AIR CONDITIONER

■DESCRIPTION

1. General

The air conditioner system in the new Camry has the following features:

- A automatic control air conditioner system is standard equipment.
- A semi-center location air conditioner unit, in which the evaporator and heater core are placed in the vehicle's longitudinal direction, has been adopted.
- A compact, lightweight, and highly efficient straight flow (full-path flow) aluminum heater core has been adopted.
- A multi-tank, super-slim structure evaporator has been adopted.
- A compact, lightweight, and low-noise swash plate type compressor has been adopted.
- The heater exchange efficiency has been improved through the adoption of the sub-cool condenser.
- A clean air filter that excels in removing dust has been adopted.
- The air conditioner ECU is equipped with a self-diagnosis function. If there is a malfunction in the system, it stores the DTCs (Diagnostic Trouble Codes) in its memory and blinks the air conditioner switch indicator.

▶ Performance ◀

Model			New	Previous
Heater	Heat Output	W (Kcal/h)	5750 (4950)	5400 (4650)
	Air Flow Volume	m^3/h	360	365
	Power Consumption	W	210	220*
Air Conditioner	Cooling Capacity	W (Kcal/h)	5500 (4730)	5230 (4500)
	Air Flow Volume	m^3/h	530	505
	Power Consumption	W	260	←

