

Toyota Motor North America, Inc.

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

January 26, 2022

NONCOMPLIANCE INFORMATION REPORT

1. Vehicle Manufacturer Name:

Toyota Motor Corporation, ["TMC"] 1, Toyota-cho, Toyota-city, Aichi, 471-8571, Japan

Affiliated U.S. Sales Company

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

Manufacturer of the turn signal lamp

STANLEY ELECTRIC

3-33 Iwata Makihira-cho, Okazaki-shi, Aichi, 444-3698 Japan

Phone: +81-564-82-2111

2. Identification of Involved Vehicles:

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 VENZA Hybrid	2021	TMC	September 17, 2020 through May 26, 2021

Applicability	Part Number	Part Name	Component Description
Toyota VENZA Hybrid	81540-48010	Lamp Assy, Rr Turn Signal, LH	Rr LH turn signal lamp
	81530-48010	Lamp Assy, Rr Turn Signal, RH	Rr RH turn signal lamp

- 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) The vehicles in the above production range are the only vehicles that were equipped with rear turn signal lamps that were located where exterior water can contact a specific heat sink and contain a specific generation LED bulb from a specific supplier.

3. Total Number of Vehicles Involved:

Total : 41,544

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

Although 100% of the involved vehicles were equipped with rear turn signal lamps that were located where exterior water can contact a specific heat sink and contain a specific generation LED bulb from a specific supplier, whether the noncompliance described below can occur depends on a number of factors such as weather and vehicle handling prior to first sale.

5. <u>Description of Noncompliance</u>:

The involved vehicles are equipped with rear turn signal lamp(s) that use LED bulb(s) of a specific generation from a specific supplier. On these vehicles, these turn signals using these LEDs are mounted in a specific location such that, during certain scenarios (e.g., heavy rain or car washing), it is possible that water may contact the heat sink located behind the circuit board in the LED socket on the turn signal assembly and lead to rapid cooling of this circuit board. This can lead to condensation forming on the circuit board that may cause some of the electrically conductive materials, such as solder, to dissolve and be redeposited on the circuit board when the condensation dries. After a small number of cycles, a sufficient amount of material can be redeposited on the circuit board, and further water condensation can cause a short circuit. This can lead to a temporary dimming or deactivation of the rear turn signal and cause a quick flashing of the turn signal indicator on the instrument panel until the condensation on the circuit board dries. As a result, these vehicles may not meet certain requirements of FMVSS No. 108, paragraphs S6.1.5.1 and S7.1.2.13.1. A dim or deactivated rear turn signal could lead to vehicles behind an involved vehicle not knowing that the driver has activated that turn signal or the hazard lights and may result in an increased risk of a crash in certain driving scenarios.

6. Test Results and Other Information:

As a result of reports in the Japan market of dim/deactivated rear turn signals on the involved vehicles and observations of conductive materials being deposited on the LED socket circuit boards in the rear turn signal lamps recovered from the field in Japan, Toyota conducted testing in attempt to determine how the conductive material was being deposited on this circuit board and what effect it had on rear turn signal performance.

Between May and December 2021, Toyota conducted testing to understand the conditions under which condensation could occur on the LED socket circuit board in the rear turn signal lamps in the potentially involved vehicles. Further, this testing investigated the conditions under which conductive materials could be dissolved and redeposited on the LED socket circuit board in the same manner that Toyota was observing in the field in Japan. The testing indicated that a larger temperature difference (e.g., ~11 degrees Celsius) between the ambient temperature and the heat sink located behind the circuit board in the LED socket could create condensation that, after a small amount of cycles, could lead to redepositing of conductive materials in the manner Toyota previously observed. Further testing showed that the presence of these conditions could lead to the temporary dimming or deactivating of the rear turn signal.

Toyota further investigated available diagnostic trouble code information for some potentially involved vehicles in the U.S. and determined that it was possible that vehicles may have experienced a dim/deactivated turn signal condition prior to sale.

As a result, Toyota determined on January 20, 2022, it is possible that the involved vehicles could have experienced a temporary dimming/deactivation of the rear turn signal lamp and did not meet the requirements of FMVSS No. 108, paragraphs S6.1.5.1 and S7.1.2.13.1 when they were sold.

7. <u>Description of Corrective Repair Action:</u>

For all involved vehicles, Toyota dealers will replace both rear turn signal LED bulbs with improved ones, and if necessary, replace the rear turn signal lamp assembly to fit with the improved bulb free of charge.

Reimbursement Plan for pre-notification remedies

As the owner notification letters will be mailed 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.

8. Recall Schedule:

Notifications to owners of the affected vehicles will occur by March 26, 2022. A copy of the draft owner notification letter(s) will be submitted as soon as available.

9. Distributor/Dealer Notification Schedule:

Notification to distributors/dealers will be sent by January 26, 2022. Copies of the dealer communications will be submitted as they are issued.

10. <u>Manufacturer's Campaign Number:</u>

Interim / Remedy: 22TB01/22TA01