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## Service Information Bulletin

SUBJECT	DATE
Fuel Cooler Leak Test Procedure - Three-Filter Fuel System	May 2014

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	Fuel Cooler Leak Test Procedure - Three Filter Fuel System	Adding note and step to soak cooler in water for two minutes to remove trapped air.



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## 2 Fuel Cooler Leak Test Procedure - Three-Filter Fuel System

Test as follows:

**Table 1.**

Service Tools Used in This Test	
Tool Number	Description
J-45982-7	Air Pressure Regulator
W470589139100	Fuel Cooler Leak Test Plate

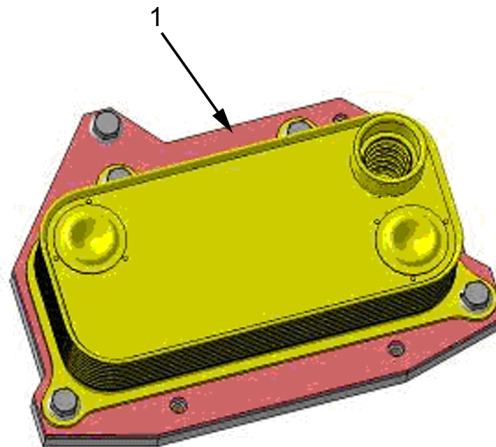
**NOTE:** This test is used only for the Three-Filter Fuel System.



**WARNING: PERSONAL INJURY**

To avoid injury, never remove any engine component while the engine is running.

1. Remove the fuel cooler from the fuel filter module. Refer to section "Removal of the Fuel Cooler - Three-Filter System".
2. Thoroughly clean the surface of the fuel cooler.
3. Install W470589139100 Fuel Cooler Leak Test Plate (1) onto the fuel cooler using supplied mounting bolts.



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4. Gradually tighten bolts in a cross pattern until a torque of 3.5 N·m (30 lb·in.) is achieved.
5. Connect J-45982-7 air pressure regulator to W470589139100 Fuel Cooler Leak Test Plate and turn the regulator counter-clockwise until regulator stops.



**WARNING: PRESSURIZED AIR AND FLYING PARTICLES**

To avoid injury to eye or face, wear a face shield or goggles when conducting a pressure test.

6. Attach shop air supply to the J-45982-7 air pressure regulator and turn the regulator clockwise until the gauge on the tool reads 68 KPa (10 psi).
7. Close the shut-off valve on the J-45982-7 air pressure regulator and disconnect the shop air supply.

**NOTE:** If air bubbles are present between the fuel cooler leak test plate and the fuel cooler, it may be necessary to tighten the mounting bolts. Only tighten enough to prevent air from escaping between the fuel cooler and the fuel cooler leak test plate.

8. Submerge the fuel cooler into a tank filled with warm water and verify no leaks are present between the fuel cooler and the fuel cooler leak test plate.

**NOTE:** Air can get trapped in the fuel cooler when the cooler is placed in the warm water.

9. Soak the fuel cooler in the warm water for two minutes to remove any air that may be trapped in the cooler.
10. Continue to monitor the fuel cooler for one minute and observe if air bubbles escape continuously from the fuel cooler.
  - a. If no air bubbles are present, reinstall the fuel cooler. Refer to section "Installation of the Fuel Cooler - Three-Filter System".
  - b. If air bubbles are present, replace the fuel cooler. Refer to section "Installation of the Fuel Cooler - Three-Filter System".