

In-Vehicle Sensor (Auto A/C Model)

HVAC SYSTEM (HEATER, VENTILATOR AND A/C)

24. In-Vehicle Sensor (Auto A/C Model)

A: REMOVAL

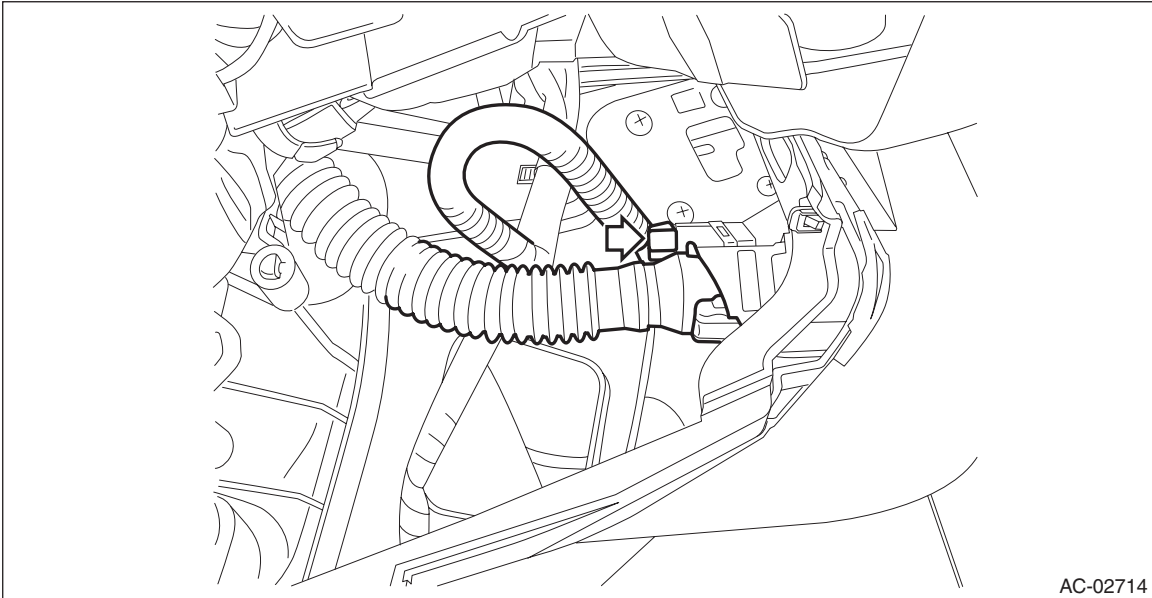
CAUTION:

Be careful not to damage the sensors and interior trims when removing.

1) Remove the knee airbag module. <Ref. to AB-44, REMOVAL, Knee Airbag Module.>

2) Remove the in-vehicle sensor.

