JEEP P1004: SHORT RUNNER VALVE CONTROL PERFORMANCE

OVERVIEW

Severity : Medium

DIY Difficulty Level : Intermediate

Repair Cost : \$80-\$320

Can I Still Drive? : Yes (Short-term only)

What Does The Jeep P1004 Code Mean?

The engine performance and power output is enhanced through the use of the Short Runner Valve (SRV) system. The SRV system allows the intake charge air to bypass the long Intake Manifold runners between the Intake Manifold plenum and the Intake Manifold interface to the cylinder heads by providing a shorter runner directly between the plenum and the cylinder head interface.

The SRV position is controlled by a pneumatic/spring actuator and electronic solenoid valve. When the solenoid is not energized (the "rest" position), the SRV is held in the closed position. When the solenoid is energized the SRV is moved and held in its opened position. There is a set of enable conditions including a minimum engine coolant and ambient temperature, SRV enable and Powertrain Coordinator load enable condition. If any of these conditions are not met, then the SRV valve is de-energized (closed).

What Are The Potential Causes Of The Jeep P1004 Code?

- (F342) ASD relay output circuit open or high resistance
- High resistance in the (K237) short runner valve (SRV) signal circuit
- High resistance in the (K238) short runner valve (SRV) control circuit
- High resistance in the (Z903) short runner valve (SRV) ground circuit
- Short runner valve (SRV) assembly
- Powertrain control module (PCM)



Reference Sources

Jeep P1004, DTCDECODE.

