

#### Toyota Motor North America, Inc.

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

September 1, 2022

## NONCOMPLIANCE INFORMATION REPORT

#### 1. Vehicle Manufacturer Name:

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

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

Toyota Motor Manufacturing Canada, ["TMMC"] 1055 Fountain Street North, Cambridge, Ontario, Canada N3H 5K2

## Affiliated U.S. Sales Company

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

Manufacturer of the Brake Actuator Assembly

Robert Bosch GmbH (Blaichach Plant)

Robert-Bosch-Strasse 1 Country: Germany Phone: +1(248)876-5472

## 2. <u>Identification of Involved Vehicles</u>:

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/Tundra		TMMTX	November 2, 2021 through August 23, 2022
Laws/NV250	Lexus/NX250 2022	TMC	May 28, 2021 through July 15, 2022
Lexus/NX250		TMMC	March 9, 2022 through August 22, 2022
Lexus/NX350	TMC	April 8, 2021 through July 15, 2022	
Lexus/NA550		TMMC	March 11, 2022 through August 22, 2022

Applicability	Part Number	Part Name	Component Description
Toyota/Tundra	44050-0C340 44050-0C350 44050-0C360	ACTUATOR ASSY, BRAKE W/FLUID	
Lexus/NX250	44050-78320 44050-F6010	ACTUATOR ASSY, BRAKE W/FLUID	Brake Actuator Assembly
Lexus/NX350			

- 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) Only vehicles in the above production range which were equipped with the Brake Actuator Assembly of a specific design and supplier are involved in this recall. Other Toyota vehicles, including 2022 model year Tundra Hybrid and NX Hybrid vehicles, are not equipped with this system.
  - (3) The Skid Control ECU described below is a sub-component of the Brake Actuator Assembly.

#### 3. Total Number of Vehicles Involved:

Toyota Tundra : 64,330 Lexus NX250 : 4,218 Lexus NX350 : 15,177

Total : 83,725

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

100% of the involved vehicles contain a Skid Control ECU which may falsely detect an overcurrent condition described in Section 5 below. However, whether the issue, in each case, will cause the Electronic Parking Brake not to be engaged depends on the value of an instantaneous voltage gap which could occur within the Skid Control ECU's ASIC on each vehicle described in Section 6 below.

## 5. Description of Noncompliance:

In the subject vehicles, there is a possibility that the Skid Control ECU within the Brake Actuator Assembly may falsely detect an overcurrent condition of the Electronic Parking Brake (EPB) Actuator and enter a failsafe mode, which illuminates the malfunction indicator lamp (MIL), displays a multi-information display (MID) message "Parking Brake Malfunction, Visit Your Dealer," and prevents the EPB from being engaged or disengaged. If the EPB cannot be engaged prior to first sale, the vehicle would not meet the requirements of FMVSS No. 135 paragraph S7.12.3. If the EPB cannot be engaged, the EPB MIL and MID warnings are ignored, and the vehicle is parked on a grade without being placed into "Park," the vehicle could rollaway, increasing the risk of a crash.

### 6. Test Results and Other Information:

After receiving a report in which a customer could not disengage the EPB, in late-January 2022 Toyota and the supplier began a quality investigation of the Brake Actuator System. Toyota continued investigating other allegations of inability to disengage EPB in the market but was unable to duplicate this condition. In late June Toyota received a report from the market in which the EPB could not be engaged. Additional evaluation was conducted by the supplier and found that an instantaneous voltage gap could occur within the ECU's ASIC during the "Motor Test Pulse" self-diagnostic check, and a series of tests confirmed that the element characteristics of resistors within the ECU's noise filter could cause the voltage gap. During the end of July through mid-August, Toyota conducted on-vehicle tests to confirm the Motor Test Pulse failure condition and identified that, under certain conditions, this could prevent the EPB from engaging.

Based on the results of the investigation indicating that this phenomenon could occur prior to first sale, on August 26, 2022, Toyota decided that the subject vehicles may not meet the requirement of FMVSS No. 135 paragraph S7.12.3.

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

All known owners of the involved vehicles will be notified via first class mail to return their vehicles to a Toyota or Lexus dealer. For all involved vehicles, the dealers will reprogram the Skid Control ECU at no cost.

## Reimbursement Plan for pre-notification remedies

As the owner notification letters will be mailed out well within the active period of the Toyota or Lexus New Vehicle Limited Warranty ("Warranty"), all involved vehicle owners for this recall would have been provided a repair at no cost under Toyota's or Lexus's Warranty.

#### 8. Recall Schedule:

Notifications to owners of the affected vehicles will occur by October 31, 2022. A copy of the draft owner notification letter(s) will be submitted as soon as available.

## 9. Distributor/Dealer Notification Schedule:

Notifications to distributors/dealers will be sent by September 1, 2022. Copies of dealer communications will be submitted as they are issued.

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

Toyota Tundra : 22TA11 Lexus NX250 and NX350 : 22LA04