

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM1000000029105
Model Year Start: 2023	Model: Prius	Prod Date Range: [12/2022 -]
Title: HEATING / AIR CONDITIONING: AIR CONDITIONING SYSTEM (for HEV Model): No Heating at All; 2023 - 2024 MY Prius [12/2022 -]		

No Heating at All

DESCRIPTION

If cool air blows from the registers regardless of the temperature setting of the air conditioning system, the following factors may be the cause.

SYMPTOM	FACTOR
<ul style="list-style-type: none"> No warm air comes out (Blower control is normal) Outlet air temperature does not increase (Blower control is normal) 	<ul style="list-style-type: none"> Engine coolant temperature (low) Air mix damper and link operation (jamming) Warm-up control Blockage in heater radiator unit sub-assembly Heater radiator unit sub-assembly malfunction

PROCEDURE

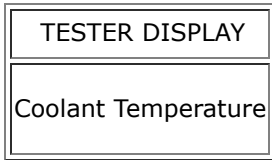
1. READ VALUE USING GTS (COOLANT TEMPERATURE)

(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	<p>This is the engine coolant temperature.</p> <p>HINT:</p> <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



OK:
The value of the display does not change frequently.

NG **GO TO COOLING SYSTEM**

for M20A-FXS: Click here

for 2ZR-FXE: Click here

OK

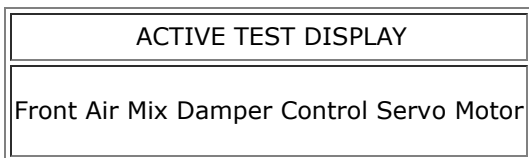
2. PERFORM ACTIVE TEST USING GTS

(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 Air Mix Damper Control Servo Motor	This test activates the Front Air Mix Damper Control Servo Motor. (No. 1 air conditioning radiator damper servo sub-assembly (air mix))	128: Min 384: Max	Operate with ignition switch ON.

Body Electrical > Air Conditioner > Active Test



OK:
Damper servo motor is operated.

OK **REPLACE HEATER RADIATOR UNIT SUB-ASSEMBLY**

NG ► **GO TO DIAGNOSTIC TROUBLE CODE CHART (FOR SERVO MOTOR OF APPLICABLE ABNORMAL OPERATION)**

