

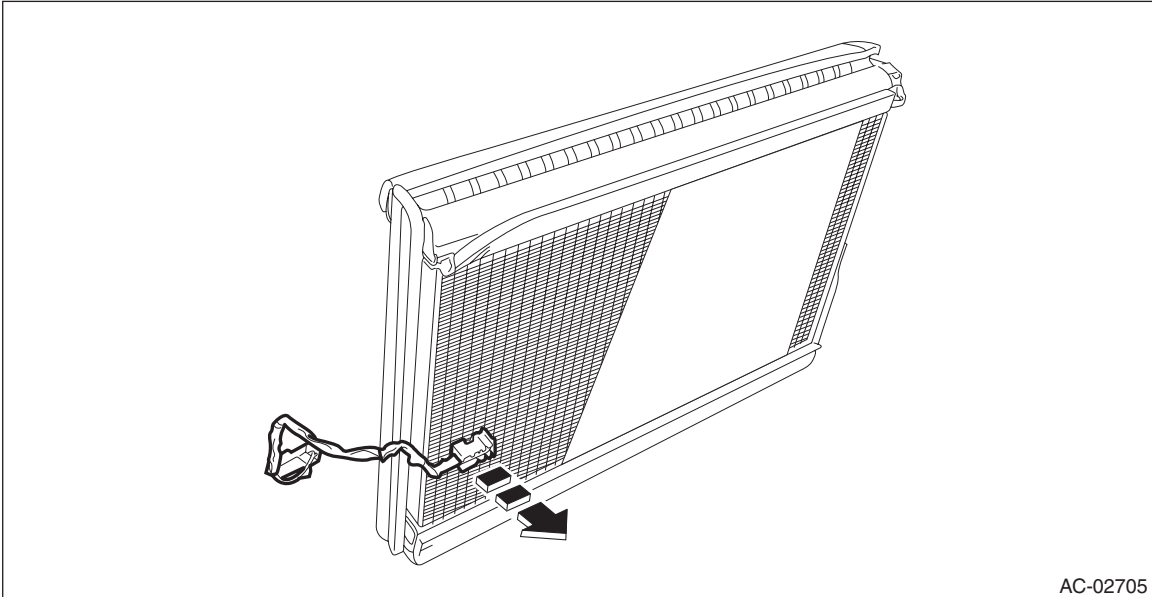
# Evaporator Sensor

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.



