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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 - ]		
Title: THEFT DETERRENT / KEYLESS ENTRY: SMART KEY SYSTEM (for Start Function): PRECAUTION; 2023 - 2024				
MY Prius Prius Prime [12/2022 -	]			

# **PRECAUTION**

## **SYSTEM TYPE DETERMINATION**

#### **NOTICE:**

For this vehicle, there are 2 types of certification ECU (smart key ECU assembly). Judgement can be performed by using the GTS to check if Data List items "Electrical Key 1 Low Battery History" to "Electrical Key 7 Low Battery History" are displayed or not.

(a) Descriptions for this repair manual are listed in the following table.

VEHICLE SPECIFICATION	EXPRESSION FOR THIS REPAIR MANUAL	
Data List items from "Electrical Key 1 Low Battery History" to "Electrical Key 7 Low Battery History" are displayed on the GTS.	Type A	
Only Data List items from "Electrical Key 1 Low Battery History" to "Electrical Key 4 Low Battery History" are displayed on the GTS.	Type B	

## Type A:

# **Body Electrical > Smart Key > Data List**

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Electrical Key 7 Low Battery History	Low battery transmission history (electronic key 7)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 6 Low Battery History	Low battery transmission history (electronic key 6)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 5 Low Battery History	Low battery transmission history (electronic key 5)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 4 Low Battery History	Low battery transmission history (electronic key 4)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Electrical Key 3 Low Battery History	Low battery transmission history (electronic key 3)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 2 Low Battery History	Low battery transmission history (electronic key 2)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 1 Low Battery History	Low battery transmission history (electronic key 1)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-

Type B:

## **Body Electrical > Smart Key > Data List**

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Electrical Key 4 Low Battery History	Low battery transmission history (electronic key 4)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 3 Low Battery History	Low battery transmission history (electronic key 3)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 2 Low Battery History	Low battery transmission history (electronic key 2)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-
Electrical Key 1 Low Battery History	Low battery transmission history (electronic key 1)	OFF or ON	OFF: Transmitter battery not depleted ON: Transmitter battery depleted	-

## **CAUTION REGARDING INTERFERENCE WITH ELECTRONIC DEVICES**

#### **CAUTION:**

As weak radio waves are emitted from the electrical key transmitter sub-assembly, if a pacemaker is being used, be sure to read the pacemaker instruction manual and the following.

• People with implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should keep away from the smart key system antennas. The radio waves may affect the operation of such devices. If necessary, the entry function can be disabled. Ask your dealer for details, such as the frequency of radio waves and timing of the emitted radio waves. Then, consult your doctor to see if you should disable the start function.

Smart key system antennas: Click here

Remote parking antenna: Click here

- User of any electrical medical device other than implantable cardiac pacemakers, cardiac resynchronization therapy-pacemakers or implantable cardioverter defibrillators should consult the manufacturer of the device for information about its operation under the influence of radio waves. Radio waves could have unexpected effects on the operation of such medical devices.
- Ask your dealer for details for disabling the smart key system.

Exterior antenna	<ul> <li>Front door outside handle assembly (for Driver Door)</li> <li>Front door outside handle assembly (for Front Passenger Door)*1</li> <li>Electrical key antenna (outside luggage compartment)*1</li> <li>Remote parking antenna assembly*2</li> </ul>
Interior antenna	<ul> <li>No. 1 indoor electrical key antenna assembly (front floor)</li> <li>No. 2 indoor electrical key antenna assembly (rear floor)</li> </ul>

\*1: w/ Front Passenger Door Entry Function

\*2: w/ Advanced Park (Remote Controlled Function)

#### HINT:

The smart key system can be disabled by a customize setting.

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## PRECAUTION FOR DISCONNECTING CABLE FROM NEGATIVE (-) AUXILIARY BATTERY TERMINAL

#### **NOTICE:**

• After the ignition switch is turned off, there may be a waiting time before disconnecting the negative (-) auxiliary battery terminal.

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#### HINT:

When disconnecting and reconnecting the auxiliary battery, there is an automatic learning function that completes learning when the respective system is used.

Click here NFO

#### PRECAUTION WHEN USING GTS

(a) When using the GTS with the ignition switch off, perform lock and unlock operations using the door control switch of the multiplex network master switch assembly at intervals of 1.5 seconds or less until communication between the GTS and the vehicle begins, and then select the vehicle model manually.

Then select Model Code "KEY REGIST" under manual mode and enter the following menus: Body Electrical / Smart Key(CAN). While using the GTS, periodically perform lock and unlock operations using the door control switch of the multiplex network master switch assembly at intervals of 1.5 seconds or less to maintain communication between the GTS and the vehicle.

#### PRECAUTION FOR ACC CUSTOMIZE

(a) When performing an inspection, make sure that "ACC Customize" is set to "ON" using the multi-display.

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#### HINT:

When "ACC Customize" is set to "ON" (ACC supply power enabled), the certification ECU (smart key ECU assembly) controls the ACC relay on and off. When "ACC Customize" is set to "OFF" (ACC supply power disabled), the certification ECU (smart key ECU assembly) and radio and display receiver assembly control the ACC relay on and off.

Therefore, inspection conditions and results may differ depending on whether "ACC customize" is set to ON or OFF when inspecting ACC related terminals or the Data List.

#### PRECAUTION FOR REGISTRATION

(a) If replacing any of the following parts, refer to Registration.

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- (1) Certification ECU (smart key ECU assembly)
- (2) Hybrid vehicle control ECU
- (3) Electrical key transmitter sub-assembly
- (4) ID code box (immobiliser code ECU)
- (5) Main body ECU (multiplex network body ECU)
- (6) DCM (telematics transceiver)\*
  - \*: for Remote Connect Compatible Type