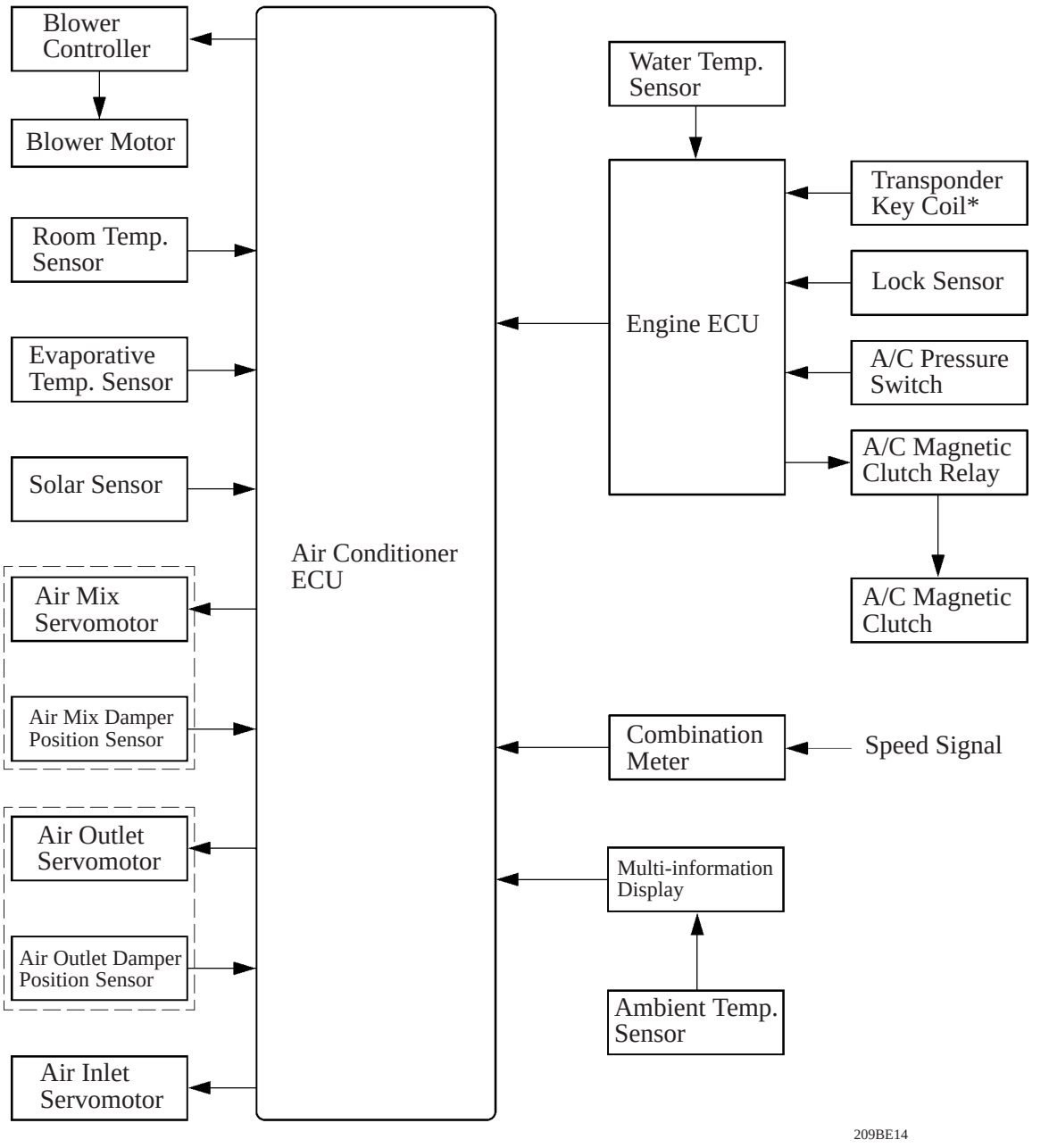
*: With Side Vent Closed

▶ Specification ◀

Model				New	Previous
Ventilation and Heater Core	Heater Core	Type		Straight Flow (Full-path Flow)	U-turn Flow
		Size W × H × L	mm (in.)	228.7 × 140 × 27 (9.0 × 5.5 × 1.1)	220.4 × 155.7 × 27 (8.7 × 6.1 × 1.1)
		Fin Pitch	mm (in.)	1.8 (0.07)	2.0 (0.08)
	Blower	Motor Type		A80Fs-12.5T	S80Fs-12T
		Fan Size Dia. × H	mm (in.)	150 × 75 (5.9 × 3.0)	←
Air Conditioner	Condenser	Type		Multi-flow (Sub-cool)	3-Passage Flow Type
