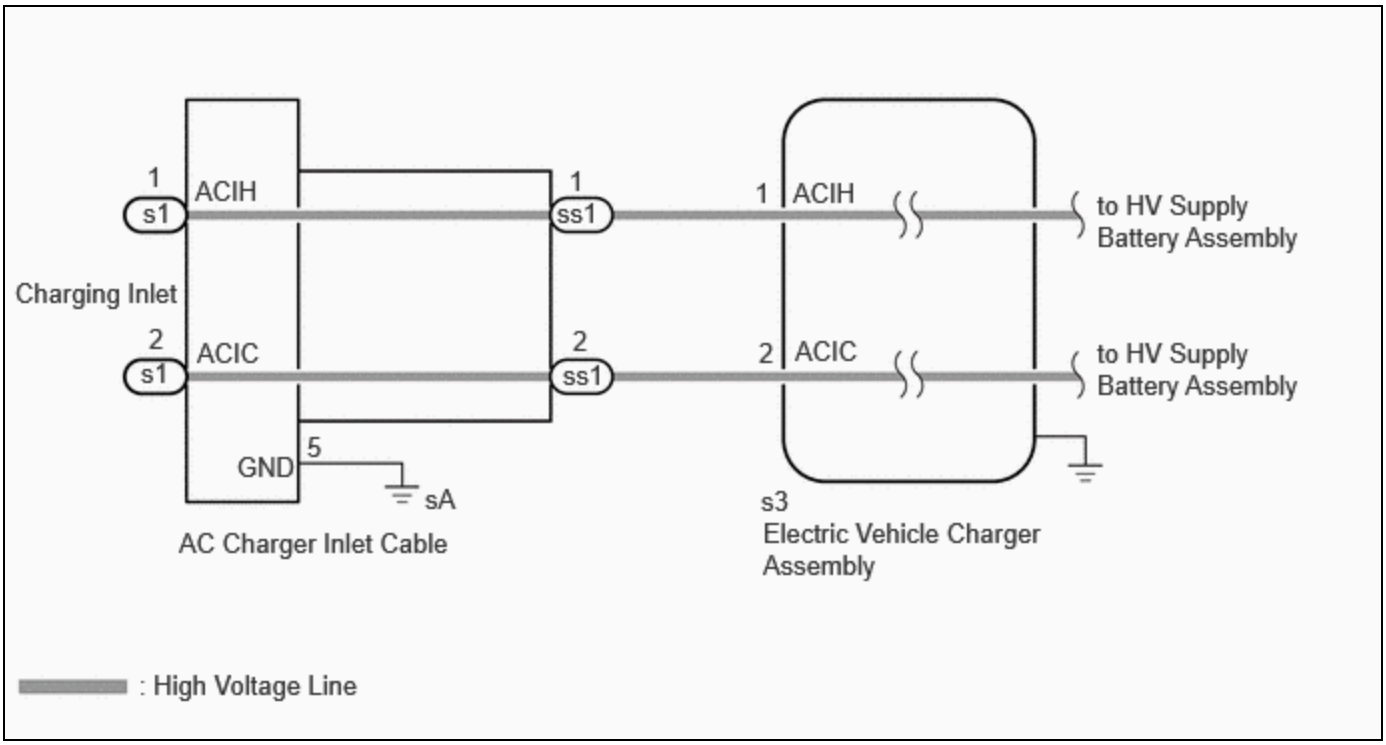
Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002BEI7
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HYBRID / BATTERY CONTROL: PLUG-IN CHARGE CONTROL SYSTEM (for PHEV Model): Open in AC Line; 2023 - 2024 MY Prius Prime [03/2023 -]		

