OMB Control No.: 2127-0004

Part 573 Safety Recall Report

20E-052

Manufacturer Name: ZF North America, Inc.

Submission Date: AUG 25, 2020 NHTSA Recall No.: 20E-052 Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: ZF North America, Inc.

Address: 12001 Tech Center Drive

Livonia MI 48150

Company phone : 7348552600

Population:

Number of potentially involved : 189,876Estimated percentage with defect : 25%

Equipment Information:

Brand / Trade 1: RAS

Model: Remote Accelerometer Sensor (RAS)

Part No.: See Descriptive Info

Size: NR Function: NR

Descriptive Information: ZF is submitting this report at NHTSA's request based on the recall of vehicles by

FCA and VW that incorporate certain Remote Accelerometer Sensors (RAS) supplied by ZF. Recalled vehicles may have been built with a RAS from a specific production period that may have been exposed to higher than expected

temperatures during manufacturing that may lead to damaged soldering connections within the airbag crash sensor. As reported by FCA and VW, if present in the vehicle, an affected airbag crash sensor may not communicate correctly with the airbag control module. If this occurs, the airbag warning light

will illuminate.

Following detection of the potential issue in July 2018, interim containment actions were implemented in the manufacturing process in order to identify potentially affected parts, and permanent process changes to improve the preheating process and temperature monitoring of the parts were implemented in July 2019. Part Nos. included 224872-216, 224872-217 and 224872-425. The information provided herein is based on information available to ZF at the time of submission and may not include all information available to the recalling vehicle manufacturers.

Production Dates: JUL 16, 2018 - SEP 07, 2018

Description of Defect:

Description of the Defect: ZF is submitting this report at NHTSA's request based on the recall of vehicles

by FCA and VW that incorporate certain Remote Accelerometer Sensors (RAS) supplied by ZF. As reported by FCA and VW, if present in the vehicle, an affected airbag crash sensor may not communicate correctly with the airbag control module. If this occurs, the airbag warning light will illuminate.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: As reported by FCA and VW, if present in the vehicle, there is a risk of delayed

airbag deployment in a frontal crash or a risk of a non-deployment in low speed collisions, which may increase the risk of occupant injury in a crash.

Description of the Cause: Recalled vehicles may have been built with a RAS from a specific production

period that may have been exposed to higher than expected temperatures during manufacturing that may lead to damaged soldering connections within

the airbag crash sensor.

Identification of Any Warning The airbag warning light will illuminate if the acceleration sensor is not

that can Occur: properly functioning

Involved Components:

Component Name: RAS

Component Description: Remote Accelerometer Sensor (RAS)

Component Part Number: 224872-216, 224872-217, 224872-425

Supplier Identification:

Component Manufacturer

Name: ZF

Address: 902 S. 2nd Street

Marshall ILLINOIS 62441

Country: United States

Chronology:

In July 2018, ZF and FCA initially identified a potential functional testing issue on remote acceleration sensors (RAS) supplied by ZF. Between July and September 2018, ZF and FCA investigated the issue and then implemented containment measures. Thereafter, ZF and FCA continued monitoring the issue and conducted

the engineering analysis of affected parts. In June 2019, ZF identified that a limited number of potentially affected parts had also been supplied to VW, notified VW of the issue, and began an investigation with VW. On June 13, 2019, FCA recalled 41,169 vehicles in the U.S. and stated that all 6 sensors in each vehicle would be replaced due to lack of traceability to specific sensors per vehicle (19V-449). On November 6, 2019, NHTSA contacted ZF about FCA recall 19V-449, and ZF communicated with NHTSA about the supply of parts and ongoing investigation with VW. On January 31, 2020, VW recalled 7 vehicles in the U.S. (20V-057). In July 2020, NHTSA and ZF communicated about the FCA and VW recalls, and on July 23, 2020, NHTSA requested that ZF file a separate part 573 report based on the FCA and VW recalls.

Description of Remedy:

Description of Remedy Program : ZF refers to FCA and VW filings How Remedy Component Differs ZF refers to FCA and VW filings.

from Recalled Component:

Identify How/When Recall Condition Following detection of the potential issue in July 2018, interim

was Corrected in Production: containment actions were implemented in the manufacturing process in

order to identify potentially affected parts, and permanent process changes to improve the preheating process and temperature monitoring of

the parts were implemented in July 2019.

Recall Schedule:

Description of Recall Schedule: ZF refers to FCA and VW filings.

Planned Dealer Notification Date : NR - NR Planned Owner Notification Date : NR - NR

Purchaser Information:

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name: FCA US, LLC

Address: 800 Chrysler Drive

Auburn Hills MI 48236

Country: US Company Phone: NR

Name: Magna Exteriors

Address: 675 Corporate Parkway

Belvidere IL 61008

Country: US Company Phone: NR Name: Volkswagon Group of America, Inc.

Address: 3800 Hamline Road

Auburn Hills MI 48236

Country: US Company Phone: NR

* NR - Not Reported