Manufacturer Name :Toyota Motor Engineering & ManufacturingSubmission Date :FEB 21, 2024NHTSA Recall No. :24V-124Manufacturer Recall No. :24TA01 / 24LA01



24V-124

### 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 : 18,616 Estimated percentage with defect : 100 %

### Vehicle Information :

Vehicle 1:	2023-2023 Toyota Mirai
Vehicle Type :	
Body Style :	
Power Train :	NR
Descriptive Information :	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 the vehicles listed above which are equipped with the Parking Assist ECU containing the specific software logic from the specific supplier. 100% of the involved vehicles contain a Parking Assist ECU with the improper software programming described in Section 5 below. Whether this issue, in each case, will cause the rearview image not to be displayed within two seconds of the start of the backing event depends on whether the camera initialization process fails.
Production Dates :	DEC 05, 2022 - OCT 03, 2023
VIN Range 1:	Begin :NREnd :NRNot sequential

Vehicle 2 : Vehicle Type :	2023-2024 I	exus ES250		
Body Style :	ND			
Power Train :				
Descriptive Information :	Although the vehicles in the This issue of Assist ECU of the involved programmin cause the rea backing even	a involved veh nis range were nly affects the ontaining the s vehicles conta g described in arview image at depends on	sold in the U.S. wehicles listed above wh specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi	e production period range, not all ich are equipped with the Parking om the specific supplier. 100% of with the improper software ier this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates :	OCT 12, 202	2 - DEC 01, 202	23	
VIN Range 1:	Begin :	NR	End: NR	☐ Not sequential
Vehicle 3 : Vehicle Type : Body Style : Power Train : Descriptive Information :	2023-2024 I NR Although the	exus ES300h e involved veh	icles are within the above	e production period range, not all
	vehicles in th This issue of Assist ECU of	nis range were nly affects the	e sold in the U.S. vehicles listed above wh	ich are equipped with the Parking
	Assist ECU of the involved programmin cause the rea backing ever	vehicles conta g described in arview image at depends on	specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi	om the specific supplier. 100% of with the improper software her this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates :	Assist ECU c the involved programmin cause the rea backing ever APR 15, 2022	vehicles conta g described in arview image nt depends on 2 - JAN 25, 202	specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi 24	om the specific supplier. 100% of with the improper software er this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates : VIN Range 1 :	Assist ECU c the involved programmin cause the rea backing ever APR 15, 2022 Begin :	vehicles conta g described in arview image at depends on 2 - JAN 25, 202 NR	specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi 24 End: NR	om the specific supplier. 100% of with the improper software er this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates : VIN Range 1 : Vehicle 4 : Vehicle Type : Body Style : Power Train :	Assist ECU of the involved programmin cause the rea backing ever APR 15, 2023 Begin : 2023-2024 I	vehicles conta g described in arview image at depends on 2 - JAN 25, 202 NR .exus ES350	specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi 24 End : NR	om the specific supplier. 100% of with the improper software her this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates : VIN Range 1 : Vehicle 4 : Vehicle Type : Body Style : Power Train : Descriptive Information :	Assist ECU of the involved programmin cause the rea backing ever APR 15, 2023 Begin : 2023-2024 I NR Although the vehicles in th This issue of Assist ECU of the involved programmin cause the rea backing ever	e involved veh nis range were nly affects the ontaining the solution of the so	specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi 24 End : NR icles are within the above sold in the U.S. vehicles listed above wh specific software logic fro ain a Parking Assist ECU Section 5 below. Wheth not to be displayed withi whether the camera initi	om the specific supplier. 100% of with the improper software her this issue, in each case, will n two seconds of the start of the ialization process fails.
Production Dates : VIN Range 1 : Vehicle 4 : Vehicle Type : Body Style : Power Train : Descriptive Information : Production Dates :	Assist ECU of the involved programmin cause the rea backing ever APR 15, 2022 Begin : 2023-2024 I NR Although the vehicles in th This issue of Assist ECU of the involved programmin cause the rea backing ever SEP 14, 2022	e involved veh ins range were naly affects the ontaining the s one containing the second solution of the second solution of the optimis range were on the solution of the second soluti	specific software logic from ain a Parking Assist ECU a Section 5 below. Wheth not to be displayed within whether the camera initiate a End : NR End : NR icles are within the above e sold in the U.S. vehicles listed above wh specific software logic from ain a Parking Assist ECU a Section 5 below. Wheth not to be displayed within whether the camera initiate a	e production period range, not all ich are equipped with the Parking om the specific supplier. 100% of with the improper software Not sequential

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Vehicle 5 : Vehicle Type : Body Style :	2024-2024 L	exus LC500		
Power Train :	NR			
Descriptive Information :	Although the vehicles in th This issue or Assist ECU co the involved programming cause the rea backing even	involved veh is range were ily affects the ontaining the s vehicles conta g described in rview image t depends on	icles are within the above e sold in the U.S. vehicles listed above whi specific software logic fro ain a Parking Assist ECU v Section 5 below. Whether not to be displayed withir whether the camera initia	e production period range, not all ch are equipped with the Parking m the specific supplier. 100% of vith the improper software er this issue, in each case, will n two seconds of the start of the alization process fails.
Production Dates :	MAY 15, 2023	3 - NOV 10, 20	)23	
VIN Range 1:	Begin :	NR	End: NR	Not sequential
Vehicle 6 : Vehicle Type : Body Style : Power Train :	2024-2024 L	exus LC500h		
Descriptive mormation.	vehicles in th This issue or Assist ECU co the involved programming cause the rea backing even	is range were aly affects the ontaining the vehicles conta g described in rview image t depends on	e sold in the U.S. vehicles listed above whi specific software logic fro ain a Parking Assist ECU v Section 5 below. Whether not to be displayed withir whether the camera initia	ch are equipped with the Parking m the specific supplier. 100% of vith the improper software er this issue, in each case, will a two seconds of the start of the alization process fails.
Production Dates :	MAY 24, 2023	3 - OCT 30, 20	23	
VIN Range 1:	Begin :	NR	End: NR	☐ Not sequential
Vehicle 7 : Vehicle Type : Body Style : Power Train :	2023-2023 L	exus LS500		
Descriptive Information :	Although the vehicles in th This issue or Assist ECU co the involved programming cause the rea backing even	involved veh is range were ily affects the ontaining the vehicles conta g described in rview image t depends on	icles are within the above e sold in the U.S. vehicles listed above whi specific software logic fro ain a Parking Assist ECU v Section 5 below. Whether not to be displayed withir whether the camera initia	e production period range, not all ch are equipped with the Parking m the specific supplier. 100% of vith the improper software er this issue, in each case, will n two seconds of the start of the alization process fails.
_	OCT 17 0000		0.0	
Production Dates :	00117,2022	2 - 001 20, 20	23	

Vehicle 8: 20	)23-2023 Lexus LS50	0h		
Vehicle Type :				
Body Style :				
Power Train : N	R			
Descriptive Information : 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 the vehicles listed above which are equipped with the Parking Assist ECU containing the specific software logic from the specific supplier. 100% of the involved vehicles contain a Parking Assist ECU with the improper software programming described in Section 5 below. Whether this issue, in each case, will cause the rearview image not to be displayed within two seconds of the start of the backing event depends on whether the camera initialization process fails.				
VIN Range 1 : Be	gin: NR	End :	NR	□ Not sequential
Description of the Noncompliance : The subject vehicles are equipped with a Panoramic View Monitor (PVM) system, which consists of multiple individual cameras located around the vehicle, including a rearview camera, and a Parking Assist ECU. The PVM system uses the Parking Assist ECU to activate the signal for each of these cameras, as needed, in order to display the corresponding image. Due to improper programming of the Parking Assist ECU software, if a camera initialization process failure occurs, the PVM system may not display a rearview image within two seconds of the start of the backing event if the driver shifts into reverse within approximately four seconds after ignition is switched on. As a result, the subject vehicles fail to comply with the requirements of FMVSS No. 111, paragraph S5.5.3, which may increase the risk of a crash during a backing event.				
FMVSS 1 : FMVSS 2 :	111 - Rear visibility			
Description of the Safety Risk :	Due to improper pr initialization process rearview image with driver shifts into re switched on. As a re requirements of FM risk of a crash durin	ogramming of the s failure occurs hin two seconds verse within app esult, the subject VSS No. 111, pa ng a backing eve	he Parking Assist , the PVM system s of the start of th proximately four t vehicles fail to c ragraph S5.5.3, w nt.	ECU software, if a camera may not display a backing event if the seconds after ignition is comply with the which may increase the
Description of the Cause :	NR	-		
Identification of Any Warning that can Occur :	NR			

