Part 573 Safety Recall Report 14V-719

Manufacturer Name: General Motors LLC
Submission Date: NOV 18, 2014
NHTSA Recall No.: 14V-719
Manufacturer Recall No.: 14743

Manufacturer Information:
Manufacturer Name: General Motors LLC
Address: 30001 VAN DYKE
MAIL CODE 480-210-2V WARREN MI 48090
Company phone: 999

Population:
Number of potentially involved: 679
Estimated percentage with defect: 85

Vehicle Information:
Vehicle:
Vehicle Type:
Body Style:
Power Train:
Descriptive Information:
Production Dates: -

VIN (Vehicle Identification Number) Range
Begin:          End:          [ ] Not sequential VINs

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, Chevrolet Suburban, Chevrolet Tahoe, GMC Sierra, and GMC Yukon XL vehicles equipped with electric power steering (EPS). Certain vehicles may experience a sudden loss of power steering assist that could occur at any time while driving.

Description of the Safety Risk: If the power steering assist is lost, a message is displayed on the Driver Information Center and a chime sounds to inform the driver. Steering control can be maintained because the vehicle will revert to manual steering mode, but would require greater driver effort particularly at low vehicle speeds, increasing the risk of a crash.

Description of the Cause: Diodes were sorted incorrectly at a sub-tier supplier, resulting in shipment of incorrect diodes for sub-assembly of EPS circuit boards that were incorporated into EPS modules manufactured by Nexteer Automotive.

Identification of Any Warning that can Occur: If the power steering assist is lost, a message is displayed on the Driver Information Center and a chime sounds to inform the driver.

The information contained in this report was submitted pursuant to 49 CFR §573
Supplier Identification:
Component Manufacturer
Name: NR
Address: NR
Country: NR

Chronology:
On October 8, 2014, Fort Wayne Assembly became aware of three vehicles that had lost electric power steering (EPS) assist and initiated a yard hold on all vehicles with a certain EPS module. On October 9, 2014, Fort Wayne Assembly expanded the yard hold to include all vehicles with a second EPS module. On October 10, 2014, the EPS supplier, working with the sub-tier suppliers, determined an incorrect diode as the root cause and identified the date code of the incorrectly sorted diodes. On that same day, Fort Wayne Assembly further expanded the yard hold to include any vehicles with EPS assist, and the Arlington, Flint and Silao assembly plants initiated a yard hold on all of their vehicles with EPS assist. On October 12, 2014, the four assembly plants initiated a yard sort and began testing the EPS in the held vehicles. On October 29, 2014, the Safety and Field Action Decision Authority (SFADA) decided to conduct a safety recall. On November 13, 2014, the assembly plant informed Safety Field and Investigations of one additional vehicle to be included in the recall population.

Description of Remedy:
Description of Remedy Program: Dealers will replace the power steering assist motor kit. Pursuant to 577.11, General Motors does not plan to provide notice about reimbursement to owners because all involved vehicles are covered under the new vehicle warranty.

How Remedy Component Differs from Recalled Component: An 18 volt overvoltage test can identify modules built with the incorrect diodes. Replacement EPS modules are manufactured with the correct diode.

Identify How/When Recall Condition was Corrected in Production: Identification of the root cause and date code by the supplier allowed the assembly plants to isolate vehicles built with suspect EPS modules. An overvoltage test was used to identify EPS modules built with the incorrect diode. The EPS modules in those vehicles were replaced. In addition, the supplier and sub-tier supplier have modified their in-house testing to identify this failure mode. The diode supplier also identified the original sorting error that caused the misbuild.
Recall Schedule:
Description of Recall Schedule: General Motors is planning to send a dealer bulletin on November 6, 2014. Owner letters are planned to be sent on November 14, 2014.

Planned Dealer Notification Date: NOV 06, 2014 - NOV 06, 2014
Planned Owner Notification Date: NOV 14, 2014 - NOV 14, 2014

* NR - Not Reported