OMB Control No.: 2127-0004

Not sequential

Part 573 Safety Recall Report

18V-586

Manufacturer Name: General Motors LLC

Submission Date: SEP 07, 2018 NHTSA Recall No.: 18V-586 Manufacturer Recall No.: 18289



Manufacturer Information:

Manufacturer Name: General Motors LLC

Address: 29427 Louis Chevrolet Road

MAIL CODE 480-210-2V WARREN MI

48093

Company phone: 5961733

Population:

Number of potentially involved: 1,015,918

Estimated percentage with defect: 2 %

Vehicle Information:

Vehicle 1: 2015-2015 Chevrolet Silverado LD

Vehicle Type: LIGHT VEHICLES Body Style: PICKUP TRUCK

Power Train: NR

Descriptive Information: Manufacturing records were used to identify the vehicles with the defective EPS

assist. Recalled products do not contain the updated software that mitigates the effect of the condition. 450,711 Chevrolet Silverado LD vehicles are affected.

Production Dates: APR 14, 2014 - OCT 10, 2015

VIN Range 1: Begin: NR End: NR

Vehicle 2: 2015-2015 GMC Yukon

Vehicle Type: LIGHT VEHICLES

Body Style : SUV Power Train : NR

Descriptive Information: Manufacturing records were used to identify the vehicles with the defective EPS

assist. Recalled products do not contain the updated software that mitigates the

effect of the condition. 109,151 GMC Yukon vehicles are affected.

Production Dates: SEP 19, 2013 - JUL 17, 2015

Vehicle 3: 2015-2015 GMC Sierra LD

Vehicle Type: LIGHT VEHICLES
Body Style: PICKUP TRUCK

Power Train: NR

Descriptive Information: Manufacturing records were used to identify the vehicles with the defective EPS

assist. Recalled products do not contain the updated software that mitigates the

effect of the condition. 186,083 GMC Sierra LD vehicles are affected.

Production Dates: APR 22, 2014 - OCT 10, 2015

VIN Range 1:	Begin :	NR	End:	NR	☐ Not sequential
Vehicle 4: 2015-2015 Cadillac Escalade					
Vehicle Type :	LIGHT VEHICL	ES			
Body Style :					
Power Train :	NR				
Descriptive Information :	Manufacturing records were used to identify the vehicles with the defective EPS assist. Recalled products do not contain the updated software that mitigates the effect of the condition. 45,270 Cadillac Escalade vehicles are affected.				
Production Dates:	DEC 03, 2013 -	JUL 23, 201	5		
VIN Range 1:	Begin:	NR	End:	NR	☐ Not sequential
Vahicla 5:	2015-2015 Che	wrolet Subv	ırhan		
	LIGHT VEHICLES				
Body Style :					
Power Train :					
Descriptive Information :	Manufacturing records were used to identify the vehicles with the defective EPS assist. Recalled products do not contain the updated software that mitigates the effect of the condition. 79,505 Chevrolet Suburban vehicles are affected				
Production Dates:	OCT 16, 2013 -	JUL 17, 201	5		
VIN Range 1:	Begin:	NR	End:	NR	☐ Not sequential
Vehicle 6: 2015-2015 Chevrolet Tahoe					
Vehicle Type :	LIGHT VEHICLES				
Body Style :	SUV				
Power Train :	NR				
Descriptive Information :	n: Manufacturing records were used to identify the vehicles with the defective EPS assist. Recalled products do not contain the updated software that mitigates the effect of the condition. 145,198 Chevrolet Tahoe vehicles are affected.				
Production Dates: SEP 19, 2013 - JUL 23, 2015					
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 2015 model year Chevrolet Silverado LD, Suburban, and Tahoe vehicles; GMC Sierra LD and Yukon vehicles; Cadillac Escalade vehicles. These vehicles may experience a temporary loss of 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 have difficulty

steering the vehicle, especially at low speeds, 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 If power steering assist is lost (i.e., the vehicle reverts to manual steer) a driver

that can Occur: information center (DIC) message may alert the driver to an EPS problem.

Also, other electrical sub-systems may shut down at the same time 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 June 28, 2018, GM opened a safety investigation into loss of EPS in the subject vehicles based on an increase in field reports from VOQs and customer complaints. Between June and August 2018, GM's safety investigator with help from engineering-analysis experts analyzed VOQs, customer complaints, and warranty, and determined the loss-of-EPS issues described in the field reports was caused by the same electrical issue exhibited in model-year 14 light-duty trucks that GM recalled in 2017 (see Recall No. 17V-414). GM's safety investigator and engineering-analysis experts also confirmed that the effect of the condition experienced by customers—a temporary loss followed by a sudden return of EPS assist—was the same. Between June and August 2018, GM also ran numerous tests at GM's Milford Proving Ground to further understand and quantify the severity of the loss-of-EPS.

The investigation was reviewed in GM's Open Investigation Review on the August 27, 2018, and on August 30, 2018, GM's Safety Field Action Decision Authority 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 The elevated amperage levels due to high energy demand from the EPS

from Recalled Component: module will be greatly reduced allowing the voltage to remain at a

sufficient level to continue operation.

Identify How/When Recall Condition A series of product and process improvements were implemented was Corrected in Production: between 2015 and 2017 model years to address temporary low voltage conditions. These improvements contributed to the mitigation of the loss of EPS assist after 2015 model year. This series of product and process changes improved the performance of a number of vehicle components and subsystems including, but not limited to, the following: the negative battery cable and cable connectors, battery distribution cable and connectors, steering gear assembly, battery terminals, steering system

grounds, and connection integrity.

Recall Schedule:

Description of Recall Schedule: General Motors will provide dealer bulletin and owner letter notification

dates when available.

Planned Dealer Notification Date: SEP 07, 2018 - SEP 07, 2018

Planned Owner Notification Date: NR - NR

^{*} NR - Not Reported