

AIR CONDITIONING

SYSTEM OUTLINE

1. HEATER BLOWER MOTOR OPERATION

With the ignition SW on, the current from the GAUGE fuse flows to TERMINAL 3 of the HEATER relay to TERMINAL 5 to TERMINAL 1 of the heater blower SW.

(Low speed operation)

When the heater blower SW is moved to the low speed position, the current applied to TERMINAL 1 of the heater blower SW flows from TERMINAL 8 to GROUND, causing the HEATER relay to come on. Then the current flowing from the HEATER fuse flows to TERMINAL 1 of the HEATER relay to TERMINAL 2 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 4 to GROUND, causing the blower motor to rotate.

At this time, current flows against the full resistance of the blower resistor, so the motor rotates slowly at low speed.

(Operation at speed M1, M2)

When the heater blower SW is moved to the speed M1 position, the current applied to TERMINAL 1 of the heater blower SW flows to TERMINAL 8 to GROUND, turning the HEATER relay to on. Then, the same as with low speed, current passes from the blower motor to TERMINAL 1 of the blower resistor to TERMINAL 2 to TERMINAL 3 of the heater blower SW to TERMINAL 8 to GROUND. At this time, the resistance of the blower resistor is less than it is for low speed, so the blower motor rotates faster than it does at low speed. With the heater blower SW in the M2 position, current flowing through the motor flows from TERMINAL 1 of the blower resistor to TERMINAL 3 to TERMINAL 2 of the heater blower SW to TERMINAL 8 to GROUND. At this time, the resistance of the blower resistor is less than for speed M1, so the blower motor rotates faster than for speed M1.

(High speed operation)

With the heater blower SW in high speed position, until the HEATER relay comes on and current flows to the blower motor, operation is the same as for speed M1 and M2. The current passing through the blower motor flows to TERMINAL 6 of the heater blower SW to TERMINAL 8 to GROUND without flowing through the blower resistor, so that the blower motor rotates at the fastest speed, high speed.

2. AIR CONDITIONING OPERATION

When the blower SW is set to on, current from the HEATER fuse flows through the HEATER relay (Point side) to A.C fuse to TERMINAL 1 of the A/C dual pressure SW to TERMINAL 2 to TERMINAL 1 of the A/C amplifier. The engine speed signal from igniter and the evaporator temp. signal from the A/C thermistor are all supplied to the A/C amplifier. When the A/C SW is turned on, the A/C SW on signal is sent to activate the A/C amplifier. Current flows from the A/C amplifier to the magnetic clutch, turning the compressor on. The A/C operation is shut off when a signal indicating low evaporator temp., or abnormally high or low refrigerant pressure, is supplied while the engine high speed signal exists. When one of these signals is received, the amplifier shuts off the A/C operation.

SERVICE HINTS

A14 A/C SW

6-GROUND : Approx. 12 volts with ignition SW on and heater blower SW on.

4-GROUND : Always continuity.

6-5 : Closed with A/C SW on.

HEATER RELAY [R/B NO.2]

1-2 : Closed with ignition SW on and blower SW on.

A13 A/C DUAL PRESSURE SW

1-2 : Open with refrigerant pressure at less than approx. 2.0 kgf/cm² (28.4 psi, 196 kpa) or more than approx. 32 kgf/cm² (455 psi, 3138 kpa).

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page	
A5	28 (5VZ-FE)	B4	32	J1	33	
	30 (3RZ-FE, 2RZ-FE)	B5	32		J9	A
A12	32	D23	32	J10		B
A13	32	E5	A		33	29 (5VZ-FE)
A14	32	E8	D		33	31 (3RZ-FE, 2RZ-FE)
A15	32	H7	33			

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
2	21	R/B No.2 (Engine Compartment Left)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	22	Engine Room Main Wire and J/B No.1 (Lower Finish Panel)
3F	24	Cowl Wire and J/B No.3 (Behind the Instrument Panel Left)
3H	26	Cowl Wire and J/B No.3 (Behind the Instrument Panel Center)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	40	Engine Room Main Wire and Cowl Wire (Left Kick Panel)
IJ1	40	Cowl Wire and A/C Sub Wire (Behind the Glove Box)
IK2	40	Engine Wire and Cowl Wire (Right Kick Panel)
IM1	40	A/C Sub Wire and A/C Wire (Behind the Glove Box)

 : GROUND POINTS

Code	See Page	Ground Points Location
EA	36 (5VZ-FE)	Front Left Fender
	38 (3RZ-FE, 2RZ-FE)	
IE	40	Around the Right Edge of the Reinforcement
IG	40	Around the Left Edge of the Reinforcement

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	36 (5VZ-FE)	Cowl Wire	I10	40	Engine Wire
	38 (3RZ-FE, 2RZ-FE)		I12	40	A/C Sub Wire
I6	40				