P3818

Fault code description

NOx sensor after catalyst - Heater element malfunction

Possible cause

1. The NOx after catalyst sensor internal heater has malfunctioned.
2. The NOx after catalyst sensor has malfunctioned or is damaged.

Additional information

This fault may result in engine torque reduction or vehicle speed limiting.

Set condition of fault code

The set condition depends on the "release sequence number"

Release sequence number <9:

This diagnostic runs continuously when the key switch is in the ON position and the engine is running and the exhaust gas temperature after the SCR catalyst is above 302ºF (150ºC) for five seconds.

The NOx sensor after catalyst heater element does not increase the sensor temperature to the required operating temperature within the required time threshold or the heater element is not able to maintain the operating temperature of the sensor.

Release sequence number ≥9:

This diagnostic runs continuously when the key switch is in the ON position and the engine is running and the exhaust gas temperature after the SCR catalyst is above 392ºF (200ºC) for 60 seconds.

The NOx sensor after catalyst heater element does not increase the sensor temperature to the required operating temperature within the required time threshold or the heater element is not able to maintain the operating temperature

of the sensor.

Reset condition of fault code

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

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P3818, Diagnostic information

Technical data

"Sensor, NOx after catalyst (F843)"

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, NOx after catalyst (F843)"

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 P3818 active?

- Yes – Proceed to step 1B
- No – Proceed to step 2A

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 P3808, P3809, P3812, P3962, P3963 or P3807 active or inactive?

- 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. Use DAVIE to check for related fault codes.

Is fault code P3798, P3967, P3800, P3801, P3802 active?

- Yes – Proceed with the appropriate fault

code

- No – An internal error has been detected in the NOx sensor heater. Replace the NOx sensor. Proceed to step 2A

Step by step 2: Clear the fault code

Step 2A: 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 P3818 inactive?

- Yes – Proceed to step 2B
- 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 2B: 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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