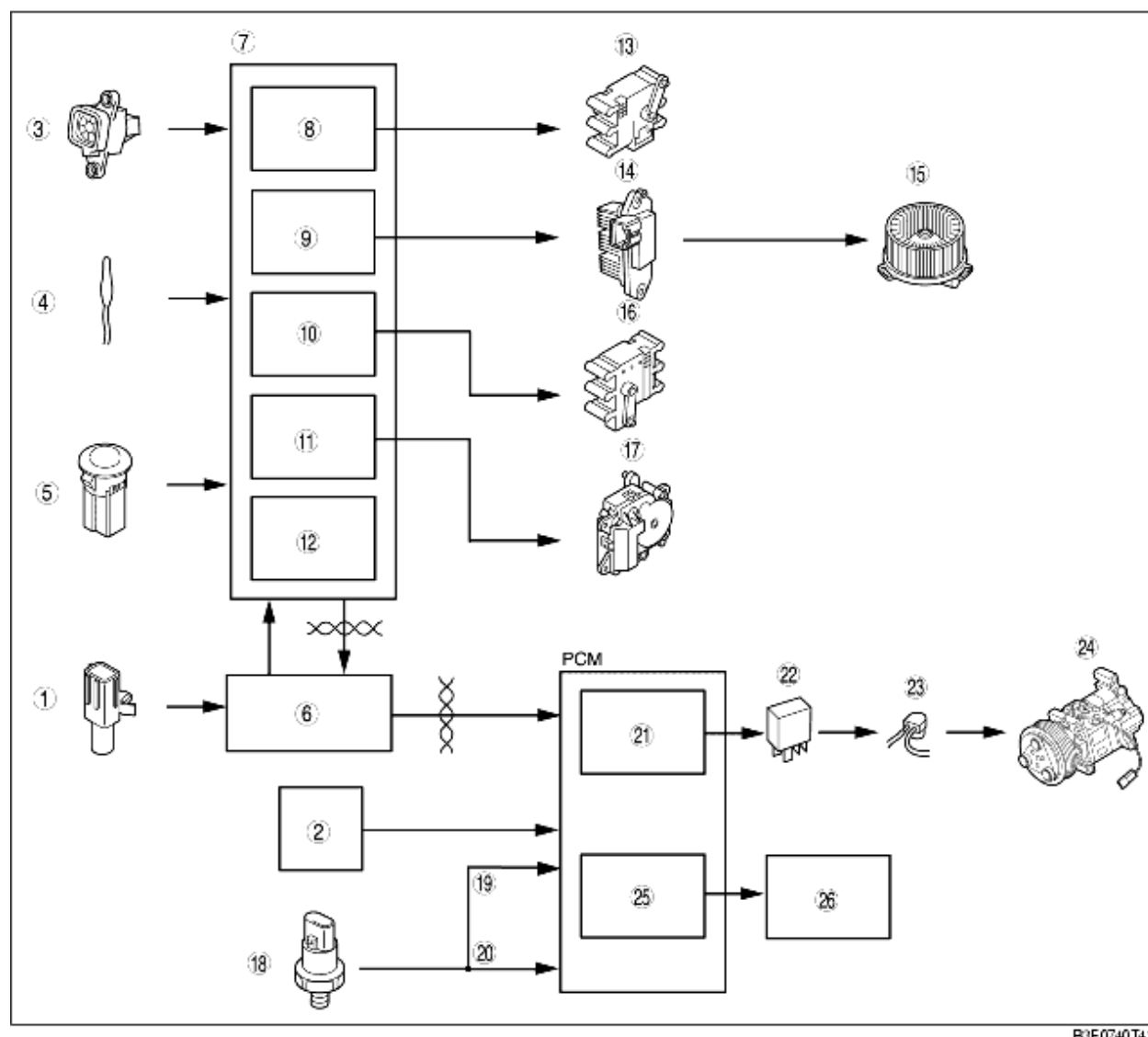


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- The control system consists of input components (sensors), output components (actuators, magnetic clutch, power MOS FET, and other parts), and a control device (climate control unit).



1	Ambient temperature sensor
2	ECT sensor
3	Cabin temperature sensor
4	Evaporator temperature sensor
5	Solar radiation sensor
6	PJB and instrument cluster
7	Climate control unit

8	Airflow temperature control
9	Airflow volume control
10	Airflow mode control
11	Air intake control
12	A/C compressor control
13	Air mix actuator
14	Power MOS FET
15	Blower motor
16	Airflow mode actuator
17	Air intake actuator
18	Refrigerant pressure switch
19	HI and LO pressure
20	Medium pressure
21	A/C cut control
22	A/C relay
23	Stator and thermal protector
24	Magnetic clutch
25	Idle speed control
26	IAC valve

Control Table

• The full-auto air conditioner system functions based on the five basic types of controls and three supplementary functions.

