HVAC SYSTEM
(HEATER, VENTILATOR, AND A/C)

1. Heater System

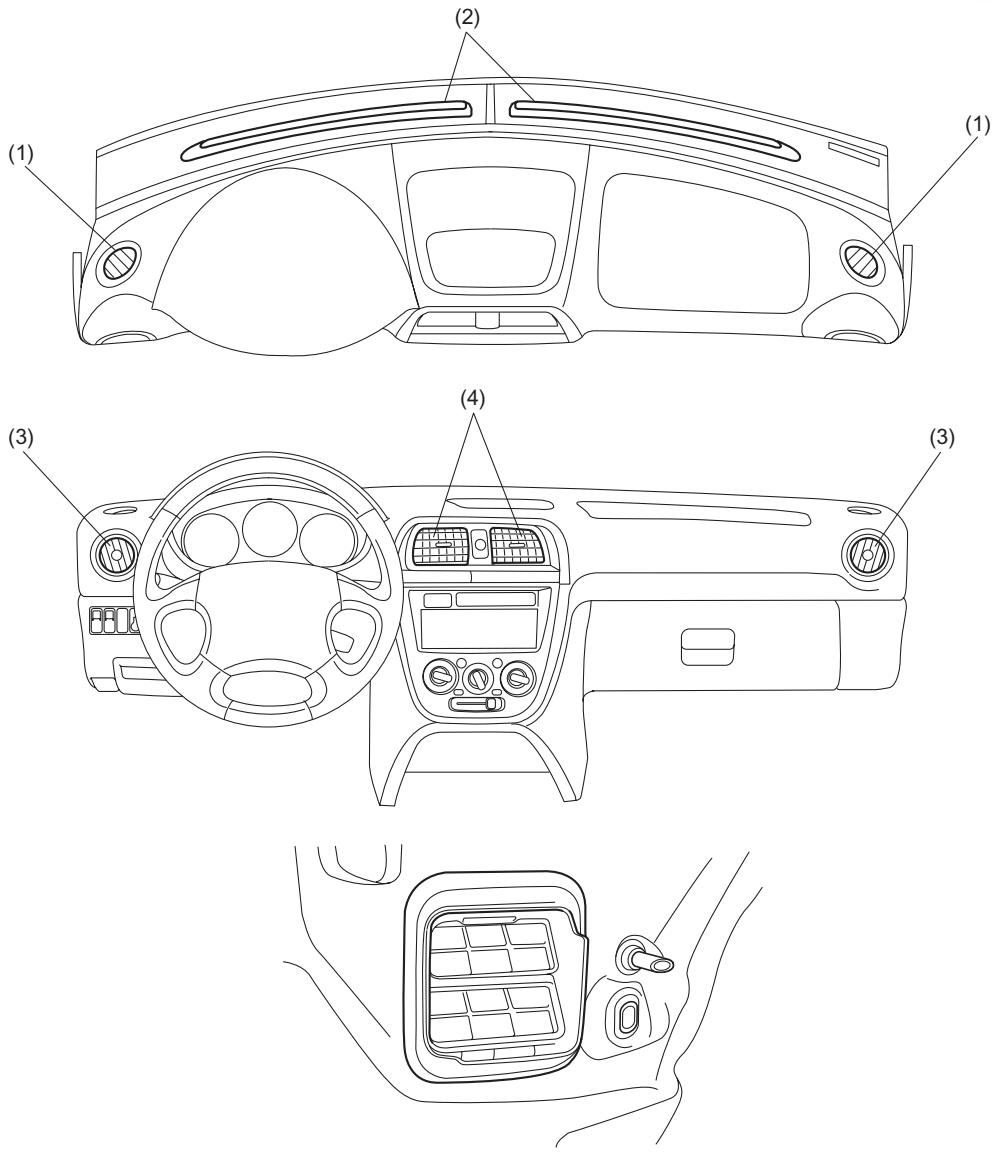
A: GENERAL

● The Impreza's HVAC system uses a semi-central control type integral air conditioning unit consisting of a thin-wall, high-performance heater core at the front and evaporator core at the rear. Being compact in size, this unit enables providing sufficient front passenger's legroom while ensuring a high air-distribution efficiency by minimizing air flow resistance in all air passages. Overall, the system can create comfortable interior air conditions quietly and in all seasons by its excellent heating, cooling, ventilating, and defrosting performances.

● There are four ventilation grilles in the dashboard; two trapezoidal grilles at the center and round grilles at both sides. The side grilles are rotatable for air flow direction adjustments.

● To ensure adequate ventilation, large-size air outlets are provided behind the side portions of the rear bumper where high-level vacuums are generated during driving.

● A clean air filter is placed at upstream of the blower fan.



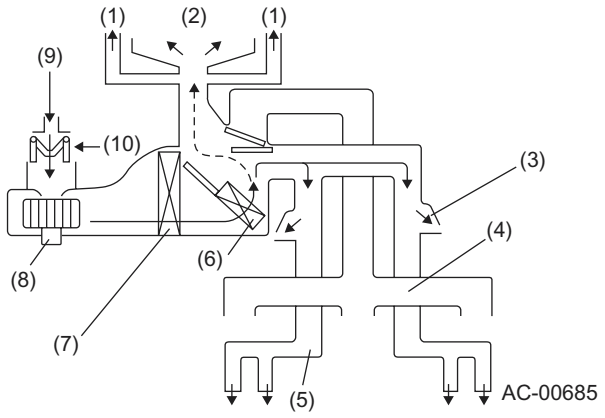
AC-00682

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

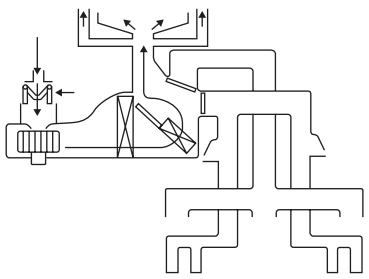
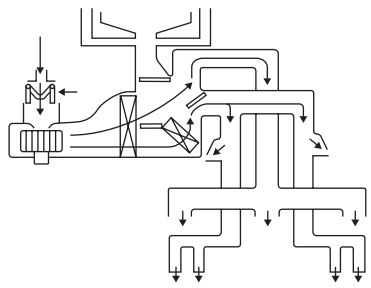
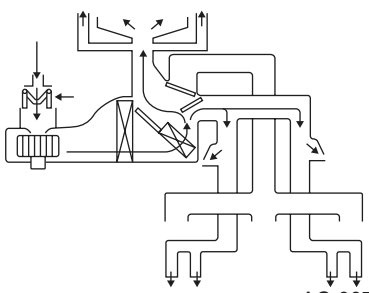
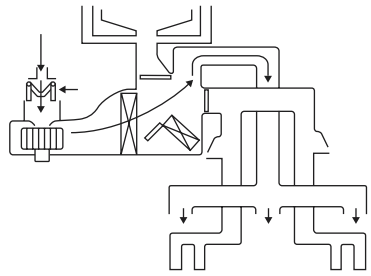
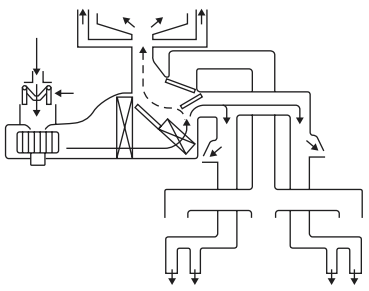
1. SPECIFICATIONS

