2. General Description

A: CAUTION

1) Never connect the battery in reverse polarity.
The Auto A/C control module will be destroyed instantly.
2) Do not disconnect the battery cables while the engine is running.2
A large counter electromotive force will be generated in the alternator, and this voltage may damage electronic parts such as A/C control module.
3) Before disconnecting the connectors of each sensor and the A/C control module, be sure to turn off the ignition switch.
Otherwise, the Auto A/C control module may be damaged.
4) Every Auto A/C-related part is a precision part. Do not drop them.
5) Airbag system wiring harness is routed near the A/C control panel (A/C control module) and junction box.

CAUTION:
• All airbag system wiring harness and connectors are colored yellow. Do not use electrical test equipment on these circuits.
• Be careful not to damage the airbag system wiring harness when servicing the A/C control panel (A/C control module) and junction box.

B: INSPECTION

Before performing diagnosis, check the following items which might affect A/C system problems.

1. BATTERY

1) Measure the battery voltage and specific gravity of electrolyte.

Standard voltage: 12 V

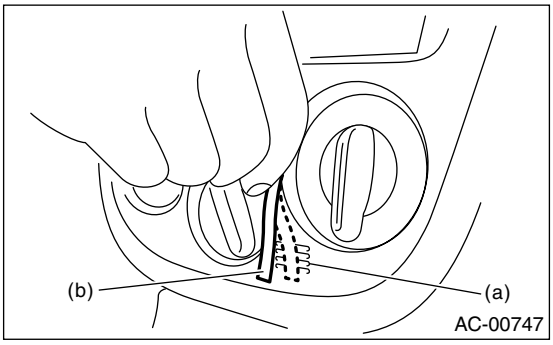
Specific gravity: Above 1.260

2) Check the condition of the fuses for A/C system power supply and other fuses.
3) Check the condition of the harnesses and harness connectors connection.

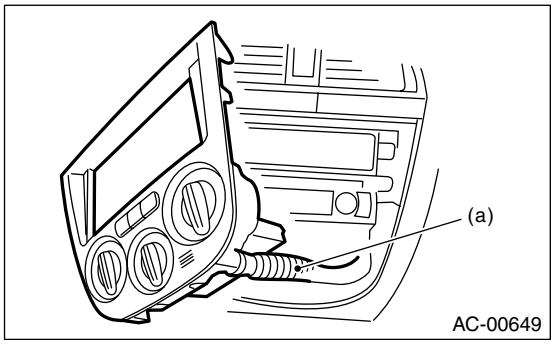
2. ASPIRATOR HOSE

1) Turn the ignition switch to ON and push the A/C switch.
2) Turn the temperature control dial to maximum hot position.
3) Turn the air flow control dial to “DEF” position.
4) Turn the fan speed control dial to 4th position.
5) Firmly hold a thin paper (b) in front of the in-vehicle sensor suction port (a) for the auto A/C control unit and check that the paper moves towards the port indicating that air is being sucked into the port.

NOTE:
Ensure the paper does not get sucked into the port.

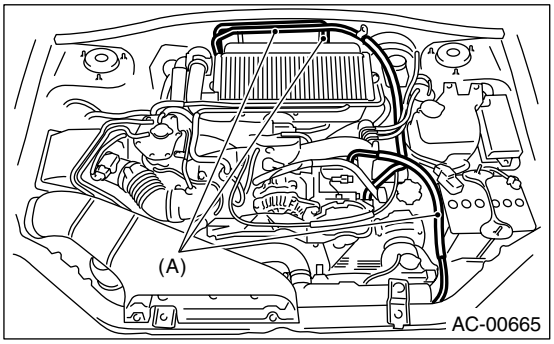


6) If the paper does not move at all, remove the auto A/C control unit <Ref. to AC-31, REMOVAL, Control Unit (Auto A/C Model).> and check for improper connection of the aspirator hose (a), auto A/C control unit and heater unit, and secure as necessary.



3. REFRIGERANT LINE

Check the connection for refrigerant line (A) and high-pressure pipe.



4. CONTROL LINKAGE

1) Check the state of mode door linkage.
2) Check the state of air mix door linkage.
3) Check the state of intake door linkage.

5. CONTROL SWITCHES

Start and warm up the engine completely.
1) Inspection using switches.

No.	Point to check	Switch operation	Judgement standard
1	Fan speed control dial	OFF position	A/C switch LED goes out. • Fan speed: OFF • Compressor: OFF
		Fan speed control dial 1st → 2nd → 3rd → 4th	Fan speed changes 1st → 2nd → 3rd → 4th
2	Fan speed control dial and temperature control dial	A. Fan speed control dial auto position. B. Temperature control dial maximum cold position	• Outlet air: Cool • Fan speed: 4th • Compressor: ON
		C. Turn the temperature control dial from maximum cold position to maximum hot position gradually.	• Outlet air: Cool → Hot • Fan speed: AUTO • Compressor: ON
		D. Temperature control dial maximum hot position	• Outlet air: Hot • Fan speed: 4th • Compressor: ON
3	Air flow control dial	Air flow control dial VENT → BI-LEVEL → HEAT → DEF/HEAT → DEF	Air flow outlet changes from VENT → BI-LEVEL → HEAT → DEF/HEAT → DEF.
4	FRESH/RECIRC switch	FRESH/RECIRC switch ON	Changes from RECIRC → FRESH, or FRESH → RECIRC.

2) Compressor operation inspection

No.	Point to check	Switch operation	Judgement standard
1	Compressor	A. A/C switch ON B. Fan speed control dial 1st-4th	Compressor: ON

3) Illumination control inspection

No.	Point to check	Switch operation	Judgement standard
1	Illumination	Lighting switch ON	Illumination light illuminates.