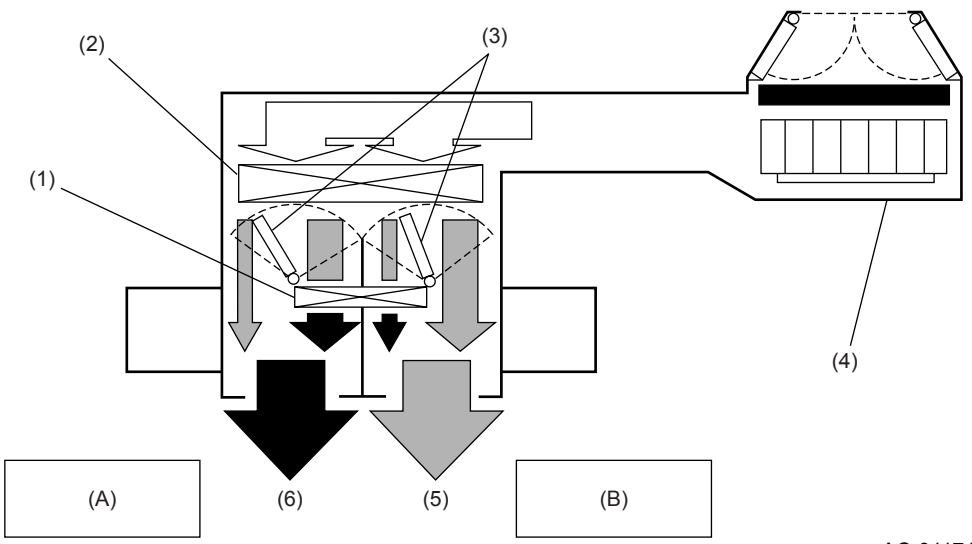
1. Heater System

A: GENERAL

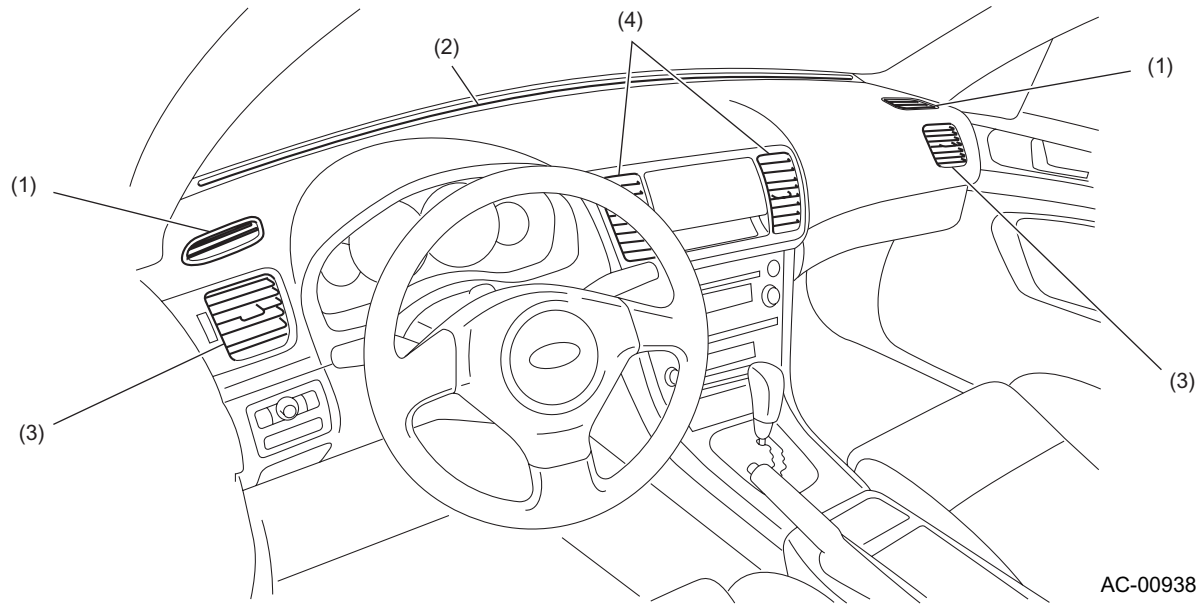
● A semi-center type integrated air conditioning unit is used, where a high performance heater core and an evaporator core are placed in front and rear of the unit. While ensuring sufficient leg space at the front passengerís seat, resistance to air flow in the air passage is reduced, and the air conditioning system offers a low noise and comfortable environment in all seasons through its functions such as heating, air conditioning, ventilating and defrosting.

