

Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM10000002AXF0
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: HEATING / AIR CONDITIONING: AIR CONDITIONING PRESSURE SENSOR: ON-VEHICLE INSPECTION; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		

ON-VEHICLE INSPECTION

PROCEDURE

1. INSPECT AIR CONDITIONING PRESSURE SENSOR (for PHEV Model)

Pre-procedure1

- (a) Disconnect the A58 air conditioning pressure sensor connector.
- (b) Disconnect the K73 air conditioning amplifier assembly connector.

Procedure1

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

Standard Resistance:

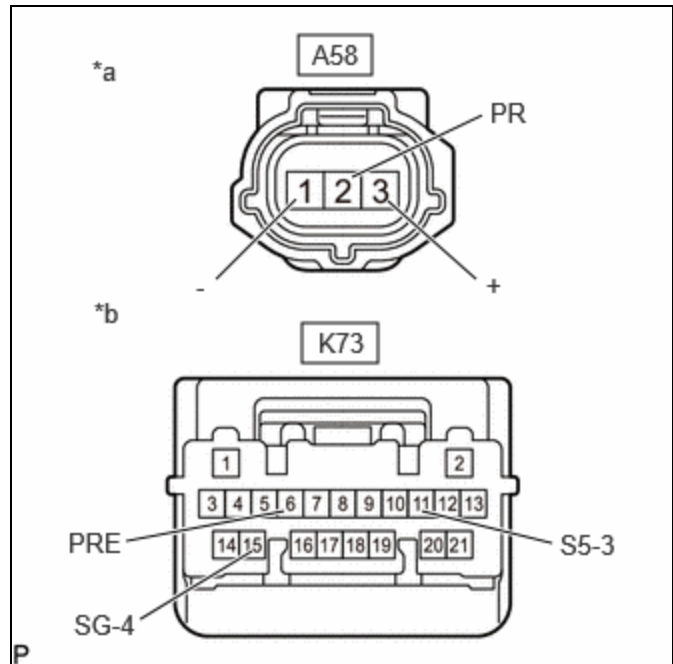


[Click Location & Routing\(A58,K73\)](#)

[Click Connector\(A58\)](#)

[Click Connector\(K73\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A58-1 (-) - K73-15 (SG-4)	Always	Below 1 Ω	Ω
A58-2 (PR) - K73-6 (PRE)	Always	Below 1 Ω	Ω
A58-3 (+) - K73-11 (S5-3)	Always	Below 1 Ω	Ω
A58-1 (-) or K73-15 (SG-4) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
A58-2 (PR) or K73-6 (PRE) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
A58-3 (+) or K73-11 (S5-3) - Other terminals and body ground	Always	10 kΩ or higher	kΩ



*a	Front view of wire harness connector (Air Conditioning Pressure Sensor)
*b	Front view of wire harness connector (Air Conditioning Amplifier Assembly)

If the resistance is not as specified, repair or replace the wire harness.

Post-procedure1

(d) Connect the K73 air conditioning amplifier assembly connector.

Pre-procedure2

(e) Turn the ignition switch to ON.

Procedure2

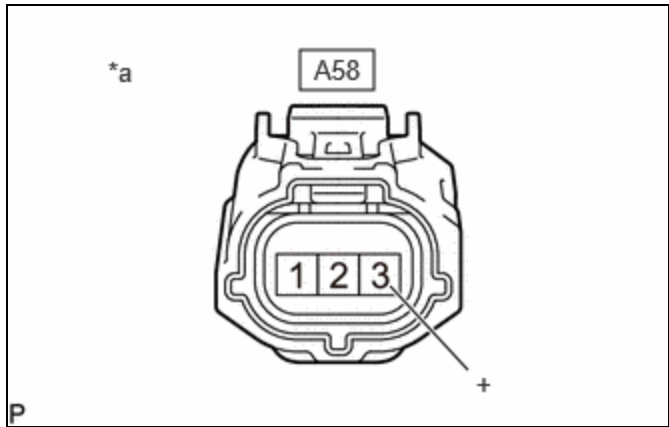
(f) Measure the voltage according to the value(s) in the table below.

Standard Voltage:



[Click Location & Routing\(A58\)](#)

[Click Connector\(A58\)](#)



*a Front view of wire harness connector (Air Conditioning Pressure Sensor)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A58-3 (+) - Body ground	Ignition switch on (IG)	4.75 to 5.25 V	V

If the result is not as specified, repair or replace the wire harness or replace the air conditioning amplifier assembly.

