P3762

Fault code description

DPF pressure - Data erratic, intermittent or incorrect

Possible cause

1. DPF pressure sensor reading, stuck in-range.
2. High resistance in the DPF pressure sensor signal or return wires.
3. Disconnected, blocked, or damaged DPF pressure sensor tubes

Additional information

The EAS-3 ECU will use a default value of 0 PSI (0 bar) for the DPF differential pressure reading.

Set condition of fault code

The diagnostic runs during different routines:

- key on diagnostic: the pressure is read when the engine is not running. The value should be around 0 PSI (0 bar).
- range diagnostic: the pressure is read when the engine is running. The change of pressure reading will be compared with changes in the exhaust volumetric flow rate.

The EAS-3 ECU detects that:

- the absolute value of the differential pressure is higher than 0.22 PSI (0.015 bar) during the key on diagnostic, or
- the volumetric flow rate of the exhaust gas is changing by more than 19.42 ft3/s (0.55 m3/s), while the DPF differential pressure is not changing by more than 0.15 PSI (0.01 bar).

  The exhaust volumetric flow rate and the differential DPF pressure can be monitored using DAVIE.

Reset condition of fault code

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

M027830 - 07/22/2015 19:12:39

P3762, Diagnostic information

Technical data

"Sensor, DPF pressure (F837)"

Location of component(s)

"Location information, EAS-3"

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

"Sensor, DPF pressure (F837)"

Block diagram

"Block diagram EAS-3"

Step by step troubleshooting

Please perform the troubleshooting steps below by utilizing 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 the fault code P3759 or P3760 active?

- Yes – Proceed with fault code P3759 or P3760
- No – Proceed to step 2A

Step by step 2: Check the DPF pressure sensor tubes

Step 2A: Inspect the DPF pressure sensor tubes

Troubleshooting steps

1. Turn the Key switch OFF.
2. Inspect the DPF pressure sensor tubes for:
    1. both ends securely connected
    2. leaks or damage
    3. blockage.

Are there damaged, disconnected or blocked tubes?

- Yes – Clean, repair or replace the damaged pressure sensor tubes - Proceed to step 5A
- No – Proceed to step 3A

Step by step 3: Check the DPF pressure sensor (differential pressure) and the

circuit

Step 3A: Inspect the DPF pressure sensor and connector pins

Troubleshooting steps

1. Turn the Key switch OFF.
2. Disconnect the DPF pressure sensor from the harness.
3. Inspect the DPF 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 5A
- No – Proceed to step 3B

Step 3B: Check the circuit response

Troubleshooting steps

1. Turn the Key switch OFF.
2. Disconnect the DPF 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 the fault code P3760 active?

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

Step 3C: Check the circuit response

Troubleshooting steps

1. Turn the Key switch OFF.
2. Disconnect the DPF 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 DPF 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 the fault code P3759 active?

- Yes – An in-range sensor has been detected. Replace the sensor. Proceed to step 5A
- No – Proceed to step 4A

Step by step 4: Check the EAS-3 unit and the harness

Step 4A: 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?

- Yes – A dirty or damaged connection has been detected. Clean, repair or replace the damaged connection or harness if possible - Proceed to step 5A
- No – Proceed to step 4B

Step 4B: Check for resistance in the harness

Troubleshooting steps

1. Turn the Key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the DPF pressure sensor from the harness.
4. Check for resistance in the circuit.
5. Measure the resistance of the DPF pressure sensor signal wire between the EAS-3 unit connector pin and the sensor connector pin.

Is the resistance less than 10 ohms?

- Yes – Proceed to step 4C
- No – High resistance has been detected in the harness. Repair or replace the harness - Proceed to step 5A

Step 4C: Check for a pin to ground short circuit

Troubleshooting steps

1. Turn the Key switch OFF.
2. Disconnect the EAS-3 unit from the harness.
3. Disconnect the DPF pressure sensor from the harness.
4. Check for a pin to ground short circuit.

5. Measure the resistance between the EAS-3 unit connector DPF pressure sensor signal pin and ground.

Is the resistance greater than 100k ohms?

- Yes – Proceed to step 4D
- No – A pin to ground short circuit has been detected in the harness. Repair or replace the harness - Proceed to step 5A

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

Is the resistance greater than 100k ohms?

- Yes – Proceed to step 4E
- No – A pin-to-pin short circuit has been detected in the harness. Repair or replace the harness - Proceed to step 5A

Step 4E: 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 the fault code P3762 inactive?

- Yes – The removal and installation of the

connector corrected the fault - Proceed to step 5A

- 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 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 if the fault codes are inactive.

Is the fault code P3762 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

M046709 - 07/22/2015 19:10:38

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