AIR CONDITIONING

■ DESCRIPTION

1. General

The air conditioning system in the new Coaster has the following features:

- A three flow level air mix type front heater which offers a linear temperature adjustment characteristic has been adopted for enhanced comfort.
- The cooling unit has been relocated to the front ceiling area to provide improved passenger comfort as well as a more comfortable air flow, with air flowing from the front towards the rear.
- To prevent damage to the ozone layer, the new refrigerant R134a is used in place of the conventional R12. Freon, or chlorofluorocarbon (CFC) reaches the stratosphere in an unresolved state. The photolysis caused by the powerful ultraviolet rays emitted from the sun causes the CFC to release chlorine, which destroys the ozone layer. The newly adopted R134a is a refrigerant that does not include chlorine. The new refrigerant differs from the previous one in both the physical sense and in its characteristics, so it requires different cycling components and compressor oil. Recharging the system and repairing methods must be altered accordingly. For inspection and repair details, see Coaster Repair Manual (Pub. No. RM 339E).
- The air conditioning switches now incorporate a ram air ventilation mode to provide improved forced air ventilation performance.

▶ Performance ◀

Model / Item			New	Previous
Heater	Front	Heat Output (W [kcal/h])	5230 [4500], 5930 [5100]*2, 4890 [4200]*4	4760 [4100]
		Air Flow Volume (m^3/h)	330, 400*2, 305*4	330
		Power Consumption (W)	110, 180*2	92
	Rear*1	Heat Output (W [kcal/h])	2960 [2550], 3430 [2950]*2	2790 [2400]
		Air Flow Volume (m^3/h)	205, 240*2	200
		Power Consumption (W)	40, 55*2	55
Cooler		Heat Output (W [kcal/h])	11050 [9500]	10640 [9150]
		Air Flow Volume (m^3/h)	1500	←
		Power Consumption (W)	130 × 3	400
Ventilation		Air Flow Volume (m^3/h)	250*3	150

*1 Specifications for each rear heater
*2 For cold area specification model
*3 Vehicle stopped, blower motor on HI
*4 Models for Australia

