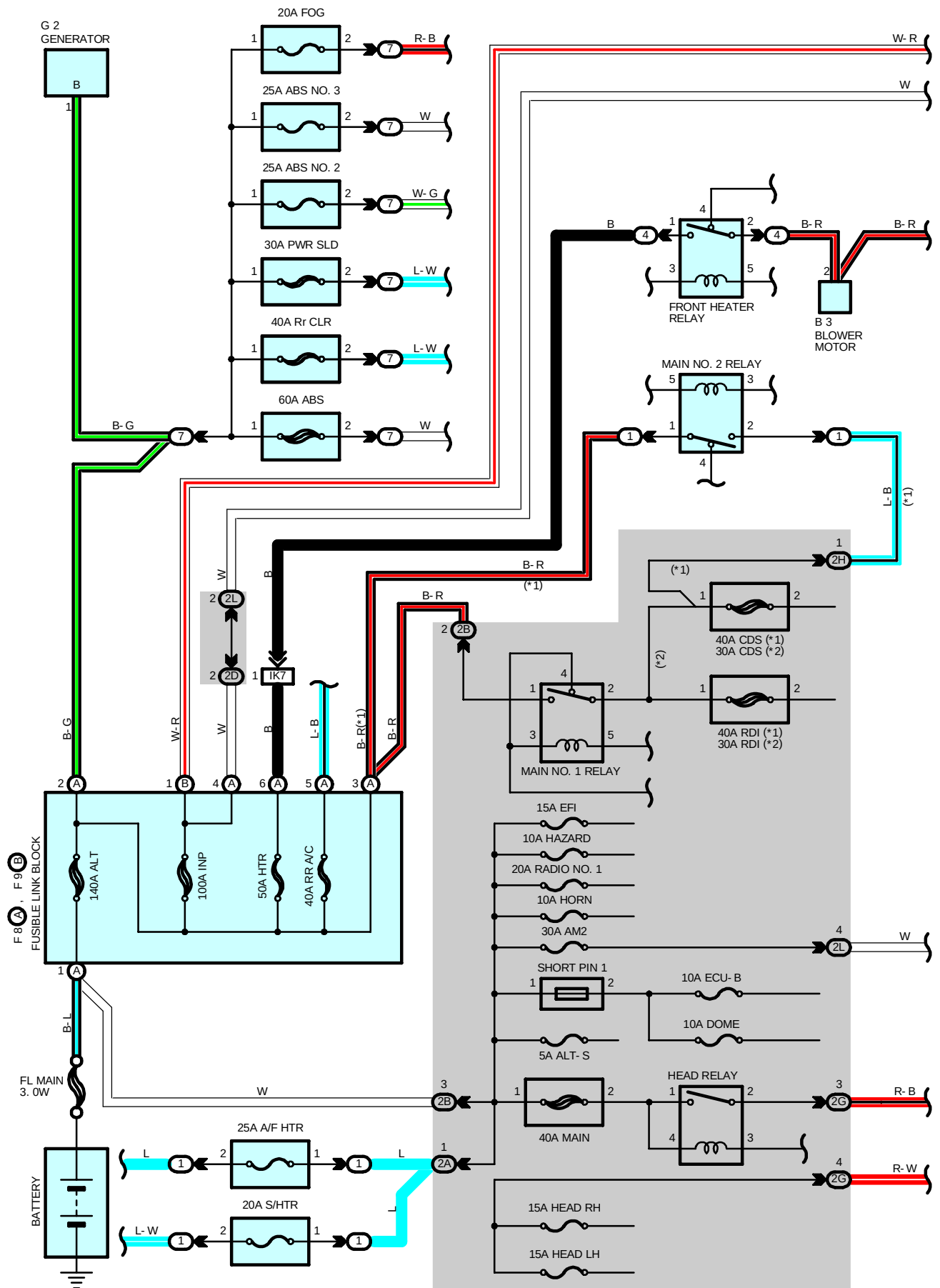


POWER SOURCE



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POWER SOURCE

SERVICE HINTS

HEAD RELAY

- 2-1 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position
 Closed with the engine running and the parking brake pedal released (Parking brake SW off)

TAILLIGHT RELAY

- 5-3 : Closed with the light control SW at **TAIL** or **HEAD** position

I12 IGNITION SW

- 2-3 : Closed with the ignition key at **ACC** or **ON** position
 2-4 : Closed with the ignition key at **ON** or **ST** position
 7-6 : Closed with the ignition key at **ON** or **ST** position
 7-8 : Closed with the ignition key at **ST** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B3	34	F9	B	I12	35
F8	A	G2	32	J1	33

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)
4	29	Passenger Side R/B No.4 (Front Side the Blower Motor)
5	29	Driver Side R/B No.5 (Lower Finish Panel)
7	29	R/B No.7 (Engine Compartment Left)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1K		
2A	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2B		
2D		
2G		
2H		
2L	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

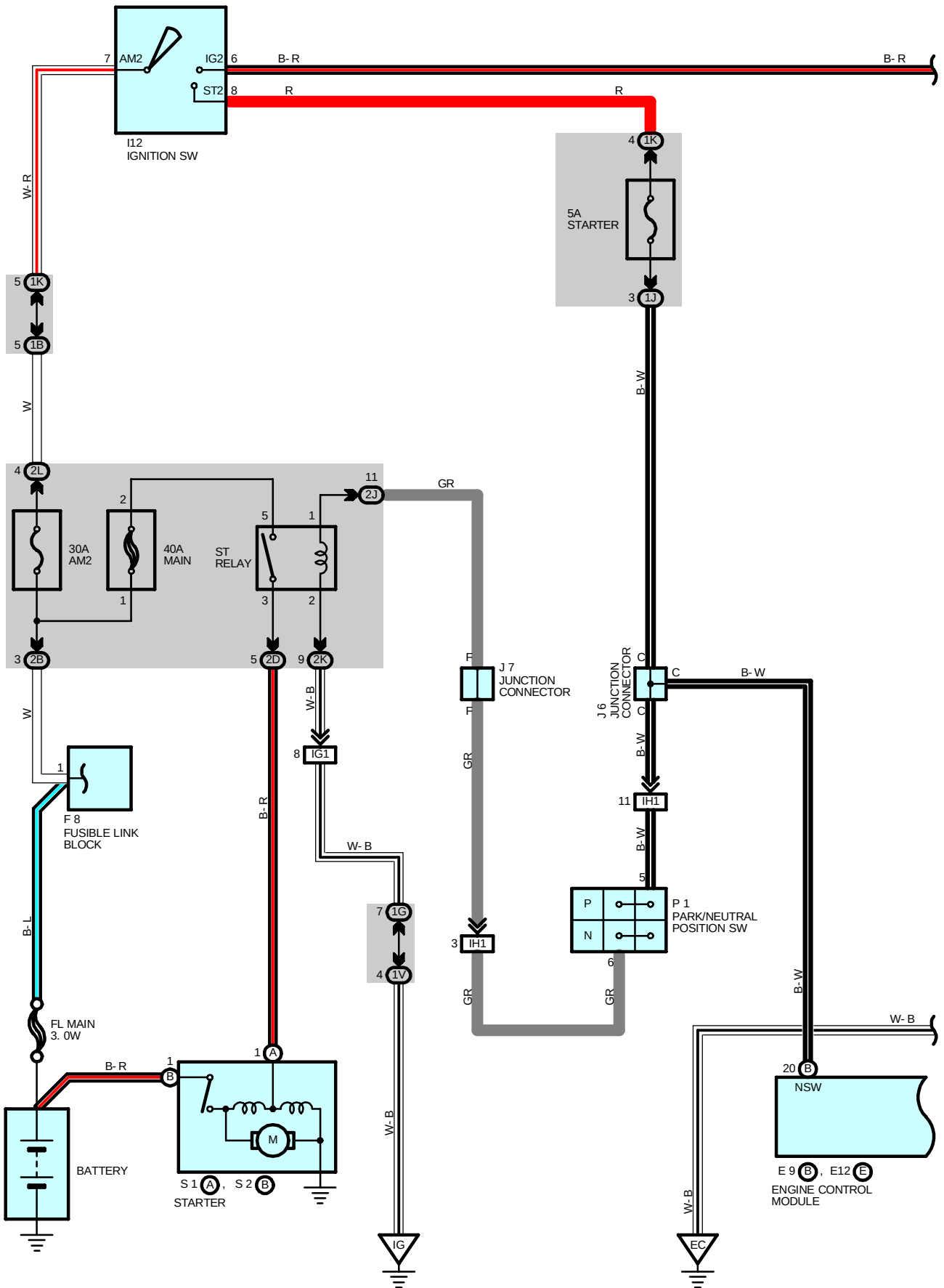
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK7	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

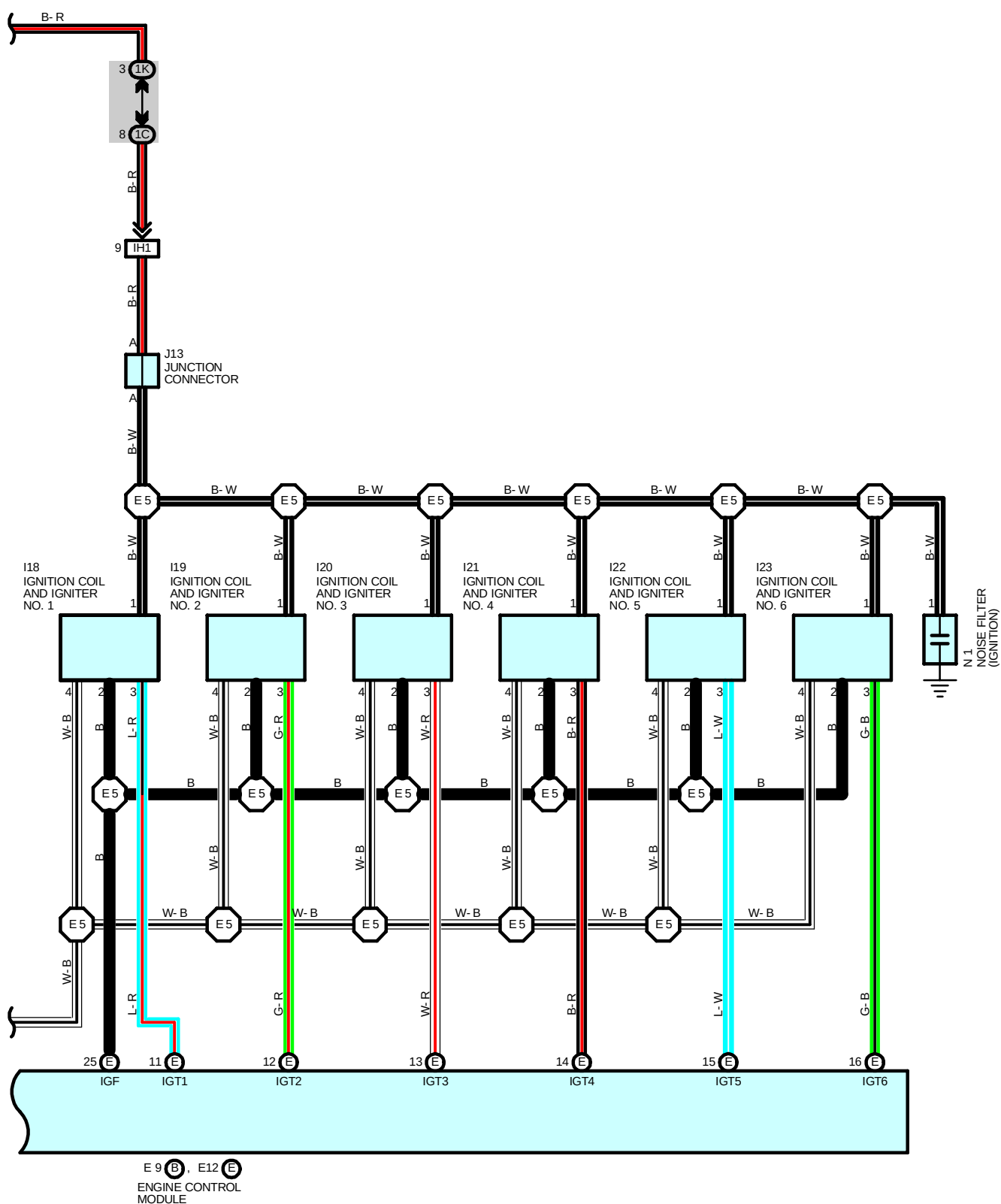
○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire			

STARTING AND IGNITION



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STARTING AND IGNITION

SERVICE HINTS

I12 IGNITION SW

7-6 : Closed with the ignition SW at **ON** or **ST** position

7-8 : Closed with the ignition SW at **ST** position

P1 PARK/NEUTRAL POSITION SW

5-6 : Closed with the A/T shift lever in **P** or **N** position

S1 (A), S2 (B) STARTER

Points closed with the Park/Neutral position SW at **P** or **N** position and the ignition SW at **ST** position



: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
E9	B	I20	33	J13	35
E12	E	I21	33	N1	33
F8	32	I22	33	P1	33
I12	35	I23	33	S1	A
I18	33	J6	35	S2	B
I19	33	J7	35		



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1K		
1V		
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2D		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
2L		



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)



: GROUND POINTS

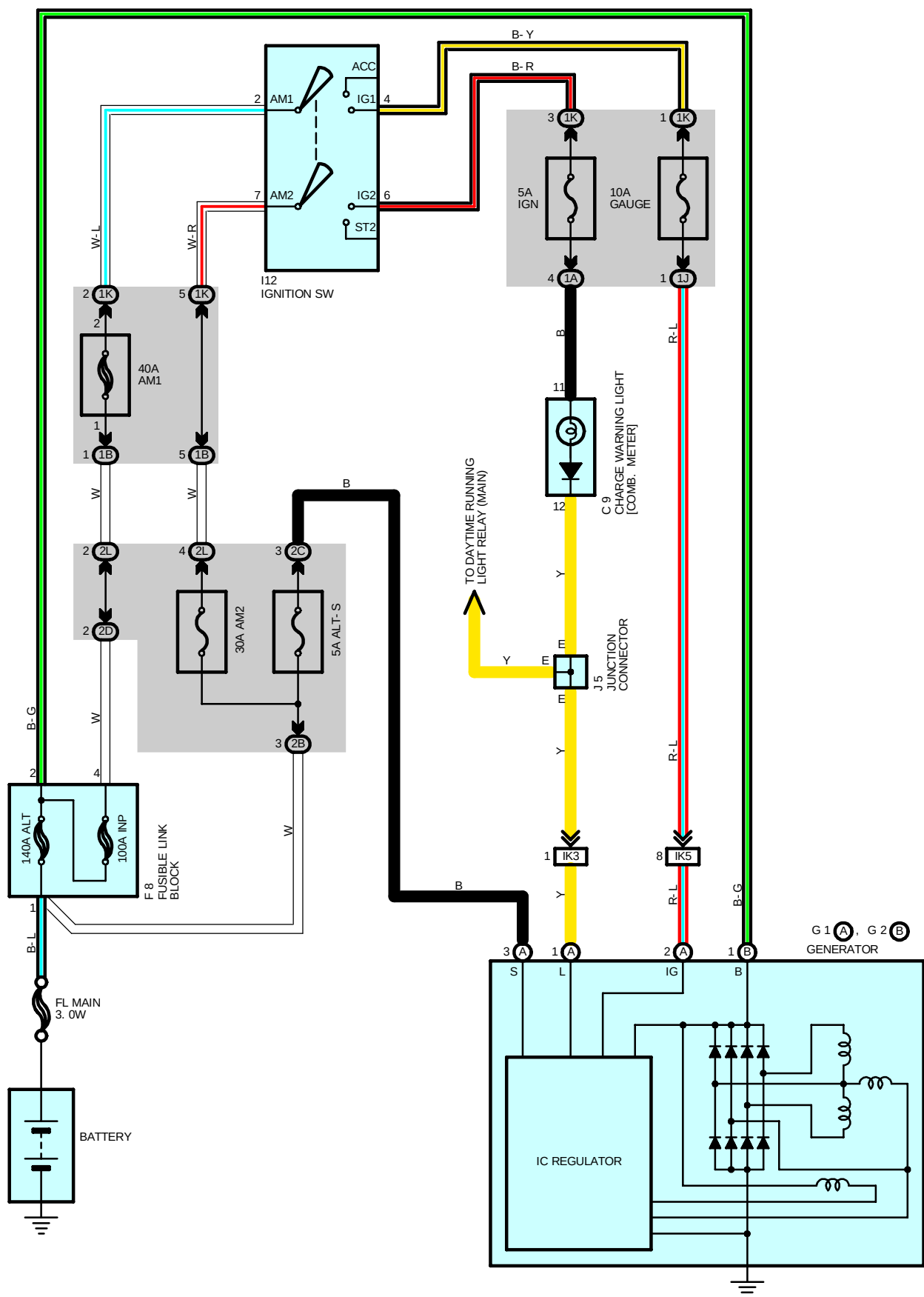
Code	See Page	Ground Points Location
EC	40	Rear Side of the Surge Tank
IG	42	Left Cowl Side Panel



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	40	Engine Wire			

CHARGING



SERVICE HINTS

G1 (A) GENERATOR

(A) 3-GROUND : **13.8- 14.7** volts with the engine running at **2000** rpm and **25°C (77°F)**
13.2- 14.0 volts with the engine running at **5000** rpm and **115°C (239°F)**

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C9	34	G1	A	I12	35
F8	32	G2	B	J5	35

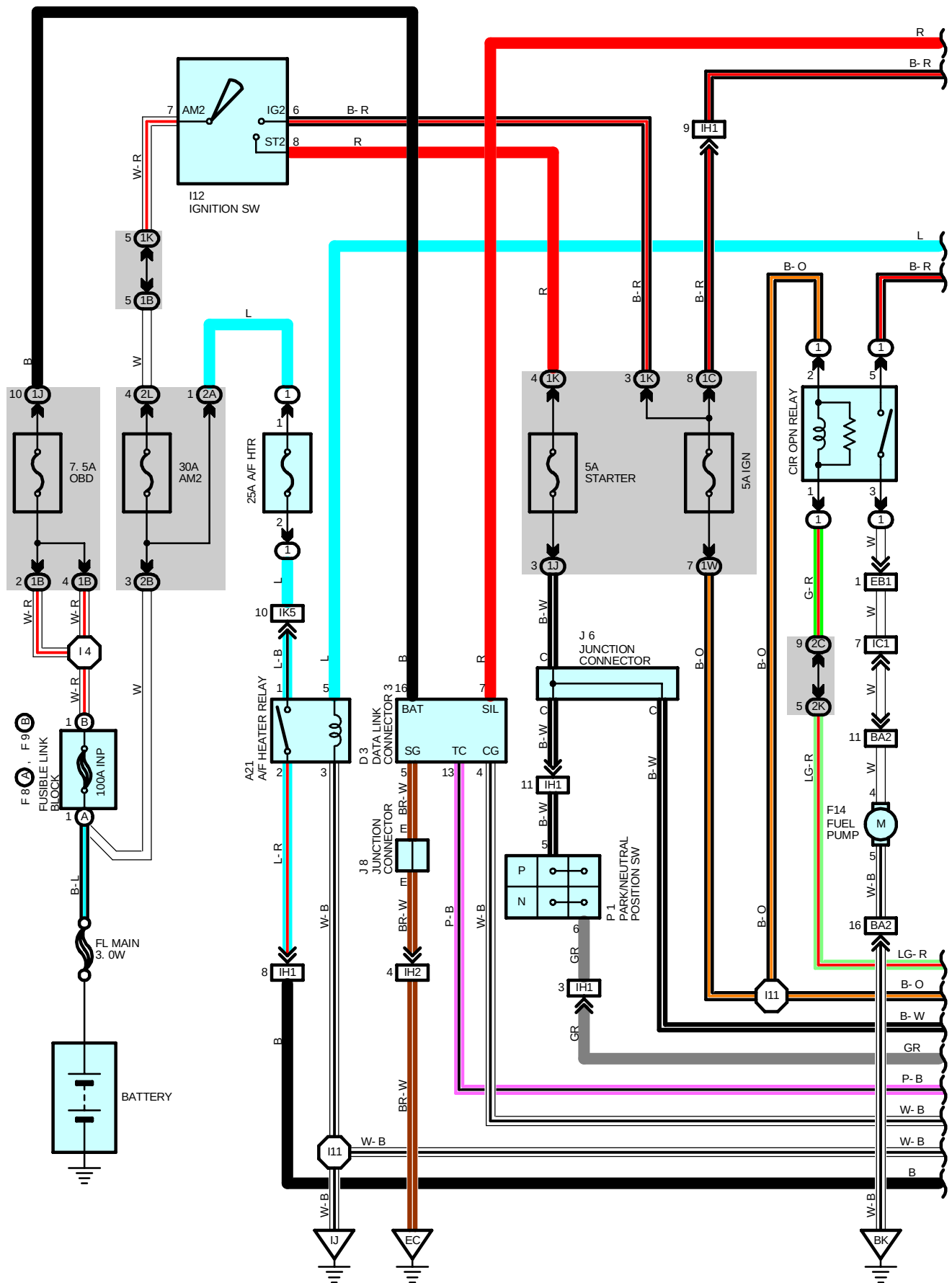
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1B		
1J		
1K		
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2C		
2D		
2L	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

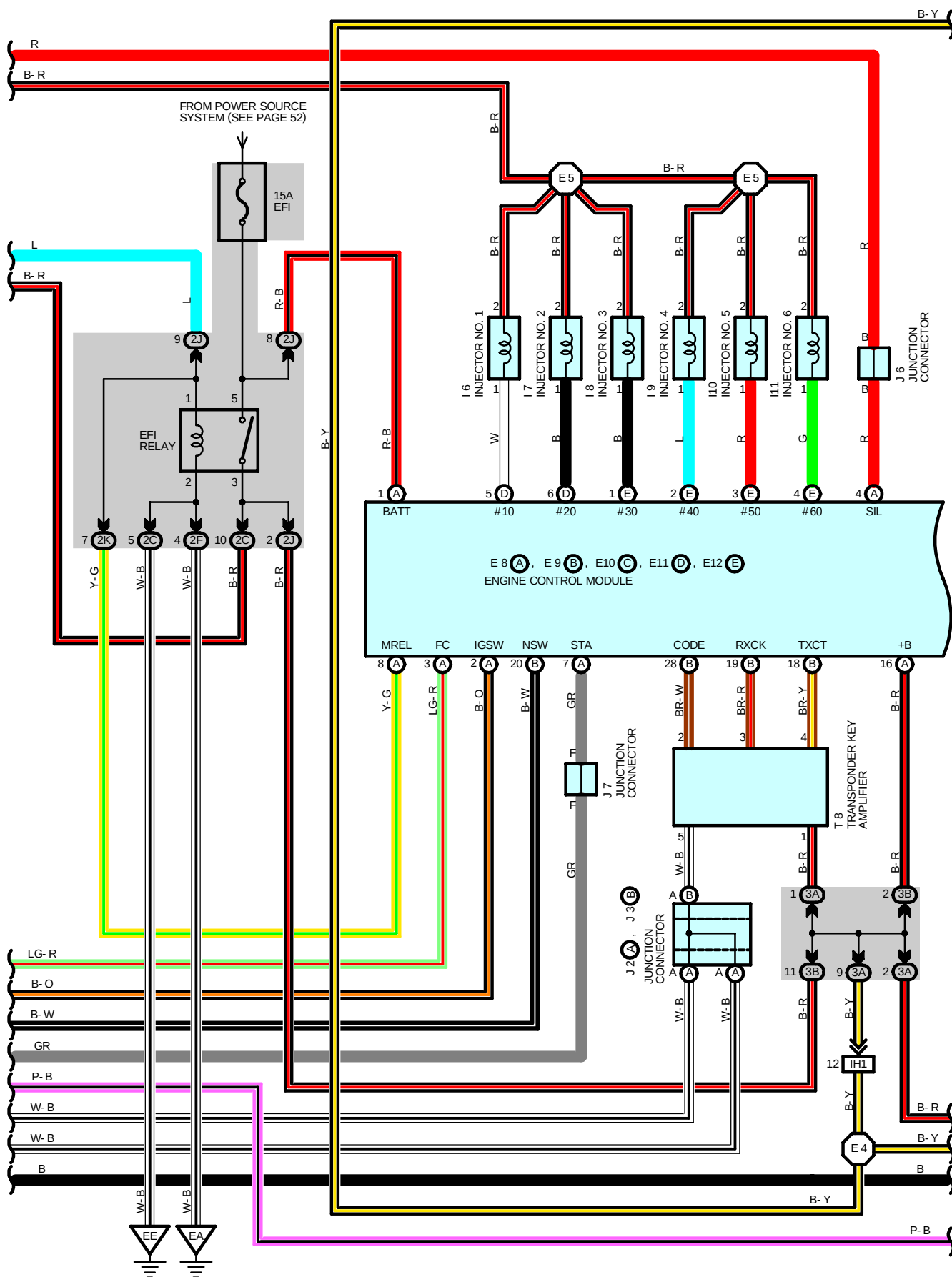
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
IK5		

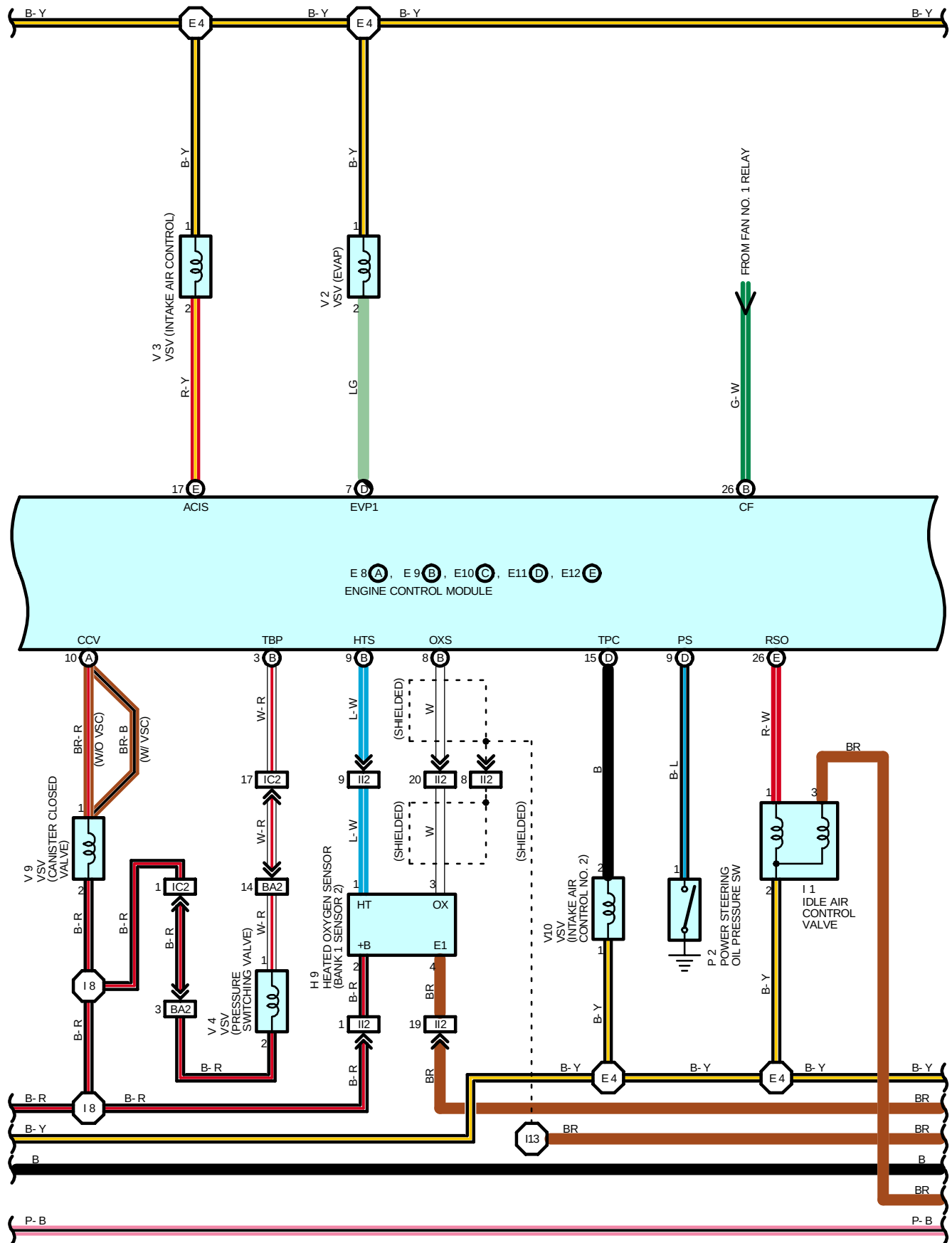
ENGINE CONTROL AND ENGINE IMMOBILISER SYSTEM



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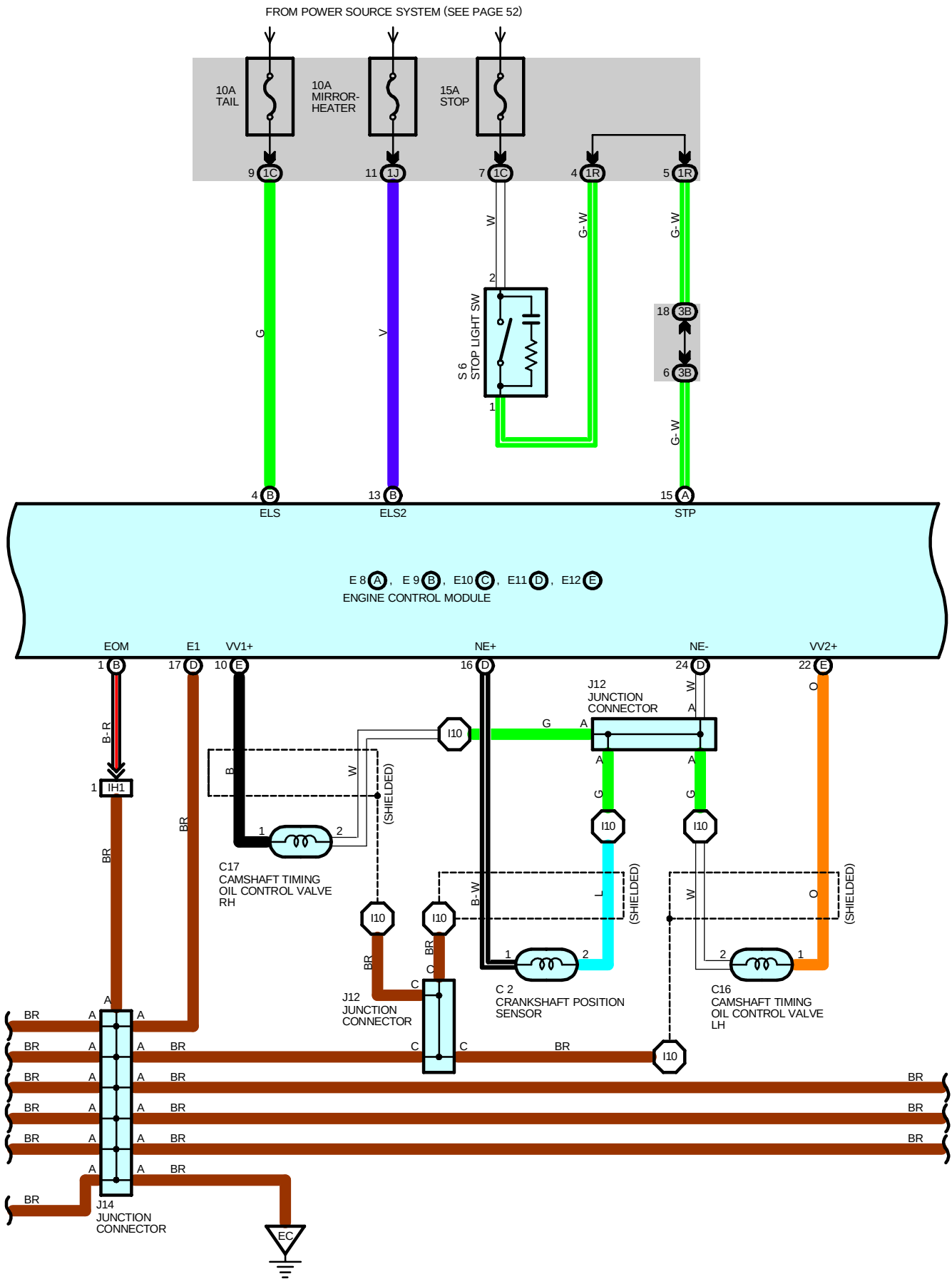


ENGINE CONTROL AND ENGINE IMMOBILISER SYSTEM

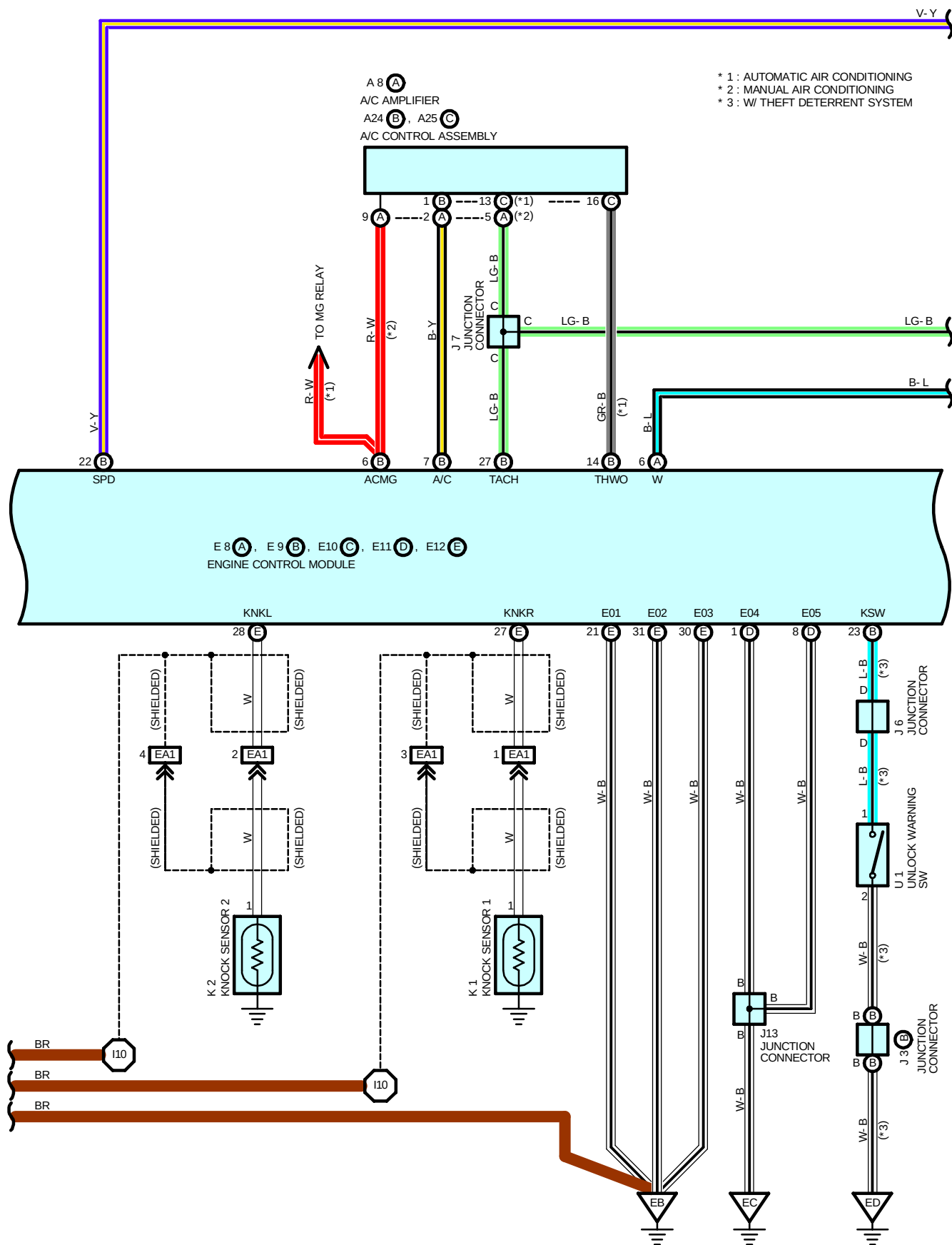


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ENGINE CONTROL AND ENGINE IMMOBILISER SYSTEM

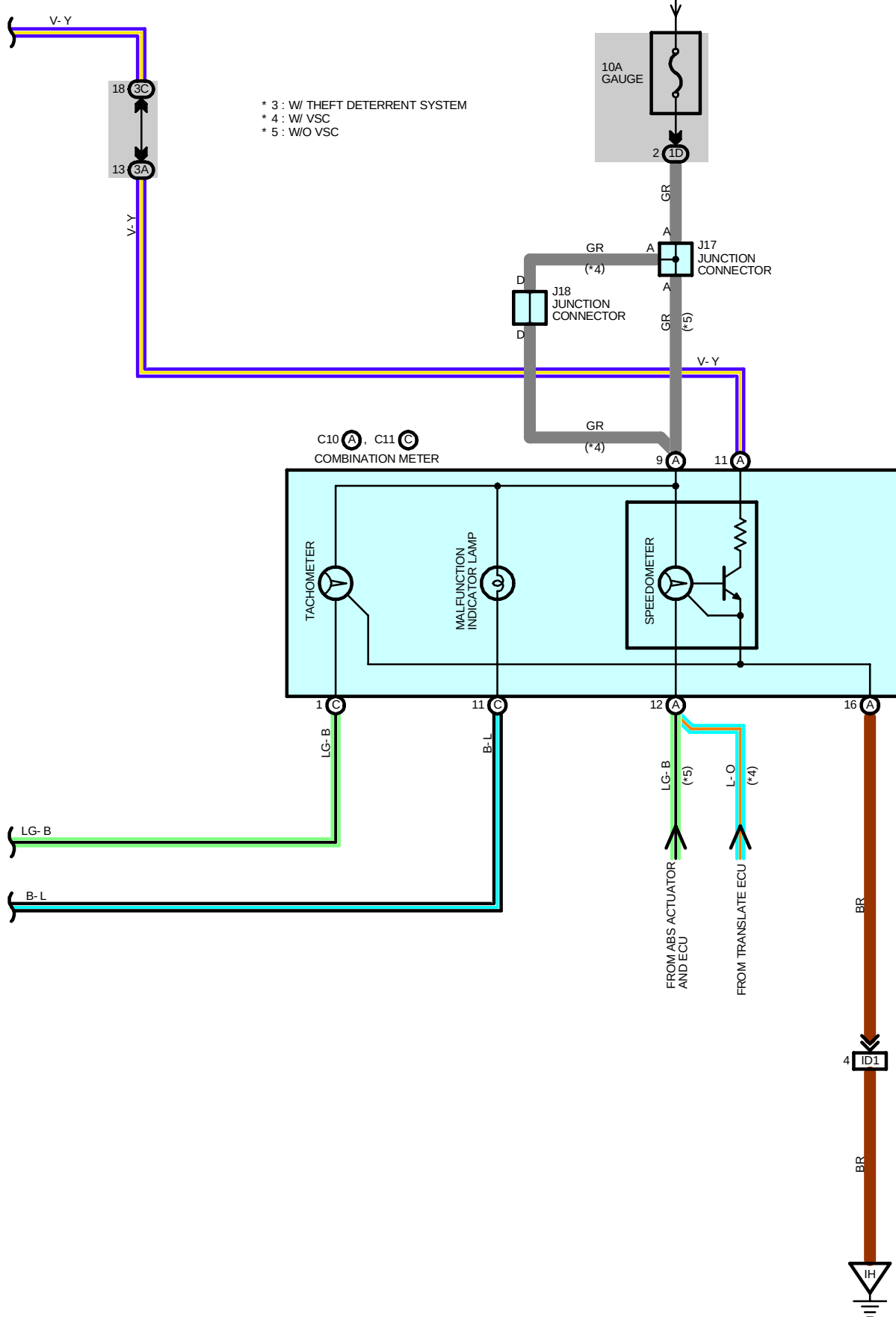


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FROM POWER SOURCE SYSTEM (SEE PAGE 52)



SYSTEM OUTLINE

This system utilizes an engine control module and maintains overall control of the engine, transaxle and so on. An outline of the engine control is explained here.

1. INPUT SIGNALS

(1) Engine coolant temp. signal circuit

The engine coolant temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the water temp. is input into TERMINAL THW of the engine control module as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the mass air flow meter and detects the intake air temp., which is input as a control signal into TERMINAL THA of the engine control module.

(3) Oxygen sensor signal system

The oxygen density in the exhaust gases is detected and input as a control signal into TERMINAL OXS of the engine control module. To maintain stable detection performance by the heated oxygen sensor, a heater is used for warming the sensor. The heater is also controlled by the engine control module (HTS).

(4) RPM signal system

Camshaft position and crankshaft position are detected by the camshaft timing oil control valve LH, RH and crankshaft position sensor. The camshaft position is input as a control signal to TERMINAL VV1+ and VV2+ of the engine control module, and the engine RPM is input into TERMINAL NE+.

(5) Throttle signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINAL VTA1 of the engine control module.

(6) Vehicle speed signal system

The vehicle speed sensor, installed inside the transaxle, detects the vehicle speed and inputs a control signal into TERMINAL SPD of the engine control module.

(7) Park/Neutral position SW signal system

The Park/Neutral position SW detects whether the shift position is in neutral, parking or not, and inputs a control signal into TERMINAL STA of the engine control module.

(8) A/C SW signal system

The A/C control assembly (Automatic air conditioning), A/C amplifier (Manual air conditioning) inputs the A/C operations into TERMINAL A/C of the engine control module as a control signal.

(9) Battery signal circuit

Voltage is always supplies to TERMINAL BATT of the engine control module.

If you turn on the ignition SW, the current goes from TERMINAL MREL of the engine control module to the EFI main relay and put on the relay, and the voltage related to the engine control module operation is supplied to TERMINAL +B of the engine control module through the EFI relay.

(10) Intake air volume signal circuit

Intake air volume is detected by the mass air flow meter and a signal is input into TERMINAL VG of the engine control module as a control signal.

(11) NSW signal circuit

To confirm whether the engine is cranking, the voltage applied to the starter motor during cranking is detected and the signal is input into TERMINAL NSW of the engine control module as a control signal.

(12) Engine knock signal circuit

Engine knocking is detected by the knock sensor 1 and 2, then the signals are input into TERMINALS KNKR and KNKL of the engine control module as a control signal.

(13) Air fuel ratio signal system

The air fuel ratio is detected and input as a control signal into TERMINALS AFL+, AFR+ of the engine control module.

2. CONTROL SYSTEM

* SFI system

The SFI system monitors the engine condition through the signals, which are input from each sensor (Input signals (1) to (12)). The best fuel injection volume is decided based on this data and the program memorized by the engine control module, and the control signal is output to TERMINALS #10, #20, #30, #40, #50 and #60 of the engine control module to operate the injector (Inject the fuel). The SFI system produces control of fuel injection operation by the engine control module in response to the driving conditions.

* ESA system

The ESA system monitors the engine condition through the signals, which are input to the engine control module from each sensor (Input signals from 1, 3, 4, 12). The best ignition timing is decided according to this data and the memorized data in the engine control module and the control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4, IGT5 and IGT6. This signal controls the igniter to provide the best ignition timing for the driving conditions.

* Heated oxygen sensor heater control system

The heated oxygen sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emissions is low), and warms up the heated oxygen sensor to improve detection performance of the sensor. The engine control module evaluates the signals from each sensor (Input signals from 1, 4, 9, 10), current is output to TERMINAL HTS, controlling the heater.

* Idle air control system

The idle air control system (Rotary solenoid type) increases the RPM and provides idle stability for fast idle-up when the engine is cold, and when the idle speed has dropped due to electrical load and so on, the engine control module evaluates the signals from each sensor (Input signals from 1, 4, 5, 8, 9), current is output to TERMINAL RSO to control idle air control valve.

* ACIS

ACIS includes a valve in the bulkhead separating the surge tank into two parts. This valve is opened and closed in accordance with the driving conditions to control the intake manifold length in two stages for increased engine output in all ranges from low to high speeds.

The engine control module judges the engine speed by the signals ((4), (5)) from each sensor and outputs signals to the TERMINAL ACIS to control the VSV (Intake air control).

3. DIAGNOSIS SYSTEM

With the diagnosis system, when there is a malfunction in the engine control module signal system, the malfunctioning system is recorded in the memory.

4. FAIL-SAFE SYSTEM

When a malfunction occurs in any systems, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail-safe system either controls the system by using data (Standard values) recorded in the engine control module memory or else stops the engine.

ENGINE CONTROL AND ENGINE IMMOBILISER SYSTEM

SERVICE HINTS

CIR OPN RELAY

5-3 : Closed with the starter running

EFI RELAY

5-3 : Closed with the ignition SW at **ON** or **ST** position

E2 ENGINE COOLANT TEMP. SENSOR

1-2 : **10.0- 20.0 kΩ** (-20 °C, -4 °F)

4.0- 7.0 kΩ (0 °C, 32 °F)

2.0- 3.0 kΩ (20 °C, 68 °F)

0.9- 1.3 kΩ (40 °C, 104 °F)

0.4- 0.7 kΩ (60 °C, 140 °F)

0.2- 0.4 kΩ (80 °C, 176 °F)

E8 (A), E9 (B), E10 (C), E11 (D), E12 (E) ENGINE CONTROL MODULE

Voltage at engine control module wiring connector

BATT-E1 : Always **9.0- 14.0** volts

+B-E1 : **9.0- 14.0** volts (Ignition SW at **ON** position)

VC-E2 : Always **4.5- 5.5** volts (Ignition SW at **ON** position)

VTA1-E2 : **0.3- 0.8** volts (Ignition SW on and throttle valve fully closed)

3.2- 4.9 volts (Ignition SW on and throttle valve fully open)

VG-E2G : **1.1- 1.5** volts (Engine idling and A/C SW off)

THA-E2 : **0.5- 3.4** volts (Engine idling and intake air temp. **20 °C, 68 °F**)

THW-E2 : **0.2- 1.0** volts (Engine idling and coolant temp. **80 °C, 176 °F**)

IGF-E1 : **4.5- 5.5** volts (Ignition SW at **ON** position)

Pulse generation (Engine idling)

NE+ -NE- : Pulse generation (Engine idling)

SIL-E1 : Pulse generation (During transmission)

TACH-E1 : Pulse generation (Engine idling)

STA-E1 : **6.0** volts or more (Engine cranking)

FC-E1 : **9.0- 14.0** volts (Ignition SW at **ON** position)

0- 3.0 volts (Engine idling)

SPD-E1 : Pulse generation (Ignition SW on and rotate driving wheel slowly)

W-E1 : Below **3.0** volts (Ignition SW at **ON** position)

A/C-E1 : Below **2.0** volts (Engine idling and A/C SW on)

9.0- 14.0 volts (A/C SW off)

ACIS-E01 : **9.0- 14.0** volts (Ignition SW at **ON** position)

NSW-E1 : **9.0- 14.0** volts (Ignition SW on and other shift position in **P** or **N** position)

0- 3.0 volts (Ignition SW on and shift position in **P** or **N** position)

EVP1-E01 : **9.0- 14.0** volts (Ignition SW at **ON** position)

TC-E1 : **9.0- 14.0** volts (Ignition SW at **ON** position)

STP-E1 : **7.5- 14.0** volts (Ignition SW on and brake pedal depressed)

0- 1.5 volts (Ignition SW on and brake pedal depressed)

CF-E1 : **9.0- 14.0** volts (Cooling fan is operating on high speed)

0- 2.0 volts (Cooling fan is operating on low speed or off)

TBP-E1 : **9.0- 14.0** volts (Ignition SW on and disconnect the vacuum hose from the vapor pressure sensor)

PTNK-E1 : **3.0- 3.6** volts (Ignition SW at **ON** position)

1.3- 2.1 volts (Ignition SW on and apply vacuum **2.0** kpa)

OXS-E1 : Pulse generation (Maintain engine speed at **2500** rpm for two minutes after warming up)

RSO-E1 : **9.0- 14.0** volts (Ignition SW at **ON** position)

HTS-E03 : **9.0- 14.0** volts (Ignition SW at **ON** position)

0- 3.0 volts (Engine idling)

KNKL, KNKR-E1 : Pulse generation (Engine idling)

IGT1, IGT2, IGT3, IGT4, IGT5, IGT6-E1 : Pulse generation (Engine idling)

#10, #20, #30, #40, #50, #60-E01 : **9.0- 14.0** volts (ignition SW at **ON** position)

Pulse generation (Engine idling)

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A8	A	34	F14		36	J18	35
A19		32	H9		36	K1	33
A20		32	I1		33	K2	33
A21		34	I6		33	M1	33
A24	B	34	I7		33	P1	33
A25	C	34	I8		33	P2	33
C2		32	I9		33	S6	35
C5		34	I10		33	T2	33
C10	A	34	I11		33	T4	35
C11	C	34	I12		35	T5	35
C16		32	J2	A	35	T8	35
C17		32	J3	B	35	T10	34
D1		32	J6		35	U1	35
D3		34	J7		35	V1	37
E2		32	J8		35	V2	33
E8	A	34	J9		35	V3	33
E9	B	34	J12		35	V4	37
E10	C	34	J13		35	V9	33
E11	D	34	J14		35	V10	33
E12	E	34	J15	A	35	V11	33
F8	A	32	J16	B	35	V12	33
F9	B	32	J17		35		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1D		
1J		
1K		
1R		
1W		
2A	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2B		
2C		
2F		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
2L		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		

ENGINE CONTROL AND ENGINE IMMOBILISER SYSTEM

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	40	Engine Wire and Sensor Wire (Near the Cylinder Head of the Left Bank)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC2		
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BA2	46	Gauge Wire and Floor Wire (On the Left Rear Wheel House)

: GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EB	40	Right Side of the Surge Tank
EC	40	Rear Side of the Surge Tank
ED	40	Near the Left Front Suspension Support
EE	40	Front Side of the Left Fender Apron
IF	42	Left Kick Panel
IH	42	Right Instrument Panel Brace
II	42	Right Kick Panel
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	40	Engine Wire	I8	44	Cowl Wire
E5			I10	44	Engine Wire
I2	44	Cowl Wire	I11	44	Cowl Wire
I4			I13		



HEADLIGHT

SYSTEM OUTLINE

Voltage from the battery is always applied through the MAIN fuse to the HEAD relay (Coil side), furthermore, to TERMINAL 6 of the daytime running light relay (Main).

