# FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2006 TOYOTA TUNDRA.

Applicable models: GSK30 Series
UCK30, 31, 40, 41 Series

Refer to the following manuals for additional service specifications and repair procedures for these models:

| Manual Name | Pub. No. |
|---|---|
| ● 2006 TOYOTA TUNDRA Repair Manual | RM00Q0U |
| ● 2006 TOYOTA New Car Features | NM0010U |

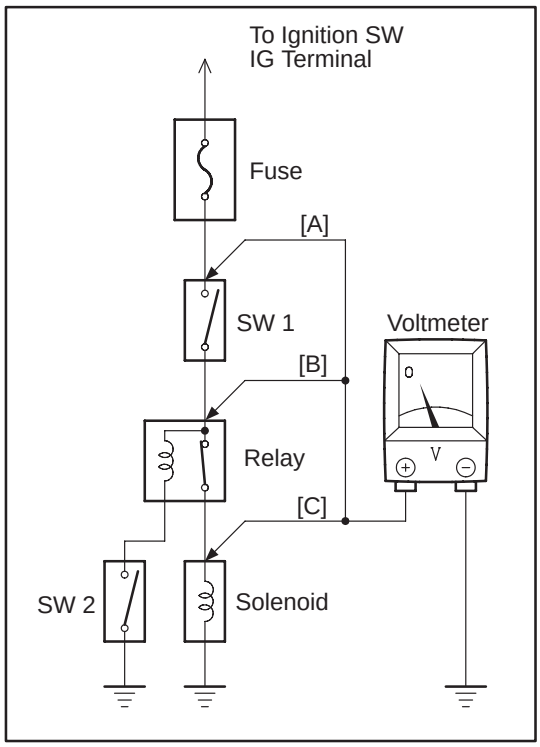
All information in this manual is based on the latest product information at the time of publication. However, specifications and procedures are subject to change without notice.

**TOYOTA MOTOR CORPORATION**

**NOTICE**

**Always follow the directions given in the above repair manuals when handling supplemental restraint system components (such as removal, installation, inspection, etc.) in order to prevent accidents and supplemental restraint system malfunction.**

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First Printing : Jul. 27, 2005 01–050727–00

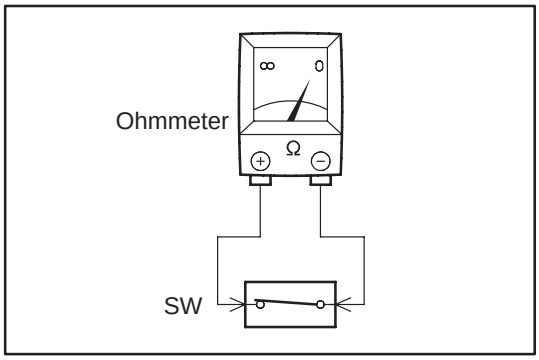



## VOLTAGE CHECK

(a) Establish conditions in which voltage is present at the check point.

Example:
[A] – Ignition SW on
[B] – Ignition SW and SW 1 on
[C] – Ignition SW, SW 1 and Relay on (SW 2 off)

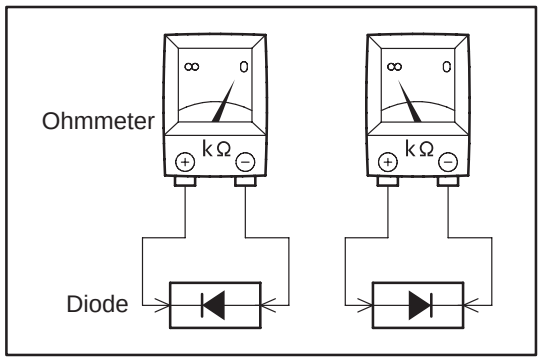
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



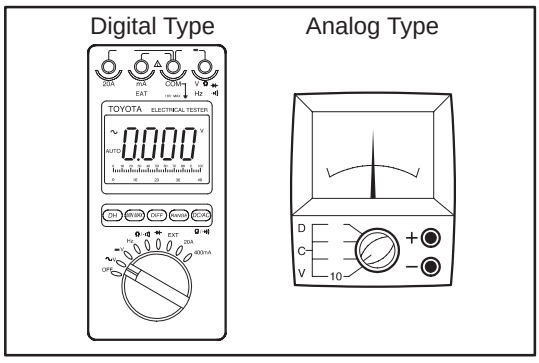

## CONTINUITY AND RESISTANCE CHECK

(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

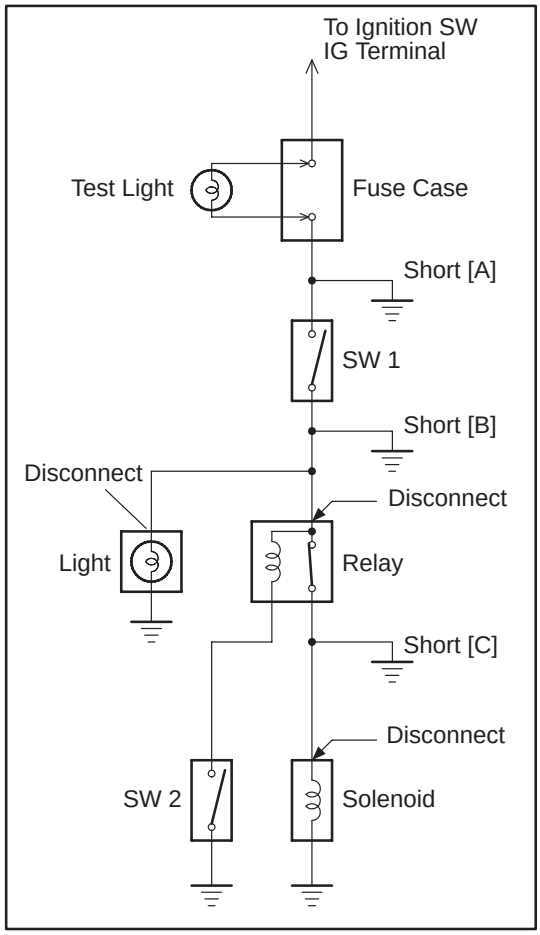
(b) Contact the two leads of an ohmmeter to each of the check points.




If the circuit has diodes, reverse the two leads and check again.
When contacting the negative lead to the diode positive side and the positive lead to the negative side, there should be continuity.
When contacting the two leads in reverse, there should be no continuity.




(c) Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting of the electrical circuit.




## FINDING A SHORT CIRCUIT

(a) Remove the blown fuse and disconnect all loads of the fuse.

(b) Connect a test light in place of the fuse.

(c) Establish conditions in which the test light comes on.

Example:

[A] – Ignition SW on
[B] – Ignition SW and SW 1 on
[C] – Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or Disconnect SW 2)

(d) Disconnect and reconnect the connectors while watching the test light.
The short lies between the connector where the test light stays lit and the connector where the light goes out.

(e) Find the exact location of the short by lightly shaking the problem wire along the body.

**CAUTION:**

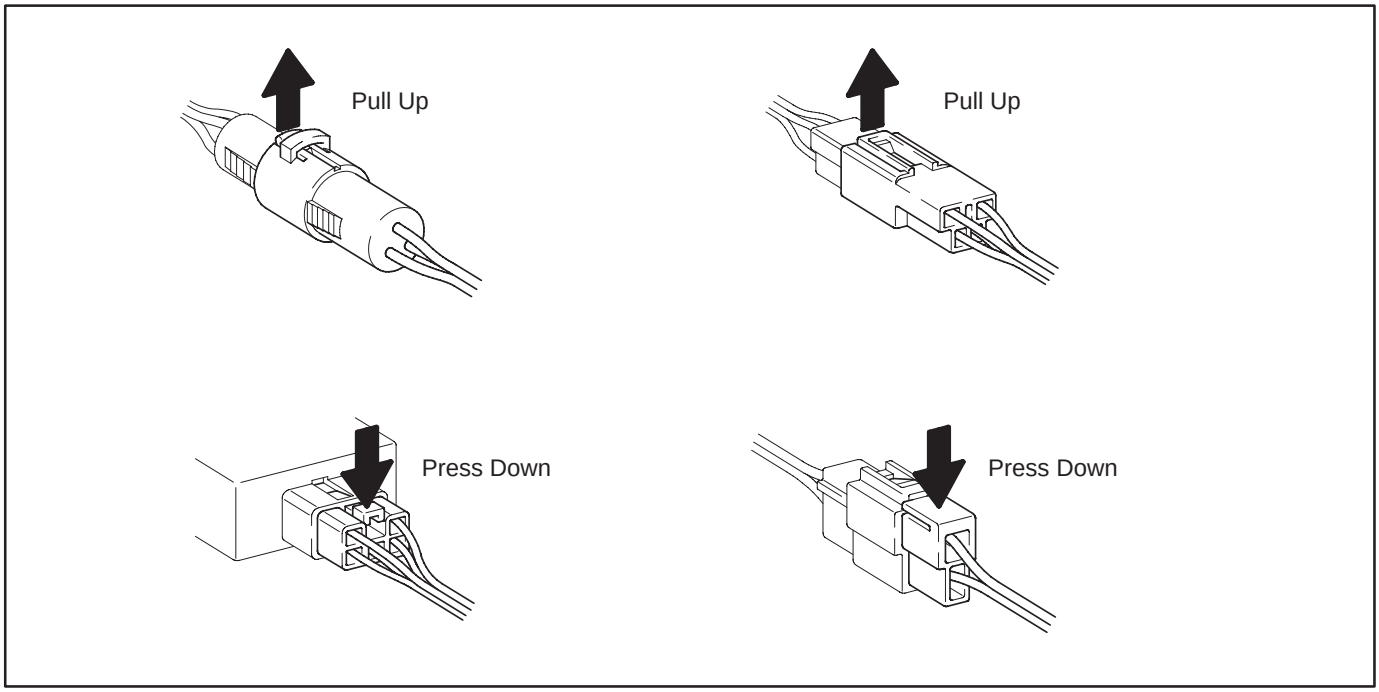
**(a) Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)**

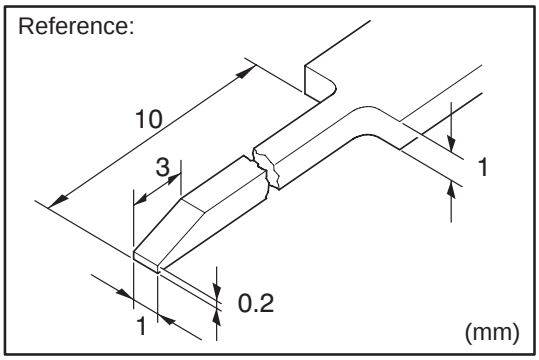
**(b) When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).**

## DISCONNECTION OF MALE AND FEMALE CONNECTORS

To pull apart the connectors, pull on the connector itself, not the wire harness.

HINT : Check to see what kind of connector you are disconnecting before pulling apart.



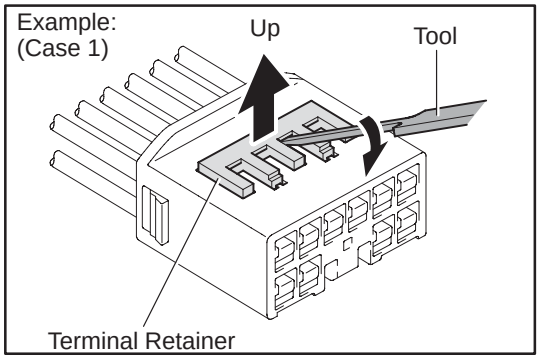



## HOW TO REPLACE TERMINAL (with terminal retainer or secondary locking device)

1. PREPARE THE SPECIAL TOOL

   HINT : To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.

2. DISCONNECT CONNECTOR

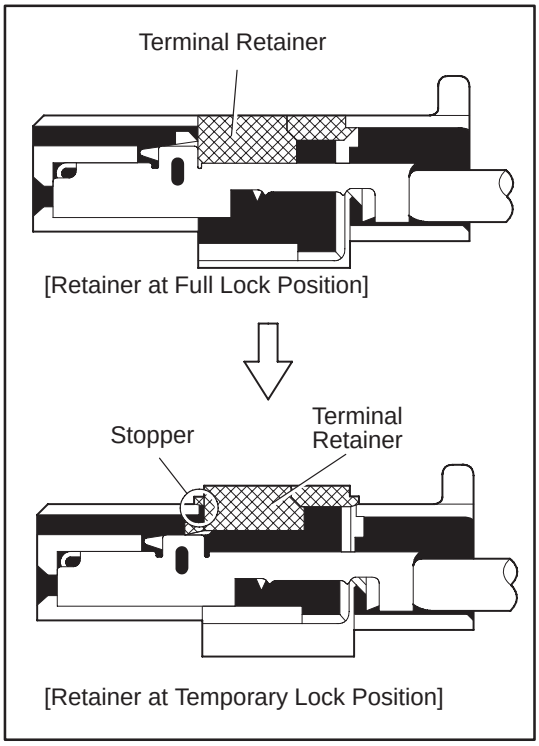



3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

   (a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.

   (b) Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

   **NOTICE:**
   **Do not remove the terminal retainer from connector body.**

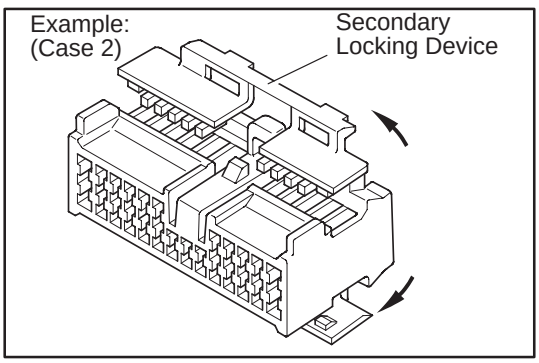



[A] For Non–Waterproof Type Connector

HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

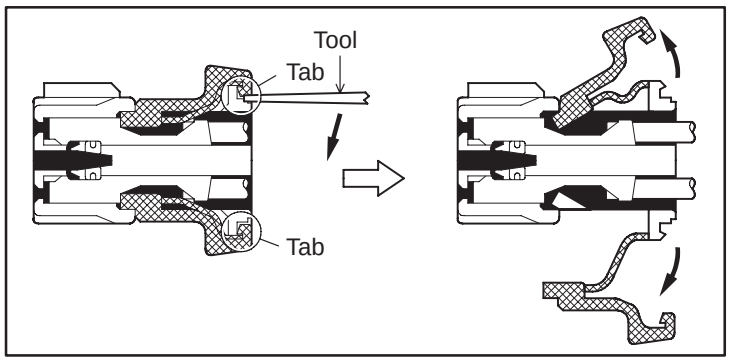
"Case 1"

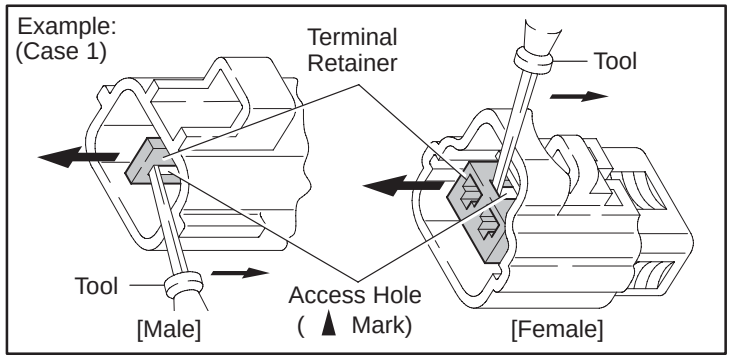
Raise the terminal retainer up to the temporary lock position.




"Case 2"

Open the secondary locking device.



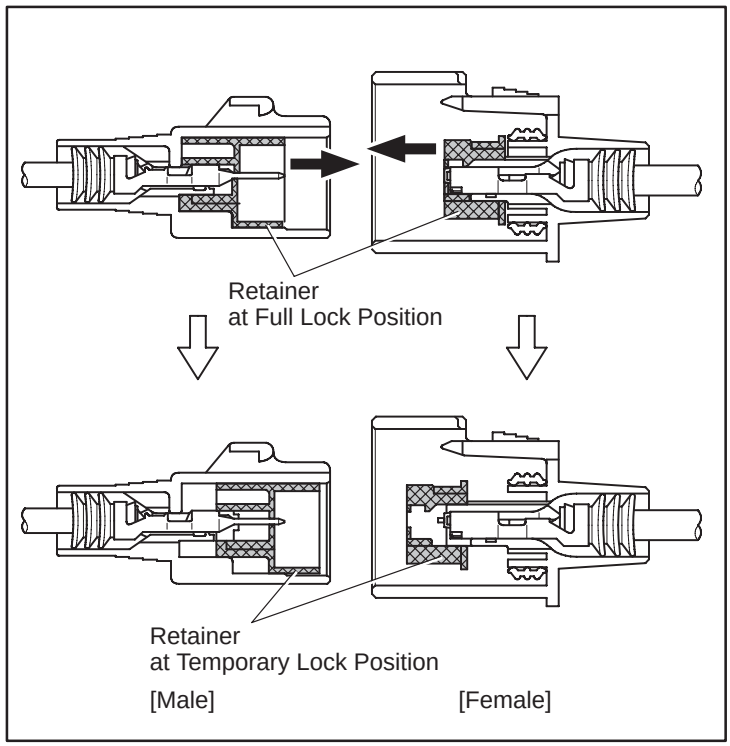




[B] For Waterproof Type Connector

HINT : Terminal retainer color is different according to connector body.

Example:

| Terminal Retainer | : | Connector Body |
|---|---|---|
| Black or White | : | Gray |
| Black or White | : | Dark Gray |
| Gray or White | : | Black |

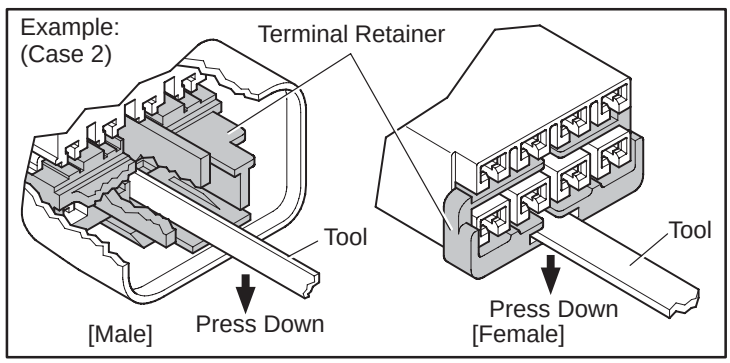



”Case 1”

Type where terminal retainer is pulled up to the temporary lock position (Pull Type).

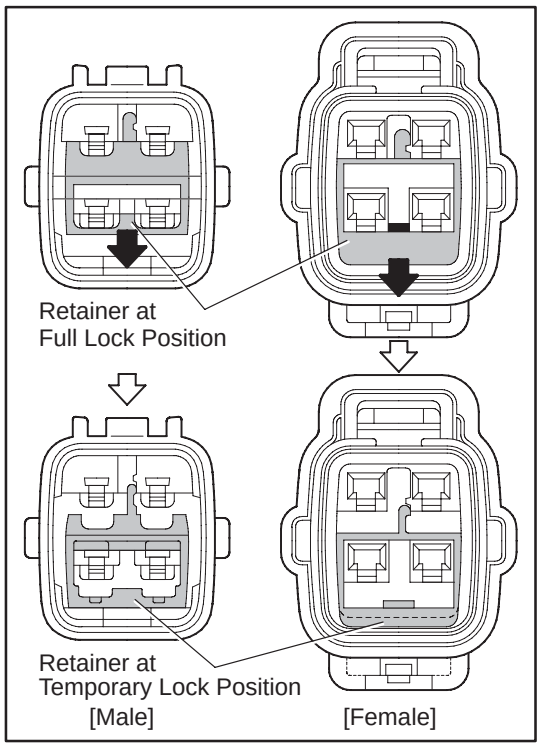
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

HINT : The needle insertion position varies according to the connector’s shape (Number of terminals etc.), so check the position before inserting it.

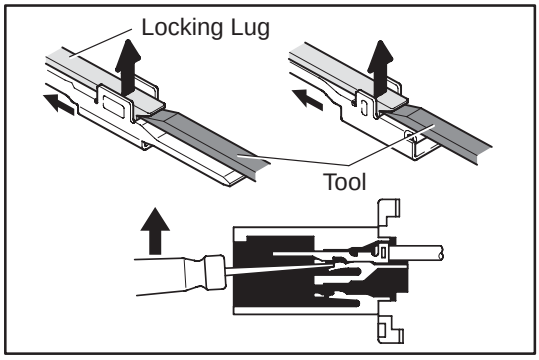



”Case 2”

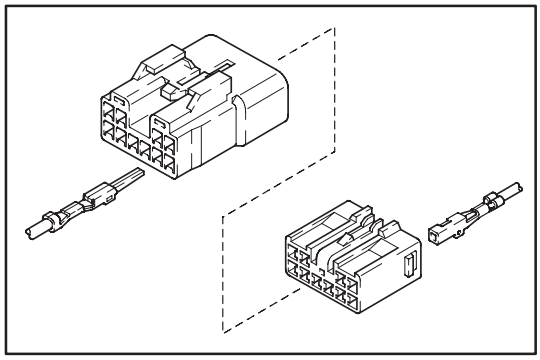
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.




Push the terminal retainer down to the temporary lock position.



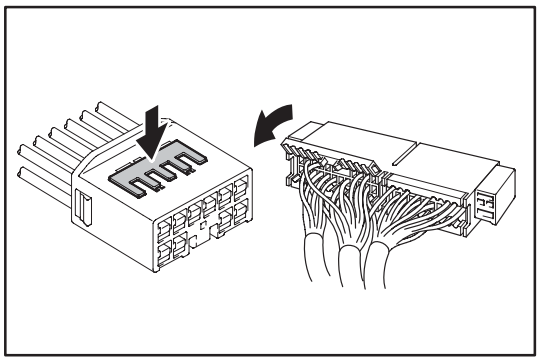

(c) Release the locking lug from terminal and pull the terminal out from rear.



4. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

HINT:
1. Make sure the terminal is positioned correctly.
2. Insert the terminal until the locking lug locks firmly.
3. Insert the terminal with terminal retainer in the temporary lock position.



(b) Push the secondary locking device or terminal retainer in to the full lock position.

5. CONNECT CONNECTOR

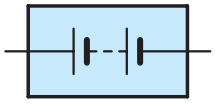
## ABBREVIATIONS

The following abbreviations are used in this manual.

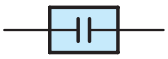
| | | |
|---|---|---|
| 2WD | = | Two Wheel Drive Vehicles |
| 4WD | = | Four Wheel Drive Vehicles |
| A/C | = | Air Conditioning |
| A/T | = | Automatic Transmission |
| ABS | = | Anti–Lock Brake System |
| ACIS | = | Acoustic Control Induction System |
| ADD | = | Automatic Disconnecting Differential |
| BEAN | = | Body Electronics Area Network |
| CAN | = | Controller Area Network |
| DVD | = | Digital Versatile Disc |
| EC | = | Electrochromic |
| ECU | = | Electronic Control Unit |
| ESA | = | Electronic Spark Advance |
| ETCS–i | = | Electronic Throttle Control System–intelligent |
| FL | = | Fusible Link Block |
| IC | = | Integrated Circuit |
| INT | = | Intermittent |
| IPO | = | Intelligent Power Outlet |
| J/B | = | Junction Block |
| LH | = | Left–Hand |
| M/T | = | Manual Transmission |
| O/D | = | Overdrive |
| R/B | = | Relay Block |
| RH | = | Right–Hand |
| SFI | = | Sequential Multiport Fuel Injection |
| SPEC. | = | Specification |
| SRS | = | Supplemental Restraint System |
| SW | = | Switch |
| TEMP. | = | Temperature |
| TRAC | = | Traction Control |
| TVIP | = | TOYOTA Vehicle Intrusion Protection |
| VSC | = | Vehicle Stability Control |
| VSV | = | Vacuum Switching Valve |
| VVT | = | Variable Valve Timing |
| w/ | = | With |
| w/o | = | Without |

* The titles given inside the components are the names of the terminals (terminal codes) and are not treated as being abbreviations.

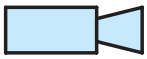
# E GLOSSARY OF TERMS AND SYMBOLS



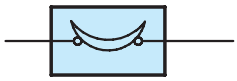
**BATTERY**
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.



**CAPACITOR (Condenser)**
A small holding unit for temporary storage of electrical voltage.



**CIGARETTE LIGHTER**
An electric resistance heating element.



**CIRCUIT BREAKER**
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.



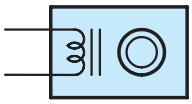
**DIODE**
A semiconductor which allows current flow in only one direction.



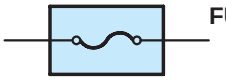
**DIODE, ZENER**
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



**PHOTODIODE**
The photodiode is a semiconductor which controls the current flow according to the amount of light.



**DISTRIBUTOR, IIA**
Channels high–voltage current from the ignition coil to the individual spark plugs.



**FUSE**
A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.



(for Medium Current Fuse)

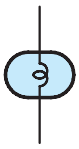
**FUSIBLE LINK**
A heavy–gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. The numbers indicate the crosssection surface area of the wires.



(for High Current Fuse or Fusible Link)



**GROUND**
The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.



**1. SINGLE FILAMENT**

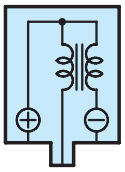


**2. DOUBLE FILAMENT**

**HEADLIGHTS**
Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament



**HORN**
An electric device which sounds a loud audible signal.



**IGNITION COIL**
Converts low–voltage DC current into high–voltage ignition current for firing the spark plugs.



**LIGHT**
Current flow through a filament causes the filament to heat up and emit light.



**LED (LIGHT EMITTING DIODE)**
Upon current flow, these diodes emit light without producing the heat of a comparable light.



**METER, ANALOG**
Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration.

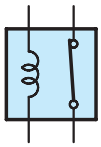



**METER, DIGITAL**
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.

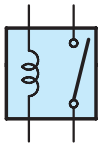



**MOTOR**
A power unit which converts electrical energy into mechanical energy, especially rotary motion.

**RELAY**



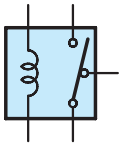
**1. NORMALLY CLOSED**



**2. NORMALLY OPEN**

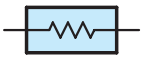
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.

**RELAY, DOUBLE THROW**



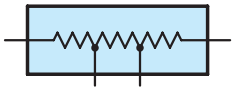
A relay which passes current through one set of contacts or the other.

**RESISTOR**



An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.

**RESISTOR, TAPPED**



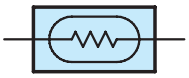
A resistor which supplies two or more different non adjustable resistance values.

**RESISTOR, VARIABLE or RHEOSTAT**



A controllable resistor with a variable rate of resistance.
Also called a potentiometer or rheostat.

**SENSOR (Thermistor)**



A resistor which varies its resistance with temperature.

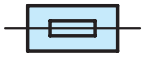
**SENSOR, SPEED**



(Reed Switch Type)

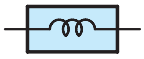
Uses magnetic impulses to open and close a switch to create a signal for activation of other components.

**SHORT PIN**



Used to provide an unbroken connection within a junction block.

**SOLENOID**



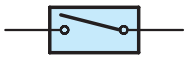
An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.

**SPEAKER**

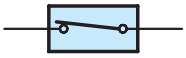


An electromechanical device which creates sound waves from current flow.

**SWITCH, MANUAL**



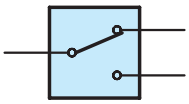
**1. NORMALLY OPEN**



**2. NORMALLY CLOSED**

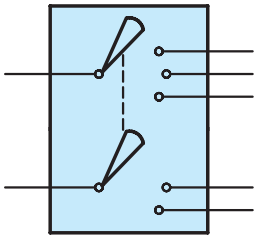
Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.

**SWITCH, DOUBLE THROW**



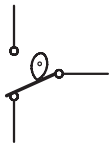
A switch which continuously passes current through one set of contacts or the other.

**SWITCH, IGNITION**



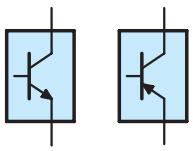
A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.

**SWITCH, WIPER PARK**



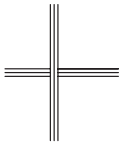
Automatically returns wipers to the stop position when the wiper switch is turned off.

**TRANSISTOR**

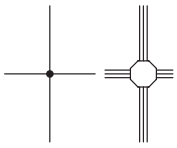


A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base".

**WIRES**



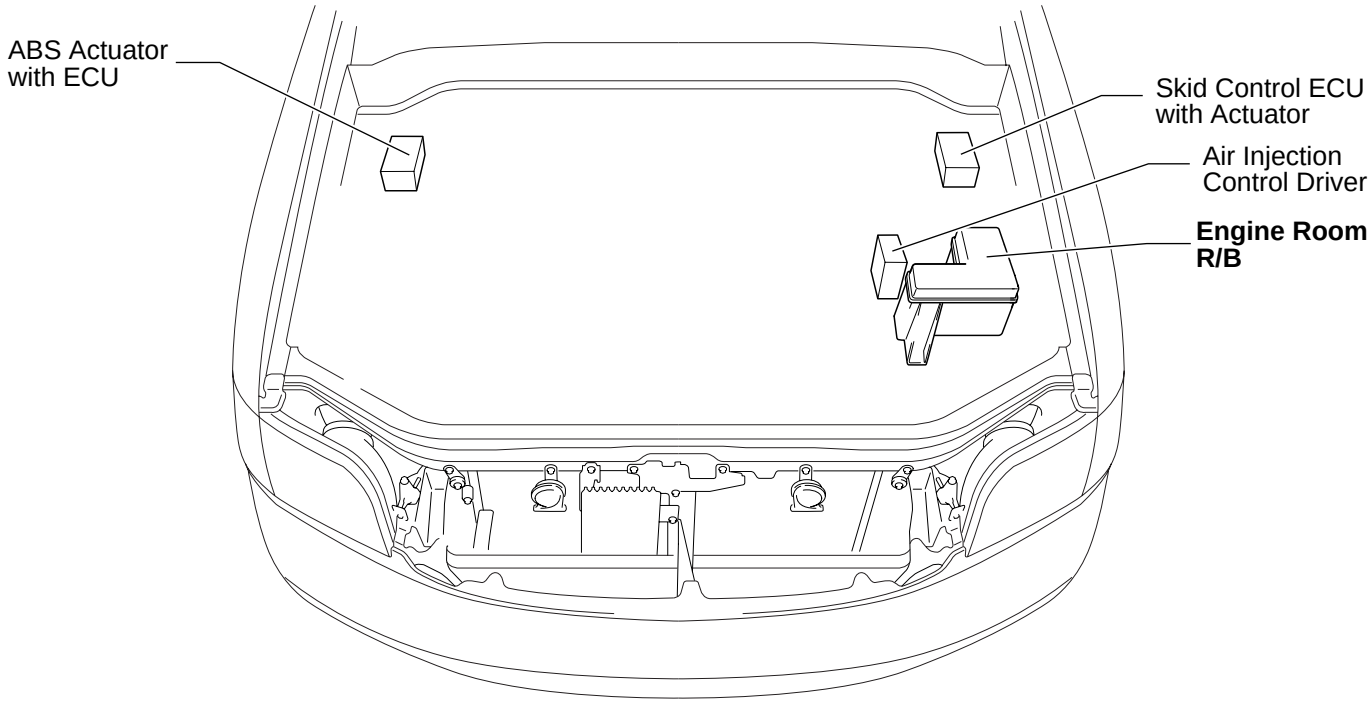
**(1) NOT CONNECTED**



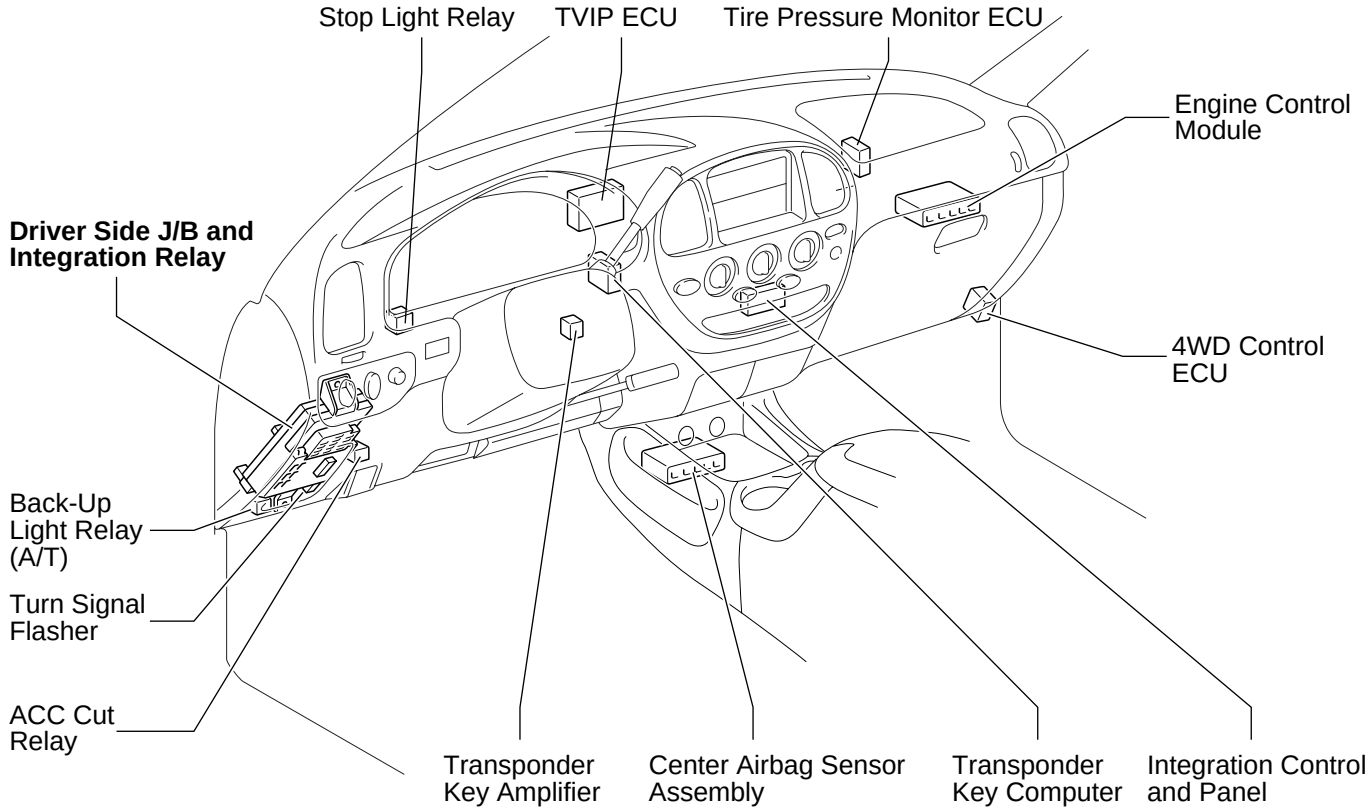
**(2) SPLICED**

Wires are always drawn as straight lines on wiring diagrams.
Crossed wires (1) without a black dot at the junction are not joined;
crossed wires (2) with a black dot or octagonal (⬡) mark at the junction are spliced (joined) connections.

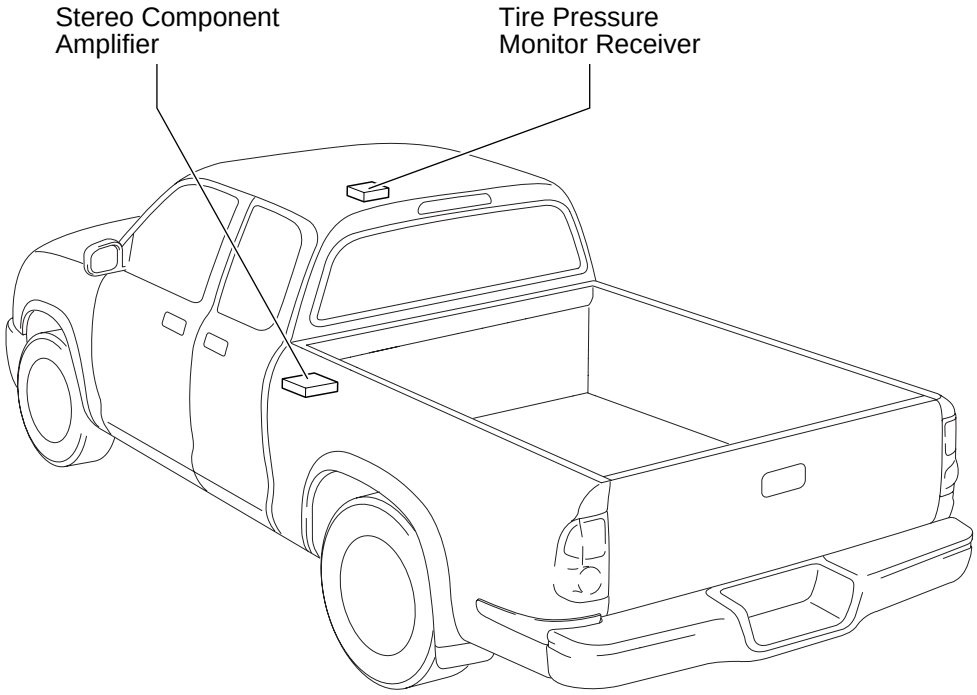
## [Engine Compartment]
## (Access Cab, Standard Cab)



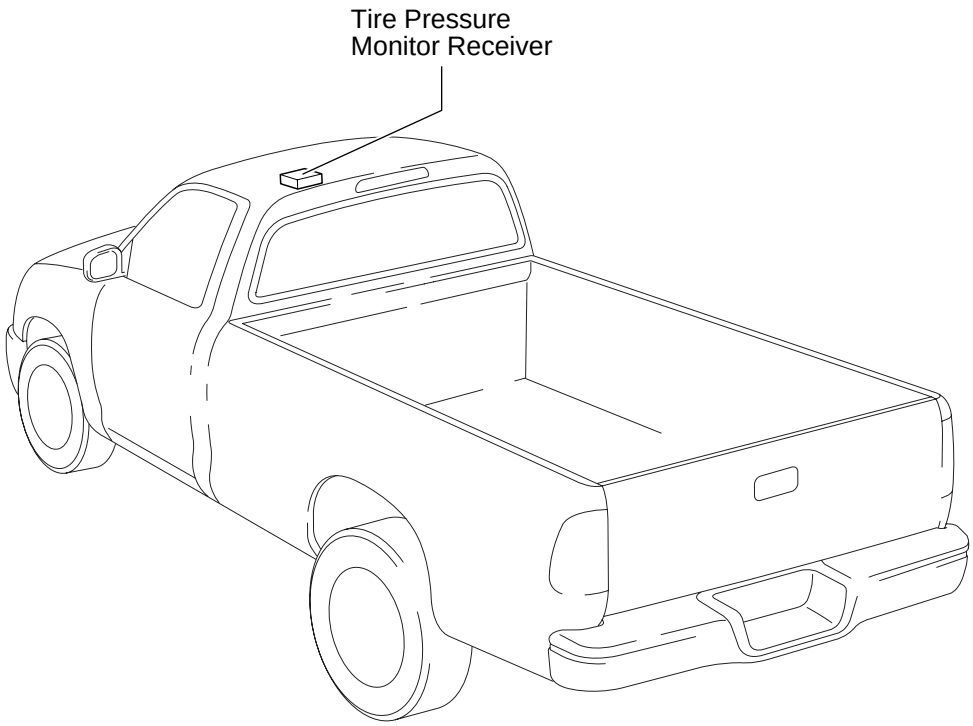

## [Instrument Panel]
## (Access Cab, Standard Cab)



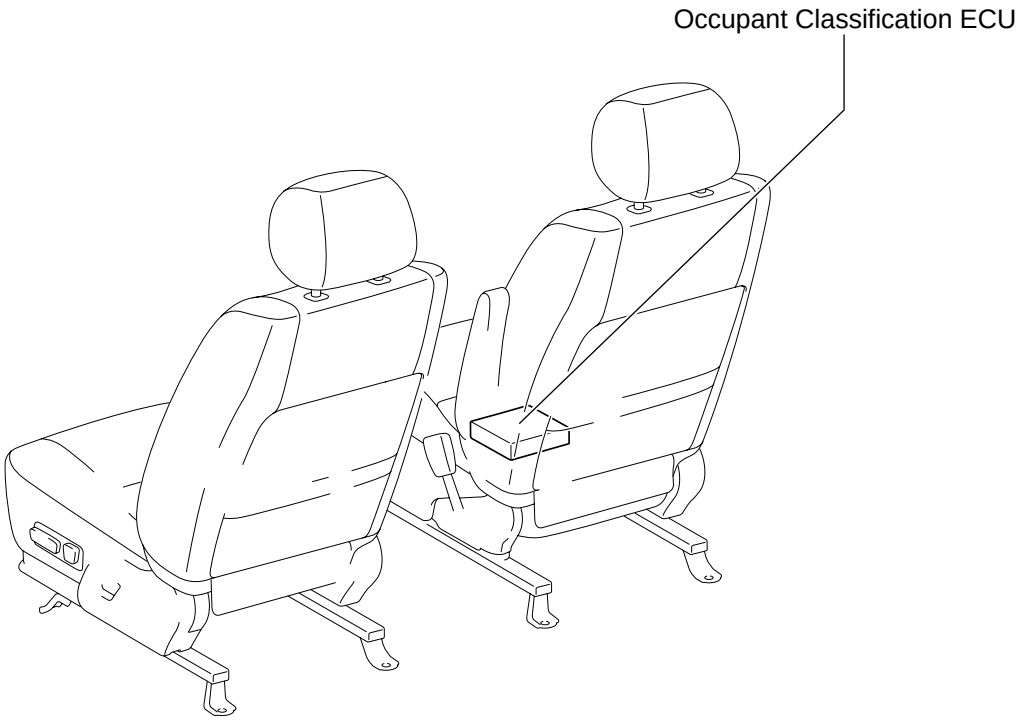
## [Body]
## (Access Cab)



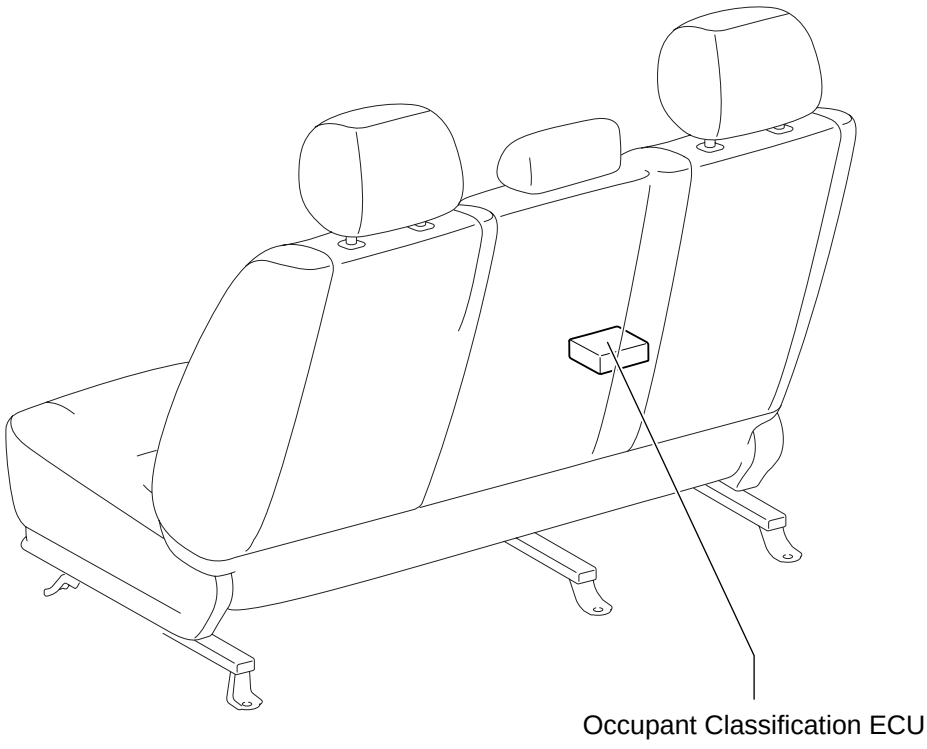

## (Standard Cab)



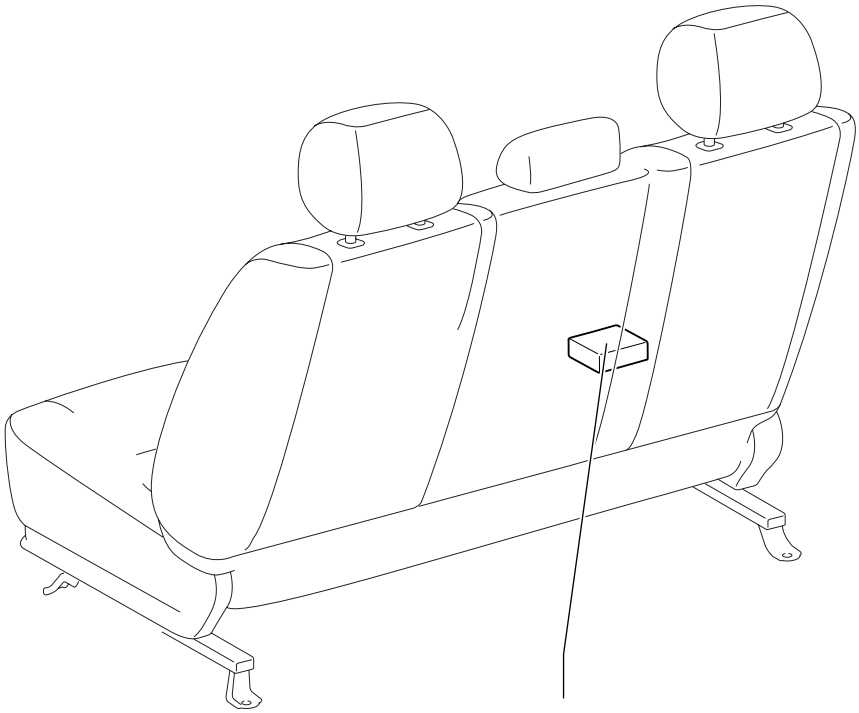
## [Seat]
## (Access Cab : Captain Seat)




## (Access Cab : Separate Seat)



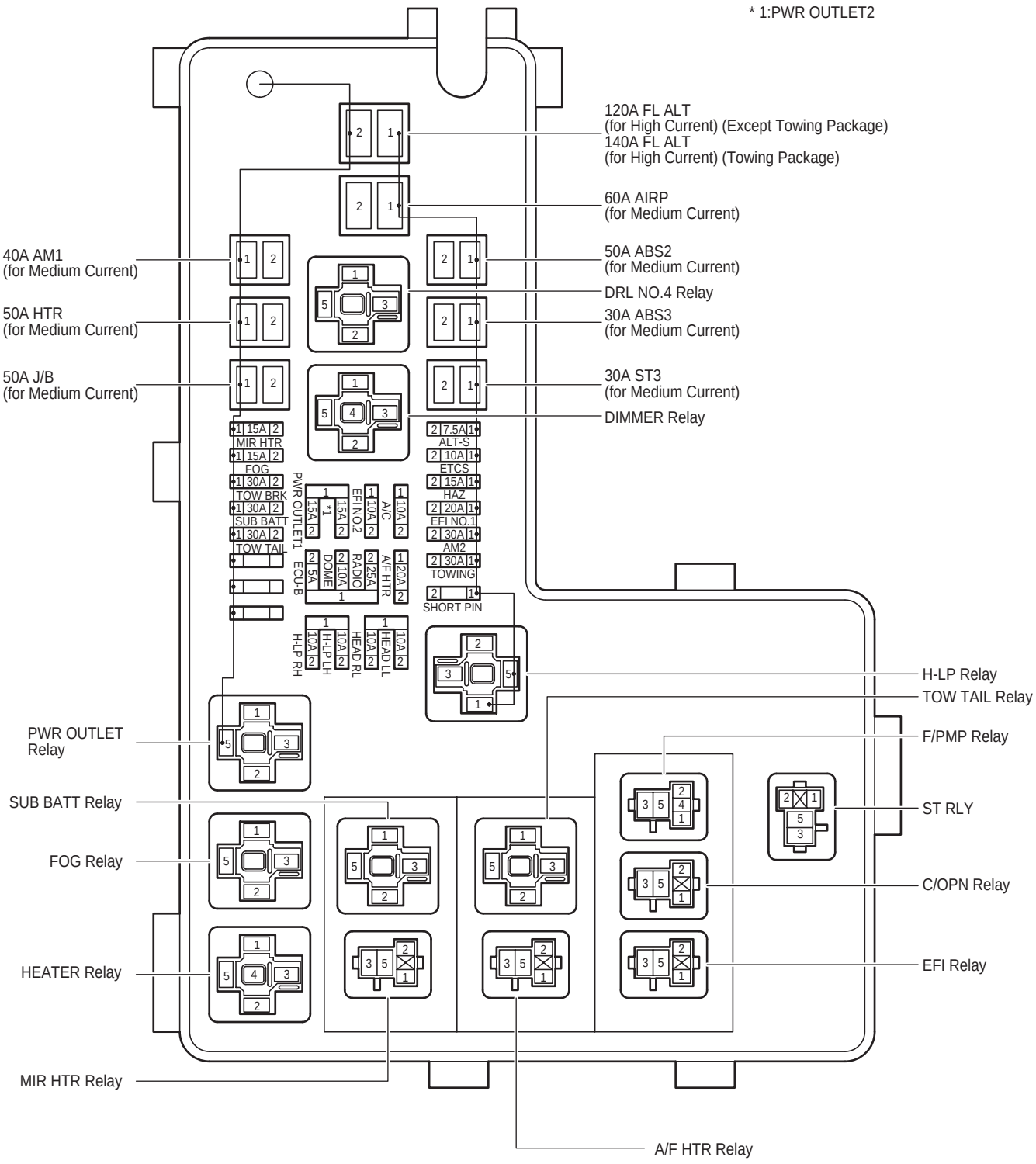
## [Seat]
## (Standard Cab : Bench Seat)



# F RELAY LOCATIONS

| ② : Engine Room R/B | Engine Compartment Left (See Page 20) |
|---|---|

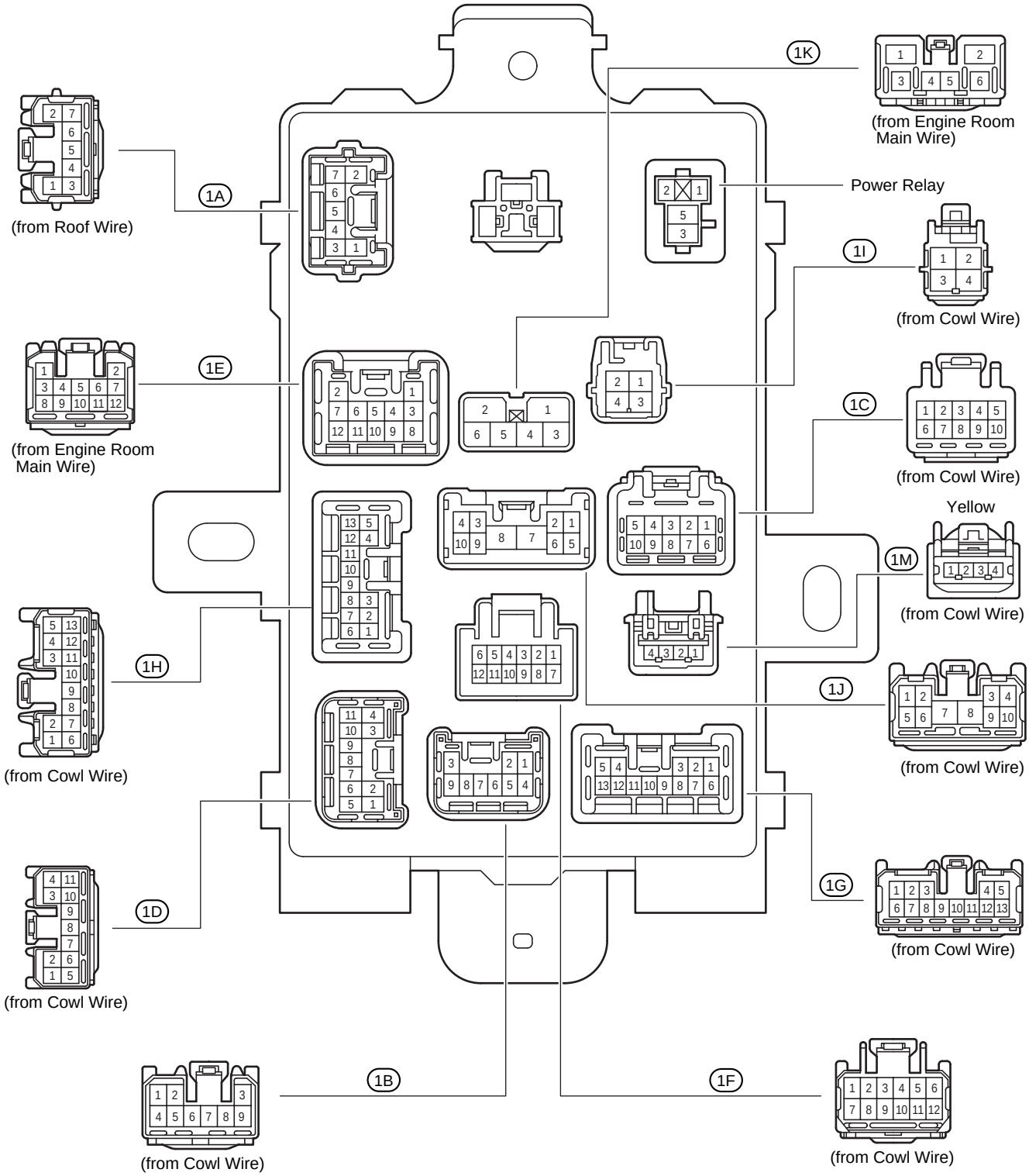
## (Access Cab, Standard Cab)

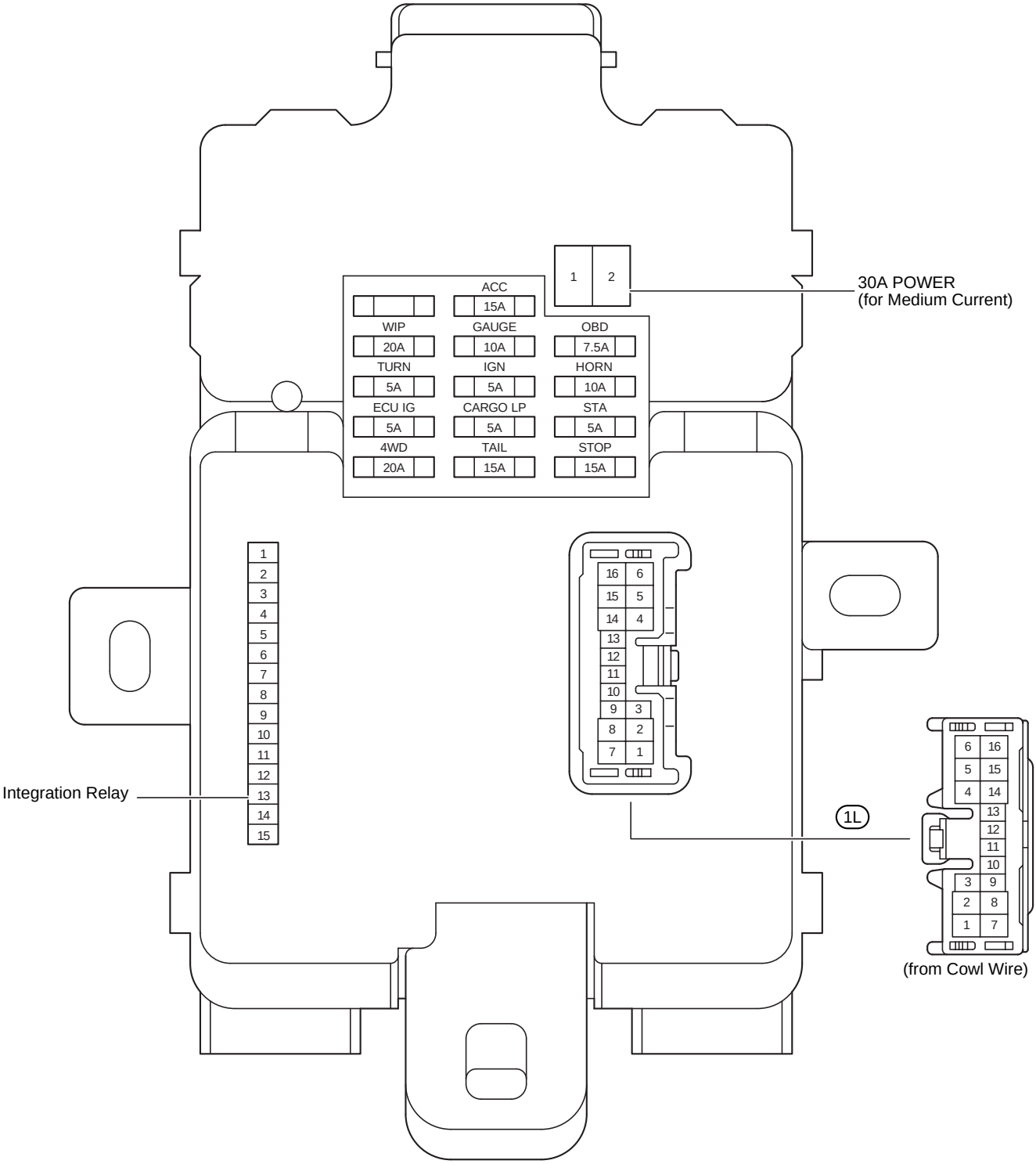


# F RELAY LOCATIONS

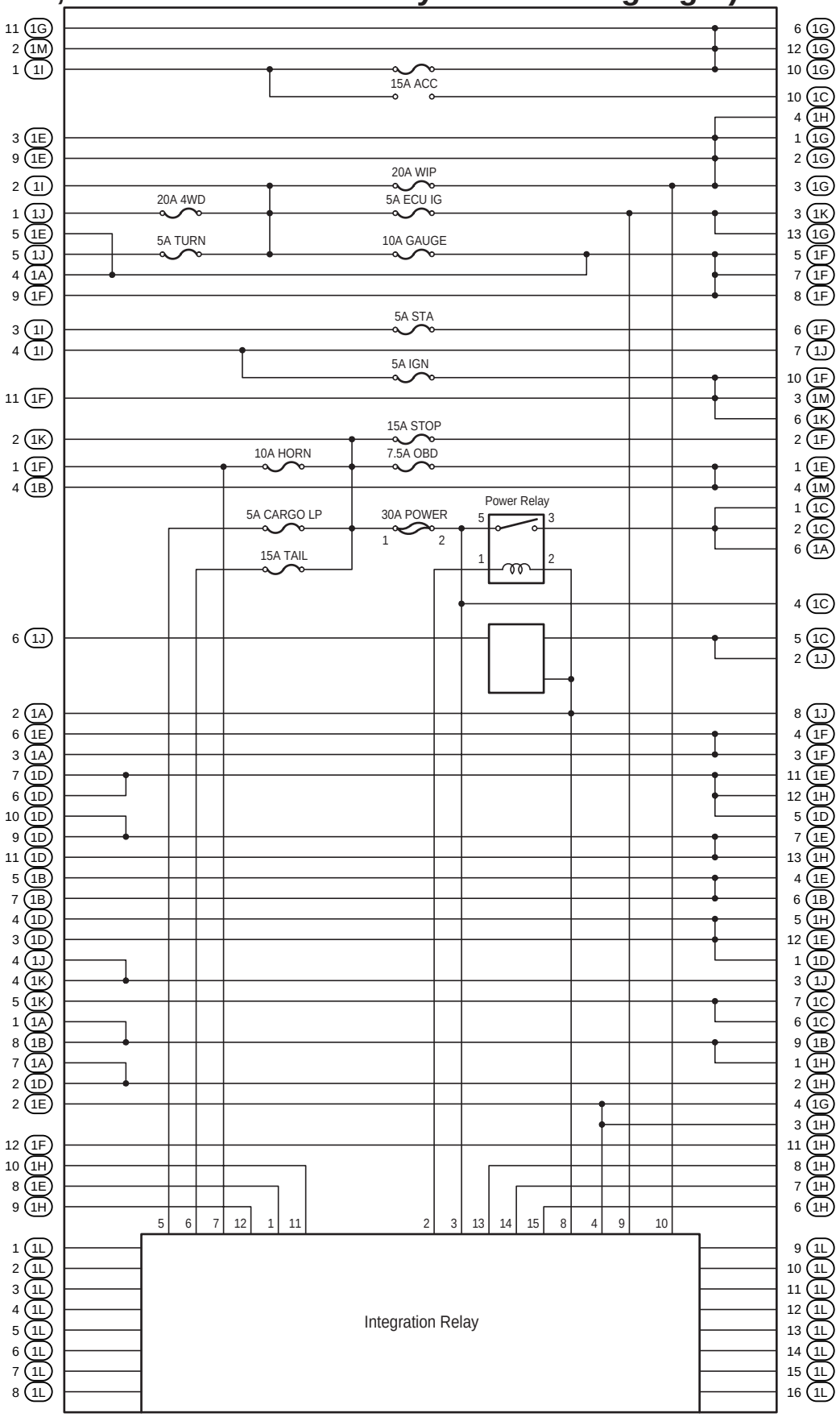
| : Driver Side J/B and Integration Relay | Lower Finish Panel (See Page 20) |
|---|---|

## (Access Cab, Standard Cab : w/o Daytime Running Light)




1
2
30A POWER
(for Medium Current)
ACC
15A
WIP
20A
GAUGE
10A
OBD
7.5A
TURN
5A
IGN
5A
HORN
10A
ECU IG
5A
CARGO LP
5A
STA
5A
4WD
20A
TAIL
15A
STOP
15A
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Integration Relay
16
6
15
5
14
4
13
12
11
10
9
3
8
2
7
1
1L
6
16
5
15
4
14
13
12
11
10
3
9
2
8
1
7
(from Cowl Wire)

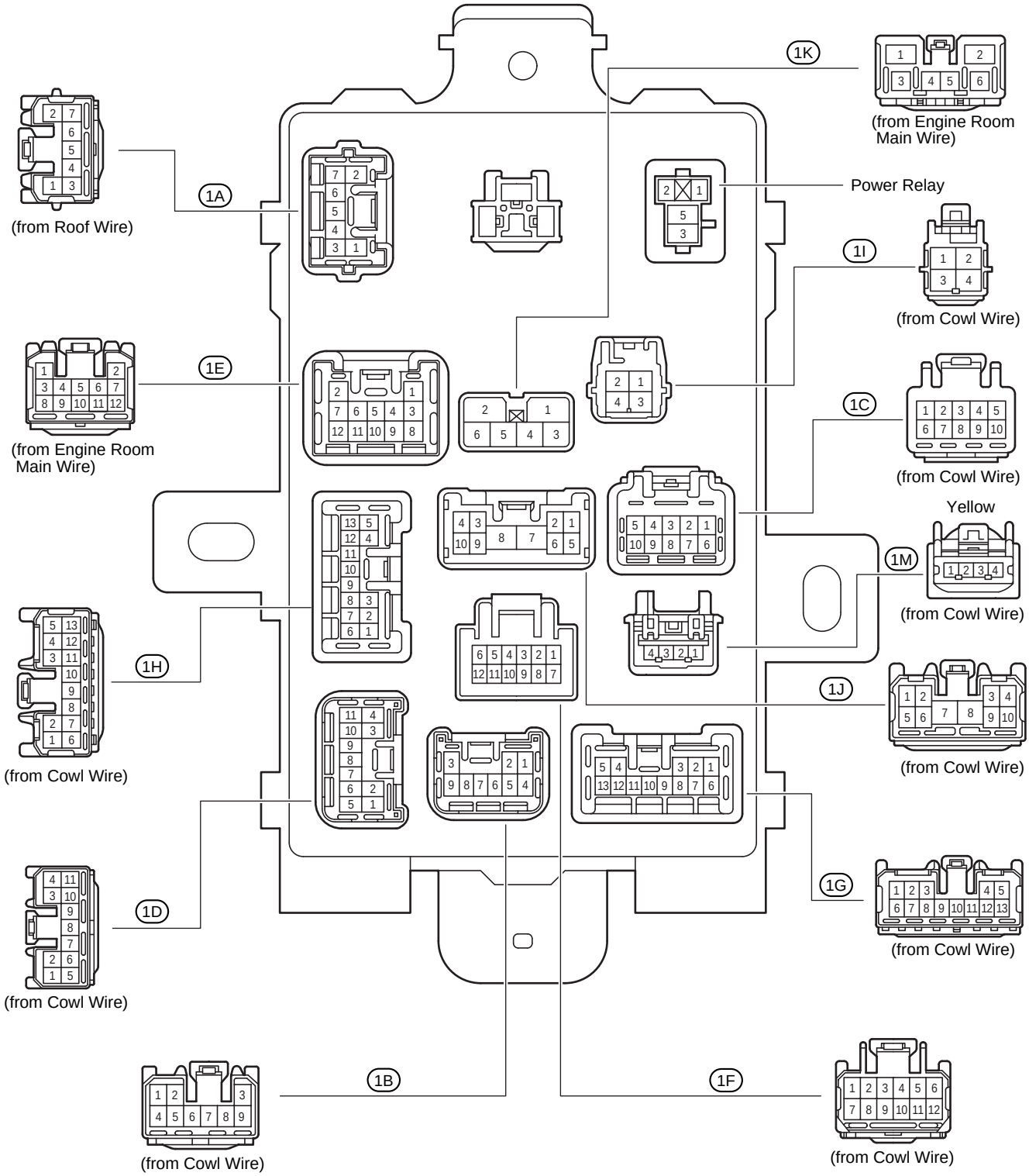
## [Driver Side J/B and Integration Relay Inner Circuit] (Access Cab, Standard Cab : w/o Daytime Running Light)

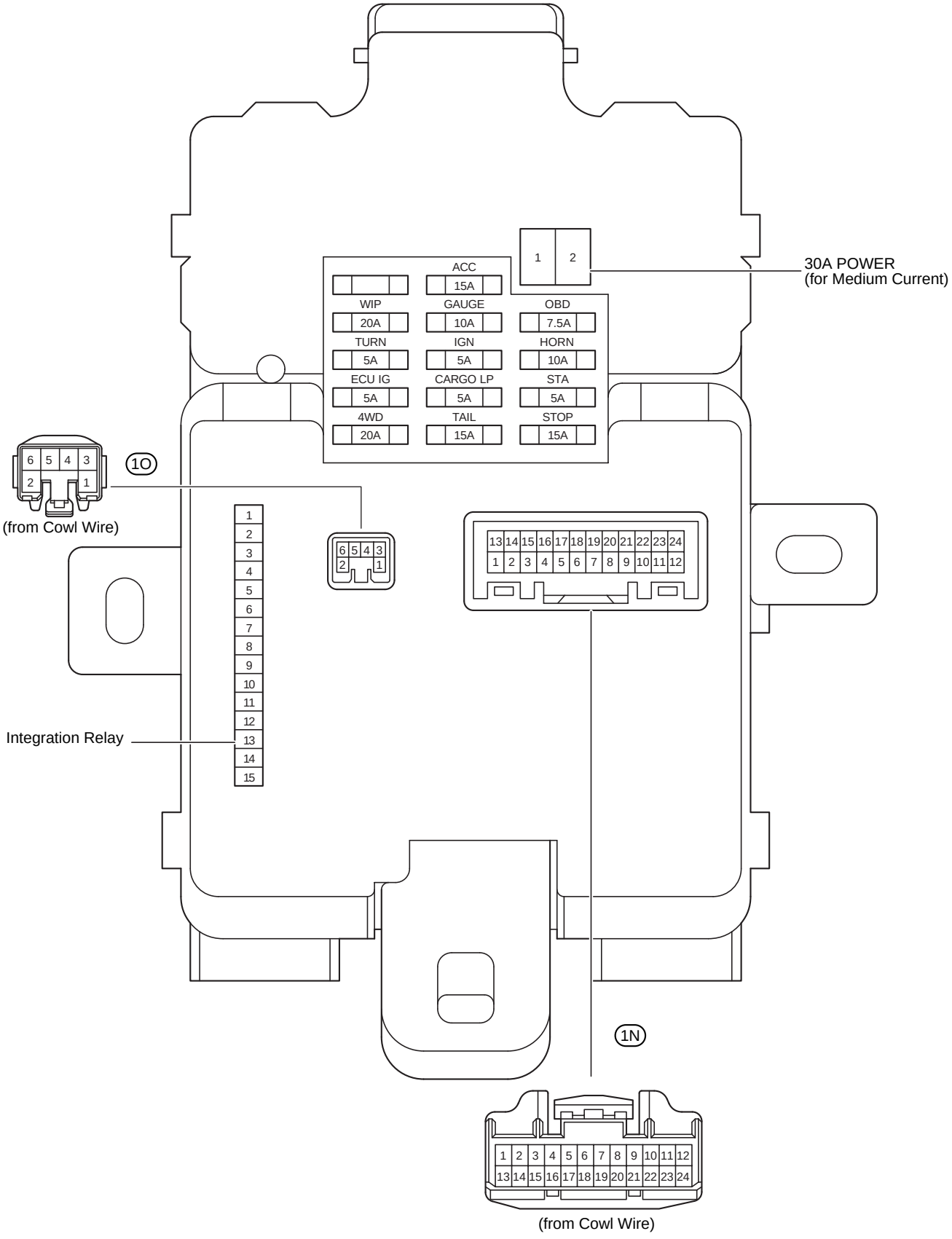


# F RELAY LOCATIONS

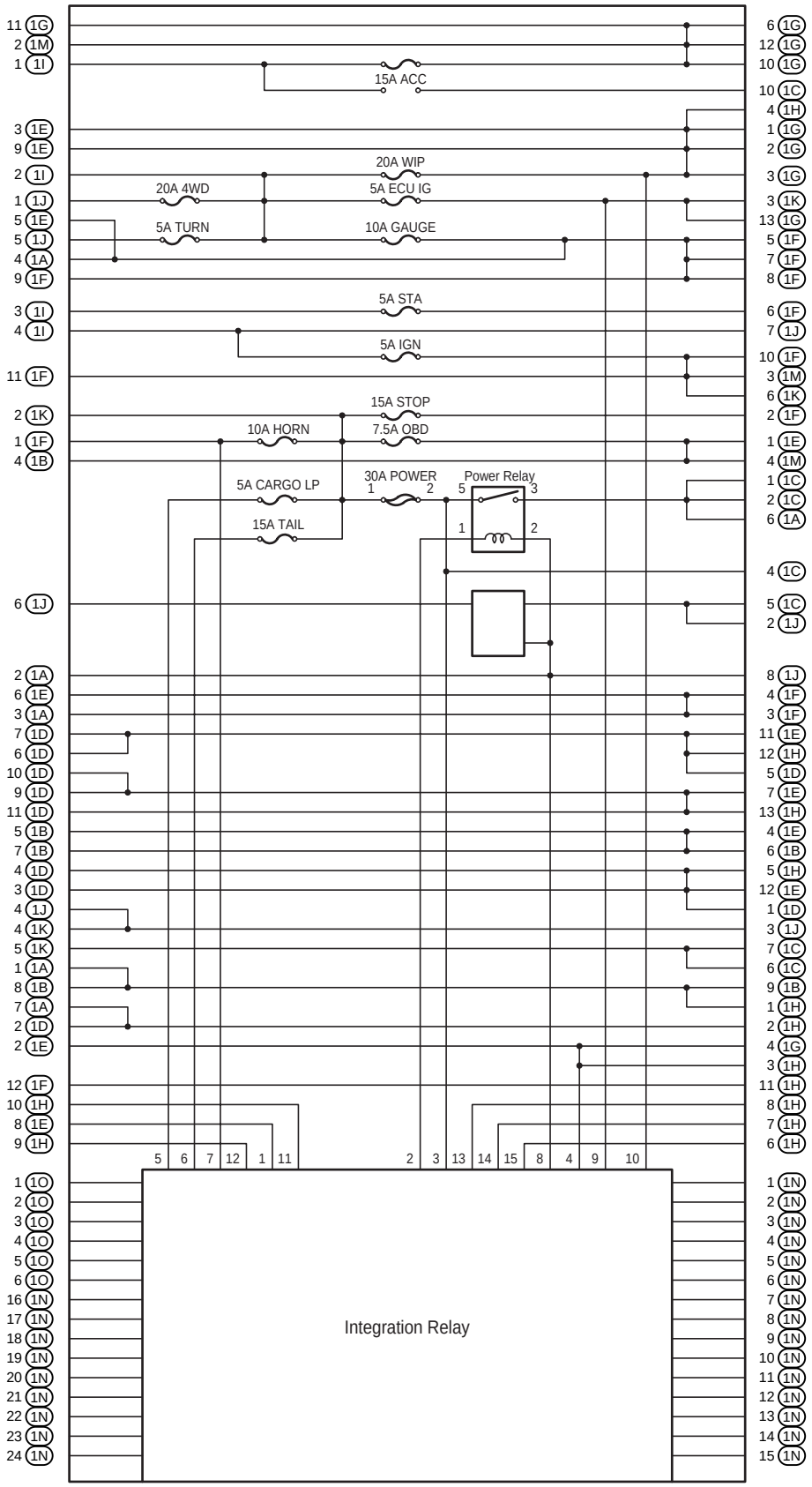
| : Driver Side J/B and Integration Relay | Lower Finish Panel (See Page 20) |
|---|---|

## (Access Cab, Standard Cab : w/ Daytime Running Light)

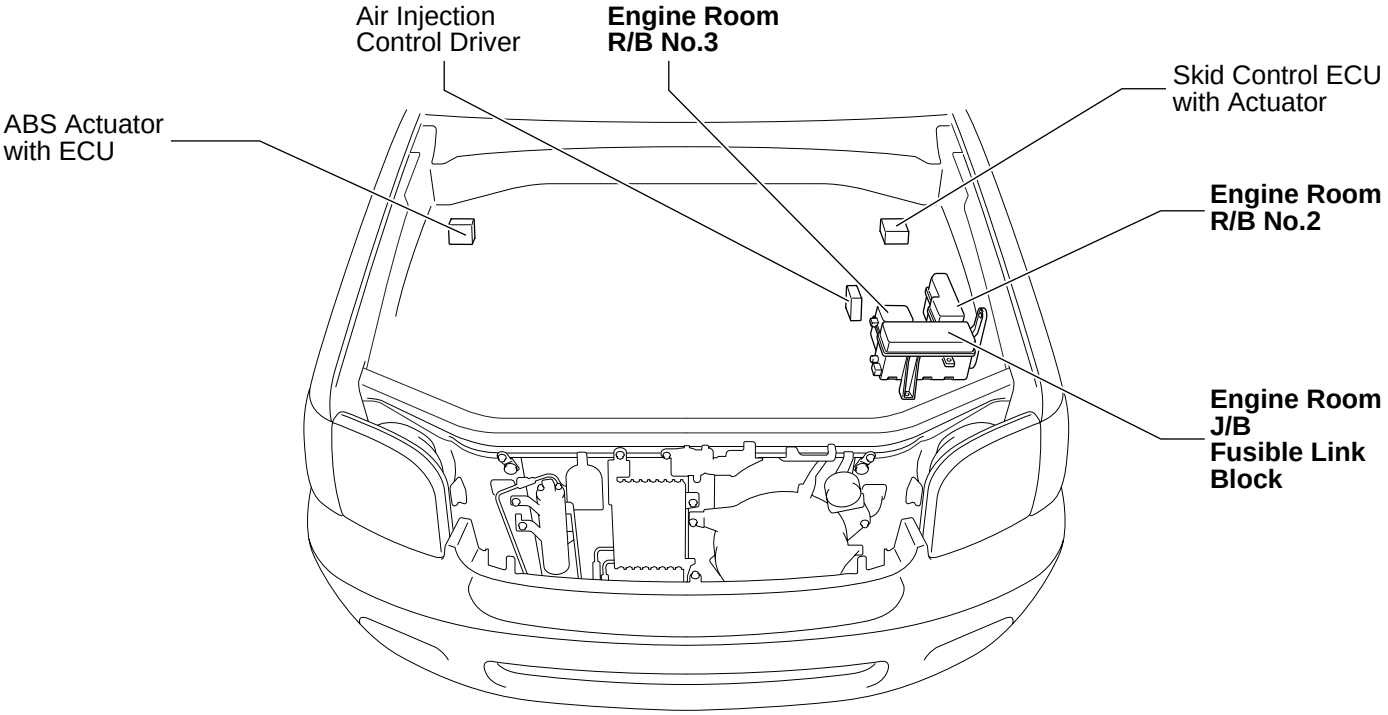



1
2
30A POWER
(for Medium Current)
ACC
15A
WIP
20A
GAUGE
10A
OBD
7.5A
TURN
5A
IGN
5A
HORN
10A
ECU IG
5A
CARGO LP
5A
STA
5A
4WD
20A
TAIL
15A
STOP
15A
6 5 4 3
2 1
1O
(from Cowl Wire)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
Integration Relay
13 14 15 16 17 18 19 20 21 22 23 24
1 2 3 4 5 6 7 8 9 10 11 12
1N
1 2 3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22 23 24
(from Cowl Wire)

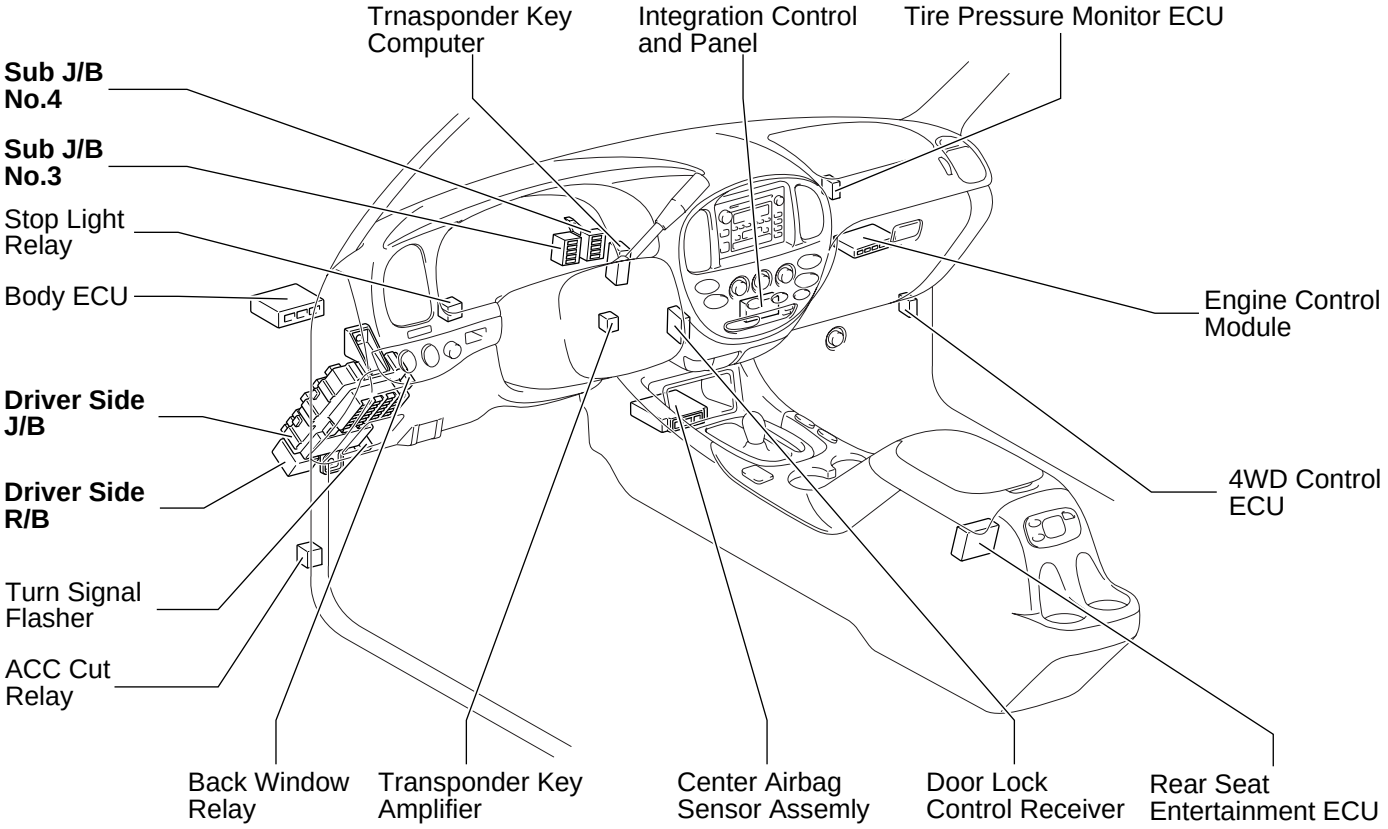
## [Driver Side J/B and Integration Relay Inner Circuit] (Access Cab, Standard Cab : w/ Daytime Running Light)



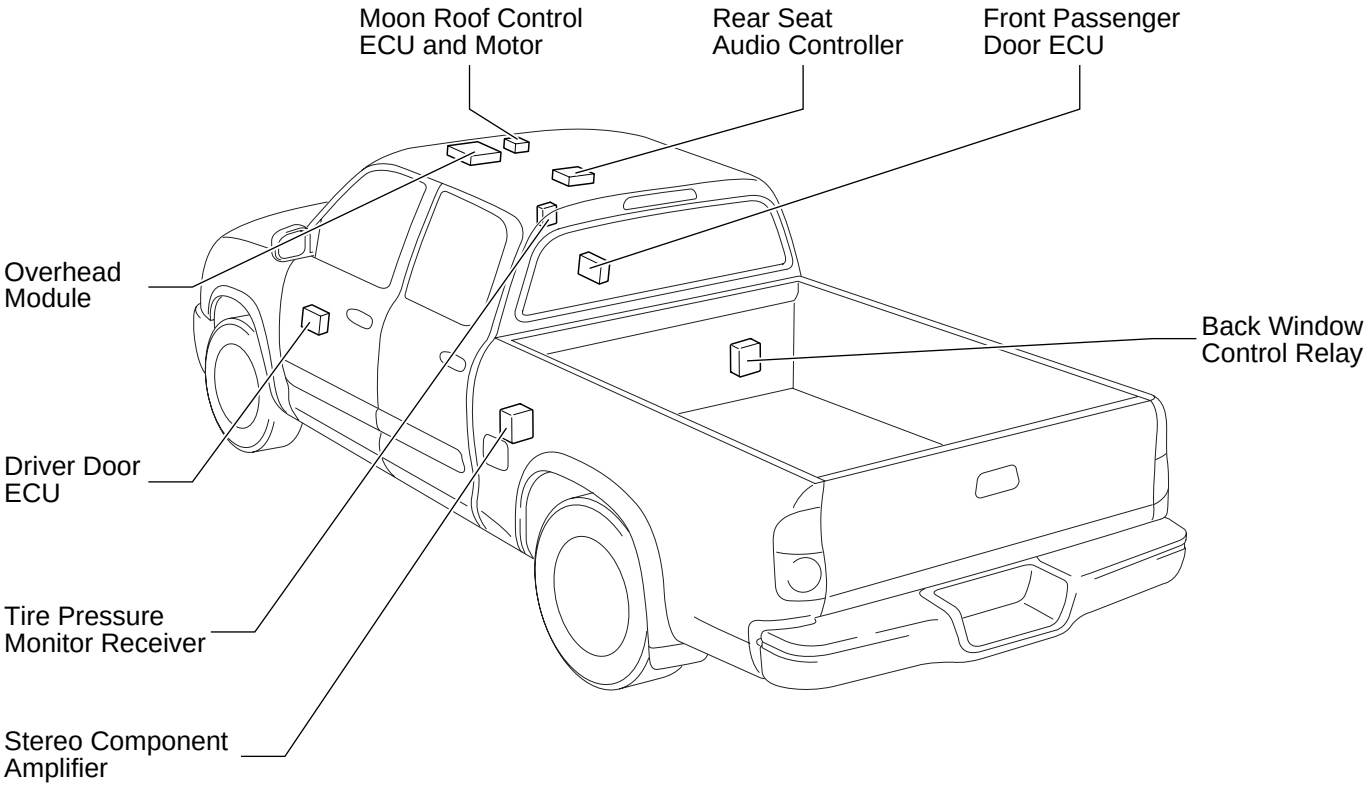
## [Engine Compartment] (Double Cab)



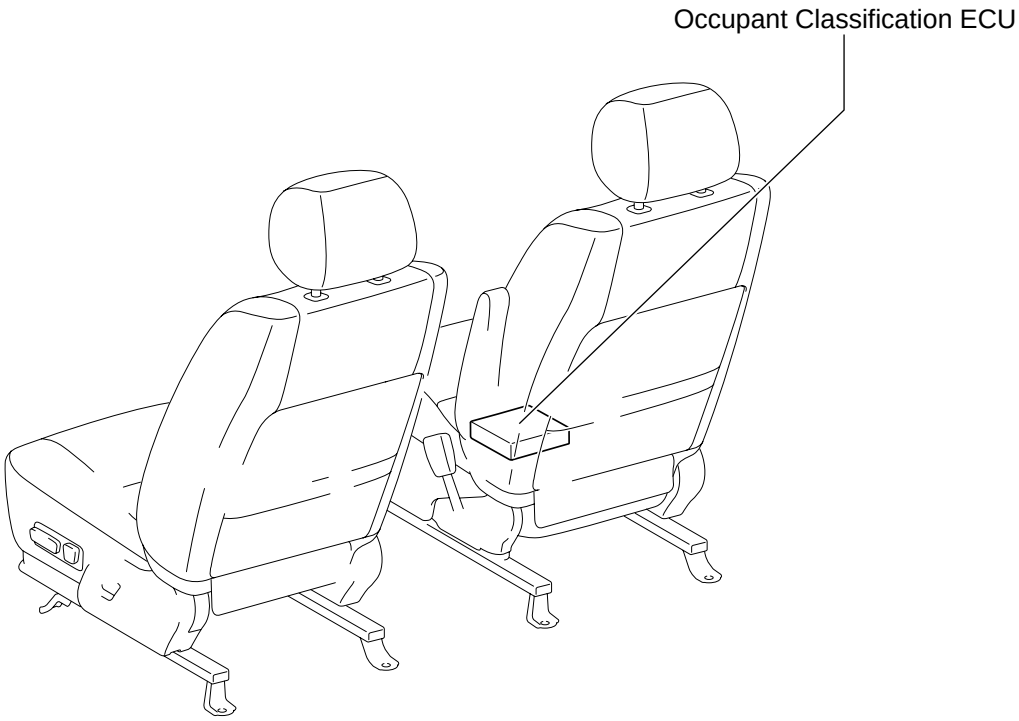

## [Instrument Panel] (Double Cab)



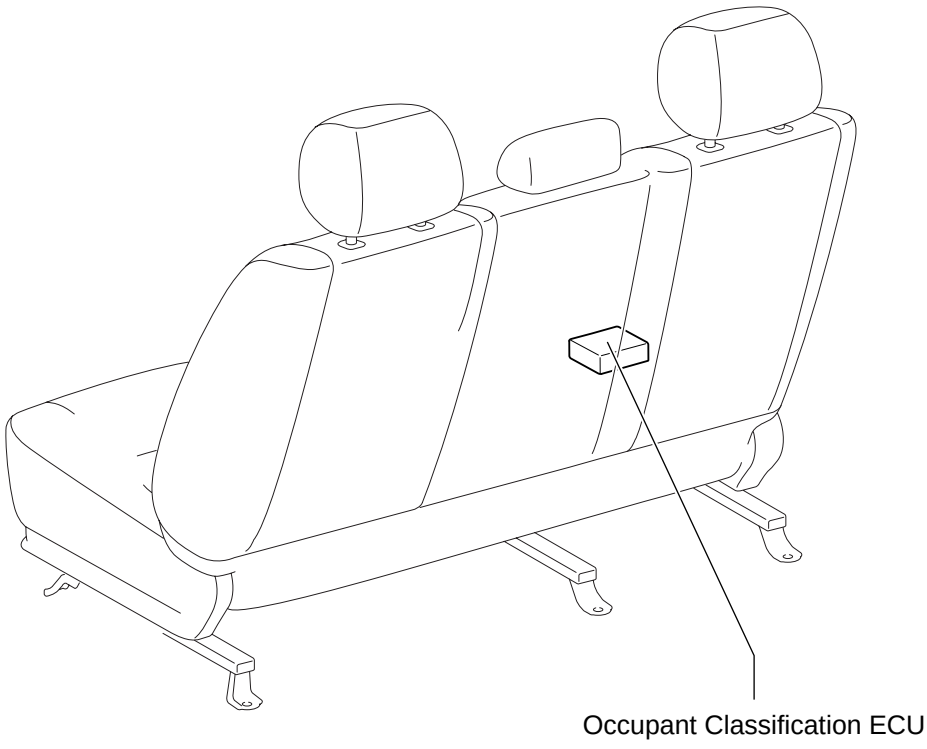
# [Body]
# (Double Cab)



## [Seat]
## (Double Cab : Captain Seat)



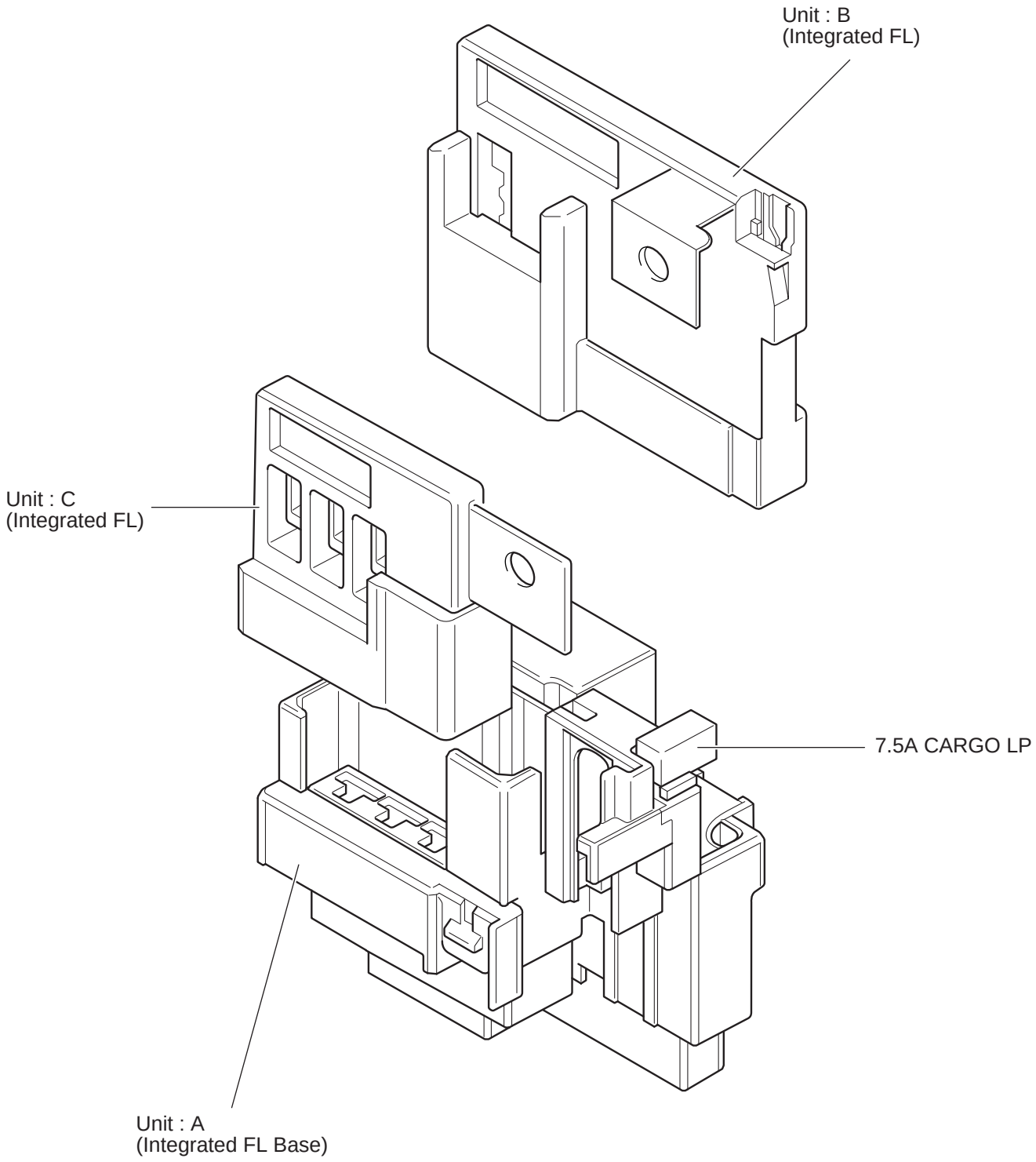

## (Double Cab : Separate Seat)



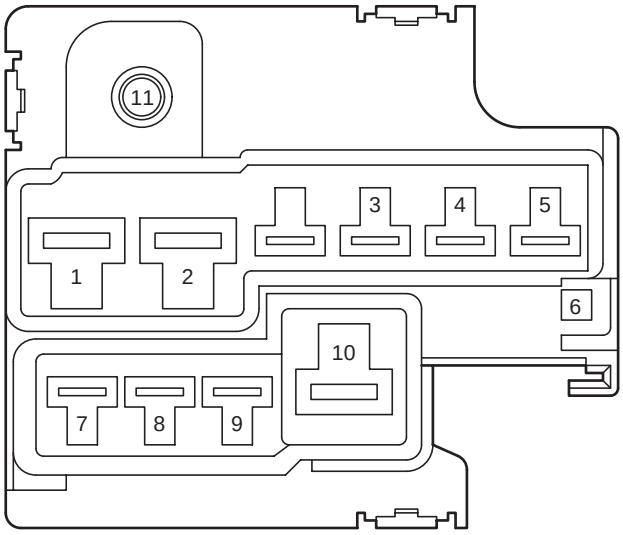
## F RELAY LOCATIONS

| | |
|---|---|
| **Fusible Link Block** | **Engine Compartment Left (See Page 34) [Inside Engine Room J/B]** |

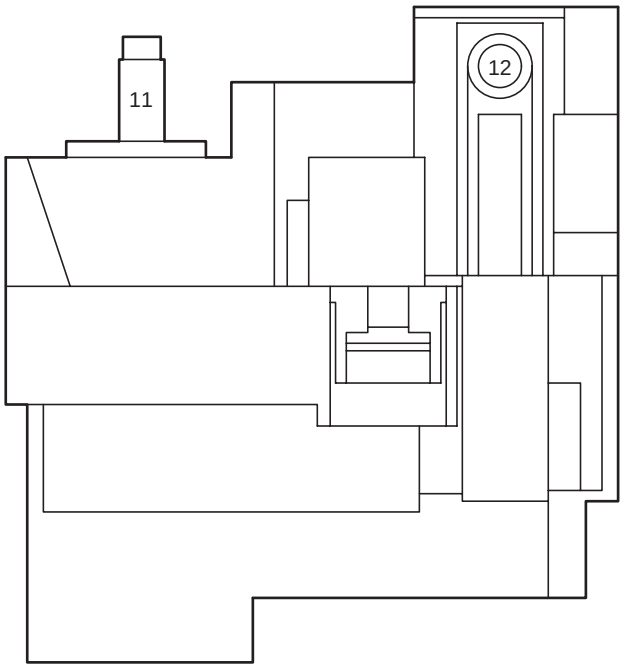
**(Double Cab)**



[Unit : A (Integrated FL Base)]




Top View



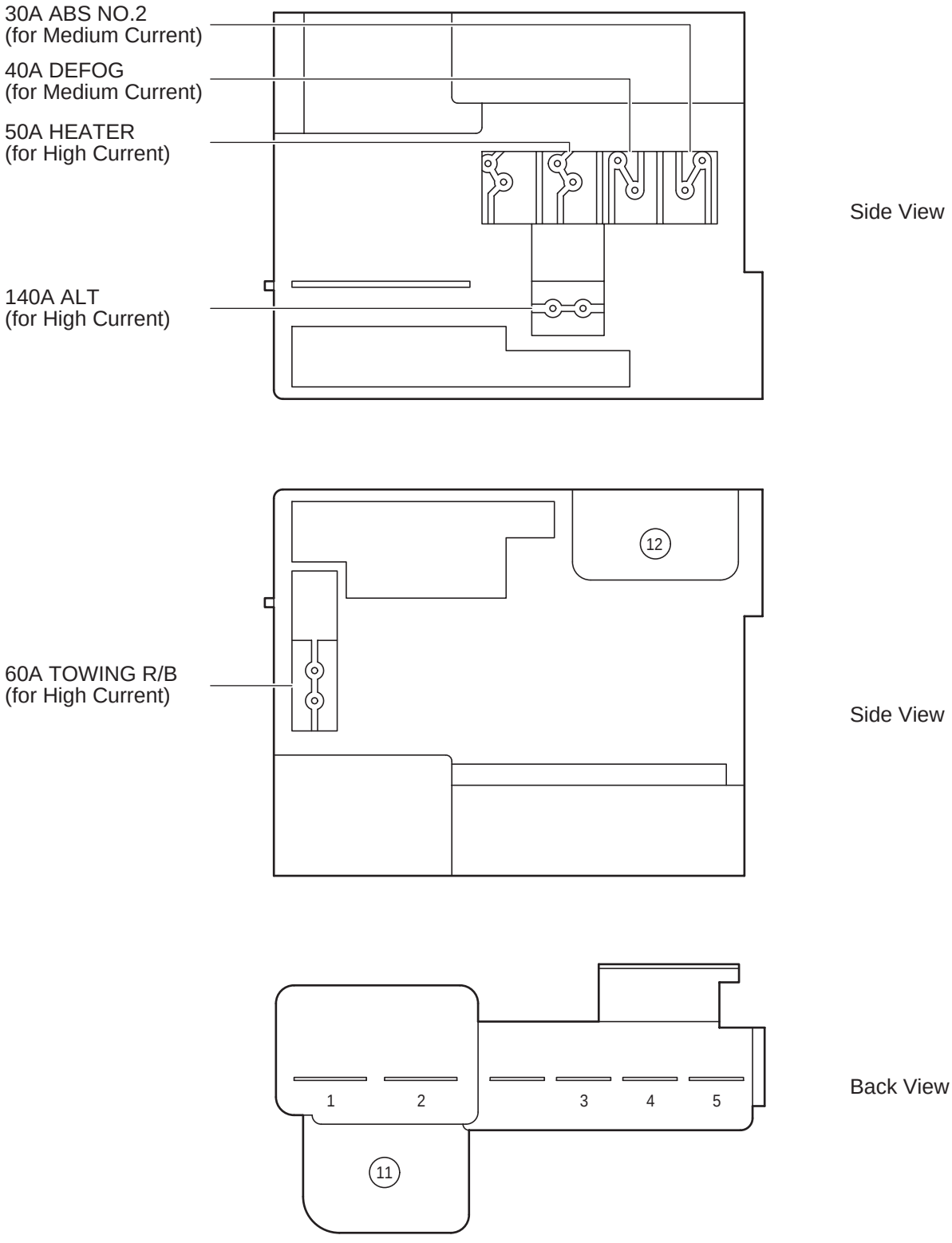

Side View

## F RELAY LOCATIONS

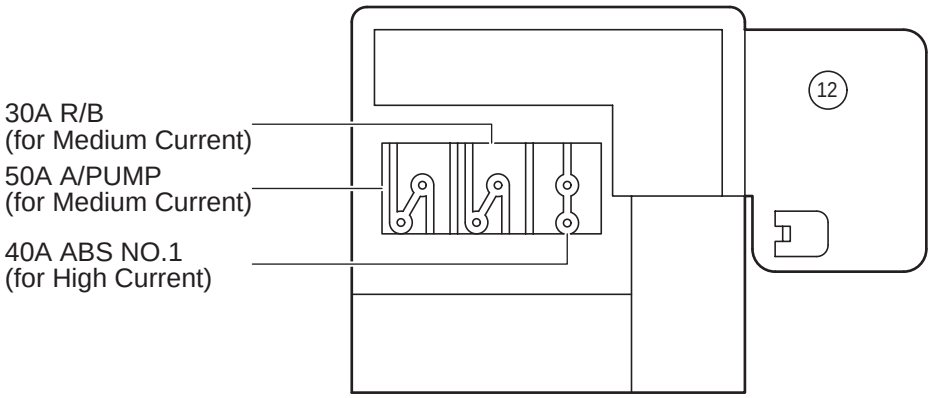
| | |
|---|---|
| **Fusible Link Block** | **Engine Compartment Left (See Page 34) [Inside Engine Room J/B]** |

**(Double Cab)**

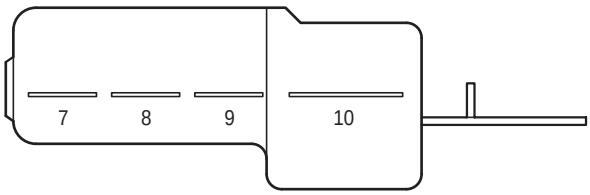
[Unit : B (Integrated FL)]



[Unit : C (Integrated FL)]

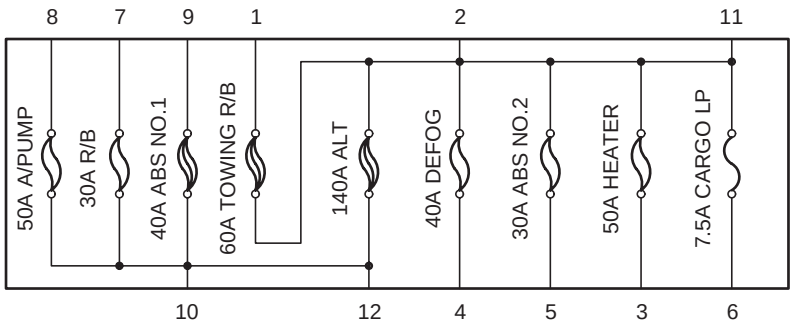



Side View




Back View

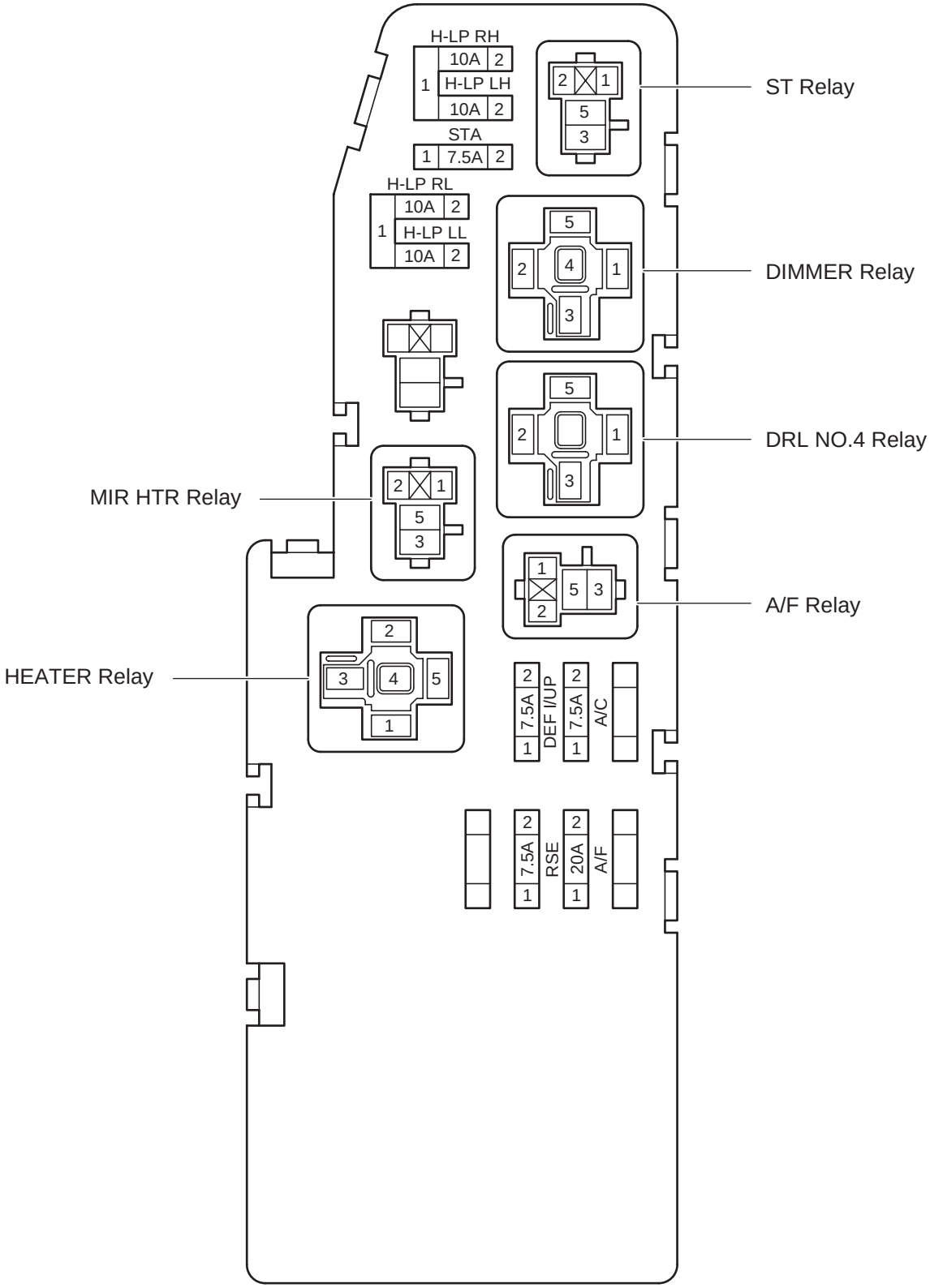
[Fusible Link Block Inner Circuit]



## F RELAY LOCATIONS

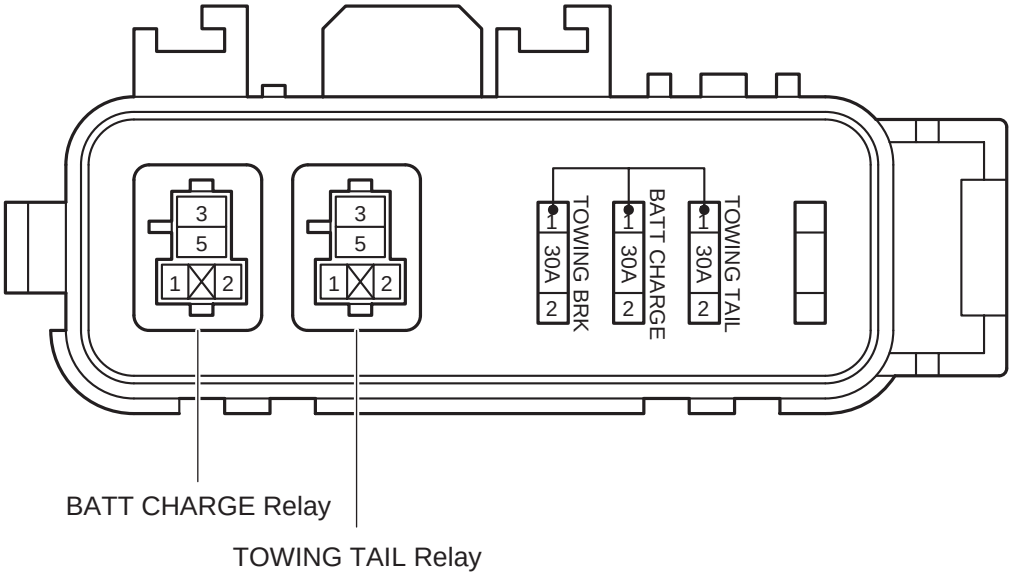
| ② : Engine Room R/B No.2 | Engine Compartment Left (See Page 34) |
|---|---|

**(Double Cab)**



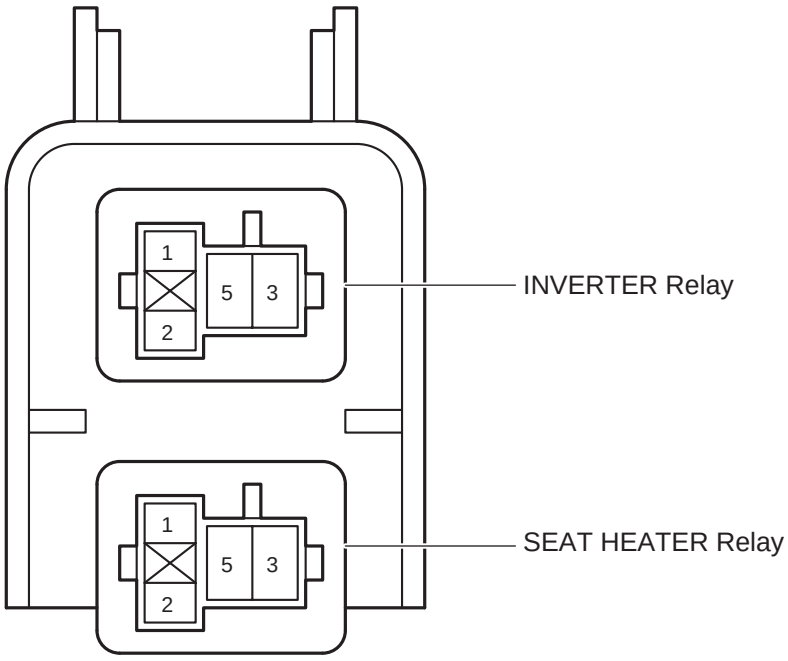
| ③ : Engine Room R/B No.3 | Engine Compartment Left (See Page 34) |
|---|---|

**(Double Cab)**




| ⑤ : Driver Side R/B | Under the Instrument Panel J/B (See Page 34) |
|---|---|

**(Double Cab)**

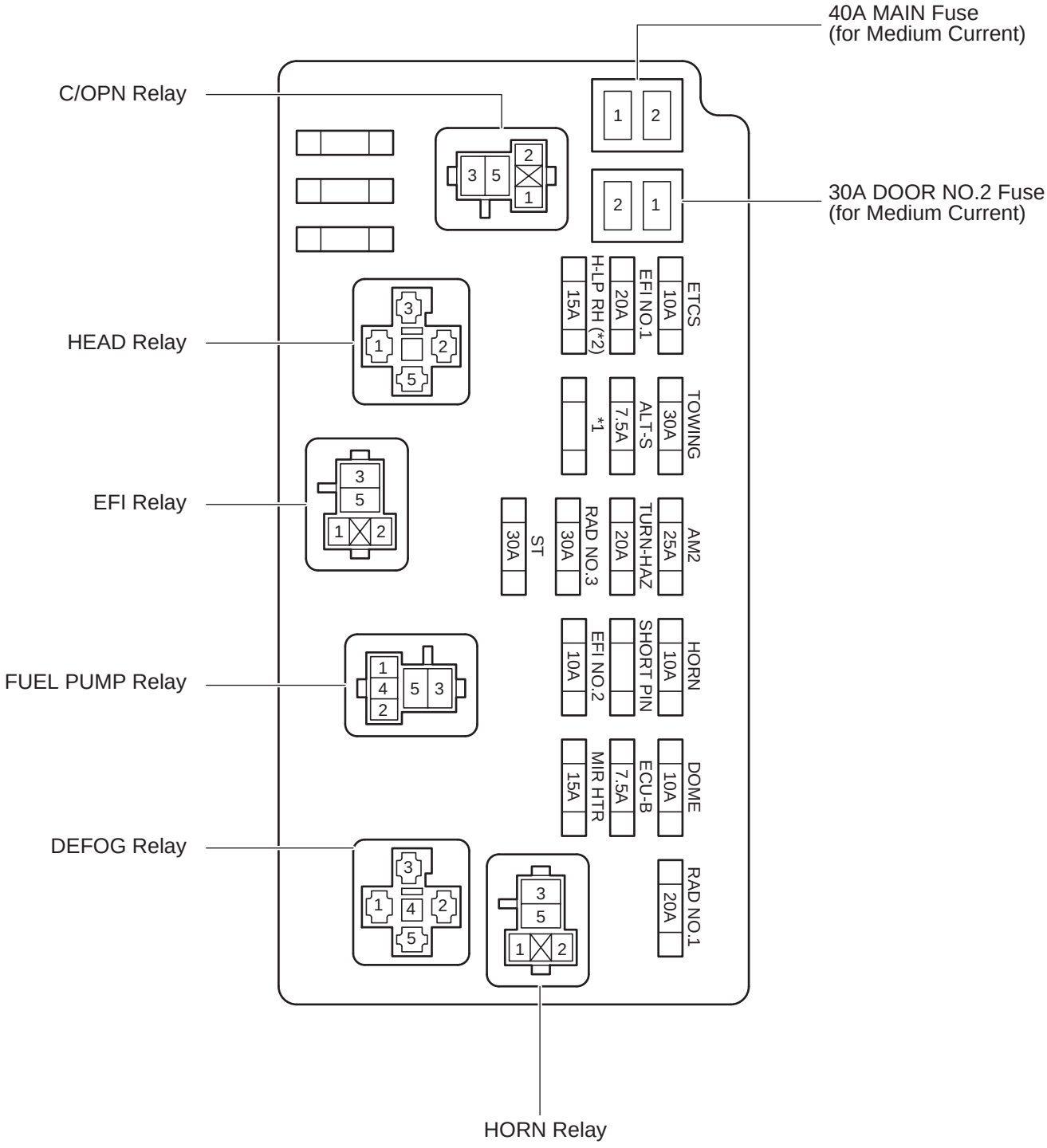


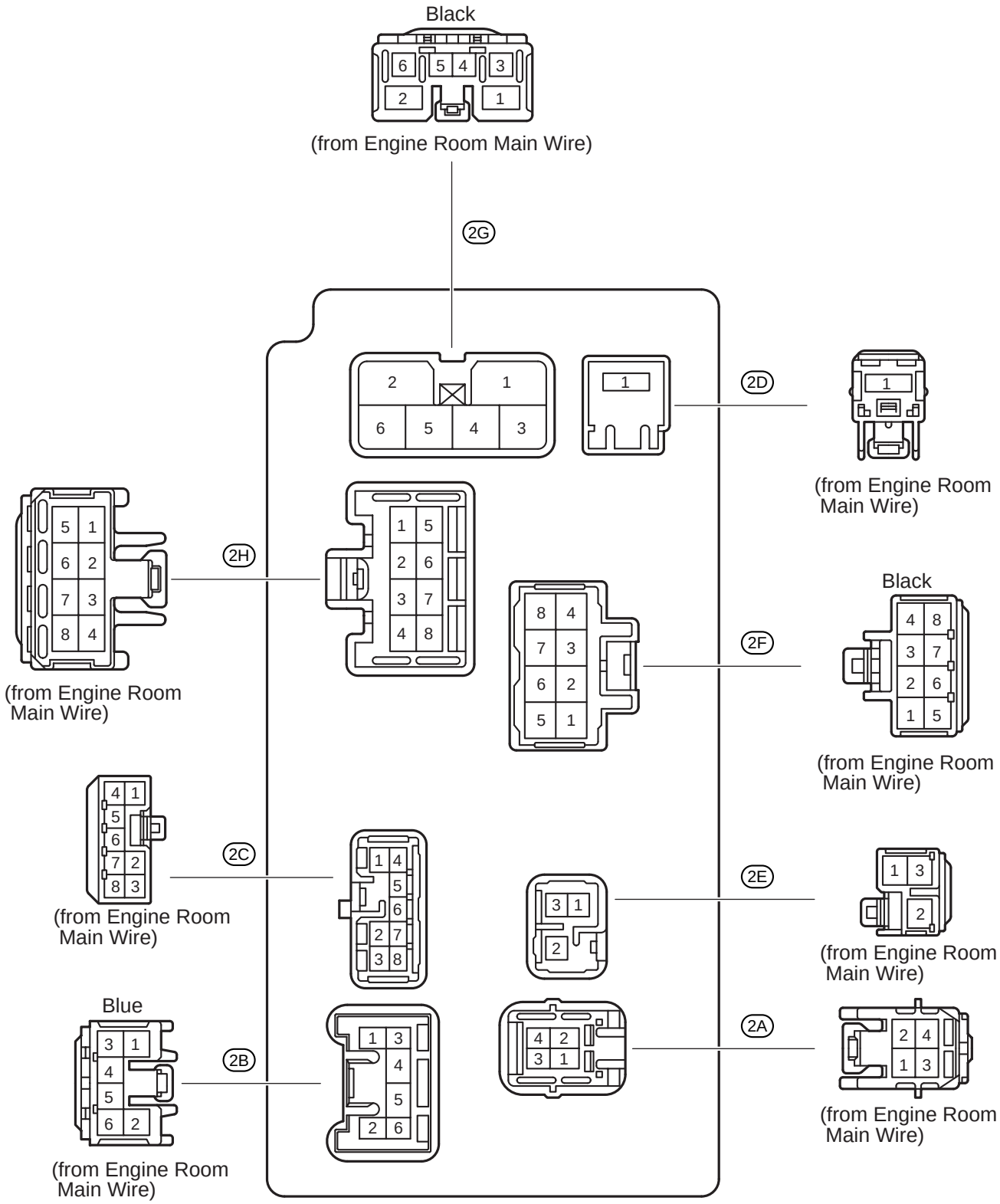
## F RELAY LOCATIONS

| : Engine Room J/B | Engine Compartment Left (See Page 34) |
|---|---|

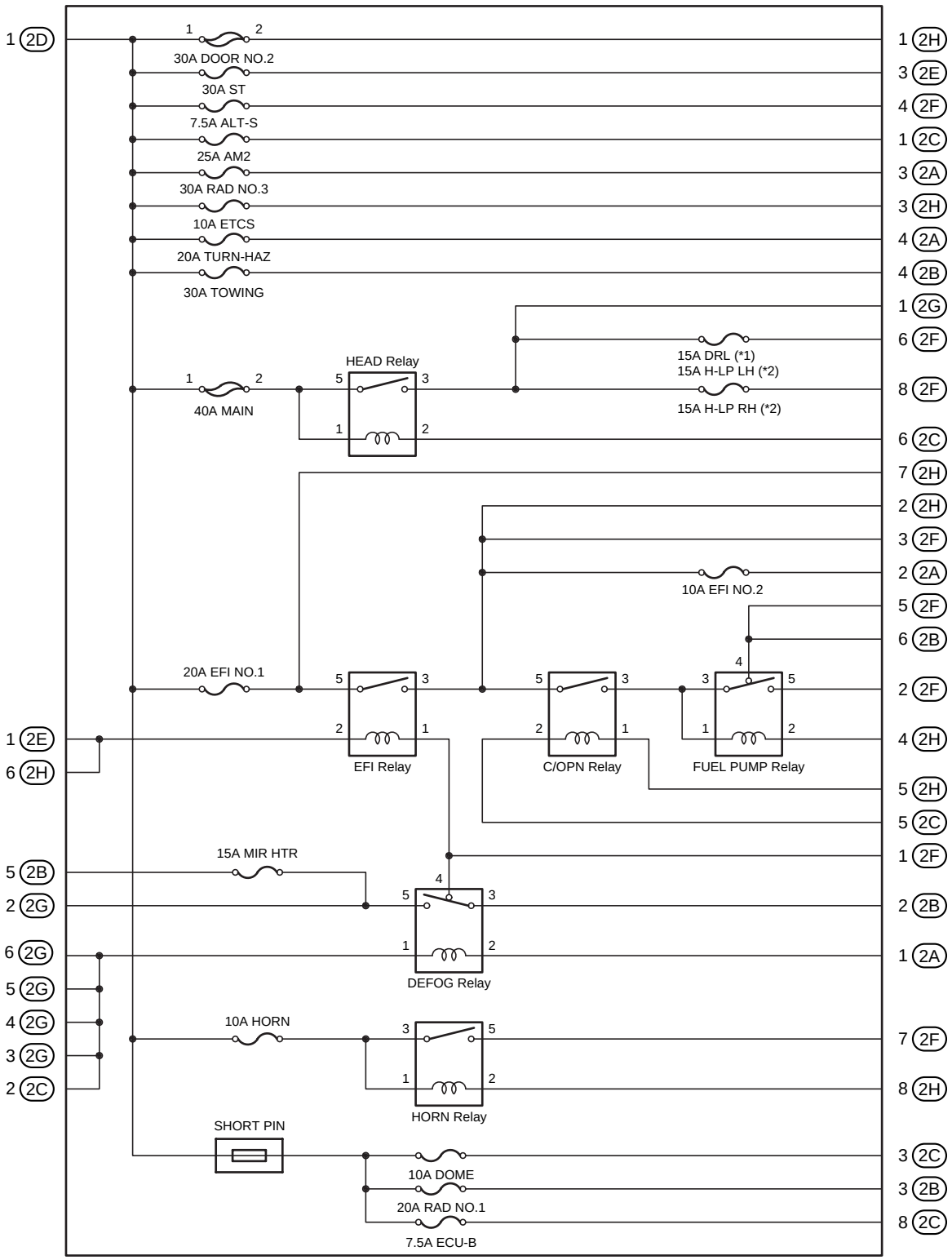
**(Double Cab)**

* 1:15A DRL (w/ Daytime Running Light)
  15A H-LP LH (w/o Daytime Running Light)
* 2:w/o Daytime Running Light




Black
(from Engine Room Main Wire)
2G
2D
(from Engine Room Main Wire)
2H
(from Engine Room Main Wire)
Black
2F
(from Engine Room Main Wire)
2C
(from Engine Room Main Wire)
2E
(from Engine Room Main Wire)
Blue
2B
(from Engine Room Main Wire)
2A
(from Engine Room Main Wire)

## [Engine Room J/B Inner Circuit]
## (Double Cab)

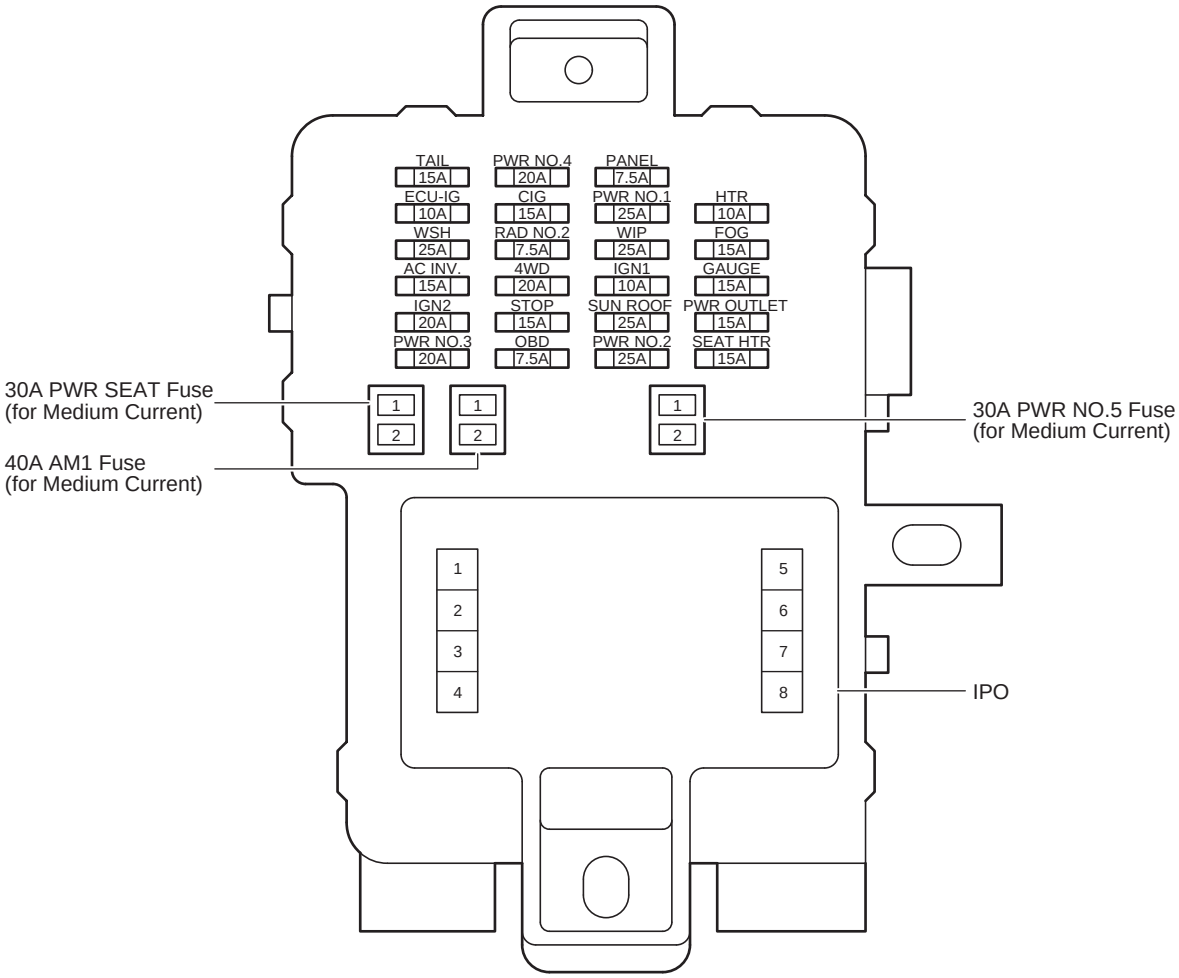


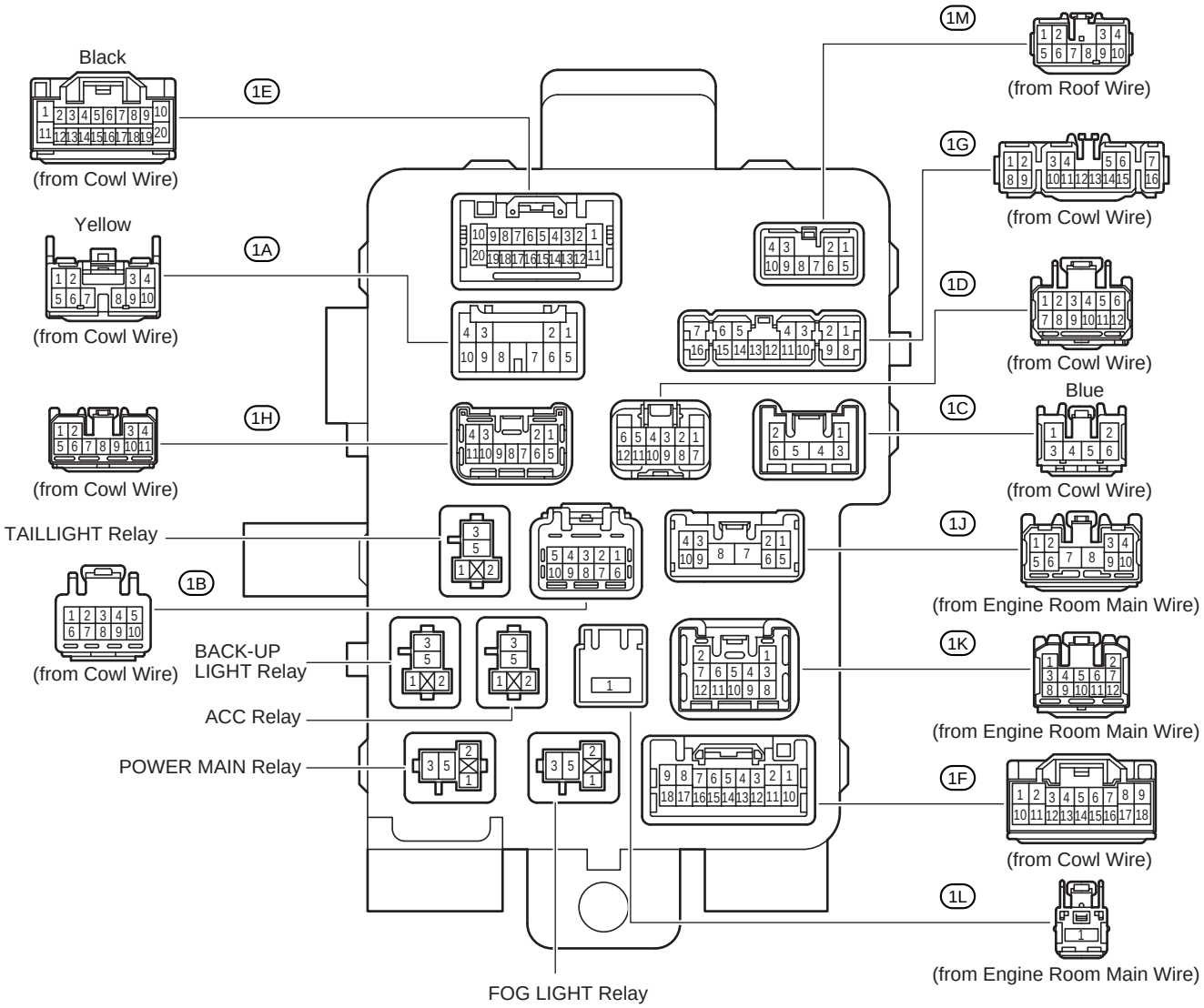

* 1:w/ Daytime Running Light
* 2:w/o Daytime Running Light

## F RELAY LOCATIONS

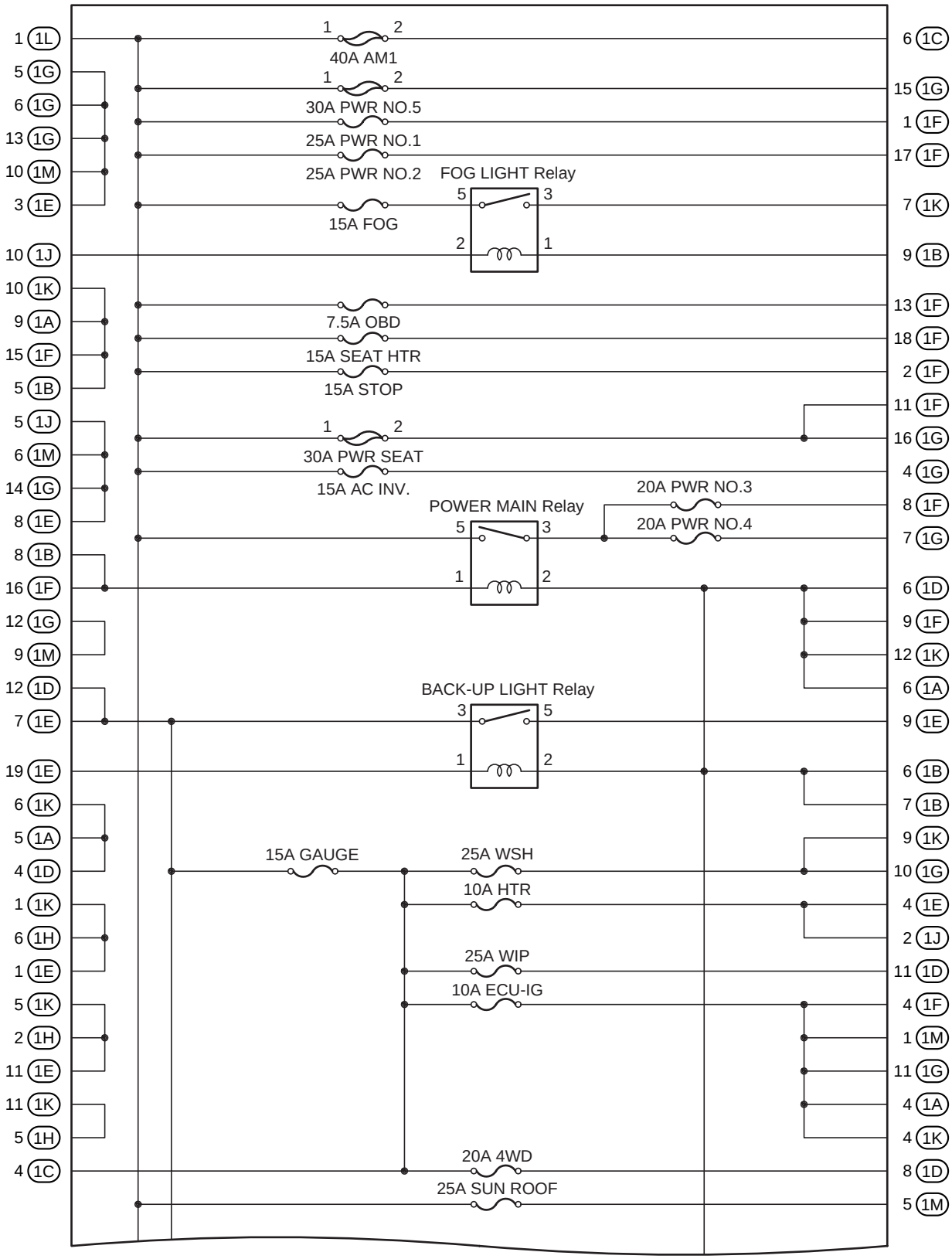
| : Driver Side J/B | Lower Finish Panel (See Page 34) |
|---|---|

**(Double Cab)**



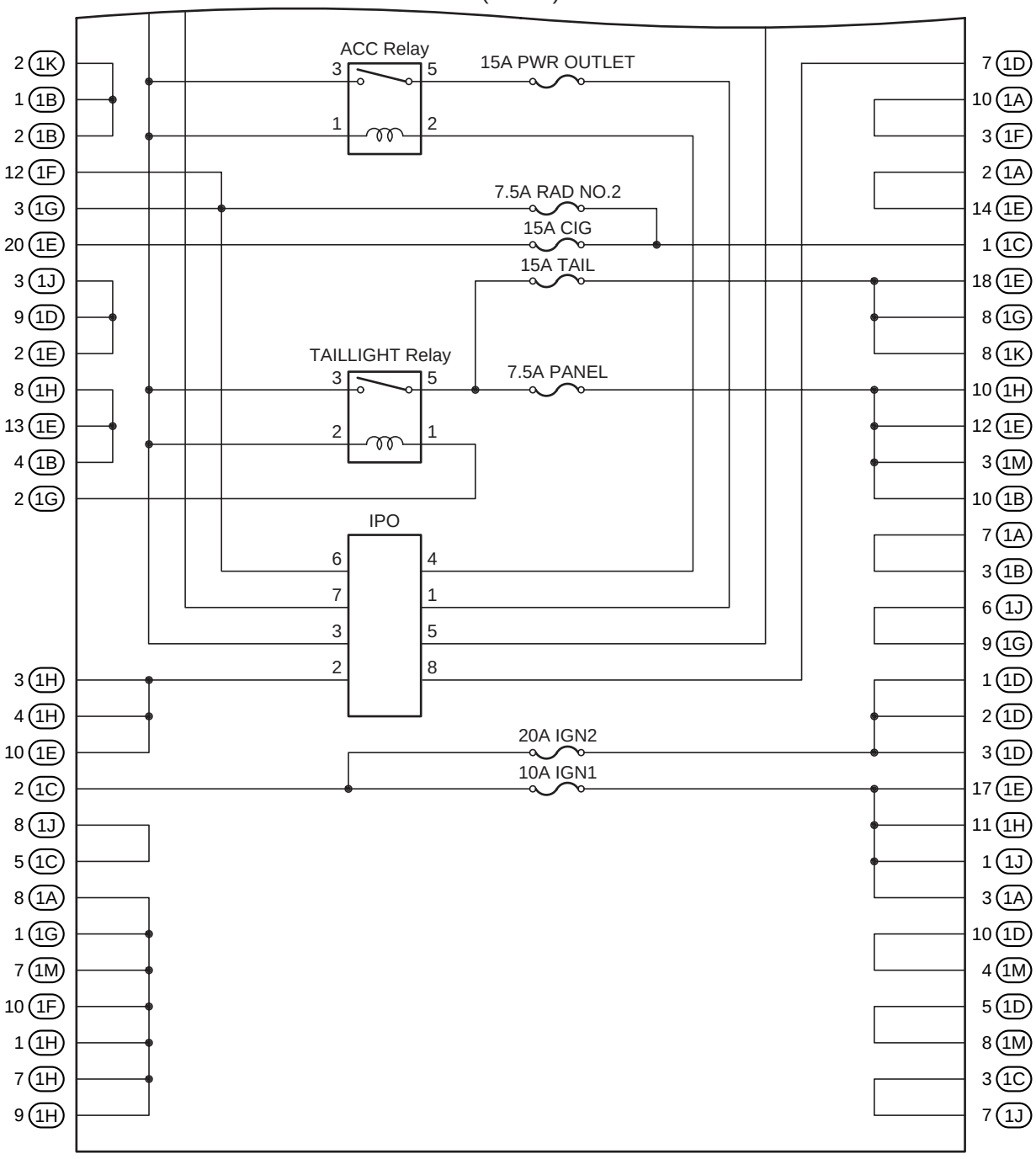

1M
(from Roof Wire)
Black
1E
(from Cowl Wire)
1G
(from Cowl Wire)
Yellow
1A
(from Cowl Wire)
1D
(from Cowl Wire)
1H
(from Cowl Wire)
Blue
1C
(from Cowl Wire)
TAILLIGHT Relay
1J
(from Engine Room Main Wire)
1B
(from Cowl Wire)
BACK-UP
LIGHT Relay
1K
(from Engine Room Main Wire)
ACC Relay
POWER MAIN Relay
1F
(from Cowl Wire)
1L
(from Engine Room Main Wire)
FOG LIGHT Relay

## [Driver Side J/B Inner Circuit]
## (Double Cab)




(Cont. Next Page)

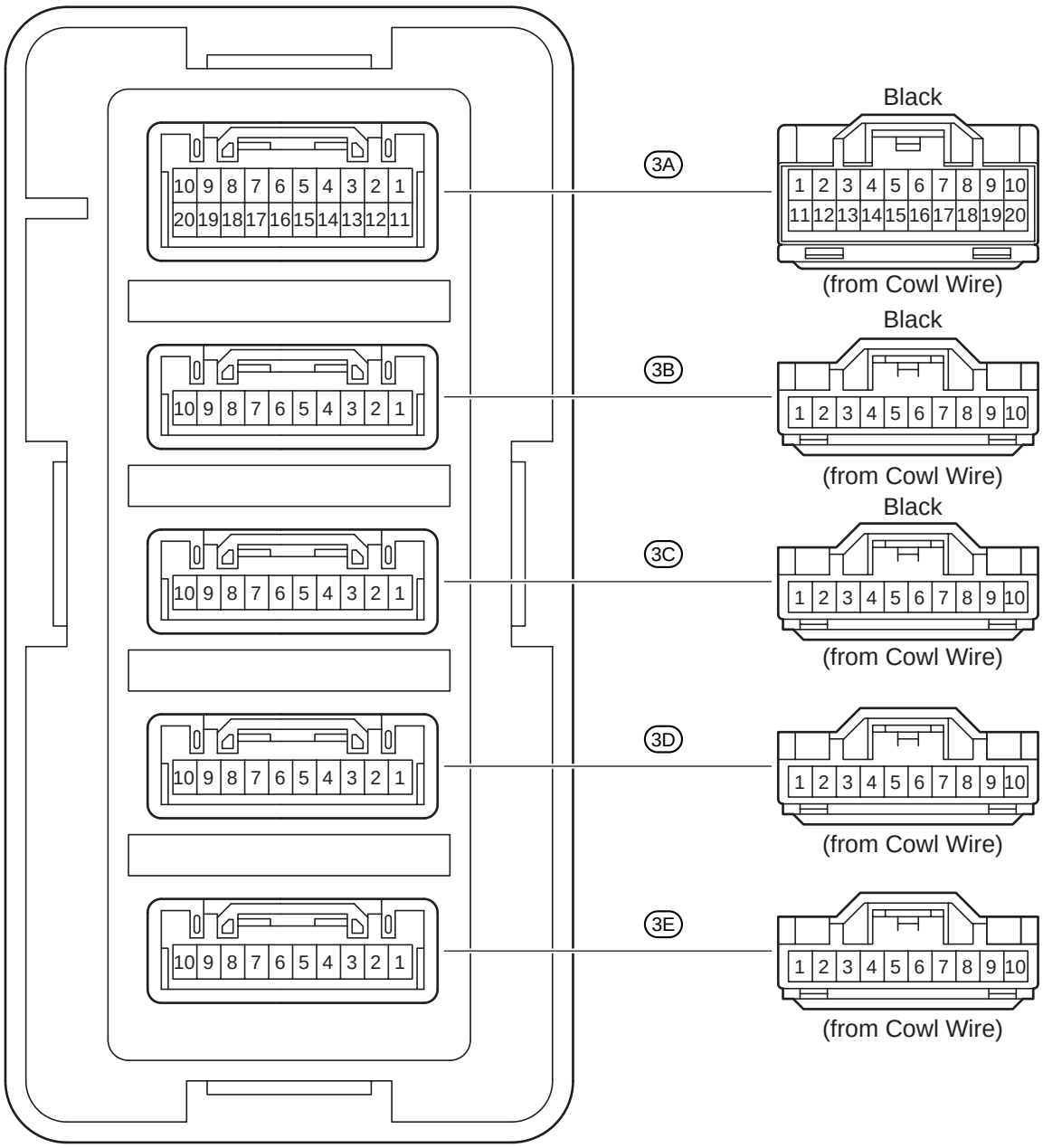
(Cont'd)


ACC Relay
15A PWR OUTLET
7.5A RAD NO.2
15A CIG
15A TAIL
TAILLIGHT Relay
7.5A PANEL
IPO
20A IGN2
10A IGN1
2 1K
1 1B
2 1B
12 1F
3 1G
20 1E
3 1J
9 1D
2 1E
8 1H
13 1E
4 1B
2 1G
3 1H
4 1H
10 1E
2 1C
8 1J
5 1C
8 1A
1 1G
7 1M
10 1F
1 1H
7 1H
9 1H
7 1D
10 1A
3 1F
2 1A
14 1E
1 1C
18 1E
8 1G
8 1K
10 1H
12 1E
3 1M
10 1B
7 1A
3 1B
6 1J
9 1G
1 1D
2 1D
3 1D
17 1E
11 1H
1 1J
3 1A
10 1D
4 1M
5 1D
8 1M
3 1C
7 1J

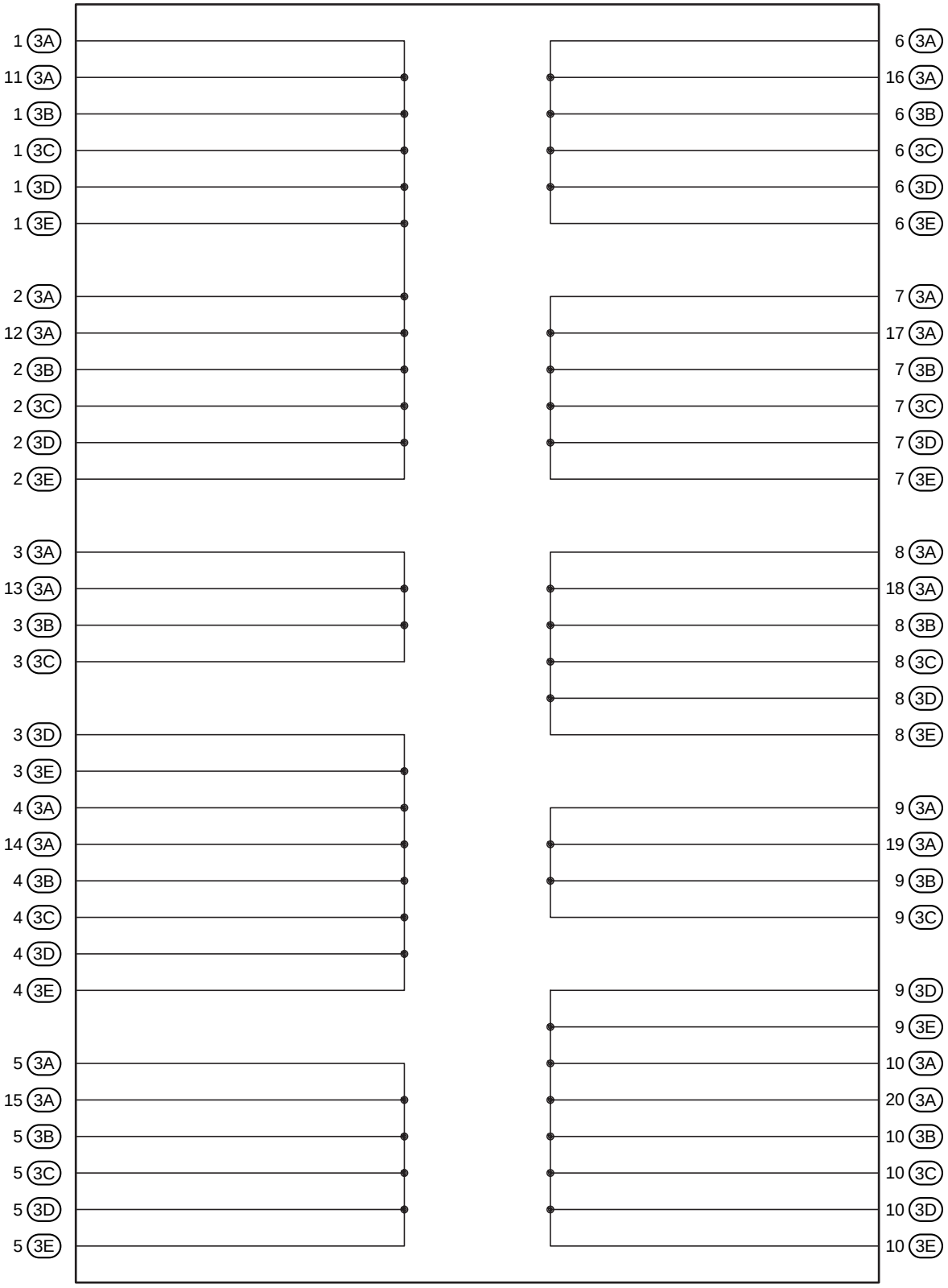
## F RELAY LOCATIONS

| : Sub J/B No.3 | Upper the Accelerator Pedal (See Page 34) |
|---|---|

**(Double Cab)**



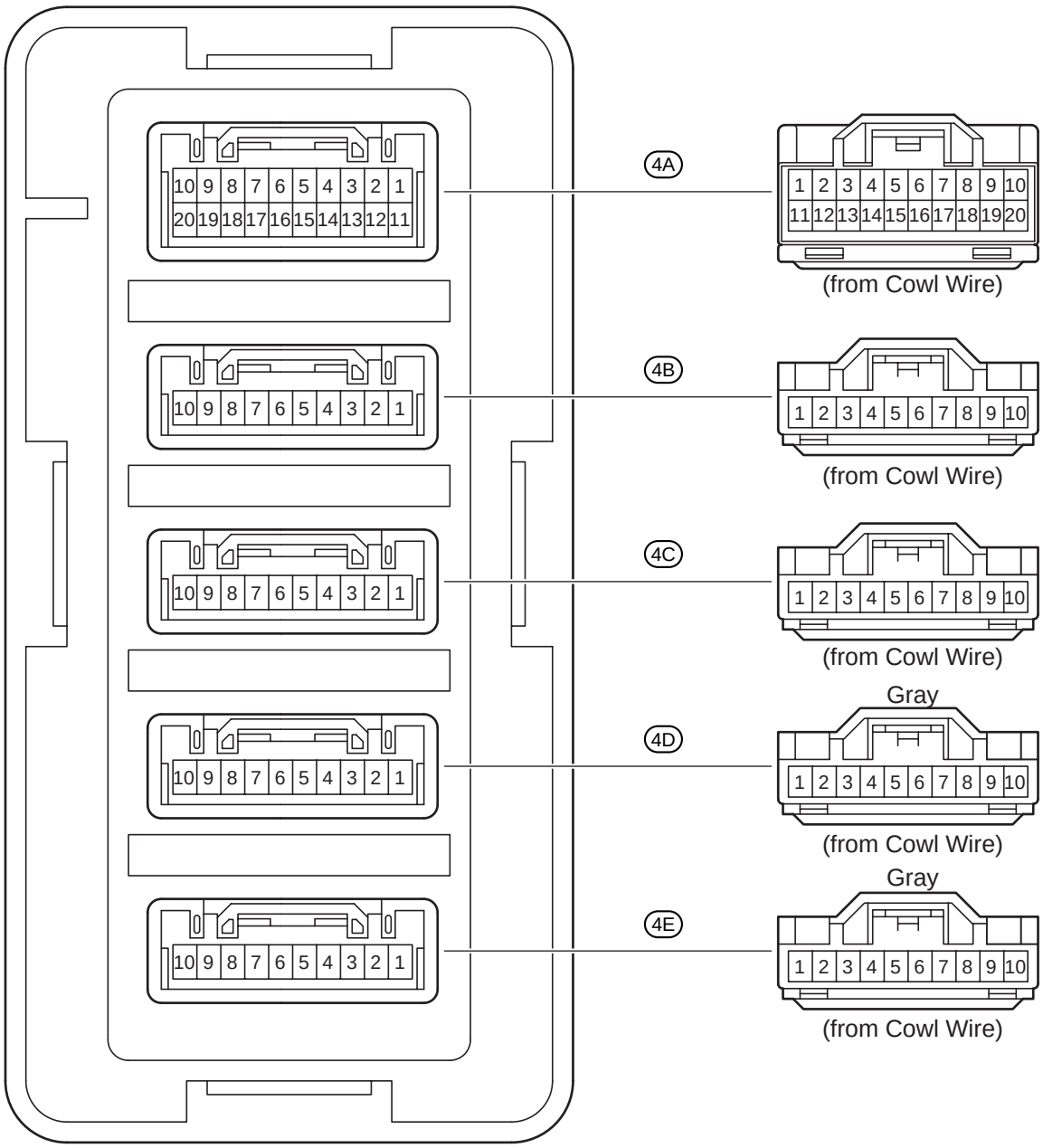
## [Sub J/B No.3 Inner Circuit]
## (Double Cab)



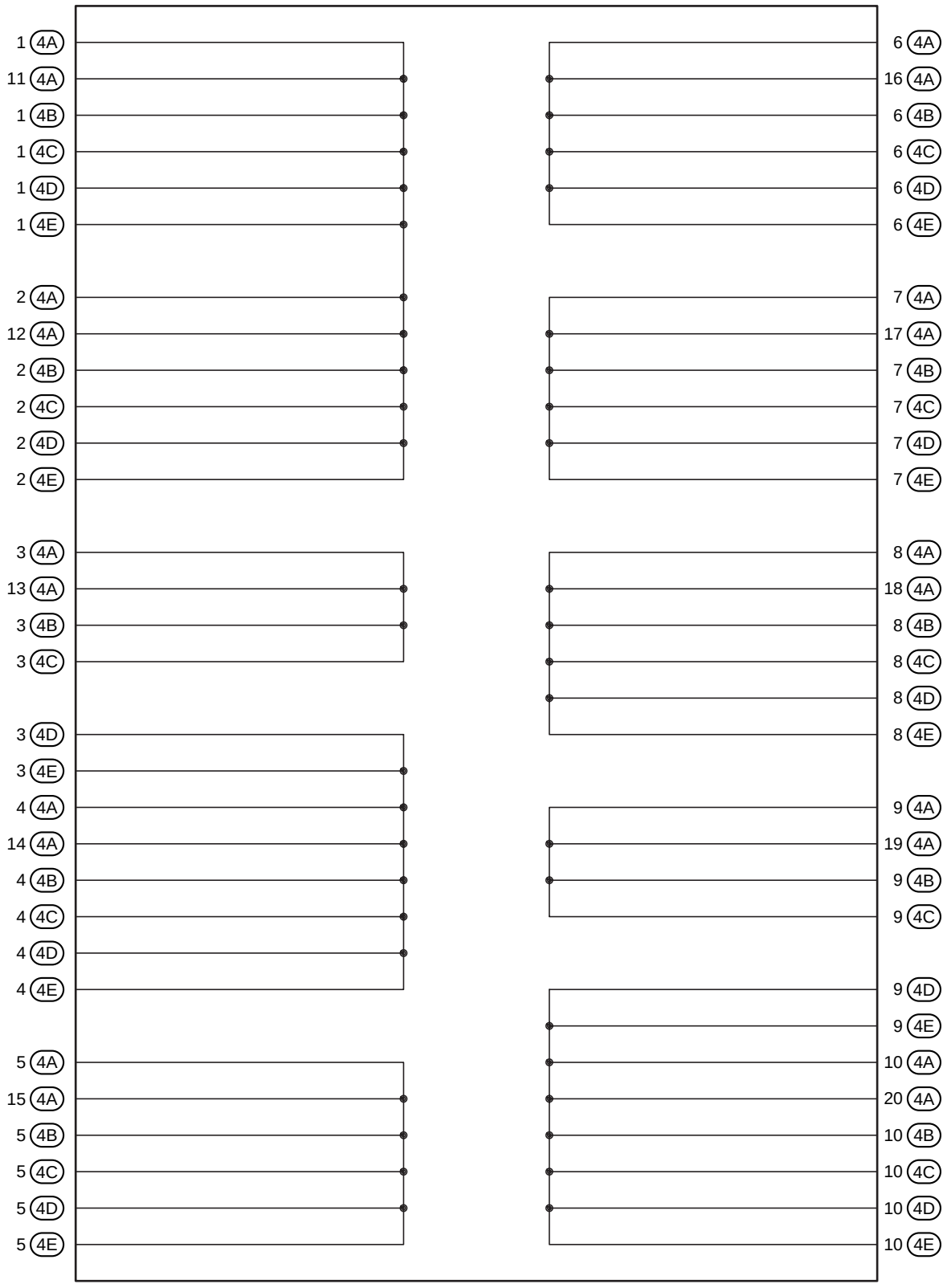
## F RELAY LOCATIONS

| : Sub J/B No.4 | Upper the Accelerator Pedal (See Page 34) |
|---|---|

**(Double Cab)**

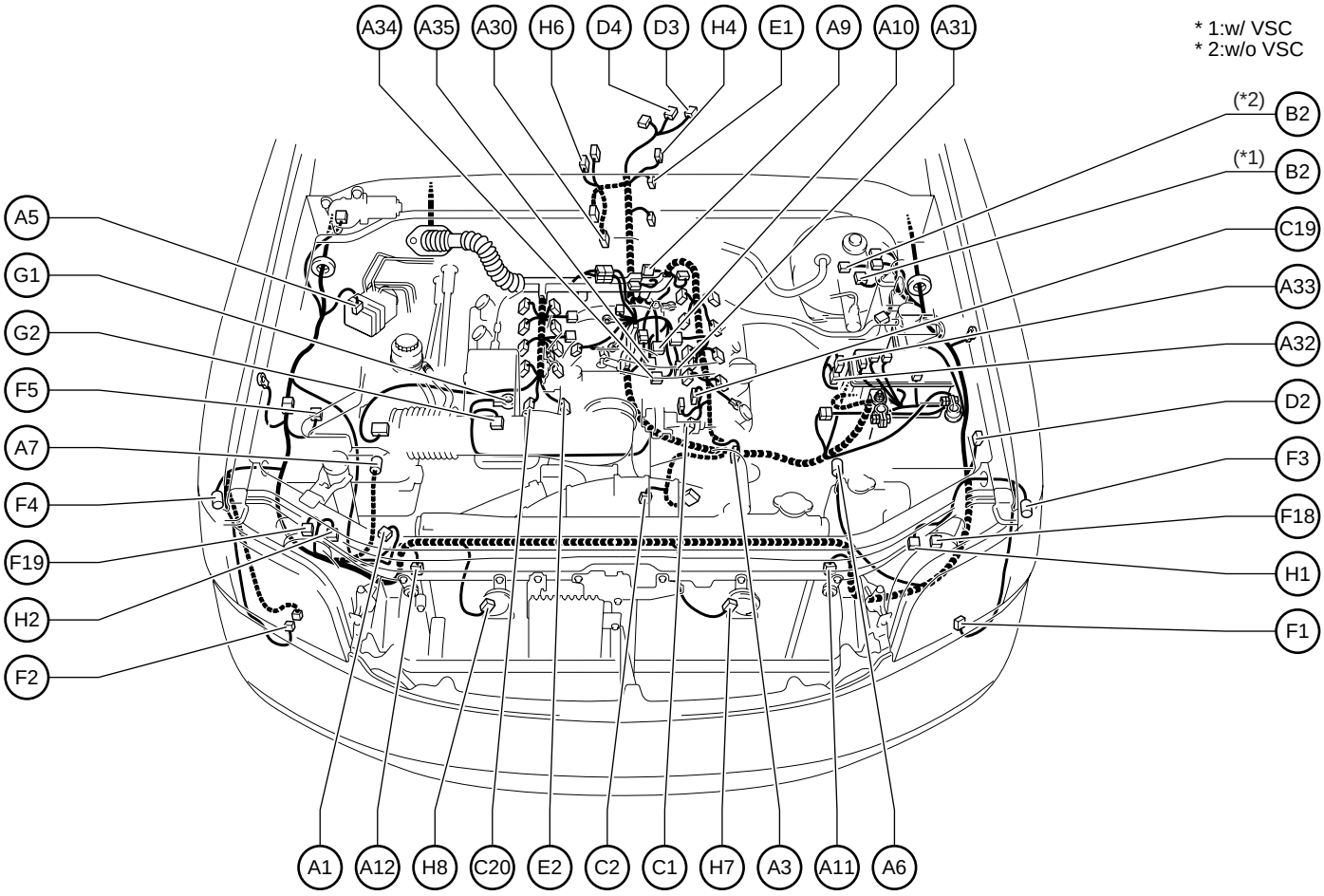


## [Sub J/B No.4 Inner Circuit]
## (Double Cab)



## Position of Parts in Engine Compartment

## [Access Cab, Standard Cab : 2UZ–FE]




A 1 Pressure SW
A 3 A/C Magnetic Clutch and Lock Sensor
A 5 ABS Actuator with ECU
A 6 ABS Speed Sensor Front LH
A 7 ABS Speed Sensor Front RH
A 9 ADD Actuator
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
A11 Airbag Sensor Front LH
A12 Airbag Sensor Front RH
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A31 Air Switching Valve
A32 Air Injection Control Driver
A33 Air Injection Control Driver
A34 Air Pressure Sensor
A35 Air Pump

B 2 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 2 Crankshaft Position Sensor
C19 Camshaft Timing Oil Control Valve LH
C20 Camshaft Timing Oil Control Valve RH

D 2 Daytime Running Light Resistor
D 3 Detection SW (Transfer 4WD Position)
D 4 Detection SW (Transfer L4 Position)

E 1 Electronically Controlled Transmission Solenoid
E 2 Engine Coolant Temp. Sensor

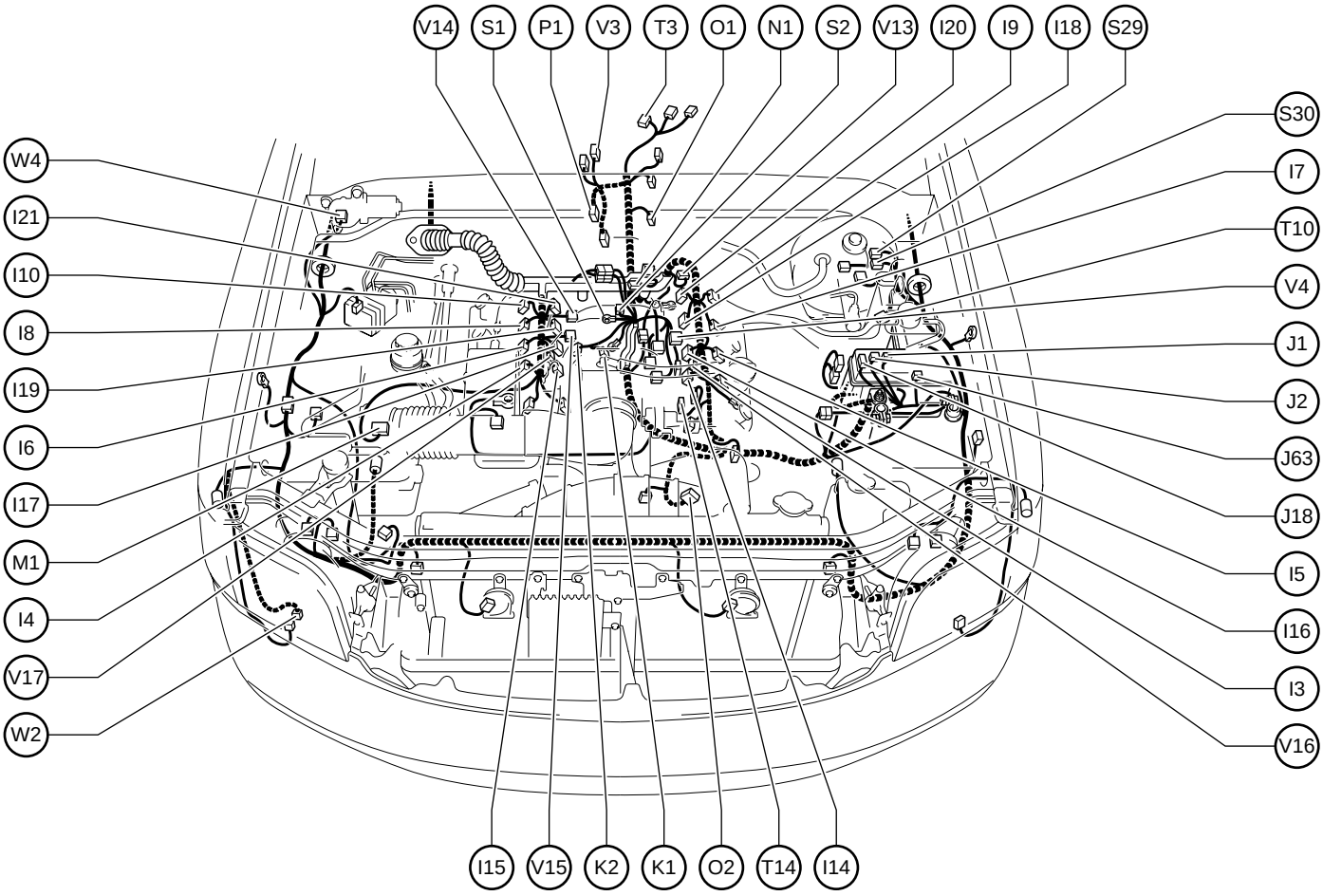
F 1 Front Fog Light LH
F 2 Front Fog Light RH
F 3 Front Turn Signal Light and Parking Light LH
F 4 Front Turn Signal Light and Parking Light RH
F 5 Fuel Pump Resistor
F18 Front Parking Light LH No.3
F19 Front Parking Light RH No.3

