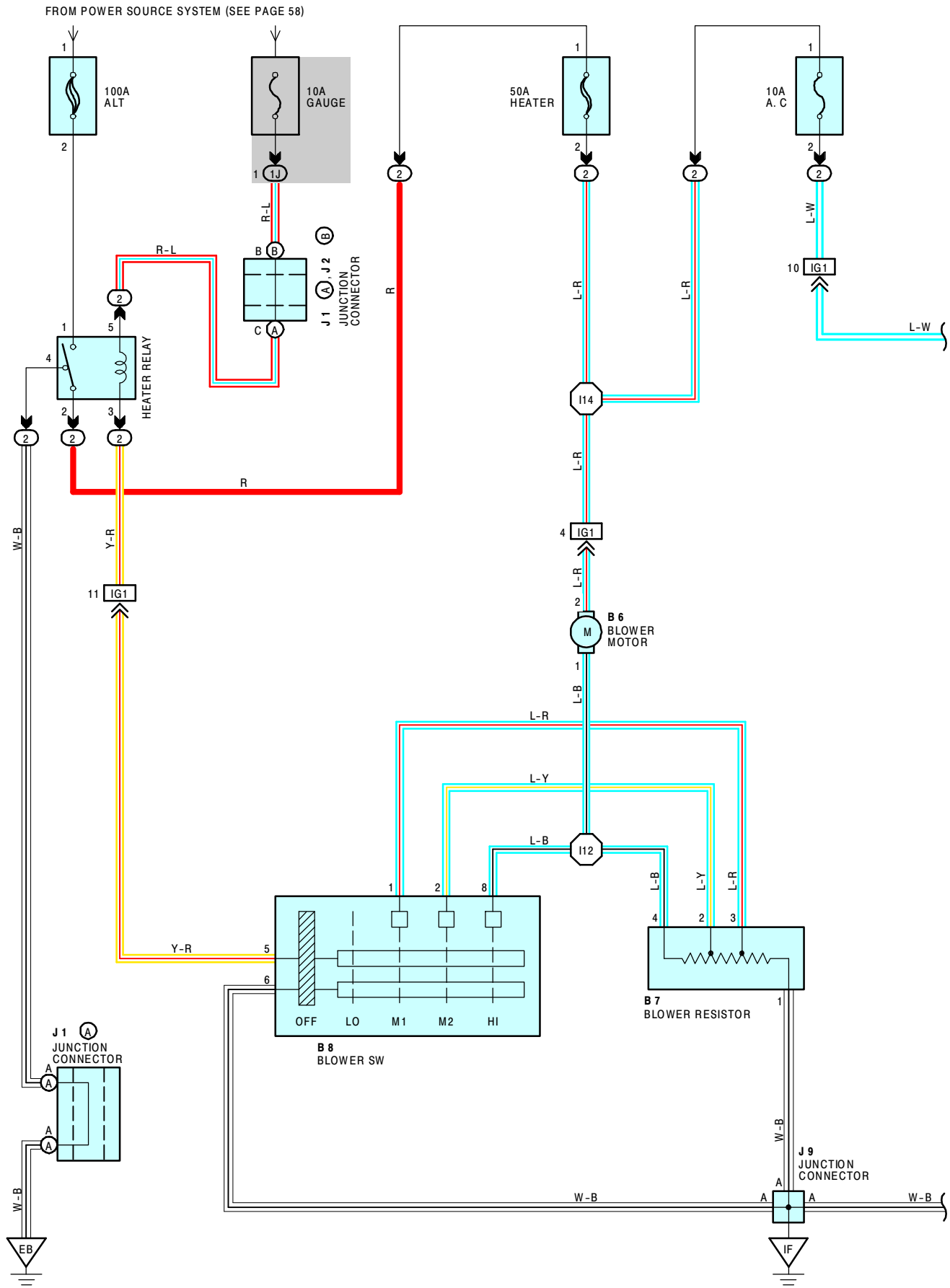
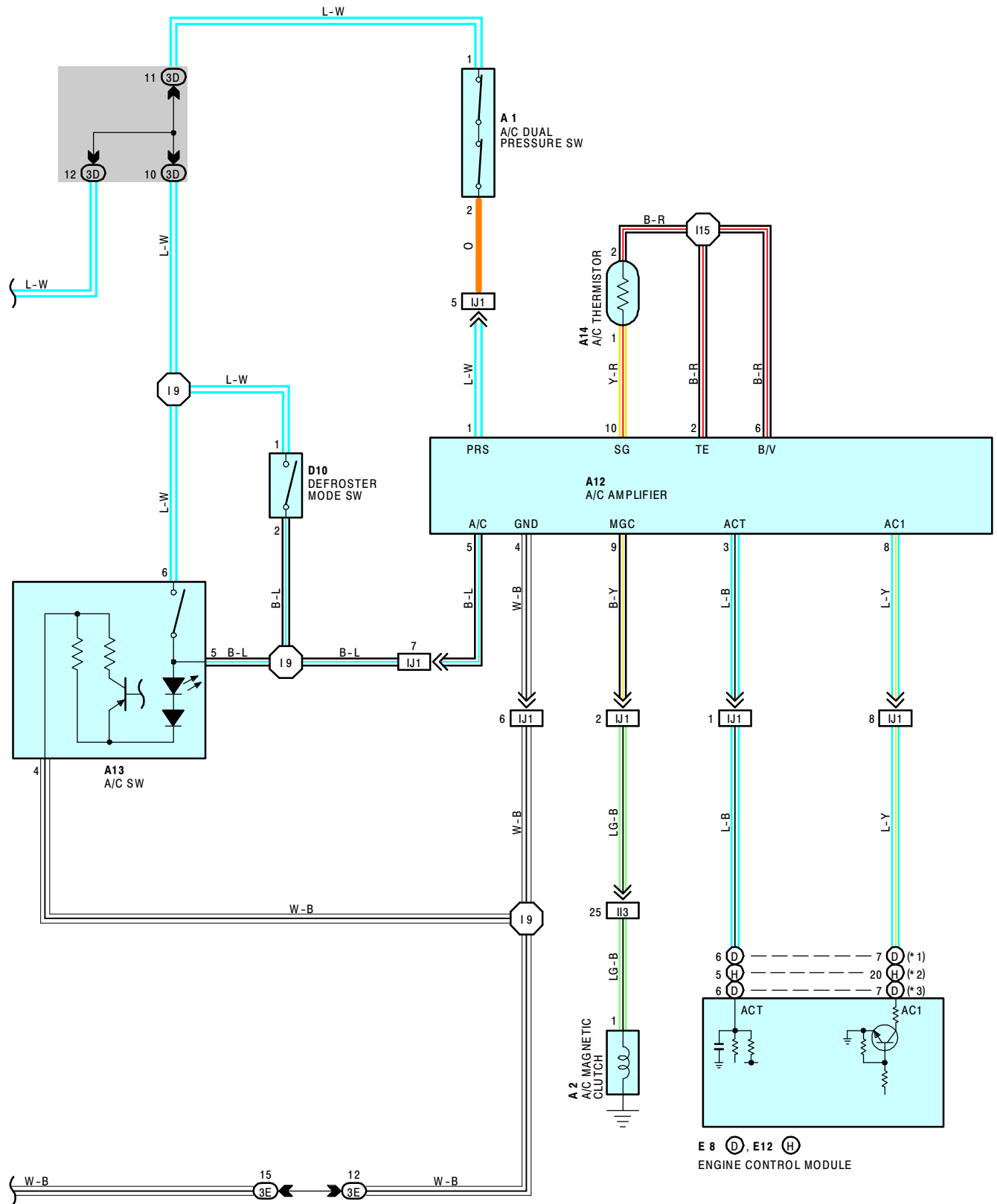




