P3832

Fault code description

Fuel dosing module - Voltage too low on ECU (D374) pin (A5)

Possible cause

1. An open circuit in the supply or return wire in the harness.
2. An open circuit in the fuel dosing module.
3. A short circuit to earth in the engine harness.
4. High resistance in the fuel dosing module.
5. A short circuit to supply in the engine harness
6. An extremely low resistance in the fuel dosing module.
7. A damaged EAS-3 ECU.

Additional information

Active DPF regeneration will be disabled until the fault code is cleared with DAVIE.

Set condition of fault code

This diagnostic runs continuously when the key switch is ON.

The EAS-3 ECU detects a circuit error within the fuel dosing module.

Reset condition of fault code

The fault must be cleared with DAVIE prior to validating the repair. Repair can be validated by performing the 'DPF regeneration' test or the 'fuel dosing system override test' with DAVIE.

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P3832, Diagnostic information

Technical data

"Dosing module, fuel (L073)"

Location of component(s)

"Location information, EAS-3"

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

"Dosing module, fuel (L073)"

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 P3832 active?

- Yes – Proceed to step 2A
- No – Proceed to step 4A

Step by step 2: Check the fuel dosing module and the circuit

Step 2A: Inspect the fuel dosing module and connector pins

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel dosing module from the harness.
3. Inspect the fuel dosing module harness and connector for:
    1. corroded or dirty pins
    2. damaged pins
    3. pushed back or expanded pins
    4. loose connector
    5. moisture in or on the connector
    6. connector shell damaged
    7. missing or damaged connector seals
    8. wire insulation damage

Dirty or damaged pins/connector?

- Yes – A dirty or damaged connection has been detected. Clean, repair or replace the damaged connection or harness if possible - Proceed to step 4A
- No – Proceed to step 2B

Step 2B: Check for an open circuit in the fuel dosing module

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel dosing module from the harness.
3. Check the fuel dosing module resistance.
4. Measure the resistance between the fuel dosing module supply and earth pin.

Is the resistance 0.5 to 2 ohms?

- Yes – Proceed to step 2C
- No – Replace the fuel dosing module. Proceed to step 4A

Step 2C: Check for a short circuit to earth in the fuel dosing module

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel dosing module from the harness.
3. Check for a short circuit to earth in the fuel dosing module.
4. Measure the resistance between the fuel dosing module supply pin and the metal housing.

Is the resistance greater than 100k ohms?

- Yes – Proceed to step 3A
- No – Short circuit in the fuel dosing module. Replace the fuel dosing module. Proceed to step 4A

Step by step 3: Check the EAS-3 unit and the harness

Step 3A: Inspect the EAS-3 unit and the harness connector pins

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Inspect the harness and EAS-3 unit connector for:
    1. corroded or dirty pins
    2. damaged pins
    3. pushed back or expanded pins
    4. loose connector
    5. moisture in or on the connector
    6. connector shell damaged
    7. missing or damaged connector seals
    8. wire insulation damage

Dirty or damaged pins/connector?

- Yes – A dirty or damaged connection has been detected. Clean, repair or replace the damaged connection or harness if possible - Proceed to step 4A
- No – Proceed to step 3B

Step 3B: Check for an open circuit in the fuel dosing module supply harness

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the fuel dosing module from the harness.
4. Check for an open circuit.
5. Measure the resistance of the fuel dosing module supply wire between the fuel dosing module connector and the EAS-3 unit connector.

Is the resistance less than 10 ohms?

- Yes – Proceed to step 3C
- No – An open circuit has been detected in the harness. Repair or replace the harness - Proceed to step 4A

Step 3C: Check for an open circuit in the fuel dosing module earth harness

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the fuel dosing module from the harness.
4. Check for an open circuit.
5. Measure the resistance of the fuel dosing module earth wire between the fuel dosing module connector and the EAS-3 unit connector.

Is the resistance less than 10 ohms?

- Yes – Proceed to step 3D
- No – An open circuit has been detected in the harness. Repair or replace the harness - Proceed to step 4A

Step 3D: Check for a pin to earth short circuit in the harness

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the fuel dosing module from the harness.
4. Check for a pin to earth short circuit.
5. Measure the resistance between the fuel dosing module supply pin and earth.
6. Measure the resistance between the fuel dosing module earth pin and earth.

Is the resistance greater than 100k ohms?

- Yes – Proceed to step 3E
- No – A pin to earth short circuit has been detected in the harness. Repair or replace the harness - Proceed to step 4A

Step 3E: Check for a pin-to-pin short circuit in the harness

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the fuel dosing module from the harness.
4. Check for a pin-to-pin short circuit.
5. Measure the resistance between the fuel dosing module supply pin and all other pins in the harness.

Is the resistance greater than 100k ohms?

- Yes – Proceed to step 3F
- No – A pin-to-pin short circuit has been detected in the harness. Repair or replace the harness - Proceed to step 4A

Step 3F: Check for an inactive fault code

Troubleshooting steps

1. Connect all components.
2. Turn the key switch ON.
3. Start the engine and let it run at idle.
4. Check for the appropriate circuit response after 60 seconds
5. Use DAVIE to read the fault codes.

Is fault code P3832 inactive?

- Yes – The removal and installation of the connector corrected the fault - Proceed to step 4A
- 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 instruction on replacement of the EAS-3 unit.

Step by step 4: Clear the fault code

Step 4A: 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 P3832 inactive?

- Yes – Proceed to step 4B
- 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 4B: 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

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