G 1 Generator
G 2 Generator

H 1 Headlight LH
H 2 Headlight RH
H 4 Heated Oxygen Sensor (Bank 1 Sensor 2)
H 6 Heated Oxygen Sensor (Bank 2 Sensor 2)
H 7 Horn LH
H 8 Horn RH

# Position of Parts in Engine Compartment

## [Access Cab, Standard Cab : 2UZ–FE]




I 3 Igniter and Ignition Coil No.1
I 4 Igniter and Ignition Coil No.2
I 5 Igniter and Ignition Coil No.3
I 6 Igniter and Ignition Coil No.4
I 7 Igniter and Ignition Coil No.5
I 8 Igniter and Ignition Coil No.6
I 9 Igniter and Ignition Coil No.7
I 10 Igniter and Ignition Coil No.8
I 14 Injector No.1
I 15 Injector No.2
I 16 Injector No.3
I 17 Injector No.4
I 18 Injector No.5
I 19 Injector No.6
I 20 Injector No.7
I 21 Injector No.8

J 1 Junction Connector
J 2 Junction Connector
J 18 Junction Connector
J 63 Junction Connector

K 1 Knock Sensor (Bank 1)
K 2 Knock Sensor (Bank 2)

M 1 Mass Air Flow Meter

N 1 Noise Filter

O 1 O/D Direct Clutch Speed Sensor
O 2 Oil Pressure SW

P 1 Park/Neutral Position SW

S 1 Starter
S 2 Starter
S 29 Skid Control ECU with Actuator
S 30 Skid Control ECU with Actuator

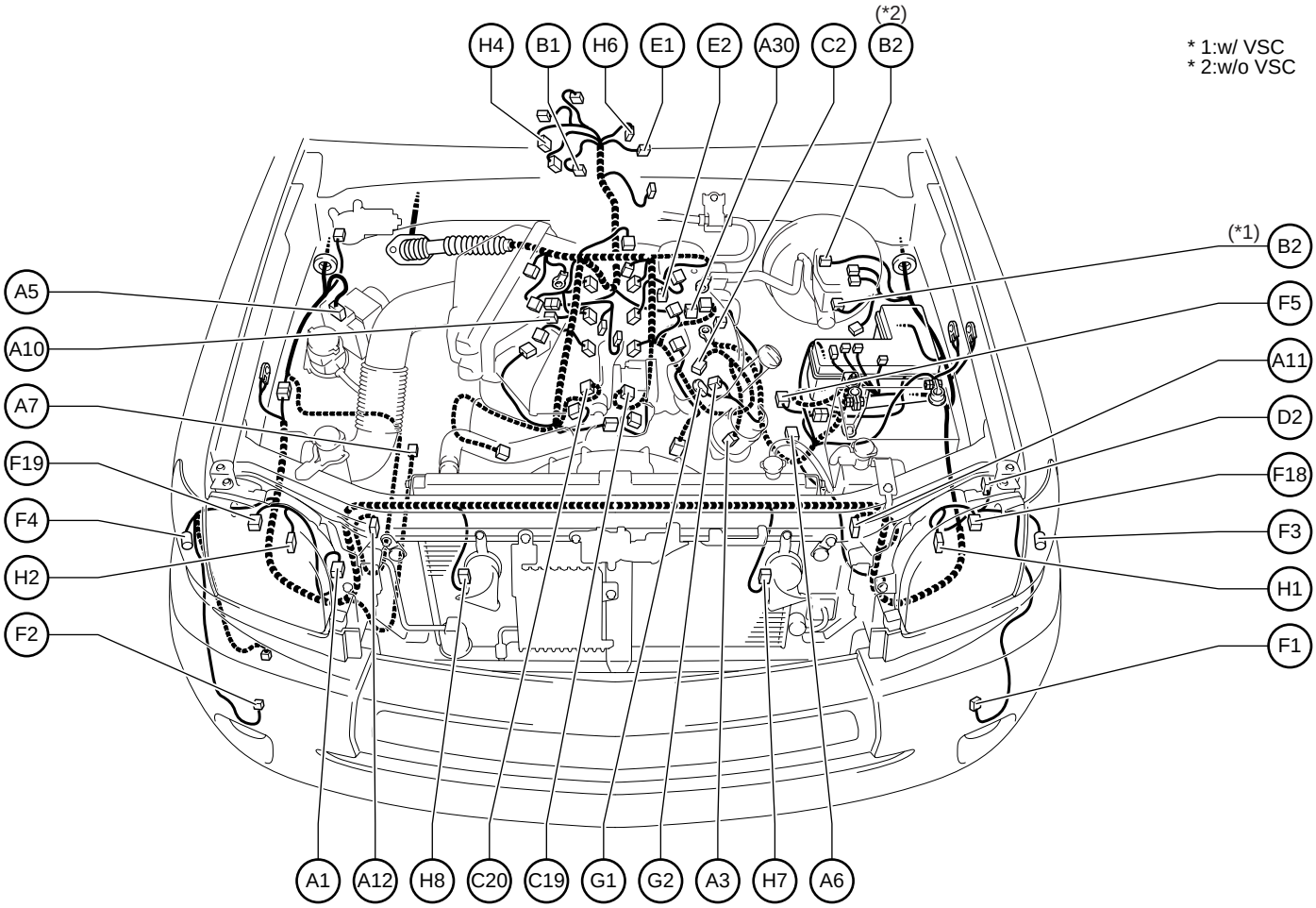
T 3 Transfer Shift Actuator
T 10 TVIP Buzzer
T 14 Throttle Control Motor and Throttle Position Sensor

V 3 Vehicle Speed Sensor
(Electronically Controlled Transmission)
V 4 VSV (Purge)
V 13 VSV (ACIS)
V 14 VSV (Air Switching Valve Bank 1)
V 15 VSV (Air Switching Valve Bank 2)
V 16 VVT Sensor LH
V 17 VVT Sensor RH

W 2 Washer Motor and Washer Level Sensor
W 4 Wiper Motor

## Position of Parts in Engine Compartment

## [Access Cab, Standard Cab : 1GR–FE]




A 1 Pressure SW
A 3 A/C Magnetic Clutch and Lock Sensor
A 5 ABS Actuator with ECU
A 6 ABS Speed Sensor Front LH
A 7 ABS Speed Sensor Front RH
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
A11 Airbag Sensor Front LH
A12 Airbag Sensor Front RH
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)

B 1 Back–Up Light SW
B 2 Brake Fluid Level Warning SW

C 2 Crankshaft Position Sensor
C19 Camshaft Timing Oil Control Vakve LH
C20 Camshaft Timing Oil Control Vakve RH

D 2 Daytime Running Light Resistor

E 1 Electronically Controlled Transmission Solenoid
E 2 Engine Coolant Temp. Sensor

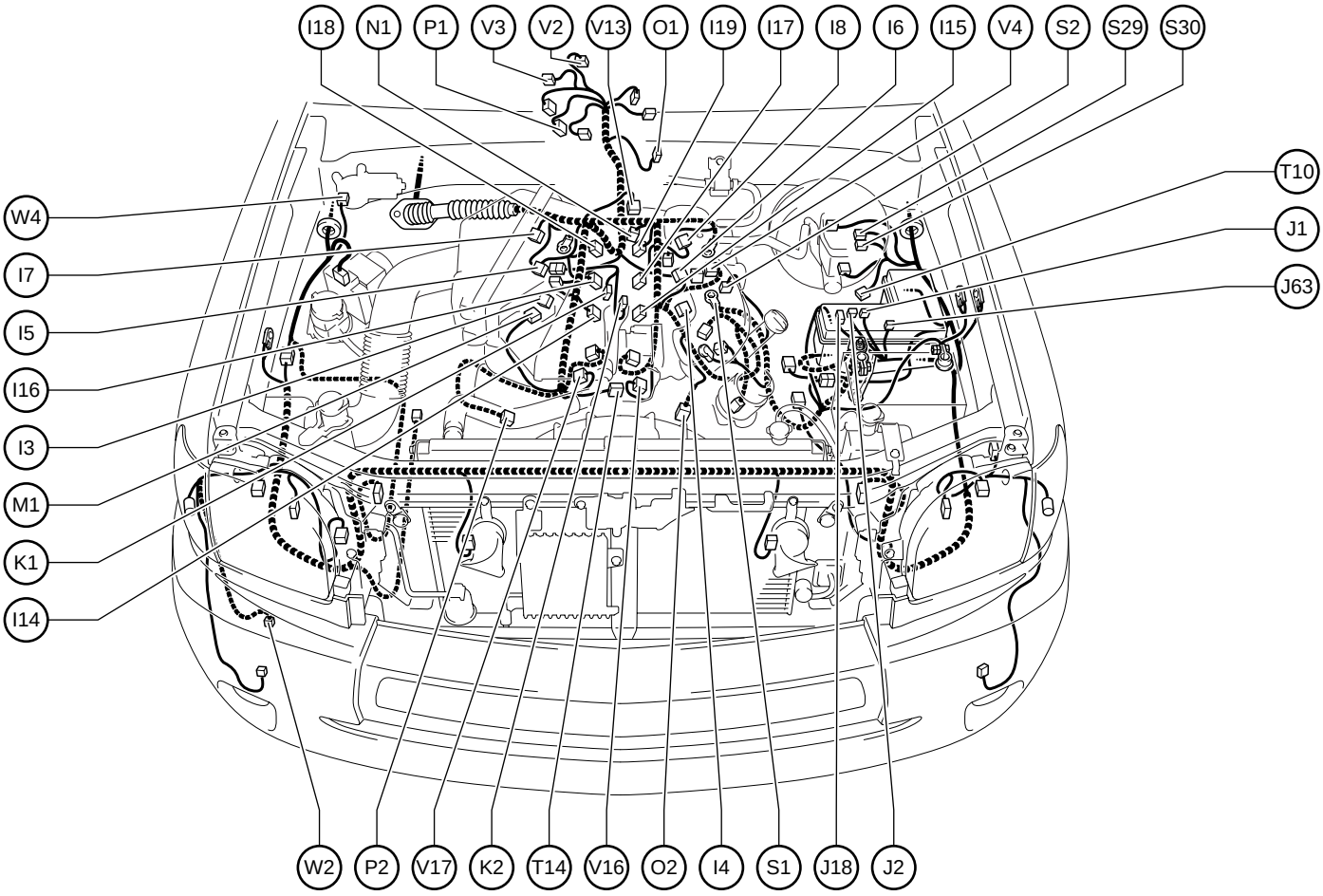
F 1 Front Fog Light LH
F 2 Front Fog Light RH
F 3 Front Turn Signal Light and Parking Light LH
F 4 Front Turn Signal Light and Parking Light RH
F 5 Fuel Pump Resistor
F18 Front Parking Light LH No.3
F19 Front Parking Light RH No.3

G 1 Generator
G 2 Generator

H 1 Headlight LH
H 2 Headlight RH
H 4 Heated Oxygen Sensor (Bank 1 Sensor 2)
H 6 Heated Oxygen Sensor (Bank 2 Sensor 2)
H 7 Horn LH
H 8 Horn RH

## Position of Parts in Engine Compartment

## [Access Cab, Standard Cab : 1GR–FE]




I 3 Igniter and Ignition Coil No.1
I 4 Igniter and Ignition Coil No.2
I 5 Igniter and Ignition Coil No.3
I 6 Igniter and Ignition Coil No.4
I 7 Igniter and Ignition Coil No.5
I 8 Igniter and Ignition Coil No.6
I 14 Injector No.1
I 15 Injector No.2
I 16 Injector No.3
I 17 Injector No.4
I 18 Injector No.5
I 19 Injector No.6

J 1 Junction Connector
J 2 Junction Connector
J 18 Junction Connector
J 63 Junction Connector

K 1 Knock Sensor (Bank 1)
K 2 Knock Sensor (Bank 2)

M 1 Mass Air Flow Meter

N 1 Noise Filter

O 1 O/D Direct Clutch Speed Sensor
O 2 Oil Pressure SW

P 1 Park/Neutral Position SW
P 2 Power Steering Oil Pressure SW

S 1 Starter
S 2 Starter
S 29 Skid Control ECU with Actuator
S 30 Skid Control ECU with Actuator

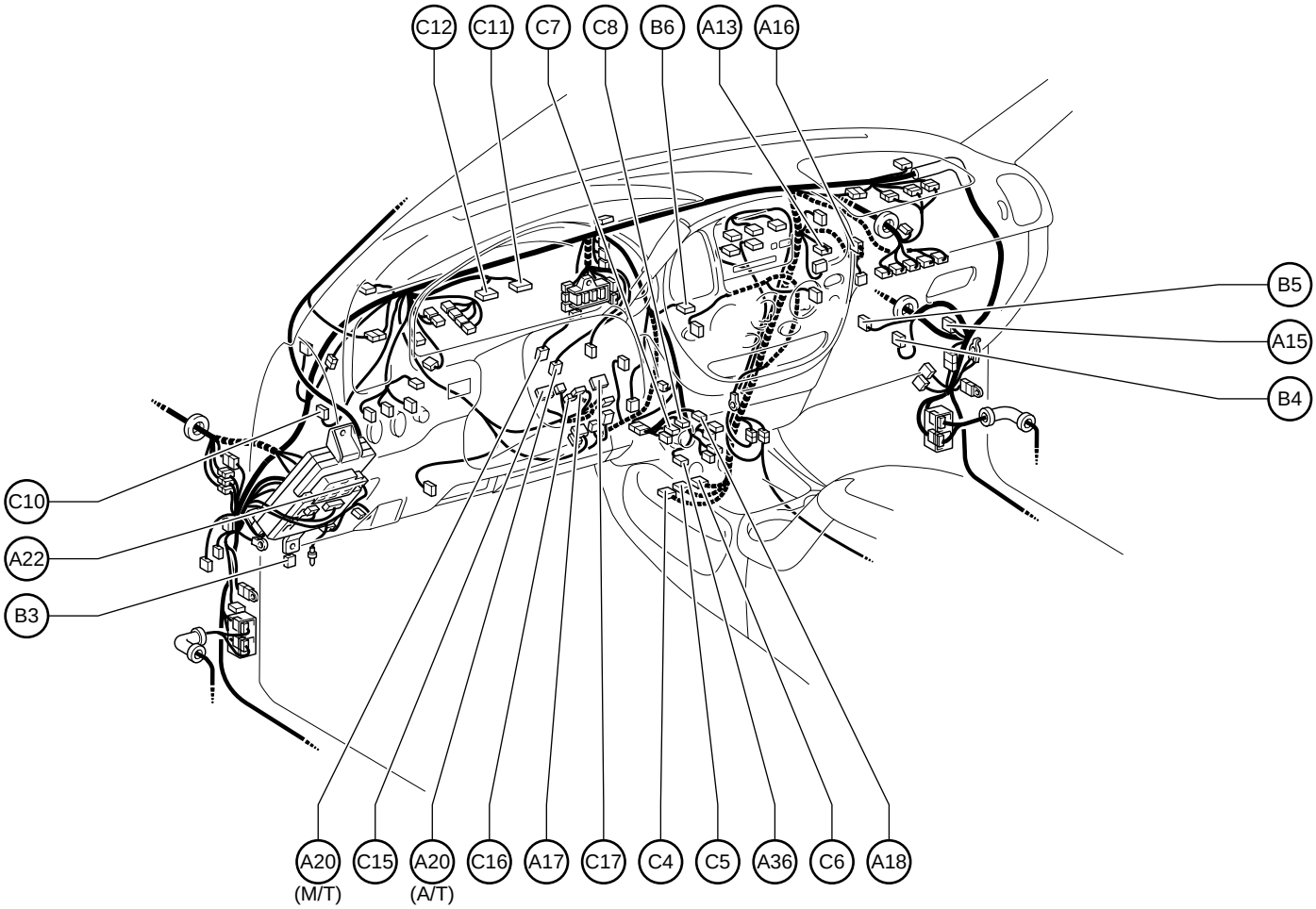
T 10 TVIP Buzzer
T 14 Throttle Control Motor and Throttle Position Sensor

V 2 Vehicle Speed Sensor (Combination Meter)
V 3 Vehicle Speed Sensor (Electronically Controlled Transmission)
V 4 VSV (Purge)
V 13 VSV (ACIS)
V 16 VVT Sensor LH
V 17 VVT Sensor RH

W 2 Washer Motor and Washer Level Sensor
W 4 Wiper Motor

## Position of Parts in Instrument Panel

## [Access Cab, Standard Cab]



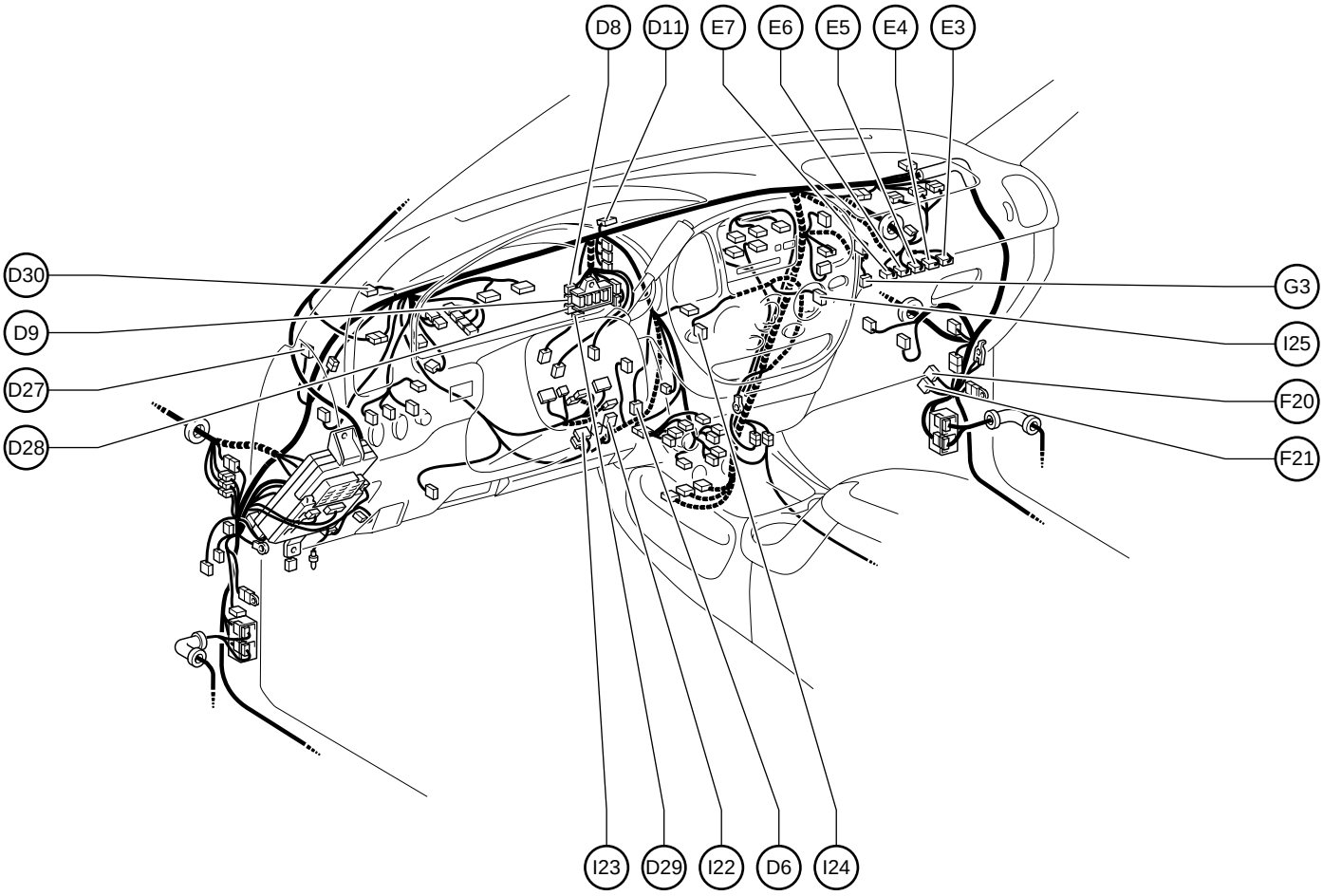

A13 A/C Thermistor
A15 Air Inlet Control Servo Motor
A16 Airbag Squib (Front Passenger Airbag Assembly)
A17 Airbag Squib (Steering Wheel Pad)
A18 Ashtray Illumination
A20 Accelerator Pedal Position Sensor
A22 ACC Cut Relay
A36 Airbag Cut Off SW

B 3 Back–Up Light Relay
B 4 Blower Motor
B 5 Blower Resistor
B 6 Blower SW and Defroster Mode SW

C 4 Center Airbag Sensor Assembly
C 5 Center Airbag Sensor Assembly
C 6 Center Airbag Sensor Assembly
C 7 Cigarette Lighter
C 8 Cigarette Lighter Illumination
C10 Clutch Start Cancel SW
C11 Combination Meter
C12 Combination Meter
C15 Combination SW
C16 Combination SW
C17 Combination SW

## Position of Parts in Instrument Panel

## [Access Cab, Standard Cab]




D 6 Data Link Connector 3
D 8 Diode (A/T)
D 9 Diode (Door Courtesy)
D11 Diode (Power Window System)
D27 Diode (Step Light)
D28 Diode (Door Lock)
D29 Diode (TVIP)
D30 Diode (Unlock Warning)

E 3 Engine Control Module
E 4 Engine Control Module
E 5 Engine Control Module
E 6 Engine Control Module
E 7 Engine Control Module

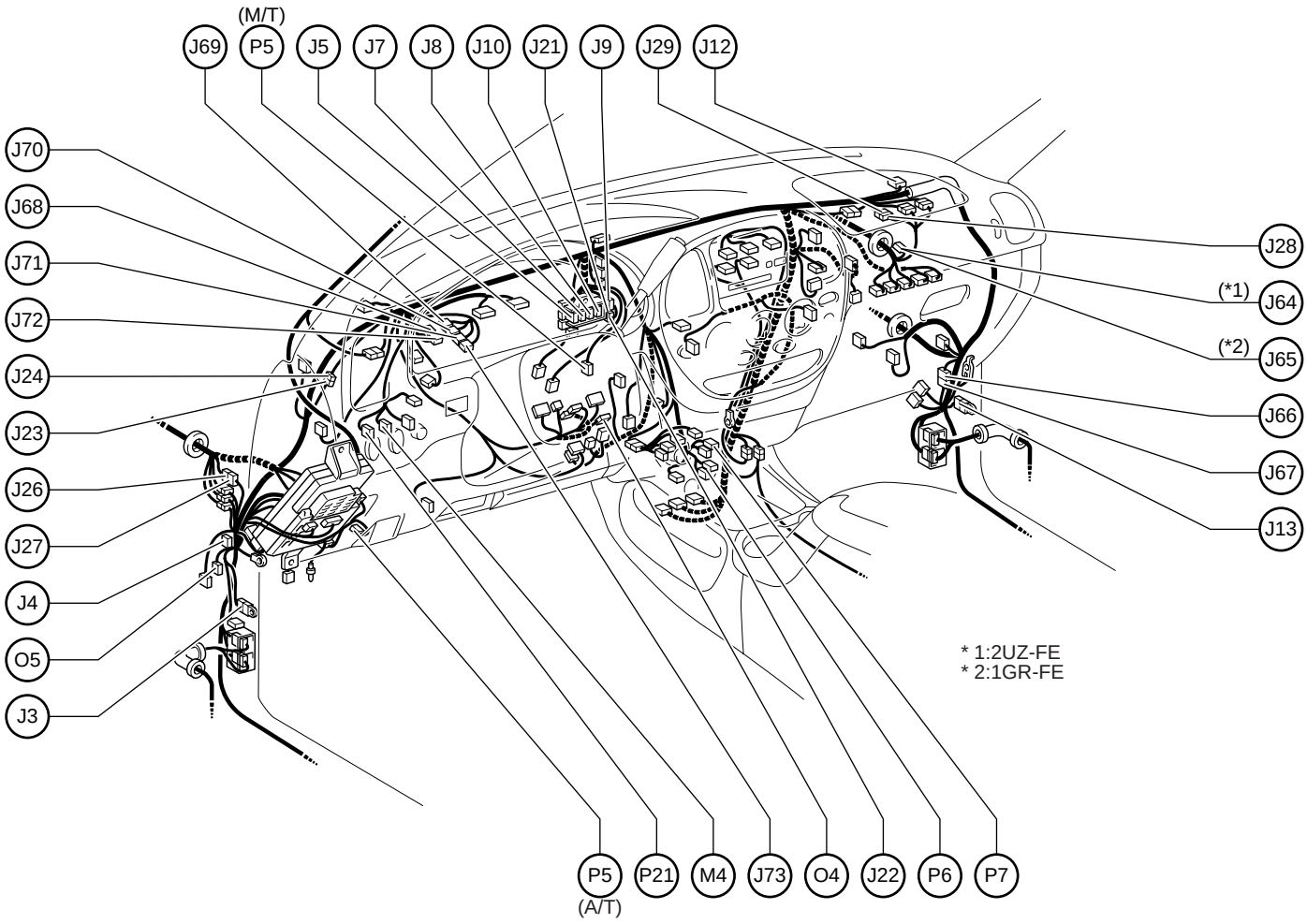
F20 4WD Control ECU
F21 4WD Control ECU

G 3 Glove Box Light

I 22 Ignition Key Cylinder Light
I 23 Ignition SW
I 24 Integration Control and Panel
I 25 Integration Control and Panel

## Position of Parts in Instrument Panel

## [Access Cab, Standard Cab]




J 3 Junction Connector
J 4 Junction Connector
J 5 Junction Connector
J 7 Junction Connector
J 8 Junction Connector
J 9 Junction Connector
J 10 Junction Connector
J 12 Junction Connector
J 13 Junction Connector
J 21 Junction Connector
J 22 Junction Connector
J 23 Junction Connector
J 24 Junction Connector
J 26 Junction Connector
J 27 Junction Connector
J 28 Junction Connector
J 29 Junction Connector
J 64 Junction Connector
J 65 Junction Connector
J 66 Junction Connector
J 67 Junction Connector
J 68 Junction Connector
J 69 Junction Connector
J 70 Junction Connector
J 71 Junction Connector
J 72 Junction Connector
J 73 Junction Connector

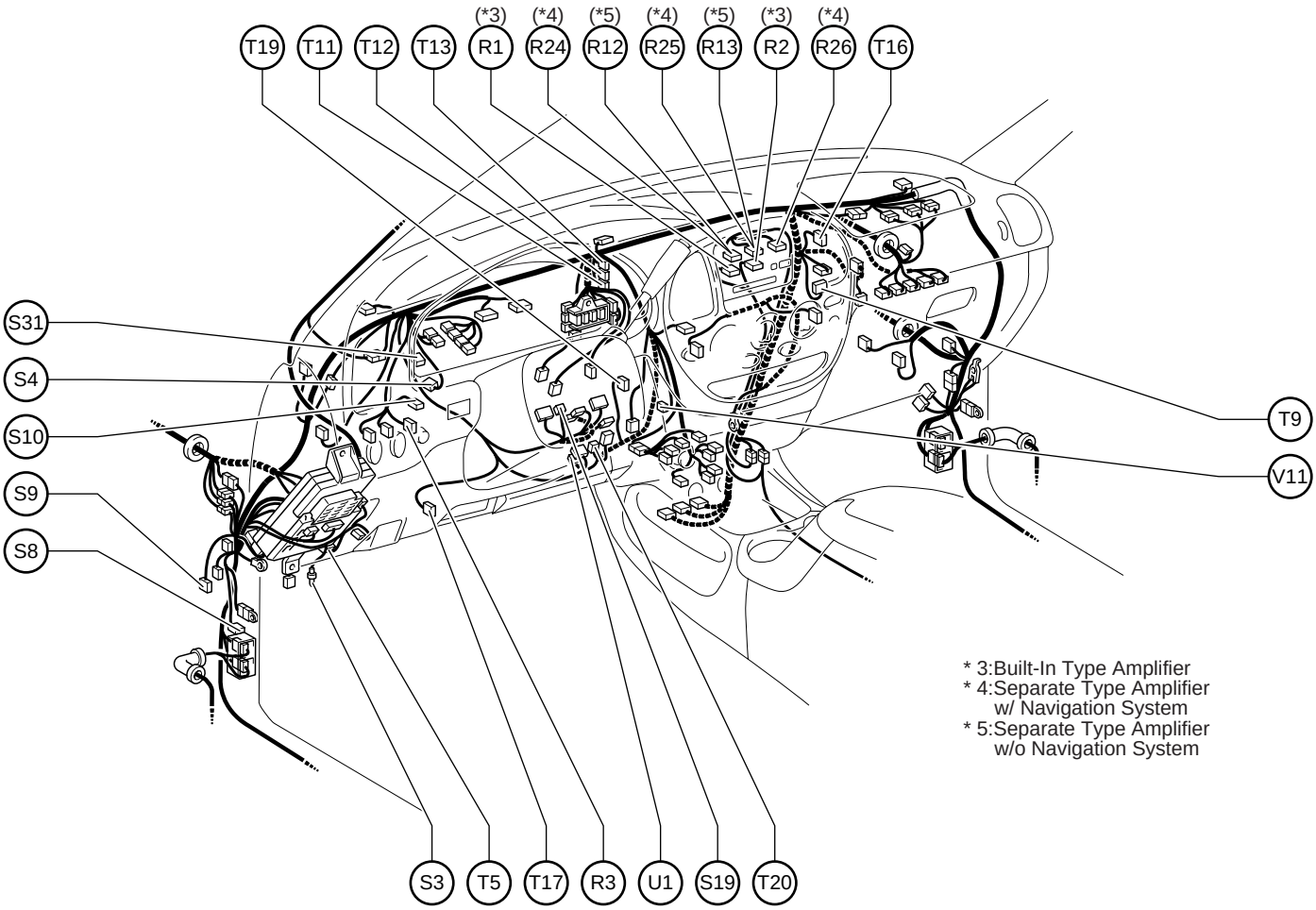
M 4 Mirror Heater SW

O 4 O/D Main SW
O 5 Option Connector

P 5 Parking Brake SW
P 6 Power Outlet
P 7 Power Outlet
P 21 Power Window Control SW (Back Window)

# Position of Parts in Instrument Panel

## [Access Cab, Standard Cab]




R 1 Radio and Player
R 2 Radio and Player
R 3 Rheostat
R12 Radio and Player
R13 Radio and Player
R24 Radio and Player with Display
R25 Radio and Player with Display
R26 Radio and Player with Display

S 3 Step Light
S 4 Stop Light SW
S 8 Short Pin
S 9 Short Connector (TVIP)
S10 Security Indicator and Glass Breakage Sensor Microphone
S19 Steering Sensor
S31 Stop Light Relay

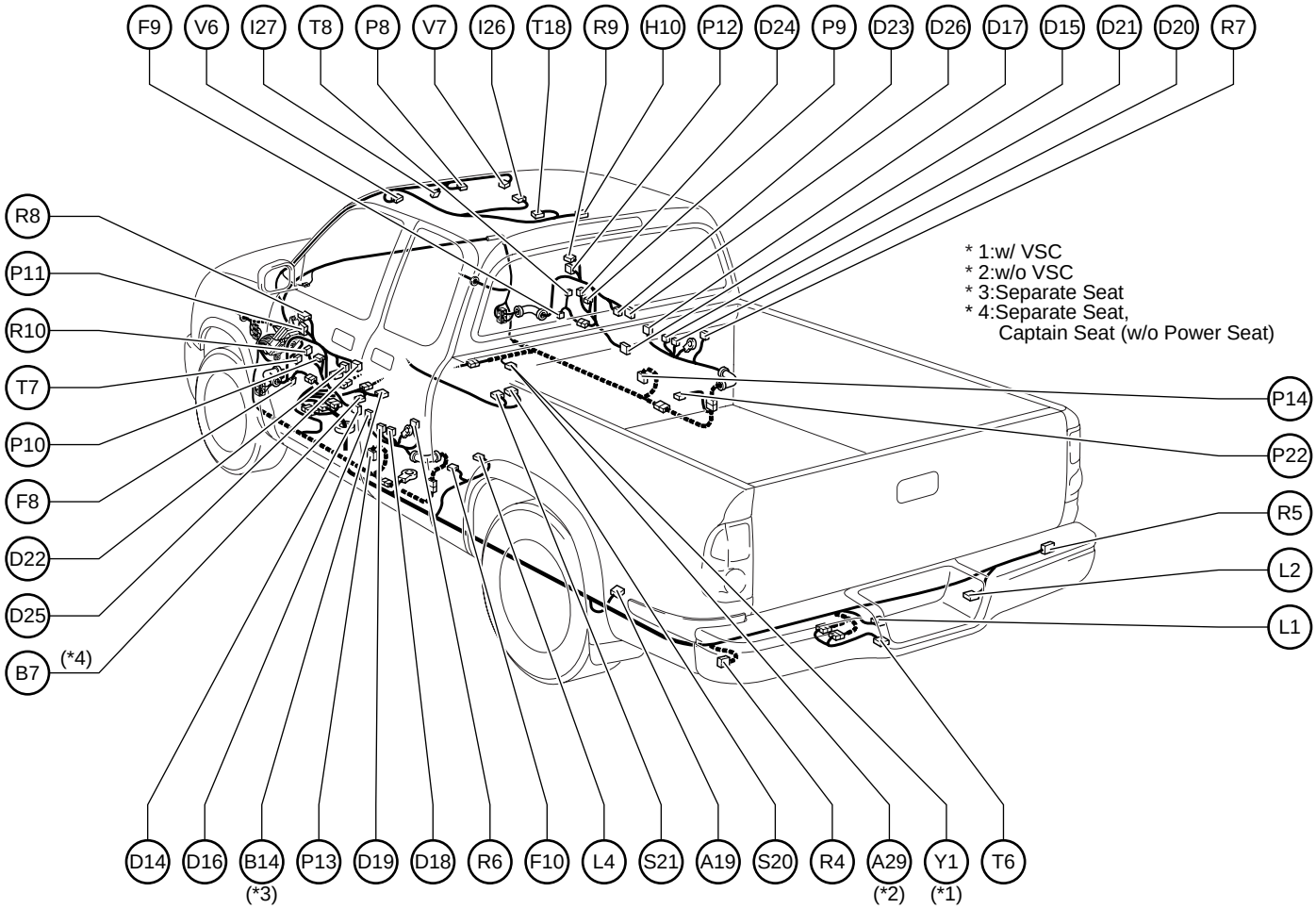
T 5 Turn Signal Flasher
T 9 Trailer Converter
T 11 TVIP ECU
T 12 TVIP ECU
T 13 TVIP ECU
T 16 Tire Pressure Monitor ECU
T 17 Tire Pressure Warning Standardization SW
T 19 Transponder Key Computer
T 20 Transponder Key Amplifier

U 1 Unlock Warning SW

V 11 VSC Warning Buzzer

## Position of Parts in Body

## [Access Cab]




A19 ABS Speed Sensor Rear
A29 ABS Deceleration Sensor

B 7 Buckle SW LH
B14 Buckle SW LH
Seat Position Airbag Sensor

D14 Door Courtesy Light Front LH
D15 Door Courtesy Light Front RH
D16 Door Courtesy SW Front LH
D17 Door Courtesy SW Front RH
D18 Door Courtesy SW Rear LH Lower
D19 Door Courtesy SW Rear LH Upper
D20 Door Courtesy SW Rear RH Lower
D21 Door Courtesy SW Rear RH Upper
D22 Door Key Lock and Unlock SW LH
D23 Door Key Lock and Unlock SW RH
D24 Door Lock Control SW RH
D25 Door Lock Motor and Door Unlock Detection SW LH
D26 Door Lock Motor and Door Unlock Detection SW RH

F 8 Front Door Speaker LH
F 9 Front Door Speaker RH
F10 Fuel Pump and Sender

H10 Cargo Light
High Mounted Stop Light

I 26 Interior Light
I 27 Inner Mirror

L 1 License Plate Light LH
L 2 License Plate Light RH
L 4 Canister Pump Module

P 8 Personal Light
P 9 Power Window Control SW Front RH
P10 Power Window Master SW
P11 Power Window Motor Front LH
P12 Power Window Motor Front RH
P13 Pretensioner LH
P14 Pretensioner RH
P22 Power Window Motor (Back Window)

R 4 Rear Combination Light LH
R 5 Rear Combination Light RH
R 6 Rear Door Speaker LH
R 7 Rear Door Speaker RH
R 8 Remote Control Mirror LH
R 9 Remote Control Mirror RH
R10 Remote Control Mirror SW

S20 Stereo Component Amplifier
S21 Stereo Component Amplifier

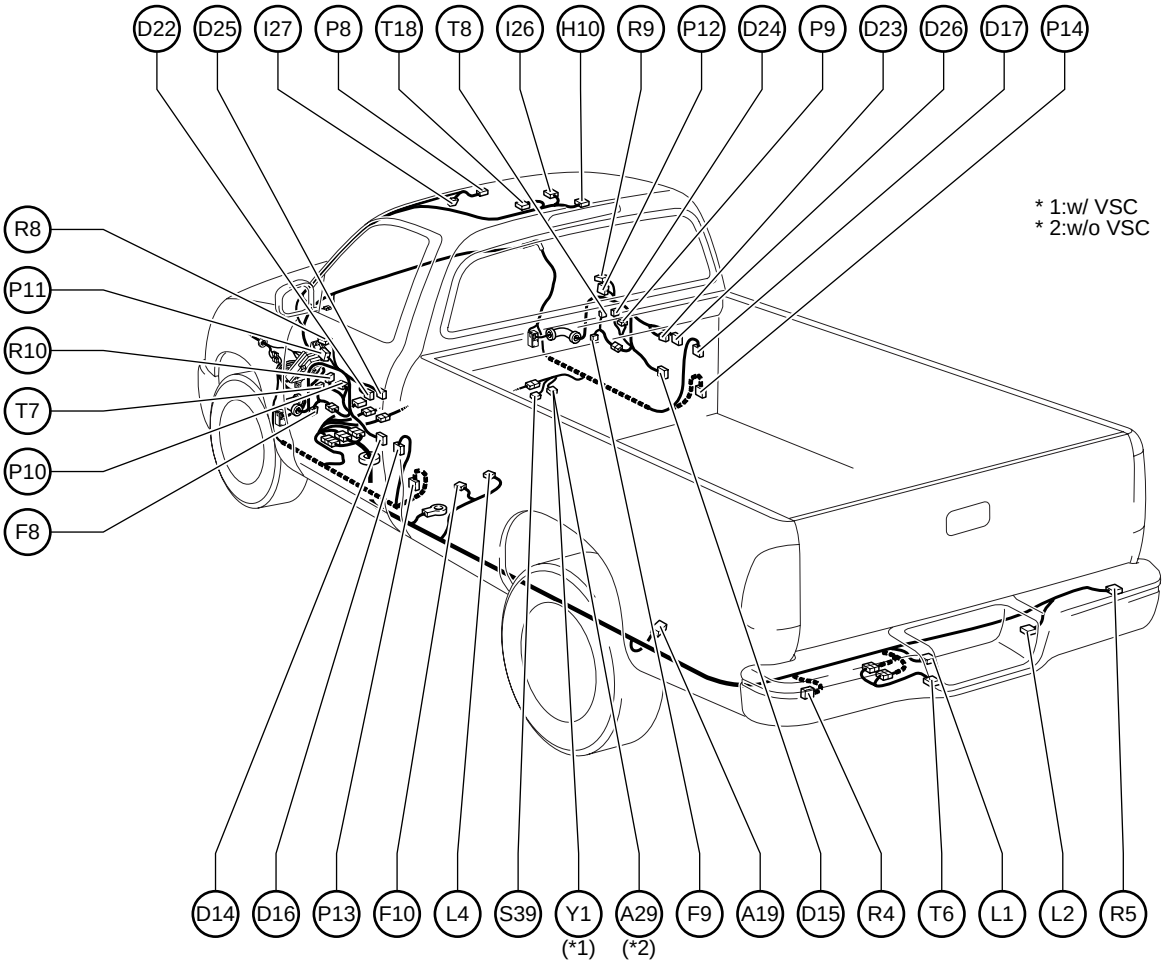
T 6 Trailer Socket
T 7 Tweeter LH
T 8 Tweeter RH
T18 Tire Pressure Monitor Receiver

V 6 Vanity Light LH
V 7 Vanity Light RH

Y 1 Yaw Rate Sensor

## Position of Parts in Body

## [Standard Cab]




A19 ABS Speed Sensor Rear
A29 ABS Deceleration Sensor

D14 Door Courtesy Light Front LH
D15 Door Courtesy Light Front RH
D16 Door Courtesy SW Front LH
D17 Door Courtesy SW Front RH
D22 Door Key Lock and Unlock SW LH
D23 Door Key Lock and Unlock SW RH
D24 Door Lock Control SW RH
D25 Door Lock Motor
Door Unlock Detection SW LH
D26 Door Lock Motor
Door Unlock Detection SW RH

F 8 Front Door Speaker LH
F 9 Front Door Speaker RH
F10 Fuel Pump
Sender

H10 Cargo Light
High Mounted Stop Light

I 26 Interior Light
I 27 Inner Mirror

L 1 License Plate Light LH
L 2 License Plate Light RH
L 4 Canister Pump Module

P 8 Personal Light
P 9 Power Window Control SW Front RH
P10 Power Window Master SW
P11 Power Window Motor Front LH
P12 Power Window Motor Front RH
P13 Pretensioner LH
P14 Pretensioner RH

R 4 Rear Combination Light LH
R 5 Rear Combination Light RH
R 8 Remote Control Mirror LH
R 9 Remote Control Mirror RH
R10 Remote Control Mirror SW

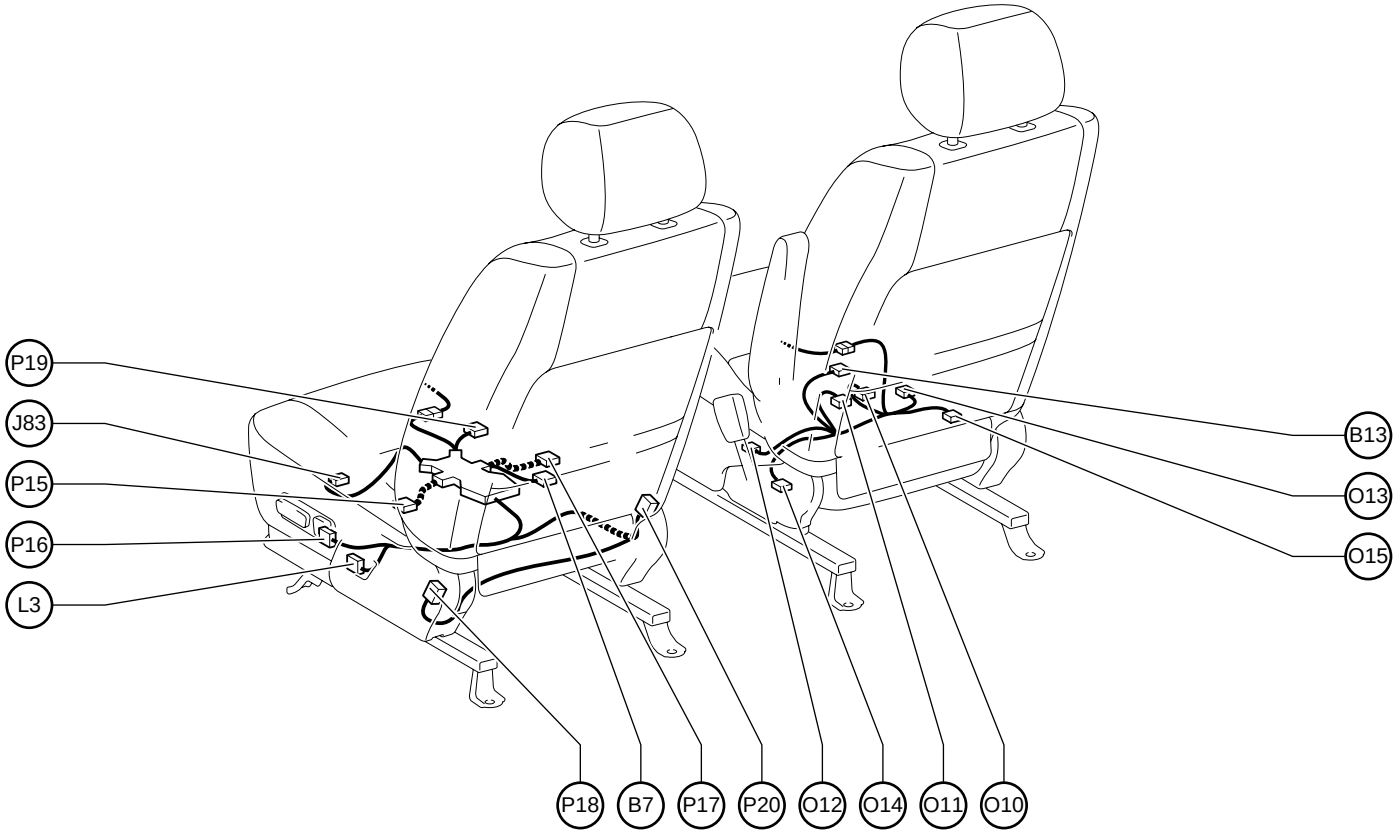
S39 Seat Belt Tension Sensor

T 6 Trailer Socket
T 7 Tweeter LH
T 8 Tweeter RH
T18 Tire Pressure Monitor Receiver

Y 1 Yaw Rate Sensor

## Position of Parts in Seat

## [Access Cab : Captain Seat]




B 7 Buckle SW LH
B13 Buckle SW RH

J 83 Junction Connector

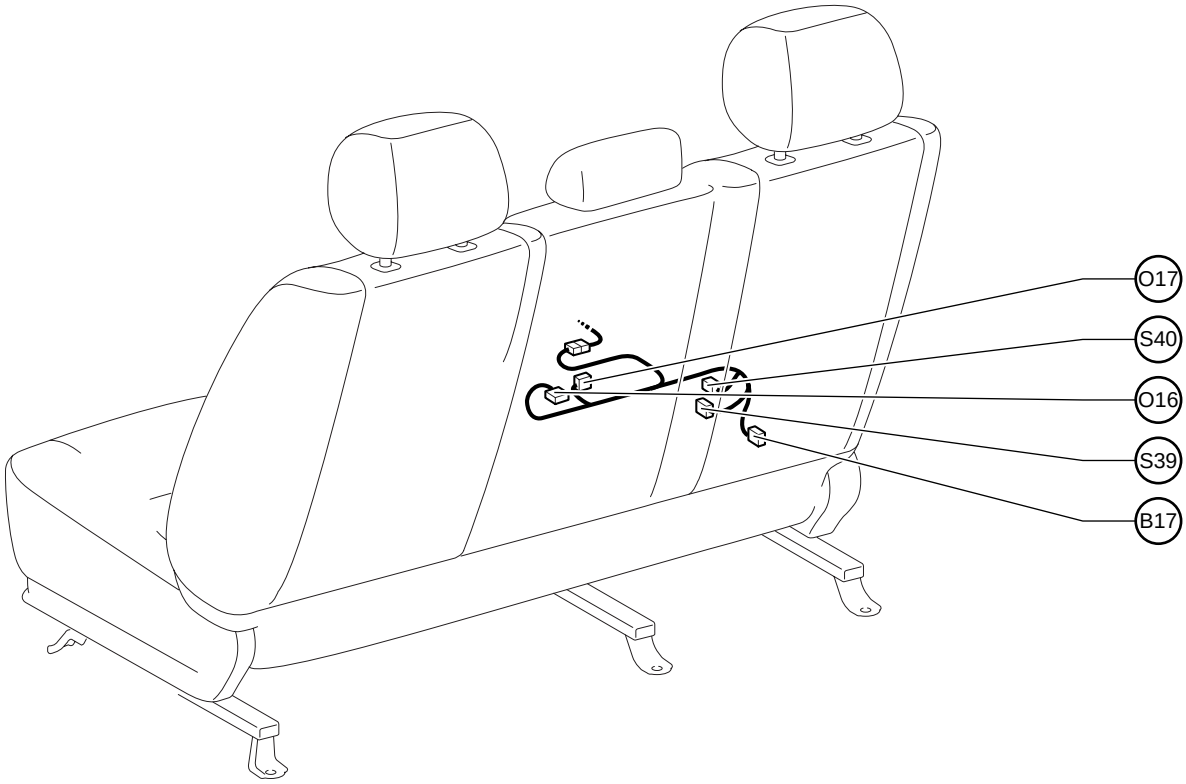
L 3 Lumbar Support Control SW (Driver's Seat)

O10 Occupant Classification ECU
O11 Occupant Classification ECU
O12 Occupant Classification Sensor Front LH
O13 Occupant Classification Sensor Front RH
O14 Occupant Classification Sensor RearLH
O15 Occupant Classification Sensor RearRH

P15 Power Seat Motor (Driver's Seat Front Vertical Control)
P16 Power Seat Control SW (Driver's Seat)
P17 Power Seat Motor (Driver's Seat Rear Vertical Control)
P18 Power Seat Motor (Driver's Seat Reclining Control)
P19 Power Seat Motor (Driver's Seat Slide Control)
P20 Power Seat Motor
(Driver's Seat Lumbar Support Control)

## Position of Parts in Seat

## [Access Cab : Separate Seat]



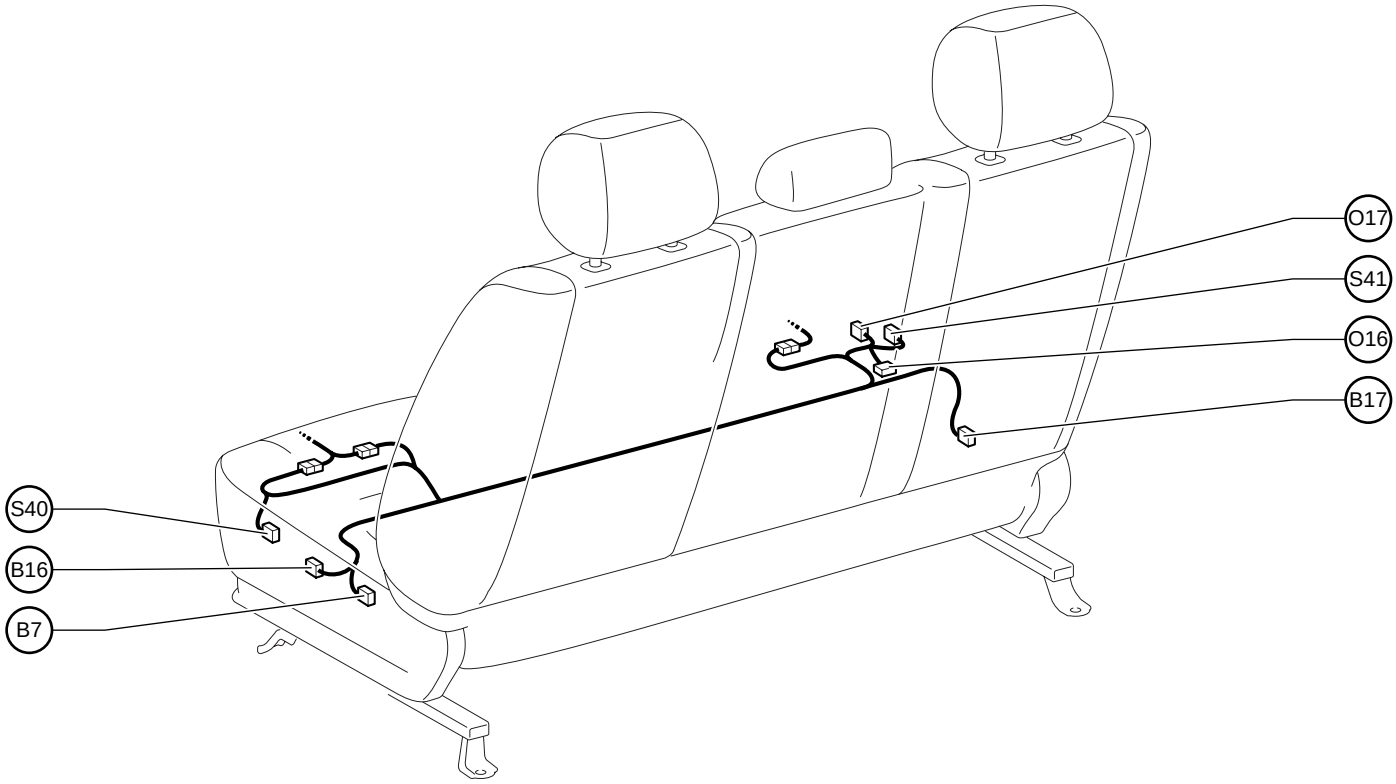

B17 Buckle SW RH

O16 Occupant Classification ECU
O17 Occupant Classification Sensor

S39 Seat Belt Tension Sensor
S40 Seat Position Airbag Sensor (Front Passenger's Side)

## Position of Parts in Seat

## [Standard Cab : Bench Seat]



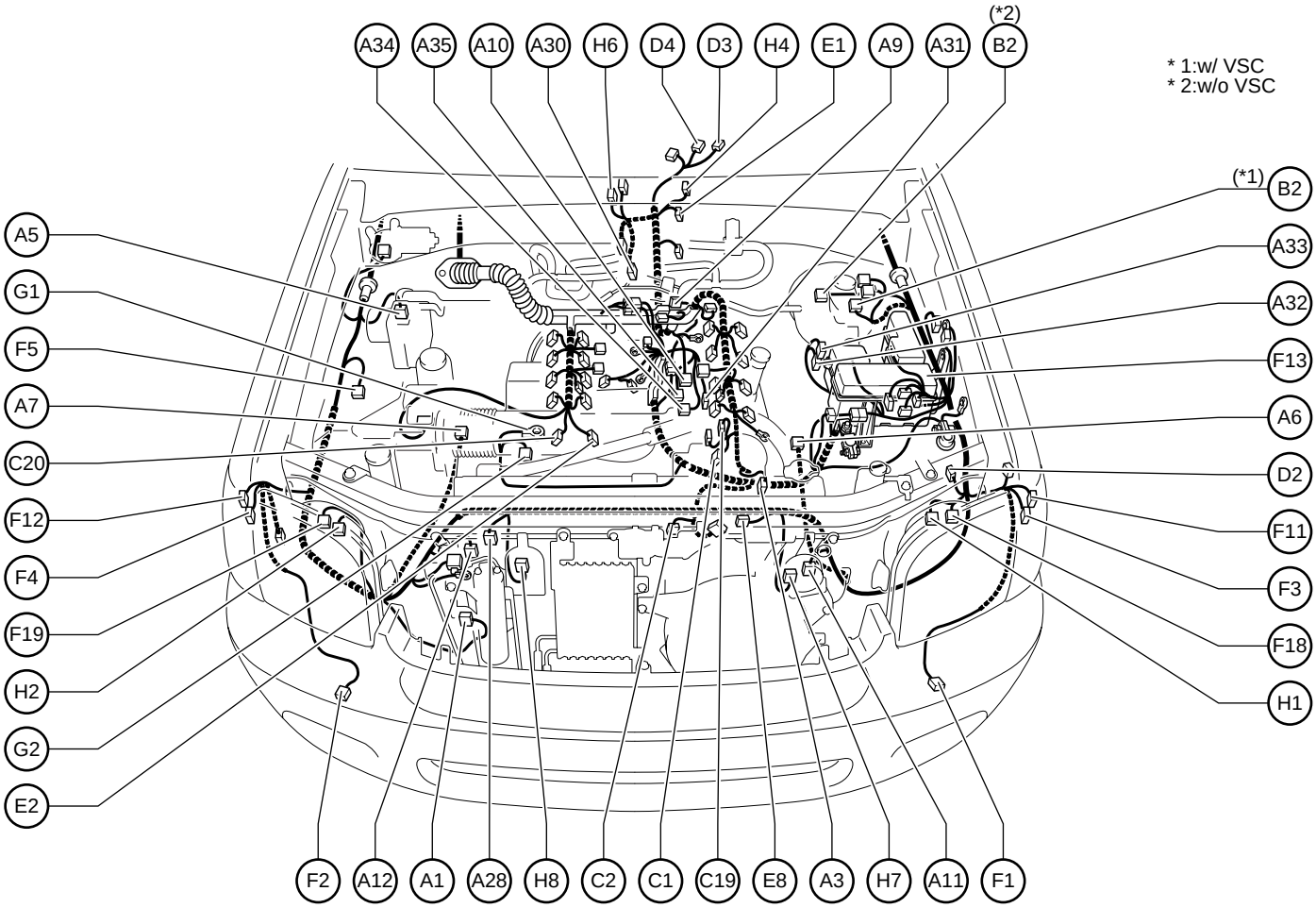

B 7 Buckle SW LH
B16 Buckle SW LH
B17 Buckle SW RH

O16 Occupant Classification ECU
O17 Occupant Classification Sensor

S40 Seat Position Airbag Sensor (Front Passenger's Side)
S41 Seat Position Airbag Sensor (Driver's Side)

## Position of Parts in Engine Compartment

## [Double Cab]




A 1 Pressure SW
A 3 A/C Magnetic Clutch and Lock Sensor
A 5 ABS Actuator with ECU
A 6 ABS Speed Sensor Front LH
A 7 ABS Speed Sensor Front RH
A 9 ADD Actuator
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
A11 Airbag Sensor Front LH
A12 Airbag Sensor Front RH
A28 Ambient Temp. Sensor
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A31 Air Switching Valve
A32 Air Injection Control Driver
A33 Air Injection Control Driver
A34 Air Pressure Sensor
A35 Air Pump

B 2 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 2 Crankshaft Position Sensor
C19 Camshaft Timing Oil Control Valve LH
C20 Camshaft Timing Oil Control Valve RH

D 2 Daytime Running Light Resistor
D 3 Detection SW (Transfer 4WD Position)
D 4 Detection SW (Transfer L4 Position)

E 1 Electronically Controlled Transmission Solenoid
E 2 Engine Coolant Temp. Sensor
E 8 Engine Hood Courtesy SW

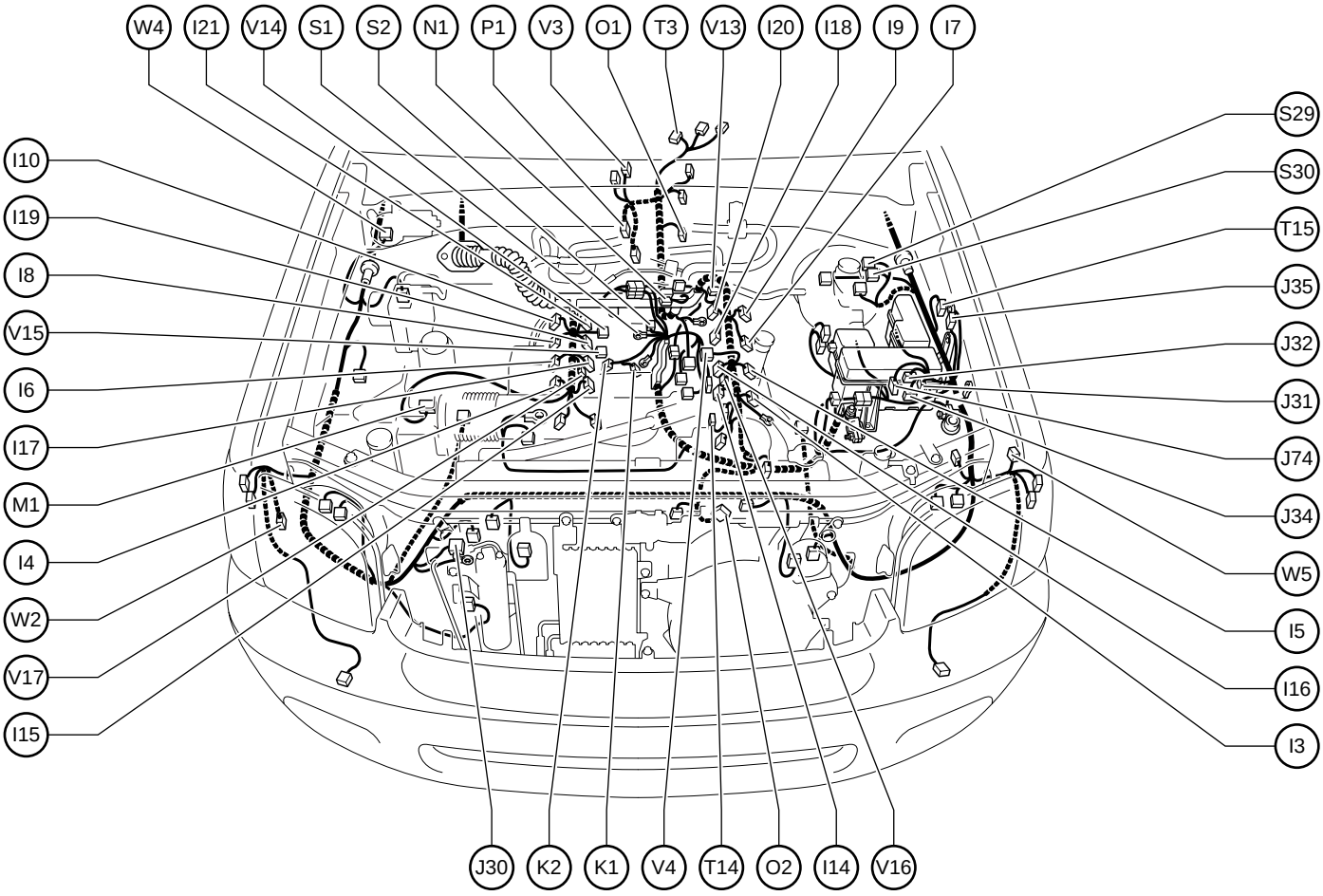
F 1 Front Fog Light LH
F 2 Front Fog Light RH
F 3 Front Turn Signal Light and Parking Light LH
F 4 Front Turn Signal Light and Parking Light RH
F 5 Fuel Pump Resistor
F 11 Front Turn Signal Light and Parking Light LH No.2
F 12 Front Turn Signal Light and Parking Light RH No.2
F 13 Fusible Link Block
F 18 Front Parking Light LH No.3
F 19 Front Parking Light RH No.3

G 1 Generator
G 2 Generator

H 1 Headlight LH
H 2 Headlight RH
H 4 Heated Oxygen Sensor (Bank 1 Sensor 2)
H 6 Heated Oxygen Sensor (Bank 2 Sensor 2)
H 7 Horn LH
H 8 Horn RH

## Position of Parts in Engine Compartment

## [Double Cab]




I 3 Igniter and Ignition Coil No.1
I 4 Igniter and Ignition Coil No.2
I 5 Igniter and Ignition Coil No.3
I 6 Igniter and Ignition Coil No.4
I 7 Igniter and Ignition Coil No.5
I 8 Igniter and Ignition Coil No.6
I 9 Igniter and Ignition Coil No.7
I 10 Igniter and Ignition Coil No.8
I 14 Injector No.1
I 15 Injector No.2
I 16 Injector No.3
I 17 Injector No.4
I 18 Injector No.5
I 19 Injector No.6
I 20 Injector No.7
I 21 Injector No.8

J 30 Junction Connector
J 31 Junction Connector
J 32 Junction Connector
J 34 Junction Connector
J 35 Junction Connector
J 74 Junction Connector

K 1 Knock Sensor (Bank 1)
K 2 Knock Sensor (Bank 2)

M 1 Mass Air Flow Meter

N 1 Noise Filter

O 1 O/D Direct Clutch Speed Sensor
O 2 Oil Pressure SW

P 1 Park/Neutral Position SW

S 1 Starter
S 2 Starter
S 29 Skid Control ECU with Actuator
S 30 Skid Control ECU with Actuator

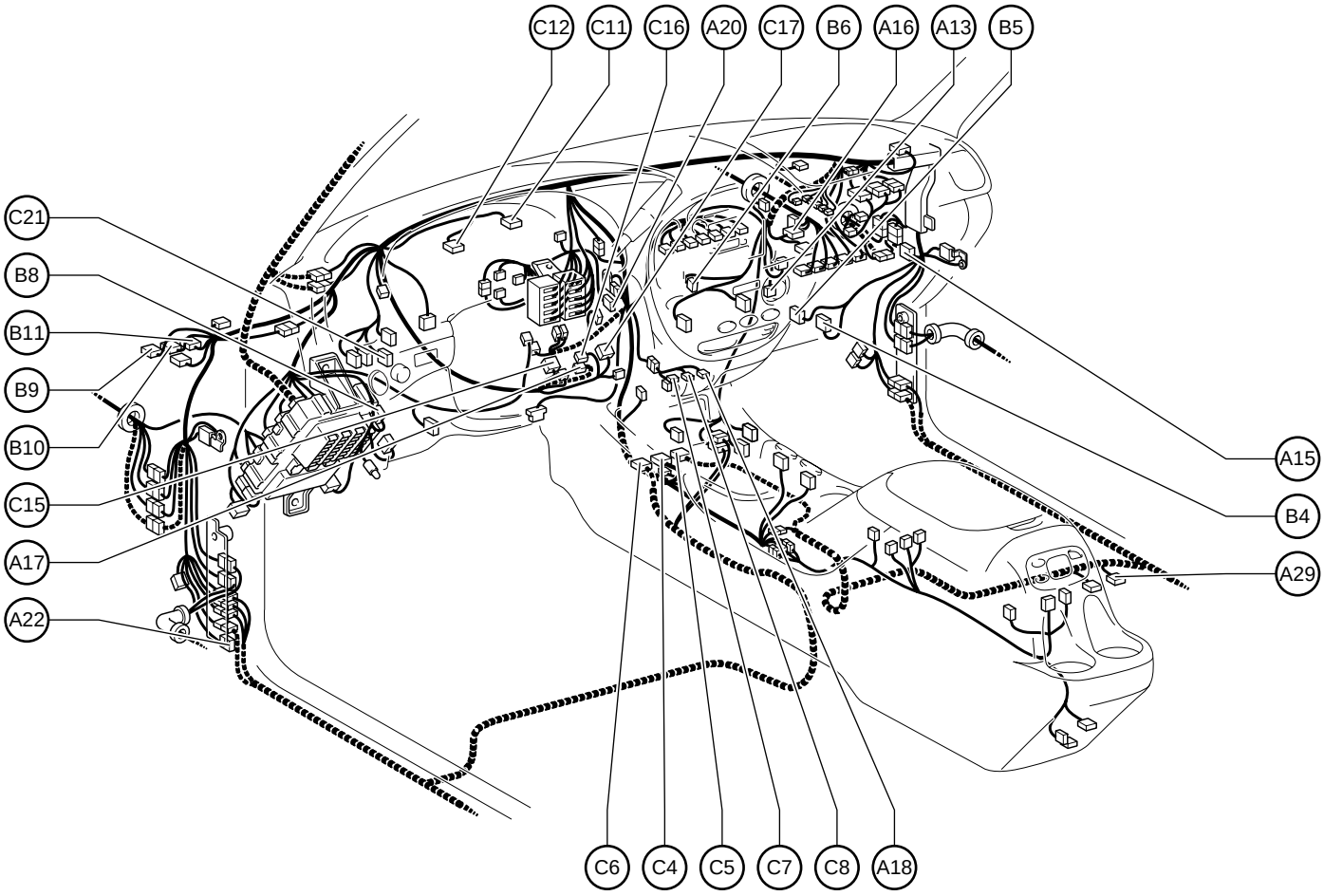
T 3 Transfer Shift Actuator
T 14 Throttle Control Motor and Throttle Position Sensor
T 15 Theft Deterrent Horn

V 3 Vehicle Speed Sensor (Electronically Controlled Transmission)
V 4 VSV (Purge)
V 13 VSV (ACIS)
V 14 VSV (Air Switching Valve Bank 1)
V 15 VSV (Air Switching Valve Bank 2)
V 16 VVT Sensor LH
V 17 VVT Sensor RH

W 2 Washer Motor and Washer Level Sensor
W 4 Wiper Motor
W 5 Wireless Door Lock Buzzer

## Position of Parts in Instrument Panel

## [Double Cab]



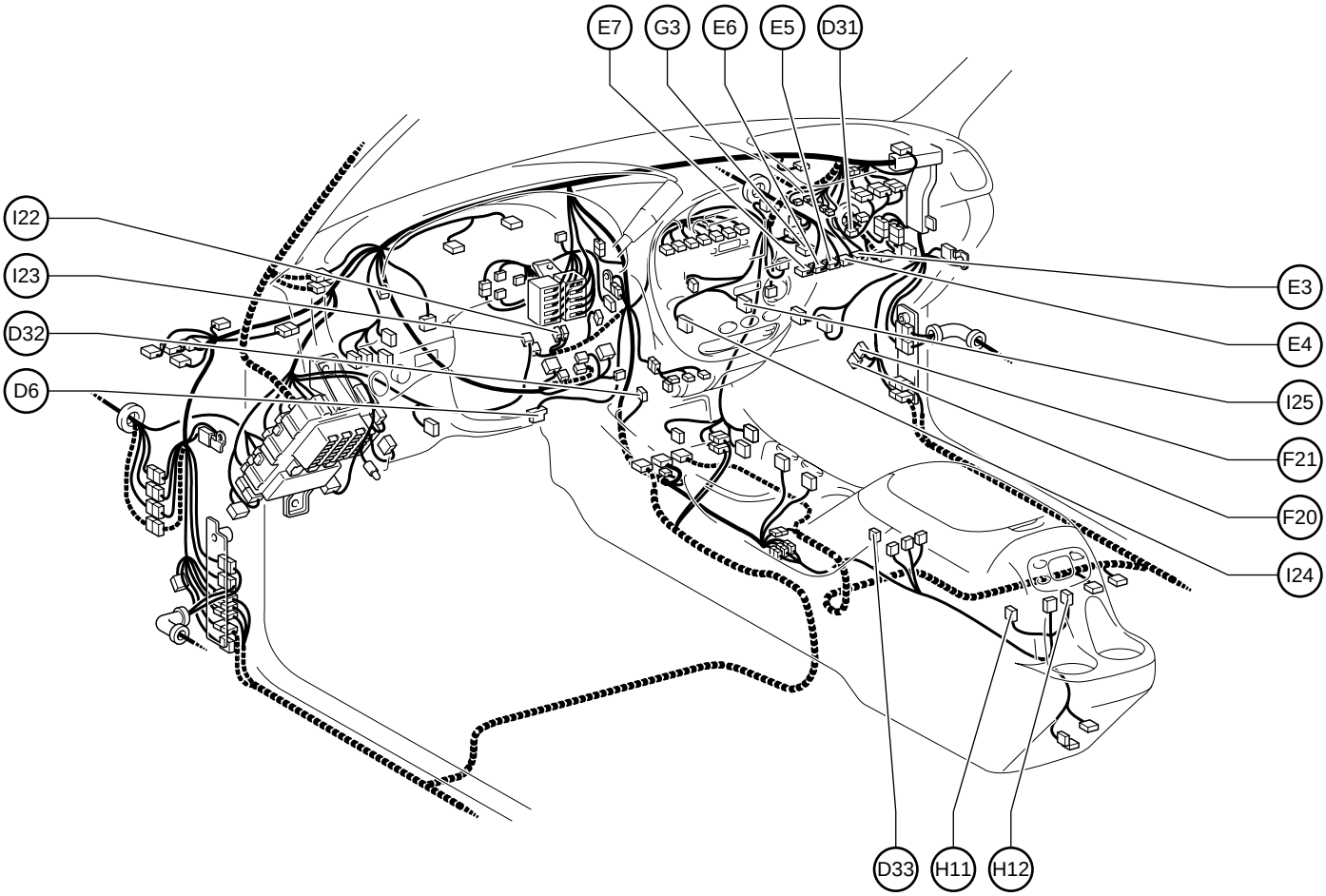

A13 A/C Thermistor
A15 Air Inlet Control Servo Motor
A16 Airbag Squib (Front Passenger Airbag Assembly)
A17 Airbag Squib (Steering Wheel Pad)
A18 Ashtray Illumination
A20 Accelerator Pedal Position Sensor
A22 ACC Cut Relay
A29 ABS Deceleration Sensor

B 4 Blower Motor
B 5 Blower Resistor
B 6 Blower SW and Defroster Mode SW
B 8 Back Window Relay
B 9 Body ECU
B10 Body ECU
B11 Body ECU

C 4 Center Airbag Sensor Assembly
C 5 Center Airbag Sensor Assembly
C 6 Center Airbag Sensor Assembly
C 7 Cigarette Lighter
C 8 Cigarette Lighter Illumination
C11 Combination Meter
C12 Combination Meter
C15 Combination SW
C16 Combination SW
C17 Combination SW
C21 Curtain Airbag Cut Off SW

## Position of Parts in Instrument Panel

## [Double Cab]




D 6 Data Link Connector 3
D31 Diode (Parking Brake SW)
D32 Door Lock Control Receiver
D33 DVD Player

E 3 Engine Control Module
E 4 Engine Control Module
E 5 Engine Control Module
E 6 Engine Control Module
E 7 Engine Control Module

F 20 4WD Control ECU
F 21 4WD Control ECU

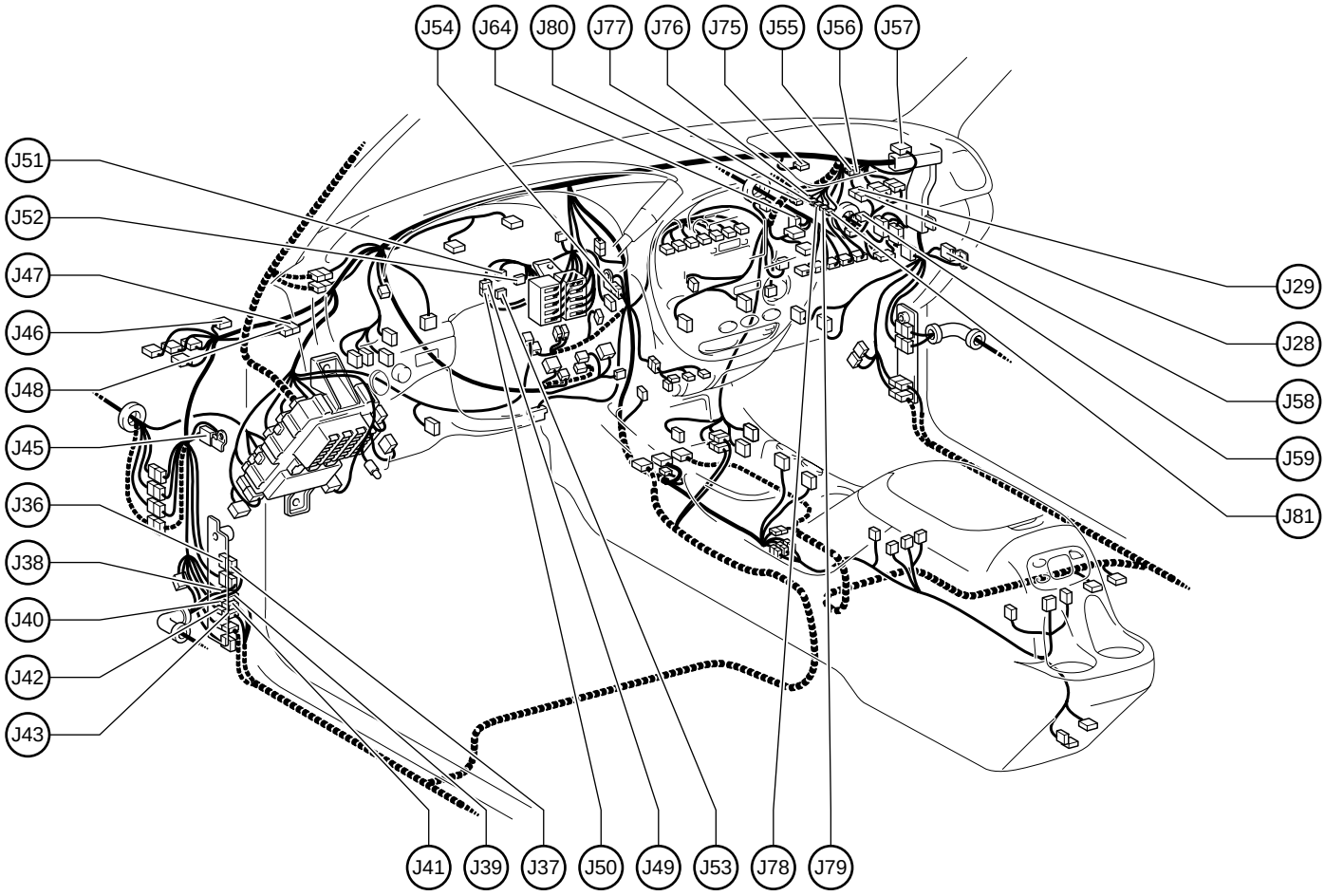
G 3 Glove Box Light

H 11 Headphone Terminal LH
H12 Headphone Terminal RH

I 22 Ignition Key Cylinder Light
I 23 Ignition SW
I 24 Integration Control and Panel
I 25 Integration Control and Panel

## Position of Parts in Instrument Panel

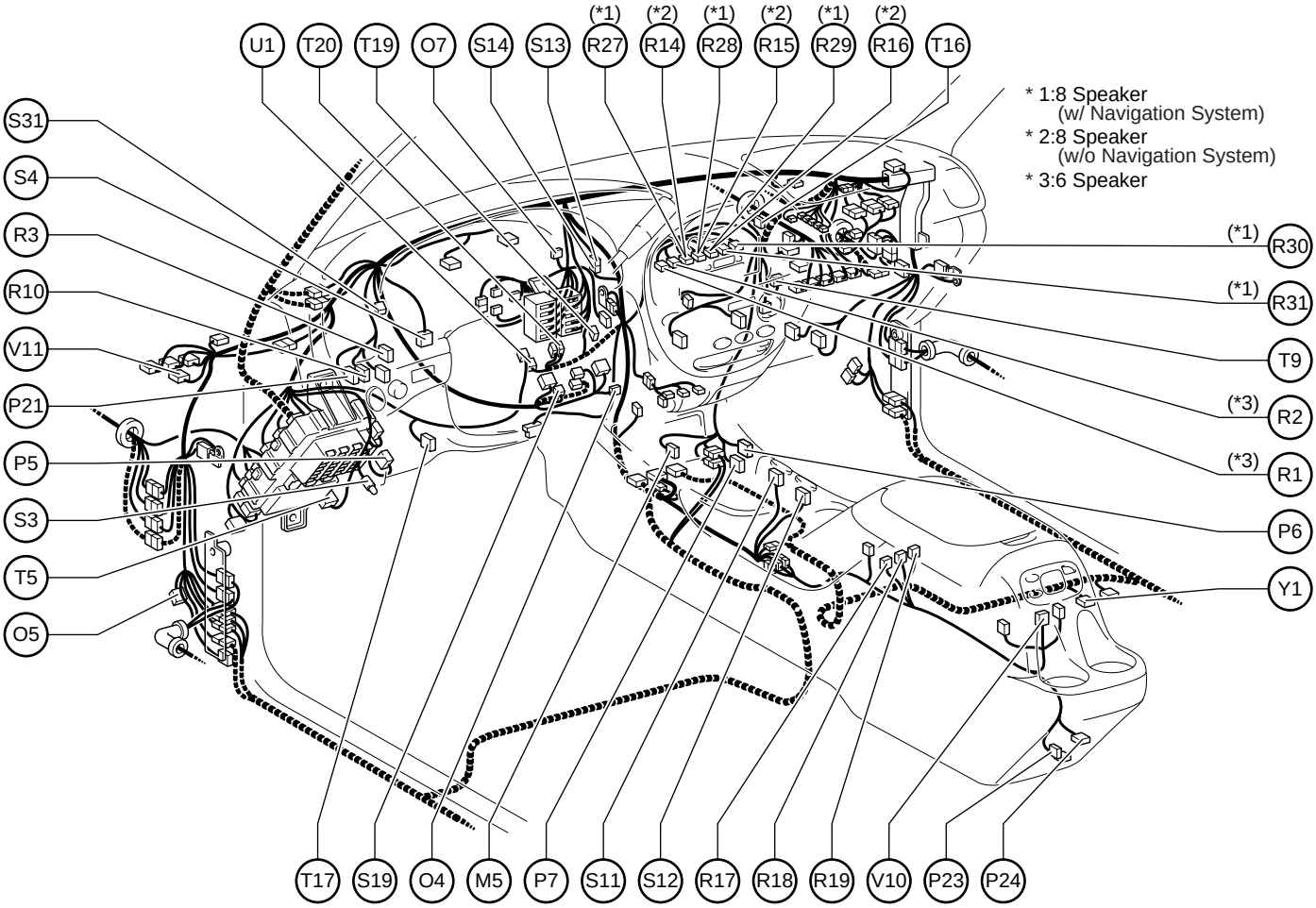
## [Double Cab]




J 28 Junction Connector
J 29 Junction Connector
J 36 Junction Connector
J 37 Junction Connector
J 38 Junction Connector
J 39 Junction Connector
J 40 Junction Connector
J 41 Junction Connector
J 42 Junction Connector
J 43 Junction Connector
J 45 Junction Connector
J 46 Junction Connector
J 47 Junction Connector
J 48 Junction Connector
J 49 Junction Connector
J 50 Junction Connector
J 51 Junction Connector
J 52 Junction Connector
J 53 Junction Connector
J 54 Junction Connector
J 55 Junction Connector
J 56 Junction Connector
J 57 Junction Connector
J 58 Junction Connector
J 59 Junction Connector
J 64 Junction Connector
J 75 Junction Connector
J 76 Junction Connector
J 77 Junction Connector
J 78 Junction Connector
J 79 Junction Connector
J 80 Junction Connector
J 81 Junction Connector

## Position of Parts in Instrument Panel

## [Double Cab]




M 5 Main SW

O 4 O/D Main SW
O 5 Option Connector
O 7 Option Connector (Grass Breakage Sensor)

P 5 Parking Brake SW
P 6 Power Outlet
P 7 Power Outlet
P 21 Power Window Control SW (Back Window)
P 23 Power Outlet (115V)
P 24 Power Outlet (Rear)

R 1 Radio and Player
R 2 Radio and Player
R 3 Rheostat
R 10 Remote Control Mirror SW
R 14 Radio and Player
R 15 Radio and Player
R 16 Radio and Player
R 17 Rear Seat Entertainment ECU
R 18 Rear Seat Entertainment ECU
R 19 Rear Seat Entertainment ECU
R 27 Radio and Player with Display
R 28 Radio and Player with Display
R 29 Radio and Player with Display
R 30 Radio and Player with Display
R 31 Radio and Player with Display

S 3 Step Light
S 4 Stop Light SW
S 11 Seat Heater SW (Driver's Seat)
S 12 Seat Heater SW (Front Passenger's Seat)
S 13 Short Connector
S 14 Short Connector
S 19 Steering Sensor
S 31 Stop Light Relay

T 5 Turn Signal Flasher
T 9 Trailer Converter
T 16 Tire Pressure Monitor ECU
T 17 Tire Pressure Warning Standardization SW
T 19 Transponder Key Computer
T 20 Transponder Key Amplifier

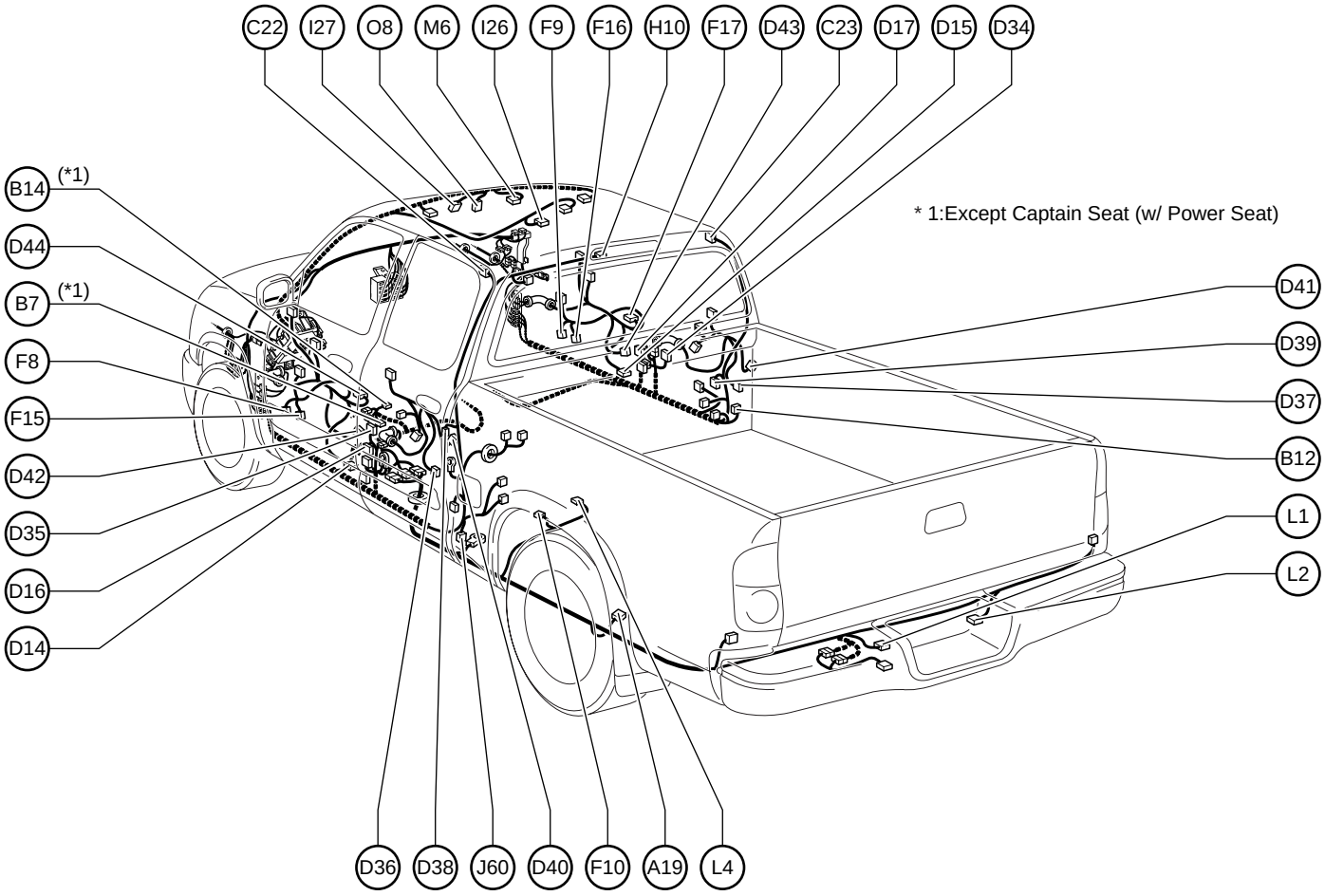
U 1 Unlock Warning SW

V 10 Video Terminal
V 11 VSC Warning Buzzer

Y 1 Yaw Rate Sensor

## Position of Parts in Body

## [Double Cab]




A19 ABS Speed Sensor Rear

B 7 Buckle SW LH
B12 Back Window Control Relay
B14 Buckle SW LH
Seat Position Airbag Sensor

C22 Curtain Shield Airbag Squib LH
C23 Curtain Shield Airbag Squib RH

D14 Door Courtesy Light Front LH
D15 Door Courtesy Light Front RH
D16 Door Courtesy SW Front LH
D17 Door Courtesy SW Front RH
D34 Diode (Door Courtesy No.1)
D35 Diode (Door Courtesy No.2)
D36 Door Courtesy Light Rear LH
D37 Door Courtesy Light Rear RH
D38 Door Courtesy SW Rear LH
D39 Door Courtesy SW Rear RH
D40 Door Lock Motor
Door Unlock Detection SW Rear LH
D41 Door Lock Motor
Door Unlock Detection SW Rear RH
D42 Door Lock Motor, Door Key Lock and Unlock SW
Door Unlock Detection SW Front LH
D43 Door Lock Motor, Door Key Lock and Unlock SW
Door Unlock Detection SW Front RH
D44 Driver Door ECU

F 8 Front Door Speaker LH
F 9 Front Door Speaker RH
F10 Fuel Pump and Sender
F15 Front Door Speaker LH (Woofer)
F16 Front Door Speaker RH (Woofer)
F17 Front Passenger Door ECU

H10 High Mounted Stop Light and Cargo Light

I 26 Interior Light
I 27 Inner Mirror

J 60 Junction Connector

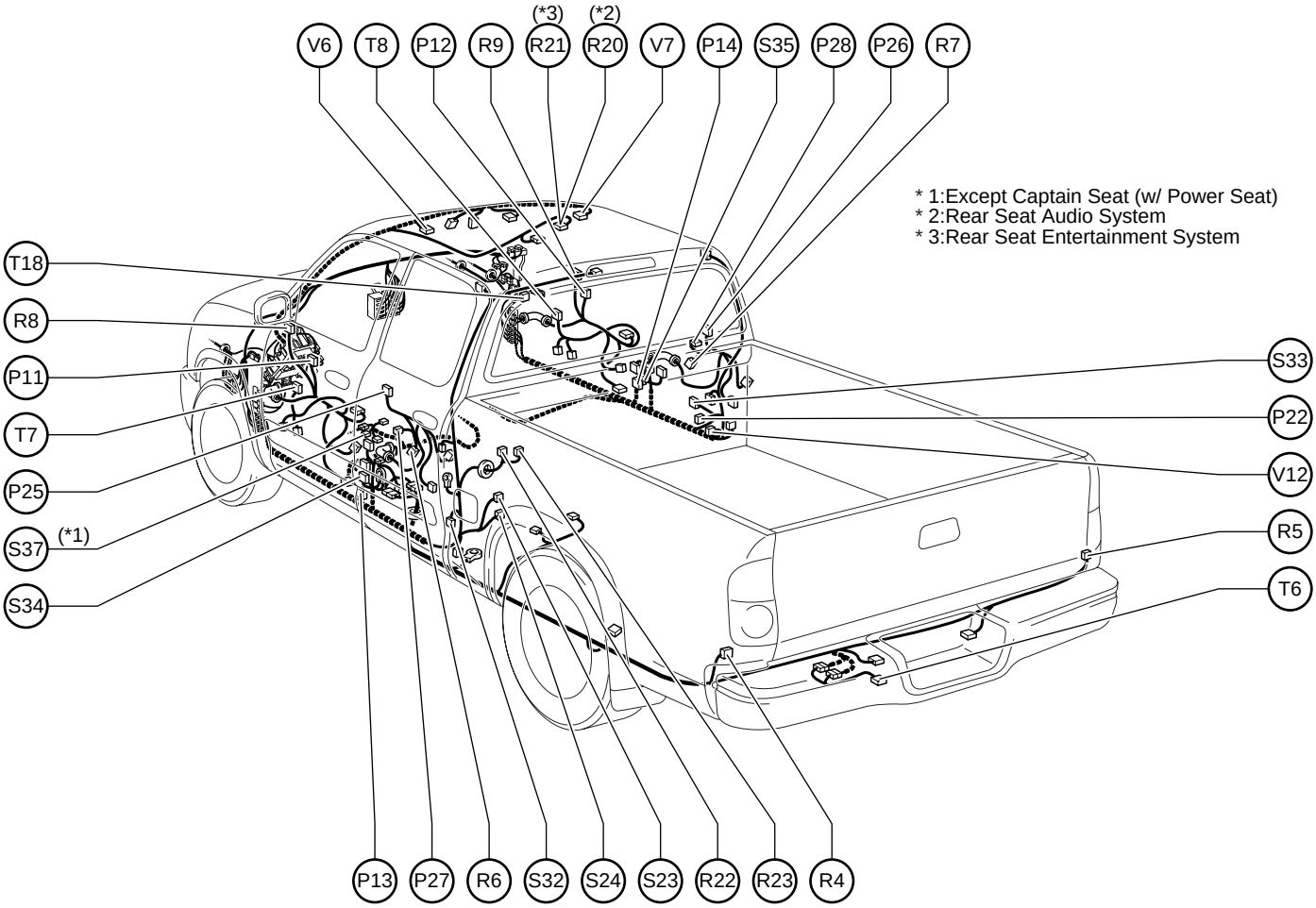
L 1 License Plate Light LH
L 2 License Plate Light RH
L 4 Canister Pump Module

M 6 Moon Roof Control ECU and Motor

O 8 Overhead Module

## Position of Parts in Body

## [Double Cab]




P 11 Power Window Motor Front LH
P 12 Power Window Motor Front RH
P 13 Pretensioner LH
P 14 Pretensioner RH
P 22 Power Window Motor (Back Window)
P 25 Power Window Control SW Rear LH
P 26 Power Window Control SW Rear RH
P 27 Power Window Motor Rear LH
P 28 Power Window Motor Rear RH

R 4 Rear Combination Light LH
R 5 Rear Combination Light RH
R 6 Rear Door Speaker LH
R 7 Rear Door Speaker RH
R 8 Remote Control Mirror LH
R 9 Remote Control Mirror RH
R20 Rear Seat Audio Controller
R21 Rear Seat Entertainment Display
R22 Rear Window Defogger
R23 Rear Window Defogger

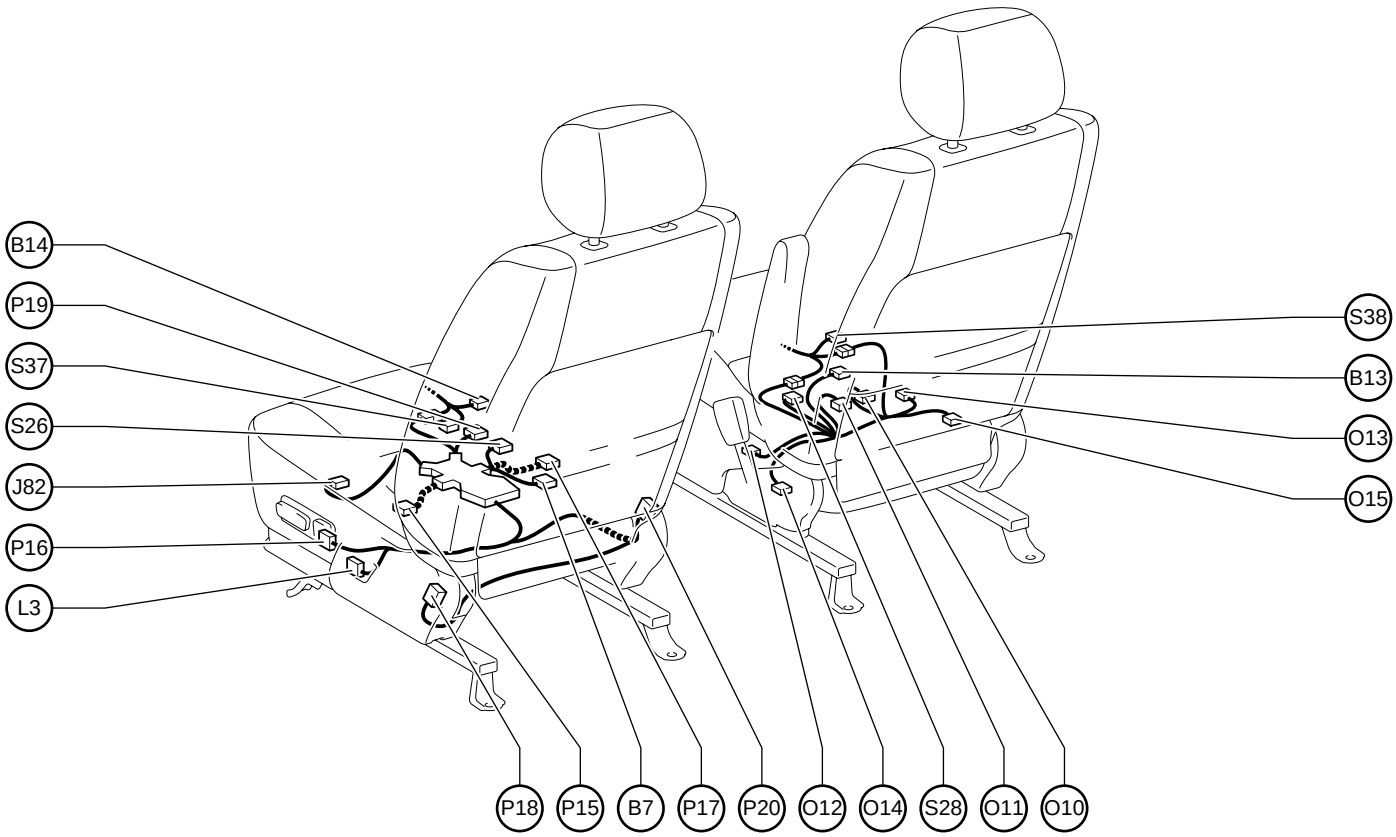
S 23 Stereo Component Amplifier
S 24 Stereo Component Amplifier
S 32 Side Airbag Sensor Rear LH
S 33 Side Airbag Sensor Rear RH
S 34 Side Airbag Sensor LH
S 35 Side Airbag Sensor RH
S 37 Side Airbag Squib LH

T 6 Trailer Socket
T 7 Tweeter LH
T 8 Tweeter RH
T 18 Tire Pressure Monitor Receiver

V 6 Vanity Light LH
V 7 Vanity Light RH
V 12 Voltage Inverter

## Position of Parts in Seat

## [Double Cab : Captain Seat]




B 7 Buckle SW LH
B13 Buckle SW RH
B14 Buckle SW LH
Seat Position Airbag Sensor

J 82 Junction Connector

L 3 Lumbar Support Control SW (Driver's Seat)

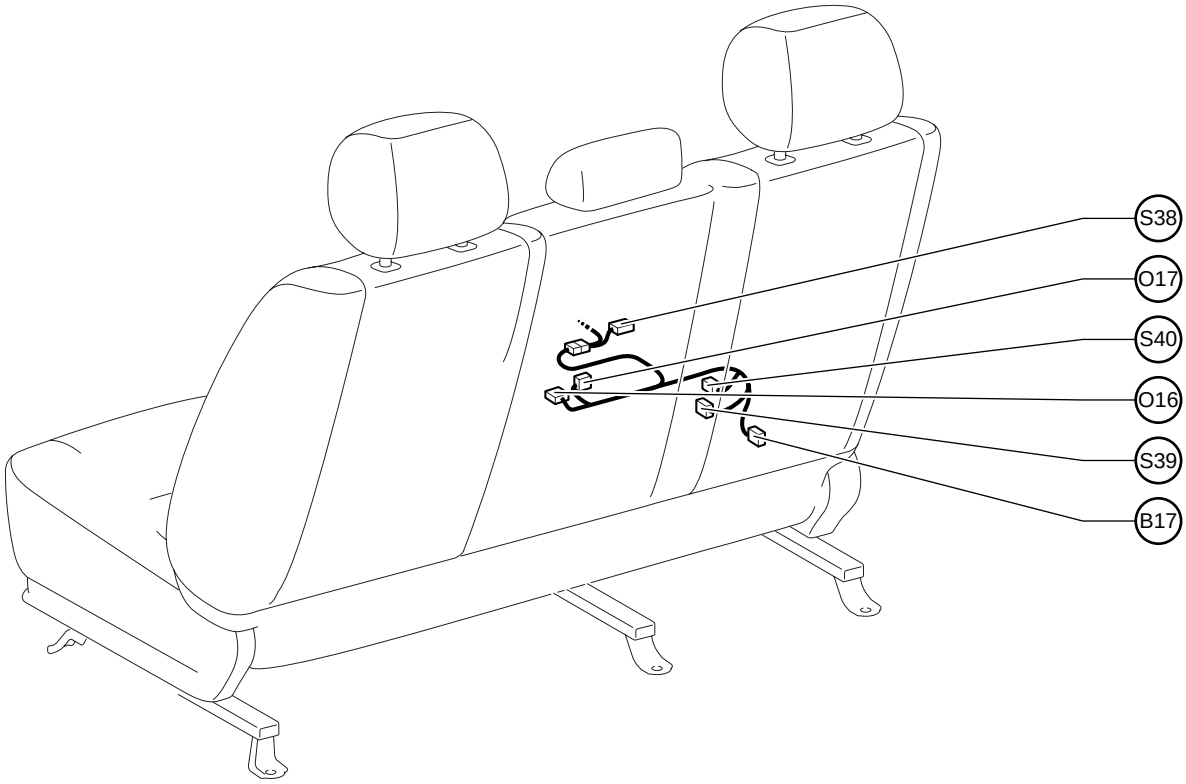
O10 Occupant Classification ECU
O11 Occupant Classification ECU
O12 Occupant Classification Sensor Front LH
O13 Occupant Classification Sensor Front RH
O14 Occupant Classification Sensor RearLH
O15 Occupant Classification Sensor RearRH

P15 Power Seat Motor (Driver's Seat Front Vertical Control)
P16 Power Seat Control SW (Driver's Seat)
P17 Power Seat Motor (Driver's Seat Rear Vertical Control)
P18 Power Seat Motor (Driver's Seat Reclining Control)
P19 Power Seat Motor (Driver's Seat Slide Control)
P20 Power Seat Motor
(Driver's Seat Lumbar Support Control)

S26 Seat Heater (Driver's Seat)
S28 Seat Heater (Front Passenger's Seat)
S37 Side Airbag Squib LH
S38 Side Airbag Squib RH

## Position of Parts in Seat

## [Double Cab : Separate Seat]



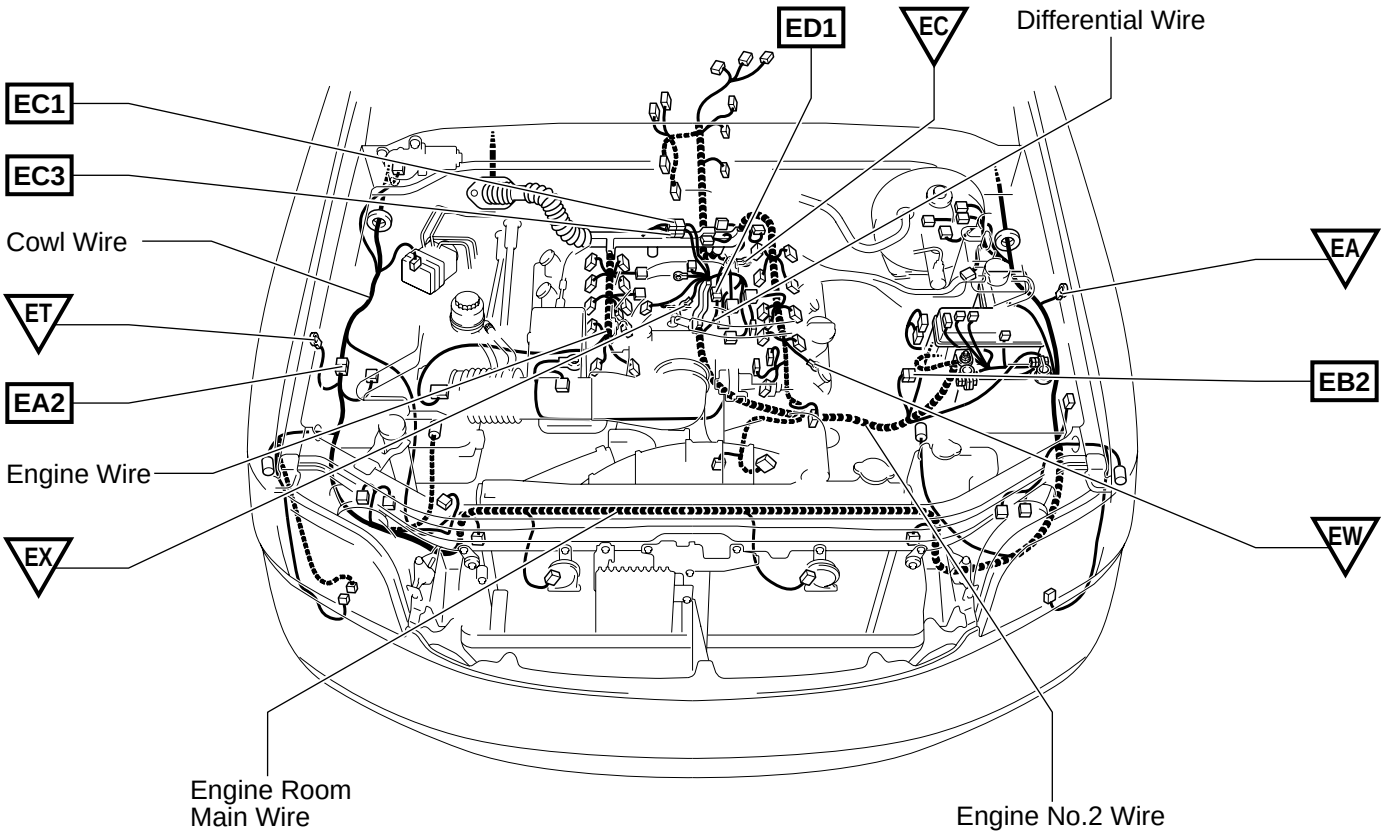

B17 Buckle SW RH

O16 Occupant Classification ECU
O17 Occupant Classification Sensor

S38 Side Airbag Squib RH
S39 Seat Belt Tension Sensor
S40 Seat Position Airbag Sensor (Front Passenger's Side)

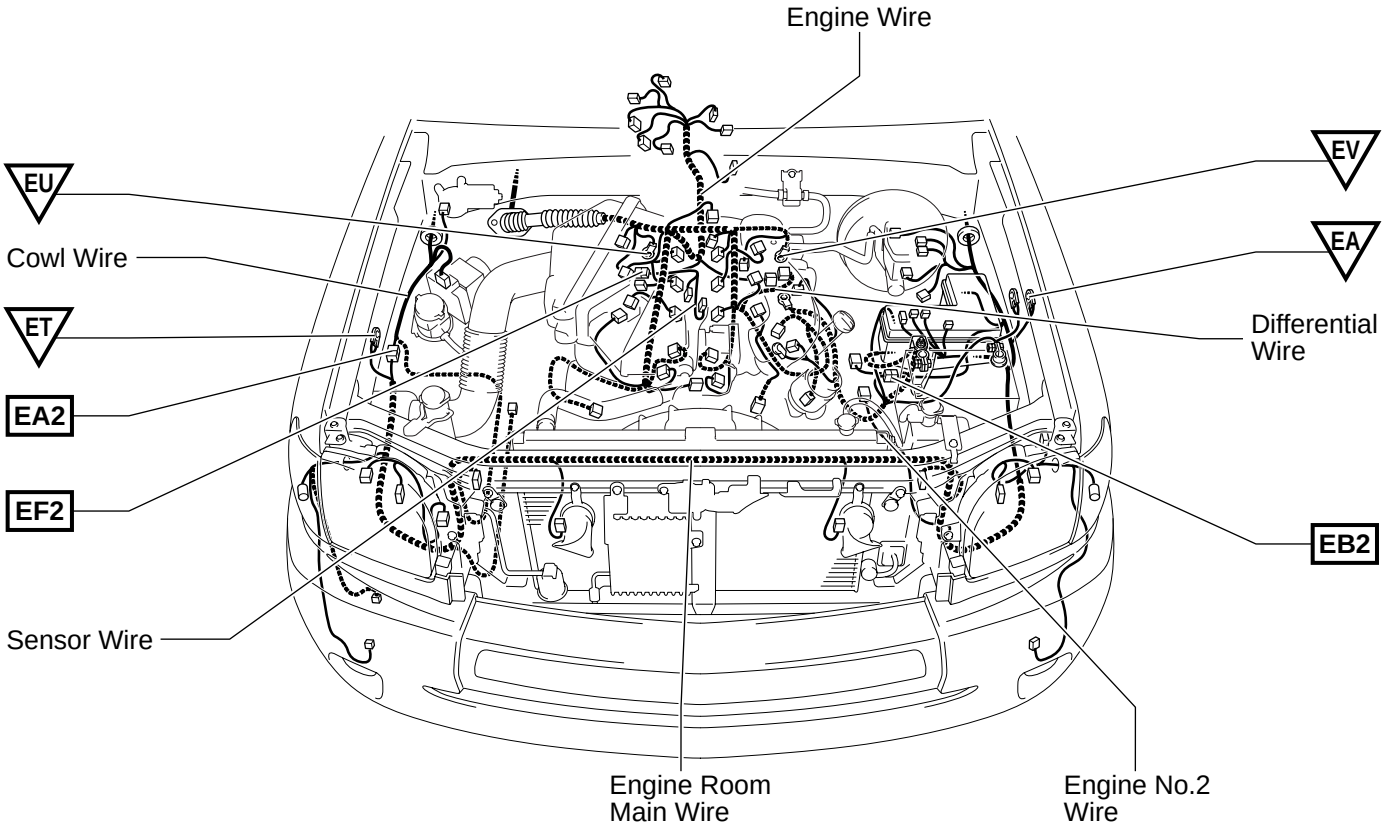
| |
|---|
| ▭ : Location of Connector Joining Wire Harness and Wire Harness |
| ▽ : Location of Ground Points |

**[Access Cab, Standard Cab : 2UZ–FE]**



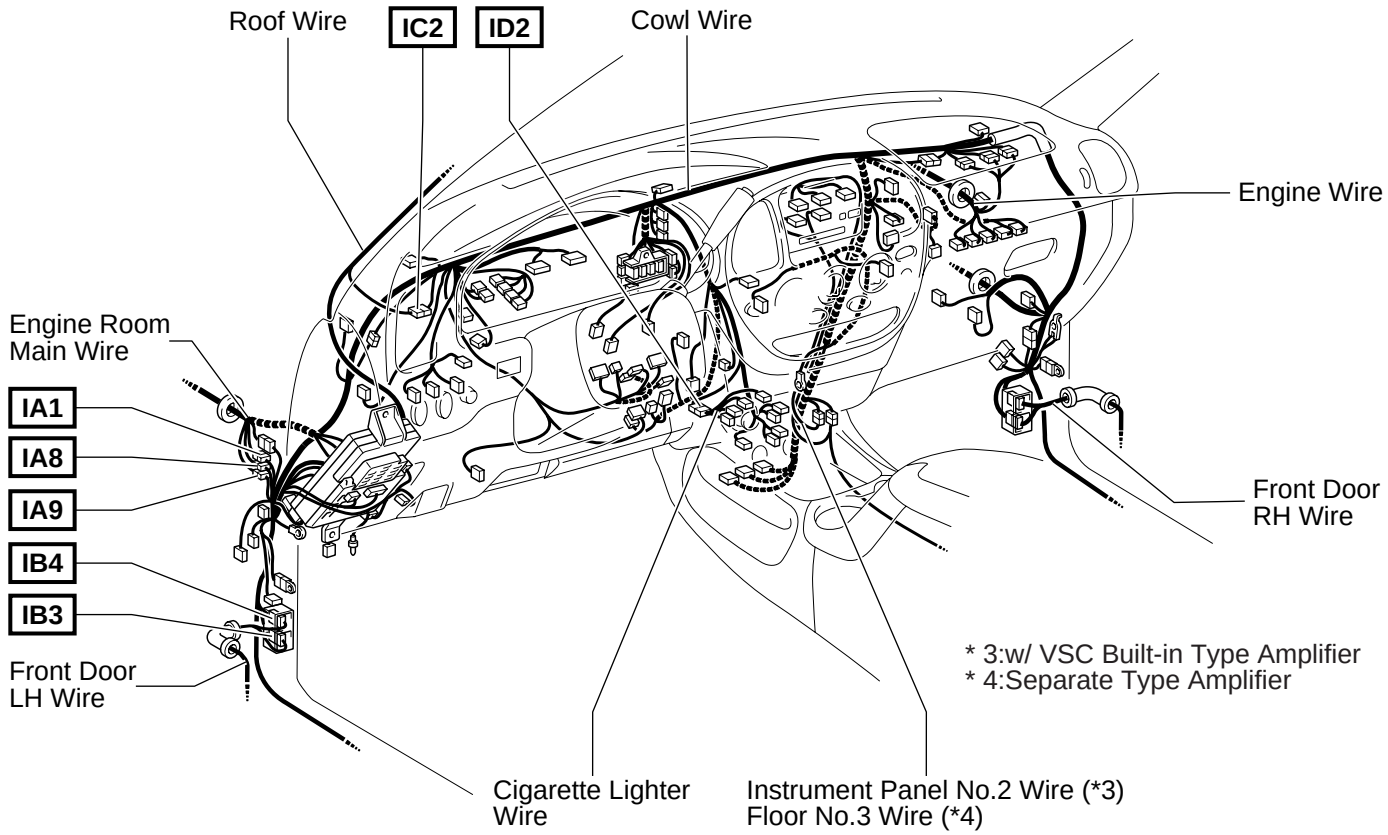
| |
|---|
| ▭ : Location of Connector Joining Wire Harness and Wire Harness |
| ▽ : Location of Ground Points |

**[Access Cab, Standard Cab : 1GR–FE]**

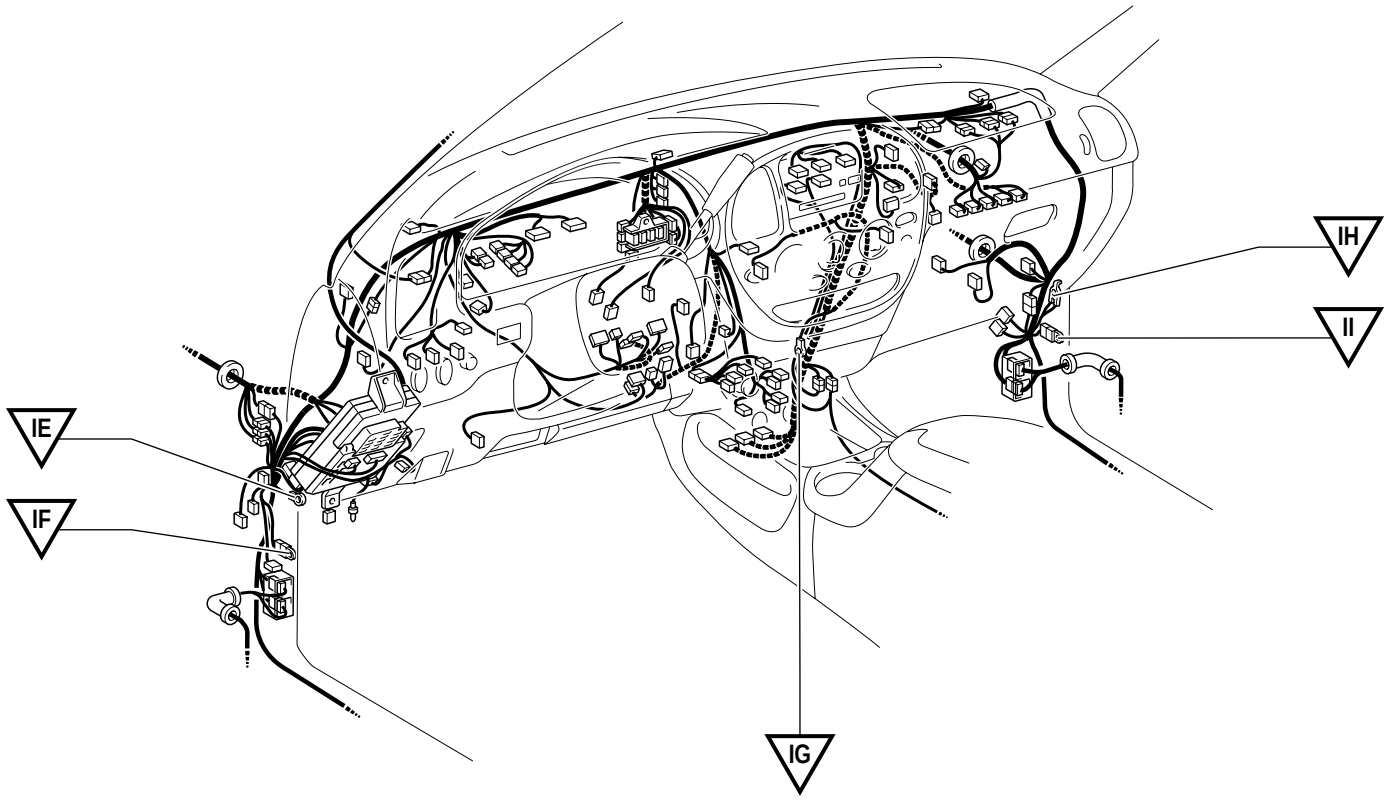


## ▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Access Cab, Standard Cab]

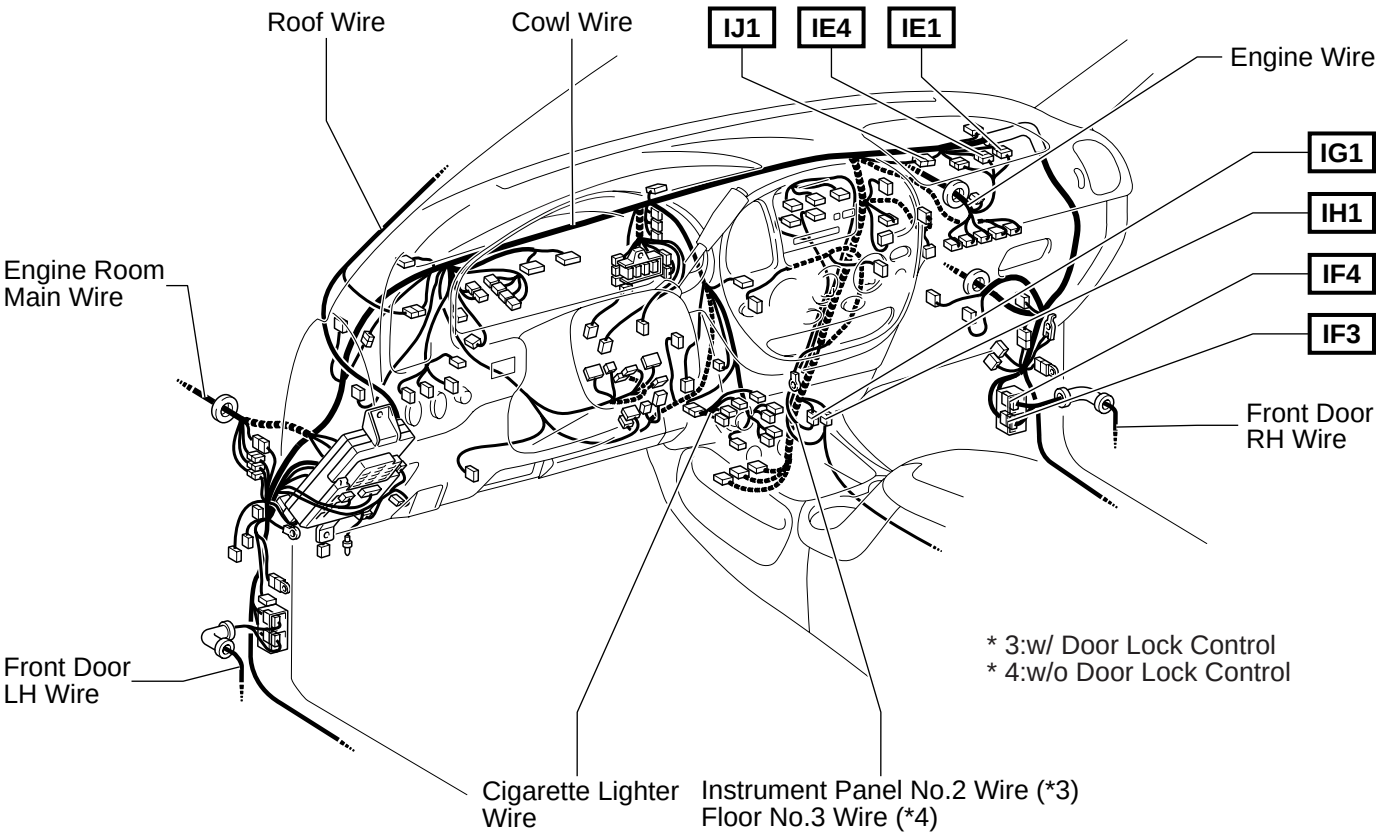



## ▽ : Location of Ground Points



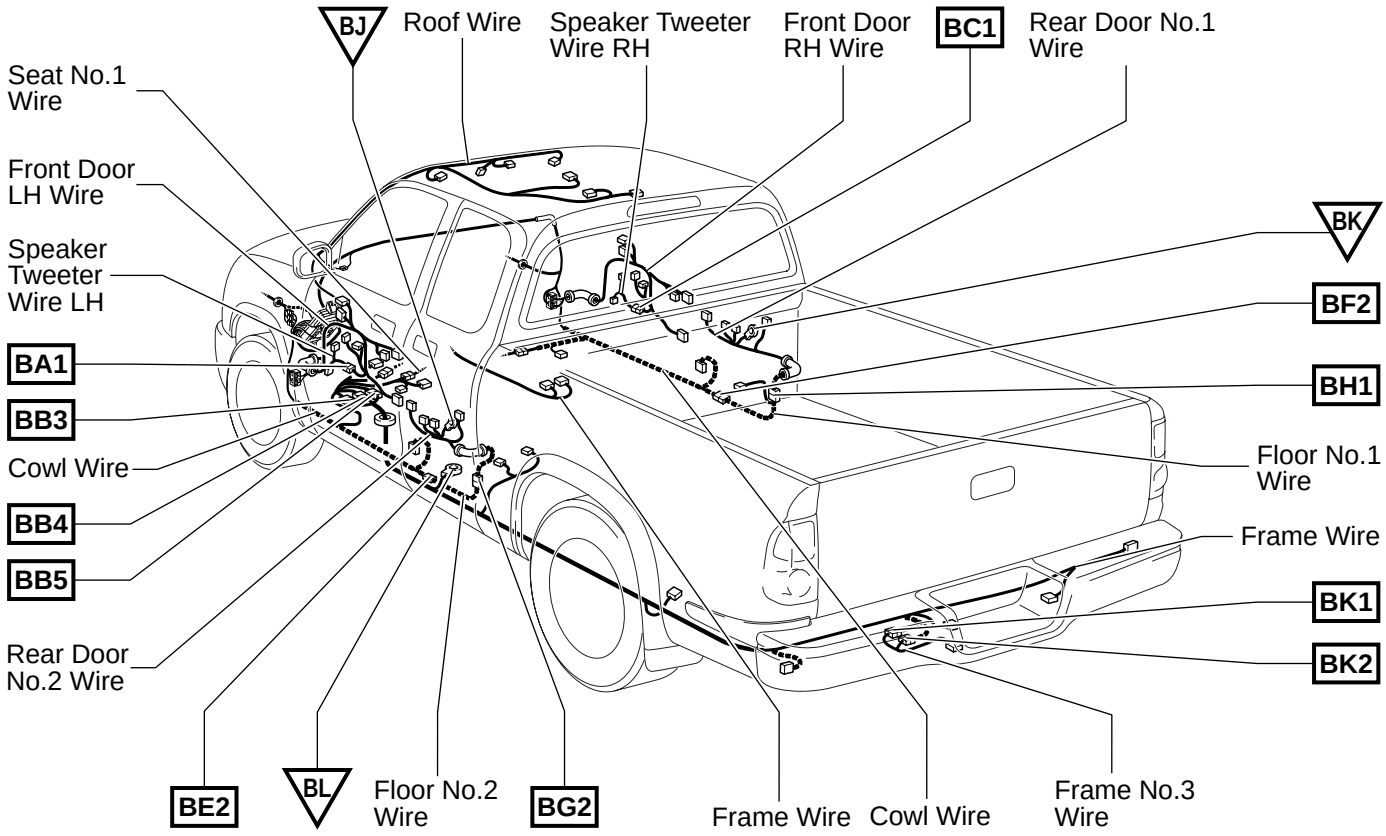
## ▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Access Cab, Standard Cab]



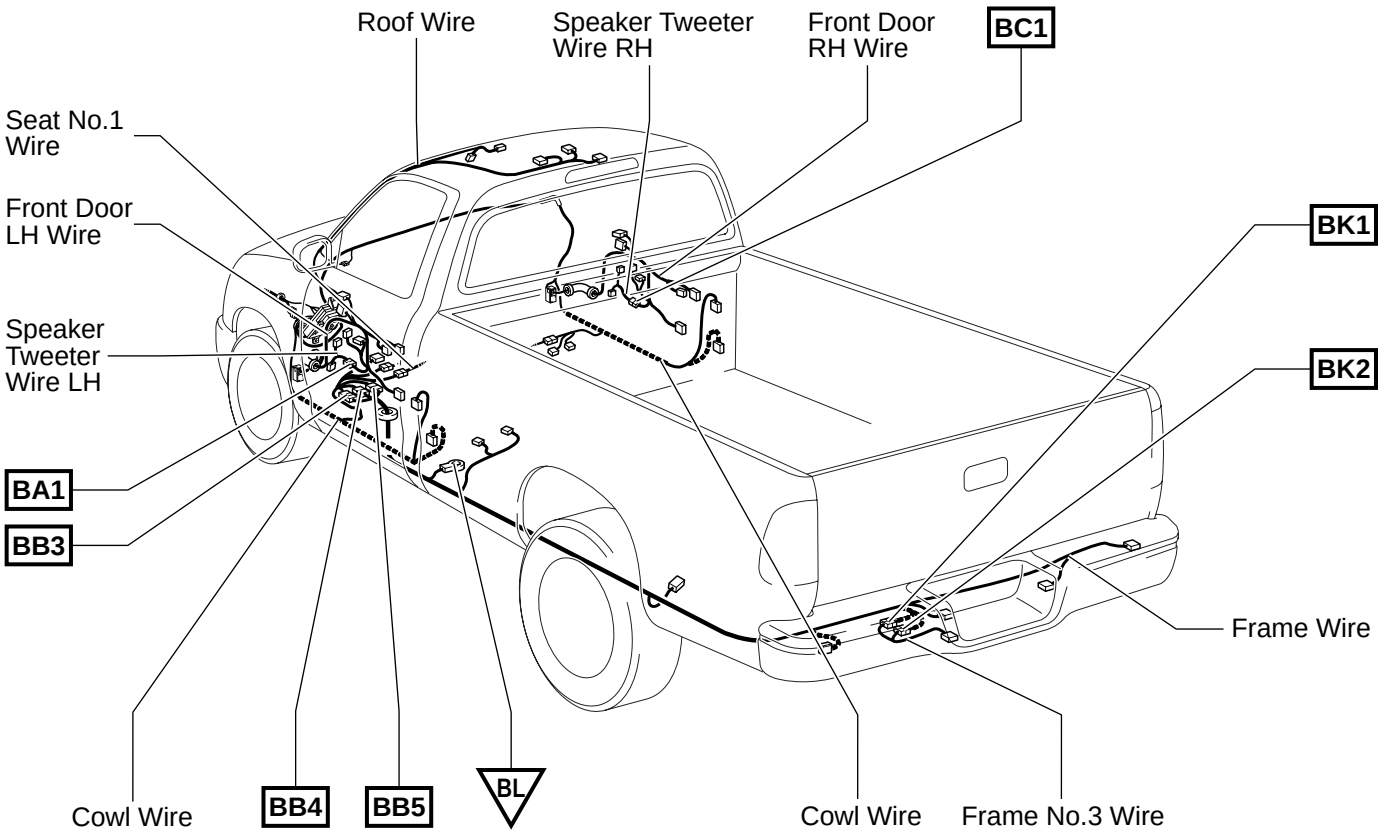
| : Location of Connector Joining Wire Harness and Wire Harness |
| --- |
| ▽ : Location of Ground Points |

## [Access Cab]



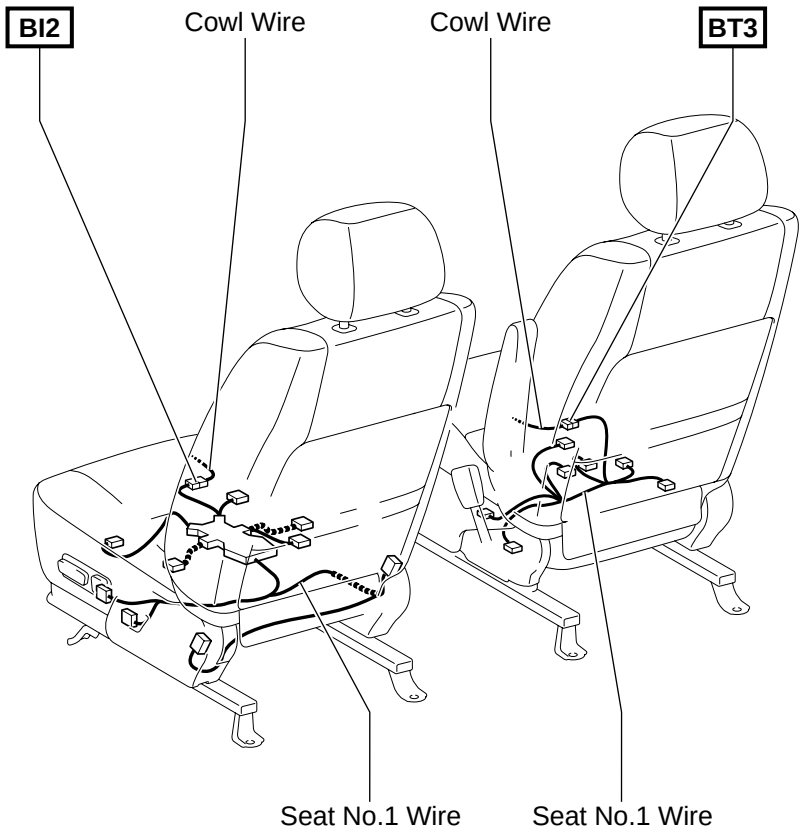
| |
|---|
| ▭ : Location of Connector Joining Wire Harness and Wire Harness |
| ▽ : Location of Ground Points |

**[Standard Cab]**



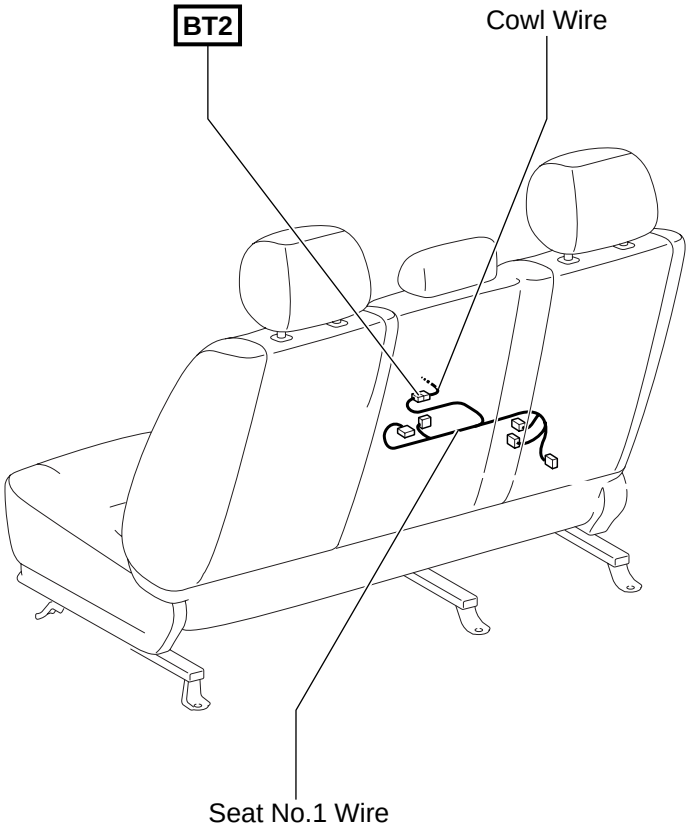
▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Access Cab : Captain Seat]



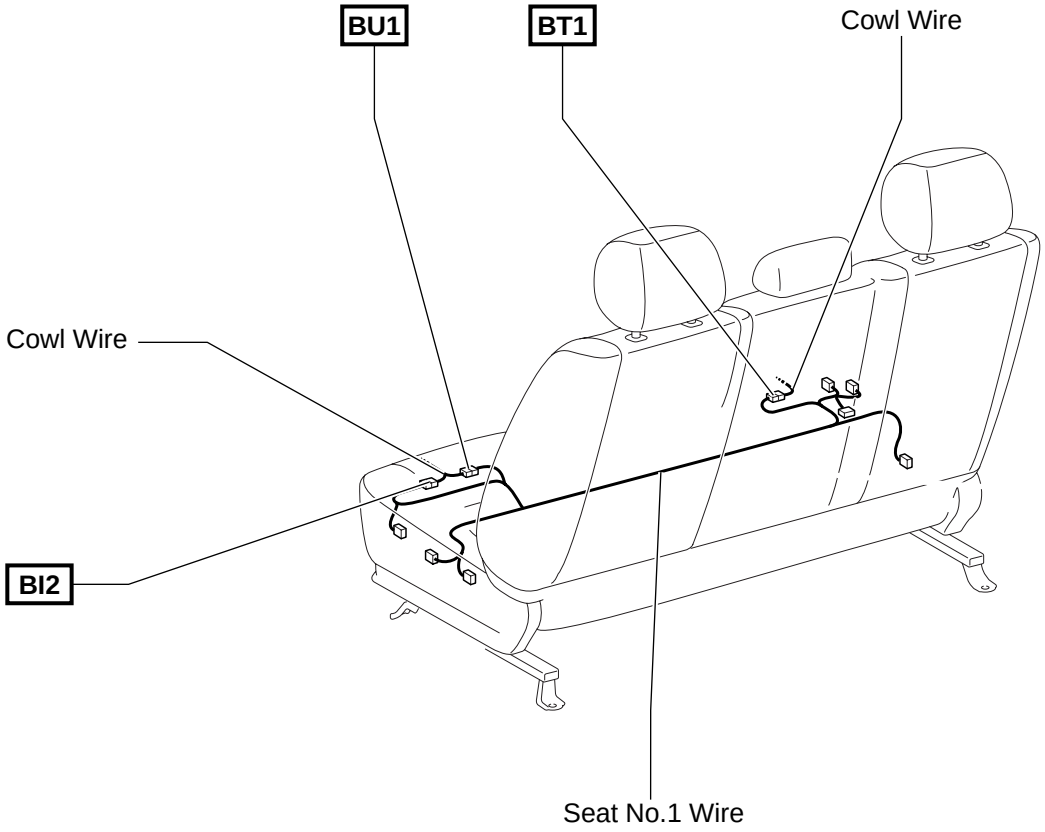
**▭ : Location of Connector Joining Wire Harness and Wire Harness**

**[Access Cab : Separete Seat]**



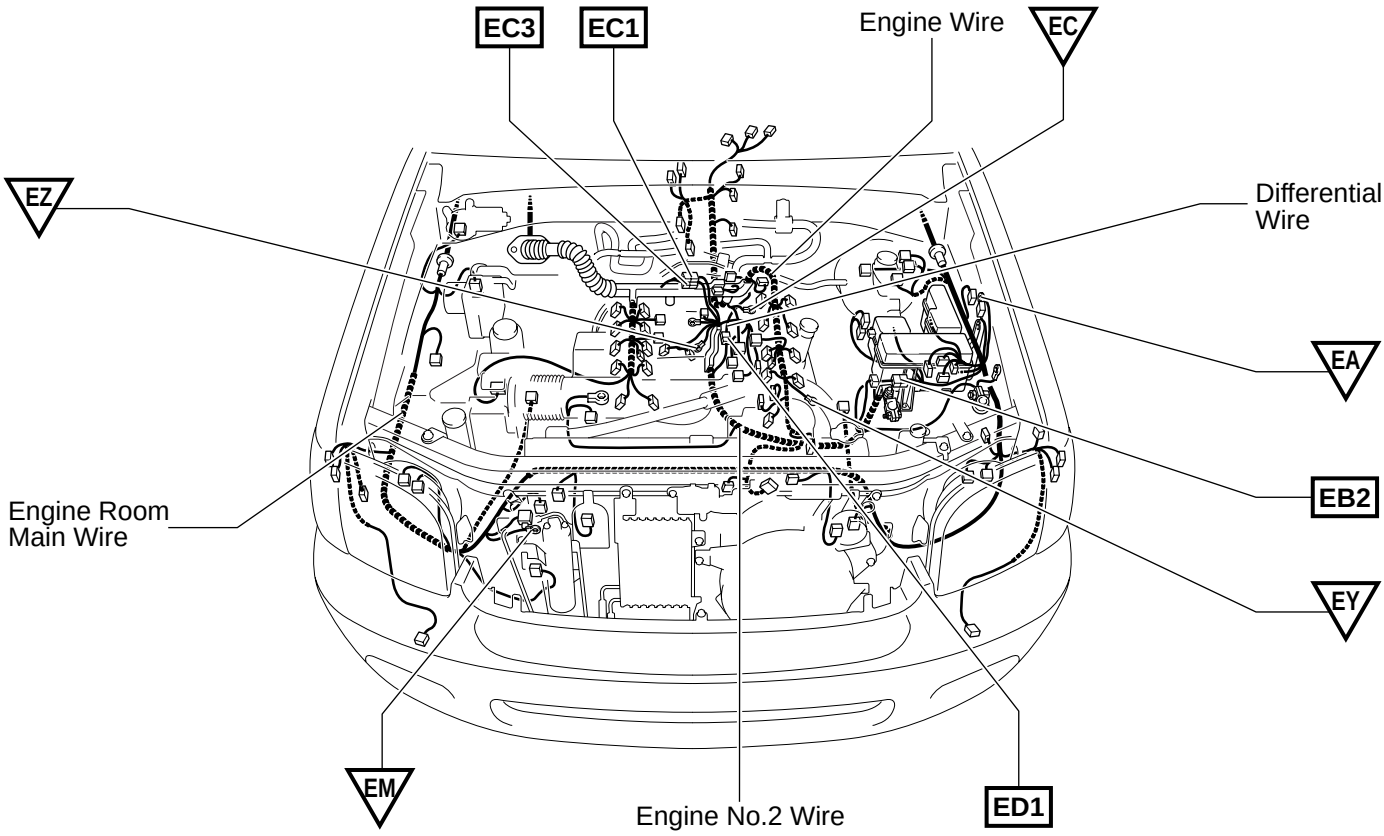
▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Standard Cab : Bench Seat]



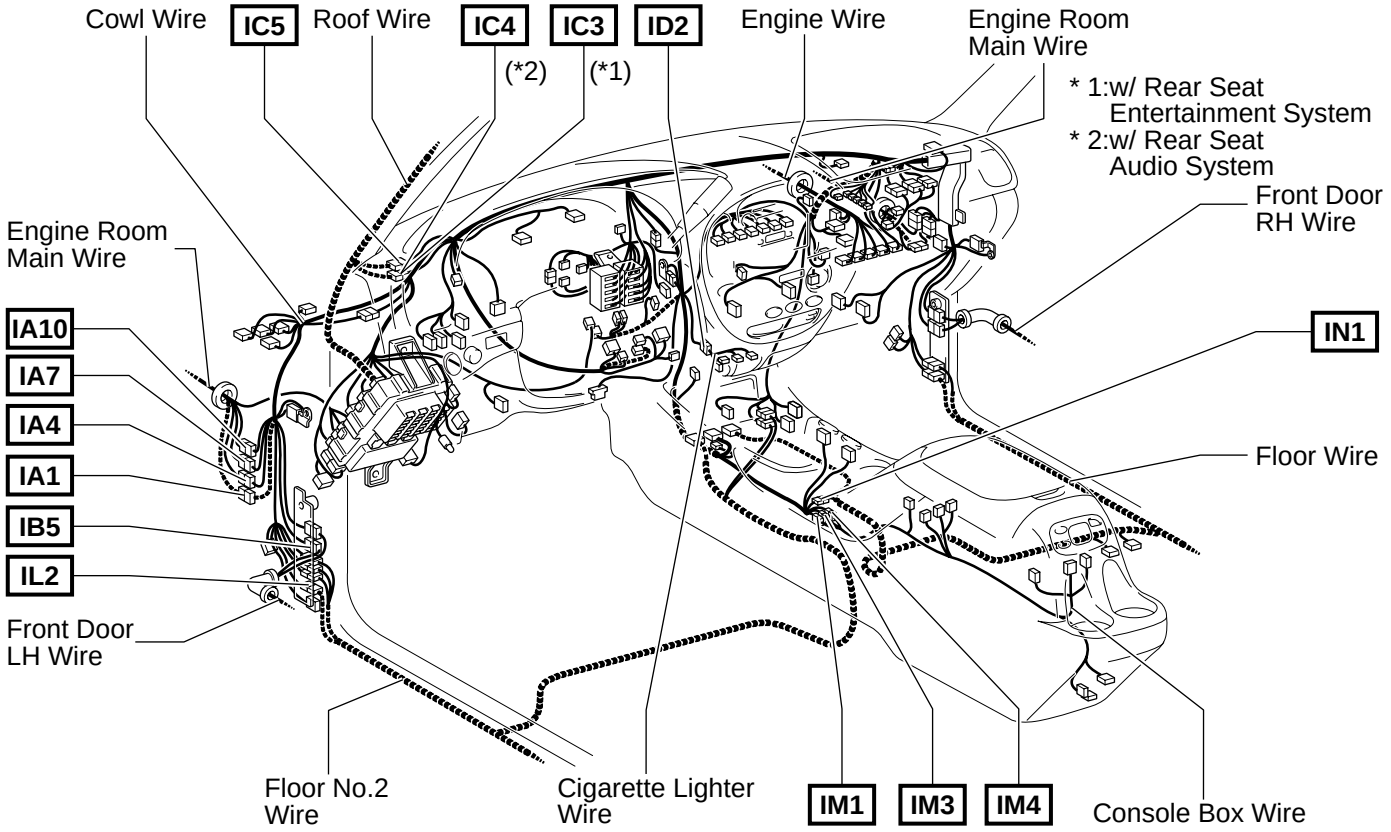
| |
|---|
| ▭ : Location of Connector Joining Wire Harness and Wire Harness |
| ▽ : Location of Ground Points |

**[Double Cab]**

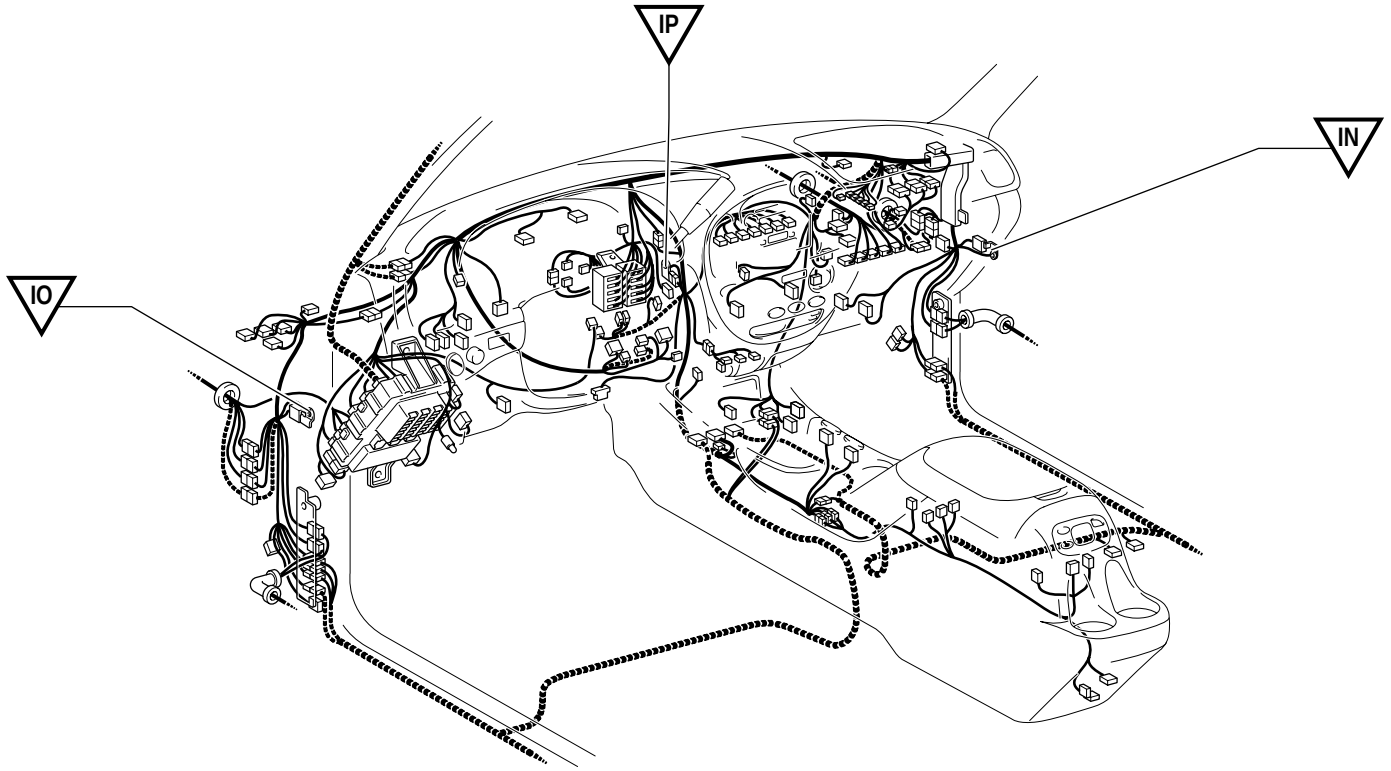


## ▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Double Cab]

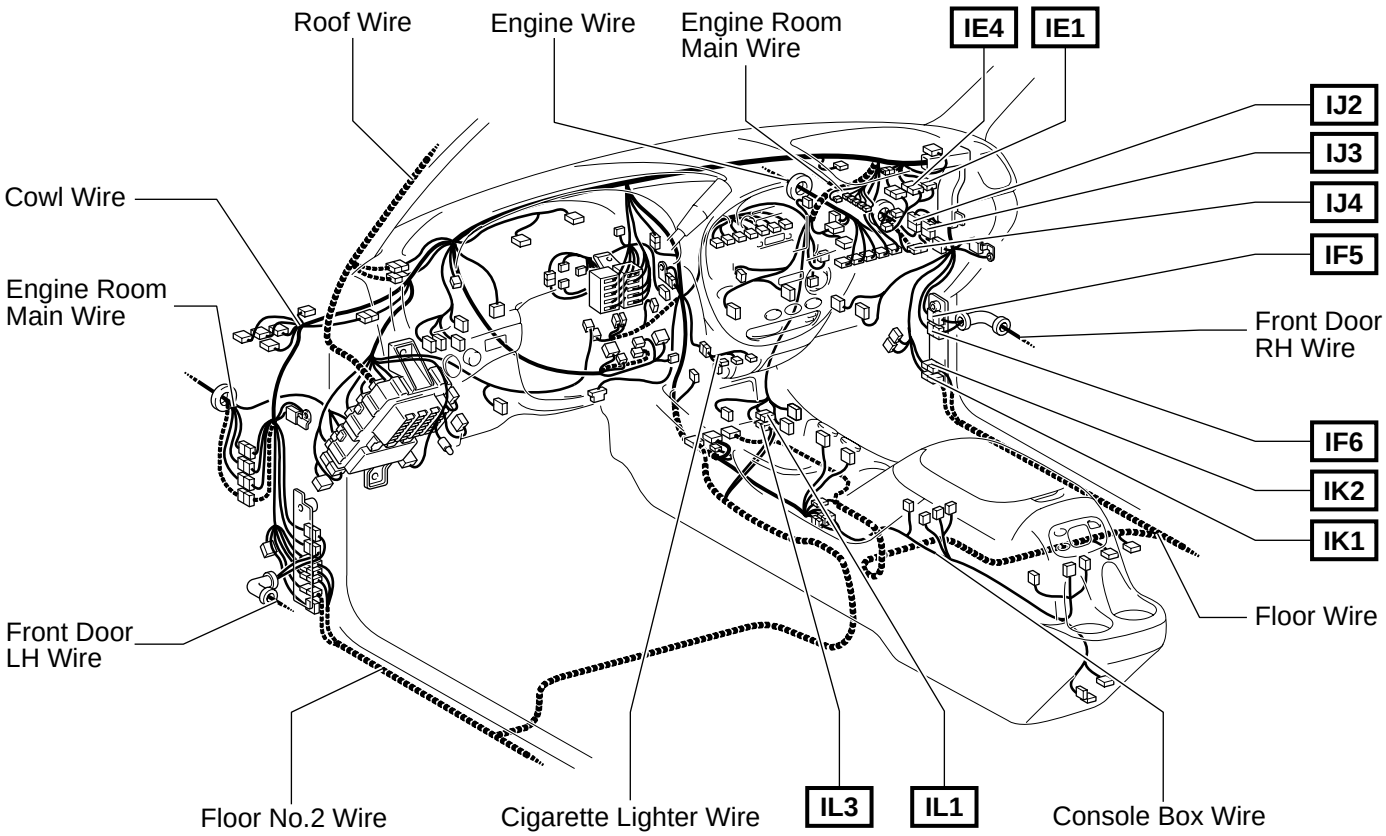



## ▽ : Location of Ground Points



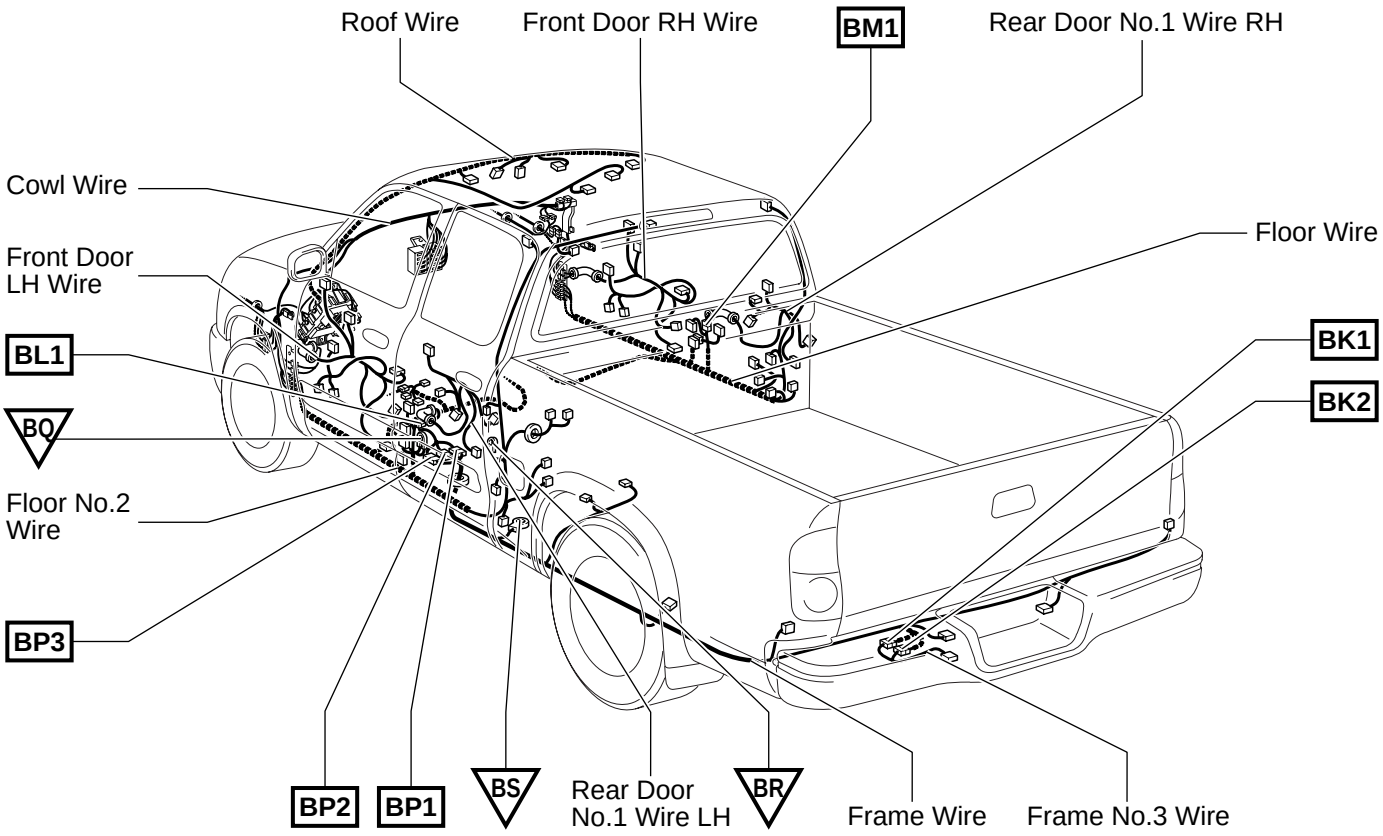
**▭ : Location of Connector Joining Wire Harness and Wire Harness**

**[Double Cab]**



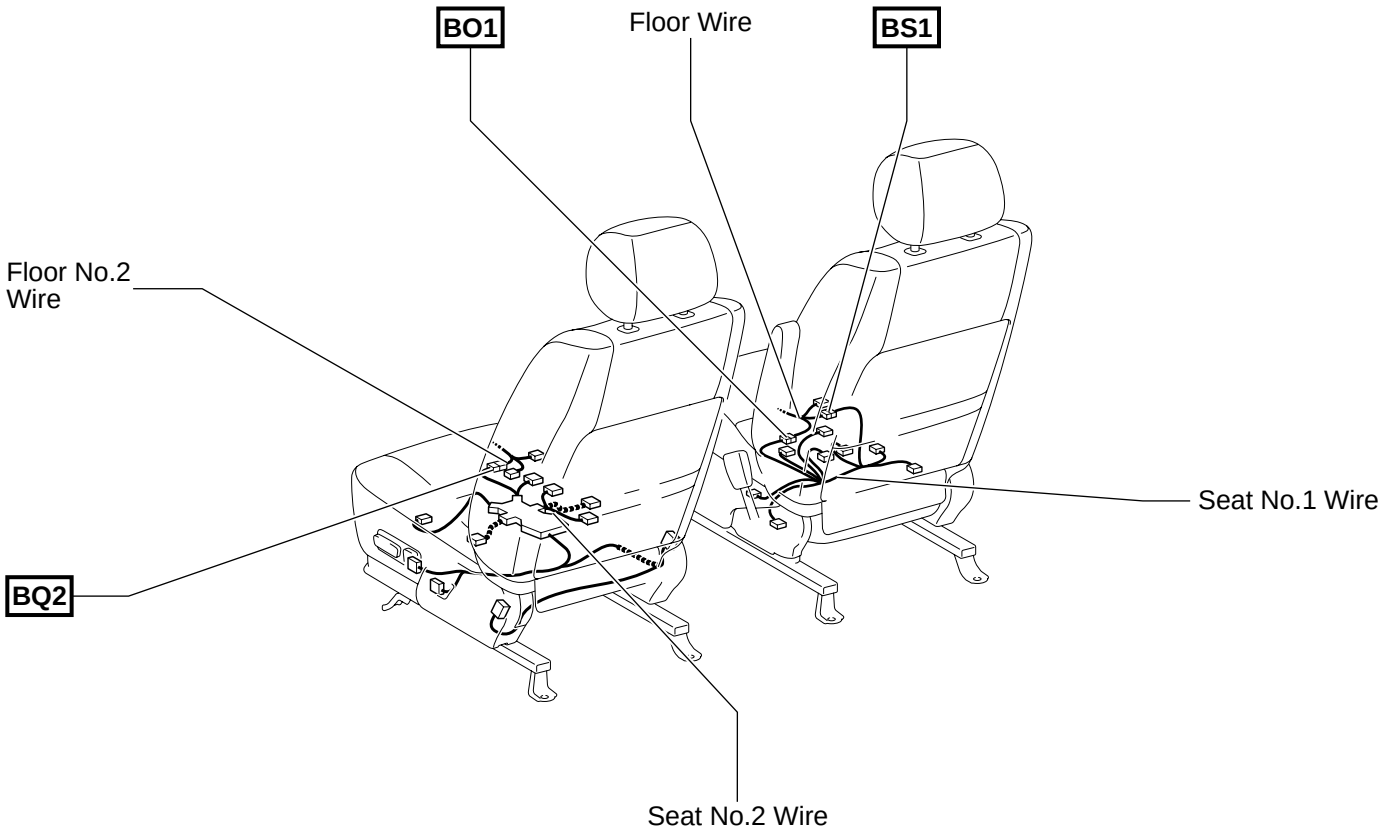
| |
|---|
| ▭ : Location of Connector Joining Wire Harness and Wire Harness |
| ▽ : Location of Ground Points |

## [Double Cab]



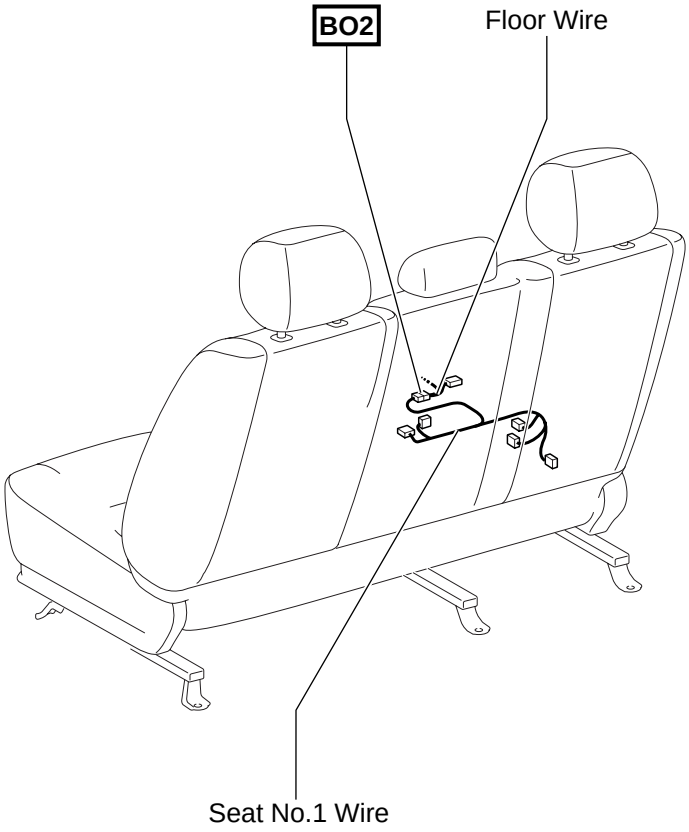
▭ : Location of Connector Joining Wire Harness and Wire Harness

