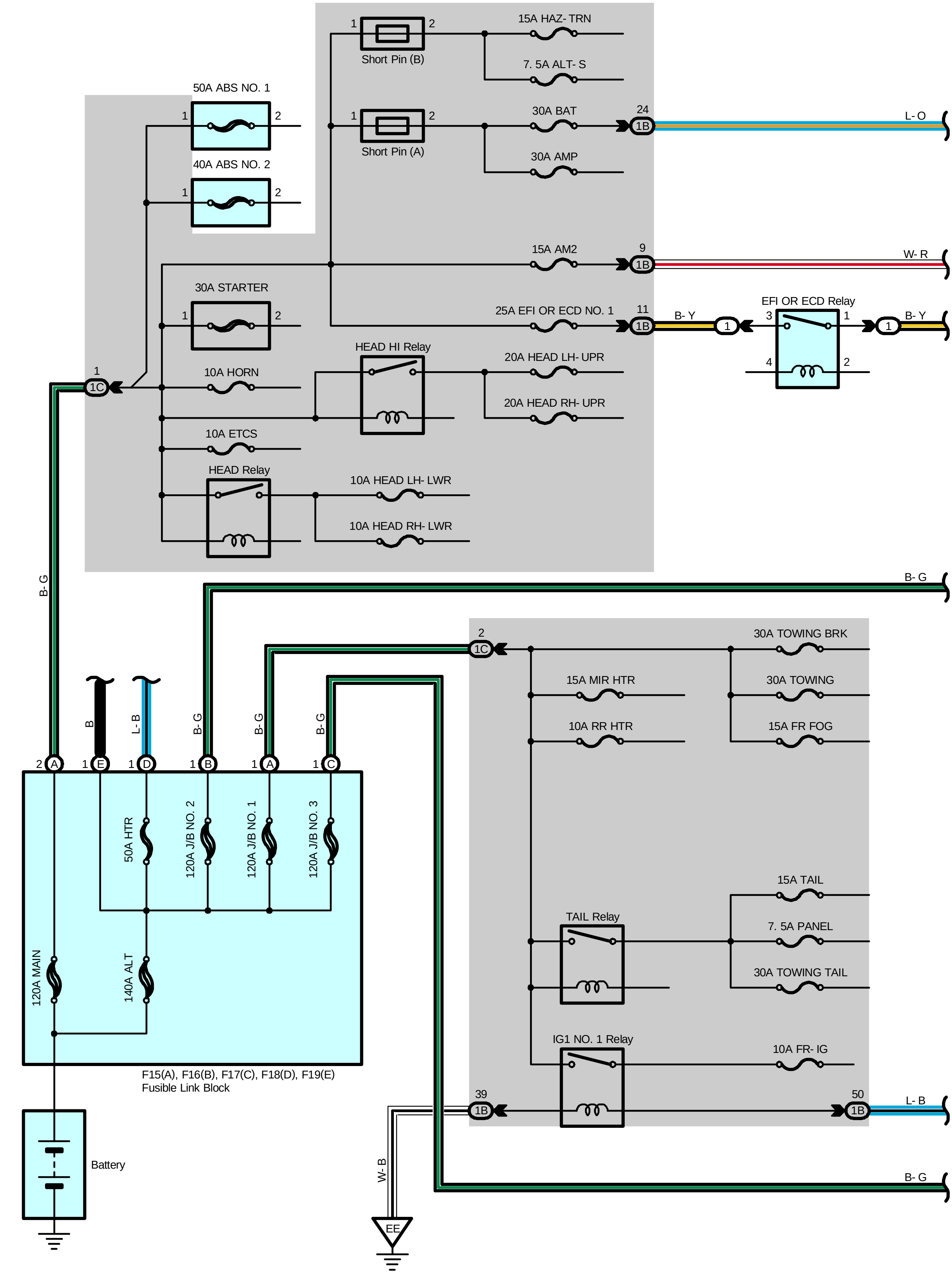
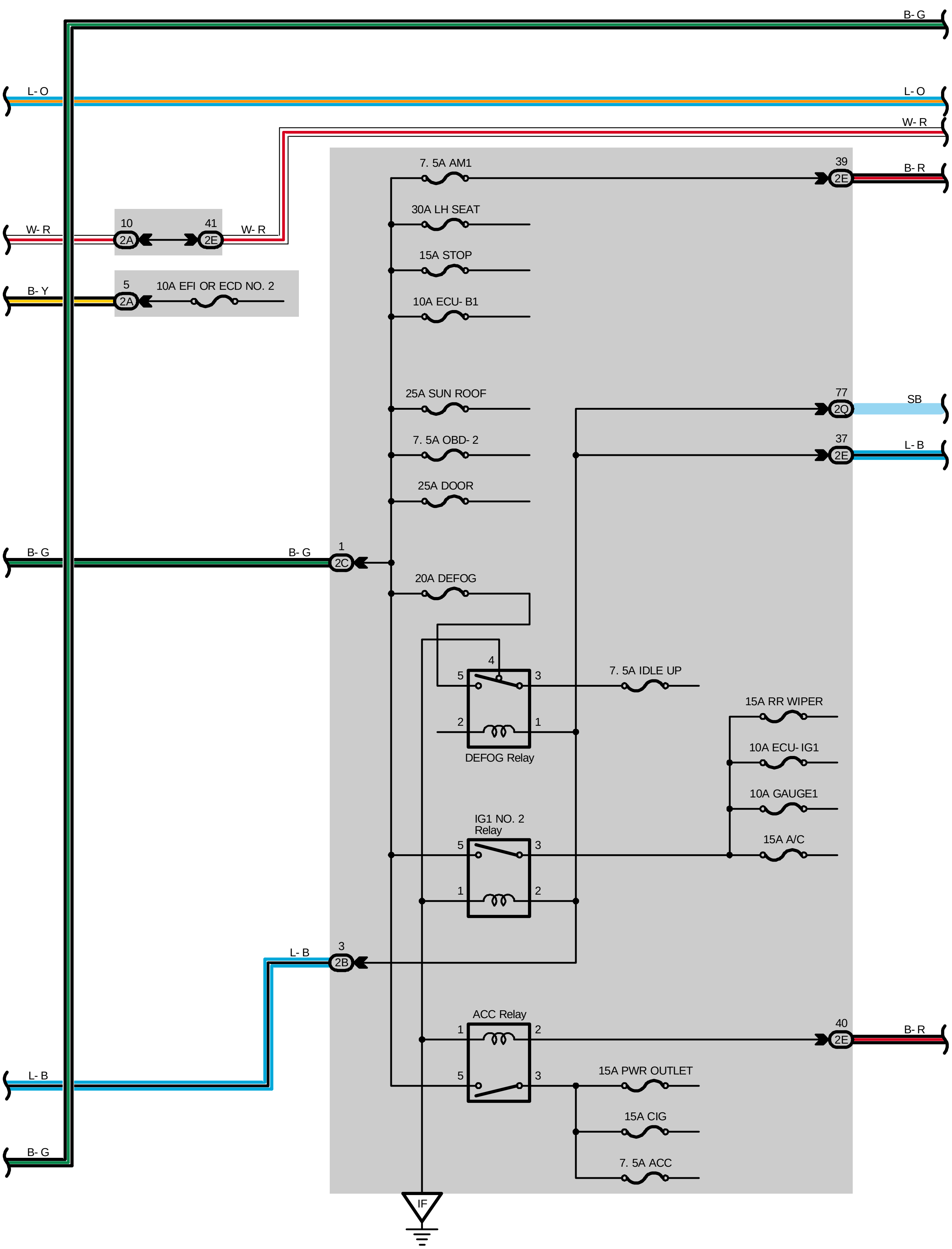
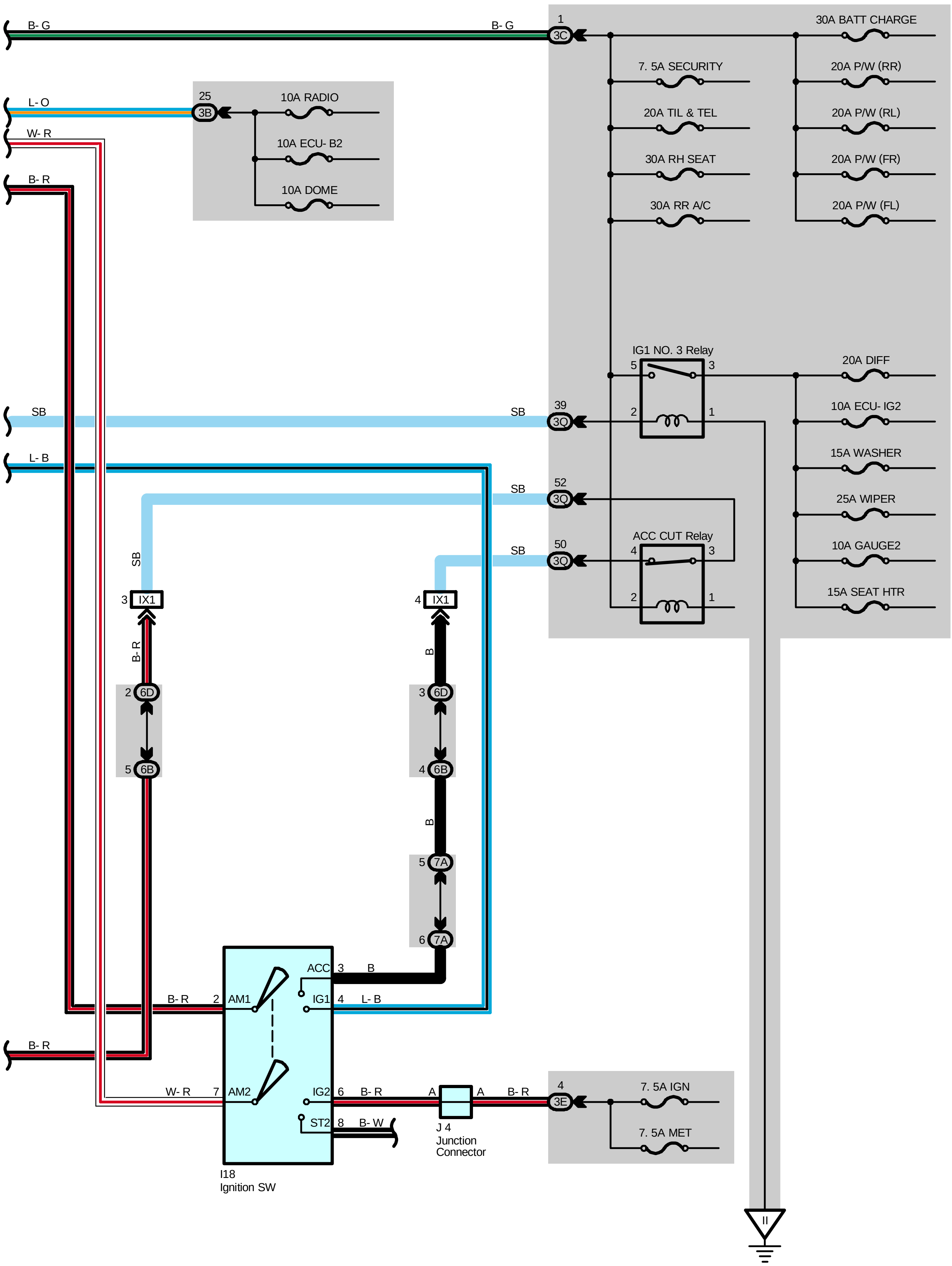

15A HAZ- TRN
7. 5A ALT- S
Short Pin (B)
30A BAT
30A AMP
Short Pin (A)
50A ABS NO. 1
40A ABS NO. 2
15A AM2
30A STARTER
25A EFI OR ECD NO. 1
EFI OR ECD Relay
HEAD HI Relay
10A HORN
20A HEAD LH- UPR
20A HEAD RH- UPR
10A ETCS
HEAD Relay
10A HEAD LH- LWR
10A HEAD RH- LWR
L- O
W- R
B- Y
B- G
30A TOWING BRK
15A MIR HTR
30A TOWING
10A RR HTR
15A FR FOG
15A TAIL
TAIL Relay
7. 5A PANEL
30A TOWING TAIL
IG1 NO. 1 Relay
10A FR- IG
L- B
W- B
EE
B
50A HTR
120A J/B NO. 2
120A J/B NO. 1
120A J/B NO. 3
120A MAIN
140A ALT
F15(A), F16(B), F17(C), F18(D), F19(E)
Fusible Link Block
Battery


B- G
L- O
L- O
W- R
7. 5A AM1
39
2E
B- R
30A LH SEAT
W- R
10
2A
41
2E
W- R
15A STOP
B- Y
5
2A
10A EFI OR ECD NO. 2
10A ECU- B1
25A SUN ROOF
77
2Q
SB
7. 5A OBD- 2
37
2E
L- B
25A DOOR
B- G
B- G
1
2C
20A DEFOG
4
5
3
7. 5A IDLE UP
2
1
15A RR WIPER
DEFOG Relay
10A ECU- IG1
10A GAUGE1
IG1 NO. 2
Relay
15A A/C
5
3
1
2
L- B
3
2B
ACC Relay
1
2
40
2E
B- R
L- B
5
3
15A PWR OUTLET
15A CIG
B- G
7. 5A ACC
IF


B-G
B-G
1
3C
30A BATT CHARGE
7. 5A SECURITY
20A P/W (RR)
L-O
25
3B
10A RADIO
W-R
10A ECU-B2
20A TIL & TEL
20A P/W (RL)
B-R
10A DOME
30A RH SEAT
20A P/W (FR)
30A RR A/C
20A P/W (FL)
IG1 NO. 3 Relay
20A DIFF
SB
SB
39
3Q
10A ECU-IG2
L-B
15A WASHER
SB
52
3Q
25A WIPER
ACC CUT Relay
SB
50
3Q
10A GAUGE2
15A SEAT HTR
IX1
IX1
6D
6D
6B
6B
7A
7A
B-R
B
ACC
IG1
AM1
L-B
B-R
AM2
IG2
ST2
W-R
B-W
A
J 4
Junction
Connector
4
3E
7. 5A IGN
7. 5A MET
I18
Ignition SW
II

Service Hints

I18 Ignition SW

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

○ : **Parts Location**

Code		See Page	Code		See Page	Code	See Page
F15	A	68	F18	D	68	J4	71
F16	B	68	F19	E	68		
F17	C	68	I18		70		

: **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**

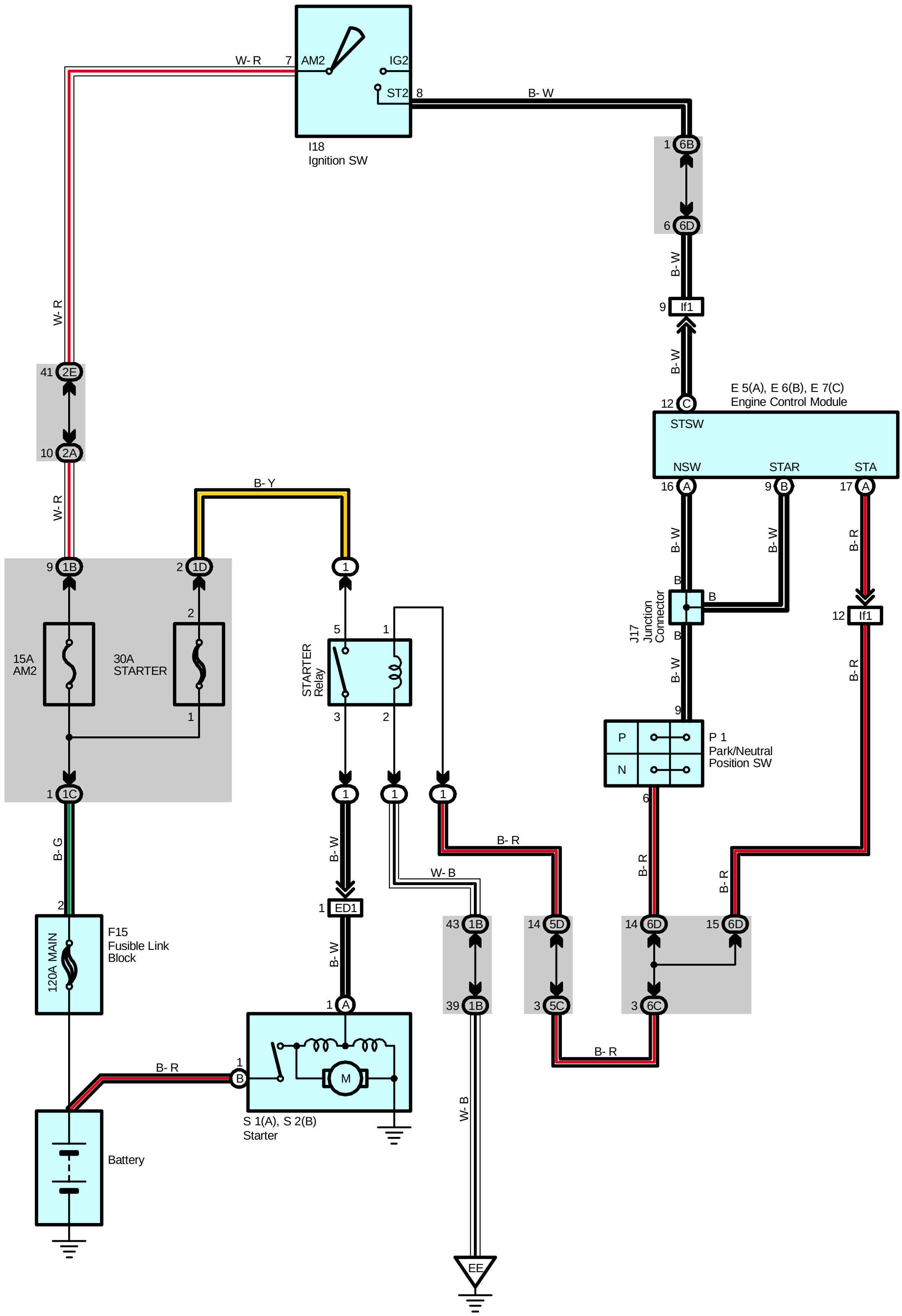
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2B		
2C		
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3C		
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
6B	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7A	64	Dash Wire and J/B No.7 (Behind the Glove Box)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)

▽ : **Ground Points**

Code	See Page	Ground Points Location
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH


W- R
7
AM2
IG2
ST2
8
B- W
I18
Ignition SW
1
6B
6
6D
B- W
9
If1
B- W
12
C
E 5(A), E 6(B), E 7(C)
Engine Control Module
STSW
NSW
STAR
STA
16
A
9
B
17
A
B- W
B- W
B- R
B
B
B
J17
Junction
Connector
12
If1
B- W
B- R
9
P
N
P 1
Park/Neutral
Position SW
6
41
2E
10
2A
W- R
W- R
B- Y
9
1B
2
1D
1
2
15A
AM2
30A
STARTER
1
1
1C
5
1
STARTER
Relay
3
2
1
1
1
B- G
B- W
B- R
W- B
B- R
B- R
1
ED1
43
1B
39
1B
14
5D
3
5C
14
6D
15
6D
3
6C
B- R
2
F15
Fusible Link
Block
120A MAIN
B- W
1
A
M
1
B
B- R
S 1(A), S 2(B)
Starter
Battery
W- B
EE

Service Hints

I18 Ignition SW

7-8 : Closed with ignition SW at ST position

P1 Park/Neutral Position SW

6-9 : Closed with A/T shift lever in P or N position

S1 (A), S2 (B) Starter

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

○ : **Parts Location**

Code		See Page	Code	See Page	Code		See Page
E5	A	70	F15	68	P1		69
E6	B	70	I18	70	S1	A	69
E7	C	70	J17	71	S2	B	69

: **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**

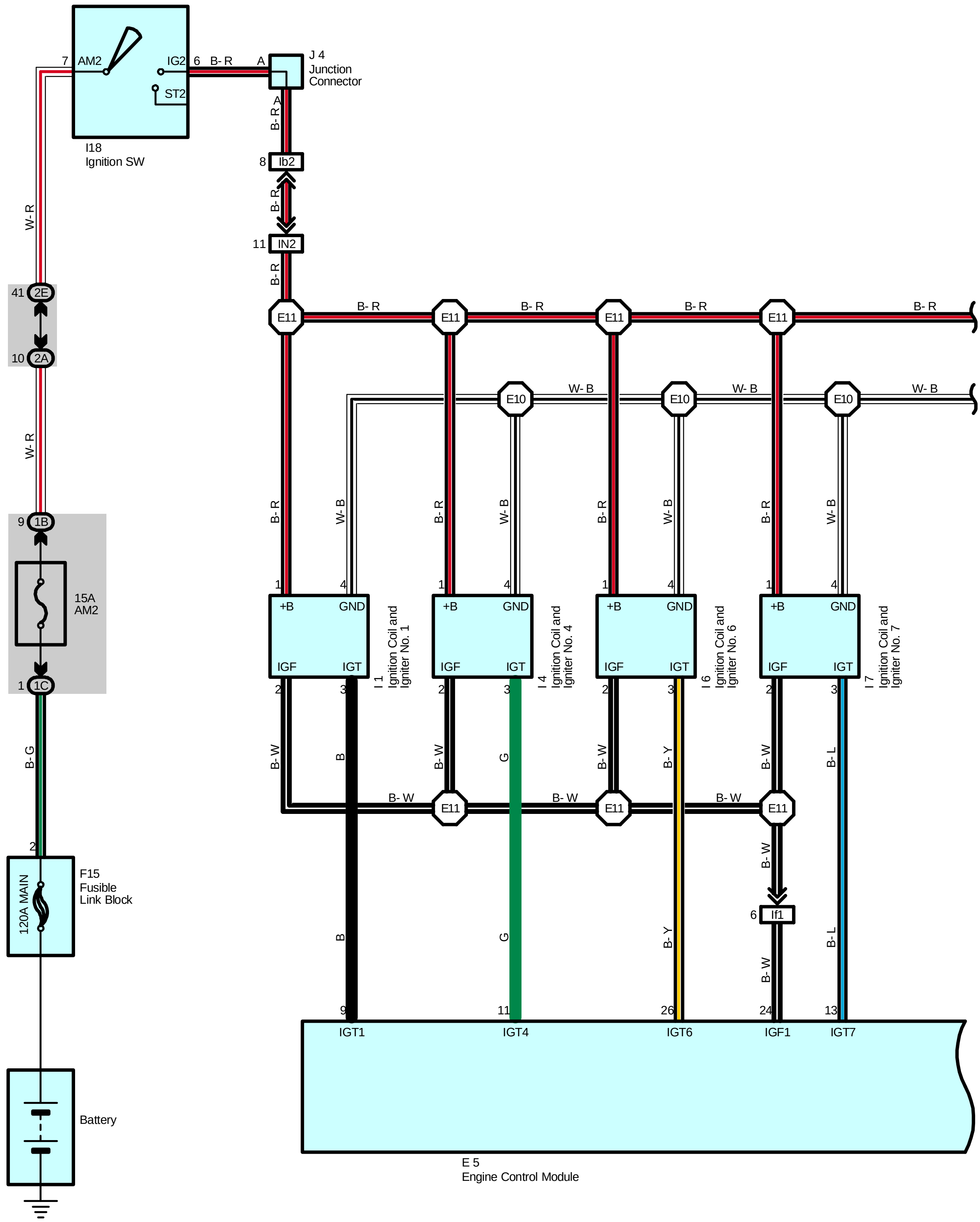
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
1D		
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
5C	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6B	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6C		
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)

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

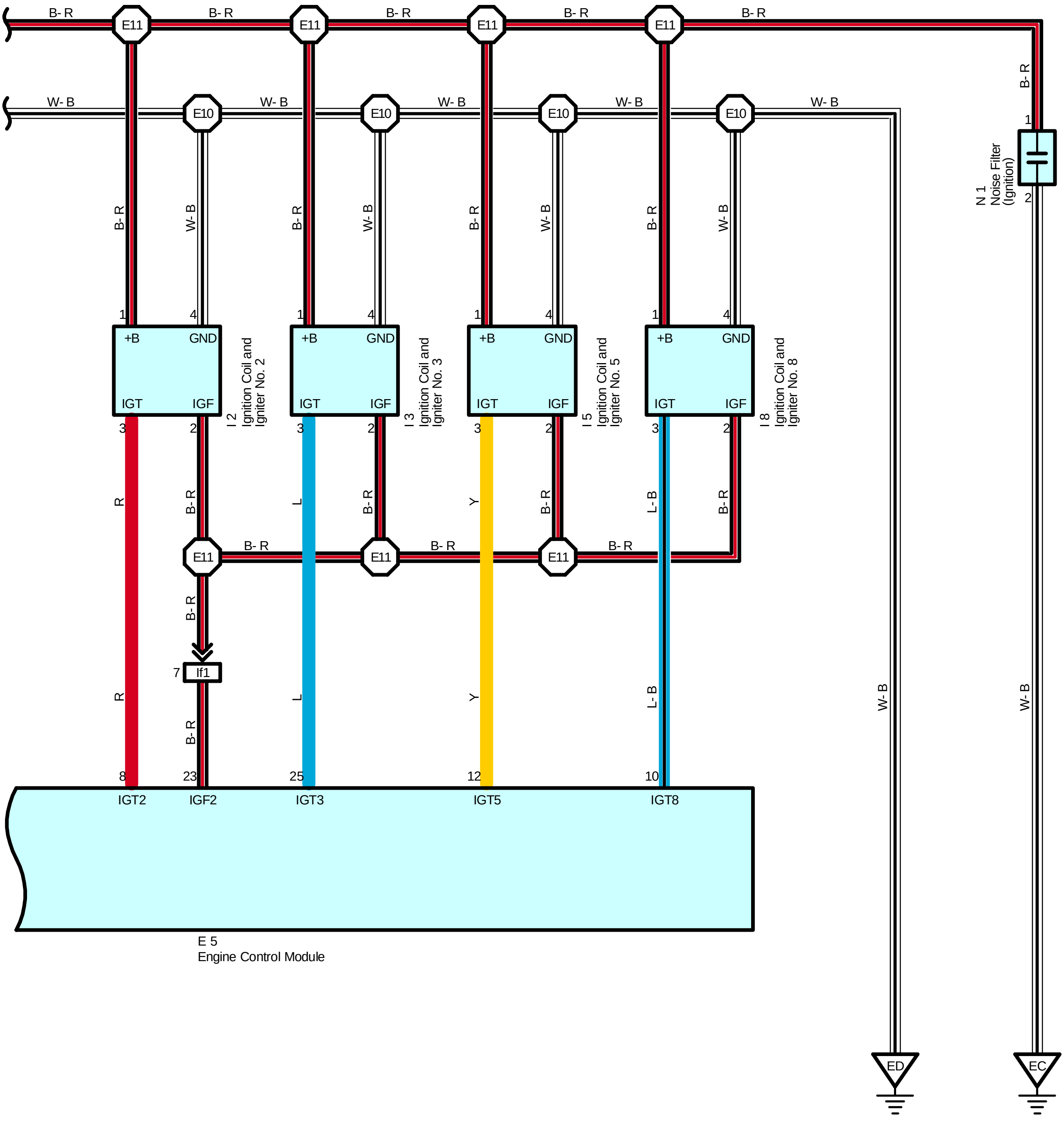
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ED1	76	Engine No.2 Wire and Engine Room No.2 Wire (Near the Engine Room J/B)
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)

▽ : **Ground Points**

Code	See Page	Ground Points Location
EE	76	Front Left Side of Fender Apron



AM2
IG2
ST2
B- R
J 4
Junction
Connector
I18
Ignition SW
W- R
Ib2
IN2
2E
2A
1B
15A
AM2
1C
B- G
F15
Fusible
Link Block
120A MAIN
Battery
E11
E10
W- B
+B
GND
IGF
IGT
I 1
Ignition Coil and
Igniter No. 1
I 4
Ignition Coil and
Igniter No. 4
I 6
Ignition Coil and
Igniter No. 6
I 7
Ignition Coil and
Igniter No. 7
B- W
B
G
B- Y
B- L
If1
IGT1
IGT4
IGT6
IGF1
IGT7
E 5
Engine Control Module


B- R
E11
W- B
E10
+B
GND
IGT
IGF
I 2
Ignition Coil and
Igniter No. 2
I 3
Ignition Coil and
Igniter No. 3
I 5
Ignition Coil and
Igniter No. 5
I 8
Ignition Coil and
Igniter No. 8
N 1
Noise Filter
(Ignition)
R
L
Y
L- B
If1
IGT2
IGF2
IGT3
IGT5
IGT8
E 5
Engine Control Module
ED
EC

Ignition

Service Hints

I18 Ignition SW

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
E5	70	I4	69	I18	70
F15	68	I5	69	J4	71
I1	69	I6	69	N1	69
I2	69	I7	69		
I3	69	I8	69		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)

: Connector Joining Wire Harness and Wire Harness

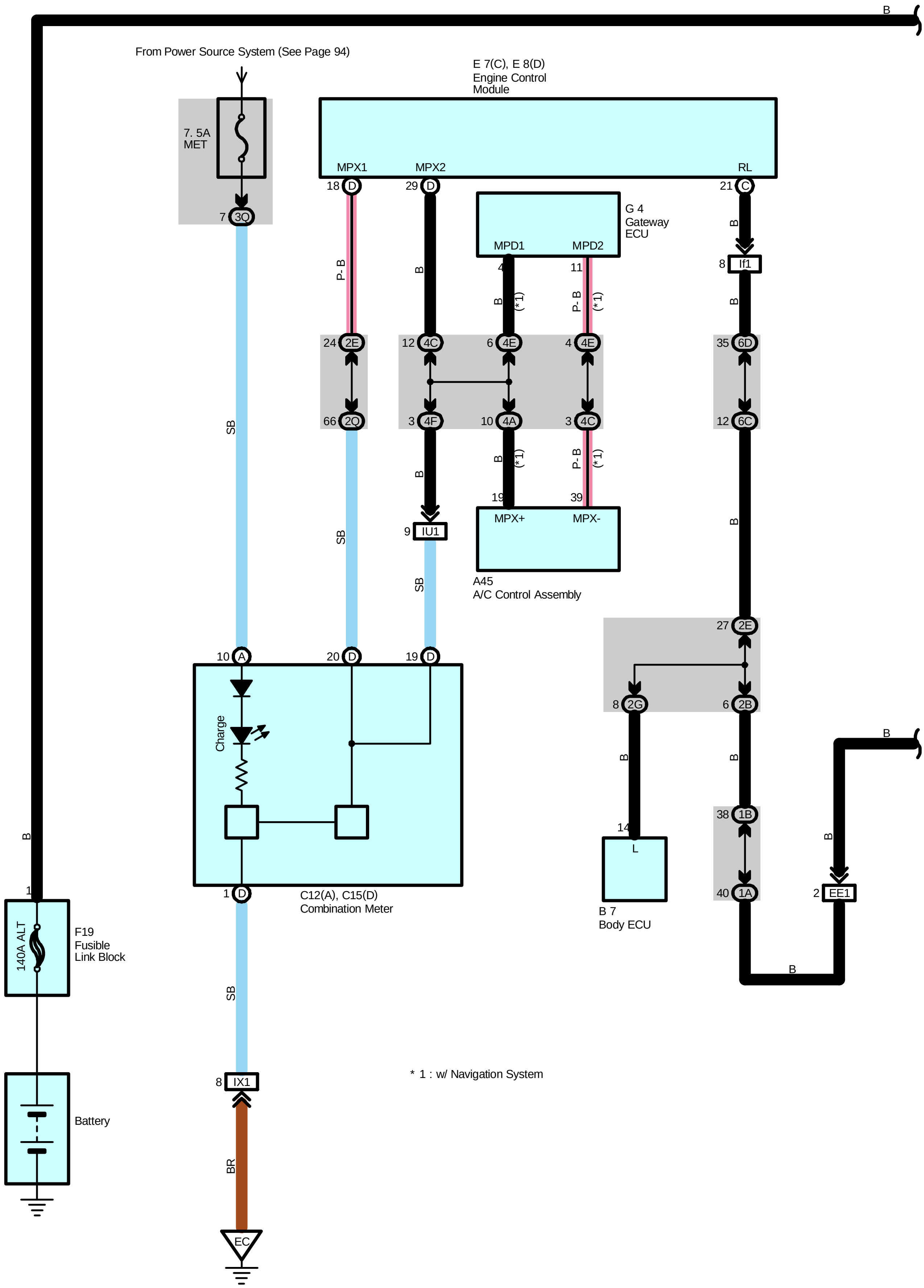
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)

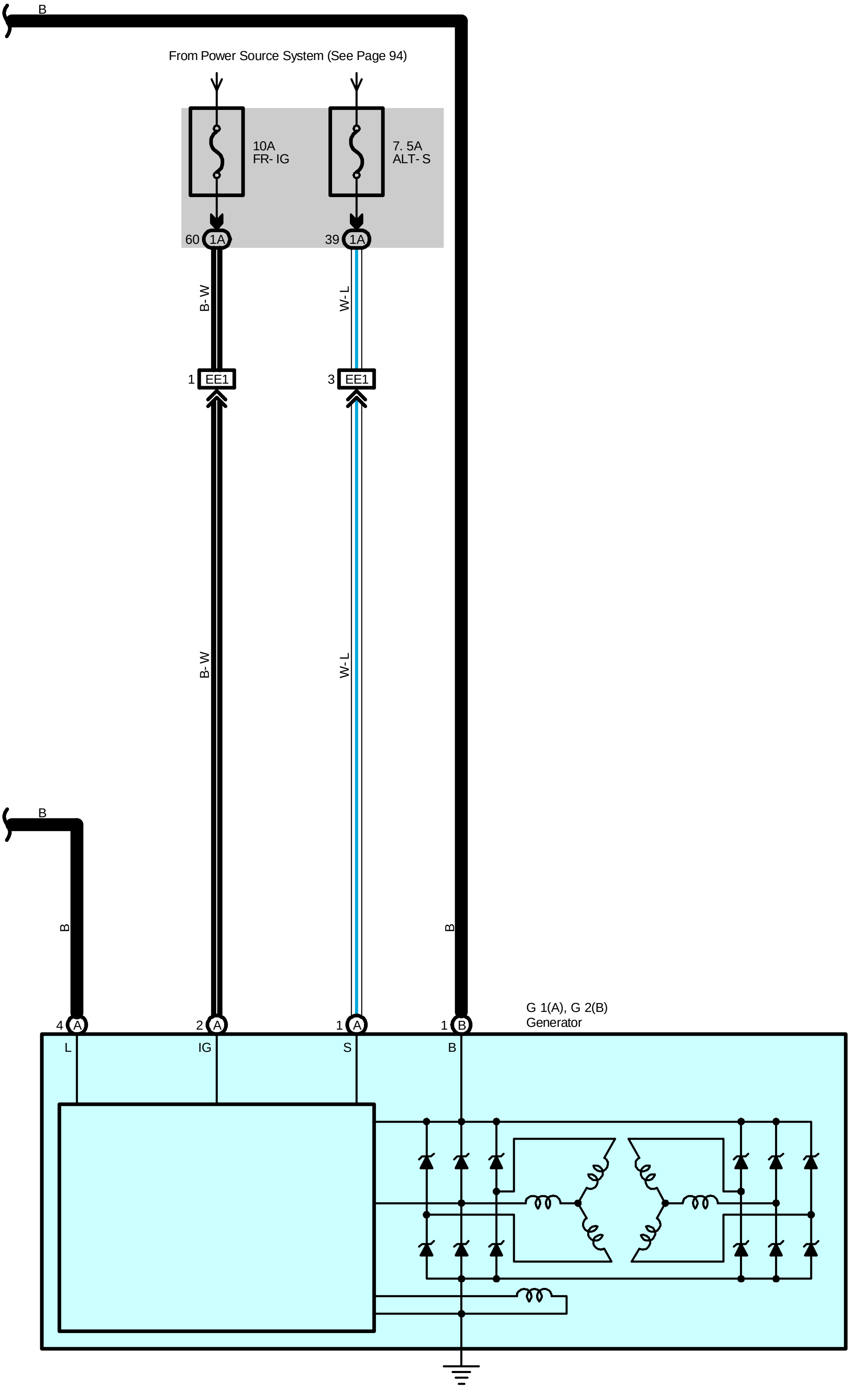
: Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
ED	76	Rear Bank of Left Cylinder Head

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E10	76	Engine Wire	E11	76	Engine Wire


From Power Source System (See Page 94)
7. 5A
MET
E 7(C), E 8(D)
Engine Control
Module
MPX1
MPX2
RL
G 4
Gateway
ECU
MPD1
MPD2
MPX+
MPX-
A45
A/C Control Assembly
Charge
C12(A), C15(D)
Combination Meter
140A ALT
F19
Fusible
Link Block
Battery
B 7
Body ECU
EC
IX1
IU1
If1
EE1
* 1 : w/ Navigation System


B
From Power Source System (See Page 94)
10A
FR- IG
7. 5A
ALT- S
60
1A
39
1A
B- W
W- L
1
EE1
3
EE1
B- W
W- L
B
B
B
G 1(A), G 2(B)
Generator
4
A
2
A
1
A
1
B
L
IG
S
B

Charging

Service Hints

G2 Generator

1-Ground : 13.2-14.0 volts with engine running at 5000 rpm and 115˚C (239˚F)

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A45		70	E7	C	70	G2	B	68
B7		70	E8	D	70	G4		70
C12	A	70	F19		68			
C15	D	70	G1	A	68			

: Junction Block and Wire Harness Connector

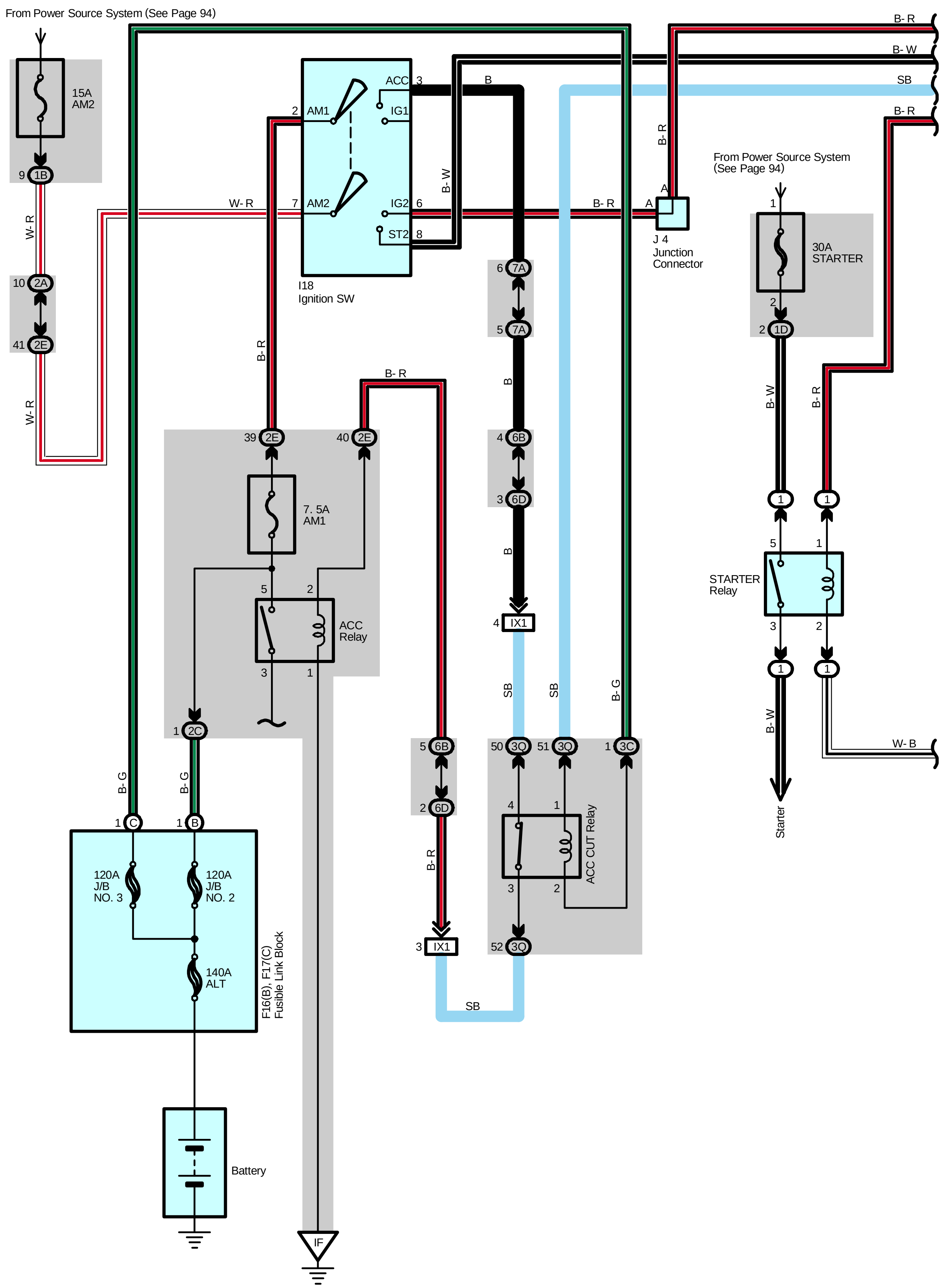
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E 2G	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A 4C 4E 4F	52	Dash Wire and J/B No.4 (Instrument Panel Center)
6C	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)

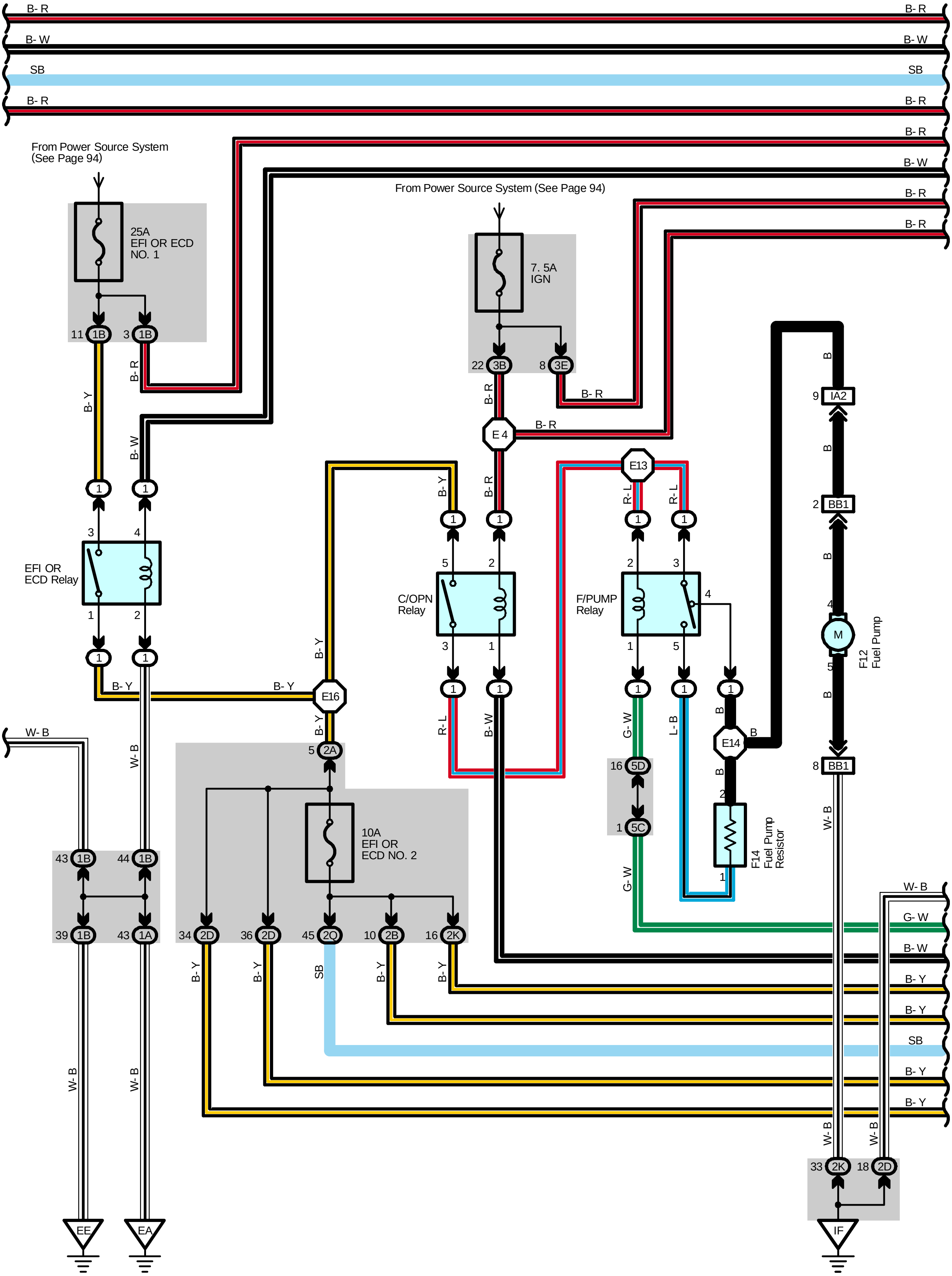
: Connector Joining Wire Harness and Wire Harness

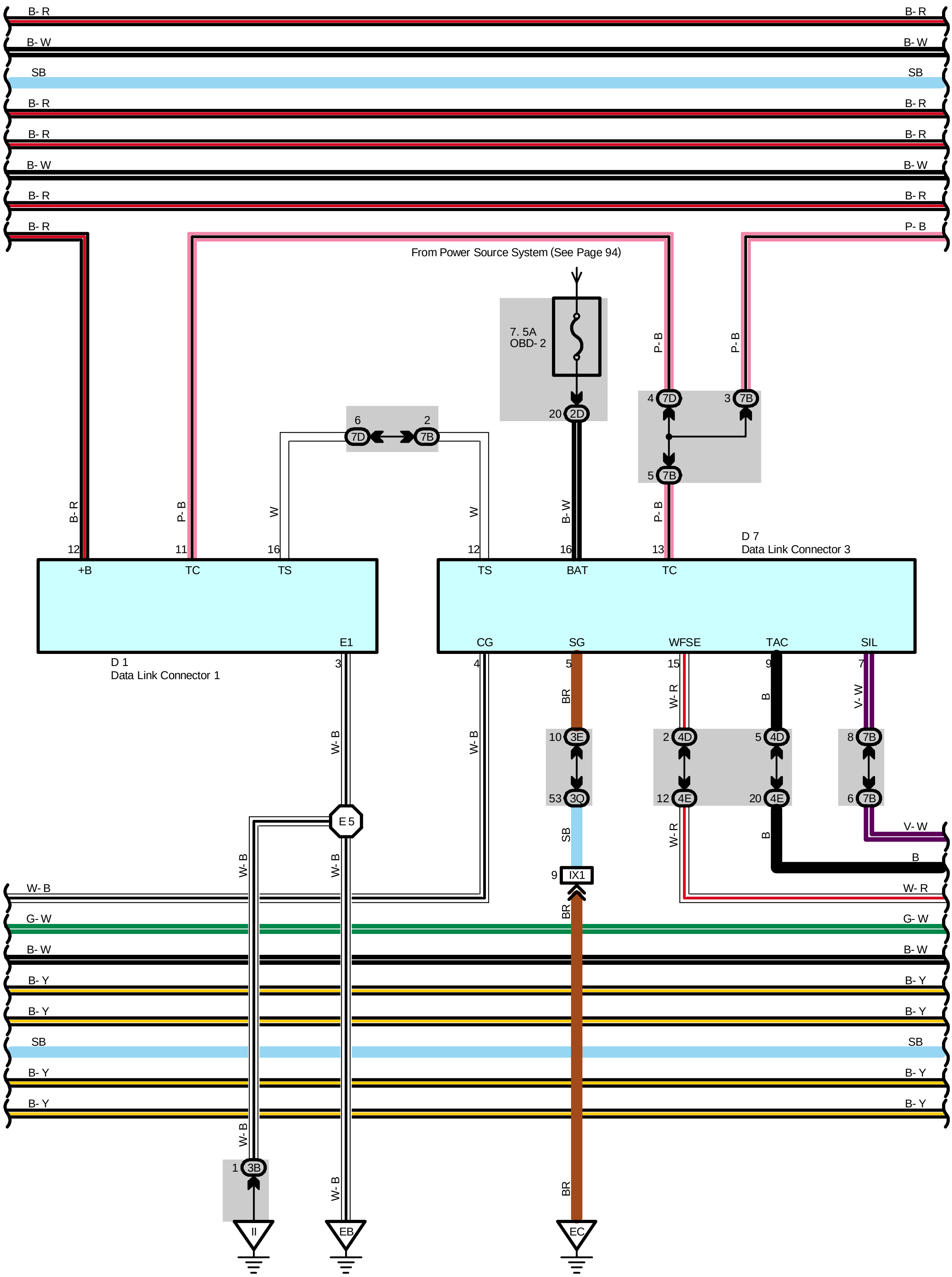
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)

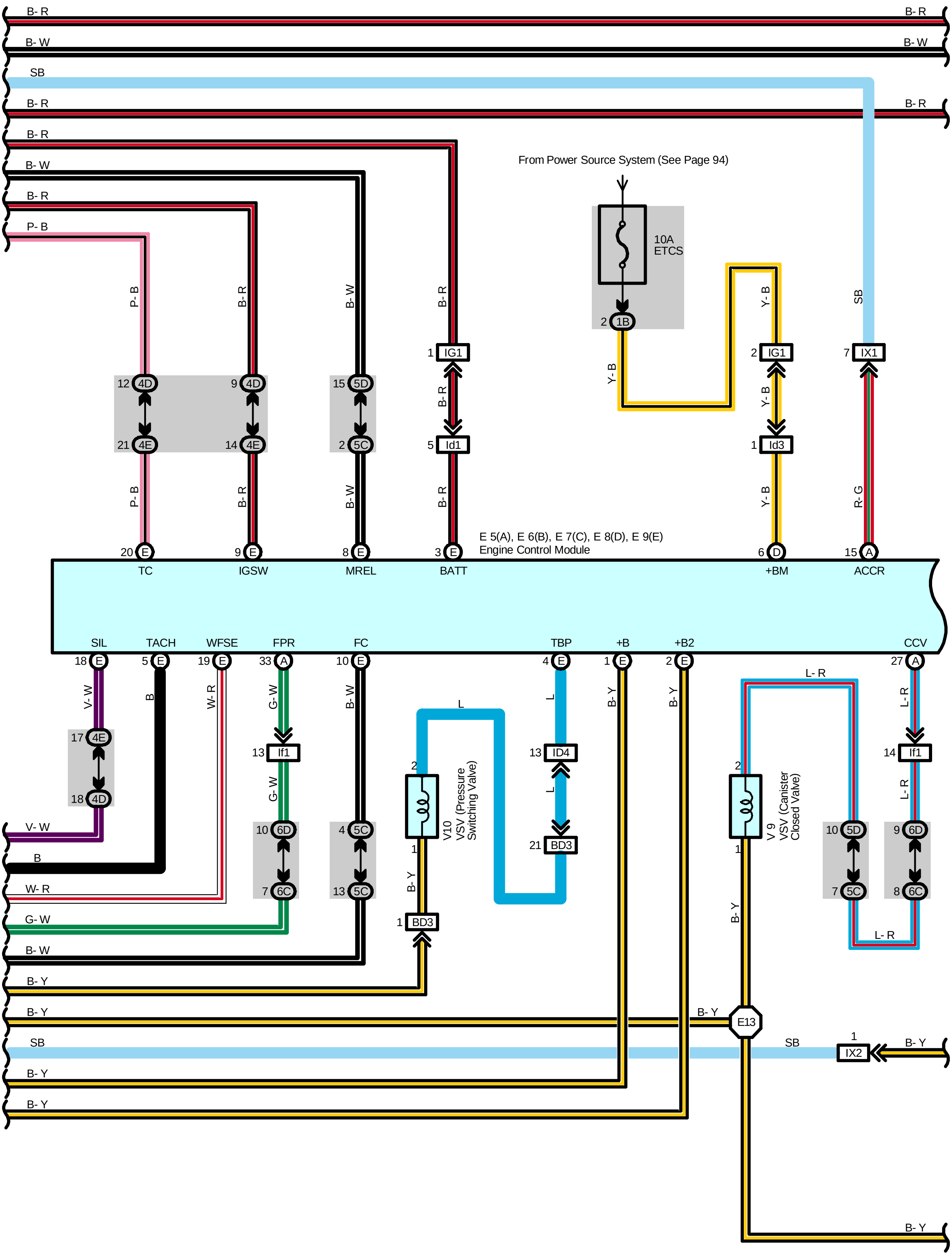
: Ground Points

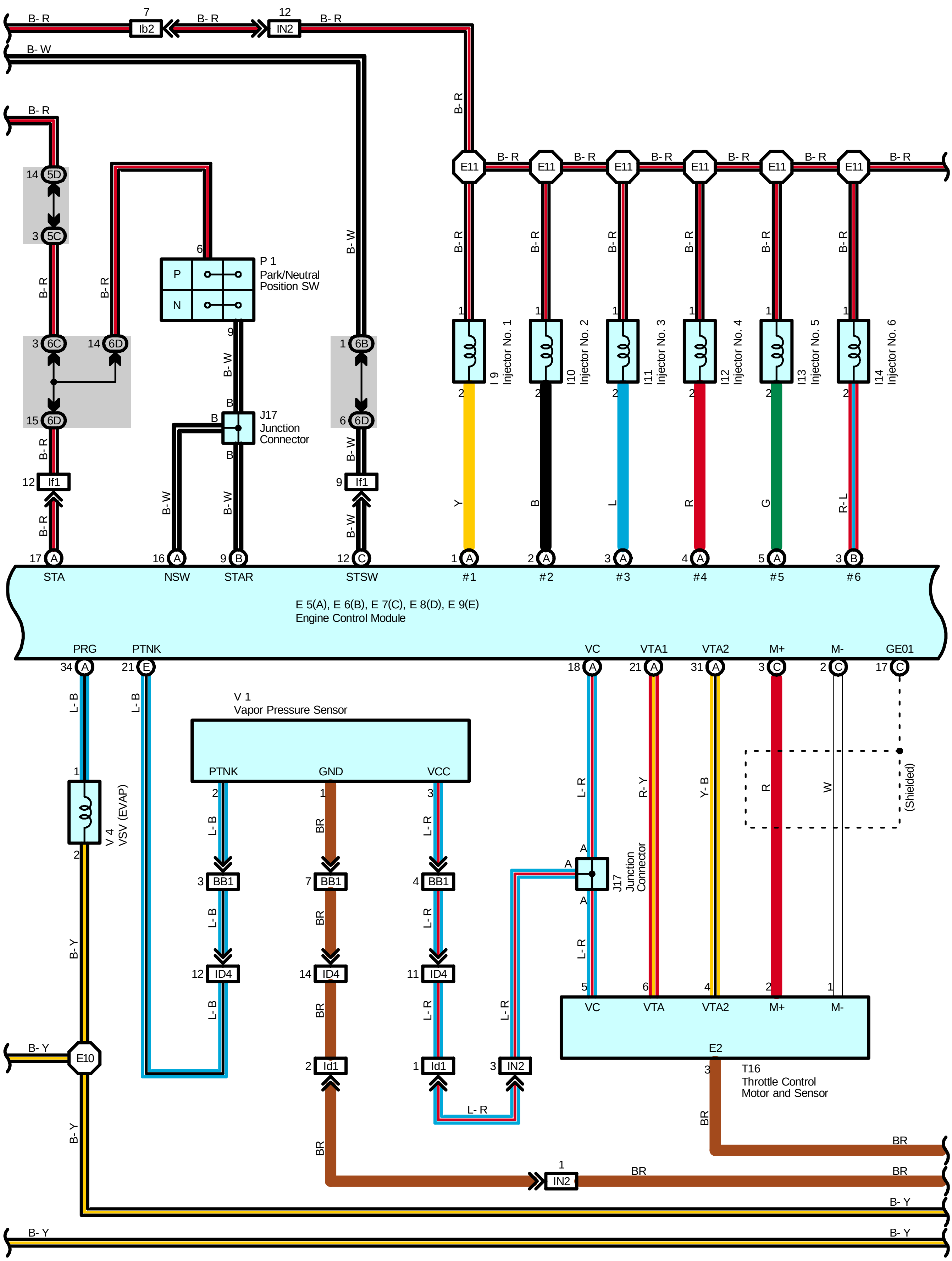
Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head

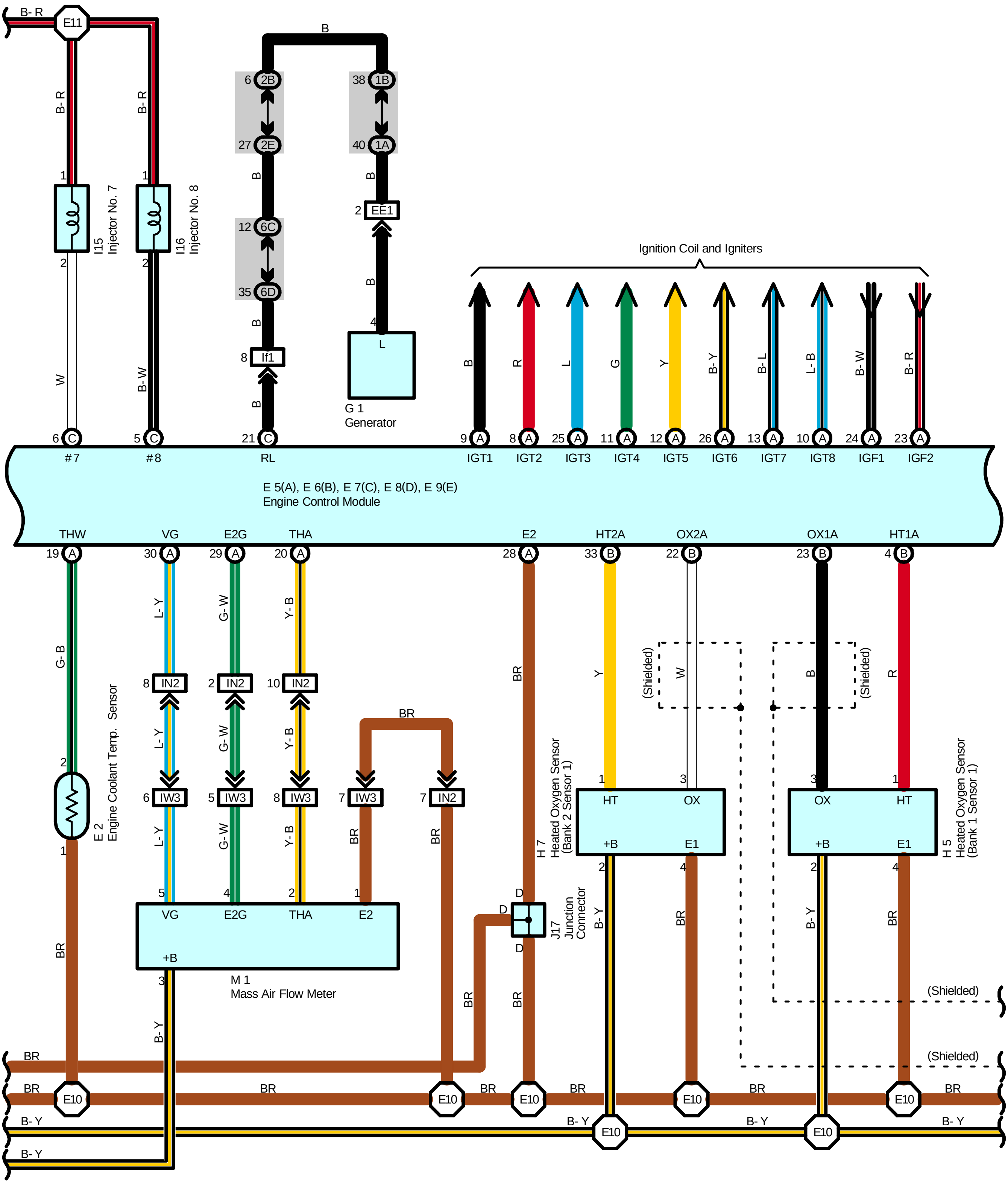

From Power Source System (See Page 94)
15A
AM2
9 1B
W- R
10 2A
41 2E
W- R
W- R
ACC 3
AM1 2
IG1
AM2 7
IG2 6
ST2 8
I18
Ignition SW
B
B- W
B- R
A
A
J 4
Junction
Connector
B- R
B- W
SB
B- R
B- R
From Power Source System
(See Page 94)
30A
STARTER
1D
B- W
B- R
6 7A
5 7A
B
4 6B
3 6D
B
4 IX1
B- R
39 2E
40 2E
B- R
7. 5A
AM1
ACC
Relay
1 2C
STARTER
Relay
Starter
W- B
B- W
SB
SB
B- G
5 6B
2 6D
B- R
3 IX1
SB
50 3Q
51 3Q
1 3C
ACC CUT Relay
52 3Q
B- G
B- G
1 C
1 B
120A
J/B
NO. 3
120A
J/B
NO. 2
140A
ALT
F16(B), F17(C)
Fusible Link Block
Battery
IF


From Power Source System
(See Page 94)
25A
EFI OR ECD
NO. 1
From Power Source System (See Page 94)
7. 5A
IGN
EFI OR
ECD Relay
C/OPN
Relay
F/PUMP
Relay
M
F12
Fuel Pump
F14
Fuel Pump
Resistor
10A
EFI OR
ECD NO. 2
E4
E13
E14
E16
IA2
BB1
EE
EA
IF
B- R
B- W
SB
B- Y
R- L
G- W
L- B
W- B
B

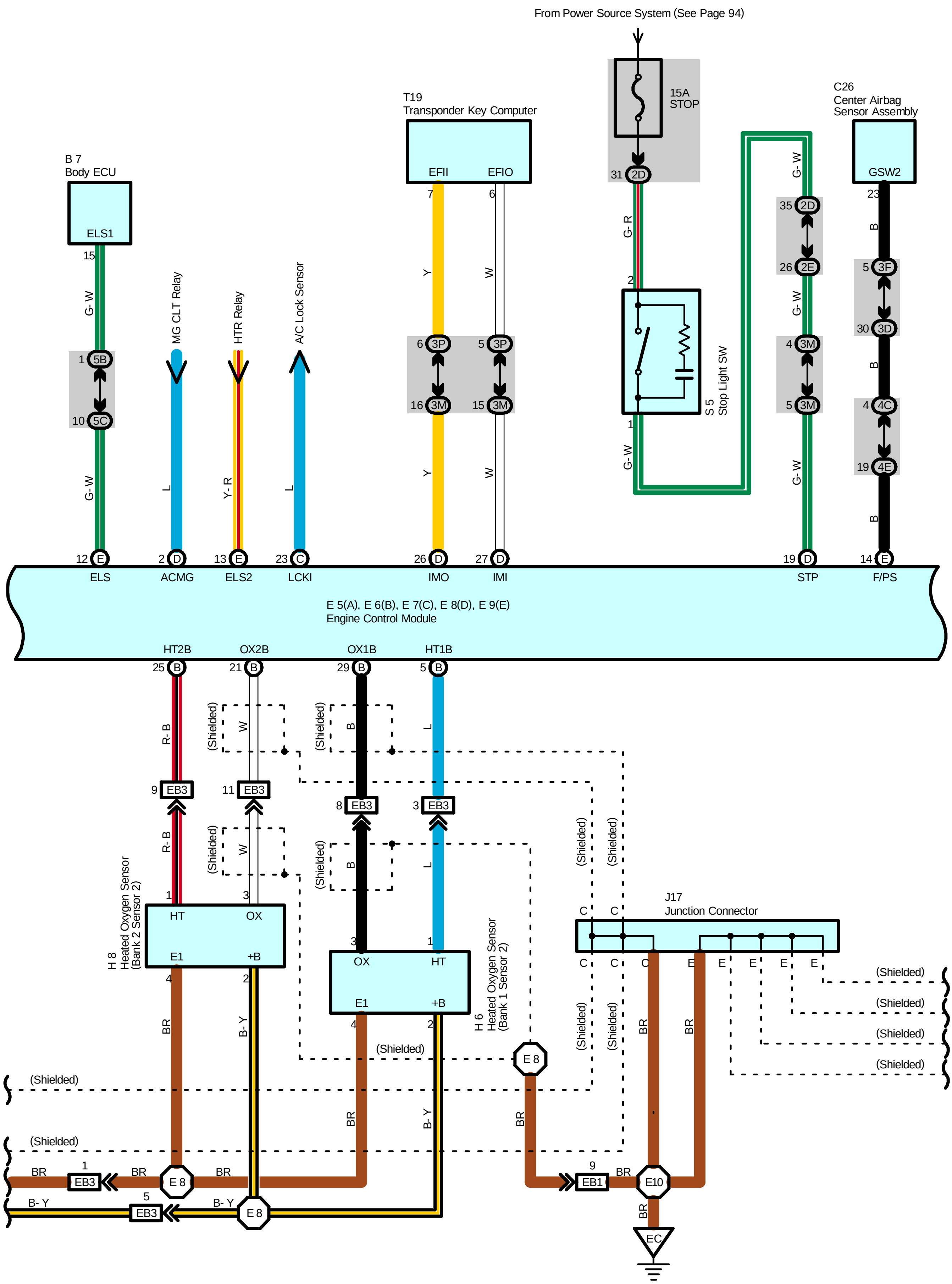

B- R
B- W
SB
B- R
B- R
B- W
B- R
B- R
P- B
From Power Source System (See Page 94)
7. 5A
OBD- 2
20 2D
4 7D
3 7B
5 7B
6 7D
2 7B
B- R
P- B
W
W
B- W
P- B
12
11
16
12
16
13
D 7
Data Link Connector 3
+B
TC
TS
E1
TS
BAT
TC
CG
SG
WFSE
TAC
SIL
D 1
Data Link Connector 1
3
4
5
15
9
7
W- B
W- B
BR
W- R
B
V- W
10 3E
53 3Q
2 4D
12 4E
5 4D
20 4E
8 7B
6 7B
E 5
SB
9 IX1
W- B
W- B
W- R
G- W
B- W
B- Y
B- Y
SB
B- Y
B- Y
V- W
B
1 3B
II
EB
EC


From Power Source System (See Page 94)
10A
ETCS
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
TC
IGSW
MREL
BATT
+BM
ACCR
SIL
TACH
WFSE
FPR
FC
TBP
+B
+B2
CCV
V10
VSV (Pressure
Switching Valve)
V 9
VSV (Canister
Closed Valve)
E13
B- R
B- W
SB
P- B
B- Y
V- W
B
W- R
G- W
L
L- R
R- G
Y- B
IG1
Id1
Id3
IX1
IX2
If1
ID4
BD3
1B
4D
4E
5D
5C
6D
6C

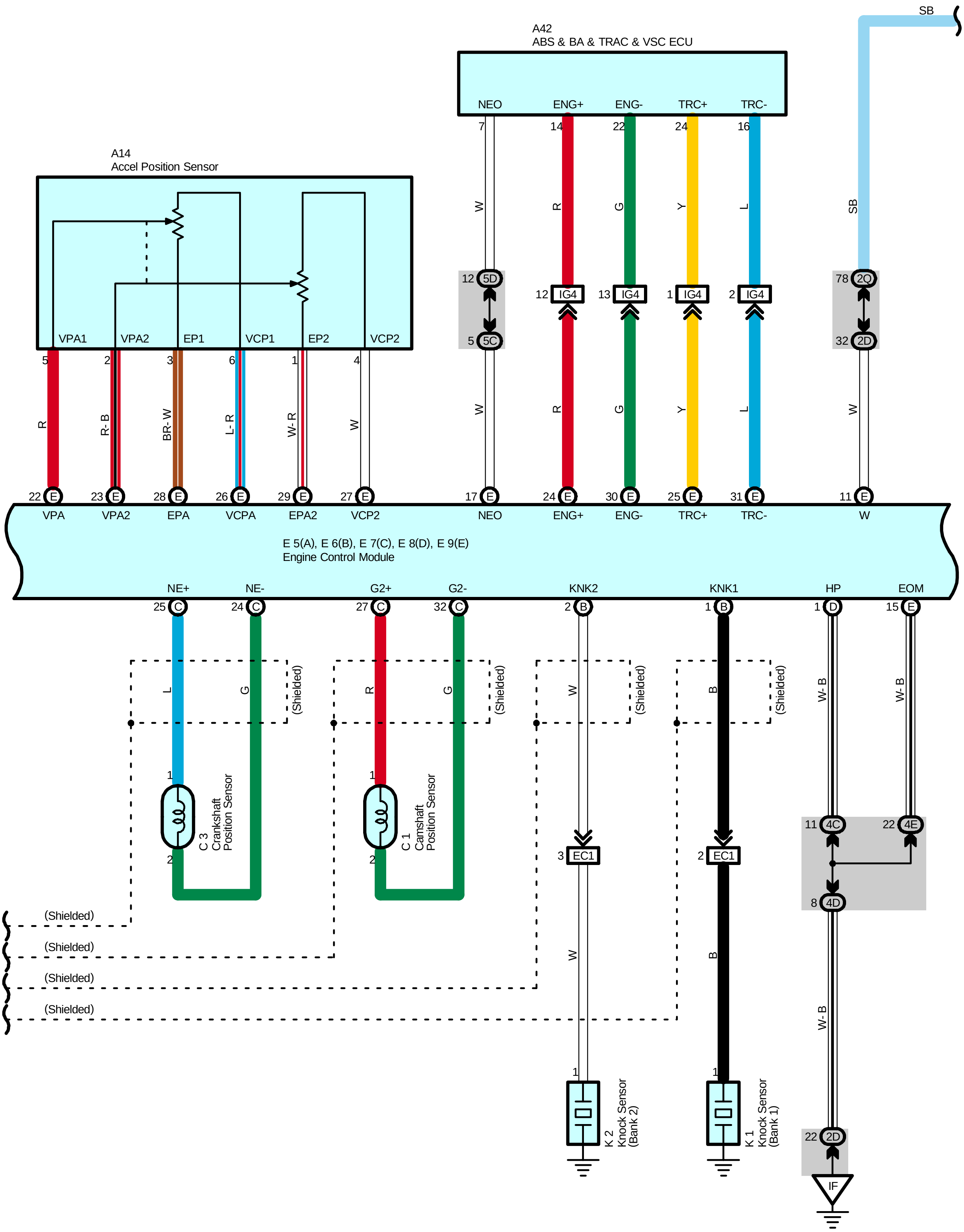

B- R
Ib2
IN2
B- W
5D
5C
6C
6D
If1
P 1
Park/Neutral
Position SW
P
N
J17
Junction
Connector
6B
E11
I 9
Injector No. 1
I10
Injector No. 2
I11
Injector No. 3
I12
Injector No. 4
I13
Injector No. 5
I14
Injector No. 6
STA
NSW
STAR
STSW
#1
#2
#3
#4
#5
#6
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
PRG
PTNK
VC
VTA1
VTA2
M+
M-
GE01
V 1
Vapor Pressure Sensor
PTNK
GND
VCC
V 4
VSV (EVAP)
BB1
ID4
Id1
E10
(Shielded)
VC
VTA
VTA2
M+
M-
E2
T16
Throttle Control
Motor and Sensor
B- Y
BR

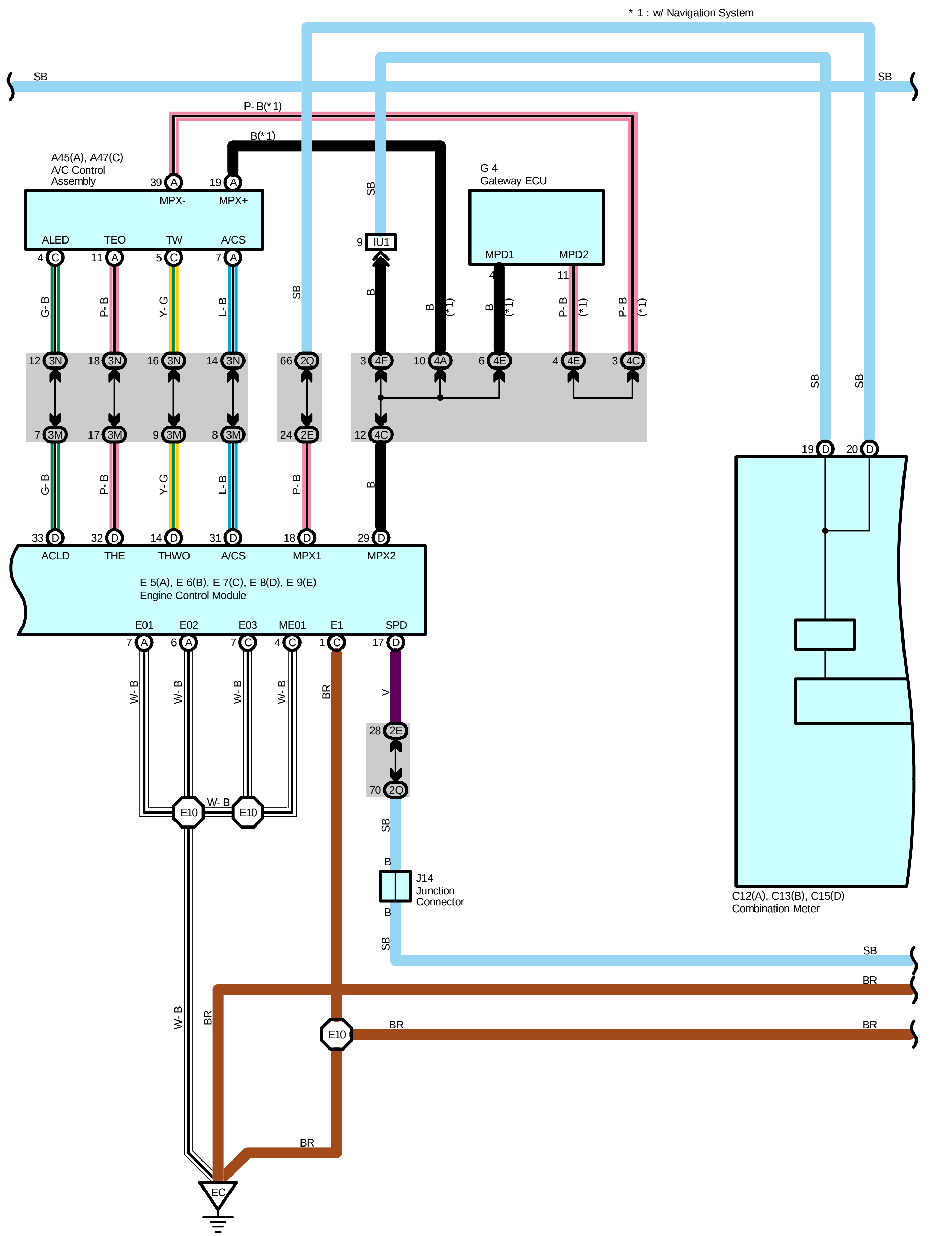


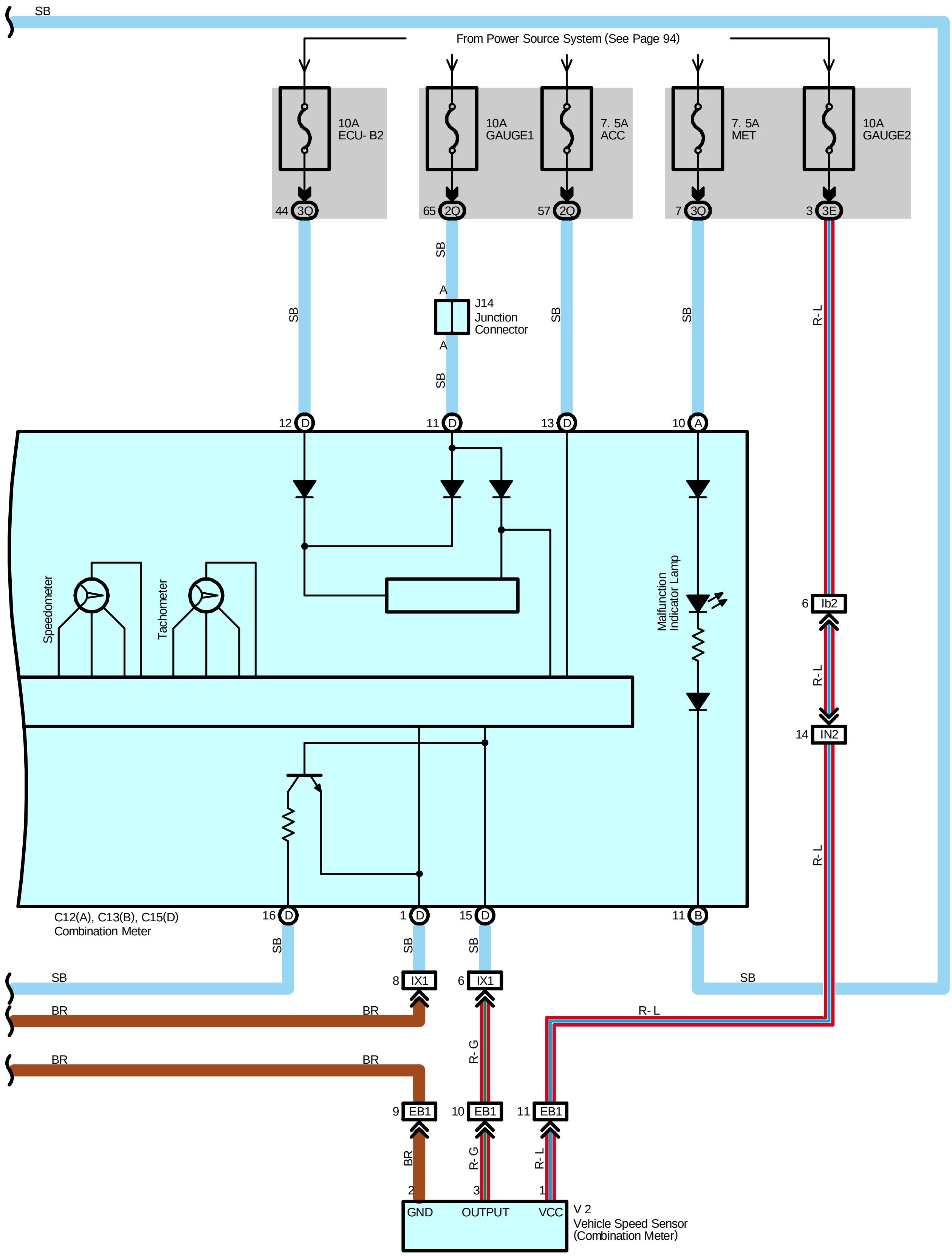
E11
B- R
I15
Injector No. 7
I16
Injector No. 8
W
B- W
B
2B
2E
6C
6D
If1
1B
1A
EE1
G 1
Generator
L
Ignition Coil and Igniters
R
G
Y
B- Y
B- L
L- B
#7
#8
RL
IGT1
IGT2
IGT3
IGT4
IGT5
IGT6
IGT7
IGT8
IGF1
IGF2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
THW
VG
E2G
THA
E2
HT2A
OX2A
OX1A
HT1A
G- B
L- Y
G- W
Y- B
IN2
IW3
BR
E 2
Engine Coolant Temp. Sensor
M 1
Mass Air Flow Meter
+B
H 7
Heated Oxygen Sensor
(Bank 2 Sensor 1)
H 5
Heated Oxygen Sensor
(Bank 1 Sensor 1)
HT
OX
E1
(Shielded)
J17
Junction
Connector
E10



From Power Source System (See Page 94)
15A STOP
T19 Transponder Key Computer
EFII
EFIO
C26 Center Airbag Sensor Assembly
GSW2
B 7 Body ECU
ELS1
MG CLT Relay
HTR Relay
A/C Lock Sensor
S 5 Stop Light SW
ELS
ACMG
ELS2
LCKI
IMO
IMI
STP
F/PS
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
HT2B
OX2B
OX1B
HT1B
(Shielded)
H 8 Heated Oxygen Sensor (Bank 2 Sensor 2)
HT
OX
E1
+B
H 6 Heated Oxygen Sensor (Bank 1 Sensor 2)
J17 Junction Connector
EB3
EB1
E 8
E10
EC


A42
ABS & BA & TRAC & VSC ECU
NEO
ENG+
ENG-
TRC+
TRC-
SB
A14
Accel Position Sensor
VPA1
VPA2
EP1
VCP1
EP2
VCP2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
VPA
VPA2
EPA
VCPA
EPA2
VCP2
W
NE+
NE-
G2+
G2-
KNK2
KNK1
HP
EOM
(Shielded)
C 3
Crankshaft
Position Sensor
C 1
Camshaft
Position Sensor
K 2
Knock Sensor
(Bank 2)
K 1
Knock Sensor
(Bank 1)
EC1
IG4
IF


* 1 : w/ Navigation System
SB
P- B(* 1)
B(* 1)
A45(A), A47(C)
A/C Control
Assembly
MPX-
MPX+
ALED
TEO
TW
A/CS
G 4
Gateway ECU
MPD1
MPD2
IU1
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
ACLD
THE
THWO
A/CS
MPX1
MPX2
E01
E02
E03
ME01
E1
SPD
E10
W- B
BR
V
J14
Junction
Connector
EC
C12(A), C13(B), C15(D)
Combination Meter


SB
From Power Source System (See Page 94)
10A
ECU- B2
10A
GAUGE1
7. 5A
ACC
7. 5A
MET
10A
GAUGE2
44 3Q
65 2Q
57 2Q
7 3Q
3 3E
SB
A
J14
Junction
Connector
A
R- L
12 D
11 D
13 D
10 A
Speedometer
Tachometer
Malfunction
Indicator Lamp
6 Ib2
14 IN2
C12(A), C13(B), C15(D)
Combination Meter
16 D
1 D
15 D
11 B
BR
8 IX1
6 IX1
R- G
9 EB1
10 EB1
11 EB1
GND
OUTPUT
VCC
V 2
Vehicle Speed Sensor
(Combination Meter)

System Outline

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

1. Input Signals

(1) Engine coolant temp. signal circuit

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

(2) Intake air temp. signal circuit

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

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust emission is detected and is input as a control signal from the heated oxygen sensors to TERMINALS OX1A, OX1B, OX2A, OX2B of the engine control module.

(4) RPM signal circuit

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

(5) Throttle position sensor signal circuit

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

(6) Vehicle speed circuit

The vehicle speed sensor (Combination meter) detects the vehicle speed, and the signal is input into TERMINAL SPD of the engine control module via the combination meter.

(7) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine control module. When the ignition SW is turned on, the voltage for engine control module start up power supply is applied through the EFI OR ECD relay, to TERMINALS +B, +B2 of the engine control module. The current from the IGN fuse flows to TERMINAL IGSW of the engine control module, and voltage is constantly applied to TERMINAL +BM.

(8) Intake air volume signal circuit

The 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.

(9) Stop light SW signal circuit

The stop light SW is used to detect whether the vehicle is braking or not, and the signal is input into TERMINAL STP of the engine control module as a control signal.

(10) Starter signal circuit

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

(11) Engine knock signal circuit

Engine knocking is detected by the knock sensors, and is input into TERMINALS KNK1, KNK2 of the engine control module as a control signal.

2. Control System

∗ SFI system
The SFI system monitors the engine condition through the signals input from each sensors to the engine control module. The control signal is sent to the engine control module TERMINALS #1, #2, #3, #4, #5, #6, #7, #8 to operate the injector (Fuel injection). The SFI system controls the fuel injection by the engine control module in response to the driving conditions.

∗ ESA system
The ESA system monitors the engine condition through the signals input from each sensors to the engine control module. The best ignition timing is decided according to this data and the data memorized in the engine control module. The control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4, IGT5, IGT6, IGT7, IGT8, and these signals control the igniter to provide the best ignition timing.

∗ Heated oxygen sensor heater control system
The heated oxygen sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emission is low), and warms up the heated oxygen sensors to improve their detection performance. The engine control module evaluates the signals from each sensors, and outputs current to TERMINALS HT1A, HT1B, HT2A, HT2B to control the heater.

∗ Fuel pump control system
The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump by the F/PUMP relay.

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

∗ ETCS-i
The ETCS-i controls the engine output at its optimal level in accordance with the opening of the accelerator pedal, under all driving conditions.

3. Diagnosis System

When there is a malfunction in the engine control module signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed on the malfunction indicator lamp.

4. Fail-Safe System

When a malfunction has occurred in any system, there is a possibility of causing engine trouble due to continued control based on that system. In that case, the fail-safe system either controls the system using the data (Standard values) recorded in the engine control module memory, or else stops the engine.

Service Hints

E2 Engine Coolant Temp. Sensor

1-2 : Approx. 15.0 kΩ (-20˚C, -4˚F)
: Approx. 2.45 kΩ (20˚C, 68˚F)
: Approx. 0.32 kΩ (80˚C, 176˚F)

E5 (A), E7 (C), E8 (D), E9 (E) Engine Control Module

BATT-E1 : Always 9.0-14.0 volts
+BM-E1 : Always 9.0-14.0 volts
IGSW-E1 : 9.0-14.0 volts with ignition SW at ON or ST position
+B, +B2-E1 : 9.0-14.0 volts with ignition SW at ON or ST position
VC-E2 : 4.5-5.5 volts with ignition SW on
VTA2-E2 : 2.0-2.9 volts with ignition SW on and accelerator pedal released
: 4.6-5.1 volts with ignition SW on and accelerator pedal depressed
VTA1-E2 : 0.4-1.0 volts with ignition SW on and accelerator pedal released
: 3.2-4.8 volts with ignition SW on and accelerator pedal depressed
THA-E2 : 0.5-3.4 volts with idling, intake air temp. 20˚C (68˚F)
THW-E2 : 0.2-1.0 volts with idling, engine coolant temp. 80˚C (176˚F)
W-E1 : 9.0-14.0 volts with idling
: Below 3.0 volts with ignition SW on

Engine Control

○ : **Parts Location**

Code		See Page	Code		See Page	Code	See Page
A14		70	E9	E	70	I16	69
A42		70	F12		72	I18	70
A45	A	70	F14		68	J4	71
A47	C	70	F16	B	68	J14	71
B7		70	F17	C	68	J17	71
C1		68	G1		68	K1	69
C3		68	G4		70	K2	69
C12	A	70	H5		69	M1	69
C13	B	70	H6		69	P1	69
C15	D	70	H7		69	S5	71
C26		70	H8		69	T16	69
D1		68	I9		69	T19	71
D7		70	I10		69	V1	73
E2		68	I11		69	V2	69
E5	A	70	I12		69	V4	69
E6	B	70	I13		69	V9	69
E7	C	70	I14		69	V10	73
E8	D	70	I15		69		

▢ : **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)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1D		
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2B		
2C		
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3C		
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3F		
3M	43	
3N		
3P		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4D		
4E		
4F		
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5C		
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6B	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6C		
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7A	64	Dash Wire and J/B No.7 (Behind the Grove Box)
7B		
7D	64	Engine Room No.2 Wire and J/B No.7 (Behind the Grove Box)

Engine Control

: Connector Joining Wire Harness and Wire Harness

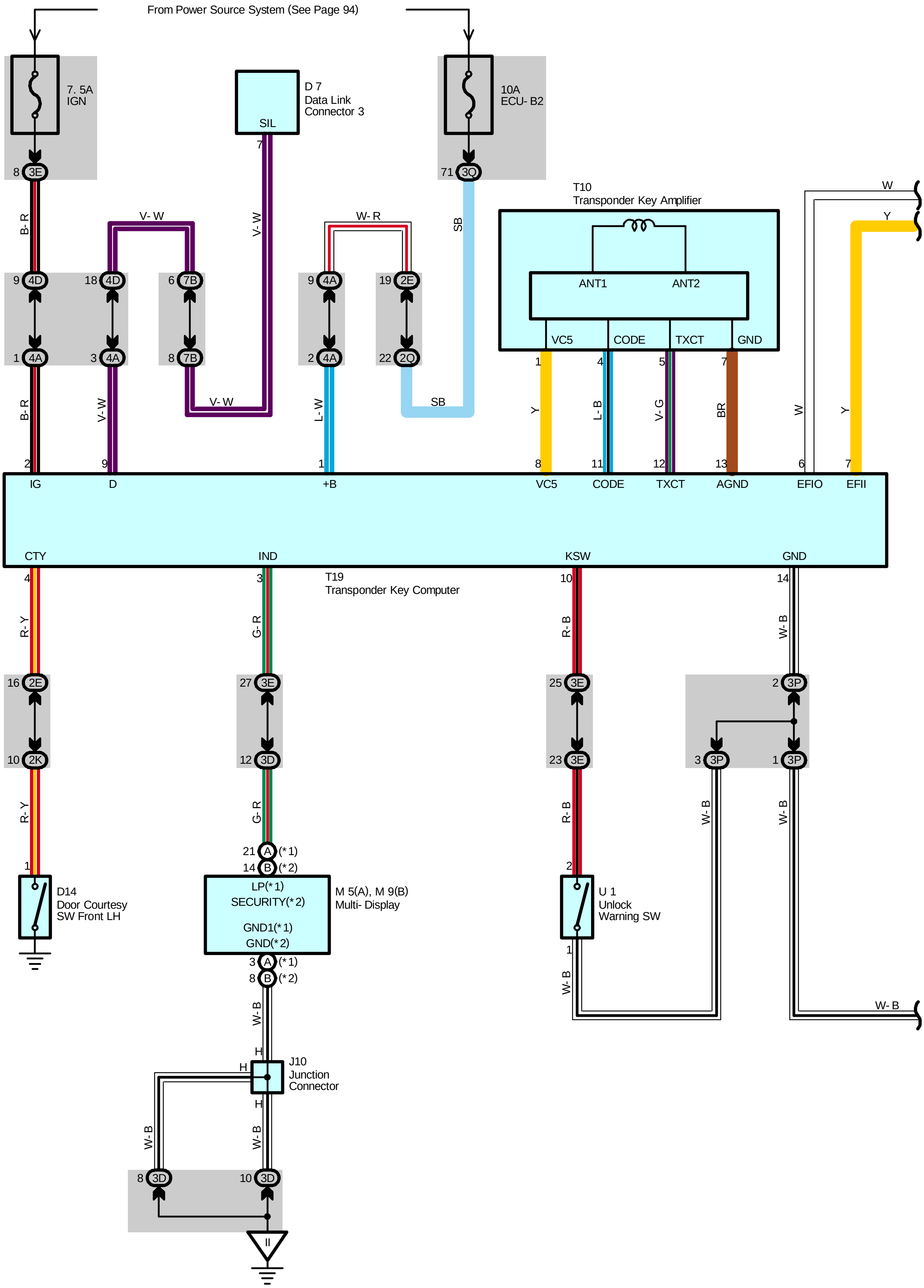
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
EB3		
EC1	76	Engine No.2 Wire and Engine Wire (On the Transmission)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IA2	78	Engine Room No.2 Wire and Floor No.1 Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IG4		
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IW3	82	Engine Room No.2 Wire and Dash Wire (Behind the Glove Box)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
IX2		
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Id1	84	Dash Wire and Dash Wire (Instrument Panel Center)
Id3		
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)
BB1	86	Floor No.1 Wire and Fuel Tank Wire (Near the Fuel Tank)
BD3	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)

: Ground Points

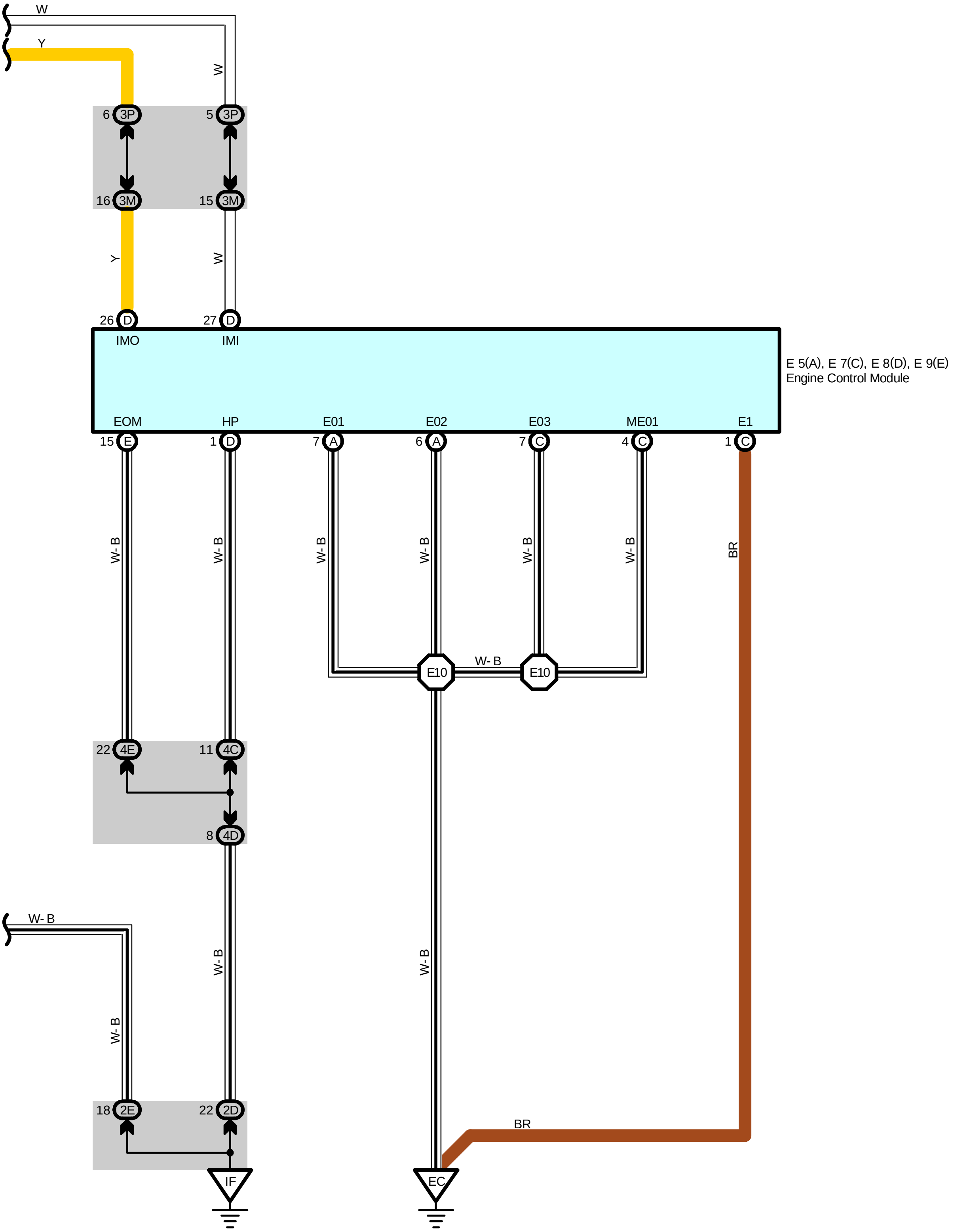
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EB		
EC	76	Rear Bank of Right Cylinder Head
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	76	Engine Room No.2 Wire	E11	76	Engine Wire
E5			E13	76	Engine Room No.2 Wire
E8	76	Transmission Wire	E14		
E10	76	Engine Wire	E16		


From Power Source System (See Page 94)
7. 5A
IGN
D 7
Data Link
Connector 3
SIL
10A
ECU- B2
T10
Transponder Key Amplifier
ANT1
ANT2
VC5
CODE
TXCT
GND
W
Y
B- R
V- W
W- R
SB
L- W
L- B
V- G
BR
IG
D
+B
VC5
CODE
TXCT
AGND
EFIO
EFII
CTY
IND
KSW
GND
T19
Transponder Key Computer
R- Y
G- R
R- B
W- B
D14
Door Courtesy
SW Front LH
LP(*1)
SECURITY(*2)
GND1(*1)
GND(*2)
M 5(A), M 9(B)
Multi- Display
U 1
Unlock
Warning SW
J10
Junction
Connector
II

* 1 : w/ Navigation System
* 2 : w/o Navigation System



Service Hints

T19 Transponder Key Computer

1-Ground : Always approx. 12 volts
2-Ground : Approx. 12 volts with ignition SW at ON or ST position
14-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
D7		70	E8	D	70	M9	B	71
D14		72	E9	E	70	T10		71
E5	A	70	J10		71	T19		71
E7	C	70	M5	A	71	U1		71

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3M	43	
3P		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4D		
4E		
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)

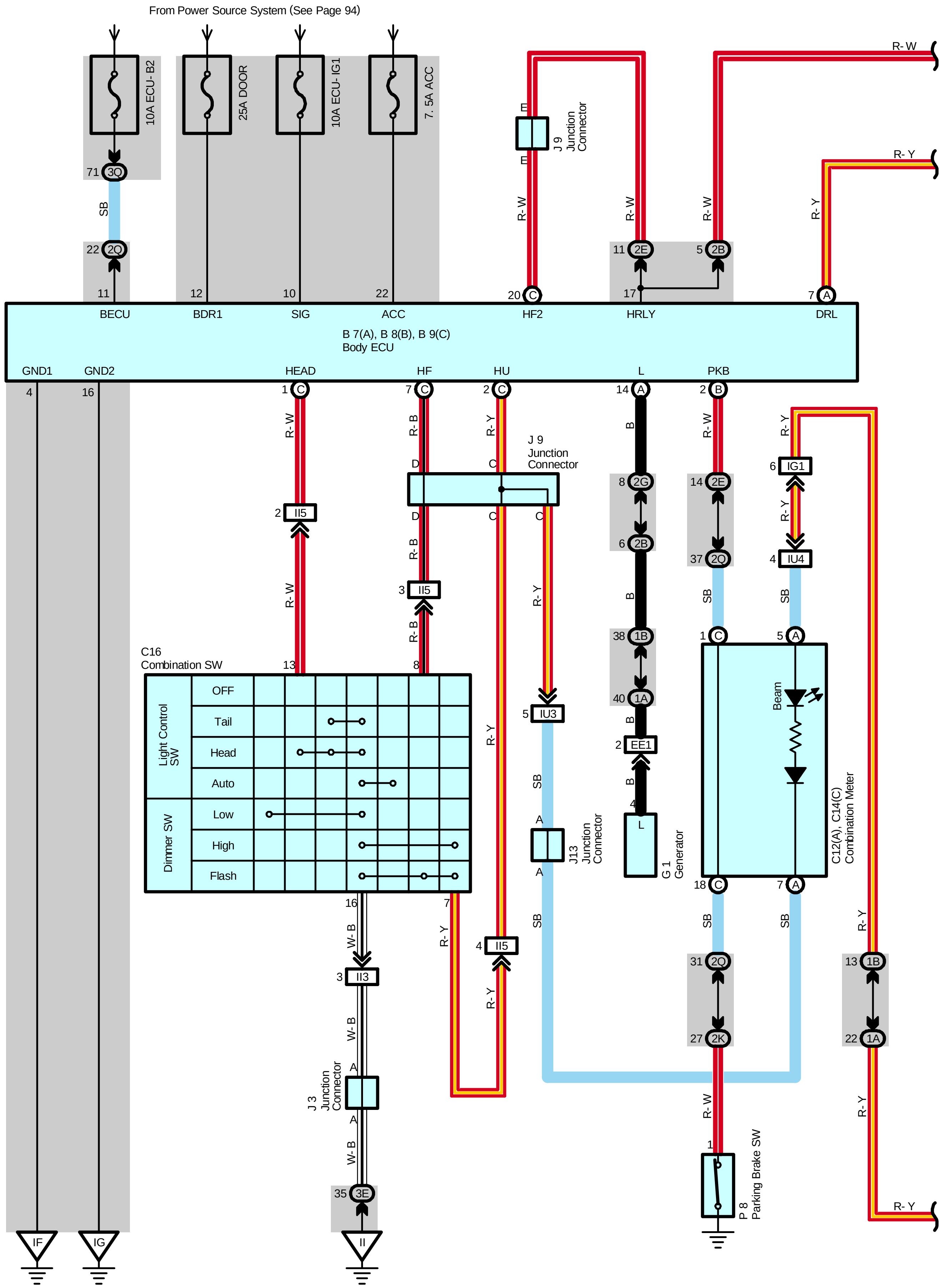
▽ : Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH

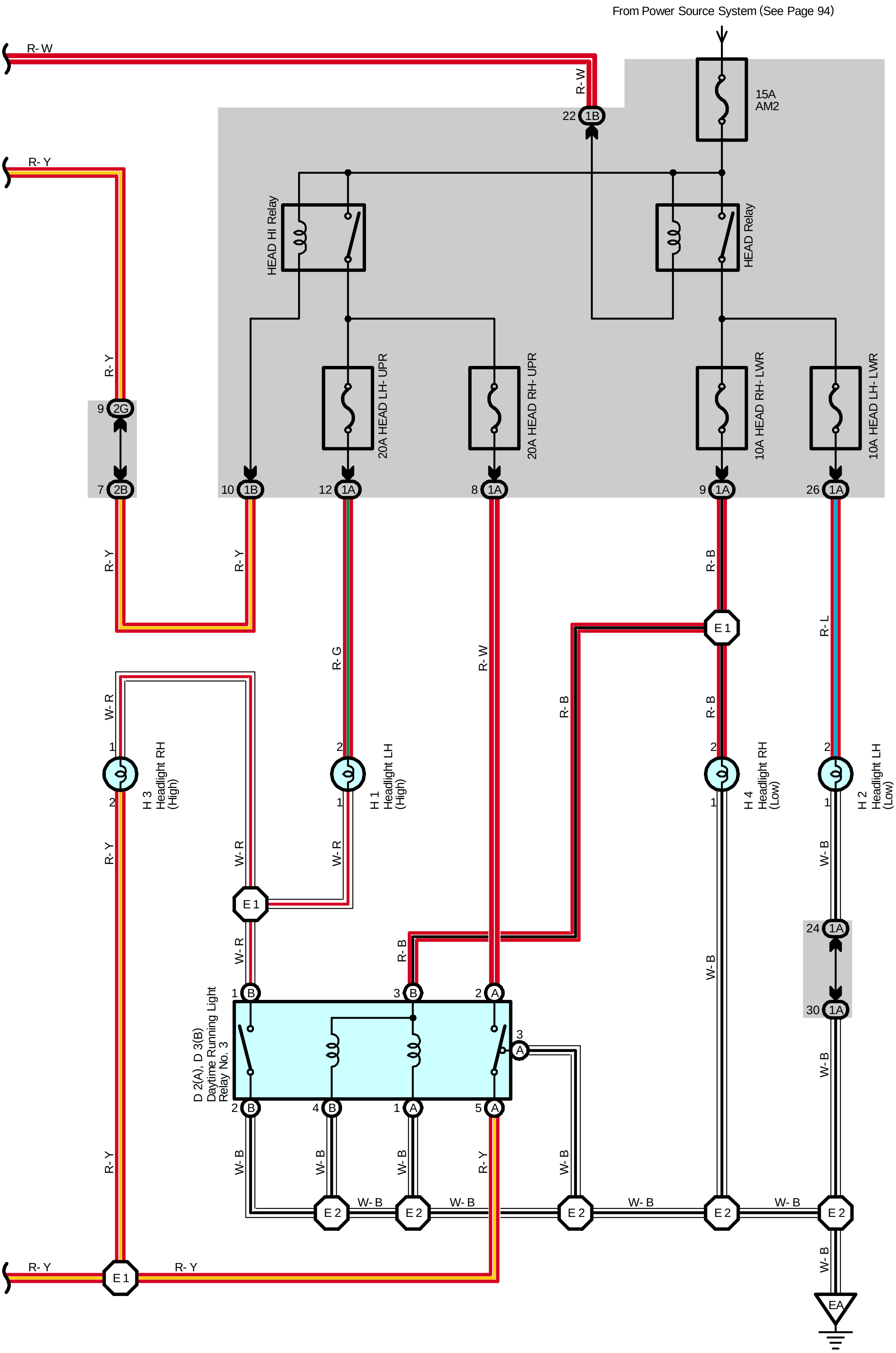
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E10	76	Engine Wire			

Headlight



From Power Source System (See Page 94)
10A ECU- B2
25A DOOR
10A ECU- IG1
7. 5A ACC
71 3Q
SB
22 2Q
J 9 Junction Connector
R- W
R- Y
11 2E
5 2B
20 C
17
7 A
BECU
BDR1
SIG
ACC
HF2
HRLY
DRL
B 7(A), B 8(B), B 9(C)
Body ECU
GND1
GND2
HEAD
HF
HU
L
PKB
1 C
7 C
2 C
14 A
2 B
R- B
B
8 2G
6 2B
14 2E
37 2Q
6 IG1
4 IU4
2 II5
3 II5
38 1B
40 1A
5 IU3
2 EE1
C16
Combination SW
Light Control SW
OFF
Tail
Head
Auto
Dimmer SW
Low
High
Flash
J13 Junction Connector
G 1 Generator
Beam
C12(A), C14(C)
Combination Meter
1 C
5 A
18 C
7 A
W- B
3 II3
4 II5
31 2Q
27 2K
13 1B
22 1A
J 3 Junction Connector
35 3E
P 8 Parking Brake SW
IF
IG
II


From Power Source System (See Page 94)
R- W
R- Y
15A AM2
22 1B
HEAD HI Relay
HEAD Relay
20A HEAD LH- UPR
20A HEAD RH- UPR
10A HEAD RH- LWR
10A HEAD LH- LWR
9 2G
7 2B
10 1B
12 1A
8 1A
9 1A
26 1A
R- G
R- B
R- L
E 1
W- R
H 3 Headlight RH (High)
H 1 Headlight LH (High)
H 4 Headlight RH (Low)
H 2 Headlight LH (Low)
W- B
24 1A
30 1A
D 2(A), D 3(B) Daytime Running Light Relay No. 3
E 2
EA

Headlight

System Outline

Daytime Running Light Operation

When the engine is started, a signal from the generator is input into TERMINAL (A) 14 of the body ECU. At this time, if the parking brake lever is pulled up (Parking brake SW ON), the body ECU is not activated, and the daytime running light system does not operate.
When the parking brake lever is released (Parking brake SW OFF), a signal is input into TERMINAL (B) 2 of the body ECU. This activates the body ECU and the headlight turns on.

