OMB Control No.: 2127-0004

Not sequential

Part 573 Safety Recall Report

17V-516

Manufacturer Name: General Motors LLC

Submission Date: SEP 05, 2017 NHTSA Recall No.: 17V-516 Manufacturer Recall No.: 17329



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 : 2,905Estimated percentage with defect : 3%

Vehicle Information:

Vehicle 1: 2017-2018 GMC Acadia

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: The supplier identified suspect components produced between 6/13/2017 and

7/21/2017. The recalled vehicles contain components produced by the supplier

during that window.

Production Dates: JUL 11, 2017 - AUG 03, 2017

VIN Range 1: Begin: NR End: NR

Vehicle 2: 2018-2018 GMC Terrain

Vehicle Type : Body Style : Power Train : NR

Descriptive Information: The supplier identified suspect components produced between 6/13/2017 and

7/21/2017. The recalled vehicles contain components produced by the supplier

during that window.

Production Dates: JUN 27, 2017 - AUG 17, 2017

VIN Range 1 : Begin : NR End : NR Not sequential

Vehicle 3: 2018-2018 Chevrolet Equinox

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: The supplier identified suspect components produced between 6/13/2017 and

7/21/2017. The recalled vehicles contain components produced by the supplier

during that window.

Production Dates: JUN 23, 2017 - AUG 17, 2017

Part 573 Safety Recall Report

17V-516

Page 2

Description of Defect:

Description of the Defect: General Motors has decided that a defect which relates to motor vehicle safety

exists in certain 2017 – 2018 model year GMC Acadia and 2018 model year Chevrolet Equinox and GMC Terrain front-wheel drive vehicles. In some of these vehicles, the front right intermediate drive shaft assembly may fracture

and separate while the vehicle is being driven.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In these vehicles, if the front right intermediate drive shaft assembly

separates while driving, the vehicle will lose propulsion, increasing the risk of a crash. If the assembly separates while parked on a grade, without the park brake engaged, the vehicle may move unintentionally, increasing the risk of a

roll-away accident.

Description of the Cause : For the period from 6/13/2017 through 7/21/2017, the drive shaft supplier's

quality check for metal hardening was performed with an ultrasonic scanning machine that was not calibrated properly, limiting the likelihood of detecting

cracks that could have formed during the quenching process.

Identification of Any Warning NR

that can Occur:

Supplier Identification:

Component Manufacturer

Name: Nexteer

Address: 3900 E Holland Rd

Saginaw 48601-9494

Country: NR

Chronology:

On July 20, 2017, General Motor's San Luis Petosi assembly plant discovered a separated front right intermediate drive shaft assembly during manufacture of a 2018 Terrain front wheel drive vehicle. Upon review at the plant, it was confirmed that the shaft had passed the supplier's end-of-line ultrasonic scan for quench crack detection on June 27, 2017. Between July 21 and July 27, three additional fractured shafts were identified at the San Luis Petosi plant. Each of these shafts had also passed the supplier ultrasonic scan on June 27, 2017.

On July 28, the issue was opened in GM's Speak Up for Safety (SUFS) program.

Nexteer reviewed its calibration records, and identified a June 13 to July 21 window of shaft build dates during which the ultrasonic scanning machine used as a quality check to detect quench cracks was determined to have been incorrectly calibrated.

Based on Nexteer's information, all four affected GM assembly plants initiated quarantine efforts. By August 1, and with Nexteer's cooperation, all four plants were equipped to ultrasonically scan quarantined parts and vehicles. Quarantined vehicles were either confirmed to have non-suspect components or repaired using properly-tested components.

GM opened a formal investigation on August 4, 2017. The investigation was reviewed in GM's Open Investigation Review on August 14, 2017, and on August 15, 2017, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall.

Description of Remedy:

Description of Remedy Program: Dealers will replace the front right intermediate drive shaft assembly in all

of the vehicles in the suspect population. Pursuant to 49 C.F.R. § 573.13(d) (1), all covered vehicles are under warranty so reimbursement is not

offered.

How Remedy Component Differs Replacement shaft assemblies will have been produced at the supplier from Recalled Component: using quench crack detection with a machine that is properly calibrated.

> Recalled Component Name: SHAFT ASM-FRT WHL DRIVE

Recalled Component Description: Front Right Intermediate Drive

Shaft Assembly for Front Wheel Drive

Recalled Component Part Number: 23356307, 84170703

Recalled Component Country of Origin: U.S.

Identify How/When Recall Condition Quarantined vehicles were ultrasonically checked and either confirmed to

was Corrected in Production: have non-suspect components or repaired using properly-tested

components. All vehicles manufactured after August 22, 2017 were built

with properly-tested components.

Recall Schedule:

Description of Recall Schedule: A stop delivery notification was sent to dealers on 08/15/2017. Owners

were notified on 08/25/2017.

Planned Dealer Notification Date: AUG 22, 2017 - AUG 22, 2017 Planned Owner Notification Date: AUG 25, 2017 - AUG 25, 2017

* NR - Not Reported