1. DAYTIME RUNNING LIGHT OPERATION

When the engine is started, voltage generated at TERMINAL 1 of the generator is applied to TERMINAL 9 of the daytime running light relay (Main). If the parking brake pedal is depressed (Parking brake SW on) at this time, the relay is not activated so the daytime running light system does not operate. If the parking brake is released (Parking brake SW off), a signal is input to TERMINAL 11 of the relay.

This activates the relay, so current flows from the MAIN fuse to the HEAD relay (Point side) to TERMINAL 5 of the DIM relay to TERMINAL 3 to H-LP LH LO, H-LP RH LO fuse to TERMINAL 1 of the headlights to TERMINAL 3 to TERMINAL 1 of the daytime running light relay (Main) to GROUND, causing the headlights to light up (Headlights light up dimmer than normal brightness.). Once the daytime running light system operates and the headlights light up, the headlights remain on even if the parking brake pedal is depressed (Parking brake SW on).

If the engine stalls and the ignition SW remains on, the headlights remain on even through current is no longer output from TERMINAL 1 of the generator. If the ignition SW is then turned off, the headlights go off.

If the engine is started with the parking brake released (Parking brake SW off), the daytime running light system operates and headlights light up when the engine starts.

2. HEADLIGHT OPERATION

When the light control SW is switched to HEAD position, current flows from the MAIN fuse to the HEAD relay (Point side) to TERMINAL 2 of the DRL relay to TERMINAL 1 to TERMINAL 1 of the diode (Daytime running light no. 2) to TERMINAL 2 to the integration relay to TERMINAL 13 of the light control SW to TERMINAL 16 to GROUND, activating the DRL relay. Current then flows from the H-LP LH LO, H-LP RH LO fuse to TERMINAL 1 of the headlights to TERMINAL 3 to TERMINAL 5 of the DRL relay to TERMINAL 3 to GROUND, causing the headlights to light up at normal intensity.

When the dimmer SW is switched to the HIGH position, the signal from the dimmer SW is input to the daytime running light relay (Main). This activates the relay and current flows from TERMINAL 2 of the DIM relay to TERMINAL 1 to TERMINAL 4 of the daytime running light relay (Main), activating the DIM relay. This causes current to flow from TERMINAL 5 of the DIM RLY relay to TERMINAL 4 to HEAD LH, HEAD RH fuse to TERMINAL 2 of the headlights to TERMINAL 3 to TERMINAL 5 of the DRL relay to TERMINAL 3 to GROUND, causing the headlights to light up at high beam and the high beam indicator to light up.

When the dimmer SW is switched to FLASH position, the daytime running light relay (Main) is activated, the current flowing from the HEAD relay (Point side) flows the DRL relay to TERMINAL 1 to TERMINAL 1 of the diode (Daytime running light no. 2) to TERMINAL 2 to TERMINAL 8 of the dimmer SW to TERMINAL 16 to GROUND, and the current flowing from the HEAD relay (Point side) also flows through the HEAD LH, HEAD RH fuse to TERMINAL 2 of the headlights to TERMINAL 3 to TERMINAL 5 of the DRL relay to TERMINAL 3 to GROUND, causing the headlights to light up at high beam and the high beam indicator to light up.

SERVICE HINTS

HEAD RELAY

- 1-2 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position
- Closed with the engine running and the parking brake released (Parking brake SW off)

D4 DAYTIME RUNNING LIGHT RELAY (MAIN)

- 12-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- 4, 7-GROUND : Approx. **12** volts with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position
- Approx. **12** volts with the engine running and the parking brake is released (Parking brake SW off)
- 3, 6-GROUND : Always approx. **12** volts
- 11-GROUND : Continuity with the parking brake pedal depressed
- 9-GROUND : **13.9- 15.1** volts with the engine running at **2000 rpm 25°C (77°F)**
- 5-GROUND : Approx. **12** volts with the high beam light up
- 2-GROUND : Always continuity
- 8-GROUND : Continuity with the dimmer SW at **HIGH** or **FLASH** position
- 10-GROUND : Continuity with the insufficient brake fluid level

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B1	32	F8	32	J2	A 35
C9	B 34	G1	32	J3	B 35
C10	A 34	H1	32	J5	35
C11	C 34	H2	32	J7	35
C12	34	I13	A 35	J17	35
D4	34		B 35	J18	35
D8	34	J1	33	P3	35

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
7	29	R/B No.7 (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V		
1W		
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2G		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
EE	40	Front Side of the Left Fender Apron
IJ	42	Right Cowl Side Panel

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SYSTEM OUTLINE

When the light control SW is set at AUTO, the automatic light control system automatically turns on or off the taillights and headlights depending on the brightness around the vehicle.

AUTOMATIC LIGHT CONTROL OPERATION

The automatic light control sensor converts the intensity of the illumination into frequency and inputs it to the integration relay. When the light control SW is set at AUTO, the signal is input to TERMINAL (A) 8 of the integration relay, the taillights and headlights are automatically turned on or off.

* Turn on function

When the integration relay receives a frequency signal from the automatic light control sensor, and determines that the brightness around the vehicle is below a predetermined level, it controls the TERMINALS (A) 9 and (A) 11. This turns on the taillight relay and HEAD relay, and thus turns on the headlights and taillights.

* Turn off function

When the integration relay receives a frequency signal from the automatic light control sensor, and determines that the brightness around the vehicle is above a predetermined level, it controls the TERMINALS (A) 9 and (A) 11. This turns off the taillight relay and HEAD relay, and thus turns off the headlights and taillights. In addition, the headlights and taillights will be turned off when the ignition SW is turned from on to off and the driver door is opened, during automatic light control.

SERVICE HINTS

C12 COMBINATION SW

12-16 : Closed with the light control SW at **AUTO** position

D16 DOOR COURTESY SW FRONT LH

1-GROUND : Closed with the driver's door open

: PARTS LOCATION

Code	See Page	Code		See Page	Code	See Page
A16	34	F8	A	32	J5	35
C12	34	F9	B	32	J18	35
D4	34	I13	A	35		
D16	36	J3		35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1J		
1M		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)

: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel

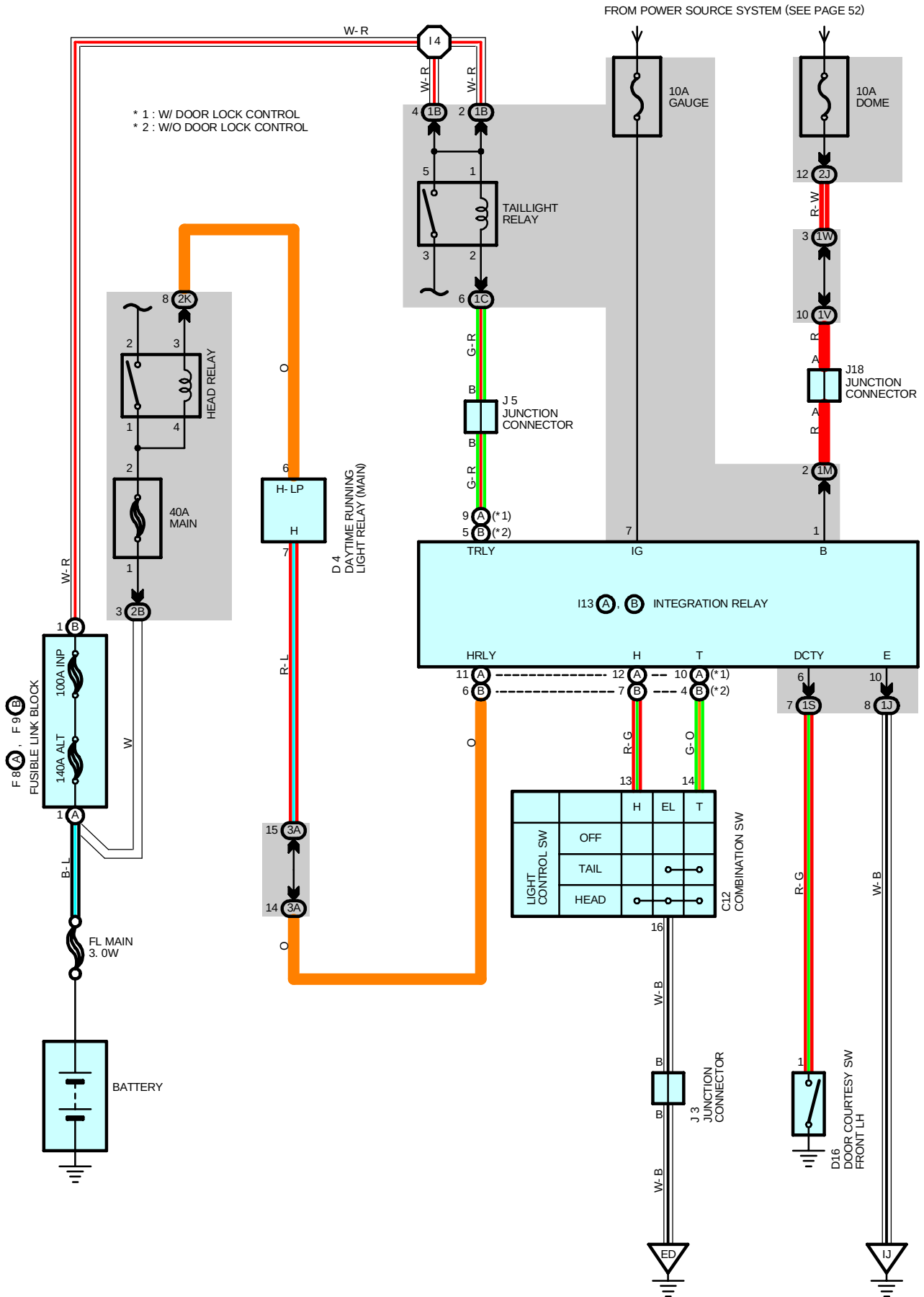
AUTOMATIC LIGHT CONTROL



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire			

LIGHT AUTO TURN OFF



SYSTEM OUTLINE

With the ignition SW turned on, the current flows to TERMINAL 7 of the integration relay through GAUGE fuse. Voltage is applied at all times to the integration relay through the taillight relay (Coil side), and to the integration relay through the daytime running light relay (Main).

1. NORMAL LIGHTING OPERATION

<Turning taillight on>

With the light control SW turned to TAIL position, a signal is input into the integration relay. Accordingly, the current flows to the integration relay to TERMINAL 14 of the light control SW to TERMINAL 16 to GROUND, and taillight relay causes taillights to turn on.

<Turning headlight on>

With the light control SW turned to HEAD position, a signal is input into the integration relay. Accordingly, the current flows to the integration relay to TERMINAL 13 of the light control SW to TERMINAL 16 to GROUND in the headlight circuit, and the taillight relay and HEAD relay turn the lights on. The taillight circuit operation is same as above.

2. LIGHT AUTO TURN OFF OPERATION

With the lights on and the ignition SW turned off (Input signal goes to TERMINAL 7 of the integration relay), when the driver's door is opened (Input signal goes to TERMINAL 6 of the integration relay), the relay operates and the current which flows to the integration relay in the taillight circuit and the integration relay in the headlight circuit is cut off.

As a result, all lights are turned off automatically.

SERVICE HINTS

HEAD RELAY

- 2-1 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position
- : Closed with the engine running and the parking brake is released

TAILLIGHT RELAY

- 3-5 : Closed with the light control SW at **TAIL** or **HEAD** position

D16 DOOR COURTESY SW FRONT LH

- 1-GROUND : Continuity with the driver's door open

I13 (A), (B) INTEGRATION RELAY

- 7-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- 6-GROUND : Continuity with the driver's door open
- 1-GROUND : Always approx. **12** volts
- 10-GROUND : Always continuity
- (A) 9, (B) 5-GROUND : Always approx. **12** volts
- (A) 12, (B) 7-GROUND : Continuity with the light control SW at **HEAD** position
- (A) 10, (B) 4-GROUND : Continuity with the light control SW at **TAIL** or **HEAD** position

○ : PARTS LOCATION

Code		See Page		Code		See Page		Code		See Page	
C12		34		F9	B	32		J5		35	
D4		34		I13	A	35		J18		35	
D16		36			B	35					
F8	A	32		J3		35					

LIGHT AUTO TURN OFF



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1J		
1M		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)



: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire			

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SERVICE HINTS

T7 TURN SIGNAL FLASHER

- 2-GROUND : Approx. **12** volts with the ignition SW on or the hazard SW on
 1-GROUND : Changes from **12** to **0** volts with the ignition SW on and the turn signal SW at **LH** or **RH** position,
 or with the hazard SW on
 3-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C11	34	H7	34	R11	37
C12	34	J2	A	T7	35
F3	32	J3	B		
F4	32	R8	37		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1L		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2K	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)

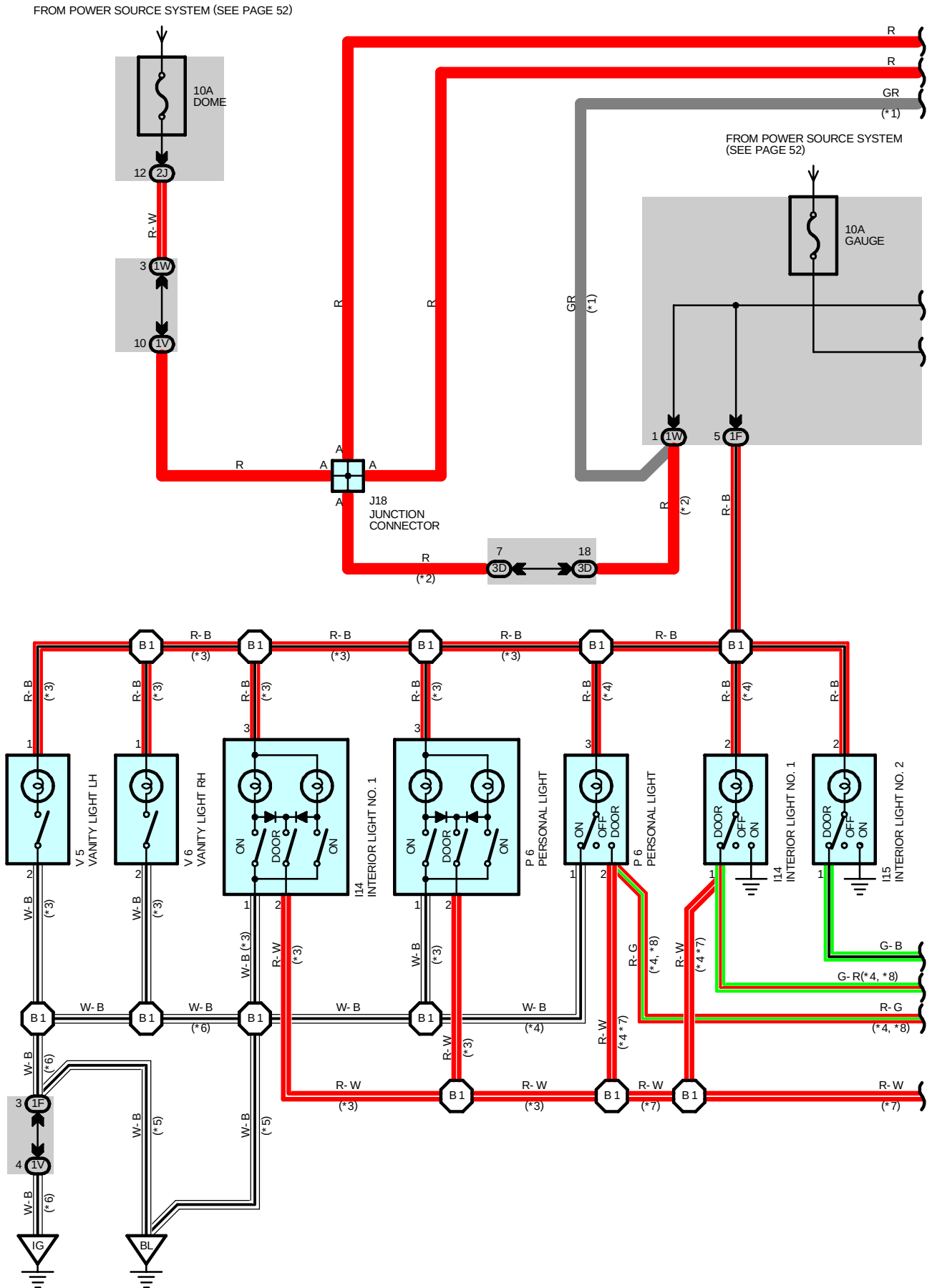
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel

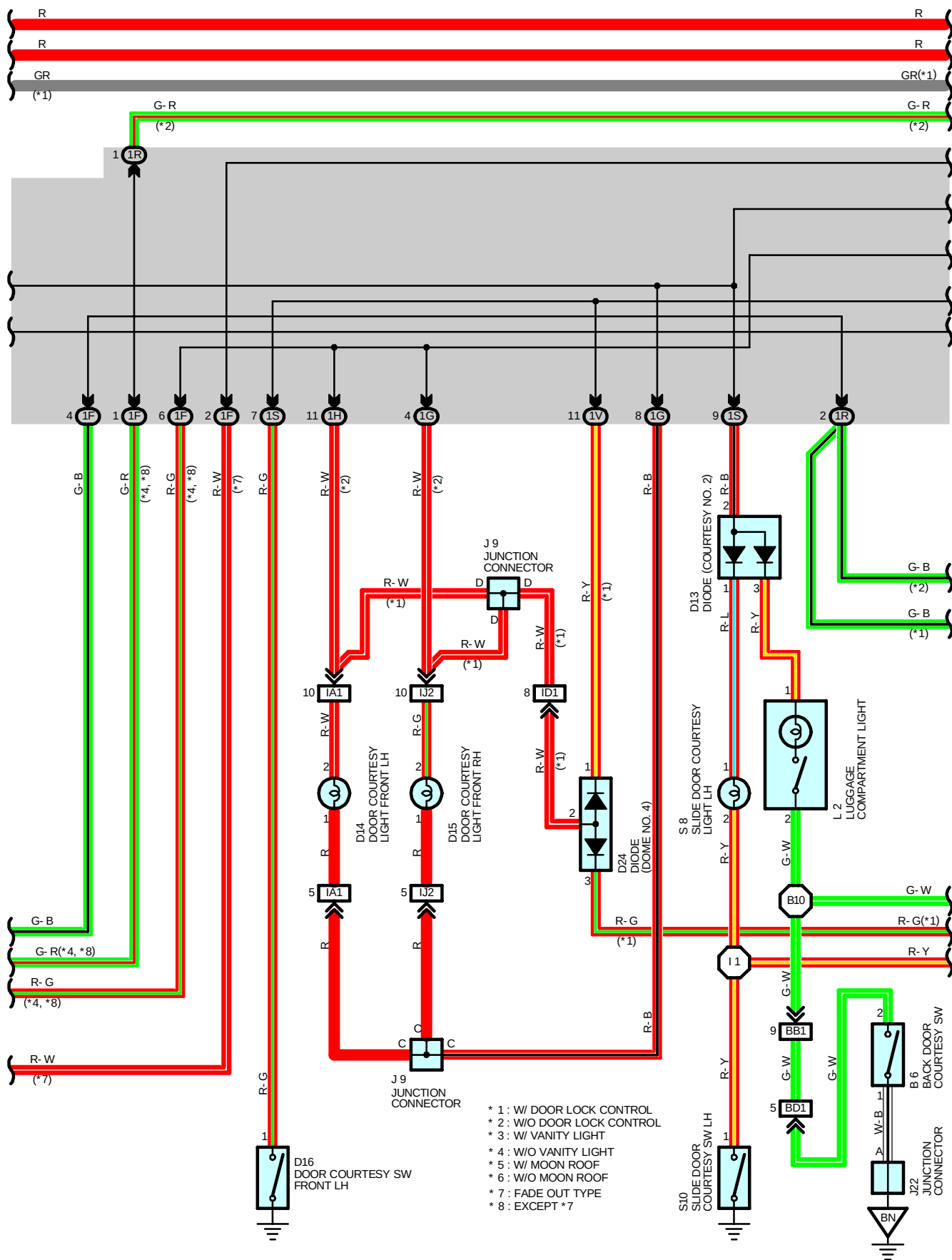
○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	46	Floor Wire			

INTERIOR LIGHT

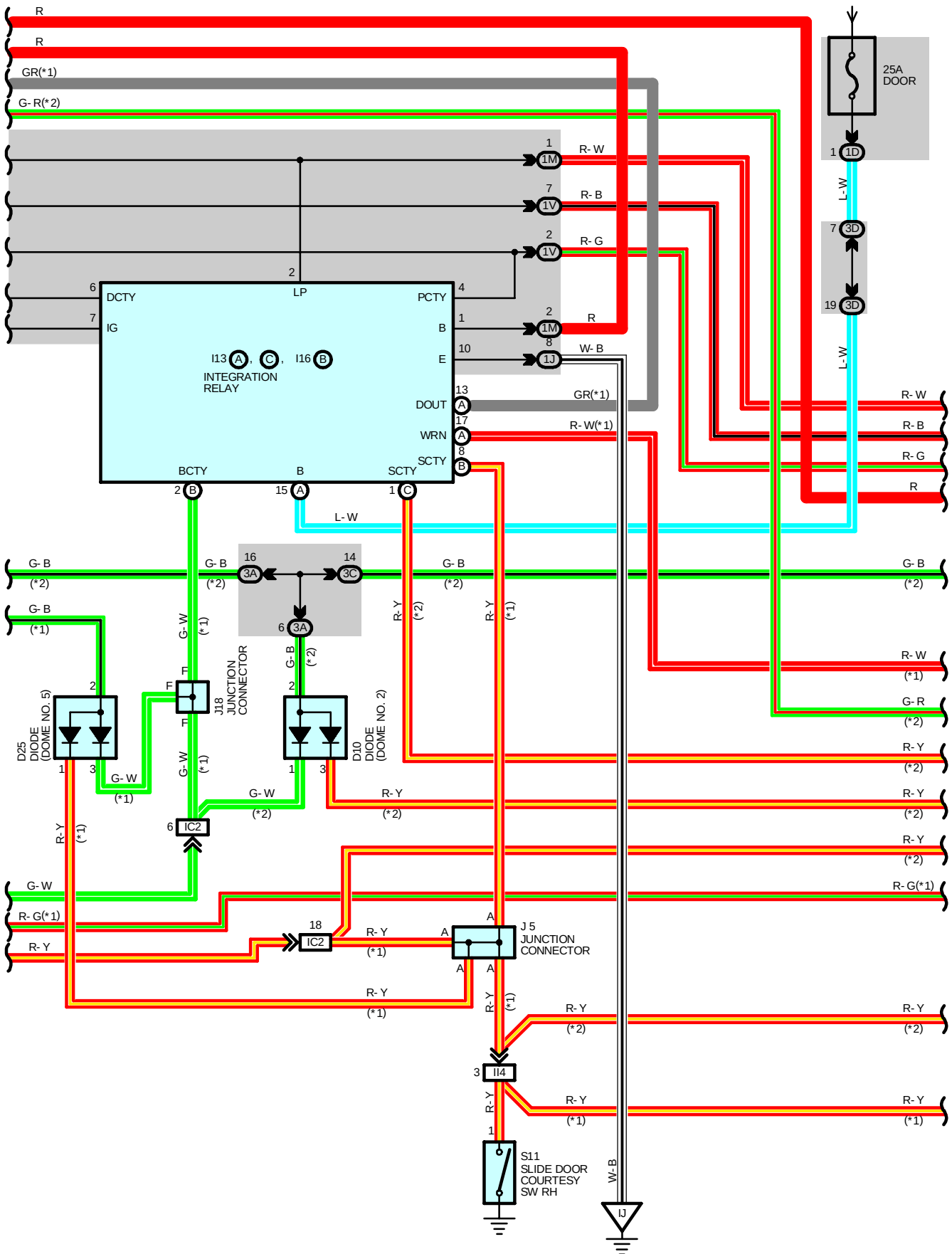


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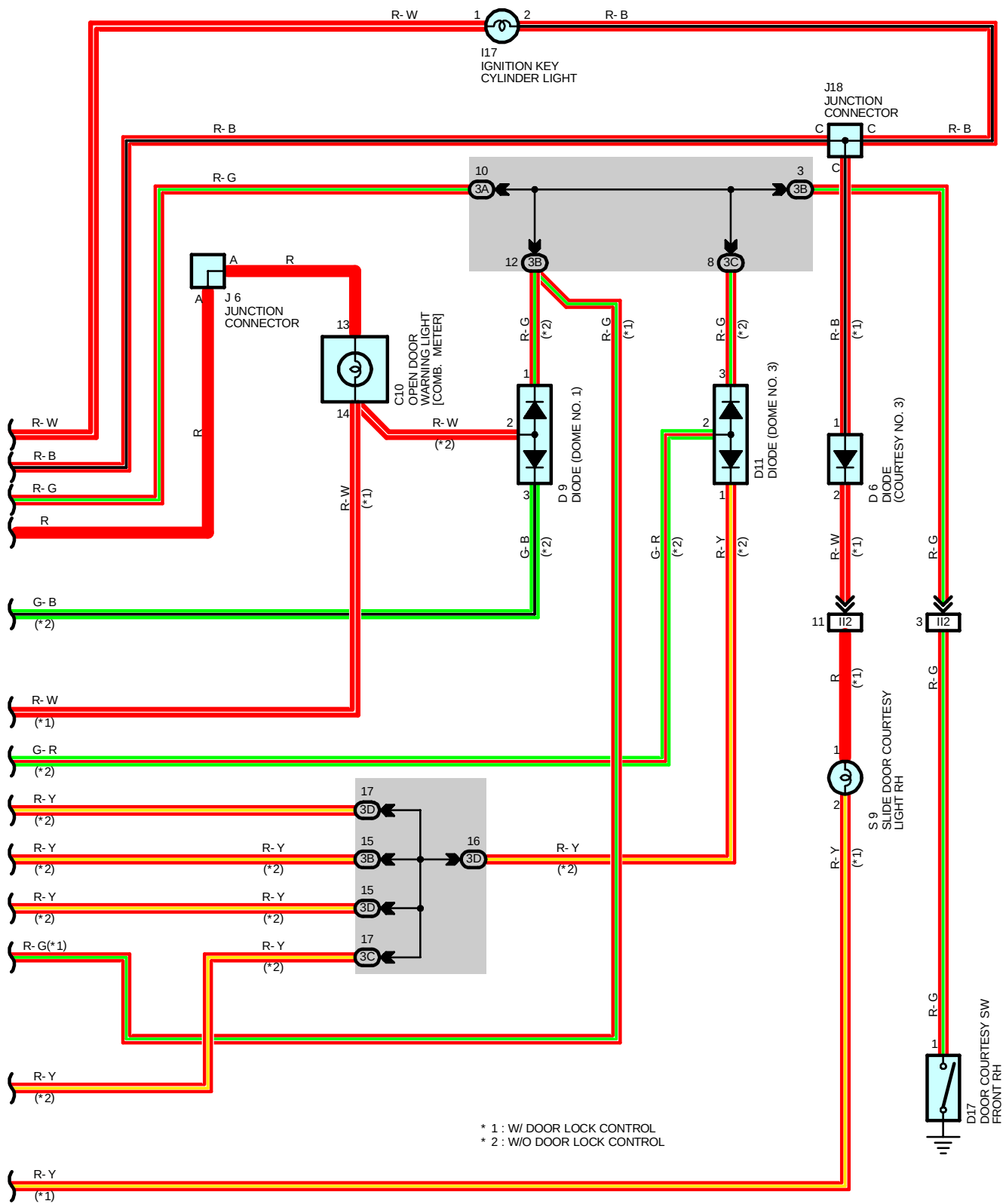


INTERIOR LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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INTERIOR LIGHT

SERVICE HINTS

INTEGRATION RELAY

- 1-GROUND : Always approx. **12** volts
- 4-GROUND : Continuity with the front RH door open
- 6-GROUND : Continuity with the front LH door open
- 10-GROUND : Always continuity

D16, D17 DOOR COURTESY SW FRONT LH, RH

- 1-GROUND : Closed with the front LH, RH door open

S10, S11 SLIDE DOOR COURTESY SW LH, RH

- 1-GROUND : Closed with the slide door open

L2 LUGGAGE COMPARTMENT LIGHT

- 2-GROUND : Closed with the luggage compartment door open

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B6	36	D24	34	J18	35
C10	34	D25	34	J22	36
D6	34	I13	A	L2	36
D9	34		C	P6	37
D10	34	I14	36	S8	37
D11	34	I15	36	S9	37
D13	36	I16	B	S10	37
D14	36	I17	35	S11	37
D15	36	J5	35	V5	37
D16	36	J6	35	V6	37
D17	36	J9	35		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1F	22	Roof Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1H		
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1M		
1R		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II4		
IJ2	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD1	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

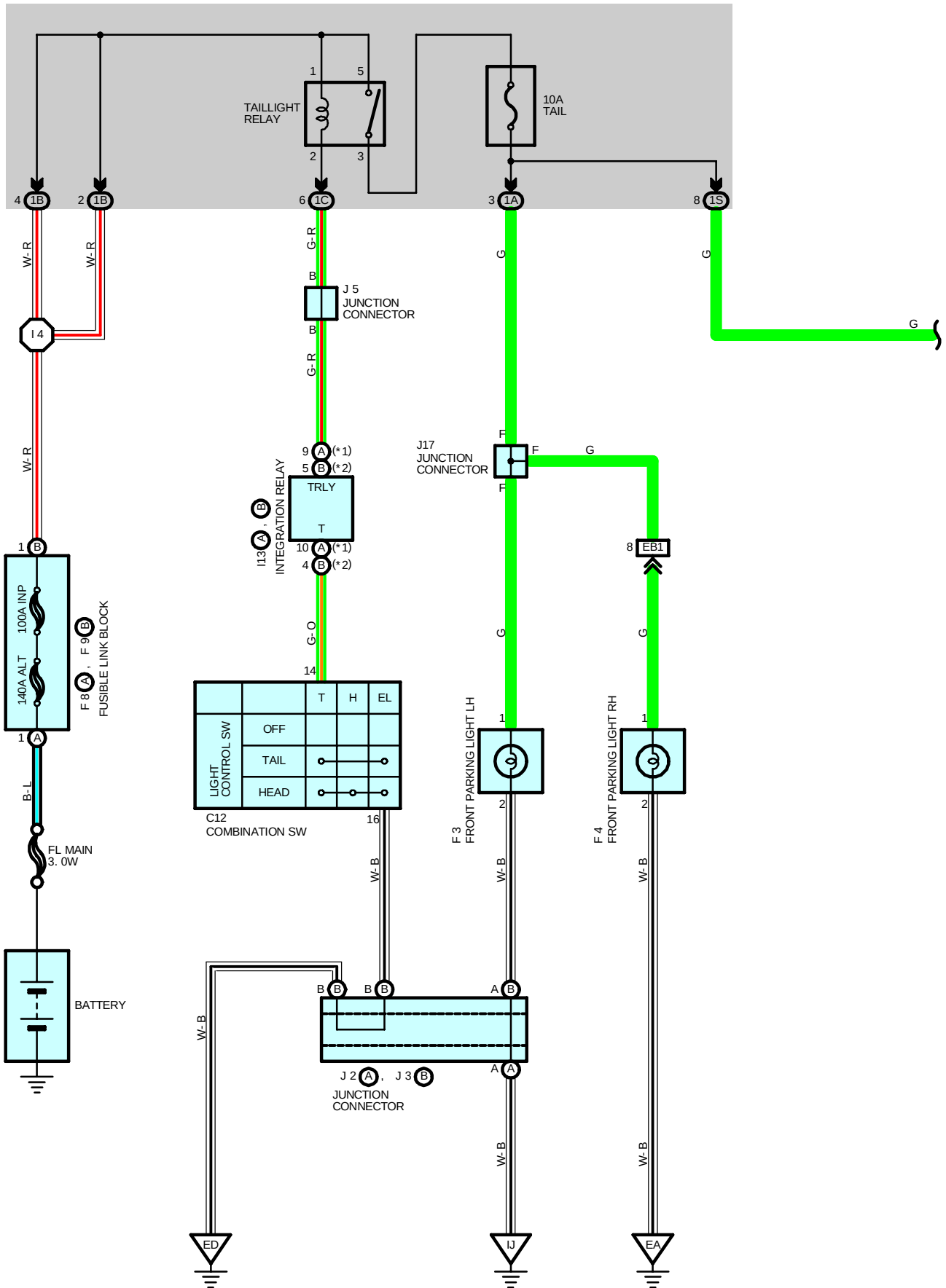
 : GROUND POINTS

Code	See Page	Ground Points Location
IG	42	Left Cowl Side Panel
IJ	42	Right Cowl Side Panel
BL	46	Left Side of the Roof Side Panel
BN	46	Right Side of the Back Door

 : SPLICE POINTS

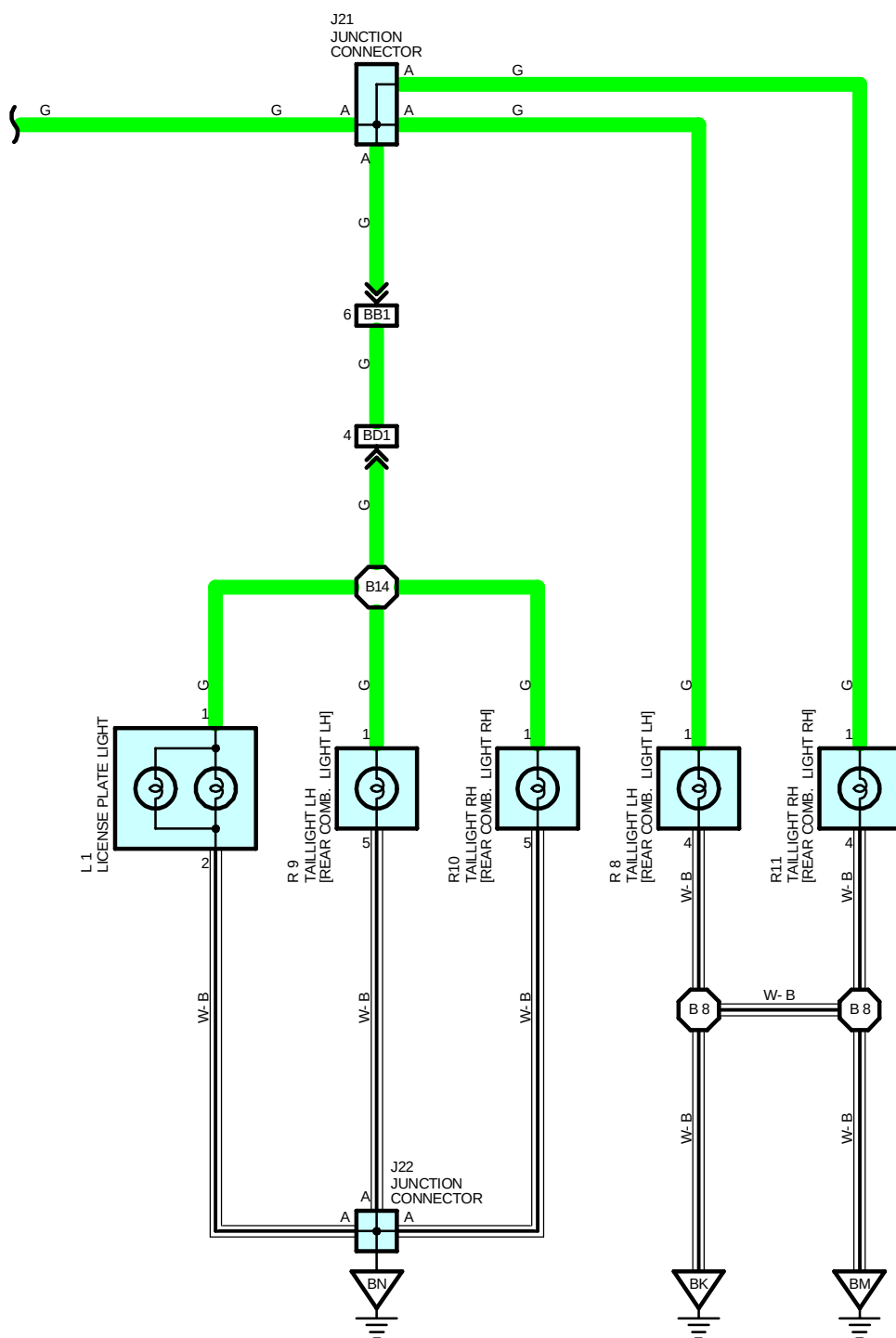
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	44	Floor Wire	B10	46	Floor Wire
B1	46	Roof Wire			

TAILLIGHT



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- * 1 : W/ DOOR LOCK CONTROL
- * 2 : W/O DOOR LOCK CONTROL



TAILLIGHT

SERVICE HINTS

TAILLIGHT RELAY

5-3 : Closed with the light control SW at **TAIL** or **HEAD** position

C12 COMBINATION SW

14-16 : Closed with the light control SW at **TAIL** or **HEAD** position

○ : PARTS LOCATION

Code		See Page		Code		See Page		Code		See Page	
C12		34		I13	B	35		J22	36		
F3		32		J2	A	35		L1	36		
F4		32		J3	B	35		R8	37		
F8	A	32		J5		35		R9	37		
F9	B	32		J17		35		R10	37		
I13	A	35		J21		36		R11	37		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1B		
1C		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD1	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

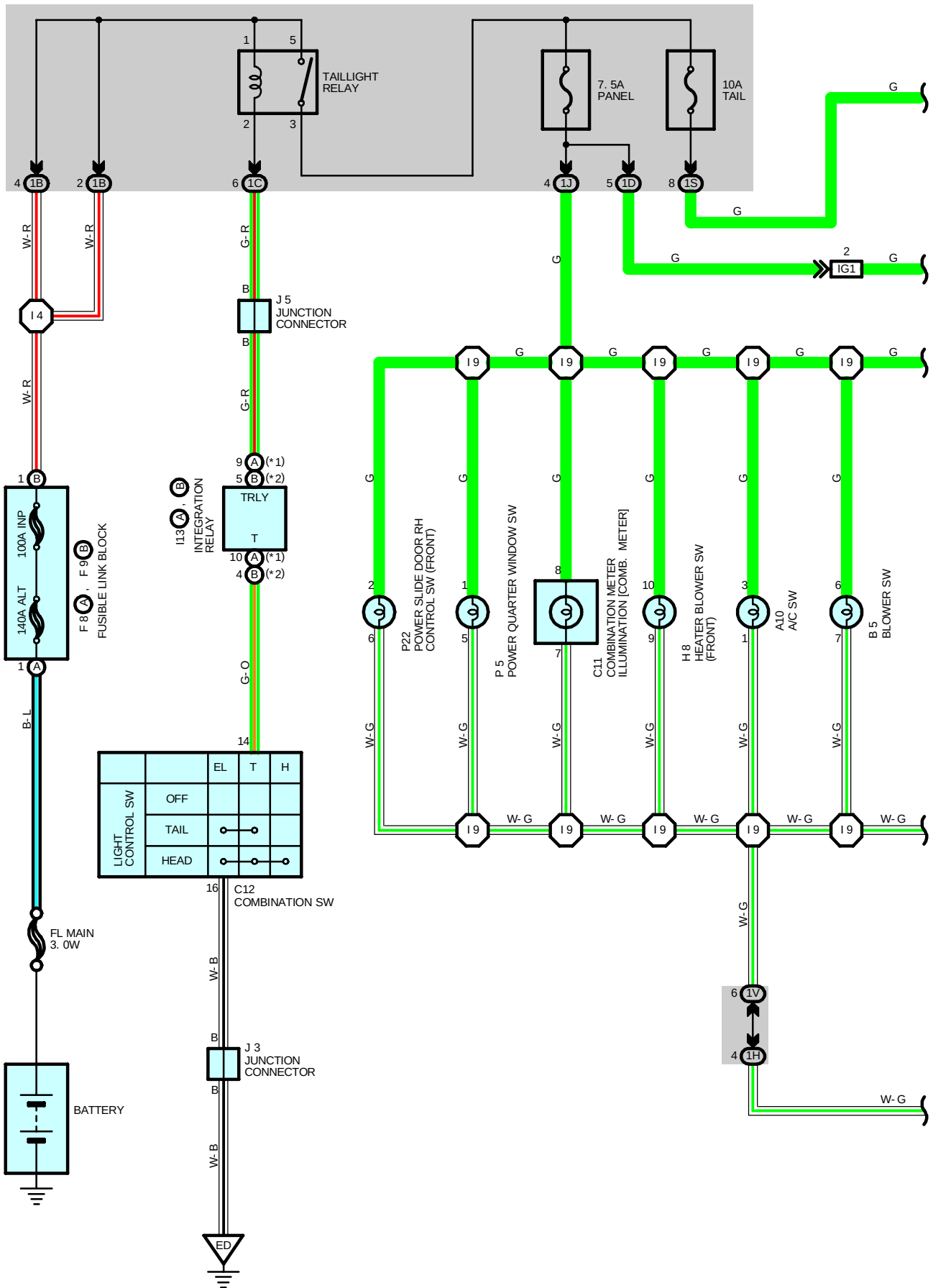
▽ : GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel
BN	46	Right Side of the Back Door

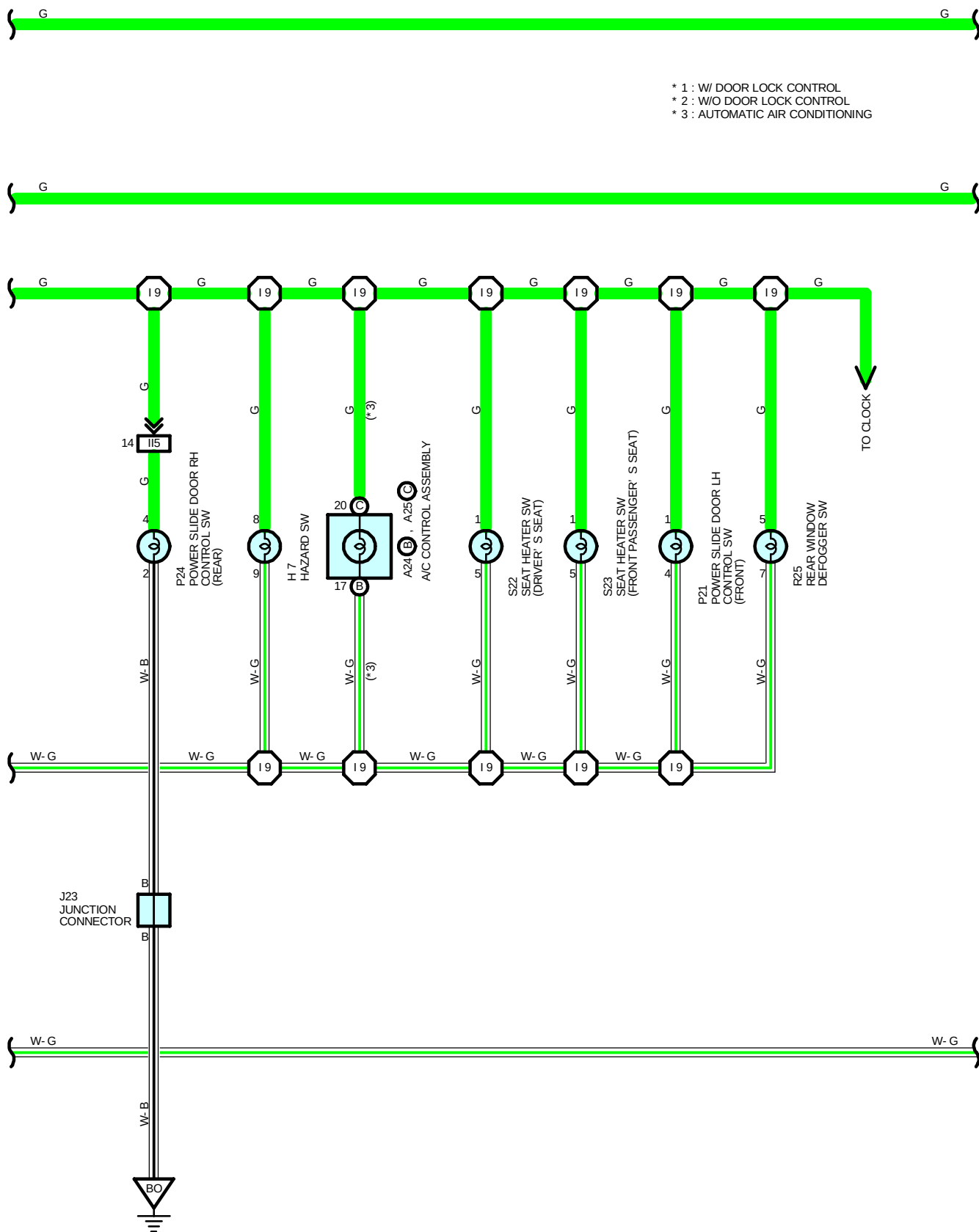
○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire	B14	46	Back Door No.2 Wire
B8	46	Floor Wire			

