P1719

Fault code description

EGR mass flow - Data valid but too low

Possible cause

1. Leakage in EGR system
2. Blockage of EGR system
3. Leakage in exhaust system
4. Poor performance of EGR valve
5. Faulty boost pressure sensor
6. Faulty NOx sensor
7. Faulty lambda sensor
8. Incorrect type of fuel used

Additional information

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Set condition of fault code

This diagnostic starts after the NOx sensor has reached the operating temperature.

The PMCI-2 ECU detects this fault after six minutes at low speed and low load, down to 35 seconds at high speed and high load.

Reset condition of fault code

This fault code will change to inactive immediately after the diagnostic runs and passes.

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P1719, Diagnostic information

Technical data

"Sensor, boost pressure (F802)"

"Sensor, NOx before catalyst (F844)"

"Sensor, lambda (F834)"

"EGR valve sensor (L033)"

Location of component(s)

"Location information, PMCI-2"

Electrical diagram(s)

"PMCI-2"

Description of component(s)

"Boost pressure sensor (F802)"

"Sensor, NOx before catalyst (F844)"

"Lambda sensor (F834)"

"EGR valve sensor (L033)"

Block diagram

"PMCI-2"

Step by step troubleshooting

- Perform the troubleshooting steps below using the breakout harness, if necessary, to check electrical components, such as sensors, electrical control units, and harnesses.
- Back probing is not recommended, as it could damage the harness.
- The ignition should always be in the OFF position when connecting or disconnecting electrical components to reduce the likelihood of damage to the components.
- Disconnecting the connectors during the troubleshooting process will result in multiple

errors.

- For specific electrical component information and pin out locations, always refer to the technical data.
- It is necessary to exit the fault code menu in DAVIE and run the diagnostic test again to identify a change in errors.
- Remember that the truck's operational or mechanical issues may be the root cause of both active and inactive fault codes. Refer to the 'possible causes' section.

Step by step 1: Check fault codes

Step 1A: Check for boost pressure sensor fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to check for fault codes.

Is the fault code for faulty boost pressure sensor active?

- Yes – Proceed with the appropriate fault code.
- No – Proceed to step 1B.

Step 1B: Check for NOx sensor fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to check for fault codes.

Is the fault code for faulty NOx sensor active?

- Yes – Proceed with the appropriate fault code.
- No – Proceed to step 1C.

Step 1C: Check for lambda sensor fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to check for fault codes.

Is the fault code for faulty lambda sensor active?

- Yes – Proceed with the appropriate fault code.
- No – Proceed to step 2A.

Step by step 2: Check for air leaks in the exhaust system

Step 2A: Check for air leaks in the exhaust system

Troubleshooting steps

1. Turn the key switch OFF.
2. Use the PACCAR MX engine intake-exhaust air leak test tool and procedure found in Rapido.

Has an air leak been found in the exhaust system?

- Yes – Follow the PACCAR MX engine intake-exhaust system air leak test procedure for resolution, then proceed to validation step.
- No – Proceed to step 3A.

Step by step 3: Check EGR System

Step 3A: Check EGR System

Troubleshooting steps

1. Turn the key switch OFF.
2. Remove the corrugated pipes that lead into and out of the EGR cooler and check them for blockages.
3. With the corrugated pipes still removed, make sure the EGR valve opens and closes freely.
4. Use a boroscope to check for blockages

in the EGR cooler.

5. Blow shop air through the EGR cooler to ensure it is free of blockages. Please note that this can create a soot cloud.

Have any blockages or leaks been found in the EGR system?

- Yes – If blockages are found in the corrugated pipes or the EGR valve doesn't open freely, clean them without solvent and remove the debris. Proceed to the validation step.

  If blockages are found in the EGR cooler, follow the EGR Cooler cleaning procedure and use the cleaning kit in Engine Rapido. Proceed to the validation step.
- No – Proceed to the validation step.

Step by step 4: Validation

Step 4A: Validate that P1719 is no longer active

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to see if fault code P1719 is still active.

Is fault code P1719 still active?

- Yes – Contact the Engine Service Center (ESC) for further instructions.
- No – Repair complete.

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