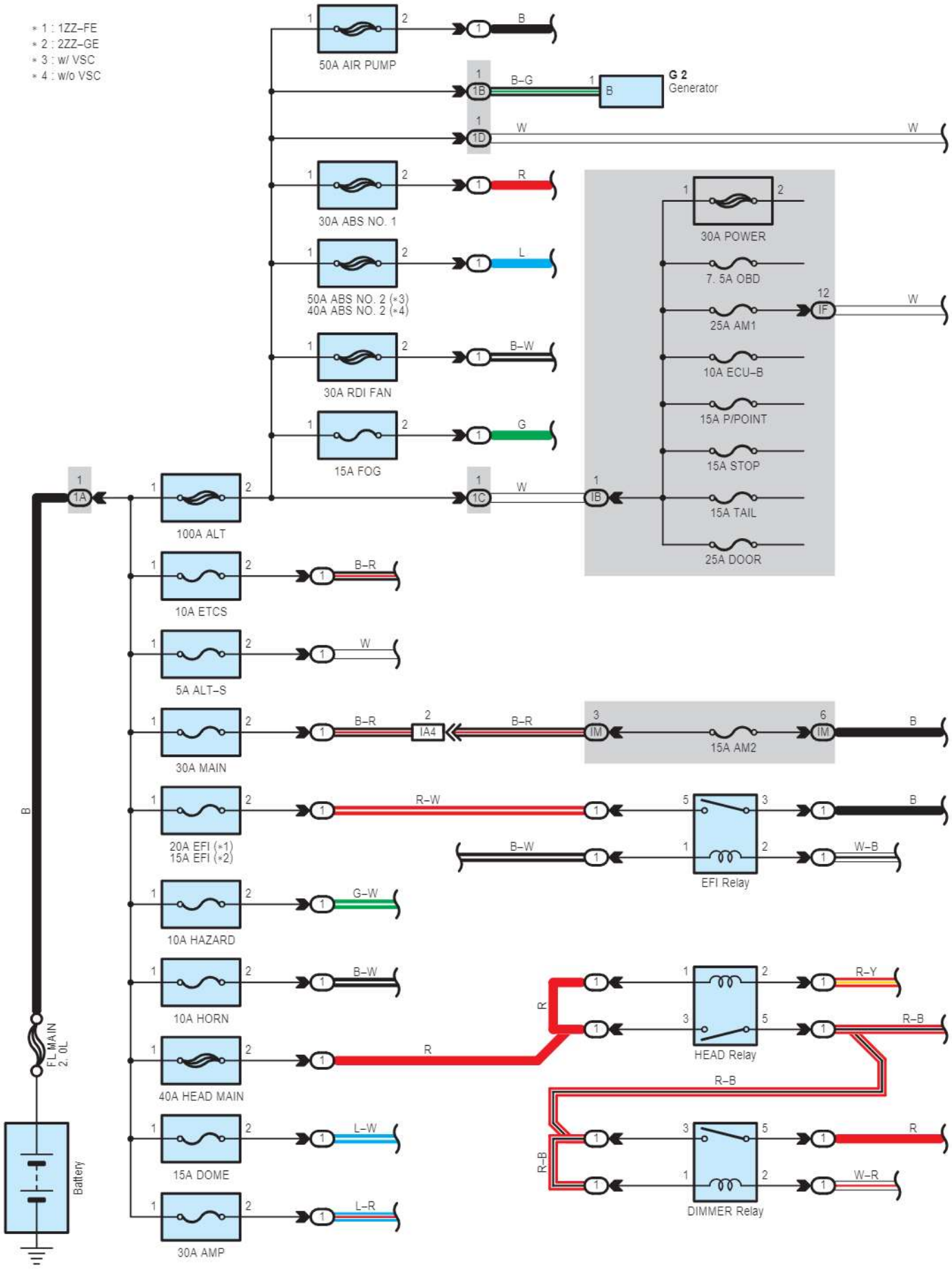
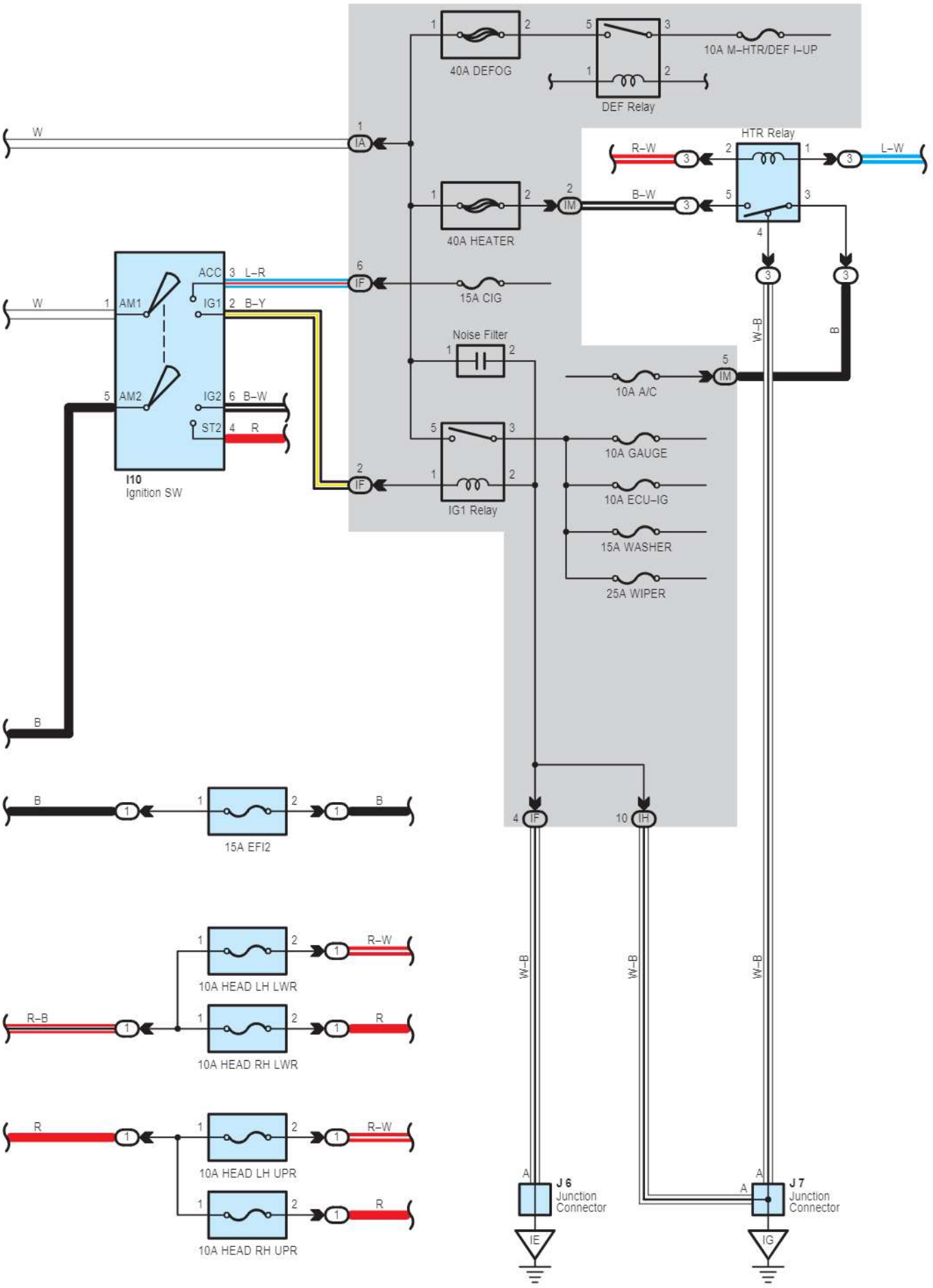

* 1 : 1ZZ–FE
* 2 : 2ZZ–GE
* 3 : w/ VSC
* 4 : w/o VSC
50A AIR PUMP
B
G 2
Generator
B–G
W
30A ABS NO. 1
R
50A ABS NO. 2 (*3)
40A ABS NO. 2 (*4)
L
30A RDI FAN
B–W
15A FOG
G
30A POWER
7. 5A OBD
25A AM1
10A ECU–B
15A P/POINT
15A STOP
15A TAIL
25A DOOR
100A ALT
10A ETCS
B–R
5A ALT–S
30A MAIN
IA4
15A AM2
20A EFI (*1)
15A EFI (*2)
R–W
EFI Relay
W–B
10A HAZARD
G–W
10A HORN
HEAD Relay
R–Y
R–B
40A HEAD MAIN
15A DOME
L–W
DIMMER Relay
W–R
30A AMP
L–R
FL MAIN
2. 0L
Battery


40A DEFOG
10A M–HTR/DEF I–UP
DEF Relay
HTR Relay
40A HEATER
15A CIG
Noise Filter
10A A/C
10A GAUGE
10A ECU–IG
15A WASHER
25A WIPER
IG1 Relay
I10
Ignition SW
15A EFI2
10A HEAD LH LWR
10A HEAD RH LWR
10A HEAD LH UPR
10A HEAD RH UPR
J 6
Junction Connector
J 7
Junction Connector
W
B
R–W
L–W
B–W
B–Y
L–R
W–B
R–B
R

Power Source

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
G2	32 (1ZZ–FE)	I10	37	J7	37
	34 (2ZZ–GE)	J6	37		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

▭ : Junction Block and Wire Harness Connector

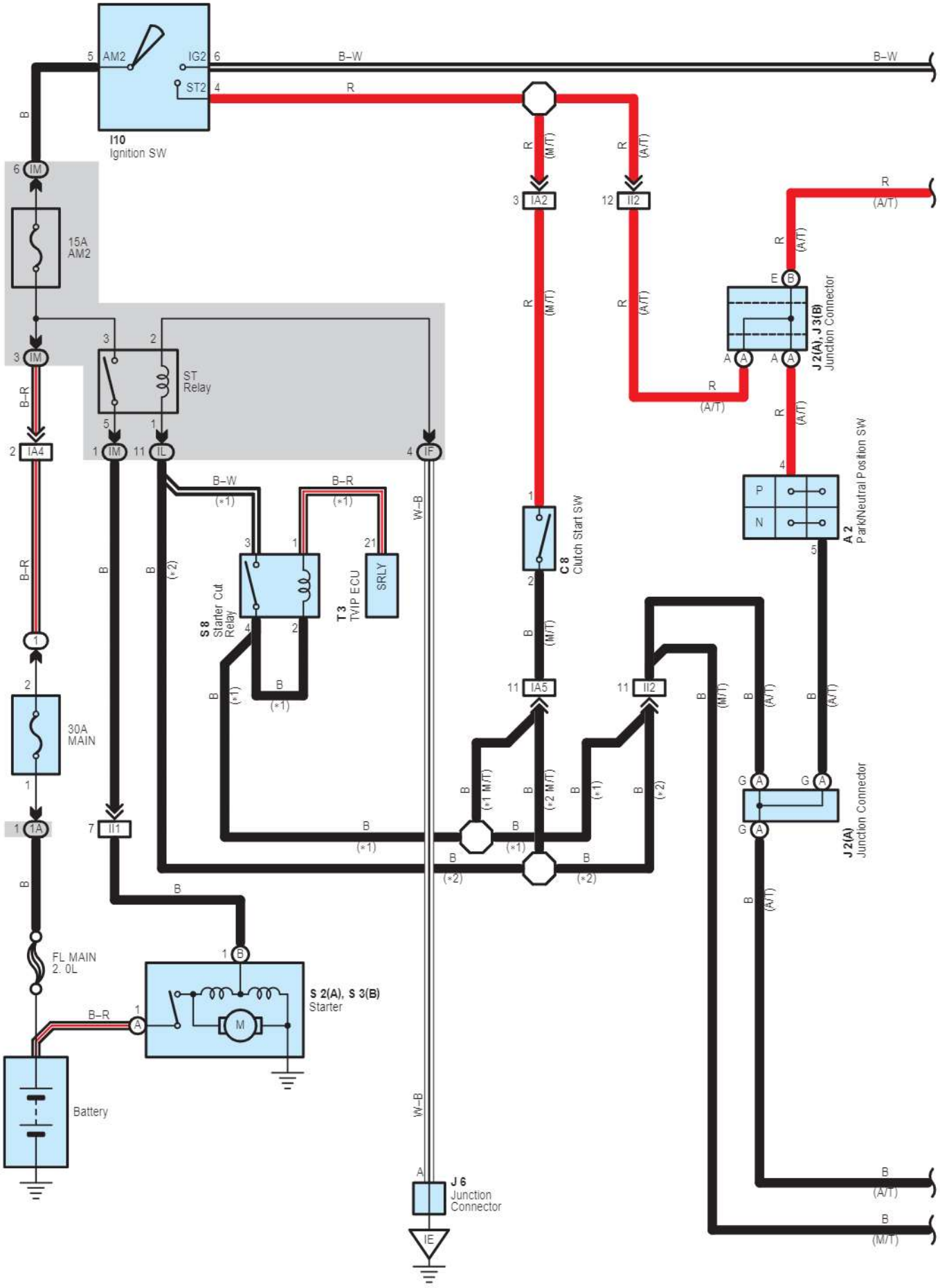
Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IB		
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IM	24	
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
1B		
1C	22	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1D		

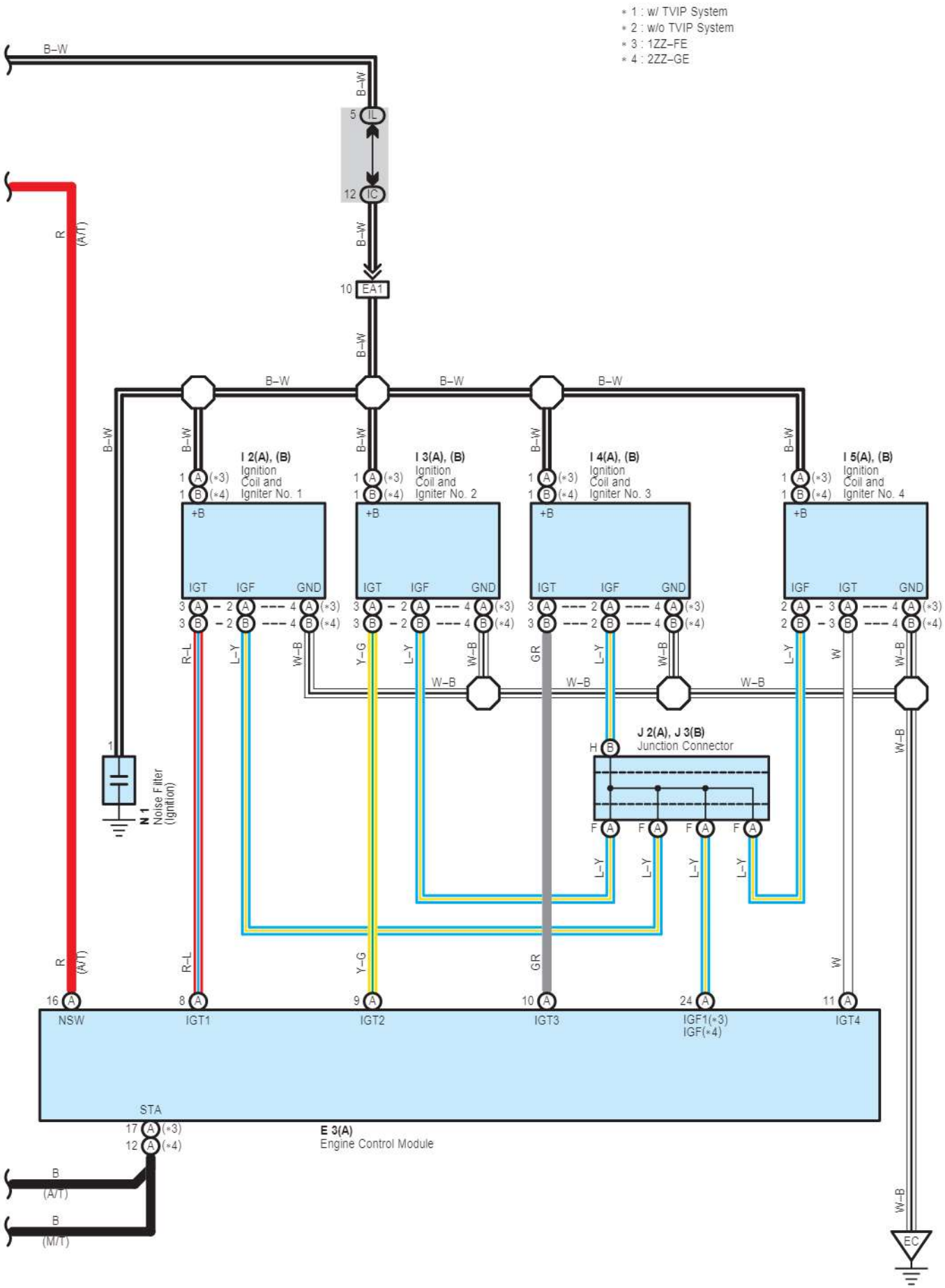
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


I10
Ignition SW
AM2
IG2
ST2
B–W
R
15A
AM2
ST
Relay
30A
MAIN
FL MAIN
2. 0L
Battery
S 2(A), S 3(B)
Starter
Starter Cut
Relay
T3
TVIP ECU
SRLY
C8
Clutch Start SW
A2
Park/Neutral Position SW
J2(A), J3(B)
Junction Connector
J2(A)
Junction Connector
J6
Junction
Connector
IE
W–B
B–R
(M/T)
(A/T)
(*1)
(*2)


* 1 : w/ TVIP System
* 2 : w/o TVIP System
* 3 : 1ZZ–FE
* 4 : 2ZZ–GE
B–W
5 IL
12 IC
10 EA1
R (A/T)
I 2(A), (B)
Ignition Coil and Igniter No. 1
I 3(A), (B)
Ignition Coil and Igniter No. 2
I 4(A), (B)
Ignition Coil and Igniter No. 3
I 5(A), (B)
Ignition Coil and Igniter No. 4
+B
IGT
IGF
GND
N 1
Noise Filter (Ignition)
J 2(A), J 3(B)
Junction Connector
R–L
L–Y
W–B
Y–G
GR
W
16 NSW
8 IGT1
9 IGT2
10 IGT3
24 IGF1(*3) IGF(*4)
11 IGT4
STA
17 (*3)
12 (*4)
E 3(A)
Engine Control Module
B (A/T)
B (M/T)
EC

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A2		32 (1ZZ–FE)	I4	A	33 (1ZZ–FE)	J6		37
C8		36			35 (2ZZ–GE)	N1		33 (1ZZ–FE)
E3	A	36		B	33 (1ZZ–FE)			35 (2ZZ–GE)
I2	A	33 (1ZZ–FE)			35 (2ZZ–GE)	S2	A	33 (1ZZ–FE)
		35 (2ZZ–GE)	I5	A	33 (1ZZ–FE)			35 (2ZZ–GE)
	B	33 (1ZZ–FE)			35 (2ZZ–GE)	S3	B	33 (1ZZ–FE)
		35 (2ZZ–GE)		B	33 (1ZZ–FE)			35 (2ZZ–GE)
I3	A	33 (1ZZ–FE)			35 (2ZZ–GE)	S8		37
		35 (2ZZ–GE)	I10		37	T3		37
	B	33 (1ZZ–FE)	J2	A	37			
		35 (2ZZ–GE)	J3	B	37			

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

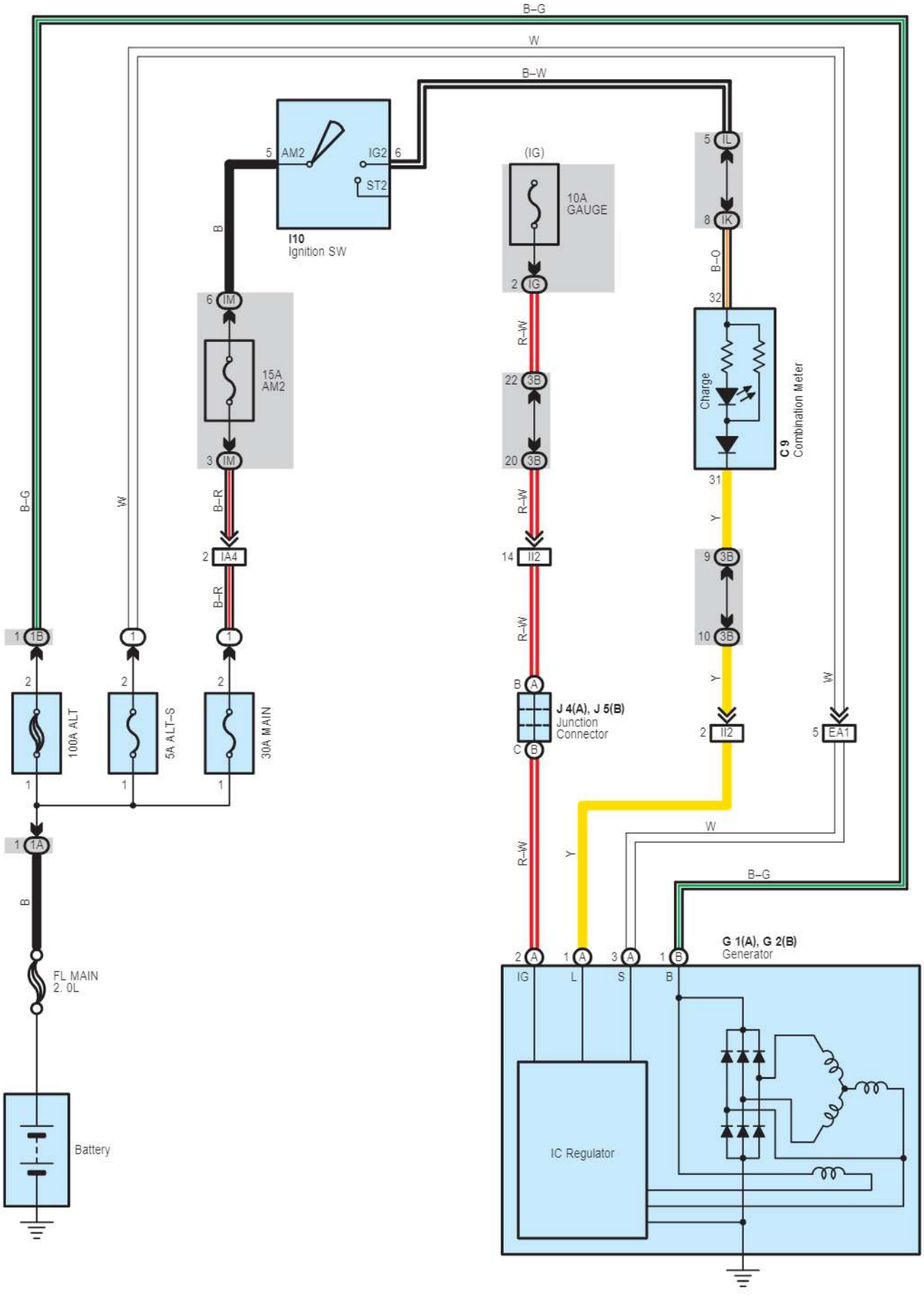
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		

: Ground Points

Code	See Page	Ground Points Location
EC	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter


B–G
W
B–W
5 AM2
IG2 6
ST2
I10
Ignition SW
B
6 IM
15A
AM2
3 IM
B–R
2 IA4
B–R
1 1B
2
100A ALT
1
2
5A ALT–S
1
2
30A MAIN
1
1 1A
B
FL MAIN
2. 0L
Battery
B–G
W
(IG)
10A
GAUGE
2 IG
R–W
22 3B
20 3B
R–W
14 II2
R–W
B A
C B
J 4(A), J 5(B)
Junction
Connector
R–W
Y
5 IL
8 IK
B–O
32
Charge
C 9
Combination Meter
31
Y
9 3B
10 3B
Y
2 II2
W
5 EA1
W
B–G
G 1(A), G 2(B)
Generator
2 A
1 A
3 A
1 B
IG
L
S
B
IC Regulator

: Parts Location

Code		See Page	Code		See Page	Code		See Page
C9		36	G2	B	32 (1ZZ–FE)	J4	A	37
G1	A	32 (1ZZ–FE)			34 (2ZZ–GE)	J5	B	37
		34 (2ZZ–GE)	I10		37			

: Relay Blocks

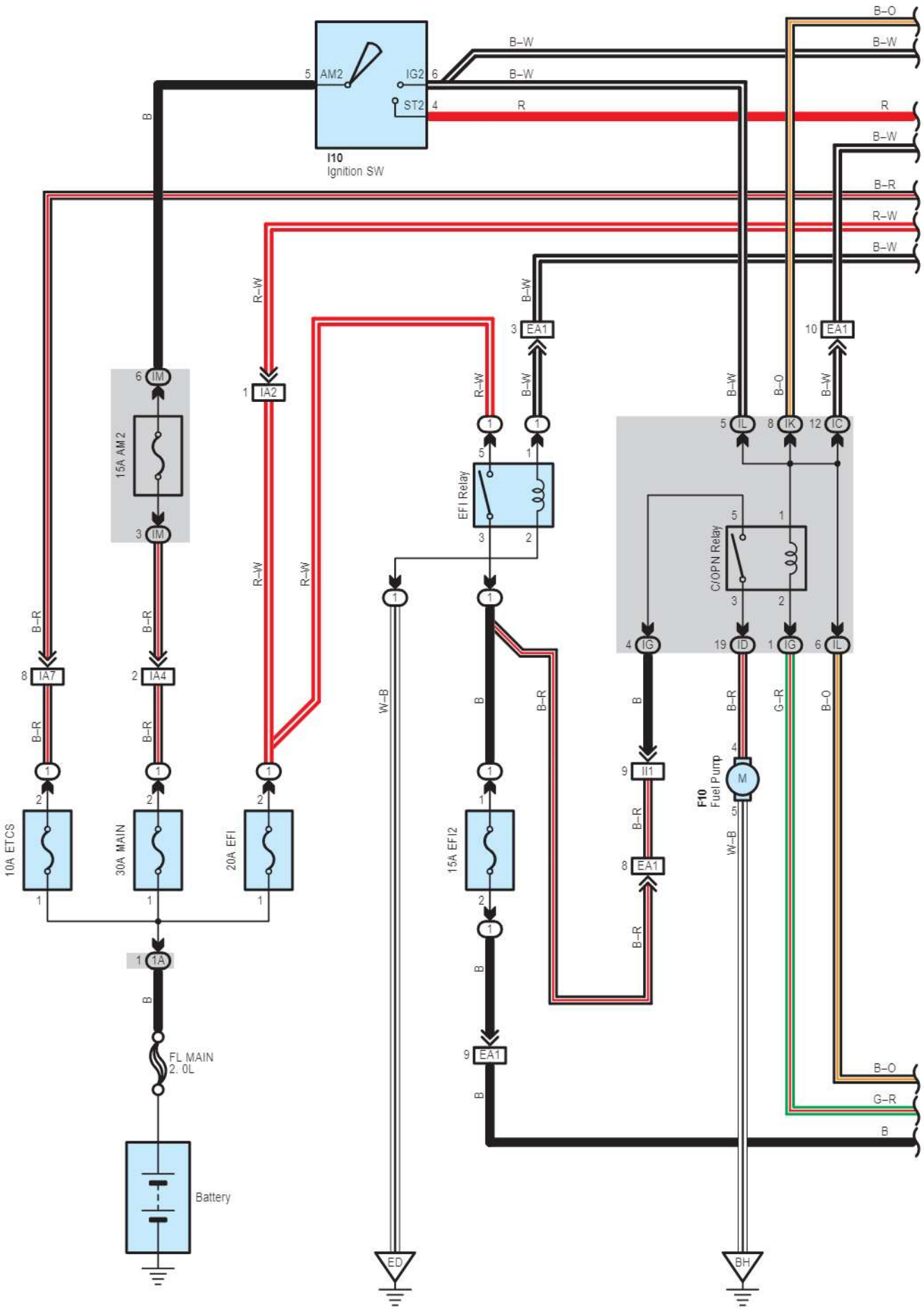
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

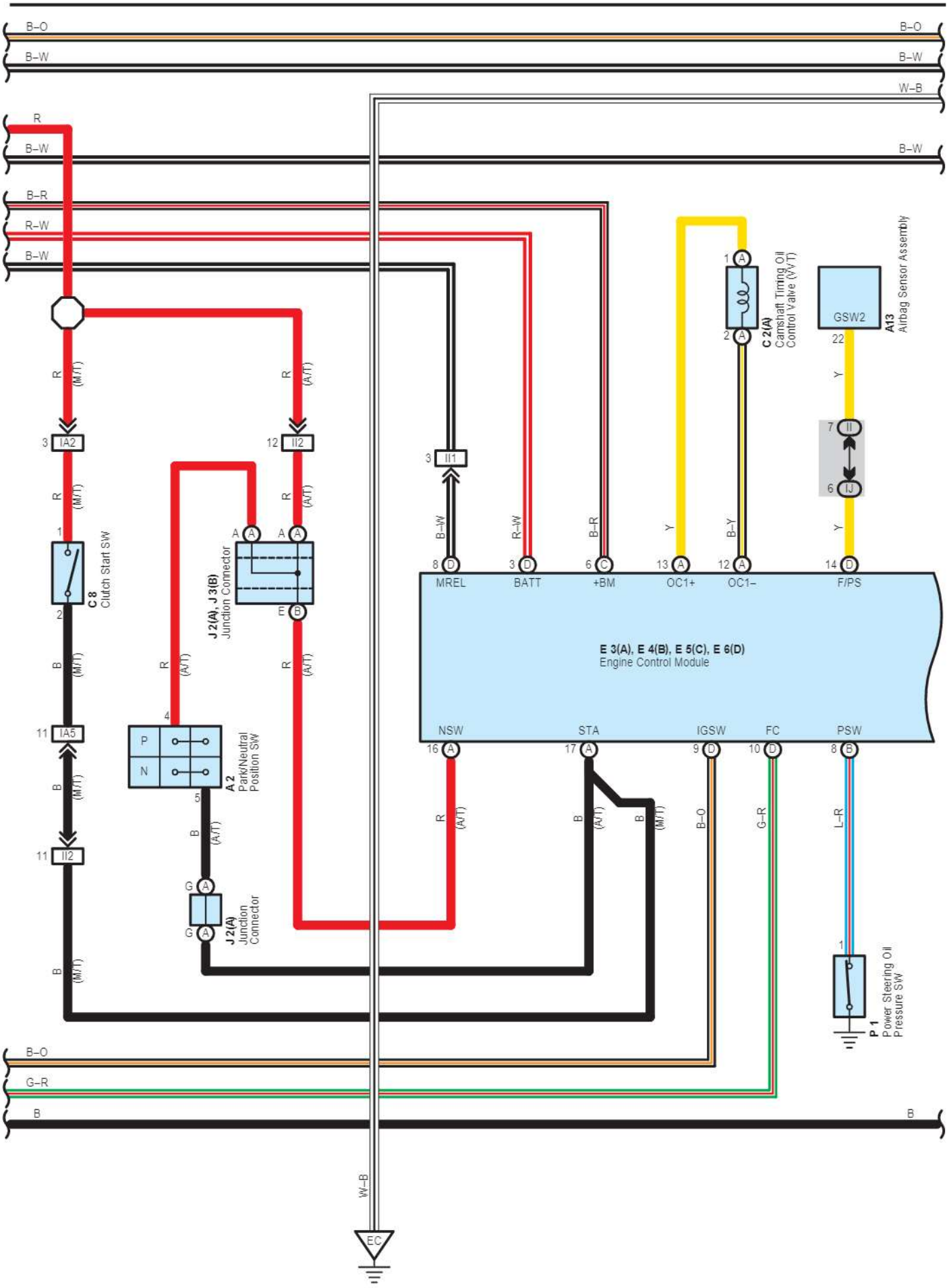
: Junction Block and Wire Harness Connector

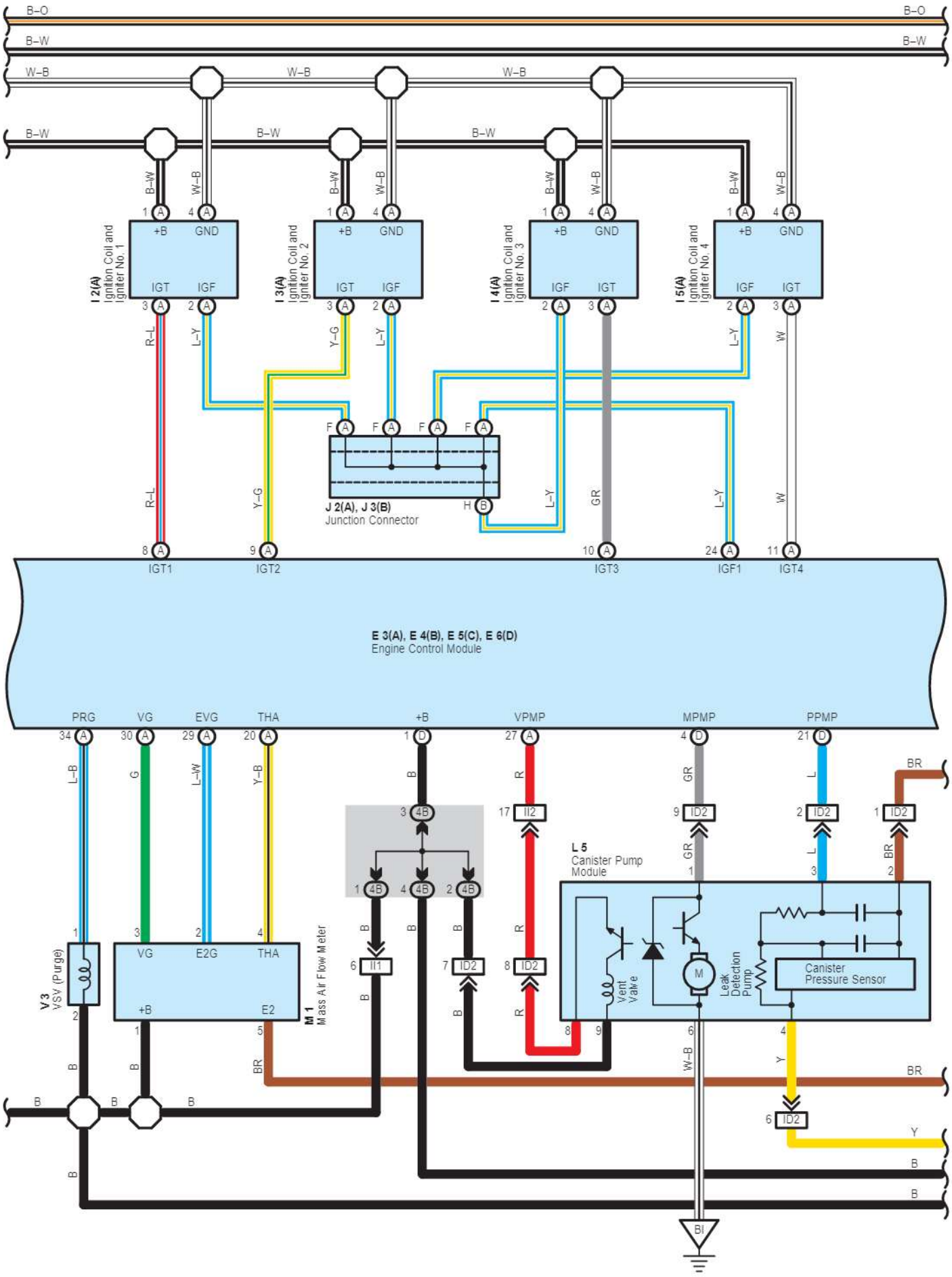
Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
1B		
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

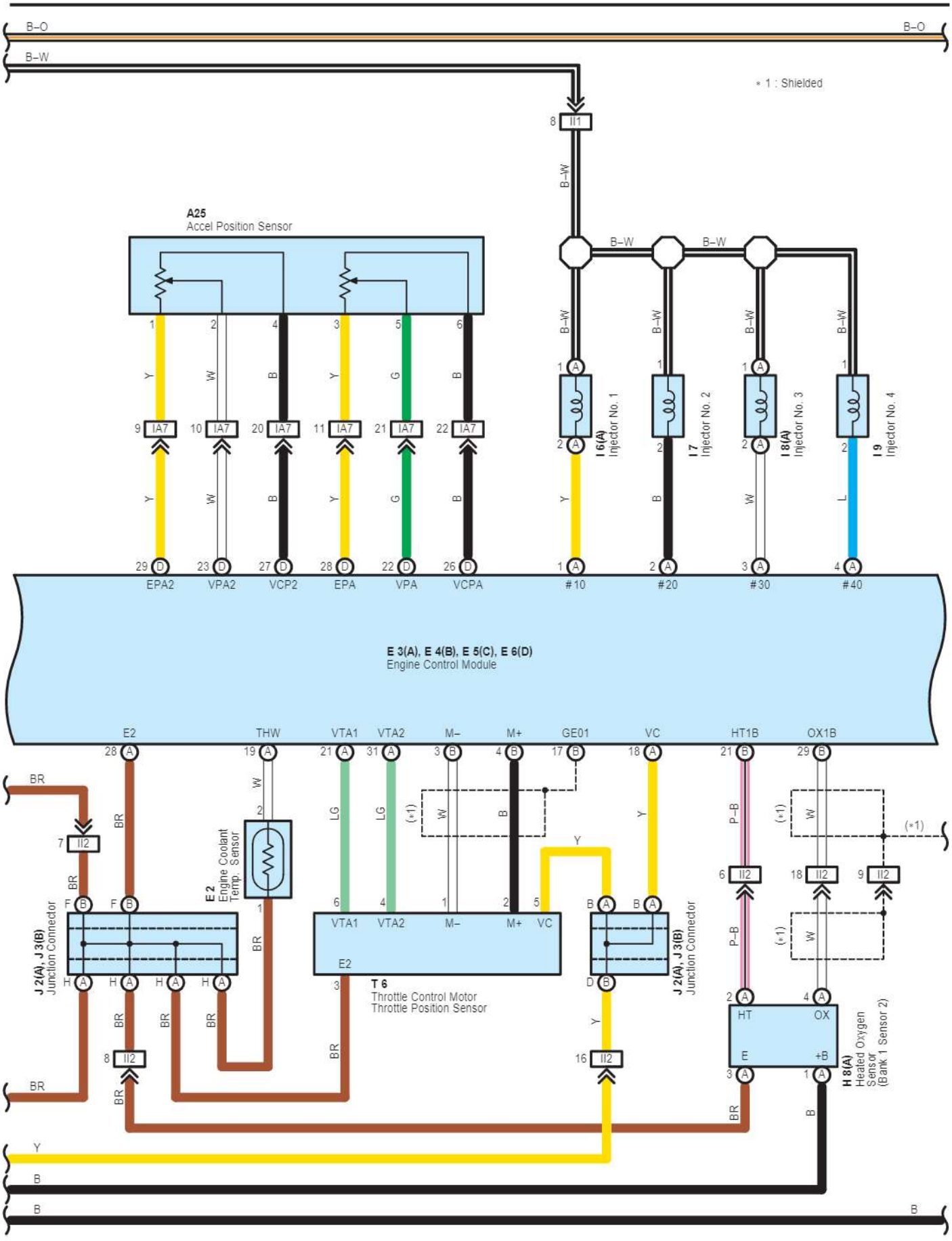
: Connector Joining Wire Harness and Wire Harness

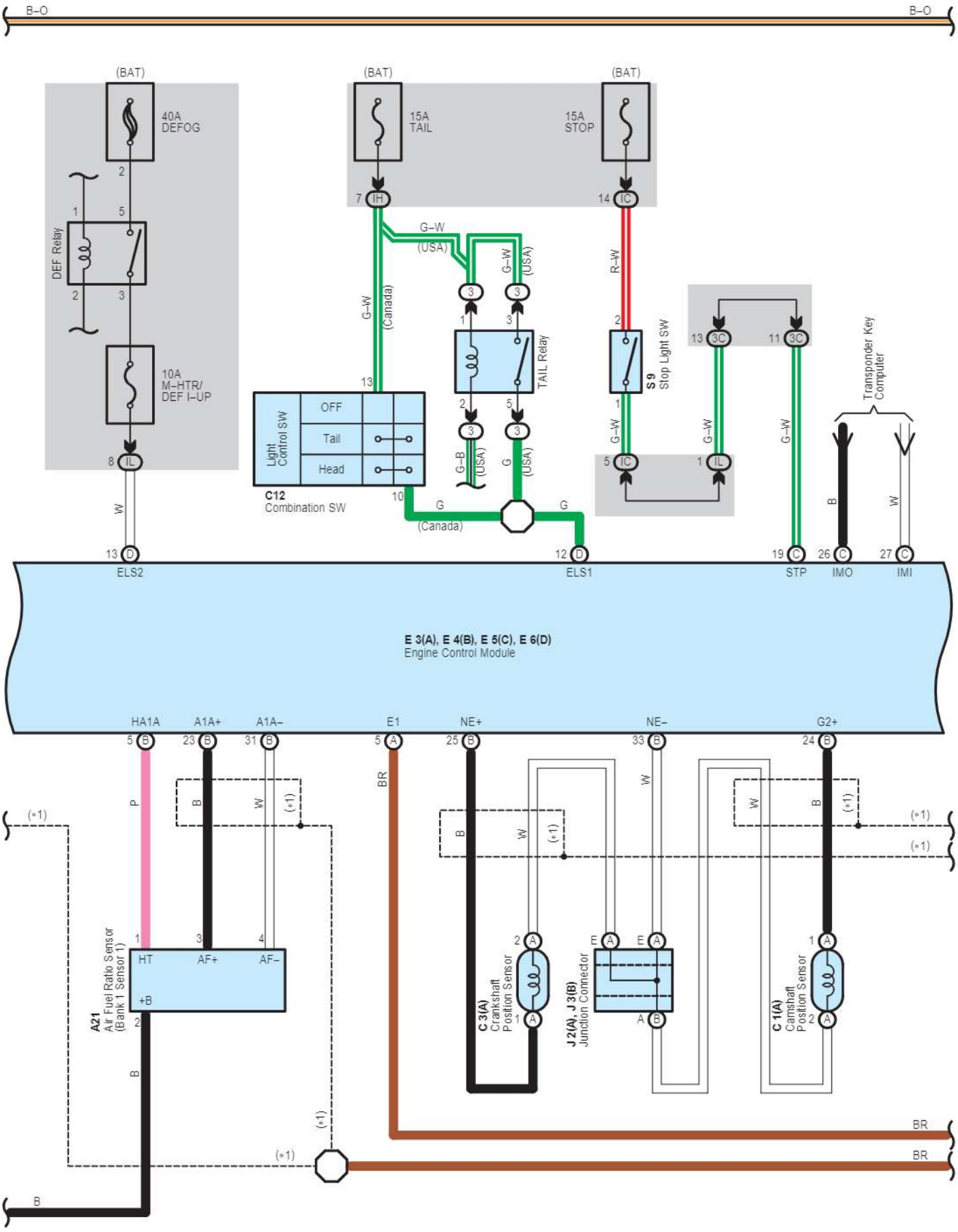
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)

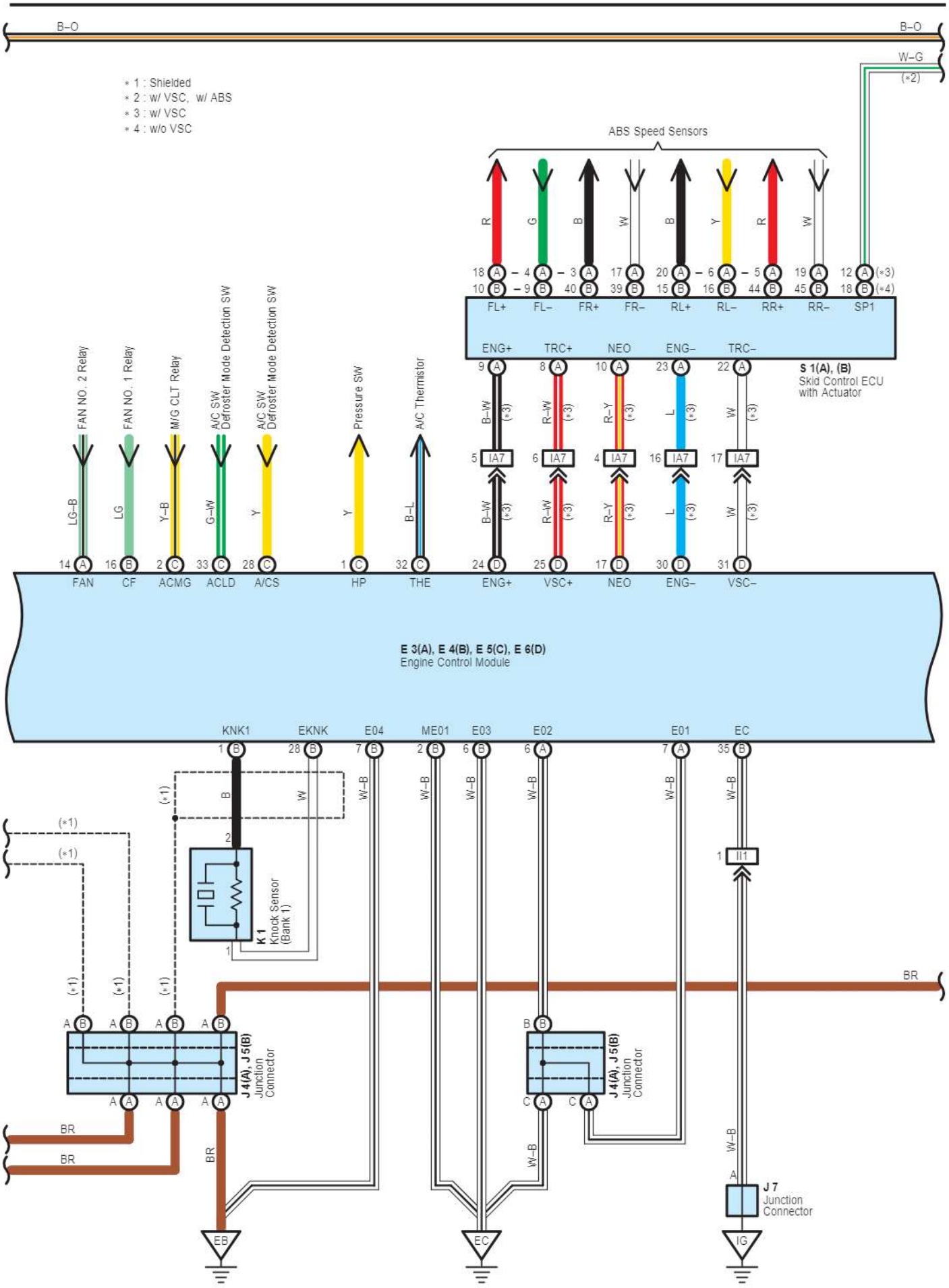

I10
Ignition SW
5 AM2
IG2 6
ST2 4
B–W
R
B–O
B–R
R–W
B
B–W
R–W
B–W
B–O
B–W
B–R
R–W
B–W
3 EA1
10 EA1
1 IA2
6 IM
15A AM2
3 IM
EFI Relay
5 IL
8 IK
12 IC
C/OPN Relay
B–R
R–W
8 IA7
2 IA4
4 IG
19 ID
1 IG
6 IL
10A ETCS
30A MAIN
20A EFI
15A EFI2
9 II1
8 EA1
F10
Fuel Pump
M
W–B
G–R
B–O
1A
FL MAIN
2. 0L
Battery
ED
BH

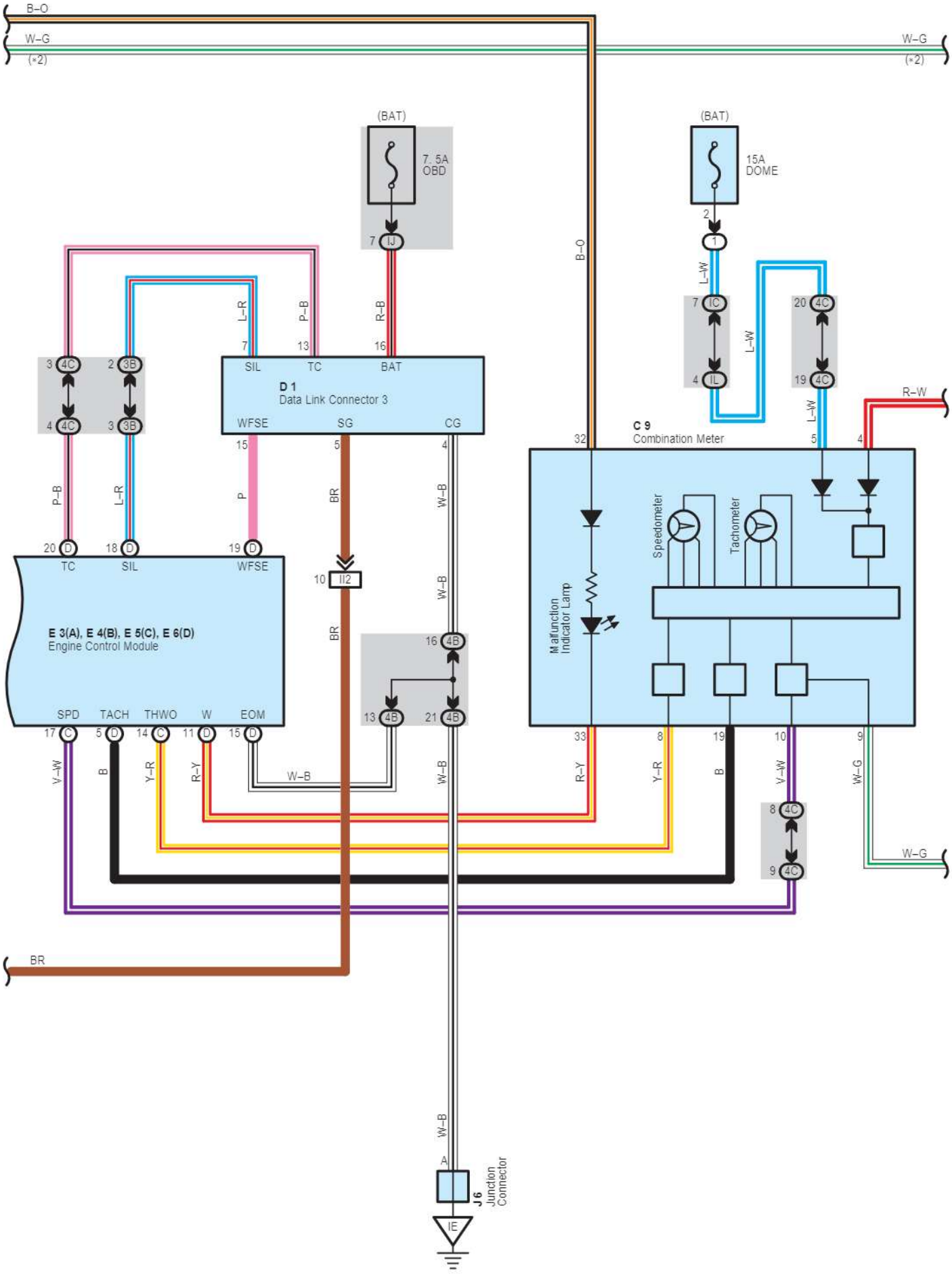

B–O
B–W
W–B
R
B–R
R–W
C 8
Clutch Start SW
J 2(A), J 3(B)
Junction Connector
A 2
Park/Neutral Position SW
J 2(A)
Junction Connector
C 2(A)
Camshaft Timing Oil Control Valve (VVT)
A13
Airbag Sensor Assembly
GSW2
IA2
IA5
II1
II2
IJ
MREL
BATT
+BM
OC1+
OC1–
F/PS
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
NSW
STA
IGSW
FC
PSW
P 1
Power Steering Oil Pressure SW
EC

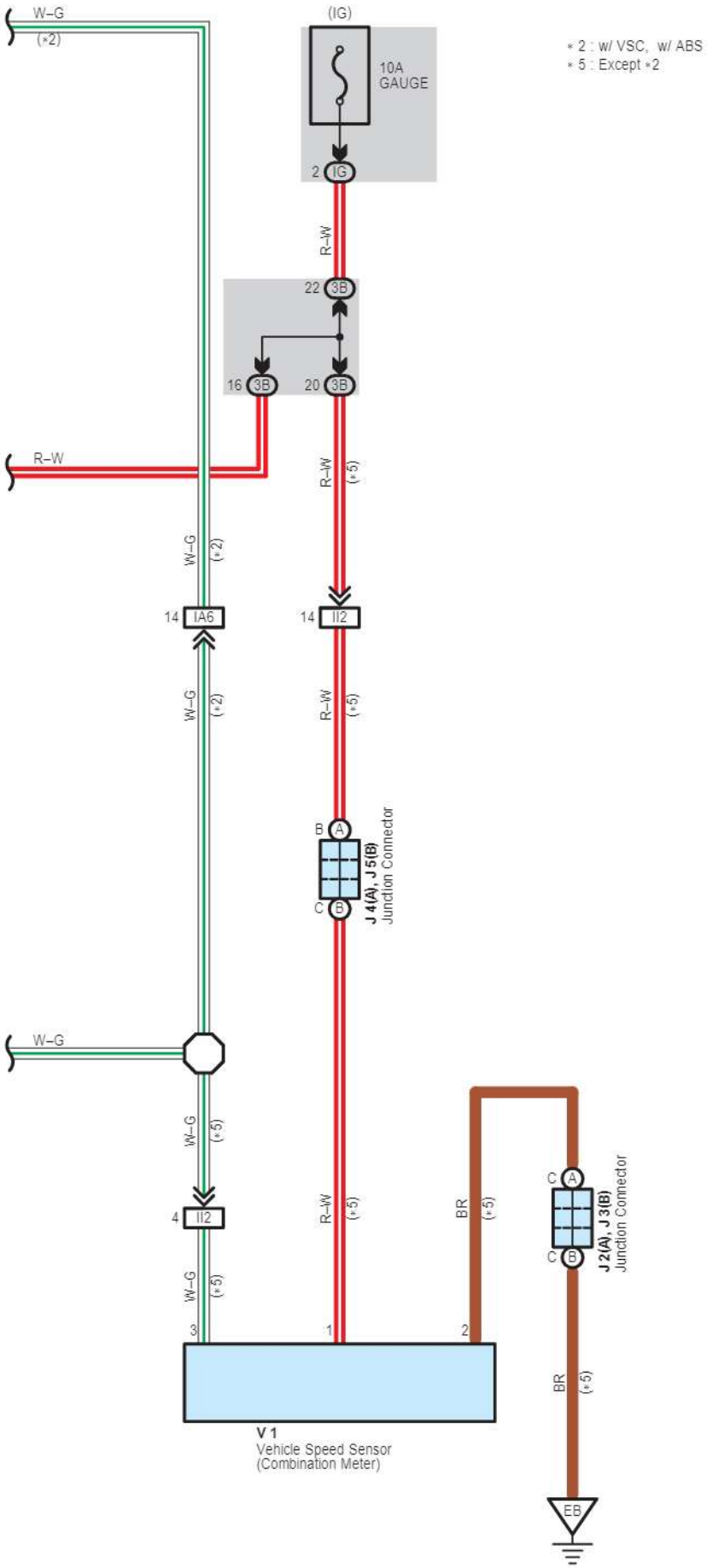

B–O
B–W
W–B
I 2(A)
Ignition Coil and Igniter No. 1
I 3(A)
Ignition Coil and Igniter No. 2
I 4(A)
Ignition Coil and Igniter No. 3
I 5(A)
Ignition Coil and Igniter No. 4
+B
GND
IGT
IGF
J 2(A), J 3(B)
Junction Connector
IGT1
IGT2
IGT3
IGF1
IGT4
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
PRG
VG
EVG
THA
+B
VPMP
MPMP
PPMP
V 3
VSV (Purge)
M 1
Mass Air Flow Meter
E2G
E2
L 5
Canister Pump Module
Vent Valve
Leak Detection Pump
Canister Pressure Sensor
BI


B–O
B–W
B–O
* 1 : Shielded
A25
Accel Position Sensor
I 6(A)
Injector No. 1
I 7
Injector No. 2
I 8(A)
Injector No. 3
I 9
Injector No. 4
EPA2
VPA2
VCP2
EPA
VPA
VCPA
#10
#20
#30
#40
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
E2
THW
VTA1
VTA2
M–
M+
GE01
VC
HT1B
OX1B
E 2
Engine Coolant Temp. Sensor
J 2(A), J 3(B)
Junction Connector
T 6
Throttle Control Motor
Throttle Position Sensor
H 8(A)
Heated Oxygen Sensor (Bank 1 Sensor 2)
HT
OX
E
+B


B–O
B–O
(BAT)
40A
DEFOG
DEF Relay
10A
M–HTR/
DEF I–UP
(BAT)
15A
TAIL
(BAT)
15A
STOP
G–W
(USA)
G–W
(Canada)
R–W
TAIL Relay
S9
Stop Light SW
Transponder Key
Computer
Light
Control SW
OFF
Tail
Head
C12
Combination SW
G–B
(USA)
G
(USA)
G
(Canada)
G
ELS2
ELS1
STP
IMO
IMI
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
HA1A
A1A+
A1A–
E1
NE+
NE–
G2+
A21
Air Fuel Ratio Sensor
(Bank 1 Sensor 1)
HT
AF+
AF–
+B
C 3(A)
Crankshaft
Position Sensor
J 2(A), J 3(B)
Junction Connector
C 1(A)
Camshaft
Position Sensor
(*1)
BR
B


B–O
B–O
W–G
(*2)
* 1 : Shielded
* 2 : w/ VSC, w/ ABS
* 3 : w/ VSC
* 4 : w/o VSC
ABS Speed Sensors
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
SP1
ENG+
TRC+
NEO
ENG–
TRC–
S 1(A), (B)
Skid Control ECU
with Actuator
FAN NO. 2 Relay
FAN NO. 1 Relay
M/G CLT Relay
A/C SW
Defroster Mode Detection SW
A/C SW
Defroster Mode Detection SW
Pressure SW
A/C Thermistor
FAN
CF
ACMG
ACLD
A/CS
HP
THE
ENG+
VSC+
NEO
ENG–
VSC–
IA7
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
KNK1
EKNK
E04
ME01
E03
E02
E01
EC
K 1
Knock Sensor
(Bank 1)
J 4(A), J 5(B)
Junction
Connector
J 4(A), J 5(B)
Junction
Connector
J 7
Junction
Connector
II1
BR
BR
BR
EB
EC
IG


B–O
W–G
(×2)
W–G
(×2)
(BAT)
7. 5A
OBD
7 IJ
(BAT)
15A
DOME
2
1
L–W
7 1C
4 1L
L–W
20 4C
19 4C
R–W
L–R
P–B
R–B
3 4C
4 4C
2 3B
3 3B
7
13
16
SIL
TC
BAT
D 1
Data Link Connector 3
WFSE
SG
CG
15
5
4
32
C 9
Combination Meter
5
4
P–B
L–R
P
BR
W–B
20 D
18 D
19 D
TC
SIL
WFSE
10 I2
W–B
BR
16 4B
13 4B
21 4B
Speedometer
Tachometer
Malfunction
Indicator Lamp
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
SPD
TACH
THWO
W
EOM
17 C
5 D
14 C
11 D
15 D
V–W
B
Y–R
R–Y
W–B
W–B
R–Y
Y–R
B
V–W
W–G
33
8
19
10
9
8 4C
9 4C
W–G
BR
W–B
A
J6
Junction
Connector
IE


W–G
(*2)
(IG)
10A
GAUGE
2 IG
R–W
22 3B
16 3B
20 3B
R–W
R–W
(*5)
W–G
(*2)
14 IA6
14 II2
W–G
(*2)
R–W
(*5)
B A
C B
J 4(A), J 5(B)
Junction Connector
W–G
W–G
(*5)
4 II2
R–W
(*5)
BR
(*5)
W–G
(*5)
3
1
2
V 1
Vehicle Speed Sensor
(Combination Meter)
C A
C B
J 2(A), J 3(B)
Junction Connector
BR
(*5)
EB
* 2 : w/ VSC, w/ ABS
* 5 : Except *2

System Outline

The engine control system utilizes a microcomputer and maintains overall control of the engine, etc. An outline of engine control is given here.

