

Cummins ISB-07 Diesel Particulate Filter (DPF) Regeneration

To meet current emissions regulations, this vehicle is equipped with a Diesel Particulate Filter as part of its exhaust aftertreatment system. The DPF traps diesel particulates and requires periodic service to ensure its proper functionality. Servicing involves regeneration (burning) of the trapped particulates. The engine's ECM senses when regeneration is required and can automatically, under the correct conditions, initiate regeneration. If the correct conditions cannot be met the operator must initiate a "Stationary" regeneration. Not performing a "Stationary" regeneration, when required, will necessitate the removal of the DPF for service.

High Exhaust Temperature Lamp

The "HIGH EXHAUST TEMPERATURE" lamp illuminates to indicate that HIGH EXHAUST TEMPERATUREs exist. When this lamp is illuminated the engine should be stopped and the exhaust system allowed to cool before restarting the engine.



DPF (Diesel Particulate Filter) Regen Needed Lamp

The "DPF REGEN NEEDED" lamp indicates, when illuminated or flashing, that the diesel particulate filter requires regeneration.

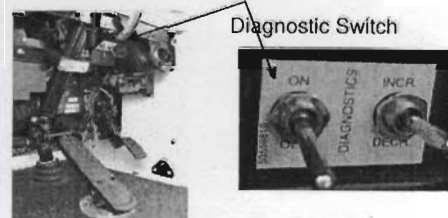
When the "DPF REGEN NEEDED" lamp illuminates the diesel particulate filter needs to regenerate within the next 2-6 hours of operation. This is accomplished by:

- 1) Changing to a more challenging duty cycle, such as highway driving, for at least 20 minutes
- OR
- 2) Performing a "Stationary" Regeneration.

If a regeneration is not completed in a timely manner after the "DPF REGEN NEEDED" lamp illuminates the lamp will begin to flash. When this happens the actions above should be performed within 1-2 hours. In addition, engine power may be reduced automatically.

Performing a "Stationary" regeneration

- 1) Park the vehicle in an area where it can safely idle for up to 50 minutes. The regeneration period may be from 5 to 50 minutes, depending upon severity.
- 2) Set the parking brake and let the truck idle.
- 3) Turn the diagnostic switch to the "ON" position. The switch is located under the dash, to the right of the steering column.
- 4) Do not throttle the engine or apply the brake pedal until the regeneration is complete and the DPF light goes out. Throttling the engine and / or applying the brake will stop the regeneration process.
- 5) Turn the diagnostic switch to the "OFF" position after regeneration is complete.



Check and Stop Engine Lamps

A flashing "DPF REGEN NEEDED" lamp combined with an illuminated "CHECK ENGINE" lamp indicates that the Diesel Particulate Filter needs to be regenerated immediately. Engine power will be reduced automatically. A "Stationary" regeneration is required immediately.



Note: If a "Stationary" regeneration is not performed, the red "STOP ENGINE" lamp will illuminate. The vehicle should be stopped as soon as it can safely be done and remain shut down until it can be serviced by a Cummins authorized repair location.

Driver Tips

- ◆ The electric-actuated variable geometry turbocharger causes the engine sound to vary at times. This is normal. A slight turbo whistle may also be observed at idle conditions.
- ◆ After prolonged idle, you may notice momentary white vapor and odor. This is normal.
- ◆ When the "HIGH EXH TEMP" Lamp is illuminated, you may notice an odor. This is normal. If the odor is excessive and you also notice white vapor, have the exhaust system inspected for leaks.
- ◆ Use only Ultra Low Sulfur Diesel (ULSD) fuel.
- ◆ CJ-4 (low ash) is the recommended oil. This will increase the time between regeneration events.
- ◆ CI-4+ is permitted. Read your Cummins Owners manual for specific details.