Service Hints

C16 Combination SW

13-16 : Closed with light control SW at HEAD position
8-16 : Closed with dimmer SW at FLASH position
7-16 : Closed with dimmer SW at HIGH or FLASH position

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
B7	A	70	D2	A	68	H4	69
B8	B	70	D3	B	68	J3	71
B9	C	70	G1		68	J9	71
C12	A	70	H1		69	J13	71
C14	C	70	H2		69	P8	73
C16		70	H3		69		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IU4		

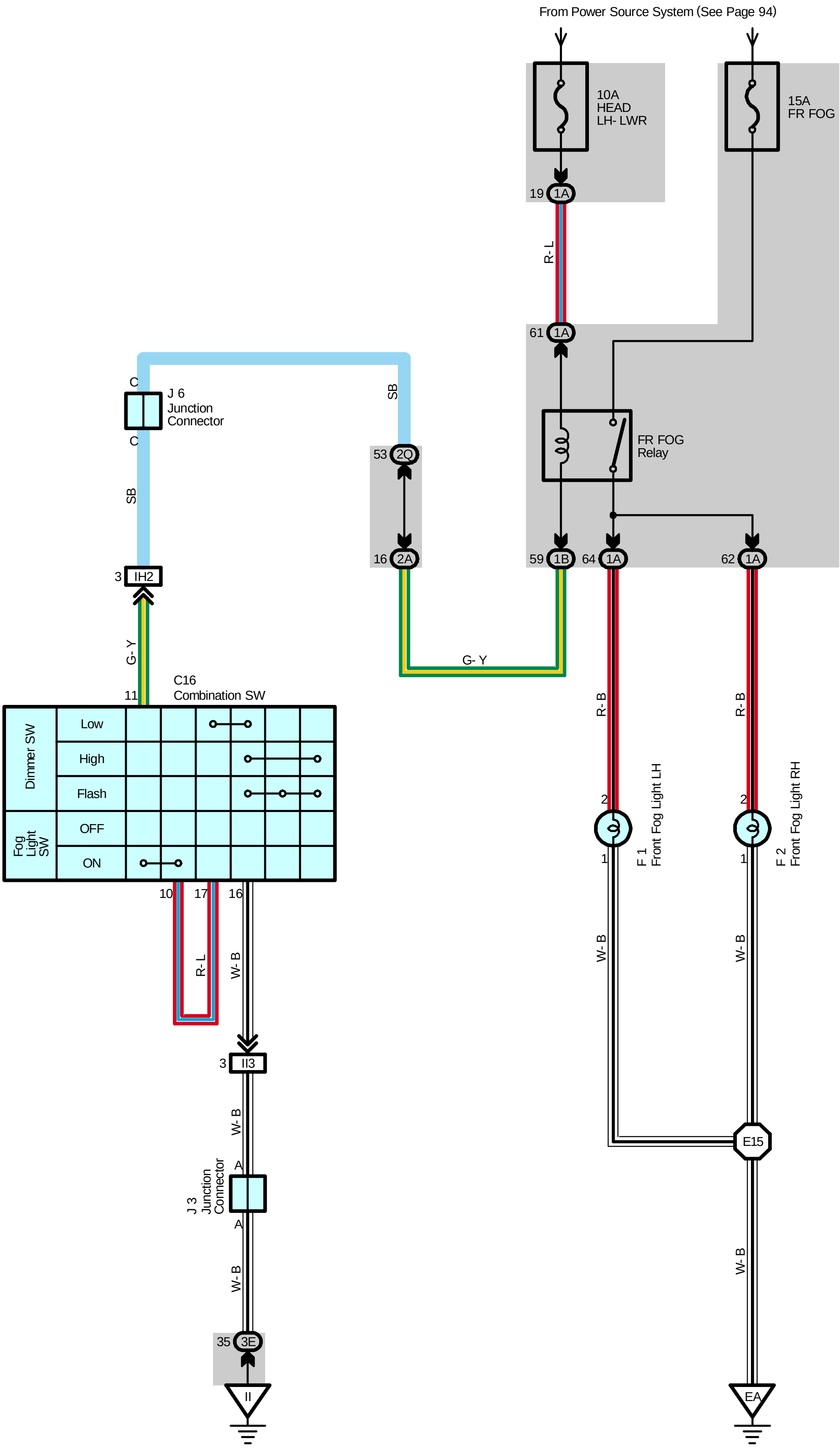
▽ : Ground Points

Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	76	Engine Room Main Wire	E2	76	Engine Room Main Wire

Front Fog Light



Service Hints

C16 Combination SW

11-Ground : Continuity with light control SW at HEAD position, dimmer SW at LOW position and fog light SW at ON position

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C16	70	F2	68	J6	71
F1	68	J3	71		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH2	80	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)

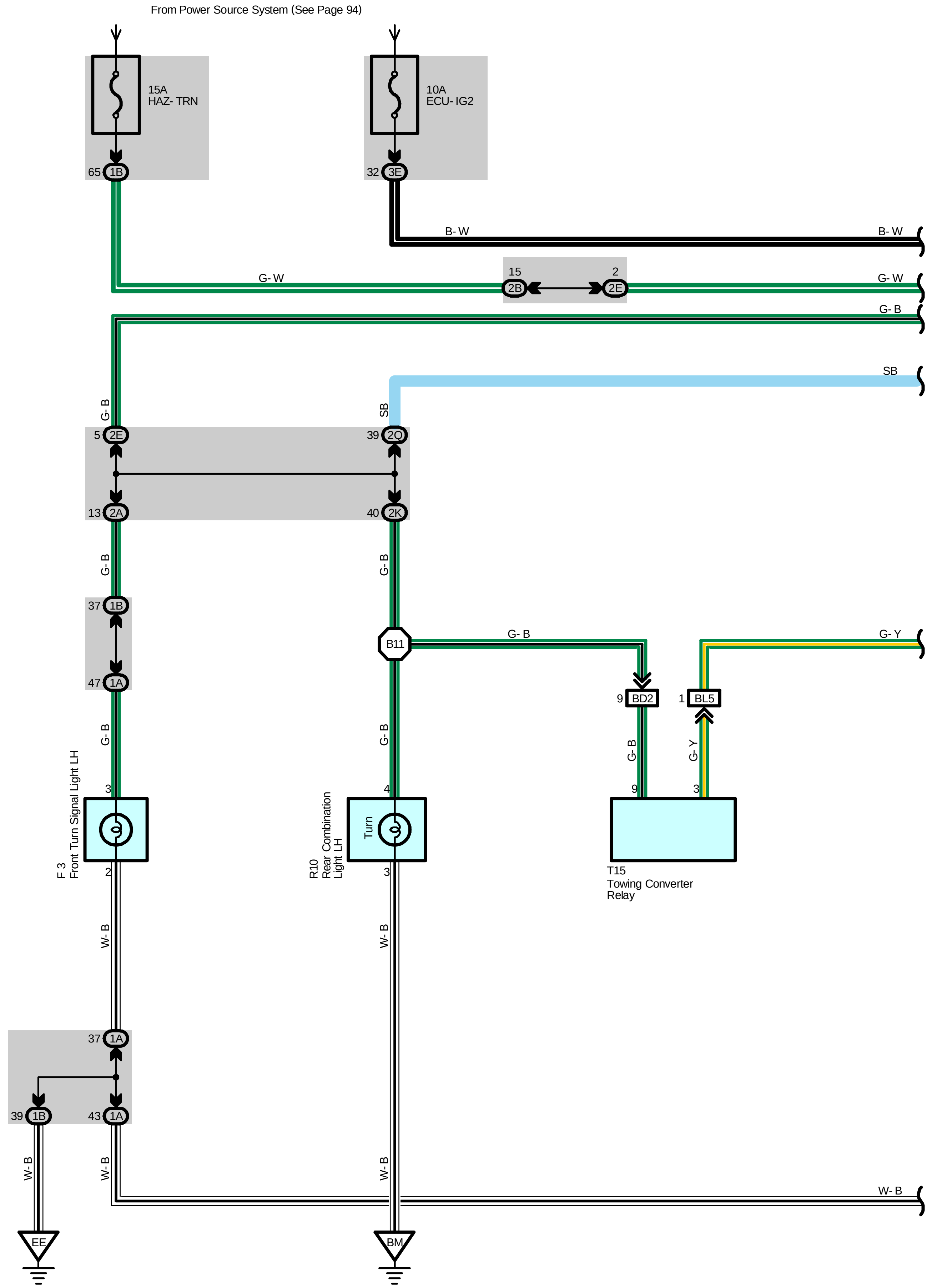
▽ : **Ground Points**

Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
II	78	Set Bolt of Cowl Side J/B RH

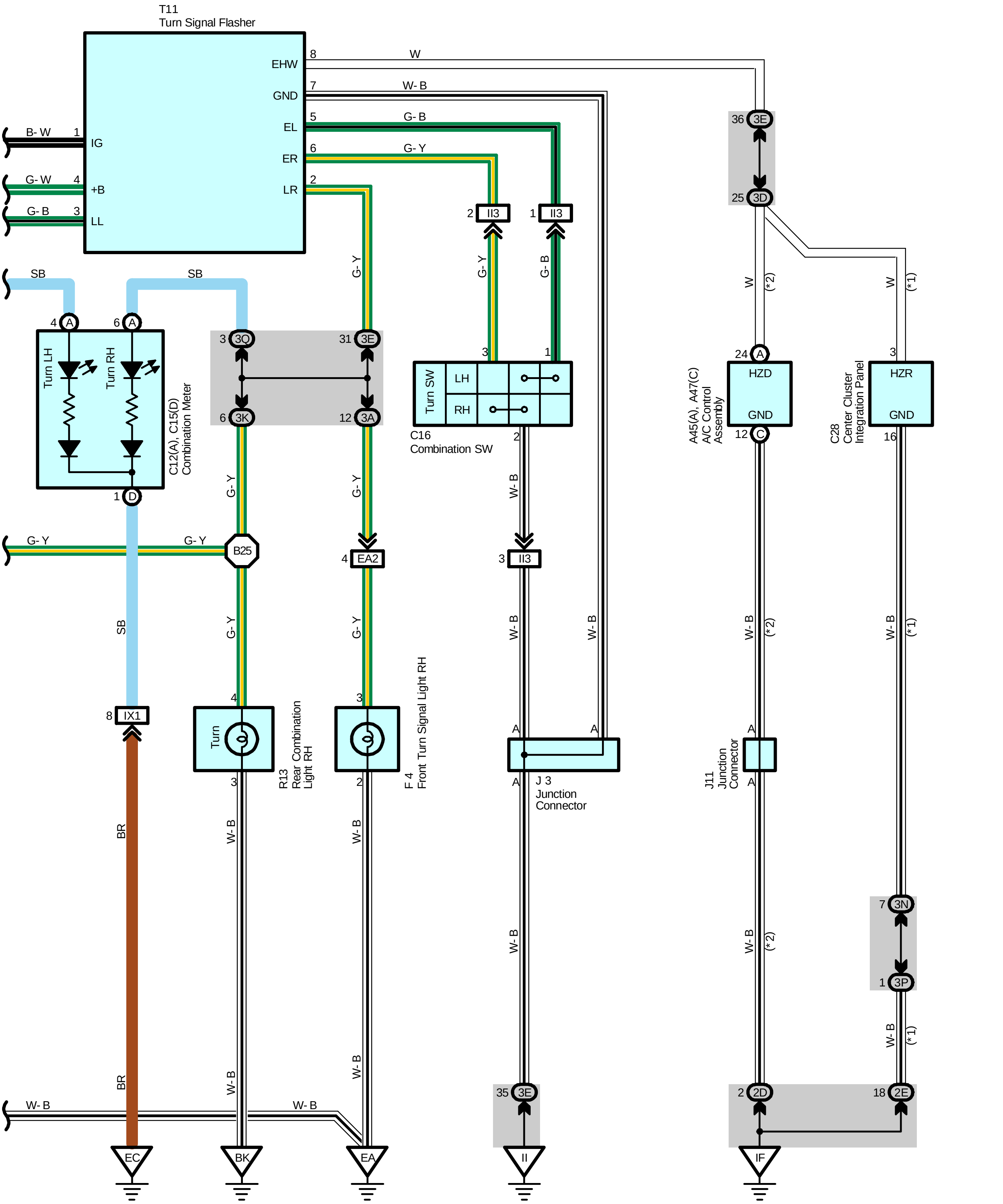
: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E15	76	Engine Room Main Wire			

Turn Signal and Hazard Warning Light



* 1 : w/ Navigation System
* 2 : w/o Navigation System



Turn Signal and Hazard Warning Light

Service Hints

T11 Turn Signal Flasher

4-Ground : Always approx. 12 volts
1-Ground : Approx. 12 volts with ignition SW at ON or ST position
7-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
A45	A	70	C28	70	R10	73
A47	C	70	F3	68	R13	73
C12	A	70	F4	68	T11	71
C15	D	70	J3	71	T15	73
C16		70	J11	71		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A 2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D 2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3A	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3D 3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3N 3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BL5	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)

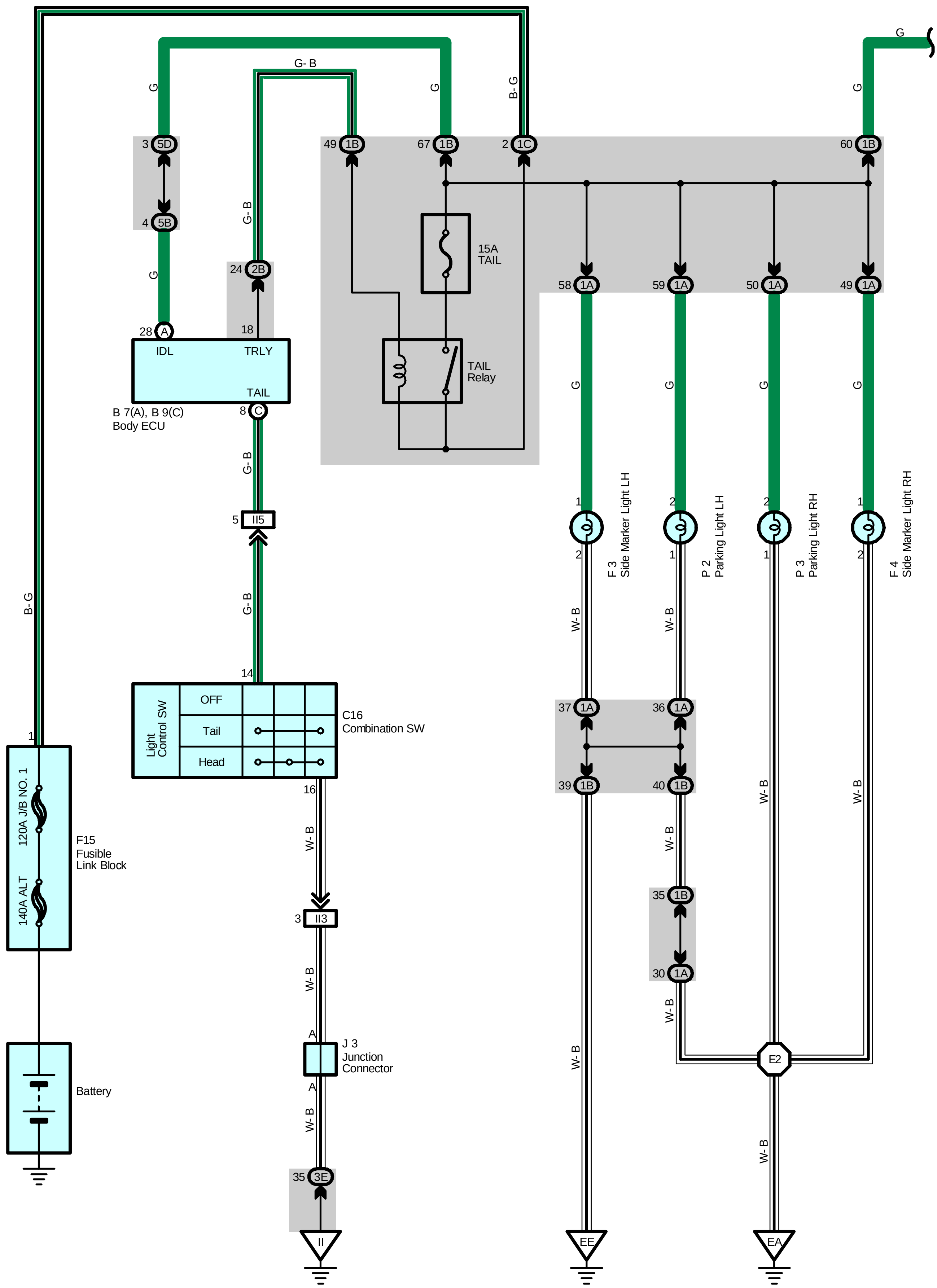
▽ : Ground Points

Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EC	76	Rear Bank of Right Cylinder Head
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel

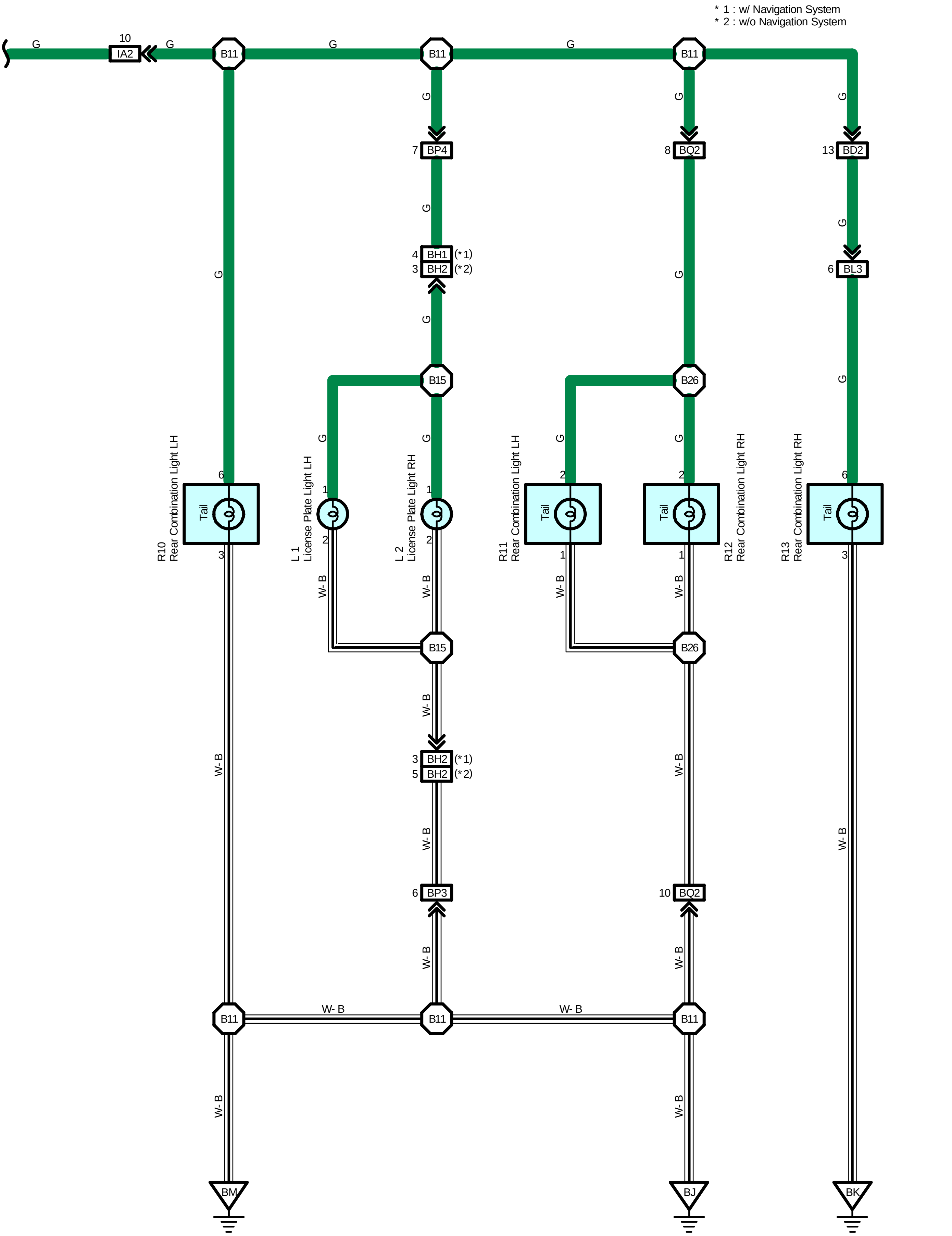
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire	B25	88	Floor No.2 Wire

Taillight



G- B
G
B- G
G
G
3 5D
4 5B
49 1B
67 1B
2 1C
60 1B
15A
TAIL
24 2B
18
28 A
IDL
TRLY
TAIL
B 7(A), B 9(C)
Body ECU
8 C
TAIL
Relay
58 1A
59 1A
50 1A
49 1A
5 II5
F 3
Side Marker Light LH
P 2
Parking Light LH
P 3
Parking Light RH
F 4
Side Marker Light RH
W- B
14
OFF
Tail
Head
Light
Control SW
C16
Combination SW
16
37 1A
36 1A
39 1B
40 1B
F15
Fusible
Link Block
120A J/B NO. 1
140A ALT
3 II3
35 1B
30 1A
J 3
Junction
Connector
E2
Battery
35 3E
II
EE
EA


* 1 : w/ Navigation System
* 2 : w/o Navigation System
G
10
IA2
B11
BP4
BQ2
BD2
BH1 (*1)
BH2 (*2)
BL3
B15
B26
Tail
R10
Rear Combination Light LH
L 1
License Plate Light LH
L 2
License Plate Light RH
R11
Rear Combination Light LH
R12
Rear Combination Light RH
R13
Rear Combination Light RH
W- B
BP3
BM
BJ
BK

Taillight

Service Hints

C16 Combination SW

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

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
B7	A	70	F15	68	P3	69
B9	C	70	J3	71	R10	73
C16		70	L1	72	R11	73
F3		68	L2	72	R12	73
F4		68	P2	69	R13	73

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)

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

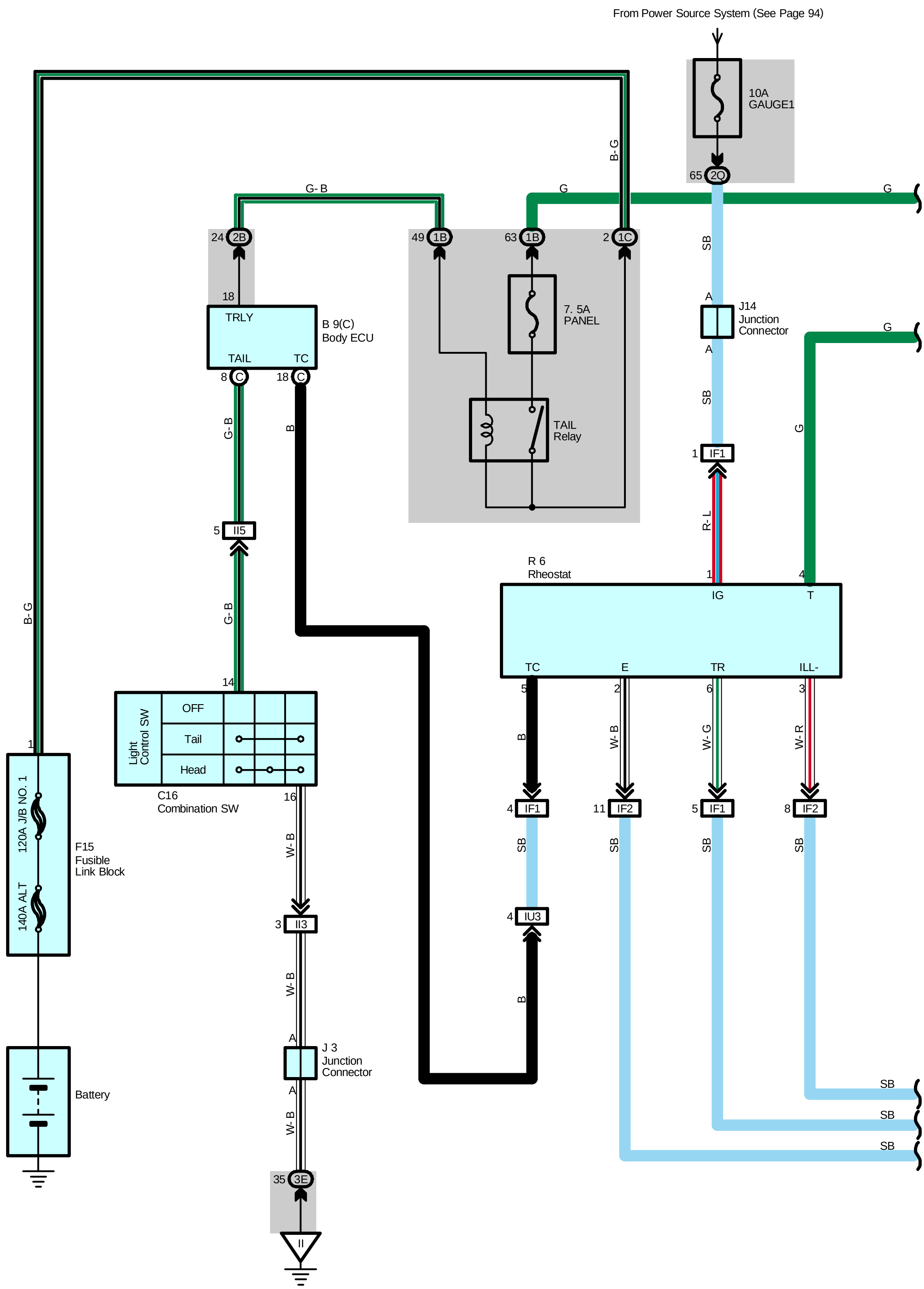
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	78	Engine Room No.2 Wire and Floor No.1 Wire (Left Kick Panel)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BH2		
BL3	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BP4		
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)

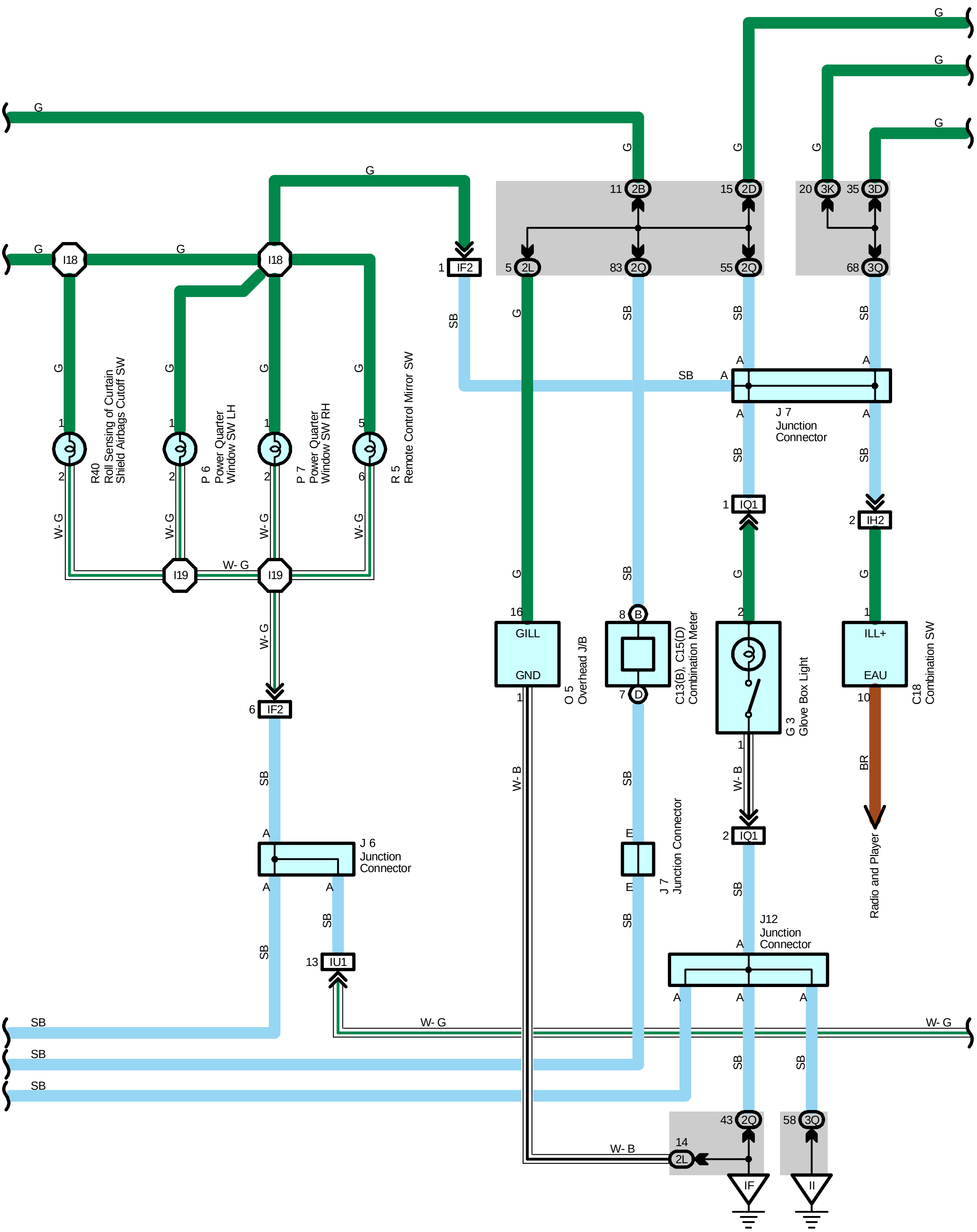
▽ : **Ground Points**

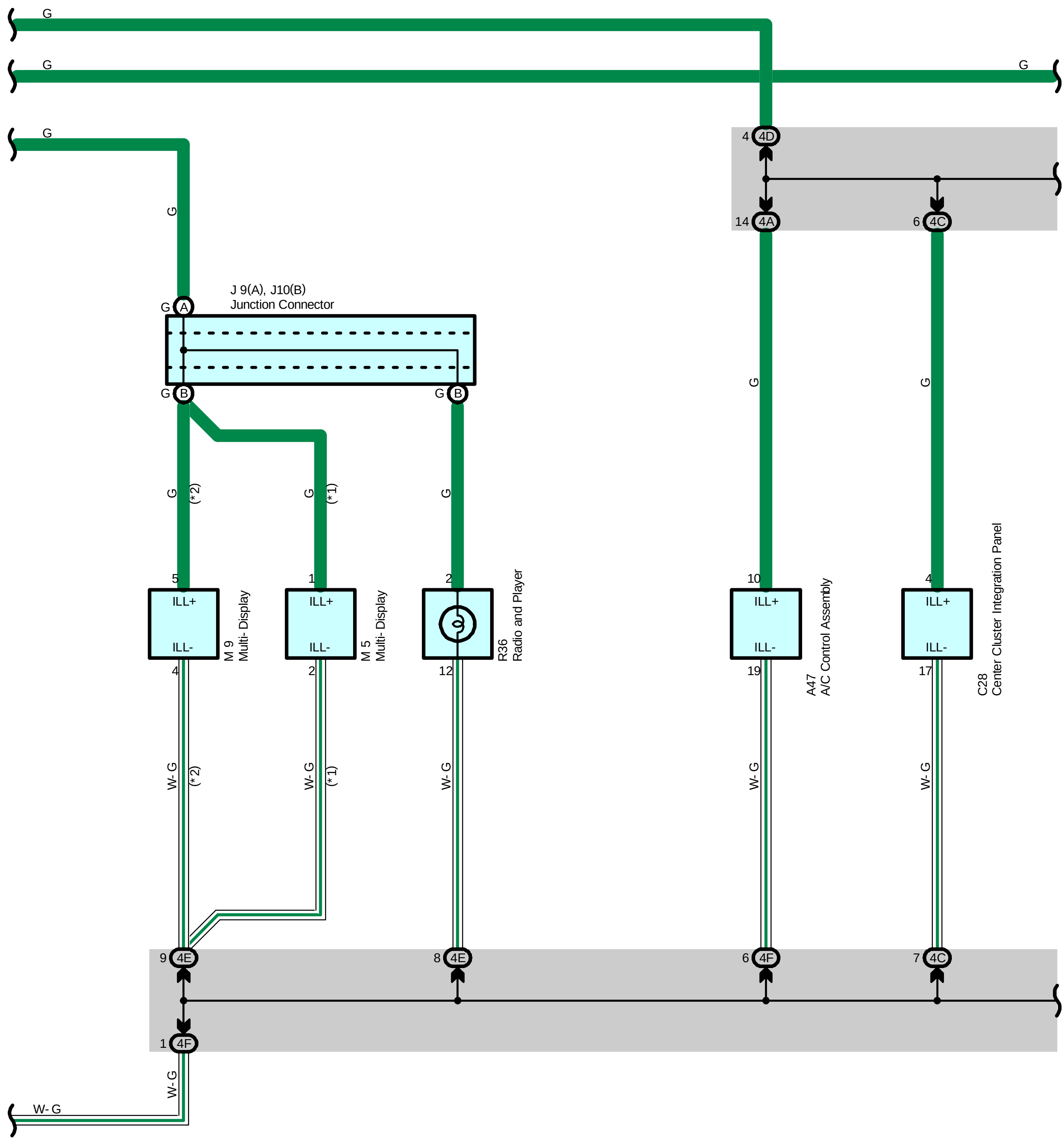
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EE	76	Front Left Side of Fender Apron
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	76	Engine Room Main Wire	B15	88	Back Door Upper Wire
B11	88	Floor No.1 Wire	B26	88	Back Door Lower Wire

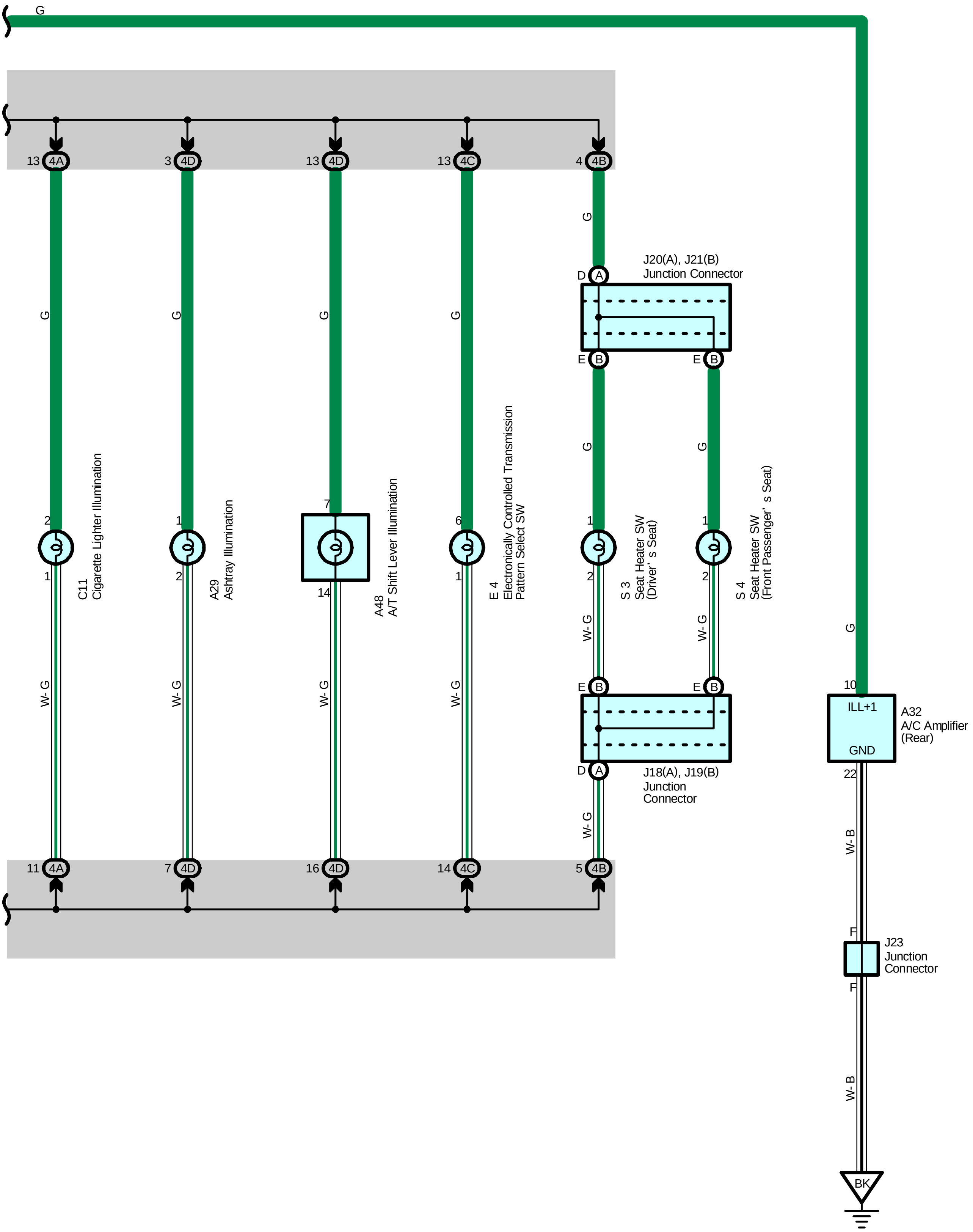

From Power Source System (See Page 94)
10A
GAUGE1
65 2Q
B-G
G-B
G
G
SB
24 2B
49 1B
63 1B
2 1C
18
TRLY
B 9(C)
Body ECU
TAIL
TC
8 C
18 C
7. 5A
PANEL
A
J14
Junction
Connector
A
G
SB
G-B
B
TAIL
Relay
1 IF1
G
5 II5
R-L
R 6
Rheostat
1
4
IG
T
B-G
G-B
TC
E
TR
ILL-
5
2
6
3
14
OFF
Tail
Head
Light
Control SW
1
B
W-B
W-G
W-R
C16
Combination SW
16
4 IF1
11 IF2
5 IF1
8 IF2
120A J/B NO. 1
140A ALT
F15
Fusible
Link Block
W-B
SB
SB
SB
SB
3 II3
4 IU3
W-B
B
A
J 3
Junction
Connector
A
Battery
SB
SB
SB
W-B
35 3E
II


R40
Roll Sensing of Curtain
Shield Airbags Cutoff SW
P 6
Power Quarter
Window SW LH
P 7
Power Quarter
Window SW RH
R 5
Remote Control Mirror SW
O 5
Overhead J/B
C13(B), C15(D)
Combination Meter
G 3
Glove Box Light
C18
Combination SW
J 7
Junction
Connector
J 6
Junction
Connector
J12
Junction
Connector
Radio and Player
GILL
GND
ILL+
EAU
I18
I19
IF2
IQ1
IH2
IU1
2B
2D
3K
3D
2L
2Q
3Q
IF
II
W- G
W- B
SB
G
BR



G
G
G
G
4 4D
14 4A
6 4C
J 9(A), J10(B)
Junction Connector
G A
G B
G B
G
(*2)
G
(*1)
G
G
G
5
ILL+
ILL-
4
M 9
Multi-Display
1
ILL+
ILL-
2
M 5
Multi-Display
2
12
R36
Radio and Player
10
ILL+
ILL-
19
A47
A/C Control Assembly
4
ILL+
ILL-
17
C28
Center Cluster Integration Panel
W-G
(*2)
W-G
(*1)
W-G
W-G
W-G
9 4E
8 4E
6 4F
7 4C
1 4F
W-G
W-G

* 1 : w/ Navigation System
* 2 : w/o Navigation System



Illumination

Service Hints

C16 Combination SW

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A29	70	G3	70	M5	71
A32	72	J3	71	M9	71
A47	70	J6	71	O5	72
A48	70	J7	71	P6	71
B9 C	70	J9 A	71	P7	71
C11	70	J10 B	71	R5	71
C13 B	70	J12	71	R6	71
C15 D	70	J14	71	R36	71
C16	70	J18 A	71	R40	71
C18	70	J19 B	71	S3	71
C28	70	J20 A	71	S4	71
E4	70	J21 B	71		
F15	68	J23	72		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4B		
4C		
4D		
4E		
4F		

: Connector Joining Wire Harness and Wire Harness

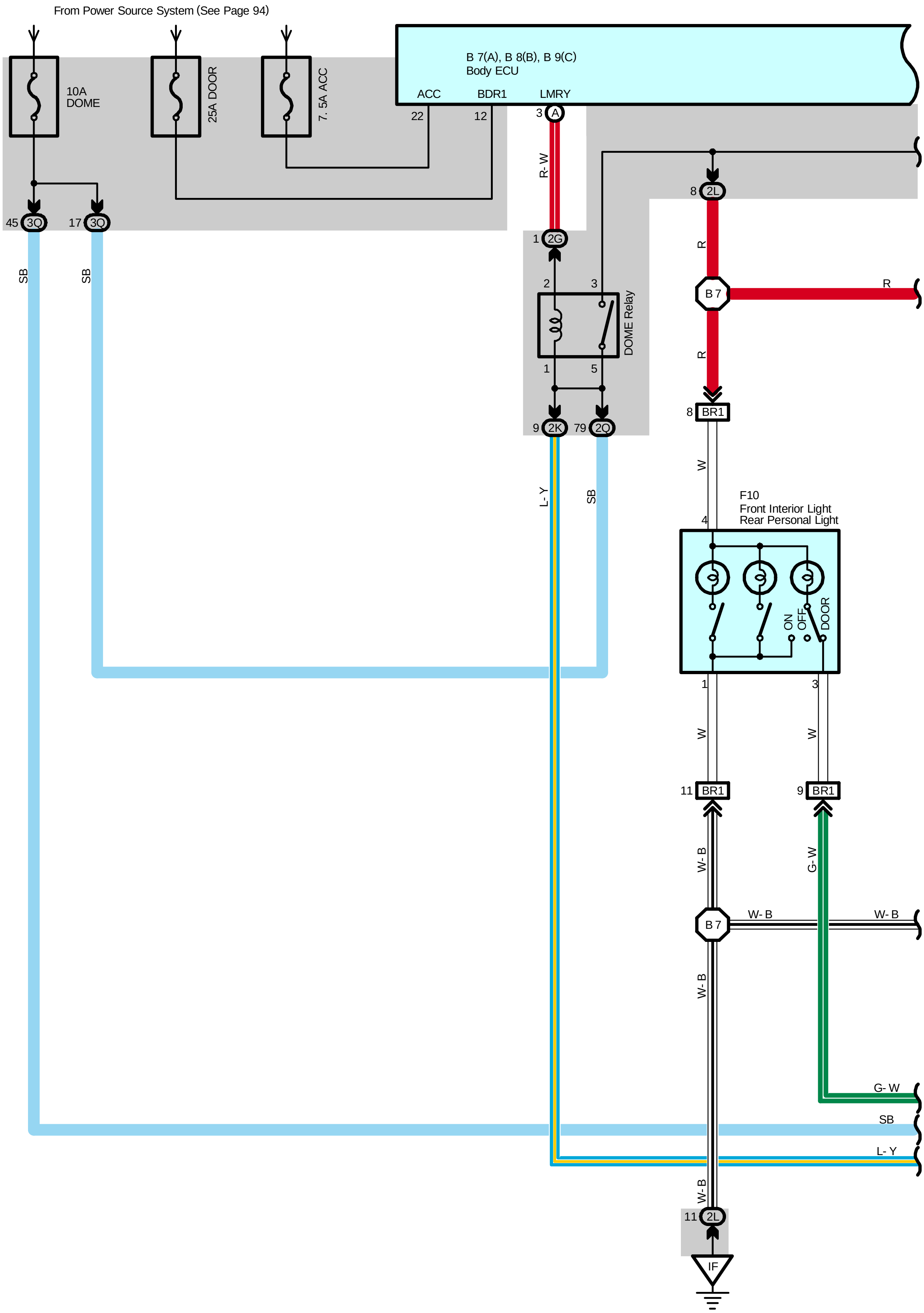
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)
IF2		
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		
IQ1	80	Instrument Panel Integration Wire and Lamp Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IU3		

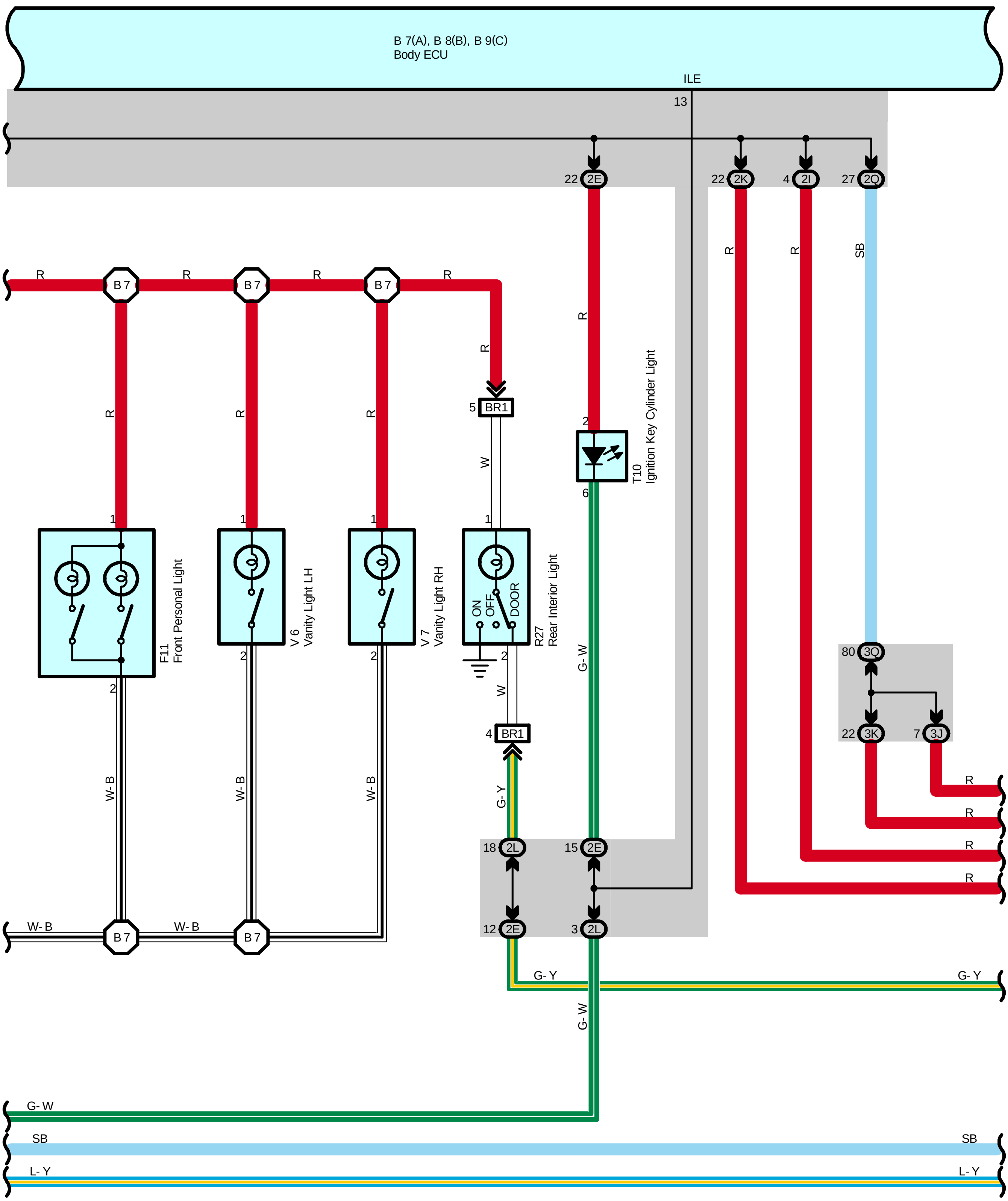
: Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BK	86	Front Side Under the Front Passenger's Seat

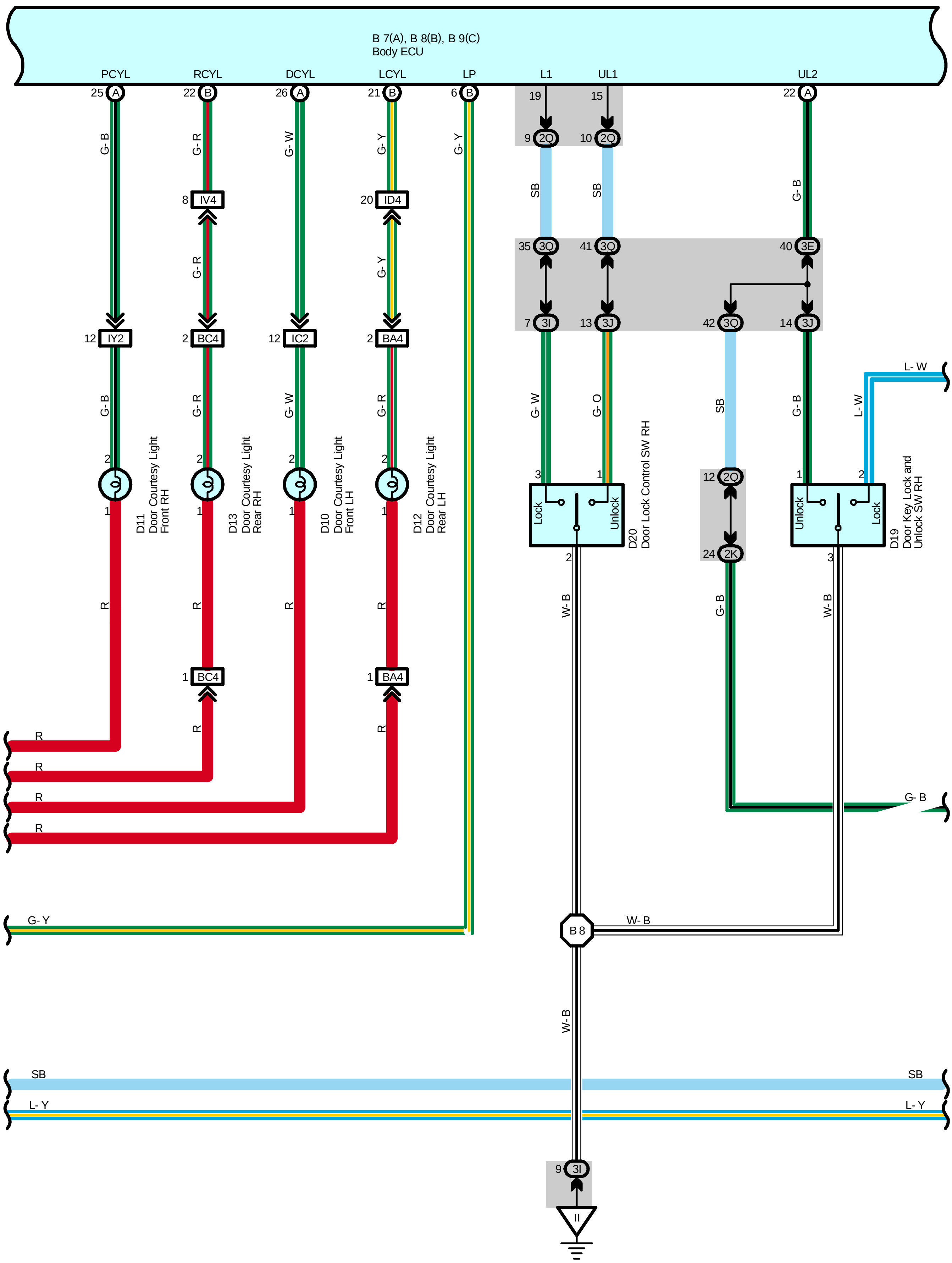
: Splice Points

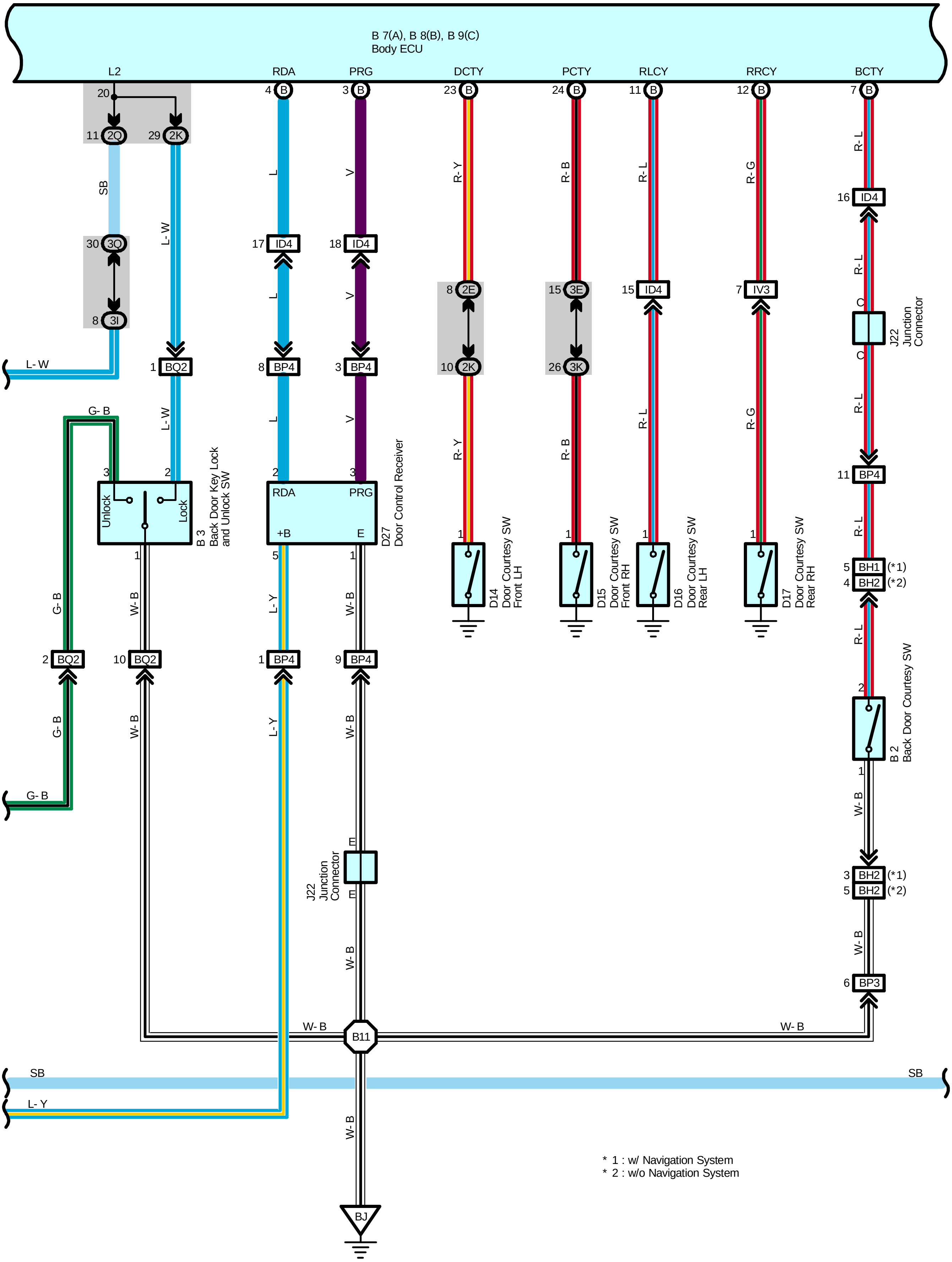
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I18	80	Instrument Panel Wire	I19	80	Instrument Panel Wire


From Power Source System (See Page 94)
10A DOME
25A DOOR
7. 5A ACC
B 7(A), B 8(B), B 9(C)
Body ECU
ACC
BDR1
LMRY
22
12
3
A
R- W
45 3Q
17 3Q
8 2L
1 2G
SB
SB
R
2
3
B 7
R
DOME Relay
1
5
R
8 BR1
9 2K
79 2Q
W
L- Y
SB
F10
Front Interior Light
Rear Personal Light
4
ON
OFF
DOOR
1
3
W
W
11 BR1
9 BR1
W- B
G- W
B 7
W- B
W- B
W- B
G- W
SB
L- Y
W- B
11 2L
IF

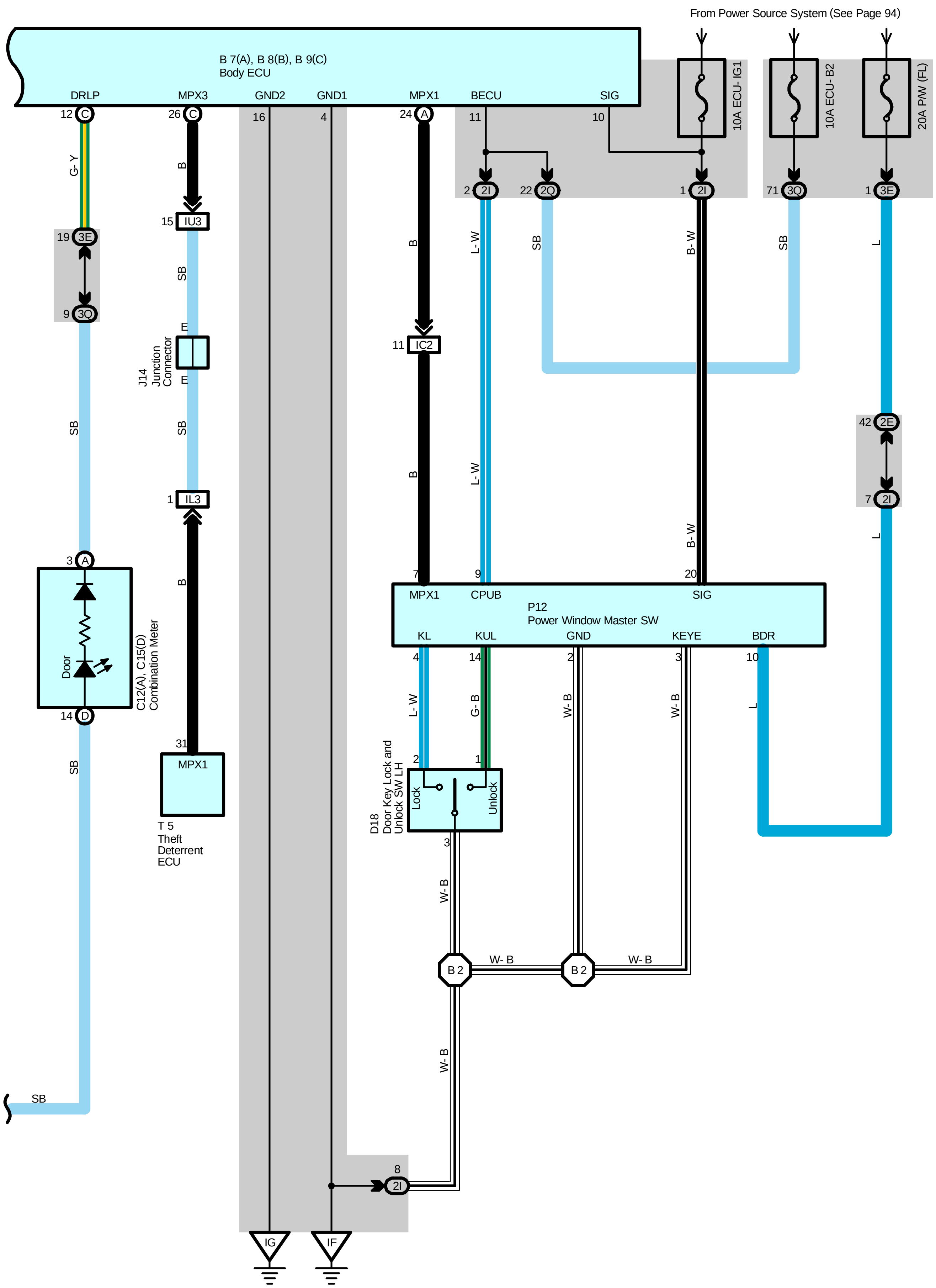

B 7(A), B 8(B), B 9(C)
Body ECU
ILE
F11
Front Personal Light
V 6
Vanity Light LH
V 7
Vanity Light RH
R27
Rear Interior Light
ON
OFF
DOOR
T10
Ignition Key Cylinder Light
BR1
B 7
G- W
SB
L- Y
G- Y
W- B

Interior Light





＊ 1 : w/ Navigation System
＊ 2 : w/o Navigation System


From Power Source System (See Page 94)
B 7(A), B 8(B), B 9(C)
Body ECU
DRLP
MPX3
GND2
GND1
MPX1
BECU
SIG
10A ECU- IG1
10A ECU- B2
20A P/W (FL)
G- Y
B
SB
L- W
B- W
L
IU3
IC2
J14
Junction Connector
IL3
Door
C12(A), C15(D)
Combination Meter
MPX1
T 5
Theft
Deterrent
ECU
P12
Power Window Master SW
CPUB
KL
KUL
GND
KEYE
BDR
G- B
W- B
D18
Door Key Lock and Unlock SW LH
Lock
Unlock
B 2
IG
IF

System Outline

Normal Operation

* When the front Door LH or RH is opened, the door courtesy light front LH, RH and open door warning light is turned on. When the front door LH and RH are closed, the door courtesy light front LH, RH is turned off.
* When the rear door LH, RH or the back door is opened, door courtesy light rear LH, RH, rear interior light and the open door warning light is turned on. When the rear door LH, RH and back door are closed, the door courtesy light rear LH, RH is turned off.
* When all the doors are closed, the open door warning light is turned off.

Turn Off Function

When the ignition SW turned off and there is no change in the door courtesy SW for approx. 30 minute, the DOME relay is turned off. The DOME relay is turned on again when any of the following conditions are met.

* Ignition SW is turned from OFF position to ACC or ON position
* Change to any door courtesy SW
* Driver or front passenger door is unlocked by the key or transmitter

Immediate Turn Off Function at Door Lock

When all the doors are closed, and the driver or front passenger door is locked by the key or transmitter, the DOME relay is turned off, after approx. 80 seconds. However, when the illuminated entry system is operating, the DOME relay is turned off after the operation is completed. the DOME relay is turned on again when any of the following conditions are met.

* Ignition SW is turned from OFF position to ACC or ON position
* Change to any door courtesy SW
* Driver or front passenger door is unlocked by the key or transmitter

Illuminated Entry System

* When any door is opened, each light is turned on.
* The light remains on for approx. 15 seconds after all doors are closed, and fades out.
* With the ignition SW is at ACC or ON position, and any door open, when all the doors are closed, each light fades out immediately.
* When the ignition SW is turned to ACC or ON position during timer lighting, each light fades out immediately.
* When the doors are locked during timer lighting, each light fades out immediately.
* The lights include, the front interior light, ignition key cylinder light, and front door courtesy light LH, RH.

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
B2		72	D13	72	F11	72
B3		72	D14	72	J14	71
B7	A	70	D15	72	J22	72
B8	B	70	D16	72	P12	73
B9	C	70	D17	72	R27	73
C12	A	70	D18	72	T5	71
C15	D	70	D19	72	T10	71
D10		72	D20	72	V6	73
D11		72	D27	72	V7	73
D12		72	F10	72		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3J		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV3 IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
BA4	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC4	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BH1 BH2	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BP3 BP4	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BR1	88	Roof No.3 Wire and Roof No.1 Wire (Front Side of Roof)

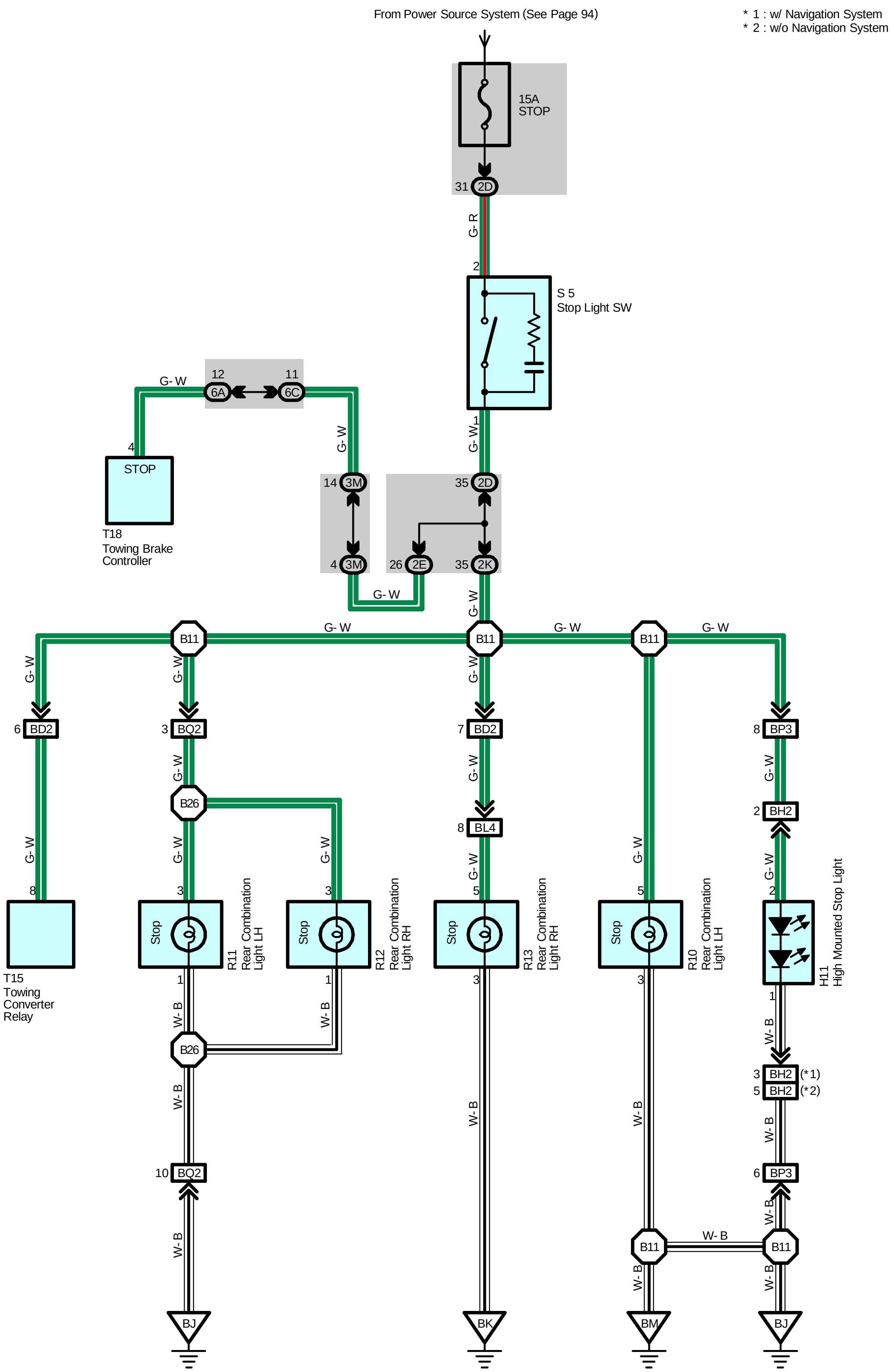
: Ground Points

Code	See Page	Ground Points Location
IF IG	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B8	88	Front Door RH Wire
B7	88	Roof No.1 Wire	B11	88	Floor No.1 Wire

Stop Light



From Power Source System (See Page 94)
* 1 : w/ Navigation System
* 2 : w/o Navigation System
15A
STOP
31 2D
G-R
S 5
Stop Light SW
G-W
12 6A
11 6C
STOP
T18
Towing Brake Controller
14 3M
4 3M
35 2D
26 2E
35 2K
B11
BD2
BQ2
B26
BL4
BP3
BH2
T15
Towing Converter Relay
Stop
R11
Rear Combination Light LH
R12
Rear Combination Light RH
R13
Rear Combination Light RH
R10
Rear Combination Light LH
H11
High Mounted Stop Light
W-B
BH2 (*1)
BH2 (*2)
BJ
BK
BM

Service Hints

S5 Stop Light SW

2-1 : Closed with brake pedal depressed

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
H11	72	R12	73	T15	73
R10	73	R13	73	T18	71
R11	73	S5	71		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3M	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
6A	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6C		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH2	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BL4	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)

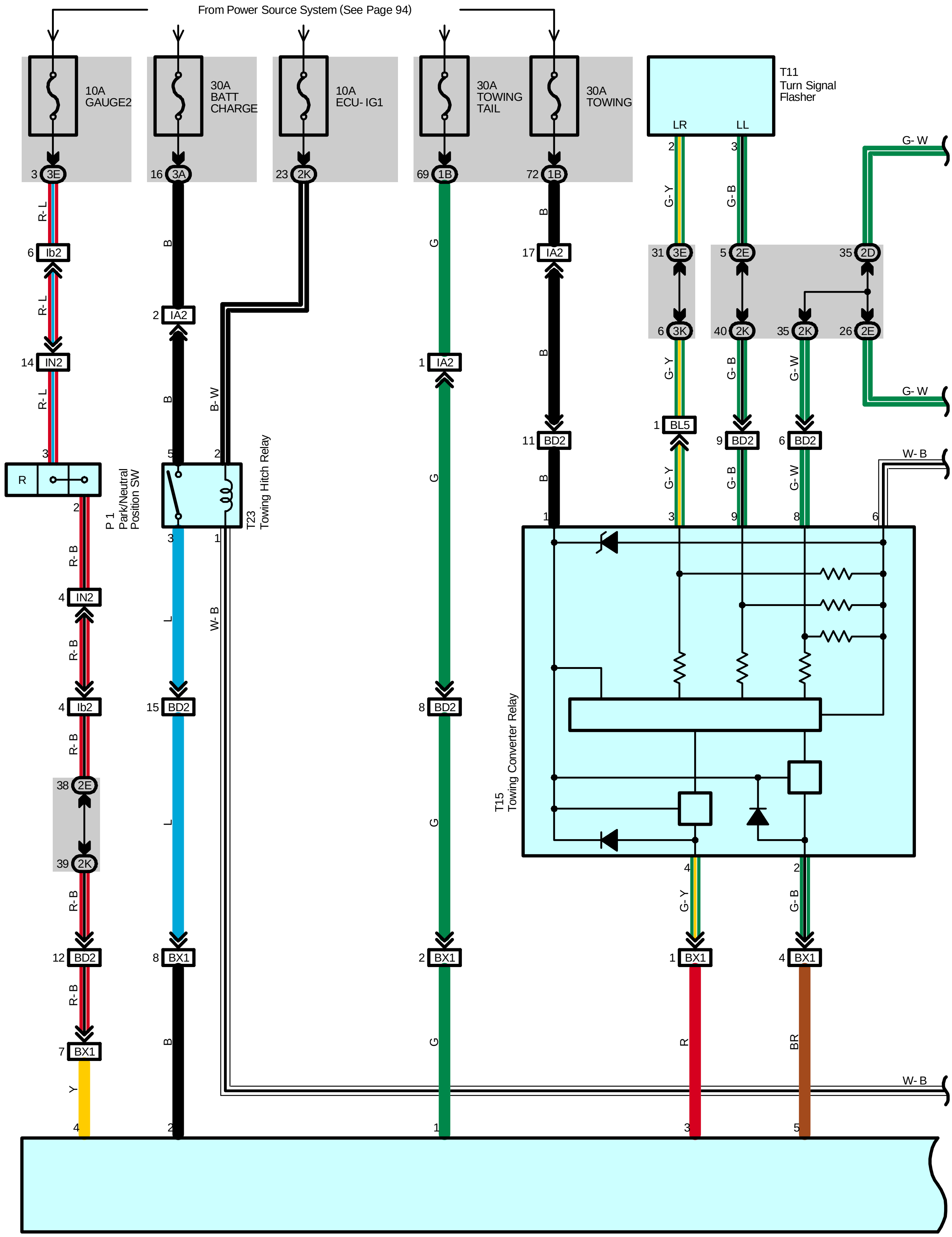
▽ : **Ground Points**

Code	See Page	Ground Points Location
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel

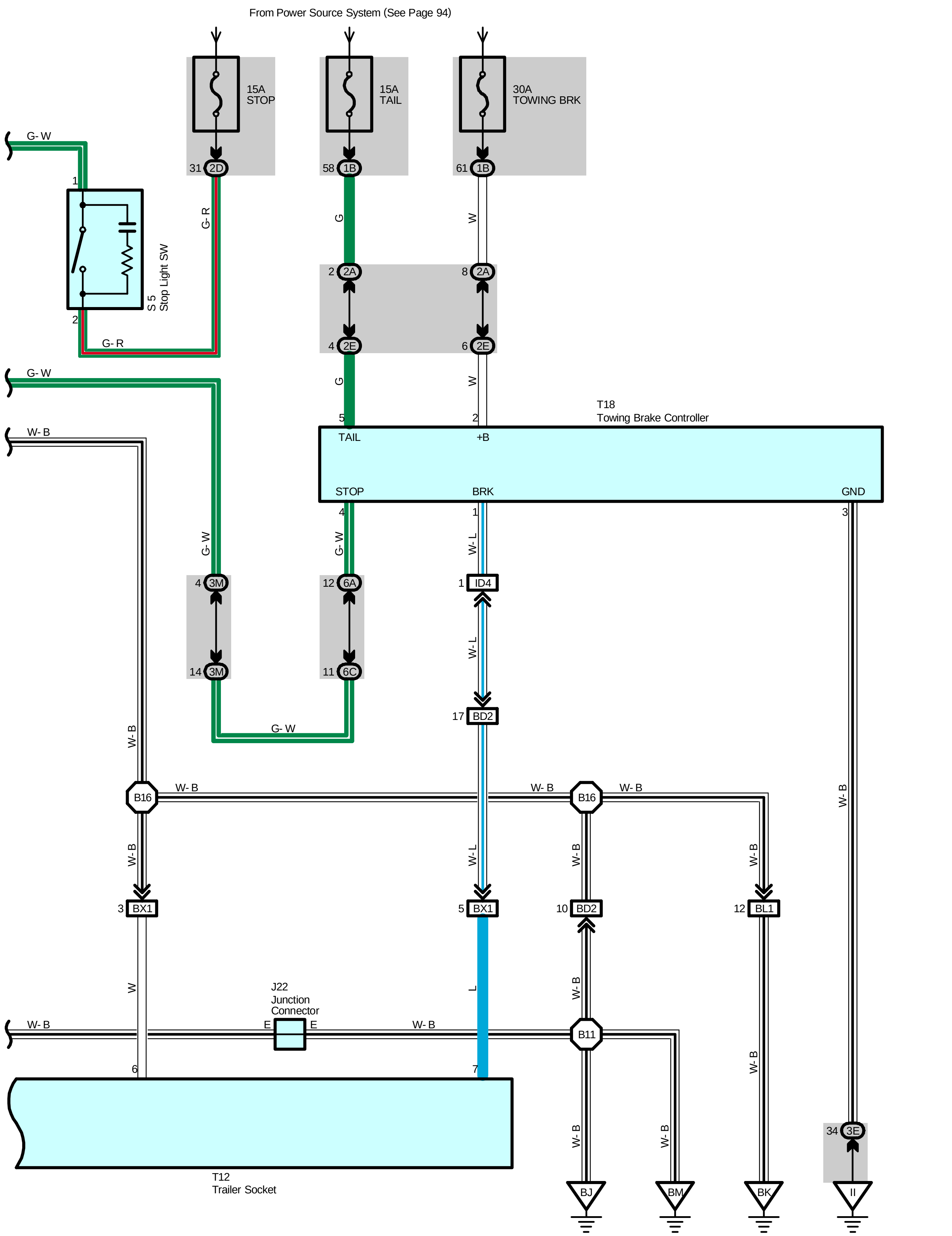
: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire	B26	88	Back Door Lower Wire

Trailer Towing



T12
Trailer Socket


From Power Source System (See Page 94)
15A
STOP
15A
TAIL
30A
TOWING BRK
G- W
S 5
Stop Light SW
G- R
T18
Towing Brake Controller
TAIL
+B
STOP
BRK
GND
W- B
W- L
B16
BX1
ID4
BD2
BL1
B11
J22
Junction
Connector
L
W
T12
Trailer Socket
BJ
BM
BK
II

Trailer Towing

Service Hints

T15 Towing Converter Relay

1-Ground : Always approx. 12 volts
6-Ground : Always continuity

S5 Stop Light SW

2-1 : Closed with brake pedal depressed

: Parts Location

Code	See Page	Code	See Page	Code	See Page
J22	72	T11	71	T18	71
P1	69	T12	73	T23	73
S5	71	T15	73		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3A	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3M	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
6A	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6C		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	78	Engine Room No.2 Wire and Floor No.1 Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BL1	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BL5		
BX1	88	Frame No.4 Wire and Floor No.3 Wire (Left Side of Rear Floor Crossmember)

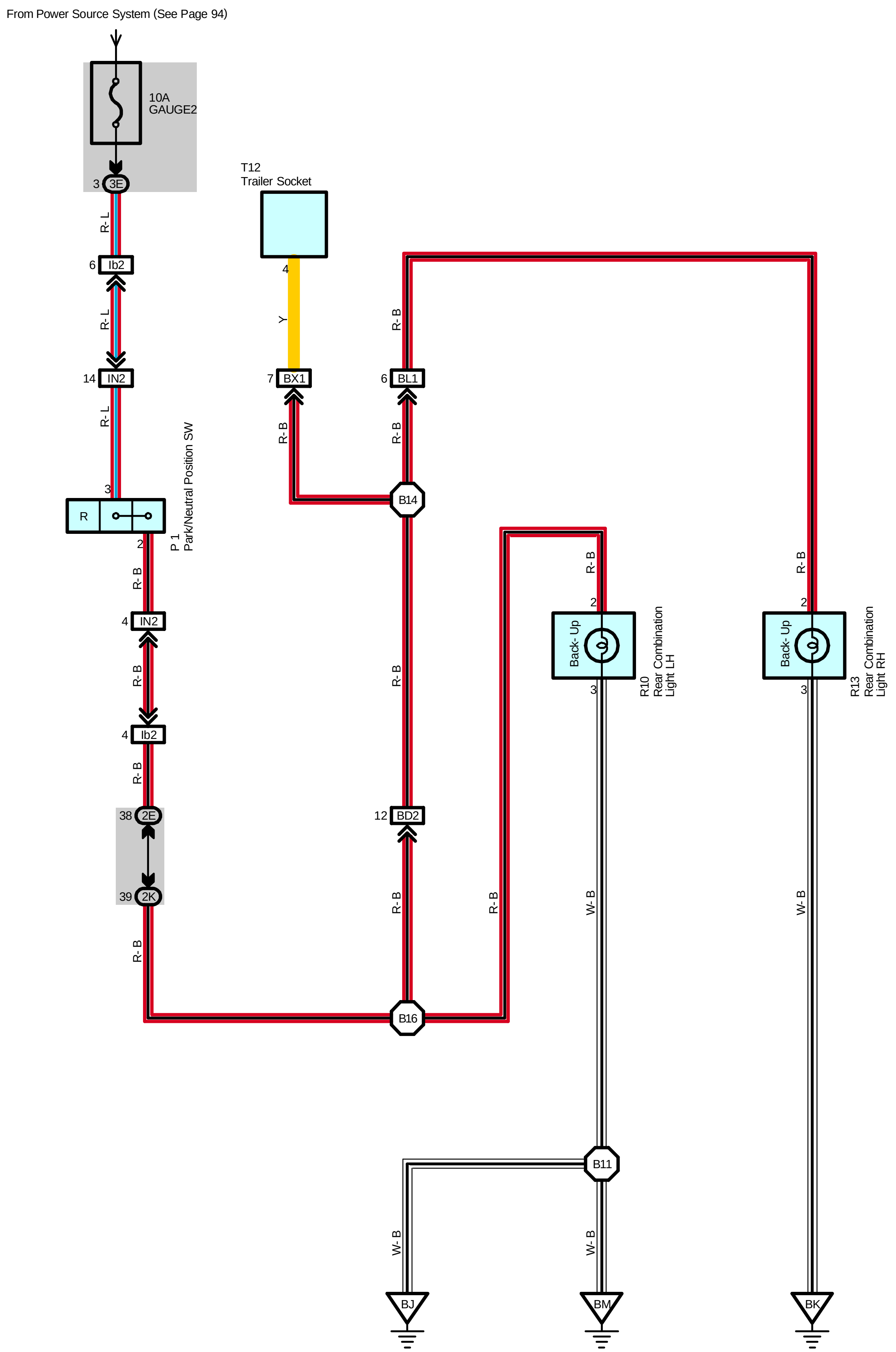
: Ground Points

Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire	B16	88	Floor No.3 Wire

Back-Up Light



Service Hints

P1 Park/Neutral Position SW

3-2 : Closed with shift lever at R position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
P1	69	R13	73		
R10	73	T12	73		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

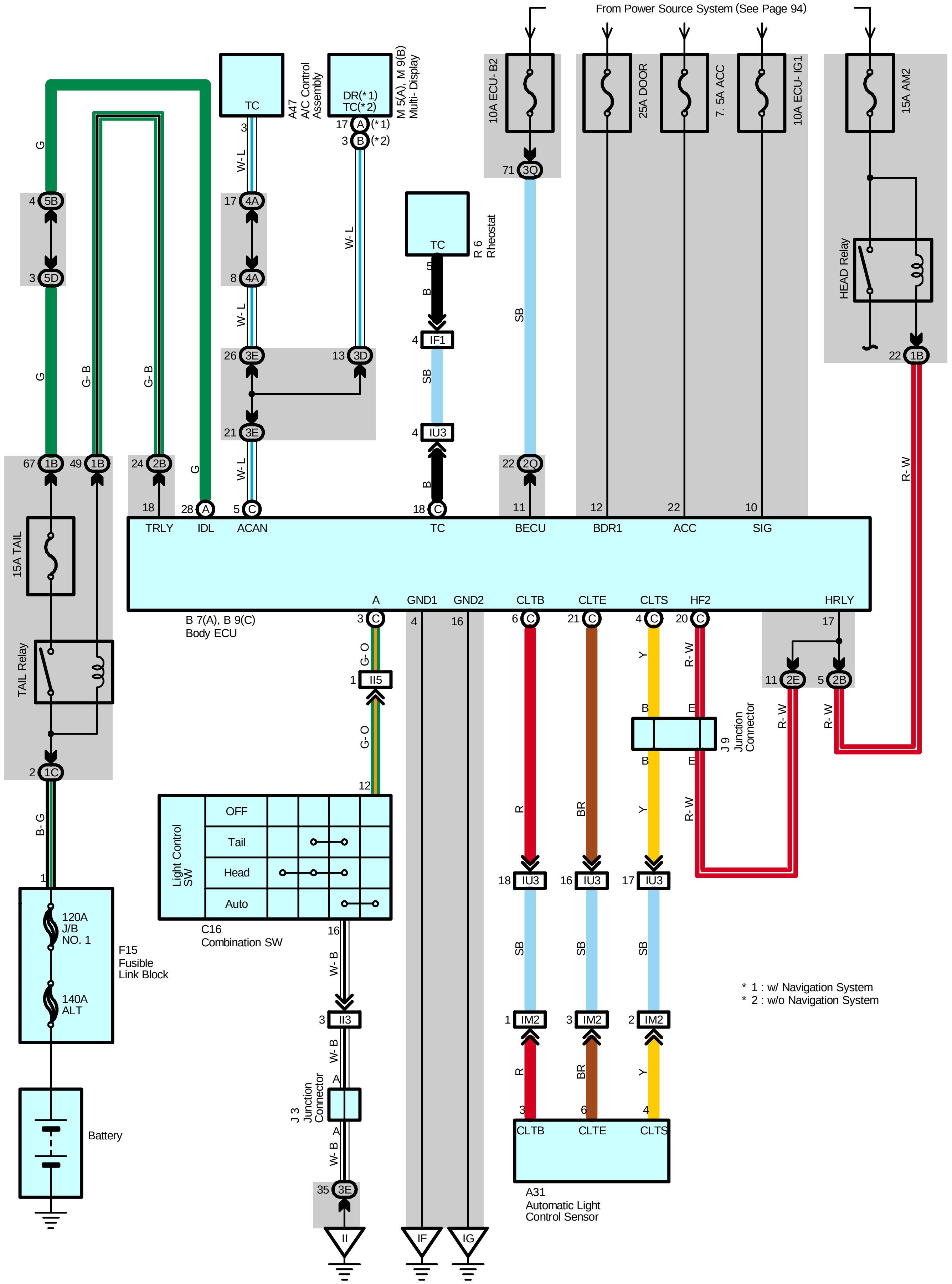
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BL1	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BX1	88	Frame No.4 Wire and Floor No.3 Wire (Left Side of Rear Floor Crossmember)

▽ : Ground Points

Code	See Page	Ground Points Location
BJ	86	Under the Driver’s Seat
BK	86	Front Side Under the Front Passenger’s Seat
BM	86	Left Rear Side Quarter Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire	B16	88	Floor No.3 Wire
B14	88	Floor No.2 Wire			


From Power Source System (See Page 94)
10A ECU- B2
25A DOOR
7. 5A ACC
10A ECU- IG1
15A AM2
HEAD Relay
A47 A/C Control Assembly
TC
M 5(A), M 9(B) Multi- Display
DR(*1)
TC(*2)
R 6 Rheostat
15A TAIL
TAIL Relay
B 7(A), B 9(C) Body ECU
TRLY
IDL
ACAN
TC
BECU
BDR1
ACC
SIG
A
GND1
GND2
CLTB
CLTE
CLTS
HF2
HRLY
J 9 Junction Connector
Light Control SW
OFF
Tail
Head
Auto
C16 Combination SW
120A J/B NO. 1
140A ALT
F15 Fusible Link Block
Battery
J 3 Junction Connector
A31 Automatic Light Control Sensor
* 1 : w/ Navigation System
* 2 : w/o Navigation System

System Outline

The automatic light control system works when the light control SW is turned to AUTO. The automatic light control sensor detects the brightness around the vehicle. By this function, the system automatically turns the taillight and headlight on if the brightness is below the regular level and turns the taillight and headlight off when the surroundings become brighter than the regular level.

Service Hints

Body ECU

11, 12-Ground : Always approx. 12 volts
22-Ground : Approx. 12 volts with ignition SW at ACC or ON position
10-Ground : Approx. 12 volts with ignition SW at ON or ST position
4, 16-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code		See Page
A31		70	C16	70	M5	A	71
A47		70	F15	68	M9	B	71
B7	A	70	J3	71	R6		71
B9	C	70	J9	71			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)

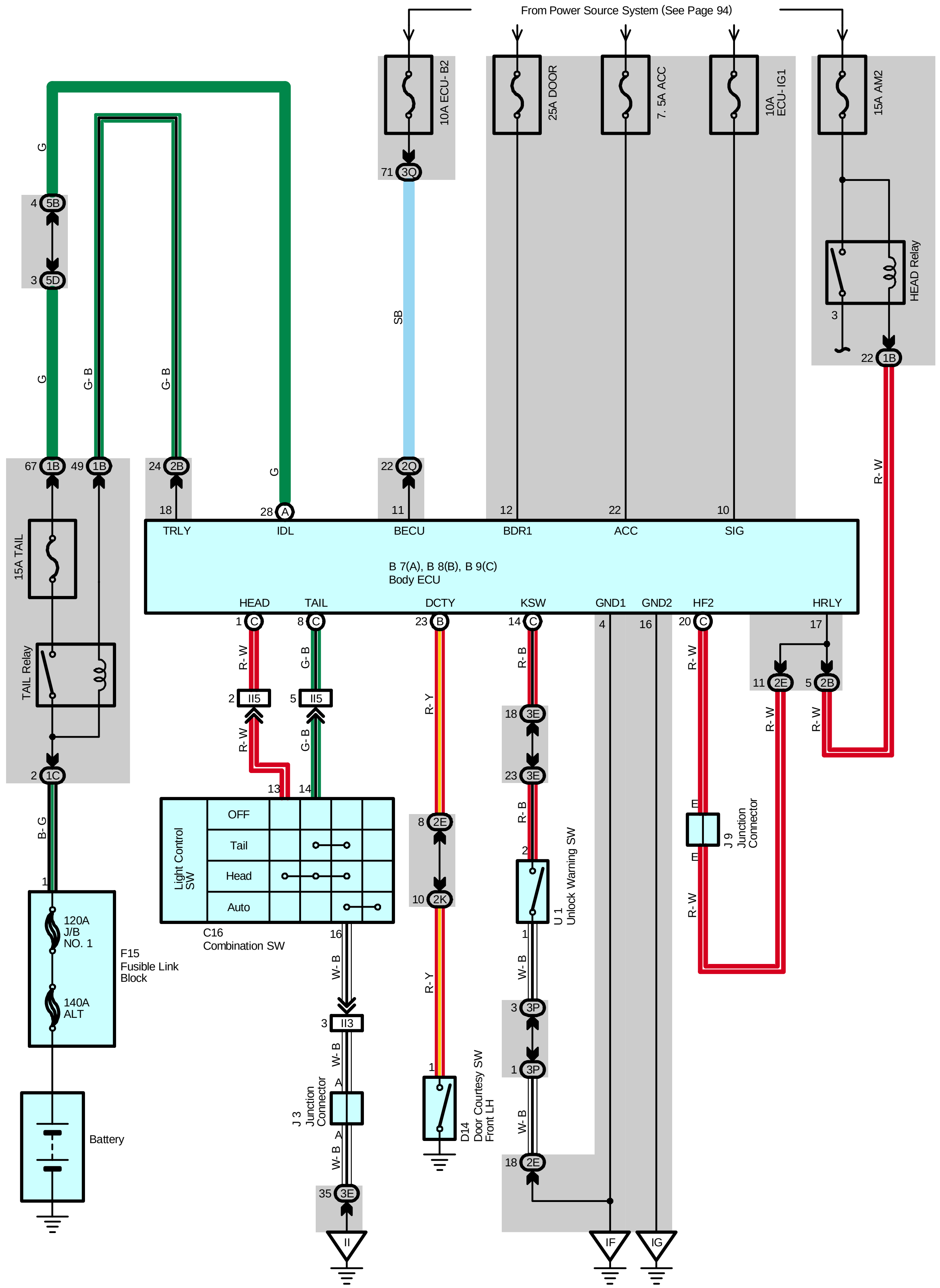
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		
IM2	80	Instrument Panel Integration Wire and Instrument Panel No.3 Wire (Right Side of Instrument Panel)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH

Light Auto Turn Off System



System Outline

The light auto turn off system automatically turns the taillight or headlight off according to the door open or close on the driver's side, and prevent failing to turn off the lights.
If the ignition switch is turned to OFF from ON with the headlight or taillight is on, the signal is input in the TERMINAL SIG of the body ECU. If the driver's side door is opened at that time, the signal from the door courtesy SW front LH is sent to the TERMINAL DCTY of the body ECU. The signal turns the headlight or taillight off.
Delayed turn off control
In the case of that some doors are opened, the headlight or taillight is left on for about 30 seconds after the all the doors was closed. However, if the doors are locked using the wireless door lock, the headlight or taillight is immediately turn off.