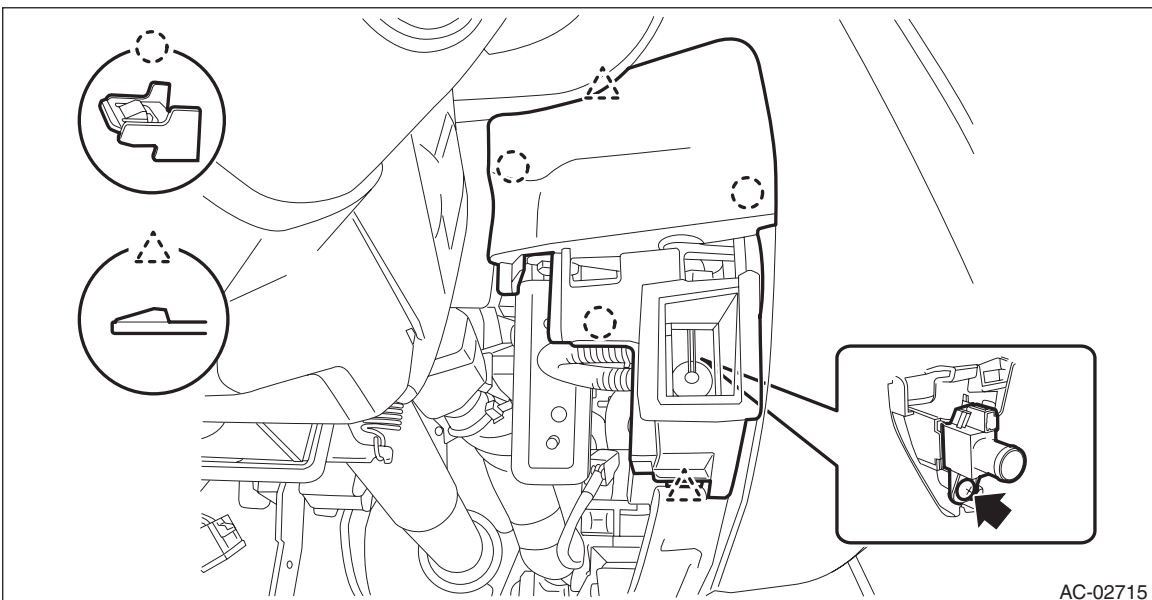
(1) Disconnect the connector, and remove the aspirator hose.



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(2) Release the claws and remove the cover switch - starter.

(3) Remove the screw and remove the in-vehicle sensor from the cover switch - starter.



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B: INSTALLATION

Install each part in the reverse order of removal.

NOTE:

Refer to "INSTALLATION" of "Knee Airbag Module". <Ref. to AB-46, INSTALLATION, Knee Airbag Module.>

Tightening torque:

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

Engine control module (ECM): 7.5 N·m (0.76 kgf·m, 5.5 ft·lb)

C: INSPECTION

On- the vehicle inspection

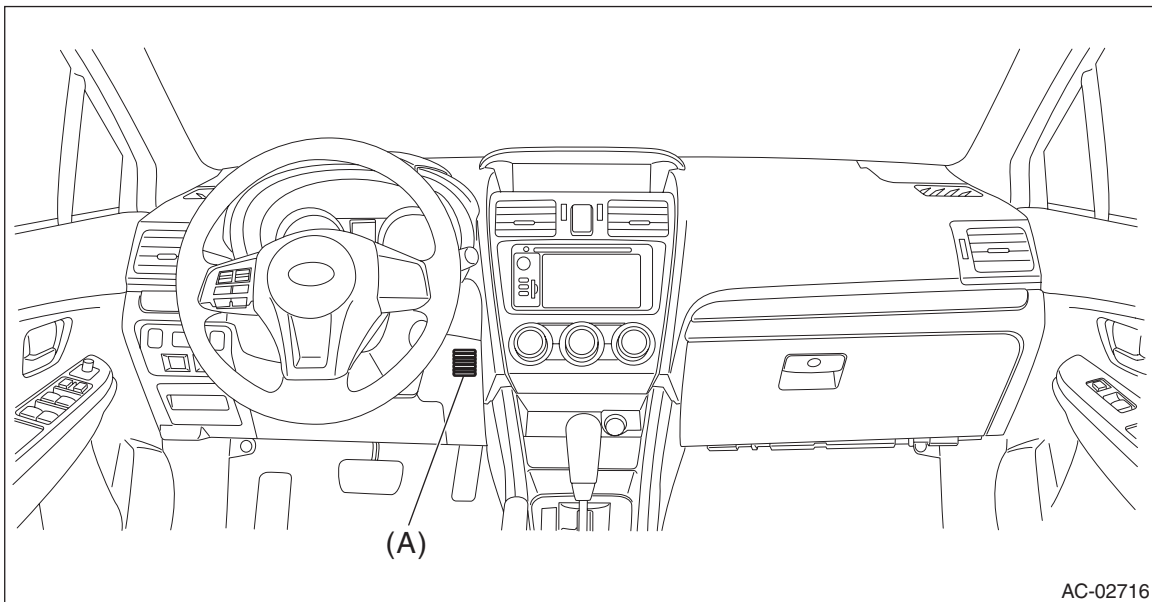
PREPARATION TOOL:

Circuit tester

1) Set the vehicle to the following conditions.

| Item | Condition |
|---------------------------------|--------------|
| Ignition switch | ON |
| A/C switch | ON |
| Temperature control dial | HI (MAX HOT) |
| Air flow control dial or switch | DEF |
| Fan dial | HI (MAX) |

2) Check the suction port (A) for in-vehicle sensor of the cover assembly - instrument panel LWR driver INN.



(1) Put a strip of paper close to the front side of suction port (A).

(2) Can you see that the paper moves toward the port and that the air is sucked into the port?

CAUTION:

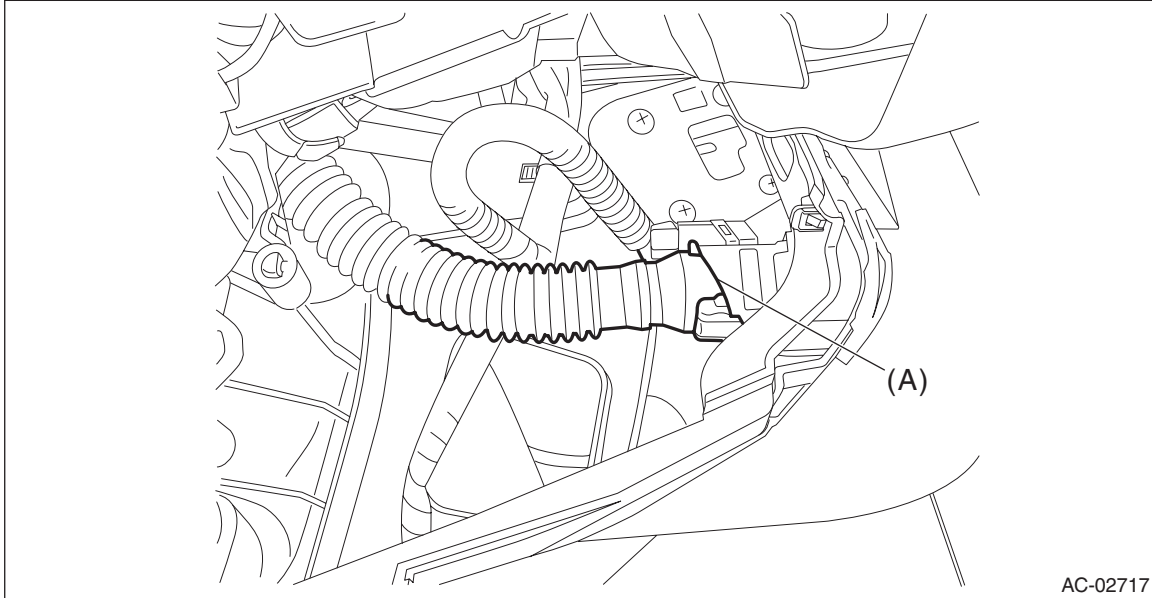
Be careful not to let the paper get sucked into the port.

- **Yes** → Go to step 5).
- **No** → Go to step 3).

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3) Remove the cover assembly - instrument panel LWR driver INN, and check the aspirator hose (A).



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(1) Is the aspirator hose on both sides of case and sensor disengaged?

(2) Is the aspirator hose deformed or cracked?

- **No** → Go to step 4).
- **Yes** → Repair or replace the aspirator hose, if necessary.

4) Check if there is anything that affects sensing, around the in-vehicle sensor.

(1) Is the in-vehicle sensor hole blocked?

(2) Is there any part (audio or navigation, etc.) that produces heat around the in-vehicle sensor?

- **No** → Go to step 5).
- **Yes** → Remove everything that affects sensing.