## **Involved Components :**

The information contained in this report was submitted pursuant to 49 CFR §573

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Component Name 1:	Computer, Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-62120
Component Name 2:	Computer, Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-33440
Component Name 3:	Computer, Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-33441
Component Name 4 :	Computer. Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-33460
-	
Component Name 5 :	Computer Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-33461
Component Name 6 :	Computer Parking Assist
Component Description ·	Parking Assist ECU
Component Part Number :	86792-33441
Component Name 7.	Computer Darking Assist
Component Description :	Computer, raiking Assist
Component Description :	1 al Killy ASSIST EUU 86702-22461
component Part Number :	00792-33401

The information contained in this report was submitted pursuant to 49 CFR \$573

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Component Name 8:	Computer, Parking Assist
Component Description :	Parking Assist ECU
Component Part Number :	86792-11020

Component Name 9: Computer, Parking Assist Component Description: Parking Assist ECU Component Part Number: 86792-50440

### **Supplier Identification :**

### **Component Manufacturer**

Name : DENSO CORPORATION Address : 1-1, Showa-cho Kariya-city, Aichi-pref Foreign States 448-8661

Country: Japan

### Chronology :

In February 2023, Toyota and the Parking Assist ECU supplier began a design review of all PVM systems in parallel with an investigation of an issue involving the rearview monitor on a certain vehicle model sold in Japan. Based on the review, it appeared that if there is a large amount of data being processed at vehicle startup, the camera initialization process could fail at vehicle startup on certain PVM systems. Beginning in September 2023, Toyota and the supplier specifically investigated the initialization sequence of the Parking Assist ECU and identified that when large amounts of data are processed at vehicle startup, the camera initialization process may conflict with the image drawing process, and the image drawing process would be prioritized, causing the camera initialization process to fail. Toyota and the supplier began replication testing focusing on the sequence.

In early February 2024, Toyota was able to replicate the issue. Toyota's analysis also found that if the initialization process failure occurred and the driver shifts into reverse within four seconds after the ignition is switched on, it would take more than two seconds after the start of the backing event to display the rearview image.

On February 15, 2024, Toyota determined that it is possible that the involved vehicles could experience a condition in which a rearview image does not display to the driver within two seconds of the start of a backing event and as such, does not meet the requirements of FMVSS No. 111 S5.5.3 and decided to conduct a recall.

Planned Owner Notification Date : APR 07, 2024 - APR 21, 2024

## **Description of Remedy :**

Description of Remedy Program :	All known owners of the subject vehicles will be notified to return their vehicles to a Toyota or Lexus dealer. The dealers will update the software of the Parking Assist ECU, free of charge. As the owner notification letters will be mailed out within the active period of the Toyota or Lexus New Vehicle Limited Warranty ("Warranty") and 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 April 21, 2024. A copy of the draft owner notification will be submitted as soon as it is available. Notifications to distributors/dealers will be sent on February 21, 2024. Copies of dealer communications will be submitted as they are issued.
Planned Dealer Notification Date :	FEB 21, 2024 - FEB 21, 2024

\* NR - Not Reported

#### Toyota Motor North America, Inc.

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

February 21, 2024

## NONCOMPLIANCE INFORMATION REPORT

1. <u>Vehicle Manufacturer Name</u>:

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

Toyota Motor Manufacturing, Kentucky ["TMMK"] 1001 Cherry Blossom Way, Georgetown, Kentucky 40324

Affiliated U.S. Sales Company:

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

Manufacturer of Parking Assist ECU:

DENSO CORPORATION 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661, Japan Phone: +81-566-25-5511

Country of Origin: Japan

### 2. <u>Identification of Involved Vehicles and Affected Components:</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 / Mirai	2023	TMC	December 5, 2022 through October 3, 2023

Lexus / ES250	2023-2024	TMMK	October 12, 2022 through December 1, 2023
Lexus / ES300h	2023-2024	TMMK	April 15, 2022 through January 25, 2024
Lexus / ES350	2023-2024	TMMK	September 14, 2022 through January 26, 2024
Lexus / LC500	2024	TMC	May 15, 2023 through November 10, 2023
Lexus / LC500h	2024	TMC	May 24, 2023 through October 30, 2023
Lexus / LS500	2023	TMC	October 17, 2022 through October 26, 2023
Lexus / LS500h	2023	TMC	May 30, 2023

Applicability	Part Number	Part Name	Component Description
MY2023 Toyota Mirai	86792-62120		
MY2023 Lexus ES250, ES300h, ES350	86792-33440 86792-33441 86792-33460 86792-33461		
MY2024 Lexus ES250, ES300h, ES350	86792-33441 86792-33461	Computer, Parking Assist	Parking Assist ECU
MY2024 Lexus LC500, LC500h	86792-11020		
MY2023 Lexus LS500, LS500h	86792-50440		

- 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 issue only affects the vehicles listed above which are equipped with the Parking Assist ECU containing the specific software logic from the specific supplier.

### 3. <u>Total Number of Vehicles Potentially Involved:</u>

 Toyota Mirai
 : 2,088

 Lexus ES250
 : 100

 Lexus ES300h
 : 6,378

 Lexus ES350
 : 7,559

 Lexus LC500
 : 1,016

 Lexus LC500h
 : 23

 Lexus LS500h
 : 1,451

 Lexus LS500h
 : 1

 Total
 : 18,616

### 4. <u>Percentage of Vehicles Estimated to Actually Contain the Noncompliance:</u>

100% of the involved vehicles contain a Parking Assist ECU with the improper software programming described in Section 5 below. Whether this issue, in each case, will cause the rearview image not to be displayed within two seconds of the start of the backing event depends on whether the camera initialization process fails, as described in Section 6 below.

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

The subject vehicles are equipped with a Panoramic View Monitor (PVM) system, which consists of multiple individual cameras located around the vehicle, including a rearview camera, and a Parking Assist ECU. The PVM system uses the Parking Assist ECU to activate the signal for each of these cameras, as needed, in order to display the corresponding image. Due to improper programming of the Parking Assist ECU software, if a camera initialization process failure occurs, the PVM system may not display a rearview image within two seconds of the start of the backing event if the driver shifts into reverse within approximately four seconds after ignition is switched on. As a result, the subject vehicles fail to comply with the requirements of FMVSS No. 111, paragraph S5.5.3, which may increase the risk of a crash during a backing event.

### 6. <u>Test Results and Other Information</u>:

In February 2023, Toyota and the Parking Assist ECU supplier began a design review of all PVM systems in parallel with an investigation of an issue involving the rearview monitor on a certain vehicle model sold in Japan. Based on the review, it appeared that if there is a large amount of data being processed at vehicle startup, the camera initialization process could fail at vehicle startup on certain PVM systems. Beginning in September 2023, Toyota and the supplier

specifically investigated the initialization sequence of the Parking Assist ECU and identified that when large amounts of data are processed at vehicle startup, the camera initialization process may conflict with the image drawing process, and the image drawing process would be prioritized, causing the camera initialization process to fail. Toyota and the supplier began replication testing focusing on the sequence.

In early February 2024, Toyota was able to replicate the issue. Toyota's analysis also found that if the initialization process failure occurred and the driver shifts into reverse within four seconds after the ignition is switched on, it would take more than two seconds after the start of the backing event to display the rearview image.

