

## #PIT5405C: Steering Jerks Or Kicks Back / Reduced Power Steering Assist / Engine Stall / No Start / Service Stabilitrak / IPC / Radio / HVAC Goes Blank Various DTCs - (Jan 27, 2017)

**Subject:** Steering Jerks Or Kicks Back / Reduced Power Steering Assist / Engine Stall / No Start / Service Stabilitrak / IPC / Radio / HVAC Goes Blank Various DTCs



**Models:** 2015-2017 Cadillac Escalade Models  
2014 Chevrolet Silverado 1500  
2015-2017 Chevrolet Silverado, Suburban, Tahoe  
2014 GMC Sierra 1500  
2015-2017 GMC Sierra, Yukon Models

**This PI was superseded to update the title, additional symptoms, recommendation and 2017 models. Please discard PIT5405B.**

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

### Condition/Concern

Some owners may comment of any of the following issues below. These issues may seem more likely to occur if the vehicle is stopped/slow speeds and turning the steering wheel, which applies additional load to the truck electrical system.

- Reduced or loss of power steering assist (only LD models equipped with electric power steering)
- Steering wheel jerks or kicks back when turning
- Service Stabilitrak message with warning chime
- Engine stall
- IPC going blank or inoperative
- Radio/ICS going blank
- HVAC going blank
- Hood ajar message and/or dome lamps flash when shifting into reverse
- Alarm sounds when locking doors or door locks cycling
- Wipers continue to run for a short time after turning off and then stop/park in the incorrect location
- Any of the following DTCs: U0073, U0078, U0029, U0028, U0415, U0140, U0126, U0121, U0101, U0100, C0544, C0710, U1510, B127B, B2605, B3600, C0800, U0428, U0452, U0131, and P0513

These concerns could be caused by any of the following issues:

1. A poor BCM ground at G218.
2. A shorted B+ Battery cable (3) at the Starter Solenoid caused by:
  - A loose starter shield contacting the starter battery cable terminal ring

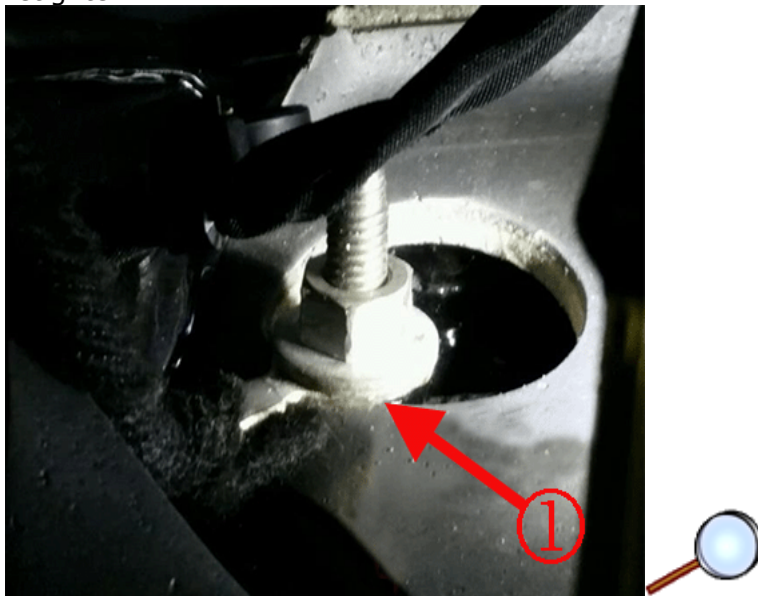
- A starter cable ring terminal that has been mis-installed and/or rotated when installed on the starter solenoid
3. Battery cables with high resistance and/or loose connections at the:
    - Battery fuse block
    - Positive or negative battery cables
  4. A discharged or faulty battery.
  5. A loose connection at the main power and ground 2-way connector (X183 or X133 depending on model) for the power steering rack.

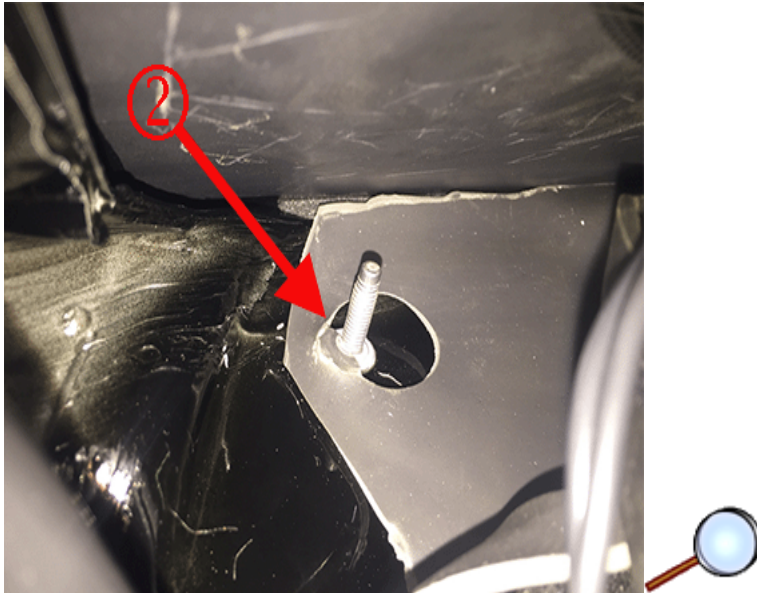
**Note:** The above items could cause the discharged battery.

