P3782

Fault code description

Diesel particulate filter (DPF) - Too frequent regeneration

Possible cause

1. DPF pressure sensor malfunction.
2. Fuel dosing module malfunction.
3. An engine malfunction that is increasing soot output.
4. A face-blocked DOC.

Additional information

The EAS-3 system has detected that the need for an active regeneration has occurred too soon following the last active regeneration.

Set condition of fault code

This diagnostic runs after completion of an active regeneration of the DPF.

The EAS-3 ECU detects that the time between the completion of a successful active regeneration and the request for another active regeneration is less than the threshold. The threshold depends on the type of operation of the vehicle.

The fault code is set after the diagnostic has run twice.

Reset condition of fault code

To validate the repair, perform the 'DPF regeneration' test with DAVIE.

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

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P3782, Diagnostic information

Technical data

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Location of component(s)

"Location information, EAS-3"

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

"DPF unit"

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 P3782 active?

- Yes – Proceed to step 1B
- No – Proceed to step 5A

Step 1B: Check for fault codes

Troubleshooting steps

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

Is fault code P3759, P3760, P3761, P3762 or P3790 active?

- Yes – Proceed with the appropriate fault code
- No – Proceed to step 1C

Step 1C: Check for fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Check for engine-related fault codes
3. Use DAVIE to check for fault codes.

Are fault codes related to the engine active?

- Yes – Proceed with the appropriate fault code

- No – Proceed to step 2A

Step by step 2: Check the DPF pressure sensor

Step 2A: Monitor the DPF pressure sensor

Troubleshooting steps

1. Turn the key switch ON.
2. Engine OFF.
3. Monitor the DPF pressure sensor with DAVIE.

Is the differential pressure reading 0±0.44 PSI (0±0.03 bar) with the key switch ON and the engine OFF?

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

Step 2B: Inspect the DPF pressure sensor tubes

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the DPF pressure sensor tubes.
3. Check the DPF pressure sensor tubes for blockage or leakages.

Are there damaged, disconnected or blocked tubes?

- Yes – Clean, repair or replace the damaged pressure sensor tubes - Proceed to step 5A
- No – Check for a pin-to-pin short circuit in the differential pressure signal wire. If no short circuit is found, replace the DPF pressure sensor - Proceed to step 5A

Step by step 3: Check the exhaust

Step 3A: Inspect the DOC for particulate accumulation

Troubleshooting steps

1. Turn the key switch OFF.
2. Remove the DOC.
3. Check the inlet of the DOC for particulate accumulation.

Are more than 50 percent of the cells completely blocked?

- Yes – Clean the DOC. An engine-related failure that causes excessive exhaust smoke could be the cause. Proceed to step 3B
- No – An engine-related failure that causes excessive exhaust smoke could be the cause. Proceed to step 3B

Step 3B: Check the DPF for Damage

Troubleshooting steps

1. Turn the key switch OFF.
2. Remove and inspect the DPF. See Engine Rapido job: 'check/clean DPF element'
3. Clean the DPF as needed. Refer to the cleaning machine manufacturing instructions.

DPF discolouration does not indicate a failed filter. See Engine Rapido job: 'check/clean DPF element'.

Is the DPF damaged according to the Engine Rapido job: 'check/clean DPF element'

- Yes – The DPF may need to be replaced. Contact the Engine Support Center for confirmation before replacing the DPF. Proceed to step 4A.
- No – Proceed to step 4A.

Step by step 4: Check the fuel dosing module

Step 4A: 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 – 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. 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 P3782 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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