Last Modified: 12-04-2024	6.11:8.1.0	**Doc ID:** RM100000002AXF8
Model Year Start: 2023	**Model:** Prius Prime	**Prod Date Range:** [03/2023 -]
Title: HEATING / AIR CONDITIONING: HEAT EXCHANGER TEMPERATURE SENSOR: INSPECTION; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

INSPECTION

PROCEDURE

1. INSPECT NO. 1 AIR CONDITIONINGTHERMISTOR ASSEMBLY

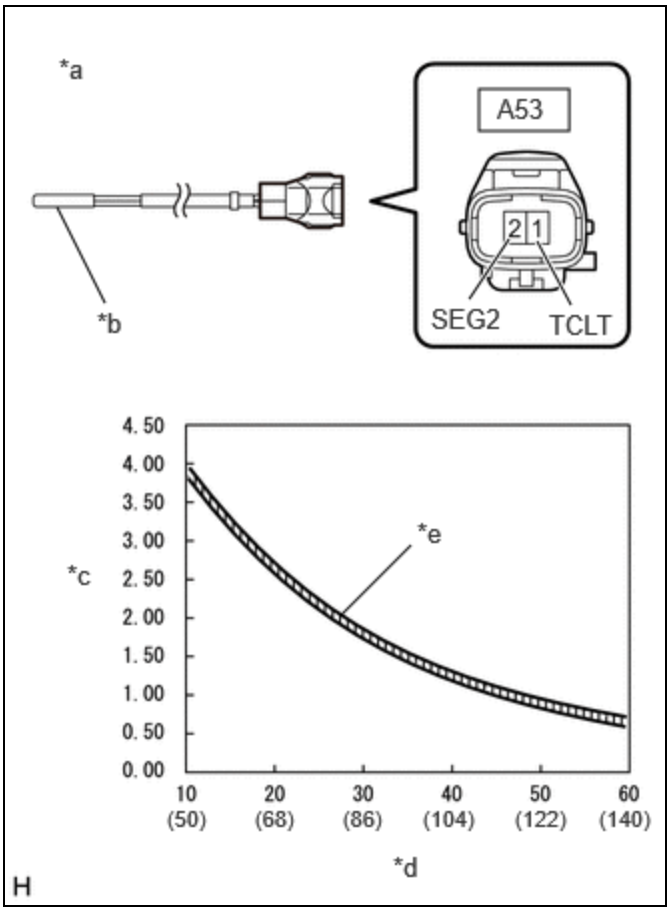
(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

EWD INFO

Click Location & Routing(A53)
Click Connector(A53)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A53-1(TCLT) - A53-2(SEG2)	10°C (50°F)	3.87 to 3.96 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	15°C (59°F)	3.15 to 3.23 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	20°C (68°F)	2.57 to 2.66 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	25°C (77°F)	2.12 to 2.20 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	30°C (86°F)	1.75 to 1.83 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	35°C (95°F)	1.46 to 1.53 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	40°C (104°F)	1.22 to 1.29 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	45°C (113°F)	1.03 to 1.09 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	50°C (122°F)	0.87 to 0.92 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	55°C (131°F)	0.74 to 0.78 kΩ	kΩ
A53-1(TCLT) - A53-2(SEG2)	60°C (140°F)	0.63 to 0.67 kΩ	kΩ



*a	Component without harness connected (No. 1 Air Conditioning Thermistor Assembly)
*b	Sensing Portion
*c	Resistance (kΩ)
*d	Temperature (°C (°F))
*e	Allowable Range

NOTICE:

- Hold the sensor only by its connector. Touching the sensing portion may change the resistance value.
- Perform the measurement once the sensor has adapted to the ambient temperature.

HINT:

As the temperature increases, the resistance decreases (see the graph).

If the result is not as specified, replace the No. 1 air conditioning thermistor assembly.