Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002923L	
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [12/2022 -]	
Title: DOOR / HATCH: POWER BACK DOOR SYSTEM: OPERATION CHECK; 2023 - 2024 MY Prius Prius Prime			
[12/2022 -]			

OPERATION CHECK

OPERATION CONDITION

NOTICE:

• This check is possible when the "Power back door" customization setting using the multi-information display in the combination meter assembly is set to "ON".

Click here

• Before performing an operation check, check that the power back door system customization is set to its default setting.

Click here NFO

- (a) Conditions necessary for the power back door to open:
 - The back door is unlocked (except wireless one motion function).*
 - The vehicle speed is 3 km/h (2 mph) or less (only when the ignition switch is turned to ON).
 - The shift lever is in P, the brake pedal is depressed or the parking brake lever is pulled up (this can be determined only when the ignition switch is turned to ON).
 - *: Depending on the customize settings, the back door may not unlock and only the driver door unlocks when the first unlock operation is performed. Check that the customize settings in the table below are set to "Disable", and check that the back door unlocks.

TESTER DISPLAY	LINK
Unlock Key Twice Function	INFO
Wireless Unlock Twice Function	INFO
Entry Unlock Twice Function	INFO

HINT:

Functions that use the electrical key transmitter sub-assembly cannot be operated when the ignition switch is ON.

CHECK BASIC OPERATION

- (a) Check the opening operation.
 - (1) With the back door fully closed, push the power back door control switch for 0.8 seconds or more and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.
 - (2) With the back door fully closed, push the electrical key transmitter sub-assembly (electrical key) for 0.8 seconds or more and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.
 - (3) With the back door fully closed, push the back door opener switch assembly and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.
- (b) Check the close operation.

- (1) With the back door fully open, push the power back door control switch for 0.8 seconds or more and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
- (2) With the back door fully open, push the electrical key transmitter sub-assembly (electrical key) for 0.8 seconds or more and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
- (3) With the back door fully open, push the power back door control switch no.1 and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
- (4) With the back door fully opened, check that when the back door control switch is briefly pressed, the buzzer sounds for 0.8 seconds, the hazard lights flash twice, and all doors lock after the back door is closed.

CHECK OPERATION WHEN ANOTHER INPUT DETECTED DURING OPEN AND CLOSE OPERATIONS

- (a) Check operation when another input detected during open operations
 - (1) During a power back door opening operation, push the power back door control switch and check that the power back door warning buzzer sound for 0.2 seconds and the back door opening operation stops.
 - After the opening operation stops, press the power back door control switch again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
 - (2) During a power back door opening operation, push the electrical key transmitter sub-assembly (electrical key) and check that the power back door warning buzzer sound for 0.2 seconds and the back door opening operation stops.
 - After the opening operation stops, push the electrical key transmitter sub-assembly (electrical key) again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
 - (3) During a power back door opening operation, push the power back door control switch no.1 and check that the power back door warning buzzer sound for 0.2 seconds and the power back door opening operation stops.
 - After the opening operation stops, push the power back door control switch no.1 again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
 - (4) During a power back door opening operation, push the back door opener switch assembly and check that the power back door warning buzzer sounds for 0.2 seconds and the power back door opening operation stops.
 - After the opening operation stops, push the back door opener switch assembly again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts closing.
- (b) Check operation when another input detected during close operations
 - (1) During a power back door closing operation, push the power back door control switch and check that the power back door warning buzzer sound for 0.2 seconds and the back door stops.
 - After the closing operation stops, press the power back door control switch again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.
 - (2) During a power back door closing operation, push the electrical key transmitter sub-assembly (electrical key) and check that the power back door warning buzzer sound for 0.2 seconds and the back door stops.
 - After the closing operation stops, press the electrical key transmitter sub-assembly (electrical key) and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash

twice and the back door starts opening.

- (3) During a power back door closing operation, push the power back door control switch no.1 and check that the power back door warning buzzer sounds for 0.2 seconds and the power back door closing operation stops.
 - After the closing operation stops, push the power back door control switch no.1 and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.
- (4) During a power back door closing operation, push the back door opener switch assembly and check that the power back door warning buzzer sounds for 0.2 seconds and the power back door closing operation stops.

After the closing operation stops, push the back door opener switch assembly again and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.

CHECK WIRELESS ONE MOTION FUNCTION

NOTICE:

- This check is possible when the "Wireless Backdoor Open Operation Adjust" customization setting using the GTS is set to other than "Prohibit".
- This check is possible when the "PBD Wireless Function" customization setting using the GTS is set to "ON".
- This check is possible when the "PBD Wireless One Motion Function" customization setting using the GTS is set to "ON".

Click here

- (a) Conditions necessary for the power back door to open:
 - (1) All doors are locked.
- (b) Check the wireless one motion operation.
 - (1) Push the electrical key transmitter sub-assembly (electrical key) and check that the power back door warning buzzer sounds for 0.8 seconds, the hazard warning lights flash twice and the back door starts opening.

