2014 - 2015 Corvette: GM TechLink: Sticking Camshaft Position Actuator Solenoid Valve

Subject: Performance Data Recorder

Model and Year: 2015 Corvette

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On some 2014-2015 Corvette, Silverado, Suburban, Tahoe Sierra, Yukon, and Yukon XL models equipped with a 4.3L, 5.3L or 6.2L engine (RPOs LV3, L83, L86, LT1), an intermittent crank, no start condition may be present with DTCs P0011 (Intake Camshaft Position System Performance) and/or P00C6 (Fuel Rail Pressure Low During Engine Cranking) set.

The engine may sound like it is cranking fast and actual fuel rail pressure may be low. A compression test may show lower than expected readings and exhaust flow from the tailpipe may be noticeably lower while cranking when compared to a known good vehicle. The fuel rail pressure sensor may show 300–400 PSI (2,068-2,758 kPa) and will slowly drop into the 50 PSI (345 kPa) range while cranking.

The camshaft position actuator solenoid valve may be sticking or binding and causing the valve timing to be retarded.

Before removing the camshaft position actuator solenoid valve, use calipers to measure the height of the center portion (called the spool) to the outer body. Do not apply force or pressure on the center portion. A stuck valve will measure less than 6 mm.

If a stuck valve is found, replace the camshaft position actuator solenoid valve. (Fig. 15)

If the concern is an intermittent no start or crank, no start condition, record the depth of the plunger and replace the camshaft position actuator solenoid valve.

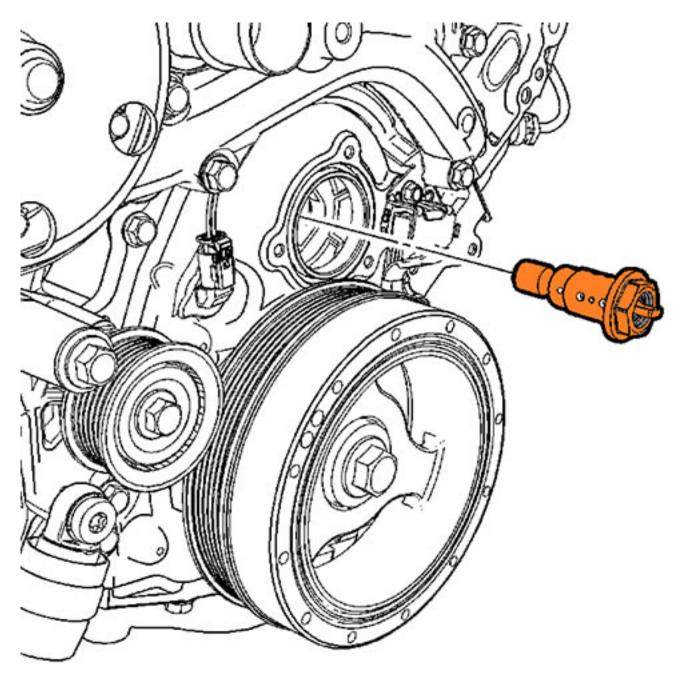


Fig. 15

TIP: The camshaft position actuator solenoid valves must be kept parallel to the engine front cover during removal and installation. The camshaft position actuator solenoid valves can be damaged if they become wedged or stuck during this process.

- Thanks to Richard Renshaw GM TechLink

Online URL:

https://www.corvetteactioncenter.com/tech/knowledgebase/article/2014-2015-corvette-gm-techlink-sticking-camshaft-position-actuator-solenoid-valve-885.html