P0653

Fault code description

Accelerator pedal sensor 1 supply - Voltage too high or short circuit to supply on ECU (D365) pin (B49)

Possible cause

1. Faulty wiring
2. Faulty connector

Additional information

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Set condition of fault code

The PMCI-2 detects sensor output voltage is too high (above 4.81 V).

Reset condition of fault code

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

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P0653, Diagnostic information

Technical data

Refer to the OEM service manual for more information.

Location of component(s)

Refer to the OEM service manual for more information.

Electrical diagram(s)

"PMCI-2"

Description of component(s)

Refer to the OEM service manual for more information.

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

Troubleshooting steps

1. Visually inspect the associated component connections and wiring for any of the following:
   - Moisture or dirt in the connections.
   - Damage to the wire harness or insulation.
   - Damaged or disconnected ECU connections.
   - Battery damage or loose battery terminal(s).
   - Improperly inserted terminals.
   - Damaged or loose terminals, possibly caused by probing.

Was there evidence of any of the above?

- Yes – Clean, adjust, repair or replace affected components for any issues identified.

  Use DAVIE to re-check for the presence of active faults. If this related fault is no longer active, then this issue has been resolved. If this related fault is still active, proceed to step 2.
- No – Proceed to step 2.

Step by step 2: Electrical checks

Troubleshooting steps

1. Disconnect connector J2 or B from the PMCI-2.
   - Perform the Visual Inspection on pin B38 as noted in Step 1.
   - Turn the contact switch to the 'ON' position.
   - Measure the voltage on pin B38 referenced to ground. Place the positive lead of a meter on pin B38 and the negative lead on a ground point.

Does the meter indicate a voltage greater than 4.8 V?

- Yes – Proceed to step 3.
- No – Proceed to step 4.

Step by step 3: Electrical wiring checks

Troubleshooting steps

1. Leave PMCI-2 connector J2 or B disconnected and the key switch in the 'ON' position.
2. Disconnect the engine harness firewall connector.
3. Use E-Cat to find engine harness diagrams for the specific truck being worked on, and identify which terminal is used for the accelerator pedal power supply circuit in the firewall connection.
4. Perform the visual Inspection on the firewall connector and terminals as noted in Step 1.
5. Measure the voltage between the accelerator pedal power supply pin on the firewall connector and ground. Place the positive lead of a meter on the accelerator pedal power supply pin in the firewall mounted connector and the negative lead on a ground point.

Does the meter indicate a voltage greater

than 4.8 V?

- Yes –Troubleshoot cabin electrical harnesses and throttle pedal. Make appropriate repairs or replace harness or components if necessary. Proceed to step 4.
- No – Fault is located in engine harness. Repair or replace engine harness as needed. Proceed to Step 4.

Step by step 4: Validate repair

Troubleshooting steps

1. Verify that all harness connections have been reconnected. Use DAVIE to re-check for the presence of active faults.

Is the fault code inactive?

- Yes – Troubleshooting completed.
- No – Proceed to step 5.

Step by step 5: Contact PACCAR Engine Support Center

Contact the PACCAR Engine Support Center for further assistance.

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