

In-Vehicle Sensor (Auto A/C Model)

HVAC SYSTEM (HEATER, VENTILATOR AND A/C)

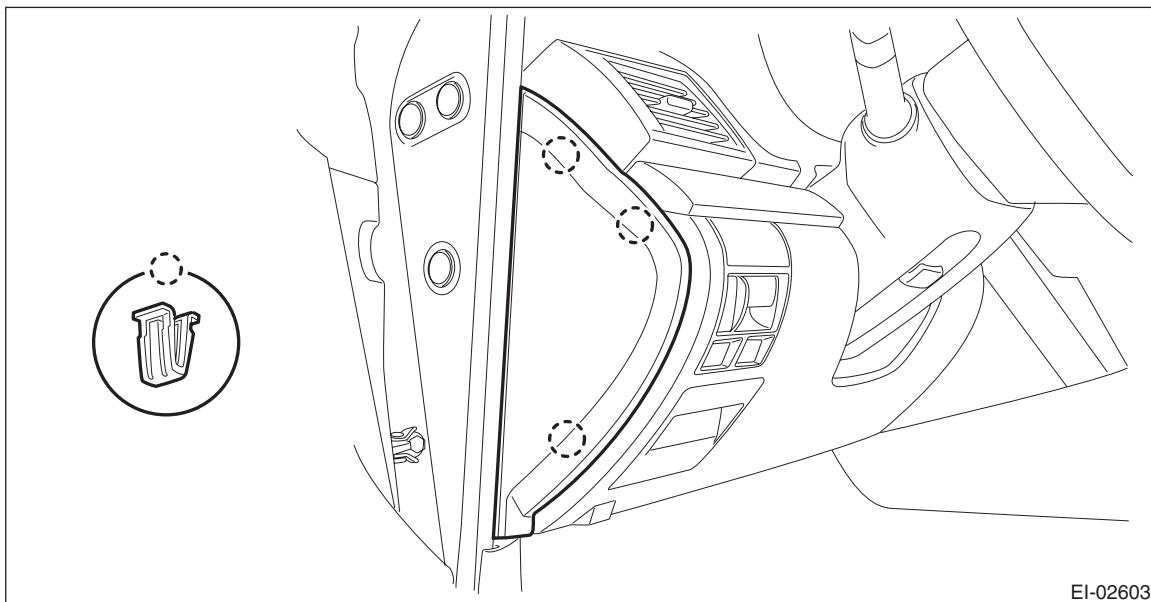
25. In-Vehicle Sensor (Auto A/C Model)

A: REMOVAL

CAUTION:

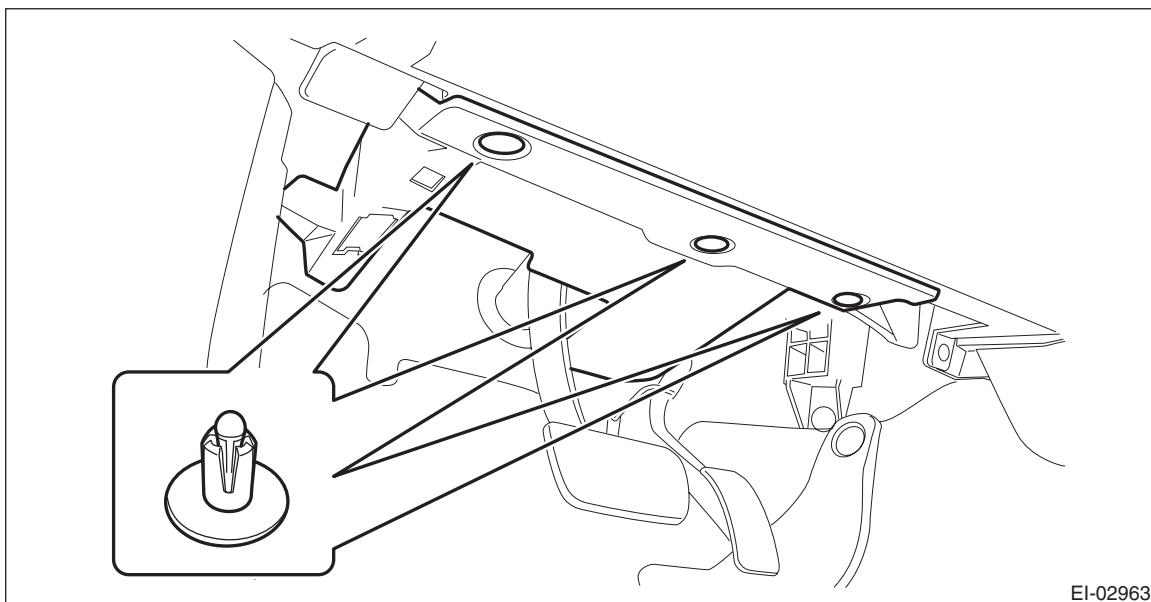
Be careful not to damage the sensors and interior trims when removing.

