

# Part 573 Safety Recall Report

# 22V-033

**Manufacturer Name :** Toyota Motor Engineering & Manufacturing**Submission Date :** JAN 26, 2022**NHTSA Recall No. :** 22V-033**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 :** 41,544

**Estimated percentage with defect :** 100 %

**Vehicle Information :**

**Vehicle 1 :** 2021-2021 Toyota Venza Hybrid

**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) 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. Note: 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.

**Production Dates :** SEP 17, 2020 - MAY 26, 2021

**VIN Range 1 : Begin :**

NR

**End :** NR

Not sequential

## Description of Noncompliance :

Description of the Noncompliance : 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.

FMVSS 1 : 108 - Lamps, reflective devices, and assoc. Equipment

FMVSS 2 : NR

Description of the Safety Risk : 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.

Description of the Cause : NR

Identification of Any Warning that can Occur : NR

## Involved Components :

Component Name 1 : Lamp Assy, Rr Turn Signal, LH

Component Description : Rr LH turn signal lamp

Component Part Number : 81540-48010

Component Name 2 : Lamp Assy, Rr Turn Signal, RH

Component Description : Rr RH turn signal lamp

Component Part Number : 81530-48010

## Supplier Identification :

### Component Manufacturer

Name : STANLEY ELECTRIC

Address : 3-33 Iwata Makihira-cho,  
Okazaki-shi, Aichi Foreign States 444-3698

Country : Japan

## Chronology :

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.

**Description of Remedy :**

Description of Remedy Program : 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. 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.

How Remedy Component Differs from Recalled Component : NR

Identify How/When Recall Condition was Corrected in Production : NR

**Recall Schedule :**

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

Planned Dealer Notification Date : JAN 26, 2022 - JAN 26, 2022

Planned Owner Notification Date : MAR 19, 2022 - MAR 26, 2022

\* NR - Not Reported