## [Double Cab : Captain Seat]

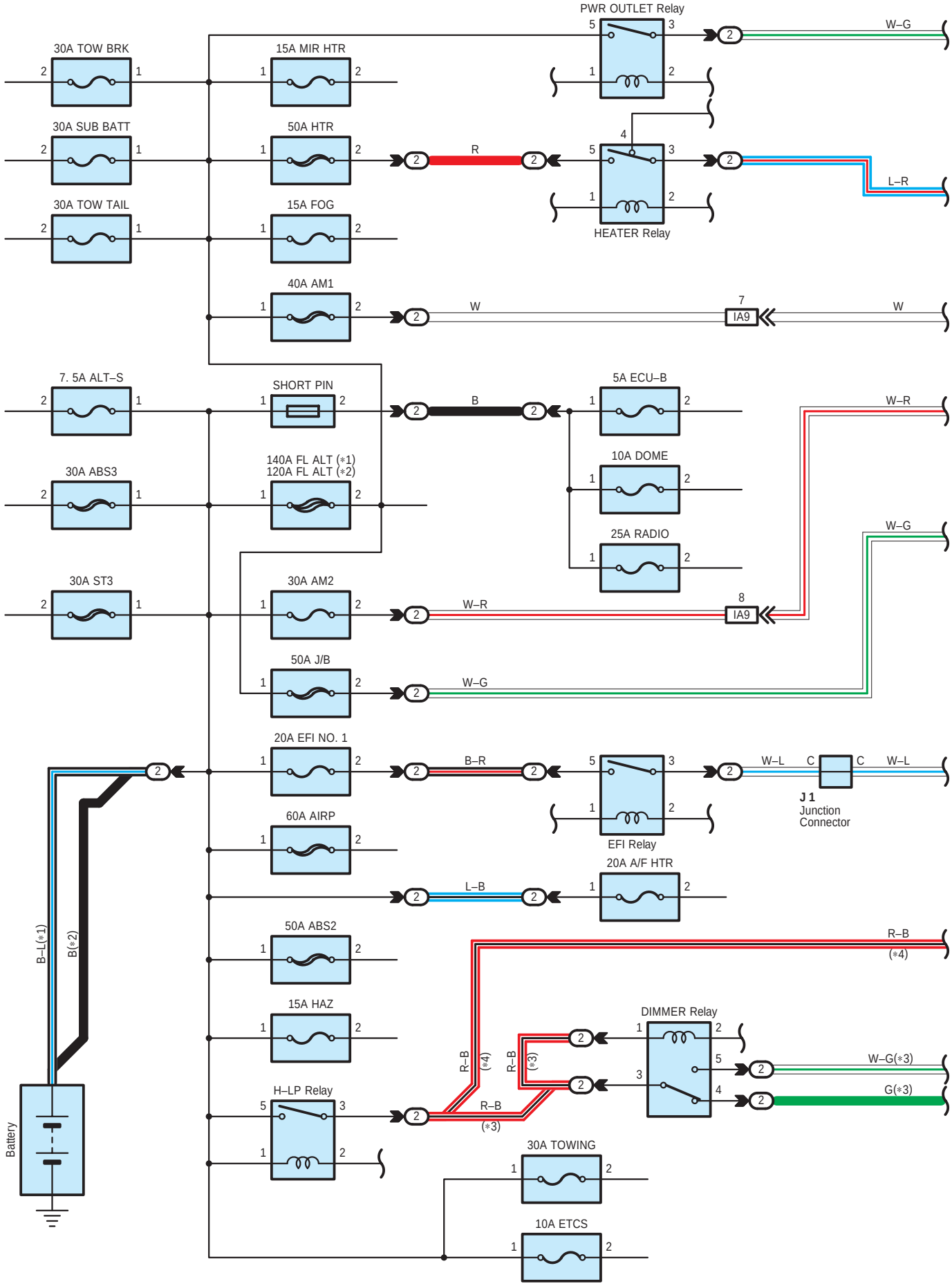


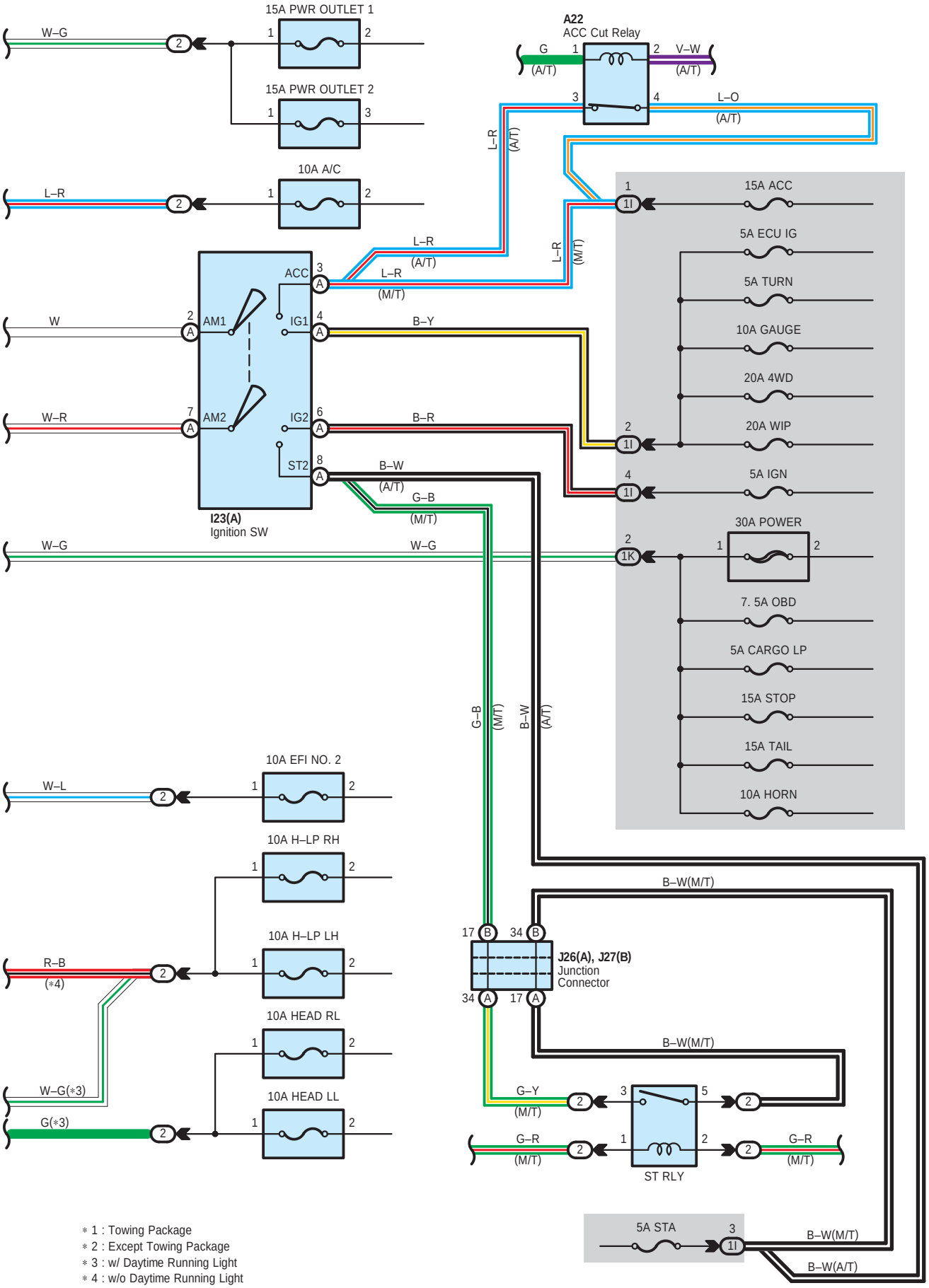
**▭ : Location of Connector Joining Wire Harness and Wire Harness**

**[Double Cab : Separate Seat]**



# Power Source (Access/Standard Cab)






* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Daytime Running Light
* 4 : w/o Daytime Running Light

# Power Source (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| A22 | | 60 | J1 | 57 (2UZ–FE) | J26 | A | 62 |
| I23 | A | 61 | | 59 (1GR–FE) | J27 | B | 62 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

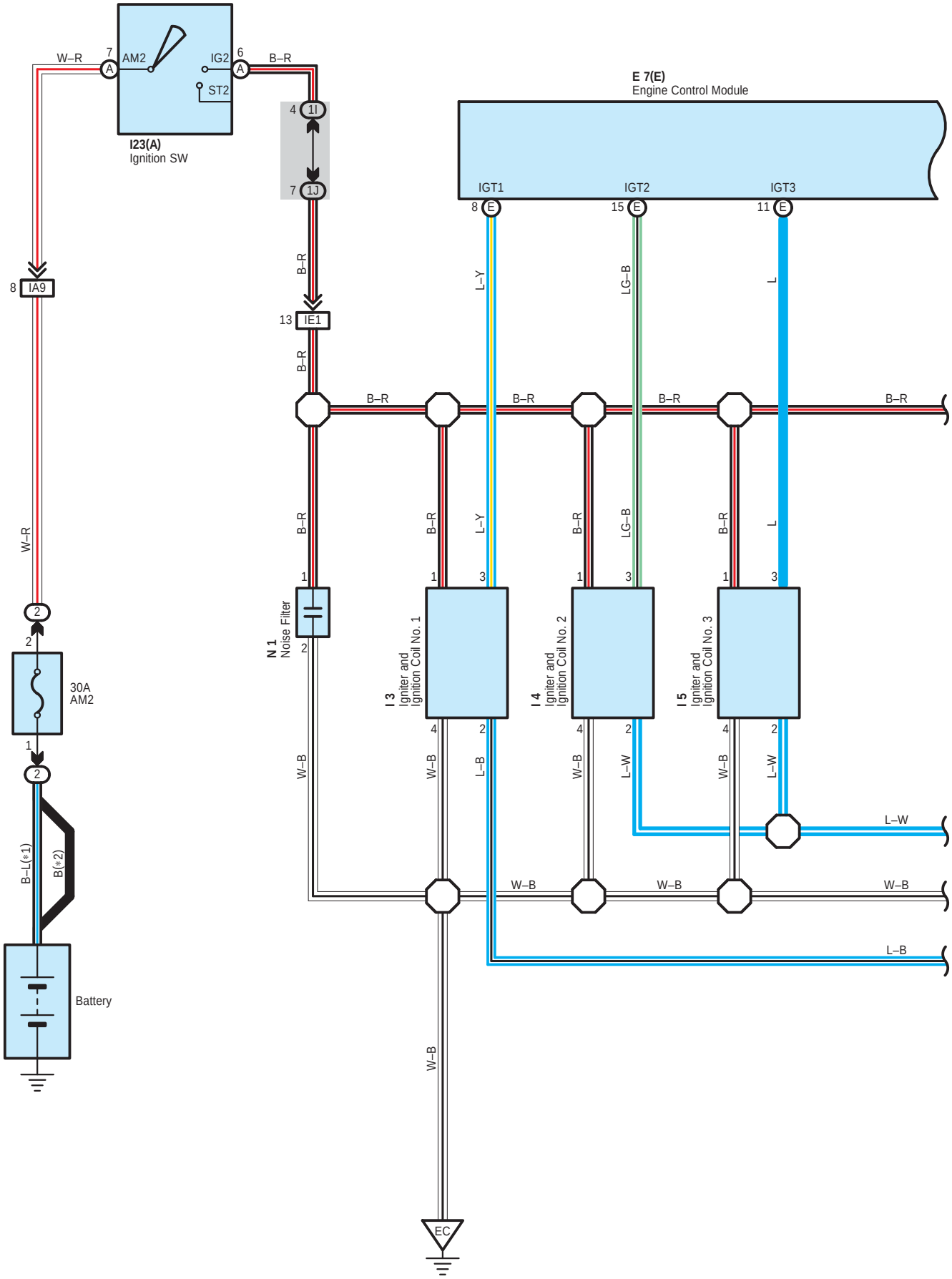
**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1I | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

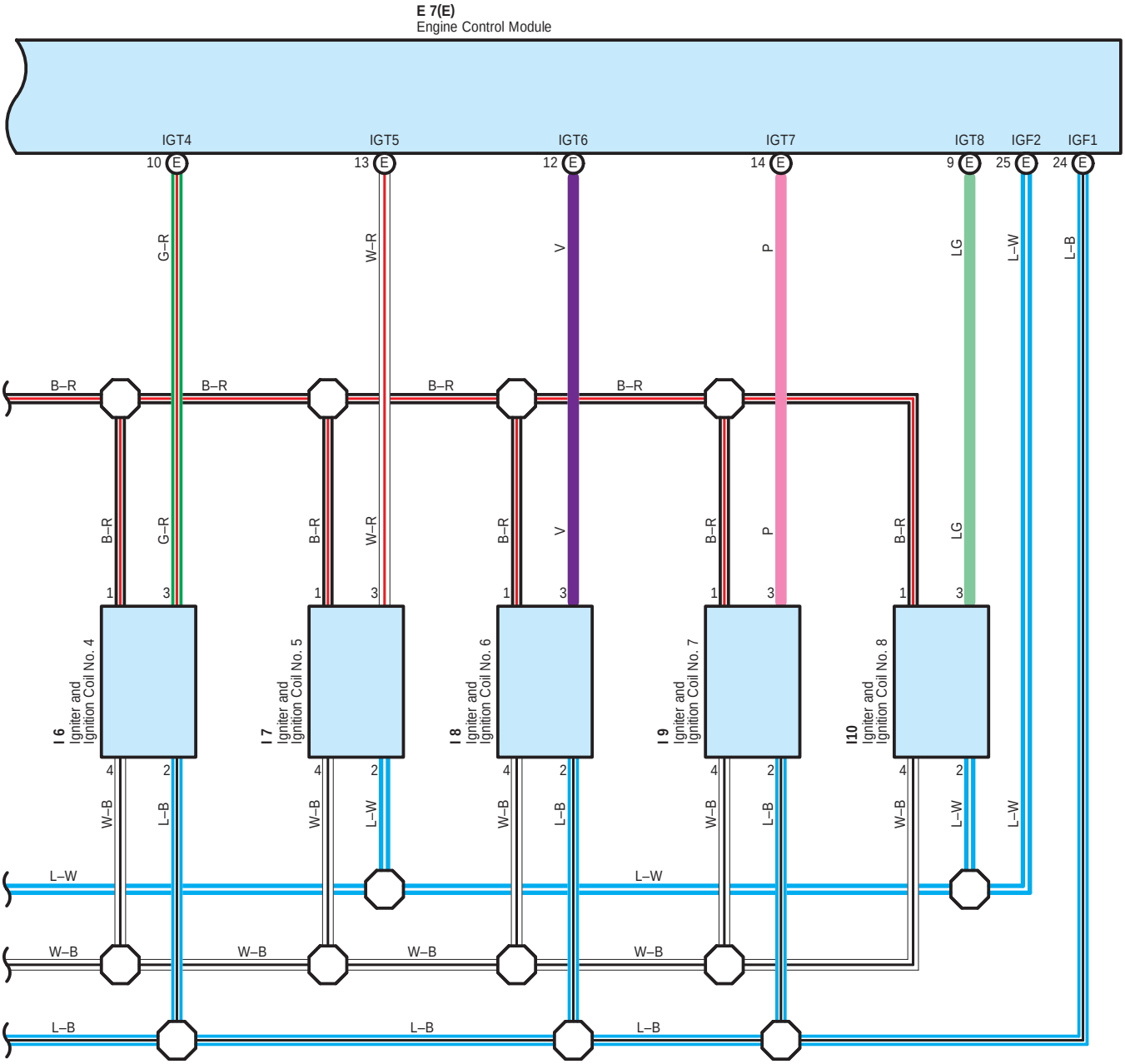
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


I23(A)
Ignition SW
AM2
IG2
ST2
W–R
B–R
E 7(E)
Engine Control Module
IGT1
IGT2
IGT3
1I
1J
IA9
IE1
L–Y
LG–B
L
N 1
Noise Filter
I 3
Igniter and Ignition Coil No. 1
I 4
Igniter and Ignition Coil No. 2
I 5
Igniter and Ignition Coil No. 3
30A
AM2
B–L(*1)
B(*2)
Battery
W–B
L–W
L–B
EC

＊1 : Towing Package
＊2 : Except Towing Package



# Ignition for 2UZ–FE (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| E7 | E | 61 | I6 | 57 (2UZ–FE) | I10 | | 57 (2UZ–FE) |
| I3 | | 57 (2UZ–FE) | I7 | 57 (2UZ–FE) | I23 | A | 61 |
| I4 | | 57 (2UZ–FE) | I8 | 57 (2UZ–FE) | N1 | | 57 (2UZ–FE) |
| I5 | | 57 (2UZ–FE) | I9 | 57 (2UZ–FE) | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1I | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

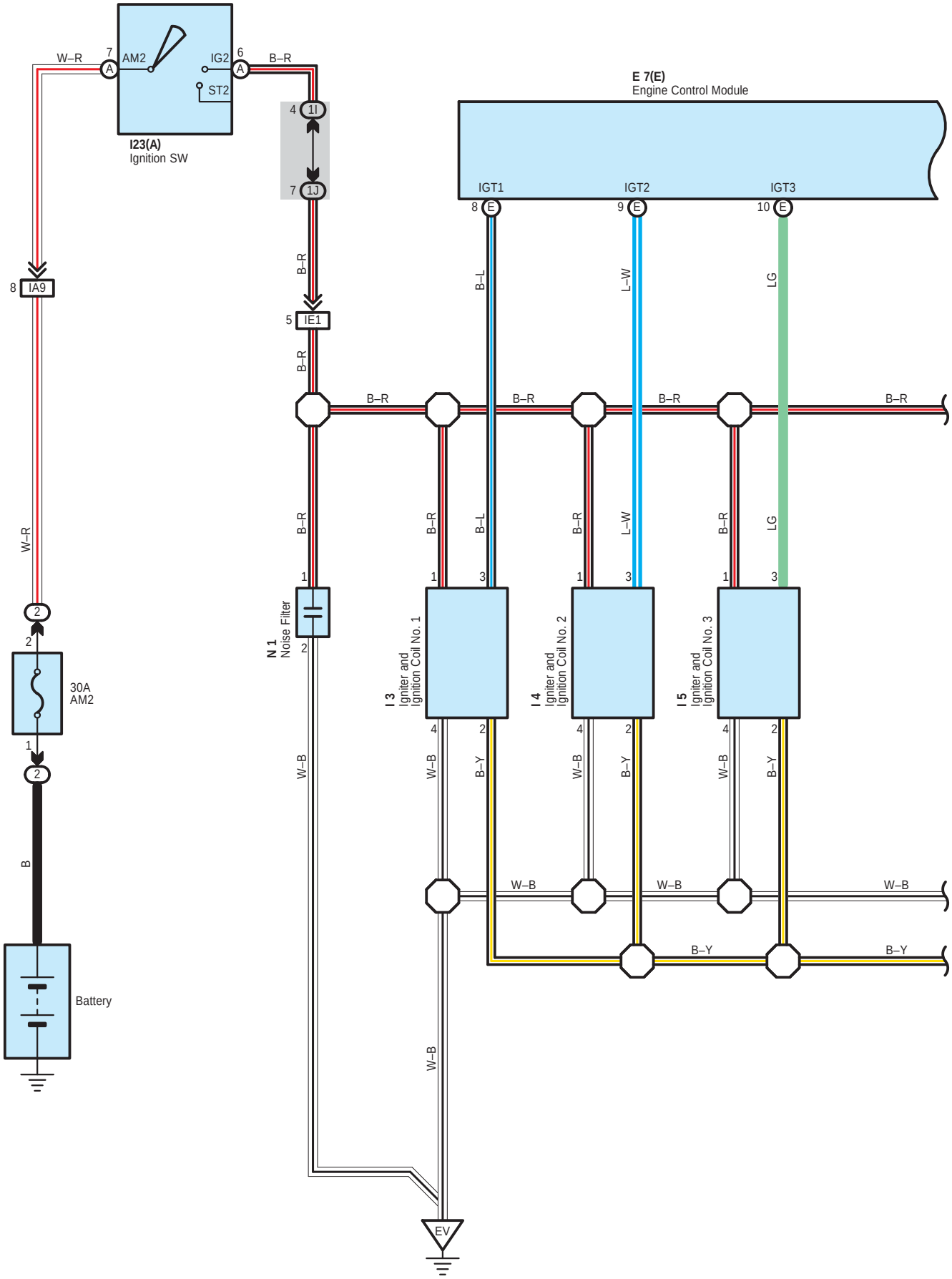
**: Connector Joining Wire Harness and Wire Harness**

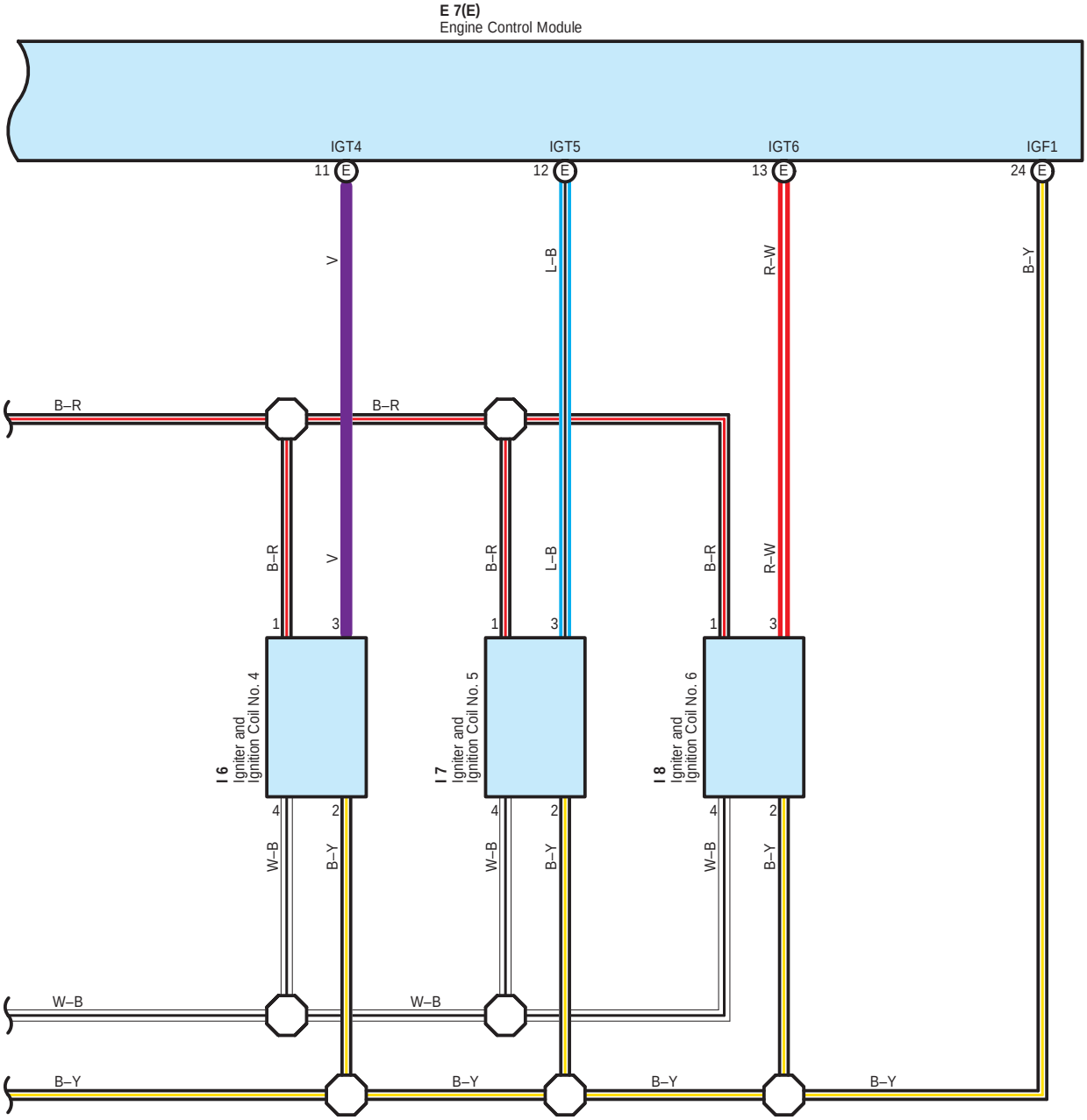
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


W–R
7
AM2
IG2
6
B–R
A
A
ST2
I23(A)
Ignition SW
4
1I
7
1J
E 7(E)
Engine Control Module
IGT1
IGT2
IGT3
8
E
9
E
10
E
B–L
L–W
LG
8
IA9
5
IE1
B–R
B–R
B–R
B–R
B–R
W–R
2
2
30A
AM2
1
2
B
Battery
N 1
Noise Filter
1
2
I 3
Igniter and
Ignition Coil No. 1
I 4
Igniter and
Ignition Coil No. 2
I 5
Igniter and
Ignition Coil No. 3
1
3
4
2
W–B
B–Y
W–B
W–B
W–B
B–Y
B–Y
W–B
EV


E 7(E)
Engine Control Module
IGT4
IGT5
IGT6
IGF1
11
12
13
24
E
V
L–B
R–W
B–Y
B–R
B–R
B–R
B–R
V
L–B
R–W
1
3
1
3
1
3
I 6
Igniter and Ignition Coil No. 4
I 7
Igniter and Ignition Coil No. 5
I 8
Igniter and Ignition Coil No. 6
4
2
4
2
4
2
W–B
B–Y
W–B
B–Y
W–B
B–Y
W–B
W–B
B–Y
B–Y
B–Y
B–Y

# Ignition for 1GR–FE (Access/Standard Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| E7 E | 61 | I5 | 59 (1GR–FE) | I8 | 59 (1GR–FE) |
| I3 | 59 (1GR–FE) | I6 | 59 (1GR–FE) | I23 A | 61 |
| I4 | 59 (1GR–FE) | I7 | 59 (1GR–FE) | N1 | 59 (1GR–FE) |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1I | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

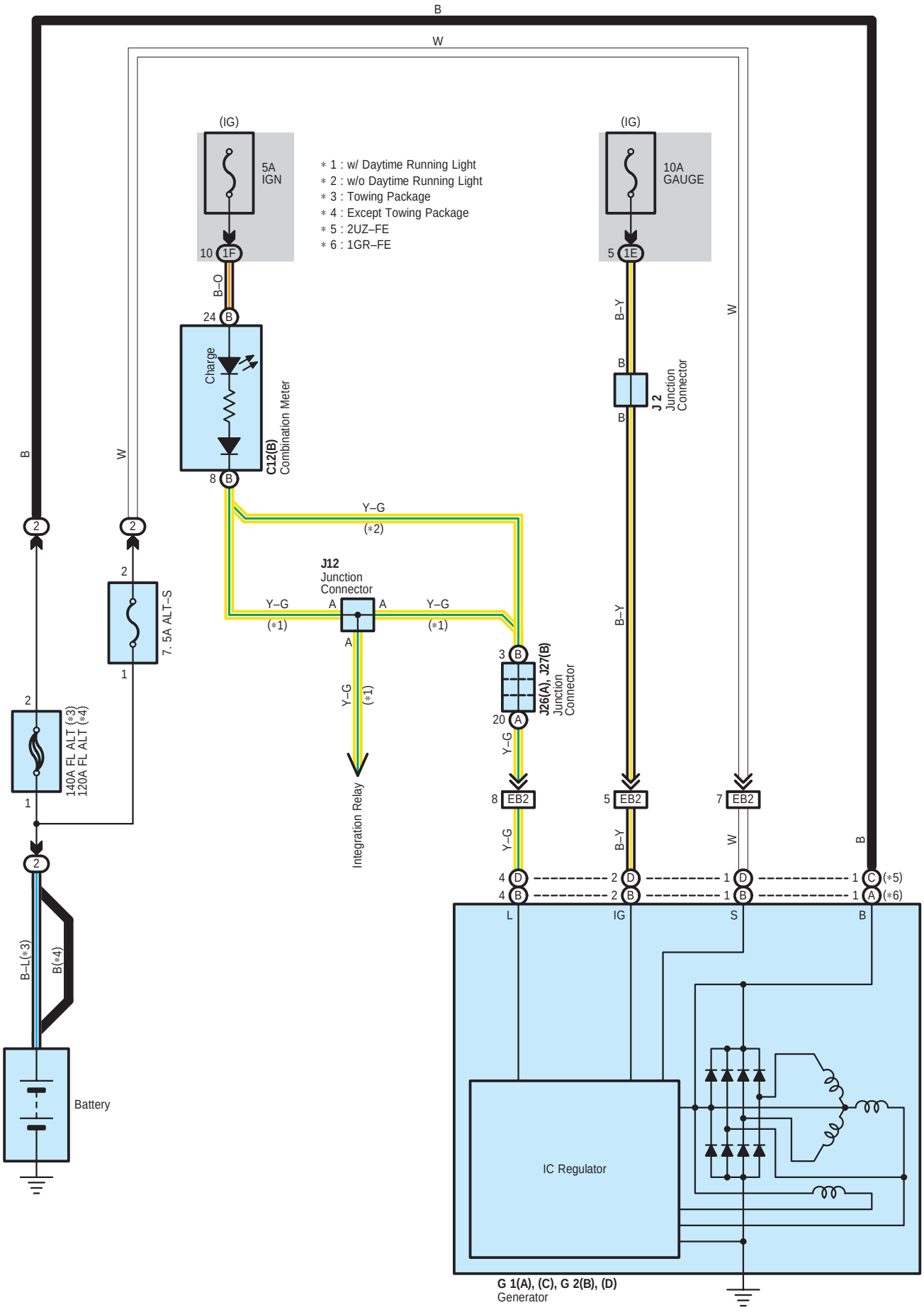
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


B
W
(IG)
5A
IGN
10
1F
B–O
24
B
Charge
C12(B)
Combination Meter
8
B
∗ 1 : w/ Daytime Running Light
∗ 2 : w/o Daytime Running Light
∗ 3 : Towing Package
∗ 4 : Except Towing Package
∗ 5 : 2UZ–FE
∗ 6 : 1GR–FE
(IG)
10A
GAUGE
5
1E
B–Y
B
J 2
Junction
Connector
B
W
Y–G
(∗2)
J12
Junction
Connector
Y–G
(∗1)
A
A
Y–G
(∗1)
A
Y–G
(∗1)
Integration Relay
3
B
20
A
J26(A), J27(B)
Junction
Connector
Y–G
8
EB2
5
EB2
7
EB2
B–Y
W
B
4
D
4
B
2
D
2
B
1
D
1
B
1
C
(∗5)
1
A
(∗6)
L
IG
S
B
2
2
2
1
7. 5A ALT–S
2
1
140A FL ALT (∗3)
120A FL ALT (∗4)
1
2
B–L(∗3)
B(∗4)
Battery
IC Regulator
G 1(A), (C), G 2(B), (D)
Generator

### : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C12 | B | 60 | G2 | D | 56 (2UZ–FE) | J26 | A | 62 |
| G1 | A | 58 (1GR–FE) | J2 | | 57 (2UZ–FE) | J27 | B | 62 |
| | C | 56 (2UZ–FE) | | | 59 (1GR–FE) | | | |
| G2 | B | 58 (1GR–FE) | J12 | | 62 | | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

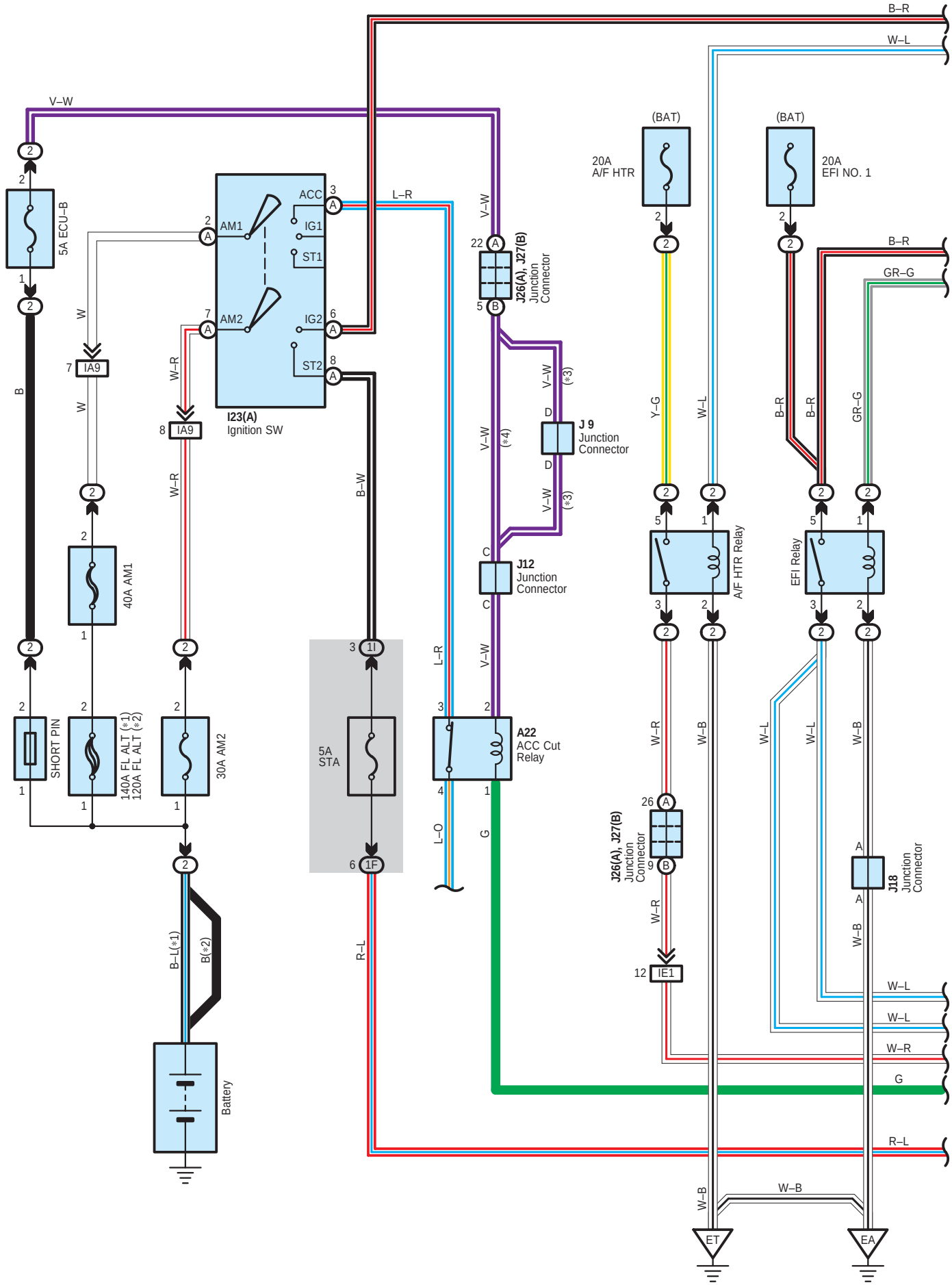
### : Junction Block and Wire Harness Connector

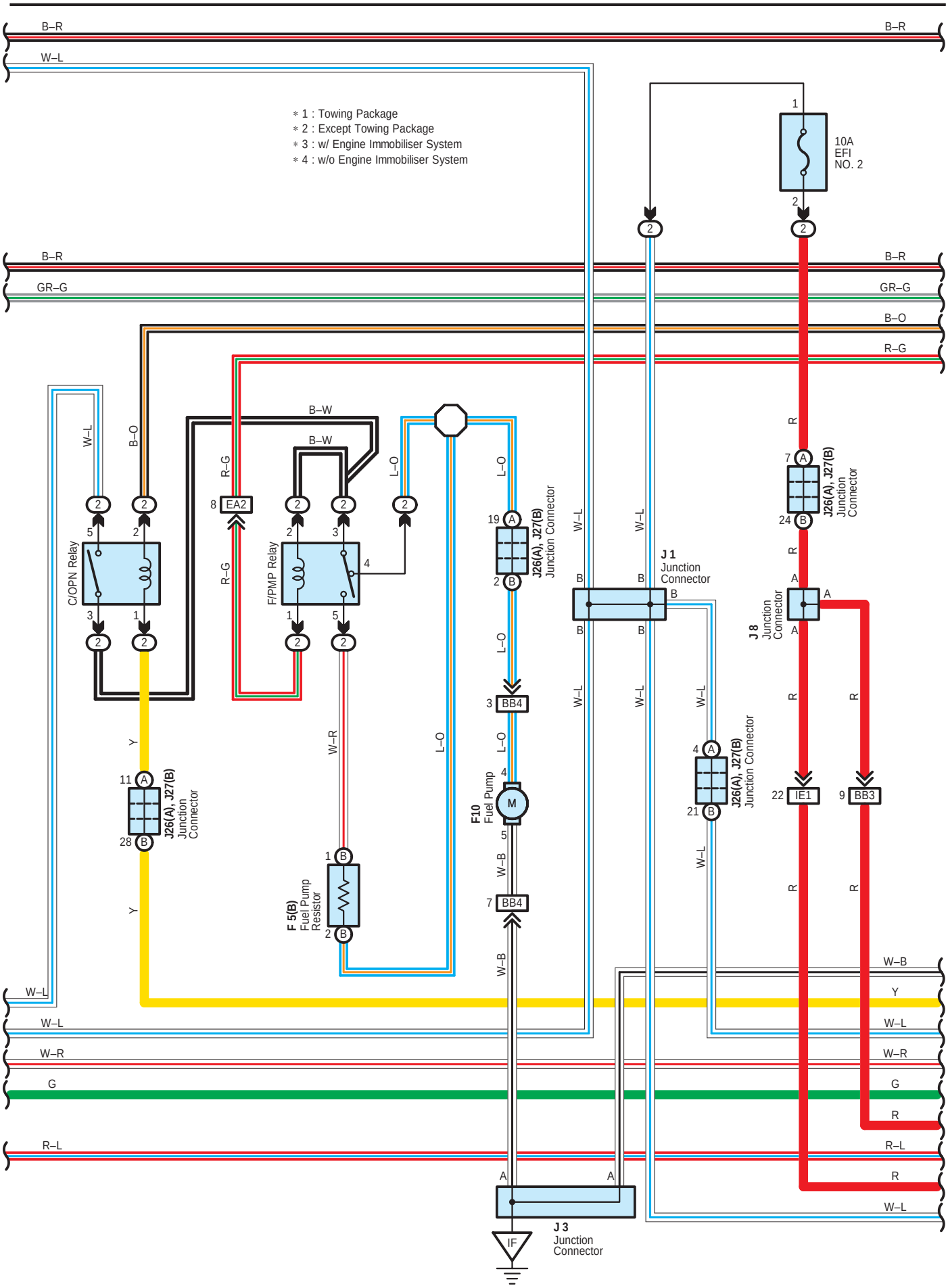
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

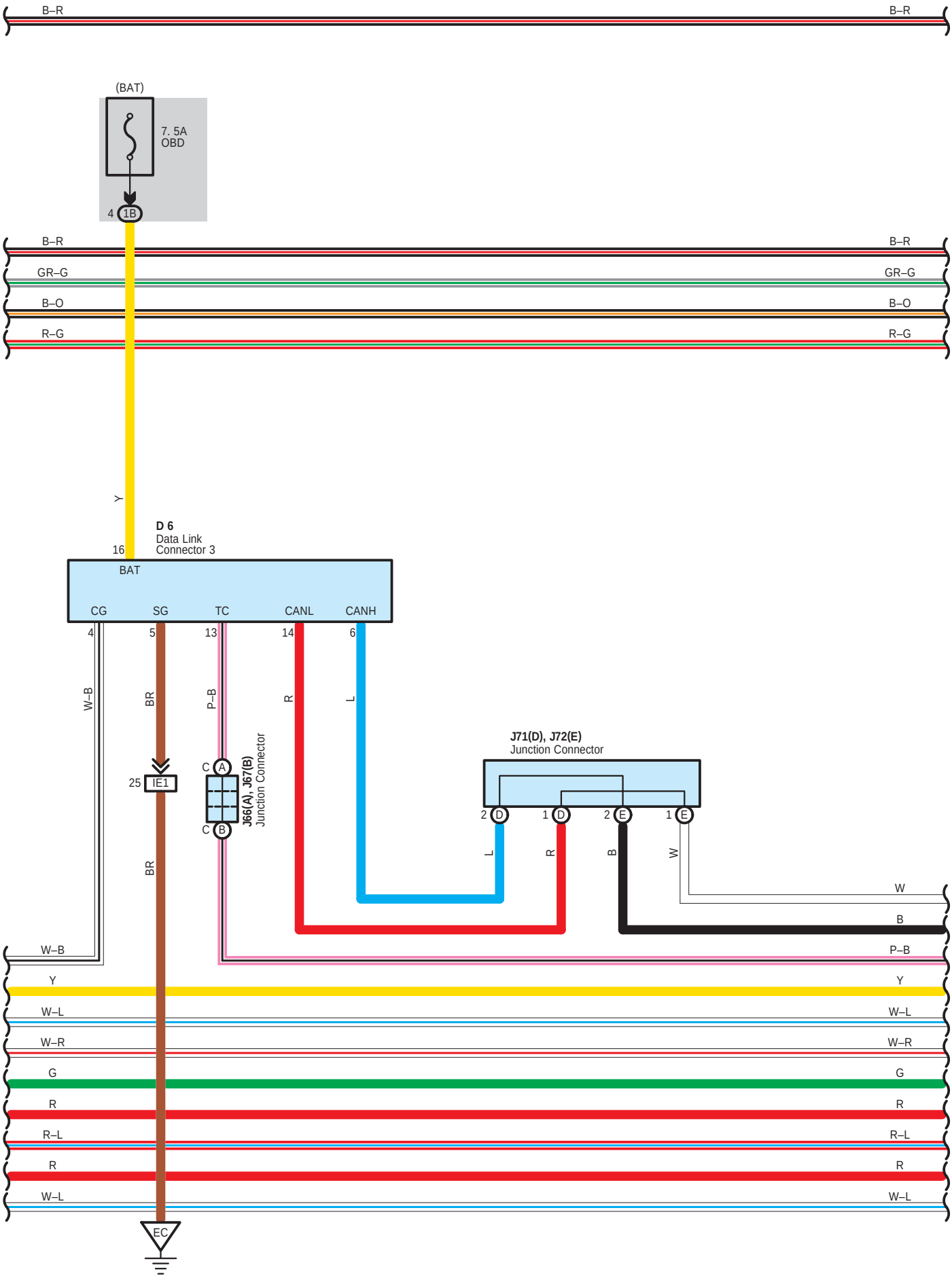
### : Connector Joining Wire Harness and Wire Harness

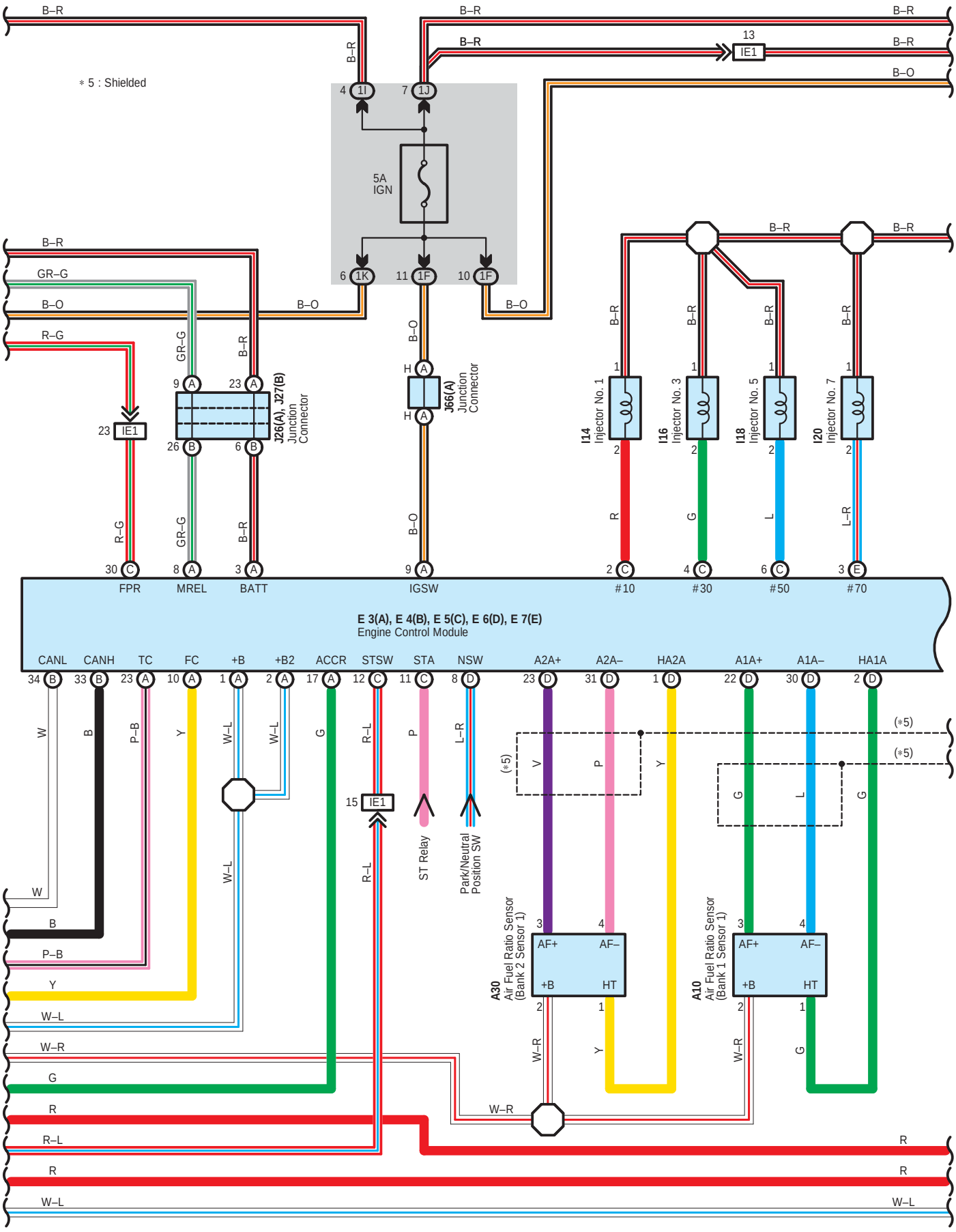
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| | 81 (1GR–FE) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

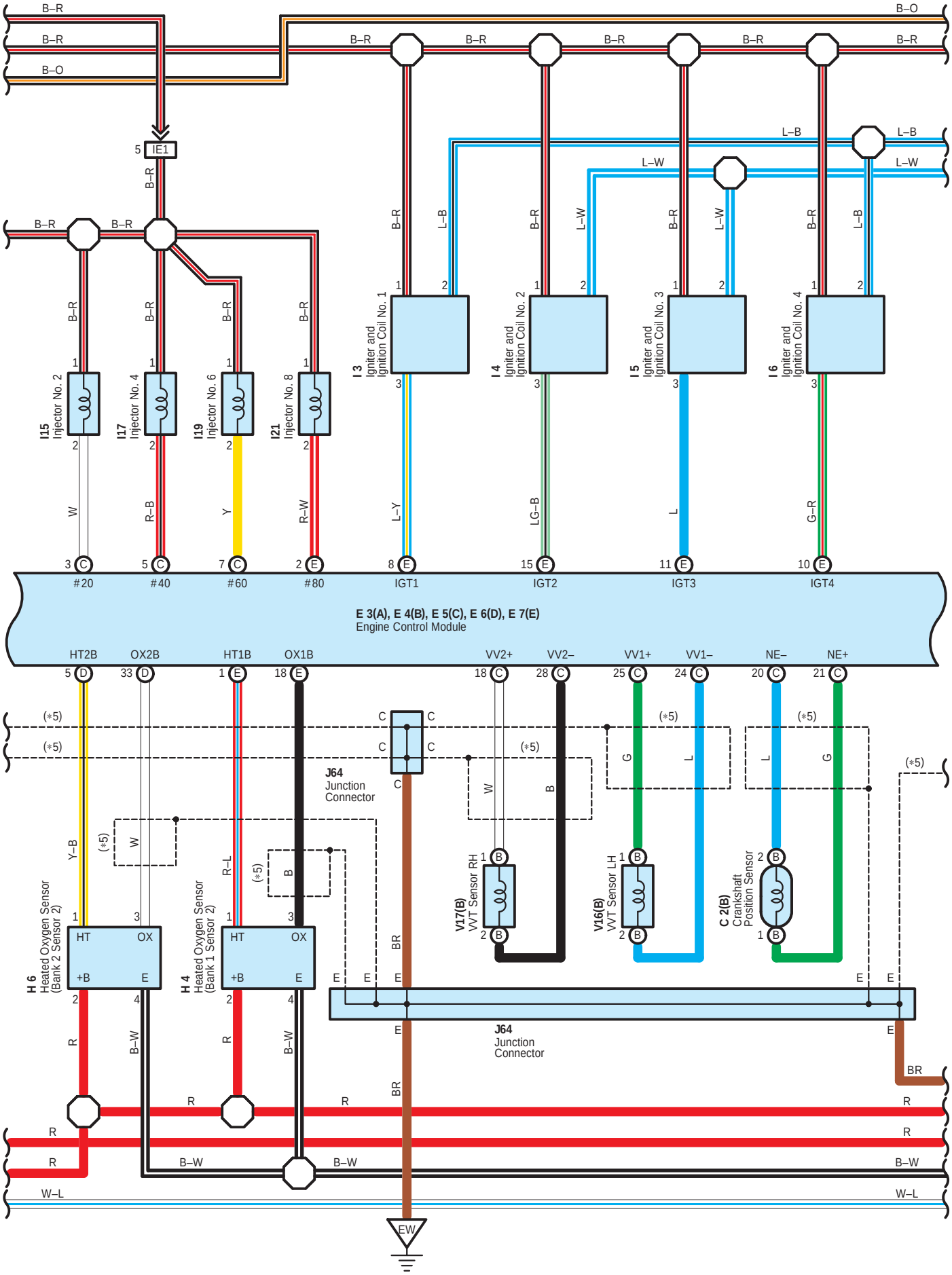

B–R
W–L
V–W
5A ECU–B
ACC
IG1
ST1
IG2
ST2
AM1
AM2
I23(A)
Ignition SW
L–R
V–W
J26(A), J27(B)
Junction Connector
J 9
Junction Connector
J12
Junction Connector
A22
ACC Cut Relay
5A STA
IA9
W
W–R
B–W
B
40A AM1
140A FL ALT (*1)
120A FL ALT (*2)
SHORT PIN
30A AM2
B–L(*1)
B(*2)
Battery
R–L
L–O
G
(BAT)
20A A/F HTR
20A EFI NO. 1
A/F HTR Relay
EFI Relay
Y–G
GR–G
W–B
IE1
J18
Junction Connector
ET
EA

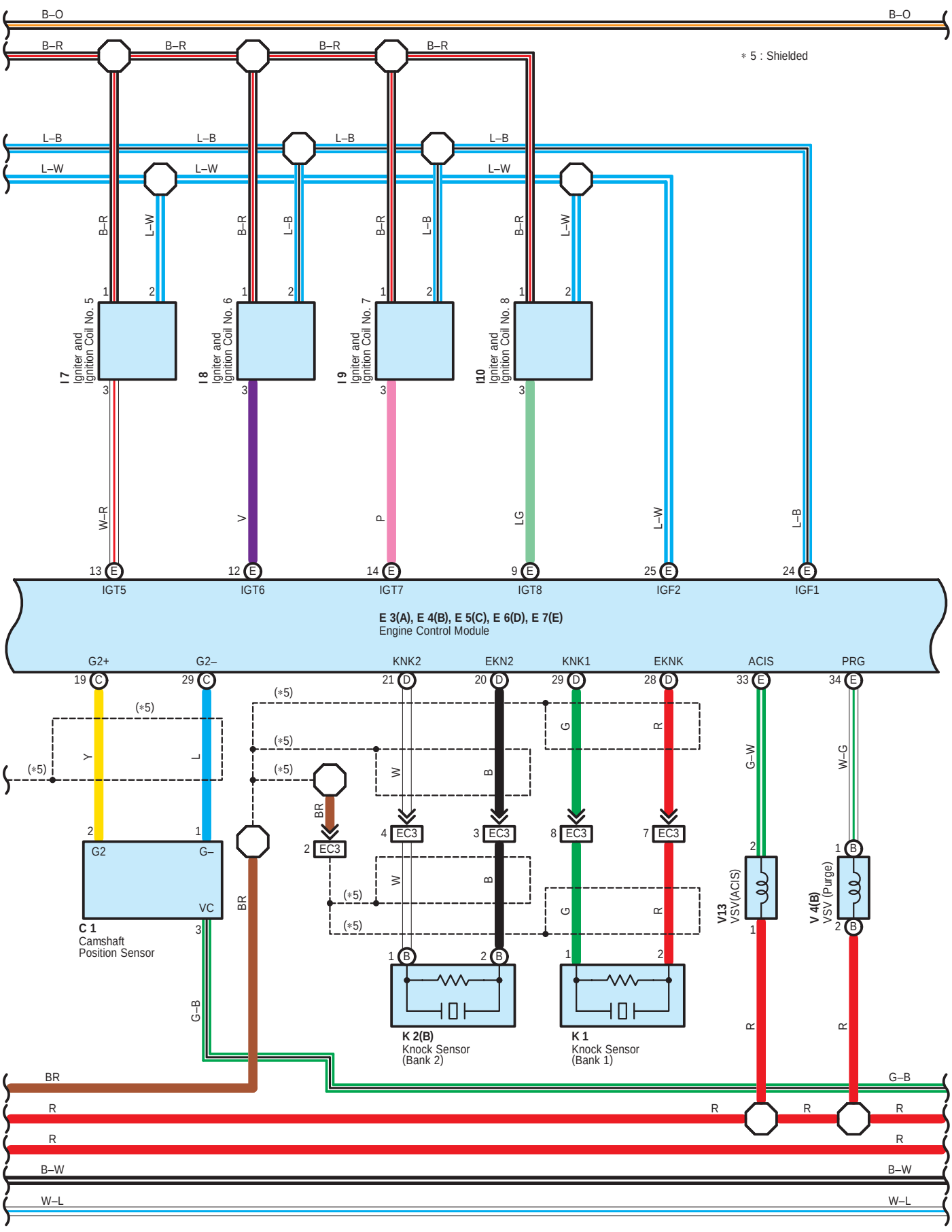

* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Engine Immobiliser System
* 4 : w/o Engine Immobiliser System
10A EFI NO. 2
C/OPN Relay
F/PMP Relay
J26(A), J27(B) Junction Connector
J 1 Junction Connector
J 8 Junction Connector
F10 Fuel Pump
F 5(B) Fuel Pump Resistor
J 3 Junction Connector
EA2
IE1
BB3
BB4
IF


B–R
B–R
(BAT)
7. 5A
OBD
4
1B
B–R
B–R
GR–G
GR–G
B–O
B–O
R–G
R–G
Y
D 6
Data Link
Connector 3
16
BAT
CG
SG
TC
CANL
CANH
4
5
13
14
6
W–B
BR
P–B
R
L
25
IE1
C
A
C
B
J66(A), J67(B)
Junction Connector
J71(D), J72(E)
Junction Connector
2
D
1
D
2
E
1
E
L
R
B
W
W
B
W–B
P–B
Y
Y
W–L
W–L
W–R
W–R
G
G
R
R
R–L
R–L
R
R
W–L
W–L
EC

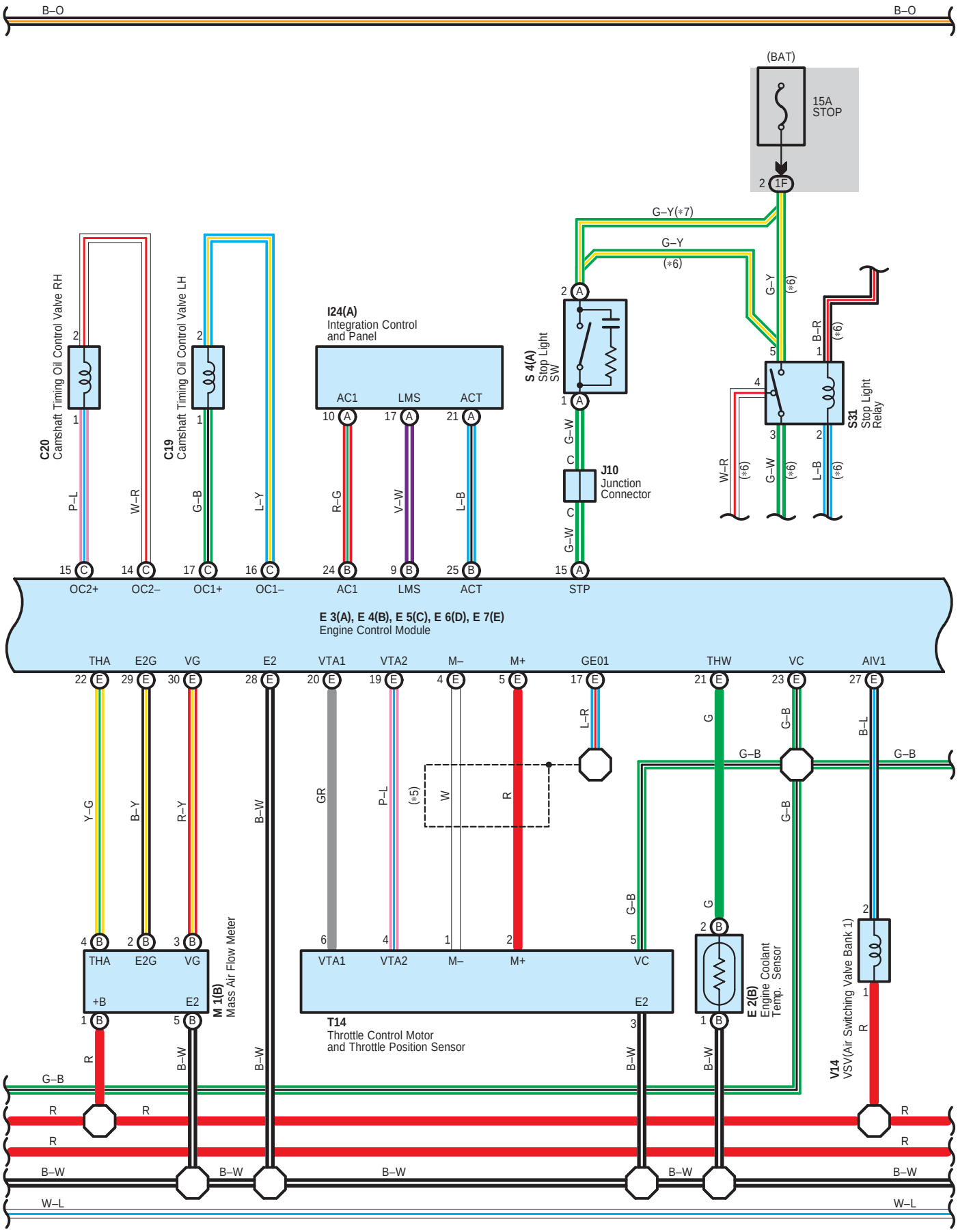

* 5 : Shielded
5A IGN
J26(A), J27(B) Junction Connector
J66(A) Junction Connector
I14 Injector No. 1
I16 Injector No. 3
I18 Injector No. 5
I20 Injector No. 7
FPR
MREL
BATT
IGSW
#10
#30
#50
#70
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
CANL
CANH
TC
FC
+B
+B2
ACCR
STSW
STA
NSW
A2A+
A2A–
HA2A
A1A+
A1A–
HA1A
ST Relay
Park/Neutral Position SW
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
AF+
AF–
+B
HT

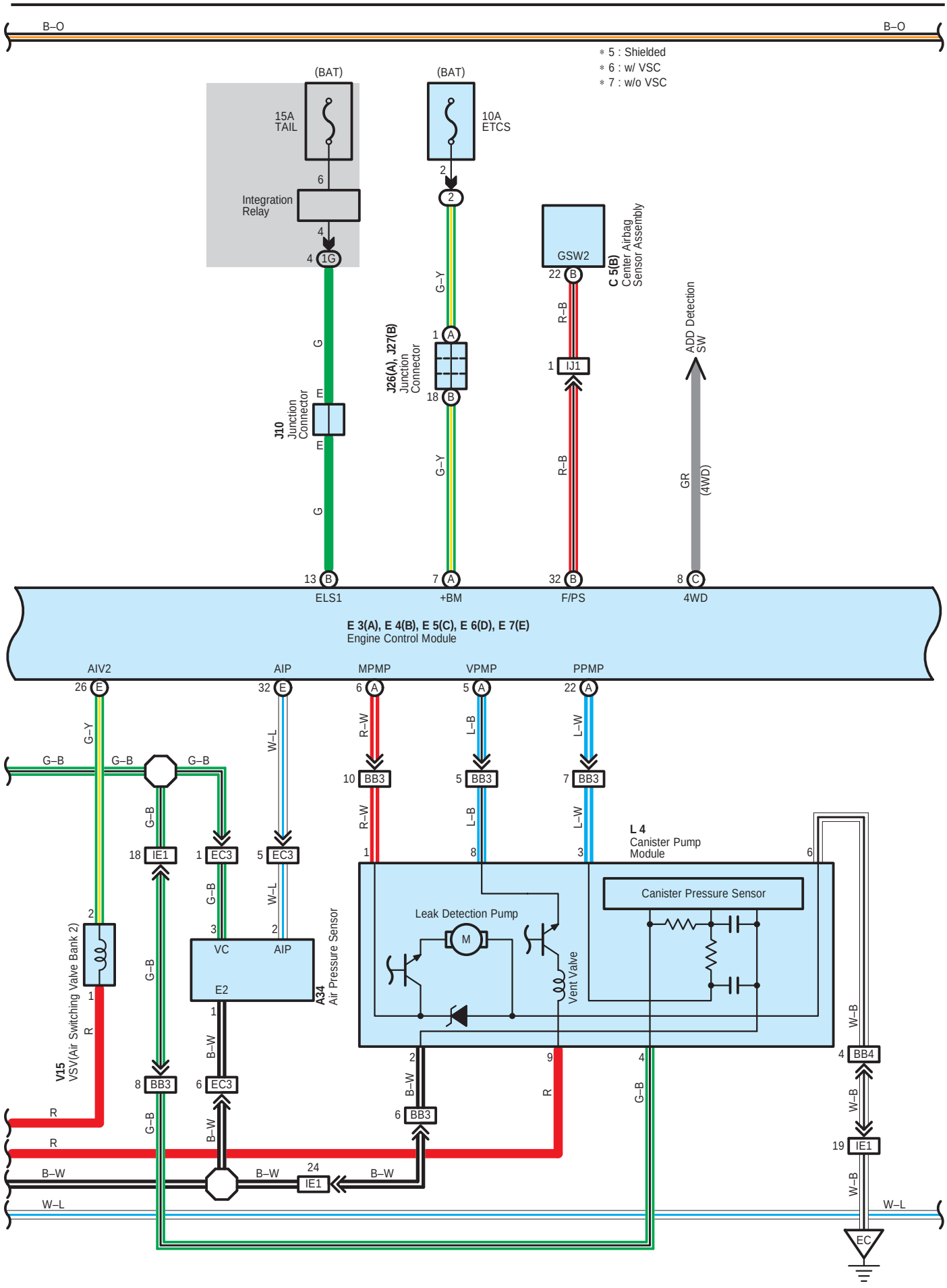
# Engine Control for 2UZ–FE (Access/Standard Cab)



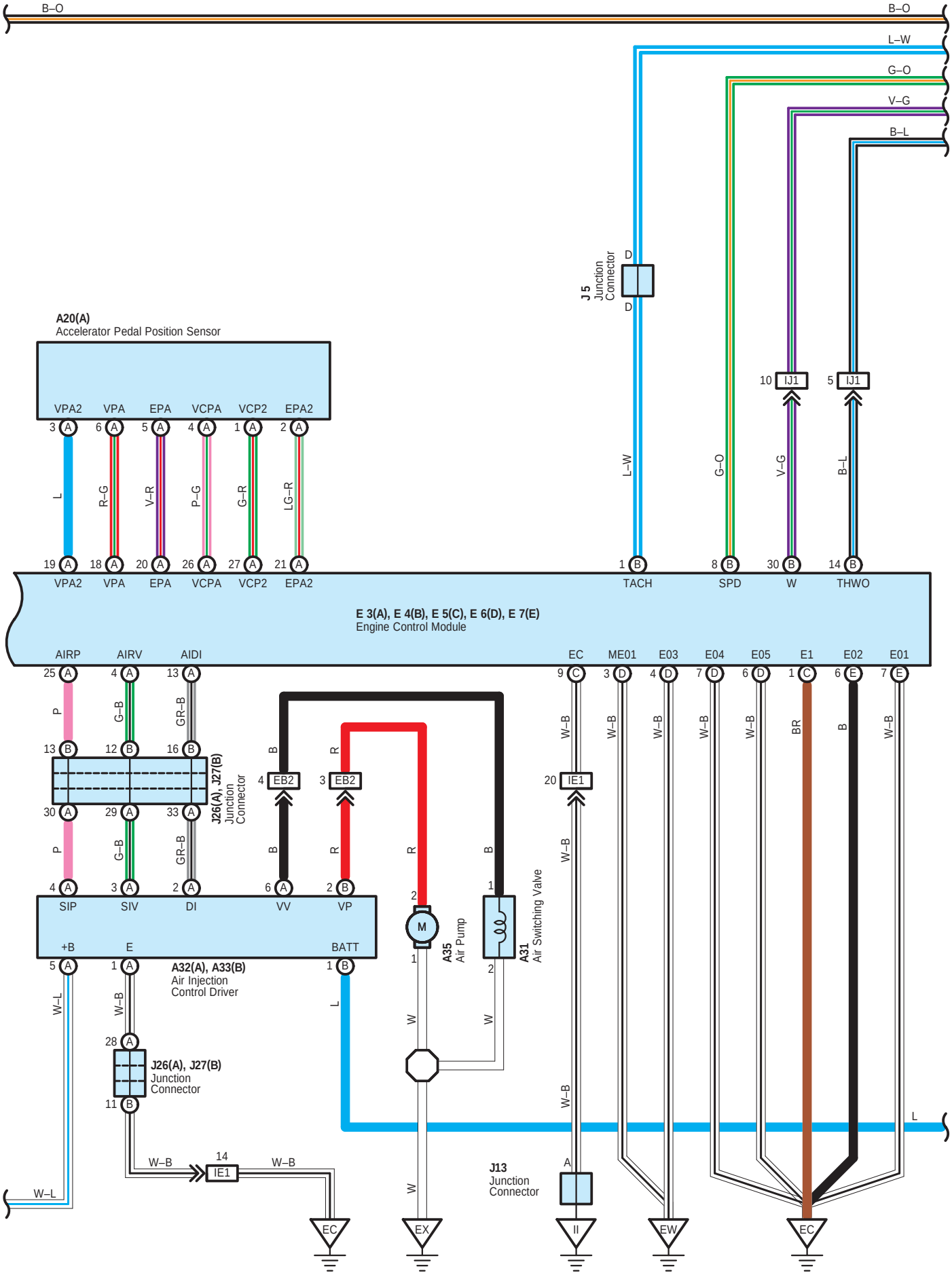

B–O
B–R
L–B
L–W
W–R
V
P
LG
L–W
L–B
∗ 5 : Shielded
I 7 Igniter and Ignition Coil No. 5
I 8 Igniter and Ignition Coil No. 6
I 9 Igniter and Ignition Coil No. 7
I10 Igniter and Ignition Coil No. 8
13 E IGT5
12 E IGT6
14 E IGT7
9 E IGT8
25 E IGF2
24 E IGF1
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
G2+
G2–
KNK2
EKN2
KNK1
EKNK
ACIS
PRG
19 C
29 C
21 D
20 D
29 D
28 D
33 E
34 E
(∗5)
Y
L
W
B
G
R
G–W
W–G
BR
EC3
G2
G–
VC
C 1
Camshaft
Position Sensor
G–B
K 2(B)
Knock Sensor
(Bank 2)
K 1
Knock Sensor
(Bank 1)
V13
VSV(ACIS)
V 4(B)
VSV (Purge)
R
B–W
W–L

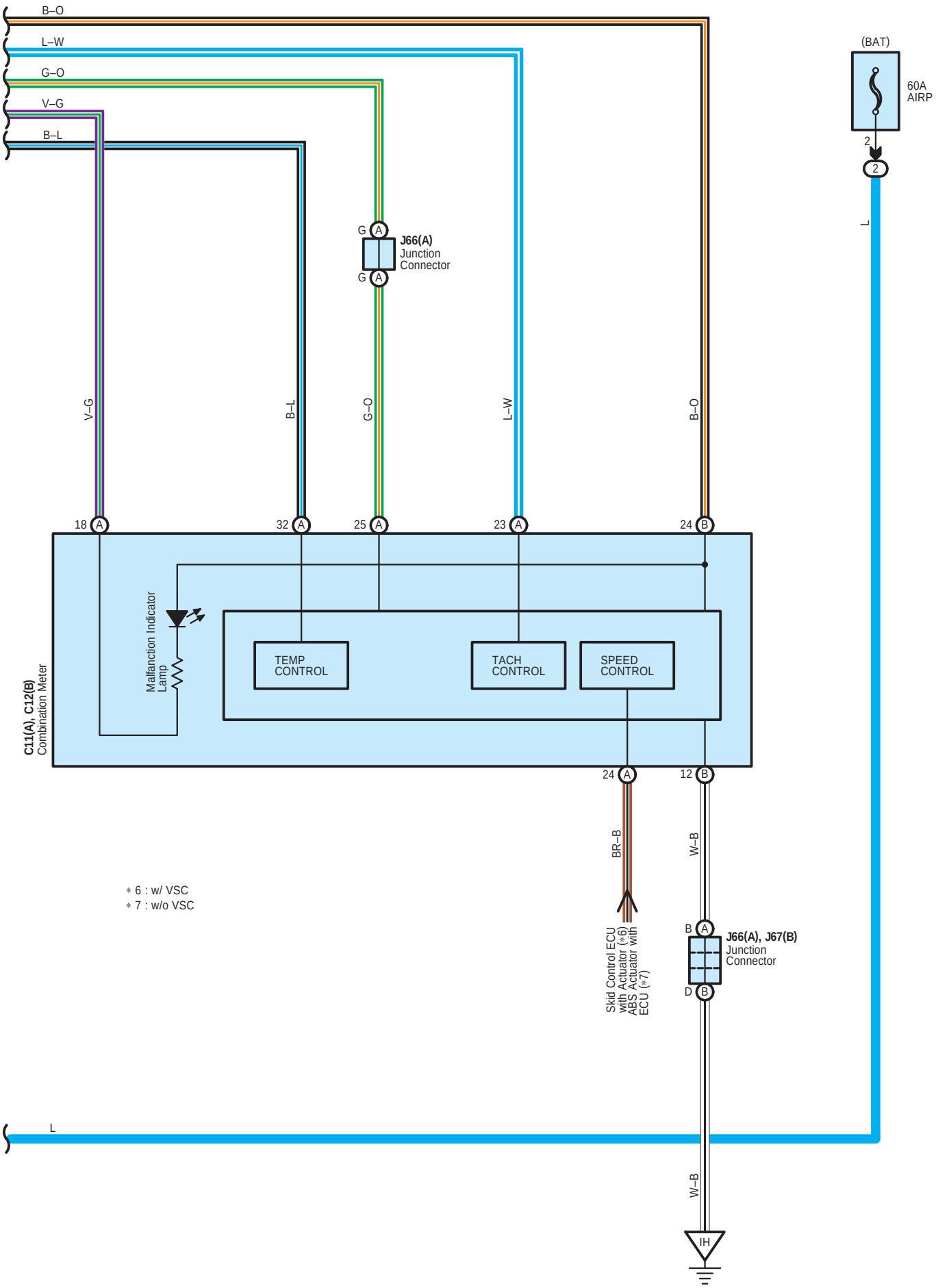
# Engine Control for 2UZ–FE (Access/Standard Cab)




B–O
B–O
* 5 : Shielded
* 6 : w/ VSC
* 7 : w/o VSC
(BAT)
15A
TAIL
Integration
Relay
(BAT)
10A
ETCS
GSW2
C 5(B)
Center Airbag
Sensor Assembly
ADD Detection
SW
J10
Junction
Connector
J26(A), J27(B)
Junction
Connector
ELS1
+BM
F/PS
4WD
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
AIV2
AIP
MPMP
VPMP
PPMP
BB3
EC3
IE1
BB4
EC
L 4
Canister Pump
Module
Canister Pressure Sensor
Leak Detection Pump
Vent Valve
V15
VSV(Air Switching Valve Bank 2)
A34
Air Pressure Sensor
VC
AIP
E2
G–Y
G–B
W–L
R–W
L–B
L–W
B–W
R
W–B
GR
(4WD)

# Engine Control for 2UZ–FE (Access/Standard Cab)




B–O
L–W
G–O
V–G
B–L
(BAT)
60A
AIRP
2
2
L
G
A
J66(A)
Junction
Connector
G
A
V–G
B–L
G–O
L–W
B–O
18 A
32 A
25 A
23 A
24 B
Malfanction Indicator
Lamp
TEMP
CONTROL
TACH
CONTROL
SPEED
CONTROL
C11(A), C12(B)
Combination Meter
24 A
12 B
BR–B
W–B
∗ 6 : w/ VSC
∗ 7 : w/o VSC
B
A
J66(A), J67(B)
Junction
Connector
D
B
Skid Control ECU
with Actuator (∗6)
ABS Actuator with
ECU (∗7)
L
W–B
IH

**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 OX1B, 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, detects the vehicle speed and input to the speed sensor of the skid control ECU with actuator, from skid control ECU to TERMINAL SPD of the engine control module, via 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 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 #10, #20, #30, #40, #50, #60, #70, #80 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 HT1B and HT2B to control the heater.
* Air fuel ratio sensor heater control system
  The air fuel ratio 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 air fuel ratio sensor to improve detection performance of the sensor.
  The engine control module evaluates the signals from each sensor, current is output to TERMINALS HA1A and HA2A controlling the heater.
* Fuel pump control system
  The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump with the F/PMP relay.
* 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.

# Engine Control for 2UZ–FE (Access/Standard Cab)

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A10 | 56 (2UZ–FE) | H4 | 56 (2UZ–FE) | J12 | 62 |
| A20 A | 60 | H6 | 56 (2UZ–FE) | J13 | 62 |
| A22 | 60 | I3 | 57 (2UZ–FE) | J18 | 57 (2UZ–FE) |
| A30 | 56 (2UZ–FE) | I4 | 57 (2UZ–FE) | J26 A | 62 |
| A31 | 56 (2UZ–FE) | I5 | 57 (2UZ–FE) | J27 B | 62 |
| A32 A | 56 (2UZ–FE) | I6 | 57 (2UZ–FE) | J64 | 62 |
| A33 B | 56 (2UZ–FE) | I7 | 57 (2UZ–FE) | J66 A | 62 |
| A34 | 56 (2UZ–FE) | I8 | 57 (2UZ–FE) | J67 B | 62 |
| A35 | 56 (2UZ–FE) | I9 | 57 (2UZ–FE) | J71 D | 62 |
| C1 | 56 (2UZ–FE) | I10 | 57 (2UZ–FE) | J72 E | 62 |
| C2 B | 56 (2UZ–FE) | I14 | 57 (2UZ–FE) | K1 | 57 (2UZ–FE) |
| C5 B | 60 | I15 | 57 (2UZ–FE) | K2 B | 57 (2UZ–FE) |
| C11 A | 60 | I16 | 57 (2UZ–FE) | L4 | 64 (*3) |
| C12 B | 60 | I17 | 57 (2UZ–FE) | | 65 (*4) |
| C19 | 56 (2UZ–FE) | I18 | 57 (2UZ–FE) | M1 B | 57 (2UZ–FE) |
| C20 | 56 (2UZ–FE) | I19 | 57 (2UZ–FE) | S4 A | 63 |
| D6 | 61 | I20 | 57 (2UZ–FE) | S31 | 63 |
| E2 B | 56 (2UZ–FE) | I21 | 57 (2UZ–FE) | T14 | 57 (2UZ–FE) |
| E3 A | 61 | I23 A | 61 | V4 B | 57 (2UZ–FE) |
| E4 B | 61 | I24 A | 61 | V13 | 57 (2UZ–FE) |
| E5 C | 61 | J1 | 57 (2UZ–FE) | V14 | 57 (2UZ–FE) |
| E6 D | 61 | J3 | 62 | V15 | 57 (2UZ–FE) |
| E7 E | 61 | J5 | 62 | V16 B | 57 (2UZ–FE) |
| F5 B | 56 (2UZ–FE) | J8 | 62 | V17 B | 57 (2UZ–FE) |
| F10 | 64 (*3) | J9 | 62 | | |
| | 65 (*4) | J10 | 62 | | |

**⬭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1I | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

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

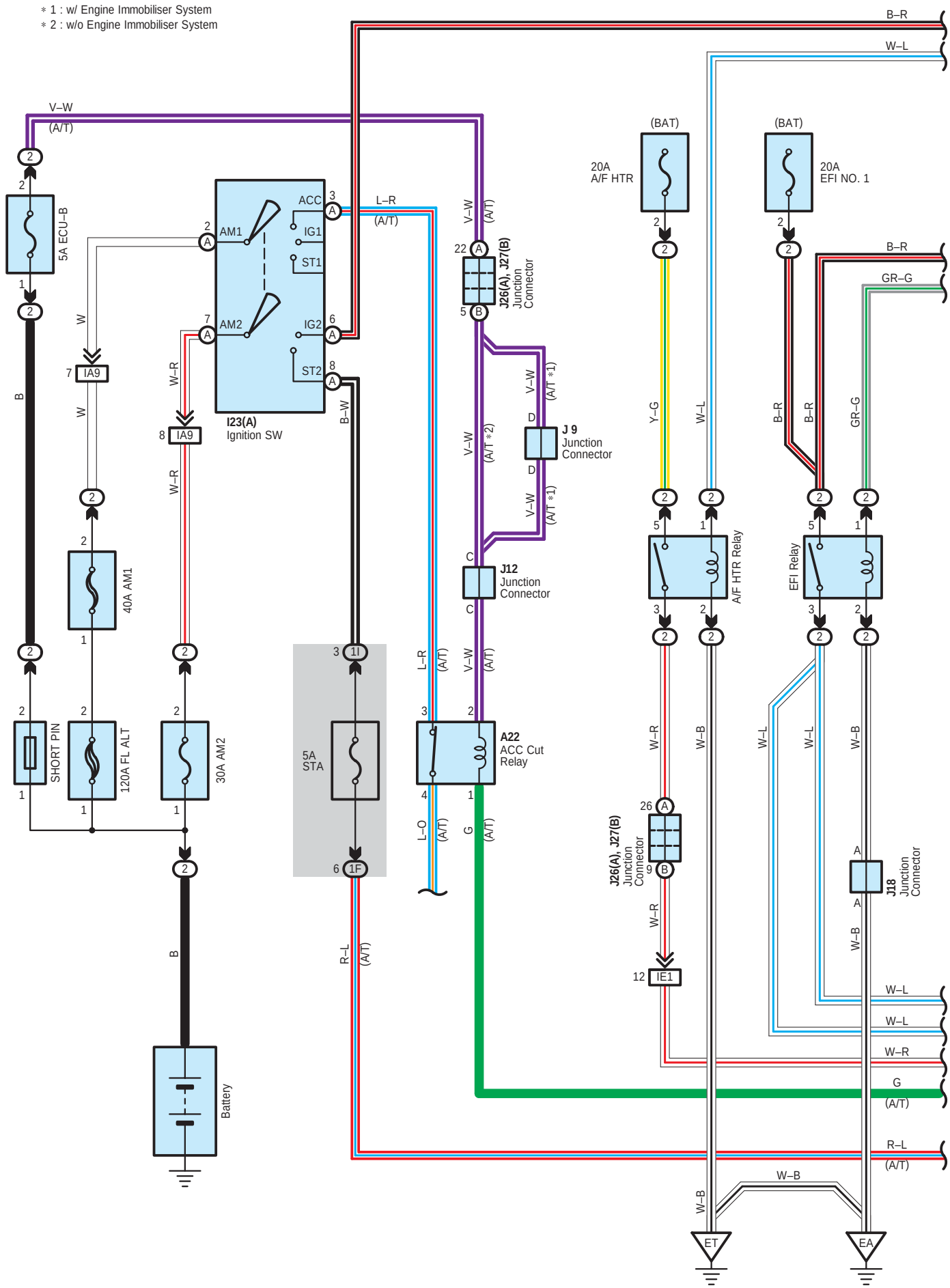
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| EB2 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| EC3 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Wire (Near the Starter) |
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB3 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BB4 | 84 (*3) | |
| | 85 (*4) | |

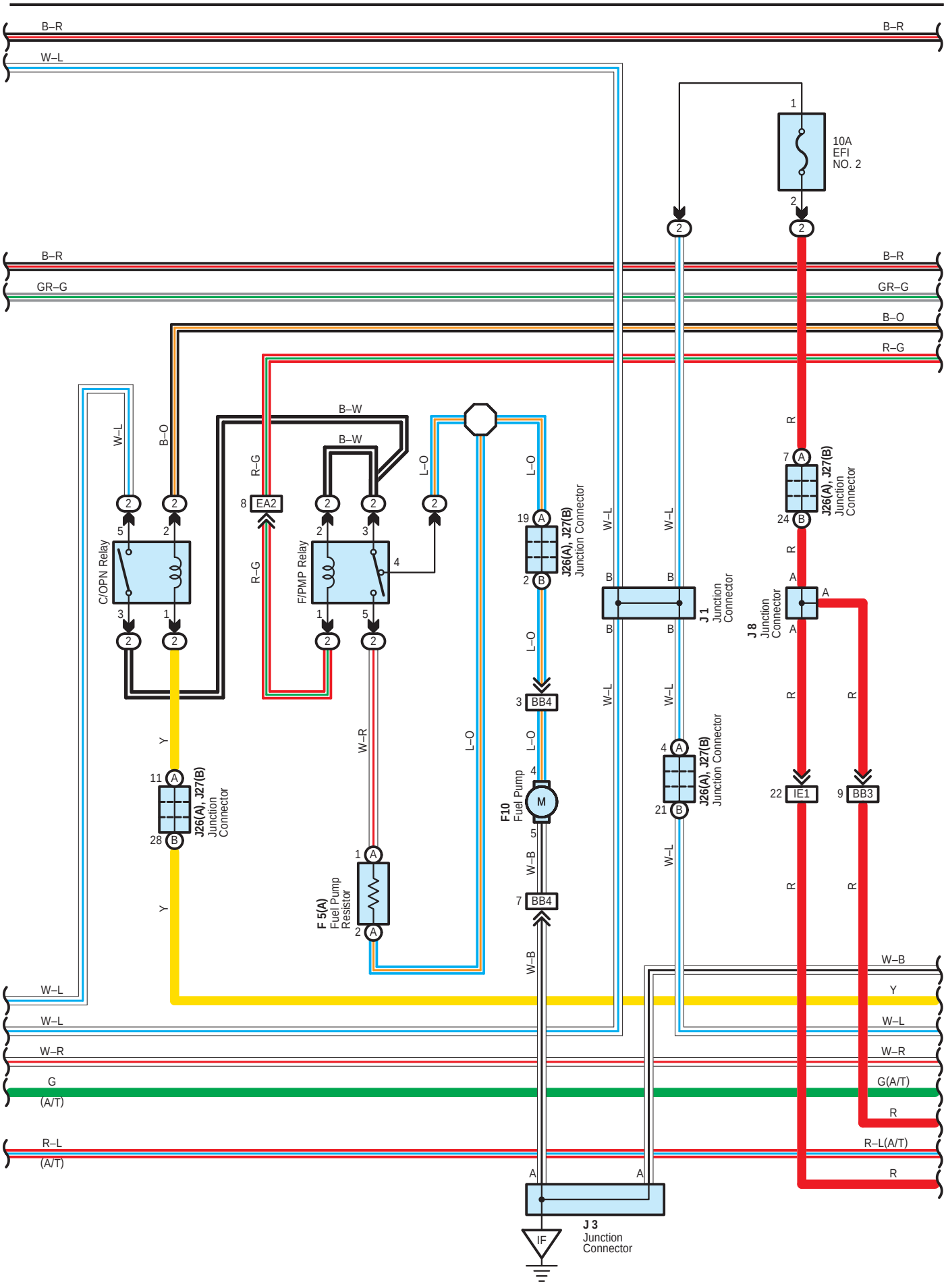
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |
| ET | 80 (2UZ–FE) | Front Right Fender |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| EX | 80 (2UZ–FE) | Left Side of Cylinder Block |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |
| II | | |

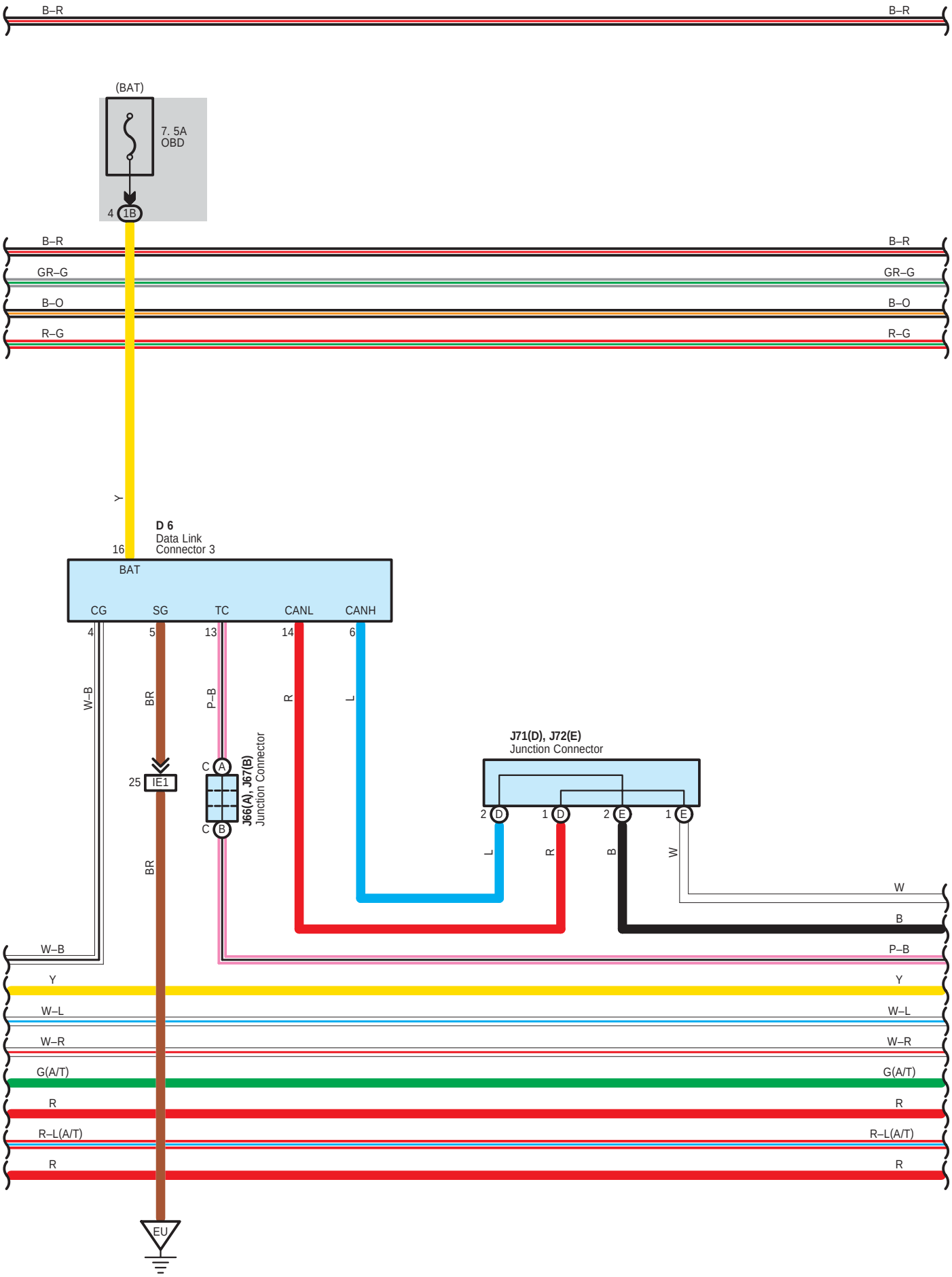
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

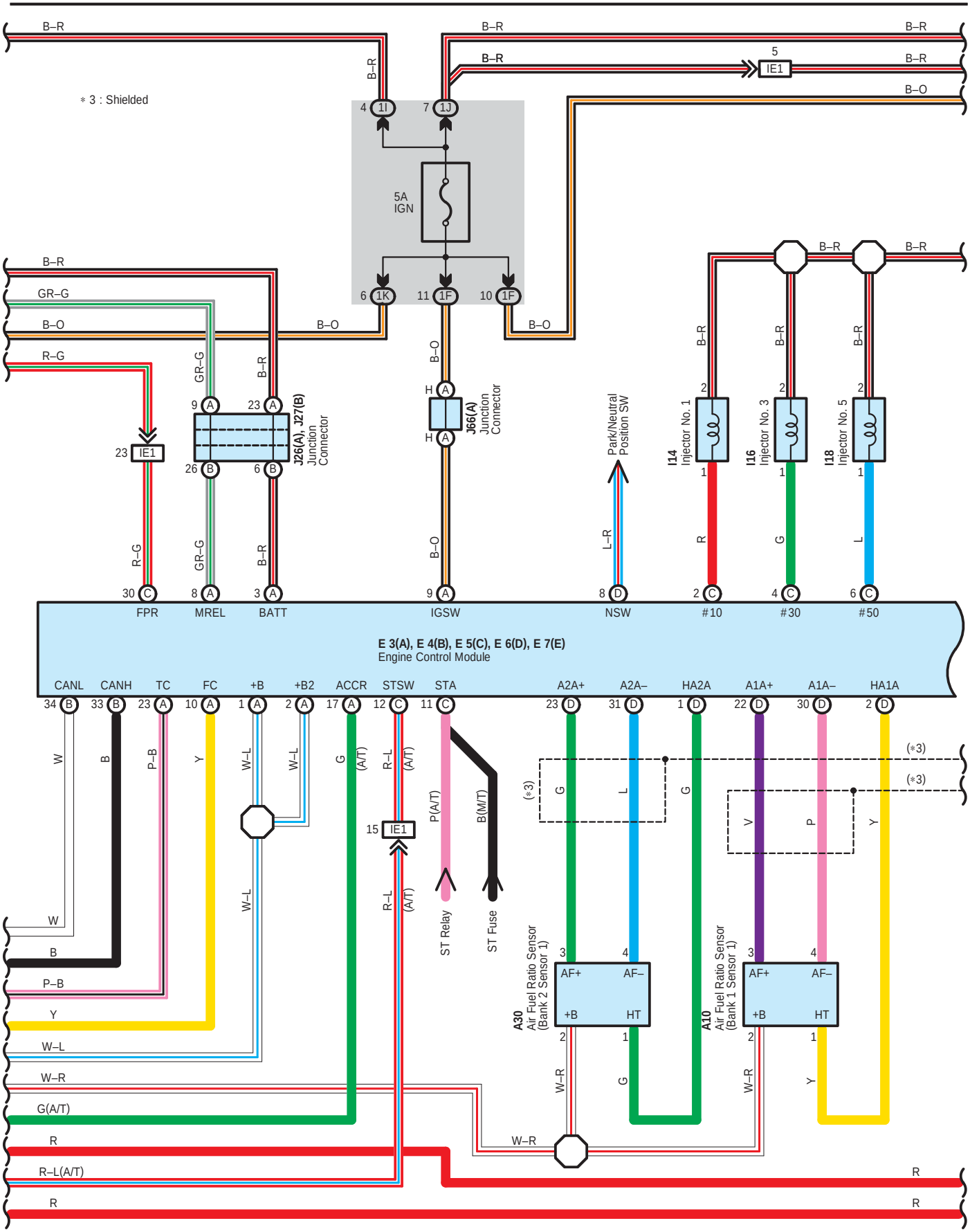
# Engine Control for 1GR–FE (Access/Standard Cab)



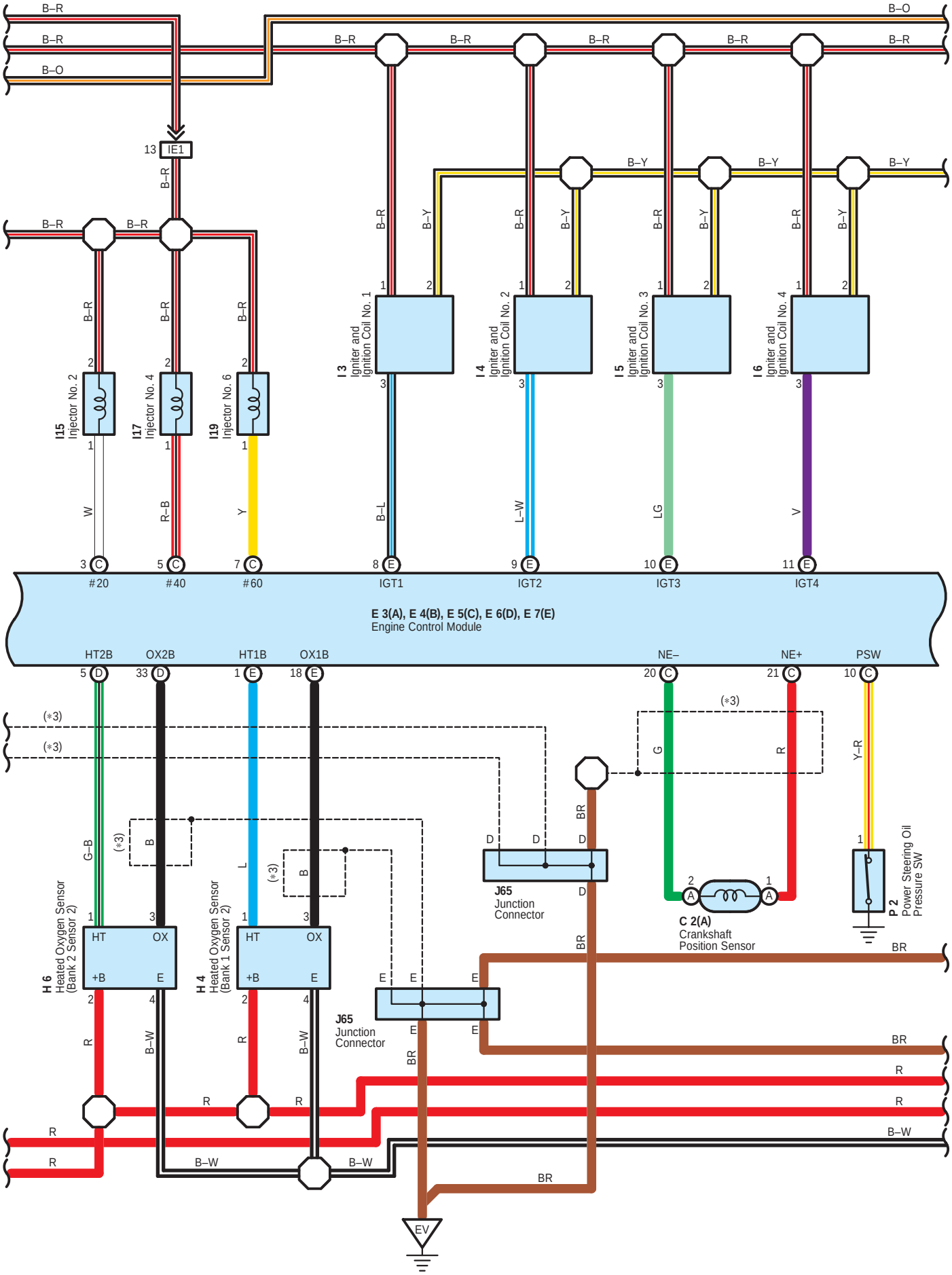

B–R
W–L
GR–G
B–O
R–G
B–W
L–O
W–R
W–B
R
Y
G
(A/T)
R–L
(A/T)
G(A/T)
R–L(A/T)
10A
EFI
NO. 2
C/OPN Relay
F/PMP Relay
EA2
J26(A), J27(B)
Junction Connector
J 1
Junction Connector
J 8
Junction Connector
F10
Fuel Pump
F 5(A)
Fuel Pump
Resistor
BB4
BB3
IE1
J 3
Junction
Connector
IF

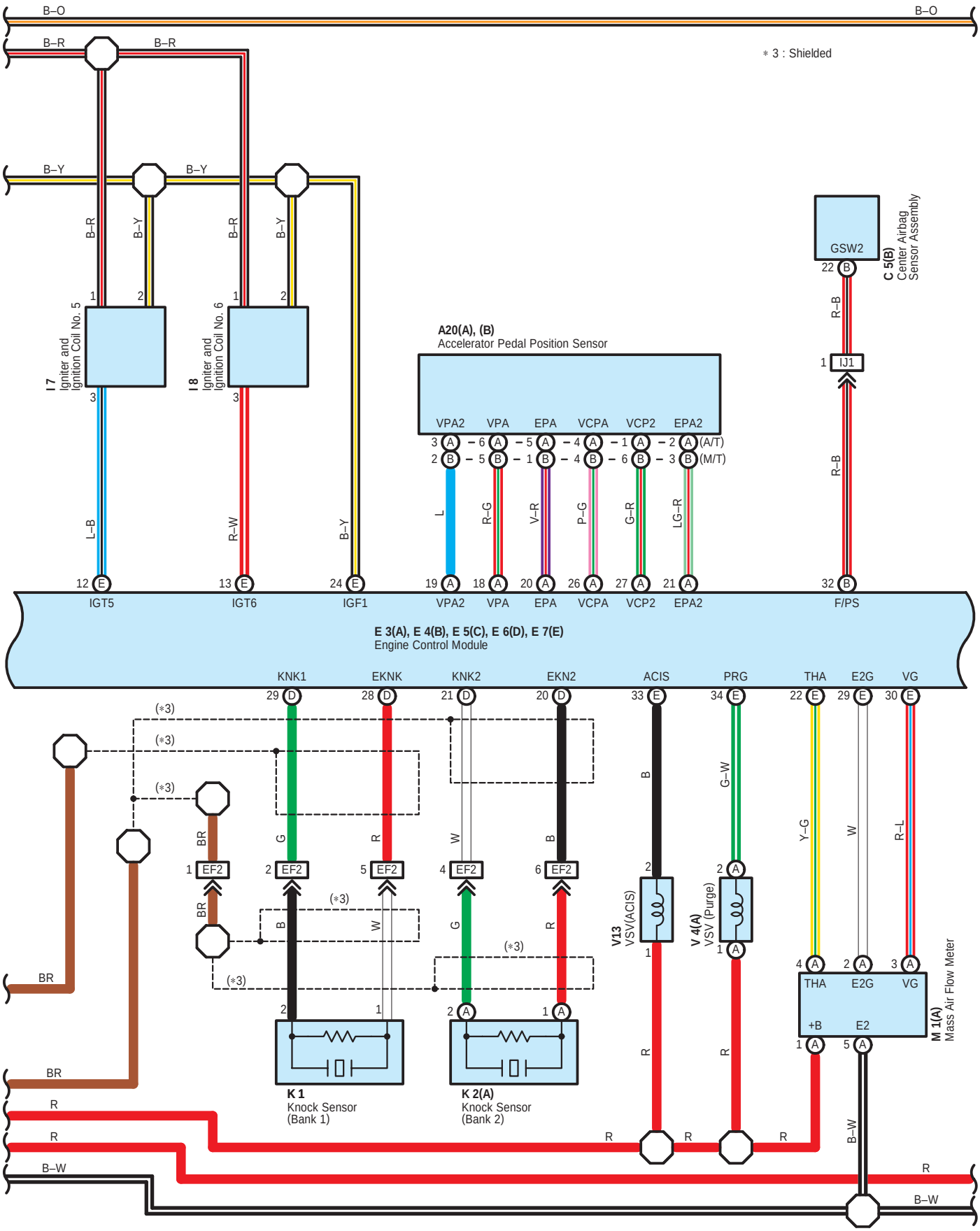
# Engine Control for 1GR–FE (Access/Standard Cab)



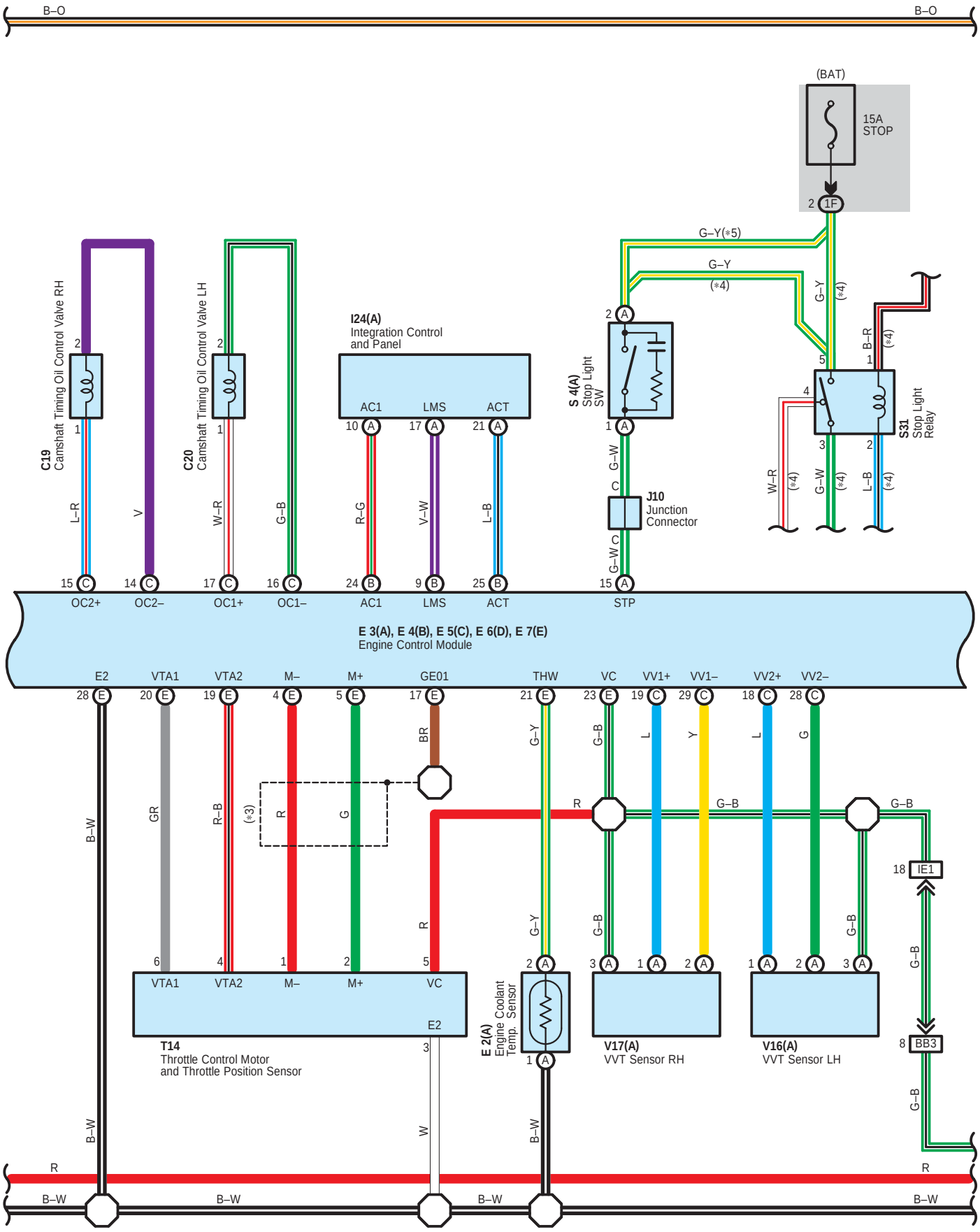

* 3 : Shielded
5A IGN
J26(A), J27(B) Junction Connector
J66(A) Junction Connector
Park/Neutral Position SW
I14 Injector No. 1
I16 Injector No. 3
I18 Injector No. 5
FPR
MREL
BATT
IGSW
NSW
#10
#30
#50
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
CANL
CANH
TC
FC
+B
+B2
ACCR
STSW
STA
A2A+
A2A–
HA2A
A1A+
A1A–
HA1A
ST Relay
ST Fuse
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
AF+
AF–
+B
HT

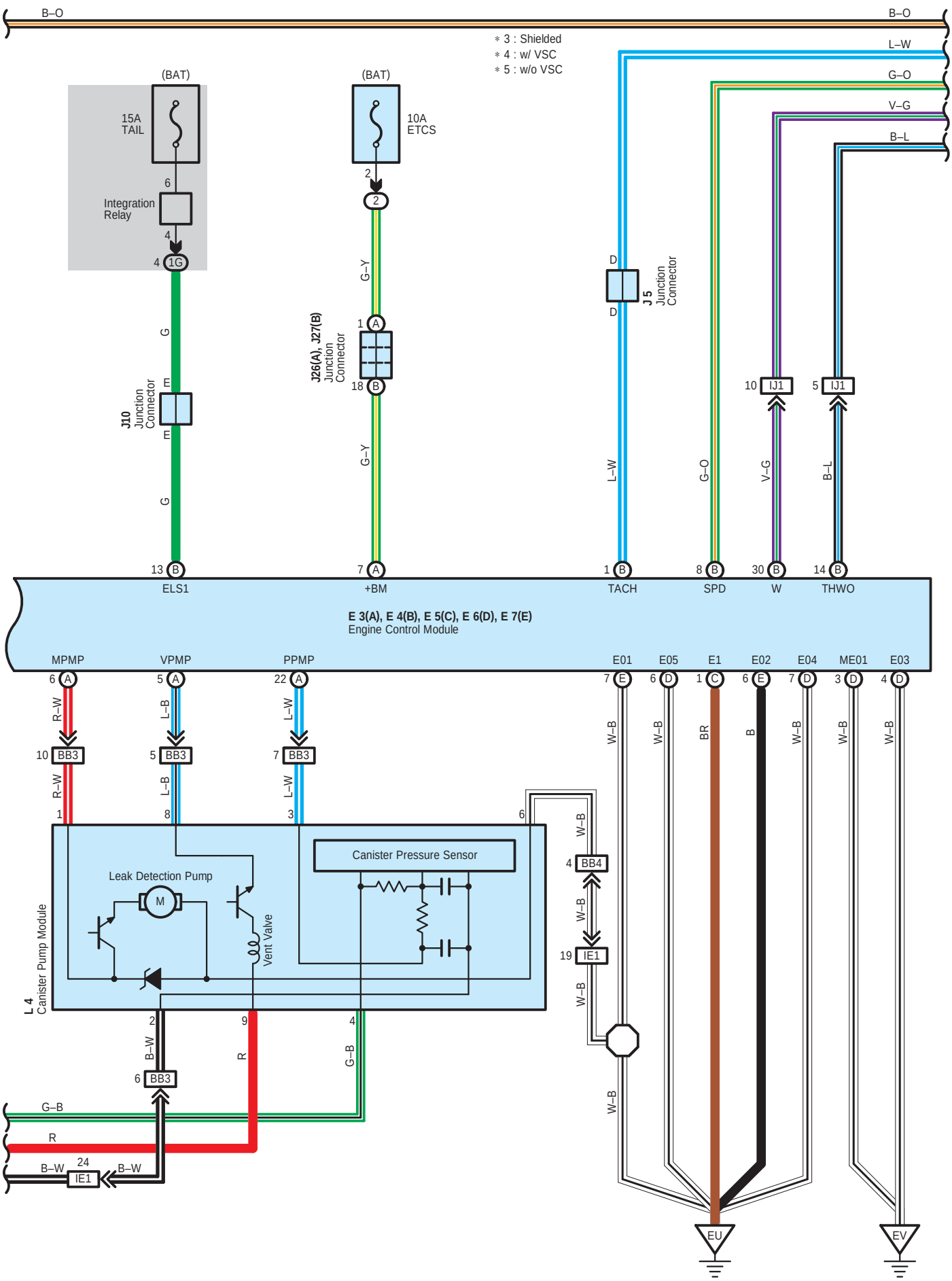
# Engine Control for 1GR–FE (Access/Standard Cab)



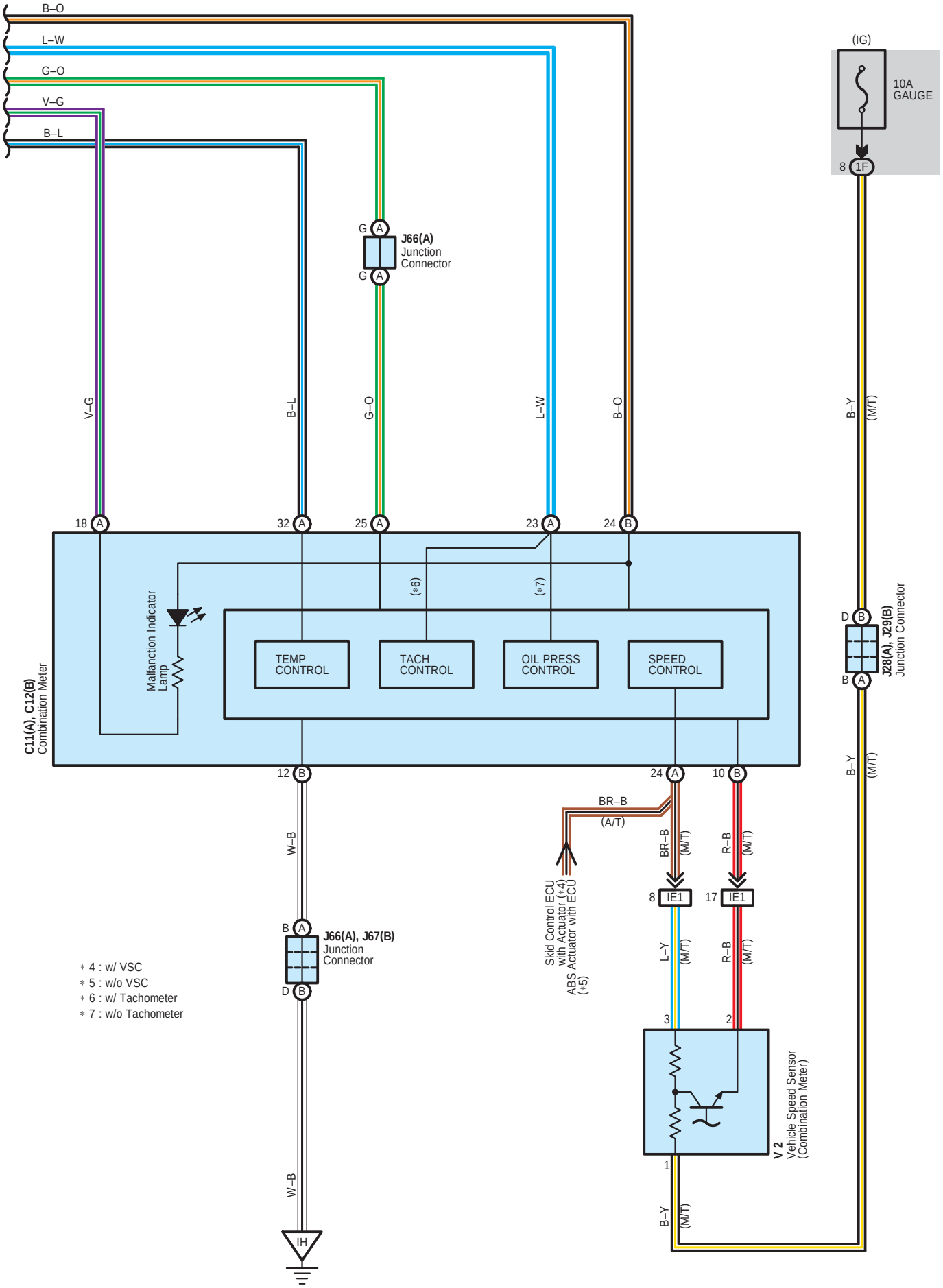

B–O
B–O
B–R
B–R
∗ 3 : Shielded
B–Y
B–Y
B–R
B–Y
B–R
B–Y
I 7
Igniter and Ignition Coil No. 5
I 8
Igniter and Ignition Coil No. 6
A20(A), (B)
Accelerator Pedal Position Sensor
VPA2 VPA EPA VCPA VCP2 EPA2
(A/T)
(M/T)
GSW2
C 5(B)
Center Airbag Sensor Assembly
R–B
IJ1
L–B
R–W
B–Y
L
R–G
V–R
P–G
G–R
LG–R
R–B
IGT5
IGT6
IGF1
VPA2
VPA
EPA
VCPA
VCP2
EPA2
F/PS
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
KNK1
EKNK
KNK2
EKN2
ACIS
PRG
THA
E2G
VG
(∗3)
BR
G
R
W
B
G–W
Y–G
R–L
EF2
V13
VSV(ACIS)
V 4(A)
VSV (Purge)
THA
E2G
VG
+B
E2
M 1(A)
Mass Air Flow Meter
K 1
Knock Sensor
(Bank 1)
K 2(A)
Knock Sensor
(Bank 2)
BR
R
B–W

# Engine Control for 1GR–FE (Access/Standard Cab)




B–O
B–O
＊3 : Shielded
＊4 : w/ VSC
＊5 : w/o VSC
L–W
G–O
V–G
B–L
(BAT)
15A
TAIL
6
Integration
Relay
4
4
1G
G
E
J10
Junction
Connector
E
G
13
B
ELS1
(BAT)
10A
ETCS
2
2
G–Y
1
A
J26(A), J27(B)
Junction
Connector
18
B
G–Y
7
A
+BM
D
D
J5
Junction
Connector
L–W
1
B
TACH
G–O
8
B
SPD
10
IJ1
V–G
30
B
W
5
IJ1
B–L
14
B
THWO
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
MPMP
VPMP
PPMP
E01
E05
E1
E02
E04
ME01
E03
6
A
R–W
10
BB3
R–W
1
5
A
L–B
5
BB3
L–B
8
22
A
L–W
7
BB3
L–W
3
7
E
W–B
6
D
W–B
1
C
BR
6
E
B
7
D
W–B
3
D
W–B
4
D
W–B
6
W–B
4
BB4
W–B
19
IE1
W–B
L 4
Canister Pump Module
Leak Detection Pump
M
Vent Valve
Canister Pressure Sensor
2
B–W
6
BB3
9
R
4
G–B
G–B
R
B–W
24
IE1
B–W
EU
EV

# Engine Control for 1GR–FE (Access/Standard Cab)



**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 OX1B, 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, detects the vehicle speed and input to the speed sensor of the skid control ECU with actuator, from skid control ECU to TERMINAL SPD of the engine control module, via 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 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 #10, #20, #30, #40, #50, #60 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 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 HT1B and HT2B to control the heater.
* Air fuel ratio sensor heater control system
  The air fuel ratio 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 air fuel ratio sensor to improve detection performance of the sensor.
  The engine control module evaluates the signals from each sensor, current is output to TERMINALS HA1A and HA2A controlling the heater.
* Fuel pump control system
  The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump with the F/PMP relay.
* 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.

## : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A10 | | 58 (1GR–FE) | I3 | | 59 (1GR–FE) | J27 | B | 62 |
| A20 | A | 60 | I4 | | 59 (1GR–FE) | J28 | A | 62 |
| | B | 60 | I5 | | 59 (1GR–FE) | J29 | B | 62 |
| A22 | | 60 | I6 | | 59 (1GR–FE) | J65 | | 62 |
| A30 | | 58 (1GR–FE) | I7 | | 59 (1GR–FE) | J66 | A | 62 |
| C2 | A | 58 (1GR–FE) | I8 | | 59 (1GR–FE) | J67 | B | 62 |
| C5 | B | 60 | I14 | | 59 (1GR–FE) | J71 | D | 62 |
| C11 | A | 60 | I15 | | 59 (1GR–FE) | J72 | E | 62 |
| C12 | B | 60 | I16 | | 59 (1GR–FE) | K1 | | 59 (1GR–FE) |
| C19 | | 58 (1GR–FE) | I17 | | 59 (1GR–FE) | K2 | A | 59 (1GR–FE) |
| C20 | | 58 (1GR–FE) | I18 | | 59 (1GR–FE) | L4 | | 64 (*3) |
| D6 | | 61 | I19 | | 59 (1GR–FE) | | | 65 (*4) |
| E2 | A | 58 (1GR–FE) | I23 | A | 61 | M1 | A | 59 (1GR–FE) |
| E3 | A | 61 | I24 | A | 61 | P2 | | 59 (1GR–FE) |
| E4 | B | 61 | J1 | | 59 (1GR–FE) | S4 | A | 63 |
| E5 | C | 61 | J3 | | 62 | S31 | | 63 |
| E6 | D | 61 | J5 | | 62 | T14 | | 59 (1GR–FE) |
| E7 | E | 61 | J8 | | 62 | V2 | | 59 (1GR–FE) |
| F5 | A | 58 (1GR–FE) | J9 | | 62 | V4 | A | 59 (1GR–FE) |
| F10 | | 64 (*3) | J10 | | 62 | V13 | | 59 (1GR–FE) |
| | | 65 (*4) | J12 | | 62 | V16 | A | 59 (1GR–FE) |
| H4 | | 58 (1GR–FE) | J18 | | 59 (1GR–FE) | V17 | A | 59 (1GR–FE) |
| H6 | | 58 (1GR–FE) | J26 | A | 62 | | | |

## : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1I | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Engine Control for 1GR–FE (Access/Standard Cab)

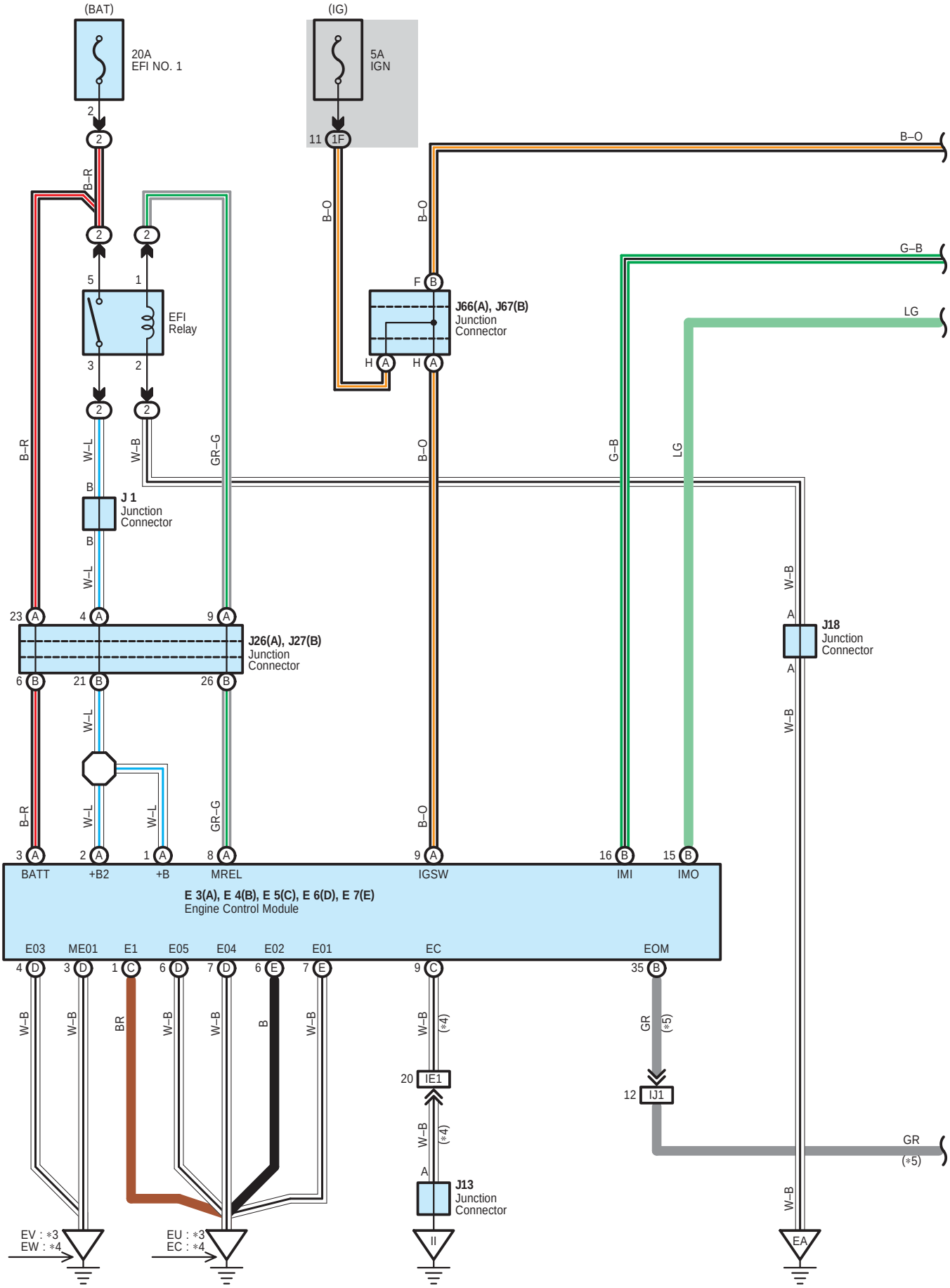
**: Connector Joining Wire Harness and Wire Harness**

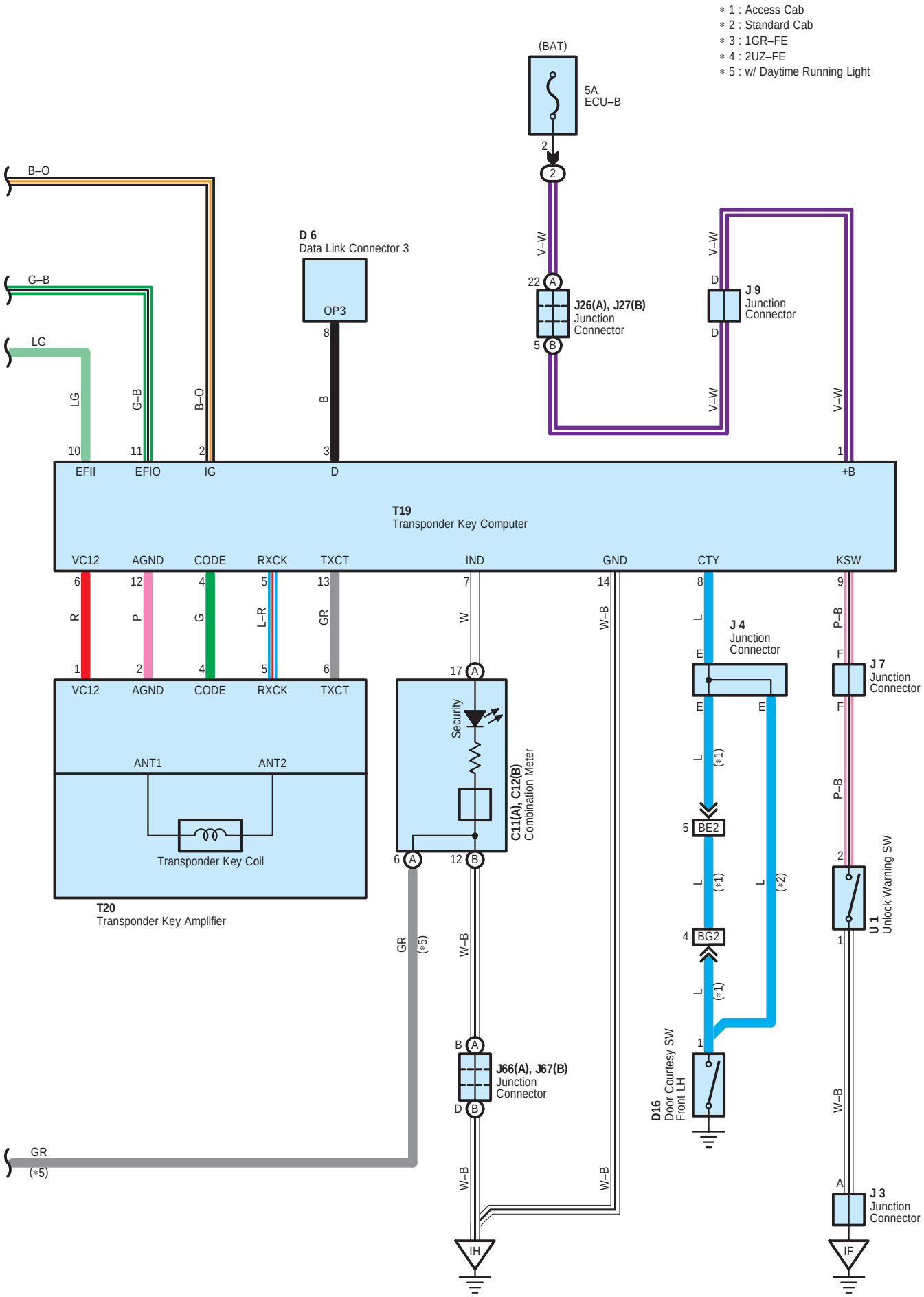
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 81 (1GR–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| EF2 | 81 (1GR–FE) | Engine Wire and Sensor Wire (Over the Cylinder Head) |
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB3 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BB4 | 84 (*3) | |
| | 85 (*4) | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 81 (1GR–FE) | Front Left Fender |
| ET | 81 (1GR–FE) | Front Right Fender |
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
20A
EFI NO. 1
(IG)
5A
IGN
EFI
Relay
J66(A), J67(B)
Junction
Connector
J 1
Junction
Connector
J26(A), J27(B)
Junction
Connector
J18
Junction
Connector
J13
Junction
Connector
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
BATT
+B2
+B
MREL
IGSW
IMI
IMO
E03
ME01
E1
E05
E04
E02
E01
EC
EOM
IE1
IJ1
EV : *3
EW : *4
EU : *3
EC : *4
B–O
G–B
LG
B–R
W–L
W–B
GR–G
BR
B
GR
W–B
EA
II


∗1 : Access Cab
∗2 : Standard Cab
∗3 : 1GR–FE
∗4 : 2UZ–FE
∗5 : w/ Daytime Running Light
(BAT)
5A
ECU–B
D 6
Data Link Connector 3
OP3
J26(A), J27(B)
Junction
Connector
J 9
Junction
Connector
T19
Transponder Key Computer
EFII
EFIO
IG
D
+B
VC12
AGND
CODE
RXCK
TXCT
IND
GND
CTY
KSW
T20
Transponder Key Amplifier
ANT1
ANT2
Transponder Key Coil
C11(A), C12(B)
Combination Meter
Security
J 4
Junction
Connector
J 7
Junction
Connector
BE2
BG2
D16
Door Courtesy SW
Front LH
U 1
Unlock Warning SW
J66(A), J67(B)
Junction
Connector
J 3
Junction
Connector
IH
IF
B–O
G–B
LG
V–W
P–B
W–B
GR
L
R
P
G
L–R
W
(∗1)
(∗2)
(∗5)

# Engine Immobiliser System (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C11 | A | 60 | E7 | E | 61 | J18 | | 59 (1GR–FE) |
| C12 | B | 60 | J1 | | 57 (2UZ–FE) | J26 | A | 62 |
| D6 | | 61 | | | 59 (1GR–FE) | J27 | B | 62 |
| D16 | | 64 (*3) | J3 | | 62 | J66 | A | 62 |
| | | 65 (*4) | J4 | | 62 | J67 | B | 62 |
| E3 | A | 61 | J7 | | 62 | T19 | | 63 |
| E4 | B | 61 | J9 | | 62 | T20 | | 63 |
| E5 | C | 61 | J13 | | 62 | U1 | | 63 |
| E6 | D | 61 | J18 | | 57 (2UZ–FE) | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

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

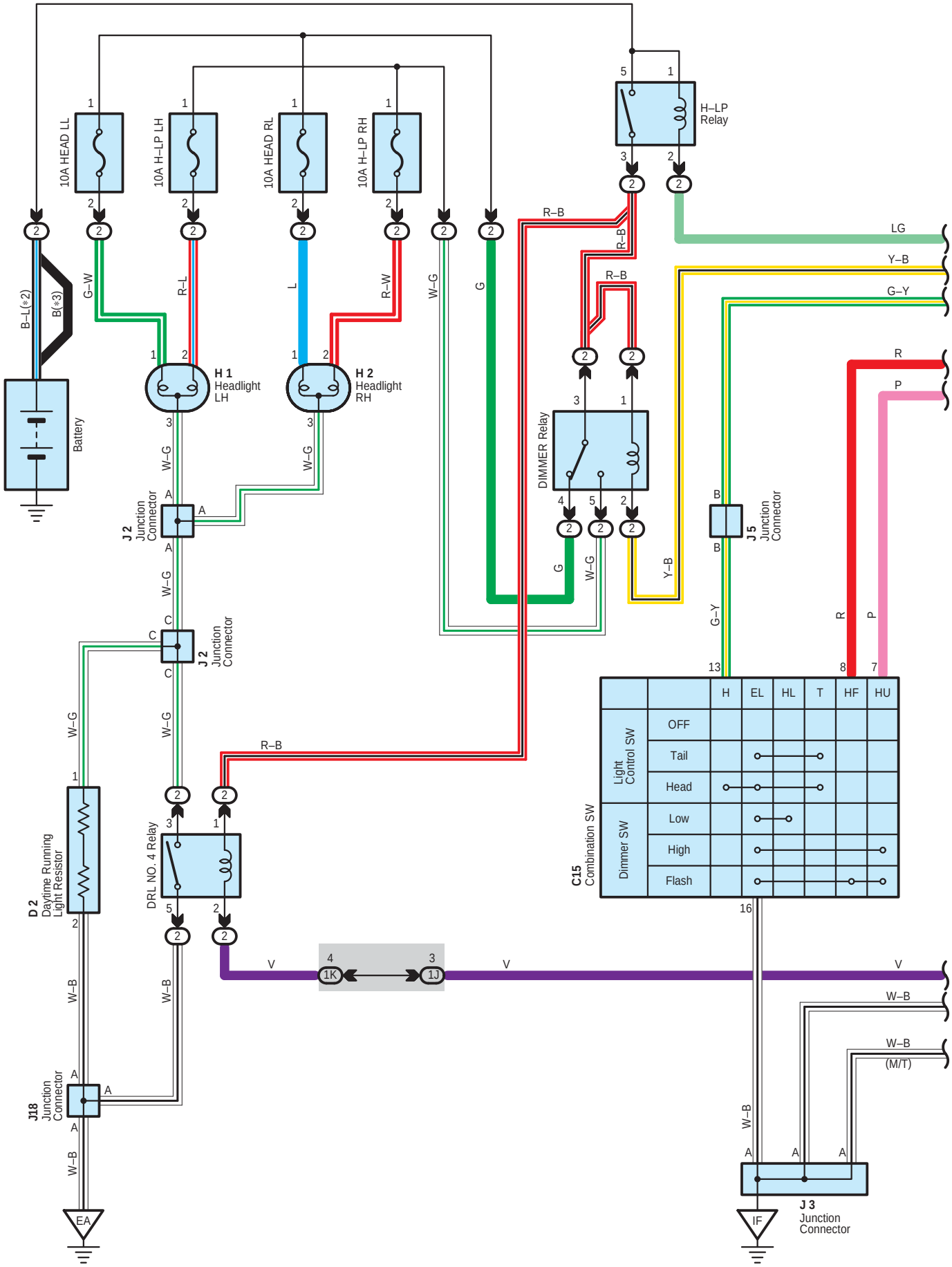
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |

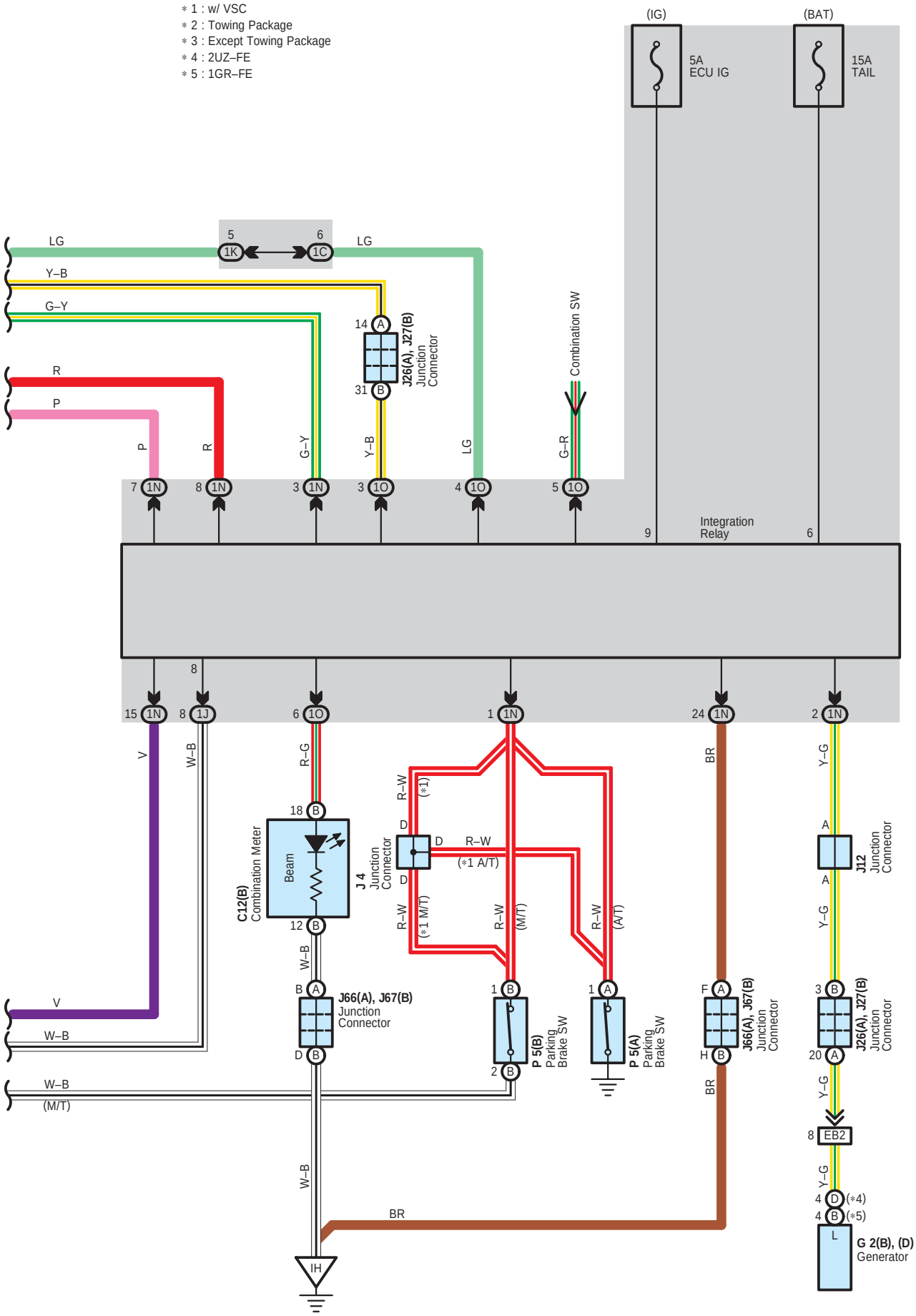
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |
| II | | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Headlight with DRL (Access/Standard Cab)




∗ 1 : w/ VSC
∗ 2 : Towing Package
∗ 3 : Except Towing Package
∗ 4 : 2UZ–FE
∗ 5 : 1GR–FE
(IG)
(BAT)
5A
ECU IG
15A
TAIL
LG
Y–B
G–Y
R
P
5
6
1K
1C
14
A
31
B
J26(A), J27(B)
Junction
Connector
Combination SW
P
R
G–Y
Y–B
LG
G–R
7 1N
8 1N
3 1N
3 1O
4 1O
5 1O
9
Integration
Relay
6
15 1N
8 1J
6 1O
1 1N
24 1N
2 1N
V
W–B
R–G
R–W
(∗1)
BR
Y–G
18
B
C12(B)
Combination Meter
Beam
12
B
J 4
Junction
Connector
D
D
R–W
(∗1 A/T)
R–W
(∗1 M/T)
R–W
(M/T)
R–W
(A/T)
A
J12
Junction
Connector
B
A
J66(A), J67(B)
Junction
Connector
D
B
1
B
2
B
P 5(B)
Parking
Brake SW
1
A
P 5(A)
Parking
Brake SW
F
A
H
B
J66(A), J67(B)
Junction
Connector
3
B
20
A
J26(A), J27(B)
Junction
Connector
8
EB2
4
D
(∗4)
4
B
(∗5)
L
G 2(B), (D)
Generator
W–B
(M/T)
IH

# Headlight with DRL (Access/Standard Cab)

**System Outline**

When the following conditions are met while the ignition SW is ON, and if the light control SW is at OFF or TAIL position, the daytime running light is controlled.

* Parking brake lever is released (Parking brake SW is OFF)
* Input signal from the generator

If any of the following conditions are met, the daytime running light control is canceled.

* Ignition SW is turned OFF.
* Light control SW is at HEAD position.

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C12 | B | 60 | H2 | 56 (2UZ–FE) | J18 | | 57 (2UZ–FE) |
| C15 | | 60 | | 58 (1GR–FE) | | | 59 (1GR–FE) |
| D2 | | 56 (2UZ–FE) | J2 | 57 (2UZ–FE) | J26 | A | 62 |
| | | 58 (1GR–FE) | | 59 (1GR–FE) | J27 | B | 62 |
| G2 | B | 58 (1GR–FE) | J3 | 62 | J66 | A | 62 |
| | D | 56 (2UZ–FE) | J4 | 62 | J67 | B | 62 |
| H1 | | 56 (2UZ–FE) | J5 | 62 | P5 | A | 62 |
| | | 58 (1GR–FE) | J12 | 62 | | B | 62 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 30 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | | |
| 1K | 30 (*2) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1O | | |

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

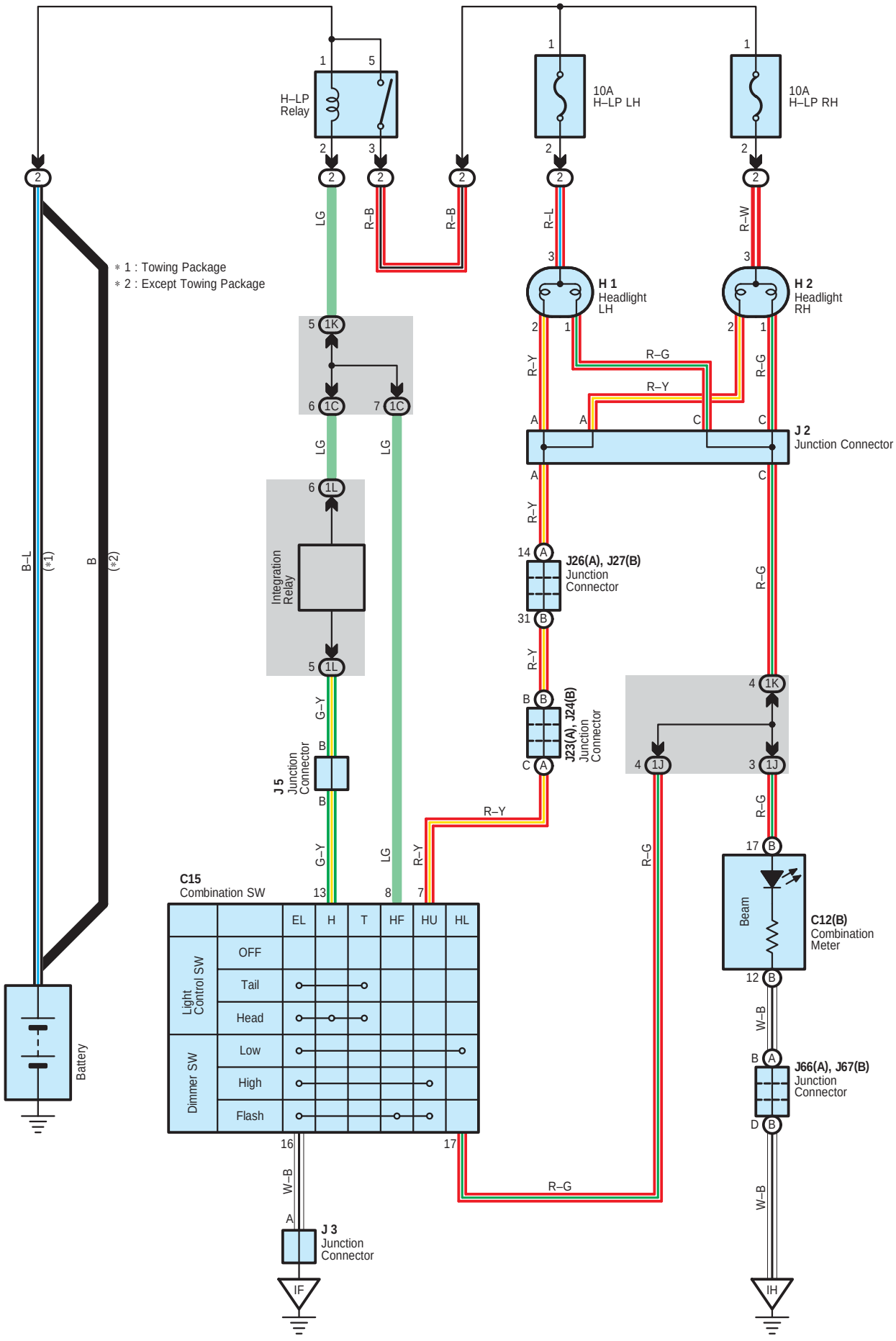
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| | 81 (1GR–FE) | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Headlight without DRL (Access/Standard Cab)



## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C12 B | 60 | J2 | 57 (2UZ–FE) | J26 A | 62 |
| C15 | 60 | | 59 (1GR–FE) | J27 B | 62 |
| H1 | 56 (2UZ–FE) | J3 | 62 | J66 A | 62 |
| | 58 (1GR–FE) | J5 | 62 | J67 B | 62 |
| H2 | 56 (2UZ–FE) | J23 A | 62 | | |
| | 58 (1GR–FE) | J24 B | 62 | | |

## : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

## : Junction Block and Wire Harness Connector

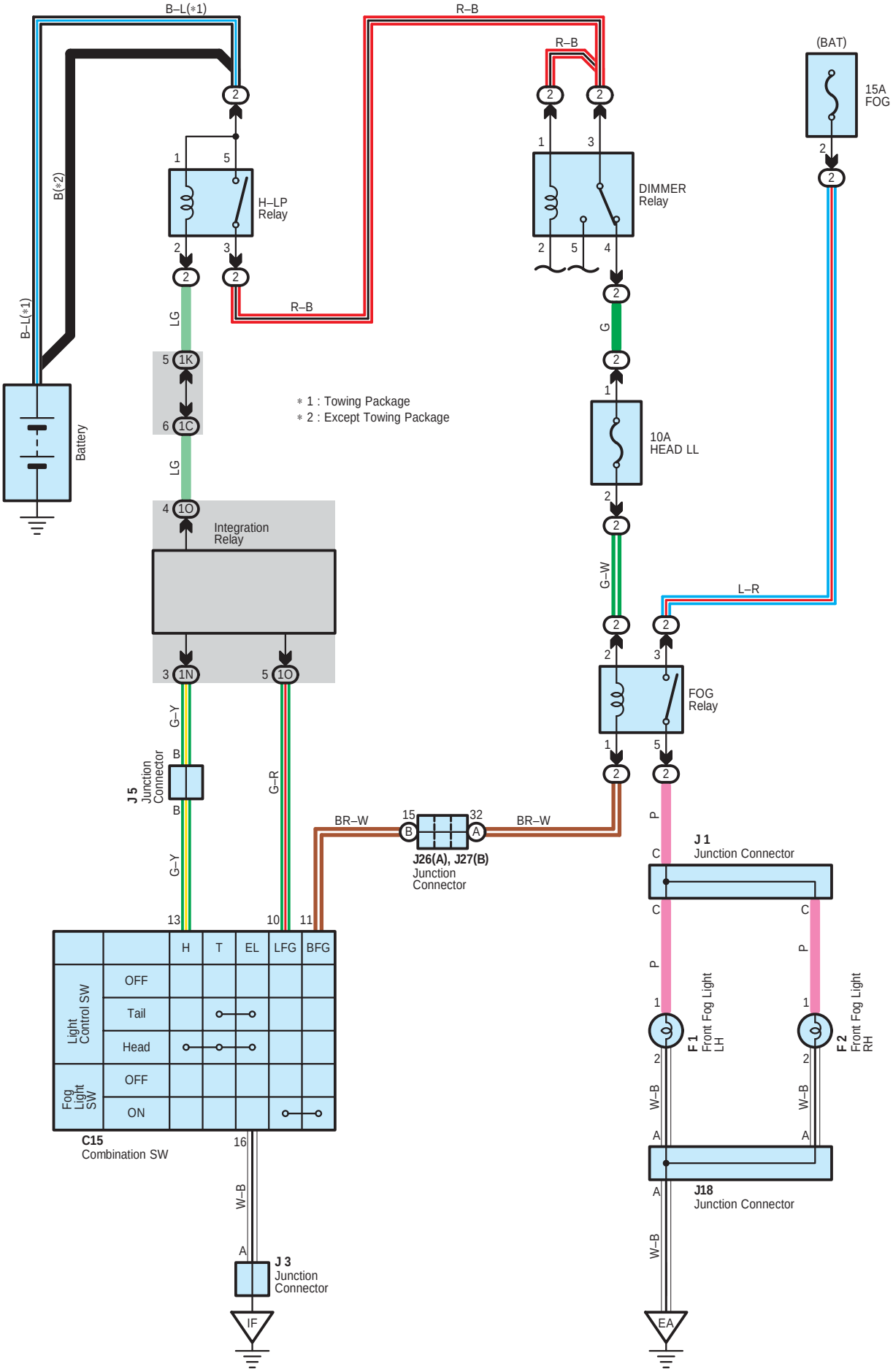
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Fog Light with DRL (Access/Standard Cab)



## : Parts Location

| Code | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|
| C15 | 60 | J1 | 57 (2UZ–FE) | J18 | | 59 (1GR–FE) |
| F1 | 56 (2UZ–FE) | | 59 (1GR–FE) | J26 | A | 62 |
| | 58 (1GR–FE) | J3 | 62 | J27 | B | 62 |
| F2 | 56 (2UZ–FE) | J5 | 62 | | | |
| | 58 (1GR–FE) | J18 | 57 (2UZ–FE) | | | |

## : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

## : Junction Block and Wire Harness Connector

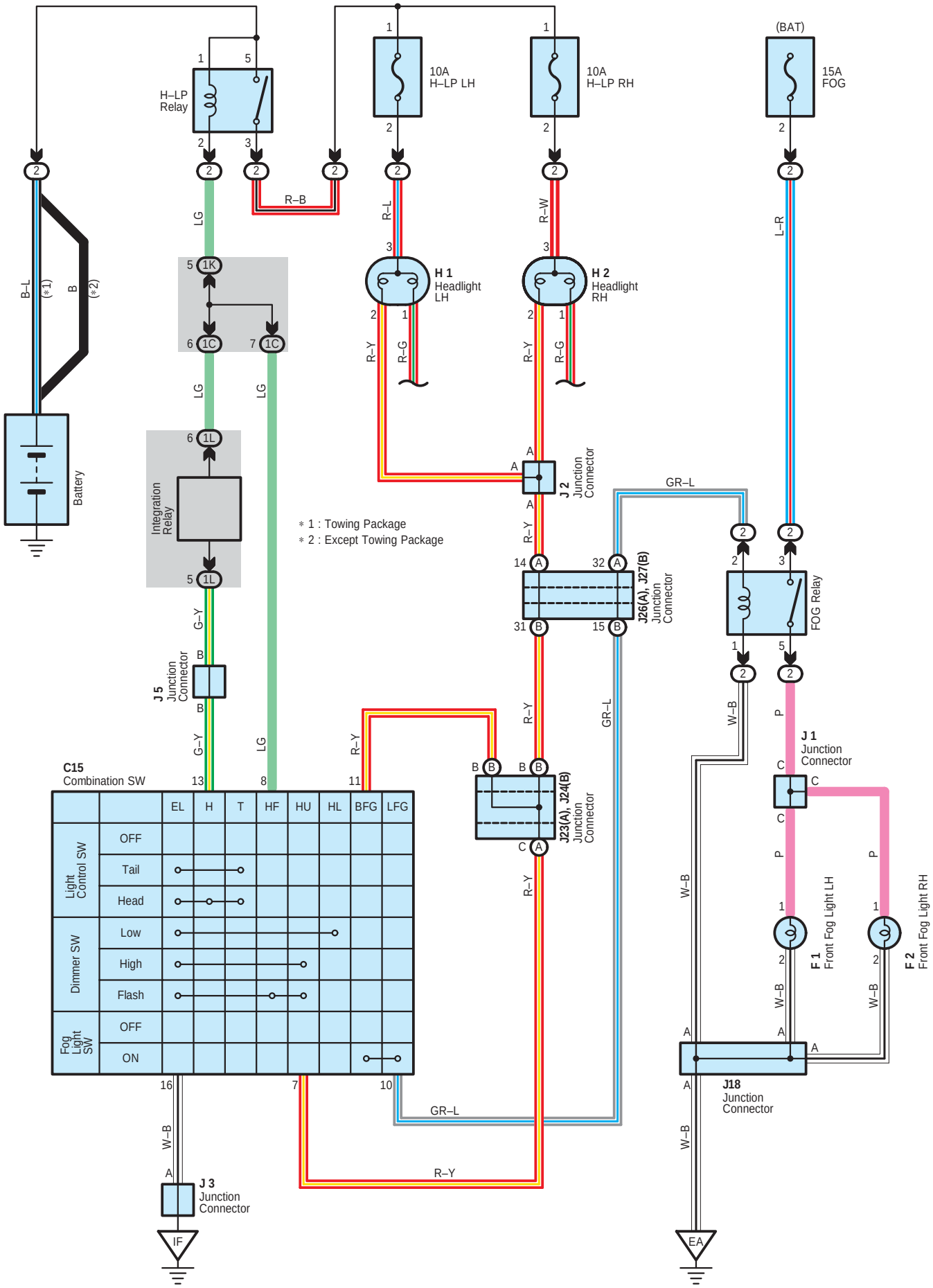
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 30 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | 30 (*2) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1O | | |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Fog Light without DRL (Access/Standard Cab)



### : Parts Location

| Code | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|
| C15 | 60 | H2 | 56 (2UZ–FE) | J5 | | 62 |
| F1 | 56 (2UZ–FE) | | 58 (1GR–FE) | J18 | | 57 (2UZ–FE) |
| | 58 (1GR–FE) | J1 | 57 (2UZ–FE) | | | 59 (1GR–FE) |
| F2 | 56 (2UZ–FE) | | 59 (1GR–FE) | J23 | A | 62 |
| | 58 (1GR–FE) | J2 | 57 (2UZ–FE) | J24 | B | 62 |
| H1 | 56 (2UZ–FE) | | 59 (1GR–FE) | J26 | A | 62 |
| | 58 (1GR–FE) | J3 | 62 | J27 | B | 62 |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |

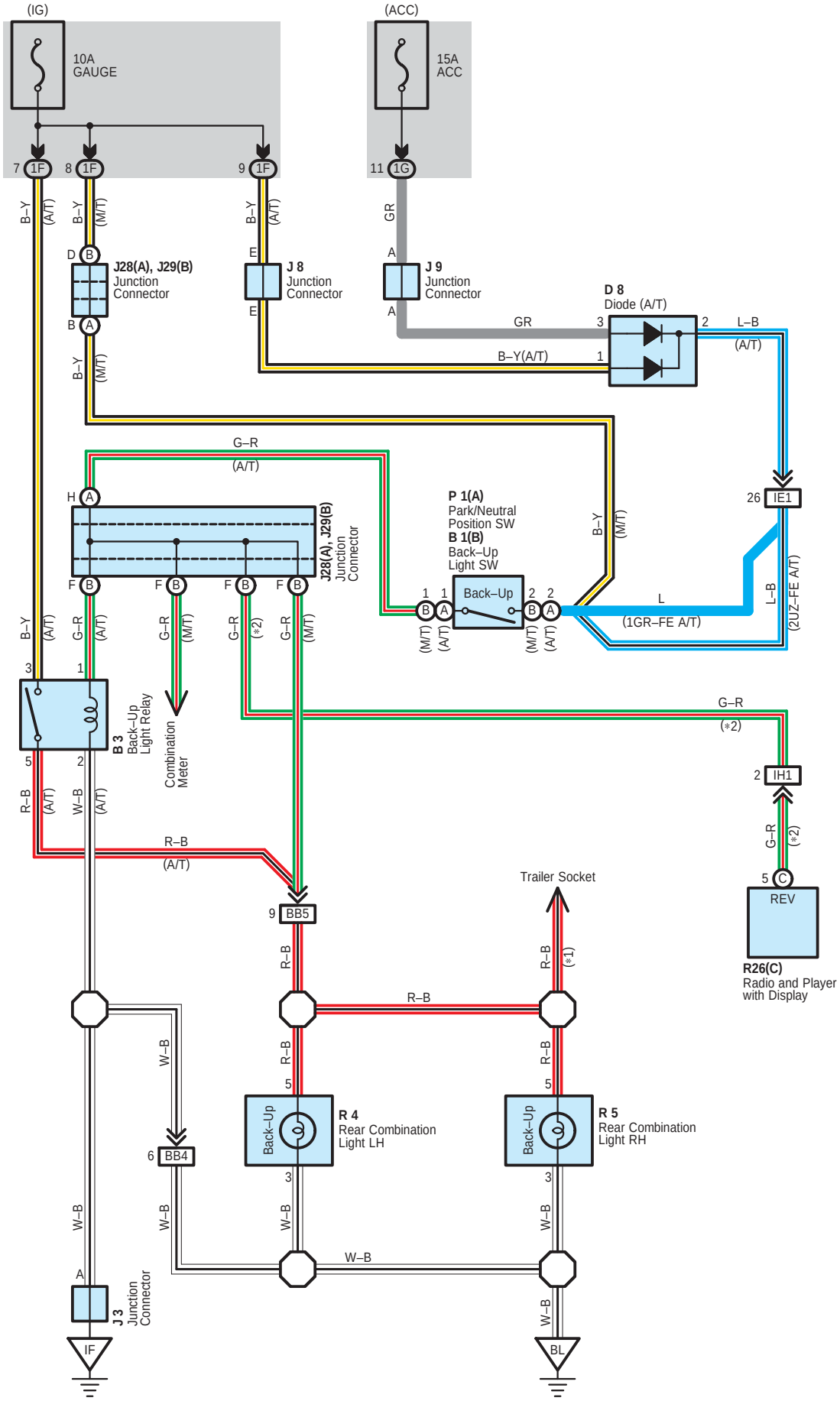
### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Back–Up Light (Access/Standard Cab)

∗ 1 : Towing Package
∗ 2 : w/ Navigation System



### : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B1 B | 58 (1GR–FE) | J9 | 62 | R4 | 64 (*3) |
| B3 | 60 | J28 A | 62 | | 65 (*4) |
| D8 | 61 | J29 B | 62 | R5 | 64 (*3) |
| J3 | 62 | P1 A | 57 (2UZ–FE) | | 65 (*4) |
| J8 | 62 | | 59 (1GR–FE) | R26 C | 63 |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

### : Connector Joining Wire Harness and Wire Harness

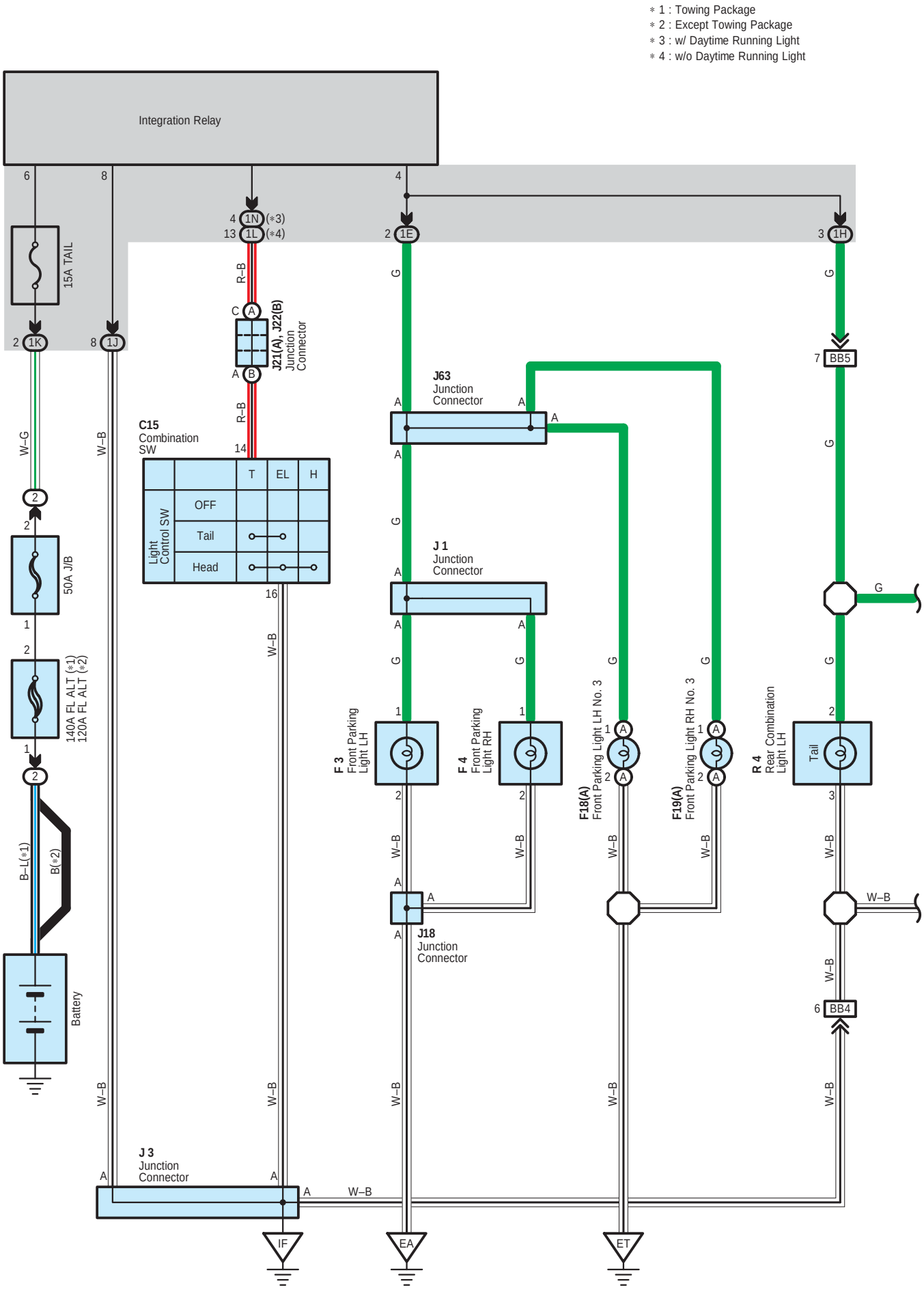
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |
| BB4 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BB5 | 84 (*3) | |
| | 85 (*4) | |

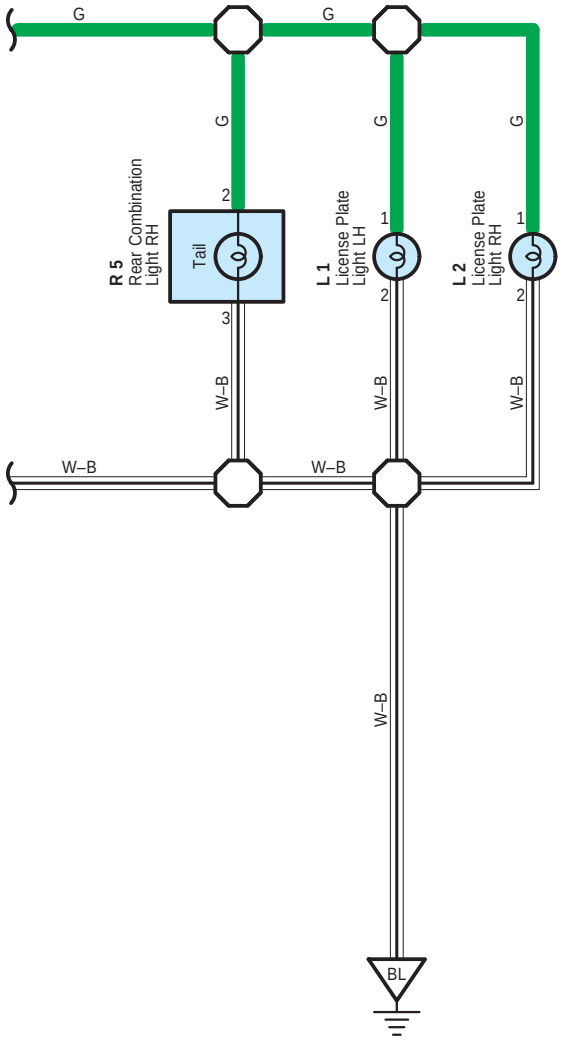
### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Taillight (Access/Standard Cab)




G
G
G
G
G
R 5
Rear Combination
Light RH
Tail
2
3
L 1
License Plate
Light LH
1
2
L 2
License Plate
Light RH
1
2
W–B
W–B
W–B
W–B
W–B
W–B
BL

# Taillight (Access/Standard Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C15 | 60 | J1 | 57 (2UZ–FE) | L1 | 64 (*3) |
| F3 | 56 (2UZ–FE) | | 59 (1GR–FE) | | 65 (*4) |
| | 58 (1GR–FE) | J3 | 62 | L2 | 64 (*3) |
| F4 | 56 (2UZ–FE) | J18 | 57 (2UZ–FE) | | 65 (*4) |
| | 58 (1GR–FE) | | 59 (1GR–FE) | R4 | 64 (*3) |
| F18 A | 56 (2UZ–FE) | J21 A | 62 | | 65 (*4) |
| | 58 (1GR–FE) | J22 B | 62 | R5 | 64 (*3) |
| F19 A | 56 (2UZ–FE) | J63 | 57 (2UZ–FE) | | 65 (*4) |
| | 58 (1GR–FE) | | 59 (1GR–FE) | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | |

