DETROIT DIESEL

Service Information Bulletin

NUMBER: 1 **2**–09 REV **S.M. REF.:** Listed in Table **ENGINE:** DD Platform **DATE:** June 2009

SUBJECT: EXTERNAL AND INTERNAL LOW PRESSURE FUEL LEAK TEST

ADDITIONS, REVISIONS, OR UPDATES

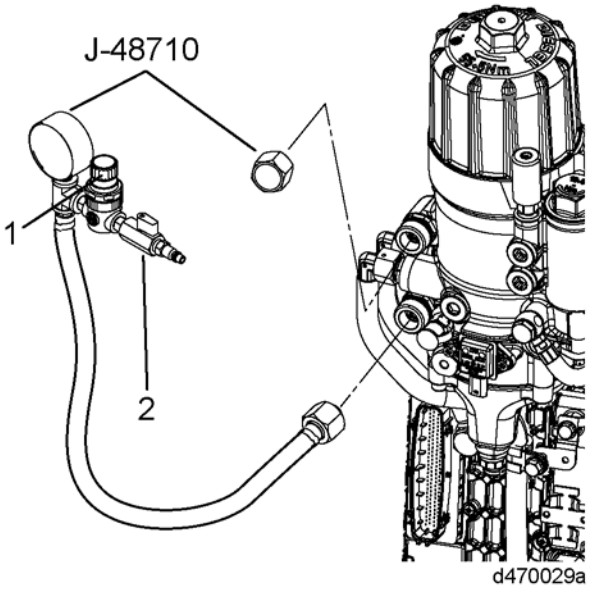
Publication Number	Platform	Section Title	Change	Page Number(s)
DDC-SVC-MAN-0037	EPA07 DD13/DD15 Fuel System Technicians Manual	5.1	Low pressure fuel system pressure has been revised from 30 psi to 75 psi.	5–2
DDC-SVC-MAN-0029	EPA07 DD13/DD15 Troubleshooting Manual	16.4	Low pressure fuel system pressure has been revised from 30 psi to 75 psi.	16–6

NOTE: Page numbers are based on the most recent version of the individual publication and may be adjusted throughout the annual print cycle.

EXTERNAL AND INTERNAL LOW PRESSURE FUEL LEAK TEST

Test as follows:

1. Shut off engine and apply the parking brake, chock the wheels, disconnect vehicle battery power, and perform any other applicable safety steps.
2. Remove the fuel feed and return lines from the fuel filter module.
3. Install J-48710 fuel pressure test kit onto the module.
4. Insure the shutoff valve (2) is in the OFF position.
5. Turn regulator (1) counterclockwise until it stops. The regulator is now set to zero pressure.



⚠ 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. Connect to shop air pressure.
7. Turn the shutoff valve to the ON position.
8. Turn the regulator clockwise to increase pressure in the fuel system to 75 psi.
9. Once the system pressure has reached 75 psi, let the system pressure stabilize for one minute then turn the shutoff valve to the OFF position and disconnect shop air from the regulator.

NOTE:
The fuel cooler and feed line for the amplifier circuit is located behind the fuel filter module. Ensure this area is not overlooked.

10. Wait 30 minutes, then check the pressure. The system pressure should not drop over 30 minutes.
    [a] If the pressure does not drop (still 75 psi), there are no low pressure fuel leaks. Continue troubleshooting elsewhere.
    [b] If the system pressure drops off over 30 minutes, go to the next step.

11. Reconnect shop air and turn on the valve.
12. Use a soapy solution and spray all connectors, fittings, and braided hoses.
    [a] If no leaks are found, go to next step.
    [b] If leaks are found, repair as necessary.
13. Remove oil fill cap and listen for internal air leaks.
    [a] If internal leaks are heard, remove the rocker cover to locate where the leak is coming from, injector/pump. If no injectors show signs of leakage, remove the oil pan and look for leakage coming from behind the fuel pump gear.
    [b] If no internal leaks are located, go to next step.
14. Install cooling system pressure testing tool.
    [a] If cooling system pressure increases and there is fuel in the coolant, replace fuel cooler located behind fuel filter module.
    [b] If cooling system pressure does not increase, return to step 12 and retest. If no problem is found, verify repairs.

ADDITIONAL SERVICE INFORMATION

Additional service information is available in *Power Service Literature*.

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