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<b>Model Year Start:</b> 2023	<b>Model:</b> Prius Prime	<b>Prod Date Range:</b> [03/2023 - ]
<b>Title:</b> HYBRID / BATTERY CONTROL: CHARGE INLET (for PHEV Model): INSPECTION; 2023 - 2024 MY Prius Prime [03/2023 - ]		

## INSPECTION

## PROCEDURE

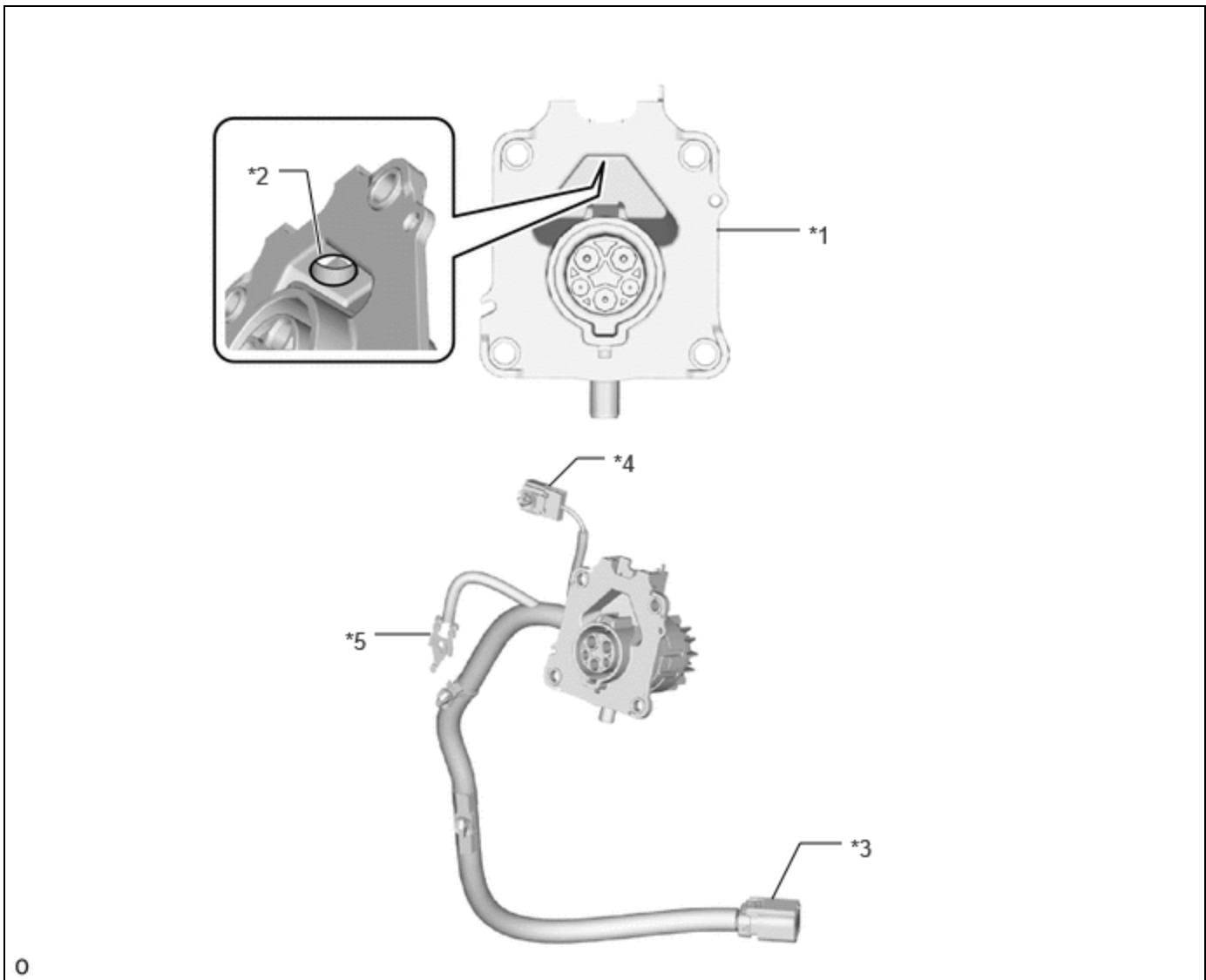
### 1. INSPECT INLET AC CHARGER CABLE

(a) Visual inspection

**NOTICE:**

Visual inspection is done with confirming comparisons with a AC charger inlet cable that is known to operate normally.