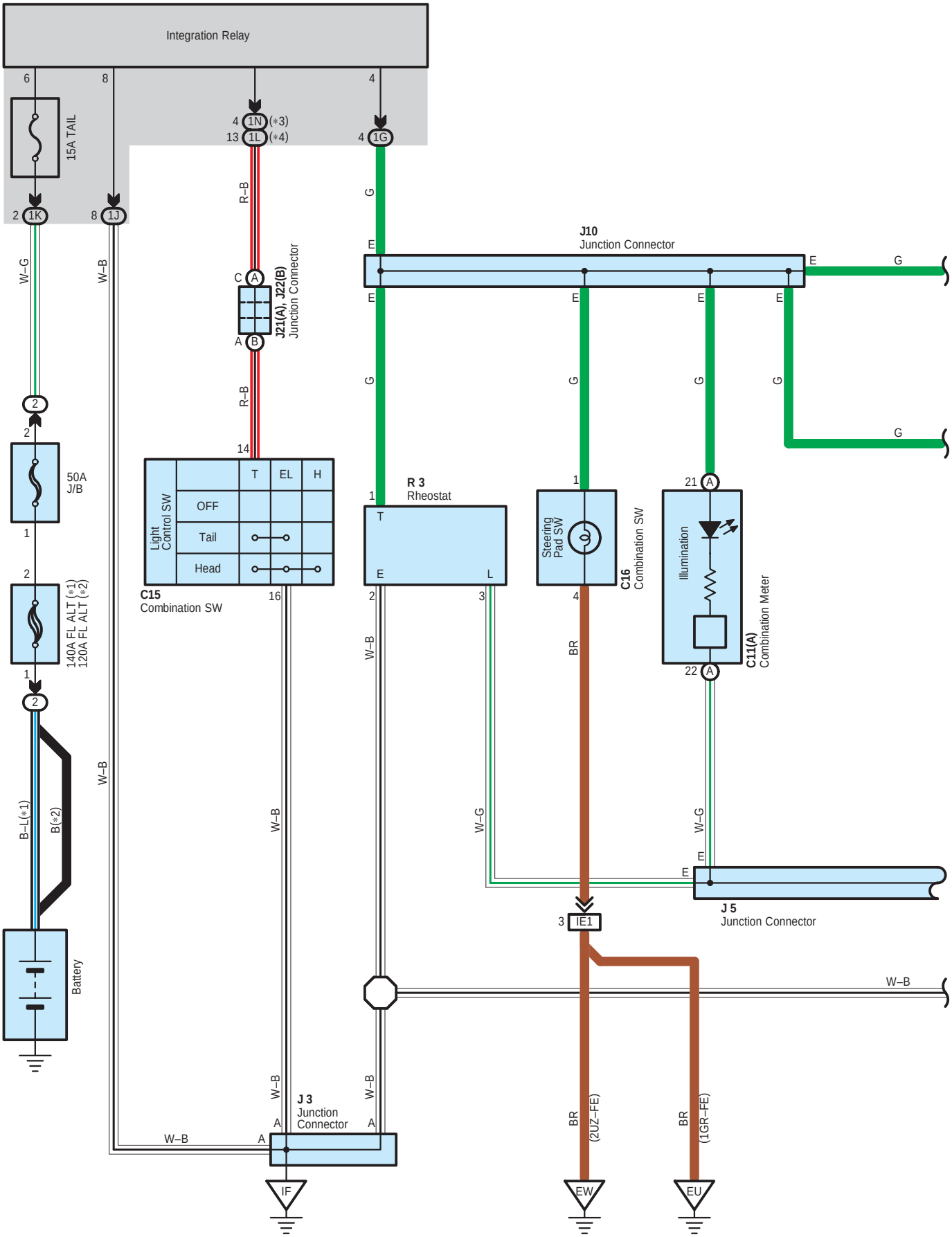
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BB4 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BB5 | 84 (*3) | |
| | 85 (*4) | |

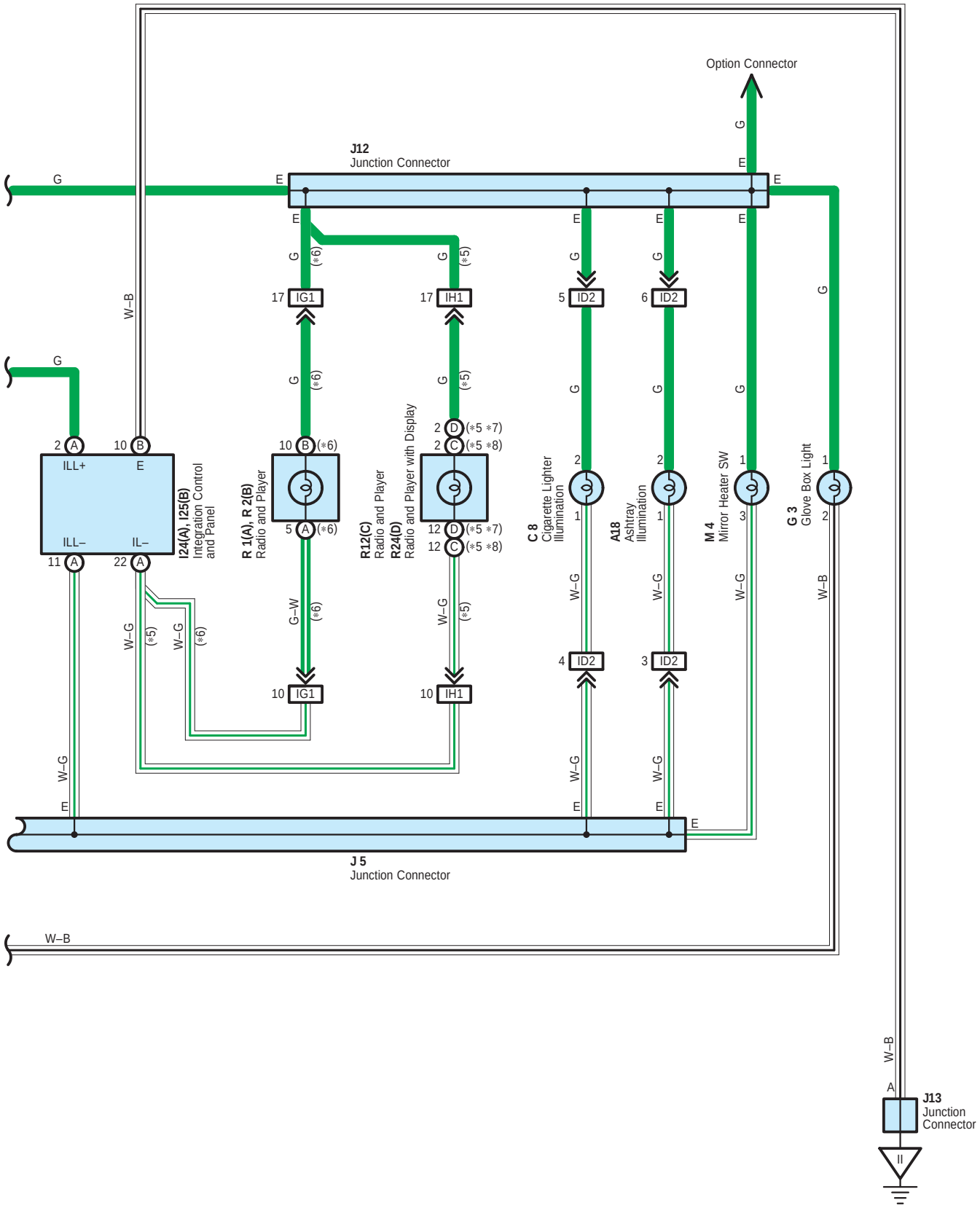
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


Integration Relay
15A TAIL
50A J/B
140A FL ALT (*1)
120A FL ALT (*2)
Battery
B–L(*1)
B(*2)
W–G
W–B
R–B
G
BR
J21(A), J22(B) Junction Connector
J10 Junction Connector
C15 Combination SW
Light Control SW
OFF
Tail
Head
T
EL
H
R 3 Rheostat
C16 Combination SW
Steering Pad SW
C11(A) Combination Meter
Illumination
J 5 Junction Connector
J 3 Junction Connector
IE1
IF
EW
EU
(2UZ–FE)
(1GR–FE)

∗ 1 : Towing Package
∗ 2 : Except Towing Package
∗ 3 : w/ Daytime Running Light
∗ 4 : w/o Daytime Running Light
∗ 5 : Separate Type Amplifier
∗ 6 : Built–in Type Amplifier
∗ 7 : w/ Navigation System
∗ 8 : w/o Navigation System



# Illumination (Access/Standard Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A18 | 60 | I25 B | 61 | J22 B | 62 |
| C8 | 60 | J3 | 62 | M4 | 62 |
| C11 A | 60 | J5 | 62 | R1 A | 63 |
| C15 | 60 | J10 | 62 | R2 B | 63 |
| C16 | 60 | J12 | 62 | R3 | 63 |
| G3 | 61 | J13 | 62 | R12 C | 63 |
| I24 A | 61 | J21 A | 62 | R24 D | 63 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | |

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

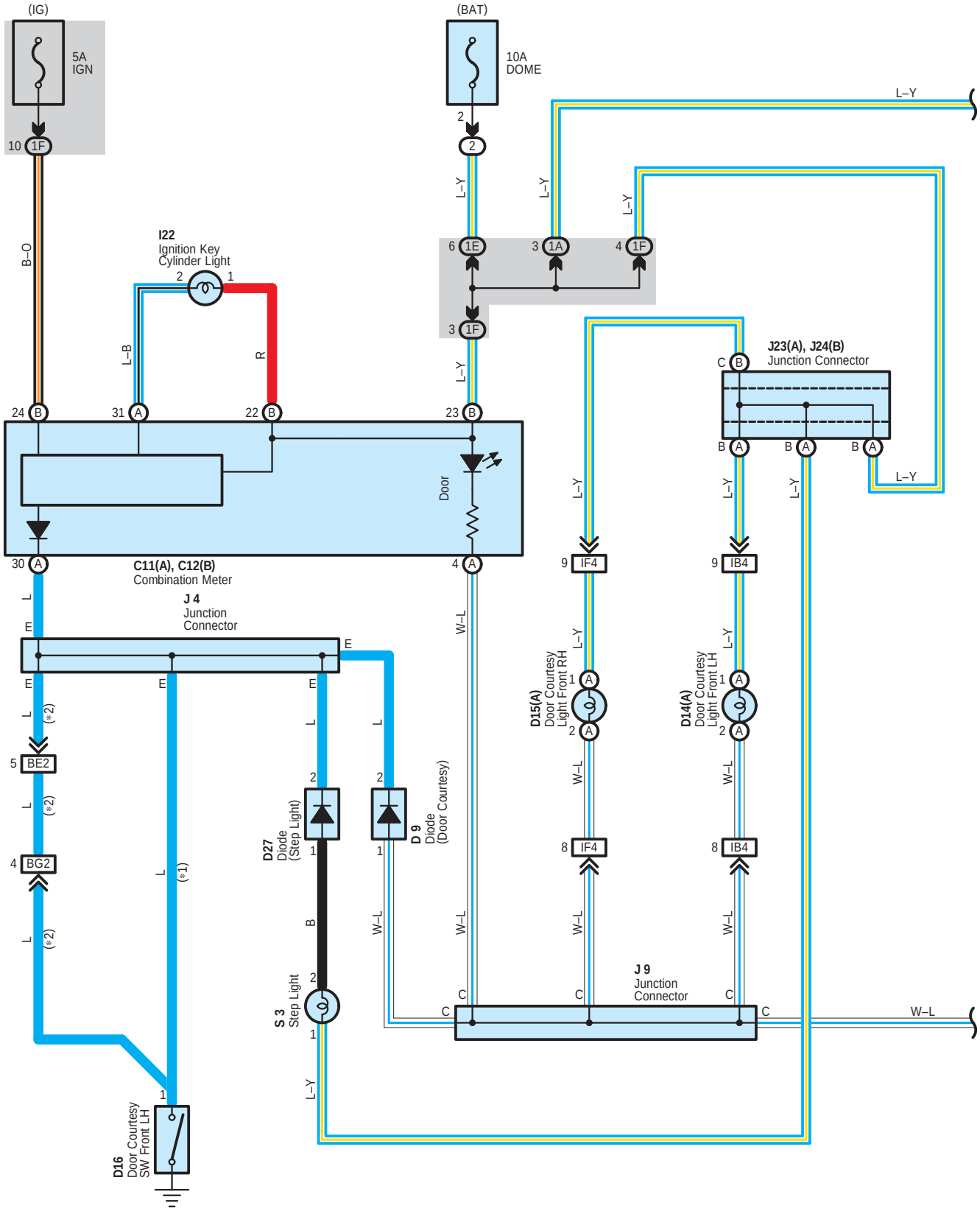
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| ID2 | 82 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IG1 | 83 | Cowl Wire and Instrument Panel No.2 Wire (Instrument Panel Brace RH) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |

**: Ground Points**

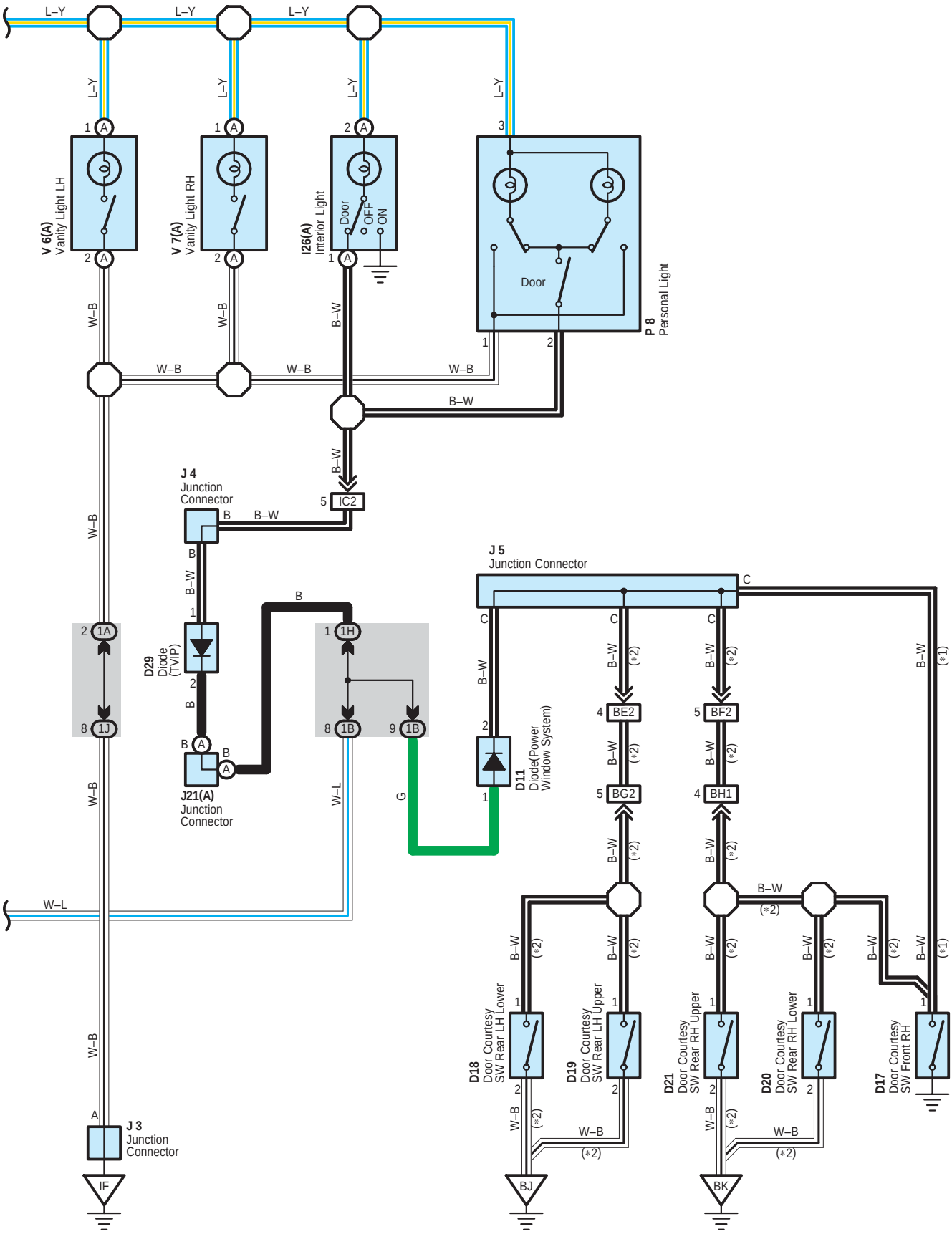
| Code | See Page | Ground Points Location |
|---|---|---|
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| IF | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Interior Light (Access/Standard Cab)



∗ 1 : Standard Cab
∗ 2 : Access Cab



# Interior Light (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C11 | A | 60 | D17 | 65 (*4) | J4 | | 62 |
| C12 | B | 60 | D18 | 64 (*3) | J5 | | 62 |
| D9 | | 61 | D19 | 64 (*3) | J9 | | 62 |
| D11 | | 61 | D20 | 64 (*3) | J21 | A | 62 |
| D14 | A | 64 (*3) | D21 | 64 (*3) | J23 | A | 62 |
| | | 65 (*4) | D27 | 61 | J24 | B | 62 |
| D15 | A | 64 (*3) | D29 | 61 | P8 | | 64 (*3) |
| | | 65 (*4) | I22 | 61 | | | 65 (*4) |
| D16 | | 64 (*3) | I26 | A 64 (*3) | S3 | | 63 |
| | | 65 (*4) | | 65 (*4) | V6 | A | 64 (*3) |
| D17 | | 64 (*3) | J3 | 62 | V7 | A | 64 (*3) |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1B | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

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

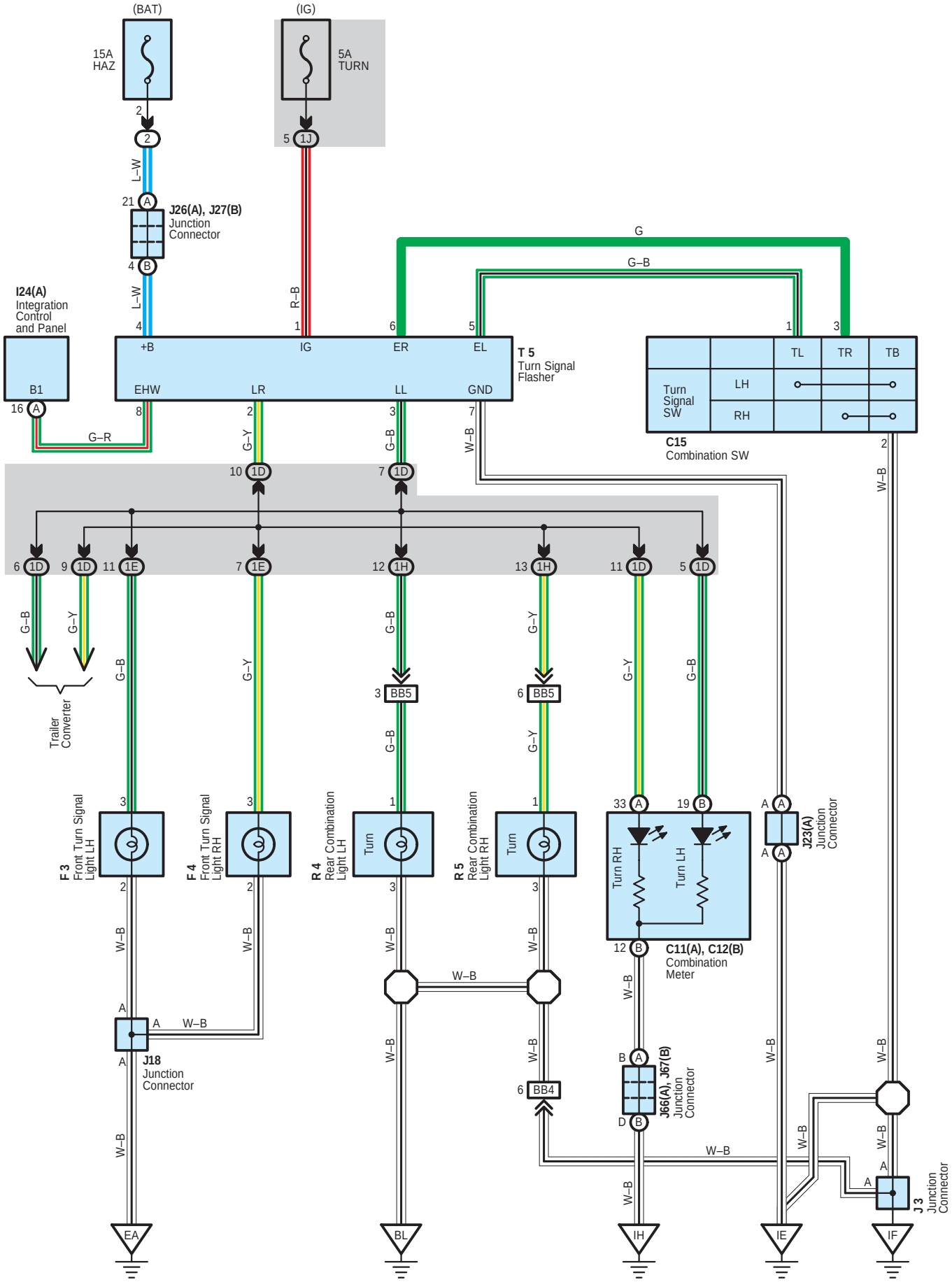
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB4 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IC2 | 82 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF4 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Turn Signal and Hazard Warning Light (Access/Standard Cab)



### : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C11 | A | 60 | I24 | A | 61 | J66 | A | 62 |
| C12 | B | 60 | J3 | | 62 | J67 | B | 62 |
| C15 | | 60 | J18 | | 57 (2UZ–FE) | R4 | | 64 (*3) |
| F3 | | 56 (2UZ–FE) | | | 59 (1GR–FE) | | | 65 (*4) |
| | | 58 (1GR–FE) | J23 | A | 62 | R5 | | 64 (*3) |
| F4 | | 56 (2UZ–FE) | J26 | A | 62 | | | 65 (*4) |
| | | 58 (1GR–FE) | J27 | B | 62 | T5 | | 63 |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

### : Connector Joining Wire Harness and Wire Harness

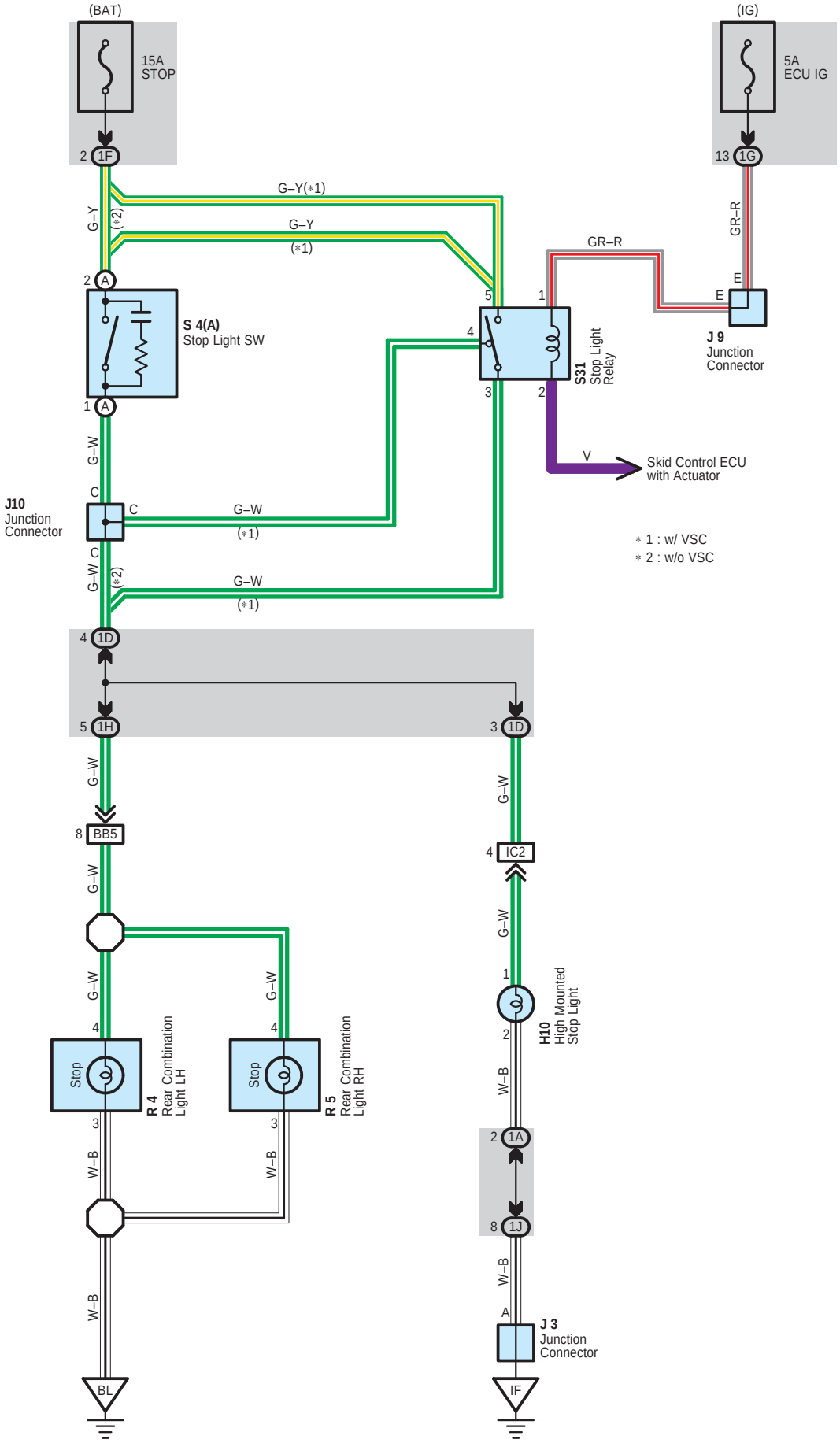
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BB4 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BB5 | 84 (*3) | |
| | 85 (*4) | |

### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Stop Light (Access/Standard Cab)



## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| H10 | 64 (*3) | J10 | 62 | R5 | 65 (*4) |
| | 65 (*4) | R4 | 64 (*3) | S4 A | 63 |
| J3 | 62 | | 65 (*4) | S31 | 63 |
| J9 | 62 | R5 | 64 (*3) | | |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

## : Connector Joining Wire Harness and Wire Harness

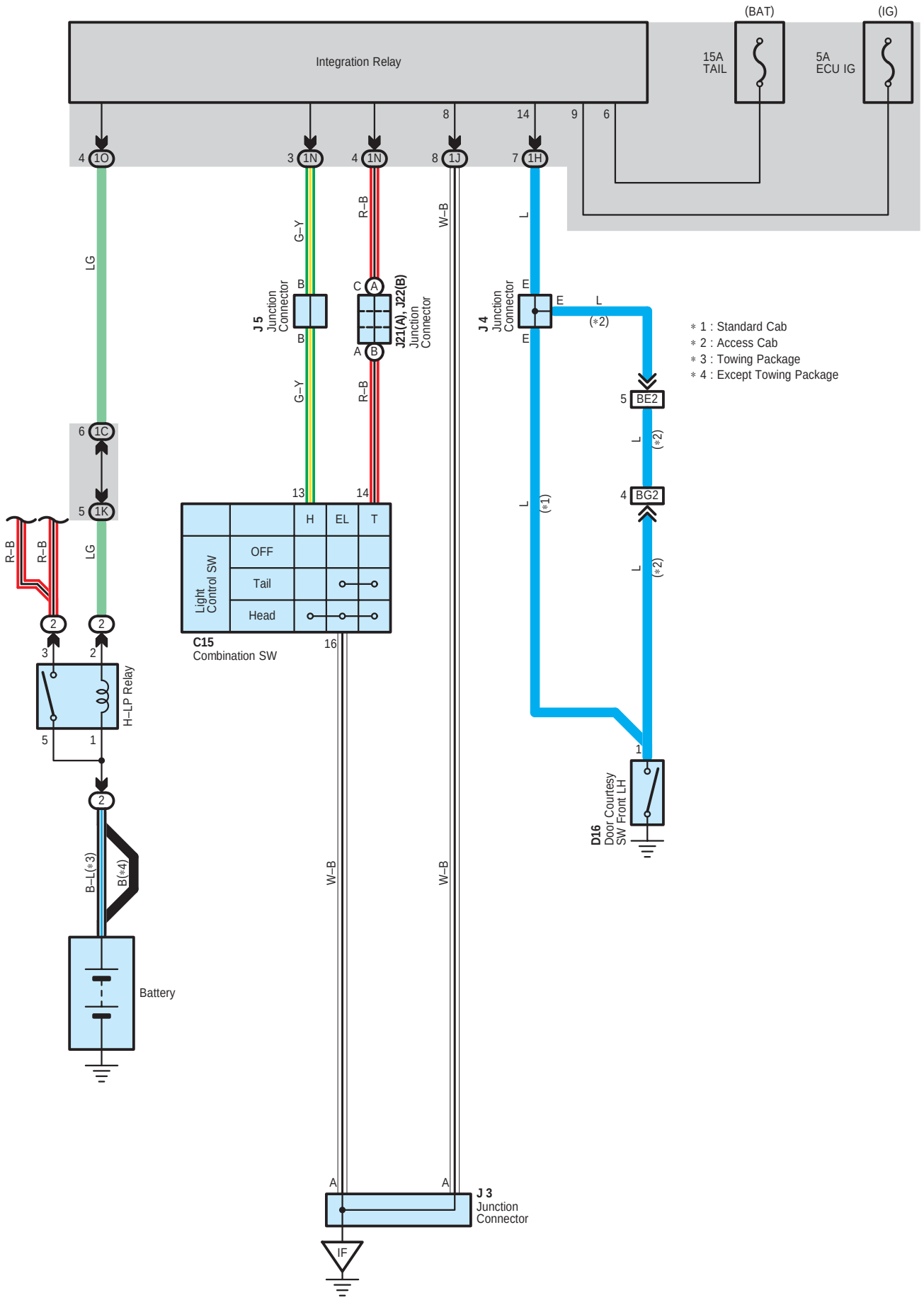
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IC2 | 82 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| BB5 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Light Auto Turn Off System with DRL (Access/Standard Cab)



**System Outline**

With the ignition SW turned on, the current flows to TERMINAL 9 of the integration relay through ECU IG fuse.
Voltage is applied at all times to TERMINAL 6 of the integration relay through the TAIL fuse, and through the H–LP relay coil side.

**1. Normal Lighting Operation**

<Turn taillight on>
With the light control SW turned to TAIL position, a signal is input into the integration relay. Due to this signal, the current flowing to TERMINAL 6 of the relay flows to TERMINAL 14 of the light control SW to TERMINAL 16 to GROUND, and taillights to turn on.

<Turn headlight on>
With the light control SW turned to HEAD position, a signal is input into the integration relay. Due to this signal, the current flowing to the relay flows to TERMINAL 13 of the light control SW to TERMINAL 16 to GROUND in the headlight circuit, and causes taillight and H–LP relay to turn the lights on. The taillight circuit is same as above.

**2. Light Auto Turn Off Operation**

With light on and ignition SW turned off (Input signal goes to TERMINAL 9 of the relay), when the driver's door is opened (Input signal goes to TERMINAL 14 of the relay), the relay operates and the current is cut off which flows from TERMINAL 6 and through the H–LP relay coil side of the relay to taillight circuit and headlight circuit.
As a result, all lights are turned off automatically.

**: Parts Location**

| Code | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|
| C15 | 60 | J3 | 62 | J21 | A | 62 |
| D16 | 64 (*3) | J4 | 62 | J22 | B | 62 |
| | 65 (*4) | J5 | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 30 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1H | | |
| 1J | | |
| 1K | 30 (*2) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1O | | |

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

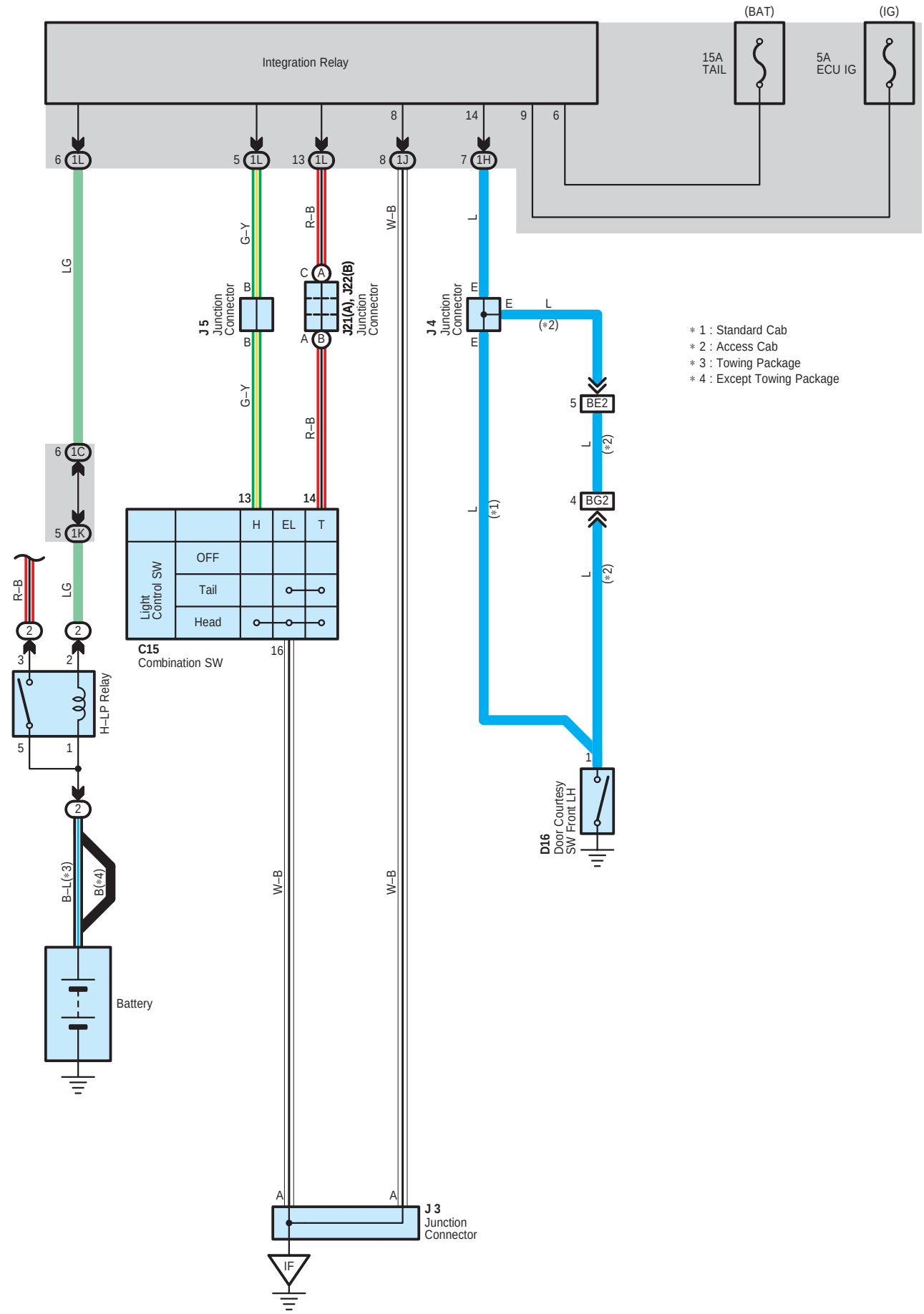
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Light Auto Turn Off System without DRL (Access/Standard Cab)



**System Outline**

With the ignition SW turned on, the current flows to TERMINAL 9 of the integration relay through ECU IG fuse.
Voltage is applied at all times to TERMINAL 6 of the integration relay through the TAIL fuse, and through the H–LP relay coil side.

**1. Normal Lighting Operation**

<Turn taillight on>
With the light control SW turned to TAIL position, a signal is input into the integration relay. Due to this signal, the current flowing to TERMINAL 6 of the relay flows to TERMINAL 14 of the light control SW to TERMINAL 16 to GROUND, and taillights to turn on.

<Turn headlight on>
With the light control SW turned to HEAD position, a signal is input into the integration relay. Due to this signal, the current flowing to the relay flows to TERMINAL 13 of the light control SW to TERMINAL 16 to GROUND in the headlight circuit, and causes taillight and H–LP relay to turn the lights on. The taillight circuit is same as above.

**2. Light Auto Turn Off Operation**

With light on and ignition SW turned off (Input signal goes to TERMINAL 9 of the relay), when the driver's door is opened (Input signal goes to TERMINAL 14 of the relay), the relay operates and the current is cut off which flows from TERMINAL 6 and through the H–LP relay coil side of the relay to taillight circuit and headlight circuit.
As a result, all lights are turned off automatically.

**: Parts Location**

| Code | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|
| C15 | 60 | J3 | 62 | J21 | A | 62 |
| D16 | 64 (*3) | J4 | 62 | J22 | B | 62 |
| | 65 (*4) | J5 | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1H | | |
| 1J | | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |

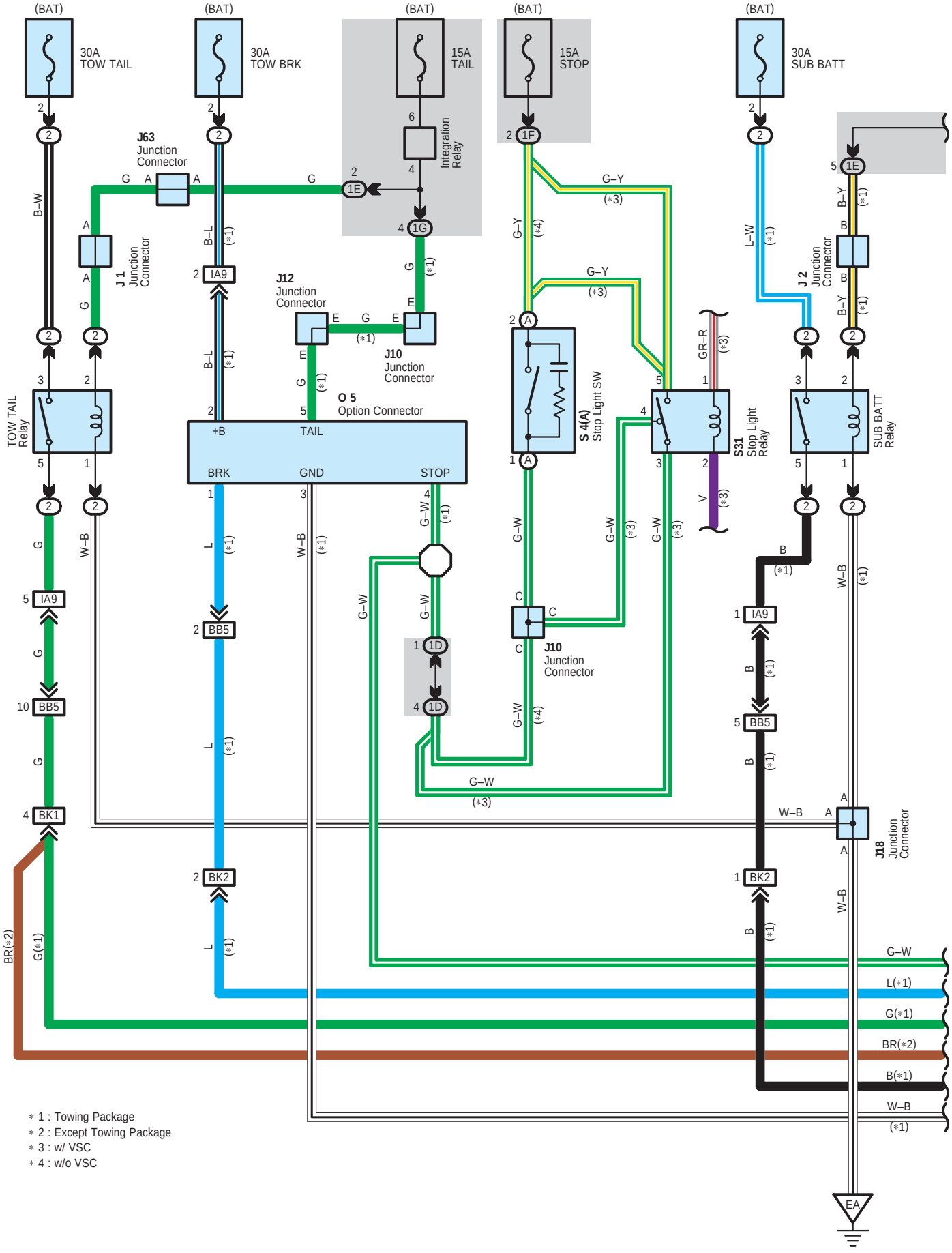
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |

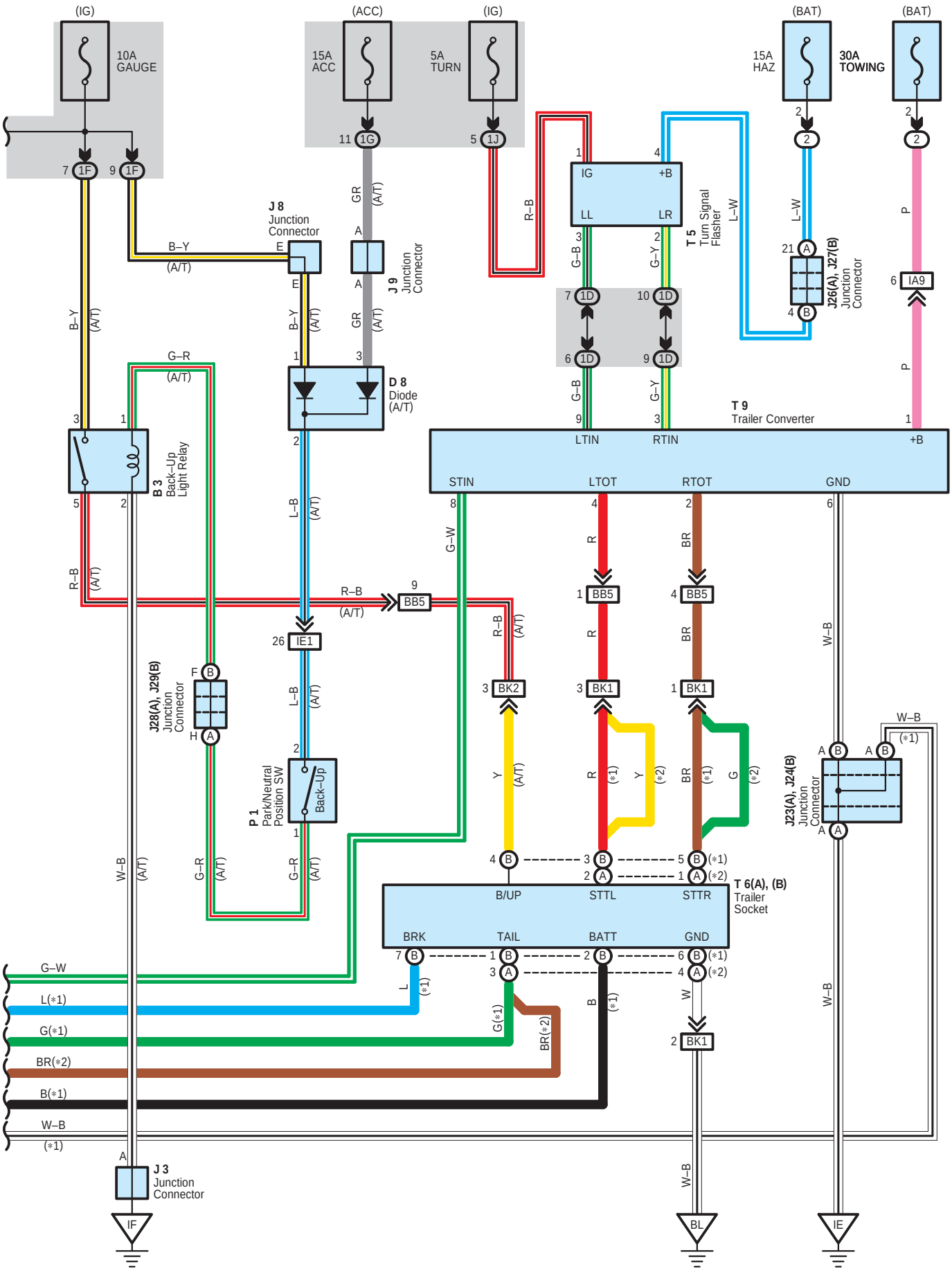
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat




* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ VSC
* 4 : w/o VSC


(IG)
10A GAUGE
(ACC)
15A ACC
(IG)
5A TURN
(BAT)
15A HAZ
30A TOWING
(BAT)
7 1F
9 1F
11 1G
5 1J
2
2
2
J 8 Junction Connector
J 9 Junction Connector
B–Y (A/T)
GR (A/T)
R–B
IG
+B
LL
LR
T 5 Turn Signal Flasher
L–W
G–B
G–Y
21 A
4 B
J26(A), J27(B) Junction Connector
P
6 IA9
7 1D
10 1D
6 1D
9 1D
D 8 Diode (A/T)
G–R (A/T)
T 9 Trailer Converter
LTIN
RTIN
+B
B 3 Back–Up Light Relay
STIN
LTOT
RTOT
GND
L–B (A/T)
G–W
R
BR
W–B
9 BB5
26 IE1
J28(A), J29(B) Junction Connector
F B
H A
P 1 Park/Neutral Position SW
Back–Up
3 BK2
3 BK1
1 BK1
Y (A/T)
R (*1)
Y (*2)
BR (*1)
G (*2)
J23(A), J24(B) Junction Connector
W–B (*1)
4 B
3 B
5 B (*1)
2 A
1 A (*2)
B/UP
STTL
STTR
T 6(A), (B) Trailer Socket
BRK
TAIL
BATT
GND
7 B
1 B
2 B
6 B (*1)
3 A
4 A (*2)
L (*1)
G (*1)
BR (*2)
B (*1)
W (*1)
2 BK1
G–W
L (*1)
G (*1)
BR (*2)
B (*1)
W–B (*1)
A
J 3 Junction Connector
IF
BL
IE

# Trailer Towing (Access/Standard Cab)

**: Parts Location**

| Code | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| B3 | 60 | J18 | | 57 (2UZ–FE) | P1 | | 57 (2UZ–FE) |
| D8 | 61 | | | 59 (1GR–FE) | | | 59 (1GR–FE) |
| J1 | 57 (2UZ–FE) | J23 | A | 62 | S4 | A | 63 |
| | 59 (1GR–FE) | J24 | B | 62 | S31 | | 63 |
| J2 | 57 (2UZ–FE) | J26 | A | 62 | T5 | | 63 |
| | 59 (1GR–FE) | J27 | B | 62 | T6 | A | 64 (*3) |
| J3 | 62 | J28 | A | 62 | | | 65 (*4) |
| J8 | 62 | J29 | B | 62 | | B | 64 (*3) |
| J9 | 62 | J63 | | 57 (2UZ–FE) | | | 65 (*4) |
| J10 | 62 | | | 59 (1GR–FE) | T9 | | 63 |
| J12 | 62 | O5 | | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

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

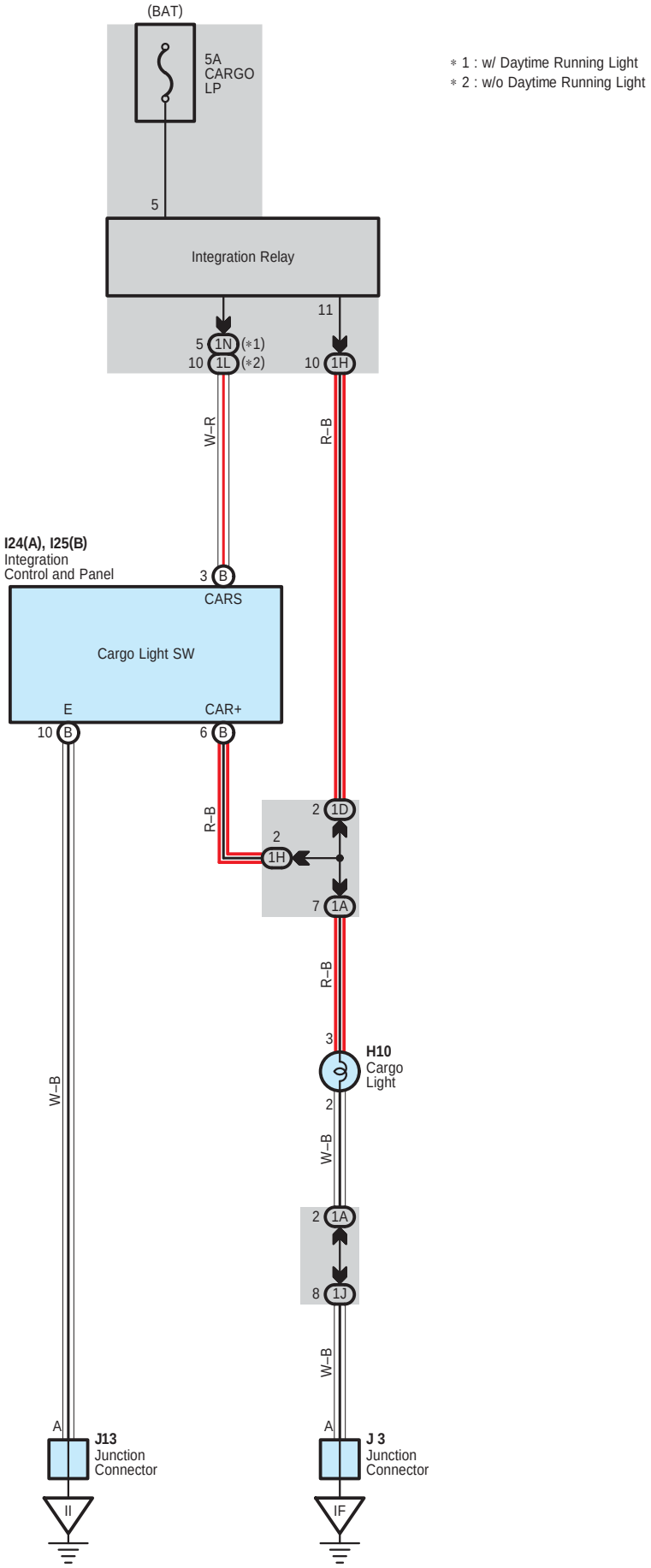
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB5 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BK1 | 84 (*3) | Frame Wire and Frame No.3 Wire (Near the License Plate Light) |
| | 85 (*4) | |
| BK2 | 84 (*3) | |
| | 85 (*4) | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IE | 82 | Left Kick Panel |
| IF | | |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Cargo Light (Access/Standard Cab)



**○ : Parts Location**

| Code | See Page | Code | | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| H10 | 64 (*3) | I24 | A | 61 | J3 | 62 |
| | 65 (*4) | I25 | B | 61 | J13 | 62 |

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

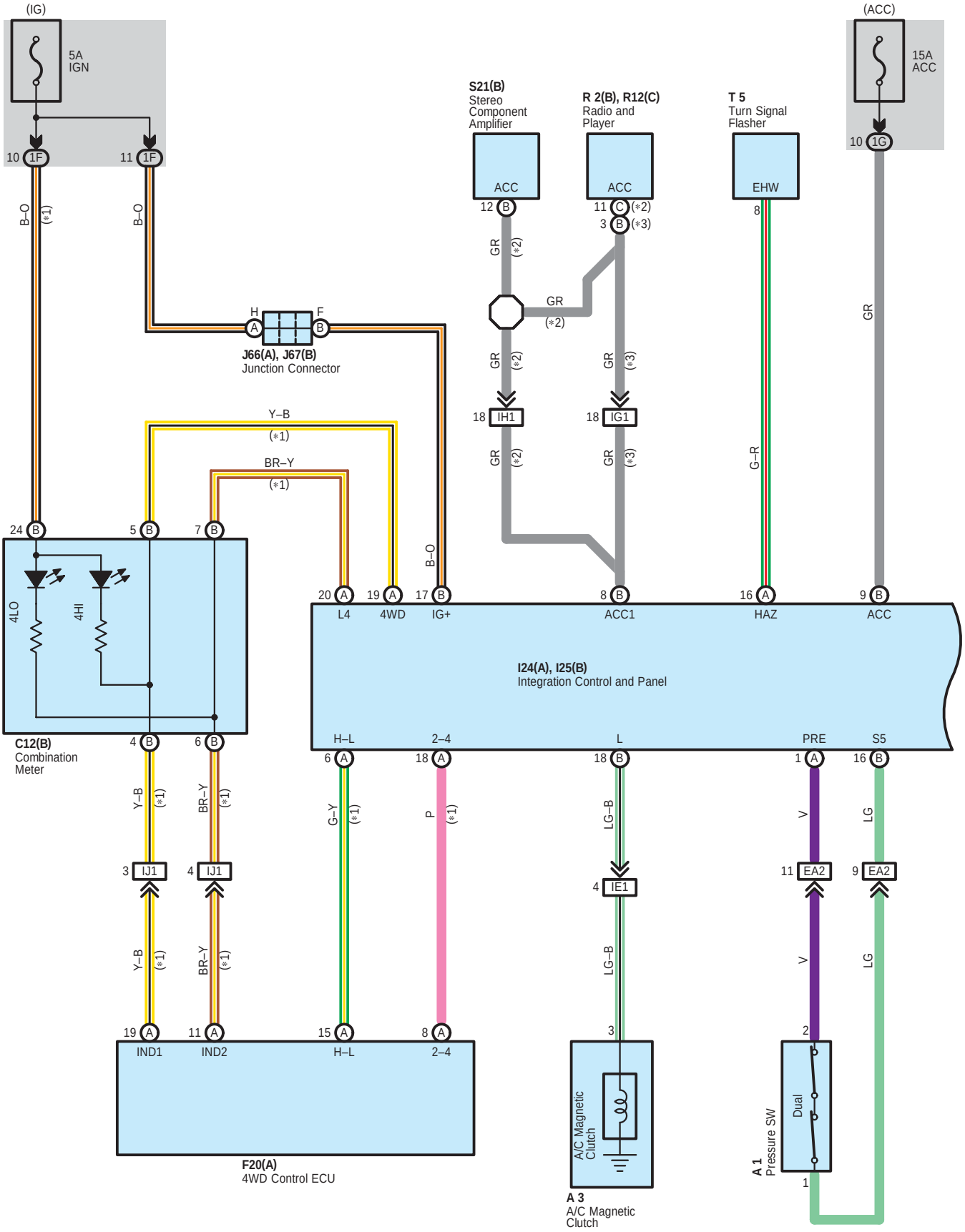
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1L | 27 (*1) | |
| 1N | 31 (*2) | |

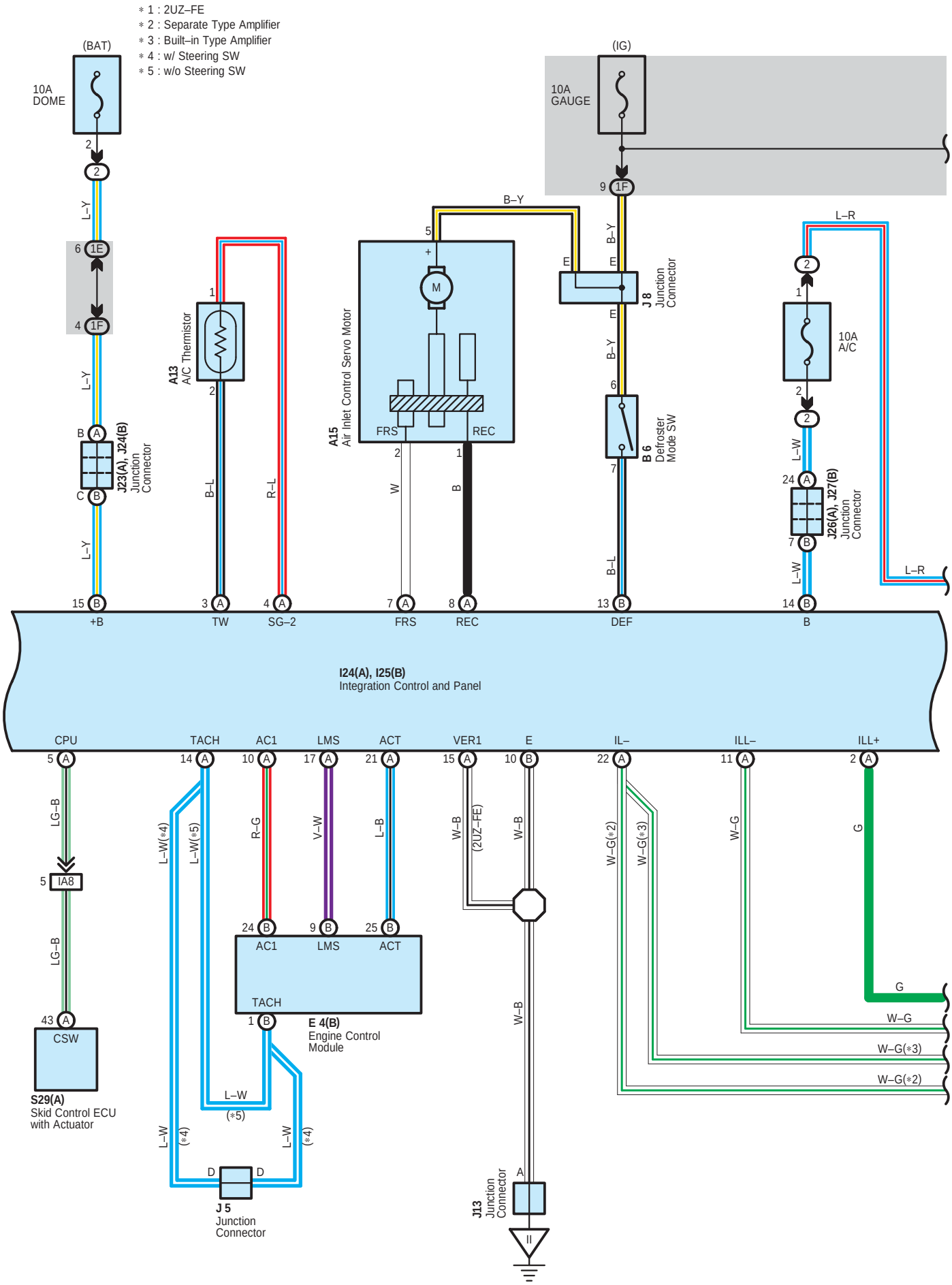
**▽ : Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |

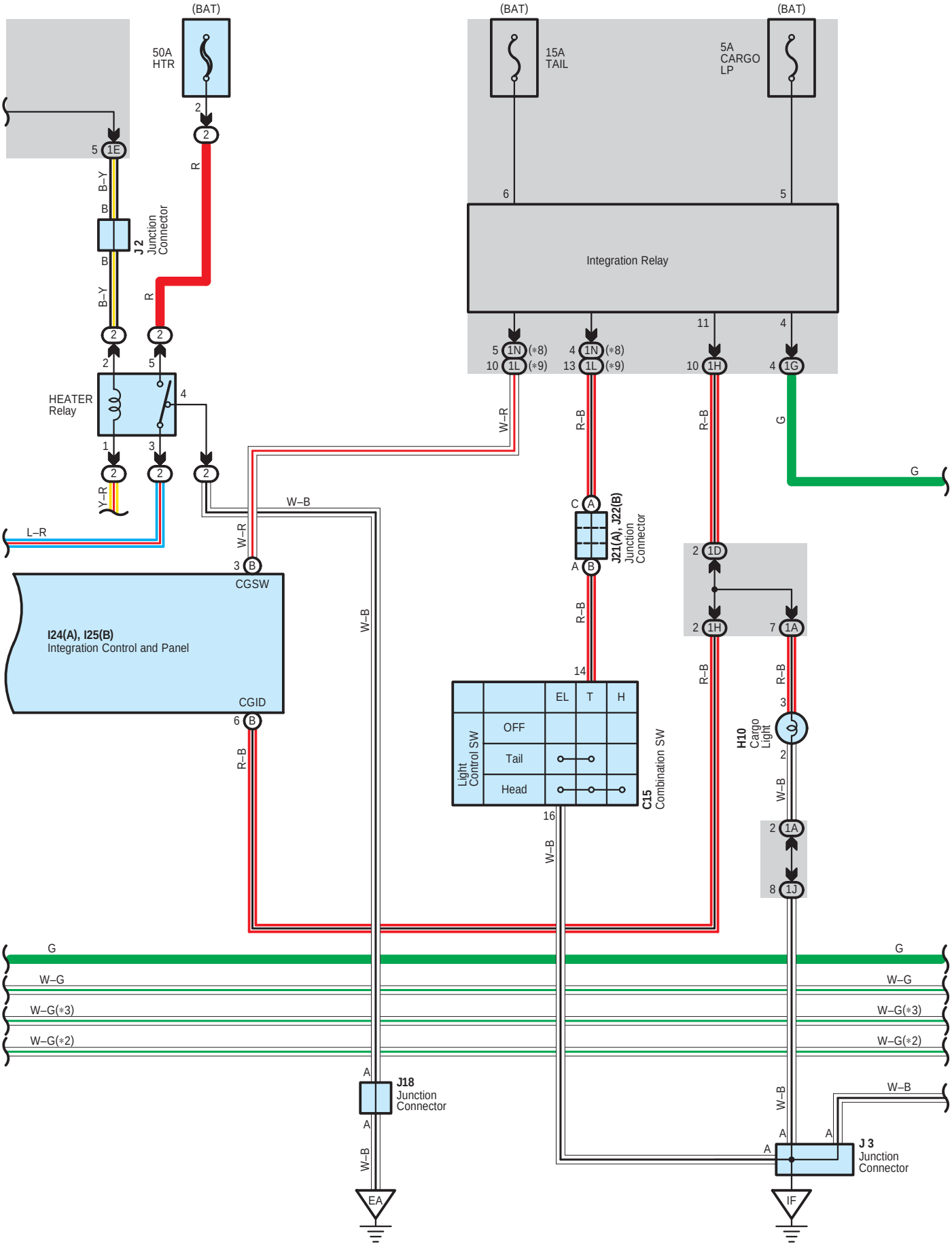
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Center Cluster Integration Control System (Access/Standard Cab)

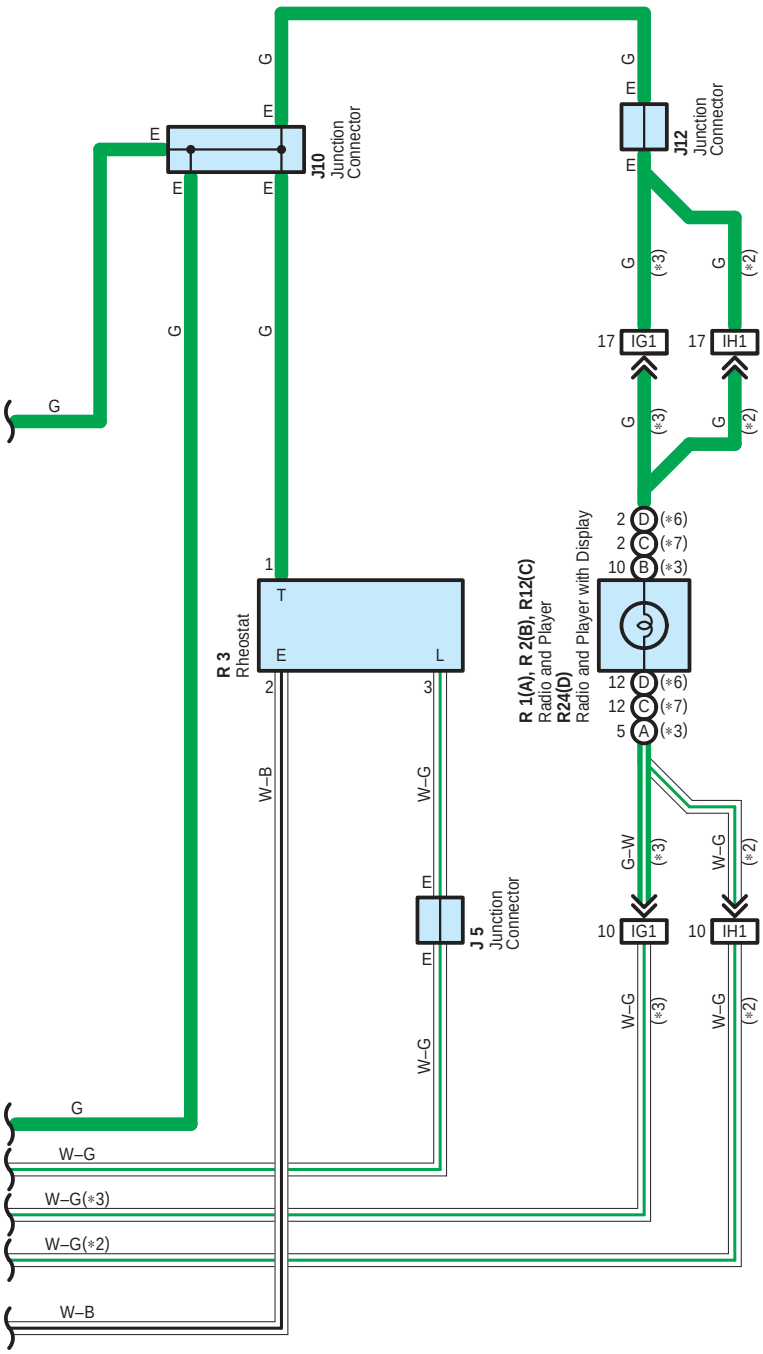



∗1 : 2UZ–FE
∗2 : Separate Type Amplifier
∗3 : Built–in Type Amplifier
∗4 : w/ Steering SW
∗5 : w/o Steering SW
(BAT)
10A DOME
(IG)
10A GAUGE
A13 A/C Thermistor
A15 Air Inlet Control Servo Motor
FRS
REC
J8 Junction Connector
B6 Defroster Mode SW
10A A/C
J23(A), J24(B) Junction Connector
J26(A), J27(B) Junction Connector
+B
TW
SG–2
FRS
REC
DEF
B
I24(A), I25(B)
Integration Control and Panel
CPU
TACH
AC1
LMS
ACT
VER1
E
IL–
ILL–
ILL+
IA8
CSW
S29(A)
Skid Control ECU with Actuator
E 4(B)
Engine Control Module
J5 Junction Connector
J13 Junction Connector
(2UZ–FE)
L–W
(∗5)
(∗4)

# Center Cluster Integration Control System (Access/Standard Cab)



∗ 2 : Separate Type Amplifier
∗ 3 : Built–in Type Amplifier
∗ 6 : Separate Type Amplifier, w/ Navigation System
∗ 7 : Separate Type Amplifier, w/o Navigation System
∗ 8 : w/ Daytime Running Light
∗ 9 : w/o Daytime Running Light



# Center Cluster Integration Control System (Access/Standard Cab)

**System Outline**

The integration control panel is composed by design components such as the cluster, resistor, heater control panel, and SW. The integration control panel controls systems such as the air conditioning, cargo light, 4WD and hazard warning light, clock, and the SRS.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A1 | 56 (2UZ–FE) | I25 B | 61 | J24 B | 62 |
| | 58 (1GR–FE) | J2 | 57 (2UZ–FE) | J26 A | 62 |
| A3 | 56 (2UZ–FE) | | 59 (1GR–FE) | J27 B | 62 |
| | 58 (1GR–FE) | J3 | 62 | J66 A | 62 |
| A13 | 60 | J5 | 62 | J67 B | 62 |
| A15 | 60 | J8 | 62 | R1 A | 63 |
| B6 | 60 | J10 | 62 | R2 B | 63 |
| C12 B | 60 | J12 | 62 | R3 | 63 |
| C15 | 60 | J13 | 62 | R12 C | 63 |
| E4 B | 61 | J18 | 57 (2UZ–FE) | R24 D | 63 |
| F20 A | 61 | | 59 (1GR–FE) | S21 B | 64 (*3) |
| H10 | 64 (*3) | J21 A | 62 | S29 A | 57 (2UZ–FE) |
| | 65 (*4) | J22 B | 62 | | 59 (1GR–FE) |
| I24 A | 61 | J23 A | 62 | T5 | 63 |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1L | 27 (*1) | |
| 1N | 31 (*2) | |

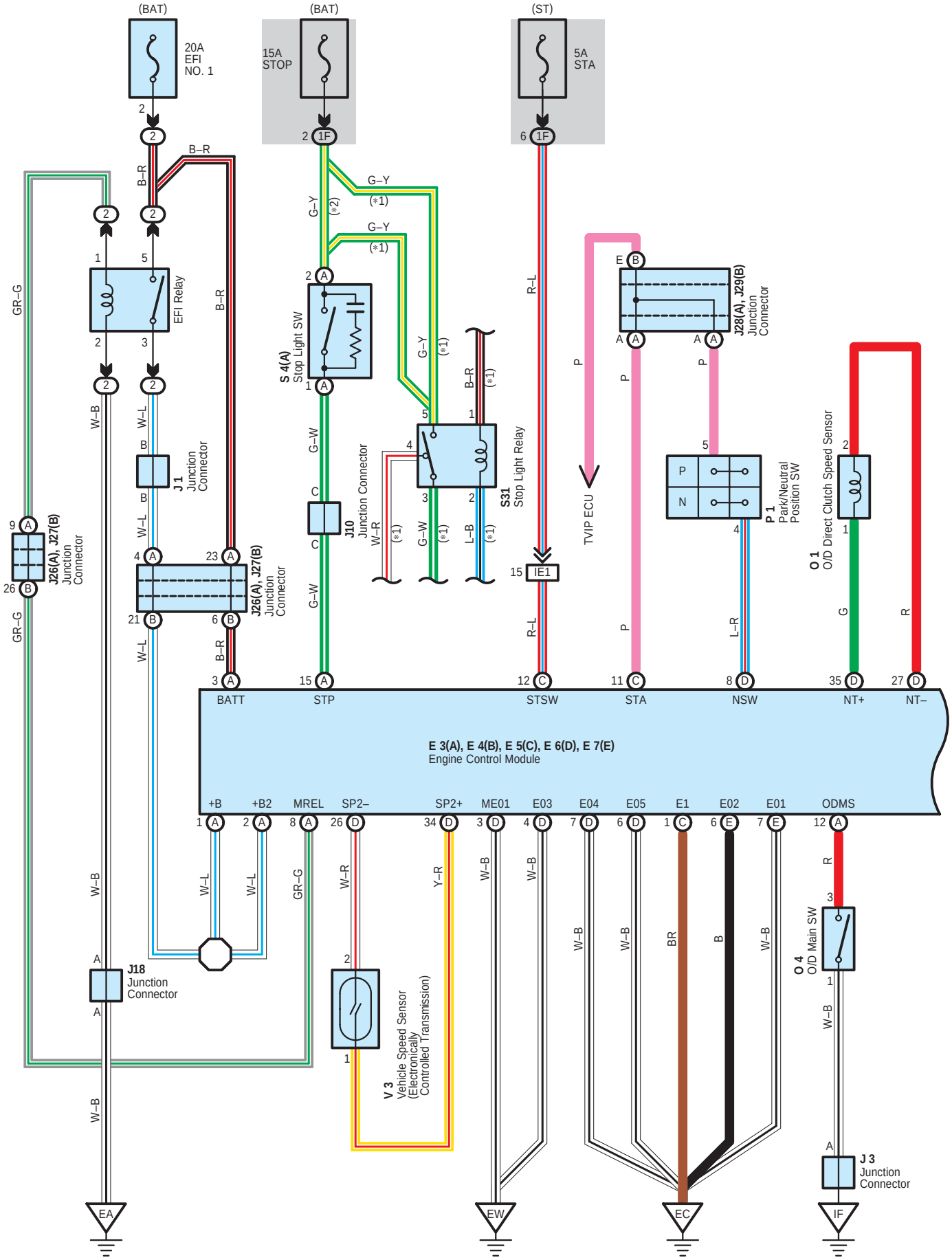
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

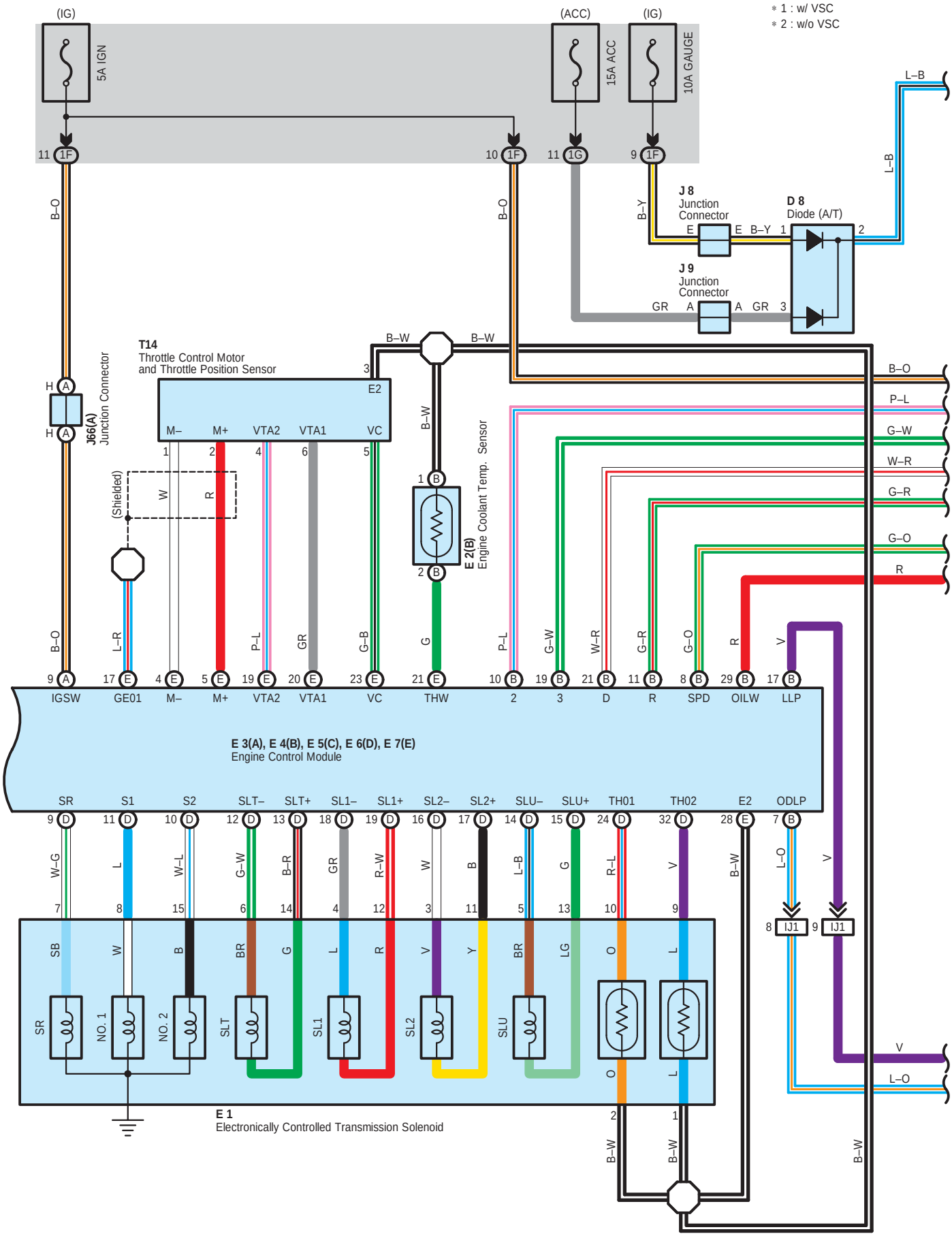
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |
| IA8 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IG1 | 83 | Cowl Wire and Instrument Panel No.2 Wire (Instrument Panel Brace RH) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

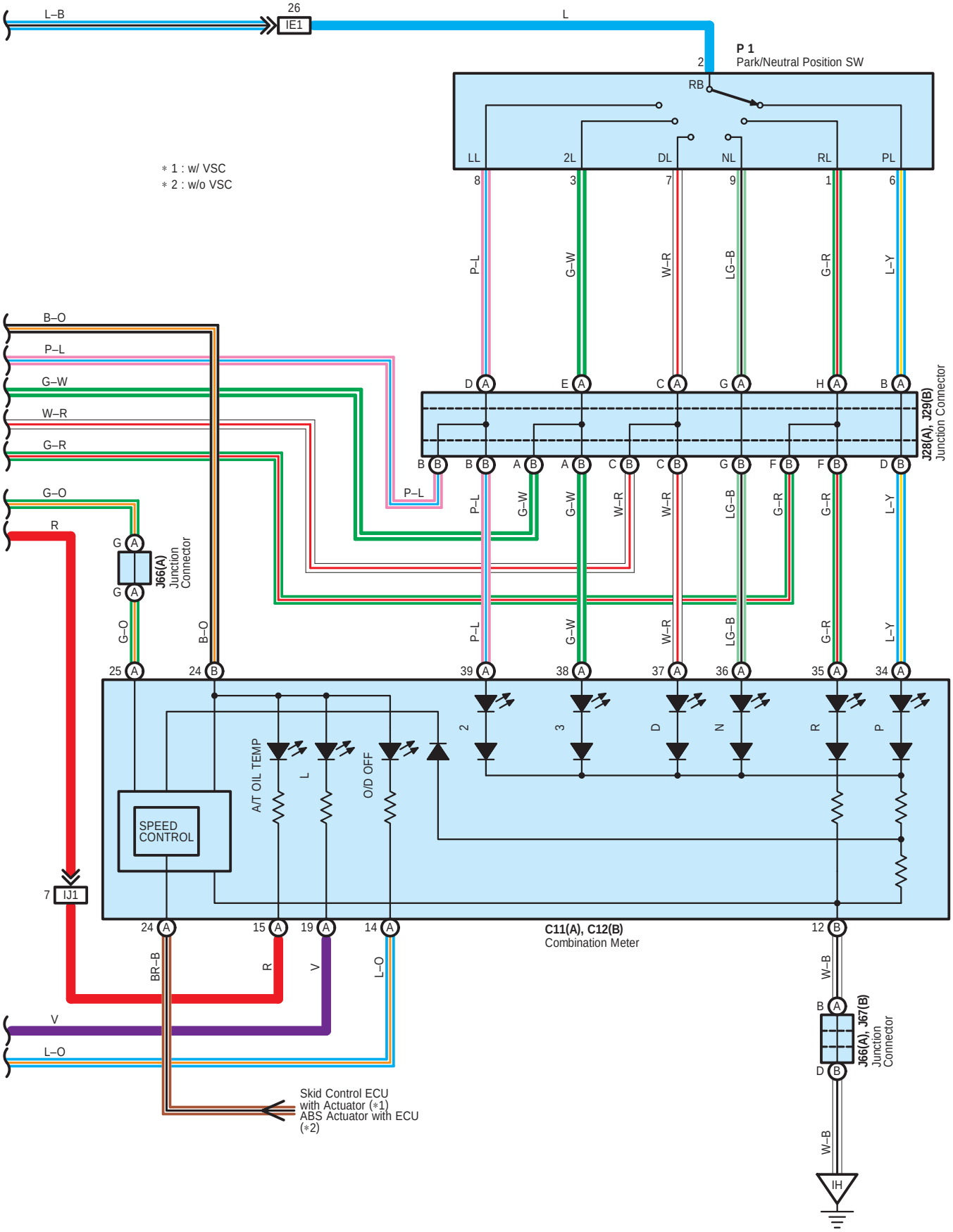
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |


(BAT)
20A
EFI
NO. 1
(BAT)
15A
STOP
(ST)
5A
STA
EFI Relay
S 4(A)
Stop Light SW
J10
Junction Connector
S31
Stop Light Relay
TVIP ECU
J28(A), J29(B)
Junction
Connector
P 1
Park/Neutral
Position SW
O 1
O/D Direct Clutch Speed Sensor
J 1
Junction
Connector
J26(A), J27(B)
Junction
Connector
J18
Junction
Connector
V 3
Vehicle Speed Sensor
(Electronically
Controlled Transmission)
O 4
O/D Main SW
J 3
Junction
Connector
BATT
STP
STSW
STA
NSW
NT+
NT–
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
+B
+B2
MREL
SP2–
SP2+
ME01
E03
E04
E05
E1
E02
E01
ODMS
EA
EW
EC
IF


(IG)
(ACC)
(IG)
5A IGN
15A ACC
10A GAUGE
∗ 1 : w/ VSC
∗ 2 : w/o VSC
J 8
Junction Connector
D 8
Diode (A/T)
J 9
Junction Connector
T14
Throttle Control Motor and Throttle Position Sensor
J66(A)
Junction Connector
(Shielded)
E 2(B)
Engine Coolant Temp. Sensor
IGSW
GE01
M–
M+
VTA2
VTA1
VC
THW
SPD
OILW
LLP
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
SR
S1
S2
SLT–
SLT+
SL1–
SL1+
SL2–
SL2+
SLU–
SLU+
TH01
TH02
E2
ODLP
IJ1
E 1
Electronically Controlled Transmission Solenoid

# ECT and A/T Indicator for 2UZ–FE (Access/Standard Cab)



**System Outline**

The electronically controlled transmission electrically controls the, throttle pressure, lock–up pressure, and accumulator pressure etc. through the solenoid valve.
The electronically controlled transmission is a system which precisely controls the 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 of the 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 control signal from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and the vehicle speed is input to TERMINAL SP2+ of the engine control module from the vehicle speed sensor. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1, VTA2 of the engine control module as a 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. Lock–Up Operation**

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL SLU+ of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to TERMINAL 13 to TERMINAL SLU– of the engine control module to GROUND.

**3. Stop Light SW Circuit**

If the brake pedal is depressed (Stop light SW on) when driving in lock–up position, a signal is input to TERMINAL STP of the engine control module. As a result, the engine control module cuts the current to the solenoid to release the lock–up.

**4. Overdrive Circuit**

* O/D main SW on
  When the O/D main SW is switched to ON position, a signal is input to TERMINAL ODMS of the engine control module, and enables shift change to the overdrive range, through the control of the engine control module.
* O/D main SW off
  When the O/D main SW is switched to OFF position, a signal is input to TERMINAL ODMS of the engine control module, and prohibits shift change to the overdrive range through the control of the engine control module. When in the overdrive range already, shift down is made.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 60 | J1 | 57 (2UZ–FE) | J66 A | 62 |
| C12 B | 60 | J3 | 62 | J67 B | 62 |
| D8 | 61 | J8 | 62 | O1 | 57 (2UZ–FE) |
| E1 | 56 (2UZ–FE) | J9 | 62 | O4 | 62 |
| E2 B | 56 (2UZ–FE) | J10 | 62 | P1 | 57 (2UZ–FE) |
| E3 A | 61 | J18 | 57 (2UZ–FE) | S4 A | 63 |
| E4 B | 61 | J26 A | 62 | S31 | 63 |
| E5 C | 61 | J27 B | 62 | T14 | 57 (2UZ–FE) |
| E6 D | 61 | J28 A | 62 | V3 | 57 (2UZ–FE) |
| E7 E | 61 | J29 B | 62 | | |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

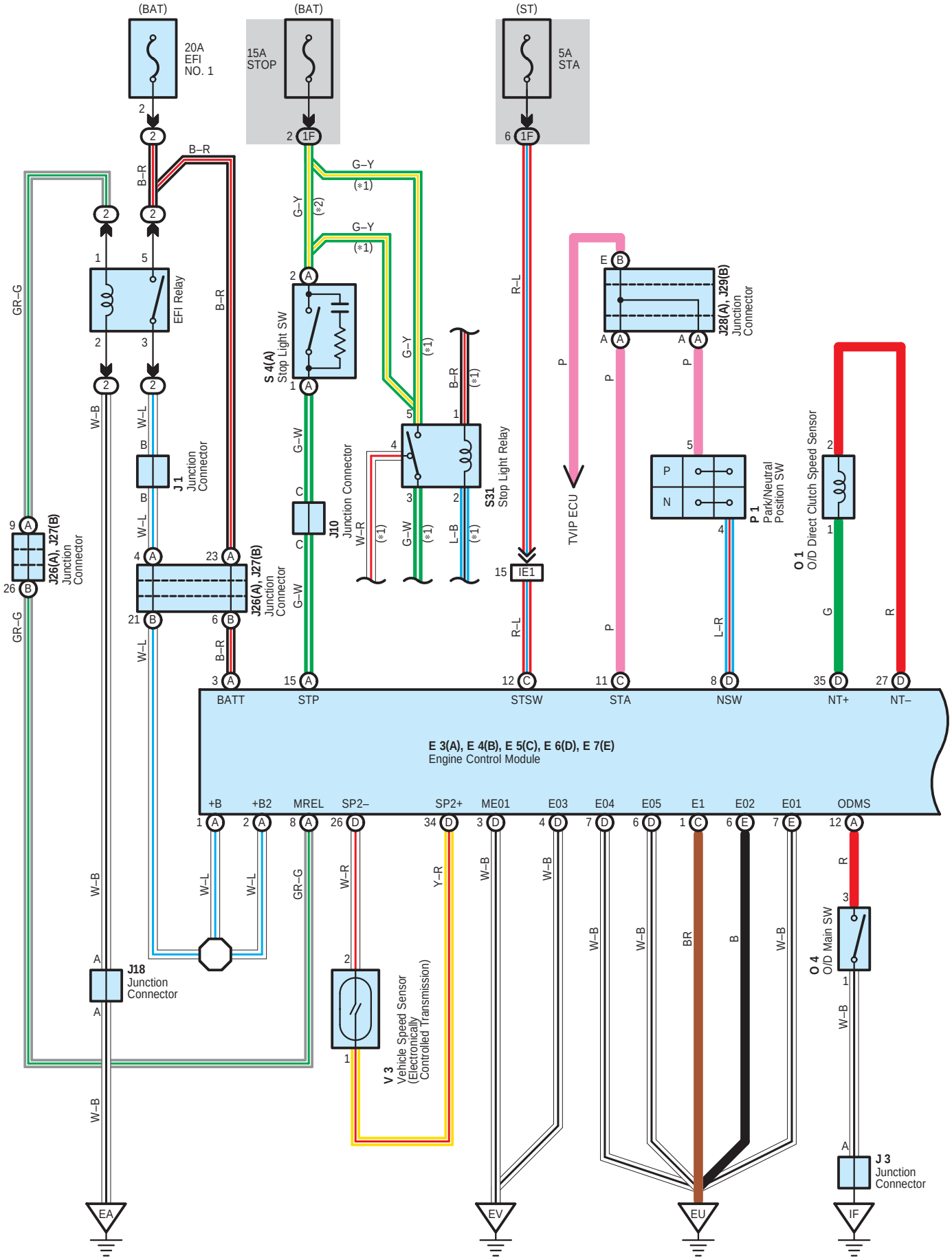
# ECT and A/T Indicator for 2UZ–FE (Access/Standard Cab)

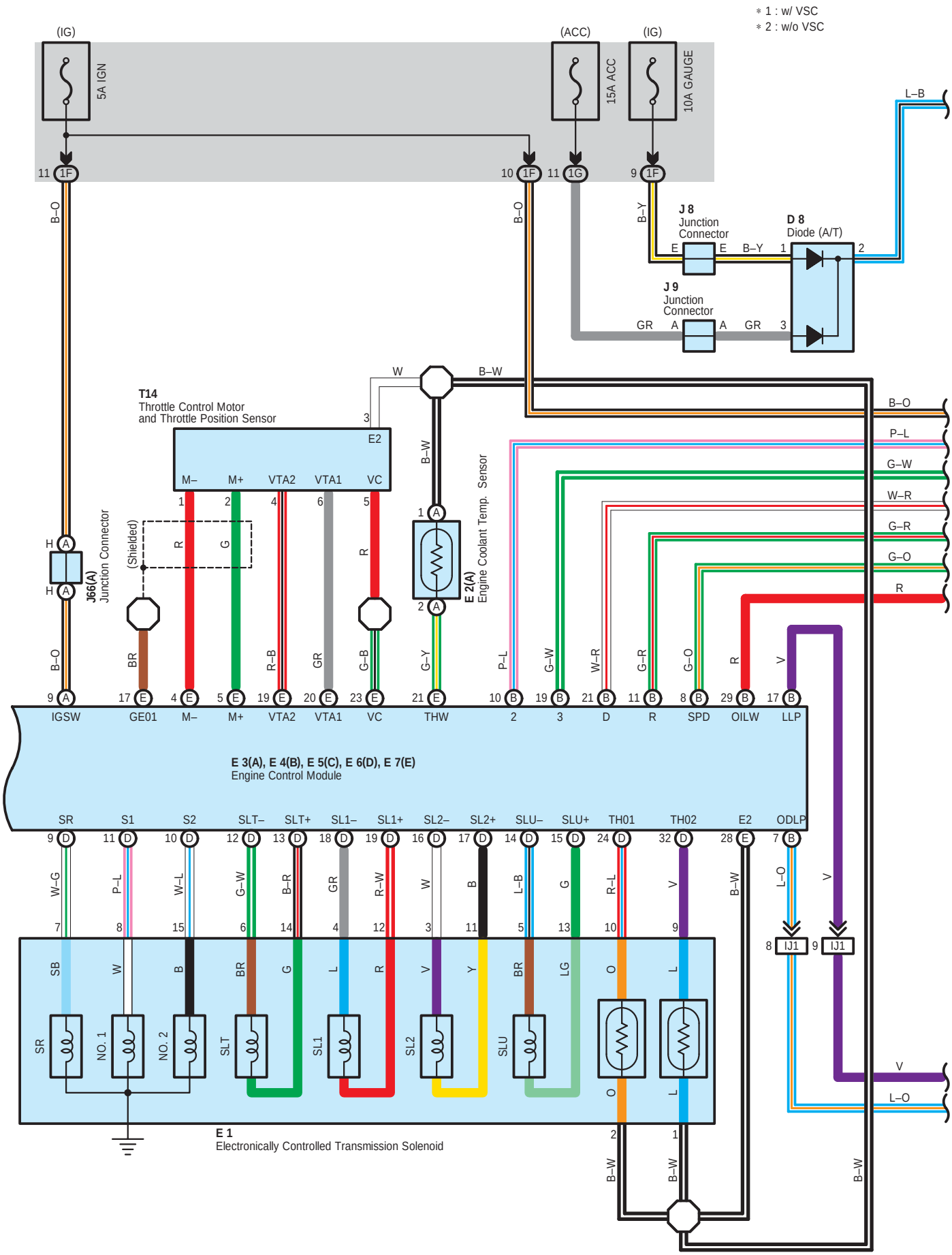
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

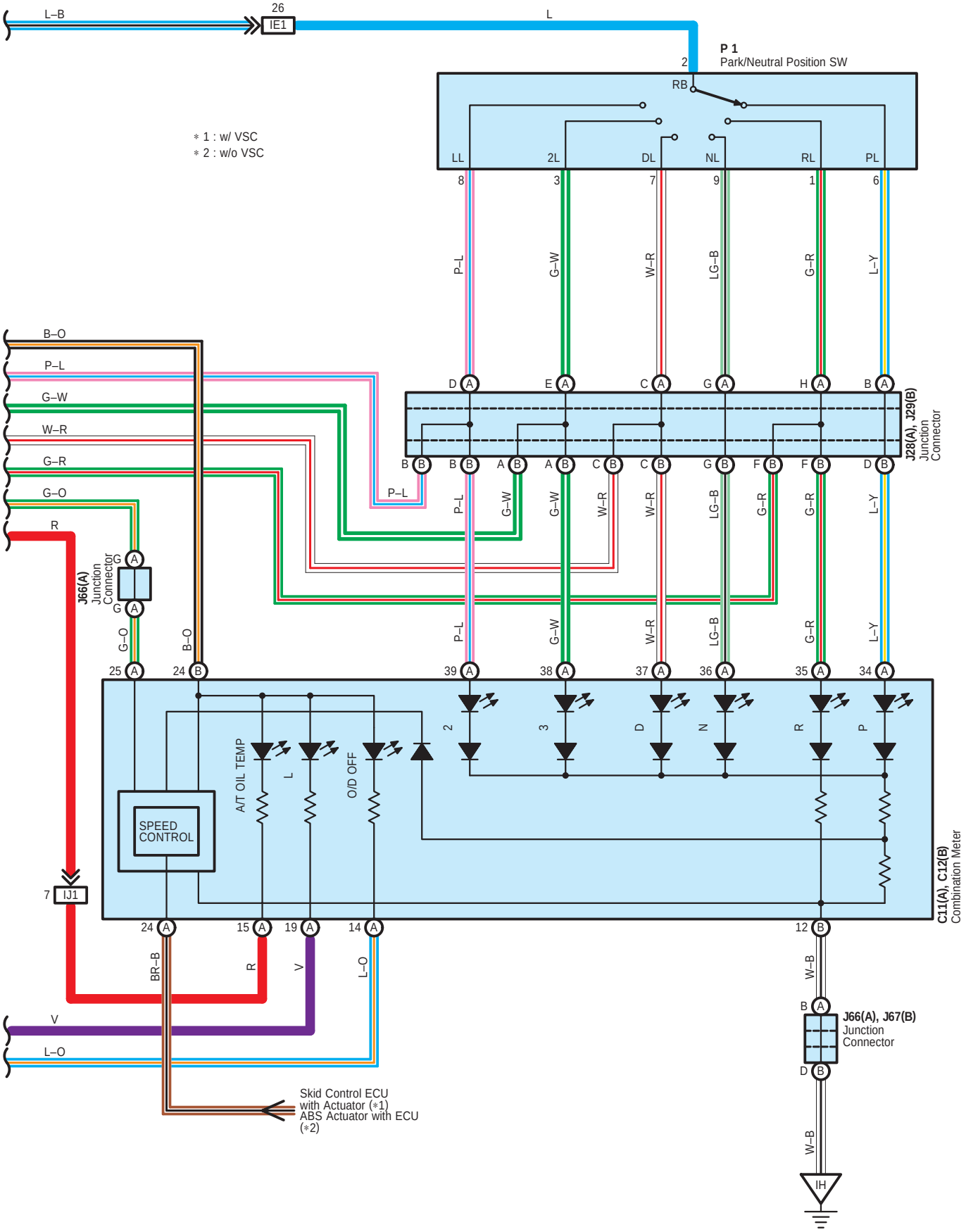
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |


(BAT)
20A
EFI
NO. 1
(BAT)
15A
STOP
(ST)
5A
STA
EFI Relay
S 4(A)
Stop Light SW
S31
Stop Light Relay
J10
Junction Connector
J 1
Junction
Connector
J26(A), J27(B)
Junction
Connector
J28(A), J29(B)
Junction
Connector
TVIP ECU
P 1
Park/Neutral
Position SW
O 1
O/D Direct Clutch Speed Sensor
BATT
STP
STSW
STA
NSW
NT+
NT–
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
+B
+B2
MREL
SP2–
SP2+
ME01
E03
E04
E05
E1
E02
E01
ODMS
J18
Junction
Connector
V 3
Vehicle Speed Sensor
(Electronically
Controlled Transmission)
O 4
O/D Main SW
J 3
Junction
Connector
EA
EV
EU
IF


* 1 : w/ VSC
* 2 : w/o VSC
(IG)
5A IGN
(ACC)
15A ACC
(IG)
10A GAUGE
J 8
Junction
Connector
D 8
Diode (A/T)
J 9
Junction
Connector
T14
Throttle Control Motor
and Throttle Position Sensor
M–
M+
VTA2
VTA1
VC
E2
J66(A)
Junction Connector
(Shielded)
E 2(A)
Engine Coolant Temp. Sensor
IGSW
GE01
M–
M+
VTA2
VTA1
VC
THW
2
3
D
R
SPD
OILW
LLP
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
SR
S1
S2
SLT–
SLT+
SL1–
SL1+
SL2–
SL2+
SLU–
SLU+
TH01
TH02
E2
ODLP
IJ1
IJ1
SR
NO. 1
NO. 2
SLT
SL1
SL2
SLU
E 1
Electronically Controlled Transmission Solenoid

# ECT and A/T Indicator for 1GR–FE (Access/Standard Cab)



**System Outline**

The electronically controlled transmission electrically controls the, throttle pressure, lock–up pressure, and accumulator pressure etc. through the solenoid valve.
The electronically controlled transmission is a system which precisely controls the 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 of the 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 control signal from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and the vehicle speed is input to TERMINAL SP2+ of the engine control module from the vehicle speed sensor. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1, VTA2 of the engine control module as a 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. Lock–Up Operation**

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL SLU+ of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to TERMINAL 13 to TERMINAL SLU– of the engine control module to GROUND.

**3. Stop Light SW Circuit**

If the brake pedal is depressed (Stop light SW on) when driving in lock–up position, a signal is input to TERMINAL STP of the engine control module. As a result, the engine control module cuts the current to the solenoid to release the lock–up.

**4. Overdrive Circuit**

* O/D main SW on
  When the O/D main SW is switched to ON position, a signal is input to TERMINAL ODMS of the engine control module, and enables shift change to the overdrive range, through the control of the engine control module.
* O/D main SW off
  When the O/D main SW is switched to OFF position, a signal is input to TERMINAL ODMS of the engine control module, and prohibits shift change to the overdrive range through the control of the engine control module. When in the overdrive range already, shift down is made.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 60 | J1 | 59 (1GR–FE) | J66 A | 62 |
| C12 B | 60 | J3 | 62 | J67 B | 62 |
| D8 | 61 | J8 | 62 | O1 | 59 (1GR–FE) |
| E1 | 58 (1GR–FE) | J9 | 62 | O4 | 62 |
| E2 A | 58 (1GR–FE) | J10 | 62 | P1 | 59 (1GR–FE) |
| E3 A | 61 | J18 | 59 (1GR–FE) | S4 A | 63 |
| E4 B | 61 | J26 A | 62 | S31 | 63 |
| E5 C | 61 | J27 B | 62 | T14 | 59 (1GR–FE) |
| E6 D | 61 | J28 A | 62 | V3 | 59 (1GR–FE) |
| E7 E | 61 | J29 B | 62 | | |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

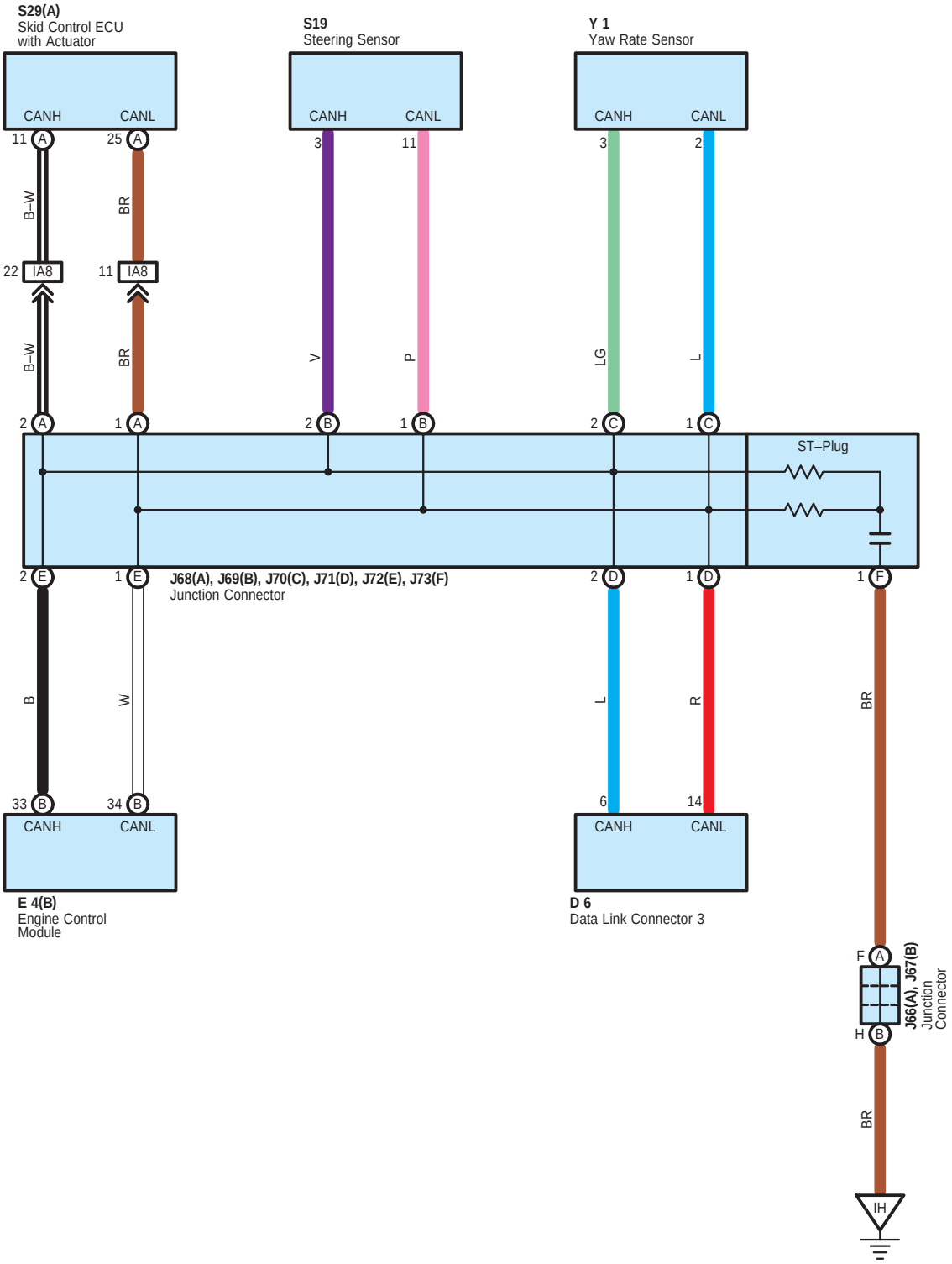
# ECT and A/T Indicator for 1GR–FE (Access/Standard Cab)

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 81 (1GR–FE) | Front Left Fender |
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |


S29(A)
Skid Control ECU
with Actuator
CANH
CANL
11 A
25 A
B–W
BR
22 IA8
11 IA8
B–W
BR
2 A
1 A
S19
Steering Sensor
CANH
CANL
3
11
V
P
2 B
1 B
Y 1
Yaw Rate Sensor
CANH
CANL
3
2
LG
L
2 C
1 C
ST–Plug
2 E
1 E
J68(A), J69(B), J70(C), J71(D), J72(E), J73(F)
Junction Connector
2 D
1 D
1 F
B
W
L
R
BR
33 B
34 B
6
14
CANH
CANL
CANH
CANL
E 4(B)
Engine Control
Module
D 6
Data Link Connector 3
F A
H B
J66(A), J67(B)
Junction
Connector
BR
IH

**System Outline**

CAN has two lines as a pair which make communication with operating voltage. CAN has excellent data speed and error detecting capacity. It consists of vehicle control systems such as engine control module, data link connector 3 and skid control ECU with actuator.

This system is working for the following systems:
* ABS (w/ VSC)
* Cruise Control
* Electronically Controlled Transmission and A/T Indicator
* Engine Control
* TRAC
* VSC

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| D6 | | 61 | J69 | B | 62 | S19 | | 63 |
| E4 | B | 61 | J70 | C | 62 | S29 | A | 57 (2UZ–FE) |
| J66 | A | 62 | J71 | D | 62 | | | 59 (1GR–FE) |
| J67 | B | 62 | J72 | E | 62 | Y1 | | 64 (*3) |
| J68 | A | 62 | J73 | F | 62 | | | 65 (*4) |

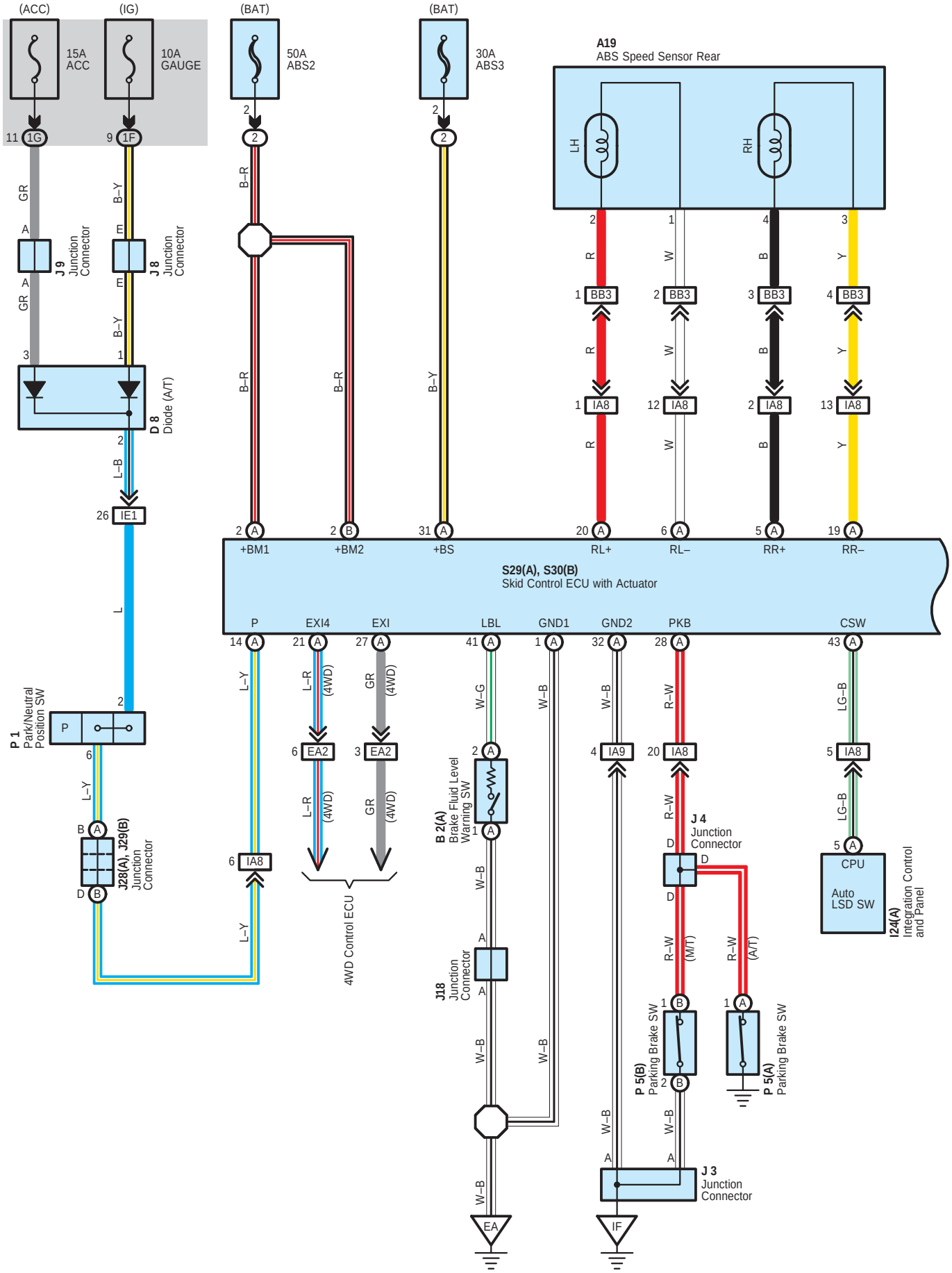
**: Connector Joining Wire Harness and Wire Harness**

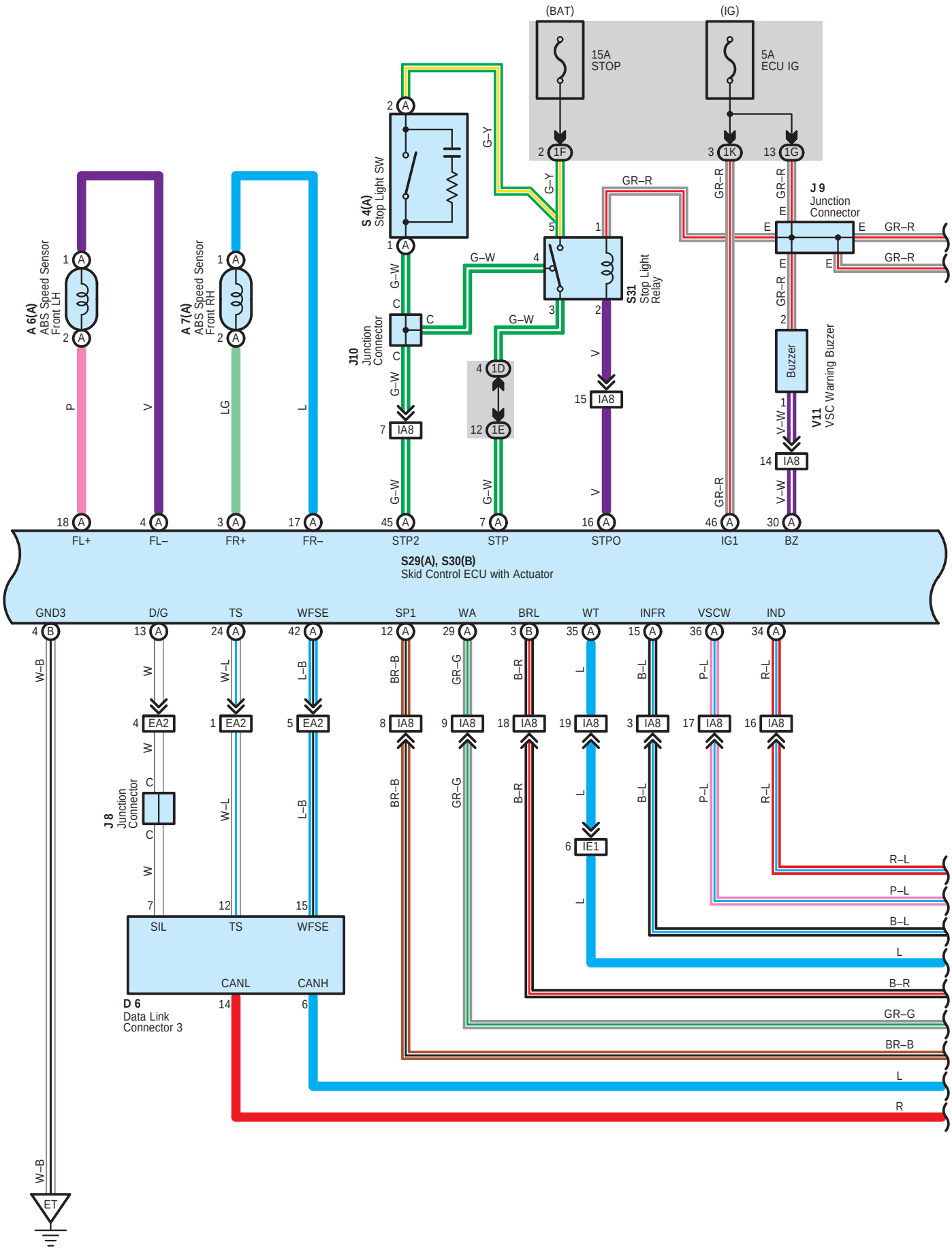
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA8 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |

**: Ground Points**

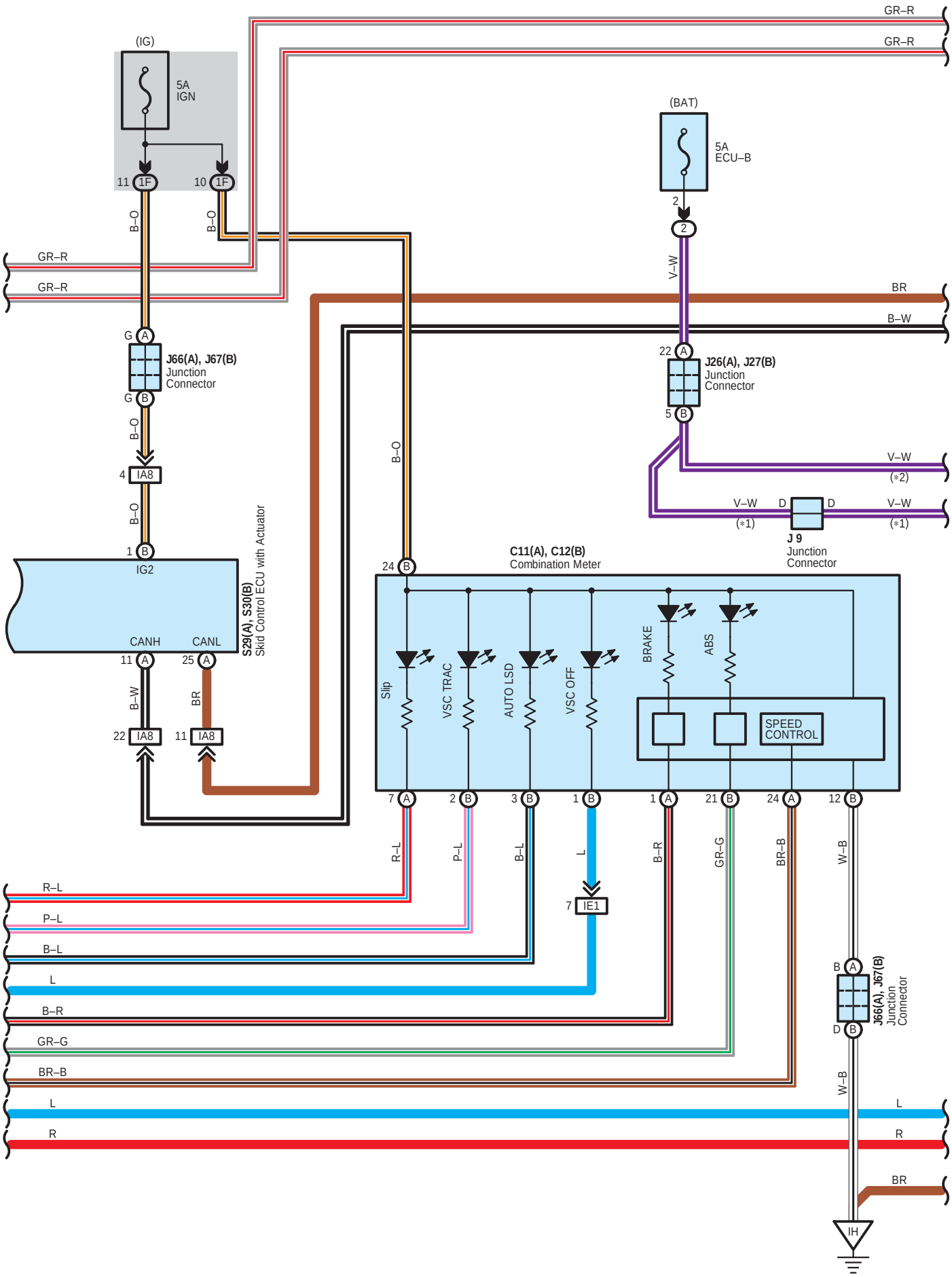
| Code | See Page | Ground Points Location |
|---|---|---|
| IH | 82 | Right Kick Panel |

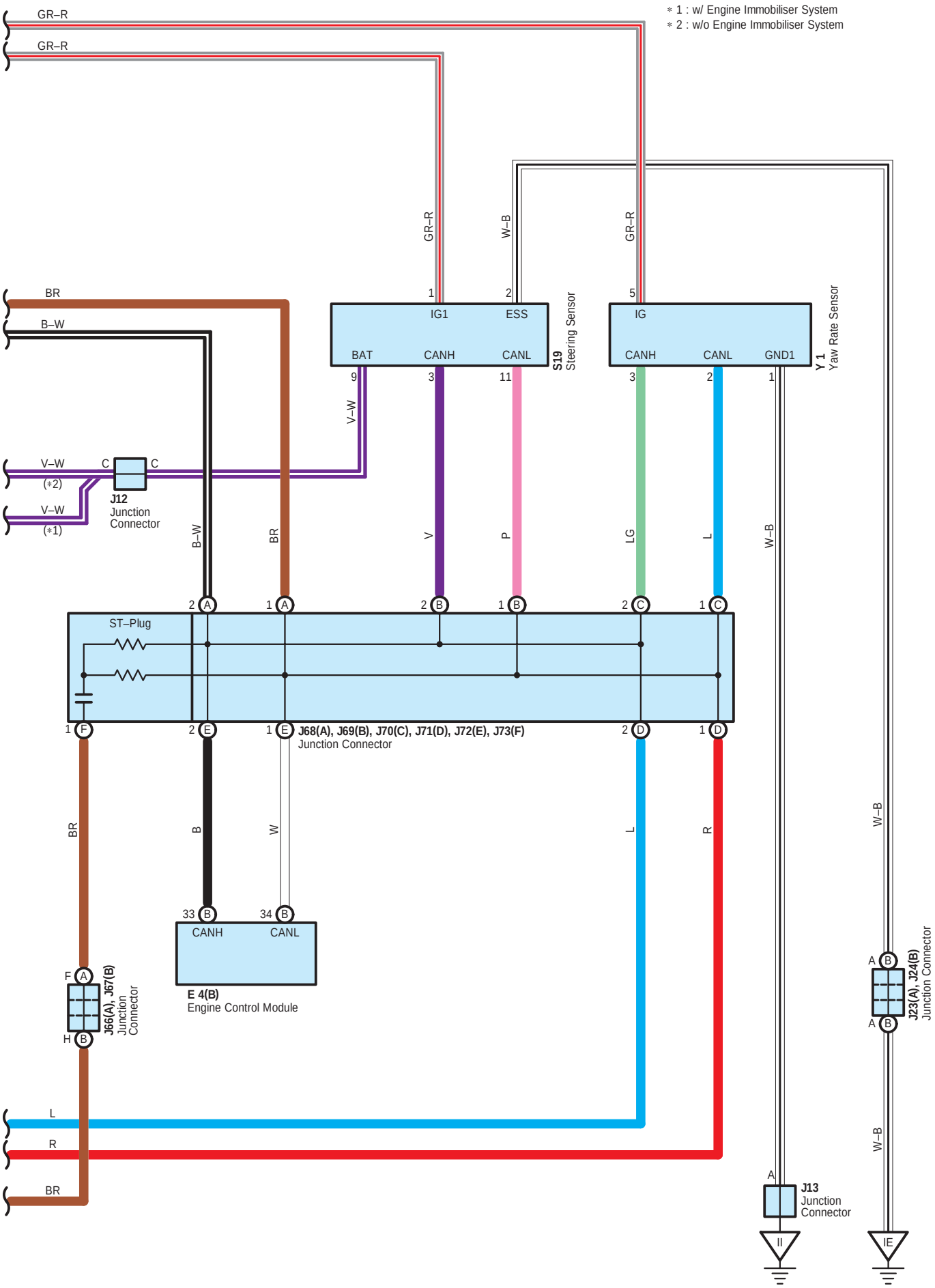
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(ACC)
(IG)
(BAT)
(BAT)
15A ACC
10A GAUGE
50A ABS2
30A ABS3
A19
ABS Speed Sensor Rear
LH
RH
J 9 Junction Connector
J 8 Junction Connector
D 8 Diode (A/T)
IE1
BB3
IA8
+BM1
+BM2
+BS
RL+
RL–
RR+
RR–
S29(A), S30(B)
Skid Control ECU with Actuator
P
EXI4
EXI
LBL
GND1
GND2
PKB
CSW
P 1 Park/Neutral Position SW
J28(A), J29(B) Junction Connector
EA2
4WD Control ECU
B 2(A) Brake Fluid Level Warning SW
J18 Junction Connector
EA
IA9
IF
J 4 Junction Connector
P 5(B) Parking Brake SW
P 5(A) Parking Brake SW
J 3 Junction Connector
CPU
Auto LSD SW
I24(A) Integration Control and Panel


(BAT)
(IG)
15A
STOP
5A
ECU IG
A 6(A)
ABS Speed Sensor
Front LH
A 7(A)
ABS Speed Sensor
Front RH
S 4(A)
Stop Light SW
J10
Junction
Connector
S31
Stop Light
Relay
J 9
Junction
Connector
V11
VSC Warning Buzzer
Buzzer
S29(A), S30(B)
Skid Control ECU with Actuator
FL+
FL–
FR+
FR–
STP2
STP
STPO
IG1
BZ
GND3
D/G
TS
WFSE
SP1
WA
BRL
WT
INFR
VSCW
IND
J 8
Junction
Connector
SIL
TS
WFSE
CANL
CANH
D 6
Data Link
Connector 3
ET

# ABS, TRAC and VSC (Access/Standard Cab)




∗1 : w/ Engine Immobiliser System
∗2 : w/o Engine Immobiliser System
GR–R
GR–R
GR–R
W–B
GR–R
BR
B–W
1
2
5
IG1
ESS
IG
BAT
CANH
CANL
CANH
CANL
GND1
S19
Steering Sensor
Y 1
Yaw Rate Sensor
9
3
11
3
2
1
V–W
V–W
C
C
(∗2)
V–W
(∗1)
J12
Junction
Connector
B–W
BR
V
P
LG
L
W–B
2 A
1 A
2 B
1 B
2 C
1 C
ST–Plug
1 F
2 E
1 E
J68(A), J69(B), J70(C), J71(D), J72(E), J73(F)
Junction Connector
2 D
1 D
BR
B
W
L
R
W–B
33 B
34 B
CANH
CANL
E 4(B)
Engine Control Module
F A
H B
J66(A), J67(B)
Junction
Connector
A B
A B
J23(A), J24(B)
Junction Connector
L
R
BR
W–B
A
J13
Junction
Connector
II
IE

**System Outline**

**1. ABS Operation**

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

**2. Traction Control Operation**

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

**3. VSC Operation**

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

To reduce large over–steering :

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

To reduce large under–steering :

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

**4. Mutual System Control**

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

Engine 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.

**5. Fail Safe Function**

If an error occurs in the skid control ECU with actuator, sensor signals, and/or actuators, the skid control ECU with actuator 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 regardless of the ABS, TRAC, and VSC systems.

## : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A6 | A | 56 (2UZ–FE) | J9 | | 62 | J71 | D | 62 |
| | | 58 (1GR–FE) | J10 | | 62 | J72 | E | 62 |
| A7 | A | 56 (2UZ–FE) | J12 | | 62 | J73 | F | 62 |
| | | 58 (1GR–FE) | J13 | | 62 | P1 | | 57 (2UZ–FE) |
| A19 | | 64 (*3) | J18 | | 57 (2UZ–FE) | | | 59 (1GR–FE) |
| | | 65 (*4) | | | 59 (1GR–FE) | P5 | A | 62 |
| B2 | A | 56 (2UZ–FE) | J23 | A | 62 | | B | 62 |
| | | 58 (1GR–FE) | J24 | B | 62 | S4 | A | 63 |
| C11 | A | 60 | J26 | A | 62 | S19 | | 63 |
| C12 | B | 60 | J27 | B | 62 | S29 | A | 57 (2UZ–FE) |
| D6 | | 61 | J28 | A | 62 | | | 59 (1GR–FE) |
| D8 | | 61 | J29 | B | 62 | S30 | B | 57 (2UZ–FE) |
| E4 | B | 61 | J66 | A | 62 | | | 59 (1GR–FE) |
| I24 | A | 61 | J67 | B | 62 | S31 | | 63 |
| J3 | | 62 | J68 | A | 62 | V11 | | 63 |
| J4 | | 62 | J69 | B | 62 | Y1 | | 64 (*3) |
| J8 | | 62 | J70 | C | 62 | | | 65 (*4) |

## : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

## : Connector Joining Wire Harness and Wire Harness

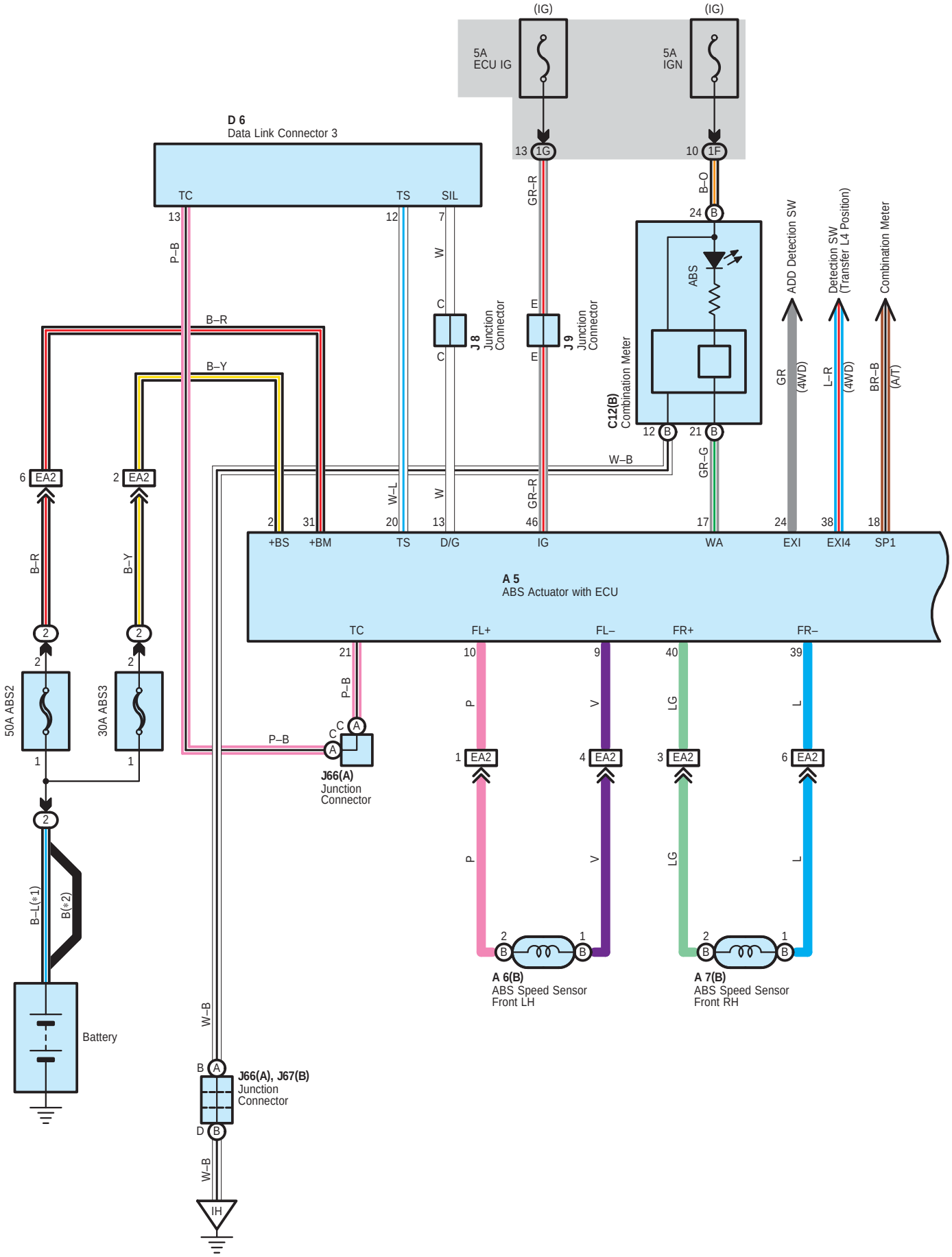
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |
| IA8 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA9 | | |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB3 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |

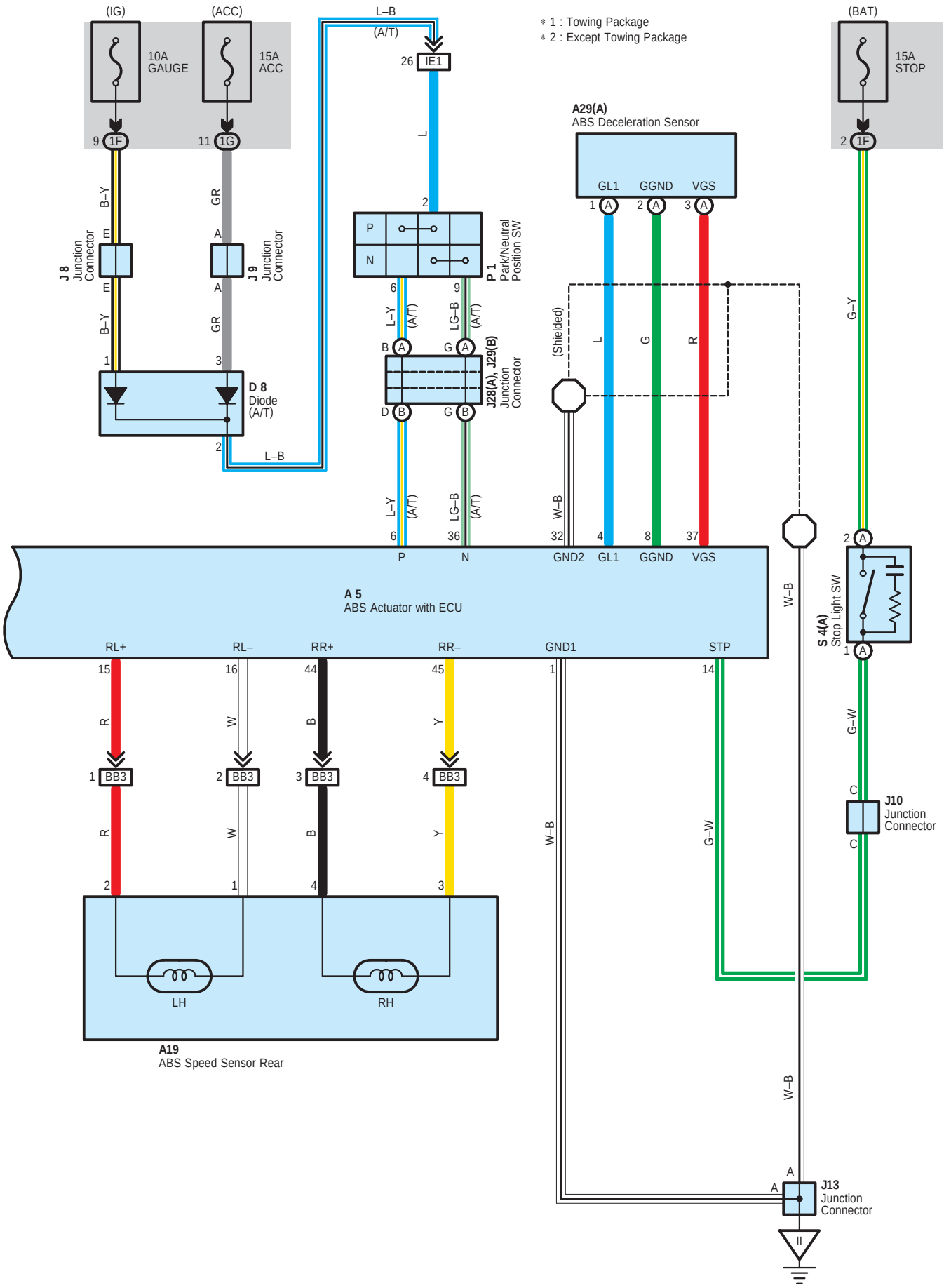
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

▽ : **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |
| II | | |

# ABS without VSC (Access/Standard Cab)




(IG)
(ACC)
(BAT)
10A GAUGE
15A ACC
15A STOP
9 1F
11 1G
2 1F
B–Y
GR
J8 Junction Connector
J9 Junction Connector
D 8 Diode (A/T)
L–B
L–B (A/T)
26 IE1
L
2
P
N
P 1 Park/Neutral Position SW
6
9
L–Y (A/T)
LG–B (A/T)
B A
G A
D B
G B
J28(A), J29(B) Junction Connector
A29(A) ABS Deceleration Sensor
GL1 GGND VGS
1 A
2 A
3 A
(Shielded)
L
G
R
W–B
G–Y
32
4
8
37
GND2
GL1
GGND
VGS
2 A
1 A
S 4(A) Stop Light SW
A 5 ABS Actuator with ECU
RL+
RL–
RR+
RR–
GND1
STP
15
16
44
45
1
14
R
W
B
Y
1 BB3
2 BB3
3 BB3
4 BB3
2
1
4
3
LH
RH
A19 ABS Speed Sensor Rear
G–W
C
C
J10 Junction Connector
A
A
J13 Junction Connector
II
＊1 : Towing Package
＊2 : Except Towing Package

# ABS without VSC (Access/Standard Cab)

**System Outline**

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

**1. Input Signal**

(1) Speed sensor signal

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

(2) Stop light SW signal

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

**2. System Operation**

During sudden braking, the ABS actuator with ECU which has signals input from each sensor lets the hydraulic pressure acting on each wheel cylinder escape to the reservoir.
The pump inside the ABS actuator with ECU is also operating at this time and it returns the brake fluid from the reservoir to the master cylinder, thus preventing locking of vehicle wheels.
If the ABS actuator with ECU judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current acting on the solenoid is controlled and the hydraulic pressure is increased.
Holding of the hydraulic pressure is also controlled by the ECU, by the same method as above, by repeated pressure reduction. Holding and increase are repeated to maintain vehicle stability and to improve steerability during sudden braking.

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A5 | | 56 (2UZ–FE) | A29 | A | 64 (*3) | J13 | | 62 |
| | | 58 (1GR–FE) | | | 65 (*4) | J28 | A | 62 |
| A6 | B | 56 (2UZ–FE) | C12 | B | 60 | J29 | B | 62 |
| | | 58 (1GR–FE) | D6 | | 61 | J66 | A | 62 |
| A7 | B | 56 (2UZ–FE) | D8 | | 61 | J67 | B | 62 |
| | | 58 (1GR–FE) | J8 | | 62 | P1 | | 57 (2UZ–FE) |
| A19 | | 64 (*3) | J9 | | 62 | | | 59 (1GR–FE) |
| | | 65 (*4) | J10 | | 62 | S4 | A | 63 |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

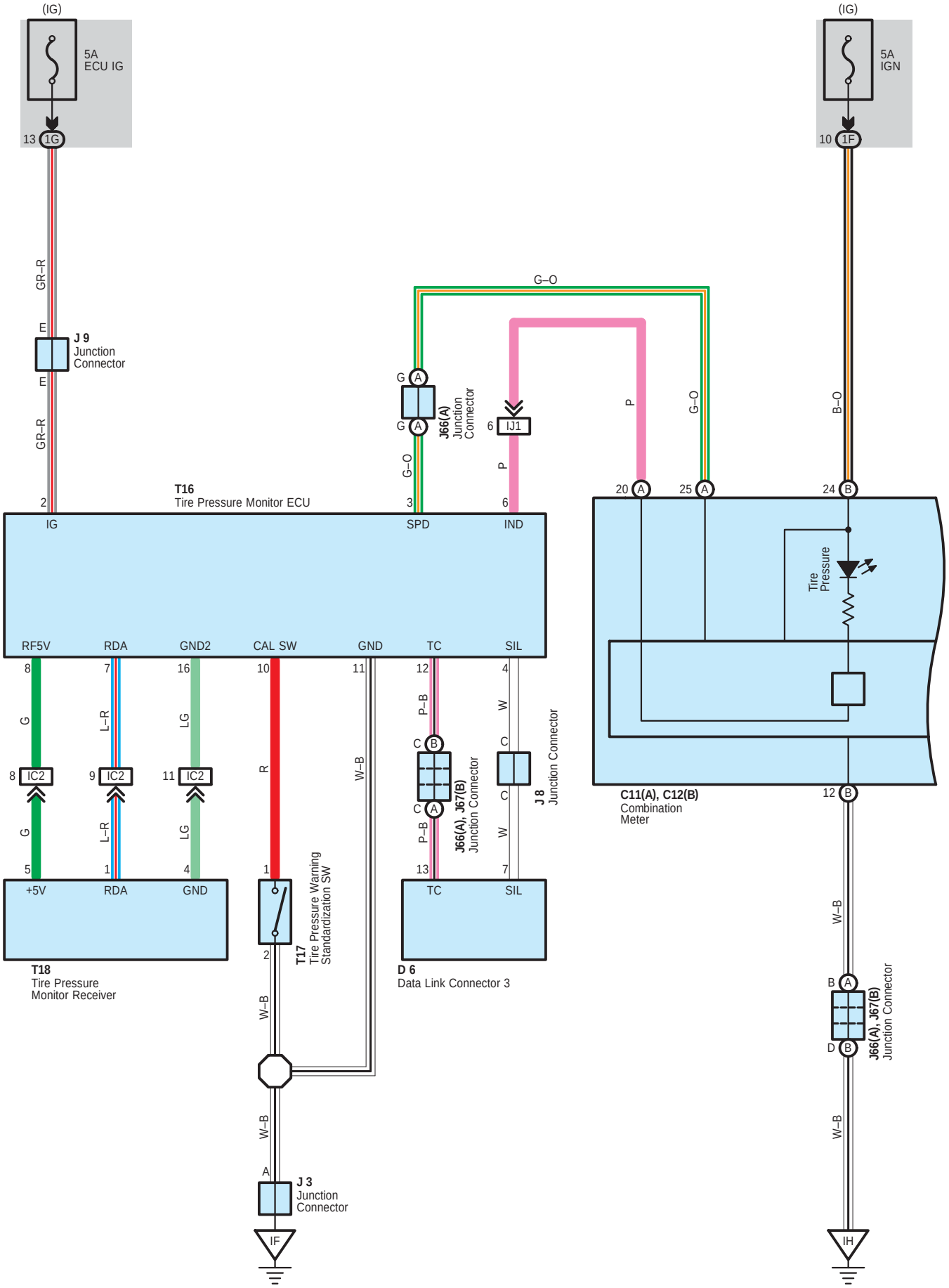
**▭ : Connector Joining Wire Harness and Wire Harness**

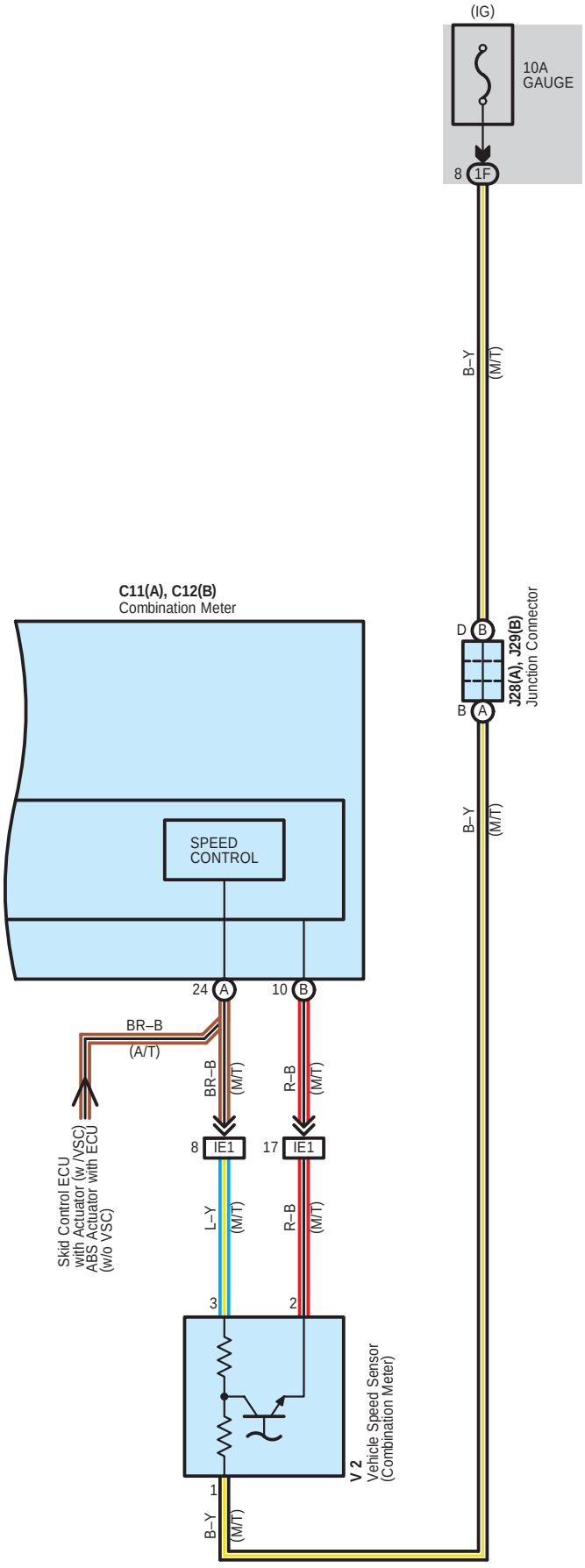
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB3 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |

**▽ : Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IH | 82 | Right Kick Panel |
| II | | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
5A
ECU IG
13 1G
GR–R
E
J 9
Junction
Connector
E
GR–R
2
IG
T16
Tire Pressure Monitor ECU
G–O
G A
G A
J66(A)
Junction
Connector
G–O
3
SPD
6 IJ1
P
6
IND
P
G–O
20 A
25 A
(IG)
5A
IGN
10 1F
B–O
24 B
Tire
Pressure
C11(A), C12(B)
Combination
Meter
12 B
RF5V
RDA
GND2
CAL SW
GND
TC
SIL
8
G
8 IC2
G
5
+5V
7
L–R
9 IC2
L–R
1
RDA
16
LG
11 IC2
LG
4
GND
10
R
1
2
T17
Tire Pressure Warning
Standardization SW
W–B
11
W–B
12
P–B
C B
C A
P–B
13
TC
J66(A), J67(B)
Junction Connector
4
W
C
C
W
7
SIL
J 8
Junction Connector
T18
Tire Pressure
Monitor Receiver
D 6
Data Link Connector 3
W–B
W–B
A
J 3
Junction
Connector
IF
W–B
B A
D B
J66(A), J67(B)
Junction Connector
W–B
IH


(IG)
10A
GAUGE
8
1F
B–Y
(M/T)
C11(A), C12(B)
Combination Meter
D
B
J28(A), J29(B)
Junction Connector
B
A
B–Y
(M/T)
SPEED
CONTROL
24
A
10
B
BR–B
(A/T)
BR–B
(M/T)
R–B
(M/T)
Skid Control ECU
with Actuator (w/ VSC)
ABS Actuator with ECU
(w/o VSC)
8
IE1
17
IE1
L–Y
(M/T)
R–B
(M/T)
3
2
V 2
Vehicle Speed Sensor
(Combination Meter)
1
B–Y
(M/T)

# Tire Pressure Warning System (Access/Standard Cab)

**System Outline**

The air pressure sensor installed in the tire wheel detects the tire air pressure and transmits signals to the vehicle side receiver. When the detected tire air pressure is below a specified level, the warning light in the combination meter comes on to inform the driver.
Press the tire pressure warning standardization SW for 3 seconds with the ignition SW at ON position after the tire pressure is adjusted to the specified value. It will lead the tire pressure monitor ECU to control and warn the pressure according to the specified value.
Warnings when the tire pressure is low
* When the tire air pressure is below a specified level, the warning light in the combination meter comes on.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 60 | J9 | 62 | T16 | 63 |
| C12 B | 60 | J28 A | 62 | T17 | 63 |
| D6 | 61 | J29 B | 62 | T18 | 64 (*3) |
| J3 | 62 | J66 A | 62 | | 65 (*4) |
| J8 | 62 | J67 B | 62 | V2 | 59 (1GR–FE) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

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

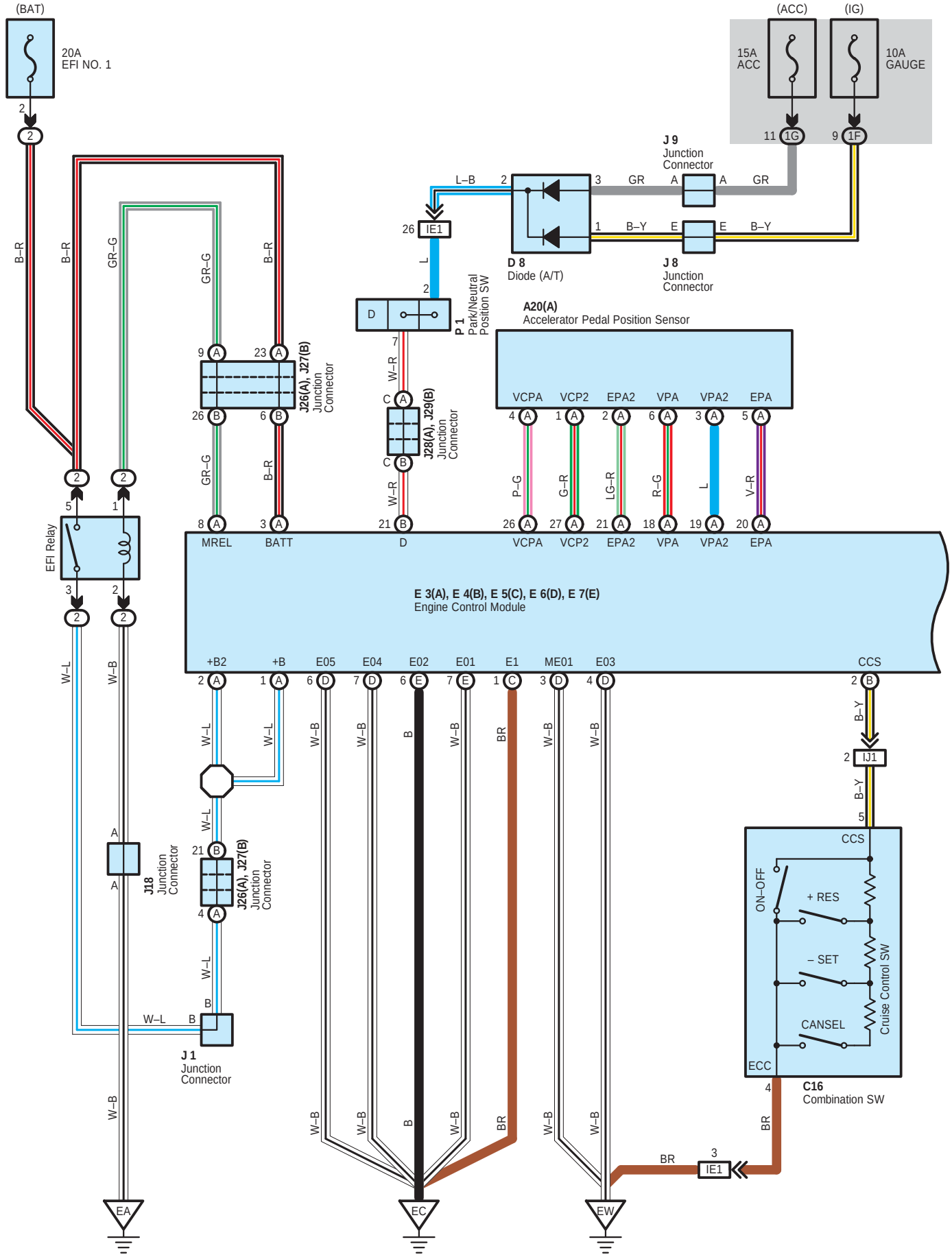
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IC2 | 82 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

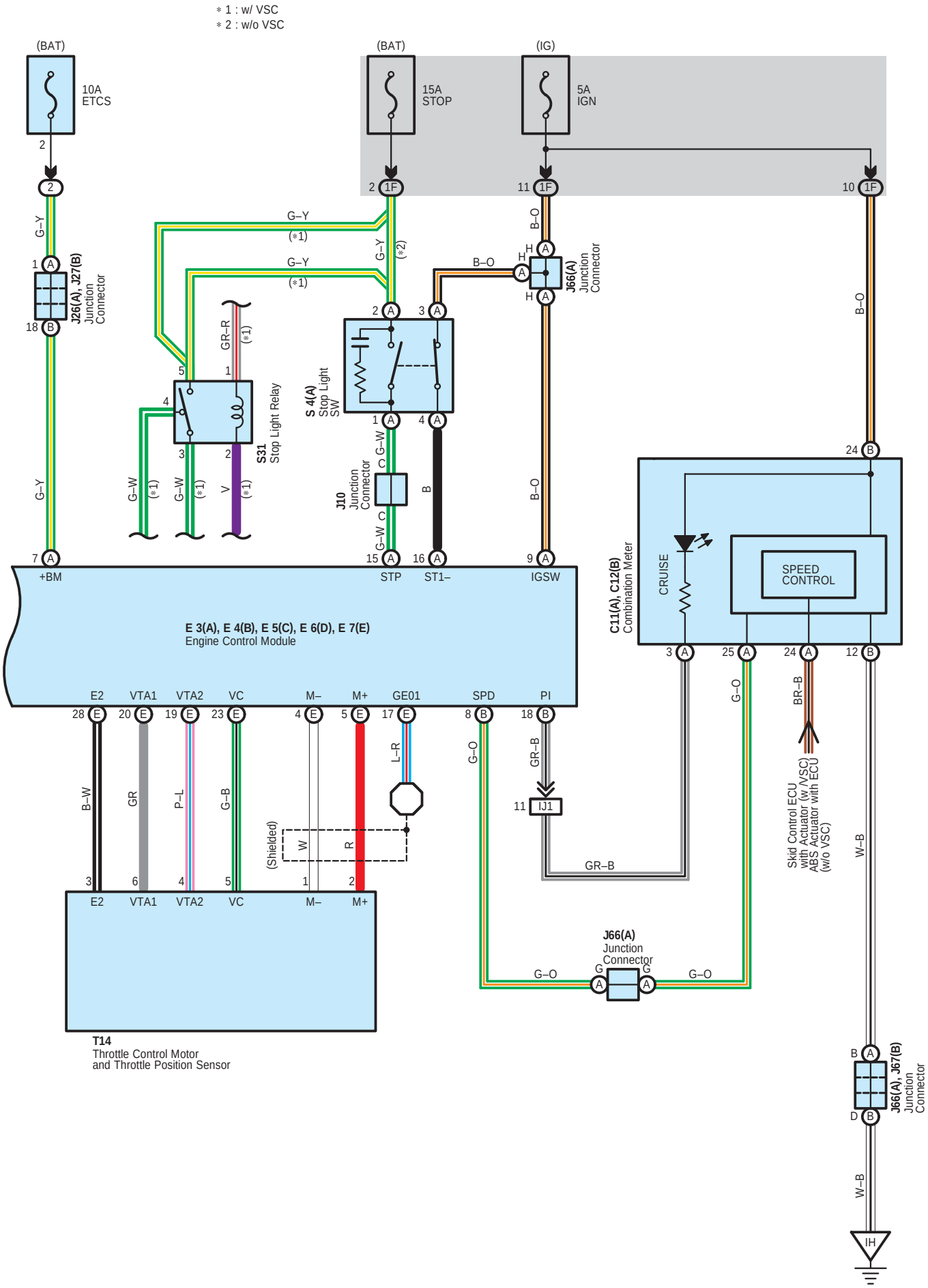
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Cruise Control for 2UZ–FE (Access/Standard Cab)




* 1 : w/ VSC
* 2 : w/o VSC
(BAT)
10A
ETCS
(BAT)
15A
STOP
(IG)
5A
IGN
J26(A), J27(B)
Junction
Connector
J66(A)
Junction
Connector
S 4(A)
Stop Light
SW
S31
Stop Light Relay
J10
Junction
Connector
+BM
STP
ST1–
IGSW
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
C11(A), C12(B)
Combination Meter
CRUISE
SPEED
CONTROL
E2
VTA1
VTA2
VC
M–
M+
GE01
SPD
PI
(Shielded)
IJ1
Skid Control ECU
with Actuator (w /VSC)
ABS Actuator with ECU
(w/o VSC)
J66(A)
Junction
Connector
T14
Throttle Control Motor
and Throttle Position Sensor
J66(A), J67(B)
Junction
Connector
IH

# Cruise Control for 2UZ–FE (Access/Standard Cab)

**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.

**1. Set Control**

When the – SET SW is operated while traveling with the ON–OFF SW on, the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed.

**2. Coast Control**

When the – SET SW is operated to on, the cruise control opening angle requirement is turned to 0 to decrease the vehicle speed, and the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed. Furthermore, every time the – SET SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is decreased by approx. 1.6 km/h (1.0 mph).

**3. Accel Control**

When the + RES SW is operated to on, the throttle motor rotates the throttle valve to open direction to increase the vehicle speed, and the speed when the + RES SW is operated to off is memorized, and the vehicle speed is controlled at that speed.
Furthermore, every time the + RES SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is increased by approx. 1.6 km/h (1.0 mph).

**4. Manual Cancel Mechanism**

If any of the following signals are input during cruise control traveling, the current to the motor flows in the direction to close the throttle valve, and cancel the cruise control.

(1) Stop lamp SW is on (Brake pedal is depressed)

(2) The CANCEL SW of the control SW is on

(3) ON–OFF SW is off

(4) Gear is shifted from D position to other positions than D.

**5. Resume Control**

After canceling the cruise control (Except when the ON–OFF SW is off) if the vehicle speed is above the minimum speed limit (Approx. 40km/h, 25mph), operating the + RES SW to on from off will cause the system to accelerate and resume to the vehicle speed before manual cancellation.

**6. Overdrive Function**

The overdrive may be cut on an uphill grade, while traveling with the cruise control.
After the overdrive is cut, 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, and if the system determines that the uphill grade has finished, the overdrive will resume after the overdrive timer operation.

**7. Auto Cancel Operation**

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

(1) Disconnection and/or short in the stop light SW

(2) Malfunction in the vehicle speed signal

(3) Malfunction in the electronic throttle parts

(4) Malfunction in the stop light SW input circuit

(5) Malfunction in the cancel circuit

(6) When the vehicle speed gets slower than the low speed limit.

(7) The actual vehicle speed becomes –16 km/h (10 mph) slower than the set speed

○ **: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A20 | A | 60 | E7 | E | 61 | J29 | B | 62 |
| C11 | A | 60 | J1 | | 57 (2UZ–FE) | J66 | A | 62 |
| C12 | B | 60 | J8 | | 62 | J67 | B | 62 |
| C16 | | 60 | J9 | | 62 | P1 | | 57 (2UZ–FE) |
| D8 | | 61 | J10 | | 62 | S4 | A | 63 |
| E3 | A | 61 | J18 | | 57 (2UZ–FE) | S31 | | 63 |
| E4 | B | 61 | J26 | A | 62 | T14 | | 57 (2UZ–FE) |
| E5 | C | 61 | J27 | B | 62 | | | |
| E6 | D | 61 | J28 | A | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

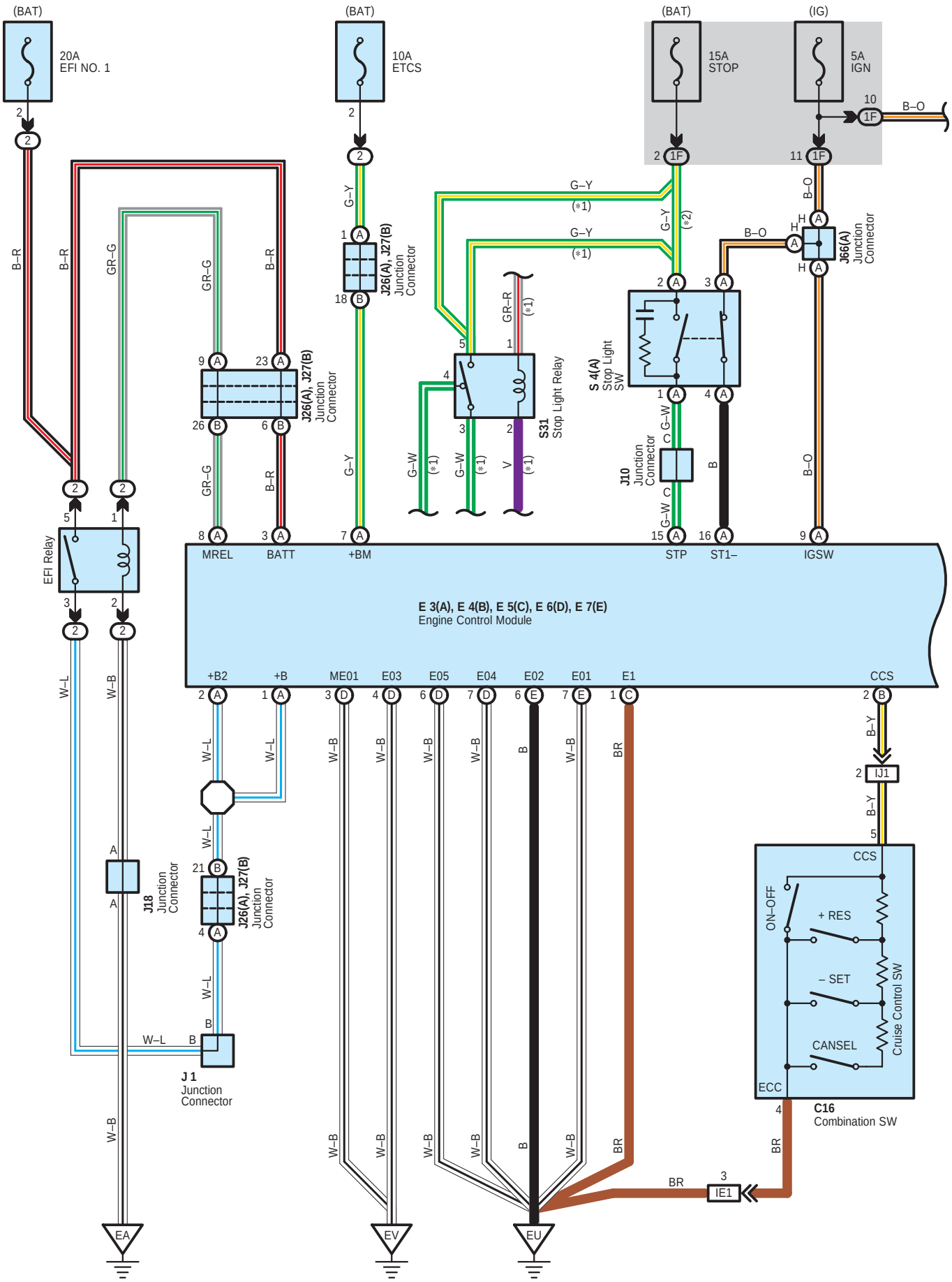
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

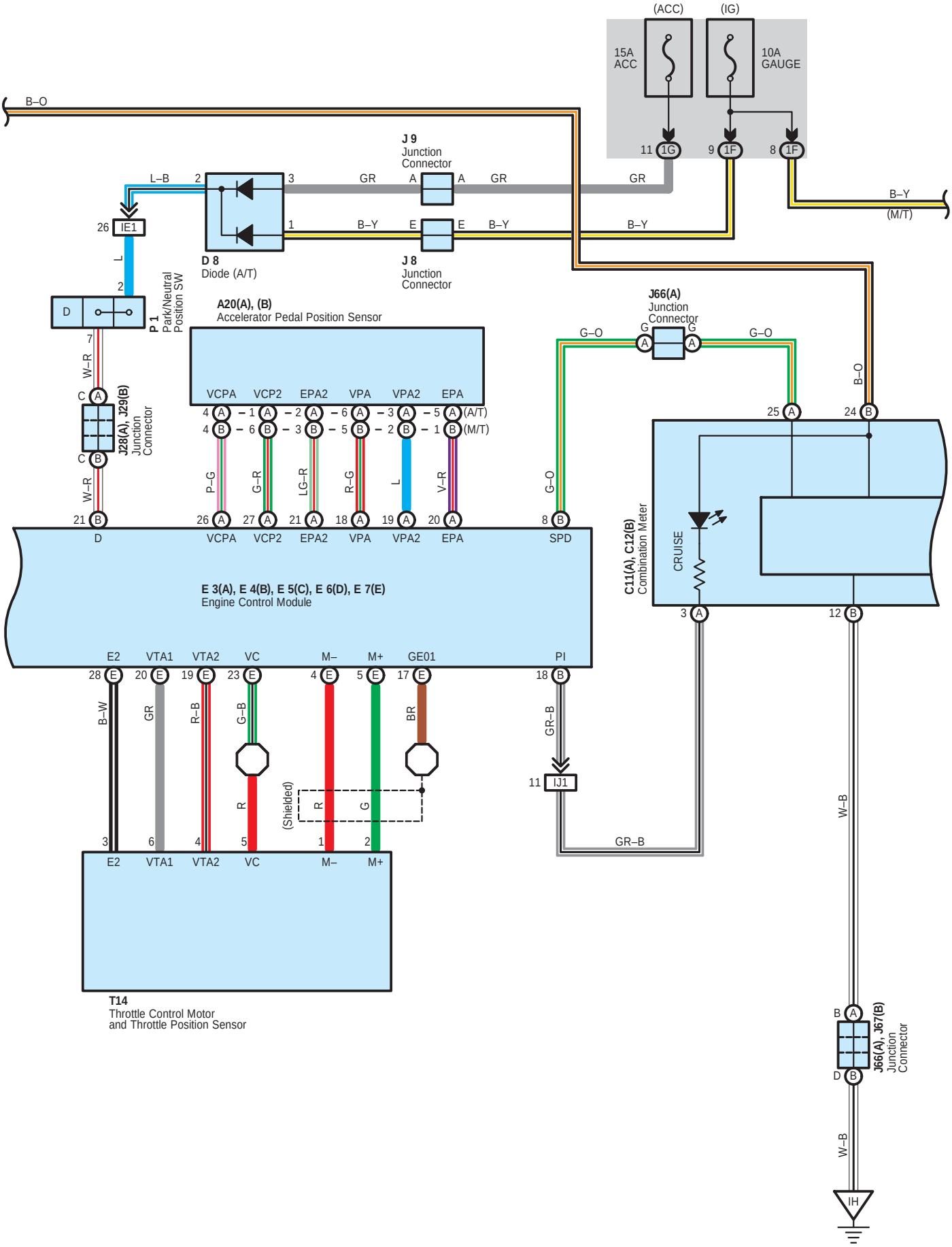
**: Ground Points**

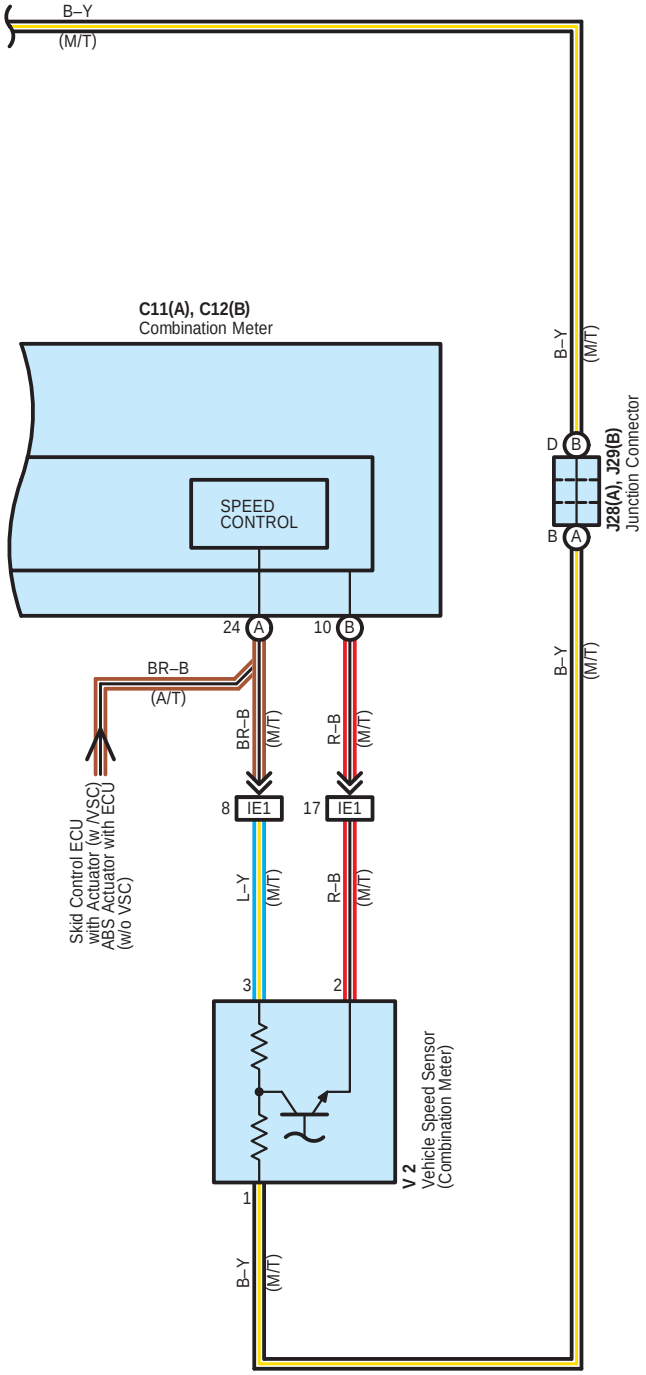
| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
20A
EFI NO. 1
(BAT)
10A
ETCS
(BAT)
15A
STOP
(IG)
5A
IGN
B–O
B–R
GR–G
G–Y
(*1)
(*2)
G–W
V
J26(A), J27(B)
Junction
Connector
S31
Stop Light Relay
S 4(A)
Stop Light
SW
J10
Junction
Connector
J66(A)
Junction
Connector
EFI Relay
MREL
BATT
+BM
STP
ST1–
IGSW
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
+B2
+B
ME01
E03
E05
E04
E02
E01
E1
CCS
W–L
W–B
B–Y
BR
B
J18
Junction
Connector
J 1
Junction
Connector
IJ1
IE1
ON–OFF
+ RES
– SET
CANSEL
Cruise Control SW
ECC
C16
Combination SW
EA
EV
EU

＊1 : w/ VSC
＊2 : w/o VSC




B–Y
(M/T)
C11(A), C12(B)
Combination Meter
SPEED
CONTROL
24
A
10
B
BR–B
(A/T)
BR–B
(M/T)
R–B
(M/T)
8
IE1
17
IE1
Skid Control ECU
with Actuator (w /VSC)
ABS Actuator with ECU
(w/o VSC)
L–Y
(M/T)
R–B
(M/T)
3
2
V 2
Vehicle Speed Sensor
(Combination Meter)
1
B–Y
(M/T)
B–Y
(M/T)
D
B
B
A
J28(A), J29(B)
Junction Connector
B–Y
(M/T)

**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.

**1. Set Control**

When the – SET SW is operated while traveling with the ON–OFF SW on, the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed.