- 1) Disconnect the ground cable from battery.
- 2) Remove the clips, and remove the instrument panel side cover LH.



- 3) Remove the instrument panel lower cover.

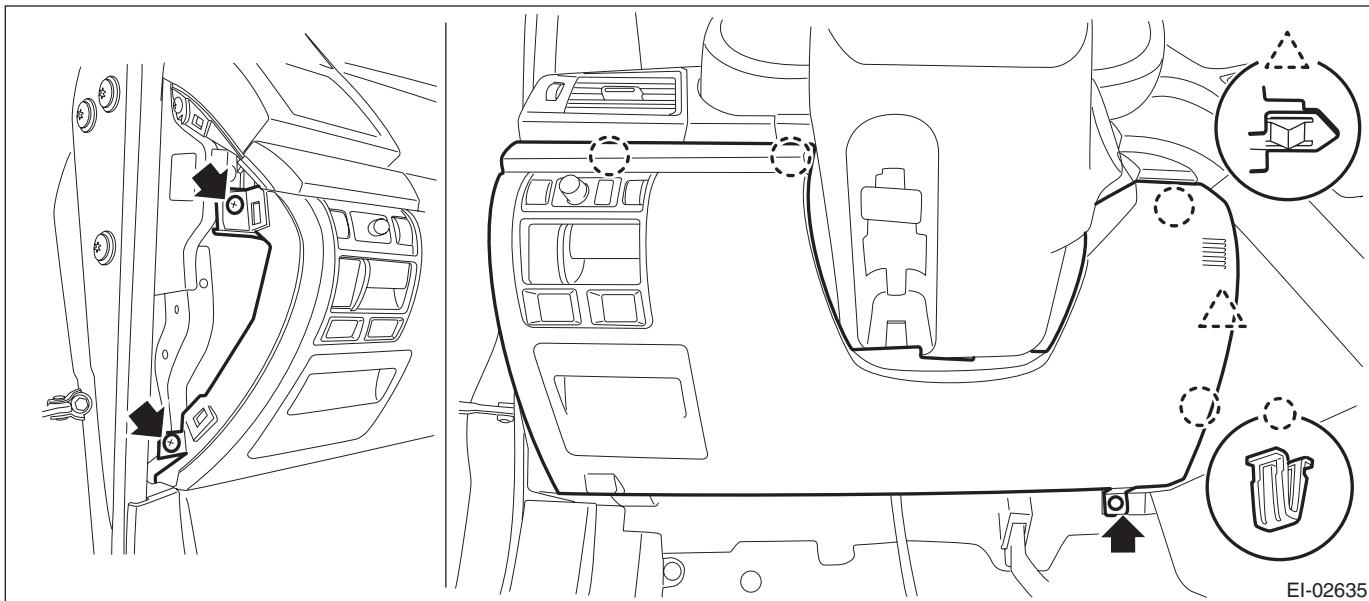
- (1) Remove the clip.
- (2) Remove the data link connector, and remove the instrument panel lower cover under.



