

In-Vehicle Sensor (Auto A/C Model)

HVAC SYSTEM (HEATER, VENTILATOR AND A/C)

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

A: REMOVAL

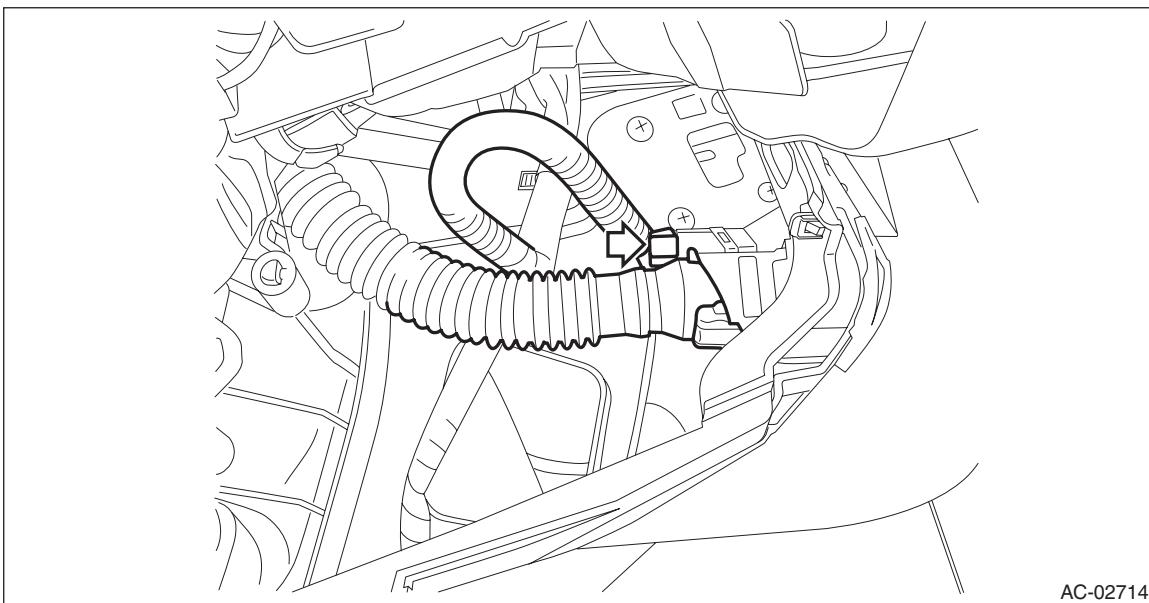
CAUTION:

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

1) Remove the instrument panel lower cover and knee airbag module. <Ref. to AB-41, REMOVAL, Knee Airbag Module.>

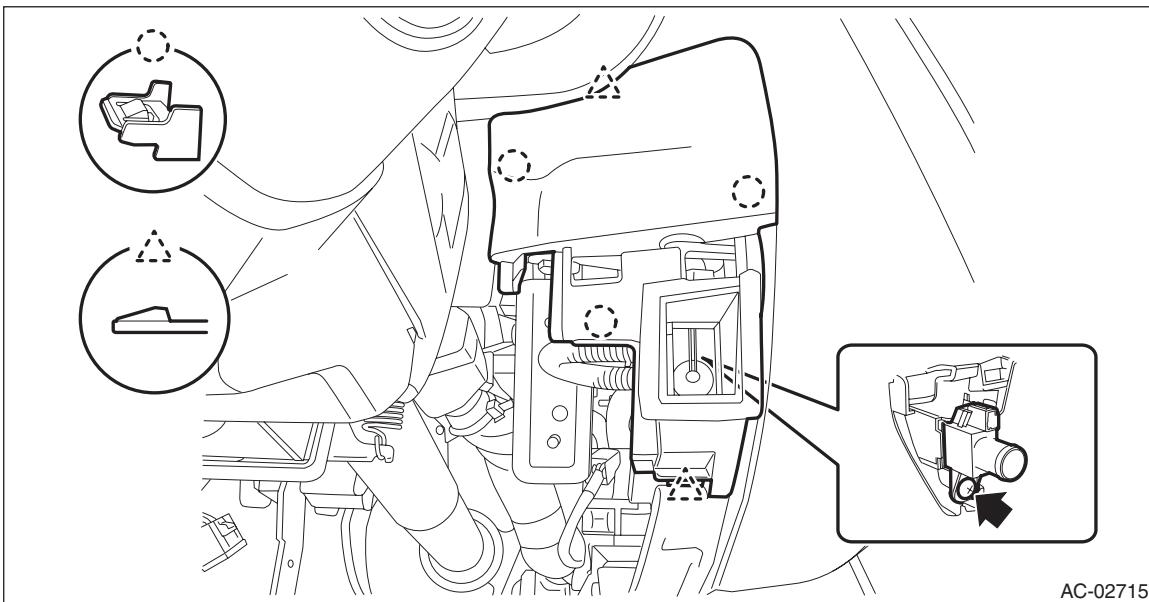
2) Remove the in-vehicle sensor.