1. Input Signals

(1) Engine coolant temp. signal system

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

(2) Intake air temp. signal system

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 to TERMINAL THA of the engine control module.

(3) Power steering oil pressure signal system

Power steering oil pressure is detected by the power steering oil pressure SW and is input as a control signal to TERMINAL PSW of the engine control module.

(4) RPM signal system

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. Camshaft position is input as a control signal to TERMINAL G2 of the engine control module, and engine RPM is input into TERMINAL NE+.

(5) Throttle signal system

The throttle position sensor detects the throttle valve opening angle, which is input as a control signal to TERMINALS VTA1 and VTA2 of the engine control module.

(6) Vehicle speed signal system

The vehicle speed is detected by the ABS speed sensor and the signal is input to TERMINAL SPD of the engine control module via the comb. meter and the skid control ECU with actuator. (w/ VSC, w/ ABS)

The vehicle speed is detected by the vehicle speed sensor installed in the transaxle and the signal is input to TERMINAL SPD of the engine control module via the comb. meter. (w/o VSC, w/o ABS)

(7) NSW signal system (A/T)

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

(8) A/C SW signal system

The operating voltage of the A/C SW is detected and is input as a control signal to TERMINAL A/CS of the engine control module.

(9) Battery signal system

Voltage is constantly applied to TERMINAL BATT of the engine control module. When the ignition SW is turned to on, voltage for engine control module operation is applied via the EFI relay to TERMINAL +B of the engine control module.

(10) Intake air volume signal system

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

(11) STA signal system

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

(12) Oxygen sensor signal system

The oxygen density in the exhaust gases is detected and is input as a control signal into TERMINAL OX1B of the engine control module. To maintain stable detection performance by the oxygen sensor, a heater is used for warming the sensor. The heater is also controlled by the engine control module (HT1B).

(13) Air fuel ratio signal circuit

The air fuel ratio is detected and input as a control signal into TERMINAL A1A+ of the engine control module.

(14) Engine knock signal system

Engine knocking is detected by the knock sensor and input as a control signal to TERMINAL KNK1 of the engine control module.

(15) Electrical load signal system

When systems which cause a high electrical load such as the rear window defogger, taillight are turned on, a signal is input to TERMINALS ELS and ELS2 as a control signal.

2. Control System

* SFI system
  The SFI system monitors the engine conditions through the signals, which are input from each sensor to the engine control module. Based on this data and the program memorized in the engine control module, the most appropriate fuel injection timing is decided and current is output to TERMINALS #10, #20, #30 and #40 of the engine control module, operating the injectors (to inject fuel). This is the system which finely controls the fuel injection in response to the driving conditions, through the engine control module.
* ESA system
  The ESA system monitors the engine conditions using the signals, which are input to the engine control module from each sensor. Based on this data and the program memorized in the engine control module, the most appropriate ignition timing is decided and current is output to TERMINALS IGT1, IGT2, IGT3 and IGT4 of the engine control module. This output controls the ignition coil and igniter No. 1 , No. 2 , No. 3 and No. 4 to produce the most appropriate ignition timing for the driving conditions.
* Knock control system
  Knock control system controls the gate based on the engine rotation speed and detects knocking by the peak value of the knock sensor output during the gate open period, and then controls it to the most suitable ignition timing in proportion to the driving condition.
* Evapoparge control system
  This system leads the vapor stuck to the canister to the serge tank in order not to agitate the air fuel by adjusting the fuel injection volume.
  The signal at this time will be output from TERMINAL PRG of the engine control module to VSV (Purge).

3. Diagnosis System

With the diagnosis system, when there is a malfunctioning in the engine control module signal system, the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the malfunction indicator lamp.

4. Fail–Safe System

When a malfunction occurs in any system, 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 the data (Standard values) recorded in the engine control module memory or else stops the engine.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	E6 D	36	J4 A	37
A13	36	F10	38 (*1)	J5 B	37
A21	32 (1ZZ–FE)		40 (*2)	J6	37
A25	36	H8 A	37	J7	37
C1 A	32 (1ZZ–FE)	I2 A	33 (1ZZ–FE)	K1	33 (1ZZ–FE)
C2 A	32 (1ZZ–FE)	I3 A	33 (1ZZ–FE)	L5	38 (*1)
C3 A	32 (1ZZ–FE)	I4 A	33 (1ZZ–FE)		40 (*2)
C8	36	I5 A	33 (1ZZ–FE)	M1	33 (1ZZ–FE)
C9	36	I6 A	33 (1ZZ–FE)	P1	33 (1ZZ–FE)
C12	36	I7	33 (1ZZ–FE)	S1 A	33 (1ZZ–FE)
D1	36	I8 A	33 (1ZZ–FE)	S1 B	33 (1ZZ–FE)
E2	32 (1ZZ–FE)	I9	33 (1ZZ–FE)	S9	37
E3 A	36	I10	37	T6	33 (1ZZ–FE)
E4 B	36	J2 A	37	V1	33 (1ZZ–FE)
E5 C	36	J3 B	37	V3	33 (1ZZ–FE)

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
II		
IJ		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

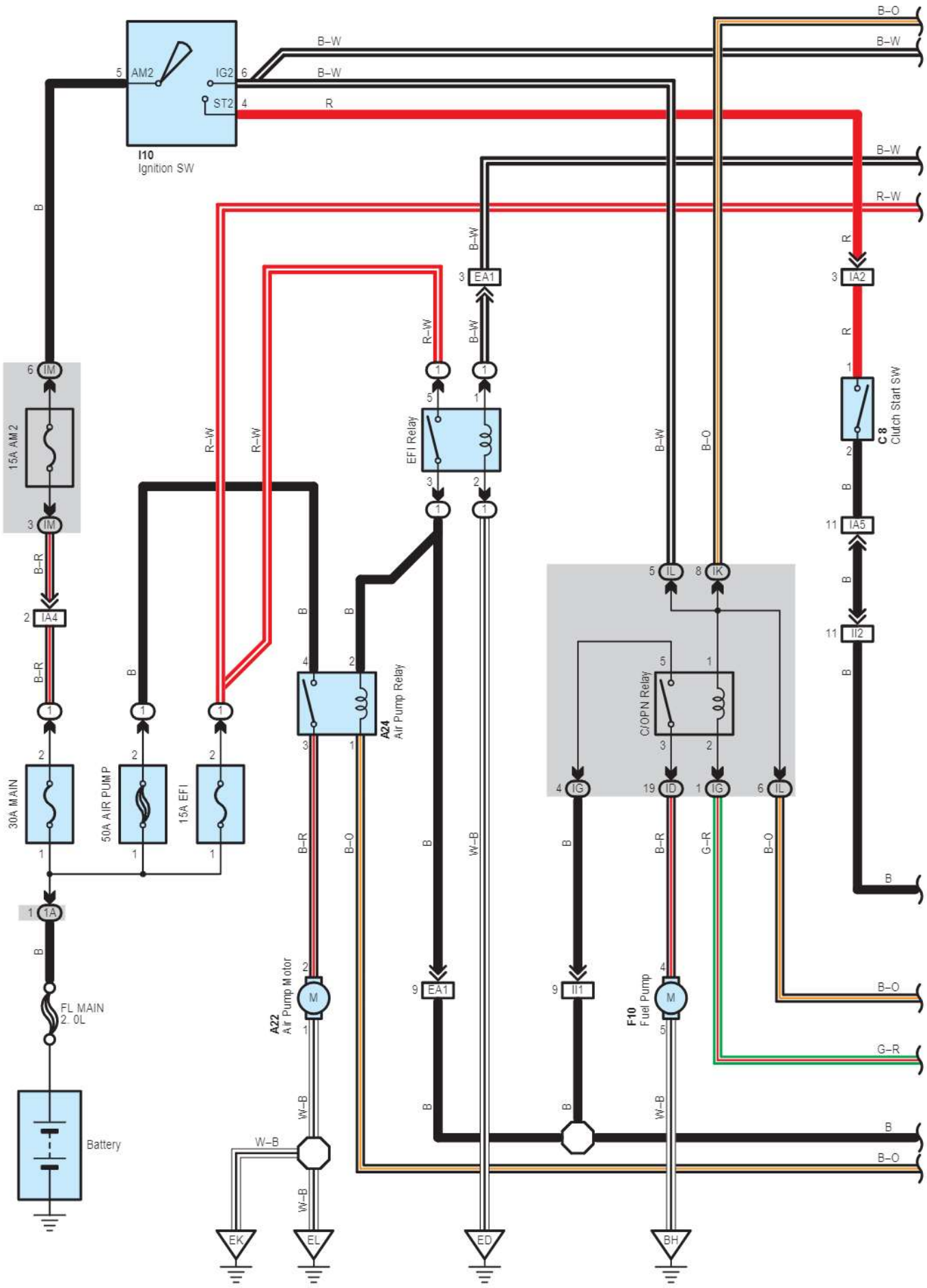
: **Connector Joining Wire Harness and Wire Harness**

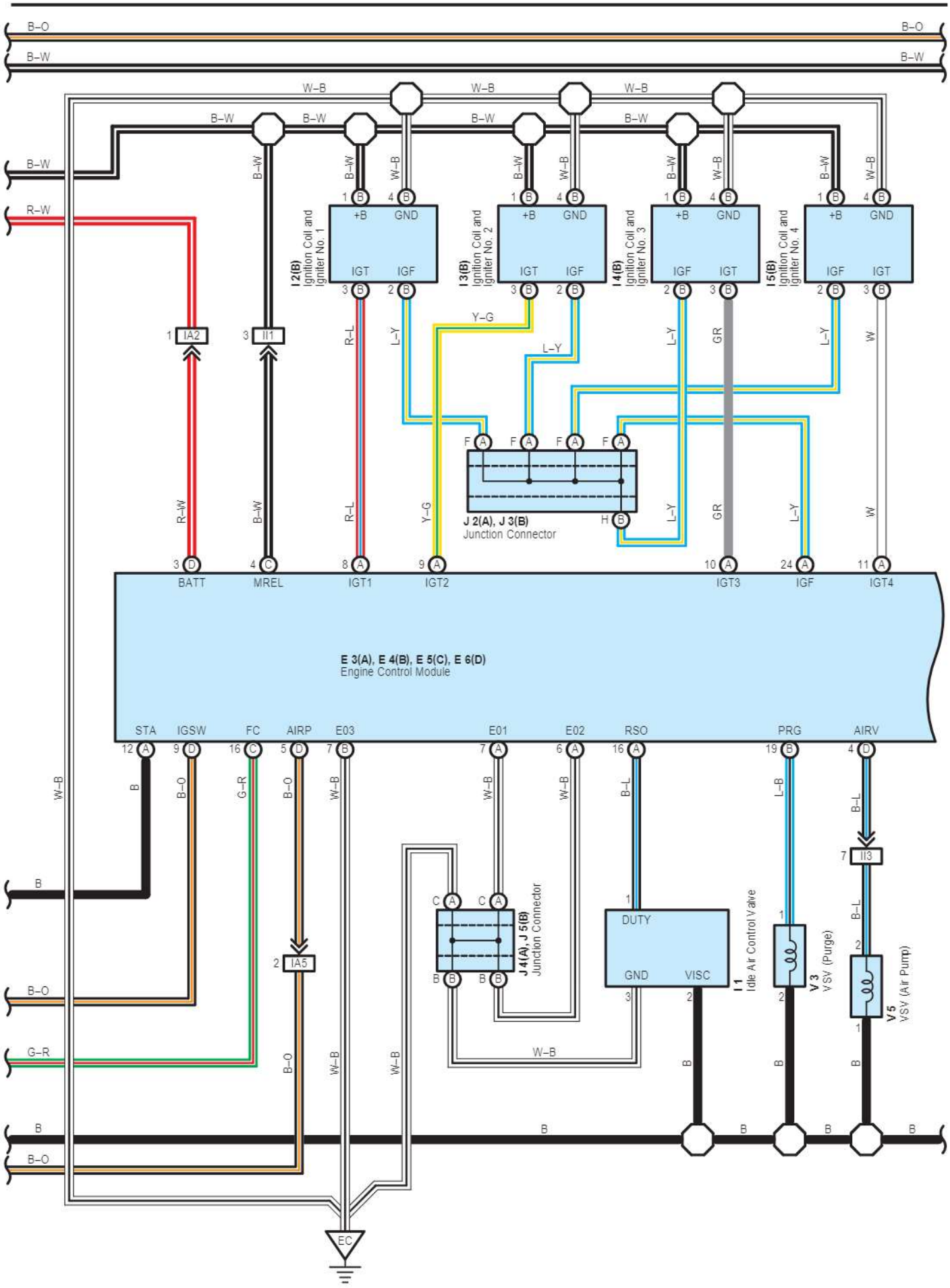
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
IA6		
IA7		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		

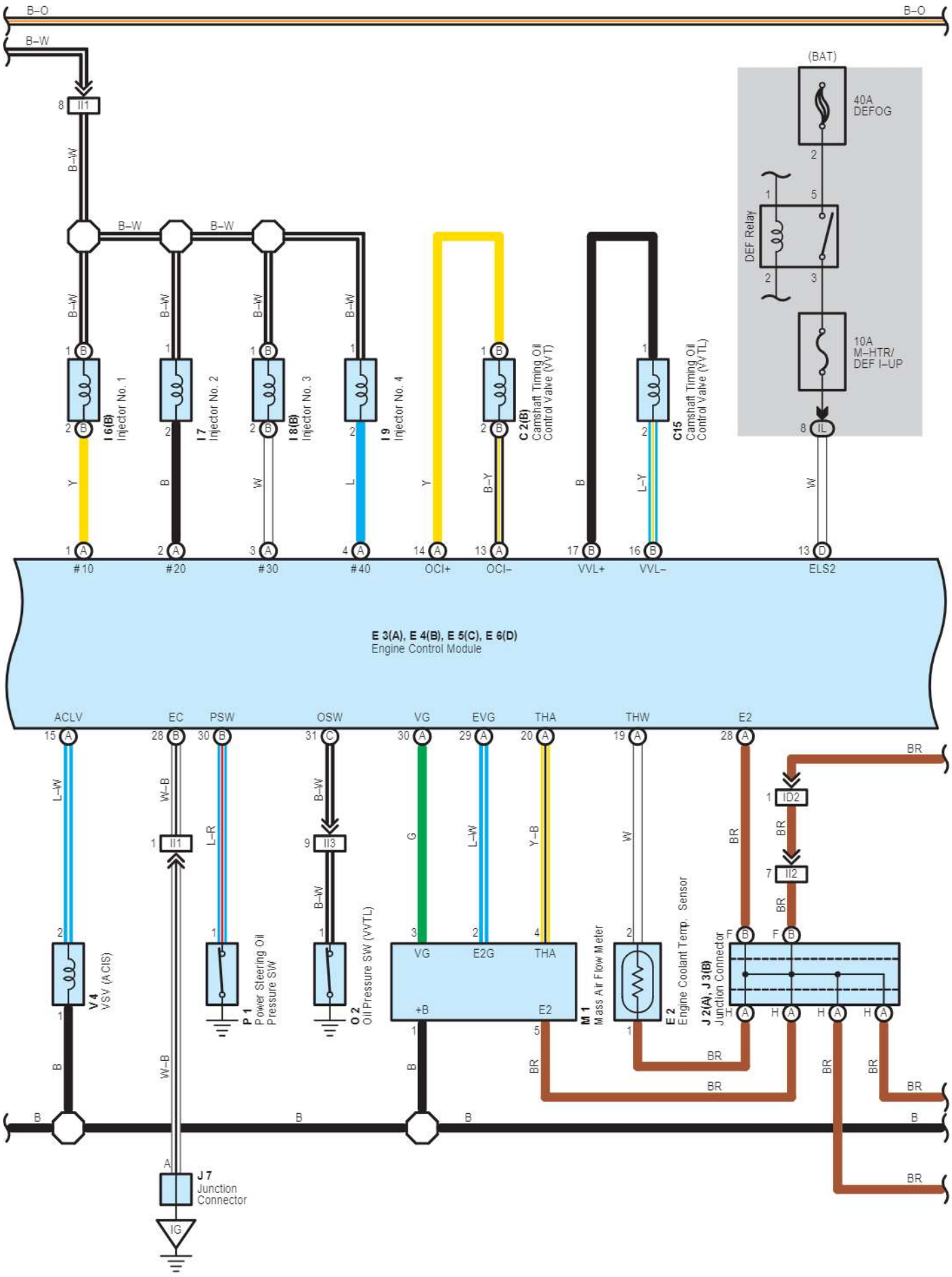
: **Ground Points**

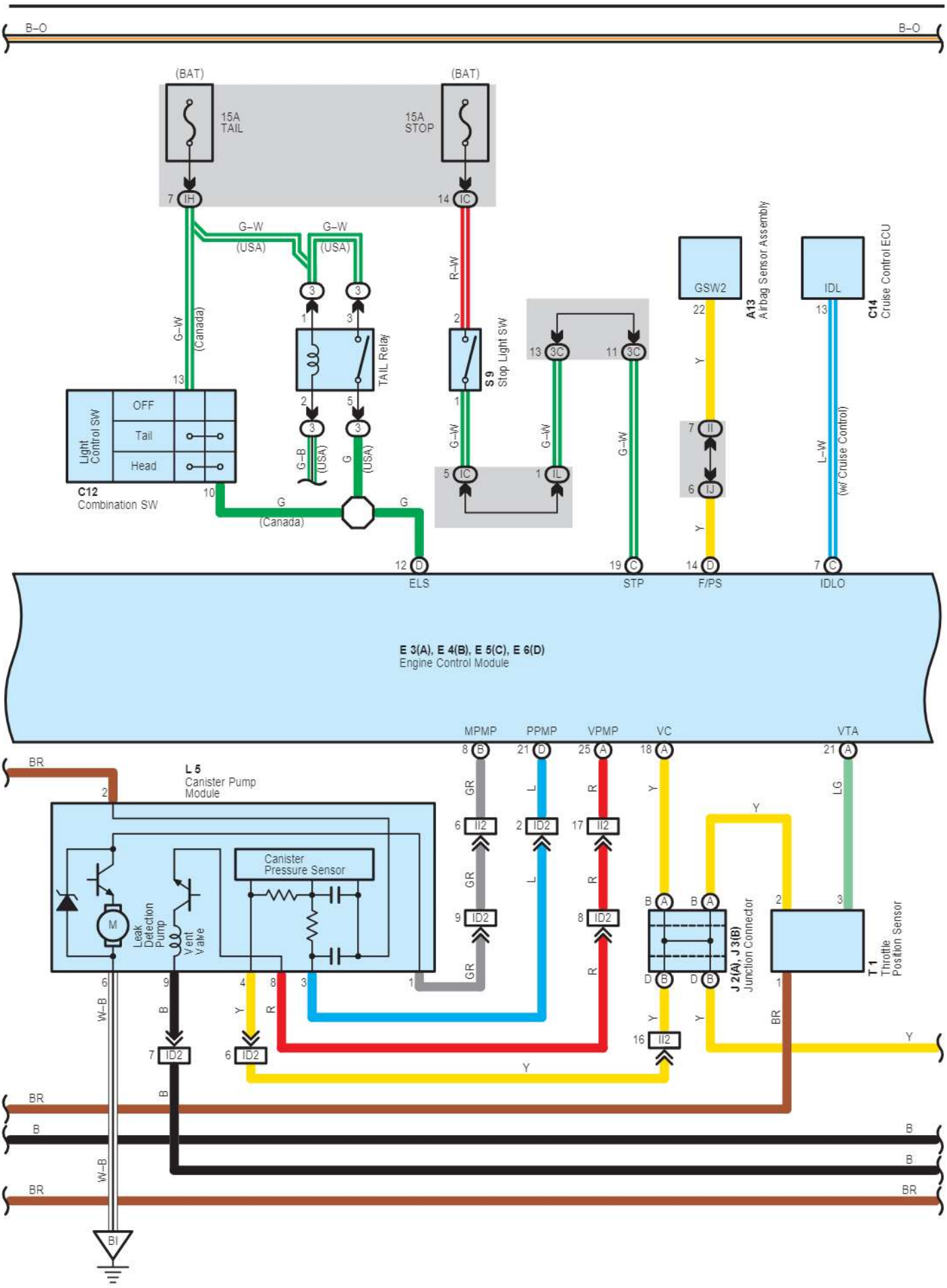
Code	See Page	Ground Points Location
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
EC		
ED	42 (1ZZ–FE)	Front Left Suspension Tower
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	
BI	46 (*1)	Lower Back Panel
	47 (*2)	

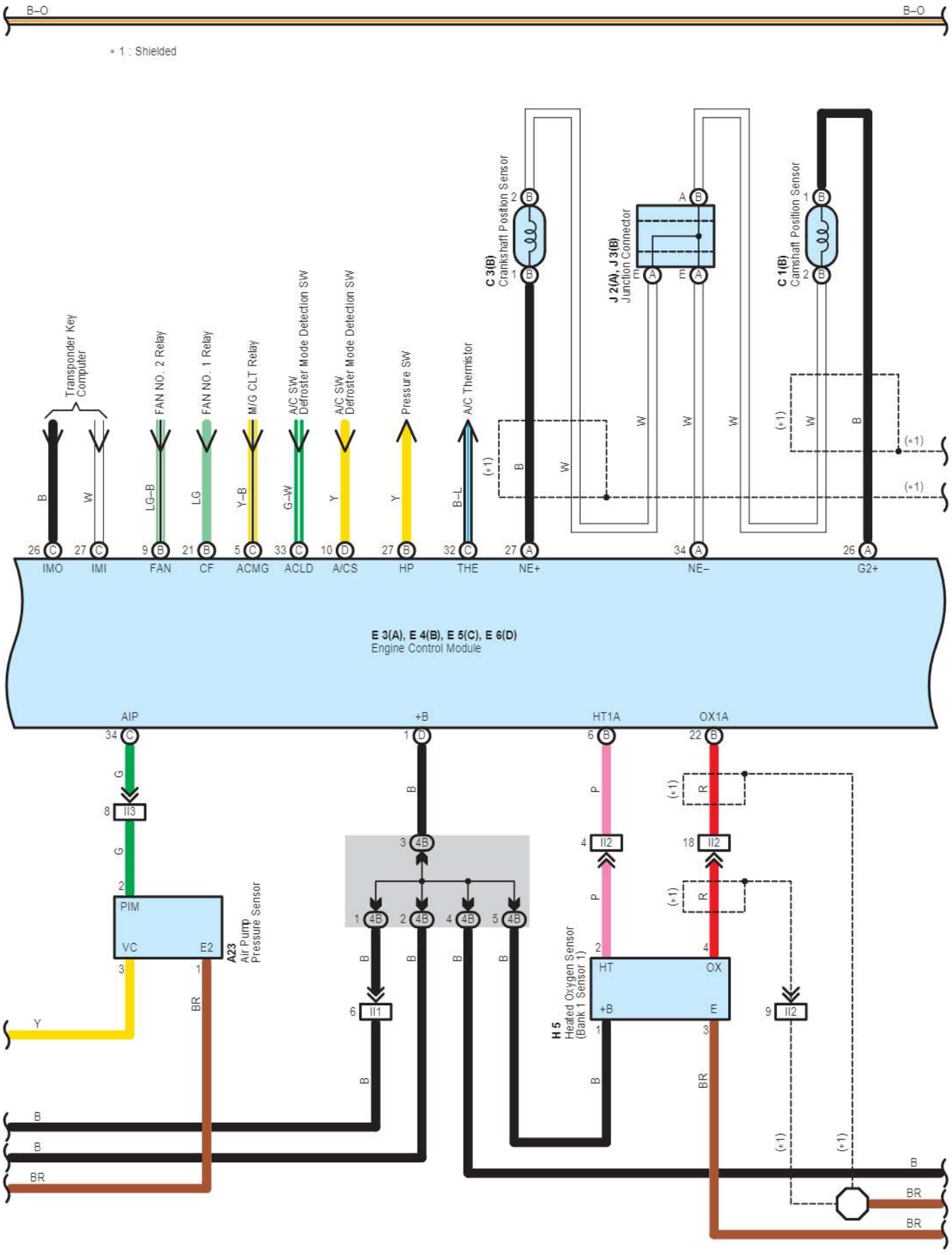
* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier

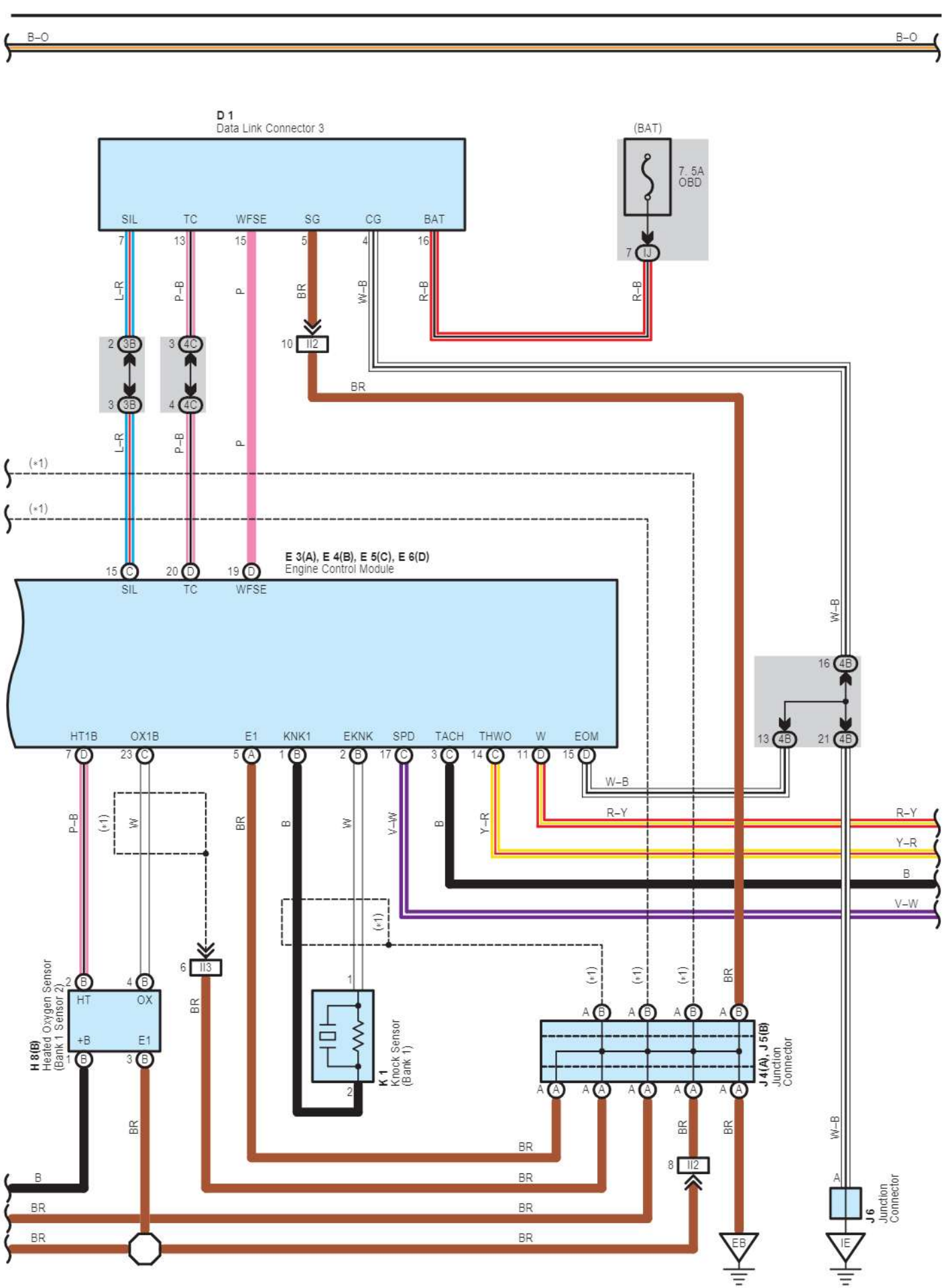

I10
Ignition SW
AM2
IG2
ST2
B–W
R
B–O
R–W
B
B–R
B–W
R–W
R–W
B–W
B–O
B
B–R
B–O
W–B
G–R
B
B–O
G–R
B
B–O
W–B
W–B
W–B
W–B
15A AM2
30A MAIN
50A AIR PUMP
15A EFI
FL MAIN
2. 0L
Battery
EFI Relay
A24
Air Pump Relay
A22
Air Pump Motor
C/OPN Relay
F10
Fuel Pump
C8
Clutch Start SW
IM
IA4
EA1
IA2
IA5
II2
IL
IK
IG
ID
II1
1A
EK
EL
ED
BH

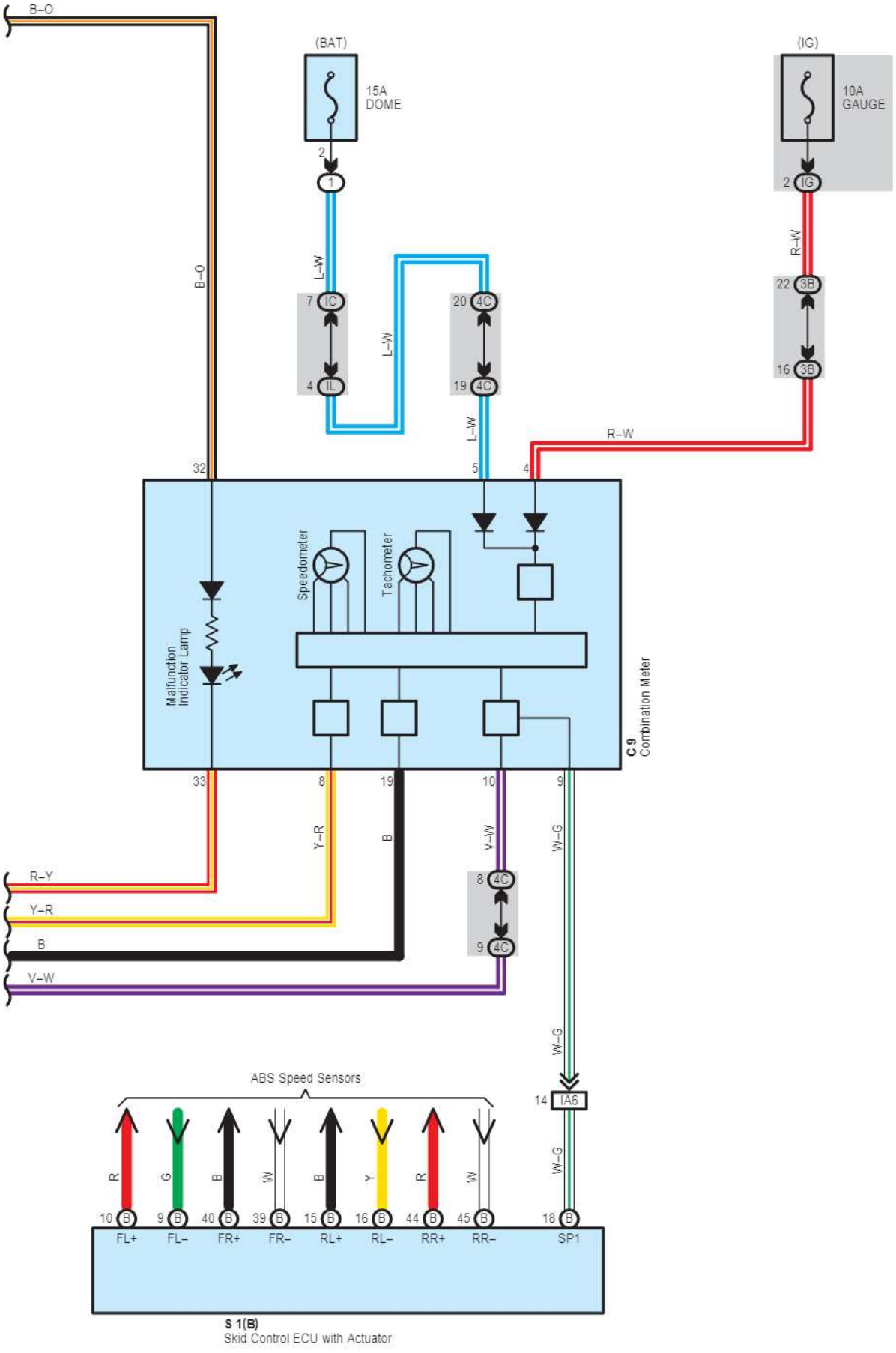

B–O
B–W
R–W
W–B
I 2(B) Ignition Coil and Igniter No. 1
I 3(B) Ignition Coil and Igniter No. 2
I 4(B) Ignition Coil and Igniter No. 3
I 5(B) Ignition Coil and Igniter No. 4
+B
GND
IGT
IGF
IA2
II1
R–L
L–Y
Y–G
GR
W
J 2(A), J 3(B) Junction Connector
BATT
MREL
IGT1
IGT2
IGT3
IGF
IGT4
E 3(A), E 4(B), E 5(C), E 6(D) Engine Control Module
STA
IGSW
FC
AIRP
E03
E01
E02
RSO
PRG
AIRV
G–R
B–L
IA5
II3
J 4(A), J 5(B) Junction Connector
DUTY
GND
VISC
I 1 Idle Air Control Valve
V 3 VSV (Purge)
V 5 VSV (Air Pump)
EC


B–O
B–O
B–W
(BAT)
40A DEFOG
DEF Relay
10A M–HTR/ DEF I–UP
8 II1
B–W
B–W
B–W
B–W
B–W
I 6(B) Injector No. 1
I 7 Injector No. 2
I 8(B) Injector No. 3
I 9 Injector No. 4
C 2(B) Camshaft Timing Oil Control Valve (VVT)
C15 Camshaft Timing Oil Control Valve (VVTL)
8 IL
Y
B
W
L
Y
B–Y
B
L–Y
W
1 A #10
2 A #20
3 A #30
4 A #40
14 A OCI+
13 A OCI–
17 B VVL+
16 B VVL–
13 D ELS2
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
ACLV
EC
PSW
OSW
VG
EVG
THA
THW
E2
15 A
28 B
30 B
31 C
30 A
29 A
20 A
19 A
28 A
L–W
W–B
L–R
B–W
G
L–W
Y–B
W
BR
1 ID2
7 II2
BR
V 4 VSV (ACIS)
P 1 Power Steering Oil Pressure SW
O 2 Oil Pressure SW (VVTL)
VG
E2G
THA
+B
E2
M 1 Mass Air Flow Meter
E 2 Engine Coolant Temp. Sensor
J 2(A), J 3(B) Junction Connector
B
W–B
BR
J 7 Junction Connector
IG


B–O
B–O
(BAT)
(BAT)
15A
TAIL
15A
STOP
7 IH
14 IC
G–W
(USA)
G–W
(USA)
G–W
(Canada)
R–W
TAIL Relay
S 9
Stop Light SW
GSW2
A13
Airbag Sensor Assembly
IDL
C14
Cruise Control ECU
Light Control SW
OFF
Tail
Head
C12
Combination SW
G–B
(USA)
G
(USA)
G
(Canada)
G
G–W
L–W
(w/ Cruise Control)
12 D
ELS
19 C
STP
14 D
F/PS
7 C
IDLO
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
MPMP
PPMP
VPMP
VC
VTA
L 5
Canister Pump
Module
Canister
Pressure Sensor
Leak
Detection
Pump
Vent
Valve
J 2(A), J 3(B)
Junction Connector
T 1
Throttle
Position Sensor
W–B
BR
B
GR
L
R
Y
LG
BI


B–O
B–O
* 1 : Shielded
Transponder Key Computer
FAN NO. 2 Relay
FAN NO. 1 Relay
M/G CLT Relay
A/C SW Defroster Mode Detection SW
A/C SW Defroster Mode Detection SW
Pressure SW
A/C Thermistor
C 3(B) Crankshaft Position Sensor
J 2(A), J 3(B) Junction Connector
C 1(B) Camshaft Position Sensor
IMO
IMI
FAN
CF
ACMG
ACLD
A/CS
HP
THE
NE+
NE–
G2+
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
AIP
+B
HT1A
OX1A
PIM
VC
E2
A23
Air Pump Pressure Sensor
H 5
Heated Oxygen Sensor (Bank 1 Sensor 1)
HT
OX
+B
E


B–O
B–O
D 1
Data Link Connector 3
SIL
TC
WFSE
SG
CG
BAT
(BAT)
7.5A
OBD
7 1J
L–R
P–B
P
BR
W–B
R–B
2 3B
3 3B
3 4C
4 4C
10 II2
(*1)
(*1)
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
15 C SIL
20 D TC
19 D WFSE
HT1B
OX1B
E1
KNK1
EKNK
SPD
TACH
THWO
W
EOM
7 D
23 C
5 A
1 B
2 B
17 C
3 C
14 C
11 D
15 D
16 4B
13 4B
21 4B
R–Y
Y–R
B
V–W
W
V–W
6 II3
2 B HT
4 B OX
1 B +B
3 B E1
H 8(B)
Heated Oxygen Sensor
(Bank 1 Sensor 2)
1
2
K 1
Knock Sensor
(Bank 1)
A B
A A
J 4(A), J 5(B)
Junction
Connector
8 II2
EB
IE
A
J 6
Junction
Connector


B–O
(BAT)
15A
DOME
2
1
L–W
7 IC
4 IL
L–W
20 4C
19 4C
L–W
(IG)
10A
GAUGE
2 IG
R–W
22 3B
16 3B
R–W
B–O
32
5
4
Speedometer
Tachometer
Malfunction
Indicator Lamp
C 9
Combination Meter
33
8
19
10
9
Y–R
B
V–W
W–G
R–Y
Y–R
B
V–W
8 4C
9 4C
W–G
14 IA6
W–G
ABS Speed Sensors
R
G
B
W
B
Y
R
W
10 B
9 B
40 B
39 B
15 B
16 B
44 B
45 B
18 B
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
SP1
S 1(B)
Skid Control ECU with Actuator

System Outline

The engine control system utilizes a microcomputer and maintains overall control of the engine, etc. An outline of engine control is given here.

1. Input Signals

(1) Engine coolant temp. signal system

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

(2) Intake air temp. signal system

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 to TERMINAL THA of the engine control module.

(3) Power steering oil pressure signal system

Power steering oil pressure is detected by the power steering oil pressure SW and is input as a control signal to TERMINAL PSW of the engine control module.

(4) RPM signal system

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. Camshaft position is input as a control signal to TERMINAL G2+ of the engine control module, and engine RPM is input into TERMINAL NE+.

(5) Throttle signal system

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

(6) Vehicle speed signal system

The vehicle speed is detected by the ABS speed sensor and the signal is input to TERMINAL SPD of the engine control module via the comb. meter and the skid control ECU with actuator. (w/ ABS)

The vehicle speed is detected by the vehicle speed sensor installed in the transaxle and the signal is input to TERMINAL SPD of the engine control module via the comb. meter. (w/o ABS)

(7) A/C SW signal system

The operating voltage of the A/C SW is detected and is input as a control signal to TERMINAL A/CS of the engine control module.

(8) Battery signal system

Voltage is constantly applied to TERMINAL BATT of the engine control module. When the ignition SW is turned to on, voltage for engine control module operation is applied via the EFI relay to TERMINAL +B of the engine control module.

(9) Intake air volume signal system

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

(10) STA signal system

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

(11) Oxygen sensor signal system

The oxygen density in the exhaust gases is detected and is input as a control signal into TERMINALS OX1A and OX1B of the engine control module. To maintain stable detection performance by the oxygen sensor, a heater is used for warming the sensor. The heater is also controlled by the engine control module (HT1A and HT1B).

(12) Engine knock signal system

Engine knocking is detected by the knock sensor and input as a control signal to TERMINAL KNK1 of the engine control module.

(13) Electrical load signal system

When systems which cause a high electrical load such as the rear window defogger, taillight are turned on, a signal is input to TERMINALS ELS and ELS2 as a control signal.

2. Control System

* SFI system
  The SFI system monitors the engine conditions through the signals, which are input from each sensor to the engine control module. Based on this data and the program memorized in the engine control module, the most appropriate fuel injection timing is decided and current is output to TERMINALS #10, #20, #30 and #40 of the engine control module, operating the injectors (to inject fuel). This is the system which finely controls the fuel injection in response to the driving conditions, through the engine control module.
* ESA system
  The ESA system monitors the engine conditions using the signals, which are input to the engine control module from each sensor. Based on this data and the program memorized in the engine control module, the most appropriate ignition timing is decided and current is output to TERMINALS IGT1, IGT2, IGT3 and IGT4 of the engine control module. This output controls the ignition coil and igniter No. 1 , No. 2 , No. 3 and No. 4 to produce the most appropriate ignition timing for the driving conditions.
* IAC system
  The IAC system 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, and outputs current to TERMINAL RSO to control the idle air control valve.
* Knock control system
  Knock control system controls the gate based on the engine rotation speed and detects knocking by the peak value of the knock sensor output during the gate open period, and then controls it to the most suitable ignition timing in proportion to the driving condition.
* Evapoparge control system
  This system leads the vapor stuck to the canister to the serge tank in order not to agitate the air fuel by adjusting the fuel injection volume.
  The signal at this time will be output from TERMINAL PRG of the engine control module to VSV (Purge).

3. Diagnosis System

With the diagnosis system, when there is a malfunctioning in the engine control module signal system,the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the malfunction indicator lamp.

4. Fail–Safe System

When a malfunction occurs in any system, 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 the data (Standard values) recorded in the engine control module memory or else stops the engine.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A13	36	E6 D	36	J4 A	37
A22	34 (2ZZ–GE)	F10	38 (*1)	J5 B	37
A23	34 (2ZZ–GE)		40 (*2)	J6	37
A24	34 (2ZZ–GE)	H5	37	J7	37
C1 B	34 (2ZZ–GE)	H8 B	37	K1	35 (2ZZ–GE)
C2 B	34 (2ZZ–GE)	I1	35 (2ZZ–GE)	L5	38 (*1)
C3 B	34 (2ZZ–GE)	I2 B	35 (2ZZ–GE)		40 (*2)
C8	36	I3 B	35 (2ZZ–GE)	M1	35 (2ZZ–GE)
C9	36	I4 B	35 (2ZZ–GE)	O2	35 (2ZZ–GE)
C12	36	I5 B	35 (2ZZ–GE)	P1	35 (2ZZ–GE)
C14	36	I6 B	35 (2ZZ–GE)	S1 B	35 (2ZZ–GE)
C15	34 (2ZZ–GE)	I7	35 (2ZZ–GE)	S9	37
D1	36	I8 B	35 (2ZZ–GE)	T1	35 (2ZZ–GE)
E2	34 (2ZZ–GE)	I9	35 (2ZZ–GE)	V3	35 (2ZZ–GE)
E3 A	36	I10	37	V4	35 (2ZZ–GE)
E4 B	36	J2 A	37	V5	35 (2ZZ–GE)
E5 C	36	J3 B	37		

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
II		
IJ		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

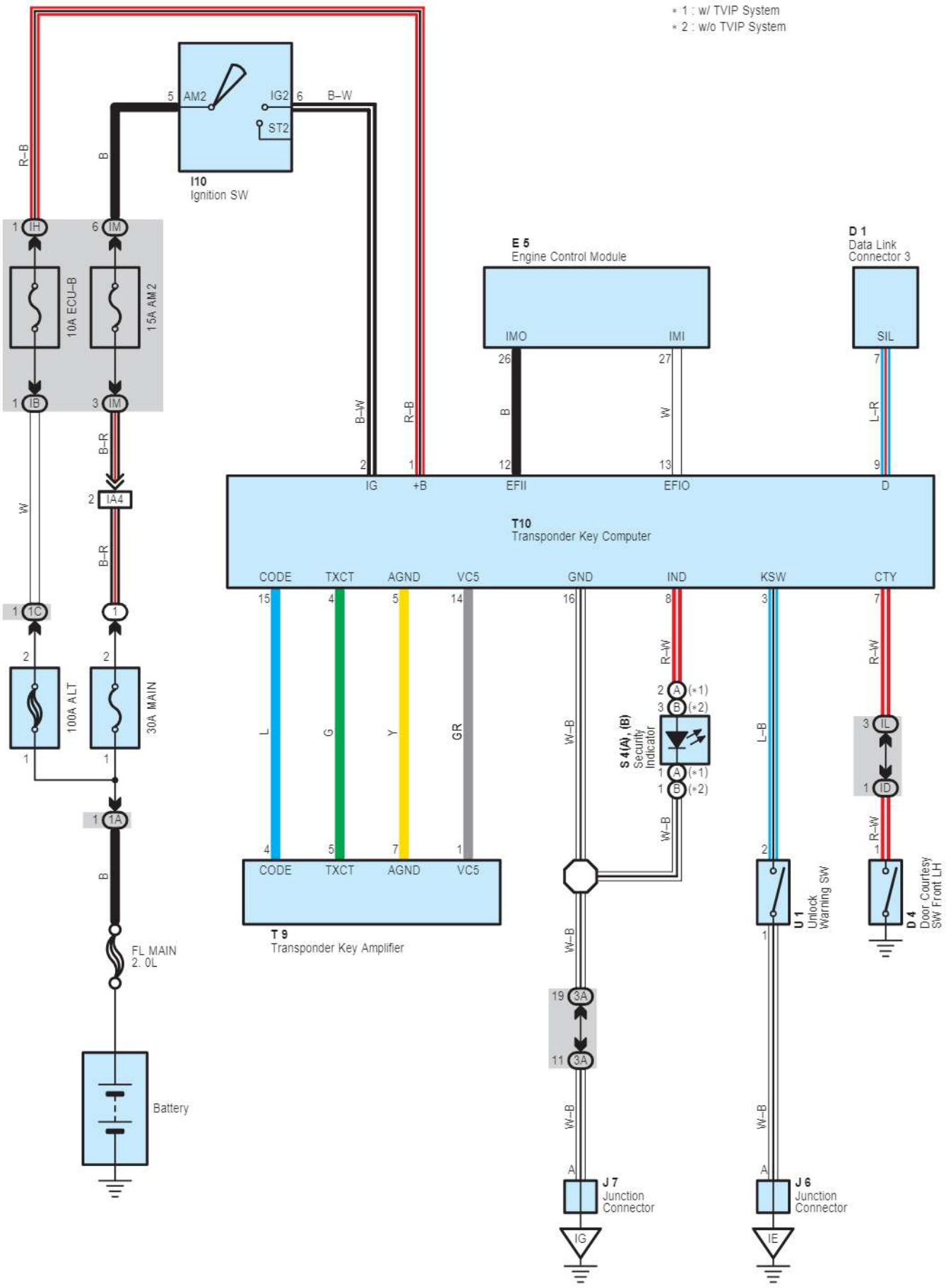
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	43 (2ZZ–GE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
IA6		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		
II3		

: Ground Points

Code	See Page	Ground Points Location
EB	43 (2ZZ–GE)	Left Side of the Cylinder Head
EC		
ED	43 (2ZZ–GE)	Front Left Suspension Tower
EK	43 (2ZZ–GE)	Front Left Fender
EL	43 (2ZZ–GE)	Front Left Suspension Tower
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	
BI	46 (*1)	Lower Back Panel
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


* 1 : w/ TVIP System
* 2 : w/o TVIP System
I10
Ignition SW
AM2
IG2
ST2
B–W
R–B
B
10A ECU–B
15A AM2
E 5
Engine Control Module
IMO
IMI
D 1
Data Link
Connector 3
SIL
B
W
L–R
B–R
W
1A4
IG
+B
EFII
EFIO
D
T10
Transponder Key Computer
CODE
TXCT
AGND
VC5
GND
IND
KSW
CTY
L
G
Y
GR
W–B
R–W
L–B
S 4 (A), (B)
Security
Indicator
1C
1
1A
100A ALT
30A MAIN
FL MAIN
2. 0L
Battery
T 9
Transponder Key Amplifier
3A
J 7
Junction
Connector
J 6
Junction
Connector
IG
IE
U 1
Unlock
Warning SW
D 4
Door Courtesy
SW Front LH
IL
ID

: Parts Location

Code	See Page	Code	See Page	Code	See Page
D1	36	I10	37	S4 B	37
D4	38 (*1)	J6	37	T9	37
	40 (*2)	J7	37	T10	37
E5	36	S4 A	37	U1	37

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IH	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
1C	22	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

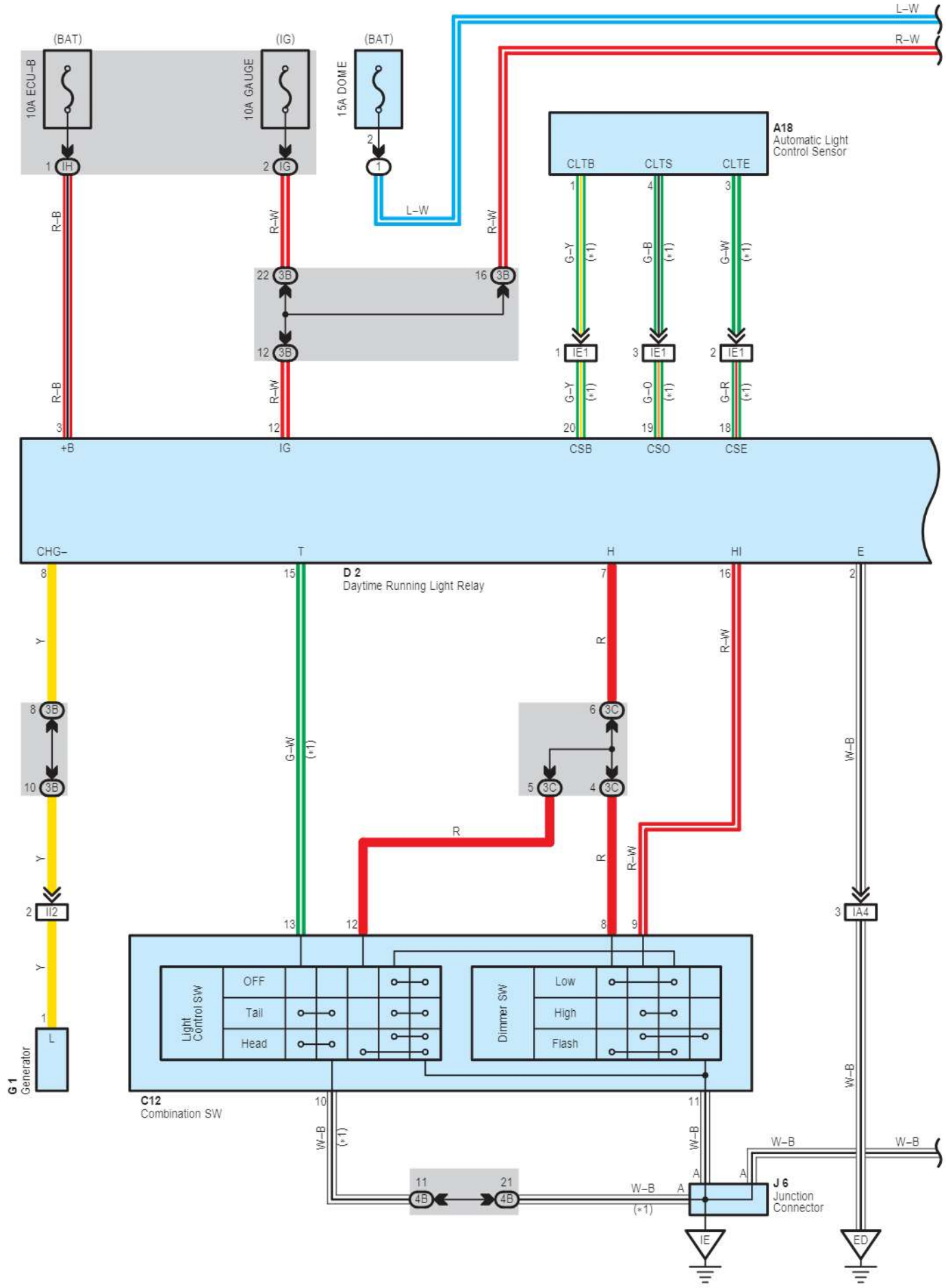
: Connector Joining Wire Harness and Wire Harness

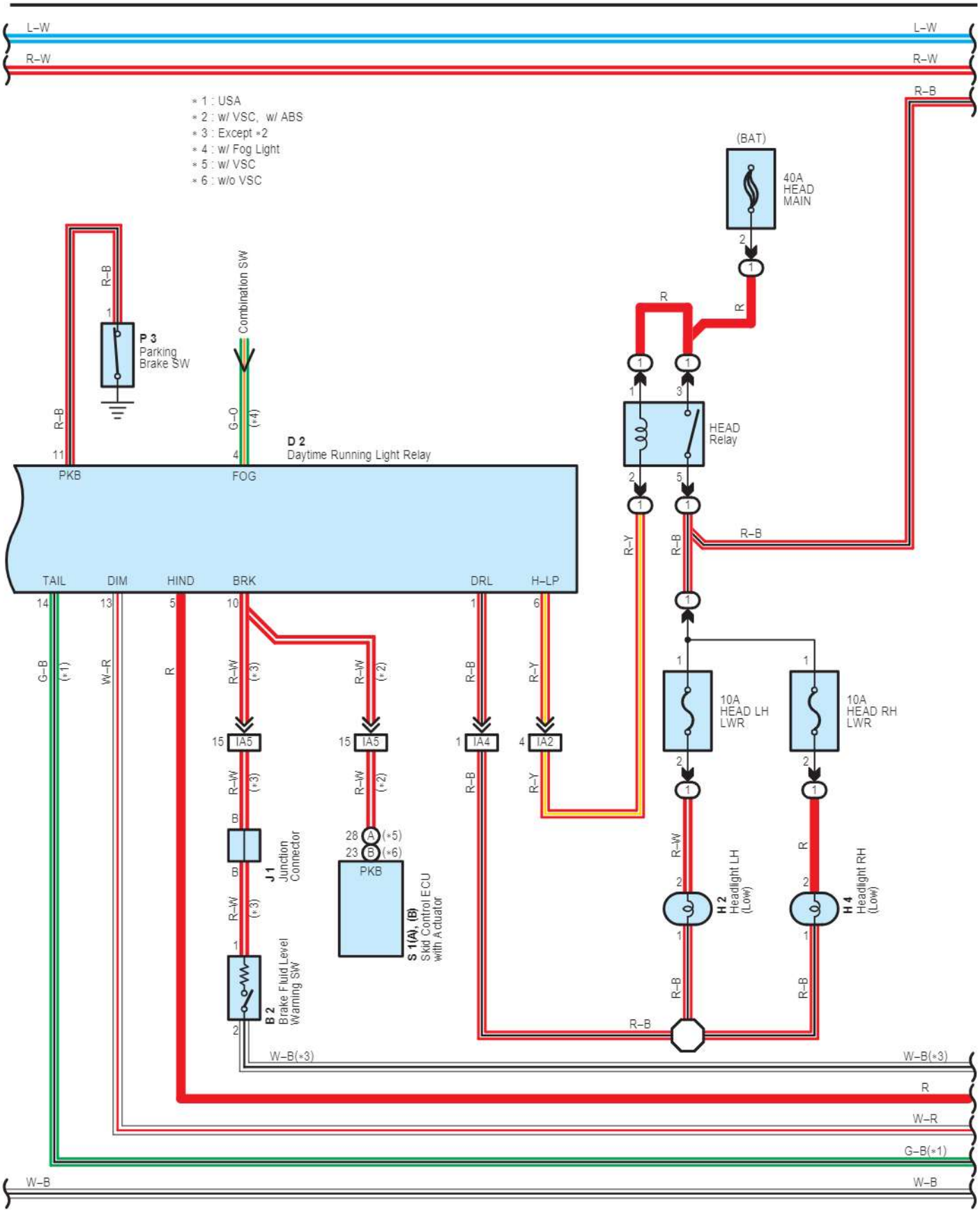
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

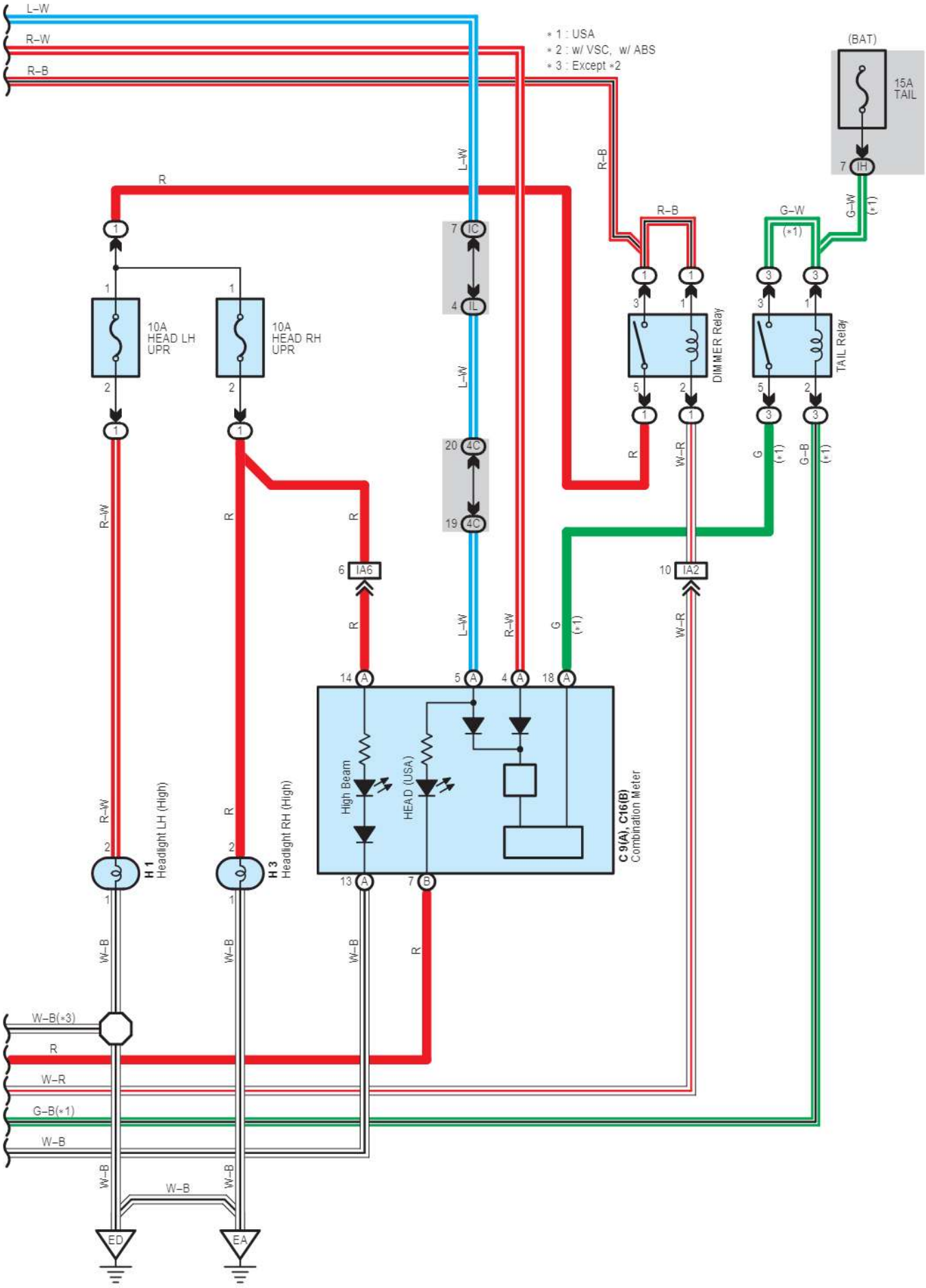
: Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


(BAT)
10A ECU–B
(IG)
10A GAUGE
(BAT)
15A DOME
L–W
R–W
A18
Automatic Light
Control Sensor
CLTB
CLTS
CLTE
1 IH
2 IG
2
1
R–B
R–W
L–W
R–W
22 3B
16 3B
12 3B
G–Y (*1)
G–B (*1)
G–W (*1)
1 IE1
3 IE1
2 IE1
G–Y (*1)
G–O (*1)
G–R (*1)
3 +B
12 IG
20 CSB
19 CSO
18 CSE
CHG–
T
H
HI
E
D 2
Daytime Running Light Relief
8
15
7
16
2
Y
G–W (*1)
R
R–W
8 3B
10 3B
6 3C
5 3C
4 3C
R
R
R–W
W–B
2 II2
3 IA4
Y
Y
1
13
12
8
9
L
Light Control SW
OFF
Tail
Head
Dimmer SW
Low
High
Flash
G 1
Generator
C12
Combination SW
10
11
W–B (*1)
W–B
11 4B
21 4B
W–B
A
A
W–B
W–B
J 6
Junction Connector
(*1)
IE
ED


L–W
R–W
L–W
R–W
R–B
* 1 : USA
* 2 : w/ VSC, w/ ABS
* 3 : Except *2
* 4 : w/ Fog Light
* 5 : w/ VSC
* 6 : w/o VSC
(BAT)
40A
HEAD
MAIN
R–B
P 3
Parking
Brake SW
Combination SW
G–O
(*4)
D 2
Daytime Running Light Relay
PKB
FOG
HEAD
Relay
R
R–Y
R–B
TAIL
DIM
HIND
BRK
DRL
H–LP
G–B
(*1)
W–R
R
R–W
(*3)
R–W
(*2)
R–B
R–Y
1A5
1A4
1A2
10A
HEAD LH
LWR
10A
HEAD RH
LWR
J 1
Junction
Connector
PKB
S 1(A), (B)
Skid Control ECU
with Actuator
H 2
Headlight LH
(Low)
H 4
Headlight RH
(Low)
B 2
Brake Fluid Level
Warning SW
W–B(*3)
R
W–R
G–B(*1)
W–B
W–B


L–W
R–W
R–B
* 1 : USA
* 2 : w/ VSC, w/ ABS
* 3 : Except *2
(BAT)
15A
TAIL
7 IH
G–W
(*1)
R
7 IC
4 IL
L–W
R–B
10A
HEAD LH
UPR
10A
HEAD RH
UPR
DIMMER Relay
TAIL Relay
20 4C
19 4C
R–W
W–R
G
G–B
6 IA6
10 IA2
14 A
5 A
4 A
18 A
High Beam
HEAD (USA)
C 9(A), C16(B)
Combination Meter
H1
Headlight LH (High)
H3
Headlight RH (High)
13 A
7 B
W–B
W–B(*3)
G–B(*1)
ED
EA

System Outline

The current is always flowing from the HEAD MAIN fuse to HEAD relay (Coil side) to TERMINAL 6 of the daytime running light relay, from ECU–B fuse to TERMINAL 3 of the daytime running light relay and from the TAIL fuse to TAIL relay (Coil side) to TERMINAL 14 of the daytime running light relay (USA).
When the ignition SW is turned on, the current flowing through the GAUGE fuse flows to TERMINAL 12 of the daytime running light relay.

