

P0400: EXHAUST GAS RECIRCULATION (EGR) FLOW MALFUNCTION

OVERVIEW

Severity	:	<div><div></div></div> High
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$100-\$200
Can I Still Drive?	:	Yes

What Does The P0400 Code Mean?

The exhaust gas recirculation (EGR) valve is vacuum controlled valve that regulates the amount of exhaust gases that re-enter the cylinders.

The powertrain control module (PCM) determines how much based on engine load, temp, and other conditions. If the PCM detects that the amount of exhaust gases entering the cylinder were insufficient or non-existent, this code is set.

What Are The Symptoms Of The P0400 Code?

No symptoms will likely be noticed by the driver other than the MIL (malfunction indicator lamp). However, non visible symptoms will be increased combustion temperature and increased Nox emissions.

What Are The Potential Causes Of The P0400 Code?

A code P0400 may mean that one or more of the following has happened:

- Plugged EGR passage which restricts the flow of exhaust gasses
- Faulty EGR solenoid
- Faulty EGR solenoid wiring/harness

- Vacuum lines damaged/disconnected to the EGR valve solenoid or to the EGR valve
- Faulty EGR valve

How Can You Fix The P0400 Code?

Since EGR valve designs are different, no one test will suffice:

- Using a scan tool, operate the EGR valve with the engine running. If the engine stumbles, the problem was likely intermittent wiring problem or intermittent blockage problem
- If engine doesn't stumble, operate the EGR valve manually, if possible. If engine doesn't stumble and die, the ports are likely plugged. Removal of valve and cleaning of all ports will be required
- Checking of solenoid can only usually be done with a scan tool, because most solenoids operate with a duty cycle of voltage, rather than constant voltage
- Check all vacuum lines, hoses, etc for any damage
- Visually inspect the solenoid harness and the solenoid for damage
- Replace EGR valve

Related EGR codes: [P0401](#), [P0402](#), [P0403](#), [P0404](#), [P0405](#), [P0406](#), [P0407](#), [P0408](#), [P0409](#)

Reference Sources

[Diagnostic Trouble Code \(DTC\) Charts and Descriptions for P0400](#) - Pages 65-66.