● On models with automatic air conditioning, a left/right independent temperature control system is introduced to enable the driver and passenger choose a desirable temperature setting individually.



(A) Driver's seat
(B) Passenger's seat
(1) Heater core
(2) Evaporator
(3) Air mix door
(4) Blower unit
(5) Cool air
(6) Warm air

● There are four ventilation grilles in the dashboard; two large size grilles at the center and a side grille at each side. To improve the defrosting performance, air is always sent out from the side grilles.

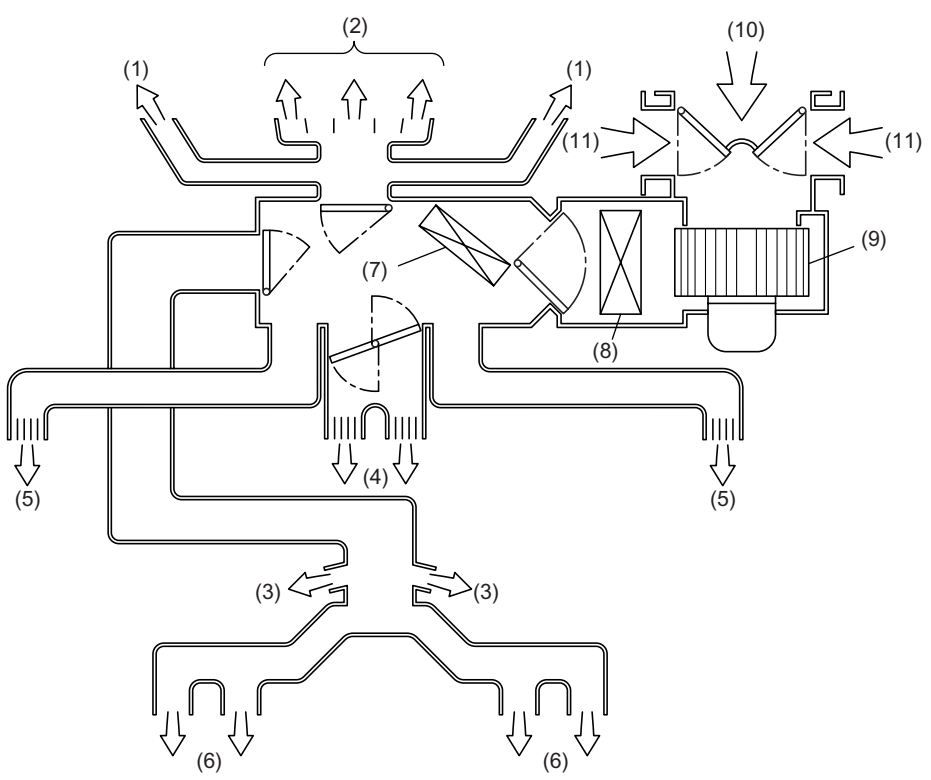


(1) Side defroster
(2) Front defroster
(3) Side ventilation grille
(4) Center ventilation grille