Basic control	Control description	Correction control
Airflow temperature control	Airflow temperature automatic control	<ul style="list-style-type: none"> • Air intake correction • A/C correction • MAX HOT and MAX COLD correction • Engine coolant temperature correction
Airflow volume control	Airflow volume automatic control	<ul style="list-style-type: none"> • Engine coolant temperature correction (warm-up correction) • Vehicle speed correction • Mild start correction • MAX HOT and MAX COLD correction • Window fogging prevention correction at start • Starting compensation correction • Defroster correction • Starting burnt-out prevention function
	Airflow volume manual control	<ul style="list-style-type: none"> • Defroster correction • Starting burnt-out prevention function
Airflow mode control	Airflow mode automatic control	<ul style="list-style-type: none"> • Ambient temperature correction • Engine coolant temperature correction (warm-up correction)
	Airflow mode manual control	
Air intake control	Air intake automatic control	<ul style="list-style-type: none"> • MAX COLD correction • Defroster correction • Ambient temperature correction • A/C OFF correction
	Air intake manual control	<ul style="list-style-type: none"> • Defroster correction
	A/C compressor automatic control	<ul style="list-style-type: none"> • Defroster correction • Ambient temperature correction • MAX COLD correction • Wiper correction

A/C compressor control		• Window fogging prevention correction at start
	A/C compressor manual control	• Defroster correction • Ambient temperature correction • Window fogging prevention correction at start

Supplementary function
Fail-safe function
Sensor signal delay function
On-board diagnostic function

Control Type Transition by Switch Operation

Airflow temperature control, airflow volume control

Operation switch		Airflow temperature control	Airflow volume control										
		Control prior to switch operation	Control prior to switch operation										
		Automatic control	Automatic control	Defroster correction	Manual control								
OFF	1				2	3	4	5	6	7			
OFF switch		Automatic control	OFF	OFF	OFF								
AUTO switch		Automatic control	Automatic control	Automatic control	Automatic control								
Fan switch	+	Automatic control	Manual control*2	Manual control*2	1	2	3	4	5	6	7	7	
	-	Automatic control	Manual control*3	Manual control*3	1	1	1	2	3	4	5	6	
VENT switch		Automatic control	Automatic control	*5	No change								
BI-LEVEL switch		Automatic control	Automatic control	*5	No change								
HEAT switch		Automatic control	Automatic control	*5	No change								
HEAT/DEF switch		Automatic control	Automatic control	*5	No change								
DEFROSTER switch		Automatic control	Defroster correction	No change	Defroster correction								
A/C switch		Automatic control	Automatic control	No change	No change								
REC/FRESH switch		Automatic control	Automatic control	No change	No change								
Temperature setting dial*1	15.0	MAX COLD	MAX HI	MAX HI	No change								
	15.5-28.5	Automatic control	Automatic control	No change	No change								
	29.0	MAX HOT	AUTO HI*4	AUTO HI	No change								

*1 : Adjusted up or down in increments of 0.5 within a range of 15.0-29.0. When the fan is OFF, the temperature setting can be adjusted in increments of ± 1.0 .

*2 : Increases to the manual voltage that is closest to the auto or defroster correction voltage.

*3 : Decreases to the manual voltage that is closest to the auto or defroster correction voltage.

*4 : Engine coolant temperature correction takes precedence.

*5 : Returns to condition prior to defroster operation. However, if it had been off prior to defroster operation, it switches to automatic control.

Airflow mode control, air intake control, A/C compressor control

Operation switch		Airflow mode control		Air intake control		A/C compressor control	
		Control prior to switch operation		Control prior to switch operation		Control prior to switch operation	
		Automatic control	Manual control	Automatic control	Manual control	Automatic control	Manual control
OFF switch		Fixed at mode before turned OFF* ²	No change* ²	Fixed at mode before turned OFF* ²	No change* ²	OFF	OFF
AUTO switch		Automatic control	Automatic control	Automatic control	Automatic control	Automatic control	Automatic control
Fan switch	+	Automatic control	No change	Automatic control	No change	Automatic control	No change
	-	Automatic control	No change	Automatic control	No change	Automatic control	No change
VENT switch		No change* ²	No change* ²	Automatic control	No change* ²	Automatic control	DEFROSTER* ³
BI-LEVEL switch		No change* ²	No change* ²	Automatic control	No change* ²	Automatic control	DEFROSTER* ³
HEAT switch		No change* ²	No change* ²	Automatic control	No change* ²	Automatic control	DEFROSTER* ³
HEAT/DEF switch		No change* ²	No change* ²	Automatic control	No change* ²	Automatic control	DEFROSTER* ³
DEFROSTER switch		DEFROSTER	DEFROSTER	Defroster correction	Defroster correction	Defroster correction	Defroster correction
A/C switch		Automatic control	No change	Automatic control	No change	A/C→OFF OFF→A/C* ⁴	A/C→OFF OFF→A/C* ⁴
REC/FRESH switch		Automatic control	No change	FRESH→REC REC→FRESH	FRESH→REC REC→FRESH	Automatic control	No change
Temperature setting dial* ¹	15.0	Automatic control	No change	Automatic control	No change	Automatic control	No change
	15.5-28.5	Automatic control	No change	Automatic control	No change	Automatic control	No change
	29.0	Automatic control	No change	Automatic control	No change	Automatic control	No change

*¹ : Adjusted up or down in increments of 0.5 within a range of 15.0-29.0. When the fan is OFF, the temperature setting can be adjusted in increments of ± 1.0 .

*² : If operated during defroster correction, it returns to the condition prior to defroster operation.

*³ : If operated during defroster correction, it returns to the condition prior to defroster operation. However, if it had been off prior to defroster operation, it switches to automatic control.

*⁴ : When the fan is OFF, it is fixed at A/C OFF.