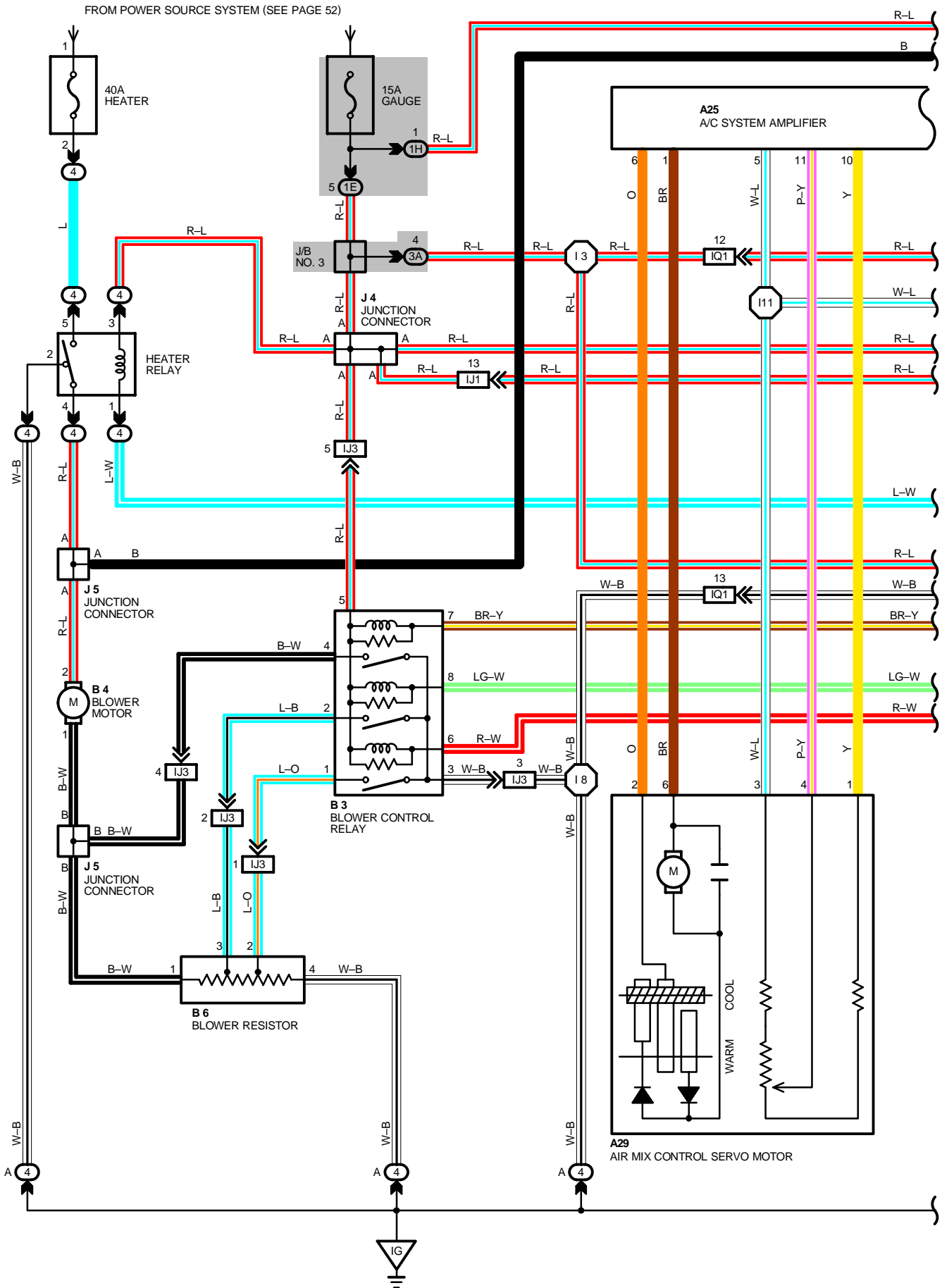
