A/C CONTROL MODULE I/O SIGNAL

HVAC SYSTEM (AUTO A/C) (DIAGNOSTICS)

4. A/C Control Module I/O Signal

A: ELECTRICAL SPECIFICATION



AC-00099

Connector & Terminal No.	Content	Measuring condition		Specified value
B9	Mada daar actuator	Changes outlet from VENT to DEF.		*2
B8		Changes outlet from DEF to VENT.		
B7	Air mix door opticitor	Changes air mix door from COOL to HOT.		*1
B6	Air mix door actuator	Changes air mix door from COOL to HOT.		
B5	IGN power supply	Ignition switch: ON		Battery voltage
B4	Battery power supply	Ignition swite	Battery voltage	
B3	Sunload sensor	Ignition switch: ON and under normal sunload (without sunload: 5 V)		3 V
B2	Evaporator sensor	Ignition switch: ON		5 V or less
B1	Air mix door actuator PR P. signal	Air mix door: COOL position		0.5 V
	Air mix door actuator P.B.R. signal	Air mix door: HOT position		4.5 V
B20		Air inlet: FRESH (other positions: 12V)		0 V
B19	Intake door actuator signal	Air inlet: MIX (other positions: 12 V)		0 V
B18		Air inlet: RECIRC (other positions: 12 V)		0 V
B17	A/C ON signal	A/C: ON (A/C OFF: 0 V)		8 — 10 V
B16	Blower motor control	*3		*3
B15	Blower fan ON signal	When blower fan running (when blower fan not running: 12 V)		0 V
B13	Engine coolant temperature sensor	When the engine coolant is at 49°C (120°F)		8.9 V
B12	In-vehicle sensor	—		—
B11	Ground	When there is continuity to chassis ground		0 Ω
A7	Air mix door actuator P.B.R. reference voltage	Ignition switch: ON		5 V
A5	Mode door actuator position detection signal	Outlet	BI-LEVEL, DEF	5 V
			VENT, HEAT, DEF/HEAT	0 V
A4	Mode door actuator position detection signal	Outlet	HEAT, DEF/HEAT, DEF	5 V
			VENT, BI-LEVEL	0 V
A1	Illumination power supply	Ignition switch: ON, light switch: ON		Battery voltage
		Ignition switch: ON, light switch: OFF		0 V
A16	Sensor ground circuit	When there is continuity to chassis ground		0 Ω

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Connector & Terminal No.	Content	Measuring condition		Specified value
A14	Combination meter (ambient temperature signal)	*3		*3
A13	Mode door actuator position detection signal	Outlet	VENT, BI-LEVEL, HEAT	5 V
			DEF/HEAT, DEF	0 V
A12	Mode door actuator position detection signal	Outlet	VENT, DEF/HEAT	5 V
			BI-LEVEL, HEAT, DEF	0 V
A10	A/C cutout signal	A/C: ON		Battery voltage
		Pressure switch operated		0 V
A9	Illumination ground	When there is continuity to chassis ground		0 Ω

*1: Battery voltage is indicated when motor running, 0 V or battery voltage pulse signal is output when motor stops.

*2: Battery voltage is indicated when motor running, 0 V is indicated when motor stops.

*3: Voltage can not be measured because of pulse signal.

B: WIRING DIAGRAM

<Ref. to WI-37, SCHEMATIC, Air Conditioning System.>