■AIR CONDITIONING

1. General

- A manual air conditioning system is used.
- A manual type air conditioning control assembly is used.
- A high efficiency type air filter is used.

▶ Performance ◀

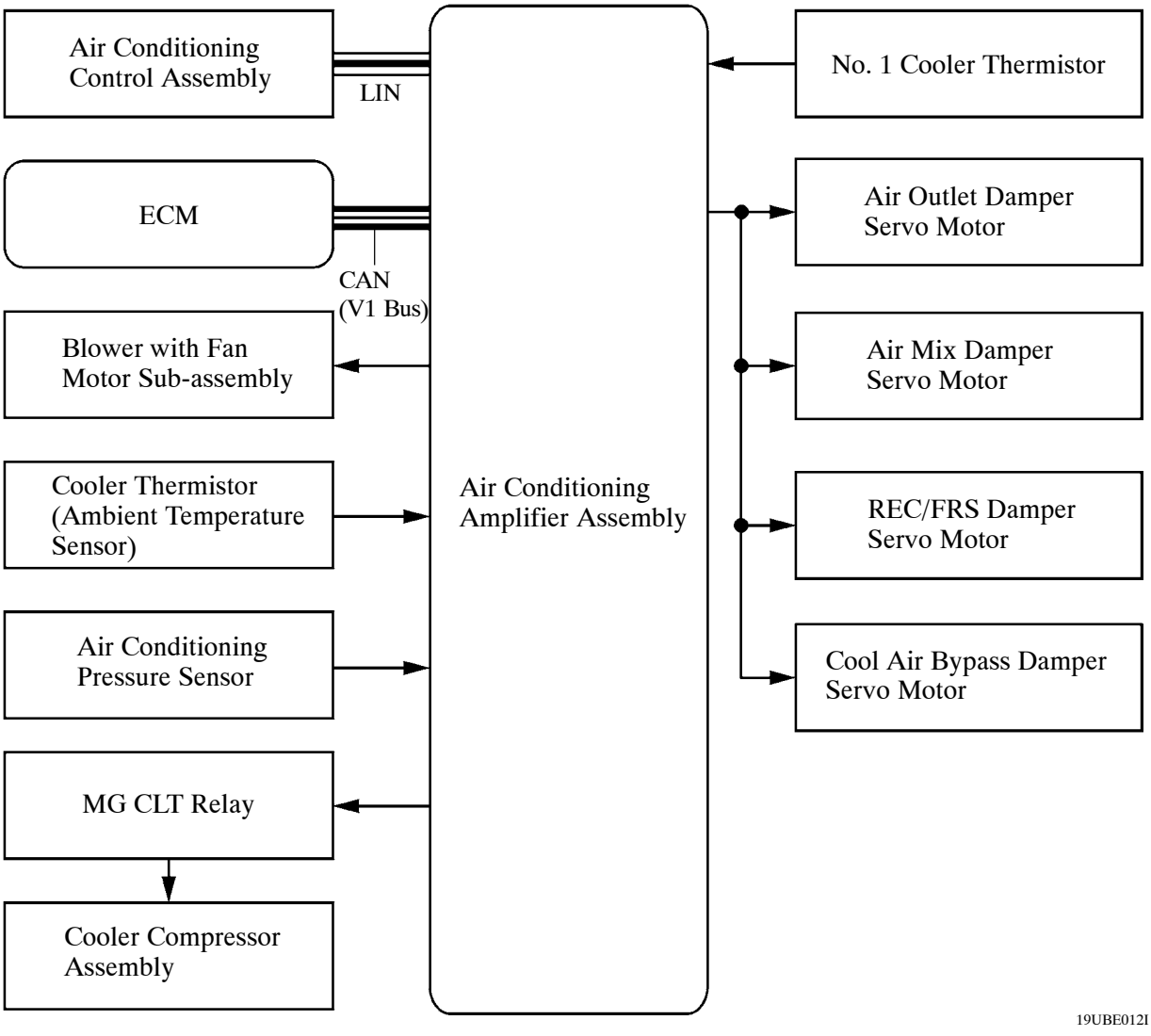
Heater	Heater Output	5390 W
	Air Flow Volume	320 m^3/h
	Power Consumption	250 W
Air Conditioning	Cooling Capacity	5310 W
	Air Flow Volume	580 m^3/h
	Power Consumption	300 W