### Recommendation/Instructions

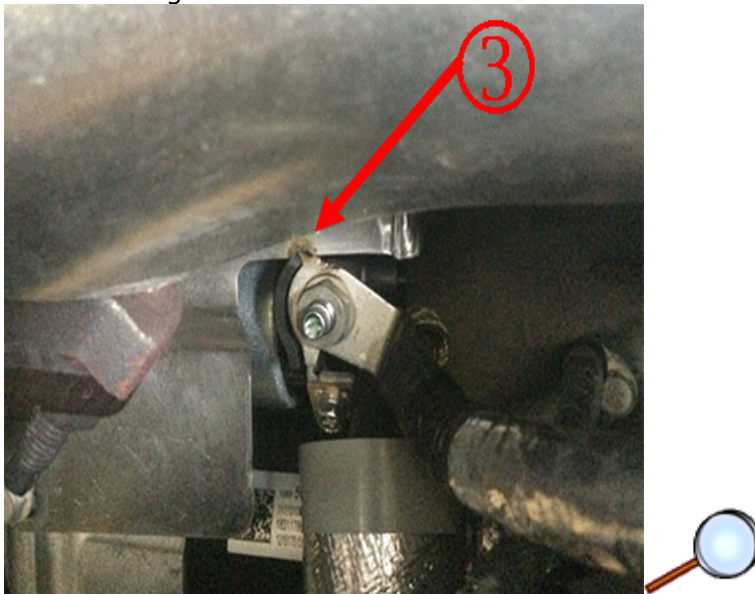
To correct these concerns:

1. Inspect G218
  - Check for the nut being loose or cross threaded, repair and tighten as necessary.
  - Check for the front of dash insulator mat (2) being trapped between the ground eyelet and the body/stud as shown below (1). If the dash insulator mat is trapped, cut the mat away from the ground stud so it will no longer interfere. Reinstall the ground eyelet, the nut, and retighten.





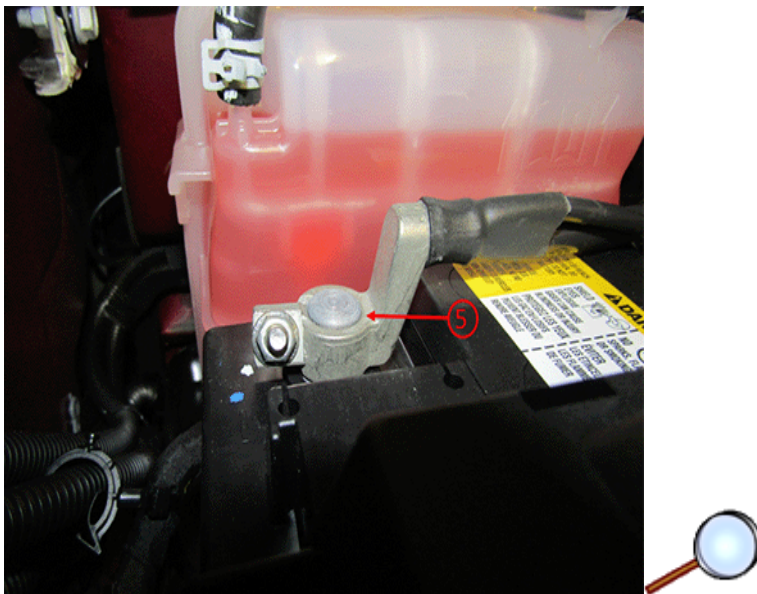
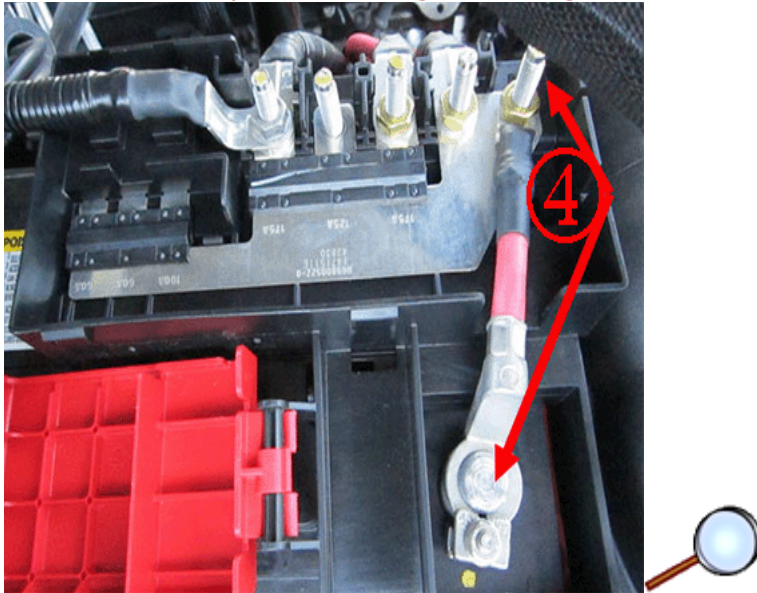
2. Inspect the starter solenoid B+ battery cable for shorting out on the starter heat shield either due to terminal contacting the shield, as shown below (3), or from the shield being loose and resting on the terminal. If the battery cable is shorting out on the starter heat shield, replace the B+ battery cable and starter heat shield. After installing the new starter heat shield and B+ battery cable, ensure there is adequate clearance and each fastener is torqued properly so it will no longer short out.