Open in AC Line

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

PROCEDURE

1.	**CHECK CHARGING CABLE (ELECTRIC VEHICLE CHARGER CABLE ASSEMBLY) (CONNECTION CONDITION)**

(a) Visual inspection

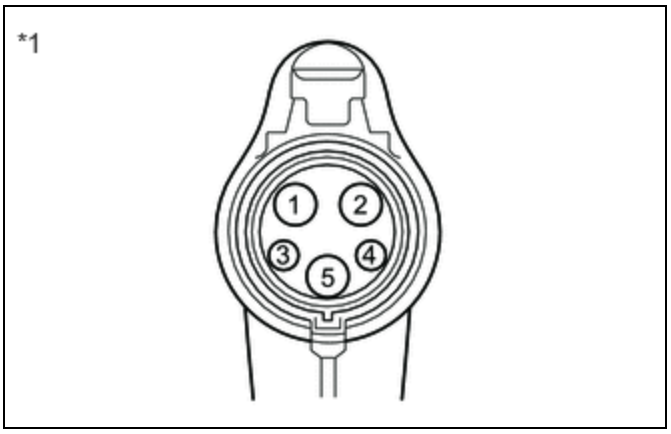
HINT:

- When performing a visual inspection, compare the charging cable (electric vehicle charger cable assembly) with a known good one.
- If the power source plug is damaged, replace the charging cable (electric vehicle charger cable assembly).
- Due to the characteristics of the charging cable (electric vehicle charger cable assembly), it may become stiff or twisted. This is not a malfunction.
- If the charging cable (electric vehicle charger cable assembly) is would tightly or repeatedly folded for storage, twists may form more easily and can lead to an open-circuit.
- Confirm that there is no sign of changes to the charging cable (electric vehicle charger cable assembly) (cable or plug construction, deformation of connector or CCID thread, etc.)
- If the charging cable (electric vehicle charger cable assembly) has been dropped or run over, a malfunction may occur.

(1) Check if any foreign matter is attached to the connecting part of the charging cable (electric vehicle charger cable assembly).

HINT:

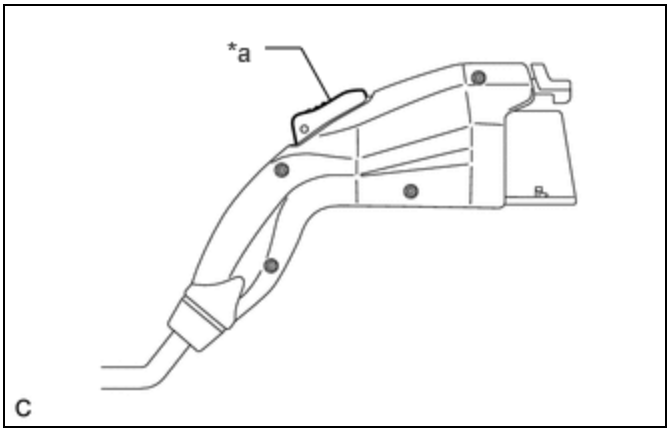
If there is foreign matter in the charging connector which prevents it from being securely connected, charging will not be performed.



*1	Charging Cable (Electric Vehicle Charger Cable Assembly) (Charging Connector Side)

(b) Check the latch release button (PISW)

(1) Check that the latch release button (PISW) can be pressed with no abnormal resistance.



*a	Latch Release Button (PISW)

(c) Check connection

(1) Check that the charging cable (electric vehicle charger cable assembly) and inlet AC charger cable (charging inlet side) can be connected smoothly.

OK:

The charging cable (electric vehicle charger cable assembly) and inlet AC charger cable (charging inlet side) connect smoothly.

HINT:

If the result is not as specified, perform the following checks.

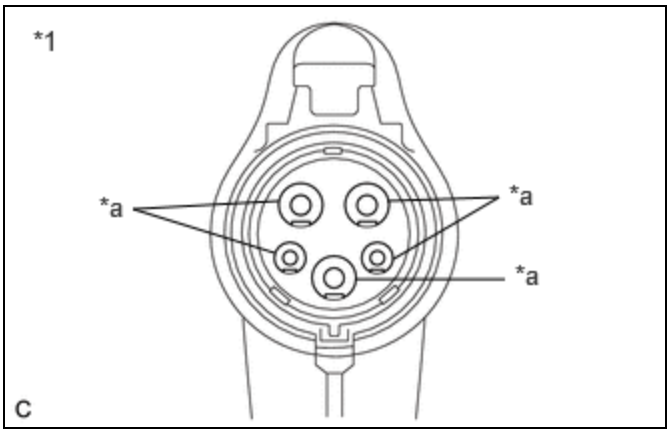
(2) Check that the terminals of the charging cable (electric vehicle charger cable assembly) (charging connector side) are not bent or deformed.