Service Hints

Body ECU

11, 12-Ground : Always approx. 12 volts
10-Ground : Approx. 12 volts with ignition SW at ON or ST position
4, 16-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
B7	A	70	C16	70	J3	71
B8	B	70	D14	72	J9	71
B9	C	70	F15	68	U1	71

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)

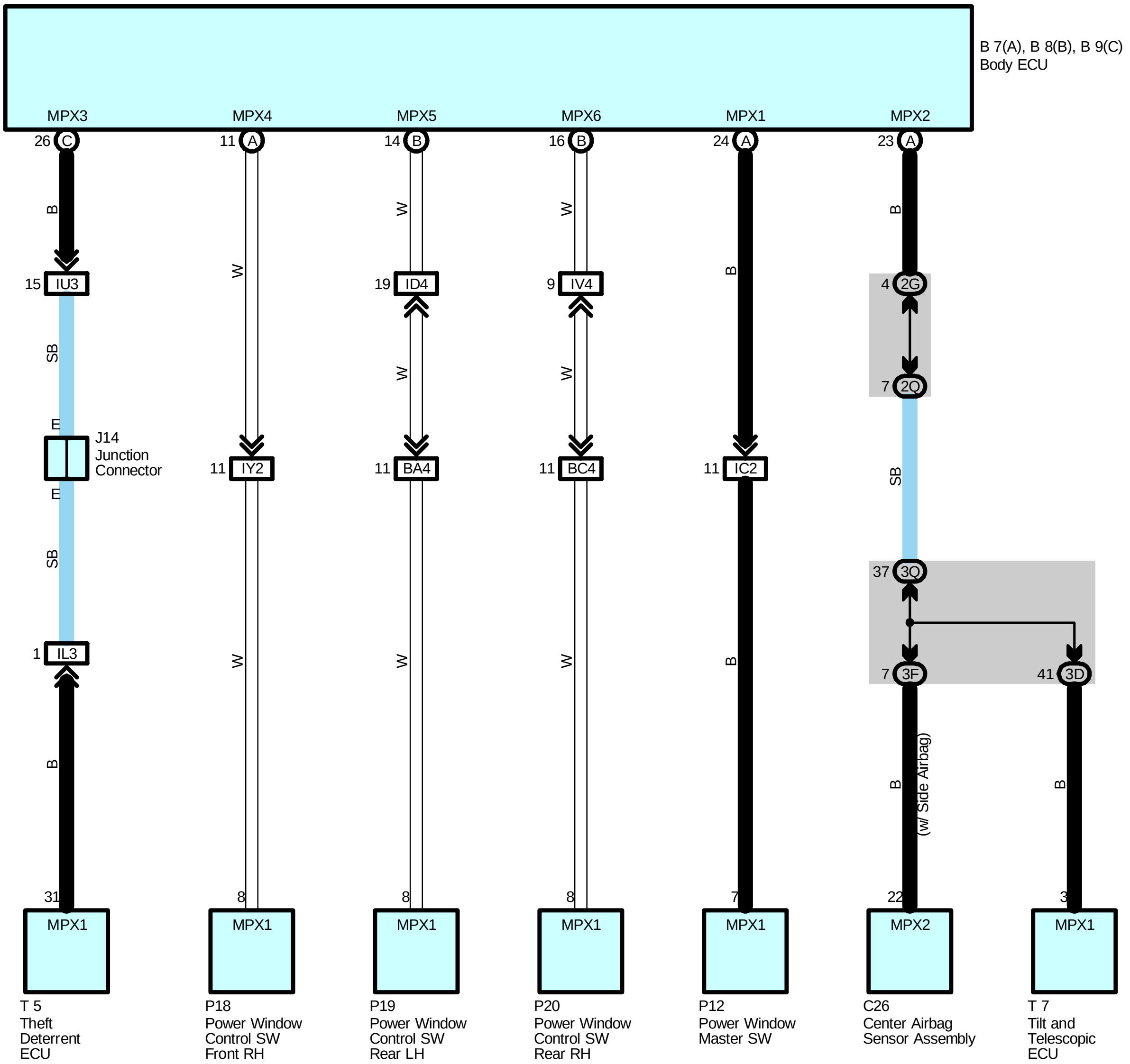
: Connector Joining Wire Harness and Wire Harness

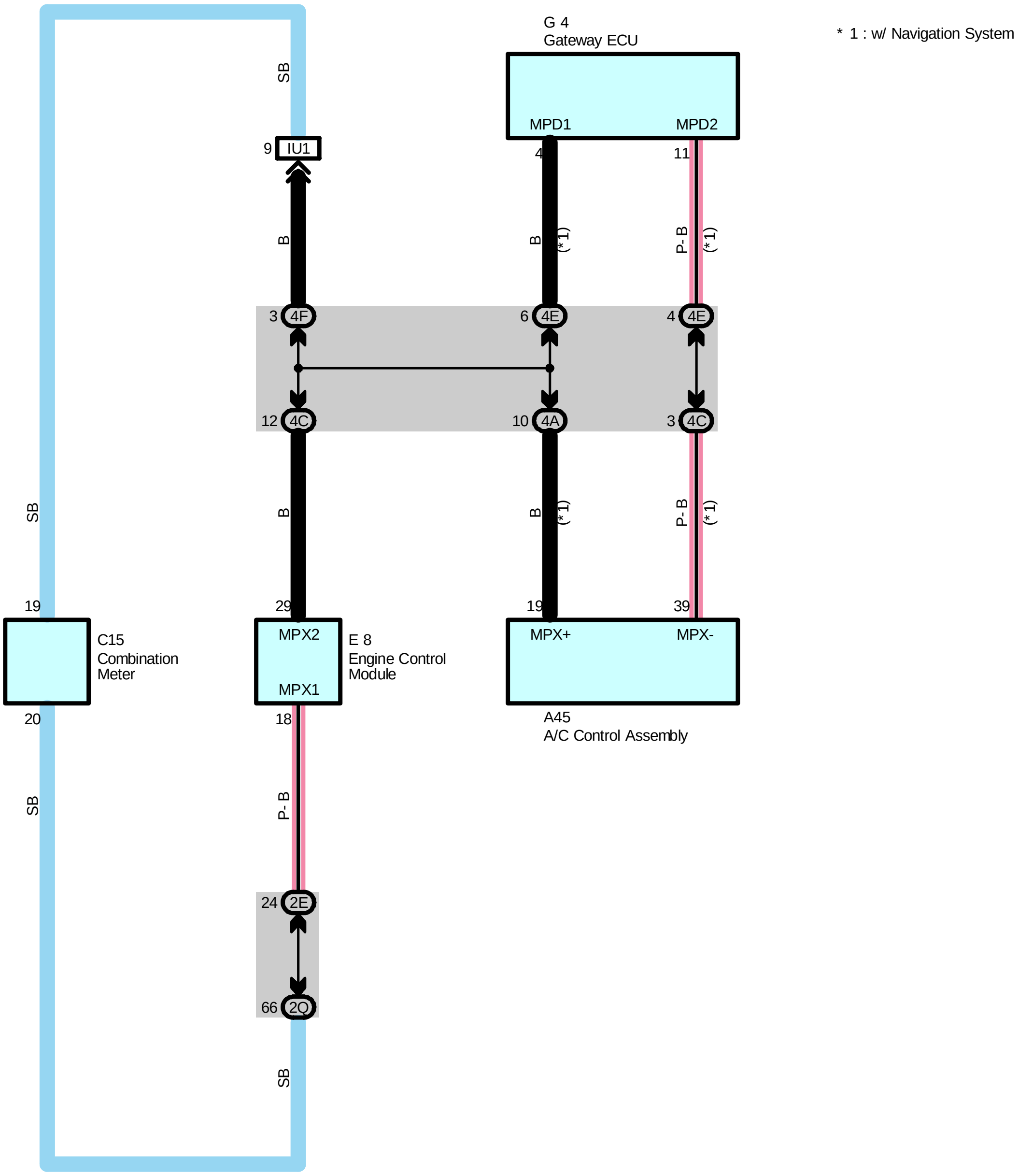
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH

Multiplex Communication System - Communication Bus



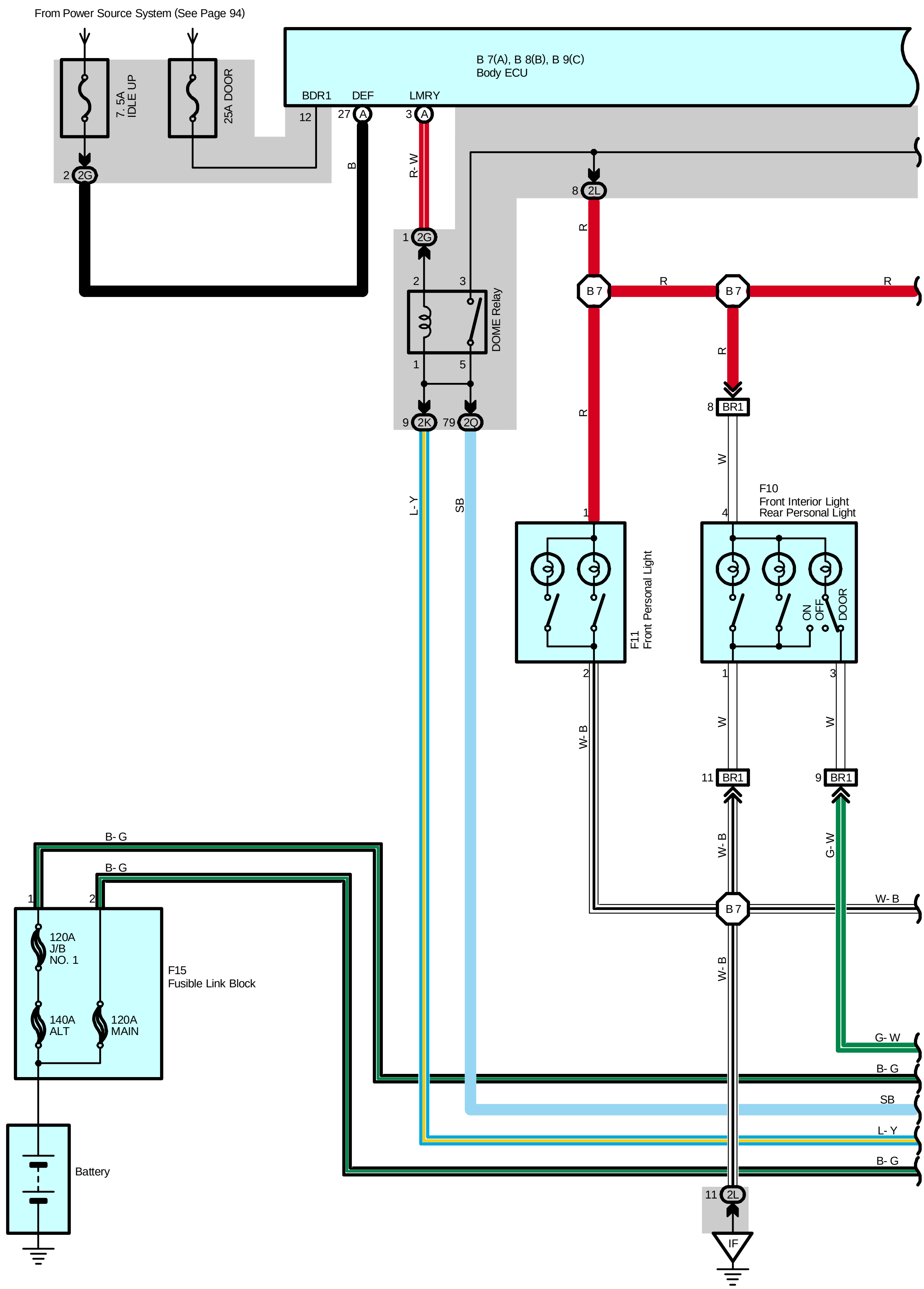

G 4
Gateway ECU
MPD1
MPD2
* 1 : w/ Navigation System
SB
9
IU1
4
11
B
B
(*1)
P- B
(*1)
3
4F
6
4E
4
4E
12
4C
10
4A
3
4C
SB
B
B
(*1)
P- B
(*1)
19
29
19
39
MPX2
MPX+
MPX-
C15
Combination
Meter
E 8
Engine Control
Module
MPX1
20
18
A45
A/C Control Assembly
SB
P- B
24
2E
66
2Q
SB

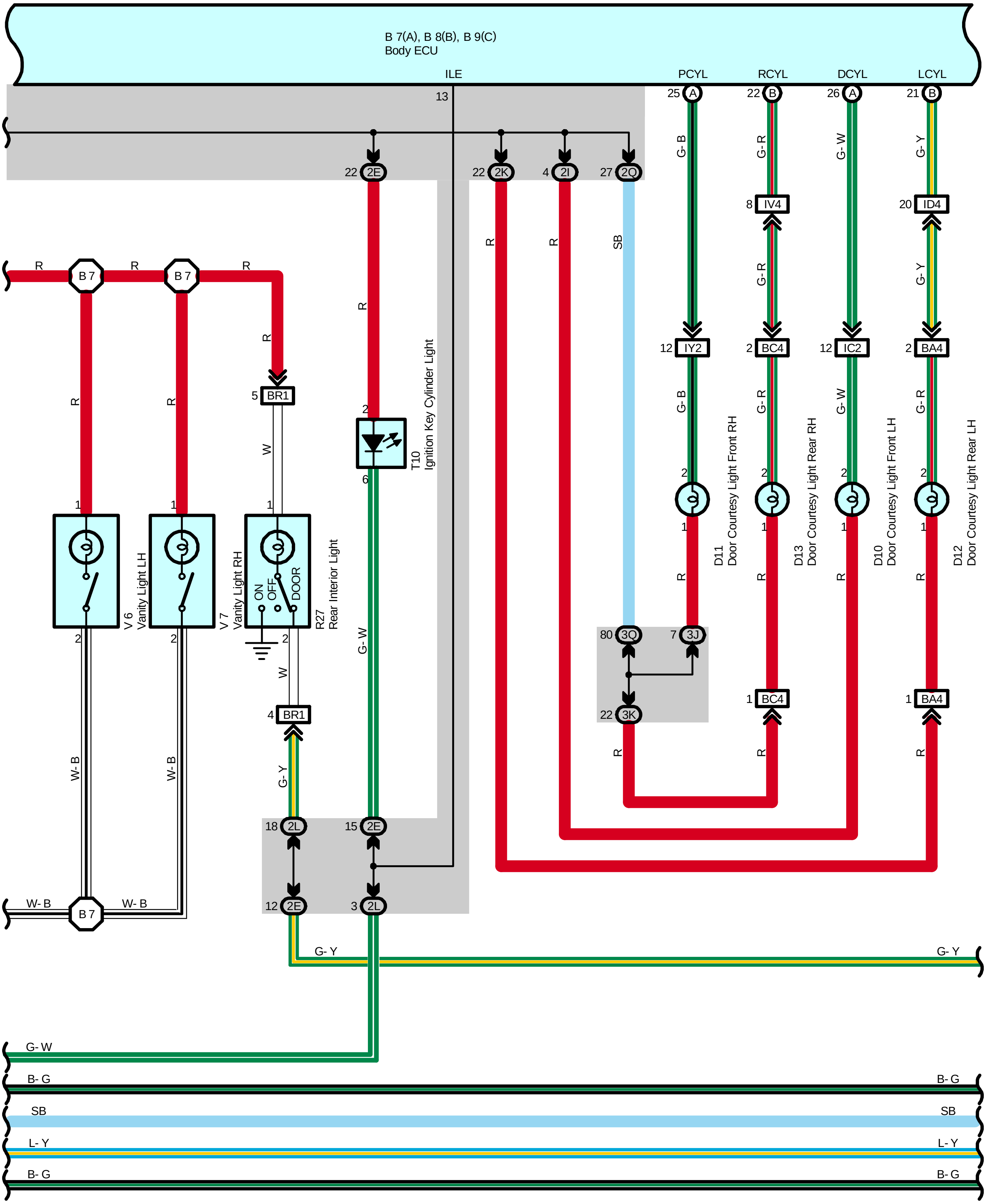
Multiplex Communication System - Communication Bus

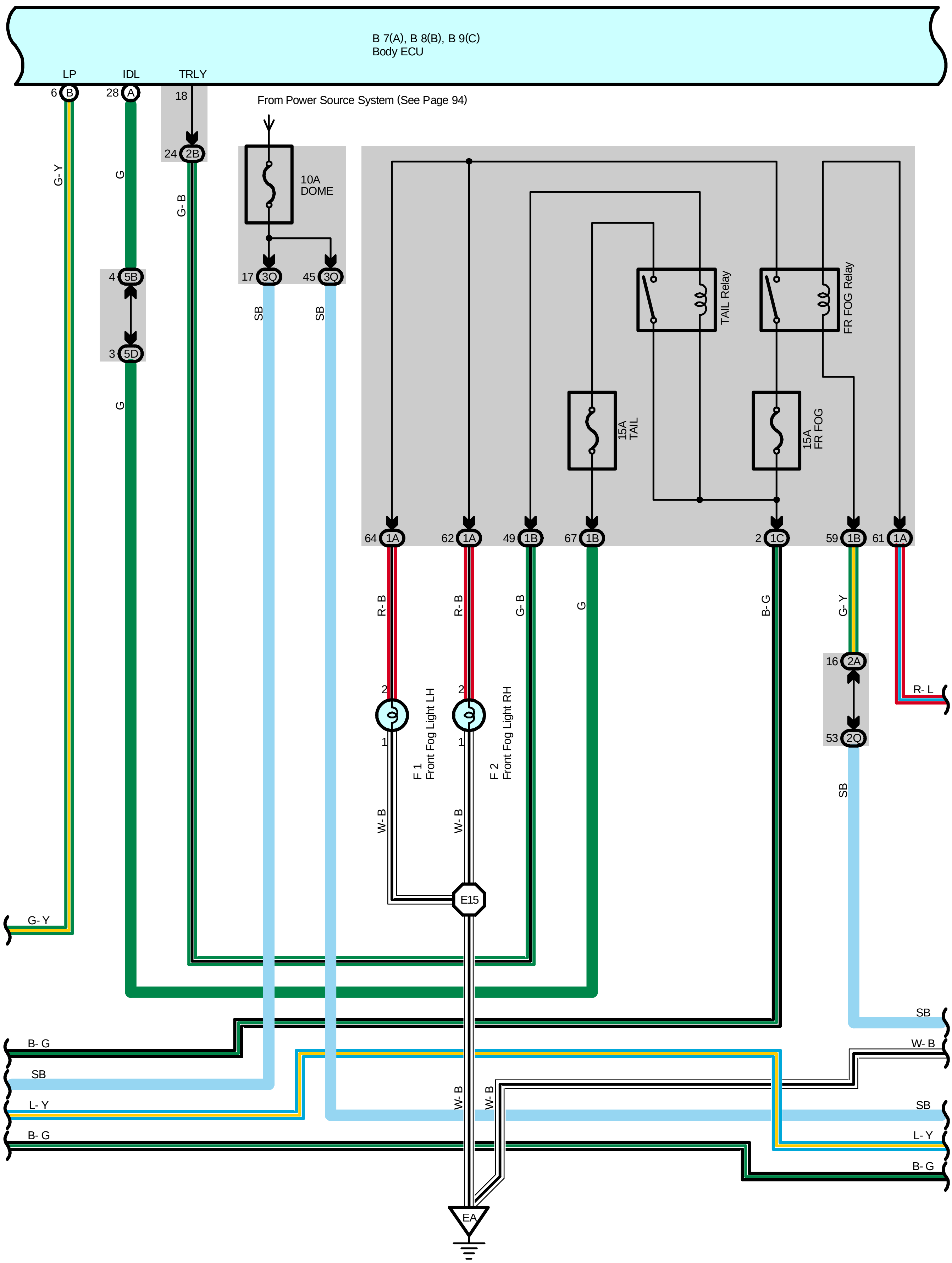
Multiplex Communication System Includes Following Systems

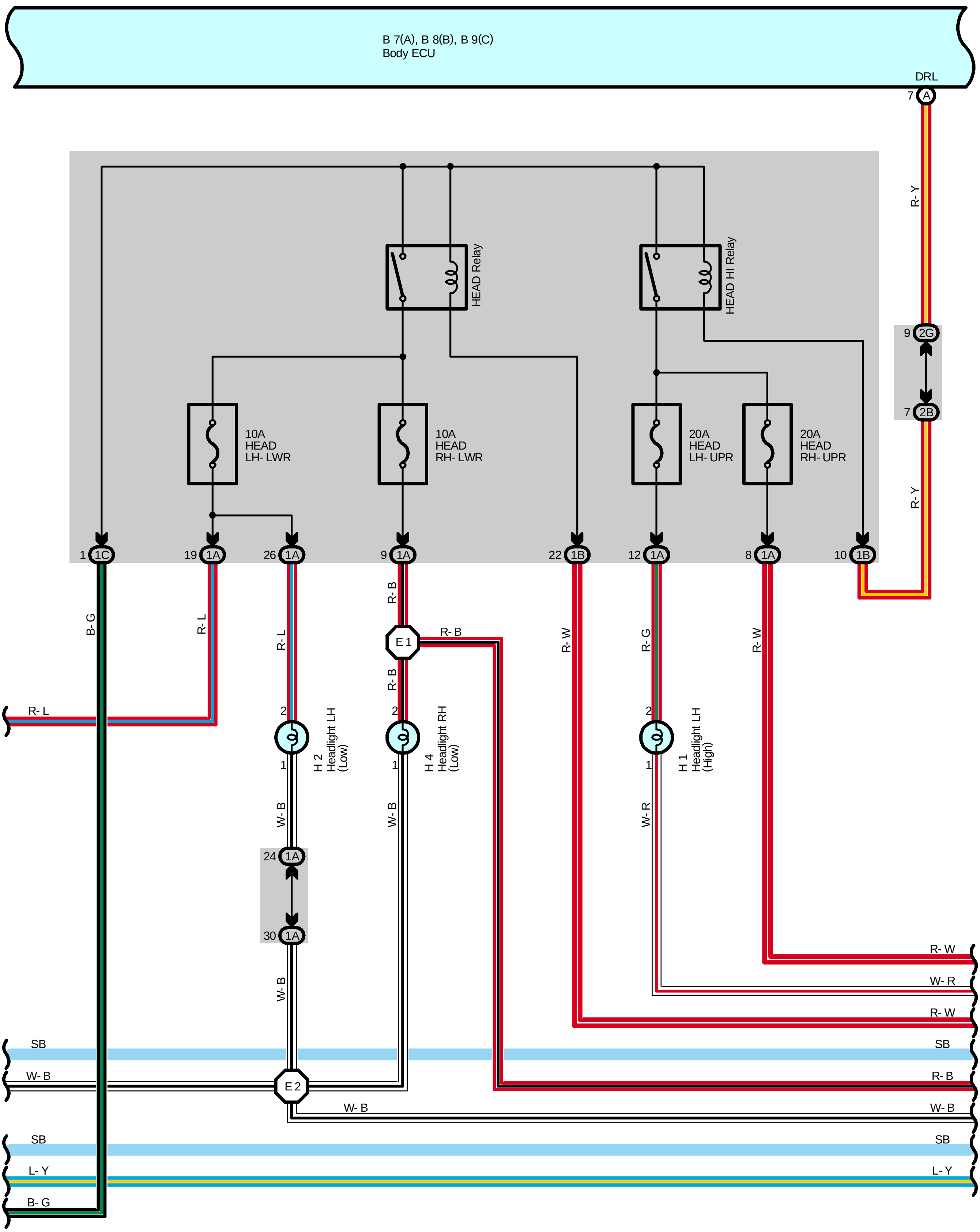
- * **Automatic Light Control**
- * **Door Lock Control**
- * **Front Fog Light**
- * **Headlight**
- * **Interior Light**
- * **Key Reminder**
- * **Light Auto Turn Off System**
- * **Power Window**
- * **Theft Deterrent**
- * **Wireless Door Lock Control**

Multiplex Communication System

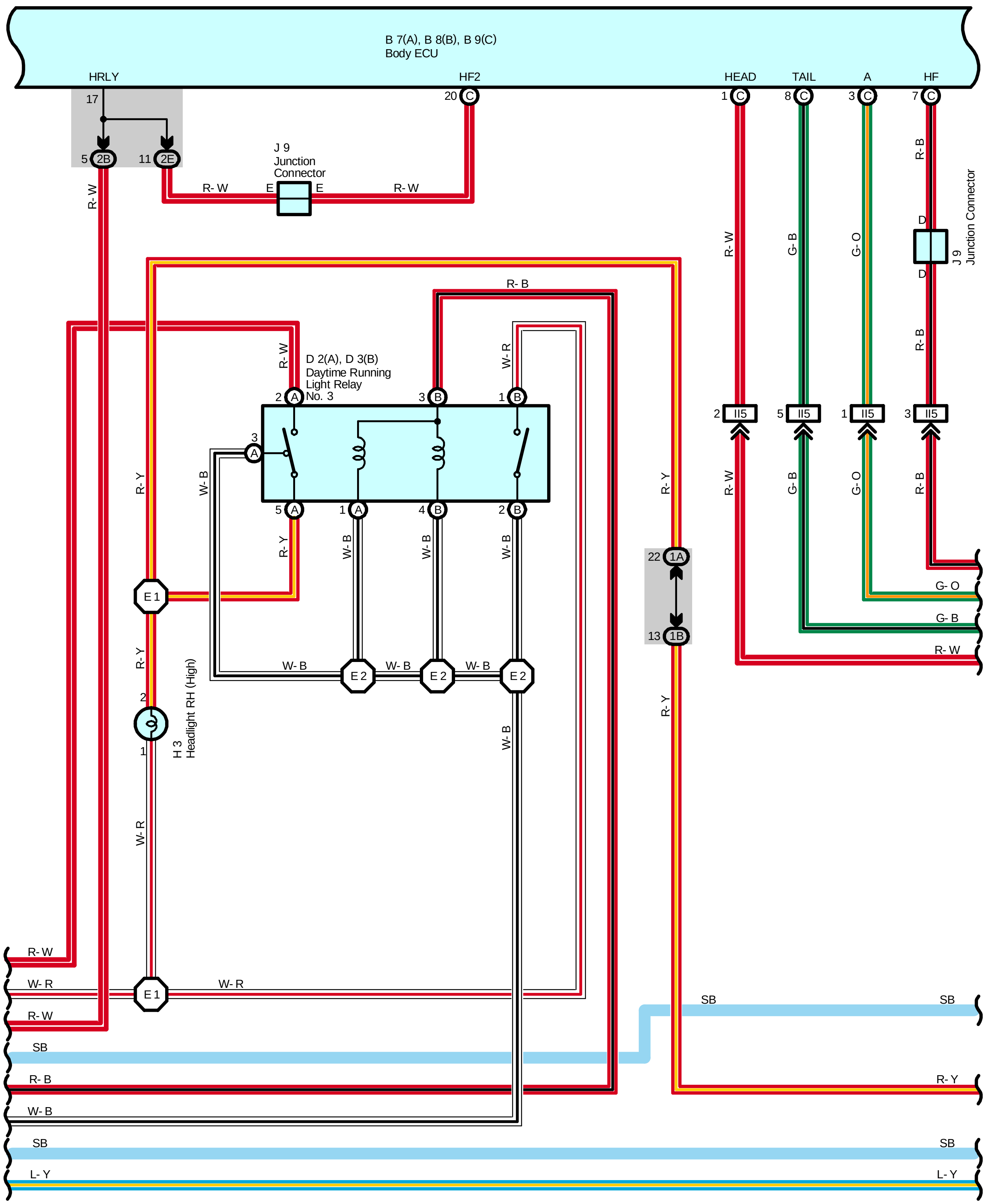


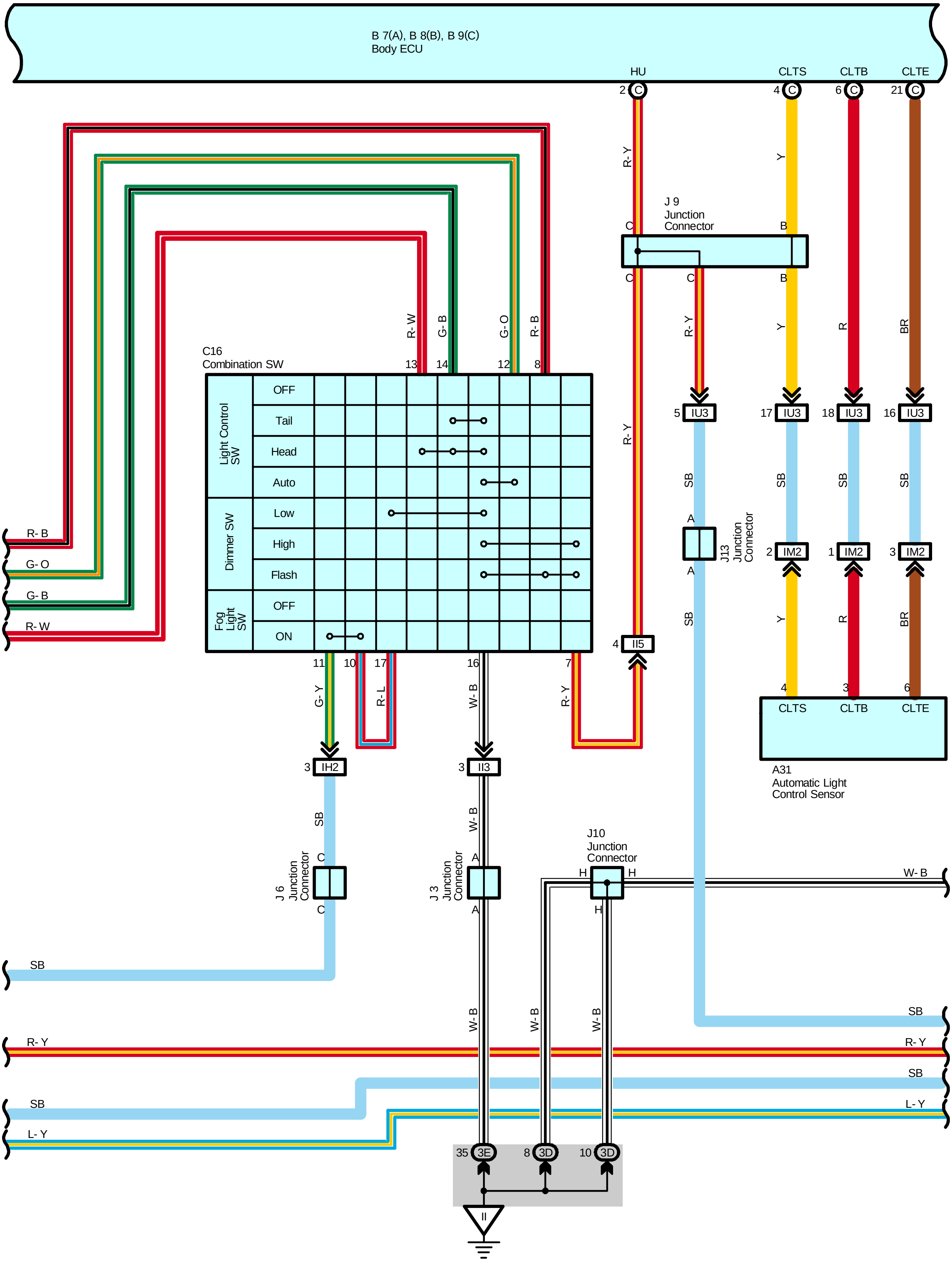

B 7(A), B 8(B), B 9(C)
Body ECU
ILE
PCYL
RCYL
DCYL
LCYL
V 6
Vanity Light LH
V 7
Vanity Light RH
R27
Rear Interior Light
ON
OFF
DOOR
T10
Ignition Key Cylinder Light
D11
Door Courtesy Light Front RH
D13
Door Courtesy Light Rear RH
D10
Door Courtesy Light Front LH
D12
Door Courtesy Light Rear LH


B 7(A), B 8(B), B 9(C)
Body ECU
LP
IDL
TRLY
6 B
28 A
18
From Power Source System (See Page 94)
24 2B
10A
DOME
G- Y
G
G- B
4 5B
3 5D
17 3Q
45 3Q
SB
SB
TAIL Relay
FR FOG Relay
15A
TAIL
15A
FR FOG
64 1A
62 1A
49 1B
67 1B
2 1C
59 1B
61 1A
R- B
R- B
G- B
G
B- G
G- Y
16 2A
53 2Q
R- L
2
1
2
1
F 1
Front Fog Light LH
F 2
Front Fog Light RH
W- B
W- B
E15
G- Y
SB
B- G
SB
L- Y
B- G
SB
W- B
SB
L- Y
B- G
W- B
W- B
EA

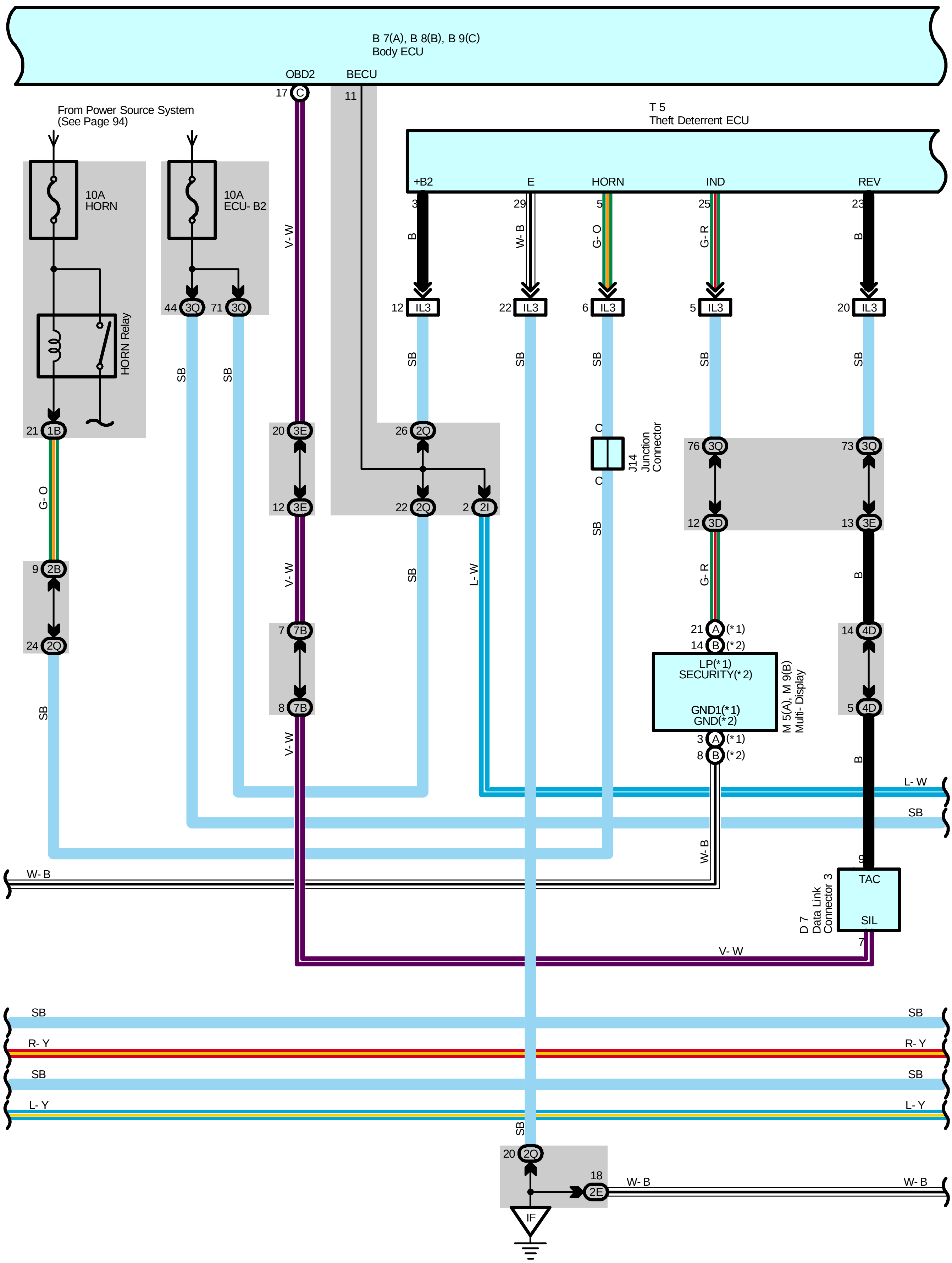


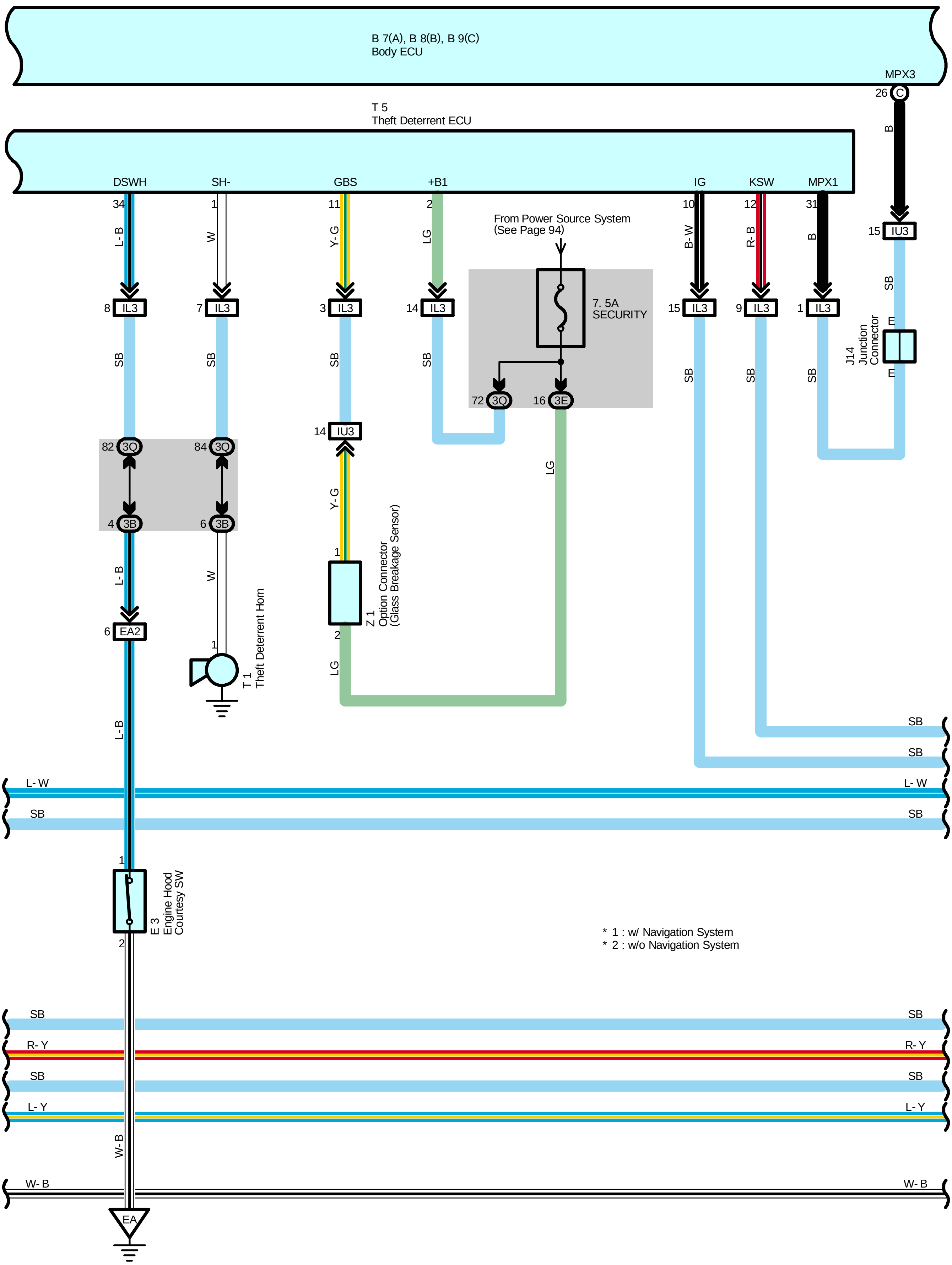
B 7(A), B 8(B), B 9(C)
Body ECU
DRL
7 A
R- Y
HEAD Relay
HEAD HI Relay
9 2G
7 2B
10A HEAD LH- LWR
10A HEAD RH- LWR
20A HEAD LH- UPR
20A HEAD RH- UPR
1 1C
19 1A
26 1A
9 1A
22 1B
12 1A
8 1A
10 1B
B- G
R- L
R- B
E 1
R- W
R- G
H 2 Headlight LH (Low)
H 4 Headlight RH (Low)
H 1 Headlight LH (High)
W- B
W- R
24 1A
30 1A
E 2
SB
L- Y


B 7(A), B 8(B), B 9(C)
Body ECU
HRLY
HF2
HEAD
TAIL
A
HF
J 9
Junction
Connector
D 2(A), D 3(B)
Daytime Running
Light Relay
No. 3
H 3
Headlight RH (High)
J 9
Junction Connector
E 1
E 2
II5
R- W
R- B
R- Y
W- R
W- B
G- B
G- O
SB
L- Y

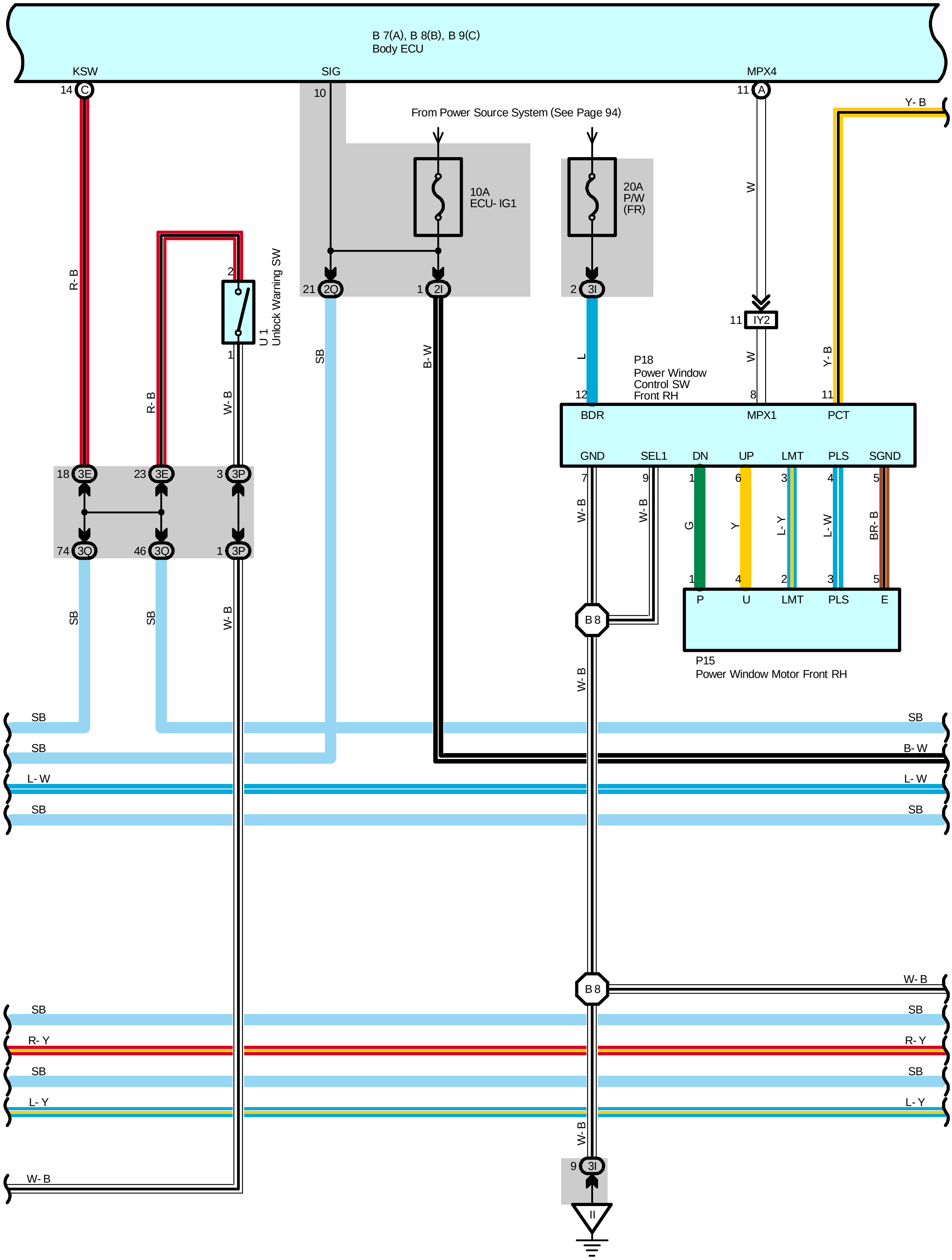

B 7(A), B 8(B), B 9(C)
Body ECU
HU
CLTS
CLTB
CLTE
J 9
Junction
Connector
C16
Combination SW
Light Control SW
OFF
Tail
Head
Auto
Dimmer SW
Low
High
Flash
Fog Light SW
OFF
ON
J13
Junction
Connector
J 6
Junction
Connector
J 3
Junction
Connector
J10
Junction
Connector
A31
Automatic Light
Control Sensor
R- B
G- O
G- B
R- W
R- Y
SB
L- Y
W- B
Y
R
BR
G- Y
R- L
IU3
IM2
II5
IH2
II3
3E
3D
II

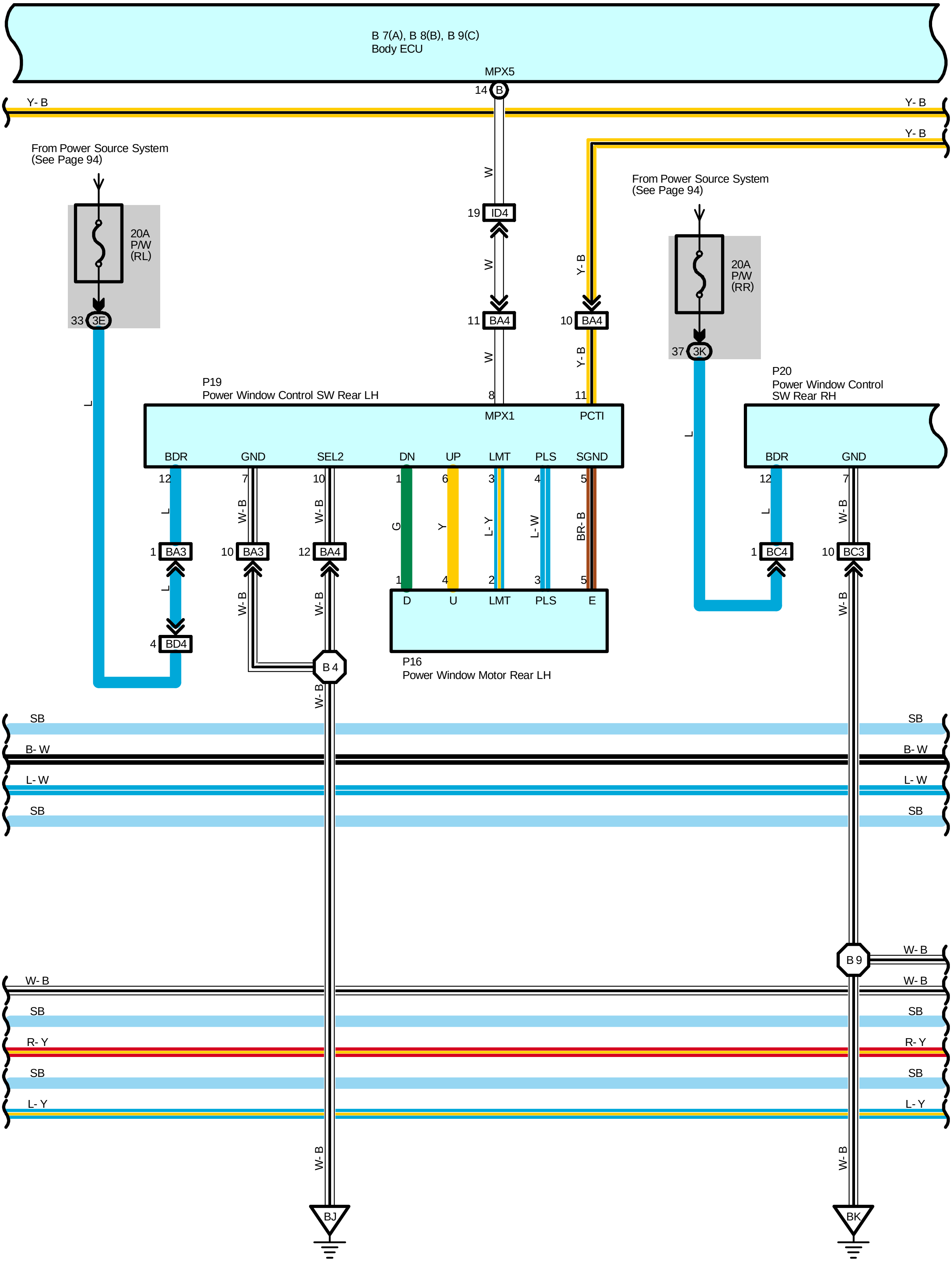
Multiplex Communication System

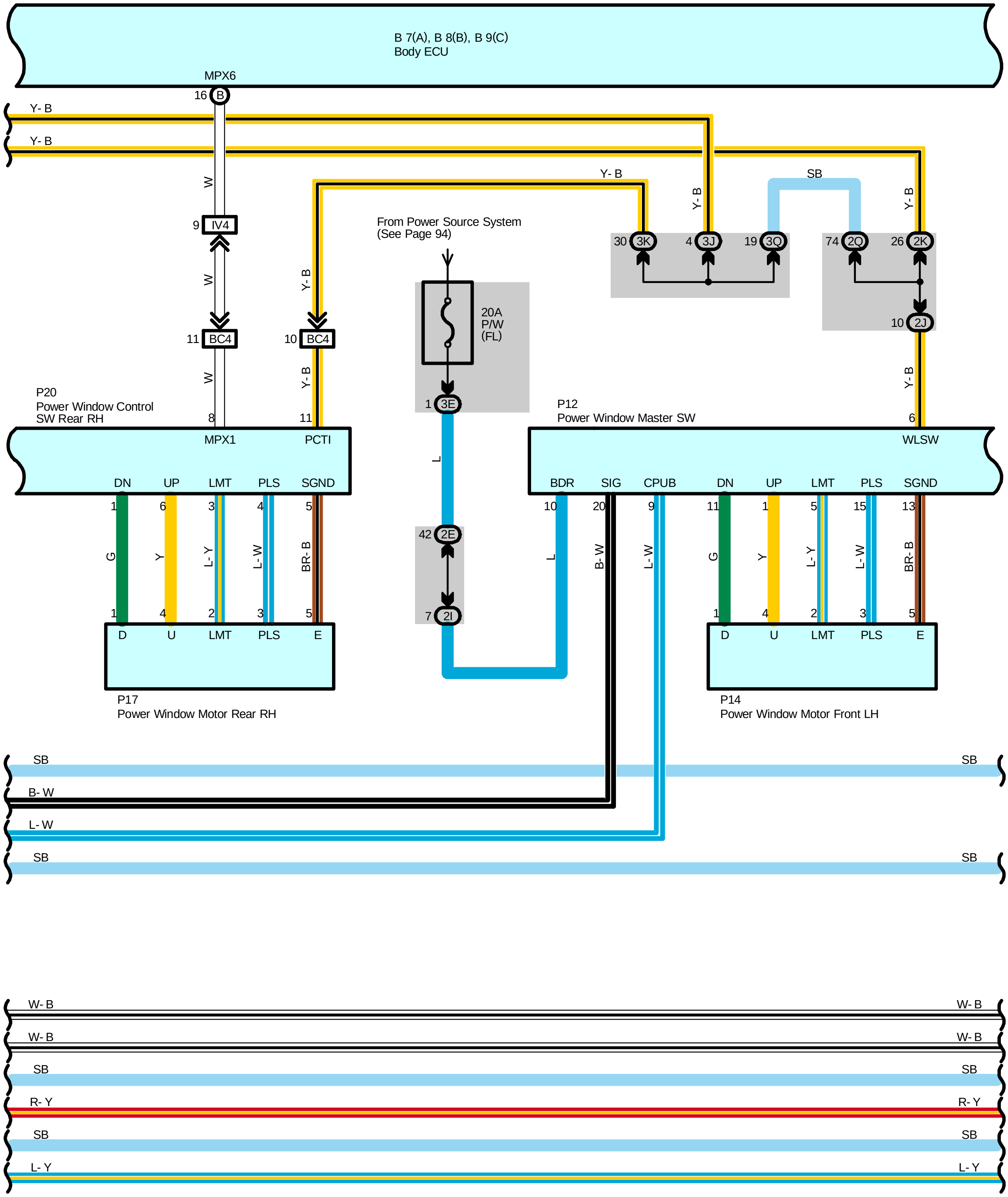


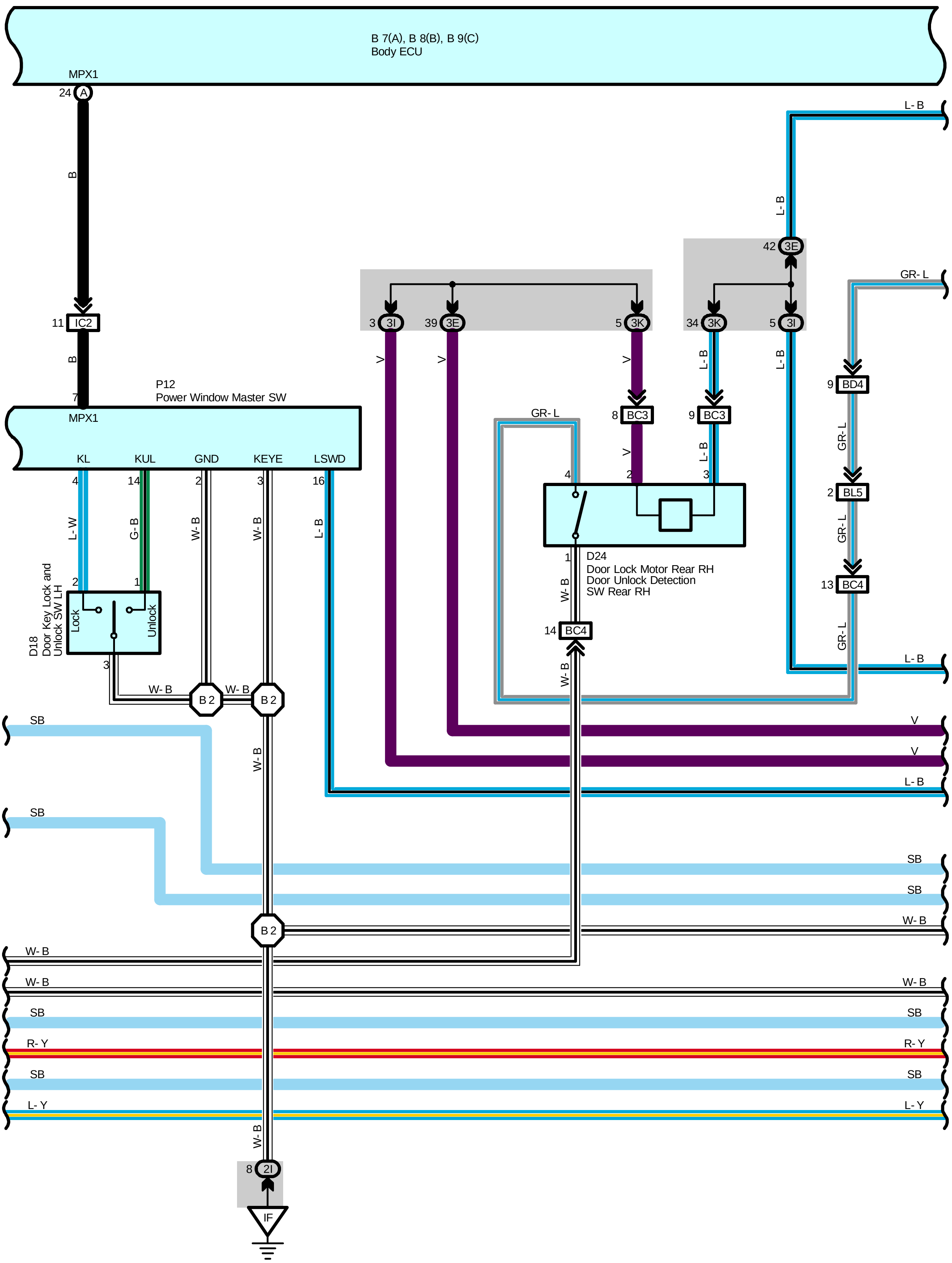


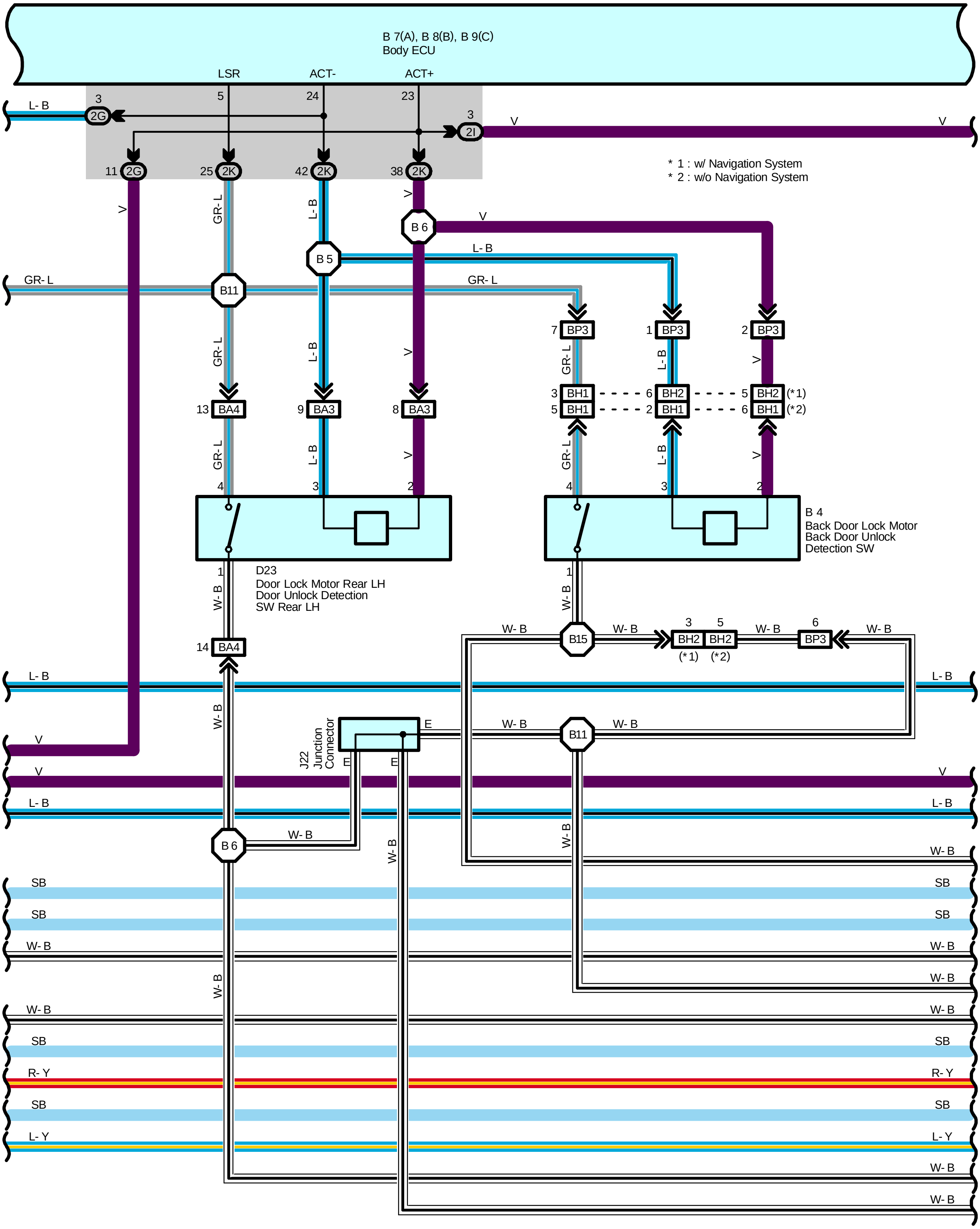
B 7(A), B 8(B), B 9(C)
Body ECU
MPX3
26 C
T 5
Theft Deterrent ECU
DSWH
SH-
GBS
+B1
IG
KSW
MPX1
From Power Source System
(See Page 94)
7. 5A
SECURITY
J14
Junction
Connector
Z 1
Option Connector
(Glass Breakage Sensor)
T 1
Theft Deterrent Horn
E 3
Engine Hood
Courtesy SW
EA
L- B
W
Y- G
LG
B- W
R- B
B
SB
L- W
R- Y
L- Y
W- B
IL3
IU3
EA2
3Q
3B
3E
* 1 : w/ Navigation System
* 2 : w/o Navigation System

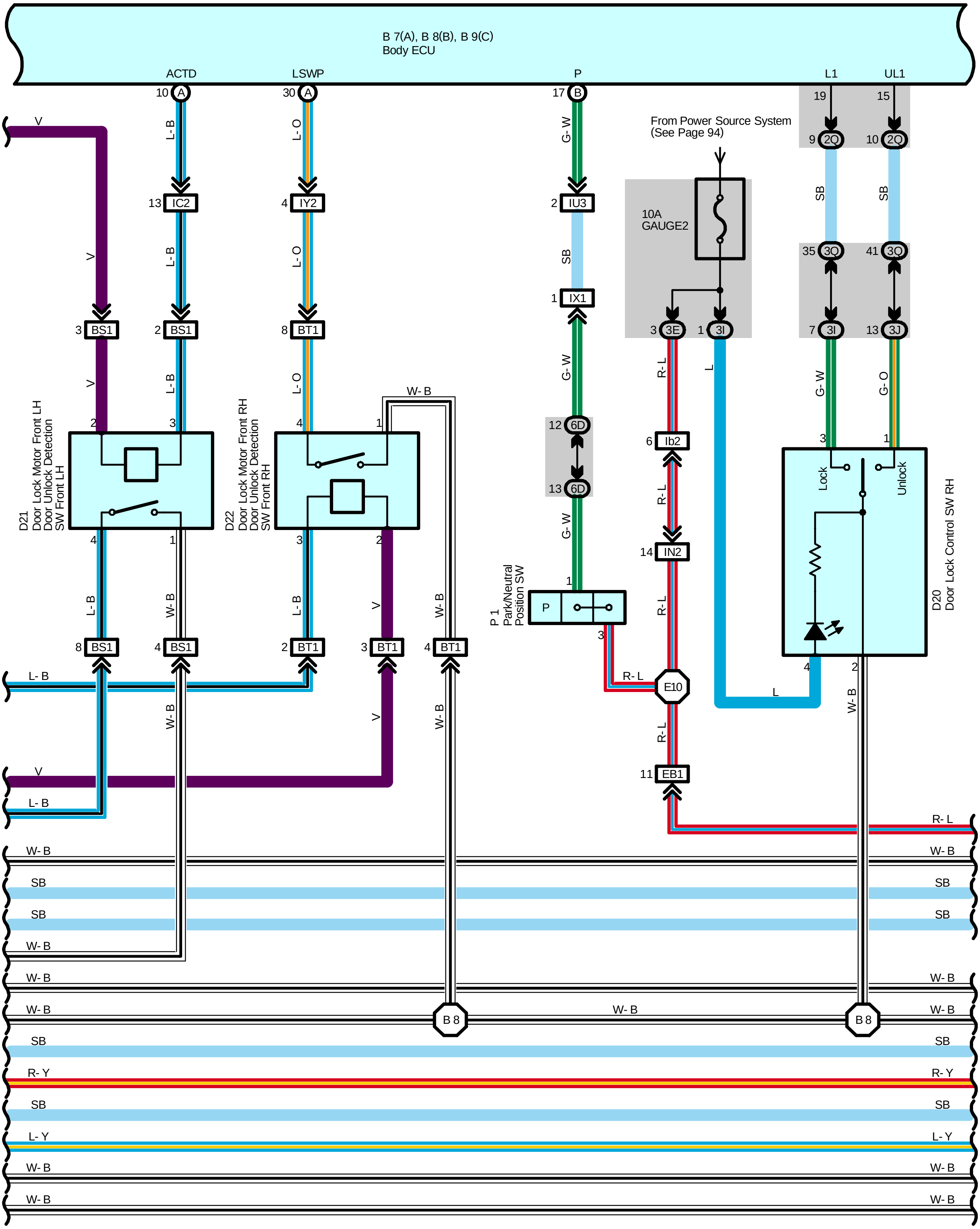

B 7(A), B 8(B), B 9(C)
Body ECU
KSW
SIG
MPX4
14 C
10
11 A
Y- B
From Power Source System (See Page 94)
10A
ECU- IG1
20A
P/W
(FR)
W
R- B
2
U 1
Unlock Warning SW
21 2Q
1 2I
2 3I
11 IY2
SB
B- W
L
P18
Power Window
Control SW
Front RH
R- B
1
W- B
12
8
11
BDR
MPX1
PCT
GND
SEL1
DN
UP
LMT
PLS
SGND
7
9
1
6
3
4
5
W- B
W- B
G
Y
L- Y
L- W
BR- B
18 3E
23 3E
3 3P
74 3Q
46 3Q
1 3P
1
4
2
3
5
P
U
LMT
PLS
E
B 8
P15
Power Window Motor Front RH
SB
SB
W- B
W- B
SB
SB
SB
B- W
L- W
L- W
SB
SB
B 8
W- B
SB
SB
R- Y
R- Y
SB
SB
L- Y
L- Y
W- B
W- B
9 3I
II

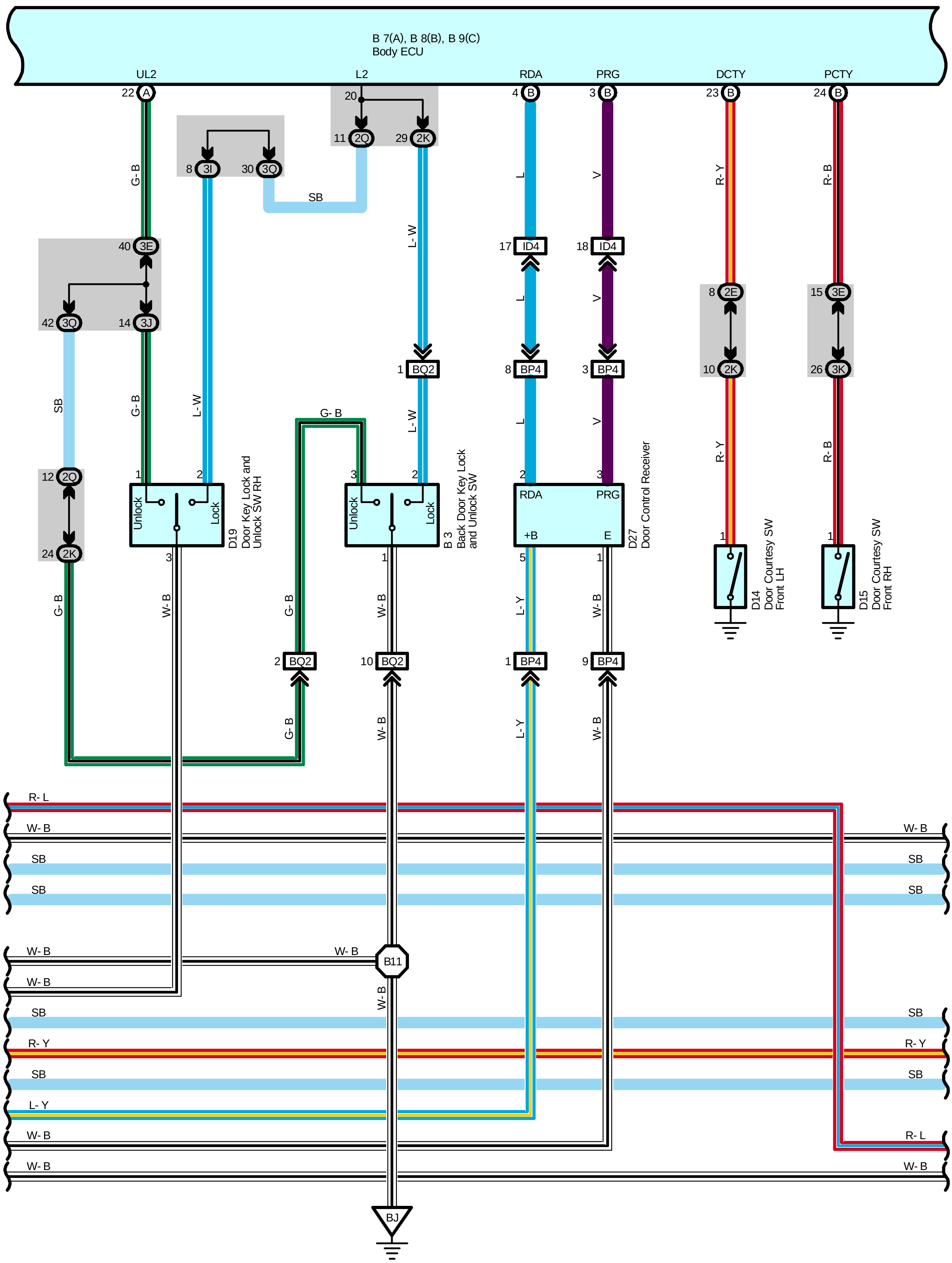

B 7(A), B 8(B), B 9(C)
Body ECU
MPX5
14 B
Y- B
Y- B
Y- B
From Power Source System
(See Page 94)
20A
P/W
(RL)
33 3E
W
19 ID4
W
11 BA4
W
Y- B
10 BA4
Y- B
From Power Source System
(See Page 94)
20A
P/W
(RR)
37 3K
L
P19
Power Window Control SW Rear LH
8
11
MPX1
PCTI
BDR
GND
SEL2
DN
UP
LMT
PLS
SGND
P20
Power Window Control
SW Rear RH
BDR
GND
L
12
7
10
1
6
3
4
5
L
W- B
W- B
G
Y
L- Y
L- W
BR- B
1 BA3
10 BA3
12 BA4
1
4
2
3
5
D
U
LMT
PLS
E
L
W- B
W- B
4 BD4
B 4
W- B
P16
Power Window Motor Rear LH
12
7
L
W- B
1 BC4
10 BC3
W- B
SB
B- W
L- W
SB
SB
B- W
L- W
SB
B 9
W- B
W- B
W- B
SB
R- Y
SB
L- Y
W- B
SB
R- Y
SB
L- Y
W- B
W- B
BJ
BK


B 7(A), B 8(B), B 9(C)
Body ECU
MPX6
From Power Source System
(See Page 94)
20A
P/W
(FL)
P20
Power Window Control
SW Rear RH
MPX1
PCTI
DN
UP
LMT
PLS
SGND
P12
Power Window Master SW
WLSW
BDR
SIG
CPUB
P17
Power Window Motor Rear RH
P14
Power Window Motor Front LH
Y-B
W
B-W
L-W
L-Y
SB
R-Y
W-B
BR-B
IV4
BC4
3K
3J
3O
2O
2K
2J
3E
2E
2I

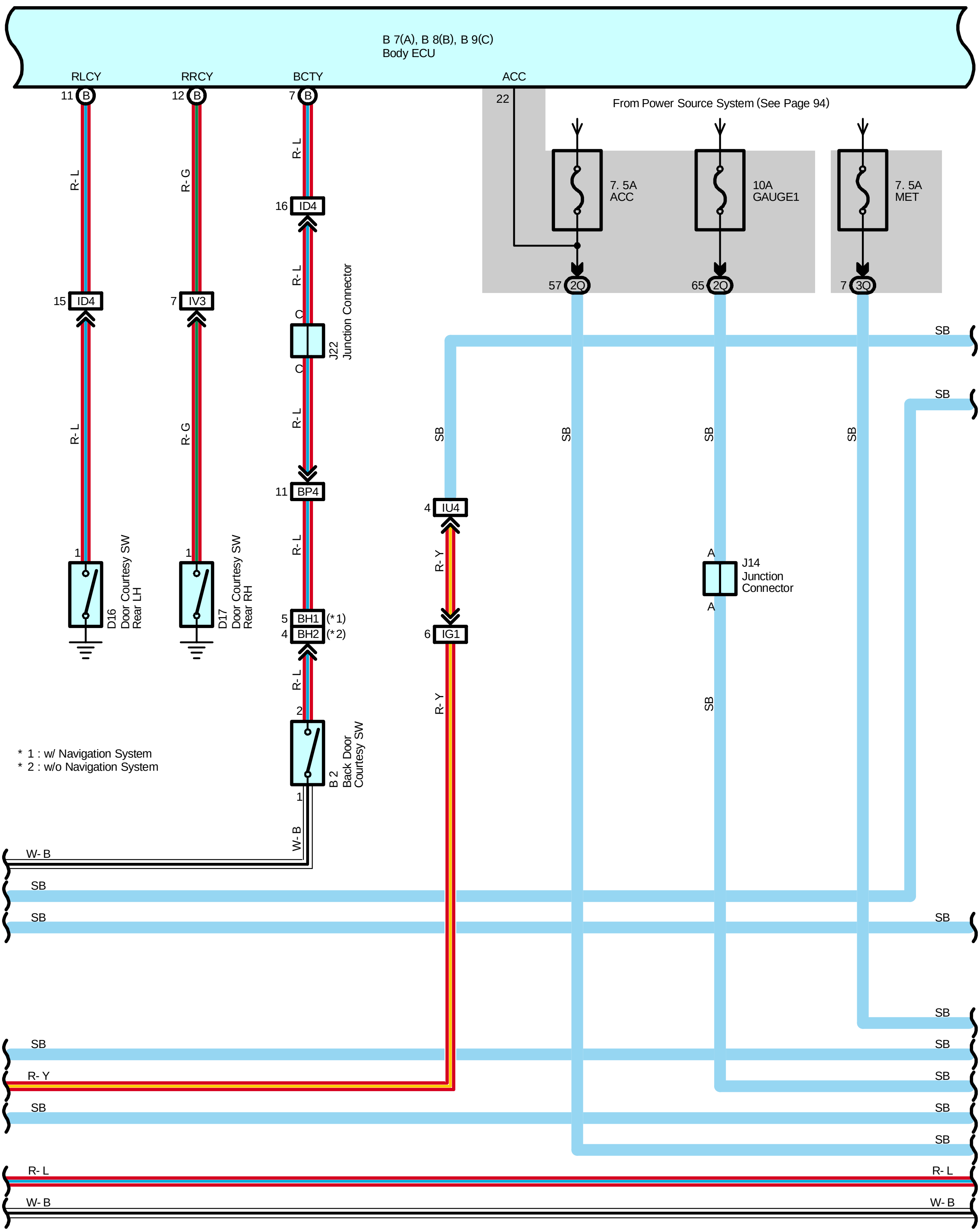

B 7(A), B 8(B), B 9(C)
Body ECU
MPX1
P12
Power Window Master SW
MPX1
KL
KUL
GND
KEYE
LSWD
D18
Door Key Lock and
Unlock SW LH
Lock
Unlock
D24
Door Lock Motor Rear RH
Door Unlock Detection
SW Rear RH
IC2
BC3
BC4
BD4
BL5
B2
IF
L-B
GR-L
V
SB
W-B
R-Y
L-Y
L-W
G-B
B


B 7(A), B 8(B), B 9(C)
Body ECU
LSR
ACT-
ACT+
* 1 : w/ Navigation System
* 2 : w/o Navigation System
B 4
Back Door Lock Motor
Back Door Unlock
Detection SW
D23
Door Lock Motor Rear LH
Door Unlock Detection
SW Rear LH
J22
Junction
Connector

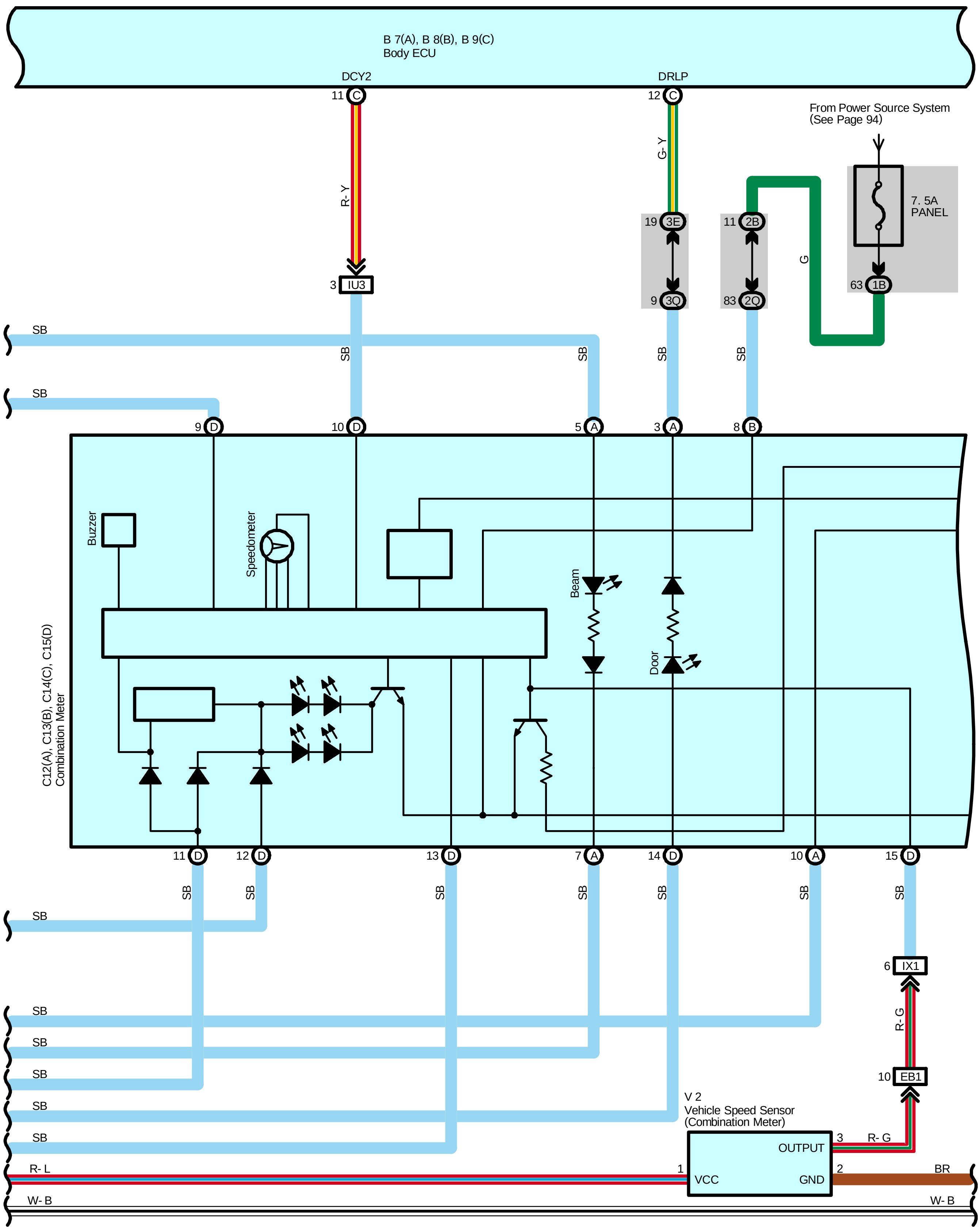

B 7(A), B 8(B), B 9(C)
Body ECU
ACTD
LSWP
P
L1
UL1
From Power Source System
(See Page 94)
10A
GAUGE2
D21
Door Lock Motor Front LH
Door Unlock Detection
SW Front LH
D22
Door Lock Motor Front RH
Door Unlock Detection
SW Front RH
P 1
Park/Neutral
Position SW
D20
Door Lock Control SW RH
Lock
Unlock
IC2
IY2
IU3
IX1
BS1
BT1
6D
Ib2
IN2
E10
EB1
2Q
3Q
3I
3J
3E
B 8
V
L-B
L-O
G-W
SB
W-B
R-L
L
G-O
R-Y
L-Y

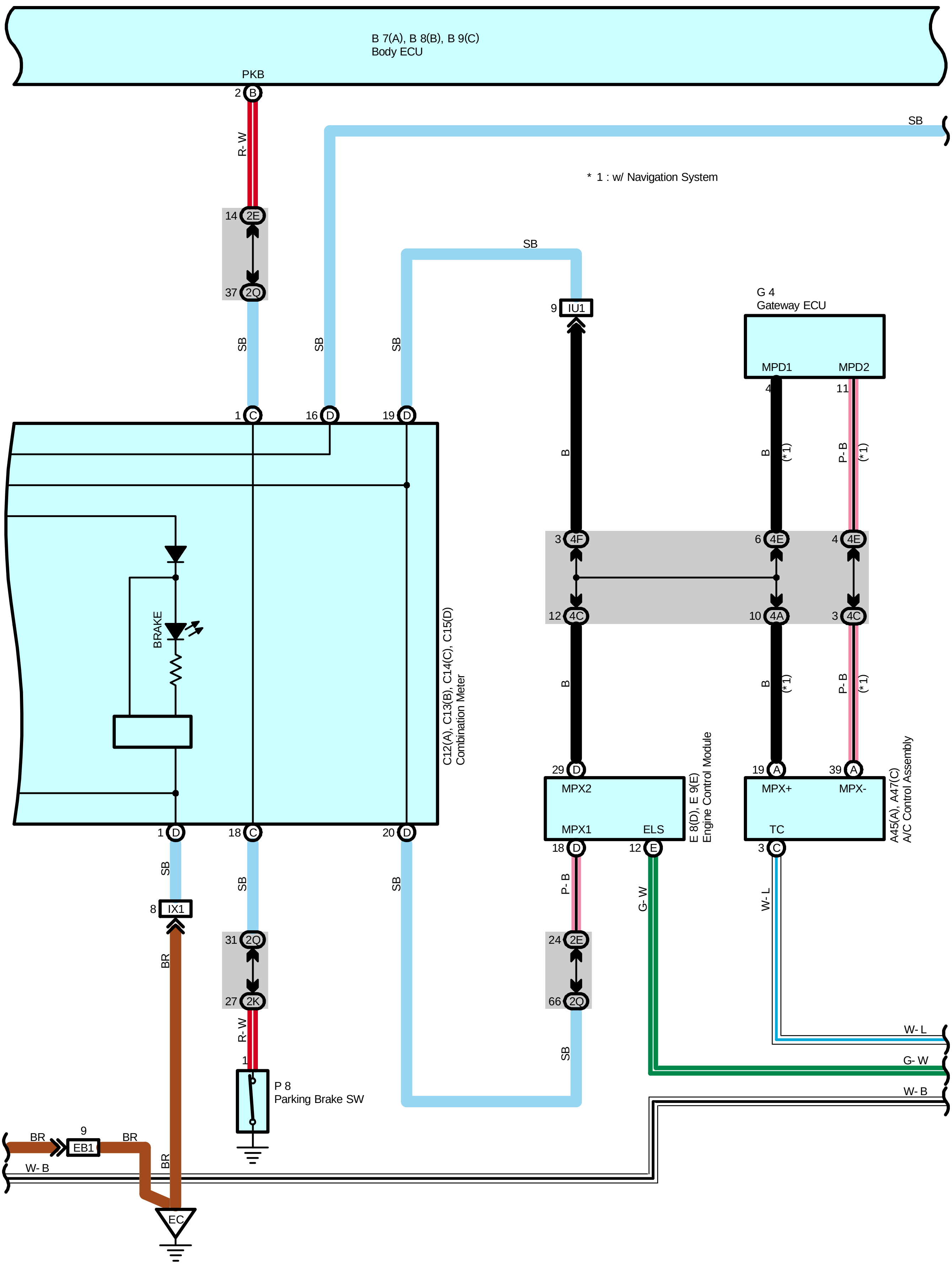


B 7(A), B 8(B), B 9(C)
Body ECU
UL2
L2
RDA
PRG
DCTY
PCTY
D19
Door Key Lock and
Unlock SW RH
B 3
Back Door Key Lock
and Unlock SW
D27
Door Control Receiver
D14
Door Courtesy SW
Front LH
D15
Door Courtesy SW
Front RH
Unlock
Lock
+B
E
B11
BJ
G-B
L-W
SB
L
V
R-Y
R-B
W-B
L-Y
R-L

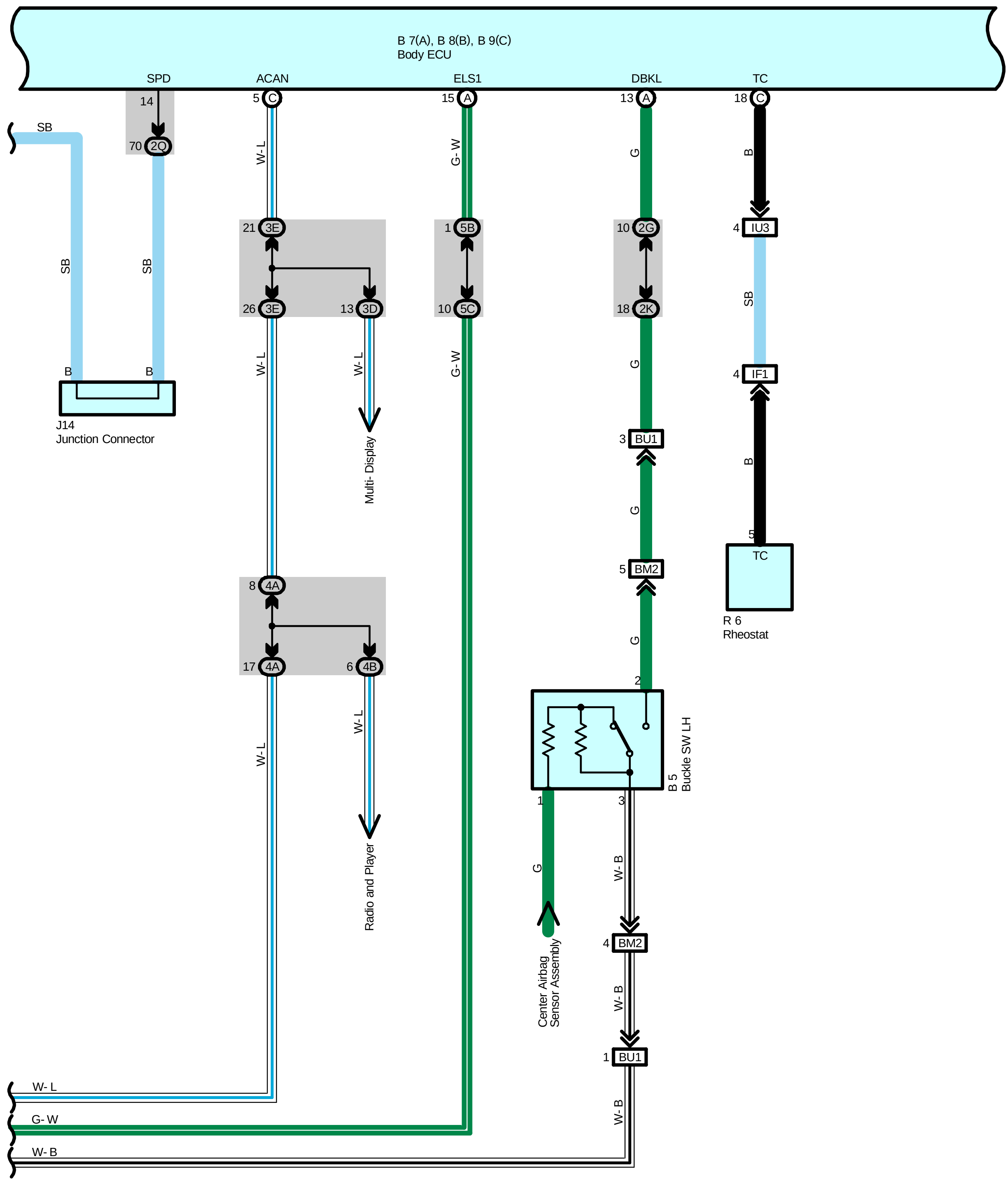


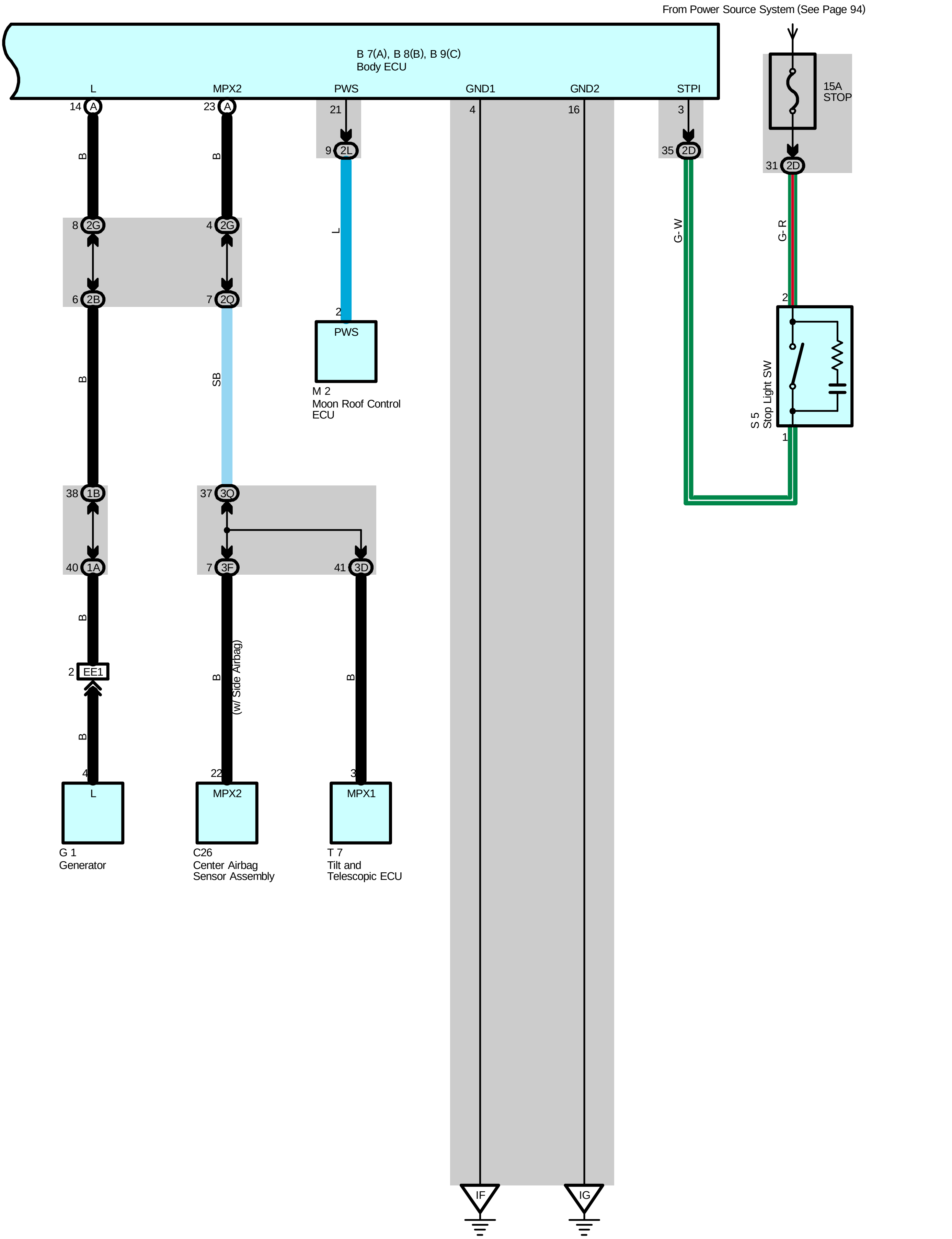
* 1 : w/ Navigation System
* 2 : w/o Navigation System


B 7(A), B 8(B), B 9(C)
Body ECU
DCY2
DRLP
11 C
12 C
From Power Source System
(See Page 94)
R- Y
G- Y
7. 5A
PANEL
19 3E
11 2B
G
3 IU3
9 3Q
83 2Q
63 1B
SB
9 D
10 D
5 A
3 A
8 B
Buzzer
Speedometer
Beam
Door
C12(A), C13(B), C14(C), C15(D)
Combination Meter
11 D
12 D
13 D
7 A
14 D
10 A
15 D
6 IX1
R- G
10 EB1
V 2
Vehicle Speed Sensor
(Combination Meter)
OUTPUT
VCC
GND
3
1
2
R- L
BR
W- B



B 7(A), B 8(B), B 9(C)
Body ECU
PKB
2 B
R- W
SB
* 1 : w/ Navigation System
14 2E
37 2Q
SB
9 IU1
G 4
Gateway ECU
MPD1
MPD2
4
11
B
(*1)
P- B
1 C
16 D
19 D
BRAKE
C12(A), C13(B), C14(C), C15(D)
Combination Meter
3 4F
6 4E
4 4E
12 4C
10 4A
3 4C
29 D
19 A
39 A
MPX2
MPX1
ELS
MPX+
MPX-
TC
E 8(D), E 9(E)
Engine Control Module
A45(A), A47(C)
A/C Control Assembly
1 D
18 C
20 D
18 D
12 E
3 C
8 IX1
BR
31 2Q
27 2K
24 2E
66 2Q
G- W
W- L
1
P 8
Parking Brake SW
W- B
9
EB1
EC


B 7(A), B 8(B), B 9(C)
Body ECU
SPD
ACAN
ELS1
DBKL
TC
SB
J14
Junction Connector
Multi- Display
Radio and Player
Center Airbag Sensor Assembly
B 5
Buckle SW LH
R 6
Rheostat
W- L
G- W
W- B


From Power Source System (See Page 94)
B 7(A), B 8(B), B 9(C)
Body ECU
L
MPX2
PWS
GND1
GND2
STPI
14
A
23
A
21
4
16
3
9
2L
35
2D
15A
STOP
31
2D
B
B
L
G- W
G- R
8
2G
4
2G
6
2B
7
2Q
2
PWS
M 2
Moon Roof Control
ECU
2
S 5
Stop Light SW
1
B
SB
38
1B
37
3Q
40
1A
7
3F
41
3D
B
2
EE1
B
(w/ Side Airbag)
B
B
4
L
22
MPX2
3
MPX1
G 1
Generator
C26
Center Airbag
Sensor Assembly
T 7
Tilt and
Telescopic ECU
IF
IG

Multiplex Communication System

System Outline

The multiplex communication system communicates among the body ECU, theft deterrent ECU, power window master SW, power window control SW front RH, power window control SW rear LH, power window control SW rear RH, center airbag sensor assembly and tilt and telescopic ECU, among the combination meter, engine control module, A/C control assembly and gateway ECU and controls the following systems according to the signals from respective sensors or switches.
For details, please refer to the new car features and/or the repair manual.

Service Hints

Body ECU

11, 12-Ground : Always approx. 12 volts
22-Ground : Approx. 12 volts with ignition SW at ACC or ON position
10-Ground : Approx. 12 volts with ignition SW at ON or ST position
4, 16-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A31		70	D18		72	J14		71
A45	A	70	D19		72	J22		72
A47	C	70	D20		72	M2		72
B2		72	D21		72	M5	A	71
B3		72	D22		72	M9	B	71
B4		72	D23		72	P1		69
B5		74	D24		72	P8		73
B7	A	70	D27		72	P12		73
B8	B	70	E3		68	P14		73
B9	C	70	E8	D	70	P15		73
C12	A	70	E9	E	70	P16		73
C13	B	70	F1		68	P17		73
C14	C	70	F2		68	P18		73
C15	D	70	F10		72	P19		73
C16		70	F11		72	P20		73
C26		70	F15		68	R6		71
D2	A	68	G1		68	R27		73
D3	B	68	G4		70	S5		71
D7		70	H1		69	T1		69
D10		72	H2		69	T5		71
D11		72	H3		69	T7		71
D12		72	H4		69	T10		71
D13		72	J3		71	U1		71
D14		72	J6		71	V2		69
D15		72	J9		71	V6		73
D16		72	J10		71	V7		73
D17		72	J13		71	Z1		71

Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2B		
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2G		
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2J		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3F		
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3J		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4B		
4C		
4D		
4E		
4F		
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5C		
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)

Multiplex Communication System

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IF1	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IH2	80	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IM2	80	Instrument Panel Integration Wire and Instrument Panel No.3 Wire (Right Side of Instrument Panel)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IU3		
IU4		
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IV4		
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BA3	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BA4		
BC3	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BC4		
BD4	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BH2		
BL5	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BM2	90	Floor No.1 Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BP4		
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BR1	88	Roof No.3 Wire and Roof No.1 Wire (Front Side of Roof)
BS1	88	Door Lock LH Sub Wire and Front Door LH Wire (Front Door LH)
BT1	88	Door Lock RH Sub Wire and Front Door RH Wire (Front Door RH)
BU1	88	Floor No.1 Wire and Floor No.1 Wire (Near the Left Rear Suspension Support)

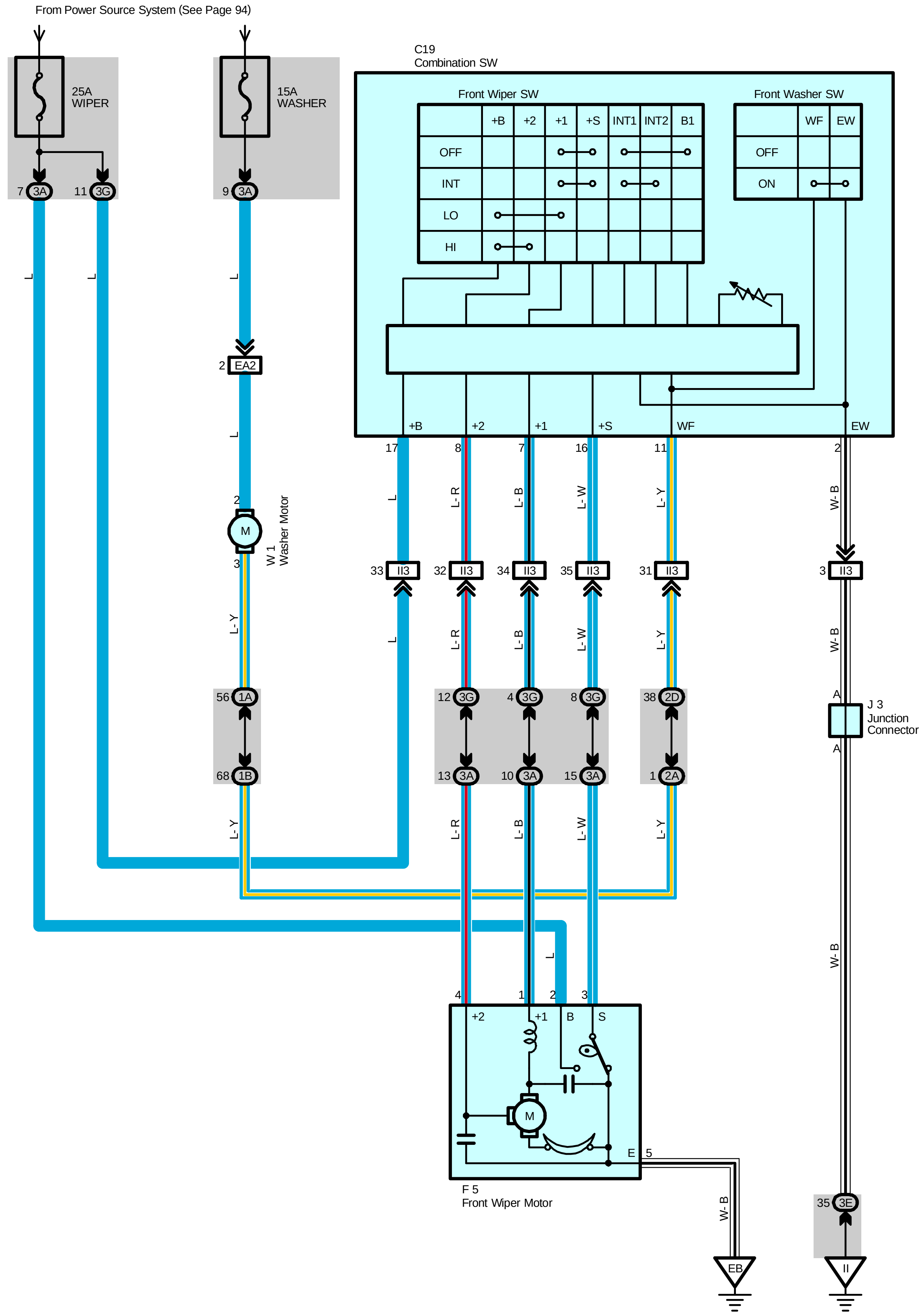
: Ground Points

Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	76	Engine Room Main Wire	B6	88	Floor No.1 Wire
E2			B7	88	Roof No.1 Wire
E10	76	Engine Wire	B8	88	Front Door RH Wire
E15	76	Engine Room Main Wire	B9	88	Floor No.2 Wire
B2	88	Front Door LH Wire	B11	88	Floor No.1 Wire
B4	88	Floor No.1 Wire	B15	88	Back Door Upper Wire
B5					

Front Wiper and Washer



System Outline

When the ignition SW turned on, the current from the WIPER fuse flows to the front wiper and washer SW TERMINAL 17, and the front wiper motor TERMINAL 2.