ILLUMINATION

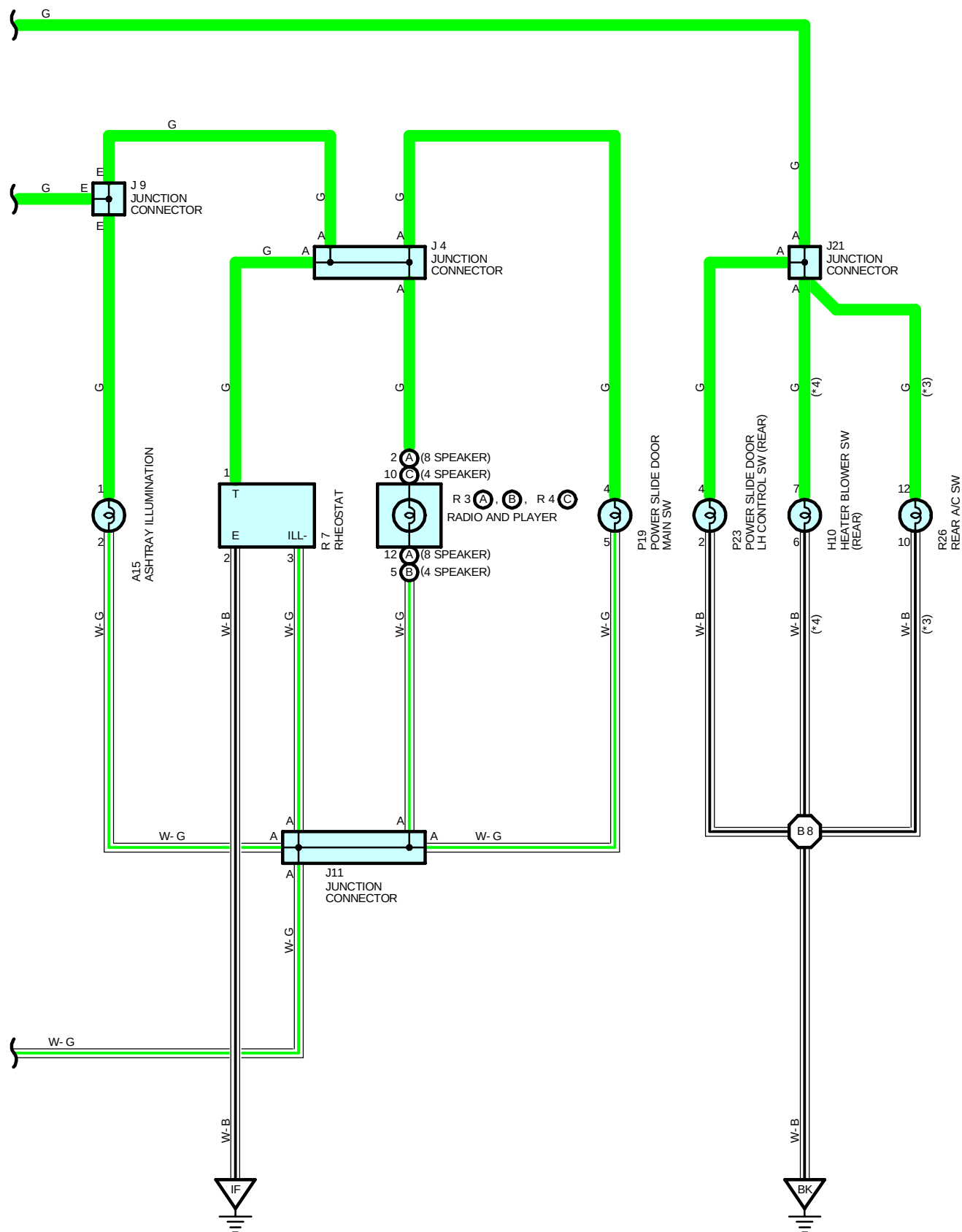


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ILLUMINATION

* 3 : AUTOMATIC AIR CONDITIONING
* 4 : MANUAL AIR CONDITIONING



SERVICE HINTS

TAILLIGHT RELAY

5-3 : Closed with the light control SW at **TAIL** or **HEAD** position

C12 COMBINATION SW

14-16 : Closed with the light control SW at **TAIL** or **HEAD** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A10	34	I13	A 35	P22	35
A15	34		B 35	P23	37
A24	B 34	J3	35	P24	37
A25	C 34	J4	35	R3	A 35
B5	34	J5	35		B 35
C11	34	J9	35	R4	C 35
C12	34	J11	35	R7	35
F8	A 32	J21	36	R25	35
F9	B 32	J23	36	R26	37
H7	34	P5	35	S22	35
H8	34	P19	35	S23	35
H10	36	P21	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1D		
1H	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II5	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)

: GROUND POINTS

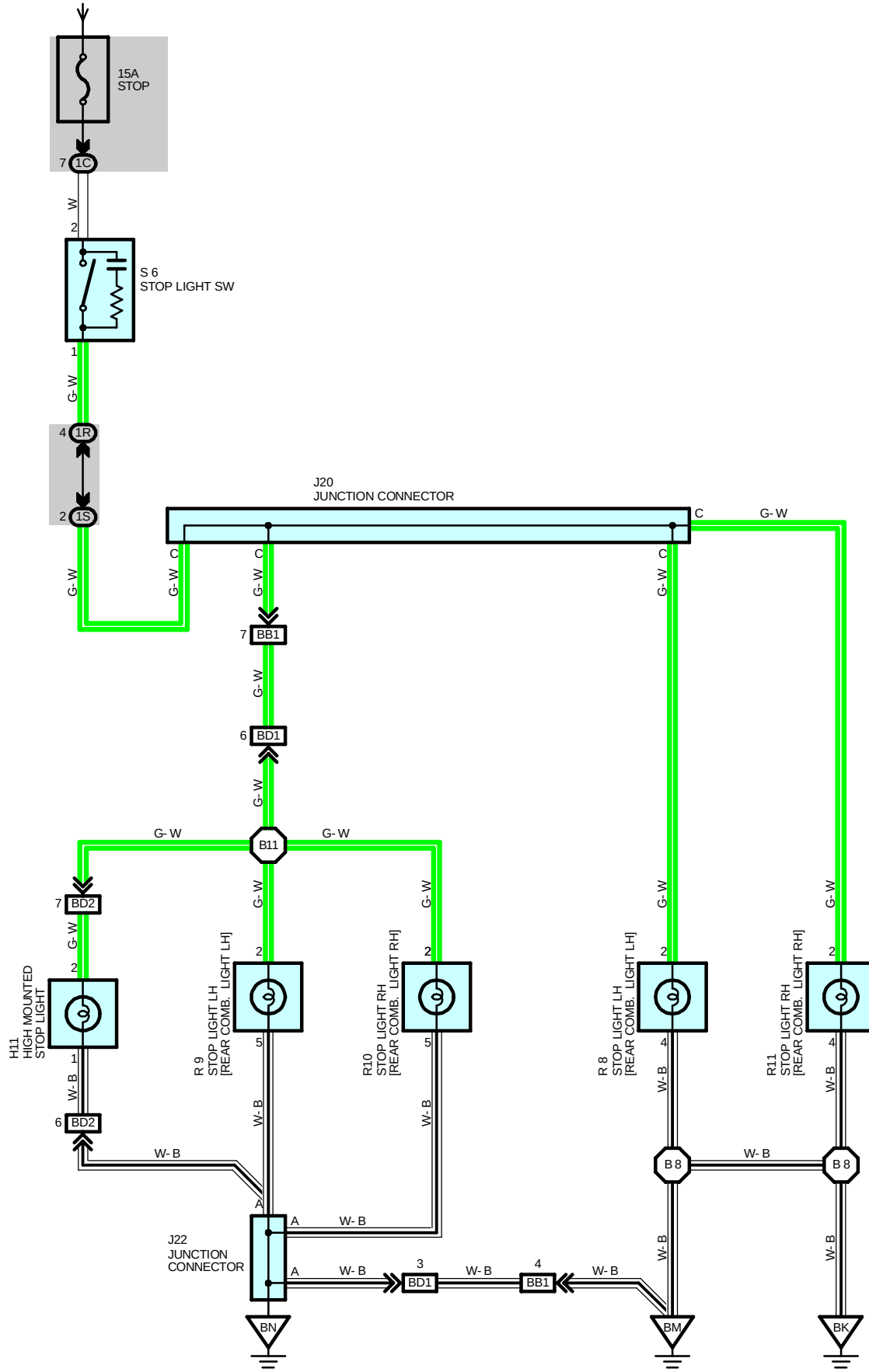
Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
BK	46	Under the Left Center Pillar
BO	46	Right Rear Quarter Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire	B8	46	Floor Wire
I9					

STOP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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SERVICE HINTS**S6 STOP LIGHT SW**

2-1 : Closed with brake pedal depressed

 : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
H11	36	R8	37	R11	37
J20	36	R9	37	S6	35
J22	36	R10	37		

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1R		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD1	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)
BD2		

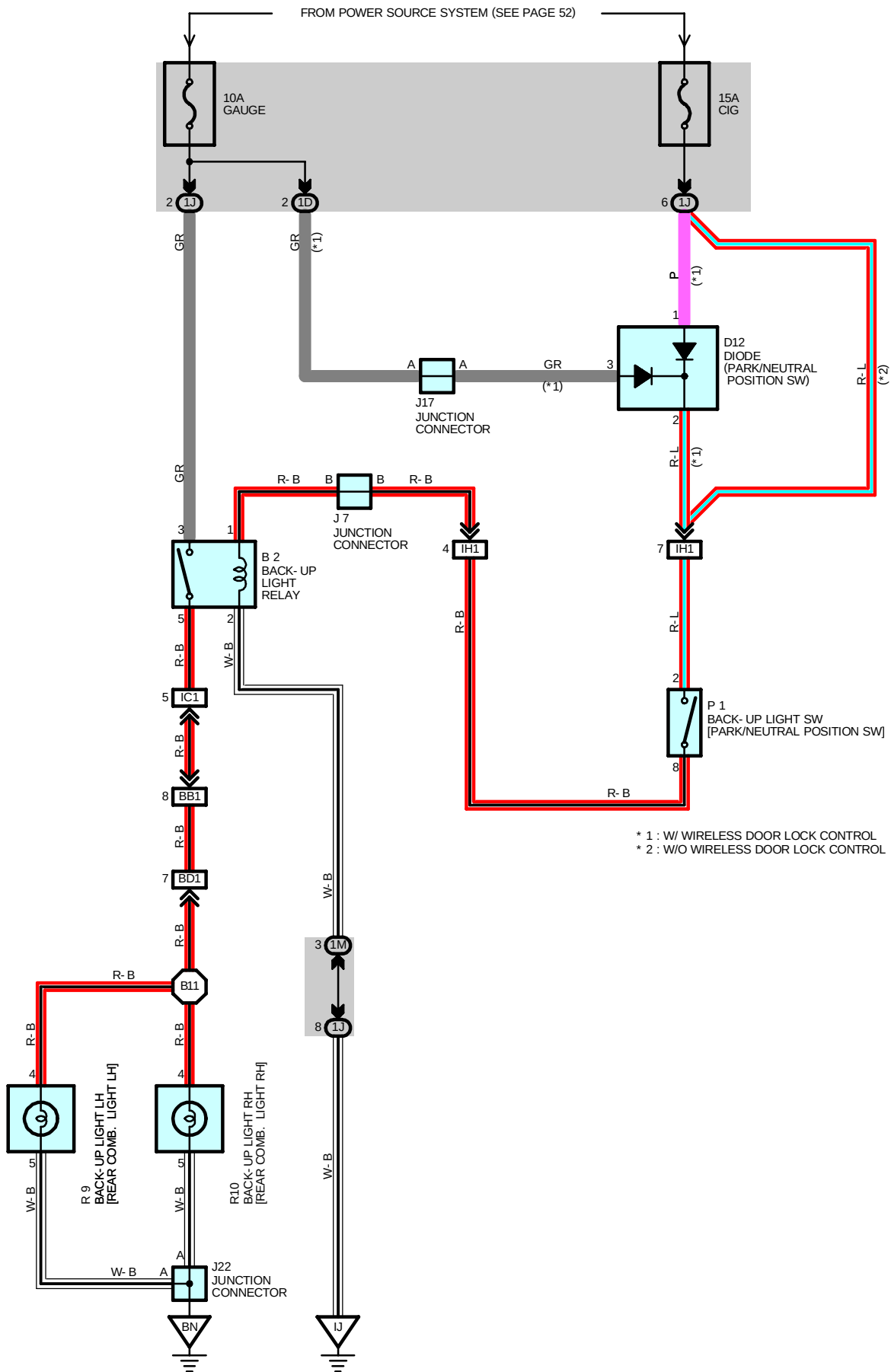
 : GROUND POINTS

Code	See Page	Ground Points Location
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel
BN	46	Right Side of the Back Door

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	46	Floor Wire	B11	46	Back Door No.2 Wire

BACK-UP LIGHT



SERVICE HINTS

P1 BACK-UP LIGHT SW [PARK/NEUTRAL POSITION SW]

2-8 : Closed with the shift lever at **R** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B2	34	J17	35	R9	37
D12	34	J22	36	R10	37
J7	35	P1	33		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J		
1M		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD1	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

: GROUND POINTS

Code	See Page	Ground Points Location
IJ	42	Right Cowl Side Panel
BN	46	Right Side of the Back Door

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	46	Back Door No.2 Wire			



SERVICE HINTS**F17 FOG LIGHT RELAY**

3-5 : Closed with the fog light SW at ON and daytime running light relay (Main) activity

 : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C12	34	F15	32	F17	34
D4	34	F16	32		

 : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
7	29	R/B No.7 (Engine Compartment Left)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK8	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

 : GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
IG	42	Left Cowl Side Panel

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	40	Engine Room Main Wire			



SYSTEM OUTLINE

With the ignition SW turned on, the current flows to TERMINAL 17 of the front wiper and washer SW, TERMINAL 2 of the front washer motor and TERMINAL 3 of the front wiper motor through the WIPER fuse.

1. LOW SPEED POSITION

With wiper SW turned to LOW position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to wiper motor to TERMINAL 1 to GROUND and causes the front wiper motor to run at low speed.

2. HIGH SPEED POSITION

With wiper SW turned to HIGH position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 8 to TERMINAL 4 of the front wiper motor to wiper motor to TERMINAL 1 to GROUND and causes the front wiper motor to run at high speed.

3. INT POSITION

With wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This flow of current operates the intermittent circuit and the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to wiper motor to TERMINAL 1 to GROUND and operates the wiper.

The intermittent operation is controlled by the charge/discharge function of the condenser installed in the relay and the intermittent time is controlled by a time control SW which changes the charging time of the condenser.

4. WASHER CONTINUOUS OPERATION

With washer SW turned to on, the current flows from TERMINAL 2 of the front washer motor to TERMINAL 1 to TERMINAL 11 of the front wiper and washer SW to TERMINAL 2 to GROUND and causes to the front washer motor to run. And the window washer emits a water spray. This causes the current to flow to washer continuous operation circuit in TERMINAL 17 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the front wiper motor to wiper motor to TERMINAL 1 to GROUND and operates the wiper.

SERVICE HINTS

C14 FRONT WIPER AND WASHER SW [COMB. SW]

2-GROUND : Always continuity

17-GROUND : Approx. 12 volts with the ignition SW at **ON** position

7-GROUND : Approx. 12 volts with the wiper and washer SW at **LOW** position

Approx. 12 volts 2 to 12 seconds intermittently with the wiper and washer SW at **INT** position

16-GROUND : Approx. 12 volts with the ignition SW on unless the wiper motor at **STOP** position

8-GROUND : Approx. 12 volts with the wiper and washer SW at **HIGH** position

F6 FRONT WIPER MOTOR

3-2 : Closed unless the wiper motor at **STOP** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C14	34	F6	32	J3 B	35
F5	32	J2 A	35		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
IG	42	Left Cowl Side Panel
IJ	42	Right Cowl Side Panel

FRONT WIPER AND WASHER

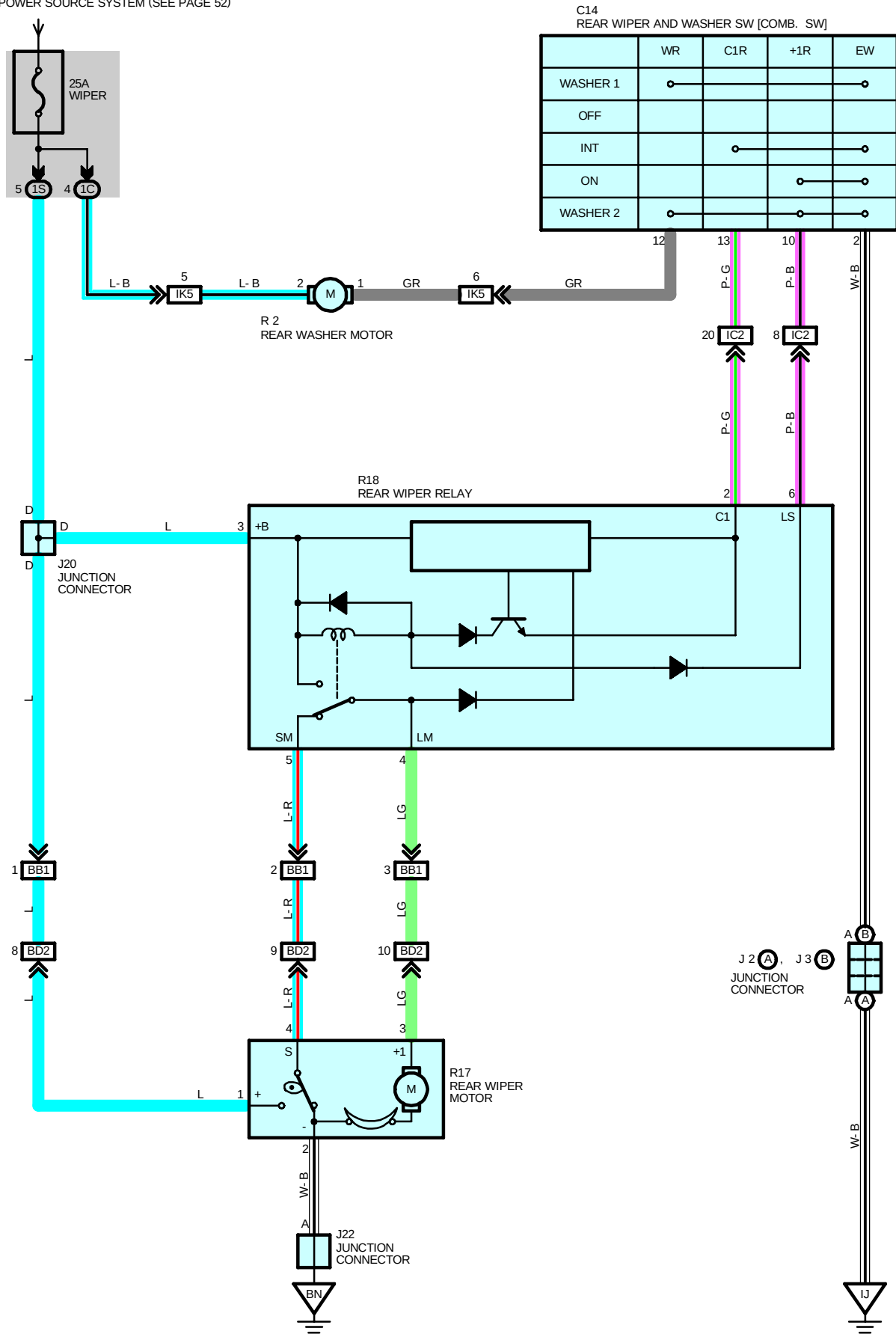


: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	44	Cowl Wire			

REAR WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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SYSTEM OUTLINE

When the ignition SW is turned on, current flows to TERMINAL 2 of the rear washer motor, TERMINAL 3 of the rear wiper relay and TERMINAL 1 of the rear wiper motor through the WIPER fuse.

1. REAR WIPER NORMAL OPERATION

With the ignition SW turned on and rear wiper and washer SW turned on, the current flowing to TERMINAL 3 of the rear wiper relay flows to TERMINAL 6 of the relay to TERMINAL 10 of the rear wiper and washer SW to TERMINAL 2 to GROUND. Thus, the relay coil is activated and the current to TERMINAL 3 of the relay flows to TERMINAL 4 to TERMINAL 3 of the rear wiper motor to motor to GROUND and causes the motor to operate the wiper.

2. REAR WIPER INTERMITTENT OPERATION

With the ignition SW turned on and rear wiper and washer SW turned to INT position, the current flowing to TERMINAL 3 of the rear wiper relay flows to TERMINAL 2 of the relay to TERMINAL 13 of the rear wiper and washer SW to TERMINAL 2 to GROUND.

This causes the motor to operate (The point changes) and the intermittent circuit of the relay operates. Intermittent operation of the circuit is controlled by the charge/discharge function of the condenser installed inside the relay.

3. WASHER OPERATION

With the ignition SW turned on and the rear wiper and washer SW turned to ON position, when the wiper switch is turned further, the current flowing to TERMINAL 2 of the rear washer motor flows to TERMINAL 1 of the motor to TERMINAL 12 of the rear wiper and washer SW to TERMINAL 2 to GROUND, so that the washer motor rotates and the window washer emits a water spray, only while the switch is fully turned.

When the wiper switch is off and then turned to washer on (Wiper off side), only the washer operates.

SERVICE HINTS

R2 REAR WASHER MOTOR

2-GROUND : Approx. **12** volts with the ignition SW at **ON** position

1-GROUND : Continuity with washer SW turned on

R18 REAR WIPER RELAY

3-GROUND : Approx. **12** volts with the ignition SW at **ON** position

2-GROUND : Continuity with rear wiper SW **INT** position

6-GROUND : Continuity with rear wiper SW **ON** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C14	34	J20	36	R17	37
J2	35	J22	36	R18	37
J3	35	R2	33		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

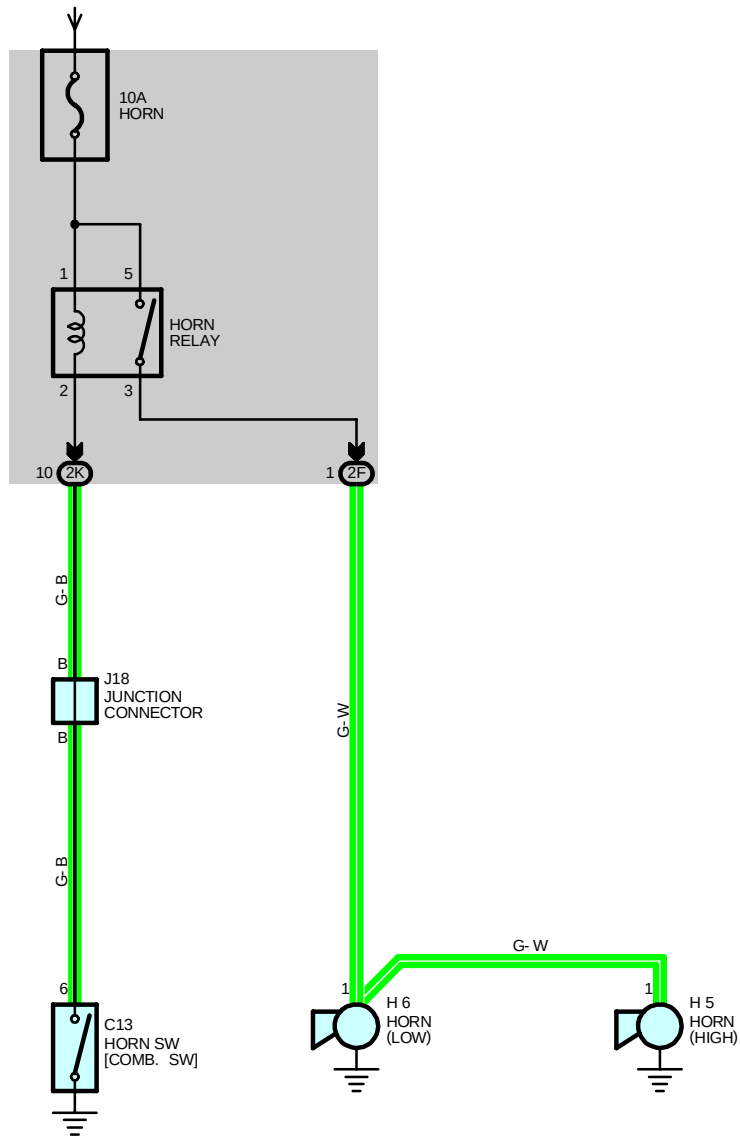
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD2	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
IJ	42	Right Cowl Side Panel
BN	46	Right Side of the Back Door

HORN

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



SERVICE HINTS

HORN RELAY

5-3 : Closed with the horn SW on

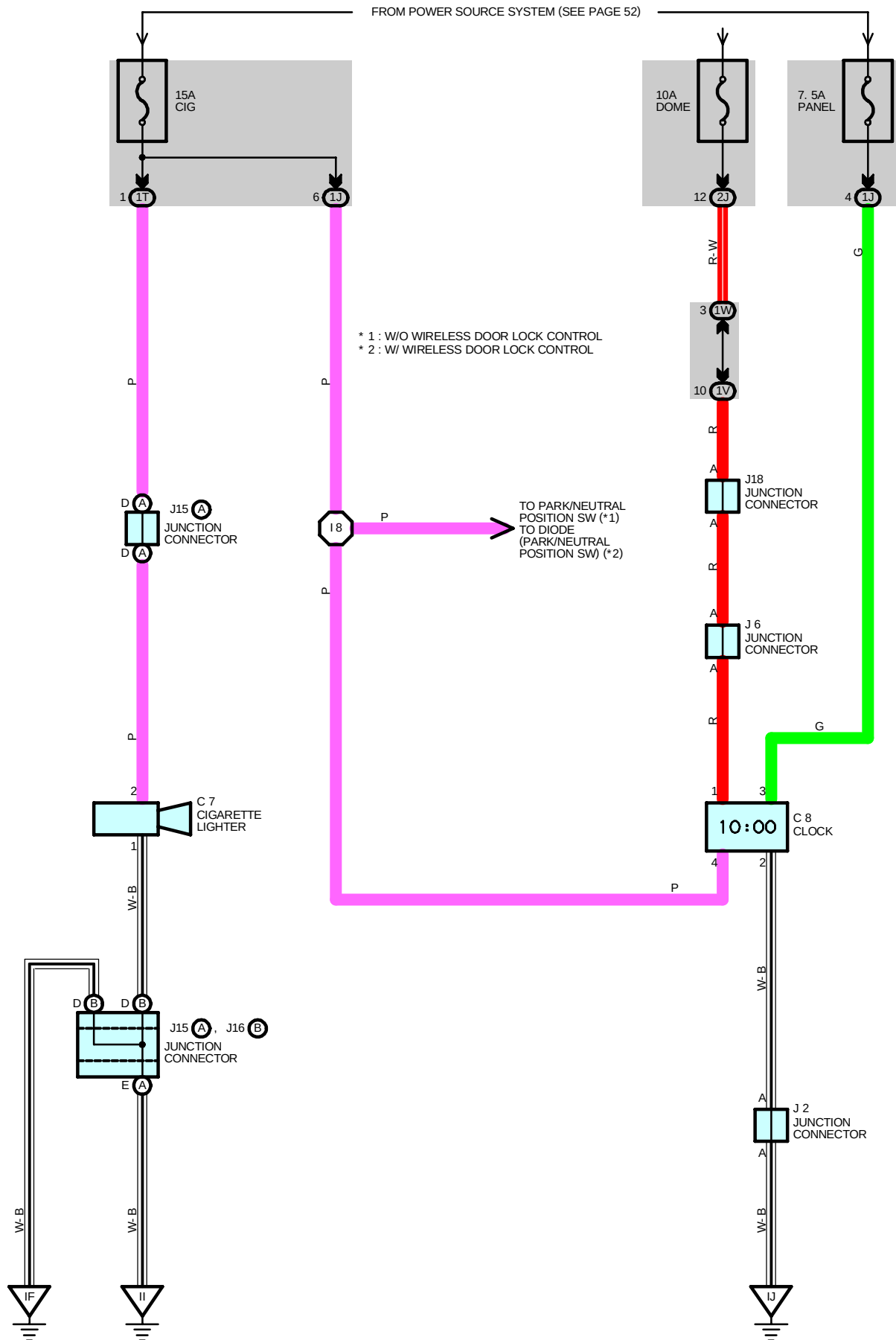
: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C13	34	H6	32		
H5	32	J18	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
2F	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

CIGARETTE LIGHTER AND CLOCK



SERVICE HINTS

C7 CIGARETTE LIGHTER

2-GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position

1-GROUND : Always continuity

C8 CLOCK

4-GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position

1-GROUND : Always approx. **12** volts

2-GROUND : Always continuity

3-GROUND : Approx. **12** volts with the light control SW at **TAIL** or **HEAD** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C7	34	J6	35	J18	35
C8	34	J15	A	35	
J2	35	J16	B	35	

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1T	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

▽ : GROUND POINTS

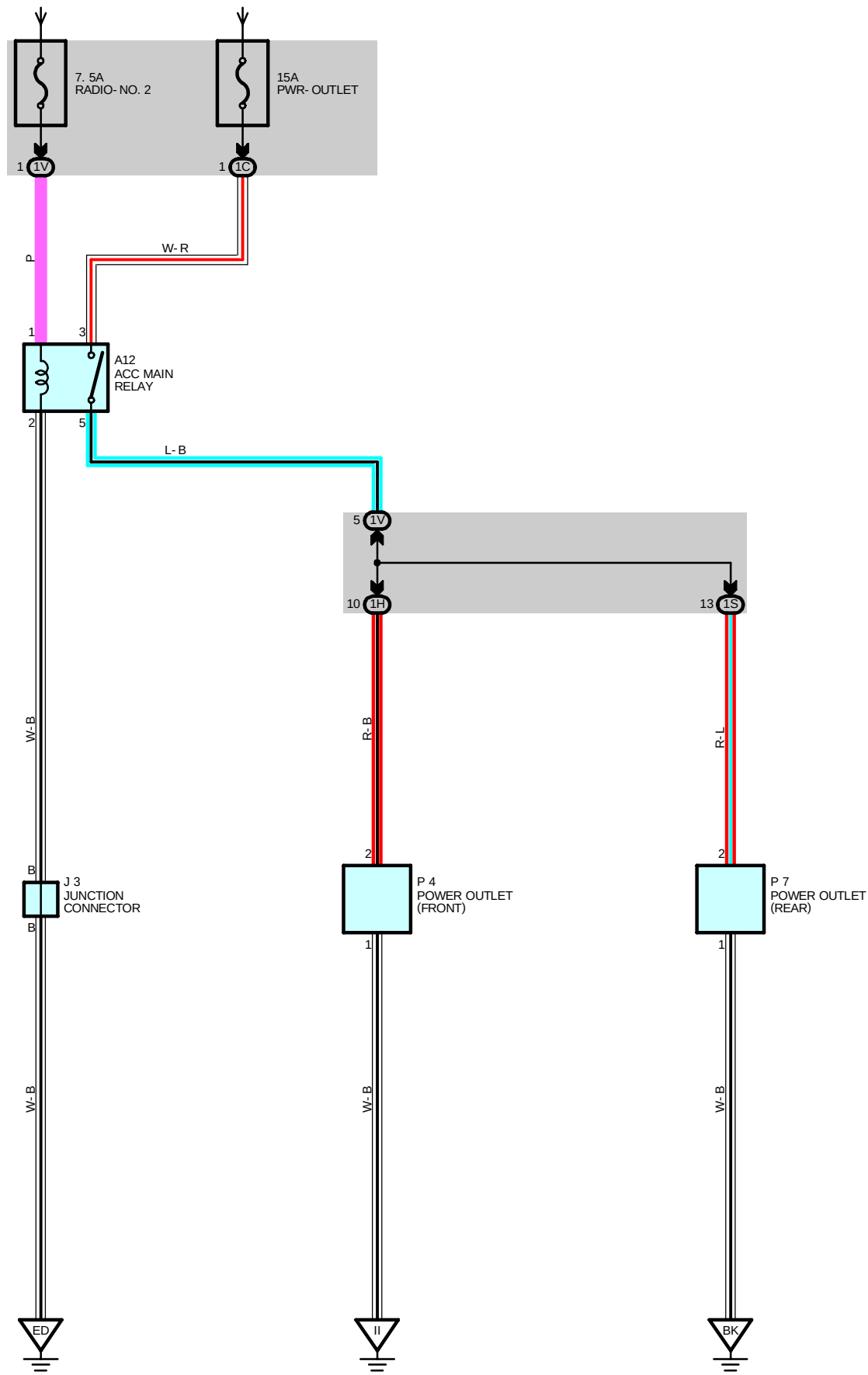
Code	See Page	Ground Points Location
IF	42	Left Kick Panel
II	42	Right Kick Panel
IJ	42	Right Cowl Side Panel

○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I8	44	Cowl Wire			

POWER OUTLET

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



SERVICE HINTS

P4, P7 POWER OUTLET (FRONT, REAR)

2-GROUND : Approx. 12 volts with the ignition SW at **ACC** or **ON** position

1-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A12	34	P4	35		
J3	35	P7	37		

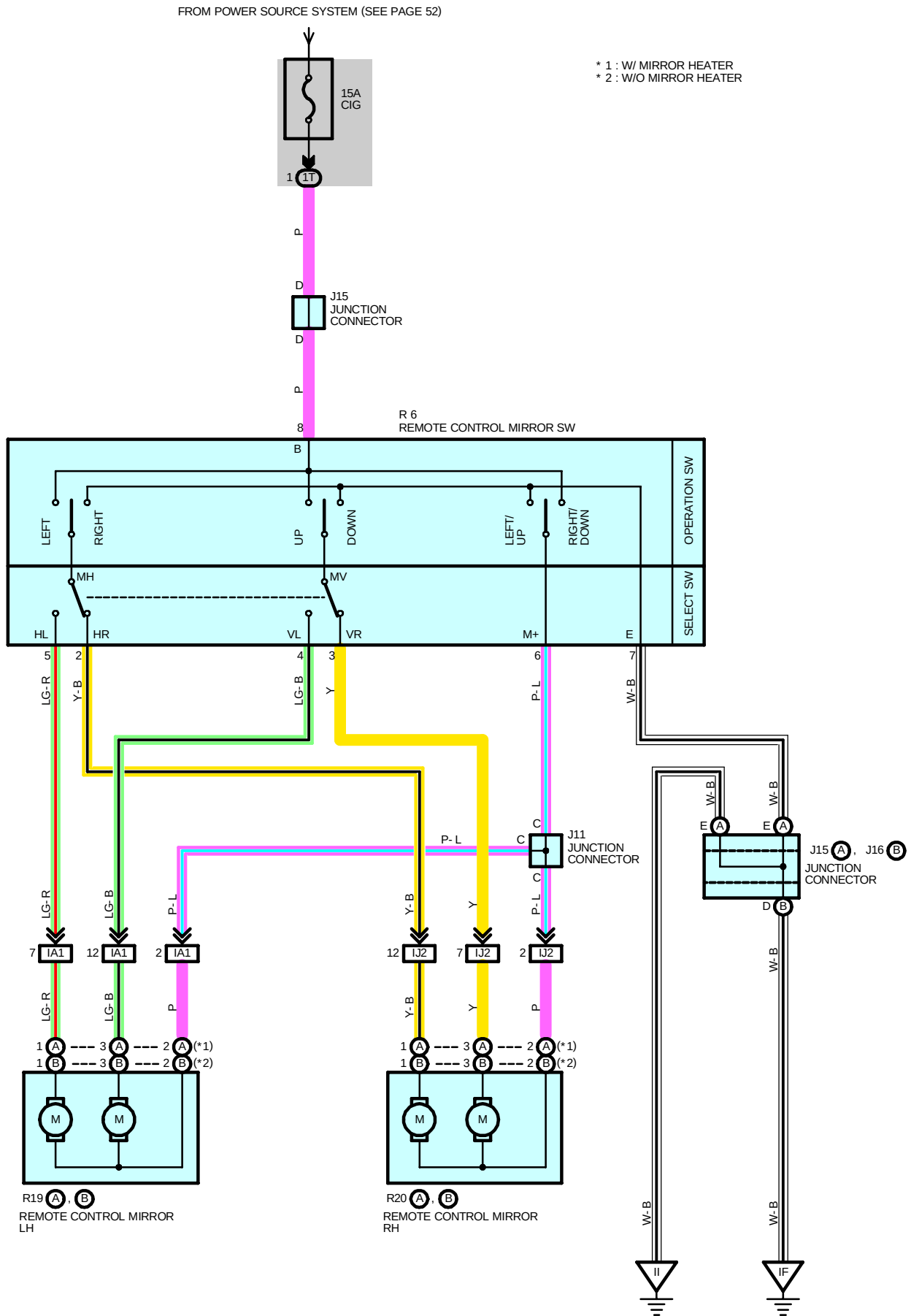
○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1H	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
II	42	Right Kick Panel
BK	46	Under the Left Center Pillar

REMOTE CONTROL MIRROR



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SERVICE HINTS

R6 REMOTE CONTROL MIRROR SW

- 8-GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
- 6-7 : Continuity with the operation SW at **UP** or **LEFT** position
- 8-6 : Continuity with the operation SW at **DOWN** or **RIGHT** position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J11	35	J16	B	R19	B
J15	35	R6	35	R20	A
J15	A	R19	A	R20	B

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1T	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

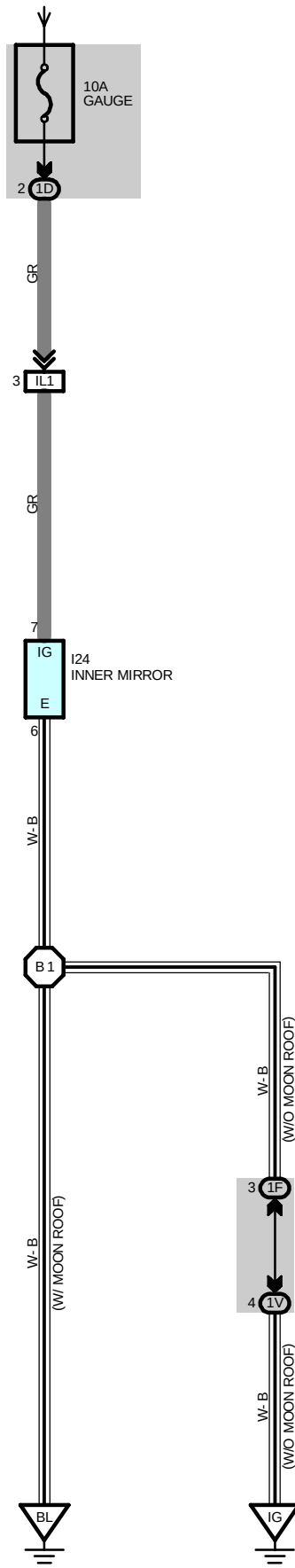
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IJ2	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
IF	42	Left Kick Panel
II	42	Right Kick Panel

AUTOMATIC GLARE-RESISTANT EC MIRROR

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



SERVICE HINTS

I24 INNER MIRROR

7-GROUND : Always approx. 12 volts

6-GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
I24	36				

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1F	22	Roof Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IL1	44	Roof Wire and Cowl Wire (The Back Side of the Lower Finish Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
IG	42	Left Cowl Side Panel
BL	46	Left Side of the Roof Side Panel

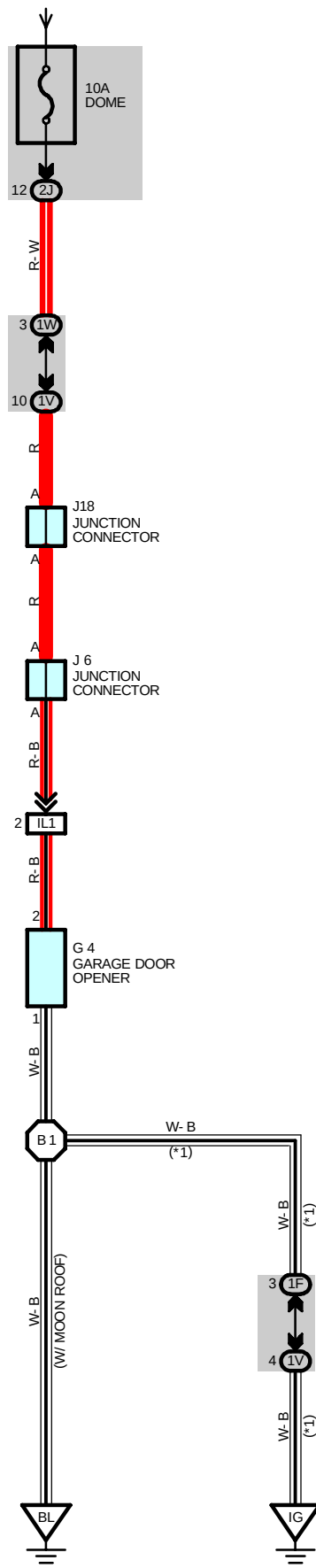
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	46	Roof Wire			

GARAGE DOOR OPENER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)

* 1 : W/O MOON ROOF



SERVICE HINTS

G4 GARAGE DOOR OPENER

- 1-GROUND : Always continuity
- 2-GROUND : Always approx. 12 volts

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
G4	36	J6	35	J18	35

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	22	Roof Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IL1	44	Roof Wire and Cowl Wire (The Back Side of the Lower Finish Panel)

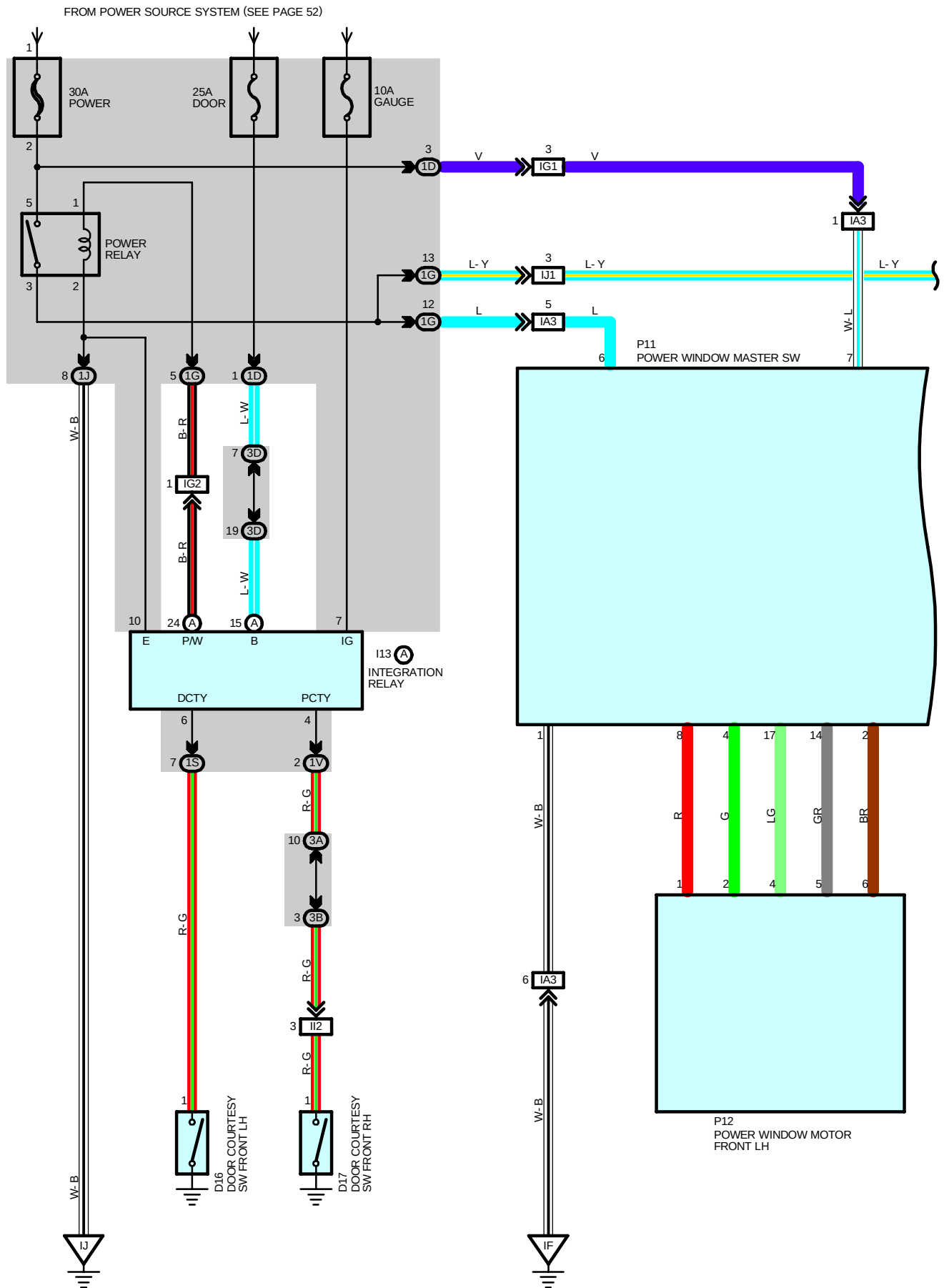
: GROUND POINTS

Code	See Page	Ground Points Location
IG	42	Left Cowl Side Panel
BL	46	Left Side of the Roof Side Panel

: SPLICE POINTS

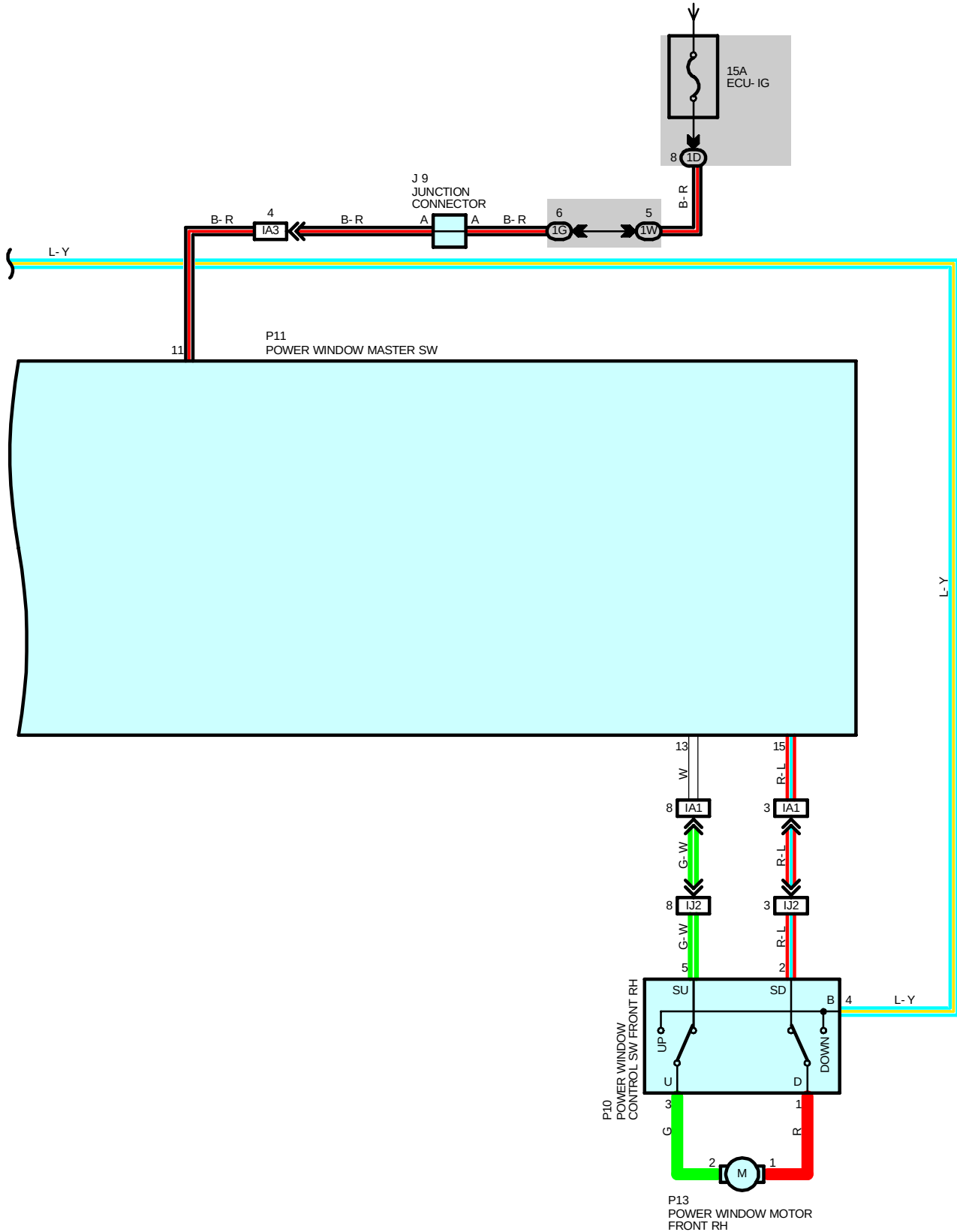
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	46	Roof Wire			

POWER WINDOW



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FROM POWER SOURCE SYSTEM (SEE PAGE 52)



POWER WINDOW

SYSTEM OUTLINE

1. MANUAL DOWN OR UP OPERATION (DRIVER'S SIDE)

When the power window master SW is pressed one step, the current flows from the power window master SW TERMINAL 4 to power window motor front LH to power window master SW TERMINAL 8 to GROUND, and rotates the motor to open the window.

When the power window master SW is pulled one step, the current flows from the power window master SW TERMINAL 8 to power window motor front LH to power window master SW TERMINAL 4 to GROUND, and rotates the motor to close the window.

2. AUTO DOWN OR UP OPERATION (DRIVER'S SIDE)

When the power window master SW is pushed two steps, the power window master SW determines it is in auto mode and the current flows from the power window master SW TERMINAL 4 to power window motor front LH to power window master SW TERMINAL 8 to GROUND, and rotates the motor to open the window automatically.

When the power window master SW is pulled two steps, the power window master SW determines it is in auto mode and the current flows from the power window master SW TERMINAL 8 to power window motor front LH to power window master SW TERMINAL 4 to GROUND, and rotates the motor to close the window automatically.

3. MANUAL OPERATION (FRONT PASSENGER'S WINDOW)

With the power window control SW front RH pulled to the up side, the current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 of the power window control SW to TERMINAL 2 of the power window motor to TERMINAL 1 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL 15 of the master SW to TERMINAL 1 to GROUND and causes the power window motor front RH to rotate in the up direction. The up operation continues only while the power window SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 1 to TERMINAL 2, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the front RH window becomes open.

As a result, even if Open/Close operation of the front RH window is attempted, the current from TERMINAL 1 of the power window master SW is not grounded, so the motor does not rotate, therefore the front RH window can not be operated. This is how the window lock function operates.