On February 15, 2024, Toyota determined that it is possible that the involved vehicles could experience a condition in which a rearview image does not display to the driver within two seconds of the start of a backing event and as such, does not meet the requirements of FMVSS No. 111 S5.5.3 and decided to conduct a recall.

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

All known owners of the subject vehicles will be notified to return their vehicles to a Toyota or Lexus dealer. The dealers will update the software of the Parking Assist ECU, free of charge.

### Reimbursement Plan for pre-notification remedies

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

### 8. <u>Recall Schedule</u>:

Notifications to owners of the affected vehicles will occur by April 21, 2024. A copy of the draft owner notification will be submitted as soon as it is available.

### 9. <u>Distributor/Dealer Notification Schedule</u>:

Notifications to distributors/dealers will be sent on February 21, 2024. Copies of dealer communications will be submitted as they are issued.

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

Toyota	24TA01	
Lexus	24LA01	

Original Publication Date: February 21, 2024

To: All Toyota Dealer Principals, General Managers, Service Managers, and Parts Managers

## SAFETY (NONCOMPLIANCE) RECALL 24TA01 (Remedy Notice)

### Certain 2023 Model Year Mirai **PVM System May Not Display Required Images**

Model / Years	Production Period	Approximate Total Vehicles	Approximate Stop Sale Dealer Inventory
2023 Mirai	Early December 2022 to Early October 2023	2,100	40



Refer to Dealer Inventory Procedures section for more details.



On February 21, 2024, Toyota will file a Noncompliance Information Report (NCIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety (Noncompliance) Recall on Certain 2023 Mirai vehicles.

### Condition

Due to a software programming issue, the rearview image may not display within the period of time required by certain U.S. safety regulations after the driver shifts the vehicle into reverse, increasing the risk of a crash while backing the vehicle.

### Remedy

Toyota dealers will update the software in the Parking Assist ECU FREE OF CHARGE.

### **Covered Vehicles**

There are approximately 2,100 vehicles covered by this Safety Recall.

### Owner Letter Mailing Date

Toyota will notify owners by late April 2024.

Toyota makes significant effort to obtain current customer name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the Safety (Noncompliance) Recall announcement, it is the dealership's responsibility to forward the owner letter to the customer who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please *verify eligibility by confirming through TIS prior to performing repairs*. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

## **Dealer Inventory Procedures**

### New Vehicles in Dealership Inventory

There are approximately 40 vehicles in new dealer inventory as of February 19, 2024.

Under Title 49, Section 30112 of the United States Code, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard or contains a defect related to motor vehicle safety. Further, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Toyota reimburses dealers for flooring costs associated with new vehicles held in dealership inventory until the recall remedy becomes available. Toyota provides these flooring reimbursements at 60-day intervals. Toyota reserves the right to withhold or charge-back any flooring reimbursement funds that may have been paid to the dealer if it determines that a new vehicle subject to a safety recall was sold without first being remedied.

Vehicle Safety Recall completion should always be verified through TIS. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

### NOTE:

- New vehicles in dealer inventory subject to a Safety Recall must be remedied before delivery into commerce under a sale or lease. Dealer-to-dealer trades as well as vehicle sales between dealers should not be made until a vehicle is remedied.
- Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily (Non-SET and GST dealers: <a href="https://dealerdaily.toyota.com/">https://dealerdaily.toyota.com/</a>). The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.

### Inspection Reminder Mirror Hang Tags for Covered Vehicles in New Dealer Stock

To easily recognize vehicles involved in this Safety (Noncompliance) Recall, each dealership should utilize Inspection Reminder Hang Tags. Inside the vehicle's glove box are stickers containing the VIN. Apply one of these stickers to the hang tag and install the hang tag in the vehicle. A sample copy of the Inspection Reminder Hang Tag has been included for your reference.

Toyota Version Below:



NOTE: Dealerships can order hang tags from the Material Distribution Center (MDC).

Part Number	Description	Quantity
00411-140003	Inspection Mirror Hang Tag	25 Per Pack

### Pre-Owned Vehicles in Dealer Inventory

Toyota typically requests that dealers *NOT* deliver any pre-owned vehicles in dealer inventory that are covered by a Safety (Noncompliance) Recall unless the defect has been remedied.

**NOTE:** Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily (**Non-SET and GST dealers:** <u>https://dealerdaily.toyota.com/</u>). The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.

### Toyota Certified Used Vehicle (TCUV)

The TCUV policy prohibits the certification of any vehicle with an outstanding Safety Recall, Special Service Campaign, or Limited-Service Campaign. Thus, no affected units are to be designated, sold, or delivered as a TCUV until all applicable Safety Recalls, Special Service Campaigns, and Limited-Service Campaigns have been completed on that vehicle.

### Toyota Rent-A-Car (TRAC) & Service Loaners

Toyota requests that dealers remove all TRAC and Service Loaner vehicles from service that are covered by a Safety Recall unless the defect has been remedied.

## Customer Handling, Parts Ordering, and Remedy Procedures

### Customer Contacts

Customers who receive the owner letter may contact your dealership with questions regarding the letter and/or the Safety (Noncompliance) Recall. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Customers with additional questions or concerns are asked to please contact the Toyota Brand Engagement Center (1-800-331-4331) – Monday through Friday, 8:00 am to 8:00 pm, Saturday 9:00 am to 7:00 pm Eastern Time.

### Salvage Title Vehicles

Every attempt should be made to complete an open Safety Recall when circumstances permit, unless noted otherwise in the Safety Recall dealer letter.

For complete details on this policy, refer to Toyota Warranty Policy <u>4.17</u>, "What Is Not Covered by The Toyota New Vehicle Limited Warranty".

### Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Joshua Burns (469) 292-6449 in Toyota Corporate Communications. Please do not provide this number to customers. Please provide this contact only to media.

### **Technician Training Requirements**

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have completed the following course:

• TIC206A

Always check which technicians can perform the repair by logging on to <u>https://www.uotdealerreports.com</u>. It is the dealership's responsibility to select technicians who have completed the above course to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to always perform this repair.

### **Remedy Procedures**

Refer to TIS for Technical Instructions on repair. Conduct all non-completed Safety Recalls and Service Campaigns on the vehicle during the time of appointment.

### Repair Quality Confirmation

The repair quality of covered vehicles is extremely important to Toyota. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

## Warranty Reimbursement Procedures



\* NOTE: Toyota will update the document within 1 week with the OP codes.

- The flat rate times include 0.1 hours for administrative cost per unit for the dealership.
- In the rare case that Parking Assist ECU contains the latest calibration ID (no software update needed), use opcode TBD\*.

### **Claim Filing Accuracy and Correction Requests**

It is the dealer's responsibility to file claims correctly for this Safety (Noncompliance) Recall. This claim filing information is used by Toyota for various government reporting activities; therefore, claim filing accuracy is crucial. If it has been identified that a claim has been filed using an incorrect Op Code or a claim has been filed for an incorrect VIN, refer to Warranty Procedure Bulletin <u>PRO17-03</u> to correct the claim.

## Campaign Designation / Phase Decoder



Examples:

19TA01 = Launched in 2019, Toyota, Safety Recall Remedy Phase, 1<sup>st</sup> Safety Recall Launched in 2019 20TC02 = Launched in 2020, Special Service Campaign, 2<sup>nd</sup> Special Service Campaign Launched in 2020 21TE05 = Launched in 2021, Customer Support Program, 5<sup>th</sup> Customer Support Program Launched in 2021

Please review this entire package with your Service and Parts staff to familiarize them with the proper step-bystep procedures required to implement this Safety (Noncompliance) Recall.

Thank you for your cooperation. TOYOTA MOTOR SALES, U.S.A., INC.



