

P0135: OXYGEN O2 SENSOR HEATER CIRCUIT MALFUNCTION (BANK 1, SENSOR 1)

OVERVIEW

Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$100-\$300
Can I Still Drive?	:	Yes (Short-term only)

What Does The P0135 Code Mean?

This code refers to the front oxygen sensor on Bank 1. The heated circuit in the oxygen sensor decreases time needed to enter closed loop.

As the O2 heater reaches operating temperature, the oxygen sensor responds by switching according to oxygen content of the exhaust surrounding it. The ECM tracks how long it takes for the oxygen sensor to begin switching. If the ECM determines (based on coolant temp) that too much time elapsed before the oxygen sensor began operating properly, it will set P0135.

What Are The Symptoms Of The P0135 Code?

You will likely notice poor fuel economy the illumination of the MIL.

What Are The Potential Causes Of The P0135 Code?

A code P0135 may mean that one or more of the following has happened:

- O2 Heater element resistance is high
- Internal short or open in the heater element
- O2 heater circuit wiring high resistance
- Open or short to ground in the wiring harness

How Can You Fix The P0135 Code?

- Repair short or open or high resistance in wiring harness or harness connectors
- Replace oxygen sensor (cannot repair open or short that occurs internally to sensor)

Reference Sources

- [Technical Service Bulletin for P0135](#) - Ford
- [Diagnostic Trouble Code \(DTC\) Charts and Descriptions for P0135](#) - Pages 34-35.