1. Daytime Running Light Operation

When the engine is started, voltage generated at TERMINAL L of the generator is applied to TERMINAL 8 of the daytime running light relay. If the parking brake lever is pulled up (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 lever is then released (Parking brake SW off), a signal is input to TERMINAL 11 of the relay.
This activates the daytime running light relay and the HEAD relay is turned to on, so the current flows from the HEAD MAIN fuse to the HEAD relay (Point side) to HEAD LH LWR, HEAD RH LWR fuses to TERMINAL 2 of the headlights to TERMINAL 1 to TERMINAL 1 of the daytime running light relay to TERMINAL 2 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 lever is pulled up (Parking brake SW on).
If the engine stalls and the ignition SW remains on, the headlights remain light up even through current is no longer output from TERMINAL L of the generator. If the ignition SW is then turned off, the headlights go off.
If the engine is started with the parking brake lever 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 and the dimmer SW is set to LOW position, causing the daytime running light relay and the HEAD relay to turn on, so the current flows from the HEAD MAIN fuse to HEAD relay (Coil side) to TERMINAL 6 of the daytime running light relay to TERMINAL 7 to TERMINAL 12 of the light control SW to TERMINAL 11 to GROUND. The current to HEAD relay (Point side) then flows to HEAD LH LWR, HEAD RH LWR fuses to TERMINAL 2 of the headlights (Low) to TERMINAL 1 to TERMINAL 1 of the daytime running light relay to TERMINAL 2 to GROUND, causing the headlights to light up at normal intensity and HEAD indicator light to light up.
When the light control SW is switched to HEAD position and the dimmer SW is set to HIGH position, the signal from the dimmer SW is input to the daytime running light relay. This activates the daytime running light relay and the HEAD relay is turned on, so the current flows from the HEAD MAIN fuse to HEAD relay (Point side) to TERMINAL 1 of the DIMMER relay to TERMINAL 2 to TERMINAL 13 of the daytime running light relay, activating the DIMMER relay. This causes current to flow from TERMINAL 3 of the DIMMER relay to TERMINAL 5 to HEAD LH UPR, HEAD RH–UPR fuses to TERMINAL 2 of the headlights (High) to TERMINAL 1 to GROUND, causing the headlights to light up at high beam and the high beam indicator light to light up and HEAD indicator light to light up.
When the dimmer SW is switched to FLASH position, the signal from the dimmer SW is input to the daytime running light relay. This activates the daytime running light relay and the HEAD relay is turned on, so the current flows from the HEAD MAIN fuse to HEAD relay (Point side) to TERMINAL 1 of the DIMMER relay to TERMINAL 2 to TERMINAL 13 of the daytime running light relay, activating the DIMMER relay, and also flows from the HEAD LH UPR, HEAD RH UPR fuses to TERMINAL 2 of the headlights to TERMINAL 1 to GROUND, causing the headlights to light up at high beam and the high beam indicator light to light up.

3. Automatic Light Control Operation (USA)

When the daytime running light is operating and the automatic control sensor detects a decrease in the ambient light, the automatic light control operation starts. At the same time, daytime running light relay is activated, so current flows from the TAIL fuse to the TAIL relay (Coil side) to TERMINAL 14 of the daytime running light relay, and the HEAD MAIN fuse to the HEAD relay (Coil side) to TERMINAL 6 of the daytime running light relay, activating both the TAIL relay and the HEAD relay, so that the taillights and headlights light up.
When the automatic light control sensor detects an increase in the ambient light, the ignition SW is turned to off, the light control SW is turned to HEAD position, and the automatic light control operation stops.

Headlight

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A18	36	H1	32 (1ZZ–FE)	J1	35 (2ZZ–GE)
B2	32 (1ZZ–FE)		34 (2ZZ–GE)	J6	37
	34 (2ZZ–GE)	H2	32 (1ZZ–FE)	P3	37
C9 A	36		34 (2ZZ–GE)	S1 A	33 (1ZZ–FE)
C12	36	H3	32 (1ZZ–FE)		35 (2ZZ–GE)
C16 B	36		34 (2ZZ–GE)	S1 B	33 (1ZZ–FE)
D2	36	H4	32 (1ZZ–FE)		35 (2ZZ–GE)
G1	32 (1ZZ–FE)		34 (2ZZ–GE)		
	34 (2ZZ–GE)	J1	33 (1ZZ–FE)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

: Junction Block and Wire Harness Connector

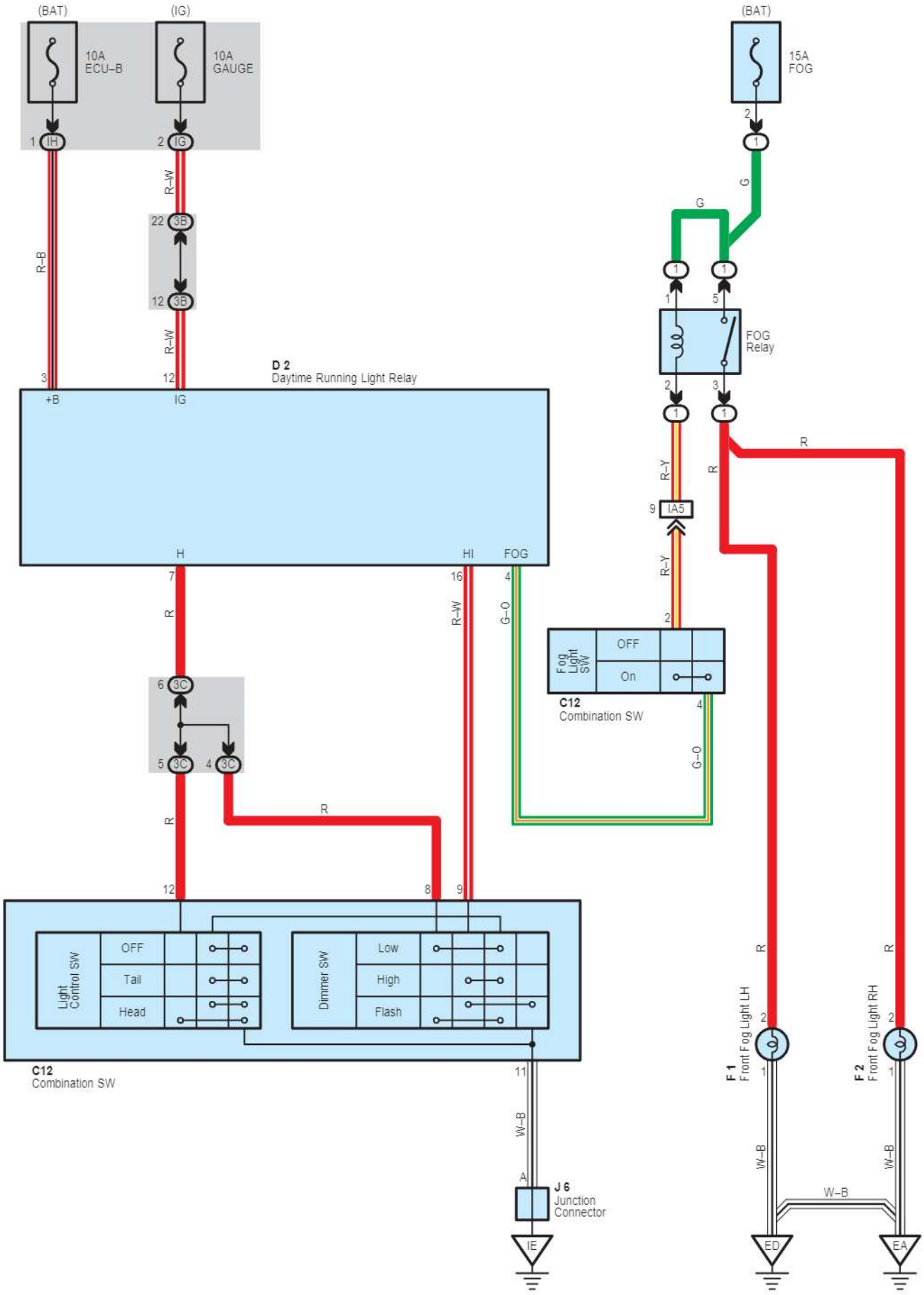
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IL	24	
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
IA6		
IE1	45	Instrument Panel Wire and Instrument Panel No.4 Wire (Behind the Combination Meter)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)

: Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter


(BAT)
(IG)
10A
ECU–B
10A
GAUGE
1 IH
2 IG
R–W
22 3B
12 3B
R–W
R–B
3
12
+B
IG
D 2
Daytime Running Light Relay
H
HI
FOG
7
16
4
R
R–W
G–O
6 3C
5 3C
4 3C
R
R
12
8
9
Light Control SW
OFF
Tail
Head
Dimmer SW
Low
High
Flash
C12
Combination SW
11
W–B
A
J 6
Junction Connector
IE
(BAT)
15A
FOG
2
1
G
G
1
1
1
5
FOG
Relay
2
3
1
1
R
R
R–Y
9 IA5
R–Y
2
Fog Light SW
OFF
On
C12
Combination SW
4
G–O
R
R
2
1
F 1
Front Fog Light LH
W–B
W–B
F 2
Front Fog Light RH
W–B
ED
EA

: Parts Location

Code	See Page	Code	See Page	Code	See Page
C12	36	F1	34 (2ZZ–GE)	J6	37
D2	36	F2	32 (1ZZ–FE)		
F1	32 (1ZZ–FE)		34 (2ZZ–GE)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

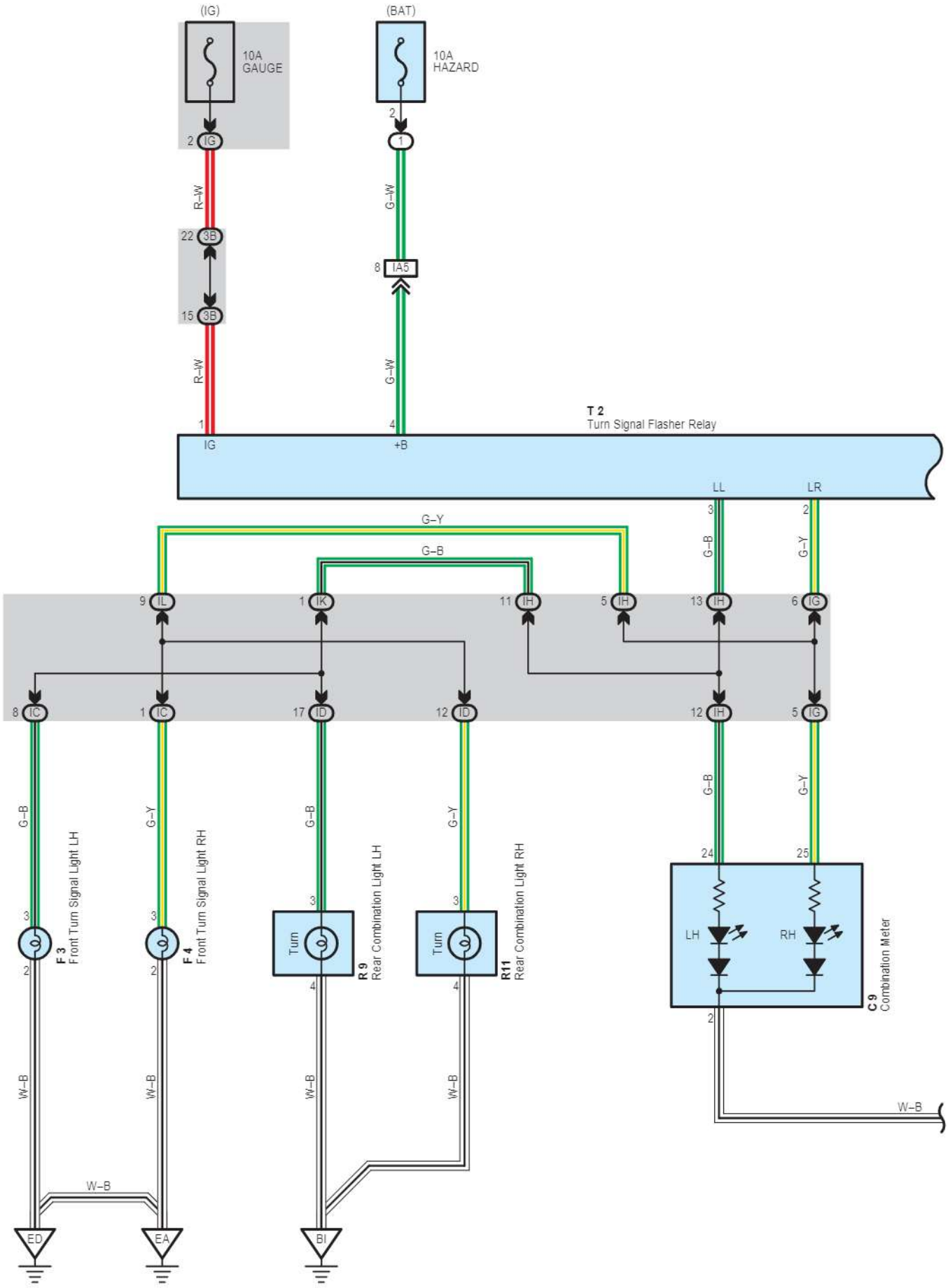
Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		

: Connector Joining Wire Harness and Wire Harness

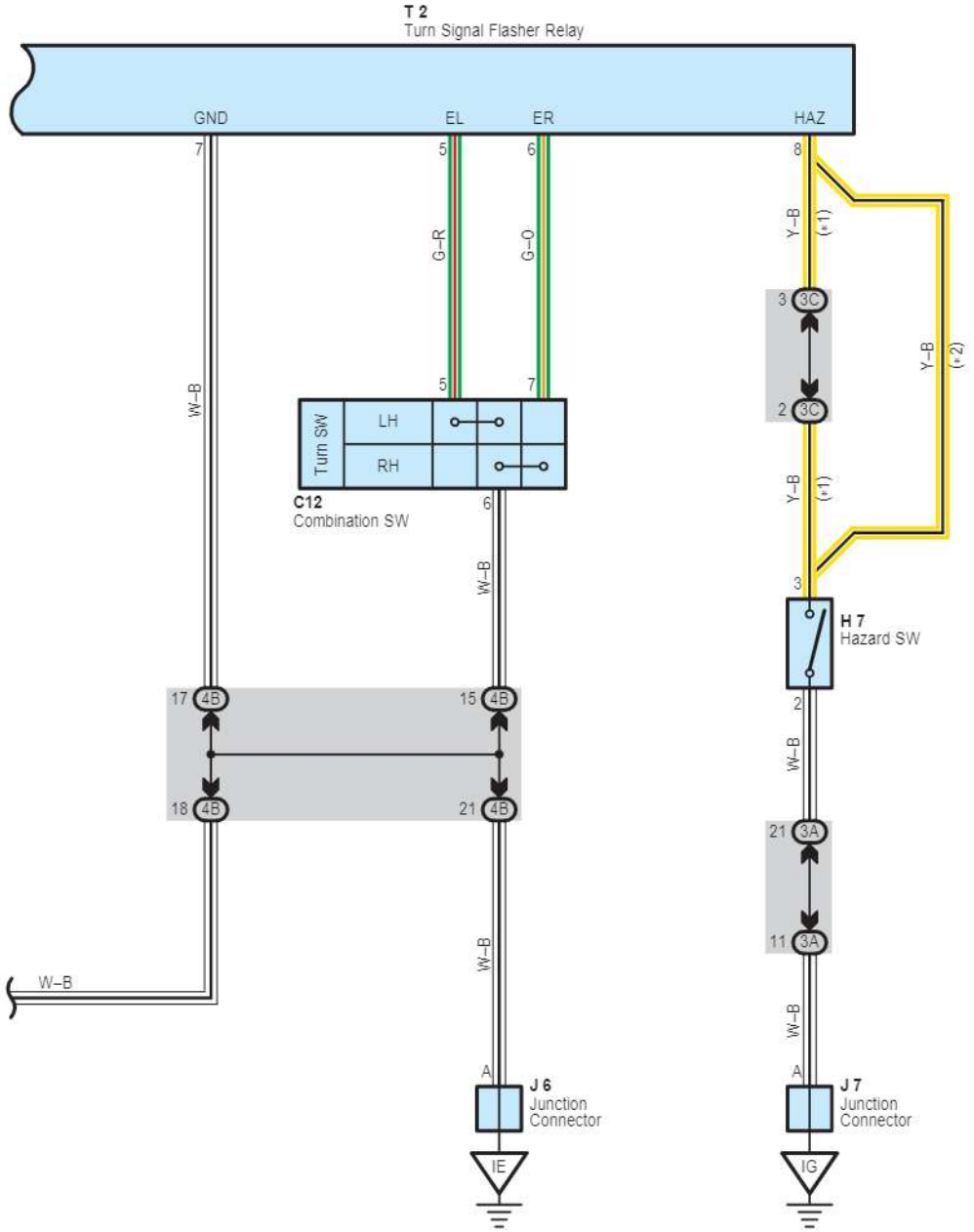
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA5	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

: Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter


(IG)
10A
GAUGE
(BAT)
10A
HAZARD
2 IG
R–W
22 3B
15 3B
R–W
1
IG
2
1
G–W
8 IA5
G–W
4
+B
T 2
Turn Signal Flasher Relay
LL
LR
3
2
G–B
G–Y
G–Y
G–B
9 IL
1 IK
11 IH
5 IH
13 IH
6 IG
8 IC
1 IC
17 ID
12 ID
12 IH
5 IG
G–B
G–Y
G–B
G–Y
3
3
3
3
F 3
Front Turn Signal Light LH
F 4
Front Turn Signal Light RH
R 9
Rear Combination Light LH
R11
Rear Combination Light RH
Turn
Turn
24
25
LH
RH
C 9
Combination Meter
2
2
4
4
2
W–B
W–B
W–B
W–B
W–B
W–B
ED
EA
BI

* 1 : w/ Wireless Door Lock
* 2 : w/o Wireless Door Lock



Turn Signal and Hazard Warning Light

: Parts Location

Code	See Page	Code	See Page	Code	See Page
C9	36	F4	34 (2ZZ–GE)	R9	41 (*2)
C12	36	H7	37	R11	39 (*1)
F3	32 (1ZZ–FE)	J6	37		41 (*2)
	34 (2ZZ–GE)	J7	37	T2	37
F4	32 (1ZZ–FE)	R9	39 (*1)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IK	24	
IL		
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

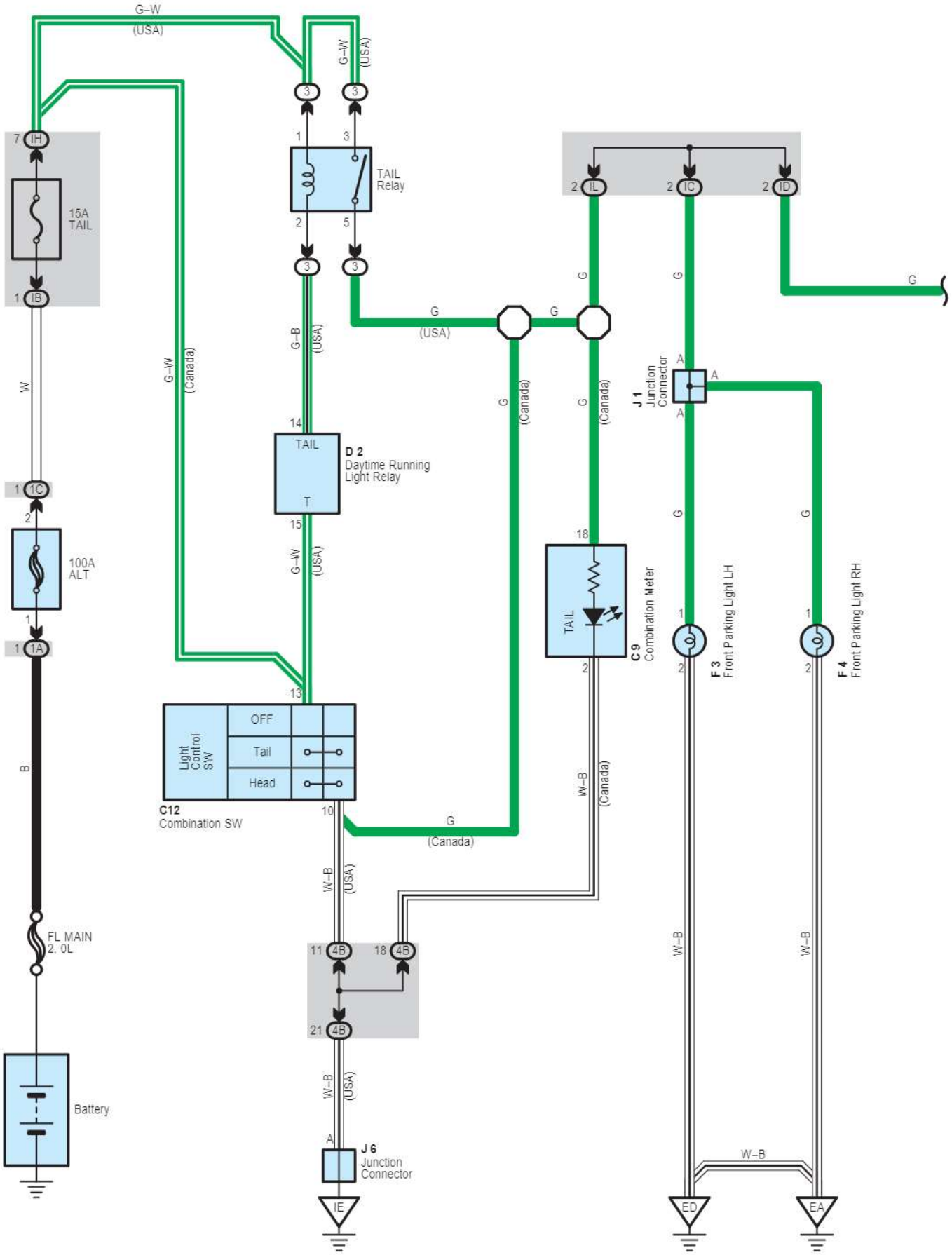
: Connector Joining Wire Harness and Wire Harness

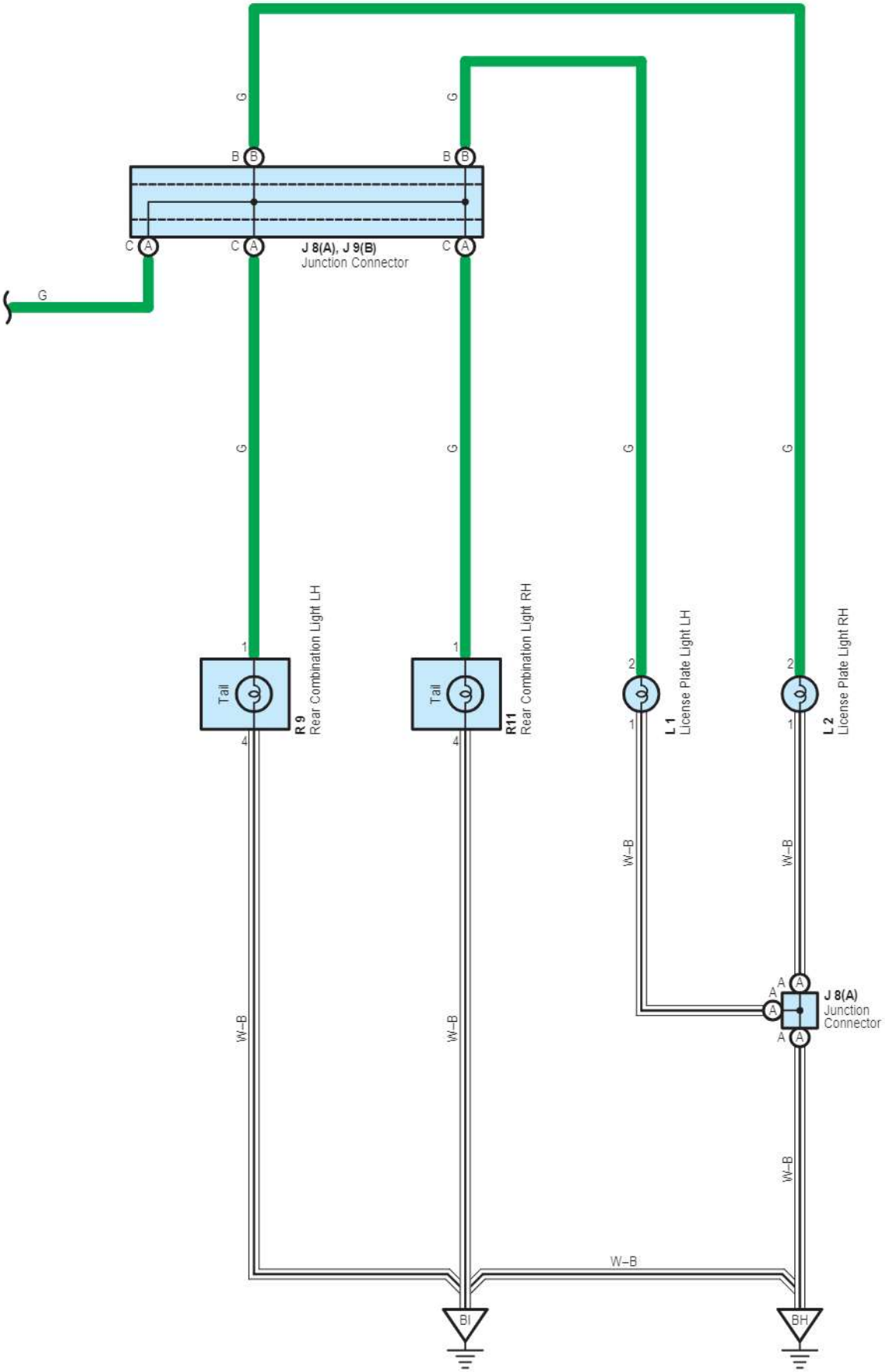
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA5	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

: Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel
BI	46 (*1)	Lower Back Panel
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


G–W
(USA)
G–W
(USA)
7 IH
15A
TAIL
1 IB
W
1 1C
2
100A
ALT
1
1 1A
B
FL MAIN
2. 0L
Battery
3
3
1
3
TAIL
Relay
2
5
3
3
G–B
(USA)
14
TAIL
T
D 2
Daytime Running
Light Relay
15
G–W
(USA)
G–W
(Canada)
13
Light
Control
SW
OFF
Tail
Head
C12
Combination SW
10
G
(USA)
G
(USA)
G
(Canada)
G
(Canada)
W–B
(USA)
11 4B
18 4B
21 4B
W–B
(USA)
A
J 6
Junction
Connector
IE
2 IL
2 IC
2 ID
G
G
G
A
A
A
J 1
Junction
Connector
18
TAIL
C 9
Combination Meter
2
W–B
(Canada)
G
G
1
2
F 3
Front Parking Light LH
1
2
F 4
Front Parking Light RH
W–B
W–B
W–B
ED
EA


G
B
C
A
J 8(A), J 9(B)
Junction Connector
Tail
R 9
Rear Combination Light LH
R11
Rear Combination Light RH
L 1
License Plate Light LH
L 2
License Plate Light RH
J 8(A)
Junction Connector
W-B
BI
BH

Taillight

○ : Parts Location

Code	See Page	Code		See Page	Code	See Page
C9	36	J1		35 (2ZZ–GE)	L2	38 (*1)
C12	36	J6		37		40 (*2)
D2	36	J8	A	38 (*1)	R9	39 (*1)
F3	32 (1ZZ–FE)			40 (*2)		41 (*2)
	34 (2ZZ–GE)	J9	B	38 (*1)	R11	39 (*1)
F4	32 (1ZZ–FE)			40 (*2)		41 (*2)
	34 (2ZZ–GE)	L1		38 (*1)		
J1	33 (1ZZ–FE)			40 (*2)		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

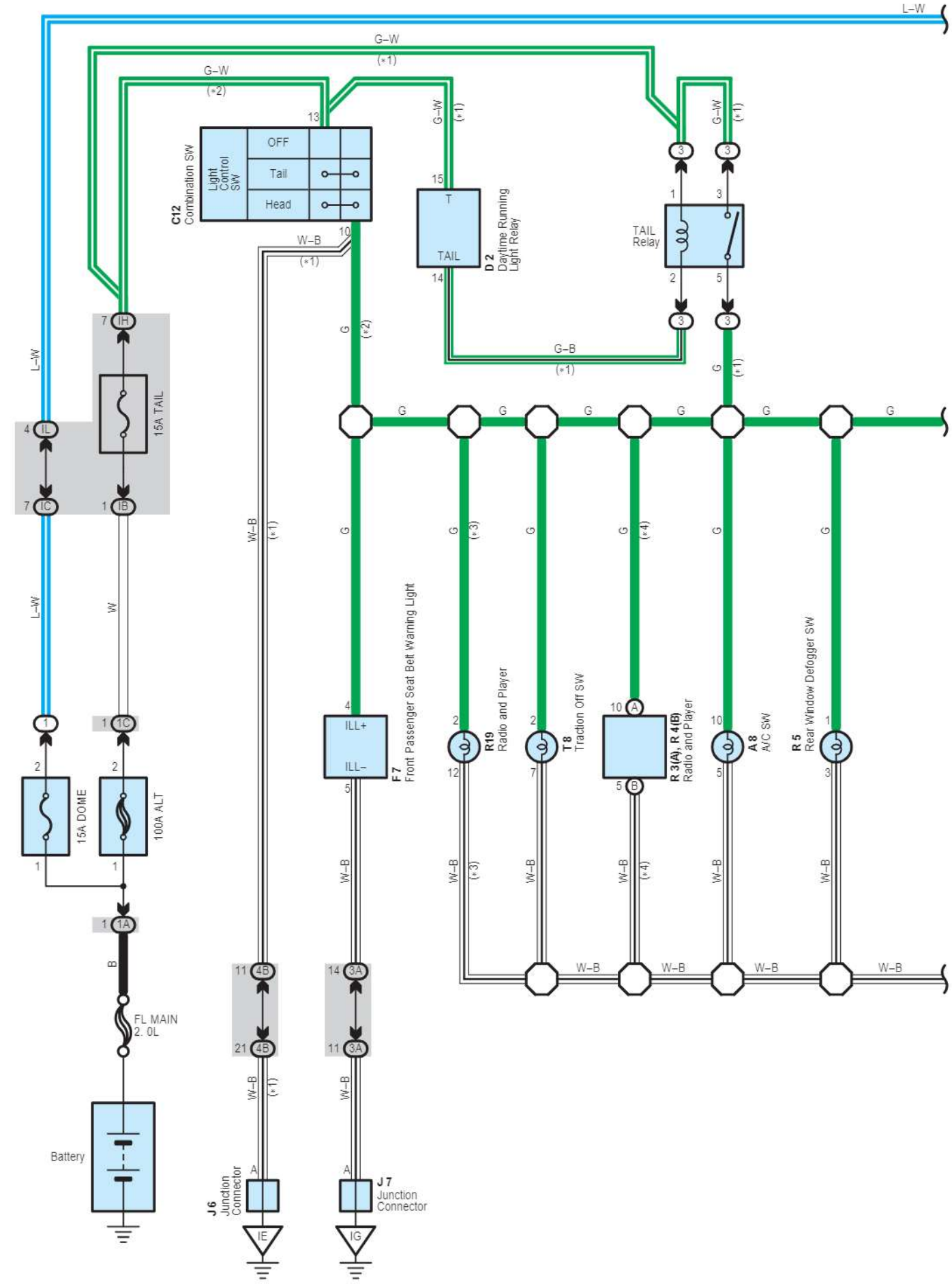
▭ : Junction Block and Wire Harness Connector

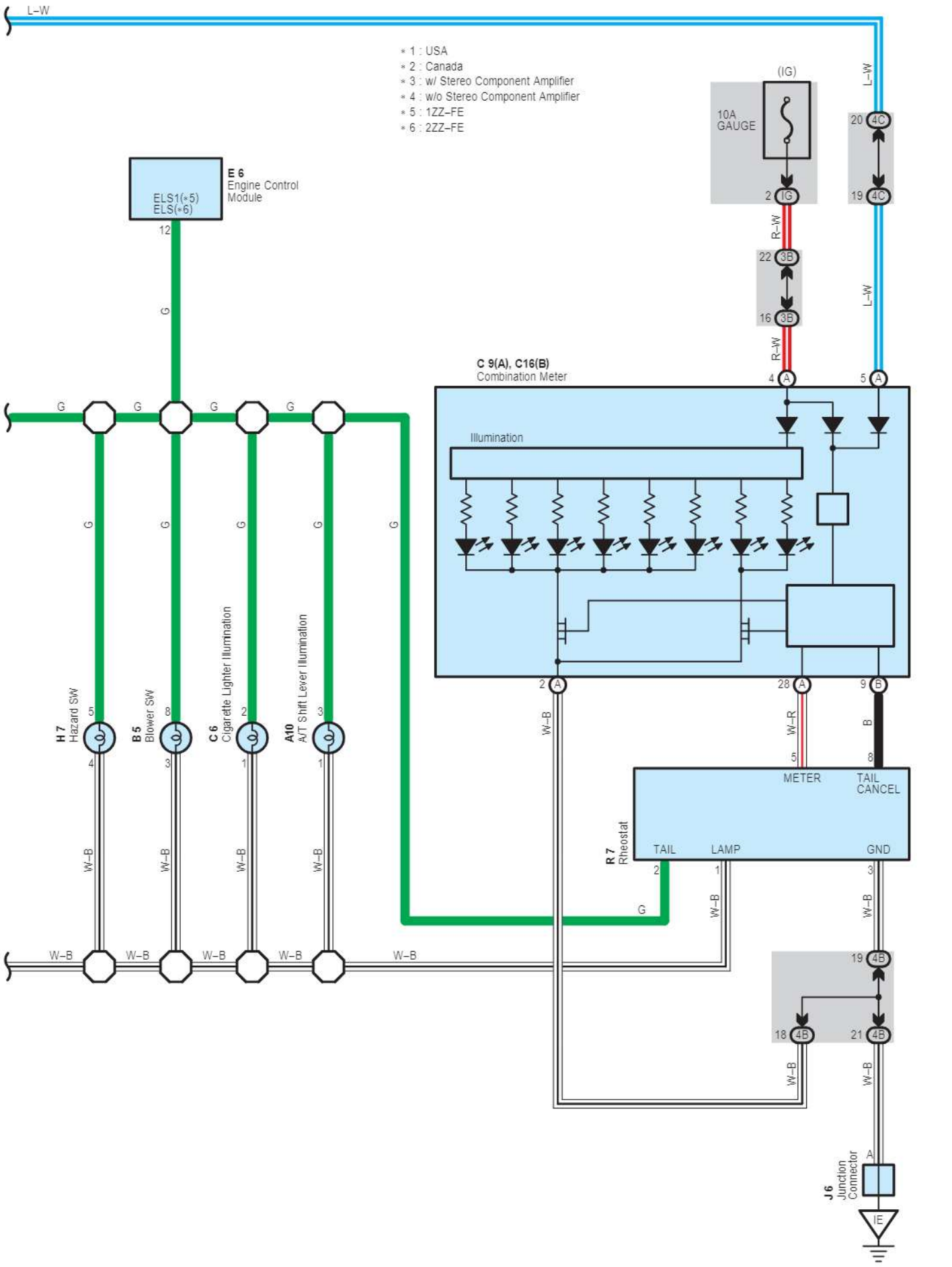
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IC		
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IH	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
1C	22	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

▽ : Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	
BI	46 (*1)	Lower Back Panel
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier


L–W
G–W
(*1)
G–W
(*2)
13
OFF
Tail
Head
Light Control SW
C12
Combination SW
G–W
(*1)
15
T
TAIL
D 2
Daytime Running Light Relay
3
3
1
3
TAIL Relay
2
5
3
3
G–B
(*1)
W–B
10
(*1)
G
(*2)
G
(*1)
7
IH
15A TAIL
4
IL
7
IC
1
IB
L–W
W
G
(*3)
G
(*4)
G
G
G
G
G
G
L–W
W
1
1C
2
2
15A DOME
100A ALT
1
1
1
1A
B
FL MAIN
2. 0L
Battery
4
ILL+
ILL–
F 7
Front Passenger Seat Belt Warning Light
5
W–B
(*1)
W–B
(*3)
W–B
(*4)
11
4B
21
4B
14
3A
11
3A
W–B
(*1)
W–B
(*1)
A
A
J 6
Junction Connector
J 7
Junction Connector
IE
IG
2
12
R19
Radio and Player
2
7
T 8
Traction Off SW
10
A
5
B
R 3(A), R 4(B)
Radio and Player
10
5
A 8
A/C SW
1
3
R 5
Rear Window Defogger SW
W–B
W–B
W–B
W–B


L–W
* 1 : USA
* 2 : Canada
* 3 : w/ Stereo Component Amplifier
* 4 : w/o Stereo Component Amplifier
* 5 : 1ZZ–FE
* 6 : 2ZZ–FE
(IG)
10A GAUGE
E 6
Engine Control Module
ELS1(*5)
ELS(*6)
C 9(A), C16(B)
Combination Meter
Illumination
H 7
Hazard SW
B 5
Blower SW
C 6
Cigarette Lighter Illumination
A10
A/T Shift Lever Illumination
R 7
Rheostat
METER
TAIL CANCEL
TAIL
LAMP
GND
J 6
Junction Connector
R–W
W–B
W–R
B
G

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A8	36	D2	36	R4 B	37
A10	36	E6	36	R5	37
B5	36	F7	37	R7	37
C6	36	H7	37	R19	37
C9 A	36	J6	37	T8	37
C12	36	J7	37		
C16 B	36	R3 A	37		

▭ : Relay Blocks

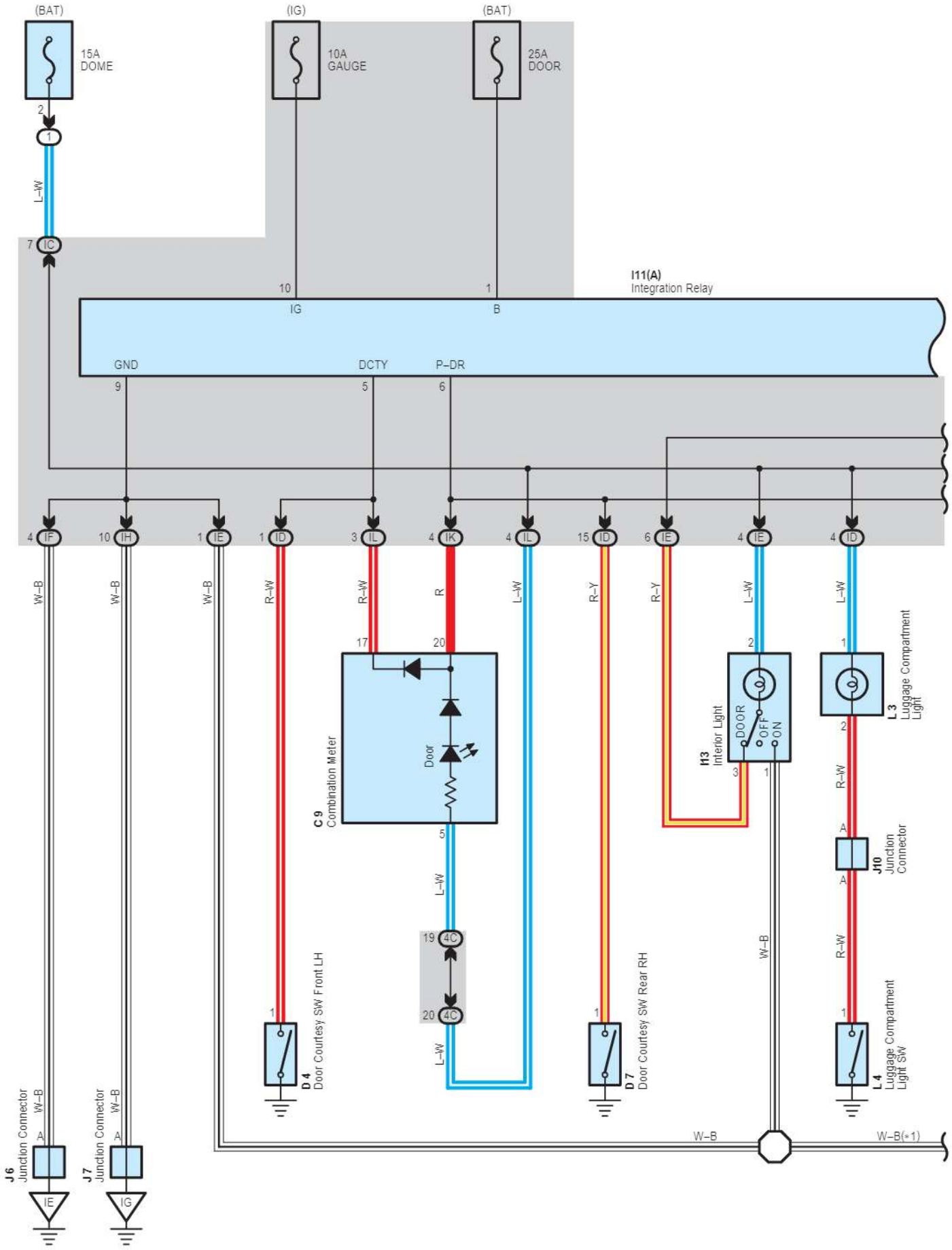
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

▭ : Junction Block and Wire Harness Connector

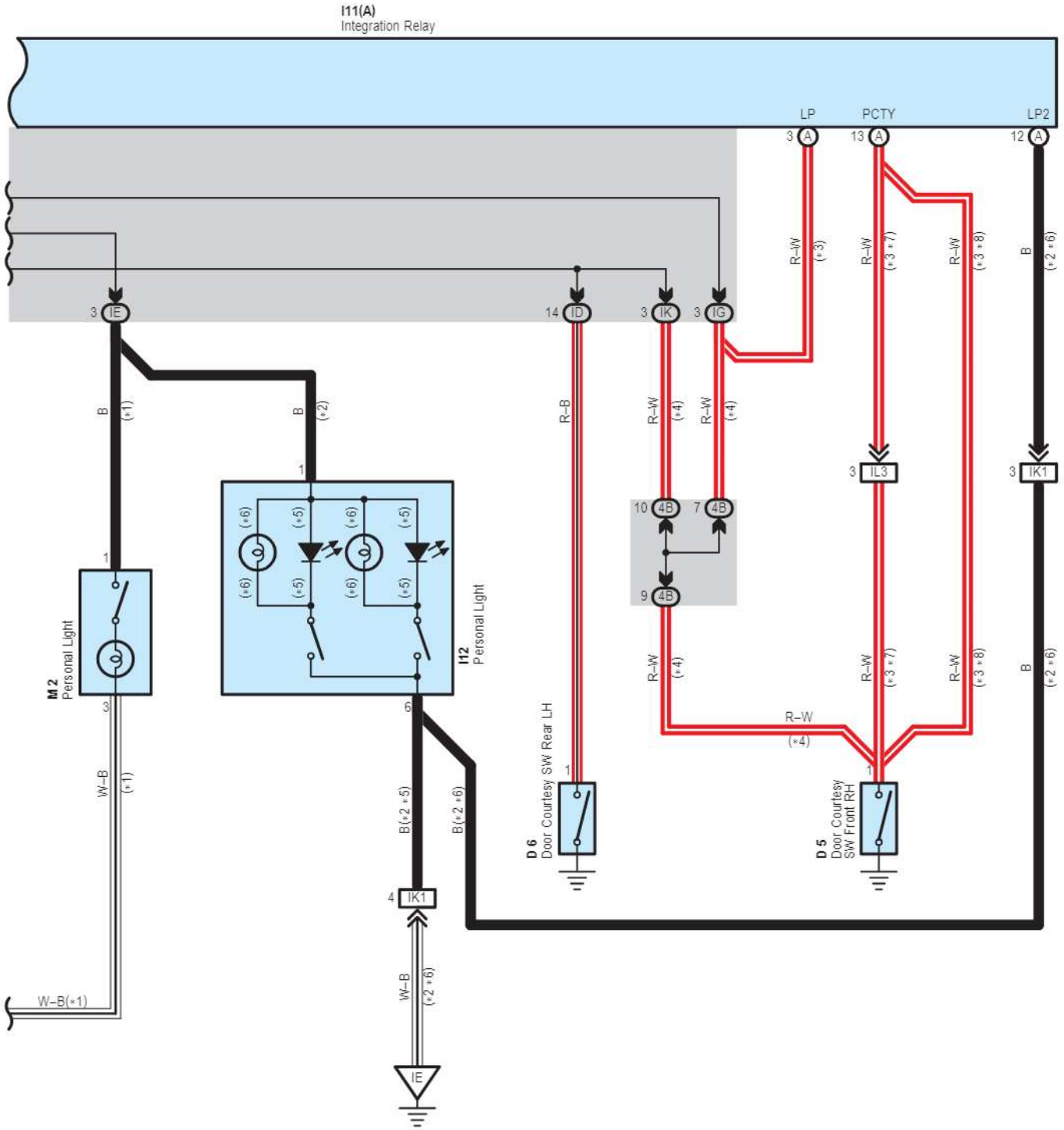
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IC		
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IL	24	
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
1C	22	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(BAT)
15A
DOME
(IG)
10A
GAUGE
(BAT)
25A
DOOR
I11(A)
Integration Relay
IG
B
GND
DCTY
P-DR
L-W
W-B
R-W
R
R-Y
C 9
Combination Meter
Door
I13
Interior Light
DOOR
OFF
ON
L 3
Luggage Compartment
Light
J10
Junction
Connector
D 4
Door Courtesy SW Front LH
D 7
Door Courtesy SW Rear RH
L 4
Luggage Compartment
Light SW
J6
Junction Connector
J7
Junction Connector
W-B(*1)

* 1 : w/ Moon Roof
* 2 : w/o Moon Roof
* 3 : w/ Door Lock Control
* 4 : w/o Door Lock Control
* 5 : w/ Automatic Glare–Resistant EC Mirror
* 6 : w/o Automatic Glare–Resistant EC Mirror
* 7 : w/ Stereo Component Amplifier
* 8 : w/o Stereo Component Amplifier



Interior Light

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C9	36	D7	40 (*2)	J10	38 (*1)
D4	38 (*1)	I11 A	37		40 (*2)
	40 (*2)	I12	38 (*1)	L3	38 (*1)
D5	38 (*1)		40 (*2)		40 (*2)
	40 (*2)	I13	38 (*1)	L4	38 (*1)
D6	38 (*1)		40 (*2)		40 (*2)
	40 (*2)	J6	37	M2	39 (*1)
D7	38 (*1)	J7	37		41 (*2)

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IE	25	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
IK	24	
IL		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

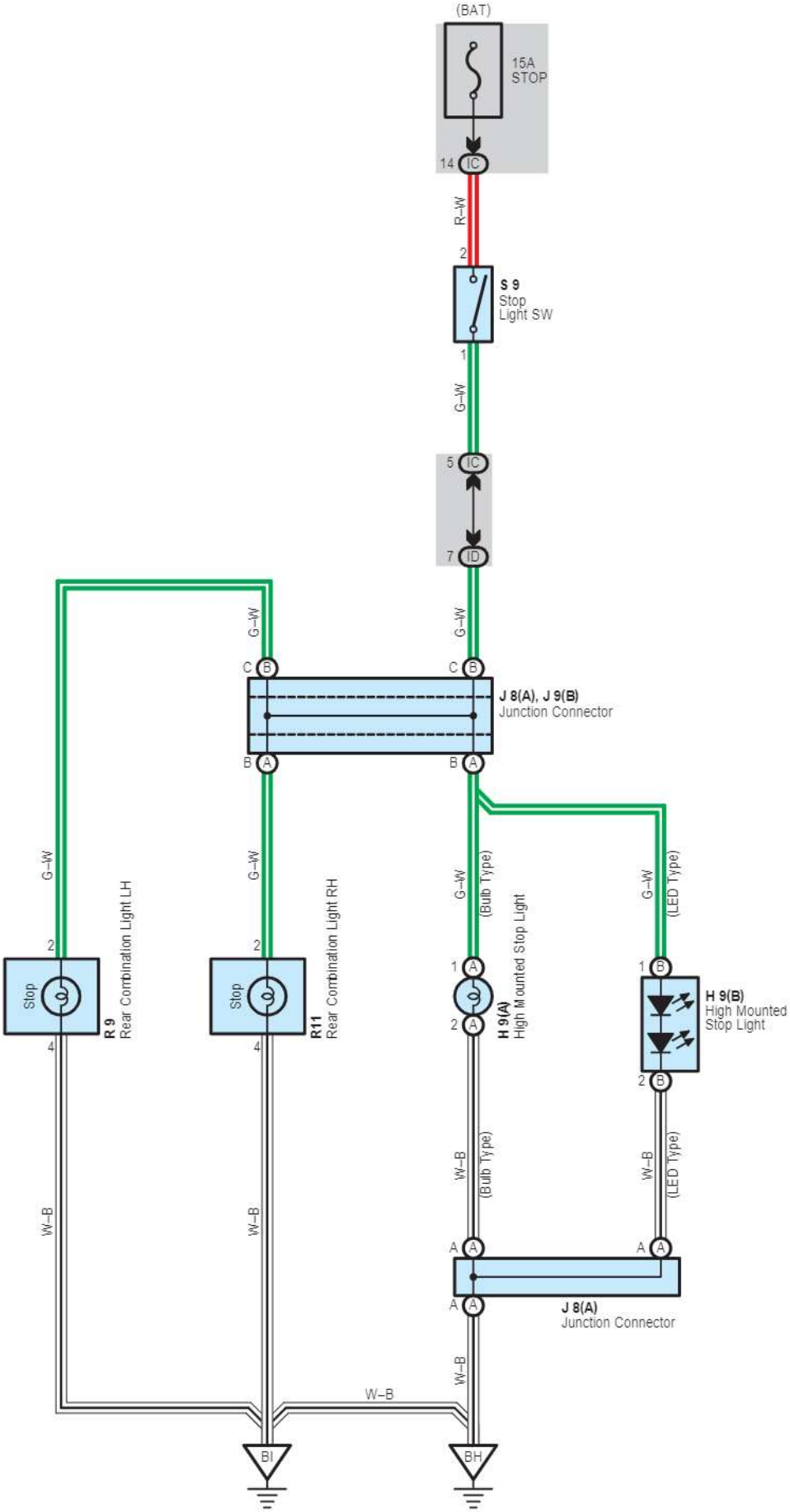
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK1	45	Roof Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IL3	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


(BAT)
15A
STOP
14 IC
R–W
2
S 9
Stop
Light SW
1
G–W
5 IC
7 ID
G–W
G–W
C B
C B
J 8(A), J 9(B)
Junction Connector
B A
B A
G–W
2
Stop
R 9
Rear Combination Light LH
4
G–W
2
Stop
R11
Rear Combination Light RH
4
G–W
(Bulb Type)
1 A
2 A
H 9(A)
High Mounted Stop Light
G–W
(LED Type)
1 B
H 9(B)
High Mounted
Stop Light
2 B
W–B
W–B
W–B
(Bulb Type)
W–B
(LED Type)
A A
A A
A A
J 8(A)
Junction Connector
W–B
W–B
BI
BH

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
H9	A	38 (*1)	J8	A	40 (*2)	R11	39 (*1)
		40 (*2)	J9	B	38 (*1)		41 (*2)
	B	38 (*1)			40 (*2)	S9	37
		40 (*2)	R9		39 (*1)		
J8	A	38 (*1)			41 (*2)		

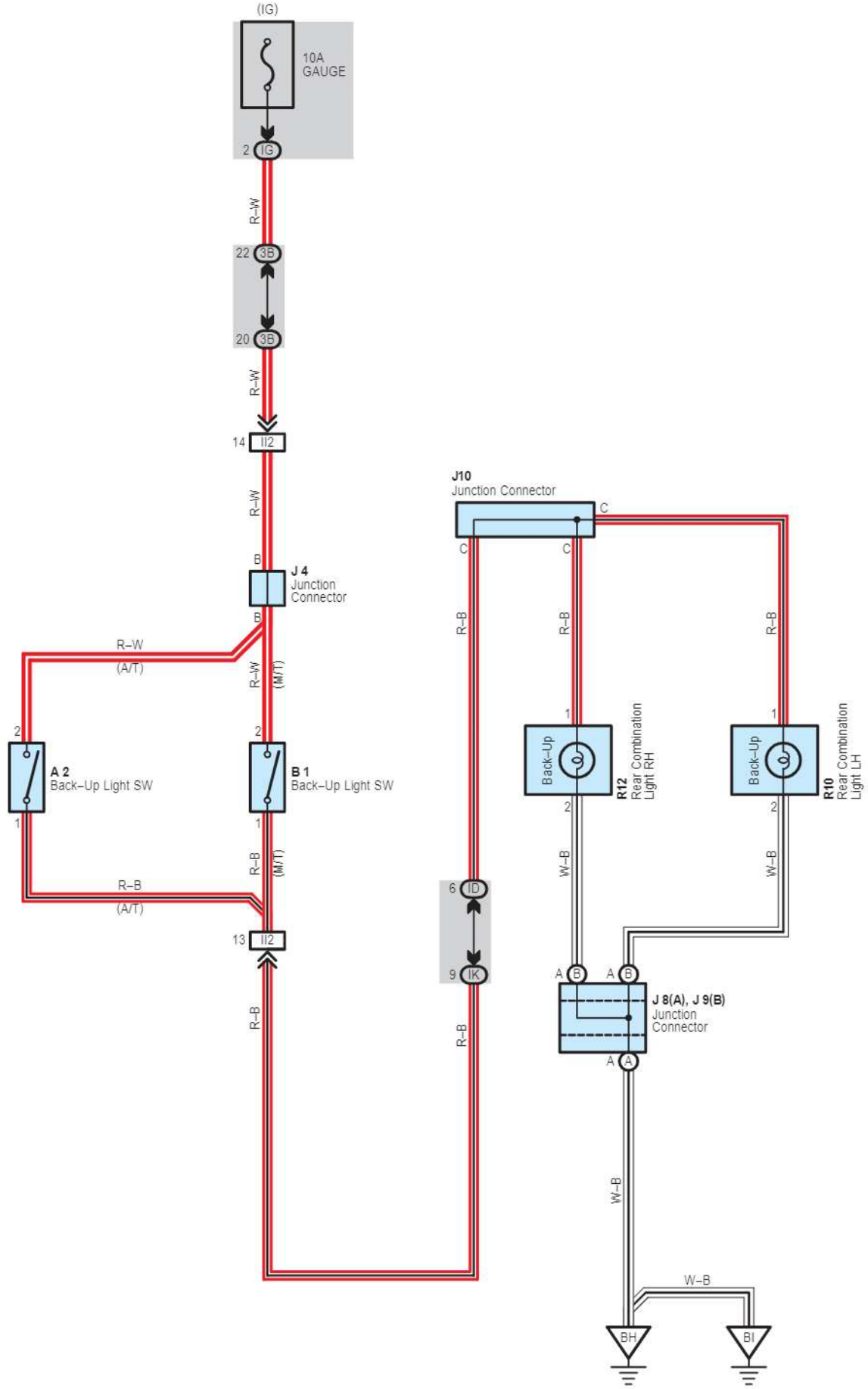
: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	
BI	46 (*1)	Lower Back Panel
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier


(IG)
10A
GAUGE
2 IG
R–W
22 3B
20 3B
R–W
14 I12
R–W
B
J 4
Junction
Connector
B
R–W
(A/T)
R–W
(M/T)
2
A 2
Back–Up Light SW
1
2
B 1
Back–Up Light SW
1
R–B
(M/T)
R–B
(A/T)
13 I12
R–B
J10
Junction Connector
C
C
C
R–B
R–B
R–B
6 ID
9 IK
R–B
1
Back–Up
R12
Rear Combination
Light RH
1
Back–Up
R10
Rear Combination
Light LH
2
W–B
2
W–B
A B
A B
J 8(A), J 9(B)
Junction
Connector
A A
W–B
W–B
BH
BI

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	J8 A	40 (*2)	R10	39 (*1)
B1	32 (1ZZ–FE)	J9 B	38 (*1)		41 (*2)
	34 (2ZZ–GE)		40 (*2)	R12	39 (*1)
J4	37	J10	38 (*1)		41 (*2)
J8 A	38 (*1)		40 (*2)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

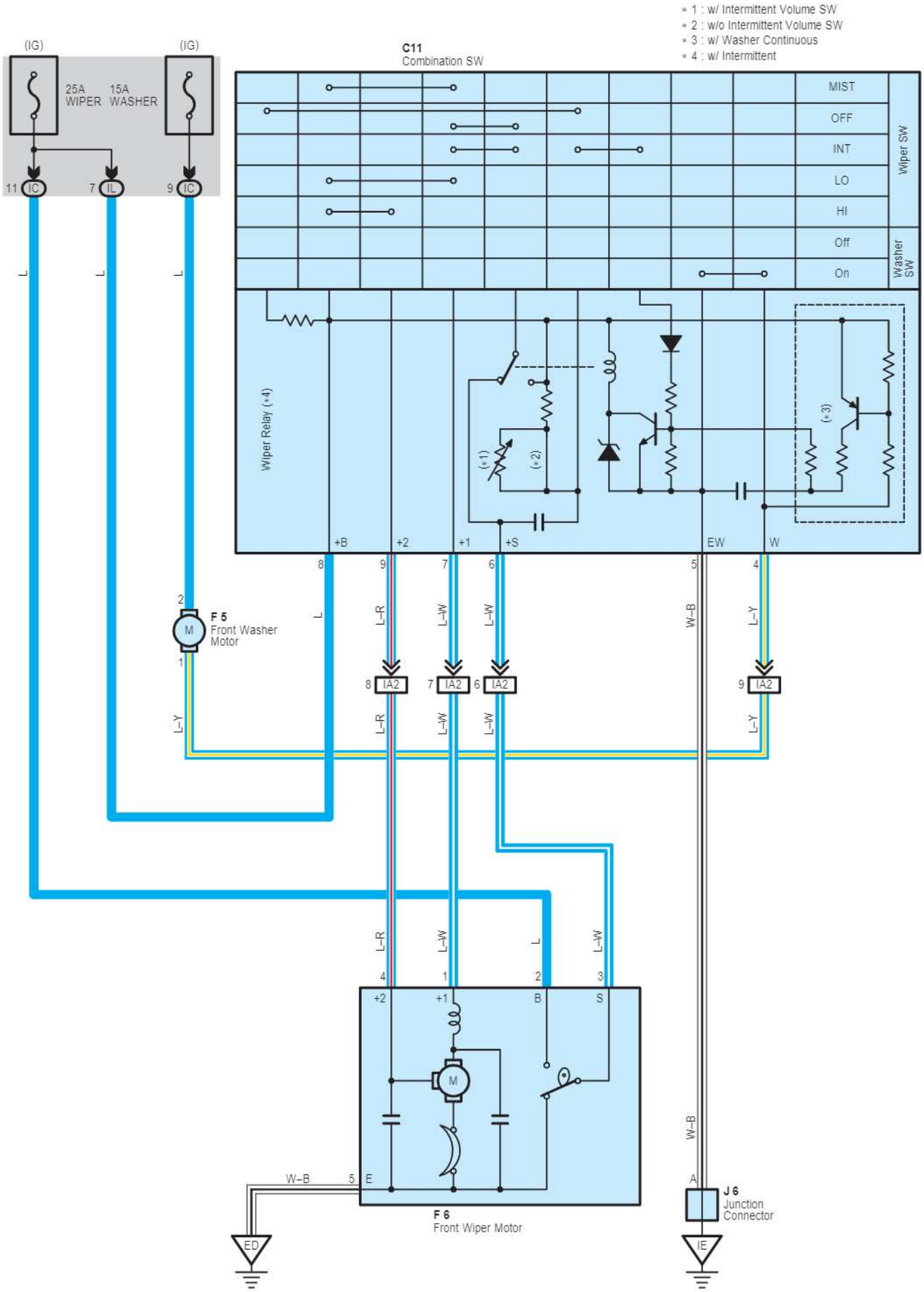
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)

: Ground Points

Code	See Page	Ground Points Location
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	
BI	46 (*1)	Lower Back Panel
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


* 1 : w/ Intermittent Volume SW
* 2 : w/o Intermittent Volume SW
* 3 : w/ Washer Continuous
* 4 : w/ Intermittent
(IG)
(IG)
25A WIPER
15A WASHER
11 IC
7 IL
9 IC
C11
Combination SW
MIST
OFF
INT
LO
HI
Off
On
Wiper SW
Washer SW
Wiper Relay (*4)
(*1)
(*2)
(*3)
+B
+2
+1
+S
EW
W
F 5
Front Washer Motor
8 IA2
7 IA2
6 IA2
9 IA2
F 6
Front Wiper Motor
J 6
Junction Connector
ED
IE

System Outline

With the ignition SW turned on, the current flows to TERMINAL 8 of the wiper and washer SW, TERMINAL 2 of the front wiper motor through the WIPER fuse, and the current flows to TERMINAL 2 of the washer motor through the WASHER fuse.

