

Reduced Power When Accelerating From a Stop

Service Category Engine/Hybrid System

Section Hybrid/Battery Control System

Market USA

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2016 - 2019	Prius	VDS(s): KBRFU, L9RFU

REVISION NOTICE

October 28, 2019 Rev1:

- The entire bulletin has been updated.
- Any previous printed versions of this bulletin should be discarded.

Introduction

Some 2016 – 2019 model year Prius vehicles equipped with a NiMH HV battery may exhibit one or both of the following conditions after repeated driving on long downhill slopes or while driving in high ambient temperatures, then turned off for approximately 1 – 2 hours, and restarted:

- When accelerating from a stop or from extremely low speeds, the vehicle may have a reduction in power.
- The HV battery monitor on the multi-information display continually shows one bar, indicating that the battery State-Of-Charge (SOC) is at its lowest level.

The Hybrid Control Computer (HV ECU) logic has been modified to reduce the possibility of these conditions. Follow the Repair Procedure in this bulletin to address these conditions condition.

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Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL YEAR	MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
2016 – 2018	Prius	Tsutsumi	JTDKBRFU#J3083928 JTDKBRFU#J3604954
2019			JTDL9RFU#L3013264

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
EL1914	Reprogram HV ECU	0.4	89981-47###	05	74

APPLICABLE WARRANTY

- This repair is covered under the Toyota Hybrid Vehicle System Component. This warranty is in effect for 96 months or 100,000 miles, whichever occurs first, from the vehicle's in-service date.
- For California specification 2016 – 2017 model year Prius vehicles sold, registered, and operated in California, Connecticut, Maine, Maryland, Massachusetts, New Jersey, New York, Oregon, Rhode Island, and Vermont, this repair is covered under the California Emission Warranty, which is in effect for 180 months or 150,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
	89981-#####	Hybrid Vehicle Control Computer (HV ECU)	–
	00451-00001-LBL	Authorized Modifications Labels	1

NOTE

- The HV ECU should NOT be replaced as part of the Repair Procedure.
- Authorized Modifications Labels may be ordered in packages of 25 from the Materials Distribution Center (MDC) through *Dealer Daily – Parts – Dealer Support Material Order*.

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Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream ADVi*	ADE	TSADVUNIT	1
Techstream 2.0		TS2UNIT	
Techstream Lite		TSLITEPDLR01	
Techstream Lite (Green Cable)		TSLP2DLR01	

*Essential SST.

NOTE

- Only ONE of the Techstream units listed above is required.
- Software version 14.20.019 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.
- Use Techstream or an approved J2534 interface to perform flash reprogramming updates. Visit techinfo.toyota.com for more information regarding J2534 reprogramming.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
DCA-8000 Battery Diagnostic Station*	DCA-8000P T	1

*Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

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Calibration Information

MODEL YEAR	CALIBRATION ID			
	PREVIOUS	NEW		
	899854702000			
	899854702100			
	899854702200			
	899854702300			
	899834751000			
	899834751100			
	899834751200			
	899834751300			
	899834751400		899854702400 / 899834760700	
	899834751500			
	899834760000			
	899834760100			
	899834760200			
	899834760300			
	899834760400			
	899834760500			
	899834760600			
	2016 – 2017		899854701000	
			899854707000	
			899854701100	
899854707100				
899854701200				
899854707200				
899854701300				
899854707300				
899834734000				
899834734100				
899834734200		899854701400 / 899834757700		
899834734300				
899834734400				
899834734500				
899834757000				
899834757100				
899834757200				
899834757300				
899834757400				
899834757500				
899834757600				

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Calibration Information (continued)

MODEL YEAR	CALIBRATION ID	
	PREVIOUS	NEW
2018	899834780000	899834788200
	899834780100	
	899834788000	
	899834788100	
	899834778000	899834786200
	899834778100	
	899834786000	
	899834786100	
2019	8998347B4000	8998347C1100
	8998347C1000	

Repair Procedure

1. Does the vehicle exhibit ANY of the following?
 - A. When accelerating from a stop or from extremely low speeds, the vehicle may have a reduction in power.
 - B. The HV battery monitor on the multi-information display continually shows one bar, indicating that the battery State-Of-Charge (SOC) is at its lowest level.
 - **YES** — Continue to step 2.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
2. Confirm the vehicle has a NiMH battery by inspecting the 5th digit of the VIN. Is the 5th character a “B” or a “9”?
 - **YES** — Continue to step 3.
 - **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

