

Toyota Motor North America, Inc.

Vehicle Safety & Compliance
Liaison Office
Mail Stop: W4-2D
6565 Headquarters Drive
Plano, TX 75024

February 27, 2024

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Manufacturing, Baja California, Inc. ["TMMBC"]
Carretera Libre Tijuana Tecate 33143 El Realito, 22550 Tijuana, B.C., Mexico

Toyota Motor Manufacturing Guanajuato ["TMMGT"]
México 45D, 38195 San Pedro Tenango, Gto., Mexico

Affiliated U.S. Sales Company:

Toyota Motor North America, Inc. ["TMNA"]
6565 Headquarters Drive, Plano, TX 75024

Manufacturer of Rear Axle Assembly:

Hino Motors Manufacturing USA
45501 Twelve Mile Rd., Novi, MI 48377
Telephone: +1-248-699-9300

Country of Origin: U.S.A.

2. Identification of Involved Vehicles and Affected Components:

Based on production records, we have determined the involved vehicle population to be the vehicles listed in the table below.

Make/Car Line	Model Year	Manufacturer	Production Period
Toyota / Tacoma	2022-2023	TMMBC	May 2, 2022 through November 13, 2023
		TMMGT	May 2, 2022 through November 21, 2023

Applicability	Part Number	Part Name	Component Description
MY2022-2023 Toyota Tacoma	42110-04100	Housing Assy, Rear Axle	Rear Axle Housing Assembly
	42110-04171		
	42110-04180		
	42110-04190		
	42110-04200		
	42110-04210		

Note: (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 only affects MY 2022-2023 Tacoma vehicles manufactured with these specific welded-on axle housings from a certain supplier used at certain vehicle assembly plants during the above production period.

3. Total Number of Vehicles Potentially Involved:

Total: 381,199

4. Percentage of Vehicles Estimated to Actually Contain the Defect:

Toyota is unable to estimate the percentage of the involved vehicles to contain the defect. Whether the issue, in each case, will actually lead to loosening of retaining nuts and an increased risk of a crash as described in Section 5 depends on various factors. However, as the NHTSA manufacturer portal requires an integer value be entered, Toyota has entered the value “1” in response to this question in the portal. For the purpose of this report, “1” means “unknown”.

5. Description of Problem:

The subject vehicles are equipped with a rear axle assembly, which includes axle shaft sub-assemblies secured to welded-on axle housing ends on each side of the assembly. Each axle shaft sub-assembly is secured to the axle housing using studs and retaining nuts. During a welding process in a certain production period at a specific supplier's manufacturing facility, an improper welding spatter guard mounting setup was used, and spatter from the welding could have landed on the retaining nut seating surface. In this condition, the joint retention could be affected; the retaining nuts could loosen over time and potentially fall off, causing one or both axle shaft sub-assembly to begin to separate from the axle housing. If the vehicle is operated with loosened nuts, the driver may experience a vibration, hear an abnormal noise, and/or observe leaking of differential oil. If an axle shaft separation occurs, vehicle stability and brake performance could be affected, increasing the risk of a crash.

6. Chronology of Principal Events:

Late October 2023 – December 2023

In late October 2023, during a receiving inspection of the Tacoma rear axle assembly at a vehicle assembly plant, Toyota found weld spatter on the retaining nut seating surface of the axle housing end. Toyota began to investigate other rear axle assemblies and recover parts.

During the investigation, Toyota and the supplier found issues within the supplier's inspection process for completed axle assemblies. Toyota and the supplier also found issues with a welding spatter guard design change which was implemented in May 2022 to standardize the design of spatter guards between welding lines. This change resulted in variability when mounting the welding spatter guard to the equipment and allowed weld spatter to land on the retaining nut surface of the axle housing end. In parallel, Toyota recovered parts from the supplier's warehouse which were later used for joint retention testing to assess the stud axial tension.

January 2024 - February 2024

During January 2024, Toyota performed joint retention testing on the recovered parts to determine the effect of changes to the retaining nut seating surface condition caused by weld spatter. The results of this testing indicated that the integrity of the joint between the seating surface of the axle housing end and retaining nuts could be affected by changes to the retaining nut seating surface condition due to weld spatter. Toyota concluded that the presence of weld spatter on the nut seating surface could affect the axial tension and reduce the initial clamping force between the axle housing end and retaining nuts beyond the design minimum required specification. This could occur at either or both ends of the axle, potentially causing the retaining nuts to loosen over time.

Based on the investigation and Toyota's engineering judgement, it was determined that, if the retaining nuts loosen and, in some cases, fall off, this can cause one or both axle shaft sub-assemblies to begin to separate from the axle housing. If the vehicle is operated with loosened nuts, the operator may experience vibration, hear an abnormal noise, and/or observe leaking of differential oil. If an axle shaft separation occurs, this can affect vehicle stability and brake performance, increasing the risk of a crash.

February 21, 2024

Toyota decided to conduct a voluntary safety recall campaign.

As of February 20, 2024, based on a diligent review of records, Toyota's best engineering judgement is that there are 0 Toyota Field Technical Reports and 0 warranty claims that have been received from U.S. sources that relate or may relate to this condition and which were considered in the decision to submit this report.

7. Description of Corrective Repair Action:

All known owners of the subject vehicles will be notified to return their vehicles to a Toyota dealer. For all involved vehicles, dealers will inspect the rear axle assembly and retighten the axle retaining nuts. If weld spatter is found, it will be removed. Axle components which are damaged may be repaired or replaced based on inspection criteria, if necessary.

Reimbursement Plan for pre-notification remedies

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 the warranty.

8. Recall Schedule:

Notifications to owners of the affected vehicles will occur by April 27, 2024. A copy of the draft owner notification will be submitted as soon as it is available.

9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers will be sent by February 27, 2024. Copies of dealer communications will be submitted as they are issued.

10. Manufacturer's Campaign Number:

Interim / Remedy: 24TB05 / 24TA05