Post-procedure2

(g) Connect the A58 air conditioning pressure sensor connector.

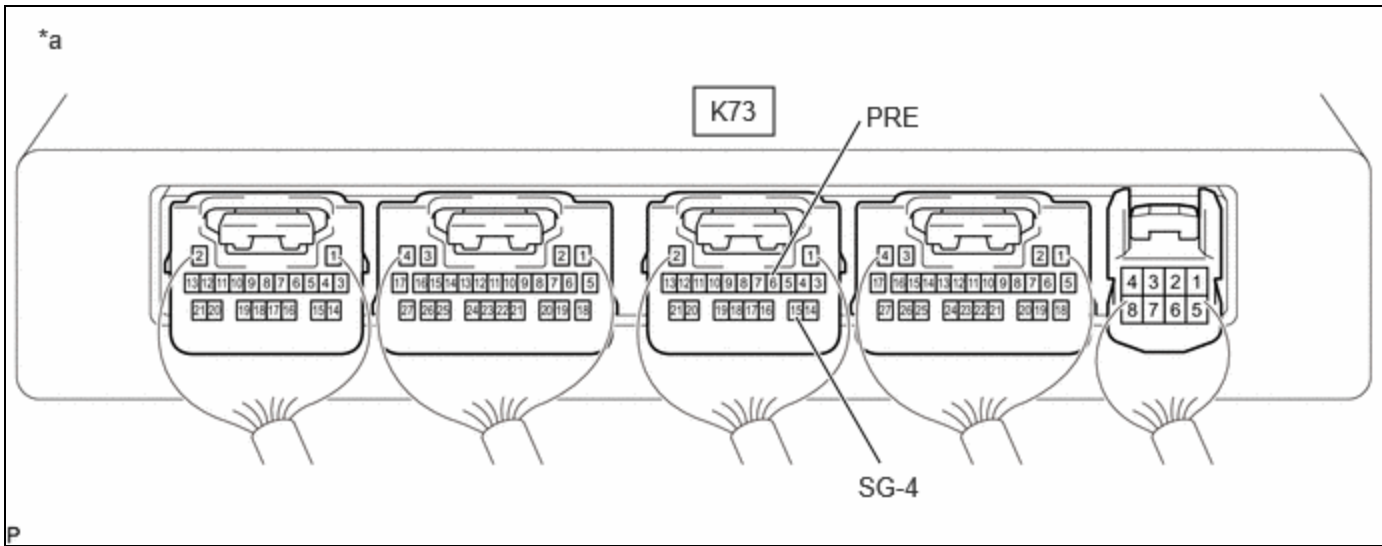
Pre-procedure3

(h) Install a manifold gauge set.

(i) Turn the A/C switch on.

Procedure3

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



*a	Component with harness connected (Air Conditioning Amplifier Assembly)	-	-
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HINT:

Check from the rear of the connector while it is connected to the air conditioning amplifier assembly.

Standard Voltage:



[Click Location & Routing\(K73\).](#)

[Click Connector\(K73\).](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K73-6 (PRE) - K73-15 (SG-4)	Refrigerant pressure: Normal pressure (less than 2812 kPa (28.6 kgf/cm ² , 408 psi) and more than 196 kPa (2.0 kgf/cm ² , 28 psi))*3	0.62 to 4.73 V	V

While sensor voltage is 5 V.

If the voltage is not as specified, replace the air conditioning pressure sensor.

Post-procedure3

(k) None

2. INSPECT AIR CONDITIONING PRESSURE SENSOR (for HEV Model)

Pre-procedure1

- (a) Disconnect the A58 air conditioning pressure sensor connector.
- (b) Disconnect the K73 air conditioning amplifier assembly connector.