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)	5000	200	450	280	300

B: AIR FLOW MODES



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

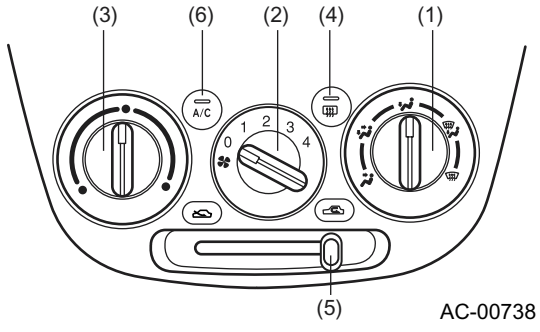
	Switch position	Heater unit door operation		Switch position	Heater unit door operation
Air flow control	**DEF** AC-00119	 AC-00725	Air flow control	**BILEVEL** AC-00122	 AC-00728
	DEF/HEAT AC-00120	 AC-00726		**VENT** AC-00123	 AC-00729
	HEAT AC-00121	 AC-00727	FRESH/RECIRC switching	AC-00124	This switch/lever allows selecting either cabin-air-recirculation or fresh-air-introduction mode. **Models with automatic air conditioning** FRESH/RECIRC is changed each time the switch is pressed. Indicator ON: cabin air recirculation Indicator OFF: fresh air introduction **Models with manual air conditioning** Switched by operating the lever.

C: CONTROL PANEL

- The HVAC control panel is incorporated into the center panel.
- 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-00738

(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.

AC-00126

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

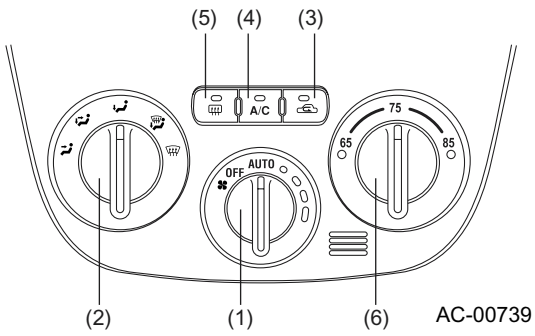
(4) Rear window defogger switch:
This switch activates the rear defogger. When the switch is left on, a timer keeps the defogger activated for 15 minutes and then turns it off automatically.

(5) FRESH/RECIRC lever:
This lever 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

● The system changes air flow, adjusts temperature and makes switching between the cabin-air re-circulation and outside-air-introduction using servo motors.



AC-00739

(1) Fan speed control dial:
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 four blower speeds.

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

AC-00127

(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.

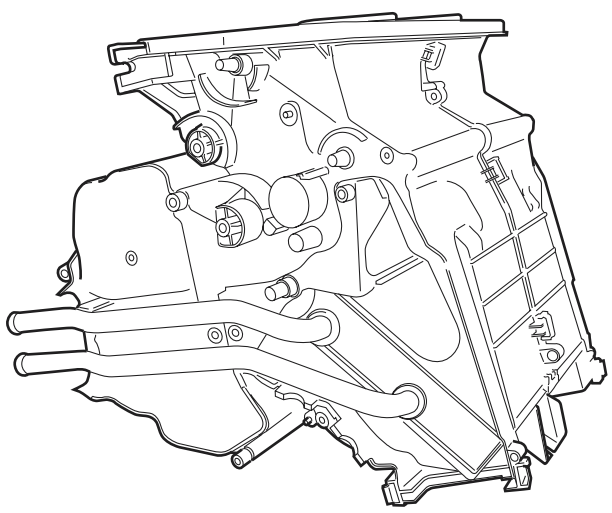
(6) Temperature control dial:
This switch allows adjusting the temperature of air delivered through ventilators.
There are 11 steps available for selection between positions 65 and 85 (vehicles for US) or between positions 20 and 30 (vehicles for Canada). The counterclockwise and clockwise extreme ends are the positions to keep the system in the maximum cooling and maximum heating operations, respectively.

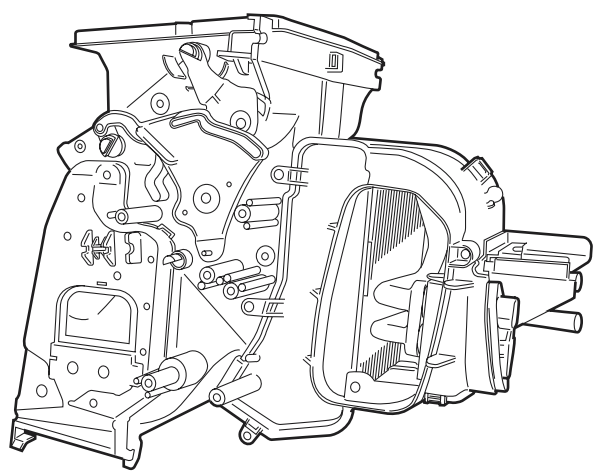
D: HEATER AND COOLING UNIT

● 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 doors for creating different air flow modes and a door for mixing heated air and outside air.

● In the models with an automatic air conditioner, the air flow mode switching doors and air mixing door are moved by electric-motor-driven actuators. The actuators are centrally controlled using a local area network (LAN) system.
In the models without an air conditioner, the air flow mode switching doors and air mixing door are moved by cables through corresponding linkages.





AC-00483

1. SPECIFICATIONS

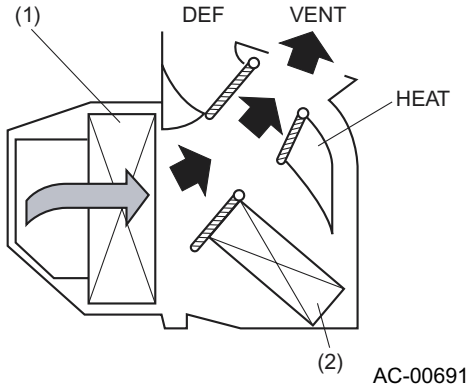
Heater core size	Heat output
163.9 × 200 × 25	5000W

2. DESIGN FEATURES FOR EACH AIR FLOW MODE

1) Ventilation (VENT) mode

● The passage leading air from the evaporator to the ventilation outlet (VENT) is made straight to reduce air flow resistance.

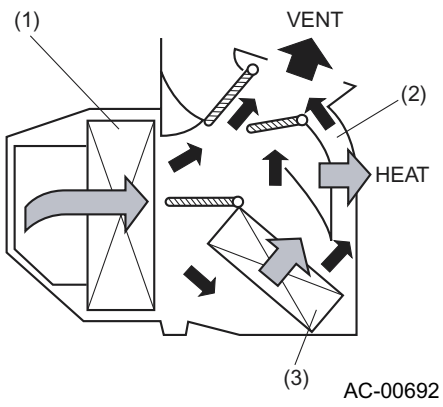
● When the air temperature is necessary to be adjusted, heated air is blown at right angles against the flow of cool air from the evaporator. This allows the airs to mix thoroughly.



(1) Evaporator
(2) Heater core

2) Foot/face (BILEVEL) mode

● Warm and cool air flows are created by structural means, namely, by forming sealing surface for air toward leg area on the heated air passage side and that for air toward the ventilation outlet (VENT) on the cooled air passage side.
To prevent an excessive difference in the temperature between the two air flows, a bypass passage is provided to allow part of heated air to flow toward the ventilation (VENT) outlet.

