

SAFETY RECALL BULLETIN

Subject: **Safety Recall 09C4**
EPA07 DD15 Grid Heater

Defect Involved

Detroit Diesel Corporation (DDC) has determined that some certified EPA07 DD15 engines will require reprogramming of the MCM with **v13.2** software (or higher) to disable the grid heater, and removal of the vehicle power and ground cables to the grid heater. The reprogramming includes new fuel injection strategy to retain the ability to start the engine in cold weather. If CPC software is not at **r4.03** (or higher), the CPC must be reprogrammed.

V13.2 MCM software became effective on October 5th, 2009, with engine serial number 472901S0025625.

R4.03 CPC software became effective for Service on December 8th, 2008. It became effective at the truck manufacturing plants on January 18th, 2009.

Engines Involved

A list of engines located in your area of responsibility that require this correction is attached.

The table below gives descriptive information to help identify the affected units:

Model Series	Model Year	Inclusive Mfg. Date (From) (To)	Descriptive Information
D472900 D472901 D472902 D472901-CD	2007, 2008, and 2009	January, 2007 to October 5, 2009	All Applications

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Owner Notification

Detroit Diesel will notify owners of equipment incorporating engines identified with this safety recall. A copy of the owner letter that will be used by Detroit Diesel is enclosed with this recall notice.

Distributor / Dealer Modification Responsibility

Detroit Diesel Repair Facilities are to service all engines subject to this recall. The recall is to be performed at no charge to owners on all affected engines under the provisions of this recall notice.

Please use the appropriate steps, noted below, for indicating that **Safety Recall 09C4** has been completed.

Freightliner, Sterling, and Western Star Trucks

- Check the base label (**Form WAR259**) to see if **Safety Recall 09C4** has been completed. The base label is usually located on the passenger-side door about 12 inches (30 cm) below the door latch. If **Safety Recall 09C4** has been completed, no further work is needed. If base label is not located on the passenger-side door, please affix label (**Form WAR259**) 12 inches or 30 cm from the door latch.
- Upon completion of **Safety Recall 09C4**, clean a spot on the base label (**Form WAR259**), write the Safety Recall Number (**09C4**) on a blank, red completion sticker (**Form WAR260**), and attach it to the base label.

Ordering Information

If you do not have the appropriate Form or Labels (DDC_WAR 259, DDC_WAR 260, DDC_WAR 261) there are several ways which they can be obtained:

1. Through the Detroit Diesel Extranet and clicking on Access EPI or going directly to ddc@epiinc.com.
2. Fax your order to (269) 968-4260; or
3. Contact EPI directly at (269) 964-4600 Ext. 5806.

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Parts Information

There are no formal part numbers required to complete **Safety Recall 09C4**. The only items needed are dual wall heat shrink tubing and cable (zip) ties, which are normal shop supplies.

Corrective Procedure

1. Apply the parking brake, chock the wheels, and perform any other applicable safety steps.
2. You **MUST** use the latest version of Detroit Diesel Reprogramming Software (DDRS) 7.04 with Service Pack 4 (or higher) to program the MCM, and CPC (if necessary). **REFERENCE** attached letter 09 CSA-34.
3. Check the Warranty system to see if **Modification 08M3** DD15 Cold Boost Pipe has been performed. If **Modification 08M3** has **NOT** been performed, you **MUST** install the necessary parts per the **Modification 08M3** bulletin in order to complete **Safety Recall 09C4**.
 - a) If you are performing **Modification 08M3**, the mainframe **MUST** be updated to the correct fuel map before you reprogram the MCM per the **Modification 08M3** bulletin. Email (csc@daimler.com) or call the Detroit Diesel Customer Support Center (313-592-5800) to have the mainframe reset to the correct fuel map.
 - b) If **Modification 08M3** was previously completed, it is not necessary to email or call the Customer Support Center.

NOTICE:

Safety Recall 09C4 and **Modification 08M3** both include reprogramming of the MCM. If you are performing **Safety Recall 09C4** and **Modification 08M3** at the same time, you only need to program the MCM once and you will only be paid for programming the MCM once.

NOTICE:

If you are performing **Safety Recall 09C4** and **Modification 08M3** at the same time, you **MUST** file two separate warranty claims per the guidelines in each bulletin. For **Modification 08M3**, you will only be paid for installing the parts since the reprogramming will be covered under **Safety Recall 09C4**.

4. Program the MCM to v13.2.0.0 software using the "Update Device Software" option. Select "No Charge", then "Description", and enter "09C4" in the "Provide Reference" box.

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5. Using the "Identification" screen in DDRS 7.04, check the CPC software level. If the CPC is not at r4.03 software or higher, program it to r4.03 using the "Update Device Software" option. Select "No Charge", then "Description", and enter "09C4" in the "Provide Reference" box.
6. When programming is complete, click the "Finish" button and perform the following. Reference Technical Service letter 07 TS-53.
 - a) Turn the vehicle ignition OFF, disconnect the USB Link at either the computer port or vehicle diagnostic port, and wait one minute.
 - b) Turn the vehicle ignition ON and wait one minute for the MCM and CPC to synchronize with each other.
 - c) Reconnect the USB Link, reconnect DDRS 7.04 to the MCM and CPC, and confirm the proper software levels. See Figure 1.



