

P0072

Fault code description

Ambient temperature - Voltage too low or short circuit to ground

Possible cause

1. Faulty wiring
2. Faulty connector
3. Faulty sensor

Additional information

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Set condition of fault code

The PMCI-2 detects the sensor output voltage is too high (above 4.99 V) or too low (below 3.99 V).

Reset condition of fault code

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

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P0072, Diagnostic information

Technical data

["Sensor, ambient temperature \(F748\)"](#)

Location of component(s)

Refer to the OEM service manual for more information.

Electrical diagram(s)

Refer to the OEM service manual for more information.

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 utilizing 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



- The Ambient Air Temperature sensor is located on the driver's side mirror
- The Ambient Air Temperature sensor circuit is integrated into the engine harness and main cab harness, please use the proper diagram for your respective OEM
- This troubleshooting tree is based on the assumption that supply power and earth to the PMCI is 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 any 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

Visual inspection- Visually inspect all applicable connectors and harnesses for

corrosion, damage and rubbing during each step of the diagnostic procedure. Proceed to step 2.

Step 2

With DAVIE connected turn the Key **ON**.

Disconnect the Ambient air temperature sensor from the engine harness:

- **If (Active High Code)** – Replace the sensor and go to the verification procedure.
- **If (Active Low Code)** – Proceed to step 3

Step 3

With DAVIE connected, turn the Key **ON** and disconnect the engine harness connector A142 from the engine harness.

Navigate through DAVIE and monitor errors.

- **If (Active High Code)** – Proceed to step 5
- **If (Active Low Code)** – Proceed to step 4

Step 4

With DAVIE connected, the Key **ON**, and the C connector disconnected at the PMCI.

Navigate through DAVIE and monitor errors.

- **If (Active High Code)** – Replace the engine harness and go to the verification procedure
- **If (Active Low Code)** – Proceed to step 6.

Step 5

The electrical problem resides in the OEM harnesses on the signal wire located between the ambient temperature sensor and the engine harness connected to the C connector on the ECU. With the proper OEM diagram, check for a short to ground on the 5 volt signal.

Step 6

Possible PMCI failure – Contact the Engine Support Center for further instructions on replacement of the PMCI.

Verification procedure

With DAVIE connected and Key **ON**, clear the errors. Start the engine and let it idle to verify with DAVIE that the errors do not re-occur

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