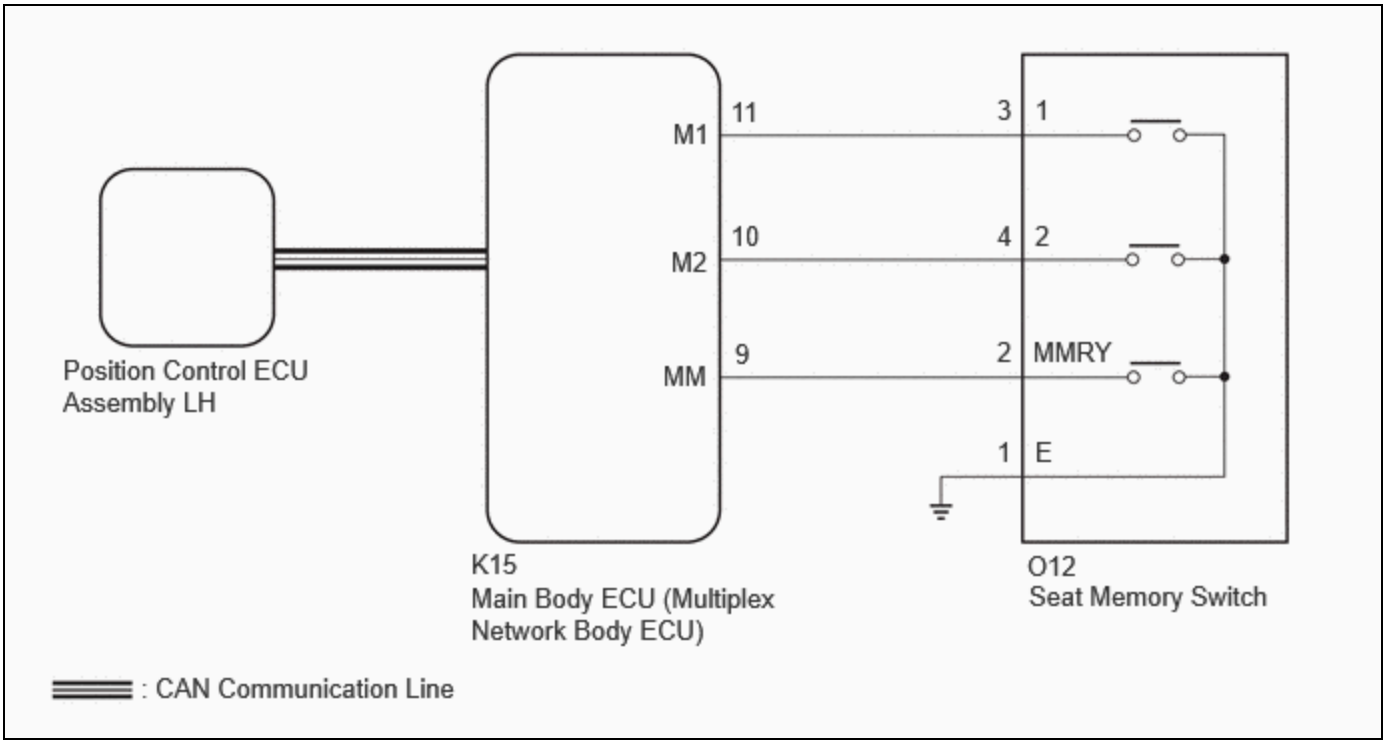
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM1000000029X3J
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [12/2022 -]
Title: SEAT: FRONT POWER SEAT CONTROL SYSTEM (w/ Memory): Power Seat Position is not Memorized; 2023 - 2024 MY Prius Prius Prime [12/2022 -]		

Power Seat Position is not Memorized

DESCRIPTION

If the SET switch is being pressed when one of the M1 or M2 switches is pressed, or if one of the M1 or M2 switches is pressed within 3 seconds of pressing the SET switch, the main body ECU (multiplex network body ECU) sends a memory request signal to the position control ECU assembly LH. After receiving the request signal, the position control ECU assembly LH memorizes the location data of each motor.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- The front power seat control system (w/ Memory) uses the CAN communication system. First, confirm that there are no malfunctions in the CAN communication system. Refer to How to Proceed with Troubleshooting.