CHECK JAM PROTECTION FUNCTION

HINT:

- The multiplex network door ECU detects changes in the operating speed of the back door while the power back door is operating.
- When the power back door sensor assemblies built into both sides of the back door are compressed, it is judged that foreign objects are in the path of the power back door and the operation will reverse a certain amount of the opposite direction and then stop.
- The power back door sensor assemblies operate only while the back door is closing. They do not operate while the back door is opening.
- (a) Check the jam protection function (the power back door sensor assembly) while the power back door is closing.

NOTICE:

Do not check this function using a part of your body such as your hand. Also, pay thorough attention that nothing gets caught by accident in this process.

- (1) Fully open the back door.
- (2) Press a switch to close the power back door.
- (3) While the back door is closing, press a power back door sensor assembly using the handle of a hammer or equivalent and check that the buzzer sounds twice for 0.1 seconds and the power back door reverses a certain amount and stops.

(b) Check the jam protection function (the pulse sensor in the multiplex network door ECU) while the power back door is closing.

NOTICE:

Do not check this function using a part of your body such as your hand. Also, pay thorough attention that nothing gets caught by accident in this process.

- (1) Fully open the back door.
- (2) Press a switch to close the power back door.
- (3) While the back door is closing, insert a tire or equivalent between the door panel and vehicle body, in order to interrupt the closing operation and check that the buzzer sounds twice for 0.1 seconds and the power back door reverses a certain amount and stops.
- (c) Check the jam protection function while the power back door is opening.
 - (1) Fully close the back door.
 - (2) Press a switch to open the power back door.
 - (3) While the back door is opening, use your hands to press on the outside surface of the back door panel so that the operating speed decreases and check that the buzzer sounds twice for 0.1 seconds and the power back door stops.

CHECK ASSIST OPERATION

NOTICE:

This check is possible when the "PBD Assist Close Function" customization setting using the GTS is set to "ON".



(a) Check that the door automatically starts to fully close when the door is manually moved in the closing direction with the back door at rest.

CHECK AUTOMATIC OPENING OPERATION STOPPED POSITION MEMORIZATION FUNCTION (When not using Multi-information display)

- (a) Register open operation automatic stopped position in memory
 - (1) Open the back door by operating each switch.
 - (2) Operate each switch to stop the open operation when the back door reaches the desired automatic stopped position.
 - (3) Press and hold the power back door control switch no.1 for 2 seconds or more with the back door at the stopped position, the buzzer sounds 4 times and the system memorizes the automatic stopped position for the open operation.
 - (4) Check that the back door stops at the memorized position when an open operation is performed with each switch.
- (b) Clear open operation automatic stopped position memory
 - (1) Open the back door by operating each switch.
 - (2) Stop the back door by operating each switch.
 - (3) Press and hold the power back door control switch no.1 for 7 seconds or more with the back door at the stopped position, the buzzer sounds 4 times and sounds 2 times and the system clears the automatic stopped position for the open operation.
 - (4) Operate each switch to start the open operation and check that the back door stops at the default opening position.

CHECK AUTOMATIC OPENING OPERATION STOPPED POSITION MEMORIZATION FUNCTION (When using Multi-information display)

- (a) Register open operation automatic stopped position in memory
 - (1) Using the multi-information display in the combination meter assembly, select the "Opening position" customize setting.

Click here

- (2) Check that the back door stops at the position set with the customize function when an open operation is performed with each switch.
- (b) Clear open operation automatic stopped position memory
 - (1) Open the back door by operating each switch.
 - (2) Stop the back door by operating each switch.
 - (3) Press and hold the power back door control switch no.1 for 7 seconds or more with the back door at the stopped position, the buzzer sounds 4 times and sounds 2 times and the system clears the automatic stopped position for the open operation.
 - (4) Operate each switch to start the open operation and check that the back door stops at the default opening position.

CHECK POWER BACK DOOR CLOSE AND LOCK FUNCTION

(a) Check reservation lock function

NOTICE:

This check is possible when the "PBD Walk Away Close & Lock Function" customization setting using the GTS is set to "OFF".

Click here

- (1) When the following conditions are met, press the back door control switch while carrying the electrical key transmitter sub-assembly (electrical key), and check that the back door closes and all doors are locked.
 - · Ignition switch off
 - Back door is open
 - Door other than the back door is closed
 - Electrical key transmitter sub-assembly (electrical key) is not in the vehicle

HINT:

If the back door control switch is operated with the hand holding the transmitter switch (electrical key transmitter sub-assembly), it may not operate due to being outside the key detection area.

(b) Check walk away close and lock function

NOTICE:

• This check is possible when the "PBD Walk Away Close & Lock Function" customization setting using the GTS is set to "ON".

Click here

- This function cannot be used with only the digital key.*
 - *: w/ Digital Key
 - (1) When the following conditions are met, press the back door control switch while carrying the electrical key transmitter sub-assembly (electrical key) to completes reservation, and carrying the electrical key transmitter sub-assembly (electrical key) outside of the detection area and check that the back door closes and all doors are locked.
 - · Ignition switch off
 - Back door is open
 - · Door other than the back door is closed

• Electrical key transmitter sub-assembly (electrical key) is not in the vehicle

HINT:

- Bringing the electrical key transmitter sub-assembly (electrical key) into the detection area while the back door is closing will stop the operation.
- If the back door control switch is operated with the hand holding the transmitter switch (electrical key transmitter sub-assembly), it may not operate due to being outside the key detection area.



