P3777

Fault code description

Fuel dosing module - Degraded

Possible cause

1. A dirty or damaged fuel dosing module.
2. Clogged secondary fuel filter.
3. Malfunctioning on fuel intake module parts.
4. Carbon build-up on fuel dosing module gasket.
5. Diesel Oxidation Catalyst (DOC) clogged.
6. Diesel Oxidation Catalyst (DOC) contaminated with engine oil or fuel.
7. Fuel dosing module not properly actuated due to electrical issues.

Additional information

The EAS-3 ECU detects that the aftertreatment fuel dosing module has used up all compensation.

Active DPF regeneration will be disabled.

Possible ineffective regeneration of the DPF can result after the fault code has changed to active.

Set condition of fault code

This diagnostic runs during active regeneration of the DPF system.

The EAS-3 ECU detects that the fuel dosing module cannot inject enough fuel for active regeneration of the DPF system.

Reset condition of fault code

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

It is necessary to run a stationary regeneration or use DAVIE to clear this fault.

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This information applies exclusively to the entered chassis number or the selected engine type. Please take into account that this information may change daily. Therefore the provided information is only valid on 12-16-2015. You cannot derive any rights from the information provided with respect to vehicles and/or components of another series, with another chassis number, and/or of another date. (/)

P3777, 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 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.

Are fault codes related to the fuel intake module, fuel pressure sensor, fuel shut off valve, air shut off valve or fuel dosing module active?

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

Step by step 2: Check the secondary fuel filter

Step 2A: Inspect for a clogged secondary fuel filter

Troubleshooting steps

1. Turn the key switch OFF.
2. Check the secondary fuel filter for blockage.

Was any blockage found in the secondary fuel filter?

- Yes – Replace the secondary fuel filter. Proceed to step 5A.
- No – Proceed to step 3A.

Step by step 3: inspect the fuel intake module

Step 3A: Inspect the fuel intake module

Troubleshooting steps

1. Turn the key switch OFF.
2. Perform the fuel shut-off valve leak test.
3. Inspect the intake module, fuel lines and fuel line connections for leaks.
4. Remove the fuel intake module
5. Inspect the fuel inlet and outlet ports of the fuel module for blockage.

Was any debris or leakage found?

- Yes – Remove any debris that is found. If the fuel intake module is leaking, contact the Engine Support Center as it may need to be replaced. Proceed to step 5A
- No – Proceed to step 4A.

Step by step 4: Check the fuel dosing module

Step 4A: Inspect the fuel dosing module and related circuit connector pins

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the connectors for the fuel dosing module circuit.
3. Inspect the connectors for:
   - Corroded or dirty pins
   - Damaged pins
   - Pushed back or expanded pins
   - Loose connector
   - Moisture in or on the connector
   - Connector shell damaged
   - Missing or damaged connector seals
   - Wire insulation damage
4. 4. Clean connectors with electrical contact cleaner.

Are any of the pins/connectors dirty or damaged?

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

Step 4B: Inspect the 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' and the 'dosing module leak test'. For more information, go to 'Explanatory notes to DAVIE'.

Does the fuel dosing module meet the specifications?

- Yes – Proceed to step 5A
- No – Remove the isolator ring, clean the fuel dosing module according to the job 'clean dosing module, fuel' and re-test.

  If after removing and cleaning the isolator ring it still doesn’t pass the test, then replace the fuel dosing module. - Proceed to step 5A

Step by step 5: Clear the fault code

Step 5A: Disable the fault code

Troubleshooting steps

1. Connect all components.
2. Perform a stationary regeneration
3. Use DAVIE to verify that the fault codes are inactive.

Is fault code P3777 inactive?

- Yes – Proceed to Step 5B
- 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 5B: 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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