2. General Description

A: CAUTION

1) Never connect the battery in reverse polarity.
• Doing so may immediately damage the A/C control module.
2) Do not disconnect the battery terminals while the engine is running.
• A large counter electromotive force will be generated in the generator, and this voltage may damage electronic parts such as A/C control module etc.
3) Before disconnecting the connectors of sensors and the A/C control module, be sure to turn off the ignition switch.
• A/C control module may be damaged.
4) Every 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 and junction box.

CAUTION:
• Do not use electrical test equipment on the airbag system wiring harness and connector.
• Be careful not to damage the airbag system wiring harness when servicing the A/C control panel and junction box.

B: INSPECTION

Before performing the diagnosis, check the following items which may cause problems in the A/C system.

1. BATTERY

Check the battery. <Ref. to SC(H4SO)-25, INSPECTION, Battery.>

NOTE:
If the battery voltage does not reach the specified value, recharge or replace the battery.

2. RADIATOR FAN

Check the radiator fan. <Ref. to CO(H4SO)-8, INSPECTION, Radiator Fan System.> <Ref. to CO(H4DOTC)-8, INSPECTION, Radiator Fan System.> <Ref. to CO(H6DO)-9, INSPECTION, Radiator Fan System.>

NOTE:
If the radiator fan does not operate, repair the radiator fan.

3. ENGINE COOLANT

Check that the reservoir tank contains engine coolant.

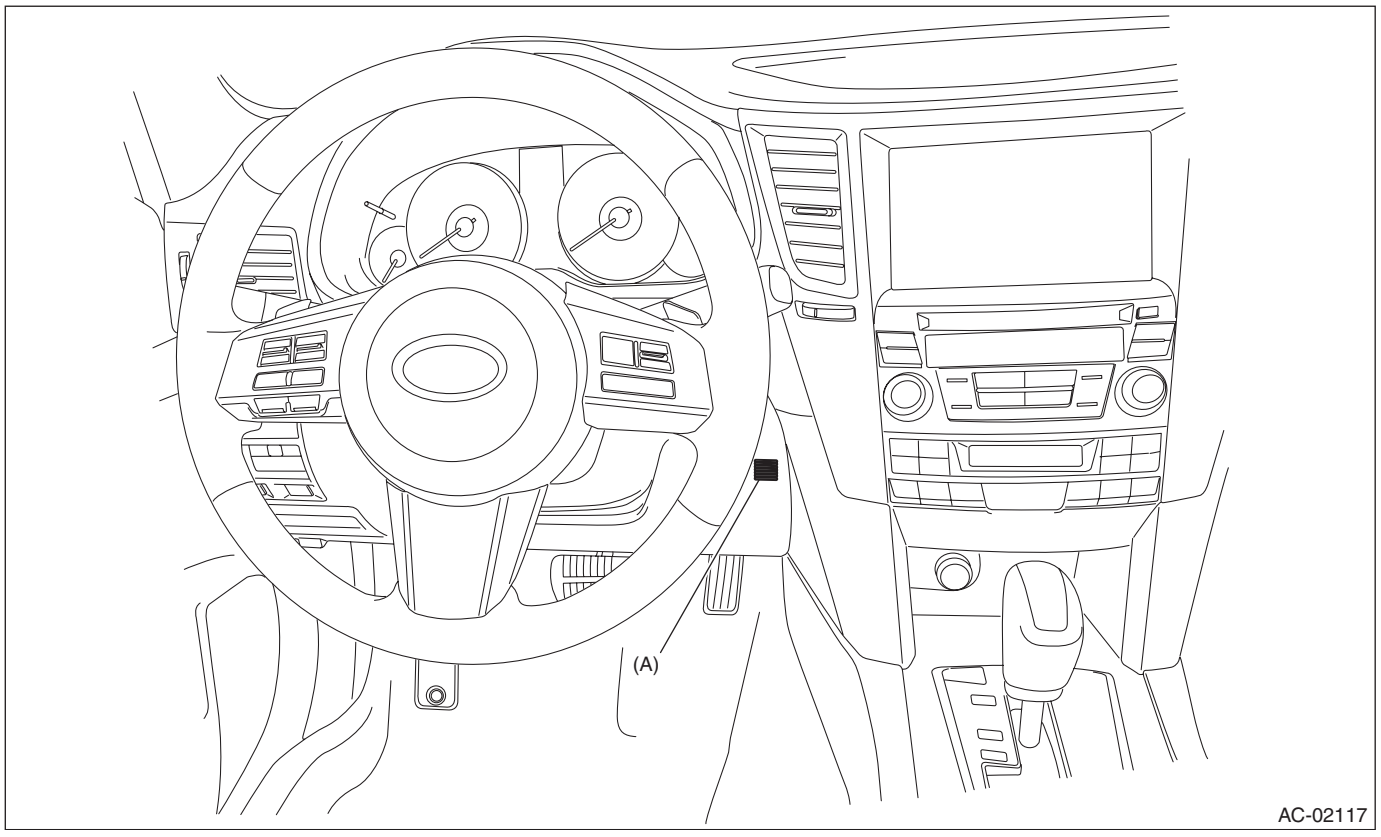
The coolant is between LOW and FULL marks of the reservoir tank.