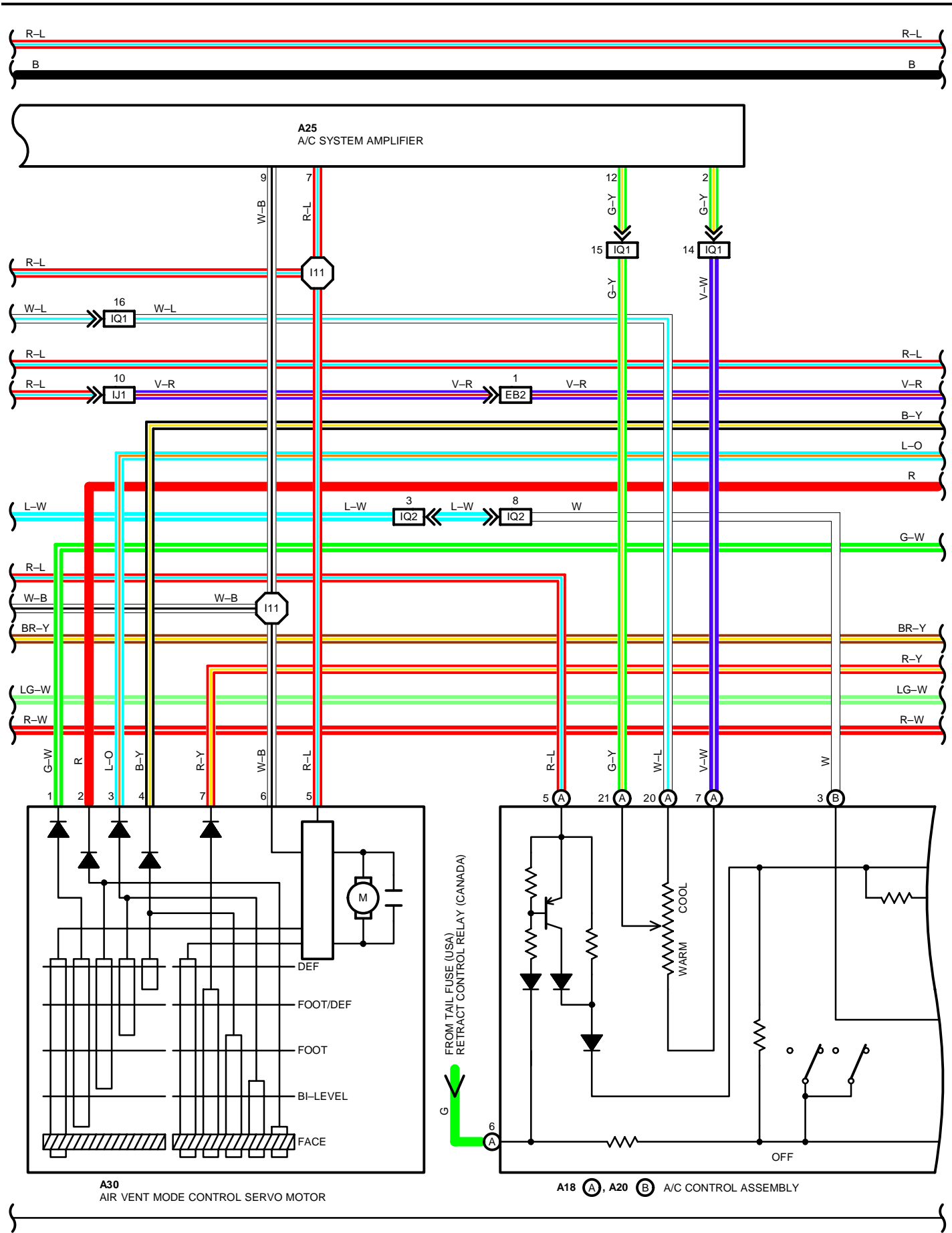
