



Diagnostic Trouble Codes (DTC) P208064, P208464, P242B64 and P246F64 Lighting The Malfunction Indicator Lamp (MIL) - US17+OBD19 And Newer Emissions, Model Years 2020 and Newer



> Internal Content

WARNING

No parts should be replaced for these fault codes unless a definite sensor failure is found.

Fault Tracing Procedure:

1. Allow the vehicle to sit until the engine and exhaust have reached ambient (air) temperature.
2. Turn the ignition to ON, engine OFF.
2. Using Premium Tech Tool (PTT), run either of the operations below:
 - [2545-08-03-02 Exhaust Aftertreatment Diagnostics](#), option A
 - This will provide a numerical view of exhaust temperatures.
 - [2589-08-03-02 Exhaust Aftertreatment System, Service Regeneration](#)
 - This will provide a graphical view of exhaust temperatures.
3. Ensure that the sensor readings are within 10 °C (18 °F) of one another before starting the engine.
4. Start the engine.
5. Monitor exhaust temperatures on PTT:
 - The sensor temperatures should rise in the order of 1, 2, 3, 4 as shown below after starting the engine.
6. Evaluate results:



... the sensor readings are equal at ambient temperature and rise

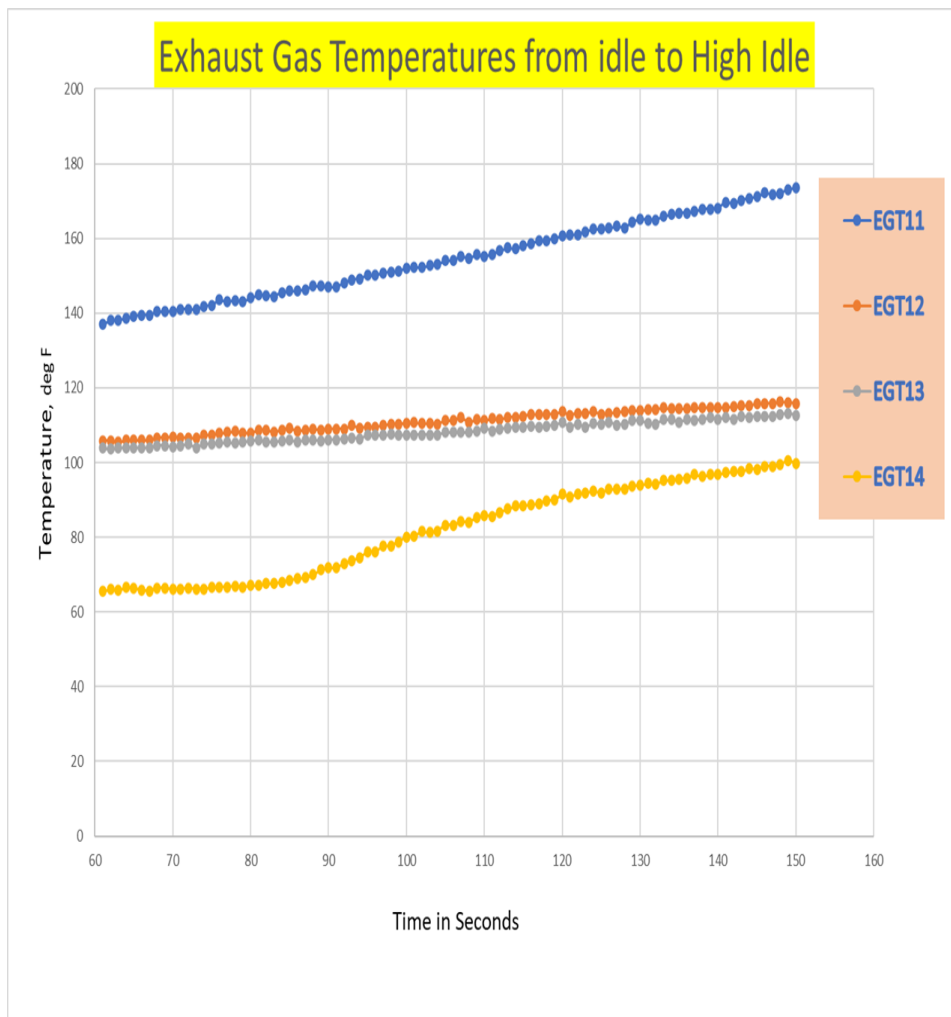
is the correct order when the engine is running. No further fault

in the correct order when the engine is running: NO TURNER FAULT tracing should be performed. Clear the DTCs and return the vehicle to service.

- **If one or more sensors are displaying a different reading from the others or are spiking instead of smoothly increasing with the engine running:** The sensor(s) should be suspected to be faulty.
- **If the temperature sensor values rise out of order:** The sensors should be checked to ensure they are installed in the correct positions.

An example of proper temperature sensor function when engine is cold (shutdown overnight). All 4 temperature sensors are expected read within 10F of each other and ambient temperature.

Once engine is warmed (idle for few minutes), taking vehicle to high idle (>1000rpm) typically should show temperatures similar to picture below. T1 > T2 > T3 > T4.



Live UI T4 is only valid for OBD19 and Newer Vehicles.

This CBR will be updated when new information is available.

