Service Information Bulletin

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<th>SUBJECT</th>
<th>DATE</th>
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<td>Fuel in Coolant/Coolant in Fuel</td>
<td>January 2013</td>
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Additions, Revisions, or Updates

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<th>Publication Number / Title</th>
<th>Platform</th>
<th>Section Title</th>
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<tr>
<td>DDC-SVC-MAN-0084</td>
<td>DD Platform</td>
<td>Fuel in Coolant/Coolant in Fuel</td>
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# 2 Fuel in Coolant/Coolant in Fuel

## Table 1.

<table>
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<th>Tool Number</th>
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<tr>
<td>W470589012500</td>
<td>DD13 Cylinder Head Leak Tool</td>
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<td>W470589002500</td>
<td>DD15/16 Cylinder Head Leak Tool</td>
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1. Pressurize the cooling system, per Original Equipment Manufacturer (OEM) specifications. Inspect for external coolant leaks.
   a. If external coolant leaks are found, repair as necessary.
   b. If no external coolant leaks are found, Go to step 2.

**NOTE:** The fuel injector O-rings and the fuel injector clamp hold-down bolts must be replaced each time they are removed from the cylinder head.

2. Release the pressure from the cooling system.
3. Remove all six fuel injectors.
   For the three-filter fuel system, Refer to section "Removal of the Fuel Injector - Three-Filter System".
   For the two-filter fuel system, Refer to section "Removal of the Fuel Injector - Two-Filter System".

**NOTICE:** Failure to reinstall the fuel injector hold-down clamps may damage the cylinder head coolant gallery plugs (1).

4. Reinstall the fuel injector hold-down clamps with old fuel injector bolts. Torque bolts to 20 N·m (15 lb·ft) + 90-degree torque turn.

5. Pressurize the cooling system per OEM specifications. Inspect for coolant leaks around the fuel injector cups.
   a. If coolant leaks are found, clean the injector cups and replace all six injector cup O-rings. Then Go to step 8.
      For the three-filter fuel system, Refer to section "Removal of the Fuel Injector Cup - Three-Filter System".
      For the two-filter fuel system, Refer to section "Removal of the Fuel Injector Cup - Two-Filter System".
   b. If no leaks are found, Go to step 6.

6. Test the fuel cooler for leaks. Refer to section "Fuel Cooler Leak Test Procedure - Three-Filter Fuel System".
a. If the fuel cooler fails the leak test, replace the fuel cooler. Then Go to step 8.
   For the three-filter fuel system, Refer to section "Installation of the Fuel Cooler - Three-Filter System".
   For the two-filter fuel system, Refer to section "Installation of the Fuel Cooler – Two Filter System".

b. If no leaks are found, Go to step 7.

7. Remove the cylinder head. Pressure test the cylinder head. For DD13 engines, use tool W470589012500. For DD15 and DD16 engines, use tool W470589002500. Are there any leaks present?
   For the DD13: Refer to section "Removal of the DD13 Cylinder Head".
   For the DD15 and DD16: Refer to section "Removal of the DD15 and DD16 Cylinder Head".

   a. If the cylinder head is leaking, replace or repair as necessary. Then Go to step 8.
      For the DD13: Refer to section "Installation of the DD13 Cylinder Head".
      For the DD15 and DD16: Refer to section "Installation of the DD15 and DD16 Cylinder Head".

b. If the cylinder head is not leaking, Contact the Detroit™ Customer Support Center at (800) 445-1980.

8. If fuel has been identified as a contaminant in the coolant, refer to 12TS-21 for further instructions.