## SAFETY (NONCOMPLIANCE) RECALL 24TA01 (Remedy Notice)

Certain 2023 Model Year Mirai PVM System May Not Display Required Images

Frequently Asked Questions Original Publication Date: February 21, 2024

### **Q1:** What is the condition?

- A1: Due to a software programming issue, the rearview image may not display within the period of time required by certain U.S. safety regulations after the driver shifts the vehicle into reverse, increasing the risk of a crash while backing the vehicle.
- Q2: Are there any warnings that this condition exists?
- A2: No.
- **Q3:** What is Toyota going to do?
- A3: Toyota dealers will update the software in the Parking Assist ECU *FREE OF CHARGE*.

### Q4: Which and how many vehicles are covered by this Safety (Noncompliance) Recall?

A4: There are approximately 2,100 vehicles covered by this Safety (Noncompliance) Recall.

Model Name	Model Year	Production Period
Mirai	2023	Early December 2022 to Early October 2023

## Q3a: Are there any other Lexus/Toyota/Scion vehicles covered by this Safety (Noncompliance) Recall in the U.S.?

A3a: Yes, there are Certain 2023 - 2024 Model Year ES250, Certain, 2023 - 2024 Model Year ES300h, Certain 2023 - 2024 Model Year ES350, Certain 2024 Model Year LC500, Certain 2024 Model Year LC Convertible, Certain 2024 Model Year LC500h, Certain 2023 Model Year LS500, and Certain 2023 Model Year LS500h Lexus vehicles covered by this Safety (Noncompliance) Recall.

### **Q5:** How long will the repair take?

A5: The repair takes approximately 45mins. However, depending upon the dealer's work schedule, it may be necessary to make the vehicle available for longer.

### **Q6:** How does Toyota obtain my mailing information?

A6: Toyota uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

### **Q7:** What if I have additional questions or concerns?

A7: If you have additional questions or concerns, please contact the Toyota Brand Engagement Center at 1-800-331-4331 Monday through Friday, 8:00 am to 8:00 pm, Saturday 9:00 am to 7:00 pm Eastern Time.

Toyota Motor Sales, USA, Inc. 6565 Headquarters Drive Plano, TX 75024 (469) 292-4000

## CUSTOMER CONTACT & VEHICLE DISCLOSURE FORM

This form is not applicable for new vehicles in dealership inventory and TCUV units.

This vehicle is involved in a Safety Recall. At this time, <u>remedy parts are not available</u> and the remedy has *NOT* been performed. I understand that the vehicle will need to be returned to an authorized Toyota dealer to have the remedy performed at *NO CHARGE* when the remedy is available.

### Customer Signature

Toyota recommends that you register with the Toyota Owners Community at <u>http://www.toyota.com/owners/</u>. and regularly check recall applicability using <u>www.toyota.com/recall</u> or <u>www.safercar.gov</u>. You will need to input your 17-digit Vehicle Identification Number (VIN).

VIN		Campaign Code	
Model	Model Year		
Customer Information			
Customer Name		Customer Email	_
Customer Address		Home Phone #	-
		Mobile Phone #	-
		Date	-
<i>Please provide this ir available. This inform preferred contact info 270-9371.</i>	nformation so that Toyota or nation will only be used for c formation in the future, visit <u>h</u>	your dealer can notify you when the remedy becomes campaign communications. If you'd like to update your ttps://www.toyota.com/owners. or contact us at 1-888-	
Dealer Information			
Dealer Name/Addres	ŝS	Dealer Code	

Dealer Name/Address	Dealer Code	
	Dealer Phone Number	
	Dealer Staff Name	
	Dealer Staff Signature	



### Original Publication Date: February 21,2024

To: All Lexus Dealer Principals, General Managers, Service Managers, and Parts Managers

## SAFETY (NONCOMPLIANCE) RECALL 24LA01 (Remedy Notice)

### Multiple Models and Model Years PVM System May Not Display Required Images

Model / Years	Production Period	Approximate Total Vehicles	Approximate Stop Sale Dealer Inventory
2023 ES250	Mid-October 2022 to Early December 2023	100	20
2023-2024 ES300H	Mid-April 2022 to Late January 2024	6380	1020
2023-2024 ES350	Mid-September 2022 to Late January 2024	7560	570
2024 LC500	Mid-May 2023 to Early November 2023	290	20
2024 LC500h	Late May 2023 to Late October 2023	30	2
2024 LC Convertible	Mid-May 2023 to Early November 2023	730	190
2024 LS500	Mid-October 2022 to Late October 2023	1450	155
2024 LS500h	Late May 2023 to Late May 2023	1	0



STOPI DO NOT SELL NEW VEHICLES IN DEALER INVENTORY. Refer to Dealer Inventory Procedures section for more details.



On February 21, 2024, Lexus will file a Noncompliance Information Report (NCIR) with the National Highway Traffic Safety Administration (NHTSA) informing the agency of our intent to conduct a voluntary Safety (Noncompliance) Recall on Certain 2023 - 2024 Model Year ES250, Certain, 2023 - 2024 Model Year ES300h, Certain 2023 - 2024 Model Year ES350, Certain 2024 Model Year LC500, Certain 2024 Model Year LC Convertible, Certain 2024 Model Year LC500h, Certain 2023 Model Year LS500, and Certain 2023 Model Year LS500h vehicles.

### <u>Condition</u>

Due to a software programming issue, the rearview image may not display within the period of time required by certain U.S. safety regulations after the driver shifts the vehicle into reverse, increasing the risk of a crash while backing the vehicle.

### Remedy

Lexus dealers will update the software in the Parking Assist ECU FREE OF CHARGE.

### **Covered Vehicles**

There are approximately 16,500 vehicles covered by this Safety Recall. Approximately 10 vehicles involved in this Safety Recall were distributed to Puerto Rico.

### Owner Letter Mailing Date

Lexus will notify owners by late April 2024.

Lexus makes significant effort to obtain current guest name and address information from each state through industry resources when mailing owner letters. In the event your dealership receives a notice for a vehicle that was sold prior to the Safety Recall announcement, it is the dealership's responsibility to forward the owner letter to the guest who purchased the vehicle.

Please note that only owners of the covered vehicles will be notified. If you are contacted by an owner who has not yet received a notification, please *verify eligibility by confirming through TIS prior to performing repairs*. Dealers should perform the repair as outlined in the Technical Instructions found on TIS.

## Dealer Inventory Procedure

### New Vehicles in Dealership Inventory

There are approximately 1,980 vehicles in new dealer inventory as of February 19, 2024.



Under Title 49, Section 30112 of the United States Code, a dealer cannot sell, offer for sale, or introduce or deliver for introduction in interstate commerce a new motor vehicle when it is aware that the vehicle does not comply with an applicable Federal Motor Vehicle Safety Standard or contains a defect related to motor vehicle safety. Further, 49 Code of Federal Regulations §577.13 requires us to provide the following advisory: It is a violation of Federal law for a dealer to deliver a new motor vehicle or any new or used item of motor vehicle equipment (including a tire) covered by this notification under a sale or lease until the defect or noncompliance is remedied.

Lexus reimburses dealers for flooring costs associated with new vehicles held in dealership inventory until the recall remedy becomes available. Toyota provides these flooring reimbursements at 60-day intervals. Toyota reserves the right to withhold or charge-back any flooring reimbursement funds that may have been paid to the dealer if it determines that a new vehicle subject to a safety recall was sold without first being remedied.

Vehicle Safety Recall completion should always be verified through TIS. We request your assistance to ensure involved vehicles are identified and not delivered prior to performing the remedy.

### NOTE:

- New vehicles in dealer inventory subject to a Safety Recall must be remedied before delivery into commerce under a sale or lease. Dealer-to-dealer trades as well as vehicle sales between dealers should not be made until a vehicle is remedied.
- Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily <u>https://dealerdaily.lexus.com/</u>). The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.



NOTE: Dealerships can order hang tags from the Material Distribution Center (MDC).