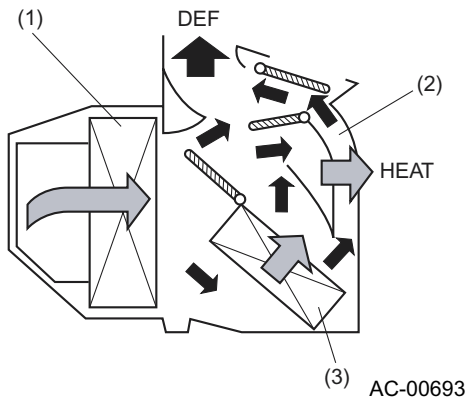


(1) Evaporator
(2) Bypass passage
(3) Heater core

3) Heating (HEAT) mode

● Warm and cool air flows are created by structural means, namely, by forming sealing surface for air toward leg area on the heated air passage side and that for air toward the defroster (DEF) outlet on the cooled air passage side.
To prevent an excessive difference in the temperature between the two air flows, a bypass passage is provided to allow part of heated air to flow toward the ventilation (VENT) outlet.

● To maintain the passage toward the defroster (DEF) outlet even during the heating mode operation, the door of the passage toward leg area is fully opened to the make the passage also serve as a passage toward the defroster (DEF) outlet.

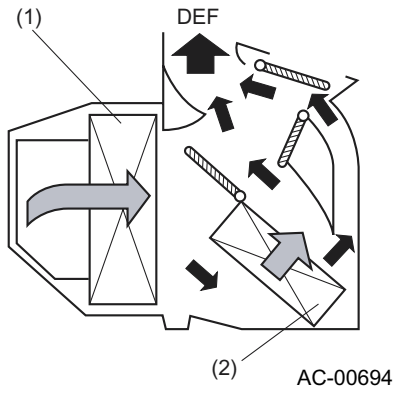


(1) Evaporator
(2) Bypass passage
(3) Heater core

4) Defroster (DEF) mode

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

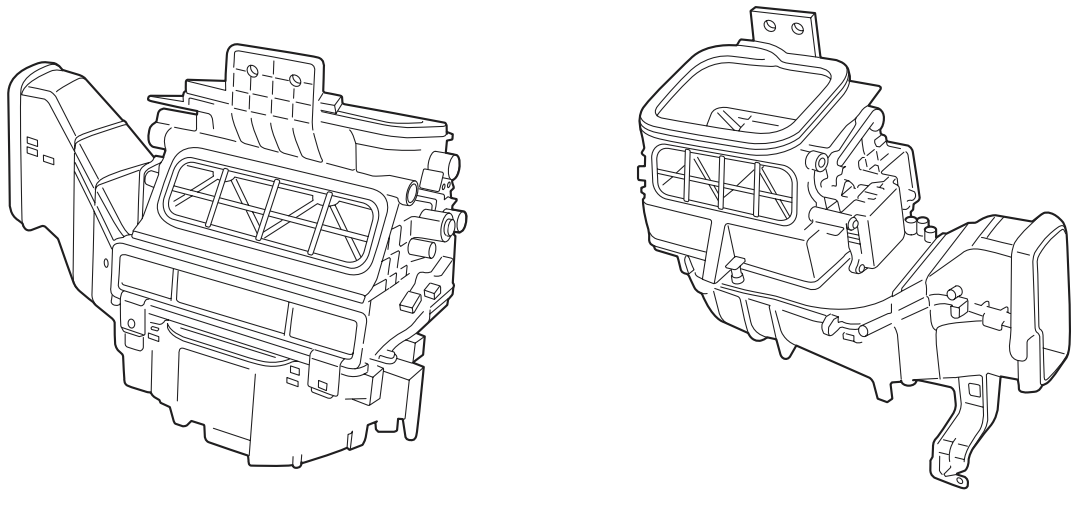
● The air passages toward the defroster (DEF) outlet is long enough to ensure a same airflow rate at all defroster outlets.



(1) Evaporator
(2) Heater core

E: BLOWER UNIT

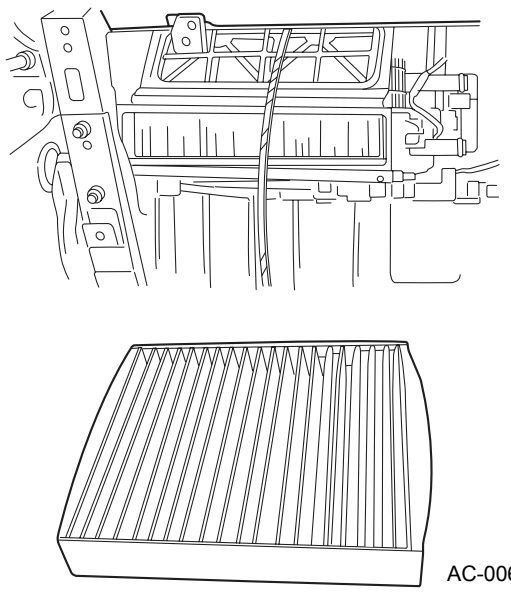
- The blower unit uses a low-noise-type motor.



AC-00478

F: FILTER

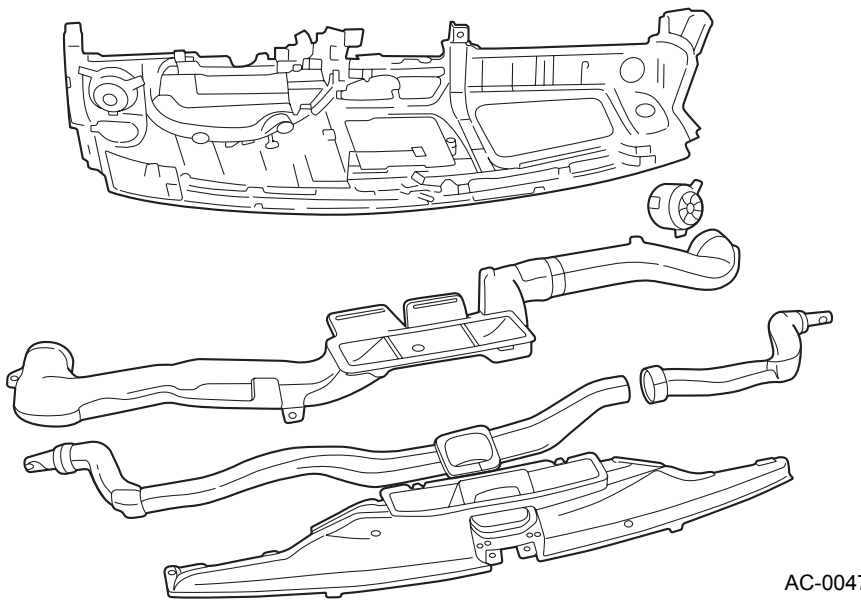
- Clean air filters are installed in models with automatic air conditioning. They can remove dust, cigarette smoke particles and other similar impurities in the air.