		Size W × H × L	mm (in.)	670 × 387.8 × 16 (26.4 × 15.3 × 0.6)	726 × 415.6 × 22 (28.6 × 16.4 × 0.9)
		Fin Pitch	mm (in.)	3.6 (0.14)	4.5 (0.18)
	Evaporator	Type		Multi-tank, Super-slim Structure	Drawn Cup
		Size W × H × L	mm (in.)	266.2 × 255 × 58 (10.5 × 10.0 × 2.3)	252 × 260 × 90 (9.9 × 10.2 × 3.5)
		Fin Pitch	mm (in.)	3.5 (0.14)	4.0 (0.16)
	Compressor	Type		10S17	10PA17

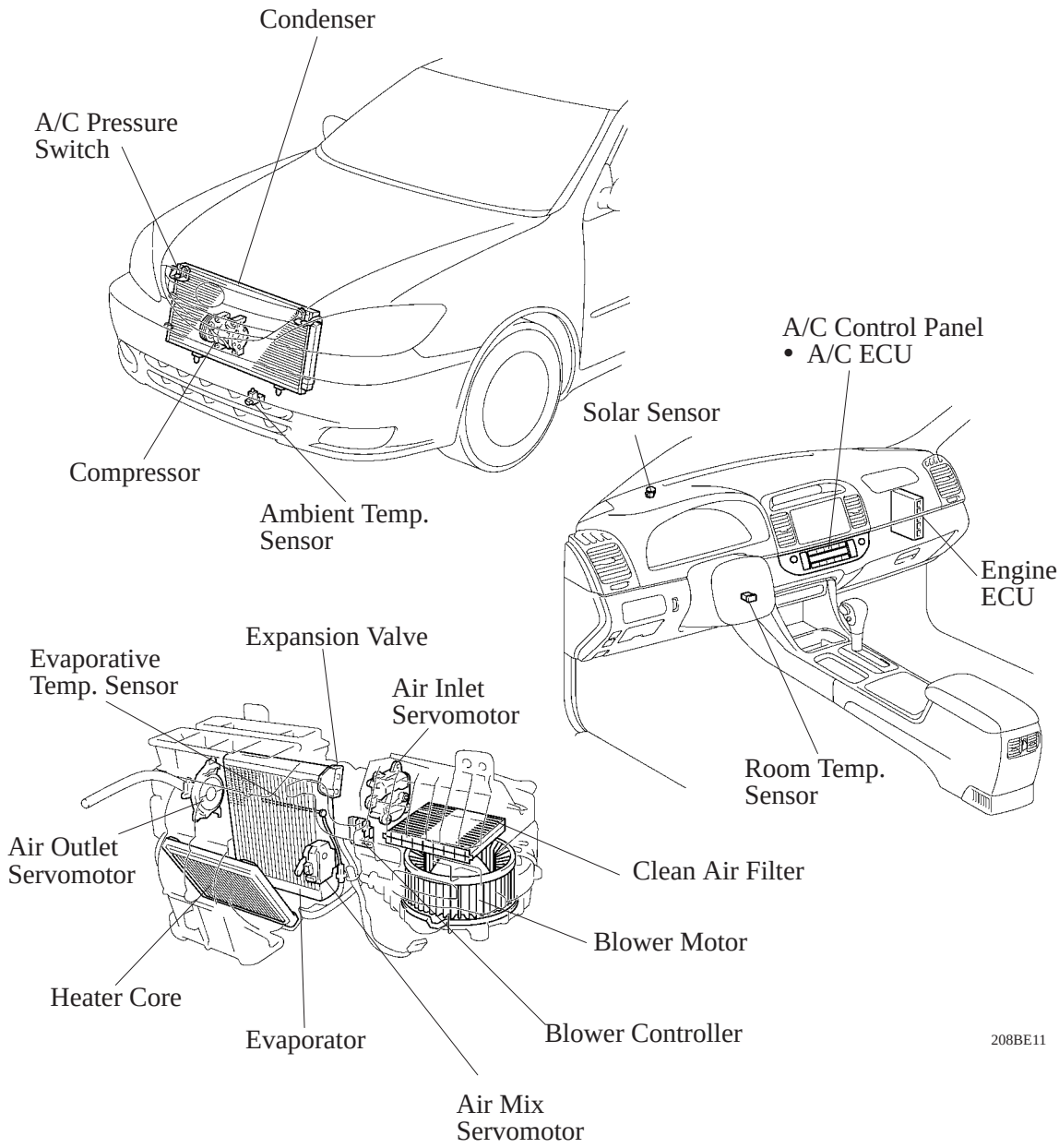
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2. System Diagram