1. Low Position

When the front wiper SW is turned to LO position, the current flows from the front wiper and washer SW TERMINAL 17 to TERMINAL 7 to the front wiper motor TERMINAL 1 to TERMINAL 5 to GROUND, and operates the front wiper motor at low speed.

2. High Position

When the front wiper SW is turned to HI position, the current flows from the front wiper and washer SW TERMINAL 17 to TERMINAL 8 to the front wiper motor TERMINAL 4 to TERMINAL 5 to GROUND, and operates the front wiper motor at high speed.

3. INT Position

When the front wiper SW is turned to INT position, the relay operates and the current which is connected by the relay function flows from the front wiper and washer SW TERMINAL 17 to TERMINAL 2 to GROUND, and operates the wipe.
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 to change the charging time of the condenser.

4. Washer Interlocking Operation

When the front washer SW is pulled up, the current flows from the washer motor TERMINAL 2 to TERMINAL 3 to the front wiper and washer SW TERMINAL 11 to TERMINAL 2 to GROUND, operates the washer motor and the window washer emits a water spray. This causes the current to flow to the washer continuous operation circuit in the front wiper and washer SW TERMINAL 11 to TERMINAL 7 to front wiper motor TERMINAL 1 to TERMINAL 5 to GROUND, and operates the wiper.

Service Hints

C19 Combination SW

17-Ground : Approx. 12 volts with ignition SW at ON or ST position
7-Ground : Approx. 12 volts with front wiper and washer SW at LO position
: Approx. 12 volts 1.6 to 10.7 seconds intermittently with the front wiper and washer SW at INT position
16-Ground : Approx. 12 volts with ignition SW on unless the front wiper motor at STOP position
8-Ground : Approx. 12 volts with front wiper and washer SW at HI position
2-Ground : Always continuity

F5 Front Wiper Motor

2-Ground : Approx. 12 volts with ignition SW at ON or ST position
5-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C19	70	J3	71		
F5	68	W1	69		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
3A	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3G		

□ : Connector Joining Wire Harness and Wire Harness

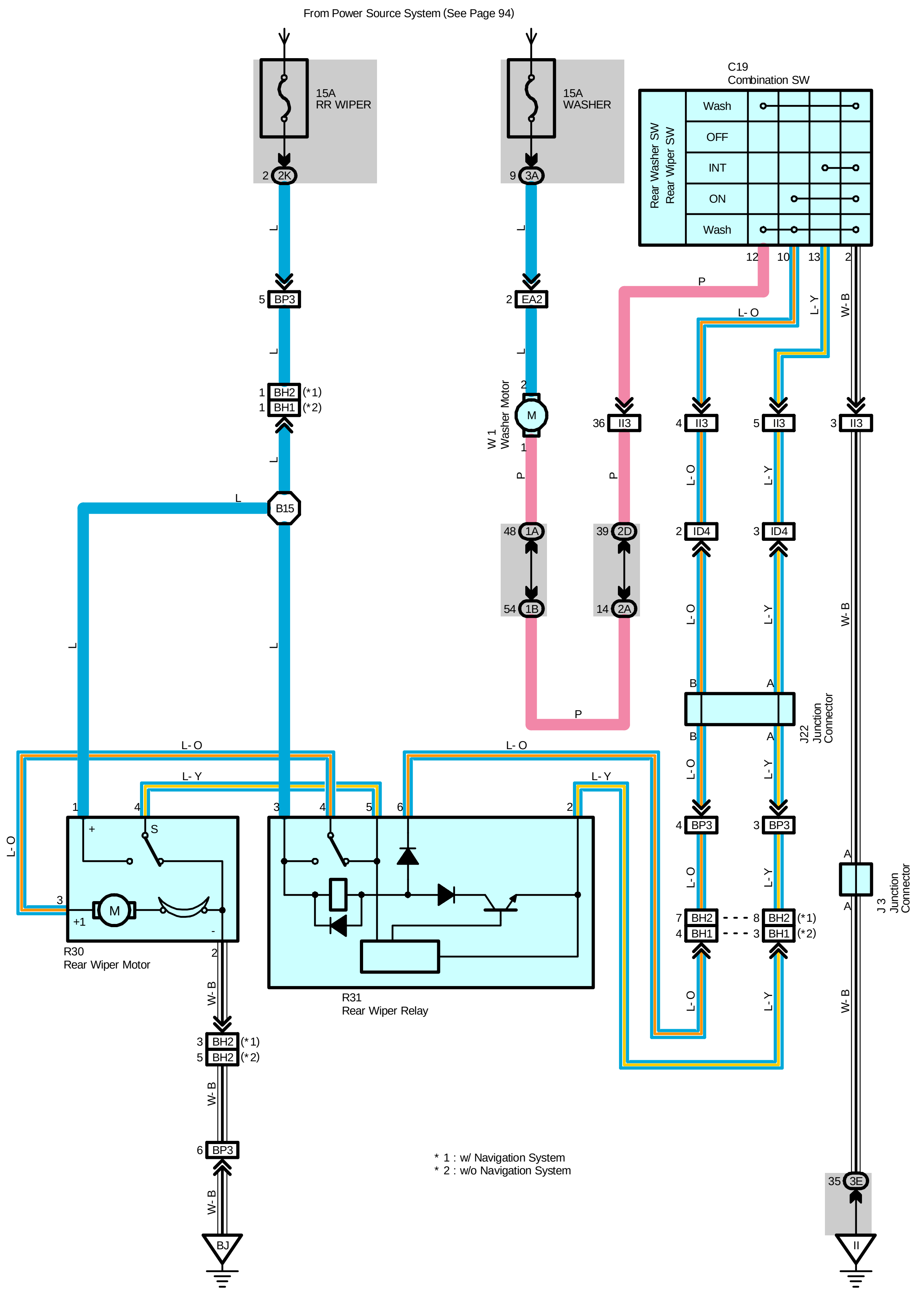
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)

Front Wiper and Washer

▽ : **Ground Points**

Code	See Page	Ground Points Location
EB	76	Front Right Side of Fender Apron
II	78	Set Bolt of Cowl Side J/B RH

Rear Wiper and Washer



* 1 : w/ Navigation System
* 2 : w/o Navigation System

System Outline

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

1. Rear Wiper Normal Operation

When the ignition SW is turned on, and the rear wiper and washer SW is turned to ON position, the current flows from the rear wiper relay TERMINAL 3 to TERMINAL 6 to the rear wiper and washer SW TERMINAL 10 to TERMINAL 2 to GROUND, and turns on the rear wiper relay. As a result, the current flows from the rear wiper relay TERMINAL 3 to TERMINAL 4 to the rear wiper motor TERMINAL 3 to TERMINAL 2 to GROUND, and operates the rear wiper.

2. Rear Wiper Intermittent Operation

When the ignition SW is turned on, and the rear wiper and washer SW is turned to INT position, the current flows from the rear wiper relay TERMINAL 3 to TERMINAL 2 to the rear wiper and washer SW TERMINAL 13 to TERMINAL 2 to GROUND, and the intermittent circuit in the rear wiper relay is controlled to operate the wiper intermittently.

3. Washer Operation

When the ignition SW is turned on, and the rear wiper and washer SW is turned from OFF to WASH position, the current flows from the WASHER fuse to the washer motor TERMINAL 2 to TERMINAL 1 to the rear wiper and washer SW TERMINAL 12 to TERMINAL 2 to GROUND. This activates the washer motor, and the window washer emits a water spray. When the rear wiper and washer SW is turned to ON position, the window washer emits a water spray during rear wiper normal operation.

Service Hints

W1 Washer Motor

2-Ground : Approx. 12 volts with ignition SW at ON or ST position
1-Ground : Continuity with rear wiper and washer SW at WASH position

R30 Rear Wiper Motor

1-Ground : Approx. 12 volts with ignition SW at ON or ST position
2-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C19	70	J22	72	R31	73
J3	71	R30	73	W1	69

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3A	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
BH1	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BH2		
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)

Rear Wiper and Washer

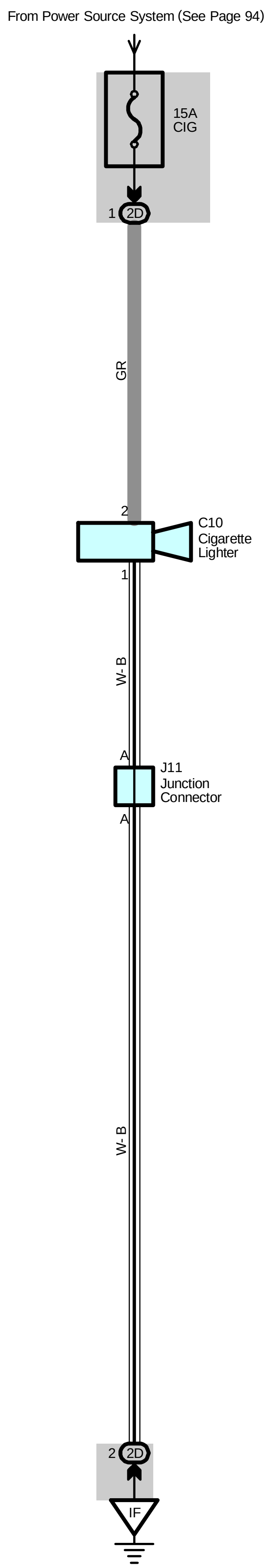
▽ : **Ground Points**

Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver’s Seat

⬡ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B15	88	Back Door Upper Wire			

Cigarette Lighter



Service Hints

C10 Cigarette Lighter

2-Ground : Approx. 12 volts with ignition SW at ACC or ON position

1-Ground : Always continuity

○ : **Parts Location**

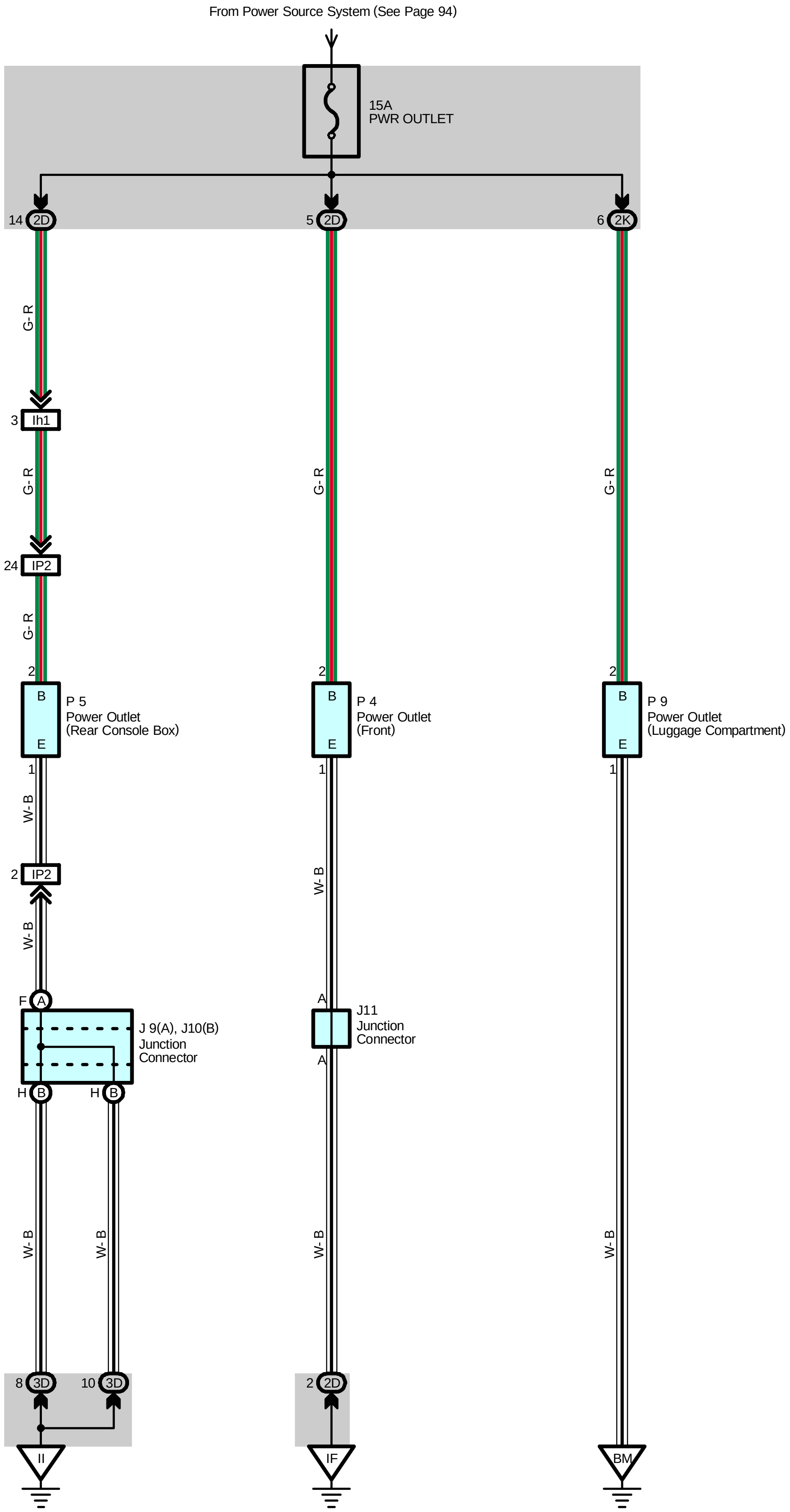
Code	See Page	Code	See Page	Code	See Page
C10	70	J11	71		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH


From Power Source System (See Page 94)
15A
PWR OUTLET
14 2D
5 2D
6 2K
G-R
3 Ih1
24 IP2
2
B
E
1
P 5
Power Outlet
(Rear Console Box)
P 4
Power Outlet
(Front)
P 9
Power Outlet
(Luggage Compartment)
W-B
2 IP2
F A
J 9(A), J10(B)
Junction
Connector
H B
H B
A
J11
Junction
Connector
A
8 3D
10 3D
2 2D
II
IF
BM

Service Hints

P4 Power Outlet (Front)

2-Ground : Approx. 12 volts with ignition SW at ACC or ON position
1-Ground : Always continuity

P5 Power Outlet (Rear Console Box)

2-Ground : Approx. 12 volts with ignition SW at ACC or ON position
1-Ground : Always continuity

P9 Power Outlet (Luggage Compartment)

2-Ground : Approx. 12 volts with ignition SW at ACC or ON position
1-Ground : Always continuity

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
J9	A	71	J11	71	P5	71
J10	B	71	P4	71	P9	73

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)

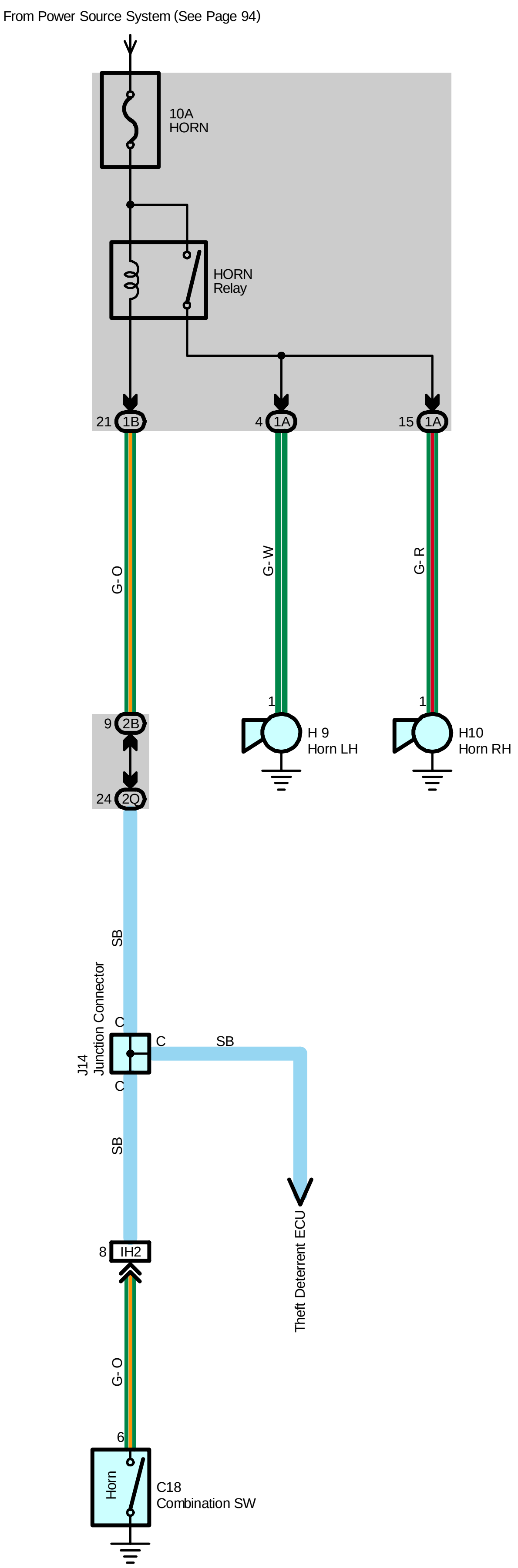
□ : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP2	80	Rear Console Box Wire and Dash Wire (Right Side of Rear Console)
Ih1	84	Dash Wire and Dash Wire (Center Side of Front Console)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BM	86	Left Rear Side Quarter Panel

Horn


From Power Source System (See Page 94)
10A
HORN
HORN
Relay
21
1B
4
1A
15
1A
G-O
G-W
G-R
1
1
H 9
Horn LH
H10
Horn RH
9
2B
24
2Q
SB
J14
Junction Connector
C
C
C
SB
Theft Deterrent ECU
SB
8
IH2
G-O
6
Horn
C18
Combination SW

Service Hints

C18 Combination SW

6-Ground :Continuity with horn SW on

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C18	70	H10	69		
H9	69	J14	71		

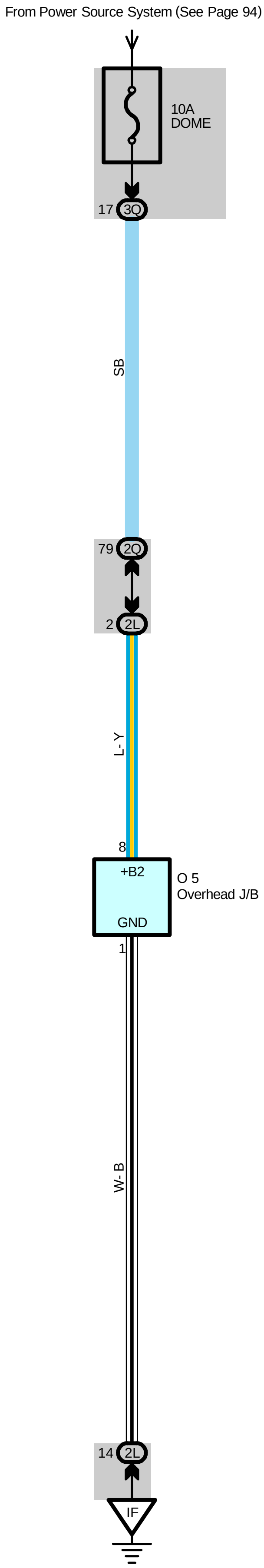
: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH2	80	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)

Garage Door Opener



Service Hints

O5 Overhead J/B

8-Ground : Always approx. 12 volts
1-Ground : Always continuity

○ : Parts Location

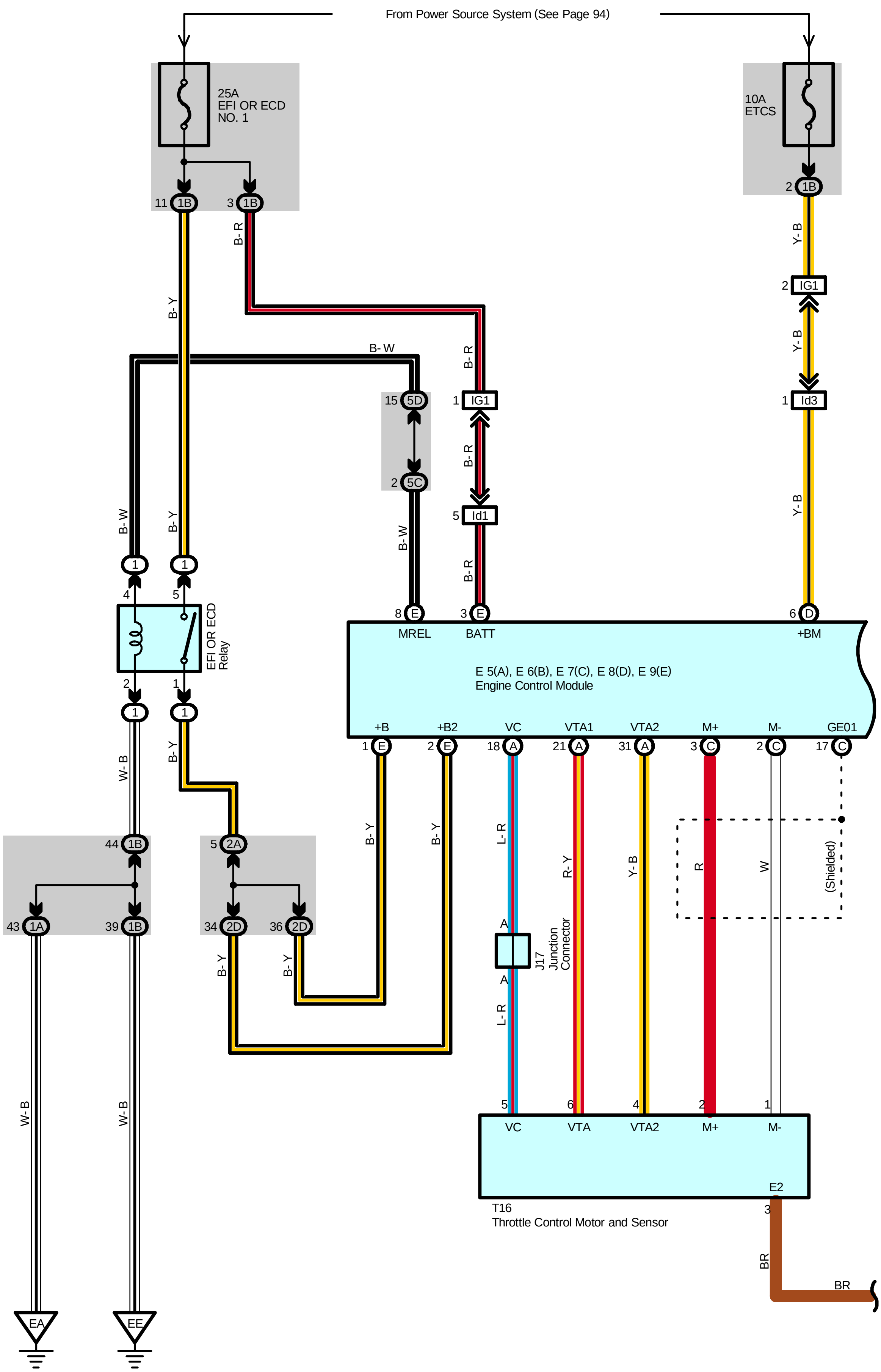
Code	See Page	Code	See Page	Code	See Page
O5	72				

: Junction Block and Wire Harness Connector

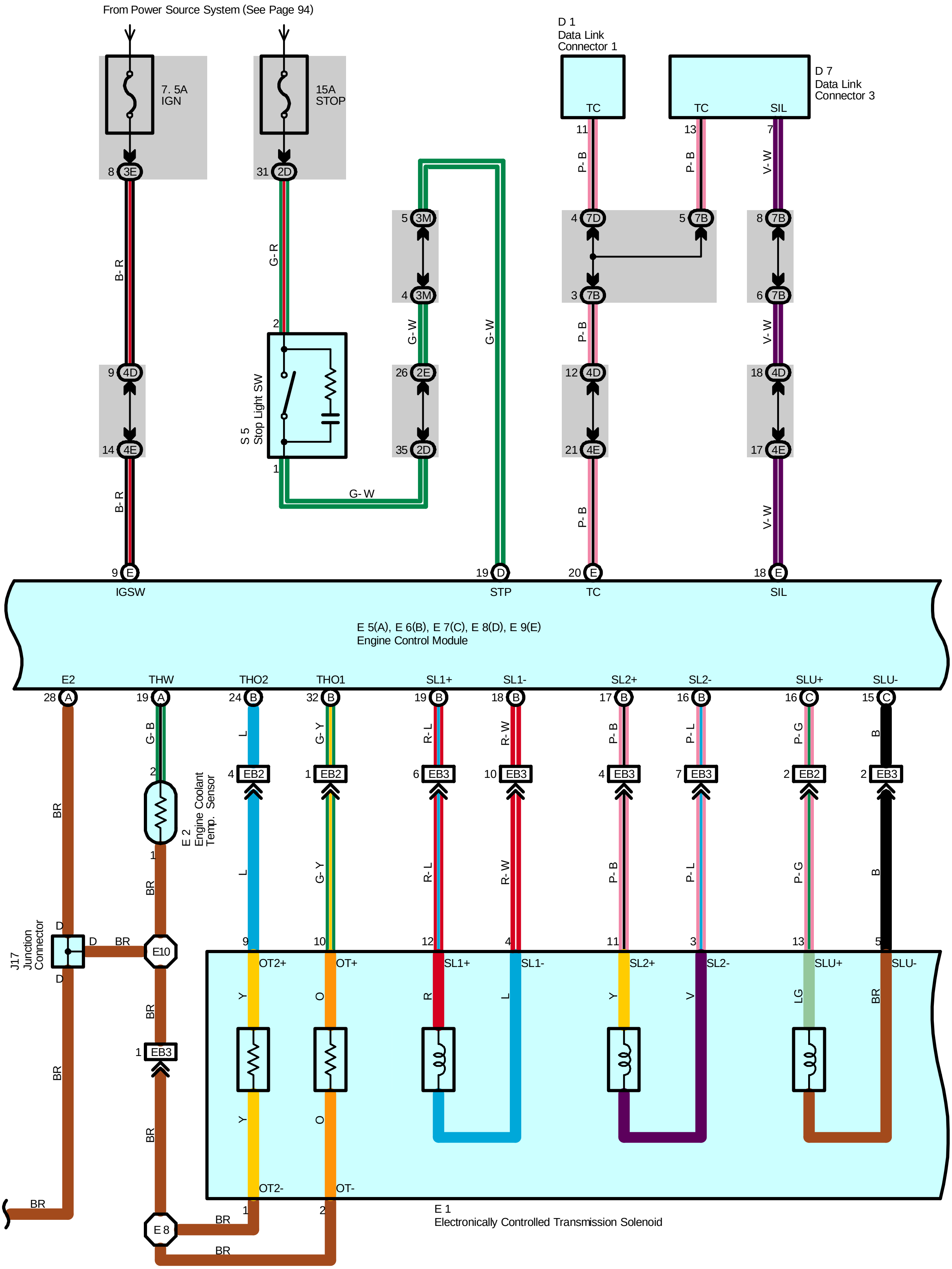
Code	See Page	Junction Block and Wire Harness (Connector Location)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

▽ : Ground Points

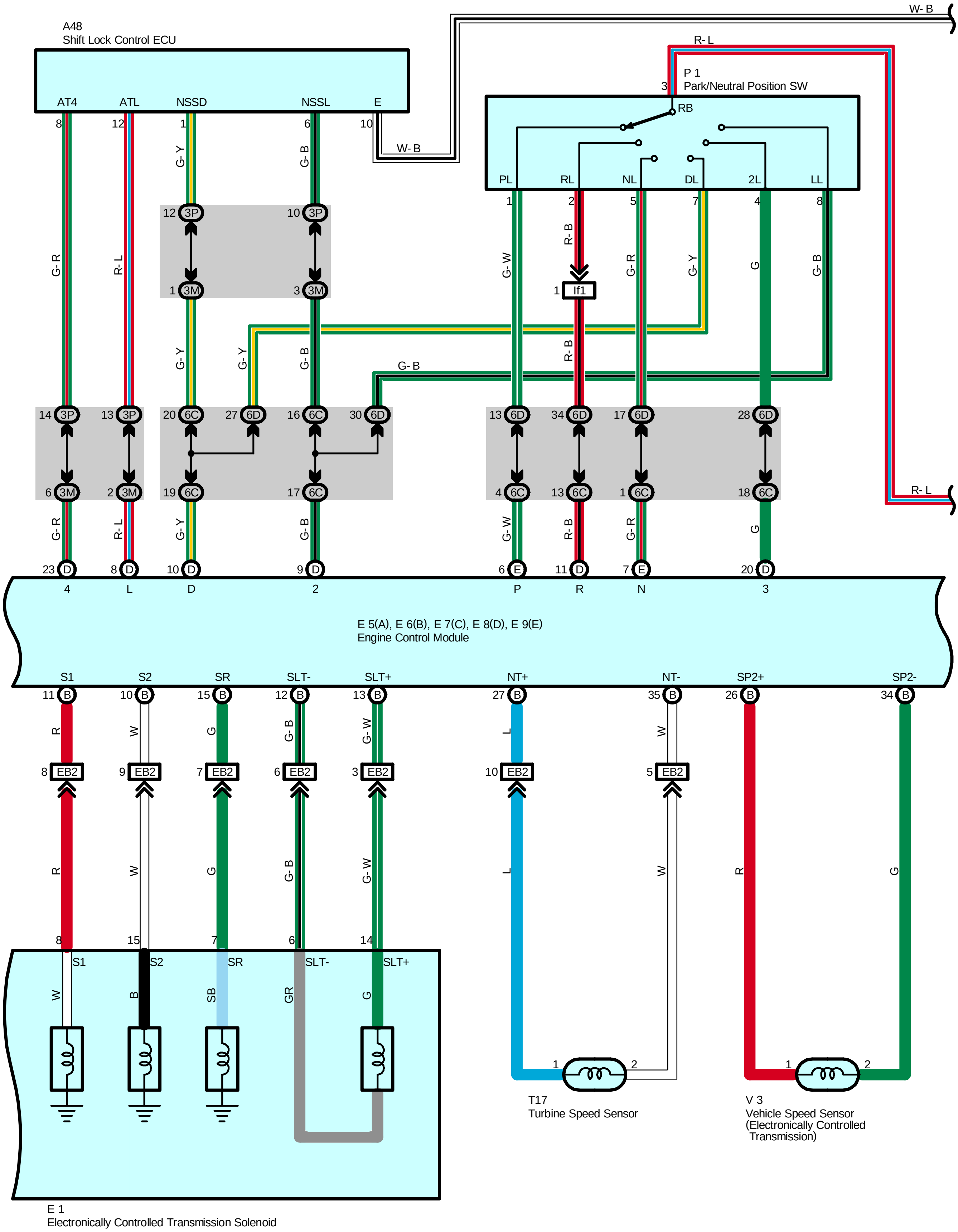
Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH

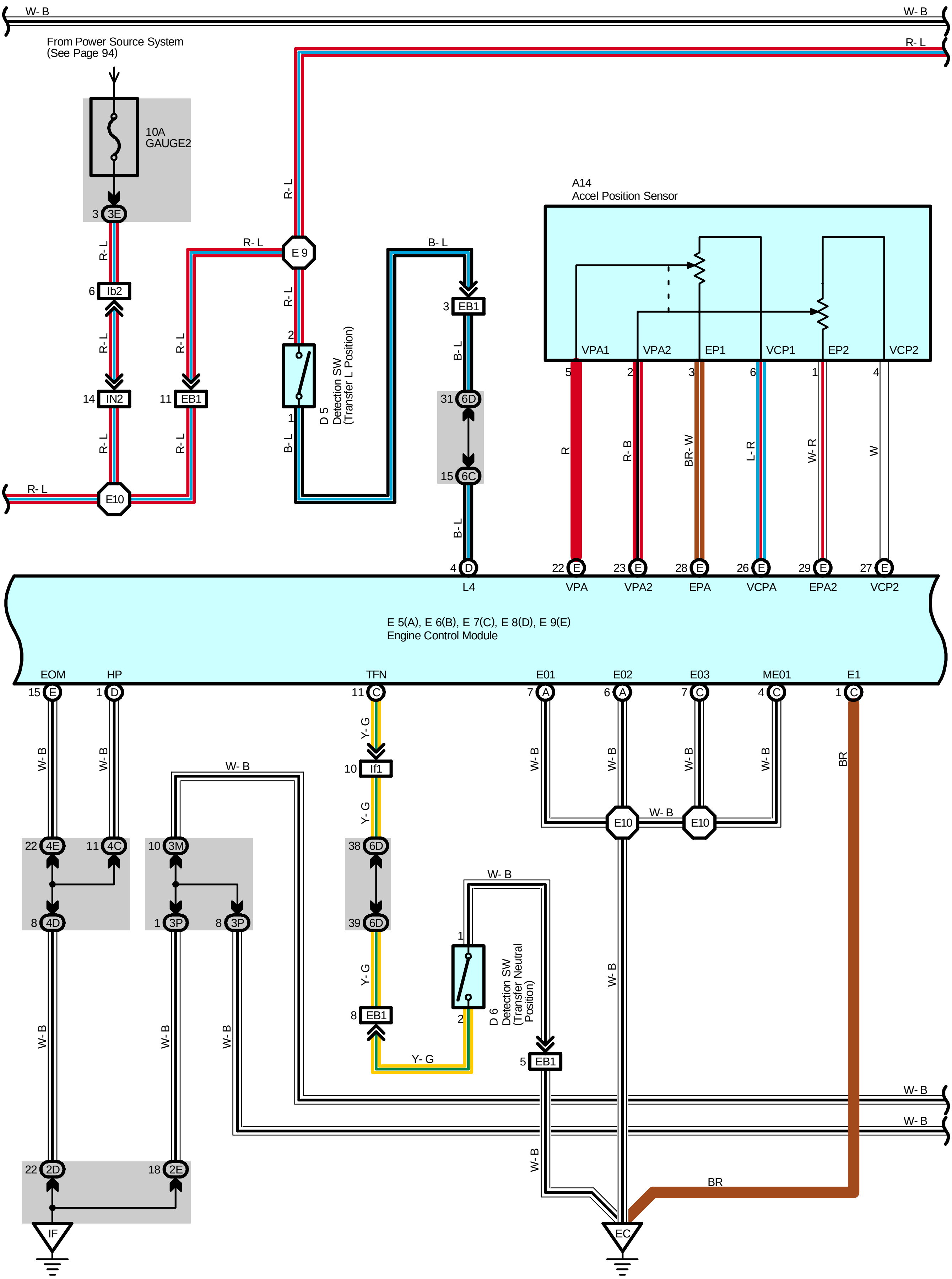


From Power Source System (See Page 94)
25A
EFI OR ECD
NO. 1
10A
ETCS
EFI OR ECD
Relay
MREL
BATT
+BM
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
+B
+B2
VC
VTA1
VTA2
M+
M-
GE01
(Shielded)
J17
Junction
Connector
VC
VTA
VTA2
M+
M-
E2
T16
Throttle Control Motor and Sensor
EA
EE

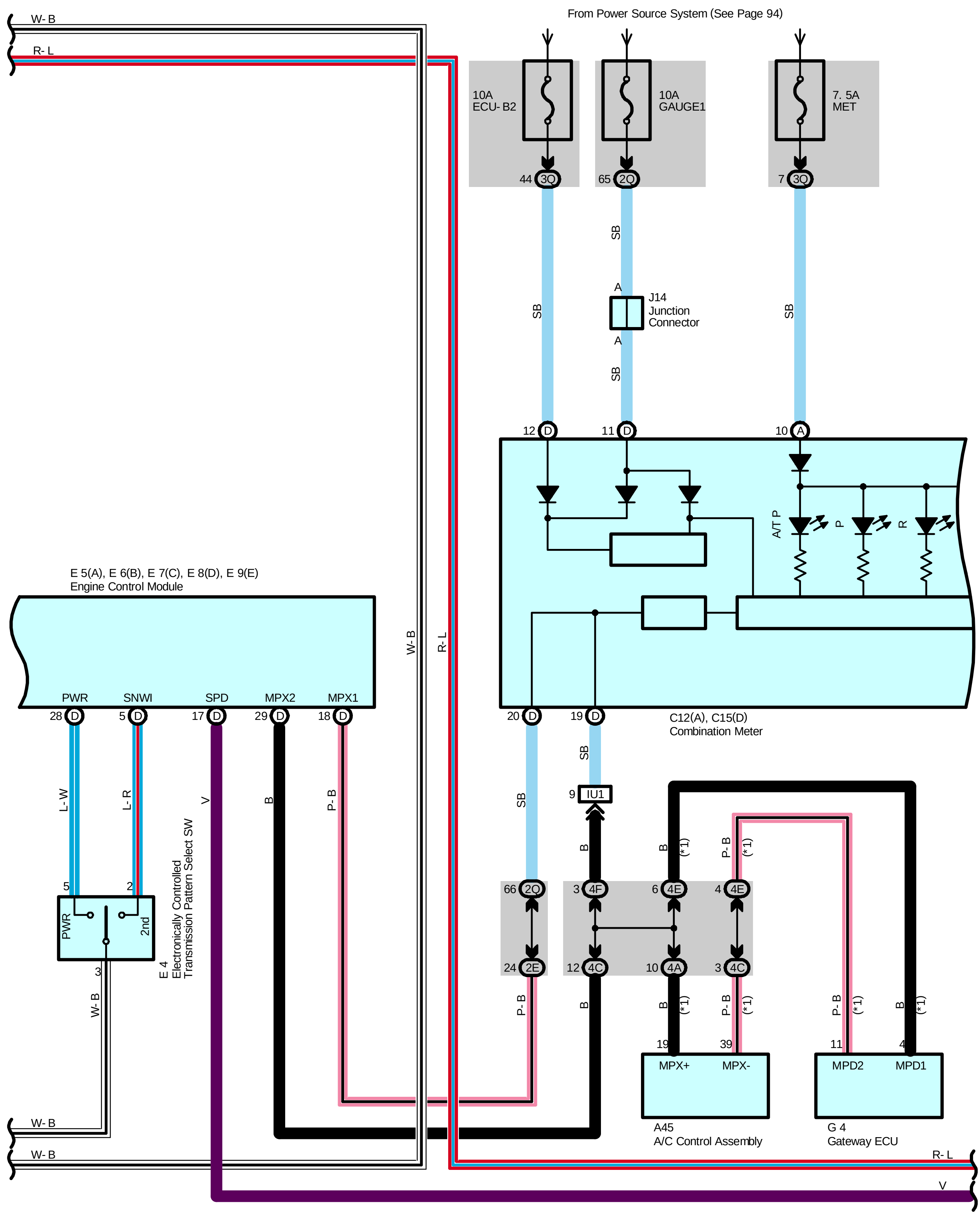

From Power Source System (See Page 94)
7. 5A
IGN
15A
STOP
D 1
Data Link
Connector 1
D 7
Data Link
Connector 3
TC
TC
SIL
S 5
Stop Light SW
IGSW
STP
TC
SIL
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
E2
THW
THO2
THO1
SL1+
SL1-
SL2+
SL2-
SLU+
SLU-
E 2
Engine Coolant
Temp. Sensor
J17
Junction
Connector
OT2+
OT+
SL1+
SL1-
SL2+
SL2-
SLU+
SLU-
OT2-
OT-
E 1
Electronically Controlled Transmission Solenoid

ECT and A/T Indicator

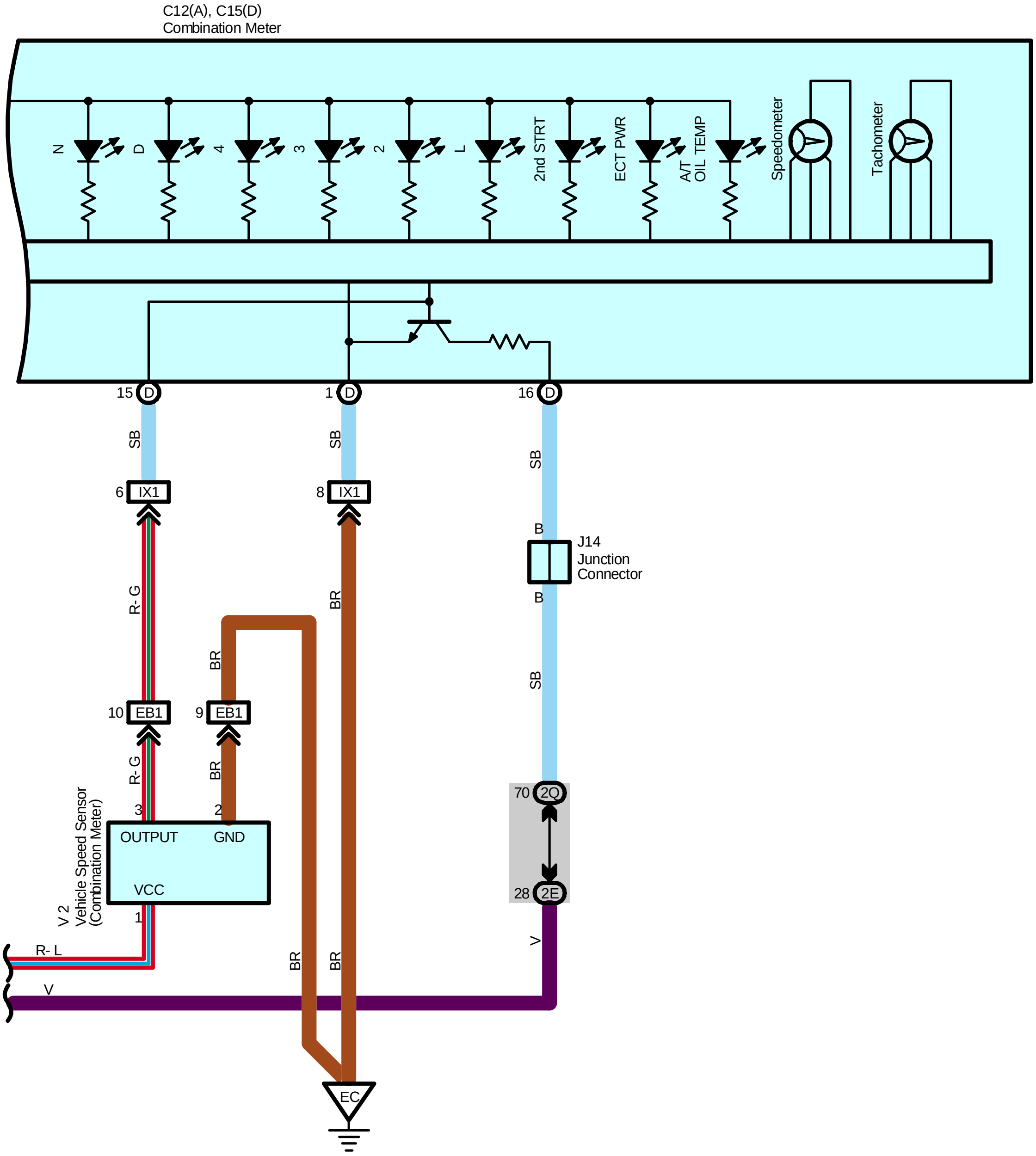



W- B
R- L
From Power Source System
(See Page 94)
10A
GAUGE2
3E
Ib2
IN2
EB1
E10
E 9
D 5
Detection SW
(Transfer L Position)
B- L
6D
6C
A14
Accel Position Sensor
VPA1
VPA2
EP1
VCP1
EP2
VCP2
R
R- B
BR- W
L- R
W- R
W
L4
VPA
VPA2
EPA
VCPA
EPA2
VCP2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
EOM
HP
TFN
E01
E02
E03
ME01
E1
Y- G
If1
BR
4E
4C
4D
3M
3P
D 6
Detection SW
(Transfer Neutral
Position)
2D
2E
IF
EC

ECT and A/T Indicator



* 1 : w/ Navigation System



ECT and A/T Indicator

System Outline

Previous automatic transmissions have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock-up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure, throttle pressure, lock-up pressure and accumulator pressure etc. through the solenoid valve. The electronically controlled transmission is a system which precisely controls gear shift timing and lock-up timing in response to the vehicle's driving conditions and the engine condition detected by various sensors. It makes smooth driving possible by shift selection for each gear which is the most appropriate to the driving conditions at that time, and by preventing downing, squat and gear shift shock when starting off.

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 from vehicle speed sensor is input to TERMINAL SP2+ of the engine control module. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1 and 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. Line Hydraulic Pressure Control

The engine control module adjusts the line hydraulic pressure to the optimal level by controlling TERMINAL SLT+ of the module according to the engine torque data. This realizes the smooth gear shifting.

3. High Response Gear Shifting Control

The engine control module performs the high response engine torque up control to control the ignition-timing lag as well as opening the electronic throttle when shifting down. By doing this, the gear shifting is performed in a short period of time. Moreover, the engine control module uses the orifice switching control, which optimizes the speed of applying and reducing the hydraulic pressure. And it realizes the fine shifting condition by applying and reducing hydraulic pressure slowly when the gear shifting shock is important and quickly when the high response is required.

4. Clutch Hydraulic Pressure Control

The engine control module controls the clutch operation in the optimal timing and with the best hydraulic pressure according to the engine torque data and the number of the clutch revolution

5. Lock-Up and Flexible Lock-Up Control

The engine control module carries out the lock-up control by controlling the TERMINAL SLU+ of the module according to the shift position, vehicle speed, throttle opening degree and running conditions. The engine control module also steadily keeps applying the lock-up clutch a delicate slippage to improve the transmission efficiency (Fuel efficiency) of the torque converter.

6. 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 cuts the current to the solenoid to release lock-up.

7. Ai-Shift Control

The engine control module judges whether the road is downslope or upslope by detecting the throttle opening degree or the vehicle's speed. Moreover it can expect the winding roads by detecting the turning condition of the vehicle. The engine control module keeps unnecessary shifting up from the fourth gear from operating and carries out the automatic shifting down to the third gear in order to control the vehicle running according to the road conditions. The engine control module also reads the driver's intention during driving from his (her) accelerating operation and the running conditions of the vehicle. As a result of that, ideal shifting patters for each driver are automatically selected without any switching operations.

8. Electronically Controlled Transmission Pattern Select SW Circuit

When the electronically controlled transmission pattern select SW is switched to PWR, a signal is input to TERMINAL PWR of the engine control module. This enables shift-up and shift-down at a higher speed range.

9. Transfer Shift Operation

When the transfer shift lever is moved to L position, a signal is input into TERMINAL L4 of the engine control module.
In addition when the transfer shift lever is moved to N position a signal is input to engine control module TERMINAL TFN.
The engine control module detects the transfer condition through this.

Service Hints

E4 Electronically Controlled Transmission Pattern Select SW

5-3 : Closed with select SW at PWR position
2-3 : Closed with select SW at 2nd position

E7 (C), E9 (E) Engine Control Module

BATT-E1 : Always 9.0-14.0 volts
+B-E1 : 9.0-14.0 volts with ignition SW at ON or ST position
+B2-E1 : 9.0-14.0 volts with ignition SW at ON or ST position
IGSW-E1 : 9.0-14.0 volts with ignition SW at ON or ST position

P1 Park/Neutral Position SW

3-1 : Closed with shift lever in P position
3-2 : Closed with shift lever in R position
3-5 : Closed with shift lever in N position
3-7 : Closed with shift lever in D position
3-4 : Closed with shift lever in 2 position
3-8 : Closed with shift lever in L position

○ : **Parts Location**

Code		See Page	Code		See Page	Code	See Page
A14		70	E1		68	J14	71
A45		70	E2		68	J17	71
A48		70	E4		70	P1	69
C12	A	70	E5	A	70	S5	71
C15	D	70	E6	B	70	T16	69
D1		68	E7	C	70	T17	69
D5		68	E8	D	70	V2	69
D6		68	E9	E	70	V3	69
D7		70	G4		70		

▭ : **Relay Blocks**

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

ECT and A/T Indicator

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3M	43	
3P		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4D		
4E		
4F		
5C	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6C	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)
7D	64	Engine Room No.2 Wire and J/B No.7 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

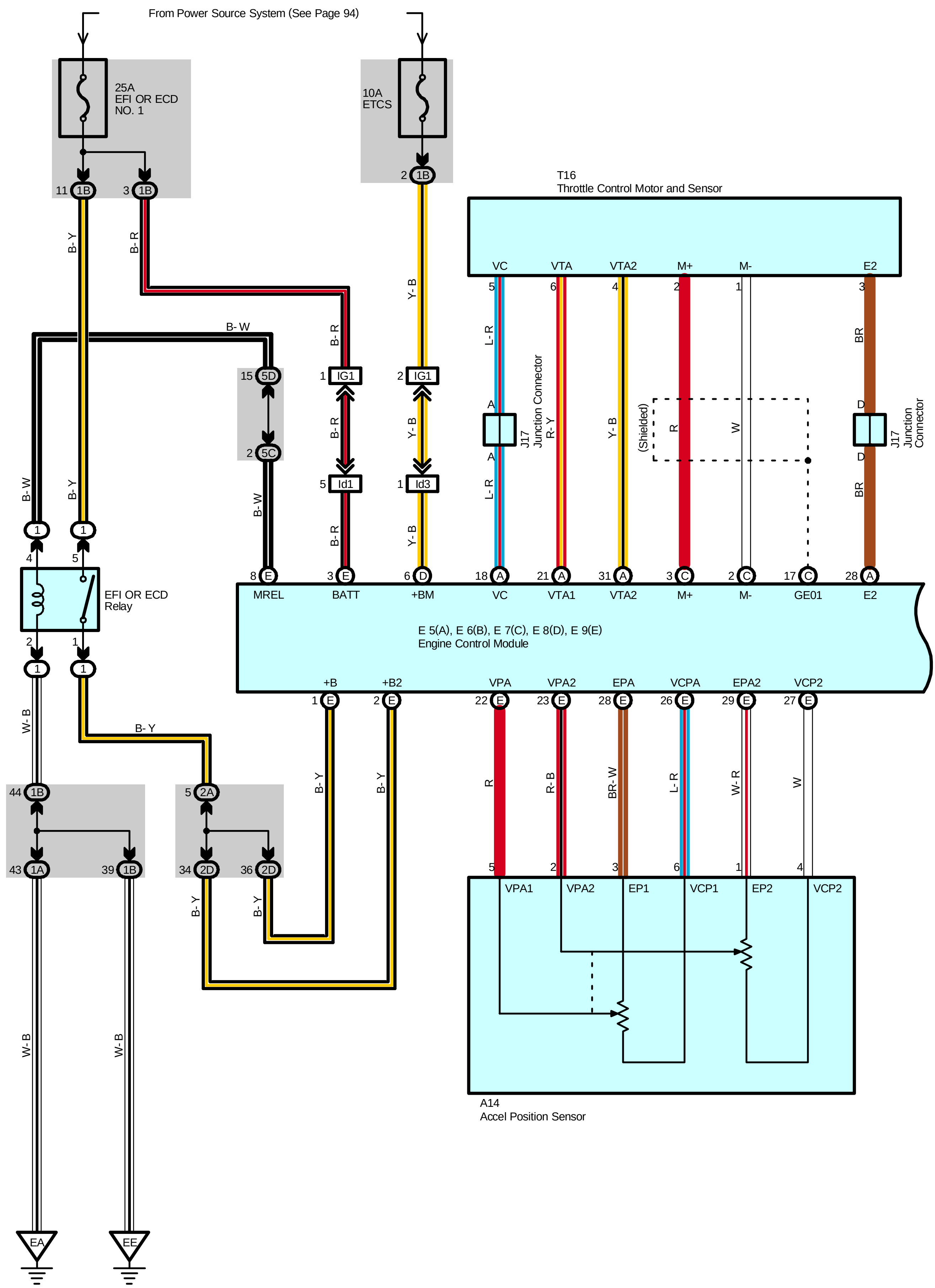
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
EB2		
EB3		
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Id1	84	Dash Wire and Dash Wire (Instrument Panel Center)
Id3		
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)

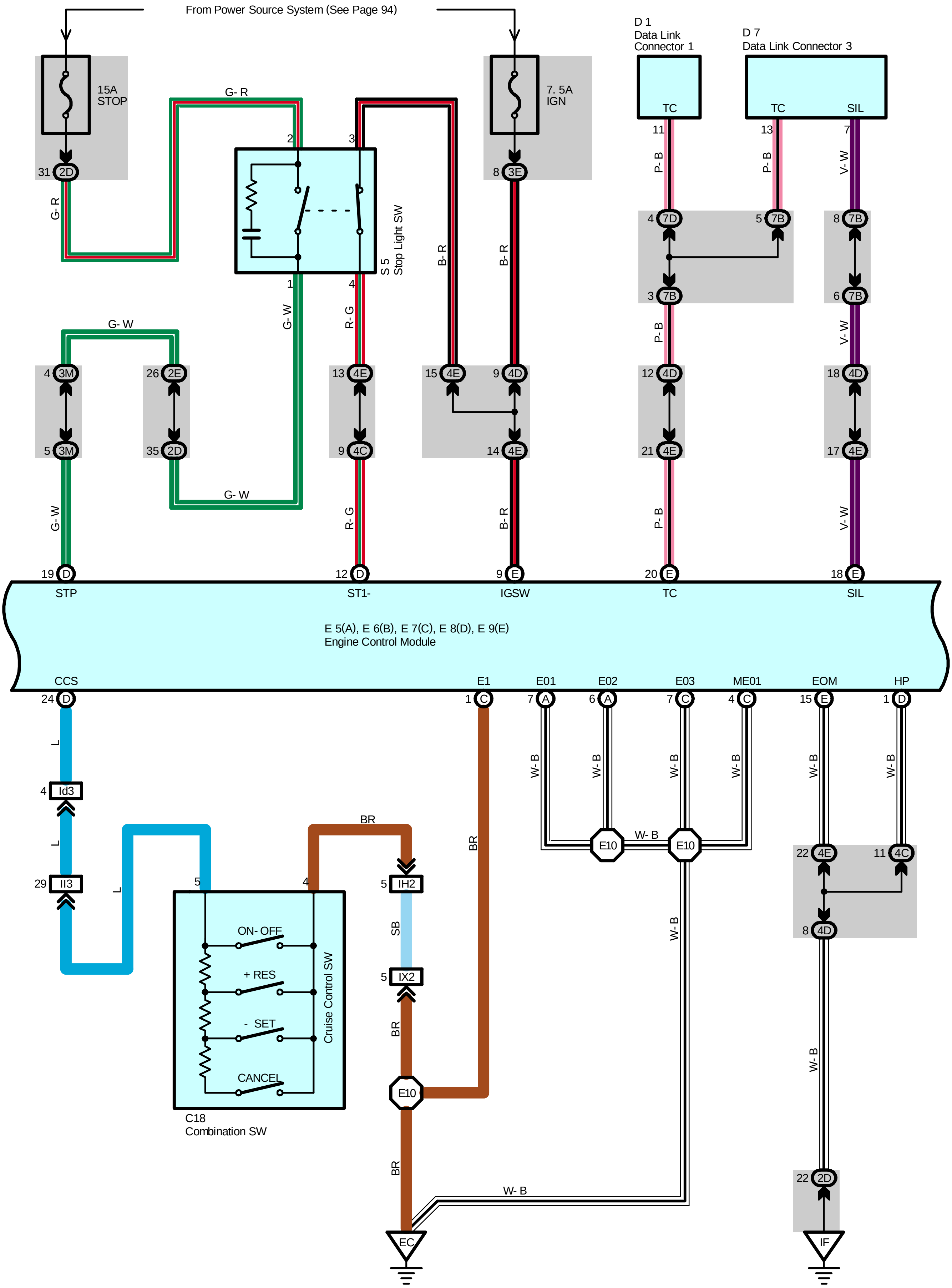
: Ground Points

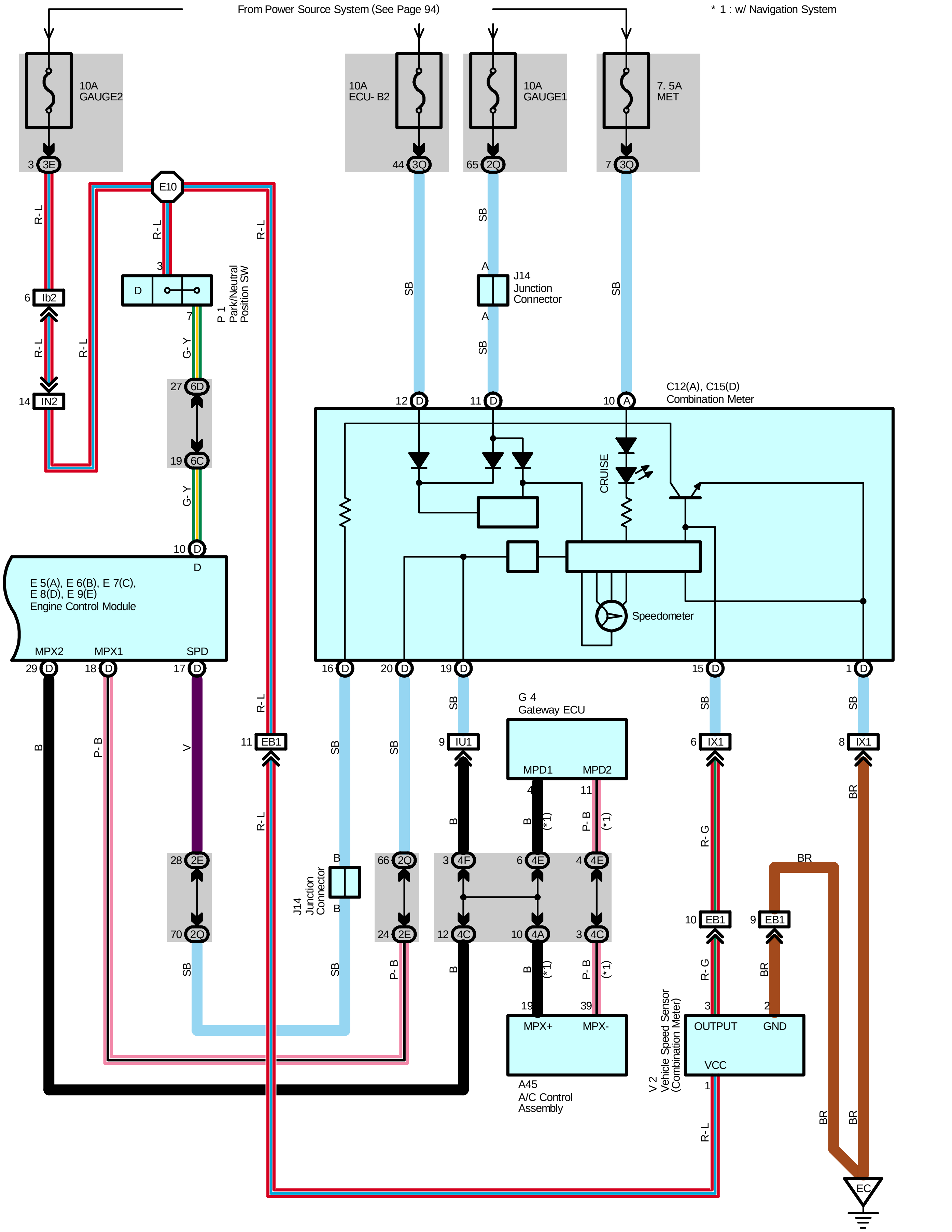
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EC	76	Rear Bank of Right Cylinder Head
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E8	76	Transmission Wire	E10	76	Engine Wire
E9					


From Power Source System (See Page 94)
25A
EFI OR ECD
NO. 1
10A
ETCS
T16
Throttle Control Motor and Sensor
VC
VTA
VTA2
M+
M-
E2
J17
Junction Connector
(Shielded)
EFI OR ECD
Relay
MREL
BATT
+BM
VC
VTA1
VTA2
M+
M-
GE01
E2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
+B
+B2
VPA
VPA2
EPA
VCPA
EPA2
VCP2
VPA1
VPA2
EP1
VCP1
EP2
VCP2
A14
Accel Position Sensor
EA
EE


From Power Source System (See Page 94)
15A STOP
7. 5A IGN
D 1 Data Link Connector 1
D 7 Data Link Connector 3
TC
TC
SIL
G- R
S 5 Stop Light SW
B- R
P- B
V- W
G- W
R- G
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E) Engine Control Module
STP
ST1-
IGSW
TC
SIL
CCS
E1
E01
E02
E03
ME01
EOM
HP
W- B
L
BR
SB
ON- OFF
+ RES
- SET
CANCEL
Cruise Control SW
C18 Combination SW
E10
EC
IF



From Power Source System (See Page 94)
* 1 : w/ Navigation System
10A GAUGE2
10A ECU- B2
10A GAUGE1
7. 5A MET
E10
P 1 Park/Neutral Position SW
J14 Junction Connector
C12(A), C15(D) Combination Meter
CRUISE
Speedometer
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E) Engine Control Module
MPX2
MPX1
SPD
G 4 Gateway ECU
MPD1
MPD2
A45 A/C Control Assembly
MPX+
MPX-
V 2 Vehicle Speed Sensor (Combination Meter)
OUTPUT
GND
VCC
EC

System Outline

The cruise control system is a constant vehicle speed controller which controls the opening angle of the engine throttle valve by the SW, and allows driving at a constant speed without depressing the accelerator pedal.

Set Operation

When the ON-OFF SW is turned on, the systems starts preparations for cruise control and turns on the indicator light in the combination meter.

Set Speed Control

When the - SET SW is operated with the ON-OFF SW turned on during driving, the speed is controlled at a constant speed.

Coast Control

When the - SET SW is kept turned on during cruise control driving, the engine control module controls the throttle valve to decelerate the vehicle speed.
Every time the - SET SW is turned on instantaneously, the vehicle speed is decelerated by approx. 1.5 km/h.

Accel Control

When the + RES SW is kept turned on during cruise control driving, the engine control module controls the throttle valve to accelerate the vehicle speed.
Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated by approx. 1.5 km/h.

Resume Control

If the vehicle speed is within the low speed limit (Approx. 40 km/h, 25 mph) when canceling the cruise control, operation of the + RES SW accelerates the vehicle speed and resumes the level before canceling the cruise control.

Manual Cancel Mechanism

If any of the following signals are input during cruise control driving, the cruise control is canceled.

* The stop light SW is on
* The CANCEL SW is turned on
* The ON-OFF SW is turned off
* Gear is shifted from D position to other positions than D.

Auto Cancel Function

If any of the following conditions are detected, the cruise control is canceled:

* Failure in the stop light SW wiring
* Abnormality in the vehicle speed signal
* Malfunction in the electronically controlled throttle parts
* When the vehicle speed gets slower than the low speed limit.
* When the vehicle speed falls to 16 km/h less than the set speed.

Overdrive Function

The overdrive may be canceled if the vehicle travels on a upward slope during cruise control driving. When the throttle opening information indicates the hill climbing is finished after the overdrive is canceled, the vehicle returns to overdrive mode again as the overdrive return timer is completed.

Service Hints

E7 (C), E8 (D), E9 (E) Engine Control Module

BATT-E1 : Always 9.0-14.0 volts
IGSW-E1 : 9.0-14.0 volts with ignition SW at ON or ST position
STP-E1 : 9.0-14.0 volts with brake pedal is depressed
: Below 1.5 volts with brake pedal is released

C18 Combination SW

5-4 : Approx. 1540 Ω with CANCEL SW on
: Approx. 240 Ω with + RES SW on
: Approx. 630 Ω with - SET SW on

Cruise Control

: Parts Location

Code		See Page	Code		See Page	Code	See Page
A14		70	E5	A	70	J17	71
A45		70	E6	B	70	P1	69
C12	A	70	E7	C	70	S5	71
C15	D	70	E8	D	70	T16	69
C18		70	E9	E	70	V2	69
D1		68	G4		70		
D7		70	J14		71		

: 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)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D 2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3M	43	
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A 4C 4D 4E 4F	52	Dash Wire and J/B No.4 (Instrument Panel Center)
5C	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6C	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)
7D	64	Engine Room No.2 Wire and J/B No.7 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

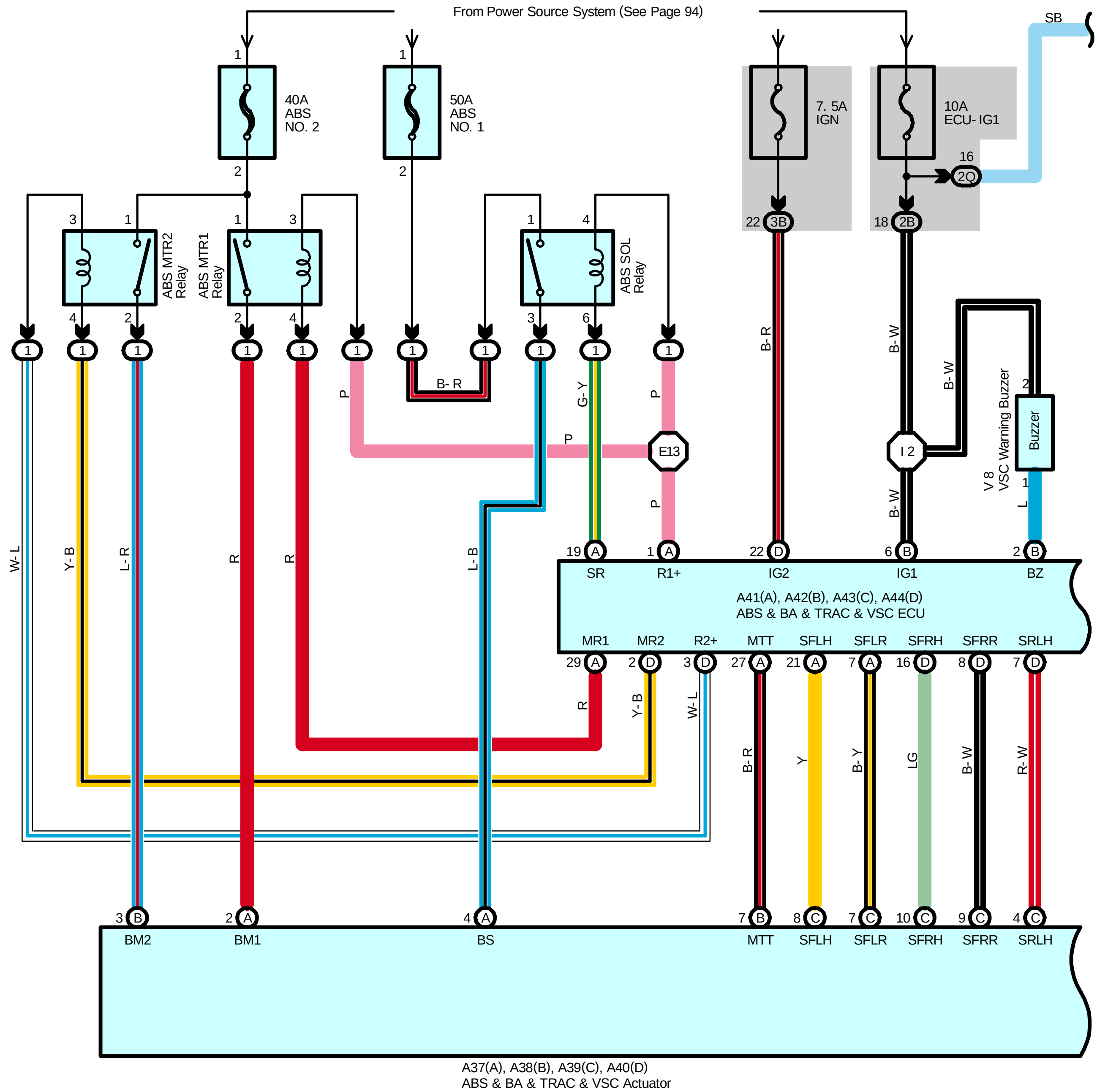
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IH2	80	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IX1 IX2	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Id1 Id3	84	Dash Wire and Dash Wire (Instrument Panel Center)

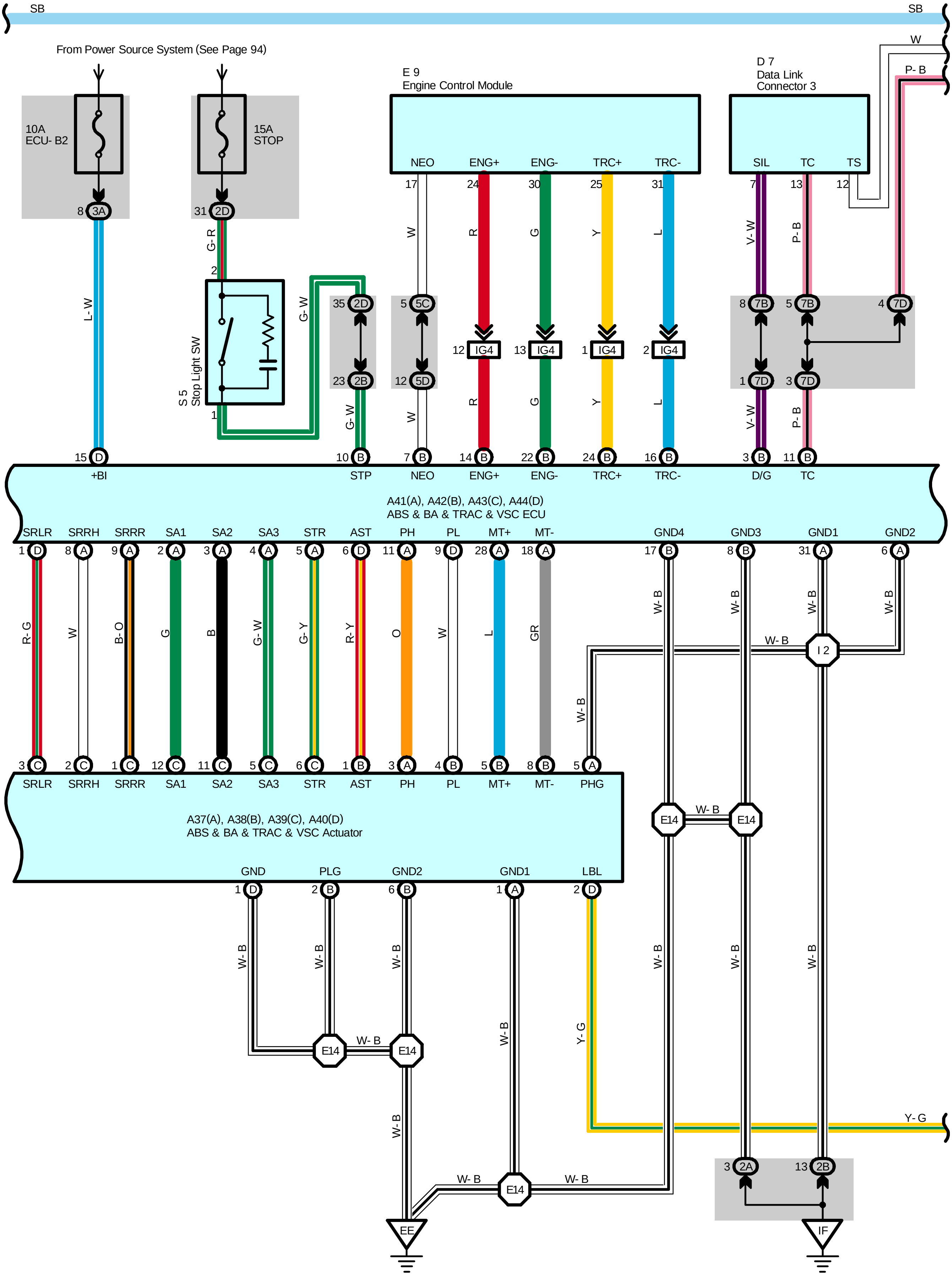
: Ground Points

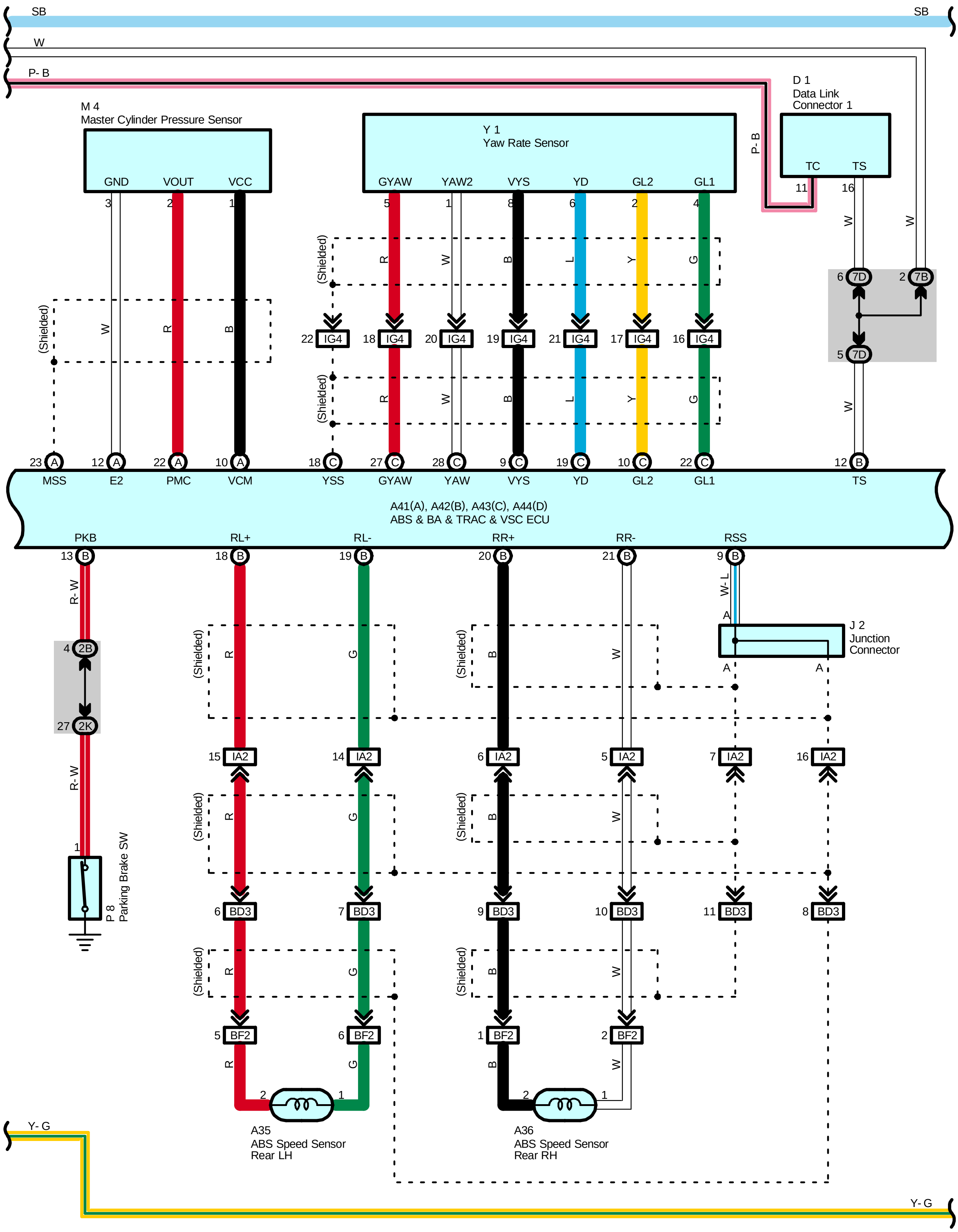
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EC	76	Rear Bank of Right Cylinder Head
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH

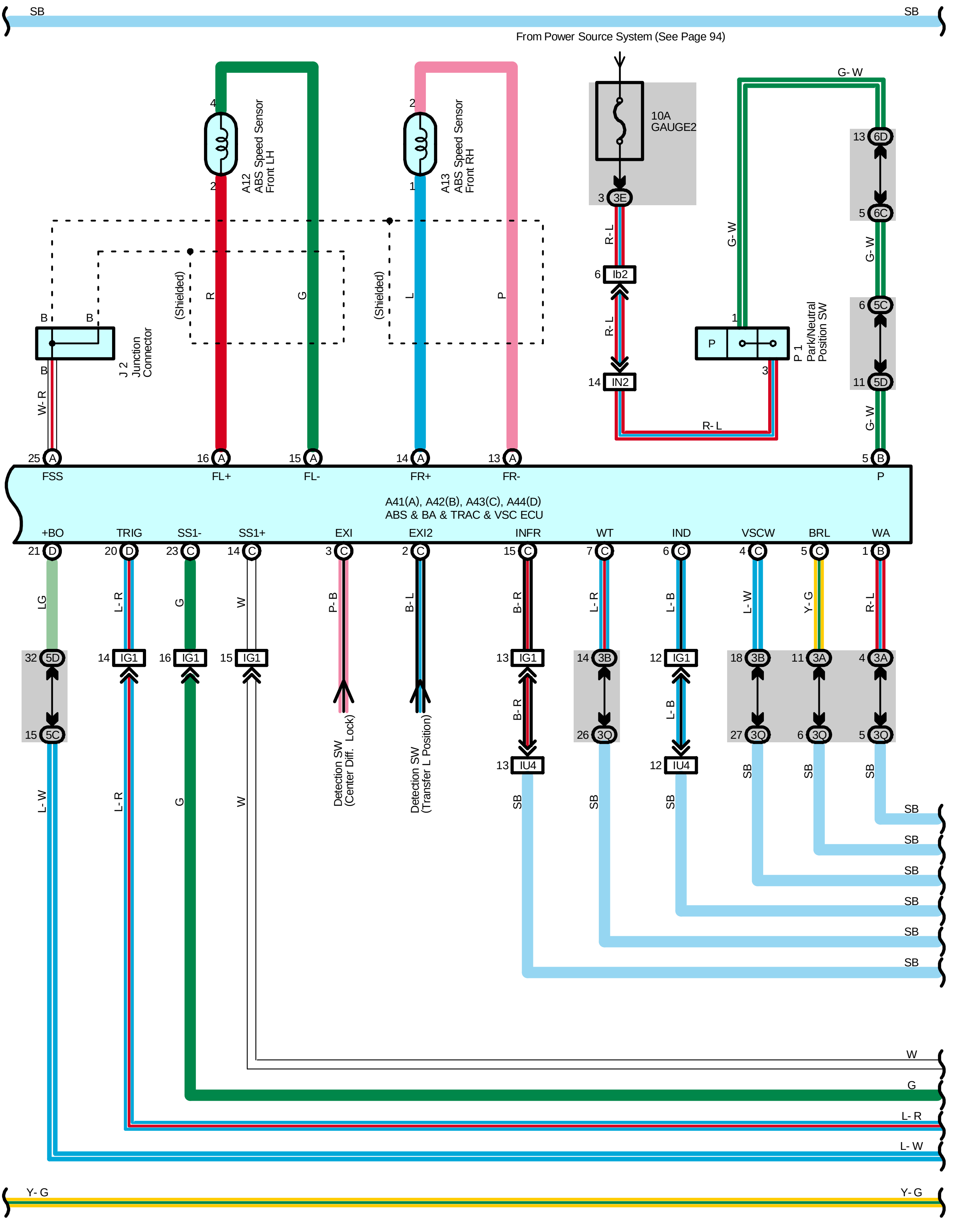
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E10	76	Engine Wire			

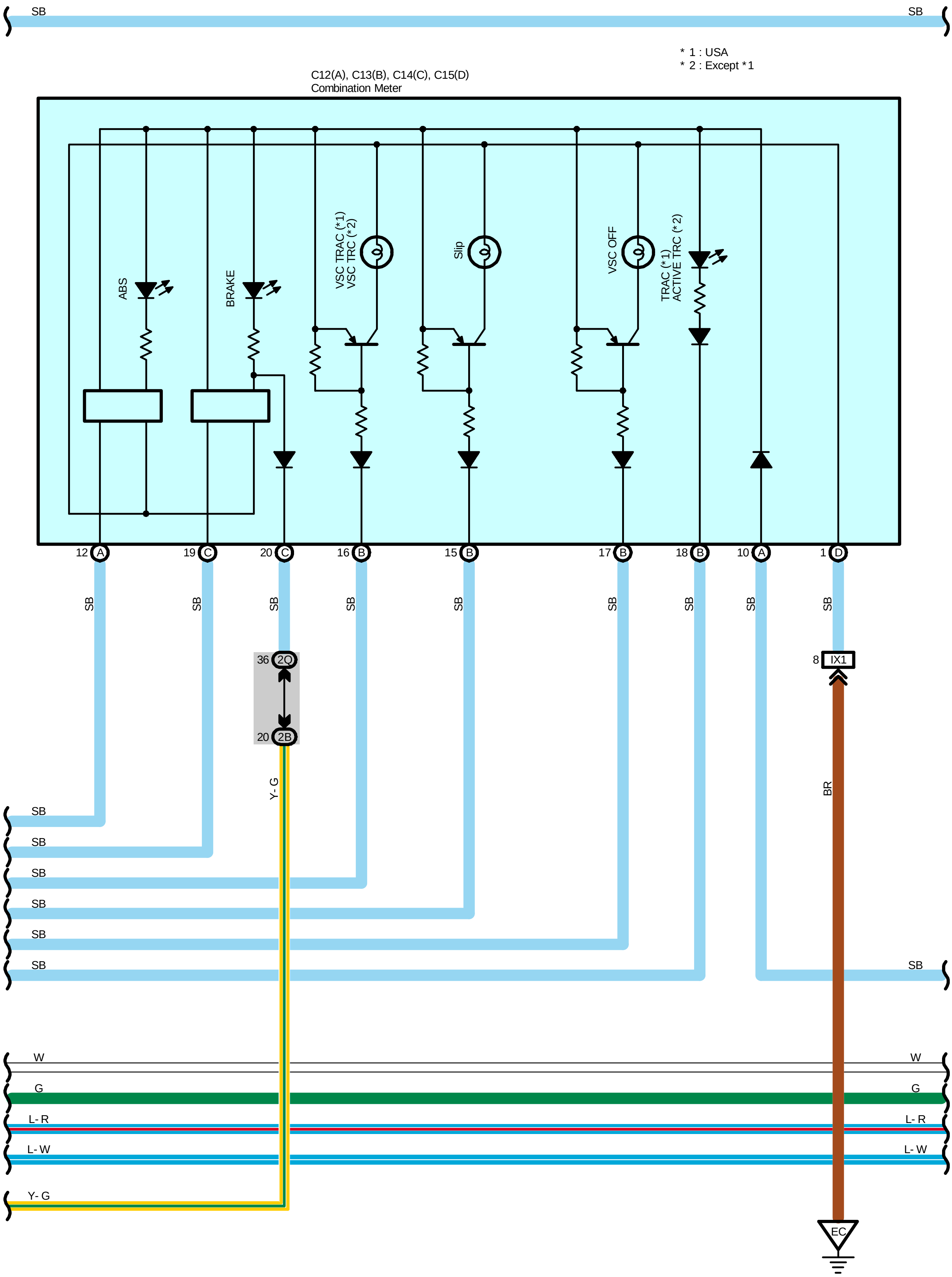

From Power Source System (See Page 94)
40A ABS NO. 2
50A ABS NO. 1
7. 5A IGN
10A ECU- IG1
SB
ABS MTR2 Relay
ABS MTR1 Relay
ABS SOL Relay
W- L
Y- B
L- R
R
L- B
B- R
P
G- Y
E13
B- W
I 2
V 8 VSC Warning Buzzer
Buzzer
SR
R1+
IG2
IG1
BZ
A41(A), A42(B), A43(C), A44(D)
ABS & BA & TRAC & VSC ECU
MR1
MR2
R2+
MTT
SFLH
SFLR
SFRH
SFRR
SRLH
Y
B- Y
LG
R- W
BM2
BM1
BS
A37(A), A38(B), A39(C), A40(D)
ABS & BA & TRAC & VSC Actuator

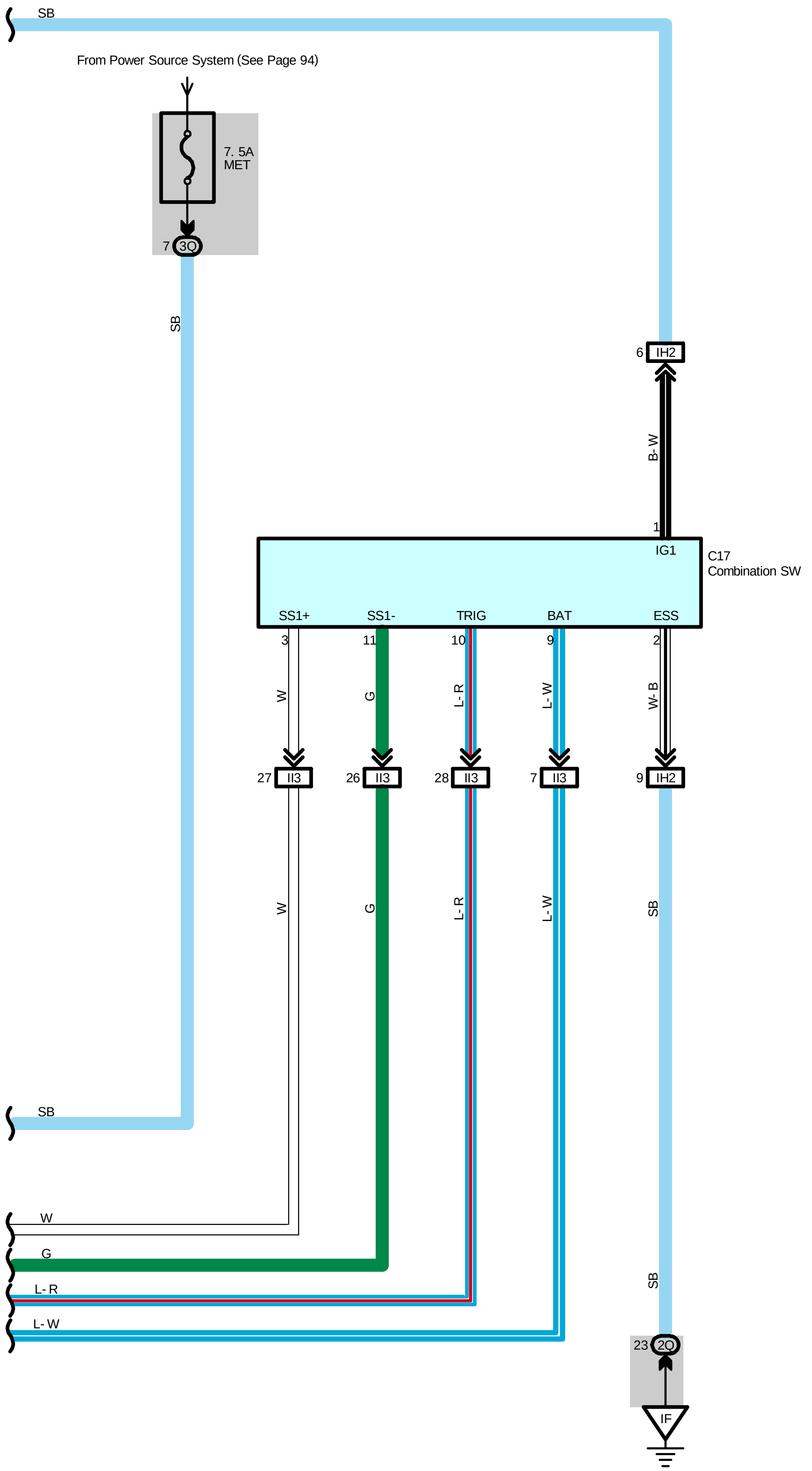

SB
From Power Source System (See Page 94)
10A
ECU- B2
15A
STOP
E 9
Engine Control Module
NEO ENG+ ENG- TRC+ TRC-
D 7
Data Link
Connector 3
SIL TC TS
S 5
Stop Light SW
+BI STP NEO ENG+ ENG- TRC+ TRC- D/G TC
A41(A), A42(B), A43(C), A44(D)
ABS & BA & TRAC & VSC ECU
SRLR SRRH SRRR SA1 SA2 SA3 STR AST PH PL MT+ MT- GND4 GND3 GND1 GND2
SRLR SRRH SRRR SA1 SA2 SA3 STR AST PH PL MT+ MT- PHG
A37(A), A38(B), A39(C), A40(D)
ABS & BA & TRAC & VSC Actuator
GND PLG GND2 GND1 LBL
E14
I 2
EE
IF
Y- G


SB
W
P- B
M 4
Master Cylinder Pressure Sensor
GND
VOUT
VCC
Y 1
Yaw Rate Sensor
GYAW
YAW2
VYS
YD
GL2
GL1
D 1
Data Link
Connector 1
TC
TS
(Shielded)
IG4
7D
7B
MSS
E2
PMC
VCM
YSS
GYAW
YAW
VYS
YD
GL2
GL1
TS
A41(A), A42(B), A43(C), A44(D)
ABS & BA & TRAC & VSC ECU
PKB
RL+
RL-
RR+
RR-
RSS
R- W
W- L
J 2
Junction
Connector
2B
2K
IA2
BD3
BF2
P 8
Parking Brake SW
A35
ABS Speed Sensor
Rear LH
A36
ABS Speed Sensor
Rear RH
Y- G



SB
From Power Source System (See Page 94)
10A
GAUGE2
G- W
A12
ABS Speed Sensor
Front LH
A13
ABS Speed Sensor
Front RH
J 2
Junction
Connector
(Shielded)
P 1
Park/Neutral
Position SW
R- L
W- R
FSS
FL+
FL-
FR+
FR-
P
A41(A), A42(B), A43(C), A44(D)
ABS & BA & TRAC & VSC ECU
+BO
TRIG
SS1-
SS1+
EXI
EXI2
INFR
WT
IND
VSCW
BRL
WA
LG
L- R
G
W
P- B
B- L
B- R
L- B
L- W
Y- G
R- L
Detection SW
(Center Diff. Lock)
Detection SW
(Transfer L Position)
IG1
IU4
lb2
IN2
Y- G


SB
SB
* 1 : USA
* 2 : Except *1
C12(A), C13(B), C14(C), C15(D)
Combination Meter
ABS
BRAKE
VSC TRAC (*1)
VSC TRC (*2)
Slip
VSC OFF
TRAC (*1)
ACTIVE TRC (*2)
12 A
19 C
20 C
16 B
15 B
17 B
18 B
10 A
1 D
36 2Q
20 2B
8 IX1
Y-G
BR
W
G
L-R
L-W
EC



SB
From Power Source System (See Page 94)
7. 5A
MET
7
3Q
SB
6
IH2
B-W
1
IG1
C17
Combination SW
SS1+
SS1-
TRIG
BAT
ESS
3
11
10
9
2
W
G
L-R
L-W
W-B
27
II3
26
II3
28
II3
7
II3
9
IH2
W
G
L-R
L-W
SB
SB
W
G
L-R
L-W
SB
23
2Q
IF

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 ABS & BA & TRAC & VSC 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 ABS & BA & TRAC & VSC 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.

VSC indicator light

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

4. Traction Mode and VSC Function

When the center differential of the transfer is locked, the VSC function is turned off. At this time, the VSC OFF indicator light in the combination meter will come on, and informs the driver that the VSC function is OFF.

5. 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 throttle control

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

Engine control and electronically controlled transmission control

The strong 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.

6. Fail Safe Function

If an error occurs in the ABS & BA & TRAC & VSC ECU, sensor signals, and/or actuators, the ABS & BA & TRAC & VSC 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 throttle open request from the VSC system. As a result, the vehicle functions without the ABS, BA, TRAC, and VSC systems.

Service Hints

A41 (A), A42 (B), A44 (D) ABS & BA & TRAC & VSC ECU

(D)15-Ground : Always approx. 12 volts
(B) 6-Ground : Approx. 12 volts with ignition SW at ON or ST position
(D)22-Ground : Approx. 12 volts with ignition SW at ON or ST position
(B)10-Ground : Approx. 12 volts with brake pedal depressed
(A) 6, (A) 31, (B) 8, (B) 17-Ground : Always continuity

A12 ABS Speed Sensor Front LH

2-4 : Approx. 1.07 kΩ (20 ˚C, 68 ˚F)

A13 ABS Speed Sensor Front RH

1-2 : Approx. 1.07 kΩ (20 ˚C, 68 ˚F)

A35, A36 ABS Speed Sensor Rear LH, RH

1-2 : Approx. 1.2 kΩ (25 ˚C, 77 ˚F)

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A12		68	A42	B	70	D7	70
A13		68	A43	C	70	E9	70
A35		72	A44	D	70	J2	71
A36		72	C12	A	70	M4	69
A37	A	68	C13	B	70	P1	69
A38	B	68	C14	C	70	P8	73
A39	C	68	C15	D	70	S5	71
A40	D	68	C17		70	V8	71
A41	A	70	D1		68	Y1	71

: 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)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2B		
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3A	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3B		
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
5C	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
6C	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)
7D	64	Engine Room No.2 Wire and J/B No.7 (Behind the Grove Box)

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	78	Engine Room No.2 Wire and Floor No.1 Wire (Left Kick Panel)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IG4		
IH2	80	Instrument Panel Integration Wire and Column Wire (Near the Ignition SW)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU4	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BD3	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BF2	86	Frame Wire and Floor No.3 Wire (Left Side of Rear Floor Crossmember)

▽ : Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
EE	76	Front Left Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH

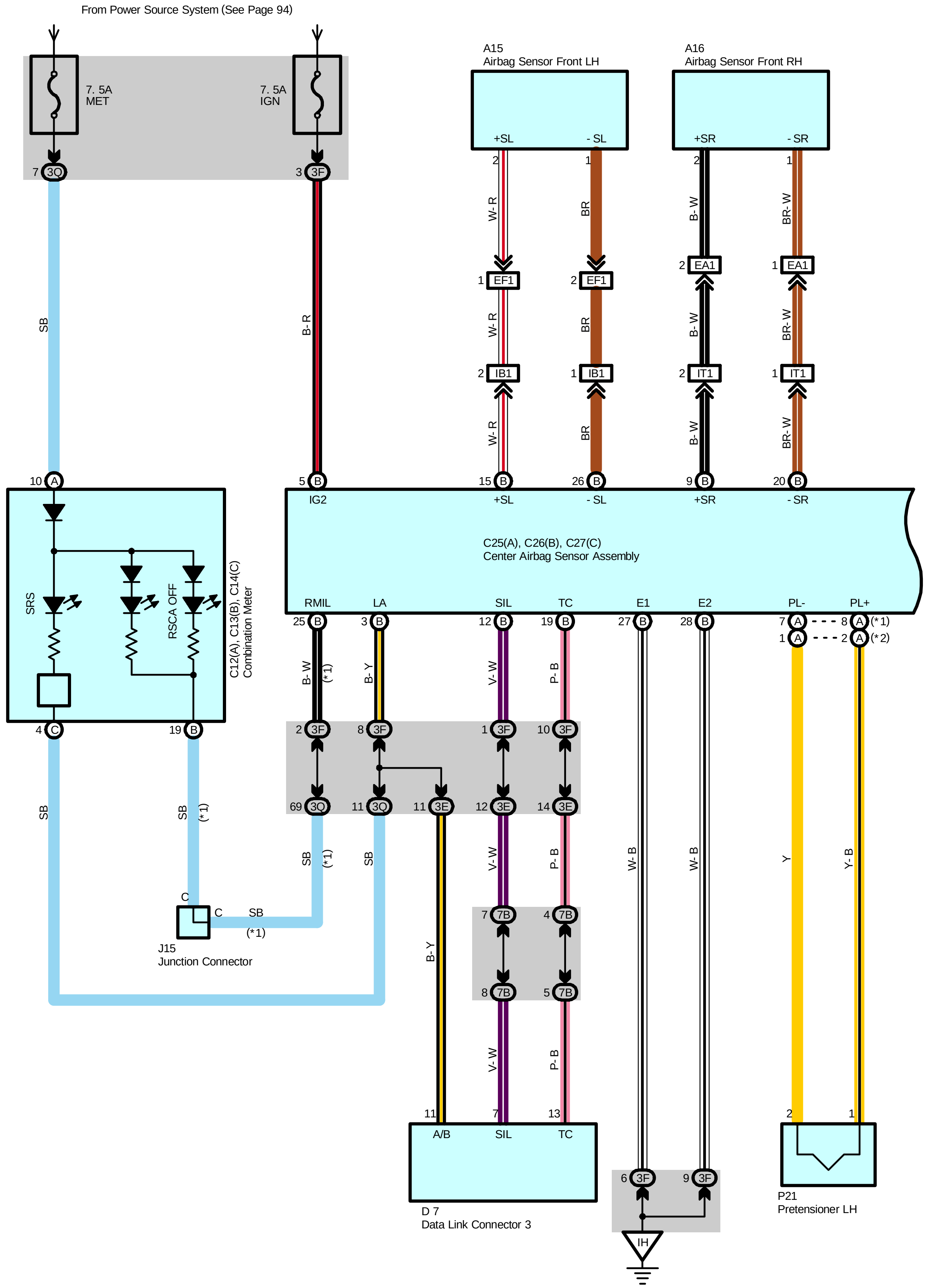
⬡ : Splice Points

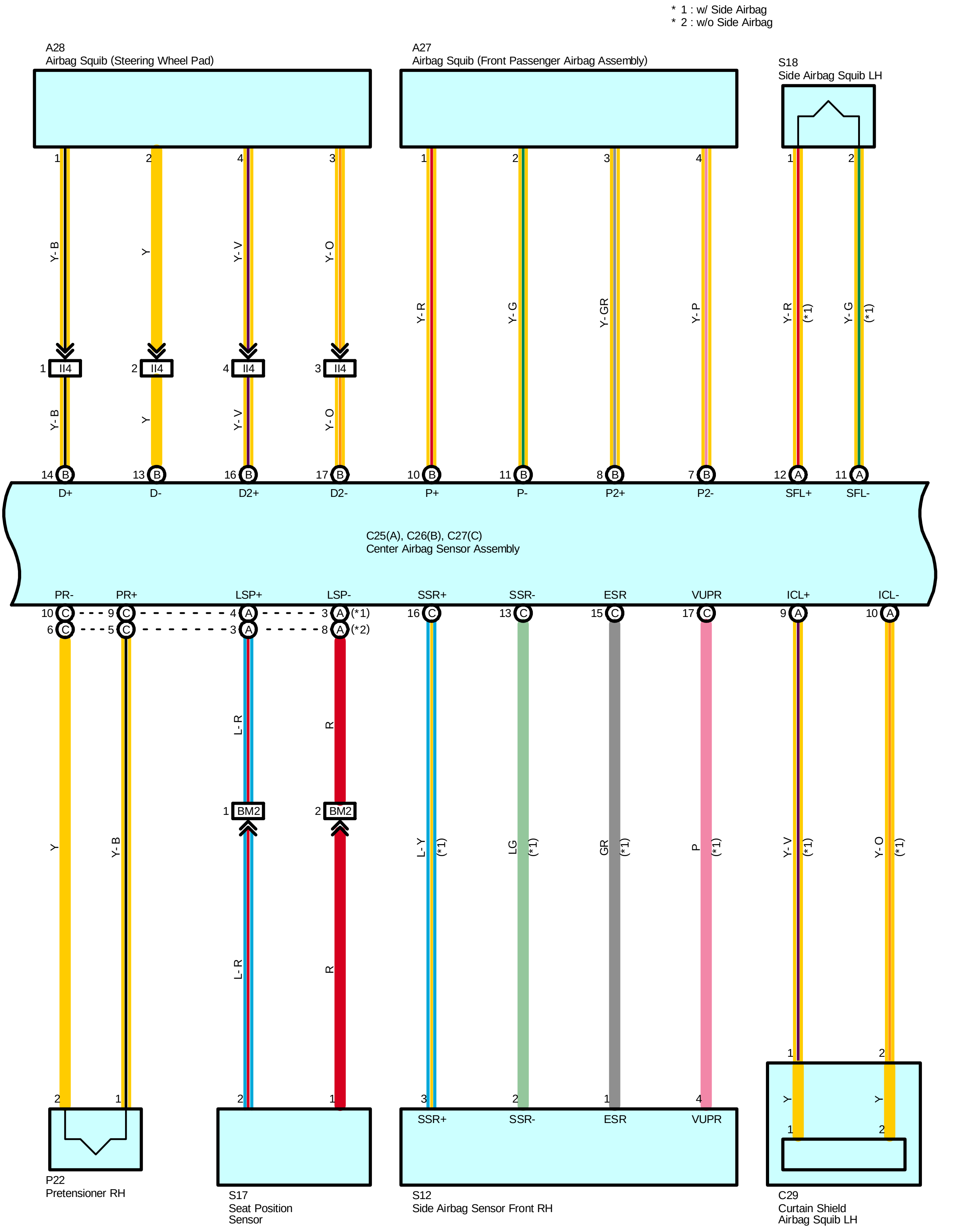
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E13	76	Engine Room No.2 Wire	I2	80	Engine Room No.2 Wire
E14					

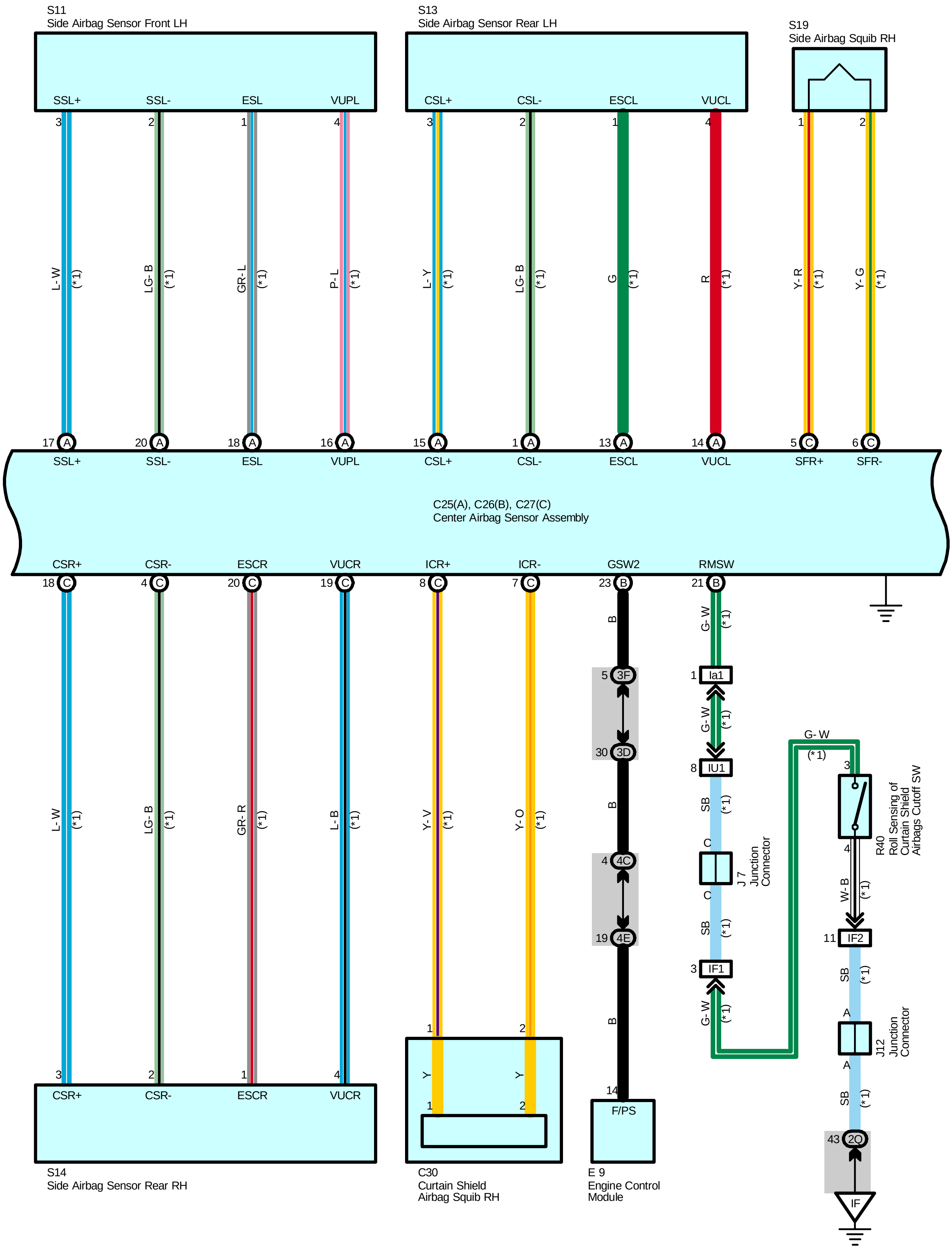
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

- 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.