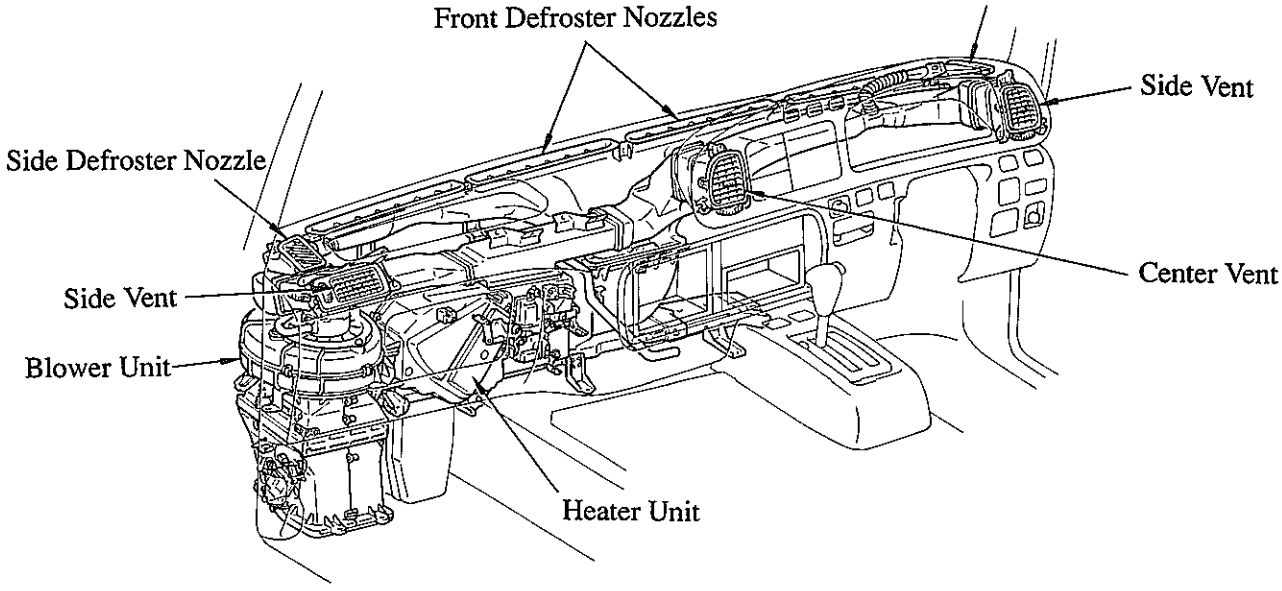
▶Specifications◀

Item			New	Previous
Front Heater	Heater Core	Type	Dimpled Tube Type	Flat Tube Type
		Size W × H × L mm (in.)	159.5 × 200 × 49 (6.28 × 7.87 × 1.93)	←
		Fin Pitch mm (in.)	2.2 (0.09)	←
	Blower	Motor Type	T70F, 86FS*	70F
		Fan Size Dia. × H mm (in.)	150 × 65 (5.91 × 2.56)	140 × 65 (5.51 × 2.56)
Rear Heater	Heater Core	Type	Dimpled Tube Type	Flat Tube Type
		Size W × H × L mm (in.)	140.5 × 130 × 49 (5.53 × 5.12 × 1.93)	←
		Fin Pitch mm (in.)	3.25 (0.13), 2.6 (0.10)*	3.5 (0.14)
	Blower	Motor Type	60F, 70F*	60F
		Fan Size Dia. × H mm (in.)	115 × 65 (4.53 × 2.56)	←
Cooler	Condenser	Type	Serpentine Tube Type	←
		Size W × H × L mm (in.)	726 × 346.2 × 22 × 2pcs (28.58 × 13.63 × 0.87)	626 × 375 × 76 (24.65 × 14.76 × 2.99)
		Fin Pitch mm (in.)	3.0 (0.12)	←
	Evaporator	Type	Corrugated Fin Type	←
		Size W × H × L mm (in.)	1090 × 145.5 × 144 (42.91 × 5.73 × 5.67)	1250 × 168 × 124.7 (49.21 × 6.61 × 4.91)
		Fin Pitch mm (in.)	2.0 (0.08)	←
	Compressor	Type	10P30	←
	Refrigerant	Type	R134a	R12

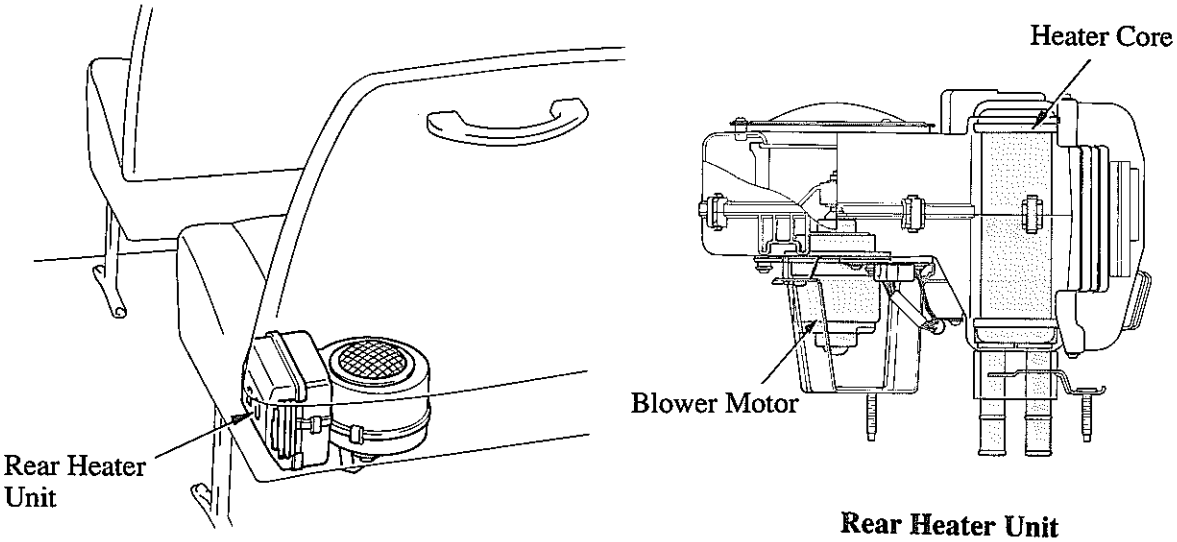
*For cold area specification model.

