P3925

Fault code description

Pump module pressure - Data valid but too high

Possible cause

1. Troubleshoot other active SCR-related faults before this fault.
2. Blocked, restricted or frozen DEF return line.
3. Blocked, restricted or frozen DEF return line fitting.
4. Failed pump module.
5. DEF contamination

Additional information

The DEF pressure is higher than the ambient pressure at initial key on. This sensor signal voltage changes based on the DEF pressure supplied by the supply module. The EAS-3 actuator will detect a low signal voltage at low DEF pressures, and high signal voltage at high DEF pressures. The pump module detected a blockage in the DEF return circuit.

DEF injection into the SCR system is disabled.

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

Set condition of fault code

This diagnostic runs continuously when the system is dosing or ready to dose DEF.

The EAS-3 actuator detects that the DEF pressure cannot be maintained during DEF dosing. The fault code will be set when the DEF pressure increases above 152 PSI (10.5 bar) for 20 seconds.

Reset condition of fault code

To validate the repair, perform the 'DEF pump module override test' with DAVIE.

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

M028013 - 07/23/2015 02:03:10

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 12-19-2015. 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. (/)

P3925, Diagnostic information

Technical data

"Pump module (L074)"

Location of component(s)

"Location information, EAS-3"

Electrical diagram(s)

Refer to the OEM service manual for more information.

Description of component(s)

"Pump module (L074)"

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 P3925 active or are there more than two inactive counts?

- Yes – Proceed to step 1B
- No – Proceed to step 4A

Step 1B: Check for related fault codes

Troubleshooting steps

1. Turn the key switch ON.
2. Use DAVIE to check for fault codes.
3. Check for related fault codes with regard to the pump module, reverting valve and/or DEF dosing valve.

Are related fault codes with regard to the pump module, reverting valve and/or dosing valve active?

- Yes – Proceed with the appropriate fault code before troubleshooting fault code P3925
- No – Proceed to step 2A

Step by step 2: Check the DEF dosing system lines and fittings

Step 2A: Inspect the DEF dosing system for external leaks

Troubleshooting steps

1. Turn the key switch OFF.
2. Inspect the following DEF lines between:
    1. The DEF tank and the pump module (supply and return line).
    2. The pump module and the DEF dosing valve.
3. Inspect the abovementioned DEF lines and associated fittings/connectors.
    - Check the supply and return line connections are not swapped at the pump module or DEF tank connections. Swapped DEF line connectors cause the pump module to fail to prime.
    - Check the DEF tank connections (supply and return lines) for cracks and pitting.
    - Check all three pump module connections and fittings for loose, leaking or damaged connections.
    - Disconnect the supply line, pressure line and return line pump module connectors and look for signs of white deposit build-up or blockages.
    - Check the supply line for signs of leakage or openings that will allow the pump module to suck in air with the DEF.
    - Check for correct sealing at all connection points, including the DEF tank (two connections), pump module (three connections) and DEF dosing valve (one connection).

DEF will form white deposits around leaking connections.

Are any swapped, damaged, leaking or restricted DEF lines/fittings/connections detected in the system?

- Yes – Repair the DEF line/fitting/connection. Proceed to step 3A
- No – Proceed to step 2B

Step 2B: Check the pump module DEF return line

Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the pump module DEF return line from the pump module.
3. Disconnect the pump module DEF return line from the DEF tank.
4. Check the pump module DEF return line for blockages.
5. Check both ends of the pump module DEF return line for signs of build-up or blockages.
6. Blow compressed air through the pump module DEF return line to make sure it flows freely.

DEF will form white deposits around leaking connections.

Is the pump module DEF return line blocked or restricted?

- Yes – Try to clean the pump module DEF return line with lukewarm water and air. If necessary, replace the return line. Proceed to step 3A
- No – Proceed to step 3A

Step by step 3: Check the pump module operation

Step 3A: Check the pump module for proper operation.

Troubleshooting steps

1. Connect all components.
2. Remove the DEF dosing valve from the decomposition pipe.
3. Perform the DEF pump module override

test. For more information, go to 'Explanatory notes to DAVIE'.

Does the DEF pump module meet the specifications?

- Yes – Proceed to step 4A
- No – Replace the pump module return line fitting. Perform the DEF pump module override test again with the new fitting. If the measured volume of DEF is still not within the specifications, replace the pump module. Proceed to step 4A

Step by step 4: Check the DEF quality

Step 4A: Inspect the DEF quality

Troubleshooting steps

1. Turn the key switch OFF.
2. Check the DEF quality:
   - Visually inspect the DEF in the tank for signs of debris or contamination.
   - Use a DEF refractometer to measure the urea concentration.
   - Use the oil test paper to test for diesel fuel or oil contamination in the DEF tank.

Is the DEF free of contamination and within the specifications?

- Yes – Proceed to step 5A
- No – The fluid in the tank is not pure DEF. Drain the tank, clean the system and fill the tank with DEF. 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 whether the fault codes are inactive.

Is fault code P3925 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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