



Service Bulletin

File in Section: -

Bulletin No.: PI0845

Date: October, 2012

PRELIMINARY INFORMATION

Subject: Information for Diesel Particulate Filter (DPF) Service Regeneration Documentation, Service Regeneration Will Not Run, Reduced Engine Power Message Displayed, DTC P2463 Set

Models: 2011-2013 Chevrolet Express, Silverado
2011-2013 GMC Savana, Sierra
Equipped with Duramax™ Diesel Engine RPO LGH, LML

Condition/Concern

Some customers may comment on an illuminated malfunction indicator lamp (MIL), and a Reduced Engine Power message displayed.

When performing the Diagnostic System Check - Vehicle, the technician may observe DTC P2463: Diesel Particulate Filter Soot Level Accumulation set.

This condition may be caused by the engine control module (ECM) detecting that the diesel particulate filter (DPF) has accumulated 70 grams or more of soot.

Recommendation/Instructions

Air Leak Inspection Procedure

1. Perform the Diagnostic System Check - Vehicle.
2. Is only DTC P2463 set?
 - ⇒ If only DTC P2463 is set, Go to Step 3.
 - ⇒ If any other DTCs are set, Go to Diagnostic Trouble Code (DTC) List - Vehicle in SI and repair those DTCs first.
3. Command the EGR Valve Closed.

Notice: When the EGR valve is closed, the ideal air leak equivalence ratio is 1.0:1; the normal range is between 0.80:1 and 1.20:1.

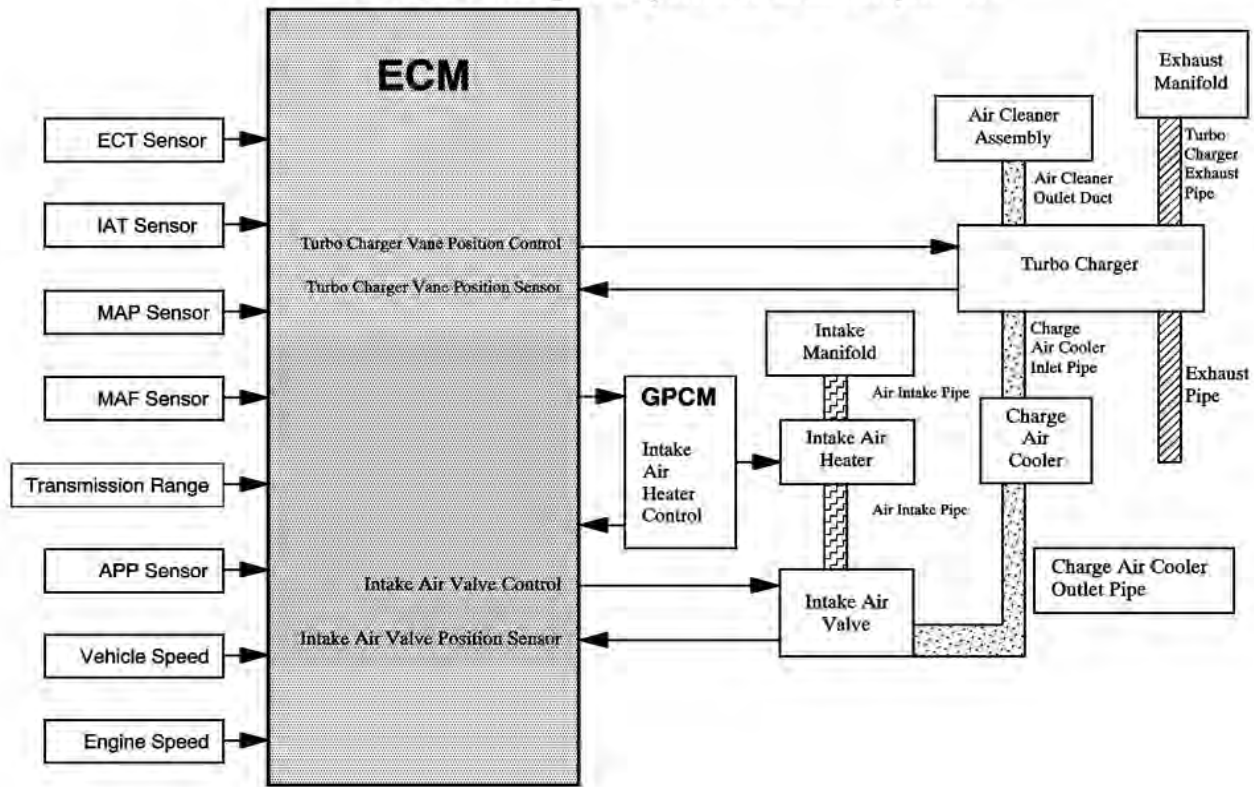
4. Observe the scan tool Air Leak Equivalence Ratio parameter for a value of 1.0:1
 - ⇒ If the scan tool Air Leak Equivalence Ratio parameter is less than 0.80:1, or greater than 1.20:1, Go to SI and review DTC P0101, then inspect for any air leak condition as follows:
 - 4.1. An air leak after the turbocharger.
 - 4.2. An air leak before the turbocharger.
 - 4.3. An air leak where the lower charge air cooler (CAC) air hose enters the CAC.
 - 4.4. A leaking EGR valve, when it is commanded closed.
 - 4.5. A leak in the positive crankcase ventilation (PCV) system.
 - 4.6. A pinhole size leak in the induction or exhaust system.
 - ⇒ If any air leak is observed, repair as needed.