Procedure1

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

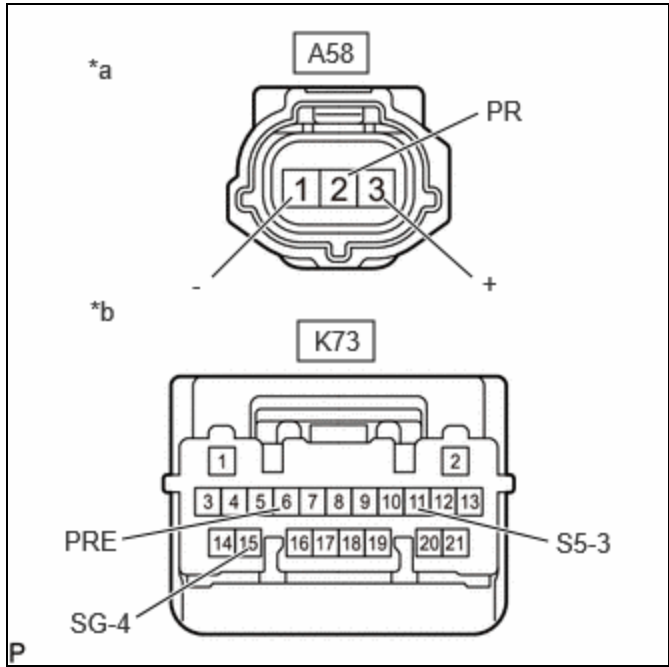
Standard Resistance:



[Click Location & Routing\(A58,K73\)](#)

[Click Connector\(A58\)](#)

[Click Connector\(K73\)](#)



*a	Front view of wire harness connector (Air Conditioning Pressure Sensor)
*b	Front view of wire harness connector (Air Conditioning Amplifier Assembly)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A58-1 (-) - K73-15 (SG-4)	Always	Below 1 Ω	Ω
A58-2 (PR) - K73-6 (PRE)	Always	Below 1 Ω	Ω
A58-3 (+) - K73-11 (S5-3)	Always	Below 1 Ω	Ω
A58-1 (-) or K73-15 (SG-4) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
A58-2 (PR) or K73-6 (PRE) - Other terminals and body ground	Always	10 kΩ or higher	kΩ
A58-3 (+) or K73-11 (S5-3) - Other terminals and body ground	Always	10 kΩ or higher	kΩ

If the resistance is not as specified, repair or replace the wire harness.

Post-procedure1

(d) Connect the K73 air conditioning amplifier assembly connector.

Pre-procedure2

(e) Turn the ignition switch to ON.

Procedure2

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

Standard Voltage:

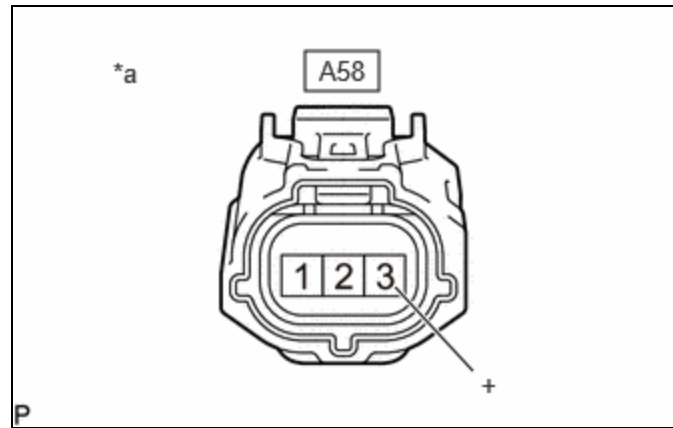


[Click Location & Routing\(A58\)](#)

[Click Connector\(A58\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
A58-3 (+) - Body ground	Ignition switch on (IG)	4.75 to 5.25 V	V

If the result is not as specified, repair or replace the wire harness or replace the air conditioning amplifier assembly.



*a	Front view of wire harness connector (Air Conditioning Pressure Sensor)
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Post-procedure2

(g) Connect the A58 air conditioning pressure sensor connector.

