DETROIT DIESEL

No.: 07 TS-40
July 27, 2007

TO: Service Locations

FROM: Technical Support Development

SUBJECT: **EPA07 MBE 900 Pre-Delivery Inspection for Freightliner, Sterling, and Freightliner Custom Chassis Corporation (FCCC) Applications (no school buses)**

ISSUE

EPA07 MBE 900 powered trucks must have several checks performed to ensure proper operation before they are delivered to their end users. These checks apply **ONLY** to vehicles meeting the following requirements:

- The vehicles **MUST** be Freightliner, Sterling, or Freightliner Custom Chassis Corporation applications (**NO** school buses).
- The vehicles **MUST** be undelivered to the end customer (pre-delivery status).

School bus applications will be covered in a separate Technical Service letter published the week of July 30th.

REQUIRED ACTION

Before performing any work on the vehicle, you **MUST** ensure that you have either Detroit Diesel Diagnostic Link (DDDL) 7.0 or Detroit Diesel Reprogramming Software (DDRS) 7.0 properly loaded onto a computer and that the DDDL/DDRS software has Service Pack 6. Reference letters 07 CSA-08 (for DDDL 7.0) and 07 CSA-11 (for DDRS 7.0) to make sure you have the correct level of diagnostic software. The Nexiq USB Link is **REQUIRED** to communicate with the vehicle if you are using DDRS 7.0. The Nexiq USB Link is **STRONGLY RECOMMENDED** to communicate with the vehicle if you are using DDDL 7.0. Reference letter 07 TS-18 for more information on the USB Link.

Once you have verified you have a properly functioning computer with DDDL 7.0 or DDRS 7.0, perform the following tasks:

- Verify the electrostatic oil separator has been updated. The part number on the rocker cover should be P/N: A9260100530. See Figure 1. If the separator needs to be changed, email the Detroit Diesel Customer Support Center at csc@detroitdiesel.com. The new parts will automatically be sent to you free of charge.

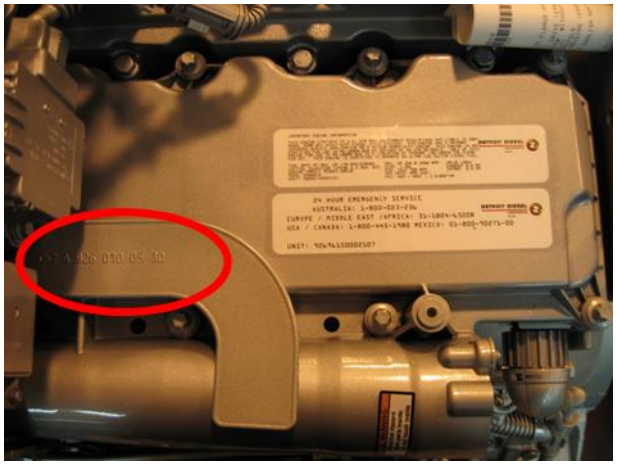

Figure 1 – Location of Electrostatic Oil Separator Part Number

- Using either DDDL 7.0 or DDRS 7.0, attach the diagnostic computer to the vehicle and turn ON the ignition. Click on the “Identification” button on the left side of the screen, and then click on the “Common” tab near the top. Verify the MCM software is v8.3 and the CPC software is r2.0. See Figure 2. If the software needs to be updated, call the Detroit Diesel Customer Support Center at 313-592-5800.