▶ Specifications ◀

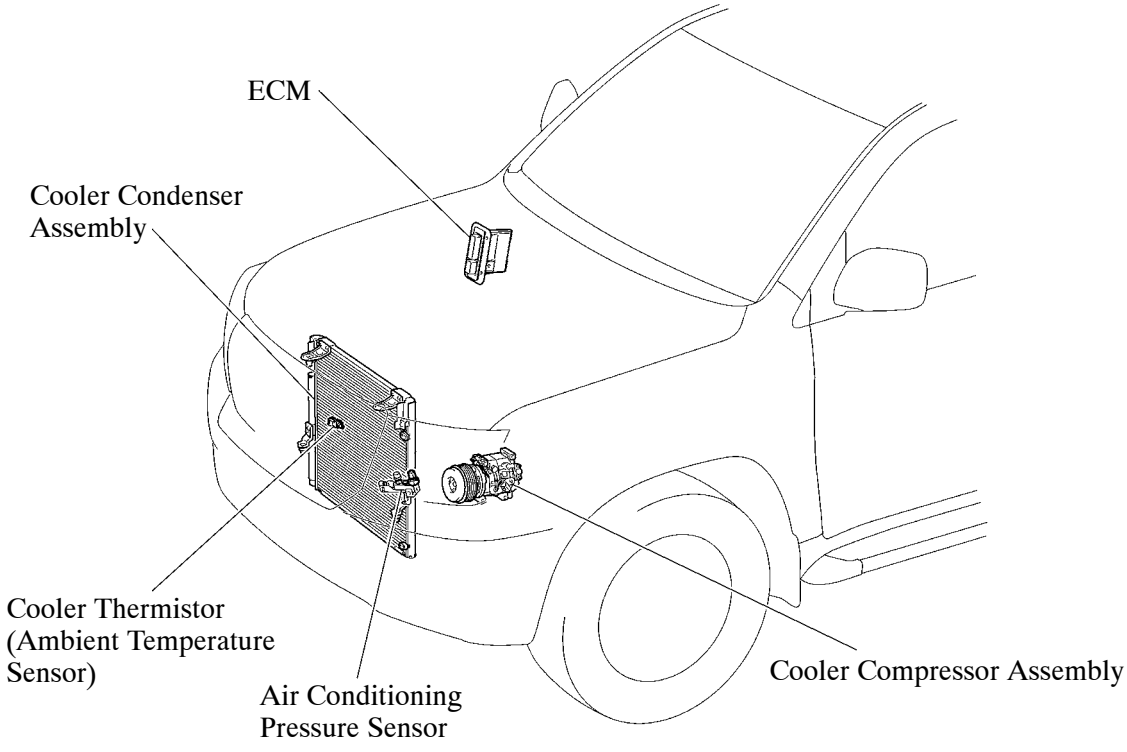
Ventilation and Heater Radiator Unit	Heater Radiator Unit Sub-assembly	Size W × H × L	284.7 mm × 120 mm × 27 mm (11.2 in. × 4.72 in. × 1.06 in.)
		Fin Pitch	1.5 mm (0.05 in.)
	Blower with Fan Motor Sub-assembly	Motor Type	Brushless Step-IV
		Fan Type	Semi Sirocco
		Fan Size Dia × H	165 mm × 70 mm (6.49 in. × 2.75 in.)
Air Conditioning	Cooler Condenser Assembly	Size W × H × L	626 mm × 528.6 mm × 22 mm*1 (24.64 in. × 20.81 in. × 0.86 in.) 640 mm × 523.8 mm × 16 mm*2 (25.19 in. × 20.62 in. × 0.62 in.)
		Fin Pitch	3.1 mm (0.12 in.)*1 3.15 mm (0.12 in.)*2
	No. 1 Cooler Evaporator Sub-assembly	Size W × H × L	293.1 mm × 235 mm × 50 mm (11.53 in. × 9.25 in. × 1.96 in.)
		Fin Pitch	3.0 mm (0.11 in.)
	Cooler Compressor Assembly	Type	10SR19
		Pulley	Magnet Clutch
	Refrigerant	Type	R134a
		Charge Volume	870 g ± 30*1 770 g ± 30*2

