P3837

Fault code description

Intake module fuel pressure - Data erratic, intermittent or incorrect

Possible cause

1. A malfunctioning in-range fuel pressure sensor.
2. A failure in the engine fuel system.

Additional information

Within the first minute after starting the engine, an aftertreatment pressure diagnostic cycles the fuel shut-off valve and fuel dosing module to check for leaks and proper operation.

Active DPF regeneration will be disabled until the next key cycle when the fault is active.

The fuel pressure sensor and fuel shut-off valve are located in the fuel intake module.

Set condition of fault code

This diagnostic runs within the first minute after the engine is started and prior to active regeneration of the DPF.

The EAS-3 ECU detects that the fuel pressure sensor is reading an erratic value, or the fuel pressure reading is not changing with engine operating conditions.

Reset condition of fault code

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

M027971 - 07/22/2015 15:11:22

P3837, Diagnostic information

Technical data

"Intake module, fuel (L072)"

Location of component(s)

"Location information, EAS-3"

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

"Intake module, fuel (L072)"

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 P3838 or P3839 active?

- Yes – Proceed with the appropriate fault code
- No – Proceed to step 2A

Step by step 2: Check the fuel pressure sensor and the circuit

Step 2A: Inspect the fuel pressure sensor and connector pins

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel pressure sensor from the harness.
3. Inspect the fuel pressure sensor 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 the circuit response

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel pressure sensor from the harness.
3. Turn the key switch ON.
4. Check for the appropriate circuit response after 30 seconds.
5. Use DAVIE to read the fault codes.

Is fault code P3839 active?

- Yes – Proceed to step 2C
- No – Proceed to step 3A

Step 2C: Check the circuit response

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel pressure sensor from the harness.
3. Place a jumper wire between the sensor supply pin and the signal pin at the sensor connector of the fuel pressure sensor.
4. Turn the key switch ON.
5. Check for the appropriate circuit response after 30 seconds.
6. Use DAVIE to read the fault codes.

Is fault code P3838 active?

- Yes – Proceed to step 4A
- No – Proceed to step 3A

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 harness

Troubleshooting steps

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

connector pin.

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 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 pressure sensor from the harness.
4. Check for a pin-to-pin short circuit.
5. Measure the resistance between the EAS-3 unit connector fuel pressure sensor signal pin and all other pins in the harness.

Is the resistance greater than 100k ohms?

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

Step 3D: 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 pressure sensor from the harness.
4. Check for a pin-to-pin short circuit.
5. Measure the resistance between the EAS-3 unit connector fuel pressure sensor supply pin and all other pins in the harness.

Is the resistance greater than 100k ohms?

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

Step 3E: Check for an inactive fault code

Troubleshooting steps

1. Connect all components.
2. Turn the key switch ON.
3. Check for the appropriate circuit response after 30 seconds.
4. Use DAVIE to read the fault codes.

Is fault code P3837 inactive?

- Yes – The removal and re-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 instructions.

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 P3837 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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