

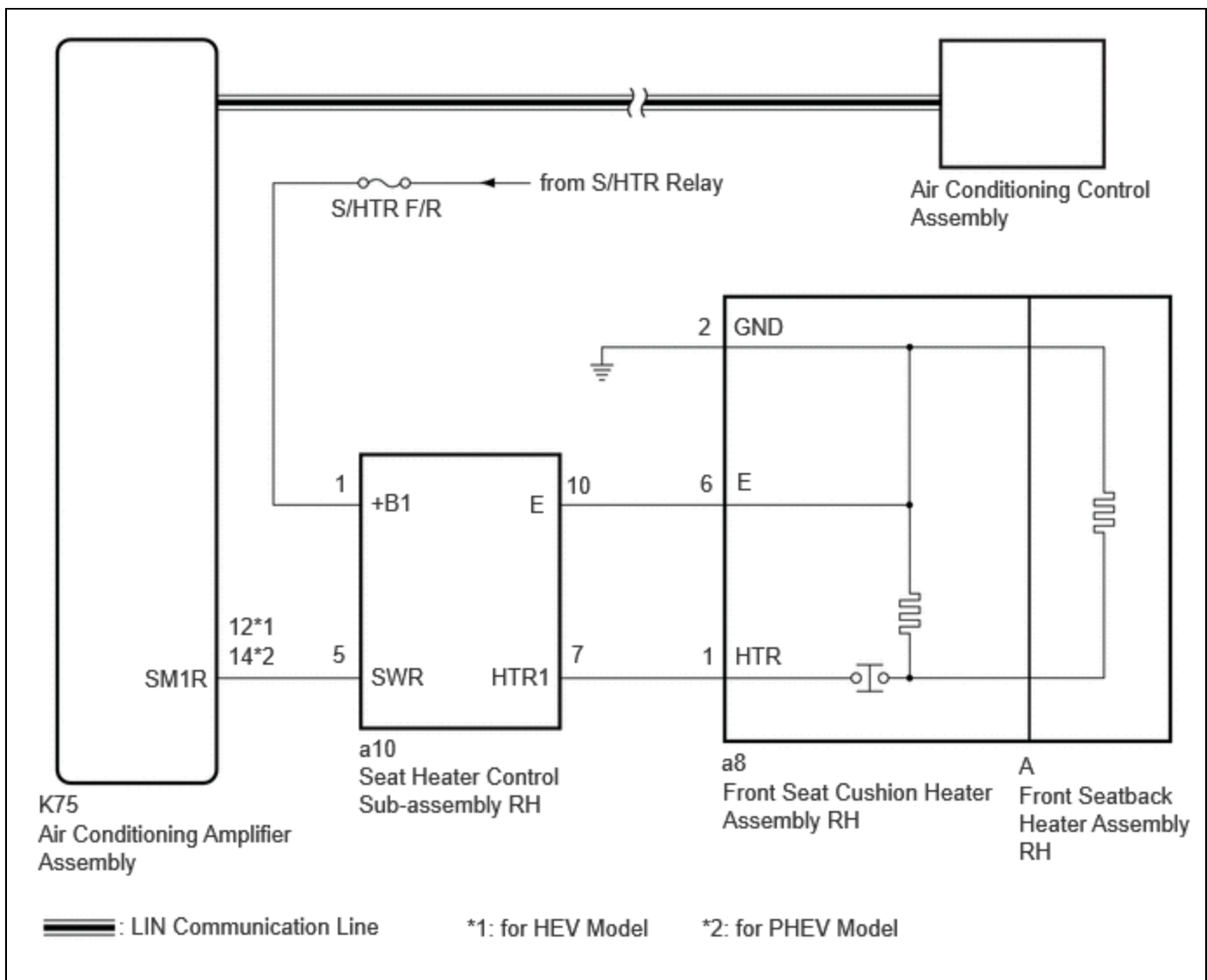
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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: SEAT: SEAT HEATER SYSTEM: Seat Heater for Front Right Seat does not Operate; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

Seat Heater for Front Right Seat does not Operate

DESCRIPTION

When the front seat heater switch is operated, the air conditioning amplifier assembly receives a signal and operates the front seat heater.