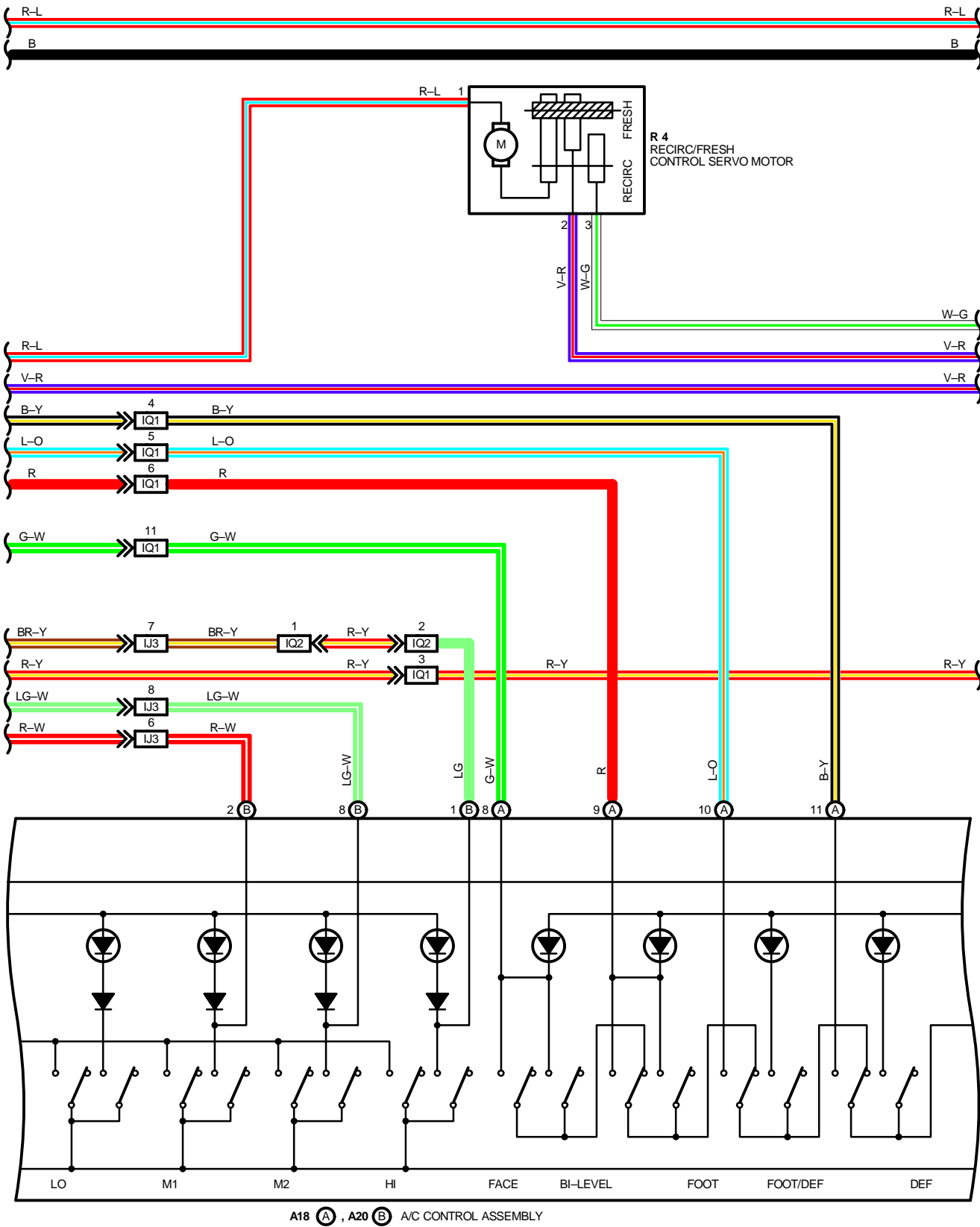


