P1409

Fault code description

Inlet air pressure in inlet manifold - Data valid but too high

Possible cause

1. Leakage in exhaust manifold (before VTG)
2. EGR valve stuck
3. Reduced VTG actuator performance

Additional information

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Set condition of fault code

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Reset condition of fault code

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P1409, Diagnostic information

Technical data

"Sensor, boost pressure (F802)"

Location of component(s)

"Location information, PMCI-2"

Electrical diagram(s)

"PMCI-2"

Description of component(s)

"Boost pressure sensor (F802)"

"EGR system description"

Block diagram

"PMCI-2"

Step by step troubleshooting

Please perform the troubleshooting steps below by utilising the breakout harness if necessary to check electrical components such as sensors, electrical control units or 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 electrical components.

- This troubleshooting tree is based on the assumption that supply power and earth to the PMCI are functioning properly.
- Disconnecting the PMCI 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

in Rapido.

- It is necessary to exit the 'active errors' screen 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 codes. Refer to the 'possible causes' section in Rapido.

Step by step 1: Visual Inspections

Step 1A: Check wiring and boost pressure sensor

Troubleshooting steps

1. Visually inspect the wiring and sensor.

Are any issues found?

- Yes – Repair any issues found. Proceed to step 2A.
- No – Proceed to step 2A.

Step by step 2: Resistance

Step 2A: Check resistance of sensor and wiring

Troubleshooting steps

1. Check the resistance of the sensor and wires. See links at the top of this document for resistance values.

Is there any issue with resistance?

- Yes – Repair any issues found, proceed to step 3A.
- No – Proceed to step 3A.

Step by step 3: Check for air leaks

Step 3A: Check for leaks

Troubleshooting steps

1. Check for leaks with the air side leak check kit. See Engine Rapido for instructions and kit.

Are any issues found?

- Yes – Repair any issues found. Proceed to step 4A.
- No – Proceed to step 4A.

Step by step 4: Pressure sensor

Step 4A: Remove the boost pressure sensor

Troubleshooting steps

1. Remove the boost pressure sensor
2. Check for soot and damage.

Are any issues found?

- Yes – Clean/Replace as needed, proceed to step 5A.
- No – Proceed to step 5A.

Step by step 5: Venturi

Step 5A: Check venturi

Troubleshooting steps

1. Check the venturi for corrosion and soot build-up.

Are any issues found?

- Yes – Clean/Replace as needed, proceed to step 6A.
- No – Proceed to step 6A.

Step by step 6: Differential pressure sensor

Step 6A: Check differential pressure sensor

Troubleshooting steps

1. Check the differential pressure sensor for corrosion and soot build-up.

Are any issues found?

- Yes – Clean/Replace as needed, proceed to step 7A.
- No – Proceed to step 7A.

Step by step 7: EGR cooler

Step 7A: Check EGR cooler

Troubleshooting steps

1. Check the EGR cooler for plugging.

Are any issues found?

- Yes – Clean as needed. See the Clean EGR Cooler procedure in Engine Rapido. Proceed to step 8A.
- No – Proceed to step 8A.

Step by step 8: Validate repair

Step 8A: Check if the fault code is active

Troubleshooting steps

1. Clear the fault code and drive to validate that the fault does not become active.

Does the fault code become active after validation?

- Yes – Proceed to step 9A.
- No – Troubleshooting completed.

Step by step 9: Contact PACCAR Engine Support Center

Step 9A: Assistance

Contact the PACCAR Engine Support Center for further assistance.

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