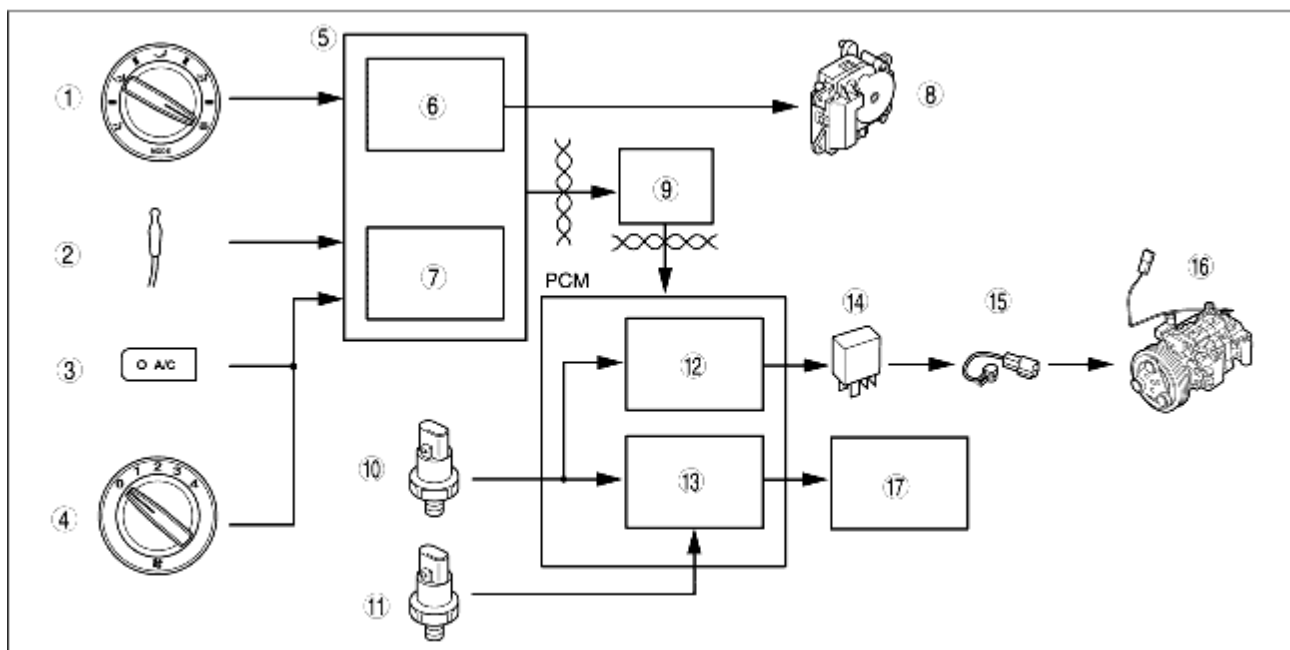


# MANUAL AIR CONDITIONER CONTROL SYSTEM

B3E074001081T02

## Block Diagram

- The climate control unit performs the defroster control based on the signal sent from the airflow mode selector dial, and sends an operating signal to the air intake actuator.
- The climate control unit sends an A/C signal to the PCM via the PJB and instrument cluster based on signals sent from the A/C switch, fan switch and evaporator temperature sensor.
- The PCM sends operating signals to the A/C relay and IAC valve based on A/C signal and vehicle signal.



B3E0740T419

1	Airflow mode selector switch
2	Evaporator temperature sensor
3	A/C switch
4	Fan switch
5	Climate control unit
6	Defroster control
7	A/C compressor control
8	Air intake actuator
9	PJB and instrument cluster
10	Refrigerant pressure switch (HI and LO pressure)
11	Refrigerant pressure switch (medium pressure)
12	A/C cut-off control
13	Idle air control
14	A/C relay

