OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21V-734

Manufacturer Name: Toyota Motor Engineering & Manufacturing

Submission Date: SEP 23, 2021 **NHTSA Recall No.:** 21V-734

Manufacturer Recall No.: 21TB07 / 21TA07



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 : 8,411 Estimated percentage with defect : 100%

Vehicle Information:

Vehicle 1: 2022-2022 Toyota Prius

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 only affects vehicles equipped with a hybrid vehicle ECU that contains the programming error described in this report. Other Toyota or Lexus vehicles sold in the U.S. are not equipped with those hybrid vehicle ECUs. Note: 100% of the involved vehicles contain a hybrid vehicle ECU with the programming error described in this report. Whether the issue, in each case, will actually lead to a hybrid system shut down while driving at higher speeds depends on whether the driver shifts the transmission such that the shifter position status signal happens to change during an approximately 0.1 millisecond window and the vehicle operating

conditions at that time.

Production Dates: JUN 01, 2021 - AUG 02, 2021

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

Not sequential

Vehicle 2: 2022-2022 Toyota Prius Prime

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.

This issue only affects vehicles equipped with a hybrid vehicle ECU that contains the programming error described in this report. Other Toyota or Lexus vehicles sold in the U.S. are not equipped with those hybrid vehicle ECUs. Note: 100% of the involved vehicles contain a hybrid vehicle ECU with the programming error described in this report. Whether the issue, in each case, will actually lead to a hybrid system shut down while driving at higher speeds depends on whether the driver shifts the transmission such that the shifter position status signal happens to change during an approximately 0.1 millisecond window and the vehicle operating

conditions at that time.

Production Dates: JUN 01, 2021 - AUG 03, 2021

End: NR VIN Range 1 : Begin :

Description of Defect:

Description of the Defect: The subject vehicles are equipped with a hybrid vehicle ECU which, among other tasks, validates a signal reporting the transmission shift position by checking that the signal status remains consistent within an approximately 0.1 millisecond window during each check. Due to incorrect programming for this task, the hybrid vehicle ECU can incorrectly determine that this signal is erroneous if the shifter position status happens to change during this approximately 0.1 millisecond window. If this occurs, warning lights will illuminate and the hybrid system will shut down, resulting in loss of the motive power. If the vehicle loses motive power while being driven at a higher speed, there could be an increased risk of a crash.

> FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: If the vehicle loses motive power while being driven at a higher speed, there

could be an increased risk of a crash.

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

Involved Component	s:
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Component Name 1: Computer, Hybrid Vehicle Control

Component Description: Hybrid Vehicle ECU

Component Part Number: 89981-47U30

Component Name 2: Computer, Hybrid Vehicle Control

Component Description: Hybrid Vehicle ECU

Component Part Number: 89981-47U40

Component Name 3: Computer, Hybrid Vehicle Control

Component Description: Hybrid Vehicle ECU

Component Part Number: 89981-47U50

Component Name 4: Computer, Hybrid Vehicle Control

Component Description: Hybrid Vehicle ECU

Component Part Number: 89981-47S90

Supplier Identification:

Component Manufacturer

Name: DENSO CORPORATION

Address: 1-1, Showa-cho

Kariya-city, Aichi-pref. Foreign States 448-8661

Country: Japan

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 by first class mail

to return their vehicles to a Toyota dealer. For all involved vehicles, dealers will update the hybrid vehicle ECU software to correct the programming in the hybrid vehicle ECU's shift monitoring logic.

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 November

20, 2021. A copy of the draft owner notification will be submitted as

soon as it is available.

Notifications to distributors/dealers will be sent on September 22, 2021.

Copies of dealer communications will be submitted as they are issued.

Planned Dealer Notification Date: SEP 22, 2021 - SEP 22, 2021 Planned Owner Notification Date: NOV 20, 2021 - NOV 20, 2021

* NR - Not Reported