2. Layout of components

Front Heater Unit, Ducts and Vents

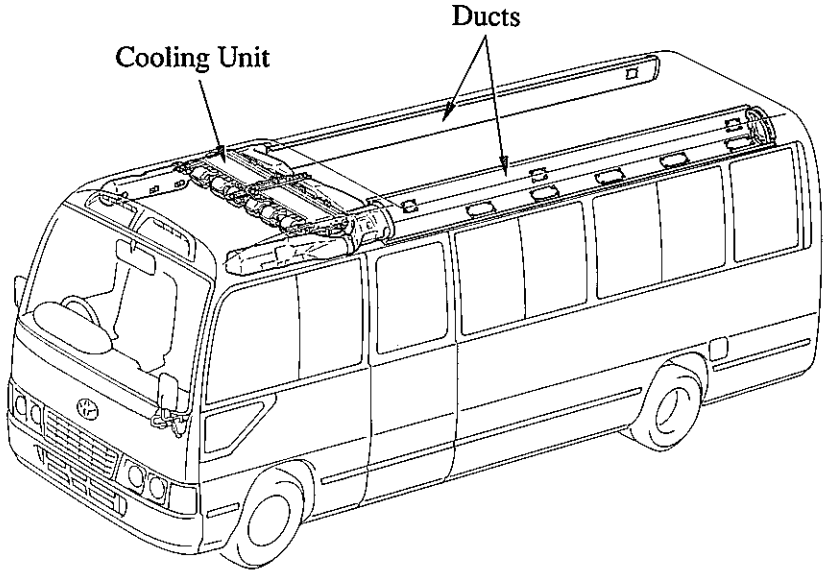


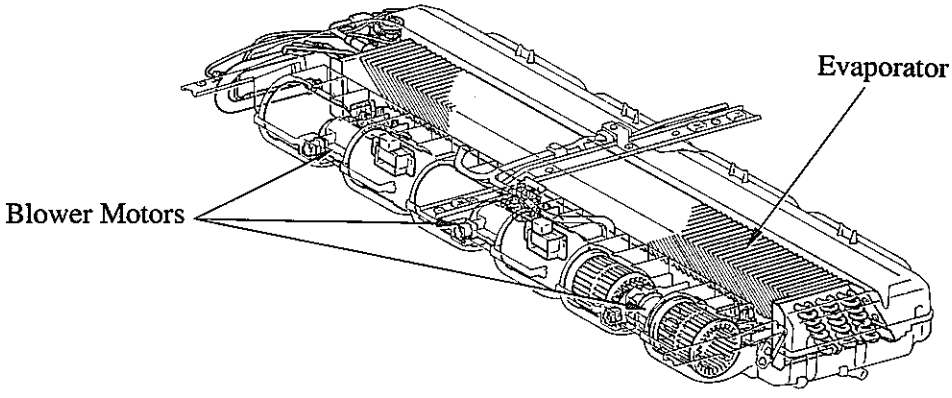
Rear Heater Unit



Rear Heater Unit

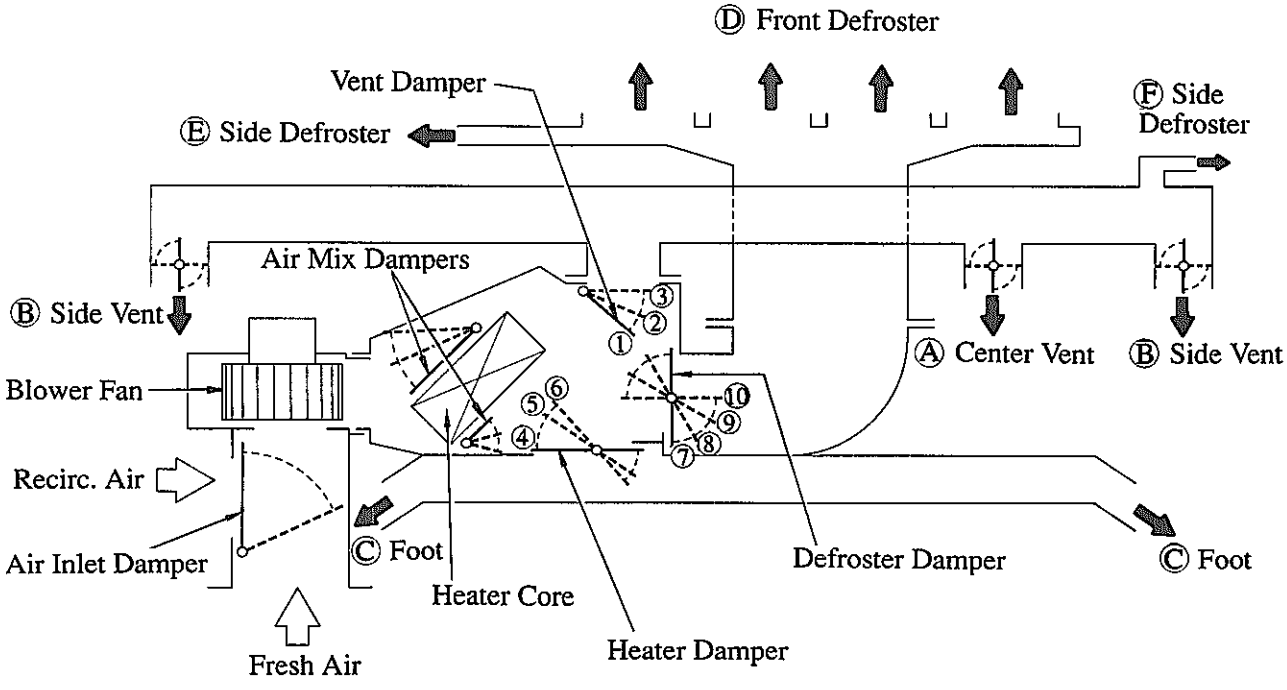
Cooling Unit





Cooling Unit

3. Damper Position and Air Flow Relationship (For Front Heater)

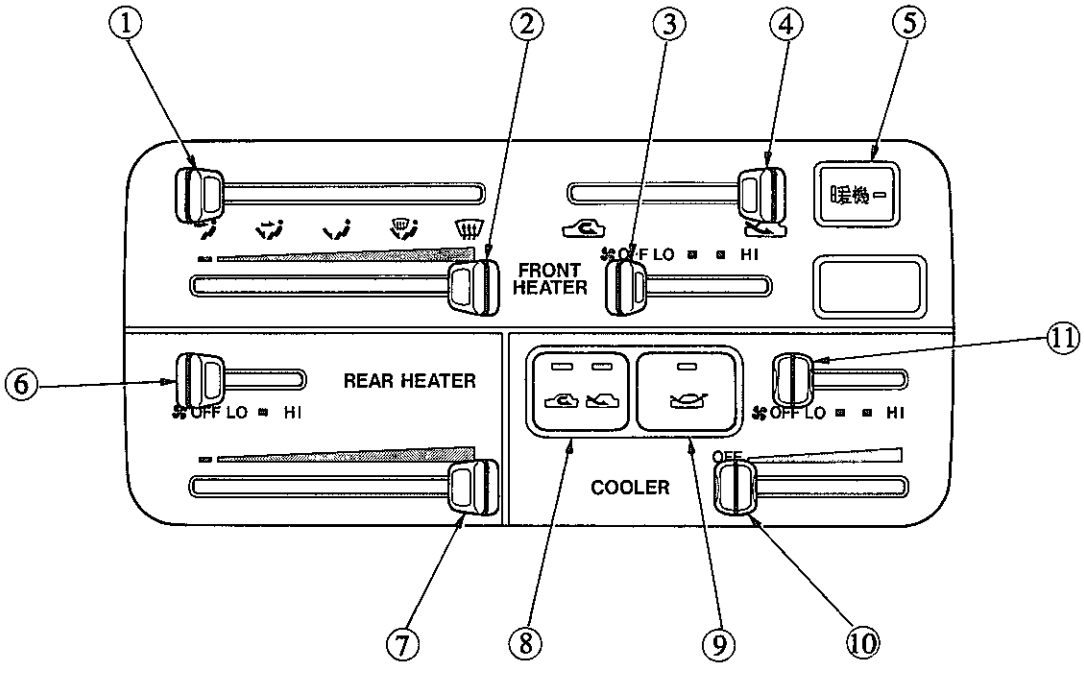


Air Outlet Mode		Mode Control Damper Position			Vent		Ⓒ Foot	Defroster		
					Ⓐ Center	Ⓑ Side		Ⓓ Front	Ⓔ Side	Ⓕ Side
Face		①	④	⑦	○	○				○
Bi-Level		②	⑤	⑦	○	○	○			○
Foot		③	⑥	⑧	○	○	○	○	○	○
Foot/Defroster		②	⑤	⑨	○	○	○	○	○	○
Defroster		①	④	⑩	○	○		○	○	○

NOTE: The size of the circle ○ indicates the proportion of air flow volume.

4. Air Conditioning Switches

- The air flow mode now has 5 positions, including the newly adopted (Foot/Defroster) mode, for enhanced utility.
- A ram air ventilation switch has been newly adopted. In addition, a heater boost switch is used on models for the CIS, to increase passenger comfort.



	No.	Switch or Lever	Function
Front Heater	①	Air Flow Mode Control	The air outlet mode to face, bi-level, foot, foot/defroster, or defroster mode.
	②	Temperature Control	Blower air temperature is regulated by the position of this knob.
	③	Blower	Blower motor speed is controlled by the switch position.
	④	Air Inlet Control	Sets air inlet to Fresh or Recirculation mode.
	⑤	Heater Boost*1	Turning this switch on increases the engine idle, and starts the warm-up operation.
Rear Heater	⑥	Blower	Blower motor speed is controlled by the switch position.
	⑦	Temperature Control	Blower air temperature is regulated by the position of this knob.
Cooler	⑧	Air Inlet Control	Sets air inlet to Fresh or Recirculation mode.
	⑨	Ram Air Ventilation*2	Forces outside air through the ceiling vent outlets.
	⑩	Cooler	• Turning this switch on while the blower switch is on engages the compressor. • Controls the compressor and vent outlet temperatures in relation to the knob position and operation of the amplifier.
	⑪	Blower	Blower motor speed is controlled by the switch position.

*1 Only for CIS
*2 All vehicles with cooler (except Hong Kong)