

CADILLAC P1635: 5-VOLT REFERENCE 1 CIRCUIT MALFUNCTION

OVERVIEW

Severity	:	Medium
DIY Difficulty Level	:	Intermediate
Repair Cost	:	\$100-\$300
Can I Still Drive?	:	Yes

What Does The Cadillac P1635 Code Mean?

Engine started; and the PCM detected an out-of-range voltage condition on the 5v Reference 1 circuit for 1 second. The PCM uses the 5v VREF 1 circuit connects to the MAP sensor, EGR Valve Pintle position sensor and Throttle Position sensor.

What Are The Potential Causes Of The Cadillac P1635 Code?

- 5v VREF circuit is shorted to sensor ground or chassis ground
- 5v VREF circuit or MAP sensor circuit is shorted to power (B+)
- 5v VREF circuit shorted to EGR sensor High signal circuit
- EGR solenoid valve (and sensor) is damaged or has failed
- PCM has failed

Reference Sources

GM, 2013, [Service Bulletin - Prior To Any Circuit Testing](#).