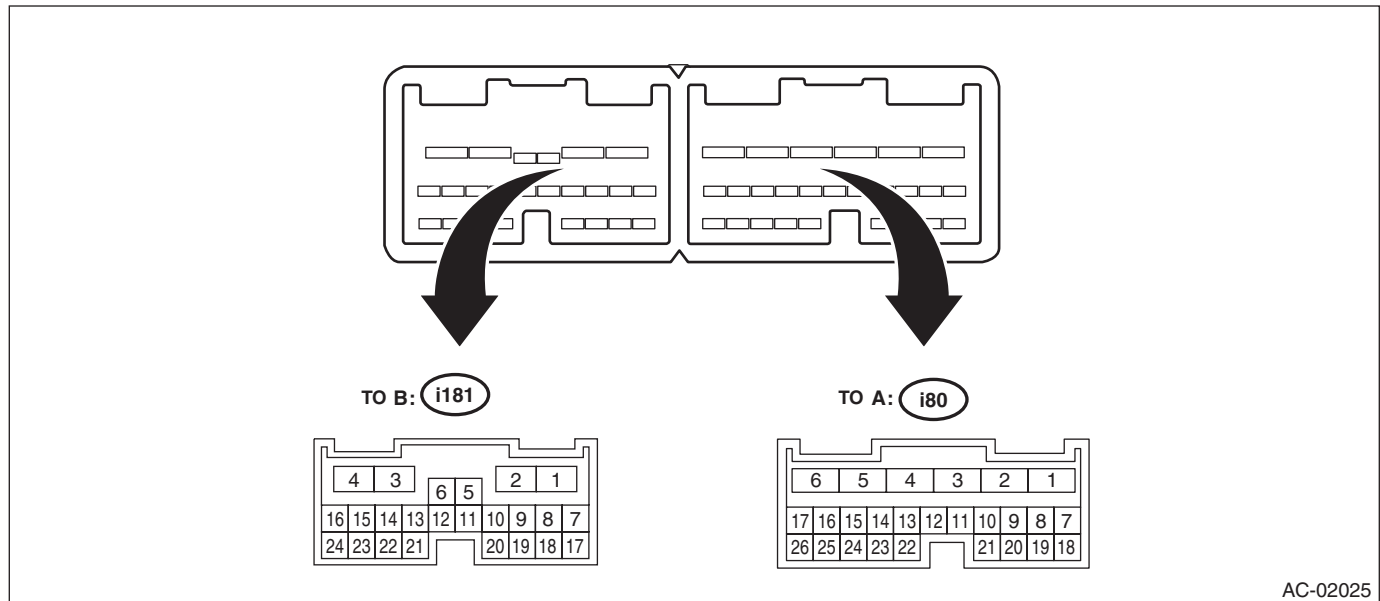


# Control Module I/O Signal

HVAC SYSTEM (DIAGNOSTICS)