**2. Coast Control**

When the – SET SW is operated to on, the cruise control opening angle requirement is turned to 0 to decrease the vehicle speed, and the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed.
Furthermore, every time the – SET SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is decreased by approx. 1.6 km/h (1.0 mph).

**3. Accel Control**

When the + RES SW is operated to on, the throttle motor rotates the throttle valve to open direction to increase the vehicle speed, and the speed when the + RES SW is operated to off is memorized, and the vehicle speed is controlled at that speed.
Furthermore, every time the + RES SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is increased by approx. 1.6 km/h (1.0 mph).

**4. Manual Cancel Mechanism**

If any of the following signals are input during cruise control traveling, the current to the motor flows in the direction to close the throttle valve, and cancel the cruise control.

(1) Stop lamp SW is on (Brake pedal is depressed)

(2) The CANCEL SW of the control SW is on

(3) ON–OFF SW is off

(4) Gear is shifted from D position to other positions than D.

**5. Resume Control**

After canceling the cruise control (Except when the ON–OFF SW is off) if the vehicle speed is above the minimum speed limit (Approx. 40km/h, 25mph), operating the + RES SW to on from off will cause the system to accelerate and resume to the vehicle speed before manual cancellation.

**6. Overdrive Function**

The overdrive may be cut on an uphill grade, while traveling with the cruise control.
After the overdrive is cut, 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, and if the system determines that the uphill grade has finished, the overdrive will resume after the overdrive timer operation.

**7. Auto Cancel Operation**

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

(1) Disconnection and/or short in the stop light SW

(2) Malfunction in the vehicle speed signal

(3) Malfunction in the electronic throttle parts

(4) Malfunction in the stop light SW input circuit

(5) Malfunction in the cancel circuit

(6) When the vehicle speed gets slower than the low speed limit.

(7) The actual vehicle speed becomes –16 km/h (10 mph) slower than the set speed

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A20 | A | 60 | E6 | D | 61 | J28 | A | 62 |
| | B | 60 | E7 | E | 61 | J29 | B | 62 |
| C11 | A | 60 | J1 | | 59 (1GR–FE) | J66 | A | 62 |
| C12 | B | 60 | J8 | | 62 | J67 | B | 62 |
| C16 | | 60 | J9 | | 62 | P1 | | 59 (1GR–FE) |
| D8 | | 61 | J10 | | 62 | S4 | A | 63 |
| E3 | A | 61 | J18 | | 59 (1GR–FE) | S31 | | 63 |
| E4 | B | 61 | J26 | A | 62 | T14 | | 59 (1GR–FE) |
| E5 | C | 61 | J27 | B | 62 | V2 | | 59 (1GR–FE) |

# Cruise Control for 1GR–FE (Access/Standard Cab)

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

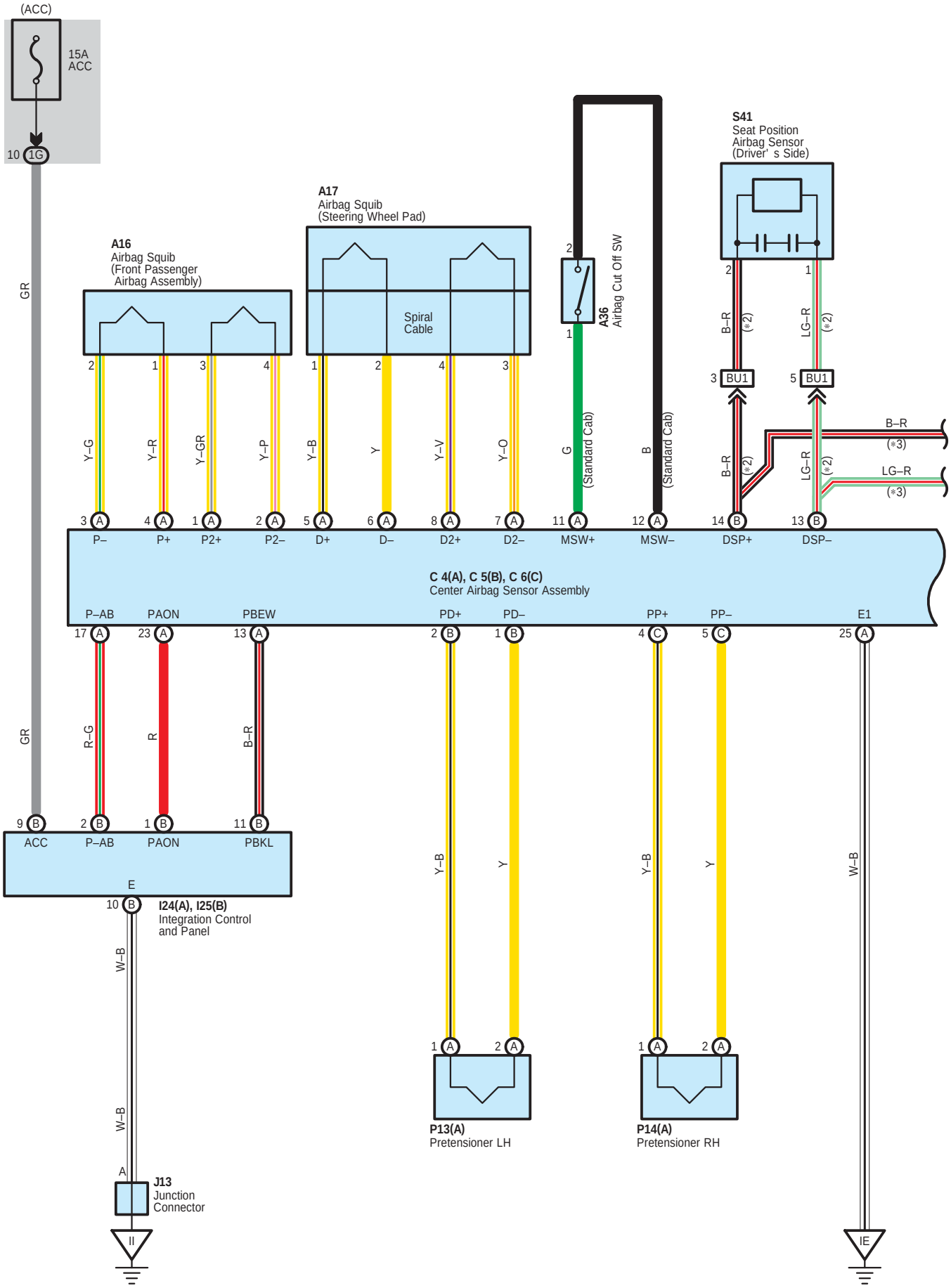
| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 81 (1GR–FE) | Front Left Fender |
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |
| IH | 82 | Right Kick Panel |

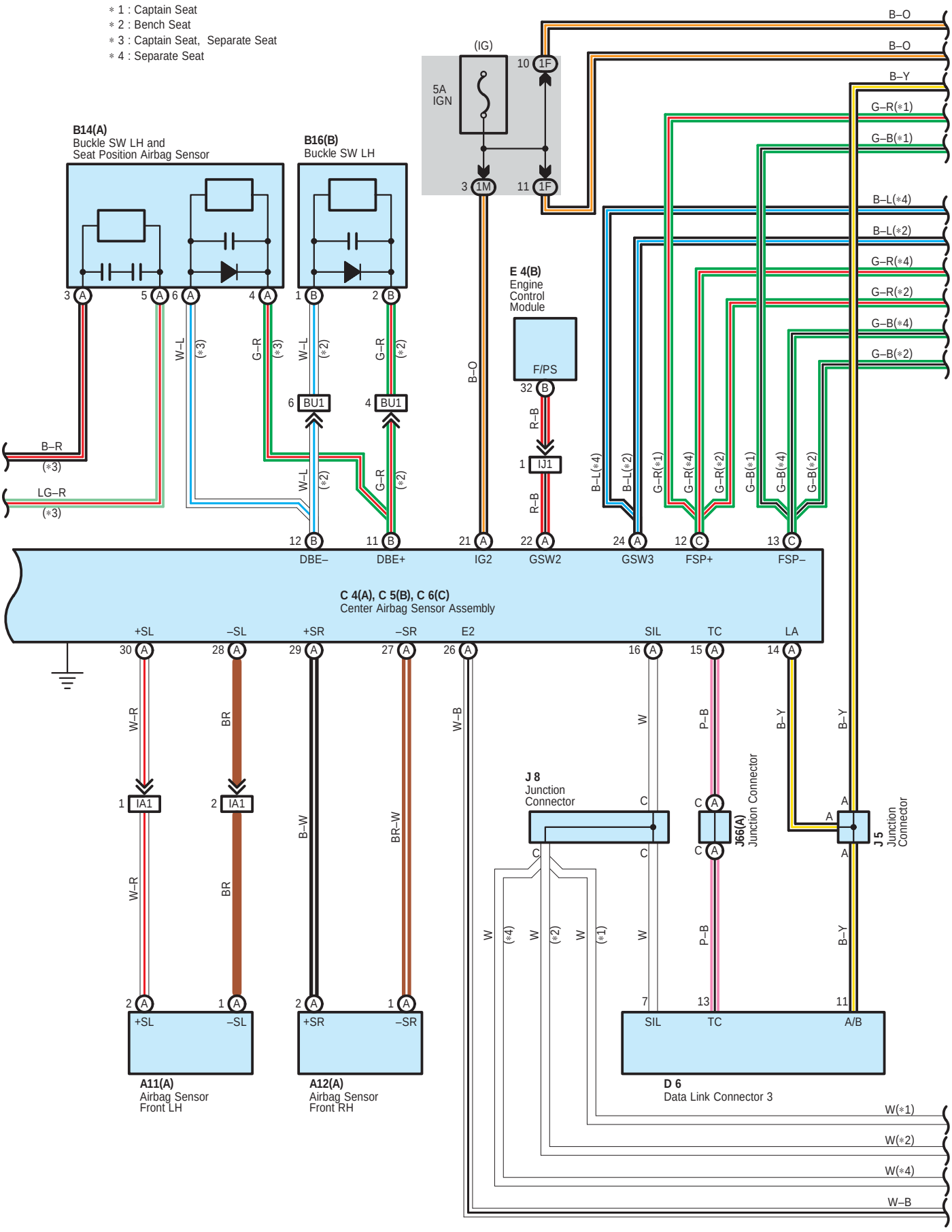
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

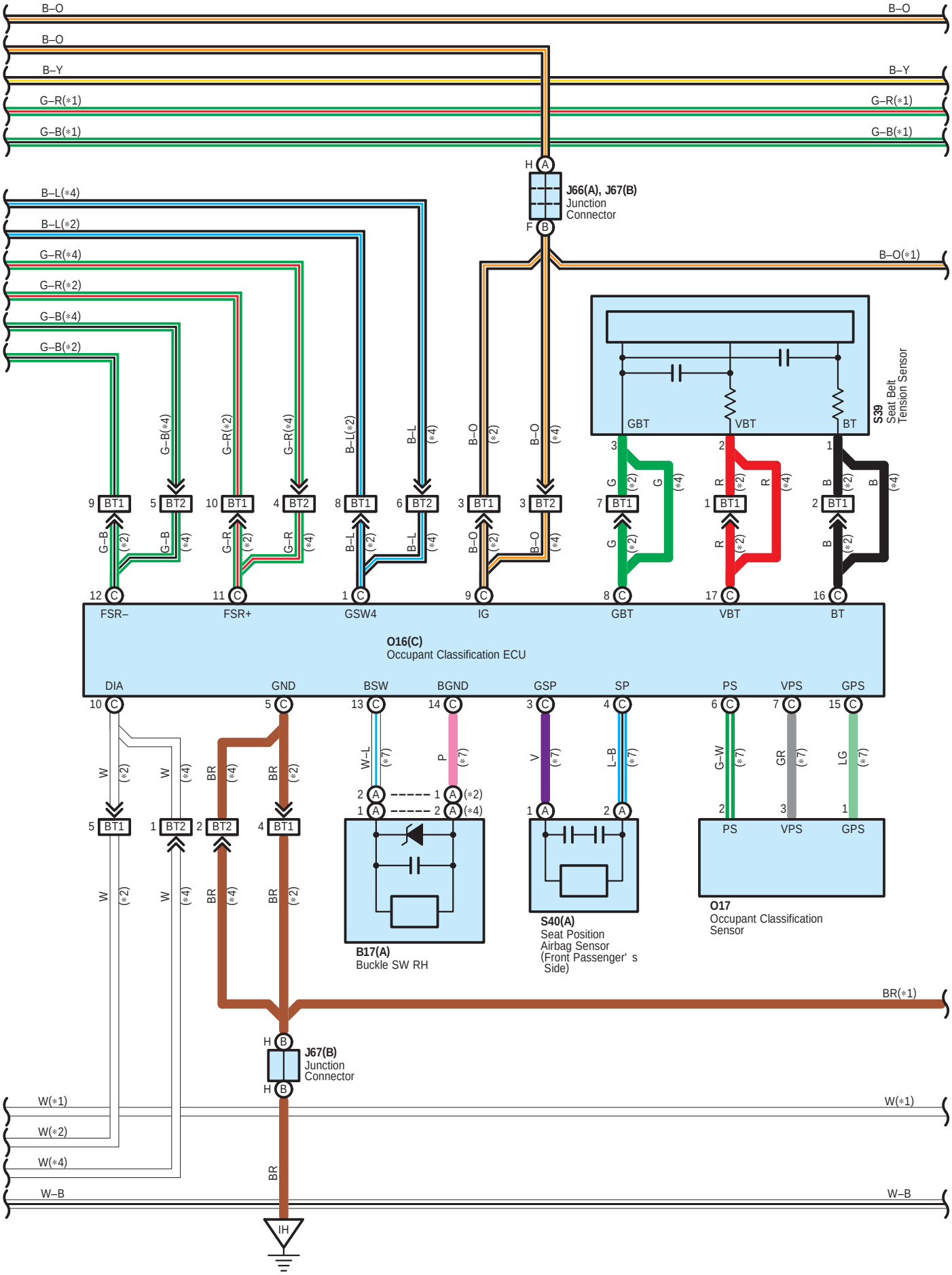
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

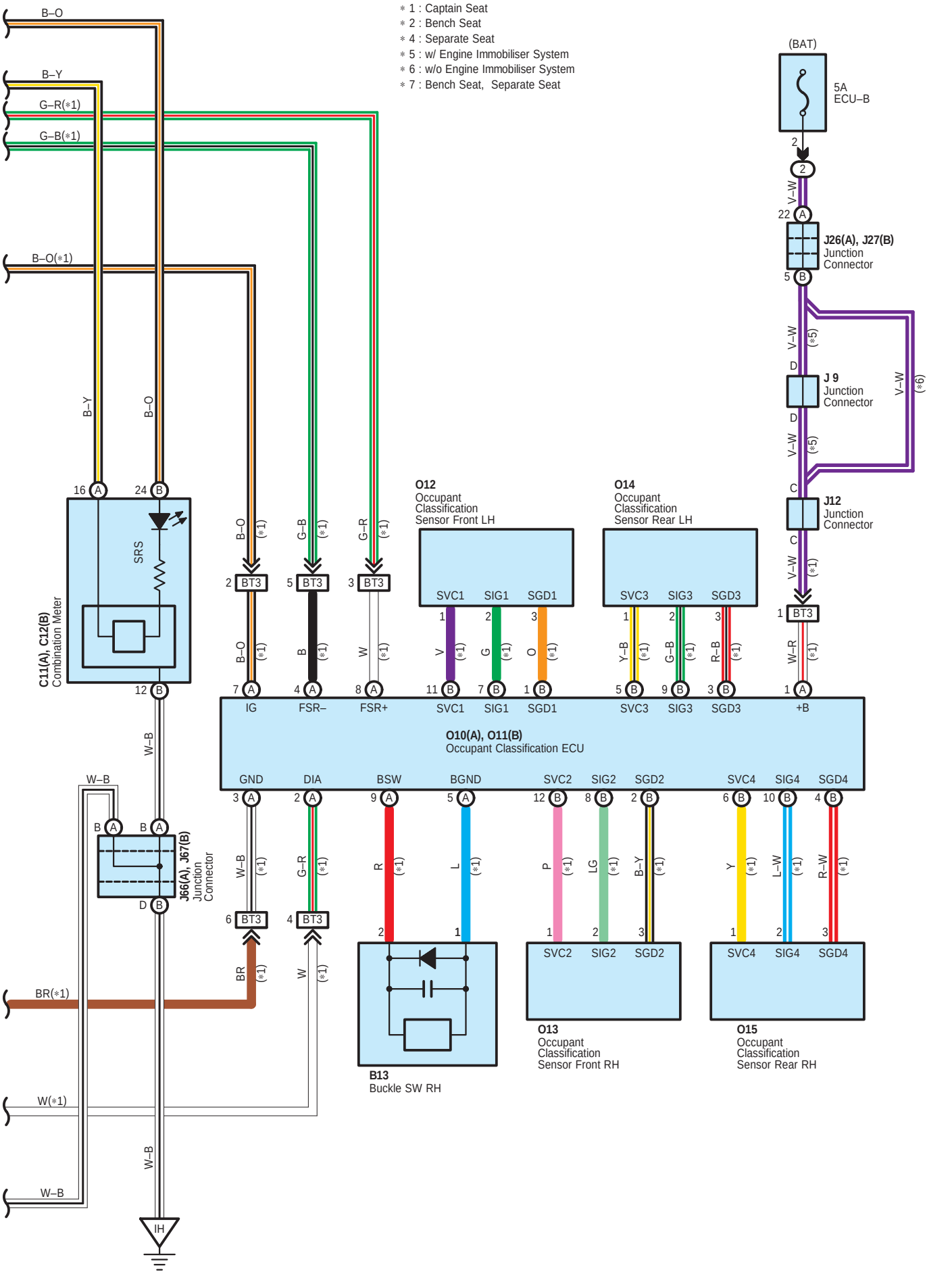
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is 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
* Seat belt pretensioner
* Center airbag sensor assembly
* Front airbag sensor assembly


(ACC)
15A
ACC
10 1G
GR
A16
Airbag Squib
(Front Passenger
Airbag Assembly)
A17
Airbag Squib
(Steering Wheel Pad)
Spiral
Cable
A36
Airbag Cut Off SW
(Standard Cab)
S41
Seat Position
Airbag Sensor
(Driver' s Side)
BU1
(*2)
(*3)
P–
P+
P2+
P2–
D+
D–
D2+
D2–
MSW+
MSW–
DSP+
DSP–
C 4(A), C 5(B), C 6(C)
Center Airbag Sensor Assembly
P–AB
PAON
PBEW
PD+
PD–
PP+
PP–
E1
ACC
P–AB
PAON
PBKL
E
I24(A), I25(B)
Integration Control
and Panel
J13
Junction
Connector
P13(A)
Pretensioner LH
P14(A)
Pretensioner RH


∗1 : Captain Seat
∗2 : Bench Seat
∗3 : Captain Seat, Separate Seat
∗4 : Separate Seat
(IG)
5A IGN
10 1F
3 1M
11 1F
B–O
B–O
B–Y
G–R(∗1)
G–B(∗1)
B–L(∗4)
B–L(∗2)
G–R(∗4)
G–R(∗2)
G–B(∗4)
G–B(∗2)
B14(A)
Buckle SW LH and Seat Position Airbag Sensor
B16(B)
Buckle SW LH
E 4(B)
Engine Control Module
F/PS
32 B
R–B
1 IJ1
R–B
B–O
B–R (∗3)
LG–R (∗3)
W–L (∗3)
G–R (∗3)
W–L (∗2)
G–R (∗2)
6 BU1
4 BU1
12 B DBE–
11 B DBE+
21 A IG2
22 A GSW2
24 A GSW3
12 C FSP+
13 C FSP–
C 4(A), C 5(B), C 6(C)
Center Airbag Sensor Assembly
+SL
–SL
+SR
–SR
E2
SIL
TC
LA
30 A
28 A
29 A
27 A
26 A
16 A
15 A
14 A
W–R
BR
B–W
BR–W
W–B
W
P–B
B–Y
1 IA1
2 IA1
W–R
BR
J 8
Junction Connector
J66(A)
Junction Connector
J 5
Junction Connector
W (∗4)
W (∗2)
W (∗1)
2 A +SL
1 A –SL
2 A +SR
1 A –SR
7 SIL
13 TC
11 A/B
A11(A)
Airbag Sensor Front LH
A12(A)
Airbag Sensor Front RH
D 6
Data Link Connector 3
W(∗1)
W(∗2)
W(∗4)
W–B


B–O
B–O
B–Y
G–R(*1)
G–B(*1)
B–Y
G–R(*1)
G–B(*1)
H A
J66(A), J67(B)
Junction
Connector
F B
B–L(*4)
B–L(*2)
G–R(*4)
G–R(*2)
G–B(*4)
G–B(*2)
B–O(*1)
S39
Seat Belt
Tension Sensor
GBT
VBT
BT
O16(C)
Occupant Classification ECU
FSR–
FSR+
GSW4
IG
GBT
VBT
BT
DIA
GND
BSW
BGND
GSP
SP
PS
VPS
GPS
B17(A)
Buckle SW RH
S40(A)
Seat Position
Airbag Sensor
(Front Passenger' s
Side)
O17
Occupant Classification
Sensor
BR(*1)
J67(B)
Junction
Connector
W(*1)
W(*2)
W(*4)
W–B
BR
IH


＊1 : Captain Seat
＊2 : Bench Seat
＊4 : Separate Seat
＊5 : w/ Engine Immobiliser System
＊6 : w/o Engine Immobiliser System
＊7 : Bench Seat, Separate Seat
(BAT)
5A
ECU–B
V–W
J26(A), J27(B)
Junction
Connector
J 9
Junction
Connector
J12
Junction
Connector
B–O
B–Y
G–R(＊1)
G–B(＊1)
B–O(＊1)
C11(A), C12(B)
Combination Meter
SRS
O12
Occupant
Classification
Sensor Front LH
SVC1
SIG1
SGD1
O14
Occupant
Classification
Sensor Rear LH
SVC3
SIG3
SGD3
BT3
IG
FSR–
FSR+
+B
O10(A), O11(B)
Occupant Classification ECU
GND
DIA
BSW
BGND
SVC2
SIG2
SGD2
SVC4
SIG4
SGD4
W–B
J66(A), J67(B)
Junction
Connector
BR(＊1)
W(＊1)
IH
B13
Buckle SW RH
O13
Occupant
Classification
Sensor Front RH
O15
Occupant
Classification
Sensor Rear RH

# SRS (Access/Standard Cab)

**System Outline**

* The system reaches an ignition judgment to deploy the following device based on the signals received from the front airbag sensor and deceleration sensor.
  – Driver Airbag
  – Front Passenger Airbag
  – Seat Belt Pretensioner
* The dual–stage SRS airbag system has been used for the driver and front passenger airbags. This system controls the optimal airbag inflation by judging the extent of impact, seat position (driver seat), whether or not the seat belt is fastened (driver seat) and information from the front passenger occupant classification system.
* The front passenger occupant classification system judges whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, according to the load applied to the front passenger seat and whether the seat belt is buckled. Based on the results, it restricts the deployment of the front passenger airbag, front passenger side airbag, and front passenger seat belt pretensioner. In addition, the system informs the driver of the result of the judgment through the use of the AIRBAG ON/OFF indicator lights.
* The front passenger occupant classification system judges whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, according to the load applied to the front passenger seat, seat position (passenger), the load applied to the belt tension sensor (passenger), and whether the seat belt is buckled (passenger). Based on the results, it restricts the deployment of the front passenger airbag, front passenger side airbag, and front passenger seat belt pretensioner. In addition, the system informs the driver of the result of the judgment through the use of the AIRBAG ON/OFF indicator lights.
* The airbag manual ON–OFF switch is used to disable the deployment of the front and side airbags for the front passenger, such as when a child seat is installed on the front passenger seat.
* The airbag sensor assembly transmits a signal to the engine control module in order to stop the fuel pump when the airbag is deployed.

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A11 | A | 56 (2UZ–FE) | D6 | | 61 | O14 | | 66 (*5) |
| | | 58 (1GR–FE) | E4 | B | 61 | O15 | | 66 (*5) |
| A12 | A | 56 (2UZ–FE) | I24 | A | 61 | O16 | C | 67 (*6) |
| | | 58 (1GR–FE) | I25 | B | 61 | | | 68 (*7) |
| A16 | | 60 | J5 | | 62 | O17 | | 67 (*6) |
| A17 | | 60 | J8 | | 62 | | | 68 (*7) |
| A36 | | 60 | J9 | | 62 | P13 | A | 64 (*3) |
| B13 | | 66 (*5) | J12 | | 62 | | | 65 (*4) |
| B14 | A | 64 (*3) | J13 | | 62 | P14 | A | 64 (*3) |
| B16 | B | 68 (*7) | J26 | A | 62 | | | 65 (*4) |
| B17 | A | 67 (*6) | J27 | B | 62 | S39 | | 65 (*4) |
| | | 68 (*7) | J66 | A | 62 | | | 67 (*6) |
| C4 | A | 60 | J67 | B | 62 | S40 | A | 67 (*6) |
| C5 | B | 60 | O10 | A | 66 (*5) | | | 68 (*7) |
| C6 | C | 60 | O11 | B | 66 (*5) | S41 | | 68 (*7) |
| C11 | A | 60 | O12 | | 66 (*5) | | | |
| C12 | B | 60 | O13 | | 66 (*5) | | | |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1M | 26 (*1) | |
| | 30 (*2) | |

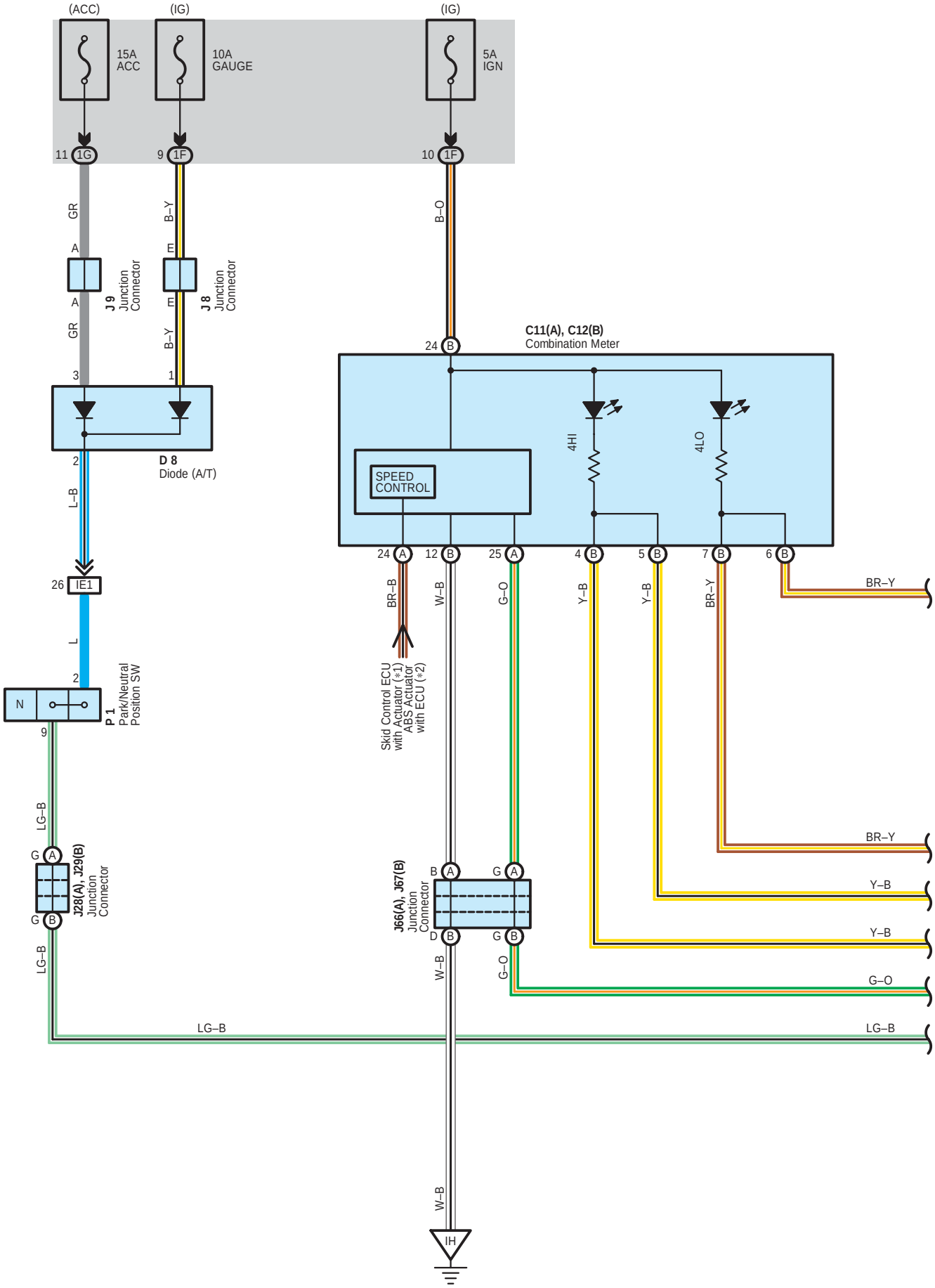
**: Connector Joining Wire Harness and Wire Harness**

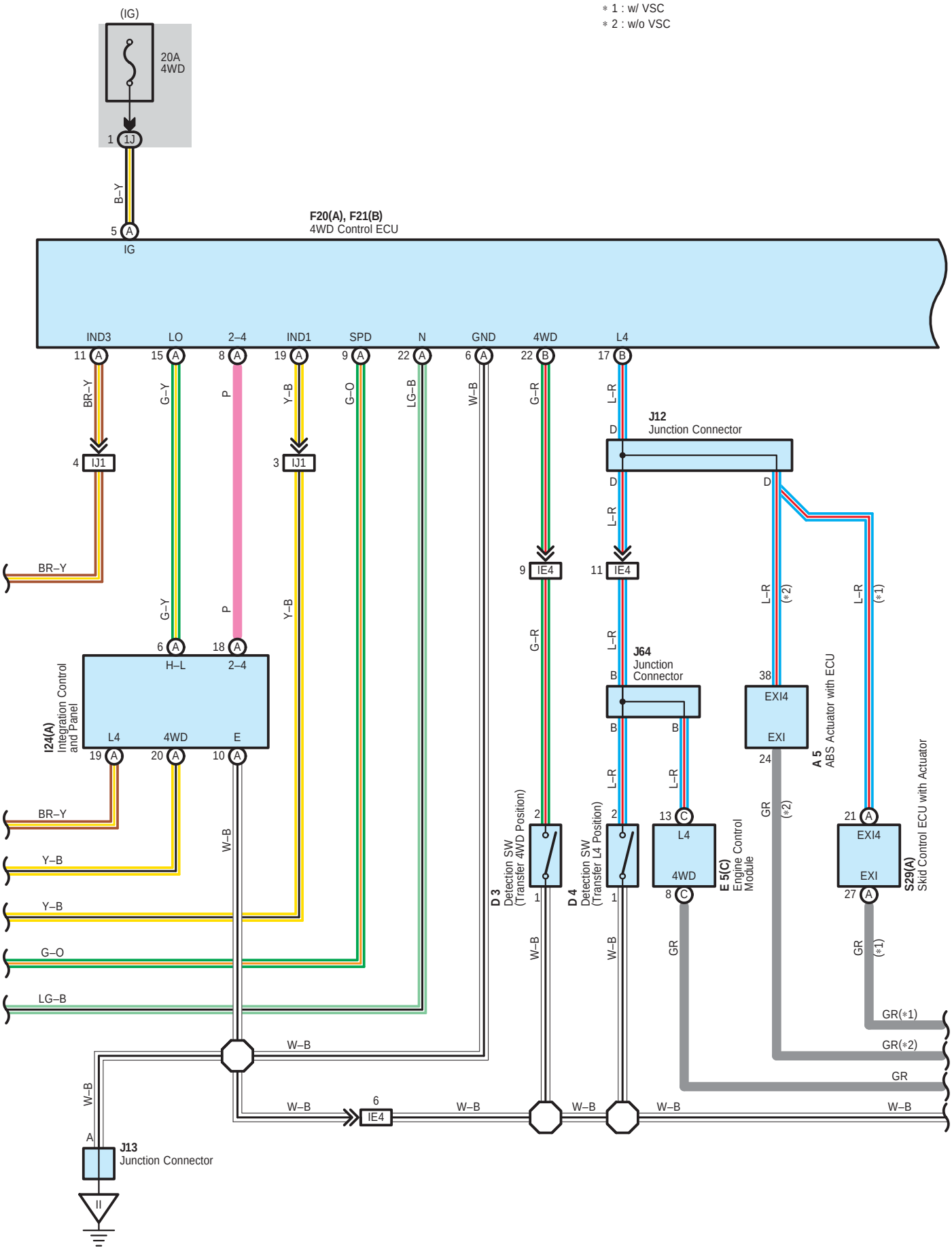
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA1 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |
| BT1 | 88 (*7) | Cowl Wire and Seat No.1 Wire (Under the Front Passenger's Seat) |
| BT2 | 87 (*6) | Seat No.1 Wire and Cowl Wire (Under the Front Passenger's Seat) |
| BT3 | 86 (*5) | |
| BU1 | 88 (*7) | Seat No.1 Wire and Cowl Wire (Under the Driver's Seat) |

**: Ground Points**

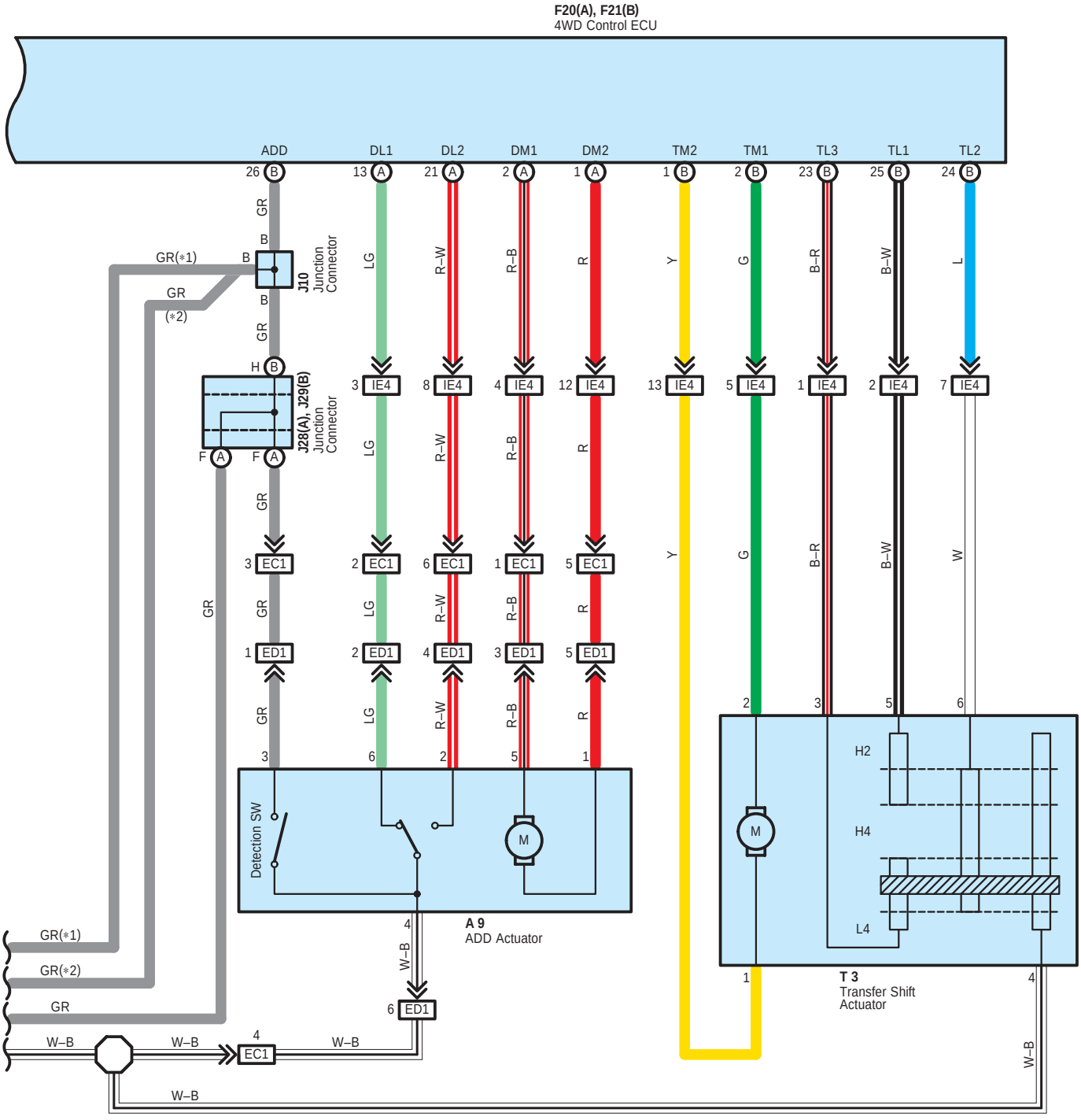
| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IH | 82 | Right Kick Panel |
| II | | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(ACC)
(IG)
(IG)
15A
ACC
10A
GAUGE
5A
IGN
11 1G
9 1F
10 1F
GR
B–Y
B–O
A
E
J 9
Junction
Connector
J 8
Junction
Connector
3
1
2
D 8
Diode (A/T)
L–B
26 IE1
L
2
N
P 1
Park/Neutral
Position SW
9
LG–B
G A
G B
J28(A), J29(B)
Junction
Connector
LG–B
C11(A), C12(B)
Combination Meter
24 B
SPEED
CONTROL
4HI
4LO
24 A
12 B
25 A
4 B
5 B
7 B
6 B
BR–B
W–B
G–O
Y–B
Y–B
BR–Y
BR–Y
Skid Control ECU
with Actuator (*1)
ABS Actuator
with ECU (*2)
BR–Y
Y–B
Y–B
G–O
LG–B
LG–B
B A
G A
J66(A), J67(B)
Junction
Connector
D B
G B
W–B
G–O
W–B
IH


＊1 : w/ VSC
＊2 : w/o VSC
(IG)
20A
4WD
1 1J
B–Y
5 A
IG
F20(A), F21(B)
4WD Control ECU
IND3
LO
2–4
IND1
SPD
N
GND
4WD
L4
11 A
15 A
8 A
19 A
9 A
22 A
6 A
22 B
17 B
BR–Y
G–Y
P
Y–B
G–O
LG–B
W–B
G–R
L–R
4 IJ1
3 IJ1
J12
Junction Connector
D
9 IE4
11 IE4
J64
Junction
Connector
B
6 A
18 A
H–L
2–4
I24(A)
Integration Control
and Panel
L4
4WD
E
19 A
20 A
10 A
38
EXI4
EXI
24
A 5
ABS Actuator with ECU
(＊2)
(＊1)
GR
2
1
D 3
Detection SW
(Transfer 4WD Position)
D 4
Detection SW
(Transfer L4 Position)
13 C
8 C
E 5(C)
Engine Control
Module
21 A
27 A
S29(A)
Skid Control ECU with Actuator
GR(＊1)
GR(＊2)
6
IE4
A
J13
Junction Connector

* 1 : w/ VSC
* 2 : w/o VSC



**System Outline**

In the conventional system, the 2–4 select SW and the transfer shift lever was used to shift the mode between H–L. In this system, the transfer shift lever is not used, and the H–L mode shift can be done by the transfer shift actuator.
The mode can be changed by the touch select 2–4 SW and touch select high–low in the integration control and panel.
The shift range is controlled according to the vehicle speed sensor and Park/Neutral position SW, and the indicator light is turned ON to inform the driver if any of the following conditions are detected:

* The shift is not completed even though 3 seconds have elapsed after transfer operation.
* The vehicle speed is above approximately 100 km/h (63 mph) when shifting from H2 to H4.
* The vehicle speed is below approximately 5 km/h (3 mph) or the A/T shift lever is in a position other than N position, when shifting from H4 to L4 or visa versa, and from L4 to H2.

**Transfer Operation**

H2 to H4
When the touch select 2–4 SW in the integration control and panel is turned ON, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD (H4 position.)
When the system shifts to 4WD, the detection SW (Transfer 4WD position) is turned ON, and the current flows from 4WD control ECU TERMINAL (A) 2 to ADD actuator TERMINAL 5 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (A) 1 to GROUND, and the ADD actuator is activated, and the ADD is connected. When the ADD is connected, the detection SW (ADD position SW) is turned ON, and the 4HI Indicator light comes ON.
H4 to H2
When the touch select 2–4 SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the transfer shifts to 2WD (H2 position.)
When the system shifts to 2WD, the detection SW (Transfer 4WD position) is turned OFF, and the current flows from 4WD control ECU TERMINAL (A) 1 to ADD actuator TERMINAL 1 to motor to TERMINAL 5 to 4WD control ECU TERMINAL (A) 2 to GROUND, and the ADD actuator is activated, and the ADD is disconnected. When the ADD is disconnected, the detection SW (ADD position SW) is turned OFF, and the 4HI indicator Light turns OFF.
H4 to L4
When the touch select high–low SW in the integration control and panel is turned ON, a signal is input into TERMINAL (A) 15 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD LO position (L4 position.)
The 4HI Indicator is turned OFF and the 4LO indicator is turned ON.
L4 to H4
When the touch select high–low SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 15 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the transfer shifts to 4WD HI position (H4 Position.)
The 4HI indicator is turned ON and the 4LO indicator is turned OFF.
The shift is not completed even though 3 seconds have elapsed after transfer operation.

* The vehicle speed is above approximately 100 km/h (63 mph) when shifting from H2 to H4.
* The vehicle speed is below approximately 5 km/h (3 mph) or the A/T Shift Lever is in a position other than N position, when shifting from H4 to L4 or visa versa, and from L4 to H2.

L4 to H2
When the touch select 2–4 SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the detection SW (Transfer L4 position) is turned OFF.
Furthermore, the motor rotates to shift the transfer to 2WD (H2 position.)
When the system shifts to 2WD, the detection SW (Transfer 4WD position) is turned OFF, and the current flows from 4WD control ECU TERMINAL (A) 1 to ADD actuator TERMINAL 1 to motor to TERMINAL 5 to 4WD control ECU TERMINAL (A) 2 to GROUND, and the ADD actuator is activated, and the ADD is disconnected. When the ADD is disconnected, the detection SW (ADD position SW) is turned OFF, and the 4LO indicator light turns OFF.

H2 to L4
When the touch select 2–4 SW in the integration control and panel is turned ON, and the touch select high–low SW is turned ON, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD (H4 position.)
When the system shifts to 4WD, the detection SW (Transfer 4WD position) is turned ON, and the current flows from 4WD control ECU TERMINAL (A) 2 to ADD actuator TERMINAL 5 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (A) 1 to GROUND, and the ADD actuator is activated, and the ADD is connected. Then a signal is input into TERMINAL (A) 15 of the 4WD control ECU and the 4WD control ECU is activated by this, so the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND. The transfer shifts to 4WD LO position (L4 position), and the 4LO indicator light comes ON.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A5 | 56 (2UZ–FE) | F20 A | 61 | J28 A | 62 |
| A9 | 56 (2UZ–FE) | F21 B | 61 | J29 B | 62 |
| C11 A | 60 | I24 A | 61 | J64 | 62 |
| C12 B | 60 | J8 | 62 | J66 A | 62 |
| D3 | 56 (2UZ–FE) | J9 | 62 | J67 B | 62 |
| D4 | 56 (2UZ–FE) | J10 | 62 | P1 | 57 (2UZ–FE) |
| D8 | 61 | J12 | 62 | S29 A | 57 (2UZ–FE) |
| E5 C | 61 | J13 | 62 | T3 | 57 (2UZ–FE) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

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

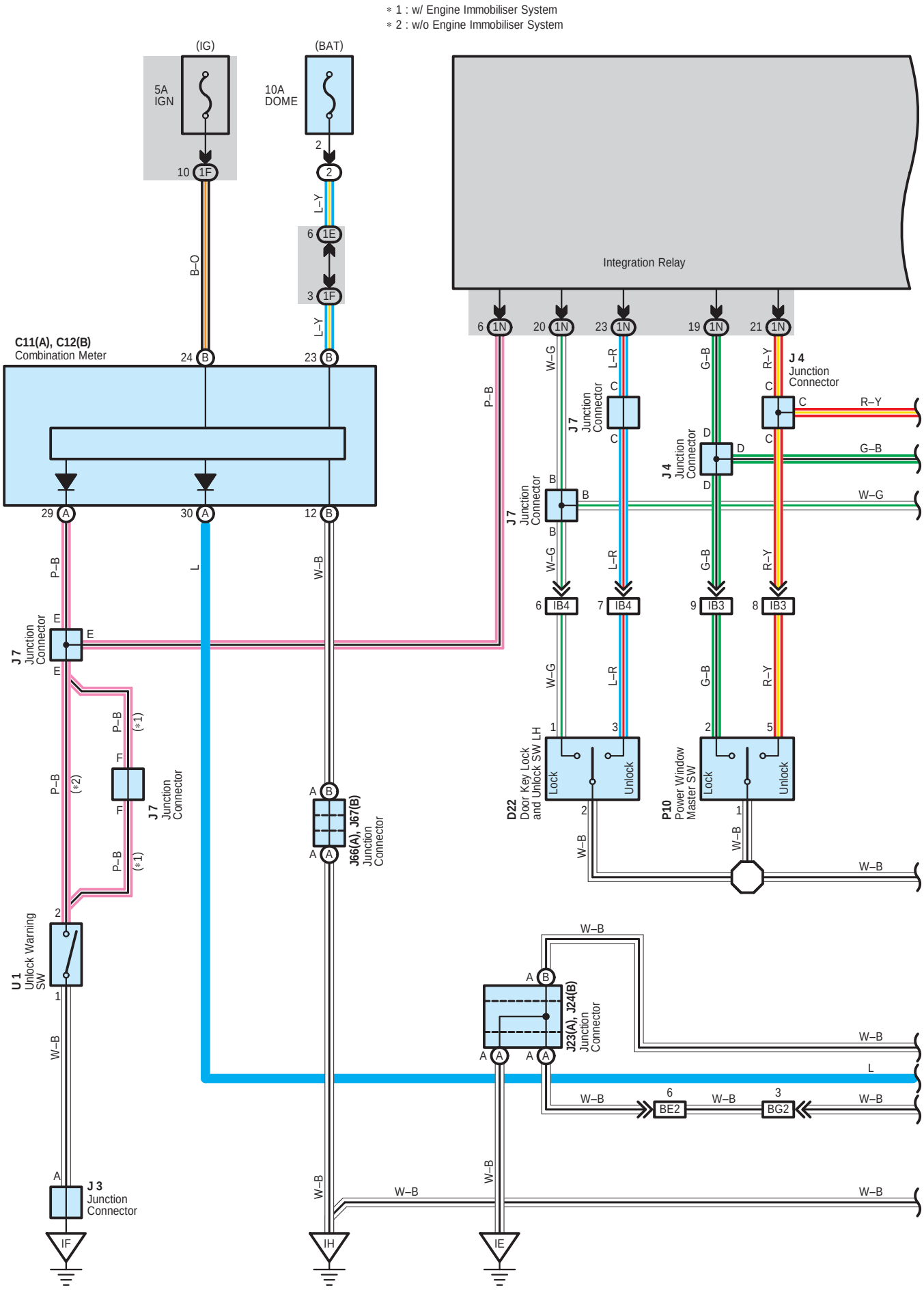
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EC1 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Wire (Near the Starter) |
| ED1 | 80 (2UZ–FE) | Engine No.2 Wire and Differential Wire (Near the Transmission) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IE4 | | |
| IJ1 | 83 | Cowl Wire and Cowl Wire (Right Side of Instrument Panel) |

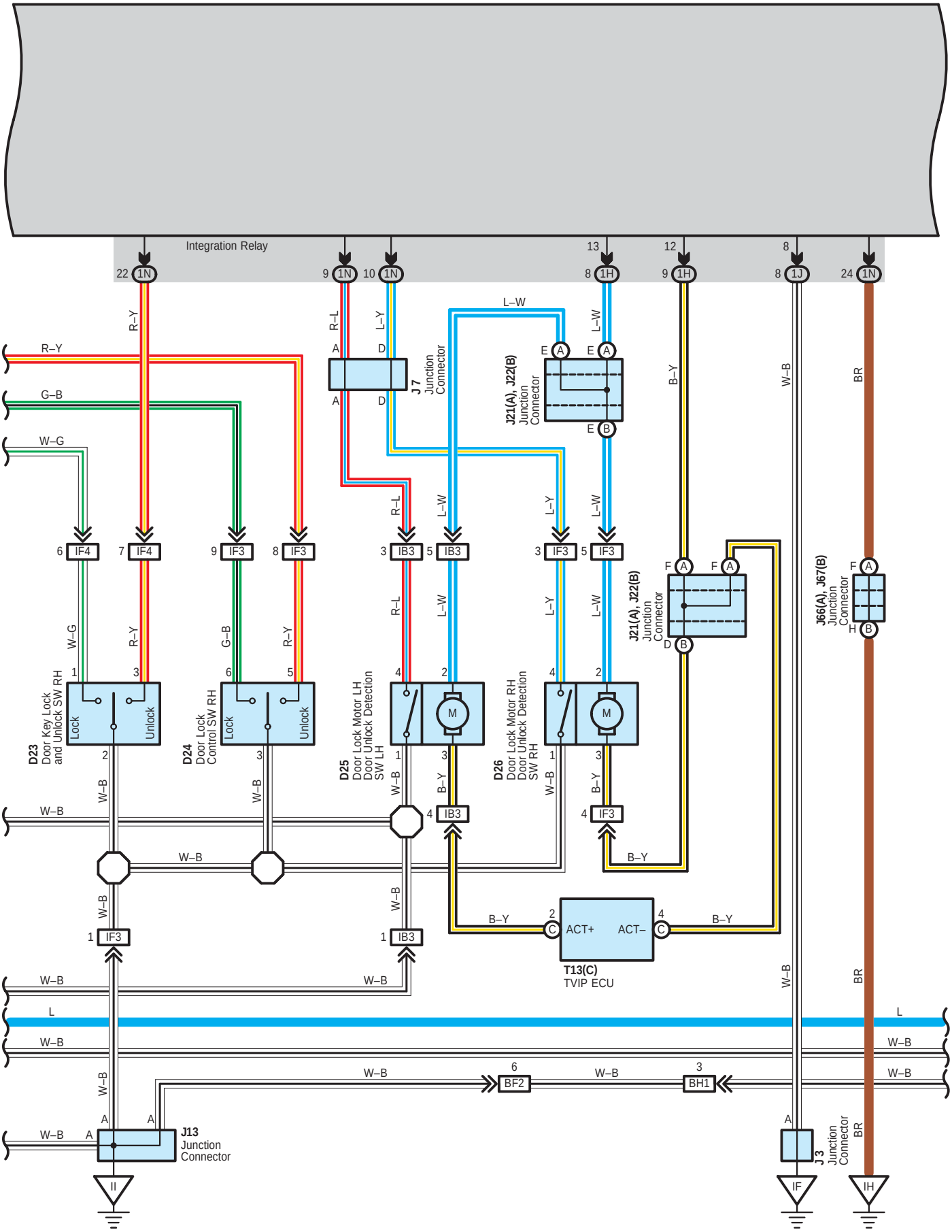
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IH | 82 | Right Kick Panel |
| II | | |

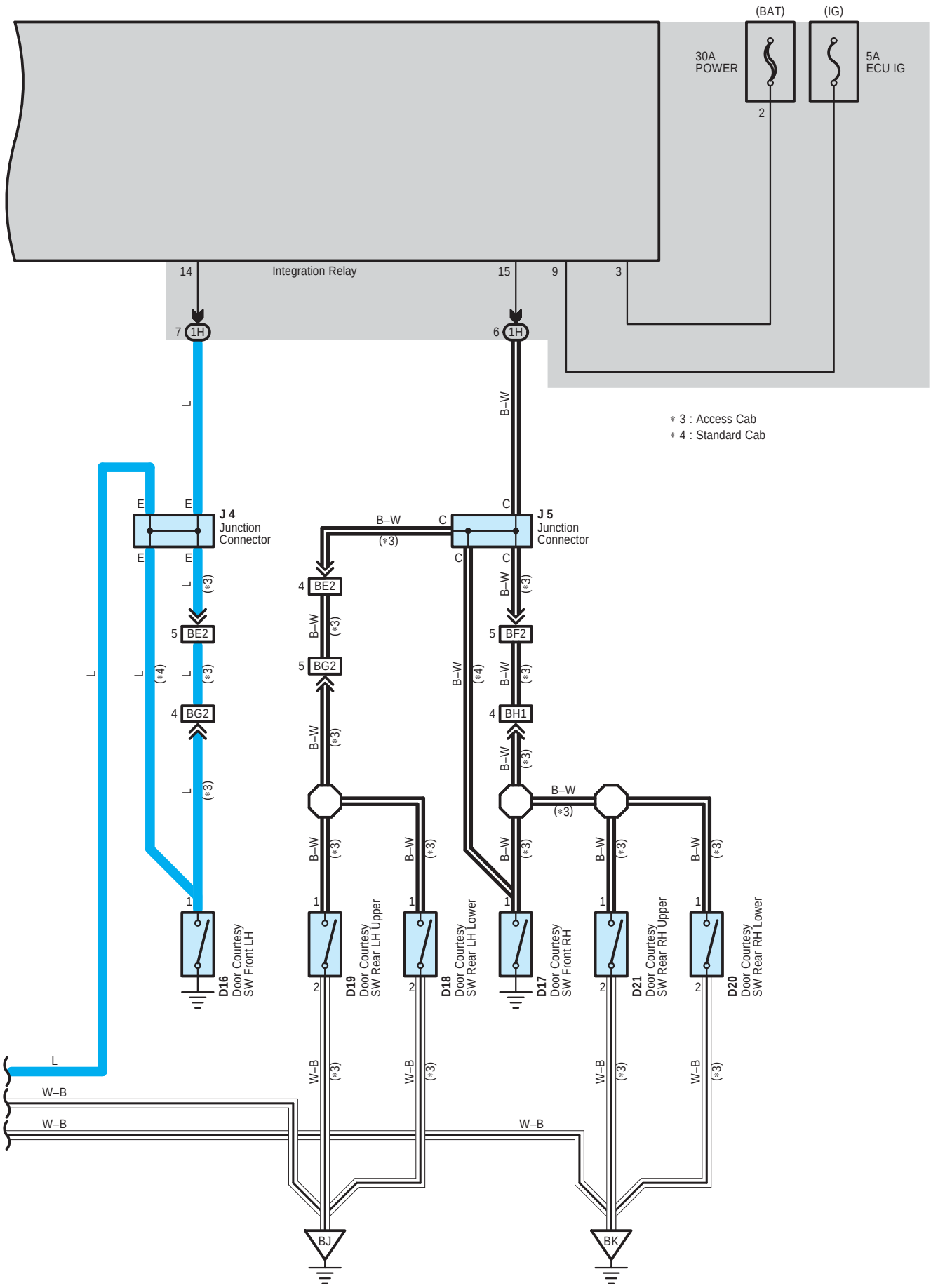
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Door Lock Control with DRL (Access/Standard Cab)




Integration Relay
22 1N
9 1N
10 1N
13 8 1H
12 9 1H
8 1J
24 1N
R–Y
R–L
L–Y
L–W
G–B
W–G
B–Y
W–B
BR
L
J 7
Junction Connector
J21(A), J22(B)
Junction Connector
J66(A), J67(B)
Junction Connector
6 IF4
7 IF4
9 IF3
8 IF3
3 IB3
5 IB3
3 IF3
5 IF3
D23
Door Key Lock and Unlock SW RH
Lock
Unlock
D24
Door Lock Control SW RH
D25
Door Lock Motor LH
Door Unlock Detection SW LH
D26
Door Lock Motor RH
Door Unlock Detection SW RH
M
4 IB3
4 IF3
1 IF3
1 IB3
ACT+
ACT–
T13(C)
TVIP ECU
6 BF2
3 BH1
J13
Junction Connector
J3
Junction Connector
II
IF
IH

# Door Lock Control with DRL (Access/Standard Cab)



**System Outline**

Current always flows to TERMINAL 3 of the integration relay through the POWER fuse.

**1. Manual Lock Operation**

(Driver's door)

To push the door lock control SW or door key lock and unlock SW to LOCK position, a lock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 13 to TERMINAL 2 of the door lock motor to TERMINAL 3 to TERMINAL 2 of the TVIP ECU to TERMINAL 4 to TERMINAL 12 of the integration relay to TERMINAL 8 to GROUND and the door lock motor causes the door to lock.

(Passenger's door)

To push the door lock control SW or door key lock and unlock SW to LOCK position, a lock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 13 to TERMINAL 2 of the door lock motor to TERMINAL 3 to TERMINAL 12 of the relay to TERMINAL 8 to GROUND and the door lock motor causes the door to lock.

**2. Manual Unlock Operation**

(Driver's door)

To push the door lock control SW or door key lock and unlock SW to UNLOCK position, an unlock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 4 of the TVIP ECU to TERMINAL 2 to TERMINAL 3 of the door lock motor to TERMINAL 2 to TERMINAL 13 of the integration relay to TERMINAL 8 to GROUND and the door lock motor causes the door to unlock.

(Passenger's door)

To push the door lock control SW or door key lock and unlock SW to UNLOCK position, an unlock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motor to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and the door lock motor causes the door to unlock.

**3. Double Operation Unlock Operation**

When the door key lock and unlock SW LH is turned to unlock position, only the front LH door is mechanically unlocked. Turning the door key lock and unlock SW LH to the unlock side causes a signal to be input to the relay, and if the signal is input again within 3 seconds by turning the door key lock and unlock SW LH to the unlock side again, current flows from TERMINAL 12 of the integration relay to TERMINAL 4 of the TVIP ECU to TERMINAL 2 to TERMINAL 3 of the door lock motor, TERMINAL 2 to TERMINAL 13 of the integration relay to TERMINAL 8 to GROUND, causing the door lock motors to operate and unlock the doors.

**4. Key Confine Prevention Function**

* Operating door lock knob (In door lock motor operation)
  With ignition key in cylinder (Unlock warning SW on), when any door is opened and locked using door lock knob (Door lock motor), the door is locked once but each door is unlocked soon by the function of the integration relay. As a result, current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motors to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and causes all the doors to unlock.
* Operating door lock control SW or door key lock and unlock SW
  With ignition key in cylinder (Unlock warning SW on), when any door is opened and locked using the door lock control SW or door key lock and unlock SW, all doors are locked once but each door is unlocked by the function of the SW contained in motor, which inputs the signal to the integration relay. According to this input signal, current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motors to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and causes all the doors to unlock.

# Door Lock Control with DRL (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C11 | A | 60 | D23 | 64 (*3) | J13 | | 62 |
| C12 | B | 60 | | 65 (*4) | J21 | A | 62 |
| D16 | | 64 (*3) | D24 | 64 (*3) | J22 | B | 62 |
| | | 65 (*4) | | 65 (*4) | J23 | A | 62 |
| D17 | | 64 (*3) | D25 | 64 (*3) | J24 | B | 62 |
| | | 65 (*4) | | 65 (*4) | J66 | A | 62 |
| D18 | | 64 (*3) | D26 | 64 (*3) | J67 | B | 62 |
| D19 | | 64 (*3) | | 65 (*4) | P10 | | 64 (*3) |
| D20 | | 64 (*3) | J3 | 62 | | | 65 (*4) |
| D21 | | 64 (*3) | J4 | 62 | T13 | C | 63 |
| D22 | | 64 (*3) | J5 | 62 | U1 | | 63 |
| | | 65 (*4) | J7 | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 30 (*2) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | 30 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1H | | |
| 1J | | |
| 1N | 31 (*2) | |

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

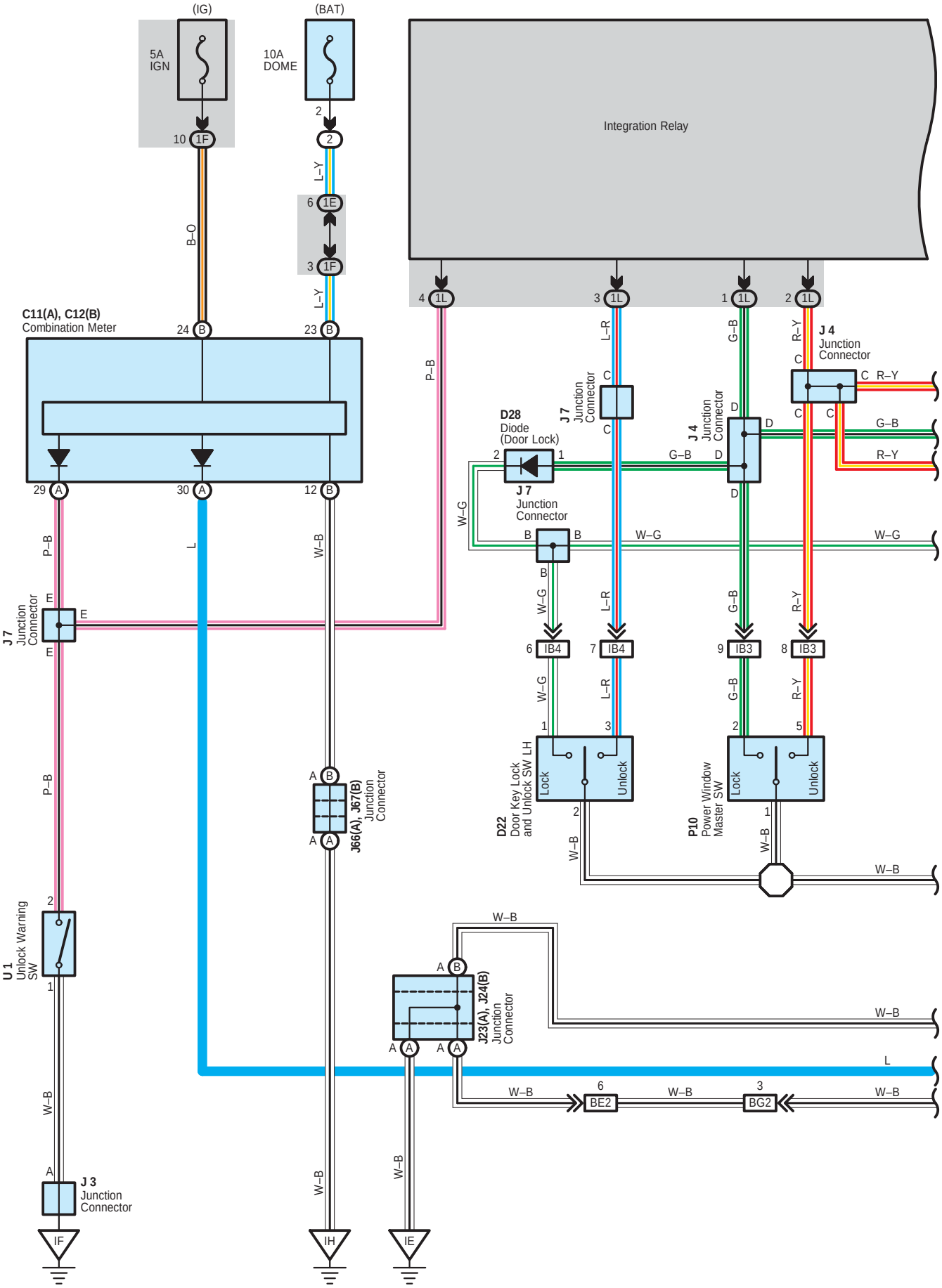
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IB4 | | |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF4 | | |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

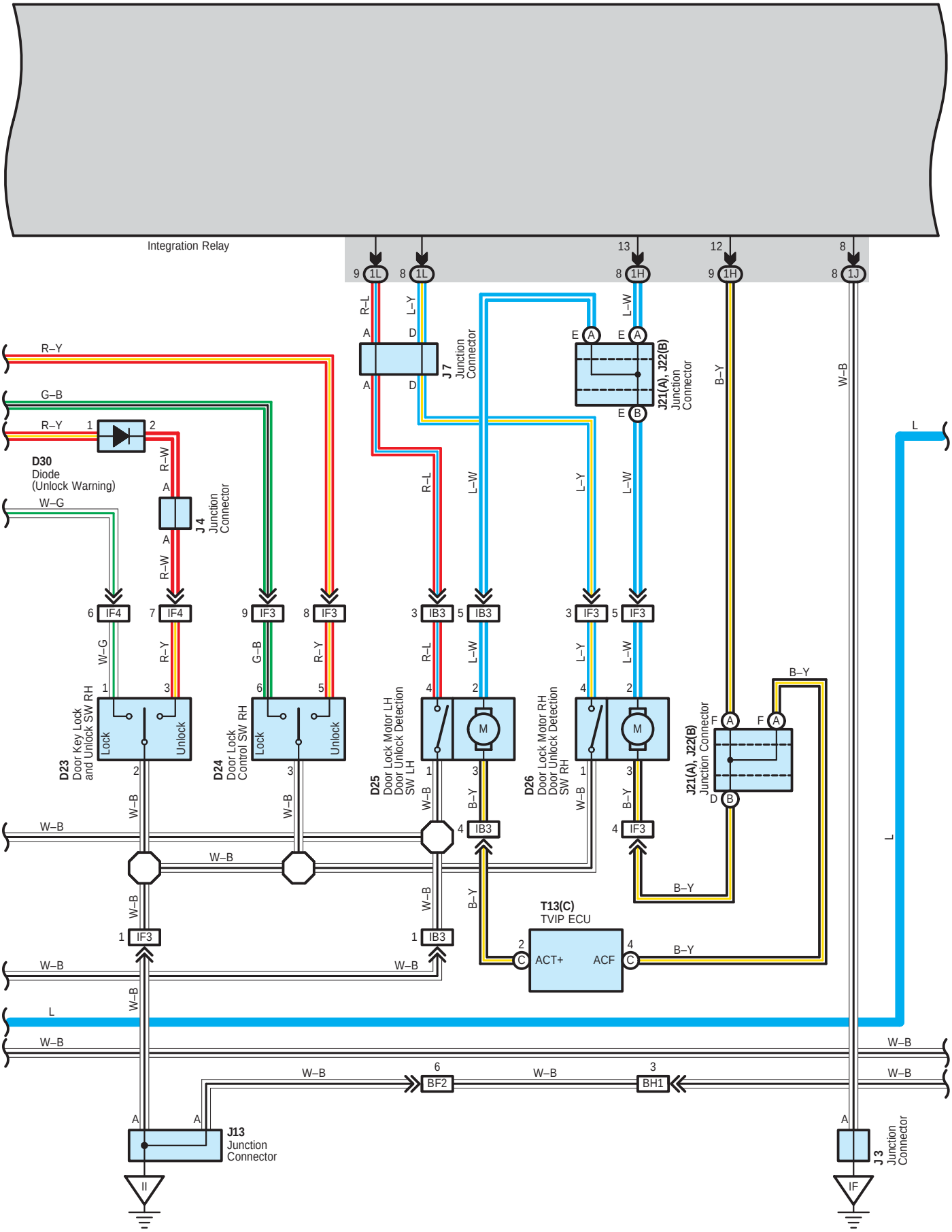
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |
| II | | |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |

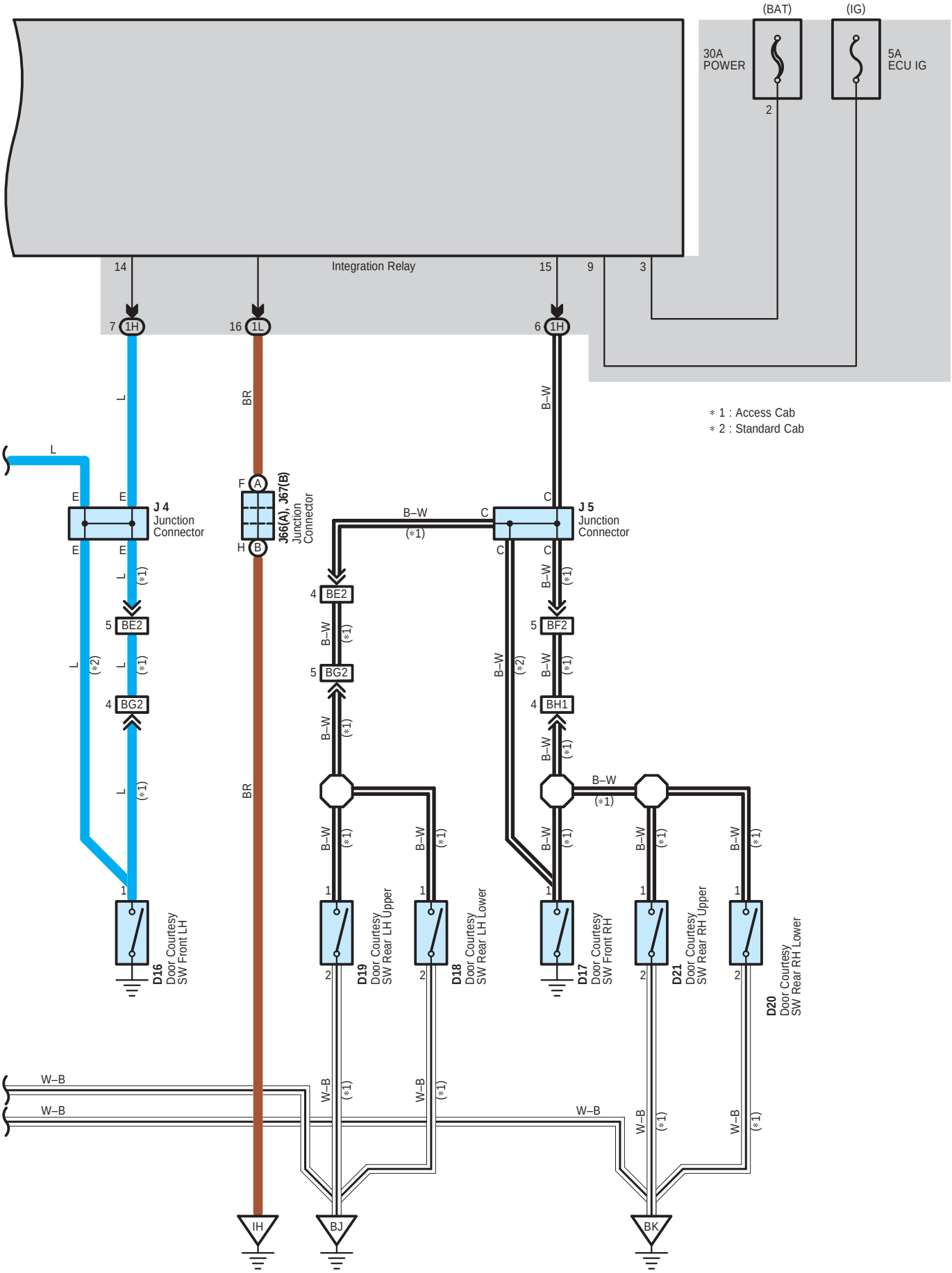
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Door Lock Control without DRL (Access/Standard Cab)




Integration Relay
9 1L
8 1L
13
8 1H
12
9 1H
8
8 1J
R–L
L–Y
L–W
B–Y
W–B
L
J7 Junction Connector
J21(A), J22(B) Junction Connector
R–Y
G–B
R–Y
D30
Diode
(Unlock Warning)
R–W
W–G
J4 Junction Connector
6 IF4
7 IF4
9 IF3
8 IF3
3 IB3
5 IB3
3 IF3
5 IF3
W–G
R–Y
G–B
R–Y
R–L
L–W
L–Y
L–W
D23
Door Key Lock and Unlock SW RH
Lock
Unlock
D24
Door Lock Control SW RH
Lock
Unlock
D25
Door Lock Motor LH
Door Unlock Detection SW LH
D26
Door Lock Motor RH
Door Unlock Detection SW RH
M
W–B
B–Y
4 IB3
4 IF3
T13(C)
TVIP ECU
2 C ACT+
ACF C 4
1 IF3
1 IB3
6 BF2
3 BH1
J13 Junction Connector
J3 Junction Connector
II
IF

# Door Lock Control without DRL (Access/Standard Cab)



**System Outline**

Current always flows to TERMINAL 3 of the integration relay through the POWER fuse.

**1. Manual Lock Operation**

(Driver's door)

To push the door lock control SW or door key lock and unlock SW to LOCK position, a lock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 13 to TERMINAL 2 of the door lock motor to TERMINAL 3 to TERMINAL 2 of the TVIP ECU to TERMINAL 4 to TERMINAL 12 of the integration relay to TERMINAL 8 to GROUND and the door lock motor causes the door to lock.

(Passenger's door)

To push the door lock control SW or door key lock and unlock SW to LOCK position, a lock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 13 to TERMINAL 2 of the door lock motor to TERMINAL 3 to TERMINAL 12 of the relay to TERMINAL 8 to GROUND and the door lock motor causes the door to lock.

**2. Manual Unlock Operation**

(Driver's door)

To push the door lock control SW or door key lock and unlock SW to UNLOCK position, an unlock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 4 of the TVIP ECU to TERMINAL 2 to TERMINAL 3 of the door lock motor to TERMINAL 2 to TERMINAL 13 of the integration relay to TERMINAL 8 to GROUND and the door lock motor causes the door to unlock.

(Passenger's door)

To push the door lock control SW or door key lock and unlock SW to UNLOCK position, an unlock signal is input to the integration relay and causes the relay to function. Current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motor to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and the door lock motor causes the door to unlock.

**3. Double Operation Unlock Operation**

When the door key lock and unlock SW LH is turned to unlock position, only the front LH door is mechanically unlocked. Turning the door key lock and unlock SW LH to the unlock side causes a signal to be input to the relay, and if the signal is input again within 3 seconds by turning the door key lock and unlock SW LH to the unlock side again, current flows from TERMINAL 12 of the integration relay to TERMINAL 4 of the TVIP ECU to TERMINAL 2 to TERMINAL 3 of the door lock motor, TERMINAL 2 to TERMINAL 13 of the integration relay to TERMINAL 8 to GROUND, causing the door lock motors to operate and unlock the doors.

**4. Key Confine Prevention Function**

* Operating door lock knob (In door lock motor operation)
  With ignition key in cylinder (Unlock warning SW on), when any door is opened and locked using door lock knob (Door lock motor), the door is locked once but each door is unlocked soon by the function of the integration relay. As a result, current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motors to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and causes all the doors to unlock.
* Operating door lock control SW or door key lock and unlock SW
  With ignition key in cylinder (Unlock warning SW on), when any door is opened and locked using the door lock control SW or door key lock and unlock SW, all doors are locked once but each door is unlocked by the function of the SW contained in motor, which inputs the signal to the integration relay. According to this input signal, current flows from TERMINAL 3 of the relay to TERMINAL 12 to TERMINAL 3 of the door lock motors to TERMINAL 2 to TERMINAL 13 of the relay to TERMINAL 8 to GROUND and causes all the doors to unlock.

# Door Lock Control without DRL (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C11 | A | 60 | D23 | 65 (*4) | J13 | | 62 |
| C12 | B | 60 | D24 | 64 (*3) | J21 | A | 62 |
| D16 | | 64 (*3) | | 65 (*4) | J22 | B | 62 |
| | | 65 (*4) | D25 | 64 (*3) | J23 | A | 62 |
| D17 | | 64 (*3) | | 65 (*4) | J24 | B | 62 |
| | | 65 (*4) | D26 | 64 (*3) | J66 | A | 62 |
| D18 | | 64 (*3) | | 65 (*4) | J67 | B | 62 |
| D19 | | 64 (*3) | D28 | 61 | P10 | | 64 (*3) |
| D20 | | 64 (*3) | D30 | 61 | | | 65 (*4) |
| D21 | | 64 (*3) | J3 | 62 | T13 | C | 63 |
| D22 | | 64 (*3) | J4 | 62 | U1 | | 63 |
| | | 65 (*4) | J5 | 62 | | | |
| D23 | | 64 (*3) | J7 | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1H | | |
| 1J | | |
| 1L | 27 (*1) | |

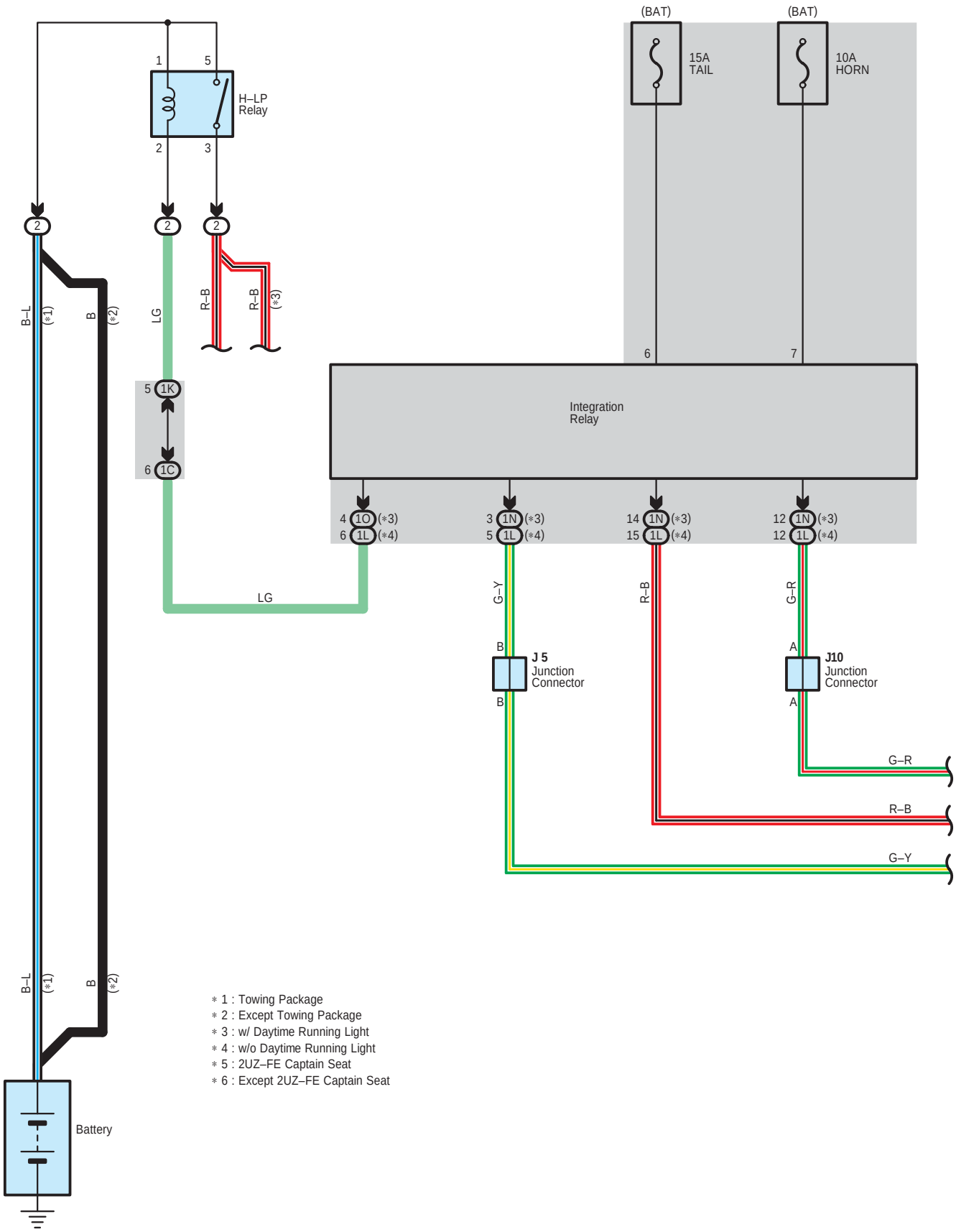
**: Connector Joining Wire Harness and Wire Harness**

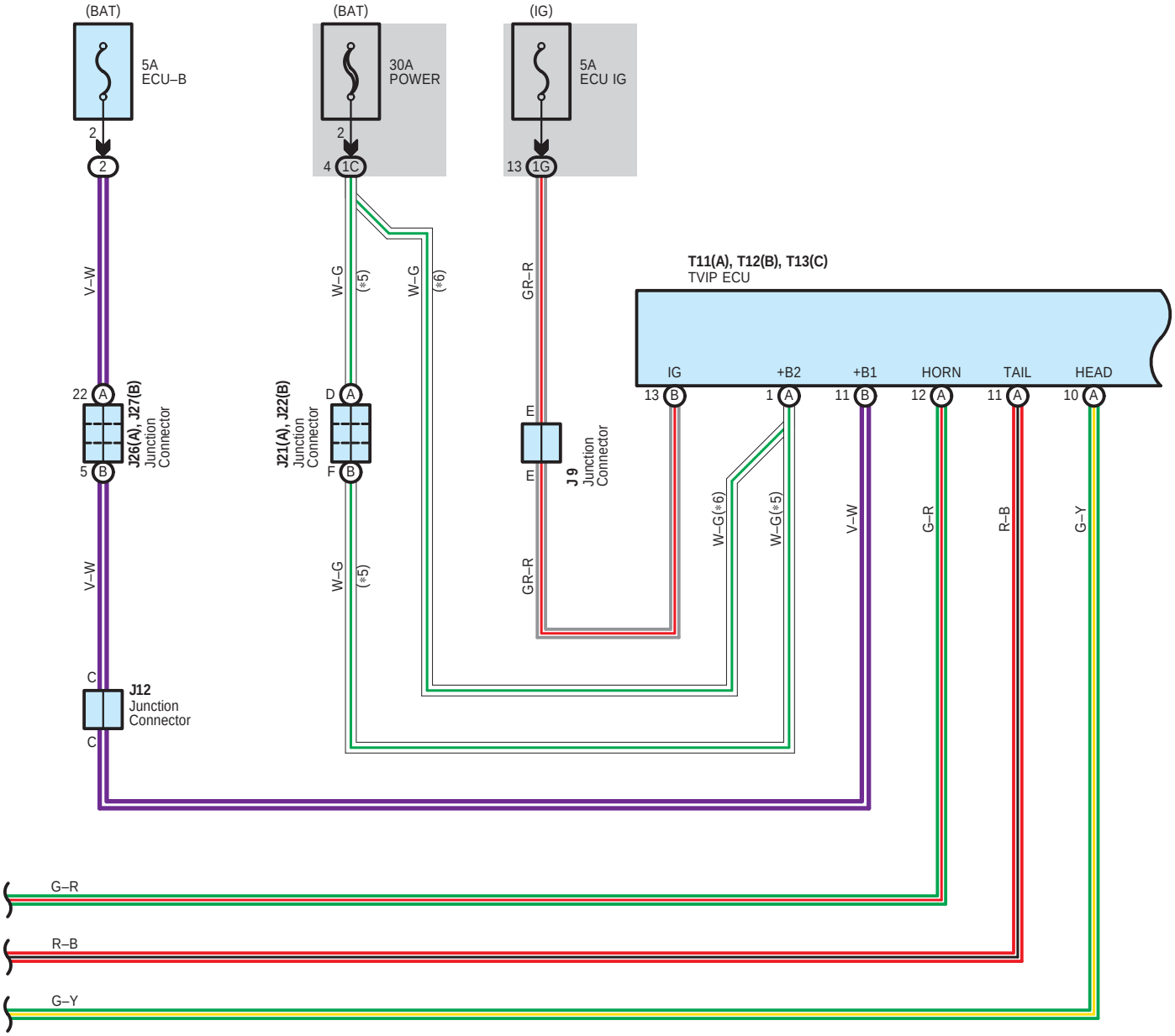
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IB4 | | |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF4 | | |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

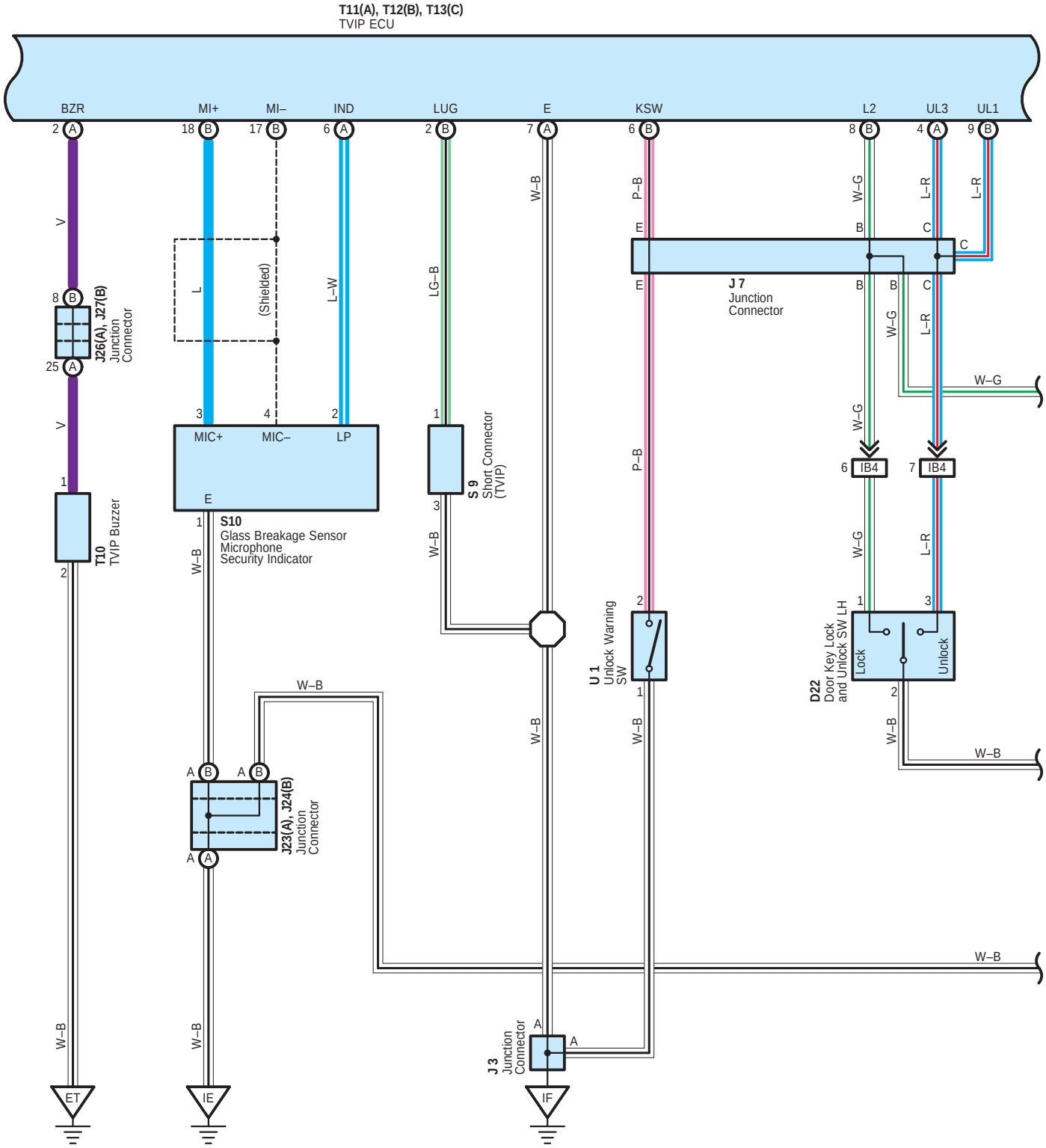
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |
| II | | |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |

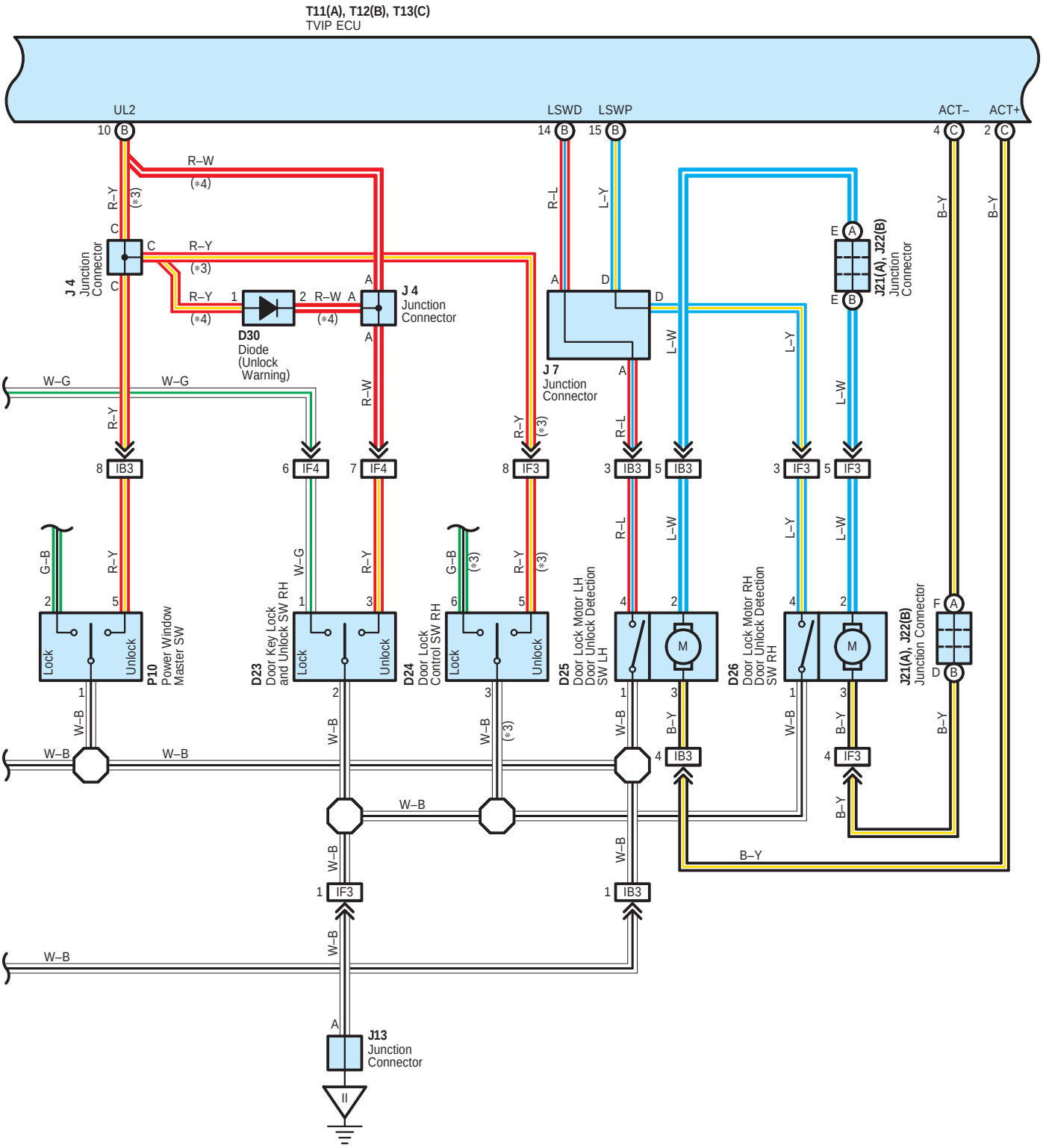
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
(BAT)
15A
TAIL
10A
HORN
1
5
H–LP
Relay
2
3
6
7
Integration
Relay
B–L
(*1)
B
(*2)
LG
R–B
R–B
(*3)
5 1K
6 1C
4 1O (*3)
6 1L (*4)
3 1N (*3)
5 1L (*4)
14 1N (*3)
15 1L (*4)
12 1N (*3)
12 1L (*4)
LG
G–Y
R–B
G–R
B
J 5
Junction
Connector
B
A
J10
Junction
Connector
A
G–R
R–B
G–Y
Battery
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Daytime Running Light
* 4 : w/o Daytime Running Light
* 5 : 2UZ–FE Captain Seat
* 6 : Except 2UZ–FE Captain Seat

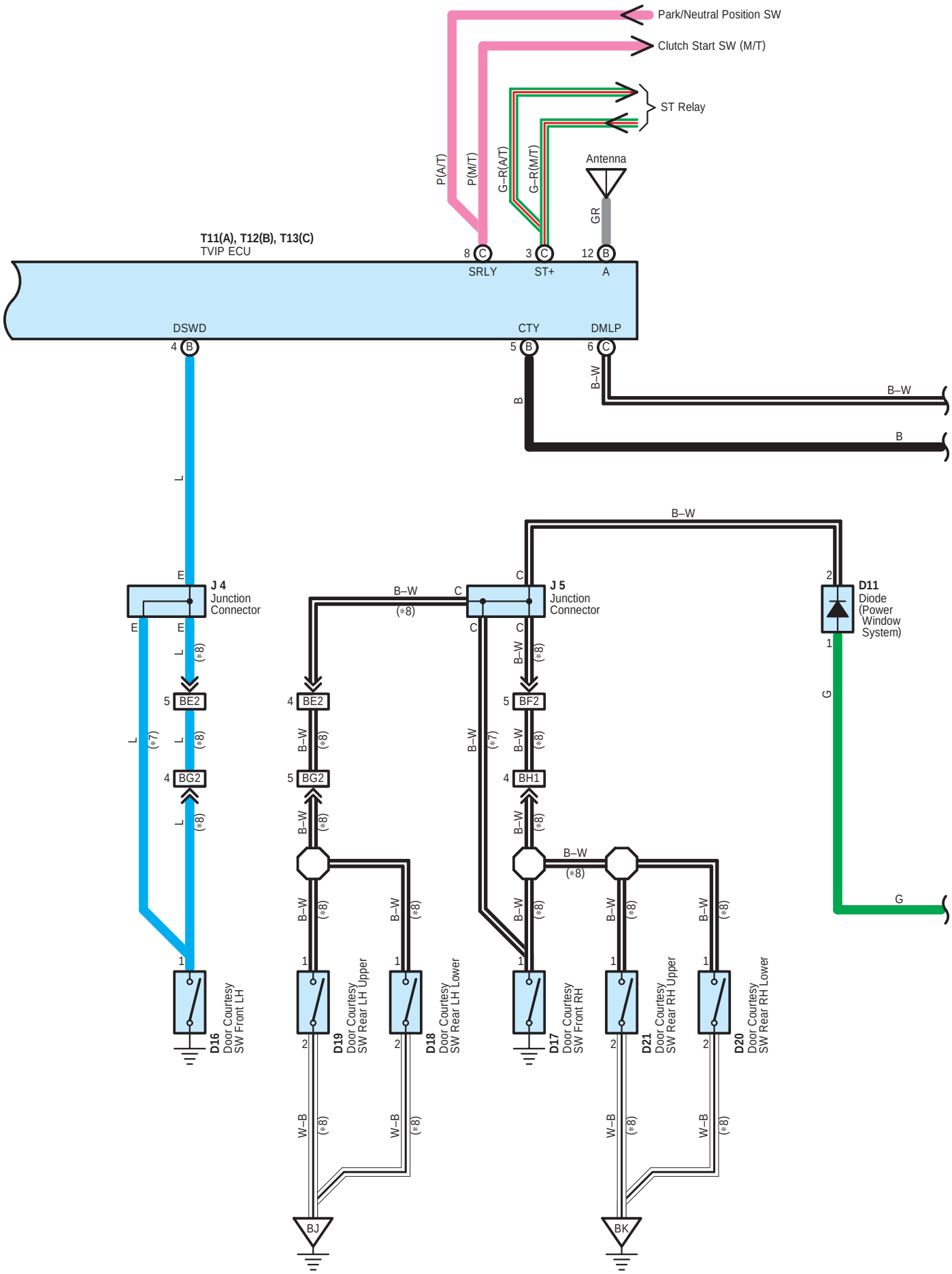

(BAT)
5A
ECU–B
2
2
V–W
22
A
J26(A), J27(B)
Junction
Connector
5
B
V–W
C
J12
Junction
Connector
C
(BAT)
30A
POWER
2
4
1C
W–G
(*5)
W–G
(*6)
D
A
J21(A), J22(B)
Junction
Connector
F
B
W–G
(*5)
(IG)
5A
ECU IG
13
1G
GR–R
E
E
J9
Junction
Connector
GR–R
T11(A), T12(B), T13(C)
TVIP ECU
IG
13
B
+B2
1
A
+B1
11
B
HORN
12
A
TAIL
11
A
HEAD
10
A
W–G(*6)
W–G(*5)
V–W
G–R
R–B
G–Y
G–R
R–B
G–Y


T11(A), T12(B), T13(C)
TVIP ECU
BZR
MI+
MI–
IND
LUG
E
KSW
L2
UL3
UL1
J26(A), J27(B) Junction Connector
T10 TVIP Buzzer
S10 Glass Breakage Sensor Microphone Security Indicator
MIC+
MIC–
LP
S 9 Short Connector (TVIP)
J 7 Junction Connector
U 1 Unlock Warning SW
D22 Door Key Lock and Unlock SW LH
Lock
Unlock
IB4
J23(A), J24(B) Junction Connector
J 3 Junction Connector
(Shielded)
ET
IE
IF

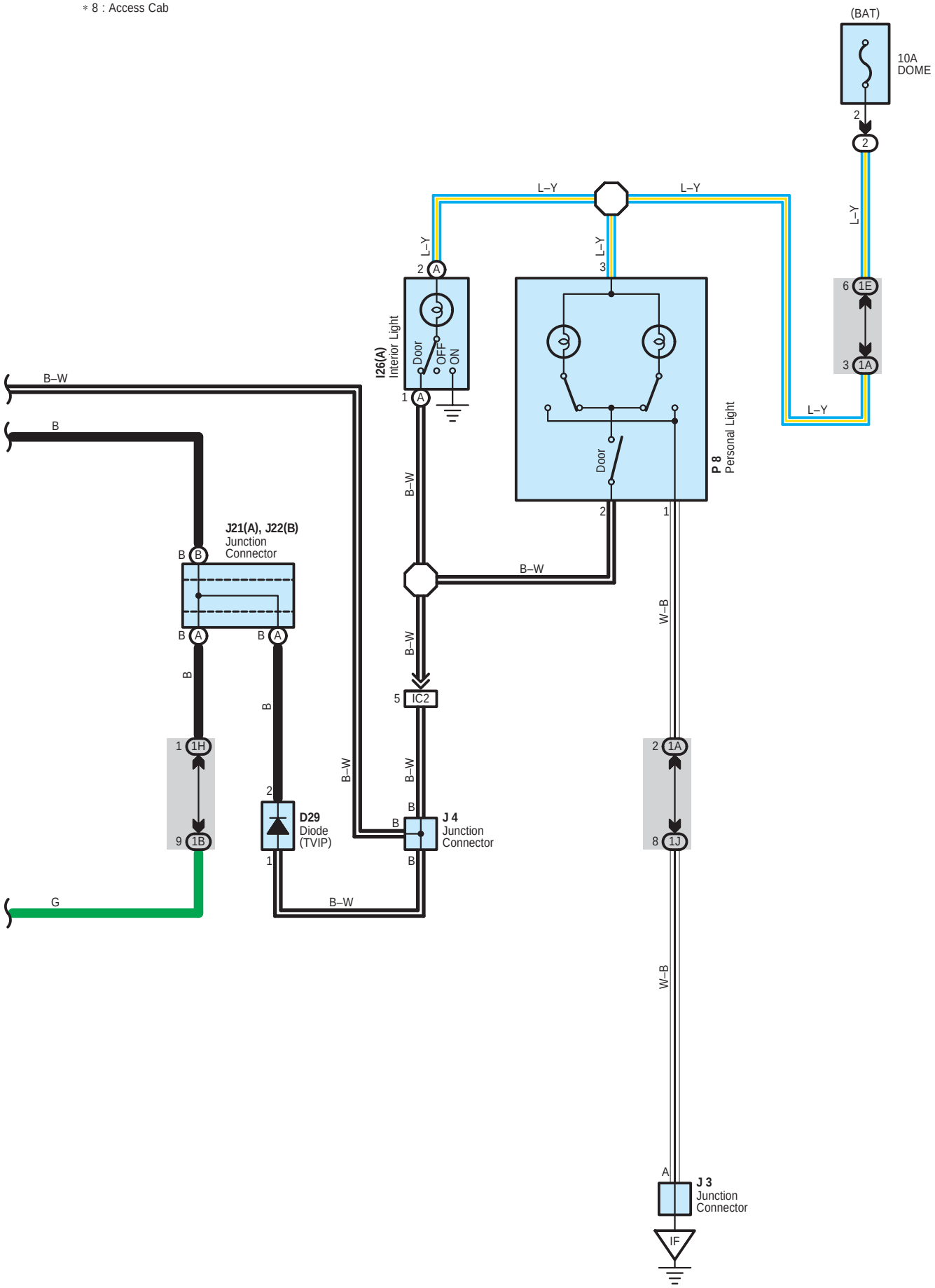
∗ 3 : w/ Daytime Running Light
∗ 4 : w/o Daytime Running Light



# TVIP and Wireless Door Lock Control (Access/Standard Cab)



* 7 : Standard Cab
* 8 : Access Cab



# TVIP and Wireless Door Lock Control (Access/Standard Cab)

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| D11 | 61 | D26 | 64 (*3) | J24 B | 62 |
| D16 | 64 (*3) | | 65 (*4) | J26 A | 62 |
| | 65 (*4) | D29 | 61 | J27 B | 62 |
| D17 | 64 (*3) | D30 | 61 | P8 | 64 (*3) |
| | 65 (*4) | I26 A | 64 (*3) | | 65 (*4) |
| D18 | 64 (*3) | | 65 (*4) | P10 | 64 (*3) |
| D19 | 64 (*3) | J3 | 62 | | 65 (*4) |
| D20 | 64 (*3) | J4 | 62 | S9 | 63 |
| D21 | 64 (*3) | J5 | 62 | S10 | 63 |
| D22 | 64 (*3) | J7 | 62 | T10 | 57 (2UZ–FE) |
| | 65 (*4) | J9 | 62 | | 59 (1GR–FE) |
| D23 | 64 (*3) | J10 | 62 | T11 A | 63 |
| | 65 (*4) | J12 | 62 | T12 B | 63 |
| D24 | 64 (*3) | J13 | 62 | T13 C | 63 |
| | 65 (*4) | J21 A | 62 | U1 | 63 |
| D25 | 64 (*3) | J22 B | 62 | | |
| | 65 (*4) | J23 A | 62 | | |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1B | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1C | 26 (*1) | |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |
| 1K | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | |
| 1O | | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

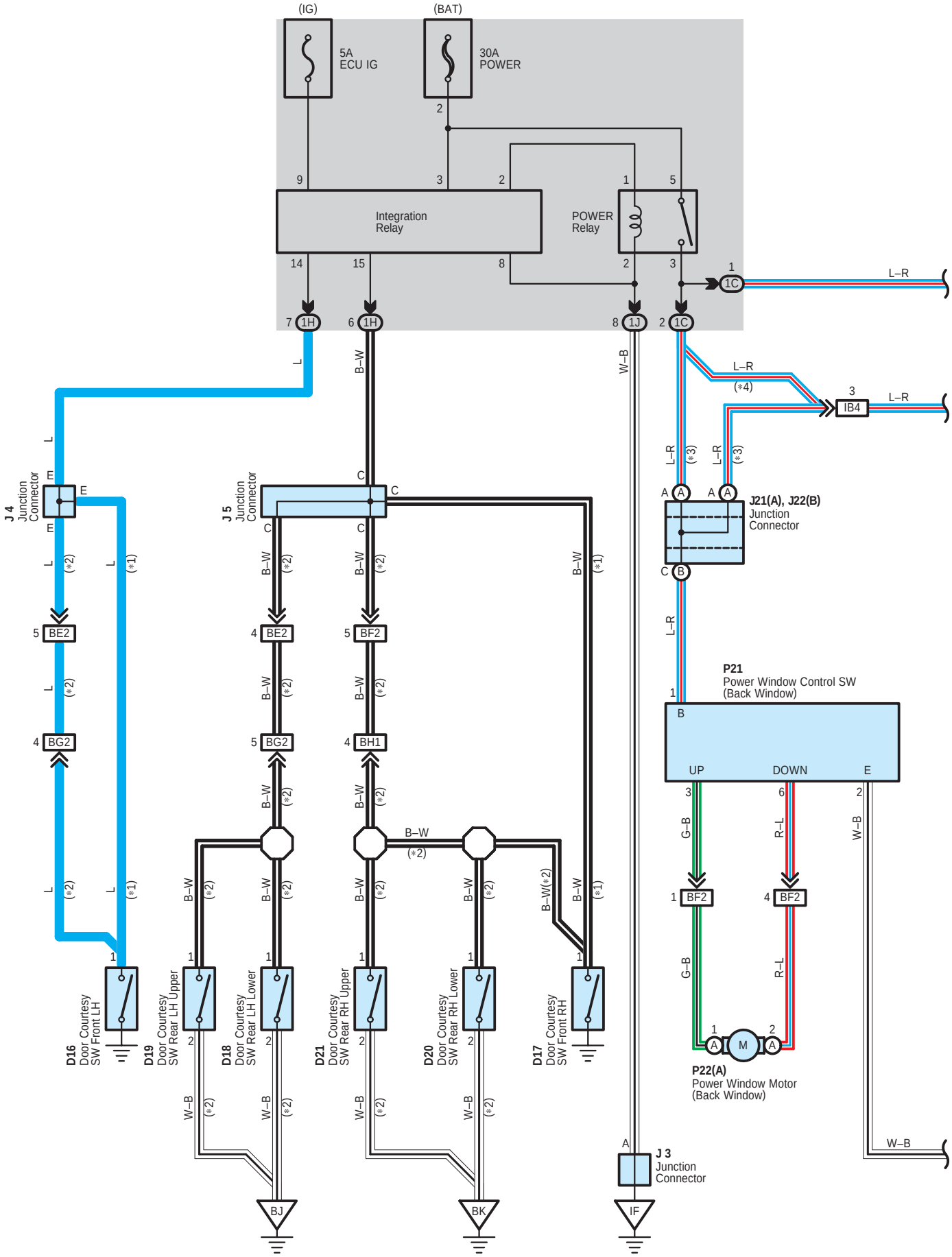
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IB4 | | |
| IC2 | 82 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF4 | | |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

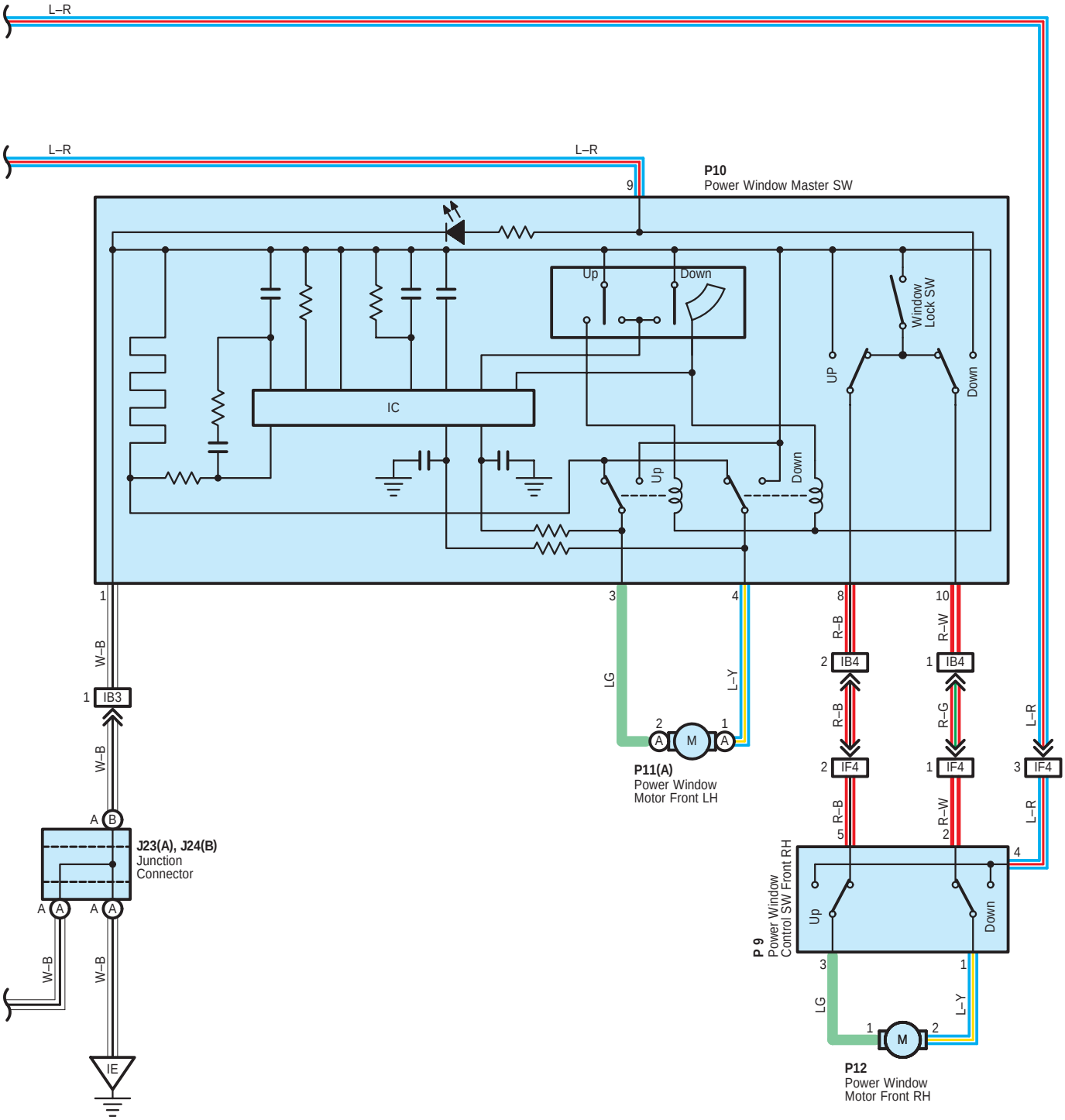
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| IE | 82 | Left Kick Panel |
| IF | | |
| II | 82 | Right Kick Panel |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
(BAT)
5A
ECU IG
30A
POWER
Integration
Relay
POWER
Relay
1C
1H
1J
L–R
(*4)
IB4
J 4
Junction
Connector
J 5
Junction
Connector
J21(A), J22(B)
Junction
Connector
P21
Power Window Control SW
(Back Window)
UP
DOWN
E
BE2
BF2
BG2
BH1
D16
Door Courtesy
SW Front LH
D19
Door Courtesy
SW Rear LH Upper
D18
Door Courtesy
SW Rear LH Lower
D21
Door Courtesy
SW Rear RH Upper
D20
Door Courtesy
SW Rear RH Lower
D17
Door Courtesy
SW Front RH
P22(A)
Power Window Motor
(Back Window)
J 3
Junction
Connector
BJ
BK
IF

* 1 : Standard Cab
* 2 : Access Cab
* 3 : w/ Power Window (Back Window)
* 4 : w/o Power Window (Back Window)



**System Outline**

With the ignition SW turned on, current flows through the ECU IG fuse to TERMINAL 9 of the integration relay to TERMINAL 2 to TERMINAL 1 of the power relay to TERMINAL 2 to GROUND, activating the power relay, and the current flowing from TERMINAL 5 of the power relay flows to TERMINAL 3 to TERMINAL 9 of the power window master SW, TERMINAL 4 of the power window control SW RH and TERMINAL 1 of power window SW (Back window).

**1. Manual Operation (Driver's Window)**

With the ignition SW turned on and with the power window master SW (Manual SW) in UP position, the current flowing to TERMINAL 9 of the power window master SW flows to TERMINAL 3 to TERMINAL 2 of the power window motor LH to TERMINAL 1 to TERMINAL 4 of the master SW to TERMINAL 1 to GROUND and causes the power window motor to rotate in the up direction. The window ascends only while the SW is being pushed.

In down operation, the current flowing from TERMINAL 9 of the power window master SW to TERMINAL 4 flows to TERMINAL 1 of the motor LH to TERMINAL 2 to TERMINAL 3 of the master SW to TERMINAL 1 to GROUND, flowing in the opposite direction to manual up operation, causing the motor to rotate in reverse and lowering the window.

**2. Auto Down Operation (Driver's Window)**

With the ignition SW on and with the auto SW of the power window master SW in DOWN position, the current flowing to TERMINAL 9 of the master SW flows to TERMINAL 4 of the master SW to TERMINAL 1 of the power window motor LH to TERMINAL 2 to TERMINAL 3 of the master SW to TERMINAL 1 to GROUND, causing the motor to rotate towards the down side.

Then the solenoid in the master SW is activated and it locks the auto SW being pushed, causing the motor to continue to rotate in auto down operation.

When the window has completely descended, the current flowing between TERMINAL 3 of the master SW and TERMINAL 1 increases. As a result, the solenoid stops operating, the auto SW turns off and the flowing from TERMINAL 9 of the master SW to TERMINAL 4 is cut off, stopping the motor so that auto stop occurs.

**3. Stopping of Auto Down AT Driver's Window**

When the manual SW (Driver's) is pushed to the up side during auto down operation, a ground circuit opens in the master SW and current does not flow from TERMINAL 3 of the master SW to TERMINAL 1, so the motor stops, causing auto down operation to stop. If the manual SW is pushed continuously, the motor rotates in the up direction in manual up operation.

**4. Manual Operation By Power Window Control SW (Passenger's Window)**

With the power window control SW RH is pushed to the up side, the current flowing from TERMINAL 4 of the power window control SW RH flows to TERMINAL 3 of the power window control SW RH to TERMINAL 1 of the power window motor RH to TERMINAL 2 to TERMINAL 1 of the power window control SW RH to TERMINAL 2 to TERMINAL 10 of the master SW to TERMINAL 1 to GROUND. This causes the power window motor RH to rotate in the up direction. Up operation is continuous only while the power window control SW RH is pushed to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 1 to TERMINAL 2, and the motor rotates in revers.

When the window lock SW is pushed to the lock side, the ground circuit to the passenger's window becomes open. As a result, even if Open/Close operation of the passenger's window is tried, the current from TERMINAL 9 of the power window master SW is not grounded and the motor does not rotate, so the passenger's window can not be operated and window lock occurs.

**5. Key Off Power Window Operation**

With the ignition SW turned from on to off, the integration relay operates for about 43 seconds and current flows from TERMINAL 1 of the power relay to TERMINAL 2 to GROUND. For this period, current also flows TERMINAL 5 to TERMINAL 3. This current flows to TERMINAL 9 of the power window master SW and to TERMINAL 4 of the power window control SW RH. As a result, for about 43 seconds after the ignition SW is turned off, it is possible to raise and lower the power window by the functioning of the integration relay. Also, by opening the door (Door courtesy SW on) within about 43 seconds after turning the ignition SW to off, a signal is input to TERMINAL 3, 14 or 15 of the integration relay. As a result, the integration relay turns off, and up and down movement of the window stops.

## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| D16 | 64 (*3) | J4 | 62 | P10 | 65 (*4) |
| | 65 (*4) | J5 | 62 | P11 A | 64 (*3) |
| D17 | 64 (*3) | J21 A | 62 | | 65 (*4) |
| | 65 (*4) | J22 B | 62 | P12 | 64 (*3) |
| D18 | 64 (*3) | J23 A | 62 | | 65 (*4) |
| D19 | 64 (*3) | J24 B | 62 | P21 | 62 |
| D20 | 64 (*3) | P9 | 64 (*3) | P22 A | 64 (*3) |
| D21 | 64 (*3) | | 65 (*4) | | |
| J3 | 62 | P10 | 64 (*3) | | |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1H | 26 (*1) | |
| | 30 (*2) | |
| 1J | 26 (*1) | |
| | 30 (*2) | |

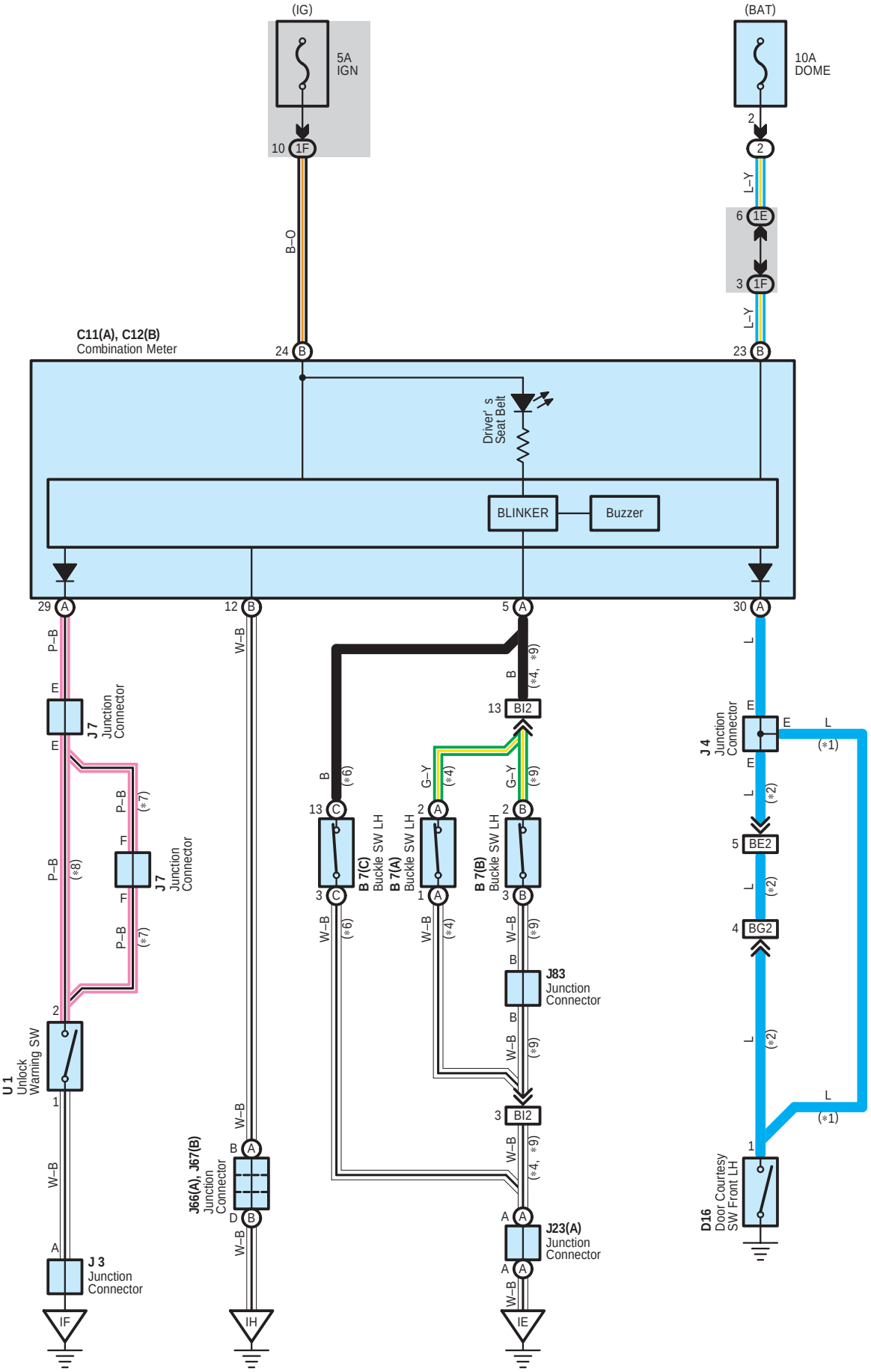
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IB4 | | |
| IF4 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

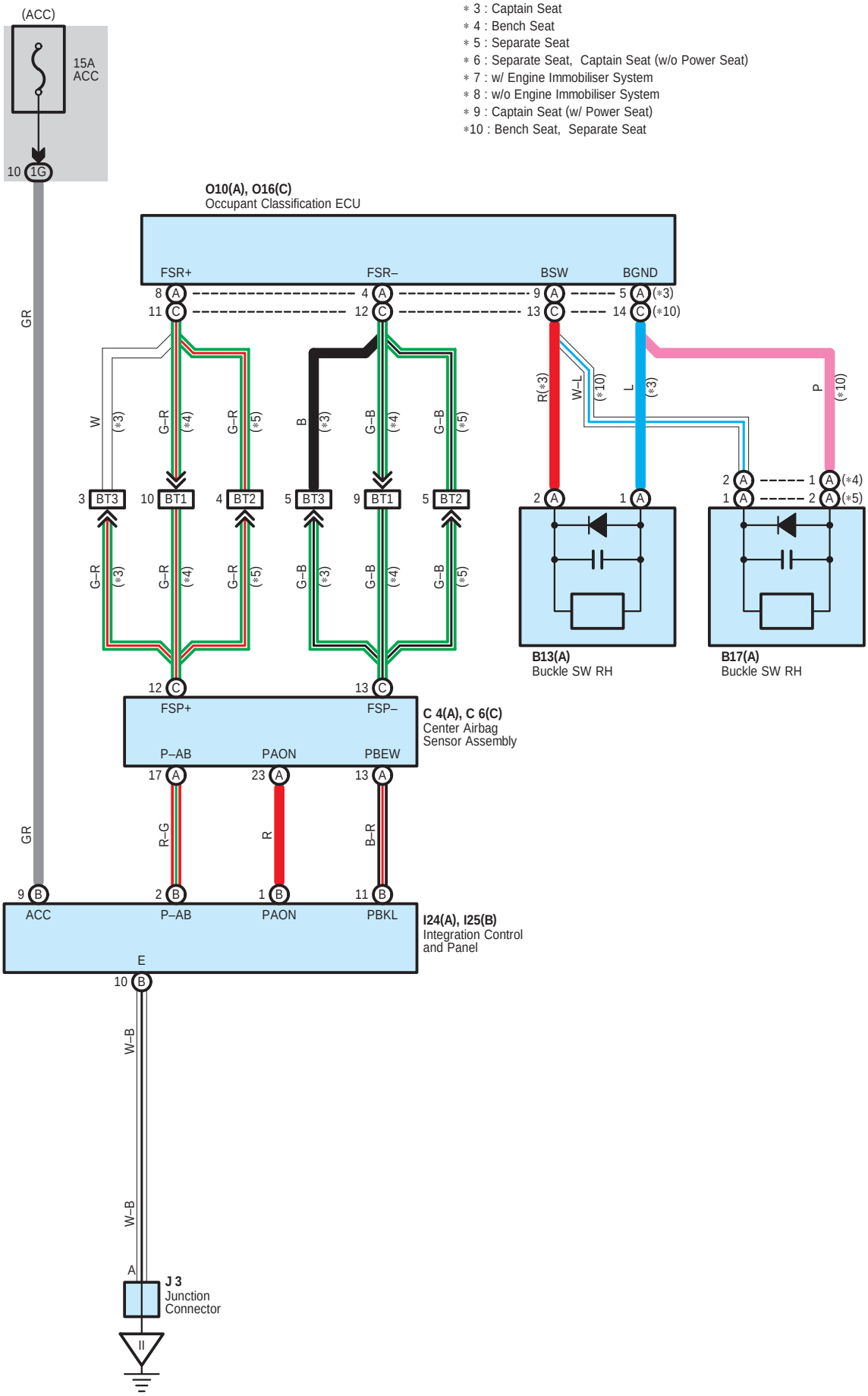
## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IF | | |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
5A
IGN
10
1F
B–O
24
B
(BAT)
10A
DOME
2
2
L–Y
6
1E
3
1F
L–Y
23
B
C11(A), C12(B)
Combination Meter
Driver's Seat Belt
BLINKER
Buzzer
29
A
P–B
E
J7
Junction
Connector
E
P–B
(*7)
F
J7
Junction
Connector
F
P–B
(*7)
P–B
(*8)
2
U1
Unlock
Warning SW
1
W–B
A
J3
Junction
Connector
IF
12
B
W–B
W–B
B
A
J66(A), J67(B)
Junction
Connector
D
B
W–B
IH
5
A
B
(*4, *9)
13
BI2
B
(*6)
13
C
B7(C)
Buckle SW LH
3
C
W–B
(*6)
G–Y
(*4)
2
A
B7(A)
Buckle SW LH
1
A
W–B
(*4)
G–Y
(*9)
2
B
B7(B)
Buckle SW LH
3
B
W–B
(*9)
B
J83
Junction
Connector
B
W–B
(*9)
3
BI2
W–B
(*4, *9)
A
A
J23(A)
Junction
Connector
A
A
W–B
IE
30
A
L
J4
Junction
Connector
E
E
L
(*1)
E
L
(*2)
5
BE2
L
(*2)
4
BG2
L
(*2)
L
(*1)
1
D16
Door Courtesy
SW Front LH

∗ 1 : Standard Cab
∗ 2 : Access Cab
∗ 3 : Captain Seat
∗ 4 : Bench Seat
∗ 5 : Separate Seat
∗ 6 : Separate Seat, Captain Seat (w/o Power Seat)
∗ 7 : w/ Engine Immobiliser System
∗ 8 : w/o Engine Immobiliser System
∗ 9 : Captain Seat (w/ Power Seat)
∗10 : Bench Seat, Separate Seat



# Key Reminder and Seat Belt Warning (Access/Standard Cab)

**System Outline**

Current always flows to TERMINAL (B) 23 of the combination meter through the DOME fuse.

**1. Seat Belt Warning System**

When the ignition SW is turned on, current flows from the IGN fuse to TERMINAL (B) 24 of the combination meter. This current activates the combination meter and the current flowing through the seat belt warning light flows from TERMINAL (B) 12 to GROUND, causing the warning light to light up. A buckle SW off signal is input to TERMINAL (A) 5 of the combination meter to TERMINAL (B) 12 to GROUND, causing the warning light to light up. A buckle SW off signal is input to TERMINAL (A) 5 of the combination meter, the current flowing to TERMINAL (B) 23 of the combination meter flows from TERMINAL (B) 12 to GROUND and the seat belt warning buzzer sounds. However, if the seat belt is put on during this period (While the buzzer is sounding), signal input to TERMINAL (A) 5 of the combination meter stops and the current flow from TERMINAL (B) 23 of the combination meter to TERMINAL (B) 12 to GROUND is cut, causing the buzzer to stop.

**2. Key Reminder System**

With the ignition key inserted in the key cylinder (Unlock warning SW on), the ignition SW still off and driver's door open (Door courtesy SW on), when a signal is input to TERMINAL (A) 30 of the combination meter, the combination meter operates, current flows from TERMINAL (B) 23 of the combination meter to TERMINAL (B) 12 to GROUND and key reminder buzzer sounds.

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B7 | A | 68 (*7) | C11 | A | 60 | J23 | A | 62 |
| | B | 66 (*5) | C12 | B | 60 | J66 | A | 62 |
| | C | 64 (*3) | D16 | | 64 (*3) | J67 | B | 62 |
| | | 66 (*5) | | | 65 (*4) | J83 | | 66 (*5) |
| B13 | A | 66 (*5) | I24 | A | 61 | O10 | A | 66 (*5) |
| B17 | A | 67 (*6) | I25 | B | 61 | O16 | C | 67 (*6) |
| | | 68 (*7) | J3 | | 62 | | | 68 (*7) |
| C4 | A | 60 | J4 | | 62 | U1 | | 63 |
| C6 | C | 60 | J7 | | 62 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

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

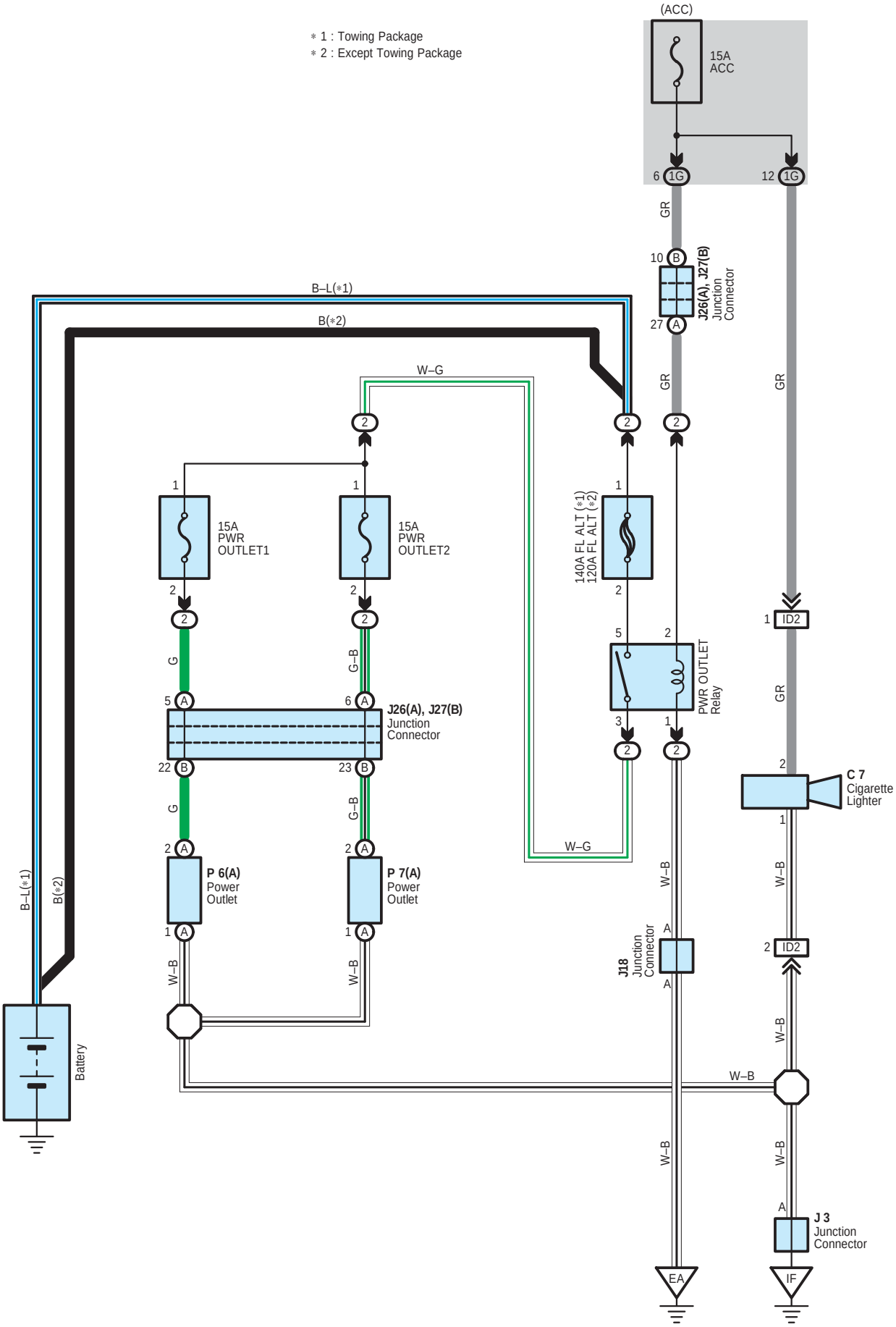
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BI2 | 86 (*5) | Cowl Wire and Seat No.2 Wire (Under the Driver's Seat) |
| | 88 (*7) | |
| BT1 | 88 (*7) | Cowl Wire and Seat No.1 Wire (Under the Front Passenger's Seat) |
| BT2 | 87 (*6) | Seat No.1 Wire and Cowl Wire (Under the Front Passenger's Seat) |
| BT3 | 86 (*5) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

▽ : **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |
| II | | |

# Cigaratte Lighter and Power Outlet (Access/Standard Cab)



### : Parts Location

| Code | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C7 | 60 | J18 | | 59 (1GR–FE) | P6 | A | 62 |
| J3 | 62 | J26 | A | 62 | P7 | A | 62 |
| J18 | 57 (2UZ–FE) | J27 | B | 62 | | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

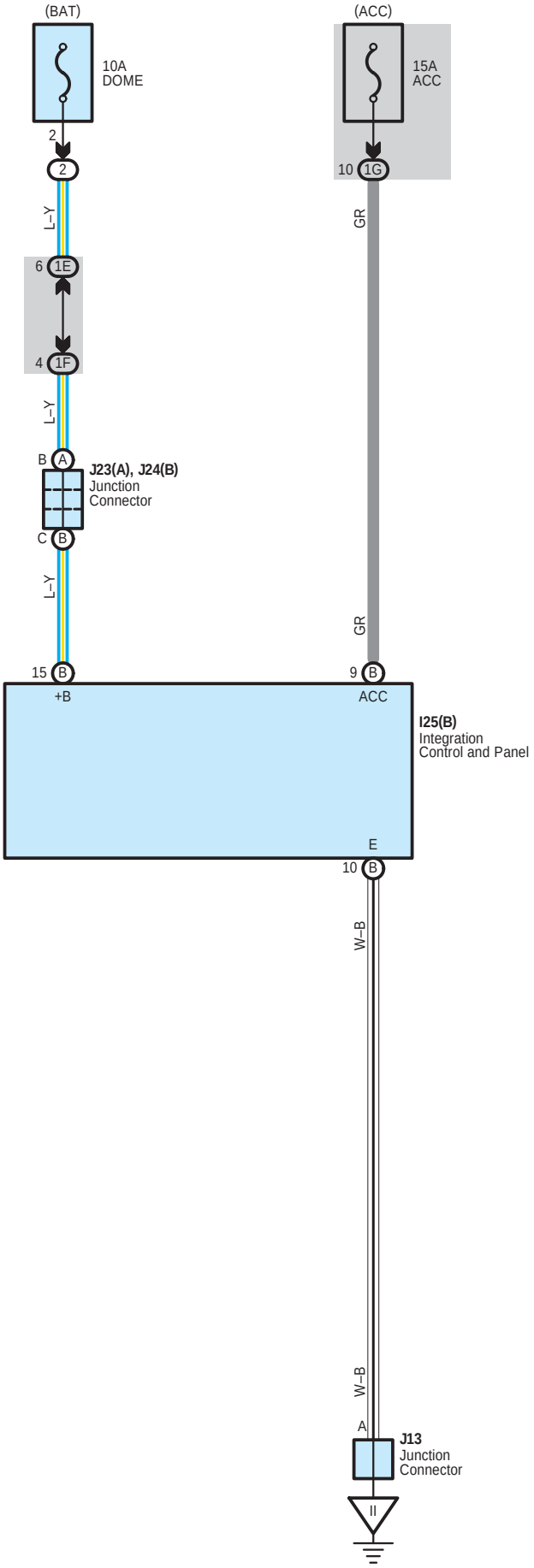
### : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| ID2 | 82 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |

### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
10A
DOME
2
2
L–Y
6
1E
4
1F
L–Y
B
A
J23(A), J24(B)
Junction
Connector
C
B
L–Y
15
B
+B
(ACC)
15A
ACC
10
1G
GR
GR
9
B
ACC
I25(B)
Integration
Control and Panel
E
10
B
W–B
W–B
A
J13
Junction
Connector

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | See Page |
|---|---|---|---|---|---|---|---|
| I25 | B | 61 | J23 | A | 62 | | |
| J13 | | 62 | J24 | B | 62 | | |

**⬭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

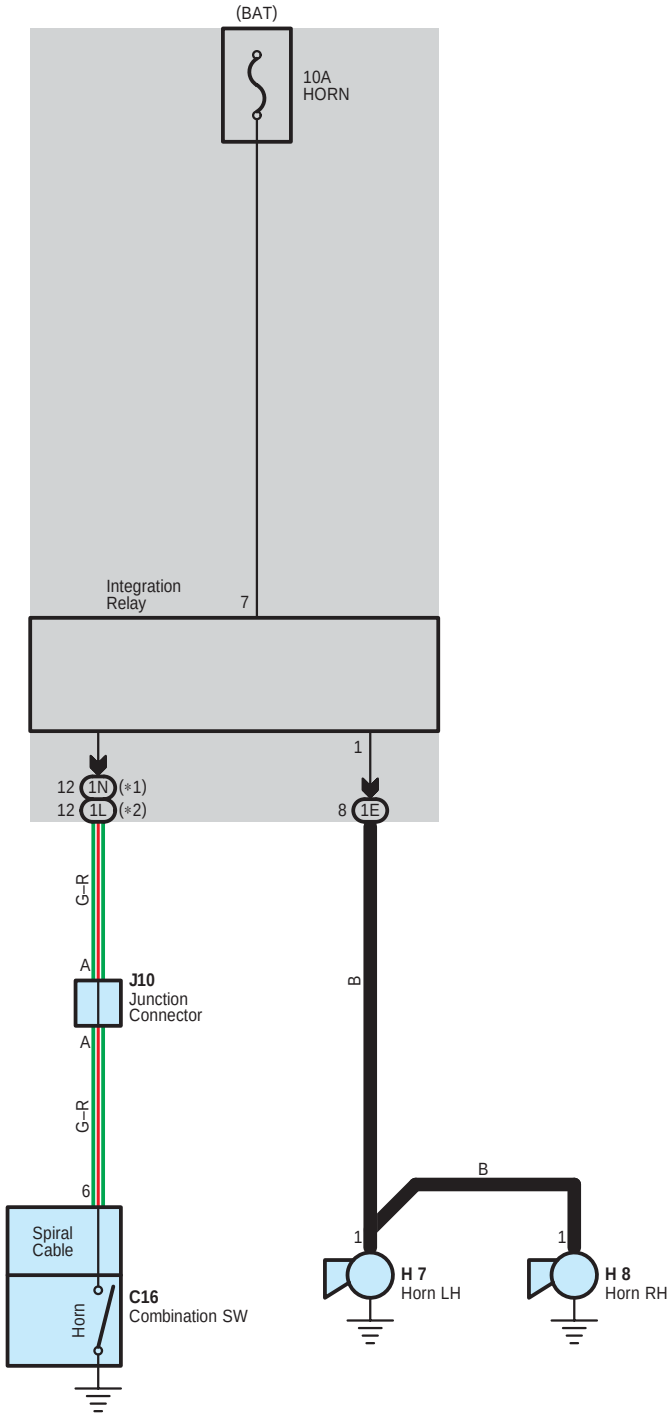
**⬭ : Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

**▽ : Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat




* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light

○ : **Parts Location**

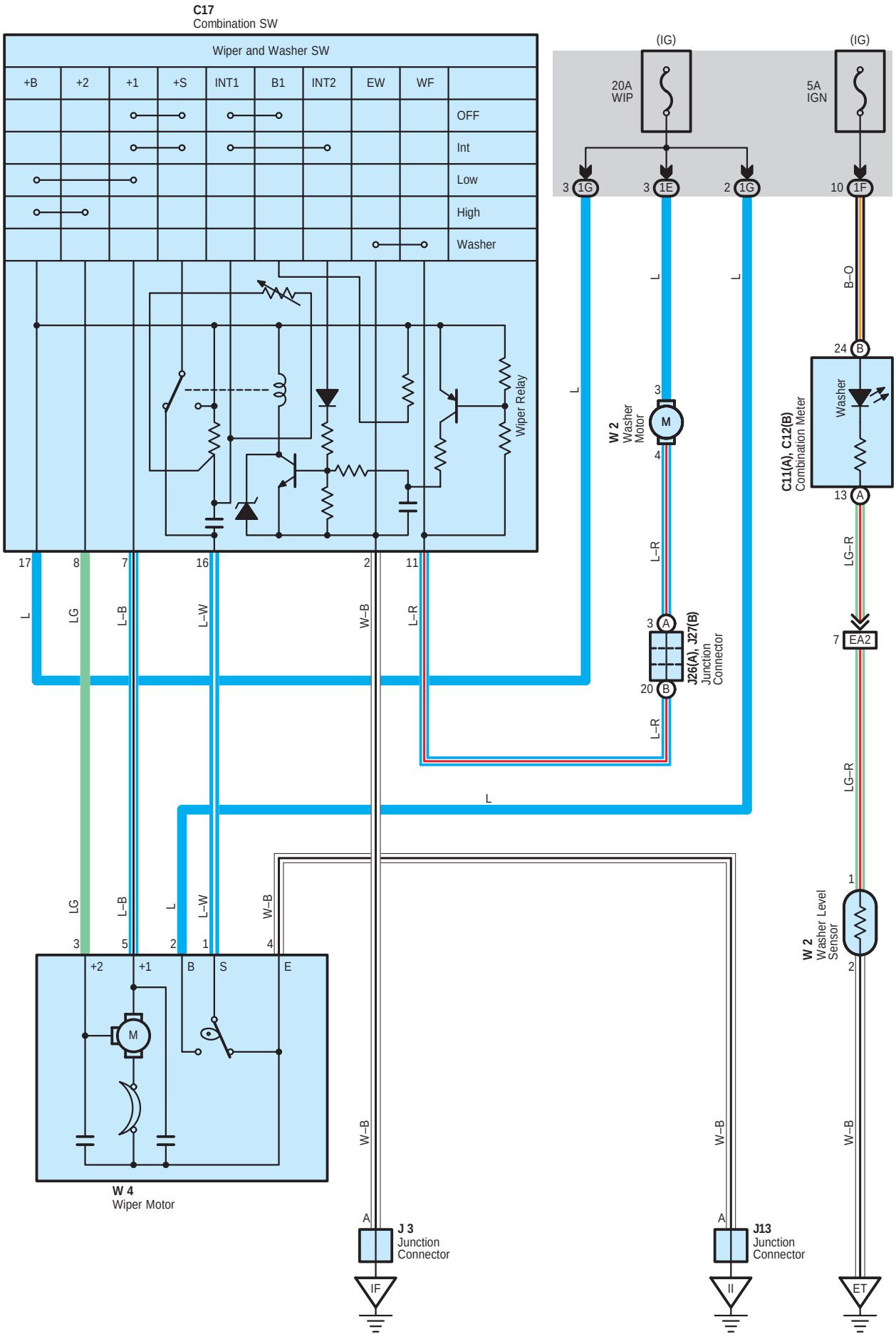
| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C16 | 60 | H7 | 58 (1GR–FE) | H8 | 58 (1GR–FE) |
| H7 | 56 (2UZ–FE) | H8 | 56 (2UZ–FE) | J10 | 62 |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1L | 27 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1N | 31 (*2) | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Wiper and Washer with INT TIME Switch (Access/Standard Cab)



**System Outline**

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

**1. Low Speed Position**

With wiper SW turned to LOW position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and causes the wiper motor to run at low speed.

**2. High Speed Position**

With wiper SW turned to HIGH position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 8 to TERMINAL 3 of the wiper motor to TERMINAL 4 to GROUND and causes the motor to run at high speed.

**3. INT Position**

With wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 2 to GROUND. This flowing the intermittent circuit and current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and the wiper functions.

The intermittent operation is controlled by charging and discharging 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**

With the washer SW turned to on, current flows from TERMINAL 3 of the washer motor to TERMINAL 4 to TERMINAL 11 of the wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer is jetted.

This causes current to flow to washer continuous operation circuit in TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and the wiper functions.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 60 | J13 | 62 | W2 | 59 (1GR–FE) |
| C12 B | 60 | J26 A | 62 | W4 | 57 (2UZ–FE) |
| C17 | 60 | J27 B | 62 | | 59 (1GR–FE) |
| J3 | 62 | W2 | 57 (2UZ–FE) | | |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

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

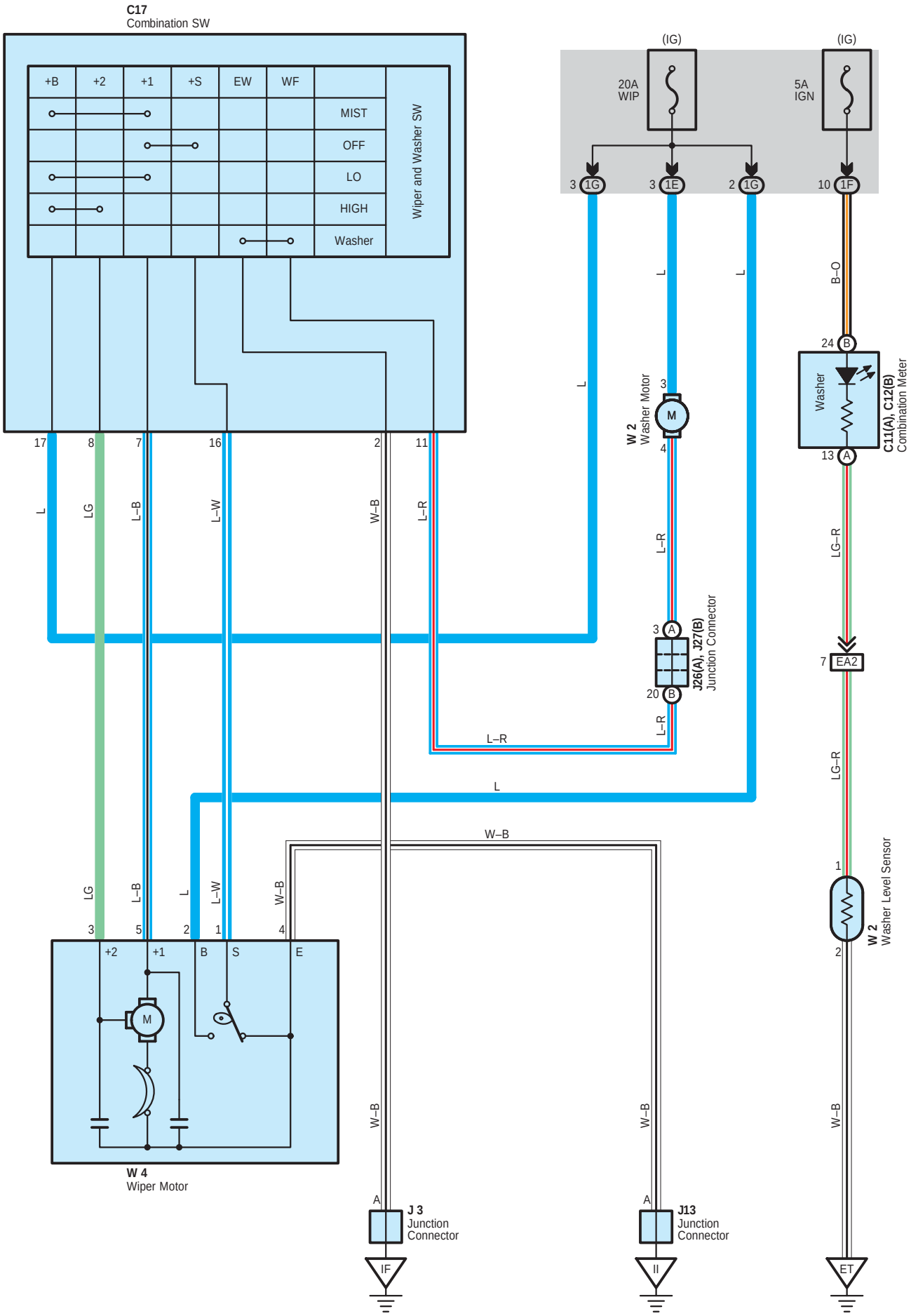
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |

**▽ : Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Wiper and Washer without INT TIME Switch (Access/Standard Cab)



**System Outline**

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

**1. Low Speed Position**

With wiper SW turned to LOW position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and causes the wiper motor to run at low speed.

**2. High Speed Position**

With wiper SW turned to HIGH position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 8 to TERMINAL 3 of the wiper motor to TERMINAL 4 to GROUND and causes the motor to run at high speed.

**3. Mist Position**

With the wiper SW turned to MIST position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and causes the wiper motor to run at low speed.

