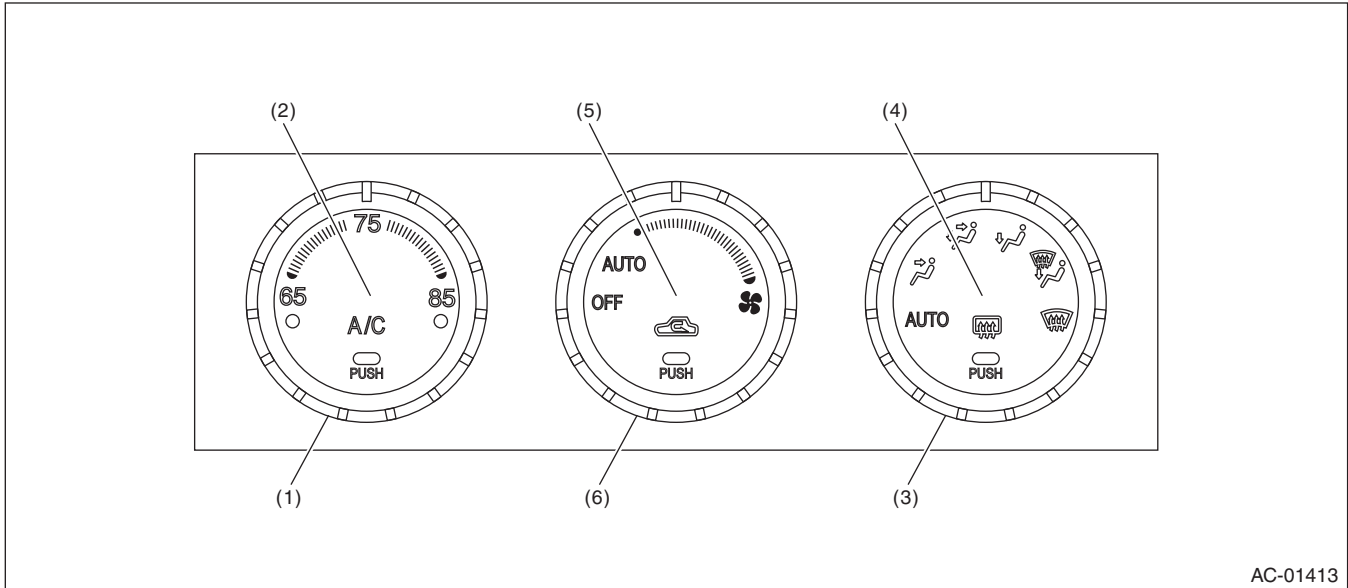


Diagnostic Chart for Self-diagnosis

HVAC SYSTEM (AUTO A/C) (DIAGNOSTICS)

