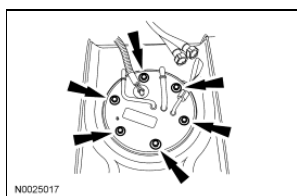


Fuel Level Sensor  [Printable View \(125 KB\)](#)**All vehicles**

1. Remove the fuel tank. For additional information, refer to [Fuel Tank — LH](#) , [Fuel Tank — RH](#) or [Fuel Tank — Aft of Axle](#) in this section.

Aft-of-axle

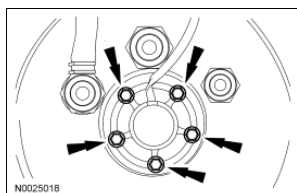
2. Remove the screws and the fuel level sensor.
 - Remove and discard the fuel level sensor gasket.
 - To install, tighten to 10 Nm (89 lb-in).

**Frame mounted tank (LH and RH)**

3. **NOTE:** LH shown, RH similar.

Remove the screws and the fuel level sensor.

- Remove and discard the fuel level sensor gasket.
- To install, tighten to 2 Nm (18 lb-in).

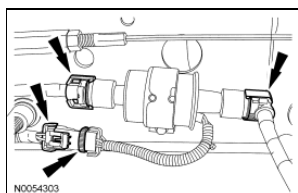
**All vehicles**

4. To install, reverse the removal procedure.

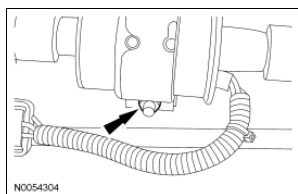
Fuel Transfer Pump  [Printable View \(109 KB\)](#)

Removal and Installation

1. Cut the fuel transfer pump electrical connector tie strap and disconnect the fuel transfer pump electrical connector and the fuel tube quick connect couplings. For additional information, refer to [Section 310-00](#) .



2. Remove the bolt and the fuel transfer pump.
 - To install, tighten to 52 Nm (38 lb-ft).



3. To install, reverse the removal procedure.
-

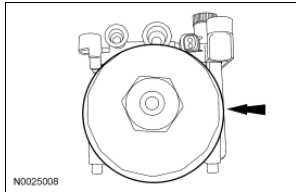
Fuel Conditioning Module  [Printable View \(228 KB\)](#)

Material

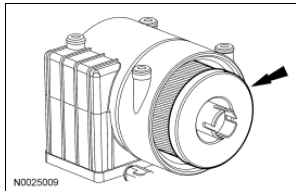
Item	Specification
SAE 15W-40 Super Duty Diesel Motor Oil XO-15W40-QSD (US); CXO-15W40-LSD12 (Canada); or equivalent	WSS-M2C171-D

Disassembly

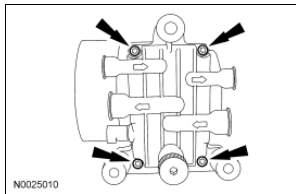
1. Remove the fuel filter cover and drain the fuel from the housing.
 - Remove and discard the O-ring seal.



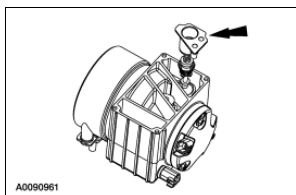
2. Remove the fuel filter and discard.



3. Remove the screws and the fuel manifold cover.
 - Remove and discard the press-in-place gasket.

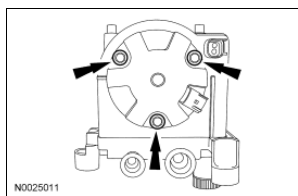


4. Remove the return valve assembly.



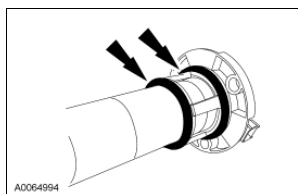
5. Remove the screws and the fuel pump.

- Remove and discard the O-ring seals.

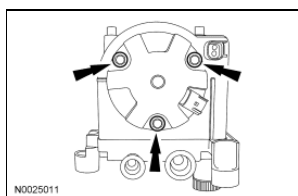


Assembly

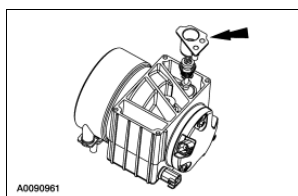
1. Install new O-ring seals on the fuel pump and lubricate with clean engine oil.



