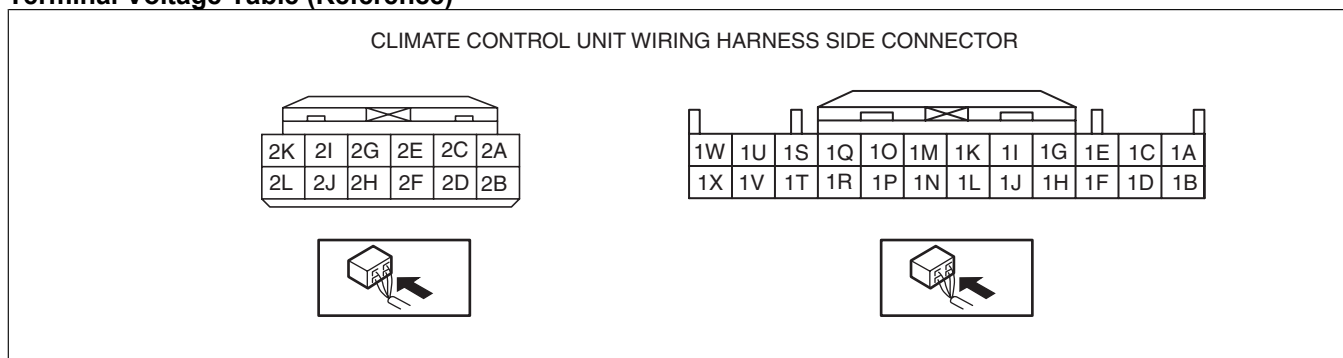


CLIMATE CONTROL UNIT INSPECTION [FULL-AUTO AIR CONDITIONER]

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1. Remove the climate control unit with the connector connected. (See CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION [FULL-AUTO AIR CONDITIONER].)
2. Switch the ignition ON (engine off or on).
3. Connect the negative (-) lead of the tester to body ground.
4. By inserting the positive (+) lead of the tester into each climate control unit terminal, measure the voltage according to the terminal voltage table.
 - If there is any malfunction, inspect the parts under "Inspection item (s)".
 - If the parts under "Inspection item (s)" are found to be normal (except for terminal 2D), replace the climate control unit.
 - For terminal 2D, first try replacing the power MOS FET. If there is still any malfunction, replace the climate control unit.

Terminal Voltage Table (Reference)



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Terminal	Signal name	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
1A*1	Parking sensor OFF indicator	Parking sensor control module	Parking sensor OFF indicator on	0.6 or less	<ul style="list-style-type: none"> • Related wiring harness • Parking sensor control unit
			Parking sensor OFF indicator off	B+	
1B*1	Parking sensor OFF switch	Parking sensor control module	Keep parking sensor OFF switch push	2.0 or less	<ul style="list-style-type: none"> • Related wiring harness • Parking sensor control unit
			Release parking sensor OFF switch	5	
1C*2	Seat warmer switch signal	Seat warmer control unit	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		<ul style="list-style-type: none"> • Related wiring harness
1D	—	—	—	—	—
1E	B+	ROOM 15 A fuse	Under any condition	B+	<ul style="list-style-type: none"> • Related wiring harness • ROOM 15 A fuse
1F	Evaporator temperature sensor input	Evaporator temperature sensor	Compared with temperature detected by evaporator temperature sensor	Refer to graph 1	<ul style="list-style-type: none"> • Related wiring harness • Evaporator temperature sensor • Climate control unit: terminal voltage (1X)
1G	DC/DC IG1*3	Ignition relay	Switch the ignition ON (engine off or on)	B+	<ul style="list-style-type: none"> • Related wiring harness • Ignition relay
			Switch the ignition off	1.0 or less	
	IG1*4	C/U IG1 15 A fuse	Switch the ignition ON (engine off or on)	B+	<ul style="list-style-type: none"> • Related wiring harness • C/U IG1 15 A fuse
			Switch the ignition off	1.0 or less	
1H	+5V	<ul style="list-style-type: none"> • Driver-side air mix actuator • Passenger-side air mix actuator • Airflow mode actuator • Solar radiation sensor 	Under any condition	5	<ul style="list-style-type: none"> • Related wiring harness • Driver-side air mix actuator • Passenger-side air mix actuator • Airflow mode actuator • Solar radiation sensor • Climate control unit: terminal voltage (1X)