Part Number	Description	Quantity
00241-INSPT	Inspection Mirror Hang Tag	25 Per Pack

### Pre-Owned Vehicles in Dealer Inventory

Lexus typically requests that dealers *NOT* deliver any pre-owned vehicles in dealer inventory that are covered by a Safety (Noncompliance) Recall unless the defect has been remedied.

**NOTE:** Dealers can identify if any of their new and used inventory has any open campaigns in the Vehicle Inventory Summary available in Dealer Daily <u>https://dealerdaily.lexus.com/</u>. The Vehicle Inventory Summary may take up to 4 hours to populate information for newly launched campaigns.

### L/Certified Vehicles

L/Certified policy prohibits the certification of any vehicle with an outstanding Safety Recall, Special Service Campaign, or Limited-Service Campaign. Thus, no affected units are to be designated, sold, or delivered as a L/Certified until all applicable Safety Recalls, Special Service Campaigns, and Limited-Service Campaigns have been completed on that vehicle.

### LCCS Service Loaners

Lexus requests that dealers remove all LCCS Service Loaner vehicles from service that are covered by a Safety Recall unless the defect has been remedied.

## Guest Handling, Parts Ordering, and Remedy Procedures

### **Guest Contacts**

Guests who receive the owner letter may contact your dealership with questions regarding the letter and/or the Safety (Noncompliance) Recall. Please welcome them to your dealership and answer any questions that they may have. A Q&A is provided to assure a consistent message is communicated.

Guests with additional questions or concerns are asked to please contact the Lexus Brand Engagement Center at 1-800-255-3987 Monday through Friday, 8:00 am to 8:00 pm, Saturday 9:00 am to 7:00 pm Eastern Time.

### Salvage Title Vehicles

Every attempt should be made to complete an open Safety Recall when circumstances permit, unless noted otherwise in the Safety Recall dealer letter.

For complete details on this policy, refer to Lexus Warranty Policy <u>4.15</u>, "What Is Not Covered by The Lexus New Vehicle Limited Warranty".

### Media Contacts

It is imperative that all media contacts (local and national) receive a consistent message. In this regard, all media contacts must be directed to Joshua Burns (469) 292-6449 in Lexus Corporate Communications. Please do not provide this number to guests. Please provide this contact only to media.

### **Technician Training Requirements**

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have completed the following course:

### ·LIC206A

Always check which technicians can perform the repair by logging on to https://www.uotdealerreports.com. It is the dealership's responsibility to select technicians who have completed the above course to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to always perform this repair.

### **Remedy Procedures**

Refer to TIS for Technical Instructions on repair. Conduct all non-completed Safety Recalls and Service Campaigns on the vehicle during the time of appointment.

### **Repair Quality Confirmation**

The repair quality of covered vehicles is extremely important to Lexus. To help ensure that all vehicles have the repair performed correctly, please designate at least one associate (someone other than the individual who performed the repair) to verify the repair quality of every vehicle prior to customer delivery.

### Warranty Reimbursement Procedures

### Warranty Reimbursement Procedure



Op Code	Description	Flat Rate Hours
TBD*	Parking Assist ECU Update	TBD*

\* NOTE: Toyota will update the document within 1 week with the OP codes.

- The flat rate times include 0.1 hours for administrative cost per unit for the dealership.
- In the rare case that the Parking Assist ECU contains the latest calibration ID (no software update needed), use opcode TBD\*.

Lexus' usual guest care amenities of car wash and fuel fill-up apply to this Safety (Noncompliance) Recall. Additionally, a maximum of three days of rental vehicle expense (at a maximum rate of \$55.00 per day) while the vehicle is being remedied or the cost of pick-up and redelivery of the guest's car may be claimed if required and subject to the guidelines published in the Safety Recall and Special Service Campaign General Procedures document on TIS.

### Claim Filing Accuracy and Correction Requests

It is the dealer's responsibility to file claims correctly for this Safety (Noncompliance) Recall. This claim filing information is used by Toyota for various government reporting activities; therefore, claim filing accuracy is crucial. If it has been identified that a claim has been filed using an incorrect Op Code or a claim has been filed for an incorrect VIN, refer to Warranty Procedure Bulletin <u>PRO17-03</u> to correct the claim.

Campaign Designation / Phase Decoder



## Please review this entire package with your Service and Parts staff to familiarize them with the proper step-by-step procedures required to implement this Safety Recall.

Thank you for your cooperation. LEXUS, A DIVISION OF TOYOTA MOTOR SALES, U.S.A., INC.



## SAFETY (NON-COMPLIANCE) RECALL 24LA01 (Remedy Notice)

Multiple Models and Model Years

PVM System May Not Display Required Images

### Frequently Asked Questions

Original Publication Date: February 21, 2024

### Q1: What is the condition?

- A1: Due to a software programming issue, the rearview image may not display within the period of time required by certain U.S. safety regulations after the driver shifts the vehicle into reverse, increasing the risk of a crash while backing the vehicle.
- Q2: Are there any warnings that this condition exists?
- *A2:* No.

### Q3: What is Lexus going to do?

A2: Lexus dealers will update the software in the Parking Assist ECU FREE OF CHARGE.

### Q4: Which and how many vehicles are covered by this Safety Recall?

A3: There are approximately 16,500 vehicles covered by this Safety Recall.

Model Years	Model	Production Period	Approximate Total Vehicles
2023 - 2024	ES250	Mid-October 2022 to Early December 2023	100
2023 - 2024	ES300H	Mid-April 2022 to Late January 2024	6380
2023 - 2024	ES350	Mid-September 2022 to Late January 2024	7560
2024	LC500	Mid-May 2023 to Early November 2023	290
2024	LC500h	Late May 2023 to Late October 2023	30
2024	LC Convertible	Mid-May 2023 to Early November 2023	730
2023	LS500	Mid-October 2022 to Late October 2023	1450
2023	LS500h	Late May 2023 to Late May 2023	1

### Q5: Are there any other Toyota/Lexus vehicles covered by this Safety Recall in the U.S.?

A5: Yes, there are certain Toyota 2023 model year Mirai vehicles covered by this Safety Recall.

### Q6: How does Lexus obtain my mailing information?

A6: Lexus uses an industry provider who works with each state's Department of Motor Vehicles (DMV) to receive registration or title information, based upon the DMV records. Please make sure your registration or title information is correct.

### Q7: What if I have additional questions or concerns?

A7: If you have additional questions or concerns, please contact the Lexus Brand Engagement Center at 1-800-255-3987 Monday through Friday, 8:00 am to 8:00 pm, Saturday 9:00 am to 7:00 pm Eastern Time.



Lexus Motor Sales, USA, Inc. 6565 Headquarters Drive Plano, TX 75024 (469) 292-4000

## GUEST CONTACT & VEHICLE DISCLOSURE FORM

This form is not applicable for new vehicles in dealership inventory.

This vehicle is involved in a Safety Recall. At this time, <u>remedy parts are not available</u>, and the remedy has **NOT** been performed. I understand that the vehicle will need to be returned to an authorized Lexus dealer to have the remedy performed at **NO CHARGE** when the remedy is available.

### **Guest Signature**

Lexus recommends that you register with the Lexus Owners Community at <u>http://www.lexus.com/owners/</u> and regularly check recall applicability using <u>www.lexus.com/recall</u> or <u>www.safercar.gov</u>. You will need to input your 17-digit Vehicle Identification Number (VIN).

		Campaign Code	
Model	Model Year		
Guest Information			
Guest Name		Guest Email	
Guest Address		Home Phone #	
		Mobile Phone #	
		Date	
Please provide this information so th only be used for campaign comm <u>www.lexus.com/ownersupdate</u> or co	nat Lexus or your dealer can notin nunications. If you'd like to up ontact us at 1-800-255-3987.	fy you when the remedy becomes available. This informated a second to the second and the second and the second a second at the s	ation will ure, visit
Dealer Information			
Dealer Name/Address		Dealer Code	
		Dealer Phone Number	
		Dealer Staff Name	

Dealer Staff Signature

# TECHNICAL INSTRUCTIONS FOR SAFETY (NONCOMPLIANCE) RECALL 24TA01 UPDATE PARKING ASSIST ECU

## **CERTAIN 2023 MIRAI VEHICLES**

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have completed the following course:

### • TIC206A

Always check which technicians can perform the repair by logging on to <u>https://www.uotdealerreports.com</u>. It is the dealership's responsibility to select technicians who have completed the above course to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to always perform this repair.