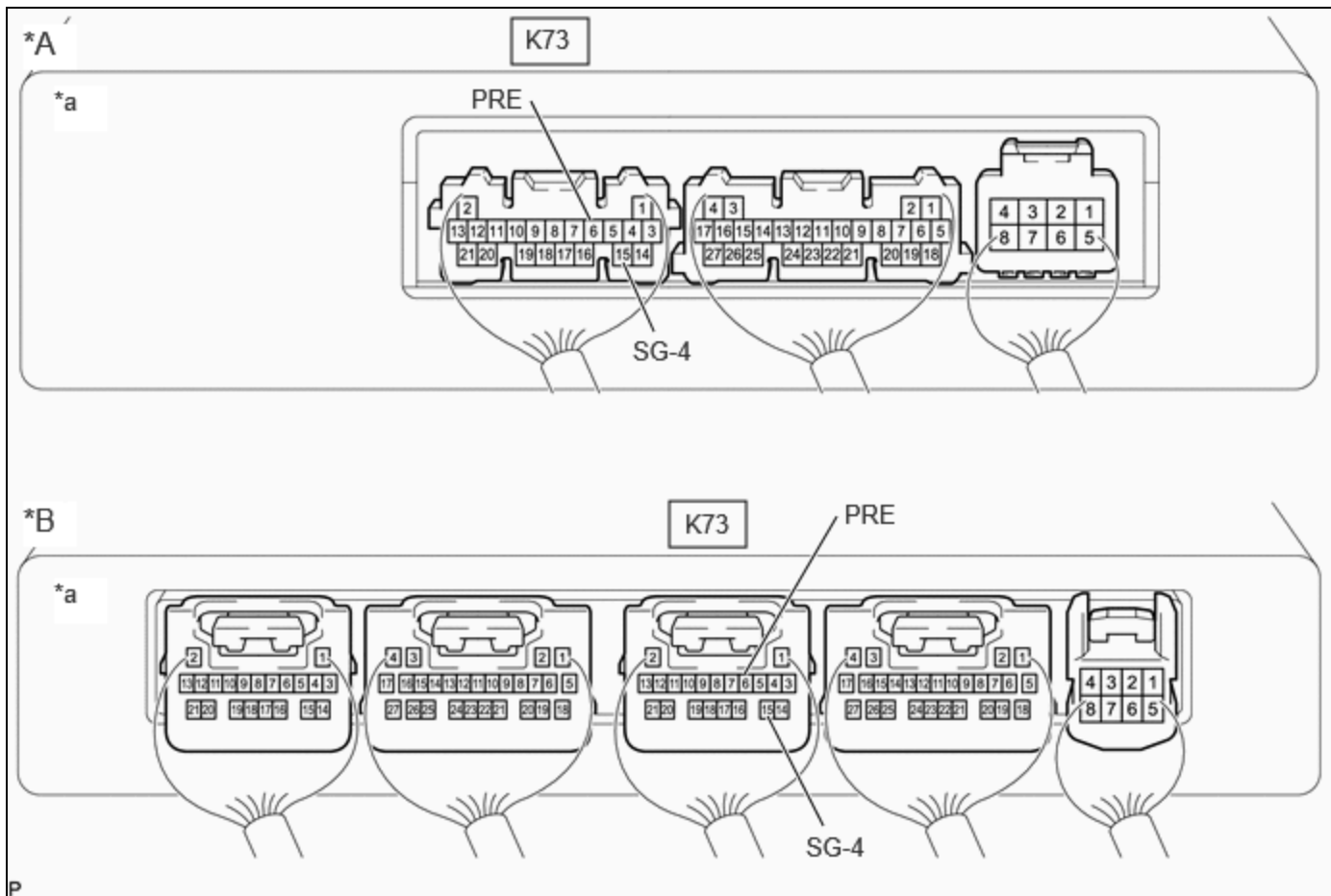
Pre-procedure3

(h) Install a manifold gauge set.

(i) Turn the A/C switch on.

Procedure3

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



*A	w/o Seat Heater System	*B	w/ Seat Heater System
*a	Component with harness connected (Air Conditioning Amplifier Assembly)	-	-

HINT:

Check from the rear of the connector while it is connected to the air conditioning amplifier assembly.

Standard Voltage:



[Click Location & Routing\(K73\)](#)

[Click Connector\(K73\)](#)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
K73-6 (PRE) - K73-15 (SG-4)	Refrigerant pressure: Normal pressure (less than 3025 kPa (30.8 kgf/cm ² , 439 psi) and more than 176 kPa (1.8 kgf/cm ² , 26 psi))*1	0.62 to 4.73 V	V
K73-6 (PRE) - K73-15 (SG-4)	Refrigerant pressure: Normal pressure (less than 2812 kPa (28.6 kgf/cm ² , 408 psi) and more than 196 kPa (2.0 kgf/cm ² , 28	0.62 to 4.73 V	V

While sensor voltage is 5 V.

*1: for HFC-134a (R134a)

*2: for HFO-1234yf (R1234yf)

TESTER CONNECTION	CONDITION	SPECIFIED CONDITION	RESULT
	psi))*2		
<p>While sensor voltage is 5 V.</p> <p>*1: for HFC-134a (R134a)</p> <p>*2: for HFO-1234yf (R1234yf)</p>			

If the voltage is not as specified, replace the air conditioning pressure sensor.

Post-procedure3

(k) None