AC-00696

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-00479

2. Cooling System

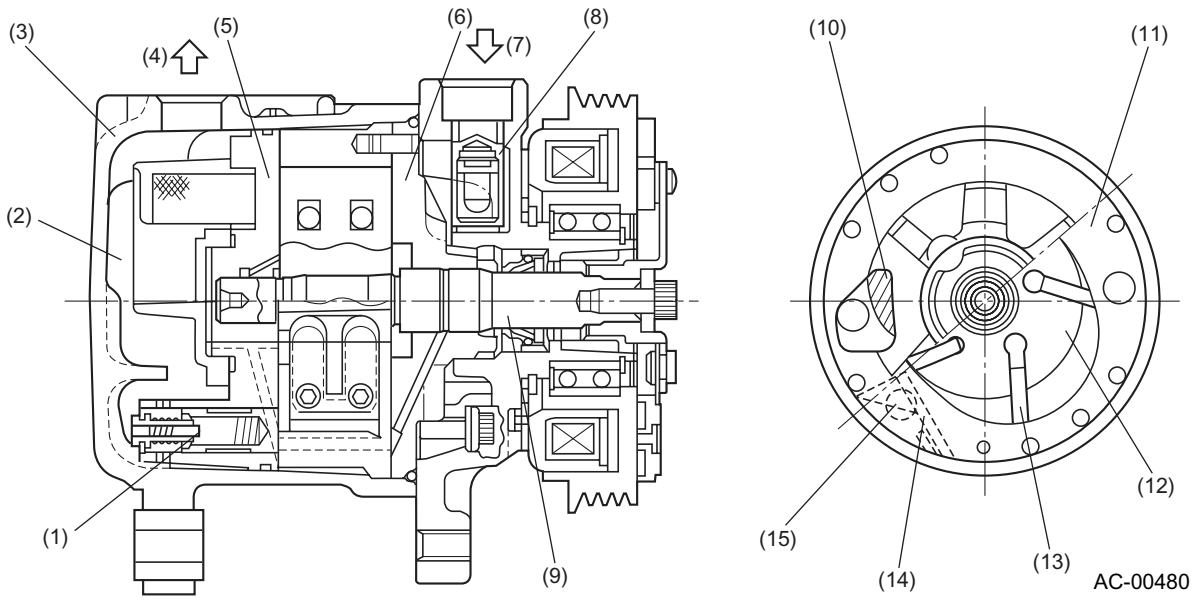
A: COMPRESSOR

The rotary type compressor consists of an integrally formed rotor and shaft, five vanes, and a cylinder.

As the rotor turns, the vanes that are movably fitted in the rotor slide over the wall of the oval-shaped cylinder while drawing, compressing, and discharging refrigerant gas.

The compressor shell has an oil separator at its rear end . High-pressure refrigerant gas having entered this chamber is separated from the oil it contains before flowing out through the compressors delivery port.

There is a check valve in the front housing to avoid reverse rotation of the compressor which would otherwise occur when the compressor is stopped.

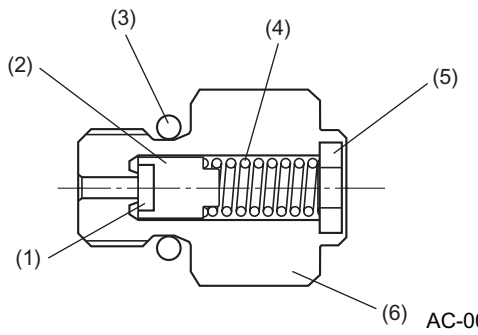


(1) Oil cut-off valve
(2) Oil separator chamber
(3) Shell
(4) Discharge port
(5) Rear side plate
(6) Front side plate
(7) Suction port
(8) Check valve
(9) Shaft
(10) Suction port
(11) Cylinder
(12) Rotor
(13) Vane
(14) Discharge valve
(15) Discharge port

1. PRESSURE RELIEF VALVE

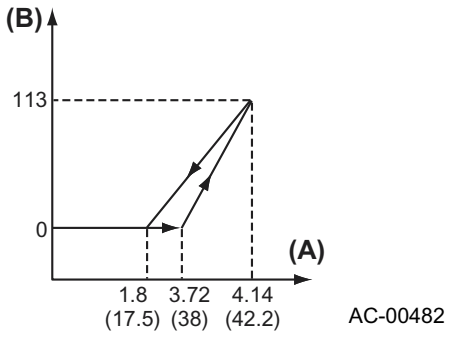
This valve opens if the pressure of the high-pressure refrigerant gas rises to a dangerously high level to release part of refrigerant into the atmosphere, thus protecting the compressor. The valve is designed to limit the amount of released gas to the necessary minimum.

Valve opening pressure: 3.72 MPa (38 kgf/cm^2)
Valve closing pressure: 1.8 MPa (17.5 kgf/cm^2)



(1) Seat rubber
(2) Seat cover
(3) O-ring
(4) Spring
(5) Cap
(6) Body

Operating characteristics

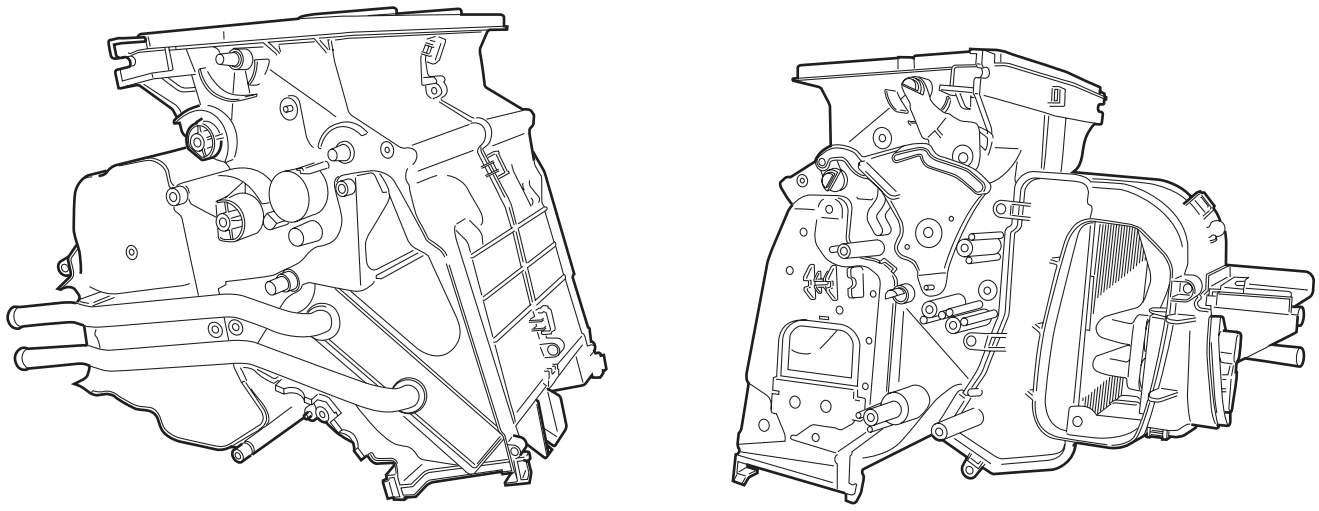


(A) Pressure MPa (kgf/cm^2)
(B) Leakage liters/min

B: COOLING UNIT

The heater unit and cooling unit are integrated into a single heater and cooling unit.

The cooling section components of this unit include an evaporator, expansion valve, and case.