*1: Models for G.C.C. Countries
*2: Models for General Countries and Australia

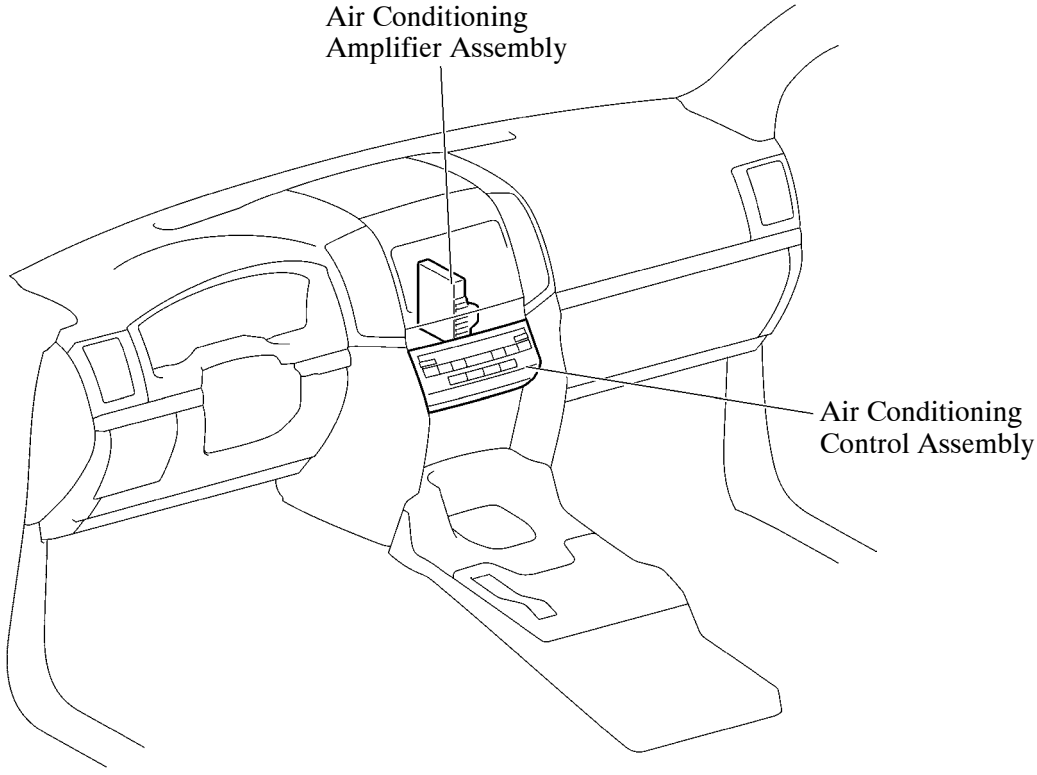
2. System Diagram



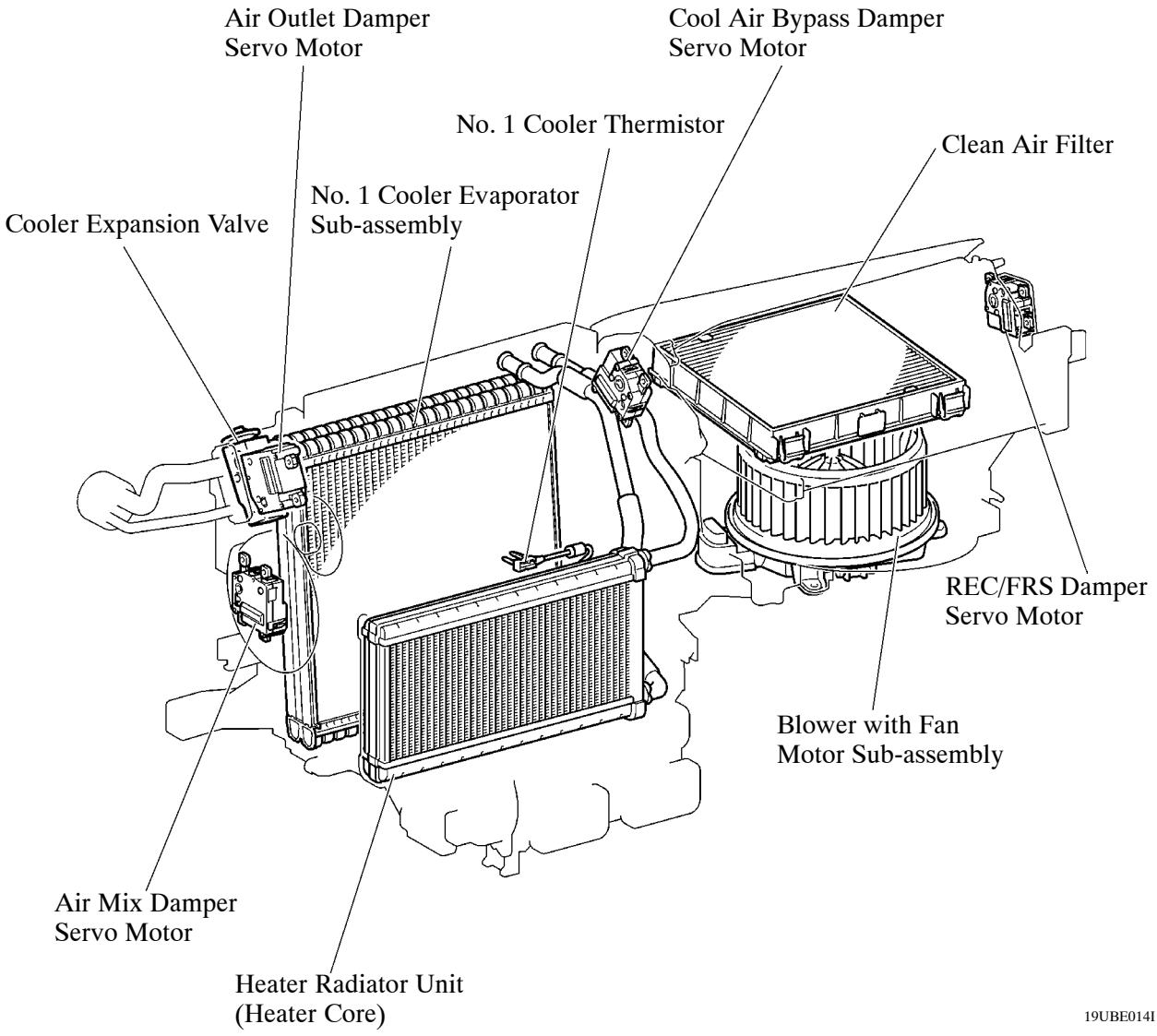
