# MANUAL AIR CONDITIONER CONTROL SYSTEM [MANUAL AIR CONDITIONER]

id0740a2101000

#### **Outline**

- The climate control unit performs the following controls based on the signals from each switch/dial and the sensor.
  - A/C compressor control
  - Defroster control
  - i-stop control

**Block Diagram** CLIMATE CONTROL UNIT FRESH SWITCH AIR INTAKE RECIRCULATE **RECIRCULATE ACTUATOR SWITCH** CONTROL REFRIGERANT **EVAPORATOR** PRESSURE SENSOR **TEMPERATURE SENSOR** A/C COMPRESSOR **FBCM** CONTROL A/C SWITCH PCM **AIRFLOW AMBIENT AMBIENT VOLUME** A/C CUT **TEMPERATURE TEMPERATURE CONTROL DIAL** CONTROL **SENSOR** SIGNAL : HS-CAN

ac5wzn00000735

A/C RELAY

MAGNETIC CLUTCH

### **Outline of Control System**

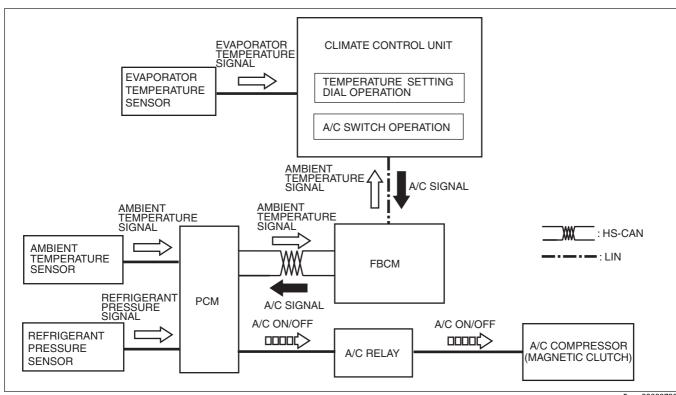
-: LIN

Manual air conditioner has the following control.

Control name	Control part
A/C compressor control	
Defroster control	Climate control unit
• i-stop control	

## A/C Compressor Control

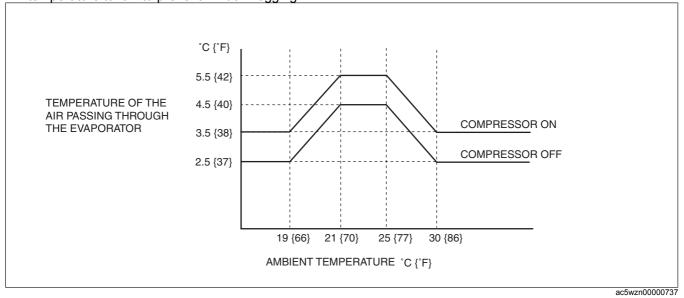
- The climate control unit sends the A/C signal to the PCM based on the signals sent from the A/C switch, airflow volume control dial, and evaporator temperature sensor.
- The PCM turns the A/C relay on/off based on the input signals from the A/C signal and A/C pressure sensor and controls the A/C compressor (magnetic clutch) operation.



A/C signal on/off control

- When the A/C switch and fan switch are turned on, the climate control unit turns the A/C signal (magnetic clutch) on/off based on the temperature of the air passing through the evaporator.
- When the fan switch and A/C switch are turned on, the climate control unit controls the surface temperature of the evaporator so that it is within a certain range to prevent the evaporator from freezing.

 When the ambient temperature is low, the climate control unit sets the A/C signal (magnetic clutch) offtemperature to low to prevent window fogging.



## **Defroster control**

- The defroster control improves the defrosting effect.
- When the defroster switch turns on, the climate control unit fixes the air intake mode to FRESH.
- The air intake is fixed at FRESH even if it has been set to REC manually.

ac5wzn00000736