

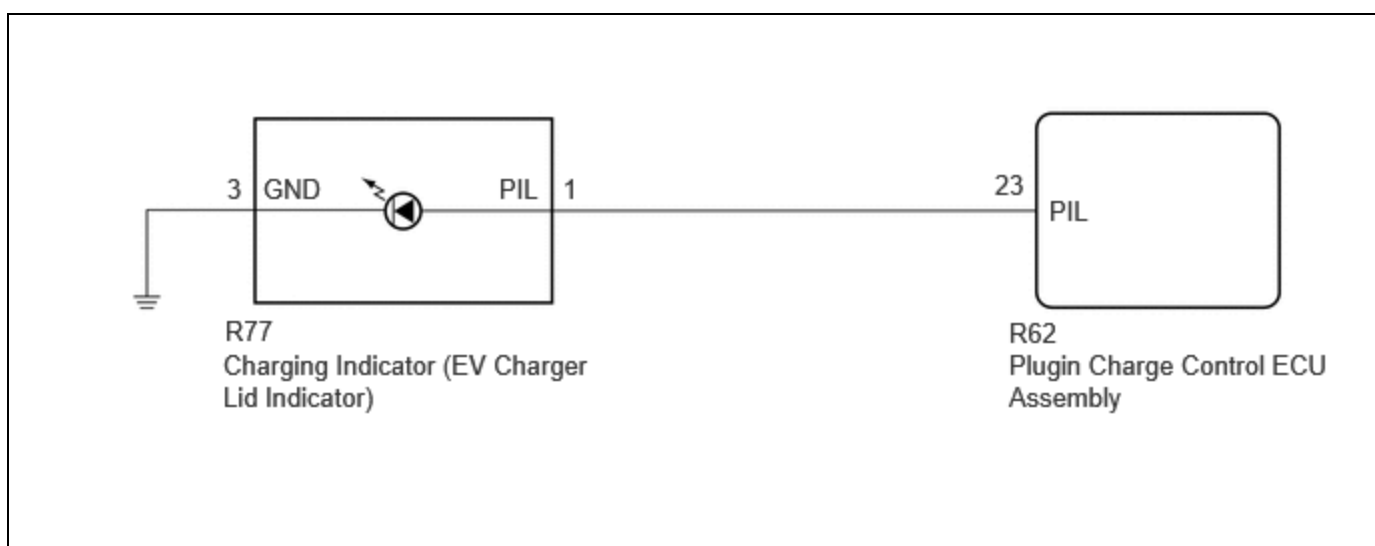
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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: HYBRID / BATTERY CONTROL: PLUG-IN CHARGE CONTROL SYSTEM (for PHEV Model): Charging Indicator Circuit; 2023 - 2024 MY Prius Prime [03/2023 -]		

Charging Indicator Circuit

DESCRIPTION

The plugin charge control ECU assembly illuminates or turns off the charging indicator (EV charger lid indicator) in accordance with the vehicle conditions.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

CAUTION:

Refer to the precautions before inspecting high voltage circuit.

Click here [INFO](#)

NOTICE:

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

Click here [INFO](#)

- When disconnecting and reconnecting the auxiliary battery.

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 [INFO](#)

Charging Indicator Light Status

CHARGING INDICATOR LIGHT	VEHICLE CONDITION
CONDITION	
Illuminated	<ul style="list-style-type: none"> AC charging in progress*1 Hybrid battery (traction battery) heater operating
Flashes normally*2 (1 second interval)	When charging schedule is registered and AC charging cable is connected to vehicle
Flashes rapidly*2 (0.2 second interval)	When charging cannot be carried out due to malfunction in a power source or the vehicle etc.
<p>*1: The indicator is dimmed when the charging is done</p> <p>*2: Flashes for a certain period of time, and then turns off.</p>	

- When AC charging has not started, the charging indicator does not illuminate.
- For example, AC charging may not have started because the vehicle may be fully charged, or due to an issue with the charging facility.

Click here [INFO](#)

PROCEDURE

1. CHECK DTC OUTPUT (HEALTH CHECK)

(a) Enter the following menus: Health Check.

(b) Check DTCs.

RESULT	PROCEED TO
No DTCs are output	A
DTCs are output	B

(c) Turn the ignition switch off.

B  **GO TO DTC CHART**

A



2. CHECK FOR VEHICLE CONTROL HISTORY

(a) Enter the following menus.

Powertrain > Plug-in Control > Utility

TESTER DISPLAY
Vehicle Control History (RoB)

(1) Enter the following menus.

Powertrain > Hybrid Control > Utility

TESTER DISPLAY
Vehicle Control History (RoB)

(b) Check for Vehicle Control History (RoB) except AC Charging History (X10F0).

HINT:

Vehicle Control History (RoB) items AC Charging History (X10F0) is stored each time plug-in charging is performed, and is also stored when plug-in charging completes without error from start to finish.

For this reason, the fact that they are output does not directly indicate any malfunction or problem.

RESULT	PROCEED TO
Vehicle Control History not stored	A
Vehicle Control History stored	B

(c) Turn the ignition switch off.

B ► GO TO VEHICLE CONTROL HISTORY

- PLUG-IN CHARGE CONTROL SYSTEM

Click here [INFO](#)

- HYBRID CONTROL SYSTEM

Click here [INFO](#)

A
▼

3.	READ VALUE USING GTS (CHARGING INDICATOR LIGHTING REQUEST)
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(a) Enter the following menus.

Powertrain > Plug-in Control > Data List

TESTER DISPLAY
Charging Indicator lighting Request

(b) Using the electric vehicle charger cable assembly, plug-in charge the vehicle.

(c) Read the value displayed on the GTS.

Powertrain > Plug-in Control > Data List

TESTER DISPLAY	MEASUREMENT ITEM	NORMAL CONDITION
Charging Indicator lighting Request	Charging indicator lighting request	Charging indicator light illuminated: ON Charging indicator light not illuminated: OFF

RESULT	PROCEED TO
The display changes according to the charging indicator light condition	A
The display does not change according to the charging indicator light condition	B

(d) Disconnect the electric vehicle charger cable assembly.

(e) Turn the ignition switch off.

A ► **GO TO AC CHARGING DOES NOT START (PLUG-IN CHARGE CONTROL SYSTEM)**

B



4.	INSPECT CHARGING INDICATOR (EV CHARGER LID INDICATOR)
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HINT:

Click here [INFO](#)

NG ► **REPLACE CHARGING INDICATOR (EV CHARGER LID INDICATOR)**

OK



5. CHECK HARNESS AND CONNECTOR (PLUGIN CHARGE CONTROL ECU ASSEMBLY - CHARGING INDICATOR (EV CHARGER LID INDICATOR))

- (a) Disconnect the R62 plugin charge control ECU assembly connector.
- (b) Disconnect the R77 charging indicator (EV charger lid indicator) connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



[Click Location & Routing\(R62,R77\).](#)

[Click Connector\(R62\).](#)

[Click Connector\(R77\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R62-23 (PIL) - R77-1 (PIL)	Ignition switch off	Below 1 Ω
R62-23 (PIL) or R77-1 (PIL) - Body ground and other terminals	Ignition switch off	10 kΩ or higher

- (d) Reconnect the charging indicator (EV charger lid indicator) connector.
- (e) Reconnect the plugin charge control ECU assembly connector.

OK ► **CHECK FOR INTERMITTENT PROBLEMS**

NG ► **REPAIR OR REPLACE HARNESS OR CONNECTOR**