1. Low Speed Position

With wiper SW turned to LO position, the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and causes to the front wiper motor to run at low speed.

2. High Speed Position

With wiper SW turned to HI position, the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 9 to TERMINAL 4 of the front wiper motor to TERMINAL 5 to GROUND and causes to the 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 8 of the front wiper and washer SW to TERMINAL 5 to GROUND. This flow of current operates the intermittent circuit and the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and the functions.

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 (w/ intermittent volume SW) to change the charging time of the condenser.

4. MIST Position

With wiper SW turned to MIST position, the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and causes to the front wiper motor to run at low speed.

5. Washer Continuous Operation

With the washer SW turned to on, the current flows from TERMINAL 2 of the washer motor to TERMINAL 1 to TERMINAL 4 of the front wiper and washer SW to TERMINAL 5 to GROUND and causes to the washer motor to run, and the window washer jet operates. This causes the current to flow to washer continuous operation circuit in TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and the washer operates continuously.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C11	36	F5	34 (2ZZ–GE)	F6	34 (2ZZ–GE)
F5	32 (1ZZ–FE)	F6	32 (1ZZ–FE)	J6	37

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

▭ : Connector Joining Wire Harness and Wire Harness

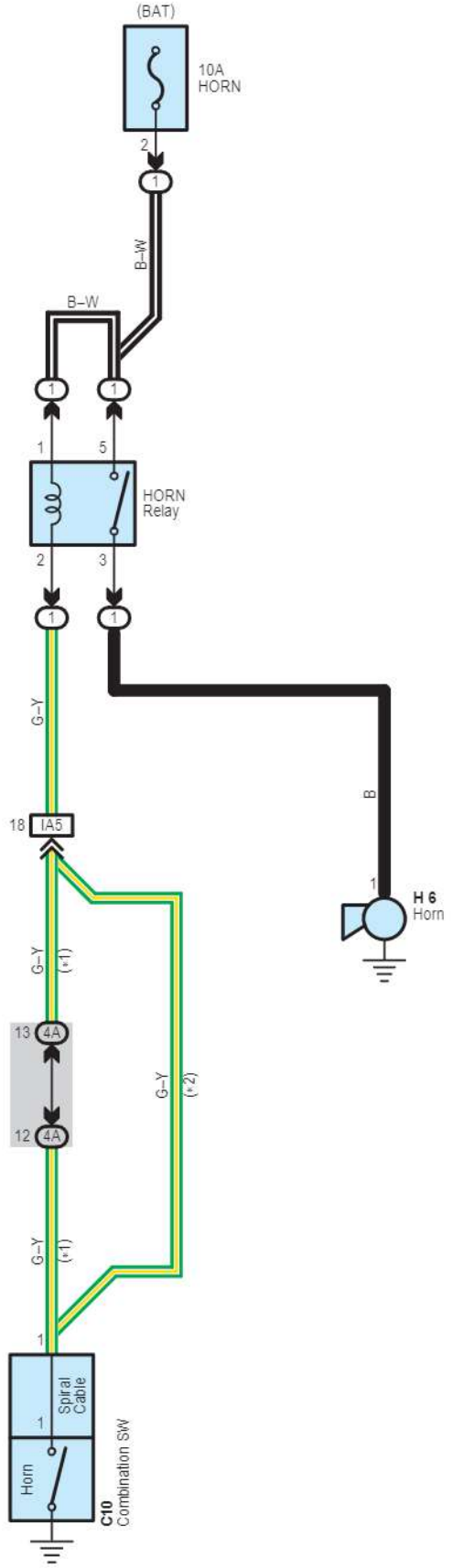
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

▽ : Ground Points

Code	See Page	Ground Points Location
ED	42 (1ZZ–FE) 43 (2ZZ–GE)	Front Left Suspension Tower
IE	44	Behind the Combination Meter

Horn

* 1 : w/ Wireless Door Lock
* 2 : w/o Wireless Door Lock



○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C10	36	H6	32 (1ZZ–FE)	H6	34 (2ZZ–GE)

⬭ : **Relay Blocks**

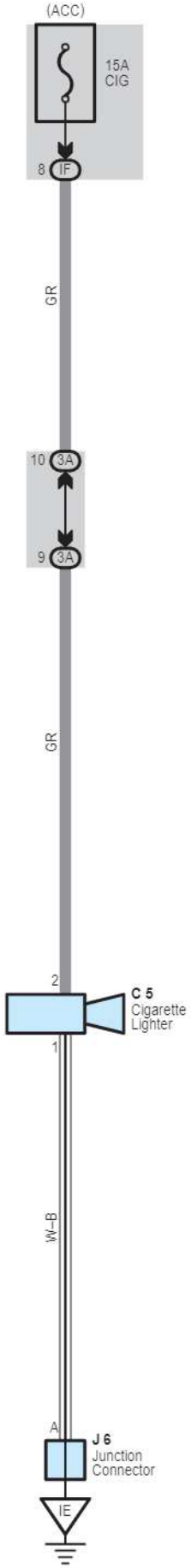
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
4A	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA5	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)


(ACC)
15A
CIG
8
IF
GR
10
3A
9
3A
GR
2
C 5
Cigarette
Lighter
1
W-B
A
J 6
Junction
Connector
IE

○ : **Parts Location**

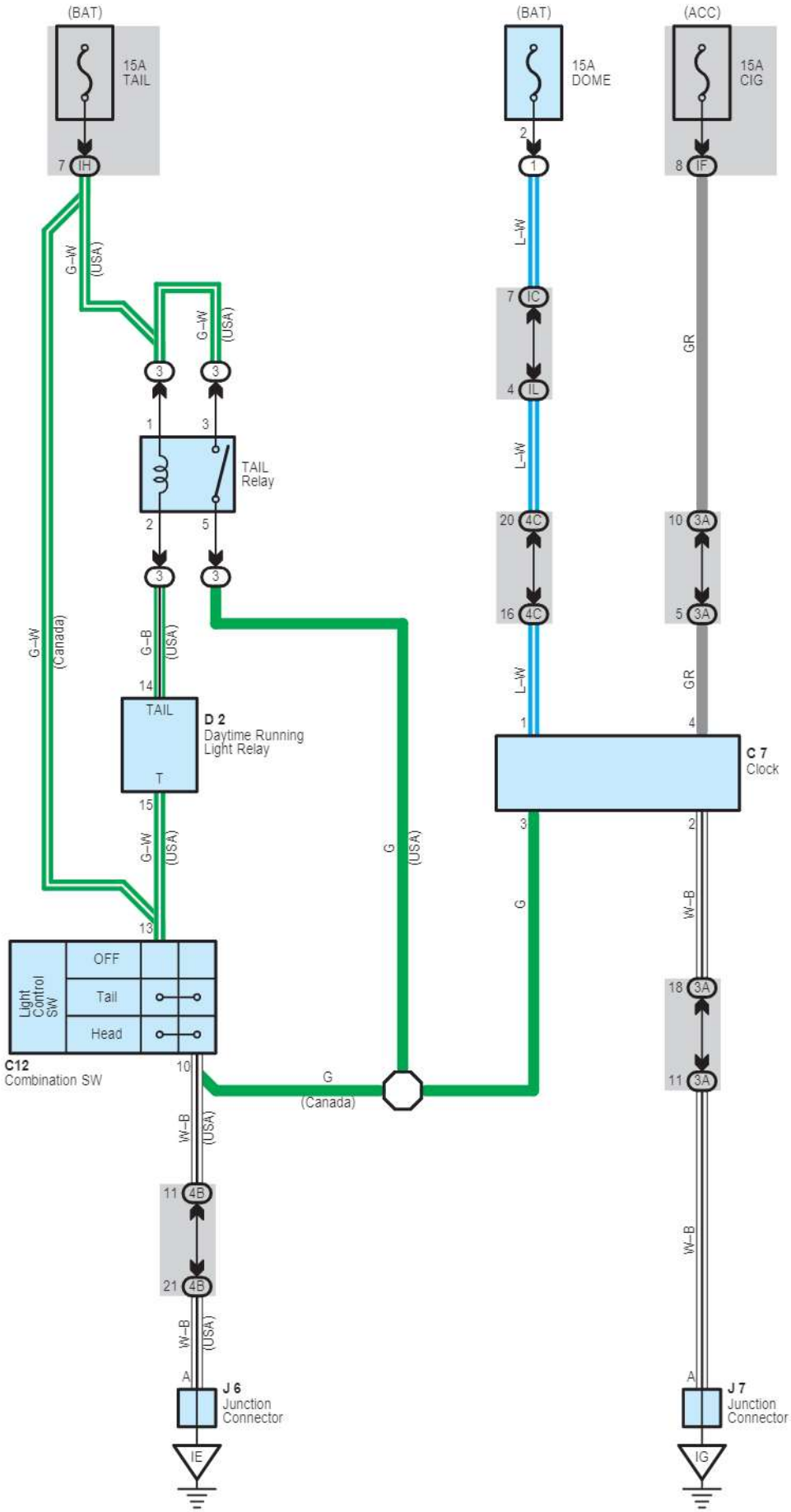
Code	See Page	Code	See Page	Code	See Page
C5	36	J6	37		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter


(BAT)
15A
TAIL
7
IH
G–W
(USA)
G–W
(USA)
3
3
1
3
TAIL
Relay
2
5
3
3
G–W
(Canada)
G–B
(USA)
14
TAIL
T
D 2
Daytime Running
Light Relay
15
G–W
(USA)
13
Light
Control
SW
OFF
Tail
Head
C12
Combination SW
10
G
(Canada)
G
(USA)
W–B
(USA)
11
4B
21
4B
W–B
(USA)
A
J 6
Junction
Connector
IE
(BAT)
15A
DOME
2
1
L–W
7
IC
4
IL
L–W
20
4C
16
4C
L–W
1
3
G
C 7
Clock
(ACC)
15A
CIG
8
IF
GR
10
3A
5
3A
GR
4
2
W–B
18
3A
11
3A
W–B
A
J 7
Junction
Connector
IG

: Parts Location

Code	See Page	Code	See Page	Code	See Page
C7	36	D2	36	J7	37
C12	36	J6	37		

: Relay Blocks

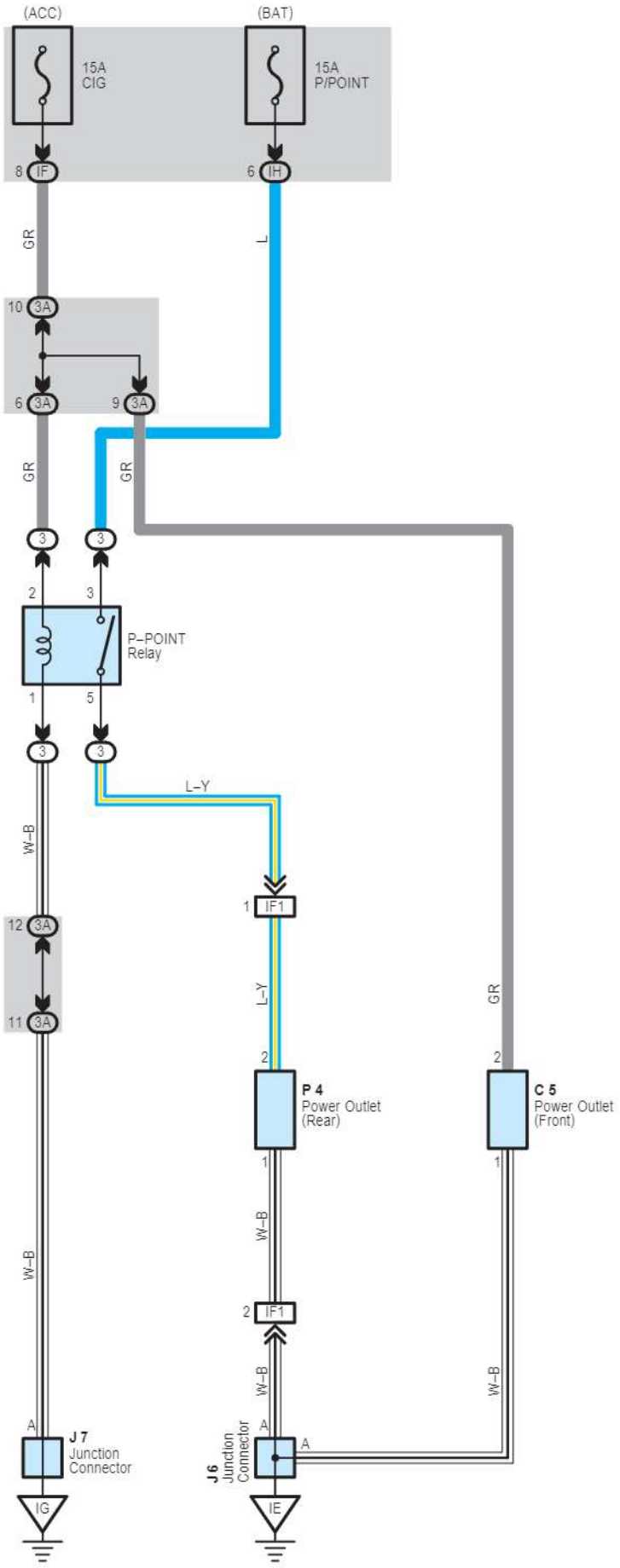
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IL	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

: Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(ACC)
(BAT)
15A
CIG
15A
P/POINT
8 IF
6 IH
GR
L
10 3A
6 3A
9 3A
GR
GR
3
3
2
3
P–POINT
Relay
1
5
3
3
L–Y
W–B
1 IF1
12 3A
11 3A
L–Y
GR
2
2
P 4
Power Outlet
(Rear)
C 5
Power Outlet
(Front)
1
1
W–B
2 IF1
W–B
W–B
A
A
J 7
Junction
Connector
J6
Junction
Connector
A
IG
IE

: Parts Location

Code	See Page	Code	See Page	Code	See Page
C5	36	J7	37		
J6	37	P4	37		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

: Junction Block and Wire Harness Connector

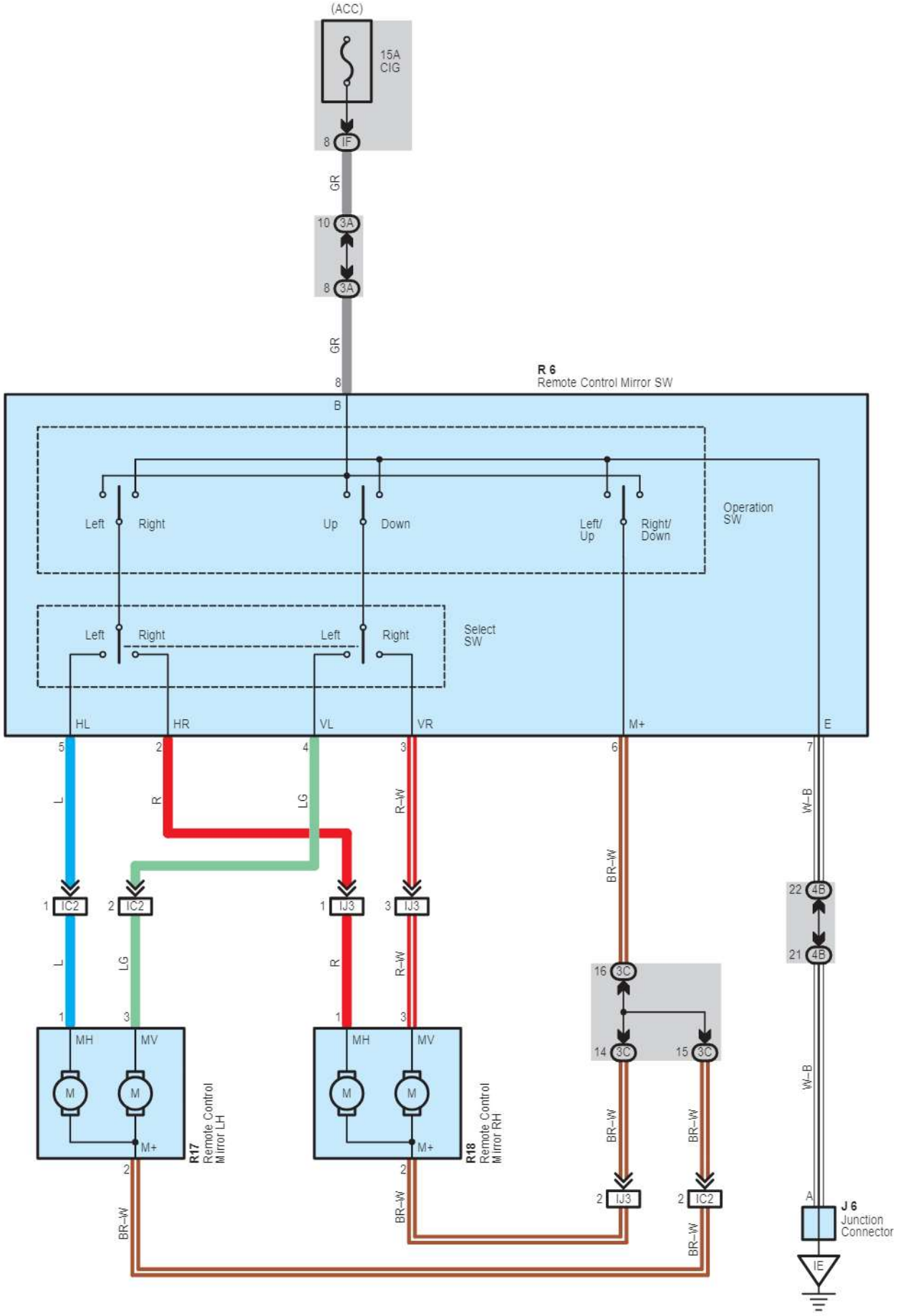
Code	See Page	Junction Block and Wire Harness (Connector Location)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	45	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Center)

: Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(ACC)
15A
CIG
8 IF
GR
10 3A
8 3A
GR
8
B
R 6
Remote Control Mirror SW
Left
Right
Up
Down
Left/
Up
Right/
Down
Operation
SW
Left
Right
Left
Right
Select
SW
HL
HR
VL
VR
M+
E
5
2
4
3
6
7
L
R
LG
R–W
BR–W
W–B
1 IC2
2 IC2
1 IJ3
3 IJ3
22 4B
21 4B
16 3C
14 3C
15 3C
L
LG
R
R–W
1
3
1
3
MH
MV
MH
MV
M
M
M
M
M+
M+
R17
Remote Control
Mirror LH
R18
Remote Control
Mirror RH
2
2
BR–W
BR–W
2 IJ3
2 IC2
BR–W
BR–W
A
J 6
Junction
Connector
IE

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J6	37	R17	39 (*1)	R18	39 (*1)
R6	37		41 (*2)		41 (*2)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IJ3	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter

* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier


(IG)
10A
GAUGE
5
IE
B–L
7
I12
Inner Mirror
6
B
4
IK1
W–B
IE

: Parts Location

Code	See Page	Code	See Page	Code	See Page
I12	38 (*1)	I12	40 (*2)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	25	Roof Wire and Instrument Panel J/B (Lower Finish Panel)

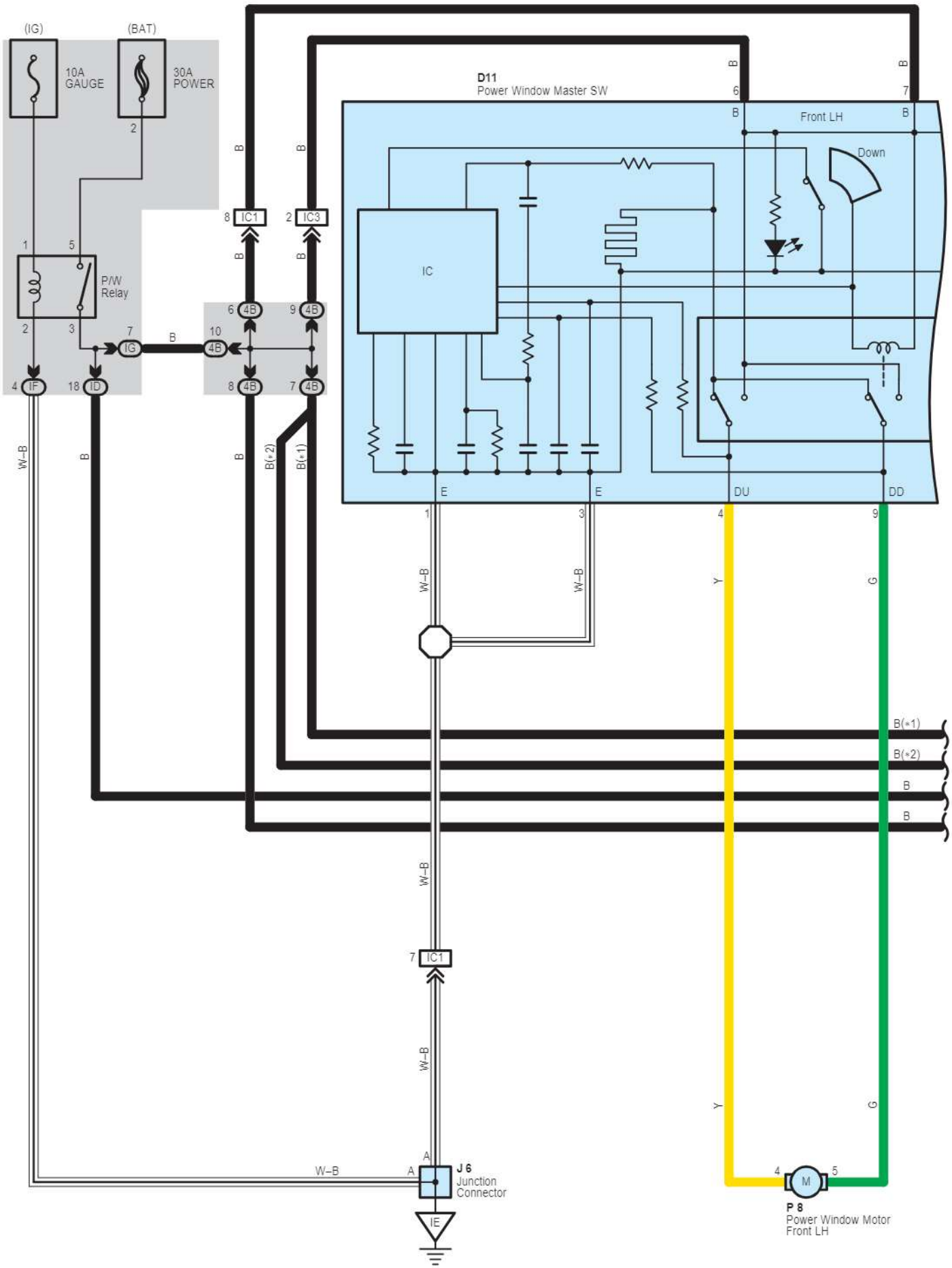
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK1	45	Roof Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

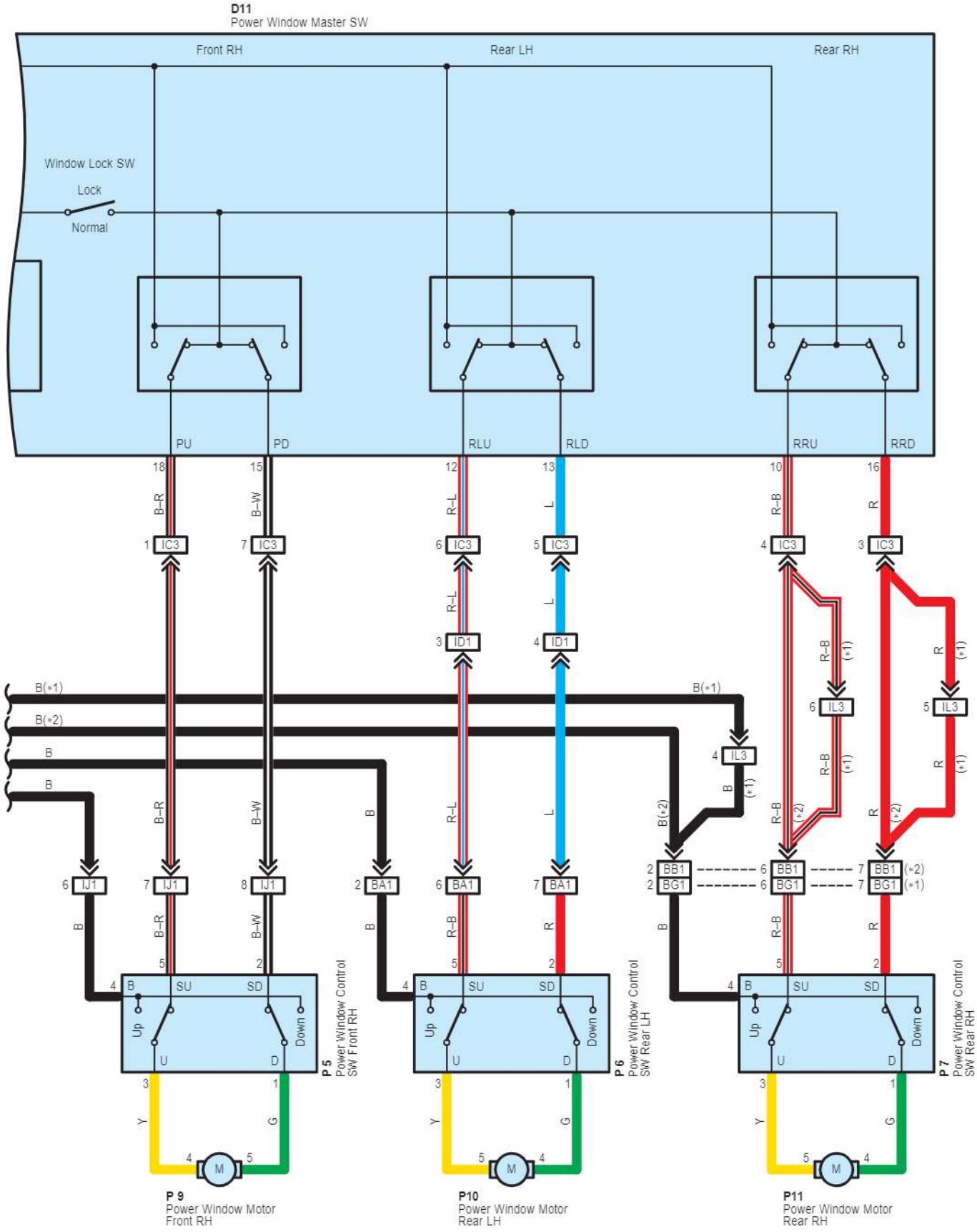
: Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


(IG)
(BAT)
10A
GAUGE
30A
POWER
P/W
Relay
D11
Power Window Master SW
Front LH
Down
IC
IC1
IC3
4B
IG
IF
ID
E
DU
DD
W–B
B
B(*1)
B(*2)
Y
G
J 6
Junction
Connector
IE
M
P 8
Power Window Motor
Front LH

* 1 : w/ Stereo Component Amplifier
* 2 : w/o Stereo Component Amplifier



Power Window

System Outline

When the ignition SW is turned on, the current flows through the GAUGE fuse to TERMINAL 1 of the P/W relay to TERMINAL 2 to GROUND. This activates the relay and the current flows through the POWER fuse to TERMINAL 5 of the relay to TERMINAL 3 to TERMINAL B of the power window master SW, TERMINAL 4 of the power window control SW.

1. Manual Operation (Driver's Window)

With the ignition SW turned on and with the power window master SW (Front LH) in Up position, the current flowing to TERMINAL B of the power window master SW flows to TERMINAL DU of the master SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL DD of the master SW to TERMINAL E to GROUND and rotates the power window motor in the up direction. The window ascends only while the SW is being pulled. In down operation, the flows of current from TERMINAL B of the power window master SW to TERMINAL DD to TERMINAL 5 of the motor to TERMINAL 4 to TERMINAL DU of the master SW to TERMINAL E to GROUND, flowing in the opposite direction to manual up operation and rotating the motor in reverse, thus opening the window.

2. Auto Down Operation (Driver's Window)

When the front LH window control SW in the power window master SW is pushed strongly on the down side, current flows from TERMINAL B of the master SW to TERMINAL DD to TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL DU of the master SW to TERMINAL E to GROUND. Because the hold circuit inside the master SW keeps the relay on the down side activated, the power window motor continues operating even if the power window master SW is released. When the driver's window is fully opened, the hold circuit turns off and the relay on the down side turns off, and auto down operation is completed.

3. Stopping of Auto Down Operation (Driver's Window)

When the master SW (Front LH) is pulled to the up side during auto down operation, a ground circuit opens in the master SW and current does not flow from TERMINAL DU of the master SW to TERMINAL E, so the motor stops, causing auto down operation to stop. If the master SW is pulled continuously, the motor rotates in the up direction in manual up operation.

4. Manual Operation (Front RH Window)

With the power window control SW (Front RH) pulled to the up side, current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL PD of the master SW to TERMINAL E to GROUND and rotates the power window motor (Front RH) in the up direction. Up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the passenger's window becomes open. As a result, even if Open/Close operation of the passenger's window is attempted, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the passenger's window can not be operated and window lock occurs.

5. Manual Operation (Rear LH, Rear RH Window)

With the power window control SW (Rear LH, rear RH) pulled to the up side, current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 to TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL RLD, RRD of the master SW to TERMINAL E to GROUND and rotates the power window motor (Rear LH, rear RH) in the up direction. Up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the passenger's window becomes open. As a result, even if Open/Close operation of the passenger's window is attempted, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the passenger's window can not be operated and window lock occurs.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
D11	38 (*1)	P6	41 (*2)	P9	41 (*2)
	40 (*2)	P7	39 (*1)	P10	39 (*1)
J6	37		41 (*2)		41 (*2)
P5	39 (*1)	P8	39 (*1)	P11	39 (*1)
	41 (*2)		41 (*2)		41 (*2)
P6	39 (*1)	P9	39 (*1)		

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

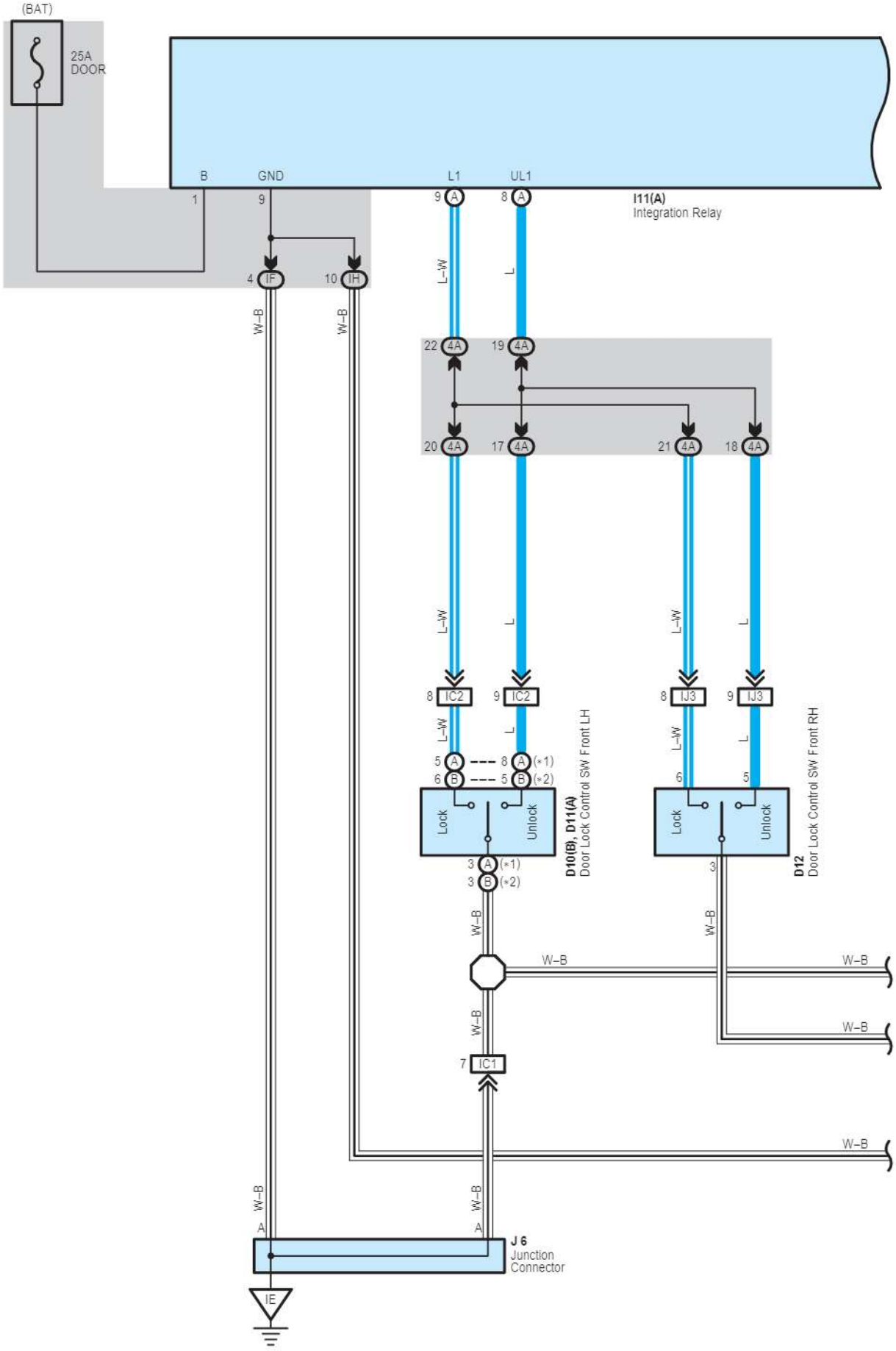
: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC3		
ID1	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IL3	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)
BA1	46 (*1)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
	47 (*2)	
BB1	46 (*1)	Rear Door RH Wire and Instrument Panel Wire (Right Center Pillar)
	47 (*2)	
BG1	46 (*1)	Rear Door RH Wire and Floor Wire (Right Center Pillar)

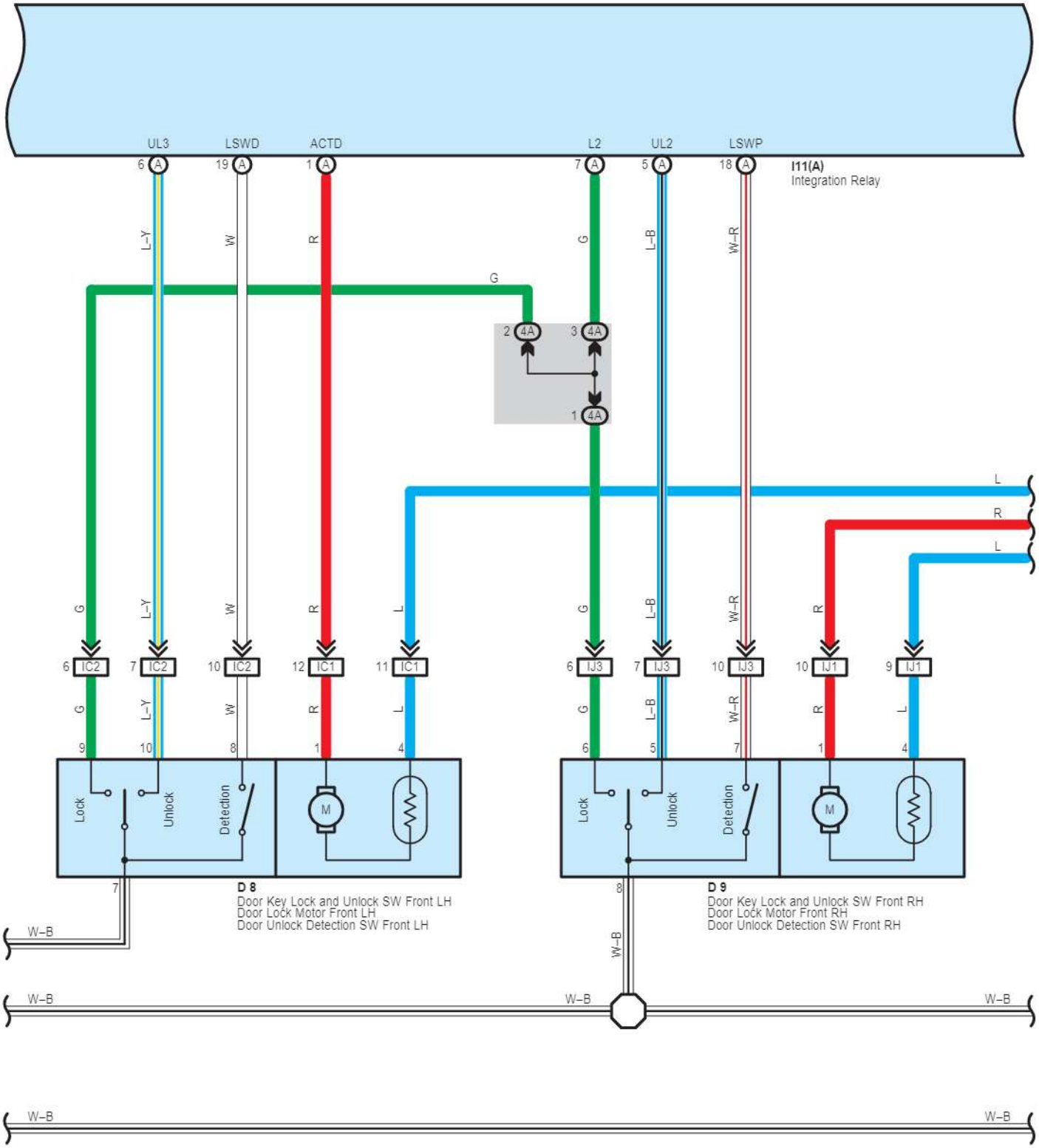
: **Ground Points**

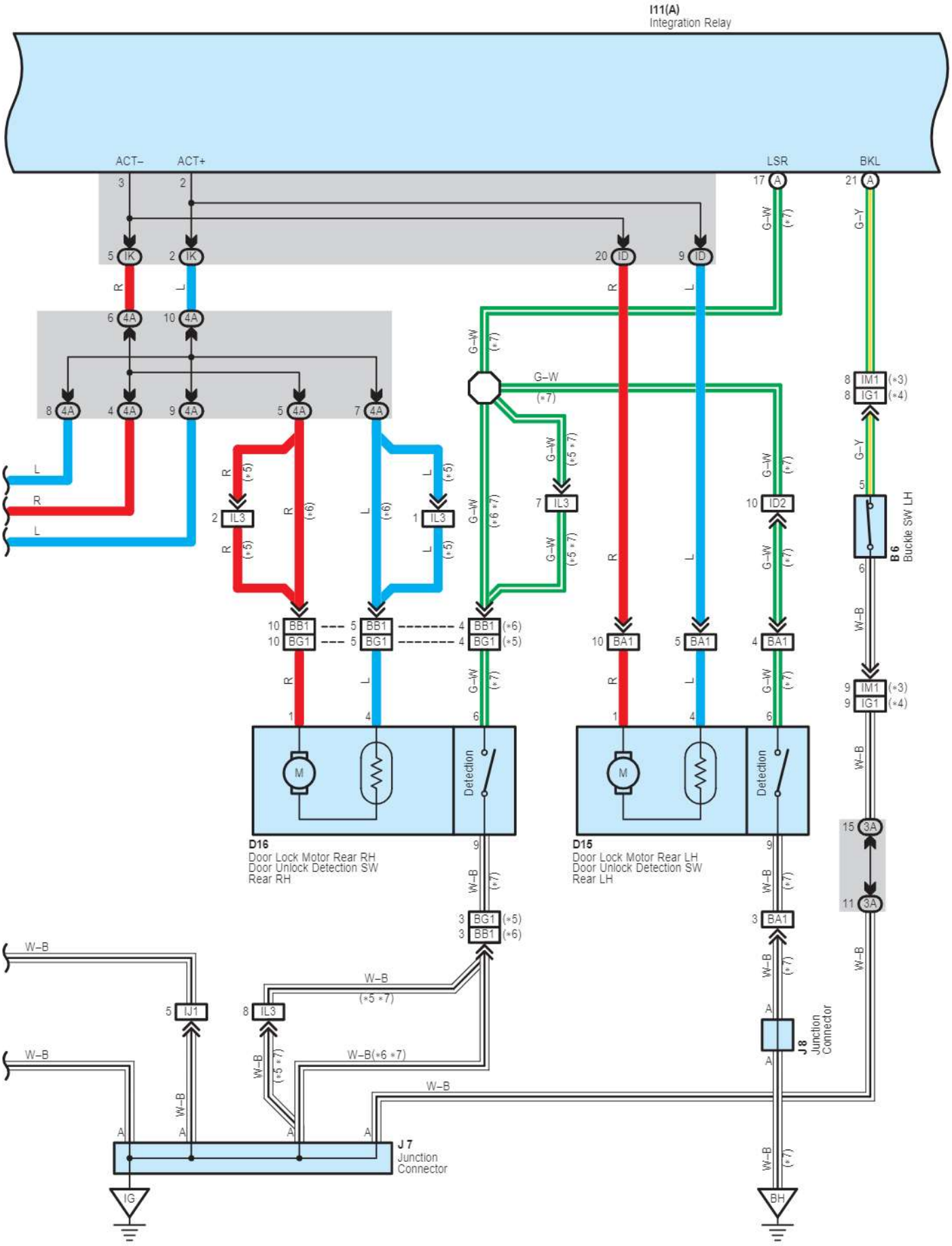
Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter

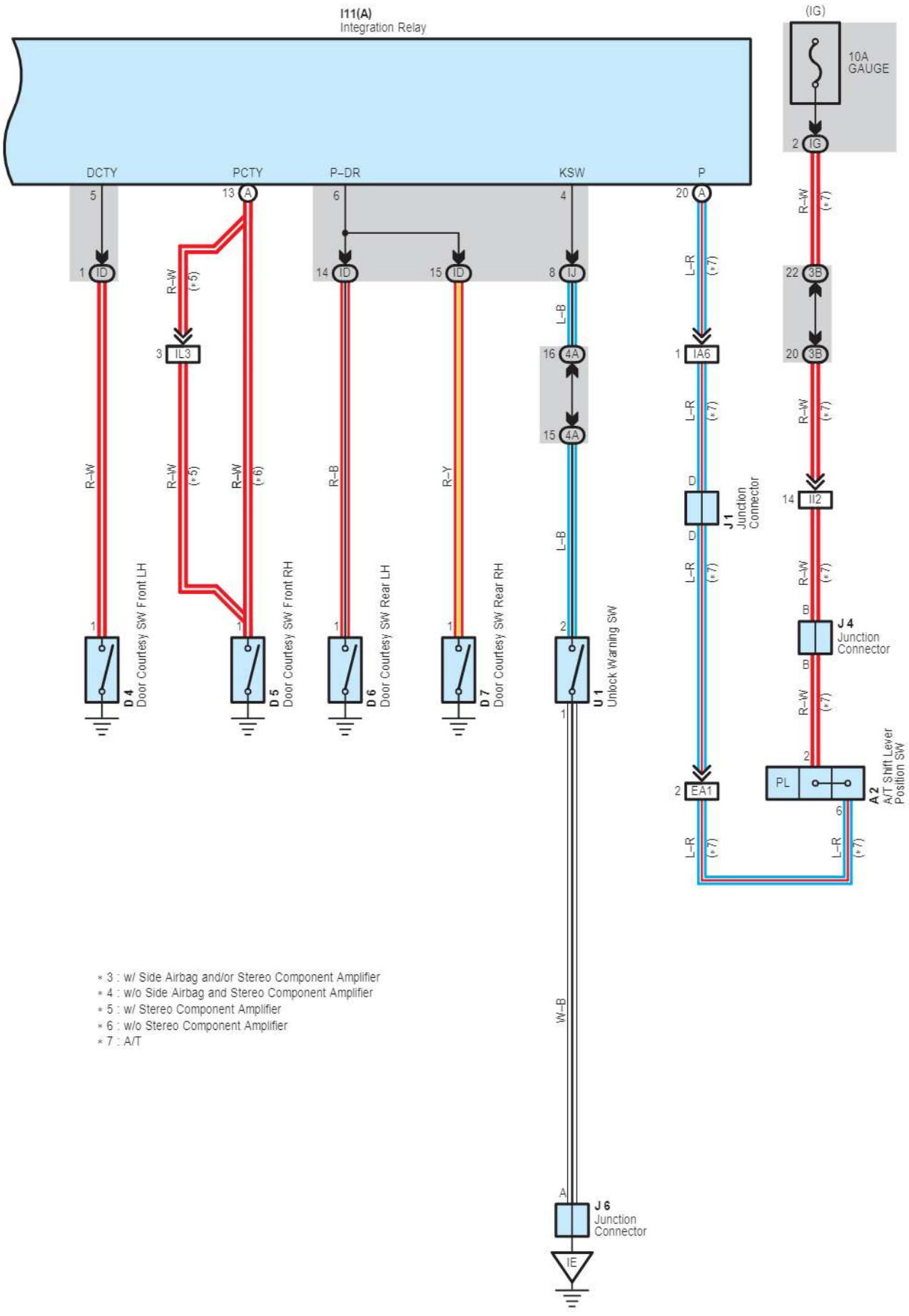
* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


(BAT)
25A
DOOR
B
GND
L1
UL1
1
9
9 A
8 A
I11(A)
Integration Relay
4 IF
10 IH
W–B
W–B
L–W
L
22 4A
19 4A
20 4A
17 4A
21 4A
18 4A
8 IC2
9 IC2
8 IJ3
9 IJ3
5 A
6 B
8 A (*1)
5 B (*2)
Lock
Unlock
D10(B), D11(A)
Door Lock Control SW Front LH
D12
Door Lock Control SW Front RH
3 A (*1)
3 B (*2)
7 IC1
A
J 6
Junction
Connector
IE

* 1 : w/ Power Window
* 2 : w/o Power Window




I11(A)
Integration Relay
ACT–
ACT+
LSR
BKL
D16
Door Lock Motor Rear RH
Door Unlock Detection SW
Rear RH
D15
Door Lock Motor Rear LH
Door Unlock Detection SW
Rear LH
B6
Buckle SW LH
J8
Junction
Connector
J7
Junction
Connector
IG
BH
M
Detection



* 3 : w/ Side Airbag and/or Stereo Component Amplifier
* 4 : w/o Side Airbag and Stereo Component Amplifier
* 5 : w/ Stereo Component Amplifier
* 6 : w/o Stereo Component Amplifier
* 7 : A/T

Door Lock Control

System Outline

The current always flows to TERMINAL 1 of the integration relay through the DOOR fuse.

1. Manual Lock Operation

When the door lock control SW or door key lock and unlock SW are operated to LOCK position, a lock signal is input to TERMINAL (A) 9 or (A) 7 of the integration relay and causes the relay to function. The current flows from TERMINAL 1 of the relay to TERMINAL 2 to the door lock motors to TERMINALS (A) 1 and 3 of the relay to TERMINAL 9 to GROUND and the door lock motors locks the door.

2. Manual Unlock Operation

When the door lock control SW or door key lock and unlock SW are operated to UNLOCK position, an unlock signal is input to TERMINAL (A) 8, (A) 6 or (A) 5 of the integration relay and causes the relay to function. The current flows from TERMINAL 1 of the relay to TERMINALS (A) 1 and 3 to the door lock motors to TERMINAL 2 of the relay to TERMINAL 9 to GROUND and the door lock motors unlocks the door.

3. Double Operation Unlock Operation

When the door key lock and unlock SW LH is turned to the unlock side, only the driver's door is unlocked. By turning the door key lock and unlock SW LH to the unlock side, a signal is input to TERMINAL (A) 6 of the relay, and if the signal is input again within 3 seconds by turning the SW to the unlock side again, current flows from TERMINAL 3 of the integration relay to the door lock motors to TERMINAL 2 of the relay to TERMINAL 9 to GROUND, causing the door lock motors to operate and unlock the doors.

4. Ignition Key Reminder Operation

- Operating door lock knob (Operation of door lock motors)
  With the ignition key in the cylinder (Unlock warning SW on), when the door is opened and locked using door lock knob (Door lock motor), the door is locked once but each door is unlocked soon by the function of the relay. As a result, the current flows from TERMINAL 1 of the integration relay to TERMINALS (A) 1 and 3 to the door lock motors to TERMINAL 2 of the relay to TERMINAL 9 to GROUND and unlocks all the doors.
- Operating door lock control SW or door key lock and unlock SW
  With the ignition key in the cylinder (Unlock warning SW on), when the door is opened and locked using door lock control SW or key SW, the door is locked once but each door is unlocked by the function of SW contained in motors, and the signal is input to TERMINAL (A) 19 of the relay. According to this input signal, the current flows from TERMINAL 1 of the relay to TERMINALS (A) 1 and 3 to the door lock motors to TERMINAL 2 of the relay to TERMINAL 9 to GROUND and unlocks all the doors.
- In case of key less lock
  With the ignition the key in the cylinder (Unlock warning SW on), when the unlock function is disturbed, for example pushing the door lock knob etc., the door holds on lock condition. After closing the door after, door courtesy SW inputs the signal into TERMINAL 5 or 6 or (A) 13 of the integration relay. By this input signal, the relay works and current flows from TERMINAL 1 of the relay to TERMINALS (A) 1 and 3 to the door lock motors to TERMINAL 2 of the relay to TERMINAL 9 to GROUND and unlocks all the doors.

5. Shift–Linked Door Lock

It is a user–friendly function to control door lock according to shift position of automatic transmission (A/T) vehicle. There are three full functions as follows;

- Shift–linked auto door lock
  It locks all the doors when shift lever is shifted from P position to other positions under the ignition SW ON condition.
- Shift–linked auto door unlock
  It unlocks all the doors when shift lever is shifted from other positions than P position to P position under the ignition SW ON condition.
- Ignition–SW–linked auto door unlock
  It unlocks all the doors when the ignition SW is turned OFF.

