OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21V-920

Manufacturer Name: Toyota Motor Engineering & Manufacturing

Submission Date: DEC 23, 2021 **NHTSA Recall No.:** 21V-920

Manufacturer Recall No.: See attached report



Manufacturer Information:

Manufacturer Name: Toyota Motor Engineering &

Manufacturing

Address: 6565 Headquarters Drive

Plano TX 75024

Company phone: 1-800-331-4331

Population:

Number of potentially involved: 22,656 Estimated percentage with defect: 25 %

Vehicle Information:

Vehicle 1: 2007-2021 Toyota Tundra

Vehicle Type :
Body Style :
Power Train : NR

Descriptive Information: (1) Although the involved vehicles are within the above production period range, not

all vehicles in this range were sold in the U.S. (2) This issue concerns power steering gear assemblies that were machined by a specific piece of equipment at a specific supplier during a specific production period. The involved vehicles are the only vehicles that may have been originally equipped with or have service records of being repaired with these steering gear assemblies. Note: Toyota estimates that 25% of the involved vehicles may contain a groove of an incorrect shape where the circlip is installed because one of the four pieces of equipment that machine this groove had the damaged teeth on the cutting tool, as further described in this report. Whether this issue will cause a sufficient amount of power steering fluid leaking due to the circlip becoming disengaged from this groove and lead to a sudden loss of power steering assist depends on the vehicle driving conditions.

Production Dates: JAN 19, 2007 - OCT 18, 2021

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

Vehicle 2: 2008-2022 Toyota Sequoia

Vehicle Type: **Body Style:** Power Train: NR

Descriptive Information: (1) Although the involved vehicles are within the above production period range, not all vehicles in this range were sold in the U.S. (2) This issue concerns power steering gear assemblies that were machined by a specific piece of equipment at a specific supplier during a specific production period. The involved vehicles are the only vehicles that may have been originally equipped with or have service records of being repaired with these steering gear assemblies. Note: Toyota estimates that 25% of the involved vehicles may contain a groove of an incorrect shape where the circlip is installed because one of the four pieces of equipment that machine this groove had the damaged teeth on the cutting tool, as further described in this report. Whether this issue will cause a sufficient amount of power steering fluid leaking due to the circlip becoming disengaged from this groove and lead to a sudden loss of power steering assist depends on the vehicle driving conditions.

Production Dates: FEB 04, 2008 - OCT 25, 2021

VIN Range 1: Begin: NR

End: NR

Not sequential

Description of Defect:

Description of the Defect: The subject vehicles are equipped with a power steering system where hydraulic pressure is applied through power steering fluid entering the steering gear assembly. An oil seal, an end stopper, and a circlip are used to contain the hydraulic fluid within the gear assembly. During a specific production period at the supplier, one of the four pieces of equipment that machine the groove in the gear assembly where the circlip is installed was not creating a groove of the correct shape. When the circlip is installed in a groove of an incorrect shape created by this piece of equipment, the circlip may not be able to hold the oil seal and end stopper in position. This can result in oil leaking from the gear assembly. After a sufficient amount of oil has leaked, it is possible that a sudden loss of power steering assist may occur. In this condition, the steering system will revert to manual steering mode, and steering control can be maintained at all times. However, suspension of power steering assist results in increased steering effort at low vehicle speeds and increases the risk of a crash.

> FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: After a sufficient amount of oil has leaked, it is possible that a sudden loss of power steering assist may occur. In this condition, the steering system will revert to manual steering mode, and steering control can be maintained at all times. However, suspension of power steering assist results in increased steering effort at low vehicle speeds and increases the risk of a crash.

Description of the Cause : NR Identification of Any Warning NR that can Occur :

Involved Components:

Component Name 1: Gear Assy, Power Steering

Component Description: Hydraulic Rack & Pinion Steering Gear

Component Part Number: 44250-0C131

Component Name 2: Gear Assy, Power Steering

Component Description: Hydraulic Rack & Pinion Steering Gear

Component Part Number: 44250-0C121

Component Name 3: Gear Assy, Power Steering

Component Description: Hydraulic Rack & Pinion Steering Gear

Component Part Number: 44250-0C170

Component Name 4: Gear Assy, Power Steering

Component Description: Hydraulic Rack & Pinion Steering Gear

Component Part Number: 44250-0C160

Supplier Identification:

Component Manufacturer

Name: JTEKT North America Corporation

Address: 7 Research Drive

Greenville South Carolina 29607

Country: United States

Chronology:

Please see the attached Part 573 Defect Information report for the full chronology.

Description of Remedy:

Description of Remedy Program: All known owners of the subject vehicles will be notified to return their

vehicles to a Toyota dealer. For all involved vehicles, Toyota dealers will inspect the power steering gear assembly and if necessary, replace it with a new one at no cost to customers. As the owner notification letters will be mailed out well within the active period of the Toyota New Vehicle Limited Warranty ("Warranty"), all involved vehicle owners for this recall would

have been provided a repair at no cost under Toyota's Warranty.

How Remedy Component Differs NR

from Recalled Component:

Identify How/When Recall Condition NR

was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: Notifications to owners of the affected vehicles will occur by January 22,

2022. A copy of the draft owner notification will be submitted as soon as it is available. Notifications to distributors/dealers had been sent on November 23, 2021. Additional notices about the amended vehicle population will be sent on December 23, 2021. Copies of dealer

communications will be submitted as they are issued.

Planned Dealer Notification Date : NOV 23, 2021 - DEC 23, 2021

Planned Owner Notification Date: JAN 22, 2022 - JAN 22, 2022

^{*} NR - Not Reported