P0666

Fault code description

ECU temperature sensor - Out of range, At ignition on on ECU (D365)

Possible cause

1. Faulty wiring
2. Faulty ECU

Additional information

Sensor value compared to a corrected average engine power up temperature

Set condition of fault code

This diagnostic only runs if the key has been off for at least 3 hours. Two seconds after key-on, the internal ECU temperature sensor reading is compared to the average of the other temperature sensors. If the difference is greater than 10.5°C (19°F) then the fault is set.

Reset condition of fault code

Fault is reset when diagnostic is run with fault condition not present.

Key-off for at least 3 hours. Key-on and wait at least 10 seconds before starting. Start engine and idle for 2 minutes.

M028559 - 07/23/2015 03:07:39

P0666, Diagnostic information

Technical data

-

Location of component(s)

"Location information, PMCI-2"

Electrical diagram(s)

"PMCI-2"

Description of component(s)

"PMCI-2 electronic unit (D365)"

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 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 the associated component connections and wiring for any of the following:

- Loose, bent or broken connector
- Bent, broken, corroded or loose connector

pins

- Moisture or dirt in the connections
- Damage to the wire harness or insulation
- Damaged or disconnected ECU connections
- Battery damage, contacts that are not tight

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, continue to step 2.
- No – Proceed to step 2.

Step 2

Electrical Checks PMCI-2 electronic unit (D420) - For all electrical checks and diagrams, refer to the Engine Service Rapido diagram viewer for detailed schematics, connector pin locations and corresponding signal values.

Based on the fault message provided, confirm that the following electrical values are within specified ranges or limits.

1. Check for supply and signal voltages.
2. Check for cable continuity (no open or short circuit).

Are measured electrical values outside of the expected range or limits?

- Yes – Make the appropriate repairs or component replacements.

  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, continue to step 3.

- No – Proceed to step 3.

Step 3

Replace: Electronic unit PMCI-2

Contact the Engine Support Center for further instructions on replacement of the ECU.
Proceed to step 4 for validation.

Step 4

Validation

Use this validation cycle after taking any corrective actions, to confirm that the fault is no longer active:

1. Start-up; power-up
2. With the brakes set, turn the key to the ON position with the engine off, and allow 10 seconds for the system to initialise and run diagnostics.

M046398 - 07/22/2015 16:05:29