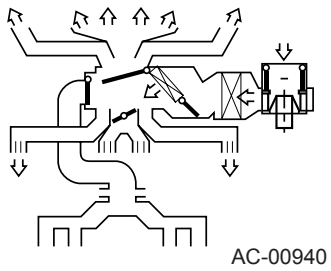
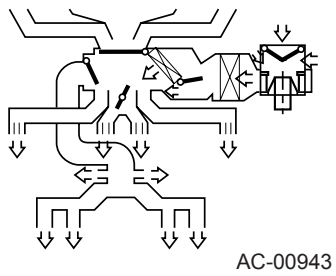
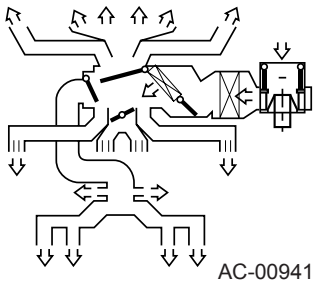
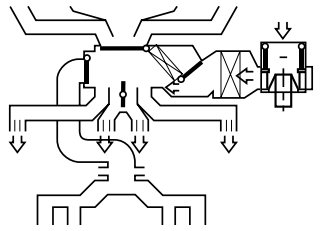
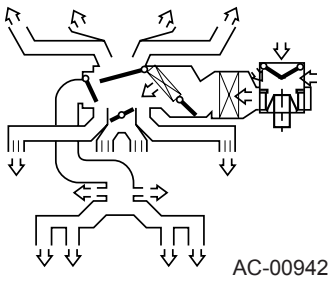
1. SPECIFICATIONS

Heating type	Heating performance (W)	Blower power consumption (W)	Maximum blower capacity (m^3/h)		
			VENT	HEAT	DEF
Outside air mixing type (“full-air-mix” type)	5200	220 or less	460	320	300

B: AIR FLOW MODES



(1) Side defroster
(2) Front defroster
(3) Foot duct
(4) Center vent duct
(5) Side vent duct
(6) Rear heater duct
(7) Heater core
(8) Evaporator
(9) Blower motor
(10) Outside air
(11) Cabin air

Switch position		Heater unit door operation	Switch position		Heater unit door operation
Air flow control	**DEF** AC-00119	 AC-00940	Air flow control	**BILEVEL** AC-00122	 AC-00943
	DEF/FOOT AC-00837	 AC-00941		**FACE** AC-00839	 AC-00944
	FOOT AC-00838	 AC-00942	FRESH/RECIRC switching	AC-00124	This switch allows selecting either of cabin-air-recirculation or fresh-air-introduction modes. FRESH/RECIRC is changed each time the switch is pressed. Indicator ON: cabin air recirculation Indicator OFF: fresh air introduction

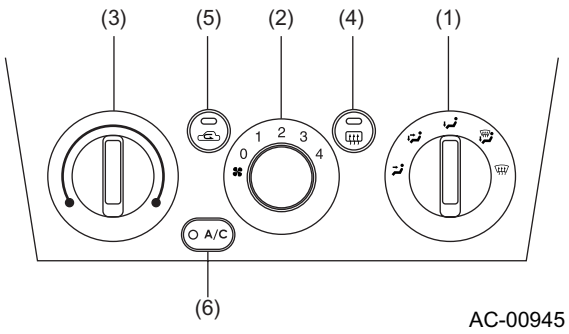
C: CONTROL PANEL

● The control panel is incorporated into the center panel. To improve the appearance of the interior, the panel is integrated with the audio panel except for models with some audio equipment variations.

● A rear window defogger switch is located in the control panel.

1. MODELS WITH MANUAL AIR CONDITIONING

● The control panel uses three large-diameter, dial type switches for easy operation and good visual recognition.



AC-00945

(1) Air flow control dial:
This switch allows selecting any of the five air flow modes.

AC-00127

(2) Fan speed control dial:
This switch allows turning on/off the blower and selecting any of the four blower speeds.

0 1 2 3 4

AC-00126

(3) Temperature control dial:
This switch allows step-less adjusting of the temperature of air delivered through ventilators.

(4) Rear window defogger switch:
This switch activates the rear defogger. When the switch is left on, a timer keeps the defogger activated for 15 minutes and then turns it off automatically.

(5) FRESH/RECIRC switch:
This switch allows selecting either cabin-air-recirculation or fresh-air-introduction.

