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Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: HEATING / AIR CONDITIONING: AIR CONDITIONING SYSTEM (for PHEV Model): Recirculated/Fresh Air Modes do not Switch; 2023 - 2024 MY Prius Prime [03/2023 -]		

Recirculated/Fresh Air Modes do not Switch

DESCRIPTION

If the air inlet mode cannot be changed between recirculation/fresh or exhaust gas odors can be smelled even though recirculation mode is selected, the following factors may be the cause.

SYMPTOM	FACTOR
<ul style="list-style-type: none"> Air inlet mode cannot be changed between recirculation/fresh Exhaust gas odors can be smelled when air inlet mode set to recirculation mode 	<ul style="list-style-type: none"> No. 1 blower damper servo sub-assembly malfunction Damper link disconnection Air inlet damper mechanically locked Air conditioner unit assembly malfunction Engine coolant temperature (high)

PROCEDURE

1.	CHECK NO. 1 BLOWER DAMPER SERVO SUB-ASSEMBLY
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(a) Check that the No. 1 blower damper servo sub-assembly is installed correctly.

OK:

No. 1 blower damper servo sub-assembly is installed correctly.

NG  **REINSTALL NO. 1 BLOWER DAMPER SERVO SUB-ASSEMBLY**

OK



2.	CHECK FOR DTC
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(a) Check for DTCs.

Body Electrical > Air Conditioner > Trouble Codes

RESULT	PROCEED TO
B143A87 and B143B7F are not output	A
B143A87 is output	B
B143B7F is output	C

B ► GO TO DTC B143A87

C ► GO TO DTC B143B7F

A



3.	READ VALUE USING GTS
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(a) Read the Data List according to the display on the GTS.

Powertrain > Engine > Data List

TESTER DISPLAY	MEASUREMENT ITEM	RANGE	NORMAL CONDITION	DIAGNOSTIC NOTE
Coolant Temperature	Engine coolant temperature	Min.: -40°C (-40°F) Max.: 140°C (284°F)	75 to 100°C (167 to 212°F): After warming up	This is the engine coolant temperature. HINT: <ul style="list-style-type: none"> After warming up the engine, the engine coolant temperature will be 75 to 100°C (167 to 212°F). After a long soak, the engine coolant temperature, intake air temperature and ambient air temperature will be approximately equal. If the value is -40°C (-40°F), or higher than 135°C (275°F), the sensor circuit is open or shorted. Check if the engine overheats if the value indicated is higher than 135°C (275°F).

Powertrain > Engine > Data List

TESTER DISPLAY
Coolant Temperature

OK:

The value of the display does not change frequently.

OK ► **REPLACE AIR CONDITIONER UNIT ASSEMBLY**

NG ► **GO TO COOLING SYSTEM**