*: With Engine Immobiliser System Model

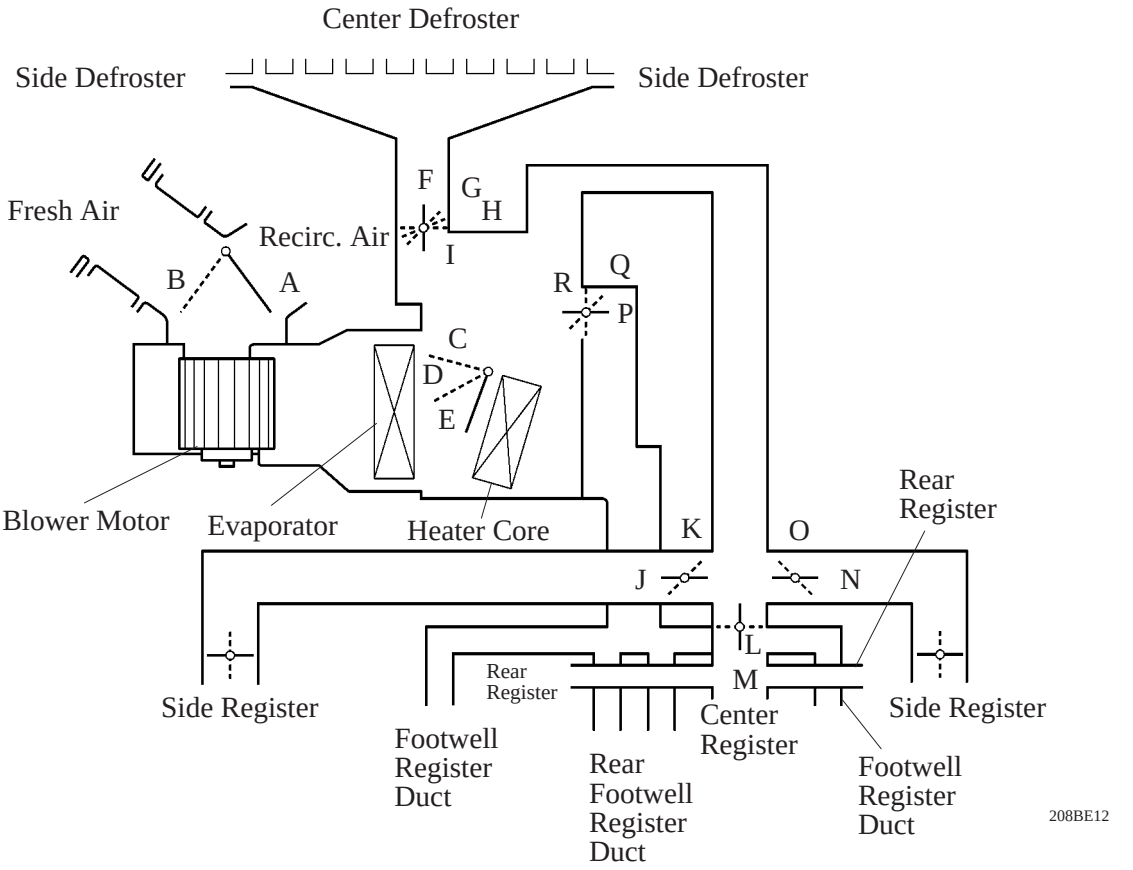
3. Layout of Main Component



LHD Model

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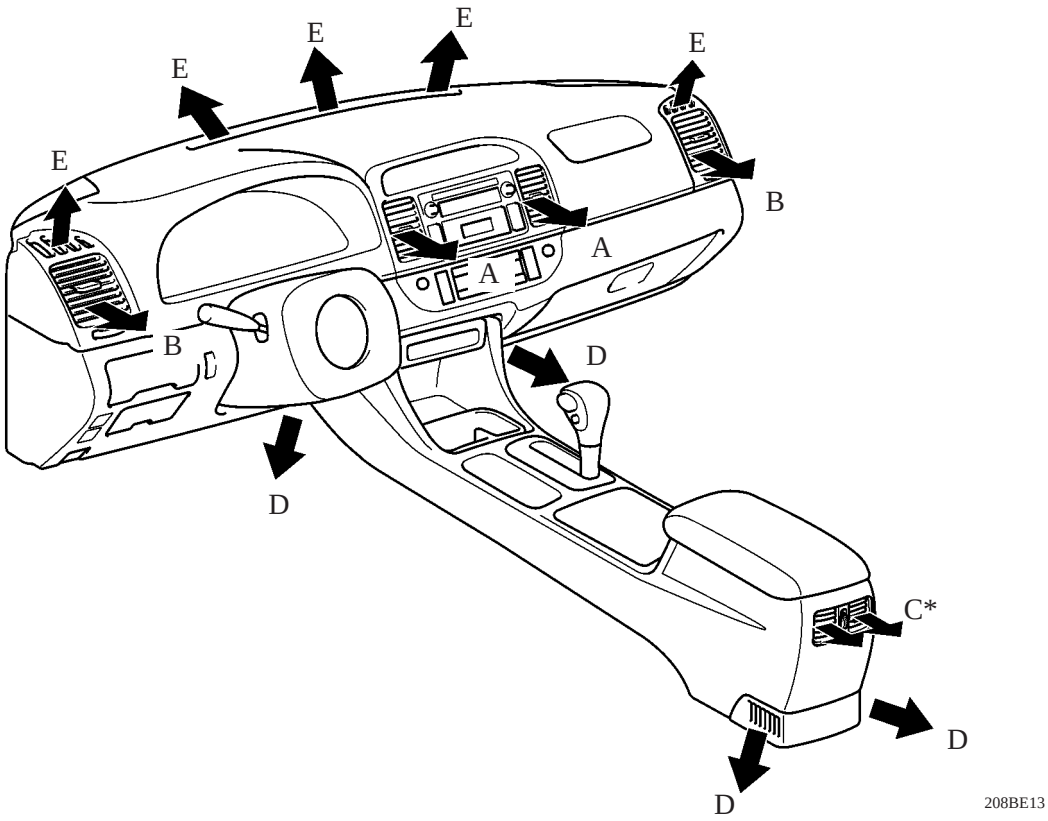
4. Mode Position and Damper Operation



▶ Function of Main Damper ◀

Control Damper	Control Position	Damper Position	Operation
Air Inlet Control Damper	FRESH 187BE23	A	Brings in fresh air.
	RECIRC 187BE41	B	Recirculates internal air.
Air Mix Control Damper	MAX COLD – MAX HOT TEMP. SETTING {18°C (65°F) - 32°C (85°F)}	C ~ D ~ E	Varies the mixture ratio of the fresh air and the recirculation air in order to regulate the temperature continuously from HOT to COLD.
Mode Control Damper	DEF 187BE28	F, K, L, O, R	Defrosts the windshield through the center defroster, side defroster, and side register.
	FOOT/DEF 187BE27	G, K, L, O, Q	Defrosts the windshield through the center defroster, side defroster, and side register, while air is also blown out from the front and rear foot well register ducts.
	FOOT 187BE26	H, K, L, O, P	Air blows out of the front and rear foot well register ducts, and side register. In addition, air blows out slightly from the center defroster and side defroster.
	BI-LEVEL 187BE25	I, J, M, N, P	Air blows out of the center registers, side registers, and foot well register ducts.
	FACE 187BE24	I, J, M, N, R	Air blows out of the center registers, and side register.

5. Air Outlets and Air Volume Rations



Air Outlet Mode	A	B	C*	D	E
	Center Face	Side Face	Rear Face	Foot	Defroster
FACE 187BE24	◯	◯	◯	—	—
BI-LEVEL 187BE25	○	○	○	○	—
FOOT 187BE26	—	○	—	◯	○
FOOT/DEF 187BE27	—	○	—	◯	○
DEF 187BE28	—	○	—	—	◯

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

*: Only for The Parking Brake Pedal Model