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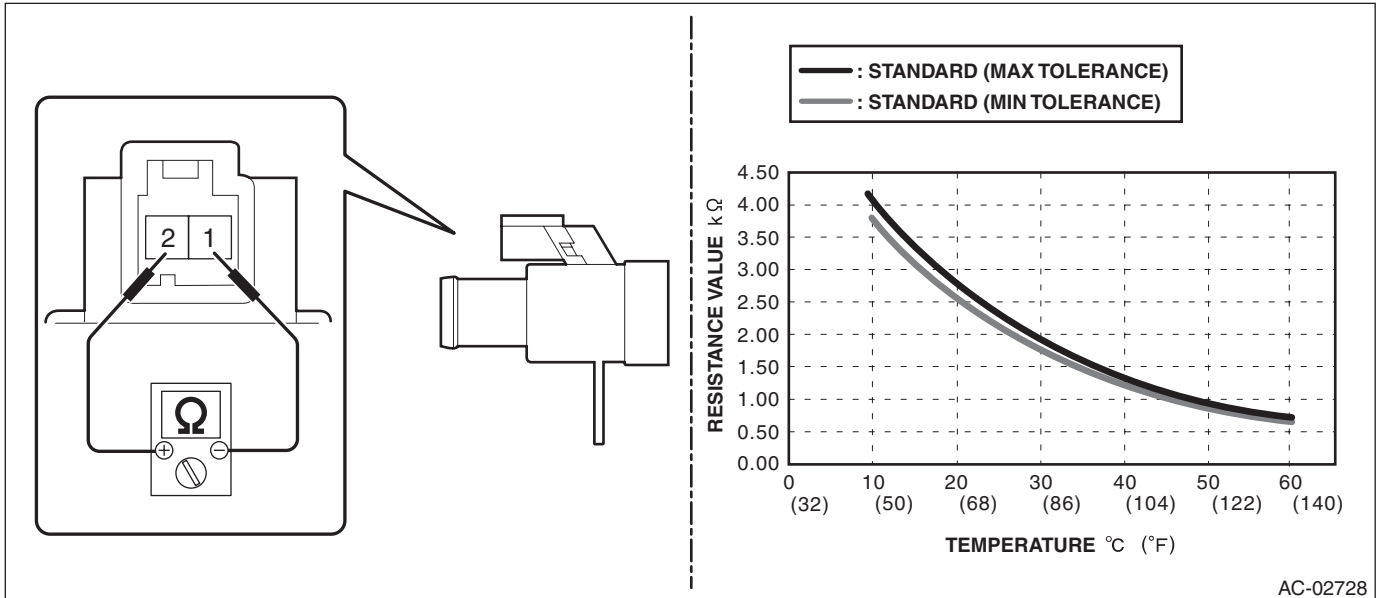
5) Perform a unit inspection of in-vehicle sensor.

(1) Disconnect the in-vehicle sensor connector.

(2) Is the resistance between in-vehicle sensor terminals within the specification?

CAUTION:

During inspection, be careful not to touch the sensor end in order to avoid misjudgment due to body temperature.



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| Terminal No. | Inspection conditions | Standard |
|--------------|-----------------------|--------------------|
| 1 — 2 | 10°C | 3.772 — 4.101 kΩ |
| | 15°C | 3.096 — 3.338 kΩ |
| | 20°C | 2.556 — 2.734 kΩ |
| | 25°C | 2.121 — 2.251 kΩ |
| | 30°C | 1.756 — 1.878 kΩ |
| | 35°C | 1.462 — 1.574 kΩ |
| | 40°C | 1.223 — 1.326 kΩ |
| | 45°C | 1.028 — 1.122 kΩ |
| | 50°C | 0.868 — 0.9542 kΩ |
| | 55°C | 0.7363 — 0.8147 kΩ |
| | 60°C | 0.6273 — 0.6984 kΩ |

- **Yes** → The in-vehicle sensor is normal.
- **No** → Replace the in-vehicle sensor.