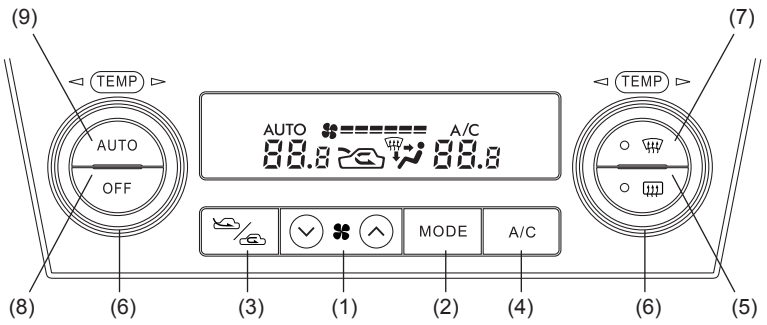
(6) Air conditioning switch:
This switch turns on or off the air conditioning compressor.

2. MODELS WITH AUTOMATIC AIR CONDITIONING

● A motor driven actuator is used for air outlet switching, driver and passenger side temperature control, and FRESH/RECIRC switching.

● A large sized LCD panel which excels in visibility is used for the control panel.

● To eliminate errors due to heat, the cabin temperature sensor is moved from the control panel to the console side panel.



AC-01122

(1) Fan speed control switch:
In automatic air conditioning mode, the system controls the blower speed automatically in accordance with sensor signals.
In manual air conditioning mode, this switch allows selecting any of the six blower speeds.

(2) Air flow control switch:
This switch allows selecting any of the four air flow modes.

AC-00130

(3) FRESH/RECIRC switch:
This switch allows selecting either cabin-air-recirculation or fresh-air-introduction.

(4) A/C switch:
This switch turns on or off the air conditioning compressor.

(5) Rear window defogger switch:
This switch activates the rear defogger. When the switch is left on, a timer keeps the defogger activated for 15 minutes and then turns it off automatically.

(6) Temperature control dial (left: driver's seat, right: passenger's seat):
By turning the left or right dial the temperature of air delivered through ventilators can be adjusted individually at the driver's side and passenger's side. When the dial is turned clockwise the temperature setting rises, and when the dial is turned counterclockwise the setting becomes lower.
Temperature setting can be changed in a range between 18 and 32°C in 0.5°C steps.

(7) Defroster switch:
When this switch is turned ON the system enters the defroster mode.

(8) OFF switch:
All functions are disabled.

(9) AUTO switch:
When this switch is turned ON the system enters auto air conditioning mode and automatically controls the blower fan speed, air outlet, fresh/recirculation switching, and compressor operation.

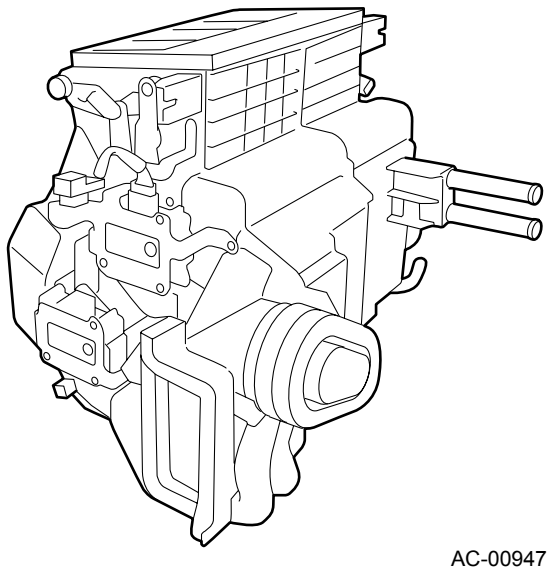
D: HEATER AND COOLING UNIT

● Having an evaporator core at the front and a heater core at the rear, this single unit combines both heating and cooling functions.

● The heater and cooling unit incorporates mode doors for creating different air flow modes and an air mix door for mixing heated air and outside air.

● On models with automatic air conditioning, the inside of the heater and cooling unit is separated into left and right parts so that the driver and passenger can individually control the temperature.

● In models with an automatic air conditioning, the mode doors and air mixing door are moved by electric-motor-driven actuators.
In models with a manual air conditioning system, the air mix door is moved by a linkage cable.



