## Subject: Engineering Information – Steering Jerks, Whips or Kicks Back

Attention: Proceed with this EI 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 EI 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 bulletins.

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Cadillac	Escalade Models	2016	2017			All	All
Chevrolet	Silverado Suburban Tahoe Models	2016	2017			All	All
GMC	Sierra Yukon Models	2016	2017			All	All

Involved Region or Country	North America
Condition	Important: If the customer did not bring their vehicle in for this concern, DO NOT proceed with this EI. Some customers may comment that the steering wheel jerks, whips, or kicks back when turning.
	This concern may seem more likely to occur if the vehicle is stopped/slow speeds and turning the steering wheel, which applies additional load to the trucks electrical system.
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.

## Correction

If you encounter a vehicle with the above concern, complete and document the following:

- What is the frequency of occurrence?
- What was your trip length?
- At what point during your trip did the issue occur?
- What was your approximate speed?
- Has the vehicle been experiencing any slow or extended engine starts?
- · Has the vehicle required any jump-starts recently?
- Does the vehicle have any aftermarket equipment installed?
- Is the vehicle still covered by the 3 year 36,000 mile warranty (in Canada, 3 yrs/60,000 km warranty)?

Does the vehicle have an active OnStar subscription?

Using GDS2, pull all Diagnostic Trouble Codes (DTC) from ALL modules and print the report.

- 1. Inspect for any high resistance and/or loose connections at both the battery fuse block and the positive or negative battery cables.
  - Perform a loaded voltage drop test (see note) on the short positive battery cable (1), shown below, and the negative battery cable (2).
  - 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 properly installed, as shown below (3).
  - Check both the positive and negative battery cable clamp nuts and make sure they are properly tightened to 7 Y (62 lb in).
  - After the positive and negative battery cables are tightened to 7 Y (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.
  - Inspect the battery fuse block cable connections for being loose by verifying each nut is torqued properly to 15 Y (11 lb ft).
  - Inspect the negative battery cable where it connects to the engine block and make sure it is not loose by verifying the cable bolt is torque properly to 45 Y (33 lb ft).

**Note:** When measuring voltage drop, the Multimeter should be set to the V (DC) position. 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 NO be used. The voltage drop should be monitored at a STEADY crank. This test should be performed during a cold engine crank and also af a hot engine soak.

Section 1				
	Loaded Voltage Drop Hot	Loaded Voltage Drop Cold	Is the cable clamp below top of battery post?	Are the cable clamp bolts tight (7Nm)?
Positive Cable	(mV)	(mV)	Y / N	Y / N
Negative Cable	(mV)	(mV)	Y / N	Y / N
	Does the cable clamp rotate on the post after verifying torque?	Were any of the battery fuse block nuts loose (15Nm)?	Was the negative cable bolt tight at the block (45Nm)?	
Positive Cable	Y / N	Y / N	Y / N	
Negative Cable	Y / N	Y / N	Y / N	





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 (4), or from the shield being loose and resting on the terminal.





3. Perform the "Battery Inspection/Test" procedure in SI, using the GR8.

Section 3				
Did the battery pass GR8 test and what was the measured CCA?	Did the battery require a charge before completing test?	What CCA was entered in the GR8?		
Y / N	Y / N	Amps		

4. Contact one of the engineers listed below with findings.

## **Contact Information**

Engineer Name	Phone Number
Peter Shear	(248) 207-6990
Dan Fosmer	(248) 520-2027

Please include the following information if leaving a message:

- Technician name
- Dealer name and phone number
- Complete VIN and repair order (R.O) number

On the repair order, document the date and time the call was placed (even if the engineer was not reached).

If engineering is unable to return the call within one hour, proceed with diagnosis and repair based on information found in SI.

## **Warranty Information**

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

Labor Operation	Description	Labor Time
7480298*	Engineering Information – Steering Jerks, Kicks Back or Locks Up	0.4 hr

\*This is a unique Labor Operation for Bulletin use only. It will not be published in the Labor Time Guide.