File in Section:

Bulletin No.: PIE0295

Date: April, 2014

# PRELIMINARY INFORMATION

Subject: Engineering Information – Engine Cranks/No Start, DTCs P00C6 or P0011 Set

Models: 2014 Chevrolet Corvette, Silverado 1500

2015 Chevrolet Suburban, Tahoe

2014 GMC Sierra 1500

2015 Chevrolet Yukon, Yukon XL

Equipped with 4.3L, 5.3L, 6.2L Engine (RPOs LV3, L83, L86, LT1)

Attention: Proceed with this PI ONLY if the customer has commented about this concern AND the

PIE number is listed in the Global Warranty Management / Investigate History link (GWM/IVH). If the customer has not commented about this condition or the El does not show in GWM/IVH, disregard the PI and proceed with diagnostics found in published service information. THIS IS NOT A RECALL — refer to the latest version of Service Bulletin 04-00-89-053 for more details on the use of Engineering Information PIs.

## Condition

Important: If the customer did not bring their vehicle in for this concern, DO NOT proceed with this El.

Some customers may comment that the engine cranks but will not start.

When checking the vehicle for DTCs, P00C6 or P0011 may be set.

The engine may sound like it is cranking fast. A compression test may show to be low and/or the exhaust flow out of the tailpipe is noticeably low while cranking compared to a known good vehicle.

The fuel pressure sensor data will be around 80 psi, while cranking the engine. The fuel rail pressure will be about 300-400 psi and then slowly drop down to 50 psi while cranking.

The camshaft position actuator solenoid valve may be stuck causing the valve timing to be retarded.

#### Cause

GM Engineering is attempting to determine the root cause of the above condition. Engineering has a need to gather information on vehicles PRIOR to repair that may exhibit this condition. As a result, this information will be used to "root cause" the customer's concern and develop/validate a field fix.

### Instructions

If you encounter a vehicle with the above concern, please complete the following and contact PQC with your findings.

- 1. Does the vehicle currently have a crank/no start condition?
  - If yes, continue with next question.
  - If no, this PI does not apply. Refer to published diagnostics.
- 2. Was DTC P00C6 or P0011 set?
  - If yes, continue with next question.
  - If no, this PI does not apply. Refer to published diagnostics.
- 3. After performing the camshaft position actuator solenoid valve measurement and replacement procedure listed below, what is the depth of the plunger?

#### Camshaft Position Actuator Solenoid Valve Measurement and Replacement Procedure

- 1. Remove the engine front cover. Refer to the Engine Front Cover Replacement procedure in SI.
- Before removing the camshaft position actuator solenoid valve, measure the height of the center portion (called the spool) to the outer body with calipers. DO NOT apply force or pressure on the center portion. A stuck valve will measure less than 6 mm.
- 3. Record the measurement on the job card and include with the valve in the shipping package.

- 4. With the valve still installed, place heavy duty tape, such as duct tape, over the head to hold the spool in the down position The surface of the head will most likely be oily. If possible, remove the oil with alcohol or degreaser to ensure the tape will hold. It will require a couple pieces of tape across the head. There is spring force behind the spool that once torque is removed it force the spool back into the extended position. The goal is to try and keep the spool down while handling the valve.
- 5. Remove the valve. Use a socket and breaker bar to remove the valve. DO NOT use an impact wrench or other powered tool to remove the valve. The goal is to jostle or move the valve as little as possible during removal.
- 6. After the valve is removed, immediately place tape across all of the top holes as shown above. Try not to move the spool during this process. The more the spool is pushed on, the greater chance that any contaminate could be lost.
- 7. Place the valve into a plastic sealed bag and roll the bag in bubble wrap. Place it into a box and tag the box. A special return will be generated to expedite the part back to the Warranty Part Center (WPC).
- 8. Install a new camshaft position actuator solenoid valve. Refer to the Camshaft Position Actuator Solenoid Valve Replacement procedure in SI.

### **Contact Information**

Contact the Product Quality Center (PQC).

# **Warranty Information**

If engineer was contacted or required information was provided, use:

Labor Operation	Description	Labor Time
4064258*	Camshaft Position Actuator Solenoid Valve Replacement	5.3 hrs
Add	To Fill Cooling System	0.3 hr
*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.		