

P3820

Fault code description

DEF temperature/level sensor - DEF level low

Possible cause

1. Very low DEF level in the DEF tank.

Additional information

The DEF tank must be refilled with pure DEF (conforming to ISO 22241-1 standard).

Set condition of fault code

This diagnostic runs continuously when the key switch is in the ON position.

The EAS-3 ECU detects a very low DEF level in the DEF tank.

Reset condition of fault code

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

M027950 - 07/23/2015 02:18:03

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P3820, Diagnostic information

Technical data

["Sensor, DEF temperature/level \(F851\)"](#)

Location of component(s)

["Location information, EAS-3"](#)

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

["Sensor, DEF temperature/level \(F851\)"](#)

Block diagram

["Block diagram EAS-3"](#)

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.



- Disconnecting the EAS 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.
- It is necessary to exit the fault code menu 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 fault codes. Refer to the 'possible causes' section.

Step by step 1: Check fault codes

Step 1A: Check for fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to check for fault codes.

Is fault code P3820 active?

- **Yes** – Low DEF level detected. Add DEF to the DEF tank - Proceed to step 2A
- **No** – Proceed to step 2A

Step by step 2: Clear the fault code

Step 2A: Disable the fault code

Troubleshooting steps

1. Connect all components.
2. Operate the system within the 'reset condition of the fault code' found in the fault code information.
3. Use DAVIE to verify if the fault codes are inactive.

Is fault code P3820 inactive?

- **Yes** – Proceed to step 2B
- **No** – Return to the troubleshooting steps - Proceed to step 1A

If all the steps have been completed and checked again, contact the Engine Support Center for further instructions.

Step 2B: Clear the inactive fault codes

Troubleshooting steps

1. Connect all components
2. Turn the key switch ON.
3. Use DAVIE to clear the inactive fault codes.

Have all the fault codes been cleared?

- Yes – Repair complete
- No – Troubleshoot any remaining active fault codes

M046767 - 07/22/2015 19:03:22

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