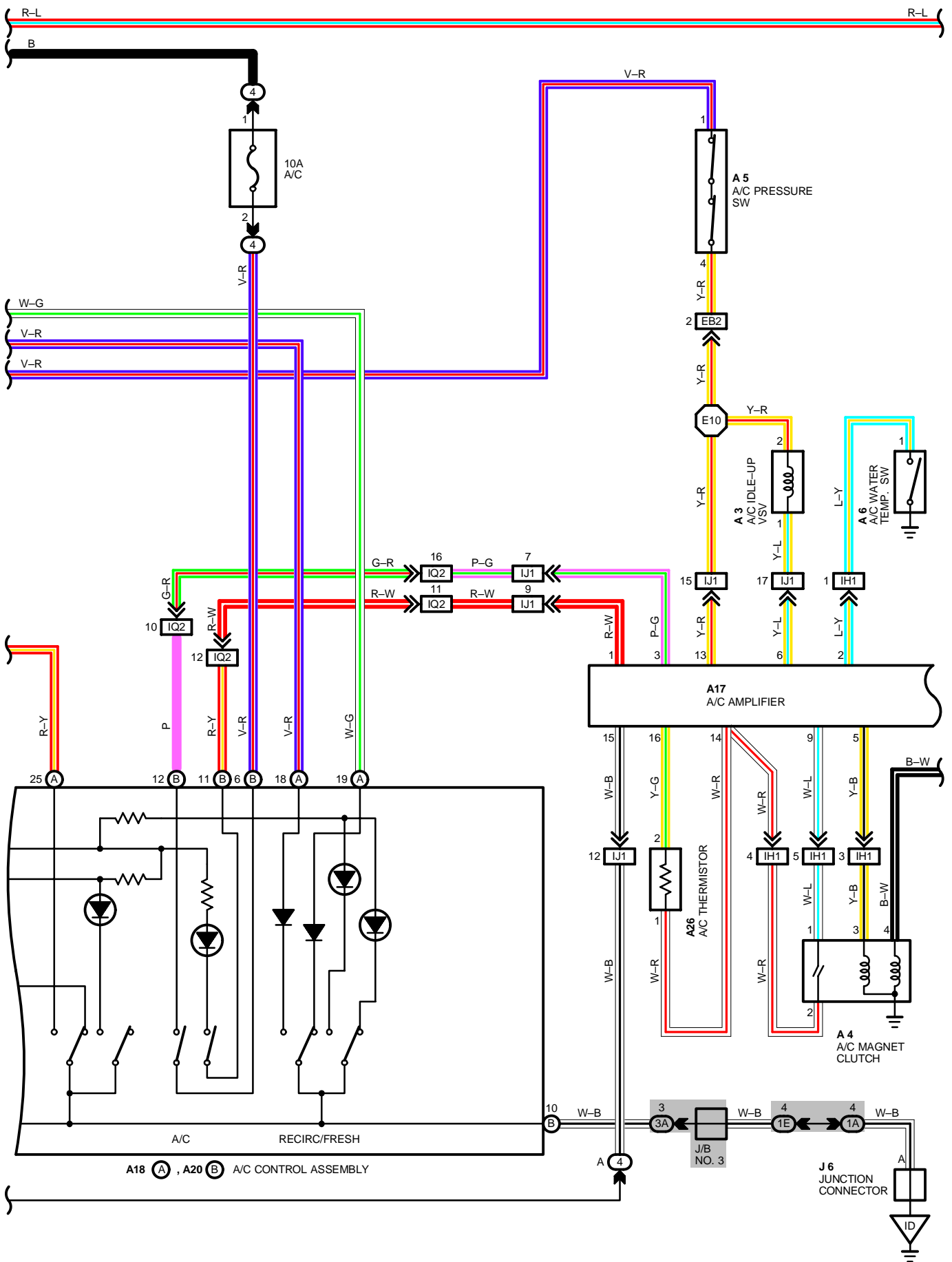
**RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)**



