Technical Service Information



TSI-07-08-01RA

Date: June, 2007

Subject File: Electrical

Subject: New Instrument Panel Cluster Indicators for 2008 Model Year

Model: 3200, 4100, 4300, 4400, 7300, 7400, 7500, 7600, 7700, 8500, 8600, BE 200, CE Bus, ProStar

DESCRIPTION

A number of important changes to the instrument cluster have been incorporated for trucks and buses built in 2007, model year 2008.

1. The gauge sweep no longer occurs when the ignition is turned on.

NOTE – For ProStar trucks equipped with the VID (Vehicle Information Display), the gauge sweep can be requested through the display.

NOTE – For any vehicle not equipped with the VID, the gauge sweep will occur when the display of on-board diagnostics is requested.

- 2. The odometer display button is now used not only to clear resettable values (by pushing), but also to select LCD quadrants (by turning). Refer to the Operator's Manual for specific instructions.
- 3. The amber Driver Alert symbol has been changed to:



It can be turned on not only by the engine but also by other modules/controllers connected to the J1939 data link. This indicator, therefore, no longer represents only an engine alert condition. To correctly identify the actual alert condition, a text message in quadrant 2 of the LCD will be displayed.

DESCRIPTION (CONT.)

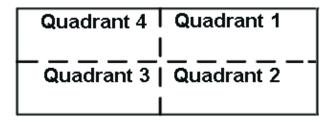


Figure 2 NOTE: Functions of the 4 quadrant LCD are described in the operator's manual.

4. The red stop symbol has been changed to:



This indicator can also be turned on by multiple modules/controllers, similar to the Amber Driver Alert. Quadrant 2 will display a text message identifying the source.

5. The amber emissions system warning symbol has been changed to:



6. A new indicator for High Exhaust System Temperature (HEST) has been added.



This **IS NOT** an indication of engine overheat. This indicator warns the driver that the exhaust temperature is high. It will come on because of NORMAL passive or active regeneration or exhaust high temperature duty cycles. The HEST lamp will come on if exhaust temperature is 400°C+ and vehicle speed is less than 5 mph. This condition is NORMAL and is not related to an engine or cooling system overheat condition.

NOTE – The following pages are meant as an explanation of the DPF gauge and symbol readings as the truck goes through preparation for and during regeneration to clear the emissions in the system.



OPERATING CONDITIONS FOR 2007 EPA EMISSIONS EQUIPPED VEHICLES



LOW SOOT LOAD



SITUATION

Exhaust filter regeneration required.

DRIVER RESPONSE

Drive on highway at highway speeds OR start Parked Regeneration (see flipside) to prevent loss of power.

MODERATE SOOT LOAD



SITUATION

Exhaust filter is full.

DRIVER RESPONSE

Pull vehicle safely off roadway and start Parked Regeneration (see flipside) to prevent loss of engine power.

FULL SOOT LOAD/ MODERATE DE-RATE



(1) 5 Short Beeps Every Minute

SITUATION

Exhaust filter is full. Engine performance is LIMITED.

△ WARNING

DRIVER RESPONSE

Pull vehicle safely off roadway and start Parked Regeneration (see flipside) to prevent engine SHUTDOWN.

OVER-FULL SOOT LOAD/ SEVERE DE-RATE



(1) Repetitive Short Beep

SITUATION

A serious engine problem has occurred. Exhaust filter may be overfull. Engine may SHUTDOWN soon.

△ WARNING

DRIVER RESPONSE

Pull vehicle safely off roadway, turn on flashers, place warning devices and STOP ENGINE. DO NOT USE Parked Regeneration. Call for service.







PROCEDURE FOR PERFORMING A PARKED REGENERATION ON A O7EPA VEHICLE*



(*IF EQUIPPED)

- Park the vehicle safely off the roadway and away from flammable materials.
- Before initiating Parked Regeneration (pressing the optional PARKD REGEN switch), the following four conditions must be in place:

A. Park Brakes On



B. Transmission in Park or Neutral



C. No Foot Pedals Applied



D. Engine Coolant Temperature





NOTE: If any of the above conditions are altered during the Parked Regeneration process, regeneration will be halted, and must be restarted.

Optional Switch

3. Press and hold the PARKD REGEN switch for 2 seconds to initiate the regeneration cycle. The engine speed will automatically ramp up to a preset RPM and the switch indicator will illuminate solidly when the cycle is started. If the indicator is blinking, check to be sure that all conditions in step 2 are met. Once started, the regeneration cycle will last approximately 20 minutes.



NOTE: In the event of an emergency situation where the vehicle must be moved after beginning Parked Regeneration, press the **PARKD REGEN** switch in the down (lower) position.







4. When the regeneration cycle is complete, the switch light will go off, the engine RPM will return to normal idle and all exhaust filter indicators will be off. The vehicle may now be driven normally.



DPF Status Lamp: Turns on solid or flashes to indicate the Diesel Particulate Filter (DPF) has reached a soot level where regeneration is needed.



HEST High Exhaust Temperature Lamp: Warns the driver that exhaust temperature is high. Will come on because of NORMAL passive or active regeneration or high duty cycles.