## I. OPERATION FLOW CHART

The flow chart is for reference only. DO NOT use it in place of the full technical instructions. Follow ALL steps as outlined in the full technical instructions to confirm the campaign is completed correctly. Verify Vehicle Eligibility Confirm vehicle VIN matches the RO. Not Covered 1. No further action required. Check for Campaign eligibility using TIS. 2. Covered Perform Health Check and Verify ECU Calibration. Old Calibration Reflash the parking assist ECU with the **New** Calibration **NEW** software. Campaign completed. Return the Vehicle to the customer.

## **II. IDENTIFICATION OF AFFECTED VEHICLES**

### 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- a) Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
- b) Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

NOTE:

TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

## **III. PREPARATION**

### A. TOOLS & EQUIPMENT

- T-SB-0107-20 Rev. 2
- DCA-8000 Battery Diagnostic Station
- Techstream ADVi / Techstream 2.0 / Techstream Lite

## **IV. BACKGROUND**



## **V. SAFETY PRECAUTIONS**

Critical CRITICAL INFORMATION - READ THOROUGHLY

An ECU could be damaged if an error occurs in the communication while reprogramming the ECU. Confirm all work is performed as described in these instructions.





### 1. STABILIZE THE POWER TO THE PERSONAL COMPUTER SIDE

a) Be sure to connect the personal computer to an external AC power supply.

### NOTE:

The ECU could be damaged if the battery voltage of the personal computer drops while reprogramming.

b) Turn off the screen saver and power saving mode of the personal computer so that the power to the hard disk is kept supplied.

### NOTE:

If the screen saver or power saving mode launches while reprogramming, the communication may be disconnected, resulting in the damage of the ECU.



c) **DO NOT** block the ventilation opening for the cooling fan of the personal computer.

### NOTE:

If the ventilation opening for the cooling fan is blocked with a sheet cover or the like, the personal computer may be heated excessively, causing the operation of the personal computer to stop.

Due to the stop of the operation, the communication for reprogramming signals could be stopped, resulting in the damage of the ECU.

## VI. CIRCUMFERENCE MONITORING CAMERA CONTROL MODULE SYSTEM CALIBRATION ID VERIFICATION



1. CHECK FOR DTC'S

a) Using a GTS+, click the "Health Check" button on the Main Menu. **NOTE:** 

This Campaign covers only the software update to the Circumference Monitoring Camera Control Module System, as detailed in these instructions. It does not cover the diagnosis or replacement of any other systems on the vehicle.

### 2. CHECK CURRENT CALIBRATION

- a) Locate the "Update" column of the "Calibration Information" for the Circumference Monitoring Camera Control Module system on the "Health Check Result" screen.
- b) Determine the status of an available update; indicated by a YES or NO.

### NOTE:

### If the CIDs indicate 'Yes', proceed with the update procedure.

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2023 XXXXXXX	(	Production	n Date 12/01/2	2022   720	)5mile B	atte	ry:12.5	iV.
Health Check Resu	lt							
STATUS								
09/06/2023 11:42:38 Campaign Status: OPEN PERMANENT: YES ECU Security Key: -	Compensation Pressure (psi(gauge)) Front: Rear:	Tech	hstream has est	tablished a n TIS. red to ensure all TIS	etwork co	nnect arailab	ion to	Ĵ
Caution								
Enhanced	ieneric Completed: 09/06/2	023 11:44:33						
-	System		Monitor Status	Configure	Ro8 D	TC	Update	÷.
Brake Booster     Tra Brassura Magitar			-	No	2	0	No	
EMPS / Steering Control	Actuator		-	No	2	0	No	
Front Recognition Comp				No		0	-	
Circumference Monitori	ng Camera Control Module			No	1	õ	Yes	
DTC information								
DTC does not exist.								
Calibration information						_		
System	867976207001 867976207001 867976212011	Calibration			<	Up	idate fes	Þ
				<b>N</b>	••••	8 <b>0</b>	$\overline{\mathbf{O}}$	Ľ
😸 👌 www.2023.03.001.02 Subscriptio	n Expiration: 360d							() onume



### ◄ CRITICAL MESSAGE ►

It is critical that T-SB-0107-20 Rev. 2 in addition to the Technical Instructions for this Recall [or LSC/CSC] are followed. This TSB outlines all steps necessary to prevent reprogramming failure. Toyota will not provide reimbursement coverage for reprogramming failures if this TSB is not followed. If you have a reprogramming failure that requires PARKING ASSIST ECU replacement and the Technical Instructions and TSB were followed correctly, please create a case with the Technical Assistance Hotline documenting all information related to the failure. If sufficient reporting is received related to re-flash failure, there will be consideration for reimbursement.

## **VII. VEHICLE PREPERATION**

1. VEHICLE PREPERATION

a) Confirm the following conditions:

- Vehicle in the IG position (READY OFF).
- Transaxle in Park.
- Parking brake engaged.



- Turn off all electrical accessories (i.e. climate control, audio system, etc.)
- Headlight switch in the DRL OFF position. (w/ DRL OFF position)
- Windshield wiper switch in the OFF position.
- b) When the vehicle has no "OFF position" in the light control switch:
  - Turn the IG ON.
- Set the light control switch to the AUTO position and make sure that the exterior lights are turned on.
- Light up the automatic light control sensor with work light to keep the exterior lights turned off.

### 2. CONNECT THE 12V BATTERY TO A POWER SUPPLY

- a) Connect the DCA-8000 or other type of a power supply (not a battery charger) to the 12V battery.
- b) Tap the Reflash icon from the Main Menu screen of the DCA-8000.

A power supply MUST be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

### NOTE:

Critical

A power supply must be connected directly to the 12V battery terminals and NOT the remote jump posts under the hood (if equipped).

### 3. VERIFY GTS+ SETUP

- a) Verify that the GTS+ meets the following conditions:
- The latest version of software is loaded.
- The GTS+ battery is fully charged. If not, connect the GTS+ to a 120V source.
- The DLC III cable is in good condition.



NOTE:

If the GTS+ communication with the vehicle fails during the re-flash procedure, the parking assist ECU will be damaged.

## VIII. UPDATE CALIBRATION

### 1. CONFIRM THE CALIBRATION ID

a) Confirm the current calibration ID in the Circumference Monitoring Camera Control Module System.

📃 🚾 τογοτά į gts	+ ((·)) ONLINE		Region	: NA	4	) e	3 i	?
2023 XXXXXXX		Produ	uction Date 12/01/2	2022   720	05mile	Batte	ry:12.5V	1
Health Check Resul	D							
STATUS								
09/06/2023 11:42:38 Campaign Status: OPEN PERMANENT: YES ECU Security Key: -	Compensation Pressure [psi(gauge)] Front: Rear:	0	Techstream has est	tablished a n TIS. red to enume all TI	tetwork co	onnect	tion to	Û
Caution								
Enhanced Ge	neric Completed: 09/06/2023	11:44:33						
	System		Monitor Status	Configure	Ro8	DTC	Update	÷
Tire Pressure Monitor				No	2	0	No	
EMPS / Steering Control A	ctuator			No	2	0	No	
<ul> <li>Eront Recognition Camer</li> </ul>				No		0		-
Circumference Monitoring	Camera Control Module			No	1	ō	Yes	
DTC information DTC does not exist.								
Calibration information						-		
Syntem	8579752027001 867975212011 867975212011	Calbrato	M		<	Uj	odate fes	
				2	10	80	0	1
😸 🖨 Ver2023.03.001.02 Subscription t	spiration:360d						0.0	0.00

The calibration IDs to re-flash in this campaign are as shown in the table below.