4. CATCHING PREVENTION FUNCTION (DRIVER'S SIDE)

When any foreign matter is caught in the window during power window up operation, the pulse sensor in the power window motor detects the changes in the number of motor rotations and forcibly opens the door window 50 mm, or when the window opening is less than 200 mm, it opens the window until the opening is 200 mm.

5. KEY OFF POWER WINDOW OPERATION

It is possible to operate the power window for approx. 43 seconds after the ignition SW is turned from on to off. However, when the door is opened while the window is being operated, the power window operation is stopped even though 43 seconds have not elapsed.

SERVICE HINTS

P11 POWER WINDOW MASTER SW

7-GROUND : Always approx. **12** volts

11-GROUND : Approx. **12** volts with the ignition SW at **ON** or **ST** position
: Approx. **12** volts with key off power window operation

1-GROUND : Always continuity

4-GROUND : Continuity with power window master SW at **MANUAL UP** position
: Continuity with power window master SW at **AUTO UP** position

8-GROUND : Continuity with power window master SW at **MANUAL DOWN** position
: Continuity with power window master SW at **AUTO DOWN** position

WINDOW LOCK SW

Open with the window lock SW at lock position

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
D16	36	J9	35	P12	37
D17	36	P10	37	P13	37
I13	A 35	P11	37		

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3D		

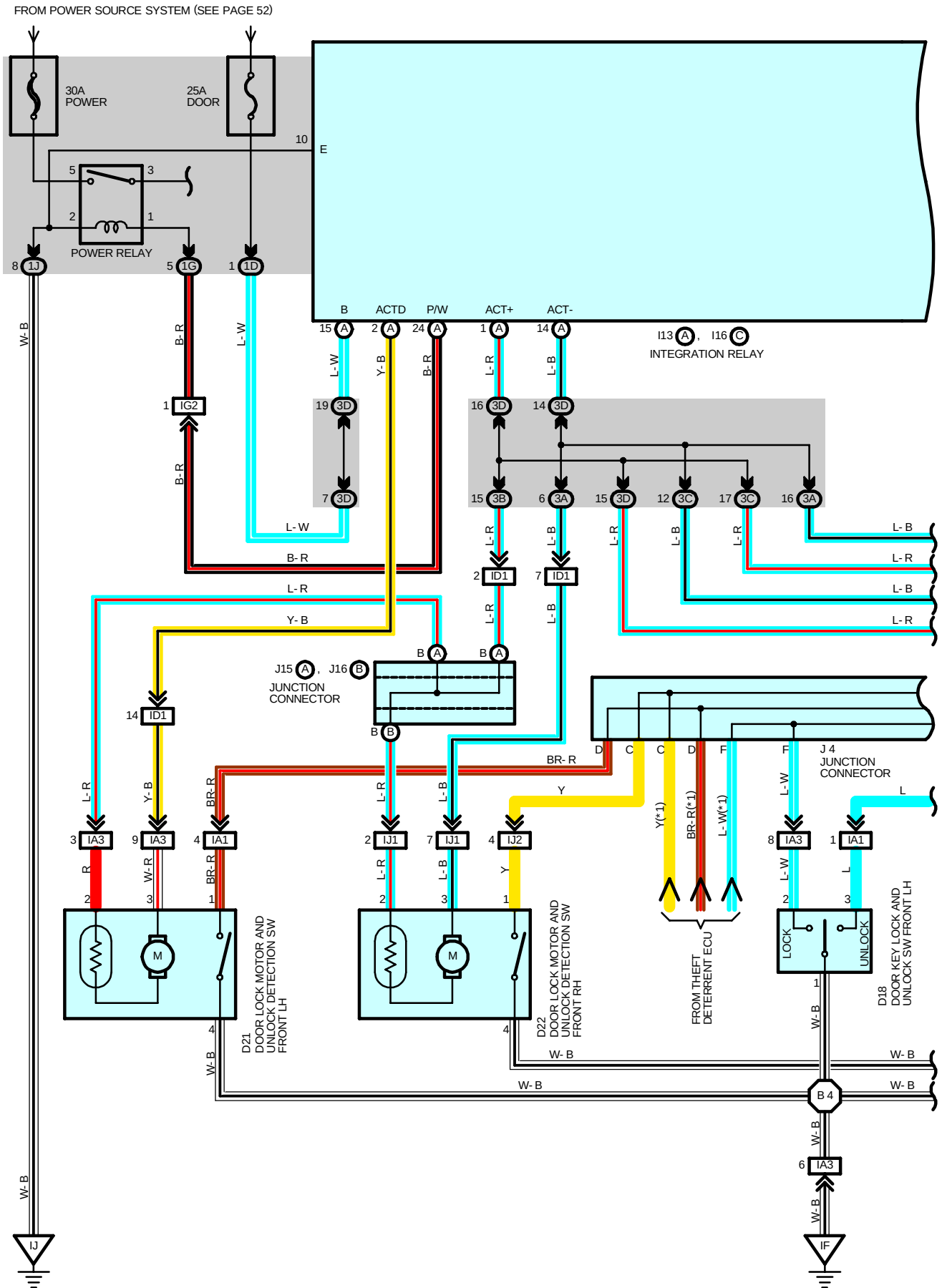
 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA3		
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IG2		
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IJ1	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2		

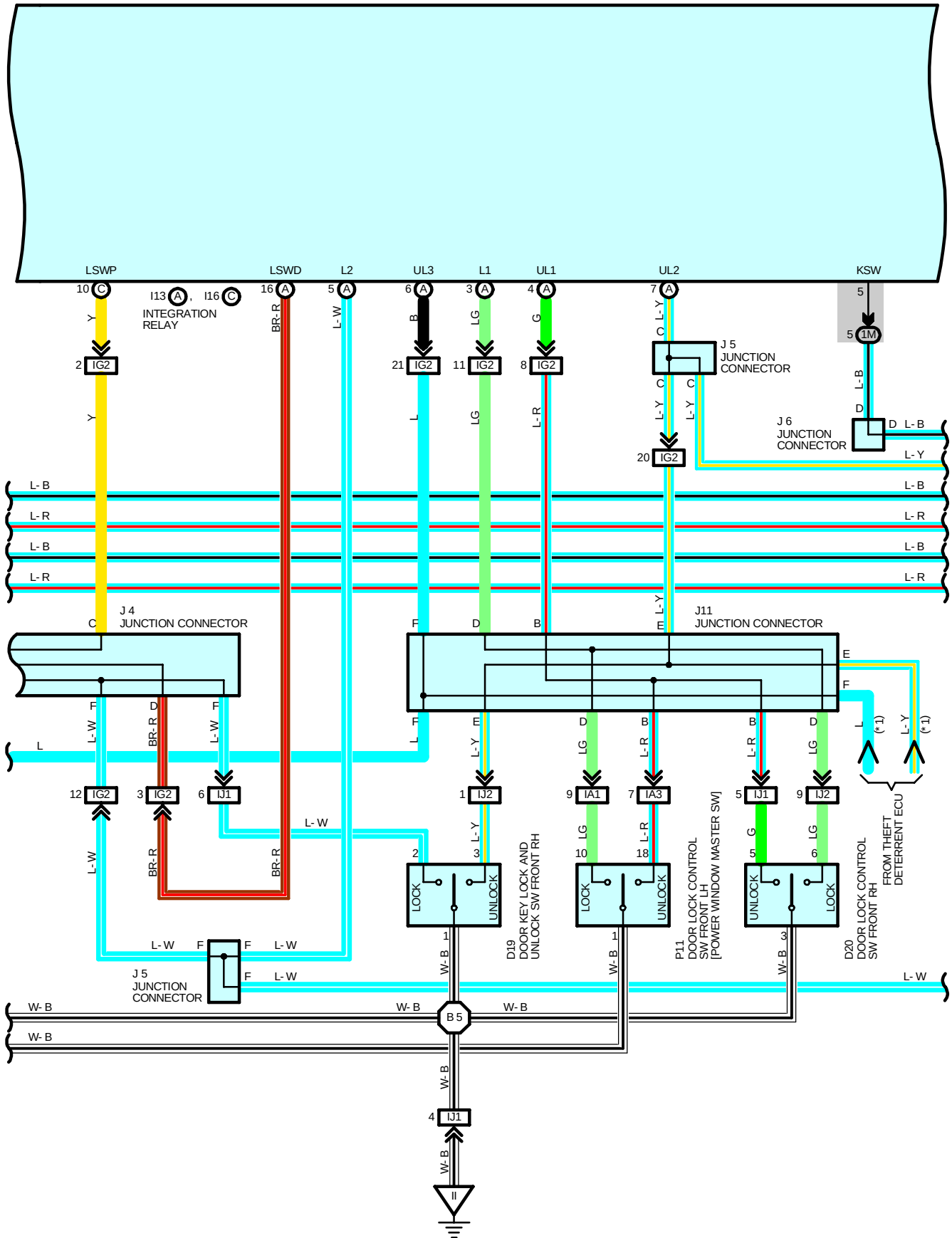
 : GROUND POINTS

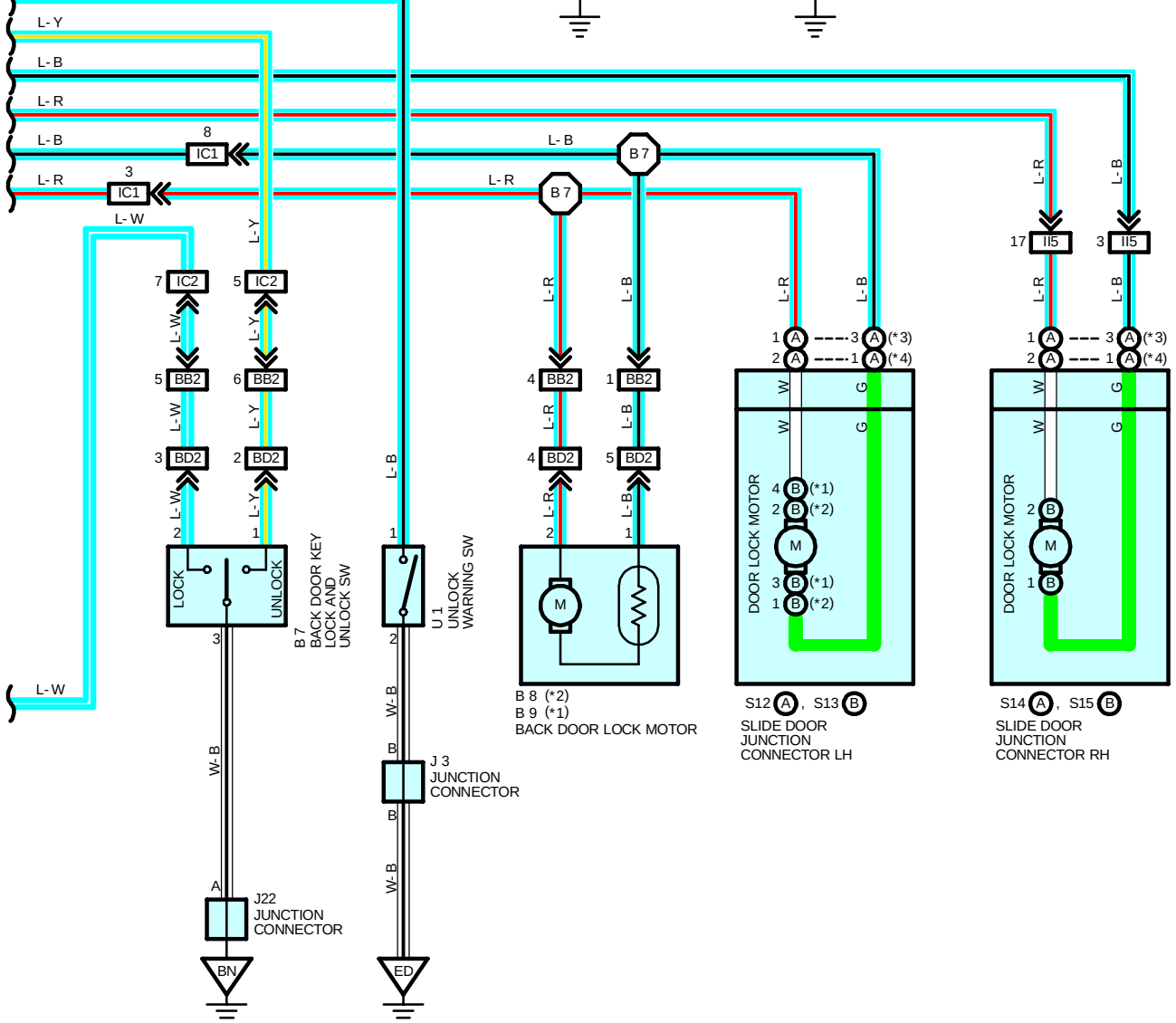
Code	See Page	Ground Points Location
IF	42	Left Kick Panel
IJ	42	Right Cowl Side Panel

DOOR LOCK CONTROL



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SYSTEM OUTLINE

Current always flows to TERMINAL (A) 15 of the integration relay through the DOOR fuse.

When the ignition SW is turned on, the current flowing through the GAUGE fuse flows to TERMINAL 7 of the integration relay to TERMINAL (A) 24 to the power relay (Coil side) to GROUND.

1. MANUAL LOCK OPERATION

When the door lock control SW or door key lock and unlock SW is operated to LOCK position, a lock signal is input to TERMINAL (A) 3 or (A) 5 of the integration relay and activates the relay. Current flows from TERMINAL (A) 15 of the integration relay to TERMINAL (A) 1 to TERMINAL 2 of the door lock motors (Front LH, RH and back door) and (A) 2 or (A) 1 of the slide door junction connectors (LH and RH) to TERMINAL 3 (Front LH and RH), 1 (Back door) and (A) 1 or (A) 3 (Slide door LH and RH) to TERMINAL (A) 2 or (A) 14 of the integration relay to TERMINAL 10 to GROUND and the door lock motors lock all doors.

2. MANUAL UNLOCK OPERATION

When the door lock control SW or door key lock and unlock SW is operated to UNLOCK position, an unlock signal is input to TERMINAL (A) 4, (A) 6 or (A) 7 of the integration relay and activates the relay. Current flows from TERMINAL (A) 15 of the integration relay to TERMINAL (A) 2 or (A) 14 to TERMINAL 3 of the front door motors (LH and RH), 1 of the back door motor and (A) 1 or (A) 3 of the slide door junction connectors (LH and RH) to TERMINAL 2 of the door motors (Front LH, RH and back door) and (A) 2 or (A) 1 (Slide door LH and RH) to TERMINAL (A) 1 of the integration relay to TERMINAL 10 to GROUND and door lock motors unlock all doors.

3. DOUBLE OPERATION UNLOCK OPERATION

When the door key lock and unlock SW front LH is turned to the unlock side, only the driver's door is mechanically unlocked. By turning the door key lock and unlock SW front LH to the unlock side, a signal is input to TERMINAL (A) 6 of the integration relay. If the signal is input to TERMINAL (A) 6 again within 3 seconds by turning the SW to the unlock side again, current flows from TERMINAL (A) 2 or (A) 14 to TERMINAL 3 of the front door motors (LH and RH), 1 of the back door motor and (A) 1 or (A) 3 of the slide door junction connectors (LH and RH) to TERMINAL 2 of the door motors (Front LH, RH and back door) and (A) 2 or (A) 1 (Slide door LH and RH) to TERMINAL (A) 1 of the integration relay to TERMINAL 10 to GROUND, operating the door lock motors to unlock all doors.

4. IGNITION KEY REMINDER OPERATION

- * Operating door lock knob (Operation of door lock motors)

In the case that the door is opened and locked using the door lock knob (door lock motor), with the ignition key remaining in the cylinder, this relay unlocks the doors within a few seconds. Accordingly, the current flows from TERMINAL (A) 15 of the integration relay to TERMINAL (A) 2 or (A) 14 to TERMINAL 3 of the front door motors (LH and RH), 1 of the back door motor and (A) 1 or (A) 3 of the slide door junction connectors (LH and RH) to TERMINAL 2 of the door motors (Front LH, RH and back door) and (A) 2 or (A) 1 (Slide door LH and RH) to TERMINAL (A) 1 of the integration relay to TERMINAL 10 to GROUND and unlocks all the doors.

- * Operating door lock control SW or door key SW

In the case that the door is opened and locked using door lock control SW or key SW, with the ignition key remaining in the cylinder, the SW in the motors unlock the doors within a few seconds, and a signal is input to TERMINAL (A) 10 or (C) 10 of the integration relay. According to this input signal, the current flows from TERMINAL (A) 15 of the integration relay to TERMINAL (A) 2 or (A) 14 to TERMINAL 3 of the front door motors (LH and RH), 1 of the back door motor and (A) 1 or (A) 3 the slide door junction connectors (LH and RH) to TERMINAL 2 of the door motors (Front LH, RH and back door) and (A) 2 or (A) 1 (Slide door LH and RH) to TERMINAL (A) 1 of the integration relay to TERMINAL 10 to GROUND and unlocks all the doors.

- * In case of key less lock

When the unlock function is disturbed more than 0.2 seconds, with ignition key in cylinder (Unlock warning SW on), for example pushing the door lock knob etc., the door holds on lock condition. Closing the door after, door courtesy SW inputs the signal into TERMINAL 4 or 6 of the integration relay. By this input signal, the integration relay works and the current flows from TERMINAL (A) 15 of the integration relay to TERMINAL (A) 2 or (A) 14 to TERMINAL 3 of the front door motors (LH and RH), 1 of the back door motor and (A) 1 or (A) 3 of the slide door junction connectors (LH and RH) to TERMINAL 2 of the door motors (Front LH, RH and back door) and (A) 2 or (A) 1 (Slide door LH and RH) to TERMINAL (A) 1 of the integration relay to TERMINAL 10 to GROUND and unlocks all the doors.

5. SIDE DOOR AUTOMATIC LOCK OPERATION

This is the function to lock the sliding door automatically if you lock the driver side door is locked with a key or manual SW and close the sliding door when the sliding door is open.

DOOR LOCK CONTROL

SERVICE HINTS

I13 (A), I16 (C) INTEGRATION RELAY

- 10-GROUND : Always continuity
- 6-GROUND : Continuity with driver's door open
- 4-GROUND : Continuity with front passenger's door open
- 7-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- (A)15-GROUND : Always approx. **12** volts
- (A) 1-GROUND : Approx. **12** volts **0.2** seconds with following operation
 - *Door lock control SW locked
 - *Locking driver's, front passenger's door cylinder with key
- (A) 3-GROUND : Continuity with door lock control SW locked
- (A)16-GROUND : Continuity with driver's door lock knob unlocked
- (C)10-GROUND : Continuity with front passenger's door lock knob unlocked
- (A) 4-GROUND : Continuity with door lock control SW unlocked
- (A) 7-GROUND : Continuity with front passenger's door lock cylinder unlocked with key
- (A) 6-GROUND : Continuity with driver's door lock cylinder unlocked with key
- (A) 5-GROUND : Continuity with driver's, front passenger's door lock cylinder locked with key
- (A)14-GROUND : Approx. **12** volts **0.2** seconds with following operation
 - *Door lock control SW unlocked
 - *Door lock control SW locked with ignition key in cylinder and driver's door open (Ignition key reminder function)
 - *Door lock knob locked with ignition key in cylinder and driver's door open (Ignition key reminder function)
 - *Unlocking driver's, front passenger's door cylinder with key

D16, D17 DOOR COURTESY SW FRONT LH,RH

- 1-GROUND : Closed with each door open

D18, D19 DOOR KEY LOCK AND UNLOCK SW FRONT LH,RH

- 1-2 : Closed with door lock cylinder locked with key
- 1-3 : Closed with door lock cylinder unlocked with key

B7 BACK DOOR KEY LOCK AND UNLOCK SW

- 2-3 : Closed with door lock cylinder locked with key
- 1-3 : Closed with door lock cylinder unlocked with key

D21, D22 DOOR LOCK MOTOR AND UNLOCK DETECTION SW FRONT LH,RH

- 1-4 : Closed with **UNLOCK** position

U1 UNLOCK WARNING SW

- 1-2 : Closed with ignition key in cylinder

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B7	36	D22	36	J16 B	35
B8	36	I13 A	35	J22	36
B9	36	I16 C	35	P11	37
D16	36	J3	35	S12 A	37
D17	36	J4	35	S13 B	37
D18	36	J5	35	S14 A	37
D19	36	J6	35	S15 B	37
D20	36	J11	35	U1	35
D21	36	J15 A	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1M		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA3		
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC2		
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II5		
IJ1	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2		
BB2	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD2	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

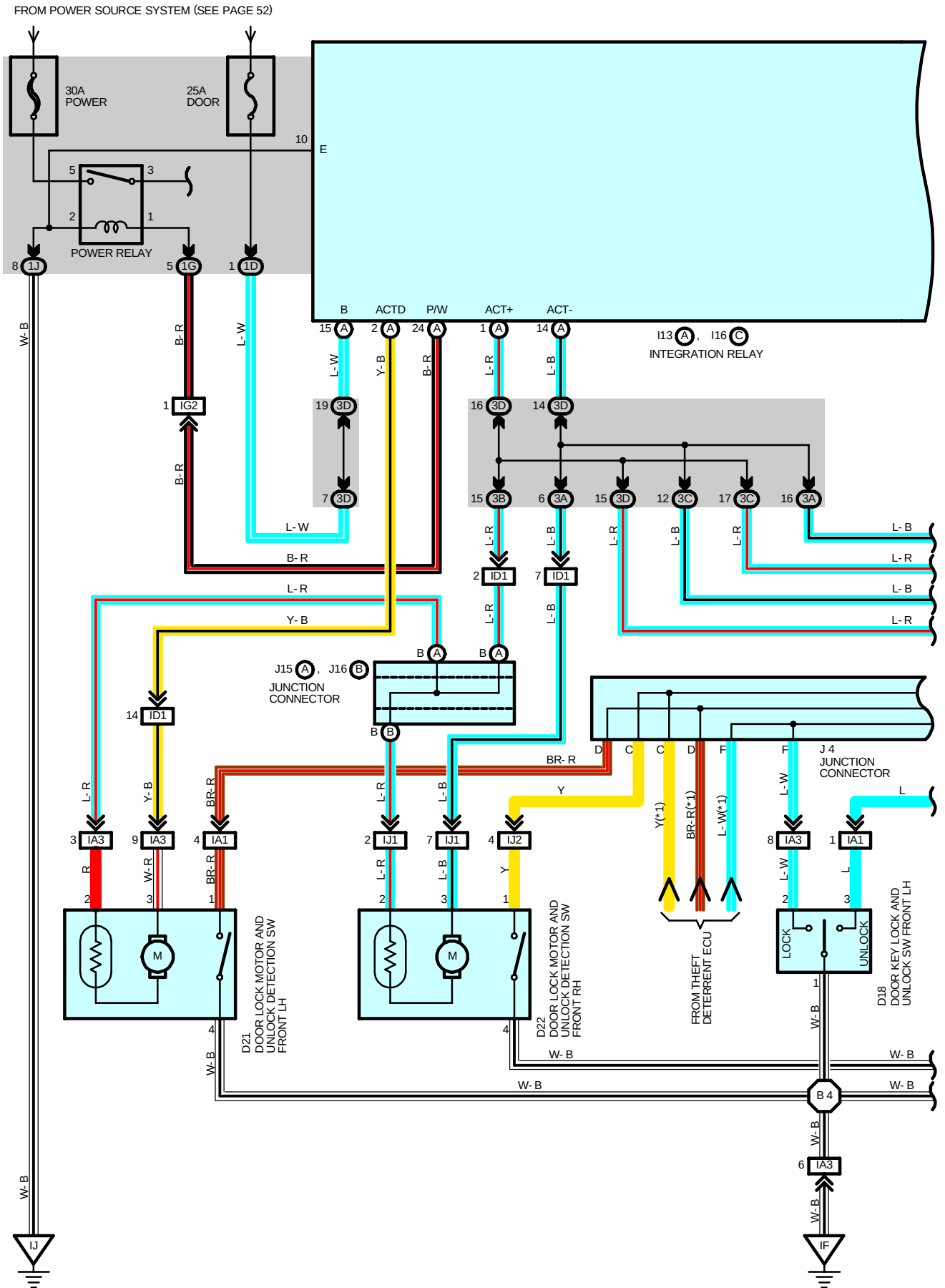
: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
II	42	Right Kick Panel
IJ	42	Right Cowl Side Panel
BN	46	Right Side of the Back Door

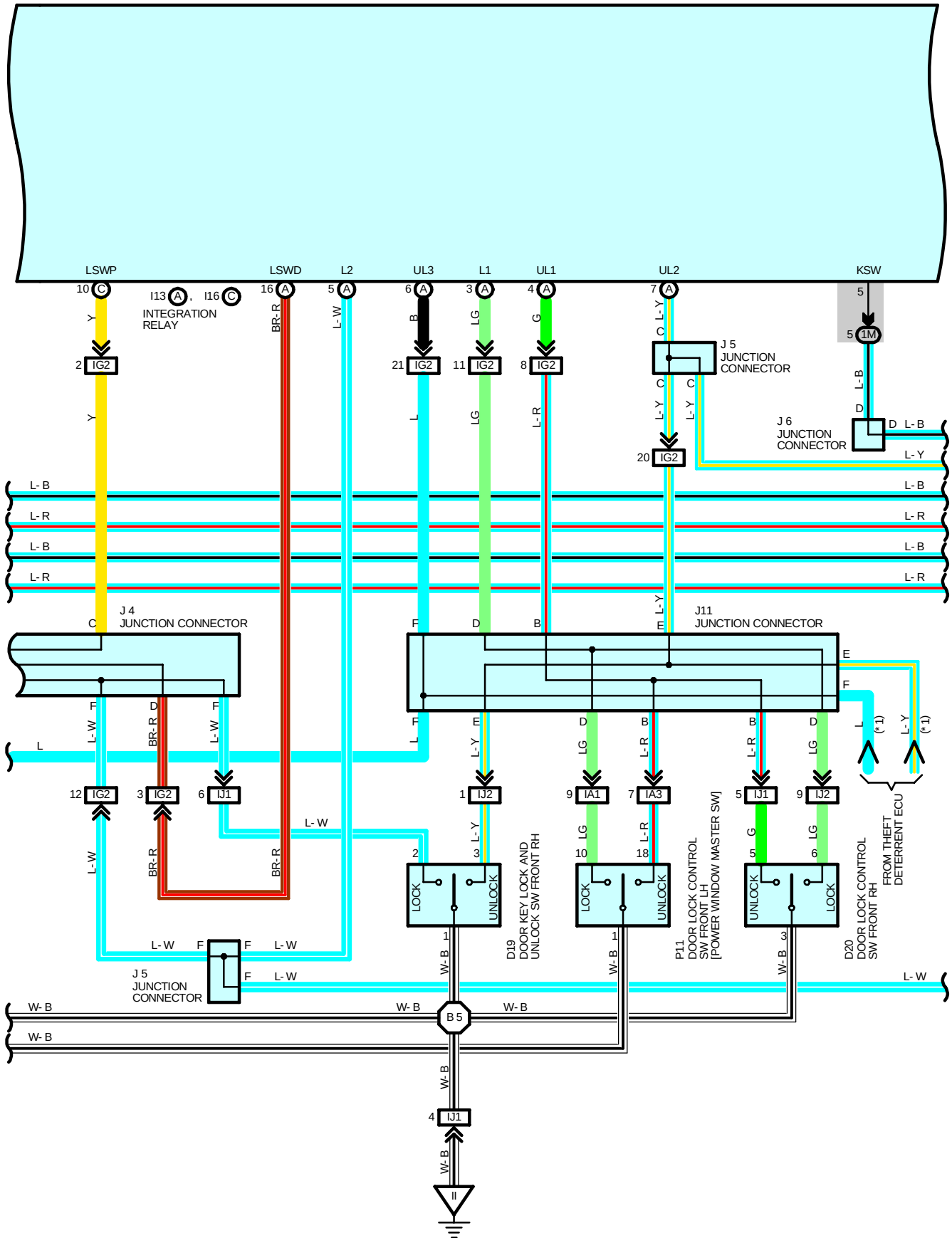
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	46	Front Door LH Wire	B7	46	Floor Wire
B5	46	Front Door RH Wire			

WIRELESS DOOR LOCK CONTROL



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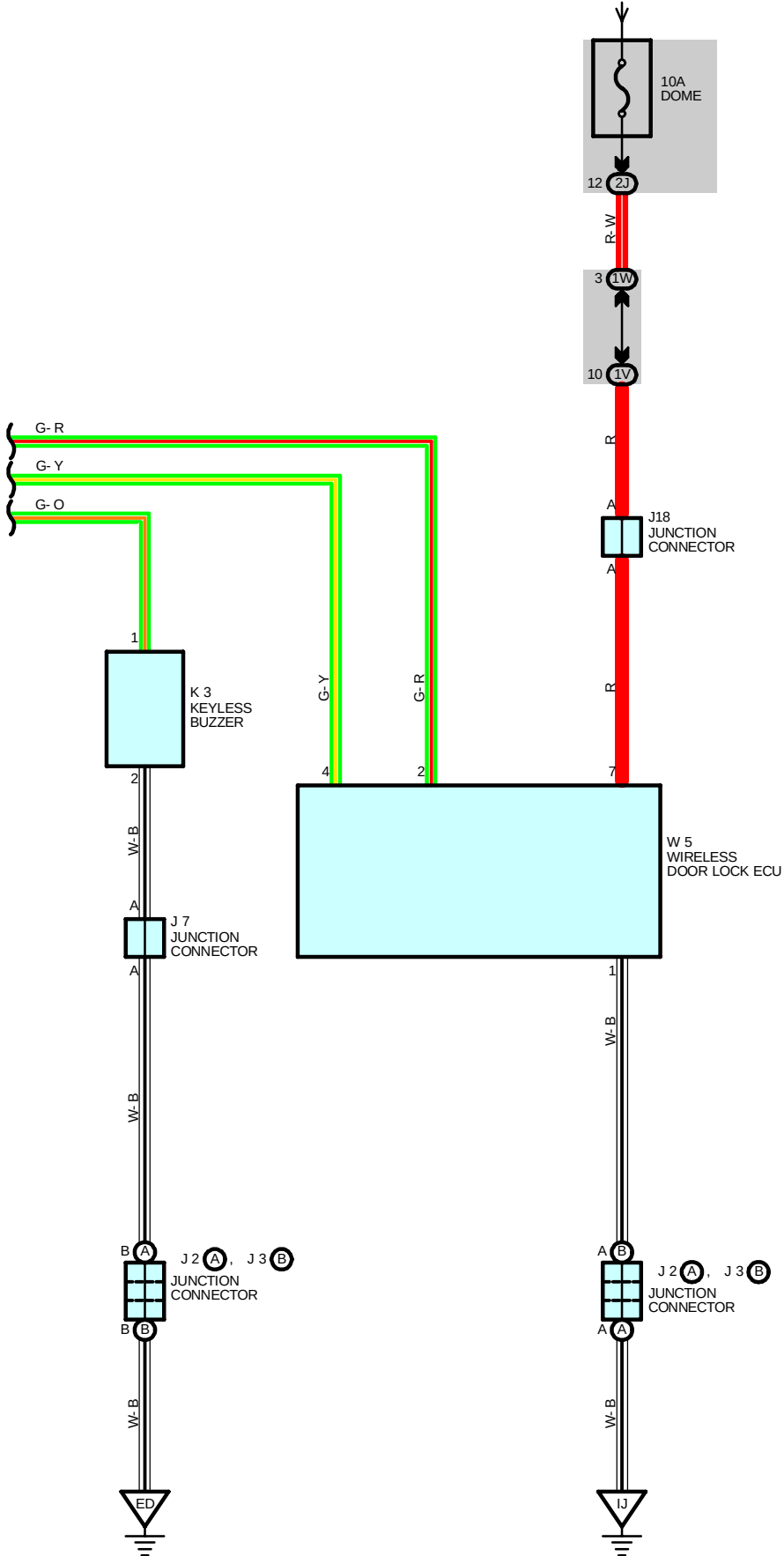


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FROM POWER SOURCE SYSTEM (SEE PAGE 52)

- * 1 : W/ THEFT DETERRENT SYSTEM
- * 2 : W/O THEFT DETERRENT SYSTEM
- * 3 : W/ POWER SLIDE DOOR
- * 4 : W/O POWER SLIDE DOOR



WIRELESS DOOR LOCK CONTROL

SYSTEM OUTLINE

In this system, the wireless door lock ECU receives weak radio wave transmitted from the transmitter built-into the ignition key, and outputs a signal to the integration relay. Accordingly, all the doors are can be locked and unlocked by remote control.

1. NORMAL OPERATION

* Lock operation

When the lock SW on the transmitter is pressed, all the doors are locked.

* Unlock operation

When the unlock SW on the transmitter is pressed once, only the driver door is unlocked. When the unlock SW is pressed again within 3 seconds, all the doors are unlocked.

2. AUTO LOCK FUNCTION

When the door is not actually opened within 30 seconds after the door has been unlocked by the unlock SW on the transmitter, all the doors are automatically locked. If any of the following conditions are detected, the wireless door lock does not function.

* Any door is opened.

* The ignition key is inserted into the ignition SW.

* When the unlock detection SW of all the doors are locked.

3. WIRELESS DOOR LOCK STOP FUNCTION

If any of the following conditions are detected, the wireless door lock does not function.

Lock operation

* When any door is open (Door courtesy SW on)

* The ignition key is inserted into the ignition SW (Unlock warning SW on)

* Ignition SW is on

Unlock operation

* Ignition SW is on

Slide door operation

* The ignition key is inserted in to the ignition SW (Unlock warning SW on)

* Ignition SW is on

4. BUZZER SOUND FUNCTION

During lock operation, when the wireless door lock ECU receives a lock signal from the door unlock detection SW, the wireless door lock buzzer goes on once. During unlock operation, when the wireless door lock ECU receives an unlock signal from the door unlock detection SW, the keyless buzzer goes on twice.

With any door open, when the wireless door lock ECU receives a lock signal from the transmitter, the keyless buzzer goes on for approx. 10 seconds. If the door is closed, or ignition SW is on, or if the unlock signal is received from the transmitter while the buzzer is on, the buzzer stops.

5. VISUAL CONFIRMATION OF LOCK OR UNLOCK

During lock operation, when the wireless door lock ECU receives a lock signal from the door unlock detection SW, the taillight and front parking light is flashed once. During unlock operation, when the wireless door lock ECU receives an unlock signal from the door unlock detection SW, the taillight and front parking light is flashed twice.

6. PANIC MODE FUNCTION

When the lock switch on the transmitter is kept pressed for approximately 2.5 sec., the wireless door lock ECU receives the signal and enters the panic mode. The theft alarm goes on upon receiving the signal, and the headlights and taillights flash. At this time, when any SW on the transmitter is pressed, the panic mode is cancelled, the theft alarm is stopped, and the headlights and taillights go off.

7. REPEAT FUNCTION

If the lock detection signal in response to the output signal is not received after the wireless door lock ECU has output the lock signal, the lock signal is output again.

8. POWER SLIDE DOOR FUNCTION

The power slide door can be opened/closed by operating the left power door SW or right power door SW on the transmitter.

SERVICE HINTS

D16, D17 DOOR COURTESY SW FRONT LH, RH

1-GROUND : Closed with the door open

U1 UNLOCK WARNING SW

2-1 : Closed with the ignition key in the cylinder

W5 WIRELESS DOOR LOCK ECU

7-GROUND : Always approx. 12 volts

1-GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page		Code		See Page		Code		See Page	
B7		36		I16	C	35		J22		36	
B8		36		J2	A	35		K3		33	
B9		36		J3	B	35		P11		37	
D16		36		J4		35		S12	A	37	
D17		36		J5		35		S13	B	37	
D18		36		J6		35		S14	A	37	
D19		36		J7		35		S15	B	37	
D20		36		J11		35		U1		35	
D21		36		J15	A	35		W5		35	
D22		36		J16	B	35					
I13	A	35		J18		35					

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1M	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA3	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II5	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IJ1	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BB2	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BD2	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)

WIRELESS DOOR LOCK CONTROL



: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
II	42	Right Kick Panel
IJ	42	Right Cowl Side Panel
BN	46	Right Side of the Back Door

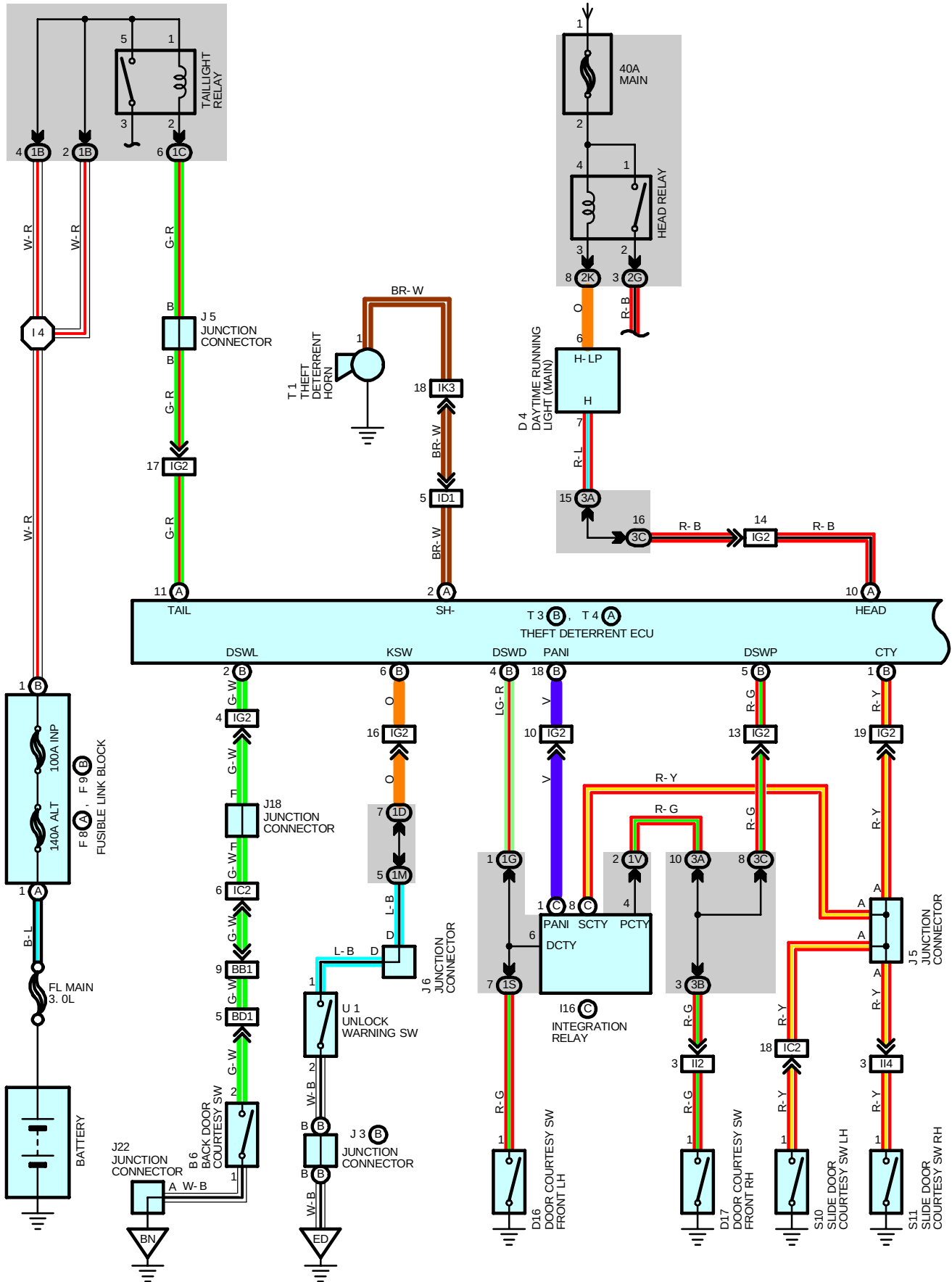


: SPLICE POINTS

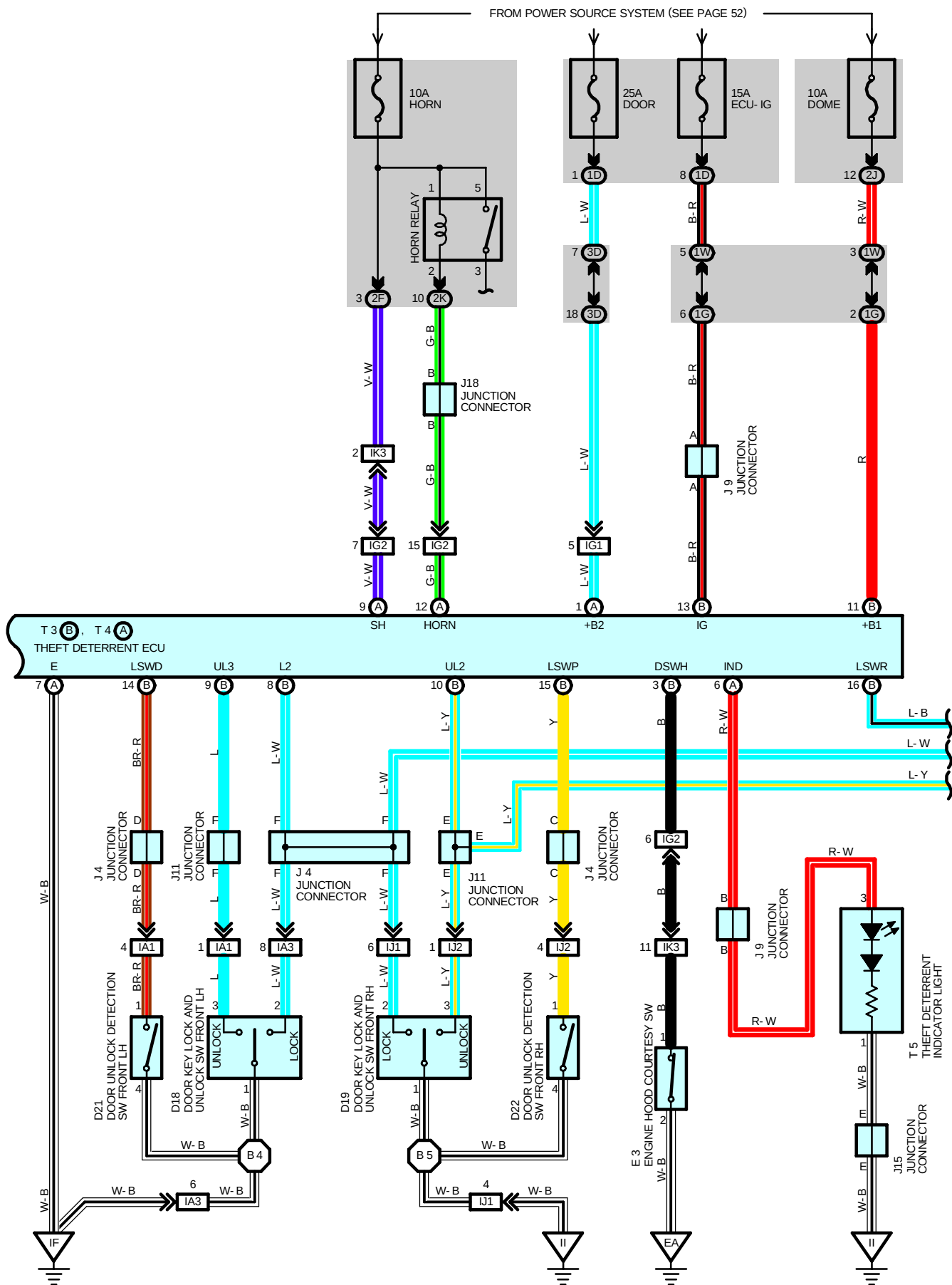
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	46	Front Door LH Wire	B7	46	Floor Wire
B5	46	Front Door RH Wire			

THEFT DETERRENT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)

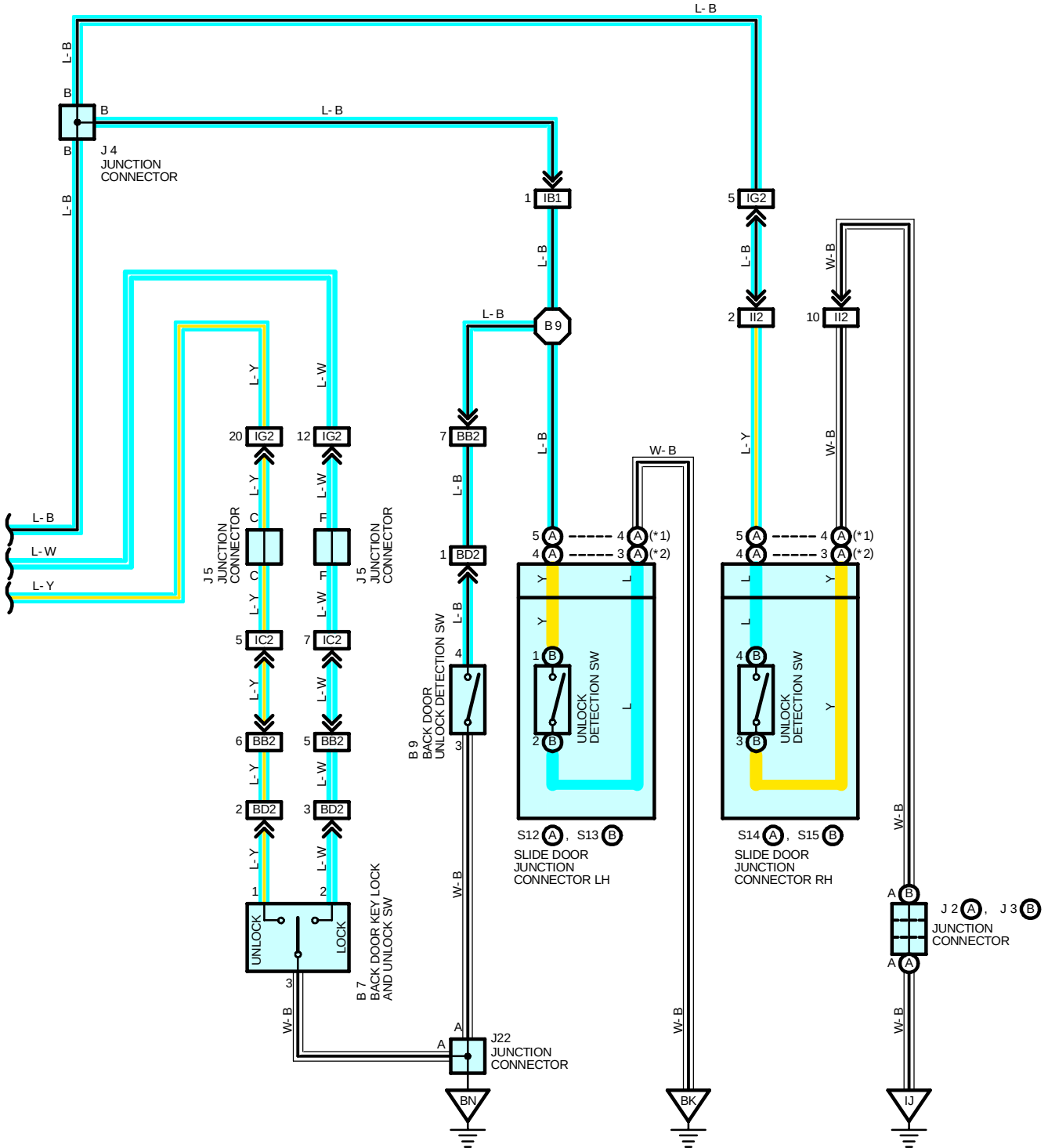


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THEFT DETERRENT

* 1 : W/ POWER SLIDE DOOR
 * 2 : W/O POWER SLIDE DOOR



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SERVICE HINTS

D18, D19 DOOR KEY LOCK AND UNLOCK SW FRONT LH, RH

- 1-3 : Closed with door lock cylinder unlocked with key
- 1-2 : Closed with door lock cylinder locked with key

B7 BACK DOOR KEY LOCK AND UNLOCK SW

- 1-3 : Closed with door lock cylinder unlocked with key
- 2-3 : Closed with door lock cylinder locked with key