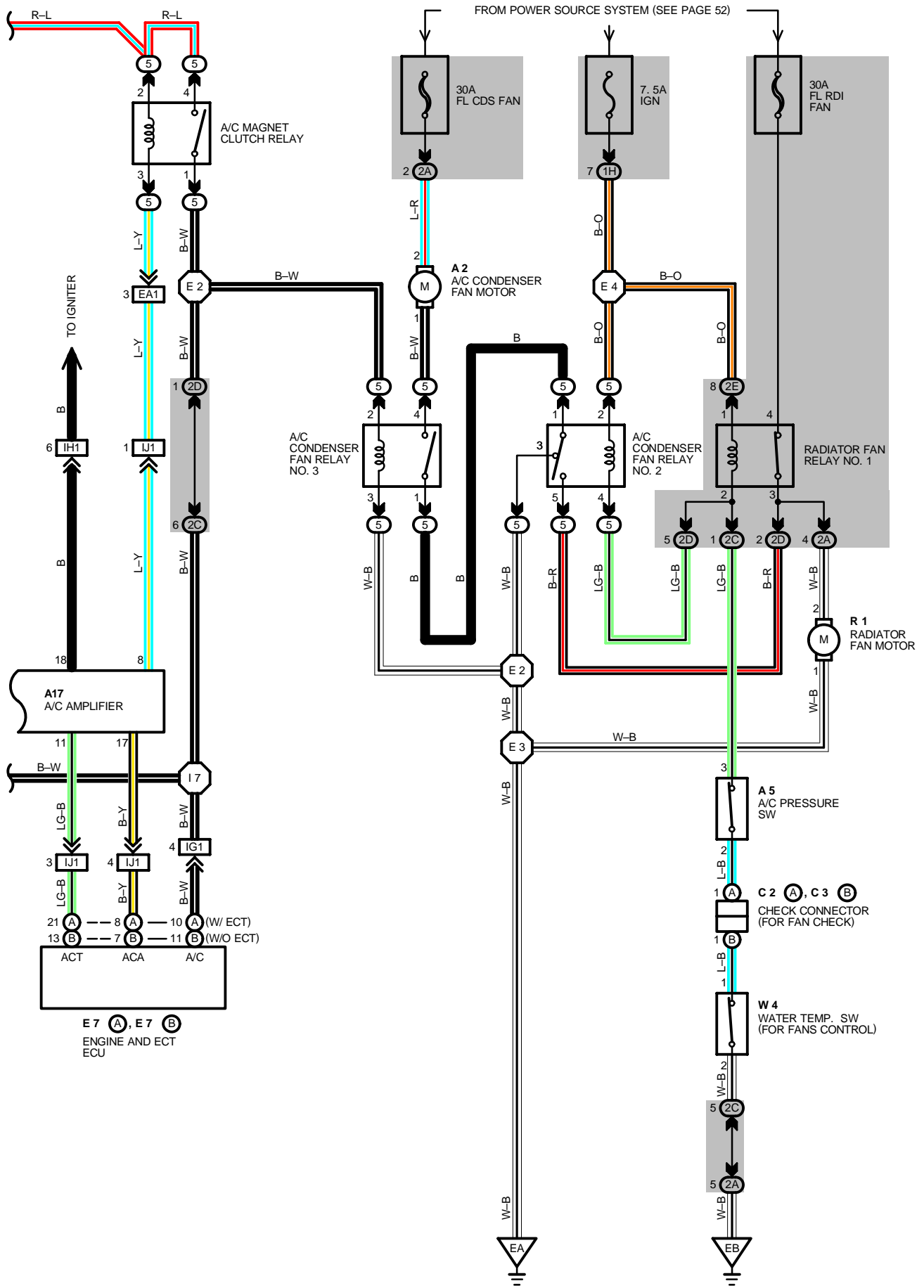


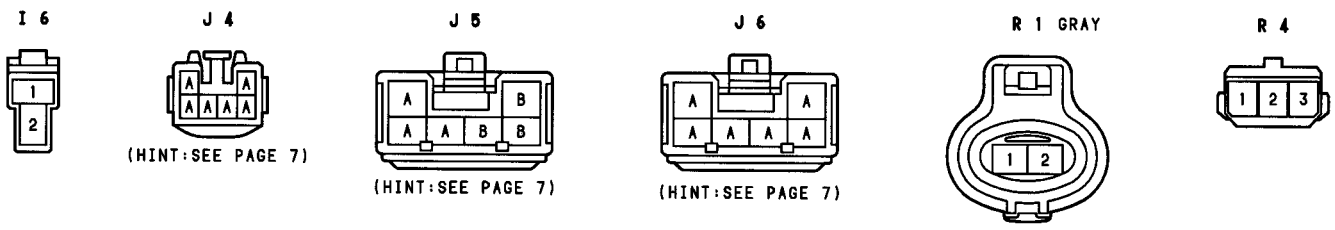
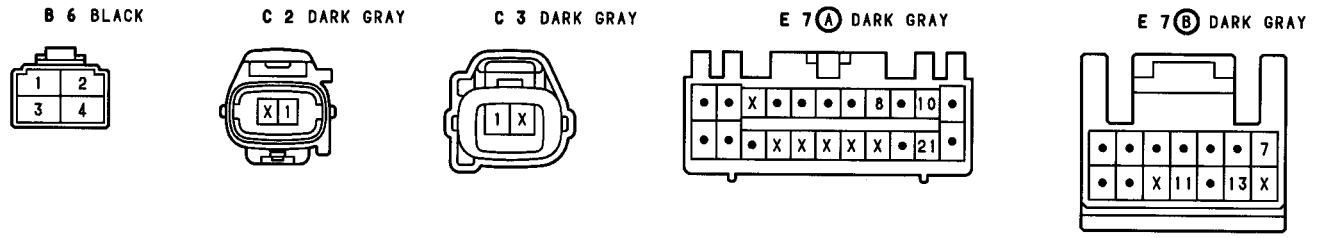
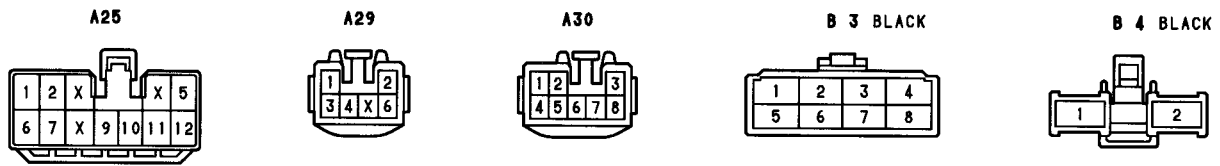
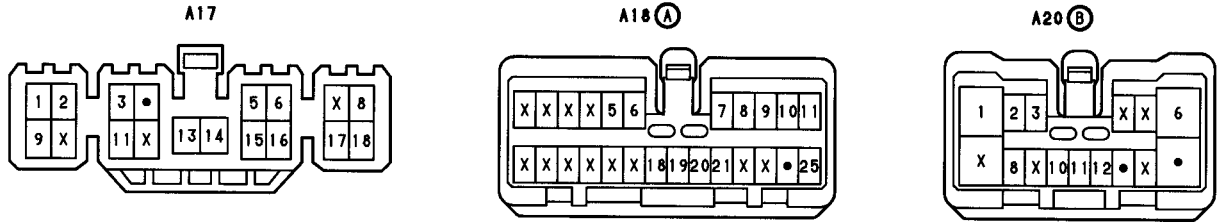
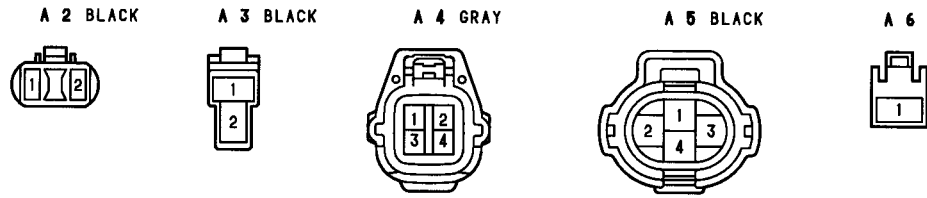
**RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)**





**RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)**





**SYSTEM OUTLINE****1. COOLING FAN OPERATION**

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FROM IGN FUSE FLOWS TO **TERMINAL 3** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 4** → **TERMINAL 3** OF THE A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, FROM **TERMINAL 2** OF A/C FAN RELAY NO. 2 → **TERMINAL 4** → **TERMINAL 3** OF A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, CAUSING RELAY NO. 1 AND RELAY NO. 2 OF EACH FAN TO TURN ON.

**\* OPERATION AT LOW SPEED**

WHEN THE A/C SW (A/C CONTROL ASSEMBLY) IS TURNED ON AND THE AIR CONDITIONER OPERATES, THE CURRENT FLOWS FROM GAUGE FUSE FLOWS TO **TERMINAL 2** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 3** → **TERMINAL 8** OF A/C AMPLIFIER CAUSING A/C MAGNET CLUTCH RELAY TO TURN ON.

AT THAT TIME, THE CURRENT FROM GAUGE FUSE FLOWS TO **TERMINAL 4** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 1** → **TERMINAL 4** OF A/C MAGNET CLUTCH → **GROUND**, AND FROM **TERMINAL 1** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 2** OF A/C FAN RELAY NO. 3 → **TERMINAL 3** → **GROUND**.