NOTE: The Parking Assist ECU calibration IDs are found in GTS+ under the following system: Circumference monitoring camera control module system

Darking Assist ECU Calibrations						
	Parking Assist ECO Calibratio	115				
CIRCUMFE	RENCE MONITORING CAMERA CONT	ROL MODULE SYSTEM				
Model	Model Current Calibration ID New Calibration ID					
	8679F6207001	8679F6207001				
MIRAI	8679F6207021	8679F6207021				
	8679F6212 <u>011</u>	8679F6212 <u>111</u>				

### NOTE:

If the Circumference monitoring camera control module system has the New CIDs, no update is necessary.

### 2. REFLASH THE CIRCUMFERENCE MONITORING CAMERA CONTROL MODULE SYSTEM

a) Click "Yes" on the "Health Check Results" screen or follow the links on the table above the begin the reflash process.

NOTE:

Reflash failure should be extremely rare and can be avoided by following all instructions and reprogramming best practices.



Critical After "Flash Calibration Update Successful" is displayed on the GTS+ screen, turn the IG off and keep with IG OFF for 5 minutes.

## IX. COMPLETE REPAIR

### 1. DISCONNECT THE DCA-8000

Sensor1: - / - Sensori	Tin 2: - / - Sensor3: - / - S	e Pressure / Threshold Value iensor4: - / - Sensor5:	•0 -/-		
Health Check	System Select	CAN Bus Check	Stored Data	Customize	
ECU Security Ke	Send Vehicle	Vehicle Control History	PCS FFD Retrieval		

### 2. PERFORM VERIFICATION HEALTH CHECK

- a) Using a GTS+, click the "Health Check" button on the Main Menu.
- b) Clear DTC's that may have set during the re-flash procedure.c) Re-run the Health Check to confirm that no DTC's reappear.

Critical THIS VERIFICATION HEALTH CHECK IS NECESSARY to update the results and CIDs to the National database.

### 3. CONFIRM CID UPDATE

- a) On the Stored Data tab, confirm the following for the Circumference Monitoring Camera Control Module System:
- The Calibration number has the "New CID" number.



Critical



Confirm the CIDs has been updated successfully to the *NEW* CIDs by someone other than the individual who performed the repair. Refer to page 5.



- f) Confirm Customer Health Check Report information is correct.
- g) Print Customer Health Check Report from TIS.
- h) Sign and provide to the customer.

### ◄ VERIFY REPAIR QUALITY ►

- Confirm the reflash completes successfully.
- Confirm there are no DTCs after the Calibration update.
- If you have any questions regarding this update, please contact your area representative.

## X. APPENDIX

### A. CAMPAIGN DESIGNATION DECODER



## **TECHNICAL INSTRUCTIONS**

## FOR

## SAFETY NONCOMPLIANCE RECALL 24LA01

## **UPDATE PARKING ASSIST ECU**

## CERTAIN 2023 MODEL YEAR ES250 2023 - 2024 MODEL YEAR ES300h 2023 - 2024 MODEL YEAR ES350 2024 MODEL YEAR LC500 2024 MODEL YEAR LC500h 2024 MODEL YEAR LC CONVERTABLE 2024 MODEL YEAR LS500 2024 MODEL YEAR LS500h

The repair quality of covered vehicles is extremely important to Toyota. All dealership technicians performing this repair are required to successfully complete the most current version of the E-Learning course "Safety Recall and Service Campaign Essentials". To ensure that all vehicles have the repair performed correctly; technicians performing this repair are required to have completed the following course:

### • LIC206A

Always check which technicians can perform the repair by logging on to https://www.uotdealerreports.com. It is the dealership's responsibility to select technicians who have completed the above course to perform this repair. Carefully review your resources, the technician skill level, and ability before assigning technicians to this repair. It is important to consider technician days off and vacation schedules to ensure there are properly trained technicians available to always perform this repair.

## I. OPERATION FLOW CHART



## **II. IDENTIFICATION OF AFFECTED VEHICLES**

### 1. CHECK VEHICLE FOR CAMPAIGN ELIGIBILITY

- a) Compare the vehicles VIN to the VIN listed on the Repair Order to ensure they match.
- b) Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Campaign, and that it has not already been completed.

### NOTE:

TMNA warranty will not reimburse dealers for repairs completed on vehicles that are not affected or were previously completed, even by another dealer.

## **III. PREPARATION**

### A. TOOLS & EQUIPMENT

- L-SB-0001-18 Rev. 2
- DCA-8000 Battery Diagnostic Station
- Techstream ADVi / Techstream 2.0 / Techstream Lite

## **IV. BACKGROUND**



## **V. SAFETY PRECAUTIONS**



An ECU could be damaged if an error occurs in the communication while reprogramming the ECU. Confirm all work is performed as described in these instructions.







- 1. STABILIZE THE POWER TO THE PERSONAL COMPUTER SIDE
  - a) Be sure to connect the personal computer to an external AC power supply.

### NOTE:

The ECU could be damaged if the battery voltage of the personal computer drops while reprogramming.

b) Turn off the screen saver and power saving mode of the personal computer so that the power to the hard disk is kept supplied.

### NOTE:

If the screen saver or power saving mode launches while reprogramming, the communication may be disconnected, resulting in the damage of the ECU.

c) **DO NOT** block the ventilation opening for the cooling fan of the personal computer.

### NOTE:

If the ventilation opening for the cooling fan is blocked with a sheet cover or the like, the personal computer may be heated excessively, causing the operation of the personal computer to stop.

Due to the stop of the operation, the communication for reprogramming signals could be stopped, resulting in the damage of the ECU.

## VI. CIRCUMFERENCE MONITORING CAMERA CONTROL MODULE SYSTEM CALIBRATION ID VERIFICATION



### 1. CHECK FOR DTC'S

a) Using a GTS+, click the "Health Check" button on the Main Menu. *NOTE:* 

This Campaign covers only the software update to the Circumference Monitoring Camera Control Module System, as detailed in these instructions. It does not cover the diagnosis or replacement of any other systems on the vehicle.

### 2. CHECK CURRENT CALIBRATION

- a) Locate the "Update" column of the "Calibration Information" for the Circumference Monitoring Camera Control Module system on the "Health Check Result" screen.
- b) Determine the status of an available update; indicated by a YES or NO.

NOTE:

If the CIDs indicate 'Yes', proceed with the update procedure.

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2023 XXXXXXX	(	Productio	on Date 12/01/2	2022   720	)5mile B	atte	ry:12.5	5V
Health Check Resu	lt							
STATUS								
09/06/2023 11:42:38 Campaign Status: OPEN PERMANENT: YES ECU Security Key: -	Compensation Pressure [psi(gauge)] Front: Rear:		chstream has est	tablished a n TIS. and to secure all TIS	etwork co	nnect .arailab	tion to	Û
Caution	1							
Enhanced G	eneric Completed: 09/06/20	23 11:44:33						
•	System		Monitor Status	Configure	Ro8 C	πc	Update	÷.
Brake Booster			-	No	2	0	No	
EMPS / Steering Control	Actuator			No	2	0	No	- 11-
Front Recognition Came	0			No		0	-	
Circumference Monitoria	g Camera Control Module			No	4	ŏ	Yes	
DTC information DTC does not exist.								
Calbration information		Collection						
	867946202001 867946302021 867946212013	Californion			2		odate fes	2
					10	80	Ō	Ċ



### ◄ CRITICAL MESSAGE ►

It is critical that L-SB-0036-22 Rev1 in addition to the Technical Instructions for this Recall [or LSC/CSC] are followed. This TSB outlines all steps necessary to prevent reprogramming failure. Toyota will not provide reimbursement coverage for reprogramming failures if this TSB is not followed. If you have a reprogramming failure that requires PARKING ASSIST ECU replacement and the Technical Instructions and TSB were followed correctly, please create a case with the Technical Assistance Hotline documenting all information related to the failure. If sufficient reporting is received related to re-flash failure, there will be consideration for reimbursement.

