

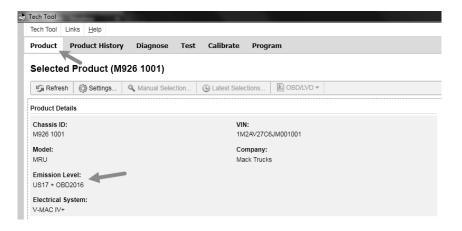
Solution K05234659 Thursday, August 29, 2019 8:49:09 PM CEST

** SOLUTION **

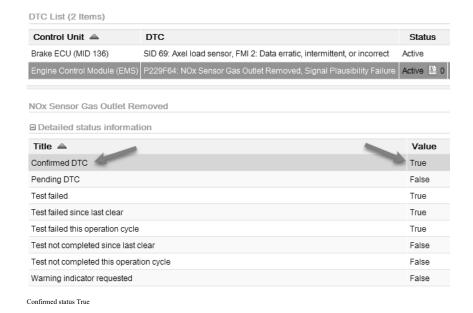
| Title | Mack Chassis - Vehicle with Diagnostic Trouble Code (DTC) P2002-00, Diagnostic |
|-------------------|---|
| | Instructions - US10+OBD13 Emssions ONLY, Model Years 2013 (Rare), 2014 |
| Mack Models | |
| Mack Model | CHU - Pinnacle, Axle back, CXU - Pinnacle, Axle front, GU - Granite |
| Emission Standard | |
| Emission Standard | US10+OBD13 |
| Engine family | |
| Engine family | MP8 |
| ** SOLUTION ** | |
| Cause | DTC P2002 - Diesel particulate filter efficiency below threshold (Bank 1) may log on |
| | US10+OBD2013 emissions chassis. This diagnostic routine is meant to detect potential |
| | damage to the Diesel Particulate Filter (DPF) or indicate an incorrect Diesel Oxydation |
| | Catalyst (DOC) or DPF installed on the vehicle. |

Solution Conditions

• Vehicle emissions level should be verified to be US10+OBD13. Emissions level can be found in Premium Tech Tool (PTT) as shown below:



- Vehicles affected will have the following Engine Control Module (EMS) Main Software Part Numbers 23036507.
- P2002 must be either:
 - Active with Confirmed status True.
 - Inactive with greater than 3 counts and Confirmed status True.



Important Notes

- If P2002 is Confirmed status False it is not the source of the issue that resulted in the shop visit. <u>DO NOT</u> troubleshoot the code. Review the DTC Readout for codes that may be related.
- If P2002 is Inactive the latest evaluation passed and may indicate an issue that resolved itself. The number of counts should then be considered as an indication of an intermittent problem.

For an Active and Confirmed Code:

Inspect the following items:

- 1. Ensure the correct DPF and DOC are installed.
 - Both parts should be OEM. Third-party aftermarket parts do not always meet factory specifications and can be the source of the code.
 - **Take pictures** of the DPF faces and the part numbers of both the DOC and DPF for documentation.
- 2. Verify that there is no evidence of soot passing through the DPF.
- 3. Check the connections and pipes for the DPF Differential Pressure Sensor. Make certain that there are no leaks or damage, and the tubes and the sensor itself are not clogged, crimped, or otherwise blocked.
- 4. Make sure the DPF Differential Pressure Sensor is reading correctly and free of any electrical faults.
- 5. Check for documentation that the DPF was cleaned per service recommendations.

Any issues found in the items above should be corrected prior to proceeding further with diagnosis.

If all the items above are determined to be correct:

If this is the vehicle's first visit for P2002 and the code is confirmed and active, clear the DTC and release the vehicle after confirming and documenting the five items in the section above. Do not proceed with the below steps.

- 1. Record a Sensor and Parameter Values Monitor.
 - The road test should last approximately one hour.
 - The test should follow both city and highway duty cycles.
 - This includes stop-and-go driving as well as steady highway speeds.
- 2. Verify the DTC status following the road test:
 - Did the code recur during the road test?
 - · How many counts logged during the road test?
- 3. Start an eService case.
 - The eService case MUST INCLUDE:
 - A thorough description of the problem.
 - A current DTC Readout from the time the vehicle arrived.
 - All of the information gathered during the inspection steps above.
 - This includes the DPF and DOC pictures.
 - · The road test data.
 - DTC status information as seen following the road test.

Cases submitted with incomplete information may be refused.

Internal comments (BO)

FOR DEALER TECHNICAL SUPPORT:

If vehicle has come in as repeat P2002 Active and Confirmed, we would recommend replacing both DOC and DPF on the vehicle and send it back to power-train engineering for analysis. Inspection steps 1-5 with good documentation is essential before we recommend DOC/DPF replacement. If we start seeing more than 10 DOC/DPF changes are required per month, please let product specialist know to plan visit and data collection.

K70734554

Solution visibility

Dealer distribution

Function(s)/component(s) affected

Function affected

DOC, DPF

Function Group

| Function Group | 254 catalytic converter; exhaust emission control equipment , 258 emissions after- |
|--|--|
| Tunonon Group | treatment , 2841 Electronic Control Unit , 2846 Sensor |
| Customer effect | |
| Main customer effect | soot, regeneration, fault code/display |
| Fault Codes And Erro | r Codes |
| OBDII Diagnostic Trouble Codes (P, U, B Format) | P2002-00 |
| Conditions | |
| Vehicle operating mode | when driving, when stationary |
| Frequency of occurrence of problem | random |
| Other conditions | after a workshop procedure on the vehicle |
| Administration | |
| Author | RU4469V |
| Dealer ID | RU4469V |
| Last modified by | A241298 |
| Creation date | 08-08-2019 21:08 |
| Date of last update | 28-08-2019 13:08 |
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