Terminal	Signal name	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
1I*5	Water pump	Water pump	Water pump on Water pump off	0.2 or less B+	• Related wiring harness • Water pump
1J	Cabin temperature sensor input	Cabin temperature sensor	Compared with temperature detected by cabin temperature sensor	Refer to graph 2	• Related wiring harness • Cabin temperature sensor • Climate control unit: terminal voltage (1X)
1K	—	—	—	—	—
1L*6	Heater core temperature sensor input	Heater core temperature sensor	Compared with temperature detected by heater core temperature sensor	Refer to graph 3	• Related wiring harness • Heater core temperature sensor • Climate control unit: terminal voltage (1X)
1M	—	—	—	—	—
1N	Potentiometer input	• Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.)	Set temperature at MAX HOT	4.3 or more	• Related wiring harness • Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.) • Climate control unit: terminal voltage (1X)
			Set temperature at MAX COLD	1.0 or less	
1O	—	—	—	—	—
1P	Potentiometer input	• Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.)	Set temperature at MAX HOT	4.3 or more	• Related wiring harness • Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.) • Climate control unit: terminal voltage (1X)
			Set temperature at MAX COLD	1.0 or less	
1Q	—	—	—	—	—
1R	Potentiometer input	Airflow mode actuator	VENT	4.3 or more	• Related wiring harness • Airflow mode actuator • Climate control unit: terminal voltage (1X)
			BI-LEVEL	3.4	
			HEAT	2.5	
			HEAT/DEF DEFROSTER	1.6 0.7 or less	
1S	MS_CAN_H	CAN related module	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		• Related wiring harness
1T	Solar radiation sensor (RH) input	Solar radiation sensor	Sunlight shined directly on the solar radiation sensor	4	• Related wiring harness • Climate control unit: terminal voltage (1H) • Solar radiation sensor
			Blocking light to solar radiation sensor	1.0 or less	
1U	MS_CAN_L	CAN related module	Because this terminal is for communication, good/no good judgment by terminal voltage is not possible.		• Related wiring harness
1V	Solar radiation sensor (LH) input	Solar radiation sensor	Sunlight shined directly on the solar radiation sensor	4	• Related wiring harness • Climate control unit: terminal voltage (1H) • Solar radiation sensor
			Blocking light to solar radiation sensor	1.0 or less	
1W	GND	Body ground	Under any condition	1.0 or less	• Related wiring harness
1X	Sensor GND	• Driver-side air mix actuator • Passenger-side air mix actuator • Airflow mode actuator • Evaporator temperature sensor • Heater core temperature sensor*6	Under any condition	1.0 or less	• Related wiring harness • Climate control unit: terminal voltage (1H)

Terminal	Signal name	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
2A	Blower motor feedback	<ul style="list-style-type: none"> • Blower motor • Power MOS FET 	Fan stopped	B+	<ul style="list-style-type: none"> • Power MOS FET • Blower motor • Blower relay • HEATER 40 A fuse • Power MOS FET replacement • Related wiring harness
			Fan: manual 1st	10.33	
			Fan: manual 7th	0.4 or less	
2B	—	—	—	—	—
2C	IG2	Front body control module (FBCM)	Switch the ignition ON (engine off or on)	B+	<ul style="list-style-type: none"> • Related wiring harness • Front body control module (FBCM)
			Switch the ignition off	1.0 or less	
2D	Blower fan speed control	Power MOS FET	Fan stopped	1.0 or less	<ul style="list-style-type: none"> • Related wiring harness • Power MOS FET
			Fan: manual 1st	2.2	
			Fan: manual 7th	9.7	
2E	Motor operation (HOT)	<ul style="list-style-type: none"> • Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.) 	Moving towards HOT	B+	<ul style="list-style-type: none"> • Related wiring harness • Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.)
			Moving towards COLD	1.0 or less	
2F	Motor operation (HOT)	<ul style="list-style-type: none"> • Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.) 	Moving towards HOT	B+	<ul style="list-style-type: none"> • Related wiring harness • Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.)
			Moving towards COLD	1.0 or less	
2G	Motor operation (COLD)	<ul style="list-style-type: none"> • Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.) 	Moving towards HOT	1.0 or less	<ul style="list-style-type: none"> • Related wiring harness • Driver-side air mix actuator (L.H.D.) • Passenger-side air mix actuator (R.H.D.)
			Moving towards COLD	B+	
2H	Motor operation (COLD)	<ul style="list-style-type: none"> • Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.) 	Moving towards HOT	1.0 or less	<ul style="list-style-type: none"> • Related wiring harness • Passenger-side air mix actuator (L.H.D.) • Driver-side air mix actuator (R.H.D.)
			Moving towards COLD	B+	
2I	Motor operation (VENT)	Airflow mode actuator	Moving towards VENT	B+	<ul style="list-style-type: none"> • Related wiring harness • Airflow mode actuator
			Moving towards DEFROSTER	1.0 or less	
2J	Motor operation (FRESH)	Air intake actuator	Moving towards RECIRCULATE	1.0 or less	<ul style="list-style-type: none"> • Related wiring harness • Air intake actuator
			Moving towards FRESH	B+	
2K	Motor operation (DEFROSTER)	Airflow mode actuator	Moving towards DEFROSTER	B+	<ul style="list-style-type: none"> • Related wiring harness • Airflow mode actuator
			Moving towards VENT	1.0 or less	
2L	Motor operation (RECIRCULATE)	Air intake actuator	Moving towards RECIRCULATE	B+	<ul style="list-style-type: none"> • Related wiring harness • Air intake actuator
			Moving towards FRESH	1.0 or less	

*1 : With parking sensor OFF switch.

*2 : With seat warmer.

*3 : With i-stop.

*4 : Without i-stop.

*5 : With water pump.

*6 : With heater core temperature sensor.

