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Service Information Bulletin

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2 Description and Operation of the Hydrocarbon Doser Block

The Hydrocarbon (HC) doser block assembly and related parts are located on the left side of the engine. The HC doser block assembly meters diesel fuel to the HC fuel doser injector valve to facilitate regeneration of the Diesel Particulate Filter (DPF). The fuel cutoff valve enables the flow to the electronic diesel dosing valve which effectively meters the desired amount of diesel fuel needed for regeneration to the HC fuel doser injector valve.

Figure 1. Hydrocarbon Doser Block

1. Fuel Compensation Pressure Sensor  
2. Fuel Doser Line Pressure Sensor  
3. Electronic Diesel Dosing Valve  
4. Dosing Fuel Line  
5. Fuel Line Inlet  
6. Fuel Cutoff Valve
1. Fuel Line Inlet
2. Fuel Cutoff Valve
3. Fuel Compensation Pressure Sensor
4. Electronic Diesel Dosing Valve
5. Fuel Doser Line Pressure Sensor
6. Dosing Fuel Line

Figure 2. MY13 Hydrocarbon Doser Block (Only used on DD15 AT)
3 Removal of the Hydrocarbon Doser Block

Remove as follows:

**WARNING: PERSONAL INJURY**
To avoid injury, never remove any engine component while the engine is running.

**WARNING: PERSONAL INJURY**
To prevent the escape of high pressure fuel that can penetrate skin, ensure the engine has been shut down for a minimum of 10 minutes before servicing any component within the high pressure circuit. Residual high fuel pressure may be present within the circuit.

**NOTICE:** Removal/installation of the Hydrocarbon doser block assembly will require that the system be purged to remove all air in the fuel lines. Refer to DDDL 7.X to perform this routine service.

**NOTE:** Always disconnect the fuel lines prior to disconnecting the electrical connectors to avoid fuel contamination into the sensors and connectors.

1. Shut off engine, apply the parking brake and chock the wheels.
2. Place a drip pan under the engine to collect any fuel.
3. Disconnect the air compressor inlet hose from the Hydrocarbon (HC) doser block bracket (if required).
4. Disconnect the fuel inlet line from the junction block connecting the HC doser block assembly to the high pressure fuel pump and the fuel filter module.
5. Disconnect the fuel dosing line from the HC doser block assembly.
6. Unplug connectors from Fuel Cutoff Valve (FCV), Fuel Doser Line Pressure Sensor (FLP), Fuel Compensation Pressure Sensor (FCP), and Electronic Dosing Valve (EDV).
7. Loosen three bolts (3) and remove the HC doser block assembly (2) from the HC doser block bracket (1).
   a. Figure below shows an EPA10 Doser Block.
   b. Figure below shows an MY13 DD15 AT Doser Block configuration.
4 Installation of the Hydrocarbon Doser Block

Install as follows:

**NOTICE:** Removal/installation of the Hydrocarbon (HC) doser block assembly will require that the system be purged to remove all air in the fuel lines. Refer to DDDL 7.X to perform this routine service.

1. Install the HC doser block assembly (2) using three bolts (3); torque bolts to 32-36 N·m (24-27 lb·ft).
   a. Figure below shows an EPA10 Doser Block.
   b. Figure below shows an MY13 DD15 AT Doser Block configuration.
2. Plug in connectors to the Fuel Cutoff Valve (FCV), Fuel Doser Line Pressure Sensor (FLP), Fuel Compensation Pressure Sensor (FCP), and the Electronic Dosing Valve (EDV).
3. Connect the dosing fuel line; torque banjo bolt to 15 N·m (11 lb·ft.)
4. Connect fuel inlet line to the junction block connecting the HC doser block assembly to the high pressure fuel pump and fuel filter module.
5. Connect the air compressor inlet hose from the doser bracket (if equipped).
6. Tighten all connections securely.

**WARNING: PERSONAL INJURY**
To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

**WARNING: ENGINE EXHAUST (i)(eov34)**
To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.

7. Start the engine.

**NOTE:** It may take more than one purge attempt to completely purge all of the air from the fuel line. Do not exceed three purge attempts.

8. Use the HC doser command to run the purge function in DDDL 7.X to purge all the air from the doser valve and line.

**WARNING: HOT EXHAUST**
During parked regeneration the exhaust gases will be extremely HOT and could cause a fire if directed at combustible materials. The vehicle must be parked outside.