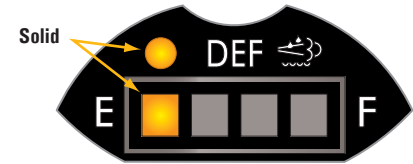


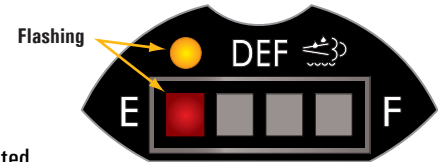
## DIESEL EXHAUST FLUID (DEF) INDICATOR LAMPS

- The light bar indicates the level of fluid in the DEF tank.
- Low DEF levels will trigger a decrease in engine performance.
- The use of improper fluid will trigger a decrease in engine performance.
- In the empty and ignored state, vehicle speed will be limited to 5 mph until DEF is detected in the tank.

DEF level is very low

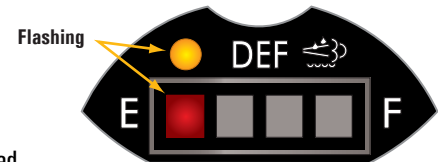


DEF level is **EMPTY**

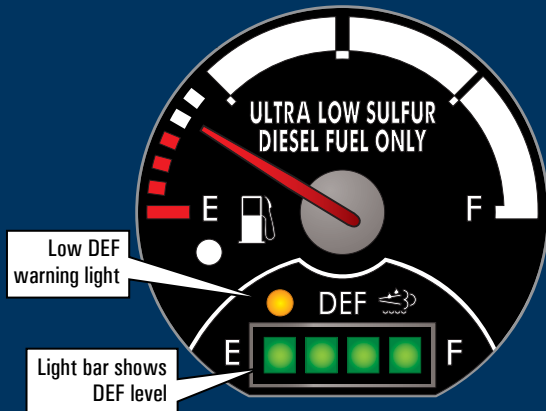


Vehicle speed limited to 55 mph / engine derated

DEF level is **EMPTY** and **IGNORED**



Vehicle speed limited to 5 mph / engine derated



## DRIVER NOTIFICATIONS, DESCRIPTIONS AND ACTIONS

### NOTIFICATION AND DESCRIPTION

### DRIVER ACTION



#### High Exhaust System Temperature Lamp (HEST)

- **Solid:** Exhaust is at high temperature and vehicle is at low speed or parked.
- **Flashing:** Parked regeneration in process. System is not up to temperature.

No change in driving style is required.  
When parked, keep vehicle at a safe distance from people and flammable materials or vapors



#### Malfunction Indicator Lamp (MIL)

- Failure of an Emission Control Device.
- May illuminate at the same time as the Check Engine Lamp.

Vehicle can be driven to end of the shift.  
If the MIL remains on after 3 drive cycles, call for service.



#### DPF Regeneration Lamp

- **Solid:** Parked regeneration may be needed.
- **Flashing:** Parked regeneration is required as soon as possible.
- Diesel Particulate Filter reaching system limits.

Perform a parked regeneration **OR** bring vehicle to highway speeds to enable Automatic Regeneration of the filter.

Flashing



#### DPF Regeneration Lamp / Check Engine Lamp ENGINE DERATED

- Diesel Particulate Filter has **reached** system limits.

A parked regeneration **must** be performed.  
If the parked regeneration exits and the lamps remain on, repeat the parked regeneration. If the second attempt fails call for service.



Flashing



#### DPF Regeneration Lamp / Check Engine Lamp / Stop Engine Lamp ENGINE SHUTDOWN

- Diesel Particulate Filter has **exceeded** system limits.

A parked regeneration **must** be performed. If the parked regeneration exits and the lamps remain on, repeat the parked regeneration. If the second attempt fails call for service.  
**Note:** Engine can be restarted but a parked regeneration must be initiated within 30 seconds or the engine will shutdown.



#### Fuel Filter Restriction Sensor Lamp (FFRS): Fuel Filter Restricted

- Fuel Filter is restricted.

Driver has one to three days to seek service or the engine may derate.



#### Water In Fuel Lamp (WIF)

- Water level is too high and must be drained from the fuel system.

Engine water separator must be drained or an engine derate will occur.

## PARKED REGENERATION PROCEDURE

1. Keep engine at slow idle (cannot be in PTO mode).
2. Cycle transmission out of neutral and back into neutral.
3. Cycle the park brake from OFF to ON.
4. Press and release clutch pedal (if configured).
5. Hold DPF Switch to the ON position for five (5) seconds, then release (engine speed will increase and DPF Lamp will go out).



← Push to initiate

DPF Switch

- The parked regeneration may take up to 40 minutes.
- The parked regeneration is completed when the engine returns to low idle and the DPF Lamp remains off. The HEST light may remain on but the vehicle can be driven.
- A parked regeneration will stop if the key is turned to the OFF position, clutch is depressed, the truck is put into gear or the parking brake is released.