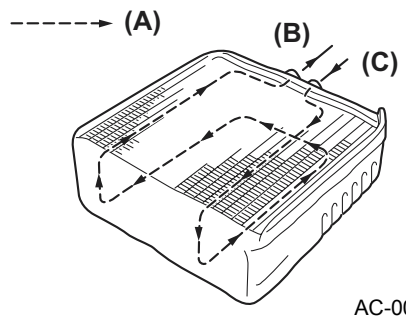
AC-00483

1. EVAPORATOR

The evaporator is a laminated type.

When a low-pressure, low-temperature refrigerant is sprayed by the expansion valve into the evaporator, it evaporates and cools the evaporator surfaces.

The cabin air is drawn by the blower and cooled down as it flows over the evaporator. The cooled air then flows passing through the heater unit and delivered into the cabin through vent outlets.



AC-00484

(A) Refrigerant flow

(B) Outlet

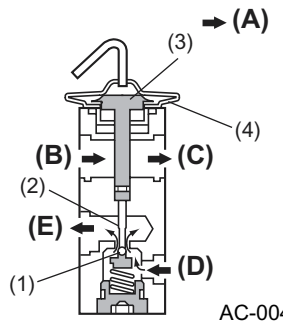
(C) Inlet

2. EXPANSION VALVE

The expansion valve regulates the flow of refrigerant such that heat exchange takes place optimally.

The expansion valve performs two functions; it sprays the high-pressure refrigerant from the condenser using a throttle valve, and it regulates the amount of the spray by changing opening of the throttle valve.

The expansion valve consists of such main components as a heat sensing cylinder, diaphragm, ball valve, spring, and adjusting screw.



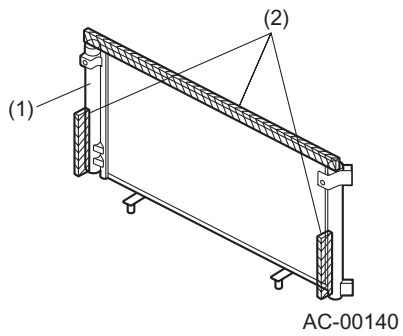
(1) Ball valve
(2) Shaft
(3) Heat sensing cylinder
(4) Diaphragm

(A) Refrigerant flow
(B) From evaporator (low-pressure side)
(C) To compressor
(D) To liquid tank
(E) To evaporator (high-pressure side)

The heat (temperature) sensing cylinder is held in contact with the evaporator outlet pipe so that a pressure corresponding to the sensed temperature may be applied to the chamber above the diaphragm. There is a pressure equalizing hole which communicates with the chamber below the diaphragm to transmit changes in the refrigerant pressure to the chamber. The ball valve is linked with the diaphragm and moves according to changes in the balance between the force applied to the diaphragm and the tension of the spring.

C: CONDENSER

The condenser used in the Impreza's air conditioning system is the newly developed "subcooling condenser" that integrates a multi-flow type condenser and a modulator (gas-liquid separator) into a single unit. The condenser has a high heat-exchange efficiency.

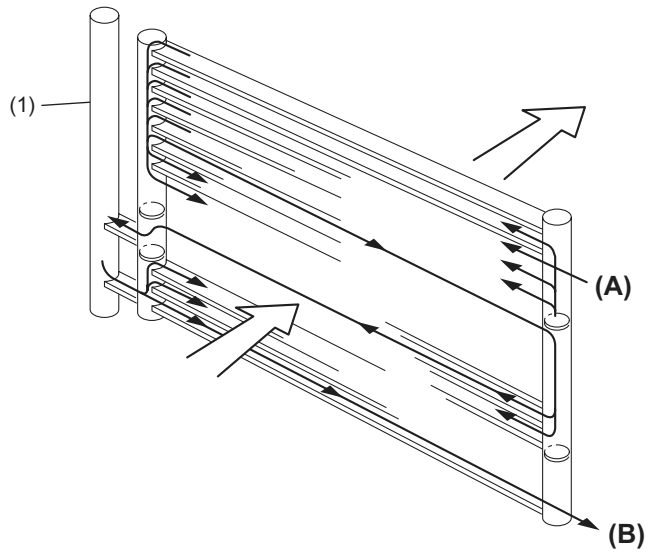


AC-00140

(1) Liquid tank
(2) Gasket

1. SUBCOOLING CONDENSER

The new subcooling condenser has a subcooling section where part of the refrigerant that remains in gas form is cooled and reduced into liquid form. This enables almost 100% of the refrigerant to be re-liquefied.



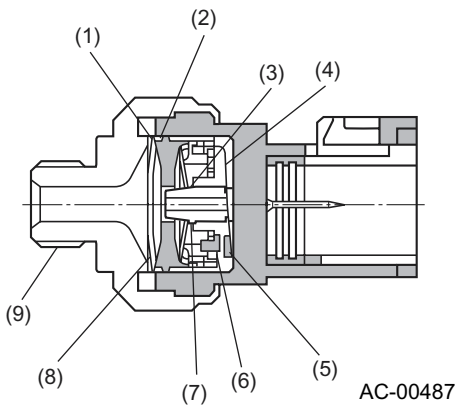
AC-00486

(1) Liquid tank
(A) Suction
(B) Discharge

D: PRESSURE SWITCH

The pressure switch is a high-pressure side component of the refrigeration cycle (cooling cycle). It consists of a diaphragm that receives refrigerant gas pressure, a snap plate, a rod, and contacts that open both when the gas pressure is too low and when it is too high.

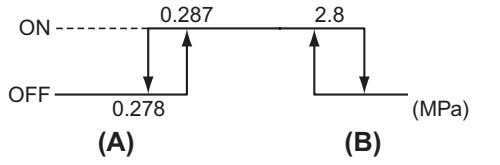
The pressure switch plays the following roles:
- Prevents “no-gas” operation due to leakage (when gas pressure is too low)
- Protects the system against abnormally high refrigerant pressure (when gas pressure is too high)



AC-00487

(1) Snap plate (high pressure)
(2) Disc
(3) Rod
(4) Leaf spring
(5) Contact
(6) Contact
(7) Snap plate (low pressure)
(8) Diaphragm
(9) Housing

ON-OFF pressures



AC-00488

(A) Low pressure
(B) High pressure

1. SPECIFICATIONS

Low limit pressure	OFF	Lower than 0.278 MPa (2.8 kgf/cm^2)
Normal pressure	Normal pressure	Between 0.287 and 2.8 MPa (2.8 and 28 kgf/cm^2)
High limit pressure	OFF	Higher than 2.8 MPa (28 kgf/cm^2)

3. Manual Air Conditioning

A: GENERAL

1. SPECIFICATIONS

Item	Specifications			Remarks
Air conditioning	"Full-air-mix" type			
Cooling performance	Cooling capacity (W)		5100	
	Air flow rate (m^3/h)		450	
Refrigerant quantity	HFC-134a (g)		500±50	
Compressor	Type		Rotary type with vanes	Calsonic CR14
	Capacity (cm^3/rev)		144	
	Maximum permissible speed (rpm)		7000	
	Lubricant (amount contained in compressor in g)		DH-PR (180)	
Magnetic clutch	Type		Dry, single disc	
	Power consumption (W)		47	
	Pulley ratio		1:1.064 (crankshaft pulley diameter: 133 mm; compressor pulley diameter: 125 mm)	
	Belt		Polyurethane V-belt with four ribs	
Condenser	Type		Multi-flow type (with built-in liquid tank for subcooling)	
	Fan	Type	Electric-motor-driven axial flow fan	
		Fan diameter	320 mm (7+5 blades)	
		Power consumption (W)	120 × 2 (turbo models), 70 × 2 (non-turbo models)	
Evaporator	Type		Laminated	
	Expansion valve		External pressure equalizing type	
	Temperature control		Thermo AMP (amplifier)	
Other controls	Fast idle control system		Engine control module (ECM)	
	High and low pressure limit control		Low-pressure switch: Turns off compressor at a pressure lower than 0.278 MPa High pressure switch: Turns off compressor at a pressure higher than 2.8 MPa	
	High-speed limit control		Performed by ECM	
	Radiator and condenser fan control		Performed by ECM	

2. CONTROL PANEL

<Ref. to AC-5 — Heater System, CONTROL PANEL.>

3. THERMO AMP (AMPLIFIER)

The thermo AMP detects the temperature at the evaporator outlet to turn off the magnetic clutch circuit when the evaporator temperature drops to a certain level in order to prevent frost from forming on the evaporator.