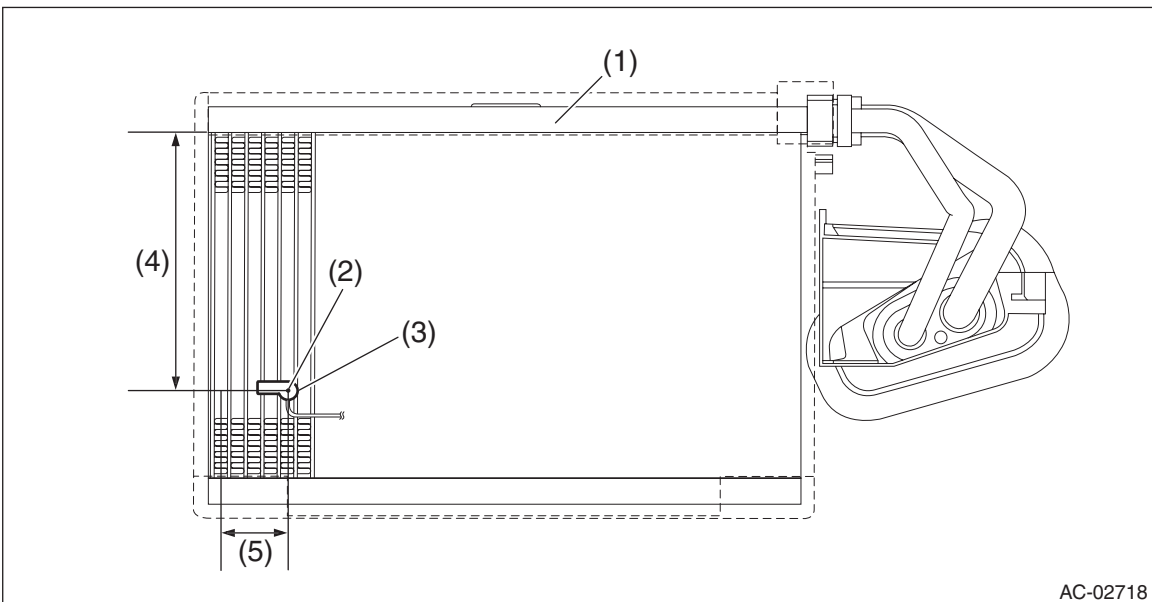
AC-02705

### 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 and hygrometer**

1) Prepare the vehicle.

#### **NOTE:**

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

- Place the vehicle in the workshop 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 is fully open.
A/C switch	OFF
Temperature adjustment 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:**

For outlet opening temperature, measure 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.

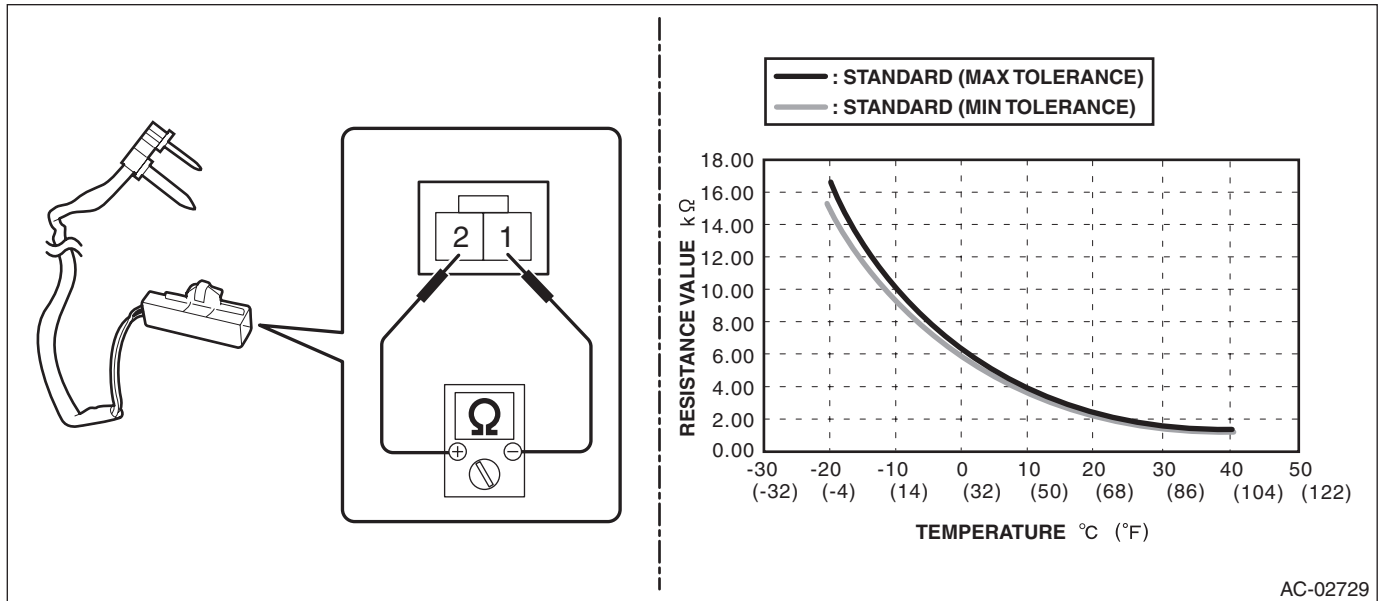
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4) Check the evaporator sensor.

(1) Disconnect the evaporator sensor connector.

(2) Is the resistance between terminals of evaporator sensor within standard value?



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.