

P1235

Fault code description

Turbo speed - Data erratic, intermittent or incorrect

Possible cause

1. Leakage in exhaust circuit
2. Malfunction of turbo speed sensor
3. Loose or disconnected wiring

Additional information

The turbo speed input signal is filtered by the ECU PMCI-2

The ECU PMCI-2 uses this filtered signal for all the calculations and control functions

Difference between filtered turbo speed and the unfiltered turbo speed signal.

Set condition of fault code

The PMCI-2 detects a speed difference of more than 5000 rpm.

Reset condition of fault code

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

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P1235, Diagnostic information

Technical data

["Sensor, turbo speed \(F683\)"](#)

Location of component(s)

["Location information, PMCI-2"](#)

Electrical diagram(s)

["PMCI-2"](#)

Description of component(s)

["Turbo speed sensor \(F683\)"](#)

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 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 1: Check the turbo speed sensor

Troubleshooting steps

1. Check for damage to the turbo speed sensor.
2. Check for an oil leak from the turbo speed sensor.

Sensor issues found?

- **Yes** – Replace the turbo speed sensor as needed. Proceed to step 4.
- **No** – Proceed to step 2.

Step 2: Check for faulty connection

Troubleshooting steps

1. Check for damaged, corroded or loose:
 - Connector housing
 - Pins
 - Terminals
 - Wiring

Electrical issues found?

- **Yes** – Correct the electrical issues as needed. Proceed to step 4.
- **No** – Proceed to step 3.

Step 3: Perform an intake/exhaust leak test

Troubleshooting steps

1. Use the 'Engine intake/exhaust air leak test kit' to pressurise the system and

check whether there is a leak.

Is there a leak?

- **Yes** – Identify the leak location and correct the leak. Proceed to step 4.
- **No** – Contact Engine Support Center for further assistance.

Step 4: Verify repair

Troubleshooting steps

1. Use DAVIE to clear the fault codes.
2. 3. Drive the truck for 15-20 minutes, driving at freeway speeds for some of that time.
3. Use DAVIE to see if fault code P1235 reappears.

Did P1235 reappear?

- **Yes** – Contact Engine Support Center for further assistance.
- **No** – Proceed to other fault codes.

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