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



(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.



B: INSTALLATION

Install each part in the reverse order of removal.

NOTE:

Refer to "INSTALLATION" of "Knee Airbag Module". <Ref. to AB-43, 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

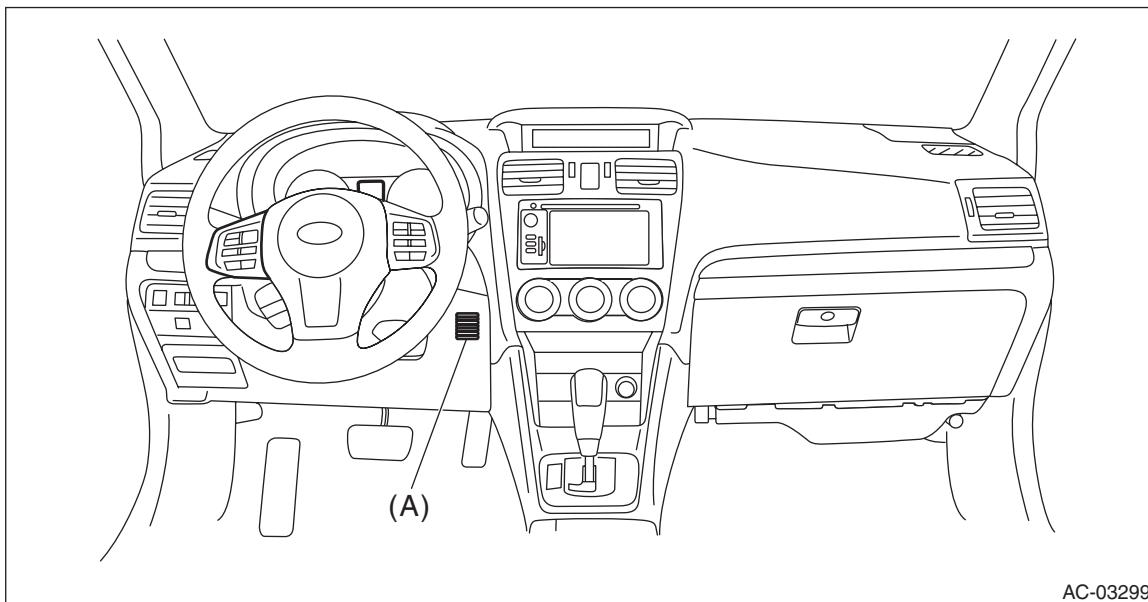
Preparation tool:

Circuit tester

1) Set the vehicle to the following conditions.

| Item | Condition |
|---------------------------------|--------------|
| Ignition switch | ON |
| A/C switch | ON |
| Temperature adjustment 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 the suction port (A).

(2) Can you see the paper moving towards the port and the air being sucked into the port?

CAUTION:

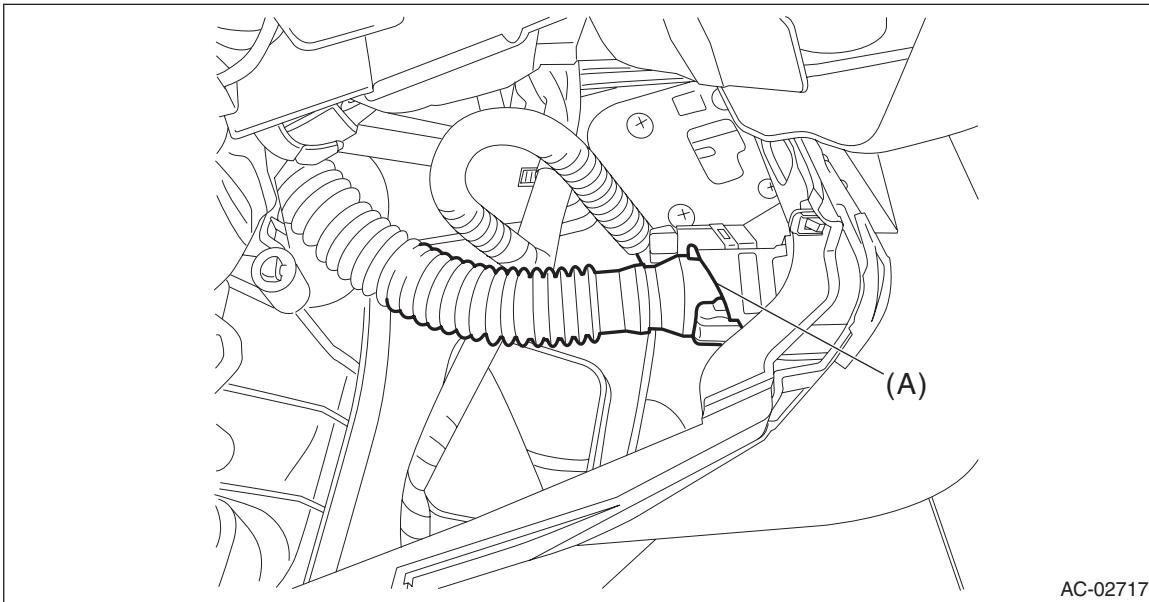
Be careful not to let the paper get sucked into the port.

