P1560

Fault code description

Coolant level - Low

Possible cause

1. Faulty wiring
2. Faulty connector
3. Faulty sensor
4. Coolant leak

Additional information

-

Set condition of fault code

-

Reset condition of fault code

-

M028269 - 07/22/2015 16:12:28

P1560, Diagnostic information

Technical data

"Sensor, coolant level low"

Location of component(s)

Refer to the OEM service manual for more information.

Electrical diagram(s)

"PMCI-2"

Description of component(s)

"Coolant level sensor"

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, and 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 the components.

- This troubleshooting tree is based on the assumption that the 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.

- 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: Check software

Step 1A: Check software

Troubleshooting steps

1. Check that the PMCI software is up-to-date (update the PMCI software if it is not up-to-date).
2. Use DAVIE to verify that P1560 is still active.

Is P1560 still active?

- Yes – Proceed to step 1B.
- No – Repair complete.

Step 1B: Check coolant level

Troubleshooting steps

1. Turn the key switch OFF.
2. Check the coolant level.

Is the coolant level low?

- Yes – The coolant may be leaking. Proceed to Step 2A.
- No – This is likely to be a sensor issue. Proceed to Step 3A.

Step by step 2: Check for coolant leaks

Step 2A: Check for external coolant leaks

Troubleshooting steps

1. Turn the key switch OFF.
2. Check for external coolant leaks.

Has an external coolant leak been found?

- Yes – Find the source of the leak and repair it. Proceed to the verification step.
- No – There may be an internal coolant leak. Proceed to Step 2B.

Step 2B: Check the coolant system for leaks

Troubleshooting steps

1. Turn the key switch OFF.
2. Pressure test the coolant system as a whole.

Does the coolant system have any leaks (pressure decay)?

- Yes – Proceed to Step 2C. If 2C has already been completed, contact the Engine Support Center for possible engine internal leak issues.
- No – Proceed to the validation step.

Step 2C: Check for EGR cooler leaks

Troubleshooting steps

1. Turn the key switch OFF.
2. Test the EGR cooler. Use the EGR cooler internal leakage assessment tool test procedure found in Rapido (part number 1903031).

Did the EGR cooler pass this test?

- Yes – Contact the Engine Support Center for possible engine internal leak issues.
- No – Replace the EGR cooler. Re-pressurise the coolant system to verify that it is no longer leaking. If it is still leaking, contact the Engine Support Center. If it is

not leaking, the repair is complete.

Step by step 3: Check for electrical and sensor issues

Step 3A: Check for coolant level sensor and connector pin damage

Troubleshooting steps

1. Perform a visual inspection of the engine harness for any potential damage.
2. Perform a wiggle test from the engine harness to the coolant sensor for loose wires.
3. Visually inspect the sensor for any damage. Make sure the level sensing part is undamaged.
4. Visually inspect the sensor for debris and contaminants.
5. Perform a connector side 5V reference check between C53 (5V) to C29 ground.
6. Check the integrity of the pins and terminals.
7. Perform a check on the system component continuity.
   - Pin A connects to C53.
   - Pin B connects to C07.
   - Pin C connects to C29.

Does the electrical system pass all of these tests?

- Yes – Proceed to Step 4A.
- No – Resolve the electrical issues. Proceed to Step 4A.

Step by step 4: Verify all campaigns performed

Step 4A: Verify all campaigns performed

Troubleshooting steps

1. Verify all campaigns performed.

Have all campaigns been performed?

- Yes – Proceed to the validation step.
- No – Perform the campaigns. Proceed to the validation step.

Step by step 5: Validation

Step 5A: Validation

Troubleshooting steps

1. Restore the coolant system to its normal operating condition.
2. Turn the key switch ON.
3. Use Rapido to verify that P1560 is inactive.

Is P1560 inactive?

- Yes – Release the truck.
- No – Contact the Engine Support Center.

M046533 - 07/22/2015 15:13:08