12/15/24, 11:01 PM

SEAT: CLIMATE CONTROL SEAT SYSTEM: Climate Control System does not Operate on Passenger Side; 2023 - 2024 MY Priu...

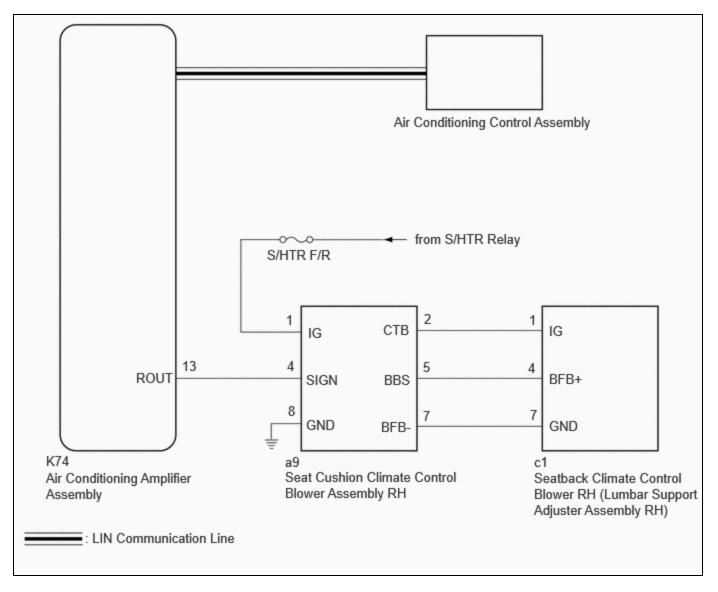
Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002BNGU	
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -	]
<b>Title:</b> SEAT: CLIMATE CONTROL SEAT SYSTEM: Climate Control System does not Operate on Passenger Side; 2023 - 2024 MY Prius Prius Prime [03/2023 - ]			

**Climate Control System does not Operate on Passenger Side** 

### **DESCRIPTION**

The air conditioning amplifier assembly receives ventilation volume switch signals when the ignition switch is ON, and then transmits airflow amount signals to each seat climate blower.

## WIRING DIAGRAM



## **CAUTION / NOTICE / HINT**

### **NOTICE:**

12/15/24, 11:01 PM SEAT: CLIMATE CONTROL SEAT SYSTEM: Climate Control System does not Operate on Passenger Side; 2023 - 2024 MY Priu...

• If the climate control seat system is operated when the auxiliary battery voltage is low, due to the electrical load limit control that gives voltage supply priority to the power steering system, the climate control seat system may not operate. In this case, check the vehicle control history (RoB) of the power steering system and check that "Battery Voltage Drop: X208F" is not stored before proceeding with troubleshooting.

Click here

• Inspect the fuses for circuits related to this system before performing the following procedure.

### **PROCEDURE**

### 1. PERFORM ACTIVE TEST USING GTS

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

### Body Electrical > Air Conditioner > Active Test

TESTER DISPLAY	MEASUREMENT ITEM	CONTROL RANGE	DIAGNOSTIC NOTE
Front Right Seat Blower	Front RH side seat blower operation	OFF or ON	-

### Body Electrical > Air Conditioner > Active Test

TESTER DISPLAY

Front Right Seat Blower

RESULT	PROCEED TO
Both seat cushion seat blower and seatback seat blower operate	A
Only seat cushion seat blower does not operate	В
Only seatback seat blower does not operate	С
Both seat cushion seat blower and seatback seat blower do not operate	D

### **A** GO TO AIR CONDITIONING SYSTEM

for HEV Model: Click here

for PHEV Model: Click here

### B REPLACE SEAT CUSHION CLIMATE CONTROL BLOWER ASSEMBLY RH

D GO TO STEP 5



### 2. CHECK HARNESS AND CONNECTOR (SEAT CUSHION CLIMATE CONTROL BLOWER ASSEMBLY RH - SEATBACK CLIMATE CONTROL BLOWER RH)

- (a) Disconnect the a9 seat cushion climate control blower assembly RH connector.
- (b) Disconnect the c1 seatback climate control blower RH (lumbar support adjuster assembly RH) connector.
- (c) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



