

Part 573 Safety Recall Report

17V-414

Manufacturer Name : General Motors LLC**Submission Date :** AUG 22, 2017**NHTSA Recall No. :** 17V-414**Manufacturer Recall No. :** 17276**Manufacturer Information :**

Manufacturer Name : General Motors LLC

Address : 30001 VAN DYKE
MAIL CODE 480-210-2V WARREN MI
48090

Company phone : 5961733

Population :

Number of potentially involved : 690,685

Estimated percentage with defect : 2 %

Vehicle Information :

Vehicle 1 : 2014-2014 GMC Sierra LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 GMC Sierra Light Duty vehicles.

Production Dates : JAN 29, 2013 -SEP 04, 2014

VIN Range 1 : Begin : NR End : NR

 Not sequential

Vehicle 2 : 2014-2014 Chevrolet Silverado LD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Certain 2014 Chevrolet Silverado Light Duty vehicles.

Production Dates : JAN 30, 2013 -SEP 04, 2014

VIN Range 1 : Begin : NR End : NR

 Not sequential**Description of Defect :**

Description of the Defect : General Motors has decided that a defect which relates to motor vehicle safety exists in certain 2014 model year Chevrolet Silverado LD and GMC Sierra LD vehicles. These vehicles may experience a temporary loss of electric power steering (EPS) assist followed by a sudden return of EPS assist, particularly during low-speed turning maneuvers. The loss and sudden return of EPS assist typically happens within a 1 second period and is caused by an electrical/software issue

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If EPS assist is lost and suddenly returned, the driver could lose temporary control of the steering wheel, increasing the risk of a crash.

Description of the Cause : Events that demand high current, such as low speed turns, can cause temporary low voltage conditions. When the system voltage drops below 8.8 volts for more than 1 second—e.g., during low-speed turns—EPS assist is disabled until voltage returns to 9 volts for a minimum of 40 milliseconds, at which point EPS assist returns.

Identification of Any Warning that can Occur : If power steering assist is lost (i.e., the vehicle reverts to manual steer) a driver information center (DIC) message may alert the driver to an EPS problem. Also, other electrical sub-systems may shut down at the same time as or just before the event, which could temporarily disable the radio, stabilitrack, the DIC, chimes, door-lock cycling, air conditioning, or cruise control.

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

On February 2, 2017, GM opened a safety investigation resulting from VOQs and customer complaints relating to the loss of EPS.

Between February and April 2017, GM continued to analyze VOQs, customer complaints, and warranty. Through this analysis, GM was able to link various loss-of-EPS cases as relating to a similar underlying electrical issue. GM then expanded the scope of its field data research to include these various electrical issues to better understand the scope, cause, and effect of the loss of EPS issue.

Between mid-April and May 2017, GM conducted testing and engineering analysis at GM's Milford Proving Ground on a vehicle exhibiting the loss-of-EPS issue. Through this evaluation, GM gained a better understanding of the effect of this condition and GM conducted further engineering analysis on a specific vehicle to understand the electrical issues causing the loss of EPS. With a better understanding of the potential electrical issue, investigators were able to more accurately evaluate field data and determine relevant cases, which they did with an extensive final review of VOQ, warranty, and legal claims in early June 2017.

The investigation was reviewed in GM's Open Investigation Review on June 19, 2017, and on June 22, 2019, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall.

Description of Remedy :

Description of Remedy Program :	Dealers will perform a reflash of the EPS module software. Pursuant to 577.11, GM will provide reimbursement to owners for repairs according to the plan submitted on May 19, 2017.
How Remedy Component Differs from Recalled Component :	The elevated amperage levels due to high energy demand from the EPS module will be greatly reduced allowing the voltage to remain at a sufficient level to continue operation.
Identify How/When Recall Condition was Corrected in Production :	Starting prior to 2015 model year production, a series of product and process changes were implemented that address potential sources of temporary low voltage conditions that disable EPS assist.

Recall Schedule :

Description of Recall Schedule :	General Motors will provide dealer bulletin and owner letter notification dates when available.
Planned Dealer Notification Date :	JUN 29, 2017 - JUN 29, 2017
Planned Owner Notification Date :	AUG 10, 2017 - AUG 10, 2017

* NR - Not Reported