OK:

The terminals are not bent or deformed.

HINT:

If the result is not as specified, replace the charging cable (electric vehicle charger cable assembly).



*1	Charging Cable (Electric Vehicle Charger Cable Assembly) (Charging Connector Side)
*a	Terminal

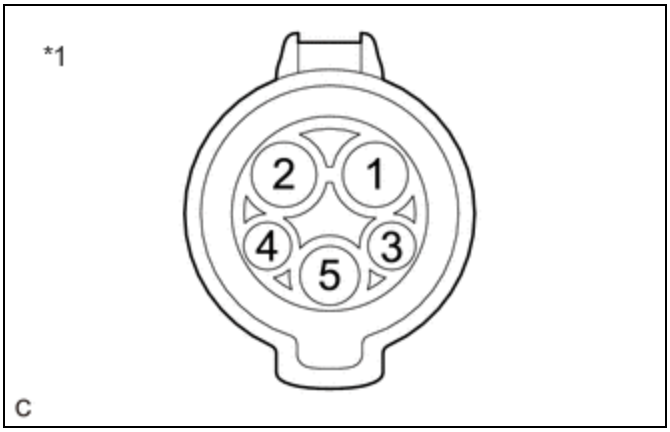
(3) Check that the terminals of the inlet AC charger cable (charging inlet side) are not bent or deformed.

OK:

The terminals are not bent or deformed.

HINT:

If the result is not as specified, replace the inlet AC charger cable (charging inlet side).



*1	Inlet AC Charger Cable (Charging Inlet Side)

NG ▶ **REPLACE MALFUNCTIONING PARTS**

OK ▼

2.	**CHECK AC CHARGER INLET CABLE (CHARGING INLET - EV CHARGER WIRE CONNECTOR)**

CAUTION:

Be sure to wear insulated gloves.

(a) Check that the service plug grip is not installed.

NOTICE:

After removing the service plug grip, do not turn the ignition switch to ON (READY), unless instructed by the repair manual because this may cause a malfunction.

(b) Disconnect the ss1 AC charger inlet cable connector.

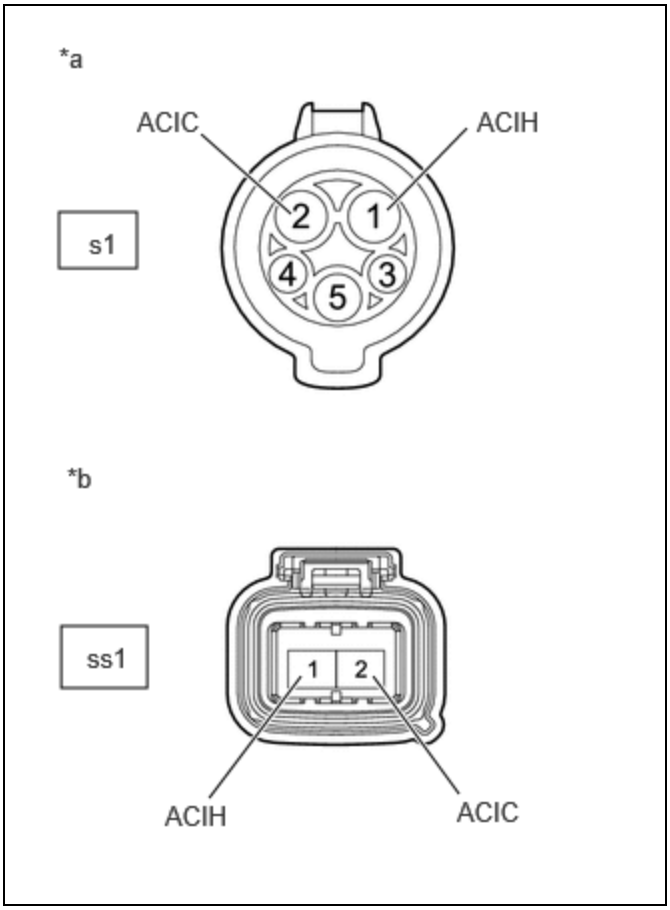
(c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(s1,ss1)
Click Connector(s1)
Click Connector(ss1)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
s1-1 (ACIH) - ss1-1 (ACIH)	Ignition switch off	Below 1 Ω
s1-2 (ACIC) - ss1-2 (ACIC)	Ignition switch off	Below 1 Ω