AIR CONDITIONING



*1 : 5VZ-FE M/T
 *2 : 5VZ-FE A/T
 *3 : 3RZ-FE





AIR CONDITIONING

SYSTEM OUTLINE

1. BLOWER MOTOR OPERATION

WITH THE IGNITION ON, CURRENT FROM THE **GAUGE** FUSE FLOWS FROM **TERMINAL 5** OF THE HEATER RELAY → COIL → **TERMINAL 3** → **TERMINAL 5** OF THE BLOWER SW.

(LOW SPEED OPERATION)

WHEN THE BLOWER SW IS MOVED TO THE LOW SPEED POSITION, THE CURRENT APPLIED FROM **TERMINAL 5** FLOWS TO **TERMINAL 6** → **GROUND**. CAUSING THE HEATER RELAY TO COME ON. THEN FROM **ALT** FUSE THE CURRENT FLOWS FROM **TERMINAL 5** OF THE HEATER RELAY → **TERMINAL 4** → **TERMINAL 2** OF THE BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE BLOWER RESISTOR → **TERMINAL 1** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE. THIS TIME, THE CURRENT FLOWS AGAINST THE FULL RESISTANCE OF THE BLOWER RESISTOR, SO THE MOTOR TURNS SLOWLY AT LOW SPEED.

(OPERATION AT SPEED M1, M2)

WHEN THE BLOWER SW IS MOVED TO THE SPEED M1 POSITION, THE CURRENT APPLIED FROM **TERMINAL 5** FLOWS TO **TERMINAL 6** → **GROUND**, TURNING THE HEATER RELAY TO ON. THEN, THE SAME AS WITH LOW SPEED, CURRENT PASSING THROUGH THE **HEATER** FUSE FROM THE BLOWER MOTOR → **TERMINAL 4** OF THE BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL 1** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**. 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 4** OF THE BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL 2** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**. THIS TIME, RESISTANCE OF THE BLOWER RESISTOR IS LESS THAN FOR SPEED M1 SO THAT THE BLOWER MOTOR ROTATES EVEN FASTER THAN FOR SPEED M1.