WIRING DIAGRAM



CAUTION / NOTICE / HINT

NOTICE:

- If the seat heater 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 seat heater 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 [INFO](#)

- 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 Heater	Front seat RH side seat heater operation	OFF or ON	-

Body Electrical > Air Conditioner > Active Test

TESTER DISPLAY
Front Right Seat Heater

OK:

Front seat RH side seat heater operates normally.

OK ▶ GO TO AIR CONDITIONING SYSTEM

for HEV Model: Click here [INFO](#)

for PHEV Model: Click here [INFO](#)

NG



2. CHECK HARNESS AND CONNECTOR (SEAT HEATER CONTROL SUB-ASSEMBLY RH - POWER SUPPLY)

(a) Disconnect the a10 seat heater control sub-assembly RH connector.

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

Standard Voltage:



[Click Location & Routing\(a10\)](#)

[Click Connector\(a10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
a10-1 (+B1) - Body ground	Ignition switch ON	11 to 14 V
a10-1 (+B1) - Body ground	Ignition switch off	Below 1 V

NG **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



3.	INSPECT HARNESS AND CONNECTOR (AIR CONDITIONING AMPLIFIER ASSEMBLY - SEAT HEATER CONTROL SUB-ASSEMBLY RH)
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(a) Disconnect the K75 air conditioning amplifier assembly connector.

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

Standard Resistance:

for HEV Model



[Click Location & Routing\(K75,a10\)](#)

[Click Connector\(K75\)](#)

[Click Connector\(a10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K75-12 (SM1R) -a10-5 (SWR)	Always	Below 1 Ω
K75-12 (SM1R) or a10-5 (SWR) - Body ground	Always	10 k Ω or higher

for PHEV Model



[Click Location & Routing\(K75,a10\)](#)

[Click Connector\(K75\)](#)

[Click Connector\(a10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
K75-14 (SM1R) -a10-5 (SWR)	Always	Below 1 Ω
K75-14 (SM1R) or a10-5 (SWR) - Body ground	Always	10 k Ω or higher

NG  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



4. CHECK HARNESS AND CONNECTOR (FRONT SEAT CUSHION HEATER ASSEMBLY RH - SEAT HEATER CONTROL SUB-ASSEMBLY RH AND BODY GROUND)

(a) Disconnect the a8 front seat cushion heater assembly RH connector.

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

Standard Resistance:



[Click Location & Routing\(a8,a10\).](#)

[Click Connector\(a8\)](#)

[Click Connector\(a10\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
a8-1 (HTR) - a10-7 (HTR1)	Always	Below 1 Ω
a8-6 (E) - a10-10 (E)	Always	Below 1 Ω
a8-1 (HTR) or a10-7 (HTR1) - Body ground	Always	10 kΩ or higher
a8-6 (E) or a10-10 (E) - Body ground	Always	10 kΩ or higher
a8-2 (GND) - Body ground	Always	Below 1 Ω

NG  **REPAIR OR REPLACE HARNESS OR CONNECTOR**

OK



5. INSPECT FRONT SEAT CUSHION HEATER ASSEMBLY RH

Click here 

NG  **REPLACE FRONT SEAT CUSHION HEATER ASSEMBLY RH**

OK



6. INSPECT FRONT SEATBACK HEATER ASSEMBLY RHClick here **NG**  **REPLACE FRONT SEATBACK HEATER ASSEMBLY RH****OK****7. REPLACE SEAT HEATER CONTROL SUB-ASSEMBLY RH**

(a) Temporarily replace the seat heater control sub-assembly RH with a new or known good one.

Click here **NEXT****8. CHECK FRONT SEAT HEATER OPERATION**

(a) Check the front seat RH side seat heater operation.

Click here 

OK:

Front seat RH side seat heater operates normally.

OK  **END (SEAT HEATER CONTROL SUB-ASSEMBLY RH WAS DEFECTIVE)****NG**  **REPLACE AIR CONDITIONING AMPLIFIER ASSEMBLY**