(1) There are not the damage of the Charge bin location of the AC charger inlet cable, cable damage (disconnection), lock part damage, the damage of the connector or confirms it.



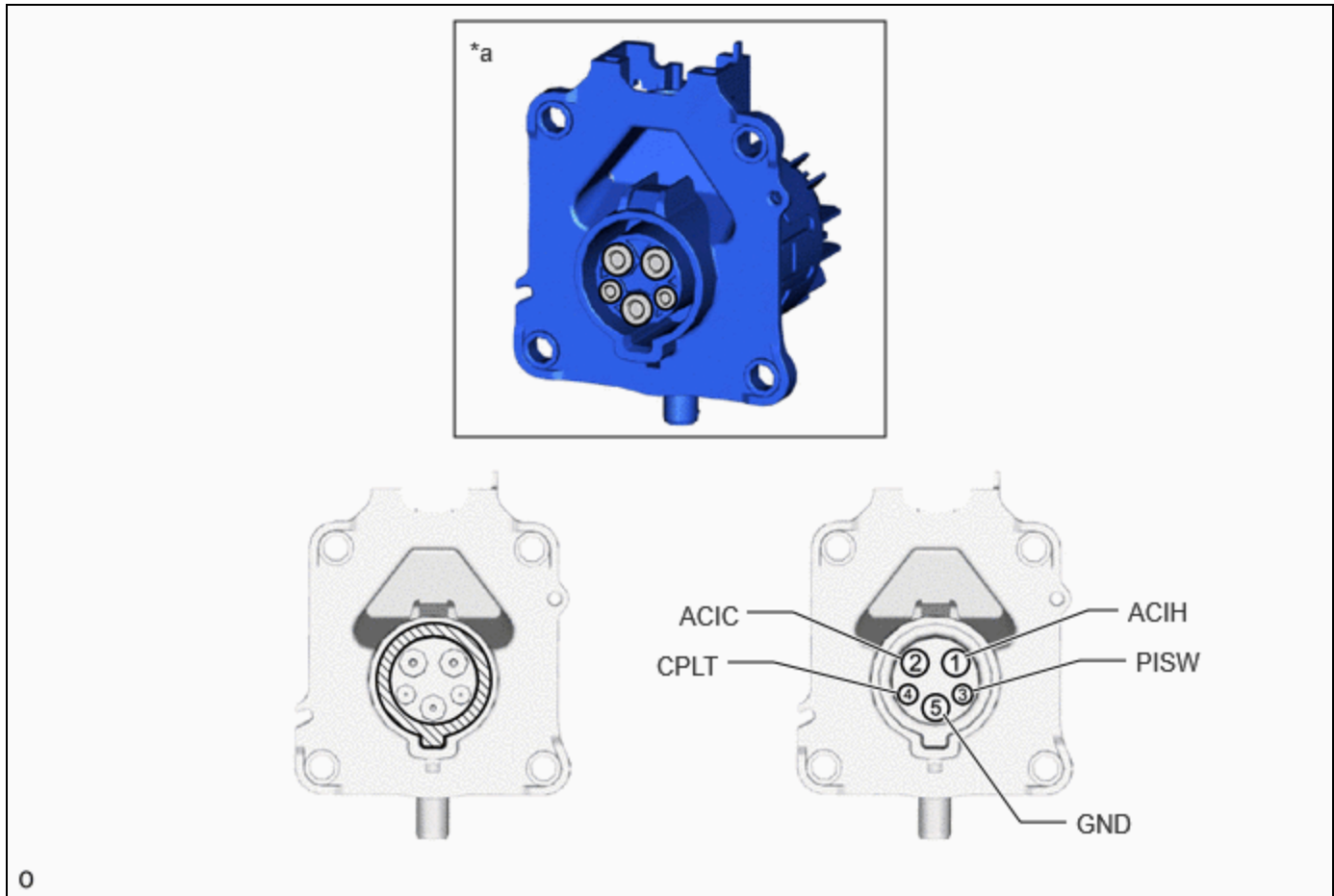
*1	Charger opening	*2	Lock part
*3	Connector (kM1)	*4	Connector (Mk1)