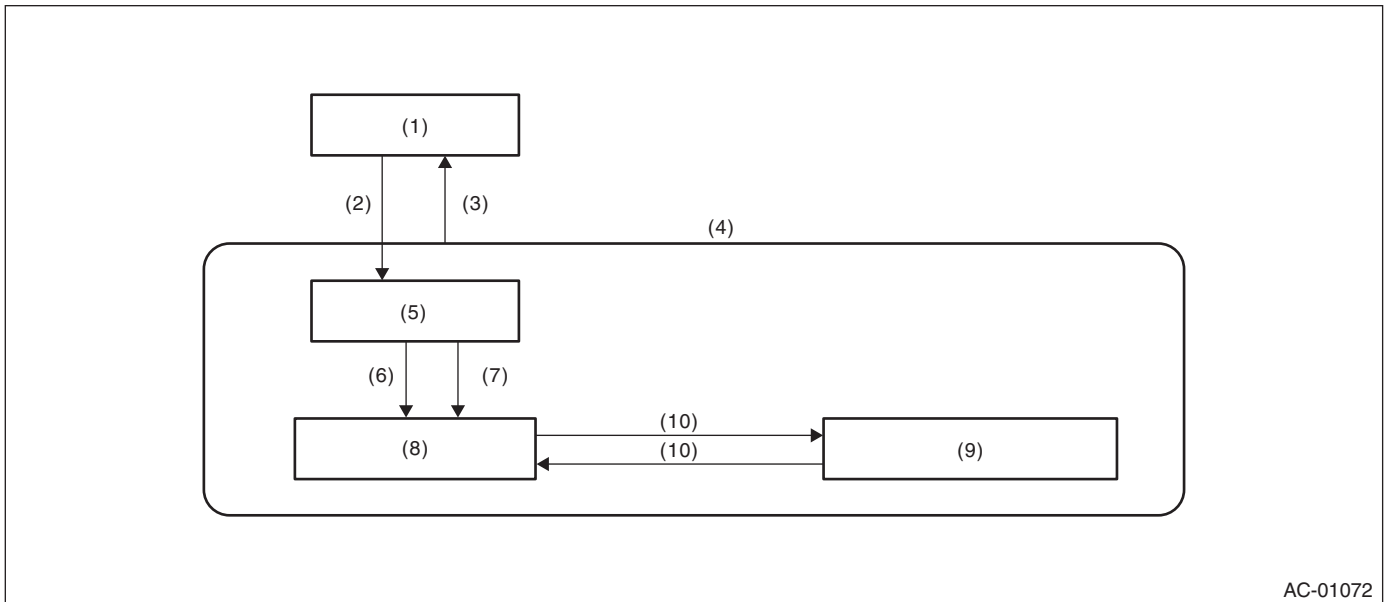
5. Diagnostic Chart for Self-diagnosis

A: OPERATION



AC-01413

- | | | |
|------------------------------|---------------------------|----------------------------|
| (1) Temperature control dial | (3) Air flow control dial | (5) FRESH/RECIRC switch |
| (2) A/C switch | (4) Rear defogger switch | (6) Fan speed control dial |



AC-01072

- | | | |
|---|--|--|
| (1) Normal operation | (3) Turn the fan speed control dial switch to the OFF position, or the ignition switch from ON to OFF. | (7) Press the rear defogger switch. |
| (2) Set the air flow control dial to the AUTO position, and the fan speed control dial to the AUTO position. Then, turn the ignition switch from OFF to ON while holding down the FRESH/RECIRC switch and the A/C switch. | (4) Self-diagnosis function | (8) Sensor check (Step operation) |
| (5) Display check | (6) After completing the display check (approximately 8 seconds) | (9) Output device operation (Step operation) |
| | | (10) Press the A/C switch. |

Diagnostic Chart for Self-diagnosis

HVAC SYSTEM (AUTO A/C) (DIAGNOSTICS)

Step	Check	Yes	No
1 SET SELF-DIAGNOSIS MODE BY OPERATING CONTROL PANEL. 1) Turn the ignition switch to OFF. 2) Set the air flow control dial to the AUTO position. 3) Set the fan speed control dial to the AUTO position. 4) Turn the ignition switch to ON while pressing the FRESH/RECIRC switch and the A/C switch. 5) The A/C control panel LED will blink.	Does the self-diagnosis function operate?	Go to step 2.	<Ref. to AC(diag)-12, A/C OR SELF-DIAGNOSIS SYSTEMS DO NOT OPERATE, Diagnostics for A/C System Malfunction.>
2 CHECK THE LIGHTING OF THE LED. Check whether the A/C control panel LED blinks. (Lighting and extinguishing repeated 8 times.)	Are all LEDs blinking?	Go to step 3.	Go to step 5.
3 SENSOR MALFUNCTION CHECK. 1) The A/C switch LED turns off and the sensor inspection is started, after the LED check is completed or when the rear defogger switch is pressed. 2) Switch the air flow control dial to check the sensors. 3) If there is no problem with the sensors, the FRESH/RECIRC switch LED will light, regardless of the position of the air flow control dial. NOTE: At this time, the rear defogger LED will light if there are previous failures. For current failures, it will turn off. It is possible to judge whether there is an open or short circuit by using the blinking patterns of the FRESH/RECIRC switch.	Does the LED of the FRESH/RECIRC switch illuminate?	Go to step 4.	Check the relationship of the air flow control dial position and sensors using the sensor check list, and check/repair sensors that have failed. <Ref. to AC(diag)-11, SENSOR CHECK TABLE, OPERATION, Diagnostic Chart for Self-diagnosis.>
4 OPERATION CHECK OF ACTUATORS, COMPRESSOR AND FAN MOTOR. 1) Press the A/C switch. (At this time, the A/C switch LED illuminates.) 2) Operate the fan speed control dial to check the operations of each of the actuator, compressor and fan motor. <Ref. to AC(diag)-11, OPERATING MODE TABLE, OPERATION, Diagnostic Chart for Self-diagnosis.> NOTE: Switching the fan speed control dial position enables the individual check of each step.	Do the actuators, compressor, and fan motor operate according to the operating mode table? <Ref. to AC(diag)-11, OPERATING MODE TABLE, OPERATION, Diagnostic Chart for Self-diagnosis.>	Either turn the fan control dial to the OFF position, or turn the ignition switch to the OFF position to quit the self-diagnosis function.	Refer to each of the diagnostics for the actuator, compressor and fan motor to repair the areas that have malfunctioned. <Ref. to AC(diag)-12, Diagnostics for A/C System Malfunction.> <Ref. to AC(diag)-21, Diagnostic Procedure for Actuators.>
5 CHECK POOR CONTACT. Check poor contact of auto A/C control module connector.	Is there poor contact in the auto A/C control module connector?	Repair the poor contact in the auto A/C control module connector.	Replace the auto A/C control module.