4. Automatic Air Conditioning

A: GENERAL

When the AUTO mode is selected, the automatic air conditioner controls the air temperature and air flow rate automatically.

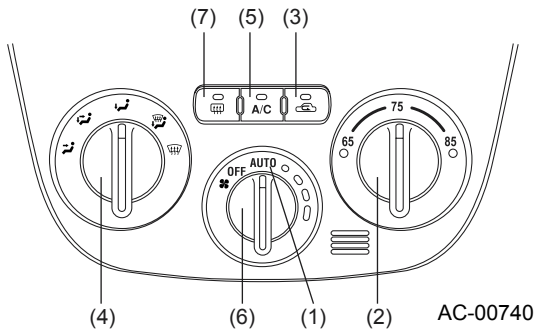
The system can maintain a comfortable cabin air condition always when the temperature control dial is set in the vicinity of position “75” (vehicles for US) or position “25” (vehicles for Canada).

1. SPECIFICATIONS

Item	Specifications			Remarks
Air conditioning	"Full-air-mix" type			
Cooling performance	Cooling capacity (W)		5000	
	Air flow rate (m^3/h)		450	
Refrigerant (g)	500±50			
Compressor	Type		Rotary type with vanes	Calsonic CR14
	Capacity (cm^3/rev)		144	
	Maximum permissible speed (rpm)		7000	
	Lubricant (amount contained in compressor in g)		DH-PR (180)	
Magnetic clutch	Type		Dry, single disc	
	Power consumption (W)		47	
	Pulley ratio		1:1.064 (crankshaft pulley diameter: 133 mm; compressor pulley diameter: 125 mm)	
	Belt		Polyurethane V-belt with four ribs	
Condenser	Type		Multi-flow type (with built-in liquid tank for subcooling)	
	Fan	Type	Electric-motor-driven axial flow fan	
		Fan diameter	320 mm (7+5 blades)	
		Power consumption (W)	120 × 2	
Evaporator	Type		Laminated	
	Expansion valve		External pressure equalizing type	
	Temperature control sensor		Thermistor	
Automatic control system	Temperature control		"Full-air-mix" system	
	Fan speed control		Automatic control: stepless Manual control: four steps	
	Air introduction selection		Manual (inside air recirculation/fresh air introduction)	
	Air outlet selection		Manual (ventilation, bi-level, heater, defroster and heater/defroster)	
Other controls	Fast idle control system		Engine control module (ECM)	
	High and low pressure limit control		Low-pressure switch: Turns off compressor at a pressure higher than 0.278 MPa High-pressure switch: Turns off compressor at a pressure higher than 2.8 MPa	
	High-speed limit control		Performed by ECM	
	Radiator and condenser fan control		Performed by ECM	
Diagnosis function	The auto A/C control module has a sensor and actuator diagnosis function.			
Other controls	Manual adjustment possible at maximum heating and maximum cooling positions			

B: CONTROL PANEL

There are three dial-type switches and three push-button switches on the control panel.



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(1) AUTO position of fan speed control dial:
When the fan speed control dial is placed in this position, the blower speed and air temperature is automatically controlled according to signals from various sensors.

(2) Temperature control dial:
The cabin temperature can be set in 11 steps between positions 65 and 85 (vehicles for US) or between positions 20 and 30 (vehicles for Canada). (The left and right ends are for fixing the system operation for maximum cooling and maximum heating.)

(3) FRESH/RECIRC switch:
Used to select either the outside-air-introduction or cabin-air-recirculation.

(4) Air flow control dial:
Used to change the air outlets. The air flow mode changes in the order shown below as the switch is turned clockwise.

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(5) A/C switch:
Used to turn on and off the air conditioner compressor.

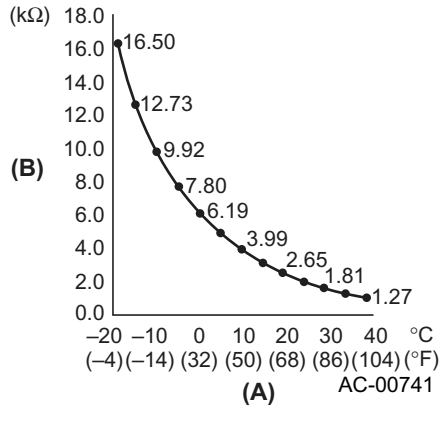
(6) Fan speed control dial:
Used to change the blower speed. When a speed is selected, the blower keeps that speed.

(7) Rear window defogger switch:
Used to active the rear window defogger. The defogger stays on for 15 minutes (unless manually turned off intermediately) and then is deactivated automatically.

C: IN-VEHICLE SENSOR

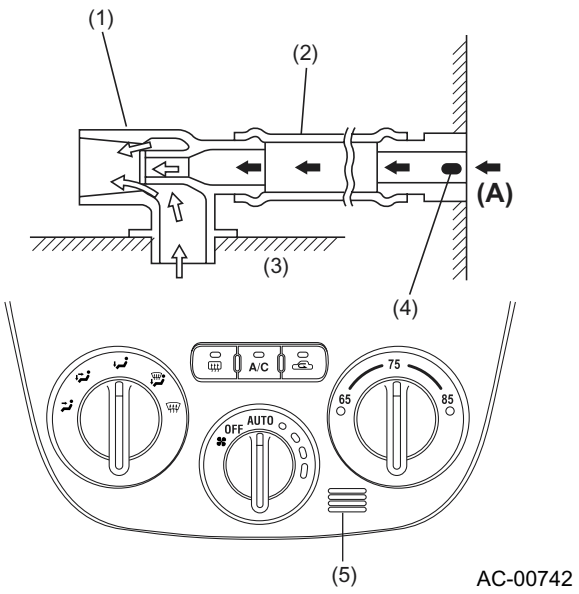
The in-vehicle sensor detects the cabin temperature and sends an electric signal corresponding to the temperature to the A/C control module.

This sensor consists of an aspirator and a thermistor, the resistance of which changes in inverse proportion to the temperature. The aspirator operates by a vacuum generated in the heater unit (only when the blower unit is turned on).



