# P3890

## Fault code description

Pump module temperature - Data erratic, intermittent or incorrect, At cold start

## Possible cause

1. Failed pump module.
2. Ambient temperature sensor signal value unlikely.
3. Ambient temperature sensor failure.

## Additional information

An internal error has been detected in the pump module.

The ambient temperature signal value is unlikely.

DEF injection into the SCR system is disabled.

## Set condition of fault code

This diagnostic runs when the key switch is turned ON after a 10-hour cold soak and the engine has cooled down.

The EAS-3 actuator detects an internal error in the pump module.

The deviation of the ambient temperature sensor compared with the internal temperature sensor exceeds the programmed value.

Please note that if any on-board ECU or display indicates an outside air temperature sensor code or inaccuracy, that repair should be made before diagnosing code P3890.

## Reset condition of fault code

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

This fault code cannot be cleared with DAVIE.

This diagnostic runs when the key switch is turned ON after a 10-hour cold soak.

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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 12-19-2015. 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. ( / )

# P3890, 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 related fault codes

Troubleshooting steps

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

#### Is fault code P009A, P0072 or P0073 active?

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

### 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 P3890 active?

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

## Step by step 2: Check the ambient temperature sensor

### Step 2A: Monitor the ambient temperature sensor

Troubleshooting steps

1. Turn the key switch ON.
2. Check the ambient temperature sensor reading.

#### Is there a large deviation between the ambient temperature sensor value and the

### actual ambient temperature?

- Yes – A problem with the ambient sensor signal is the cause. Repair the sensor, wiring etc. Proceed to step 3A.
- No – Proceed to step 3A

## Step by step 3: Clear the fault code

### Step 3A: 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 P3890 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 3B: 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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