Buzz here! Calling all County Technicians!

Do you or your drivers have questions about the 2007 emission DPF regeneration process and the dash lights?

We get periodic calls from counties asking questions.
Normal highway driving, or operating the engine under load, helps keep the Diesel Particulate Filter (DPF) hot enough to self-clean, but operating with a light load or at reduced speeds or idling can allow soot to build up in the DPF.
The soot accumulation causes a dash indicator lamp to come on indicating that a regeneration must happen soon. The light is pictured below. If ignored, it will start to flash and eventually de-rate the engine.
All 2007 emission buses delivered had the following in each bus:

- Colored placard left of the driver seat explaining the dash lights.
- Laminated cards provided for each bus with dash light and regeneration info.
- Explanation sheet prepared by Carolina Thomas at request of DPI to help.
I am providing this information here so you can refresh yourselves on this information. My hope is that this will make your job easier.

Please call us if you need any help. 1-800-440-3492.

There is additional information in your operators manual to manually make a bus regen.
Diesel Particulate Filter (DPF) Status Light On, EPA07 Engines

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**EXHAUST AFTERTREATMENT SYSTEM INFORMATION**

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<td>System Failure</td>
<td>Engine will shut down.</td>
<td>Engine will shut down.</td>
<td>Engine will shut down.</td>
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<tr>
<td>Component Failure</td>
<td>System Failure</td>
<td>Engine will shut down.</td>
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<td>Engine will shut down.</td>
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<tr>
<td>Component Action</td>
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<td>Using vehicle at lower speed to allow for an Automatic or Manual regeneration or perform a Manual regeneration.</td>
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For a driver performed Manual Regeneration, vehicle must be equipped with a dash mounted Regeneration Switch.

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**Fig. 2, Aftertreatment System (ATS) Indicator Lamps Decal, Cummins engines**

**Procedure**

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**WARNING**

The exhaust gas temperature could reach 1600°F (870°C), which is hot enough to ignite or melt common materials, and to burn people.

1. Make sure the vehicle is parked away from all combustible and flammable materials.

**NOTE:** If the engine is a Mercedes-Benz, warm the engine until the coolant is at least 140°F (60°C) before beginning regeneration.
Diesel Particulate Filter (DPF) Status Light On, EPA07 Engines

2. With the engine running:
   2.1 Set the parking brake (if the parking brake is already set, you must release it, then set it again).
   2.2 Put the transmission in neutral.
   2.3 Fully depress and release the clutch pedal, if equipped.
   2.4 If the vehicle has a two-pedal automatic transmission, shift it into gear, then back to neutral.

NOTE: The Regen switch may have a lockout button, as shown in Fig. 4. If the Regen switch has a lockout button, slide the button toward the center of the switch in the direction of the arrow, then press and hold the switch in for 4 seconds. The engine rpm will increase to between 1100 and 1600 and initiate the regeneration process.

3. If the Regen switch does not have a lockout button, simply press the Regen switch and hold it in for 4 seconds.

Regeneration Process

The Regen switch causes the engine to increase rpm and initiate the regeneration process.

NOTE: The Regen switch will only initiate a regen if the engine software deems it necessary.

In about 20 to 40 minutes regeneration will be complete, and the engine idle will drop to the base idle speed.

The vehicle may now be driven normally. The High Exhaust System Temperature (HES) light may be lit, but it will go out when the AFD has cooled to normal operating temperature. See Fig. 5. This light is informational; no driver action is required.

Warranty

This is an informational bulletin only; warranty does not apply.
Diesel Particulate Filter (DPF) Status Light On, EPA07 Engines

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2007 EPA ENGINES

PLEASE ALWAYS REFER TO OWNER OPERATOR’S MANUAL PROVIDED IN EVERY VEHICLE FOR EXACT MAINTENANCE REQUIREMENTS!

CUMMINS ENGINES MEETING 2007 EPA REQUIREMENTS REQUIRE:
- LOW ASH ENGINE OIL MEETING CJ-4 SPECIFICATIONS.
- OIL THAT MEETS CES-20081 STANDARD.
  - REFER TO SECTION V – PAGE 10-11 IN YOUR OPERATOR’S MANUAL.
- USE ONLY ULTRA LOW SULFUR DIESEL.
- REFER TO PICTORIAL CHART LEFT OF DRIVER FOR KEY TO EPA EMISSION LIGHTS AND HOT EXHAUST TEMPERATURES.
- EXPECTED SERVICE INTERVAL ON ATD (AFTER TREATMENT DEVICE FOR EXHAUST) IS 200,000 MILES.
- AVOID PROLONGED IDLING WHENEVER POSSIBLE.
- COOLING SYSTEM MUST BE MAINTAINED PER OWNER OPERATOR’S MANUAL TO PREVENT ENGINE AND SYSTEM DAMAGE.

STATIONARY REGEN EVENT FOR EXHAUST SYSTEM
IF A STATIONARY REGEN EVENT IS REQUIRED FOR THE EXHAUST SYSTEM OF THIS EPA 2007 COMPLIANT VEHICLE PLEASE FOLLOW THESE PROCEDURES TO ACTIVATE.
- REGEN MUST BE REQUIRED BY THE ECM TO ALLOW EVENT.
- TRANSMISSION MUST BE IN NEUTRAL.
- ENGINE MUST BE AT OPERATING TEMPERATURE AND ENGINE IDLING.
- CYCLE THE PARK BRAKE AND MAKE SURE THAT IT IS LEFT APPLIED.
- HOLD REGEN SWITCH ON THE DASH UNTIL FAST IDLE ENGAGES.
- REGEN EVENT WILL TAKE 20-30 MINUTES TO COMPLETE.

CAUTION: THE EXHAUST CAN REACH VERY HOT TEMPERATURES DURING A STATIONARY REGEN. PLEASE USE ALL CAUTIONS NECESSARY AND REFER TO OWNER OPERATOR’S MANUAL.

Carolina Thomas, LLC
8277 Burnt Poplar Road
Greensboro, NC 27409
336-851-1718

This is the information sheet delivered with each bus and paperwork to refer to.
Good luck knocking the soot out of these DPF’s!
Talk to you soon!