(A) Temperature

(B) Resistance



(1) Aspirator

(2) Aspirator duct

(3) Heater unit

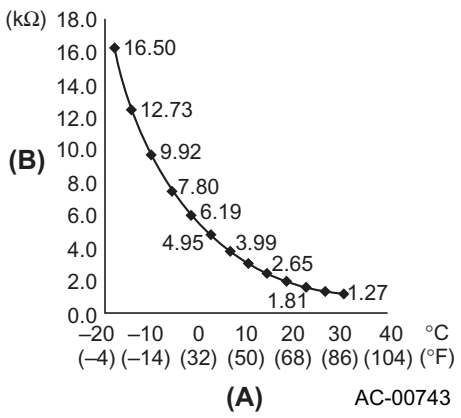
(4) In-vehicle sensor

(5) Cabin air inlet

(A) Cabin air

D: AMBIENT SENSOR

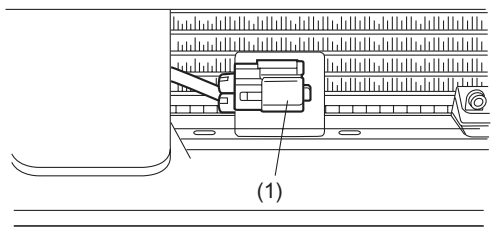
The ambient sensor uses a thermistor to detect the ambient temperature and outputs a signal corresponding the detected temperature to the auto A/C control module.
The thermistor is covered with a plastic molding to increase its thermal capacity, thus preventing it from being too sensitive to rapid changes in the temperature and enabling the sensor to output an average ambient temperature.



(A) Temperature

(B) Resistance

The ambient sensor is attached to the radiator lower panel at the portion where the radiator panel is located in such a way that it is exposed to outside air most efficiently.



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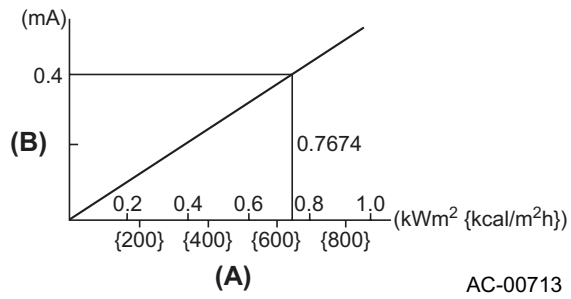
(1) Ambient sensor

E: SUN-LOAD SENSOR

The sun-load sensor uses a photodiode which can convert change in the intensity of solar radiation into change in the electric current. The output signal of the sensor is sent to the auto A/C control module.

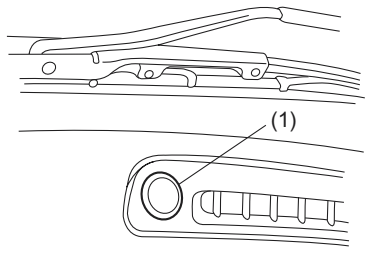
Sun-load sensor characteristics



(A) Solar radiation

(B) Photoelectric current

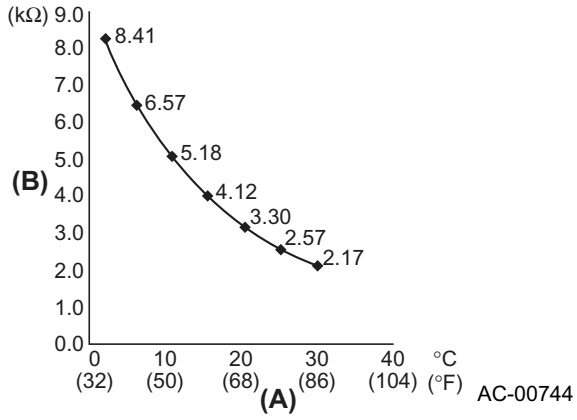
The sun-load sensor is attached to the front defroster grill.



(1) Sun-load sensor

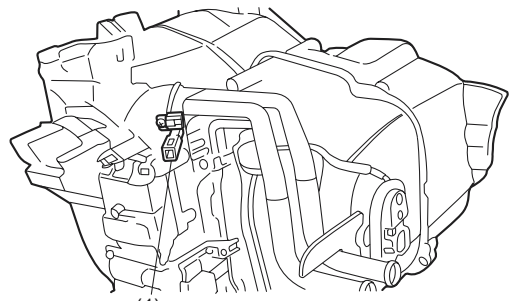
F: EVAPORATOR SENSOR

The evaporator sensor detects the temperature of the air that has passed over the evaporator and transmits a signal corresponding to the temperature to the auto A/C control module.



(A) Temperature

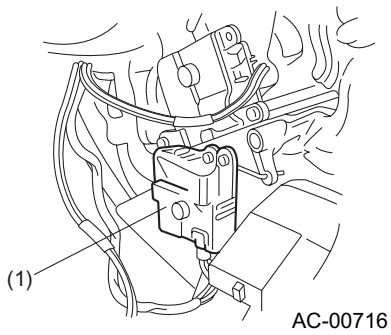
(B) Resistance



(1) Evaporator sensor connector

G: AIR MIX DOOR ACTUATOR

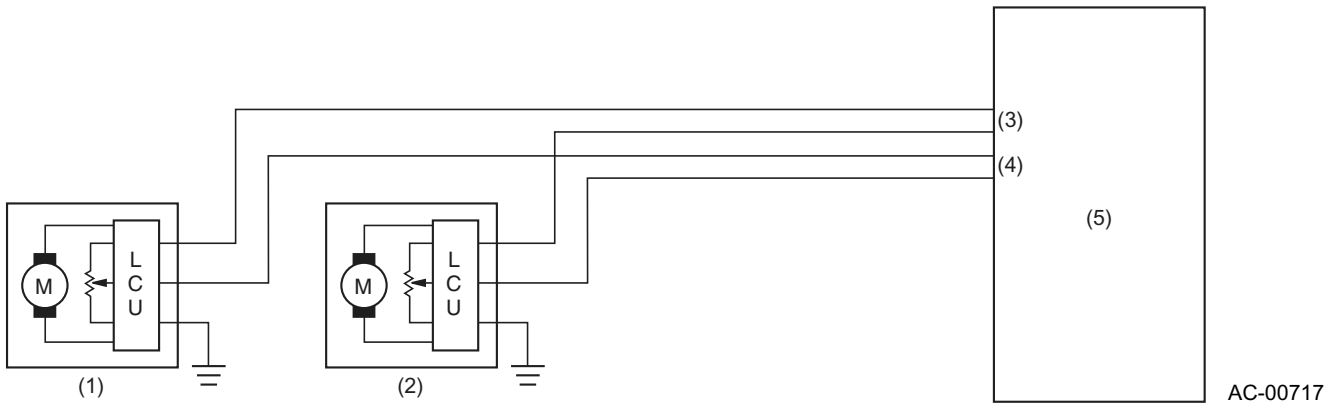
The air mix door actuator incorporates an electric motor which turns in one or the other direction in response to signals from the auto A/C control module. The motion of the electric motor is transmitted to the air mix door via a linkage to move the door to an appropriate position.



(1) Air mix door actuator

1. CONTROL SYSTEM

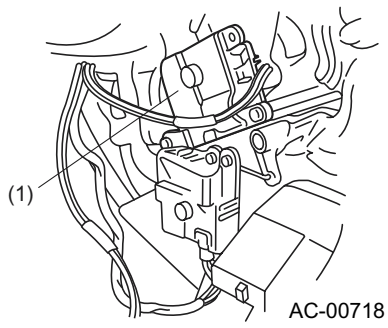
The air mix door actuator and mode door actuator have their own local control units (LCUs) so that they can be controlled through a single communication line by using the local area network (LAN) technology.
When each LCU receives from the auto A/C control module a control signal (a combination of two pulse signals with different amplitudes), it causes the corresponding door to move to a target position by calculating an appropriate amount of movement based on a door position signal. When the movement of the door has completed, the LCU sends a signal to the auto A/C control module to inform it of the fact.