E3 ENGINE HOOD COURTESY SW

- 2-1 : Opened with engine hood open

U1 UNLOCK WARNING SW

- 2-1 : Closed with ignition key in cylinder

T3 (B), T4 (A) THEFT DETERRENT ECU

- (B) 6-GROUND : Continuity with ignition key in cylinder
- (B)15-GROUND : Continuity with front RH door unlocked
- (B)14-GROUND : Continuity with front LH door unlocked
- (B) 5-GROUND : Continuity with front RH door open
- (B) 4-GROUND : Continuity with front LH door open
- (B) 8-GROUND : Continuity with door key lock SW to **LOCK** position
- (A) 7-GROUND : Always continuity
- (B) 1-GROUND : Continuity with each door opened
- (B) 3-GROUND : Continuity with engine hood close
- (B) 2-GROUND : Continuity with back door open
- (B)16-GROUND : Continuity with slide door or back door unlocked
- (B)9, (B) 10-GROUND : Continuity with door key lock SW to **UNLOCK** position
- (A) 1, (A) 11, (A) 12, (B) 11-GROUND : Always approx. **12** volts

○ : PARTS LOCATION

Code		See Page		Code		See Page		Code		See Page	
B6		36		F9	B	32		S10		37	
B7		36		I16	C	35		S11		37	
B9		36		J2	A	35		S12	A	37	
D4		34		J3	B	35		S13	B	37	
D16		36		J4		35		S14	A	37	
D17		36		J5		35		S15	B	37	
D18		36		J6		35		T1		33	
D19		36		J9		35		T3	B	35	
D21		36		J11		35		T4	A	35	
D22		36		J15		35		T5		35	
E3		32		J18		35		U1		35	
F8	A	32		J22		36					

THEFT DETERRENT



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1D		
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1M	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2F	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2G		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA3		
IB1	42	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IG2		
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II4		
IJ1	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2		
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BB2		
BD1	46	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Door)
BD2		



: GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
II	42	Right Kick Panel
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar
BN	46	Right Side of the Back Door

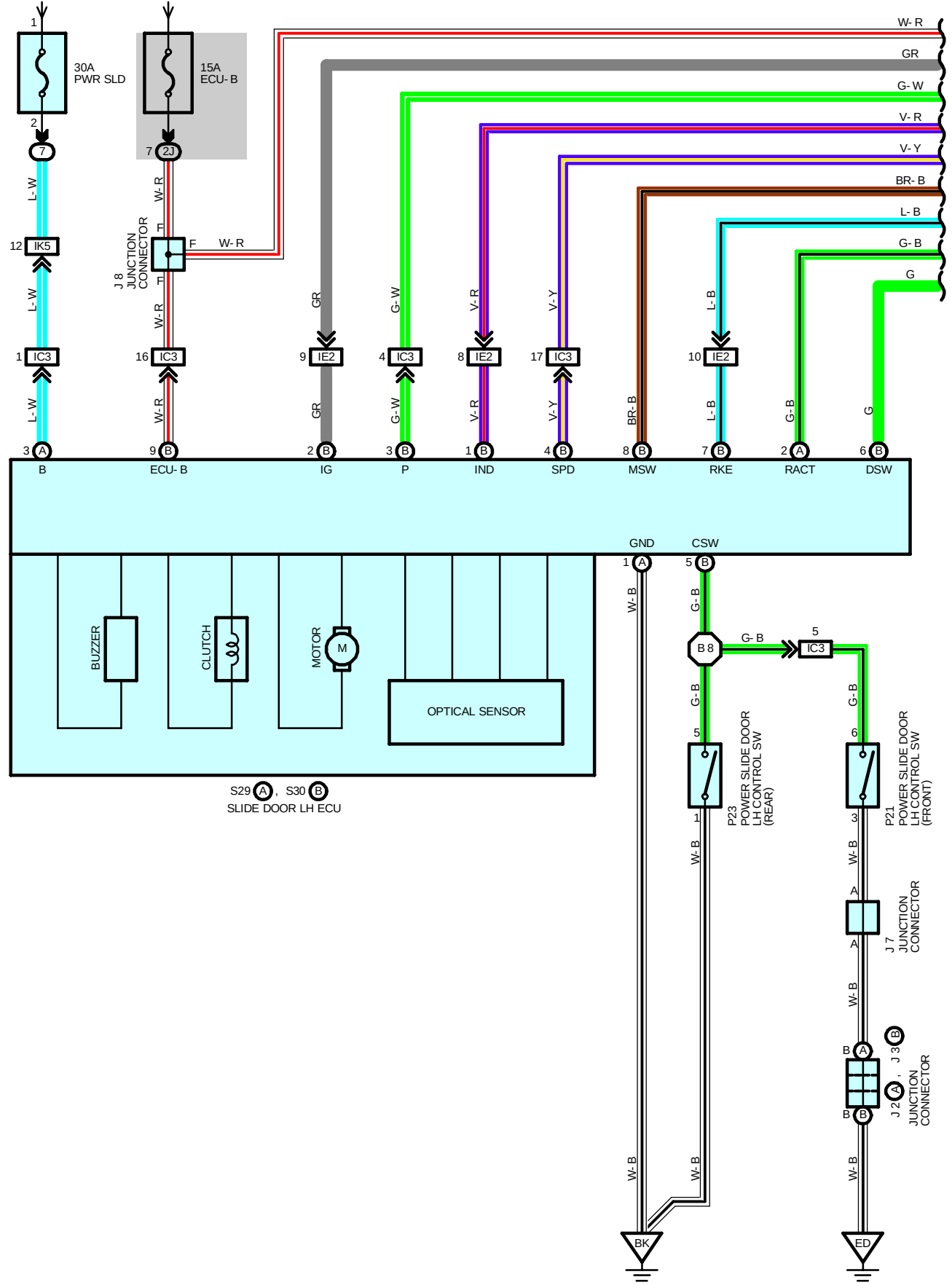


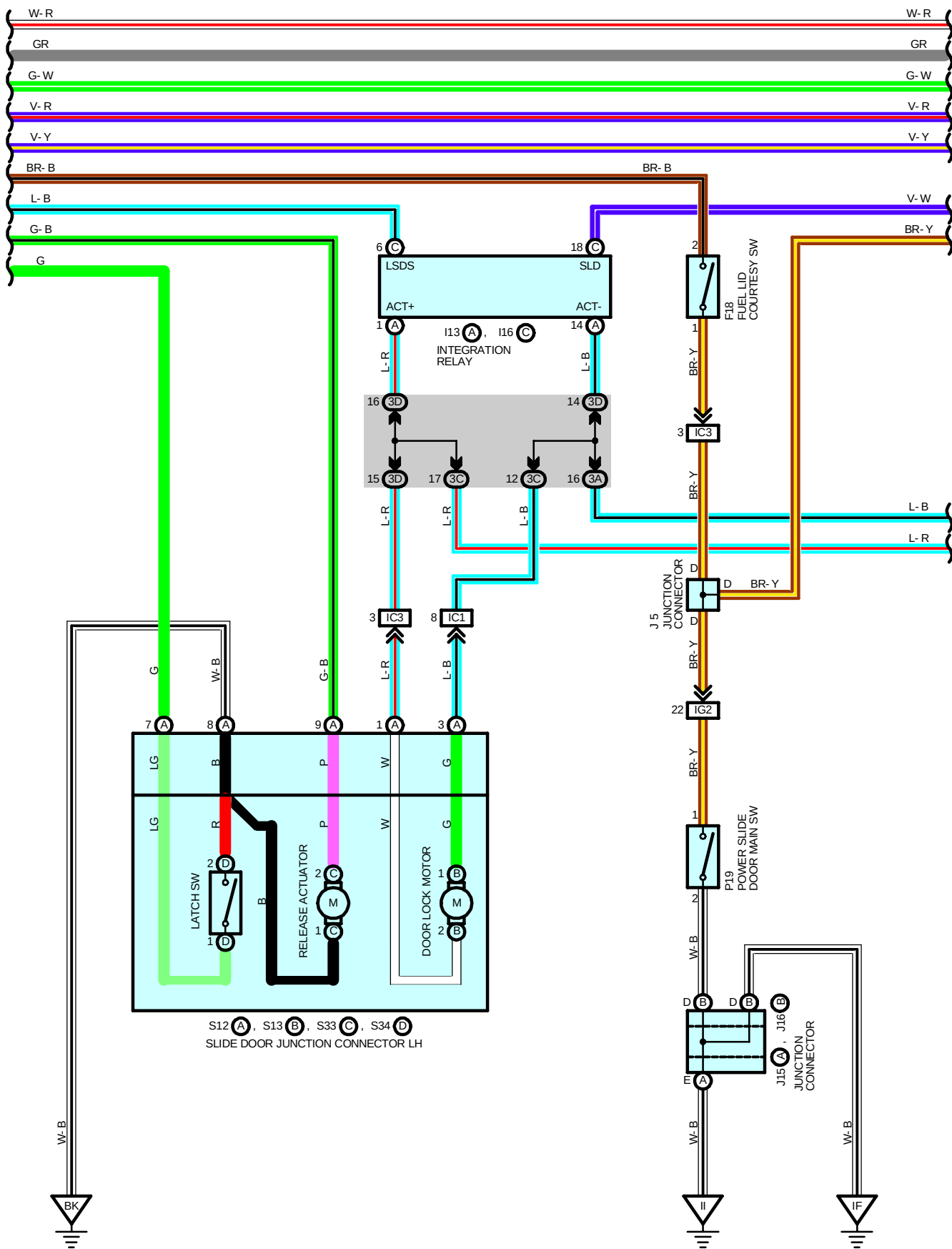
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire	B5	46	Front Door RH Wire
B4	46	Front Door LH Wire	B9	46	Floor Wire

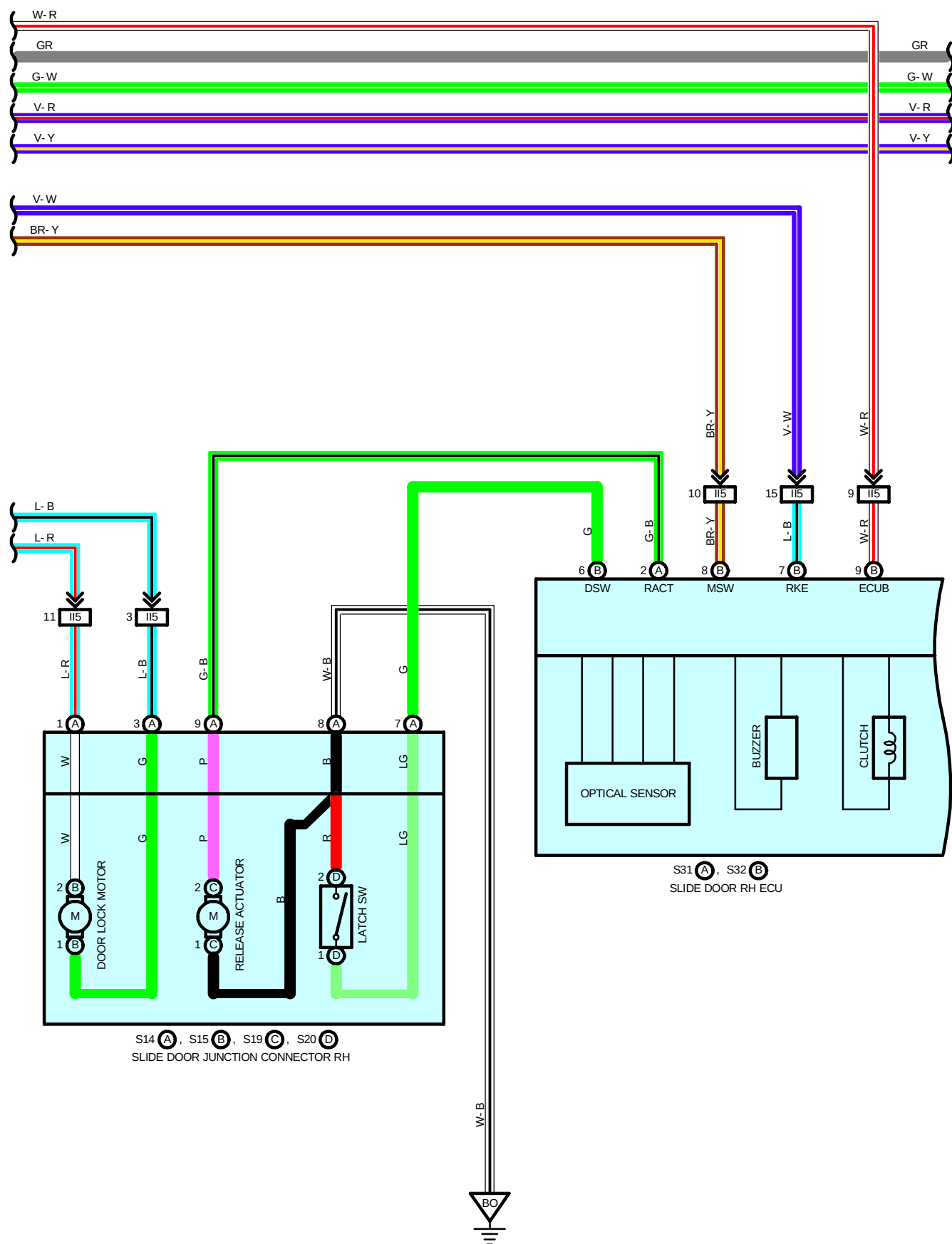
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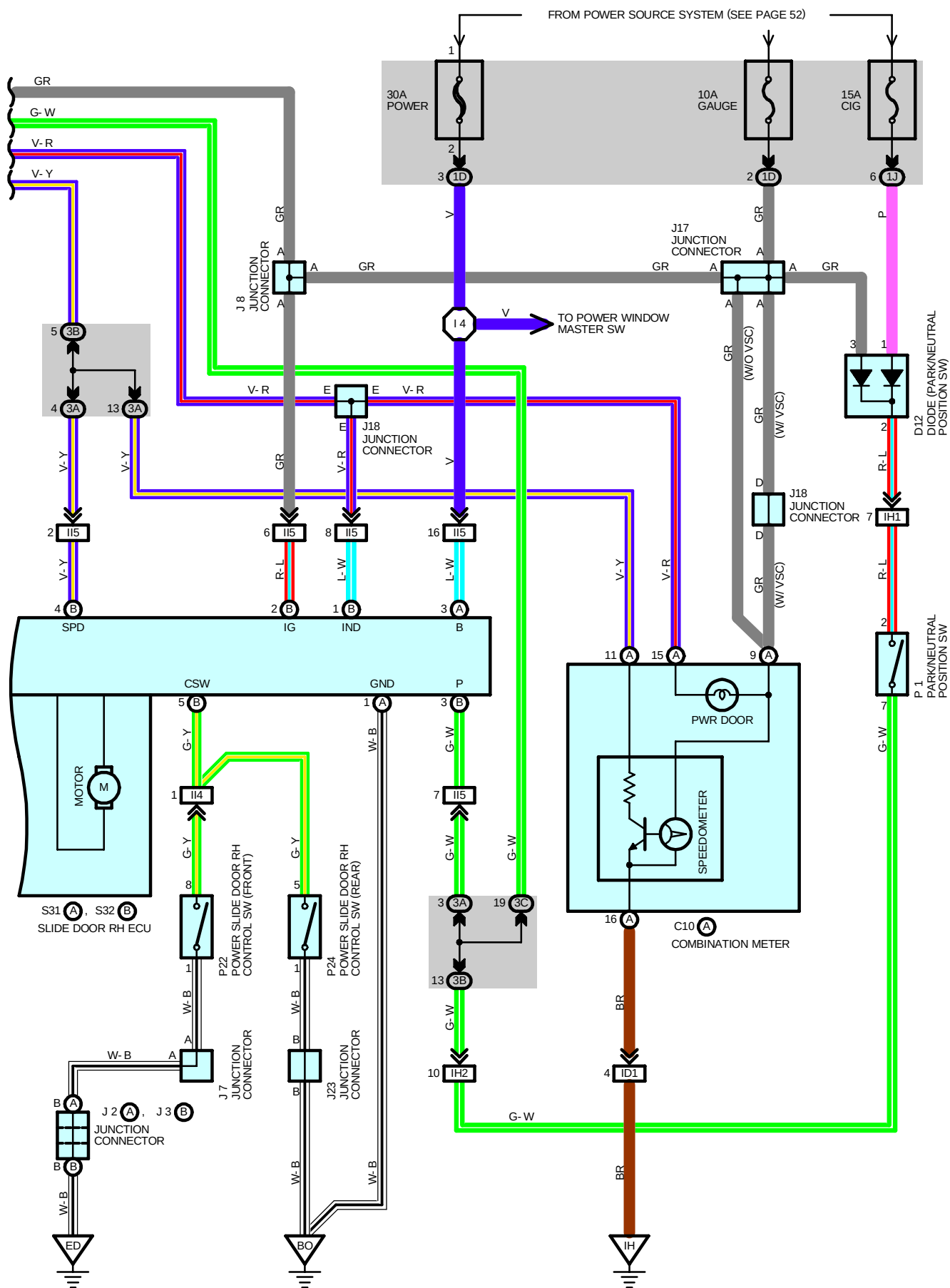
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POWER SLIDE DOOR





POWER SLIDE DOOR

SYSTEM OUTLINE

The slide door can be opened/closed automatically by operating the power slide door control SW.

1. SWITCH OPERATION

Open operation

The slide door can be opened automatically when all of the following conditions are met;

- * Power slide door main SW is off
- * Door position is in between fully or half way closed.
- * Doors are unlocked when fully closed
- * Shift lever is in P position when the ignition SW is on.
(Shift lever is in any position when the ignition SW is off.)
- * Fuel lid closed

Close operation

The slide door can be closed automatically when all of the following conditions are met;

- * Power slide door main SW is off
- * Door position is in between fully or half way open.
- * Fuel lid closed

2. MANUAL OPEN/CLOSE OPERATION SUPPORT

When the slide door is opened/closed for a certain amount, the system begins to support the operation by switching to automatic operation. When fully closed, the system begins support when the handle is pulled.

The slide door can be opened when all of the following conditions are met;

- * Power slide door main SW is on.
- * Doors are unlocked when fully closed.
- * Shift lever is in P position when the ignition SW is on.
(Shift lever is in any position when the ignition SW is off.)
- * Fuel lid closed

The slide door can be closed when all of the following conditions are met;

- * Power slide door main SW is on.
- * Fuel lid closed

3. JAM PROTECTION FUNCTION

When the system detects change in the operation speed due to any foreign objects being caught during close operation, it automatically reverses and/or stops the operation.

4. WARNING BUZZER

The warning buzzer goes on and the indicator lamp in the combination meter blinks under the following conditions;

- * Ignition SW is on
- * Slide door is open
- * Shift lever is in the position other than P
- * Power slide door main SW is on

SERVICE HINTS

S29 (A), S30 (B) SLIDE DOOR LH ECU

- (A)3-GROUND : Always approx. **12** volts
- (B)9-GROUND : Always approx. **12** volts
- (B)2-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- (A)1-GROUND : Always continuity

S31 (A), S32 (B) SLIDE DOOR RH ECU

- (A)3-GROUND : Always approx. **12** volts
- (B)9-GROUND : Always approx. **12** volts
- (B)2-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- (A)1-GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C10	A	34	J16	B	35
D12	34	J17	35	S13	B
F18	36	J18	35	S14	A
I13	A	J23	36	S15	B
I16	C	P1	33	S19	C
J2	A	P19	35	S20	D
J3	B	P21	35	S29	A
J5	35	P22	35	S30	B
J7	35	P23	37	S31	A
J8	35	P24	37	S32	B
J15	A	S12	A	S33	C
				S34	D

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
7	29	R/B No.7 (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC3		
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IE2	42	Floor Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
II4	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II5		
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
IH	42	Right Instrument Panel Brace
II	42	Right Kick Panel
BK	46	Under the Left Center Pillar
BO	46	Right Rear Quarter Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire	B8	46	Floor Wire

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SYSTEM OUTLINE

Current is applied at all times through the POWER fuse to TERMINAL 5 of the power relay. With the ignition SW turned on, the current flows through the GAUGE fuse to TERMINAL 7 of the integration relay to TERMINAL (A) 24 to TERMINAL 1 of the power relay to TERMINAL 2 to GROUND, as a result, the power relay is activated and the current to TERMINAL 5 of the power relay flows from TERMINAL 3 to TERMINAL 4 of the moon roof control SW and relay.

1. SLIDE OPEN OPERATION

Only when the slide open switch is valid and actuated, the moon roof motor will operate continually towards the open direction of the roof panel.

Releasing and depressing again the open switch, or depressing another operation switch shall cancel this express open function. The relay shall operate the moon roof motor continually for only approx. 20 seconds per actuation.

2. SLIDE CLOSE OPERATION

Only when the tilt up switch is valid and actuated, the moon roof motor will operate towards the close direction of the roof panel.

When the moon roof reaches half position, the limit switch no. 1 is turned from on to off. Thereby signaling the moon roof control relay to stop the motor. The motor can not continue operation until the close switch is released and depressed again.

3. TILT UP OPERATION

Only when the tilt up switch is valid and actuated, the moon roof motor will operate towards the closed direction of the roof panel.

4. TILT DOWN OPERATION

Only when the slide open switch is valid and actuated, the moon roof motor will operate towards the open direction of the roof panel.

5. KEY OFF MOON ROOF OPERATION

With the ignition SW turned from on to off, the integration relay operates and the current flows from the DOOR fuse to TERMINAL (A) 15 of the integration relay to TERMINAL (A) 24 to TERMINAL 1 of the power relay to TERMINAL 2 to GROUND for about 43 seconds. In the same way as normal operation, the current flows from the POWER fuse to TERMINAL 5 of the power relay to TERMINAL 3 to TERMINAL 4 of the moon roof control SW and relay. As a result, this relay is still activated for about 43 seconds after the ignition SW is turned off, allowing the open/close operation of the moon roof. Also, by opening the front door (Door open detection SW on) within about 43 seconds after turning the ignition SW to off, a signal is input to TERMINAL 6 or 4 of the integration relay. As a result, the relay turns off and open/close movement of the moon roof stops.

SERVICE HINTS

POWER RELAY

5-3 : Closed with the ignition SW at **ON** position or key off moon roof operation

M2 MOON ROOF CONTROL SW AND RELAY

2-GROUND : Always continuity

4-GROUND : Approx. **12** volts with the ignition SW at **ON** position or key off moon roof operation

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
D16	36	I13 A	35	M3	37
D17	36	M2	37		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1F	22	Roof Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3D		

MOON ROOF



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)



: GROUND POINTS

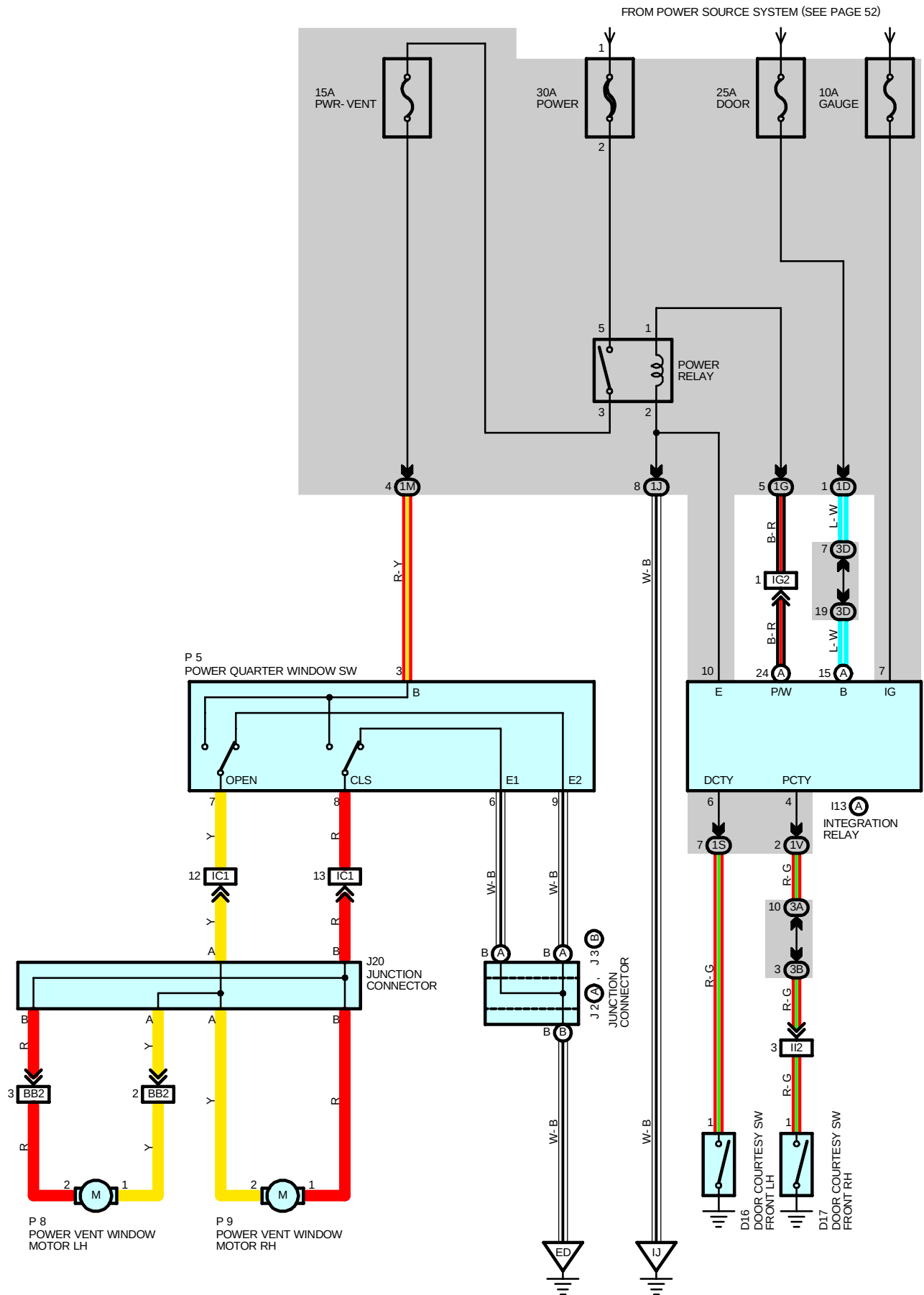
Code	See Page	Ground Points Location
IJ	42	Right Cowl Side Panel
BL	46	Left Side of the Roof Side Panel



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I9	44	Cowl Wire			

POWER REAR QUARTER WINDOW



SYSTEM OUTLINE

The current always flows to the TERMINAL 5 of the power relay through the POWER fuse.

When the ignition SW is on, the current from the GAUGE fuse flows to the TERMINAL 7 of the integration relay and by flowing from the TERMINAL (A) 24 through the power relay (Coil side) to the GROUND, the power relay (Point side) will turn on.

Accordingly, the current flows from the power relay (Point side) through PWR-VENT fuse to TERMINAL 3 of the power quarter window SW and it enables to operate the quarter window to open or close.

KEY OFF QUARTER WINDOW OPERATION

When the ignition SW is turned from ON to OFF, the integration relay will operate and for about 43 seconds, the current flows from the DOOR fuse to TERMINAL (A) 15 of the integration relay, and from TERMINAL (A) 24 through the power relay (Coil side) to the GROUND, the power relay (Point side) is turned on and enables the quarter window to open or close.

However, even within that period, if the front door is opened, the quarter window can not be operated.

SERVICE HINTS

POWER RELAY

5-3 : Closed with the ignition SW at **ON** position or key off quarter window operation

P5 POWER QUARTER WINDOW SW

6-GROUND : Always continuity

9-GROUND : Always continuity

3-GROUND : Approx. **12** volts with the ignition SW at **ON** position or key off quarter window operation

: PARTS LOCATION

Code		See Page		Code		See Page		Code		See Page	
D16		36		J2	A	35		P5		35	
D17		36		J3	B	35		P8		37	
I13	A	35		J20		36		P9		37	

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1G	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1M		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3D		

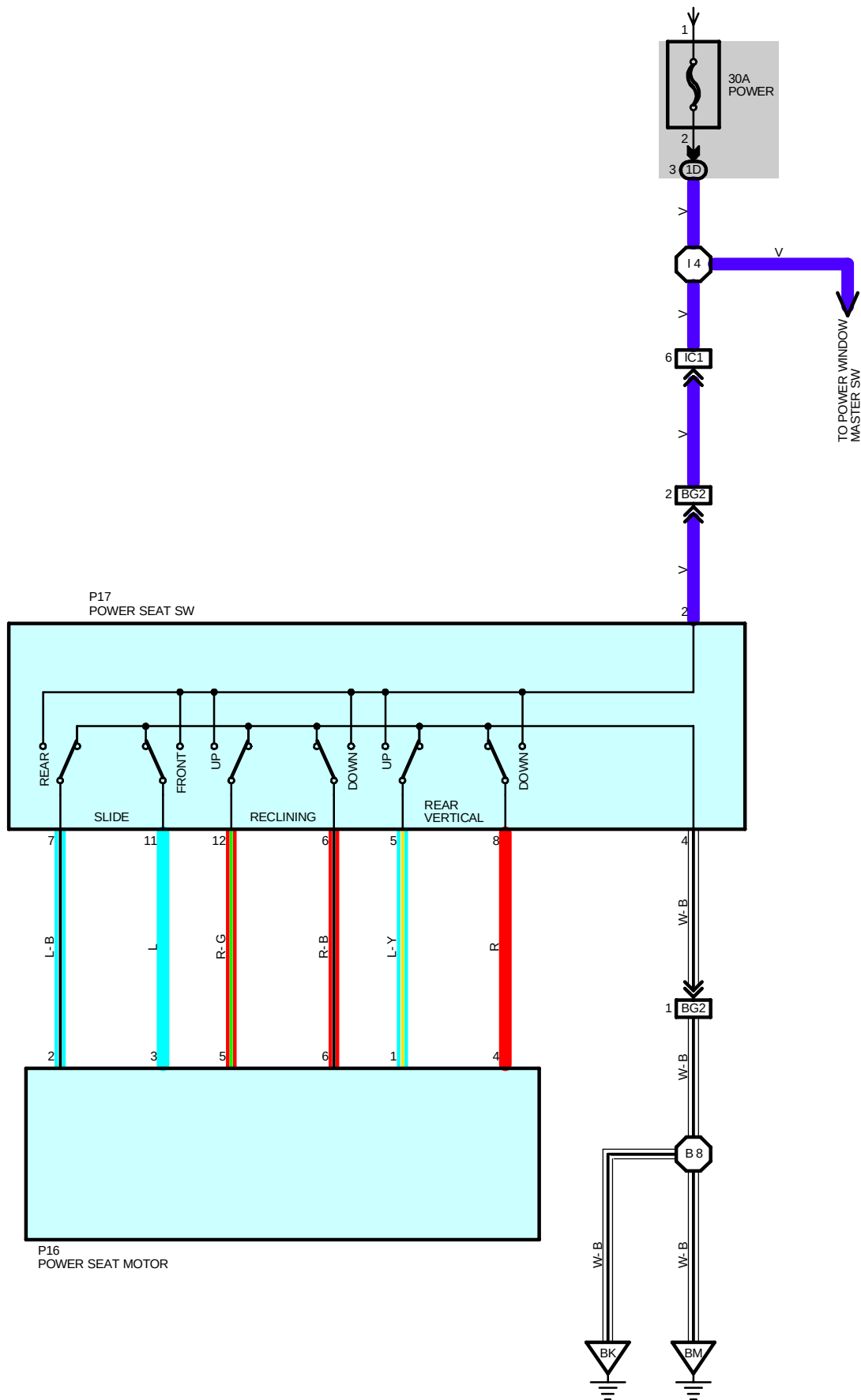
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IG2	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
BB2	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



SERVICE HINTS

P17 POWER SEAT SW

2-GROUND : Always approx. 12 volts

4-GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
P16	38	P17	38		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
BG2	48	Floor Wire and Seat Wire (Beneath the Driver Seat)

: GROUND POINTS

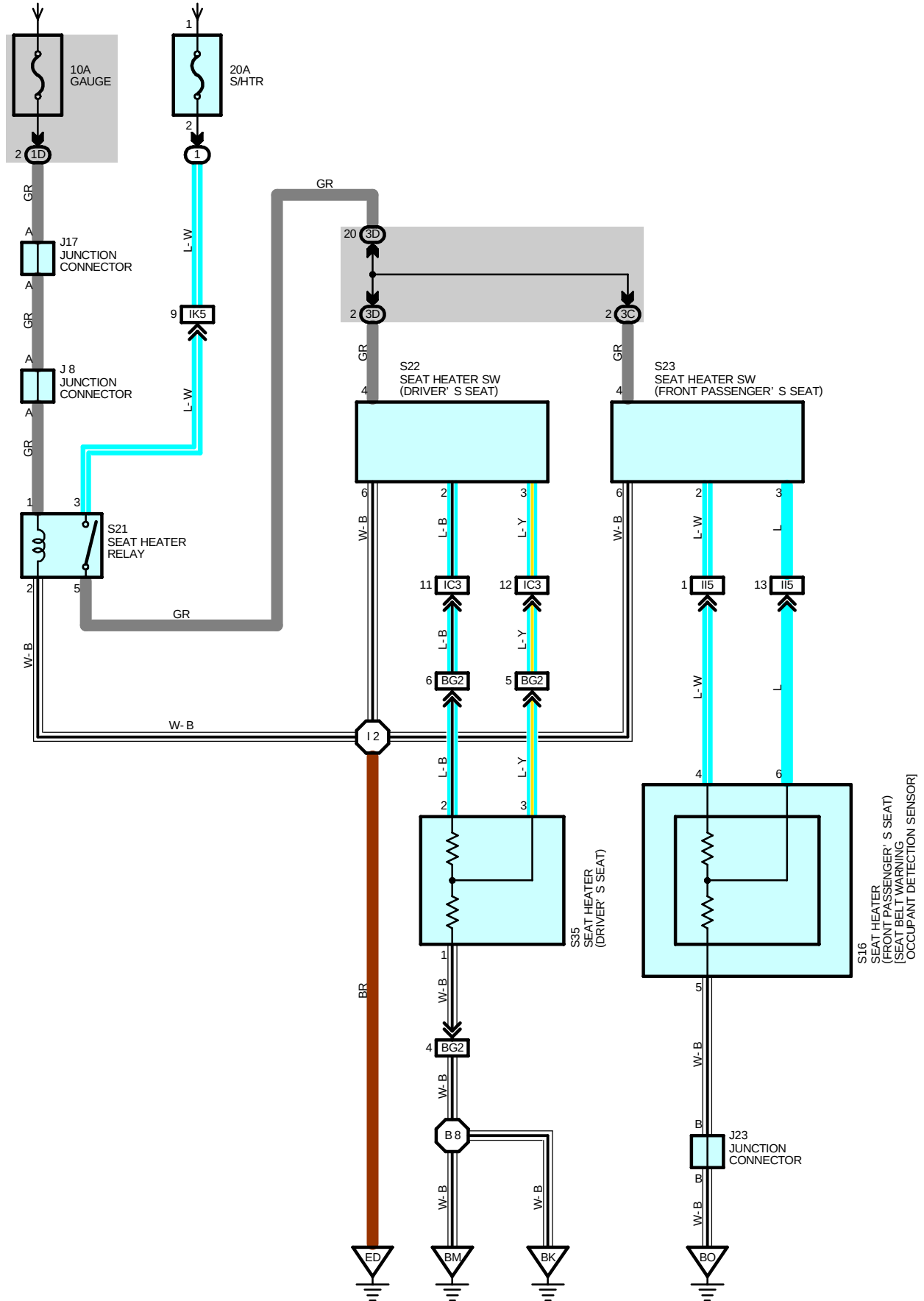
Code	See Page	Ground Points Location
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	44	Cowl Wire	B8	46	Floor Wire

SEAT HEATER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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SERVICE HINTS

S21 SEAT HEATER RELAY

3-5 : Closed with the ignition SW at **ON** or **ST** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J8	35	S16	38	S23	35
J17	35	S21	35	S35	38
J23	36	S22	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
II5	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BG2	48	Floor Wire and Seat Wire (Beneath the Driver Seat)

: GROUND POINTS

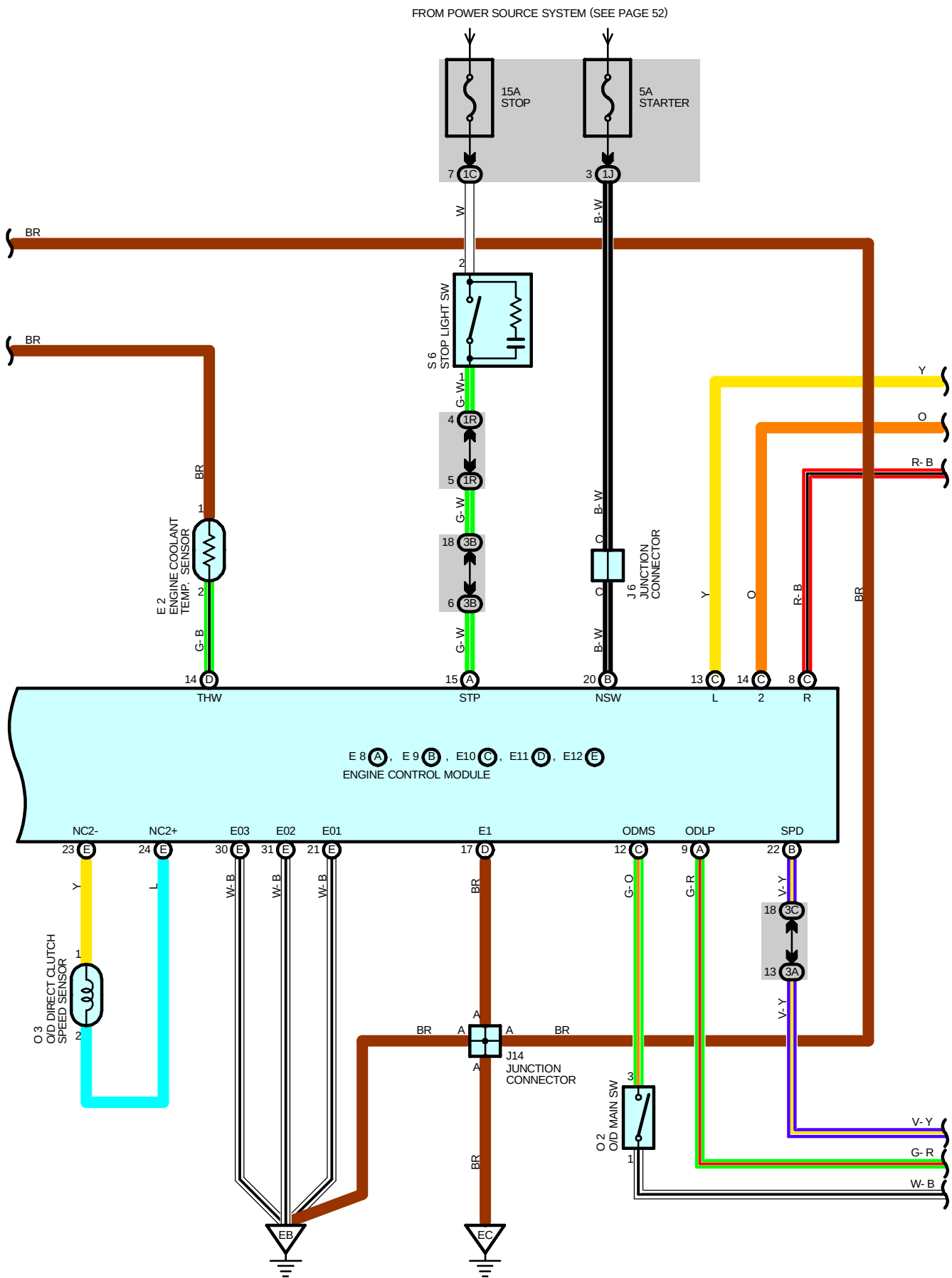
Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel
BO	46	Right Rear Quarter Panel

: SPLICE POINTS

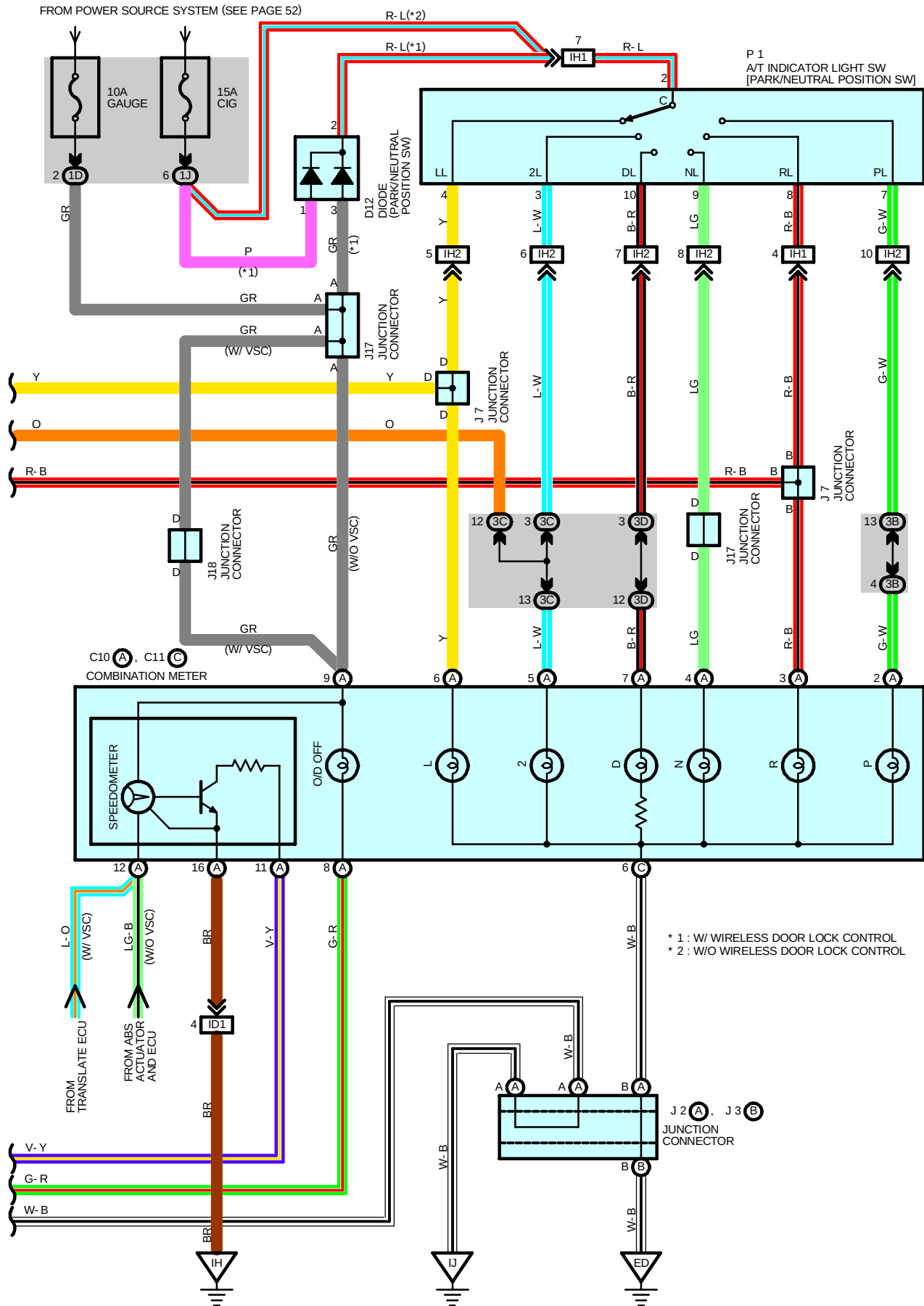
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	44	Cowl Wire	B8	46	Floor Wire

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ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR



SYSTEM OUTLINE

Previous automatic transaxle have selected each gear shift using the mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock-up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure and lock-up pressure etc., through the solenoid valve. Engine control module control of the solenoid valve based on the input signals from each sensor, makes smooth driving possible by shift selection for each gear which is most appropriate to the driving conditions at that time.

1. GEAR SHIFT OPERATION

During driving, the engine control module selects the shift for each gear which is most appropriate to the driving conditions, based on input signals from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and also the input signals to TERMINAL SPD of the engine control module from the speedometer. Current is then output to the electronically controlled transmission solenoid. When shifting to 1st speed, current flows from TERMINAL S1 of the engine control module to TERMINAL 3 of the electronically controlled transmission solenoid to GROUND, and continuity to the no. 1 solenoid causes the shift.

For the 2nd speed, current flows from TERMINAL S1 of the engine control module to TERMINAL 3 of the electronically controlled transmission solenoid to GROUND, and from TERMINAL S2 of the engine control module to TERMINAL 1 of the electronically controlled transmission solenoid to GROUND, and continuity to solenoids no. 1 and no. 2 causes the shift.

For the 3rd speed, there is no continuity to no. 1 solenoid, only to no. 2, causing the shift.

Shifting into 4th speed (Overdrive) takes place when there is no continuity to both no. 1 and no. 2 solenoid.

2. LOCK-UP OPERATION

When the engine control module judges from each signal that lock-up operation conditions have been met, current flows from TERMINAL SL of the engine control module to TERMINAL 2 of the electronically controlled transmission solenoid to GROUND, and continuity to the lock-up solenoid performs the lock-up operation.

3. STOP LIGHT SW CIRCUIT

If the brake pedal is depressed (Stop light SW on) when driving in lock-up condition, a signal is input to TERMINAL STP of the engine control module, the engine control module operates, and continuity to the lock-up solenoid is cut.

4. OVERDRIVE CIRCUIT

* O/D main SW on

When the O/D main SW is turned on, a signal is input into TERMINAL ODMS of the engine control module and engine control module operation causes gear shift when the conditions for overdrive are met.

* O/D main SW off

When the O/D main SW is turned off, a signal is input into TERMINAL ODMS of the engine control module, and turns on the O/D off indicator light. This activates the ECU, and the transmission system is controlled not to shift to overdrive.