*a	AC Charger Inlet Cable (Charging Inlet)
*b	AC Charger Inlet Cable (to EV Charger Wire)

(d) Reconnect the AC charger inlet cable connector.

NG ▶ **REPLACE AC CHARGER INLET CABLE**

OK

▼

3.	**CHECK EV CHARGER WIRE (ELECTRIC VEHICLE CHARGER ASSEMBLY - AC CHARGER INLET CABLE)**

CAUTION:

Be sure to wear insulated gloves.

(a) Check that the service plug grip is not installed.

NOTICE:

After removing the service plug grip, do not turn the ignition switch to ON (READY), unless instructed by the repair manual because this may cause a malfunction.

(b) Disconnect the s3 electric vehicle charger assembly connector.

(c) Disconnect the ss1 AC charger inlet cable connector.

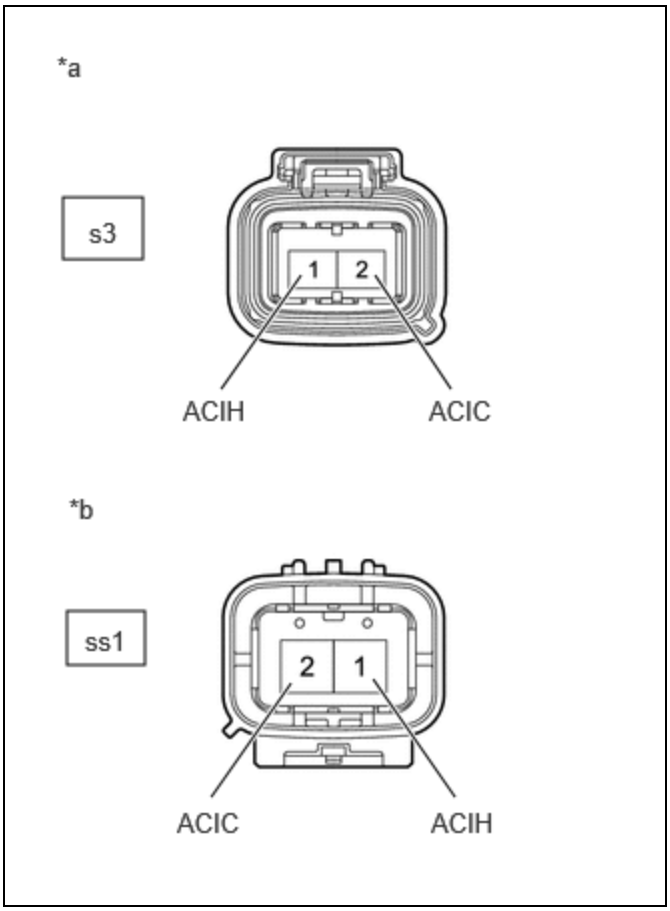
(d) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(s3,ss1)
Click Connector(s3)
Click Connector(ss1)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
s3-1(ACIH) - ss1-1(ACIH)	Ignition switch off	Below 1 Ω
s3-2(ACIC) - ss1-2(ACIC)	Ignition switch off	Below 1 Ω



*a	Front view of wire harness connector (to Electric Vehicle Charger Assembly)
*b	Front view of wire harness connector (AC Charger Inlet Cable Side)

(e) Reconnect the AC charger inlet cable connector.

(f) Reconnect the electric vehicle charger assembly connector.

OK ▶ **REPLACE ELECTRIC VEHICLE CHARGER ASSEMBLY**

NG ▶ **REPLACE EV CHARGER WIRE**