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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -	]			
Title: DOOR / HATCH: CHARGE LID OPENER SYSTEM: Multi-information Display Indicates Open when Charge Lid is						
Closed; 2023 - 2024 MY Prius Prius	Prime [03/2023 - ]					

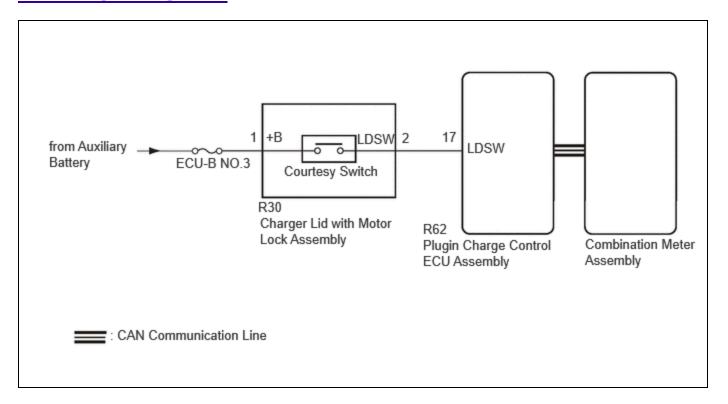
Multi-information Display Indicates Open when Charge Lid is Closed

## **DESCRIPTION**

The plugin charge control ECU assembly detects and sends the charger lid with motor lock assembly (courtesy switch) on/off signal to the combination meter assembly via CAN communication, and the charge lid open/close information is displayed on the multi-information display.

When the charge lid open/close information is not correctly displayed on the multi-information display, the charger lid with motor lock assembly (courtesy switch) may be improperly installed, the wire harness between the charger lid with motor lock assembly (courtesy switch) and plugin charge control ECU assembly may be malfunctioning, or there may be an internal malfunction in the plugin charge control ECU assembly.

# **WIRING DIAGRAM**



# **CAUTION / NOTICE / HINT**

## **CAUTION:**

Refer to the precautions before inspecting high voltage circuit.

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### **NOTICE:**

• After turning the power switch off, waiting time may be required before disconnecting the cable from the negative (-) auxiliary battery terminal. Therefore, make sure to read the disconnecting the cable from the

negative (-) auxiliary battery terminal notices before proceeding with work.

Click here

• The charge lid opener system uses the CAN communication system. Inspect the communication function by following How to Proceed with Troubleshooting. Troubleshoot the charge lid opener system after confirming that the communication system is functioning properly.

Click here

- Check that there are no electrical key transmitter sub-assemblies in the vehicle.
- Inspect the fuses for circuits related to this system before performing the following procedure.
- To protect the charging port lid lock motor, if the charging port lid lock/unlock is operated repeatedly, operation of the unlock will be prohibited. Wait for 3 minutes or more to allow the motor to cool and then resume the inspection.
- To protect the charging port lid lock motor, if the charging port lid lock/unlock is operated repeatedly in quick succession, operation of the unlock will be prohibited for a certain amount of time. Wait for 3 seconds or more after operation was prohibited and then resume the inspection.
- If the charging port lid lock pin or lid lifter is dirty or frozen, or if foreign matter is caught between the charging port lid lock pin and charging port lid, the charging port lid lock pin may not be able to be locked/unlocked. Clean the charging port lid lock pin before performing the inspection.
- The charging port lid lock may not operate if the charge inlet box assembly has damaged. Thus, check the charge inlet box assembly first.

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## **PROCEDURE**

1. CHECK FOR DTC

(a) Check for DTCs.

## Powertrain > Plug-in Control > Trouble Codes

OK:

DTC is not output

NG GO TO PLUG-IN CHARGE CONTROL SYSTEM



## 2. READ VALUE USING GTS (CHARGING LID SWITCH STATUS)

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

### Powertrain > Plug-in Control

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Charging Lid Switch Status	Charging lid switch status	OFF/ON	OFF: Charging port lid close (push lifter of charger lid with motor lock assembly pushed in)	-

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
			ON: Charging port lid open (push lifter of charger lid with motor lock assembly extended)	

## Powertrain > Plug-in Control > Data List

TESTER DISPLAY		
Charging Lid Switch Status		

OK:

The GTS display changes correctly in response to the charger lid with motor lock assembly (courtesy switch) operation.





- 3. CHECK THE INSTALLATION CONDITION OF CHARGE LID WITH MOTOR LOCK ASSEMBLY (COURTESY SWITCH)
- (a) Install charger lid with motor lock assembly (courtesy switch) properly.

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- 4. INSPECT CHARGE LID WITH MOTOR LOCK ASSEMBLY (COURTESY SWITCH)
- (a) Unlock the any doors.
- (b) Push the charge lid to open/close it.
- (c) Close the charge lid.
- (d) Check that charge lid open message is not displayed on the multi-information display.

OK:

Charge lid open message is not displayed.

OK END (PROBLEM DUE TO THE INSTALLATION CONDITION OF CHARGE LID WITH MOTOR LOCK

## **ASSEMBLY (COURTESY SWITCH))**



5. INSPECT CHARGE LID WITH MOTOR LOCK ASSEMBLY

Click here NFO

NG REPLACE CHARGE LID WITH MOTOR LOCK ASSEMBLY



6.

CHECK HARNESS AND CONNECTOR (CHARGE LID WITH MOTOR LOCK ASSEMBLY (COURTESY SWITCH) - PLUGIN CHARGE CONTROL ECU ASSEMBLY (LDSW TERMINAL))

### **CAUTION:**

Be sure to wear insulated gloves.

- (a) Disconnect the R30 charger lid with motor lock assembly connector.
- (b) Disconnect the R62 plugin charge control ECU assembly connector.
- (c) Measure the resistance according to the value(s) in the table below.

  Standard Resistance:



Click Location & Routing(R30,R62)

**Click Connector(R30)** 

**Click Connector(R62)** 

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R30-2 (LDSW) - R62-17 (LDSW)	Always	Below 1 Ω
R30-2 (LDSW) or R62-17 (LDSW) - Body ground	Always	10 kΩ or higher

**OK** REPLACE PLUGIN CHARGE CONTROL ECU ASSEMBLY

NG > REPAIR OR REPLACE HARNESS OR CONNECTOR