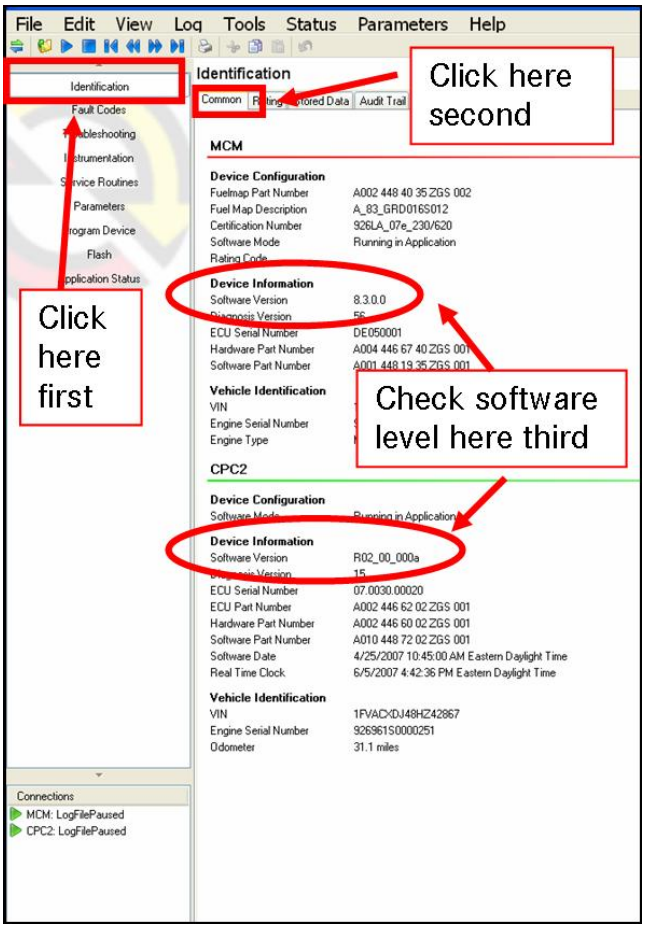

Figure 2 – Proper Identification of MCM Software v8.3 and CPC Software r2.0.

- Start a hydrocarbon (HC) doser purge service routine by doing the following:
    1. Start the engine and let it run at base (low) idle.
    2. Make sure the transmission is in neutral and the parking brake set (ON).
    3. Using either DDDL 7.0 or DDRS 7.0, attach the diagnostic computer to the vehicle. Click on the “Service Routines” button on the left side of the screen, and then click on the “HC Doser” tab near the top. See Figure 3.

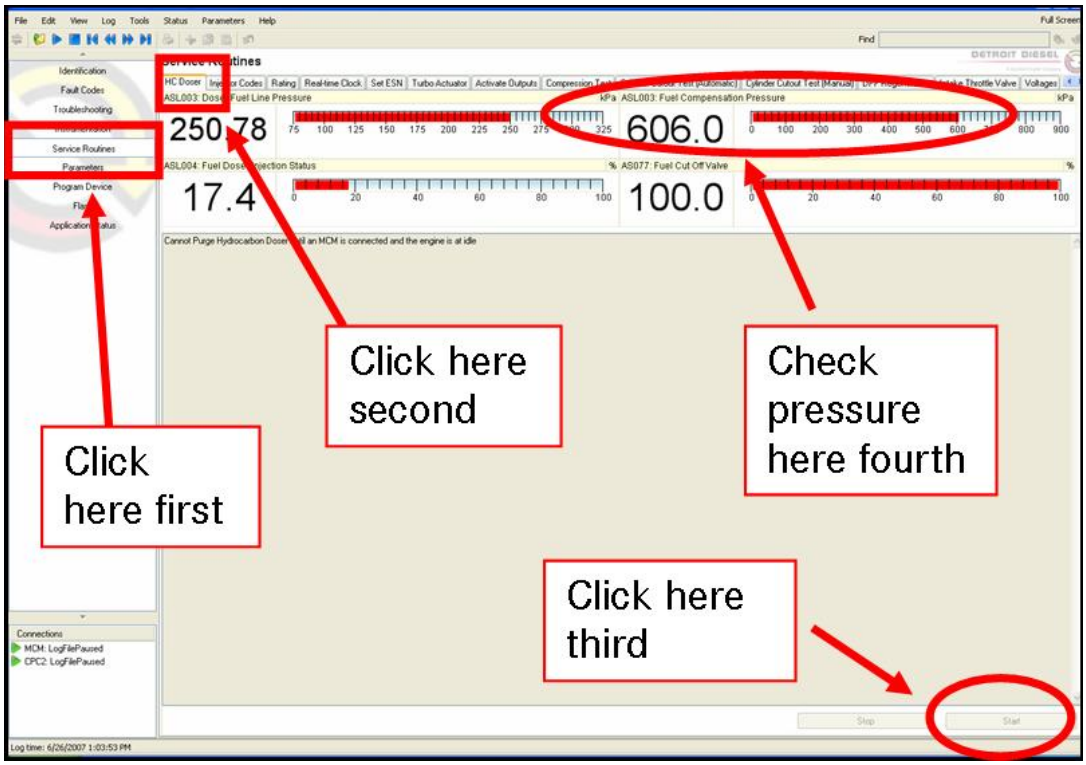

Figure 3 – DDDL/DDRS 7.0 “HC Doser” Service Routine

4. Click the button marked “Start” and monitor the Fuel Compensation Pressure while the purge routine is taking place. The purge routine only takes 2 or 3 seconds so watch the computer screen carefully. Note the log file that is generated can be replayed to review the Fuel Compensation Pressure. If the Fuel Compensation Pressure is less than 65 psi (450 kPa), or greater than greater than 100 psi (689 kPa), call the Detroit Diesel Customer Support Center at 313-592-5800.
5. If any fuel system repairs are made, repeat steps 1-4 and make sure the Fuel Compensation pressure is between 65 – 100 psi (450 – 689 kPa) before proceeding to the parked regeneration described below.