 Tags

- [k47838695](#)
- [p2080-64](#)
- [p2084-64](#)
- [p242b-64](#)
- [p208064](#)
- [p208464](#)
- [p242b64](#)
- [p246f-64](#)
- [p246f64](#)
- [mack](#)
- [volvo](#)

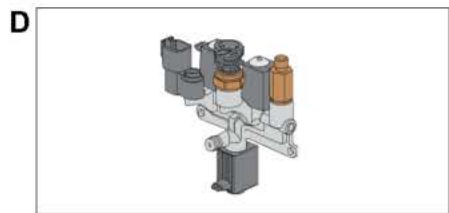
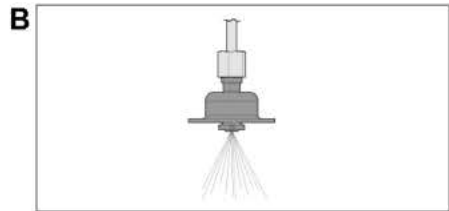
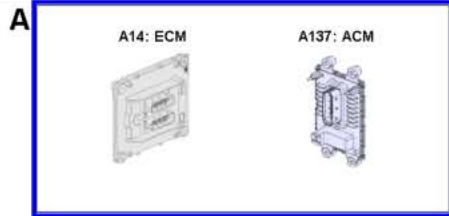
Related links and attachments

No links or attachments available

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2545-08-03-02 Exhaust Aftertreatment Diagnostics

Simulation

Information >> Conditions >> Execution

Purpose

Check the function of the exhaust aftertreatment system (DPF)

Ash and soot level reset

Description

This operation allows monitoring of system conditions, activation of components and reset of system values

Selections

Select the illustration corresponding to the method or test to be performed

A

Sensor Values, Monitoring

B

Aftertreatment hydrocarbon doser air flow test

C

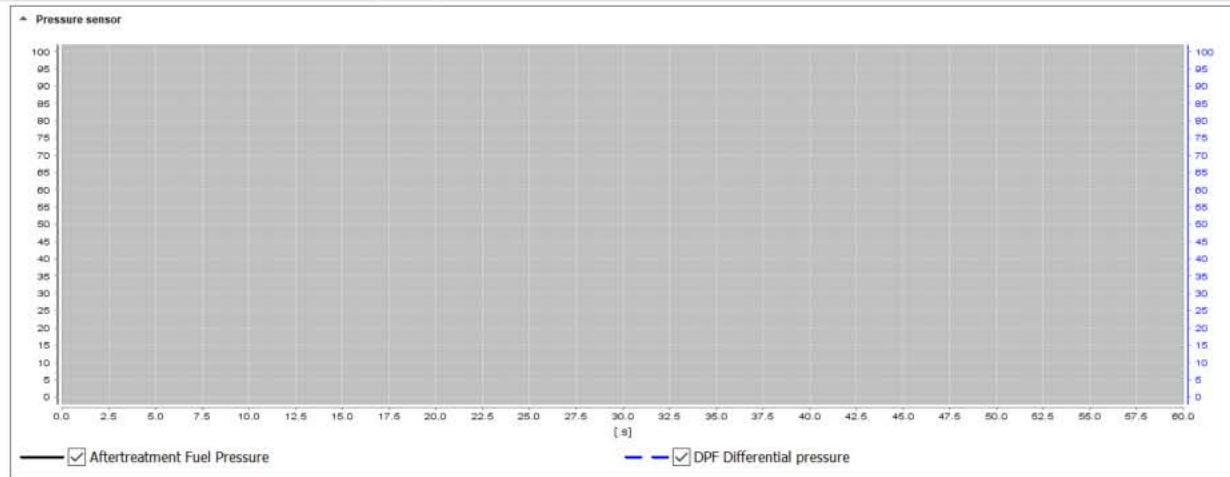
DPF System Reset

- AHD Adaptive Factor
- Soot Level

D

Active Diagnostics Test

- The "Active Diagnostics Test" is self-test of the dosing control system
- Aftertreatment Hydrocarbon Dosing Module



Exhaust gas temperature sensor

Other sensors

2545-08-03-02 Exhaust Aftertreatment Diagnostics

Simulation

Information >> Conditions >> Execution

Service information can be found at the following link(s):

[Intake and exhaust system Function description](#)

Action

- Ignition Key ON and Engine OFF
- Read out the status of the operating conditions
- Start the engine
- Check that all signals and values are stable and without abnormal deviations
- Check that all signals are displaying realistic values according to the actual conditions

+ -

Pressure sensor

0 psi	Aftertreatment Fuel Pressure
0.7 psi	DPF Differential pressure

Exhaust gas temperature sensor

Other sensors

+ -

Test result

Select one of the following alternatives

- OK
- Not OK

Restart the operation

Continue >

A

DPF - Soot



B

SCR - Sulfur



C

Crystal Sublimation



2589-08-03-02 Exhaust Aftertreatment System, Service Regeneration

Simulation

Information >> Conditions >> Execution

Purpose



- Perform a service regeneration
- Check that the regeneration functions properly
- Prepare particulate filter for ash cleaning

Description

The regeneration selection is determined by an **ECM** request that determines which regeneration option that should be performed based on system conditions. If there is no request for regeneration from the Engine Control Module (ECM), regeneration can still be performed by manual selection.

Selections

Select the recommended regeneration type. If there is no recommended regeneration request from the Engine control module (ECM), select any of the regeneration types to be performed.

Reference	Status
	ECM request active
	ECM request inactive
<div style="border: 1px solid gray; padding: 2px;"> A - 2545-08-03-03 Diesel Particulate Filter Service Regeneration </div>	
<div style="border: 1px solid gray; padding: 2px;"> B - 2589-08-03-15 Aftertreatment Selective Catalytic Reduction (SCR), Regeneration </div>	
<div style="border: 1px solid gray; padding: 2px;"> C - 2585-11-03-03 SCR, Diesel Exhaust Fluid, Crystal Sublimation </div>	