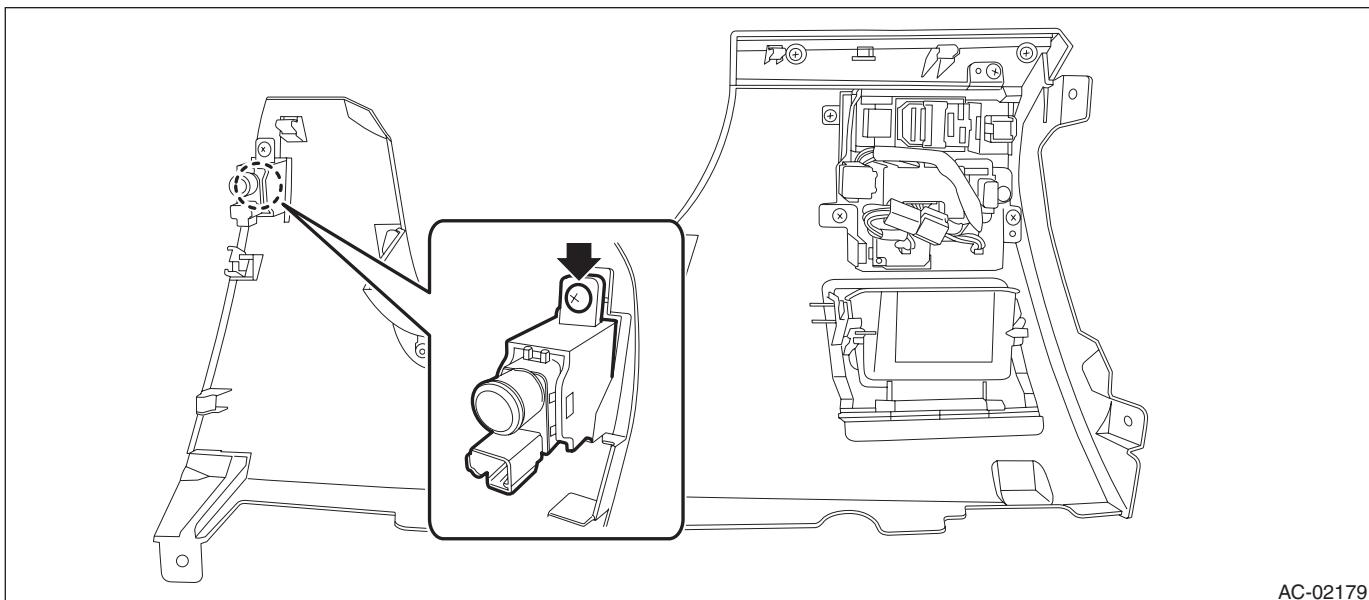
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(3) Remove the screws and clips and release the claws, and remove the instrument panel lower cover while disconnecting the harness connectors.



4) Remove the screw and remove the in-vehicle sensor from the instrument lower cover.



B: INSTALLATION

Install each part in the reverse order of removal.

C: INSPECTION

Preparation tool:

Circuit tester

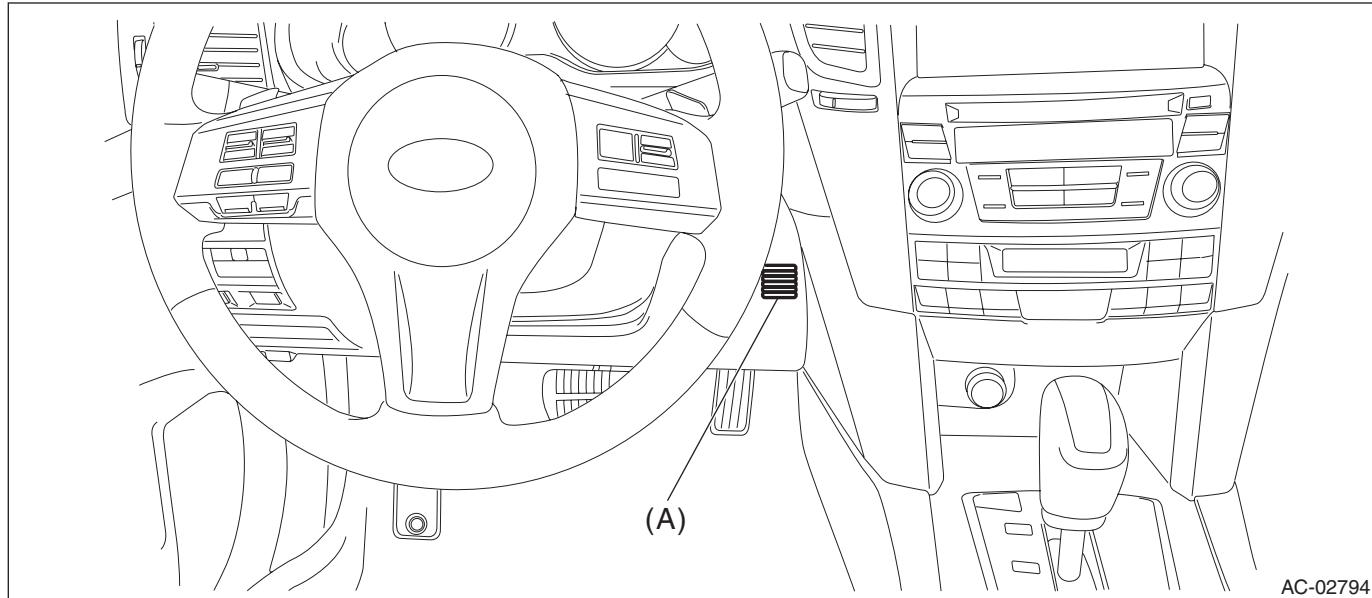
1) Set the vehicle to the following conditions.