AS A RESULT, A/C MAGNET CLUTCH AND A/C FAN RELAY NO. 3 TURNS ON AND THE CURRENT FLOWS FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** → **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 5** → **TERMINAL 2** OF A/C CONDENSOR FAN MOTOR → **TERMINAL 1** → **GROUND**, FLOWING TO EACH FAN MOTOR IN SERIES, CAUSING THE COOLING FAN TO ROTATE AT LOW SPEED.

**\* OPERATION AT HIGH SPEED**

DURING A/C OPERATION, WHEN THE PRESSURE OF A/C COMPRESSOR BECOMES HIGHER THAN NORMAL PRESSURE (MORE THAN **14.3 KG/CM<sup>2</sup> 1401 KPA, 203 PSI**), THE A/C PRESSURE SW TURNS OFF.

AS A RESULT, FAN RELAY NO. 1 AND NO. 2 TURNS OFF AND THE CURRENT FLOWS FROM FL RDI FAN → **TERMINAL 1** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 2** → **TERMINAL 2** OF RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, AND FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** → **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 3** → **GROUND**, FLOWING TO EACH FAN MOTOR IN PARALLEL CAUSING THE → COOLING FAN TO ROTATE AT HIGH SPEED. WHEN THE ENGINE COOLANT TEMPERATURE BECOMES MORE THAN ABOUT **90°C (194°F)**, THE WATER TEMP. SW TURNS OFF AND THE SAME OPERATION AS ABOVE IS PERFORMED.

**2. HEATER BLOWER MOTOR OPERATION PUSH TYPE BLOWER CONTROL SW (W/O AUTO A/C)**

CURRENT IS APPLIED AT ALL TIMES THROUGH THE HEATER FUSE TO **TERMINAL 5** OF HEATER RELAY. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL 3** OF HEATER RELAY → **TERMINAL 1** → **TERMINAL C3** OF A/C CONTROL ASSEMBLY.

AT THE SAME TIME, CURRENT ALSO FLOWS FROM GAUGE FUSE TO **TERMINAL 5** OF A/C BLOWER CONTROL RELAY → **TERMINAL 7** → **TERMINAL C1** OF A/C CONTROL ASSEMBLY, FROM **TERMINAL 5** OF BLOWER CONTROL RELAY → **TERMINAL 8** → **TERMINAL C8** OF A/C CONTROL ASSEMBLY, AND ALSO FROM **TERMINAL 5** OF BLOWER CONTROL ASSEMBLY.

**\* LOW SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **LOW** POSITION, CURRENT FLOWS FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 4** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT LOW SPEED.

**\* HIGH SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **HI** POSITION, CURRENT FLOWS FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY → **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

AS A RESULT, THE CURRENT FLOWING TO **TERMINAL C1** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND**, TURNING THE A/C BLOWER CONTROL RELAY ON.

THIS CASE IS THE CURRENT FLOWING FROM THE HEATER FUSE → **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF RELAY → **TERMINAL 2** OF BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 4** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

\* MEDIUM SPEED OPERATION (OPERATION AT MANUAL M1, M2)

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M1** POSITION. CURRENT FLOWS FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

AS A RESULT, CURRENT FLOWING TO **TERMINAL C2** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF THE A/C CONTROL ASSEMBLY → **GROUND**, TURNING THE BLOWER CONTROL RELAY ON SO THAT THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 5** OF THE HEATER RELAY FLOWS TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 2** OF BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL 7** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT MEDIUM SPEED.

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M2** POSITION, CURRENT FLOWS FROM **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL 2** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**.

THIS CURRENT FLOW FROM BLOWER MOTOR TO GROUND IS GREATER THAN AT **M1** POSITION, SO THE BLOWER MOTOR ROTATES AT MEDIUM HIGH SPEED.

### 3. OPERATION OF RECIRC/FRESH CONTROL SERVO MOTOR

(SWITCHING FROM FRESH TO RECIRC)

WITH IGNITION SW TURNED ON, THE CURRENT FLOWS FROM GAUGE FUSE TO **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR. WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE RECIRC SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 2** → **TERMINAL A18** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL C10** → **GROUND**, THE MOTOR ROTATES AND THE DAMPER MOVES TO THE RECIRC SIDE.