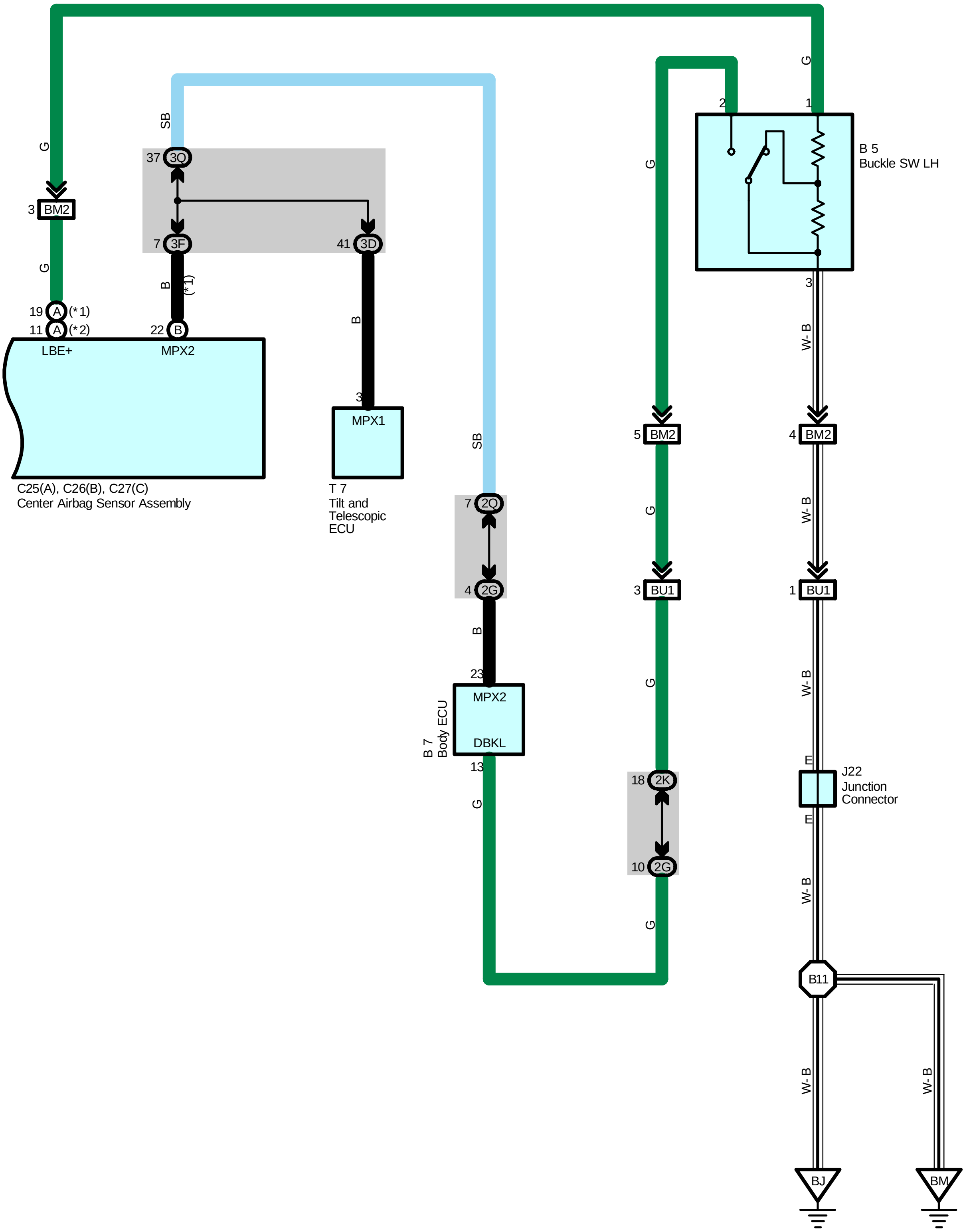
* Steering wheel pad * Front passenger airbag assembly * Side airbag assembly * Curtain shield airbag assembly * Seat belt pretensioner * Center airbag sensor assembly * Front airbag sensor assembly * Side airbag sensor assembly * Rear airbag sensor assembly


From Power Source System (See Page 94)
7. 5A
MET
7. 5A
IGN
A15
Airbag Sensor Front LH
A16
Airbag Sensor Front RH
+SL
- SL
+SR
- SR
W- R
BR
B- W
BR- W
EF1
EA1
IB1
IT1
SB
B- R
IG2
C25(A), C26(B), C27(C)
Center Airbag Sensor Assembly
RMIL
LA
SIL
TC
E1
E2
PL-
PL+
(*1)
(*2)
SRS
RSCA OFF
C12(A), C13(B), C14(C)
Combination Meter
B- Y
V- W
P- B
W- B
Y
Y- B
J15
Junction Connector
A/B
D 7
Data Link Connector 3
IH
P21
Pretensioner LH


* 1 : w/ Side Airbag
* 2 : w/o Side Airbag
A28
Airbag Squib (Steering Wheel Pad)
A27
Airbag Squib (Front Passenger Airbag Assembly)
S18
Side Airbag Squib LH
Y-B
Y
Y-V
Y-O
Y-R
Y-G
Y-GR
Y-P
(*1)
II4
D+
D-
D2+
D2-
P+
P-
P2+
P2-
SFL+
SFL-
C25(A), C26(B), C27(C)
Center Airbag Sensor Assembly
PR-
PR+
LSP+
LSP-
SSR+
SSR-
ESR
VUPR
ICL+
ICL-
(*2)
L-R
R
BM2
L-Y
LG
GR
P
P22
Pretensioner RH
S17
Seat Position
Sensor
S12
Side Airbag Sensor Front RH
C29
Curtain Shield
Airbag Squib LH


S11
Side Airbag Sensor Front LH
SSL+ SSL- ESL VUPL
L-W LG-B GR-L P-L
S13
Side Airbag Sensor Rear LH
CSL+ CSL- ESCL VUCL
L-Y LG-B G R
S19
Side Airbag Squib RH
Y-R Y-G
(*1)
SSL+ SSL- ESL VUPL CSL+ CSL- ESCL VUCL SFR+ SFR-
C25(A), C26(B), C27(C)
Center Airbag Sensor Assembly
CSR+ CSR- ESCR VUCR ICR+ ICR- GSW2 RMSW
L-W LG-B GR-R L-B Y-V Y-O B G-W
3F 3D 4C 4E
Ia1 IU1 IF1 IF2 2O IF
SB W-B
J 7
Junction Connector
J12
Junction Connector
R40
Roll Sensing of Curtain Shield Airbags Cutoff SW
CSR+ CSR- ESCR VUCR
S14
Side Airbag Sensor Rear RH
Y Y
C30
Curtain Shield Airbag Squib RH
F/PS
E 9
Engine Control Module

* 1 : w/ Side Airbag
* 2 : w/o Side Airbag



System Outline

- ＊ The SRS airbag are provided for the driver and front passenger. The SRS airbags have been designed to help reducing the shocks to the heads and chests of the driver and front passenger in the event of a severe frontal impact collision as supplements to the seat belts.
  This system is a 3-sensor type airbag system to detect the impact during a front collision using the center airbag sensor assembly and airbag sensor front LH, RH, and to make the airbag system and pretensioner operate as well.
- ＊ In this system, a front side collision is detected by the side airbag sensor front LH, RH in order to simultaneously deploy the side and curtain shield airbags. A rear side collision is detected by the side airbag sensor rear LH, RH in order to deploy only the curtain shield airbag.
- ＊ Roll sensing of curtain shield airbags control has been adopted in order to deploy the curtain shield airbags and the pretensioners for the driver and front passenger, in the event that the vehicle rolls over.
  A roll sensing of curtain shield airbags cutoff SW is provided on the driver side of the instrument panel to enable the driver to disable this system.
- ＊ Dual-stage SRS airbags system, that controls the airbag inflating output optimum by judging the extent of impact and seat position (Driver seat), has been used for the driver and front passenger airbags.
- ＊ In accordance with the adoption of the dual-stage SRS airbag system, a seat position sensor has been established for the driver seat.
- ＊ This system has adopted a fuel cut control that stops the fuel pump when the airbag is deployed.

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A15		68	C27	C	70	R40	71
A16		68	C29		72	S11	73
A27		70	C30		72	S12	73
A28		70	D7		70	S13	73
B5		74	E9		70	S14	73
B7		70	J7		71	S17	74
C12	A	70	J12		71	S18	74
C13	B	70	J15		71	S19	74
C14	C	70	J22		72	T7	71
C25	A	70	P21		73		
C26	B	70	P22		73		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3F		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4C	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4E		
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
EF1	76	Engine Room No.2 Wire and Engine Room Main Wire (Under the Engine Room J/B)
IB1	78	Engine Room No.2 Wire and Dash Wire (Left Kick Panel)
IF1	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)
IF2		
II4	80	Dash Wire and Column Wire (Near the Ignition SW)
IT1	80	Engine Room No.2 Wire and Dash Wire (Right Kick Panel)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
Ia1	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BM2	90	Floor No.1 Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)
BU1	88	Floor No.1 Wire and Floor No.1 Wire (Near the Left Rear Suspension Support)

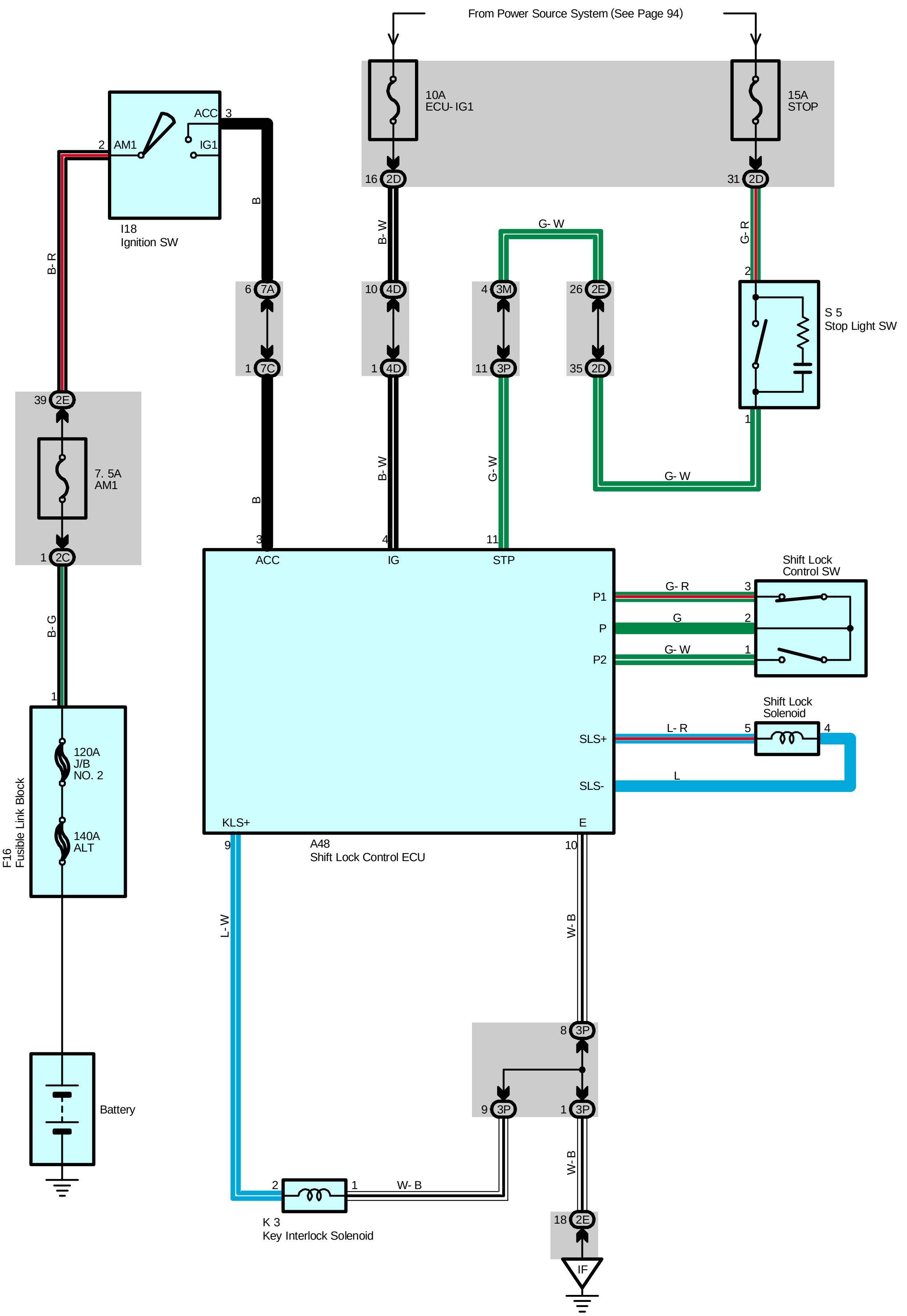
: Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
IH	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BM	86	Left Rear Side Quarter Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire			

Shift Lock


From Power Source System (See Page 94)
10A
ECU- IG1
15A
STOP
16 2D
31 2D
ACC 3
2 AM1
IG1
I18
Ignition SW
B- R
B
B- W
G- W
G- R
2
S 5
Stop Light SW
6 7A
1 7C
10 4D
1 4D
4 3M
11 3P
26 2E
35 2D
1
39 2E
7. 5A
AM1
1 2C
G- W
B- G
3
ACC
4
IG
11
STP
P1
P
P2
G- R
G
G- W
Shift Lock
Control SW
3
2
1
Shift Lock
Solenoid
L- R
5
4
SLS+
L
SLS-
KLS+
E
9
10
A48
Shift Lock Control ECU
1
120A
J/B
NO. 2
140A
ALT
F16
Fusible Link Block
L- W
W- B
8 3P
9 3P
1 3P
Battery
2
1
W- B
K 3
Key Interlock Solenoid
18 2E
IF

System Outline

1. Shift Lock Mechanism

When the brake pedal is depressed with the ignition SW is turned on (Stop light SW on), the shift lock control ECU is activated and allows the driver to change the shift lever to a position other than P position.

2. Key Interlock Mechanism

When the ignition SW is turned on and the shift lever is at a position other than P position, shift lock control ECU is activated to flow current to the key interlock solenoid. This inhibits to turn the ignition SW from on to OFF position.

Service Hints

A48 Shift Lock Control ECU

3-Ground : Approx. 12 volts with ignition SW at ACC or ON position
4-Ground : Approx. 12 volts with ignition SW at ON or ST position
11-Ground : Approx. 12 volts with brake pedal depressed
10-Ground : Always continuity

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A48	70	I18	70	S5	71
F16	68	K3	71		

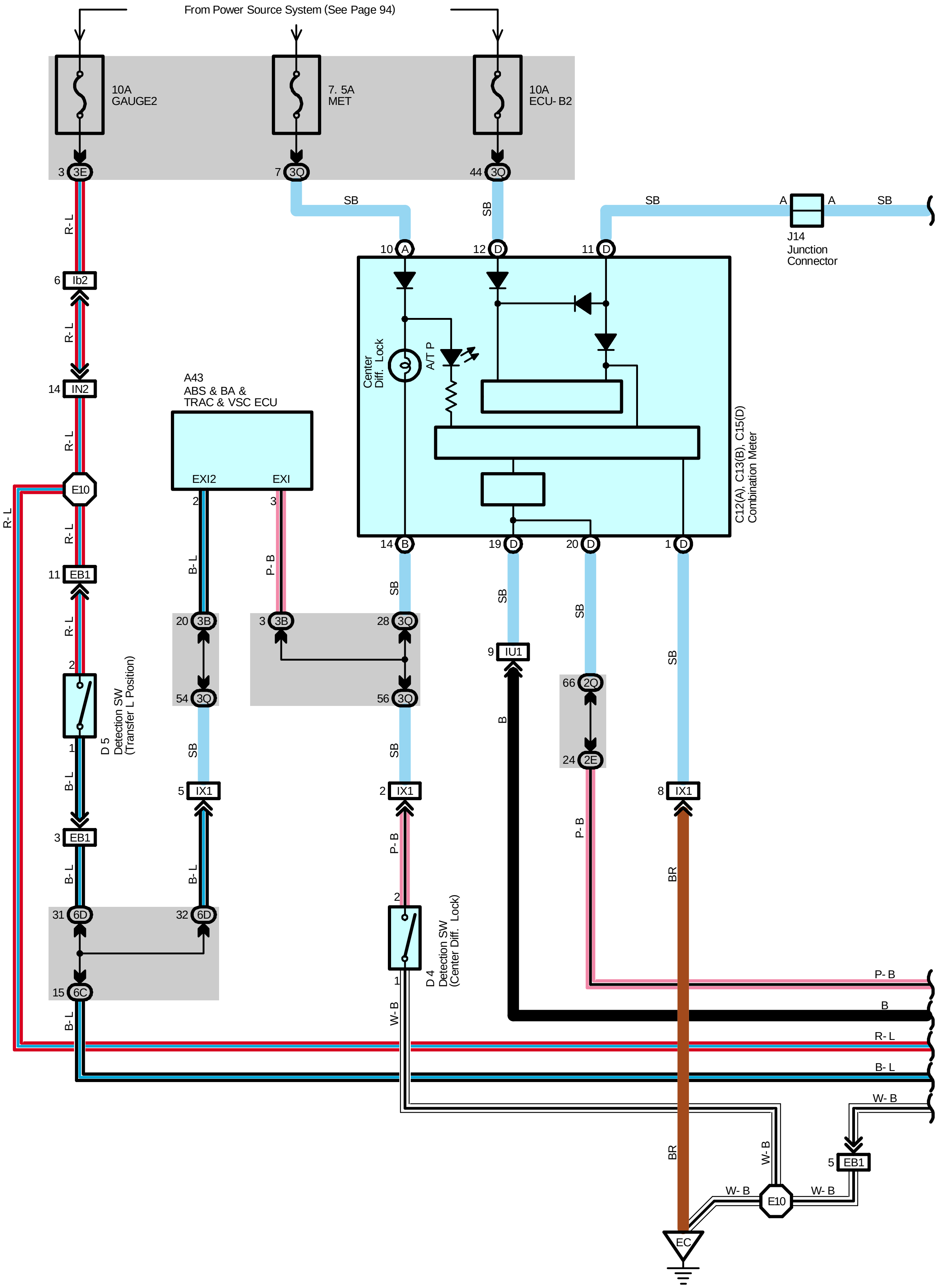
: **Junction Block and Wire Harness Connector**

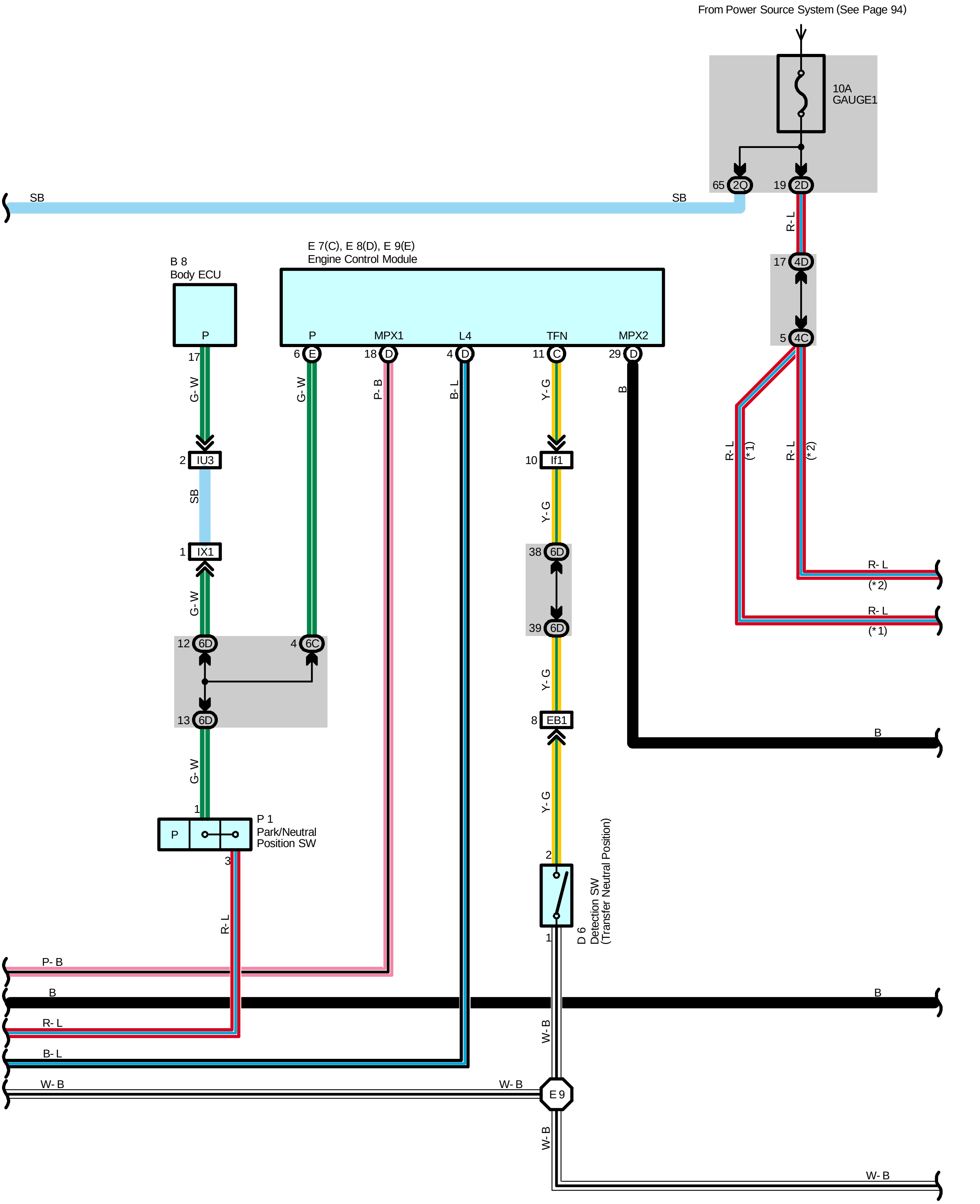
Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2D		
2E		
3M	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3P		
4D	52	Dash Wire and J/B No.4 (Instrument Panel Center)
7A	64	Dash Wire and J/B No.7 (Behind the Glove Box)
7C		

▽ : **Ground Points**

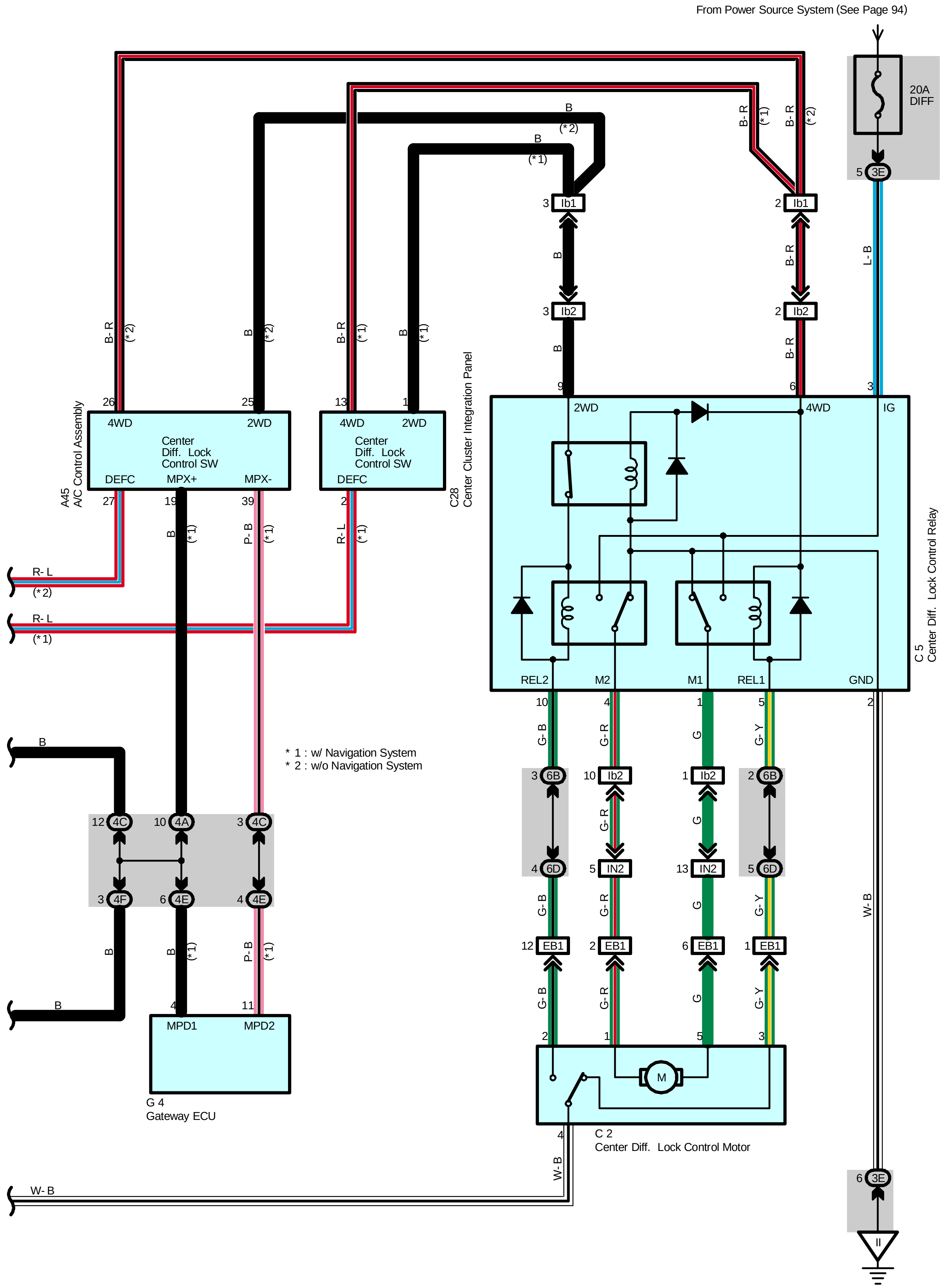
Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH

Center Differential Lock





* 1 : w/ Navigation System
* 2 : w/o Navigation System



From Power Source System (See Page 94)
20A DIFF
A45 A/C Control Assembly
Center Diff. Lock Control SW
C28 Center Cluster Integration Panel
Center Diff. Lock Control SW
C5 Center Diff. Lock Control Relay
2WD
4WD
IG
REL2
M2
M1
REL1
GND
DEFC
MPX+
MPX-
MPD1
MPD2
G4 Gateway ECU
C2 Center Diff. Lock Control Motor
M
B-R
R-L
P-B
G-B
G-R
G
G-Y
L-B
W-B
* 1 : w/ Navigation System
* 2 : w/o Navigation System

Service Hints

C5 Center Diff. Lock Control Relay

3-Ground : Approx. 12 volts with ignition SW at ON or ST position
2-Ground : Always continuity

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A43		70	C13	B	70	E7	C	70
A45		70	C15	D	70	E8	D	70
B8		70	C28		70	E9	E	70
C2		68	D4		68	G4		70
C5		70	D5		68	J14		71
C12	A	70	D6		68	P1		69

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4D		
4E		
4F		
6B	60	Dash Wire and J/B No.6 (Behind the Grove Box)
6C		
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

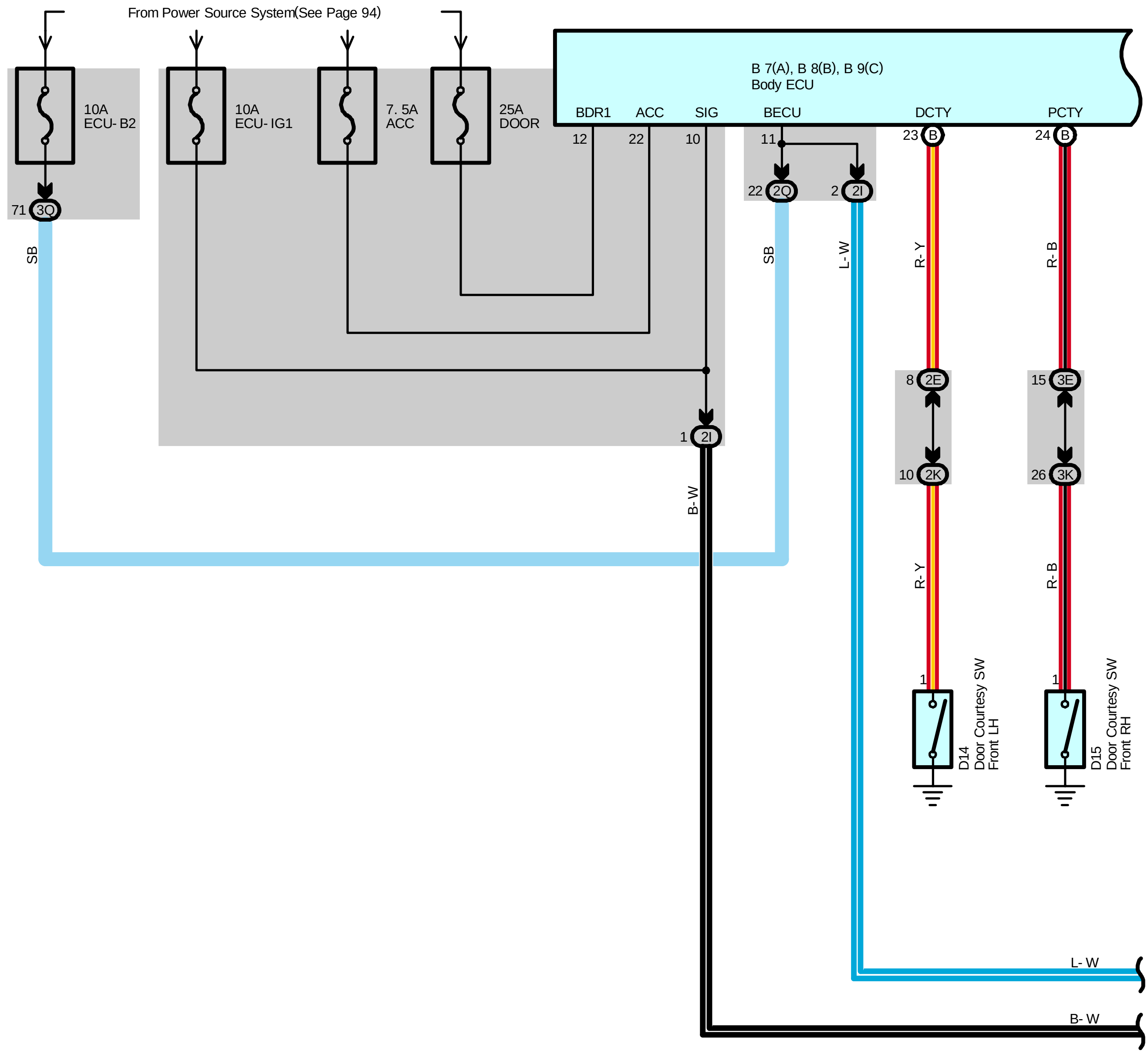
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IU3		
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib1	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Ib2		
If1	84	Engine Wire and Engine Wire (Behind the Glove Box)

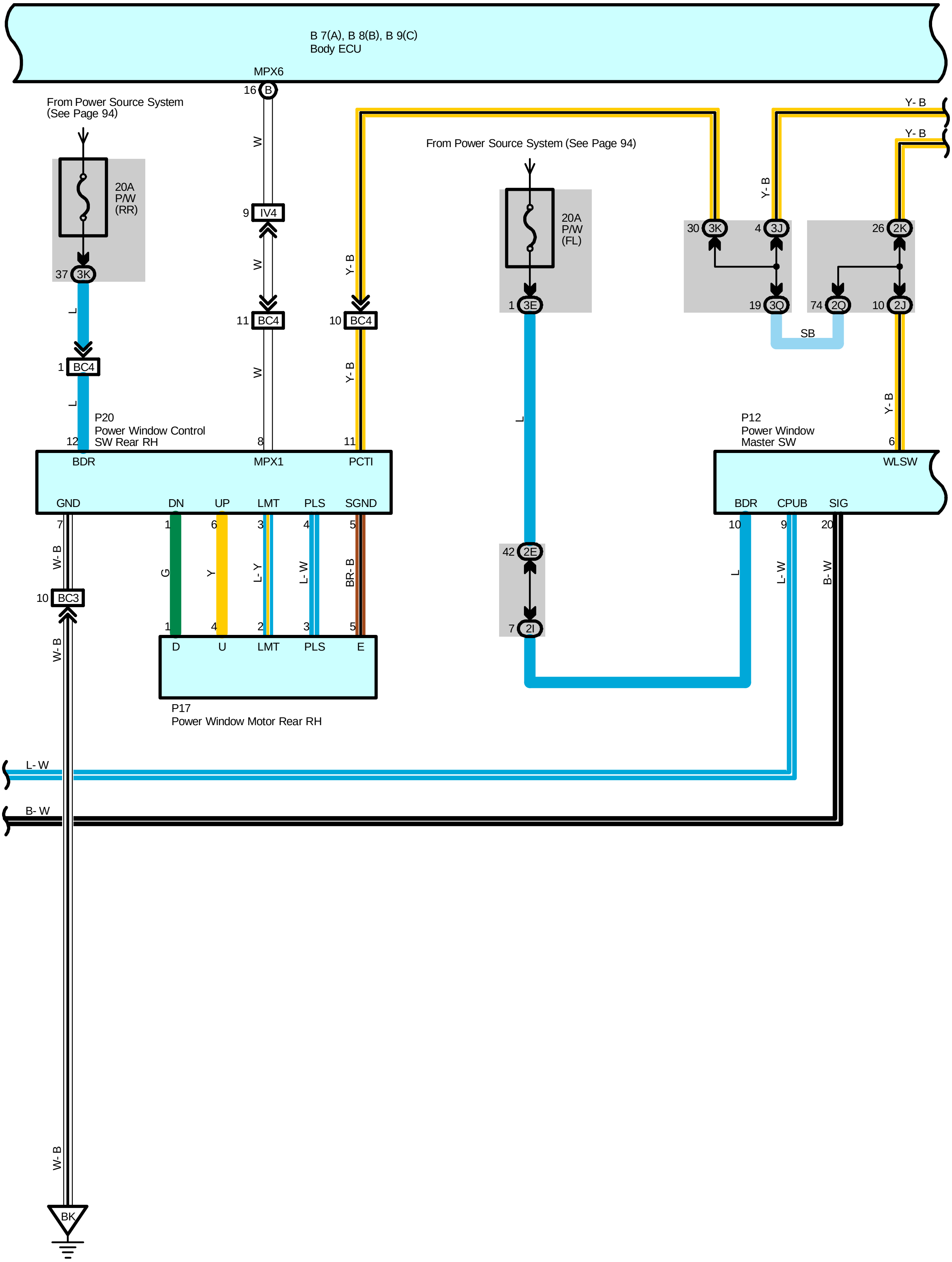
: Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
II	78	Set Bolt of Cowl Side J/B RH

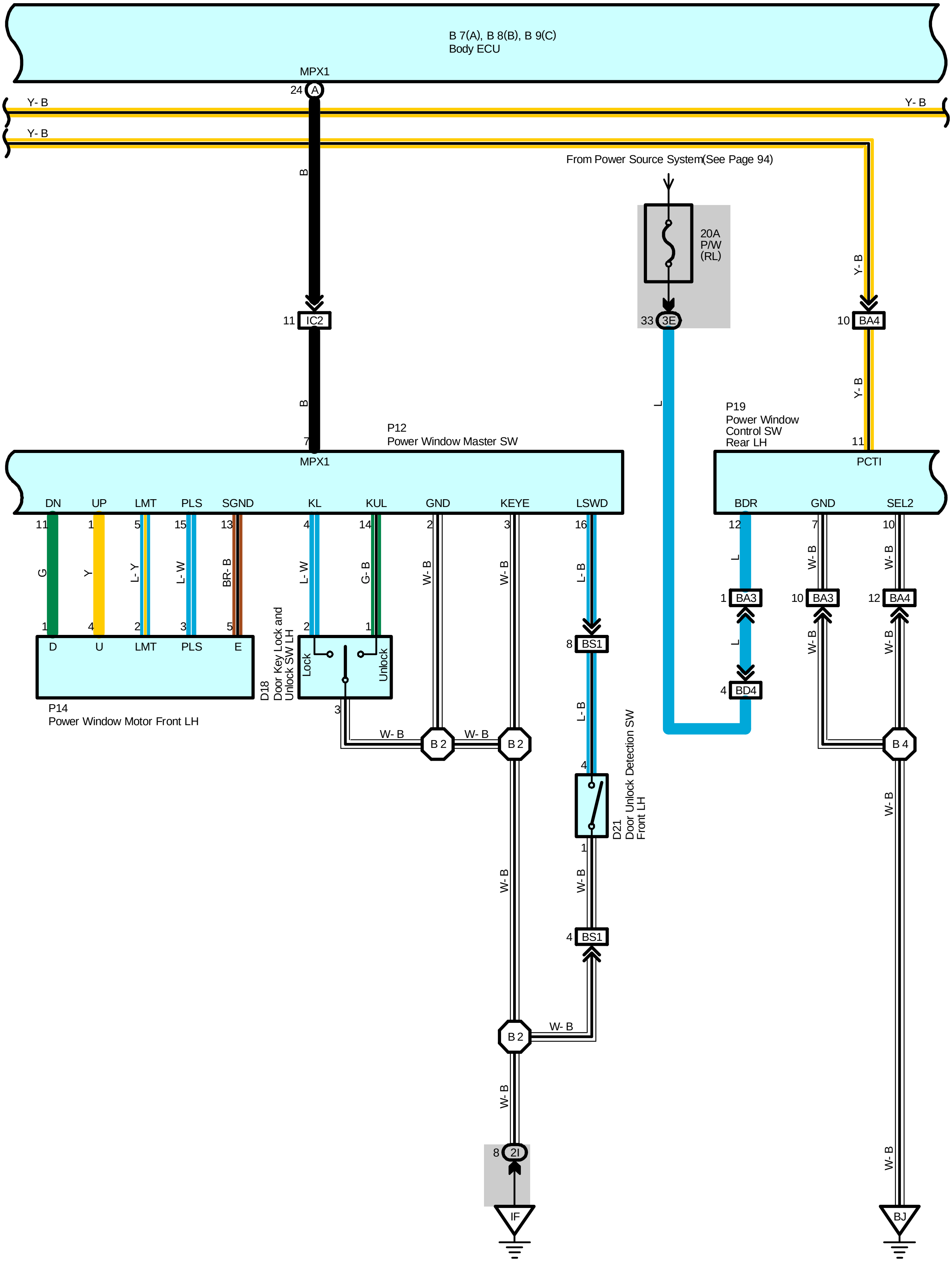
: Splice Points

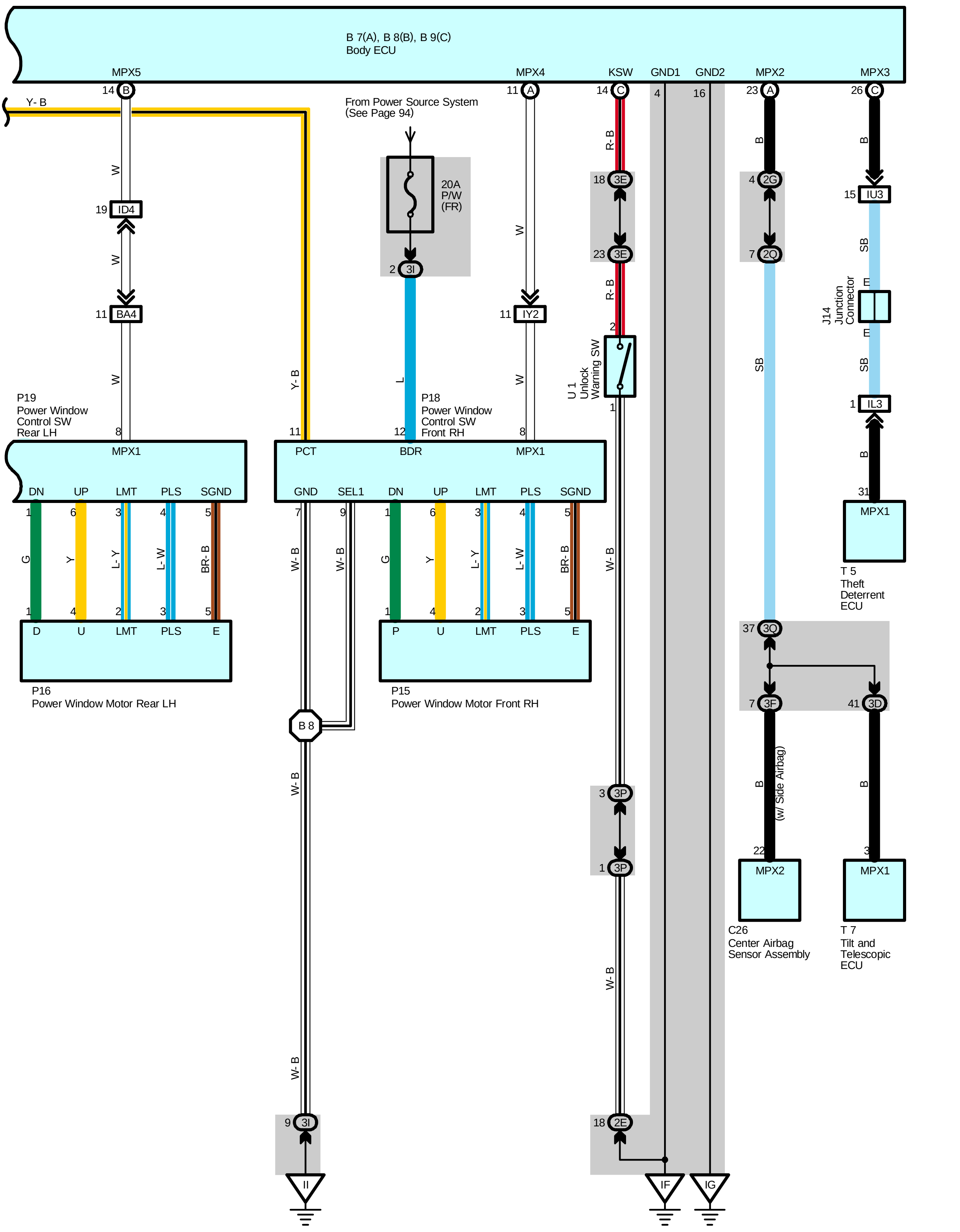
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E9	76	Transmission Wire	E10	76	Engine Wire


From Power Source System(See Page 94)
10A
ECU- B2
10A
ECU- IG1
7. 5A
ACC
25A
DOOR
B 7(A), B 8(B), B 9(C)
Body ECU
BDR1
ACC
SIG
BECU
DCTY
PCTY
12
22
10
11
23 B
24 B
71 3Q
22 2Q
2 2I
1 2I
SB
SB
L- W
R- Y
R- B
B- W
8 2E
10 2K
15 3E
26 3K
R- Y
R- B
1
1
D14
Door Courtesy SW
Front LH
D15
Door Courtesy SW
Front RH
L- W
B- W


B 7(A), B 8(B), B 9(C)
Body ECU
MPX6
From Power Source System
(See Page 94)
20A
P/W
(RR)
3K
BC4
IV4
W
L
Y-B
From Power Source System (See Page 94)
20A
P/W
(FL)
3E
3K
3J
3O
2K
2O
2J
SB
P20
Power Window Control
SW Rear RH
BDR
MPX1
PCTI
GND
DN
UP
LMT
PLS
SGND
W-B
G
Y
L-Y
L-W
BR-B
BC3
D
U
LMT
PLS
E
P17
Power Window Motor Rear RH
2E
2I
P12
Power Window
Master SW
WLSW
BDR
CPUB
SIG
B-W
L-W
BK

Power Window





B 7(A), B 8(B), B 9(C)
Body ECU
MPX5
MPX4
KSW
GND1
GND2
MPX2
MPX3
Y- B
From Power Source System
(See Page 94)
20A
P/W
(FR)
ID4
BA4
IY2
3E
2G
2Q
IU3
3I
J14
Junction
Connector
U 1
Unlock
Warning SW
IL3
P19
Power Window
Control SW
Rear LH
P18
Power Window
Control SW
Front RH
MPX1
PCT
BDR
DN
UP
LMT
PLS
SGND
GND
SEL1
T 5
Theft
Deterrent
ECU
D
U
P
E
P16
Power Window Motor Rear LH
P15
Power Window Motor Front RH
B 8
3Q
3F
3D
3P
(w/ Side Airbag)
C26
Center Airbag
Sensor Assembly
T 7
Tilt and
Telescopic
ECU
2E
II
IF
IG

Power Window

System Outline

1. Manual Down or Up Operation

When the power window master SW is pressed one step, the current flows from the power window master SW TERMINAL DN to the power window motor front LH to the power window master SW TERMINAL UP to GROUND, and rotates the motor to open the window.
When the power window master SW is pulled one step, the current flows from the power window master SW TERMINAL UP to the power window motor front LH to the power window master SW TERMINAL DN to GROUND, and rotates the motor to close the window.
For the other windows, as the power window master SW and the power window SW is operated, the relevant door window is opened or closed.

2. Auto Down or Up Operation

When the power window master SW is pushed two steps, the power window master SW determines it is in auto mode and the current flows from the power window master SW TERMINAL DN to the power window motor front LH to the power window master SW TERMINAL UP to GROUND, and rotates the motor to open the window automatically.
When the power window master SW is pulled two steps, the power window master SW determines it is in auto mode and the current flows from the power window master SW TERMINAL UP to the power window motor front LH to the power window master SW TERMINAL DN to GROUND, and rotates the motor to close the window automatically.
Accordingly, when each window switch of the power window control SW is operated, the relevant door window is automatically opened/closed.

3. Catching Prevention Function

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

4. Key Off Power Window Operation

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

: Parts Location

Code		See Page	Code	See Page	Code	See Page
B7	A	70	D21	72	P18	73
B8	B	70	J14	71	P19	73
B9	C	70	P12	73	P20	73
C26		70	P14	73	T5	71
D14		72	P15	73	T7	71
D15		72	P16	73	U1	71
D18		72	P17	73		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2J		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3F		
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3J		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

▭ : Connector Joining Wire Harness and Wire Harness

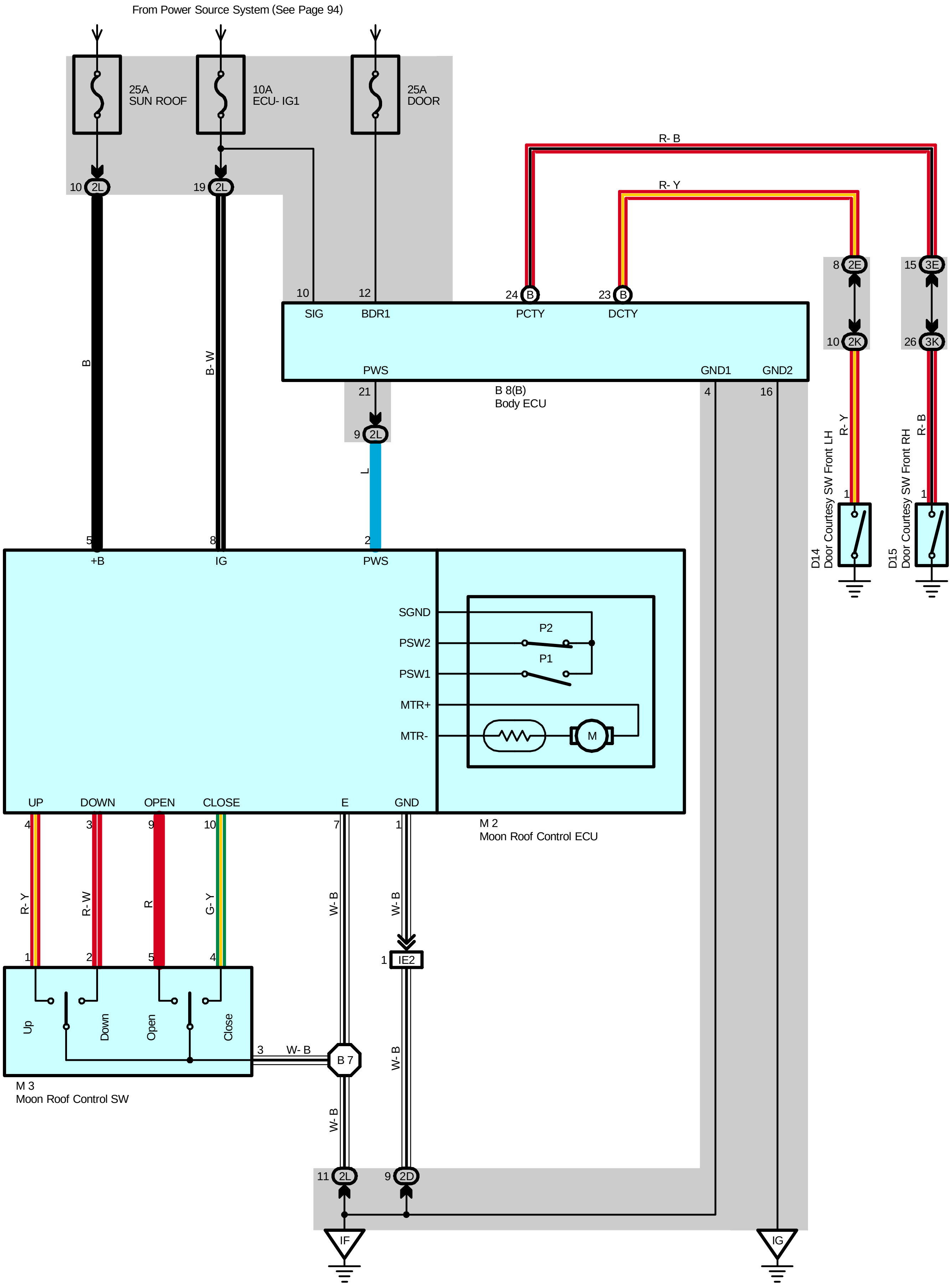
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
BA3	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BA4		
BC3	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BC4		
BD4	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BS1	88	Door Lock LH Sub Wire and Front Door LH Wire (Front Door LH)

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

⬡ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B8	88	Front Door RH Wire
B4	88	Floor No.1 Wire			



From Power Source System (See Page 94)
25A SUN ROOF
10A ECU- IG1
25A DOOR
R- B
R- Y
10 2L
19 2L
B
B- W
10 SIG
12 BDR1
24 B PCTY
23 B DCTY
PWS
GND1
GND2
21
4
16
B 8(B) Body ECU
9 2L
L
8 2E
10 2K
15 3E
26 3K
D14 Door Courtesy SW Front LH
D15 Door Courtesy SW Front RH
5 +B
8 IG
2 PWS
SGND
PSW2
PSW1
MTR+
MTR-
P2
P1
M
UP
DOWN
OPEN
CLOSE
E
GND
M 2 Moon Roof Control ECU
R- Y
R- W
R
G- Y
W- B
1 IE2
Up
Down
Open
Close
3 W- B
B 7
M 3 Moon Roof Control SW
11 2L
9 2D
IF
IG

System Outline

In this system, the HALL IC in the moon roof control ECU detects the changes in motor rotation, and allows opening/closing, tilting up/down of the moon roof by one touch operation.
In addition, catching prevention function during moon roof operation is also provided.
Voltage is constantly applied from the SUN ROOF fuse to the moon roof control ECU TERMINAL 5 of the moon roof control ECU.
When the ignition SW is turned on, the current flows from the ECU-IG1 fuse to TERMINAL 8 of the moon roof control ECU.

1. Slide Open Operation

When the moon roof control SW is kept pressed to OPEN position for approx. 0.3 seconds or longer (Limit SW No.1 off, limit SW No.2 on), a signal is input from the moon roof control SW TERMINAL 5 to the moon roof control ECU TERMINAL 9. This activates the moon roof control ECU and rotates the motor to open the moon roof automatically. However, in case of pressing the moon roof control SW for 0.3 seconds or less, the moon roof can be operated manually. Then, when the limit SW No.1 is turned on and then turned off again, the pulse signal sent from the HALL IC activates the moon roof control ECU, and determines that the moon roof is fully open, and stops the motor. If other operation SW or the open SW is operated while the moon roof is being opened, the moon roof control ECU is activated to stop the moon roof operation. In addition, when the moon roof is tilted up, the slide open operation does not function.

2. Slide Close Operation

When the moon roof control SW is kept pressed to CLOSE position for approx. 0.3 seconds or longer (Limit SW No.1 off, limit SW No.2 off), a signal is input from the moon roof control SW TERMINAL 4 to the moon roof control ECU TERMINAL 10. This activates the moon roof control ECU and rotates the motor to close the moon roof automatically. However, in case of pressing the moon roof control SW for 0.3 seconds or less, the moon roof can be operated manually. Then, when the limit SW No.2 is turned on, the pulse signal sent from the HALL IC activates the moon roof control ECU, and determines that the moon roof is closed fully, and stops the motor. If other operation SW or the close SW is operated while the moon roof is being closed, the moon roof control ECU is activated to stop the moon roof operation.

3. Tilt Up Operation

When the moon roof control SW is kept pressed to UP position for approx. 0.3 seconds or longer (Limit SW No.1 off, limit SW No.2 on), a signal is input from the moon roof control SW TERMINAL 1 to the moon roof control ECU TERMINAL 4. This activates the moon roof control ECU and rotates the motor to tilt up the moon roof automatically. If the pulse signal is not input from the HALL IC for 0.5 seconds or longer, it determines that the moon roof is fully tilted up, and stops the motor. If other operation SW or the tilt up SW is operated while the moon roof is being tilted up, the moon roof control ECU is activated to stop the moon roof operation. In addition, when the moon roof is opened, the tilt up operation does not function.

4. Tilt Down Operation

When the moon roof control SW is kept pressed to DOWN position for approx. 0.3 seconds or longer (Limit SW No.1 on, limit SW No.2 on), a signal is input from the moon roof control SW TERMINAL 2 to the moon roof control ECU TERMINAL 3. This activates the moon roof control ECU and rotates the motor to tilt down the moon roof automatically.
Then, when the limit SW No.1 is turned off, the pulse signal sent from the HALL IC activated the moon roof control ECU, and determines that the moon roof is closed fully, and stops the motor.
If other operation SW or the tilt down SW is operated while the moon roof is being tilted down, the moon roof control ECU is activated to stop the moon roof operation.

5. Catching Prevention Function

During slide close or tilt down operation, if the moon roof control ECU detects a catching load from the changes in the rotation of the motor, the operation is stopped, and the motor is rotated in the reverse direction.

∗ Slide close operation
The moon roof is moved approx. 200 mm in the reverse direction (Slide open) after a catching load has been detected. However, if the full open position is detected before moving approx. 200 mm, the reverse movement is stopped.

∗ Tilt down operation
If a catching load is detected, the moon roof is moved in the reverse direction until fully tilted up.

6. Key Off Moon Roof Operation

Within approx. 43 seconds after the ignition SW is turned from on to off, the moon roof can be operated. However, if the driver or front passenger door is opened during this period of time, the moon roof operation is stopped even though 43 seconds have not elapsed.

7. Fail-Safe Function

If the moon roof is operated continuously in the same direction, the current flowing to the motor is cut off when the time shown below has elapsed after the motor operation has been started.

∗ Slide open/close operation by the moon roof SW approx. 20 seconds
∗ Tilt up/down operation by the moon roof SW approx. 2 second
∗ Slide open operation for reverse movement in case of catching prevention function approx. 20 seconds
∗ Tilt up operation for reverse movement in case of catching prevention function approx. 2 seconds

Moon Roof

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
B8	B	70	D15	72	M3	72
D14		72	M2	72		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	78	Dash Wire and Roof No.1 Wire (Left Kick Panel)

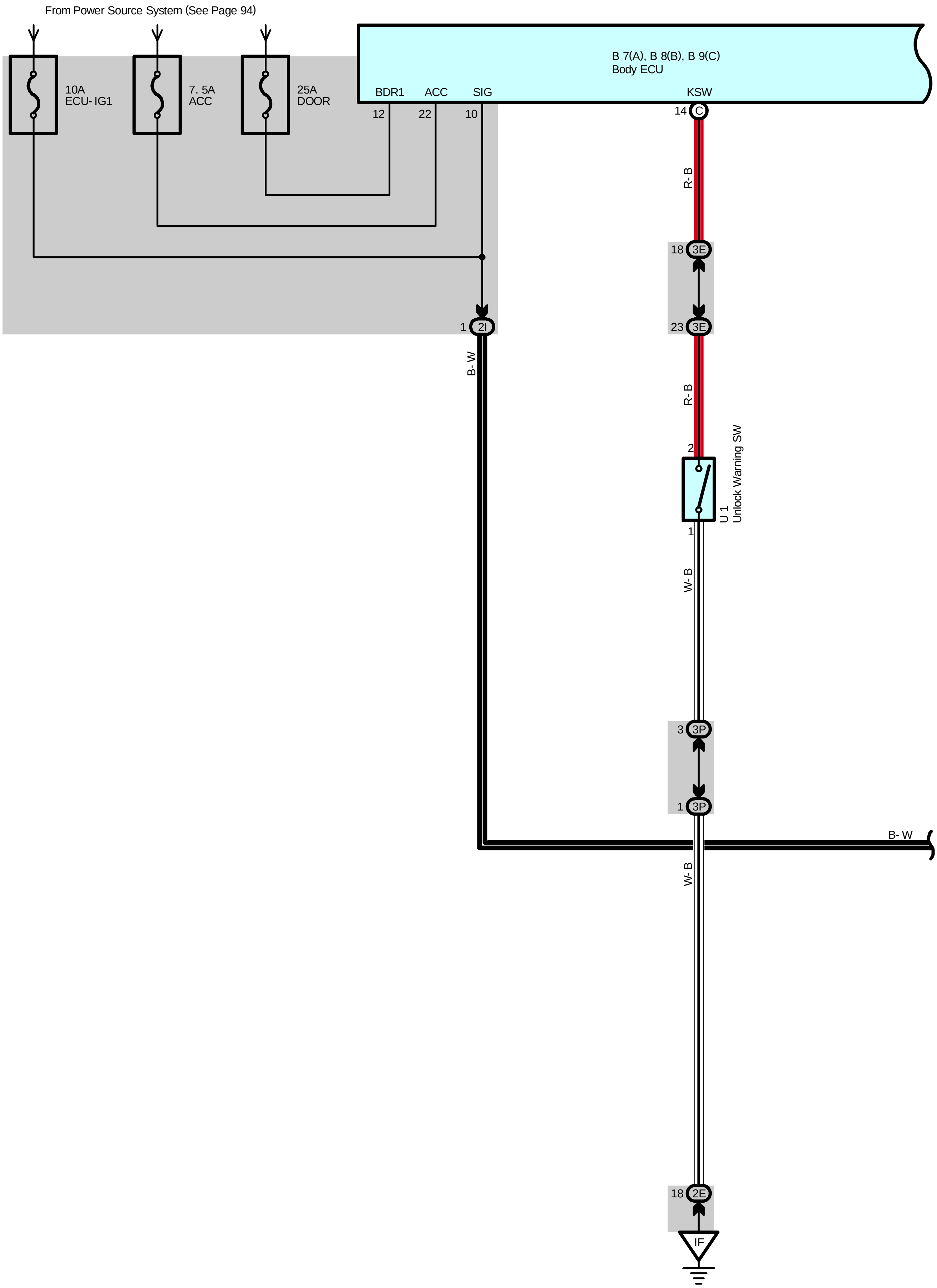
▽ : **Ground Points**

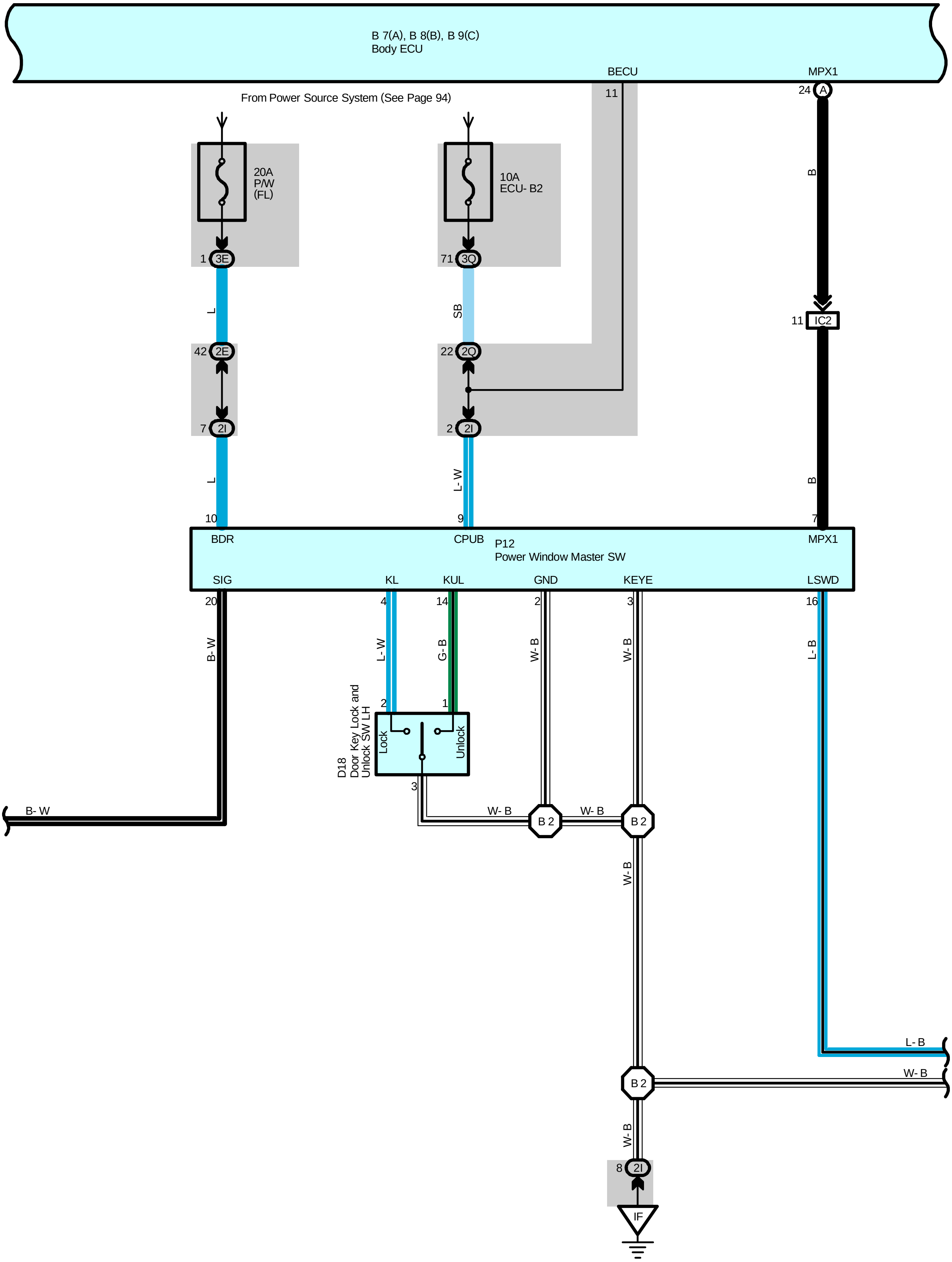
Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
IG		

: **Splice Points**

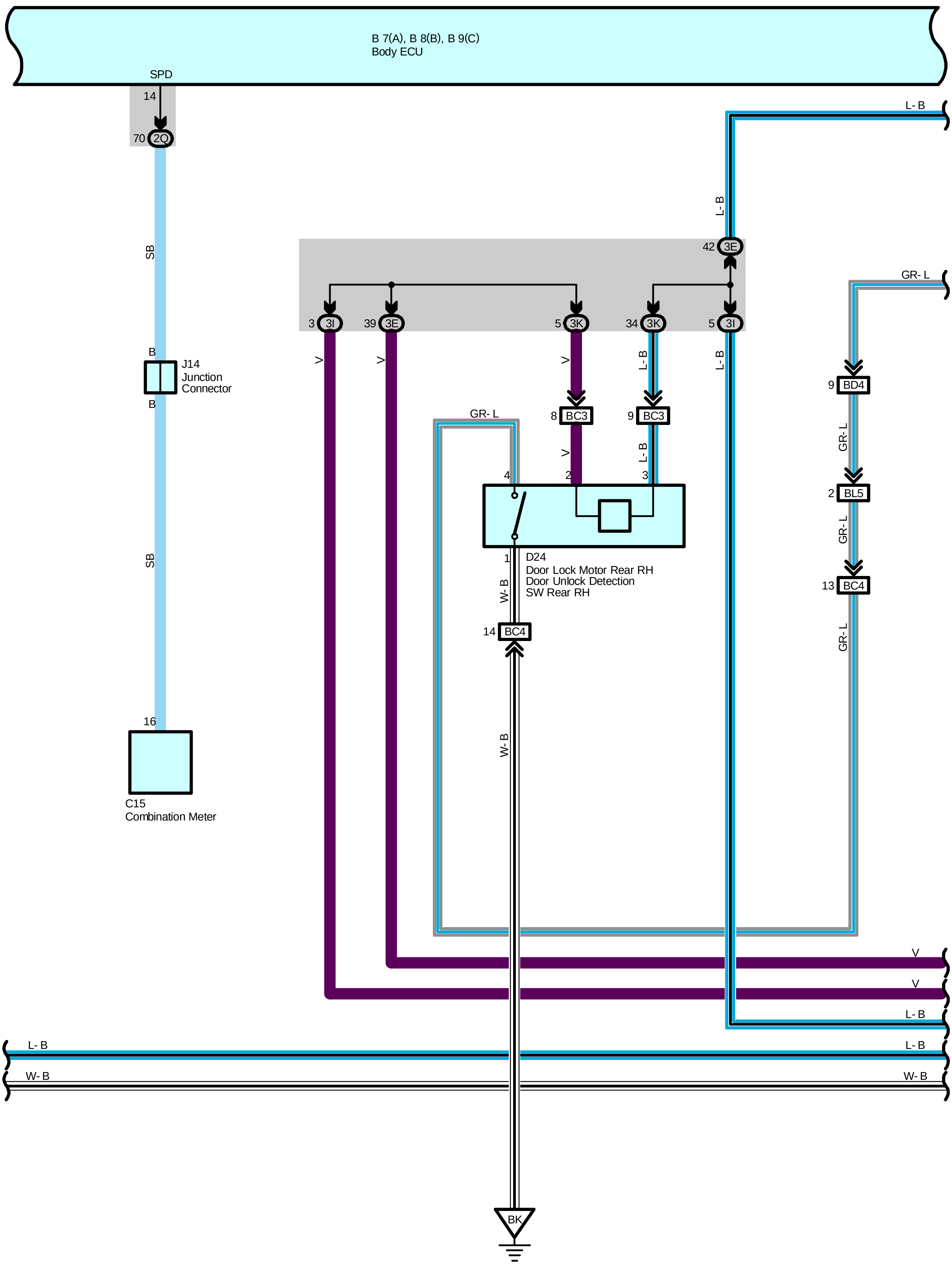
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	88	Roof No.1 Wire			

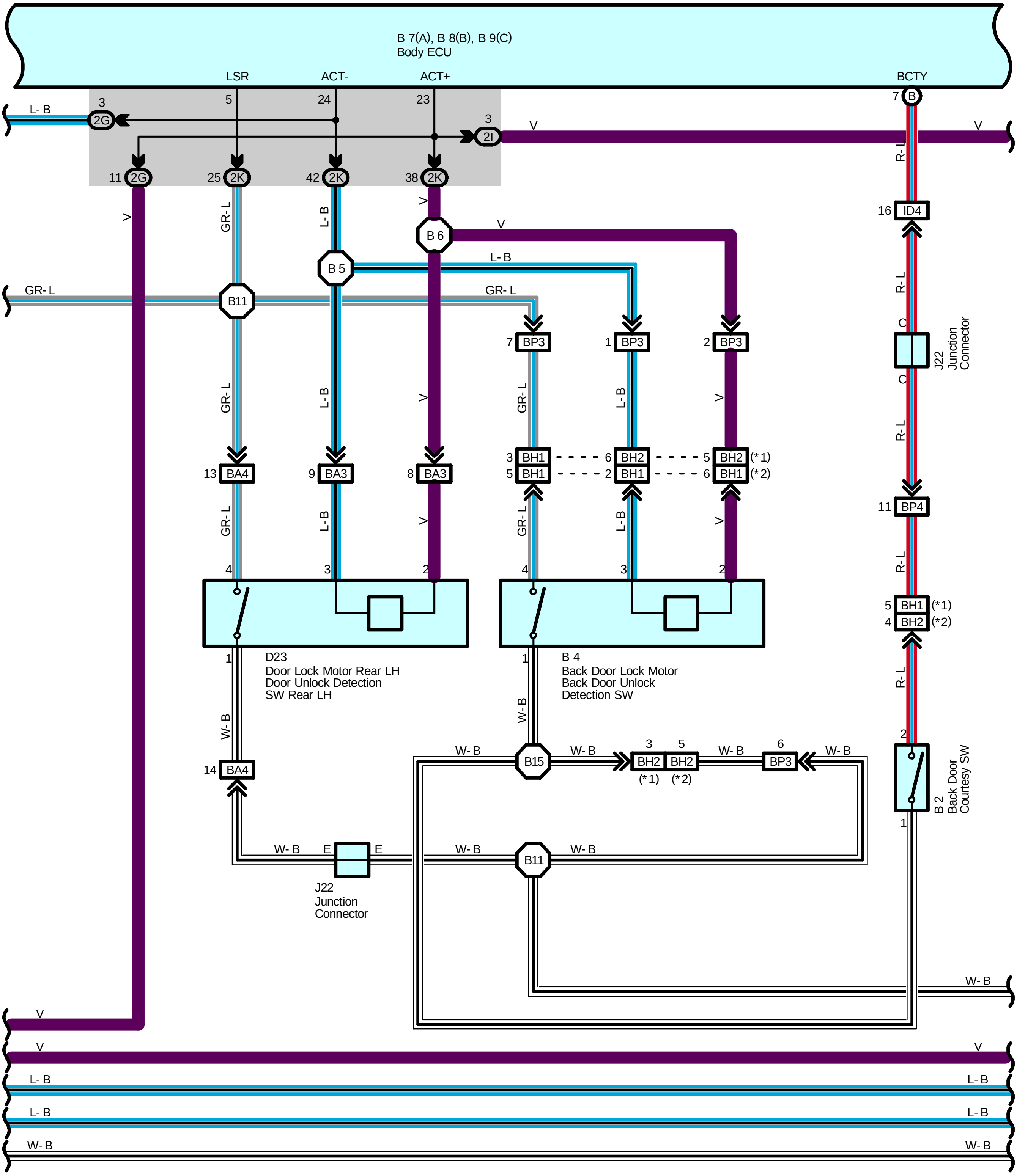
Door Lock Control





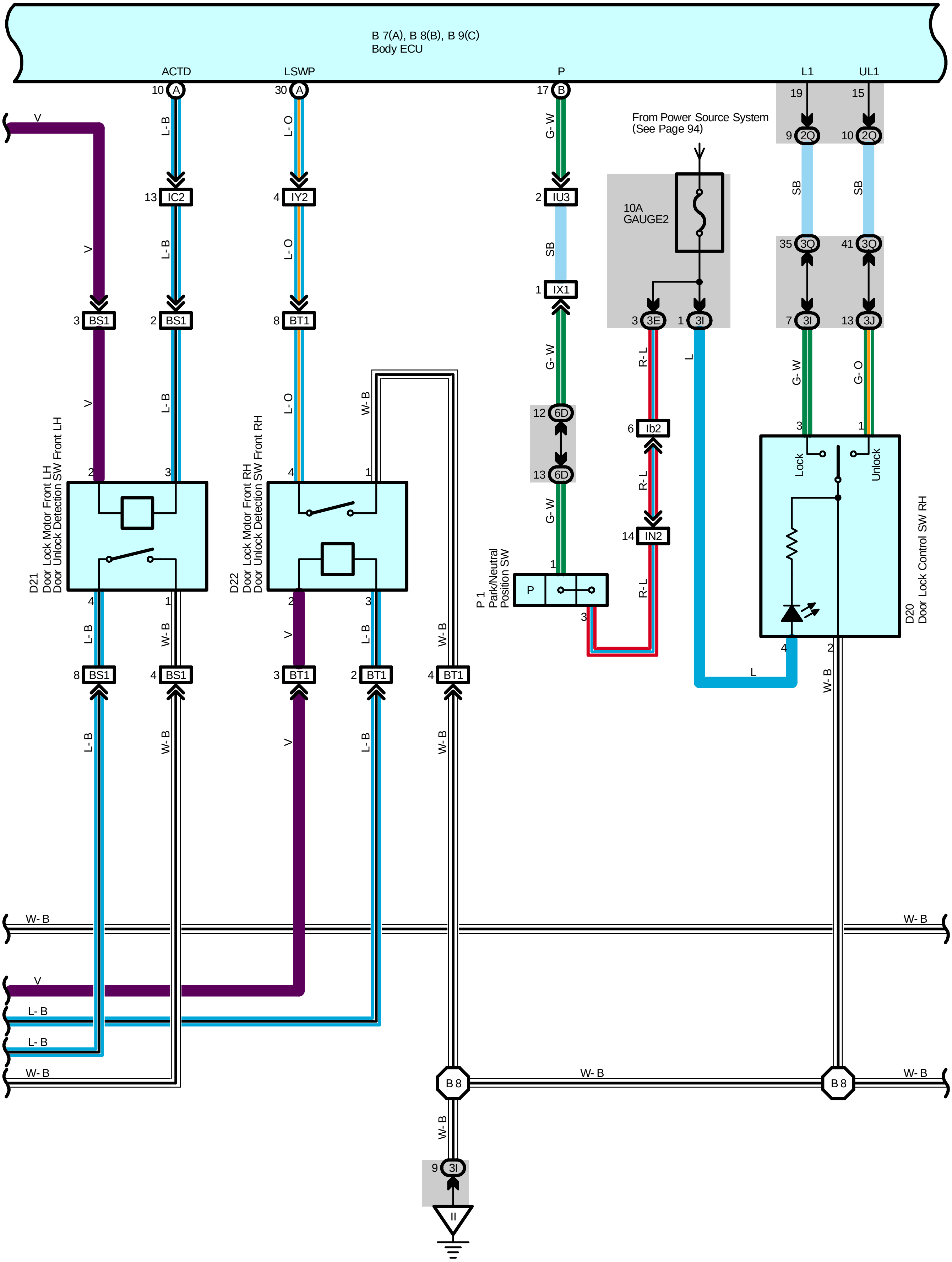
B 7(A), B 8(B), B 9(C)
Body ECU
BECU
MPX1
From Power Source System (See Page 94)
20A
P/W
(FL)
10A
ECU- B2
3E
3Q
2E
2Q
2I
IC2
L
SB
L- W
B
BDR
CPUB
P12
Power Window Master SW
MPX1
SIG
KL
KUL
GND
KEYE
LSWD
B- W
G- B
W- B
L- B
D18
Door Key Lock and
Unlock SW LH
Lock
Unlock
B 2
IF

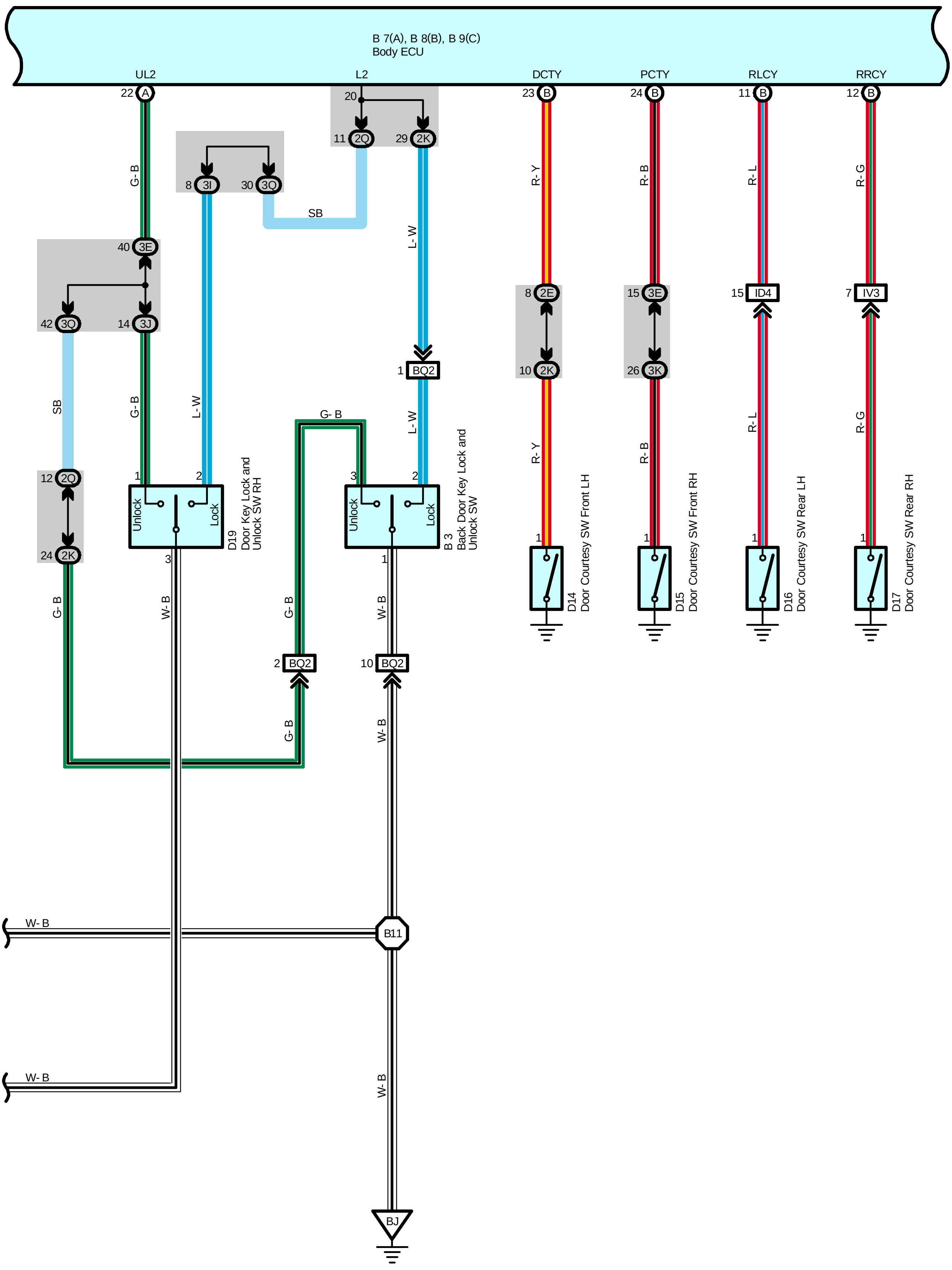

B 7(A), B 8(B), B 9(C)
Body ECU
SPD
14
70
2Q
SB
B
J14
Junction
Connector
B
SB
16
C15
Combination Meter
L- B
42
3E
GR- L
3
3I
39
3E
5
3K
34
3K
5
3I
V
V
V
L- B
L- B
9
BD4
GR- L
8
BC3
9
BC3
V
L- B
2
BL5
GR- L
4
2
3
1
D24
Door Lock Motor Rear RH
Door Unlock Detection
SW Rear RH
W- B
13
BC4
14
BC4
GR- L
W- B
V
V
L- B
L- B
L- B
W- B
W- B
BK

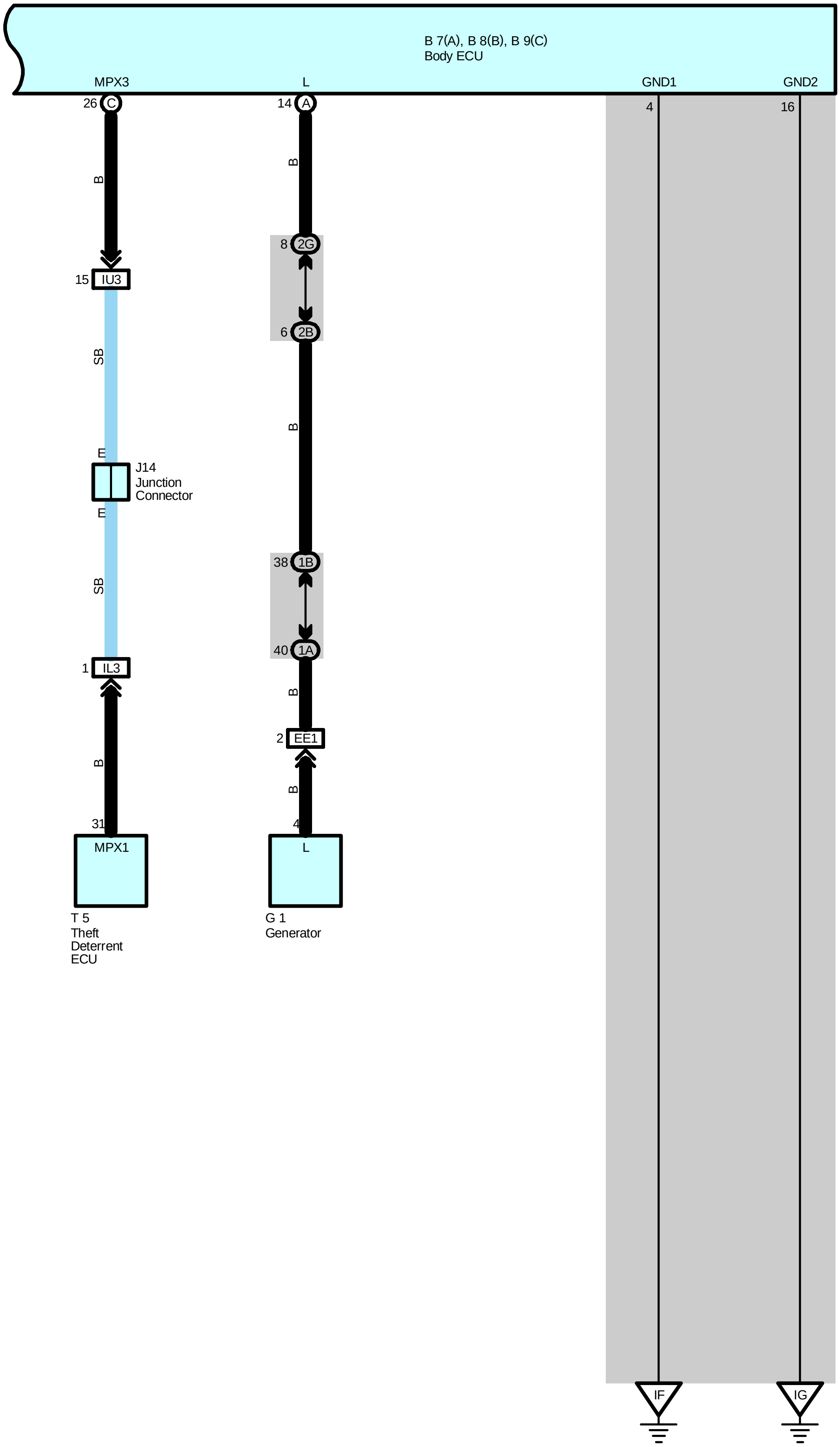


* 1 : w/ Navigation System
* 2 : w/o Navigation System

Door Lock Control




B 7(A), B 8(B), B 9(C)
Body ECU
UL2
L2
DCTY
PCTY
RLCY
RRCY
G- B
L- W
SB
R- Y
R- B
R- L
R- G
W- B
Unlock
Lock
D19
Door Key Lock and Unlock SW RH
B 3
Back Door Key Lock and Unlock SW
D14
Door Courtesy SW Front LH
D15
Door Courtesy SW Front RH
D16
Door Courtesy SW Rear LH
D17
Door Courtesy SW Rear RH
BQ2
ID4
IV3
B11
BJ


B 7(A), B 8(B), B 9(C)
Body ECU
MPX3
L
GND1
GND2
26 C
14 A
4
16
B
8 2G
6 2B
15 IU3
SB
E
J14
Junction
Connector
E
38 1B
40 1A
1 IL3
2 EE1
31
MPX1
4
L
T 5
Theft
Deterrent
ECU
G 1
Generator
IF
IG

System Outline

The door lock control system is controlled by the body ECU.
This system has following features. However, the adopted function differs depending on the establishment.

1. Manual Lock and Unlock Operation

Pressing the power door lock switch on the driver or front passenger door to the lock side will lock all the doors and pressing it to the unlock side will unlock all the doors.

2. Key-Linked Lock and Unlock Function

This function, which is linked with the key cylinder, can lock or unlock all the doors when a lock or unlock operation is effected.

3. Manual Unlock Prohibition Function

Performing the door lock operation with a transmitter or an ignition key will prohibit the unlock operation by the door lock control switch.

4. 2-Step Unlock Function

This function is provided to unlock the driver's door by turning the key cylinder first and unlock passenger's door by turning it the second time.

5. Key Confine Prevention Function

When the key is inserted in the ignition key cylinder and if you perform the door lock operation, all the doors will be unlocked.

6. Shift-Linked Automatic Door Lock

When the conditions listed below are met consecutively, this function causes all the doors to be automatically locked.
* The ignition switch is turned from the OFF or ACC position to the ON position.
* All doors are closed.
* The shift lever is moved out of P position.
* Either one of the doors is unlocked.

7. Theft Deterrent System-Linked Door Lock Function

When the body ECU receives the door lock signal from the theft deterrent system, "all doors lock" operation will be performed in spite of the current door lock condition.