- **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).



- (1) Are the aspirator hoses on both sides of the case and sensor connected securely?
(2) Is the aspirator hose free from any kinks or cracks?
 - **Yes** → Go to step 4).
 - **No** → 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 free from clogging?
 - (2) Is the peripheral area of in-vehicle sensor free from any heat-producing parts (such as audio, navigation system etc.)?
 - **Yes** → Go to step 5).
 - **No** → Remove everything that affects sensing.

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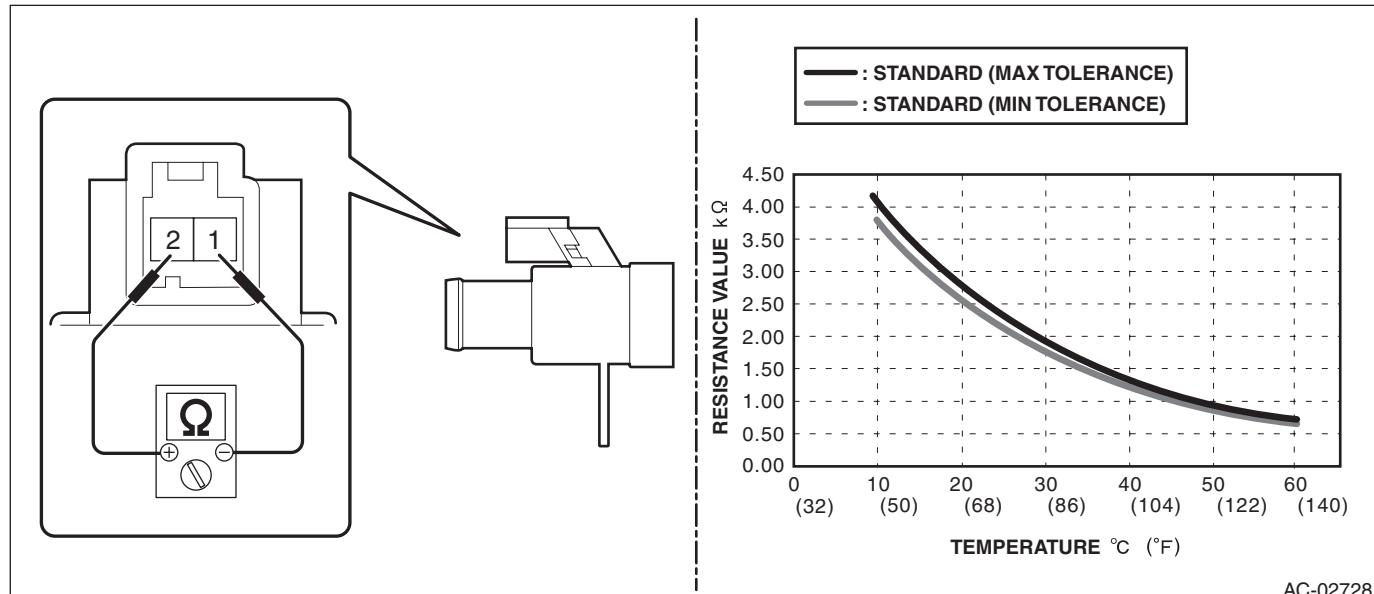
5) Perform the inspection of in-vehicle sensor unit.

(1) Disconnect the in-vehicle sensor connector.

(2) Is the resistance between terminals of in-vehicle sensor within standard value?

CAUTION:

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



AC-02728

| 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.