**4. Washer Interlocking Operation**

With the washer SW turned to on, current flows from TERMINAL 3 of the washer motor to TERMINAL 4 to TERMINAL 11 of the wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer is jetted.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 60 | J13 | 62 | W2 | 59 (1GR–FE) |
| C12 B | 60 | J26 A | 62 | W4 | 57 (2UZ–FE) |
| C17 | 60 | J27 B | 62 | | 59 (1GR–FE) |
| J3 | 62 | W2 | 57 (2UZ–FE) | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

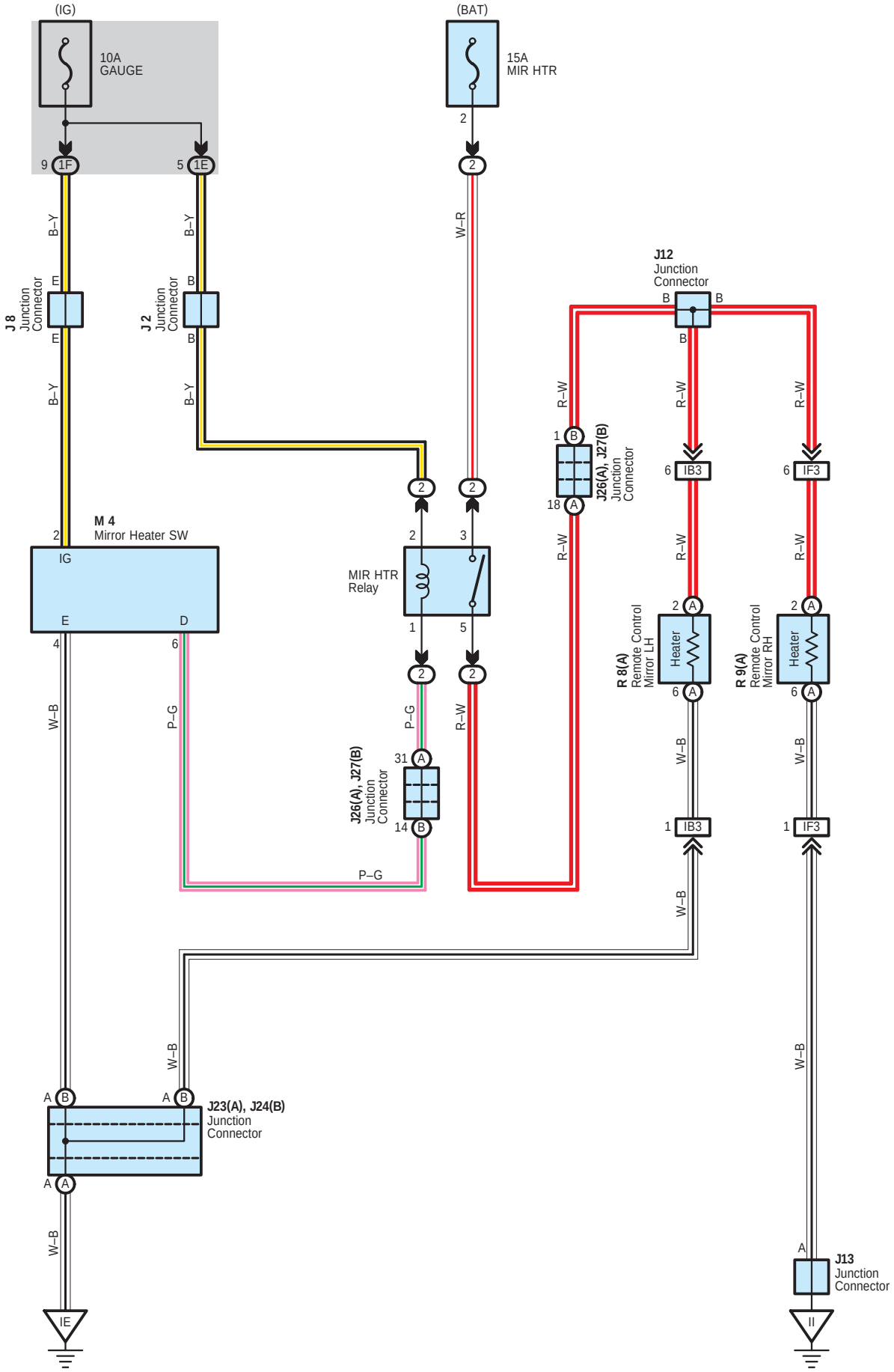
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| IF | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
10A
GAUGE
(BAT)
15A
MIR HTR
9 1F
5 1E
2
B–Y
W–R
J8
Junction
Connector
J2
Junction
Connector
J12
Junction
Connector
R–W
M 4
Mirror Heater SW
IG
E
D
MIR HTR
Relay
J26(A), J27(B)
Junction
Connector
R 8(A)
Remote Control
Mirror LH
R 9(A)
Remote Control
Mirror RH
Heater
IB3
IF3
W–B
P–G
J23(A), J24(B)
Junction
Connector
J13
Junction
Connector
IE
II

### : Parts Location

| Code | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| J2 | 57 (2UZ–FE) | J23 | A | 62 | R8 | A | 64 (*3) |
| | 59 (1GR–FE) | J24 | B | 62 | | | 65 (*4) |
| J8 | 62 | J26 | A | 62 | R9 | A | 64 (*3) |
| J12 | 62 | J27 | B | 62 | | | 65 (*4) |
| J13 | 62 | M4 | | 62 | | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

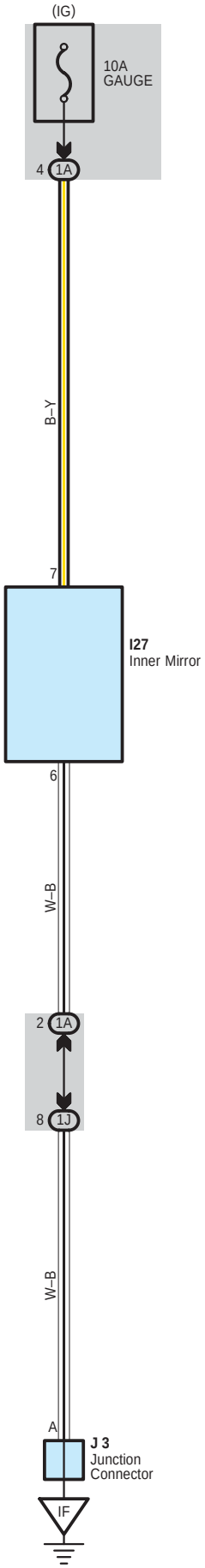
### : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |

### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
10A
GAUGE
4
1A
B–Y
7
I27
Inner Mirror
6
W–B
2
1A
8
1J
W–B
A
J 3
Junction
Connector
IF

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| I27 | 64 (*3) | I27 | 65 (*4) | J3 | 62 |

**: Junction Block and Wire Harness Connector**

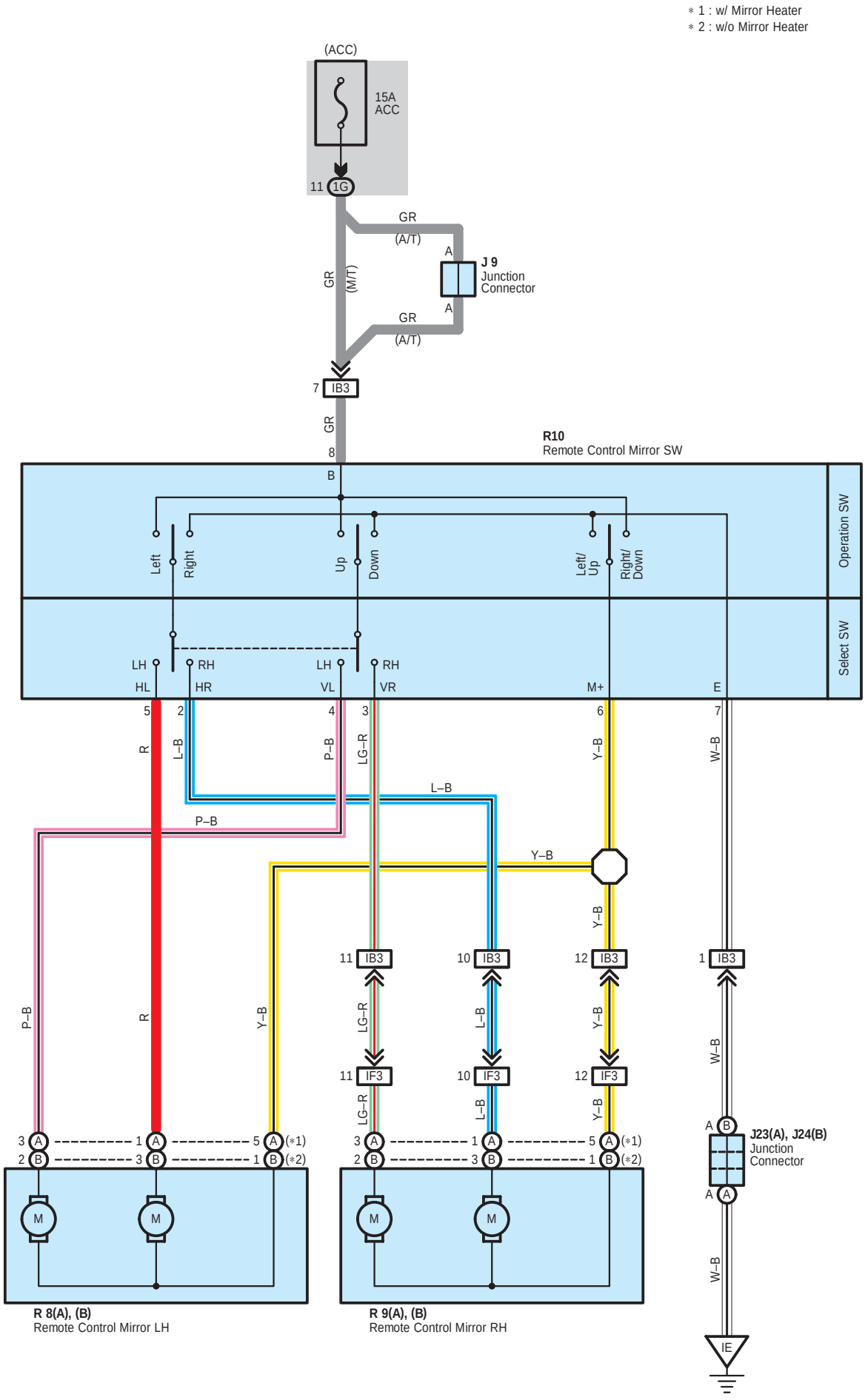
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

**▽ : Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IF | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Remote Control Mirror (Access/Standard Cab)



## : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| J9 | | 62 | R8 | B | 64 (*3) | R9 | B | 65 (*4) |
| J23 | A | 62 | | | 65 (*4) | R10 | | 64 (*3) |
| J24 | B | 62 | R9 | A | 64 (*3) | | | 65 (*4) |
| R8 | A | 64 (*3) | | | 65 (*4) | | | |
| | | 65 (*4) | | B | 64 (*3) | | | |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

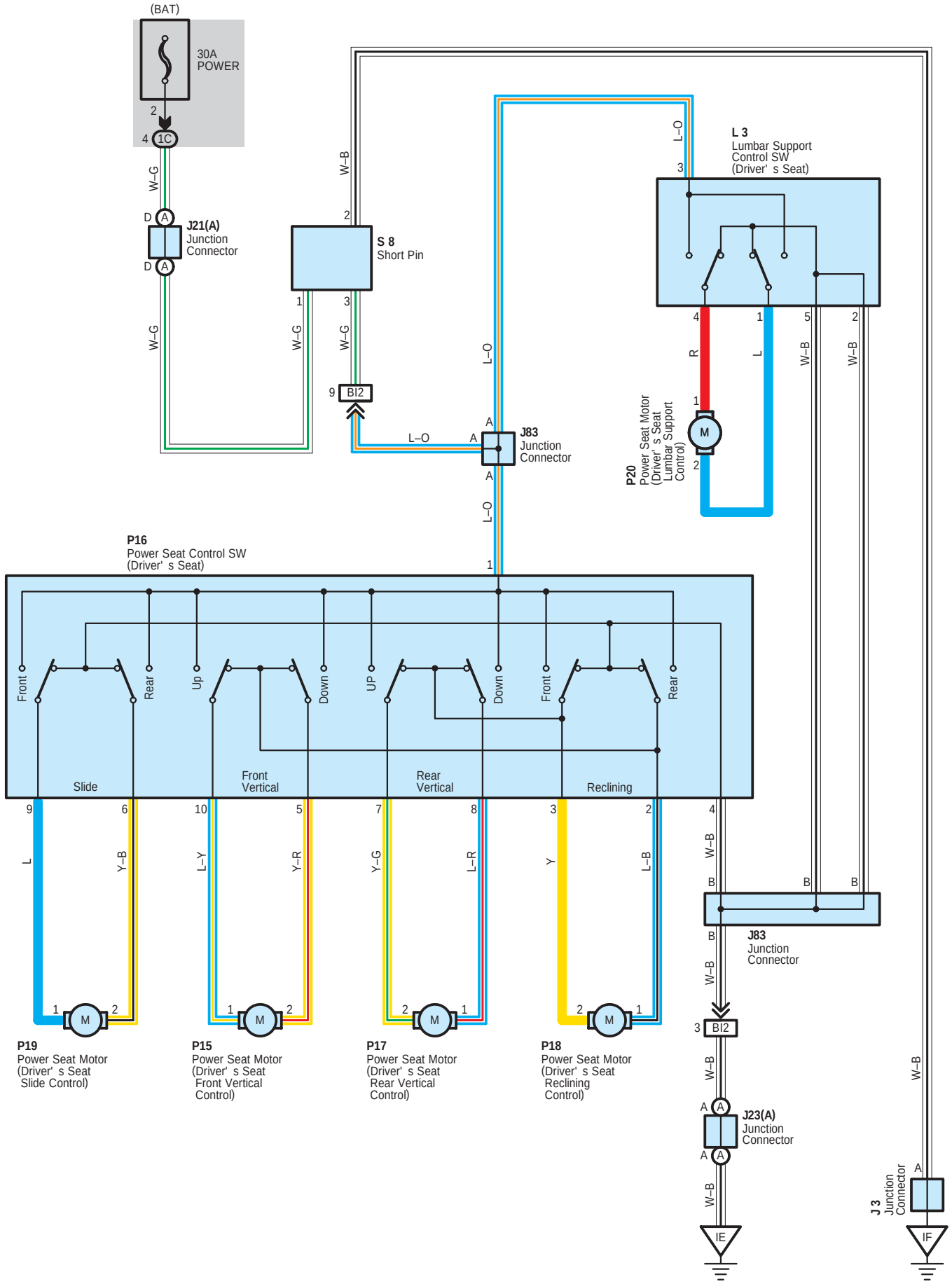
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
30A
POWER
2
4
1C
W–G
D
A
J21(A)
Junction
Connector
D
A
W–G
W–G
W–B
2
S 8
Short Pin
1
3
W–G
9
BI2
L–O
A
J83
Junction
Connector
A
L–O
1
L–O
3
L 3
Lumbar Support
Control SW
(Driver' s Seat)
4
R
1
L
5
W–B
2
W–B
1
M
2
P20
Power Seat Motor
(Driver' s Seat
Lumbar Support
Control)
P16
Power Seat Control SW
(Driver' s Seat)
Front
Rear
Up
Down
UP
Down
Front
Rear
Slide
Front
Vertical
Rear
Vertical
Reclining
9
6
L
Y–B
10
5
L–Y
Y–R
7
8
Y–G
L–R
3
2
Y
L–B
4
W–B
B
B
B
B
J83
Junction
Connector
W–B
3
BI2
W–B
A
A
J23(A)
Junction
Connector
A
A
W–B
IE
W–B
J3
Junction
Connector
A
IF
1
M
2
P19
Power Seat Motor
(Driver' s Seat
Slide Control)
P15
Power Seat Motor
(Driver' s Seat
Front Vertical
Control)
P17
Power Seat Motor
(Driver' s Seat
Rear Vertical
Control)
P18
Power Seat Motor
(Driver' s Seat
Reclining
Control)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| J3 | 62 | L3 | 66 (*5) | P18 | 66 (*5) |
| J21 A | 62 | P15 | 66 (*5) | P19 | 66 (*5) |
| J23 A | 62 | P16 | 66 (*5) | P20 | 66 (*5) |
| J83 | 66 (*5) | P17 | 66 (*5) | S8 | 63 |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 26 (*1)<br>30 (*2) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |

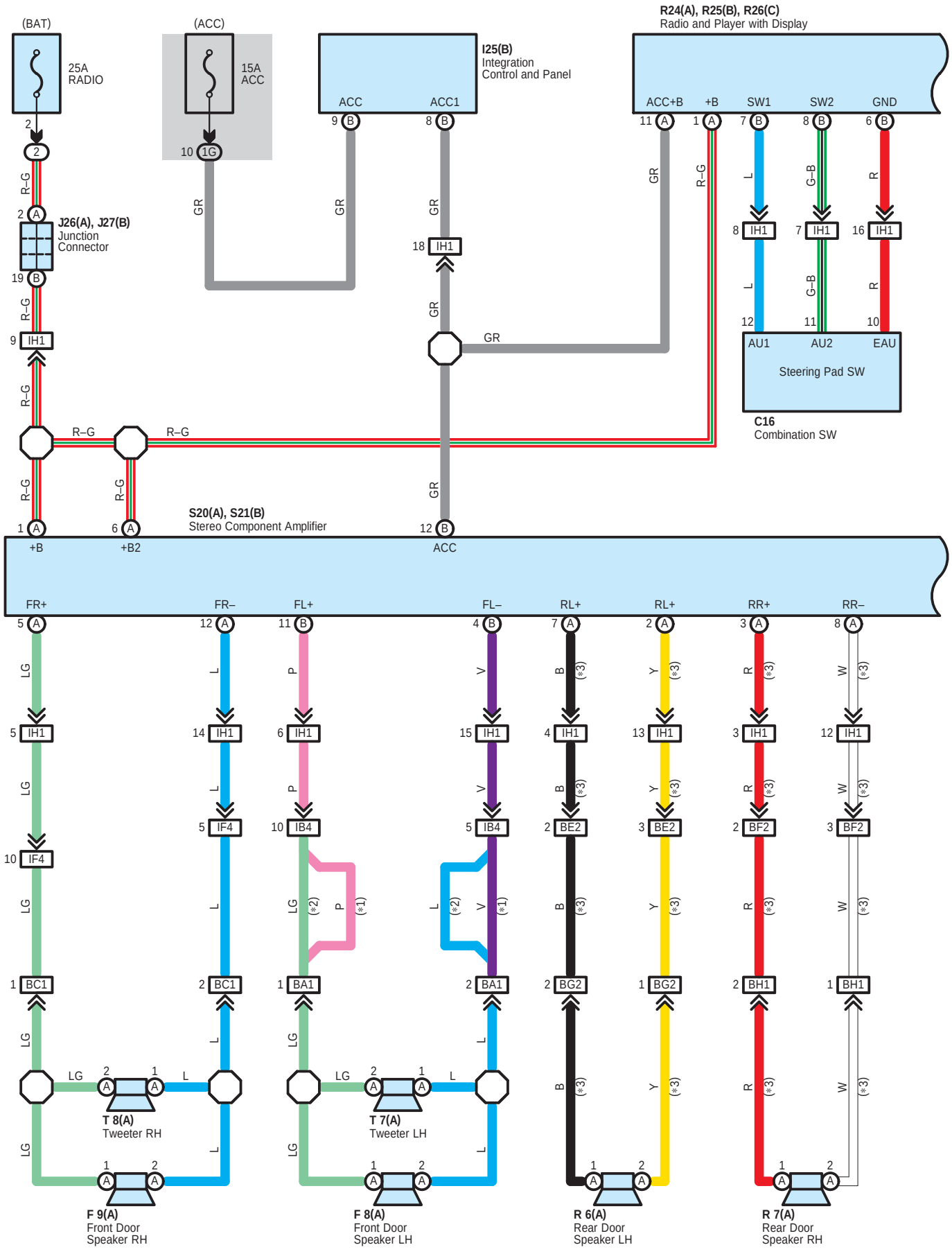
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BI2 | 86 (*5)<br>88 (*7) | Cowl Wire and Seat No.2 Wire (Under the Driver's Seat) |

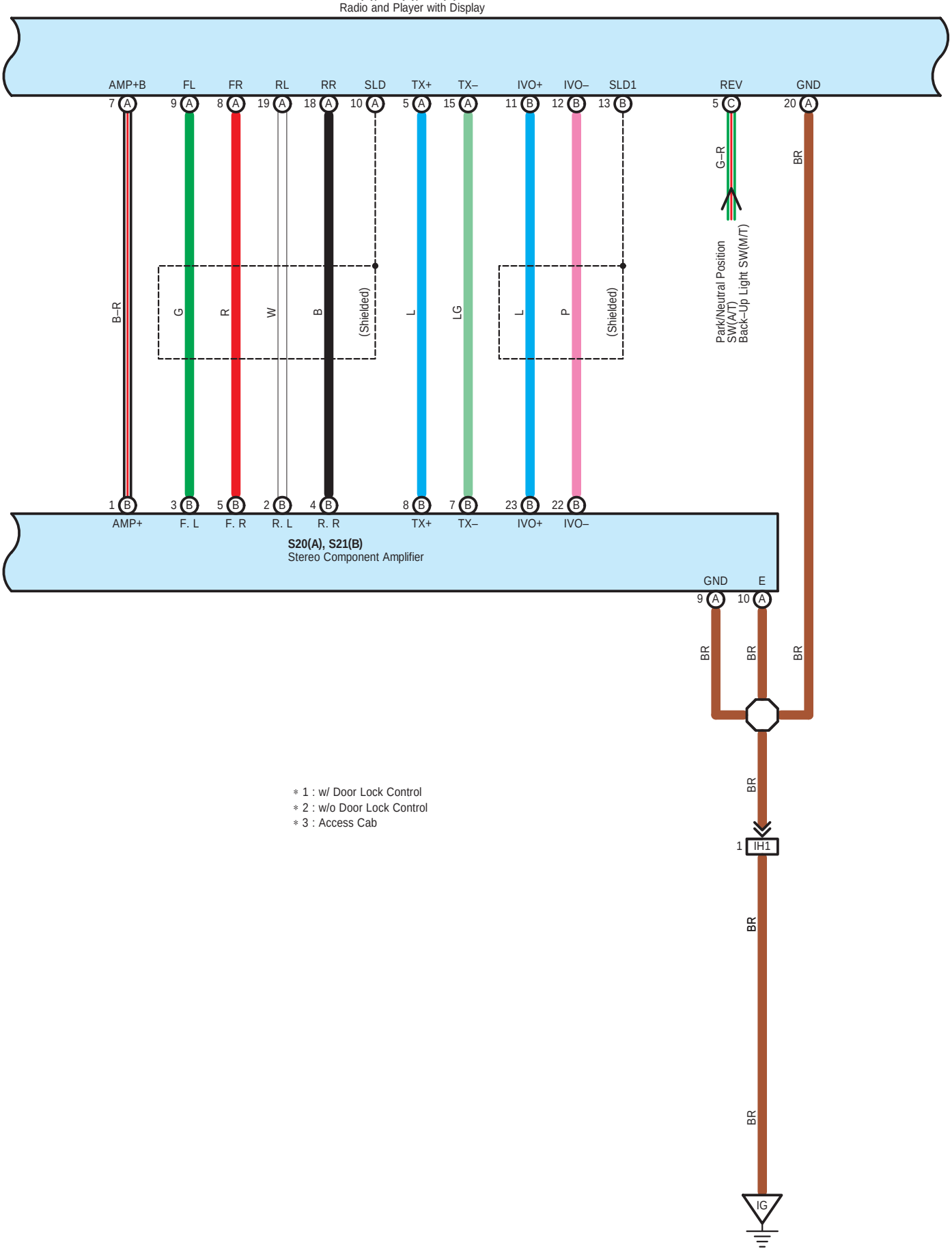
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IE<br>IF | 82 | Left Kick Panel |

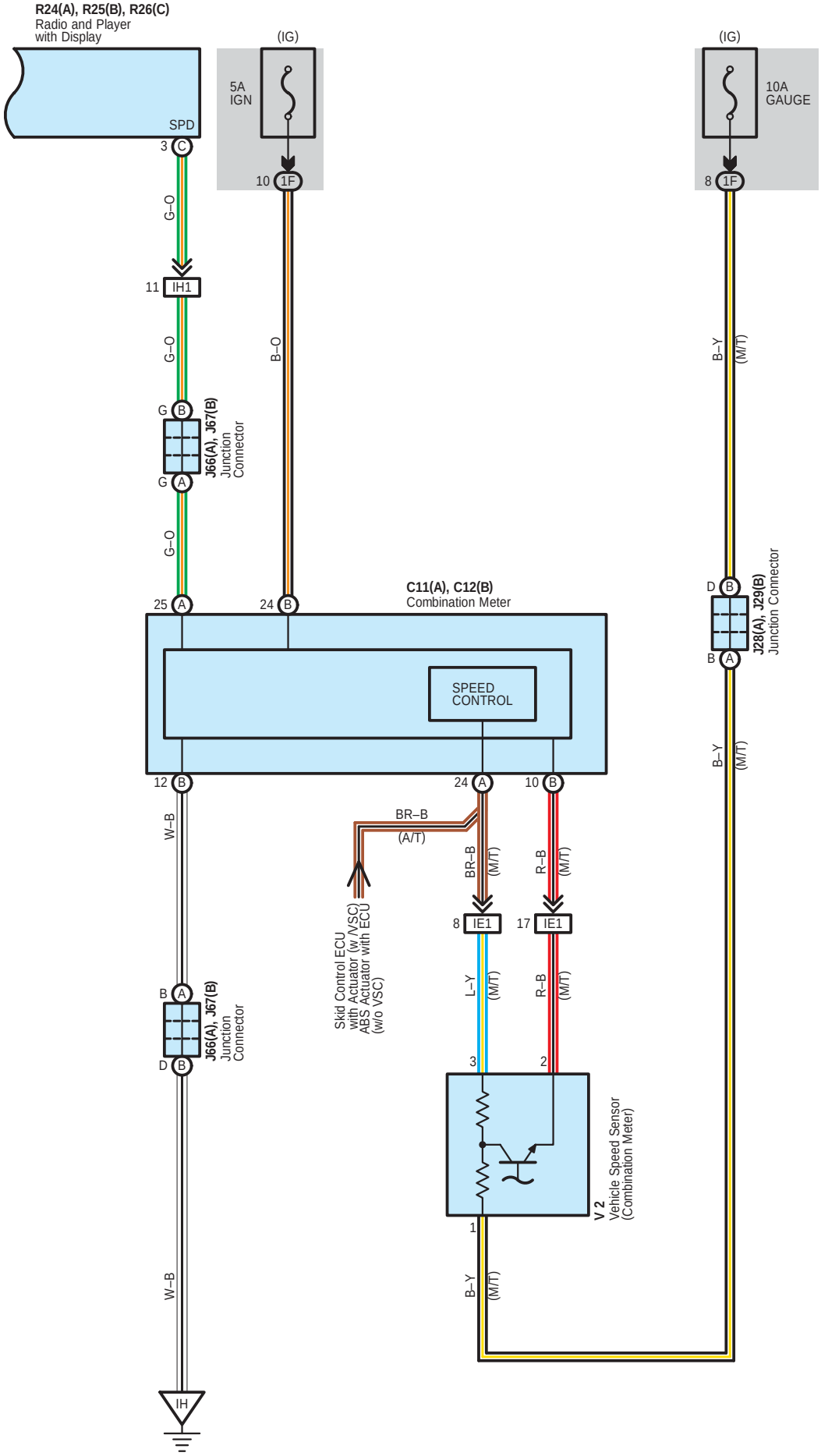
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(BAT)
25A
RADIO
(ACC)
15A
ACC
I25(B)
Integration
Control and Panel
ACC
ACC1
R24(A), R25(B), R26(C)
Radio and Player with Display
ACC+B
+B
SW1
SW2
GND
J26(A), J27(B)
Junction
Connector
IH1
AU1
AU2
EAU
Steering Pad SW
C16
Combination SW
S20(A), S21(B)
Stereo Component Amplifier
+B
+B2
ACC
FR+
FR–
FL+
FL–
RL+
RL+
RR+
RR–
IF4
IB4
BC1
BA1
BE2
BG2
BF2
BH1
T 8(A)
Tweeter RH
T 7(A)
Tweeter LH
F 9(A)
Front Door
Speaker RH
F 8(A)
Front Door
Speaker LH
R 6(A)
Rear Door
Speaker LH
R 7(A)
Rear Door
Speaker RH

**R24(A), R25(B), R26(C)**
Radio and Player with Display




∗ 1 : w/ Door Lock Control
∗ 2 : w/o Door Lock Control
∗ 3 : Access Cab


R24(A), R25(B), R26(C)
Radio and Player with Display
SPD
3 C
G–O
11 IH1
G–O
G B
G A
J66(A), J67(B) Junction Connector
G–O
25 A
(IG)
5A IGN
10 1F
B–O
24 B
(IG)
10A GAUGE
8 1F
B–Y (M/T)
D B
B A
J28(A), J29(B) Junction Connector
B–Y (M/T)
C11(A), C12(B)
Combination Meter
SPEED CONTROL
12 B
24 A
10 B
W–B
BR–B (A/T)
BR–B (M/T)
R–B (M/T)
8 IE1
17 IE1
Skid Control ECU with Actuator (w /VSC) ABS Actuator with ECU (w/o VSC)
L–Y (M/T)
R–B (M/T)
B A
D B
J66(A), J67(B) Junction Connector
3
2
1
V 2
Vehicle Speed Sensor (Combination Meter)
B–Y (M/T)
W–B
IH

### : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C11 | A | 60 | J28 | A | 62 | R26 | C | 63 |
| C12 | B | 60 | J29 | B | 62 | S20 | A | 64 (*3) |
| C16 | | 60 | J66 | A | 62 | S21 | B | 64 (*3) |
| F8 | A | 64 (*3) | J67 | B | 62 | T7 | A | 64 (*3) |
| F9 | A | 64 (*3) | R6 | A | 64 (*3) | T8 | A | 64 (*3) |
| I25 | B | 61 | R7 | A | 64 (*3) | V2 | | 59 (1GR–FE) |
| J26 | A | 62 | R24 | A | 63 | | | |
| J27 | B | 62 | R25 | B | 63 | | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1G | 26 (*1) | |
| | 30 (*2) | |

### : Connector Joining Wire Harness and Wire Harness

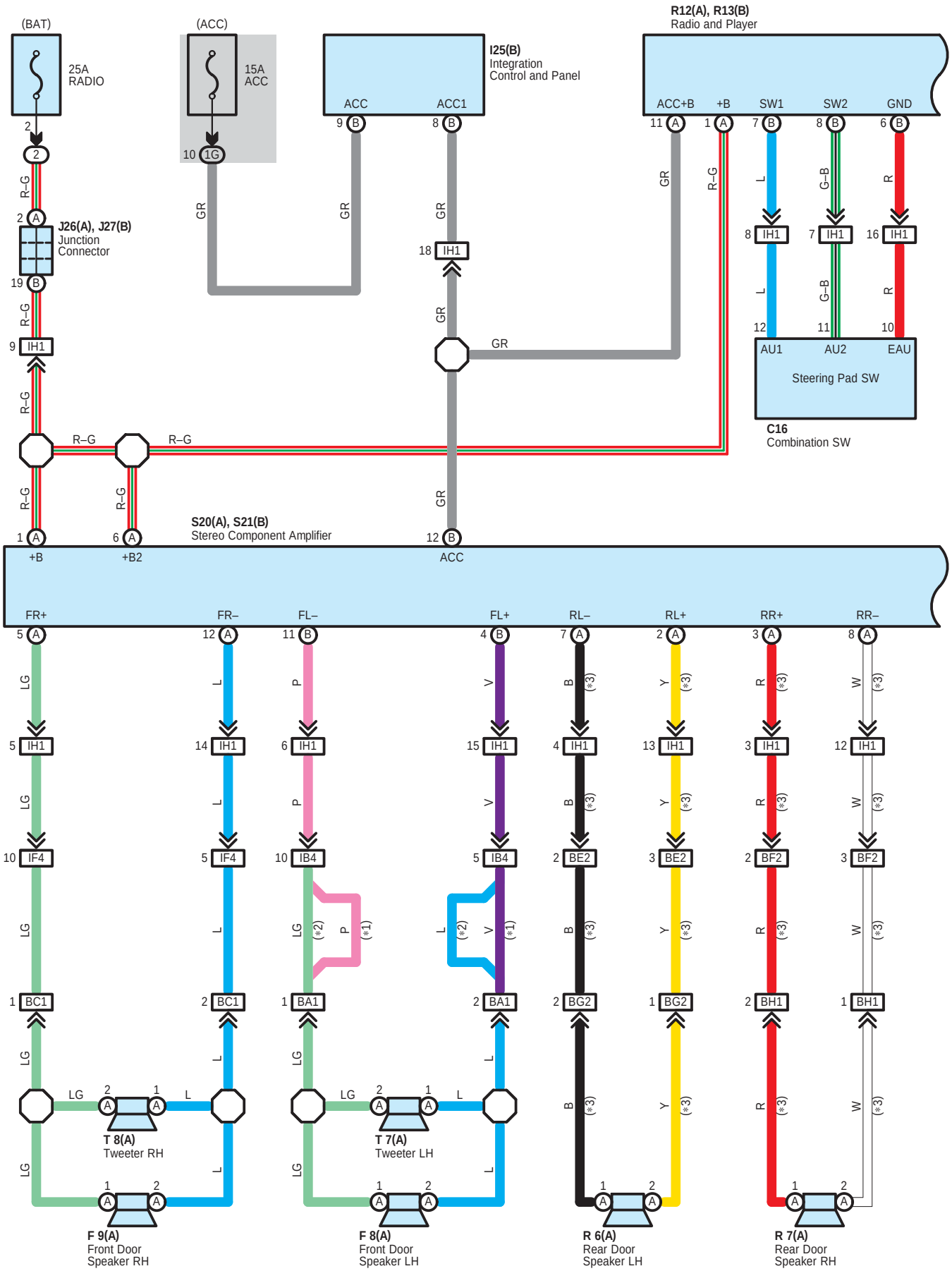
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB4 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IF4 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |
| BA1 | 84 (*3) | Front Door LH Wire and Speaker Tweeter Wire LH (Inside of Front Door LH) |
| BC1 | 84 (*3) | Front Door RH Wire and Speaker Tweeter Wire RH (Inside of Front Door RH) |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

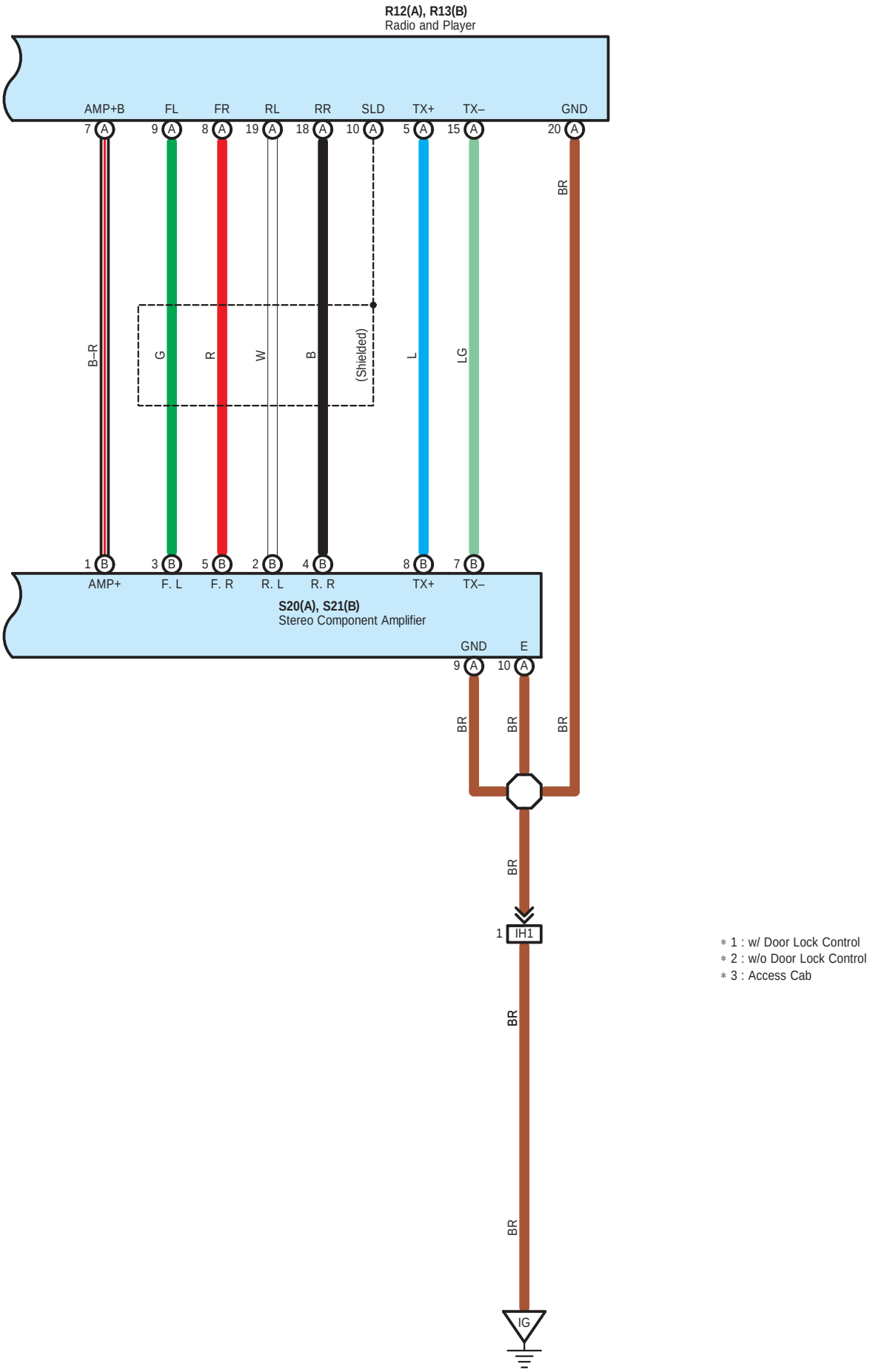
### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IG | 82 | Instrument Panel Brace RH |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Audio System for Separate Amplifier (Access/Standard Cab)






* 1 : w/ Door Lock Control
* 2 : w/o Door Lock Control
* 3 : Access Cab

# Audio System for Separate Amplifier (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C16 | | 60 | J27 | B | 62 | S20 | A | 64 (*3) |
| F8 | A | 64 (*3) | R6 | A | 64 (*3) | S21 | B | 64 (*3) |
| F9 | A | 64 (*3) | R7 | A | 64 (*3) | T7 | A | 64 (*3) |
| I25 | B | 61 | R12 | A | 63 | T8 | A | 64 (*3) |
| J26 | A | 62 | R13 | B | 63 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

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

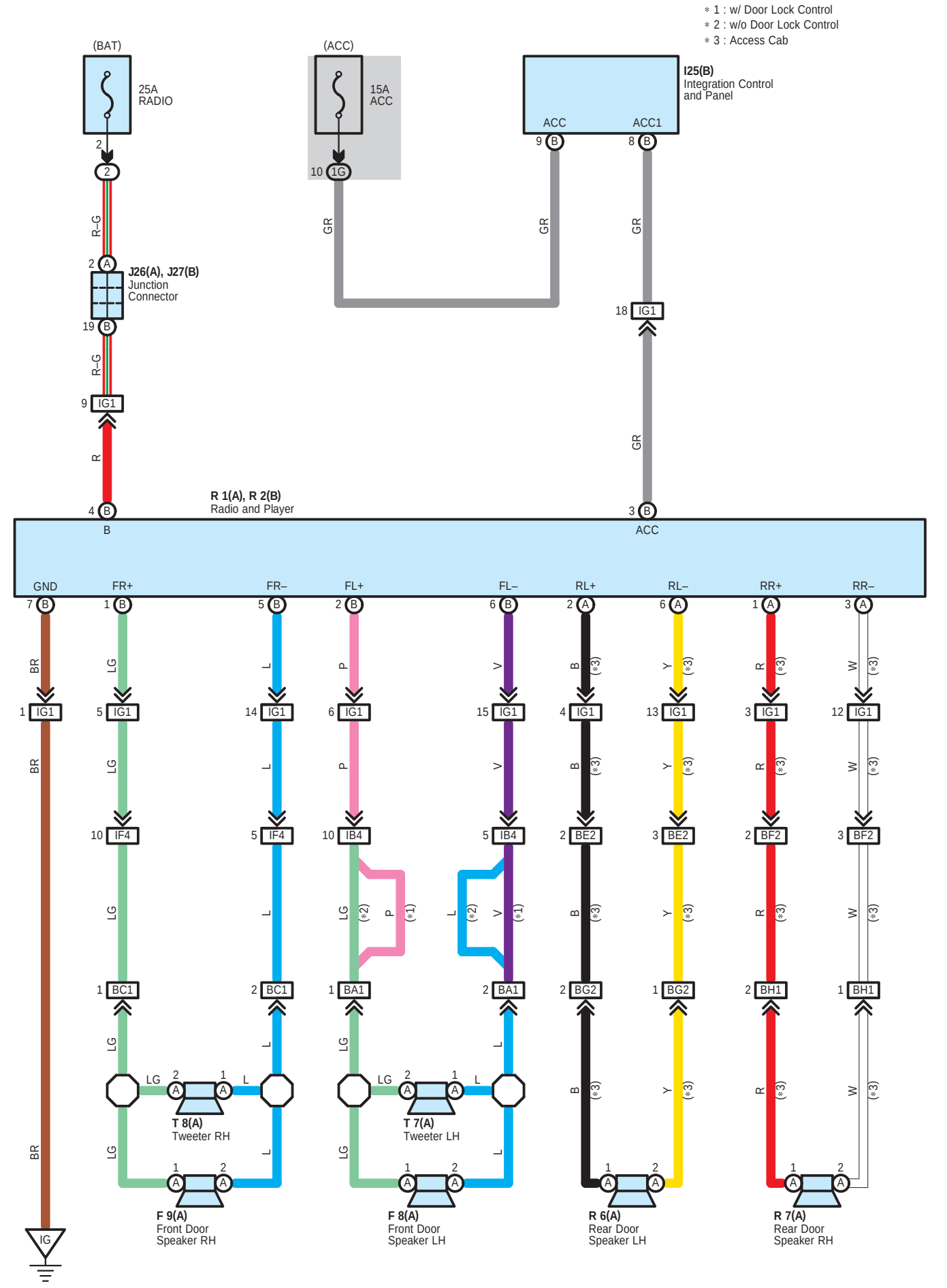
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB4 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF4 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |
| BA1 | 84 (*3) | Front Door LH Wire and Speaker Tweeter Wire LH (Inside of Front Door LH) |
| BC1 | 84 (*3) | Front Door RH Wire and Speaker Tweeter Wire RH (Inside of Front Door RH) |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IG | 82 | Instrument Panel Brace RH |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Audio System for Built–in Amplifier (Access/Standard Cab)



**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| F8 | A | 64 (*3) | J26 | A | 62 | R7 | A | 64 (*3) |
| | | 65 (*4) | J27 | B | 62 | T7 | A | 64 (*3) |
| F9 | A | 64 (*3) | R1 | A | 63 | | | 65 (*4) |
| | | 65 (*4) | R2 | B | 63 | T8 | A | 64 (*3) |
| I25 | B | 61 | R6 | A | 64 (*3) | | | 65 (*4) |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

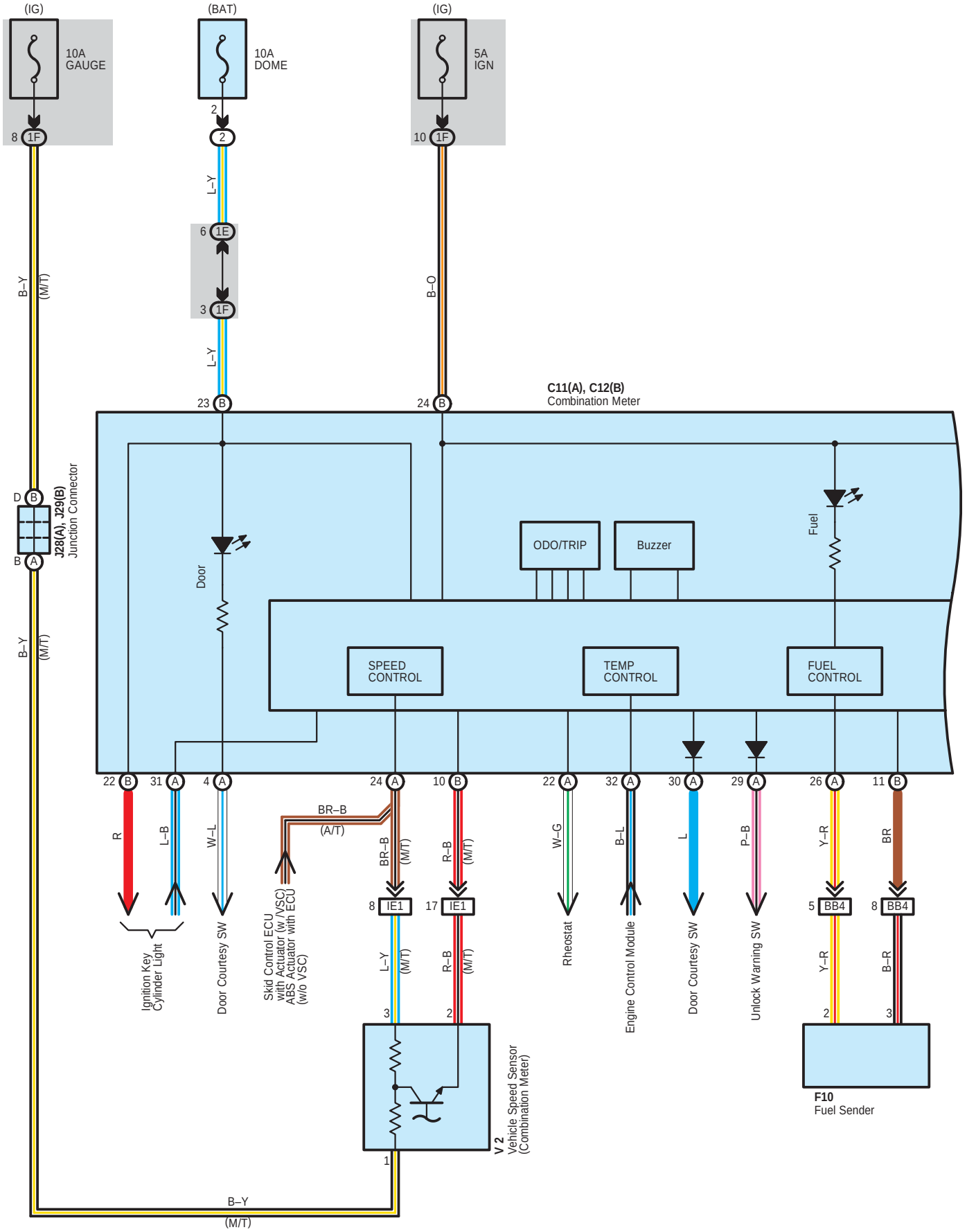
**: Connector Joining Wire Harness and Wire Harness**

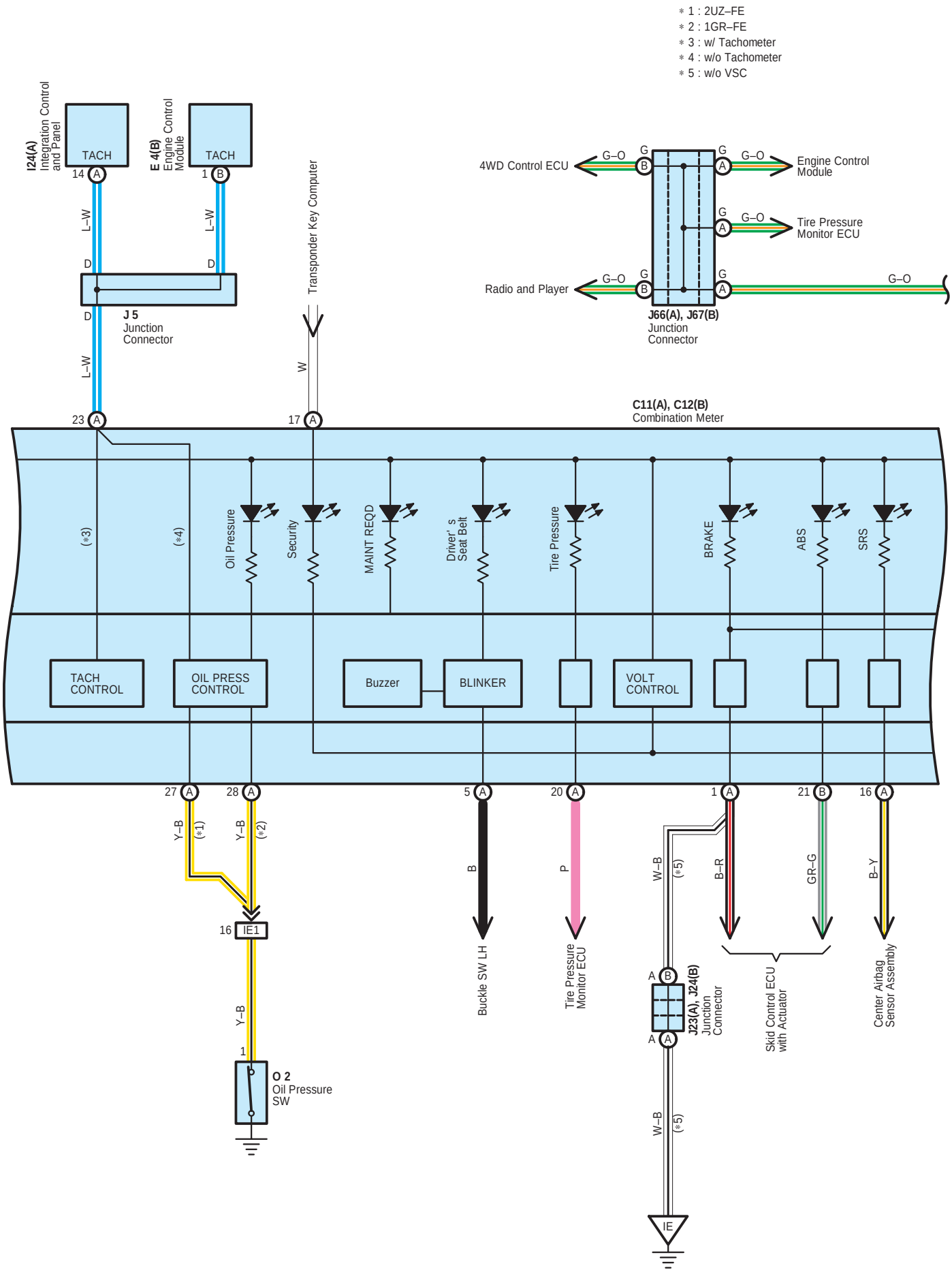
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB4 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF4 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IG1 | 83 | Cowl Wire and Instrument Panel No.2 Wire (Instrument Panel Brace RH) |
| BA1 | 84 (*3) | Front Door LH Wire and Speaker Tweeter Wire LH (Inside of Front Door LH) |
| | 85 (*4) | |
| BC1 | 84 (*3) | Front Door RH Wire and Speaker Tweeter Wire RH (Inside of Front Door RH) |
| | 85 (*4) | |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |

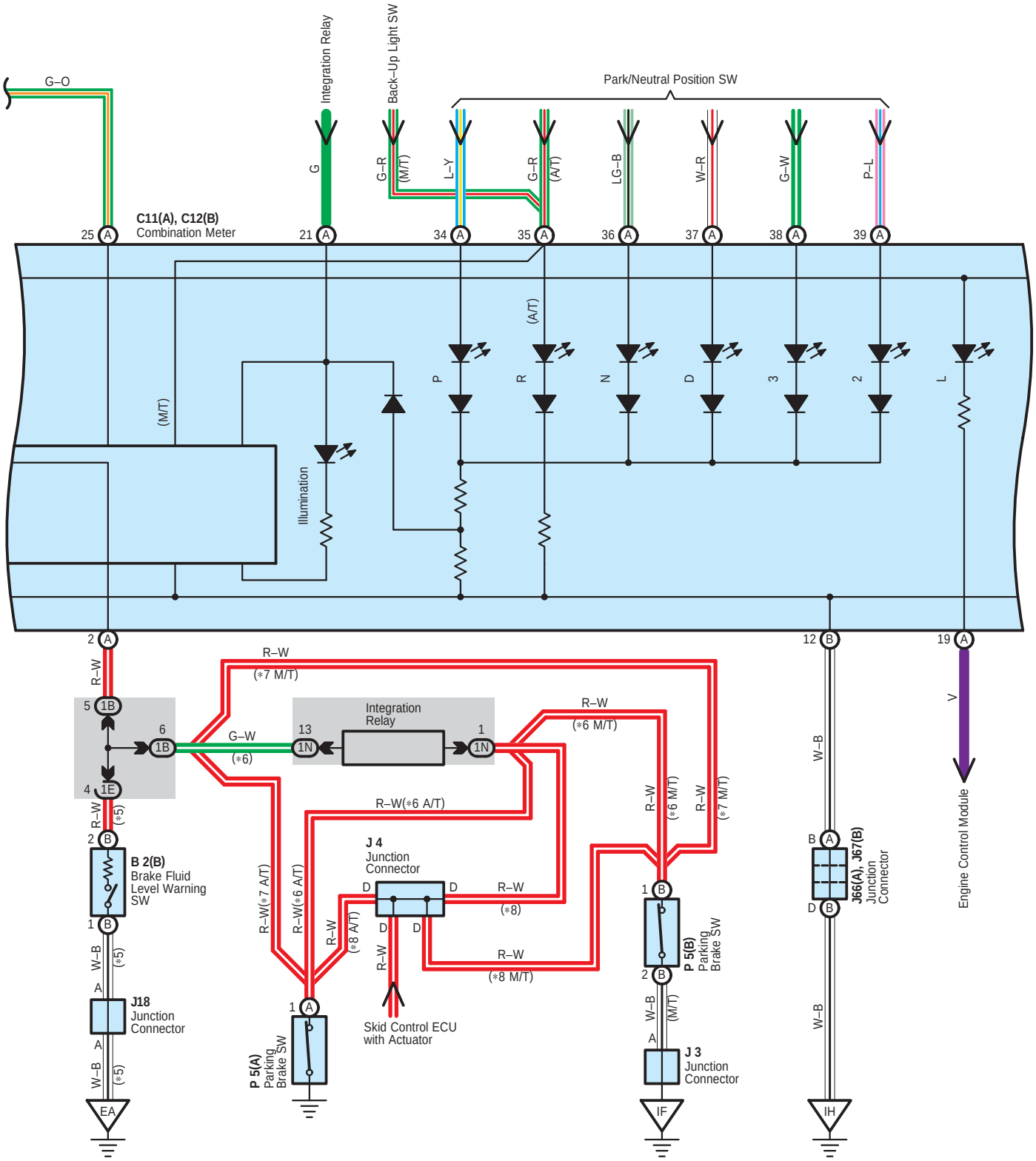
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IG | 82 | Instrument Panel Brace RH |

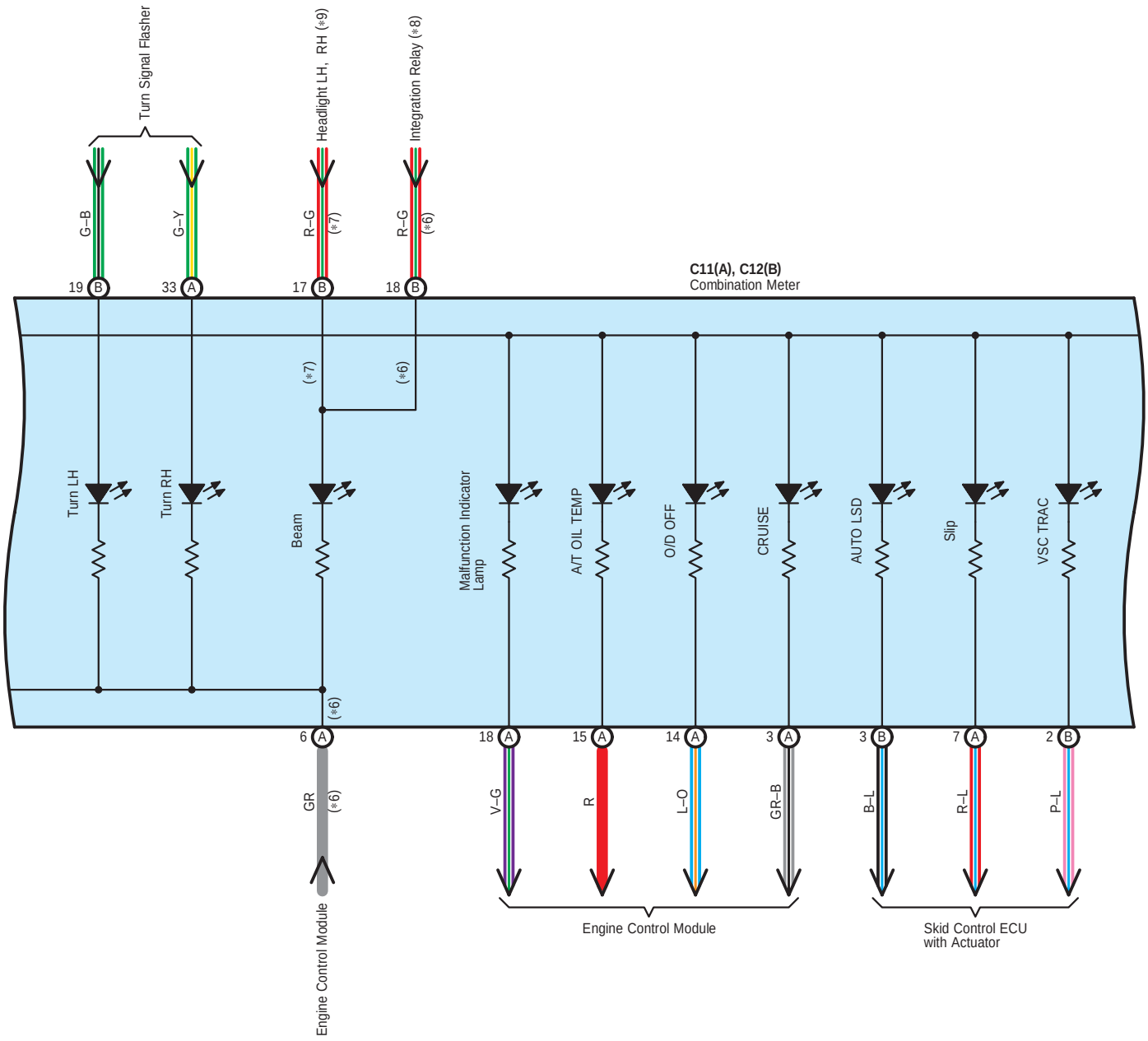
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

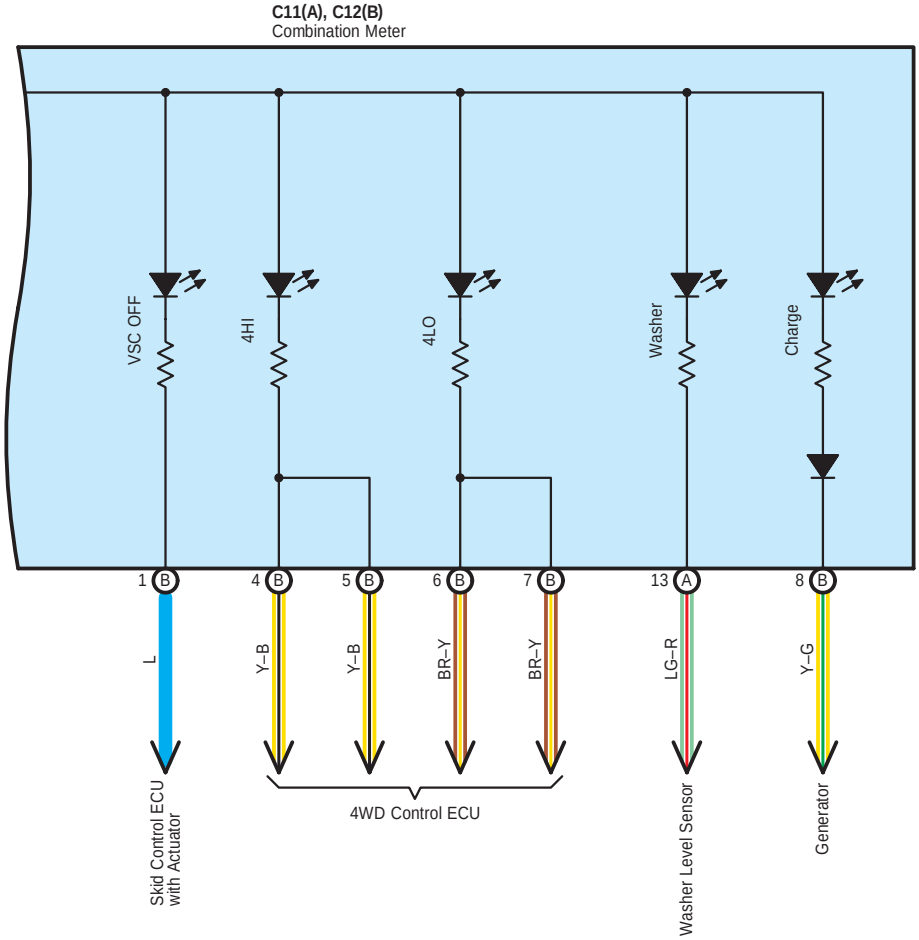

(IG)
10A GAUGE
(BAT)
10A DOME
(IG)
5A IGN
8 1F
2
10 1F
L–Y
6 1E
3 1F
L–Y
B–Y (M/T)
B–O
23 B
24 B
C11(A), C12(B)
Combination Meter
D B
B A
J28(A), J29(B)
Junction Connector
B–Y (M/T)
Door
ODO/TRIP
Buzzer
Fuel
SPEED CONTROL
TEMP CONTROL
FUEL CONTROL
22 B
31 A
4 A
24 A
10 B
22 A
32 A
30 A
29 A
26 A
11 B
R
L–B
W–L
BR–B (A/T)
BR–B (M/T)
R–B (M/T)
W–G
B–L
L
P–B
Y–R
BR
8 IE1
17 IE1
5 BB4
8 BB4
L–Y (M/T)
R–B (M/T)
Y–R
B–R
3
2
2
3
1
Ignition Key Cylinder Light
Door Courtesy SW
Skid Control ECU with Actuator (w /VSC) ABS Actuator with ECU (w/o VSC)
Rheostat
Engine Control Module
Door Courtesy SW
Unlock Warning SW
V 2
Vehicle Speed Sensor (Combination Meter)
F10
Fuel Sender
B–Y (M/T)


* 1 : 2UZ–FE
* 2 : 1GR–FE
* 3 : w/ Tachometer
* 4 : w/o Tachometer
* 5 : w/o VSC
I24(A) Integration Control and Panel
TACH
E 4(B) Engine Control Module
TACH
14 A
1 B
L–W
D
J 5 Junction Connector
Transponder Key Computer
W
23 A
17 A
4WD Control ECU
G–O
Engine Control Module
Tire Pressure Monitor ECU
Radio and Player
J66(A), J67(B) Junction Connector
C11(A), C12(B) Combination Meter
(*3)
(*4)
Oil Pressure
Security
MAINT REQD
Driver's Seat Belt
Tire Pressure
BRAKE
ABS
SRS
TACH CONTROL
OIL PRESS CONTROL
Buzzer
BLINKER
VOLT CONTROL
27 A
28 A
5 A
20 A
1 A
21 B
16 A
Y–B
(*1)
(*2)
B
P
W–B
B–R
GR–G
B–Y
16 IE1
O 2 Oil Pressure SW
Buckle SW LH
Tire Pressure Monitor ECU
J23(A), J24(B) Junction Connector
Skid Control ECU with Actuator
Center Airbag Sensor Assembly
IE


G–O
Integration Relay
Back–Up Light SW
Park/Neutral Position SW
G
G–R (M/T)
L–Y
G–R (A/T)
LG–B
W–R
G–W
P–L
C11(A), C12(B)
Combination Meter
25 A
21 A
34 A
35 A
36 A
37 A
38 A
39 A
(A/T)
(M/T)
P
R
N
D
3
2
L
Illumination
2 A
12 B
19 A
R–W
(*7 M/T)
5 1B
6 1B
4 1E
G–W
(*6)
13 1N
1 1N
Integration Relay
R–W
(*6 M/T)
R–W(*6 A/T)
R–W(*7 A/T)
R–W(*6 A/T)
R–W
(*8 A/T)
J 4
Junction Connector
D
R–W
(*8)
R–W
(*8 M/T)
R–W
(*6 M/T)
R–W
(*7 M/T)
V
W–B
Engine Control Module
2 B
B 2(B)
Brake Fluid Level Warning SW
(*5)
1 B
W–B
(*5)
A
J18
Junction Connector
A
W–B
(*5)
EA
P 5(A)
Parking Brake SW
Skid Control ECU with Actuator
1 B
P 5(B)
Parking Brake SW
2 B
W–B
(M/T)
A
J 3
Junction Connector
IF
B A
D B
J66(A), J67(B)
Junction Connector
W–B
IH

∗ 5 : w/o VSC
∗ 6 : w/ Daytime Running Light
∗ 7 : w/o Daytime Running Light
∗ 8 : w/ Daytime Running Light w/ VSC




C11(A), C12(B)
Combination Meter
VSC OFF
4HI
4LO
Washer
Charge
1 B
4 B
5 B
6 B
7 B
13 A
8 B
L
Y–B
Y–B
BR–Y
BR–Y
LG–R
Y–G
Skid Control ECU with Actuator
4WD Control ECU
Washer Level Sensor
Generator

### : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B2 | B | 56 (2UZ–FE) | J3 | | 62 | J29 | B | 62 |
| | | 58 (1GR–FE) | J4 | | 62 | J66 | A | 62 |
| C11 | A | 60 | J5 | | 62 | J67 | B | 62 |
| C12 | B | 60 | J18 | | 57 (2UZ–FE) | O2 | | 57 (2UZ–FE) |
| E4 | B | 61 | | | 59 (1GR–FE) | | | 59 (1GR–FE) |
| F10 | | 64 (*3) | J23 | A | 62 | P5 | A | 62 |
| | | 65 (*4) | J24 | B | 62 | | B | 62 |
| I24 | A | 61 | J28 | A | 62 | V2 | | 59 (1GR–FE) |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1N | 31 (*2) | |

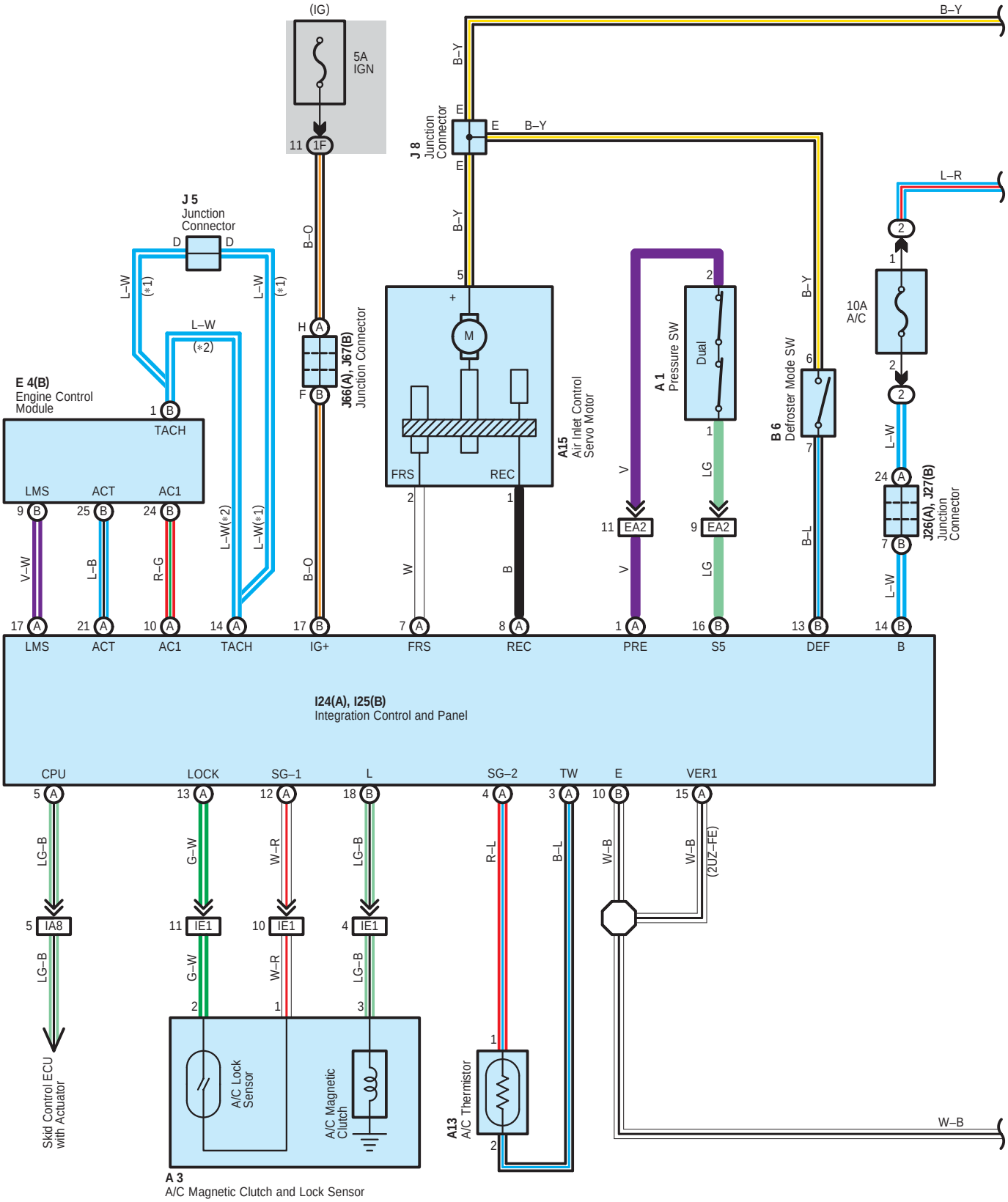
### : Connector Joining Wire Harness and Wire Harness

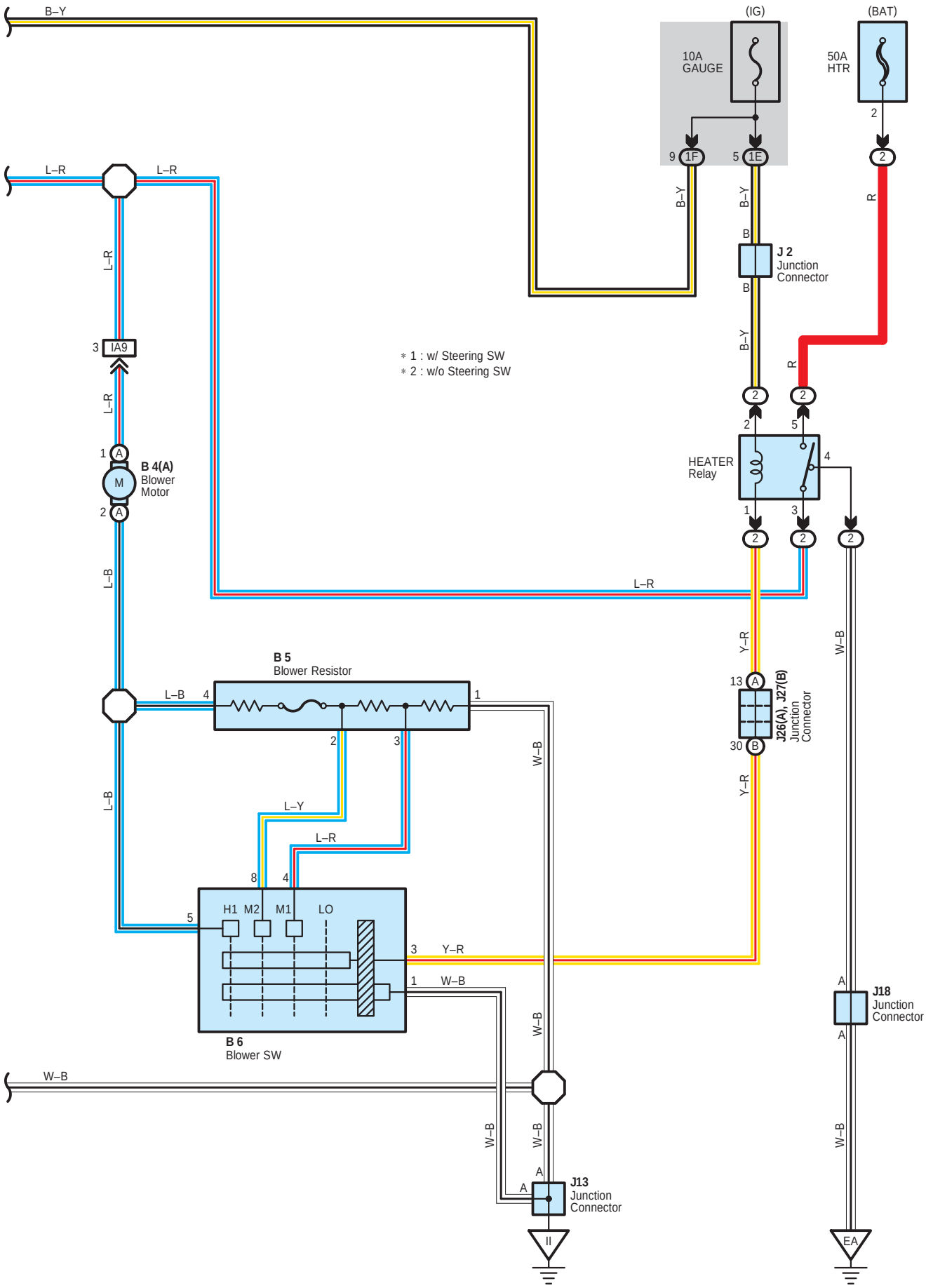
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| BB4 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |

### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| IE | 82 | Left Kick Panel |
| IF | | |
| IH | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat


(IG)
5A IGN
11 1F
B–Y
J 8 Junction Connector
E
B–Y
J 5 Junction Connector
D
L–W (*1)
L–W (*2)
B–O
H A
F B
J66(A), J67(B) Junction Connector
5
M
FRS
REC
A15 Air Inlet Control Servo Motor
A 1 Pressure SW
Dual
V
LG
11 EA2
9 EA2
2
1
B 6 Defroster Mode SW
6
7
B–L
10A A/C
L–R
L–W
24 A
7 B
J26(A), J27(B) Junction Connector
E 4(B) Engine Control Module
1 B
TACH
LMS
ACT
AC1
9 B
25 B
24 B
V–W
L–B
R–G
L–W(*2)
L–W(*1)
17 A
21 A
10 A
14 A
17 B
7 A
8 A
1 A
16 B
13 B
14 B
W
B
LMS
ACT
AC1
TACH
IG+
FRS
REC
PRE
S5
DEF
B
I24(A), I25(B)
Integration Control and Panel
CPU
LOCK
SG–1
L
SG–2
TW
E
VER1
5 A
13 A
12 A
18 B
4 A
3 A
10 B
15 A
LG–B
G–W
W–R
R–L
W–B
(2UZ–FE)
5 IA8
11 IE1
10 IE1
4 IE1
Skid Control ECU with Actuator
A/C Lock Sensor
A/C Magnetic Clutch
A13 A/C Thermistor
W–B
A 3
A/C Magnetic Clutch and Lock Sensor


B–Y
(IG)
(BAT)
10A
GAUGE
50A
HTR
9 1F
5 1E
2
L–R
L–R
B–Y
B–Y
R
B
J 2
Junction
Connector
B
3 IA9
＊1 : w/ Steering SW
＊2 : w/o Steering SW
L–R
B–Y
R
2
2
2
5
1 A
M
2 A
B 4(A)
Blower
Motor
HEATER
Relay
4
1
3
2
2
2
L–B
L–R
B 5
Blower Resistor
L–B
4
1
2
3
W–B
13 A
30 B
J26(A), J27(B)
Junction
Connector
Y–R
Y–R
W–B
L–B
L–Y
L–R
8
4
5
H1 M2 M1 LO
3 Y–R
1 W–B
W–B
A
J18
Junction
Connector
A
B 6
Blower SW
W–B
W–B
W–B
W–B
A
A
J13
Junction
Connector
W–B
II
EA

**System Outline**

**1. Heater Blower Motor Operation**

Current is applied at all times through the HTR fuse to TERMINAL 5 of the HTR relay.
When the ignition SW is turned on, current flows through the GAUGE fuse to TERMINAL 2 of the HTR relay to the coil side to TERMINAL 1 to TERMINAL 3 of the blower SW.

* Low speed operation
When the blower SW is moved to LO position, current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to switch on. This causes the current to flow from the HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 4 of the blower resistor to TERMINAL 1 to GROUND, causing the blower motor to rotate at low speed.

* Medium speed operation (Operation at M1, M2)
When the blower SW is moved to M1 position, current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, turning the HTR relay to switch on. This causes the current to flow from the HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 4 of the blower resistor to TERMINAL 3 to TERMINAL 4 of the blower SW to TERMINAL 1 to GROUND. At this time, the blower resistance of the blower resistor is less than at low speed, so the blower motor rotates at medium low speed.
When the blower SW is moved to M2 position, current flows through the motor flows from TERMINAL 4 of the blower resistor to TERMINAL 2 to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

* High speed operation
When the blower SW is moved to HIGH position, current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, turning the HTR relay to switch on.
This causes the current to flow from the HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 5 of the blower SW to TERMINAL 1 to GROUND, causing the blower motor to rotate at high speed.

**2. Operation of Air Inlet Control Servo Motor**

* Switching from FRESH to RECIRC
With the ignition SW turned on, current flows from the GAUGE fuse to TERMINAL 5 of the air inlet control servo motor. When the RECIRC/FRESH SW is switched to the RECIRC side, current flows from TERMINAL 5 of the air inlet control servo motor to TERMINAL 1 to TERMINAL (A) 8 of the integration control and panel to TERMINAL (B) 1 to GROUND. The motor rotates and the damper moves to the RECIRC side. When it is in the RECIRC position, current is cut inside the servo motor and the damper stops at that position.

* Switching from RECIRC to FRESH
With the ignition SW turned on, when the RECIRC/FRESH SW is switched to the FRESH side, current flows from TERMINAL 5 of the air inlet control servo motor to TERMINAL 2 to TERMINAL (A) 7 of the integration control and panel to TERMINAL (B) 1 to GROUND, the motor rotates and the damper moves to the FRESH side. when it is in the FRESH position, current is cut inside the servo motor and the damper stops at that position. When the ignition SW turned on, and mode SW (Integration control and panel) is at DEF or F/DEF position, it causes the damper to move to the FRESH side. Whether the RECIRC/FRESH SW (Integration control and panel) is on or not.

**3. Air Conditioning Operation**

When the blower SW is on, current flows from the GAUGE fuse to the HTR relay (Coil side) to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, activating the HTR relay. This causes current to flow from the HTR fuse to the HTR relay (Point side) to A/C fuse to TERMINAL (B) 12 of the A/C SW (Integration control and panel). When the A/C SW (Integration Control and panel) is turned on. Current flows from the A/C fuse to TERMINAL (B) 14 of the integration control and panel to TERMINAL (B) 18 to A/C magnetic clutch. Causing The compressor to operate.
When blower SW is on and mode SW (Integration control and panel) is at DEF or F/DEF position, it causes A/C to run whether A/C SW (Integration control and panel) is on or not.

### : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A1 | 56 (2UZ–FE) | B6 | 60 | J13 | 62 |
| | 58 (1GR–FE) | E4 B | 61 | J18 | 57 (2UZ–FE) |
| A3 | 56 (2UZ–FE) | I24 A | 61 | | 59 (1GR–FE) |
| | 58 (1GR–FE) | I25 B | 61 | J26 A | 62 |
| A13 | 60 | J2 | 57 (2UZ–FE) | J27 B | 62 |
| A15 | 60 | | 59 (1GR–FE) | J66 A | 62 |
| B4 A | 60 | J5 | 62 | J67 B | 62 |
| B5 | 60 | J8 | 62 | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 26 (*1) | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |

### : Connector Joining Wire Harness and Wire Harness

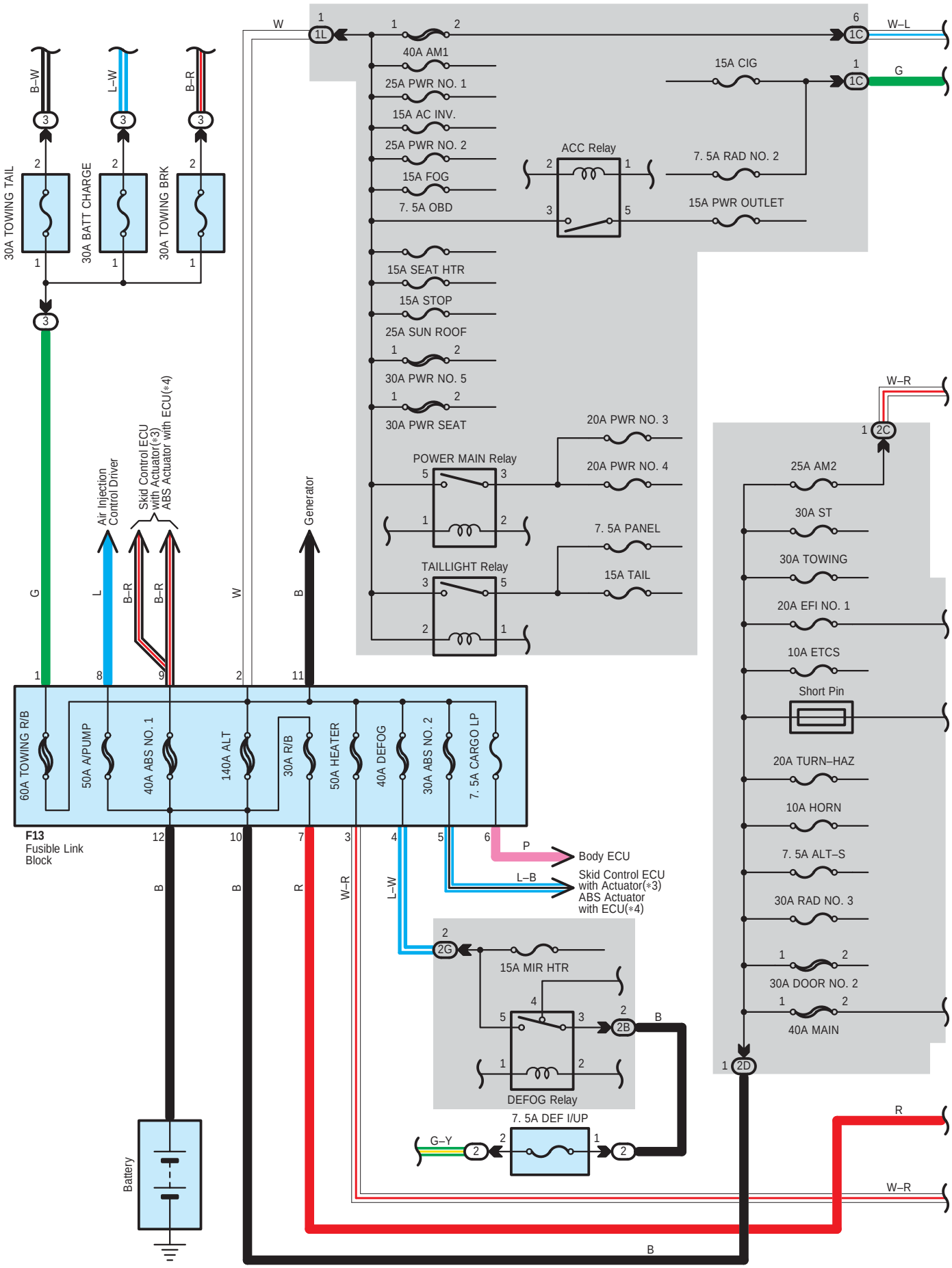
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EA2 | 80 (2UZ–FE) | Cowl Wire and Engine Room Main Wire (Right Fender) |
| | 81 (1GR–FE) | |
| IA8 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA9 | | |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

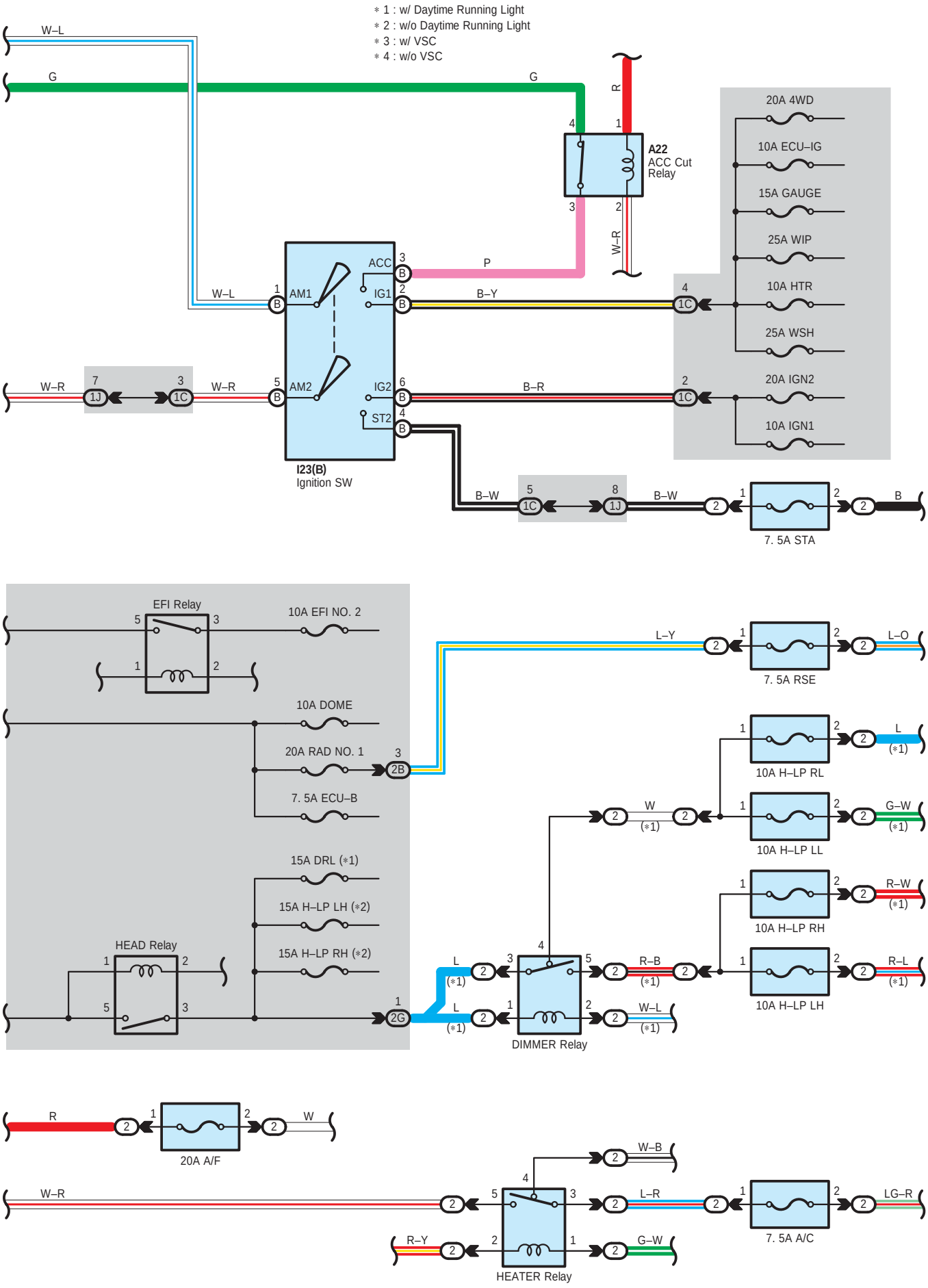
### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| II | 82 | Right Kick Panel |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# Power Source (Double Cab)




∗ 1 : w/ Daytime Running Light
∗ 2 : w/o Daytime Running Light
∗ 3 : w/ VSC
∗ 4 : w/o VSC
W–L
G
G
R
A22
ACC Cut
Relay
W–R
20A 4WD
10A ECU–IG
15A GAUGE
25A WIP
10A HTR
25A WSH
20A IGN2
10A IGN1
ACC
IG1
AM1
AM2
IG2
ST2
P
B–Y
B–R
I23(B)
Ignition SW
B–W
7. 5A STA
EFI Relay
10A EFI NO. 2
10A DOME
20A RAD NO. 1
7. 5A ECU–B
15A DRL (∗1)
15A H–LP LH (∗2)
15A H–LP RH (∗2)
HEAD Relay
L–Y
7. 5A RSE
L–O
10A H–LP RL
L
(∗1)
W
(∗1)
10A H–LP LL
G–W
(∗1)
10A H–LP RH
R–W
(∗1)
10A H–LP LH
R–L
(∗1)
R–B
(∗1)
W–L
(∗1)
DIMMER Relay
20A A/F
W–B
L–R
7. 5A A/C
LG–R
R–Y
G–W
HEATER Relay

# Power Source (Double Cab)

**: Parts Location**

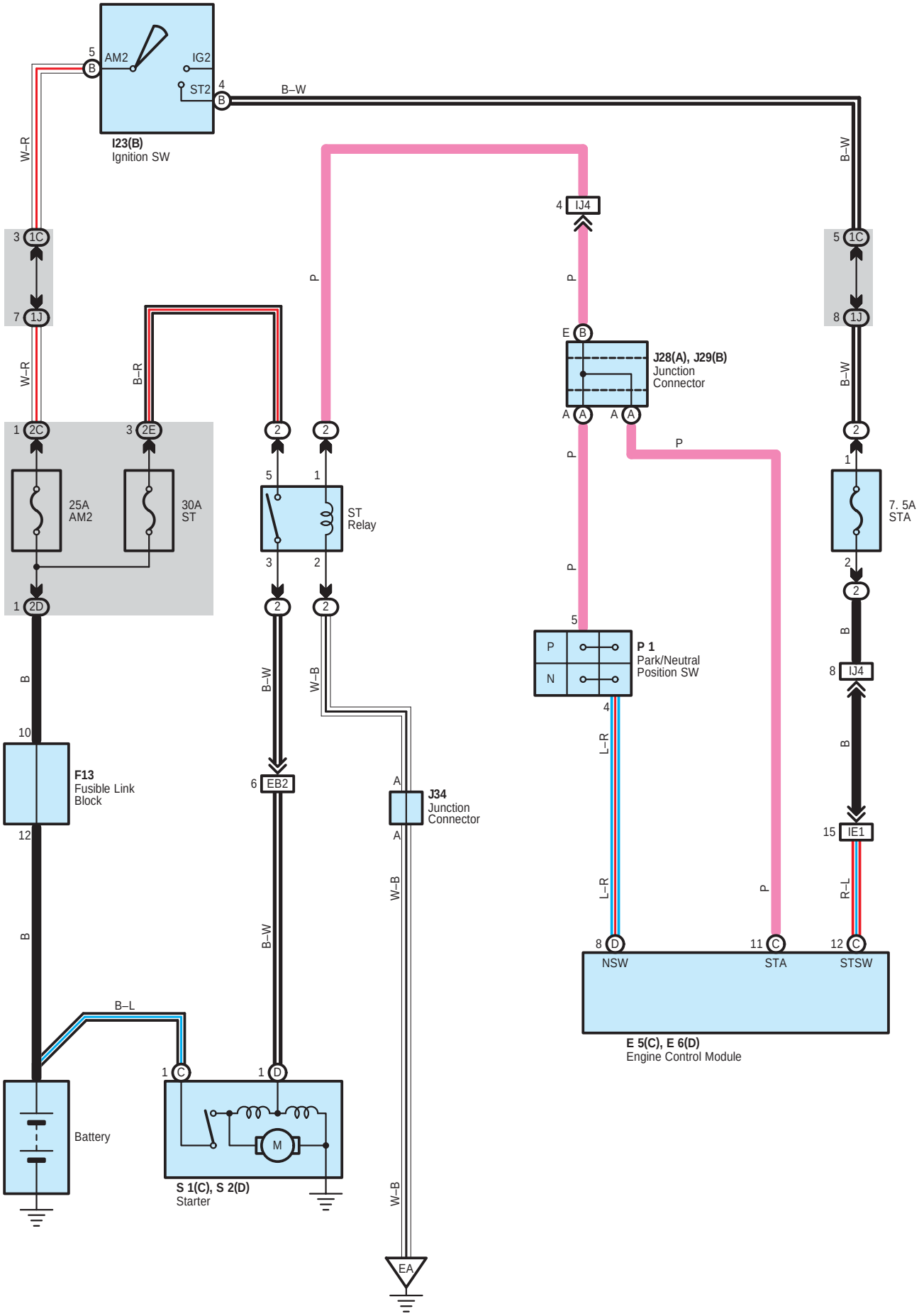
| Code | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|
| A22 | 72 | F13 | 70 | I23 | B | 73 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |
| 3 | 43 | Engine Room R/B No.3 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2B | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2C | | |
| 2D | | |
| 2G | | |


I23(B)
Ignition SW
AM2
IG2
ST2
B–W
W–R
B–R
P
J28(A), J29(B)
Junction
Connector
25A
AM2
30A
ST
ST
Relay
7. 5A
STA
P 1
Park/Neutral
Position SW
F13
Fusible Link
Block
J34
Junction
Connector
B–L
L–R
R–L
W–B
B
Battery
S 1(C), S 2(D)
Starter
M
E 5(C), E 6(D)
Engine Control Module
NSW
STA
STSW
EA

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| E5 | C | 73 | J28 | A | 74 | S1 | C | 71 |
| E6 | D | 73 | J29 | B | 74 | S2 | D | 71 |
| F13 | | 70 | J34 | | 71 | | | |
| I23 | B | 73 | P1 | | 71 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

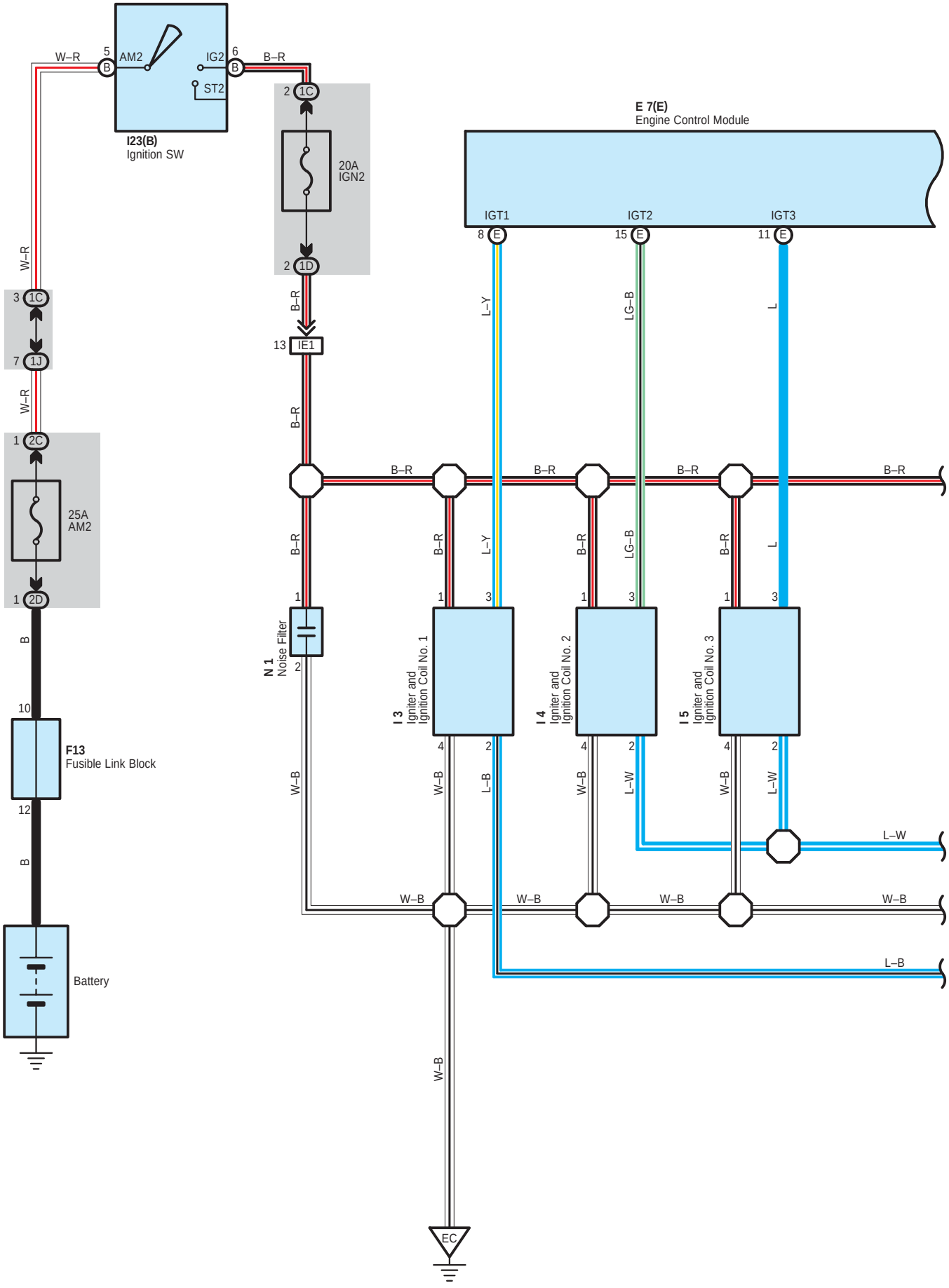
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2D | | |
| 2E | | |

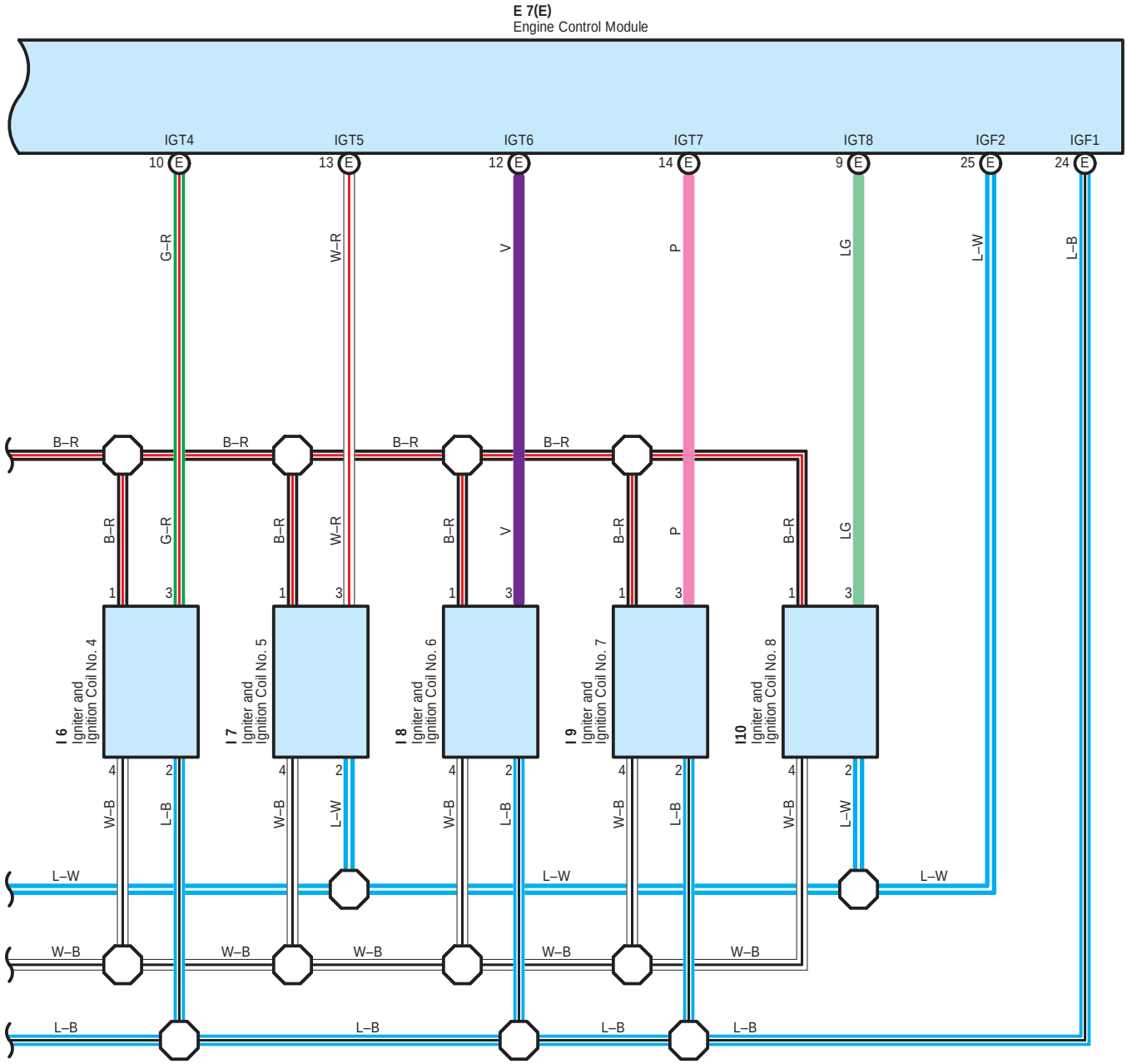
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 90 | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |


I23(B)
Ignition SW
AM2
IG2
ST2
W–R
B–R
20A
IGN2
E 7(E)
Engine Control Module
IGT1
IGT2
IGT3
L–Y
LG–B
L
IE1
25A
AM2
F13
Fusible Link Block
Battery
N 1
Noise Filter
I 3
Igniter and
Ignition Coil No. 1
I 4
Igniter and
Ignition Coil No. 2
I 5
Igniter and
Ignition Coil No. 3
W–B
L–W
L–B
EC


E 7(E)
Engine Control Module
IGT4
IGT5
IGT6
IGT7
IGT8
IGF2
IGF1
10 E
13 E
12 E
14 E
9 E
25 E
24 E
G–R
W–R
V
P
LG
L–W
L–B
B–R
I 6 Igniter and Ignition Coil No. 4
I 7 Igniter and Ignition Coil No. 5
I 8 Igniter and Ignition Coil No. 6
I 9 Igniter and Ignition Coil No. 7
I10 Igniter and Ignition Coil No. 8
1
3
4
2
W–B
L–W
L–B

# Ignition (Double Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| E7 E | 73 | I5 | 71 | I9 | 71 |
| F13 | 70 | I6 | 71 | I10 | 71 |
| I3 | 71 | I7 | 71 | I23 B | 73 |
| I4 | 71 | I8 | 71 | N1 | 71 |

**: Junction Block and Wire Harness Connector**

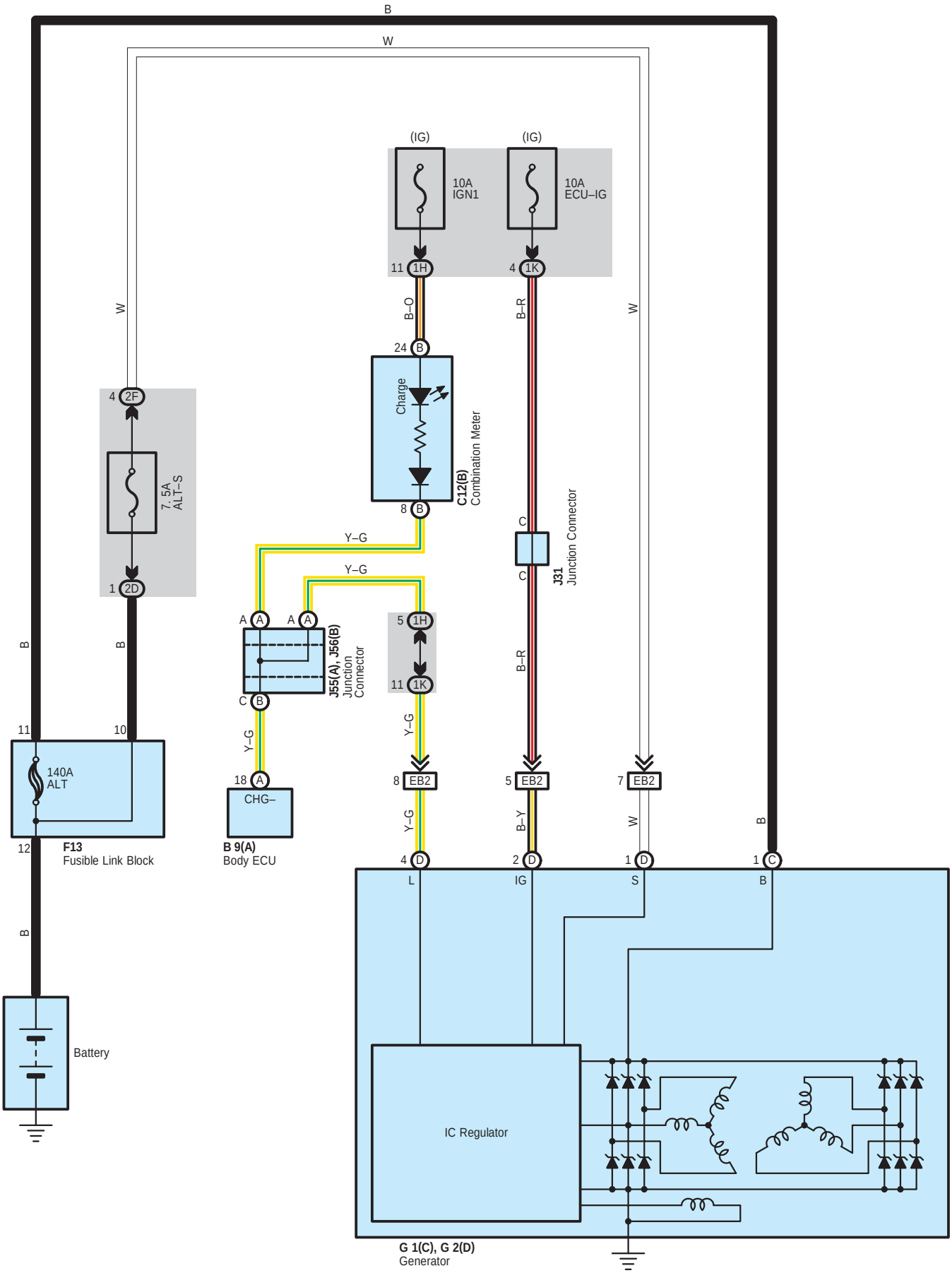
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1C | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1D | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2D | | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EC | 90 | Rear Bank of Left Cylinder Head |


B
W
(IG)
10A
IGN1
(IG)
10A
ECU–IG
11 1H
4 1K
B–O
B–R
W
24 B
Charge
C12(B)
Combination Meter
8 B
4 2F
7. 5A
ALT–S
1 2D
Y–G
Y–G
C
C
J31
Junction Connector
A A A
J55(A), J56(B)
Junction
Connector
C B
5 1H
11 1K
B–R
Y–G
18 A
CHG–
B 9(A)
Body ECU
8 EB2
5 EB2
7 EB2
Y–G
B–Y
W
B
4 D
2 D
1 D
1 C
L
IG
S
B
11
10
140A
ALT
12
F13
Fusible Link Block
B
Battery
IC Regulator
G 1(C), G 2(D)
Generator

: **Parts Location**

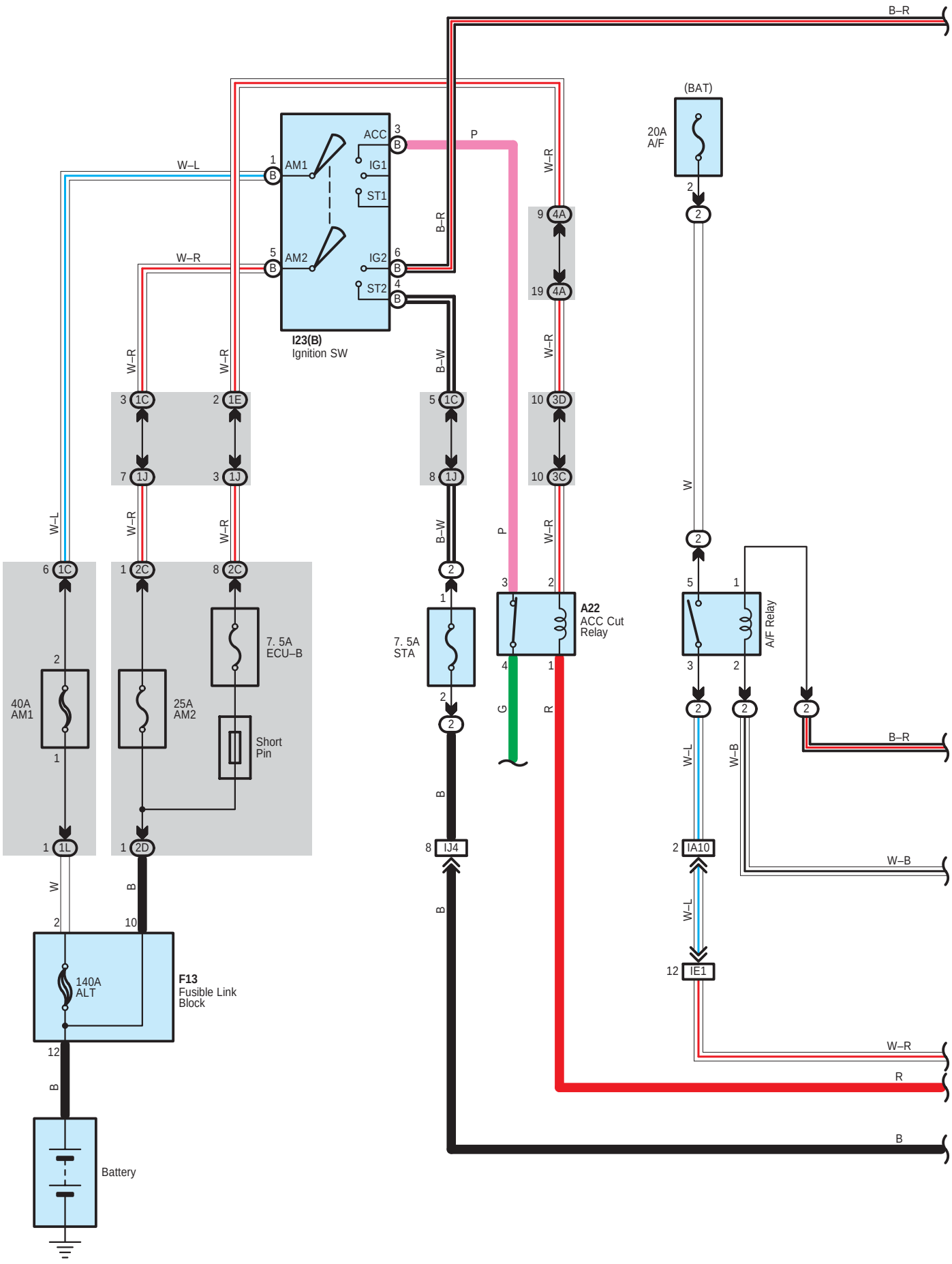
| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B9 | A | 72 | G1 | C | 70 | J55 | A | 74 |
| C12 | B | 72 | G2 | D | 70 | J56 | B | 74 |
| F13 | | 70 | J31 | | 71 | | | |

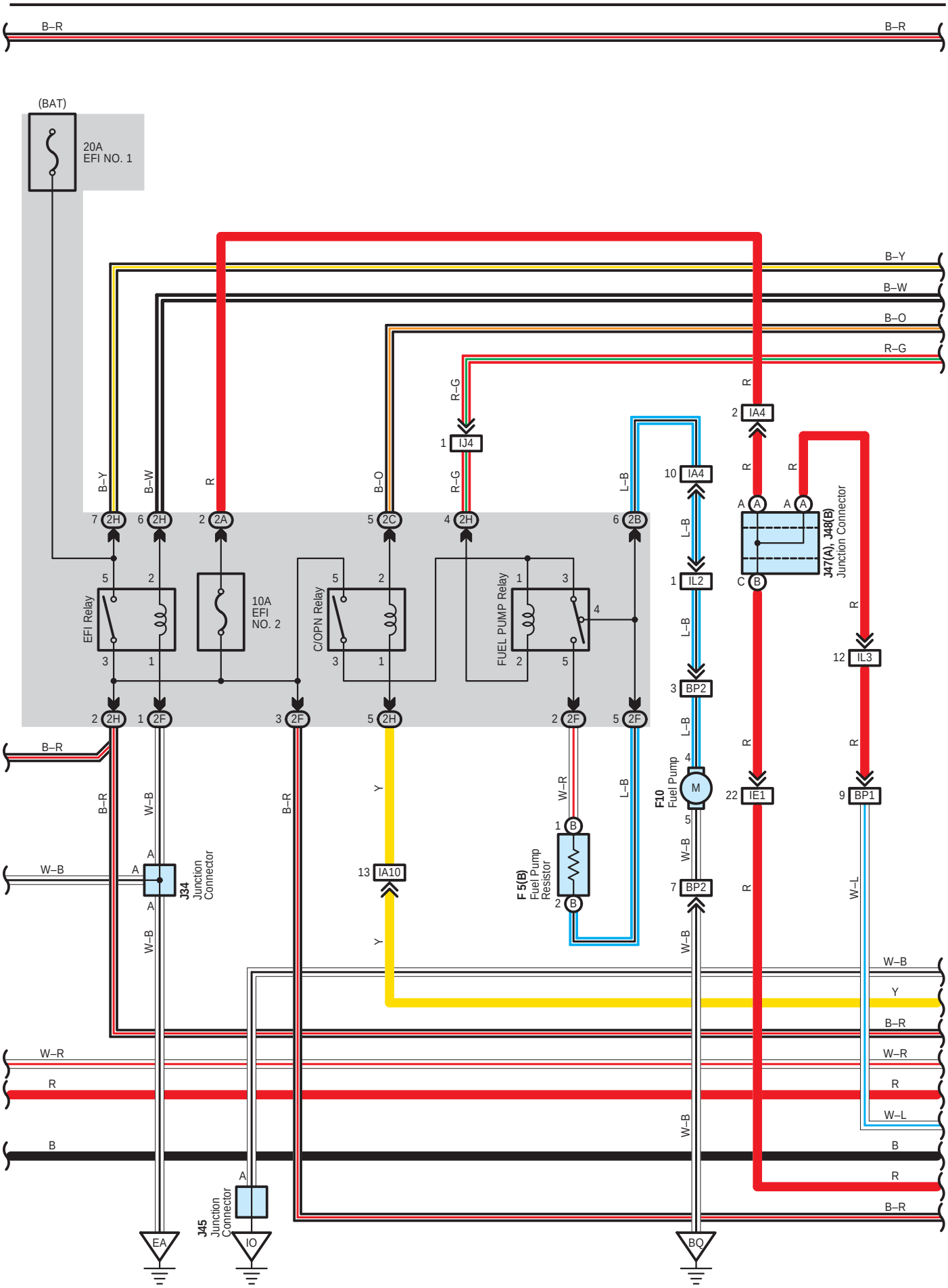
: **Junction Block and Wire Harness Connector**

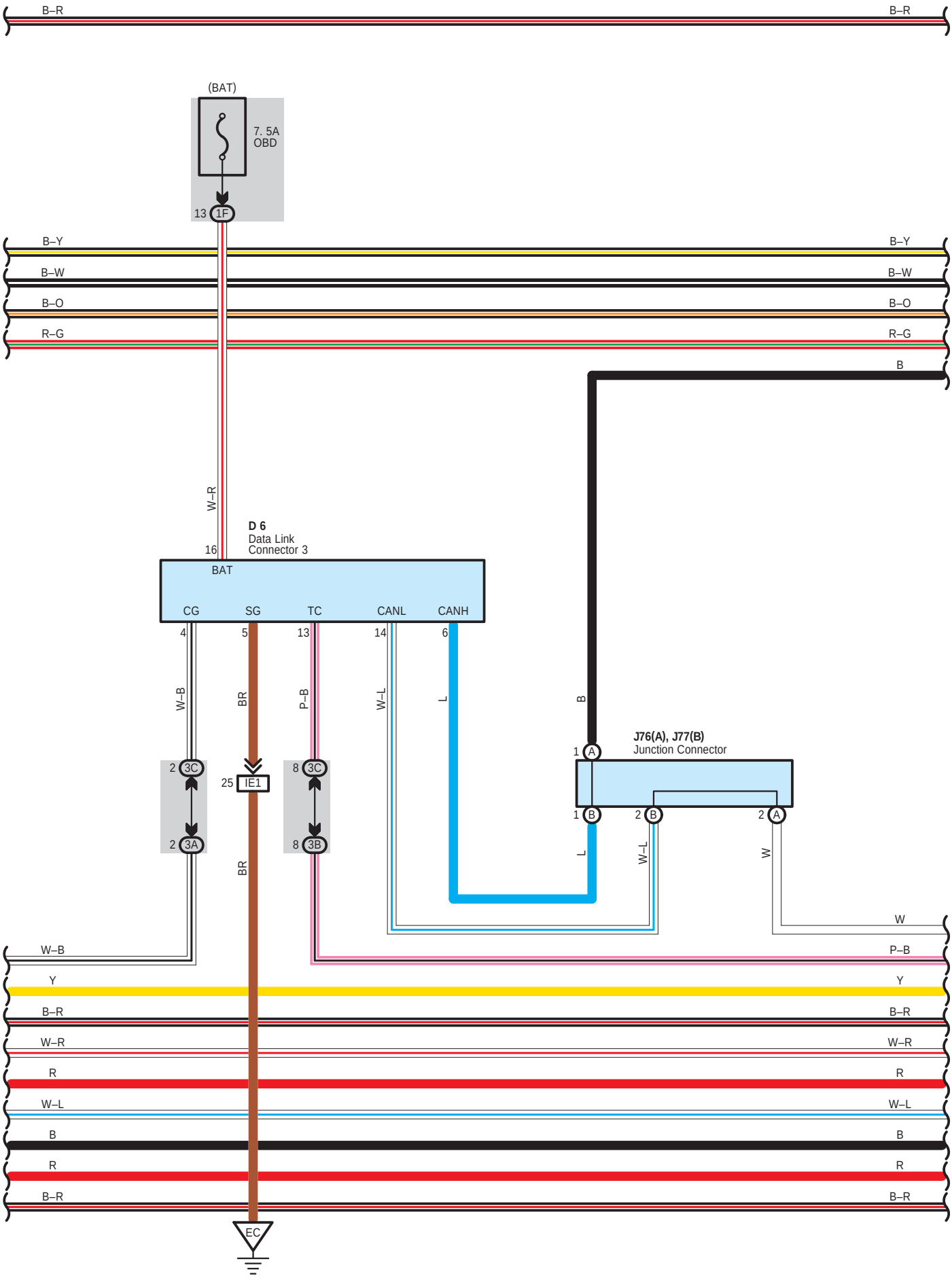
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1H | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2D | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |

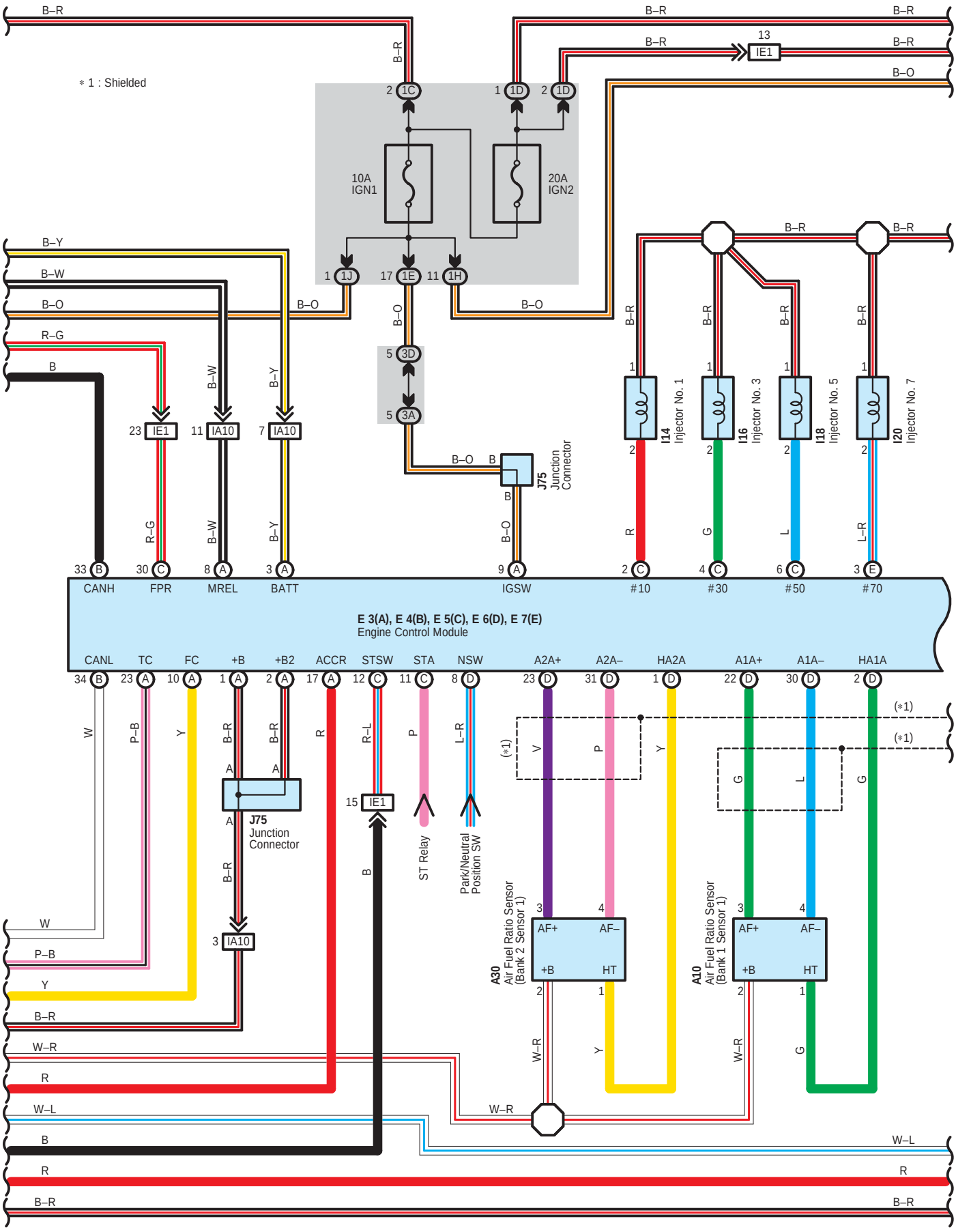
: **Connector Joining Wire Harness and Wire Harness**

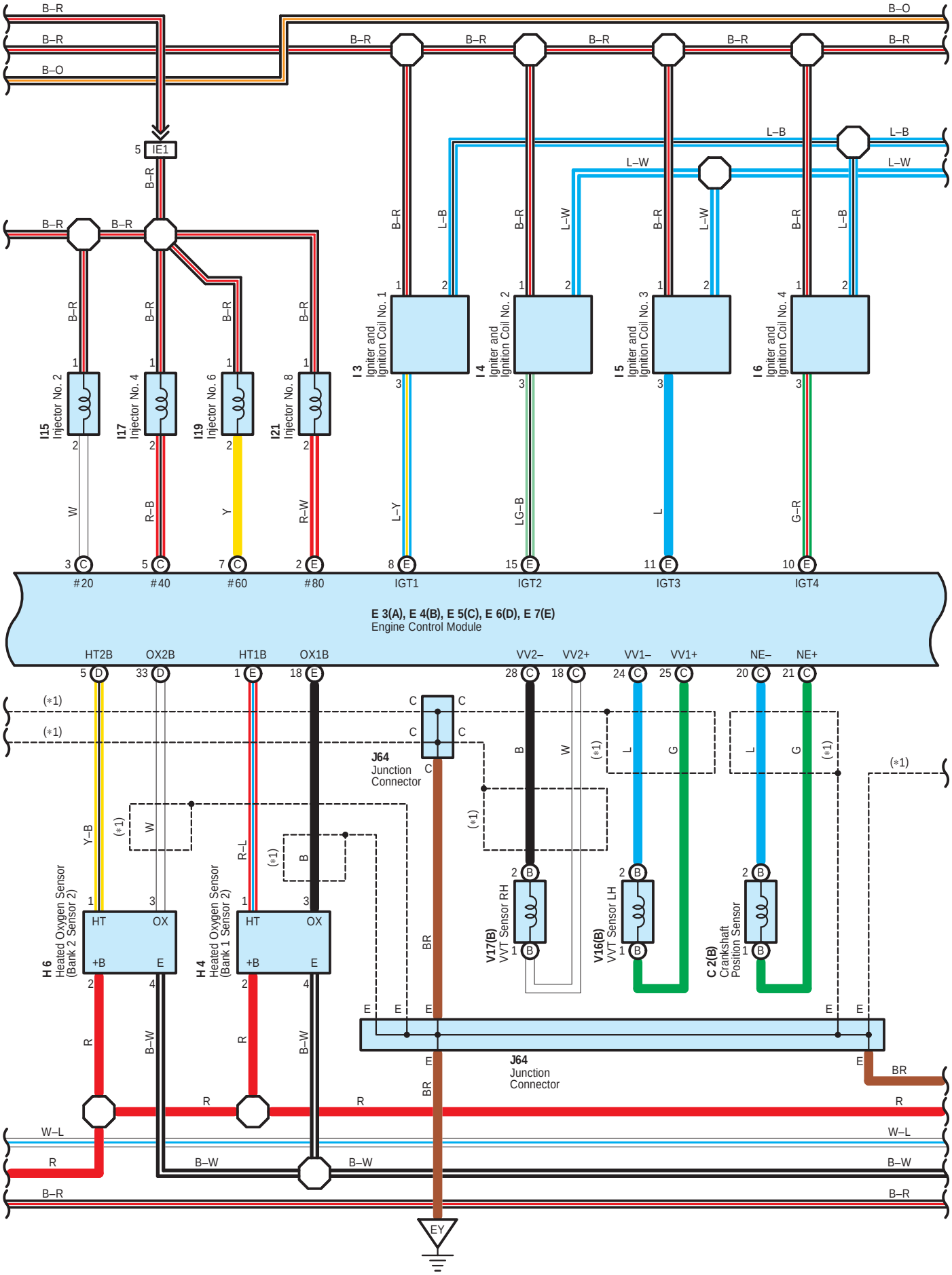
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 90 | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |

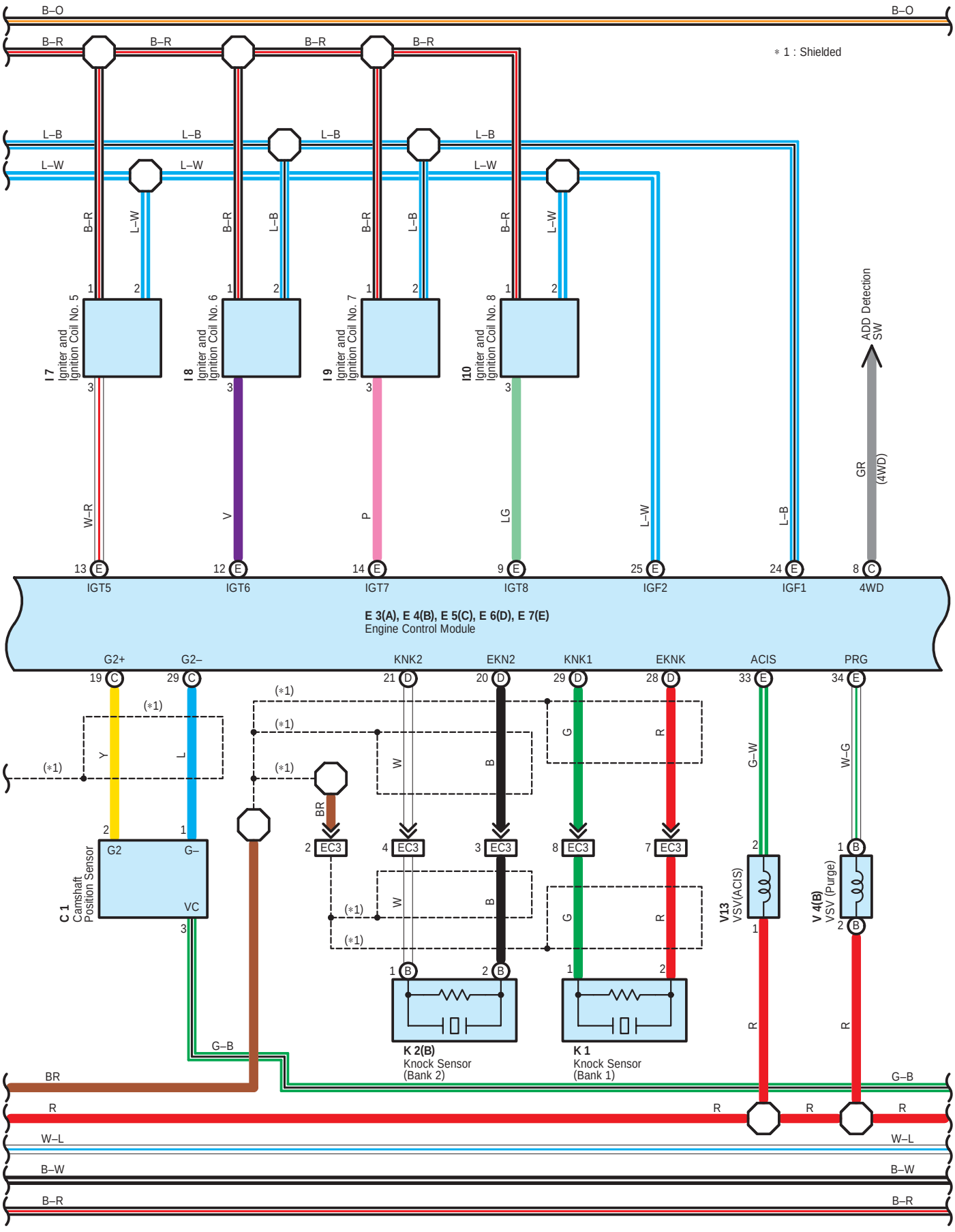

B–R
(BAT)
20A
A/F
ACC
IG1
ST1
IG2
ST2
AM1
AM2
I23(B)
Ignition SW
W–L
W–R
B–R
P
B–W
W
9 4A
19 4A
10 3D
10 3C
3 1C
7 1J
2 1E
3 1J
5 1C
8 1J
6 1C
1 2C
8 2C
1 2D
1 1L
40A
AM1
25A
AM2
7. 5A
ECU–B
Short
Pin
7. 5A
STA
A22
ACC Cut
Relay
A/F Relay
8 IJ4
2 IA10
12 IE1
W–B
G
R
B
140A
ALT
F13
Fusible Link
Block
Battery

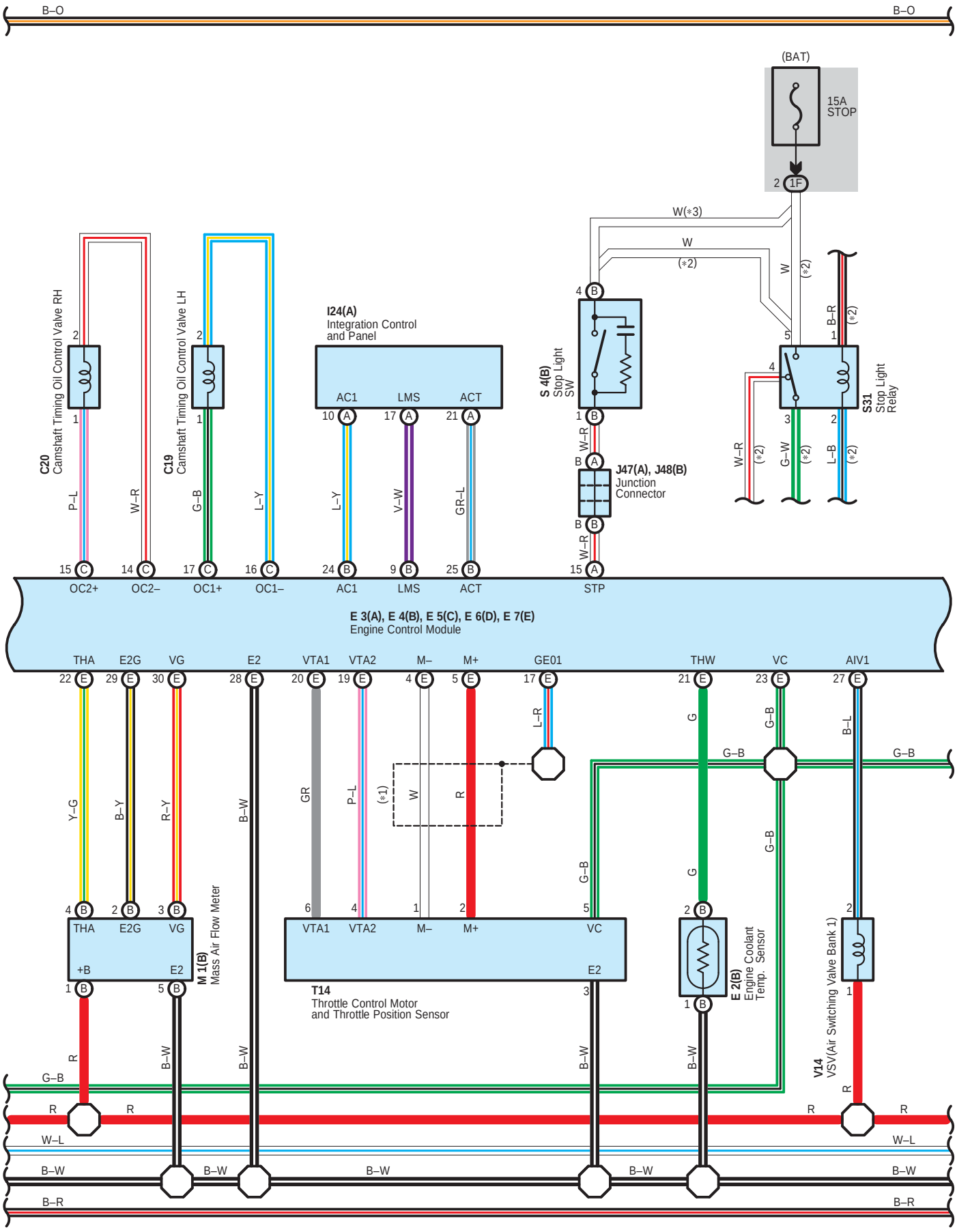

B–R
B–R
(BAT)
20A
EFI NO. 1
B–Y
B–W
B–O
R–G
R
L–B
EFI Relay
10A
EFI
NO. 2
C/OPN Relay
FUEL PUMP Relay
J47(A), J48(B)
Junction Connector
IJ4
IA4
IL2
IL3
BP2
BP1
IA10
IE1
2H
2A
2C
2B
2F
F10
Fuel Pump
M
F 5(B)
Fuel Pump
Resistor
W–R
Y
W–B
W–L
J34
Junction
Connector
J45
Junction
Connector
EA
IO
BQ

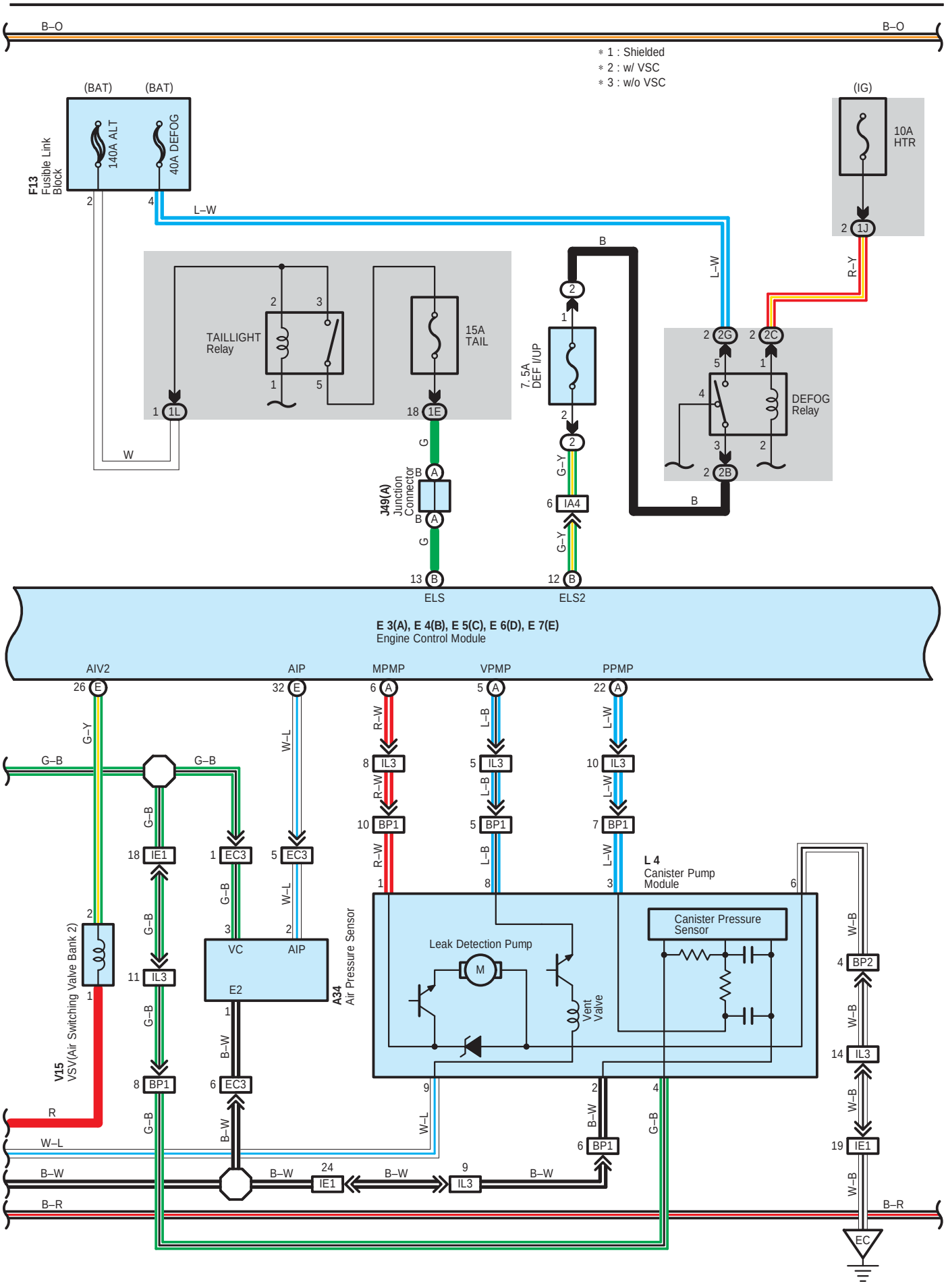

B–R
B–R
(BAT)
7. 5A
OBD
13 1F
B–Y
B–W
B–O
R–G
B–Y
B–W
B–O
R–G
B
W–R
D 6
Data Link
Connector 3
16
BAT
CG
SG
TC
CANL
CANH
4
5
13
14
6
W–B
BR
P–B
W–L
L
B
J76(A), J77(B)
Junction Connector
1 A
2 3C
25 IE1
8 3C
2 3A
8 3B
1 B
2 B
2 A
L
W–L
W
W
W–B
P–B
Y
Y
B–R
B–R
W–R
W–R
R
R
W–L
W–L
B
B
R
R
B–R
B–R
EC

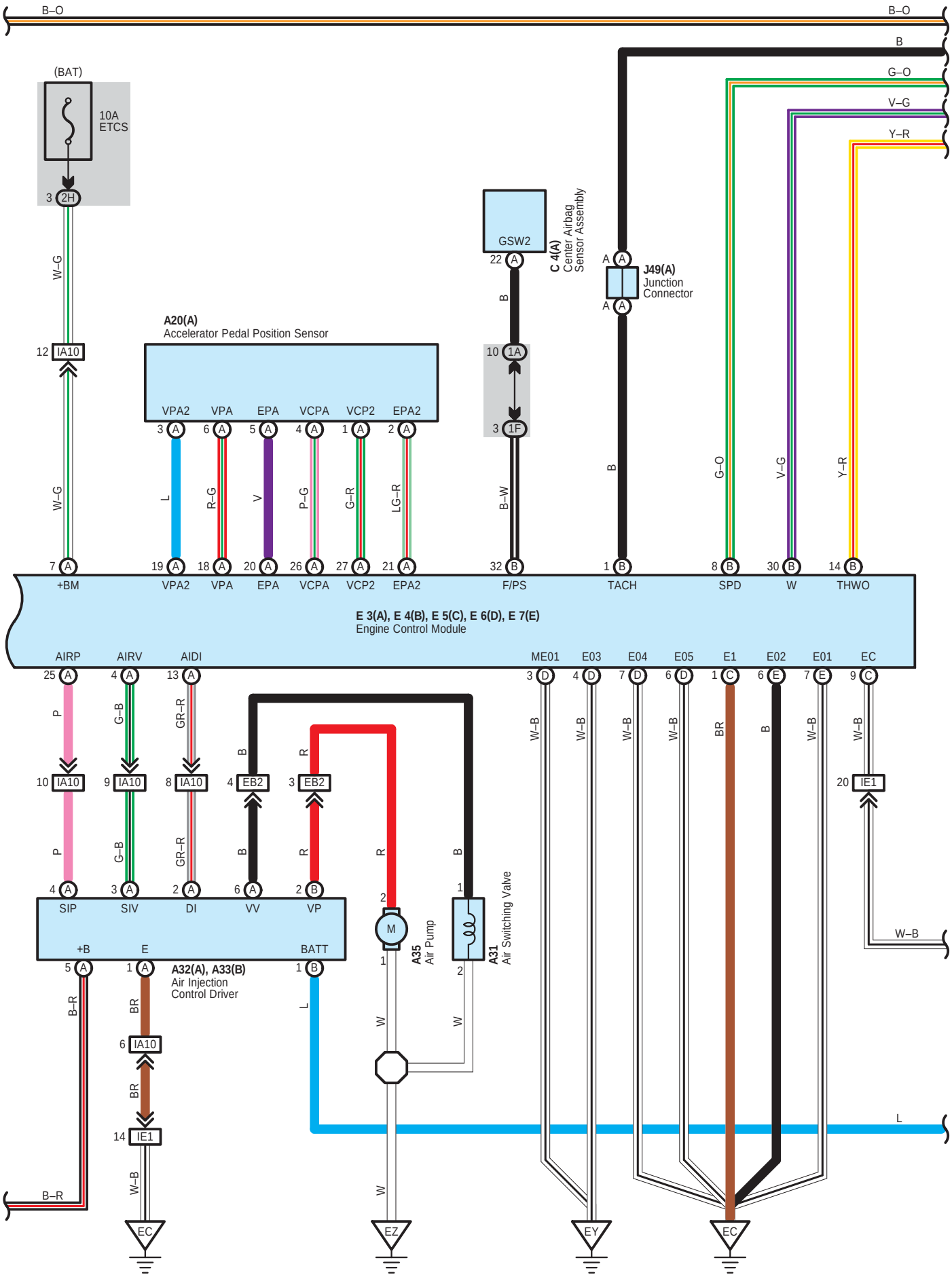

* 1 : Shielded
10A IGN1
20A IGN2
J75 Junction Connector
Injector No. 1
Injector No. 3
Injector No. 5
Injector No. 7
CANH
FPR
MREL
BATT
IGSW
#10
#30
#50
#70
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
CANL
TC
FC
+B
+B2
ACCR
STSW
STA
NSW
A2A+
A2A–
HA2A
A1A+
A1A–
HA1A
ST Relay
Park/Neutral Position SW
A30 Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A10 Air Fuel Ratio Sensor (Bank 1 Sensor 1)
AF+
AF–
+B
HT

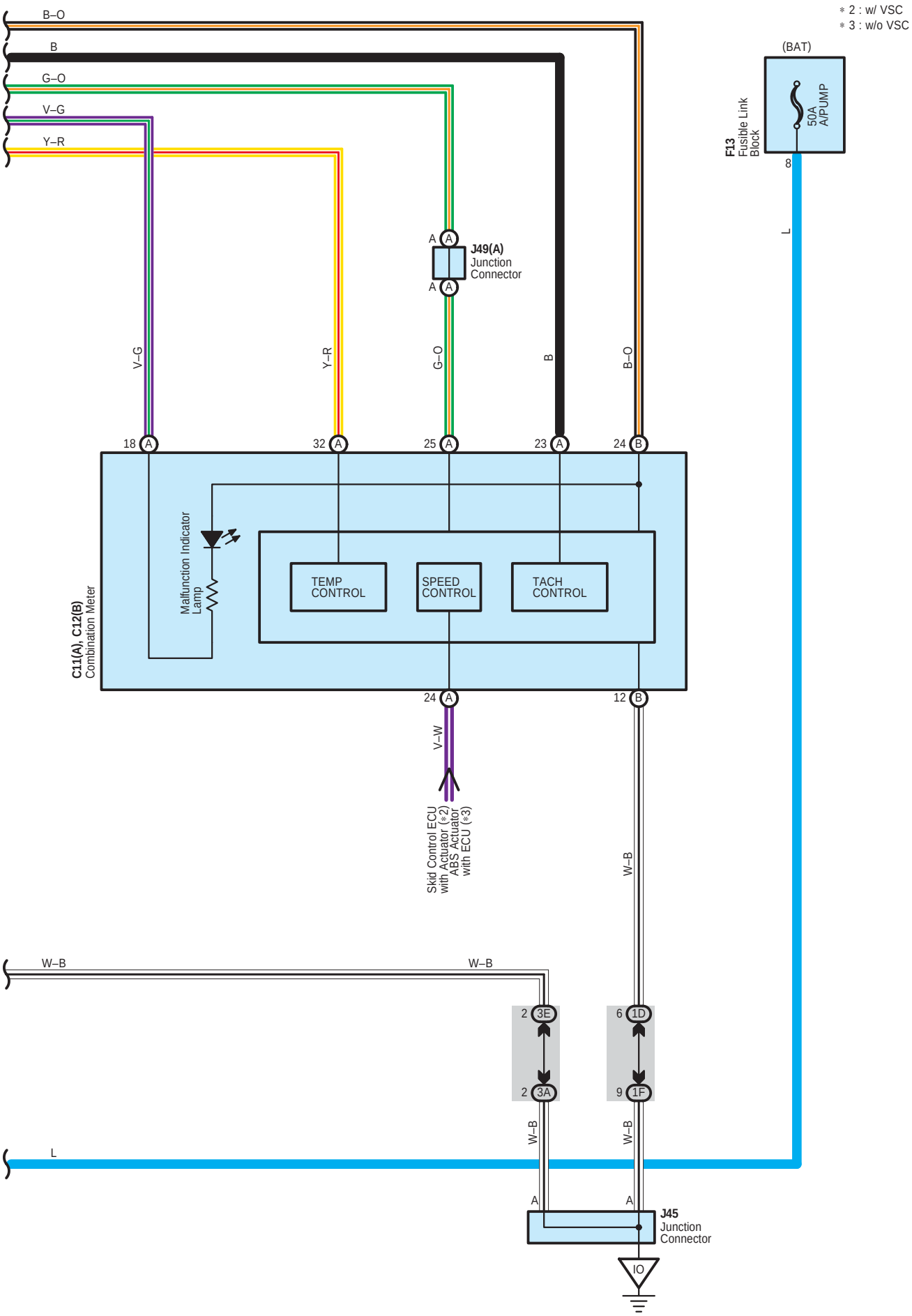

B–R
B–O
IE1
I15 Injector No. 2
I17 Injector No. 4
I19 Injector No. 6
I21 Injector No. 8
I3 Igniter and Ignition Coil No. 1
I4 Igniter and Ignition Coil No. 2
I5 Igniter and Ignition Coil No. 3
I6 Igniter and Ignition Coil No. 4
#20
#40
#60
#80
IGT1
IGT2
IGT3
IGT4
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
HT2B
OX2B
HT1B
OX1B
VV2–
VV2+
VV1–
VV1+
NE–
NE+
J64
Junction Connector
H 6 Heated Oxygen Sensor (Bank 2 Sensor 2)
H 4 Heated Oxygen Sensor (Bank 1 Sensor 2)
V17(B) VVT Sensor RH
V16(B) VVT Sensor LH
C 2(B) Crankshaft Position Sensor
HT
OX
+B
E
EY


B–O
B–R
L–B
L–W
∗1 : Shielded
I 7 Igniter and Ignition Coil No. 5
I 8 Igniter and Ignition Coil No. 6
I 9 Igniter and Ignition Coil No. 7
I10 Igniter and Ignition Coil No. 8
ADD Detection SW
GR
(4WD)
W–R
V
P
LG
L–W
L–B
13 E IGT5
12 E IGT6
14 E IGT7
9 E IGT8
25 E IGF2
24 E IGF1
8 C 4WD
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
G2+
G2–
KNK2
EKN2
KNK1
EKNK
ACIS
PRG
19 C
29 C
21 D
20 D
29 D
28 D
33 E
34 E
(∗1)
Y
L
W
B
G
R
G–W
W–G
BR
2 EC3
4 EC3
3 EC3
8 EC3
7 EC3
C 1 Camshaft Position Sensor
G2
G–
VC
V13 VSV(ACIS)
V 4(B) VSV (Purge)
K 2(B) Knock Sensor (Bank 2)
K 1 Knock Sensor (Bank 1)
G–B
R
W–L
B–W
B–R


B–O
B–O
(BAT)
15A
STOP
2 1F
W(*3)
W
(*2)
W
(*2)
B–R
(*2)
4 B
1 B
S 4(B)
Stop Light
SW
W–R
B A
J47(A), J48(B)
Junction
Connector
B B
W–R
15 A
STP
5
4
1
3
2
S31
Stop Light
Relay
W–R
(*2)
G–W
(*2)
L–B
(*2)
C20
Camshaft Timing Oil Control Valve RH
2
1
P–L
W–R
15 C
14 C
OC2+
OC2–
C19
Camshaft Timing Oil Control Valve LH
2
1
G–B
L–Y
17 C
16 C
OC1+
OC1–
I24(A)
Integration Control
and Panel
AC1
LMS
ACT
10 A
17 A
21 A
L–Y
V–W
GR–L
24 B
9 B
25 B
AC1
LMS
ACT
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
THA
E2G
VG
E2
VTA1
VTA2
M–
M+
GE01
THW
VC
AIV1
22 E
29 E
30 E
28 E
20 E
19 E
4 E
5 E
17 E
21 E
23 E
27 E
Y–G
B–Y
R–Y
B–W
GR
P–L
(*1)
W
R
L–R
G
G–B
B–L
4 B
2 B
3 B
THA
E2G
VG
+B
E2
M 1(B)
Mass Air Flow Meter
1 B
5 B
R
B–W
B–W
6
4
1
2
5
VTA1
VTA2
M–
M+
VC
E2
T14
Throttle Control Motor
and Throttle Position Sensor
3
B–W
2 B
1 B
E 2(B)
Engine Coolant
Temp. Sensor
B–W
2
1
V14
VSV(Air Switching Valve Bank 1)
R
G–B
R
R
R
R
W–L
W–L
B–W
B–W
B–W
B–W
B–W
B–R
B–R


B–O
B–O
* 1 : Shielded
* 2 : w/ VSC
* 3 : w/o VSC
(BAT)
(BAT)
F13
Fusible Link Block
140A ALT
40A DEFOG
(IG)
10A HTR
L–W
R–Y
TAILLIGHT Relay
15A TAIL
7.5A DEF I/UP
DEFOG Relay
J49(A)
Junction Connector
ELS
ELS2
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
AIV2
AIP
MPMP
VPMP
PPMP
V15
VSV(Air Switching Valve Bank 2)
A34
Air Pressure Sensor
L 4
Canister Pump Module
Leak Detection Pump
Vent Valve
Canister Pressure Sensor
G–Y
G–B
W–L
R–W
L–B
L–W
B–W
B–R
R
W
G
B
IE1
IL3
EC3
BP1
BP2
IA4
1L
1E
1J
2G
2C
2B
VC
E2
AIP
EC


B–O
B–O
B
G–O
V–G
Y–R
(BAT)
10A
ETCS
3 2H
W–G
12 IA10
W–G
7 A
+BM
A20(A)
Accelerator Pedal Position Sensor
VPA2 VPA EPA VCPA VCP2 EPA2
3 A 6 A 5 A 4 A 1 A 2 A
L R–G V P–G G–R LG–R
19 A 18 A 20 A 26 A 27 A 21 A
VPA2 VPA EPA VCPA VCP2 EPA2
GSW2
22 A
B
10 1A
3 1F
B–W
32 B
F/PS
C 4(A)
Center Airbag
Sensor Assembly
A A
J49(A)
Junction
Connector
A A
B
1 B
TACH
G–O
8 B
SPD
V–G
30 B
W
Y–R
14 B
THWO
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
AIRP AIRV AIDI
25 A 4 A 13 A
P G–B GR–R
10 IA10 9 IA10 8 IA10
P G–B GR–R
4 A 3 A 2 A
SIP SIV DI
B B R R
4 EB2 3 EB2
6 A 2 B
VV VP
+B E BATT
5 A 1 A 1 B
B–R BR L
A32(A), A33(B)
Air Injection
Control Driver
6 IA10
BR
14 IE1
W–B
B–R
EC
R R
2 2
M
1 W
A35
Air Pump
B
1
2 W
A31
Air Switching Valve
W
EZ
ME01 E03 E04 E05 E1 E02 E01 EC
3 D 4 D 7 D 6 D 1 C 6 E 7 E 9 C
W–B W–B W–B W–B BR B W–B W–B
20 IE1
W–B
L
EY
EC


* 2 : w/ VSC
* 3 : w/o VSC
B–O
B
G–O
V–G
Y–R
(BAT)
F13
Fusible Link Block
50A A/PUMP
8
L
A
A
J49(A)
Junction Connector
A
A
V–G
Y–R
G–O
B
B–O
18 A
32 A
25 A
23 A
24 B
C11(A), C12(B)
Combination Meter
Malfunction Indicator Lamp
TEMP CONTROL
SPEED CONTROL
TACH CONTROL
24 A
12 B
V–W
Skid Control ECU with Actuator (*2)
ABS Actuator with ECU (*3)
W–B
W–B
W–B
2 3E
2 3A
6 1D
9 1F
W–B
W–B
L
A
A
J45
Junction Connector
IO

**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 OX1B, 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, detects the vehicle speed and input to the speed sensor of the skid control ECU with actuator, from skid control ECU to TERMINAL SPD of the engine control module, via 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 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 #10, #20, #30, #40, #50, #60, #70, #80 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 HT1B and HT2B to control the heater.
* Air fuel ratio sensor heater control system
  The air fuel ratio 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 air fuel ratio sensor to improve detection performance of the sensor.
  The engine control module evaluates the signals from each sensor, current is output to TERMINALS A1A+ and A2A+ controlling the heater.
* Fuel pump control system
  The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump with the F/PMP relay.
* 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.