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B2	72	D16	72	G1	68
B3	72	D17	72	J14	71
B4	72	D18	72	J22	72
B7 A	70	D19	72	P1	69
B8 B	70	D20	72	P12	73
B9 C	70	D21	72	T5	71
C15	70	D22	72	U1	71
D14	72	D23	72		
D15	72	D24	72		

Door Lock Control

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E 2G	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3I 3J	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

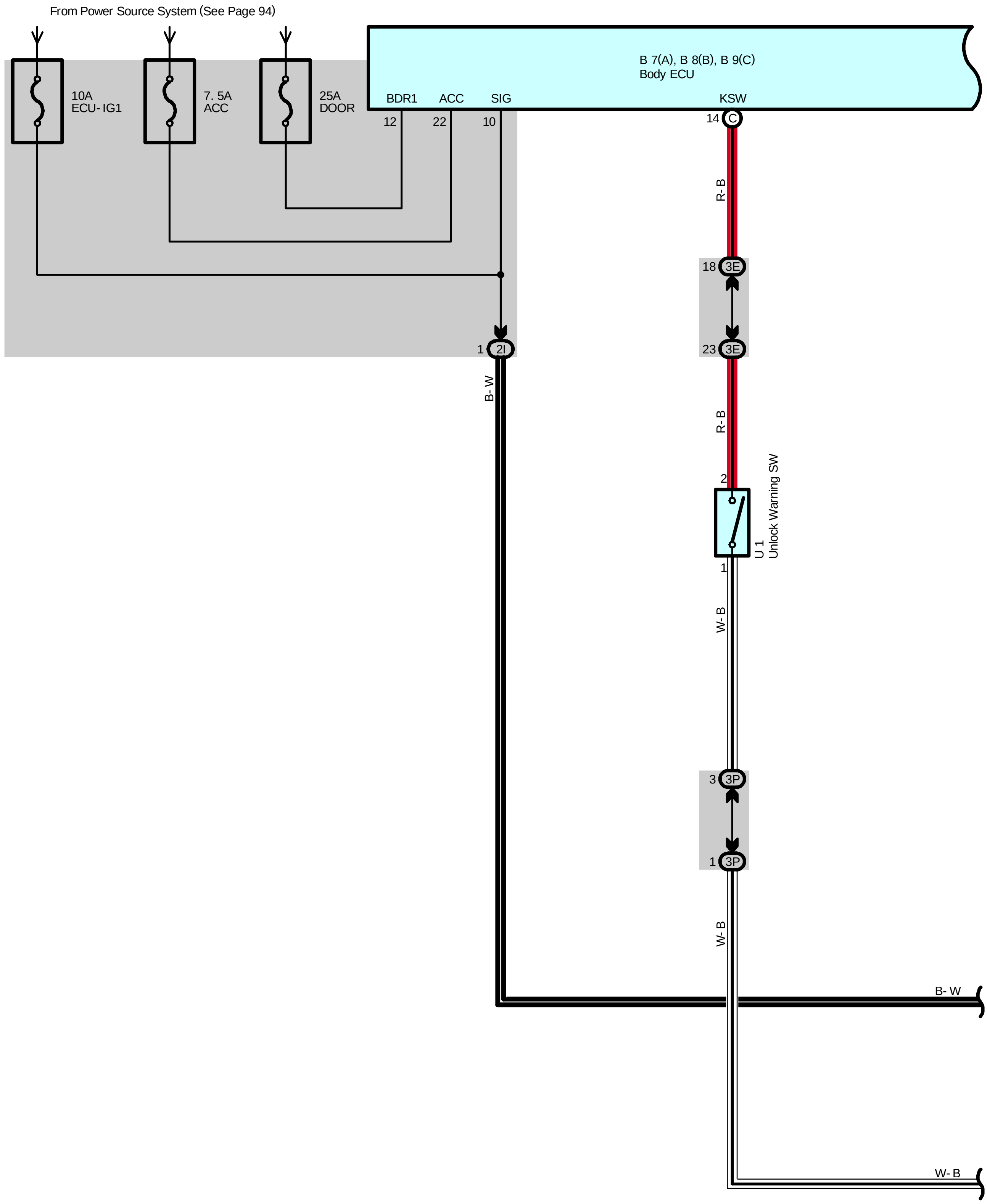
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BA3 BA4	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC3 BC4	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BD4	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1 BH2	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BL5	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP3 BP4	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BS1	88	Door Lock LH Sub Wire and Front Door LH Wire (Front Door LH)
BT1	88	Door Lock RH Sub Wire and Front Door RH Wire (Front Door RH)

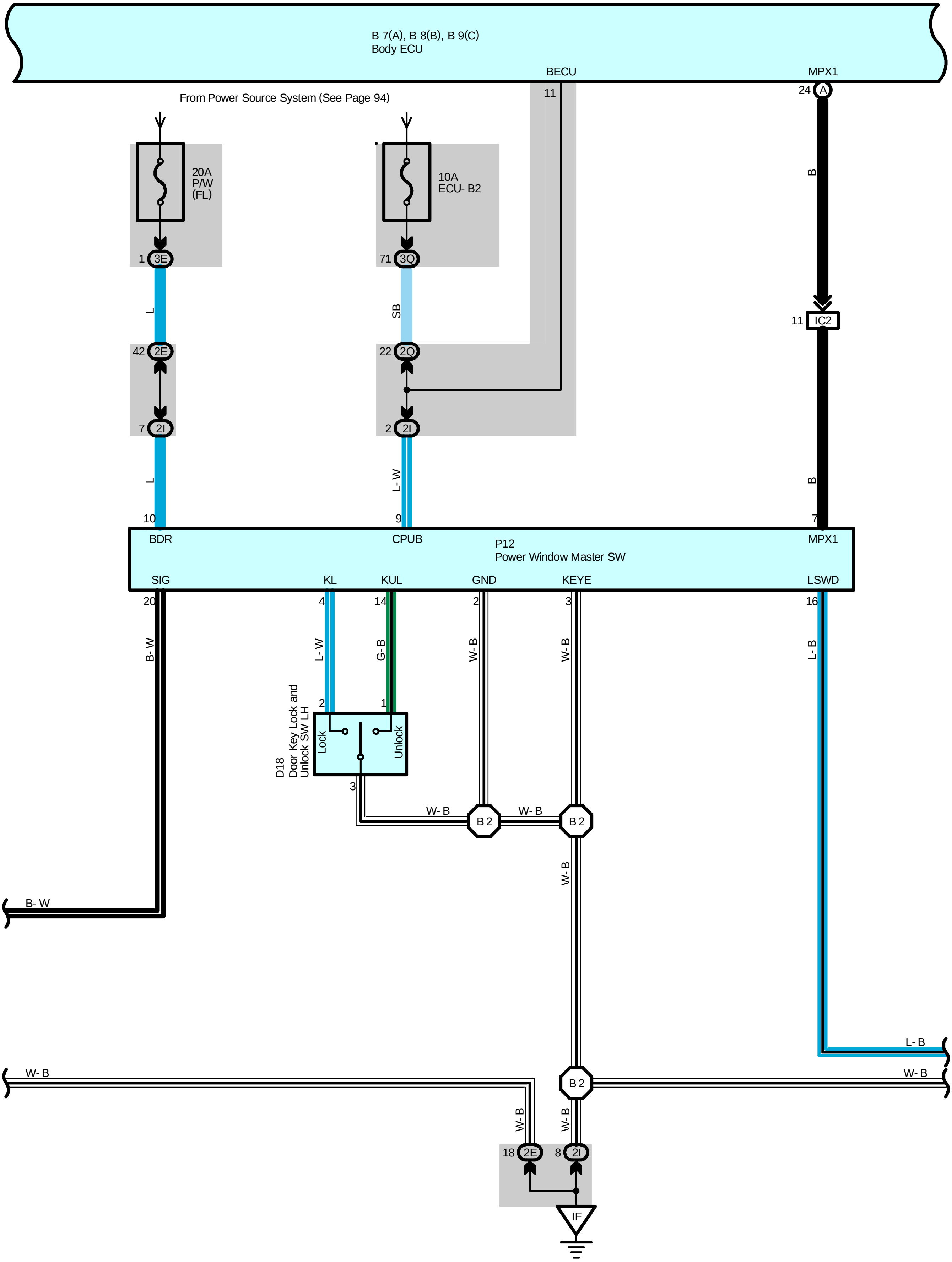
: Ground Points

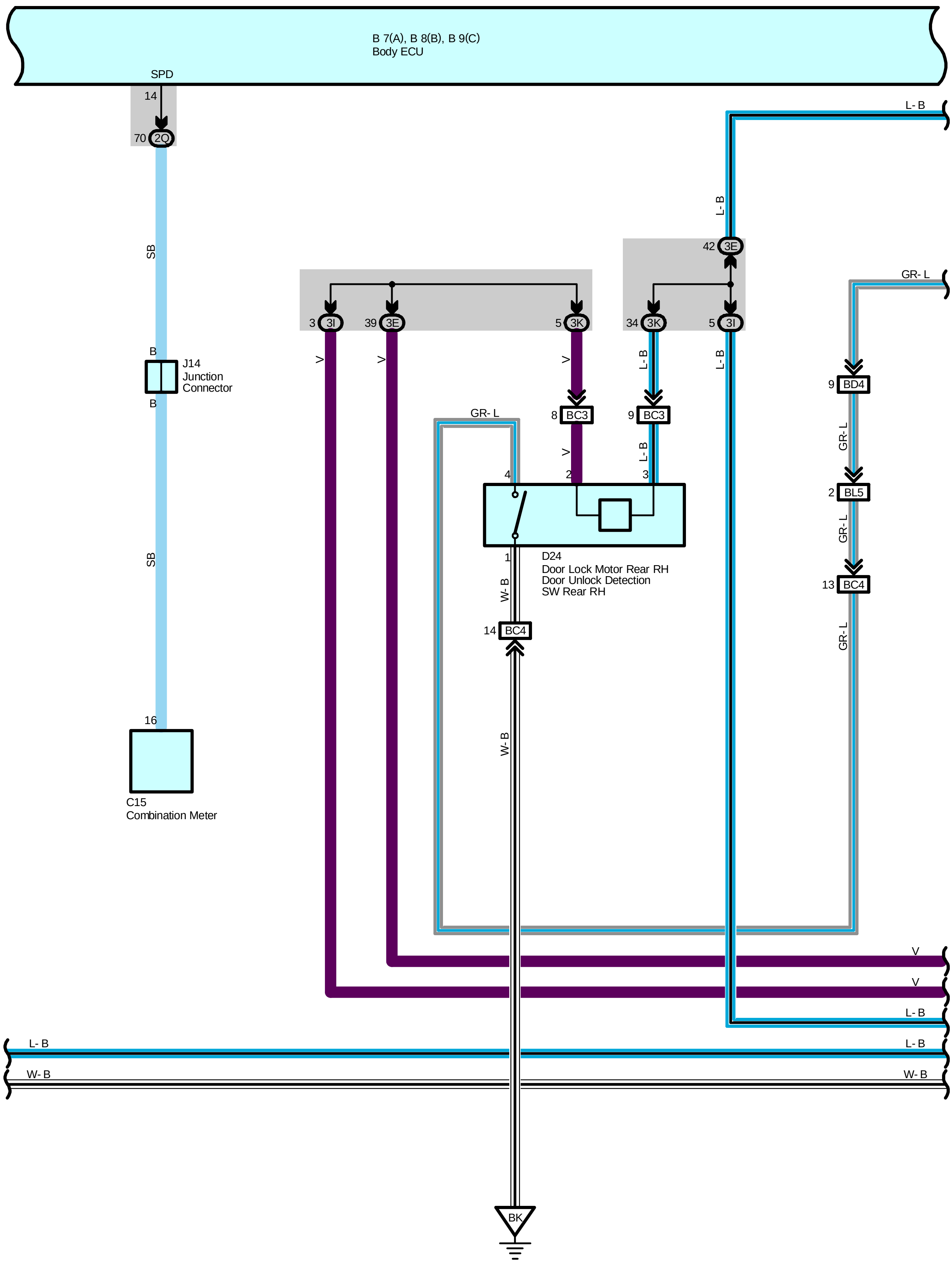
Code	See Page	Ground Points Location
IF IG	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

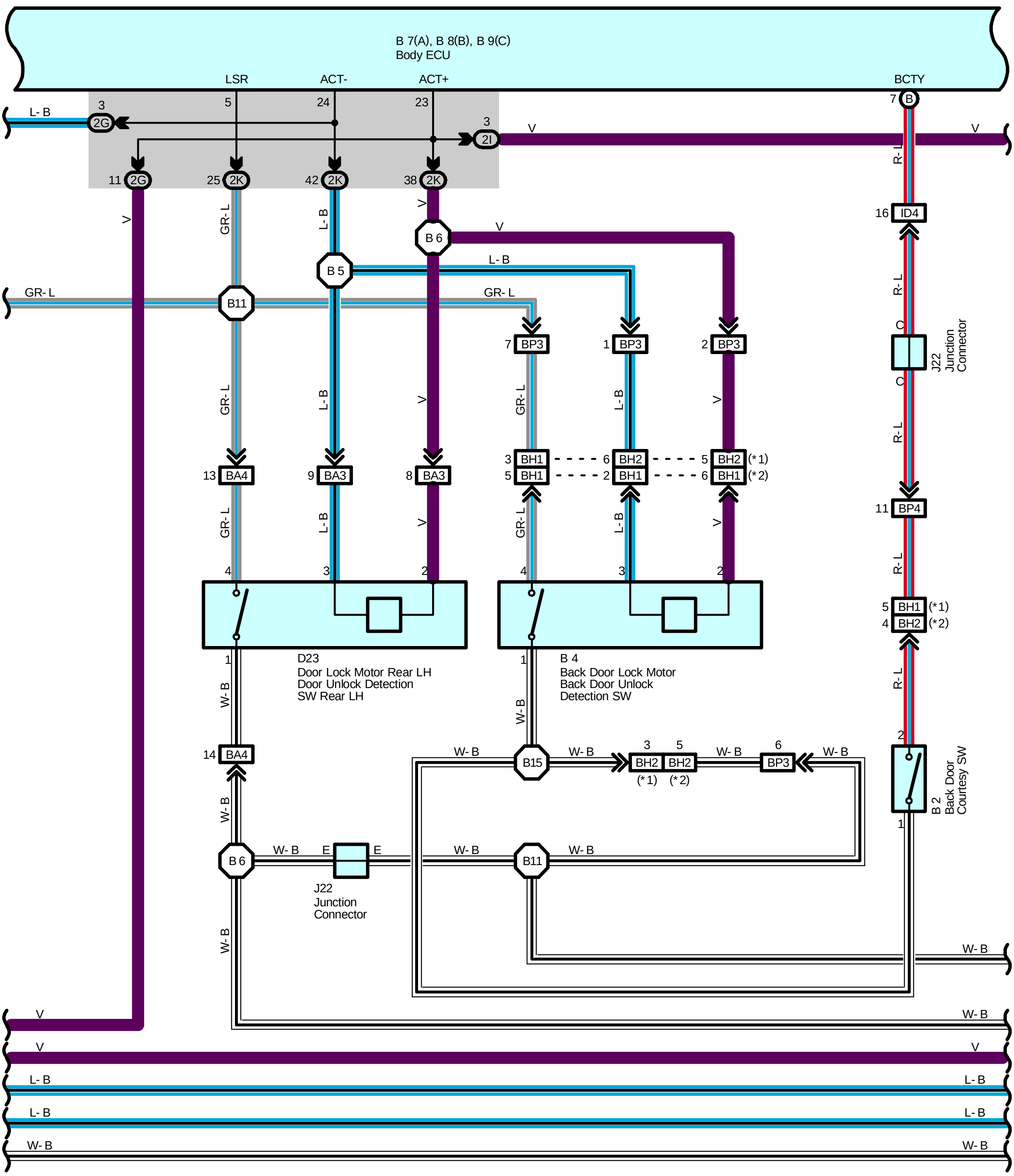
: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B8	88	Front Door RH Wire
B5	88	Floor No.1 Wire	B11	88	Floor No.1 Wire
B6			B15	88	Back Door Upper Wire


From Power Source System (See Page 94)
10A
ECU- IG1
7. 5A
ACC
25A
DOOR
B 7(A), B 8(B), B 9(C)
Body ECU
BDR1
ACC
SIG
KSW
12
22
10
14
C
R- B
18
3E
23
3E
1
2I
B- W
R- B
2
1
U 1
Unlock Warning SW
W- B
3
3P
1
3P
W- B
B- W
W- B

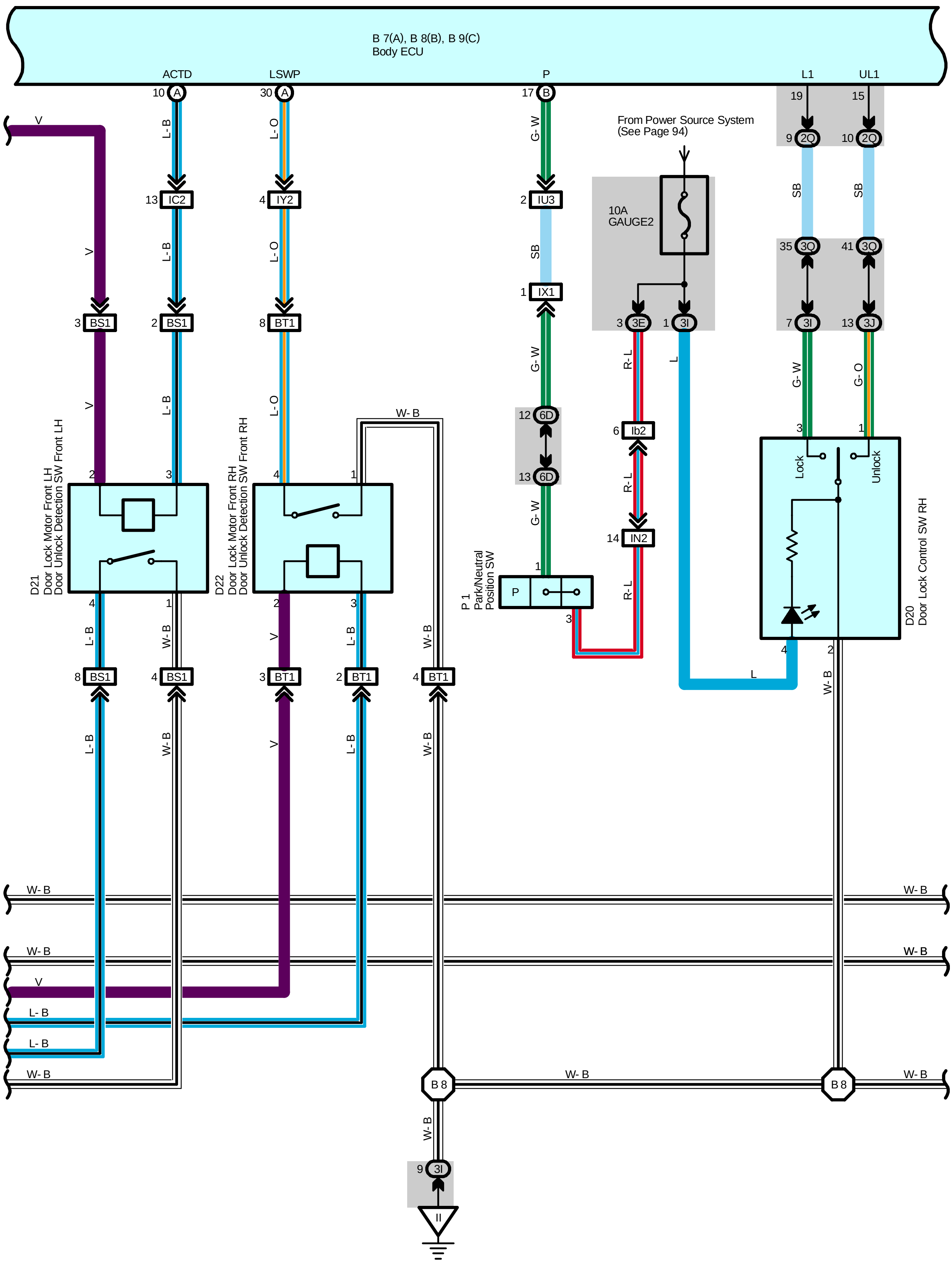

B 7(A), B 8(B), B 9(C)
Body ECU
BECU
MPX1
11
24
A
From Power Source System (See Page 94)
20A
P/W
(FL)
10A
ECU- B2
1
3E
71
3Q
B
L
SB
11
IC2
42
2E
22
2Q
7
2I
2
2I
L
L- W
B
10
9
7
BDR
CPUB
P12
Power Window Master SW
MPX1
SIG
KL
KUL
GND
KEYE
LSWD
20
4
14
2
3
16
B- W
L- W
G- B
W- B
W- B
L- B
D18
Door Key Lock and
Unlock SW LH
2
1
Lock
Unlock
3
W- B
W- B
B 2
B 2
W- B
B- W
L- B
W- B
W- B
B 2
W- B
W- B
18
2E
8
2I
IF

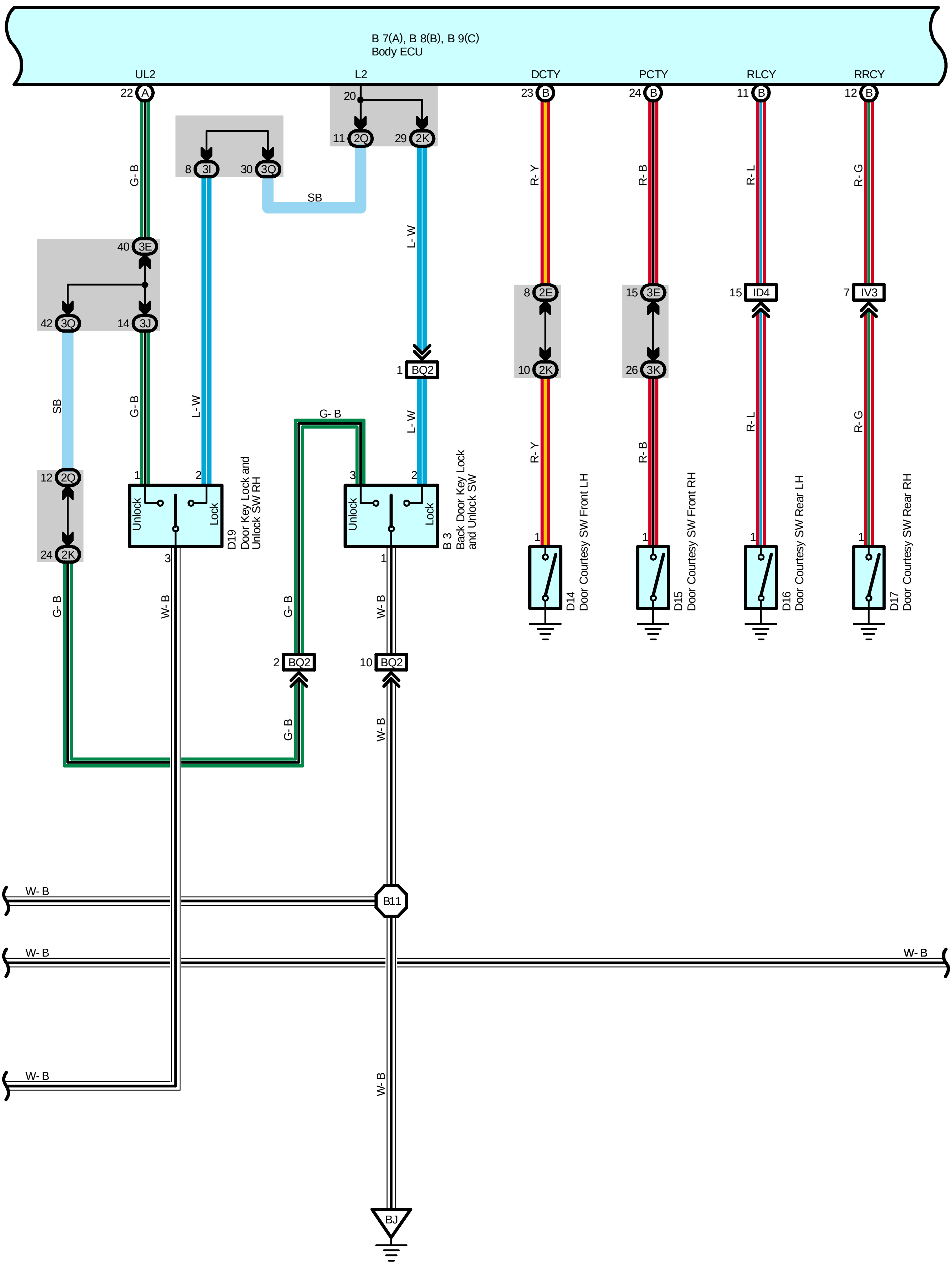

B 7(A), B 8(B), B 9(C)
Body ECU
SPD
14
70 2Q
SB
B
J14
Junction
Connector
B
SB
16
C15
Combination Meter
L-B
42 3E
GR-L
3 3I
39 3E
5 3K
34 3K
5 3I
V
V
V
L-B
L-B
9 BD4
GR-L
8 BC3
9 BC3
V
L-B
4
2
3
2 BL5
GR-L
13 BC4
1
D24
Door Lock Motor Rear RH
Door Unlock Detection
SW Rear RH
W-B
14 BC4
W-B
V
V
L-B
L-B
W-B
BK



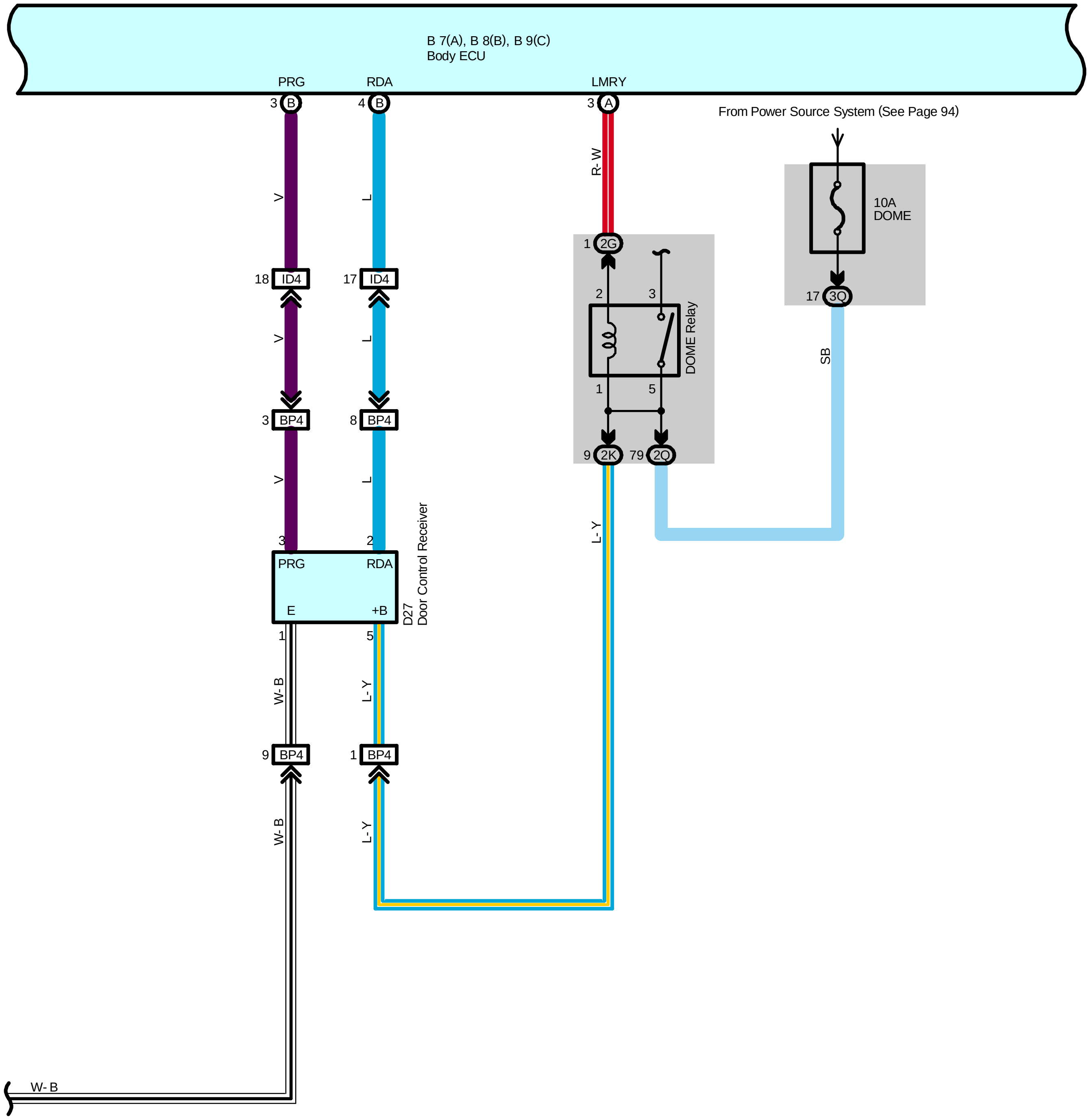
* 1 : w/ Navigation System
* 2 : w/o Navigation System

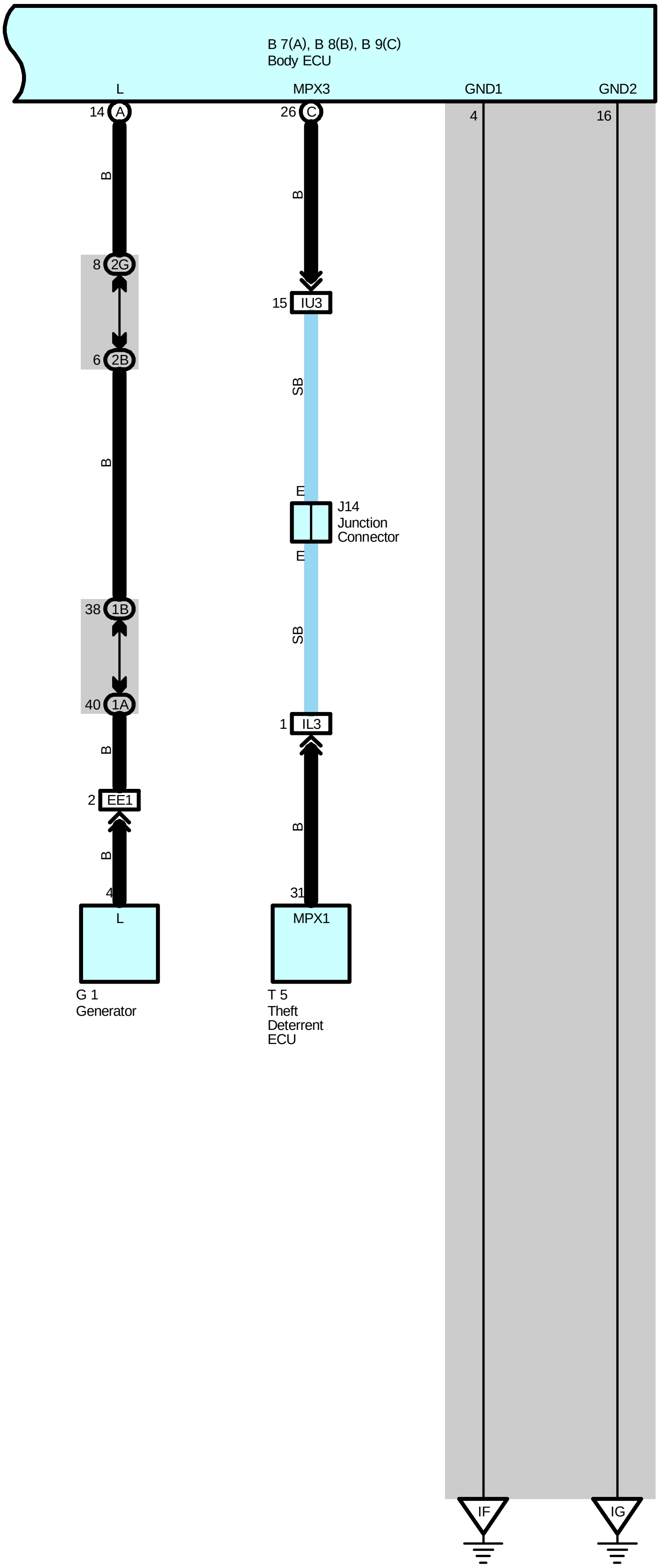
Wireless Door Lock Control




B 7(A), B 8(B), B 9(C)
Body ECU
UL2
L2
DCTY
PCTY
RLCY
RRCY
G- B
L- W
SB
R- Y
R- B
R- L
R- G
W- B
Unlock
Lock
D19
Door Key Lock and
Unlock SW RH
B 3
Back Door Key Lock
and Unlock SW
D14
Door Courtesy SW Front LH
D15
Door Courtesy SW Front RH
D16
Door Courtesy SW Rear LH
D17
Door Courtesy SW Rear RH
BQ2
B11
BJ
ID4
IV3
3E
3J
3Q
3I
2Q
2K
2E
3K

Wireless Door Lock Control





B 7(A), B 8(B), B 9(C)
Body ECU
L
MPX3
GND1
GND2
14
A
26
C
4
16
B
8
2G
6
2B
15
IU3
SB
E
J14
Junction
Connector
E
38
1B
40
1A
1
IL3
2
EE1
4
31
L
MPX1
G 1
Generator
T 5
Theft
Deterrent
ECU
IF
IG

Wireless Door Lock Control

System Outline

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

1. Normal Operation

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

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

2. Auto Lock Function

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

∗ Any door is opened.
∗ The ignition key is inserted into the ignition SW.
∗ When the unlock detection SW of all the doors are locked.

3. Wireless Door Lock Stop Function

If any of the following conditions are detected, the wireless door lock does not function.
Lock operation
∗ When any door is open (Door courtesy SW on)
∗ The ignition key is inserted into the ignition SW (Unlock warning SW on)
∗ Ignition SW is on
Unlock operation
∗ Ignition SW is on

4. Visual Confirmation of Lock or Unlock

During lock operation, when the door control receiver receives a lock signal from the door unlock detection SW, the turn signal light is flashed once. During unlock operation, when the door control receiver receives an unlock signal from the door unlock detection SW, the turn signal light is flashed twice.

5. Panic Mode Function

When the panic SW on the transmitter is pressed, the door control receiver receives a signal and enters the panic mode. The signal input into the theft deterrent ECU from the body ECU turns on the theft deterrent horn, and flashes the taillight and headlight. When the panic SW or the unlock SW of the transmitter is pressed during the panic mode, the panic mode is canceled, and the theft deterrent horn stops, and the taillight and headlight are turned off.

6. Repeat Function

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

Service Hints

D27 Door Control Receiver

5-Ground : Always approx. 12 volts
1-Ground : Always continuity

D21, D22, D23, D24 Door Unlock Detection SW Front LH, RH, Rear LH, RH

1-Ground : Always continuity

B4 Back Door Unlock Detection SW

1-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
B2		72	D16	72	D27	72
B3		72	D17	72	G1	68
B4		72	D18	72	J14	71
B7	A	70	D19	72	J22	72
B8	B	70	D20	72	P1	69
B9	C	70	D21	72	P12	73
C15		70	D22	72	T5	71
D14		72	D23	72	U1	71
D15		72	D24	72		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3J		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
6D	60	Engine Wire and J/B No.6 (Behind the Grove Box)

Wireless Door Lock Control

: Connector Joining Wire Harness and Wire Harness

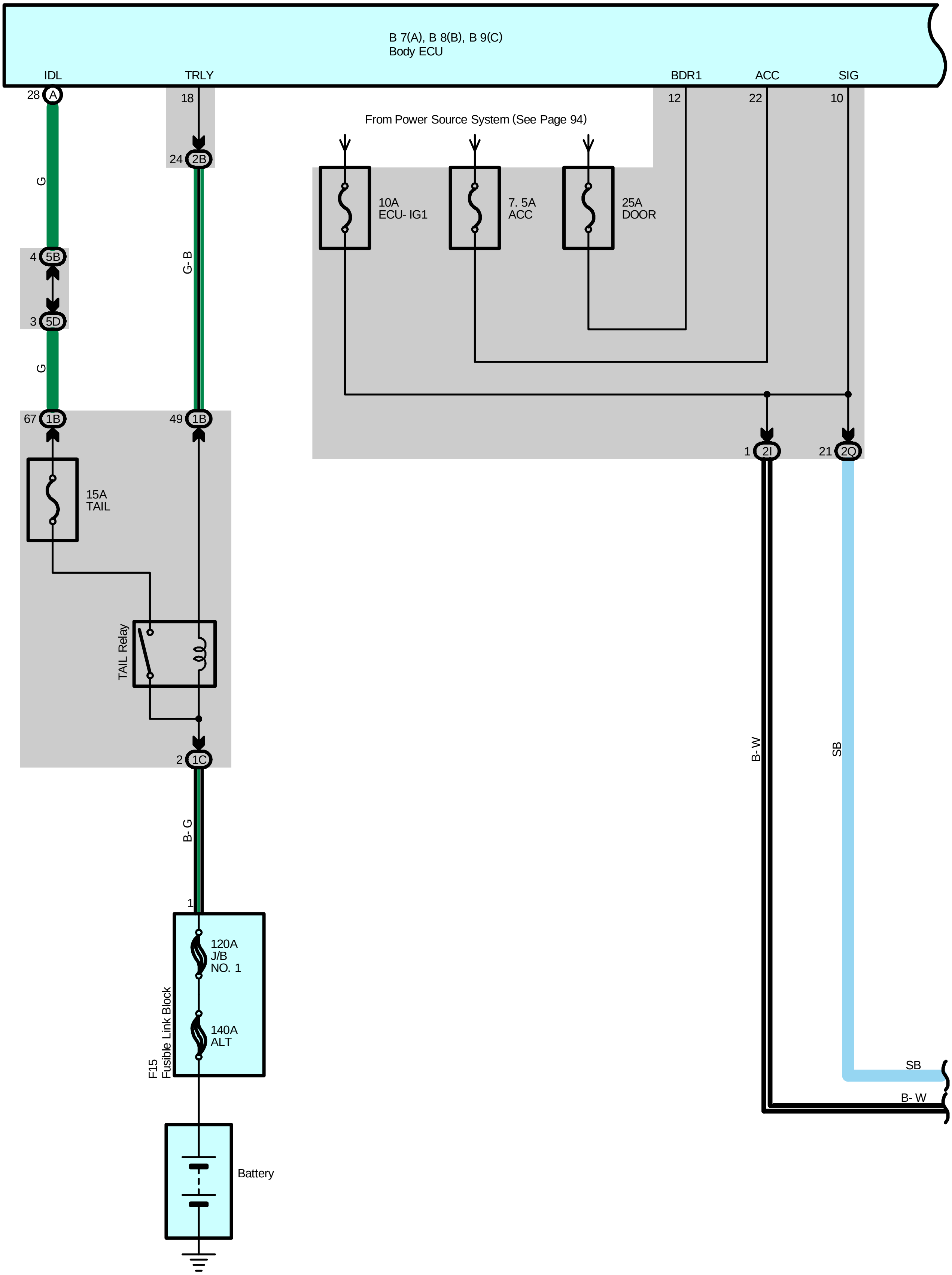
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EE1	76	Engine Room Main Wire and Alternator Wire (Near the Battery)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
BA3 BA4	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC3 BC4	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BD4	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1 BH2	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BL5	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP3 BP4	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BS1	88	Door Lock LH Sub Wire and Front Door LH Wire (Front Door LH)
BT1	88	Door Lock RH Sub Wire and Front Door RH Wire (Front Door RH)

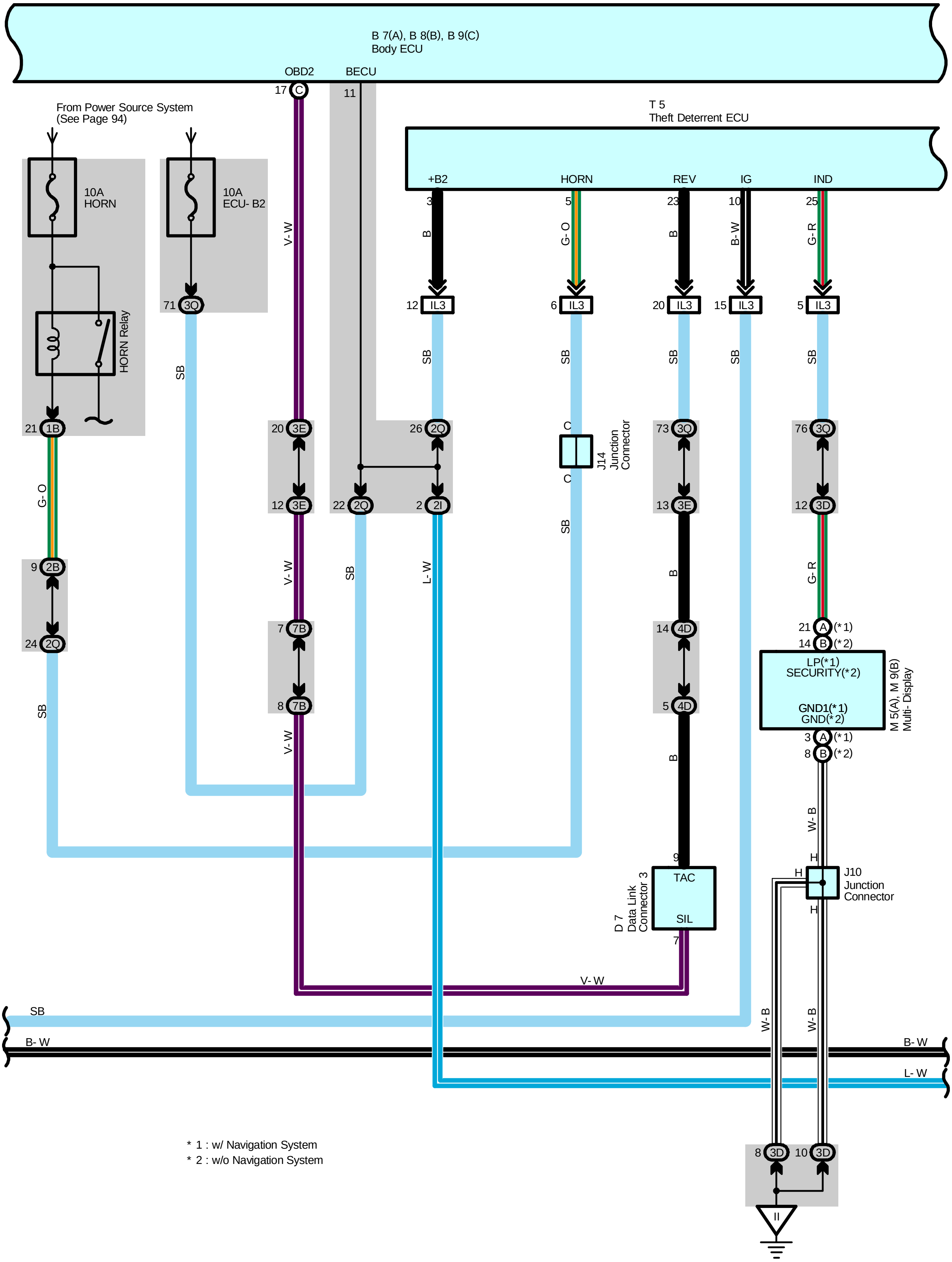
: Ground Points

Code	See Page	Ground Points Location
IF IG	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver’s Seat
BK	86	Front Side Under the Front Passenger’s Seat

: Splice Points

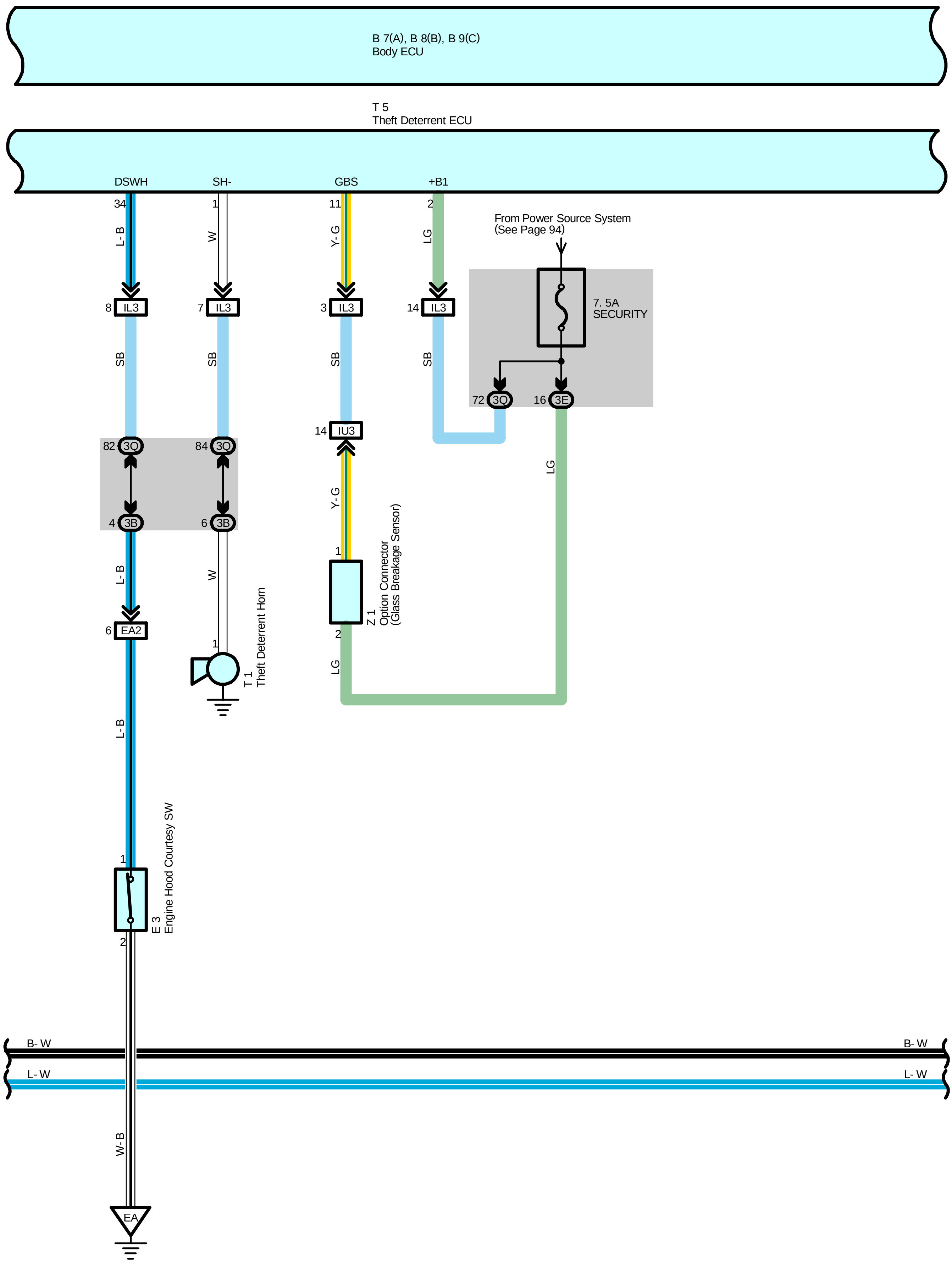
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B8	88	Front Door RH Wire
B5 B6	88	Floor No.1 Wire	B11	88	Floor No.1 Wire
			B15	88	Back Door Upper Wire

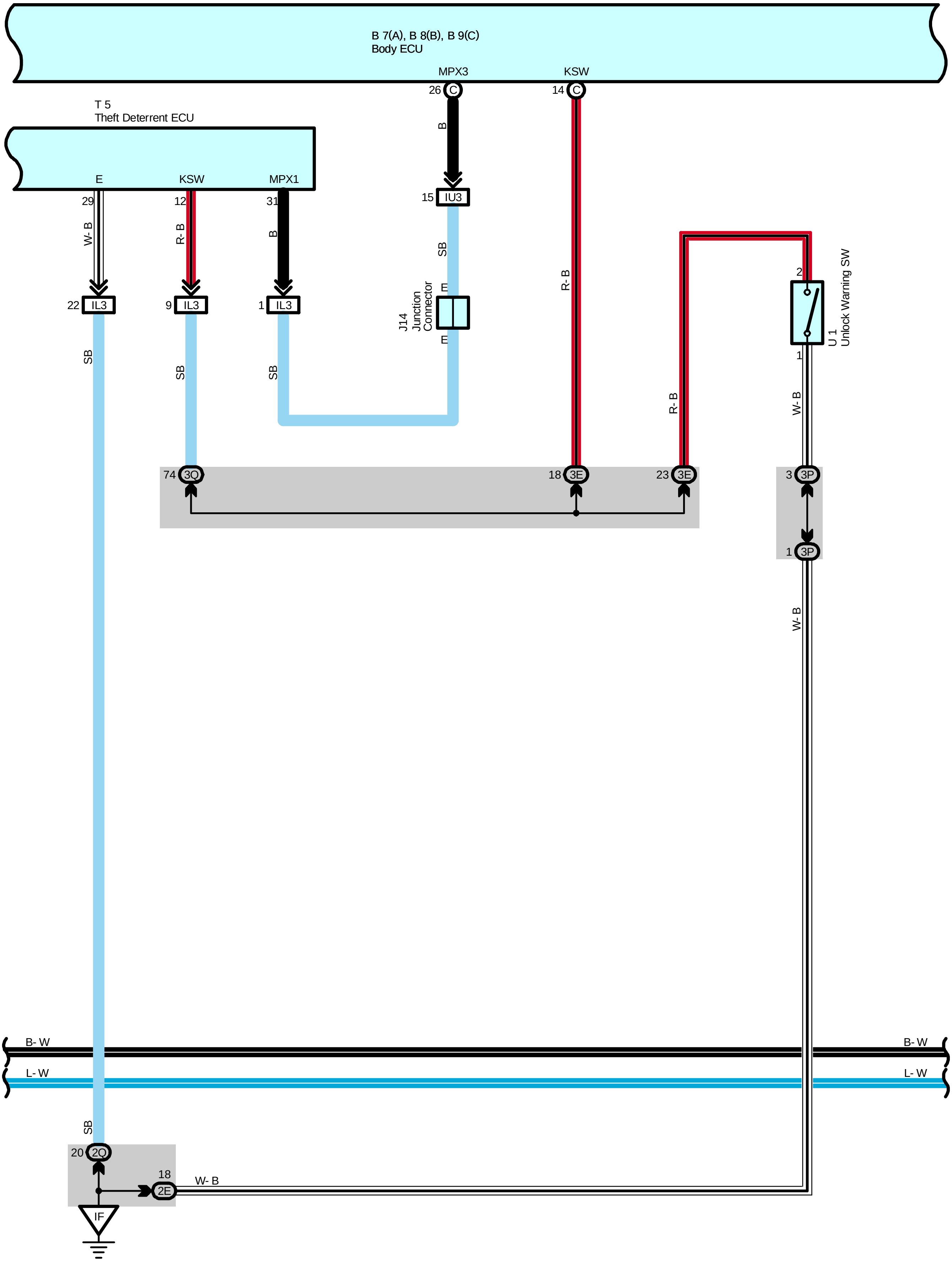

B 7(A), B 8(B), B 9(C)
Body ECU
IDL
TRLY
BDR1
ACC
SIG
28
A
18
12
22
10
From Power Source System (See Page 94)
24
2B
G
G-B
10A
ECU-IG1
7. 5A
ACC
25A
DOOR
4
5B
3
5D
G
67
1B
49
1B
1
2I
21
2Q
15A
TAIL
TAIL Relay
2
1C
B-W
SB
B-G
1
120A
J/B
NO. 1
140A
ALT
F15
Fusible Link Block
SB
B-W
Battery

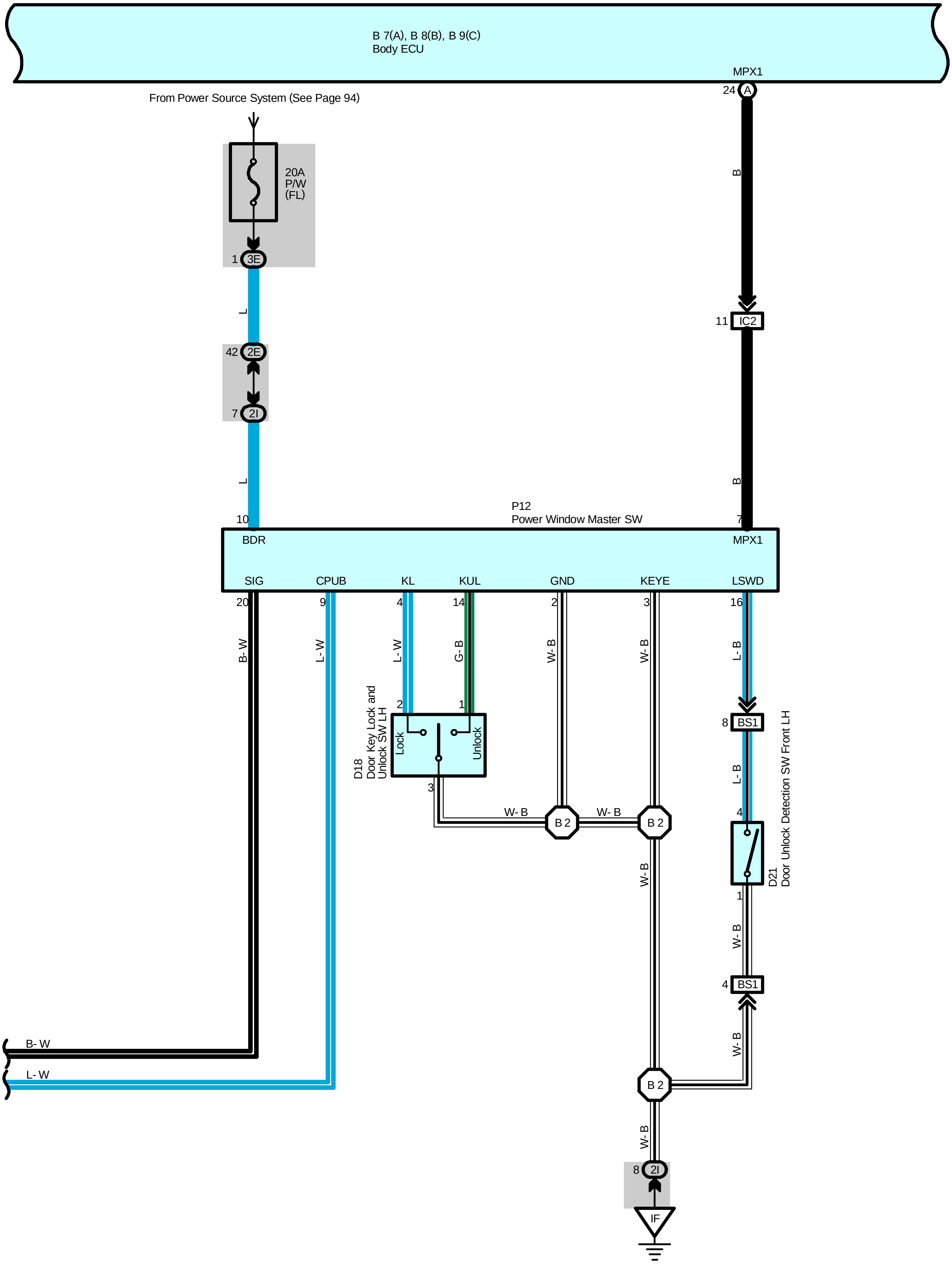


* 1 : w/ Navigation System
* 2 : w/o Navigation System

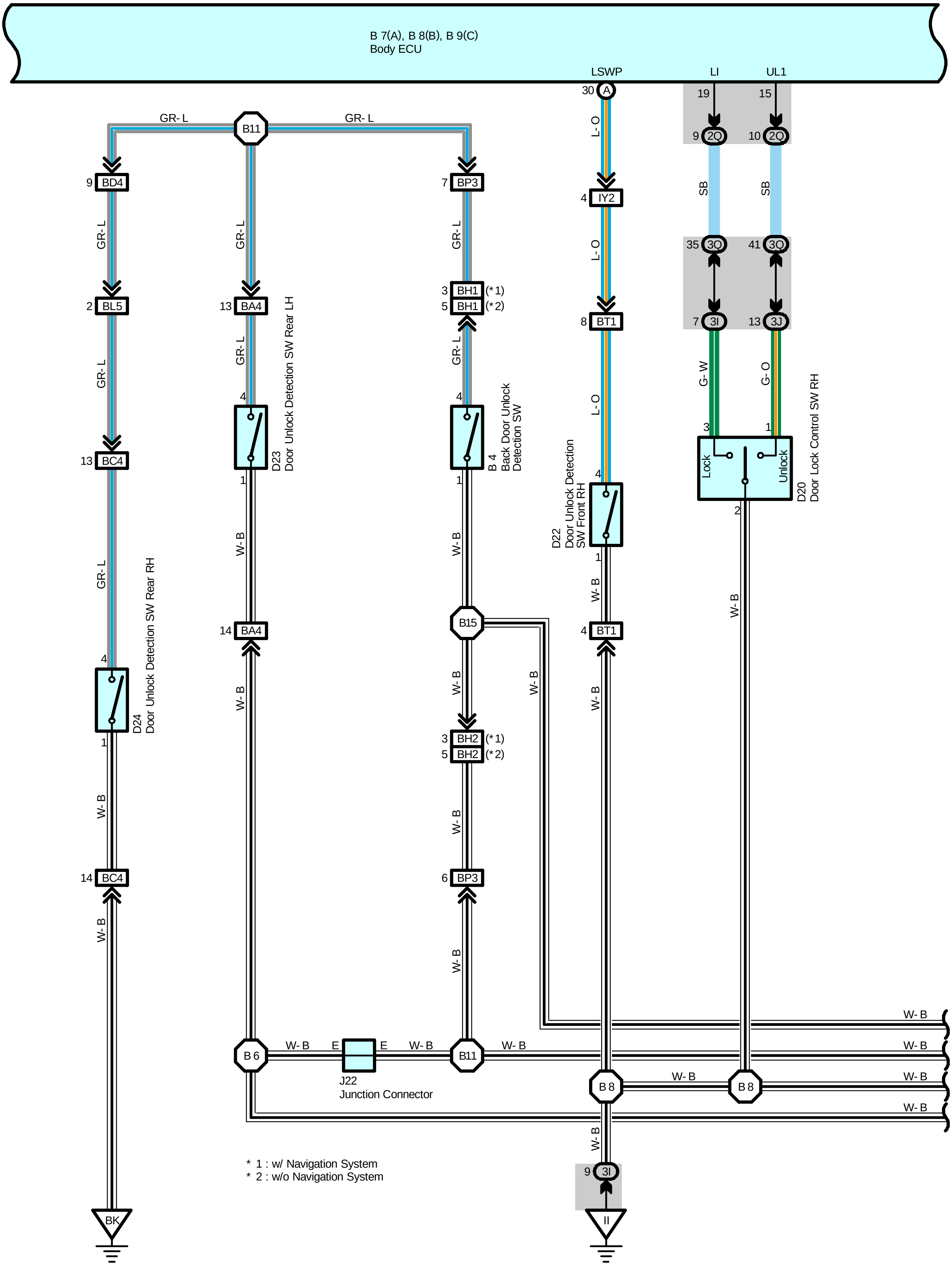
Theft Deterrent



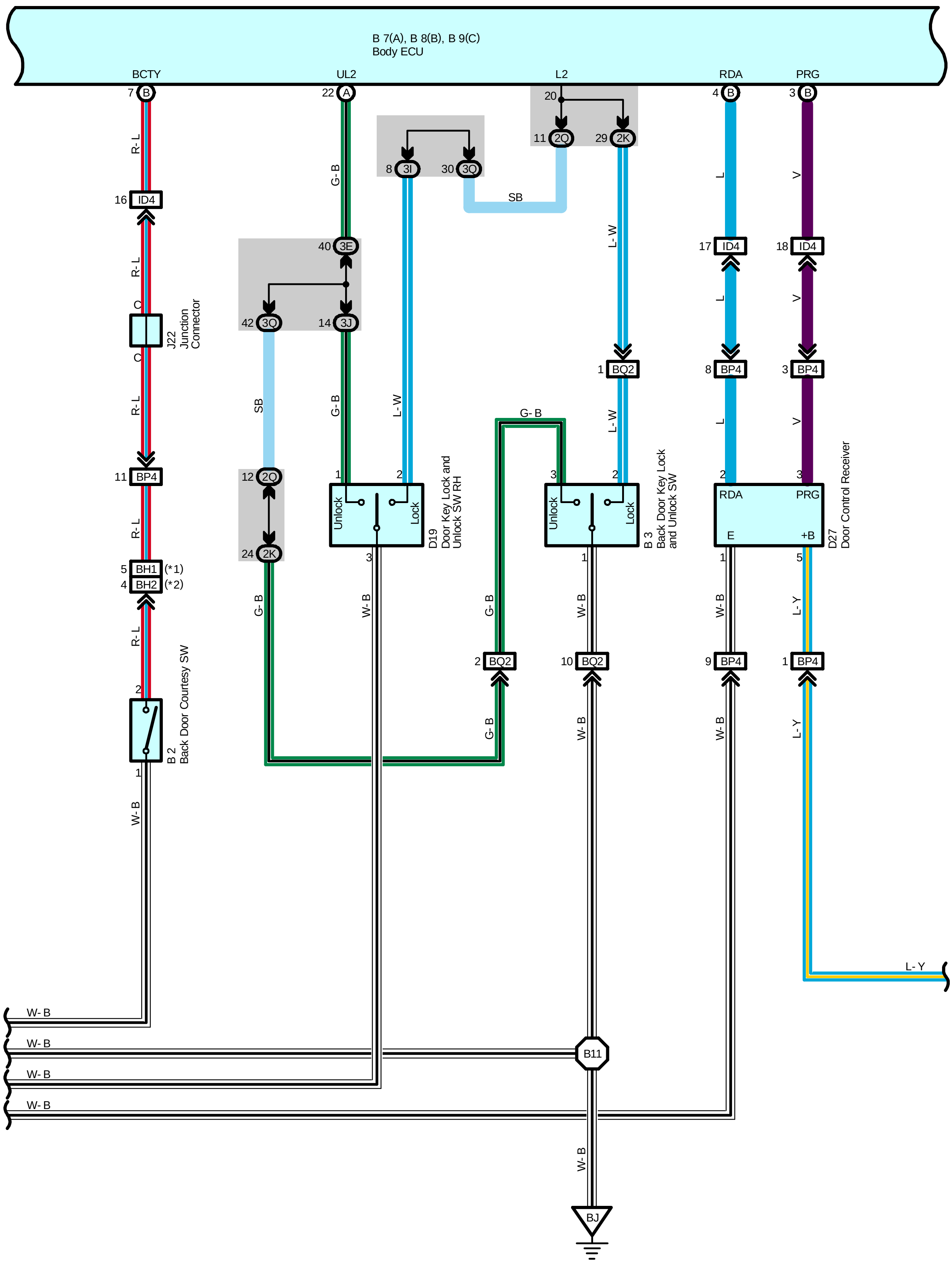

B 7(A), B 8(B), B 9(C)
Body ECU
MPX3
KSW
26 C
14 C
T 5
Theft Deterrent ECU
E
KSW
MPX1
29
12
31
W- B
R- B
B
15 IU3
SB
22 IL3
9 IL3
1 IL3
J14
Junction
Connector
E
R- B
2
U 1
Unlock Warning SW
1
W- B
74 3Q
18 3E
23 3E
3 3P
1 3P
B- W
L- W
20 2O
18 2E
IF



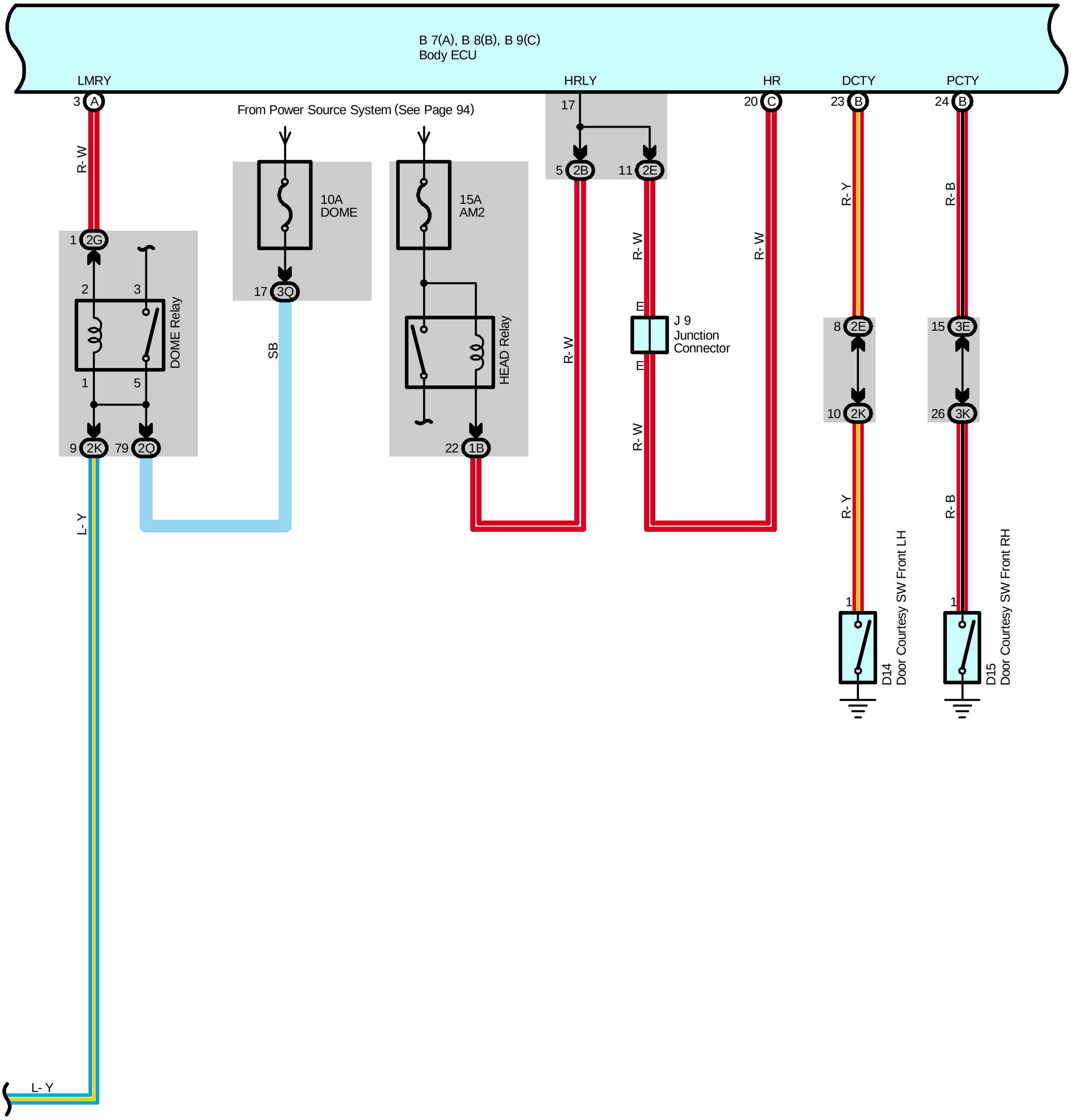
B 7(A), B 8(B), B 9(C)
Body ECU
MPX1
24 A
From Power Source System (See Page 94)
20A
P/W
(FL)
1 3E
L
42 2E
7 2I
L
B
11 IC2
B
P12
Power Window Master SW
10
BDR
7
MPX1
SIG
CPUB
KL
KUL
GND
KEYE
LSWD
20
9
4
14
2
3
16
B-W
L-W
L-W
G-B
W-B
W-B
L-B
D18
Door Key Lock and
Unlock SW LH
2
1
Lock
Unlock
3
W-B
B 2
W-B
B 2
8 BS1
L-B
4
D21
Door Unlock Detection SW Front LH
1
W-B
4 BS1
W-B
W-B
B 2
W-B
8 2I
IF
B-W
L-W



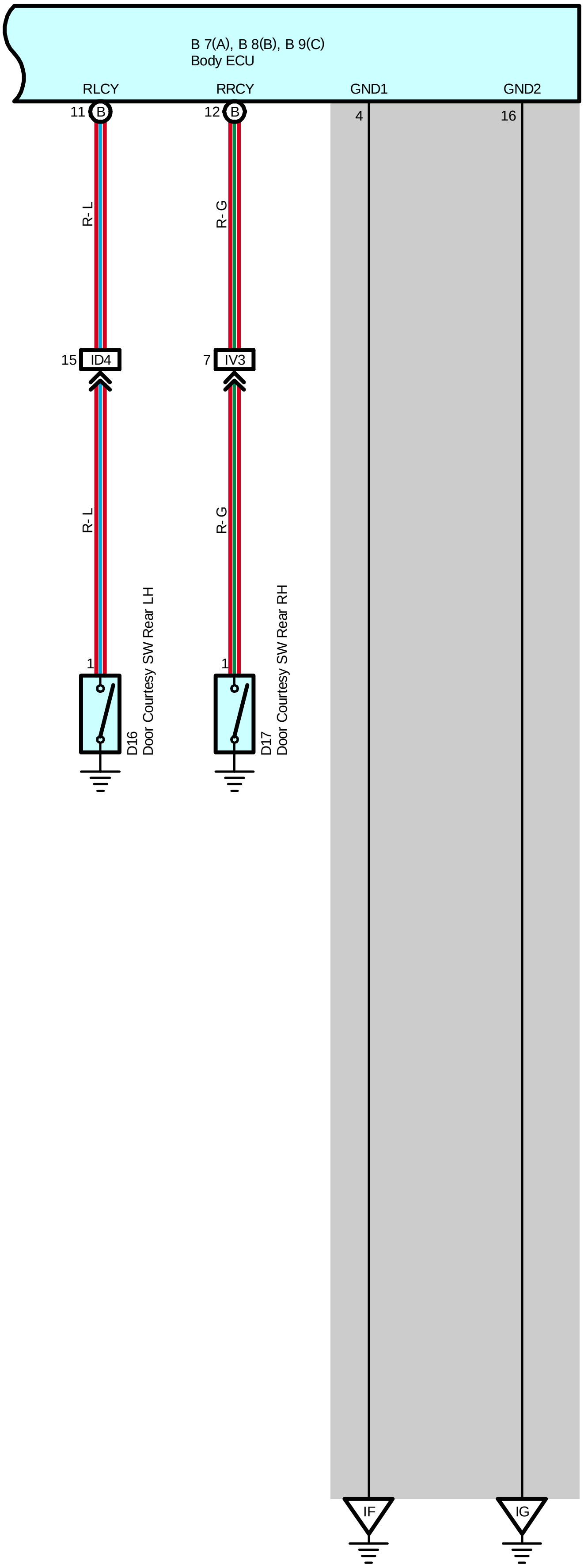
* 1 : w/ Navigation System
* 2 : w/o Navigation System



B 7(A), B 8(B), B 9(C)
Body ECU
BCTY
UL2
L2
RDA
PRG
J22
Junction
Connector
D19
Door Key Lock and
Unlock SW RH
B 3
Back Door Key Lock
and Unlock SW
D27
Door Control Receiver
B 2
Back Door Courtesy SW
Unlock
Lock
RDA
PRG
E
+B
ID4
BP4
BH1
BH2
(*1)
(*2)
BQ2
B11
BJ
R- L
G- B
SB
L- W
L
V
W- B
L- Y



* 1 : w/ Navigation System
* 2 : w/o Navigation System


B 7(A), B 8(B), B 9(C)
Body ECU
RLCY
RRCY
GND1
GND2
11
B
12
B
4
16
R- L
R- G
15
ID4
7
IV3
R- L
R- G
1
1
D16
Door Courtesy SW Rear LH
D17
Door Courtesy SW Rear RH
IF
IG

Service Hints

D18, D19 Door Key Lock and Unlock SW LH, RH

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

B3 Back Door Key Lock and Unlock SW

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

E3 Engine Hood Courtesy SW

1-2 : Opened with engine hood open

U1 Unlock Warning SW

2-1 : Closed with ignition key in cylinder

T5 Theft Deterrent ECU

2, 3-Ground : Always approx. 12 volts
10-Ground : Approx. 12 volts with ignition SW at ON or ST position
29-Ground : Always continuity
12-Ground : Continuity with ignition key in cylinder
34-Ground : Continuity with engine hood close

○ : **Parts Location**

Code		See Page	Code	See Page	Code		See Page
B2		72	D18	72	J10		71
B3		72	D19	72	J14		71
B4		72	D20	72	J22		72
B7	A	70	D21	72	M5	A	71
B8	B	70	D22	72	M9	B	71
B9	C	70	D23	72	P12		73
D7		70	D24	72	T1		69
D14		72	D27	72	T5		71
D15		72	E3	68	U1		71
D16		72	F15	68	Z1		71
D17		72	J9	71			

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
1C		
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2I	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3J		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4D	52	Dash Wire and J/B No.4 (Instrument Panel Center)
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)

Theft Deterrent

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	76	Engine Room Main Wire and Engine Room No.2 Wire (Engine Compartment Right)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IU3	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
BA4	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC4	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)
BD4	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BH2		
BL5	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BP4		
BQ2	88	Back Door Lower Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BS1	88	Door Lock LH Sub Wire and Front Door LH Wire (Front Door LH)
BT1	88	Door Lock RH Sub Wire and Front Door RH Wire (Front Door RH)

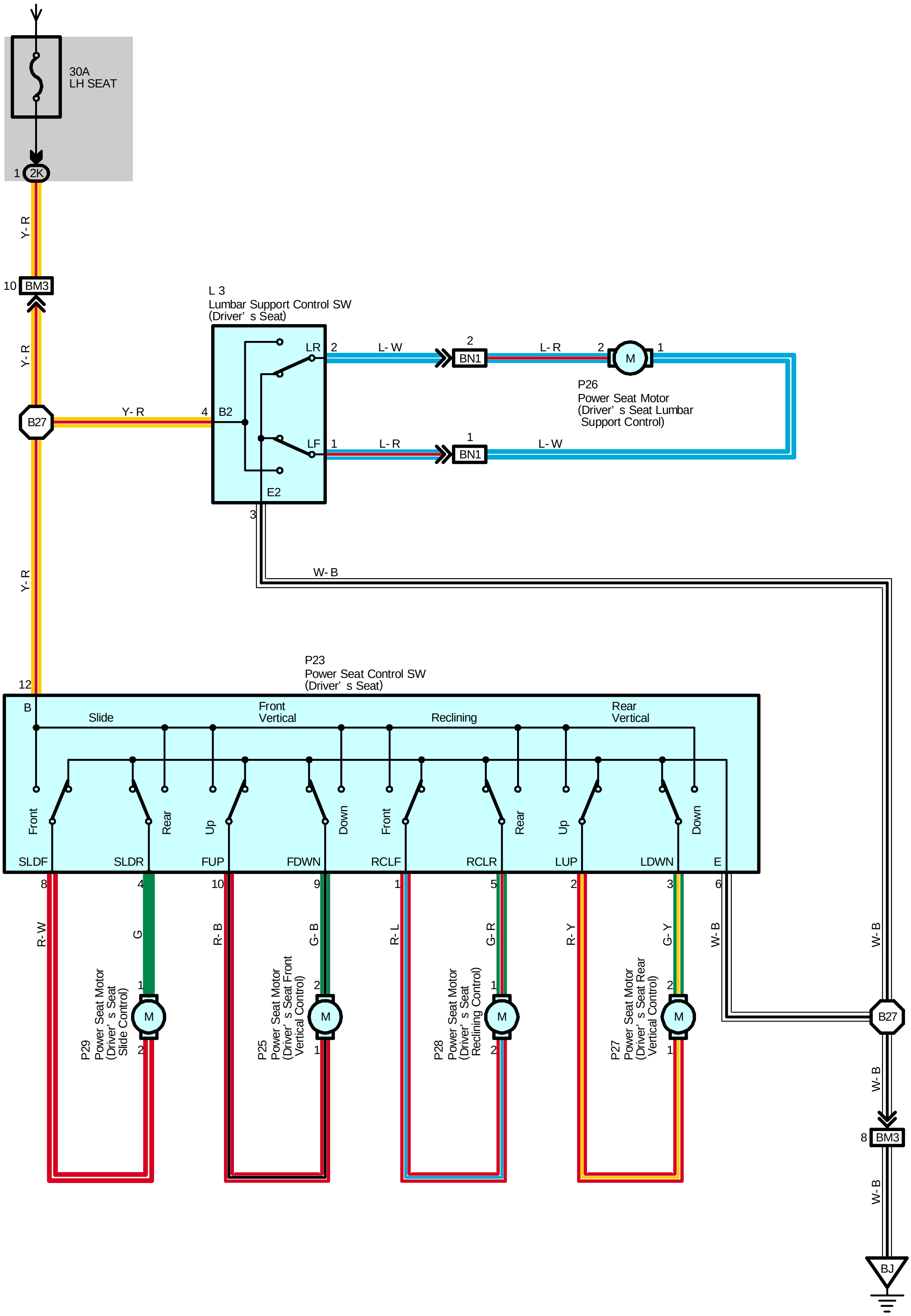
: Ground Points

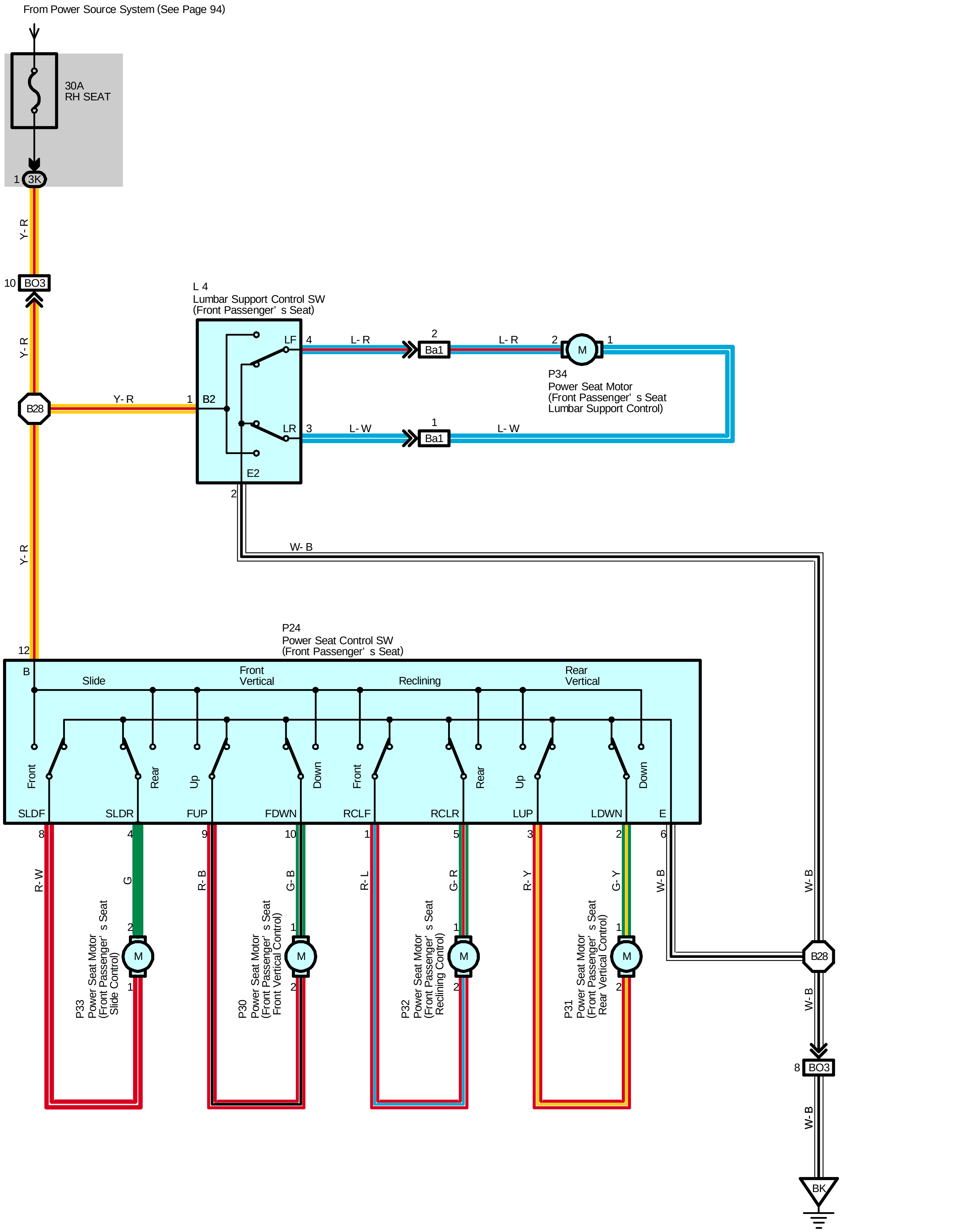
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
IF	78	Set Bolt of Cowl Side J/B LH
IG		
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B11	88	Floor No.1 Wire
B6	88	Floor No.1 Wire	B15	88	Back Door Upper Wire
B8	88	Front Door RH Wire			

From Power Source System (See Page 94)




From Power Source System (See Page 94)
30A
RH SEAT
3K
Y- R
BO3
B28
L 4
Lumbar Support Control SW
(Front Passenger' s Seat)
LF
LR
B2
E2
L- R
L- W
Ba1
M
P34
Power Seat Motor
(Front Passenger' s Seat
Lumbar Support Control)
W- B
P24
Power Seat Control SW
(Front Passenger' s Seat)
B
Slide
Front
Vertical
Reclining
Rear
Vertical
Front
Rear
Up
Down
SLDF
SLDR
FUP
FDWN
RCLF
RCLR
LUP
LDWN
E
R- W
G
R- B
G- B
R- L
G- R
R- Y
G- Y
P33
Power Seat Motor
(Front Passenger' s Seat
Slide Control)
P30
Power Seat Motor
(Front Passenger' s Seat
Front Vertical Control)
P32
Power Seat Motor
(Front Passenger' s Seat
Reclining Control)
P31
Power Seat Motor
(Front Passenger' s Seat
Rear Vertical Control)
BK

Power Seat

Service Hints

P23 Power Seat Control SW (Driver's Seat)

12-1 : Closed with driver's seat at front reclining operation
12-5 : Closed with driver's seat at rear reclining operation
12-10 : Closed with driver's seat at front vertical up operation
12-9 : Closed with driver's seat at front vertical down operation
12-2 : Closed with driver's seat at rear vertical up operation
12-3 : Closed with driver's seat at rear vertical down operation
12-8 : Closed with driver's seat at front slide operation
12-4 : Closed with driver's seat at rear slide operation
6-Ground : Always continuity

P24 Power Seat Control SW (Front Passenger's Seat)

12-1 : Closed with front passenger's seat at front reclining operation
12-5 : Closed with front passenger's seat at rear reclining operation
12-9 : Closed with front passenger's seat at front vertical up operation
12-10 : Closed with front passenger's seat at front vertical down operation
12-3 : Closed with front passenger's seat at rear vertical up operation
12-2 : Closed with front passenger's seat at rear vertical down operation
12-8 : Closed with front passenger's seat at front slide operation
12-4 : Closed with front passenger's seat at rear slide operation
6-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
L3	74	P26	74	P31	74
L4	74	P27	74	P32	74
P23	74	P28	74	P33	74
P24	74	P29	74	P34	74
P25	74	P30	74		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BM3	90	Floor No.1 Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)
BN1	90	Seat No.2 Wire and Front Seat LH Wire (Rear Side Under the Driver's Seat)
BO3	90	Floor No.2 Wire and Front Seat RH Wire (Front Side Under the Front Passenger's Seat)
Ba1	90	Seat No.2 Wire and Front Seat RH Wire (Rear Side Under the Front Passenger's Seat)

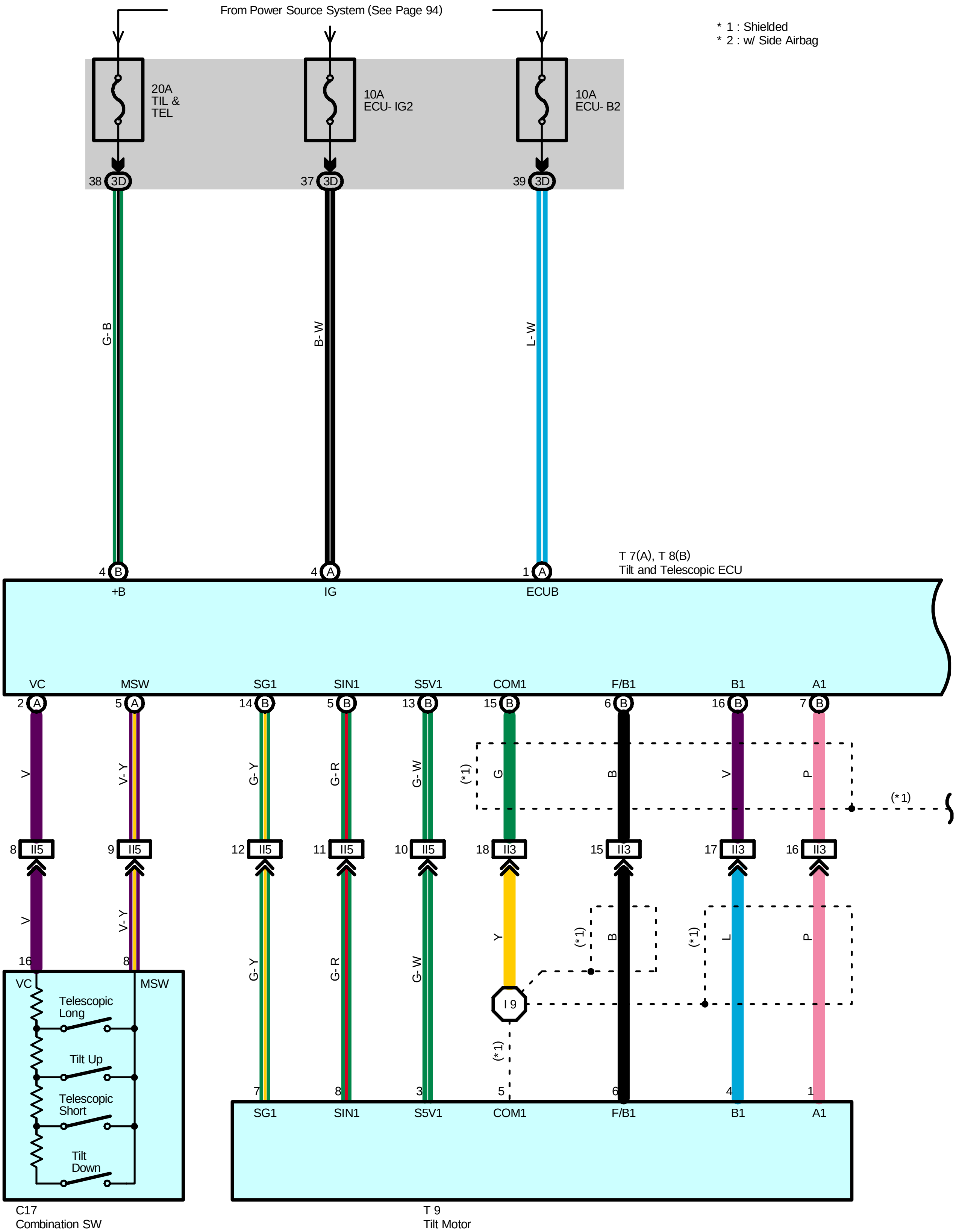
▽ : Ground Points

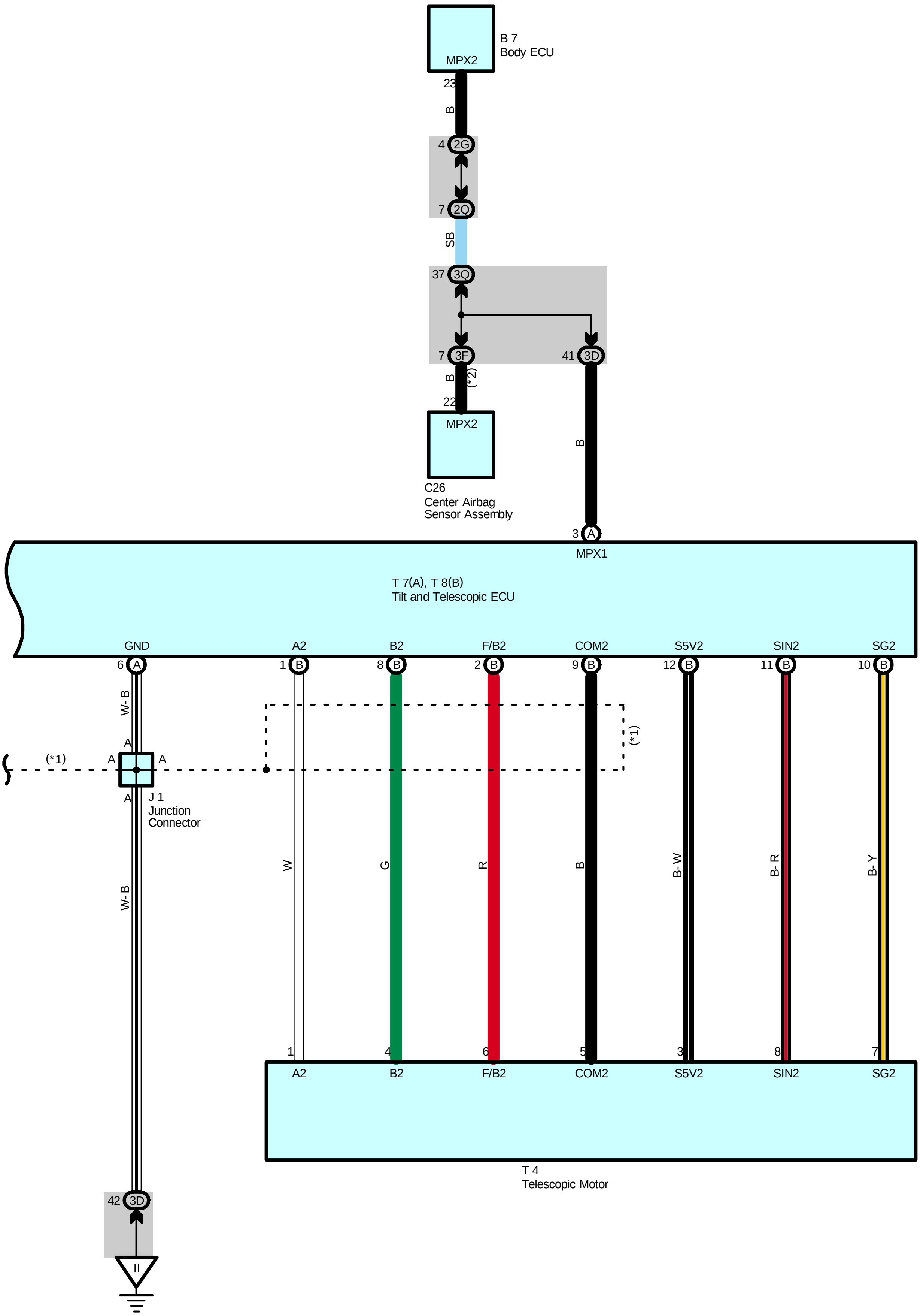
Code	See Page	Ground Points Location
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B27	90	Front Seat LH Wire	B28	90	Front Seat RH Wire

Power Tilt and Power Telescopic




B 7
Body ECU
MPX2
23
B
4 2G
7 2Q
SB
37 3Q
7 3F
41 3D
B
(*2)
22
MPX2
C26
Center Airbag
Sensor Assembly
B
3 A
MPX1
T 7(A), T 8(B)
Tilt and Telescopic ECU
GND
A2
B2
F/B2
COM2
S5V2
SIN2
SG2
6 A
1 B
8 B
2 B
9 B
12 B
11 B
10 B
W- B
(*1)
A
A
A
A
J 1
Junction
Connector
(*1)
W
G
R
B
B- W
B- R
B- Y
W- B
1
4
6
5
3
8
7
A2
B2
F/B2
COM2
S5V2
SIN2
SG2
T 4
Telescopic Motor
42 3D
II

Power Tilt and Power Telescopic

System Outline

This system provides the automatic tilt and telescopic mechanisms using the motor drive, tilt and telescopic ECU control, allowing variable steering movement in the back and forth, and vertical directions. This makes it possible to set the steering to the desired steering position.