## 4. Control Module I/O Signal

### A: ELECTRICAL SPECIFICATION



AC-02025

Terminal No.	Description	Measuring condition	Standard
A1	Battery power supply	Always	Battery voltage
A2	Ignition power supply	Ignition switch: ON	Battery voltage
A3	ACC power supply	Ignition switch: ACC	Battery voltage
A4	CAN communication (Hi)	Digital signal; can not be measured	*1
A5	CAN communication (Lo)	Digital signal; can not be measured	*1
A6	Ground	Always	0V
A7	A/C control panel communication	Digital signal; can not be measured	*1
A11	In-vehicle sensor	Ignition switch: ON	25°C: Approx. 1.5 V 40°C: Approx. 1.0 V
A13	Flow sensor	Ignition switch: ON	0.3 — 4.7 V
A14	Air mix door position signal *2 or air mix door (driver's seat) position signal *3	Ignition switch: ON, Air mix door: maximum cool position	4 V
		Ignition switch: ON, Air mix door: maximum hot position	1 V
A16	Each potentiometer and sensor power supply	Ignition switch: ON	5 V
A17	Rear vent actuator position signal*4	Ignition switch: ON, Air mix door: maximum cool position	1.8 V
		Ignition switch: ON, Air mix door: maximum hot position	4.1 V
A18	A/C control panel communication	Digital signal; can not be measured	*1
A21	After-evaporator sensor signal	Ignition switch: ON, fluctuates depending on temperature after the evaporator.	1 — 4.5 V
A22	Pressure sensor	Ignition switch: ON	0.5 — 4.9 V
A24	Sunload sensor (with automatic light)*3	Ignition switch: ON (0 V: No sunload)	0 — 4.9 V
A25	Air mix door actuator (passenger's seat) position signal*3	Ignition switch: ON, Air mix door: maximum cool position	4 V
		Ignition switch: ON, Air mix door: maximum hot position	1 V
A26	Mode door actuator position signal	Ignition switch: ON, Mode door: FACE position	4 V
		Ignition switch: ON, Mode door: DEF position	1 V
B1	Sensor GND	Always	Less than 0.5 V
B2	Variable compressor solenoid valve	Ignition switch: ON, Blower switch: ON, A/C switch: ON	2 — 12 V

# Control Module I/O Signal

HVAC SYSTEM (DIAGNOSTICS)

Terminal No.	Description	Measuring condition	Standard
B3	Intake door actuator drive signal (FRESH)	Intake door actuator operating on the FRESH side	0.7 V or less
B4	Air mix door actuator (passenger's seat) drive signal (HOT)*3	Turning towards HOT side: B4 is 12 V, B16 is GND	While operating: 12 V While not operating: 0 V
B16	Air mix door actuator (passenger's seat) drive signal (COOL)*3	Turning towards COOL side: B16 is 12 V, B4 is GND	
B6	Intake door actuator drive signal (RECIRC)	Intake door actuator operating on the RECIRC side	0.7 V or less
B8	Blower motor voltage feedback*3	Ignition switch: ON, Blower switch: ON	0.45 — 10 V
B9	Blower motor control signal*3	Ignition switch: ON, Blower switch: ON	9.05 V
B11	Mode servo drive signal (FACE)	When turning towards FACE side: B11 is 12 V, B13 is GND	While operating: 12 V While not operating: 0 V
B13	Mode servo drive signal (DEF)	When turning towards DEF side: B13 is 12 V, B11 is GND	
B20	Heater main relay drive signal*3	Ignition switch: ON, Blower switch: ON	0.7 V or less
B21	Air mix door actuator drive signal (COOL)*2 or air mix door actuator (driver's seat) drive signal (COOL)*3	Turning towards COOL side: B21 is 12 V, B22 is GND	While operating: 12 V While not operating: 0 V
B22	Air mix door actuator drive signal (HOT)*2 or air mix door actuator (driver's seat) drive signal (HOT)*3	Turning towards HOT side: B22 is 12 V, B21 is GND	
B23	Rear vent actuator drive signal (HOT)*4	Turning towards HOT side: B23 is 12 V, B24 is GND	While operating: 12 V While not operating: 0 V
B24	Rear vent actuator drive signal (COOL)*4	Turning towards COOL side: B24 is 12 V, B23 is GND	

\*1: Battery voltage cannot be measured because of digital signal.