NOTE:
If the engine coolant is low, add engine coolant. <Ref. to CO(H4SO)-13, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.> <Ref. to CO(H4DOTC)-14, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.> <Ref. to CO(H6DO)-12, FILLING OF ENGINE COOLANT, REPLACEMENT, Engine Coolant.>

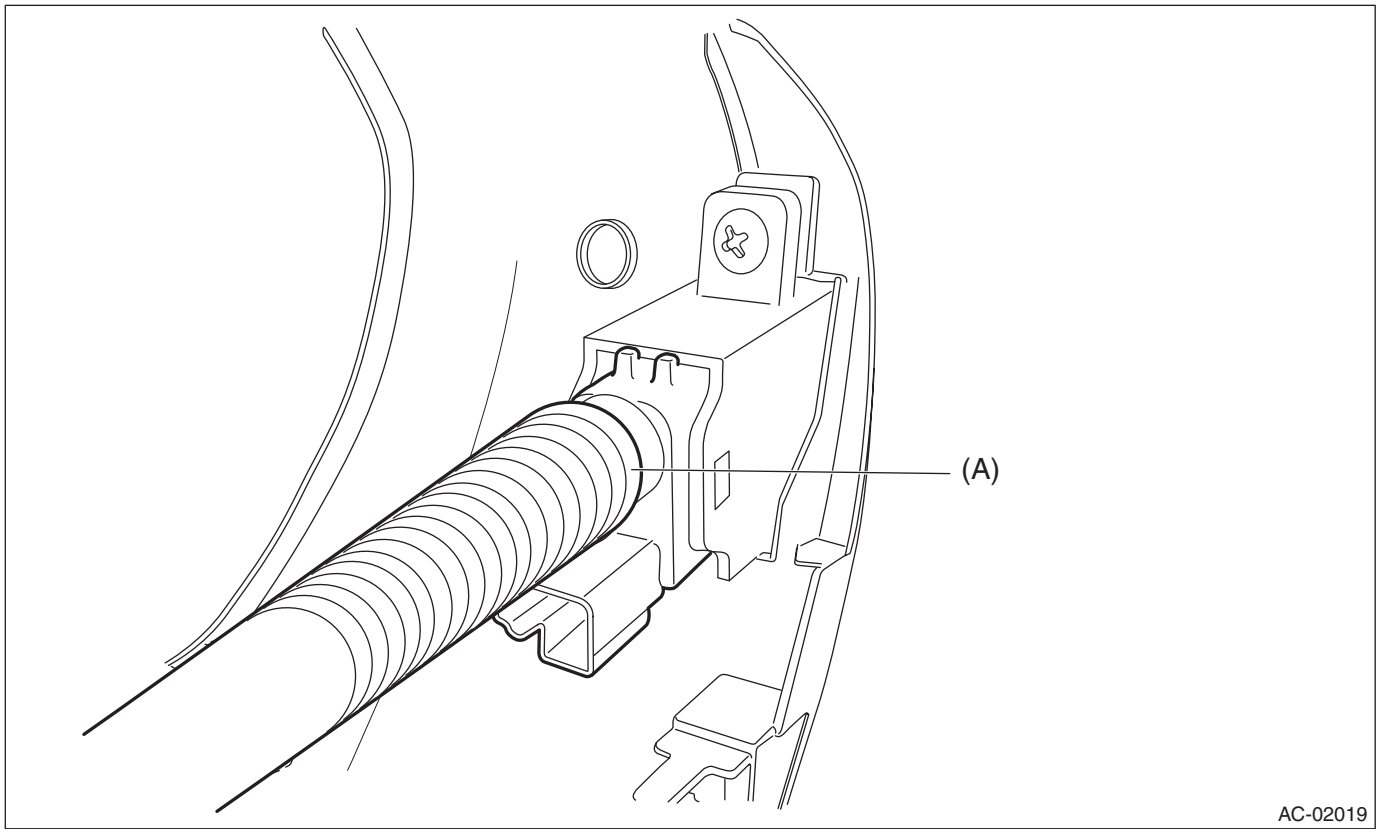
4. ASPIRATOR HOSE

1) Turn the ignition switch to ON, and press the A/C switch.
2) Turn the temperature control switch to maximum hot position.
3) Set the blow vents to the DEF position.
4) Turn the fan switch to “MAX” position.
5) Put a strip of paper close to the front side of in-vehicle sensor suction port (A) located in the instrument panel lower cover, and check that air is being sucked into the port by seeing the paper moving towards the port.