### <u>Click Location & Routing(a9,c1)</u> <u>Click Connector(a9)</u> <u>Click Connector(c1)</u>

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
a9-2 (CTB) - c1-1 (IG)	Always	Below 1 Ω
a9-2 (CTB) or c1-1 (IG) - Body ground	Always	$10 \ k\Omega$ or higher
a9-5 (BBS) - c1-4 (BFB+)	Always	Below 1 Ω
a9-5 (BBS) or c1-4 (BFB+) - Body ground	Always	$10 \ k\Omega$ or higher
a9-7 (BFB-) - c1-7 (GND)	Always	Below 1 Ω
a9-7 (BFB-) or c1-7 (GND) - Body ground	Always	$10 \ \text{k}\Omega$ or higher

### **NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

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# 3. REPLACE SEATBACK CLIMATE CONTROL BLOWER RH (LUMBAR SUPPORT ADJUSTER ASSEMBLY RH)

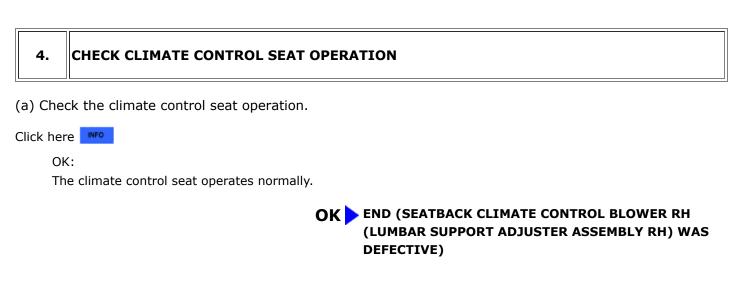
(a) Replace the seatback climate control blower RH (lumbar support adjuster assembly RH) with a new or known good one.

Click here



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### NG REPLACE SEAT CUSHION CLIMATE CONTROL BLOWER ASSEMBLY RH

5. CHECK HARNESS AND CONNECTOR (SEAT CUSHION CLIMA ASSEMBLY RH - POWER SUPPLY)	FE CONTROL BLOWER
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(a) Disconnect the a9 seat cushion climate control blower assembly RH connector.

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

Standard Voltage:



### Click Location & Routing(a9) Click Connector(a9)

TESTER CONNECTION	SWITCH CONDITION	SPECIFIED CONDITION
a9-1 (IG) - Body ground	Ignition switch ON	11 to 14 V
a9-1 (IG) - Body ground	Ignition switch off	Below 1 V

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

Standard Resistance:



### Click Location & Routing(a9) Click Connector(a9)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
a9-8 (GND) - Body ground	Always	Below 1 Ω

### **NG** REPAIR OR REPLACE HARNESS OR CONNECTOR



## 6. CHECK HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER ASSEMBLY - SEAT CUSHION CLIMATE CONTROL BLOWER ASSEMBLY RH)

- (a) Disconnect the K74 air conditioning amplifier assembly connector.
- (b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



### <u>Click Location & Routing(K74,a9)</u> <u>Click Connector(K74)</u> <u>Click Connector(a9)</u>

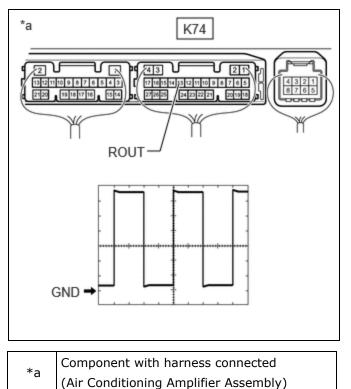
TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K74-13 (ROUT) - a9-4 (SIGN)	Always	Below 1 Ω
K74-13 (ROUT) or a9-4 (SIGN) - Body ground	Always	10 k $\Omega$ or higher

### **NG** REPAIR OR REPLACE HARNESS OR CONNECTOR

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### CHECK AIR CONDITIONING AMPLIFIER ASSEMBLY

12/15/24, 11:01 PM



(a) Connect the K74 air conditioning amplifier assembly connector.

(b) Connect the a9 seat cushion climate control blower assembly RH connector.

(c) Check for pulses according to the value(s) in the table below.

### **Measurement Condition**

ITEM	CONTENT	
Tester Connection	K74-13 (ROUT) - Body ground	
Tool Setting	1 V/DIV., 1 ms/DIV.	
Vehicle Condition	<ul><li> Ignition switch ON</li><li> Climate control switch RH on</li></ul>	

OK:

9

Waveform is similar to that shown in the illustration.

### OK REPLACE SEAT CUSHION CLIMATE CONTROL BLOWER ASSEMBLY RH

### **NG** REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY

TOYOTA