P3833

Fault code description

Fuel pressure fuel intake module (Relative) - Data erratic, intermittent or incorrect

Possible cause

1. Internal leak of the fuel shut-off valve allowing fuel pressure to leak past the shut-off valve.
2. Internal leak of the air shut-off valve.
3. Stuck closed fuel dosing module.

Additional information

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

The fuel shut-off valve is located in the fuel intake module.

Set condition of fault code

This diagnostic runs before and after active regeneration of the DPF.

The EAS-3 ECU detects an internally-leaking fuel shut-off valve, air shut-off valve or a stuck closed fuel dosing module.

Reset condition of fault code

This fault code will change to inactive as soon as the diagnostic runs and passes.

In order for this fault code to clear, an active regeneration of the DPF may be required. Once the temperature in the DPF is high enough to inject diesel fuel into the exhaust, the diagnostic will run.

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P3833, 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 using 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 P3837, P3838 or P3839 active?

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

Step by step 2: Check the aftertreatment fuel pressure sensor

Step 2A: Monitor the aftertreatment fuel pressure sensor accuracy

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel supply line from the fuel dosing module.
3. Place the fuel supply line in a measuring container and cover the measuring container.
4. Turn the key switch ON.
5. Compare the readings of the aftertreatment fuel pressure sensor and the ambient pressure reading, with the key switch ON and the engine not running.

Are the readings of the aftertreatment fuel pressure sensor and ambient pressure within 1.5 PSI (0.1 bar)?

- Yes – Proceed to step 3A
- No – Damaged aftertreatment fuel pressure sensor. Replace the aftertreatment fuel pressure sensor - Proceed to step 6A

Step by step 3: Check the fuel shut-off valve

Step 3A: Inspect for a stuck open or leaking fuel shut-off valve

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel supply line from the fuel dosing module.
3. Place the fuel supply line in a measuring container and cover the measuring container.
4. Start and idle the engine.
5. Perform the 'fuel shut-off valve leak test'. Perform the test 3 times. For more information, go to 'Explanatory notes to DAVIE'.
6. Check for a stuck open or leaking fuel shut-off valve.

Is fuel leaking from the fuel dosing module supply line?

- Yes – Leaking fuel shut-off valve. Replace the fuel shut-off valve - Proceed to step 6A
- No – Proceed to step 4A

Step by step 4: Check the air shut-off valve

Step 4A: Inspect for a stuck open or leaking air shut-off valve

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the fuel supply line from the fuel dosing module.
3. Place the fuel supply line in a measuring container and cover the measuring

container.

4. Start and idle the engine.
5. Perform the 'fuel shut-off valve leak test'. Perform the test 3 times. For more information, go to 'Explanatory notes to DAVIE'.
6. Check for a stuck open or leaking air shut-off valve. Airflow will be delayed for 30 seconds, air will blow for 60 seconds, then airflow should stop. Verify that air does not blow beyond this 90 second interval.

Did the airflow last longer than the 90 second interval?

- Yes – Leaking air shut-off valve. Replace the air shut-off valve - Proceed to step 6A
- No – Proceed to step 5A

Step by step 5: Check the fuel dosing module

Step 5A: Inspect for a stuck closed fuel dosing module

Troubleshooting steps

1. Turn the key switch OFF.
2. Remove the fuel dosing module.
3. Place the fuel dosing module in a measuring container and cover the measuring container.
4. Perform the 'fuel dosing system override test'. For more information, go to 'Explanatory notes to DAVIE'.

Does the fuel dosing module meet the specifications?

- Yes – Proceed to step 6A
- No – Replace the fuel dosing module - Proceed to step 6A

Step by step 6: Clear the fault code

Step 6A: 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 that the fault codes are inactive.

Is fault code P3833 inactive?

- Yes – Proceed to step 6B
- 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 6B: 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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