

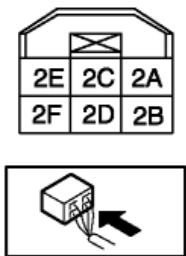
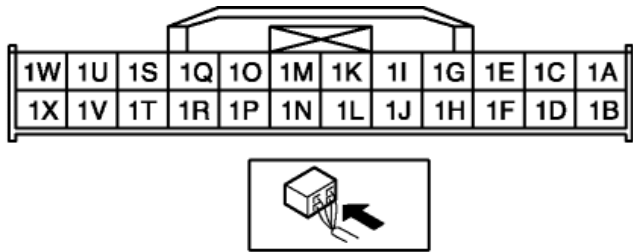
2012 - Mazda6 - HVAC

CLIMATE CONTROL UNIT INSPECTION [MANUAL AIR CONDITIONER]

1. Remove the climate control unit. (See [CLIMATE CONTROL UNIT REMOVAL/ INSTALLATION \[MANUAL AIR CONDITIONER\]](#).)
2. Connect the climate control unit connector.
3. Connect the negative (-) lead of the tester to body ground.
4. Switch the ignition to ON.
5. 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, replace the climate control unit.

Terminal Voltage Table (Reference)

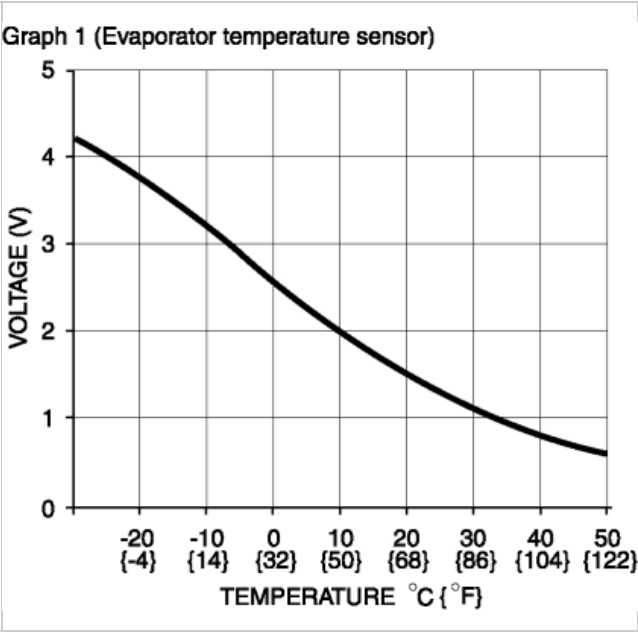


Terminal	Signal name	Connected to	Measurement condition	Voltage (V)	Inspection item (s)
1A	Illumination control	Instrument cluster	Headlight switch ON and panel light control switch at max	1.0 or less	• Related wiring harness • Instrument cluster
			Headlight switch ON and panel light control switch at min	B+	
1B	TNS signal	Auto light/wiper control module	Headlight switch ON	B+	• Related wiring harness • Auto light/wiper control module • Headlight switch
			Headlight switch OFF	1.0 or less	
1C	Motor operation (RECIRCULATE)	Air intake actuator	Moving towards FRESH	1.0 or less	• Related wiring harness • Air intake actuator
			Moving towards RECIRCULATE	B+	
1D	Motor operation	Airflow mode actuator	Moving towards DEFROSTER	B+	• Related wiring harness • Airflow mode actuator
			Moving towards VENT	1.0 or less	
1E	Motor operation	Air intake actuator	Moving towards FRESH	B+	• Related wiring harness

	(FRESH)		Moving towards RECIRCULATE	1.0 or less	Air intake actuator
1F	Motor operation	Airflow mode actuator	Moving towards VENT	B+	- Related wiring harness - Airflow mode actuator
			Moving towards DEFROSTER	1.0 or less	
1G	Motor operation (COLD)	Air mix actuator	Moving towards HOT	1.0 or less	- Related wiring harness - Air mix actuator
			Moving towards COLD	B+	
1H	—	—	—	—	—
1I	Motor operation (HOT)	Air mix actuator	Moving towards HOT	B+	- Related wiring harness - Air mix actuator
			Moving towards COLD	1.0 or less	
1J	—	—	—	—	—
1K	Rear window defroster switch	Rear window defroster relay	Rear window defroster switch OFF	B+	- Related wiring harness - Rear window defroster relay - Climate control unit: terminal voltage (1S) - Climate control unit
			Rear window defroster switch ON	1.0 or less	
1L	A/C on	Instrument cluster	A/C off	5	- Related wiring harness - Instrument cluster
			A/C on	1.0 or less	
1M	Fan on	Fan switch	Fan switch ON	1.0 or less	- Related wiring harness - Climate control unit: terminal voltage (10) - Fan switch
			Fan switch OFF	B+	
1N	—	—	—	—	—
1O	IG2	A/C 10 A fuse	IG SW ON	B+	- Related wiring harness - A/C 10 A fuse
			IG SW OFF	1.0 or less	
1P	Evaporator temperature sensor input	Evaporator temperature sensor	Compared with temperature detected by evaporator temperature sensor	Refer to graph 1	- Related wiring harness - Evaporator temperature sensor - Climate control unit: terminal voltage (10,1U)