6. Door–Key–Linked Door Lock Prohibition Control

It prohibits central door–key–linked door lock or door unlock operation only when the driver's seat belt is fastened under the ignition SW ON condition.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	D8	40 (*2)	D16	40 (*2)
B6	38 (*1)	D9	38 (*1)	I11 A	37
	40 (*2)		40 (*2)	J1	33 (1ZZ–FE)
D4	38 (*1)	D10 B	38 (*1)		35 (2ZZ–GE)
	40 (*2)		40 (*2)	J4	37
D5	38 (*1)	D11 A	38 (*1)	J6	37
	40 (*2)		40 (*2)	J7	37
D6	38 (*1)	D12	38 (*1)	J8	38 (*1)
	40 (*2)		40 (*2)		40 (*2)
D7	38 (*1)	D15	38 (*1)	U1	37
	40 (*2)		40 (*2)		
D8	38 (*1)	D16	38 (*1)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
IJ		
IK	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
4A	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

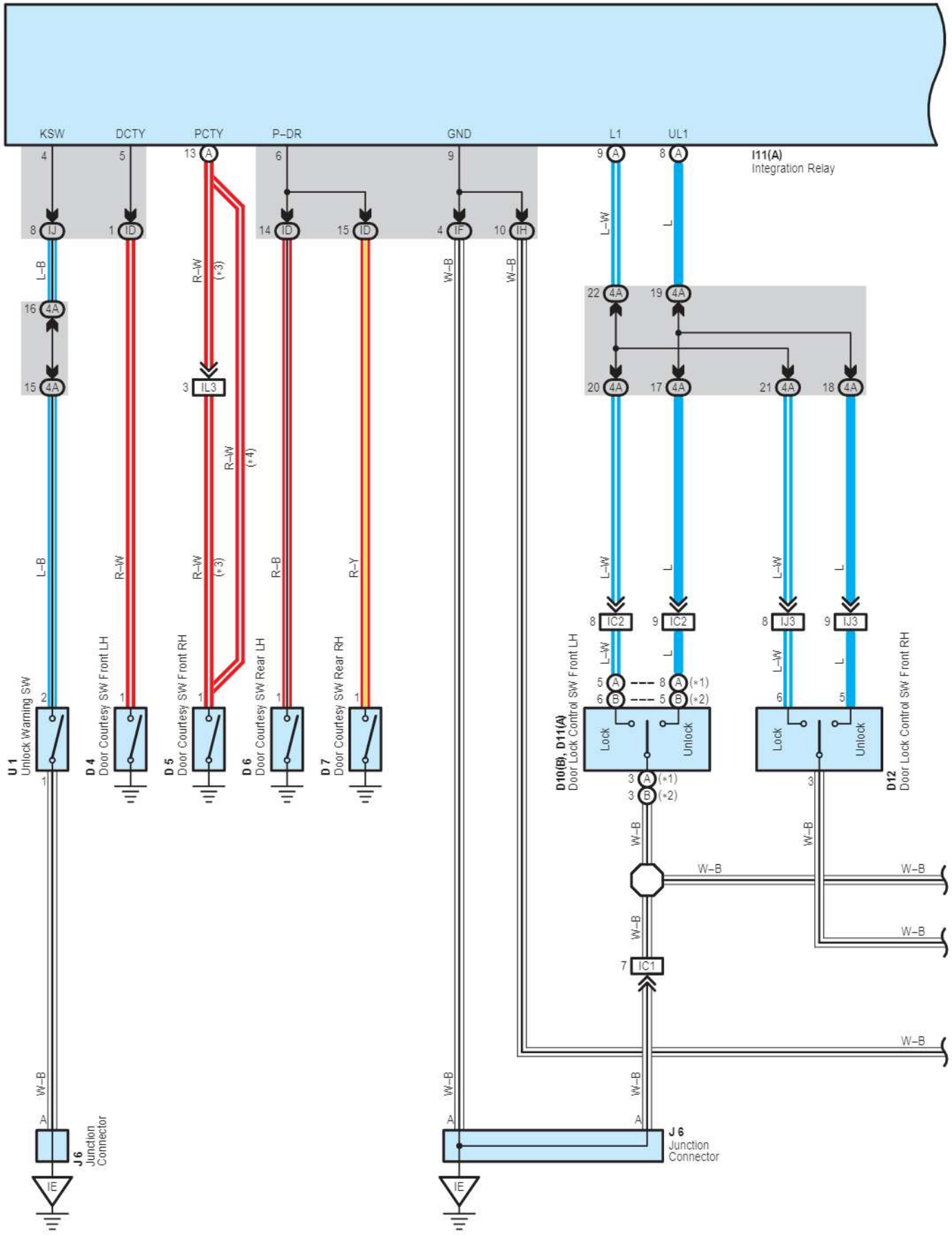
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA6	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IG1	45	Instrument Panel Wire and Instrument Panel No.3 Wire (Front Side of the Parking Brake Lever)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3		
IL3	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)
IM1	45	Instrument Panel Wire and Floor Wire (Front Side of the Parking Brake Lever)
BA1	46 (*1)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
	47 (*2)	
BB1	46 (*1)	Rear Door RH Wire and Instrument Panel Wire (Right Center Pillar)
	47 (*2)	
BG1	46 (*1)	Rear Door RH Wire and Floor Wire (Right Center Pillar)

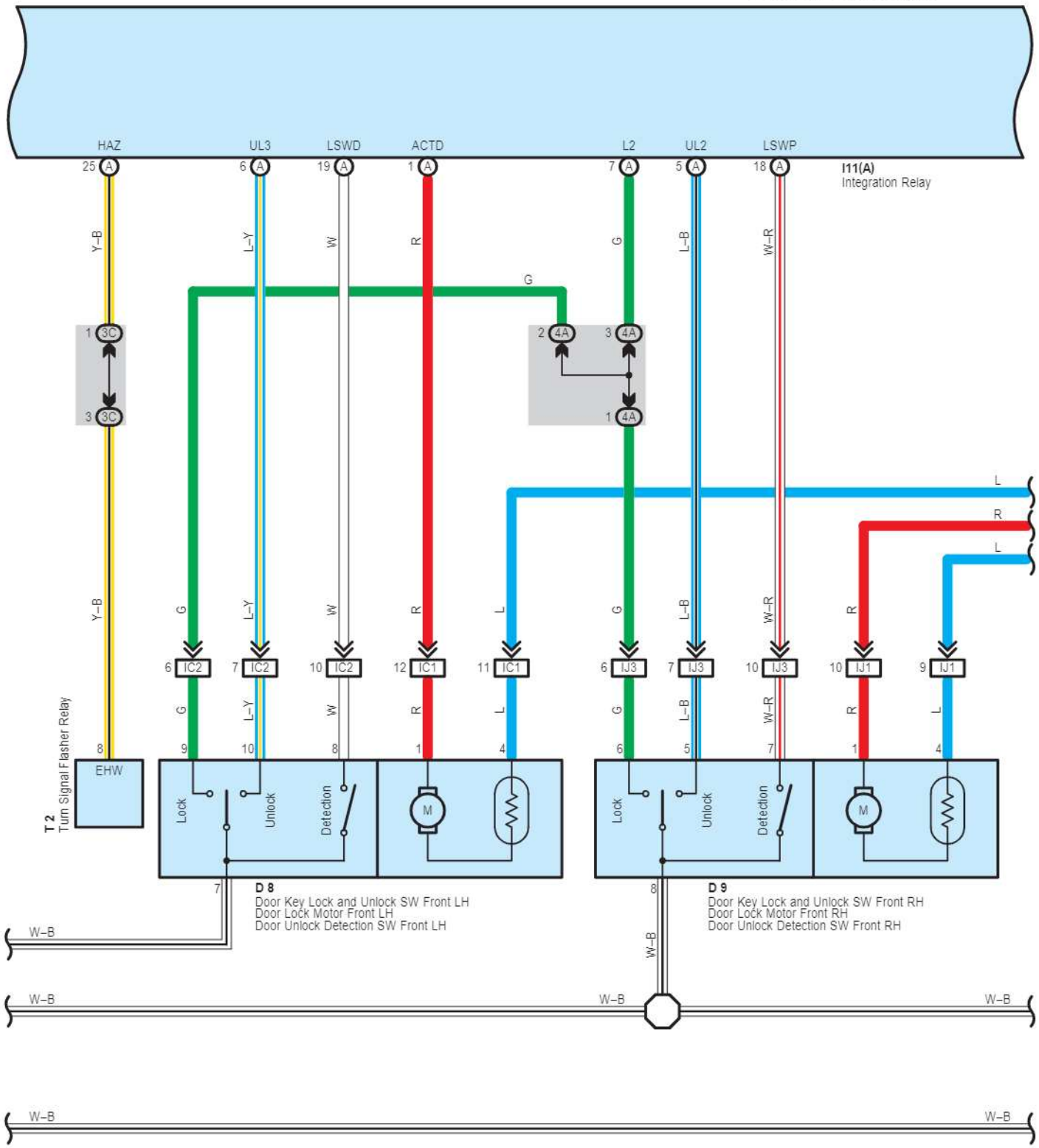
: Ground Points

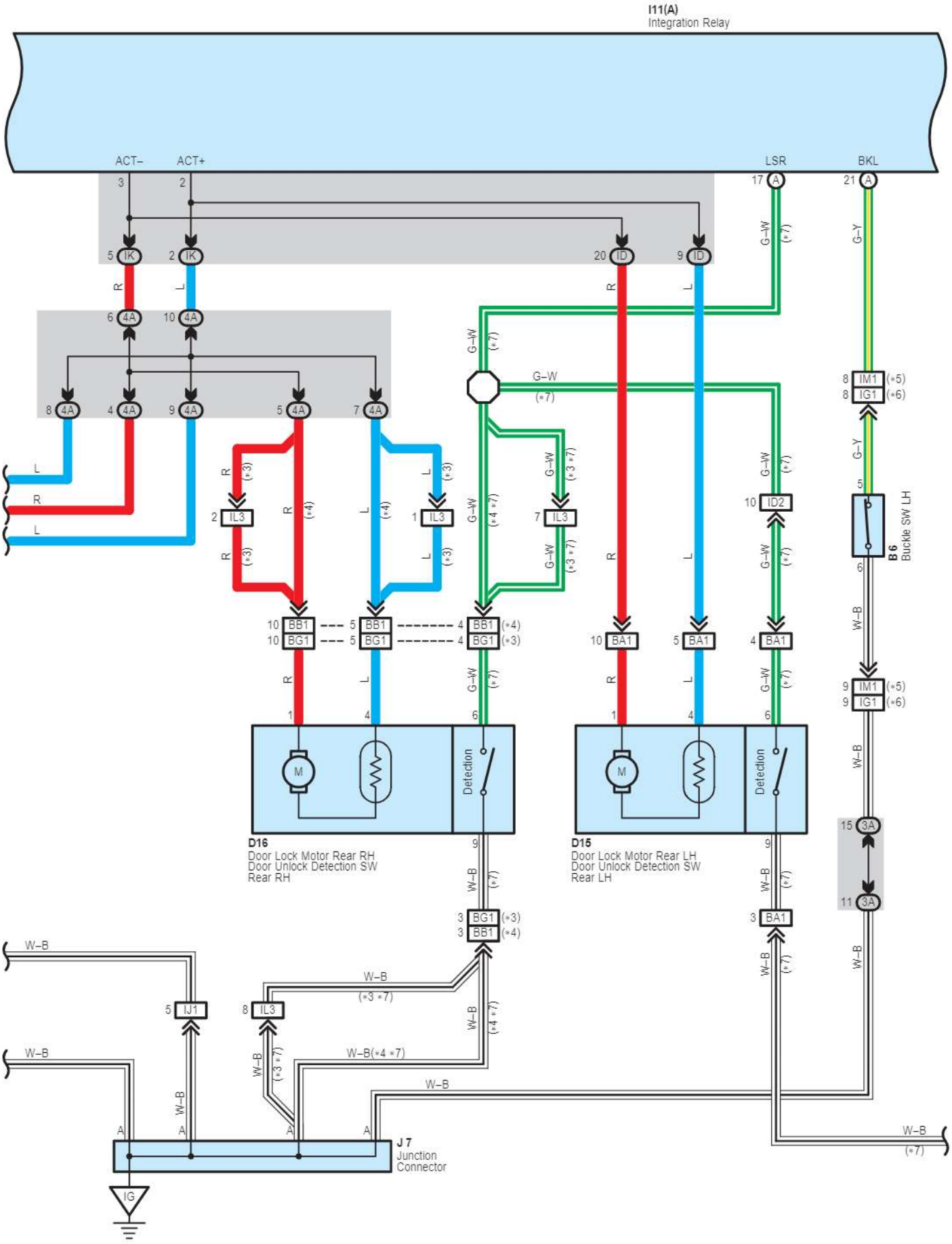
Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	

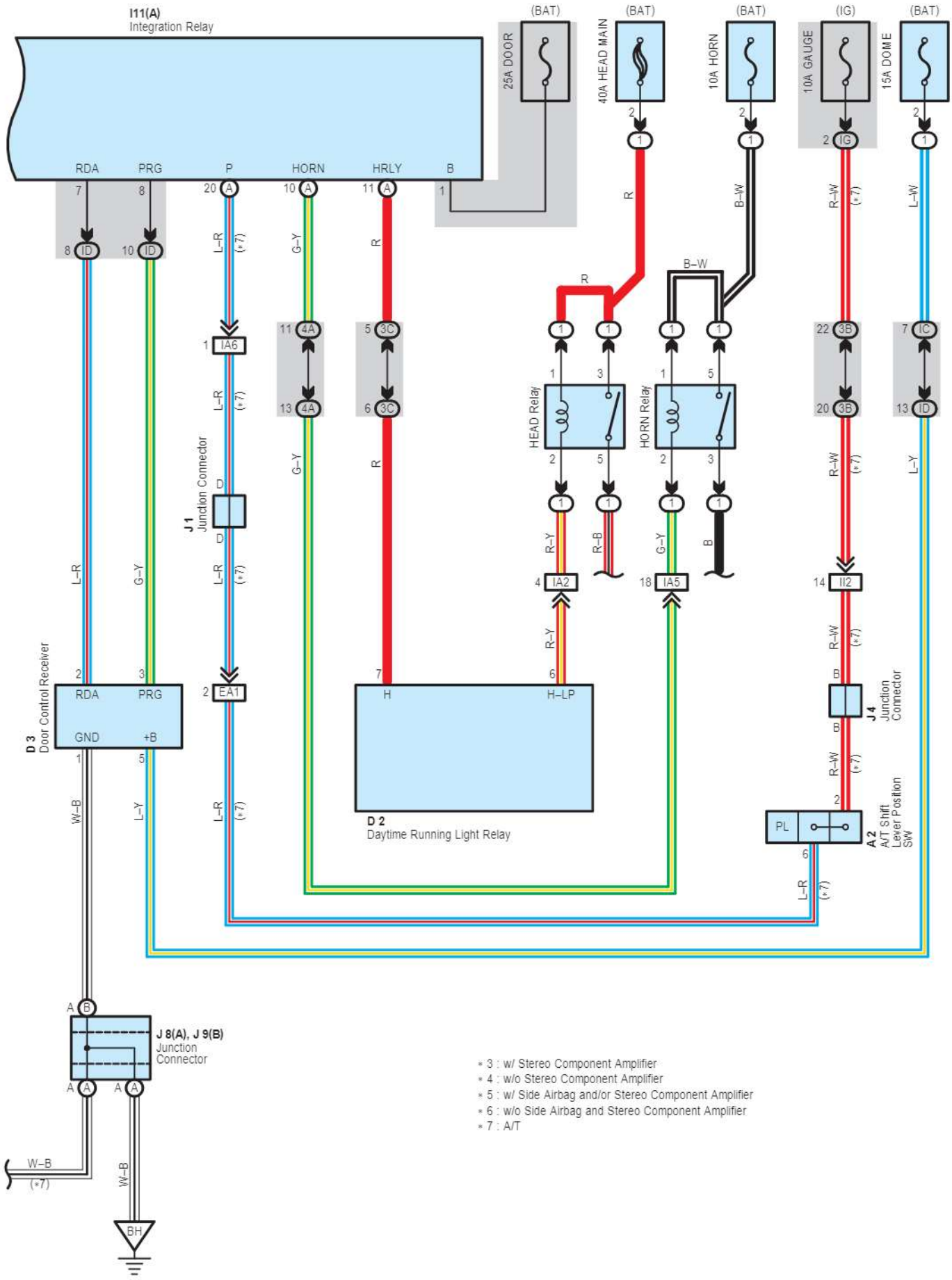
* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


KSW
DCTY
PCTY
P-DR
GND
L1
UL1
I11(A)
Integration Relay
L-B
R-W
R-B
R-Y
L-W
L
W-B
(*3)
(*4)
(*1)
(*2)
U 1
Unlock Warning SW
D 4
Door Courtesy SW Front LH
D 5
Door Courtesy SW Front RH
D 6
Door Courtesy SW Rear LH
D 7
Door Courtesy SW Rear RH
D10(B), D11(A)
Door Lock Control SW Front LH
D12
Door Lock Control SW Front RH
Lock
Unlock
J 6
Junction Connector
IE

* 1 : w/ Power Window
* 2 : w/o Power Window
* 3 : w/ Stereo Component Amplifier
* 4 : w/o Stereo Component Amplifier




I11(A)
Integration Relay
ACT–
ACT+
LSR
BKL
D16
Door Lock Motor Rear RH
Door Unlock Detection SW
Rear RH
D15
Door Lock Motor Rear LH
Door Unlock Detection SW
Rear LH
B6
Buckle SW LH
J7
Junction
Connector
Detection
M
IG


I11(A)
Integration Relay
RDA
PRG
P
HORN
HRLY
B
(BAT)
25A DOOR
40A HEAD MAIN
10A HORN
(IG)
10A GAUGE
15A DOME
HEAD Relay
HORN Relay
J 1
Junction Connector
D 3
Door Control Receiver
GND
+B
D 2
Daytime Running Light Relay
H
H–LP
J 4
Junction Connector
A 2
A/T Shift Lever Position SW
PL
J 8(A), J 9(B)
Junction Connector
BH
* 3 : w/ Stereo Component Amplifier
* 4 : w/o Stereo Component Amplifier
* 5 : w/ Side Airbag and/or Stereo Component Amplifier
* 6 : w/o Side Airbag and Stereo Component Amplifier
* 7 : A/T

Wireless Door Lock Control

System Outline

Door lock control (Lock and unlock) and panic control (TVIP alarm and flash) is performed by remote control, without the ignition key inserted in the door key cylinder, using low–power electrical waves emitted by a transmitter.

1. Wireless Door Lock or Unlock Normal Operation

With the ignition key not inserted into the ignition key cylinder (Unlock warning SW off) and all the doors completely closed, when the lock or unlock button (Transmitter) is pushed, the door control receiver receives the electrical waves from the transmitter, and sends a signal to the integration relay causing it to operate.
As a result, the integration relay judges whether the door is locked or unlocked based on the signal from the door lock motor and door unlock detection SW, and sends a signal to switch the condition from lock to unlock or vice versa, causing the door lock motor to operate.

2. Visual Confirmation of Lock or Unlock

If all doors indicate that they are locked after the lock command, parking lights and taillights will flash once. If any door indicates that it is open after the unlock command, parking lights and taillights will flash twice.

3. Wireless Door Unlock Operation

Pushing the unlock button (Transmitter) once, driver's door is unlocked. Furthermore, pushing the button again within 3 seconds, the other doors are unlocked.

4. Automatic Lock Operation

With the ignition key not inserted into the ignition key cylinder (Unlock warning SW off) and all the doors completely closed, after pushing the button (Transmitter) to unlock all the doors, if a door is not opened within 30 seconds, all the doors will be automatically relocked.

5. Wireless Control Stop Function

If a door is open (Door courtesy SW on), a signal is input from the door courtesy SW to the integration relay stopping wireless door lock or unlock.
If the ignition key is in the ignition key cylinder (Unlock warning SW on), the unlock warning SW inputs a signal to the integration relay stopping wireless door lock or unlock.

6. Repeat Function

In case an appropriate lock detection signal is not received after outputting a lock signal when pushing the lock button (Transmitter), 1 seconds later, the integration relay output the lock signal again.

7. Remote Panic Operation

Panic will function when doors are locked or unlocked, open or closed. When the panic button (Transmitter) is pushed once, theft alarm sounds and headlights and taillights flash. Then, the panic or the unlock button (Transmitter) is pushed once more, sounding and flashing will stop. Panic will not function when ignition key is in ignition key cylinder.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	D8	38 (*1)	I11 A	37
B6	38 (*1)		40 (*2)	J1	33 (1ZZ–FE)
	40 (*2)	D9	38 (*1)		35 (2ZZ–GE)
D2	36		40 (*2)	J4	37
D3	38 (*1)	D10 B	38 (*1)	J6	37
	40 (*2)		40 (*2)	J7	37
D4	38 (*1)	D11 A	38 (*1)	J8 A	38 (*1)
	40 (*2)		40 (*2)		40 (*2)
D5	38 (*1)	D12	38 (*1)	J9 B	38 (*1)
	40 (*2)		40 (*2)		40 (*2)
D6	38 (*1)	D15	38 (*1)	T2	37
	40 (*2)		40 (*2)	U1	37
D7	38 (*1)	D16	38 (*1)		
	40 (*2)		40 (*2)		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
IJ		
IK	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
3C		
4A	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

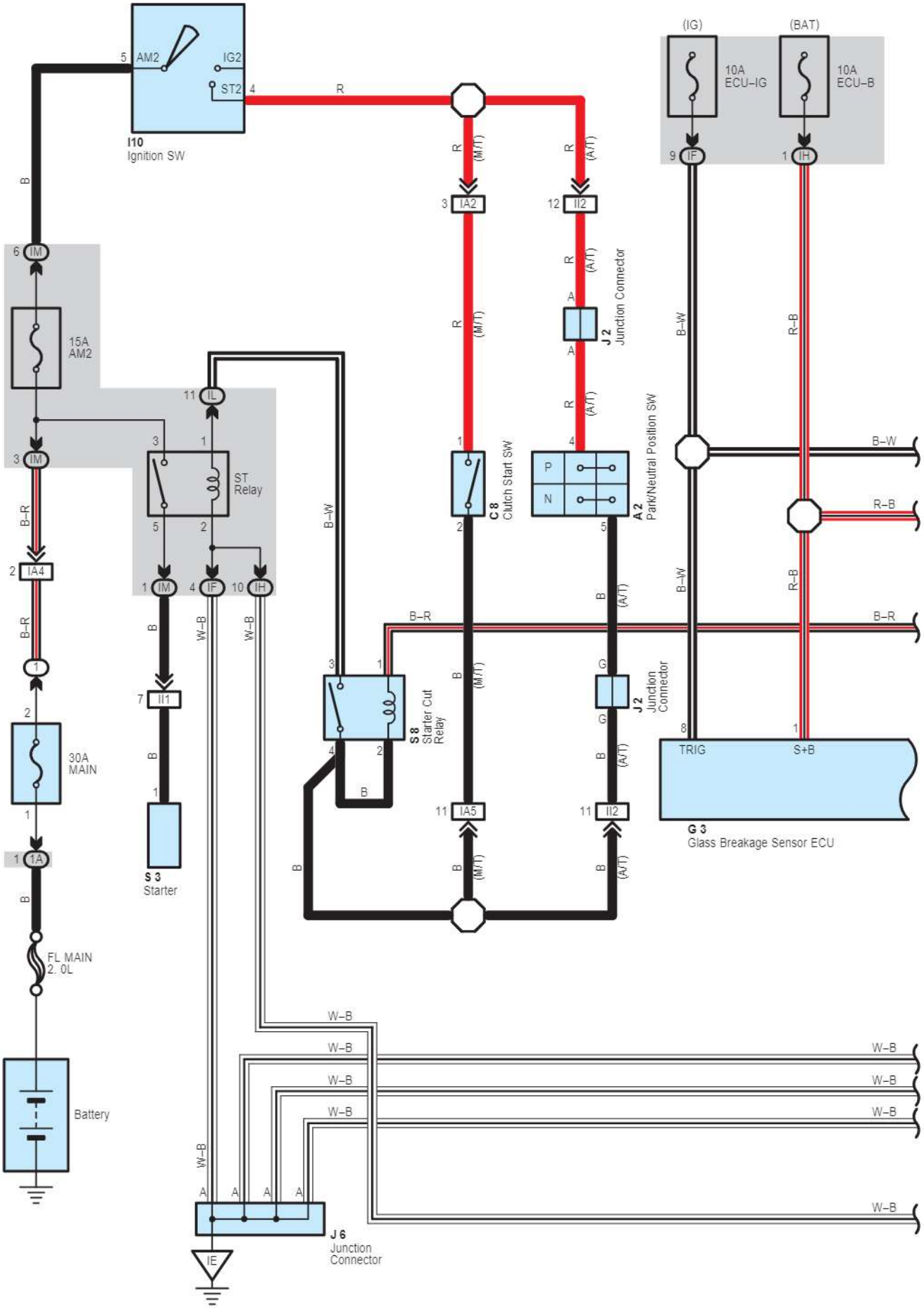
: Connector Joining Wire Harness and Wire Harness

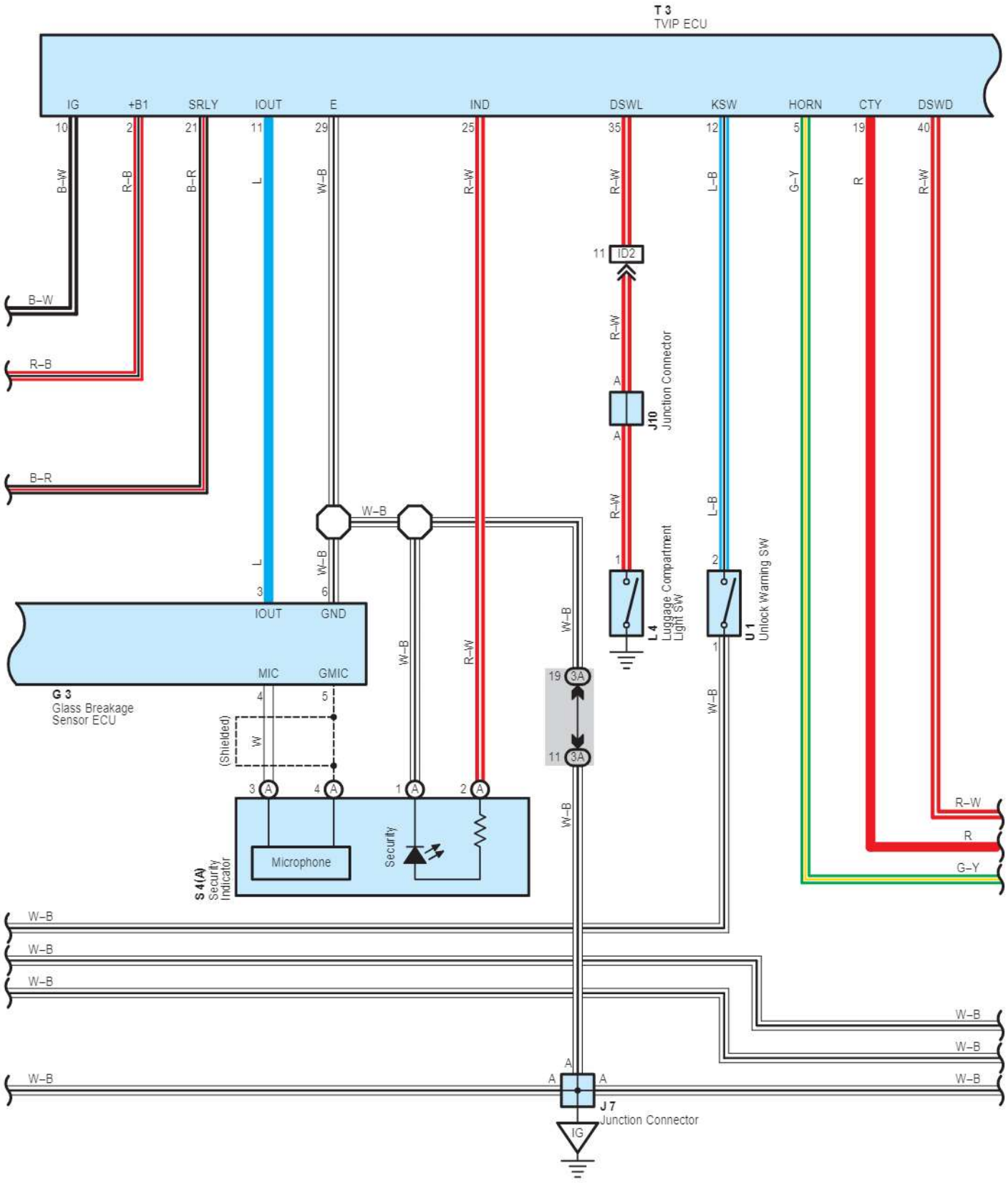
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA5		
IA6		
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IG1	45	Instrument Panel Wire and Instrument Panel No.3 Wire (Front Side of the Parking Brake Lever)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3		
IL3	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)
IM1	45	Instrument Panel Wire and Floor Wire (Front Side of the Parking Brake Lever)
BA1	46 (*1)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
	47 (*2)	
BB1	46 (*1)	Rear Door RH Wire and Instrument Panel Wire (Right Center Pillar)
	47 (*2)	
BG1	46 (*1)	Rear Door RH Wire and Floor Wire (Right Center Pillar)

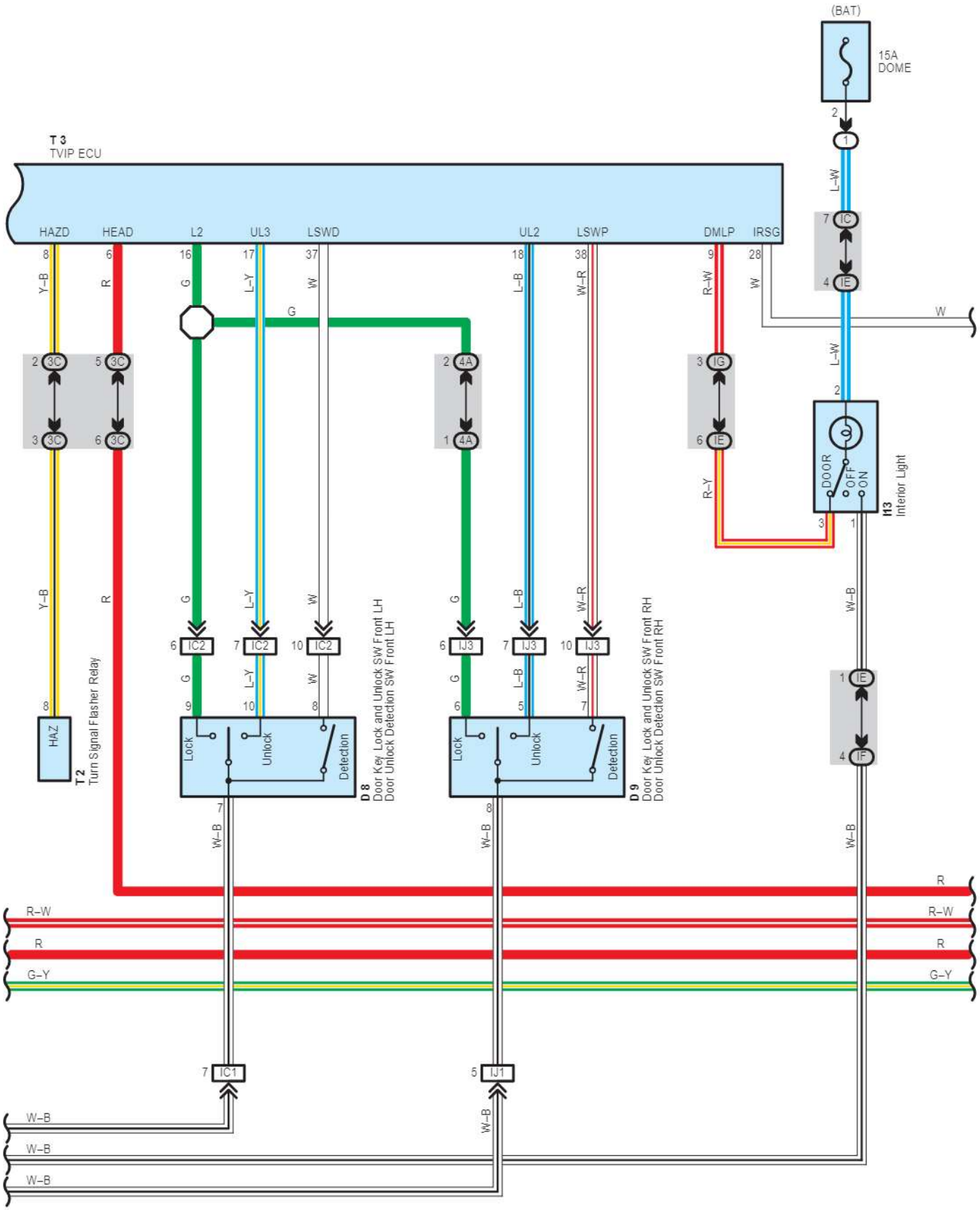
: Ground Points

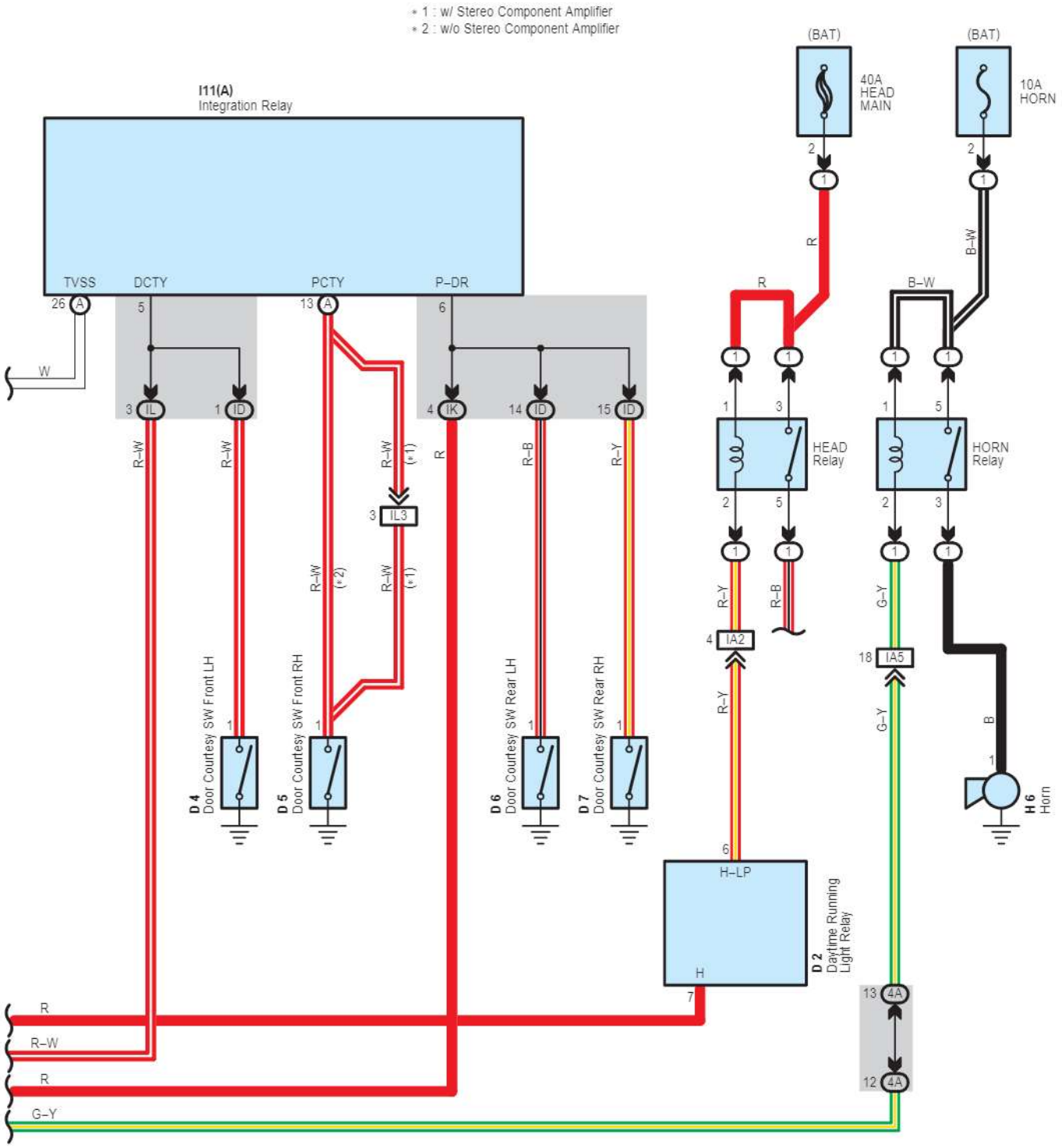
Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel
BH	46 (*1)	Under the Left Quarter Pillar
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


I10
Ignition SW
AM2
IG2
ST2
15A
AM2
ST
Relay
30A
MAIN
FL MAIN
2. 0L
Battery
S 3
Starter
C8
Clutch Start SW
A2
Park/Neutral Position SW
P
N
J 2
Junction Connector
S 8
Starter Cut
Relay
J 6
Junction
Connector
(IG)
(BAT)
10A
ECU–IG
10A
ECU–B
TRIG
S+B
G 3
Glass Breakage Sensor ECU
(M/T)
(A/T)


T 3
TVIP ECU
IG
+B1
SRLY
IOUT
E
IND
DSWL
KSW
HORN
CTY
DSWD
10
2
21
11
29
25
35
12
5
19
40
B–W
R–B
B–R
L
W–B
R–W
L–B
G–Y
R
11 ID2
J10
Junction Connector
A
A
1
2
L4
Luggage Compartment Light SW
U1
Unlock Warning SW
3
6
IOUT
GND
MIC
GMIC
4
5
G3
Glass Breakage Sensor ECU
(Shielded)
W
3 A
4 A
1 A
2 A
S4(A)
Security Indicator
Microphone
Security
19 3A
11 3A
A
A
A
J7
Junction Connector
IG


(BAT)
15A
DOME
T3
TVIP ECU
HAZD
HEAD
L2
UL3
LSWD
UL2
LSWP
DMLP
IRSG
L-W
W
R-W
R-Y
Y-B
R
G
L-Y
W
L-B
W-R
W-B
G-Y
IC
IE
IG
3C
4A
IC2
IJ3
IC1
IJ1
IF
DOOR
OFF
ON
I13
Interior Light
HAZ
T2
Turn Signal Flasher Relay
Lock
Unlock
Detection
D8
Door Key Lock and Unlock SW Front LH
Door Unlock Detection SW Front LH
D9
Door Key Lock and Unlock SW Front RH
Door Unlock Detection SW Front RH


* 1 : w/ Stereo Component Amplifier
* 2 : w/o Stereo Component Amplifier
I11(A)
Integration Relay
TVSS
DCTY
PCTY
P-DR
(BAT)
40A HEAD MAIN
10A HORN
HEAD Relay
HORN Relay
D 4 Door Courtesy SW Front LH
D 5 Door Courtesy SW Front RH
D 6 Door Courtesy SW Rear LH
D 7 Door Courtesy SW Rear RH
D 2 Daytime Running Light Relay
H 6 Horn
H-LP
IL3
IA2
IA5
4A
R
R-W
G-Y
R-Y
R-B
B-W
B
W

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	D8	40 (*2)	J7	37
C8	36	D9	38 (*1)	J10	38 (*1)
D2	36		40 (*2)		40 (*2)
D4	38 (*1)	G3	37	L4	38 (*1)
	40 (*2)	H6	32 (1ZZ–FE)		40 (*2)
D5	38 (*1)		34 (2ZZ–GE)	S3	33 (1ZZ–FE)
	40 (*2)	I10	37		35 (2ZZ–GE)
D6	38 (*1)	I11 A	37	S4 A	37
	40 (*2)	I13	38 (*1)	S8	37
D7	38 (*1)		40 (*2)	T2	37
	40 (*2)	J2	37	T3	37
D8	38 (*1)	J6	37	U1	37

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IE	25	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4A	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

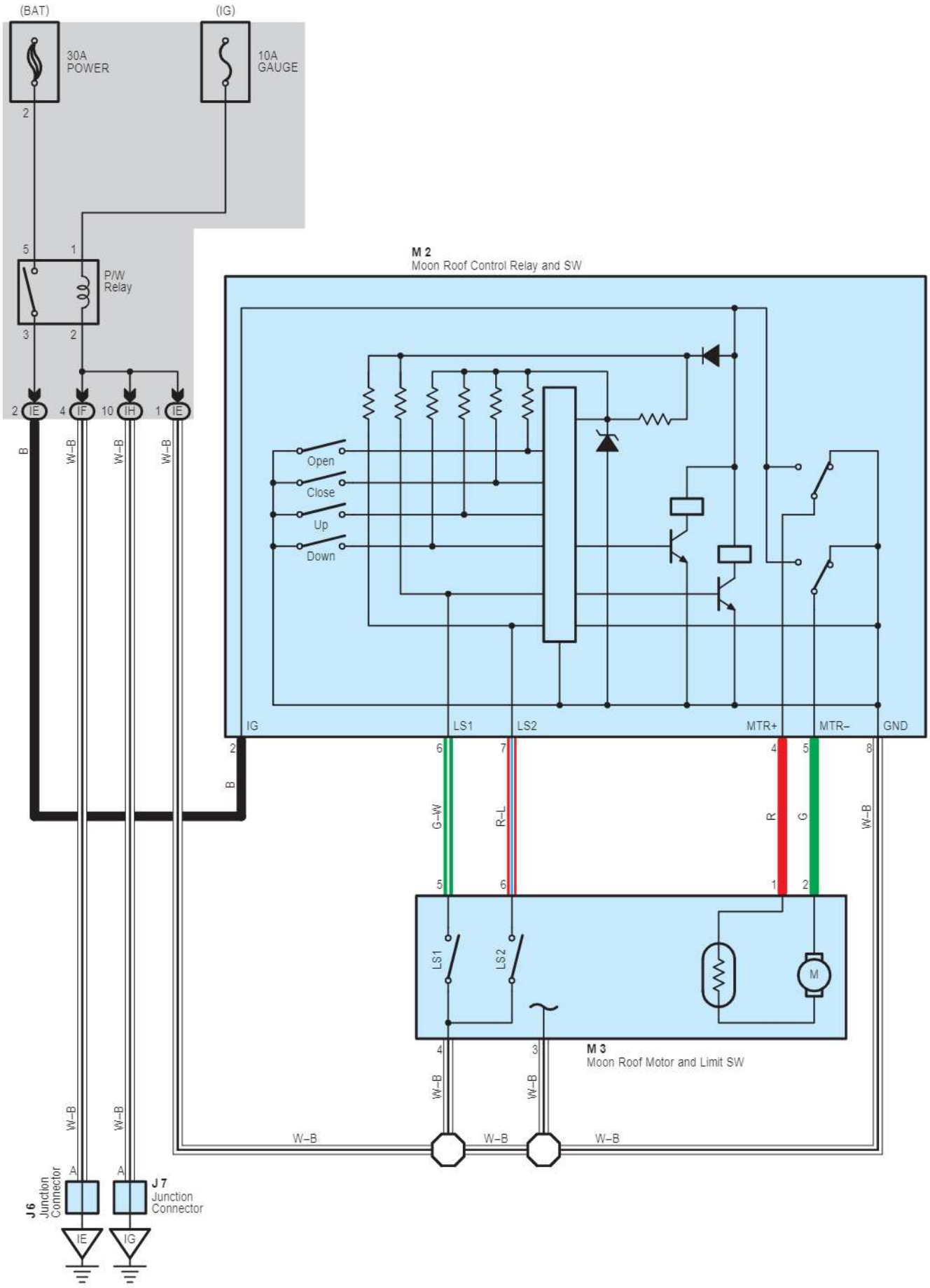
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3		
IL3	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

▽ : **Ground Points**

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(BAT)
(IG)
30A
POWER
10A
GAUGE
P/W
Relay
M 2
Moon Roof Control Relay and SW
Open
Close
Up
Down
IG
LS1
LS2
MTR+
MTR–
GND
M 3
Moon Roof Motor and Limit SW
J6
Junction
Connector
J7
Junction
Connector
IE
IG
W–B
G–W
R–L
R
G

System Outline

The moon roof can be operated when the ignition SW is turned to ON position.

1. Slide Open Operation

The moon roof fully opens automatically by pressing the slide open button of the moon roof control SW once. If the moon roof control switch is pressed again when the moon roof is operating, the movement of the moon roof stops.
The operation of slide open is not worked when the moon roof at tilt up position.

2. Slide Close Operation

If you keep pressing the slide close button of the moon roof control SW when the moon roof is open, the moon roof closes half and stops the operation once. If you keep pressing the slide close once again, the moon roof fully closes.

3. Tilt Up Operation

If you press the tilt up button of the moon roof control SW, the moon roof is tilted up. However, the moon roof is not tilted up when it is open

4. Tilt Down Operation

If you press the tilt down button when the tilt up of the moon roof control SW is pressed, the moon roof is tilted down.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J6	37	M2	39 (*1)	M3	39 (*1)
J7	37		41 (*2)		41 (*2)

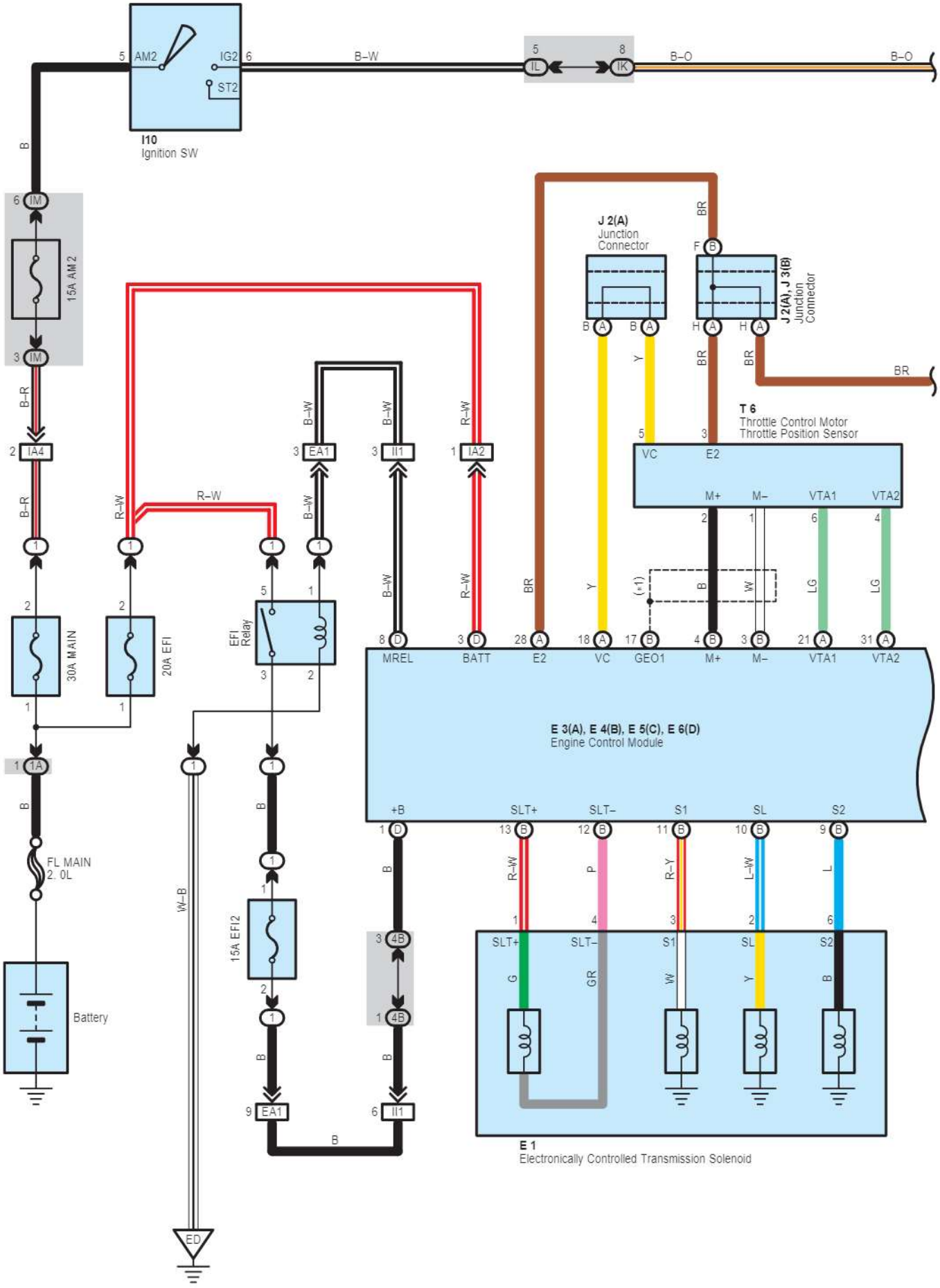
: Junction Block and Wire Harness Connector

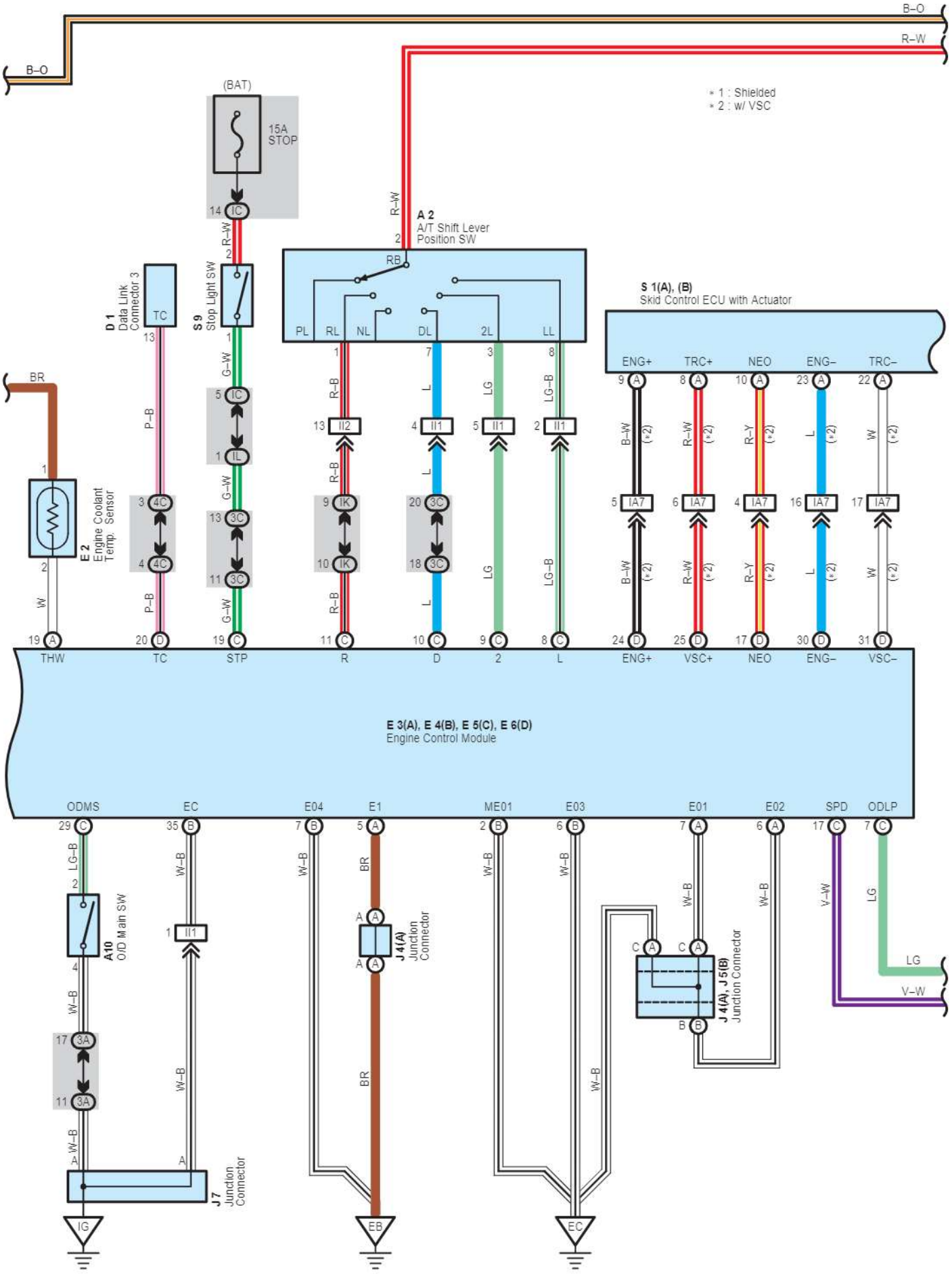
Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	25	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		

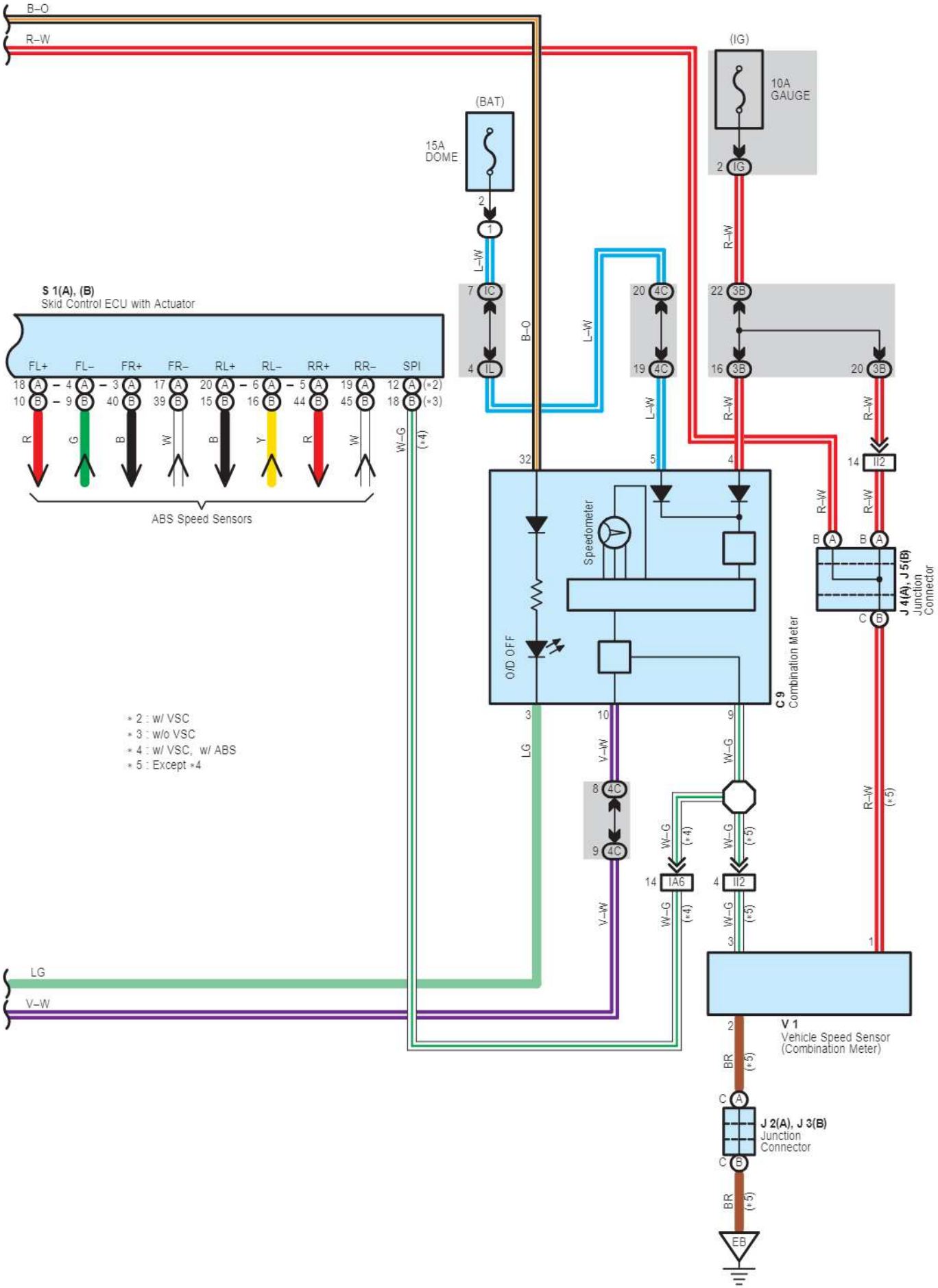
▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


I10
Ignition SW
AM2
IG2
ST2
B–W
B–O
IL
IK
15A AM2
30A MAIN
20A EFI
EFI Relay
15A EFI2
FL MAIN
2. 0L
Battery
J 2(A)
Junction Connector
J 2(A), J 3(B)
Junction Connector
T 6
Throttle Control Motor
Throttle Position Sensor
VC
E2
M+
M–
VTA1
VTA2
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
MREL
BATT
GEO1
+B
SLT+
SLT–
S1
SL
S2
E 1
Electronically Controlled Transmission Solenoid
ED


B–O
R–W
(BAT)
15A
STOP
* 1 : Shielded
* 2 : w/ VSC
A 2
A/T Shift Lever
Position SW
D 1
Data Link
Connector 3
S 9
Stop Light SW
S 1(A), (B)
Skid Control ECU with Actuator
BR
E 2
Engine Coolant
Temp. Sensor
PL
RL
NL
DL
2L
LL
ENG+
TRC+
NEO
ENG–
TRC–
THW
TC
STP
R
D
2
L
ENG+
VSC+
NEO
ENG–
VSC–
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
ODMS
EC
E04
E1
ME01
E03
E01
E02
SPD
ODLP
A10
O/D Main SW
J7
Junction
Connector
J 4(A)
Junction
Connector
J 4(A), J 5(B)
Junction Connector
IG
EB
EC


B–O
R–W
(IG)
10A
GAUGE
(BAT)
15A
DOME
S 1(A), (B)
Skid Control ECU with Actuator
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
SPI
ABS Speed Sensors
L–W
B–O
R–W
Speedometer
O/D OFF
C 9
Combination Meter
J 4(A), J 5(B)
Junction
Connector
LG
V–W
W–G
BR
V 1
Vehicle Speed Sensor
(Combination Meter)
J 2(A), J 3(B)
Junction
Connector
EB
* 2 : w/ VSC
* 3 : w/o VSC
* 4 : w/ VSC, w/ ABS
* 5 : Except *4

System Outline

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

1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine control module from the engine coolant temp. sensor and the vehicle speed signal is input to TERMINAL SPD of the engine control module. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1, VTA2 of the engine control module as throttle angle signal.
Based on these signals, the engine control module selects the best shift position for the driving conditions and sends current to the electronically controlled transmission solenoid.

2. 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.

