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Service Information Bulletin

SUBJECT	DATE
Contaminated Fluids	March 2015

Additions, Revisions, or Updates

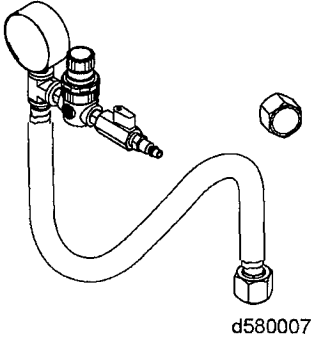
Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	Fuel in Oil	This is a new section.



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2 Fuel in Oil

Table 1.

Service Tools Used in the Procedure		
Tool Number	Tool Description	Tool Graphic
J-48710	Air Pressure Test, Fuel System	 d580007
DiagnosticLink® 7.10 or later		

Check as follows:

1. Perform Low Pressure Leak Test.

For Two-Filter System: Refer to section "FIS Low Pressure Leak Test-Two-Filter Fuel System" . Was a leak detected?

For Three-Filter System: Refer to section "FIS Low Pressure Leak Test - Three-Filter Fuel System". Was a leak detected?

- a. Yes; Go to step 2.
- b. No; Go to step 6.

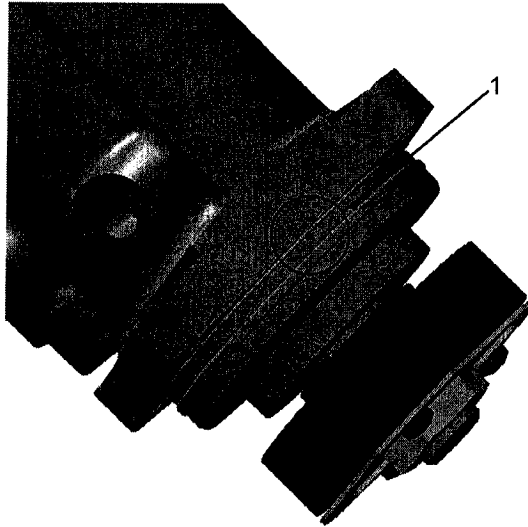
NOTE: The high pressure pump weep hole (1) is located near the six o'clock position where the high pressure fuel pump meets the flywheel housing.



WARNING: PRESSURIZED FUEL

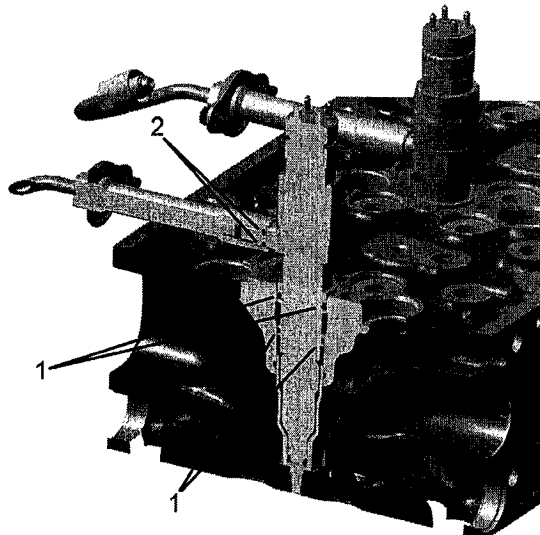
To avoid injury to eye or face, wear a face shield or goggles when conducting a pressure test.

2. Pressurize the fuel system with shop air using tool J-48710 to 517 kPa (75 psi). Check for air leaks at the weep hole (1) on the high pressure fuel pump. Is there an air leak present?



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- a. Yes; replace the High Pressure Fuel Pump.
For Two-Filter System: Refer to section "Removal of the High Pressure Fuel Pump – Two-Filter System". Go to step 12.
For Three-Filter System: Refer to section "Removal of the High Pressure Fuel Pump - Three-Filter System". Go to step 12.
 - b. No; Go to step 3.
3. Remove the rocker cover; pressurize the fuel system with shop air using tool J-48710 to 517 kPa (75 psi). Inspect for leaks at the fuel injector bodies as show below. Was a leak detected?
 - a. Yes; Go to step 4.
 - b. No; Go to step 6.