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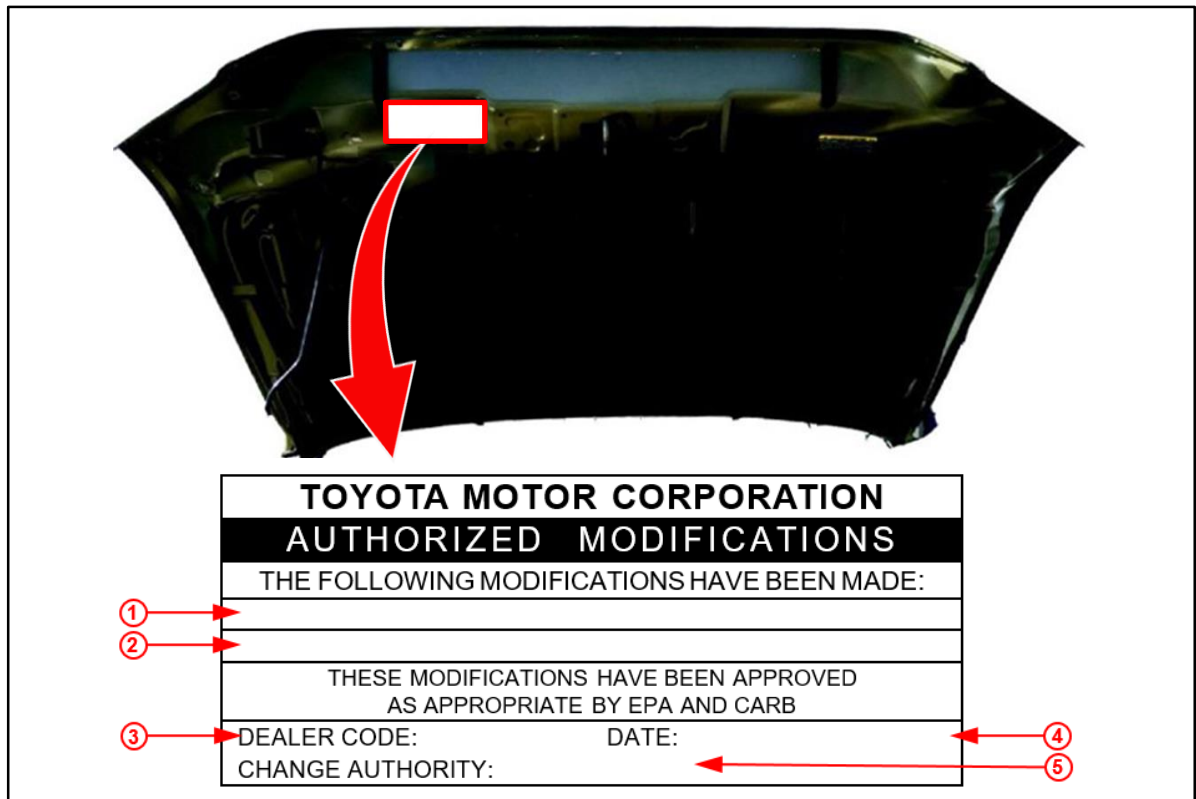
Repair Procedure (continued)

3. Check for the Authorized Modifications Label affixed to the vehicle in the location shown below. Confirm if the HV ECU calibration has been updated.

Is the calibration ID listed the latest HV ECU calibration?

- **YES** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.
- **NO** — Continue to step 4.

Figure 1. Location of Authorized Modifications Label on 2016 – 2019 Prius



1	Replacement HV ECU Part Number (i.e., 89981-#####)
2	New Calibration ID(s) (i.e., 8998347C1100)
3	Dealer Code

4	Date Completed
5	This SB Number

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Repair Procedure (continued)

4. Flash reprogram the HV ECU.

NOTE

- The DCA-8000 battery diagnostic station MUST be used in Power Supply Mode to maintain battery voltage at 13.5V while flash reprogramming the vehicle.
- For details on how to use the DCA-8000 battery diagnostic station, refer to the "[DCA-8000 Instructions Manual](#)" located at *TIS – Diagnostics – Tools & Equipment – Battery Diagnostics*.

Follow the procedures outlined in Service Bulletin [T-SB-0134-16](#), *Techstream ECU Flash Reprogramming Procedure*, and flash the HV ECU with the NEW calibration file update.

5. Prepare and install the Authorized Modifications Label.

A. Using a permanent marker, enter the following information on the label:

- HV ECU part number [*Refer to the **Parts Information** section for the **NEW PART NUMBER***]
- Calibration ID(s) [*Refer to the **Calibration Information** section for the **NEW CALIBRATION ID***]
- Dealer Code
- Repair Date
- Change Authority [***This bulletin number***]

B. Install the Authorized Modifications Label on the vehicle at the location shown in Figure 1. The Authorized Modifications Label is available through the MDC, P/N 00451-00001-LBL.

6. Ready the vehicle ON, warm it up to normal operating temperature, and test drive to confirm proper vehicle operation.