

Diesel Fuel System Contamination Repair/Flushing - Key Turned to Run or Engine Started

Flushing

NOTICE: This procedure is to be performed only when metal debris is found on the Volume Control Valve (VCV) screen and/or fuel system contamination is known to be present and has circulated through the fuel system.

NOTICE: Leave the original Fuel Filters, Fuel Injection Pump, fuel lines, Fuel Rail and Fuel Injectors in place until the flushing procedure is completed to prevent contamination of replacement components.

NOTICE: The Fuel Filter/Water Separator must be inspected during filter replacement to verify no low pressure fuel system damage. If metal debris or DEF contamination is present, the Fuel Filter/Water Separator must be replaced.

NOTE: This procedure is for flushing the low pressure fuel system lines from the fuel tank, through both fuel filters and the high pressure Fuel Injection Pump to remove all contaminants before installing new fuel system components.

NOTE: All remaining low pressure fuel lines can be reused if no physical damage is present.

1. Remove the fuel pump and sender unit.
Refer to: Fuel Pump and Sender Unit (310-01B Fuel Tank and Lines - 6.7L Power Stroke Diesel, Removal and Installation).
2. **NOTE:** Dispose of contaminated fuel in accordance with local laws and regulations.

Flush out the fuel tank.
3. Install the fuel pump and sender unit.
Refer to: Fuel Pump and Sender Unit (310-01B Fuel Tank and Lines - 6.7L Power Stroke Diesel, Removal and Installation).
4. Fill the fuel tank with fresh, clean, good quality diesel fuel.
5. **NOTE:** Dispose of contaminated fuel in accordance with local laws and regulations.

Using a suitable container, drain the Fuel Filter/Water Separator of any residual liquids.
6. **NOTE:** Dispose of contaminated fuel in accordance with local laws and regulations.

Disconnect the front (inlet) line from the Fuel Cooler that feeds fuel to the cooler from the engine and place in a suitable container.
7. Use Scan Tool Active Commands or cycle the ignition to "RUN" to activate the low pressure fuel pump to flush the system.
8. **NOTE:** Dispose of contaminated fuel in accordance with local laws and regulations.

Allow the fuel pump to run for 3 minutes or until approximately 3 gallons of fuel has been flushed through the system.
9. Connect the front (inlet) line to the Fuel Cooler.
10. Replace both primary and secondary fuel filters.
Refer to: Fuel Filter (310-01B Fuel Tank and Lines - 6.7L Power Stroke Diesel, Removal and Installation).
Refer to: Fuel Filter/Water Separator (310-01B Fuel Tank and Lines - 6.7L Power Stroke Diesel, Removal and Installation).
11. After the flush is completed, replace the following high pressure fuel system components:
 - Fuel injection pump
 - Fuel rail supply tube
 - Fuel injector supply tubes
 - Fuel injector fuel return line
 - Fuel rails
 - Fuel injectors
 - Fuel pressure and temperature sensor (located on the engine low pressure line near the secondary fuel filter)

