

2007 EPA Emission Vehicles

“What Do I Do When the Light Comes On?”

Three Different Types of Regeneration

Passive Regeneration

- The natural process of regeneration where the engine provides sufficient temperature through the exhaust gasses to convert the particulate matter to ash.

Active Regeneration

- The process of regeneration where changes to the engine operation are required and handled through the vehicle and engine software to increase the exhaust temperature so that particulate matter can be converted to ash.

Manual (Parked) Regeneration

- The process of regeneration where the operator may request that the vehicle and engine change their state to increase the temperature of the exhaust gasses so that regeneration can occur and convert particulate matter to ash. Often referred to as *Parked Regeneration*.

Driver Interface: Manual (Parked) Regeneration

Pre-Set Conditions:

- DPF lamp must be illuminated
 - Solid or Flashing
- Engine temperature must be at operating conditions
 - Coolant should be at 170° F or greater
- Ensure Tailpipe is clear from flammables

Desired Response:

- Set parking brake
- Place transmission in Neutral or Park
- Push PARKD REGEN switch
- Driver goes “Hands-Off”
 - No accelerator, brake or clutch pedal input
- Engine ECU takes control



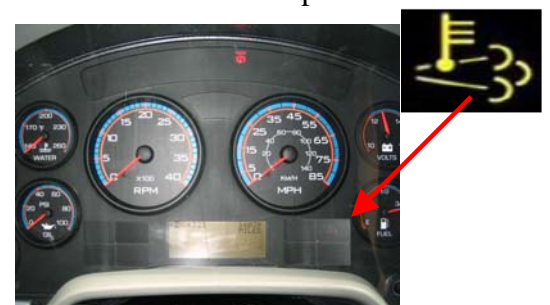
Emission Labels

The below label is placed on the drivers sun visor and serves as a quick reference to the Regeneration Processes.

EMISSION SYSTEM INSTRUCTIONS				
(Solid)	(Flashing)	(Flashing) (Solid)	(Solid)	Exhaust System Temperature is HOT
LEVEL 1 Exhaust filter regeneration required.	LEVEL 2 Exhaust filter is full.	LEVEL 3 Exhaust filter is full. Engine performance LIMITED.	LEVEL 4 A serious engine problem has occurred. Exhaust filter may be overfull. Engine may SHUTDOWN soon.	WARNING: Exhaust components and exhaust gas are at extremely high temperatures. When stationary, keep away from people and flammable materials, vapors, or structures or STOP ENGINE.
Drive on highway at highway speeds OR start "Parked Regeneration" to prevent loss of engine power.	Pull vehicle safely off roadway and start "Parked Regeneration" to prevent loss of engine power.	WARNING: Pull vehicle safely off roadway and start "Parked Regeneration" to prevent engine stopping.	WARNING: Pull vehicle safely off roadway, turn on flashers, place warning devices, and STOP ENGINE. Seek service immediately.	
* See Operator's Manual for Further Details				
WARNING: When performing "Parked Regeneration, make certain vehicle is safely off roadway and exhaust system is away from people, or any flammable materials, vapors, or structures. Parked Regeneration may increase engine speed.		WARNING: Failure to follow these instructions may result in a loss of engine power, vehicle speed, increased exhaust temperatures, and may cause an accident or fire resulting in property damage, personal injury, or death.		

HEST Lamp

The High Exhaust System Temperature Lamp (HEST Lamp) warns the driver that exhaust temperature is high. Will come on because of NORMAL passive or active regeneration or high duty cycles at +400°C and below 5mph.



NAVISTAR®

ENGINE GROUP

Aftertreatment Lamps: Level 1

Low Soot Load

- DPF Lamp, *Solid*



Situation: Exhaust filter regeneration required.

Operator Action: Drive continuously at 30 mph or greater until the DPF light turns off. Continue to drive at this pace for 10-15 minutes after the DPF lamp turns off. OR, initiate a parked regen.

Aftertreatment Lamps: Level 2

Moderate Soot Load

- DPF Lamp, *Flashing*



Situation: Exhaust filter full.

Operator Action: Pull vehicle safely off roadway and start Parked Regeneration to prevent loss of engine power.

Aftertreatment Lamps: Level 3

Full Soot Load

- DPF Lamp, *Flashing*
- Amber Warning Lamp is on
- Warn Engine text on LCD
- Audible alarm is on



Situation: Exhaust filter full. Engine performance *limited*.

Operator Action: Pull vehicle safely off roadway and start Parked Regeneration to prevent engine stopping.

Aftertreatment Lamps: Level 4

Over Full Soot Load

- DPF Lamp, *Off*
- Stop Engine Lamp is on
- Audible alarm is on



Situation: Exhaust filter may be overfull. Engine may *shutdown* soon.

Operator Action: Pull vehicle safely off roadway, turn on flashers, stop engine. Do not start Parked Regen. Seek service.