3. Inspect for any high resistance and/or loose connections at both the battery fuse block and the positive or negative battery cables.
- It is imperative that both the positive and negative battery top posts protrude above the battery cable clamps 1-2 mm (0.040 - 0.080 in) to be properly installed, as shown below (5).
  - Check both the positive and negative battery cable clamp nuts and make sure they are properly tightened to 7 Nm (62 lb in).
  - After the positive and negative battery cables are fully installed and tightened to 7 Nm (62 lb in), grasp each battery cable near the battery post and make sure they are secure and that they do not spin on the post. If so, replace the battery cable.
  - Inspect the battery fuse block cable connections for being loose by grasping each cable near the eyelet and verify they do not rotate on their respective stud. Verify each nut is torqued properly to 15 Nm (11 ft lb).

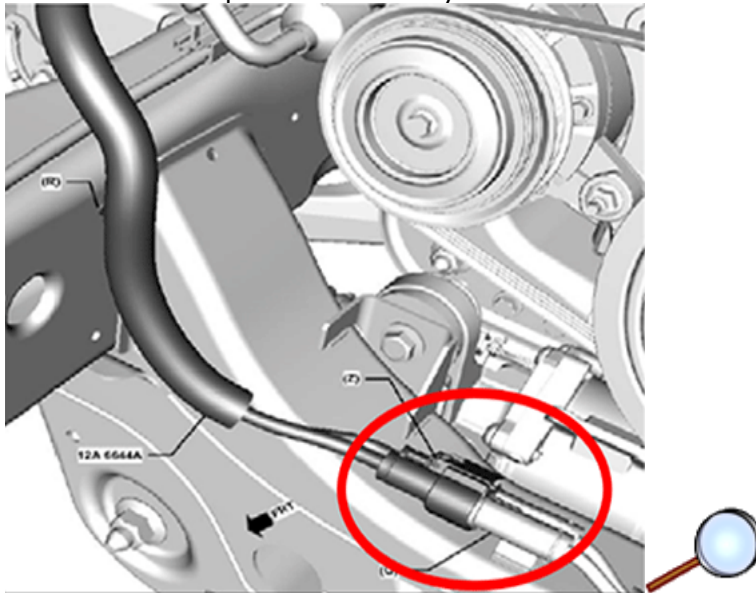
- Inspect the negative battery cable where it connects to the engine block and make sure it is not loose by grasping the cable near the eyelet and verify it does not rotate. Verify the cable nut is torqued properly to 45 Nm (33 ft lb).
- Perform a loaded voltage drop test on the short positive battery cable (4), shown below, and the negative battery cable.

**Note:** When checking voltage drop, the voltage drop should be performed with the fuel system disabled (or hold the accelerator WOT) and while cranking the engine. MIN/MAX on the Digital Multi Meter (DMM) should NOT be used. The voltage drop should be monitored at a STEADY crank. The voltage drop should not exceed 200 mV. If the voltage drop is above 200 mV, replace the affected cable(s). This test should be performed during a cold engine crank and also after a hot engine soak



4. Perform the "Battery Inspection/Test" procedure in SI, using the GR8, and replace the battery if it fails the test.

5. Inspect connector X183 or X133, location shown below, for any broken/loose/backed out terminals and repair as necessary.



### Warranty Information

The correction for this concern may be one of several repairs described above. For vehicles repaired under warranty, please use the appropriate warranty labor operation based on the actual cause and repair.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

### **Additional SI Keywords**

jerk kick back kickback

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