- Start a parked regeneration of the Aftertreatment Device (ATD) by doing the following:
    1. Start the engine and warm it up. Move the vehicle outside if it is not already there.
    2. Make sure the transmission is in neutral and the parking brake set (ON).
    3. Engine must be at base (low) idle (cannot be in fast idle or PTO mode).
    4. Using either DDDL 7.0 or DDRS 7.0, attach the diagnostic computer to the vehicle. Click on the “Service Routines” button on the left side of the screen and then click on the “DPF Regeneration” tab near the top after scrolling it into view. See Figure 4.

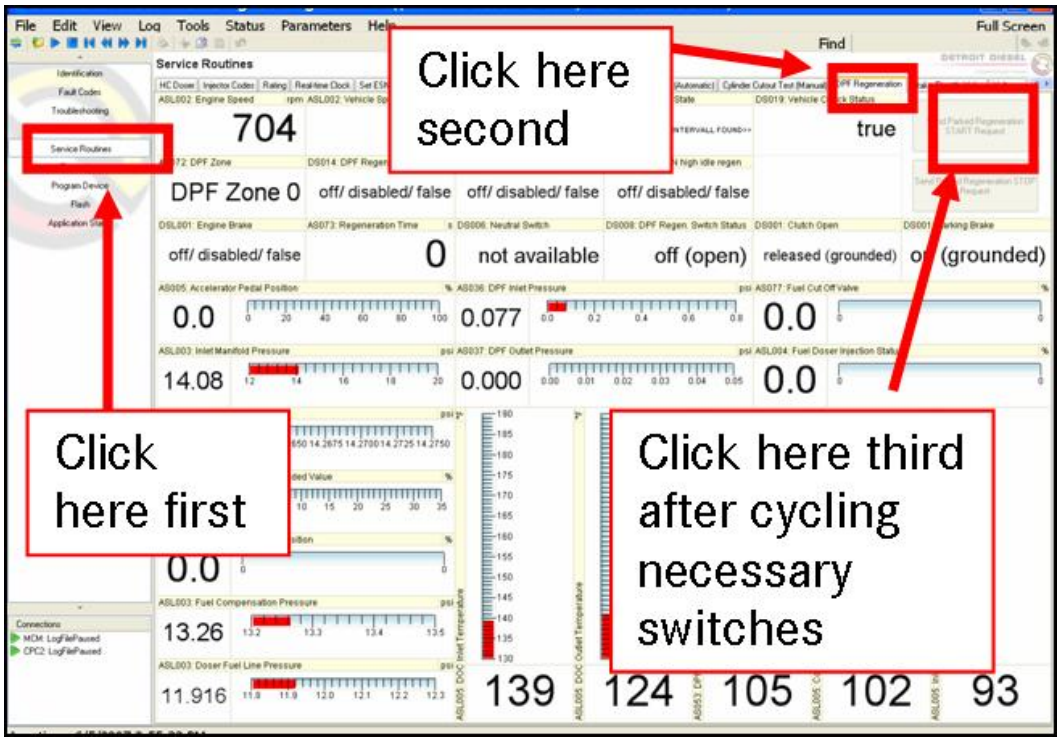

Figure 4 – DDDL/DDRS 7.0 “DPF Regeneration” Service Routine

    5. Cycle the park brake to OFF and then back ON.
    6. For automatic transmissions, move the transmission selector to DRIVE and then back to NEUTRAL. For manual transmissions, press and then release the clutch pedal.
    7. Click the button marked “Send Parked Regeneration START Request”.
    8. Engine speed (rpm) should now increase as the regeneration begins.
    9. You **MUST** leave the diagnostic computer connected to the vehicle during the regeneration. Disconnecting the diagnostic computer will cause the regeneration to stop.
    10. The driver **MUST** stay with the vehicle throughout the regeneration process.

A successful parked regeneration should take 20-40 minutes and will end when the engine returns to idle speed. If you are using a laptop for the parked regeneration, make sure the laptop battery is sufficiently charged to last the entire parked regeneration. Use a corded electrical supply if necessary. If the unit successfully completes a regeneration, release the vehicle.
If you encounter problems during the regeneration, note any codes or other info and call the Detroit Diesel Customer Support Center at 313-592-5800.

CLAIM PROCESS

Use the following information when filing claims for successful hydrocarbon doser purge routines and parked regenerations. For other issues that you may encounter (MCM or CPC software update, electrostatic oil separator update, fuel system repairs, etc.), file separate claims for each particular failure.

Claim Type:	01
Authorization Number:	**PDI**
Failure Code:	037
Complaint Code:	PD
Primary Failed Part:	**REGEN**
Labor OP 062600:	0.7 HOUR
Parts Return:	**NONE**

CONTACT INFORMATION

Please contact the Detroit Diesel Customer Support Center at 313-592-5800 if you have any questions.