

DODGE P1643: SUPERCHARGER BYPASS VALVE ACTUATOR CONTROL SYSTEM - STUCK CLOSED

OVERVIEW

Severity	:	<div><div>Medium</div></div>
DIY Difficulty Level	:	<div><div>Intermediate</div></div>
Repair Cost	:	\$300-\$400
Can I Still Drive?	:	Yes

What Does The Dodge P1643 Code Mean?

The Supercharger boost pressure is managed by the use of a Supercharger Bypass (SCB) Valve. The PCM can vary the position of the SCB Valve to control the amount of boost. The SCB system uses two Position Sensors to monitor the SCB blade position. Position Sensors are located within the SCB Valve assembly.

Each sensor has its own Signal circuit. Both sensors share a 5-Volt reference circuit (Supply) and a low reference circuit (Sensor Return). The Powertrain Control Module (PCM) monitors the SCB Valve Sensor data. Each Signal circuit provides the PCM with a signal voltage proportional to SCB blade movement. The PCM monitors the data to verify that the indicated SCB position is correct.

What Are The Potential Causes Of The Dodge P1643 Code?

- COKING OR BLOCKAGE OF THE SUPERCHARGER BYPASS VALVE PLATE
- SUPERCHARGER BYPASS VALVE

Reference Sources

[Dodge P1643](#), DTCDECODE.