

Toyota Motor North America, Inc.

Vehicle Safety & Compliance

Liaison Office

Mail Stop: W4-2D

6565 Headquarters Drive

Plano, TX 75024

May 15, 2025

DEFECT INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Manufacturing, Texas, Inc. ["TMMTX"]
1 Lone Star Pass, San Antonio, TX 78264

Affiliated U.S. Sales Company:

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

Manufacturer of Reverse Lamp Assembly:

Hella Automotive de México S.A. de C.V.
Anillo Periférico Sur No 7980 Edificio Connect
Col. Santa Maria Tlaquepaque CP 45601
Tlaquepaque, Jalisco, México
Telephone: +52 55 41 92 03 71

Country of Origin: Mexico

2. Identification of Involved Vehicles and Affected Components:

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

Make/Car Line	Model Year	Manufacturer	Production Period
Toyota / Tundra	2022-2025	TMMTX	May 10, 2021 through March 26, 2025
Toyota / Tundra Hybrid			June 30, 2021 through March 20, 2025

Applicability	Part Number	Part Name	Component Description
MY2022-2025 Toyota Tundra, Tundra Hybrid	81580-0C080	Lamp Assy, Rear, RH	Backup Lamp Assembly Including License Plate Lamp
	81590-0C070	Lamp Assy, Rear, LH	

- 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 recall only affects the 2022-2025MY Tundra and Tundra Hybrid vehicles equipped with reverse lamp assemblies of a specific design using a specific adhesive for the vent patch.

3. Total Number of Vehicles Potentially Involved:

Tundra : 351,147
Tundra Hybrid : 92,297
Total : 443,444

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 both reverse lamps not illuminating depends on whether the multi-layer vent patch has allowed moisture to enter the reverse lamp assembly and caused corrosion of electrical components. 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 two reverse lamp assemblies, each containing a multi-layer vent patch which, among other things, provides protection from water intrusion. The multi-layer vent patch may separate over time due to thermal cycling, compromising the adhesive and allowing moisture to enter an assembly. Moisture in a reverse lamp assembly could corrode the internal circuit board, connectors and/or the wire harness and cause a lamp to not illuminate. If both reverse lamps do not illuminate when the vehicle is operating in reverse, the driver's view to the rear can be limited when backing during low ambient light conditions, and there may be no indication to others that the vehicle is operating in reverse. This can increase the risk of a crash.

6. Chronology of Principal Events:

June 2022 – April 2024

Beginning in June 2022, Toyota began receiving random and occasional reports with allegations of (1) reverse lamp(s) being inoperative or on all the time, (2) license plate lamp(s) being inoperative or on all the time, (3) check engine light illuminated on the multi-instrument display, (4) backup camera on while in Drive, or (5) "R" lit on the gear selector at all times along with the selected gear position light. Toyota monitored these reports and recovered parts for analysis; Toyota observed signs of corrosion in the field report photos and recovered parts, however, no definitive conclusions could be made regarding any potential issues.

May – October 2024

Toyota noticed an increase in the number of field reports and warranty claims, each having a certain Diagnostic Trouble Code (DTC) in common, though the symptoms would vary as described above. Toyota hypothesized that the various symptoms could be related and began recovering additional reverse lamp assemblies from the field for investigation. During the investigation, Toyota noticed there were signs of moisture and corrosion inside some of the assemblies. To better understand how moisture could enter, Toyota began testing both new and recovered parts.

November 2024 – February 2025

The results of the tests confirmed that moisture was entering the reverse lamp assemblies through a multi-layer vent patch. The results also confirmed that the various symptoms were all related

to the reverse lamp having corrosion on the internal circuit boards and wire harness connectors.

Toyota conducted additional duplication tests, including thermal cycling and water submersion evaluations, to determine how the moisture was passing through the vent patch. The test results indicated that the vent patch material may experience layer separation when exposed to thermal cycling over time. This layer separation could allow moisture to reach the adhesive used to adhere the vent patch to the reverse lamp assembly and cause it to lose its adhesion property, allowing the vent patch to separate from the reverse lamp assembly. Moisture was then able to enter the assembly, potentially creating the chance of corrosion.

March – April 2025

Toyota began testing to evaluate the possible corrosion path to understand why customers were experiencing various symptoms. However, no trend was discerned, and Toyota was unable to predict the frequency that owners would experience one or more of the symptoms noted above. Toyota assessed the various conditions that could occur, concluding that the following did not present unreasonable risks to safety: (1) reverse lamp(s) being on all the time, (2) license plate lamp(s) being inoperative or on all the time, (3) check engine light illuminated on the multi-instrument display, (4) backup camera on while in Drive, or (5) “R” lit on the gear selector at all times along with the selected gear position light.

However, Toyota determined that, if one reverse lamp becomes inoperative due to moisture entering the reverse lamp assembly (which does not present an unreasonable risk), the other reverse lamp assembly could soon also become inoperative. If both reverse lamps do not illuminate when the vehicle is operating in reverse, the driver’s view to the rear can be limited when backing during low ambient light conditions, and there may be no indication to others that the vehicle is operating in reverse. Toyota determined this condition could present an unreasonable risk to safety and increase the risk of a crash.

May 9, 2025

Based on the results of the above investigation, Toyota decided to conduct a voluntary safety recall campaign.

As of May 9, 2025, based on a diligent review of records, Toyota’s best engineering judgement is that there are 3 Toyota Field Technical Reports and 59 warranty claims regarding moisture entering the reverse lamps on subject vehicles 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. The dealers will replace both reverse lamp assemblies with improved ones, free of charge. Additionally, the wire harnesses will be repaired for any vehicles identified to have corrosion that has extended into the wire harness connector, free of charge.

This repair will also remedy other conditions potentially caused by moisture accumulation in the reverse lamp assemblies.

Reimbursement Plan for pre-notification remedies

The owner letter will instruct vehicle owners who have paid to have this condition remedied prior to this campaign to seek reimbursement pursuant to Toyota's General Reimbursement Plan.

8. Recall Schedule:

Notifications to owners of the affected vehicles will occur by July 14, 2025. 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 on May 15, 2025. Copies of dealer communications will be submitted as they are issued.

10. Manufacturer's Campaign Number:

[Interim / Remedy] 25TB06 / 25TA06