SERVICE HINTS

E8 (A), E9 (B), E11 (D), E12 (E) ENGINE CONTROL MODULE

S1,S2-E1 : 9.0- 14.0 volts with the solenoid on

0- 1.5 volts with the solenoid off

L-E1 : 7.5- 14.0 volts with the shift lever at **L** position

2-E1 : 7.5- 14.0 volts with the shift lever at **2** position

R-E1 : 7.5- 14.0 volts with the shift lever at **R** position

STP-E1 : 7.5- 14.0 volts with the brake pedal depressed

THW-E2 : 0.2- 1.0 volts with the engine coolant temp. 80°C (176°F)

VTA1-E2 : 0.3- 0.8 volts with the throttle valve fully closed

3.2- 4.9 volts with the throttle valve fully opened

VC-E2 : 4.5- 5.5 volts

ODMS-E1 : 9.0- 14.0 volts with the O/D main SW turned off

0- 3.0 volts with the O/D main SW turned on

+B-E1 : 9.0- 14.0 volts

OD1-E1 : 9.0- 14.0 volts

ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C10	A	34	E9	B	34
C11	C	34	E10	C	34
C15		34	E11	D	34
D1		32	E12	E	34
D3		34	J2	A	35
D12		34	J3	B	35
E1		32	J6		35
E2		32	J7		35
E8	A	34	J12		35
				J13	35
				J14	35
				J17	35
				J18	35
				O2	35
				O3	33
				P1	33
				S6	35
				T2	33

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1D		
1J		
1R		
2F	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

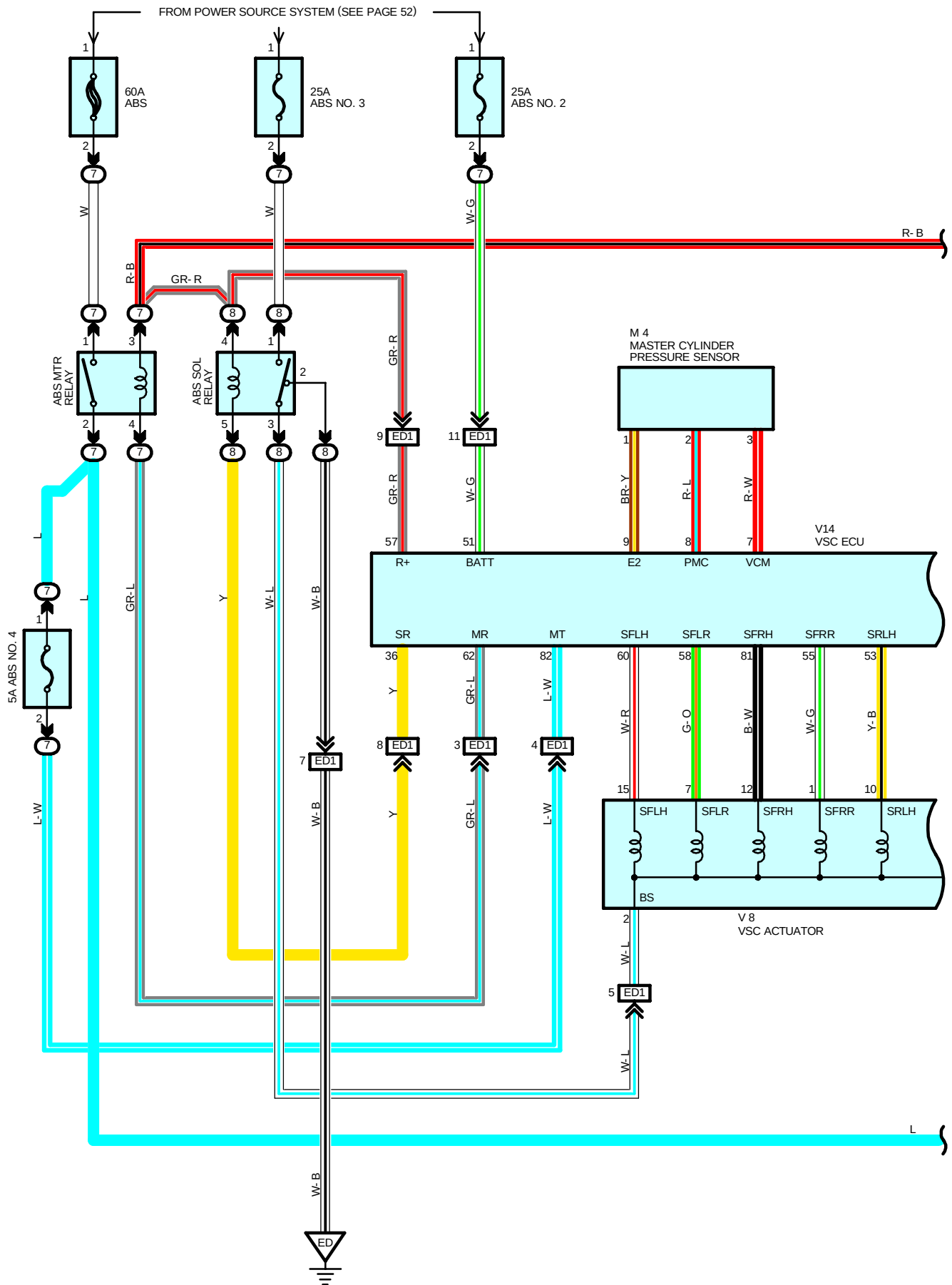
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		

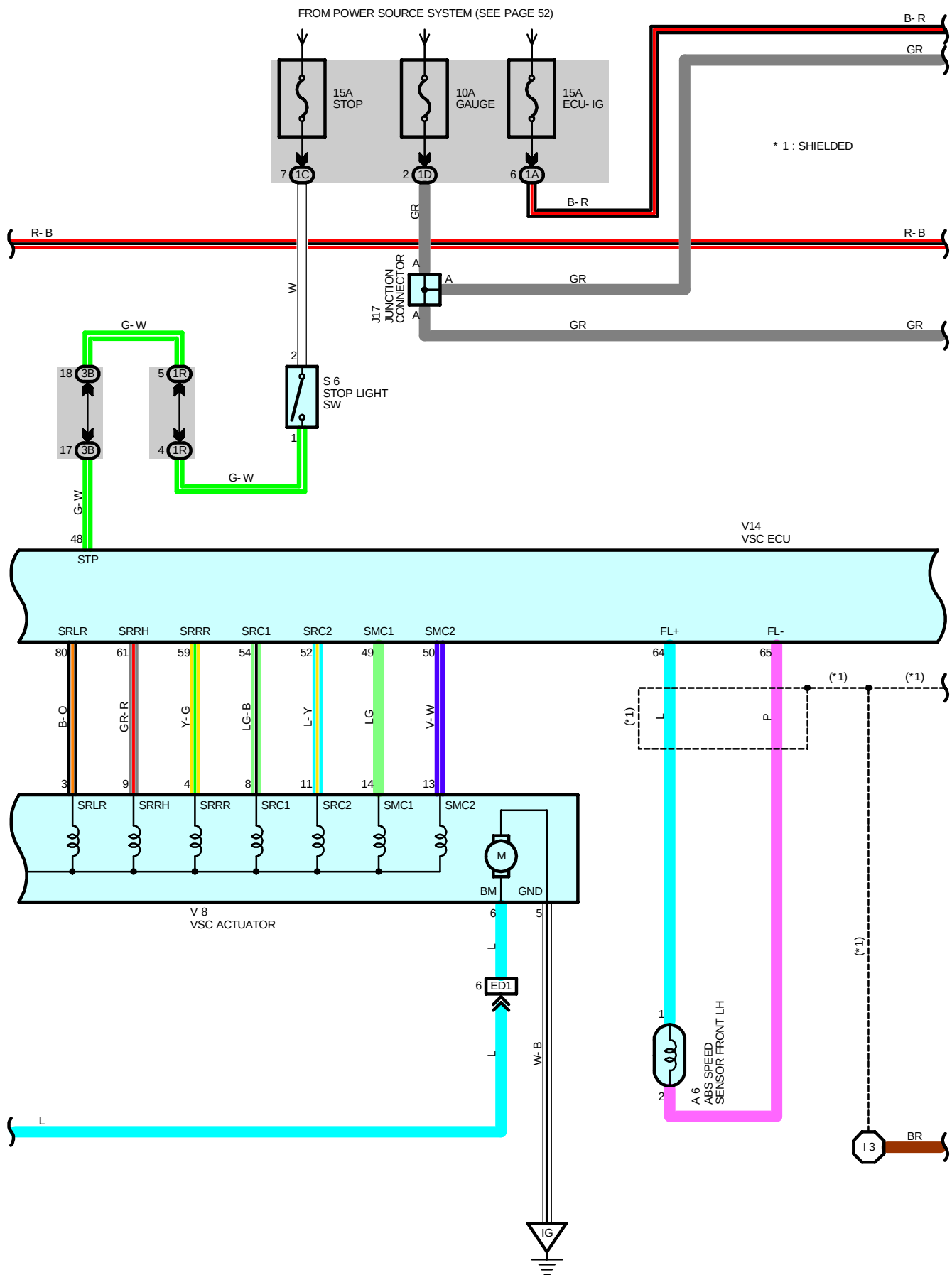
: GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EB	40	Right Side of the Surge Tank
EC	40	Rear Side of the Surge Tank
ED	40	Near the Left Front Suspension Support
IH	42	Right Instrument Panel Brace
IJ	42	Right Cowl Side Panel

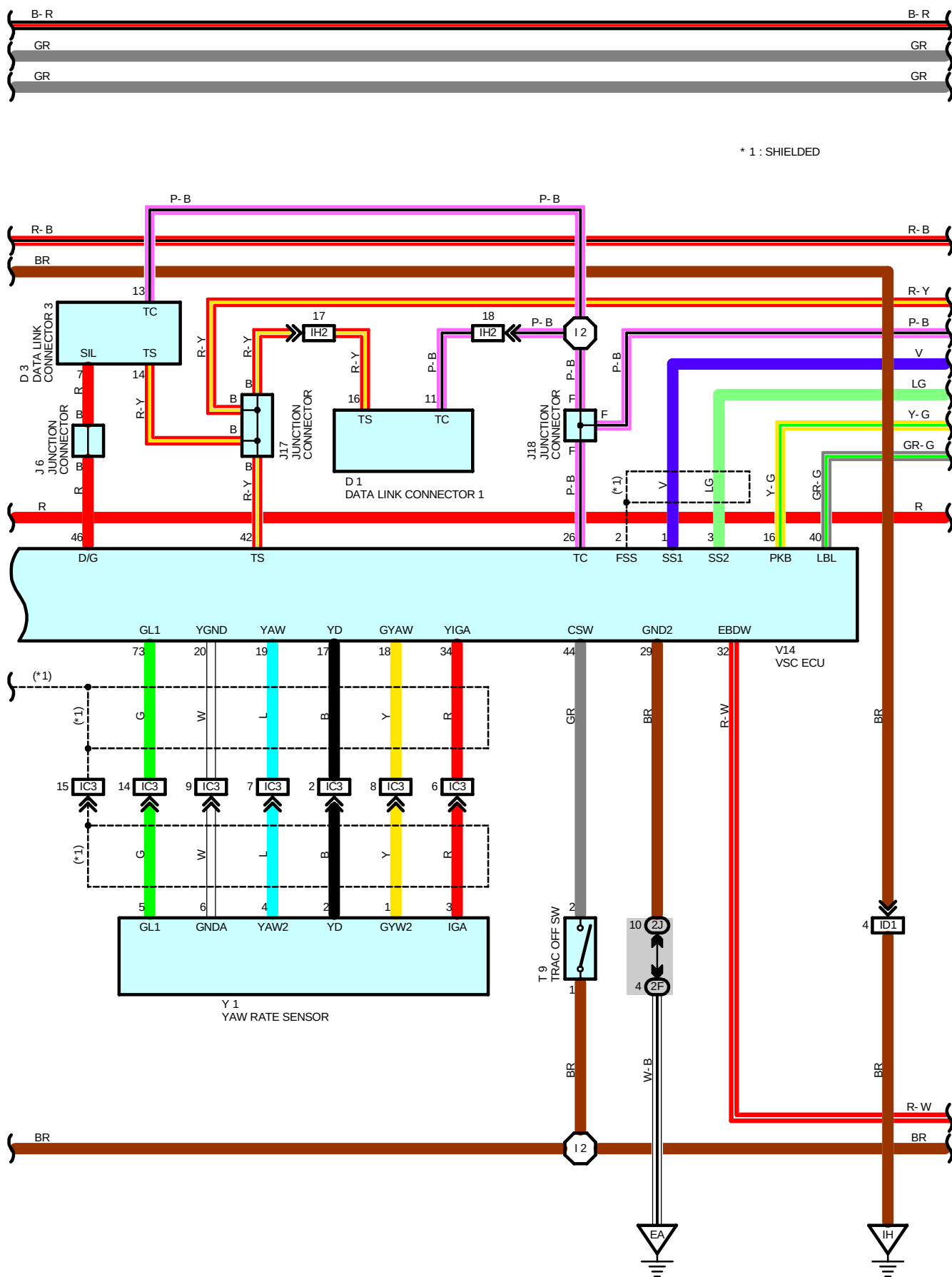
: SPLICE POINTS

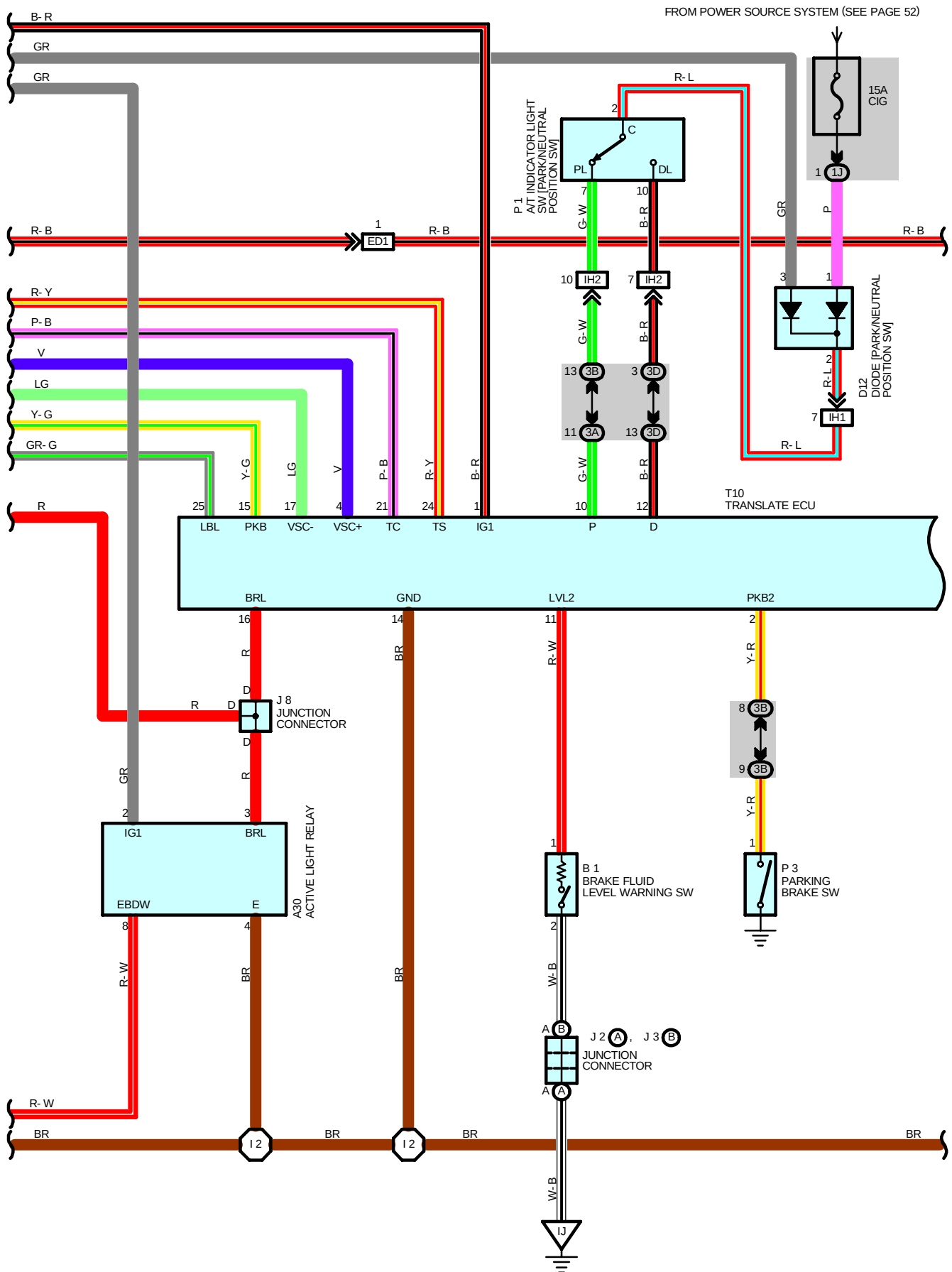
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	40	Engine Wire	I2	44	Cowl Wire





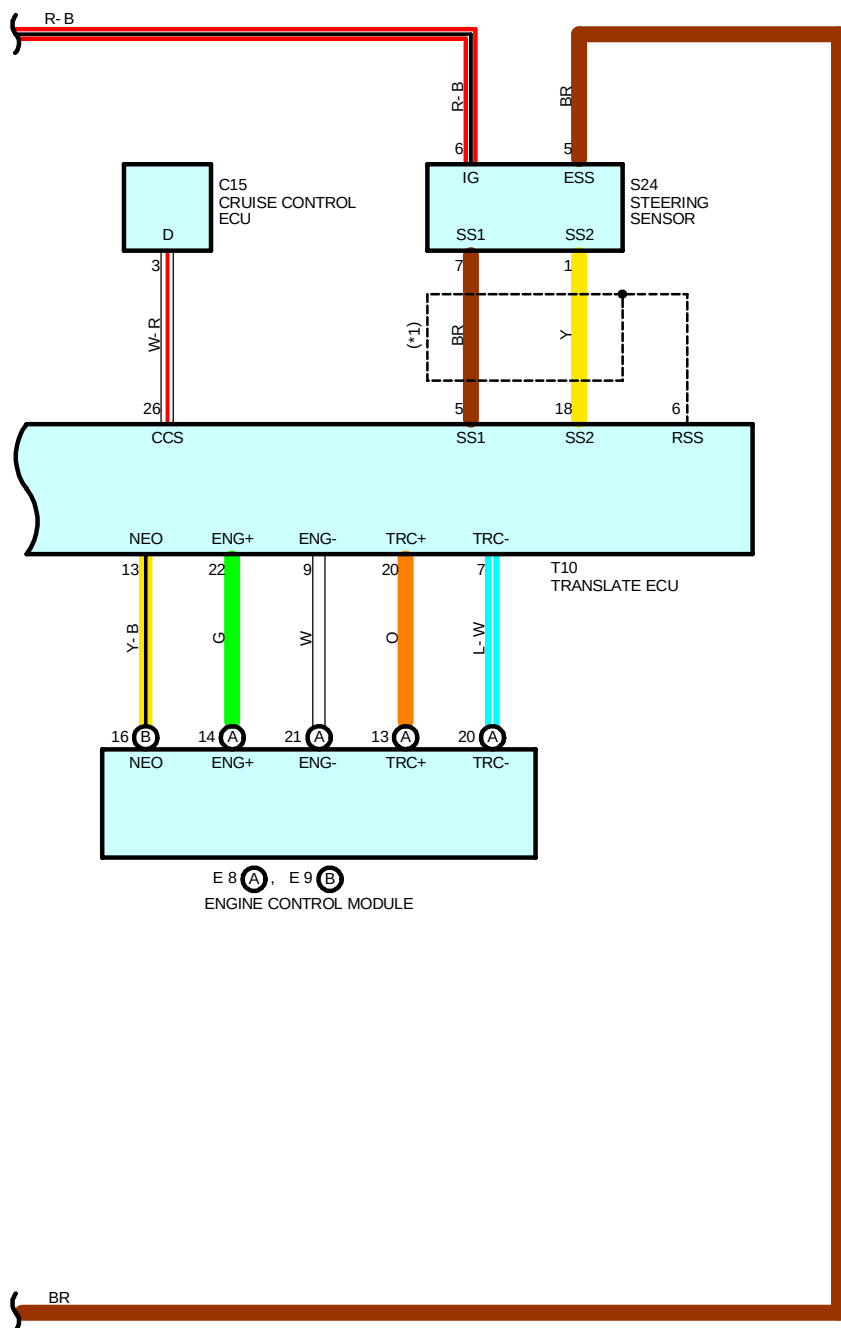






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* 1 : SHIELDED



SYSTEM OUTLINE

The vehicle could be in an extreme over steering or under steering tendency due to unexpected accidents, road conditions, vehicle speed, or by other external factors. In such a case, this system automatically controls the engine output and the braking to each wheel, to decrease the extreme over steering and under steering.

* To decrease extreme over steering tendency

When the system determines that the over steering tendency is large, the system applies brakes to the outer wheels according to the degree of over steering, and creates a moment towards the outer side of the vehicle, to decrease the tendency of over steering. Also, when the brakes are applied, the vehicle speed decreases while the stability increases.

* To decrease extreme under steering tendency

When the system determines that the under steering tendency is large, the system applies brakes to the front or rear wheels according to the degree of under steering, to decrease the tendency of under steering.

* TRAC OFF SW

The SW to send the VSC system into OFF mode. When the SW is pushed after starting the engine, the system will be in OFF mode, and the TRAC OFF indicator light will turn on. When the SW is pushed again, the system will be in standby mode. When the engine is stopped and re-started, regardless of the TRAC OFF SW, the system will be in standby mode.

Information to the driver

The VSC system informs the driver when the tire grip is about to exceed its grip capacity, by blinking the slip indicator light and turning on the buzzer. Accordingly, the driver is informed to drive more gently.

SERVICE HINTS

V14 VSC ECU

51-GROUND : Always approx. **12** volts

56-GROUND : Approx. **12** volts with the ignition SW at **ON** position

83, 29-GROUND : Always continuity

T10 TRANSLATE ECU

1-GROUND : Approx. **12** volts with the ignition SW at **ON** position

14-GROUND : Always continuity

A6, A7 ABS SPEED SENSOR FRONT LH, RH

1-2 : **1.5 - 1.7** k Ω (20°C, 68°F)

A17, A18 ABS SPEED SENSOR REAR LH, RH

1-2 : **1.5 - 1.7** k Ω (20°C, 68°F)

S6 STOP LIGHT SW

2-1 : Closed with brake pedal depressed

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A6	32	D3	34	P1	33
A7	32	D12	34	P3	35
A17	36	E8	A 34	S6	35
A18	36	E9	B 34	S24	35
A30	34	J2	A 35	T9	35
B1	32	J3	B 35	T10	34
C9	B 34	J6	35	V8	33
C10	A 34	J8	35	V13	35
C11	C 34	J17	35	V14	35
C15	34	J18	35	Y1	37
D1	32	M4	33		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
7	29	R/B No.7 (Engine Compartment Left)
8	30	R/B No.8 (Engine Compartment Right)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1D		
1J		
1R		
2F	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3D		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

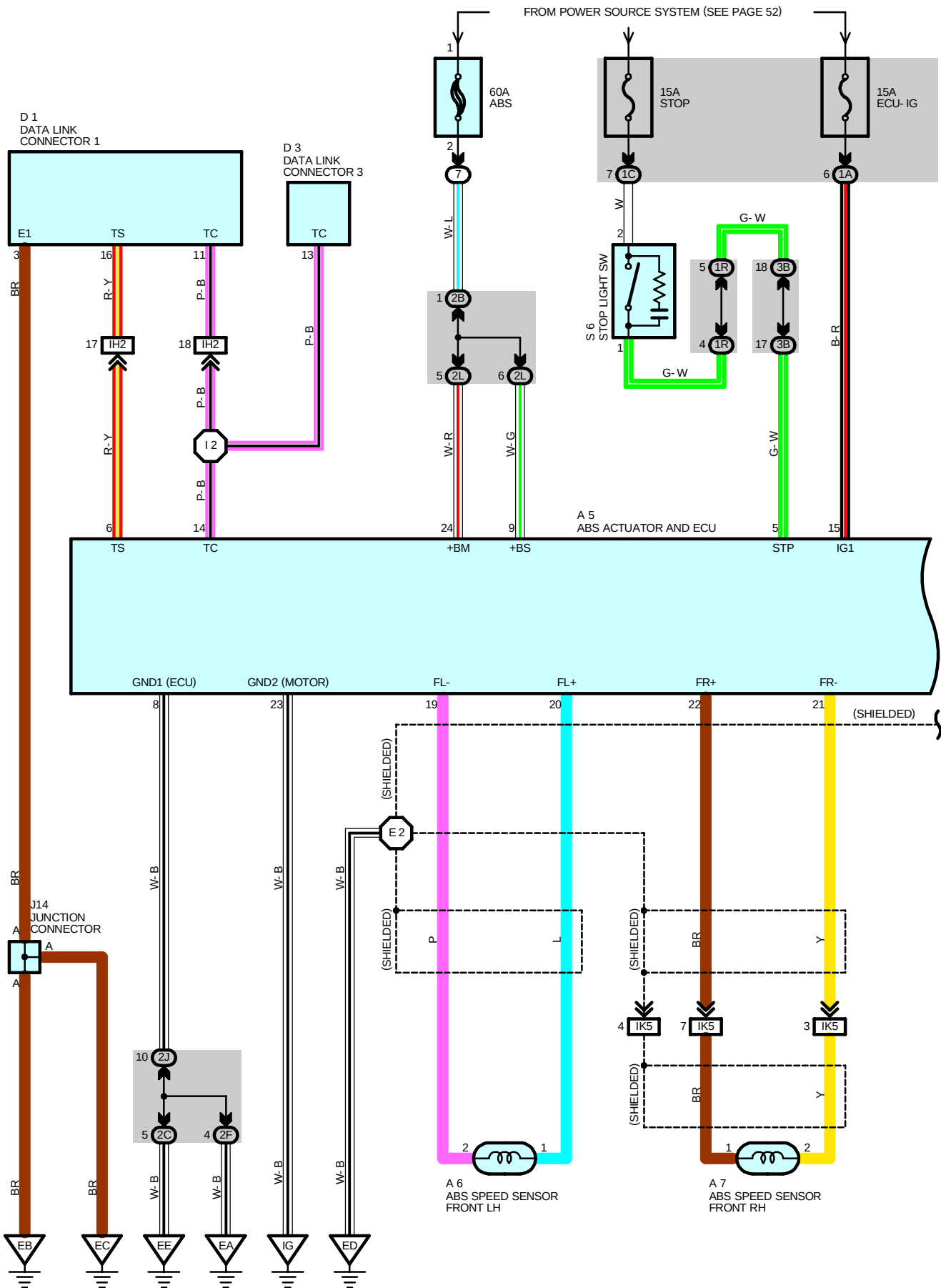
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ED1	40	Cowl Wire and Engine Room Main Wire (Behind Headlight LH)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC3		
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BA2	46	Gauge Wire and Floor Wire (On the Left Rear Wheel House)

 : GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
ED	40	Near the Left Front Suspension Support
IG	42	Left Cowl Side Panel
IH	42	Right Instrument Panel Brace
IJ	42	Right Cowl Side Panel

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	44	Cowl Wire	B6	46	Floor Wire
I3					



SYSTEM OUTLINE

ABS system controls the respective brake fluid pressures acting on the disc brake cylinders of the right front wheel, left front wheel and rear wheels when the brakes are applied in a panic stop, so that the wheels do not lock. This results in improved directional stability and steerability during panic braking.

Tire pressure warning system turns on the tire pressure warning light and warns the driver of low tire pressure, when driving with a low tire pressure, which may cause trouble driving.

However, this system can detect the low tire pressure condition only if one of the tires has such a condition in particular compared to other tires, and it cannot detect. Therefore, it can not detect natural (Gradual) air loss occurring to the tires.

1. INPUT SIGNALS

(1) Speed sensor signal

The speed of the wheels is detected and input to TERMINALS FL+, FR+, RL+ and RR+ of the ABS actuator and ECU.

(2) Stop light SW signal

A signal is input to TERMINAL STP of the ABS actuator and ECU when the brake pedal is operated.

(3) Standardization SW Signal

A signal is input to TERMINAL INIT of the ABS actuator and ECU when the tire pressure warning standardization SW is operated.

(4) Parking position signal

A signal is input to TERMINAL P of the ABS actuator and ECU when the Shift lever at "P" position.

(5) Neutral position signal

A signal is input to TERMINAL N of the ABS actuator and ECU when the Shift lever at "N" position.

2. ABS SYSTEM OPERATION

During sudden braking the ABS actuator and ECU has signals input from each sensor, which controls the current to the solenoid inside the actuator and lets the hydraulic pressure acting on each wheel cylinder escape to the reservoir. The pump inside the actuator is also operating at this time, and it returns the brake fluid from the reservoir to the master cylinder, thus preventing locking of the vehicle wheels.

If the ABS actuator and ECU judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current on the solenoid is controlled and the hydraulic pressure is increased. Holding of the hydraulic pressure is also controlled by the ABS actuator and ECU, by the same method as above. Pressure reduction, holding and increase are repeated to maintain vehicle stability and to improve steerability during sudden braking.

3. OPERATION OF TIRE PRESSURE WARNING SYSTEM

In accordance with the reduction of tire pressure, tire diameter becomes small and the tire rotation speed becomes greater.

In the relation between the difference of the vehicle speed of normal wheels and the low pressure wheel and the tire pressure, based on the speed signal detected during driving, it detects the change of the tire pressure.

As a result, if the system judges that the tire pressure has reduced, it turns on the tire pressure warning light and warn the driver using the signal from the ABS actuator and ECU.

SERVICE HINTS

A6, A7 ABS SPEED SENSOR FRONT LH, RH

2-1 : Approx. 1.6 kΩ

A17, A18 ABS SPEED SENSOR REAR LH, RH

2-1 : Approx. 1.1 kΩ

A5 ABS ACTUATOR AND ECU

(Disconnect the ABS actuator and ECU connectors)

14-GROUND : Approx. 12 volts with the ignition SW at **ON** position and the data link connector 1
TC-E1 not connected

6-GROUND : Approx. 12 volts with the ignition SW at **ON** position and the data link connector 1
TS-E1 not connected

8,23-GROUND : Always continuity

15-GROUND : Approx. 12 volts with the ignition SW at **ON** position

5-GROUND : Approx. 12 volts with the brake pedal depressed

9,24-GROUND : Always approx. 12 volts

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A5	32	C11	C	J14	35
A6	32	D1	32	J17	35
A7	32	D3	34	P1	33
A17	36	D12	34	S6	35
A18	36	J2	A	T6	35
C10	A	J3	B		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
7	29	R/B No.7 (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1C		
1D		
1J		
1M		
1R	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2B		
2C		
2F	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2J		
2L	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3A		
3B		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
IK5	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BA2	46	Gauge Wire and Floor Wire (On the Left Rear Wheel House)

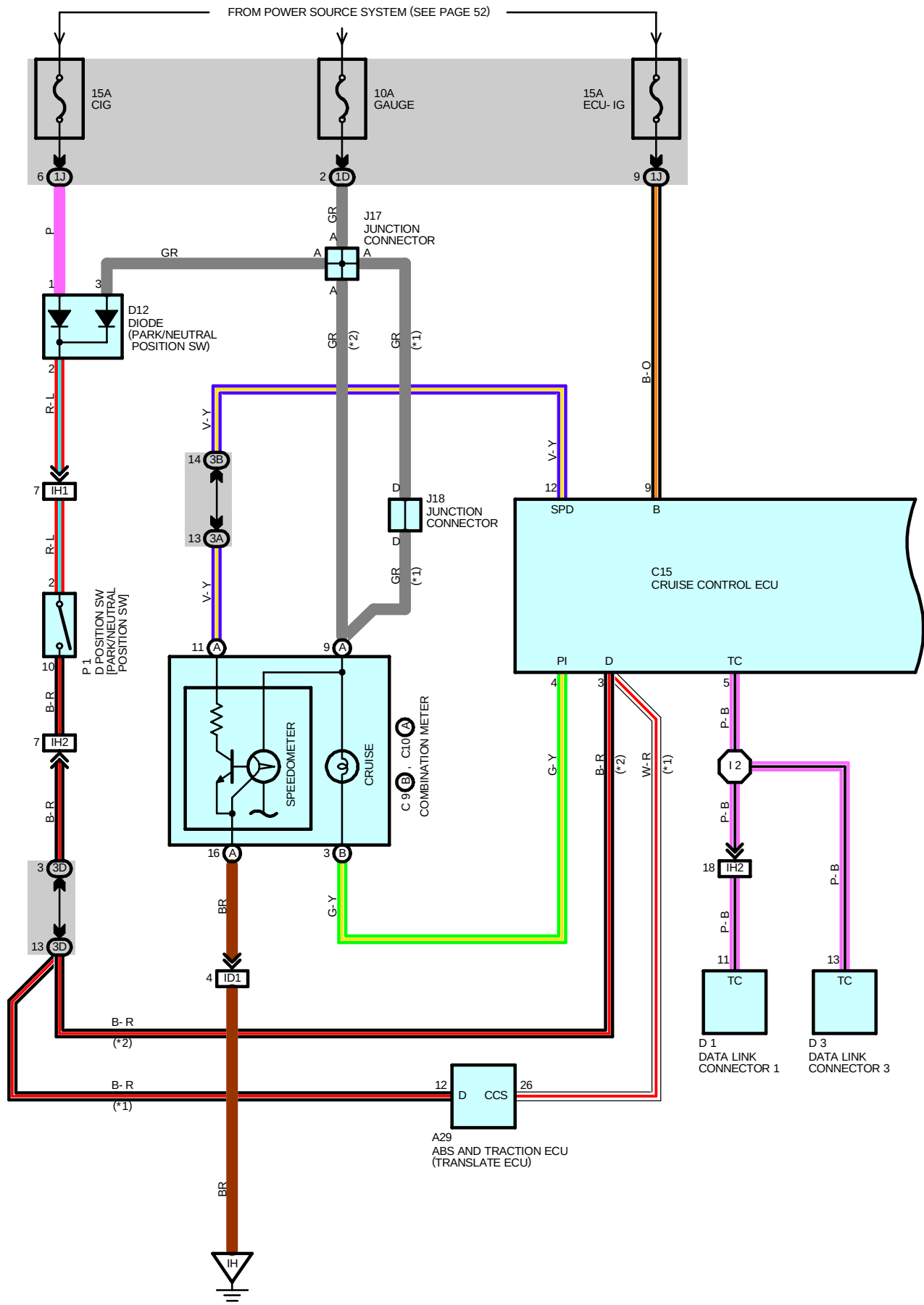
: GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EB	40	Right Side of the Surge Tank
EC	40	Rear Side of the Surge Tank
ED	40	Near the Left Front Suspension Support
EE	40	Front Side of the Left Fender Apron
IG	42	Left Cowl Side Panel
IH	42	Right Instrument Panel Brace
IJ	42	Right Cowl Side Panel

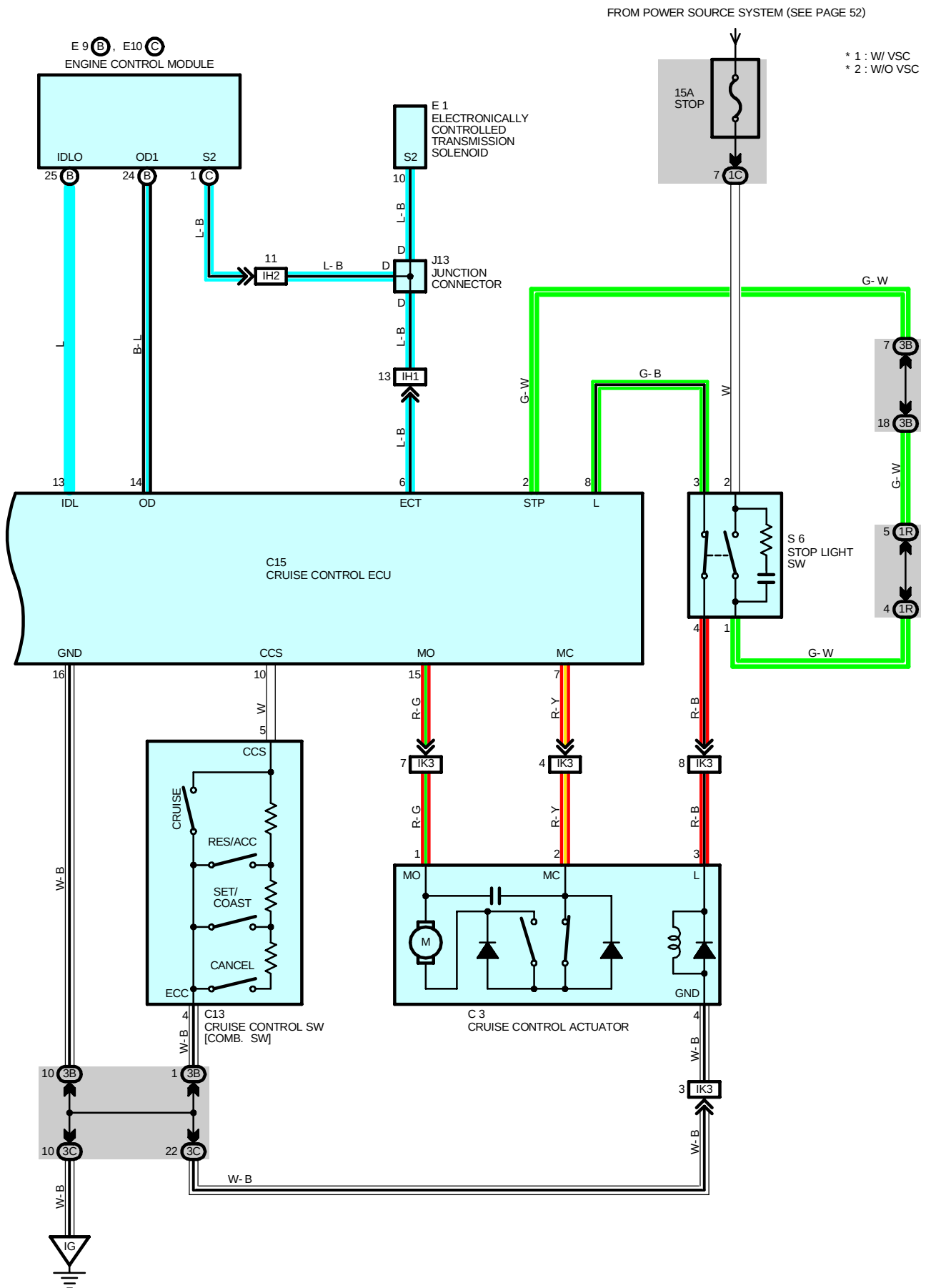
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	40	Cowl Wire	B6	46	Floor Wire
I2	44				

CRUISE CONTROL



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SYSTEM OUTLINE

Current is applied at all times through the STOP fuse to TERMINAL 2 of the stop light SW.

With the ignition SW turned on, current flows through the GAUGE fuse to TERMINAL (A) 9 of the cruise control indicator light and the current through the ECU-IG fuse flows to TERMINAL 9 of the cruise control ECU.

When the ignition SW is on and the cruise SW is turned on, a signal is input from TERMINAL 5 of the cruise control SW to TERMINAL 10 of the cruise control ECU. As a result, the cruise control ECU functions and the current flows from the ECU-IG fuse to TERMINAL 9 of the cruise control ECU to TERMINAL 16 to GROUND, and the cruise control system is ready for operation.

At the same time, the current through the GAUGE fuse flows to TERMINAL (A) 9 of the cruise control indicator light to TERMINAL (B) 3 to TERMINAL 4 of the cruise control ECU to TERMINAL 16 to GROUND, which lights up the cruise control indicator light, indicating that the cruise control is ready for operation.

1. SET OPERATION

When the cruise SW is turned on and the set SW is pushed with the vehicle speed within the set limit (Approx. 40 km/h, 25 mph to 200 km/h, 124 mph), a signal is input to TERMINAL 10 of the cruise control ECU, and the vehicle speed when the set SW is released is memorized in the ECU as the set speed.

2. SET SPEED CONTROL

During cruise control driving, the ECU compares the set speed memorized in the ECU with the actual vehicle speed input into TERMINAL 12 of the cruise control ECU from the speed sensor, and controls the cruise control actuator to maintain the set speed.

When the actual speed is lower than the set speed, the ECU causes the current to the cruise control actuator to flow from TERMINAL 15 of the cruise control ECU to TERMINAL 1 of the cruise control actuator to TERMINAL 2 to TERMINAL 7 of the cruise control ECU. As a result, the motor in the cruise control actuator is rotated to open the throttle valve and pull the throttle cable to increase the vehicle speed.

When the actual vehicle speed is higher than the set speed, the current to the cruise control actuator flows from TERMINAL 7 of the ECU to TERMINAL 2 of the cruise control actuator to TERMINAL 1 to TERMINAL 15 of the cruise control ECU.

This causes the motor in the cruise control actuator to rotate and close the throttle valve to return the throttle cable, thus decrease the vehicle speed.

3. COAST CONTROL

During the cruise control driving, while the coast SW is turned on, the cruise control actuator returns the throttle cable to close the throttle valve and decrease the driving speed. The vehicle speed when the coast SW is turned off is memorized, and the vehicle continues at the new set speed.

4. ACCEL CONTROL

During cruise control driving, while the accel SW is turned on, the cruise control actuator pulls the throttle cable to open the throttle valve and increase the driving speed.

The vehicle speed when the accel SW is turned off is memorized, and the vehicle continues at the new set speed.

5. RESUME CONTROL

Unless the vehicle speed falls below the minimum speed limit (Approx. 40 km/h, 25 mph) after canceling the set speed by the cancel SW, pushing the resume SW will resume the speed which was set before cancellation.

6. MANUAL CANCEL MECHANISM

If any of the following operations occurs during cruise control operation, the magnetic clutch of the actuator turns off and the motor rotates to close the throttle valve and the cruise control is released.

- * Placing the shift lever to a position except "D" position (Park/Neutral position SW except "D" position). "Signal is not input to TERMINAL 3 of the ECU".
- * Depressing the brake pedal (Stop light SW on). "Signal input to TERMINAL 2 of the ECU".
- * Pushing the cancel switch (Cancel SW on). "Signal input to TERMINAL 10 of the ECU".
- * Pushing the cruise SW (Cruise SW off).

7. TAP-UP CONTROL FUNCTION

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be increased 1.5 km/h (0.9 mph) each time by operation the RES/ACC SW quickly, within approx. 0.5 seconds.

8. TAP-DOWN CONTROL FUNCTION

When the difference between the actual vehicle speed and the set speed is less than 5 km/h (3 mph), the set speed can be lowered 1.5 km/h (0.9 mph) each time by operating the SET/COAST SW quickly, within approx. 0.6 seconds.

9. AUTO CANCEL FUNCTION

A) If any of the following conditions are detected, the set vehicle speed memory is erased, and the cruise control is released. In addition, the power indicator will blink until the cruise SW is turned on again, and the cruise SW will not accept further operations unless the ignition SW is turned on again.

- * When current continues to flow to the motor inside the actuator, in the throttle valve "OPEN" direction.
- * The motor does not operate despite the motor drive signal being output.

B) If any of the following conditions are detected, the set vehicle speed memory is erased, and the cruise control is released. In addition, the power indicator will blink until the cruise SW is turned on again, and the system can not be operated until the cruise SW is turned on again.

- * Over current to transistor driving the motor or the magnetic clutch.
- * Open circuit in the magnetic clutch.
- * Momentary interruption of vehicle speed signal.

C) If any of the following conditions are detected, the set vehicle speed memory is erased, and the cruise control is released. (Reset is accepted)

- * When the vehicle speed falls below the minimum speed limit, approx. 40 km/h (25 mph)
- * When the vehicle speed becomes - 16 km/h slower than the set speed.

10. AUTOMATIC TRANSAXLE CONTROL FUNCTION

- * In overdrive, if the vehicle speed becomes lower than the overdrive cut speed (Set speed minus approx. 4 km/h, 2.5 mph) during cruise control operation, such as driving up a hill, the overdrive is released and the power is increased to prevent reduction in the vehicle speed.
- * After releasing the overdrive, if the vehicle speed becomes higher than the overdrive return speed (Set speed minus approx. 2 km/h, 1.2 mph), and the ECU judges by the signals from the actuator's potentiometer that the upward slope has finished, the overdrive is resumed after.
- * During cruise control driving, the cruise control operation signal is output from the cruise control ECU to the engine control module. Upon receiving this signal, the engine control module changes the shift pattern to normal. To maintain smooth cruise control operation (on a downward slope etc.), the lock-up release of the transaxle when the idling point of the throttle position is "ON" is forbidden.

SERVICE HINTS

C3 CRUISE CONTROL ACTUATOR

3-4 : Approx. 38.5 Ω

C13 CRUISE CONTROL SW [COMB. SW]

5-4 : Continuity with the CRUISE SW on
 5-4 : Approx. 1540 Ω with the CANCEL SW on
 Approx. 240 Ω with the RES/ACC SW on
 Approx. 630 Ω with the SET/COAST SW on

C15 CRUISE CONTROL ECU

9-GROUND : Approx. 12 volts with the ignition SW at ON position
 12-GROUND : 4 pulses with 1 rotation of rotor shaft
 10-GROUND : Approx. 1540 Ω with the CANCEL SW on in the control SW
 Approx. 630 Ω with the SET/COAST SW on in the control SW
 Approx. 240 Ω with the RES/ACC SW on in the control SW
 16-GROUND : Always continuity

CRUISE CONTROL

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A29	34	D1	32	J13	35
C3	32	D3	34	J17	35
C9	34	D12	34	J18	35
C10	34	E1	32	P1	33
C13	34	E9	34	S6	35
C15	34	E10	34		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1D		
1J		
1R		
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

: GROUND POINTS

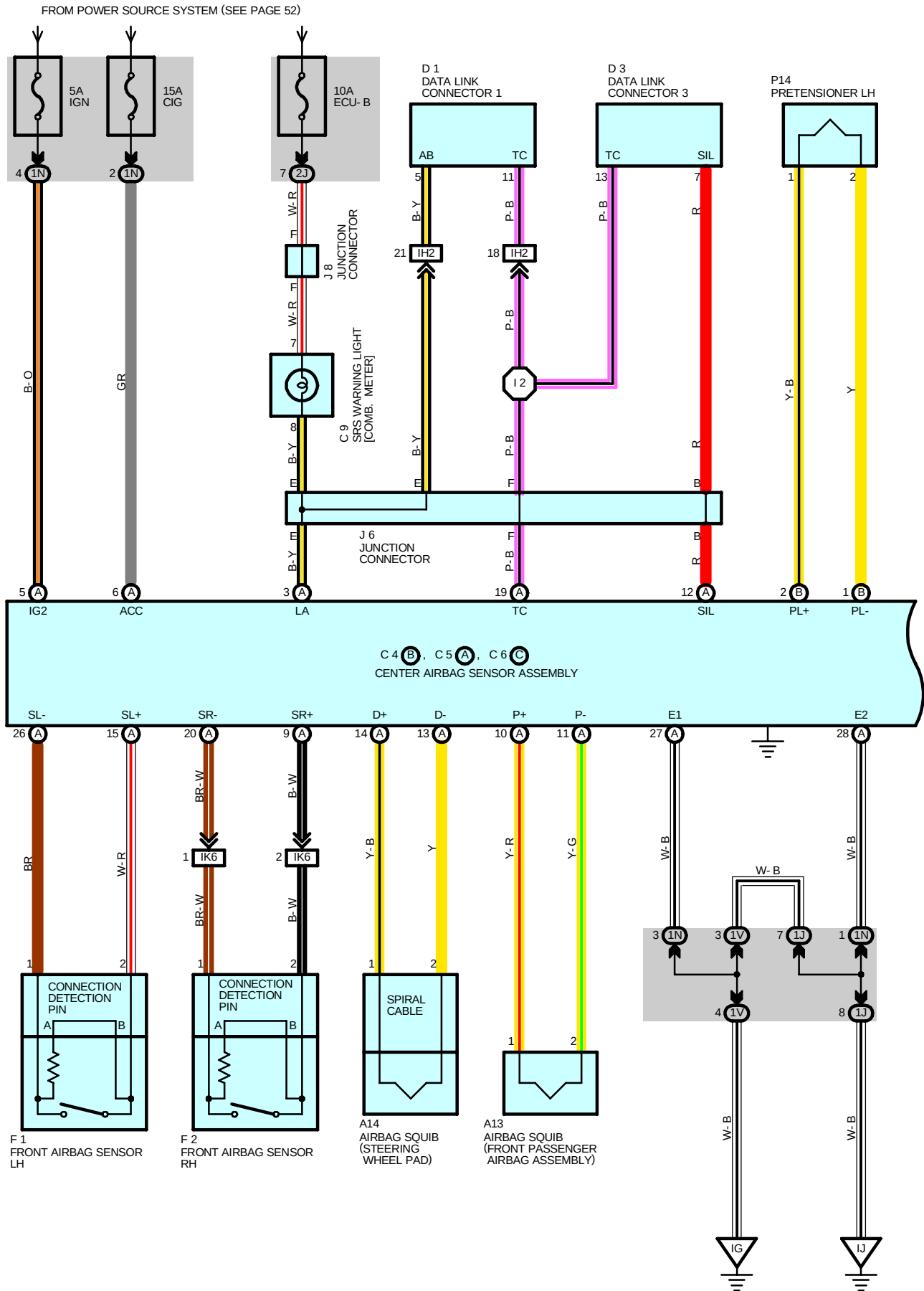
Code	See Page	Ground Points Location
IG	42	Left Cowl Side Panel
IH	42	Right Instrument Panel Brace

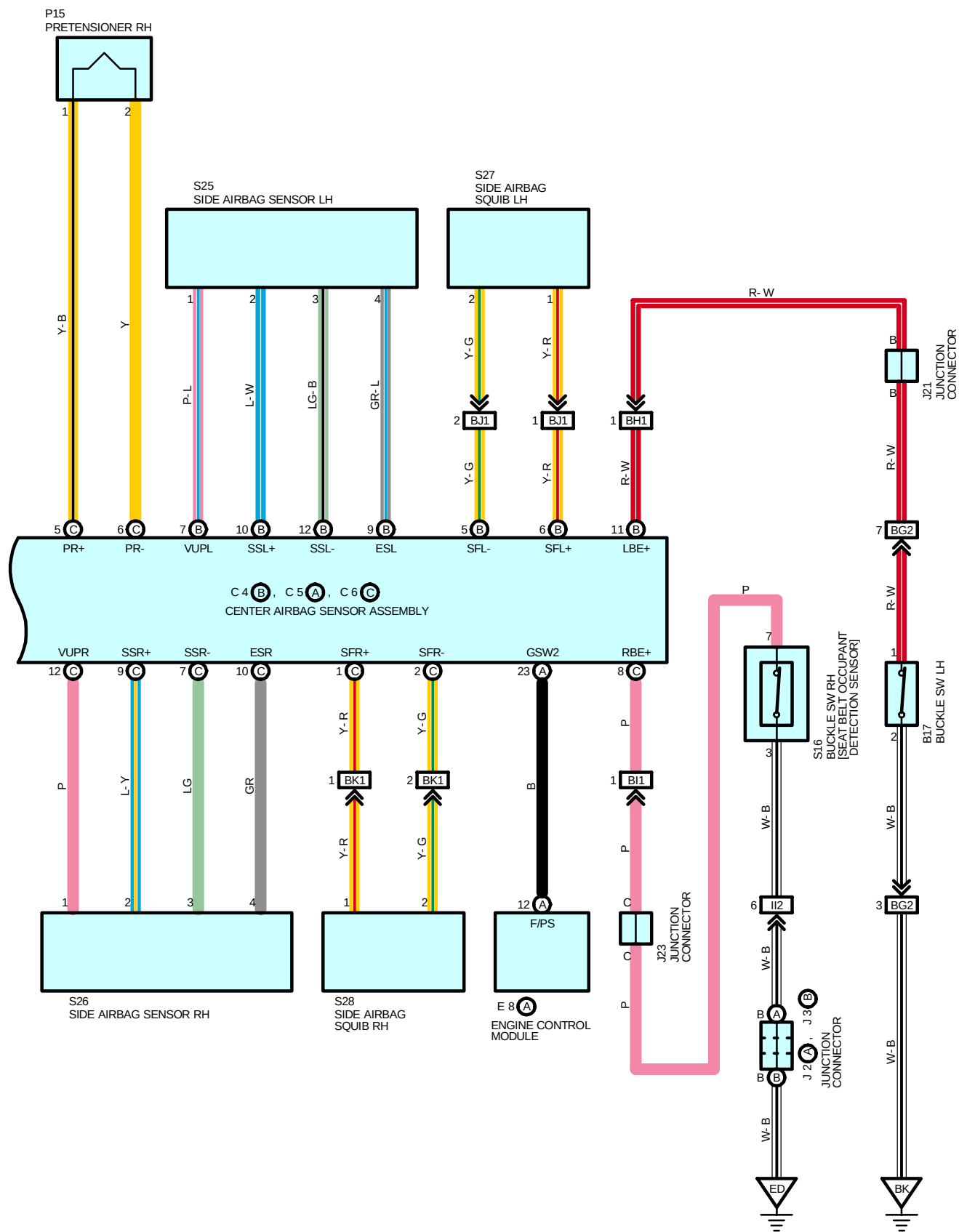
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	44	Cowl Wire			

NOTICE: When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual for the applicable model year.

- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started after 90 seconds from when the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.**
(The SRS is equipped with a back-up power source so that if work is started within 90 seconds from disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed.)
- When the negative (-) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. To avoid erasing the memory in each memory system, never use a back-up power supply from outside the vehicle.
- Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.
- Do not expose the steering wheel pad, front passenger airbag assembly, side airbag assembly seat belt pretensioner, center airbag sensor assembly, front airbag sensor or side airbag sensor directly to hot air or flames.
- Even in cases of a minor collision where the SRS does not deploy, the steering wheel pad, front passenger airbag assembly, side airbag assembly, seat belt pretensioner, center airbag sensor assembly, front airbag sensor and side airbag sensor should be inspected.
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, side airbag assembly, seat belt pretensioner, center airbag sensor assembly, front airbag sensor or side airbag sensor in order to reuse it.
- If the steering wheel pad, front passenger airbag assembly, side airbag assembly, seat belt pretensioner, center airbag sensor assembly, front airbag sensor or side airbag sensor has been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace them with new ones.
- Use a volt/ohmmeter with high impedance (10 k Ω /V minimum) for troubleshooting the system's electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- After work on the SRS is completed, perform the SRS warning light check.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.





SYSTEM OUTLINE

The SRS is a driver and front passenger protection device which has a supplemental role to the seat belts.

When the ignition SW is turned to ACC or ON, current from the CIG fuse flows to TERMINAL (A) 6 of the center airbag sensor assembly. Only when the ignition SW is on does the current flow from the IGN fuse to TERMINAL (A) 5 of the center airbag sensor assembly.

If an accident occurs while driving, when the frontal impact exceeds a set level, current from the CIG or IGN fuse flows to TERMINALS (A) 14, (A) 10, (B) 2 and (C) 5 of the center airbag sensor assembly to TERMINALS 1 of the airbag squibs and the pretensioners to TERMINALS 2 to TERMINALS (A) 13, (A) 11, (B) 1 and (C) 6 of the center airbag sensor assembly to TERMINAL (A) 27, (A) 28 or BODY GROUND to GROUND, so that current flows to the front airbag squibs and the pretensioners and causes them to operate.

When the side impact also exceeds a set level, current from the CIG or IGN fuse flows to TERMINALS (B) 5, (C) 2, (B) 2 and (C) 5 of the center airbag sensor assembly to TERMINALS 1 of the side airbag squibs and the pretensioners to TERMINALS 2 to TERMINALS (B) 6, (C) 1, (B) 1 and (C) 6 of the center airbag sensor assembly to TERMINAL (A) 27, (A) 28 or BODY GROUND to GROUND, causing side airbag squibs and the pretensioners to operate.

The airbag stored inside the steering wheel pad is instantaneously expanded to soften the shock to the driver.

The airbag stored inside the passenger's instrument panel is instantaneously expanded to soften the shock to the front passenger.

Side airbags are instantaneously expanded to soften the shock of side to the driver and front passenger.

The pretensioners make sure of the seat belt restrainability.

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A13	34	E8 A	34	P14	37
A14	34	F1	32	P15	37
B17	38	F2	32	S16	38
C4 B	34	J2 A	35	S25	37
C5 A	34	J3 B	35	S26	37
C6 C	34	J6	35	S27	38
C9	34	J8	35	S28	38
D1	32	J21	36		
D3	34	J23	36		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1J	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1N		
1V		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH2	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IK6	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BG2	48	Floor Wire and Seat Wire (Beneath the Driver Seat)
BH1	46	Floor No.3 Wire and Floor Wire (Under the Left Center Pillar)
BJ1	48	Floor No.3 Wire and Seat Wire (Beneath the Driver Seat)
BK1	48	Floor No.3 Wire and Seat No.2 Wire (Beneath the Front Passenger's Seat)

▽ : GROUND POINTS

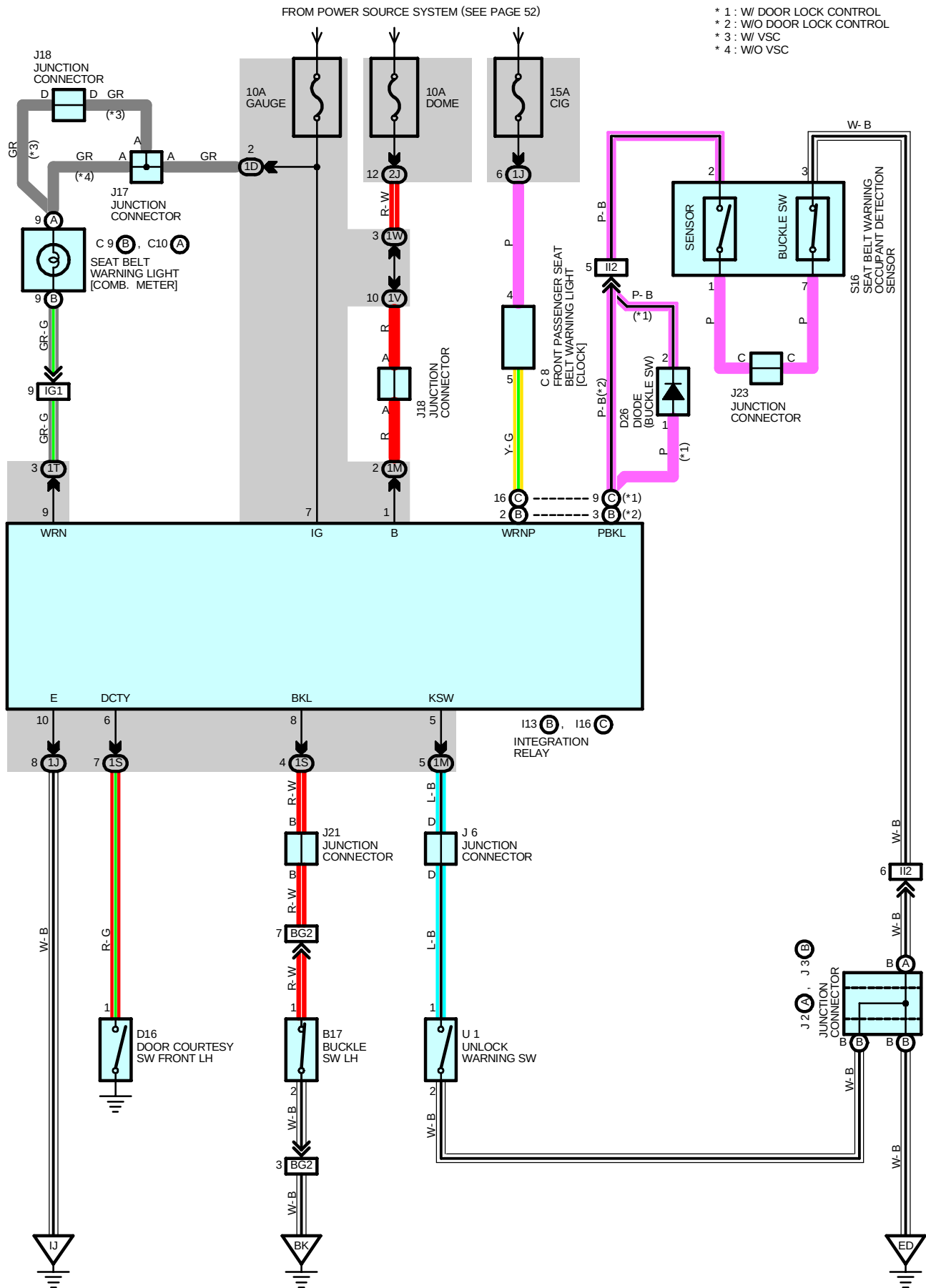
Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IG	42	Left Cowl Side Panel
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	44	Cowl Wire			

KEY REMINDER AND SEAT BELT WARNING



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SYSTEM OUTLINE

Current always flows to TERMINAL 1 of the integration relay through the DOME fuse.

1. SEAT BELT WARNING SYSTEM

When the ignition SW is turned on, current flows from the GAUGE fuse to TERMINAL 7 of the integration relay. At the same time, current flows to TERMINAL 9 of the integration relay from the GAUGE fuse through the seat belt warning light. Then, if the driver's seat belt is not fastened (A retractor SW off signal is input to TERMINAL 8 of the integration relay), the current flowing through the warning light flows from TERMINAL 9 of the integration relay to TERMINAL 10 to GROUND, and flashes the warning light. The current flowing to TERMINAL 1 of the integration relay also flows from TERMINAL 10 to GROUND and the seat belt warning buzzer sounds for approx. 6 seconds. However, if the seat belt is put on during this period (While the buzzer is sounding), signal input to TERMINAL 8 of the integration relay stops, and the current flowing from TERMINAL 1 of the integration relay to TERMINAL 10 to GROUND is cut, causing the buzzer to stop.

Additionally, the sensor (Seat belt warning occupant detection sensor) installed on the front passenger seat detects the passenger and determines whether or not the passenger fastens the seat belt.

If the passenger does not fasten the seat belt, the front passenger seat belt warning light is flashed.

2. KEY REMINDER SYSTEM

With the ignition key inserted in the key cylinder (Unlock warning SW on), the ignition SW still off and driver's door open (Door courtesy SW on), when a signal is input to TERMINAL 6 of the integration relay, the integration relay operates, the current flows from TERMINAL 1 of the integration relay to TERMINAL 10 to GROUND and the key reminder buzzer sounds.

SERVICE HINTS

D16 DOOR COURTESY SW FRONT LH

1-GROUND : Closed with LH door open

U1 UNLOCK WARNING SW

1-2 : Closed with ignition key in cylinder

INTEGRATION RELAY

10-GROUND : Always continuity

6-GROUND : Continuity with the driver's door open

5-GROUND : Continuity with the ignition key in cylinder

8-GROUND : Continuity with the driver's seat belt in use

1-GROUND : Always approx. 12 volts

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B17	38	I13	B 35	J18	35
C8	34	I16	C 35	J21	36
C9	B 34	J2	A 35	J23	36
C10	A 34	J3	B 35	S16	38
D16	36	J6	35	U1	35
D26	34	J17	35		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J		
1M		
1S	22	Floor Wire and Driver Side J/B No.1 (Lower Finish Panel)
1T	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

KEY REMINDER AND SEAT BELT WARNING



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
BG2	48	Floor Wire and Seat Wire (Beneath the Driver Seat)



: GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar

200



SERVICE HINTS

DEFOGGER RELAY

5-3 : Closed with the ignition SW on and the rear window defogger SW on

R25 REAR WINDOW DEFOGGER SW (MANUAL AIR CONDITIONING)

2-GROUND : Approx. 12 volts with the ignition SW on

3-GROUND : Always continuity

6-GROUND : Continuity with the defogger SW on and approx. 15 minutes thereafter

R19, R20 MIRROR HEATER LH, RH [REMOTE CONTROL MIRROR LH, RH]

6-GROUND : Approx. 12 volts with the ignition SW on and the rear window defogger SW on

4-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A25	34	J22	36	R20	37
J2	A	R15	A	R25	35
J3	B	R16	B		
J7	35	R19	37		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1J		
1L		
1R		
1T	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

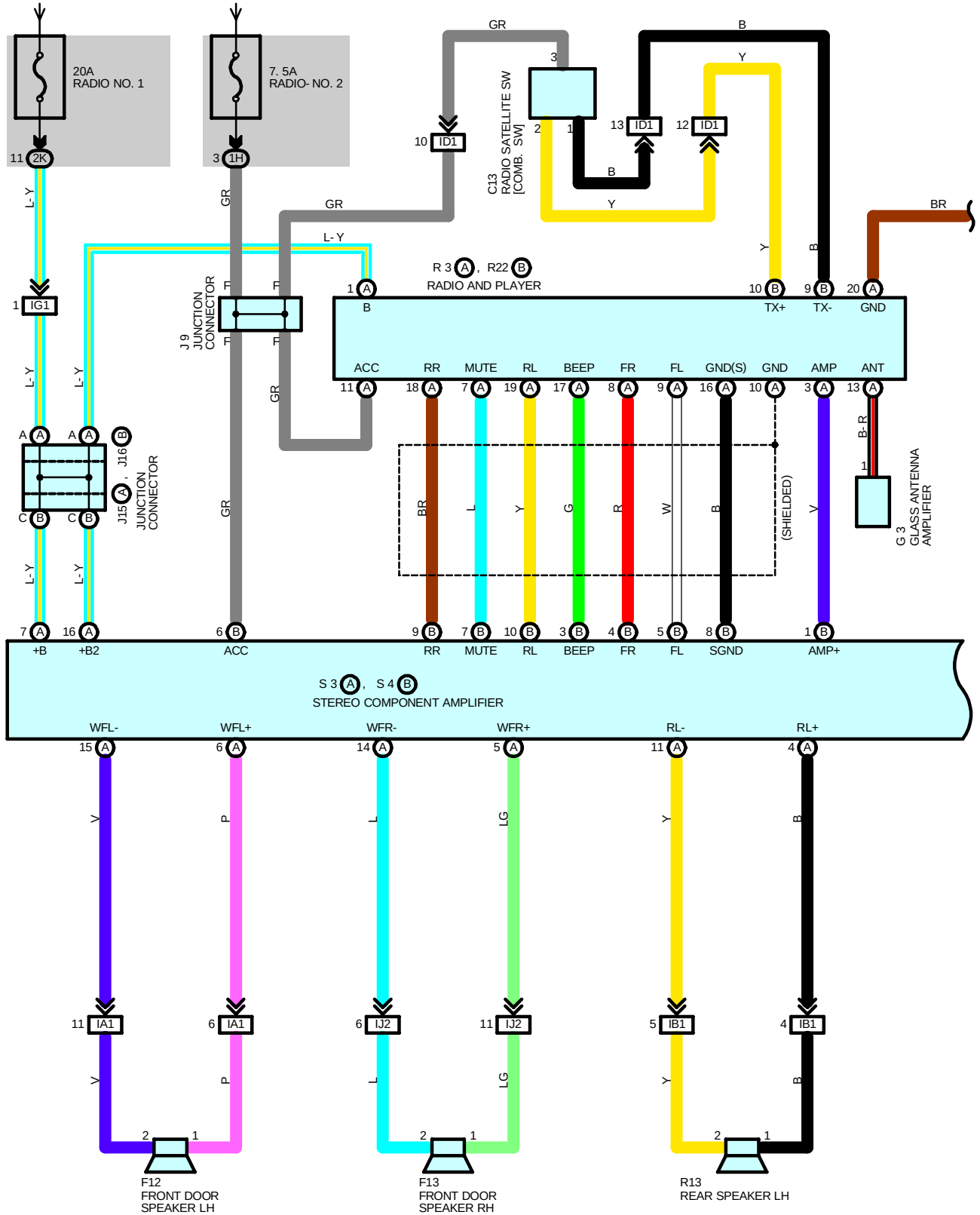
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IE1	42	Floor Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IJ1	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BB1	46	Back Door No.1 Wire and Floor Wire (Left Rear Quarter Panel)
BC1	46	Rear Window No.1 Wire and Back Door No.1 Wire (Left Side of the Back Door)
BF1	46	Rear Window No.2 Wire and Back Door No.2 Wire (Right Side of the Back Door)

▽ : GROUND POINTS

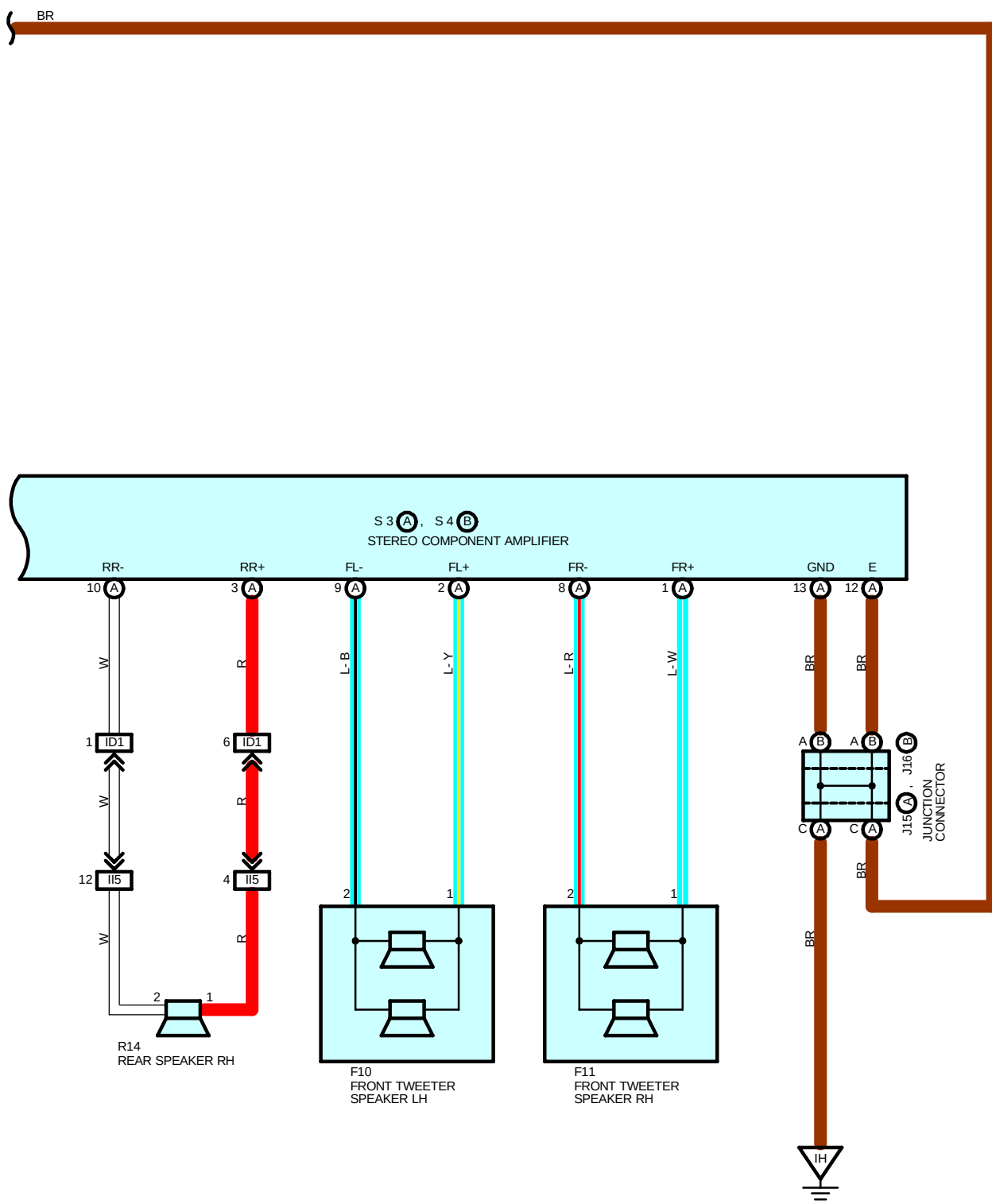
Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IF	42	Left Kick Panel
II	42	Right Kick Panel
BN	46	Right Side of the Back Door

RADIO AND PLAYER (8 SPEAKER)

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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RADIO AND PLAYER (8 SPEAKER)

SERVICE HINTS

S3 (A), S4 (B) STEREO COMPONENT AMPLIFIER

(A) 7, (A) 16-GROUND : Always approx. **12** volts

(B) 6-GROUND : Approx. **12** volts with the ignition SW at **ON** or **ACC** position

(A) 12, (A) 13-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C13	34	G3	34	R13	37
F10	34	J9	35	R14	37
F11	34	J15	A 35	R22	B 35
F12	36	J16	B 35	S3	A 35
F13	36	R3	A 35	S4	B 35

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
2K	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB1	42	Floor Wire and Instrument Panel Wire (Left Kick Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II5	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IJ2	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
IH	42	Right Instrument Panel Brace

RADIO AND PLAYER (4 SPEAKER)



SERVICE HINTS

R4 (B) RADIO AND PLAYER

(B)3-GROUND : Approx. **12** volts with the ignition SW at **ON** or **ACC** position

(B)4-GROUND : Always approx. **12** volts

(B)7-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C13	34	J9	35	R13	37
F12	36	R3	A 35	R14	37
F13	36	R4	B 35	R22	C 35

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	22	Instrument Panel Wire and Driver Side J/B No.1 (Lower Finish Panel)
2K	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)

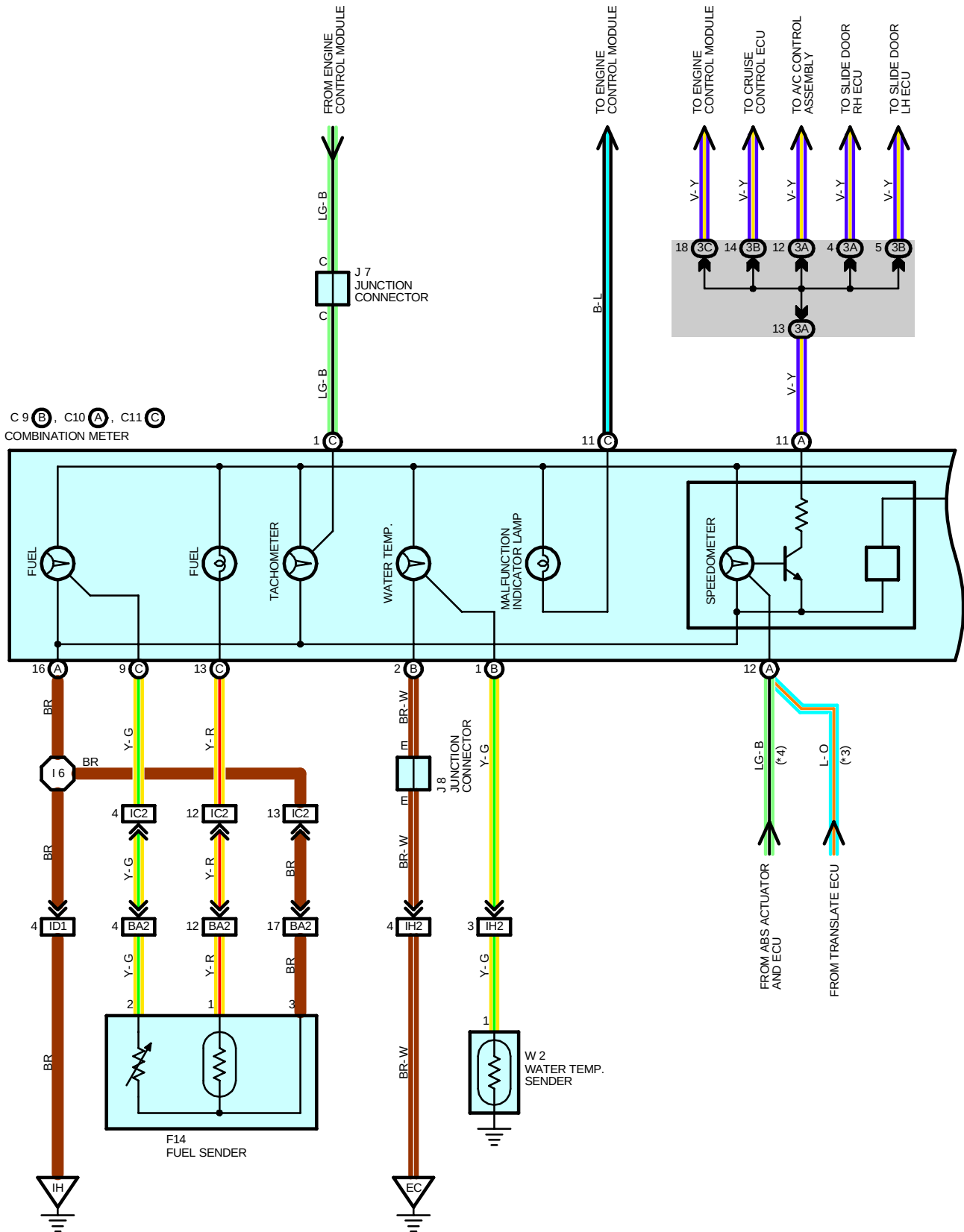
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	42	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB1	42	Floor Wire and Instrument Panel Wire (Left Kick Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
II5	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
IJ2	44	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : GROUND POINTS

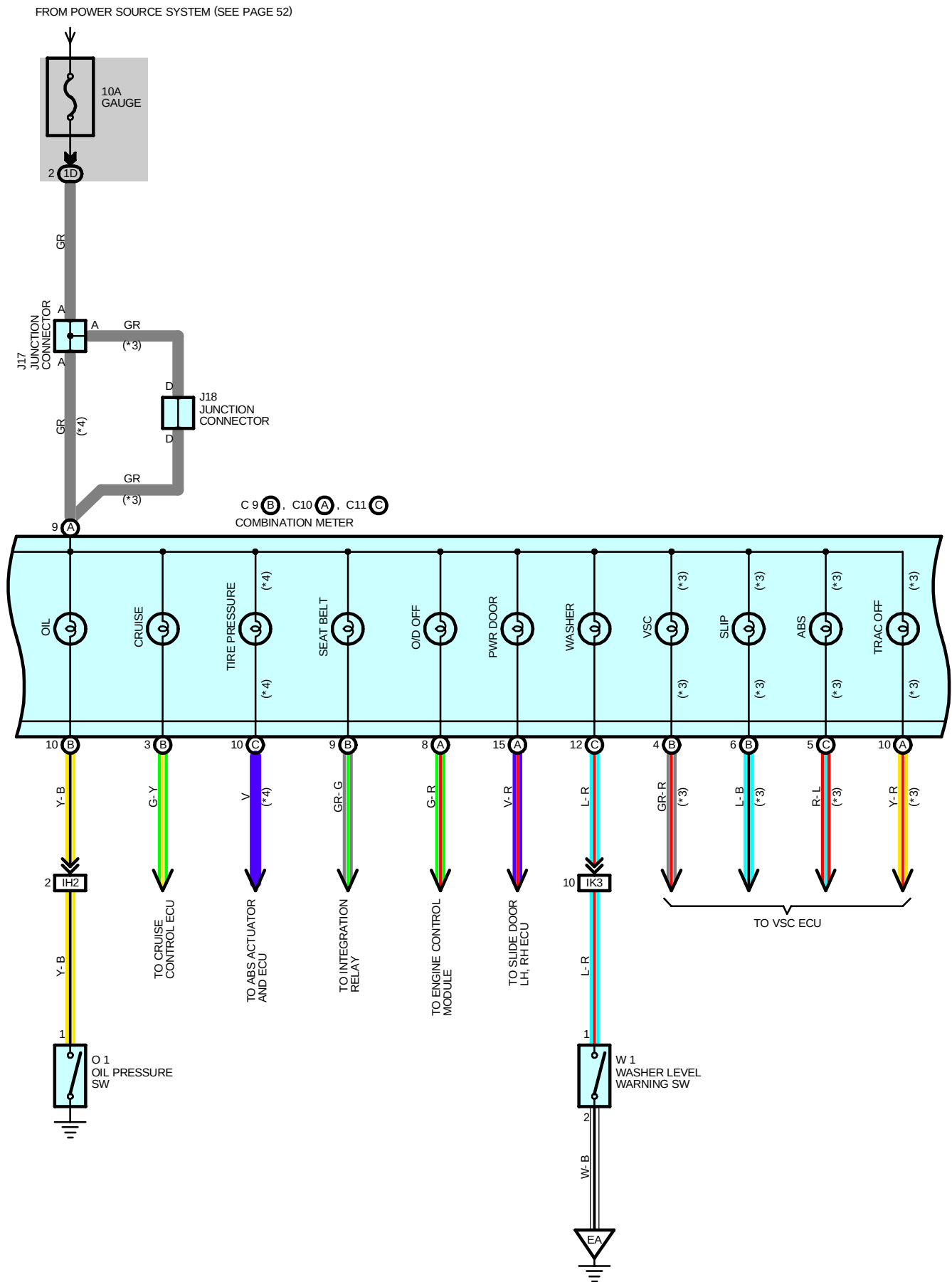
Code	See Page	Ground Points Location
IH	42	Right Instrument Panel Brace

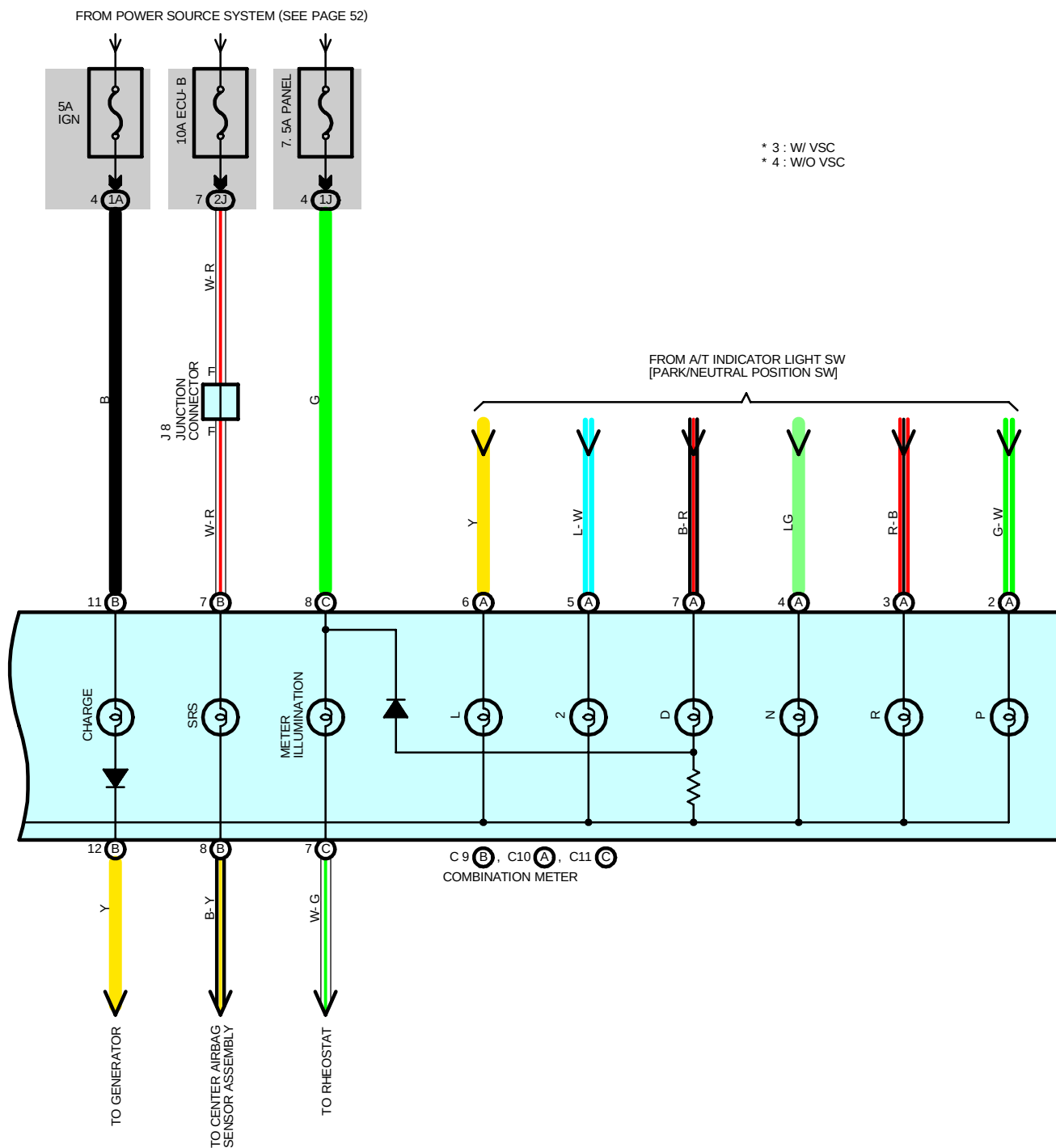
COMBINATION METER



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COMBINATION METER





COMBINATION METER

SERVICE HINTS

B1 BRAKE FLUID LEVEL WARNING SW

1-2 : Closed with the float down

C9 (B), C10 (A), C11 (C) COMBINATION METER

(B)13-GROUND : Approx. **12** volts with the ignition SW at **ST** position and the shift lever at **P** or **N** position

(B) 11, (A) 9-GROUND : Approx. **12** volts with the ignition SW at **ON** position

(A) 13, (B) 7-GROUND : Always approx. **12** volts

(B) 2, (A)16, (C) 6-GROUND : Always continuity

O1 OIL PRESSURE SW

1-GROUND : Closed with the oil pressure above approx. **19.6** kpa (**2.8** psi, **0.2** kgf/cm²)

P3 PARKING BRAKE SW

1-GROUND : Closed with the parking brake pedal is depressed

W2 WATER TEMP. SENDER

1-GROUND : Approx. **160- 240** Ω (**50**°C, **122**°F)

Approx. **17.1- 21.2** Ω (**120**°C, **288**°F)

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
B1	32	J3 B	35	P1	33
C9 B	34	J6	35	P3	35
C10 A	34	J7	35	T10	34
C11 C	34	J8	35	W1	33
D4	34	J17	35	W2	33
F14	36	J18	35		
J2 A	35	O1	33		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1D		
1J		
1V		
1W		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3A	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3B		
3C		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
ID1	42	Instrument Panel Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IH1	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IH2		
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BA2	46	Gauge Wire and Floor Wire (On the Left Rear Wheel House)

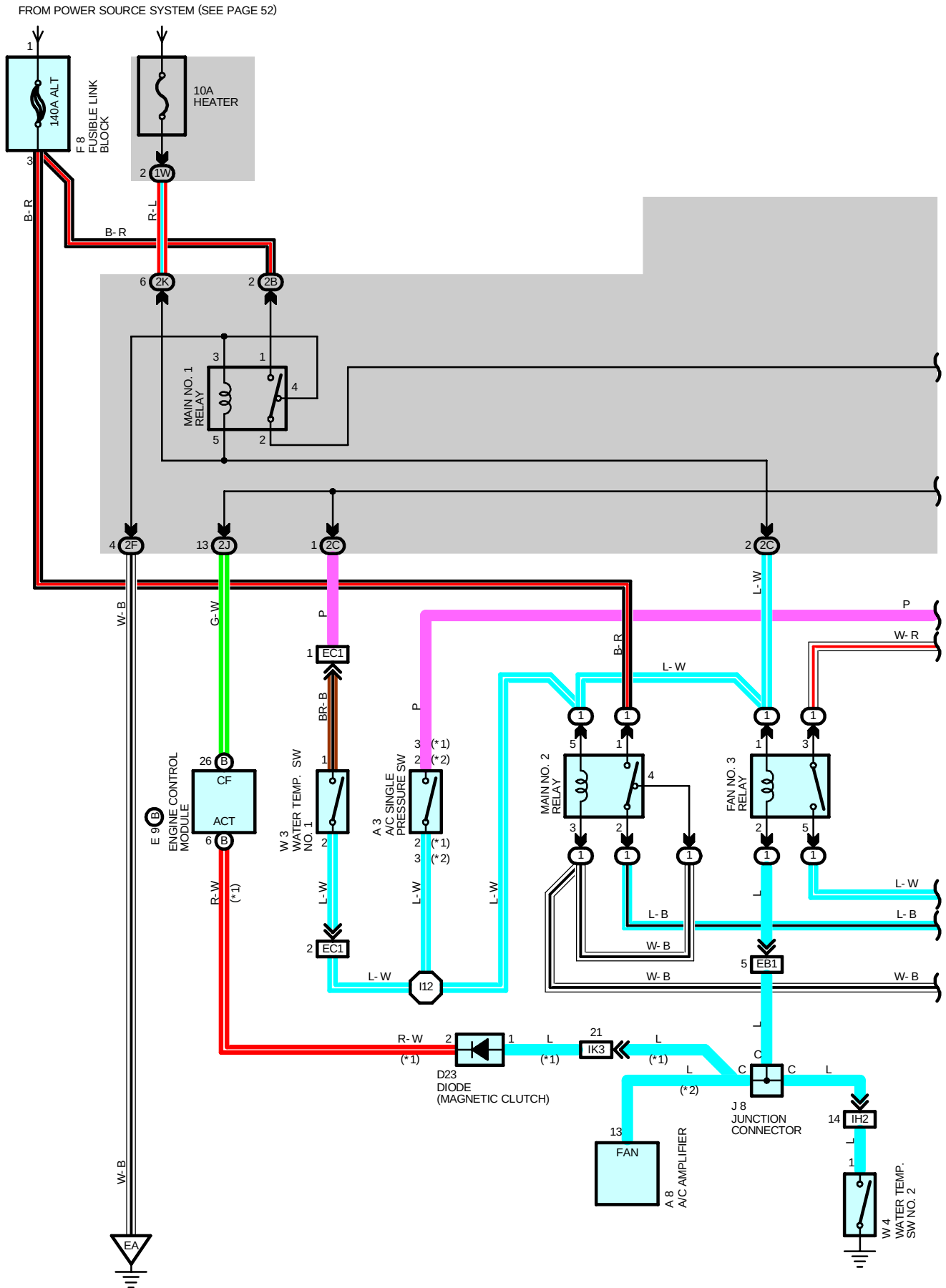
**: GROUND POINTS**

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EC	40	Rear Side of the Surge Tank
ED	40	Near the Left Front Suspension Support
IH	42	Right Instrument Panel Brace
IJ	42	Right Cowl Side Panel

**: SPLICE POINTS**

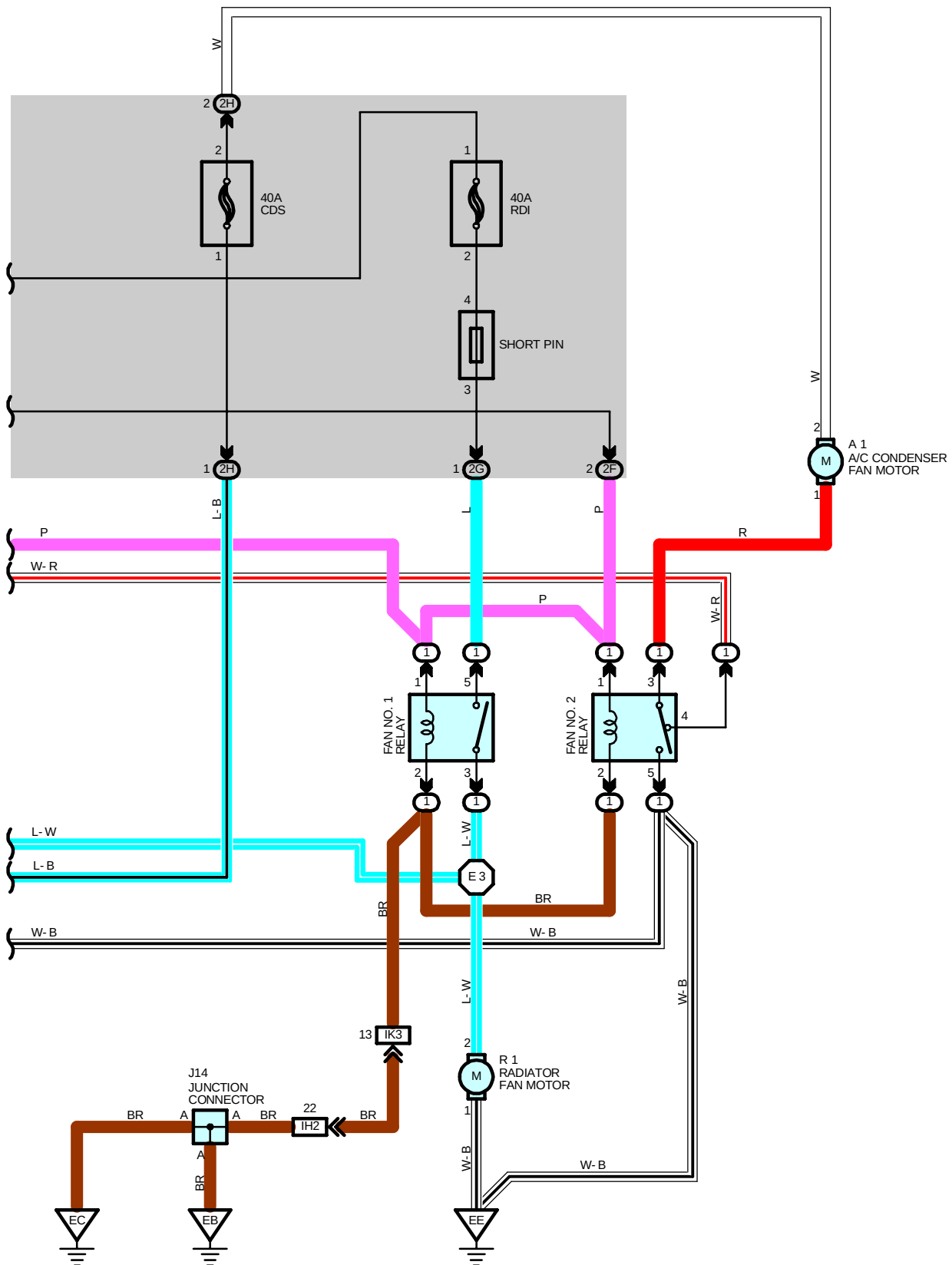
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	44	Cowl Wire			

RADIATOR FAN AND CONDENSER FAN (TOWING PACKAGE)



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* 1 : AUTOMATIC AIR CONDITIONING
 * 2 : MANUAL AIR CONDITIONING



RADIATOR FAN AND CONDENSER FAN (TOWING PACKAGE)

SYSTEM OUTLINE

FAN MOTOR OPERATION

With the ignition SW turned on, the current through the HEATER fuse flows to the main no.1 relay (Coil side), FAN NO. 3 relay (Coil side), TERMINAL 2 (Automatic air conditioning), 3 (Manual air conditioning) of the A/C single pressure SW, TERMINAL 2 of the water temp. SW no. 1 and MAIN NO. 2 relay (Coil side).

1. LOW SPEED OPERATION

Only when the A/C system is activated or the water temp. SW no. 2 is turned on, the A/C condenser fan motor and the radiator fan motor rotates at low speed.

When the A/C system is activated, the current from HEATER fuse flows to the FAN NO. 3 relay (Coil side) to TERMINAL (B) 6 of the engine control module (Automatic air conditioning) or TERMINAL 13 of the A/C amplifier (Manual air conditioning), causing the FAN NO. 3 relay to turn on. As a result, the current through the CDS fuse flows to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO. 2 relay to TERMINAL 4 to TERMINAL 3 of the FAN NO. 3 relay to TERMINAL 5 to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. As the current flows to the motors in series, the motors rotate at low speed.

When the water temp. SW no. 2 is turned on, the current from HEATER fuse flows to the FAN NO. 3 relay (Coil side) to TERMINAL 1 of the water temp. SW no. 2 to GROUND, causing the FAN NO. 3 relay to turn on. As a result, the current through the CDS fuse flows through the same route as above, rotating the motors at low speed.

2. HIGH SPEED OPERATION

Only when the A/C single pressure SW is turned on or the water temp. SW no. 1 is turned on, the A/C condenser fan motor and the radiator fan motor rotate at high speed.

When the A/C single pressure SW is turned on or the water temp. SW no. 1 is turned on, the current from the RDI fuse flows to the FAN NO. 1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. At the same time, the current from the CDS fuse flows to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND.

As the current to the motors flow in parallel as above, the motors rotate at high speed.

SERVICE HINTS

A3 A/C SINGLE PRESSURE SW

3-2 : Open above approx. **15.5 kgf/cm² (224 psi, 1520 kpa)**

Closed below approx. **12.5 kgf/cm² (181 psi, 1225 kpa)**

W3 WATER TEMP. SW NO.1

2-1 : Closed above approx. **95°C (203°F)**

W4 WATER TEMP. SW NO.2

1-GROUND : Closed above approx. **90°C (194°F)**

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A1	32	E9 B	34	R1	33
A3	32	F8	32	W3	33
A8	34	J8	35	W4	33
D23	32	J14	35		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1W	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2C		
2F		
2G		
2H		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
EC1	40	Engine Room Main Wire and Engine Room No.2 Wire (Near the Condenser Fan Motor)
IH2	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

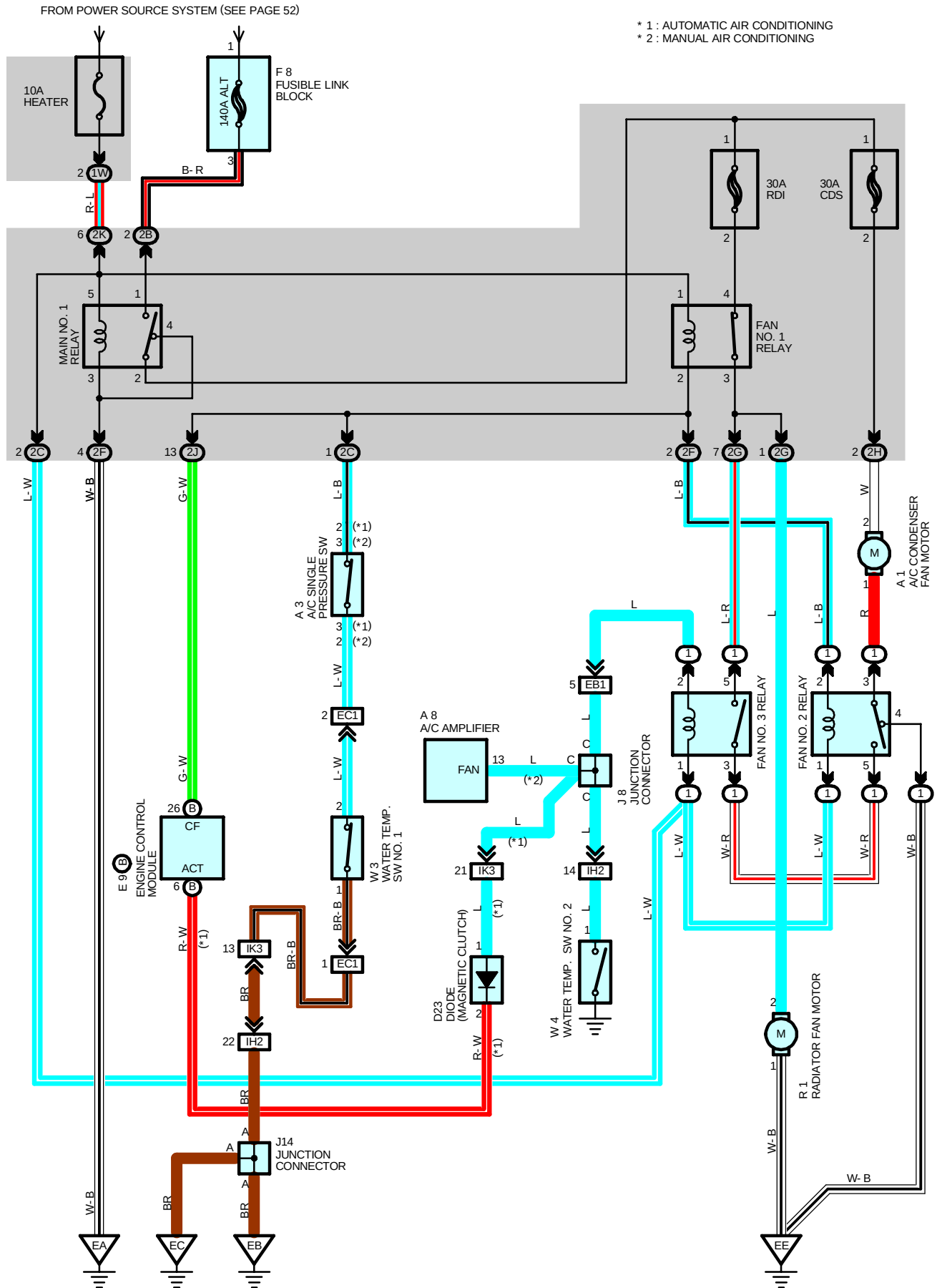
 : GROUND POINTS

Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EB	40	Right Side of the Surge Tank
EC	40	Rear Side of the Surge Tank
EE	40	Front Side of the Left Fender Apron

 : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	40	Engine Room Main Wire	I12	44	Engine Room Main Wire

RADIATOR FAN AND CONDENSER FAN (EXCEPT TOWING PACKAGE)



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SYSTEM OUTLINE

FAN MOTOR OPERATION

With the ignition SW turned on, the current through the HEATER fuse flows to the FAN NO. 1 relay (Coil side), FAN NO. 2 relay (Coil side) and FAN NO. 3 relay (Coil side). Furthermore, the current through the FAN NO. 1 relay (Coil side) or the FAN NO. 2 relay (Coil side) flows to TERMINAL 3 of the A/C single pressure SW to TERMINAL 2 to TERMINAL 2 of the water temp. SW no. 1 to TERMINAL 1 to GROUND, causing the FAN NO. 1 relay to turn off and the FAN NO. 2 relay to turn on.