Figure 1 – Confirm Software Levels

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7. Turn the vehicle ignition OFF and disconnect the batteries.
8. Disconnect the negative (ground) cable from the grid heater and the vehicle frame and completely remove the cable from the vehicle. See Figure 2.

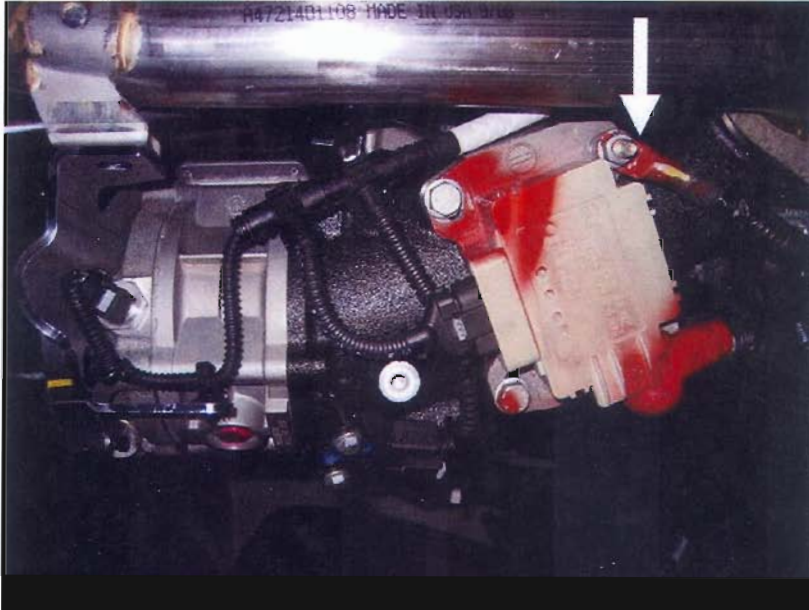


Figure 2 – Negative (Ground) Cable Connection At Grid Heater

9. Disconnect the positive cable from the grid heater. See Figure 3.

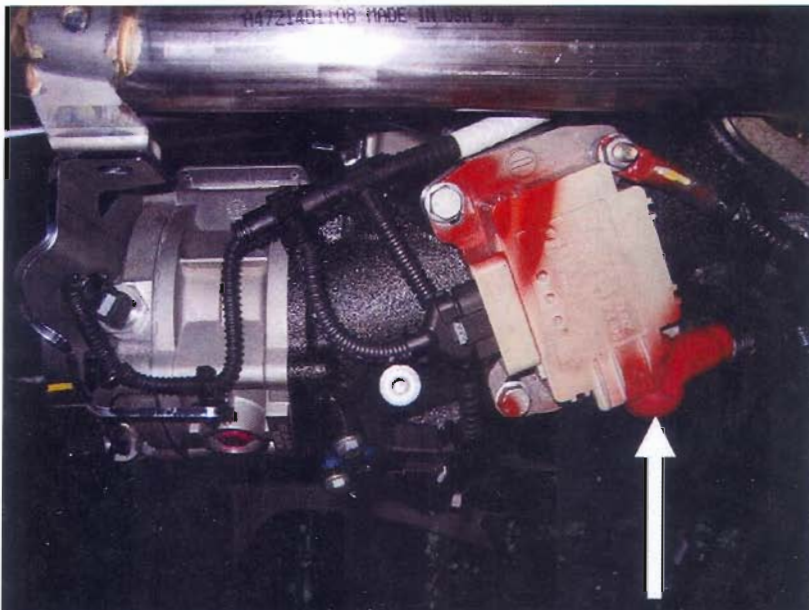


Figure 3 – Positive Cable Connection At Grid Heater

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10. The other end of the positive cable is located at the following points.
 - a) On Freightliner and Sterling trucks, the positive cable is located at the alternator connection.
 - b) On Western Star trucks, the positive cable is located at the starter solenoid.
11. If the positive cable is **NOT** part of the vehicle-side engine harness, disconnect the other end of the positive cable as described in step #10 and completely remove the positive cable from the vehicle. Then go to step #17.
 - a) On Freightliner and Western Star trucks, the positive cable was **NOT** part of the vehicle-side engine harness on trucks built before July 7th, 2008.
 - b) On Sterling trucks, the positive cable was **NOT** part of the vehicle-side engine harness on trucks built before July 15th, 2008.
12. If the positive cable is integrated into the vehicle-side engine harness, disconnect the cables at the power supply end as described in step #10 and use a continuity tester between the positive grid heater cable terminal and the cables that were just disconnected to determine which cable is the correct power supply for the grid heater.
13. Cut **BOTH** ends of the positive cable approximately 2" from the cable clipping points leaving the majority of the cable in the harness.
14. Use dual wall heat shrink tubing to seal both ends of the positive cable.
15. Zip tie or tape the loose positive cable ends back to the vehicle-side engine harness.
16. Reconnect the uncut cables at the starter or alternator.
17. Leave the engine sensor harness connector plugged into the grid heater.
18. Connect the batteries.
19. Start the engine and verify the repairs.

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Warranty Information

Claim Type:	04
Modification:	09C4
Fault Type:	ZZ
Primary Failed Part:	A0001592404
Labor:	1.0 Hour
Labor Code:	R09C4
Parts Return:	NONE

Should you have any additional questions, please contact Detroit Diesel.

DETROIT DIESEL
13400 Outer Drive West
Detroit, Michigan 48239-4001

BULLETIN