Repair Order Documentation

Perform the following actions and also enter the following information on the repair order:

1. **Before** performing the DPF service regeneration, check the engine oil level.
2. **Before** performing the DPF service regeneration, document the amount of soot mass **before** and then **after** the DPF Service Regeneration is performed.
3. **Before** performing the DPF service regeneration, document the number of successful DPF regenerations.

Turbocharger System Description



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4. **Before** performing the DPF service regeneration, inspect the lower charge air cooler (CAC) hose where it enters the CAC for signs of engine oil contamination and for an air leak.
 - ⇒ If engine oil is observed, clean all CAC hoses.
 - ⇒ If an air leak is observed, repair as needed.
5. Document if the vehicle has been **upfitted**.

Vehicles With Repeat Visits For This Concern

If the vehicle has been in for service more than once for this concern, perform the following:

- Inspect the entire air induction system for air leaks.
- Inspect the entire exhaust system for leaks.
- Refer to the latest version of Corporate Bulletin #08-06-04-006J: Information for Identifying Non-GM ECM Calibration Use and Power-up Hardware Detection in Duramax™ Diesel Engines.

2011 Pickups and Vans and 2012 Pickups With a DPF Accumulation Status Parameter Reading of More Than 120 Grams

2011 pickups and vans and 2012 pickups with a DPF Accumulation Status Parameter reading of more than 120 grams, the DPF Service Regeneration may not run.

⇒ If the DPF Service Regeneration does not run, verify that the vehicle is updated with the latest ECM calibration.

2012 Chevrolet Express and GMC Savana With a DPF Accumulation Status Parameter Reading of More Than 120 Grams

2012 Chevrolet Express and GMC Savana, with a DPF Accumulation Status Parameter reading of more than 120 grams, the DPF Service Regeneration will not run.

Perform the following:

1. Verify that DTC P2463 is the only DTC present.
 - ⇒ If any other DTCs are set, go to Diagnostic Trouble Code (DTC) List - Vehicle in SI.
2. Verify that the **Conditions for Running** the Diesel Particulate Filter (DPF) Service Regeneration have been met. Refer to Diesel Particulate Filter (DPF) Service Regeneration in SI.
3. Turn OFF the ignition and allow the ECM to reset.
4. Turn ON the ignition, with the engine OFF.

5. Select and build the vehicle in the Tech 2®.
 6. Go to > Engine Control Module > Module Set-Up > DPF/Catalyst 2 Reset.
 7. Perform the DPF/Catalyst 2 Reset.
 8. Go to > Diagnostic Trouble Codes > DTC Display - Clear Active Codes. Clear the DTC.
 9. Go to > Special Functions > Output Control > Reductant System > Reductant Fluid Quality Test (RFQT).
 10. Start the engine and begin the RFQT.
 11. During the RFQT, exit the screen while running the test and Go to > DPF Service Regeneration and start it. The engine RPM will drop briefly and then slowly increase to 2,000 RPM and then to 2,500 RPM for the DPF Service Regeneration.
 12. Allow the DPF Service Regeneration to complete.
 13. Clear DTC P2463 after the DPF Service Regeneration has been performed.
- Notice: If the DPF Accumulation Status Parameter reading was elevated, it may be beneficial to run another DPF Service Regeneration to fully clean the DPF.**
14. Clear DTC P2463 **BEFORE** beginning the second DPF Service Regeneration.

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