Item	Condition
Ignition switch	ON
AC switch	ON
Temperature control switch or dial	HI (MAX HOT)
Air flow control switch	DEF
Fan switch or dial	HI (MAX)

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2) Check the suction port (A) for in-vehicle sensor provided on the instrument panel lower cover.



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

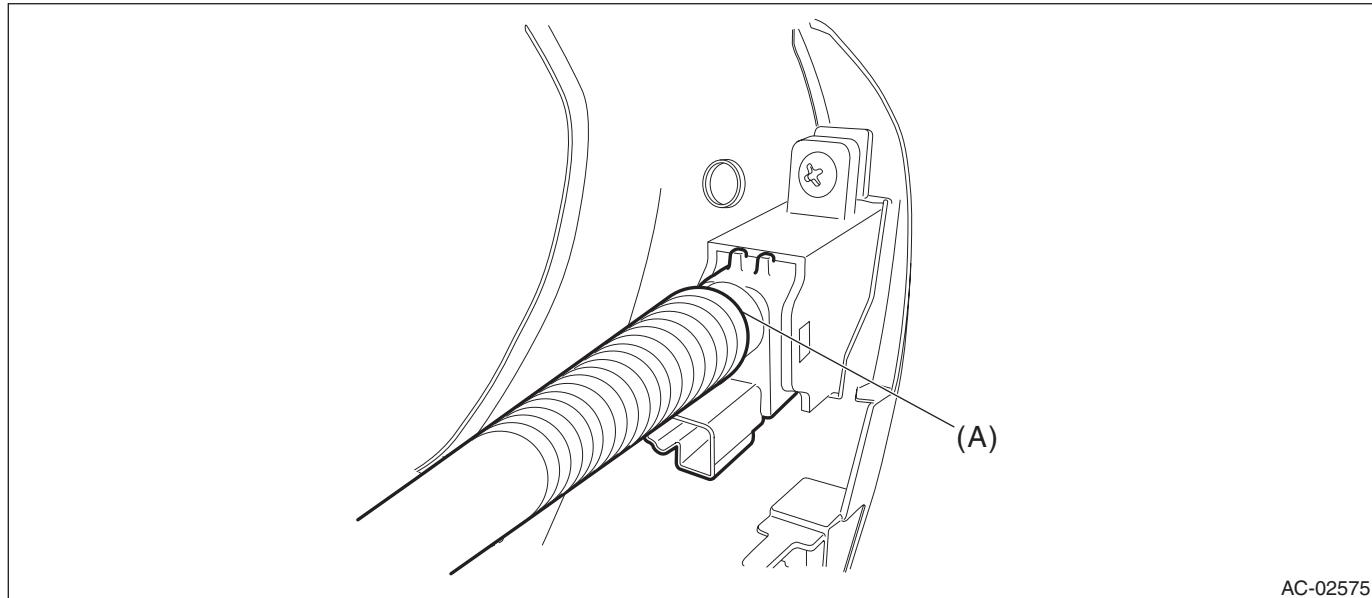
(2) Can you see the paper moving towards the port and the air being sucked into the port?