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

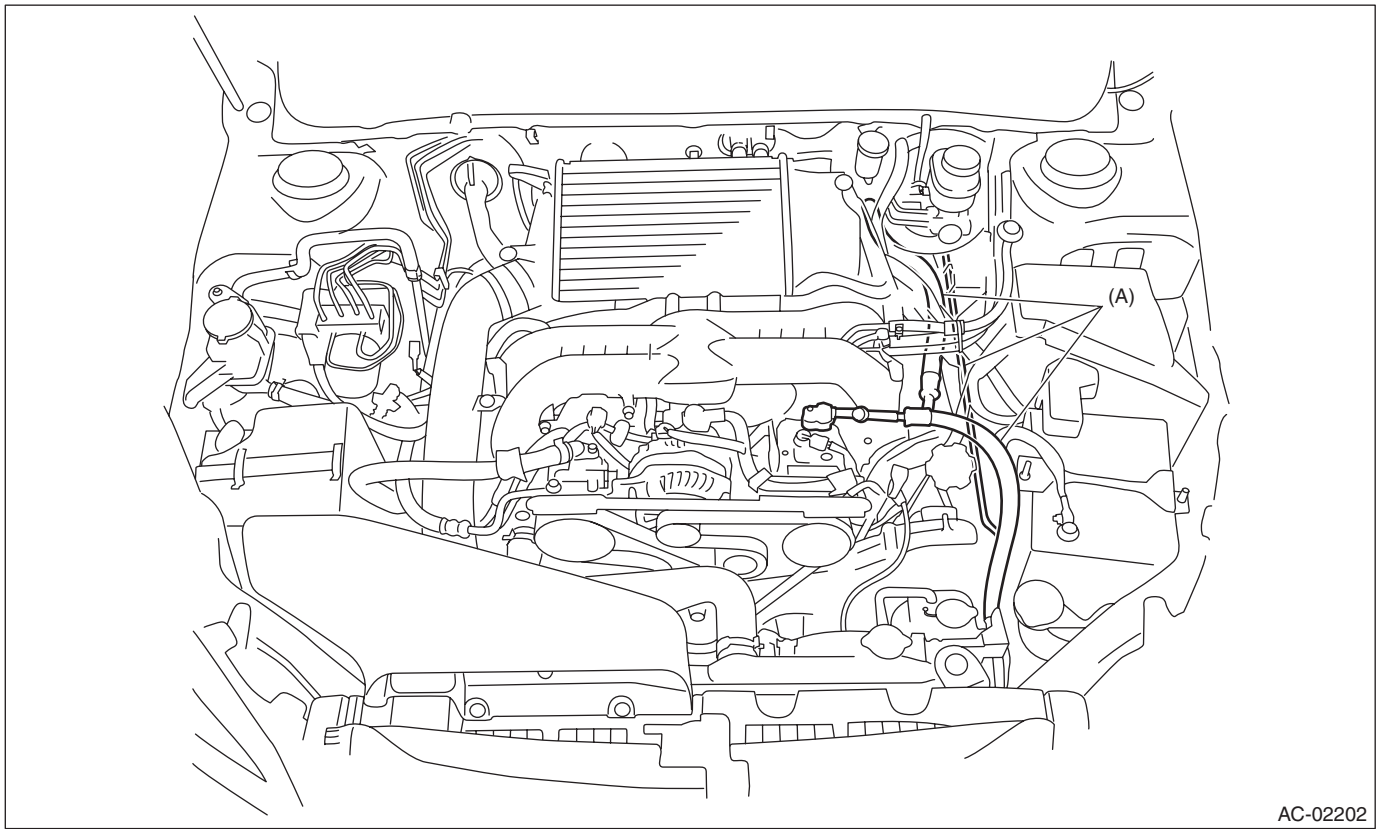


6) If the paper does not move at all, remove the instrument panel lower cover <Ref. to EI-63, REMOVAL, Instrument Panel Lower Cover.> and check for poor connection of the aspirator hose (A), in-vehicle sensor and heater unit, and repair them if necessary.



5. A/C LINE

Check the connection for A/C line (A) and lower side high-pressure pipe.



6. 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.

7. CONTROL SWITCHES

Start the engine and warm up completely.

1) Inspection using switches

No.	Point to check	Switch operation	Judgment standard
1	OFF switch	Press the OFF switch.	Setting temperature display goes out. • Blower fan: OFF • Inlet opening: FRESH • Compressor: OFF
2	AUTO switch, driver's side temperature control switch, and passenger's side temperature control switch	1) Press the AUTO switch. 2) Press the temperature control switch to set to LO (maximum cool position).	FULL AUTO display illuminates. • Outlet air temperature: COOL • Blower fan: HI (AUTO) • Outlet opening: FACE • Inlet opening: AUTO • Compressor: AUTO
		3) Press the temperature control switch to change the setting from LO (maximum cool position) to HI.	• Outlet air temperature: COOL → HOT • Blower fan: AUTO • Outlet opening: FACE → B/L → FOOT • Inlet opening: AUTO • Compressor: AUTO