AC-00947

1. SPECIFICATIONS

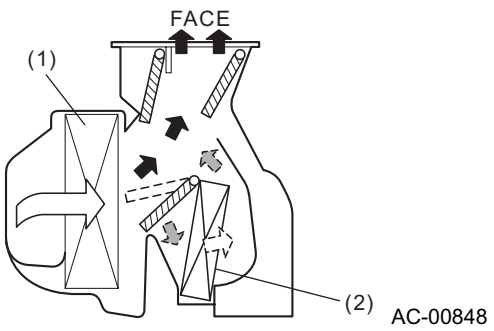
Heater core size	Heat output
264 × 110 × 27	5200 W

2. DESIGN FEATURES FOR EACH AIR FLOW MODE

1) Ventilation (FACE) mode

● The passage leading air from the evaporator to the ventilation duct is made straight to reduce air flow resistance.

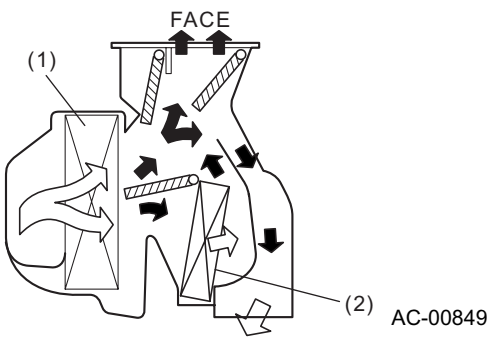
● When the air temperature is necessary to be adjusted, heated air is blown at right angles against the flow of cool air from the evaporator. This allows the airs to mix thoroughly.



(1) Evaporator
(2) Heater core

2) Foot/face (BILEVEL) mode

● The air that has flown through the evaporator is divided into two directions. Part of this air flows through the heater core and becomes warm air. The rest of the air goes to the outlet as cool air, however, this is mixed with the warm air from the heater core. The mixed air then flows to the ventilation and heater ducts.



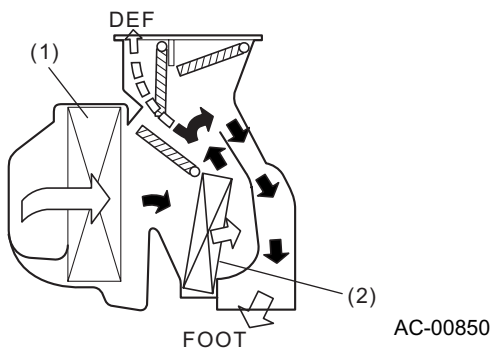
(1) Evaporator
(2) Heater core

3) Heating (FOOT) mode

● The air that has flown through the evaporator is heated at the heater core and then flows to the heater ducts.

● To defog the windshield, the defroster door is slightly open and warm air is also sent to the defroster (DEF) duct.

● The side ventilation grills ventilate air always.



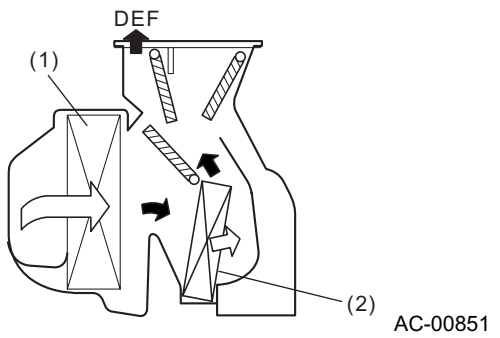
(1) Evaporator
(2) Heater core

4) Defroster (DEF) mode

● Air passages are designed in such a way that air flow resistance is minimized and defrosting performance is maximized.

● The air passages toward the defroster (DEF) outlet is long enough to ensure a same airflow rate at all defroster outlets.

● The side ventilation grills ventilate air always.



