

## P3859

### Fault code description

Pump module - Open circuit

### Possible cause

1. Open circuit in the pump module.
2. Open circuit in the pump module harness.
3. Failed EAS-3 actuator ECU.

### Additional information

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

### Set condition of fault code

This diagnostic runs continuously when the key switch is ON.

The EAS-3 ECU detects that the pump module has an open circuit.

### Reset condition of fault code

To validate the repair, start the engine and let it idle for one minute.

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

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## P3859, 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 P3859 active?

- Yes – Proceed to step 2A
- No – Proceed to step 4A

## Step by step 2: Check the pump module and the circuit

### Step 2A: Inspect the pump module and connector pins

#### Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the pump module from the harness.
3. Inspect the pump module harness and 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 4A
- **No** – Proceed to step 2B

### Step 2B: Check the circuit response

#### Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the pump module from the harness.
3. Place a jumper wire between the pump motor/temperature sensor signal pin and the pump motor/temperature sensor earth pin at the sensor connector of the pump module.
4. Turn the key switch ON.
5. Check for the appropriate circuit response after 30 seconds.
6. Use DAVIE to read the fault codes.



Multiple fault codes related to the pump module will become active.

### Is fault code P3858 active and P3859 inactive?

- **Yes** – Proceed to step 2C
- **No** – Proceed to step 3A

### Step 2C: Check the fault codes and verify the pump module condition

#### Troubleshooting steps

1. Turn the key switch OFF.
2. Connect all components.
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 fault code P3859 active?

- **Yes** – A damaged pump module has been detected. Replace the pump module.  
Proceed to step 4A
- **No** – The removal and reinstallation of the connector corrected the fault. Proceed to step 4A

### Step by step 3: Check the EAS-3 actuator and the harness

#### Step 3A: Inspect the EAS-3 actuator and the harness connector pins

##### Troubleshooting steps

1. Turn the key switch OFF.
2. Disconnect the EAS-3 actuator from the harness.
3. Inspect the harness and EAS-3 actuator 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 4A
- **No** – Proceed to step 3B

#### Step 3B: Check for an open circuit in the harness

##### Troubleshooting steps

1. Turn the key switch OFF.

2. Disconnect the EAS-3 actuator from the harness.
3. Disconnect the pump module from the harness.
4. Measure the resistance of the pump motor/temperature sensor signal wire between the EAS-3 actuator connector pin and the pump module connector pin.
5. Measure the resistance of the pump motor supply wire between the EAS-3 actuator connector pin and the pump module connector pin.
6. Measure the resistance of the pump motor earth wire between the EAS-3 actuator connector pin and the pump motor connector pin.

#### Is the resistance less than 10 ohms?

- **Yes** – 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 on replacement of the EAS-3 actuator.
- **No** – An open circuit has been detected in the harness. Repair or replace the harness - Proceed to step 4A

#### Step by step 4: Clear the fault code

##### Step 4A: 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 P3859 inactive?

- **Yes** – Proceed to step 4B

- **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 4B: 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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