15	Stator and thermal protector
16	Magnetic clutch
17	IAC valve

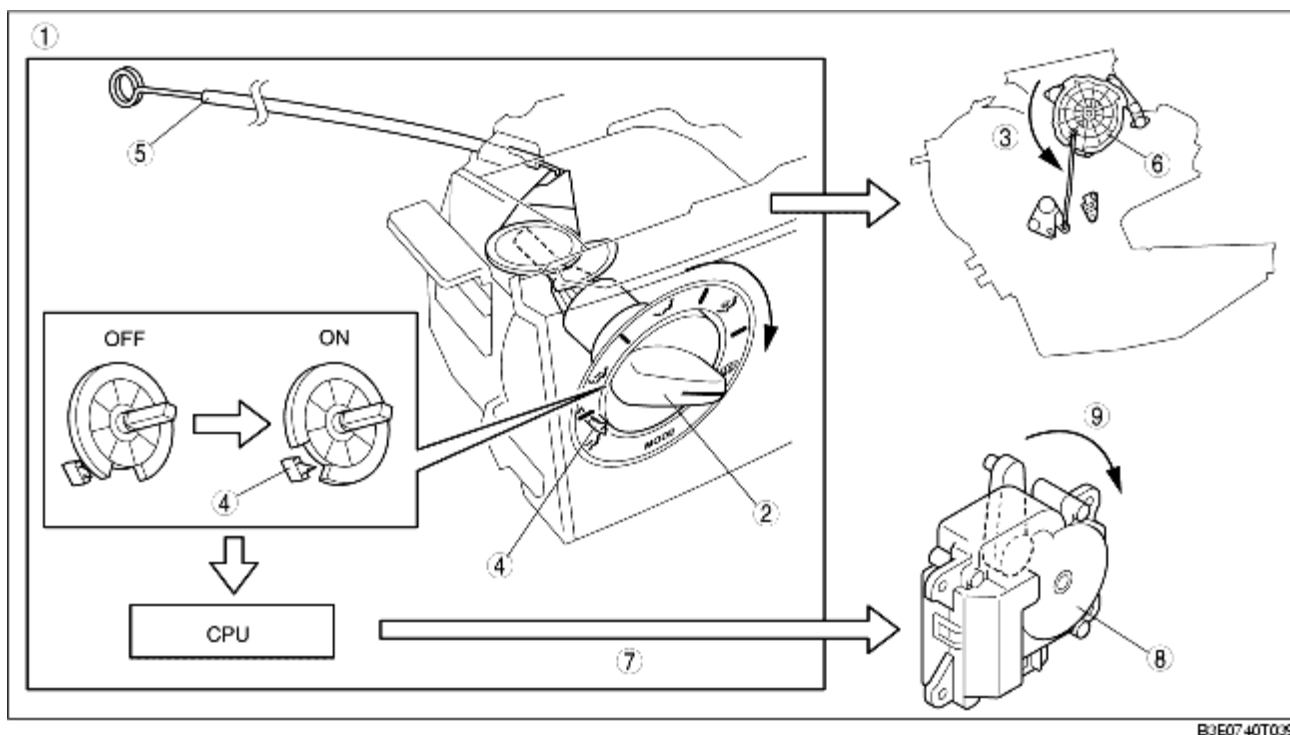
## Outline of Control System

- Manual air conditioner defroster control and A/C compressor control.

Control name	Control part
Defroster control	Climate control unit
A/C compressor control	Climate control unit

## Defroster Control

1. When the airflow mode selector dial is turned to DEFROSTER position, a wire moves the airflow mode main link, turning the airflow mode to DEFROSTER.
2. The defroster switch turns on at the same time, and the CPU sends a signal to turn the air intake mode to FRESH.
3. The air intake actuator operates and turns the air intake mode to FRESH.



B3E07-40T039

1	Climate control unit
2	Airflow mode selector dial
3	To DEFROSTER position
4	Defroster switch
5	Wire
6	Airflow mode main link

7	FRESH signal
8	Air intake actuator
9	To FRESH position

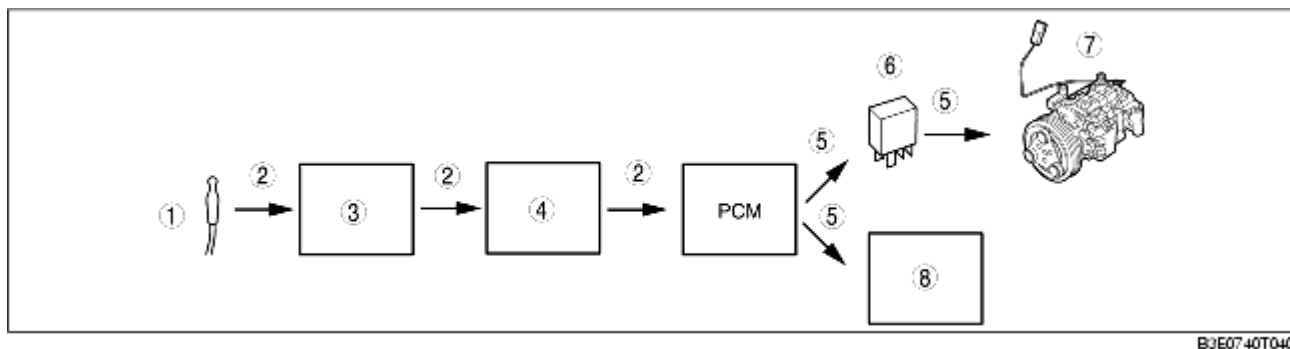
X: Operates

-: Does not operate

Airflow mode	Air intake mode (REC/FRESH switch pushed)	Defroster control
VENT	REC ⇔ FRESH	-
BI-LEVEL	REC ⇔ FRESH	-
HEAT	REC ⇔ FRESH	-
HEAT/DEF	REC ⇔ FRESH	-
DEFROSTER	FRESH	x

## A/C Compressor Control

- The climate control unit sends an A/C signal to the PCM via the PJB and instrument cluster based on signals sent from the A/C switch, fan switch and evaporator temperature sensor.
- The PCM controls the A/C relay and IAC valve based on the input signal from the climate control unit and refrigerant pressure switch.



B3E07 40T040

1	Evaporator temperature sensor
2	A/C signal
3	Climate control unit
4	PJB and instrument cluster
5	Output
6	A/C relay
7	Magnetic clutch
8	IAC valve

## A/C signal on/off control

- The climate control unit turns the A/C signal (magnetic clutch) on and off based on the temperature of the air passing through the evaporator when the A/C and fan switches are on. This keeps the evaporator surface temperature within the specified range, preventing the evaporator from freezing while the fan switch and A/C switch are turned on.

1	A/C signal on/off decision
2	Evaporator temperature sensor
3	A/C signal