3. Overdrive Circuit

* Overdrive on
  When the engine is turned on from ignition off, the engine control module turns the O/D on. When the O/D main SW is pushed while the O/D is off, a signal is input into TERMINAL ODMS of the engine control module, and the O/D is turned on by the engine control module. In this case, the engine control module controls the gear shift according to the vehicle's driving condition, using the O/D range. At this time, the O/D off indicator light is off.
* Overdrive off
  When the O/D main SW is pushed while the O/D is on, a signal is input into TERMINAL ODMS of the engine control module, and the O/D is turned off. At this time, the current flows through the O/D off indicator light to TERMINAL ODLP of the engine control module. As a result, the O/D off indicator light turns on, and the engine control module controls the gear shift according to the vehicle's driving condition, without using the O/D range.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	E4 B	36	J7	37
A10	36	E5 C	36	S1 A	33 (1ZZ–FE)
C9	36	E6 D	36	S1 A	35 (2ZZ–GE)
D1	36	I10	37	S1 B	33 (1ZZ–FE)
E1	32 (1ZZ–FE)	J2 A	37	S1 B	35 (2ZZ–GE)
E2	32 (1ZZ–FE)	J3 B	37	S9	37
E2	34 (2ZZ–GE)	J4 A	37	T6	33 (1ZZ–FE)
E3 A	36	J5 B	37	V1	33 (1ZZ–FE)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

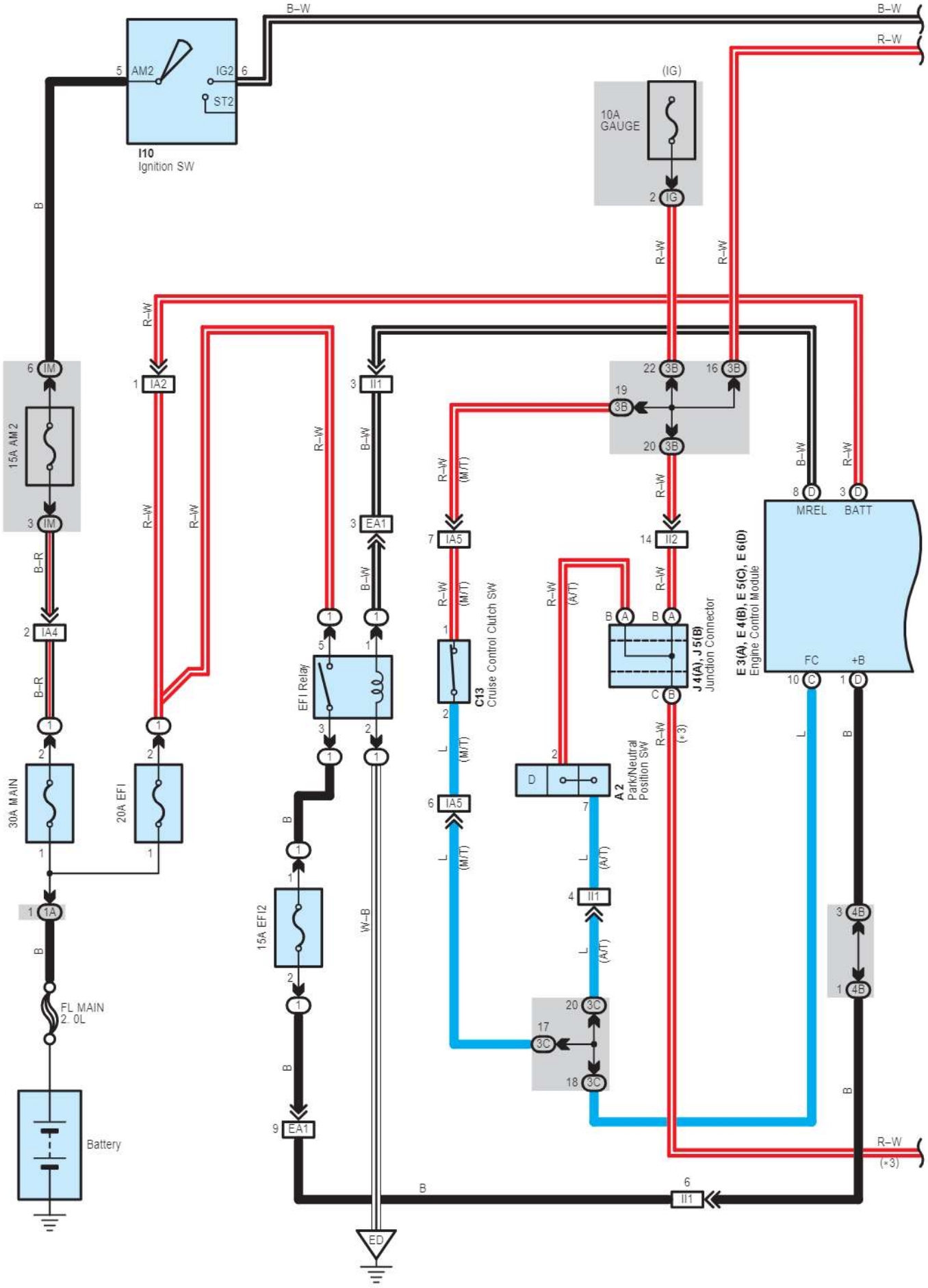
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IM	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

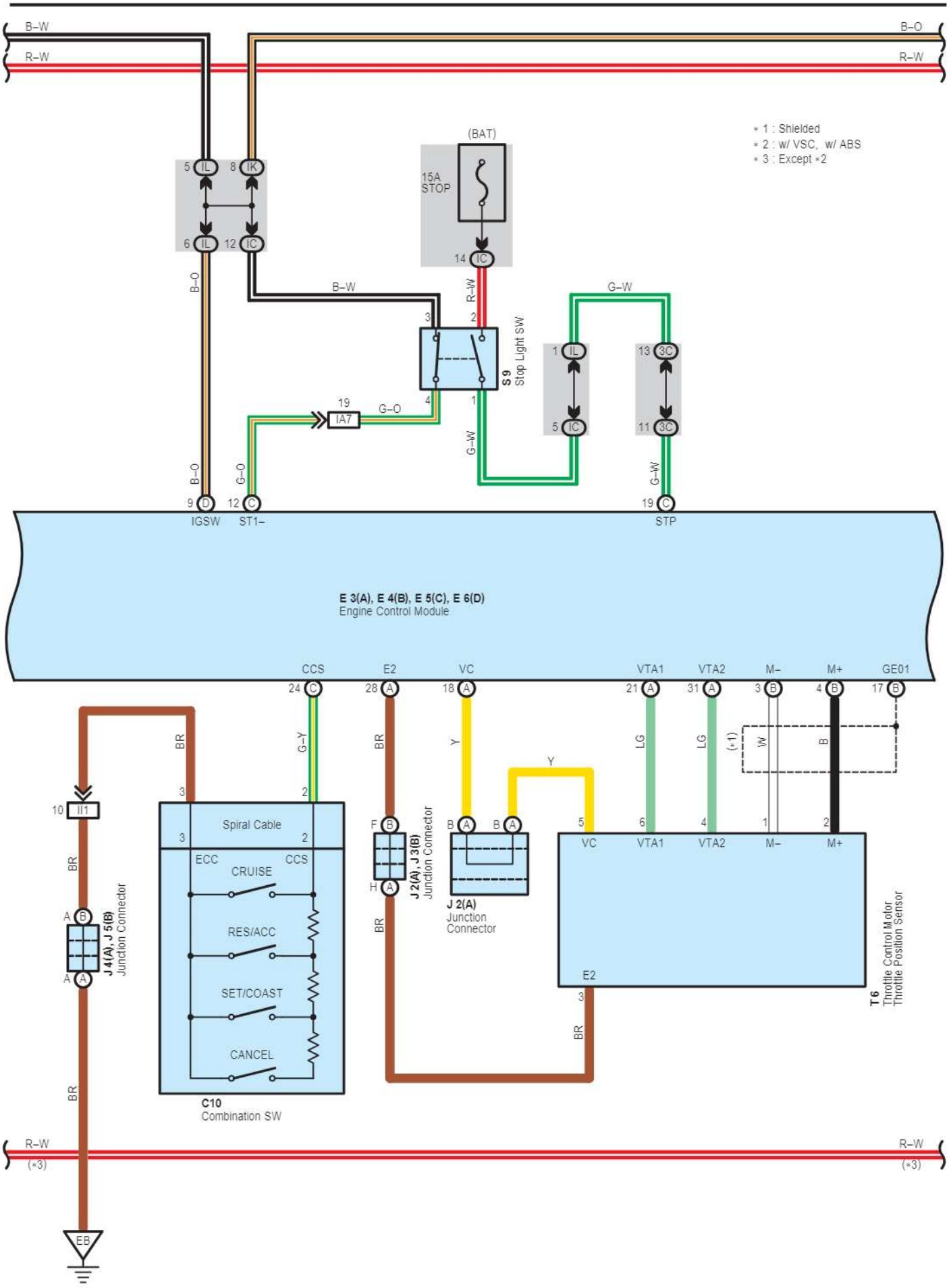
: **Connector Joining Wire Harness and Wire Harness**

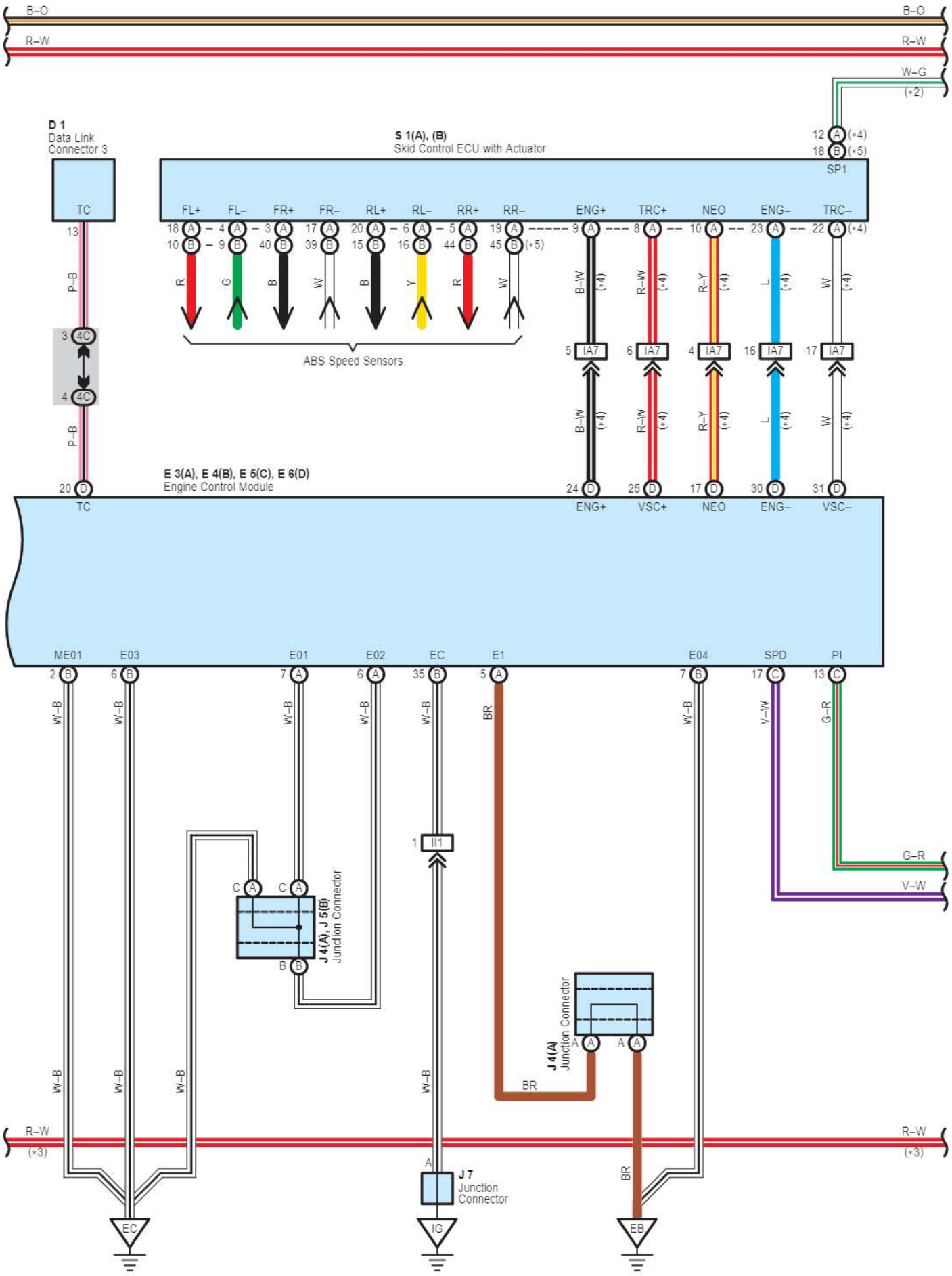
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA6		
IA7		
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		

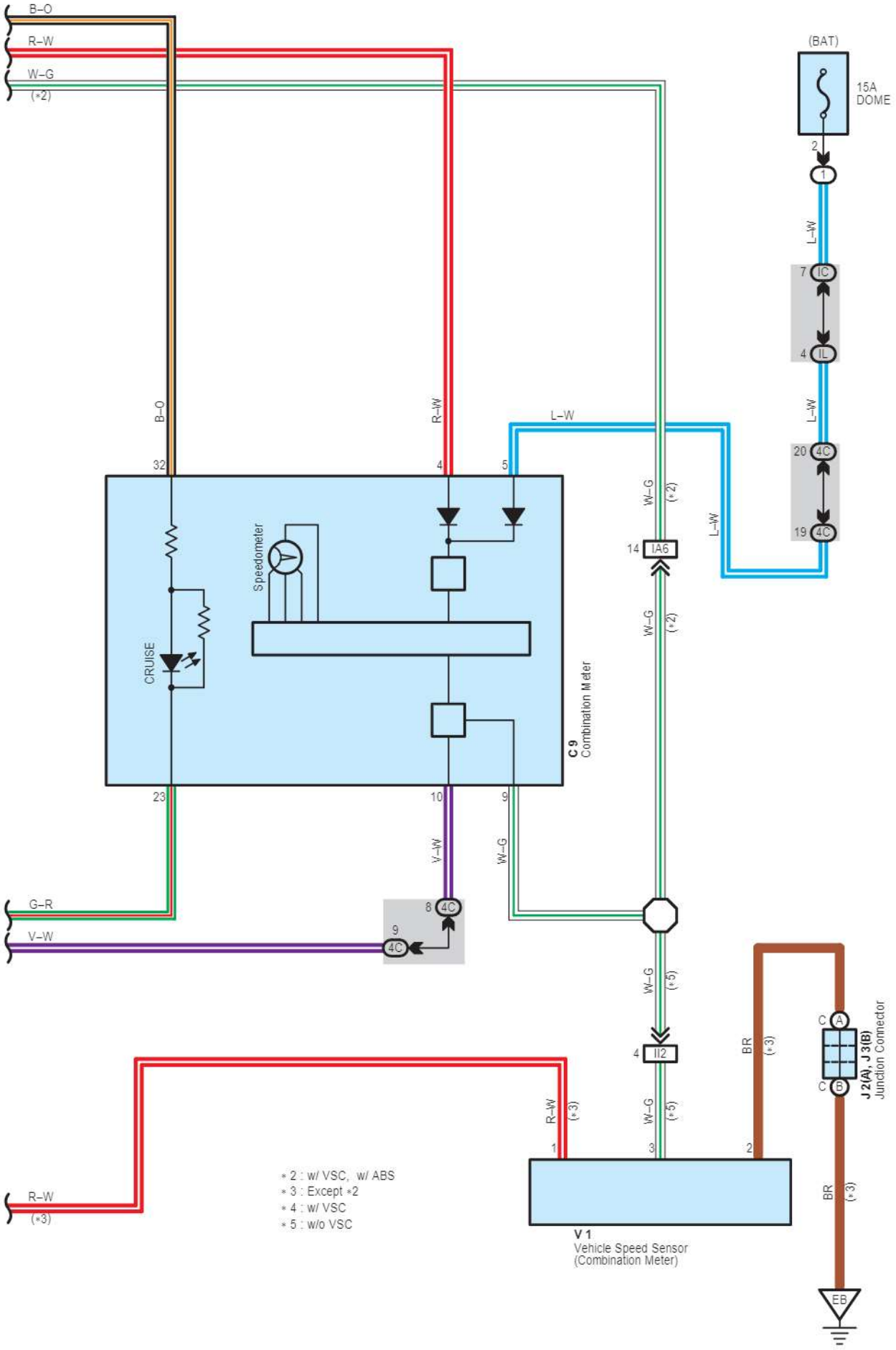
: **Ground Points**

Code	See Page	Ground Points Location
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
EC	42 (1ZZ–FE)	
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IG	44	Right Kick Panel


I10
Ignition SW
AM2
IG2
ST2
(IG)
10A GAUGE
15A AM2
30A MAIN
20A EFI
15A EFI2
EFI Relay
FL MAIN 2.0L
Battery
C13
Cruise Control Clutch SW
A2
Park/Neutral Position SW
J4(A), J5(B)
Junction Connector
E3(A), E4(B), E5(C), E6(D)
Engine Control Module
MREL
BATT
FC
+B
(M/T)
(A/T)
(*3)
ED


B–W
R–W
B–O
R–W
* 1 : Shielded
* 2 : w/ VSC, w/ ABS
* 3 : Except *2
(BAT)
15A
STOP
5 IL
8 IK
6 IL
12 IC
14 IC
B–O
B–W
R–W
G–W
3
2
1
4
S 9
Stop Light SW
1 IL
5 IC
13 3C
11 3C
19
IA7
G–O
G–W
9 D
IGSW
12 C
ST1–
19 C
STP
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
CCS
E2
VC
VTA1
VTA2
M–
M+
GE01
24 C
28 A
18 A
21 A
31 A
3 B
4 B
17 B
G–Y
BR
Y
LG
W
B
(*1)
10 I11
Spiral Cable
ECC
CCS
CRUISE
RES/ACC
SET/COAST
CANCEL
C10
Combination SW
J 4(A), J 5(B)
Junction Connector
F B
H A
J 2(A), J 3(B)
Junction Connector
B A
J 2(A)
Junction
Connector
5
6
4
1
2
3
VC
VTA1
VTA2
M–
M+
E2
T6
Throttle Control Motor
Throttle Position Sensor
R–W
(*3)
EB


B–O
R–W
W–G
(×2)
D 1
Data Link
Connector 3
TC
S 1(A), (B)
Skid Control ECU with Actuator
SP1
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
ENG+
TRC+
NEO
ENG–
TRC–
ABS Speed Sensors
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
ME01
E03
E01
E02
EC
E1
E04
SPD
PI
J 4(A), J 5(B)
Junction Connector
J 4(A)
Junction Connector
J 7
Junction
Connector
EC
IG
EB


B–O
R–W
W–G
(*2)
(BAT)
15A
DOME
2
1
L–W
7 IC
4 IL
L–W
20 4C
19 4C
B–O
R–W
L–W
32
4
5
W–G
(*2)
14 IA6
L–W
W–G
(*2)
Speedometer
CRUISE
C 9
Combination Meter
23
10
9
V–W
W–G
G–R
V–W
8 4C
9 4C
W–G
(*5)
4 II2
BR
(*3)
C A
C B
J 2(A), J 3(B)
Junction Connector
R–W
(*3)
1
3
2
BR
(*3)
EB
R–W
(*3)
* 2 : w/ VSC, w/ ABS
* 3 : Except *2
* 4 : w/ VSC
* 5 : w/o VSC
V 1
Vehicle Speed Sensor
(Combination Meter)

System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel pedal.

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 CCS of the engine control module, and the vehicle speed at the time 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 SPD of the engine control module from the combination meter, and controls the throttle control motor to maintain the set speed.

When the actual speed is lower than the set speed, the ECU causes the current to the throttle control motor to flow from TERMINAL M+ of the engine control module to TERMINAL 2 of the throttle control motor to TERMINAL 1 to TERMINAL M– of the engine control module. As a result, the motor in the throttle control motor is rotated to open the throttle valve to increase the vehicle speed. When the actual driving speed is higher than the set speed, the current to the throttle control motor flows from TERMINAL M– of the ECU to TERMINAL 1 of the throttle control motor to TERMINAL 2 to TERMINAL M+ of the engine control module.

This causes the motor in the throttle control motor to rotate to close the throttle valve to decrease the vehicle speed.

3. Coast Control

During cruise control driving, while the COAST SW is on, the throttle control motor is rotated 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 ACC SW is turned on, the throttle control motor is rotated to open the throttle valve and increase the driving speed.

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

5. Resume Control

If the vehicle speed is approximately 40 km/h (25 mph) or above after canceling the set speed with the CANCEL SW, pushing the RES SW will cause the vehicle to resume the speed set before the cancellation.

6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.

* Depressing the clutch pedal (Cruise control clutch SW off). "Signal is not input to TERMINAL FC of the ECU"
* Placing the shift lever to positions except "D" position (Park/Neutral position SW except "D" position) (A/T), depressing the brake pedal (Stop light SW on) (M/T). "Signal input to TERMINAL STP of the ECU"
* Pushing the CANCEL SW (CANCEL SW on). "Signal input to TERMINAL CCS of the ECU"
* Pushing the CRUISE SW off "signal input to TERMINAL CCS of the ECU".

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 1.6 km/h (1 mph) each time by operating the RES/ACC SW quickly within 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 1.6 km/h (1 mph) each time by operating the SET COAST SW quickly within 0.5 seconds.

9. Auto Cancel Function

A) If any of the following operating conditions occurs during cruise control operation, the set speed is erased and the cruise control is released, (CRUISE SW turns off).

When this occurs, the ignition SW must be turned off once before the CRUISE SW will turn on.

* When abnormality is found in the stop light SW input circuit.
* When abnormality is found in the cancel circuit.

B) If any of the following operating conditions occurs during cruise control operation, the set speed is erased and the cruise control is released. (CRUISE SW turn off).

When this occurs, the cancel state is cleared as the CRUISE SW will turn on again.

* When abnormality is found in electronic throttle parts.
* Open circuit in the stop light SW.
* Momentary interruption of vehicle speed signal.
* Short circuit in the stop light SW.

C) If any of the following conditions occurs during cruise control operation, the set speed is erased and the cruise control is released. (The power to the magnetic clutch is cut off until the SET SW is "ON" again.)

* When power to the cruise control system is momentarily cut off.

10. Overdrive Control Function

The overdrive control may be cancelled if the vehicle travels on the slope during cruise control travelling. After the overdrive control has been cancelled it is decided that the slope is finished, the vehicle returns to the overdrive control mode again.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	E5 C	36	J7	37
C9	36	E6 D	36	S1 A	33 (1ZZ–FE)
C10	36	I10	37	S1 B	33 (1ZZ–FE)
C13	36	J2 A	37	S9	37
D1	36	J3 B	37	T6	33 (1ZZ–FE)
E3 A	36	J4 A	37	V1	33 (1ZZ–FE)
E4 B	36	J5 B	37		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

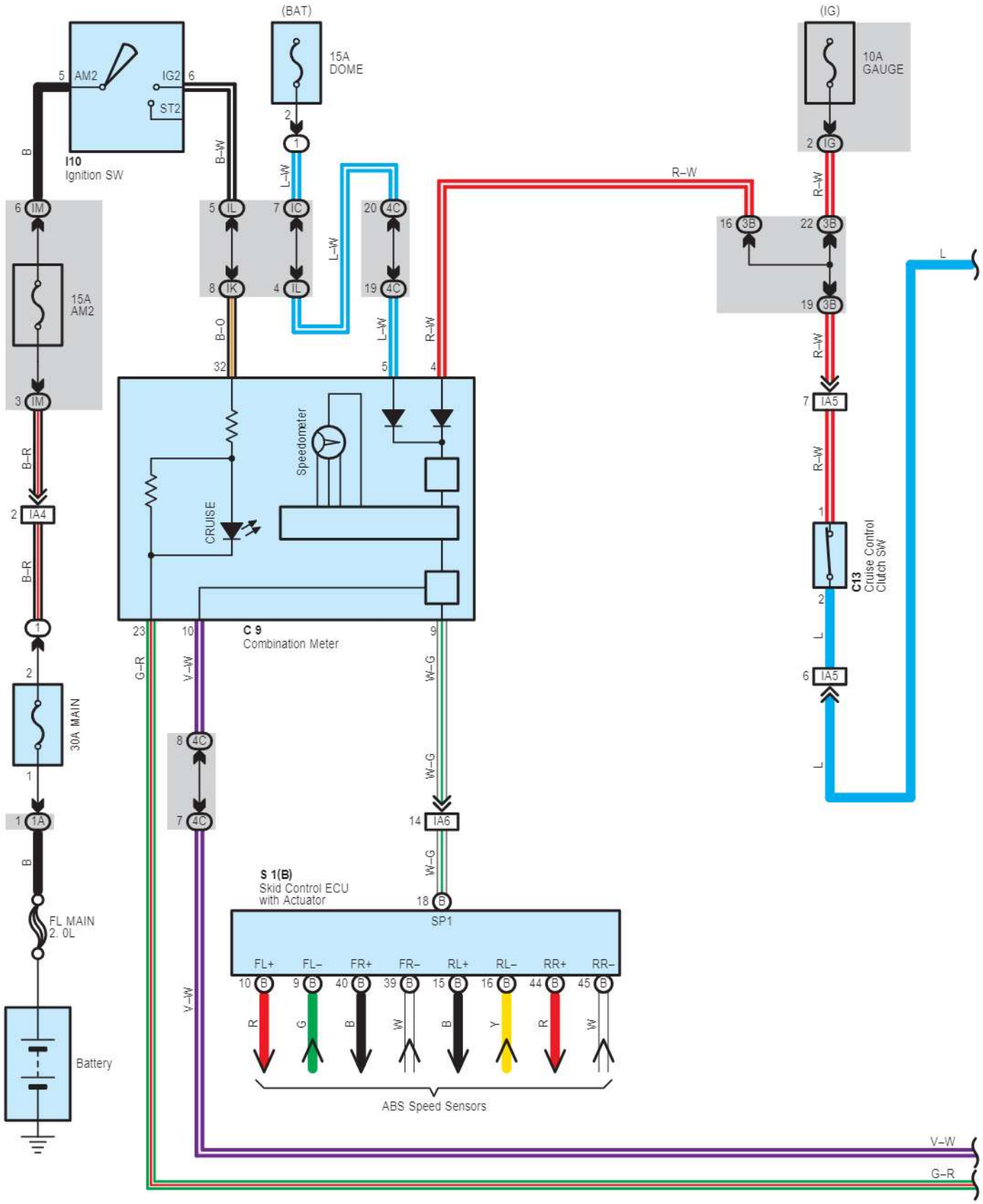
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

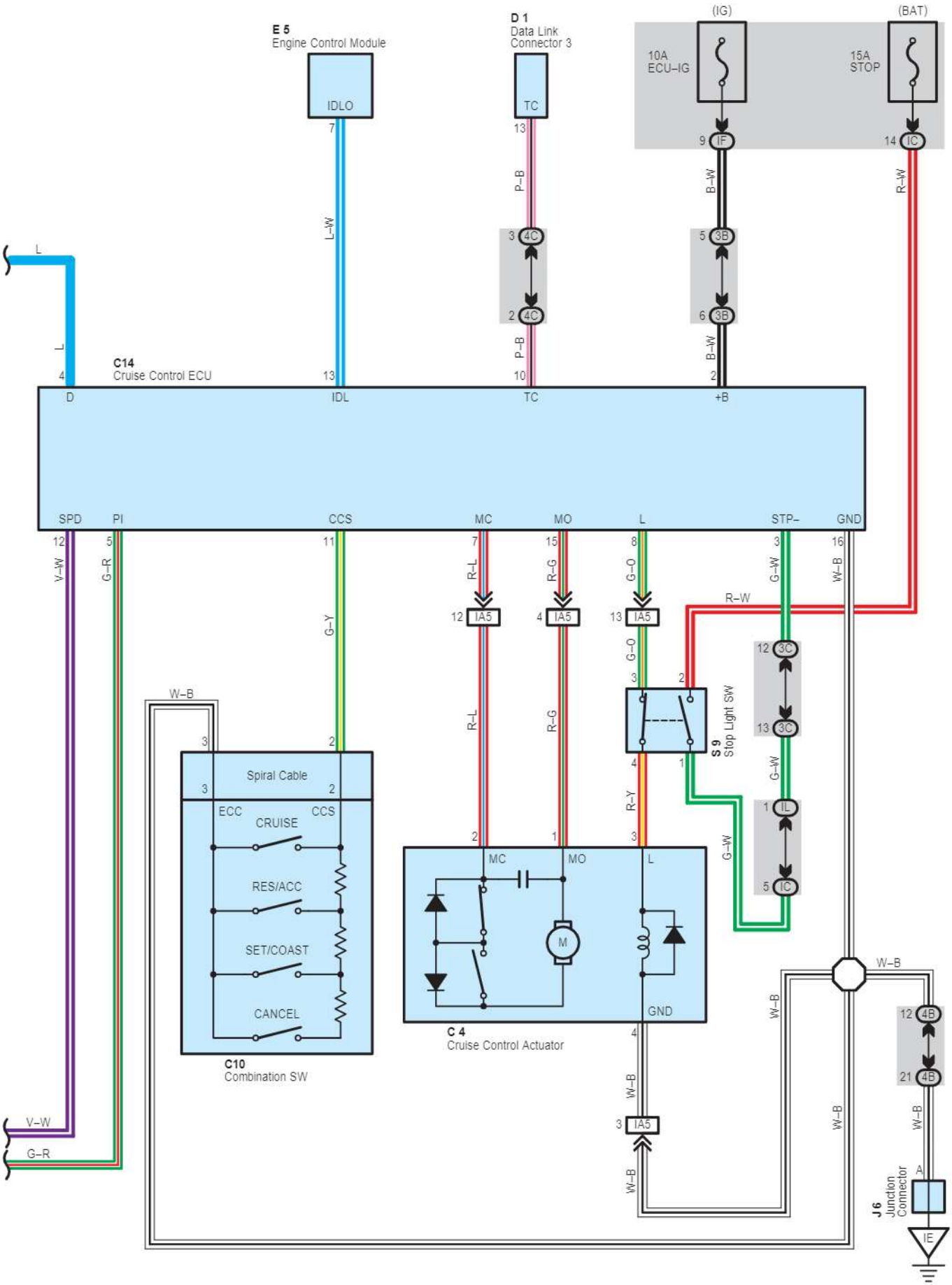
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IA5		
IA6		
IA7		
II1	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
II2		

: Ground Points

Code	See Page	Ground Points Location
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
EC		
ED	42 (1ZZ–FE)	Front Left Suspension Tower
IG	44	Right Kick Panel


(BAT)
(IG)
15A
DOME
10A
GAUGE
I10
Ignition SW
AM2
IG2
ST2
15A
AM2
30A MAIN
FL MAIN
2. 0L
Battery
Speedometer
CRUISE
C 9
Combination Meter
C13
Cruise Control
Clutch SW
S 1(B)
Skid Control ECU
with Actuator
SP1
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
ABS Speed Sensors
B
B–W
L–W
B–O
R–W
B–R
G–R
V–W
W–G
L
R
G
W
Y


E 5
Engine Control Module
IDLO
7
L–W
D 1
Data Link
Connector 3
TC
13
P–B
3 4C
2 4C
P–B
10
(IG)
10A
ECU–IG
9 IF
B–W
5 3B
6 3B
B–W
2
(BAT)
15A
STOP
14 IC
R–W
L
L
4
C14
Cruise Control ECU
D
IDL
TC
+B
SPD
PI
CCS
MC
MO
L
STP–
GND
12
V–W
5
G–R
11
G–Y
7
R–L
15
R–G
8
G–O
3
G–W
16
W–B
12 IA5
4 IA5
13 IA5
G–O
R–W
12 3C
13 3C
G–W
1 IL
5 IC
S 9
Stop Light SW
R–L
R–G
R–Y
G–W
W–B
3
2
Spiral Cable
3
2
ECC
CCS
CRUISE
RES/ACC
SET/COAST
CANCEL
C10
Combination SW
MC
MO
L
M
GND
C 4
Cruise Control Actuator
W–B
W–B
W–B
12 4B
21 4B
W–B
3 IA5
W–B
W–B
J6
Junction
Connector
A
IE
V–W
G–R

System Outline

The current is applied at all times through the STOP fuse to TERMINAL 2 of the stop light SW.
With the ignition SW turned to on, the current flows through the MAIN fuse to AM2 fuse to ignition SW (IG2) to TERMINAL 32 of the combination meter and the current through the ECU–IG fuse flows to TERMINAL 2 of the cruise control ECU.
When the ignition SW is on and the CRUISE SW is turned on, a signal is input from TERMINAL 2 of the cruise control SW to TERMINAL 11 of the cruise control ECU. As a result, the cruise control ECU functions and the current flows from the ECU–IG fuse to TERMINAL 2 of the cruise control ECU to TERMINAL 16 of the cruise control ECU to GROUND, and the cruise control system is in a condition ready for operation.
At the same time, the current flows through the MAIN fuse to AM2 fuse to ignition SW (IG2) to TERMINAL 32 of the cruise indicator light to TERMINAL 23 to TERMINAL 5 of the cruise control ECU to TERMINAL 16 to GROUND, causing the cruise indicator light to light up, indicating that 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 11 of the cruise control ECU, and the vehicle speed at the time 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 combination meter, 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 the throttle cable is pulled to increase the vehicle speed. When the actual driving 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 to close the throttle valve and return the throttle cable to decrease the vehicle speed.

3. Coast Control

During cruise control driving, while the COAST SW is 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 ACC 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 ACC SW is turned off is memorized and the vehicle continues at the new set speed.

5. Resume Control

If the vehicle speed is approximately 40 km/h (25 mph) or above after canceling the set speed with the CANCEL SW, pushing the RES SW will cause the vehicle to resume the speed set before the 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.
* Depressing the clutch pedal (Cruise control clutch SW off). "Signal is not input to TERMINAL 4 of the ECU"
* Depressing the brake pedal (Stop light SW on). "Signal input to TERMINAL 3 of the ECU"
* Pushing the CANCEL SW (CANCEL SW on). "Signal input to TERMINAL 1 of the ECU"
* Pushing the CRUISE SW off "signal input to TERMINAL 1 of the ECU".

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 1.6 km/h (1 mph) each time by operating the RES/ACC SW quickly within 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 1.6 km/h (1 mph) each time by operating the SET COAST SW quickly within 0.5 seconds.

9. Auto Cancel Function

A) If any of the following operating conditions occurs during cruise control operation, the set speed is erased, current flow to the magnetic clutch is stopped and the cruise control is released, (CRUISE SW turns off).
When this occurs, the ignition SW must be turned off once before the CRUISE SW will turn on.
* When abnormality is found in the stop light SW input circuit.
* When abnormality is found in the cancel circuit.

B) If any of the following operating conditions occurs during cruise control operation, the set speed is erased, current flow to the magnetic clutch is stopped and the cruise control is released. (CRUISE SW turn off).
When this occurs, the cancel state is cleared as the CRUISE SW will turn on again.
* Over current to transistor driving the motor or the magnetic clutch.
* Open circuit in the stop light SW.
* Momentary interruption of vehicle speed signal.
* Short circuit in the stop light SW.

C) If any of the following conditions occurs during cruise control operation, the set speed is erased and the cruise control is released. (The power to the magnetic clutch is cut off until the SET SW is "ON" again.)
* When power to the cruise control system is momentarily cut off.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C4	34 (2ZZ–GE)	C14	36	J6	37
C9	36	D1	36	S1 B	35 (2ZZ–GE)
C10	36	E5	36	S9	37
C13	36	I10	37		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

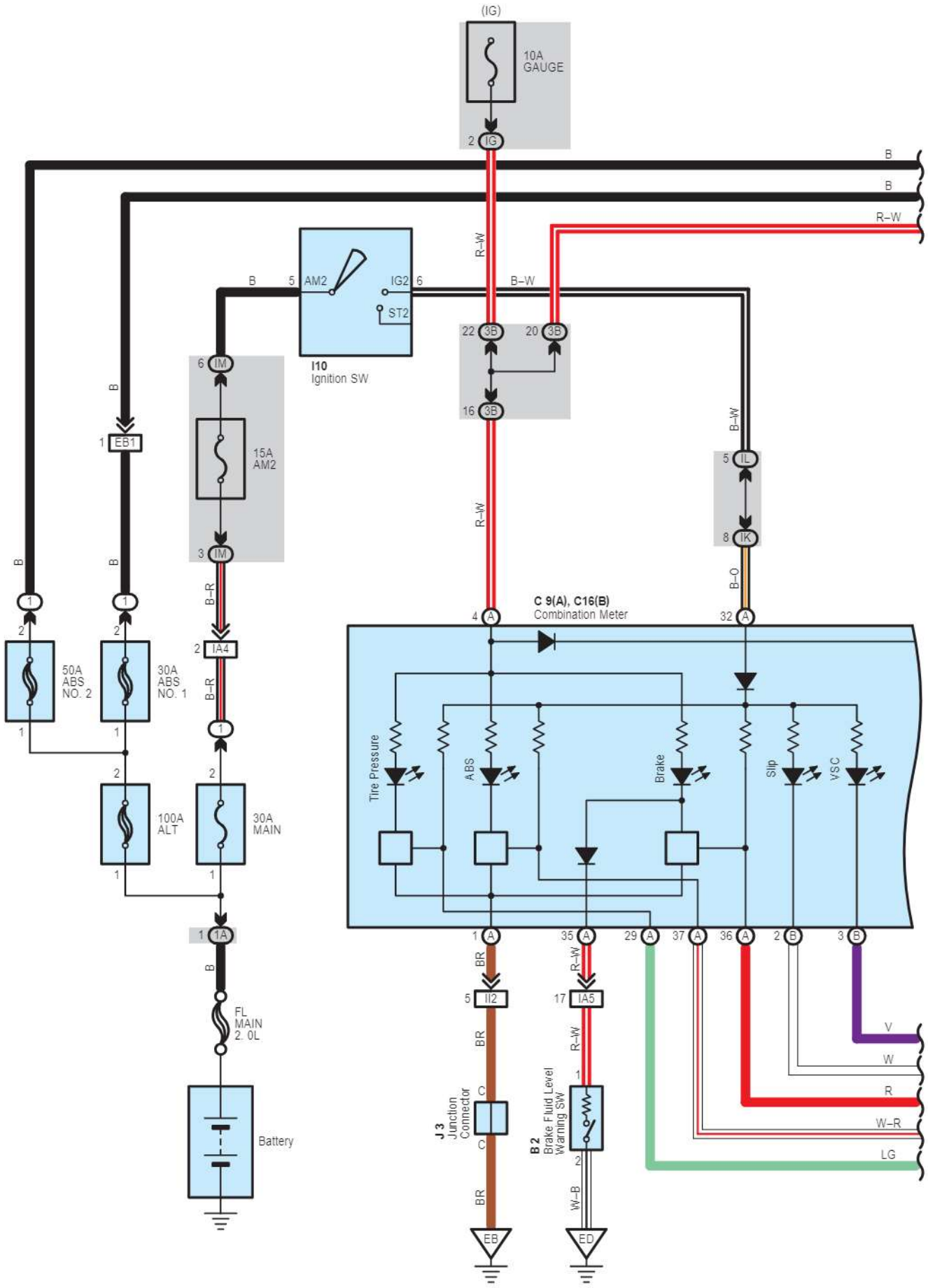
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3C		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

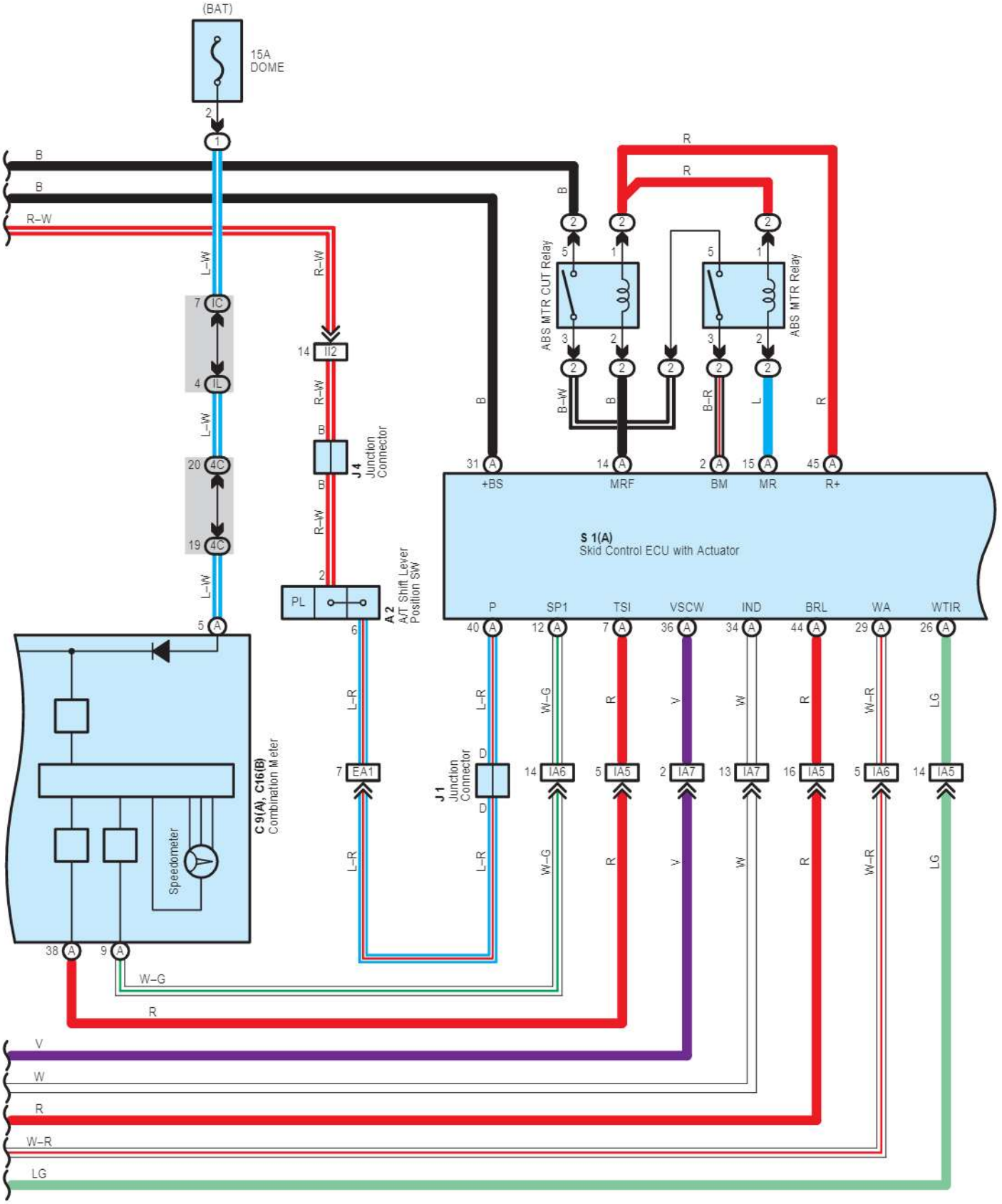
▭ : Connector Joining Wire Harness and Wire Harness

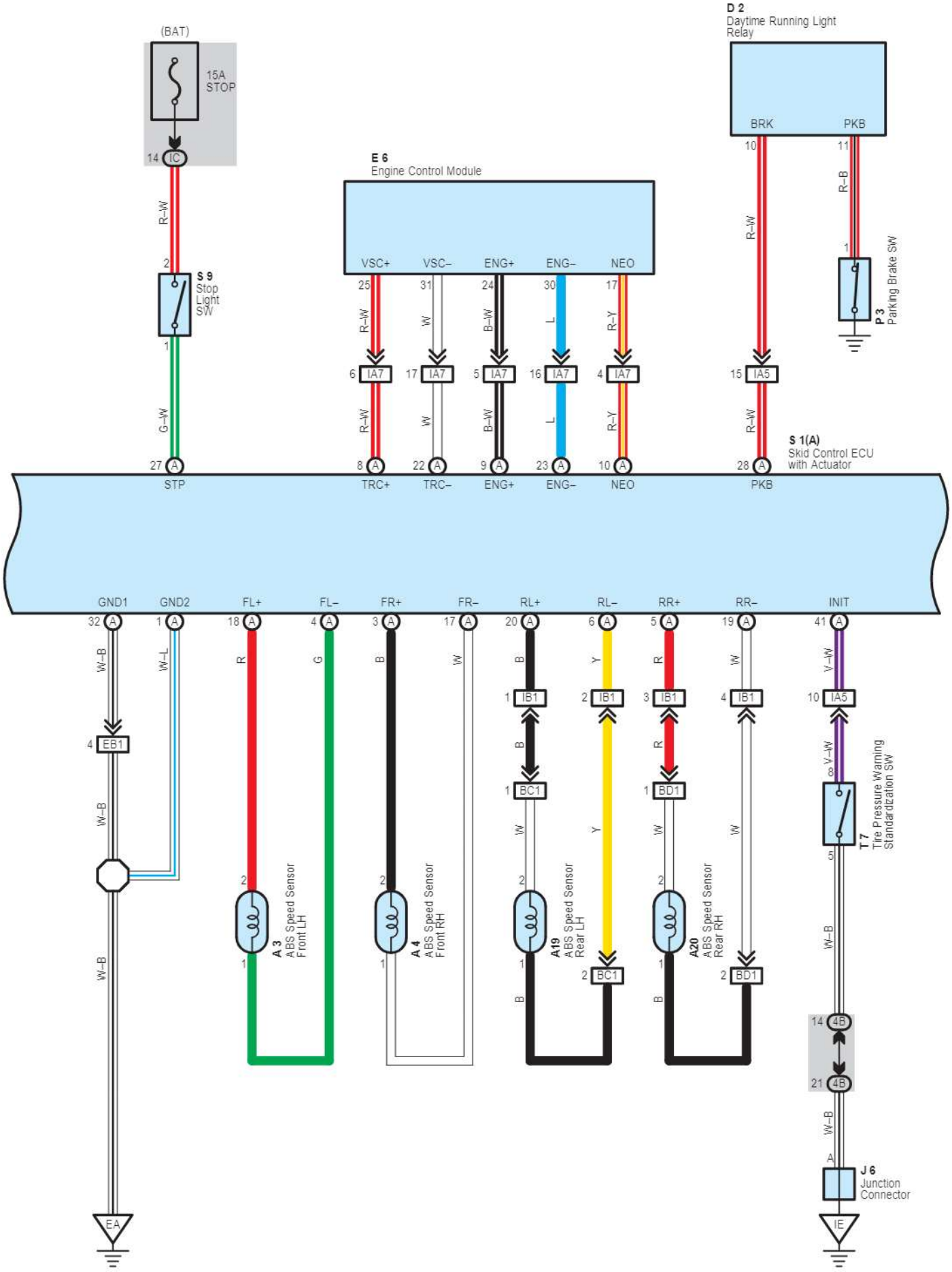
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA5		
IA6		

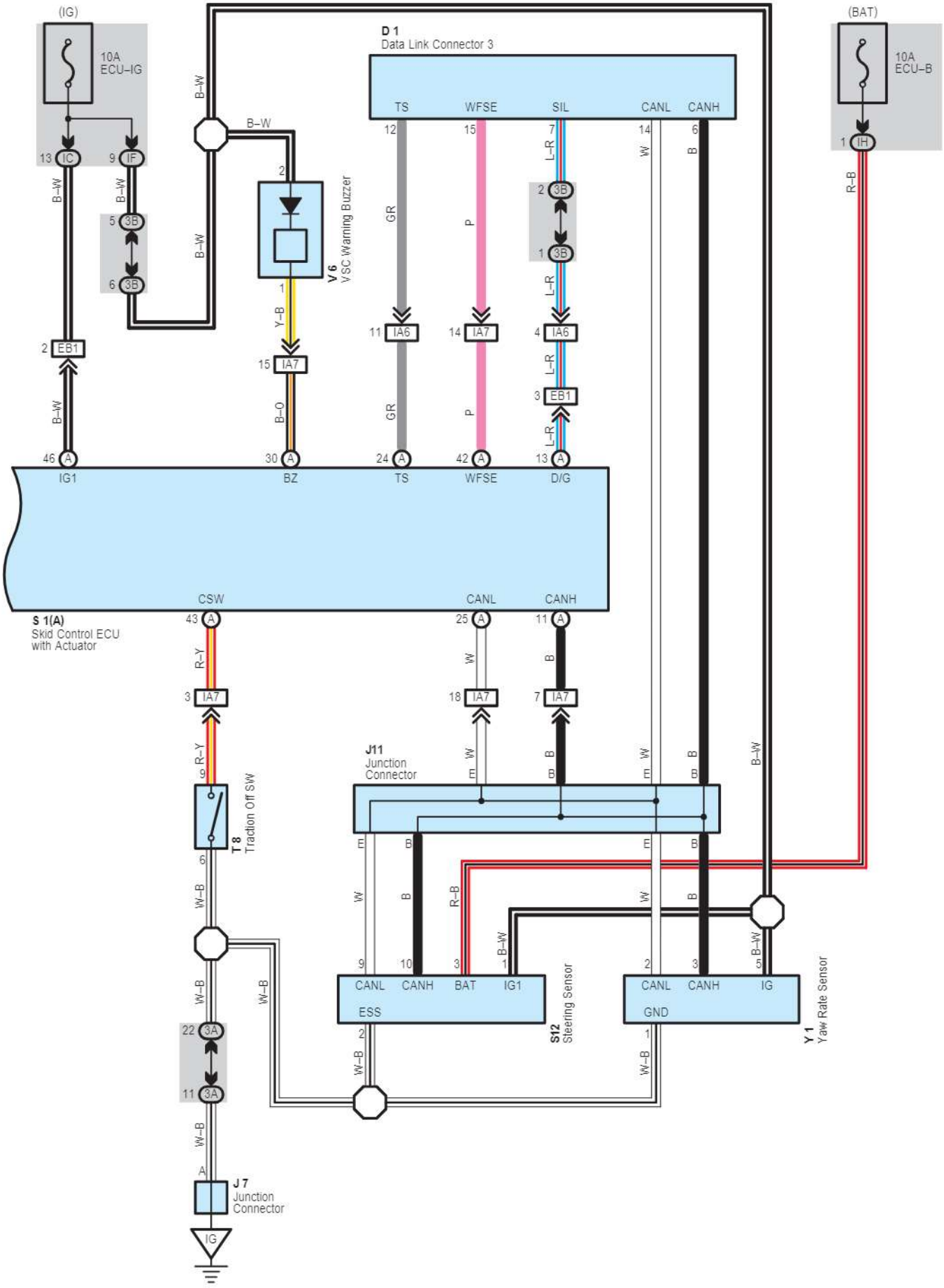
▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter


(IG)
10A
GAUGE
2 IG
B
B
R–W
R–W
B
5 AM2
IG2 6
ST2
I10
Ignition SW
22 3B
20 3B
16 3B
B–W
6 IM
15A
AM2
3 IM
B–R
2 IA4
B–R
1 EB1
B
B
B
5 IL
8 IK
B–O
R–W
4 A
C 9(A), C16(B)
Combination Meter
32 A
50A
ABS
NO. 2
30A
ABS
NO. 1
100A
ALT
30A
MAIN
1 1A
B
FL
MAIN
2. 0L
Battery
Tire Pressure
ABS
Brake
Slip
VSC
1 A
35 A
29 A
37 A
36 A
2 B
3 B
BR
5 II2
BR
BR
R–W
17 IA5
R–W
1
2
W–B
J 3
Junction
Connector
B 2
Brake Fluid Level
Warning SW
EB
ED
V
W
R
W–R
LG


(BAT)
15A
DOME
B
B
R–W
L–W
R–W
7 IC
4 IL
20 4C
19 4C
14 II2
R–W
B
J4
Junction
Connector
B
R–W
2
PL
A2
A/T Shift Lever
Position SW
6
L–R
7 EA1
5 A
C9(A), C16(B)
Combination Meter
Speedometer
38 A
9 A
W–G
R
V
W
R
W–R
LG
L–R
D
J1
Junction
Connector
D
L–R
40 A
P
L–R
W–G
14 IA6
W–G
12 A
SP1
R
5 IA5
R
7 A
TSI
V
2 IA7
V
36 A
VSCW
W
13 IA7
W
34 A
IND
R
16 IA5
R
44 A
BRL
W–R
5 IA6
W–R
29 A
WA
LG
14 IA5
LG
26 A
WTIR
B
R
R
B
2
2
2
ABS MTR CUT Relay
5
1
3
2
2
2
2
B–W
B
2
5
1
3
2
2
2
B–R
L
2
ABS MTR Relay
R
31 A
+BS
14 A
MRF
2 A
BM
15 A
MR
45 A
R+
S1(A)
Skid Control ECU with Actuator


(BAT)
15A
STOP
14 IC
R–W
2
S 9
Stop
Light
SW
1
G–W
27 A
STP
E 6
Engine Control Module
VSC+
VSC–
ENG+
ENG–
NEO
25
31
24
30
17
R–W
W
B–W
L
R–Y
6 IA7
17 IA7
5 IA7
16 IA7
4 IA7
R–W
W
B–W
L
R–Y
8 A
22 A
9 A
23 A
10 A
TRC+
TRC–
ENG+
ENG–
NEO
D 2
Daytime Running Light
Relay
BRK
PKB
10
11
R–W
R–B
15 IA5
1
R–W
28 A
PKB
P 3
Parking Brake SW
S 1(A)
Skid Control ECU
with Actuator
GND1
GND2
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
INIT
32 A
1 A
18 A
4 A
3 A
17 A
20 A
6 A
5 A
19 A
41 A
W–B
W–L
R
G
B
W
B
Y
R
W
V–W
4 EB1
1 IB1
2 IB1
3 IB1
4 IB1
10 IA5
B
Y
R
W
V–W
1 BC1
1 BD1
8
W–B
2
2
2
2
5
A3
ABS Speed Sensor
Front LH
A4
ABS Speed Sensor
Front RH
A19
ABS Speed Sensor
Rear LH
A20
ABS Speed Sensor
Rear RH
T7
Tire Pressure Warning
Standardization SW
1
1
1
1
2 BC1
2 BD1
B
B
14 4B
21 4B
W–B
A
J 6
Junction
Connector
EA
IE


(IG)
10A
ECU–IG
13 IC
9 IF
B–W
5 3B
6 3B
2 EB1
46 A
IG1
B–W
2
V 6
VSC Warning Buzzer
1
Y–B
15 IA7
B–O
30 A
BZ
D 1
Data Link Connector 3
TS
WFSE
SIL
CANL
CANH
12
15
7
14
6
GR
P
L–R
W
B
11 IA6
14 IA7
4 IA6
3 EB1
24 A
42 A
13 A
TS
WFSE
D/G
(BAT)
10A
ECU–B
1 IH
R–B
CSW
CANL
CANH
S 1(A)
Skid Control ECU
with Actuator
43 A
25 A
11 A
R–Y
3 IA7
18 IA7
7 IA7
J11
Junction
Connector
T 8
Traction Off SW
6
W–B
22 3A
11 3A
J 7
Junction
Connector
IG
E
B
9
10
3
1
2
CANL
CANH
BAT
IG1
ESS
S12
Steering Sensor
GND
IG
Y 1
Yaw Rate Sensor

System Outline

1. ABS Operation

If the brake pedal is depressed suddenly, the ABS controls the hydraulic pressure of the wheel cylinders for all the four wheels to automatically avoid wheel locking and ensure the directional and steering stability of the vehicle. If the brake pedal is depressed suddenly, the skid control ECU controls the solenoids in the actuators using the signals from the sensors to move the brake fluid to the reservoir in order to release the braking pressure applied to the wheel cylinder. If the skid control ECU detects that the fluid pressure in the wheel cylinder is insufficient, the ECU controls the solenoids in the actuators to increase the braking pressure.

2. Traction Control Operation

The traction control system controls the engine torque, the hydraulic pressure of the driving wheel cylinders, slipping of the wheels which may occur at start or acceleration of the vehicle, to ensure an optimal driving power and vehicle stability corresponding to the road conditions.

3. VSC Operation

Unexpected road conditions, vehicle speed, emergency situation, and any other external factors may cause large under– or over–steering of the vehicle. If this occurs, the VSC system automatically controls the engine power and wheel brakes to reduce the under– or over–steering.

To reduce large over–steering :

If the VSC system determines that the over–steering is large, it activates the brakes for the outer turning wheels depending on the degree of the over–steering to produce the moment toward the outside of the vehicle and reduce the over–steering.

To reduce large under–steering :

If the VSC system determines that the under–steering is large, it controls the engine power and activates the rear wheel brakes to reduce the under–steering.

Traction off SW

The traction off SW is used to stop the TRAC function. After the engine is started, the TRAC system is stopped (Turned off) and the traction off indicator light lights up. When the traction off SW is pressed again, the TRAC system enters the stand–by mode. If the engine is stopped and restarted, the TRAC system enters the stand–by mode regardless of the traction off SW.

VSC indicator light

If an error occurs in the VSC system, the VSC indicator lights up to warn the driver.

4. Mutual System Control

To efficiently operate the VSC system at its optimal level, the VSC system and other control systems are mutually controlled while the VSC system is being operated.

Engine fuel injecting control

The engine power does not interfere with the VSC brake control by controlling the opening of the fuel injecting and reducing the engine output.

Engine control and electronically controlled transmission control

The strong engine braking force does not interfere with the braking force control of the VSC system by turning off the accel. and reducing changes in the driving torque at shift–down.

VSC system operation indication

The slip indicator light flashes and the buzzer sounds intermittently to warn the driver that the current road is slippery, while the VSC system is being operated.

5. Fail Safe Function

If an error occurs in the skid control ECU, sensor signals, and/or actuators, the skid control ECU inhibits the brake actuator control and inputs the error signal to the engine control module. According to the error signal, the brake actuator turns off the solenoid and the engine control module rejects any electronically controlled fuel injection request from the VSC system. As a result, the vehicle functions without the ABS, TRC, and VSC systems.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	C9 A	36	J7	37
A3	32 (1ZZ–FE)	C16 B	36	J11	37
	34 (2ZZ–GE)	D1	36	P3	37
A4	32 (1ZZ–FE)	D2	36	S1 A	33 (1ZZ–FE)
	34 (2ZZ–GE)	E6	36		35 (2ZZ–GE)
A19	38 (*1)	I10	37	S9	37
	40 (*2)	J1	33 (1ZZ–FE)	S12	37
A20	38 (*1)		35 (2ZZ–GE)	T7	37
	40 (*2)	J3	37	T8	37
B2	32 (1ZZ–FE)	J4	37	V6	37
	34 (2ZZ–GE)	J6	37	Y1	37

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
2	23	ABS R/B (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

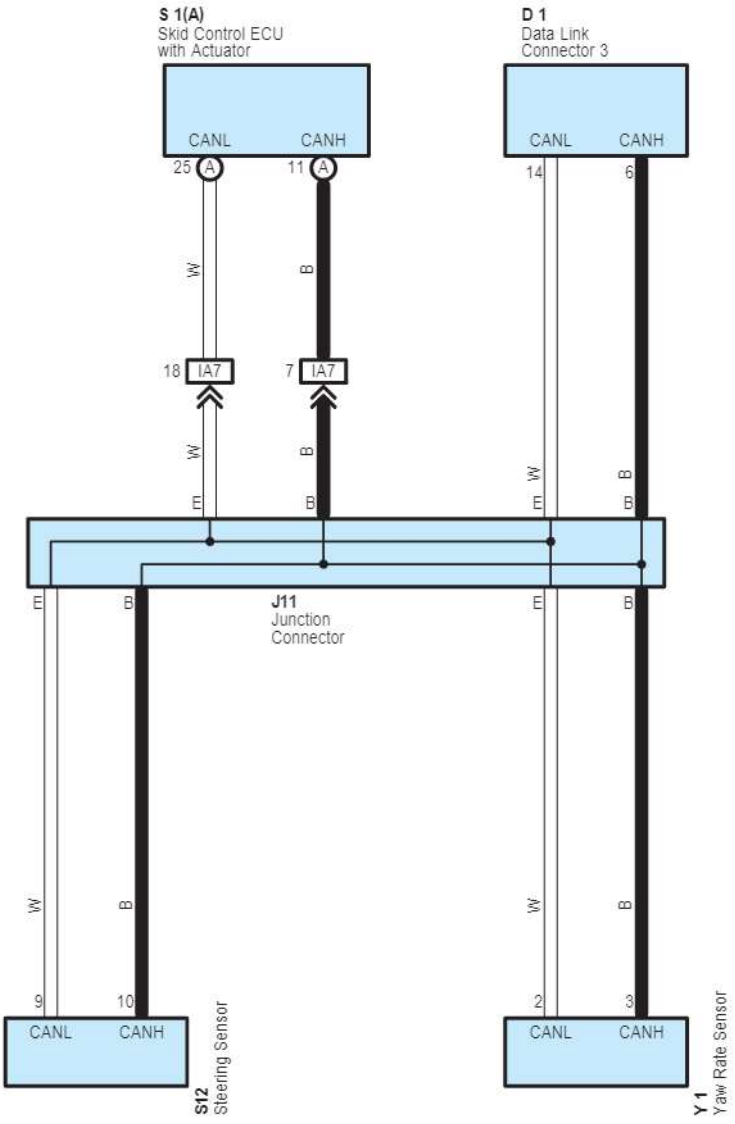
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
EB1	42 (1ZZ–FE)	Engine Room Main Wire and Engine Room Main Wire (Front Right Fender)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA5		
IA6		
IA7		
IB1	44	Engine Room Main Wire and Floor Wire (Cowl Side Panel LH)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
BC1	46 (*1)	Skid Control Sensor Wire LH and Floor Wire (Quarter Wheel House LH)
	47 (*2)	
BD1	46 (*1)	Skid Control Sensor Wire RH and Floor Wire (Quarter Wheel House RH)
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier

▽ : **Ground Points**

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


S 1(A)
Skid Control ECU
with Actuator
CANL
CANH
25
11
W
B
18
IA7
7
IA7
D 1
Data Link
Connector 3
14
6
J11
Junction
Connector
9
10
S12
Steering Sensor
2
3
Y 1
Yaw Rate Sensor

System Outline

Multiplex communication system (CAN) uses a serial communication protocol and communicates with a differential voltage. In this network system, TERMINALS CANH and CANL are used for communication between the ECUs and sensors, and excellent data communication speed and communication error detecting facility are provided.

