

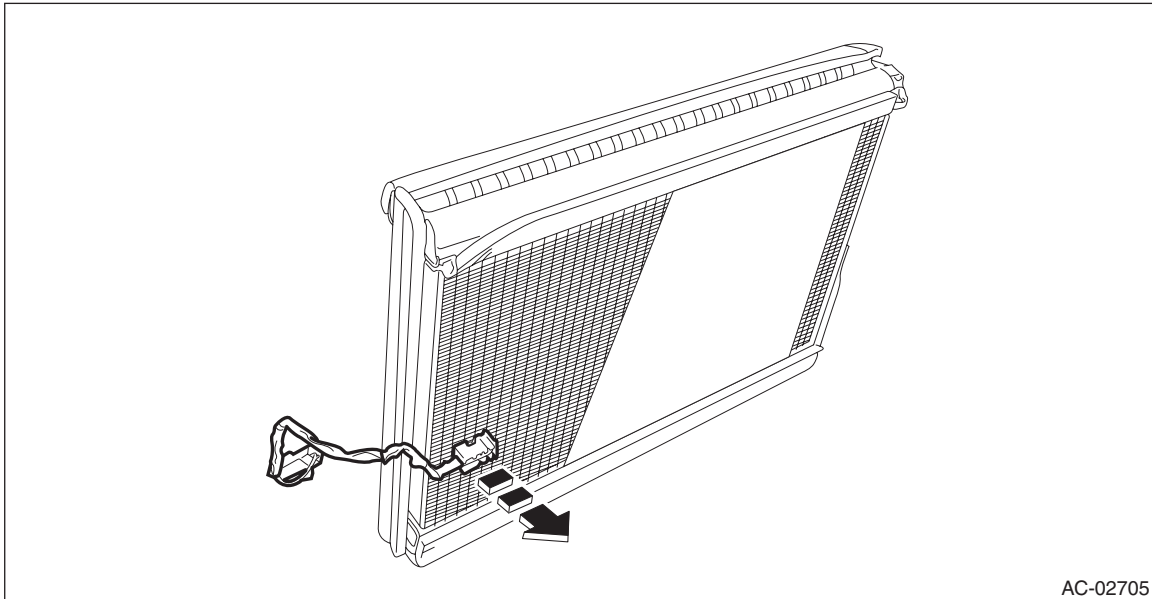
Evaporator Sensor

HVAC SYSTEM (HEATER, VENTILATOR AND A/C)

25.Evaporator Sensor

A: REMOVAL

- 1) Remove the evaporator assembly - cooling. <Ref. to AC-63, REMOVAL, Evaporator.>
- 2) Remove the thermostat - cooling from the evaporator assembly - cooling.



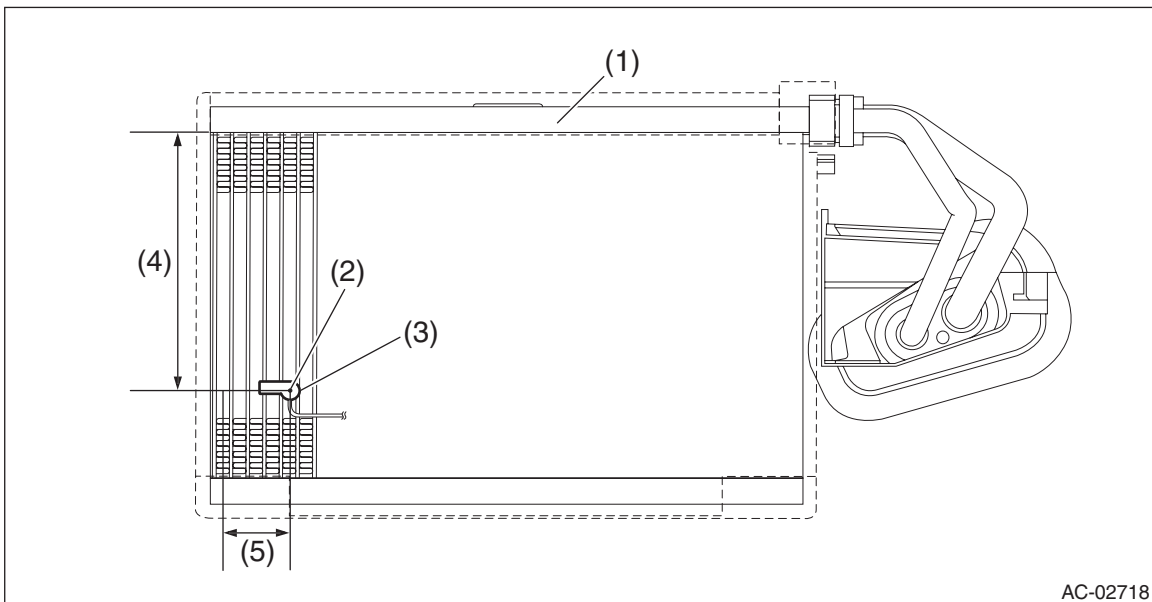
AC-02705

B: INSTALLATION

CAUTION:

- Make sure that the water seal packing on the cover attachment area is securely attached.
- Replace the O-rings with new parts, and then apply compressor oil.

- 1) Install the thermostat - cooling at the position shown in the figure below.



AC-02718

- | | | |
|-------------------------------|---|-------------------------------------|
| (1) Evaporator ASSY - cooling | (3) Thermostat - cooling | (5) Fifth row fin from the left end |
| (2) Center | (4) 130 mm (5.12 in) from the upper end of the fins | |

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2) Install each part in the reverse order of removal.