WHEN IT IS IN THE **RECIRC** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH IGNITION SW ON, WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE FRESH SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 3** → **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND**, THE MOTOR ROTATES AND THE DAMPER MOVES TO THE FRESH SIDE. WHEN IT IS IN THE **FRESH** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

## SERVICE HINTS

### A 4 A/C MAGNET CLUTCH

4-GROUND : APPROX. 3.7 Ω

### A 5 A/C PRESSURE SW

3-2 : OPEN ABOVE APPROX. 13.5 KG/CM<sup>2</sup> (192 PSI, 1323 KPA)

CLOSED BELOW APPROX. 10 KG/CM<sup>2</sup> (142 PSI, 980 KPA)

1-4 : OPEN WITH PRESSURE LESS THAN 2.1 KG/CM<sup>2</sup> (30 PSI, 206 KPA) OR ABOVE 27 KG/CM<sup>2</sup> (384 PSI, 2648 KPA)

### A17 A/C AMPLIFIER

8-15 : CONTINUITY WITH A/C SW (A/C CONTROL ASSEMBLY) ON AND IGNITION SW AT **ON** POSITION

14-15 : ALWAYS CONTINUITY

14-GROUND: ALWAYS CONTINUITY

15-GROUND: ALWAYS CONTINUITY

13-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON

### A26 A/C THERMISTOR

1-2 : APPROX. 4852 Ω AT 0°C (32°F)

APPROX. 2341 Ω AT 15°C (59°F)

APPROX. 1500 Ω AT 25°C (77°F)

### A29 AIR MIX CONTROL SERVO MOTOR

2-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **WARM** TO **COOL** POSITION

6-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **COOL** TO **WARM** POSITION

1-3 : ALWAYS APPROX. 6 KΩ

### B 3 BLOWER CONTROL RELAY

3-4 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **HI** POSITION

1-3 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **M1** POSITION

2-3 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **M2** POSITION

### B 6 BLOWER RESISTOR

1-3 : APPROX. 0.48 Ω

3-2 : APPROX. 0.94 Ω

2-4 : APPROX. 0.91 Ω

### W 4 WATER TEMP. SW (FOR FANS CONTROL)

1-2 : OPEN ABOVE APPROX. 90°C (194°F)

CLOSED BELOW APPROX. 83°C (181.4°F)



**RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)**

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 2	26 (5S-FE)	A29	28	I 6	26 (5S-FE)
A 3	26 (5S-FE)	A30	28	J 4	29
A 4	26 (5S-FE)	B 3	28	J 5	29
A 5	26 (5S-FE)	B 4	28	J 6	29
A 6	26 (5S-FE)	B 6	28	R 1	26 (5S-FE)
A17	26 (5S-FE)	C 2	26 (5S-FE)	R 4	29
A18	A 28	C 3	26 (5S-FE)	W 4	26 (5S-FE)
A20	B 28	E 7	A 29		
A25	28		B 29		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

**○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR**

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	32 (5S-FE) 34 (4A-FE)	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
EB2	32 (5S-FE) 34 (4A-FE)	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
IG1	36	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IH1	36	ENGINE WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ1	36	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IQ1	36	COWL WIRE AND A/C NO. 2 WIRE (BESIDE HEATER UNIT)
IQ2		

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	32 (5S-FE) 34 (4A-FE)	FRONT RIGHT FENDER
EB	32 (5S-FE) 34 (4A-FE)	FRONT LEFT FENDER
ID	36	LEFT KICK PANEL
IG	36	R/B NO. 4 SET BOLT

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	32 (5S-FE)	ENGINE ROOM MAIN WIRE	E10	32 (5S-FE)	COWL WIRE
	34 (4A-FE)			34 (4A-FE)	
E 3	32 (5S-FE)		I 3	36	ENGINE WIRE
	34 (4A-FE)		I 7	36	COWL WIRE
E 4	32 (5S-FE)		I 8	36	COWL WIRE
	34 (4A-FE)		I11	36	A/C NO. 2 WIRE