# Engine Control (Double Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A10 | 70 | F5 B | 70 | J34 | 71 |
| A20 A | 72 | F10 | 76 | J45 | 74 |
| A22 | 72 | F13 | 70 | J47 A | 74 |
| A30 | 70 | H4 | 70 | J48 B | 74 |
| A31 | 70 | H6 | 70 | J49 A | 74 |
| A32 A | 70 | I3 | 71 | J64 | 74 |
| A33 B | 70 | I4 | 71 | J75 | 74 |
| A34 | 70 | I5 | 71 | J76 A | 74 |
| A35 | 70 | I6 | 71 | J77 B | 74 |
| C1 | 70 | I7 | 71 | K1 | 71 |
| C2 B | 70 | I8 | 71 | K2 B | 71 |
| C4 A | 72 | I9 | 71 | L4 | 76 |
| C11 A | 72 | I10 | 71 | M1 B | 71 |
| C12 B | 72 | I14 | 71 | S4 B | 75 |
| C19 | 70 | I15 | 71 | S31 | 75 |
| C20 | 70 | I16 | 71 | T14 | 71 |
| D6 | 73 | I17 | 71 | V4 B | 71 |
| E2 B | 70 | I18 | 71 | V13 | 71 |
| E3 A | 73 | I19 | 71 | V14 | 71 |
| E4 B | 73 | I20 | 71 | V15 | 71 |
| E5 C | 73 | I21 | 71 | V16 B | 71 |
| E6 D | 73 | I23 B | 73 | V17 B | 71 |
| E7 E | 73 | I24 A | 73 | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

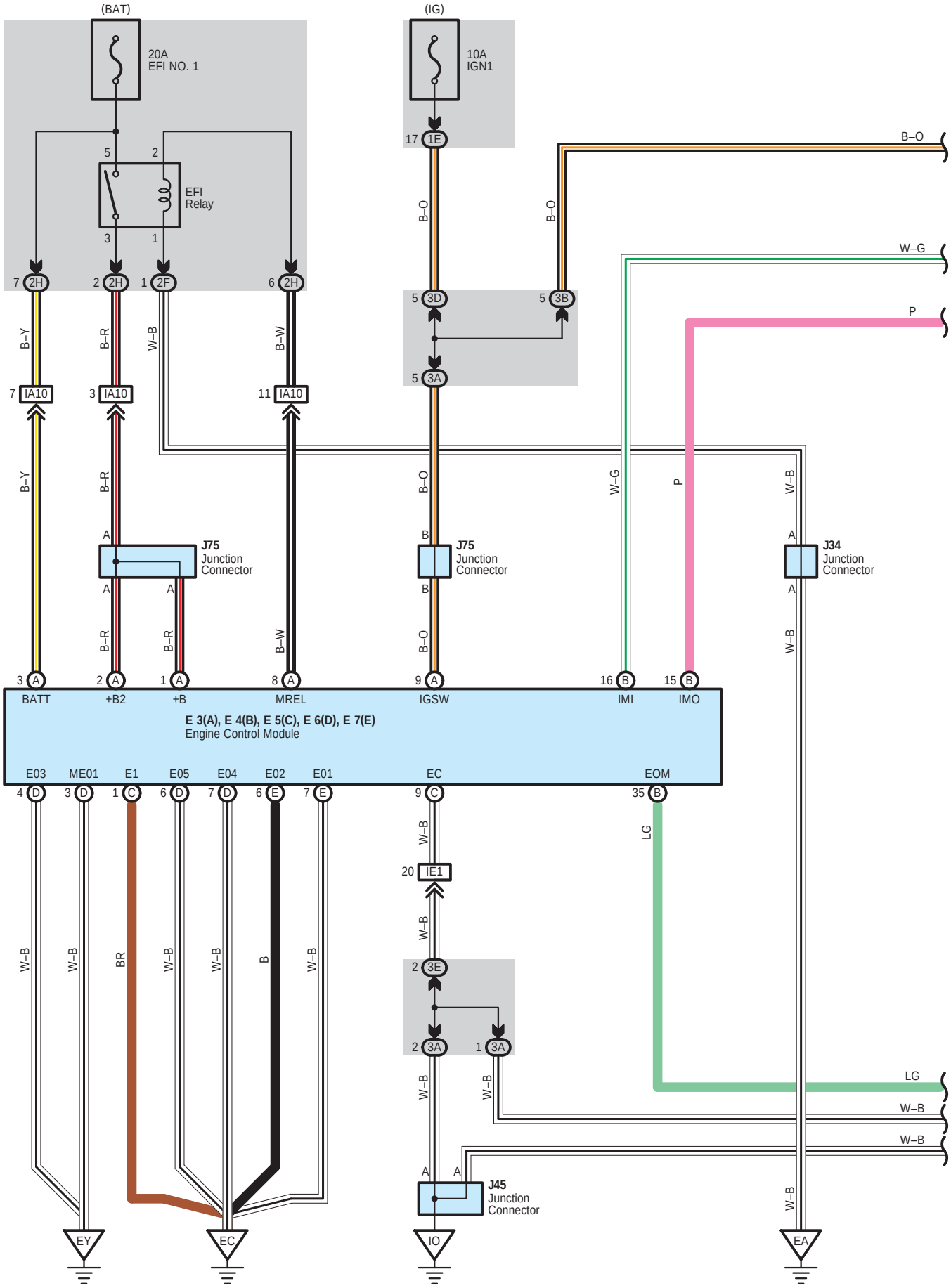
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1C | | |
| 1D | | |
| 1E | | |
| 1F | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 2C | | |
| 2D | | |
| 2F | | |
| 2G | | |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3C | | |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |

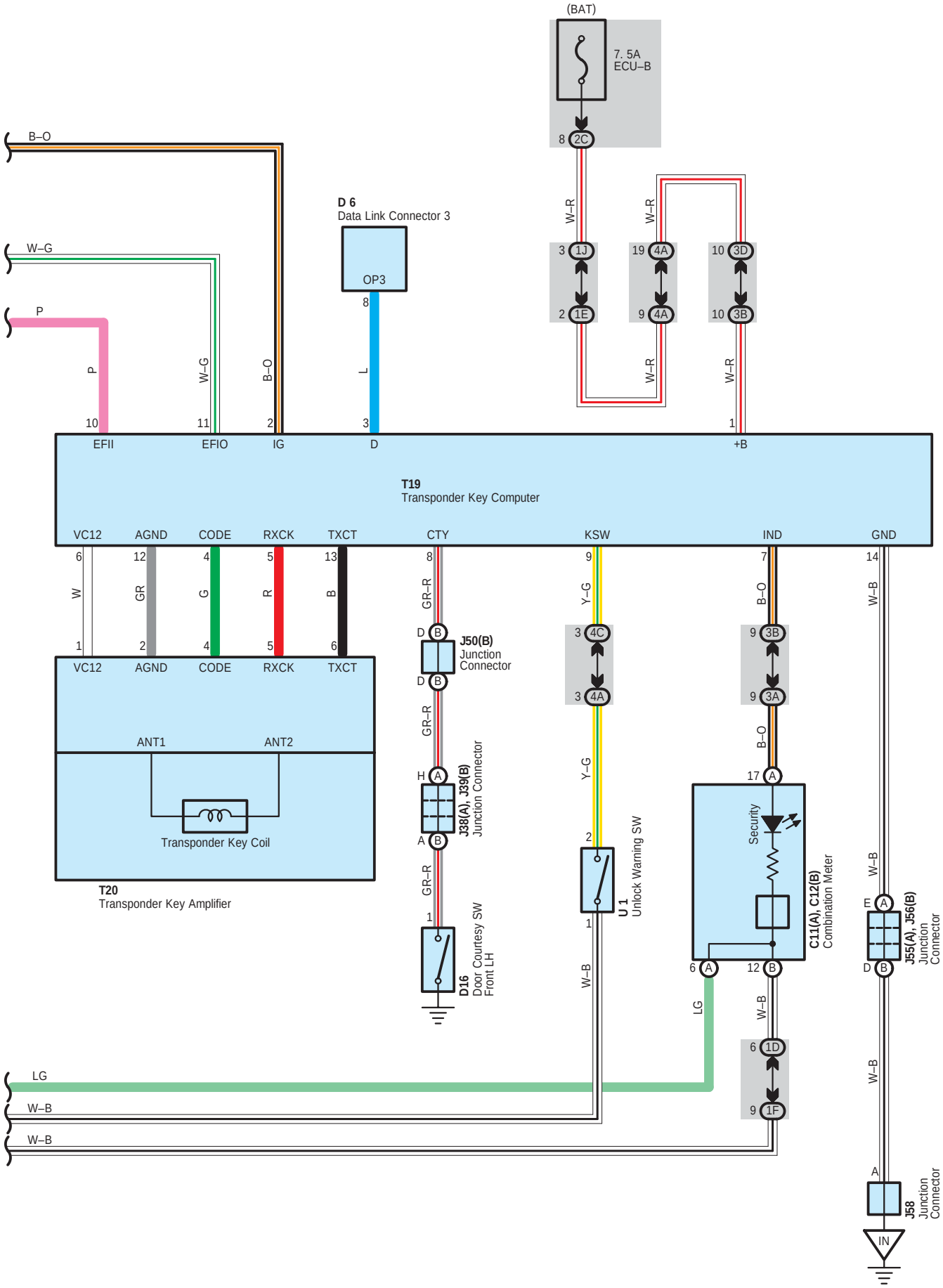
: **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 90 | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| EC3 | 90 | Engine No.2 Wire and Engine Wire (Near the Starter) |
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA10 | | |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| IL3 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| BP1 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |
| BP2 | | |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EC | 90 | Rear Bank of Left Cylinder Head |
| EY | 90 | Front Left Side of Cylinder Head |
| EZ | 90 | Left Side of Cylinder Block |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |


(BAT)
20A
EFI NO. 1
EFI
Relay
(IG)
10A
IGN1
B–O
W–G
P
W–B
B–Y
B–R
W–B
B–W
J75
Junction
Connector
J34
Junction
Connector
BATT
+B2
+B
MREL
IGSW
IMI
IMO
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
E03
ME01
E1
E05
E04
E02
E01
EC
EOM
LG
BR
B
J45
Junction
Connector
EY
EC
IO
EA


(BAT)
7. 5A
ECU–B
8 2C
B–O
W–G
P
D 6
Data Link Connector 3
OP3
8
L
3
W–R
3 1J
2 1E
19 4A
9 4A
10 3D
10 3B
1
10
11
2
EFII
EFIO
IG
D
+B
T19
Transponder Key Computer
VC12
AGND
CODE
RXCK
TXCT
CTY
KSW
IND
GND
6
12
4
5
13
8
9
7
14
W
GR
G
R
B
GR–R
Y–G
B–O
W–B
1
2
4
5
6
D B
J50(B)
Junction
Connector
H A
A B
J38(A), J39(B)
Junction Connector
3 4C
3 4A
9 3B
9 3A
17 A
E A
D B
J55(A), J56(B)
Junction
Connector
ANT1
ANT2
Transponder Key Coil
T20
Transponder Key Amplifier
Security
C11(A), C12(B)
Combination Meter
6 A
12 B
LG
6 1D
9 1F
U 1
Unlock Warning SW
D16
Door Courtesy SW
Front LH
A
J58
Junction
Connector
IN

# Engine Immobiliser System (Double Cab)

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C11 | A | 72 | E6 | D | 73 | J55 | A | 74 |
| C12 | B | 72 | E7 | E | 73 | J56 | B | 74 |
| D6 | | 73 | J34 | | 71 | J58 | | 74 |
| D16 | | 76 | J38 | A | 74 | J75 | | 74 |
| E3 | A | 73 | J39 | B | 74 | T19 | | 75 |
| E4 | B | 73 | J45 | | 74 | T20 | | 75 |
| E5 | C | 73 | J50 | B | 74 | U1 | | 75 |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |

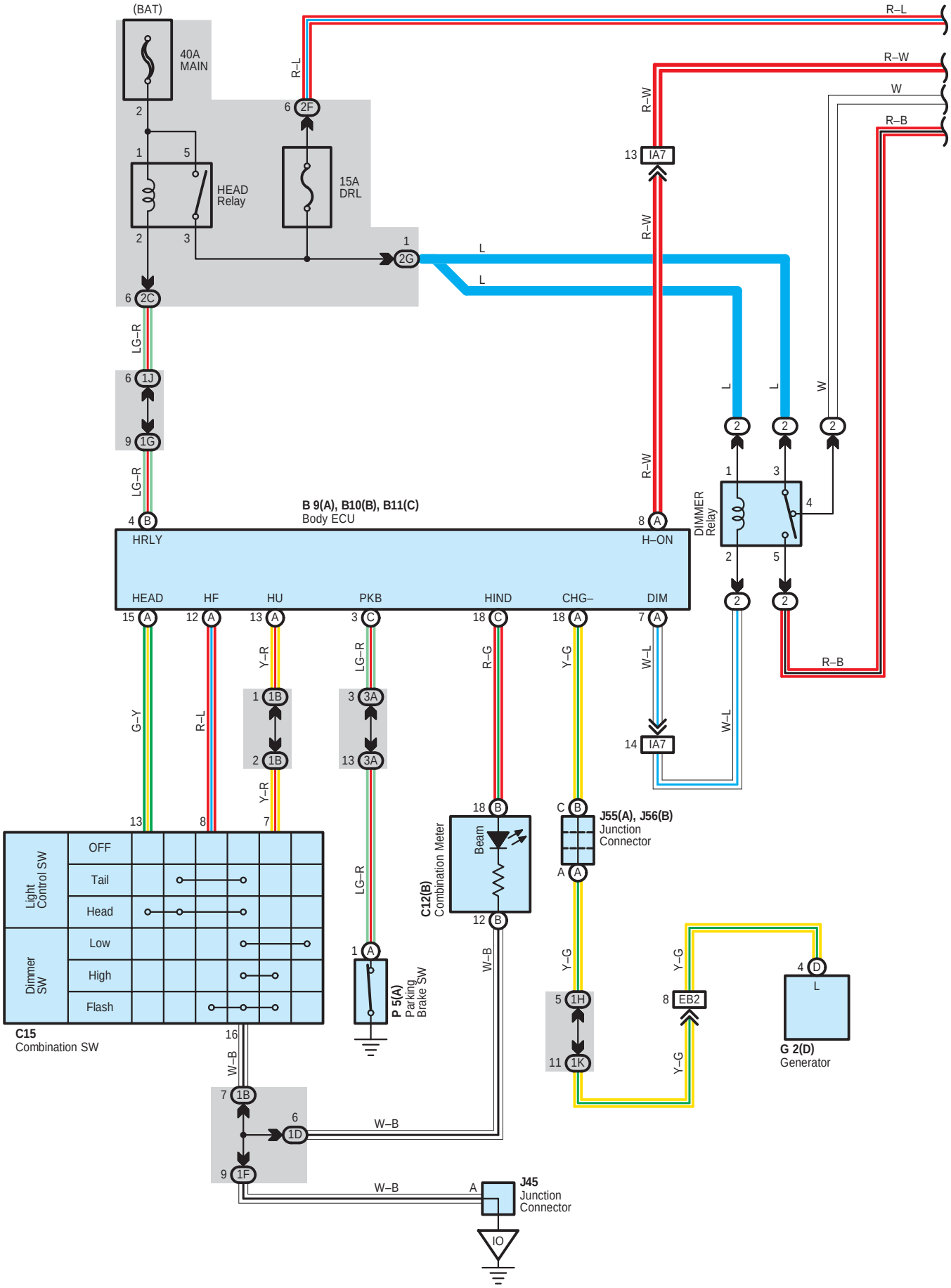
**: Connector Joining Wire Harness and Wire Harness**

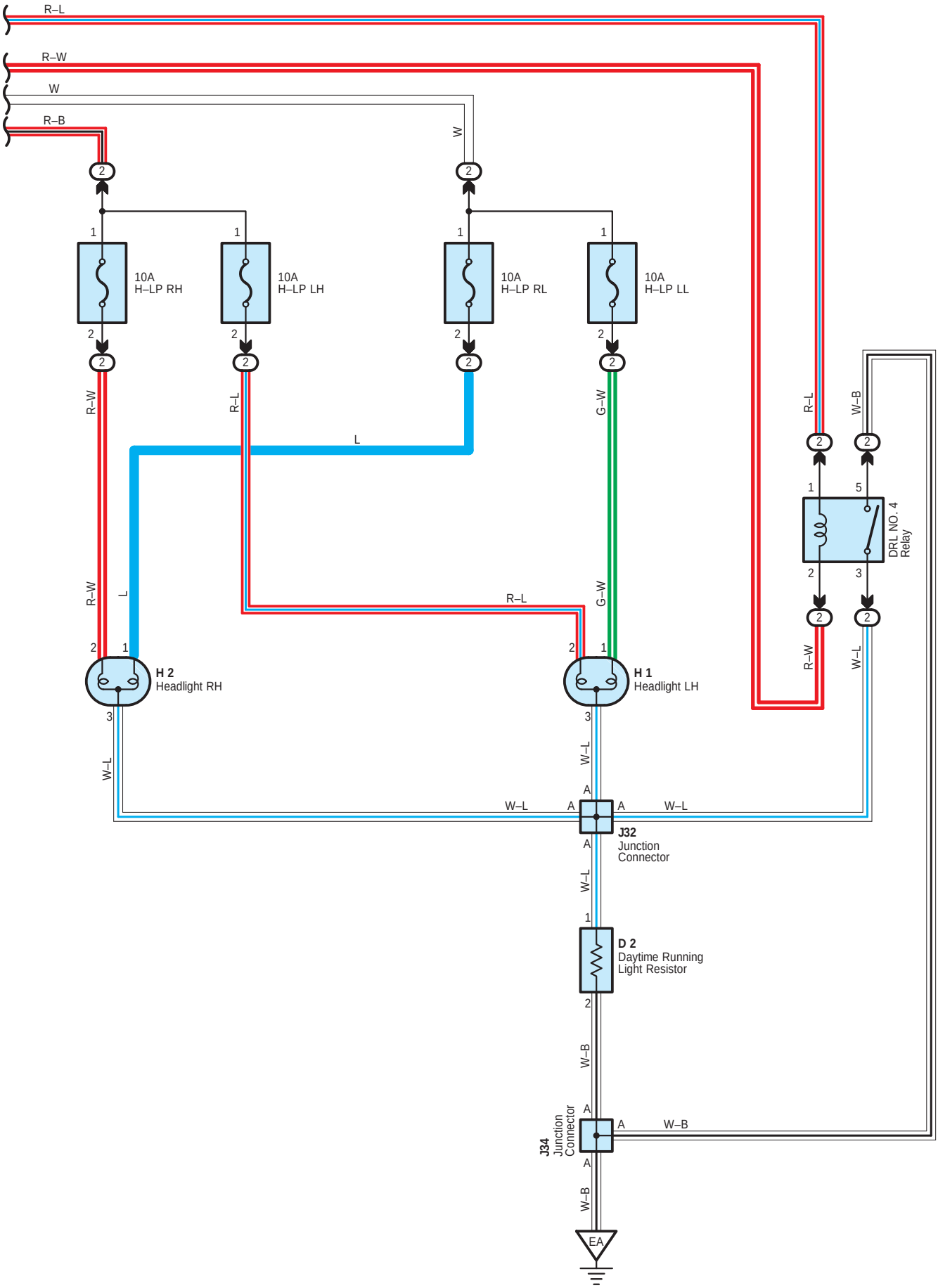
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA10 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EC | 90 | Rear Bank of Left Cylinder Head |
| EY | 90 | Front Left Side of Cylinder Head |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |

# Headlight with DRL (Double Cab)




R–L
R–W
W
R–B
W
10A
H–LP RH
10A
H–LP LH
10A
H–LP RL
10A
H–LP LL
R–W
R–L
L
G–W
R–L
W–B
DRL NO. 4
Relay
R–W
W–L
R–W
L
R–L
G–W
H 2
Headlight RH
H 1
Headlight LH
W–L
W–L
W–L
A
A
A
W–L
J32
Junction
Connector
W–L
D 2
Daytime Running
Light Resistor
W–B
J34
Junction
Connector
A
W–B
W–B
EA

# Headlight with DRL (Double Cab)

**System Outline**

**Daytime Running Light Operation**

When the engine is started, the generator signal is input of the body ECU. At this time, if the parking brake pedal is depressed (Parking brake SW ON), the body ECU is not activated, and the daytime running light system does not operate.
When the parking brake pedal is released (Parking brake SW OFF), a signal is input into TERMINAL (C) 3 of the body ECU. This activates the body ECU and the headlight turns on.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | D2 | 70 | J34 | 71 |
| B10 B | 72 | G2 D | 70 | J45 | 74 |
| B11 C | 72 | H1 | 70 | J55 A | 74 |
| C12 B | 72 | H2 | 70 | J56 B | 74 |
| C15 | 72 | J32 | 71 | P5 A | 75 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1D | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |
| 2G | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |

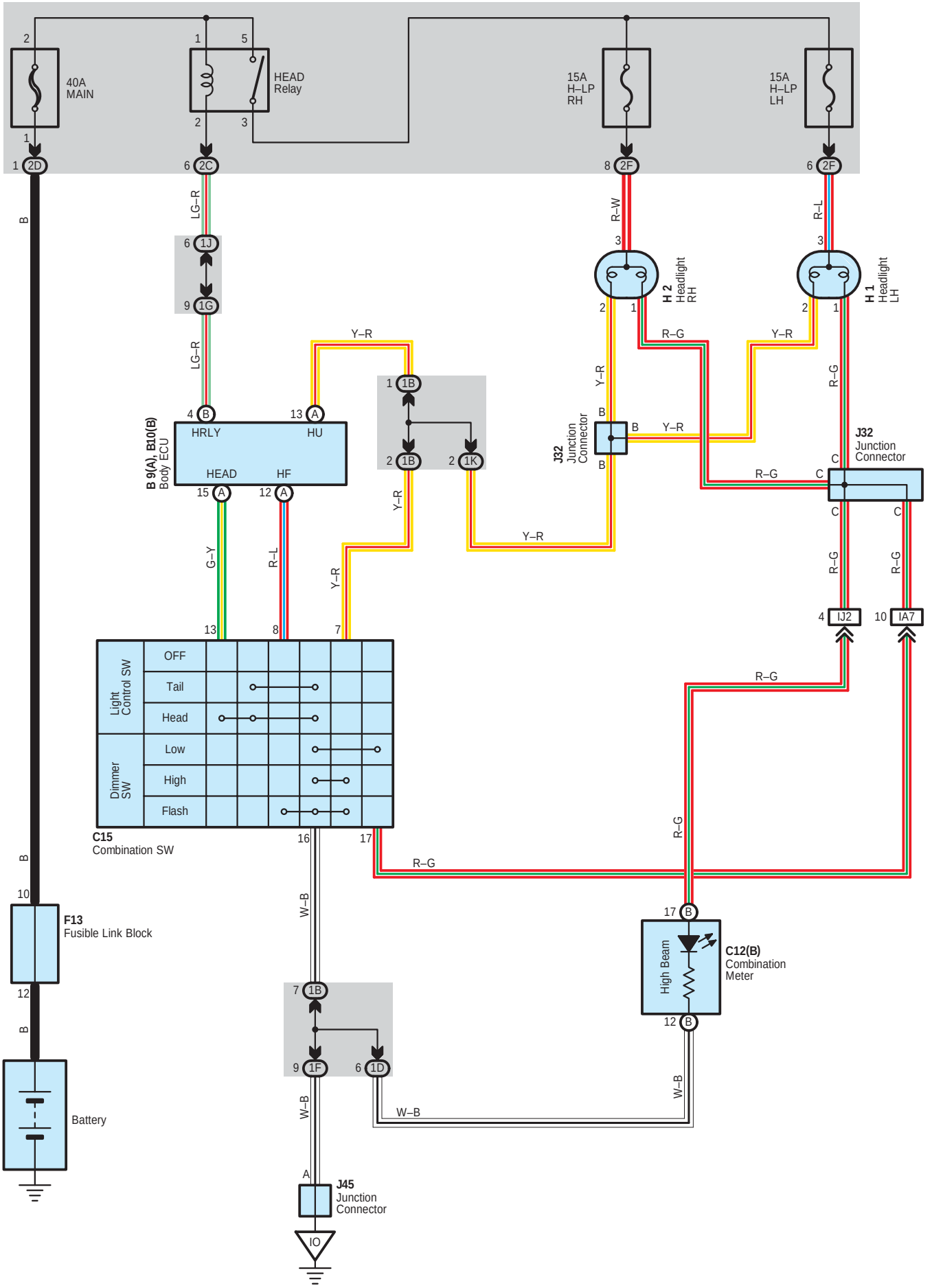
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 90 | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| IA7 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IO | 92 | Left Kick Panel |

# Headlight without DRL (Double Cab)



## : Parts Location

| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| B9 | A | 72 | C15 | 72 | H2 | 70 |
| B10 | B | 72 | F13 | 70 | J32 | 71 |
| C12 | B | 72 | H1 | 70 | J45 | 74 |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1D | | |
| 1F | | |
| 1G | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2D | | |
| 2F | | |

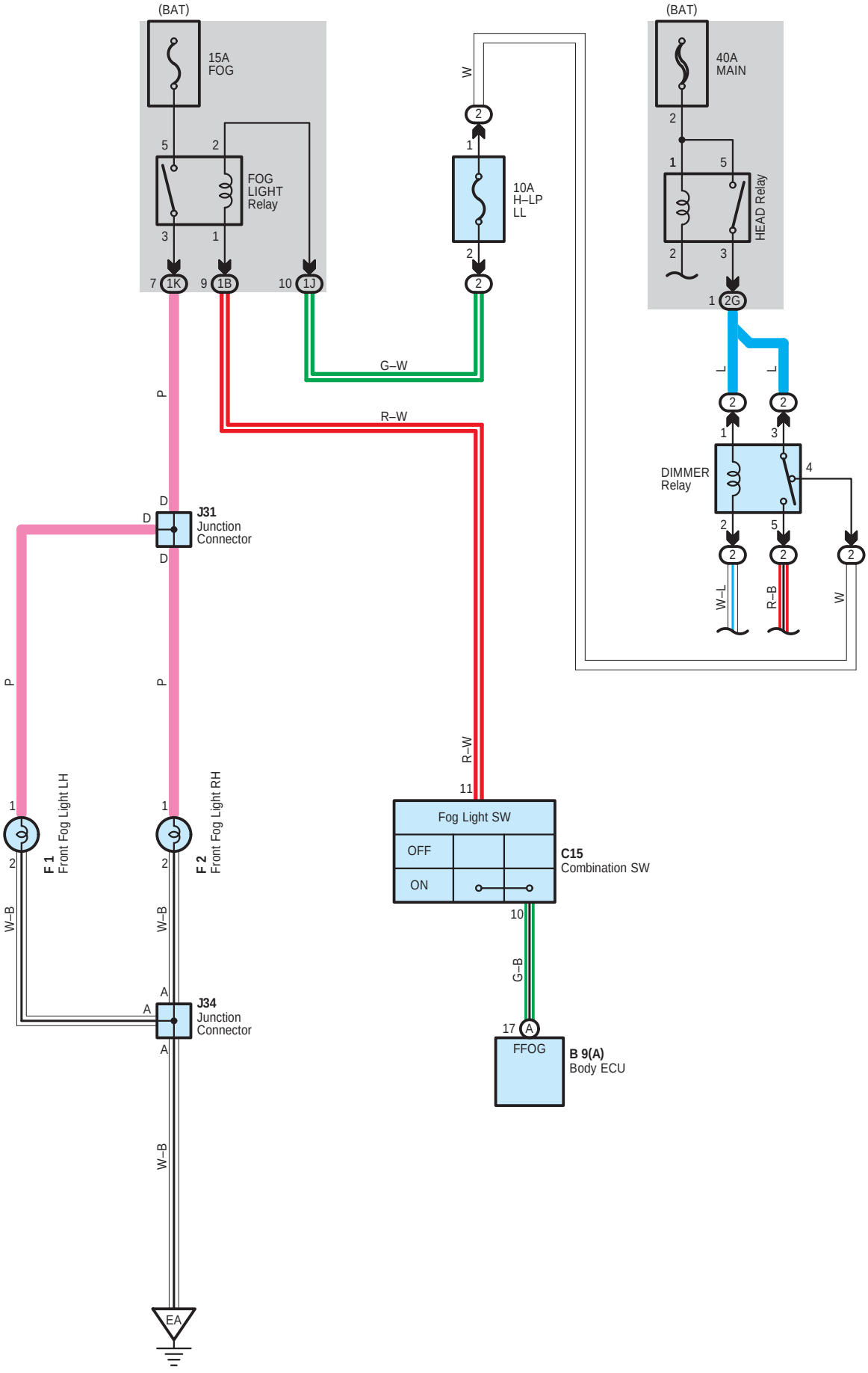
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA7 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IO | 92 | Left Kick Panel |

# Fog Light with DRL (Double Cab)



**: Parts Location**

| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| B9 | A | 72 | F1 | 70 | J31 | 71 |
| C15 | | 72 | F2 | 70 | J34 | 71 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

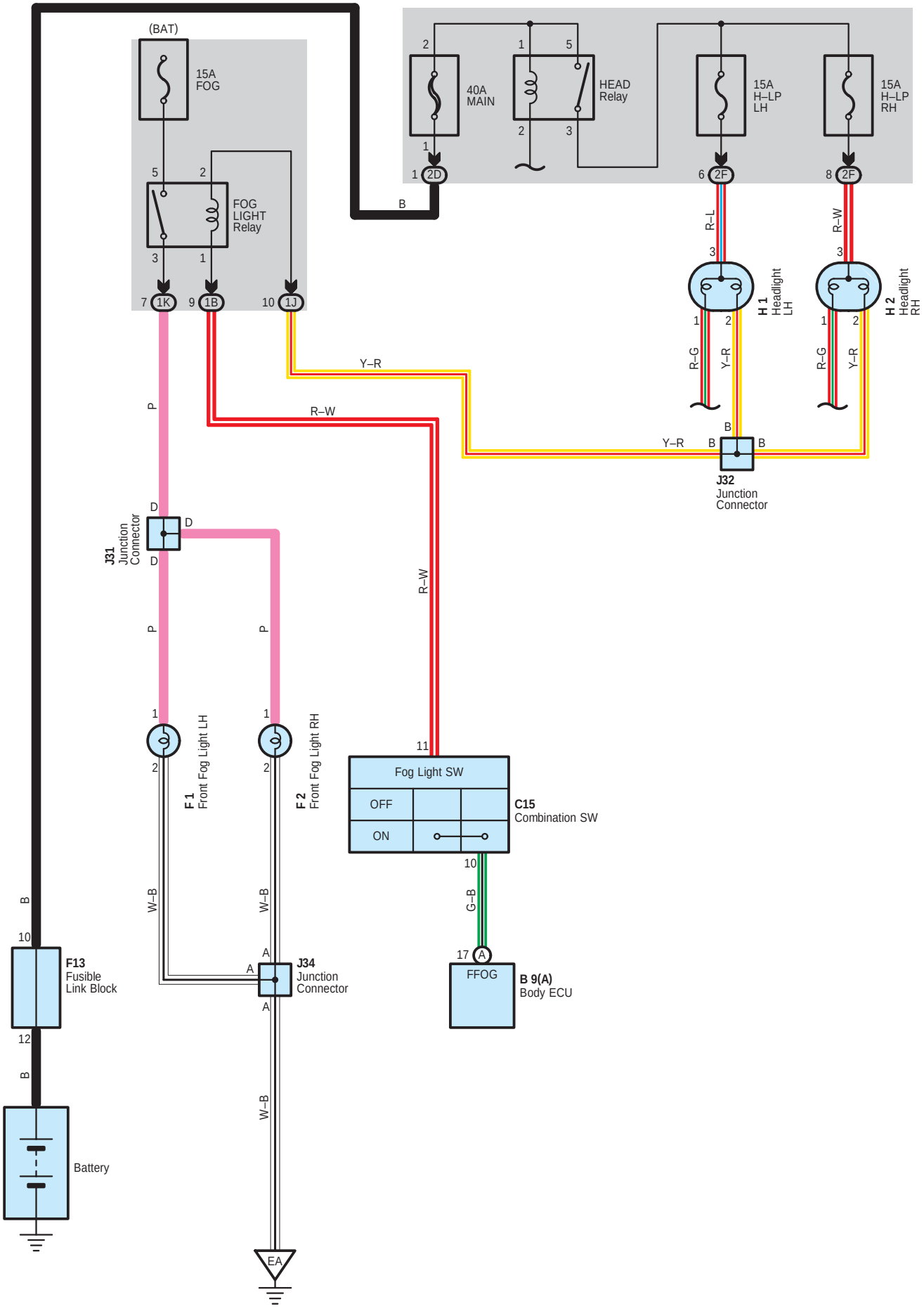
**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 2G | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |

# Fog Light without DRL (Double Cab)



**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | F13 | 70 | J32 | 71 |
| C15 | 72 | H1 | 70 | J34 | 71 |
| F1 | 70 | H2 | 70 | | |
| F2 | 70 | J31 | 71 | | |

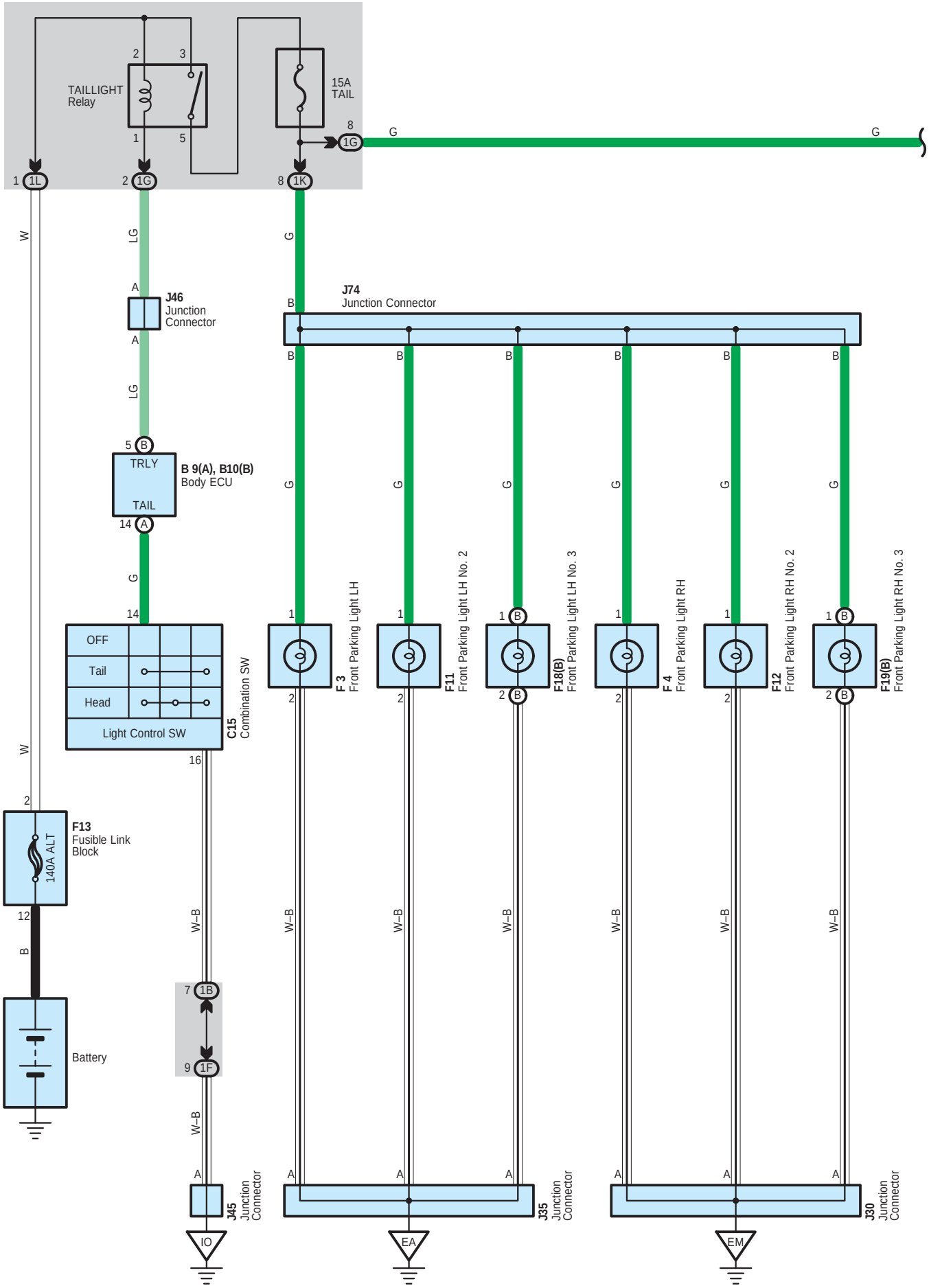
**: Junction Block and Wire Harness Connector**

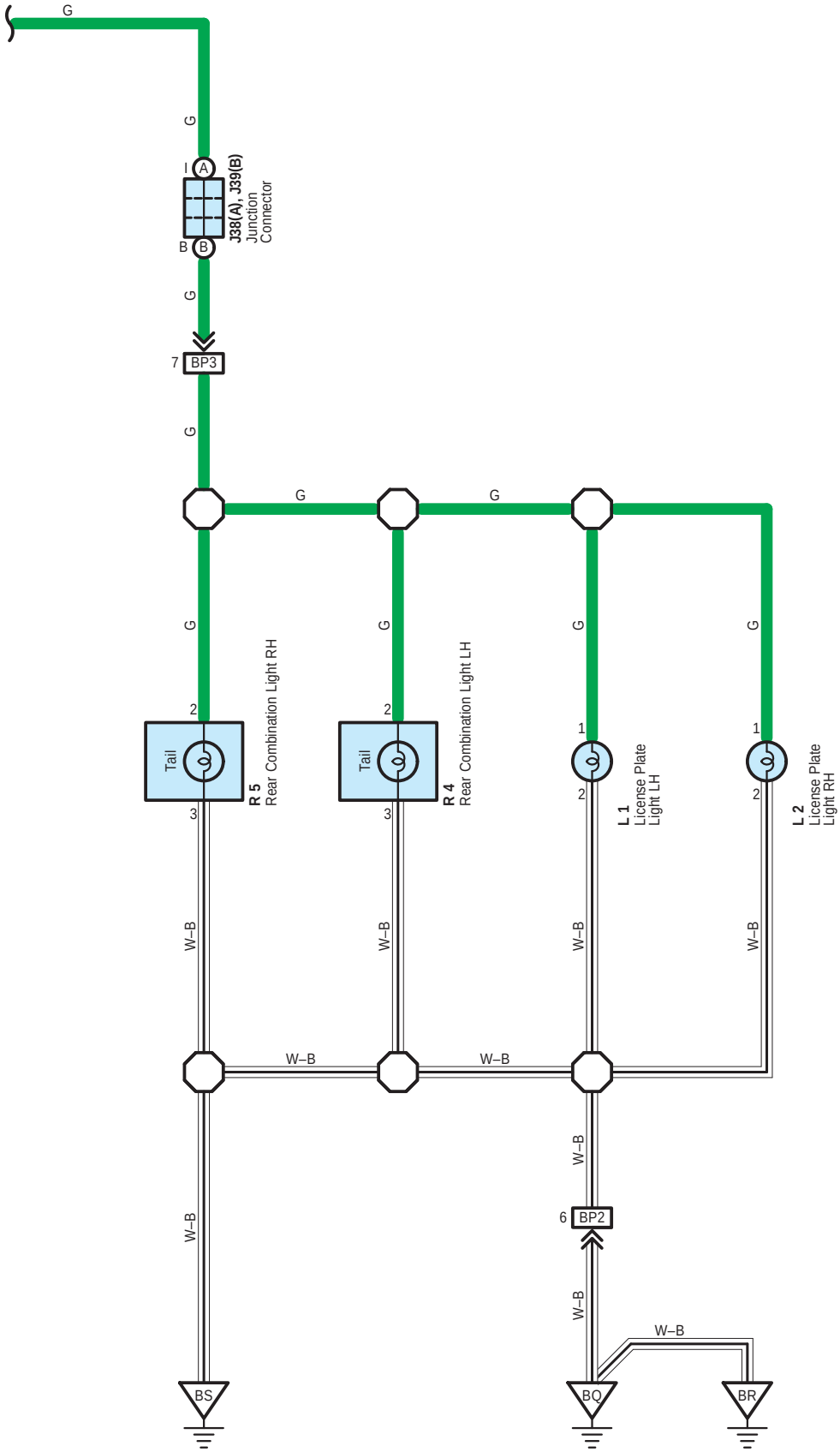
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 2D | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |

# Taillight (Double Cab)




G
G
I A
J38(A), J39(B)
Junction
Connector
B B
G
7 BP3
G
G
G
G
G
G
G
2
Tail
R 5
Rear Combination Light RH
2
Tail
R 4
Rear Combination Light LH
1
2
L 1
License Plate
Light LH
1
2
L 2
License Plate
Light RH
3
3
W–B
W–B
W–B
W–B
W–B
W–B
W–B
W–B
6 BP2
W–B
W–B
BS
BQ
BR

# Taillight (Double Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | F13 | 70 | J45 | 74 |
| B10 B | 72 | F18 B | 70 | J46 | 74 |
| C15 | 72 | F19 B | 70 | J74 | 71 |
| F3 | 70 | J30 | 71 | L1 | 76 |
| F4 | 70 | J35 | 71 | L2 | 76 |
| F11 | 70 | J38 A | 74 | R4 | 77 |
| F12 | 70 | J39 B | 74 | R5 | 77 |

**: Junction Block and Wire Harness Connector**

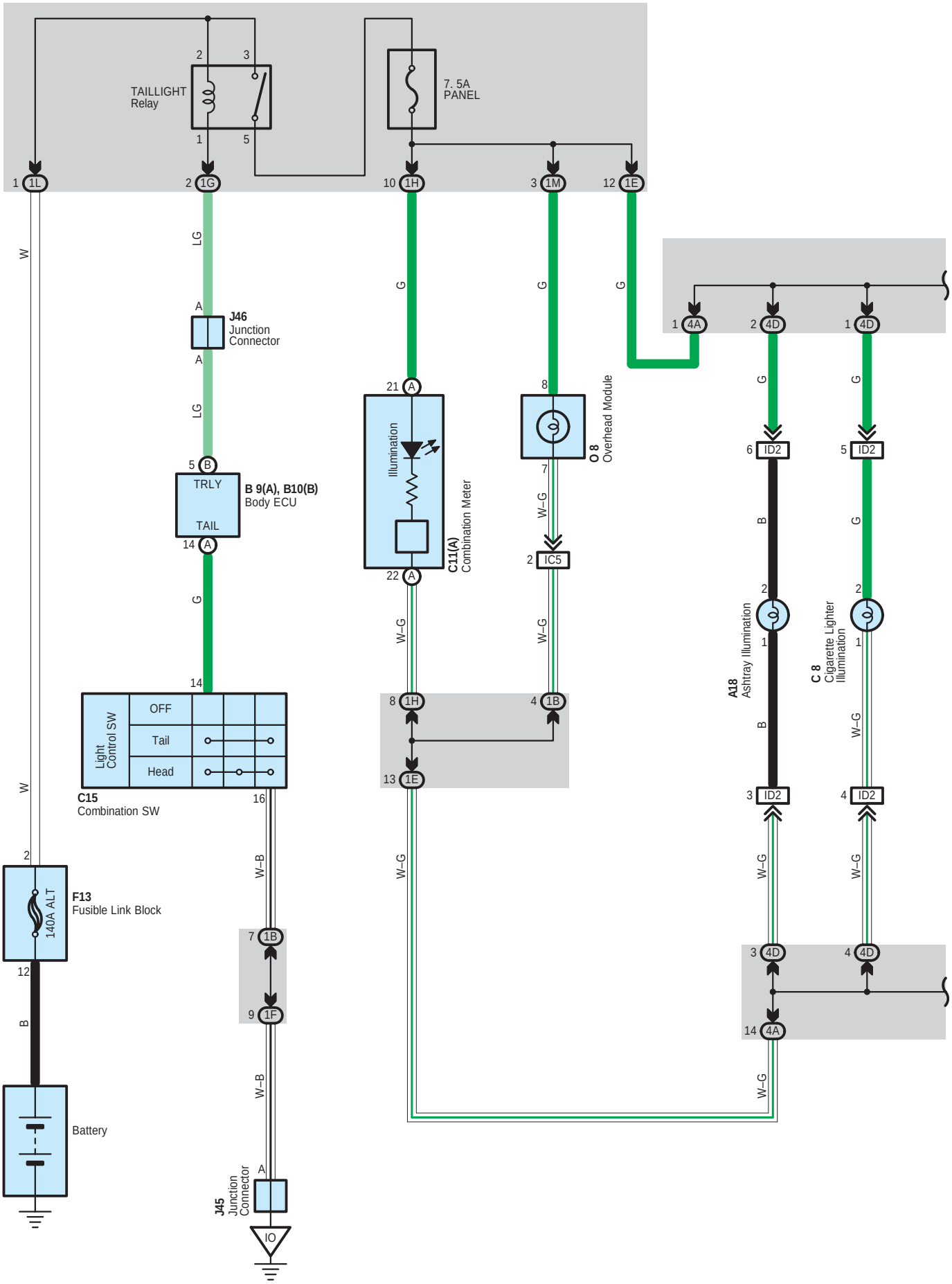
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1G | | |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |

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

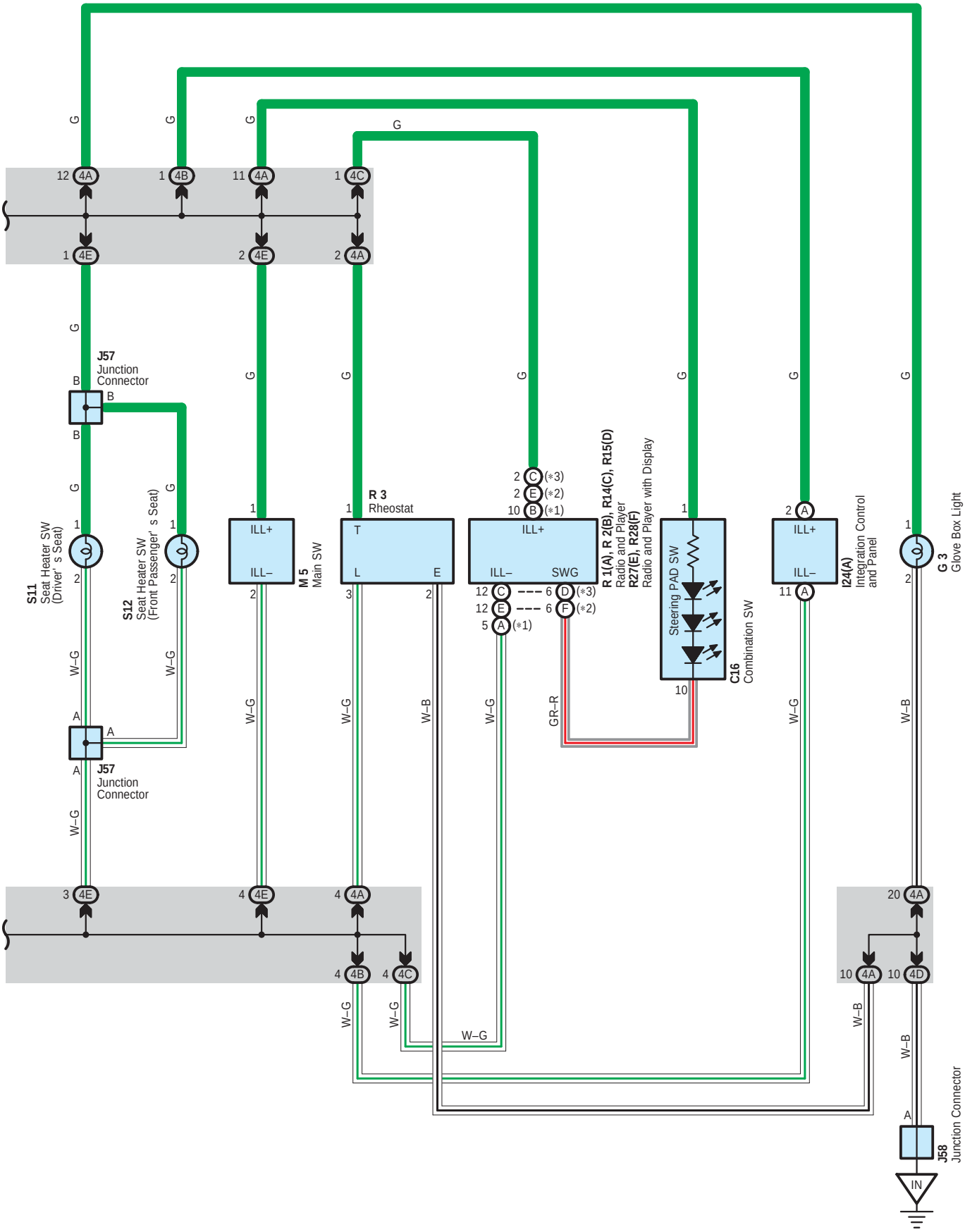
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BP2 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |
| BP3 | | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EM | 90 | Radiator Side Support RH |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |
| BR | 94 | Back Panel Left |
| BS | 94 | Surrounding of the Front of the Fuel Tank |


TAILLIGHT Relay
7. 5A PANEL
1 1L
2 1G
10 1H
3 1M
12 1E
J46 Junction Connector
B 9(A), B10(B) Body ECU
TRLY
TAIL
Light Control SW
OFF
Tail
Head
C15 Combination SW
F13 Fusible Link Block
140A ALT
Battery
J45 Junction Connector
IO
C11(A) Combination Meter
Illumination
O 8 Overhead Module
IC5
1 4A
2 4D
1 4D
A18 Ashtray Illumination
C 8 Cigarette Lighter Illumination
ID2
W
LG
G
B
W–G
W–B

* 1 : 6 Speaker
* 2 : 8 Speaker w/ Navigation System
* 3 : 8 Speaker w/o Navigation System



# Illumination (Double Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A18 | 72 | I24 A | 73 | R3 | 75 |
| B9 A | 72 | J45 | 74 | R14 C | 75 |
| B10 B | 72 | J46 | 74 | R15 D | 75 |
| C8 | 72 | J57 | 74 | R27 E | 75 |
| C11 A | 72 | J58 | 74 | R28 F | 75 |
| C15 | 72 | M5 | 75 | S11 | 75 |
| C16 | 72 | O8 | 76 | S12 | 75 |
| F13 | 70 | R1 A | 75 | | |
| G3 | 73 | R2 B | 75 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1L | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4C | | |
| 4D | | |
| 4E | | |

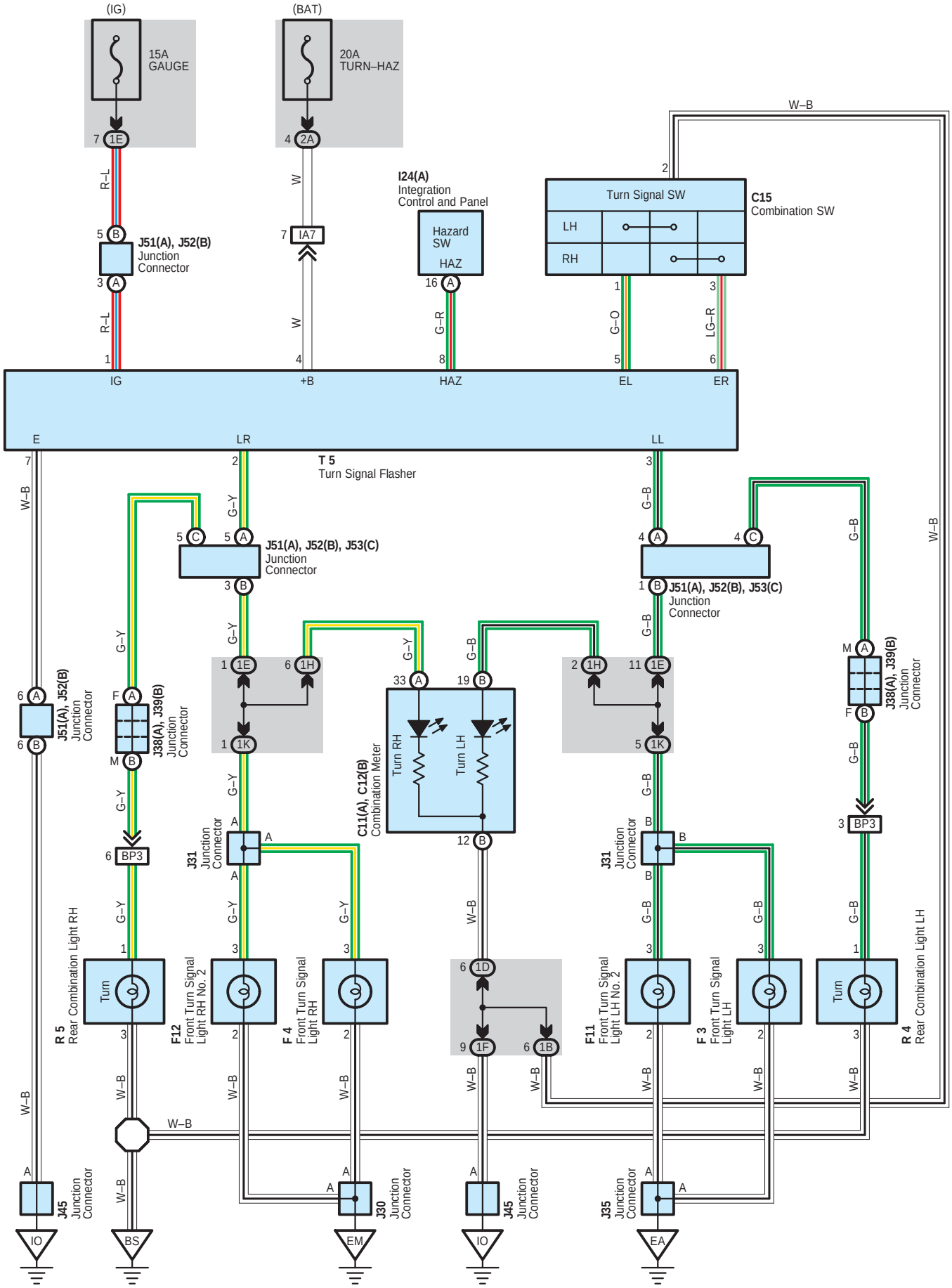
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IC5 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| ID2 | 92 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |

# Turn Signal and Hazard Warning Light (Double Cab)



**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 72 | I24 A | 73 | J51 A | 74 |
| C12 B | 72 | J30 | 71 | J52 B | 74 |
| C15 | 72 | J31 | 71 | J53 C | 74 |
| F3 | 70 | J35 | 71 | R4 | 77 |
| F4 | 70 | J38 A | 74 | R5 | 77 |
| F11 | 70 | J39 B | 74 | T5 | 75 |
| F12 | 70 | J45 | 74 | | |

**: Junction Block and Wire Harness Connector**

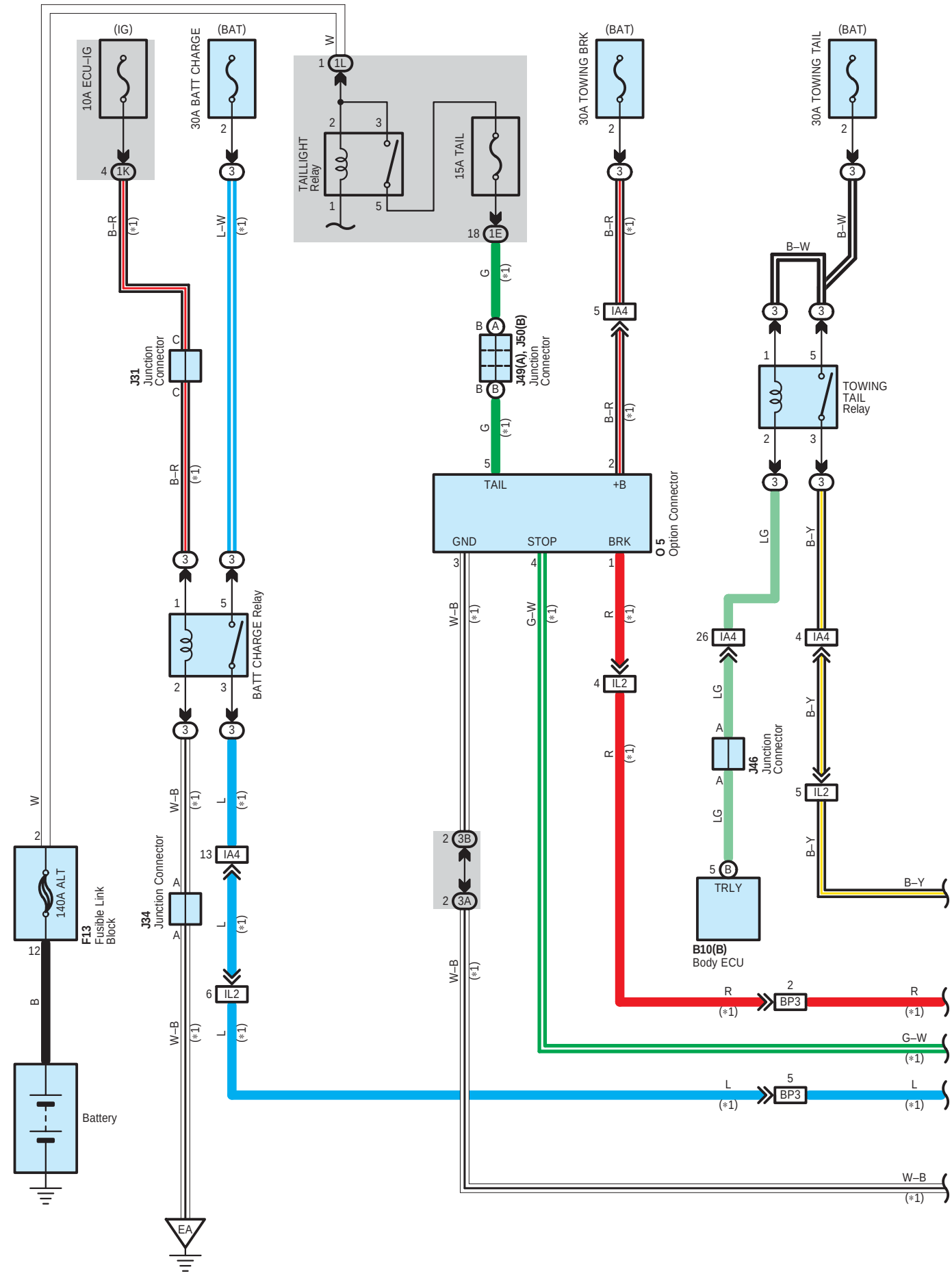
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1D | | |
| 1E | | |
| 1F | | |
| 1H | | |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |

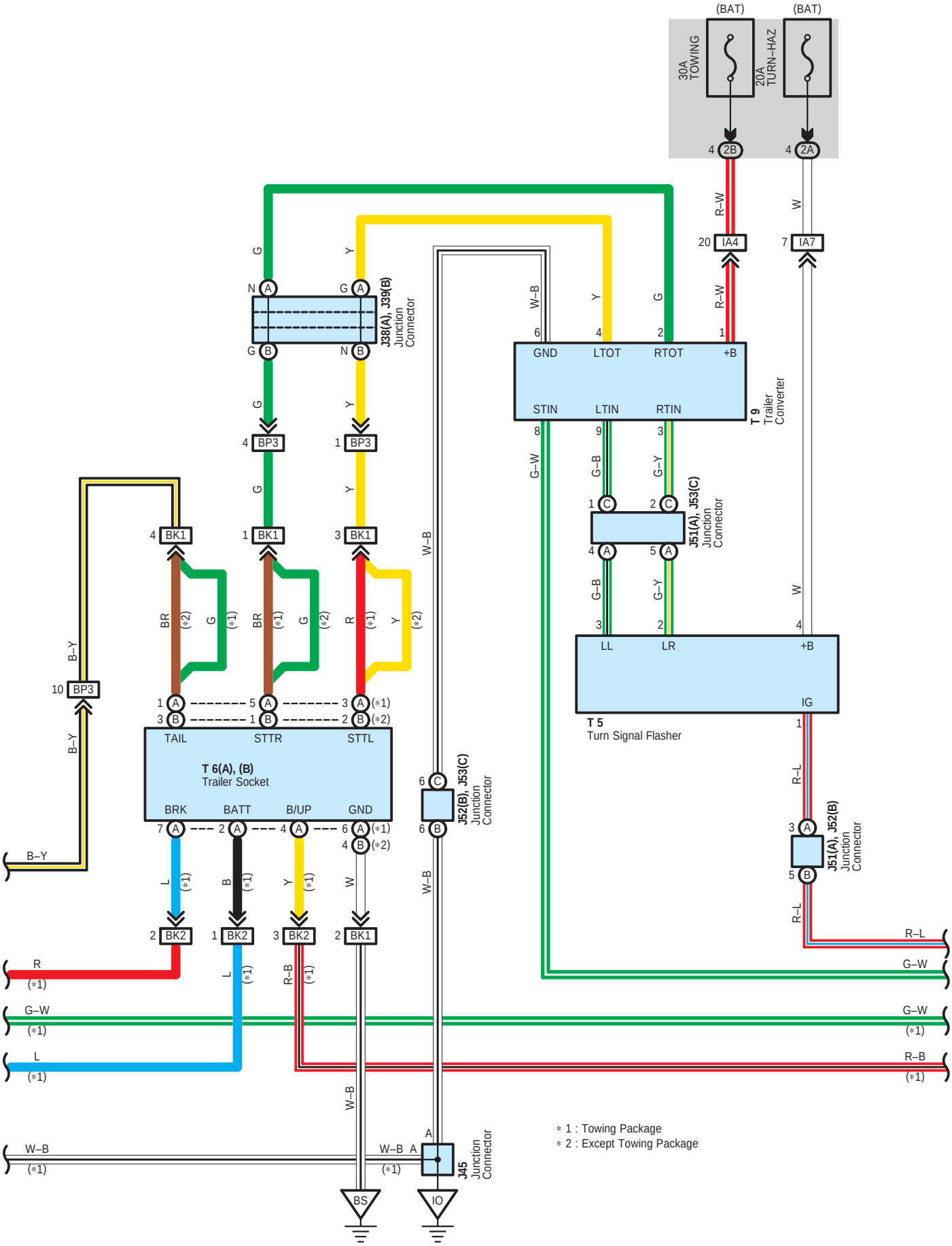
**: Connector Joining Wire Harness and Wire Harness**

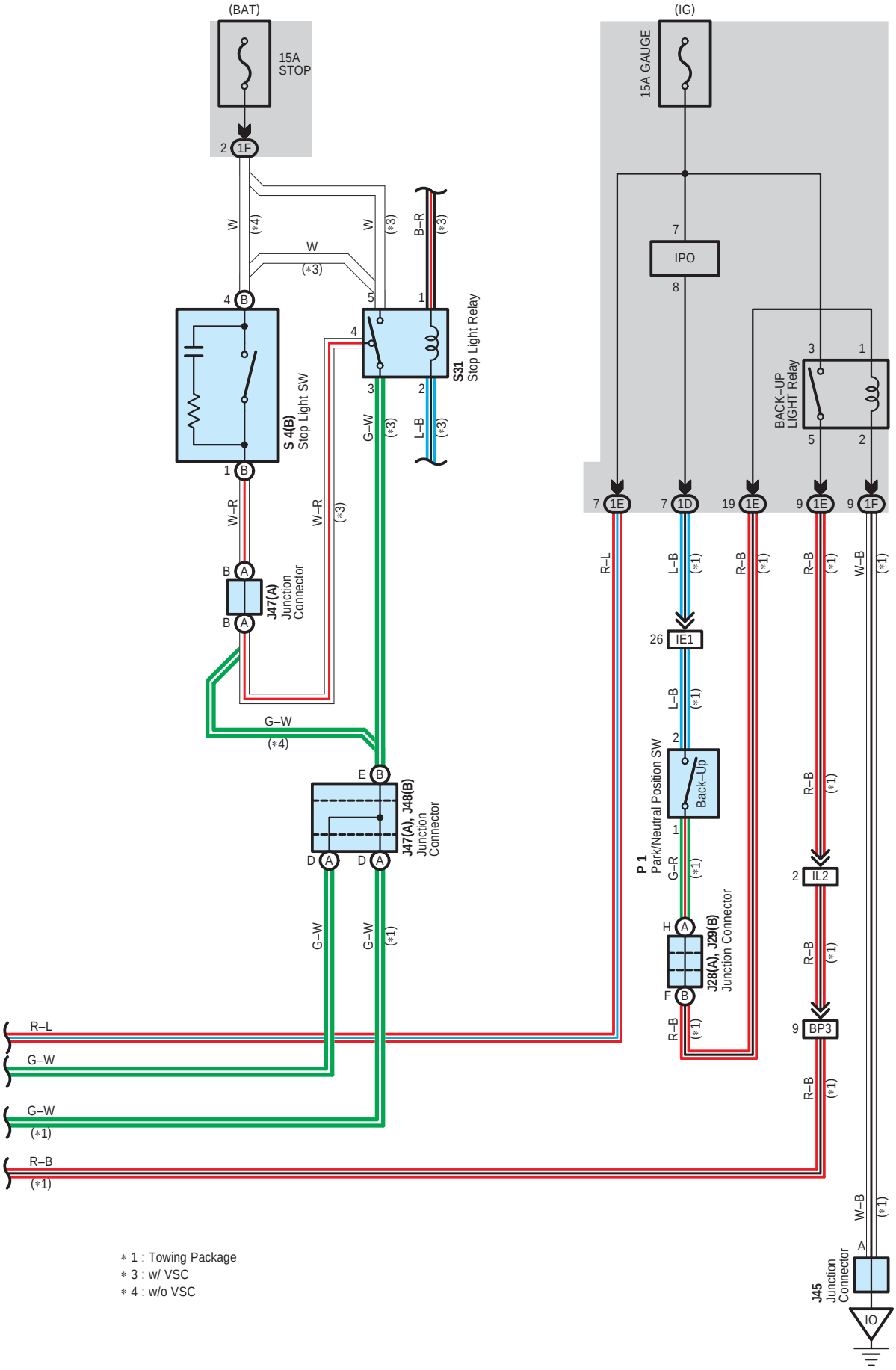
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA7 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EM | 90 | Radiator Side Support RH |
| IO | 92 | Left Kick Panel |
| BS | 94 | Surrounding of the Front of the Fuel Tank |


(IG)
10A ECU-IG
(BAT)
30A BATT CHARGE
W
1L
TAILLIGHT Relay
15A TAIL
(BAT)
30A TOWING BRK
(BAT)
30A TOWING TAIL
4 1K
3
2
18 1E
B–R (*1)
L–W (*1)
G (*1)
B–W
J31 Junction Connector
C
J49(A), J50(B) Junction Connector
B A
B B
5 IA4
TOWING TAIL Relay
1
5
2
3
TAIL
+B
GND
STOP
BRK
O5 Option Connector
BATT CHARGE Relay
W–B (*1)
G–W (*1)
R (*1)
LG
B–Y
26 IA4
4 IA4
4 IL2
5 IL2
J46 Junction Connector
A
LG
5 B
TRLY
B10(B) Body ECU
B–Y
2 3B
2 3A
J34 Junction Connector
13 IA4
6 IL2
L (*1)
W–B (*1)
R
2 BP3
G–W
5 BP3
L
W–B
2
F13 Fusible Link Block
140A ALT
12
B
Battery
EA


(BAT)
(BAT)
30A TOWING
20A TURN–HAZ
4 2B
4 2A
R–W
W
20 IA4
7 IA7
R–W
J38(A), J39(B) Junction Connector
GND
LTOT
RTOT
+B
STIN
LTIN
RTIN
T 9 Trailer Converter
J51(A), J53(C) Junction Connector
LL
LR
+B
IG
T 5 Turn Signal Flasher
J51(A), J52(B) Junction Connector
J52(B), J53(C) Junction Connector
BP3
BK1
BK2
T 6(A), (B) Trailer Socket
TAIL
STTR
STTL
BRK
BATT
B/UP
GND
J45 Junction Connector
BS
IO
B–Y
G
Y
W–B
G–B
G–Y
G–W
R–L
R–B
L
R
BR
W
(*1)
(*2)
∗ 1 : Towing Package
∗ 2 : Except Towing Package




∗ 1 : Towing Package
∗ 3 : w/ VSC
∗ 4 : w/o VSC

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B10 B | 72 | J46 | 74 | P1 | 71 |
| F13 | 70 | J47 A | 74 | S4 B | 75 |
| J28 A | 74 | J48 B | 74 | S31 | 75 |
| J29 B | 74 | J49 A | 74 | T5 | 75 |
| J31 | 71 | J50 B | 74 | T6 A | 77 |
| J34 | 71 | J51 A | 74 | T6 B | 77 |
| J38 A | 74 | J52 B | 74 | T9 | 75 |
| J39 B | 74 | J53 C | 74 | | |
| J45 | 74 | O5 | 75 | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 3 | 43 | Engine Room R/B No.3 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |

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

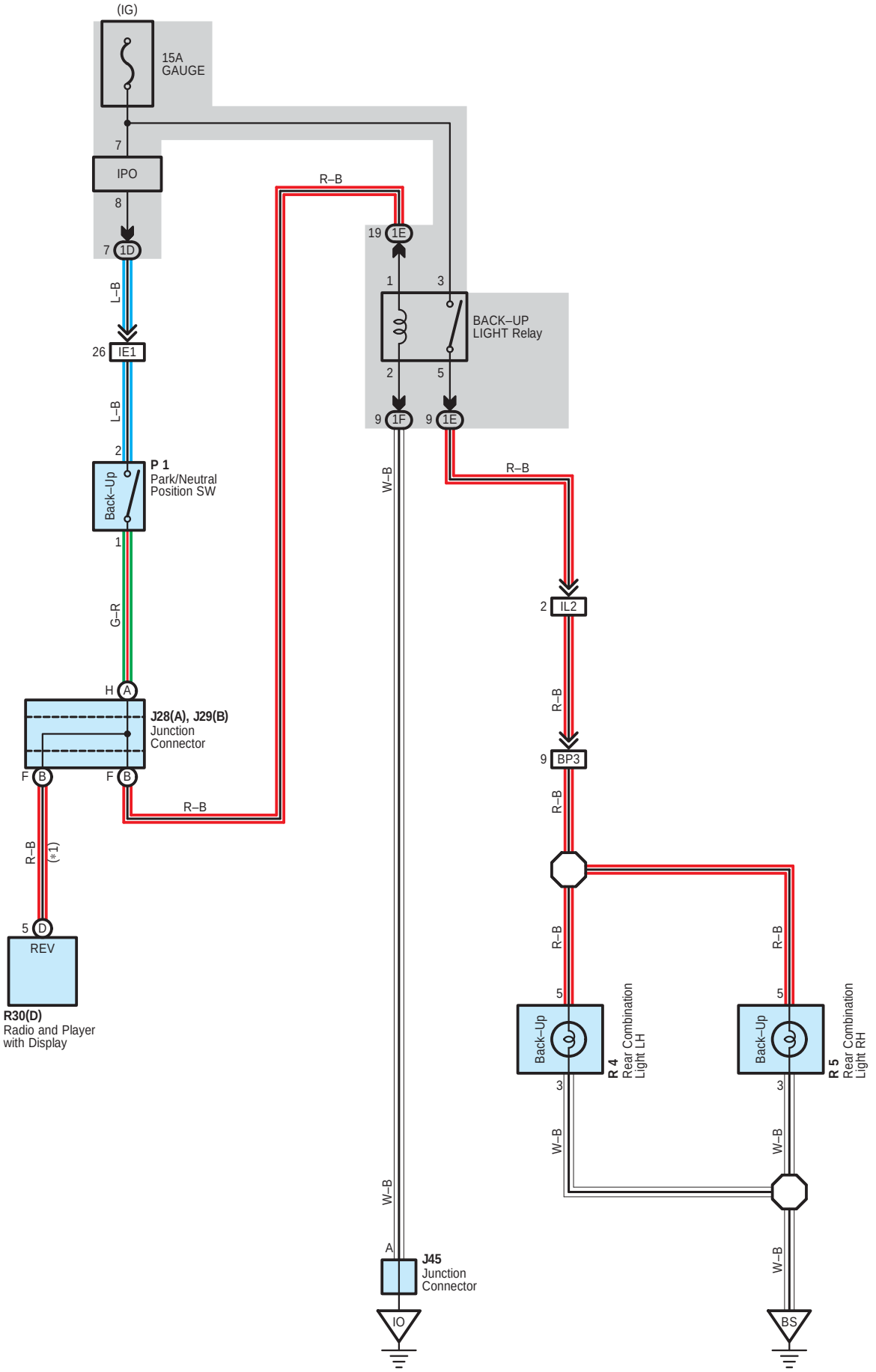
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| BK1 | 94 | Frame Wire and Frame No.3 Wire (Near the License Plate Light) |
| BK2 | | |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IO | 92 | Left Kick Panel |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

# Back–Up Light (Double Cab)

∗ 1 : w/ Navigation System



**: Parts Location**

| Code | | See Page | Code | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| J28 | A | 74 | P1 | 71 | R30 | D | 75 |
| J29 | B | 74 | R4 | 77 | | | |
| J45 | | 74 | R5 | 77 | | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |

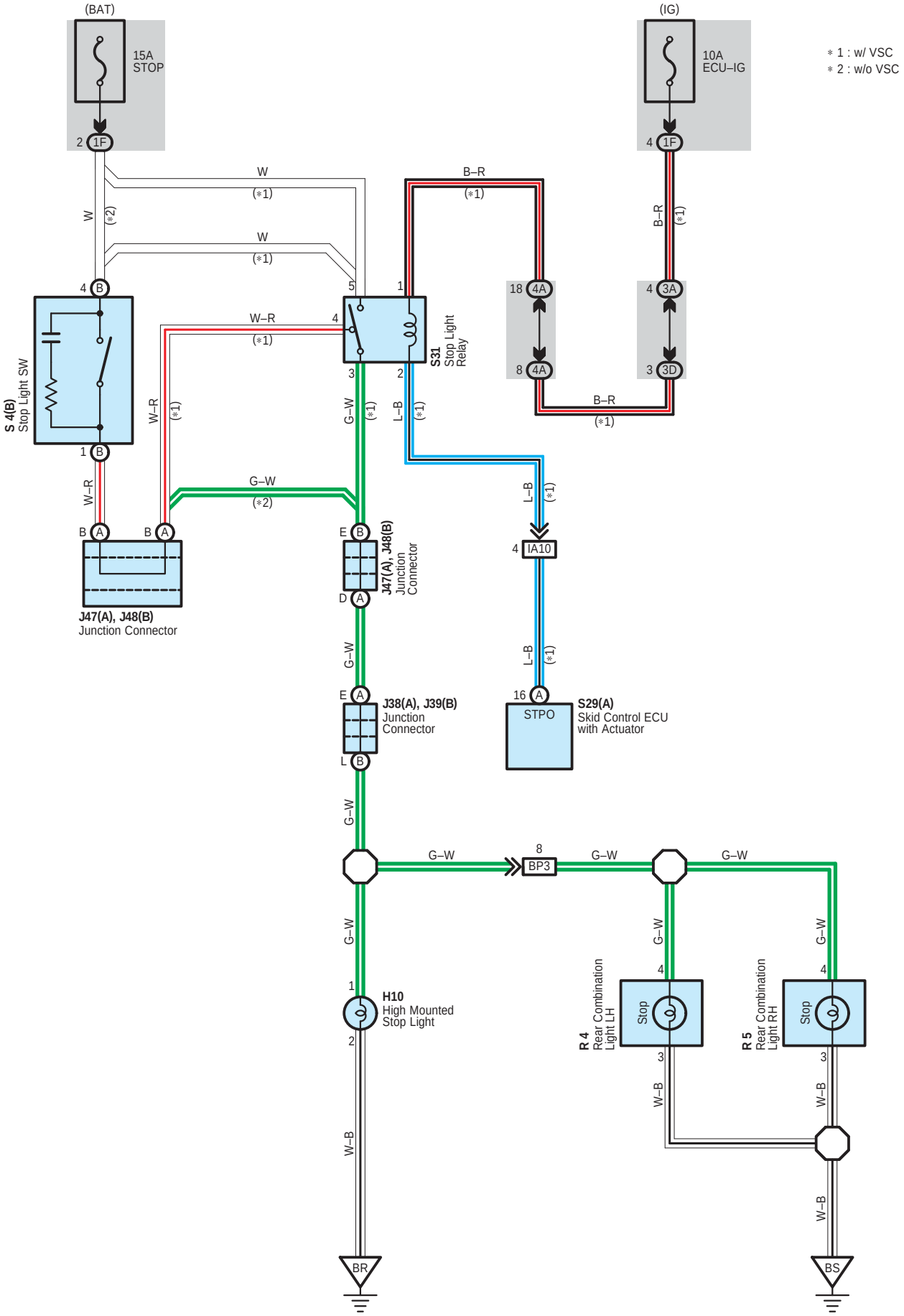
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IO | 92 | Left Kick Panel |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

# Stop Light (Double Cab)



**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| H10 | | 76 | J48 | B | 74 | S29 | A | 71 |
| J38 | A | 74 | R4 | | 77 | S31 | | 75 |
| J39 | B | 74 | R5 | | 77 | | | |
| J47 | A | 74 | S4 | B | 75 | | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |

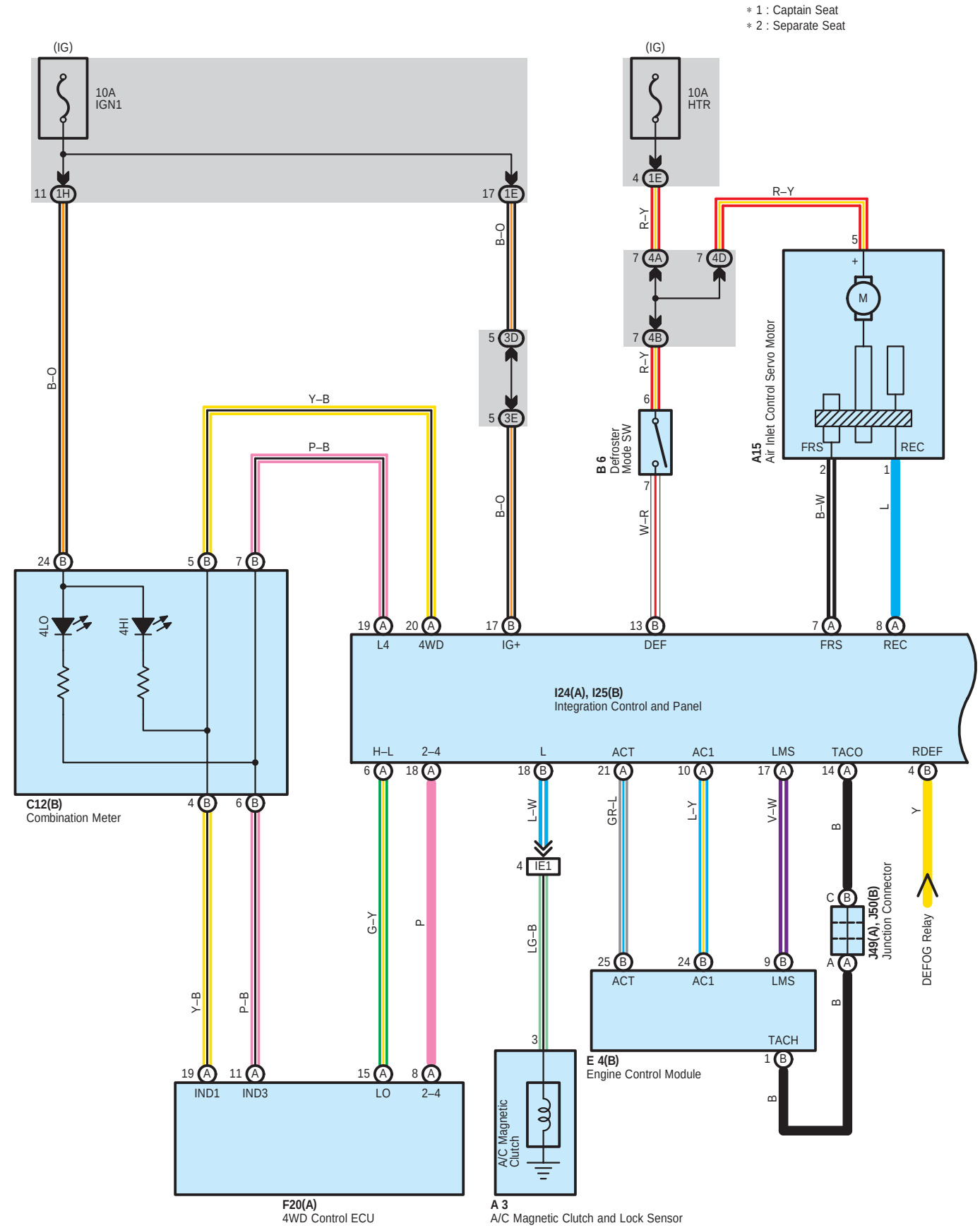
**: Connector Joining Wire Harness and Wire Harness**

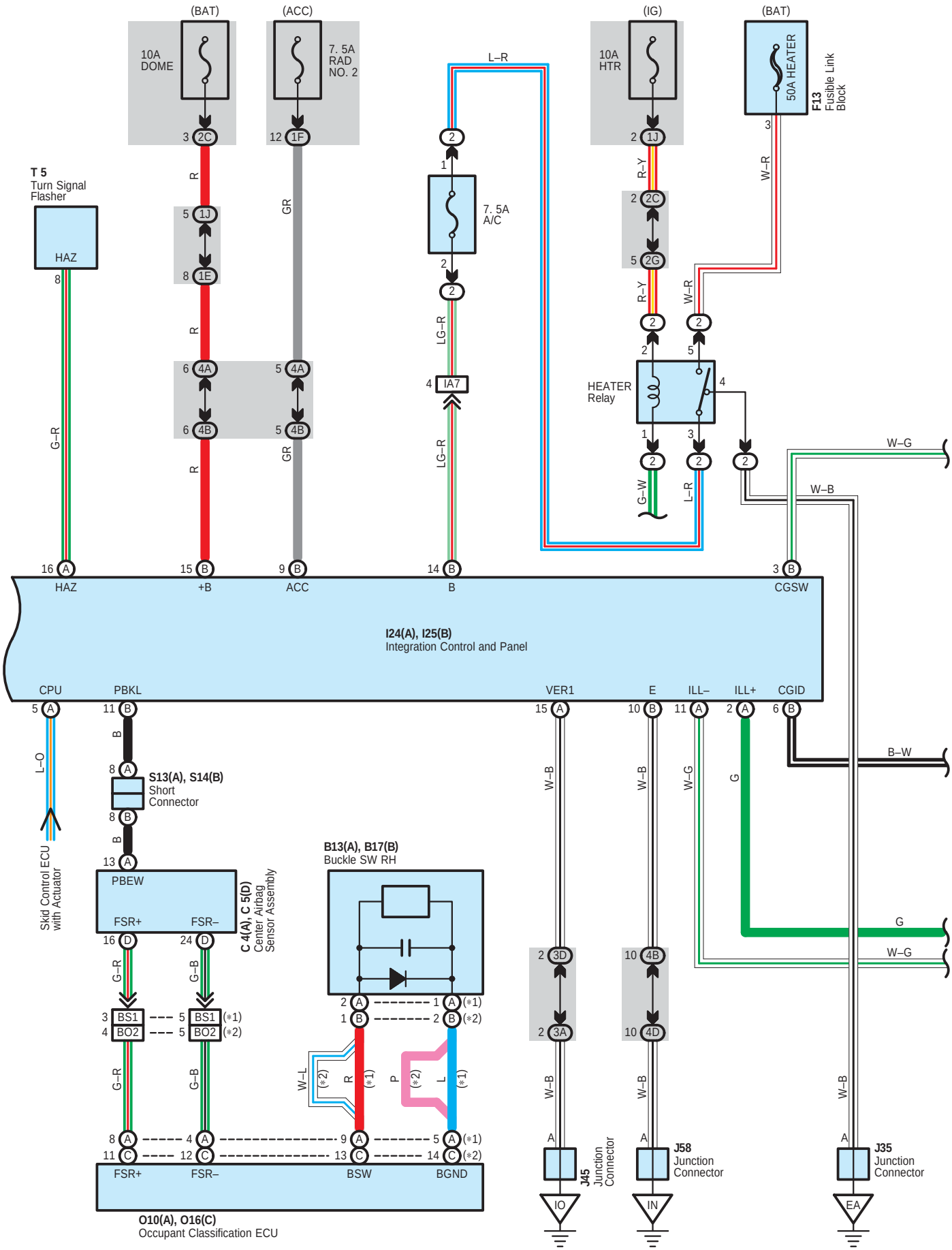
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA10 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

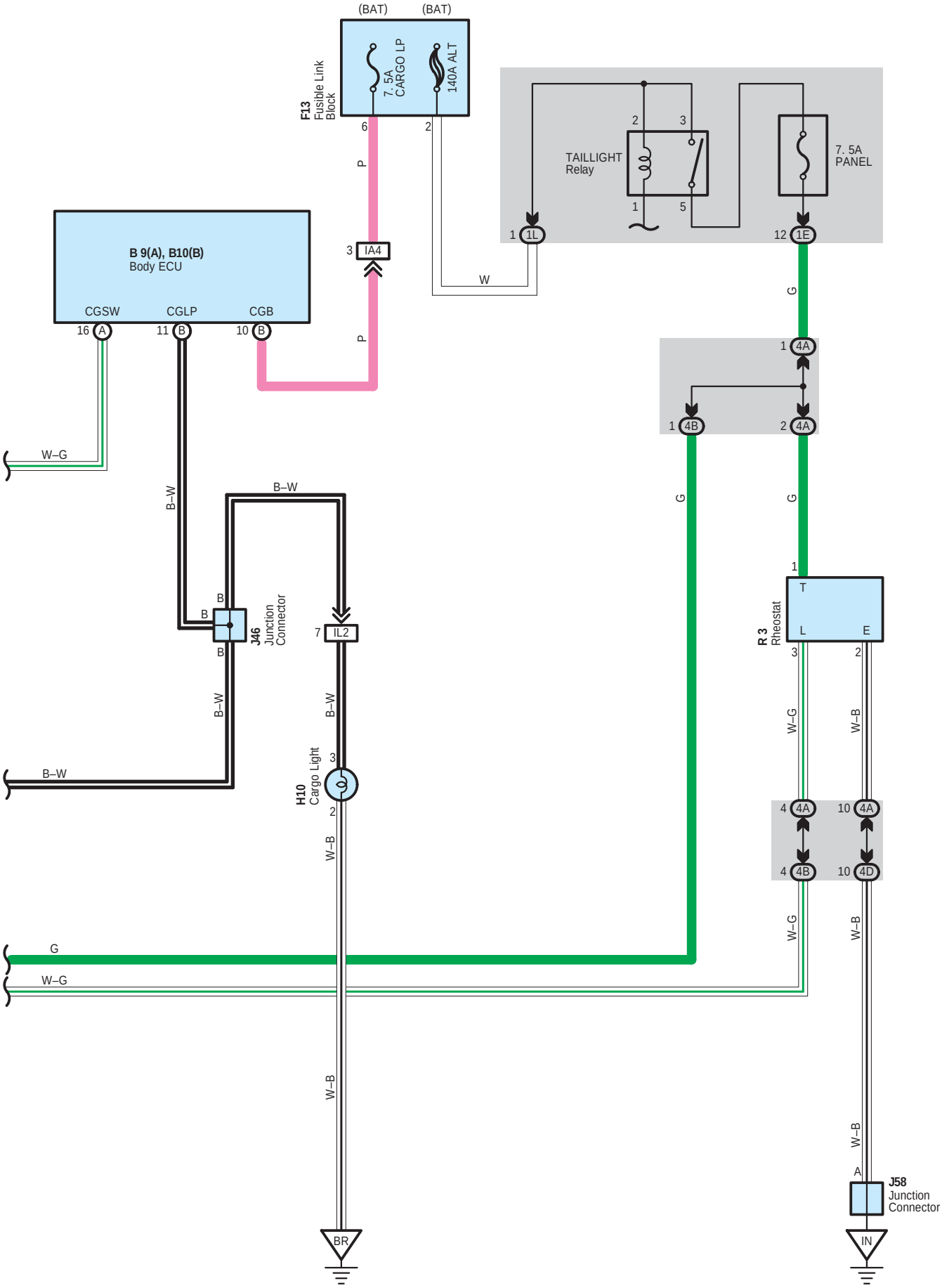
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| BR | 94 | Back Panel Left |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

# Center Cluster Integration Control System (Double Cab)




(BAT)
(ACC)
(IG)
(BAT)
10A DOME
7. 5A RAD NO. 2
10A HTR
50A HEATER
F13 Fusible Link Block
T 5 Turn Signal Flasher
HAZ
7. 5A A/C
HEATER Relay
I24(A), I25(B) Integration Control and Panel
CPU
PBKL
VER1
E
ILL–
ILL+
CGID
HAZ
+B
ACC
B
CGSW
S13(A), S14(B) Short Connector
Skid Control ECU with Actuator
PBEW
FSR+
FSR–
C 4(A), C 5(D) Center Airbag Sensor Assembly
B13(A), B17(B) Buckle SW RH
BS1
BO2
BSW
BGND
O10(A), O16(C) Occupant Classification ECU
J45 Junction Connector
J58 Junction Connector
J35 Junction Connector
IO
IN
EA
L–R
R
GR
LG–R
R–Y
W–R
G–R
W–G
W–B
B–W
G
L–O
G–B
W–L
P
L


(BAT)
(BAT)
F13
Fusible Link Block
7. 5A CARGO LP
140A ALT
6
2
P
3
IA4
P
B 9(A), B10(B)
Body ECU
CGSW
CGLP
CGB
16 A
11 B
10 B
W–G
B–W
B–W
B
B
B
J46
Junction Connector
7
IL2
B–W
B–W
H10
Cargo Light
3
2
W–B
B–W
G
W–G
W–B
BR
TAILLIGHT Relay
2
3
1
5
1
1L
W
7. 5A PANEL
12
1E
G
1
4A
1
4B
2
4A
G
G
1
R 3
Rheostat
T
L
E
3
2
W–G
W–B
4
4A
10
4A
4
4B
10
4D
W–G
W–B
G
W–G
W–B
A
J58
Junction Connector
IN

**System Outline**

The integration control panel is composed by design components such as the cluster, resistor, heater control panel, and SW. The integration control panel controls systems such as the air conditioning, cargo light, 4WD and hazard warning light and clock.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A3 | 70 | E4 B | 73 | J50 B | 74 |
| A15 | 72 | F13 | 70 | J58 | 74 |
| B6 | 72 | F20 A | 73 | O10 A | 78 (*1) |
| B9 A | 72 | H10 | 76 | O16 C | 79 (*2) |
| B10 B | 72 | I24 A | 73 | R3 | 75 |
| B13 A | 78 (*1) | I25 B | 73 | S13 A | 75 |
| B17 B | 79 (*2) | J35 | 71 | S14 B | 75 |
| C4 A | 72 | J45 | 74 | T5 | 75 |
| C5 D | 72 | J46 | 74 | | |
| C12 B | 72 | J49 A | 74 | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2G | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4D | | |

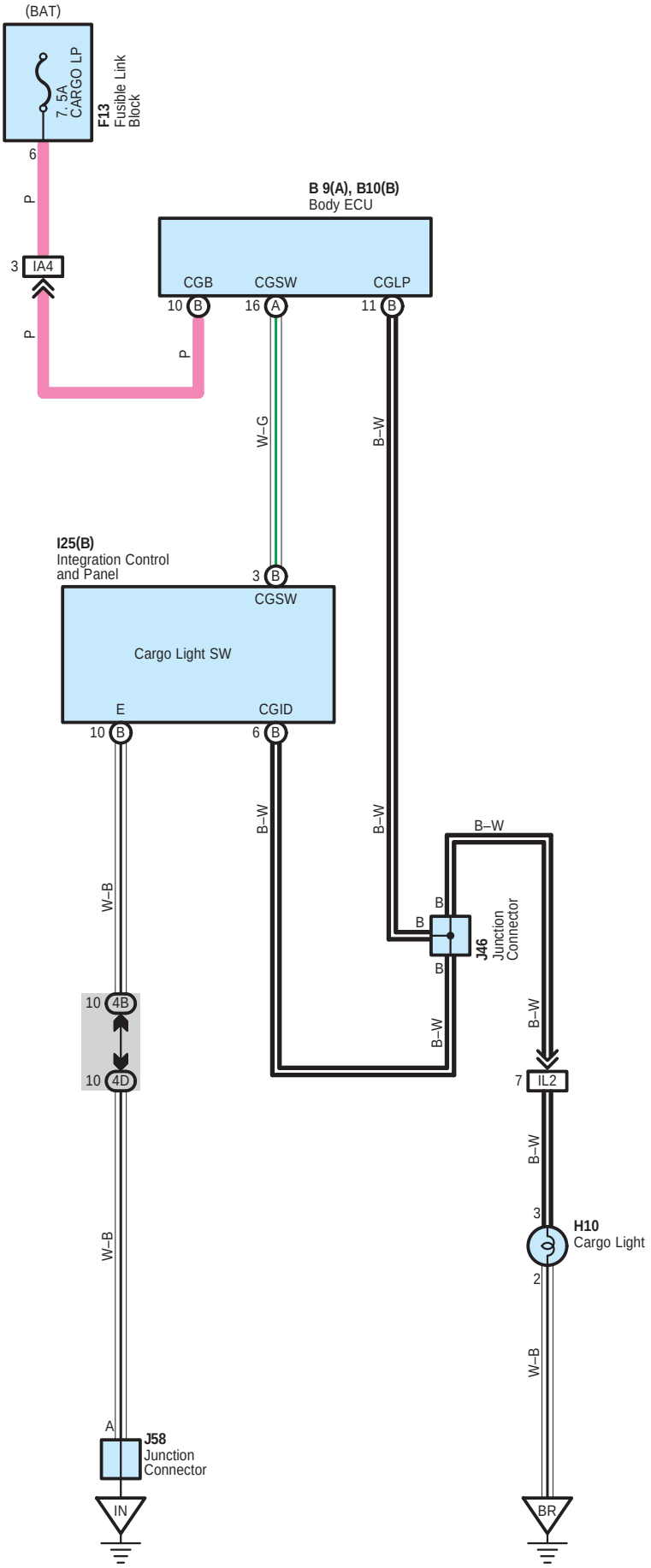
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| BO2 | 97 (*2) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |
| BS1 | 96 (*1) | |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BR | 94 | Back Panel Left |

* 1 : Captain Seat * 2 : Separate Seat


(BAT)
7.5A
CARGO LP
F13
Fusible Link
Block
6
P
3
IA4
P
P
B 9(A), B10(B)
Body ECU
CGB
CGSW
CGLP
10 B
16 A
11 B
W–G
B–W
I25(B)
Integration Control
and Panel
3 B
CGSW
Cargo Light SW
E
CGID
10 B
6 B
W–B
B–W
B–W
B–W
B
B
B
J46
Junction
Connector
10 4B
10 4D
B–W
7 IL2
W–B
3
H10
Cargo Light
2
W–B
W–B
A
J58
Junction
Connector
IN
BR

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | See Page |
|---|---|---|---|---|---|---|---|
| B9 | A | 72 | H10 | | 76 | J58 | 74 |
| B10 | B | 72 | I25 | B | 73 | | |
| F13 | | 70 | J46 | | 74 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 4B | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4D | | |

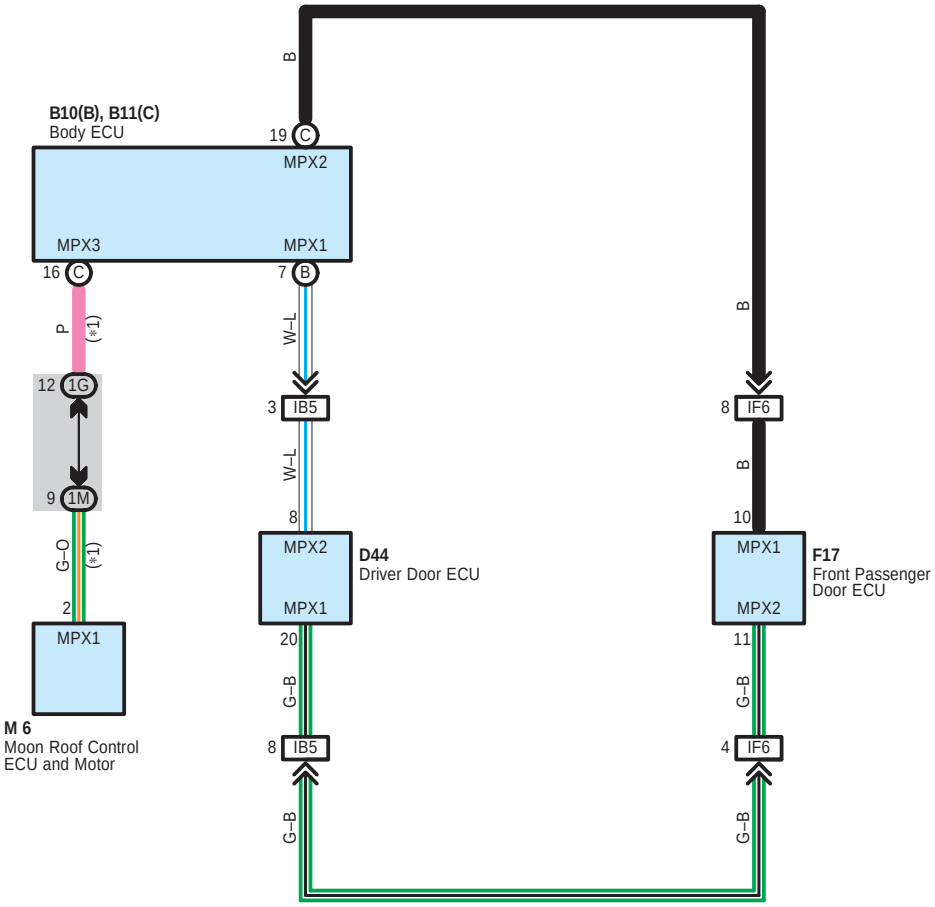
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| BR | 94 | Back Panel Left |

∗ 1 : w/ Moon Roof


B
B10(B), B11(C)
Body ECU
19 C
MPX2
MPX3
MPX1
16 C
7 B
P
(∗1)
W–L
B
12 1G
3 IB5
8 IF6
W–L
B
9 1M
8
10
G–O
(∗1)
MPX2
D44
Driver Door ECU
MPX1
F17
Front Passenger
Door ECU
2
MPX1
20
11
G–B
G–B
M 6
Moon Roof Control
ECU and Motor
8 IB5
4 IF6
G–B
G–B

**Multiplex Communication System Includes Following Systems**

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

**: Parts Location**

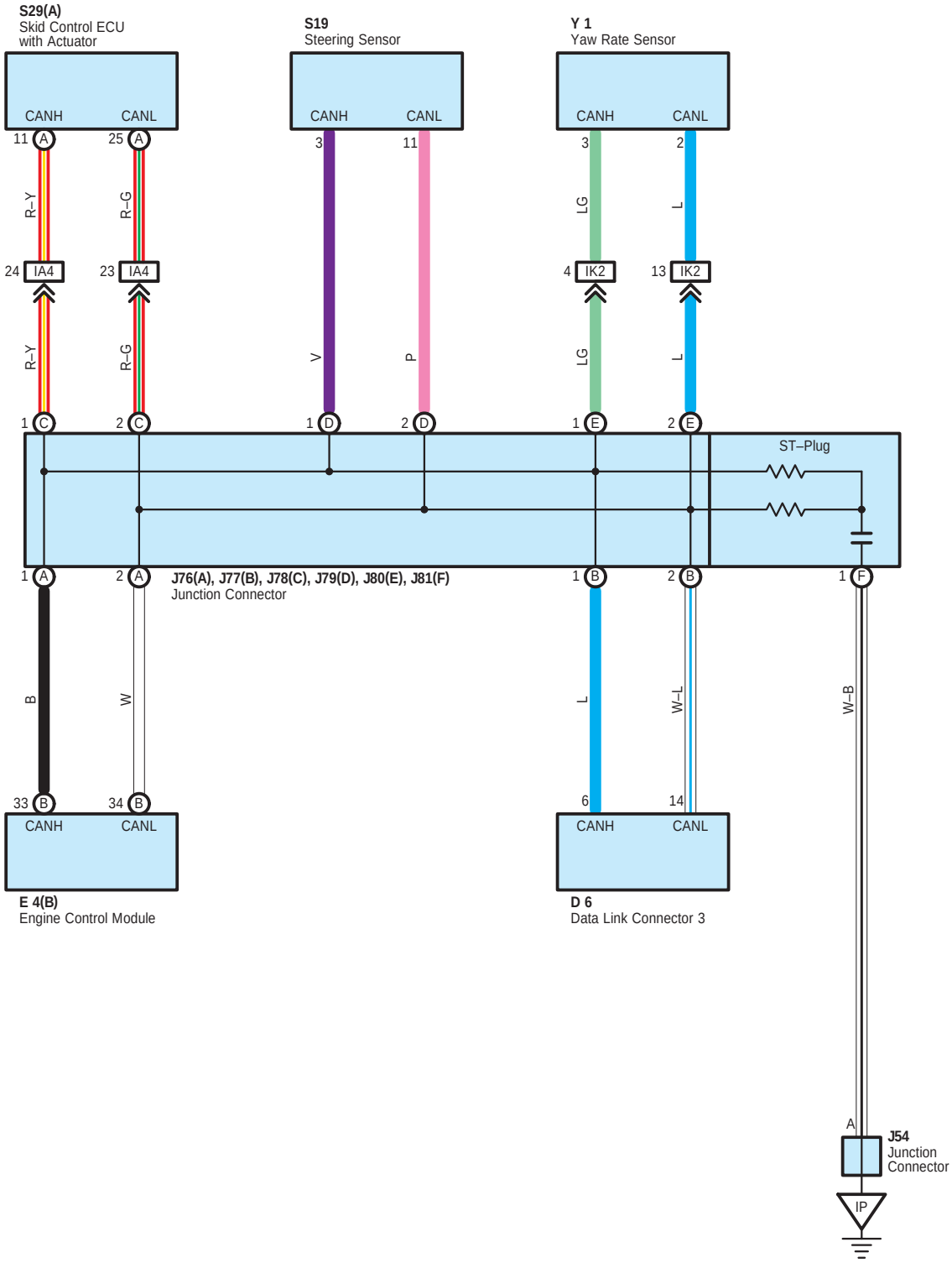
| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| B10 | B | 72 | D44 | 76 | M6 | 76 |
| B11 | C | 72 | F17 | 76 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |


S29(A)
Skid Control ECU
with Actuator
CANH
CANL
11 A
25 A
R–Y
R–G
24 IA4
23 IA4
R–Y
R–G
1 C
2 C
S19
Steering Sensor
CANH
CANL
3
11
V
P
1 D
2 D
Y 1
Yaw Rate Sensor
CANH
CANL
3
2
LG
L
4 IK2
13 IK2
LG
L
1 E
2 E
ST–Plug
1 A
2 A
J76(A), J77(B), J78(C), J79(D), J80(E), J81(F)
Junction Connector
1 B
2 B
1 F
B
W
L
W–L
W–B
33 B
34 B
6
14
CANH
CANL
CANH
CANL
E 4(B)
Engine Control Module
D 6
Data Link Connector 3
A
J54
Junction
Connector
IP

**System Outline**

CAN has two lines as a pair which make communication with operating voltage. CAN has excellent data speed and error detecting capacity. It consists of vehicle control systems such as engine control module, data link connector 3 and skid control ECU with actuator.

This system is working for the following systems:
* ABS (w/ VSC)
* Cruise Control
* Electronically Controlled Transmission and A/T Indicator
* Engine Control
* TRAC
* VSC

**: Parts Location**

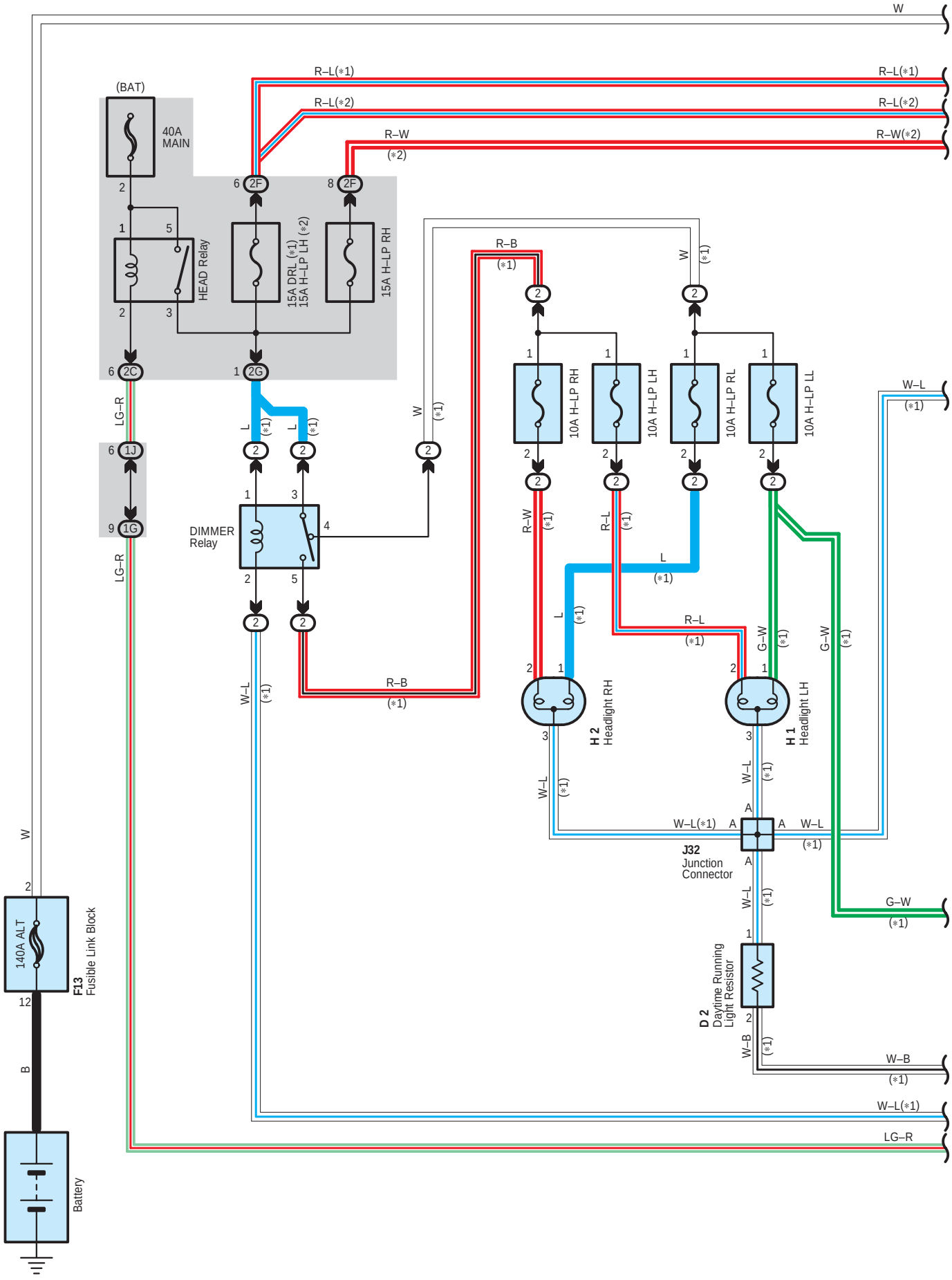
| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| D6 | 73 | J77 B | 74 | J81 F | 74 |
| E4 B | 73 | J78 C | 74 | S19 | 75 |
| J54 | 74 | J79 D | 74 | S29 A | 71 |
| J76 A | 74 | J80 E | 74 | Y1 | 75 |

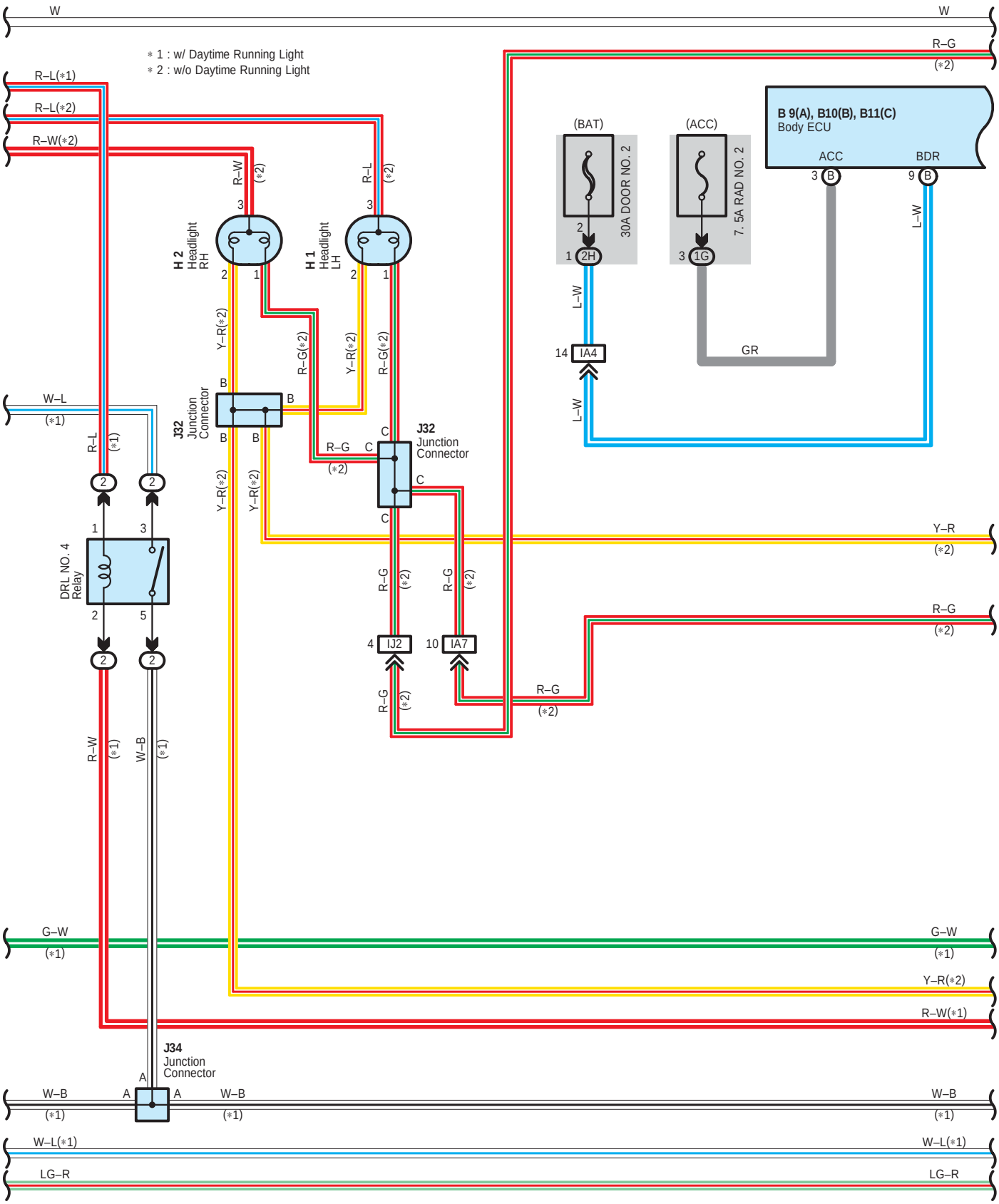
**: Connector Joining Wire Harness and Wire Harness**

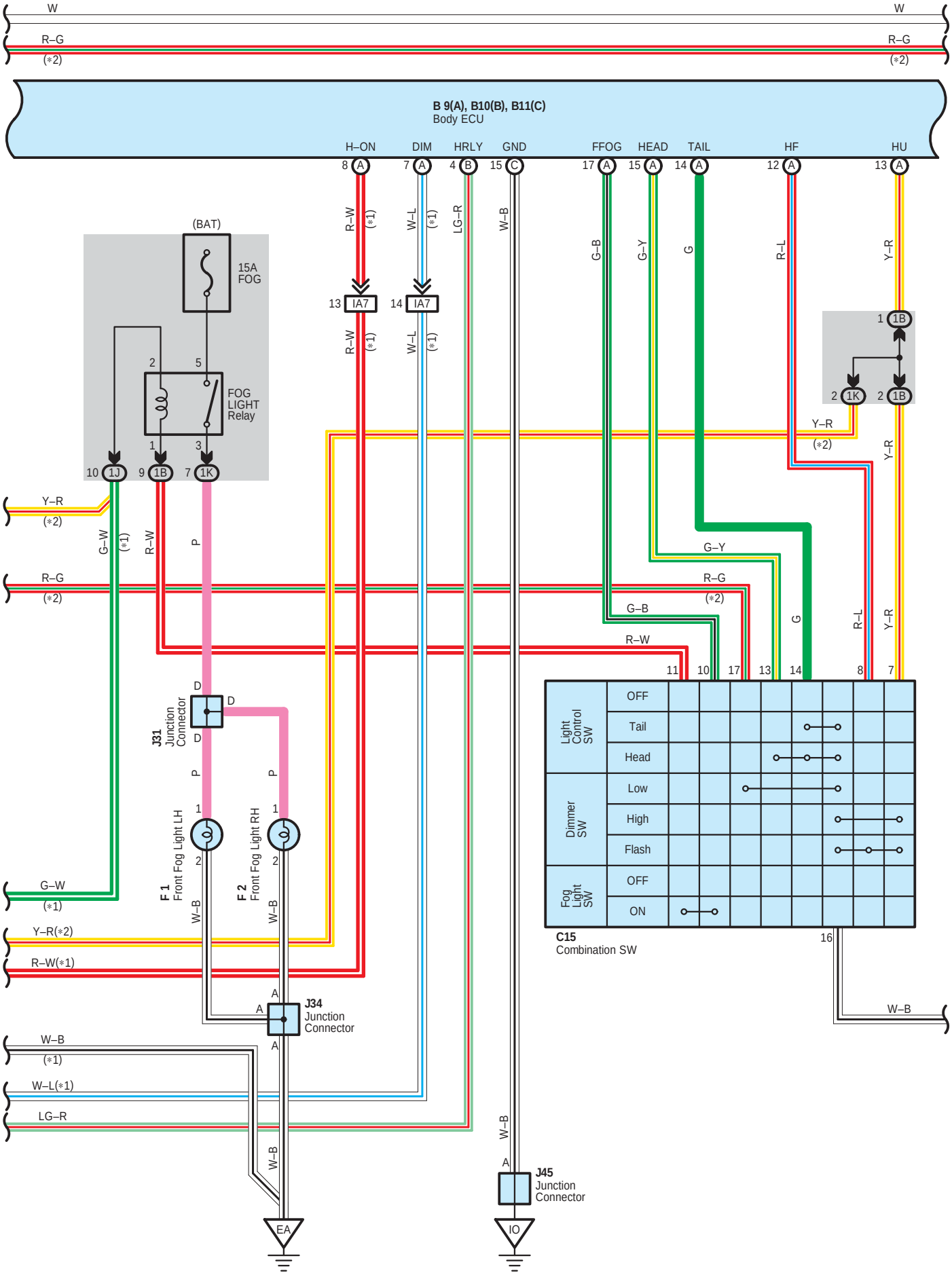
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |

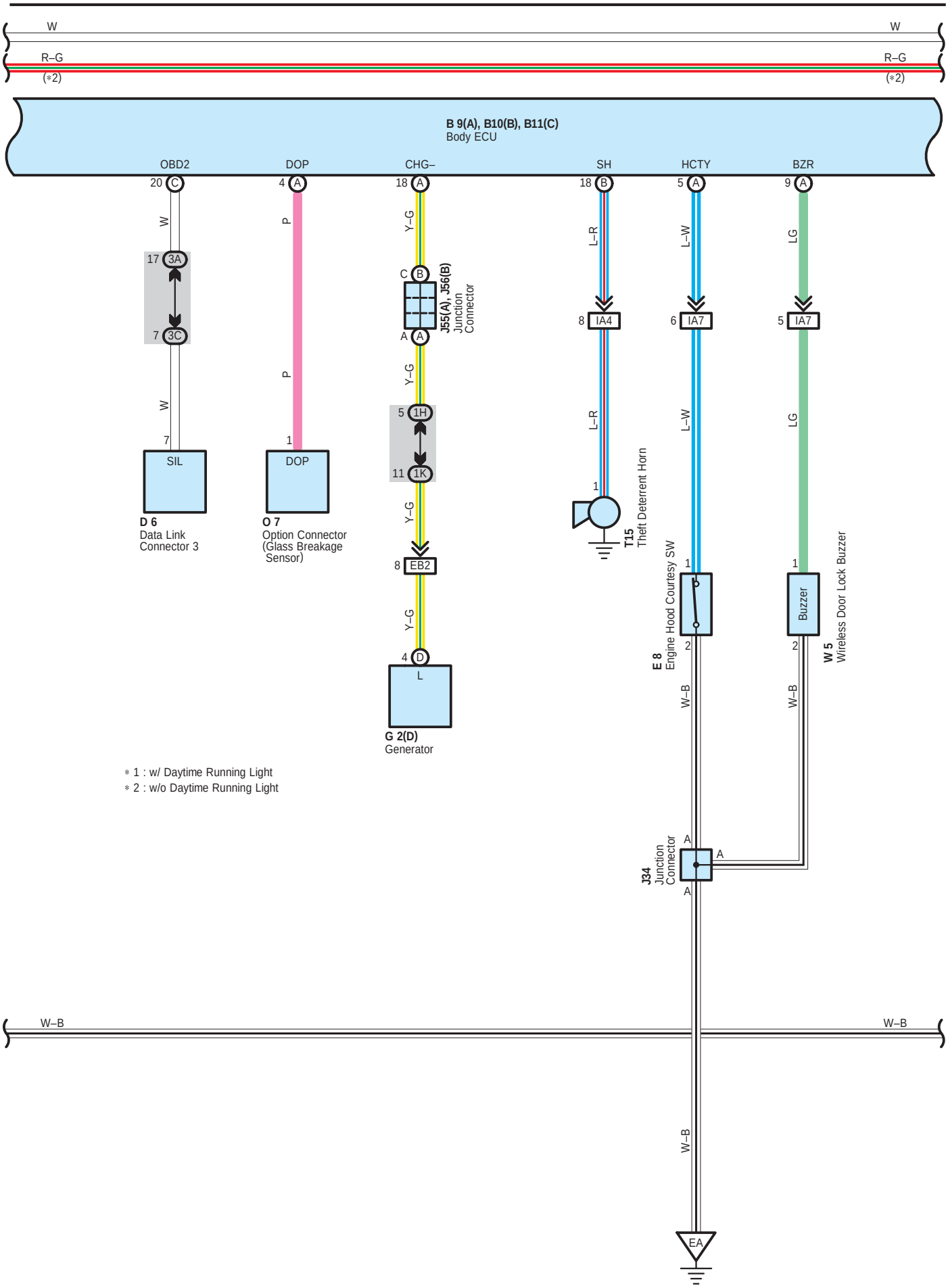
**: Ground Points**

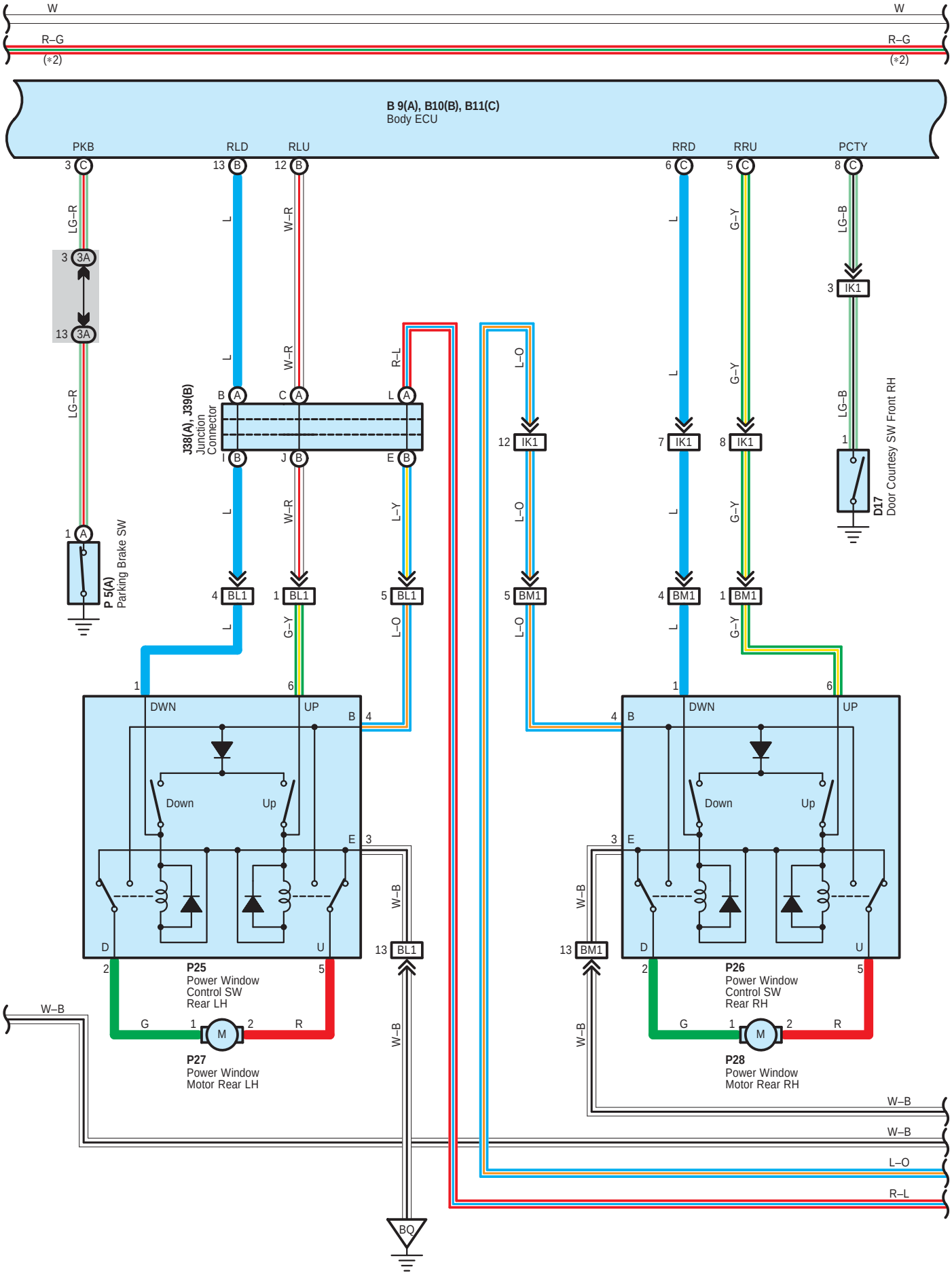
| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |

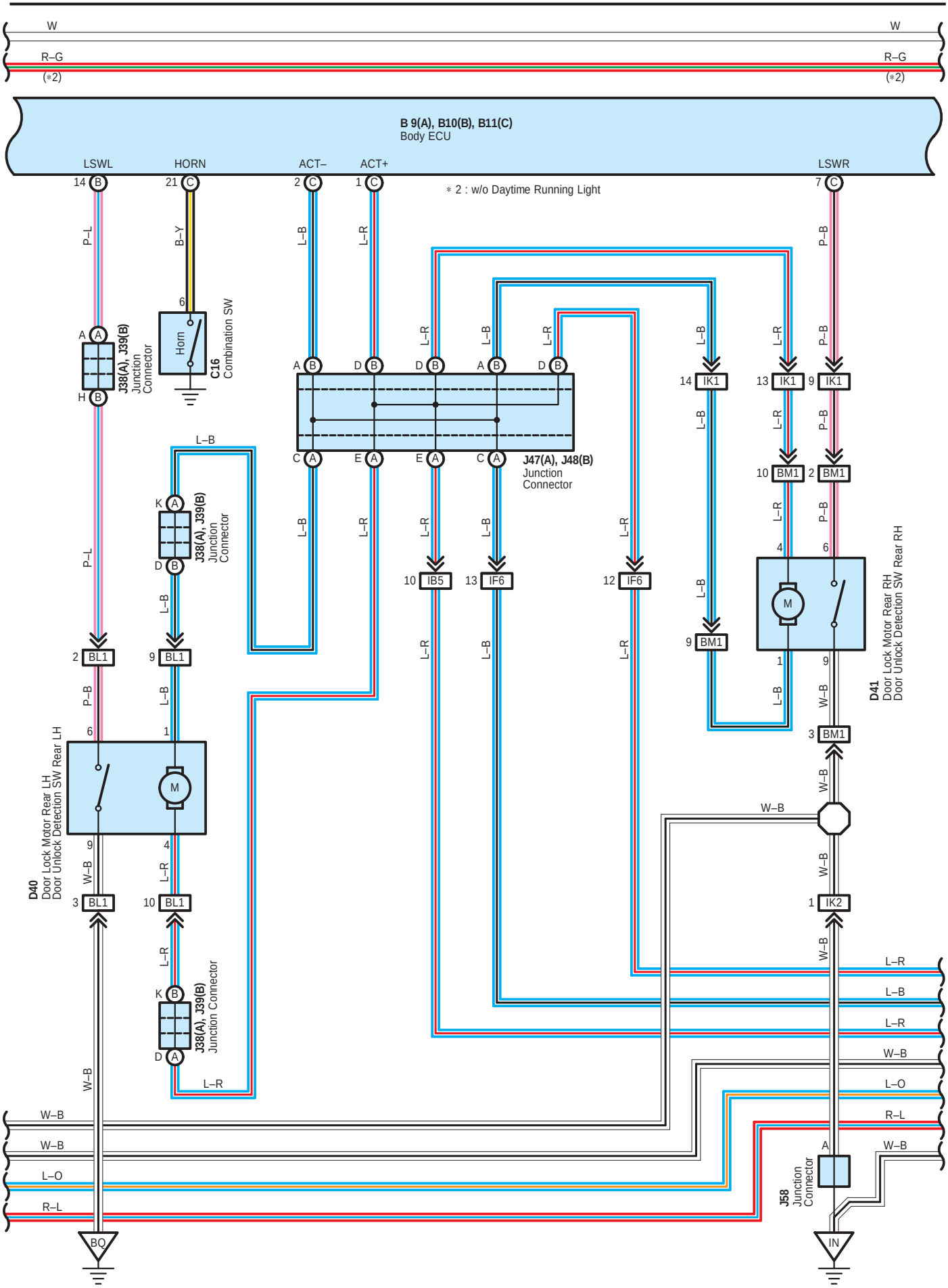

W
R–L(*1)
R–L(*2)
R–W
(*2)
R–L(*1)
R–L(*2)
R–W(*2)
(BAT)
40A
MAIN
HEAD Relay
15A DRL (*1)
15A H–LP LH (*2)
15A H–LP RH
6 2F
8 2F
6 2C
1 2G
LG–R
6 1J
9 1G
LG–R
L
(*1)
W
(*1)
DIMMER
Relay
R–B
(*1)
W–L
(*1)
R–B
(*1)
10A H–LP RH
10A H–LP LH
10A H–LP RL
10A H–LP LL
R–W
(*1)
R–L
(*1)
L
(*1)
R–L
(*1)
G–W
(*1)
G–W
(*1)
W–L
(*1)
H 2
Headlight RH
H 1
Headlight LH
W–L
(*1)
W–L(*1)
J32
Junction
Connector
W–L
(*1)
G–W
(*1)
D 2
Daytime Running
Light Resistor
W–B
(*1)
W–B
(*1)
W–L(*1)
LG–R
W
B
140A ALT
F13
Fusible Link Block
Battery


∗ 1 : w/ Daytime Running Light
∗ 2 : w/o Daytime Running Light
W
R–L(∗1)
R–L(∗2)
R–W(∗2)
R–G
(∗2)
(BAT)
(ACC)
B 9(A), B10(B), B11(C)
Body ECU
ACC
BDR
30A DOOR NO. 2
7. 5A RAD NO. 2
H 2
Headlight
RH
H 1
Headlight
LH
R–W
R–L
L–W
Y–R(∗2)
R–G(∗2)
W–L
(∗1)
J32
Junction
Connector
J34
Junction
Connector
DRL NO. 4
Relay
IA4
IJ2
IA7
GR
Y–R
G–W
W–B
W–L(∗1)
LG–R
Y–R(∗2)
R–W(∗1)

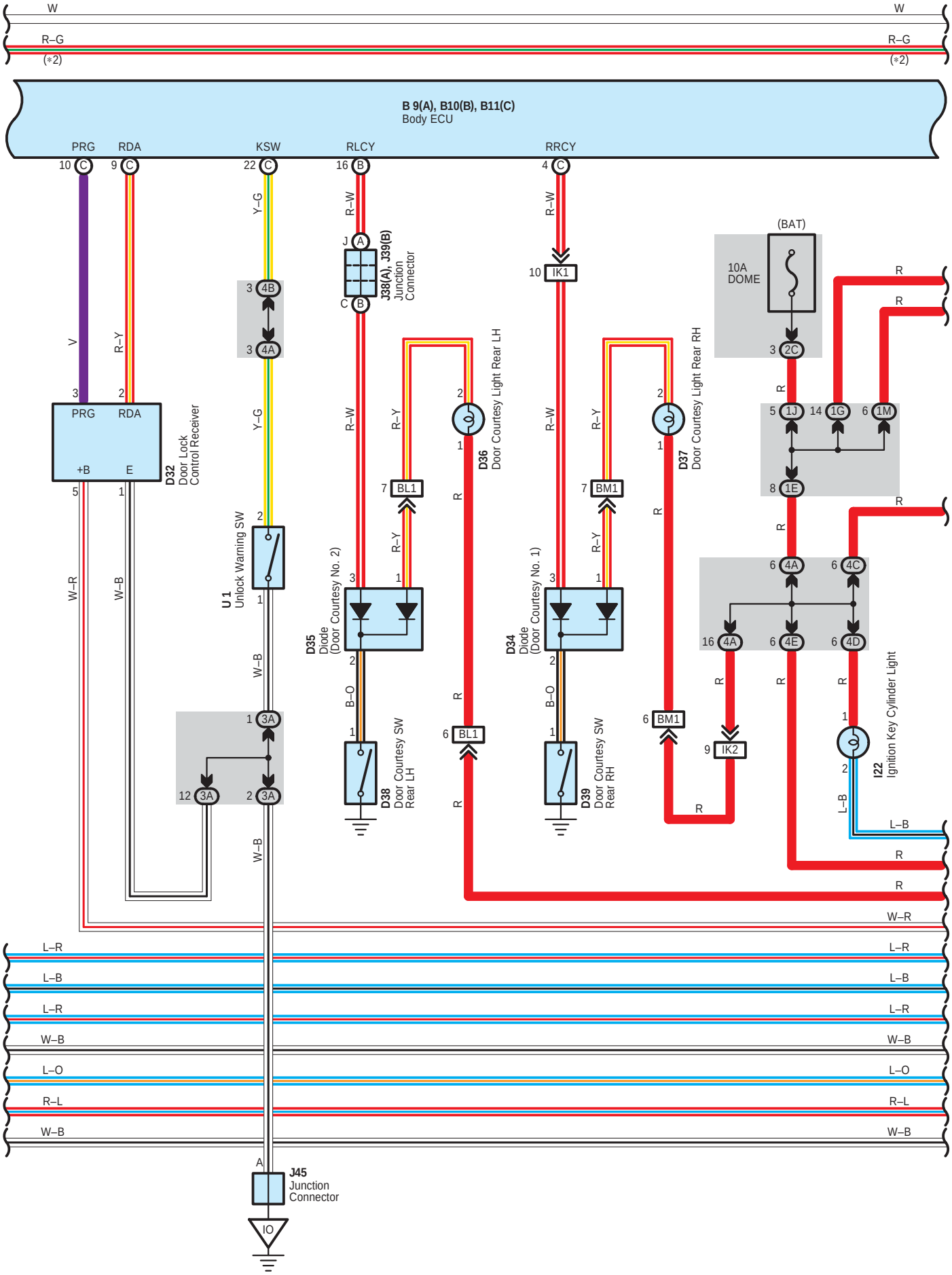

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
H–ON
DIM
HRLY
GND
FFOG
HEAD
TAIL
HF
HU
(BAT)
15A
FOG
FOG
LIGHT
Relay
IA7
IA7
R–W
(*1)
W–L
(*1)
LG–R
W–B
G–B
G–Y
G
R–L
Y–R
1B
1K
1J
Y–R
(*2)
G–W
(*1)
P
R–G
(*2)
G–Y
R–G
(*2)
G–B
R–W
J31
Junction
Connector
F 1
Front Fog Light LH
F 2
Front Fog Light RH
G–W
(*1)
Y–R(*2)
R–W(*1)
J34
Junction
Connector
W–B
(*1)
W–L(*1)
LG–R
EA
J45
Junction
Connector
IO
Light
Control
SW
OFF
Tail
Head
Dimmer
SW
Low
High
Flash
Fog
Light
SW
OFF
ON
C15
Combination SW
W–B

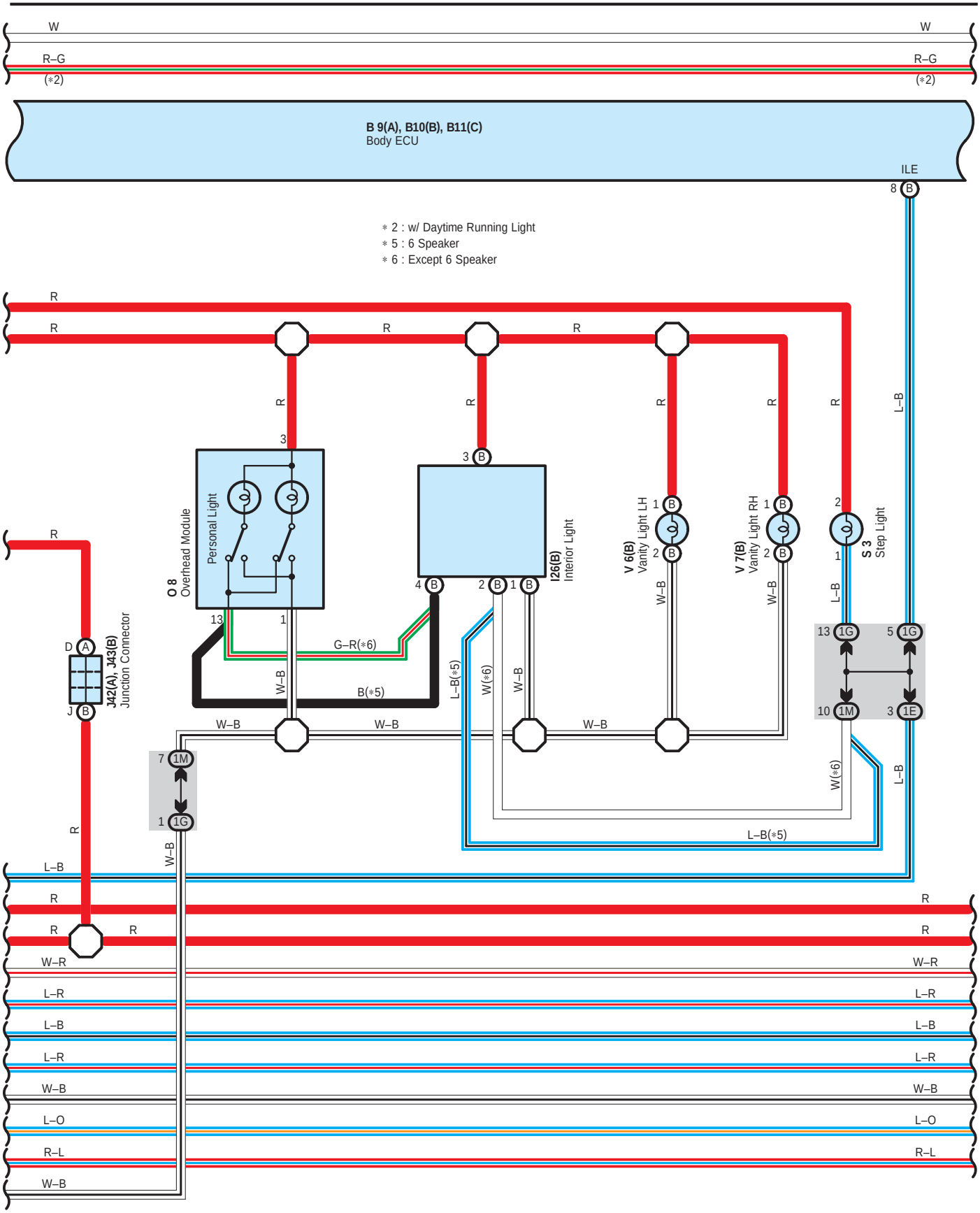

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
OBD2
DOP
CHG–
SH
HCTY
BZR
20 C
W
17 3A
7 3C
W
7
SIL
D 6
Data Link
Connector 3
4 A
P
P
1
DOP
O 7
Option Connector
(Glass Breakage
Sensor)
18 A
Y–G
C B
J55(A), J56(B)
Junction
Connector
A A
Y–G
5 1H
11 1K
Y–G
8 EB2
Y–G
4 D
L
G 2(D)
Generator
18 B
L–R
8 IA4
L–R
1
T15
Theft Deterrent Horn
5 A
L–W
6 IA7
L–W
1
2
W–B
E 8
Engine Hood Courtesy SW
9 A
LG
5 IA7
LG
1
Buzzer
2
W–B
W 5
Wireless Door Lock Buzzer
J34
Junction
Connector
A
A
A
W–B
W–B
W–B
EA
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light

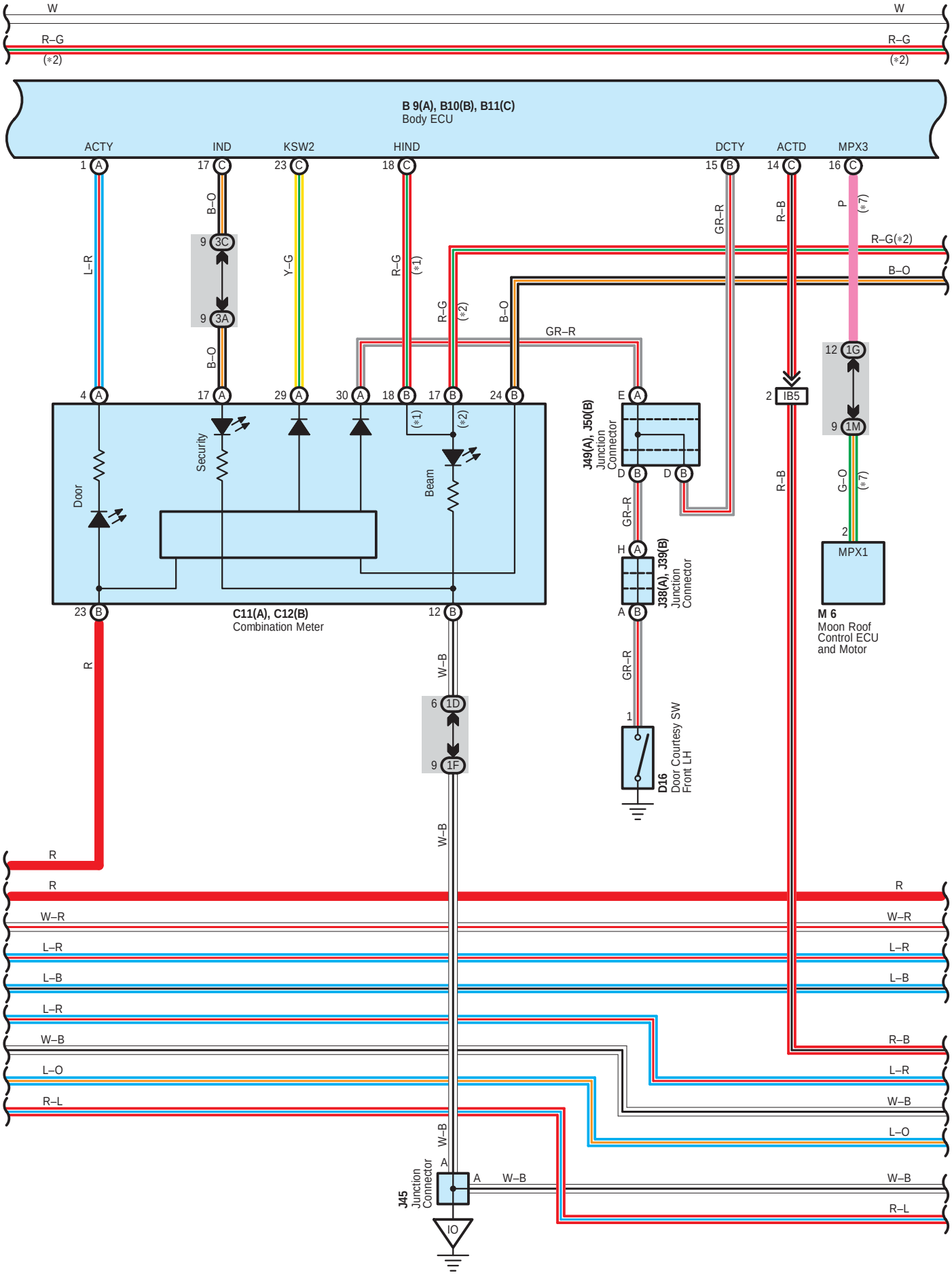

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
PKB
RLD
RLU
RRD
RRU
PCTY
LG–R
L
W–R
R–L
L–O
G–Y
LG–B
3A
IK1
BL1
BM1
J38(A), J39(B)
Junction Connector
P 5(A)
Parking Brake SW
D17
Door Courtesy SW Front RH
DWN
UP
Down
Up
P25
Power Window Control SW Rear LH
P26
Power Window Control SW Rear RH
P27
Power Window Motor Rear LH
P28
Power Window Motor Rear RH
W–B
G
R
M
BQ

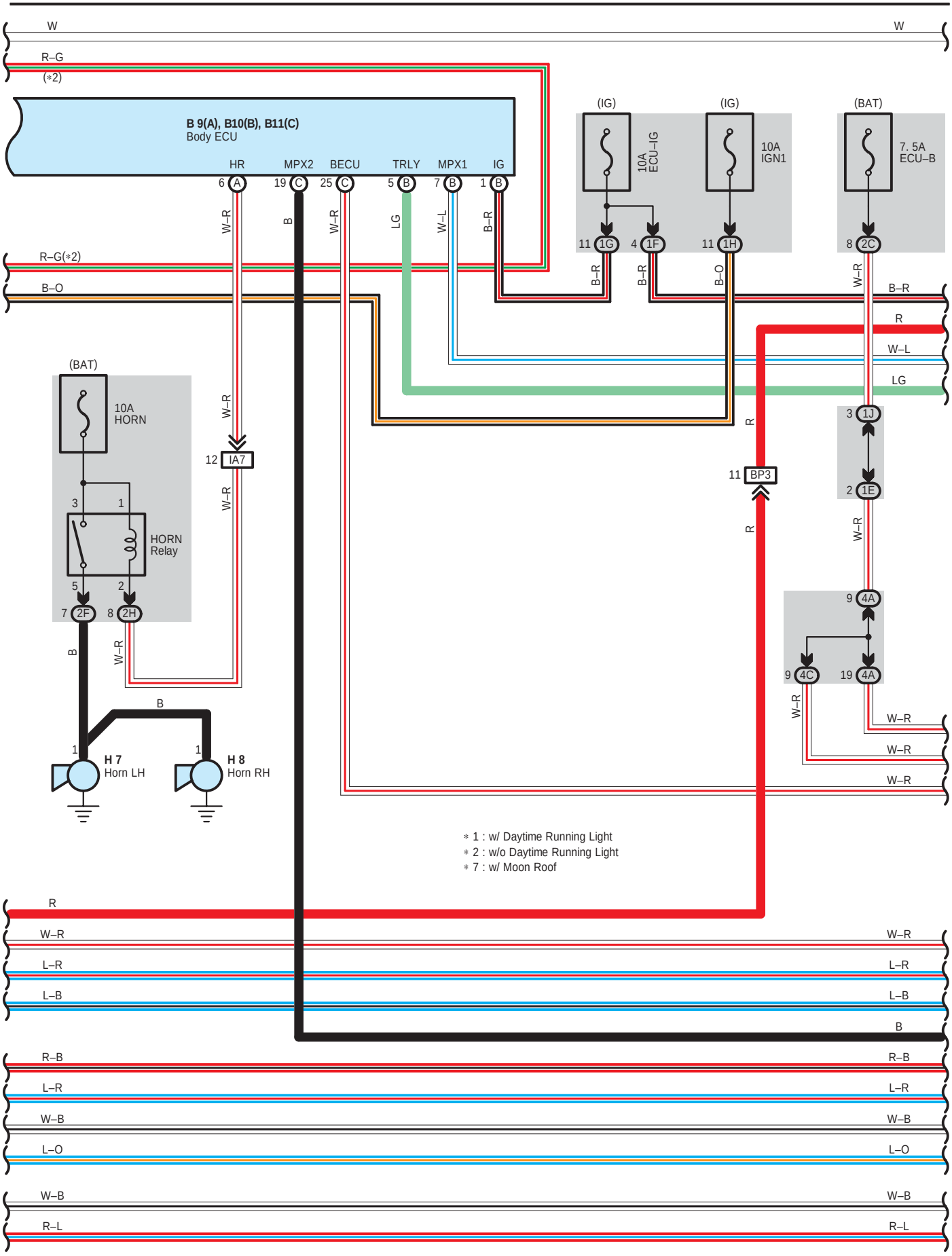

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
LSWL
HORN
ACT–
ACT+
LSWR
* 2 : w/o Daytime Running Light
J38(A), J39(B) Junction Connector
C16 Combination SW
Horn
J47(A), J48(B) Junction Connector
D40 Door Lock Motor Rear LH Door Unlock Detection SW Rear LH
D41 Door Lock Motor Rear RH Door Unlock Detection SW Rear RH
J58 Junction Connector
BQ
IN

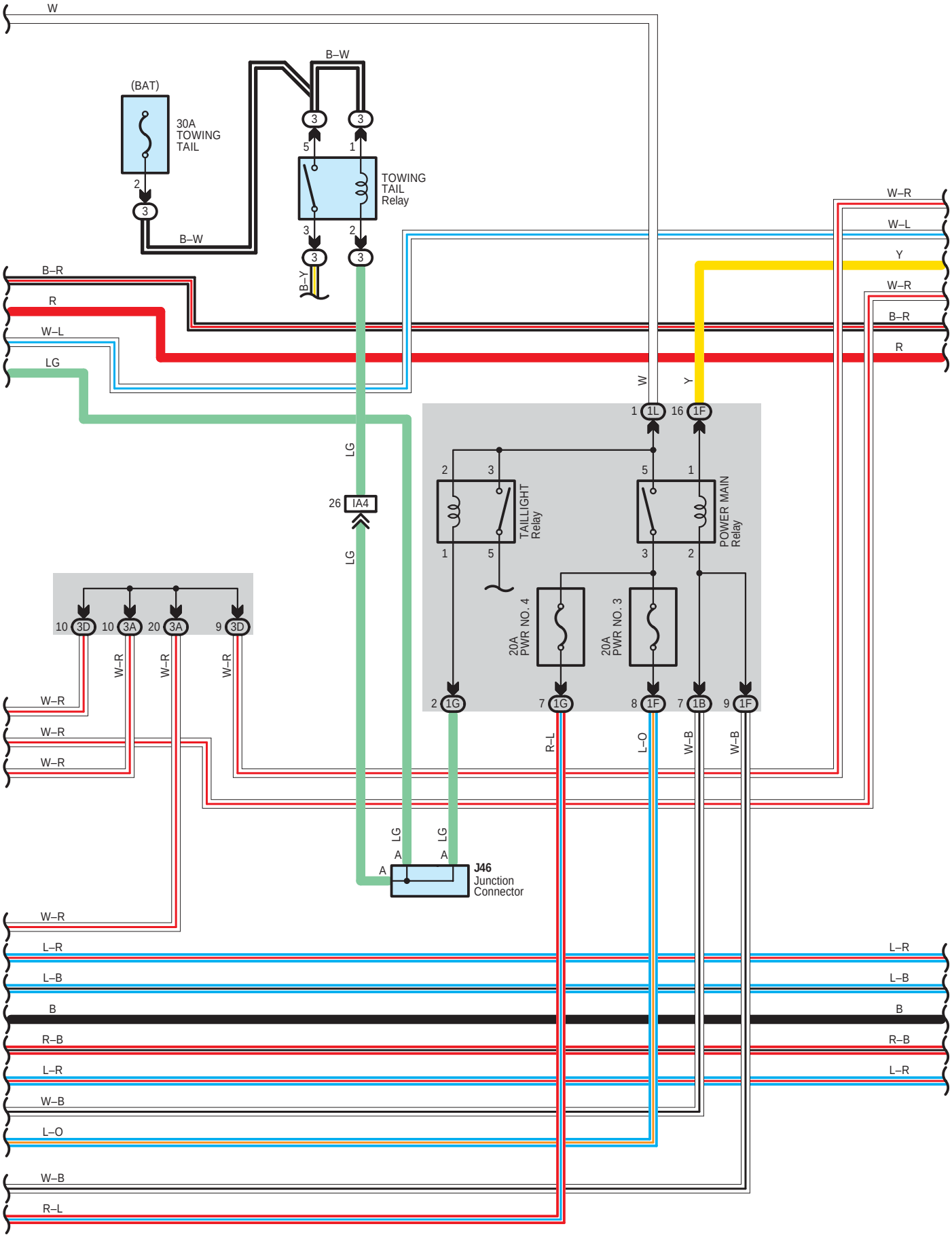
# Multiplex Communication System – BEAN (Double Cab)

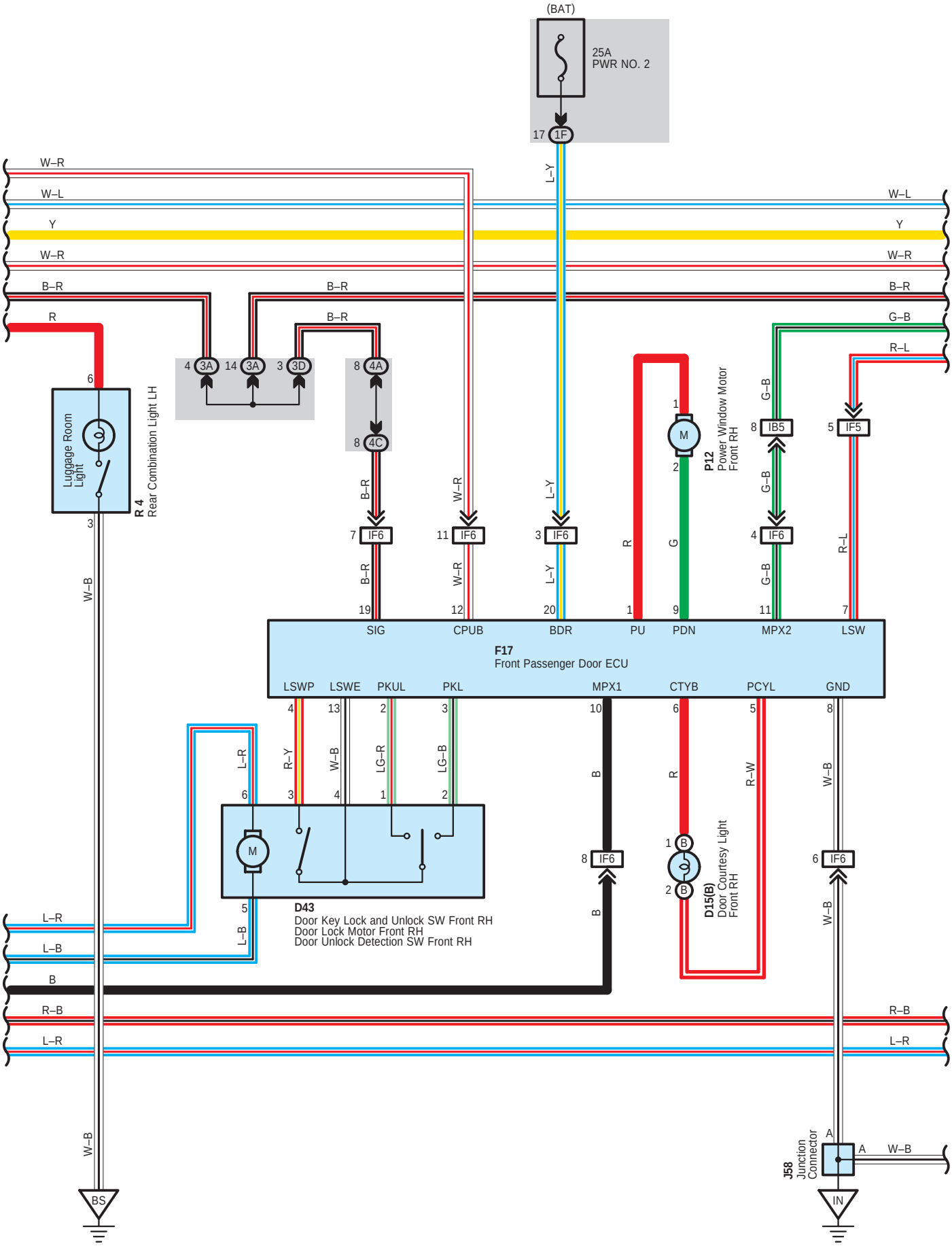


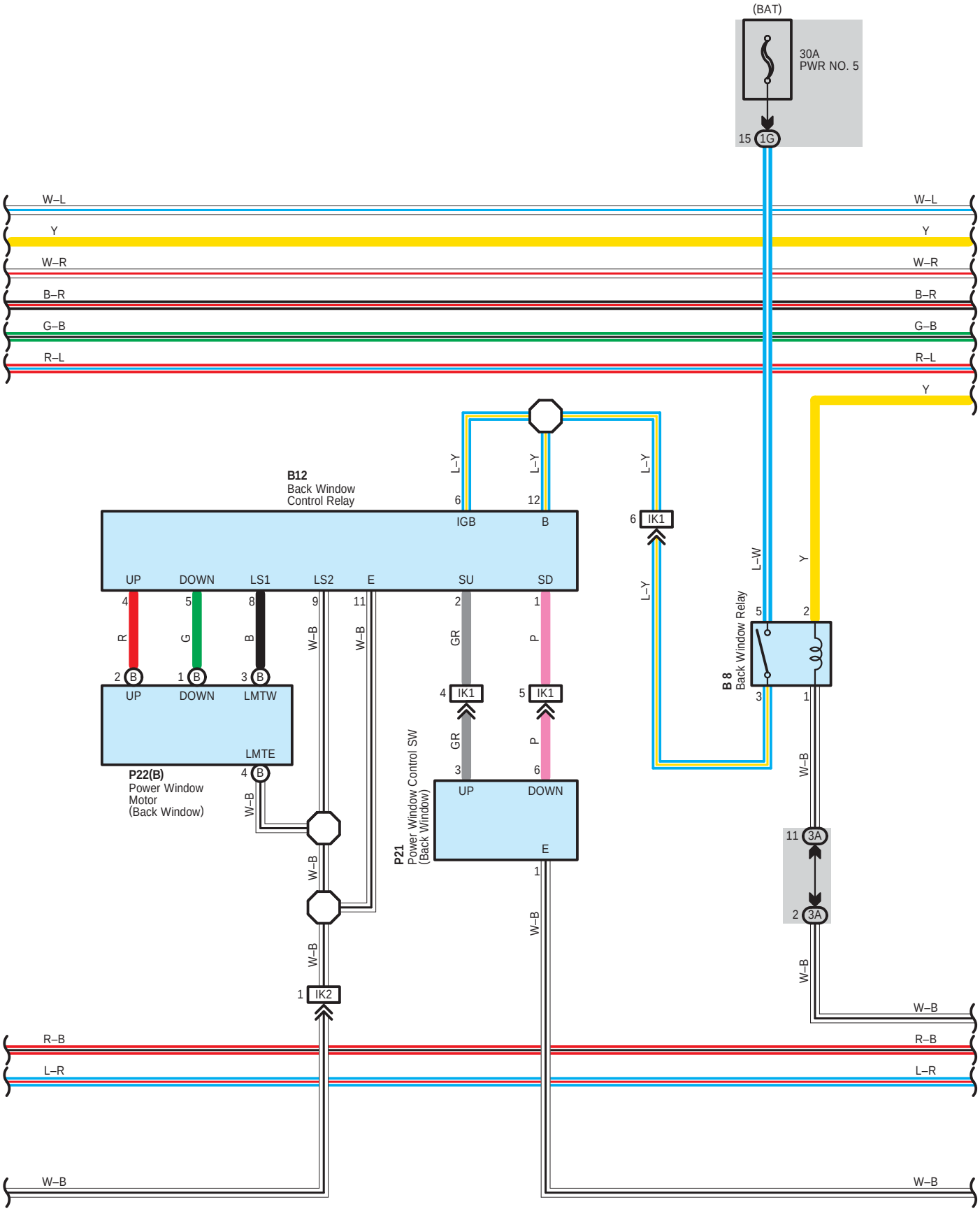

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
ILE
8 B
* 2 : w/ Daytime Running Light
* 5 : 6 Speaker
* 6 : Except 6 Speaker
R
R
R
R
R
R
R
R
R
L–B
3
3 B
O 8
Overhead Module
Personal Light
I26(B)
Interior Light
V 6(B)
Vanity Light LH
V 7(B)
Vanity Light RH
S 3
Step Light
4 B
2 B
1 B
1 B
2 B
1 B
2 B
2
1
L–B
13
1
G–R(*6)
W–B
B(*5)
L–B(*5)
W(*6)
W–B
W–B
W–B
W–B
13 1G
5 1G
10 1M
3 1E
W(*6)
L–B
L–B(*5)
D A
J B
J42(A), J43(B)
Junction Connector
7 1M
1 1G
W–B
R
L–B
R
R
R
R
W–R
L–R
L–B
L–R
W–B
L–O
R–L
W–B
R
R
W–R
L–R
L–B
L–R
W–B
L–O
R–L

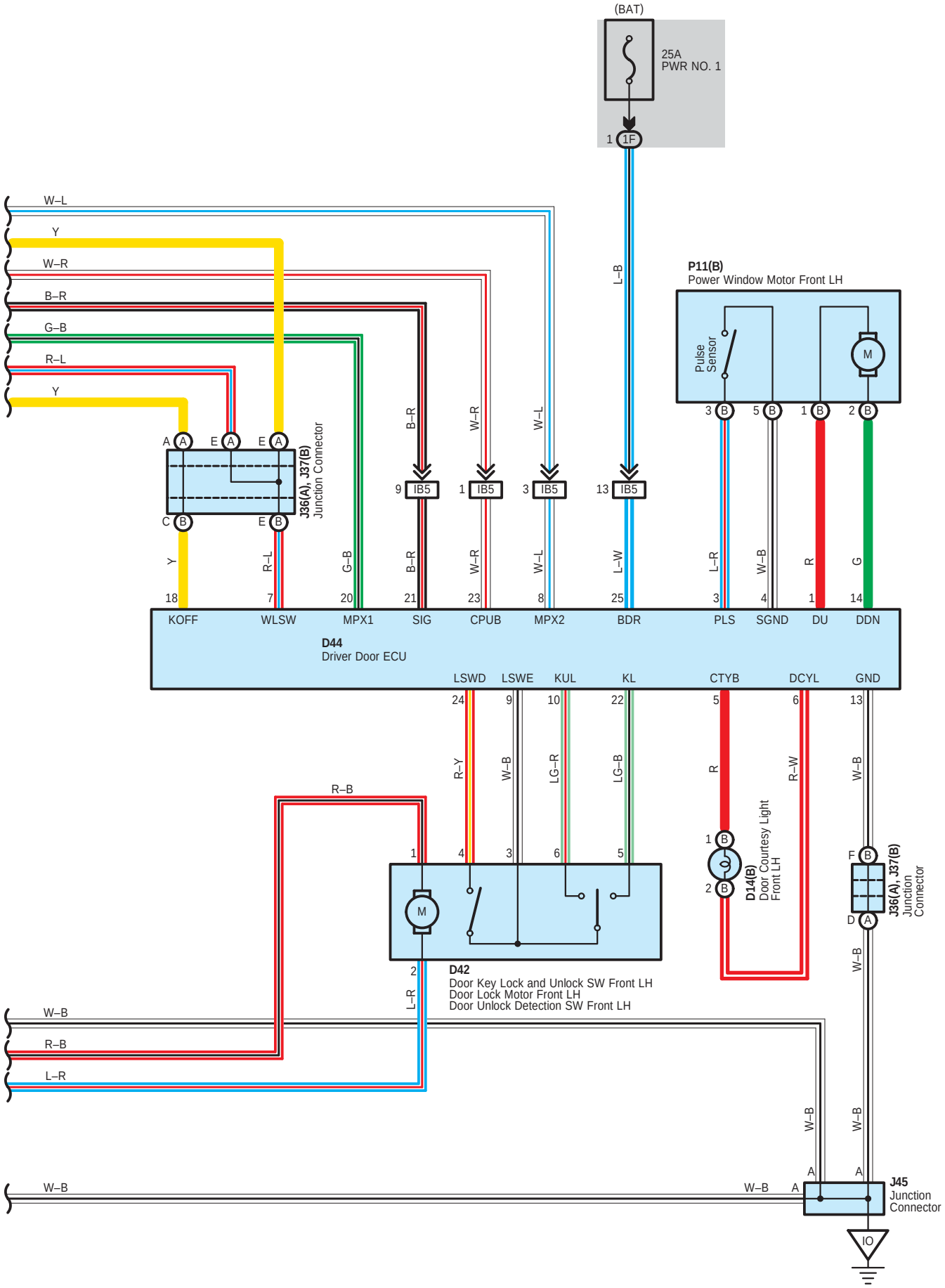

W
R–G
(*2)
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
ACTY
IND
KSW2
HIND
DCTY
ACTD
MPX3
1 A
17 C
23 C
18 C
15 B
14 C
16 C
L–R
B–O
Y–G
R–G
(*1)
GR–R
R–B
P
(*7)
R–G(*2)
B–O
9 3C
9 3A
4 A
17 A
29 A
30 A
18 B
17 B
24 B
E A
2 IB5
12 1G
9 1M
Door
Security
Beam
J49(A), J50(B)
Junction
Connector
D B
D B
G–O
2
MPX1
M 6
Moon Roof
Control ECU
and Motor
H A
J38(A), J39(B)
Junction
Connector
A B
23 B
12 B
C11(A), C12(B)
Combination Meter
R
W–B
6 1D
9 1F
1
D16
Door Courtesy SW
Front LH
R
W–R
L–R
L–B
W–B
L–O
R–L
J45
Junction
Connector
A
IO


W
W
R–G
(*2)
B 9(A), B10(B), B11(C)
Body ECU
HR
MPX2
BECU
TRLY
MPX1
IG
6 A
19 C
25 C
5 B
7 B
1 B
W–R
B
W–R
LG
W–L
B–R
(IG)
(IG)
(BAT)
10A
ECU–IG
10A
IGN1
7. 5A
ECU–B
11 1G
4 1F
11 1H
8 2C
B–R
B–R
B–O
W–R
R–G(*2)
B–O
B–R
R
W–L
LG
(BAT)
10A
HORN
12 IA7
W–R
3 1J
R
11 BP3
2 1E
W–R
3
1
HORN
Relay
5
2
7 2F
8 2H
R
9 4A
B
W–R
9 4C
19 4A
W–R
B
W–R
W–R
1
H 7
Horn LH
1
H 8
Horn RH
W–R
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light
* 7 : w/ Moon Roof
R
W–R
W–R
L–R
L–R
L–B
L–B
B
R–B
R–B
L–R
L–R
W–B
W–B
L–O
L–O
W–B
W–B
R–L
R–L


W
B–W
(BAT)
30A
TOWING
TAIL
2
3
B–W
5
1
TOWING
TAIL
Relay
3
2
3
3
B–Y
B–R
R
W–L
LG
W–R
W–L
Y
W–R
B–R
R
W
Y
1
1L
16
1F
2
3
TAILLIGHT
Relay
5
1
POWER MAIN
Relay
1
5
3
2
20A
PWR NO. 4
20A
PWR NO. 3
LG
26
IA4
LG
10
3D
10
3A
20
3A
9
3D
W–R
W–R
W–R
W–R
W–R
W–R
2
1G
7
1G
8
1F
7
1B
9
1F
R–L
L–O
W–B
W–B
LG
A
LG
A
A
J46
Junction
Connector
W–R
L–R
L–B
B
R–B
L–R
W–B
L–O
W–B
R–L
L–R
L–B
B
R–B
L–R


(BAT)
25A
PWR NO. 2
17 1F
W–R
W–L
Y
W–R
B–R
R
L–Y
W–L
Y
W–R
B–R
G–B
R–L
4 3A 14 3A 3 3D
8 4A
8 4C
6
Luggage Room Light
R 4
Rear Combination Light LH
3
W–B
B–R
W–R
L–Y
R
G
P12
Power Window Motor Front RH
G–B
R–L
8 IB5
5 IF5
7 IF6
11 IF6
3 IF6
4 IF6
19
12
20
1
9
11
7
SIG
CPUB
BDR
PU
PDN
MPX2
LSW
F17
Front Passenger Door ECU
LSWP
LSWE
PKUL
PKL
MPX1
CTYB
PCYL
GND
4
13
2
3
10
6
5
8
L–R
R–Y
W–B
LG–R
LG–B
B
R
R–W
W–B
6
3
4
1
2
8 IF6
1 B
2 B
6 IF6
M
5
L–B
D43
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D15(B)
Door Courtesy Light Front RH
L–R
L–B
B
R–B
L–R
W–B
BS
J58
Junction Connector
A
A
W–B
IN


(BAT)
30A
PWR NO. 5
15 1G
W–L
Y
W–R
B–R
G–B
R–L
B12
Back Window
Control Relay
IGB
B
UP
DOWN
LS1
LS2
E
SU
SD
6
12
6 IK1
L–Y
L–W
Y
B 8
Back Window Relay
5
2
3
1
4 R 2 B
5 G 1 B
8 B 3 B
9 W–B
11 W–B
2 GR
1 P
4 IK1
5 IK1
UP
DOWN
LMTW
LMTE
P22(B)
Power Window
Motor
(Back Window)
4 B
W–B
P21
Power Window Control SW
(Back Window)
3 GR
6 P
UP
DOWN
E
1
W–B
11 3A
2 3A
1 IK2
R–B
L–R
W–B


(BAT)
25A
PWR NO. 1
1F
W–L
Y
W–R
B–R
G–B
R–L
Y
L–B
P11(B)
Power Window Motor Front LH
Pulse Sensor
M
3 B
5 B
1 B
2 B
A A
E A
E A
J36(A), J37(B)
Junction Connector
C B
E B
9 IB5
1 IB5
3 IB5
13 IB5
B–R
W–R
W–L
L–W
L–R
W–B
R
G
Y
R–L
G–B
B–R
W–R
W–L
L–W
18
7
20
21
23
8
25
3
4
1
14
KOFF
WLSW
MPX1
SIG
CPUB
MPX2
BDR
PLS
SGND
DU
DDN
D44
Driver Door ECU
LSWD
LSWE
KUL
KL
CTYB
DCYL
GND
24
9
10
22
5
6
13
R–Y
W–B
LG–R
LG–B
R
R–W
W–B
R–B
1
4
3
6
5
M
2
L–R
D42
Door Key Lock and Unlock SW Front LH
Door Lock Motor Front LH
Door Unlock Detection SW Front LH
1 B
2 B
D14(B)
Door Courtesy Light
Front LH
F B
D A
J36(A), J37(B)
Junction
Connector
W–B
R–B
L–R
W–B
W–B
W–B
A
A
W–B
A
J45
Junction
Connector
IO

# Multiplex Communication System – BEAN (Double Cab)

**System Outline**

This multiplex communication system is consisted of the BODY ECU, driver door ECU, passenger door ECU and sliding roof control ECU.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B8 | 72 | D44 | 76 | J49 A | 74 |
| B9 A | 72 | E8 | 70 | J50 B | 74 |
| B10 B | 72 | F1 | 70 | J55 A | 74 |
| B11 C | 72 | F2 | 70 | J56 B | 74 |
| B12 | 76 | F13 | 70 | J58 | 74 |
| C11 A | 72 | F17 | 76 | M6 | 76 |
| C12 B | 72 | G2 D | 70 | O7 | 75 |
| C15 | 72 | H1 | 70 | O8 | 76 |
| C16 | 72 | H2 | 70 | P5 A | 75 |
| D2 | 70 | H7 | 70 | P11 B | 77 |
| D6 | 73 | H8 | 70 | P12 | 77 |
| D14 B | 76 | I22 | 73 | P21 | 75 |
| D15 B | 76 | I26 B | 76 | P22 B | 77 |
| D16 | 76 | J31 | 71 | P25 | 77 |
| D17 | 76 | J32 | 71 | P26 | 77 |
| D32 | 73 | J34 | 71 | P27 | 77 |
| D34 | 76 | J36 A | 74 | P28 | 77 |
| D35 | 76 | J37 B | 74 | R4 | 77 |
| D36 | 76 | J38 A | 74 | S3 | 75 |
| D37 | 76 | J39 B | 74 | T15 | 71 |
| D38 | 76 | J42 A | 74 | U1 | 75 |
| D39 | 76 | J43 B | 74 | V6 B | 77 |
| D40 | 76 | J45 | 74 | V7 B | 77 |
| D41 | 76 | J46 | 74 | W5 | 71 |
| D42 | 76 | J47 A | 74 | | |
| D43 | 76 | J48 B | 74 | | |

**⬭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |
| 3 | 43 | Engine Room R/B No.3 (Engine Compartment Left) |

: **Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1D | | |
| 1E | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 1L | | |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |
| 2G | | |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3C | | |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4C | | |
| 4D | | |
| 4E | | |

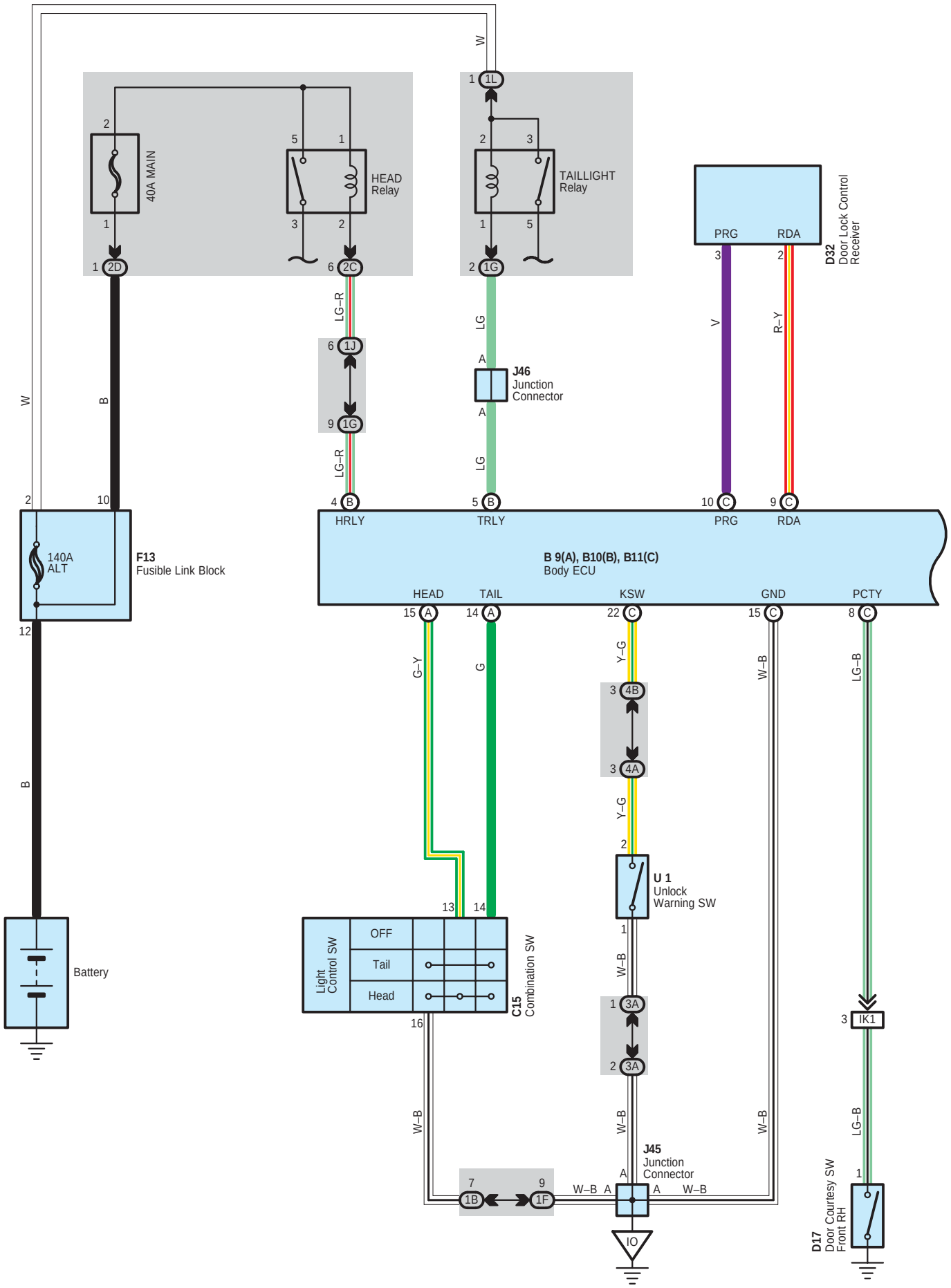
: **Connector Joining Wire Harness and Wire Harness**

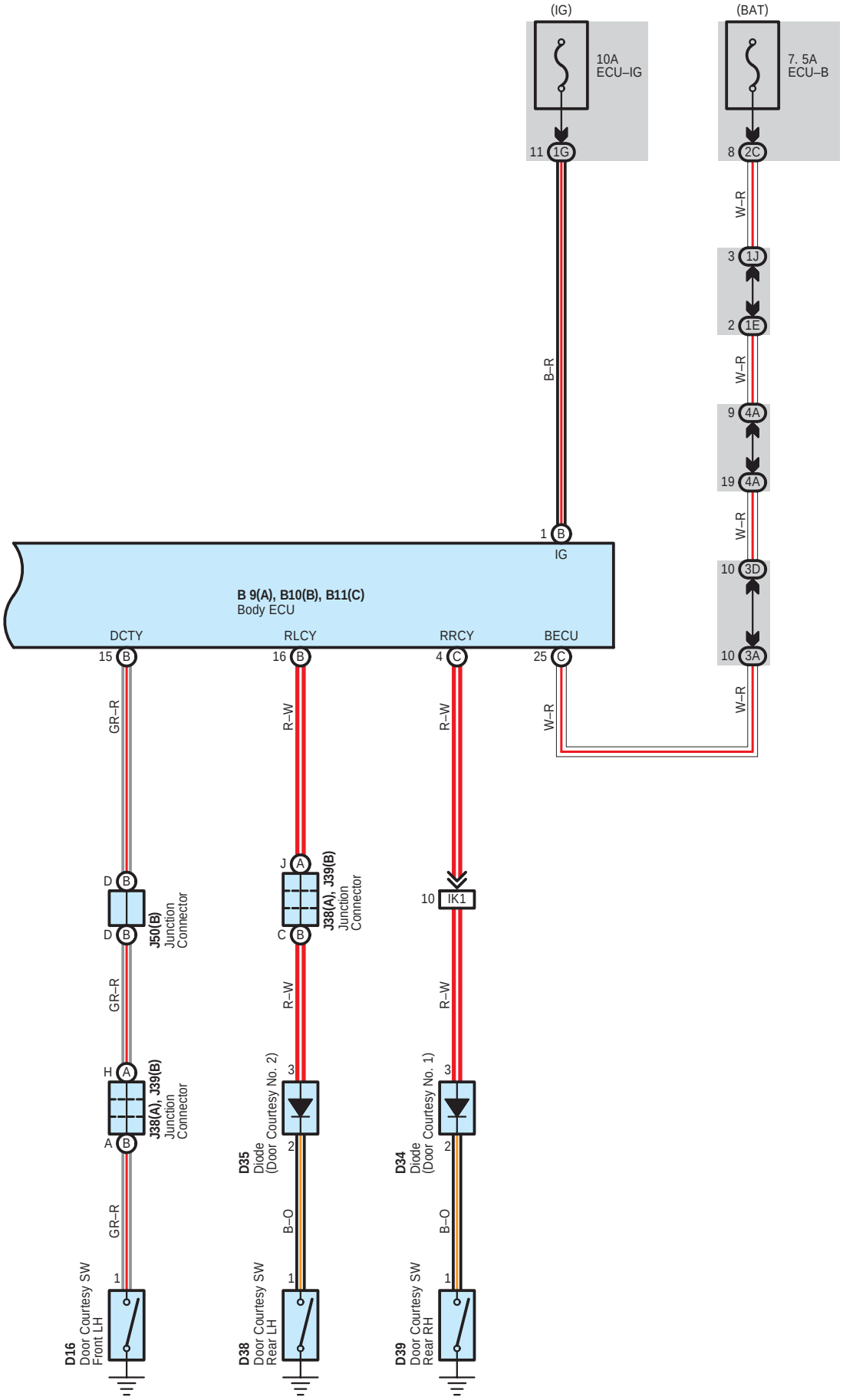
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 90 | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF5 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF6 | | |
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IK2 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

# Light Auto Turn Off System (Double Cab)




(IG)
10A
ECU–IG
11 1G
(BAT)
7. 5A
ECU–B
8 2C
W–R
3 1J
2 1E
W–R
9 4A
19 4A
W–R
10 3D
10 3A
W–R
B–R
1 B
IG
B 9(A), B10(B), B11(C)
Body ECU
DCTY
RLCY
RRCY
BECU
15 B
16 B
4 C
25 C
GR–R
R–W
R–W
W–R
D B
D B
J50(B)
Junction
Connector
J A
C B
J38(A), J39(B)
Junction
Connector
10 IK1
GR–R
R–W
R–W
H A
A B
J38(A), J39(B)
Junction
Connector
3
2
3
2
D35
Diode
(Door Courtesy No. 2)
D34
Diode
(Door Courtesy No. 1)
GR–R
B–O
B–O
1
1
1
D16
Door Courtesy SW
Front LH
D38
Door Courtesy SW
Rear LH
D39
Door Courtesy SW
Rear RH

# Light Auto Turn Off System (Double Cab)

**System Outline**

With the light control SW at TAIL position, and the ignition SW turned to ACC or OFF position from ON or ST position, the tail lights will be turned off when the driver's door is opened.
When the ignition SW is turned to ACC or OFF position from ON or ST position with the headlights on, the headlights will be turned off 30 seconds after all the doors are closed.
The light goes off immediately when all the doors are locked using the wireless door lock.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | D32 | 73 | J38 A | 74 |
| B10 B | 72 | D34 | 76 | J39 B | 74 |
| B11 C | 72 | D35 | 76 | J45 | 74 |
| C15 | 72 | D38 | 76 | J46 | 74 |
| D16 | 76 | D39 | 76 | J50 B | 74 |
| D17 | 76 | F13 | 70 | U1 | 75 |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1B | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1G | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2D | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |

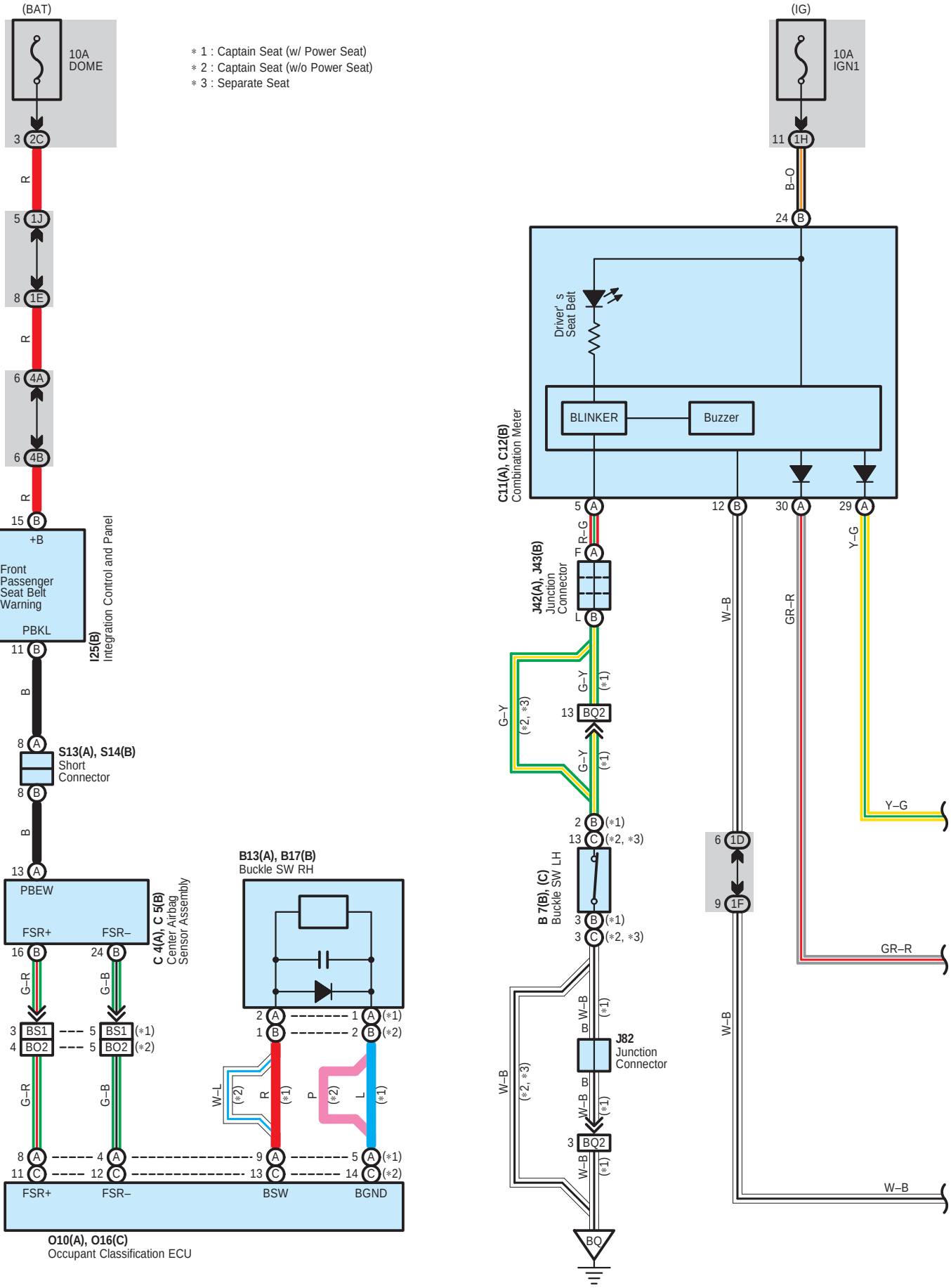
**: Connector Joining Wire Harness and Wire Harness**

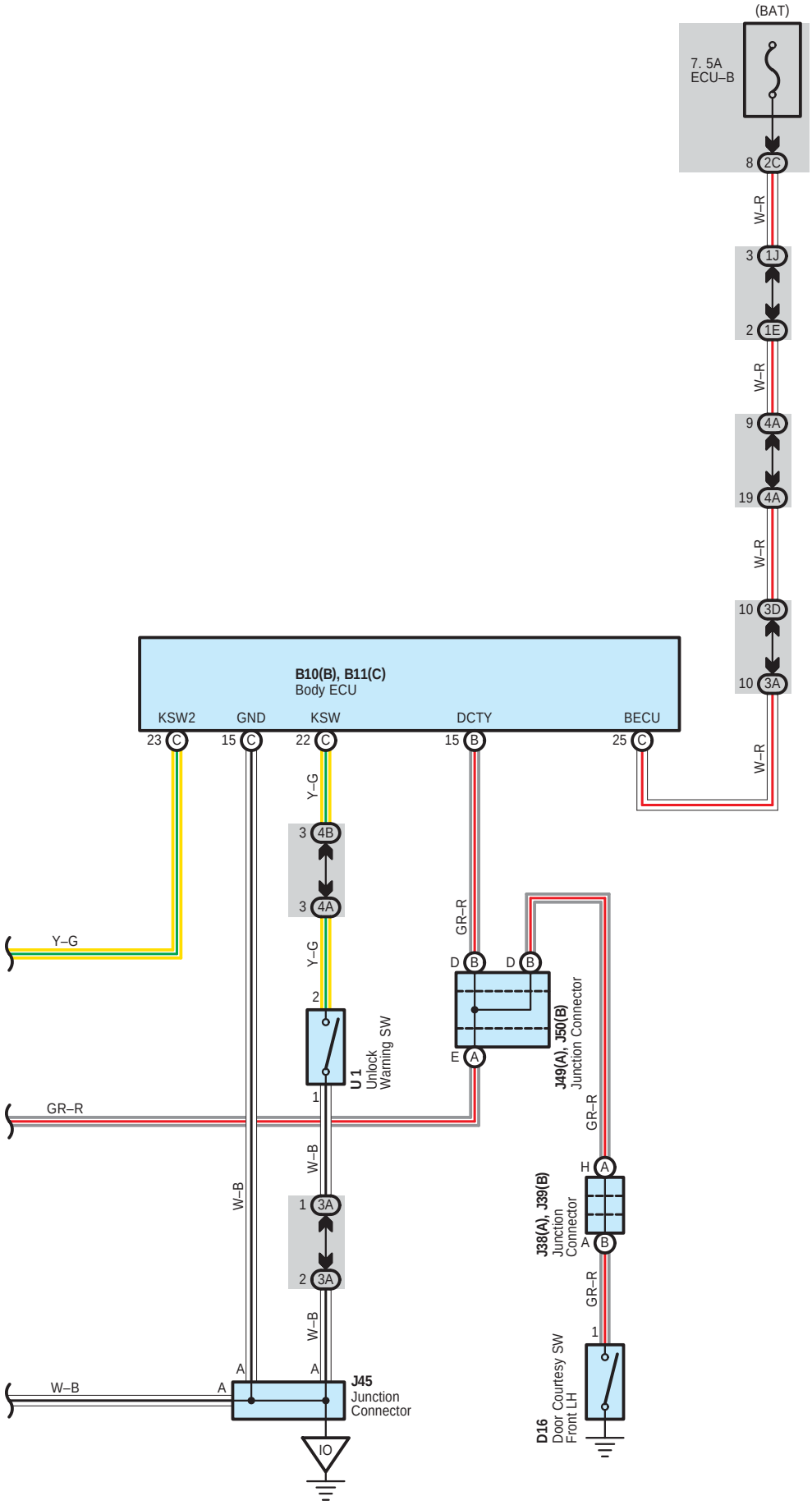
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IO | 92 | Left Kick Panel |

# Key Reminder and Seat Belt Warning (Double Cab)




(BAT)
7. 5A
ECU–B
8 2C
W–R
3 1J
2 1E
W–R
9 4A
19 4A
W–R
10 3D
10 3A
W–R
B10(B), B11(C)
Body ECU
KSW2
GND
KSW
DCTY
BECU
23 C
15 C
22 C
15 B
25 C
Y–G
3 4B
3 4A
Y–G
2
U 1
Unlock
Warning SW
1
GR–R
GR–R
D B
D B
E A
J49(A), J50(B)
Junction Connector
GR–R
H A
A B
J38(A), J39(B)
Junction
Connector
GR–R
1
D16
Door Courtesy SW
Front LH
W–B
1 3A
2 3A
W–B
W–B
A
A
W–B
A
J45
Junction
Connector
IO

# Key Reminder and Seat Belt Warning (Double Cab)

**System Outline**

**1. Seat Belt Warning**

In case the driver has not fastened the seat belt when the ignition SW is turned ON, a warning light flashes, and the warning buzzer goes on.

