# **GROUP 55**

# HEATER, AIR CONDITIONING AND VENTILATION

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# **GENERAL INFORMATION**

The heater and air conditioner system incorporating the heater and cooling unit has reduced ventilation resistance to increase air volume and reduce noise.

### **FEATURES**

#### Improvements in comfort

- 1. Two-way blow full air mix heater
- 2. Low noise, large air volume heater and air conditioner system

#### Improvements in operation performance

- 1. Installation of dial type control with excellent operation performance on the heater and air conditioner control panel
- 2. Incorporation of rear defogger switch with timer into the control panel
- 3. Increase in panel display size

# Reliable visual field (improvement in safety)

- 1. Achievement of ventilation system to defog windows by increasing the outside air intake duct area on the front deck and adopting a large air outlet
- 2. Windshield defogging speed improvement derived from increase in air volume and wind speed by adopting a blower type defroster and high performance heater

#### Improvements in fuel economy

- 1. Optimization of idle rotation speed according to air conditioner load
- 2. Installation of sub-cooling type condenser

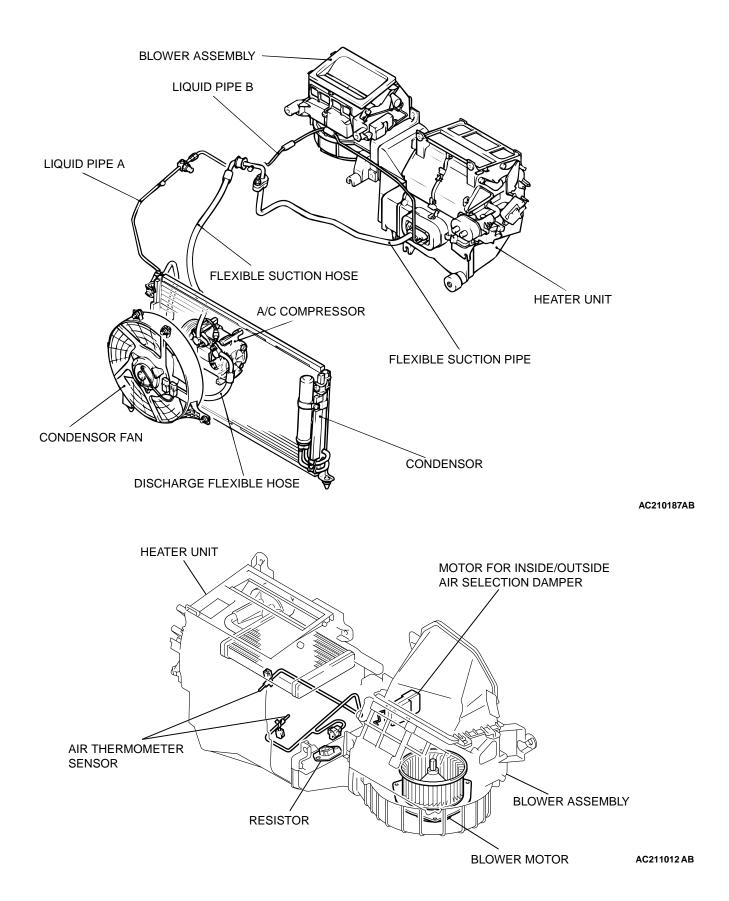
#### Improvements in service quality

- 1. O-ring dropout prevention structure for the refrigerant lines.
- 2. Reduction of gas leakage and improvement in service performance by incorporating condenser and receiver

## SPECIFICATIONS

ITEM		SPECIFICATION
Heater unit type		Two-way blow full air mix method
Heater control m	ethod	Dial type
Air conditioner sv	witch type	Push button type
Compressor		MSC90C
Compressor type	9	Scroll type
Refrigerant	Туре	R134a (HFC-134a)
	Filled air volume g	480 – 520