  Click here INFO
- The seat position will not be stored if the SET switch and 2 or more of the seat memory switches (for example, M1 switch and M2 switch) are pressed simultaneously.

  If a memorizing operation has failed, release all of the switches. The seat memory function will not operate unless the switches are released.
- The seat will not return to the memorized position if 2 or more of the seat memory switches (for example, M1 switch and M2 switch) are pressed simultaneously.

If a restoring operation has failed, release all of the switches. The seat memory restoring function will not operate unless the switches are released.

- Make sure to initialize the position control ECU assembly LH after replacing the position control ECU assembly LH, seat assembly or any related parts (including removal and installation).

Click here INFO

- Initializing the position control ECU assembly LH will clear the seat position memory.
- Before replacing the main body ECU (multiplex network body ECU), refer to Registration.

Click here INFO

PROCEDURE

1.	**CHECK FRONT POWER SEAT CONTROL OPERATION**

(a) Check that each function of the power seat operates normally by using the front power seat switch assembly LH.

Click here INFO

OK:

Each function of the power seat operates normally using the front power seat switch assembly LH.

NG ▶ **GO TO PROBLEM SYMPTOMS TABLE**

OK ▼

2.	**READ VALUE USING GTS**

(a) Read the Data List according to the display on the GTS.

Body Electrical > Main Body > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Driver Seat Memory Switch (MM)	SET switch	OFF or ON	OFF: SET switch off ON: SET switch on	-
Driver Seat Memory Switch (M1)	M1 switch	OFF or ON	OFF: M1 switch off ON: M1 switch on	-
Driver Seat Memory Switch (M2)	M2 switch	OFF or ON	OFF: M2 switch off ON: M2 switch on	-

Body Electrical > Main Body > Data List

TESTER DISPLAY
Driver Seat Memory Switch (MM)
Driver Seat Memory Switch (M1)
Driver Seat Memory Switch (M2)

OK:
On the GTS screen, OFF or ON is displayed accordingly.

NG ▶ **GO TO STEP 6**

OK ▼

3.	**PERFORM ACTIVE TEST USING GTS**

(a) Perform the Active Test according to the display on the GTS.

Body Electrical > Driver Seat > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Buzzer	Buzzer operation	ON	-

Body Electrical > Driver Seat > Active Test

TESTER DISPLAY
Buzzer

OK:
Buzzer sounds normally.

NG ▶ **REPLACE POSITION CONTROL ECU ASSEMBLY LH**

Click here INFO

OK ▼

4.	**REPLACE POSITION CONTROL ECU ASSEMBLY LH**

(a) Replace the position control ECU assembly LH with a new or known good one.

Click here INFO

NEXT

5.	**CHECK SEAT POSITION MEMORY AND RESTORING FUNCTION**

(a) Check the seat position memory and restoring functions.

Click here INFO

OK:
Seat position memory and restoring functions operate normally.

OK ▶ **END (POSITION CONTROL ECU ASSEMBLY LH WAS DEFECTIVE)**

NG ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)**

Click here INFO

6.	**INSPECT SEAT MEMORY SWITCH**

Click here INFO

NG ▶ **REPLACE SEAT MEMORY SWITCH**

OK

7.	**CHECK HARNESS AND CONNECTOR (MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU) - SEAT MEMORY SWITCH - BODY GROUND)**

(a) Disconnect the K15 main body ECU (multiplex network body ECU) connector.

(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(K15,O12)
Click Connector(K15)
Click Connector(O12)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K15-9 (MM) - O12-2 (MMRY)	Always	Below 1 Ω
K15-9 (MM) or O12-2 (MMRY) - Body ground	Always	10 kΩ or higher
K15-11 (M1) - O12-3 (1)	Always	Below 1 Ω
K15-11 (M1) or O12-3 (1) - Body ground	Always	10 kΩ or higher
K15-10 (M2) - O12-4 (2)	Always	Below 1 Ω
K15-10 (M2) or O12-4 (2) - Body ground	Always	10 kΩ or higher
O12-1 (E) - Body ground	Always	Below 1 Ω

OK ▶ **REPLACE MAIN BODY ECU (MULTIPLEX NETWORK BODY ECU)**

Click here INFO

NG ▶ **REPAIR OR REPLACE HARNESS OR CONNECTOR**