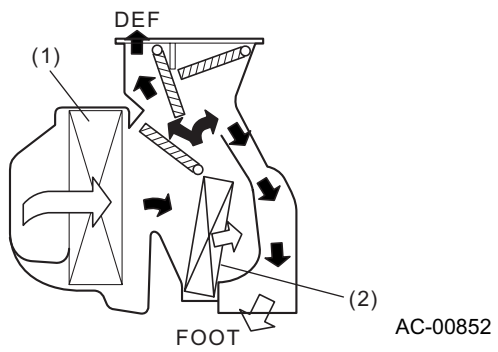
(1) Evaporator
(2) Heater core

5) Defroster (DEF) /Heating (FOOT) mode

● The air from the evaporator flows through the heater core and the warmed air flows to the defroster (DEF) duct and foot duct to defog the windshield while sending warm air to the legs.

● The air directed to the defroster duct flows out from the front and side defroster ducts to defog the windows.

● The side ventilation grills ventilate air always.

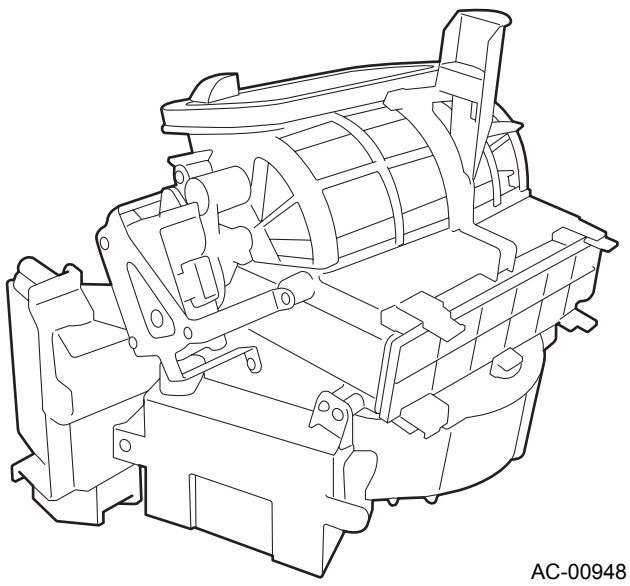


AC-00852

(1) Evaporator
(2) Heater core

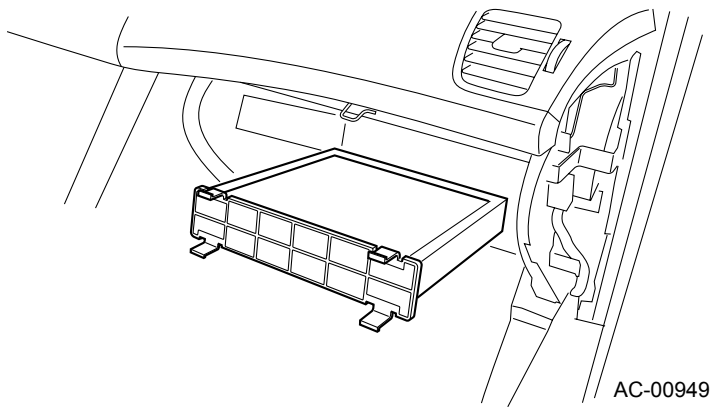
E: BLOWER UNIT

● The blower unit uses a low-noise-type motor.


AC-00948

F: FILTER

● Clean air filters are available for all models as dealer option. They can remove dust, cigarette smoke particles and other similar impurities in the air.

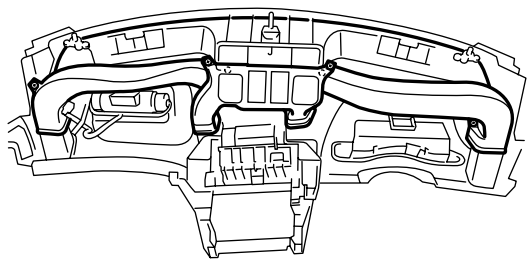


AC-00949

G: DUCT

● The ventilation duct and defroster duct are located behind the instrument panel. Both the ducts have been modified in the shape to reduce air flow resistance.

● Defrosting air flow is divided at the center, so that air can flow out evenly through a wide center defroster as well as right and left side defrosters.



AC-00950