\*2: Manual A/C

\*3: Auto A/C

\*4: With rear seat A/C

## B: WIRING DIAGRAM

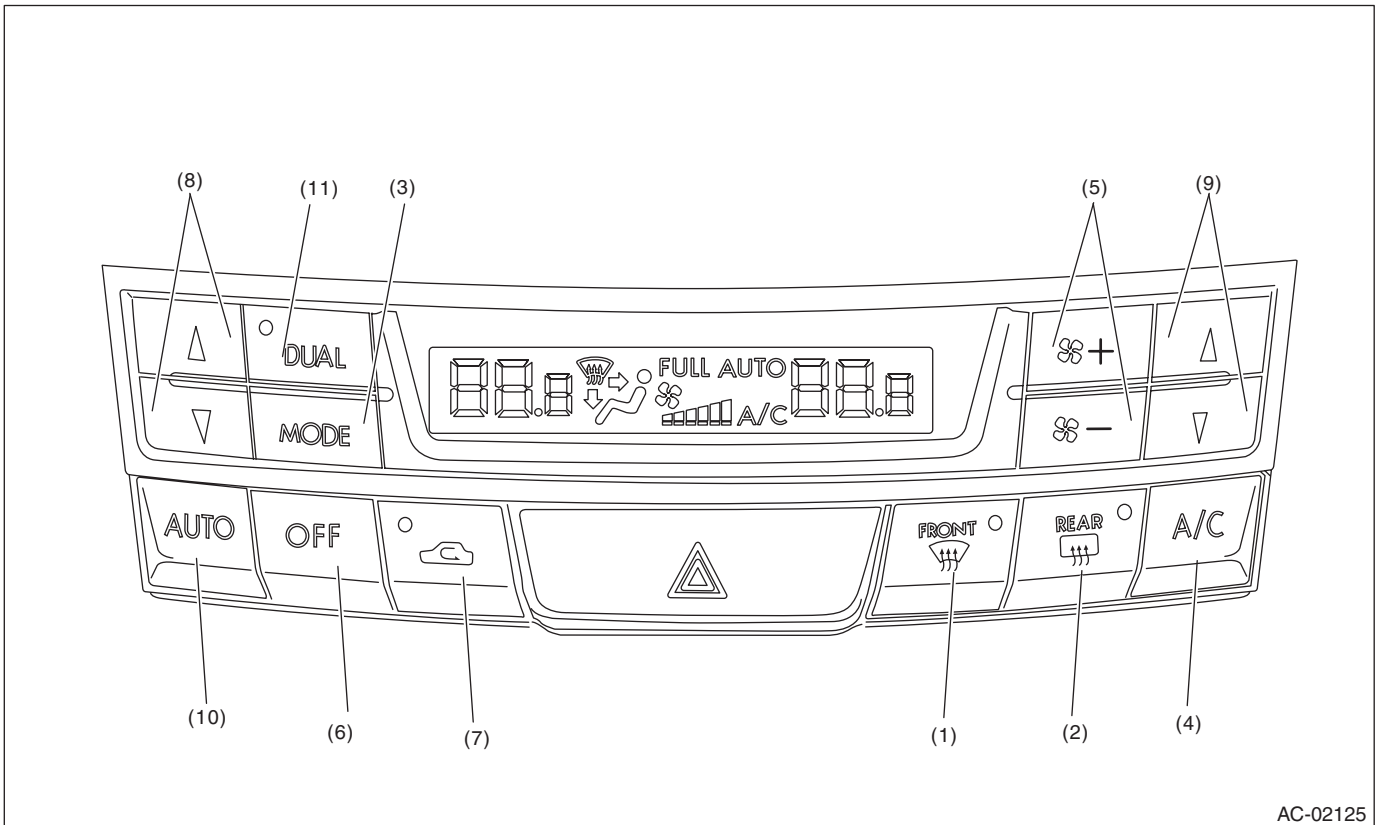
<Ref. to WI-51, WIRING DIAGRAM, Air Conditioning System.>

# Diagnostic Chart for Self-Diagnosis

HVAC SYSTEM (DIAGNOSTICS)

## 5. Diagnostic Chart for Self-Diagnosis

### A: OPERATION



AC-02125

- |                                 |  |   |
|---------------------------------|--|---|
| (1) Defroster switch            | (5) FAN switch                                     | (9) Temperature control switch (for passenger's seat) |
| (2) Rear window defogger switch | (6) OFF switch                                     | (10) AUTO switch                                      |
| (3) Mode change switch          | (7) FRESH/RECIRC switch                            | (11) DUAL switch                                      |
| (4) A/C switch                  | (8) Temperature control switch (for driver's seat) |   |