*5	Earth terminal	-	-
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**HINT:**

If there is damage in the charger opening that obstructs the charger connector fitting as well as cable damage (disconnection), the lock damaged, or connector damage, replace the AC charger inlet cable.

(2) Confirm there is no foreign objects within the charge opening for the AC charger inlet cable.



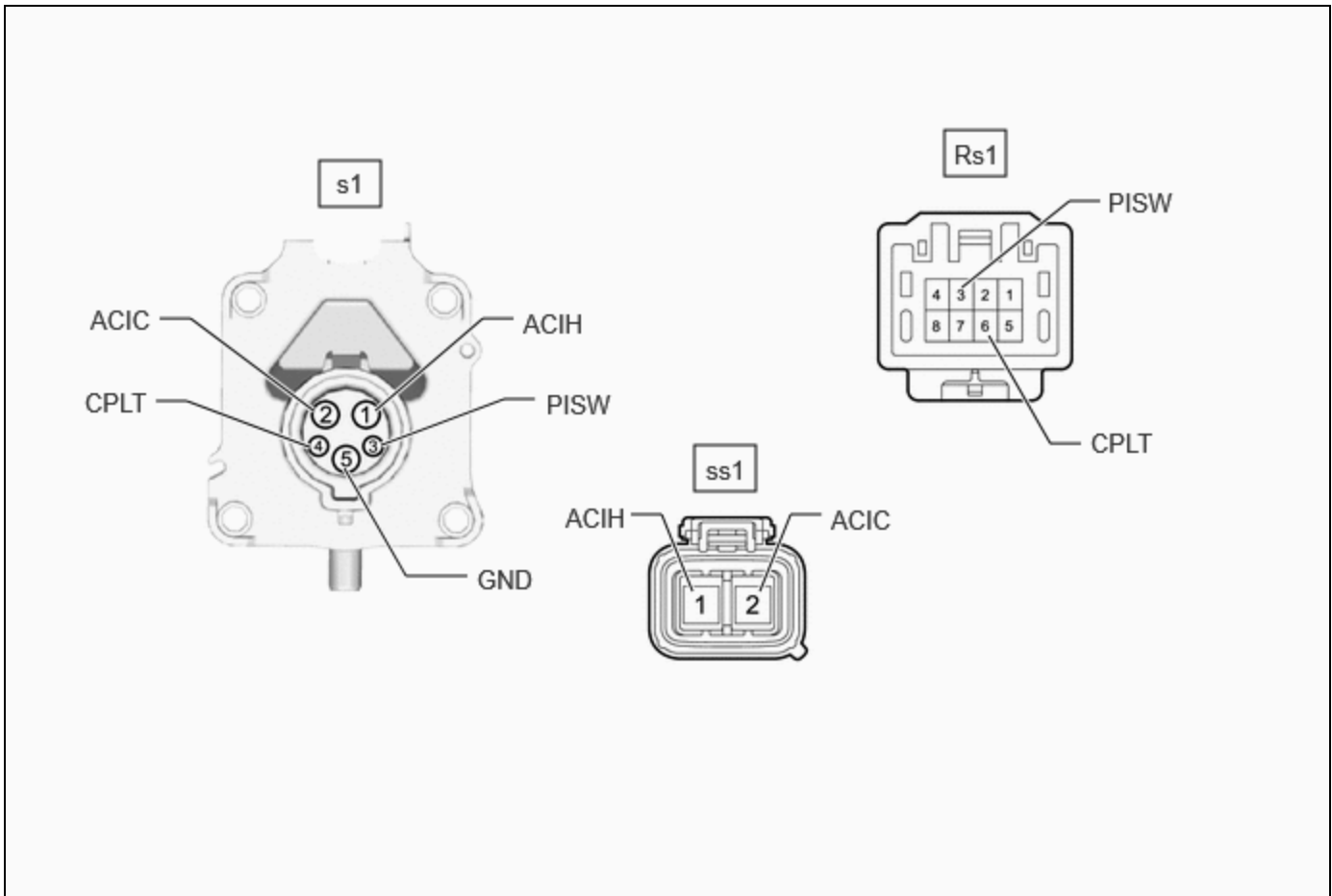
*a	Inspect the terminal (ACIH, ACIC, GND, CPLT, PISW)	-	-
	Confirm the region within the terminal		Confirm the region within charger opening