1Q	B+	ROOM 15 A fuse	Under any condition	B+	- Related wiring harness - ROOM 15 A fuse
1R	Potentiometer input	Airflow mode actuator	VENT	4.2 or more	- Related wiring harness - Airflow mode actuator - Climate control unit: terminal voltage (1S)
			BILEVEL	3.31	
			HEAT	2.37	
			HEAT/DEF	1.39	
			DEFROSTER	0.8 or less	
1S	+5V	- Air mix actuator - Airflow mode actuator	IG SW ON	5	- Related wiring harness - Air mix actuator - Airflow mode actuator - Climate control unit: terminal voltage (1U)
			IG SW OFF	1.0 or less	
1T	Potentiometer input	Air mix actuator	Set temperature at MAX COLD	1.0 or less	- Related wiring harness - Air mix actuator - Climate control unit: terminal voltage (1S)
			Set temperature at MAX HOT	4.3	
1U	GND	Body ground	Under any condition	1.0 or less	Related wiring harness
1V	Sensor GND	- Evaporator temperature sensor - Air mix actuator - Airflow mode actuator	Under any condition	1.0 or less	Climate control unit: terminal voltage (1U)
1W	—	—	—	—	—
1X	—	—	—	—	—
2A	Blower fan switch GND	GND	Under any condition	1.0 or less	Related wiring harness
2B	—	—	—	—	—
2C	Blower fan 1st	Resistor	IG SW ON, fan switch 1st	1.0 or less	Related wiring harness
			Fan switch off	B+	
				1.0 or	

2D	Blower fan 4th	Resistor	IG SW ON, fan switch 4th	less	Related wiring harness
			Fan switch off	B+	
2E	Blower fan 2nd	Resistor	IG SW ON, fan switch 2nd	1.0 or less	Related wiring harness
			Fan switch off	B+	
2F	Blower fan 3rd	Resistor	IG SW ON, fan switch 3rd	1.0 or less	Related wiring harness
			Fan switch off	B+	



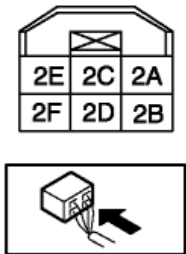
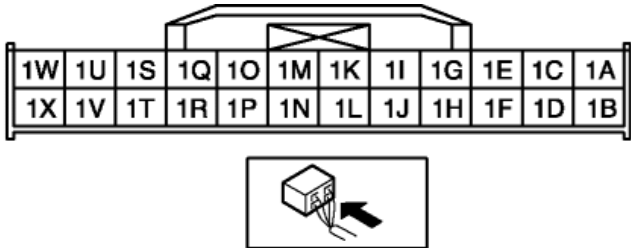
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1E	Motor operation	Air intake actuator	Moving towards FRESH	B+	• Related wiring harness

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			Moving towards COLD	1.0 or less	
1J	—	—	—	—	—
1K	Rear window defroster switch	Rear window defroster relay	Rear window defroster switch OFF	B+	- Related wiring harness - Rear window defroster relay - Climate control unit: terminal voltage (1S) - Climate control unit
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			A/C on	1.0 or less	
1M	Fan on	Fan switch	Fan switch ON	1.0 or less	- Related wiring harness - Climate control unit: terminal voltage (10) - Fan switch
			Fan switch OFF	B+	
1N	—	—	—	—	—
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			Set temperature at MAX HOT	4.3	
1U	GND	Body ground	Under any condition	1.0 or less	Related wiring harness
1V	Sensor GND	- Evaporator temperature sensor - Air mix actuator - Airflow mode actuator	Under any condition	1.0 or less	Climate control unit: terminal voltage (1U)
1W	—	—	—	—	—
1X	—	—	—	—	—
2A	Blower fan switch GND	GND	Under any condition	1.0 or less	Related wiring harness
2B	—	—	—	—	—
2C	Blower fan 1st	Resistor	IG SW ON, fan switch 1st	1.0 or less	Related wiring harness
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