



## STAR ONLINE PUBLICATION



**Case Number: S211800001 REV. B**

**Release Date: July 2022**

**Symptom/Vehicle Issue:** Malfunction Indicator Lamp (MIL) Illumination. Diagnostic Trouble Code (DTC) P0471 – Exhaust Pressure Sensor 1 Performance, Set.

**Discussion:** A small number of customers may experience a MIL illumination. Upon further investigation, a technician may find DTC P0471 set in the Powertrain Control Module (PCM).

In addition to P0471, you may also have one or more of the following DTCs set:

- P1451 – Diesel Particulate Filter System Performance
- P2463 – Diesel Particulate Filter Restriction
- P242F – Diesel Particulate Filter Restriction, Ash Accumulation
- P0506 – Idle Control System, RPM Lower Than Expected

DTC P0471 may be caused by back pressure in the exhaust due to plugging up of the Aftertreatment system. If you are diagnosing a vehicle with P0471 set, please inspect for, and repair, any possible restrictions in the exhaust system that may be leading to this DTC to set.

**NOTE: Do not replace the Exhaust Manifold Pressure (EMP) sensor for this DTC if the exhaust system is found to be restricted. The P0471 setting will not lead to the exhaust system becoming restricted.**

If you receive a vehicle with this concern, please perform the following.

1. Prior to clearing any DTCs, obtain a current Freeze Frame report via wiTECH.
2. Email the report to the following email address ([FCA\\_DC@cummins.com](mailto:FCA_DC@cummins.com)). In the email subject, please put "Freeze Frame Report for P0471. This is for information gathering purposes to better understand what may be leading to the DTC setting.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

**Contact STAR Center, or your Technical Assistance Center Via TechCONNECT or eCONTACT ticket if no solution is found**



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3. Inspect the exhaust system for restrictions (e.g. DOC/DPF face plugging).
4. If the exhaust is found restricted. Inspect the following areas for the cause of the restriction.
  - a. Restricted air intake
  - b. Restricted EGR systems,
  - c. Fuel system concerns causing over fueling, etc.
5. Inspect the Charge Air Cooler (CAC) hoses for loose connections/clamps, splits, and other damage which can also cause the exhaust system to plug up. Please see (Figures 1, 2, and 3).



**Figure 1**



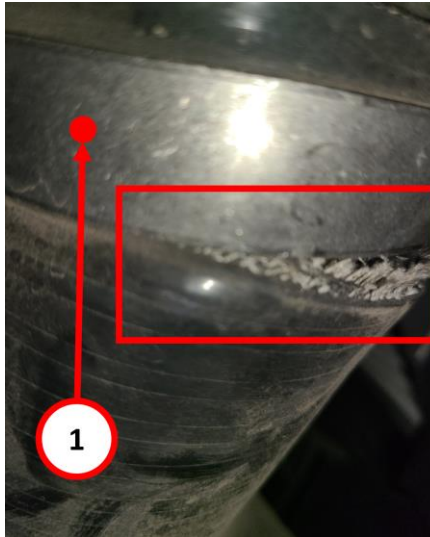
**Figure 2**

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**Figure 3**

1. CAC Hose Clamp

6. Repair the cause of the exhaust restriction prior to replacing any of the exhaust components.

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