		4) Press the temperature control switch to set to HI (maximum hot position).	• Outlet air temperature: HOT • Blower fan: HI (AUTO) • Outlet opening: FOOT • Inlet opening: FRESH (AUTO) • Compressor: AUTO
3	Defroster switch	Press the defroster switch.	Defroster switch indicator illuminates. • Outlet air temperature: AUTO • Blower fan: AUTO • Outlet opening: DEF • Inlet opening: FRESH • Compressor: ON
4	FRESH/RECIRC switch	Press the FRESH/RECIRC switch.	Inlet opening switches RECIRC → FRESH or FRESH → RECIRC each time pressing the switch.
5	MODE switch	Press the MODE switch.	Outlet opening switches FACE → B/L → FOOT → F/D each time pressing the switch.
6	FAN switch	Press the FAN (+) switch.	Blower fan switches LO → M1 → M2 → M3 → M4 → HI each time pressing the switch.

2) Inspection of compressor operation

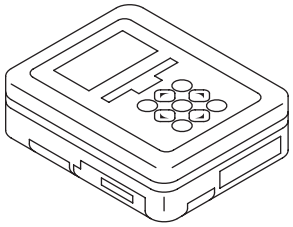
No.	Point to check	Switch operation	Judgment standard
1	Compressor	1) Turn the A/C switch to ON. 2) Set the FAN switch between LO and HI.	Compressor: ON

3) Inspection of illumination control

No.	Point to check	Switch operation	Judgment standard
1	Illumination	Turn the lighting switch to ON.	Illumination comes on.

C: PREPARATION TOOL

1. SPECIAL TOOL

ILLUSTRATION	TOOL NUMBER	DESCRIPTION	REMARKS
 ST1B022XU0	1B022XU0	SUBARU SELECT MONITOR III KIT	Used for troubleshooting the electrical system.

2. GENERAL TOOL

TOOL NAME	REMARKS
Circuit tester	Used for measuring resistance, voltage and current.