## **VII. VEHICLE PREPERATION**

### 1. VEHICLE PREPERATION

- a) Confirm the following conditions:
- Vehicle in the IG position (READY OFF).
- Transaxle in Park.
- Parking brake engaged.

- Turn off all electrical accessories (i.e. climate control, audio system, etc.)
- Headlight switch in the DRL OFF position. (w/ DRL OFF position)
- Windshield wiper switch in the OFF position.





- b) When the vehicle has no "OFF position" in the light control switch:
- Turn the IG ON.
- Set the light control switch to the AUTO position and make sure that the exterior lights are turned on.
- Light up the automatic light control sensor with work light to keep the exterior lights turned off.
- 2. STOP THE OPERATION OF THE ELECTRIC FAN (For HV Model)
  - a) Disconnect the electrical connector from the cooling fan on the radiator fan shroud.

Critical If the cooling fans run during the Calibration update procedure, the battery voltage will be inconsistent and could cause damage to the control module(s).

### NOTE:

The illustration is an example of ES.

### 3. CONNECT THE 12V BATTERY TO A POWER SUPPLY

- a) Connect the DCA-8000 or other type of a power supply (not a battery charger) to the 12V battery.
- b) Tap the Reflash icon from the Main Menu screen of the DCA-8000.

A power supply MUST be used during reprogramming. ECU damage will occur if the battery voltage is not properly maintained during this re-flash procedure.

### NOTE:

Critical

A power supply must be connected directly to the 12V battery terminals and NOT the remote jump posts under the hood (if equipped).

### 4. VERIFY GTS+ SETUP

- a) Verify that the GTS+ meets the following conditions:
- The latest version of software is loaded.
- The GTS+ battery is fully charged. If not, connect the GTS+ to a 120V source.
- The DLC III cable is in good condition.

Critical The GTS+'s battery voltage must also be maintained during the re-flash procedure. If necessary, plug the GTS+ into a 120V outlet during this procedure.

### NOTE:

If the GTS+ communication with the vehicle fails during the re-flash procedure, the parking assist ECU will be damaged.

## VIII. UPDATE CALIBRATION

### 1. CONFIRM THE CALIBRATION ID

a) Confirm the current calibration ID in the Circumference Monitoring Camera Control Module System.

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2	02	23 XXXXXXXXXX	- I		- I	Produ	uction l	Date 12/01/2	2022   720	05mile	Batte	ery:12.	.5V
G	lea	alth Check Resu	Ð										
	-												
-	ST	ATUS											
	19	09/06/2023 11:42:38	Comper	sation Pressure		<b>•</b>	Techs	tream has est	tablished a n	ietwork c	onneo	tion to	
		Campaign Status:	(psi(gau	(ge)]		9			TIS.				
		PERMANENT: YES	Front:				A network	connection is sponi	red to ensure all TIS	S functionality	is avails	ble such a	<u> </u>
		ECU Security Key: -	Rear:										
	G	aution											
		Enhanced Ge	neric	Completed	: 09/06/2023 11	44:33							
Ē	•			System				Monitor Status	Configure	RoB	DTC	Updat	e 🔶
ſ	1	Brake Booster						-	No	2	0	No	
		Tire Pressure Monitor						-	No	2	0	No	- 11
		LMP's / steering Control /	CTURSOF					-	No	1	0		
		Circumference Monitorin	Camera	Control Module				-	No	-	0		
÷		DTC information						-	140		v	162	-
		DTC does not exist.											
		Calibration information									_	_	
		System				Calbratio	n				L I	lpdate	
				867976207001							-	Yes	-1
				867976212011	>								
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The calibration IDs to re-flash in this campaign are as shown in the table below.

NOTE: The Parking Assist ECU calibration IDs are found in GTS+ under the following system: Circumference monitoring camera control module system

	Parking Assist ECU Calibratior	IS
CIRCUMFEI	RENCE MONITORING CAMERA CONTR	ROL MODULE SYSTEM
Model	Current Calibration ID	New Calibration ID
ES250 / ES300b / ES350	8679F3344 <b>001</b> 8679F3344021 8679F334 <b>4012</b> 8679F3344101 8679F3344021 8679F3344021 8679F3344 <u>111</u>	8679F3344 <mark>101</mark> 8679F3344021 8679F334 <mark>4211</mark>
ES2507 ES30017 ES350	8679F3344 <u>001</u> 8679F3344021 8679F334 <u>6012</u> 8679F3344101 8679F3344021 8679F334 <u>6111</u>	8679F3344 <u>101</u> 8679F3344021 8679F334 <u>6211</u>
LC500 / LC Convertible	8679F1101001 - 8679F1102 <u>011</u>	8679F1101001 - 8679F1102 <u>111</u>
LS500 / LS500h	8679F5040001 - 8679F504 <mark>2011</mark> 8679F5040001 8679F5043021 8679F504 <mark>4011</mark>	8679F5040001 

### NOTE:

If the Circumference monitoring camera control module system has the New CIDs, no update is necessary.

### 2. REFLASH THE CIRCUMFERENCE MONITORING CAMERA CONTROL MODULE SYSTEM

a) Click "Yes" on the "Health Check Results" screen or follow the links on the table above the begin the reflash process.

### NOTE:

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Main Menu

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Reflash failure should be extremely rare and can be avoided by following all instructions and reprogramming best practices.

### **IX. COMPLETE REPAIR**

#### **DISCONNECT THE DCA-8000** 1.





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#### 2. RECONNECT COOLING FAN CONNECTOR (For HEV Model) Connect the electrical connectors to the cooling fan on the a)

radiator fan shroud.

### NOTE:

### The illustration is an example of ES.

- 3. CHECK THE OPERATION OF THE ELECTRIC FAN (For HEV Model)
  - Turn the READY ON. a)
  - Turn the air conditioner ON to check if the electric fan operates. b)

#### PERFORM VERIFICATION HEALTH CHECK 4.

- Using a GTS+, click the "Health Check" button on the Main a) Menu.
- Clear DTC's that may have set during the re-flash procedure. b)
- Re-run the Health Check to confirm that no DTC's reappear. c)

THIS VERIFICATION HEALTH CHECK IS Critical **NECESSARY** to update the results and CIDs to the National database.

#### **CONFIRM CID UPDATE** 5.

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- On the Stored Data tab, confirm the following for the Circumference Monitoring Camera Control Module a) Svstem:
- The Calibration number has the "New CID" number.

**Ö**.

The Update column says "No".

00/04/2022 11:42:26	Companyation Reserves			
Campaign Status:	(psi(gauge))	Techstream has established a network TIS.	k connection to	
PERMANENT YES	Front: Rear:	A network connection is secured to ensure all TIS deterious	the an exhibiter and an	New CIDs
ECU Security Key: -				MUST be
Caution				displayed
•	System	Monitor Status Configure Roll	OfC Update	
<ul> <li>Brake Booster</li> <li>Tire Pressure Monitor</li> </ul>		- No	0 No	
EMPS / Steering Control	Actuator	i i i	0	
Circumference Monitoria	g Camera Control Module	No	0 - 0 No	Undate
OTC Information				must sav
COT down and pulled				Indst Say
OTC does not exist. Calibration information				
OTC does not exist. Calibration information		Culturion .	Update	NO



Confirm the CIDs has been updated successfully to the NEW CIDs by someone other than the

- f) Confirm Customer Health Check Report information is correct.
- g) Print Customer Health Check Report from TIS.
- h) Sign and provide to the customer.

### ◄ VERIFY REPAIR QUALITY ►

- Confirm the reflash completes successfully.
- Confirm there are no DTCs after the Calibration update.
- If you have any questions regarding this update, please contact your area representative.

## X. APPENDIX

### A. CAMPAIGN DESIGNATION DECODER



22LE05 = Launched in 2022, Customer Support Program, 5th Customer Support Program Launched in 2022