P0527

Fault code description

Electronically controlled fan - Voltage too high or short circuit to supply

Possible cause

1. Faulty wiring
2. Faulty connector
3. Faulty fan clutch

Additional information

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Set condition of fault code

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Reset condition of fault code

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P0527, 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 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 key OFF, disconnect the fan speed sensor and measure the resistance between the signal and earth pins.

Resistance values change with temperature

- If the resistance is acceptable – Proceed to step 3.
- If the resistance is NOT acceptable – Replace the sensor and reconnect the harness. Proceed to the verification procedure listed at the end of this document.

Step 3

With key OFF, disconnect the engine harness from the PMCI. Perform a continuity test on all wires associated with the sensor:

- If the continuity is acceptable – Proceed to step 4.
- If the continuity is NOT acceptable – Replace the engine harness. Proceed to the verification procedure listed at the end of this document.

Step 4

With key OFF, inspect the connection pins of the harness, sensor and PMCI:

- If the pins are good – Proceed to step 5.
- If the pins are NOT good – Replace the engine harness. Proceed to the verification procedure listed at the end of this document.

Step 5

With key OFF, disconnect the fan speed sensor and remove from the fan clutch. Check for damage or debris:

- If no damage or debris is found – Proceed to step 6.
- If debris or damage is found – Clean or replace the fan speed sensor. Proceed to the verification procedure listed at the end of this document.

Step 6

Inspect the fan clutch for damage:

- If no damage is found – Proceed to step 7.
- If damage is found – See Engine Rapido for fan clutch repair.

Step 7

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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