(1) Air mix door actuator
(2) Mode door actuator
(3) Actuator power source
(4) LAN signal
(5) Auto A/C control module

H: MODE DOOR ACTUATOR

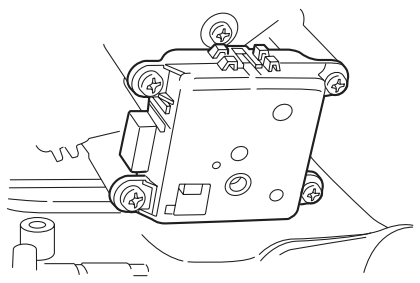
The mode door actuator incorporates an electric motor which turns in one or the other direction in response to signals from the auto A/C control module. The motion of the electric motor is transmitted to each mode door via a linkage and moves the door to the position appropriate for the selected air flow mode.



(1) Mode door actuator

I: FRESH/RECIRC DOOR ACTUATOR

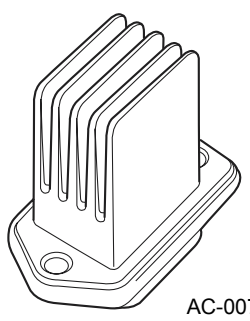
The FRESH/RECIRC door actuator incorporates an electric motor which turns in one or the other direction in response to a signal from the auto A/C control module. The motion of the electric motor is transmitted to the FRESH/RECIRC door via a linkage to move the door to the outside-air introduction or cabin-air-recirculation position.



J: FAN CONTROL AMPLIFIER

The fan control amplifier uses a MOS* type field effect transistor. This amplifier steplessly regulates the blower motor voltage (in the range between approximately 3V and 12V) in response to gate voltage signals issued by the auto A/C control module.
Since this fan control amplifier features very small voltage drop, it can handle the maximum voltage for the maximum blower speed without need for a high-voltage relay.

*MOS = metal oxide semiconductor



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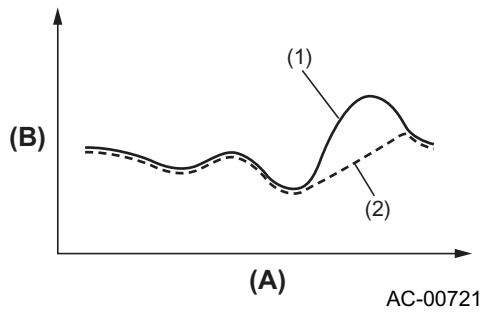
K: CONTROL SYSTEM

1. CORRECTION TO INPUT DATA

1) Correction to ambient sensor data

- The auto A/C control module receives ambient temperature data from the ambient sensor.
- If the ambient sensor data shows a rapid temperature rise by some causes such as heat from the radiator, the auto A/C control module performs a delay correction. By effecting this correction, the rate of temperature rise recognized by the auto A/C control module becomes slower than that detected by the ambient sensor. The auto A/C control module performs no correction when the ambient temperature drops.

Characteristics of correction to ambient sensor data



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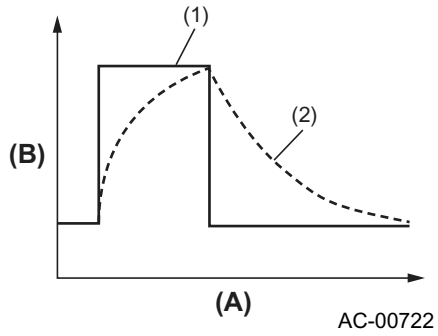
(1) Temperature detected by the sensor
(2) Outside air temperature after correction
(A) Time
(B) Outside air temperature

2) Correction to sun-load sensor data

- The auto A/C control module receives solar radiation intensity data from the sun-load sensor.
- If the solar radiation intensity changes rapidly when, for example, the vehicle enters or goes out of a tunnel, the auto A/C control module performs a correction that slows down the rate of change in the solar radiation intensity recognized by itself.
- The auto A/C control module performs this correction in such a way that the rate of change in the solar radiation intensity it recognizes becomes higher when the intensity differs much from the sensor-detected intensity than when the difference between the two intensities is little. Also, the auto A/C control module perform the correction such that the rate of change in the recognized intensity becomes higher when the detected intensity changes upward than when it changes downward.

This is to make the control match the way in which the human senses respond to change in the solar radiation intensity.

Characteristics of correction to sun-load sensor data

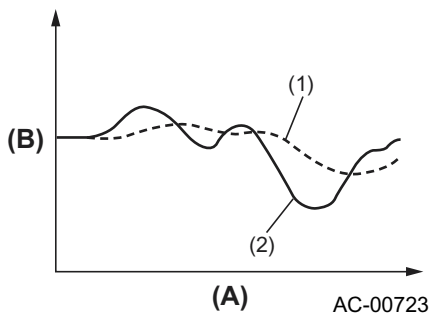


(1) Solar radiation intensity detected by the sensor
(2) Solar radiation intensity read by the ECM
(A) Time
(B) Solar radiation intensity

3) Correction to in-vehicle sensor data

- The auto A/C control module receives cabin temperature data from the in-vehicle sensors.
- To prevent the air temperature control from directly reflecting non-uniformity of the cabin temperature or effects of external thermal factors, the auto A/C control module performs a correction that slows down the rate of change in the cabin temperature recognized by itself.
- The auto A/C control module performs this correction in such a way that the rate of change in the cabin temperature it recognizes becomes higher when the temperature differs much from the sensor-detected temperature than when the difference between the two temperatures is little.

Characteristics of correction to in-vehicle sensor data

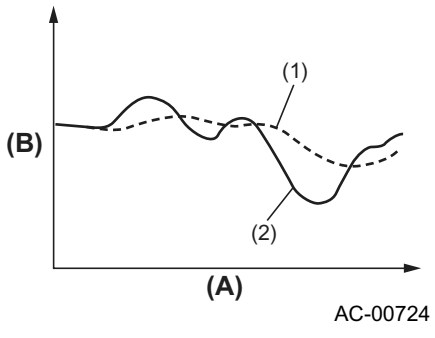


(1) Solar radiation intensity read by the ECM
(2) Solar radiation intensity detected by the sensor
(A) Time
(B) Cabin temperature

4) Correction to evaporator sensor data

- The auto A/C control module receives data of the evaporator downstream air temperature from the evaporator sensor.
- To prevent the air temperature control from directly reflecting non-uniformity of the evaporator downstream air temperature or effects of external disturbances, the auto A/C control module performs a correction that slows down the rate of change in the evaporator downstream air temperature recognized by itself.
- The auto A/C control module performs this correction in such a way that the rate of change in the evaporator downstream air temperature it recognizes becomes higher when the temperature differs much from the sensor-detected temperature than when the difference between the two temperatures is little.

Characteristics of correction to evaporator sensor data



(1) Temperature read by the ECM
(2) Temperature detected by the sensor
(A) Time
(B) Air temperature at downstream of evaporator