usually causes misfires, smoke and knocking. When this happens shortly after installation it is caused by contamination entering the injector resulting in the nozzle remaining open. Preventive actions include cleaning the engine around the high-pressure fuel connectors and rail connections to prevent contamination from entering the fuel system prior to the injector removal and cleaning all parts prior to their reinstallation.

Contamination deposits collect in the rail in the area of the #5 and #6 injection line connections. Remove the #1 injection line fitting and use a borescope to inspect the rail bore. If contamination is found replace or clean the rail.

Replacement of the high-pressure fuel connector is recommended. Prior to reuse of a fuel connector check the inlet edge filter for contamination and the outlet sealing surface for wear or signs of leakage (small lines or erosion). Connectors with contamination or wear must be replaced.

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.

Please see the reverse side for injector installation instructions.

Injector Installation

Please Read The Information On The Reverse Side Before Installation

1. Make sure that the injector bore is clean and that the old nozzle-sealing washer has been removed.
 2. 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 fuel connector. Push down on the mounting flange to seat the injector in the bore. Do not push on the injector coil or its terminals.
 3. Install the hold-down bolts but do not tighten.
 4. Install the high-pressure fuel 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.
 5. Evenly run the hold-down bolts down by hand to insure that the hold-down clamp is evenly spaced around the injector body.
 6. Tighten the hold-down bolts by alternately tightening each until the final torque of 89 in-lb is reached.
 7. Tighten the high-pressure fuel connector nut to 41 ft-lb.
 8. Tighten the coil wires to 13 in-lb. Over tightening will strip the terminal threads.
 9. Tighten the injection line nuts to 22 ft-lb.
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Injector/Engine Operation Issues

Following the installation of DTech 5.9L common rail injectors should you encounter any operational problems such as misfire, low rail pressure, low power, starting problems, or other issues please refer to the Service Information area at dtechproducts.com for diagnostic tips.

DTech 5.9L injectors are covered by a 12 month, unlimited mileage, limited warranty. In the unlikely event of the operational failure of a DTech 5.9L injector, complete warranty information can be found at dtechproducts.com or dipaco.com in the Warranty area.