Diagnostic Chart for Self-diagnosis

HVAC SYSTEM (AUTO A/C) (DIAGNOSTICS)

1. SENSOR CHECK TABLE

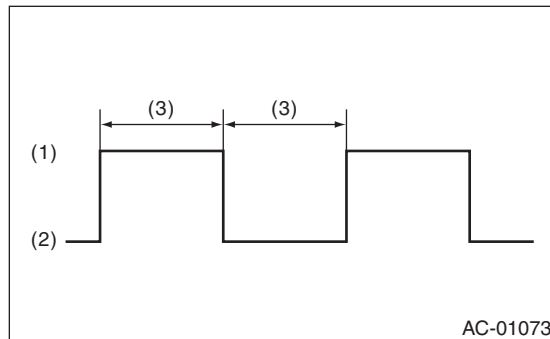
NOTE:

When checking the sunload sensor indoor or in the shade, an open circuit might be indicated. Always check the sunload sensor at a location exposed to direct sunlight.

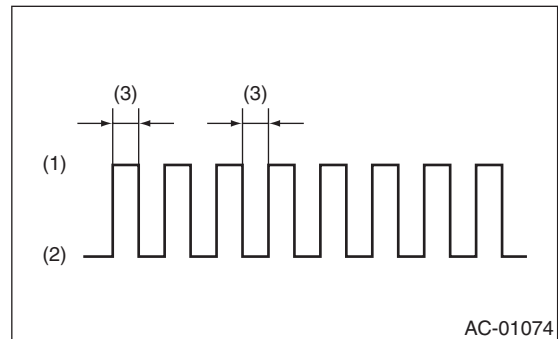
No.	Target for inspection	Air flow control dial position
1	In-vehicle sensor	AUTO
2	Ambient sensor	VENT
3	Evaporator sensor	B/L
4	Sunload sensor *1	HEAT
5	Air mix door actuator PBR	D/H
6	Meter communication	DEF

*1: For a sunload sensor open circuit, only the current malfunction is displayed. (However, it is possible to display past failures for short circuits.)

- The LED blinking pattern for open circuit failures
- The LED blinking pattern for short circuit failures



- (1) Light ON
- (2) Light OFF
- (3) Approx. 1 sec.



- (1) Light ON
- (2) Light OFF
- (3) Approx. 0.2 sec.

2. OPERATING MODE TABLE

Step	1	2	3	4	5	6	7	8
Fan control dial position	AUTO	1st	2nd	3rd	4th	5th	6th	7th
Fan speed (%)	24.0	24.0	34.0	45.0	42.0	59.0	71.0	100.0
Mode door actuator	VENT	VENT	VENT	B/L	HEAT	HEAT	D/H	DEF
Intake door actuator	FRE	REC	REC	FRE	FRE	FRE	FRE	FRE
Air mix door actuator	Maximum cool (0%)	Maximum cool (0%)	Maximum cool (0%)	Mid (50%)	Mid (50%)	Maximum hot (100%)	Maximum hot (100%)	Maximum hot (100%)
Compressor (Magnet clutch)	OFF	ON	ON	ON	ON	ON	ON	ON