Tightening torque:

Heater cooling unit: <Ref. to AC-6, HEATER AND COOLING UNIT, COMPONENT, General Description.>

Blower motor unit: <Ref. to AC-10, BLOWER MOTOR UNIT, COMPONENT, General Description.>

3) Charge refrigerant. <Ref. to AC-27, PROCEDURE, Refrigerant Charging Procedure.>

C: INSPECTION

On- the vehicle inspection

PREPARATION TOOL:

SUBARU SELECT MONITOR III KIT

Circuit tester

Thermometer

1) Prepare the vehicle.

NOTE:

Check that the ambient temperature is 25 — 40°C (77 — 104°F) and humidity is 30% — 80%.

- Place the vehicle in the enclosed space such as maintenance room or in the shade and windless condition.
- Open all windows.

2) Set the vehicle to the following conditions.

Item	Condition
Engine	Idling
Air vent grille	Shutter: Fully open
A/C switch	OFF
Temperature control dial	LO (MAX COOL)
FRESH/RECIRC switch	CIRC
Air flow control dial or switch	VENT
Fan dial	Auto A/C model: 5/7 level
	Manual A/C model: 3/4 level

3) Using the Subaru Select Monitor, check «Evaporator Temperature».

NOTE:

For detailed procedures, refer to “PC application help for Subaru Select Monitor”.

(1) Idle the engine for 15 minutes, and then compare the air flow outlet temperature with «Evaporator Temperature».

NOTE:

Obtain the air flow outlet temperature by measuring the average temperature of center grille assembly and side grille assembly.

(2) Do the air flow outlet temperature and «Evaporator Temperature» differ by 3°C (5.4°F) or more?

- **Yes** → Go to step 4).
- **No** → Evaporator sensor is normal.

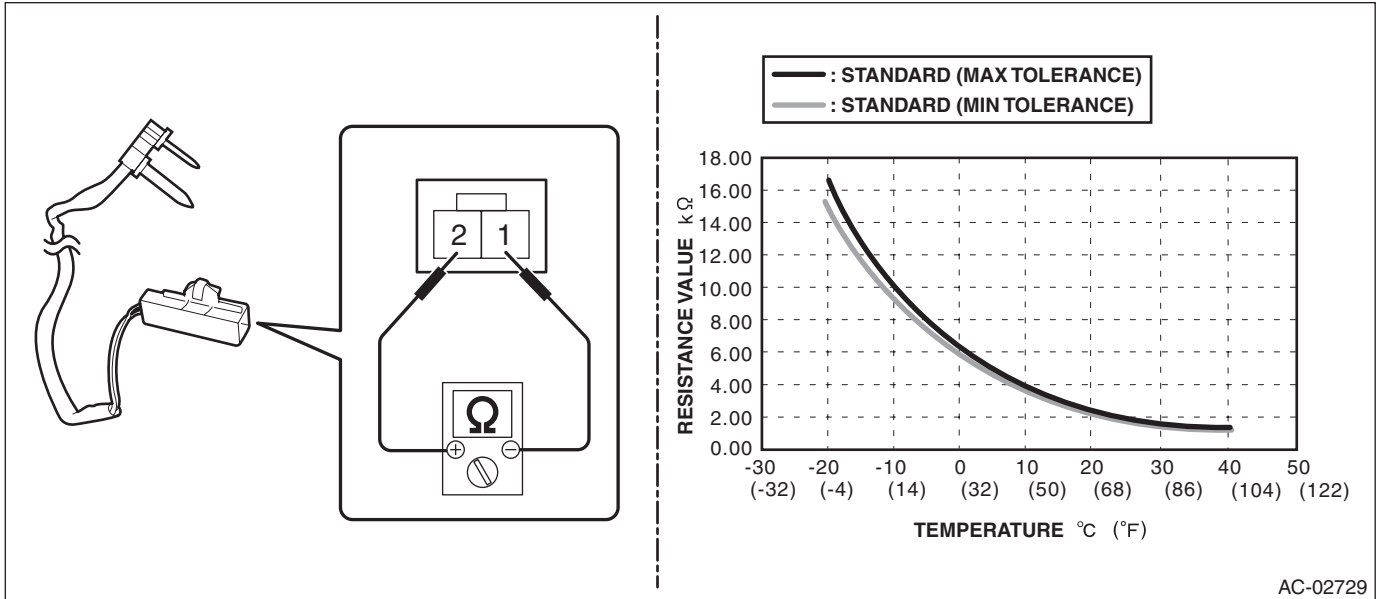
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4) Perform the inspection of evaporator sensor.

(1) Disconnect the evaporator sensor connector.

(2) Is the resistance between evaporator sensor terminals within the specification?



Terminal No.	Inspection conditions	Standard
1 — 2	-20°C	15.37 — 16.62 kΩ
	-15°C	12.09 — 12.87 kΩ
	-10°C	9.576 — 10.05 kΩ
	-5°C	7.636 — 7.899 kΩ
	0°C	6.132 — 6.256 kΩ
	5°C	4.891 — 5.057 kΩ
	10°C	3.928 — 4.113 kΩ
	15°C	3.174 — 3.366 kΩ
	20°C	2.581 — 2.77 kΩ
	25°C	2.111 — 2.292 kΩ
	30°C	1.737 — 1.907 kΩ
	35°C	1.437 — 1.595 kΩ
	40°C	1.195 — 1.34 kΩ

- **Yes** → Evaporator sensor is normal.
- **No** → Replace the evaporator sensor.