System Outline

1. Heater Blower Motor Operation

Current is applied at all times through the HTR (40A) fuse to TERMINAL 5 of the HTR relay.
When the engine start/stop SW is pushed IG ON position, current flows through the HTR (10A) fuse to TERMINAL 1 of the HTR relay to TERMINAL 2 to TERMINAL 3 of the blower SW.

* Low speed operation
  When the blower SW is moved to LO position, the current to TERMINAL 3 of the blower SW flows to TERMINAL 7 to GROUND, causing the HTR relay is turned on. This causes the current to flow from the HTR (40A) fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 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 low speed.

* Medium speed operation (Operation at M1, M2)
  When the blower SW is moved to M1 position, the current to TERMINAL 3 of the blower SW flows to TERMINAL 7 to GROUND, turns the HTR relay on. This causes the current to flow from the HTR (40A) fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 2 to TERMINAL 8 of the blower SW to TERMINAL 7 to GROUND. At this time, the blower resistance of the blower resistor is less than at low speed, so the blower motor rotates at medium low speed.
  When the blower SW is moved to M2 position, the current to TERMINAL 2 of the blower SW flows to TERMINAL 7 to GROUND, turns the HTR relay on. This causes the current to flow from the HTR (40A) fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 3 to TERMINAL 6 of the blower SW to TERMINAL 7 to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

* High speed operation
  When the blower SW is moved to HI position, the current flows to TERMINAL 3 of the blower SW to TERMINAL 7 to GROUND and turns the HTR relay on.
  This causes the current to flow from the HTR (40A) fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 5 of the blower SW to TERMINAL 7 to GROUND, causing the blower motor to rotate at high speed.

2. Damper Servo Motor (Air Inlet) Control

When the FRESH/RECIRC select SW is set to RECIRC, the motor in the damper servo motor (Air inlet) starts rotating to move the damper toward the RECIRC side. The motor is continuously rotates until the damper reaches its stop position. When the FRESH/RECIRC select SW is set to FRESH, the motor in the damper servo motor (Air inlet) starts rotating to move the damper toward the FRESH side. The motor is continuously rotated until the damper reaches its stop position. However, when the mode SW is at DEF position, forcibly the air intake is set to FRESH mode.

3. Air Conditioner Operation

If the A/C control SW is turned on when the blower SW is set to on, A/C operation starts.

Service Hints

A11 (A), A14 (B) A/C Amplifier

24–Ground : Always approx. 12 volts
12–Ground : Approx. 12 volts with the engine start/stop SW at IG ON position
19–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	40 (*1)	B4	54 (RHD)	J8 B	45 (LHD)
	42 (*2)	B6	44 (LHD)		55 (RHD)
	50 (*3)		54 (RHD)	J13	45 (LHD)
	52 (*4)	B7	44 (LHD)	J14	45 (LHD)
A4	40 (*1)		54 (RHD)		55 (RHD)
	42 (*2)	B8	44 (LHD)	J19	45 (LHD)
	50 (*3)		54 (RHD)		55 (RHD)
	52 (*4)	C14	44 (LHD)	J24	55 (RHD)
A10	40 (*1)		54 (RHD)	S5 A	41 (*1)
	42 (*2)	D1	45 (LHD)		43 (*2)
	50 (*3)		55 (RHD)		51 (*3)
	52 (*4)	E4 A	45 (LHD)		53 (*4)
A11	44 (LHD)		55 (RHD)	S5 B	41 (*1)
	54 (RHD)	E5 B	45 (LHD)		43 (*2)
A16	44 (LHD)		55 (RHD)		51 (*3)
	54 (RHD)	I8	45 (LHD)		53 (*4)
A17	44 (LHD)		55 (RHD)	T13	47 (LHD)
	54 (RHD)	J4	45 (LHD)		57 (RHD)
A19	44 (LHD)		55 (RHD)	T16	47 (LHD)
	54 (RHD)	J7 A	45 (LHD)		57 (RHD)
B4	44 (LHD)		55 (RHD)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24 (*5)	Engine Room R/B No.1 (Engine Compartment Left)
	25 (*6)	
5	28	Fuse Block (Lower Finish Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
CA	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CB	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CF	36 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	36 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CH	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CJ	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
CK	37 (LHD)	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
	37 (RHD)	Instrument Panel Wire and Center J/B (Instrument Panel Reinforcement RH)
DA	32	Instrument Panel Wire and Instrument Panel J/B (Left Side of the Instrument Panel)
DB		
DC		
DF		
DP	33	Engine Room Main Wire and Instrument Panel J/B (Left Side of the Instrument Panel)

* 1 : LHD 1ZZ–FE, 3ZZ–FE * 2 : LHD 1CD–FTV * 3 : RHD 1ZZ–FE, 3ZZ–FE * 4 : RHD 1CD–FTV * 5 : 1ZZ–FE, 3ZZ–FE * 6 : 1CD–FTV

: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IA2	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IA8	64 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind the Combination Meter)
	74 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IE2	64 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
	74 (RHD)	
II1	66 (LHD)	Instrument Panel Wire and A/C No.1 Wire (Near the A/C Unit)
	76 (RHD)	
IJ2	66 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	76 (RHD)	

: **Ground Points**

Code	See Page	Ground Points Location
II	64 (LHD)	Left Kick Panel
	74 (RHD)	
IJ	74 (RHD)	Behind the Combination Meter
IK	64 (LHD)	
	74 (RHD)	
IM	64 (LHD)	Right Kick Panel
	74 (RHD)	

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	66 (LHD)	Instrument Panel Wire	I6	66 (LHD)	Instrument Panel Wire
	76 (RHD)			76 (RHD)	