Service Hints

T7 (A), T8 (B) Tilt and Telescopic ECU

(A) 1-Ground : Always approx. 12 volts
(B) 4-Ground : Always approx. 12 volts
(A) 4-Ground : Approx. 12 volts with ignition SW at ON or ST position
(A) 6-Ground : Always continuity

C17 Combination SW

16-8 : Approx. 160 Ω with telescopic long operation
: Approx. 360 Ω with tilt up operation
: Approx. 790 Ω with telescopic short operation
: Approx. 1.99 kΩ with tilt down operation

: Parts Location

Code	See Page	Code	See Page	Code	See Page
B7	70	J1	71	T8 B	71
C17	70	T4	71	T9	71
C26	70	T7 A	71		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3F		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

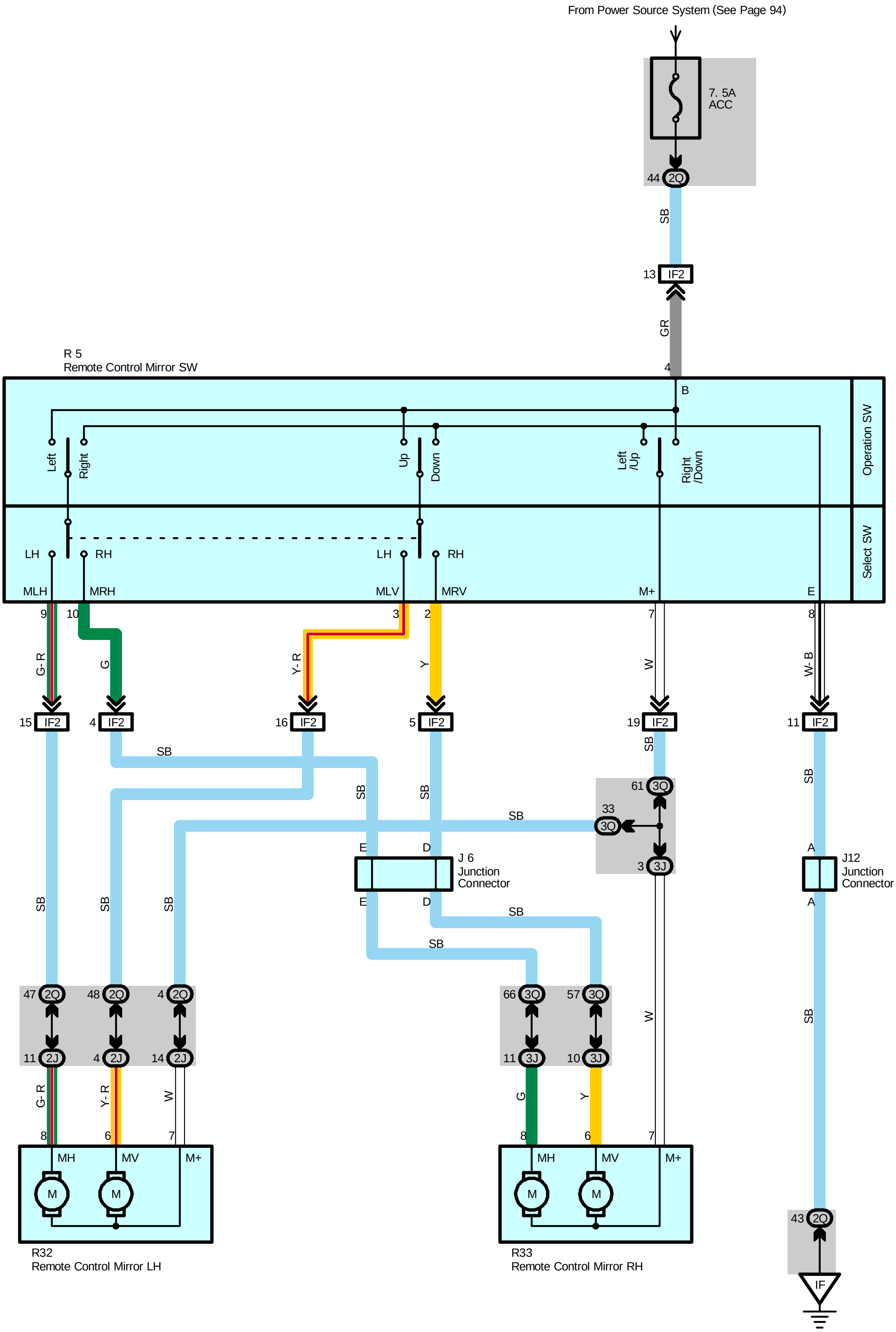
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II5		

: Ground Points

Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I9	80	Column Wire			



From Power Source System (See Page 94)
7. 5A
ACC
44 2Q
SB
13 IF2
GR
4
R 5
Remote Control Mirror SW
B
Left
Right
Up
Down
Left /Up
Right /Down
Operation SW
LH
RH
LH
RH
Select SW
MLH
MRH
MLV
MRV
M+
E
9
10
3
2
7
8
G-R
G
Y-R
Y
W
W-B
15 IF2
4 IF2
16 IF2
5 IF2
19 IF2
11 IF2
SB
61 3Q
33 3Q
3 3J
E
D
J 6
Junction Connector
E
D
A
J12
Junction Connector
A
47 2Q
48 2Q
4 2Q
11 2J
4 2J
14 2J
66 3Q
57 3Q
11 3J
10 3J
8
6
7
MH
MV
M+
M
M
R32
Remote Control Mirror LH
R33
Remote Control Mirror RH
43 2Q
IF

Service Hints

R5 Remote Control Mirror SW

7-8 : Continuity with operation SW at LEFT or UP position
4-7 : Continuity with operation SW at RIGHT or DOWN position
4-9 : Continuity with operation SW at LEFT position and the select SW at LH position
4-3 : Continuity with operation SW at UP position and the select SW at LH position
8-10 : Continuity with operation SW at RIGHT position and the select SW at RH position
2-8 : Continuity with operation SW at DOWN position and the select SW at RH position
4-Ground : Approx. 12 volts with ignition SW at ACC or ON position
8-Ground : Always continuity

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
J6	71	R5	71	R33	73
J12	71	R32	73		

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2J	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3J	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

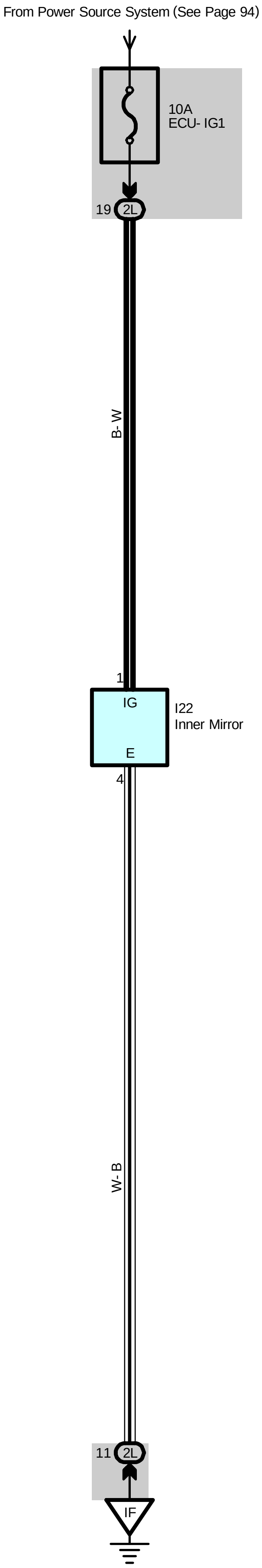
□ : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF2	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH

Automatic Glare-Resistant EC Mirror with Compass



Service Hints

I22 Inner Mirror

1-Ground : Approx. 12 volts with ignition SW at ON or ST position
4-Ground : Always continuity

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
I22	72				

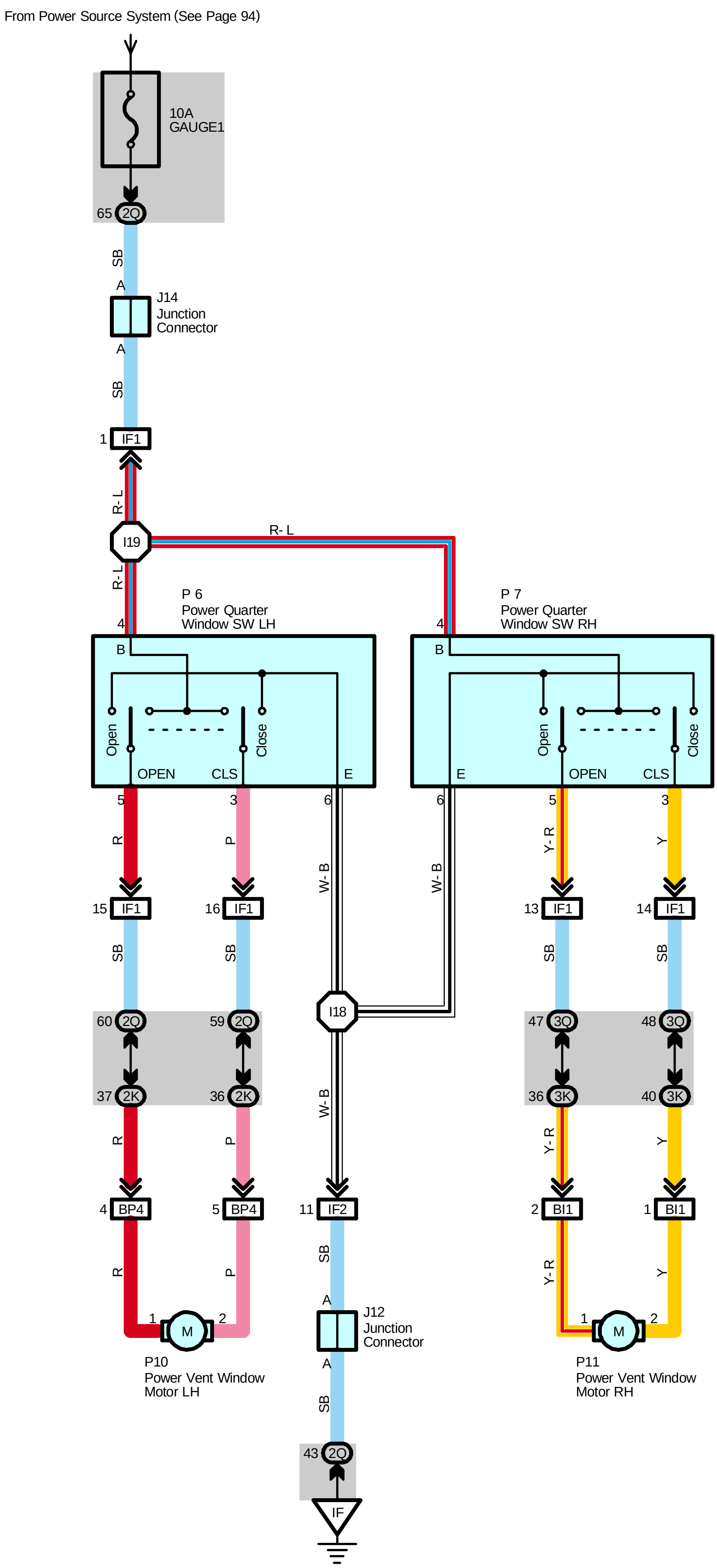
: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH

Power Rear Quarter Window



Service Hints

P6 Power Quarter Window SW LH

4-Ground : Approx. 12 volts with ignition SW at ON or ST position
6-Ground : Always continuity

P7 Power Quarter Window SW RH

4-Ground : Approx. 12 volts with ignition SW at ON or ST position
6-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J12	71	P6	71	P10	73
J14	71	P7	71	P11	73

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

□ : Connector Joining Wire Harness and Wire Harness

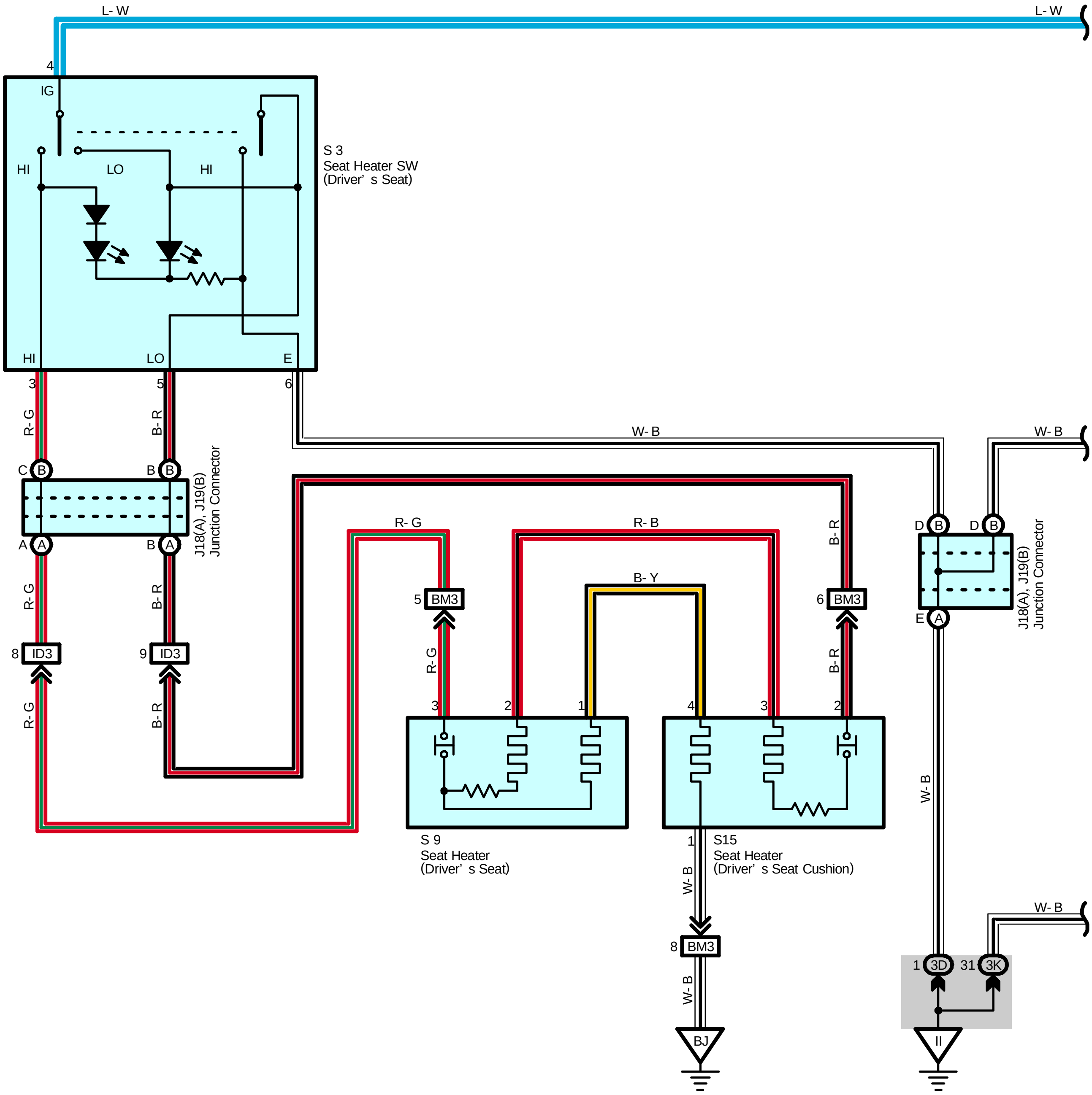
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	78	Instrument Panel Integration Wire and Instrument Panel Wire (Left Side of Instrument Panel)
IF2		
BI1	86	Roof No.2 Wire and Floor No.2 Wire (Right Side Rear Quarter Panel)
BP4	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)

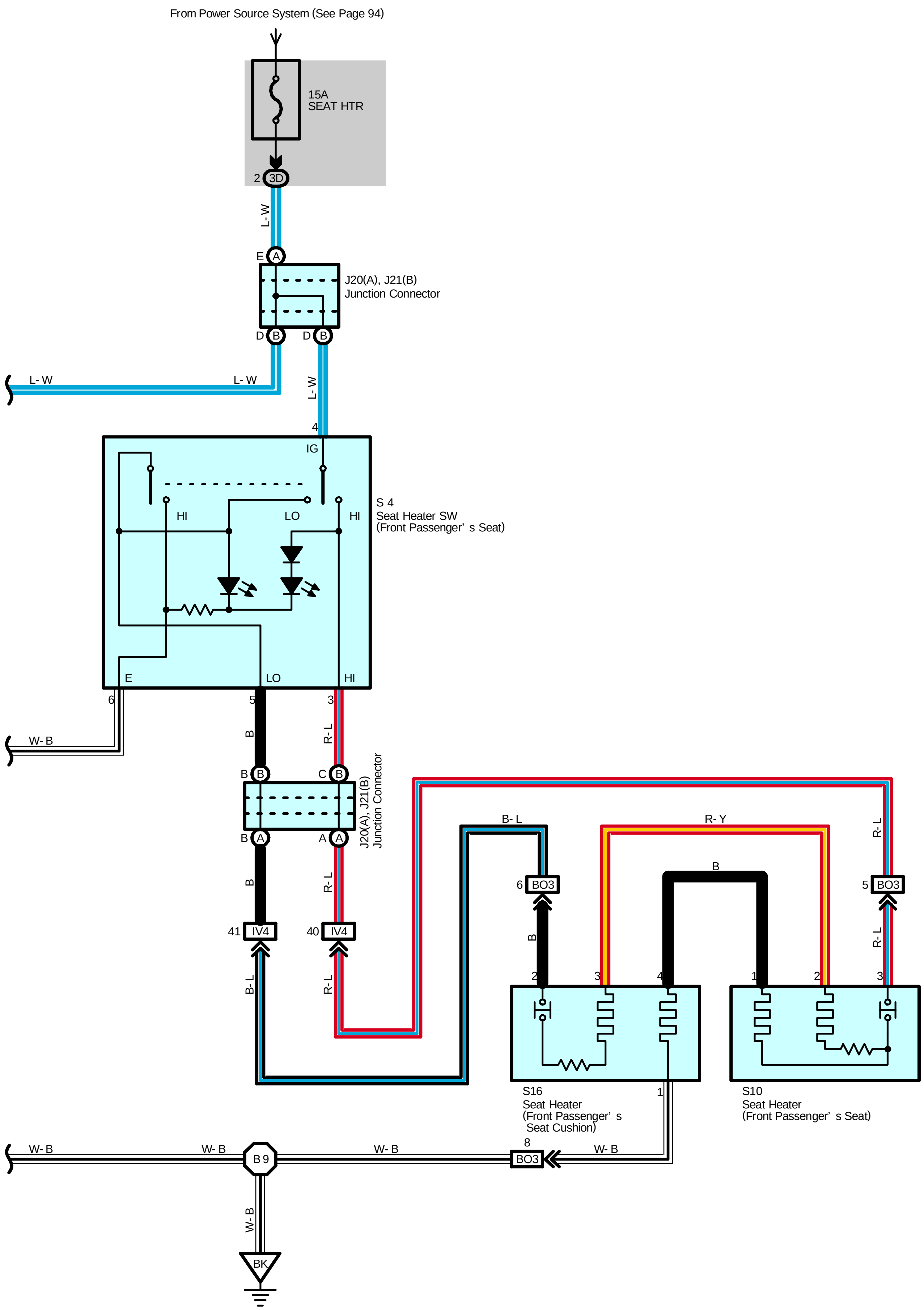
▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I18	80	Instrument Panel Wire	I19	80	Instrument Panel Wire


L- W
L- W
4
IG
HI
LO
HI
S 3
Seat Heater SW
(Driver' s Seat)
HI
LO
E
3
5
6
R- G
B- R
W- B
W- B
C B
B B
A A
B A
J18(A), J19(B)
Junction Connector
R- G
R- B
B- R
D B
D B
E A
J18(A), J19(B)
Junction Connector
B- Y
5 BM3
6 BM3
8 ID3
9 ID3
3
2
1
4
3
2
S 9
Seat Heater
(Driver' s Seat)
1
S15
Seat Heater
(Driver' s Seat Cushion)
W- B
8 BM3
BJ
W- B
1 3D
31 3K
II



From Power Source System (See Page 94)
15A
SEAT HTR
2 3D
L-W
E A
J20(A), J21(B)
Junction Connector
D B
D B
L-W
L-W
L-W
4
IG
HI
LO
HI
S 4
Seat Heater SW
(Front Passenger' s Seat)
E
LO
HI
6
5
3
W-B
B
R-L
B B
C B
B A
A A
J20(A), J21(B)
Junction Connector
B
R-L
41 IV4
40 IV4
B-L
R-L
B-L
R-Y
B
R-L
6 BO3
5 BO3
B
R-L
2
3
4
1
2
3
1
S16
Seat Heater
(Front Passenger' s
Seat Cushion)
S10
Seat Heater
(Front Passenger' s Seat)
W-B
W-B
B 9
W-B
8
BO3
W-B
W-B
BK

Seat Heater

Service Hints

S3 Seat Heater SW (Driver's Seat)

4-Ground : Approx. 12 volts with ignition SW at ON or ST position
6-Ground : Always continuity

S4 Seat Heater SW (Front Passenger's Seat)

4-Ground : Approx. 12 volts with ignition SW at ON or ST position
6-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
J18	A	71	S3	71	S15	74
J19	B	71	S4	71	S16	74
J20	A	71	S9	74		
J21	B	71	S10	74		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID3	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
BM3	90	Floor No.1 Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)
BO3	90	Floor No.2 Wire and Front Seat RH Wire (Front Side Under the Front Passenger's Seat)

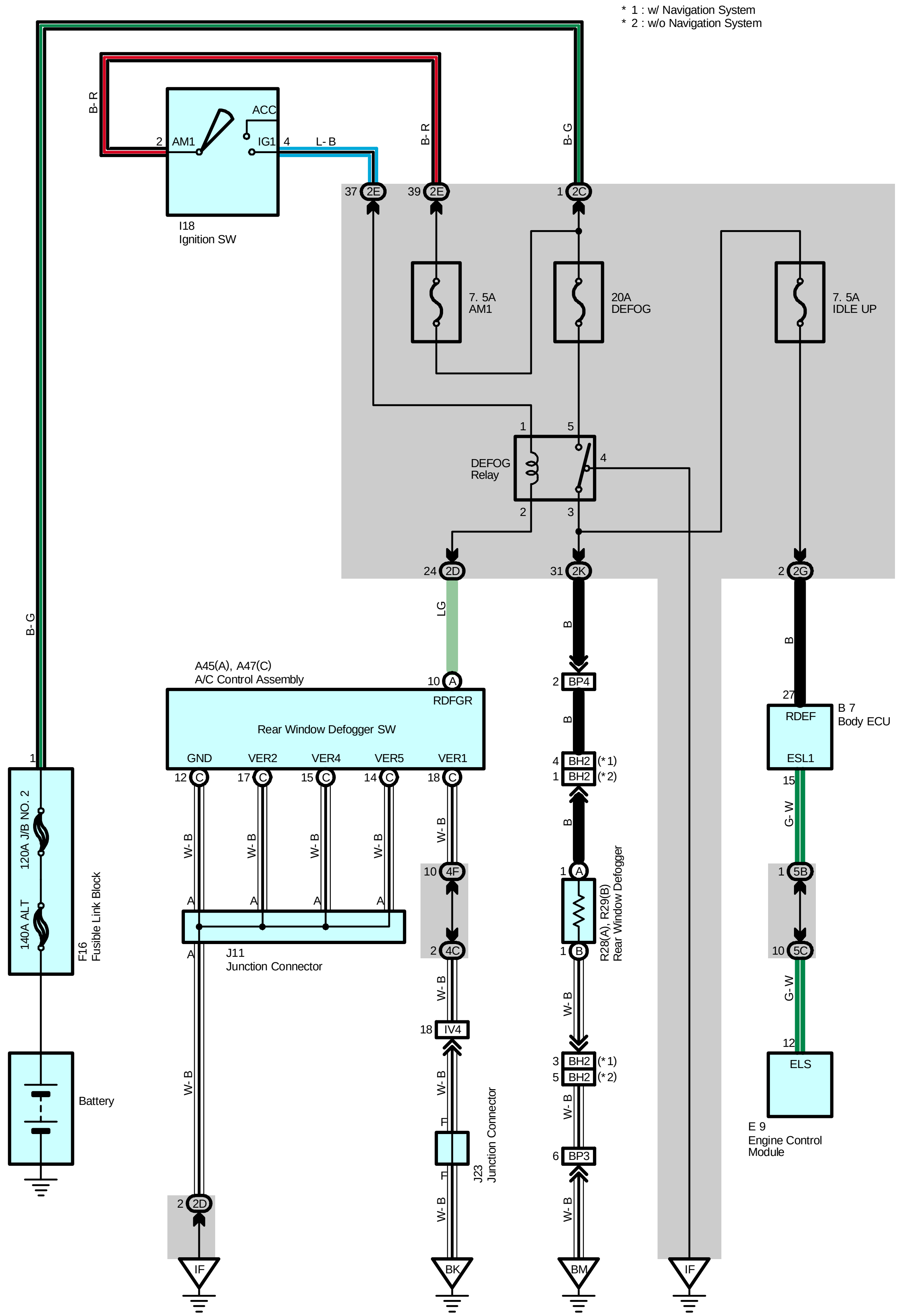
▽ : Ground Points

Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B9	88	Floor No.2 Wire			

Rear Window Defogger



Service Hints

A45 (A), A47 (C) A/C Control Assembly

(A)10-Ground : Approx. 12 volts with ignition SW at ON or ST position

(C)12, (C) 14, (C) 15, (C) 17, (C) 18-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code		See Page
A45	A	70	F16	68	R28	A	73
A47	C	70	I18	70	R29	B	73
B7		70	J11	71			
E9		70	J23	72			

: Junction Block and Wire Harness Connector

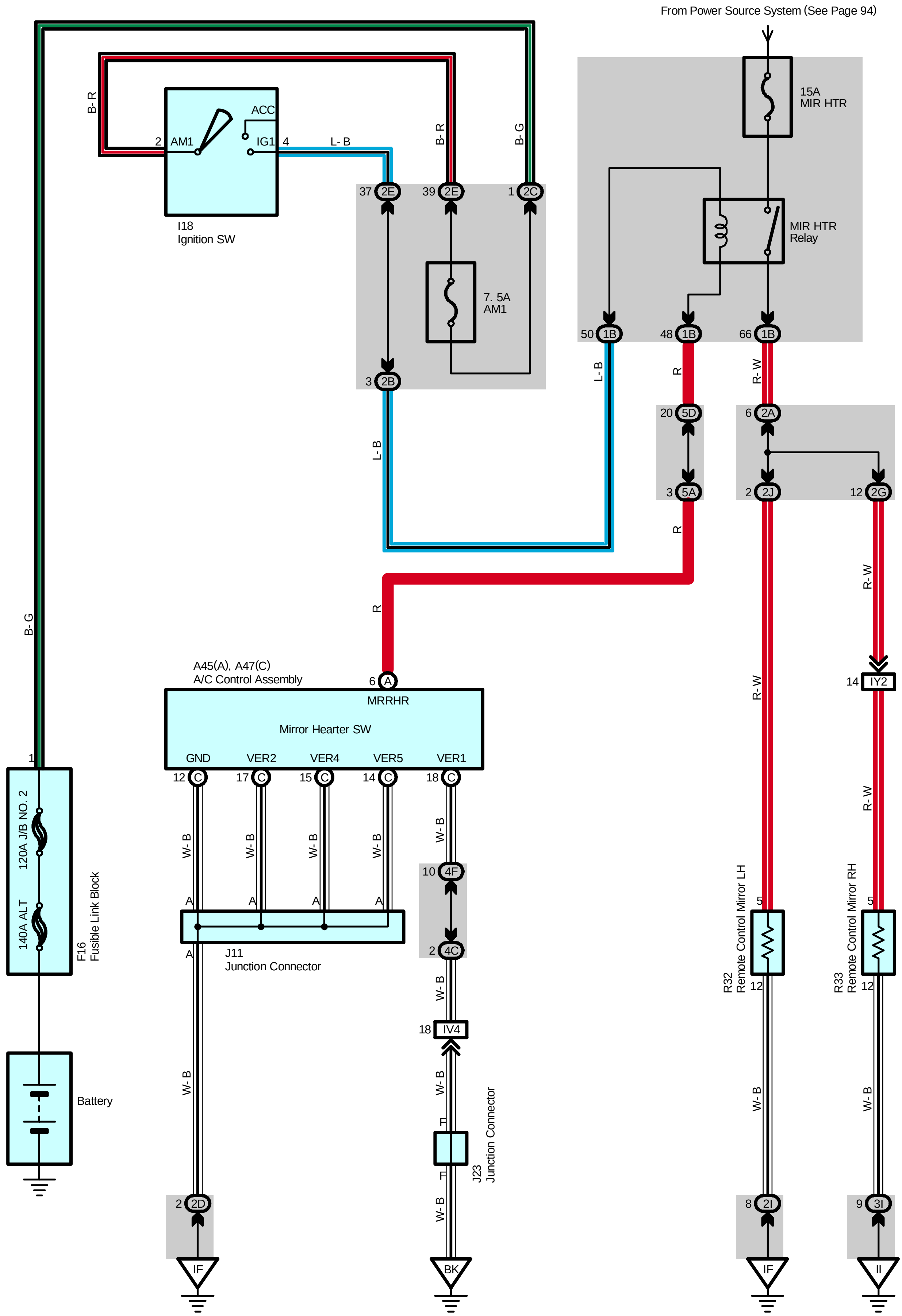
Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2G		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
4C	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4F		
5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5C		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
BH2	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BP3	88	Pillar No.1 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BP4		

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel


From Power Source System (See Page 94)
15A
MIR HTR
MIR HTR
Relay
B- R
ACC
2 AM1
IG1 4
L- B
B- R
B- G
37 2E
39 2E
1 2C
I18
Ignition SW
7. 5A
AM1
3 2B
50 1B
48 1B
66 1B
L- B
R
R- W
20 5D
6 2A
3 5A
2 2J
12 2G
L- B
R
R- W
R
B- G
A45(A), A47(C)
A/C Control Assembly
6 A
MRRHR
Mirror Hearter SW
14 IY2
R- W
R- W
GND
VER2
VER4
VER5
VER1
12 C
17 C
15 C
14 C
18 C
1
120A J/B NO. 2
140A ALT
F16
Fusible Link Block
W- B
W- B
W- B
W- B
W- B
10 4F
A
A
A
A
J11
Junction Connector
A
2 4C
W- B
18 IV4
R32
Remote Control Mirror LH
R33
Remote Control Mirror RH
5
12
5
12
Battery
W- B
W- B
F
F
J23
Junction Connector
W- B
W- B
W- B
2 2D
8 2I
9 3I
IF
BK
IF
II

Service Hints

A45 (A), A47 (C) A/C Control Assembly

(A) 6-Ground : Approx. 12 volts with ignition SW at ON or ST position

(C)12, (C) 14, (C) 15, (C) 17, (C) 18-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
A45	A	70	I18	70	R32	73
A47	C	70	J11	71	R33	73
F16		68	J23	72		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A 2B 2C	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D 2E 2G	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2I 2J	28	Front Door LH Wire and Cowl Side J/B LH (Left Kick Panel)
3I	40	Front Door RH Wire and Cowl Side J/B RH (Right Kick Panel)
4C 4F	52	Dash Wire and J/B No.4 (Instrument Panel Center)
5A	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)

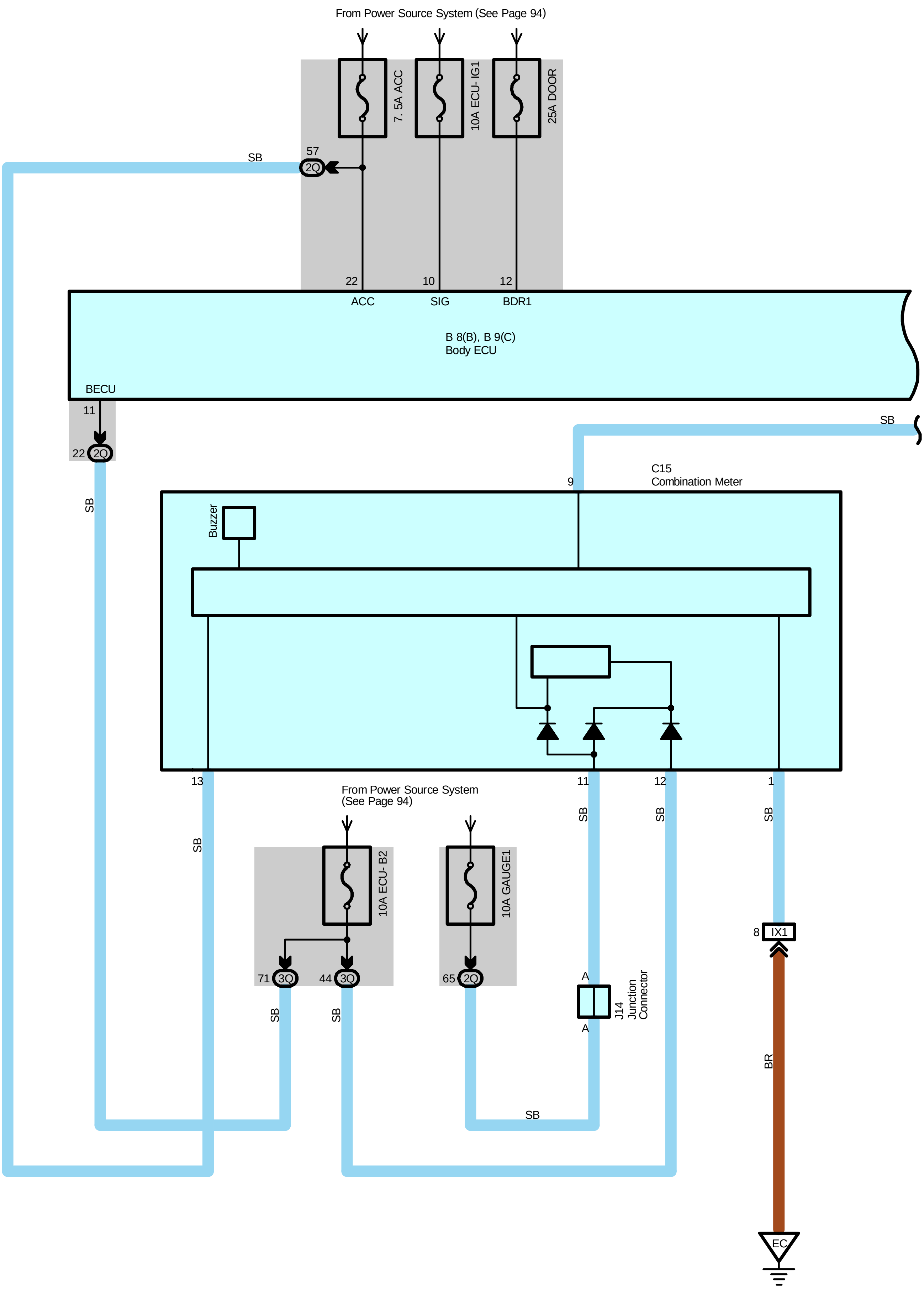
□ : Connector Joining Wire Harness and Wire Harness

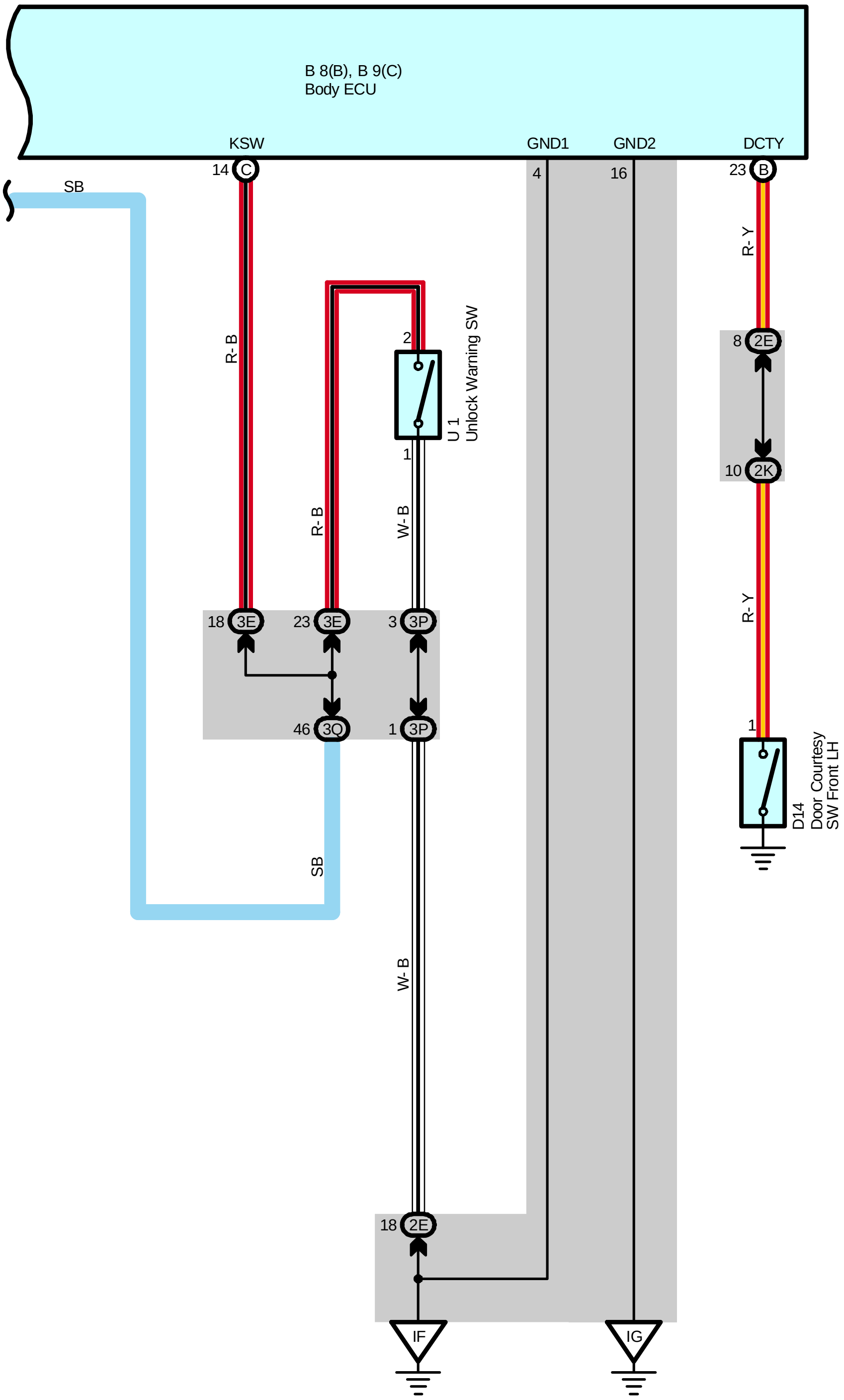
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BK	86	Front Side Under the Front Passenger's Seat

Key Reminder





B 8(B), B 9(C)
Body ECU
KSW
GND1
GND2
DCTY
14
C
4
16
23
B
SB
R- B
R- Y
2
U 1
Unlock Warning SW
1
8
2E
10
2K
R- B
W- B
R- Y
18
3E
23
3E
3
3P
46
3Q
1
3P
1
D14
Door Courtesy
SW Front LH
SB
W- B
18
2E
IF
IG

Key Reminder

System Outline

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 the combination meter TERMINAL 9, the body ECU TERMINAL (C) 14, and from the door courtesy SW front LH to the body ECU TERMINAL (B)23. As a result, the buzzer in the combination meter goes on and warns the driver that the key is remaining in the key cylinder.

Service Hints

D14 Door Courtesy SW Front LH

1-Ground : Closed with driver's door open

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
B8	B	70	C15	70	J14	71
B9	C	70	D14	72	U1	71

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3P	43	
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

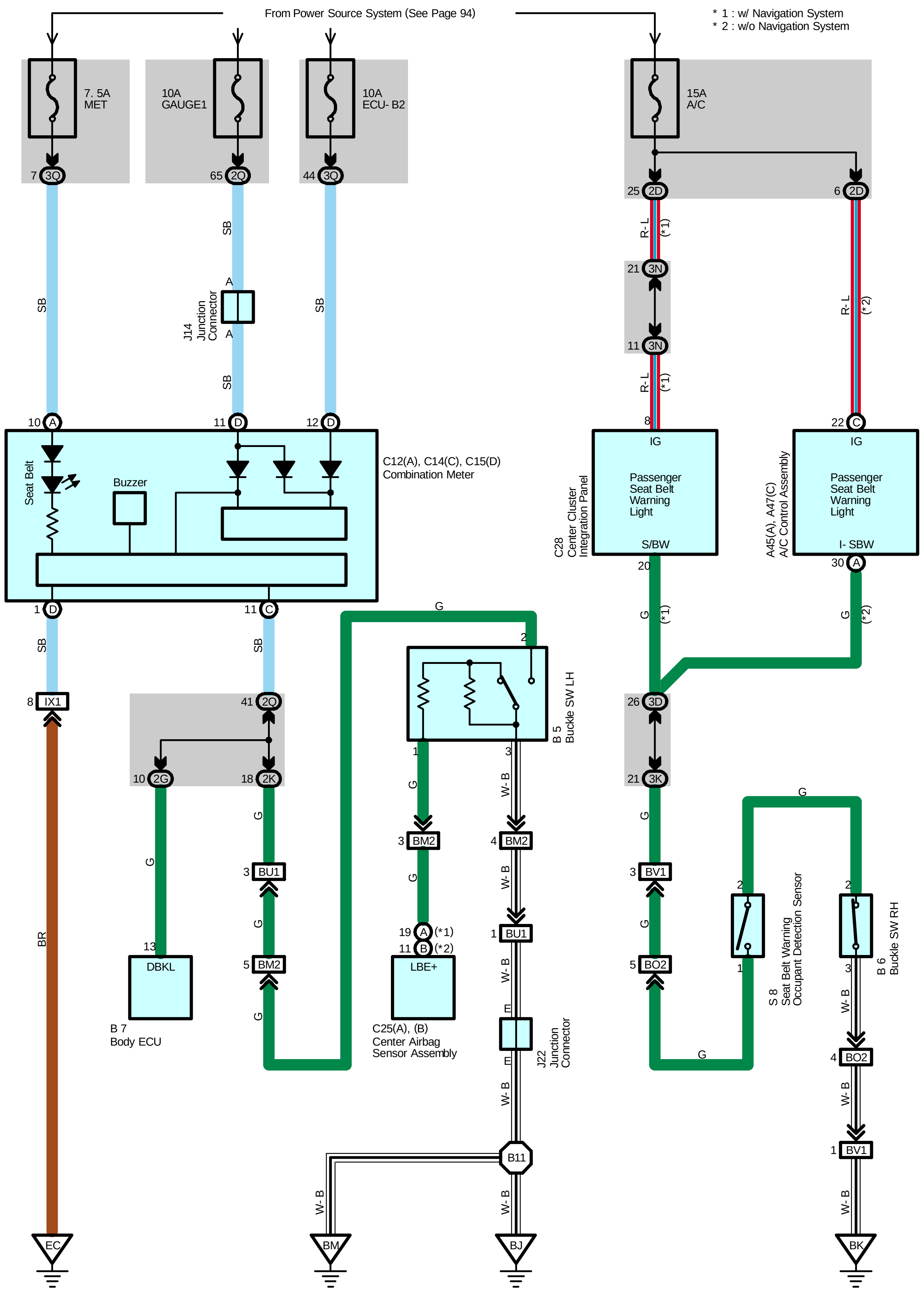
□ : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)

▽ : **Ground Points**

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH
IG		

Seat Belt Warning



System Outline

When the ignition SW turned on, a signal is input to the combination meter and the center cluster integration panel (w/ navigation system) or the A/C control assembly (w/o navigation system). To determine whether the driver has fastened the seat belt, a signal is input from the buckle SW LH to 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 (Seat belt warning 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 seat belt warning occupant detection sensor and the buckle SW RH is input to the center cluster integration panel (w/ navigation system) or the A/C control assembly (w/o navigation system), and the passenger seat belt warning light blinks to warn the passenger.

Service Hints

S8 Seat Belt Warning Occupant Detection Sensor

1-2 : Closed with passenger sit on the front passenger seat

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A45	A	70	C12	A	70	C28	70
A47	C	70	C14	C	70	J14	71
B5		74	C15	D	70	J22	72
B6		74	C25	A	70	S8	74
B7		70		B	70		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2G		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3N	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)

: Connector Joining Wire Harness and Wire Harness

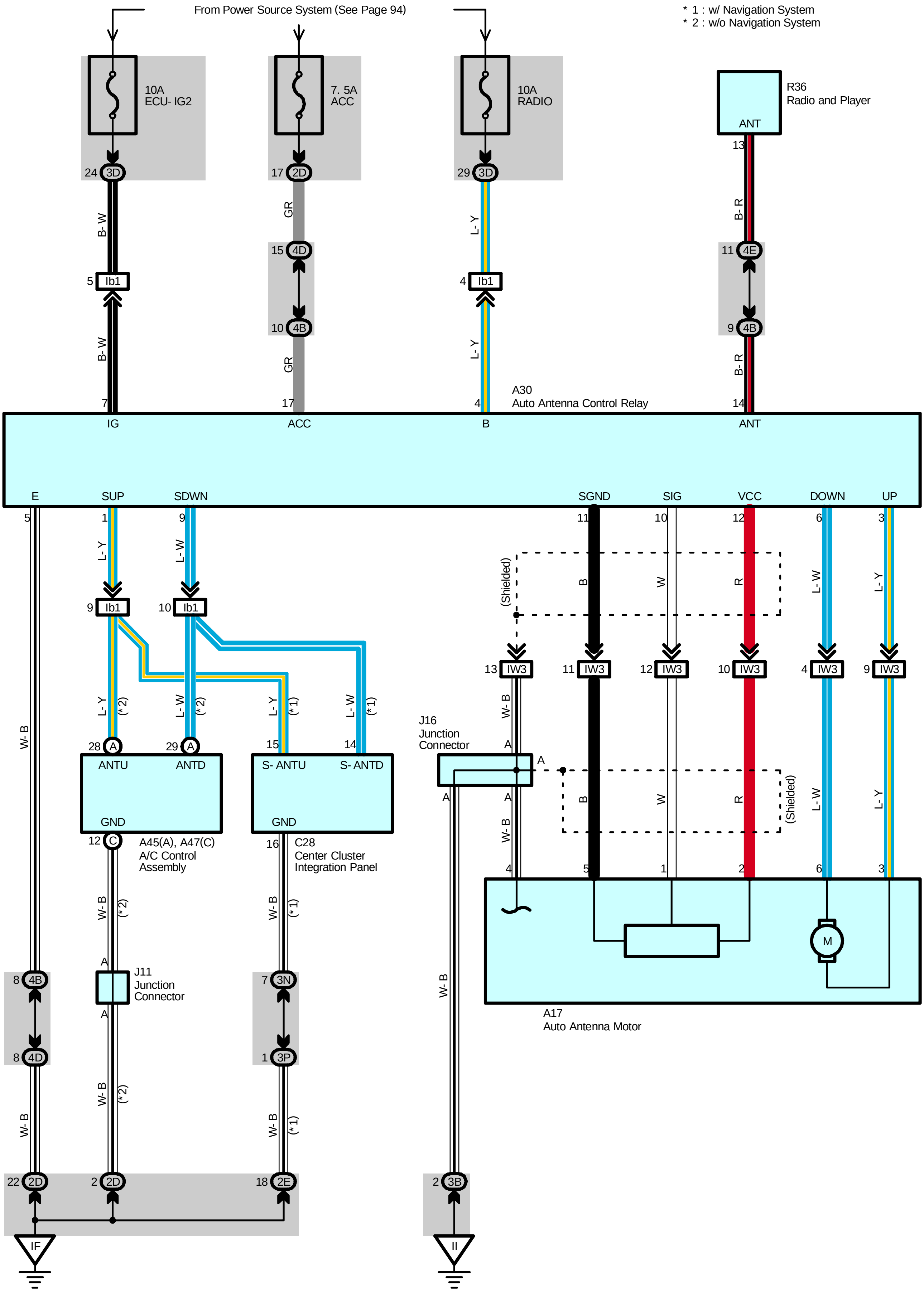
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
BM2	90	Floor No.1 Wire and Front Seat LH Wire (Front Side Under the Driver's Seat)
BO2	90	Floor No.2 Wire and Front Seat RH Wire (Front Side Under the Front Passenger's Seat)
BU1	88	Floor No.1 Wire and Floor No.1 Wire (Near the Left Rear Suspension Support)
BV1	88	Floor No.2 Wire and Floor No.2 Wire (Near the Right Rear Suspension Support)

▽ : Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
BJ	86	Under the Driver's Seat
BK	86	Front Side Under the Front Passenger's Seat
BM	86	Left Rear Side Quarter Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	88	Floor No.1 Wire			



From Power Source System (See Page 94)
* 1 : w/ Navigation System
* 2 : w/o Navigation System
10A ECU- IG2
7. 5A ACC
10A RADIO
R36 Radio and Player
ANT
A30 Auto Antenna Control Relay
IG
ACC
B
ANT
E
SUP
SDWN
SGND
SIG
VCC
DOWN
UP
(Shielded)
J16 Junction Connector
ANTU
ANTD
GND
A45(A), A47(C) A/C Control Assembly
S- ANTU
S- ANTD
C28 Center Cluster Integration Panel
J11 Junction Connector
A17 Auto Antenna Motor
M
B- W
GR
L- Y
B- R
L- W
W- B

Service Hints

A30 Auto Antenna Control Relay

4-Ground : Always approx. 12 volts
17-Ground : Approx. 12 volts with ignition SW at ACC or ON position
7-Ground : Approx. 12 volts with ignition SW at ON or ST position
5-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A17		68	A47	C	70	J16	71
A30		70	C28		70	R36	71
A45	A	70	J11		71		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3N	43	
3P		
4B	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4D		
4E		

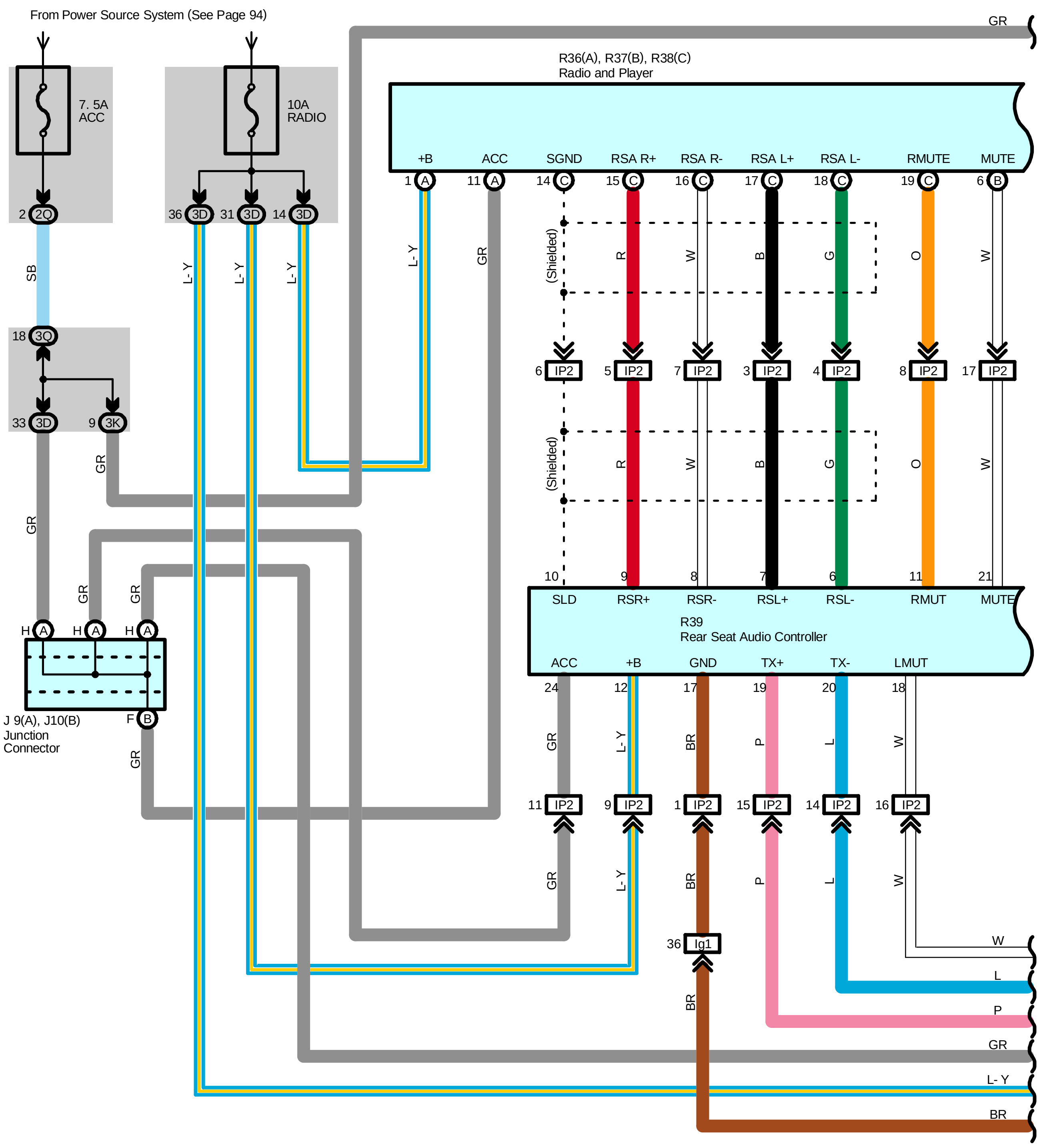
: Connector Joining Wire Harness and Wire Harness

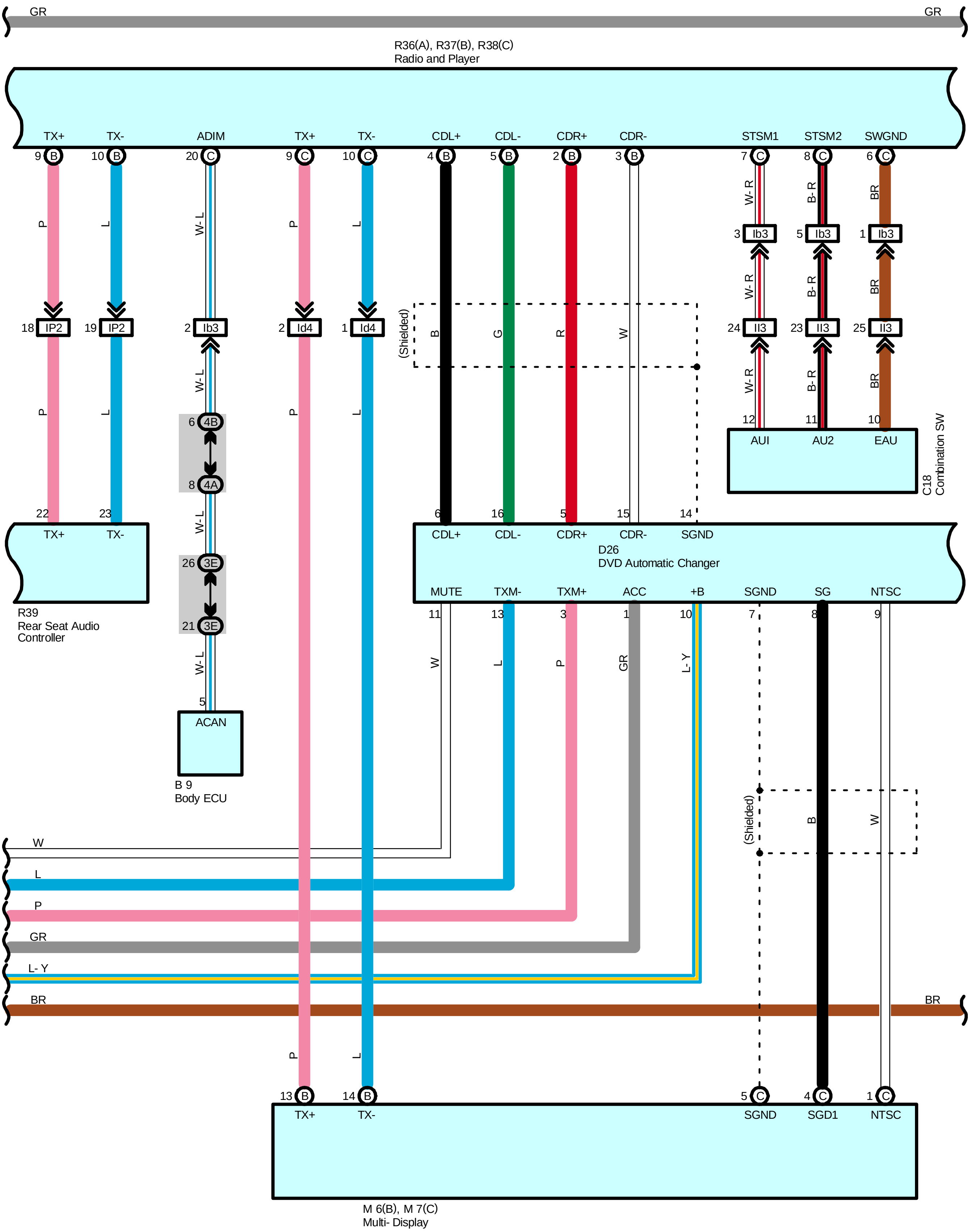
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IW3	82	Engine Room No.2 Wire and Dash Wire (Behind the Glove Box)
Ib1	84	Dash Wire and Dash Wire (Behind the Combination Meter)

▽ : Ground Points

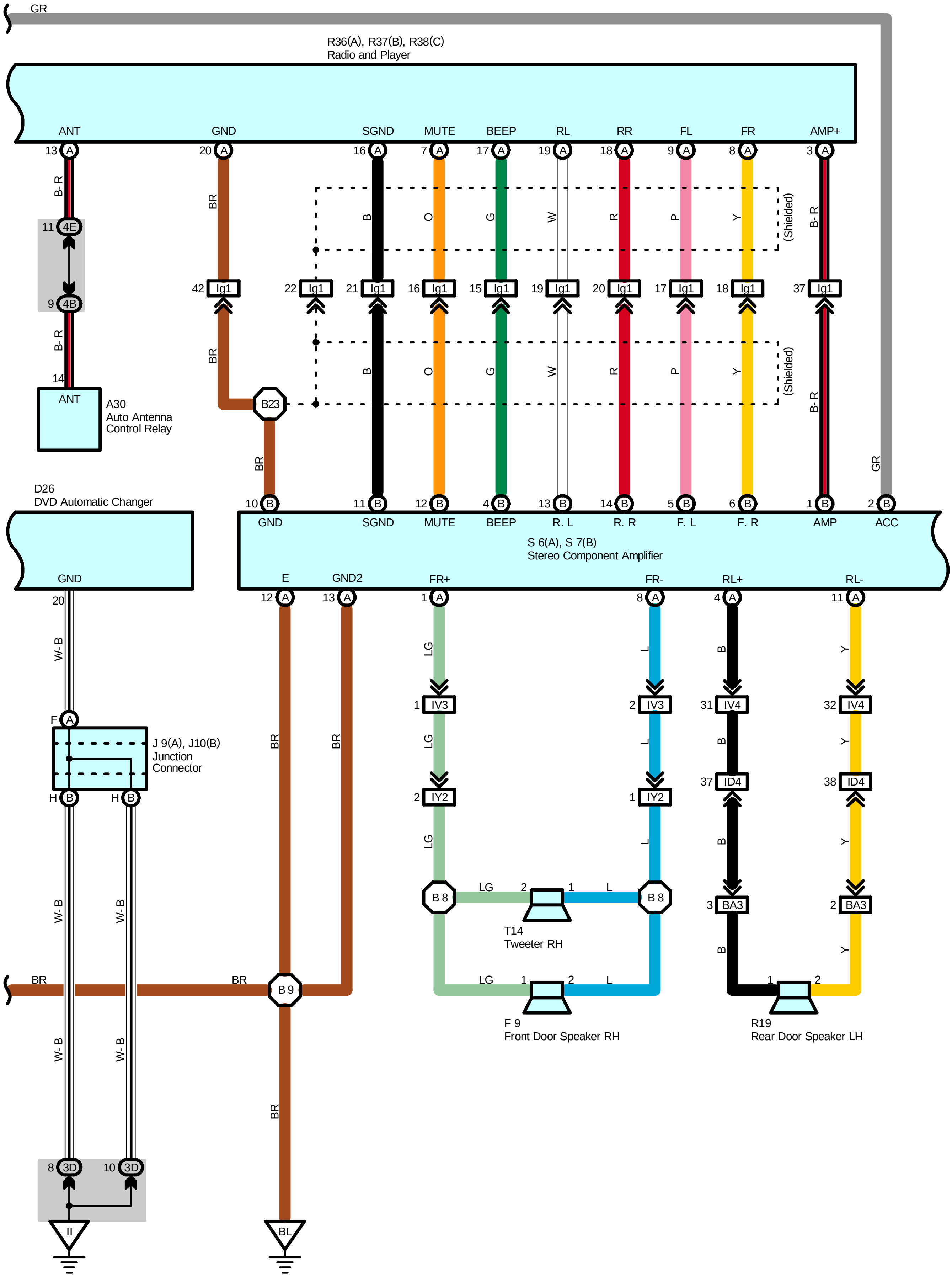
Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH

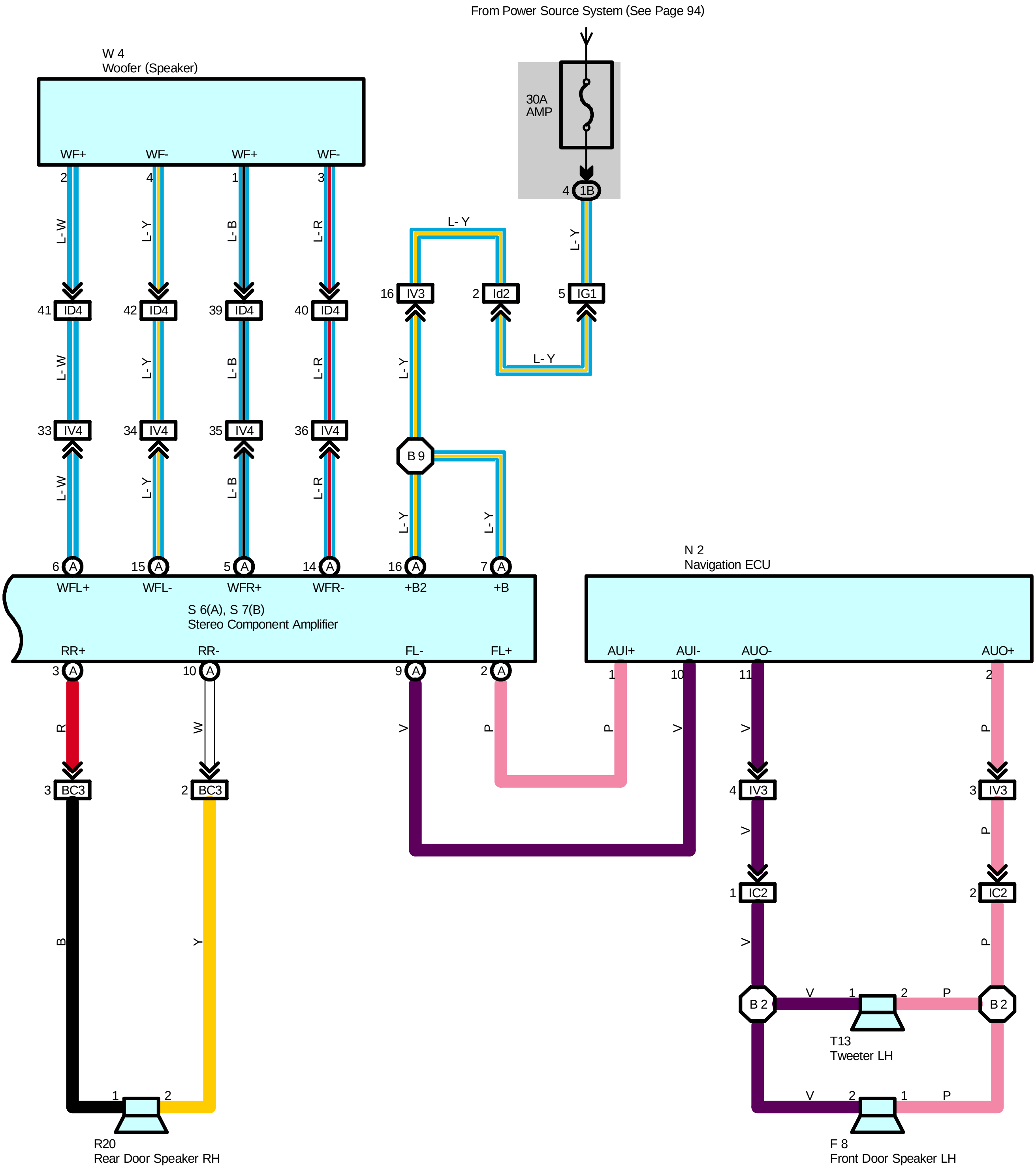
Audio System with Navigation System




GR
GR
R36(A), R37(B), R38(C)
Radio and Player
TX+
TX-
ADIM
TX+
TX-
CDL+
CDL-
CDR+
CDR-
STSM1
STSM2
SWGND
R39
Rear Seat Audio
Controller
B 9
Body ECU
ACAN
(Shielded)
C18
Combination SW
AUI
AU2
EAU
D26
DVD Automatic Changer
CDL+
CDL-
CDR+
CDR-
SGND
MUTE
TXM-
TXM+
ACC
+B
SGND
SG
NTSC
W
L
P
GR
L- Y
BR
BR
TX+
TX-
SGND
SGD1
NTSC
M 6(B), M 7(C)
Multi- Display

Audio System with Navigation System





From Power Source System (See Page 94)
W 4
Woofer (Speaker)
WF+
WF-
WF+
WF-
30A
AMP
1B
L-W
L-Y
L-B
L-R
ID4
IV3
Id2
IG1
IV4
B 9
N 2
Navigation ECU
WFL+
WFL-
WFR+
WFR-
+B2
+B
S 6(A), S 7(B)
Stereo Component Amplifier
RR+
RR-
FL-
FL+
AUI+
AUI-
AUO-
AUO+
R
W
V
P
BC3
IC2
B
Y
B 2
T13
Tweeter LH
R20
Rear Door Speaker RH
F 8
Front Door Speaker LH

Audio System with Navigation System

Service Hints

R36 Radio and Player

1-Ground : Always approx. 12 volts
11-Ground : Approx. 12 volts with ignition SW at ACC or ON position

S6 (A), S7 (B) Stereo Component Amplifier

(A) 7, (A) 16-Ground : Always approx. 12 volts
(B) 2-Ground : Approx. 12 volts with ignition SW at ACC or ON position
(A) 12, (A) 13-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A30		70	M6	B	71	R39		71
B9		70	M7	C	71	S6	A	73
C18		70	N2		72	S7	B	73
D26		70	R19		73	T13		73
F8		72	R20		73	T14		73
F9		72	R36	A	71	W4		73
J9	A	71	R37	B	71			
J10	B	71	R38	C	71			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D 3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A 4B 4E	52	Dash Wire and J/B No.4 (Instrument Panel Center)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
IP2	80	Rear Console Box Wire and Dash Wire (Right Side of Rear Console)
IV3 IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
Ib3	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Id2 Id4	84	Dash Wire and Dash Wire (Instrument Panel Center)
Ig1	84	Dash Wire and Floor No.2 Wire (Right Side of Front Console)
BA3	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC3	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)

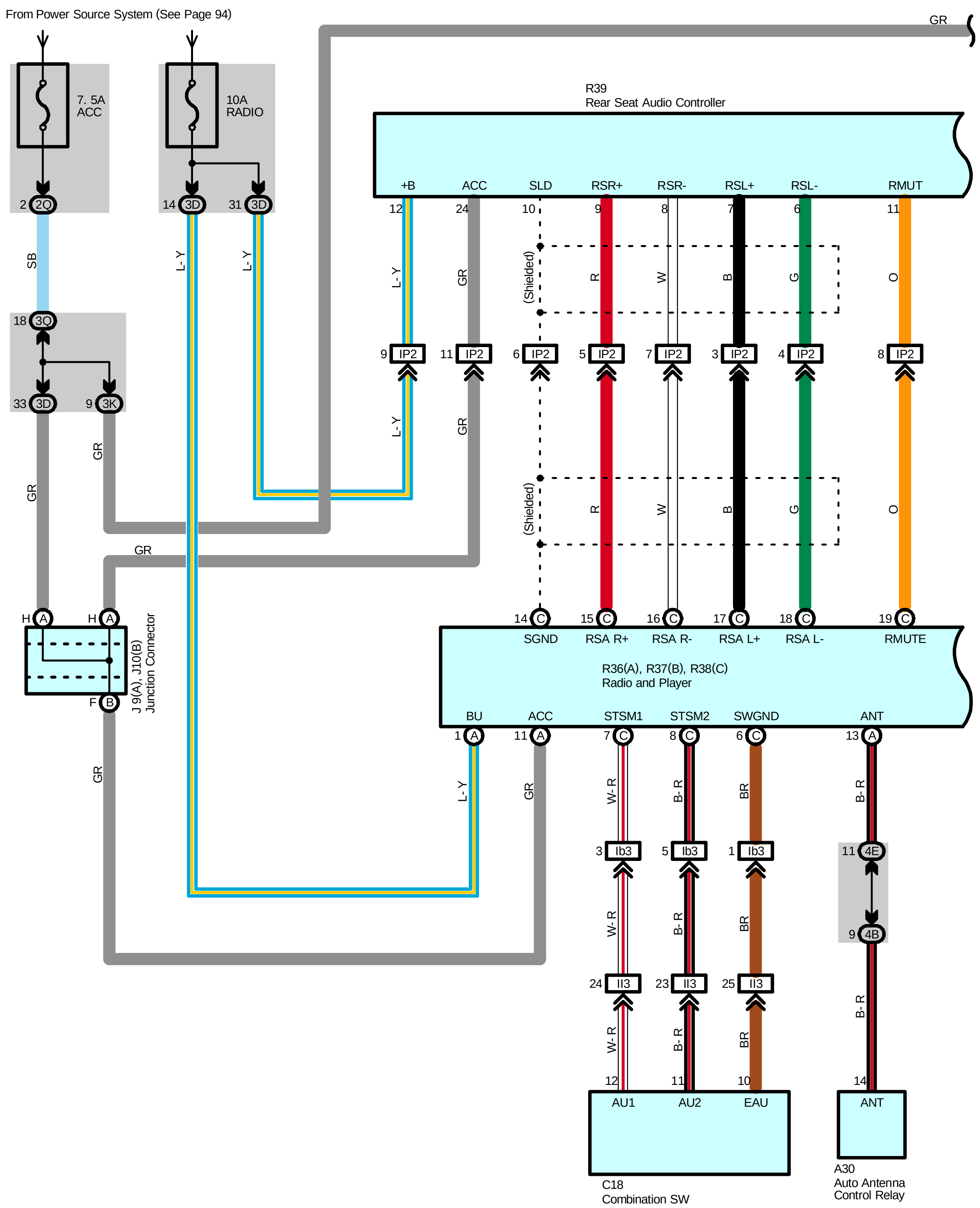
▽ : Ground Points

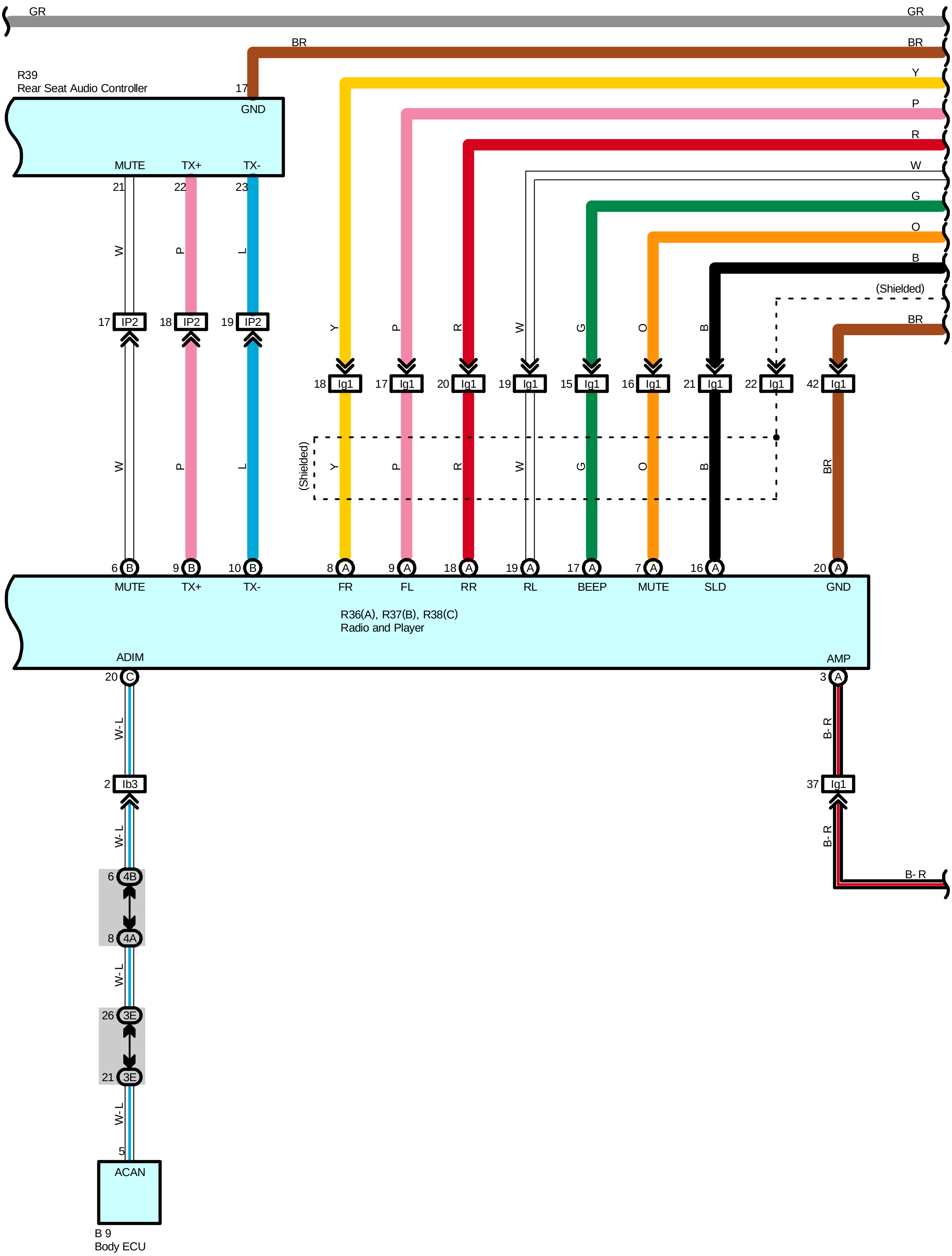
Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH
BL	86	Rear Side Under the Front Passenger's Seat

: **Splice Points**

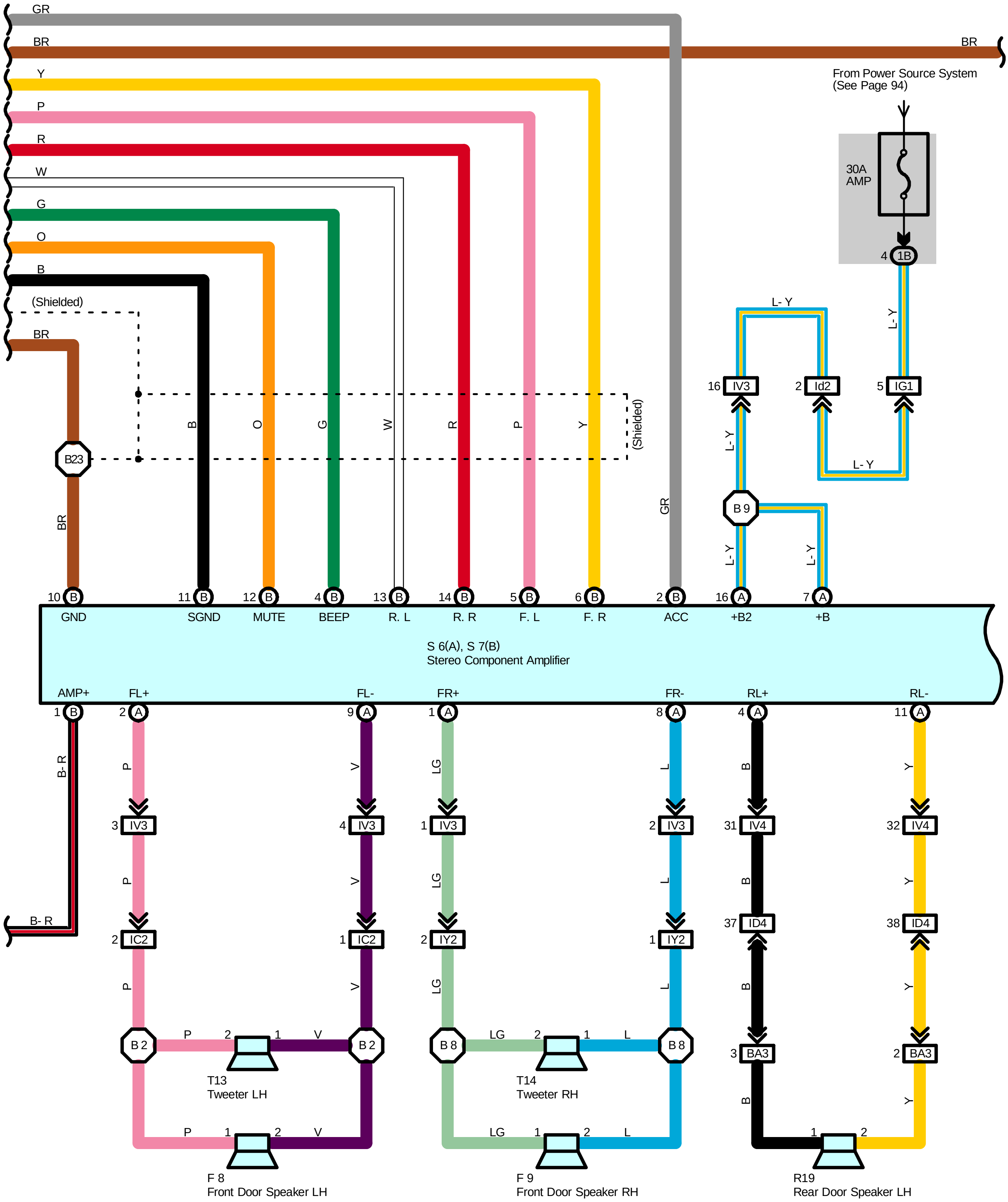
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B9	88	Floor No.2 Wire
B8	88	Front Door RH Wire	B23		

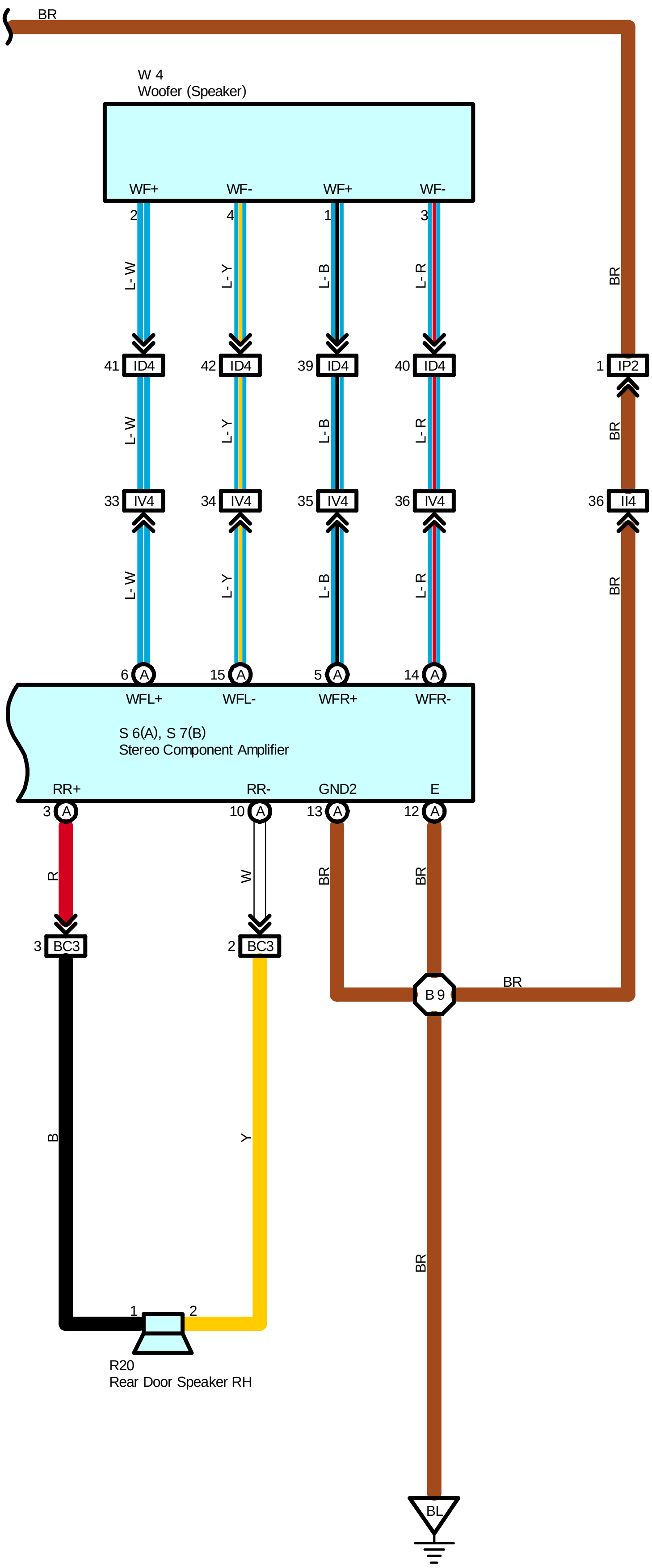
Audio System without Navigation System




GR
BR
Y
P
R
W
G
O
B
(Shielded)
R39
Rear Seat Audio Controller
17
GND
MUTE
TX+
TX-
21
22
23
IP2
Ig1
R36(A), R37(B), R38(C)
Radio and Player
FR
FL
RR
RL
BEEP
MUTE
SLD
GND
ADIM
AMP
W-L
B- R
Ib3
4B
4A
3E
ACAN
B 9
Body ECU

Audio System without Navigation System





BR
W 4
Woofer (Speaker)
WF+
WF-
WF+
WF-
L-W
L-Y
L-B
L-R
BR
41 ID4
42 ID4
39 ID4
40 ID4
1 IP2
33 IV4
34 IV4
35 IV4
36 IV4
36 II4
WFL+
WFL-
WFR+
WFR-
S 6(A), S 7(B)
Stereo Component Amplifier
RR+
RR-
GND2
E
R
W
3 BC3
2 BC3
B 9
B
Y
R20
Rear Door Speaker RH
BL

Audio System without Navigation System

Service Hints

R36 Radio and Player

1-Ground : Always approx. 12 volts
11-Ground : Approx. 12 volts with ignition SW at ACC or ON position

S6 (A), S7 (B) Stereo Component Amplifier

(A) 7, (A) 16-Ground : Always approx. 12 volts
(B) 2-Ground : Approx. 12 volts with ignition SW at ACC or ON position
(A) 12, (A) 13-Ground : Always continuity

○ : **Parts Location**

Code		See Page	Code		See Page	Code		See Page
A30		70	J10	B	71	R39		71
B9		70	R19		73	S6	A	73
C18		70	R20		73	S7	B	73
F8		72	R36	A	71	T13		73
F9		72	R37	B	71	T14		73
J9	A	71	R38	C	71	W4		73

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4B		
4E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
ID4	78	Dash Wire and Floor No.1 Wire (Left Kick Panel)
IG1	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
II3	80	Dash Wire and Column Wire (Near the Ignition SW)
II4		
IP2	80	Rear Console Box Wire and Dash Wire (Right Side of Rear Console)
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IV4		
IY2	82	Front Door RH Wire and Dash Wire (Right Kick Panel)
Ib3	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Id2	84	Dash Wire and Dash Wire (Instrument Panel Center)
Ig1	84	Dash Wire and Floor No.2 Wire (Right Side of Front Console)
BA3	86	Rear Door LH Wire and Floor No.1 Wire (Left Side of Center Pillar)
BC3	86	Rear Door RH Wire and Floor No.2 Wire (Right Side of Center Pillar)

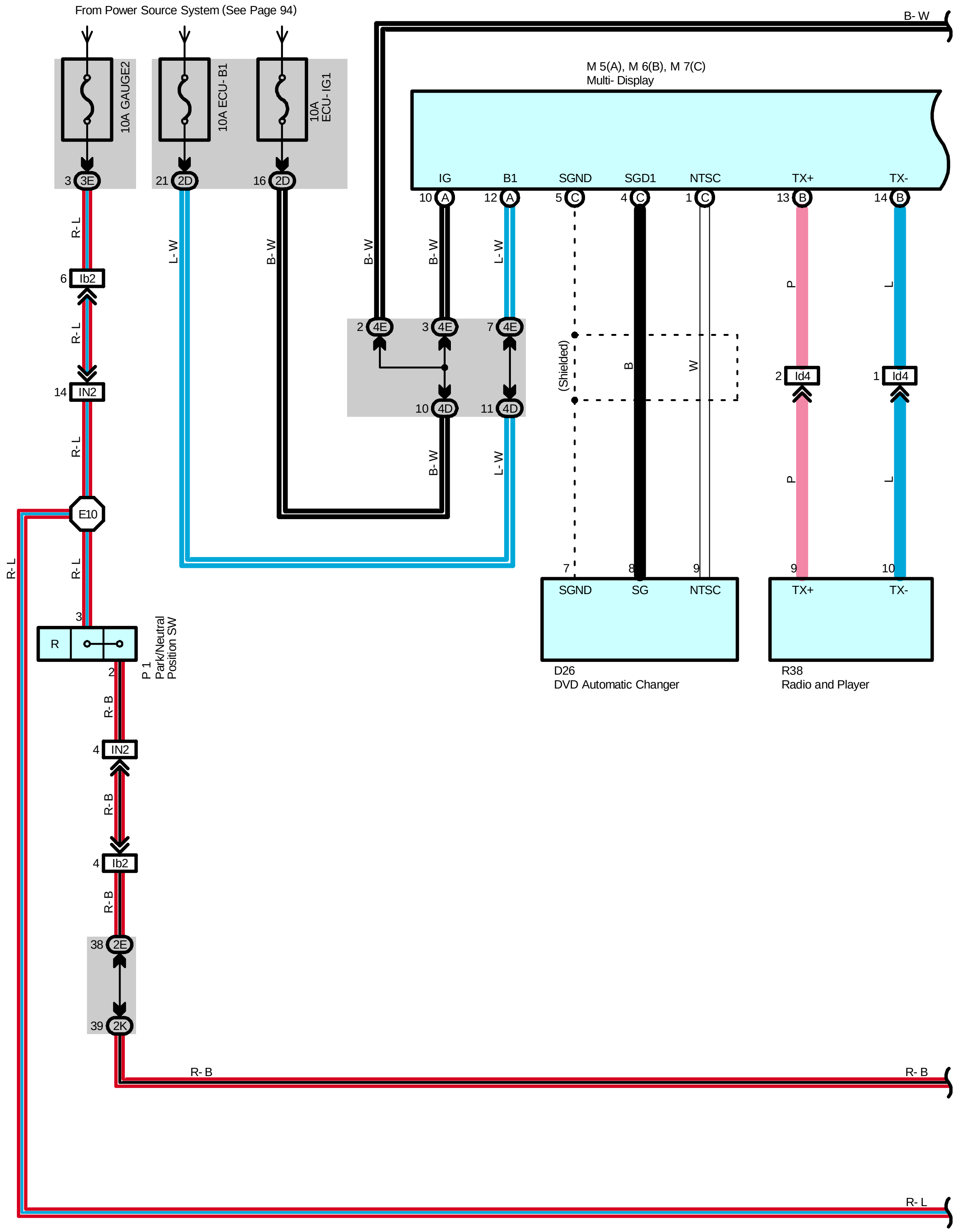
▽ : **Ground Points**

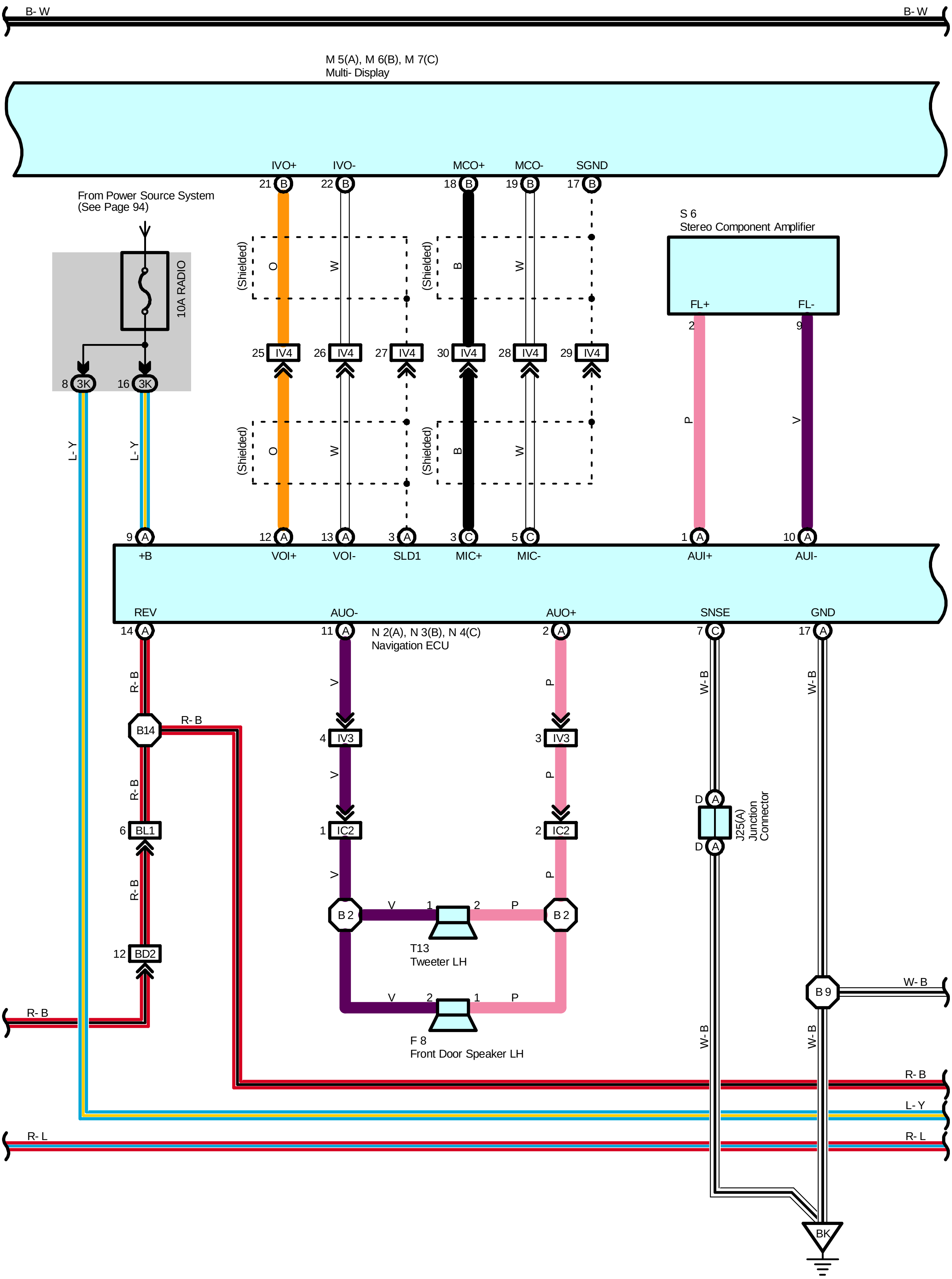
Code	See Page	Ground Points Location
BL	86	Rear Side Under the Front Passenger's Seat

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	88	Front Door LH Wire	B9	88	Floor No.2 Wire
B8	88	Front Door RH Wire	B23		

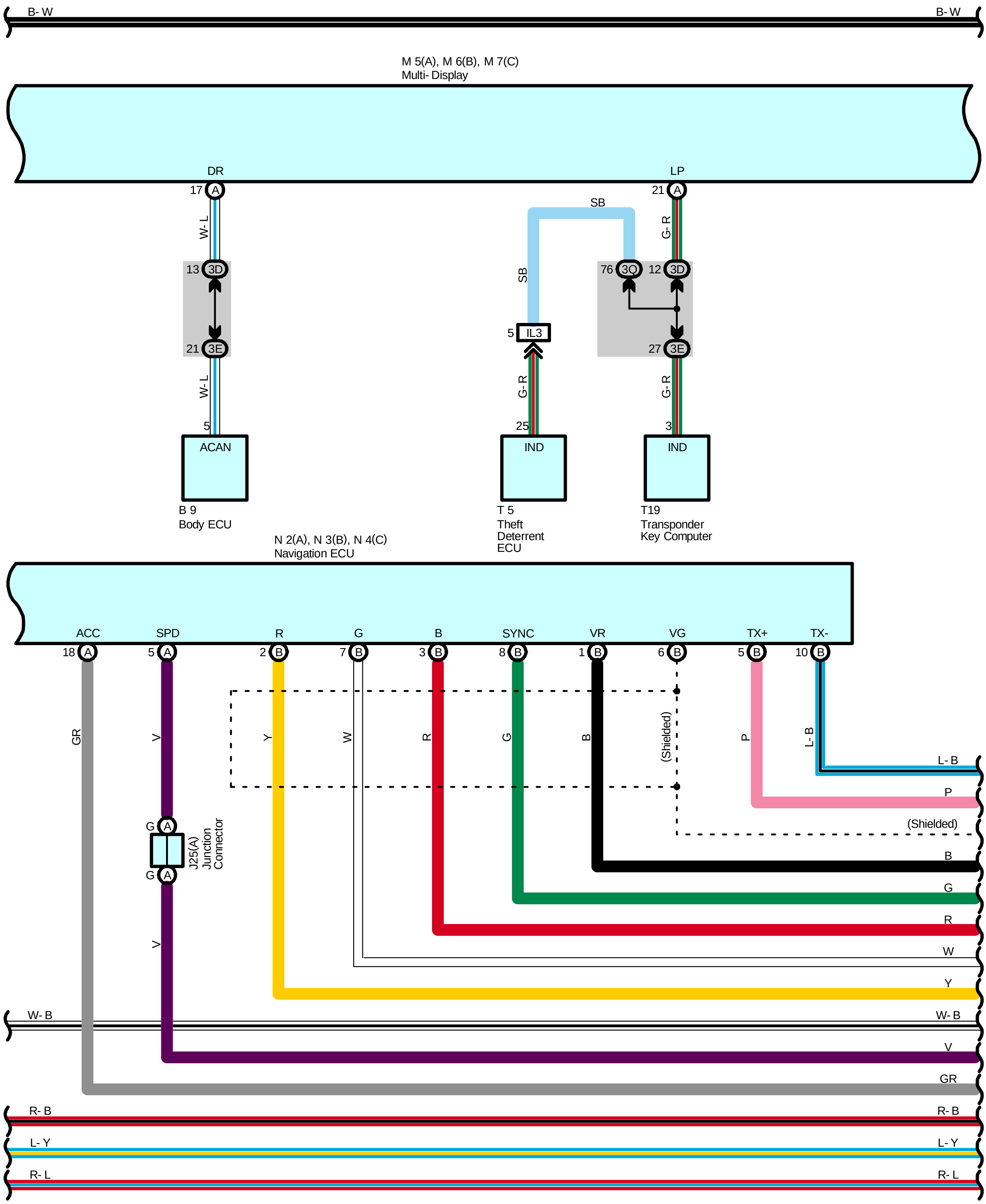
Navigation System and Parking Assist (Rear View Monitor)

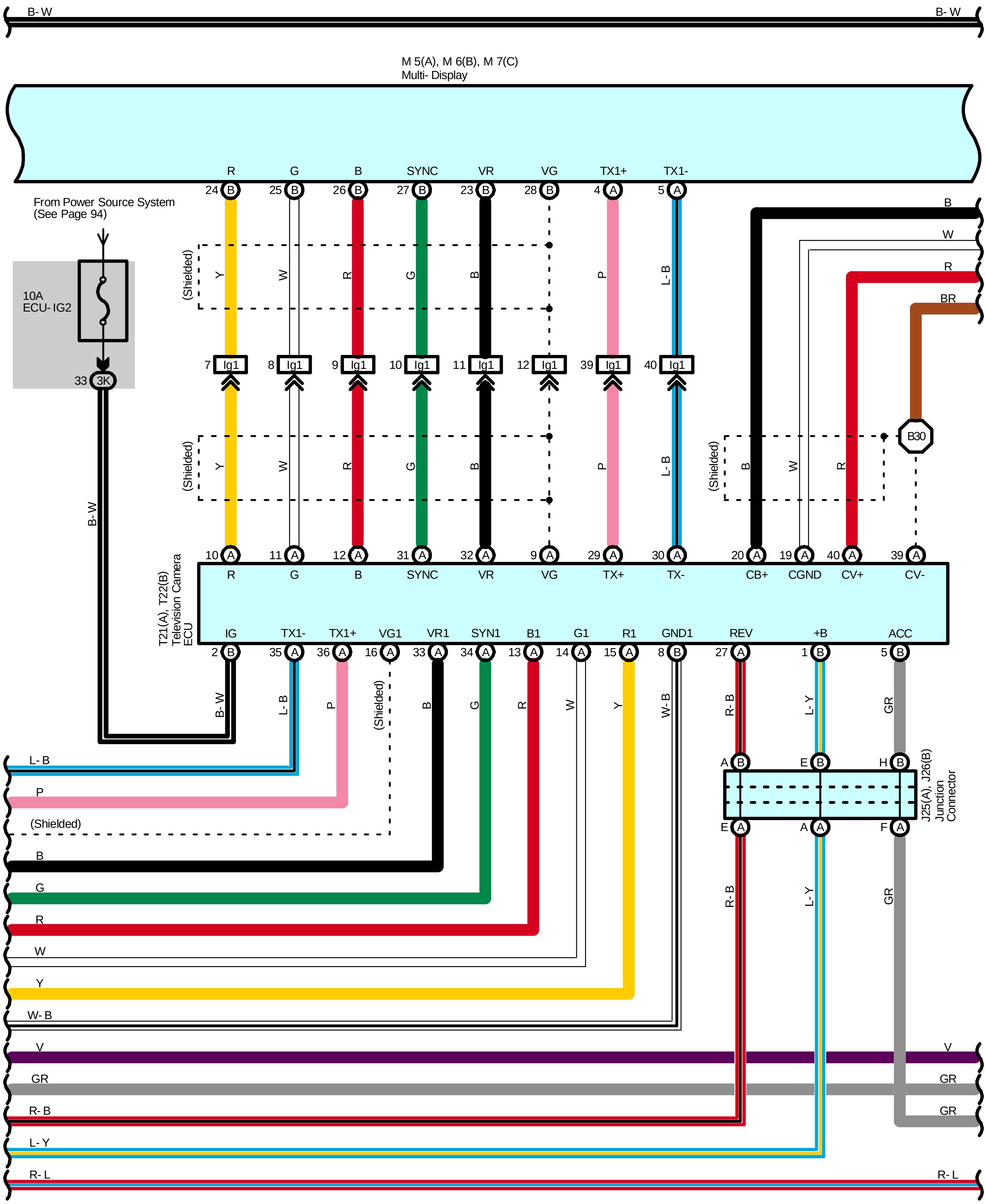


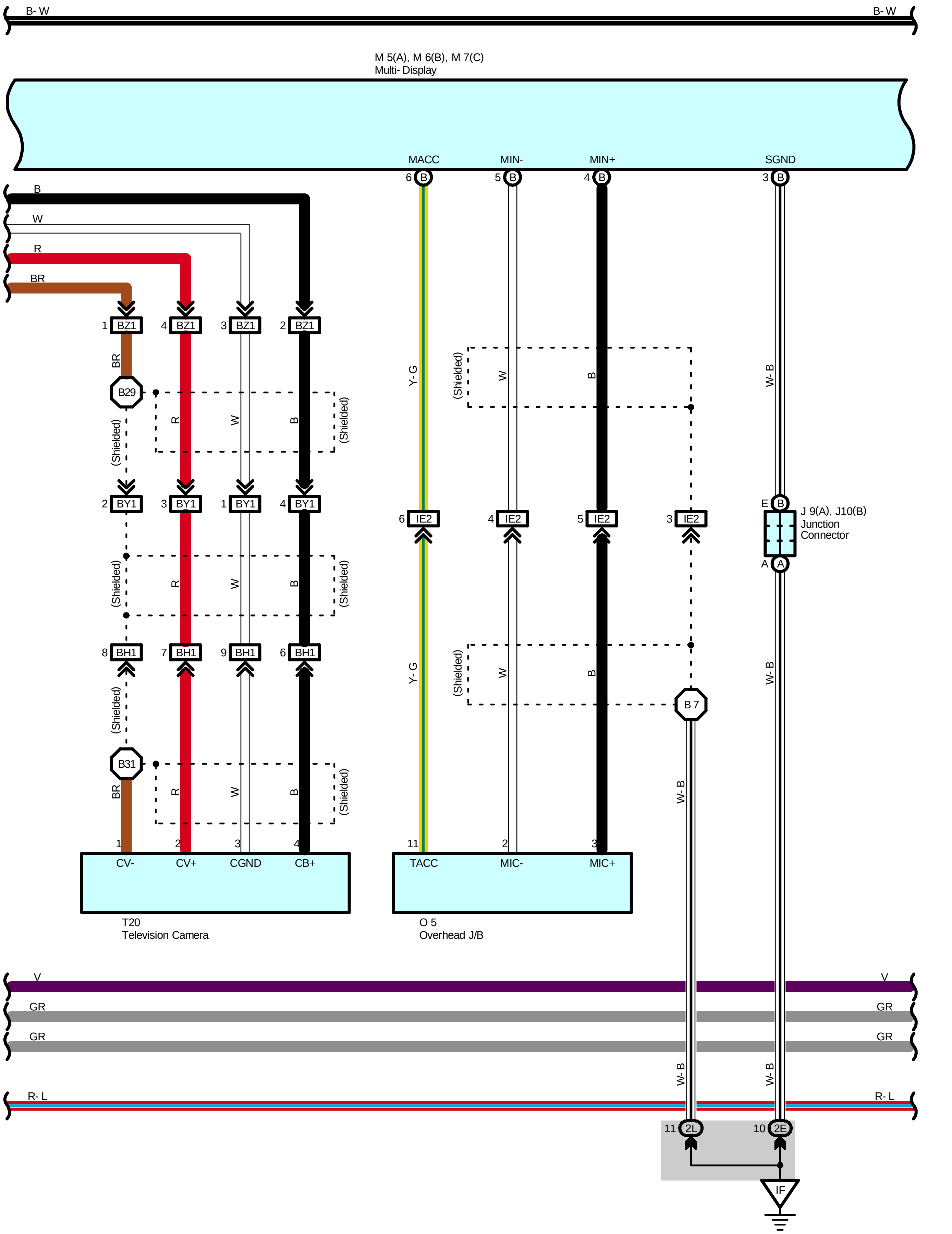


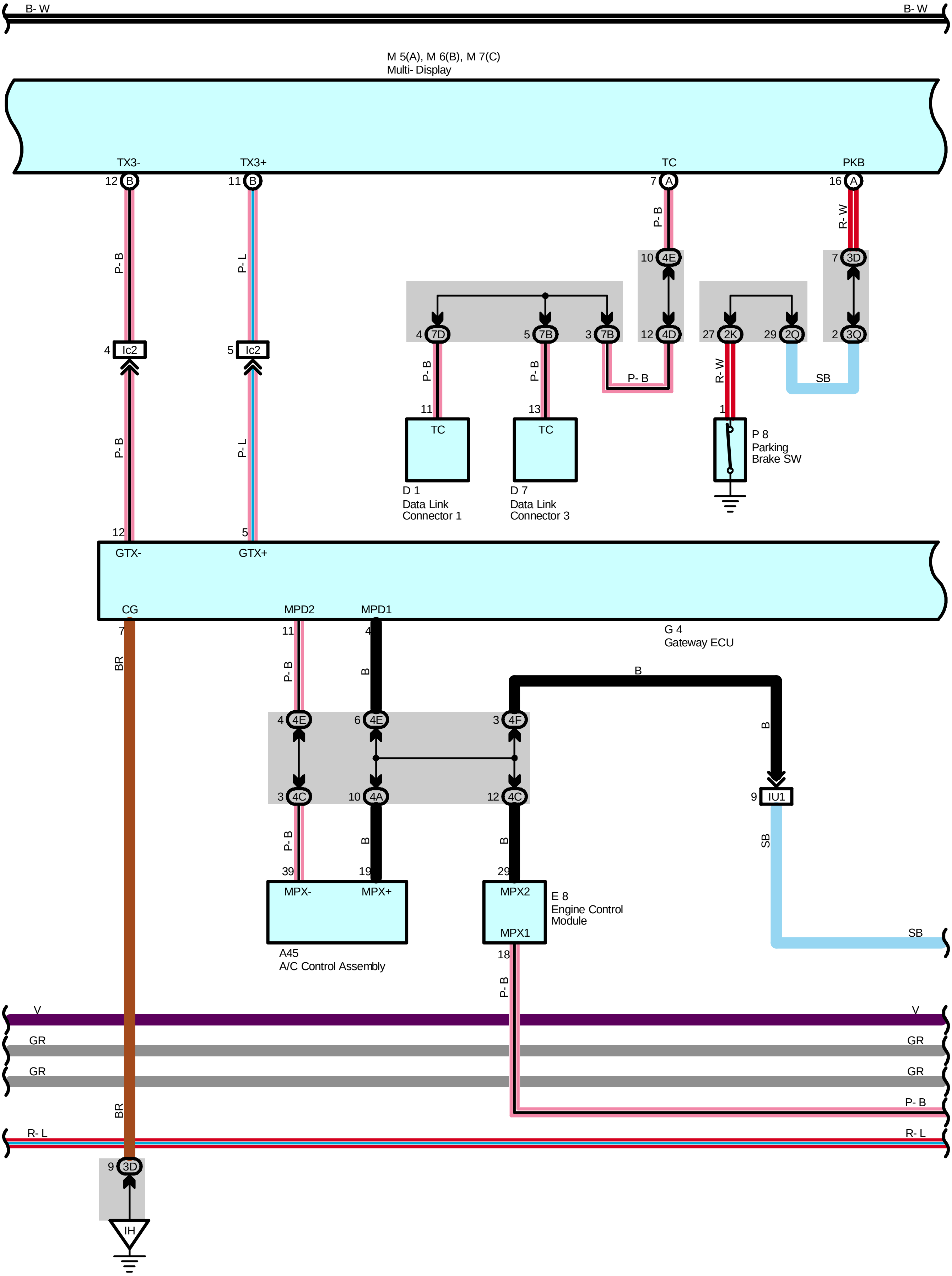
B- W
M 5(A), M 6(B), M 7(C)
Multi- Display
IVO+
IVO-
MCO+
MCO-
SGND
From Power Source System
(See Page 94)
10A RADIO
S 6
Stereo Component Amplifier
FL+
FL-
(Shielded)
IV4
3K
L- Y
+B
VOI+
VOI-
SLD1
MIC+
MIC-
AUI+
AUI-
REV
AUO-
AUO+
SNSE
GND
N 2(A), N 3(B), N 4(C)
Navigation ECU
R- B
B14
IV3
BL1
IC2
BD2
B 2
T13
Tweeter LH
F 8
Front Door Speaker LH
J25(A)
Junction
Connector
W- B
B 9
R- L
BK

Navigation System and Parking Assist (Rear View Monitor)

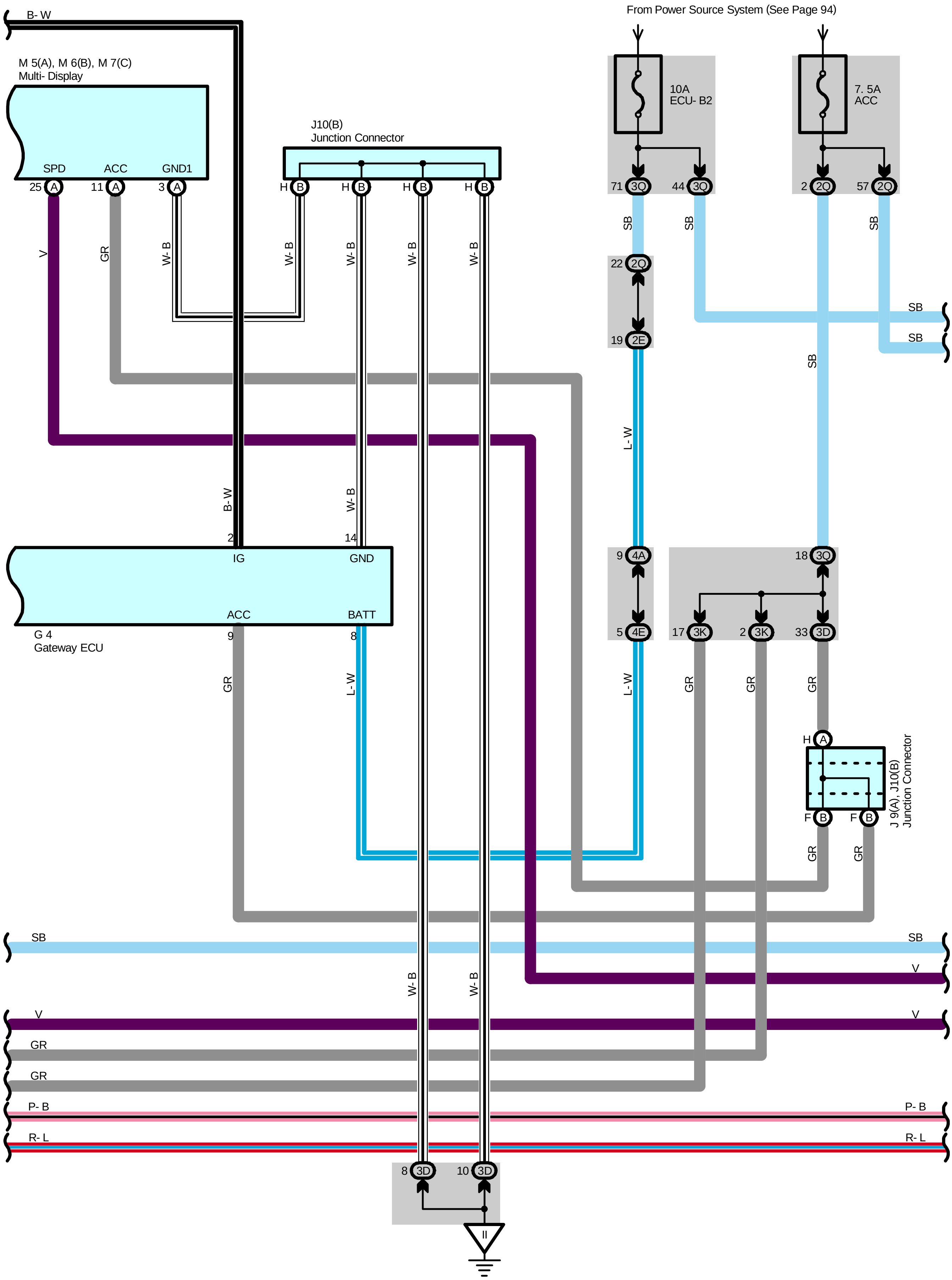


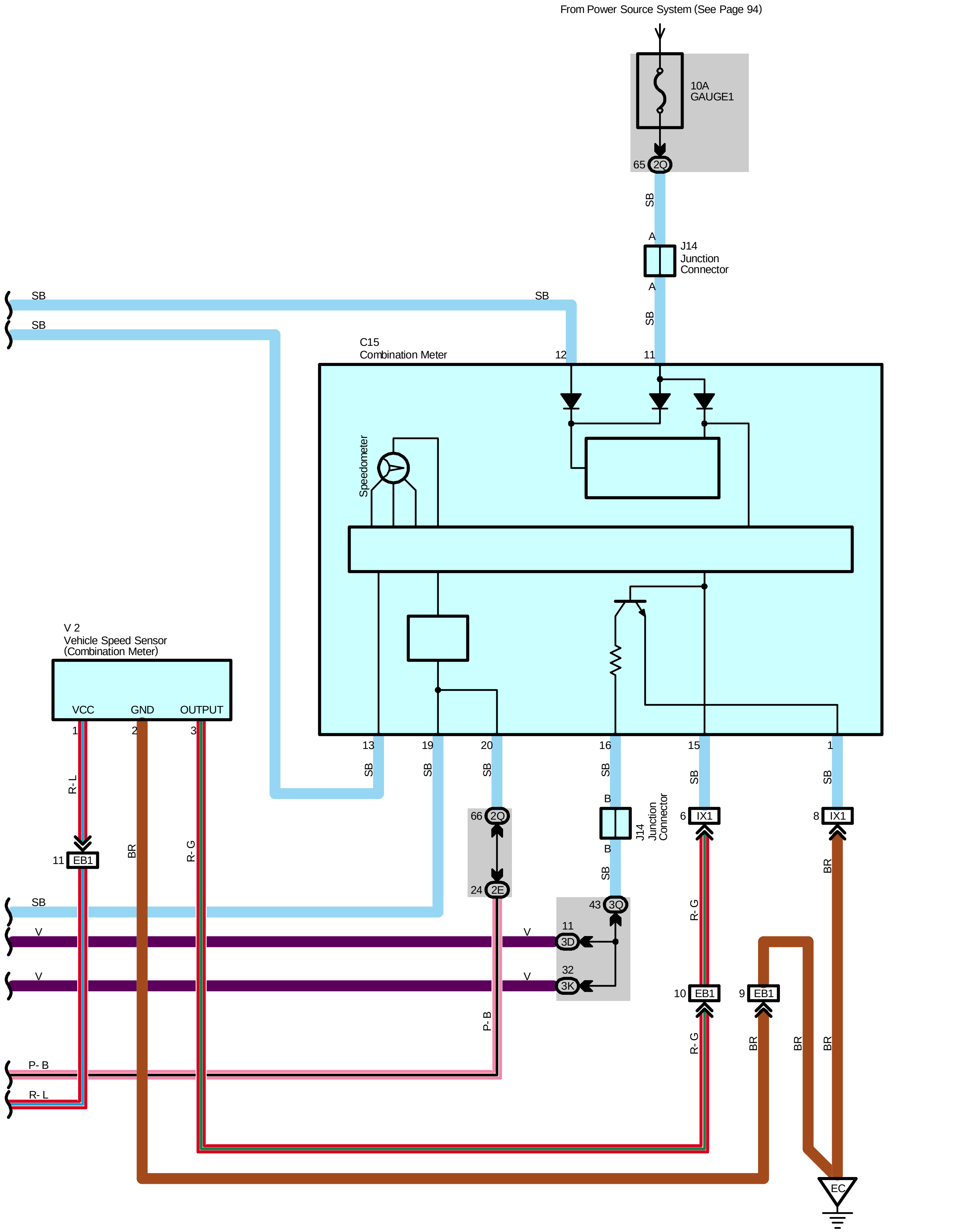

B- W
B- W
M 5(A), M 6(B), M 7(C)
Multi- Display
R
G
B
SYNC
VR
VG
TX1+
TX1-
From Power Source System
(See Page 94)
10A
ECU- IG2
33 3K
(Shielded)
Ig1
B-W
T21(A), T22(B)
Television Camera
ECU
CB+
CGND
CV+
CV-
IG
TX1-
TX1+
VG1
VR1
SYN1
B1
G1
R1
GND1
REV
+B
ACC
B30
J25(A), J26(B)
Junction
Connector
L- B
P
(Shielded)
B
G
R
W
Y
W- B
V
GR
R- B
L- Y
R- L
BR


B- W
B- W
M 5(A), M 6(B), M 7(C)
Multi- Display
MACC
MIN-
MIN+
SGND
B
W
R
BR
BZ1
BR
B29
(Shielded)
R
W
B
BY1
B31
BH1
Y- G
W
IE2
J 9(A), J10(B)
Junction
Connector
W- B
B 7
CV-
CV+
CGND
CB+
T20
Television Camera
TACC
MIC-
MIC+
O 5
Overhead J/B
V
GR
R- L
2L
2E
IF


B- W
B- W
M 5(A), M 6(B), M 7(C)
Multi- Display
TX3-
TX3+
TC
PKB
12 B
11 B
7 A
16 A
P- B
P- L
P- B
R- W
10 4E
7 3D
4 7D
5 7B
3 7B
12 4D
27 2K
29 2Q
2 3Q
4 Ic2
5 Ic2
P- B
P- B
P- B
R- W
SB
11
13
1
TC
TC
P 8
Parking
Brake SW
D 1
Data Link
Connector 1
D 7
Data Link
Connector 3
P- B
P- L
12
5
GTX-
GTX+
CG
MPD2
MPD1
7
11
4
G 4
Gateway ECU
BR
P- B
B
B
B
4 4E
6 4E
3 4F
3 4C
10 4A
12 4C
9 IU1
P- B
B
B
SB
39
19
29
MPX-
MPX+
MPX2
MPX1
E 8
Engine Control
Module
18
A45
A/C Control Assembly
SB
P- B
V
V
GR
GR
GR
GR
P- B
BR
R- L
R- L
9 3D
IH

Navigation System and Parking Assist (Rear View Monitor)




From Power Source System (See Page 94)
10A
GAUGE1
65 2Q
SB
A
J14
Junction
Connector
A
SB
SB
SB
SB
C15
Combination Meter
12
11
Speedometer
V 2
Vehicle Speed Sensor
(Combination Meter)
VCC
GND
OUTPUT
1
2
3
R- L
BR
R- G
11 EB1
13
19
20
16
15
1
SB
SB
SB
SB
SB
SB
66 2Q
24 2E
B
B
J14
Junction
Connector
6 IX1
8 IX1
SB
V
V
V
V
43 3Q
11 3D
32 3K
P- B
P- B
R- L
R- G
BR
10 EB1
9 EB1
R- G
BR
BR
BR
EC

Navigation System and Parking Assist (Rear View Monitor)

System Outline

The navigation system displays the operating status and instructions for the automatic air conditioning or radio and player, as well as trip information. Additionally, the navigation system precisely measures the current vehicle position, displays the map obtained from the map database on the screen, and informs the route to the destination shown on the map using voice guidance.