This system is working for the following systems:
* ABS (w/ VSC)
* TRAC
* VSC

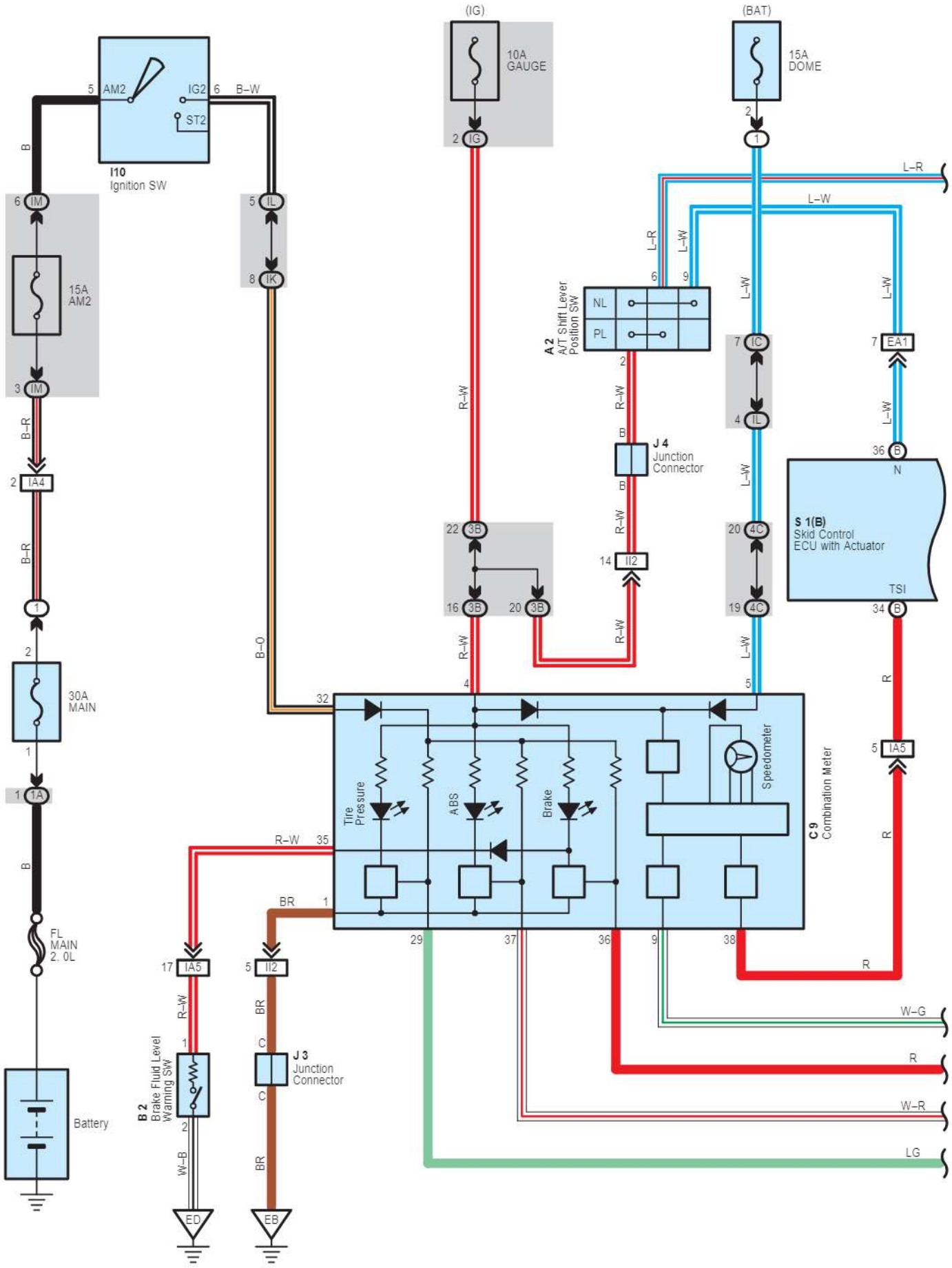
○ : Parts Location

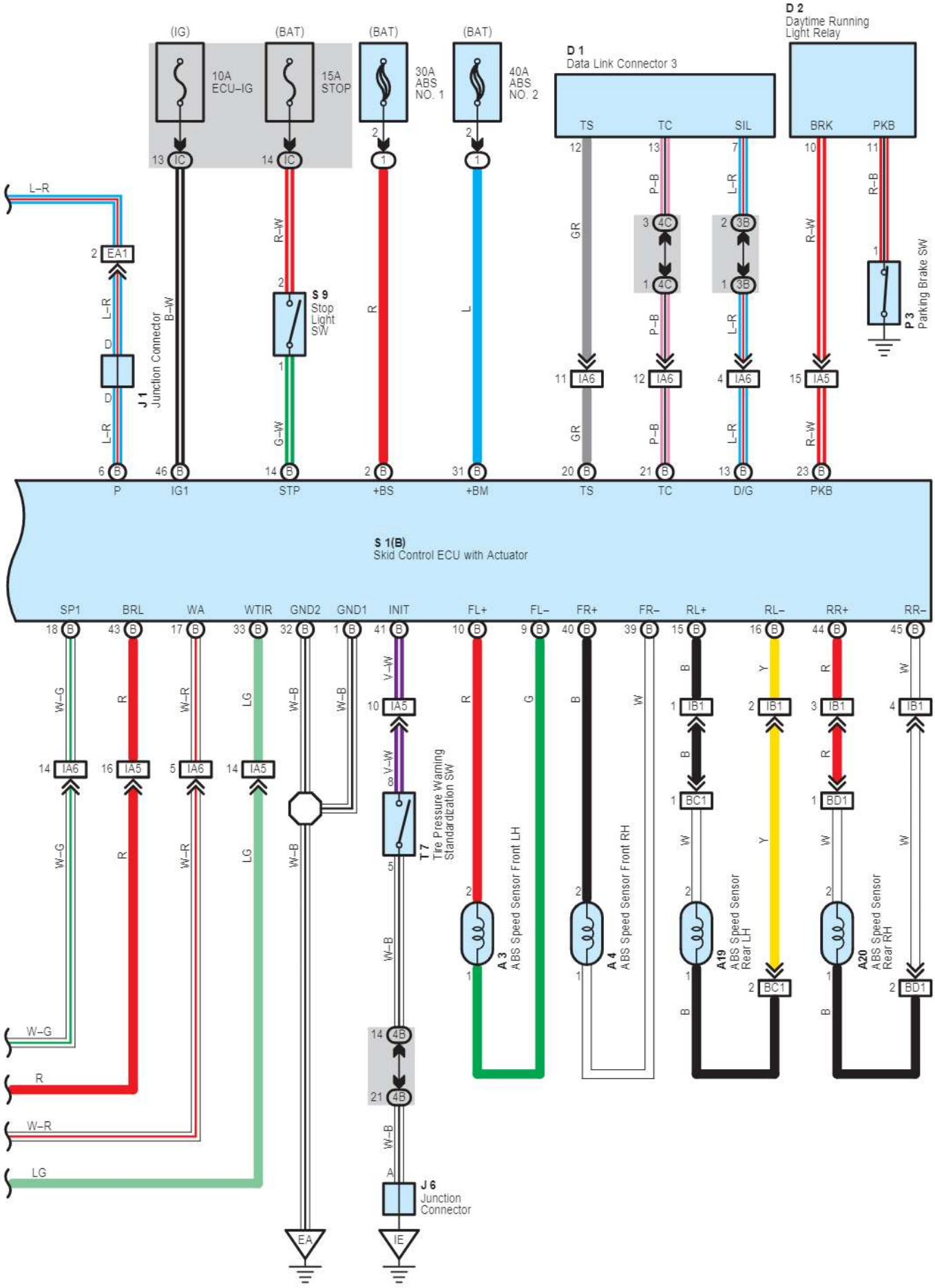
Code	See Page	Code		See Page	Code	See Page
D1	36	S1	A	33 (1ZZ–FE)	S12	37
J11	37			35 (2ZZ–GE)	Y1	37

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA7	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)

ABS and Tire Pressure Warning System without VSC




(IG)
(BAT)
(BAT)
(BAT)
10A ECU-IG
15A STOP
30A ABS NO. 1
40A ABS NO. 2
D 1
Data Link Connector 3
TS
TC
SIL
D 2
Daytime Running Light Relay
BRK
PKB
L-R
EA1
J 1
Junction Connector
B-W
R-W
S 9
Stop Light SW
G-W
R
L
GR
P-B
L-R
R-W
R-B
P 3
Parking Brake SW
P
IG1
STP
+BS
+BM
TS
TC
D/G
PKB
S 1(B)
Skid Control ECU with Actuator
SP1
BRL
WA
WTIR
GND2
GND1
INIT
FL+
FL-
FR+
FR-
RL+
RL-
RR+
RR-
W-G
R
W-R
LG
W-B
V-W
T 7
Tire Pressure Warning Standardization SW
A 3
ABS Speed Sensor Front LH
A 4
ABS Speed Sensor Front RH
A19
ABS Speed Sensor Rear LH
A20
ABS Speed Sensor Rear RH
J 6
Junction Connector
EA
IE

ABS and Tire Pressure Warning System without VSC

System Outline

ABS is a brake system designed to improve the operating ability and securing the stability of the vehicle by preventing the lock–up of the vehicle by controlling the wheel cylinder pressure of all the four wheels at the time of sudden braking.

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 skid control ECU and actuator.

(2) Stop light SW signal

A signal is input to TERMINAL STP of the skid control ECU with actuator when brake pedal is depressed.

2. System Operation

When the wheels are locked–up, the solenoid inside the actuator is controlled by the signal from the skid control ECU with actuator, and the brake fluid in the wheel cylinder will flow through the reservoir and reduce the hydraulic pressure.

While the ABS is in operation, as the skid control ECU with actuator always outputs the operation signal to the pump inside the actuator, and the brake fluid stored inside the reservoir will be sucked up by the pump inside the actuator and returned to the master cylinder.

When the hydraulic pressure of the wheel cylinder is decompressed or increased until the necessary hydraulic pressure, the solenoid inside the actuator is controlled by the control signal from the skid control ECU with actuator and as a result, hydraulic pressure of the wheel cylinder will be closed at both the master cylinder and reservoir sides routes, and the hydraulic pressure of the wheel cylinder will be in the hold condition.

If increase of the hydraulic pressure volume of the wheel cylinder becomes necessary, the control signals from the skid control ECU with actuator control the solenoid inside the actuator, to resume to the normal condition. Thus the brake fluid of the master cylinder will be sent to the wheel cylinder and will increase the hydraulic pressure of the wheel cylinder. At this time, in the case that the brake fluid is left in the reservoir, it will be sucked up by the pump inside the actuator and will be sent to the wheel cylinder.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (1ZZ–FE)	B2	32 (1ZZ–FE)	J4	37
A3	32 (1ZZ–FE)		34 (2ZZ–GE)	J6	37
	34 (2ZZ–GE)	C9	36	P3	37
A4	32 (1ZZ–FE)	D1	36	S1 B	33 (1ZZ–FE)
	34 (2ZZ–GE)	D2	36		35 (2ZZ–GE)
A19	38 (*1)	I10	37	S9	37
	40 (*2)	J1	33 (1ZZ–FE)	T7	37
A20	38 (*1)		35 (2ZZ–GE)		
	40 (*2)	J3	37		

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA5		
IA6		
IB1	44	Engine Room Main Wire and Floor Wire (Cowl Side Panel LH)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
BC1	46 (*1)	Skid Control Sensor Wire LH and Floor Wire (Quarter Wheel House LH)
	47 (*2)	
BD1	46 (*1)	Skid Control Sensor Wire RH and Floor Wire (Quarter Wheel House RH)
	47 (*2)	

: **Ground Points**

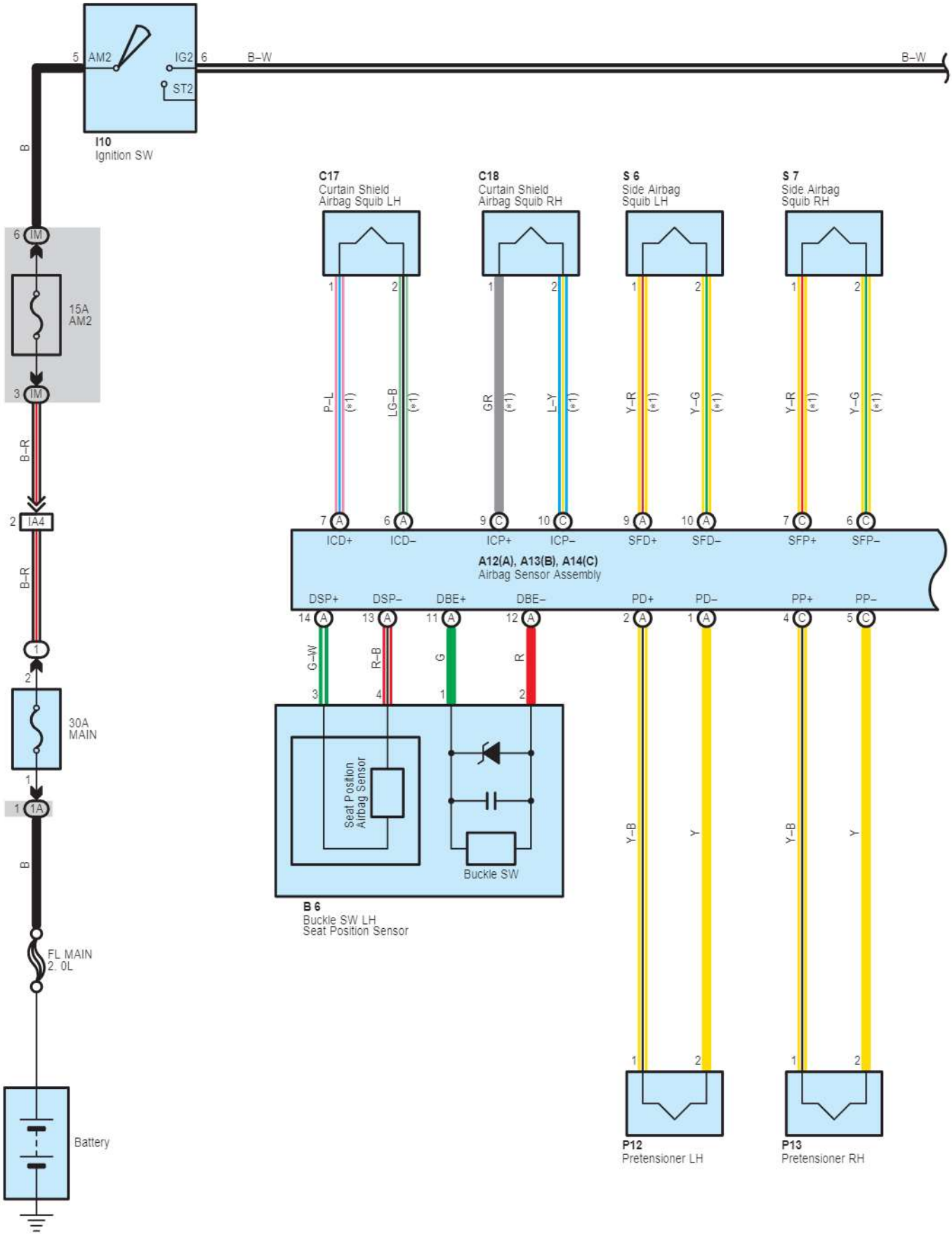
Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

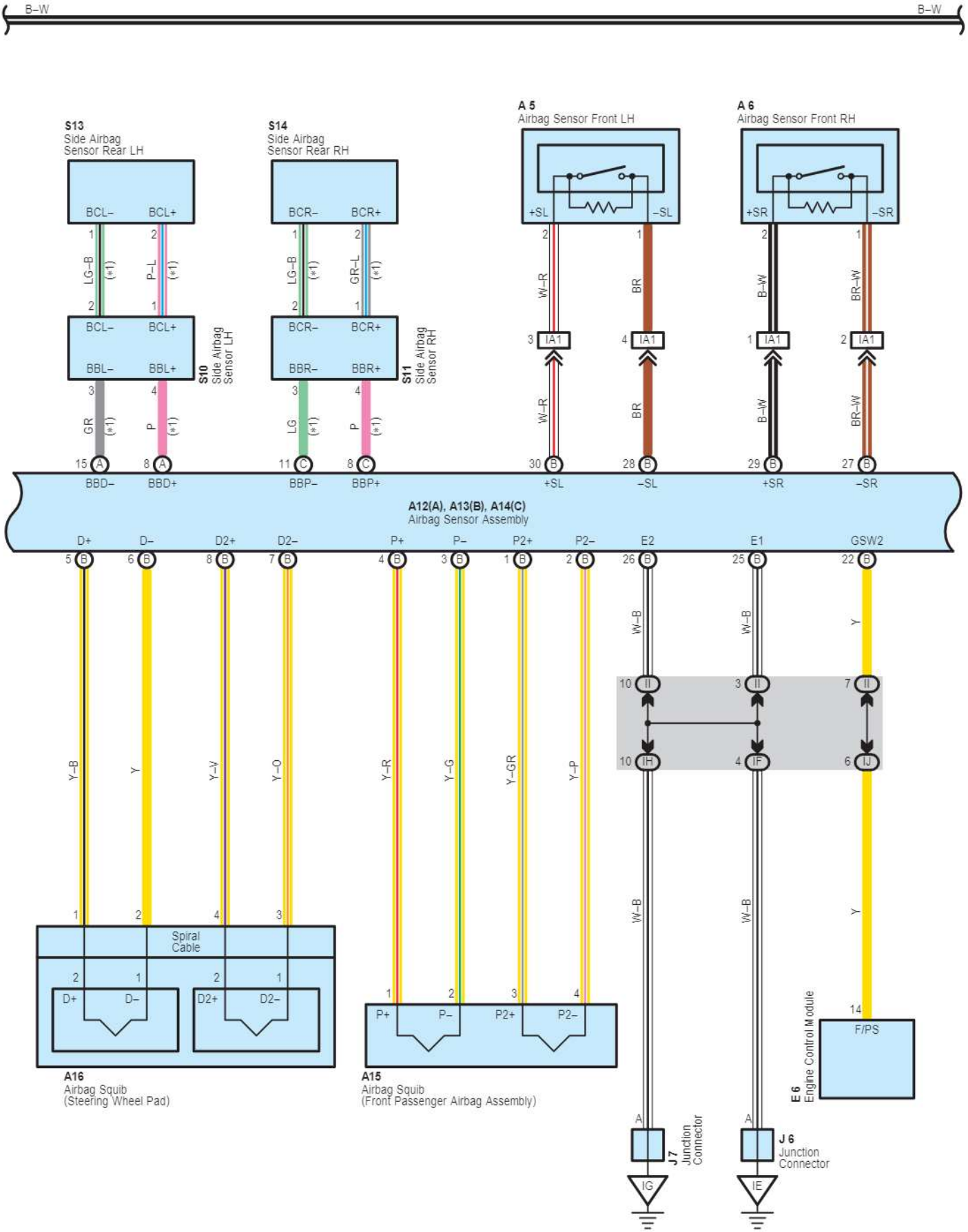
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

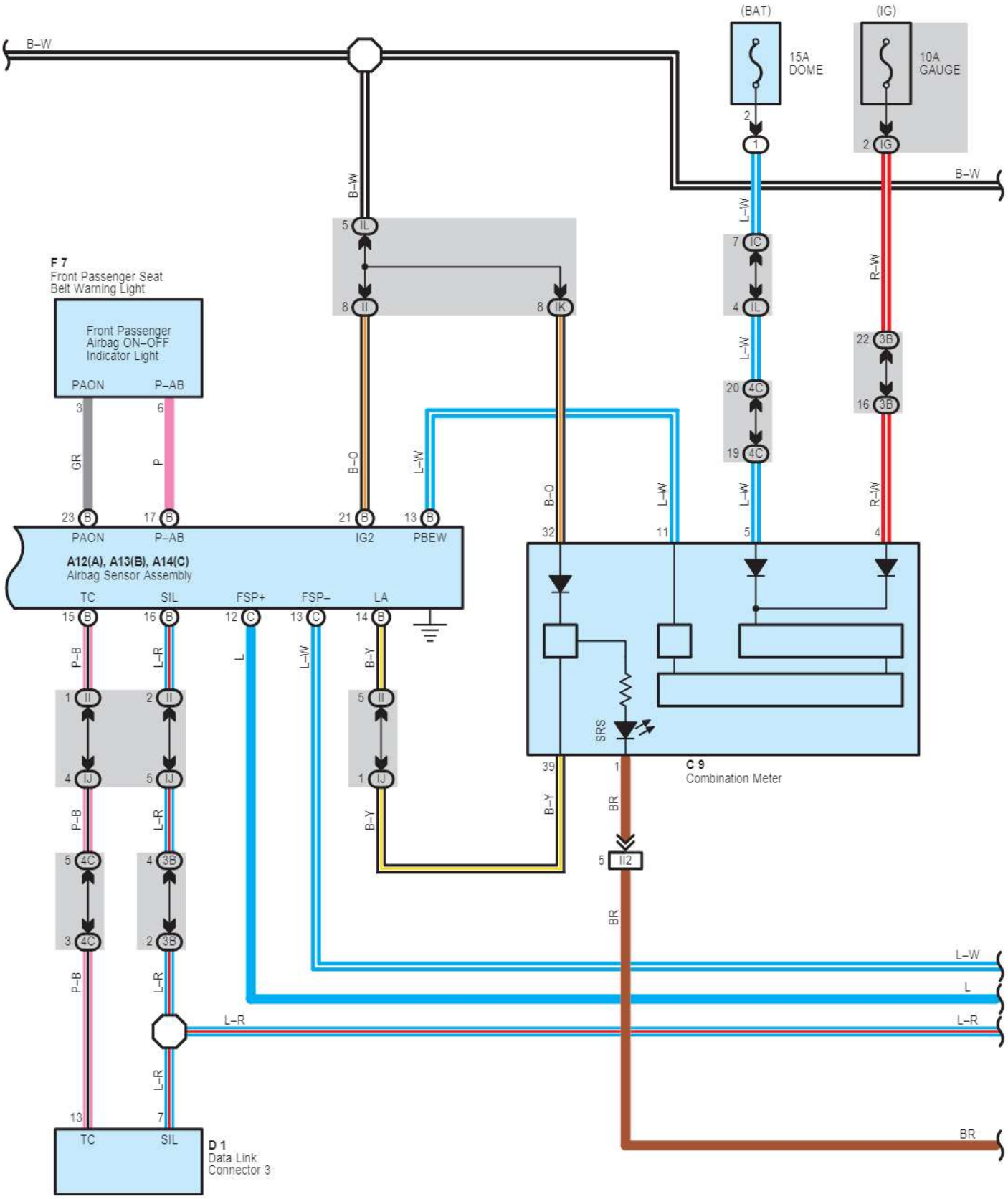
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is 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 deploy.)
- When the negative (–) terminal cable is disconnected from the battery, the memory of the clock and audio system will be cleared. So before starting work, make a record of the contents in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. Some vehicles have power tilt steering, power telescopic steering, power seat and power outside rear view mirror which are all equipped with memory function. However, it is not possible to make a record of these memory contents. So when the work is finished, it will be necessary to explain it to your customer, and ask the customer to adjust the features and reset the memory. To avoid erasing the memory in each system, never use a back–up power supply from outside the vehicle.
- Before repair, remove the airbag sensor if shocks are likely to be applied to the sensor during repair.
- Do not expose the following parts directly to hot air or flame;
- Even in cases of a minor collision where the SRS does not deploy, the following parts should be inspected;
- Never use SRS parts from another vehicle. When replacing parts, replace with new parts.
- For the purpose of reuse, never disassemble and repair the following parts.
- If the following parts have been dropped, or have cracks, dents and other defects in their case, bracket, and connector, replace with new one.
- Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting electrical circuits of the system.
- Information labels are attached to the periphery of the SRS components. Follow the instructions of the notice.
- After work on the SRS is completed, check the SRS warning light.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.

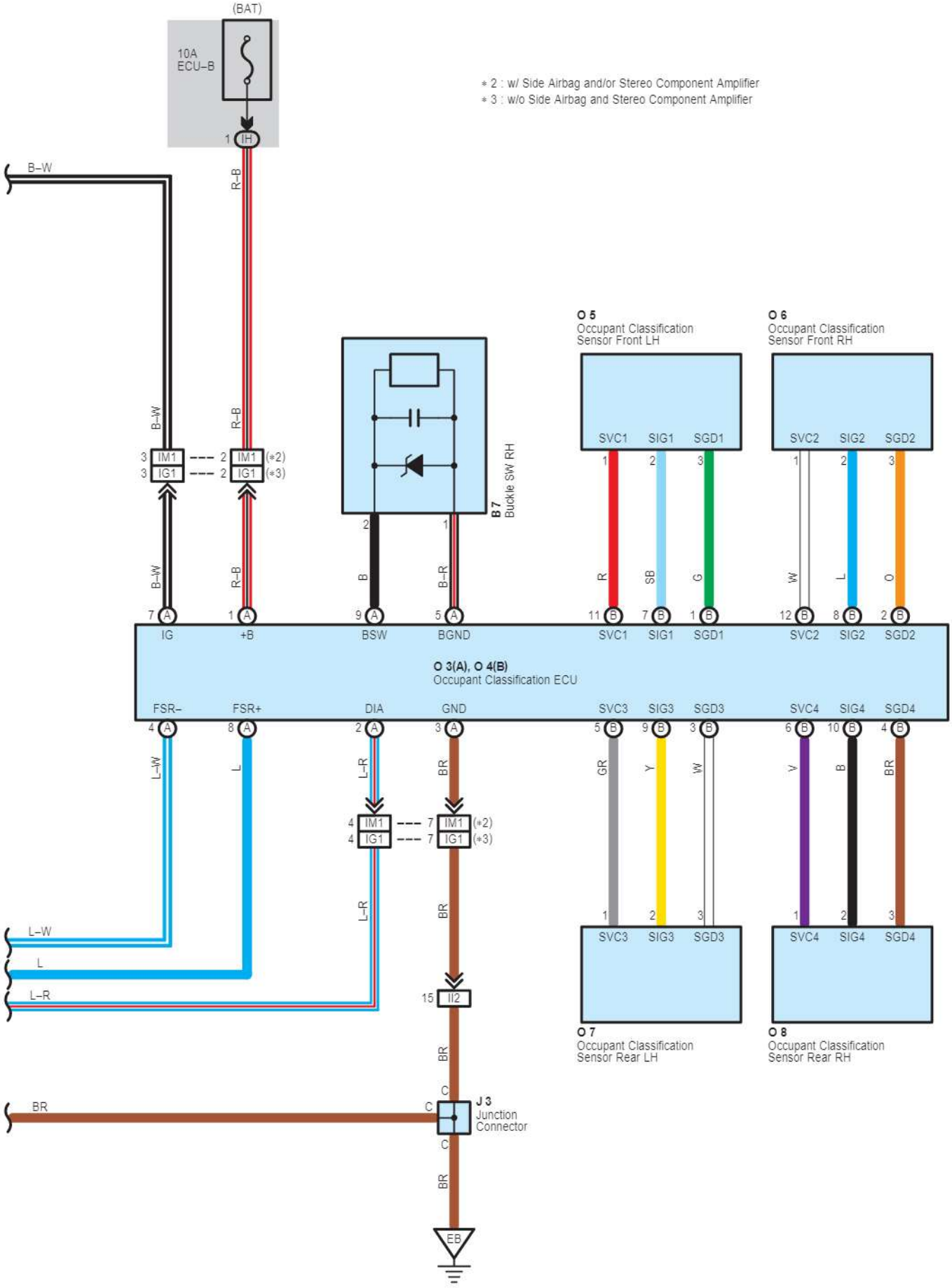
* Steering wheel pad
* Front passenger airbag assembly
* Side airbag assembly
* Curtain shield airbag assembly
* Seat belt pretensioner
* Center airbag sensor assembly
* Front airbag sensor assembly
* Side airbag sensor assembly
* Rear airbag sensor assembly


I10
Ignition SW
5 AM2
IG2 6
ST2
B–W
B–W
B
6 IM
15A
AM2
3 IM
B–R
2 IA4
B–R
1
2
30A
MAIN
1
1 1A
B
FL MAIN
2. 0L
Battery
C17
Curtain Shield
Airbag Squib LH
C18
Curtain Shield
Airbag Squib RH
S 6
Side Airbag
Squib LH
S 7
Side Airbag
Squib RH
P–L (*1)
LG–B (*1)
GR (*1)
L–Y (*1)
Y–R (*1)
Y–G (*1)
Y–R (*1)
Y–G (*1)
7 A
6 A
9 C
10 C
9 A
10 A
7 C
6 C
ICD+
ICD–
ICP+
ICP–
SFD+
SFD–
SFP+
SFP–
A12(A), A13(B), A14(C)
Airbag Sensor Assembly
DSP+
DSP–
DBE+
DBE–
PD+
PD–
PP+
PP–
14 A
13 A
11 A
12 A
2 A
1 A
4 C
5 C
G–W
R–B
G
R
3
4
1
2
Seat Position
Airbag Sensor
Buckle SW
B 6
Buckle SW LH
Seat Position Sensor
Y–B
Y
Y–B
Y
1
2
1
2
P12
Pretensioner LH
P13
Pretensioner RH

＊1 : w/ Side Airbag




(BAT)
(IG)
15A
DOME
10A
GAUGE
B–W
B–W
L–W
R–W
F 7
Front Passenger Seat
Belt Warning Light
Front Passenger
Airbag ON–OFF
Indicator Light
PAON
P–AB
GR
P
B–O
L–W
A12(A), A13(B), A14(C)
Airbag Sensor Assembly
TC
SIL
FSP+
FSP–
LA
PAON
P–AB
IG2
PBEW
P–B
L–R
L
L–W
B–Y
SRS
C 9
Combination Meter
BR
L–W
L
L–R
BR
D 1
Data Link
Connector 3


(BAT)
10A
ECU–B
1 IH
* 2 : w/ Side Airbag and/or Stereo Component Amplifier
* 3 : w/o Side Airbag and Stereo Component Amplifier
B–W
R–B
B–W
R–B
3 IM1
3 IG1
2 IM1 (*2)
2 IG1 (*3)
B7
Buckle SW RH
O 5
Occupant Classification
Sensor Front LH
O 6
Occupant Classification
Sensor Front RH
SVC1 SIG1 SGD1
SVC2 SIG2 SGD2
R
SB
G
W
L
O
B
B–R
7 A IG
1 A +B
9 A BSW
5 A BGND
11 B SVC1
7 B SIG1
1 B SGD1
12 B SVC2
8 B SIG2
2 B SGD2
O 3(A), O 4(B)
Occupant Classification ECU
FSR– FSR+ DIA GND SVC3 SIG3 SGD3 SVC4 SIG4 SGD4
4 A
8 A
2 A
3 A
5 B
9 B
3 B
6 B
10 B
4 B
L–W
L
L–R
BR
GR
Y
W
V
B
BR
4 IM1
4 IG1
7 IM1 (*2)
7 IG1 (*3)
L–W
L
L–R
15 II2
BR
C
BR
C J 3
Junction
Connector
C
BR
EB
O 7
Occupant Classification
Sensor Rear LH
O 8
Occupant Classification
Sensor Rear RH

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 ON, current from the MAIN fuse flows to AM2 fuse to ignition SW (IG2) to TERMINAL (B) 21 of the airbag sensor assembly.
If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the TERMINAL (B) 21 of the airbag sensor assembly flows to TERMINALS (B) 5, (B) 8, (B) 4, (B) 1, (A) 2 and (C) 4 of the airbag sensor assembly to the airbag squibs and the pretensioners to TERMINALS (B) 6, (B) 7, (B) 3, (B) 2, (A) 1 and (C) 5 of the airbag sensor assembly to TERMINAL (B) 25, (B) 26 or BODY GROUND to GROUND, so that the current flows to the front airbag squibs and the pretensioners, and causes them to operate.
When the side impact also exceeds a set level, the current from the TERMINAL (B) 21 of the airbag sensor assembly flows to TERMINALS (A) 9, (C) 7, (A) 7, (C) 9 of the airbag sensor assembly to the side airbag squibs and curtain shield airbag squibs to TERMINALS (A) 10, (C) 6, (A) 6, (C) 10 of the airbag sensor assembly to TERMINAL (B) 25, (B) 26 or BODY GROUND to GROUND, causing side airbag squibs 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 curtain shield airbag can reduce impact on the head of the front and rear passengers and reduce risk or injury.
The pretensioners make sure of the seat belt restrainability.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A5	32 (1ZZ–FE)	C18	38 (*1)	O6	41 (*2)
	34 (2ZZ–GE)	D1	36	O7	39 (*1)
A6	32 (1ZZ–FE)	E6	36		41 (*2)
	34 (2ZZ–GE)	F7	37	O8	39 (*1)
A12 A	36	I10	37		41 (*2)
A13 B	36	J3	37	P12	39 (*1)
A14 C	36	J6	37		41 (*2)
A15	36	J7	37	P13	39 (*1)
A16	36	O3 A	39 (*1)		41 (*2)
B6	38 (*1)		41 (*2)	S6	39 (*1)
	40 (*2)	O4 B	39 (*1)	S7	39 (*1)
B7	38 (*1)		41 (*2)	S10	39 (*1)
	40 (*2)	O5	39 (*1)	S11	39 (*1)
C9	36		41 (*2)	S13	39 (*1)
C17	38 (*1)	O6	39 (*1)	S14	39 (*1)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
II		
IJ		
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4C	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

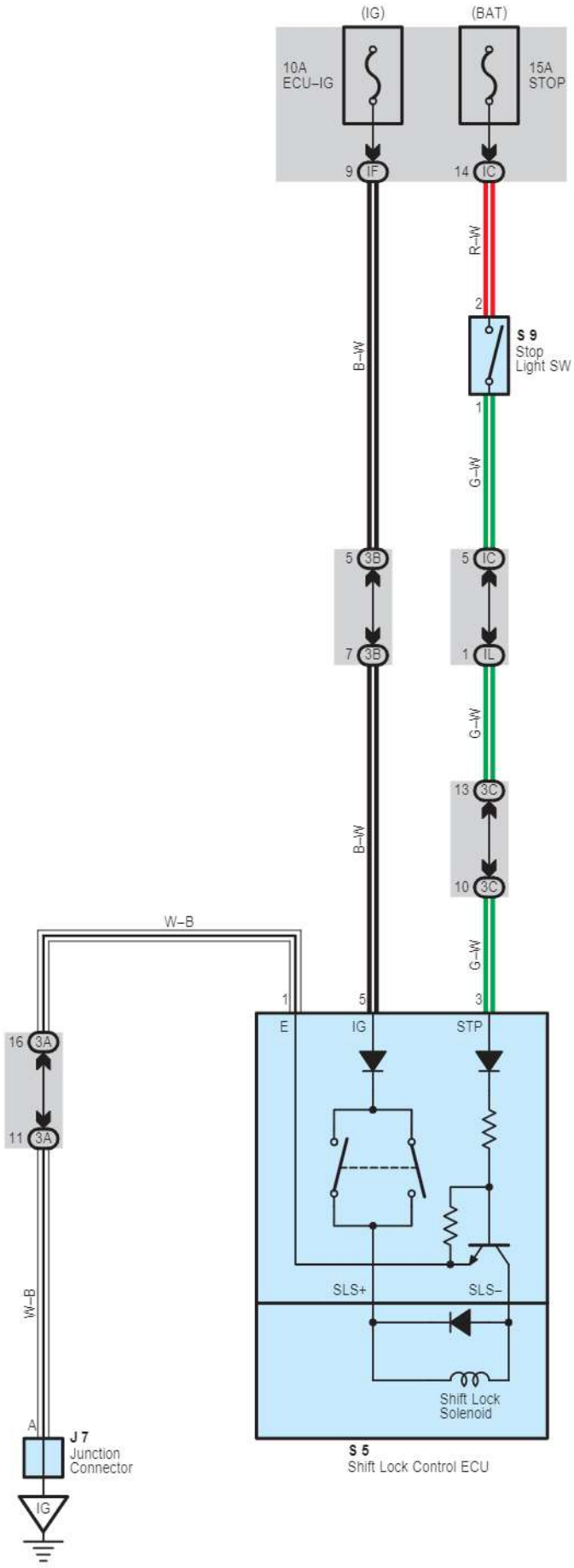
* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA4		
IG1	45	Instrument Panel Wire and Instrument Panel No.3 Wire (Front Side of the Parking Brake Lever)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
IM1	45	Instrument Panel Wire and Floor Wire (Front Side of the Parking Brake Lever)

: **Ground Points**

Code	See Page	Ground Points Location
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(IG)
(BAT)
10A
ECU–IG
15A
STOP
9 IF
14 IC
R–W
2
S 9
Stop
Light SW
1
G–W
B–W
5 3B
7 3B
5 IC
1 IL
G–W
13 3C
10 3C
B–W
G–W
W–B
1
5
3
E
IG
STP
16 3A
11 3A
SLS+
SLS–
W–B
Shift Lock
Solenoid
A
J 7
Junction
Connector
IG
S 5
Shift Lock Control ECU

System Outline

When the ignition SW is turned to ON position, the current from the ECU–IG fuse flows to TERMINAL 5 of the shift lock control ECU.

Shift Lock Mechanism

With the ignition SW at ON position, when a signal that the brake pedal is depressed (Stop light SW on) and a signal that the shift lever is put in P position is input to the ECU, the ECU operates and the current flows from TERMINAL 5 of the ECU to TERMINAL SLS+ of the shift lock solenoid to TERMINAL SLS– to TERMINAL 1 of the ECU to GROUND. This causes the shift lock solenoid to turn on (Plate stopper disengages) and the shift lever can shift into position other than P.

○ : Parts Location

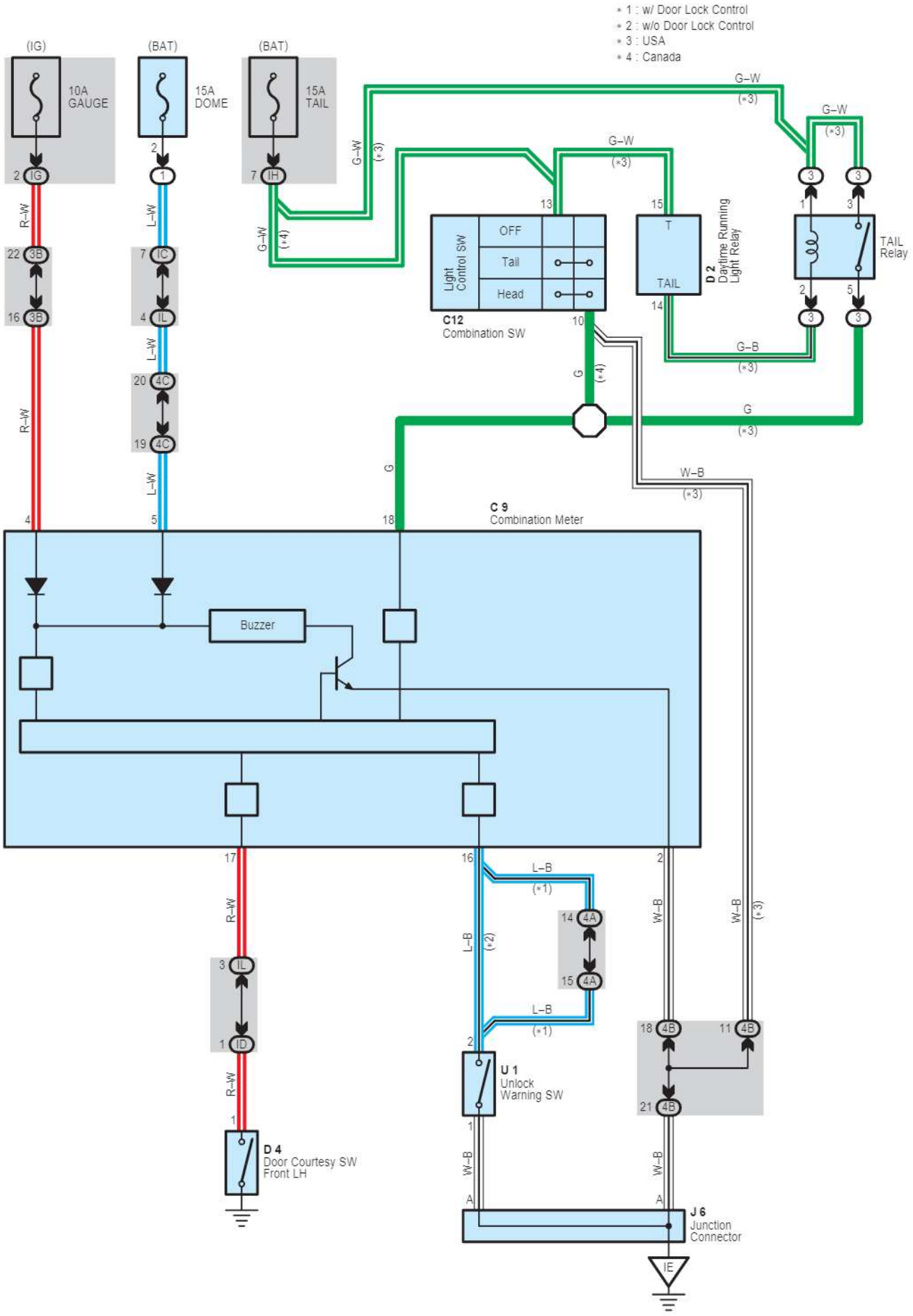
Code	See Page	Code	See Page	Code	See Page
J7	37	S5	37	S9	37

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
3C		

▽ : Ground Points

Code	See Page	Ground Points Location
IG	44	Right Kick Panel


* 1 : w/ Door Lock Control
* 2 : w/o Door Lock Control
* 3 : USA
* 4 : Canada
(IG)
(BAT)
(BAT)
10A GAUGE
15A DOME
15A TAIL
2 IG
2
1
7 IH
R-W
L-W
G-W (*3)
G-W (*4)
22 3B
16 3B
7 IC
4 IL
20 4C
19 4C
13
15
OFF
Tail
Head
Light Control SW
C12
Combination SW
T
TAIL
D 2
Daytime Running Light Relay
TAIL Relay
14
10
G-B (*3)
G (*4)
G (*3)
W-B (*3)
C 9
Combination Meter
4
5
18
Buzzer
17
16
2
L-B (*1)
L-B (*2)
W-B
W-B (*3)
14 4A
15 4A
3 IL
1 ID
D 4
Door Courtesy SW Front LH
U 1
Unlock Warning SW
18 4B
11 4B
21 4B
A
J 6
Junction Connector
IE

System Outline

The current is applied at all times to TERMINAL 5 of the combination meter through the DOME fuse.
When the ignition SW is turned to ON position, the current flows to TERMINAL 4 of the combination meter through the GAUGE fuse. When the light control SW is turned to TAIL or HEAD position, current is applied to TERMINAL 18 of the combination meter through the TAIL fuse via the TAIL relay (USA) or the light control SW (Canada).

1. Light Reminder System

When the light control SW is in TAIL or HEAD position, the ignition SW turned to OFF from ON position, and the driver's door opened (Door courtesy SW on), the current flows to TERMINAL 4 of the combination meter stops. As a result, the combination meter is activated and current flows from TERMINAL 5 of the combination meter to TERMINAL 2 to GROUND, the buzzer in the combination meter goes on to remind the light is lighting up.

2. Key Reminder System

When the driver door is opened with the ignition SW off and ignition key remaining in the key cylinder (Unlock warning SW on), a signal is input from the unlock warning SW to TERMINAL 16 of the combination meter, and from the door courtesy SW front LH to TERMINAL 17 of the combination meter. As a result, the buzzer in the combination meter goes on and warns the driver that the key is remaining in the key cylinder.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C9	36	D4	38 (*1)	U1	37
C12	36		40 (*2)		
D2	36	J6	37		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

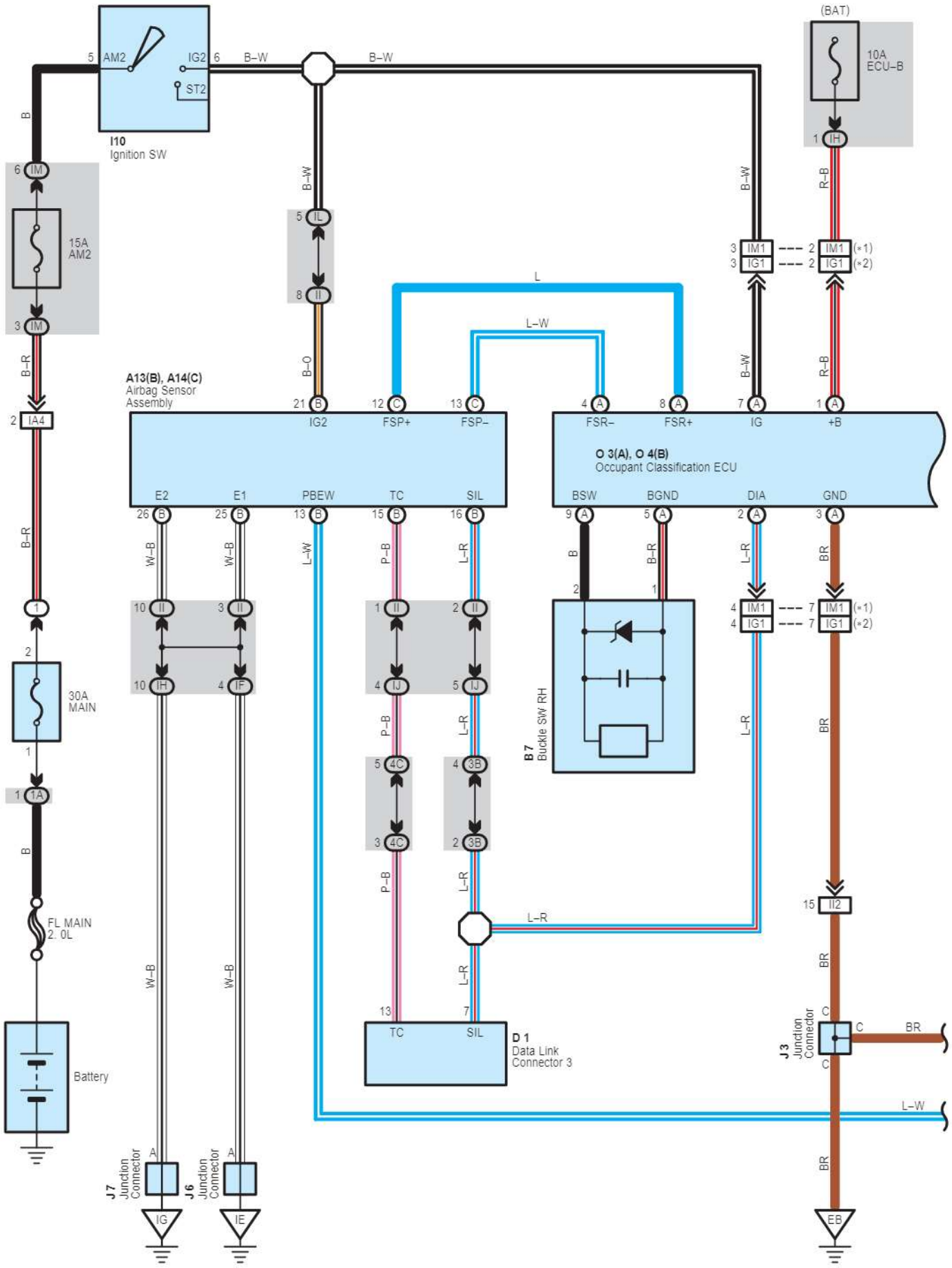
⬭ : Junction Block and Wire Harness Connector

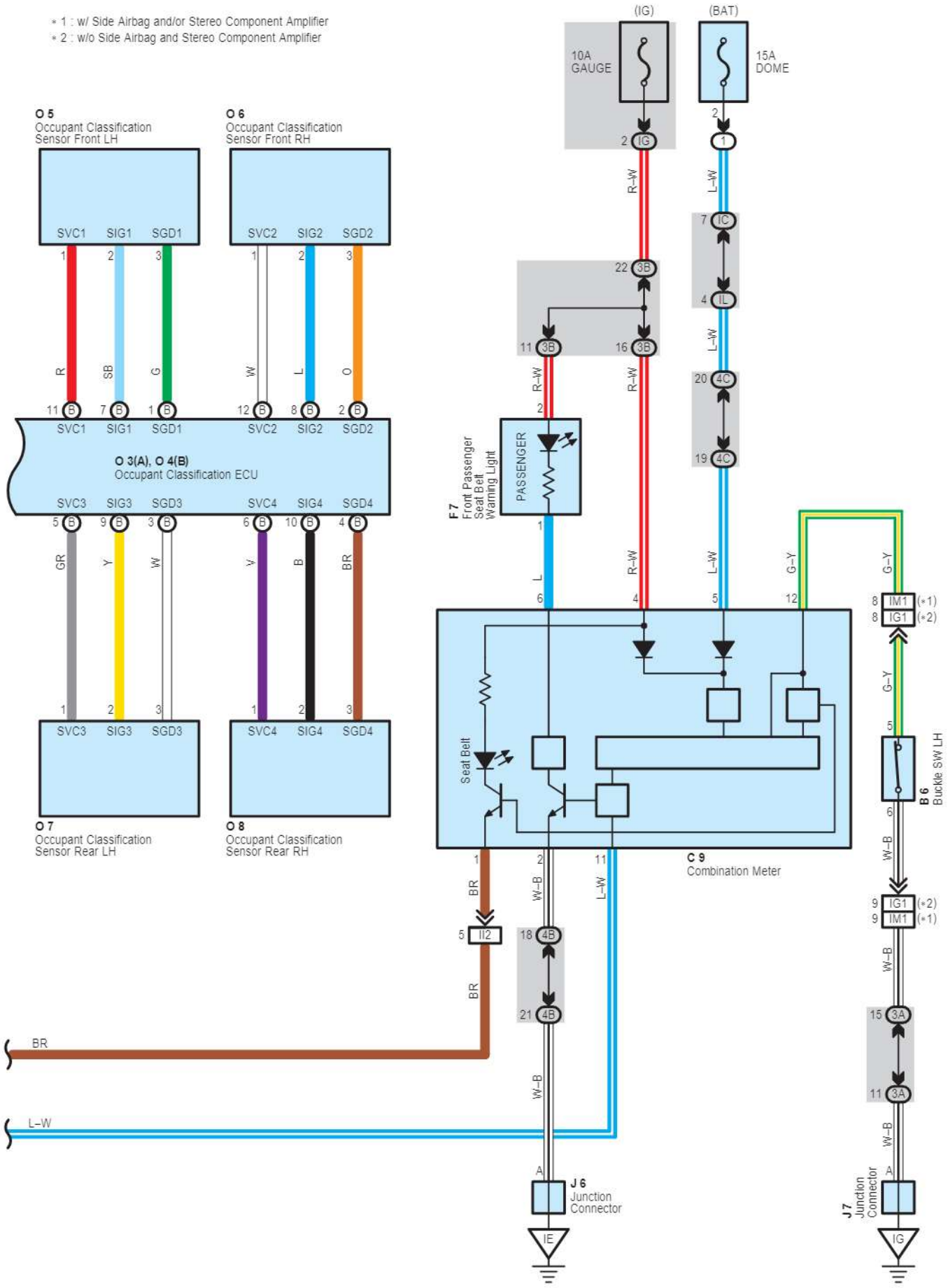
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
ID	25	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IH		
IL	24	
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4A	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4B		
4C		

▽ : Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


I10
Ignition SW
AM2
IG2
ST2
B–W
B
15A
AM2
30A
MAIN
FL MAIN
2. 0L
Battery
(BAT)
10A
ECU–B
A13(B), A14(C)
Airbag Sensor
Assembly
IG2
FSP+
FSP–
FSR–
FSR+
IG
+B
O 3(A), O 4(B)
Occupant Classification ECU
BSW
BGND
DIA
GND
E2
E1
PBEW
TC
SIL
B7
Buckle SW RH
D1
Data Link
Connector 3
J3
Junction
Connector
J6
Junction
Connector
J7
Junction
Connector
IG
IE
EB
B–R
B–O
B–W
L
L–W
L–R
R–B
W–B
P–B
BR


* 1 : w/ Side Airbag and/or Stereo Component Amplifier
* 2 : w/o Side Airbag and Stereo Component Amplifier
(IG)
(BAT)
10A GAUGE
15A DOME
O 5 Occupant Classification Sensor Front LH
O 6 Occupant Classification Sensor Front RH
SVC1 SIG1 SGD1
SVC2 SIG2 SGD2
O 3(A), O 4(B) Occupant Classification ECU
SVC3 SIG3 SGD3 SVC4 SIG4 SGD4
O 7 Occupant Classification Sensor Rear LH
O 8 Occupant Classification Sensor Rear RH
F 7 Front Passenger Seat Belt Warning Light
PASSENGER
Seat Belt
C 9 Combination Meter
B 6 Buckle SW LH
J 6 Junction Connector
J 7 Junction Connector
IE
IG
R
SB
G
W
L
O
GR
Y
V
B
BR
R–W
L–W
G–Y
W–B
BR
L–W

Seat Belt Warning

System Outline

Current is always applied from the DOME fuse to TERMINAL 5 of the combination meter. When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL 4 of the combination meter and flows TERMINAL 1 of the front passenger seat belt warning light.

