OMB Control No.: 2127-0004

Part 573 Safety Recall Report

19E-012

Manufacturer Name: Dana Incorporated

Submission Date: APR 23, 2019 **NHTSA Recall No.:** 19E-012

Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: Dana Incorporated

Address: 3939 Technology Drive

Maumee OH 43537

Company phone: 419-887-3000

Population:

Number of potentially involved : 1,330 Estimated percentage with defect : 100%

Equipment Information:

Brand / Trade 1: Dana - Spicer

Model: Ultimate Dana 44™ Front Axle

Part No.: Provided below

Size: NR Function: Axle

Descriptive Information: The issue potentially affects certain Ultimate Dana 44™ Front Axles sold to

aftermarket customers for use in some Jeep® Wrangler® vehicle applications.

Production Dates: DEC 14, 2015 - FEB 20, 2019

Description of Defect:

Description of the Defect: The position in which covered axles are installed into vehicles may not allow

sufficient lubrication to reach the axles' pinion tail bearings. This potential condition, when occurring in conjunction with a slow-speed initial drive, can

lead to a pinion tail bearing seizure.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: In the event of a pinion tail bearing seizure, the axle may not be able to rotate.

If this occurs, it could affect a vehicle operator's control of the vehicle.

Description of the Cause: The installed position of the axle may not allow sufficient lubrication to reach

the axle pinion tail bearing.

Identification of Any Warning NR

that can Occur:

Supplier Identification:

Component Manufacturer

Name: NR

Address: NR

NR

Country: NR

Chronology:

In early February 2019, Dana received four axles returned in warranty with seized pinion tail bearings. Dana promptly initiated an intensive root cause analysis, beginning with physical inspections of the axles returned in warranty. Out of an abundance of caution, Dana filed its initial report with NHTSA on February 13, 2019, even as its investigation proceeded. Since then, Dana has continued with its intensive root cause analysis, assessing warranty-returned and unused axles in both simulated and in-vehicle test conditions. Dana additionally reviewed all warranty data for this axle model. Through this assessment, at the end of March 2019, Dana identified and then confirmed the root cause of the issue, as described elsewhere in this report. Dana paused the production and shipment of this axle model during its root cause analysis.

Description of Remedy:

Description of Remedy Program: Dana will at its cost seek the return of all units that have not yet been sold to end-users (e.g., are in dealer or distributor inventory), or have been sold to end users but not yet installed in vehicles. For these returned units, as well as others that remain in Dana's inventory, Dana will install 200 mL of oil into the axle with the pinion nose down to ensure that sufficient lubrication reaches these axles' pinion tail bearings. The axles will then be left in the pinion nose down position for 30 minutes, allowing the oil to run into the lube channel and to further lubricate the pinion tail bearing. Dana will then redeploy the axles into the field. Dana will provide replacement axles in exchange for those returned.

> For units that have been installed in customer vehicles, Dana will at its cost direct owners to have their vehicles towed to appropriate dealers or service centers. Dealers and service centers will be directed to undertake the following procedure to ensure that sufficient lubrication reaches these pinion tail bearings: (1) remove the axle cover and drain out the oil; (2) provide oil directly into the cavity of the tail bearing; (3) replace the cover; and (4) complete the oil fill procedure identified in the installation manual.

How Remedy Component Differs In remedied components, Dana is taking steps to have its axle pinion tail from Recalled Component: bearings sufficiently lubricated with oil.

Identify How/When Recall Condition Dana has modified its production processes to see to it that sufficient was Corrected in Production: lubrication reaches the axle pinion tail bearing by installing 100 mL of oil into the axle with the pinion nose down. Given the geometry of the components, this will allow for 30 mL of oil to reach the pinion tail bearing position, ensuring proper lubrication of this bearing. Dana will additionally supplement its instructions to customers directing them to verify axle oil levels and to provide guidance on the quantity of oil that must be installed in the axle. Finally, Dana will affix "no oil" tags onto the exterior of the axle further reminding consumers that oil must be installed in the axle before use.

Recall Schedule:

Description of Recall Schedule: Dana will notify customers, service centers and dealers of the recall

promptly upon NHTSA's approval of its recall notification, but no later

than April 12, 2019. Dana can begin offering the recall remedy

immediately.

Planned Dealer Notification Date: APR 16, 2019 - APR 17, 2019

Planned Owner Notification Date: APR 12, 2019 - 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: NR

Address: NR

NR

Country: NR

Company Phone: NR

* NR - Not Reported