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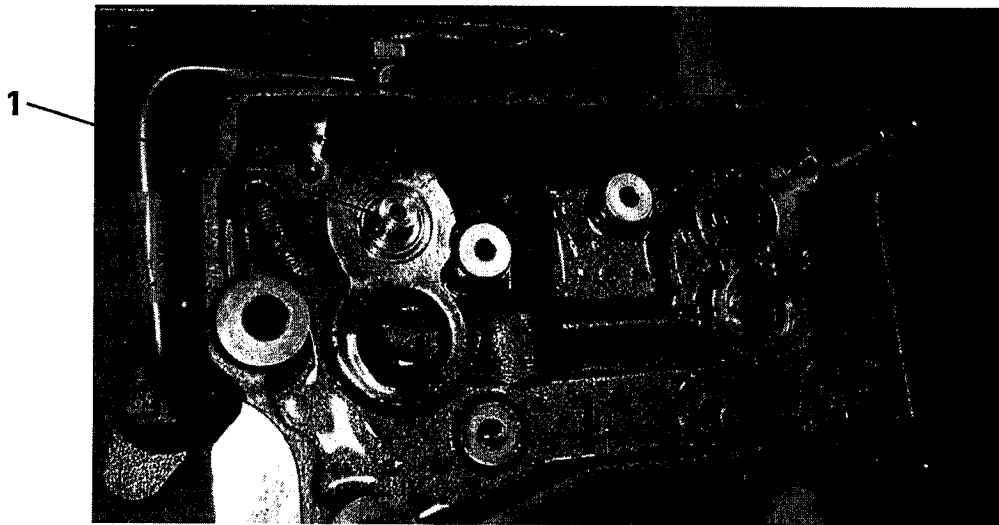
NOTE: The Fuel Injector O-rings, the High Pressure Fuel Injector Line Seal and the Fuel Injector clamp hold-down bolt must be replaced each time a Fuel Injector is removed from the cylinder head.

4. Inspect for a loose Fuel Injector hold-down bolt at the leaking Fuel Injector. Is the hold-down bolt loose?
 - a. Yes; replace the Fuel Injector and its Fuel Injector Cup.

For Two-Filter System: Refer to section "Removal of the Fuel Injector - Two-Filter System" and Refer to section "Removal of the Fuel Injector Cup - Two-Filter System". Go to step 12.

For Three-Filter System: Refer to section "Removal of the Fuel Injector - Three-Filter System" and Refer to section "Removal of the Fuel Injector Cup - Three-Filter System". Go to step 12.

- b. No; replace the fuel injector.
For Two-Filter System: Refer to section "Removal of the Fuel Injector - Two-Filter System", Go to step 5.
For Three-Filter System : Refer to section "Removal of the Fuel Injector - Three-Filter System", Go to step 5.
- 5. Is the Engine Serial Number earlier than xxx3894? Note: In order to remove the Amplification Return Check Valve, Refer to section "Removal of the Fuel Cooler - Two Filter System" or Refer to section "Removal of the Fuel Cooler - Three-Filter System" . Discard this valve and do not replace. Valve is threaded into Fuel Filter Module.
 - a. Yes; Remove the Amplification Return Check Valve (1). Go to step 12.



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- b. No; Go to step 12.