3. Layout of Main Components



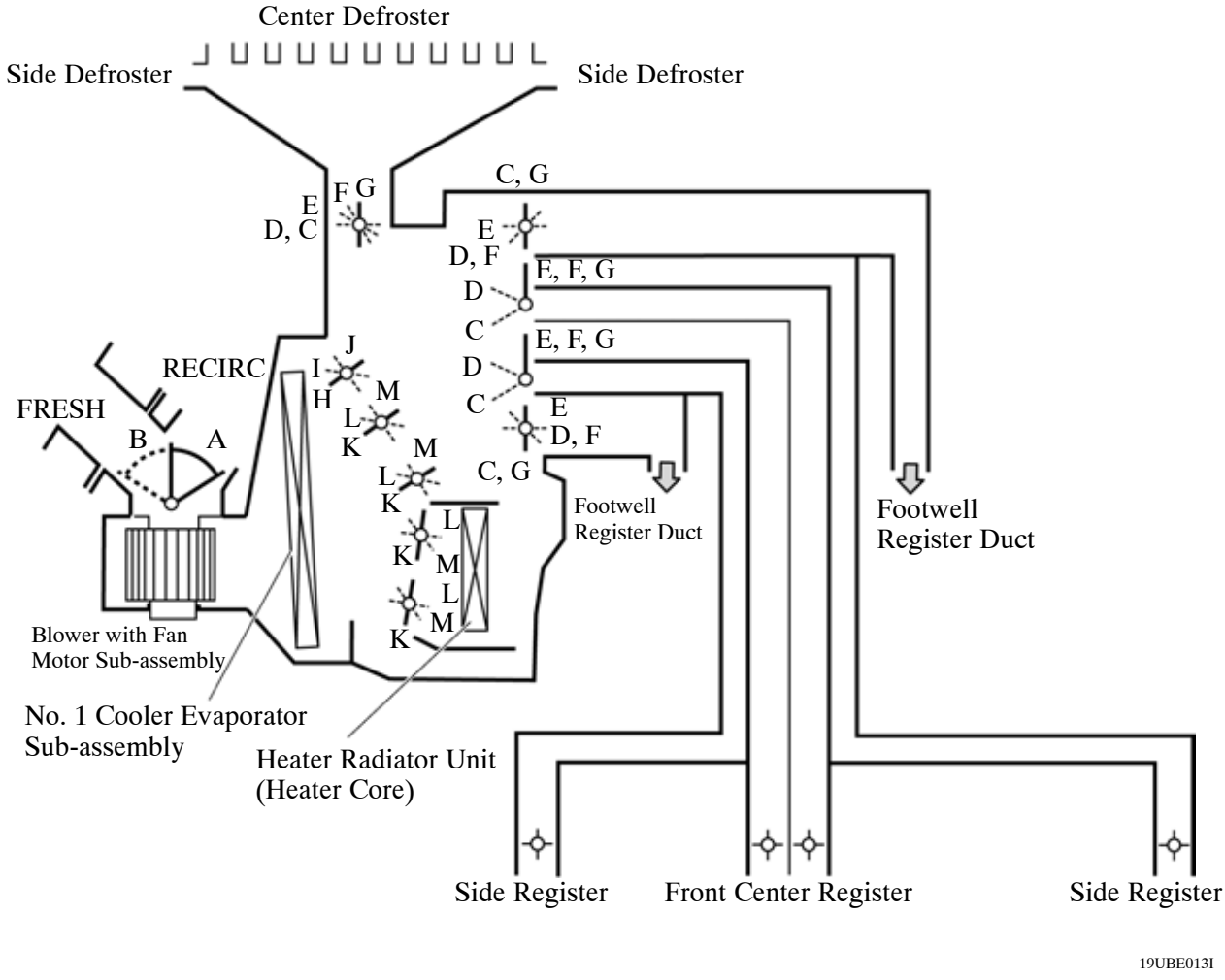
19UBE016I



19UBE009O


Air Outlet Damper
Servo Motor
Cool Air Bypass Damper
Servo Motor
No. 1 Cooler Thermistor
Clean Air Filter
Cooler Expansion Valve
No. 1 Cooler Evaporator
Sub-assembly
REC/FRS Damper
Servo Motor
Blower with Fan
Motor Sub-assembly
Air Mix Damper
Servo Motor
Heater Radiator Unit
(Heater Core)
19UBE014I