Seat Belt Warning System

When the ignition SW turned on, a signal is input to the combination meter. To determine whether the driver has fastened the seat belt, a signal is input from the buckle SW LH to TERMINAL 12 of the combination meter. When the seat belt is not fastened, the seat belt warning light in the combination meter blinks, and emits a warning sound.
In addition, the front passenger is recognized by a sensor (Occupant detection sensor) is installed in the front passenger seat, and determines whether the seat belt is fastened. When not fastened, the signals from the occupant detection sensor is input to TERMINAL 11 of the combination meter, and the front passenger seat belt warning light blinks.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A13 B	36	I10	37	O5	41 (*2)
A14 C	36	J3	37	O6	39 (*1)
B6	38 (*1)	J6	37		41 (*2)
	40 (*2)	J7	37	O7	39 (*1)
B7	38 (*1)	O3 A	39 (*1)		41 (*2)
	40 (*2)		41 (*2)	O8	39 (*1)
C9	36	O4 B	39 (*1)		41 (*2)
D1	36		41 (*2)		
F7	37	O5	39 (*1)		

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IH		
II		
IJ		
IL	24	
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

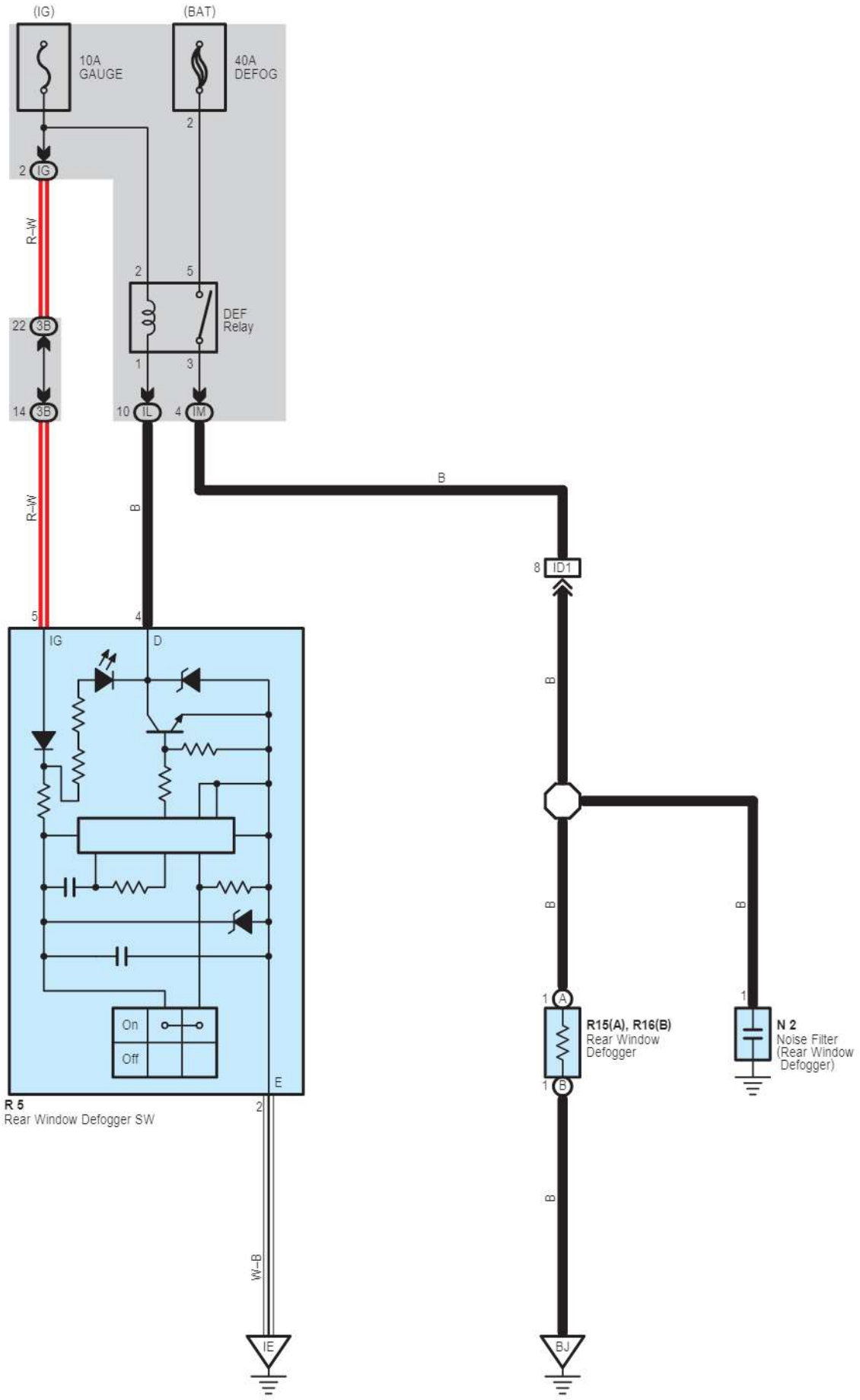
▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IG1	45	Instrument Panel Wire and Instrument Panel No.3 Wire (Front Side of the Parking Brake Lever)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)
IM1	45	Instrument Panel Wire and Floor Wire (Front Side of the Parking Brake Lever)

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

▽ : **Ground Points**

Code	See Page	Ground Points Location
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter
IG	44	Right Kick Panel


(IG)
(BAT)
10A
GAUGE
40A
DEFOG
2
IG
R–W
2
5
DEF
Relay
1
3
22
3B
14
3B
10
IL
4
IM
B
B
R–W
8
ID1
5
4
IG
D
On
Off
E
R 5
Rear Window Defogger SW
2
W–B
IE
B
B
B
1
A
1
B
R15(A), R16(B)
Rear Window
Defogger
1
N 2
Noise Filter
(Rear Window
Defogger)
B
BJ

: Parts Location

Code	See Page	Code		See Page	Code		See Page
N2	39 (*1)	R15	A	39 (*1)	R16	B	41 (*2)
	41 (*2)			41 (*2)			
R5	37	R16	B	39 (*1)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
IM		
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)

: Connector Joining Wire Harness and Wire Harness

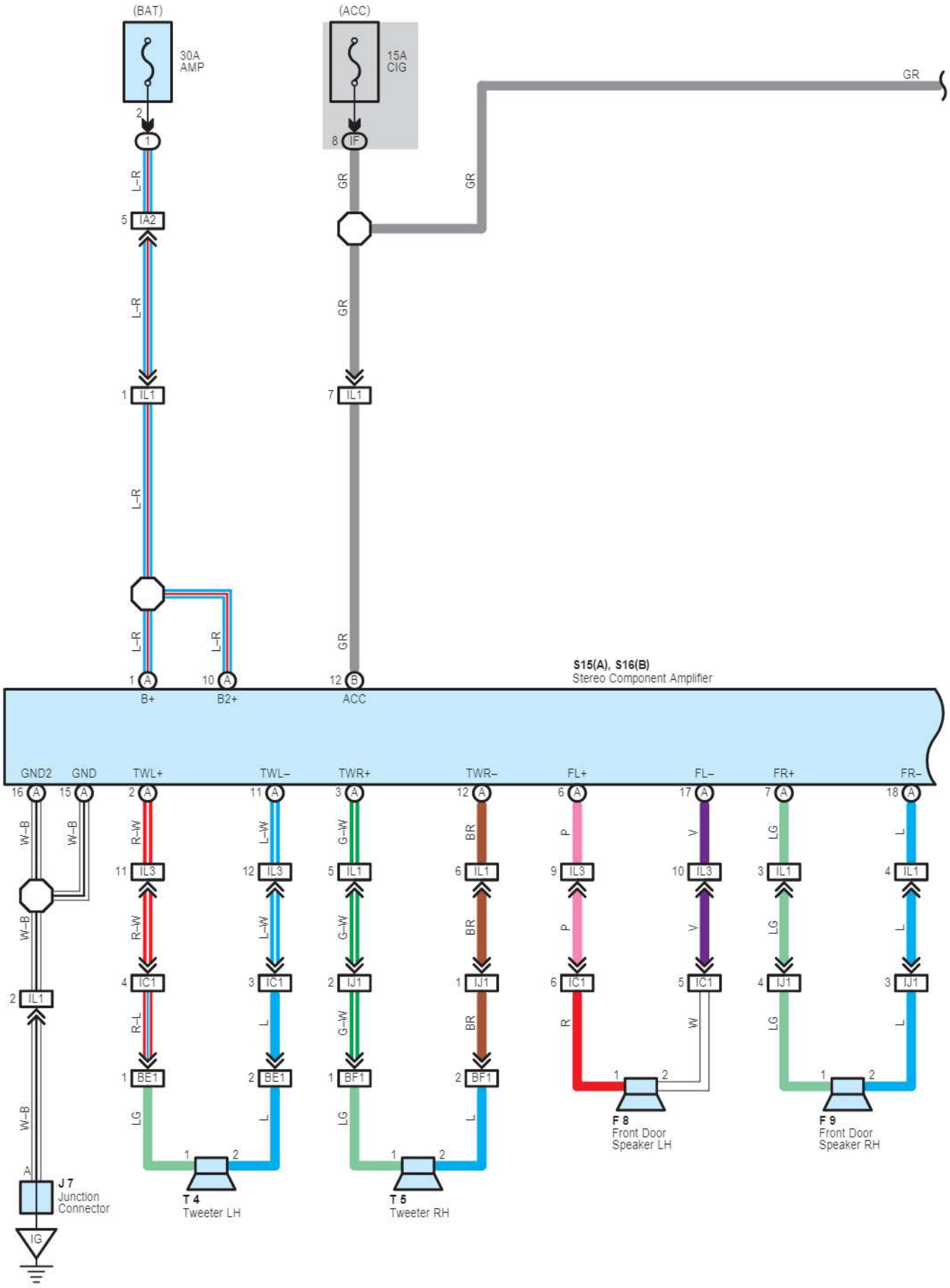
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)

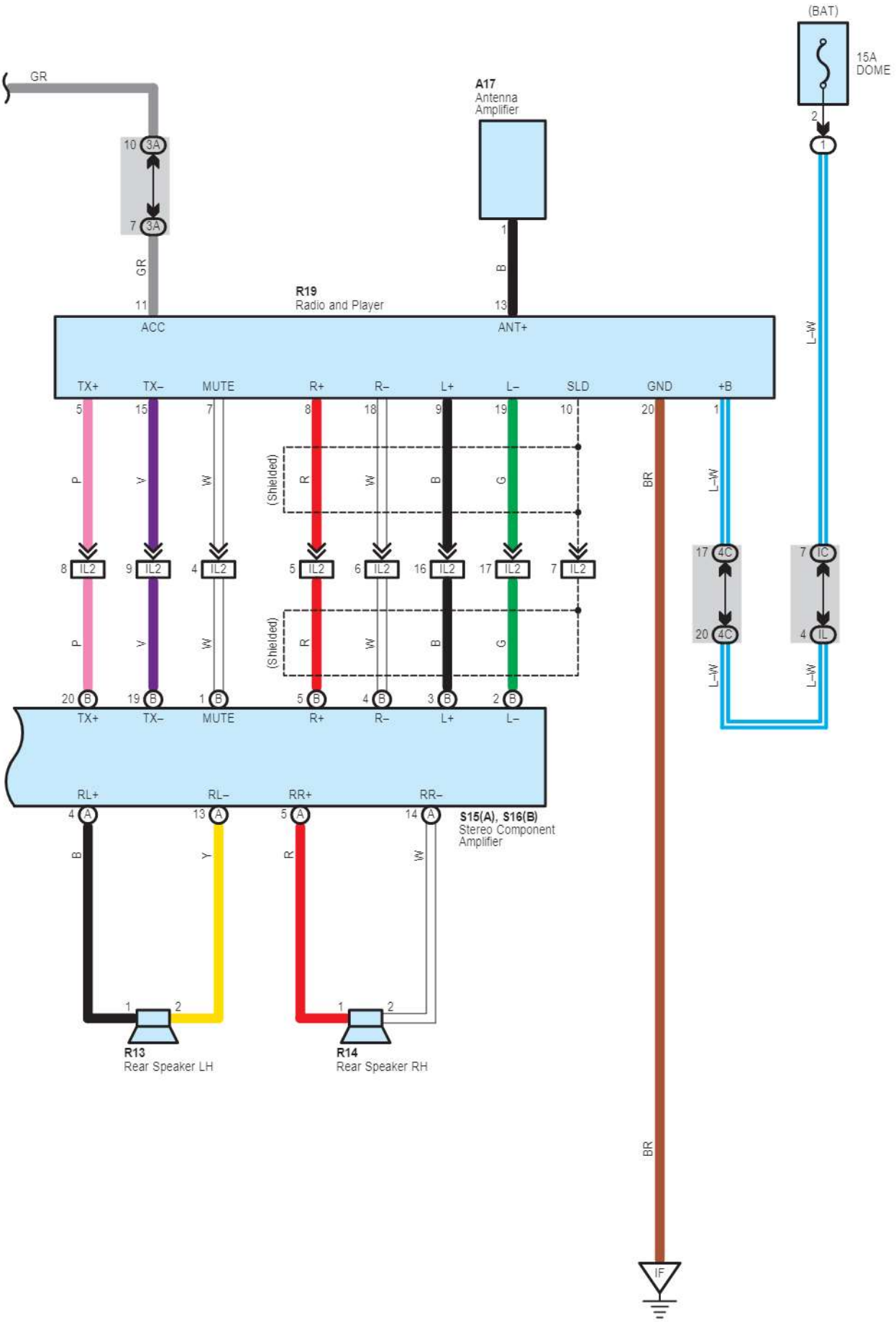
: Ground Points

Code	See Page	Ground Points Location
IE	44	Behind the Combination Meter
BJ	46 (*1)	Under the Right Quarter Pillar
	47 (*2)	

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier

Audio System with Stereo Component Amplifier




(BAT)
15A
DOME
GR
A17
Antenna
Amplifier
R19
Radio and Player
ACC
ANT+
TX+
TX–
MUTE
R+
R–
L+
L–
SLD
GND
+B
(Shielded)
RL+
RL–
RR+
RR–
S15(A), S16(B)
Stereo Component
Amplifier
R13
Rear Speaker LH
R14
Rear Speaker RH
IF

Audio System with Stereo Component Amplifier

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A17	36	R13	39 (*1)	S16 B	39 (*1)
F8	38 (*1)		41 (*2)	T4	39 (*1)
	40 (*2)	R14	39 (*1)		41 (*2)
F9	38 (*1)		41 (*2)	T5	39 (*1)
	40 (*2)	R19	37		41 (*2)
J7	37	S15 A	39 (*1)		

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4C	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

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

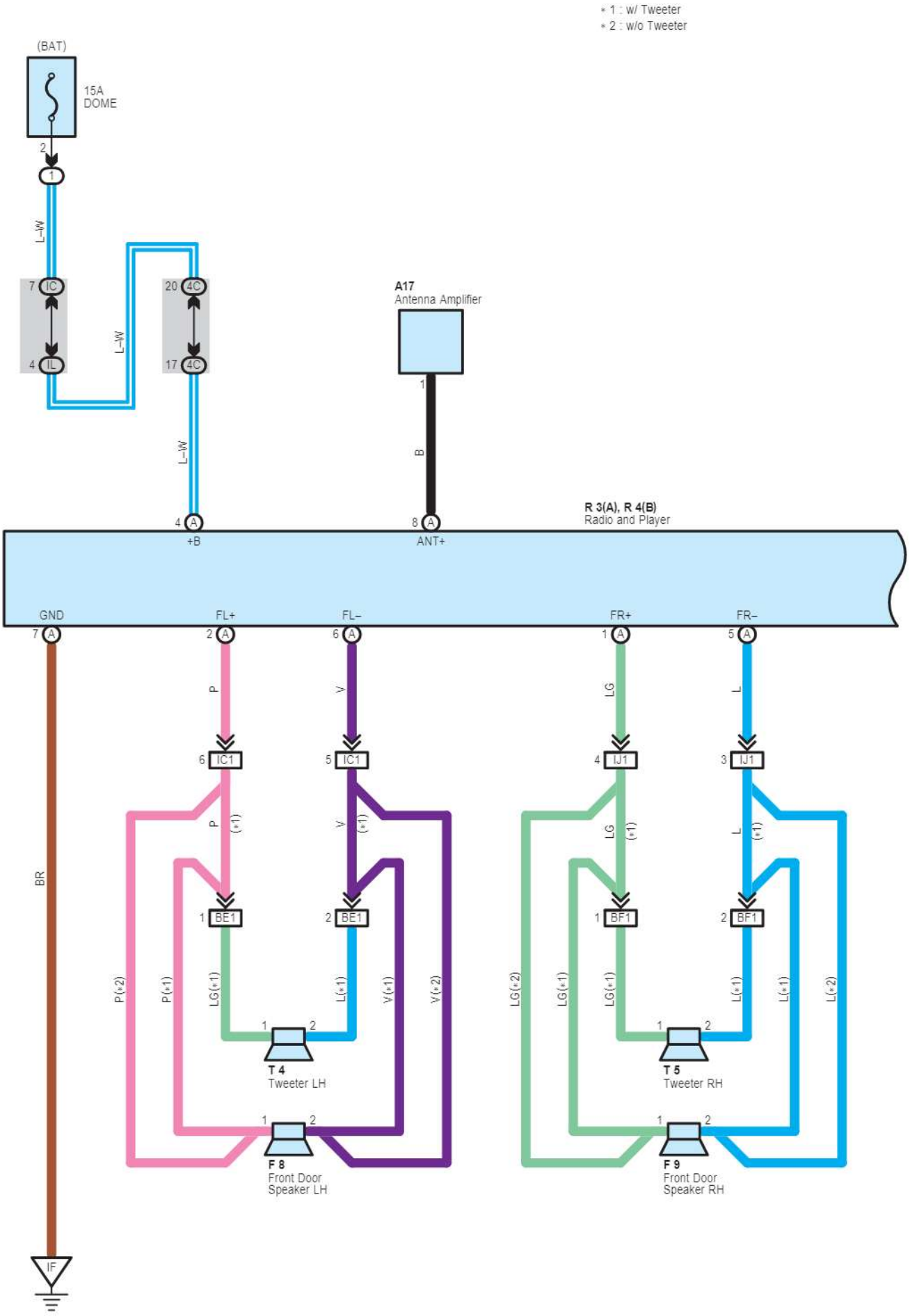
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IL1	45	Floor Wire and Instrument Panel Wire (Right Kick Panel)
IL2		
IL3		
BE1	46 (*1)	Speaker Tweeter LH Wire and Front Door LH Wire (Inside of the Front Door LH)
	47 (*2)	
BF1	46 (*1)	Speaker Tweeter RH Wire and Front Door RH Wire (Inside of the Front Door RH)
	47 (*2)	

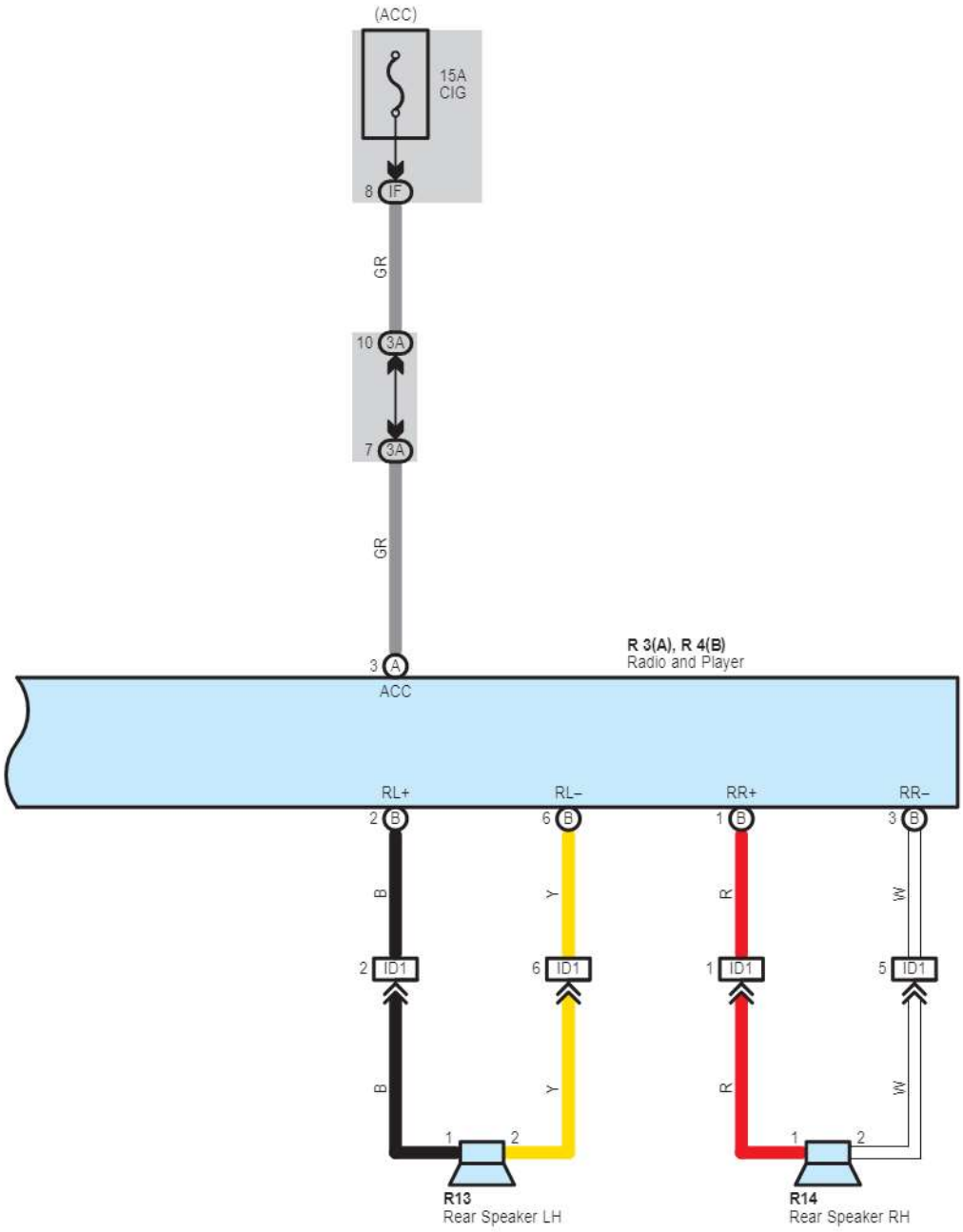
▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	44	Behind the Combination Meter
IG	44	Right Kick Panel

* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier

Audio System without Stereo Component Amplifier




(ACC)
15A
CIG
8 IF
GR
10 3A
7 3A
GR
3 A
ACC
R 3(A), R 4(B)
Radio and Player
RL+
RL−
RR+
RR−
2 B
6 B
1 B
3 B
B
Y
R
W
2 ID1
6 ID1
1 ID1
5 ID1
B
Y
R
W
1
2
1
2
R13
Rear Speaker LH
R14
Rear Speaker RH

Audio System without Stereo Component Amplifier

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A17	36	R3 A	37	R14	41 (*2)
F8	38 (*1)	R4 B	37	T4	39 (*1)
	40 (*2)	R13	39 (*1)		41 (*2)
F9	38 (*1)		41 (*2)	T5	39 (*1)
	40 (*2)	R14	39 (*1)		41 (*2)

⬭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

⬭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IL	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4C	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)

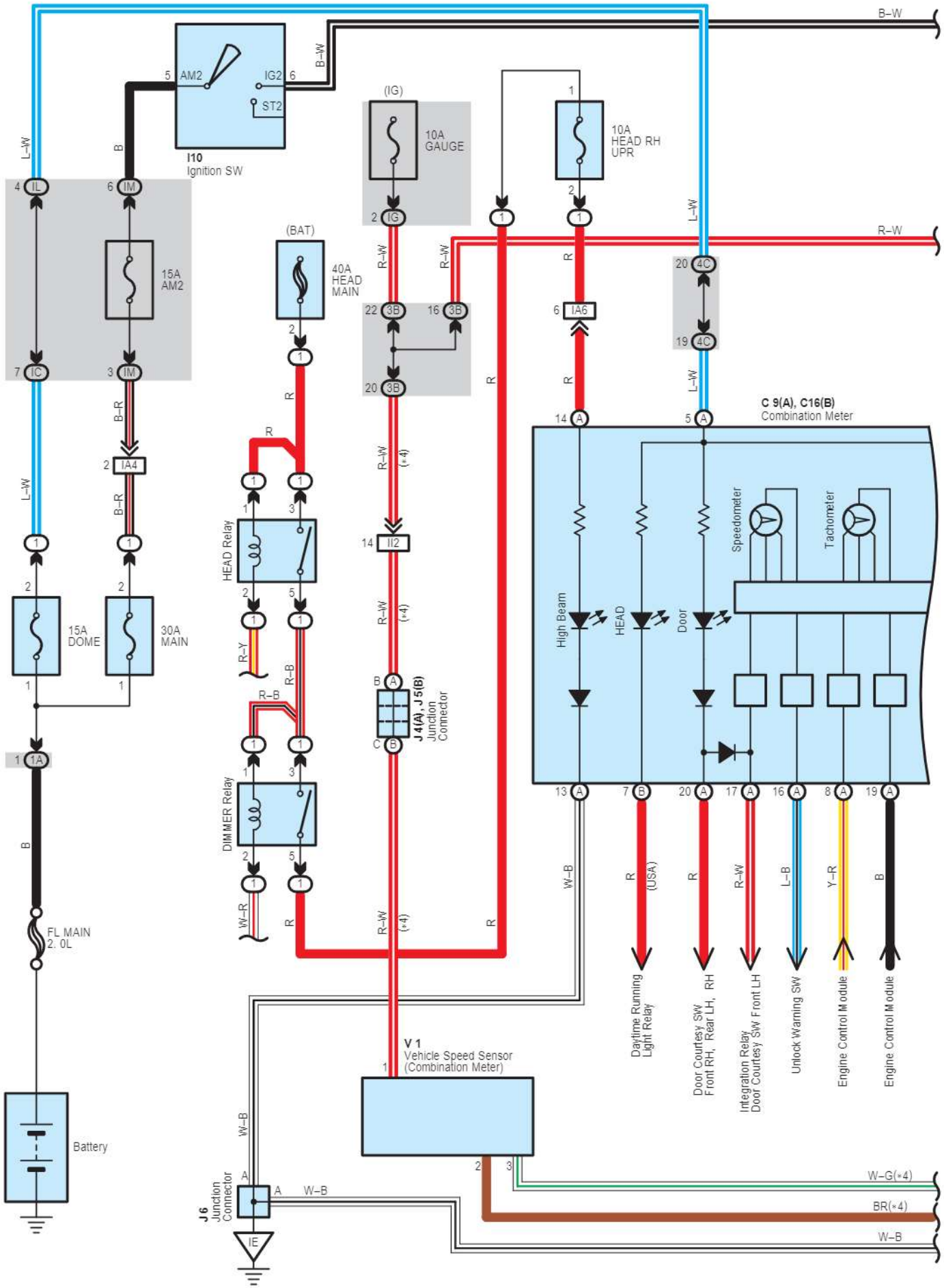
▭ : **Connector Joining Wire Harness and Wire Harness**

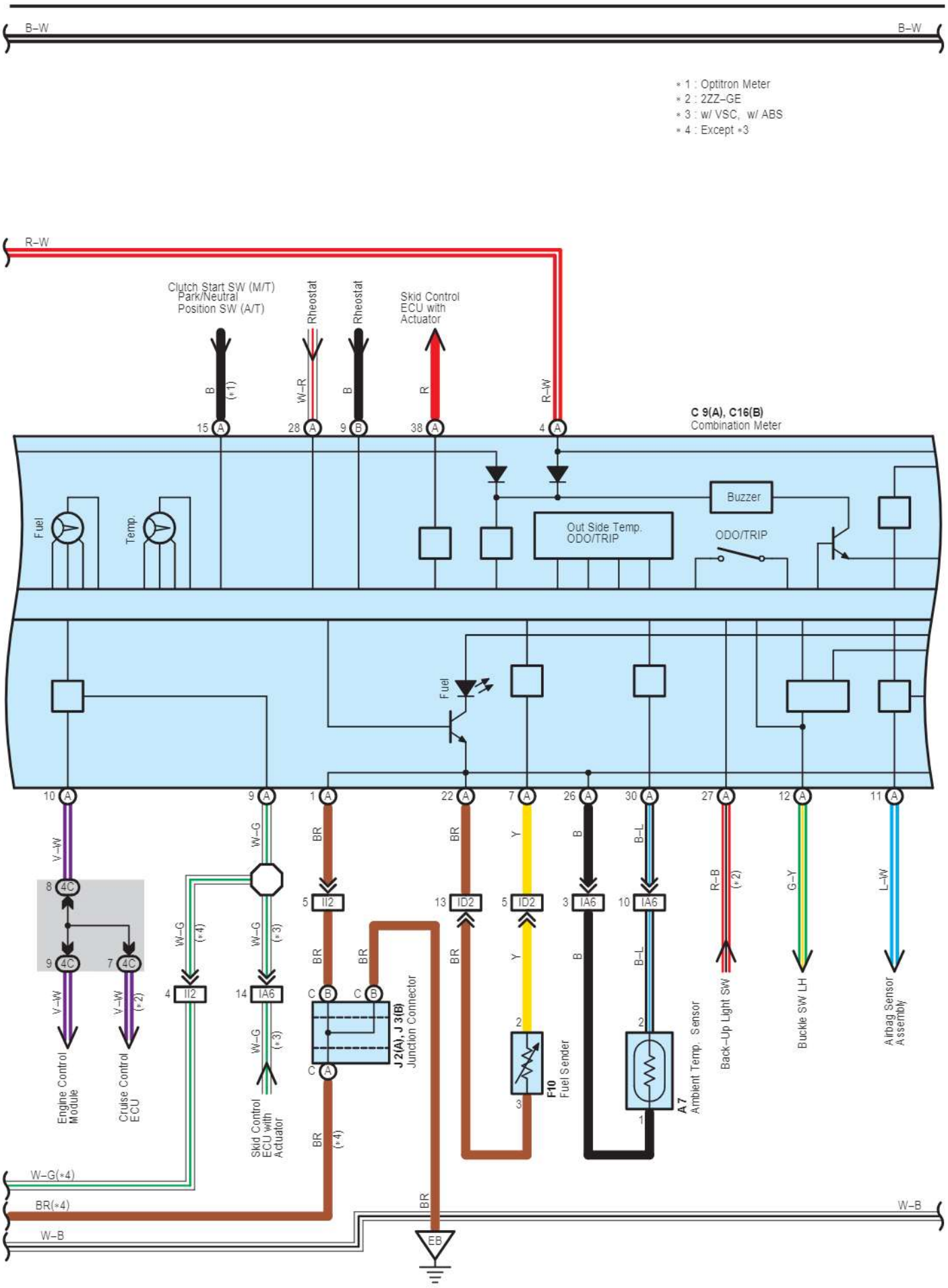
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IJ1	45	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BE1	46 (*1)	Speaker Tweeter LH Wire and Front Door LH Wire (Inside of the Front Door LH)
	47 (*2)	
BF1	46 (*1)	Speaker Tweeter RH Wire and Front Door RH Wire (Inside of the Front Door RH)
	47 (*2)	

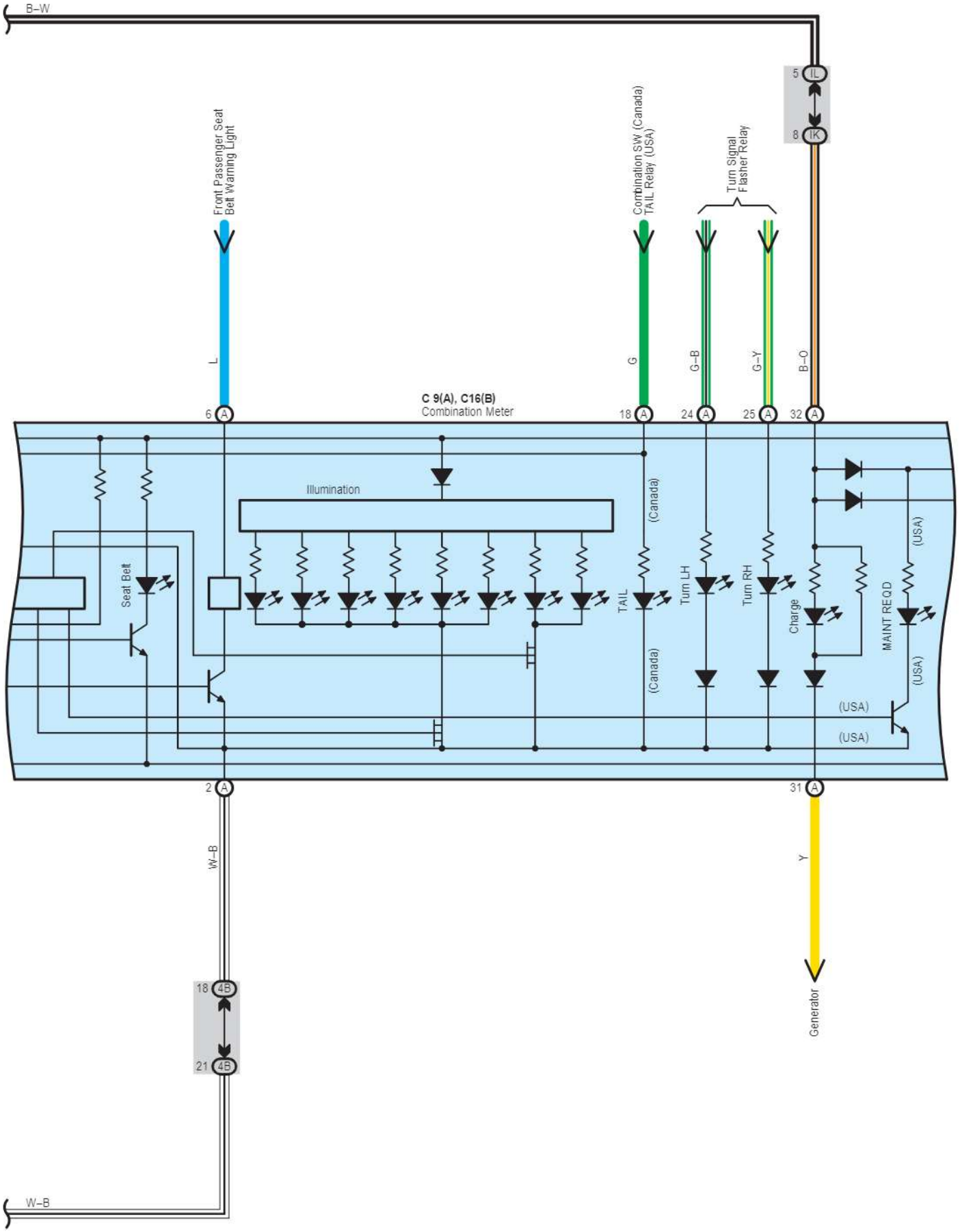
▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	44	Behind the Combination Meter

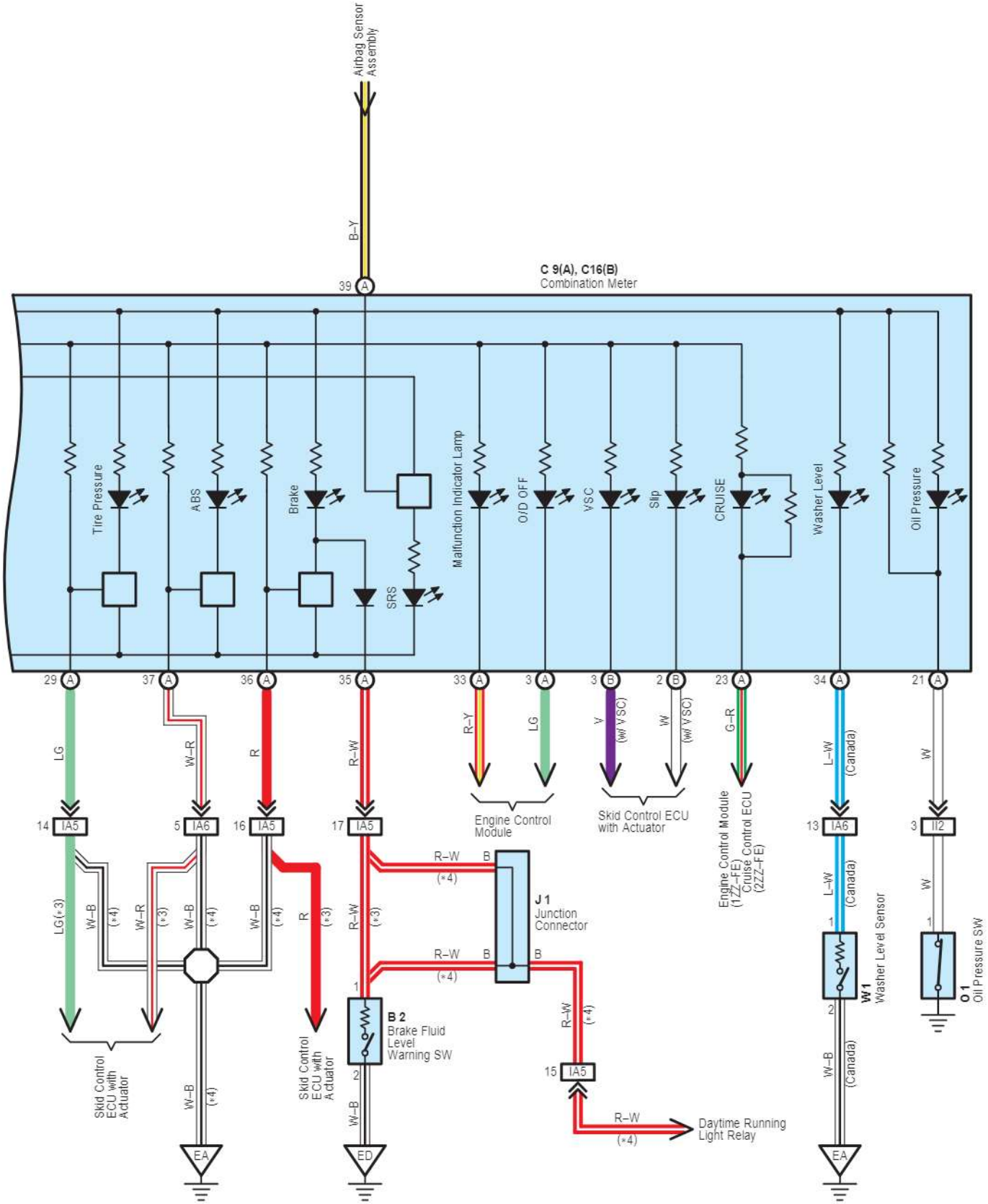
* 1 : w/ Side Airbag and/or Stereo Component Amplifier　　* 2 : w/o Side Airbag and Stereo Component Amplifier


B–W
I10
Ignition SW
AM2
IG2
ST2
(IG)
10A
GAUGE
10A
HEAD RH
UPR
(BAT)
40A
HEAD
MAIN
15A
AM2
15A
DOME
30A
MAIN
HEAD Relay
DIMMER Relay
J 4(A), J 5(B)
Junction
Connector
C 9(A), C16(B)
Combination Meter
Speedometer
Tachometer
High Beam
HEAD
Door
FL MAIN
2. 0L
Battery
V 1
Vehicle Speed Sensor
(Combination Meter)
J6
Junction
Connector
Daytime Running
Light Relay
Door Courtesy SW
Front RH, Rear LH, RH
Integration Relay
Door Courtesy SW Front LH
Unlock Warning SW
Engine Control Module
Engine Control Module
W–G(×4)
BR(×4)
W–B


B–W
B–W
* 1 : Optitron Meter
* 2 : 2ZZ–GE
* 3 : w/ VSC, w/ ABS
* 4 : Except *3
R–W
Clutch Start SW (M/T)
Park/Neutral
Position SW (A/T)
Rheostat
Rheostat
Skid Control
ECU with
Actuator
B
(*1)
W–R
B
R
R–W
15 A
28 A
9 B
38 A
4 A
C 9(A), C16(B)
Combination Meter
Fuel
Temp.
Buzzer
Out Side Temp.
ODO/TRIP
ODO/TRIP
Fuel
10 A
9 A
1 A
22 A
7 A
26 A
30 A
27 A
12 A
11 A
V–W
W–G
BR
BR
Y
B
B–L
R–B
(*2)
G–Y
L–W
8 4C
9 4C
7 4C
5 I12
13 ID2
5 ID2
3 IA6
10 IA6
W–G
(*4)
W–G
(*3)
4 I12
14 IA6
C B
C B
J 2(A), J 3(B)
Junction Connector
C A
2
3
F10
Fuel Sender
2
1
A7
Ambient Temp. Sensor
V–W
V–W
(*2)
W–G
(*3)
BR
(*4)
Engine Control
Module
Cruise Control
ECU
Skid Control
ECU with
Actuator
Back–Up Light SW
Buckle SW LH
Airbag Sensor
Assembly
W–G(*4)
BR(*4)
W–B
BR
W–B
EB


B–W
5 IL
8 IK
Front Passenger Seat Belt Warning Light
Combination SW (Canada) TAIL Relay (USA)
Turn Signal Flasher Relay
L
G
G–B
G–Y
B–O
C 9(A), C16(B)
Combination Meter
6 A
18 A
24 A
25 A
32 A
Illumination
Seat Belt
TAIL
(Canada)
Turn LH
Turn RH
Charge
MAINT REQD
(USA)
2 A
31 A
W–B
Y
18 4B
21 4B
Generator
W–B

∗ 3 : w/ VSC, w/ ABS
∗ 4 : Except ∗3



Combination Meter

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	32 (1ZZ–FE)	F10	40 (*2)	J5 B	37
	34 (2ZZ–GE)	I10	37	J6	37
B2	32 (1ZZ–FE)	J1	33 (1ZZ–FE)	O1	33 (1ZZ–FE)
	34 (2ZZ–GE)		35 (2ZZ–GE)		35 (2ZZ–GE)
C9 A	36	J2 A	37	V1	33 (1ZZ–FE)
C16 B	36	J3 B	37	W1	33 (1ZZ–FE)
F10	38 (*1)	J4 A	37		35 (2ZZ–GE)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IK	24	
IL		
IM		
1A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)
3B	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
4B	30	Instrument Panel Wire and Center J/B (Behind the Combination Meter)
4C		

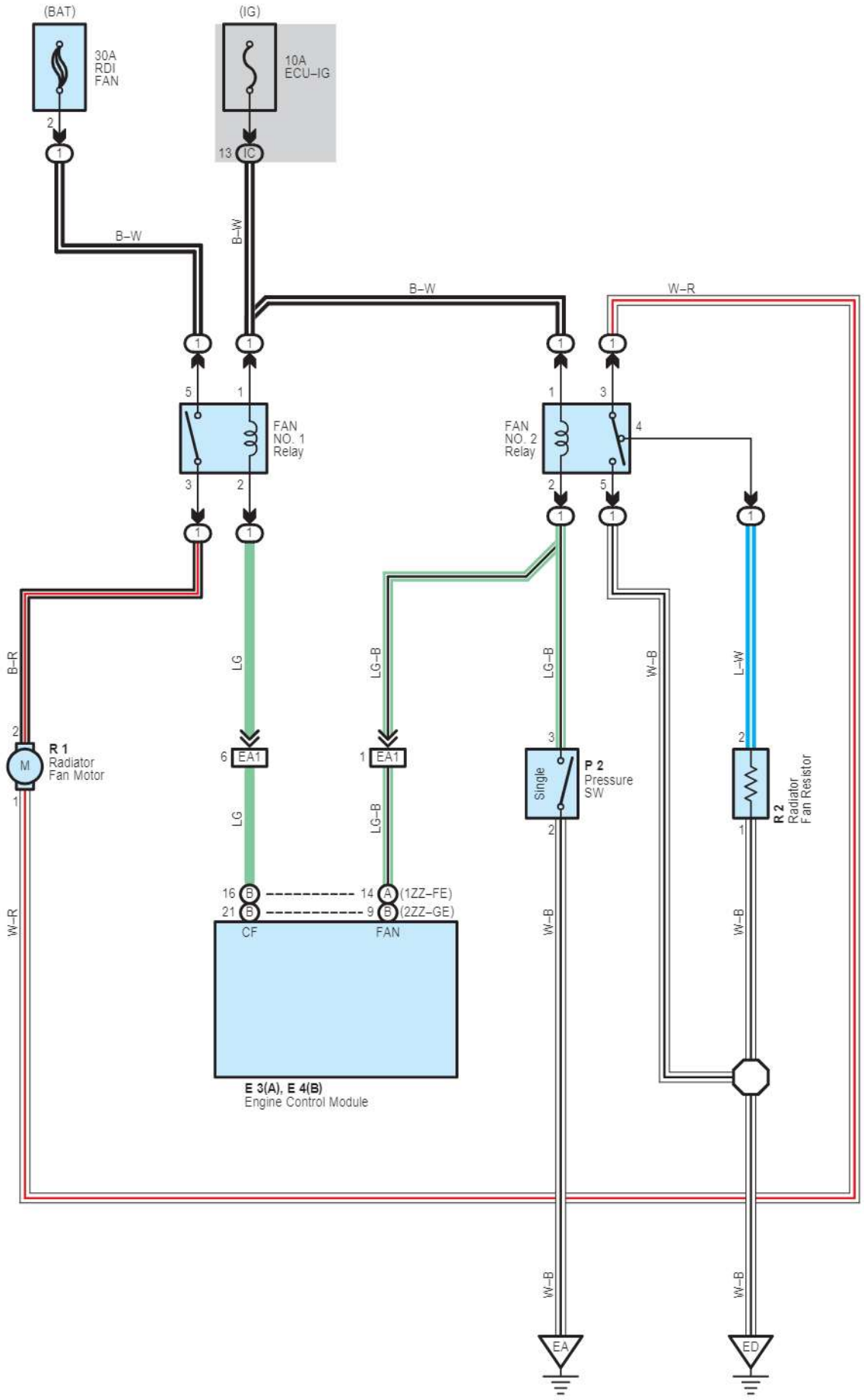
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
IA5		
IA6		
ID2	44	Instrument Panel Wire and Floor Wire (Left Kick Panel)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)

: Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
EB	42 (1ZZ–FE)	Left Side of the Cylinder Head
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	
IE	44	Behind the Combination Meter

* 1 : w/ Side Airbag and/or Stereo Component Amplifier * 2 : w/o Side Airbag and Stereo Component Amplifier


(BAT)
(IG)
30A
RDI
FAN
10A
ECU–IG
2
13
IC
B–W
B–W
B–W
W–R
5
1
FAN
NO. 1
Relay
1
3
FAN
NO. 2
Relay
4
3
2
2
5
B–R
LG
LG–B
LG–B
W–B
L–W
2
R 1
Radiator
Fan Motor
1
6
EA1
1
EA1
3
Single
P 2
Pressure
SW
2
2
R 2
Radiator
Fan Resistor
1
LG
LG–B
W–R
16
B
14
A
(1ZZ–FE)
21
B
9
B
(2ZZ–GE)
CF
FAN
W–B
W–B
W–B
W–B
E 3(A), E 4(B)
Engine Control Module
EA
ED

System Outline

The current is applied at all times through the RDI FAN fuse to TERMINAL 5 of the FAN NO.1 relay.
When the ignition SW is turned on, the current flows through the ECU–IG fuse to FAN NO.1 relay (Coil side) to TERMINAL CF of the engine control module. At the same time as this current flow, the current from ECU–IG fuse flows to the FAN NO.2 relay (Coil side) to TERMINAL 3 of the pressure SW.

1. Low Speed Operation

When the A/C system is operating, the FAN NO.1 relay is turned on. As a result, the current flows from the RDI FAN fuse to FAN NO.1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 4 to TERMINAL 2 of the radiator fan resistor to TERMINAL 1 to GROUND, and the radiator fan motor rotates at low speed.

2. High Speed Operation

When the pressure SW is on or engine control module operated, the FAN NO.1 and NO.2 relay is turned on. As a result, the current flows from the RDI FAN fuse to FAN NO.1 relay (Point side) to radiator fan motor to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND, and the radiator fan motor rotates at high speed.

: Parts Location

Code		See Page	Code	See Page	Code	See Page
E3	A	36	P2	35 (2ZZ–GE)	R2	33 (1ZZ–FE)
E4	B	36	R1	33 (1ZZ–FE)		35 (2ZZ–GE)
P2		33 (1ZZ–FE)		35 (2ZZ–GE)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

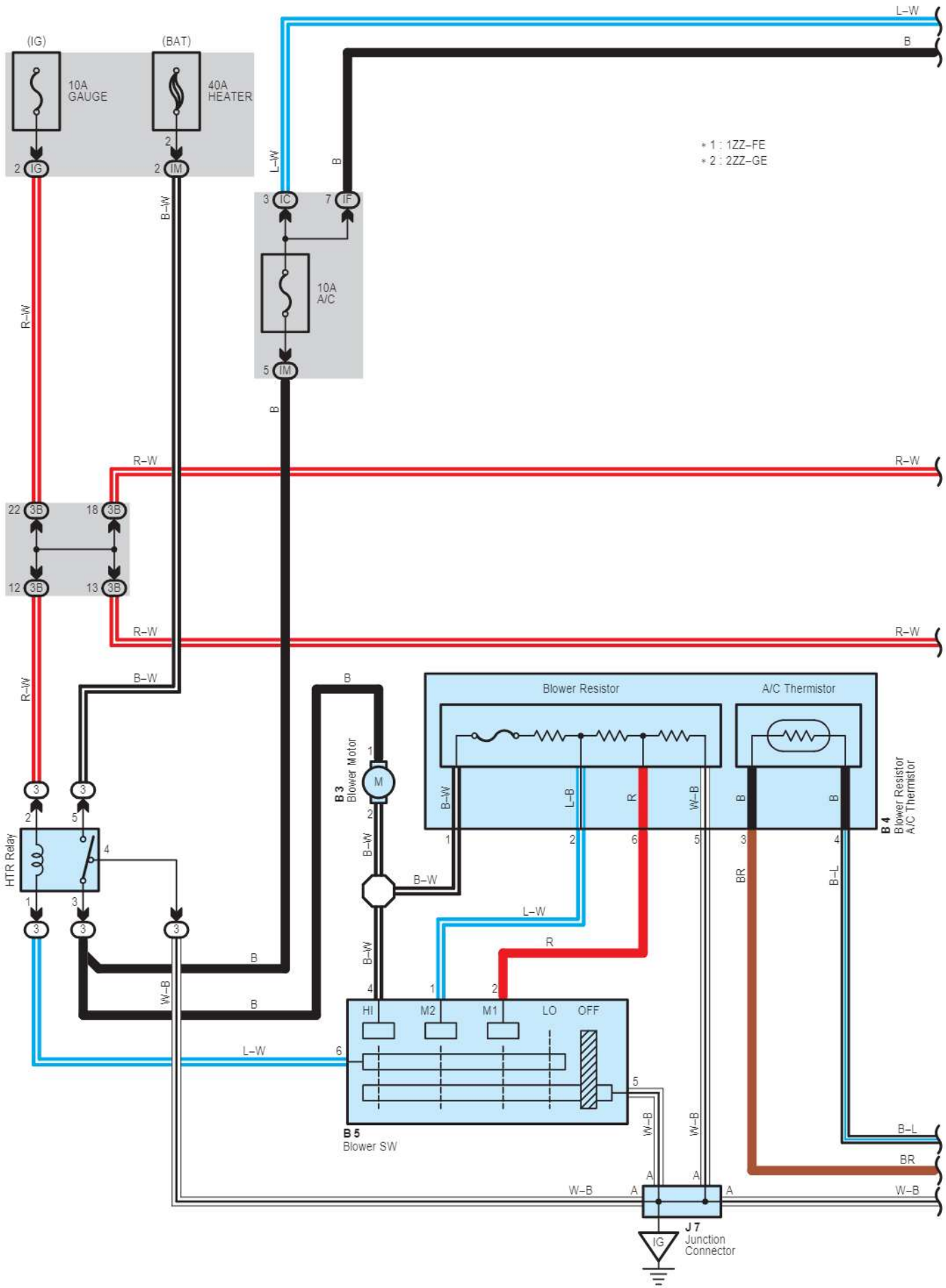
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)

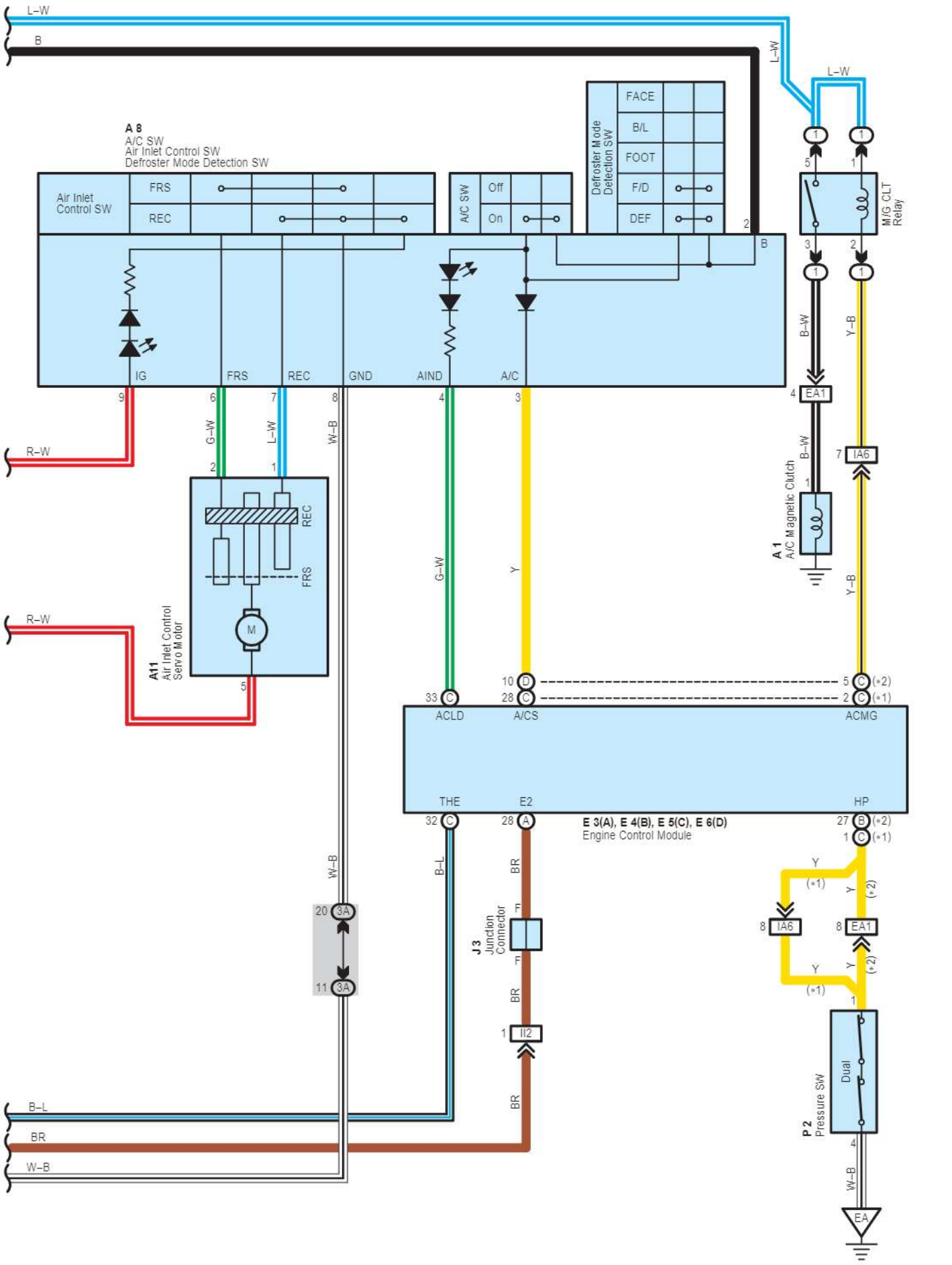
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	

: Ground Points

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
ED	42 (1ZZ–FE)	Front Left Suspension Tower
	43 (2ZZ–GE)	


(IG)
(BAT)
10A
GAUGE
40A
HEATER
2 IG
2 IM
2
L–W
B
* 1 : 1ZZ–FE
* 2 : 2ZZ–GE
3 IC
7 IF
10A
A/C
5 IM
B–W
R–W
22 3B
18 3B
12 3B
13 3B
HTR Relay
B3
Blower Motor
M
Blower Resistor
A/C Thermistor
B4
Blower Resistor
A/C Thermistor
B–W
L–B
R
W–B
B
BR
B–L
HI
M2
M1
LO
OFF
B5
Blower SW
W–B
A
J7
Junction
Connector
IG


L–W
B
A 8
A/C SW
Air Inlet Control SW
Defroster Mode Detection SW
Air Inlet Control SW
FRS
REC
A/C SW
Off
On
Defroster Mode Detection SW
FACE
B/L
FOOT
F/D
DEF
M/G CLT Relay
IG
FRS
REC
GND
AIND
A/C
R–W
G–W
L–W
W–B
Y
Y–B
B–W
EA1
IA6
A 1
A/C Magnetic Clutch
A11
Air Inlet Control Servo Motor
M
ACLD
A/CS
ACMG
THE
E2
HP
E 3(A), E 4(B), E 5(C), E 6(D)
Engine Control Module
B–L
BR
J3
Junction Connector
II2
3A
P 2
Pressure SW
Dual
EA

System Outline

Current is applied at all times through the HEATER fuse to TERMINAL 5 of the HTR relay.
When the ignition SW is turned on, the current flows through the GAUGE fuse to TERMINAL 2 of the HTR relay to TERMINAL 1 to TERMINAL 6 of the blower SW.

1. Heater Blower Motor Operation

* Low speed operation
When the blower SW is moved to LO position, the current flows to TERMINAL 6 of the blower SW to TERMINAL 5 to GROUND, causing the HTR relay to turn on. This causes the current flows from the HEATER fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to the blower motor to the blower resistor 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 flows to TERMINAL 6 of the blower SW to TERMINAL 5 to GROUND, causing the HTR relay to turn on. This causes the current flows from the HEATER fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to the blower motor to the blower resistor to TERMINAL 2 of the blower SW to TERMINAL 5 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 flows through the HTR relay to the blower motor to the blower resistor to TERMINAL 1 of the blower SW to TERMINAL 5 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 6 of the blower SW to TERMINAL 5 to GROUND, causing the HTR relay to turn on.
This causes the current flows from the HEATER fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to the blower motor to TERMINAL 4 of the blower SW to TERMINAL 5 to GROUND, rotating the blower motor at high speed.

2. Air Conditioning Operation

When the blower SW is set on, the current flows from the HEATER fuse to the HTR relay (Point side) to the A/C fuse to the TERMINAL 2 of the A/C SW. If the A/C SW is turned on, at this time a signal is input into the engine control module. This activates the engine control module and M/G CLT relay. So that current flows from the A/C fuse to M/G CLT relay (Point side) to A/C magnetic clutch. Causing the compressor to operate.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	32 (1ZZ–FE)	B4	36	E6 D	36
	34 (2ZZ–GE)	B5	36	J3	37
A8	36	E3 A	36	J7	37
A11	36	E4 B	36	P2	33 (1ZZ–FE)
B3	36	E5 C	36		35 (2ZZ–GE)

▭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

▭ : Junction Block and Wire Harness Connector

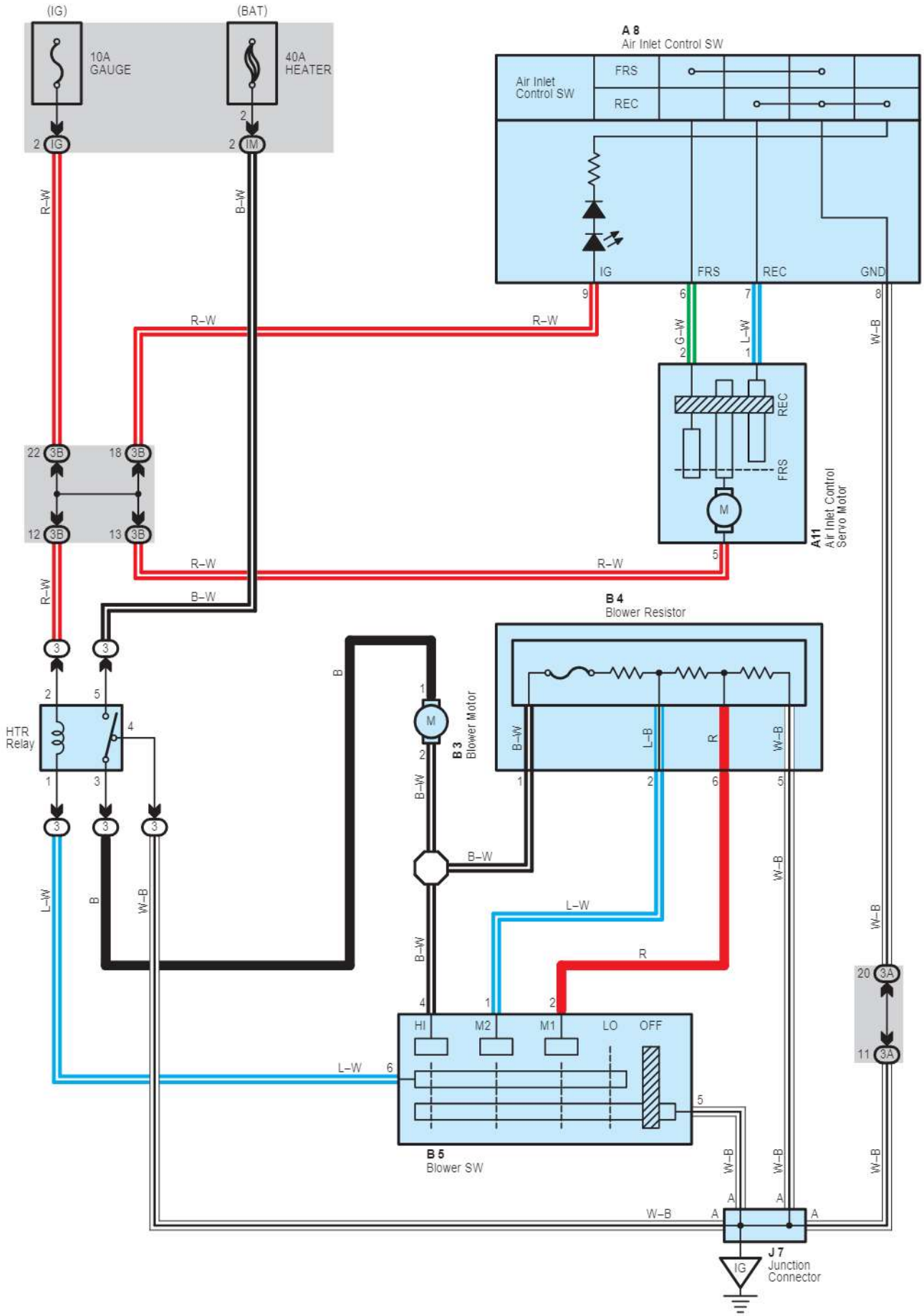
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	25	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
IF	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IG		
IM	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42 (1ZZ–FE)	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
	43 (2ZZ–GE)	
IA6	44	Engine Room Main Wire and Instrument Panel Wire (Left Side of the Instrument Panel Reinforcement)
II2	45	Engine Wire and Instrument Panel Wire (Blower Unit RH)

: **Ground Points**

Code	See Page	Ground Points Location
EA	42 (1ZZ–FE)	Front Right Fender
	43 (2ZZ–GE)	
IG	44	Right Kick Panel


(IG)
(BAT)
10A
GAUGE
40A
HEATER
2 IG
2 IM
A 8
Air Inlet Control SW
Air Inlet
Control SW
FRS
REC
IG
FRS
REC
GND
9
6
7
8
R–W
B–W
G–W
L–W
W–B
22 3B
18 3B
12 3B
13 3B
A11
Air Inlet Control
Servo Motor
M
5
B 4
Blower Resistor
B–W
L–B
R
W–B
HTR
Relay
B 3
Blower Motor
B
L–W
B
W–B
R
20 3A
11 3A
HI
M2
M1
LO
OFF
B 5
Blower SW
A
J 7
Junction
Connector

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A8	36	B3	36	B5	36
A11	36	B4	36	J7	37

▭ : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
3	28	RH R/B (Right Side of the Instrument Panel Reinforcement)

▭ : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
IM	24	
3A	28	Instrument Panel Wire and RH J/B (Right Side of the Instrument Panel Reinforcement)
3B		

▽ : **Ground Points**

Code	See Page	Ground Points Location
IG	44	Right Kick Panel