**HINT:**

If a foreign object that entered within the downward pointing terminals of the AC charging inlet as well as within the charger opening is able to be removed, remove the foreign object and use. If a foreign object in the terminals is not able to be removed, replace the AC charge inlet cable.

(b) Electricity check

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



Standard Resistance:



[Click Location & Routing\(s1,ss1,Rs1\)](#)

[Click Connector\(s1\)](#)

[Click Connector\(ss1\)](#)

[Click Connector\(Rs1\)](#)

TESTER CONNECTION	SPECIFIED CONDITION
s1-1 (ACIH) - ss1-1 (ACIH)	Below 1 Ω
s1-2 (ACIC) - ss1-2 (ACIC)	
s1-3 (PISW) - Rs1-1 (PISW)	
s1-4 (CPLT) - Rs1-6 (CPLT)	
s1-5 (GND) - Earth terminal	
s1-3 (PISW) - s1-5 (GND)	2.3 to 3.0 kΩ

**HINT:**

If the result is not as specified, replace the inlet AC charger cable.

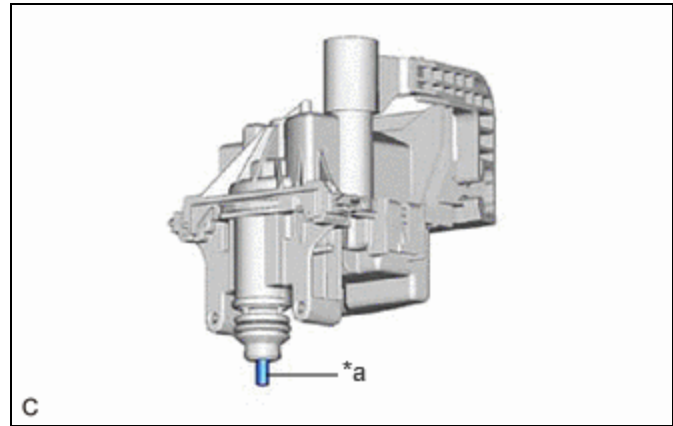
**2. INSPECT CABLE EV CHARGER LOCK ASSEMBLY**

(a) Visual inspection

(1) Check that there is no foreign matter on the lock pin of the cable EV charger lock assembly.

**HINT:**

- If there is foreign matter on the lock pin, remove it.
- If the foreign matter cannot be removed, replace the cable EV charger lock assembly.