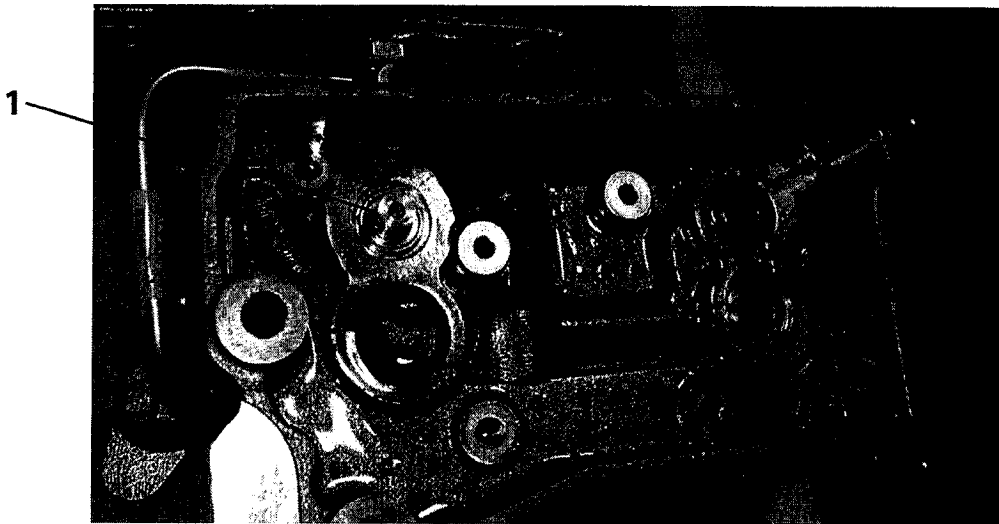


WARNING: HOT OIL

To avoid injury from hot oil, do not operate the engine with the rocker cover(s) removed.

- 6. Perform Fuel Dye Method; Refer to section "Engine Fuel Leaks - Fuel Dye Method - Two-Filter Fuel System" or Refer to section "Engine Fuel Leaks - Fuel Dye Method - Three-Filter Fuel System".
- 7. Inspect for dye at the weep hole on the high pressure fuel pump. Is dye present?
 - a. Yes; replace the High Pressure Fuel Pump.
For Two-Filter System: Refer to section "Removal of the High Pressure Fuel Pump – Two-Filter System" . Go to step 12.
For Three-Filter System: Refer to section "Removal of the High Pressure Fuel Pump - Three-Filter System" . Go to step 12.
 - b. No; Go to step 8.
- 8. Remove the rocker cover. Inspect for dye at the fuel injector bodies. Was dye detected?
 - a. Yes; Go to step 9.
 - b. No; Go to step 11.
- 9. Inspect for a loose Fuel Injector hold-down bolt at the leaking Fuel Injector. Is the hold-down bolt loose?

- a. Yes; replace the fuel injector and its Fuel Injector Cup.
For Two-Filter System: Refer to section "Removal of the Fuel Injector - Two-Filter System" and Refer to section "Removal of the Fuel Injector Cup - Two-Filter System". Go to step 12.
For Three-Filter System: Refer to section "Removal of the Fuel Injector - Three-Filter System" and Refer to section "Removal of the Fuel Injector Cup - Three-Filter System" Go to step 12.
 - b. No; replace the fuel injector.
For Two-Filter System: Refer to section "Removal of the Fuel Injector - Two-Filter System", Go to step 10.
For Three-Filter System: Refer to section "Removal of the Fuel Injector - Three-Filter System", Go to step 10.
10. Is the Engine Serial Number earlier than xxx3894? Note: In order to remove the Amplification Return Check Valve, Refer to section "Removal of the Fuel Cooler - Two Filter System" or Refer to section "Removal of the Fuel Cooler - Three-Filter System" . Discard this valve and do not replace. Valve is threaded into Fuel Filter Module.
- a. Yes; Remove and discard the Amplification Return Check Valve (1). Go to step 12.



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- b. No; Go to step 12.
11. Remove the oil pan and inspect for Dye on the gear train. Is there dye present on the gear train?
- a. Yes; Contact the Detroit™ Customer Support Center at 800-445-1980.
 - b. No; Go to step 12.
12. Is SPN 100/FMI 1 Low Oil Pressure present?
- a. Yes; inspect the rod and main bearings for damage, Refer to section "Inspection of the Main and Connecting Rod Bearing in Chassis". Go to step 13.
 - b. No; Go to step 13.
13. Was a leak found and repaired that would have caused fuel to leak into the oil?
- a. Yes; Change engine oil and release unit.
 - b. No; advise the customer to change the oil and start to perform oil samples every 10,000 miles.