

DIESEL PARTICULATE FILTER (DPF) BEST PRACTICES



Vehicle Number _____ Date _____

Engine Serial Number _____

Individual Responsible _____

Did you check?		Settings and recordings	Comments / notes
Yes	No		
		Idle Time: _____ Idle Shutdown: _____ Enabled _____ Setting	
		Calibration Revision: _____ Basic Maintenance: _____	
		Hours since last DPF Cleaning or DPF Exchange: _____	
		DPF Stay Warm: _____ Enabled _____ Setting	
		Regeneration Frequency: _____ Hours Between: _____	

Idle Time:

One of the key operational activities that should be minimized when possible is Idle Time. When bus system or student comfort is critical, continue to idle as needed, however when possible, limit the idle time as the engine is operating at low engine speeds, low engine loads, and providing low heat and air flow to the Diesel Particulate Filter (DPF). A “good” idle time as a percent of operation is less than 20%.

Idle Shutdown:

Idle shutdown is a parameter that can be set using PowerSpec or INSITE. Additional Idle Shutdown feature specifications exist and will allow you to customize the feature to support your operation. For more information, please consult the feature description section of PowerSpec, INSITE, or the recent DPF Maintenance For Your School Bus White Paper. Enabling Idle Shutdown allows the bus to automatically turn off after specified period of time.

Idle Shutdown Time:

This feature limits the amount of time an engine can idle. For 2013 and newer model year vehicles, this feature may be enabled for Green House Gas credits and is called “Green House Gas Idle Shutdown.” The Green House Gas Idle Shutdown feature establishes a specific Idle Timer that can only be adjusted by the bus manufacturer. The default setting is 60 minutes but can be adjusted to 30 seconds if the “Green House Gas Idle Shutdown” feature is not enabled.

Calibration Revision:

The best way to ensure the most up to date calibration is installed for your engine is to connect the engine to INSITE. If an update is available, please contact your local Cummins Representative or OEM Dealer, and request a calibration update.

Maintenance Schedule:

The most up-to-date maintenance schedule information can be found at QuickServe.Cummins.com. Enter the engine serial number in the relevant field to find the latest owners and maintenance manuals under the “Service” tab. Please verify that all of the recommended service events are followed per the hours, miles, and months schedule (based on whichever number occurs first).

Hours since last DPF cleaning or exchange:

For DPF maintenance, please ensure that the particulate filter has not exceeded the miles, hours, or months since the last cleaning or exchange event was to occur.

(DPF Stay Warm) Aftertreatment Diesel Particulate Filter Temperature Stabilization:

Allows the DPF to stay warm when, during an in-motion regeneration event, the vehicle speed drops below a specified threshold. When enabled, the engine will continue to provide additional heat to the DPF and assist with the regeneration event until the moving speed target is met. Enabling the Diesel Particulate Filter Regeneration Stay Warm feature can potentially eliminate the need for stationary regeneration. This feature requires INSITE to enable, please consult your local Cummins Representative or OEM dealer.

DPF Automotive Mobile Regeneration – Minimum Vehicle Speed:

Consult your local OEM Dealer and Cummins Representative on the minimum vehicle speed limit applicable for your bus.

Hours Between Regeneration:

If you believe that you have a frequent regeneration issue, please consult the Aftertreatment Diesel Particulate Filter - Excessive Automatic and/or Stationary Regeneration Symptom Tree - t147. Additionally, read your aftertreatment performance data using INSITE, and make sure that the time between regenerations (per aftertreatment system reports) is consistent.

Fault Codes:

Address any active or frequent fault codes that have occurred.

For more information, please contact your local Cummins representative or discover one at locator.cummins.com