*a	Lock Pin
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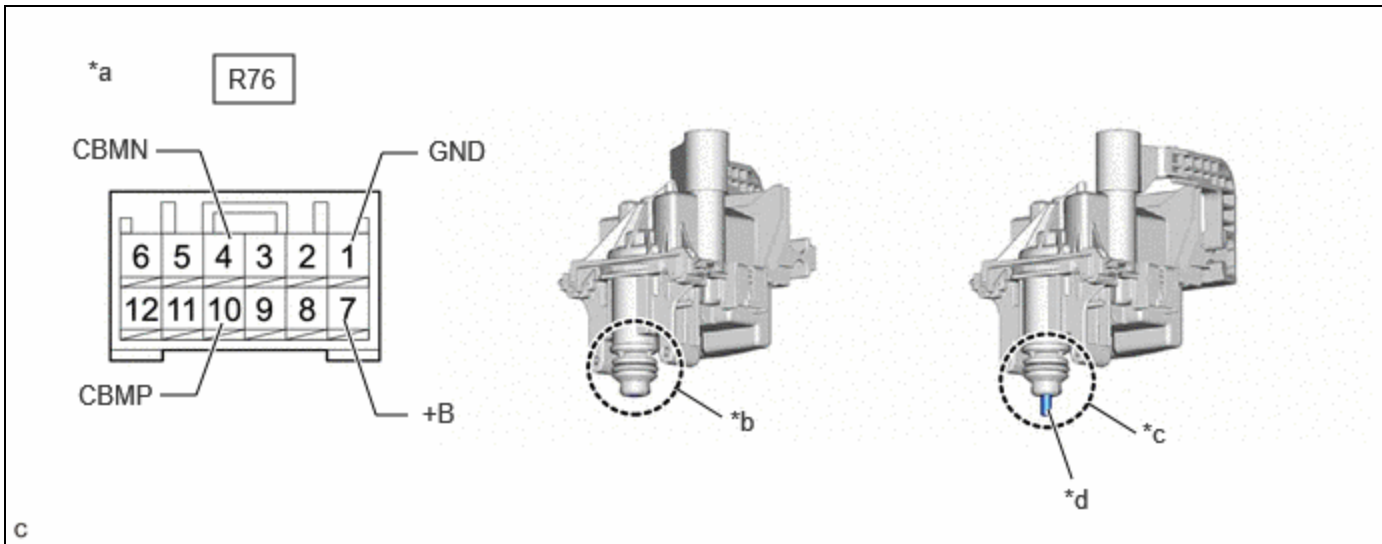
(2) Check that the lock pin of the cable EV charger lock assembly is not bent, damaged or deformed.

**HINT:**

If the lock pin of the cable EV charger lock assembly is bent, damaged or deformed, replace the cable EV charger lock assembly.

(b) Check the operation of the lock pin.

(1) Apply auxiliary battery voltage to the terminals of the connector and check that the lock pin operates.



*a	Component without harness connected (Cable EV Charger Lock Assembly)	*b	Unlocked
*c	Locked	*d	Lock Pin

OK:

MEASUREMENT CONDITION	SPECIFIED CONDITION
Auxiliary Battery positive (+) → R76-10 (CBMP) and R76-7 (+B) Auxiliary Battery negative (-) → R76-1 (GND)	Locks
Auxiliary Battery positive (+) → R76-4 (CBMN) and R76-7 (+B) Auxiliary Battery negative (-) → R76-1 (GND)	Unlocks