(HIGH SPEED OPERATION)

WITH THE 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 FROM **TERMINAL 8** OF THE BLOWER SW → **TERMINAL 6** → **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 **ALT** FUSE FLOWS THROUGH THE **HEATER** FUSE AND **A/C** FUSE → **TERMINAL 1** OF THE A/C DUAL PRESSURE SW → **TERMINAL 2** → **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

A13 A/C SW

6-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION AND HEATER BLOWER SW ON

4-GROUND : ALWAYS CONTINUITY

6-5 : CLOSED WITH A/C SW ON OR DEFROSTER MODE SW ON

A1 A/C DUAL PRESSURE SW

1-2 : OPEN WITH REFRIGERANT PRESSURE AT LESS THAN APPROX. 2.0 KG/CM² (28.4 PSI, 196 KPA) OR MORE THAN APPROX. 32 KG/CM² (455 PSI, 3138 KPA)

HEATER RELAY

(2) 1-(2) 2: CLOSED WITH IGNITION SW ON AND BLOWER SW ON

(2) 1-GROUND: ALWAYS APPROX 12 VOLTS

(2) 5-GROUND: APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

(2) 4-GROUND: ALWAYS CONTINUITY

B8 BLOWER SW

6-5 : CLOSED WITH BLOWER SW AT **LOW** POSITION

6-1, 5 : CLOSED WITH BLOWER SW AT **M1** POSITION

6-2, 5 : CLOSED WITH BLOWER SW AT **M2** POSITION

6-8, 5 : CLOSED WITH BLOWER SW AT **HI** POSITION

A2 A/C MAGNETIC CLUTCH

1-GROUND : 3.7Ω

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A1	26 (5VZ-FE), 28 (3RZ-FE)	B6	30	E12	H 31
A2	26 (5VZ-FE), 28 (3RZ-FE)	B7	30	J1	A 27 (5VZ-FE), 29 (3RZ-FE)
A12	30	B8	30	J2	B 27 (5VZ-FE), 29 (3RZ-FE)
A13	30	D10	30	J9	31
A14	30	E8	D 31		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	20 (USA) 21 (CANADA)	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	22	ENGINE ROOM MAIN WIRE AND DRIVER SIDE J/B (LOWER FINISH PANEL)
3D	24	COWL WIRE AND CENTER J/B (NEAR THE STEERING COLUMN TUBE)
3E		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG1	40	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II3	40	ENGINE WIRE AND COWL WIRE (ON THE GLOVE BOX)
IJ1	40	COWL WIRE AND A/C SUB WIRE (NEAR THE A/C UNIT)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	36 (5VZ-FE) 38 (3RZ-FE)	FRONT LEFT FENDER
IF	40	COWL SIDE PANEL RH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I9	40	COWL WIRE	I14	40	COWL WIRE
I12			I15	40	A/C SUB WIRE

A1 GRAY

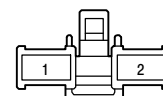
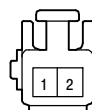
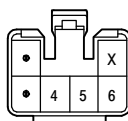
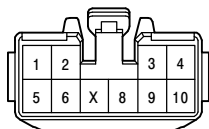
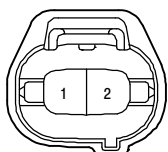
A2 GRAY

A12 BLACK

A13 BLACK

A14

B6 BLACK



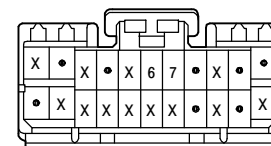
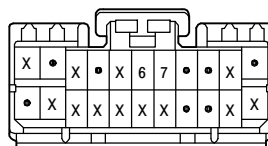
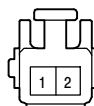
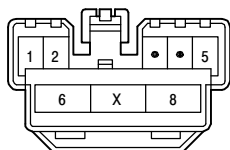
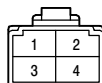
B8 BLACK

D10

(5VZ-FE M/T) E8 ①

(3RZ-FE M/T) E8 ①

B7 BLACK

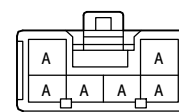
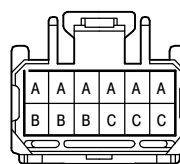
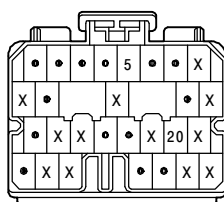
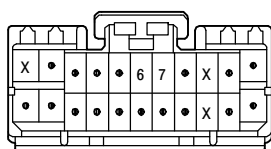


(3RZ-FE A/T) E8 ①

(5VZ-FE A/T) E12 ①

J1 ①, J2 ② GRAY

J9



(HINT : SEE PAGE 7)

(HINT : SEE PAGE 7)