Service Hints

N2 (A), N4 (C) Navigation ECU

(A) 9-Ground : Always approx. 12 volts
(A)18-Ground : Approx. 12 volts with ignition SW at ACC or ON position
(A)17-Ground : Always continuity
(C) 7-Ground : Always continuity

M5 (A), M6 (B) Multi-Display

(A)12-Ground : Always approx. 12 volts
(A)11-Ground : Approx. 12 volts with ignition SW at ACC or ON position
(A)10-Ground : Approx. 12 volts with ignition SW at ON or ST position
(A) 3-Ground : Always continuity
(B) 3-Ground : Always continuity

T22 Television Camera ECU

1-Ground : Always approx. 12 volts
5-Ground : Approx. 12 volts with ignition SW at ACC or ON position
2-Ground : Approx. 12 volts with ignition SW at ON or ST position
8-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A45		70	J14		71	P8		73
B9		70	J25	A	72	R38		71
C15		70	J26	B	72	S6		73
D1		68	M5	A	71	T5		71
D7		70	M6	B	71	T13		73
D26		70	M7	C	71	T19		71
E8		70	N2	A	72	T20		73
F8		72	N3	B	72	T21	A	73
G4		70	N4	C	72	T22	B	73
J9	A	71	O5		72	V2		69
J10	B	71	P1		69			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2L	28	Roof No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4D		
4E		
4F		
7B	64	Dash Wire and J/B No.7 (Behind the Grove Box)
7D	64	Engine Room No.2 Wire and J/B No.7 (Behind the Grove Box)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
IC2	78	Front Door LH Wire and Dash Wire (Left Kick Panel)
IE2	78	Dash Wire and Roof No.1 Wire (Left Kick Panel)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IV3	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
IV4		
IX1	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Ic2	84	Dash Wire and Dash Wire (Behind the Center Panel)
Id4	84	Dash Wire and Dash Wire (Instrument Panel Center)
Ig1	84	Dash Wire and Floor No.2 Wire (Right Side of Front Console)
BD2	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BH1	86	Pillar No.1 Wire and Back Door Upper Wire (Left Side of Back Door)
BL1	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BY1	88	Pillar No.1 Wire and Floor No.3 Wire (Left Rear Side Quarter Panel)
BZ1	88	Floor No.3 Wire and Floor No.2 Wire (Right Side of Rear Floor Crossmember)

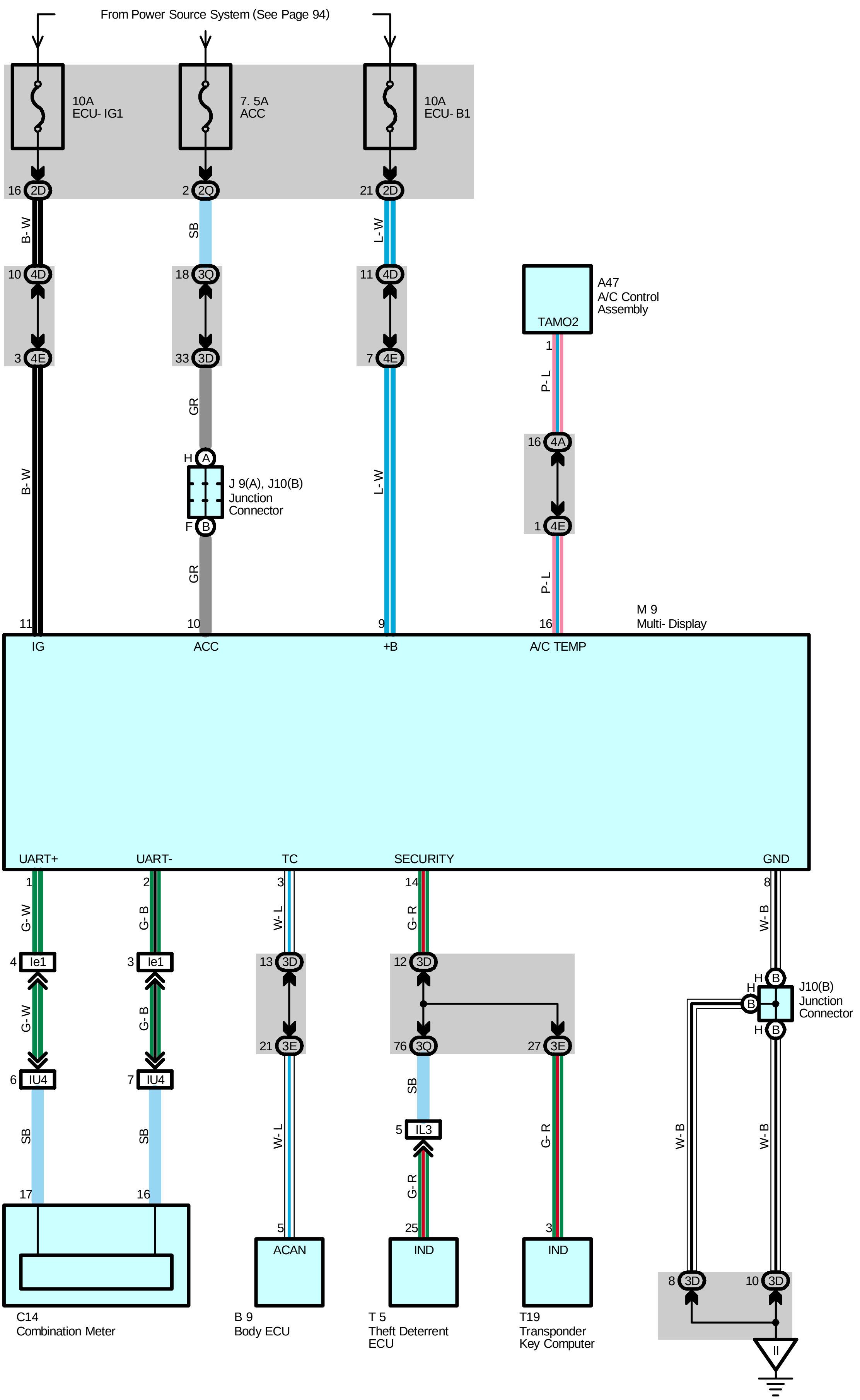
: Ground Points

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH
IH	78	Set Bolt of Cowl Side J/B RH
II		
BK	86	Front Side Under the Front Passenger’s Seat

Navigation System and Parking Assist (Rear View Monitor)

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E10	76	Engine Wire	B14	88	Floor No.2 Wire
B2	88	Front Door LH Wire	B29	88	Floor No.3 Wire
B7	88	Roof No.1 Wire	B30	88	Floor No.2 Wire
B9	88	Floor No.2 Wire	B31	88	Back Door Upper Wire


From Power Source System (See Page 94)
10A
ECU- IG1
7. 5A
ACC
10A
ECU- B1
16 2D
2 2Q
21 2D
B- W
SB
L- W
10 4D
18 3Q
11 4D
3 4E
33 3D
7 4E
A47
A/C Control
Assembly
TAMO2
1
P- L
16 4A
1 4E
GR
H A
J 9(A), J10(B)
Junction
Connector
F B
M 9
Multi- Display
11
10
9
16
IG
ACC
+B
A/C TEMP
UART+
UART-
TC
SECURITY
GND
1
2
3
14
8
G- W
G- B
W- L
G- R
W- B
4 Ie1
3 Ie1
13 3D
12 3D
J10(B)
Junction
Connector
21 3E
76 3Q
27 3E
6 IU4
7 IU4
SB
5 IL3
17
16
5
25
3
ACAN
IND
IND
8 3D
10 3D
II
C14
Combination Meter
B 9
Body ECU
T 5
Theft Deterrent
ECU
T19
Transponder
Key Computer

Service Hints

M9 Multi-Display

9-Ground : Always approx. 12 volts
10-Ground : Approx. 12 volts with ignition SW at ACC or ON position
11-Ground : Approx. 12 volts with ignition SW at ON or ST position
8-Ground : Always continuity

○ : Parts Location

Code	See Page	Code		See Page	Code	See Page
A47	70	J9	A	71	T5	71
B9	70	J10	B	71	T19	71
C14	70	M9		71		

: Junction Block and Wire Harness Connector

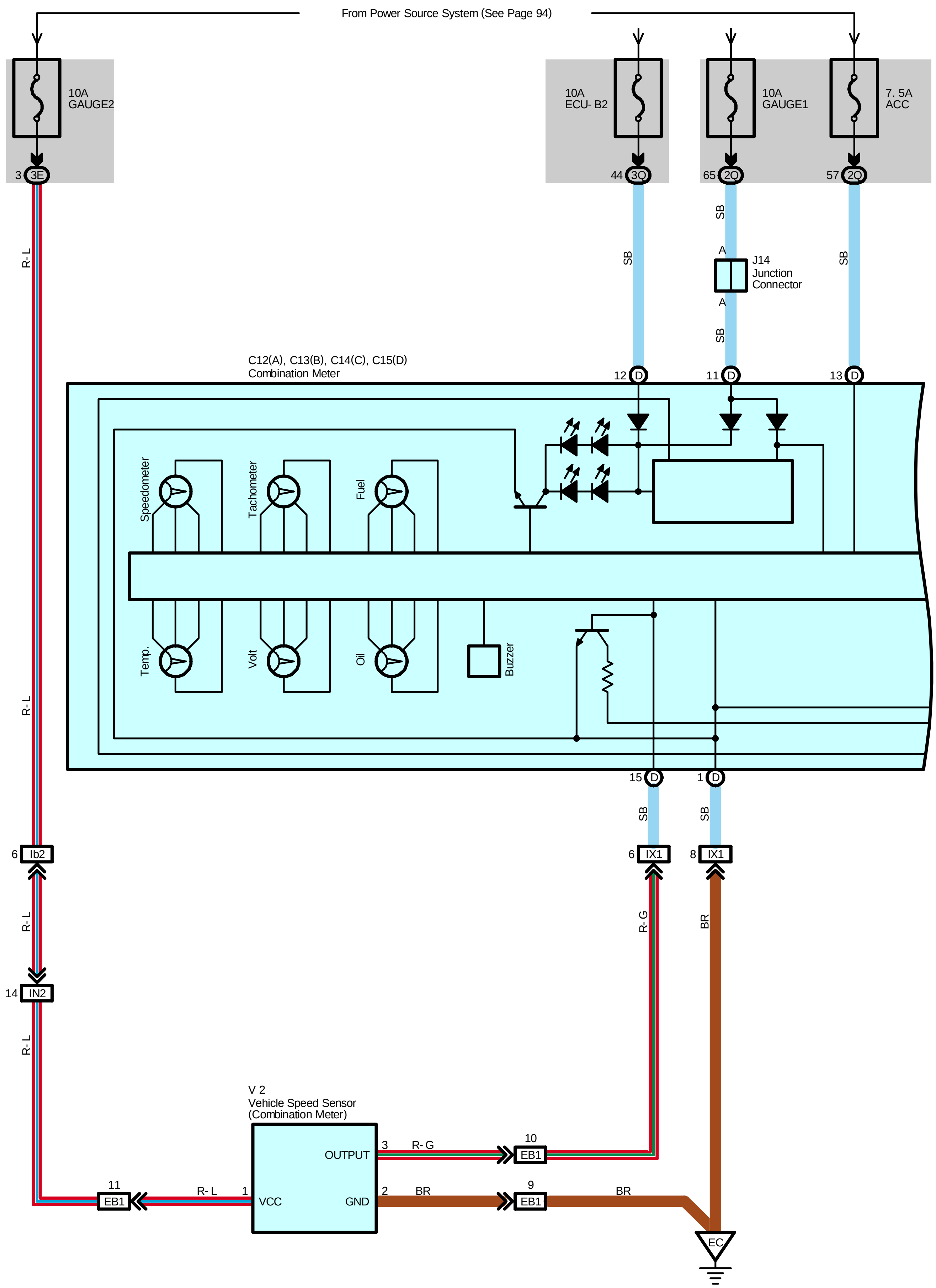
Code	See Page	Junction Block and Wire Harness (Connector Location)
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3E		
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4D		
4E		

□ : Connector Joining Wire Harness and Wire Harness

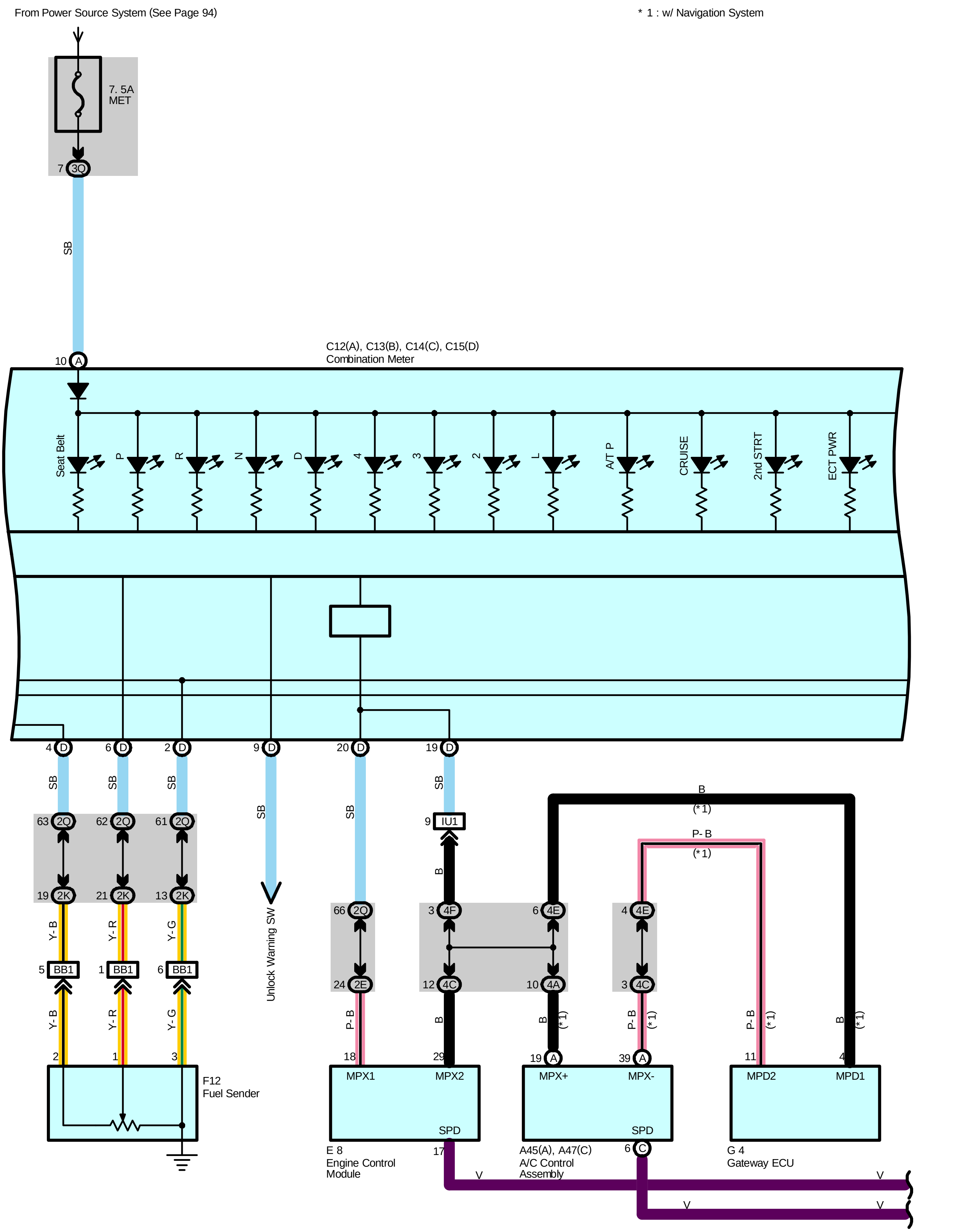
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IL3	80	Instrument Panel Integration Wire and Computer Wire (Instrument Panel Center)
IU4	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
Ie1	84	Dash Wire and Dash Wire (Behind the Glove Box)

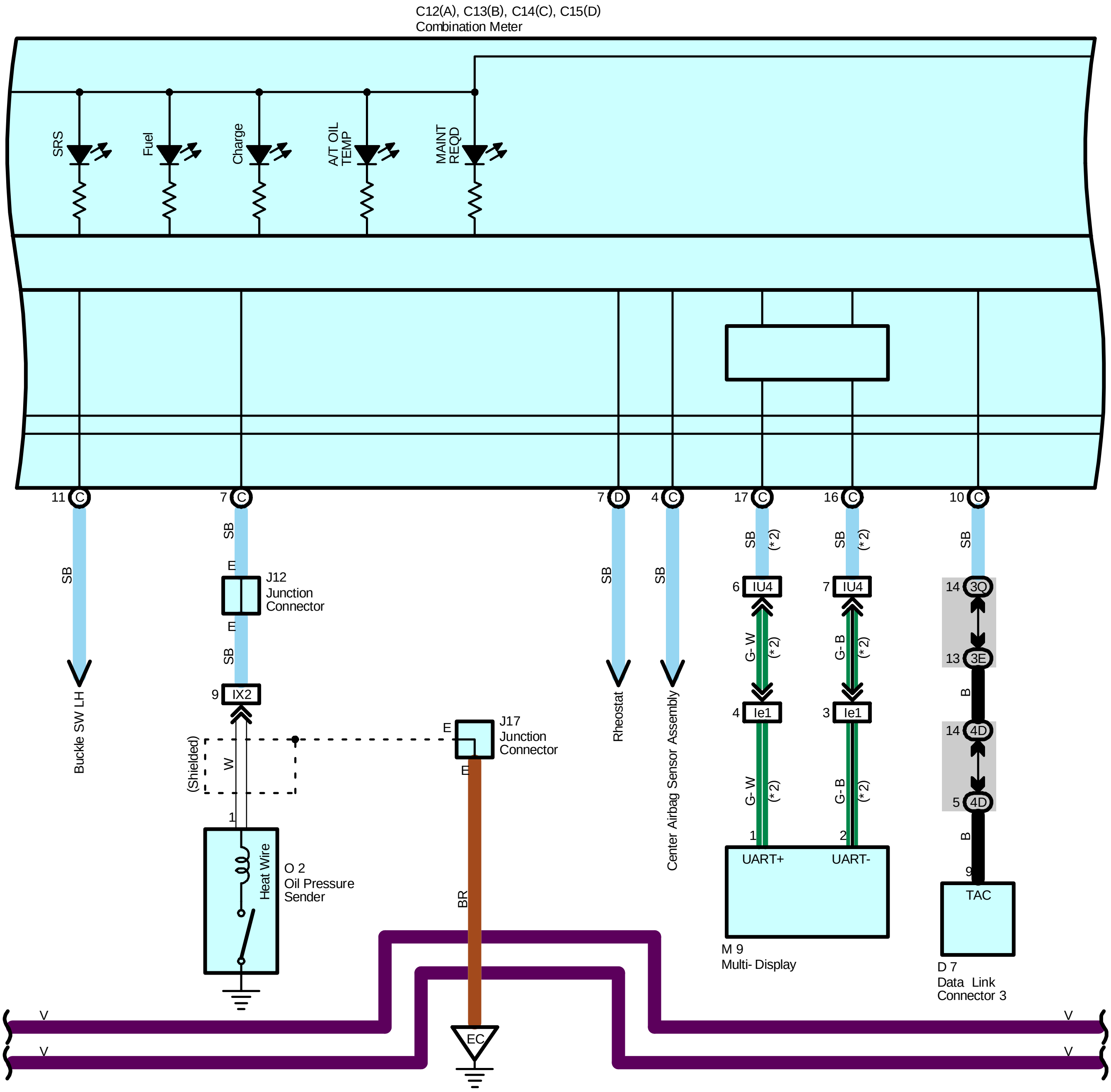
▽ : Ground Points

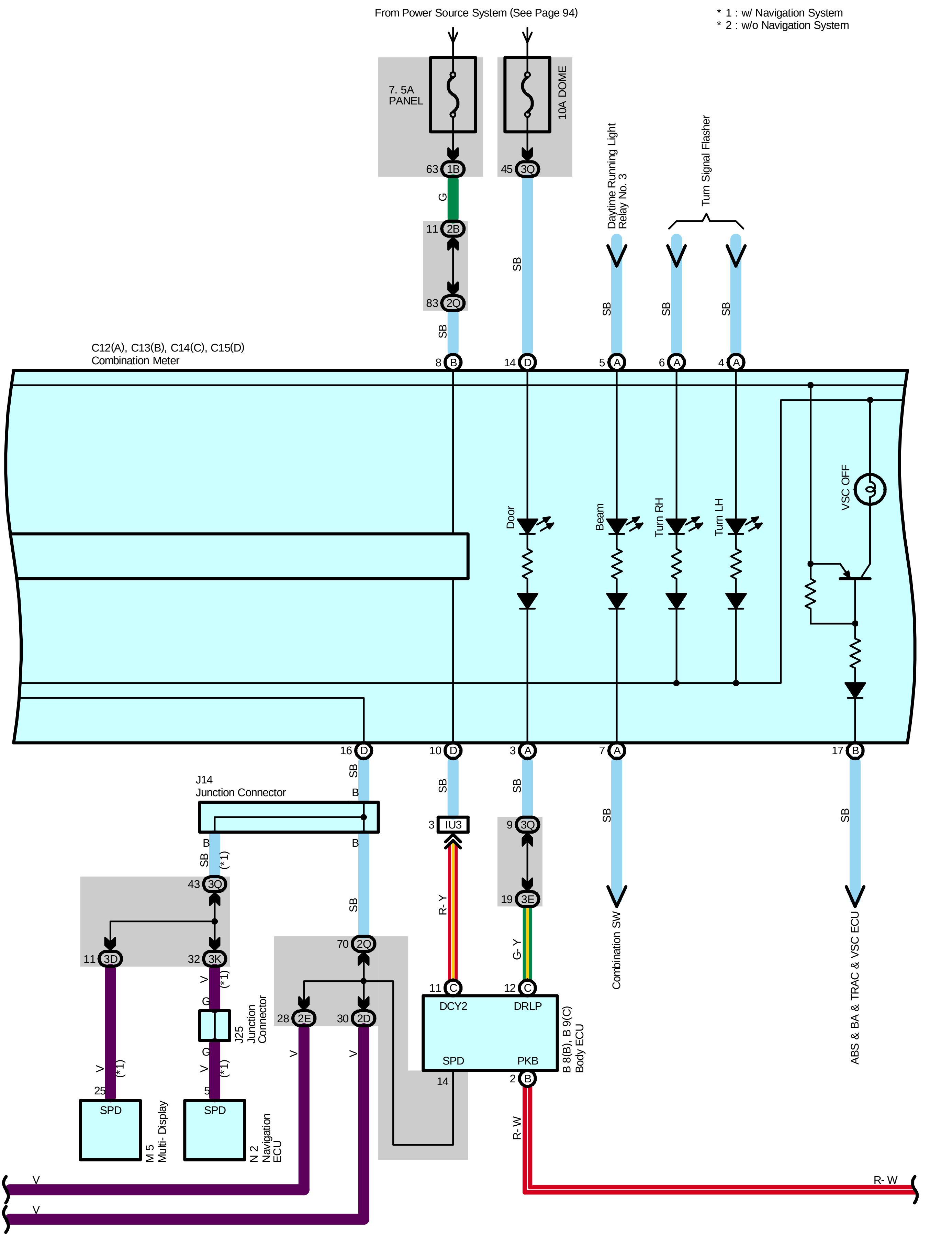
Code	See Page	Ground Points Location
II	78	Set Bolt of Cowl Side J/B RH



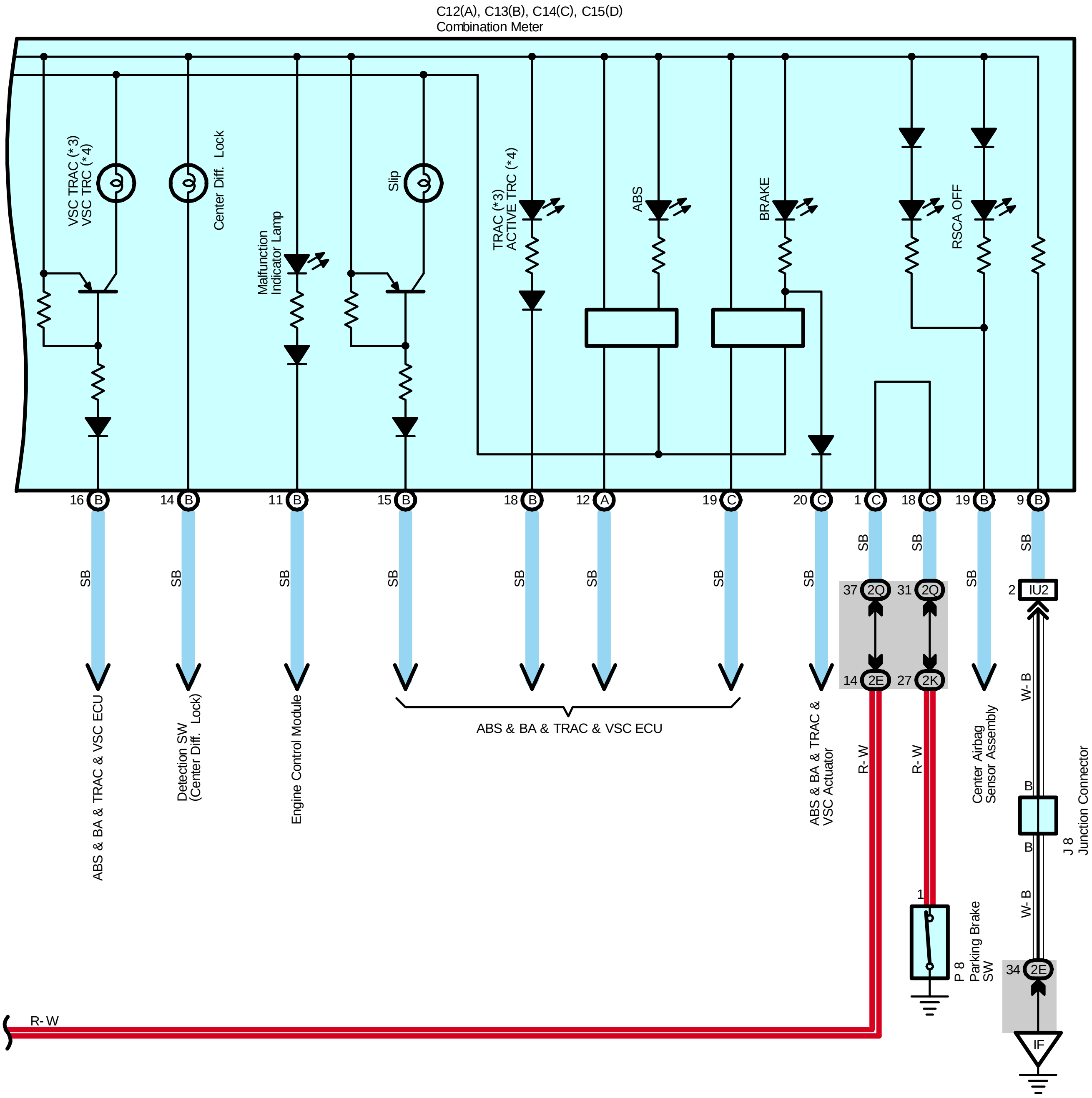
From Power Source System (See Page 94)
10A
GAUGE2
3
3E
10A
ECU- B2
44
3Q
10A
GAUGE1
65
2Q
7. 5A
ACC
57
2Q
R- L
SB
SB
A
J14
Junction
Connector
A
SB
SB
C12(A), C13(B), C14(C), C15(D)
Combination Meter
12
D
11
D
13
D
Speedometer
Tachometer
Fuel
Temp.
Volt
Oil
Buzzer
15
D
1
D
SB
SB
6
Ib2
6
IX1
8
IX1
R- L
R- G
BR
14
IN2
R- L
V 2
Vehicle Speed Sensor
(Combination Meter)
OUTPUT
3
R- G
10
EB1
11
EB1
R- L
1
VCC
GND
2
BR
9
EB1
BR
EC


From Power Source System (See Page 94)
* 1 : w/ Navigation System
7. 5A
MET
C12(A), C13(B), C14(C), C15(D)
Combination Meter
Seat Belt
P
R
N
D
4
3
2
L
A/T P
CRUISE
2nd STRT
ECT PWR
SB
Y- B
Y- R
Y- G
P- B
B
V
(*1)
Unlock Warning SW
F12
Fuel Sender
MPX1
MPX2
SPD
E 8
Engine Control
Module
MPX+
MPX-
A45(A), A47(C)
A/C Control
Assembly
MPD2
MPD1
G 4
Gateway ECU


C12(A), C13(B), C14(C), C15(D)
Combination Meter
SRS
Fuel
Charge
A/T OIL TEMP
MAINT REQD
11 C
7 C
7 D
4 C
17 C
16 C
10 C
SB
E
J12
Junction Connector
9 IX2
W
(Shielded)
1
Heat Wire
O 2
Oil Pressure Sender
Buckle SW LH
J17
Junction Connector
BR
EC
Rheostat
Center Airbag Sensor Assembly
(*2)
6 IU4
7 IU4
G-W
G-B
4 Ie1
3 Ie1
1
2
UART+
UART-
M 9
Multi-Display
14 3Q
13 3E
B
14 4D
5 4D
9
TAC
D 7
Data Link Connector 3
V


From Power Source System (See Page 94)
* 1 : w/ Navigation System
* 2 : w/o Navigation System
7. 5A PANEL
10A DOME
63 1B
45 3Q
G
SB
11 2B
83 2Q
Daytime Running Light Relay No. 3
Turn Signal Flasher
C12(A), C13(B), C14(C), C15(D)
Combination Meter
8 B
14 D
5 A
6 A
4 A
Door
Beam
Turn RH
Turn LH
VSC OFF
16 D
10 D
3 A
7 A
17 B
J14
Junction Connector
B
(*1)
43 3Q
11 3D
32 3K
V
G
J25
Junction Connector
70 2Q
28 2E
30 2D
3 IU3
9 3Q
19 3E
R- Y
G- Y
11 C
12 C
DCY2
DRLP
SPD
PKB
14
2 B
B 8(B), B 9(C)
Body ECU
R- W
Combination SW
ABS & BA & TRAC & VSC ECU
25
5
SPD
M 5
Multi- Display
N 2
Navigation ECU

* 3 : USA
* 4 : Except *3



Service Hints

C12 (A), C13 (B), C15 (D) Combination Meter

(D) 12, (D) 14-Ground : Always approx. 12 volts
(D) 13-Ground : Approx. 12 volts with ignition SW at ACC or ON position
(A) 10, (D) 11-Ground : Approx. 12 volts with ignition SW at ON or ST position
(B) 8-Ground : Approx. 12 volts with light control SW at TAIL or HEAD position
(B) 9, (D) 1-Ground : Always continuity

○ : **Parts Location**

Code		See Page	Code	See Page	Code	See Page
A45	A	70	D7	70	J25	72
A47	C	70	E8	70	M5	71
B8	B	70	F12	72	M9	71
B9	C	70	G4	70	N2	72
C12	A	70	J8	71	O2	69
C13	B	70	J12	71	P8	73
C14	C	70	J14	71	V2	69
C15	D	70	J17	71		

: **Junction Block and Wire Harness Connector**

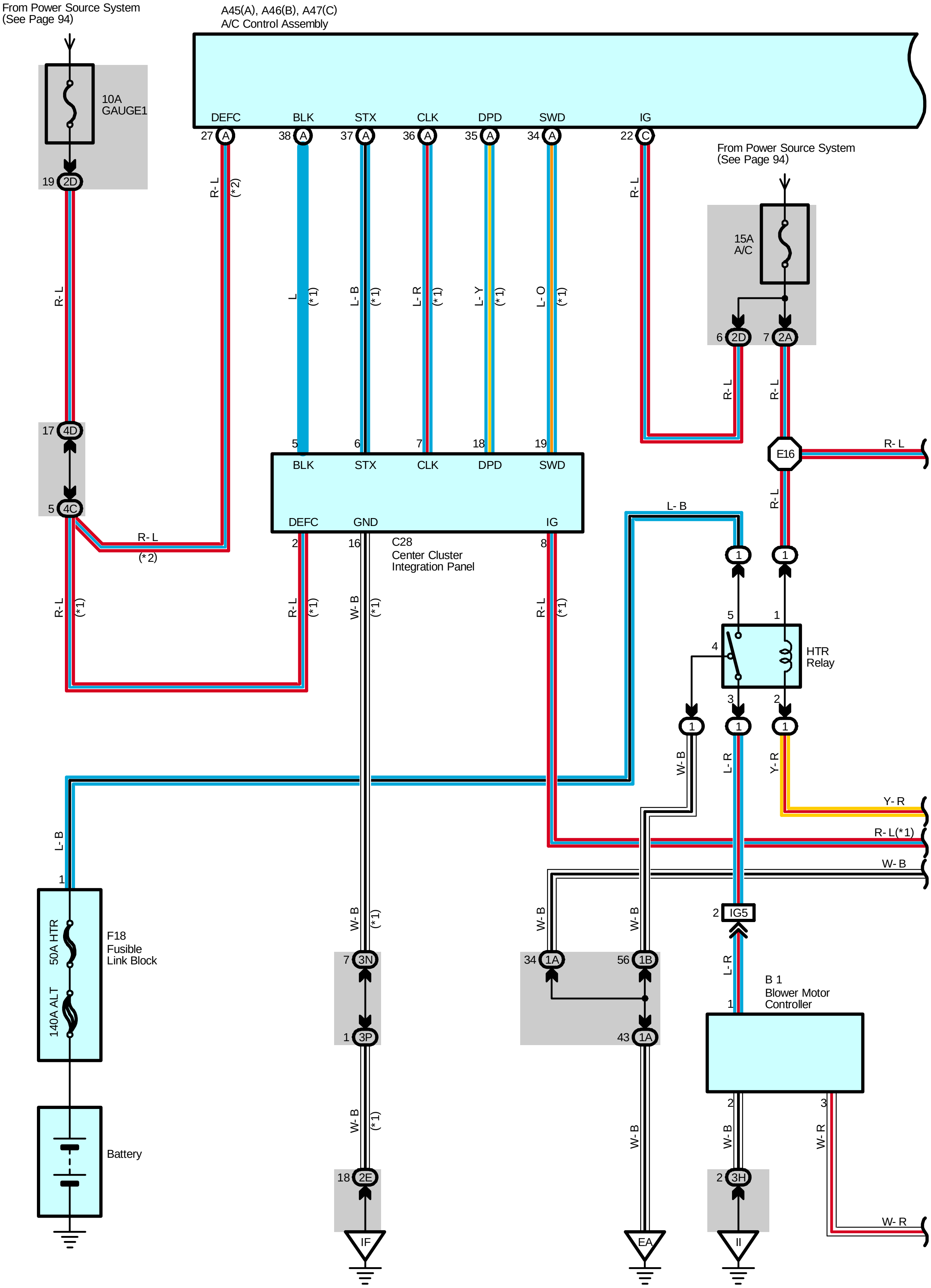
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D 2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2K	28	Floor No.1 Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D 3E	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A 4C 4D 4E 4F	52	Dash Wire and J/B No.4 (Instrument Panel Center)

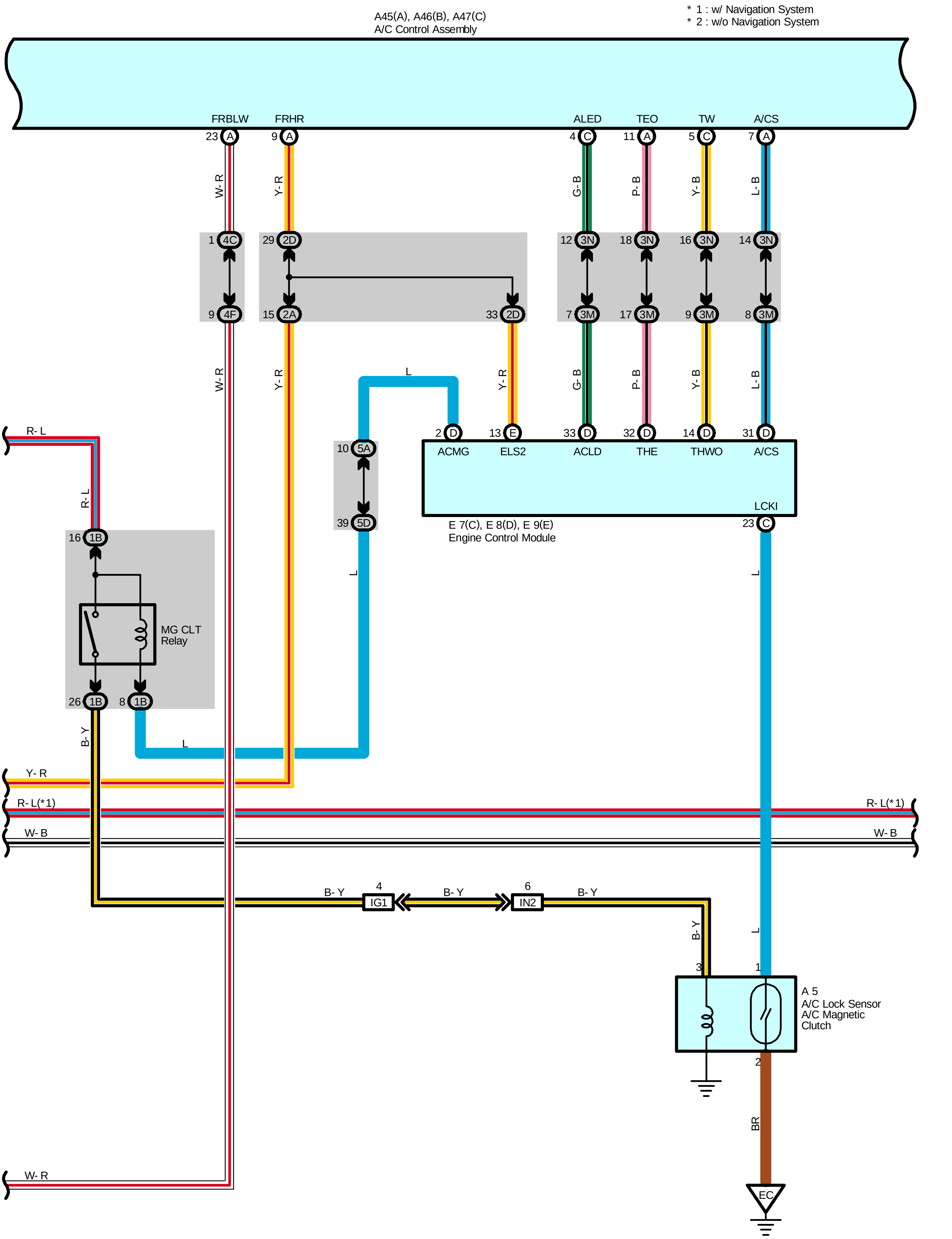
□ : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	76	Engine Wire and Transmission Wire (On the Transmission)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IU1 IU2 IU3 IU4	82	Instrument Panel Integration Wire and Dash Wire (Behind the Glove Box)
IX1 IX2	82	Instrument Panel Integration Wire and Engine Wire (Behind the Glove Box)
Ib2	84	Dash Wire and Dash Wire (Behind the Combination Meter)
Ie1	84	Dash Wire and Dash Wire (Behind the Glove Box)
BB1	86	Floor No.1 Wire and Fuel Tank Wire (Near the Fuel Tank)

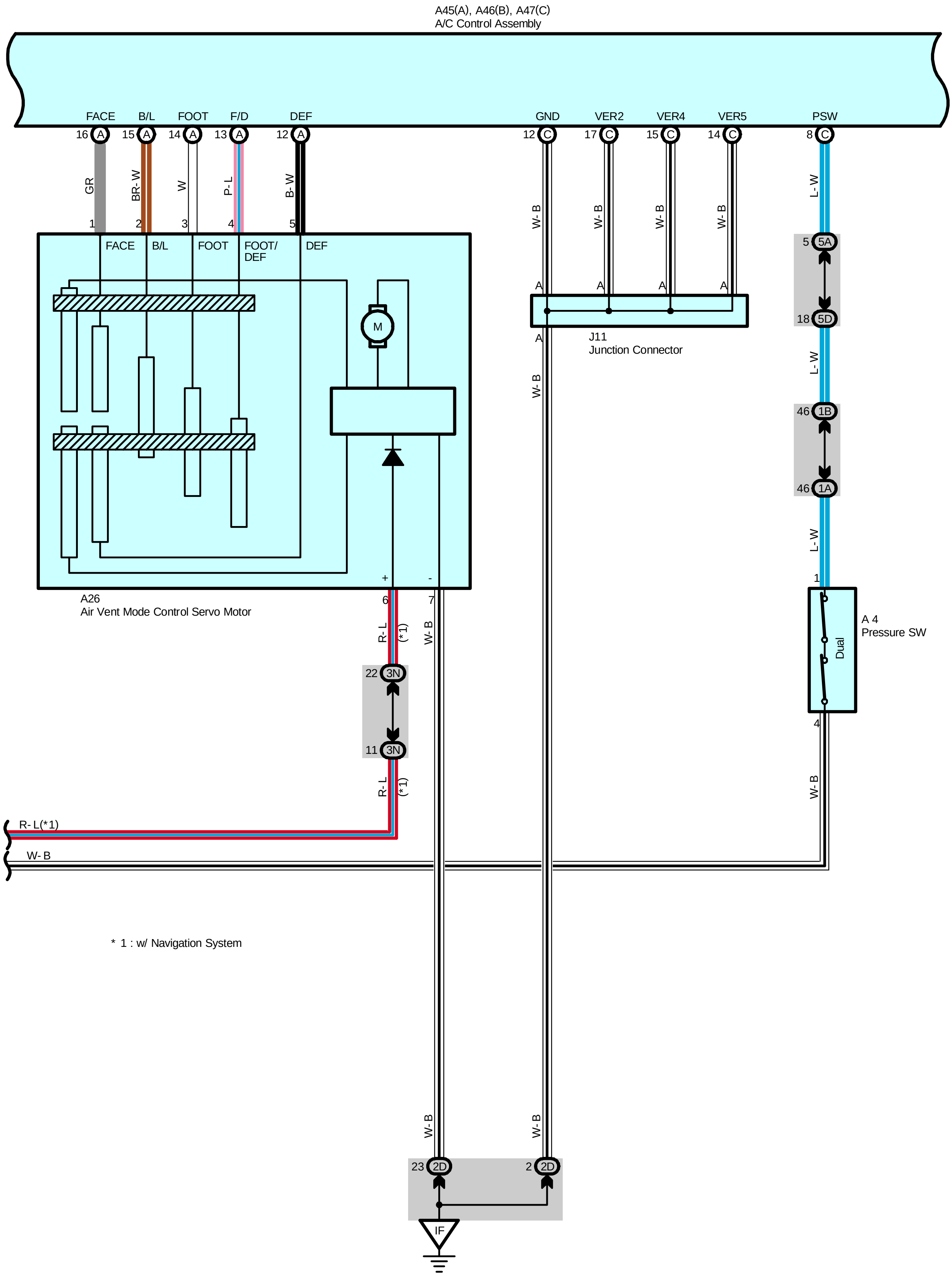
▽ : **Ground Points**

Code	See Page	Ground Points Location
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH

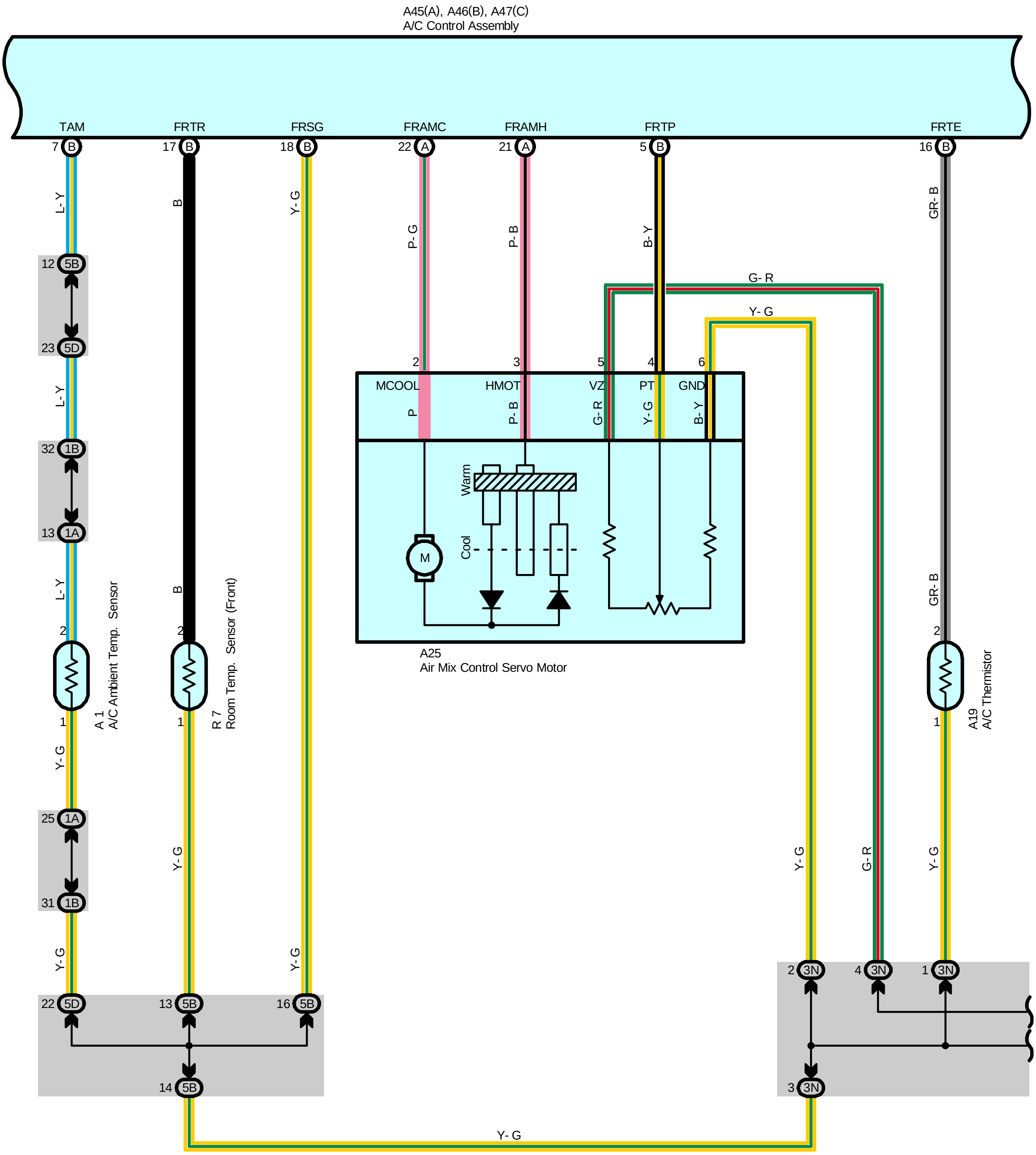

From Power Source System
(See Page 94)
A45(A), A46(B), A47(C)
A/C Control Assembly
10A
GAUGE1
DEFC
BLK
STX
CLK
DPD
SWD
IG
From Power Source System
(See Page 94)
15A
A/C
C28
Center Cluster
Integration Panel
GND
HTR
Relay
F18
Fusible
Link Block
50A HTR
140A ALT
Battery
B 1
Blower Motor
Controller
R- L
L- B
W- B
L- R
Y- R
R- L(*1)
W- R
L
L- Y
L- O
(*1)
(*2)
E16
IG5
IF
EA
II

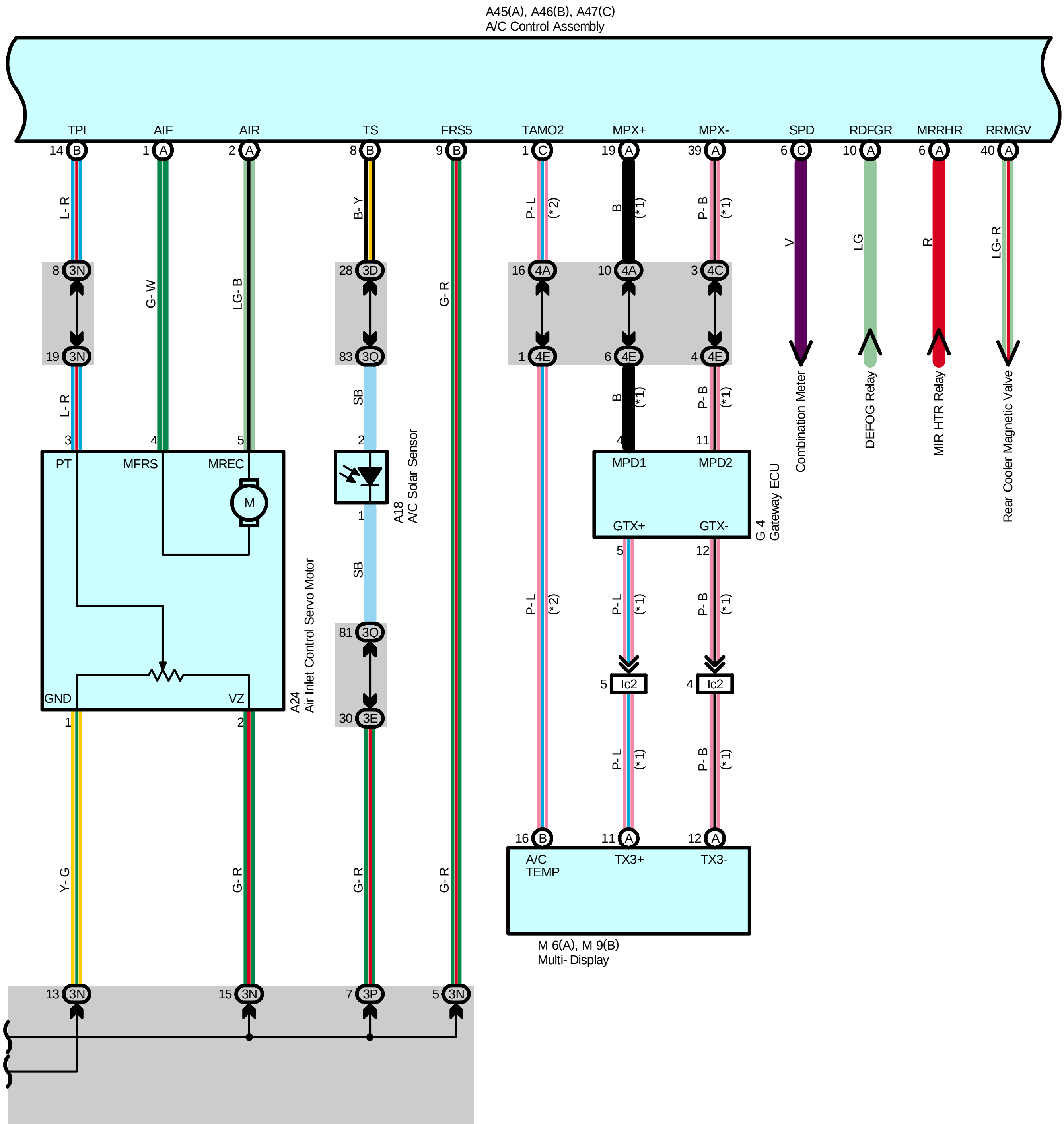

* 1 : w/ Navigation System
* 2 : w/o Navigation System
A45(A), A46(B), A47(C)
A/C Control Assembly
FRBLW
FRHR
ALED
TEO
TW
A/CS
W-R
Y-R
G-B
P-B
Y-B
L-B
R-L
L
ACMG
ELS2
ACLD
THE
THWO
A/CS
LCKI
E 7(C), E 8(D), E 9(E)
Engine Control Module
MG CLT
Relay
B-Y
Y-R
R-L(*1)
W-B
IG1
IN2
A 5
A/C Lock Sensor
A/C Magnetic
Clutch
BR
EC

Air Conditioning (Front)

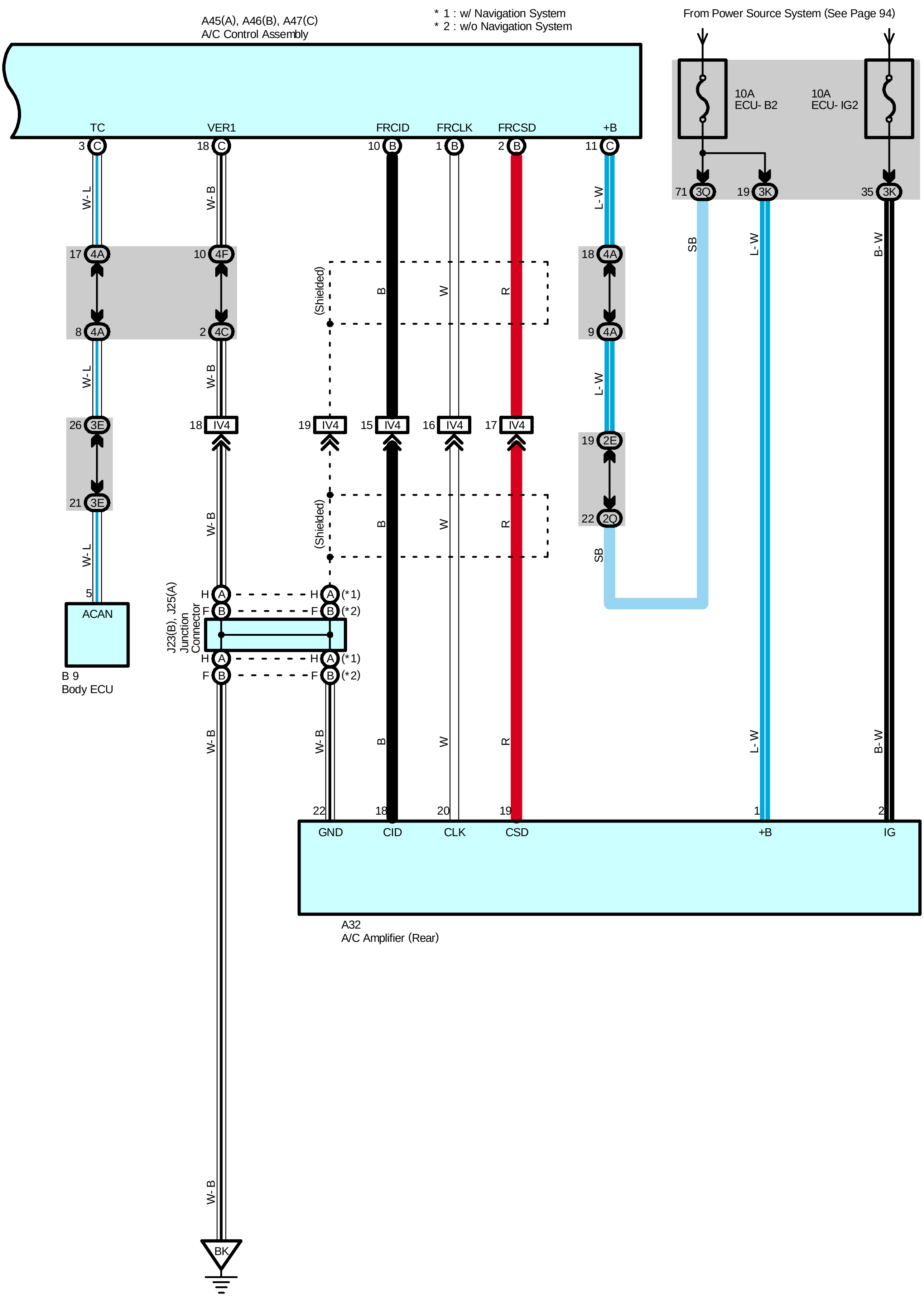


* 1 : w/ Navigation System


A45(A), A46(B), A47(C)
A/C Control Assembly
TAM
FRTR
FRSG
FRAMC
FRAMH
FRTP
FRTE
L-Y
B
Y-G
P-G
P-B
B-Y
GR-B
G-R
MCOOL
HMOT
VZ
PT
GND
P
Warm
Cool
M
A25
Air Mix Control Servo Motor
A 1
A/C Ambient Temp. Sensor
R 7
Room Temp. Sensor (Front)
A19
A/C Thermistor



A45(A), A46(B), A47(C)
A/C Control Assembly
TPI
AIF
AIR
TS
FRS5
TAMO2
MPX+
MPX-
SPD
RDFGR
MRRHR
RRMGV
L-R
G-W
LG-B
B-Y
G-R
P-L
(*2)
B
(*1)
P-B
V
LG
R
LG-R
Combination Meter
DEFOG Relay
MIR HTR Relay
Rear Cooler Magnetic Valve
PT
MFRS
MREC
M
GND
VZ
A24
Air Inlet Control Servo Motor
SB
A18
A/C Solar Sensor
MPD1
MPD2
GTX+
GTX-
G 4
Gateway ECU
Ic2
Y-G
A/C
TEMP
TX3+
TX3-
M 6(A), M 9(B)
Multi-Display


A45(A), A46(B), A47(C)
A/C Control Assembly
* 1 : w/ Navigation System
* 2 : w/o Navigation System
From Power Source System (See Page 94)
10A
ECU- B2
10A
ECU- IG2
TC
VER1
FRCID
FRCLK
FRCSD
+B
(Shielded)
J23(B), J25(A)
Junction
Connector
ACAN
B 9
Body ECU
GND
CID
CLK
CSD
+B
IG
A32
A/C Amplifier (Rear)
BK

System Outline

1. Heater Blower Operation

Manual operation

When the blower speed is set ant any speed by the blower control SW, the A/C control assembly sends a signal to the blower motor controller, and controls the blower motor speed.

Auto operation

When the auto SW is operated, the A/C control assembly sends signals to the blower motor controller, according to the signals from respective sensors, commands from the temperature SW etc., and controls the blower motor automatically.

2. Air Inlet Control Servo Motor Control

When the FRESH/RECIRC select SW is switched to RECIRC, the motor in the air inlet control servo motor rotates to move the damper to the RECIRC side. The damper position is recognized by the A/C control assembly TERMINAL TPI, and rotates the motor until the damper reaches its position.

When the FRESH/RECIRC select SW is switched to FRESH, the motor in the air inlet control servo motor rotates to move the damper to the FRESH side. The damper position is recognized by the A/C control assembly TERMINAL TPI, and rotates the motor until the damper reaches its position.

When the FRESH/RECIRC select SW is set to auto, the exhaust gas sensor in the engine room detects the ingredient of the exhaust emission, and switches the FRESH/RECIRC mode automatically.

3. Air Vent Mode Control Servo Motor

When the mode select SW in the A/C control assembly is pushed, a signal is sent from the A/C control assembly, and activates the air vent mode control servo motor. This causes the servo motor to rotate to the position selected using the mode select SW (FACE, BI-LEVEL, FOOT, FOOT/DEF, DEF), and moves the damper.

4. Air Mix Control Servo Motor

When the temperature control SW in the A/C control assembly is pushed, a signal is sent from the A/C control assembly, and activates the air mix control servo motor. The motor and damper is moved until it reaches the temperature set by the temperature control SW.

5. Air Conditioning Operation

The A/C control assembly receives various signals, i. e., the engine RPM from the crankshaft position sensor, outlet temperature from the A/C ambient temp. sensor, coolant temperature from the engine coolant temp. sensor, and the lock signal from the A/C compressor, etc. When the engine is started and the A/C SW is turned on, a signal is sent to the A/C control assembly. As a result, the magnetic clutch is turned on and operates the compressor.

In addition, when the engine control module detects that the magnetic clutch is on and the A/C compressor is operating, it controls the engine in the direction to avoid lowering the engine RPM during A/C operation.

When any of the following signals are sent to the A/C control assembly, the A/C is turned off.

∗ Coolant temp. is high.
∗ Outlet air temp. is low.
∗ Large difference between the engine speed and compressor speed.
∗ The refrigerant pressure is abnormally high or low.

Service Hints

A45 (A), A47 (C) A/C Control Assembly

(C)11-Ground : Always approx. 12 volts
(C)22-Ground : Approx. 12 volts with ignition SW at ON or ST position
(A)27-Ground : Approx. 12 volts with ignition SW at ON or ST position (w/o navigation system)
(C)12, (C) 14, (C) 15, (C) 17, (C) 18-Ground : Always continuity

C28 Center Cluster Integration Panel (w/ Navigation System)

2-Ground : Approx. 12 volts with ignition SW at ON or ST position
16-Ground : Always continuity

: Parts Location

Code	See Page	Code		See Page	Code		See Page
A1	68	A45	A	70	F18		68
A4	68	A46	B	70	G4		70
A5	68	A47	C	70	J11		71
A18	70	B1		70	J23	B	72
A19	70	B9		70	J25	A	72
A24	70	C28		70	M6	A	71
A25	70	E7	C	70	M9	B	71
A26	70	E8	D	70	R7		71
A32	72	E9	E	70			

: 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)
1A	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2A	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2D 2E	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3D 3E 3H	40	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3M 3N 3P	43	Dash Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A 4C 4D 4E 4F	52	Dash Wire and J/B No.4 (Instrument Panel Center)
5A 5B	56	Dash Wire and J/B No.5 (Behind the Combination Meter)
5D	56	Engine Room No.2 Wire and J/B No.5 (Behind the Combination Meter)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1 IG5	78	Engine Room No.2 Wire and Dash Wire (Behind the Combination Meter)
IN2	80	Engine Wire and Dash Wire (Behind the Glove Box)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
Ic2	84	Dash Wire and Dash Wire (Behind the Center Panel)

Air Conditioning (Front)

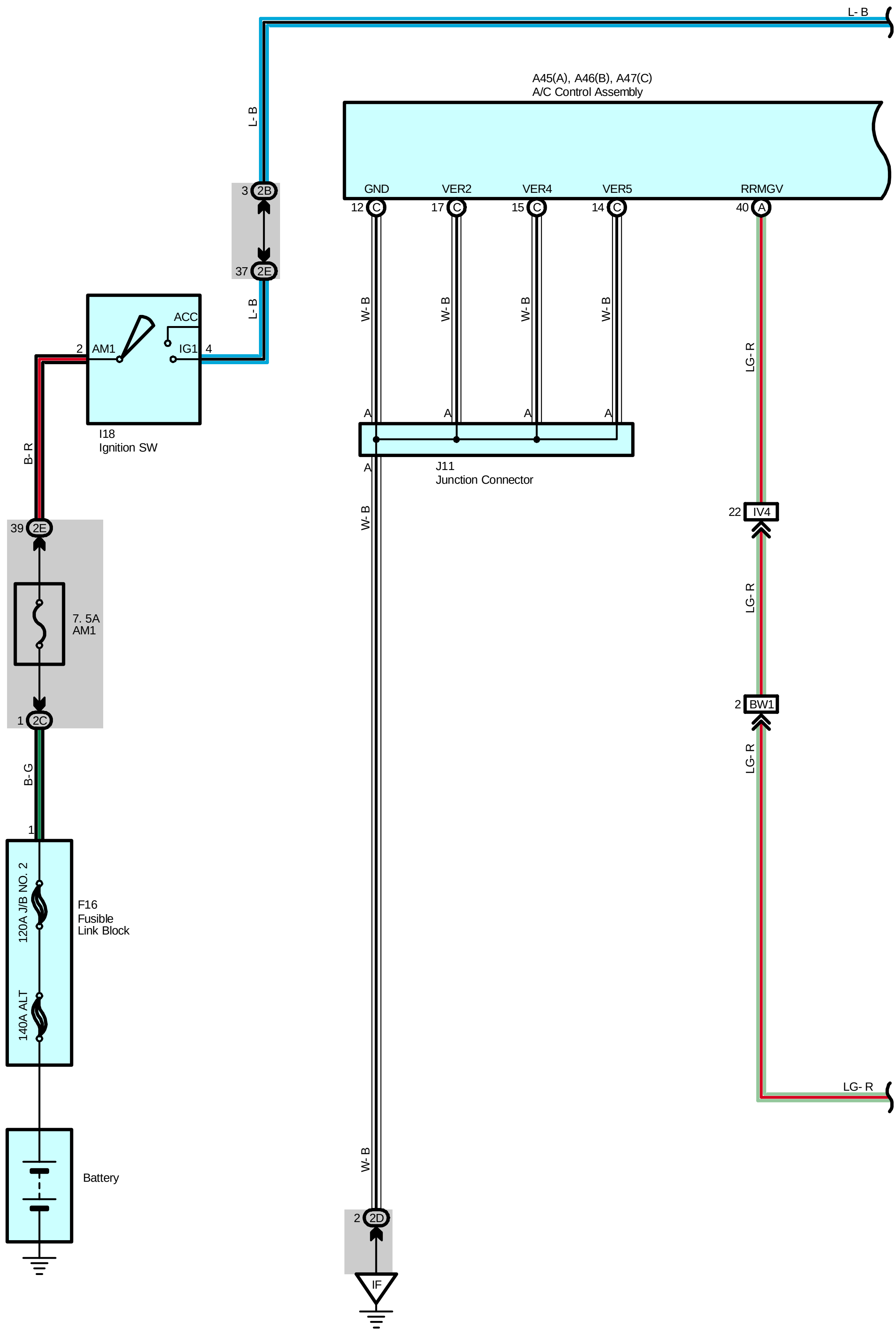
▽ : **Ground Points**

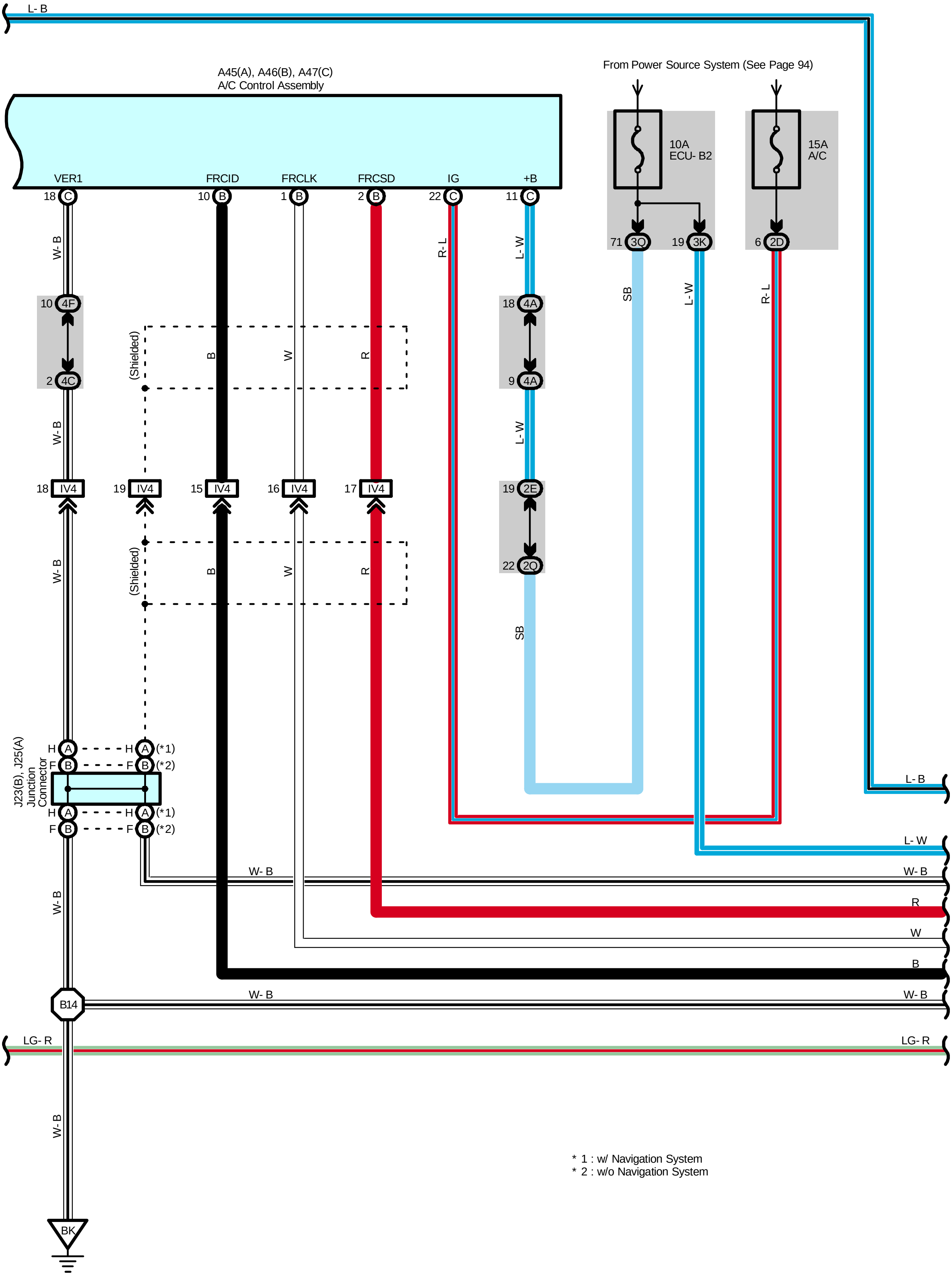
Code	See Page	Ground Points Location
EA	76	Front Right Side of Fender Apron
EC	76	Rear Bank of Right Cylinder Head
IF	78	Set Bolt of Cowl Side J/B LH
II	78	Set Bolt of Cowl Side J/B RH
BK	86	Front Side Under the Front Passenger's Seat

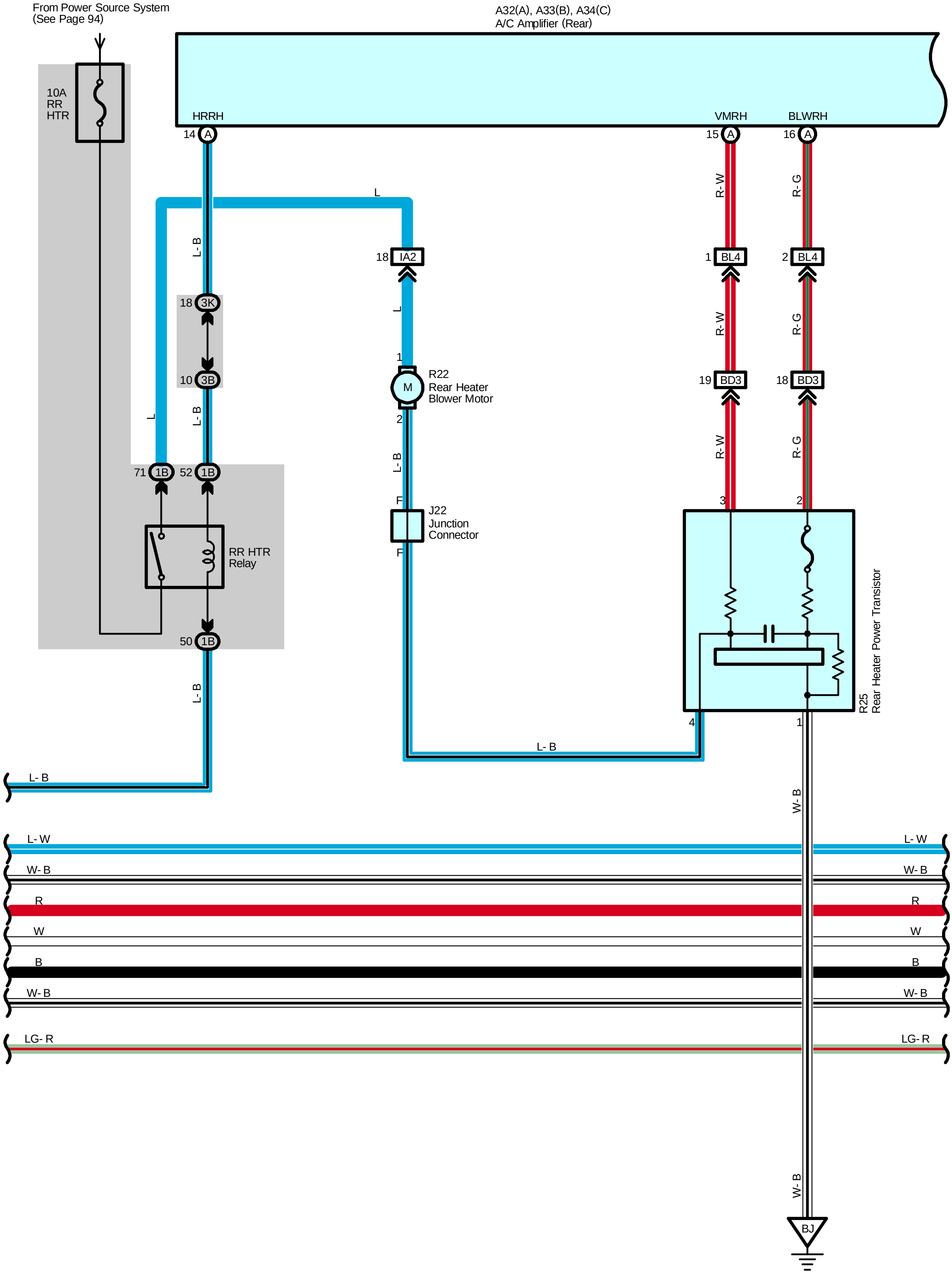
: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E16	76	Engine Room No.2 Wire			

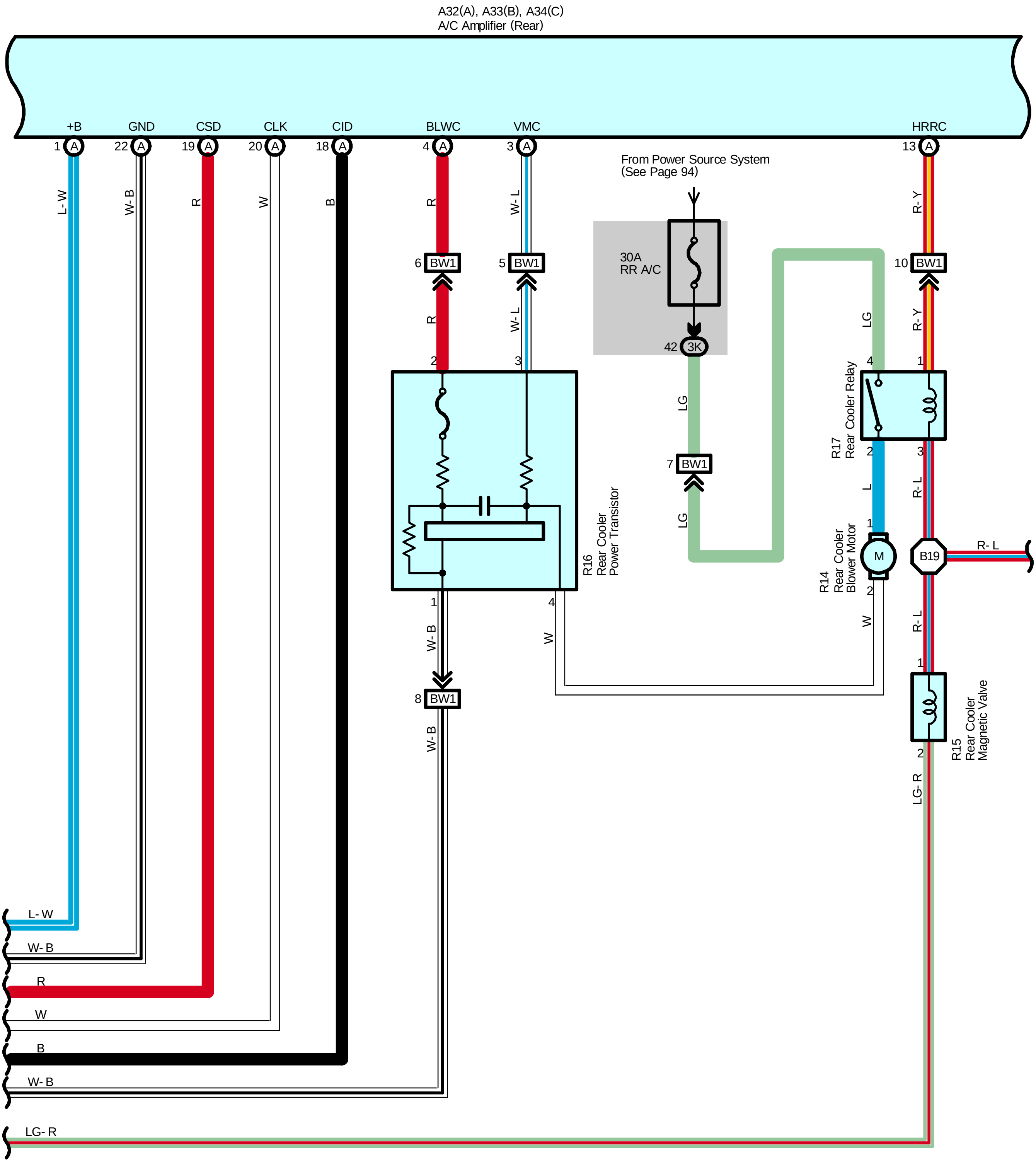
Air Conditioning (Rear)

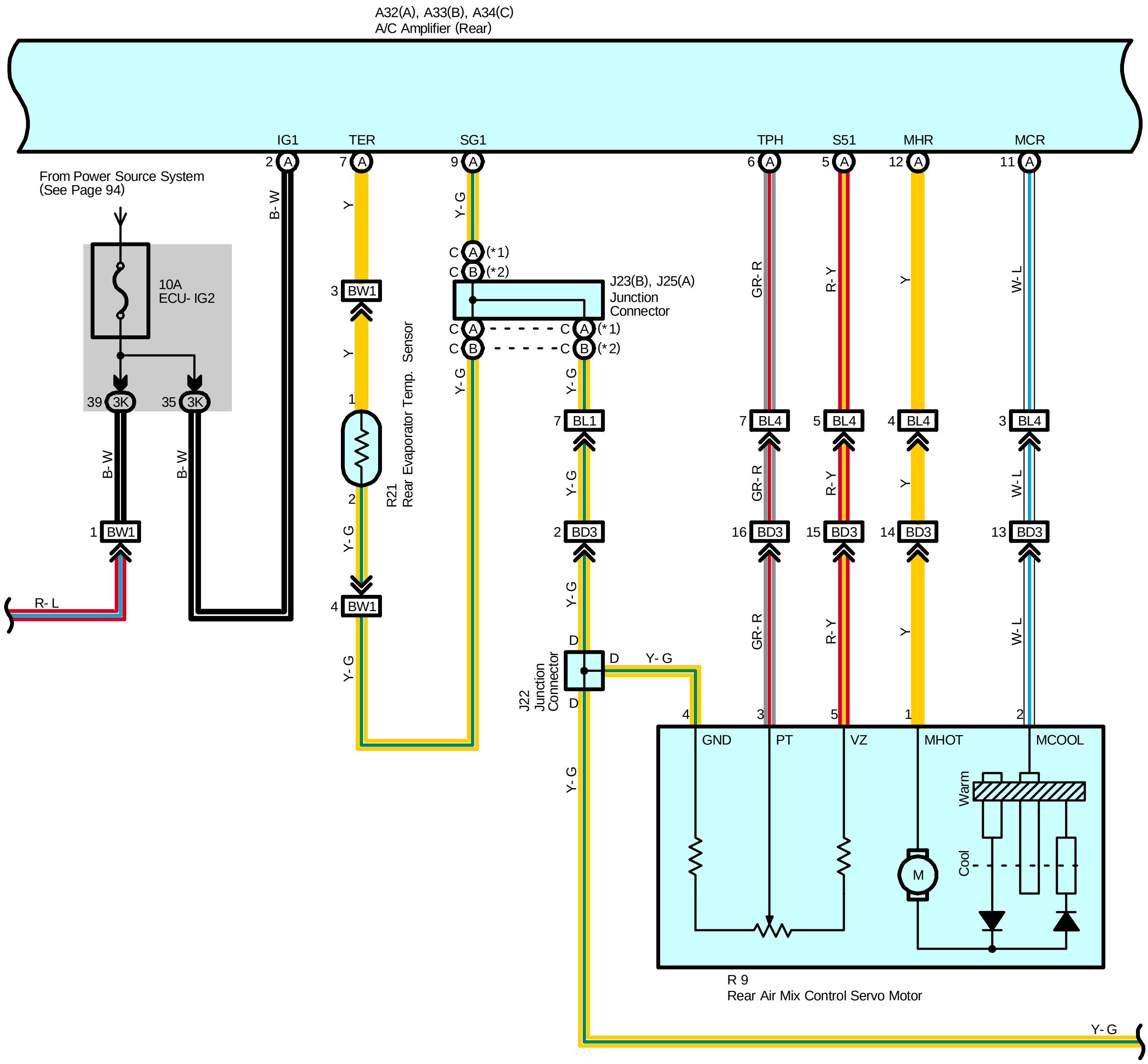



L- B
A45(A), A46(B), A47(C)
A/C Control Assembly
From Power Source System (See Page 94)
10A
ECU- B2
15A
A/C
VER1
FRCID
FRCLK
FRCSD
IG
+B
(Shielded)
J23(B), J25(A)
Junction
Connector
B14
BK
W- B
R- L
L- W
SB
LG- R
B
W
R
* 1 : w/ Navigation System
* 2 : w/o Navigation System

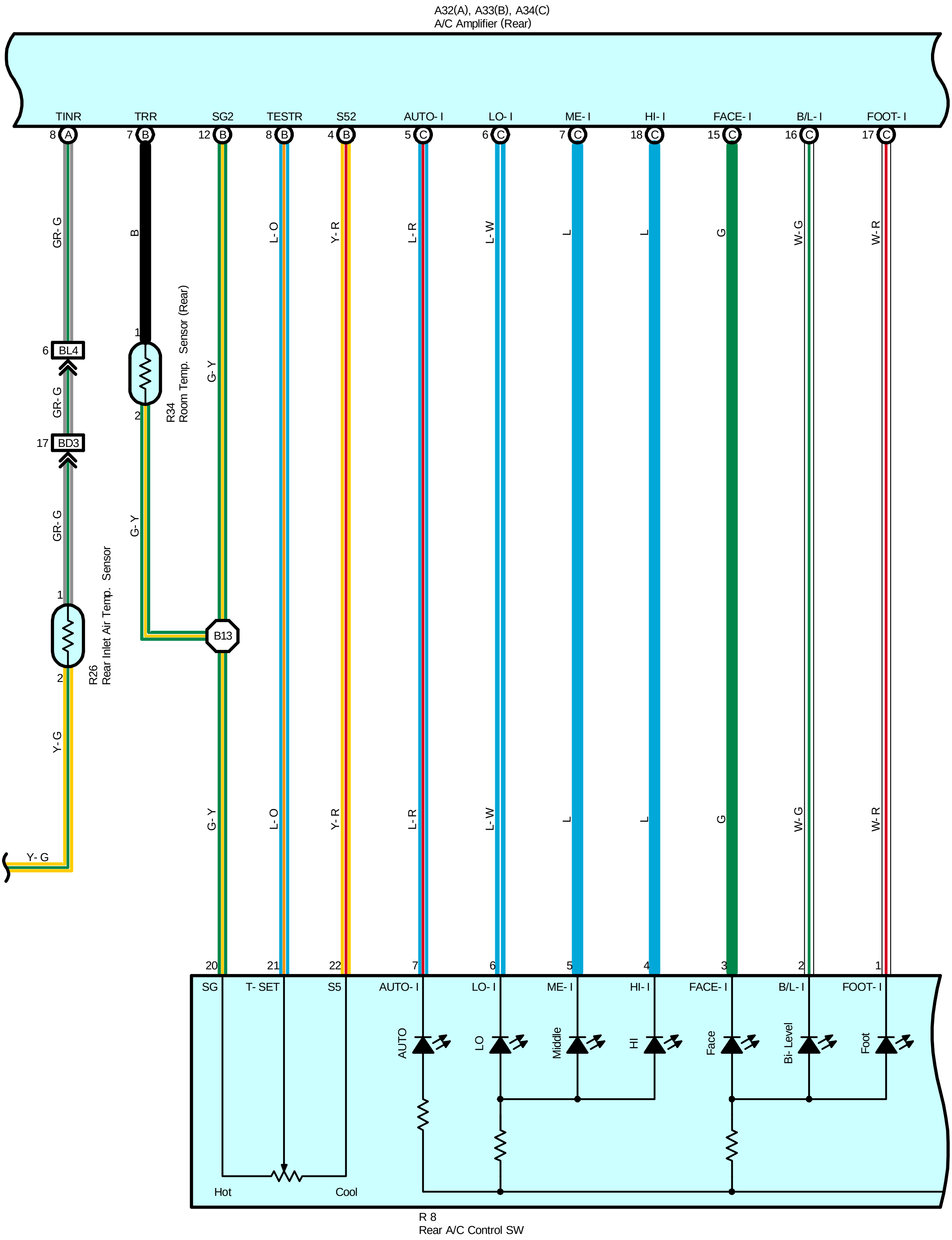


From Power Source System
(See Page 94)
10A
RR
HTR
A32(A), A33(B), A34(C)
A/C Amplifier (Rear)
HRRH
VMRH
BLWRH
14 A
15 A
16 A
L
L- B
R- W
R- G
18 IA2
1 BL4
2 BL4
18 3K
10 3B
L
1
M
R22
Rear Heater
Blower Motor
2
19 BD3
18 BD3
71 1B
52 1B
F
J22
Junction
Connector
F
3
2
RR HTR
Relay
50 1B
R25
Rear Heater Power Transistor
4
1
L- B
L- B
W- B
L- W
W- B
R
W
B
W- B
LG- R
W- B
BJ

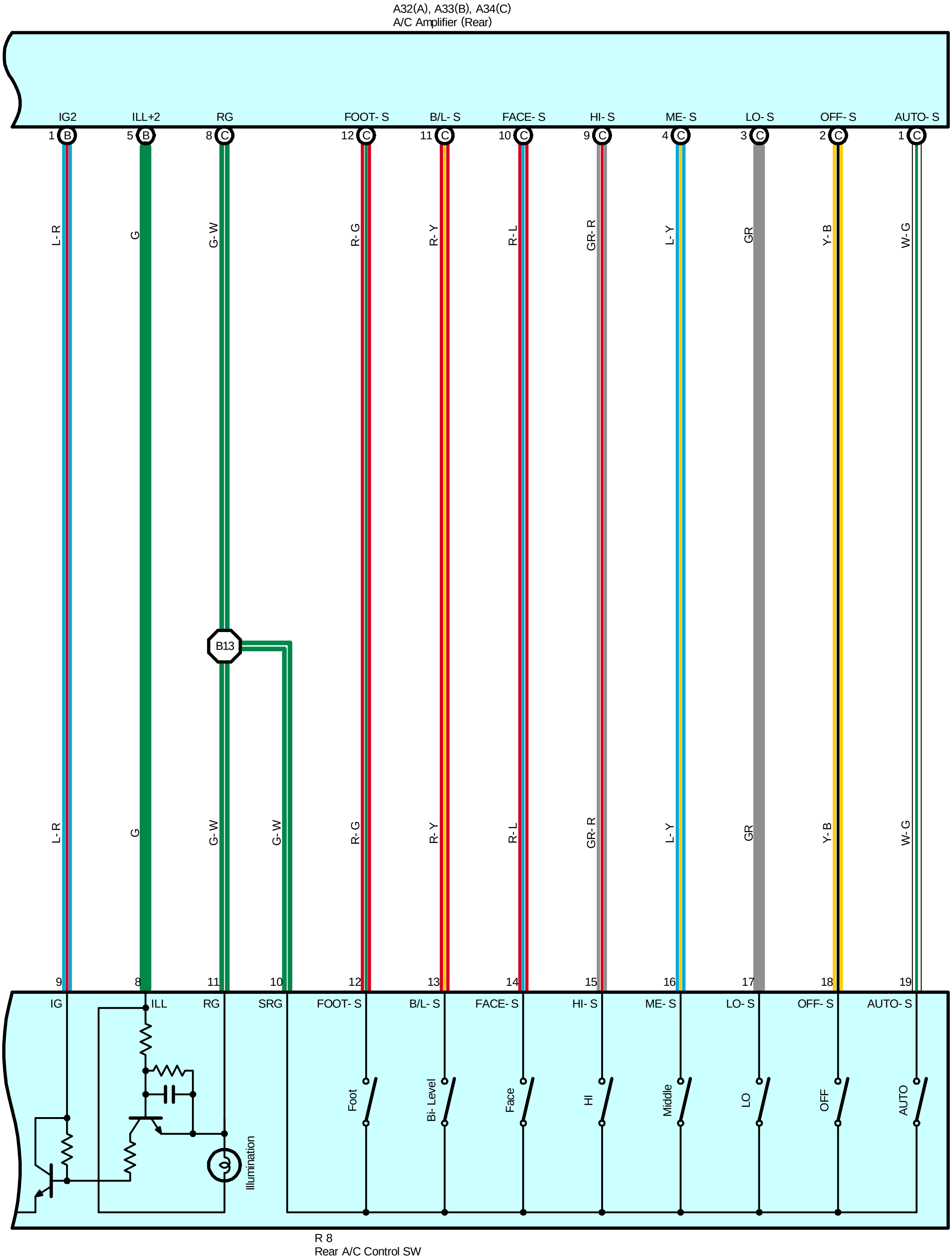

A32(A), A33(B), A34(C)
A/C Amplifier (Rear)
+B
GND
CSD
CLK
CID
BLWC
VMC
HRRC
From Power Source System
(See Page 94)
30A
RR A/C
R16
Rear Cooler
Power Transistor
R17
Rear Cooler Relay
R14
Rear Cooler
Blower Motor
R15
Rear Cooler
Magnetic Valve
BW1
3K
B19
M
L-W
W-B
R
W
B
W-L
R-Y
LG
L
R-L
LG-R



* 1 : w/ Navigation System
* 2 : w/o Navigation System


A32(A), A33(B), A34(C)
A/C Amplifier (Rear)
TINR
TRR
SG2
TESTR
S52
AUTO- I
LO- I
ME- I
HI- I
FACE- I
B/L- I
FOOT- I
GR- G
B
G- Y
L- O
Y- R
L- R
L- W
L
G
W- G
W- R
BL4
BD3
B13
R34
Room Temp. Sensor (Rear)
R26
Rear Inlet Air Temp. Sensor
Y- G
SG
T- SET
S5
AUTO
LO
Middle
HI
Face
Bi- Level
Foot
Hot
Cool
R 8
Rear A/C Control SW

Air Conditioning (Rear)



System Outline

1. Cooler and Heater Blower Operation

∗ Manual operation
When the blower control SW in the rear A/C control SW is set to any blower speed, a signal is sent to the A/C amplifier. The A/C amplifier controls the power transistor and operates the rear cooler blower motor and rear heater blower motor at the set speed.

∗ Auto operation
When the auto SW in the rear A/C control SW is operated, a signal is sent to the A/C amplifier. The A/C amplifier controls the power transistor according to the signals from respective sensors, and operates the rear cooler blower motor and rear heater blower motor.

2. Air Mix Control Servo Motor Control

When the temperature control lever in the rear A/C control SW is operated, a signal is sent to the A/C amplifier. The A/C amplifier controls the rear air mix control servo motor to operate the damper until it reaches the temperature set by the temperature control lever.

3. Air Conditioning Operation

The cooler and heater operation can be switched by the mode select SW in the rear A/C control SW.

Service Hints

A32 A/C Amplifier (Rear)

1-Ground : Always approx. 12 volts
2-Ground : Approx. 12 volts with ignition SW at ON or ST position
22-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A32	A	72	J11		71	R16	73
A33	B	72	J22		72	R17	73
A34	C	72	J23	B	72	R21	73
A45	A	70	J25	A	72	R22	73
A46	B	70	R8		73	R25	73
A47	C	70	R9		73	R26	73
F16		68	R14		73	R34	73
I18		70	R15		73		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room No.2 Wire and Engine Room J/B (Engine Compartment Left)
2B	28	Engine Room No.2 Wire and Cowl Side J/B LH (Left Kick Panel)
2C		
2D	28	Dash Wire and Cowl Side J/B LH (Left Kick Panel)
2E		
2Q	30	Instrument Panel Integration Wire and Cowl Side J/B LH (Left Kick Panel)
3B	40	Engine Room No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3K	40	Floor No.2 Wire and Cowl Side J/B RH (Right Kick Panel)
3Q	42	Instrument Panel Integration Wire and Cowl Side J/B RH (Right Kick Panel)
4A	52	Dash Wire and J/B No.4 (Instrument Panel Center)
4C		
4F		

Air Conditioning (Rear)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	78	Engine Room No.2 Wire and Floor No.1 Wire (Left Kick Panel)
IV4	82	Dash Wire and Floor No.2 Wire (Right Kick Panel)
BD3	86	Floor No.3 Wire and Floor No.1 Wire (Left Rear Side Quarter Panel)
BL1	88	Floor No.2 Wire and Floor No.3 Wire (Right Side of Rear Floor Crossmember)
BL4		
BW1	88	Floor No.2 Wire and A/C Sub Wire (Right Side Rear Quarter Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IF	78	Set Bolt of Cowl Side J/B LH
BJ	86	Under the Driver’s Seat
BK	86	Front Side Under the Front Passenger’s Seat

⬡ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B13	88	Roof No.2 Wire	B19	88	A/C Sub Wire
B14	88	Floor No.2 Wire			