

CHEVROLET P1402: EXHAUST GAS RECIRCULATION (EGR) FLOW INSUFFICIENT

OVERVIEW

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

What Does The Chevrolet P1402 Code Mean?

The Engine Control Module (ECM) supplies the Exhaust Gas Recirculation (EGR) valve with a 5 V reference circuit, a low reference circuit, an H-bridge motor directional control circuit, and a signal circuit. The EGR position sensor provides a signal voltage that changes relative to the EGR position.

The EGR position sensor information is transmitted between the EGR valve and the ECM on the signal circuit. The Mass Air Flow (MAF) sensor signal is used by the ECM to detect the proper amount of EGR flow. The ECM will close the EGR valve, then open the EGR valve to 100%. The ECM will then calculate the MAF difference and determine if the proper EGR flow has been detected. The Diagnostic Trouble Code (DTC) will be set when the ECM detects a low voltage on the EGR motor supply for greater than 2.5s.

What Are The Potential Causes Of The Chevrolet P1402 Code?

- Faulty Exhaust Gas Recirculation (EGR) Valve
- Exhaust Gas Recirculation Valve harness is open or shorted
- Exhaust Gas Recirculation Valve circuit poor electrical connection
- Faulty Engine Control Module (ECM)

Reference Sources

- GM, 2020, [Service Bulletin](#) - PIT5751A SES MIL / Reduced Engine Power / Misre / IPC Gauges Sweep / IPC Warning Message / Loss Communication / Various DTCs / Blown Fuse (Inspect Engine Harness 3.0L Diesel).
- GM, 2020, [Service Bulletin](#) - PIT5751B SES MIL / Reduced Engine Power / Misre / IPC Gauges Sweep / IPC Warning Message / Loss Communication / Various DTCs / Blown Fuse (Inspect Engine Harness 3.0L Diesel).