

## P0404

### Fault code description

EGR valve - Unable to reach target position

### Possible cause

1. Low oil pressure
2. EGR valve stuck (for example: soot deposit)
3. Outdated software

### Additional information

EGR valve position monitoring

### Set condition of fault code

This diagnostic starts four minutes after engine start and it runs continuously.

### Reset condition of fault code

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

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## P0404, Diagnostic information

Technical data

["EGR valve sensor \(L033\)"](#)

Location of component(s)

["Location information, PMCI-2"](#)

Electrical diagram(s)

["PMCI-2"](#)

Description of component(s)

["EGR valve sensor \(L033\)"](#)

Block diagram

["PMCI-2"](#)

### Step by step troubleshooting



Please perform the troubleshooting steps below by utilising 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.



- This troubleshooting tree is based on the assumption that supply power and earth to the PMCI are functioning properly.
- Disconnecting the PMCI 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 in Rapido.
- It is necessary to exit the '**active errors**' screen in DAVIE and run the diagnostic test again to identify any change in errors.
- Remember that the truck's operational or mechanical issues may be the root cause of both active and inactive codes. Refer to the 'possible causes' section in Rapido.

### Step 1

Make sure that the software on the truck is the most recent version.

If the software is not the most recent version, update it.

Did the software need to be updated?

- **Yes** – Clear the codes then run the engine to verify that fault code P0404 does not return. If the fault code returns, proceed to step 2. If the fault code does not return, proceed to any remaining fault codes.
- **No** – Proceed to step 2.

## Step 2

Fault code P0404 typically occurs along with the following EGR-related faults. Check DAVIE for the presence of these faults:

- P0489
- P0490
- P2425
- **If these faults are present** – Proceed to the troubleshooting for these faults.
- **If there are no other faults** – Proceed to step 3.

## Step 3

**Visual inspection** - Visually inspect all applicable connectors and harnesses for corrosion, damage, and rubbing during each step of the diagnostic procedure. Proceed to step 4.

## Step 4

Determine current status of the fault code P0404.

- **If code is inactive** – Proceed to the verification procedure.
- **If code is active** – Proceed to step 5.

## Step 5

With key **OFF**, disconnect the engine harness from the EGR valve. Measure the resistance of the actuator.

- **If the resistance is acceptable** – Proceed

to step 6.

- **If the resistance is not acceptable** – Replace the EGR valve assembly. Proceed to the verification procedure.

## Step 6

With key **OFF**, disconnect the engine harness from the EGR valve. With key **ON**, measure the voltage on the harness.

- **If the voltage is acceptable** – Proceed to step 7
- **If the voltage is not acceptable** – Proceed to step 8.

## Step 7

With key **ON**, measure the voltage on the harness while performing a gentle wiggle test on the EGR wire harness.

- **If the voltage changes** – Repair or replace the engine harness. Proceed to the verification procedure.
- **If the voltage remains constant** – Proceed to step 8.

## Step 8

With key **OFF**, disconnect the engine harness from the PMCI and measure the continuity of signal and earth wires.

- **If there is an open circuit or high resistance** – Repair or replace the engine harness. Proceed to the verification procedure.
- **If the circuit test passes** – Proceed to step 9.

## Step 9

Using the freeze frame data from the DAVIE fault log, determine the oil pressure and oil temperature when the fault occurred.

- If oil pressure was greater than 15 psi (1 bar) and oil temperature was greater than 95°F (35°C) – Proceed to step 10.
- If the oil pressure was less than 15 psi (1 bar) or the oil temperature was less than 95°F (35°C) – Proceed to step 11.

### Step 10

Remove EGR valve assembly from engine and manually open and close the valve.

- If the valve is stuck or difficult to move – Replace the EGR valve. Proceed to the verification procedure.
- If the valve moves easily – Reinstall the EGR valve. Proceed to step 11.

### Step 11

With engine running and oil at operating temperature, measure oil pressure.

- If oil pressure remains less than 15 psi (1 bar) – Investigate cause of low oil pressure.
- If oil pressure is greater than 15 psi (1 bar) – Proceed to the verification procedure.

### Verification procedure

With DAVIE connected and key ON, clear the errors. Return the truck to operating condition. Perform the EGR initialisation in DAVIE. Start the engine and let it idle to verify with DAVIE that the errors do not recur.

- If errors recur – Contact the Engine Support Center (ESC).
- If errors do not recur – Proceed to any active fault codes.

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