**NOTICE:**

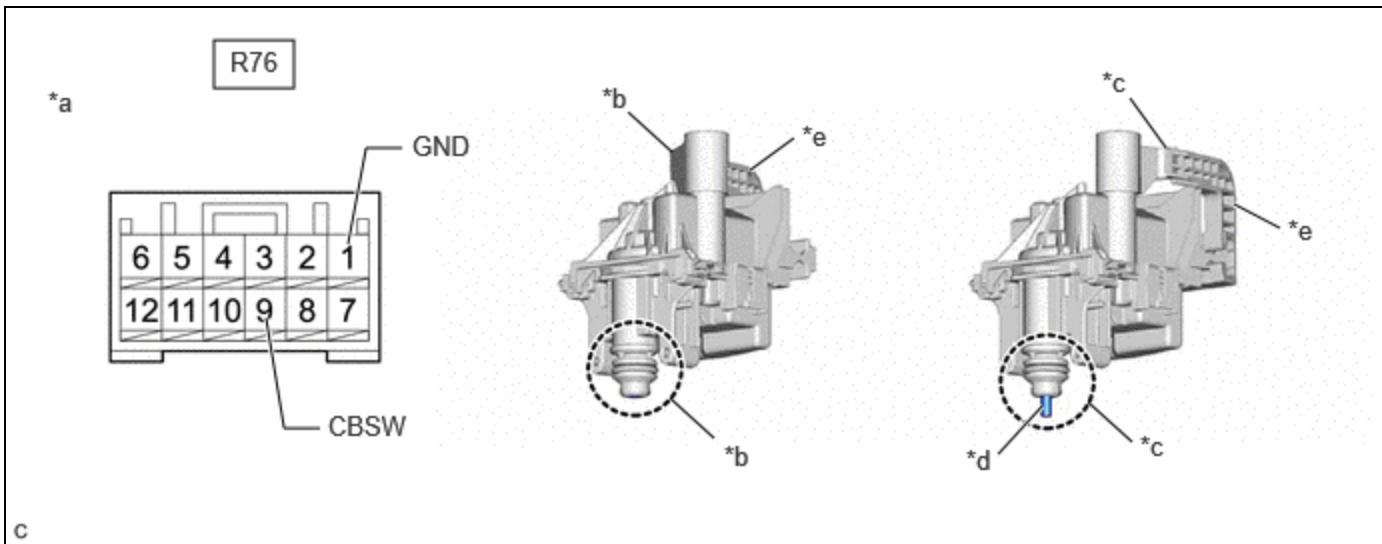
- Apply auxiliary battery voltage for less than 2 or 3 seconds.
  - If voltage is applied for an excessive amount of time, the cable EV charger lock assembly may be damaged.
- Confirm the current position of the lock pin before applying auxiliary battery voltage.
  - When the lock pin is in the locked position, perform the unlock operation inspection.
  - When the lock pin is in the unlocked position, perform the lock operation inspection.

**HINT:**

If the result is not as specified, replace the cable EV charger lock assembly.

(c) Inspect the lock pin position detection circuit.

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



*a	Component without harness connected (Cable EV Charger Lock Assembly)	*b	Unlocked
*c	Locked	*d	Lock Pin
*e	Lock Release Lever	-	-

Standard Resistance:



[Click Location & Routing\(R76\)](#)

[Click Connector\(R76\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R76-9 (CBSW) - R76-1 (GND)	Locks	Below 1 Ω
	Unlocks	10 kΩ or higher

**NOTICE:**

The lock release lever moves when the lock pin changes from locked to unlocked or from unlocked to locked.

**HINT:**

If the result is not as specified, replace the cable EV charger lock assembly.

(d) Inspect the power supply circuit of the fuel lid lock with motor assembly

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

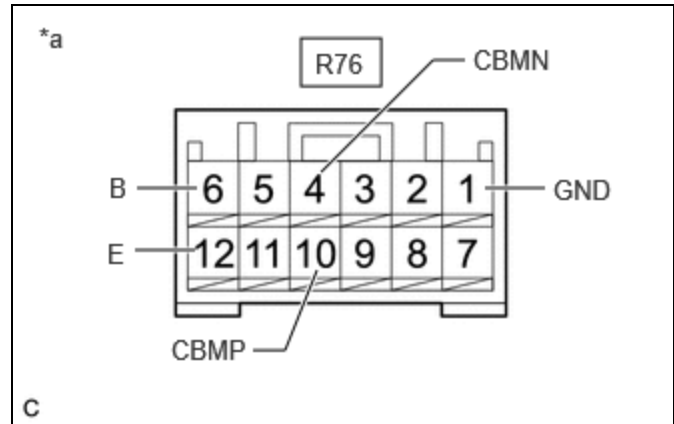
Standard Resistance:



[Click Location & Routing\(R76\)](#)

[Click Connector\(R76\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
R76-12(E) - R76-1(GND)	(Auxiliary battery voltage not applied between terminals R76-10 (CBMP) - R76-1 (GND))	Below 1 Ω
R76-6(B) - R76-1(GND)	(Auxiliary battery voltage applied between terminals R76-4 (CBMN) - R76-1 (GND))	



*a	Component without harness connected (Cable EV Charger Lock Assembly)
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**HINT:**

If the result is not as specified, replace the cable EV charger lock assembly.