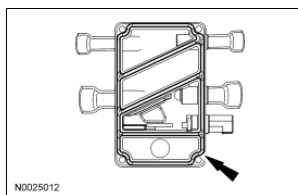
2. Install the fuel pump and mounting bolts.
 - Tighten to 5 Nm (44 lb-in).



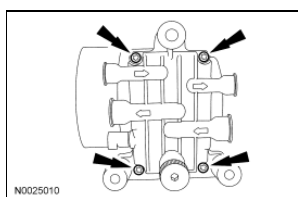
3. Install the return valve assembly.



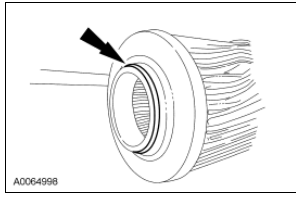
4. Install a new press-in-place gasket in the fuel manifold cover.



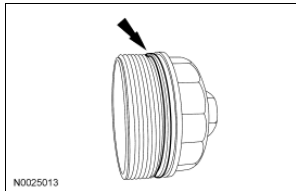
5. Install the fuel manifold cover and bolts.
 - Tighten to 5 Nm (44 lb-in).



6. Lubricate the O-ring seal with clean engine oil and install the fuel filter.

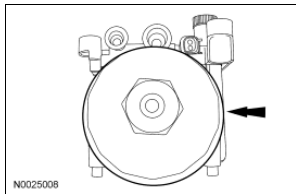


7. Install a new O-ring seal on the fuel filter cover and lubricate with clean engine oil.



8. Install the fuel filter cover.

- Tighten to 25 Nm (18 lb-ft).



[!\[\]\(feabb98897b440bc8695a03336a6e2df_img.jpg\) Printable View \(62 KB\)](#)

Torque Specifications

Description	Nm	lb-ft
Accelerator pedal assembly bolts	22	16

Acceleration Control  [Printable View \(62 KB\)](#)


The diesel engine uses an accelerator sensor assembly located on the accelerator pedal assembly. This drive-by-wire system is entirely electronic and, except for the accelerator pedal assembly, does not use mechanically moving parts. The accelerator sensor assembly is not adjustable.

Acceleration Control  [Printable View \(62 KB\)](#)

Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.

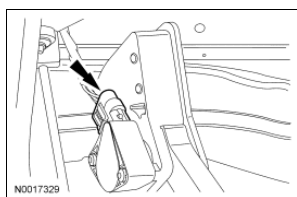
Accelerator Pedal  [Printable View \(125 KB\)](#)

Removal and Installation

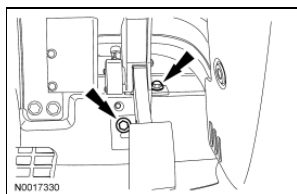
1.  **CAUTION: Make sure the ignition switch is in the OFF position prior to working on the electronic engine controls.**

Turn the ignition switch to the OFF position.

2. Disconnect the accelerator pedal assembly electrical connector.



3. Remove the bolts and the accelerator pedal assembly.
 - To install, tighten to 22 Nm (16 lb-ft).



4. To install, reverse the removal procedure.
-

Speed Control  [Printable View \(63 KB\)](#)

The speed control system is controlled by the engine control module (ECM). The speed control system is designed to maintain a selected vehicle speed between 48 and 200 km/h (30 and 124 mph). The speed control system is controlled by the instrument panel-mounted switches (CRUISE/RPM, RESUME +/SET-) and the brake lamp switch. The instrument panel-mounted switches are hardwired to the ECM.

The speed control functions:

- turn on the vehicle speed control system.
- set and maintain the desired vehicle speed.
- accelerate the vehicle speed.
- coast down to a lower vehicle speed.
- resume the prior vehicle speed.
- turn off the vehicle speed control system.

The speed control system consists of the following components:

- Speed control switches
 - ECM
 - Electronic controlled throttle (ECT) body
 - Brake lamp switch
-