1. LOW SPEED OPERATION

Only when the A/C system is activated or the water temp. SW no. 2 is turned on, the A/C condenser fan motor and the radiator fan motor rotates at low speed.

When the A/C system is activated, the current from HEATER fuse flows to the FAN NO. 3 relay (Coil side) to TERMINAL (B) 6 of the engine control module (Automatic air conditioning) TERMINAL 13 of the A/C amplifier (Manual air conditioning), causing the FAN NO. 3 relay to turn on. As a result, the current through the CDS fuse flows to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO. 2 relay to TERMINAL 5 to TERMINAL 3 of the FAN NO. 3 relay to TERMINAL 5 to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. As the current flows in series to the motors, the motors rotate at low speed.

When the water temp. SW no. 2 is turned on, the current from HEATER fuse flows to the FAN NO. 3 relay (Coil side) to TERMINAL 1 of the water temp. SW no. 2 to GROUND, causing the FAN NO. 3 relay to turn on. As a result, the current through the CDS fuse flows the same route as above, rotating the motors at low speed.

2. HIGH SPEED OPERATION

Only when the A/C single pressure SW is turned off or the water temp. SW no. 1 is turned off, the A/C condenser fan motor and the radiator fan motor rotate at high speed.

When the A/C single pressure SW is turned off, the current from the RDI fuse flows to the FAN NO. 1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. At the same time, the current from the CDS fuse flows to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 4 to GROUND.

As the current flows in parallel to the motors, the motors rotate at high speed.

SERVICE HINTS

A3 A/C SINGLE PRESSURE SW

3-2 : Open above approx. **15.5 kgf/cm² (224 psi, 1520 kpa)**
Closed below approx. **12.5 kgf/cm² (181 psi, 1225 kpa)**

W3 WATER TEMP. SW NO.1

2-1 : Open above approx. **95°C (203°F)**

W4 WATER TEMP. SW NO.2

1-GROUND : Closed above approx. **90°C (194°F)**

: PARTS LOCATION

Code	See Page	Code		See Page	Code	See Page
A1	32	E9	B	34	R1	33
A3	32	F8		32	W3	33
A8	34	J8		35	W4	33
D23	32	J14		35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)

RADIATOR FAN AND CONDENSER FAN (EXCEPT TOWING PACKAGE)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1W	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2B	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2C		
2F		
2G		
2H		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

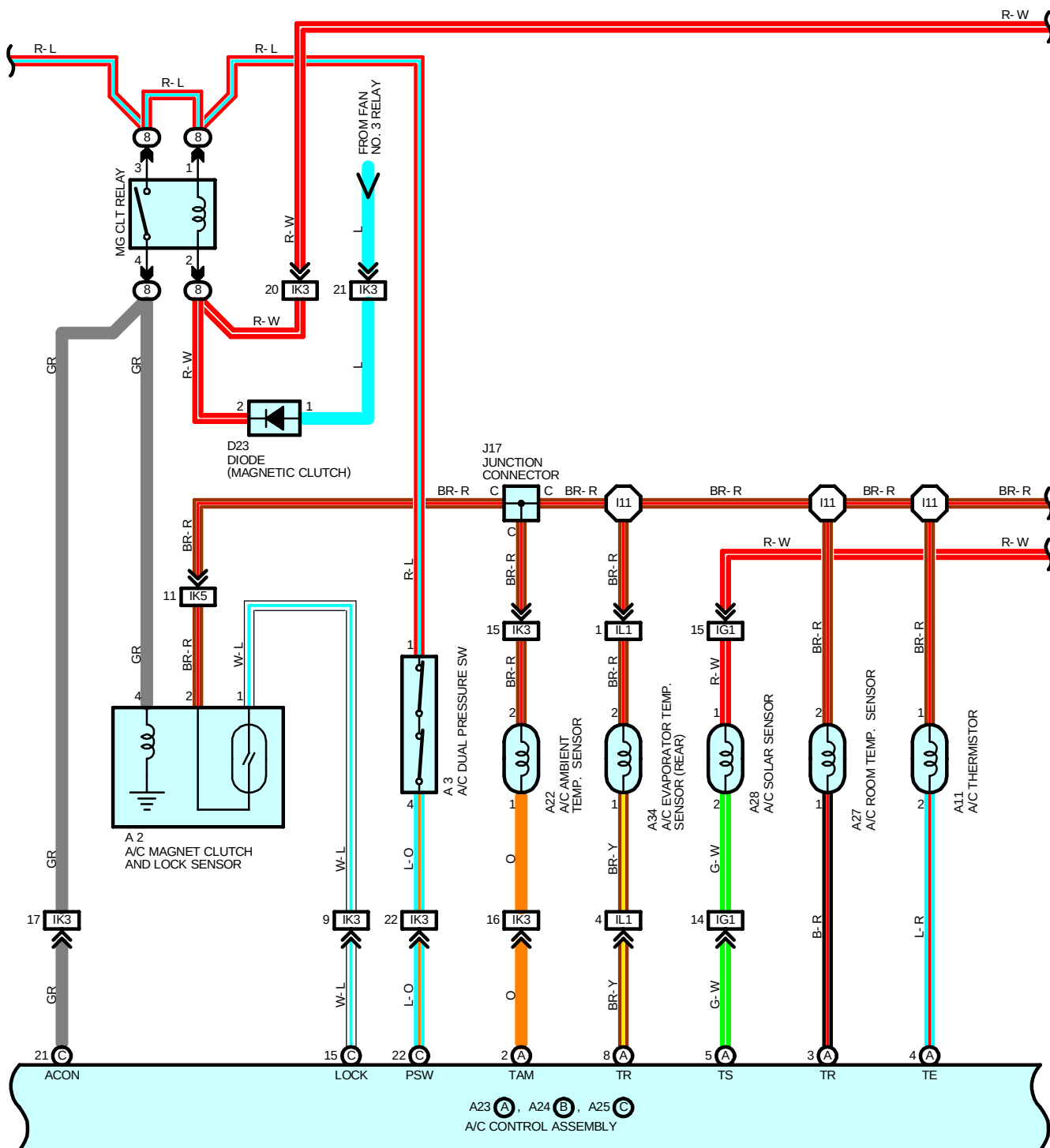
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
EC1	40	Engine Room Main Wire and Engine Room No.2 Wire (Near the Condenser Fan Motor)
IH2	44	Engine Wire and Cowl Wire (Front Side of the Blower Motor)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)

: GROUND POINTS

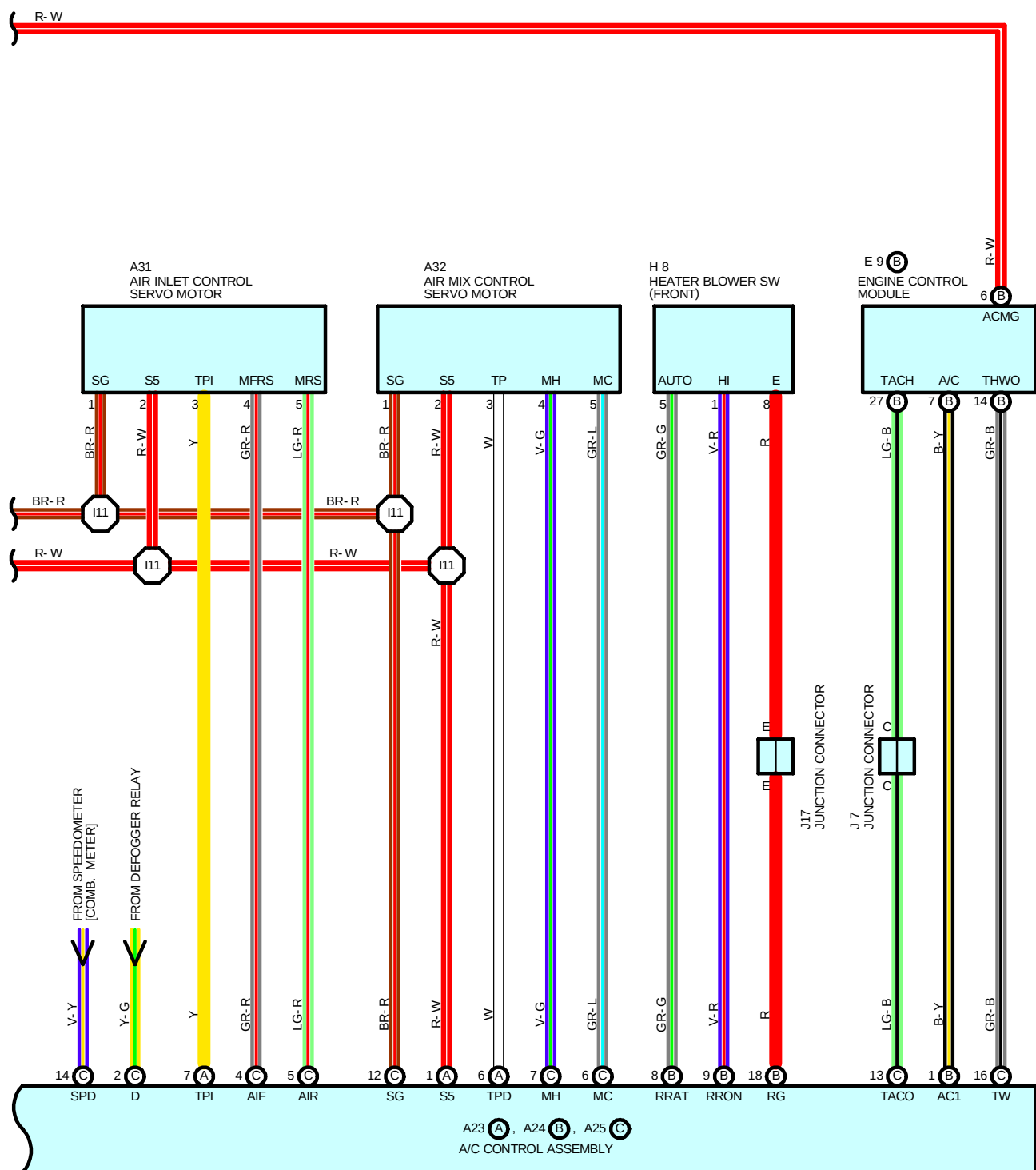
Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
EB	40	Right Side of the Surge Tank
EC	40	Rear Side of the Surge Tank
EE	40	Front Side of the Left Fender Apron

AUTOMATIC AIR CONDITIONING (FRONT)





AUTOMATIC AIR CONDITIONING (FRONT)



SERVICE HINTS

A25 (C) A/C CONTROL ASSEMBLY

11-GROUND : Always approx. **12** volts

10-GROUND : Approx. **12** volts with the ignition SW at **ON** position

1-GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A2	32	A31	34	H8	34
A3	32	A32	34	J2	35
A11	34	A33	34	J6	35
A22	32	A34	36	J7	35
A23	A	B3	34	J8	35
A24	B	B16	34	J17	35
A25	C	D23	32	J18	35
A27	34	E9	B		
A28	34	F8	32		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
4	29	Passenger Side R/B No.4 (Front Side the Blower Motor)
8	30	R/B No.8 (Engine Compartment Right)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1R	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V		
1W		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	42	Instrument Panel Wire and Cowl Wire (Behind the Combination Meter)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
IK5		
IK7		
IL1	44	Roof Wire and Cowl Wire (The Back Side of the Lower Finish Panel)

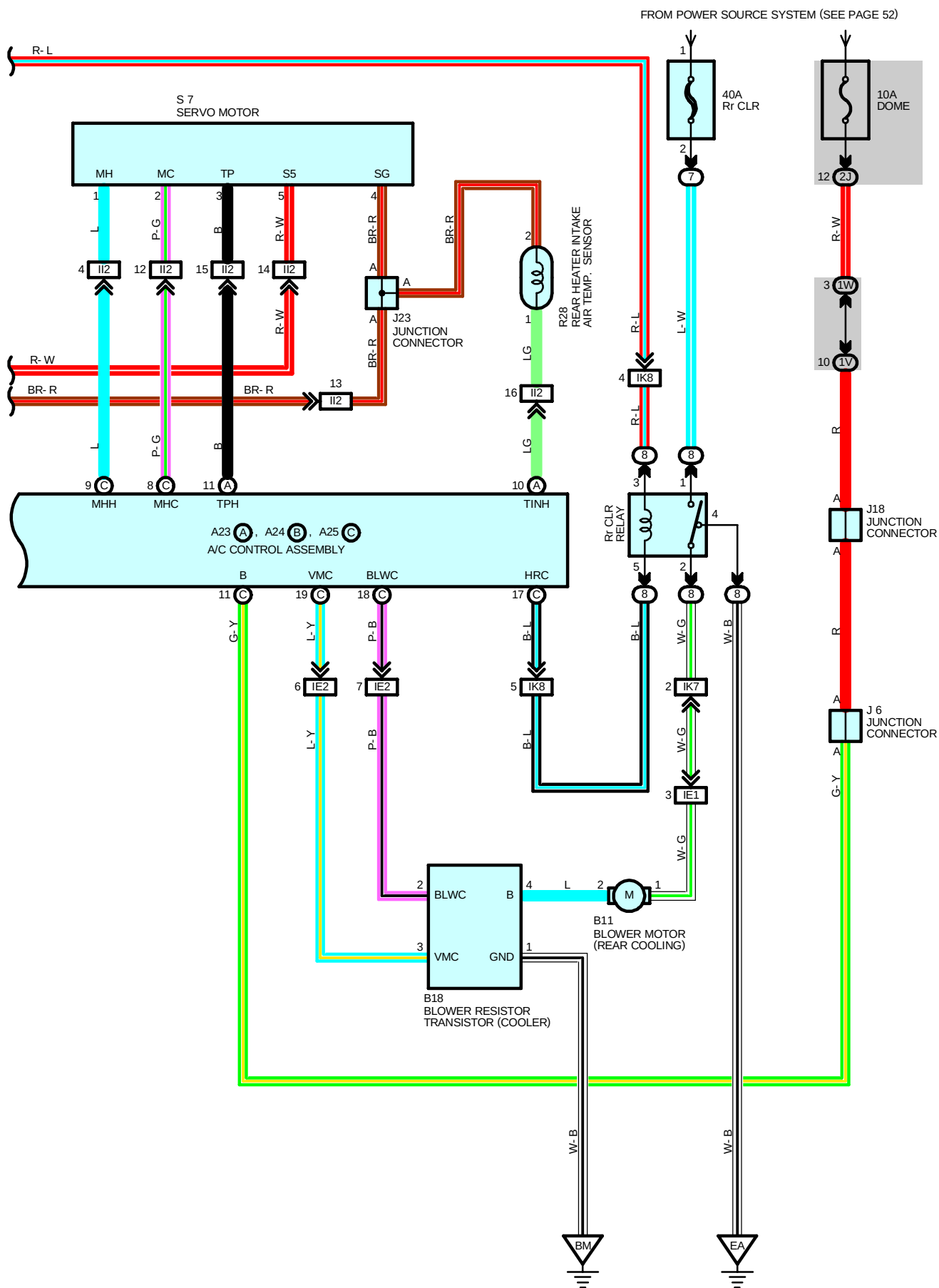
▽ : GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel

○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	44	Cowl Wire	I11	44	Cowl Wire





AUTOMATIC AIR CONDITIONING (REAR)

SERVICE HINTS

A25 (C) A/C CONTROL ASSEMBLY

- 11-GROUND : Always approx. **12** volts
- 10-GROUND : Approx. **12** volts with the ignition SW at **ON** position
- 1-GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
A23	A	34	B19	37	J17	35
A24	B	34	F8	32	J18	35
A25	C	34	H8	34	J23	36
B11		36	J3	35	R26	37
B12		36	J6	35	R28	37
B18		37	J8	35	S7	37

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
5	29	Driver Side R/B No.5 (Lower Finish Panel)
7	29	R/B No.7 (Engine Compartment Left)
8	30	R/B No.8 (Engine Compartment Right)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1R	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1V		
1W		
2J	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ED1	40	Cowl Wire and Engine Room Main Wire (Behind Headlight LH)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IE1	42	Floor Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
IE2		
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II4		
IK7	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
IK8		

▽ : GROUND POINTS

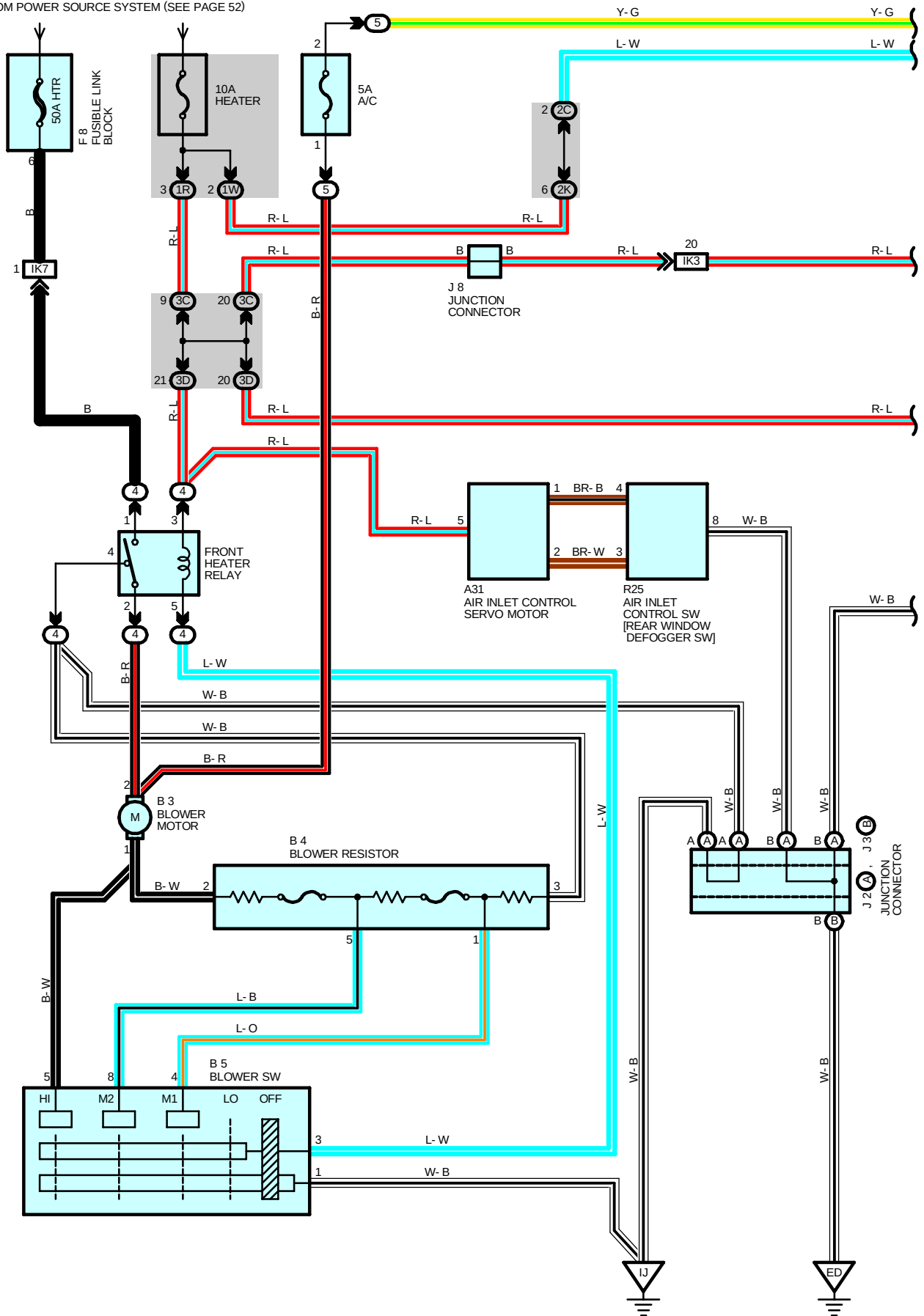
Code	See Page	Ground Points Location
EA	40	Front Side of the Right Fender Apron
ED	40	Near the Left Front Suspension Support
BM	46	Left Rear Quarter Panel
BO	46	Right Rear Quarter Panel

○ : SPLICE POINTS

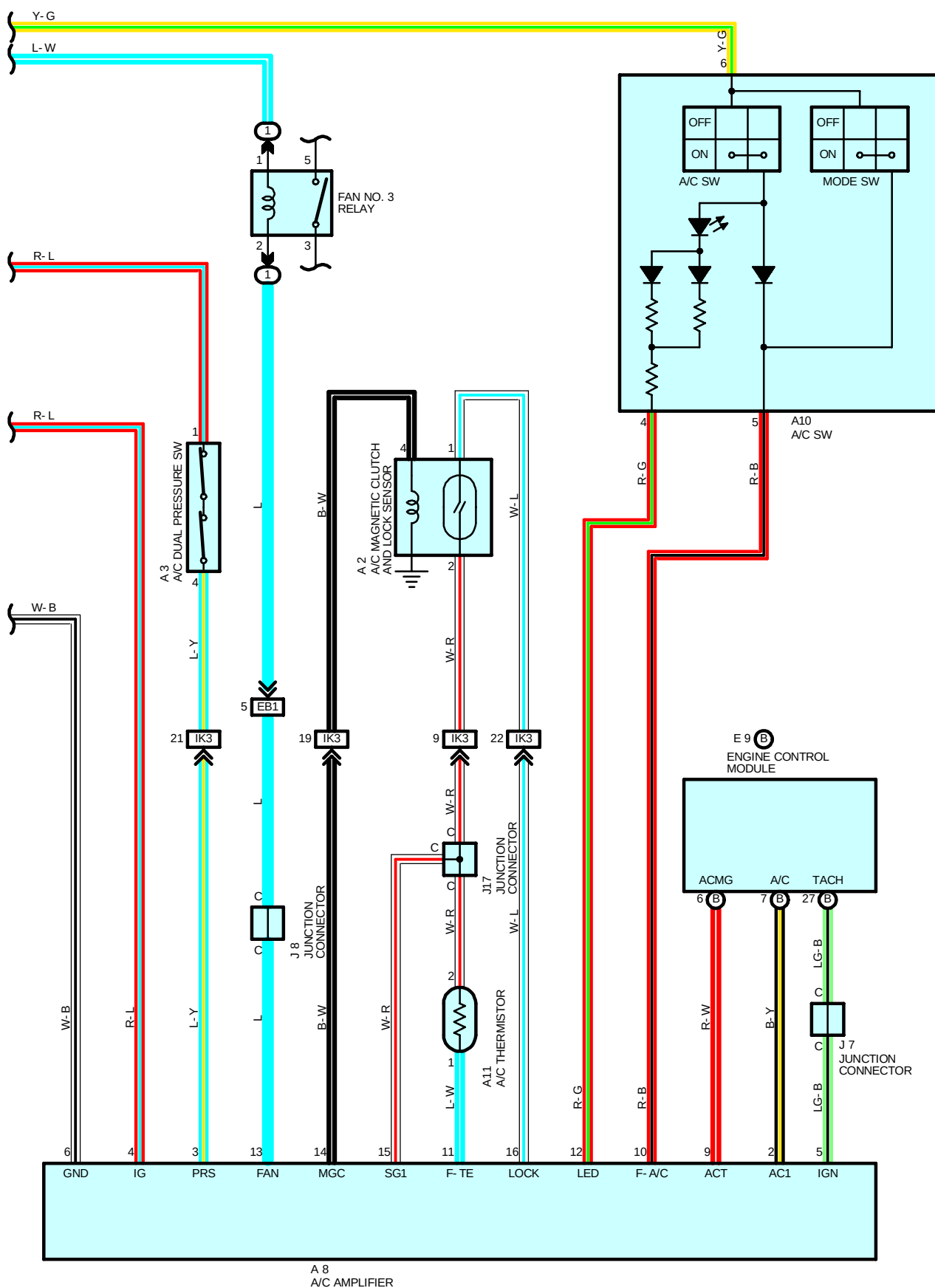
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I11	44	Cowl Wire			

MANUAL AIR CONDITIONING (FRONT)

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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MANUAL AIR CONDITIONING (FRONT)

SYSTEM OUTLINE

1. HEATER BLOWER MOTOR OPERATION

Current is applied at all times through the HTR fuse to TERMINAL 1 of the front heater relay.

When the ignition SW is turned on, the current flows through HEATER fuse to TERMINAL 3 of the front heater relay to TERMINAL 5 to TERMINAL 3 of the blower SW.

* Low speed operation

When the blower SW is moved to LO position, the current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, causing the front heater relay to turn on. This causes the current to flow from the HTR fuse to TERMINAL 1 of the front heater relay to TERMINAL 2 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 2 of the blower resistor to TERMINAL 1 to TERMINAL 4 of the blower SW to TERMINAL 1 to GROUND. At this time, the blower resistance of the blower resistor is smaller than at low speed, so the blower motor rotates at medium low speed.

* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, the current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, causing the front heater relay to turn on. This causes the current flows from the HTR fuse to TERMINAL 1 of the front heater relay to TERMINAL 2 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 2 of the blower resistor to TERMINAL 1 to TERMINAL 4 of the blower SW to TERMINAL 1 to GROUND. At this time, the blower resistance of the blower resistor is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current through the motor flows from TERMINAL 2 of the blower resistor to TERMINAL 5 to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND. At this time, resistance of the blower resistor is smaller 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 1 to GROUND, causing the front heater relay to turn on.

This causes the current to flow from the HTR fuse to TERMINAL 1 of the front heater relay to TERMINAL 2 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 5 of the blower SW to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

2. AIR CONDITIONING OPERATION

When the blower SW is set on, the current from the HEATER fuse flows to TERMINAL 1 of the A/C dual pressure SW to TERMINAL 4 to TERMINAL 3 of the A/C amplifier. The engine RPM signal from the Engine Control Module, the evaporator temp. signal from the A/C thermistor and the lock signal from the lock sensor are all supplied to the A/C amplifier.

When the A/C SW is turned on, a signal is sent to the A/C amplifier. The current flows from the HEATER fuse to FAN NO.3 relay (Coil side) to TERMINAL 13 of the A/C amplifier to TERMINAL 6 to GROUND, turning the FAN NO.3 relay on.

SERVICE HINTS

FRONT HEATER RELAY

1-2 : Closed with the ignition SW at **ON** position and the blower SW on

A3 A/C DUAL PRESSURE SW

1-4 : Open with the refrigerant pressure at less than approx. **196.1 kpa (2.0 kgf/cm², 28.4 psi)** or more than approx. **3138.1 kpa (32.0 kgf/cm², 455 psi)**

B4 BLOWER RESISTOR

2-5 : Approx. **0.33 Ω**

5-1 : Approx. **1.01 Ω**

1-3 : Approx. **3.21 Ω**

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A2	32	B3	34	J3 B	35
A3	32	B4	34	J7	35
A8	34	B5	34	J8	35
A10	34	E9 B	34	J17	35
A11	34	F8	32	R25	35
A31	34	J2 A	35		

 : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	28	Engine Room R/B No.1 (Engine Compartment Left)
4	29	Passenger Side R/B No.4 (Front Side the Blower Motor)
5	29	Driver Side R/B No.5 (Lower Finish Panel)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1R	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
1W		
2C	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2K	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)
3D		

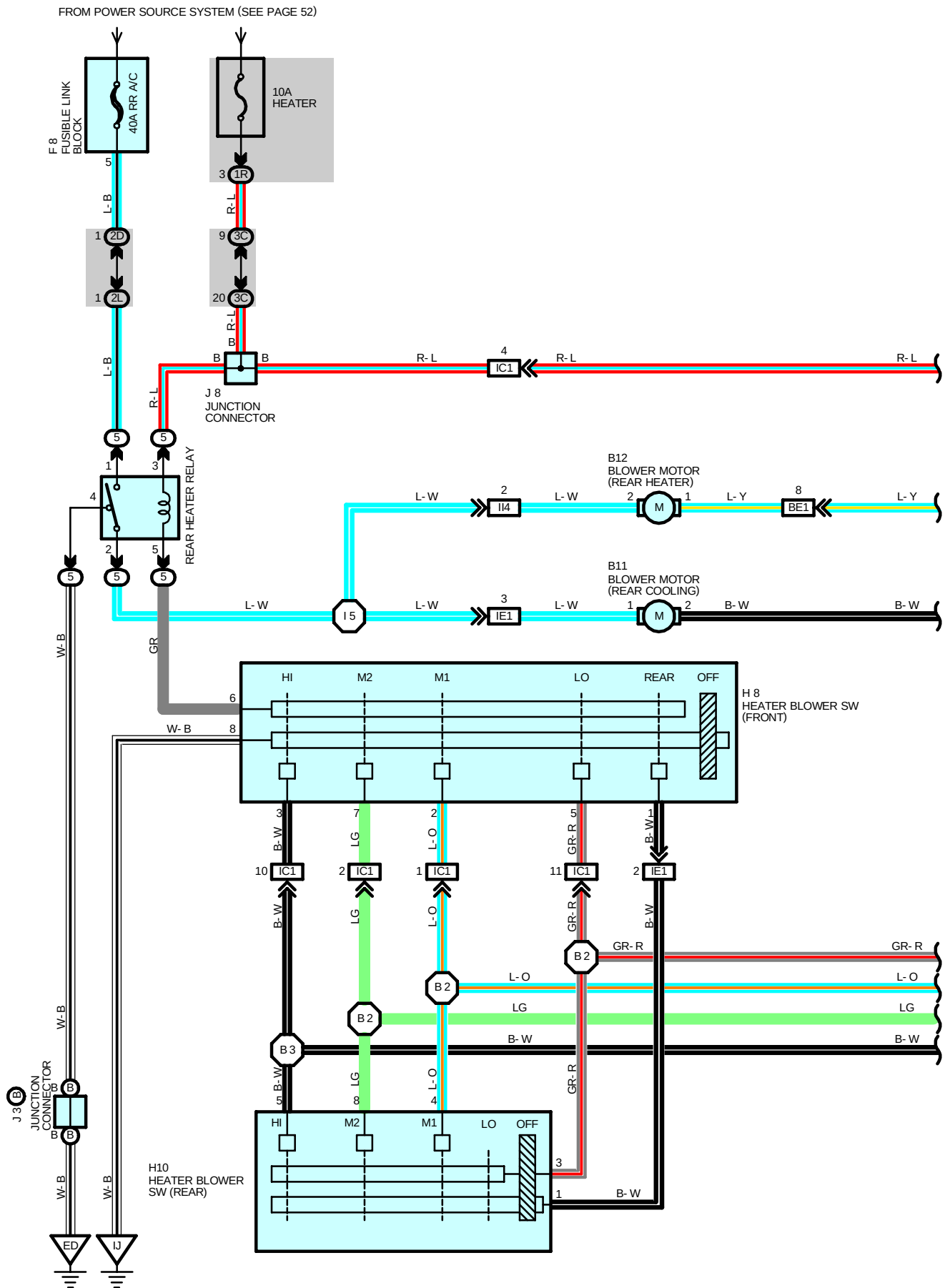
 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	40	Cowl Wire and Engine Room Main Wire (Inside the Lower Cover of Engine Room J/B No.2)
IK3	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
IK7		

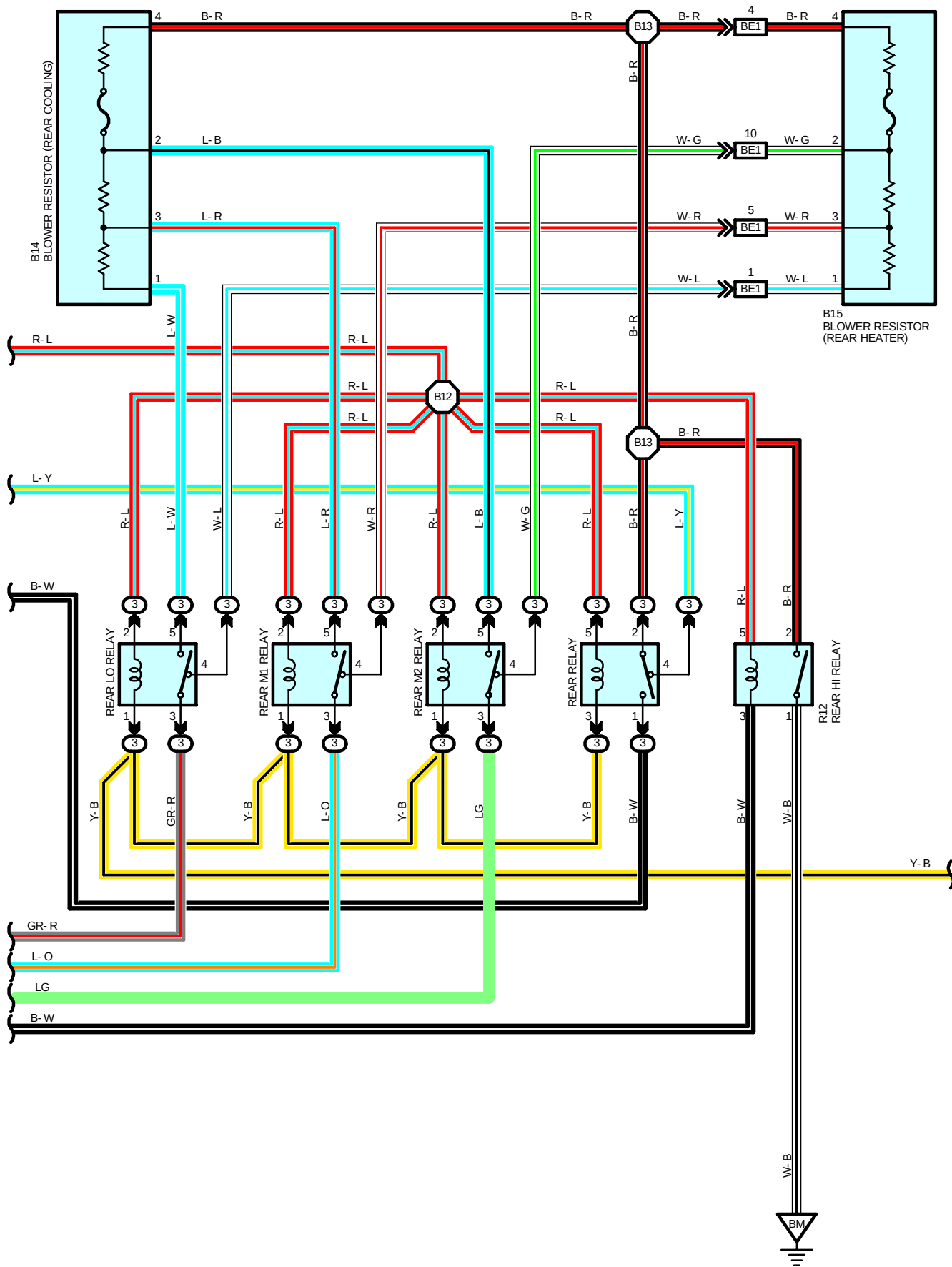
 : GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel

MANUAL AIR CONDITIONING (REAR)

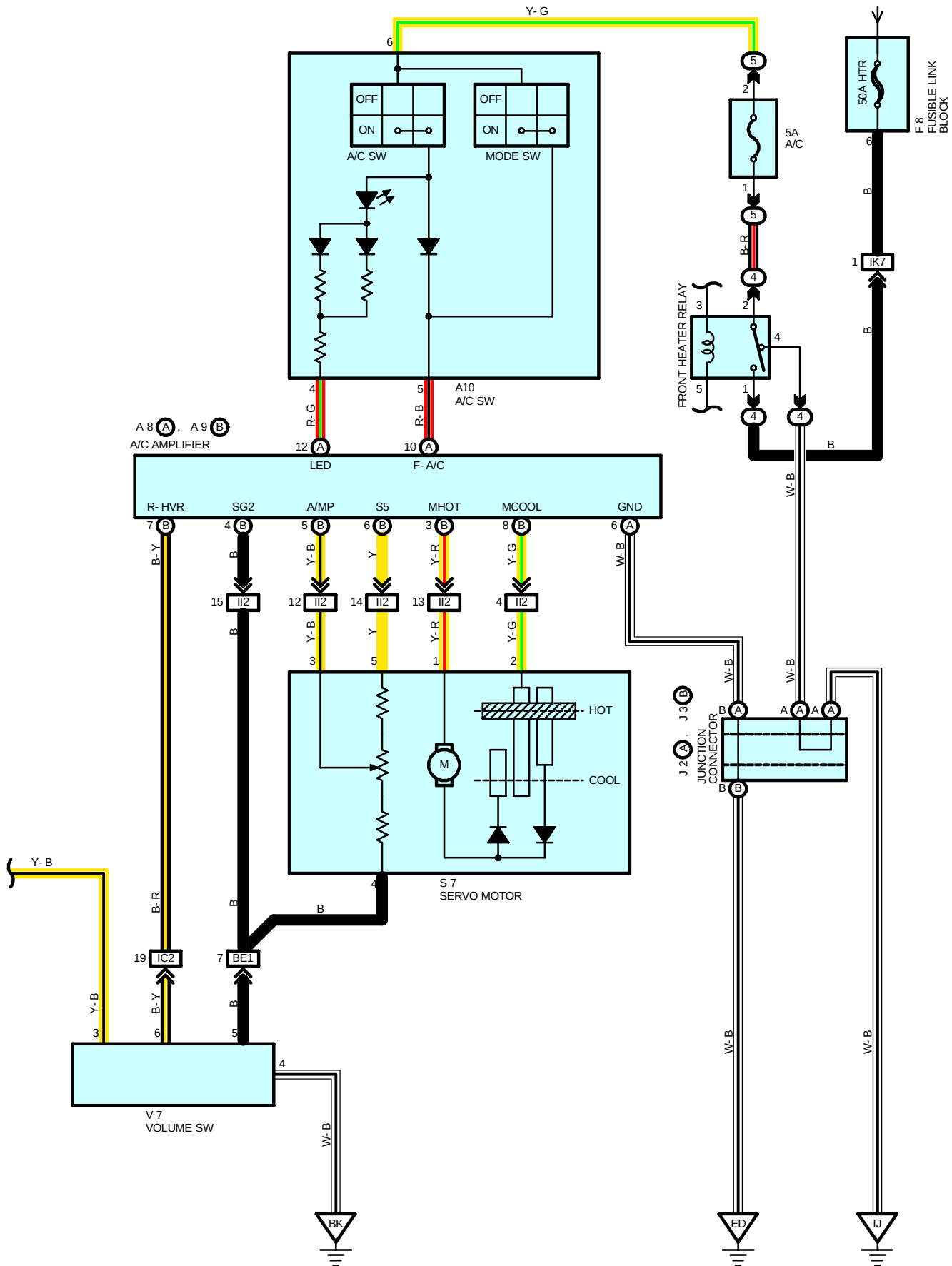


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MANUAL AIR CONDITIONING (REAR)

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



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SYSTEM OUTLINE

1. BLOWER MOTOR (REAR HEATER) OPERATION

Current is applied at all times through the RR A/C fuse to TERMINAL 1 of the rear heater relay.

When the ignition SW is turned on, the current flows through HEATER fuse to TERMINAL 3 of the rear heater relay to TERMINAL 5 to TERMINAL 6 of the heater blower SW (Front), rear HI relay (Coil side), rear LO relay (Coil side), rear M1 relay (Coil side), rear M2 relay (Coil side) and rear relay (Coil side).

(1) Heater blower SW (Front) operation

* Low speed operation

When the blower SW is moved to LO position, the current to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 8 to GROUND, causing the rear heater relay to turn on. This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear LO relay to TERMINAL 3 to TERMINAL 5 of the heater blower SW (Front) to TERMINAL 8 to GROUND, rotating the blower motor at low speed.

* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, the current to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 8 to GROUND, causing the rear heater relay to turn on. This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 3 to TERMINAL 4 of the rear M1 relay to TERMINAL 3 to TERMINAL 2 of the heater blower SW (Front) to TERMINAL 8 to GROUND. At this time, the blower resistance of the blower resistor (Rear heater) is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current through the motor flows from TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 2 to TERMINAL 4 of the rear M2 relay to TERMINAL 3 to TERMINAL 7 of the heater blower SW (Front) to TERMINAL 8 to GROUND. At this time, resistance of the blower resistor (Rear heater) is smaller 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 to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 8 to GROUND, causing the rear heater relay to turn on. At this time, the current flows to TERMINAL 3 of the heater blower SW (Front) to TERMINAL 8 to GROUND, causes the rear HI relay to turn on.

This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 2 of the rear HI relay to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

(2) Heater blower SW (Rear) operation

With the heater blower SW (Front) at REAR position, the current to TERMINAL 6 of the heater blower SW (Front) to flows TERMINAL 8 to GROUND, causing the rear heater relay to turn on.

* Low speed operation

When the blower SW (Rear) is moved to LO position, the current flows through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear LO relay to TERMINAL 3 to TERMINAL 3 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 8 to GROUND, rotating the blower motor at low speed.

* Medium speed operation (Operation at M1, M2)

When the blower SW (Rear) is moved to M1 position, the current flows through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 3 to TERMINAL 4 of the rear M1 relay to TERMINAL 3 to TERMINAL 4 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 8 to GROUND. At this time, the blower resistance of the blower resistor (Rear heater) is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW (Rear) is moved to M2 position, the current through the motor flows from TERMINAL 4 of the blower resistor (Rear heater) to TERMINAL 2 to TERMINAL 4 of the rear M2 relay to TERMINAL 3 to TERMINAL 8 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 8 to GROUND. At this time, resistance of the blower resistor (Rear heater) is smaller 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 5 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 8 to GROUND, causes the rear HI relay to turn on.

This causes the current flows through the rear heater relay (Point Side) to TERMINAL 2 of the blower motor (Rear heater) to TERMINAL 1 to TERMINAL 4 of the rear relay to TERMINAL 2 to TERMINAL 2 of the rear HI relay to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

2. BLOWER MOTOR (REAR COOLING) OPERATION

Current is applied at all times through the RR A/C fuse to TERMINAL 1 of the rear heater relay.

When the ignition SW is turned on, the current flows through HEATER fuse to TERMINAL 3 of the rear heater relay to TERMINAL 5 to TERMINAL 6 of the heater blower SW (Front) and rear HI relay (Coil side).

The current from the HEATER fuse flows through the rear LO relay, rear M1 relay, rear M2 relay and rear relay to TERMINAL 3 of the volume SW to TERMINAL 4 to GROUND, causing each relay to turn on.

(1) Heater blower SW (Front) operation

* Low speed operation

When the blower SW is moved to LO position, the current to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 8 to GROUND, causing the rear heater relay to turn on. This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 1 to TERMINAL 5 of the rear LO relay to TERMINAL 3 to TERMINAL 5 of the heater blower SW (Front) to TERMINAL 8 to GROUND, rotating the blower motor at low speed.

* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, the current to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 10 to GROUND, causing the rear heater relay to turn on. This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 3 to TERMINAL 5 of the rear M1 relay to TERMINAL 3 to TERMINAL 2 of the heater blower SW (Front) to TERMINAL 8 to GROUND. At this time, the blower resistance of the blower resistor (Rear cooling) is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current through the motor flows from TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 2 to TERMINAL 5 of the rear M2 relay to TERMINAL 3 to TERMINAL 7 of the blower SW (Front) to TERMINAL 8 to GROUND. At this time, resistance of the blower resistor (Rear cooling) is smaller 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 to TERMINAL 6 of the heater blower SW (Front) flows to TERMINAL 8 to GROUND, causing the rear heater relay to turn on. At this time, the current flows to TERMINAL 3 of the heater blower SW (Front) to TERMINAL 8 to GROUND, causes the rear HI relay to turn on.

This causes the current to flow through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 2 of the rear HI relay to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

(2) Heater blower SW (Rear) operation

With the heater blower SW (Front) at REAR position, the current to TERMINAL 6 of the heater blower SW (Front) to flows TERMINAL 8 to GROUND, causing the rear heater relay to turn on.

* Low speed operation

When the heater blower SW (Rear) is moved to LO position, the current flows through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 1 to TERMINAL 5 of the rear LO relay to TERMINAL 3 to TERMINAL 3 of the blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 10 to GROUND, rotating the blower motor at low speed.

* Medium speed operation (Operation at M1, M2)

When the heater blower SW (Rear) is moved to M1 position, the current flows through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 3 to TERMINAL 5 of the rear M1 relay to TERMINAL 3 to TERMINAL 4 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 10 to GROUND. At this time, the blower resistance of the blower resistor (Rear cooling) is smaller than at low speed, so the blower motor rotates at medium low speed.

When the heater blower SW (Rear) is moved to M2 position, the current through the motor flows from TERMINAL 4 of the blower resistor (Rear cooling) to TERMINAL 2 to TERMINAL 5 of the rear M2 relay to TERMINAL 3 to TERMINAL 8 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 10 to GROUND. At this time, resistance of the blower resistor (Rear cooling) is smaller than at M1 position, so the blower motor rotates at medium high speed.

* High speed operation

When the blower SW (Rear) is moved to HI position, the current flows to TERMINAL 5 of the heater blower SW (Rear) to TERMINAL 1 to TERMINAL 1 of the heater blower SW (Front) to TERMINAL 10 to GROUND, causes the rear HI relay to turn on.

This causes the current flows through the rear heater relay (Point Side) to TERMINAL 1 of the blower motor (Rear cooling) to TERMINAL 2 to TERMINAL 1 of the rear relay to TERMINAL 2 to TERMINAL 2 of the rear HI relay to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

SERVICE HINTS

REAR HEATER RELAY

1-2 : Closed with the ignition SW at **ON** position and the heater blower SW on

B14 BLOWER RESISTOR (REAR COOLING)

4-2 : Approx. **0.22** Ω

2-3 : Approx. **0.86** Ω

3-1 : Approx. **1.68** Ω

B15 BLOWER RESISTOR (REAR HEATER)

4-2 : Approx. **0.46** Ω

2-3 : Approx. **1.0** Ω

3-1 : Approx. **2.14** Ω

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A8	A	34	B15		36	J8	35
A9	B	34	F8		32	R12	37
A10		34	H8		34	S7	37
B11		36	H10		36	V7	37
B12		36	J2	A	35		
B14		36	J3	B	35		

○ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
3	28	Passenger Side R/B No.3 (Right Rear Quarter Panel)
4	29	Passenger Side R/B No.4 (Front Side the Blower Motor)
5	29	Driver Side R/B No.5 (Lower Finish Panel)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1R	22	Cowl Wire and Driver Side J/B No.1 (Lower Finish Panel)
2D	24	Engine Room Main Wire and Engine Room J/B No.2 (Engine Compartment Left)
2L	24	Cowl Wire and Engine Room J/B No.2 (Engine Compartment Left)
3C	26	Cowl Wire and J/B No.3 (Behind the Combination Meter)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	42	Cowl Wire and Floor Wire (Left Cowl Side Panel)
IC2		
IE1	42	Floor Wire and Cowl Wire (The Back Side of the Lower Finish Panel)
II2	44	Floor No.2 Wire and Cowl Wire (Right Kick Panel)
II4		
IK7	44	Engine Room Main Wire and Cowl Wire (Right Cowl Side Panel)
BE1	46	Floor No.2 Wire and Floor Wire (On the Right Rear Wheel House)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ED	40	Near the Left Front Suspension Support
IJ	42	Right Cowl Side Panel
BK	46	Under the Left Center Pillar
BM	46	Left Rear Quarter Panel

MANUAL AIR CONDITIONING (REAR)



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B12	46	Floor Wire
B2	46	Floor Wire	B13		
B3					