4. Mode Position and Damper Operation



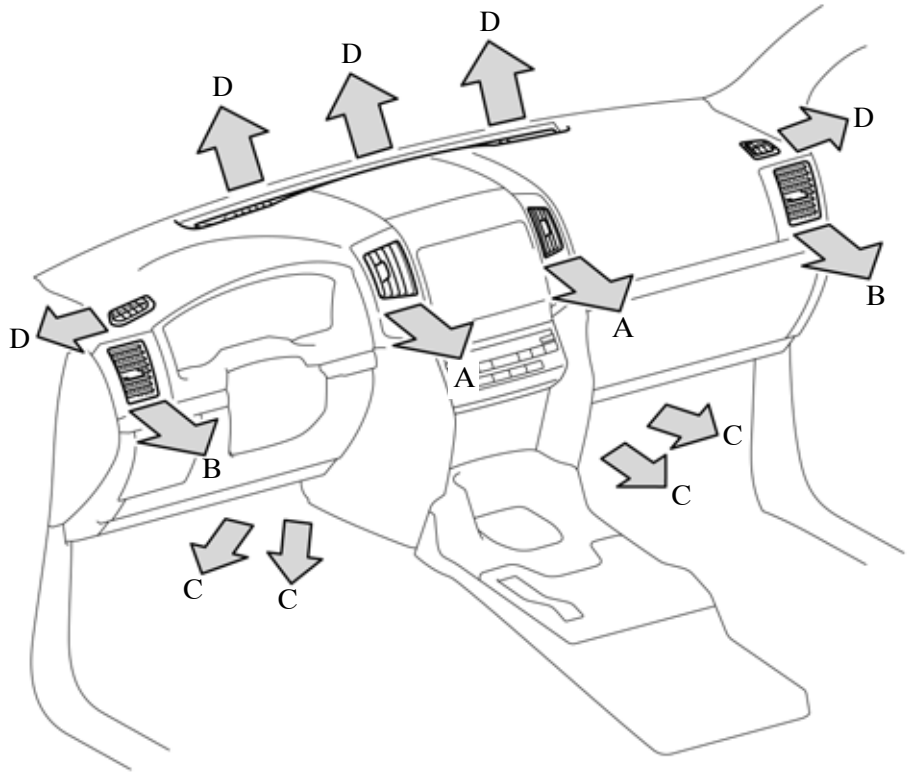
19UBE013I

▶ Operation of Main Control Dampers ◀

Control Damper	Operation Position	Damper Position	Operation
Air Inlet Control Damper	FRESH	A	Brings in fresh air.
	RECIRC	B	Recirculates internal air.
Air Mix Control Damper	Max Cool to Max Hot Temp Setting	K, L, M	Varied the mixture ratio of cold air and hot air in order to regulate the temperature continuously from hot to cool.
Cool Air Bypass Control Damper	Max Cool to Max Hot Temp Setting	H, I, J	Cool air blows out from the front center register and side registers in order to adjust the temperature around the heads of the occupants during cooling or warming.

Control Damper	Operation Position		Damper Position	Operation
Mode Control Damper	FACE	 19UBE017I	C	Air blows out of the center registers and side registers.
	BI-LEVEL	 19UBE018I	D	Air blows out of the center registers and side register. Air also blows out from the footwell register ducts.
	FOOT	 19UBE019I	E	Air blows out of the footwell register duct, center register and side register. In addition, air blows out slightly from the center defroster and side defroster.
	FOOT/DEF	 19UBE020I	F	Defrosts the windshield through the center defroster and side defroster while air is also blown out from the footwell register ducts. In addition, air blows out slightly from the center registers and side register.
	DEF	 19UBE021I	G	Defrosts the windshield through the center defroster and side defroster.

5. Air Outlets and Airflow Volume



19UBE015I

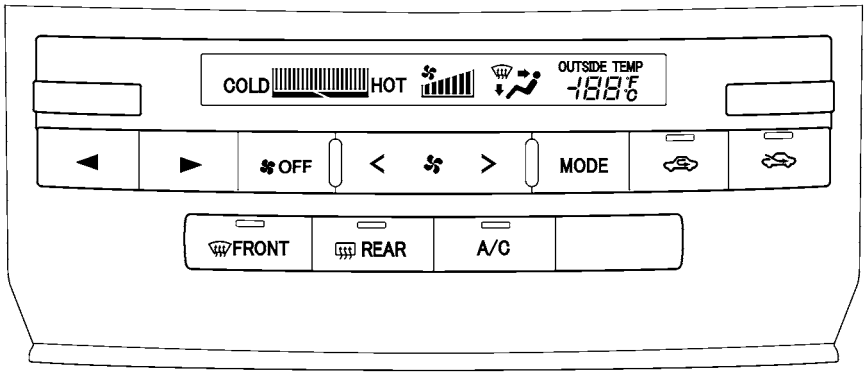
Indication	Mode	A	B	C	D
		Center	Side	Footwell	Defroster
 19UBE017I	FACE	○	○	—	—
 19UBE018I	BI-LEVEL	○	○	○	—
 19UBE019I	FOOT	○	○	○	○
 19UBE020I	FOOT/DEF	○	○	○	○
 19UBE021I	DEF	—	—	—	○

The size of the circle ○ indicates the proportion of airflow volume

6. Construction and Operation

Heater Control Panel

- A manual type air conditioning control assembly is used.



19UBE007O

Clean Air Filter

- A high efficiency type air filter is used.
- The high efficiency type clean air filter is used to remove dust and other micron particles from air entering from the outside of the vehicle to provide a comfortable cabin with clean air.

Service Tip

- The replacement intervals are shown in the chart below:

Destination	Replacement Interval	
	Normal Conditions	Dusty Conditions
G.C.C. Countries and General Countries	20000 km	15000 km
Australia	30000 km	15000 km

- Replace the clean air filter after the ignition switch is turned off.