CAUTION:

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

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

3) Remove the instrument panel lower cover, and check the aspirator hose (A).



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

(2) Are there any kinks or cracks on the aspirator hose?

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

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

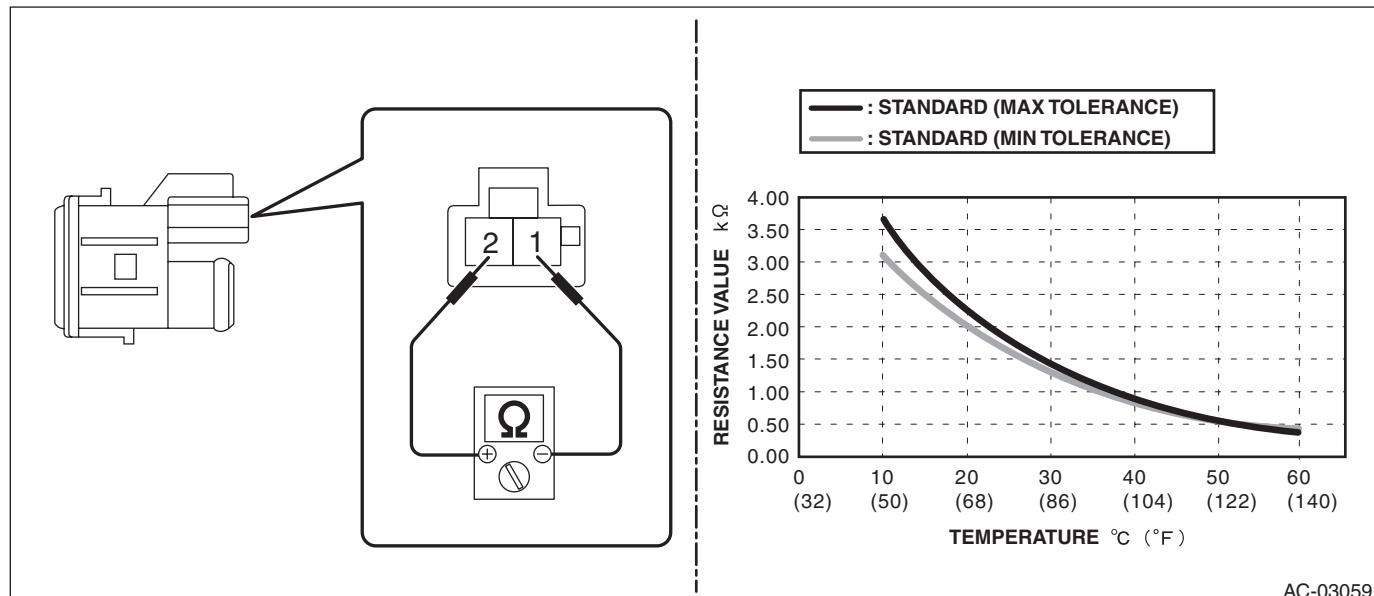
- (1) Is the in-vehicle sensor hole plugged?
- (2) Is there any heat-producing part (audio or navigation system, etc.) around in-vehicle sensor?
- **No** → Go to step 5).
- **Yes** → Remove everything that affects sensing.

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.



Terminal No.	Inspection conditions	Standard
1 — 2	10°C	3.12 — 3.70 kΩ
	15°C	2.49 — 2.88 kΩ
	20°C	2.00 — 2.26 kΩ
	25°C	1.62 — 1.79 kΩ
	30°C	1.32 — 1.42 kΩ
	35°C	1.08 — 1.14 kΩ
	40°C	0.89 — 0.92 kΩ
	45°C	0.74 — 0.75 kΩ
	50°C	0.62 — 0.62 kΩ
	55°C	0.52 — 0.51 kΩ
	60°C	0.44 — 0.42 kΩ

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