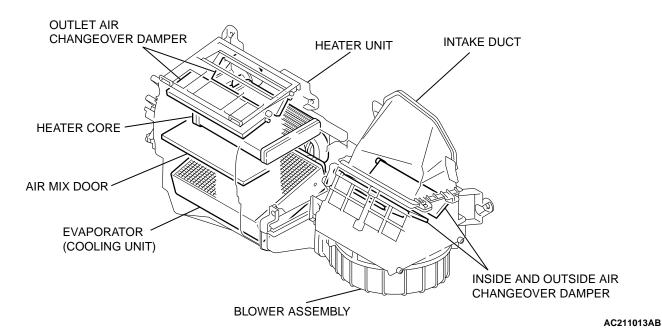
#### CONSTRUCTION DIAGRAM



# HEATER AND AIR CONDITIONER SYSTEM

#### **BLOWER ASSEMBLY AND HEATER UNIT**

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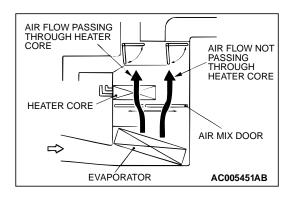


The blower assembly and heater unit increases air volume, reduces noise and improves air-conditioning performance and the car interior air environment.

- Installation of two-way blow full air mix heater
- Incorporation of heater and cleaning unit
- Increase in the outside air intake duct area size of the blower assembly and optimization of the shape

#### TWO-WAY BLOW FULL AIR MIX HEATER

In the heater unit, there are two currents of air, one which passes through the heater core, and one which does not pass through the core. One air mix door is used for temperature control. The two-way blow full mix heater with low ventilation resistance has increased air volume and has reduced noise.



CON-DENSER

SECTION

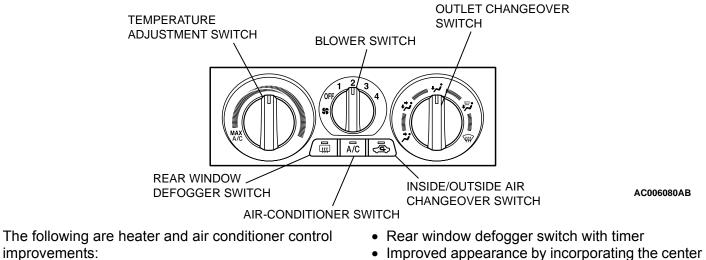
SUB-COOLED VAPOR FLUID SEPARATION DEVICE

AC005453AB

## CONDENSER

The heat exchange efficiency has been improved with a subcooling type condenser added with a sub-cooled section. The reduction of line unions by incorporating the condenser and receiver reduces a possibility of gas leakage and increases service performance.

## HEATER AND AIR CONDITIONER CONTROL



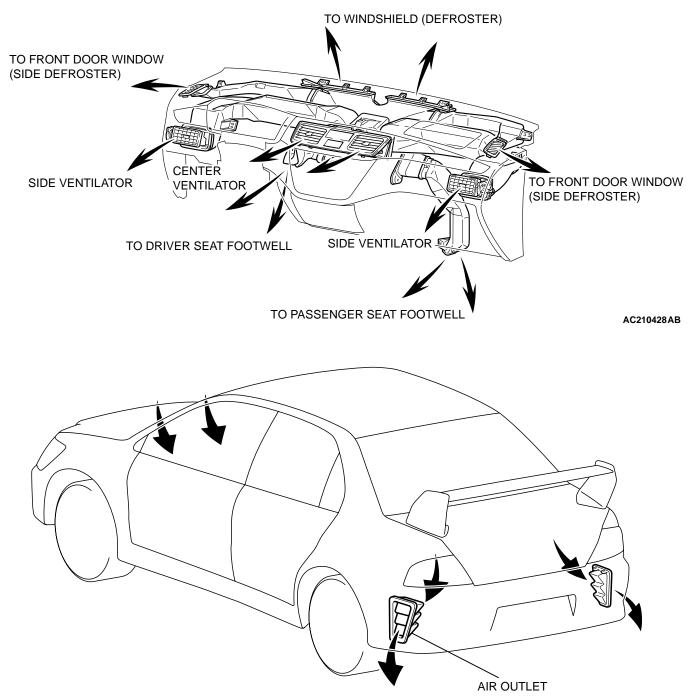
• Dial type switch

 Improved appearance by incorporating the center panel

# **VENTILATION SYSTEM**



## DESCRIPTION OF STRUCTURE AND OPERATION



AC210865AB

The following increases air volume for ventilation and for defogging windows.

- Increased outside air intake duct area
- Increased size of air outlet on the back of the rear bumper
- Installation of blower type defroster