**2. Key Reminder**

In case the driver's door is opened with the key in the key cylinder and the ignition SW at ACC or OFF position, a warning buzzer goes on.

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B7 | B | 76 | C5 | B | 72 | J45 | | 74 |
| | | 78 (*1) | C11 | A | 72 | J49 | A | 74 |
| | C | 76 | C12 | B | 72 | J50 | B | 74 |
| | | 78 (*1) | D16 | | 76 | J82 | | 78 (*1) |
| B10 | B | 72 | I25 | B | 73 | O10 | A | 78 (*1) |
| B11 | C | 72 | J38 | A | 74 | O16 | C | 79 (*2) |
| B13 | A | 78 (*1) | J39 | B | 74 | S13 | A | 75 |
| B17 | B | 79 (*2) | J42 | A | 74 | S14 | B | 75 |
| C4 | A | 72 | J43 | B | 74 | U1 | | 75 |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |

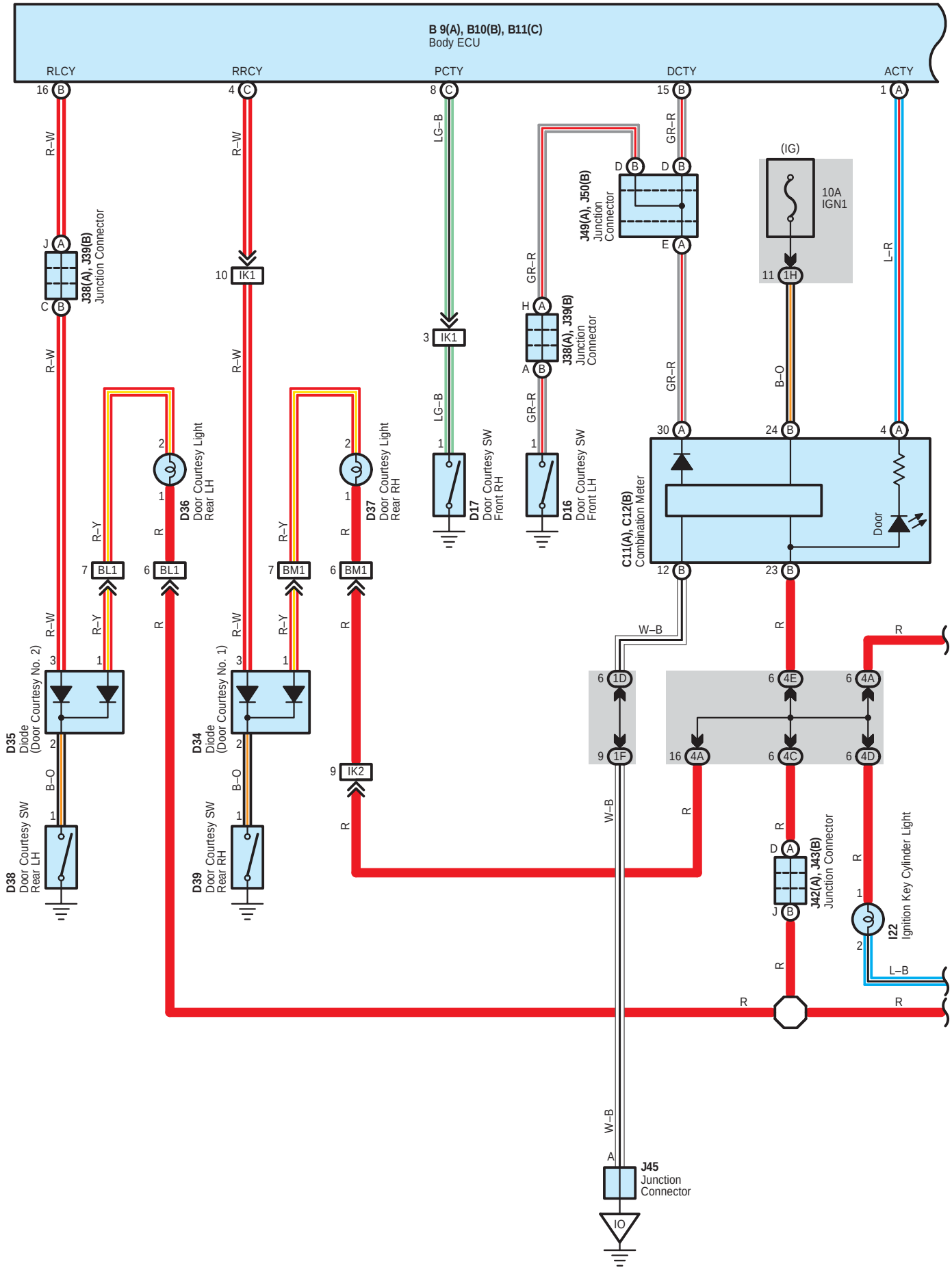
**: Connector Joining Wire Harness and Wire Harness**

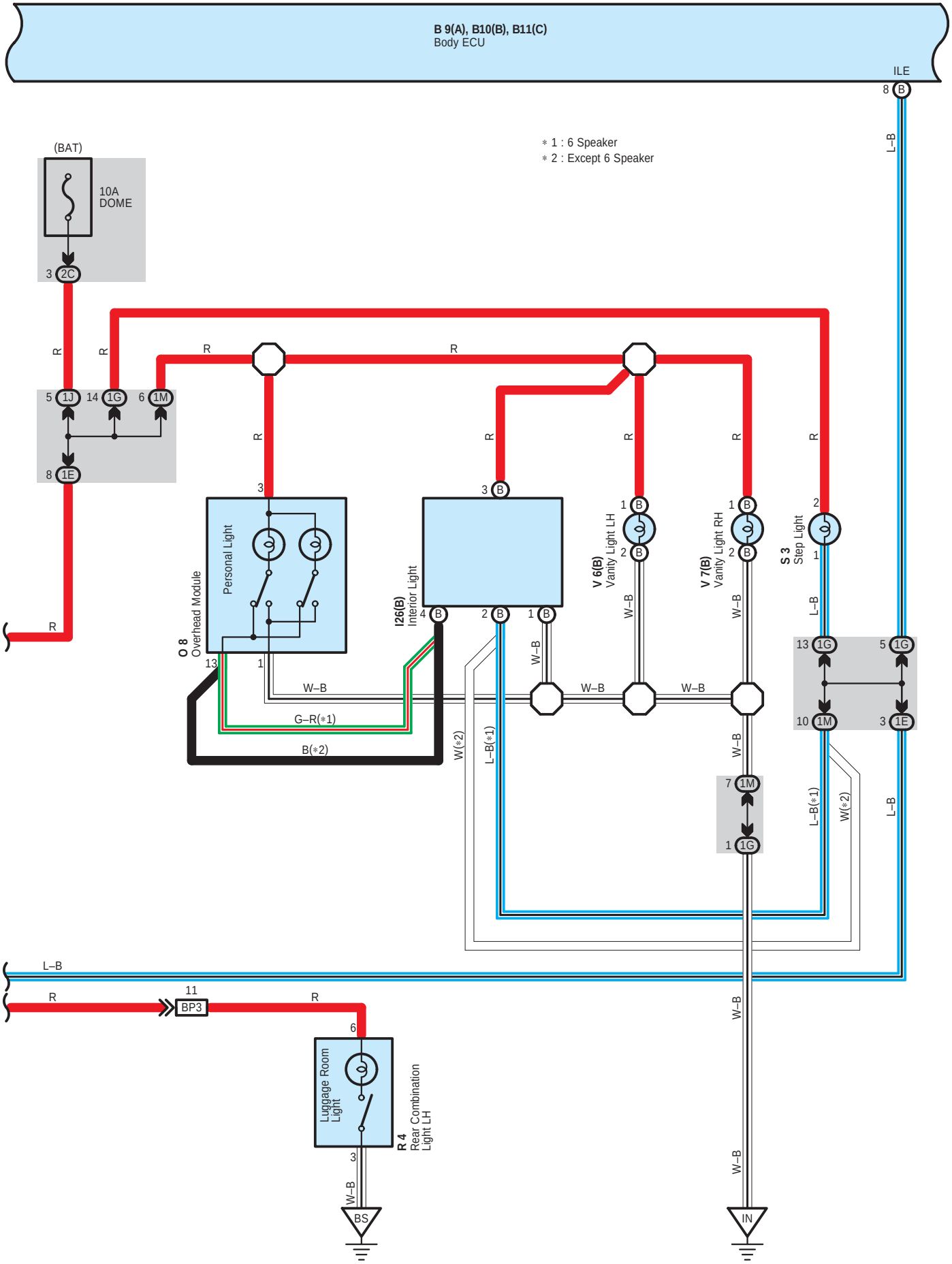
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BO2 | 97 (*2) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |
| BQ2 | 96 (*1) | Floor No.2 Wire and Seat No.2 Wire (Under the Driver's Seat) |
| BS1 | 96 (*1) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |

**▽ : Ground Points**

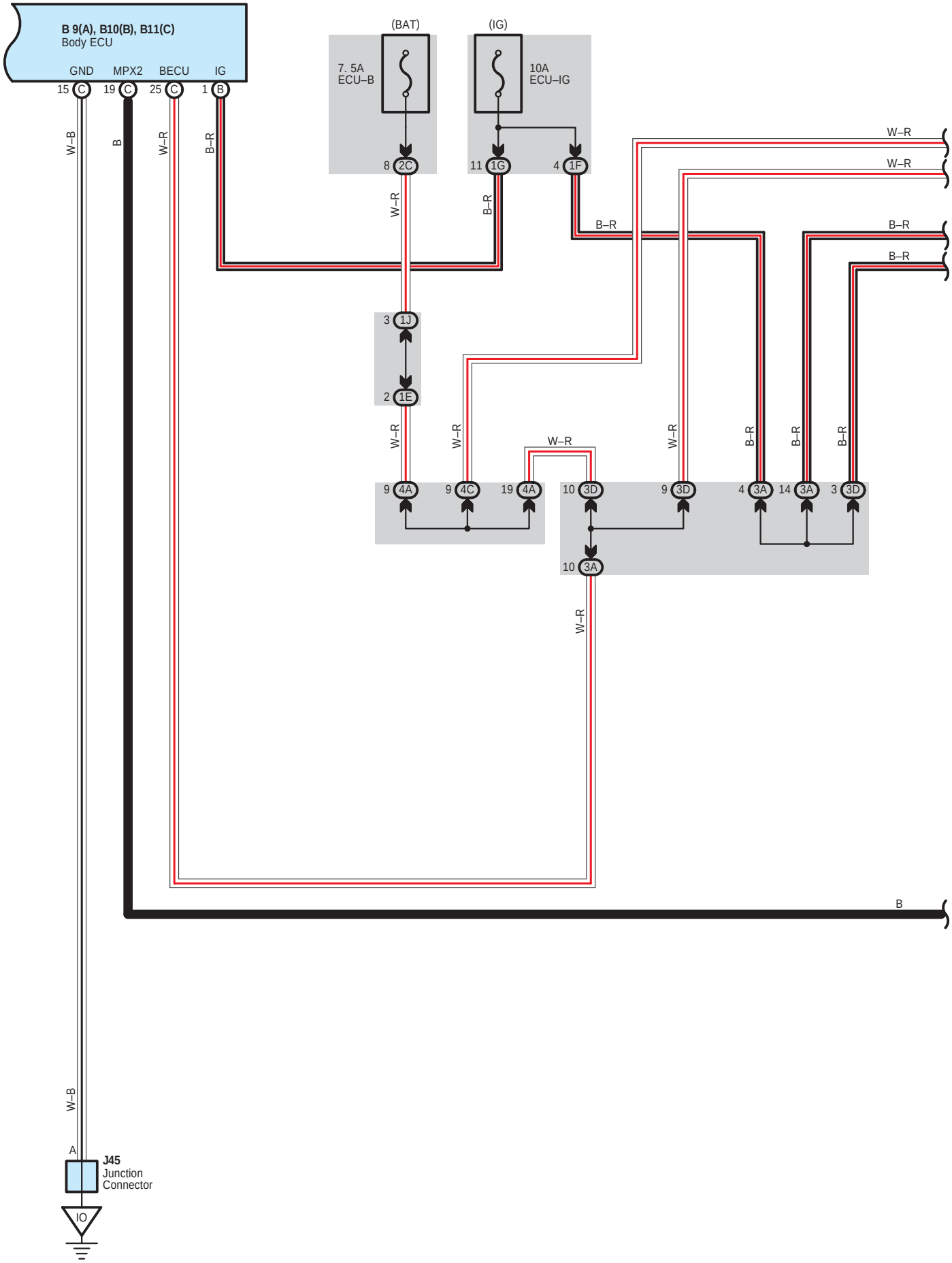
| Code | See Page | Ground Points Location |
|---|---|---|
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |

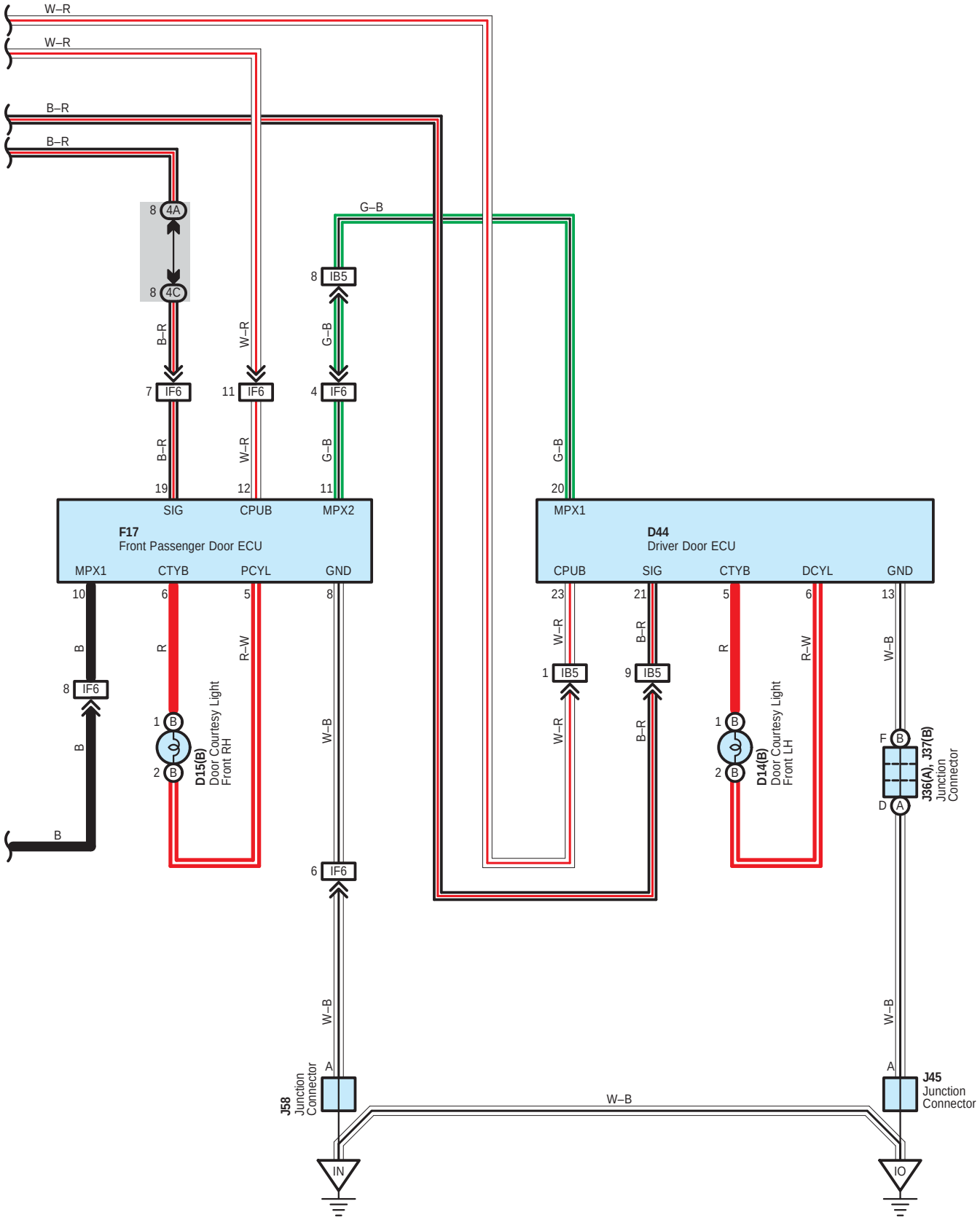
* 1 : Captain Seat * 2 : Separate Seat


B 9(A), B10(B), B11(C)
Body ECU
RLCY
RRCY
PCTY
DCTY
ACTY
J38(A), J39(B) Junction Connector
J49(A), J50(B) Junction Connector
(IG)
10A IGN1
D36 Door Courtesy Light Rear LH
D37 Door Courtesy Light Rear RH
D17 Door Courtesy SW Front RH
D16 Door Courtesy SW Front LH
C11(A), C12(B) Combination Meter
Door
D35 Diode (Door Courtesy No. 2)
D34 Diode (Door Courtesy No. 1)
D38 Door Courtesy SW Rear LH
D39 Door Courtesy SW Rear RH
J42(A), J43(B) Junction Connector
I22 Ignition Key Cylinder Light
J45 Junction Connector
IO
IK1
IK2
BL1
BM1
1D
1F
4A
4C
4D
4E
1H
R–W
R–Y
B–O
LG–B
GR–R
W–B
L–R
R
L–B


B 9(A), B10(B), B11(C)
Body ECU
ILE
8 B
L–B
(BAT)
10A
DOME
3 2C
＊1 : 6 Speaker
＊2 : Except 6 Speaker
R
5 1J
14 1G
6 1M
8 1E
O 8
Overhead Module
Personal Light
13
1
W–B
G–R(＊1)
B(＊2)
I26(B)
Interior Light
4 B
2 B
1 B
3 B
W–B
V 6(B)
Vanity Light LH
V 7(B)
Vanity Light RH
S 3
Step Light
2
1
L–B
13 1G
5 1G
10 1M
3 1E
W(＊2)
L–B(＊1)
7 1M
1 1G
BP3
11
6
R 4
Rear Combination
Light LH
Luggage Room
Light
3
BS
IN

# Interior Light (Double Cab)




W–R
W–R
B–R
B–R
8 4A
8 4C
B–R
7 IF6
B–R
19
SIG
W–R
11 IF6
W–R
12
CPUB
G–B
8 IB5
G–B
4 IF6
G–B
11
MPX2
F17
Front Passenger Door ECU
MPX1
CTYB
PCYL
GND
10
B
8 IF6
B
B
6
R
1 B
2 B
D15(B)
Door Courtesy Light
Front RH
5
R–W
8
W–B
6 IF6
W–B
A
J58
Junction
Connector
IN
G–B
20
MPX1
D44
Driver Door ECU
CPUB
SIG
CTYB
DCYL
GND
23
W–R
1 IB5
W–R
21
B–R
9 IB5
B–R
5
R
1 B
2 B
D14(B)
Door Courtesy Light
Front LH
6
R–W
13
W–B
F B
D A
J36(A), J37(B)
Junction
Connector
W–B
A
J45
Junction
Connector
W–B
IO

# Interior Light (Double Cab)

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B9 | A | 72 | D37 | | 76 | J43 | B | 74 |
| B10 | B | 72 | D38 | | 76 | J45 | | 74 |
| B11 | C | 72 | D39 | | 76 | J49 | A | 74 |
| C11 | A | 72 | D44 | | 76 | J50 | B | 74 |
| C12 | B | 72 | F17 | | 76 | J58 | | 74 |
| D14 | B | 76 | I22 | | 73 | O8 | | 76 |
| D15 | B | 76 | I26 | B | 76 | R4 | | 77 |
| D16 | | 76 | J36 | A | 74 | S3 | | 75 |
| D17 | | 76 | J37 | B | 74 | V6 | B | 77 |
| D34 | | 76 | J38 | A | 74 | V7 | B | 77 |
| D35 | | 76 | J39 | B | 74 | | | |
| D36 | | 76 | J42 | A | 74 | | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |
| 4E | | |

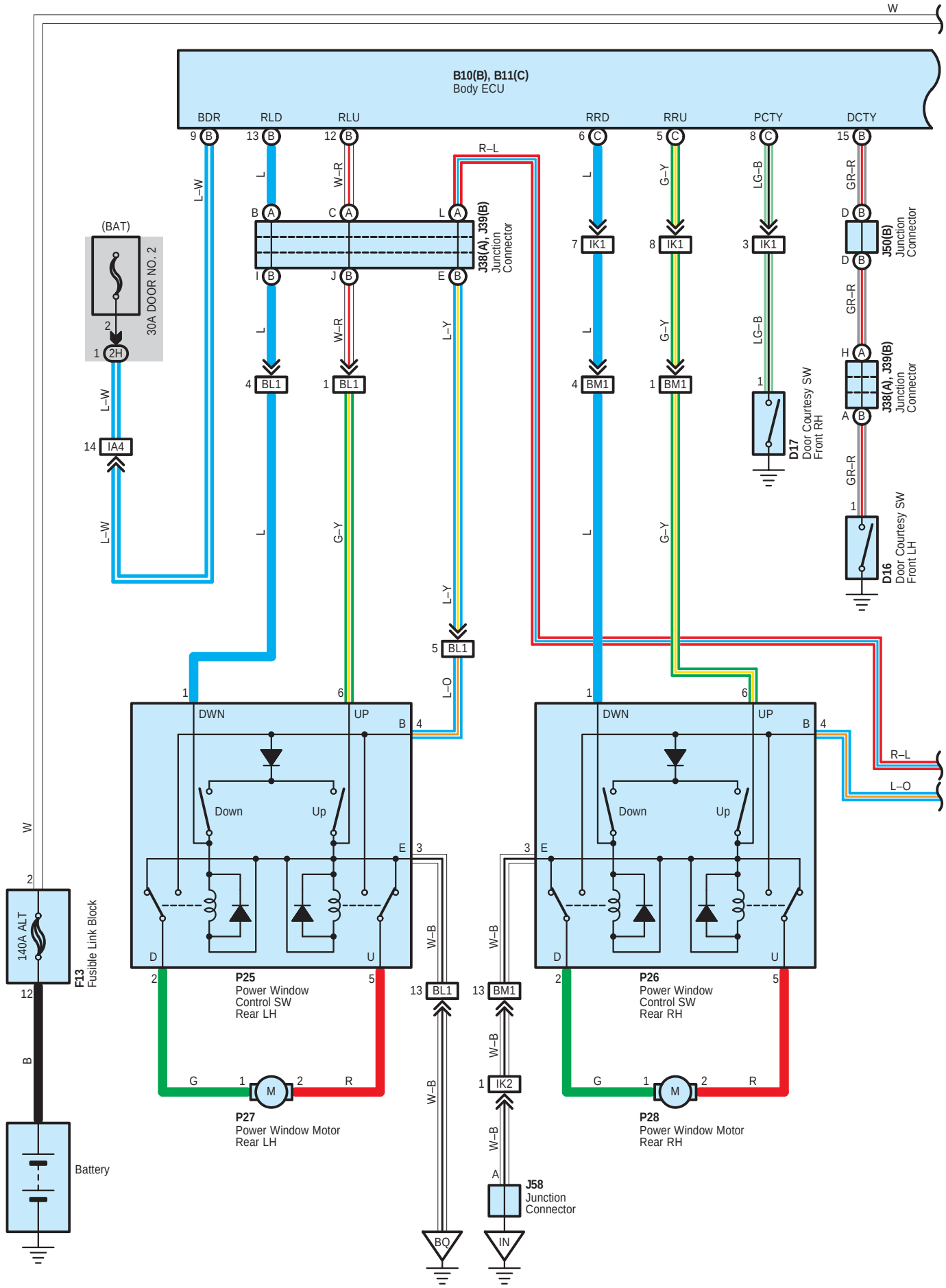
**: Connector Joining Wire Harness and Wire Harness**

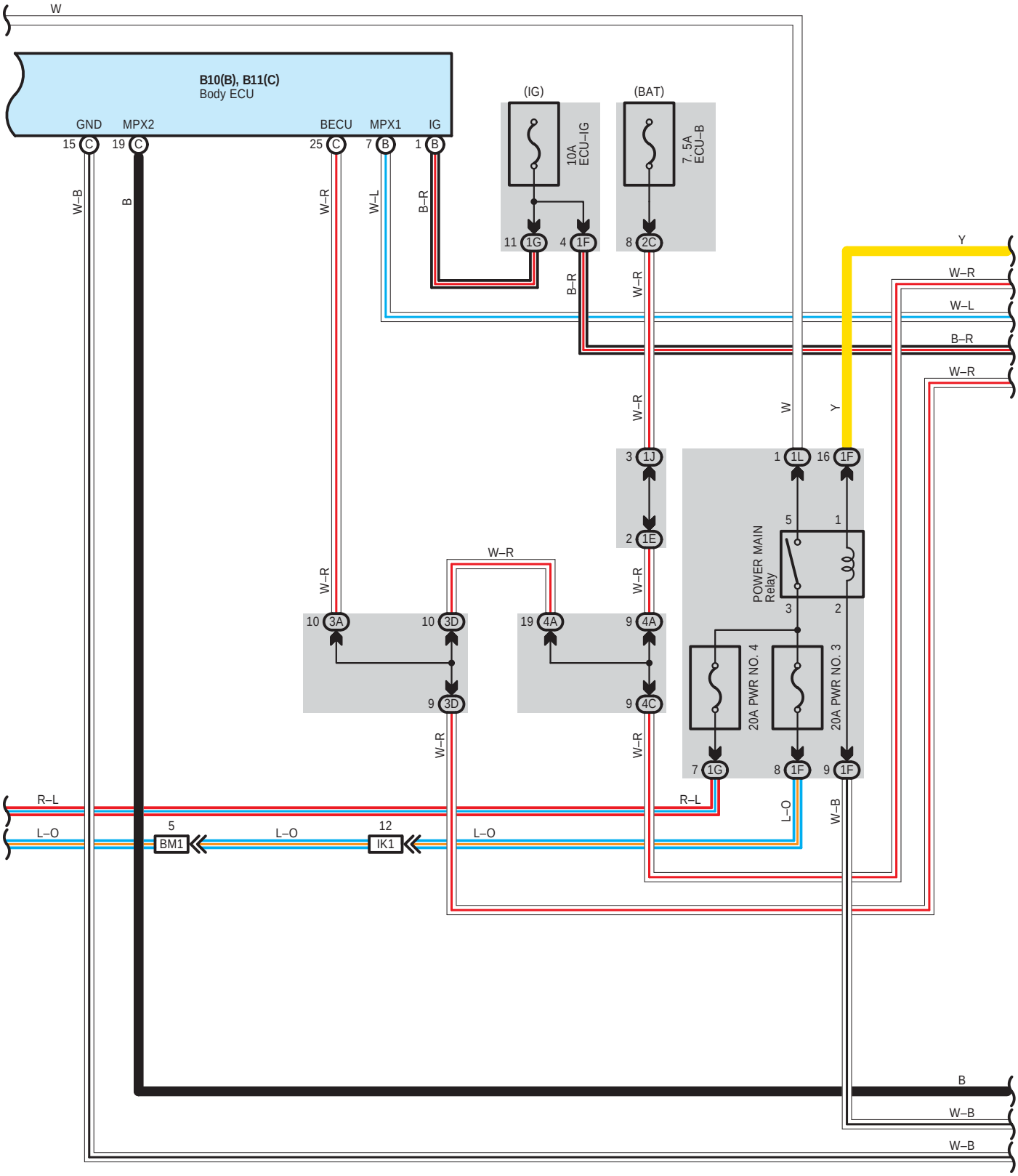
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IK2 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |
| BP3 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

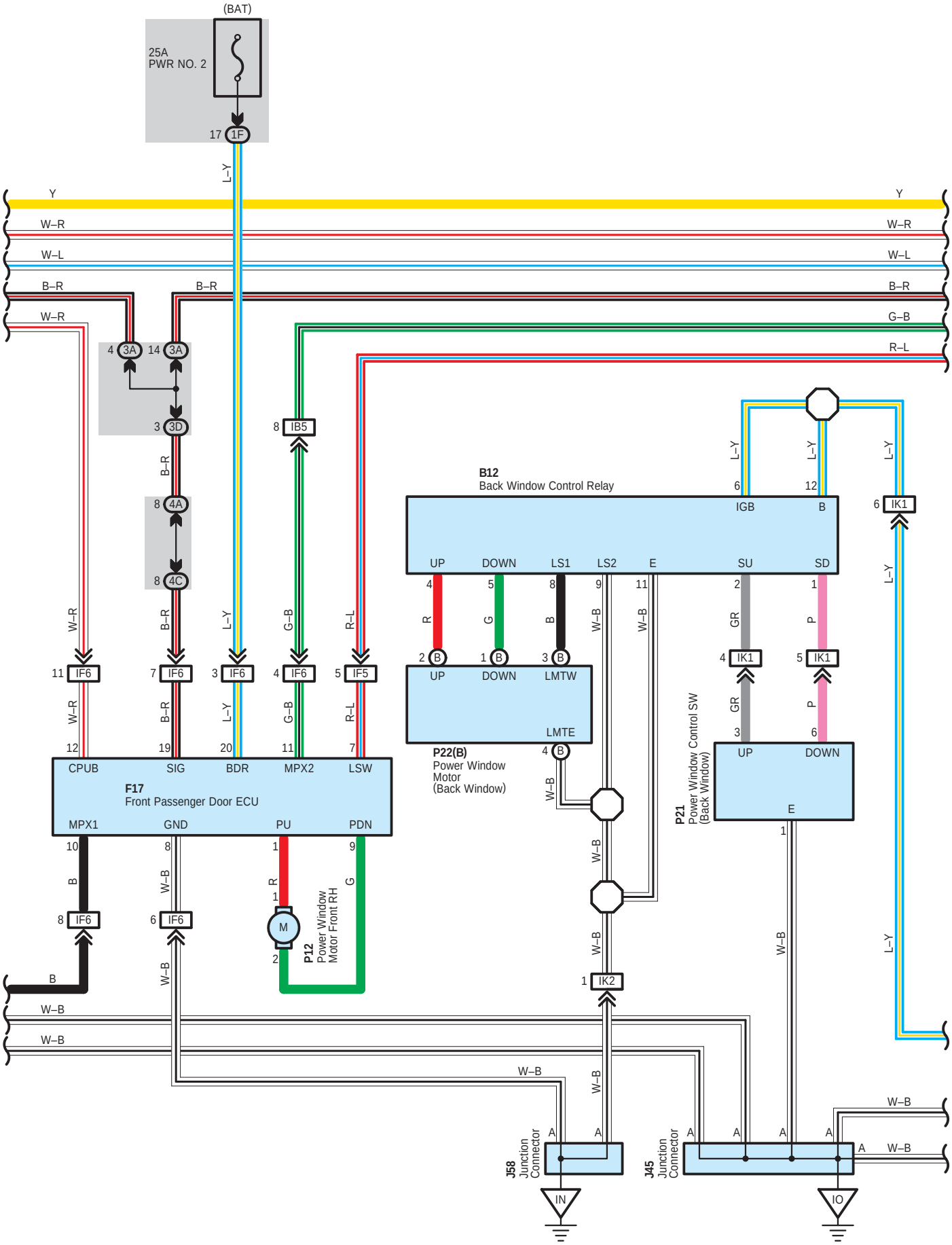
| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

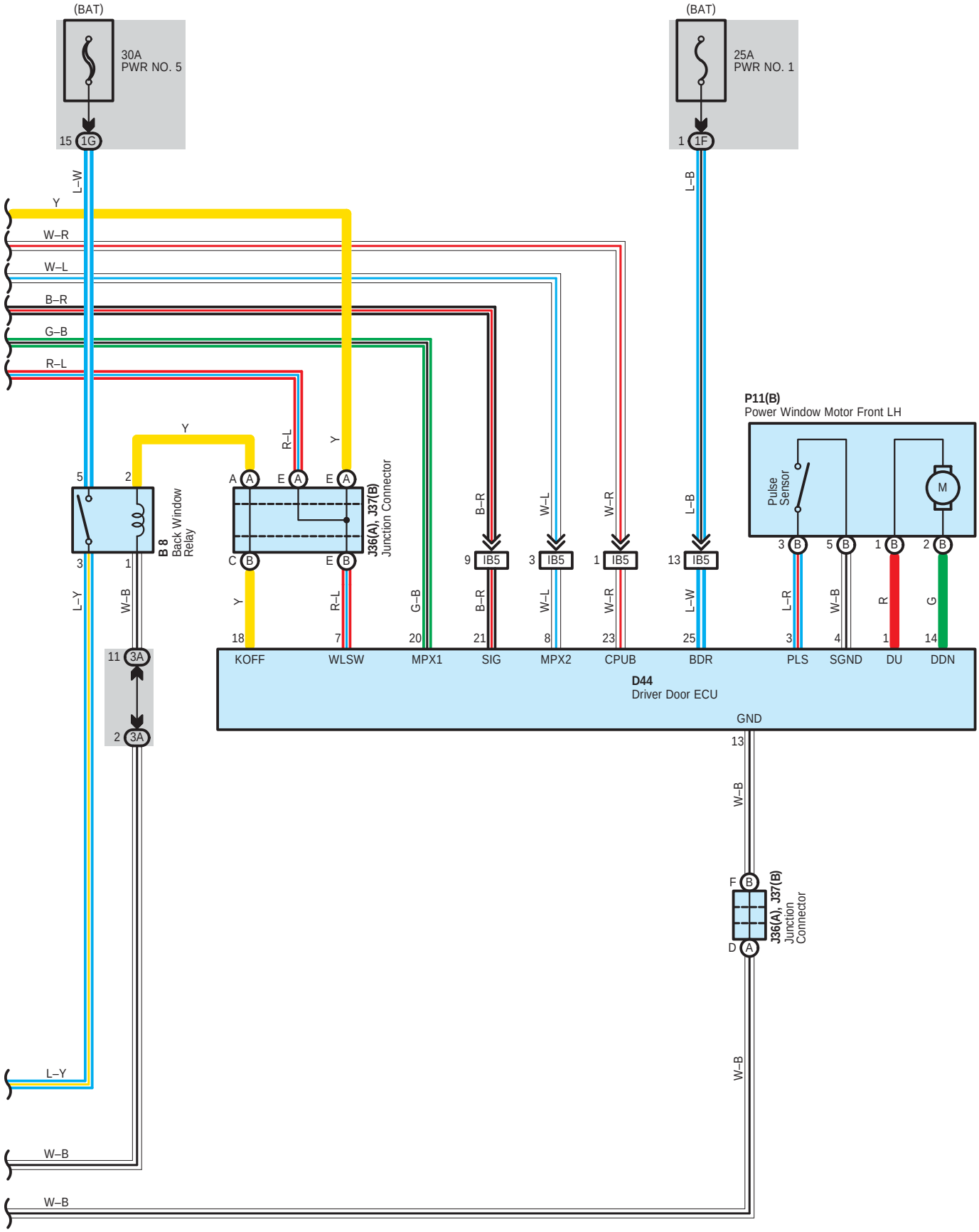
# Power Window (Double Cab)




W
B10(B), B11(C)
Body ECU
GND
MPX2
BECU
MPX1
IG
15 C
19 C
25 C
7 B
1 B
(IG)
(BAT)
10A
ECU–IG
7.5A
ECU–B
11 1G
4 1F
8 2C
W–B
B
W–R
W–L
B–R
Y
W–R
W–L
B–R
W–R
W
Y
3 1J
2 1E
1 1L
16 1F
5
1
3
2
POWER MAIN
Relay
W–R
10 3A
10 3D
9 3D
19 4A
9 4A
9 4C
20A PWR NO. 4
20A PWR NO. 3
7 1G
8 1F
9 1F
R–L
L–O
5
BM1
L–O
12
IK1
L–O
R–L
L–O
W–B
B
W–B
W–B

# Power Window (Double Cab)




(BAT)
30A
PWR NO. 5
15 1G
(BAT)
25A
PWR NO. 1
1 1F
L–W
L–B
Y
W–R
W–L
B–R
G–B
R–L
P11(B)
Power Window Motor Front LH
Pulse Sensor
M
3 B
5 B
1 B
2 B
5
2
3
1
B 8
Back Window Relay
A A E A E A
C B E B
J36(A), J37(B)
Junction Connector
9 IB5
3 IB5
1 IB5
13 IB5
L–Y
W–B
Y
R–L
G–B
B–R
W–L
W–R
L–W
L–R
W–B
R
G
18
7
20
21
8
23
25
3
4
1
14
KOFF
WLSW
MPX1
SIG
MPX2
CPUB
BDR
PLS
SGND
DU
DDN
D44
Driver Door ECU
GND
11 3A
2 3A
13
F B
D A
J36(A), J37(B)
Junction Connector
L–Y
W–B
W–B
W–B

# Power Window (Double Cab)

**System Outline**

The power window motor will operate when the power window SW, remote control SW, or the key–linked SW is operated.

**1. Power Window SW Manual/Automatic Operation**

When the ignition SW is turned ON, or during key–off operation stand–by mode, the power window can be operated by the power window SW.

**2. Remote Control SW Manual/Automatic Operation**

When the ignition SW is turned ON, or during key–off operation stand–by mode, the power window can be operated by the remote control SW. The front passenger, rear left, right windows can be operated according to the remote control signals from the DRIVER DOOR ECU.

**3. Key–Off Operation**

With all the doors closed, within 43 seconds after the ignition switch has been turned to OFF from ON, the power window can be operated. However, if the front door is opened, the power window cannot be operated.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B8 | 72 | F17 | 76 | P11 B | 77 |
| B10 B | 72 | J36 A | 74 | P12 | 77 |
| B11 C | 72 | J37 B | 74 | P21 | 75 |
| B12 | 76 | J38 A | 74 | P22 B | 77 |
| D16 | 76 | J39 B | 74 | P25 | 77 |
| D17 | 76 | J45 | 74 | P26 | 77 |
| D44 | 76 | J50 B | 74 | P27 | 77 |
| F13 | 70 | J58 | 74 | P28 | 77 |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1G | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |

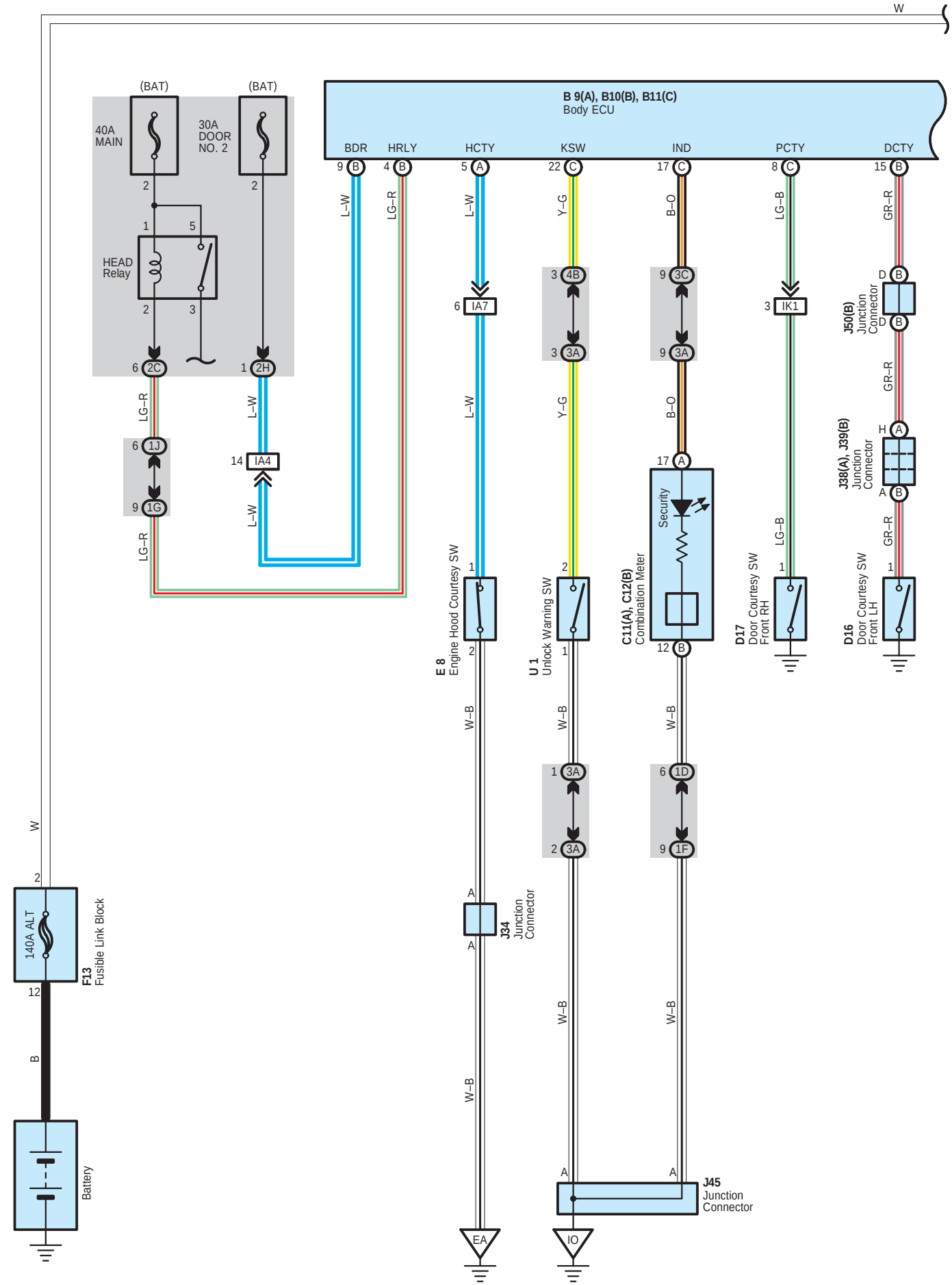
**▭ : Connector Joining Wire Harness and Wire Harness**

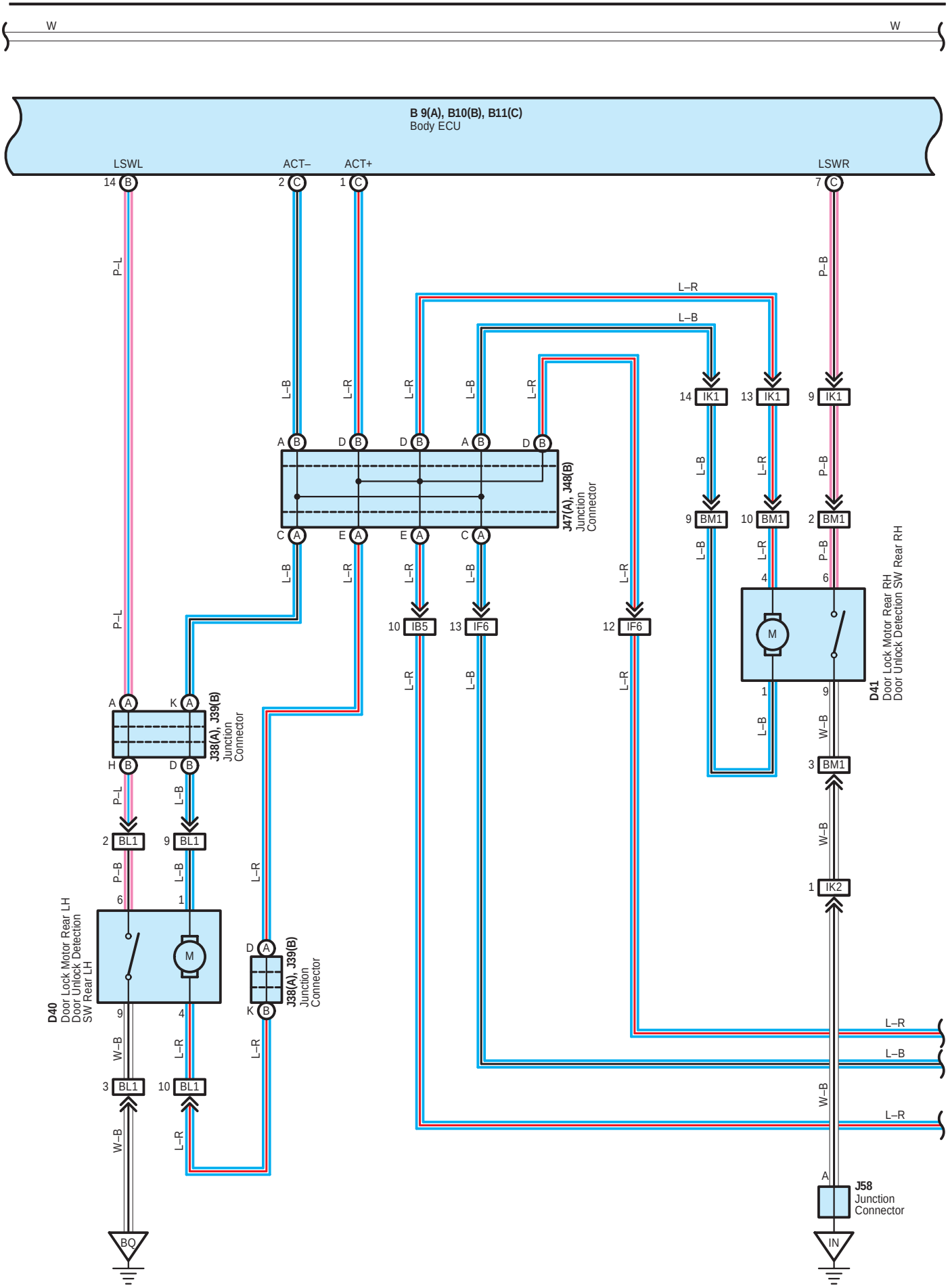
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF5 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF6 | | |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IK2 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**▽ : Ground Points**

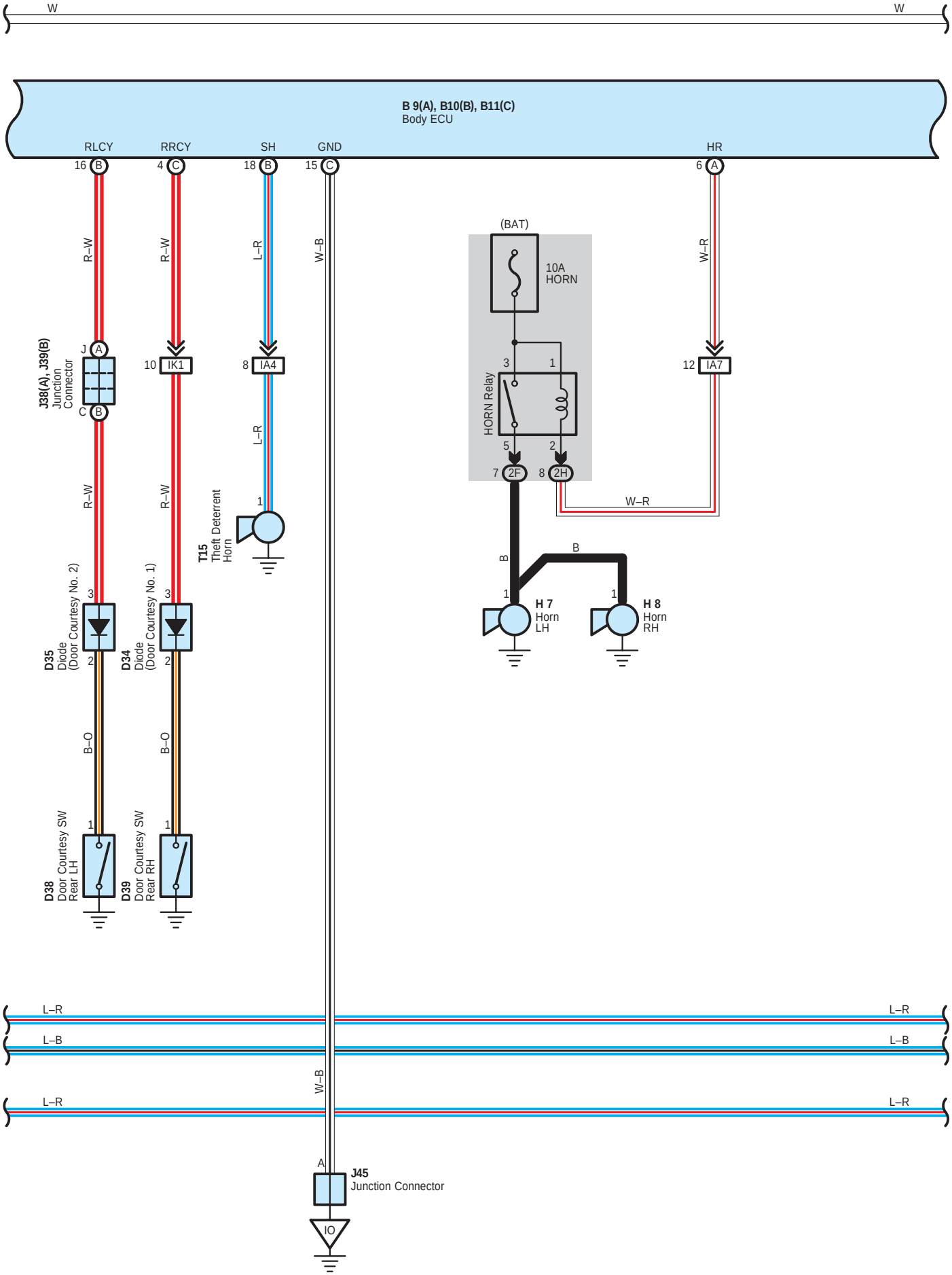
| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |

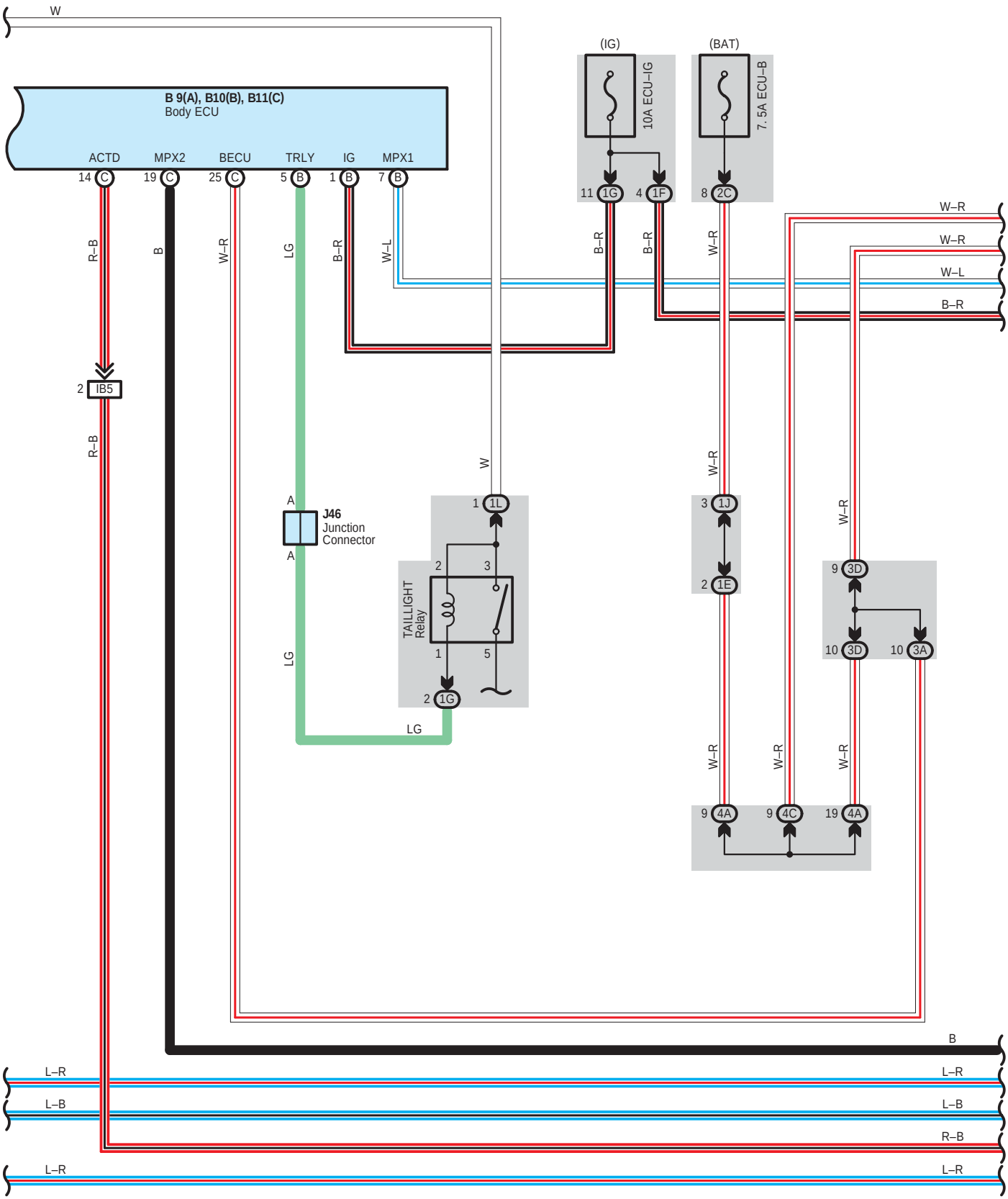
# Door Lock Control and Theft Deterrent (Double Cab)

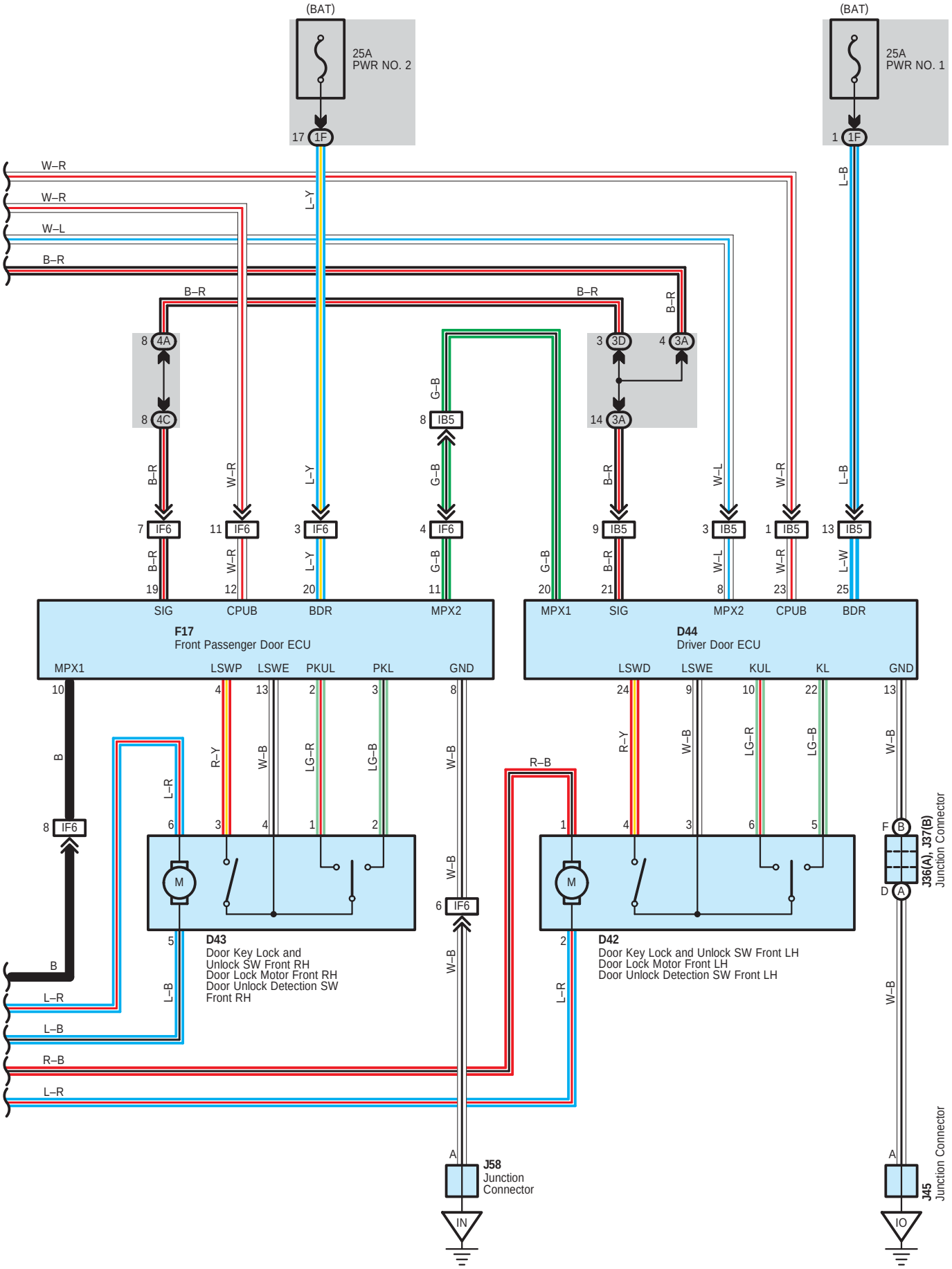



W
W
B 9(A), B10(B), B11(C)
Body ECU
LSWL
ACT–
ACT+
LSWR
14 B
2 C
1 C
7 C
P–L
L–B
L–R
P–B
J47(A), J48(B)
Junction Connector
14 IK1
13 IK1
9 IK1
9 BM1
10 BM1
2 BM1
10 IB5
13 IF6
12 IF6
D41
Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH
J38(A), J39(B)
Junction Connector
2 BL1
9 BL1
3 BL1
10 BL1
D40
Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
W–B
1 IK2
J58
Junction Connector
BQ
IN

# Door Lock Control and Theft Deterrent (Double Cab)




W
B 9(A), B10(B), B11(C)
Body ECU
ACTD
MPX2
BECU
TRLY
IG
MPX1
14 C
19 C
25 C
5 B
1 B
7 B
(IG)
(BAT)
10A ECU–IG
7. 5A ECU–B
11 1G
4 1F
8 2C
W–R
W–R
W–L
B–R
R–B
B
W–R
LG
B–R
W–L
B–R
W–R
2 IB5
R–B
W
W–R
A
J46
Junction
Connector
A
1 1L
3 1J
2 1E
W–R
9 3D
10 3D
10 3A
2
3
TAILLIGHT
Relay
1
5
2 1G
LG
LG
W–R
W–R
W–R
9 4A
9 4C
19 4A
B
L–R
L–R
L–B
L–B
R–B
L–R
L–R


(BAT)
25A PWR NO. 2
17 1F
(BAT)
25A PWR NO. 1
1 1F
W–R
W–R
W–L
B–R
L–Y
L–B
B–R
B–R
B–R
8 4A
8 4C
3 3D
4 3A
14 3A
8 IB5
G–B
G–B
B–R
W–R
L–Y
W–L
W–R
L–B
7 IF6
11 IF6
3 IF6
4 IF6
9 IB5
3 IB5
1 IB5
13 IB5
B–R
W–R
L–Y
G–B
B–R
W–L
W–R
L–W
19
12
20
11
20
21
8
23
25
SIG
CPUB
BDR
MPX2
MPX1
SIG
MPX2
CPUB
BDR
F17
Front Passenger Door ECU
D44
Driver Door ECU
MPX1
LSWP
LSWE
PKUL
PKL
GND
LSWD
LSWE
KUL
KL
GND
10
4
13
2
3
8
24
9
10
22
13
B
R–Y
W–B
LG–R
LG–B
W–B
R–Y
W–B
LG–R
LG–B
W–B
8 IF6
L–R
6
3
4
1
2
1
4
3
6
5
M
M
R–B
W–B
6 IF6
W–B
5
2
B
L–R
L–B
L–R
L–B
R–B
L–R
D43
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D42
Door Key Lock and Unlock SW Front LH
Door Lock Motor Front LH
Door Unlock Detection SW Front LH
F B
D A
J36(A), J37(B)
Junction Connector
A
J58
Junction Connector
IN
A
J45
Junction Connector
IO

**System Outline**

**1. Manual Unlock Operation**

When the door lock control SW of the driver's or passenger's side door is pushed to UNLOCK, the door lock will unlock.

**2. Manual Lock Operation**

When the door lock control SW of the driver's or passenger's side door is pushed to LOCK, the door lock will lock.

**3. Door Key Unlock Operation**

* Unlock operation from driver's side door

When the driver's side door is unlocked once using the ignition key, only the driver's side door is unlocked. If this operation is repeated within 3 seconds, all the other doors are unlocked.

* Unlock operation from front passenger's side door

When the front passenger's side door is unlocked using the ignition key, all the other doors are unlocked, too.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | D41 | 76 | J38 A | 74 |
| B10 B | 72 | D42 | 76 | J39 B | 74 |
| B11 C | 72 | D43 | 76 | J45 | 74 |
| C11 A | 72 | D44 | 76 | J46 | 74 |
| C12 B | 72 | E8 | 70 | J47 A | 74 |
| D16 | 76 | F13 | 70 | J48 B | 74 |
| D17 | 76 | F17 | 76 | J50 B | 74 |
| D34 | 76 | H7 | 70 | J58 | 74 |
| D35 | 76 | H8 | 70 | T15 | 71 |
| D38 | 76 | J34 | 71 | U1 | 75 |
| D39 | 76 | J36 A | 74 | | |
| D40 | 76 | J37 B | 74 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1G | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2F | | |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3C | | |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4C | | |

# Door Lock Control and Theft Deterrent (Double Cab)

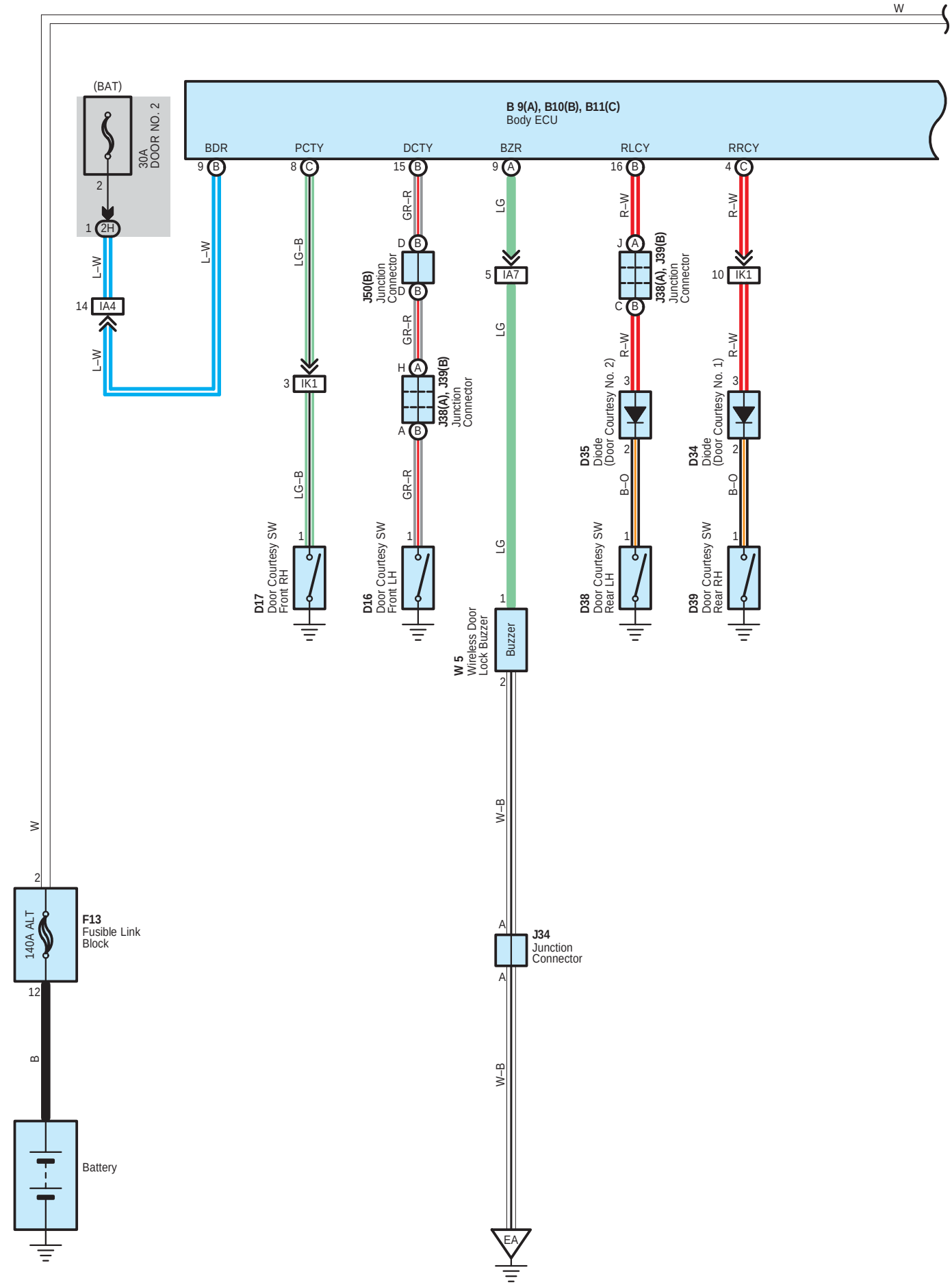
**: Connector Joining Wire Harness and Wire Harness**

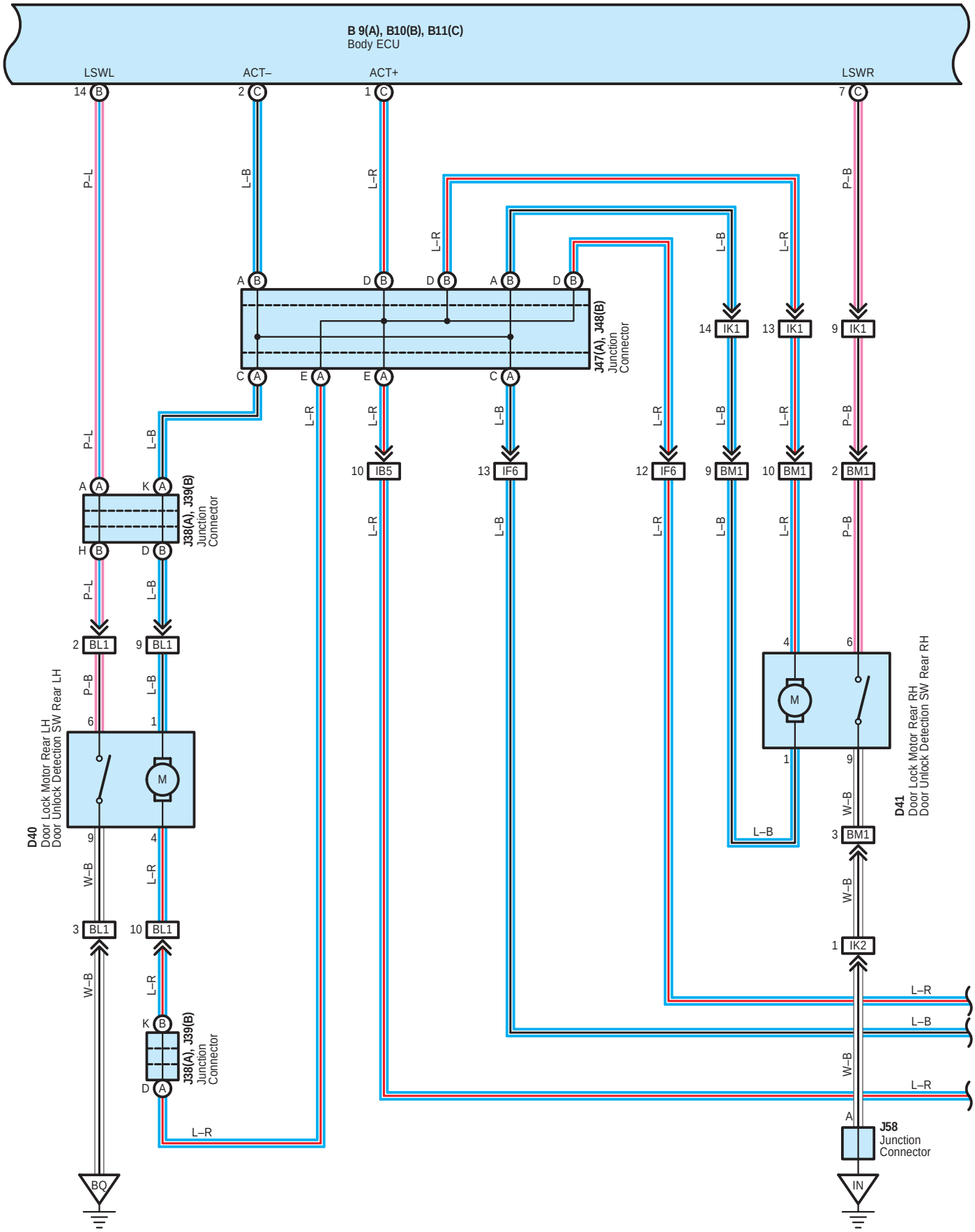
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IK2 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**: Ground Points**

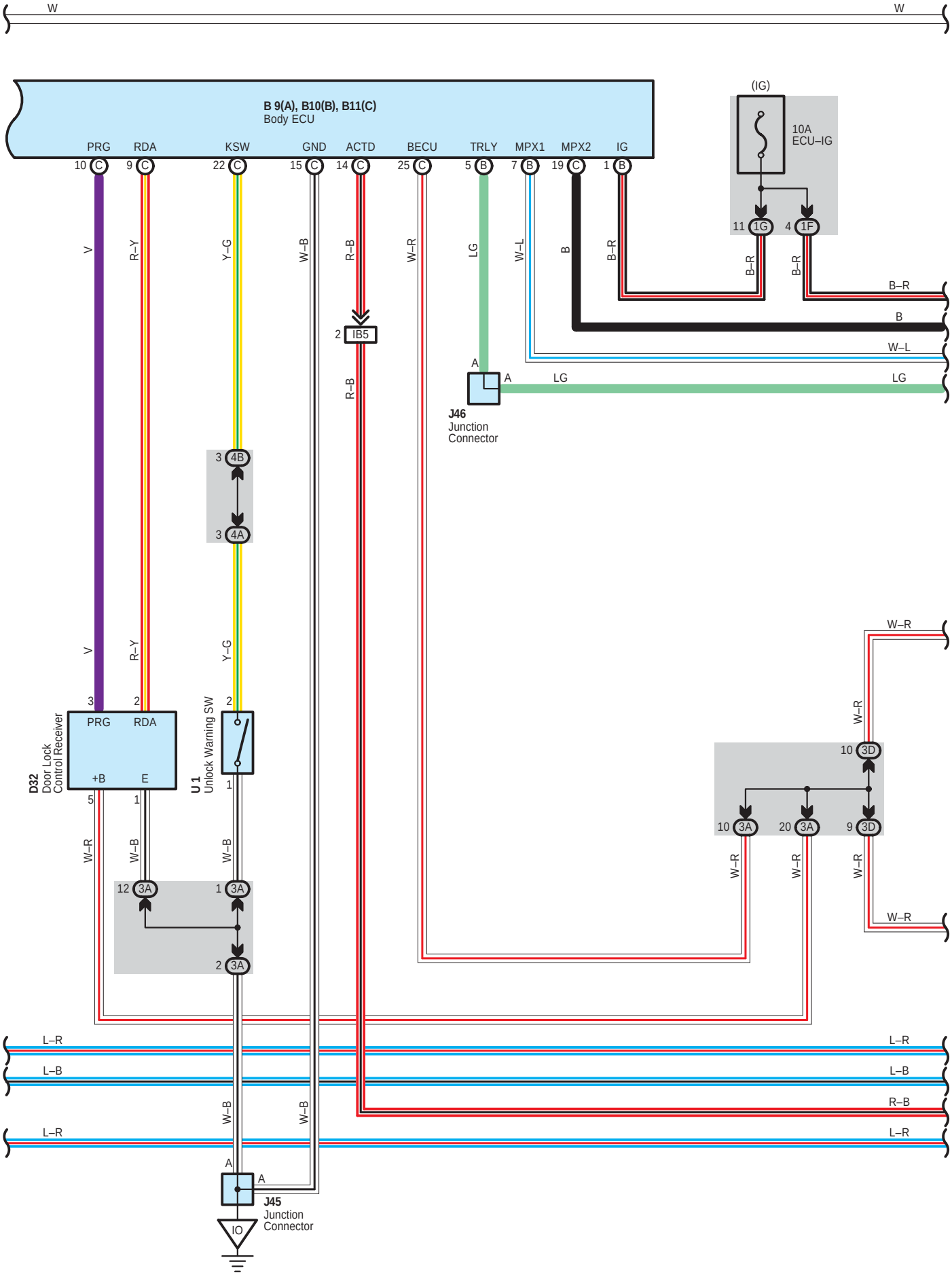
| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |

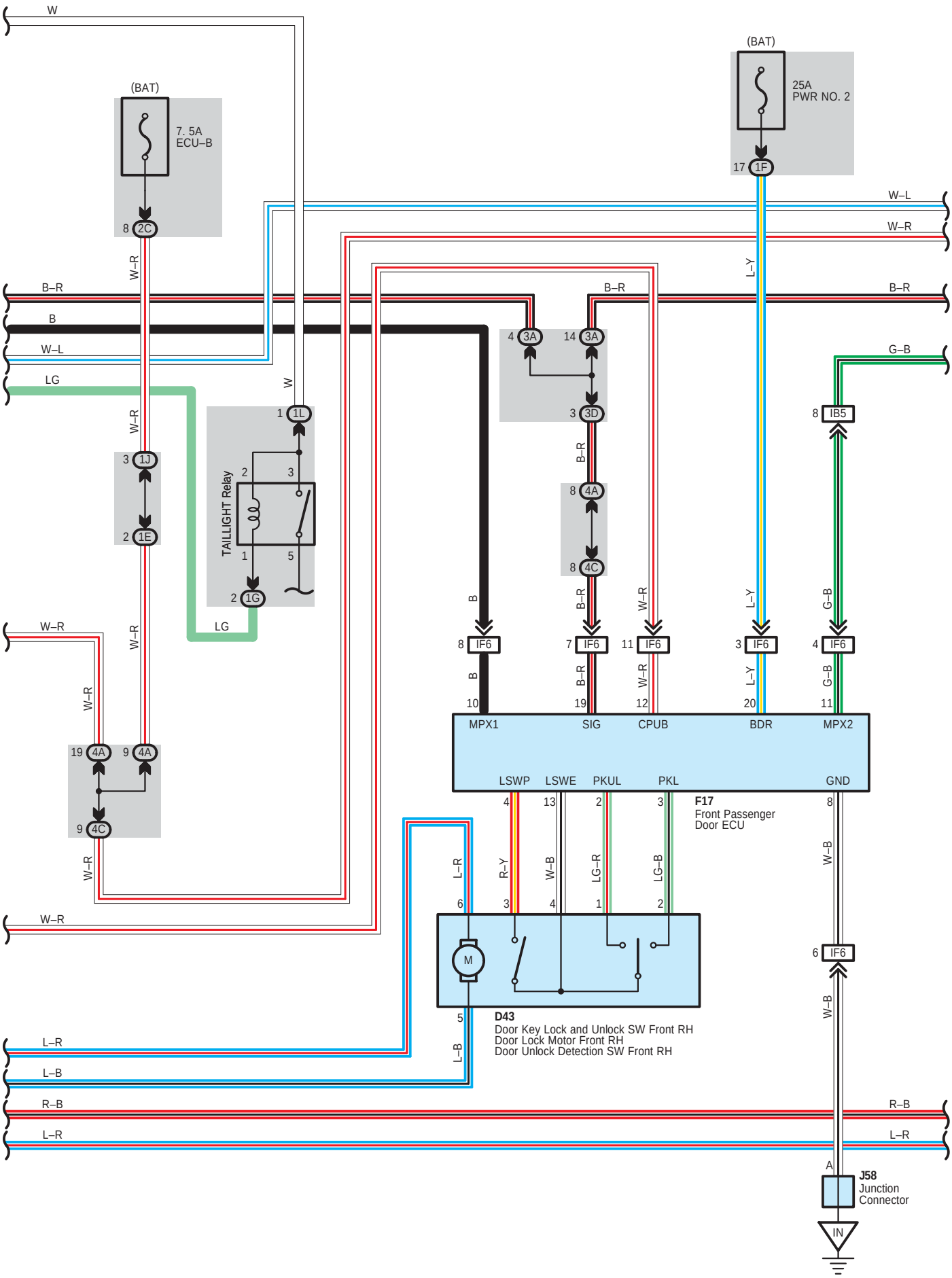
# Wireless Door Lock Control (Double Cab)



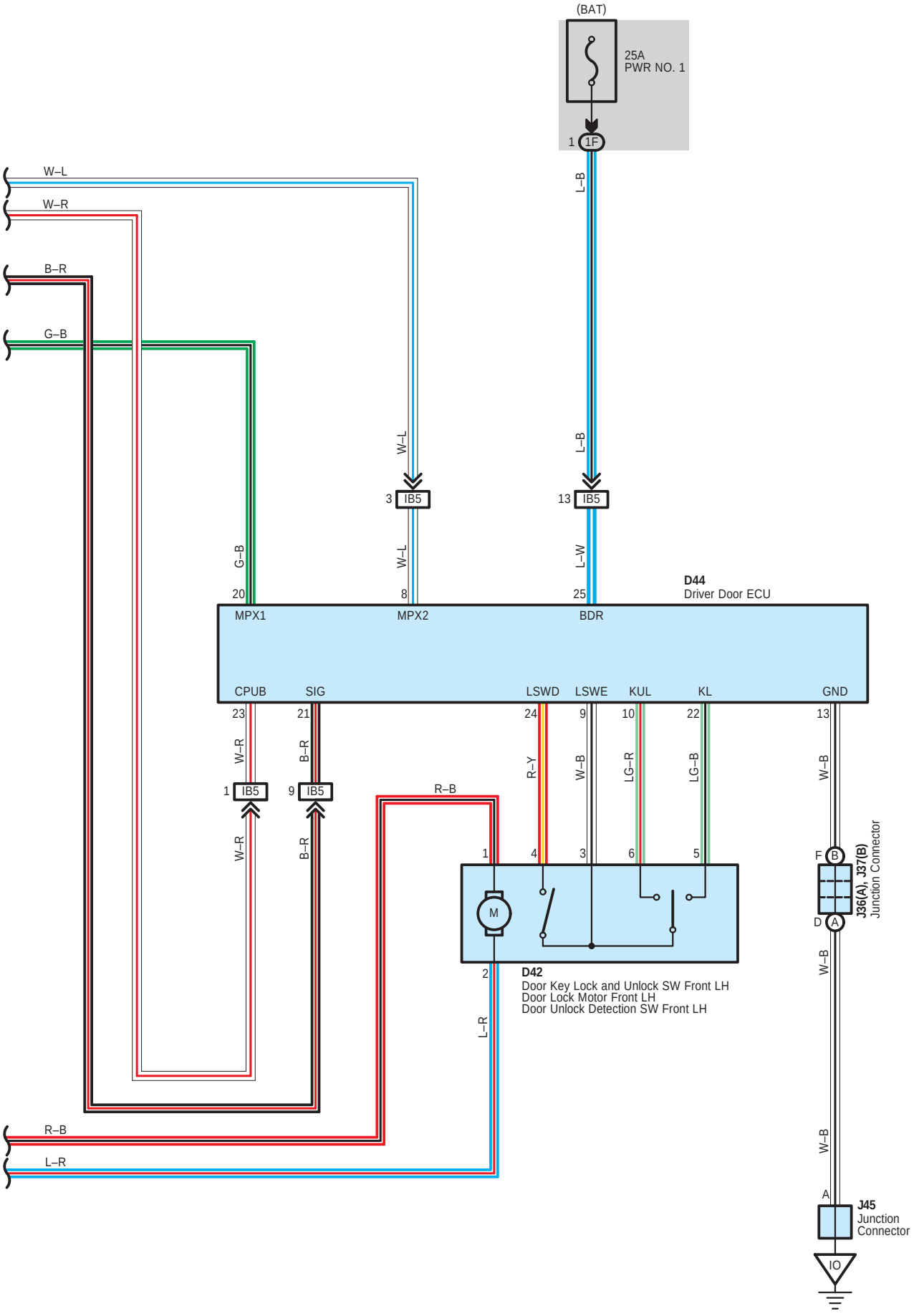

B 9(A), B10(B), B11(C)
Body ECU
LSWL
ACT–
ACT+
LSWR
J47(A), J48(B) Junction Connector
J38(A), J39(B) Junction Connector
J38(A), J39(B) Junction Connector
D40 Door Lock Motor Rear LH Door Unlock Detection SW Rear LH
D41 Door Lock Motor Rear RH Door Unlock Detection SW Rear RH
J58 Junction Connector
BQ
IN
P–L
L–B
L–R
P–B
W–B

# Wireless Door Lock Control (Double Cab)




W
(BAT)
7. 5A
ECU–B
8 2C
W–R
B–R
B
W–L
LG
W–R
3 1J
2 1E
W
1 1L
TAILLIGHT Relay
2 3
1 5
2 1G
LG
W–R
W–R
W–R
19 4A
9 4A
9 4C
W–R
W–R
(BAT)
25A
PWR NO. 2
17 1F
W–L
W–R
L–Y
B–R
B–R
4 3A
14 3A
3 3D
B–R
8 4A
8 4C
G–B
8 IB5
B
8 IF6
B
10
B–R
7 IF6
B–R
19
W–R
11 IF6
W–R
12
L–Y
3 IF6
L–Y
20
G–B
4 IF6
G–B
11
MPX1
SIG
CPUB
BDR
MPX2
LSWP
LSWE
PKUL
PKL
GND
4
13
2
3
8
F17
Front Passenger
Door ECU
L–R
R–Y
W–B
LG–R
LG–B
W–B
6
3
4
1
2
6 IF6
W–B
M
5
L–B
D43
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
L–R
L–B
R–B
L–R
R–B
L–R
A
J58
Junction
Connector
IN

# Wireless Door Lock Control (Double Cab)



**System Outline**

The current flows continuously from DOOR NO.2 fuse to body ECU TERMINAL BDR, from PWR NO.2 fuse to front passenger door ECU TERMINAL BDR, from PWR NO.1 fuse to driver door ECU TERMINAL BDR, and from ECU–B fuse to body ECU, front passenger ECU, driver door ECU, door control receiver.

**1. Wireless Door Lock/Unlock Normal Operation:**

Lock operation

All the doors are locked when the lock SW of the transmitter is operated.

Unlock operation

When the unlock SW of the transmitter is operated, the driver's door is unlocked, and if the SW is operated again within 3 seconds, all the doors are unlocked.

**2. Automatic Lock Operation**

When the doors are unlocked by operating the unlock SW of the transmitter, if no door is opened or the ignition key is not inserted in the key cylinder within 30 seconds, all the doors will be locked again.

**3. Lock/Unlock Operation Audiovisual Effect Check**

When the vehicle is locked by the transmitter, the parking light & taillight flashes once, and a buzzer sounds once. When the vehicle is unlocked by the transmitter, the parking light & taillight flashes twice, and a buzzer sounds twice.

When the unlock SW of the transmitter is operated while all the doors are locked, the doors will be unlocked and the room light will come on.

**4. Output Repeat Function**

If there is not change in the lock condition of the vehicle after the lock signal is output from the transmitter, the lock signal is output again.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B9 A | 72 | D40 | 76 | J38 A | 74 |
| B10 B | 72 | D41 | 76 | J39 B | 74 |
| B11 C | 72 | D42 | 76 | J45 | 74 |
| D16 | 76 | D43 | 76 | J46 | 74 |
| D17 | 76 | D44 | 76 | J47 A | 74 |
| D32 | 73 | F13 | 70 | J48 B | 74 |
| D34 | 76 | F17 | 76 | J50 B | 74 |
| D35 | 76 | J34 | 71 | J58 | 74 |
| D38 | 76 | J36 A | 74 | U1 | 75 |
| D39 | 76 | J37 B | 74 | W5 | 71 |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1G | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4C | | |

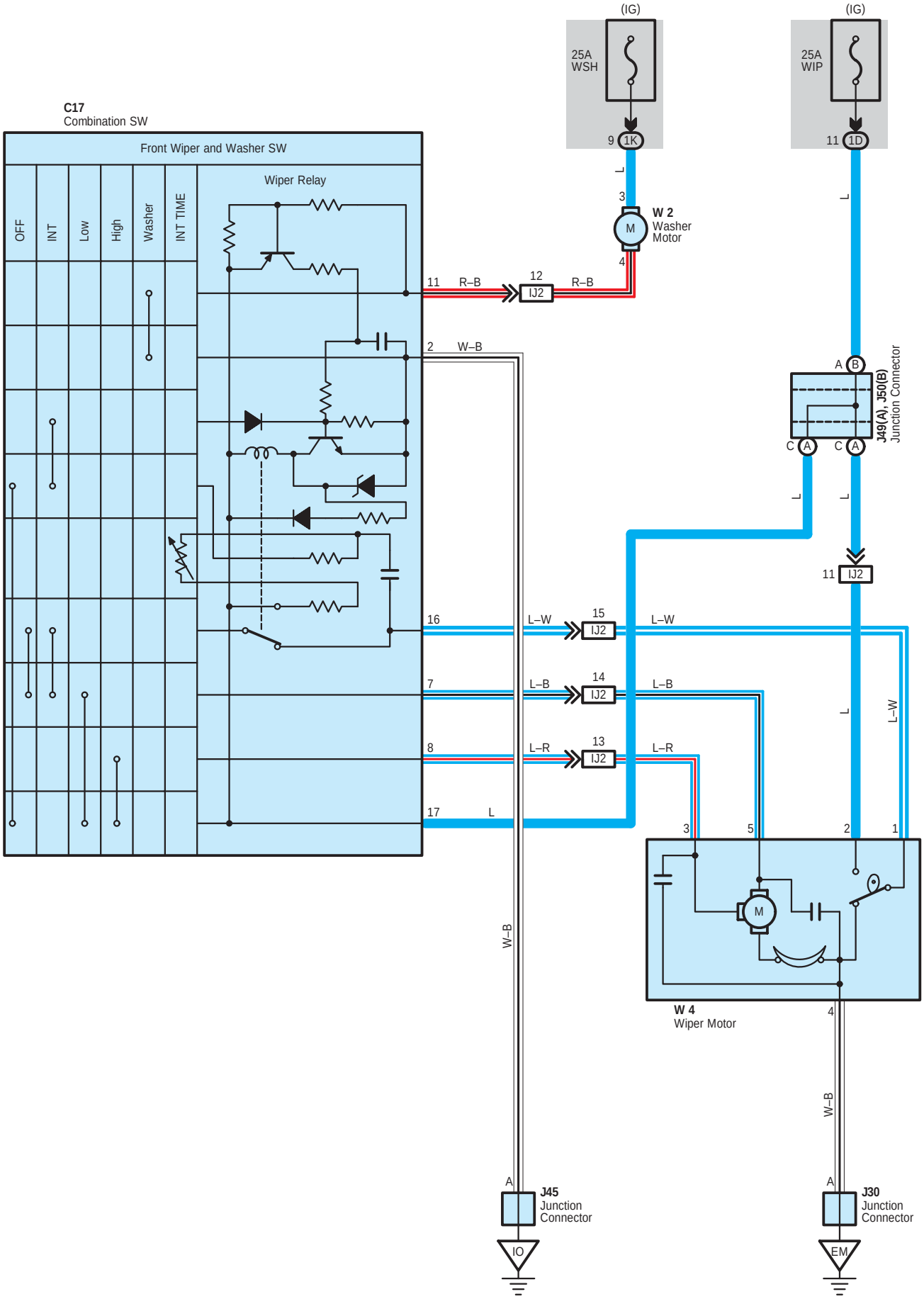
# Wireless Door Lock Control (Double Cab)

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IK2 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |


(IG)
25A WSH
9 1K
(IG)
25A WIP
11 1D
C17
Combination SW
Front Wiper and Washer SW
Wiper Relay
OFF
INT
Low
High
Washer
INT TIME
3
W 2
Washer Motor
M
4
11 R–B
12
IJ2
R–B
2 W–B
A B
J49(A), J50(B)
Junction Connector
C A
C A
11
IJ2
16
L–W
15
IJ2
L–W
7
L–B
14
IJ2
L–B
8
L–R
13
IJ2
L–R
17 L
L–W
3 5 2 1
M
W 4
Wiper Motor
4
W–B
W–B
A
J45
Junction Connector
IO
A
J30
Junction Connector
EM

**System Outline**

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

**1. Low Speed Position**

With wiper SW turned to LOW position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and causes the wiper motor to run at low speed.

**2. High Speed Position**

With wiper SW turned to HIGH position, current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 8 to TERMINAL 3 of the wiper motor to TERMINAL 4 to GROUND and causes the motor to run at high speed.

**3. INT Position**

With wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 2 to GROUND. This flowing the intermittent circuit and current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and the wiper functions.

The intermittent operation is controlled by charging and discharging 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**

With the washer SW pulled up, current flows from TERMINAL 3 of the washer motor to TERMINAL 4 to TERMINAL 11 of the wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer is jetted. This causes current to flow to washer continuous operation circuit in TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 5 of the wiper motor to TERMINAL 4 to GROUND and the wiper functions.

**○ : Parts Location**

| Code | See Page | Code | | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| C17 | 72 | J49 | A | 74 | W4 | 71 |
| J30 | 71 | J50 | B | 74 | | |
| J45 | 74 | W2 | | 71 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |

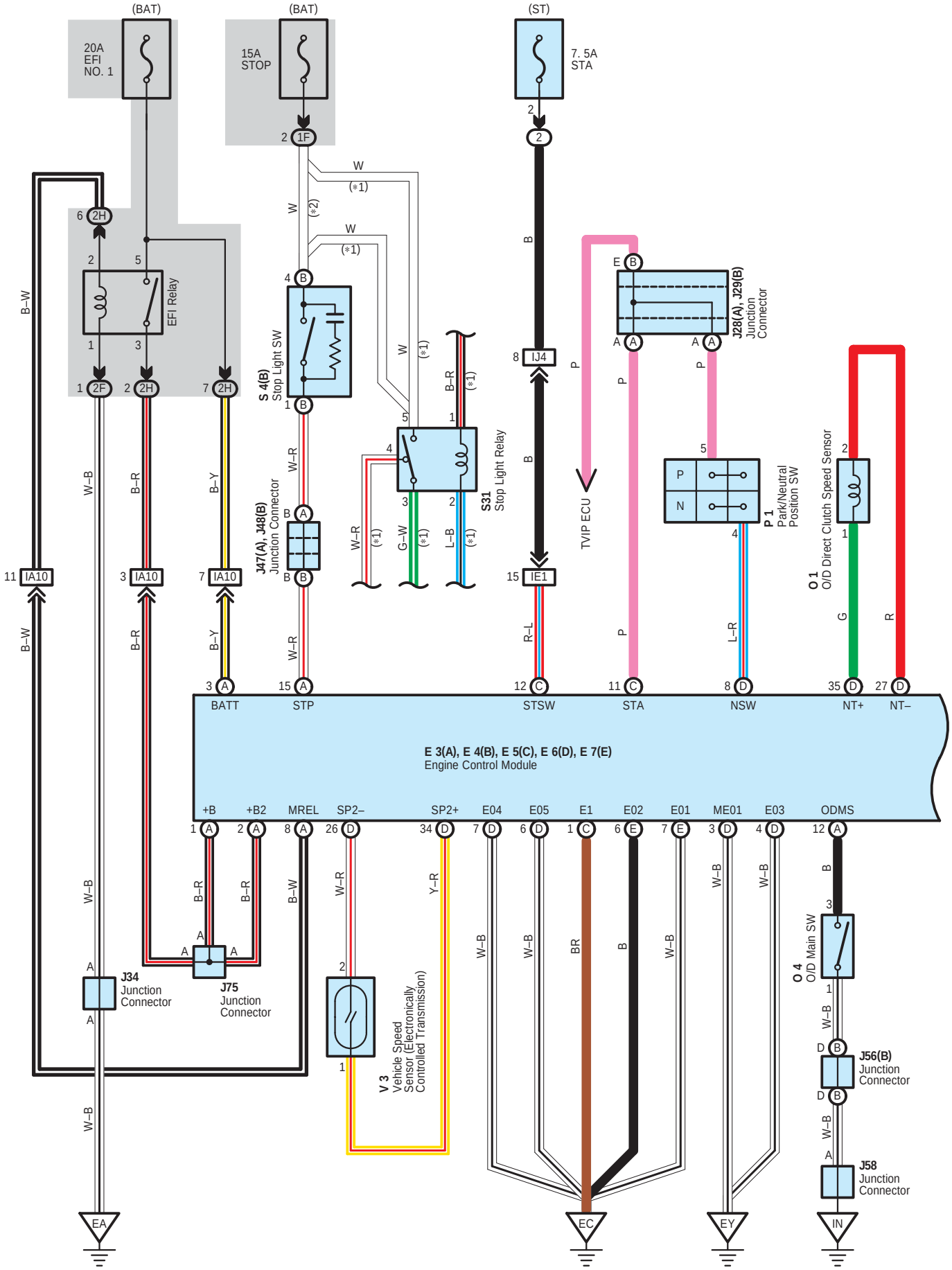
**: Connector Joining Wire Harness and Wire Harness**

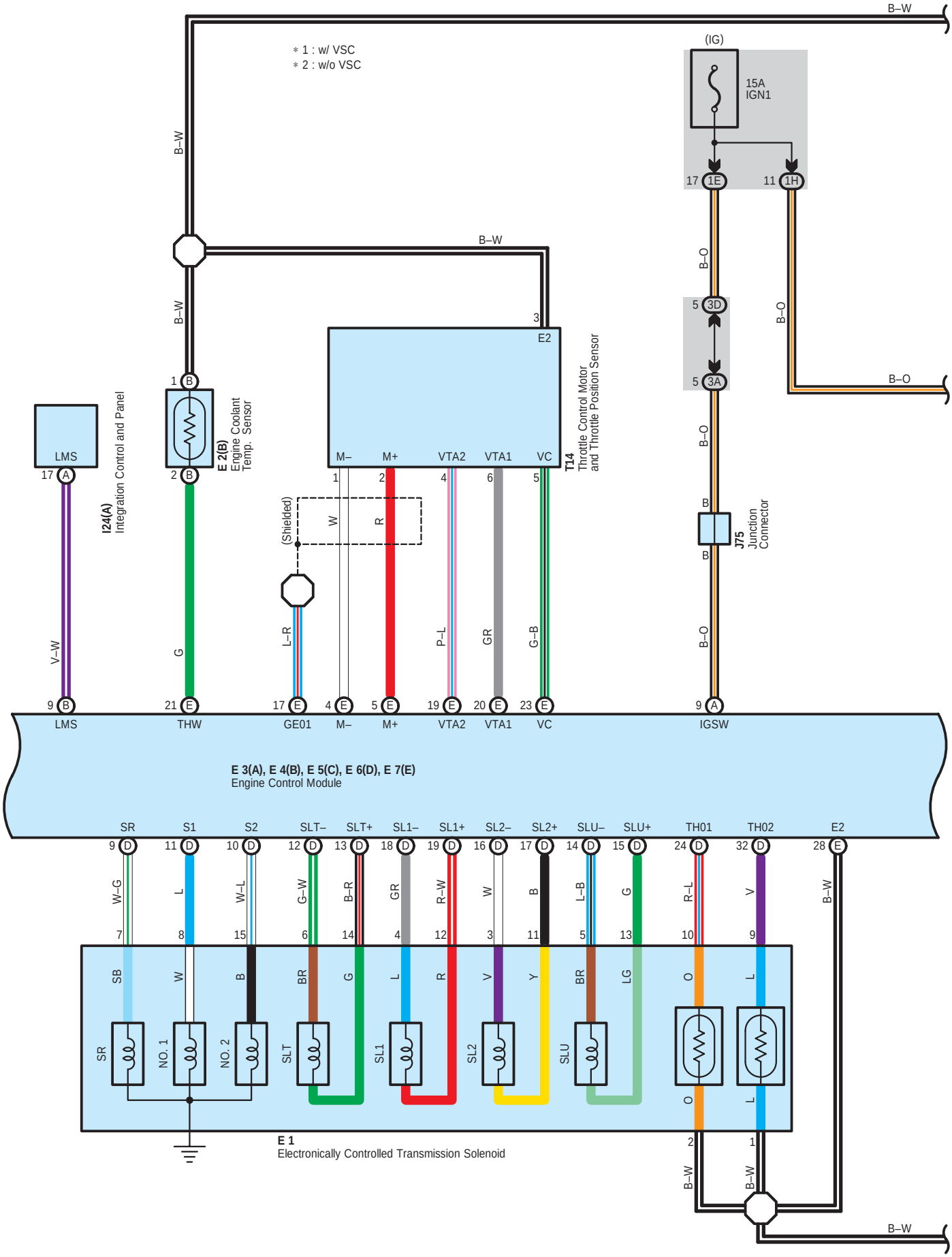
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |

**: Ground Points**

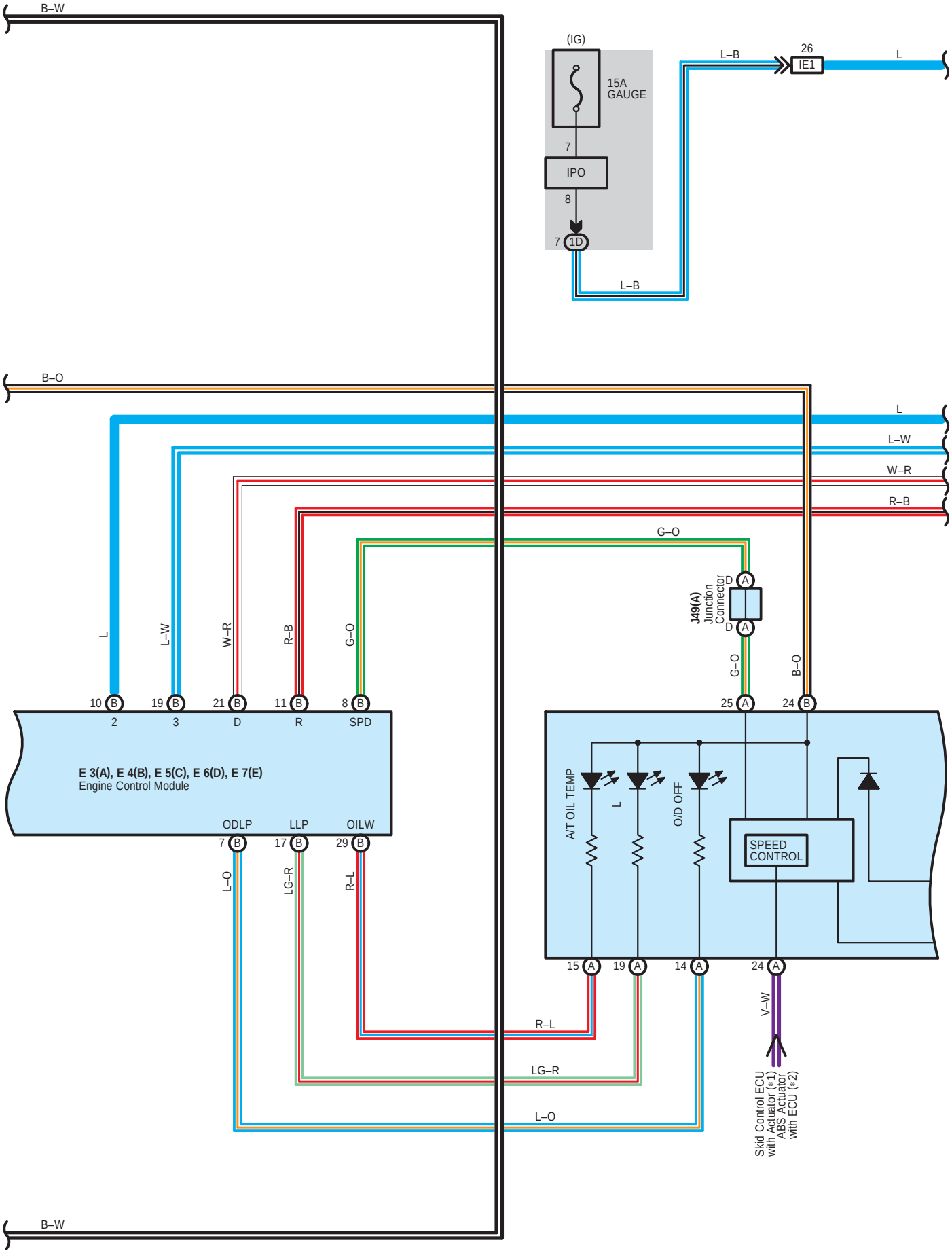
| Code | See Page | Ground Points Location |
|---|---|---|
| EM | 90 | Radiator Side Support RH |
| IO | 92 | Left Kick Panel |

# ECT and A/T Indicator (Double Cab)

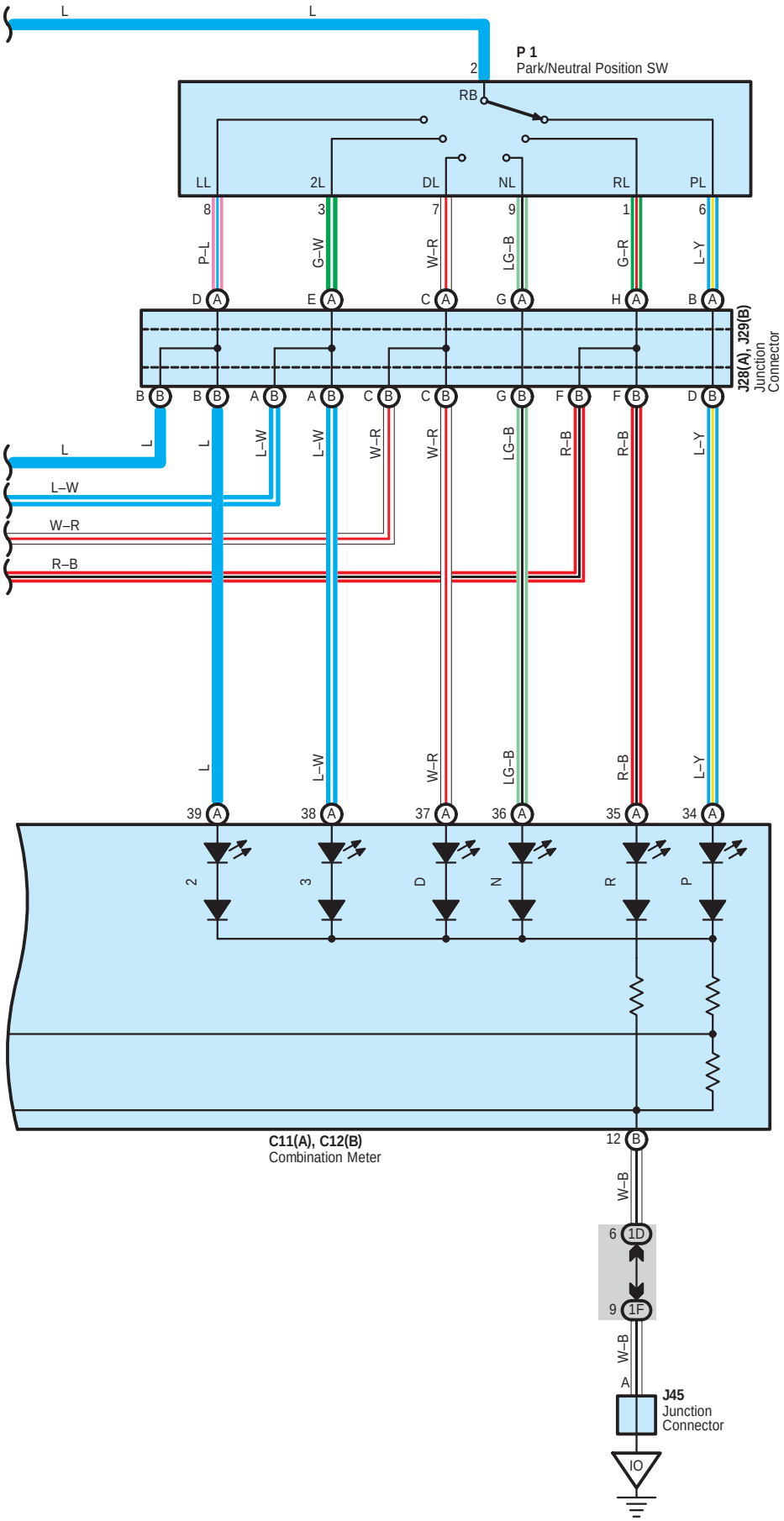



＊1 : w/ VSC
＊2 : w/o VSC
B–W
(IG)
15A
IGN1
17 1E
11 1H
B–O
5 3D
5 3A
B–O
B–O
B–O
B–O
B–W
B–W
B–W
3
E2
T14
Throttle Control Motor
and Throttle Position Sensor
M– M+ VTA2 VTA1 VC
1 2 4 6 5
1 B
2 B
E 2(B)
Engine Coolant
Temp. Sensor
LMS
17 A
I24(A)
Integration Control and Panel
(Shielded)
W
R
L–R
P–L
GR
G–B
V–W
G
B
J75
Junction
Connector
B
B–O
9 B
21 E
17 E
4 E
5 E
19 E
20 E
23 E
9 A
LMS
THW
GE01
M–
M+
VTA2
VTA1
VC
IGSW
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
SR S1 S2 SLT– SLT+ SL1– SL1+ SL2– SL2+ SLU– SLU+ TH01 TH02 E2
9 D 11 D 10 D 12 D 13 D 18 D 19 D 16 D 17 D 14 D 15 D 24 D 32 D 28 E
W–G L W–L G–W B–R GR R–W W B L–B G R–L V B–W
7 8 15 6 14 4 12 3 11 5 13 10 9
SB W B BR G L R V Y BR LG O L O L
SR NO. 1 NO. 2 SLT SL1 SL2 SLU
E 1
Electronically Controlled Transmission Solenoid
2 1
B–W B–W
B–W

# ECT and A/T Indicator (Double Cab)



＊1 : w/ VSC
＊2 : w/o VSC



# ECT and A/T Indicator (Double Cab)

**System Outline**

The electronically controlled transmission electrically controls the, throttle pressure, lock–up pressure, and accumulator pressure etc. through the solenoid valve.
The electronically controlled transmission is a system which precisely controls the 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 of the 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 control signal from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and the vehicle speed is input to TERMINAL SP2+ of the engine control module from the vehicle speed sensor. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1, VTA2 of the engine control module as a 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. Lock–Up Operation**

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL SLU+ of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to TERMINAL 13 to TERMINAL SLU– of the engine control module to GROUND.

**3. Stop Light SW Circuit**

If the brake pedal is depressed (Stop light SW on) when driving in lock–up position, a signal is input to TERMINAL STP of the engine control module. As a result, the engine control module cuts the current to the solenoid to release the lock–up.

**4. Overdrive Circuit**

* O/D main SW on
  When the O/D main SW is switched to ON position, a signal is input to TERMINAL ODMS of the engine control module, and enables shift change to the overdrive range, through the control of the engine control module.
* O/D main SW off
  When the O/D main SW is switched to OFF position, a signal is input to TERMINAL ODMS of the engine control module, and prohibits shift change to the overdrive range through the control of the engine control module. When in the overdrive range already, shift down is made.

**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C11 | A | 72 | I24 | A | 73 | J58 | | 74 |
| C12 | B | 72 | J28 | A | 74 | J75 | | 74 |
| E1 | | 70 | J29 | B | 74 | O1 | | 71 |
| E2 | B | 70 | J34 | | 71 | O4 | | 75 |
| E3 | A | 73 | J45 | | 74 | P1 | | 71 |
| E4 | B | 73 | J47 | A | 74 | S4 | B | 75 |
| E5 | C | 73 | J48 | B | 74 | S31 | | 75 |
| E6 | D | 73 | J49 | A | 74 | T14 | | 71 |
| E7 | E | 73 | J56 | B | 74 | V3 | | 71 |

**⬭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

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

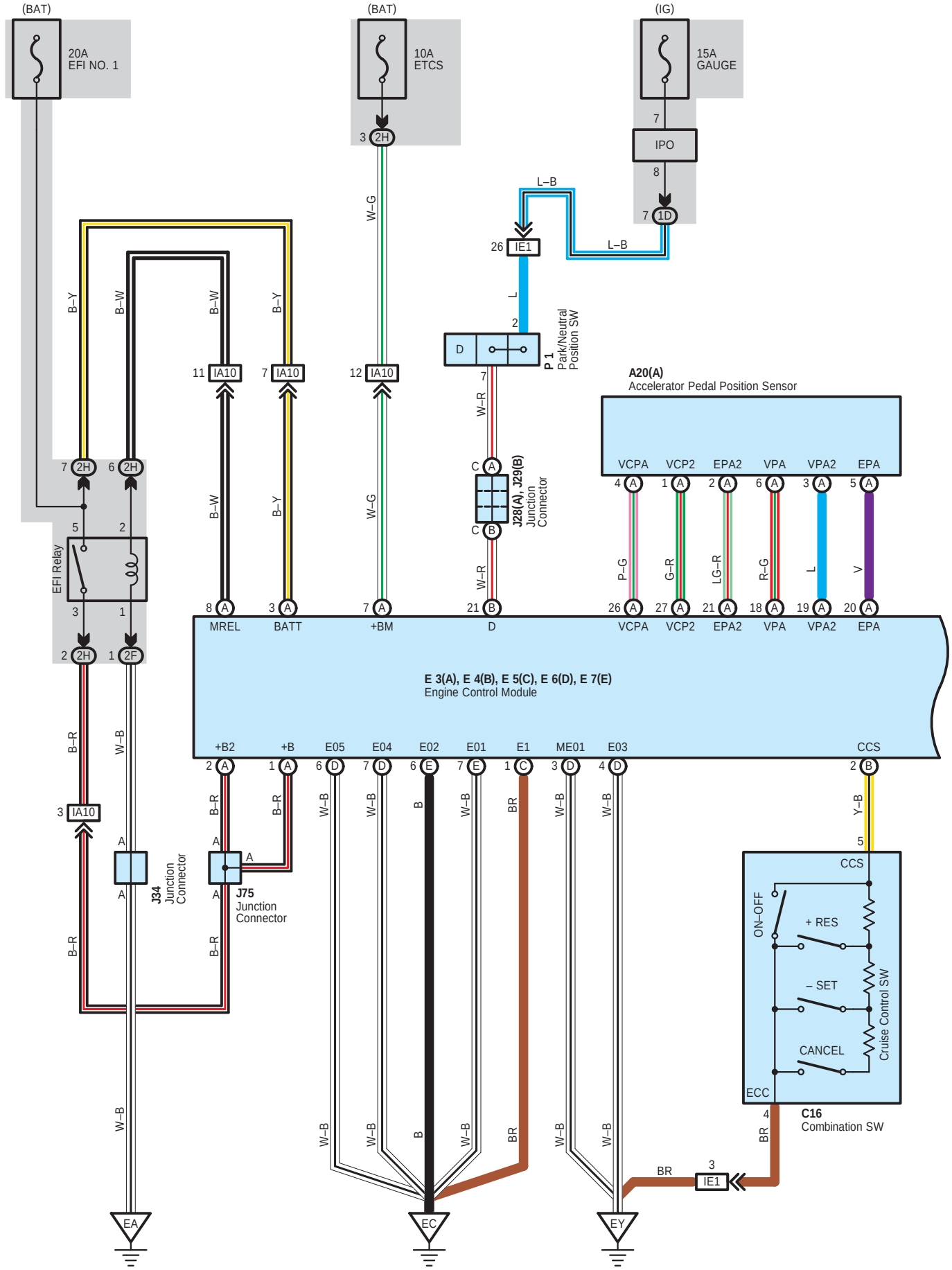
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1H | | |
| 2F | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |

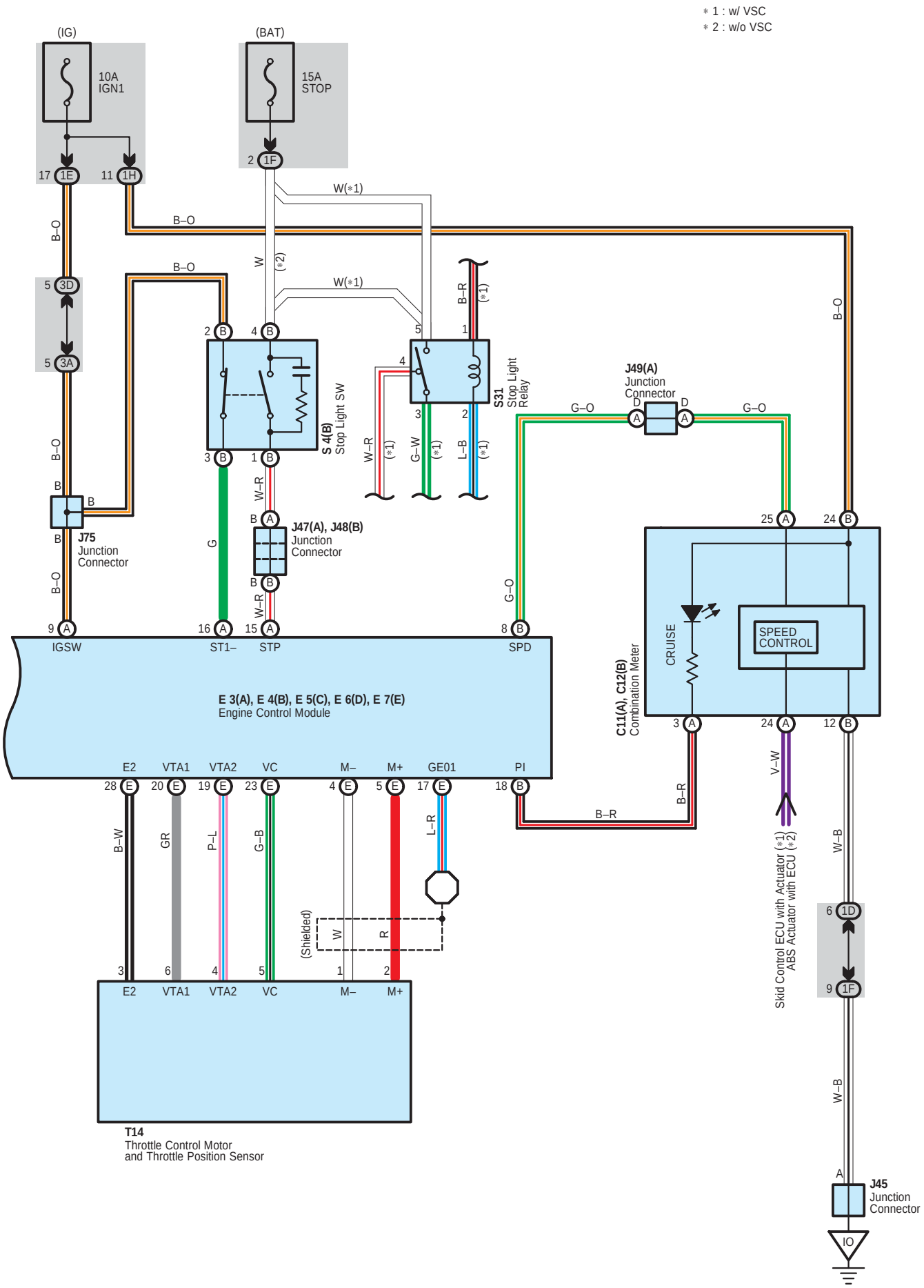
: **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA10 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EC | 90 | Rear Bank of Left Cylinder Head |
| EY | 90 | Front Left Side of Cylinder Head |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |


(BAT)
20A
EFI NO. 1
(BAT)
10A
ETCS
(IG)
15A
GAUGE
IPO
1D
IE1
L–B
L
P 1
Park/Neutral
Position SW
A20(A)
Accelerator Pedal Position Sensor
VCPA
VCP2
EPA2
VPA
VPA2
EPA
P–G
G–R
LG–R
R–G
L
V
J28(A), J29(B)
Junction
Connector
W–R
W–G
B–Y
B–W
IA10
EFI Relay
MREL
BATT
+BM
D
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
+B2
+B
E05
E04
E02
E01
E1
ME01
E03
CCS
B–R
W–B
B
BR
Y–B
J34
Junction
Connector
J75
Junction
Connector
ON–OFF
+ RES
– SET
CANCEL
Cruise Control SW
ECC
C16
Combination SW
EA
EC
EY


∗1 : w/ VSC
∗2 : w/o VSC
(IG)
(BAT)
10A
IGN1
15A
STOP
17 1E
11 1H
2 1F
W(∗1)
B–O
W
(∗2)
5 3D
5 3A
2 B
4 B
3 B
1 B
S 4(B)
Stop Light SW
5
4
1
3
2
S31
Stop Light
Relay
B–R
(∗1)
W–R
G–W
L–B
J49(A)
Junction
Connector
G–O
D
A
25 A
24 B
B
J75
Junction
Connector
J47(A), J48(B)
Junction
Connector
G
9 A
16 A
15 A
8 B
IGSW
ST1–
STP
SPD
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
C11(A), C12(B)
Combination Meter
CRUISE
SPEED
CONTROL
3 A
24 A
12 B
V–W
B–R
E2
VTA1
VTA2
VC
M–
M+
GE01
PI
28 E
20 E
19 E
23 E
4 E
5 E
17 E
18 B
B–W
GR
P–L
G–B
L–R
(Shielded)
W
R
3
6
4
5
1
2
T14
Throttle Control Motor
and Throttle Position Sensor
Skid Control ECU with Actuator (∗1)
ABS Actuator with ECU (∗2)
W–B
6 1D
9 1F
A
J45
Junction
Connector
IO

# Cruise Control (Double Cab)

**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.

**1. Set Control**

When the – SET SW is operated while traveling with the ON–OFF SW on, the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed.

**2. Coast Control**

When the – SET SW is operated to on, the cruise control opening angle requirement is turned to 0 to decrease the vehicle speed, and the speed when the – SET SW is operated to off is memorized, and the vehicle speed is controlled at that speed. Furthermore, every time the – SET SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is decreased by approx. 1.6 km/h (1.0 mph).

**3. Accel Control**

When the + RES SW is operated to on, the throttle motor rotates the throttle valve to open direction to increase the vehicle speed, and the speed when the + RES SW is operated to off is memorized, and the vehicle speed is controlled at that speed.
Furthermore, every time the + RES SW is operated momentarily (Approx. 0.5 sec.) to on, the memorized vehicle speed is increased by approx. 1.6 km/h (1.0 mph).

**4. Manual Cancel Mechanism**

If any of the following signals are input during cruise control traveling, the current to the motor flows in the direction to close the throttle valve, and cancel the cruise control.

(1) Stop lamp SW is on (Brake pedal is depressed)

(2) The CANCEL SW of the control SW is on

(3) ON–OFF SW is off

(4) Gear is shifted from D position to other positions than D.

**5. Resume Control**

After canceling the cruise control (Except when the ON–OFF SW is off) if the vehicle speed is above the minimum speed limit (Approx. 40km/h, 25mph), operating the + RES SW to on from off will cause the system to accelerate and resume to the vehicle speed before manual cancellation.

**6. Overdrive Function**

The overdrive may be cut on an uphill grade, while traveling with the cruise control.
After the overdrive is cut, 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, and if the system determines that the uphill grade has finished, the overdrive will resume after the overdrive timer operation.

**7. Auto Cancel Operation**

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

(1) Disconnection and/or short in the stop light SW

(2) Malfunction in the vehicle speed signal

(3) Malfunction in the electronic throttle parts

(4) Malfunction in the stop light SW input circuit

(5) Malfunction in the cancel circuit

(6) When the vehicle speed gets slower than the low speed limit.

(7) The actual vehicle speed becomes –16 km/h (10 mph) slower than the set speed

○ **: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A20 | A | 72 | E6 | D | 73 | J48 | B | 74 |
| C11 | A | 72 | E7 | E | 73 | J49 | A | 74 |
| C12 | B | 72 | J28 | A | 74 | J75 | | 74 |
| C16 | | 72 | J29 | B | 74 | P1 | | 71 |
| E3 | A | 73 | J34 | | 71 | S4 | B | 75 |
| E4 | B | 73 | J45 | | 74 | S31 | | 75 |
| E5 | C | 73 | J47 | A | 74 | T14 | | 71 |

: **Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1H | | |
| 2F | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |

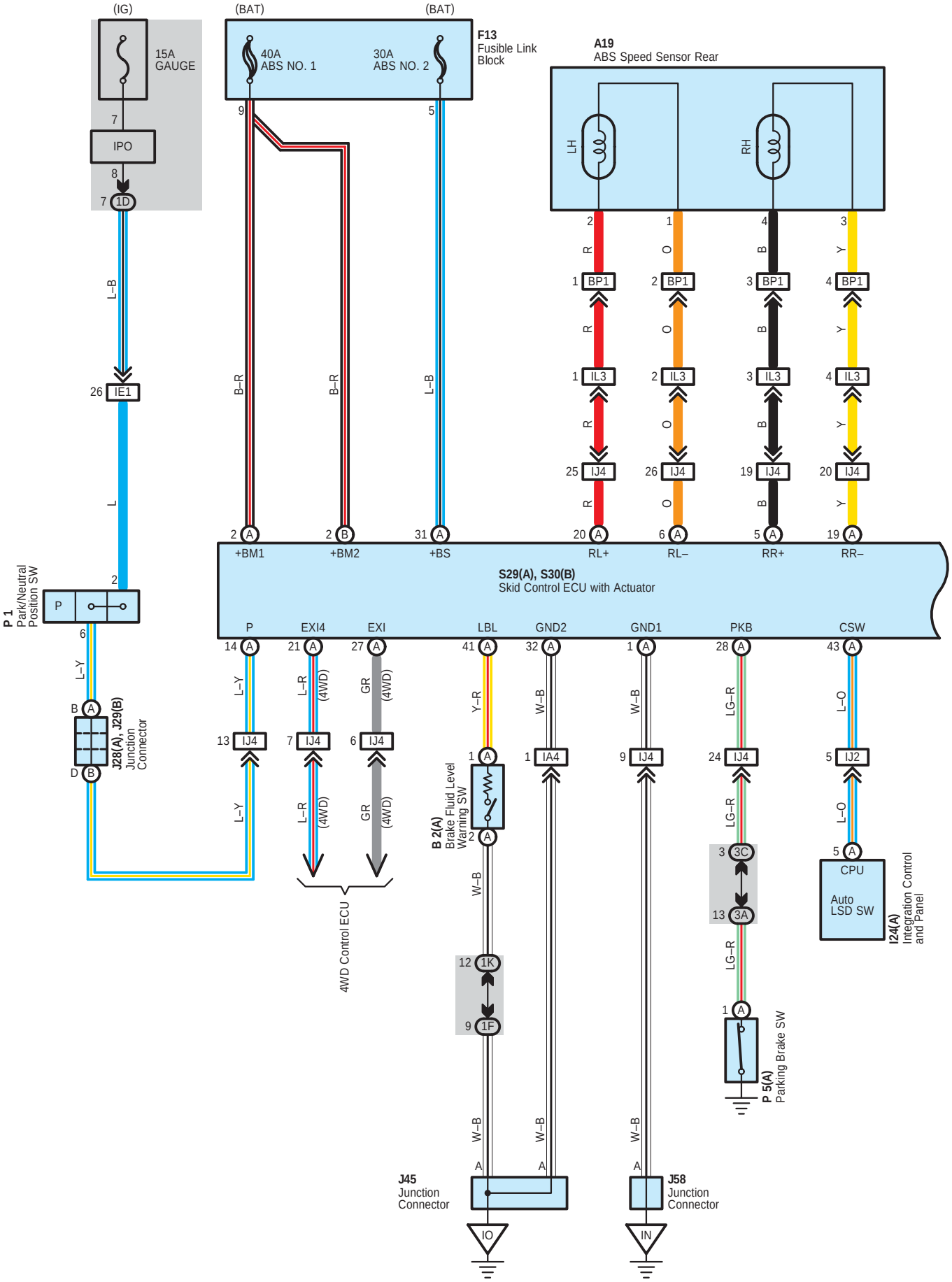
: **Connector Joining Wire Harness and Wire Harness**

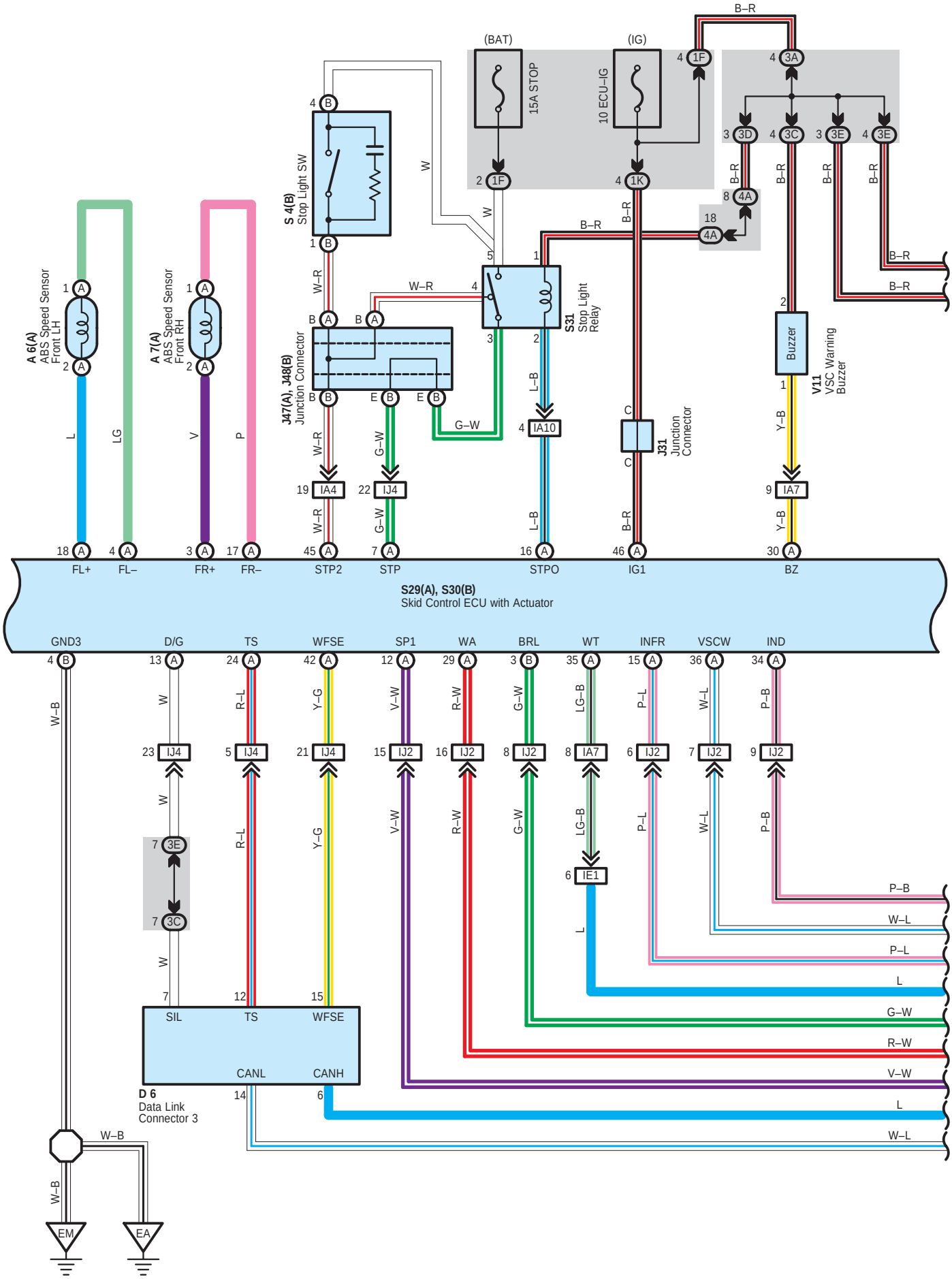
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA10 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

: **Ground Points**

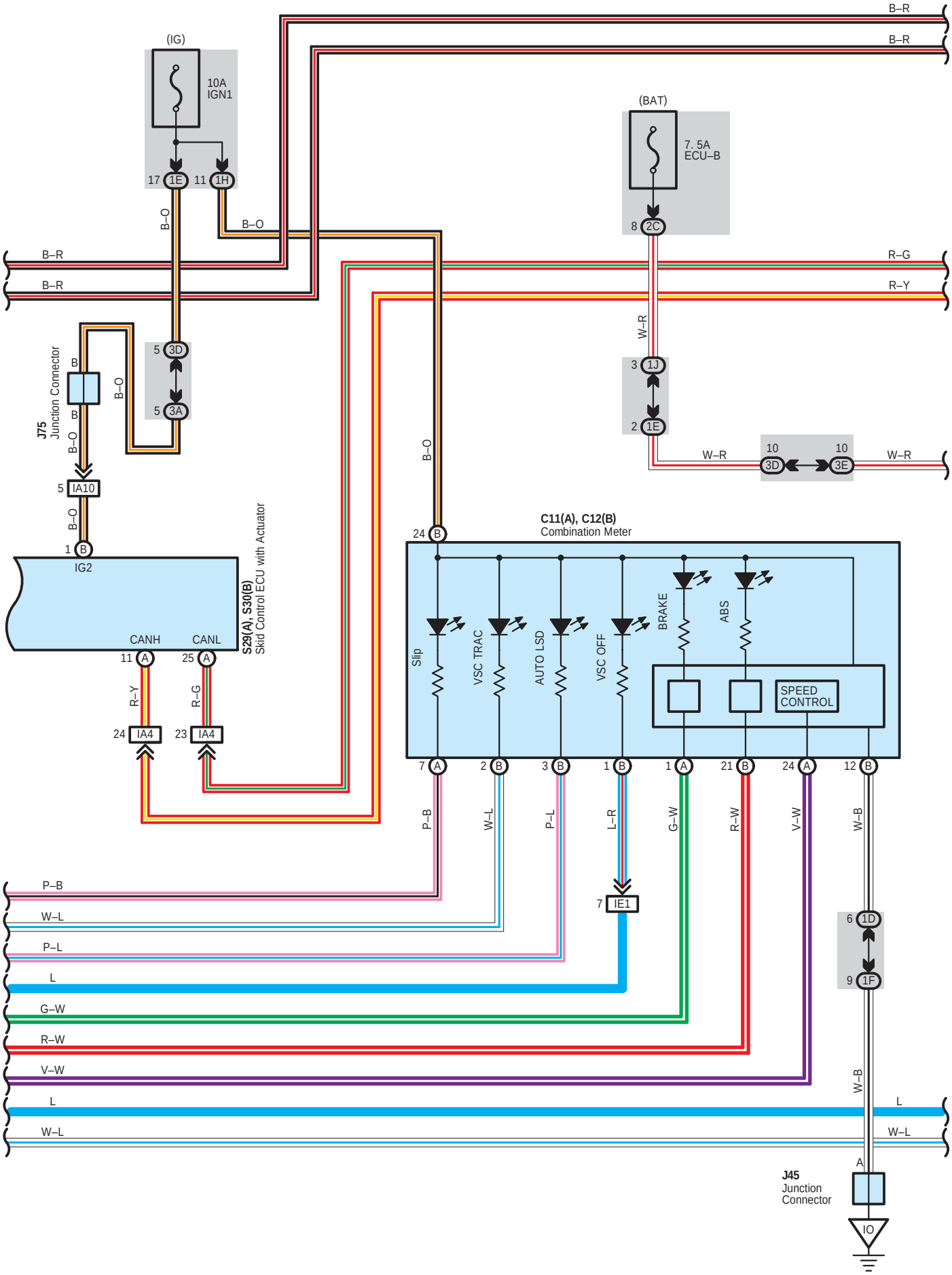
| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EC | 90 | Rear Bank of Left Cylinder Head |
| EY | 90 | Front Left Side of Cylinder Head |
| IO | 92 | Left Kick Panel |

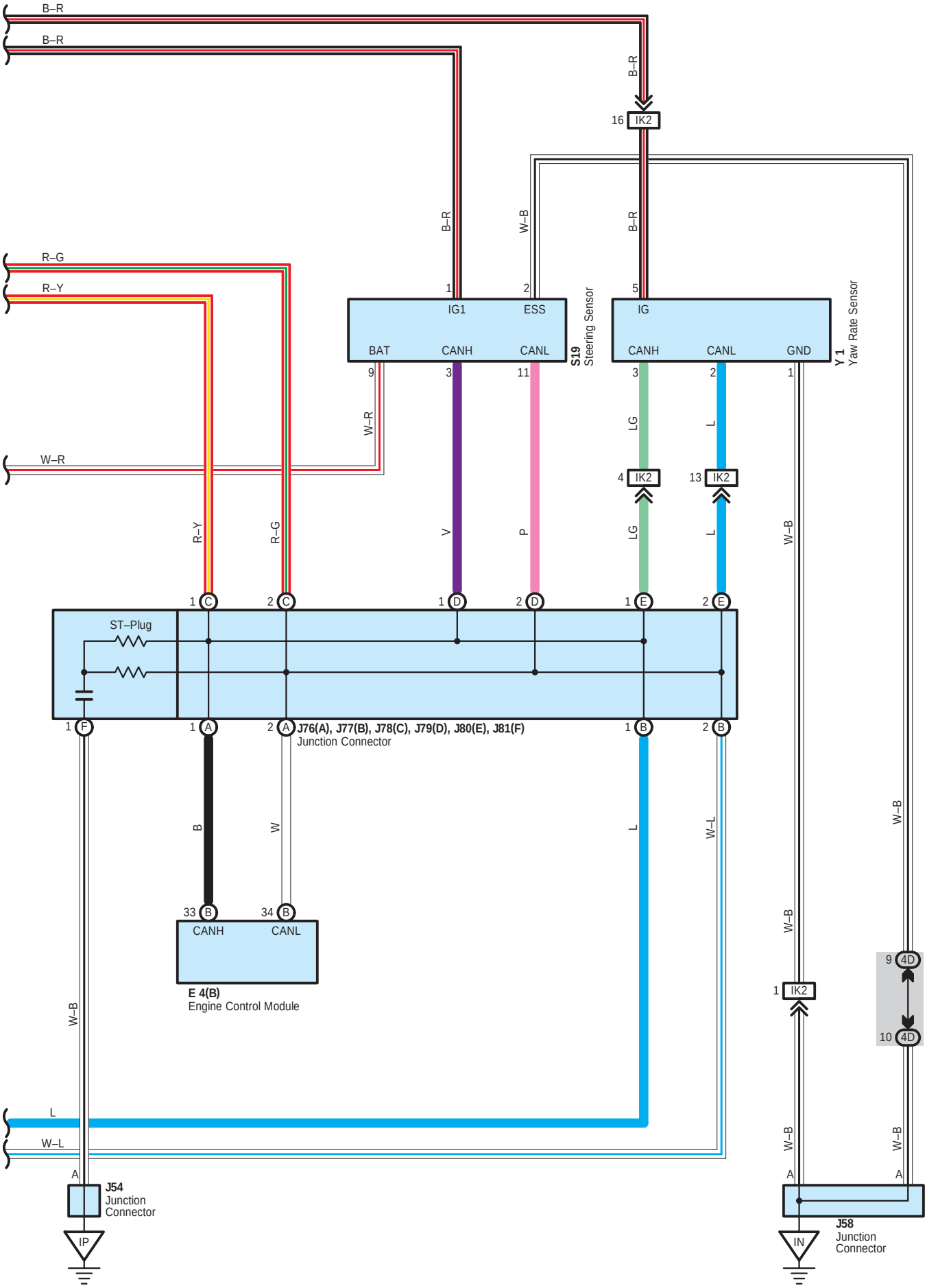
# ABS with VSC, TRAC and VSC (Double Cab)




(BAT)
(IG)
15A STOP
10 ECU-IG
B–R
S 4(B)
Stop Light SW
W
W–R
G–W
L–B
Y–B
A 6(A)
ABS Speed Sensor
Front LH
A 7(A)
ABS Speed Sensor
Front RH
J47(A), J48(B)
Junction Connector
S31
Stop Light
Relay
J31
Junction
Connector
V11
VSC Warning
Buzzer
Buzzer
L
LG
V
P
FL+
FL–
FR+
FR–
STP2
STP
STPO
IG1
BZ
S29(A), S30(B)
Skid Control ECU with Actuator
GND3
D/G
TS
WFSE
SP1
WA
BRL
WT
INFR
VSCW
IND
W–B
R–L
Y–G
V–W
R–W
G–W
LG–B
P–L
W–L
P–B
L
SIL
TS
WFSE
CANL
CANH
D 6
Data Link
Connector 3
EM
EA

# ABS with VSC, TRAC and VSC (Double Cab)




B–R
B–R
B–R
16 IK2
W–B
B–R
R–G
R–Y
1
2
IG1
ESS
S19
Steering Sensor
5
IG
BAT
CANH
CANL
CANH
CANL
GND
Y 1
Yaw Rate Sensor
9
3
11
3
2
1
W–R
LG
L
W–R
4 IK2
13 IK2
R–Y
R–G
V
P
LG
L
W–B
1 C
2 C
1 D
2 D
1 E
2 E
ST–Plug
1 F
1 A
2 A
J76(A), J77(B), J78(C), J79(D), J80(E), J81(F)
Junction Connector
1 B
2 B
B
W
L
W–L
W–B
33 B
34 B
CANH
CANL
E 4(B)
Engine Control Module
W–B
9 4D
1 IK2
10 4D
L
W–L
W–B
W–B
A
A
A
J54
Junction
Connector
IP
J58
Junction
Connector
IN

# ABS with VSC, TRAC and VSC (Double Cab)

**System Outline**

**1. ABS Operation**

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

**2. Traction Control Operation**

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

**3. VSC Operation**

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

To reduce large over–steering :

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

To reduce large under–steering :

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

**4. Mutual System Control**

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

Engine 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.

**5. Fail Safe Function**

If an error occurs in the skid control ECU with actuator, sensor signals, and/or actuators, the skid control ECU with actuator 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 regardless of the ABS, TRAC, and VSC systems.

○ **: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A6 | A | 70 | J31 | | 71 | J81 | F | 74 |
| A7 | A | 70 | J45 | | 74 | P1 | | 71 |
| A19 | | 76 | J47 | A | 74 | P5 | A | 75 |
| B2 | A | 70 | J48 | B | 74 | S4 | B | 75 |
| C11 | A | 72 | J54 | | 74 | S19 | | 75 |
| C12 | B | 72 | J58 | | 74 | S29 | A | 71 |
| D6 | | 73 | J75 | | 74 | S30 | B | 71 |
| E4 | B | 73 | J76 | A | 74 | S31 | | 75 |
| F13 | | 70 | J77 | B | 74 | V11 | | 75 |
| I24 | A | 73 | J78 | C | 74 | Y1 | | 75 |
| J28 | A | 74 | J79 | D | 74 | | | |
| J29 | B | 74 | J80 | E | 74 | | | |

: **Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3C | | |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4D | | |

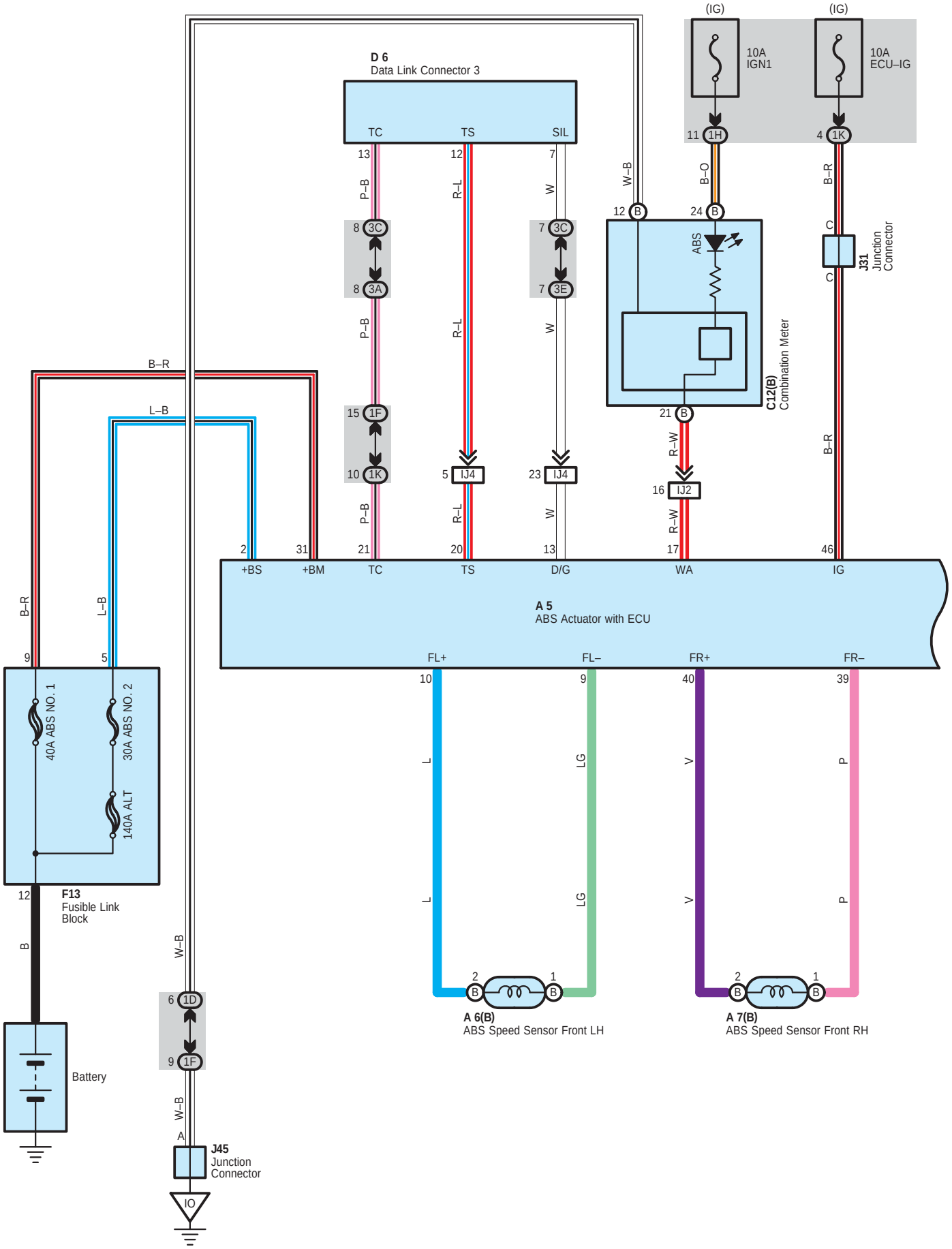
: **Connector Joining Wire Harness and Wire Harness**

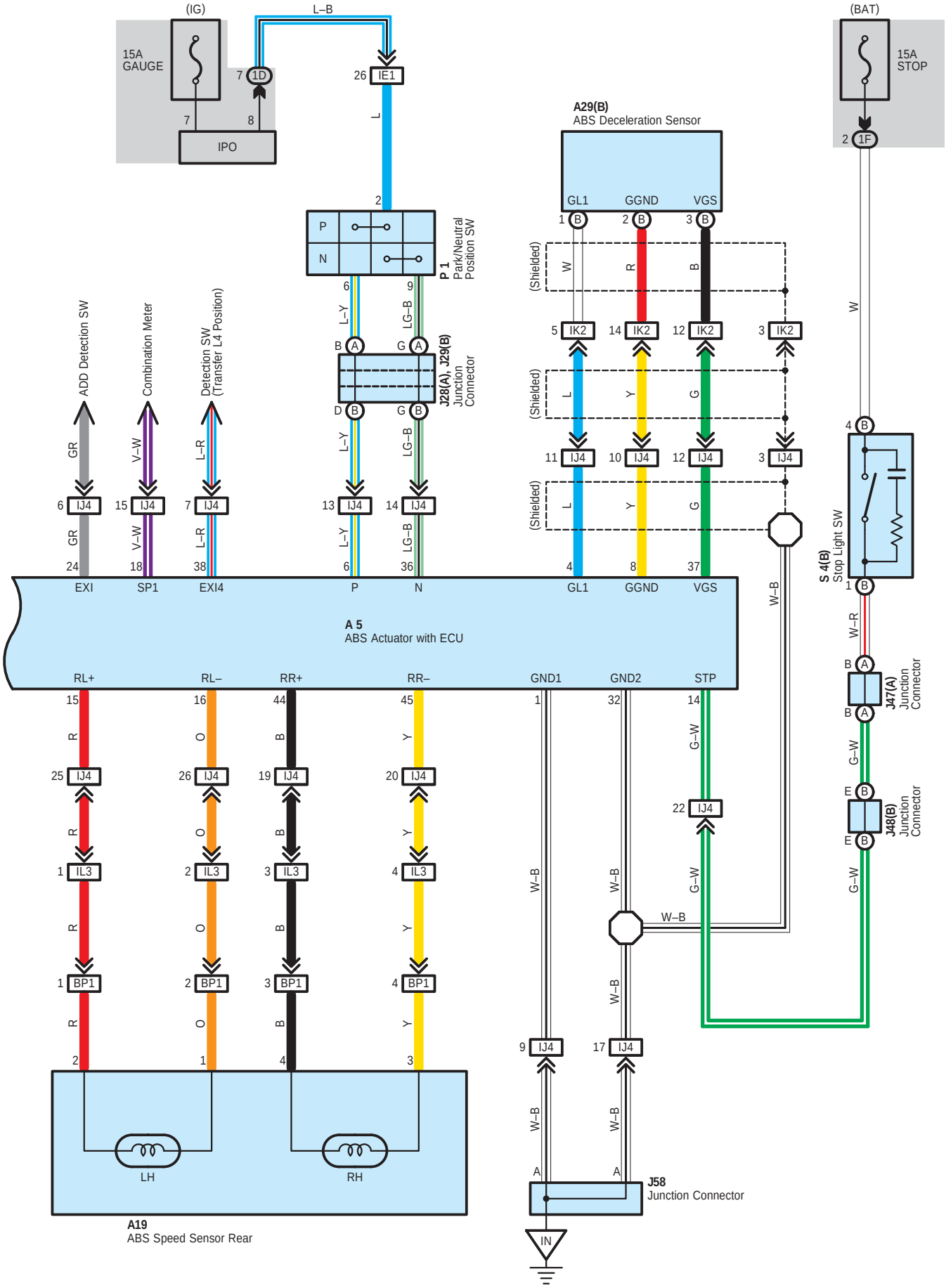
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IA10 | | |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IJ4 | | |
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL3 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| BP1 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EM | 90 | Radiator Side Support RH |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| IP | 92 | Instrument Panel Brace LH |

# ABS without VSC (Double Cab)




(IG)
L–B
15A
GAUGE
7
1D
26
IE1
L
7
8
IPO
2
P
N
P 1
Park/Neutral
Position SW
6
9
L–Y
LG–B
B
A
G
A
J28(A), J29(B)
Junction
Connector
D
B
G
B
L–Y
LG–B
ADD Detection SW
Combination Meter
Detection SW
(Transfer L4 Position)
GR
V–W
L–R
6
IJ4
15
IJ4
7
IJ4
13
IJ4
14
IJ4
GR
V–W
L–R
L–Y
LG–B
24
18
38
6
36
EXI
SP1
EXI4
P
N
A29(B)
ABS Deceleration Sensor
GL1
GGND
VGS
1
B
2
B
3
B
(Shielded)
W
R
B
5
IK2
14
IK2
12
IK2
3
IK2
(Shielded)
L
Y
G
11
IJ4
10
IJ4
12
IJ4
3
IJ4
(Shielded)
L
Y
G
4
8
37
GL1
GGND
VGS
W–B
A 5
ABS Actuator with ECU
RL+
RL–
RR+
RR–
GND1
GND2
STP
15
16
44
45
1
32
14
R
O
B
Y
25
IJ4
26
IJ4
19
IJ4
20
IJ4
R
O
B
Y
1
IL3
2
IL3
3
IL3
4
IL3
R
O
B
Y
1
BP1
2
BP1
3
BP1
4
BP1
R
O
B
Y
2
1
4
3
LH
RH
A19
ABS Speed Sensor Rear
G–W
22
IJ4
W–B
W–B
W–B
9
IJ4
17
IJ4
W–B
W–B
A
A
J58
Junction Connector
IN
(BAT)
15A
STOP
2
1F
W
4
B
S 4(B)
Stop Light SW
1
B
W–R
B
A
J47(A)
Junction
Connector
B
A
G–W
E
B
J48(B)
Junction
Connector
E
B
G–W

# ABS without VSC (Double Cab)

**System Outline**

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

**1. Input Signal**

(1) Speed sensor signal

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

(2) Stop light SW signal

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

**2. System Operation**

During sudden braking, the ABS actuator with ECU which has signals input from each sensor lets the hydraulic pressure acting on each wheel cylinder escape to the reservoir.
The pump inside the ABS actuator with ECU is also operating at this time and it returns the brake fluid from the reservoir to the master cylinder, thus preventing locking of vehicle wheels.
If the ABS actuator with ECU judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current acting on the solenoid is controlled and the hydraulic pressure is increased.
Holding of the hydraulic pressure is also controlled by the ECU, by the same method as above, by repeated pressure reduction. Holding and increase are repeated to maintain vehicle stability and to improve steerability during sudden braking.

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A5 | 70 | D6 | 73 | J47 A | 74 |
| A6 B | 70 | F13 | 70 | J48 B | 74 |
| A7 B | 70 | J28 A | 74 | J58 | 74 |
| A19 | 76 | J29 B | 74 | P1 | 71 |
| A29 B | 72 | J31 | 71 | S4 B | 75 |
| C12 B | 72 | J45 | 74 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1H | | |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3C | | |
| 3E | | |

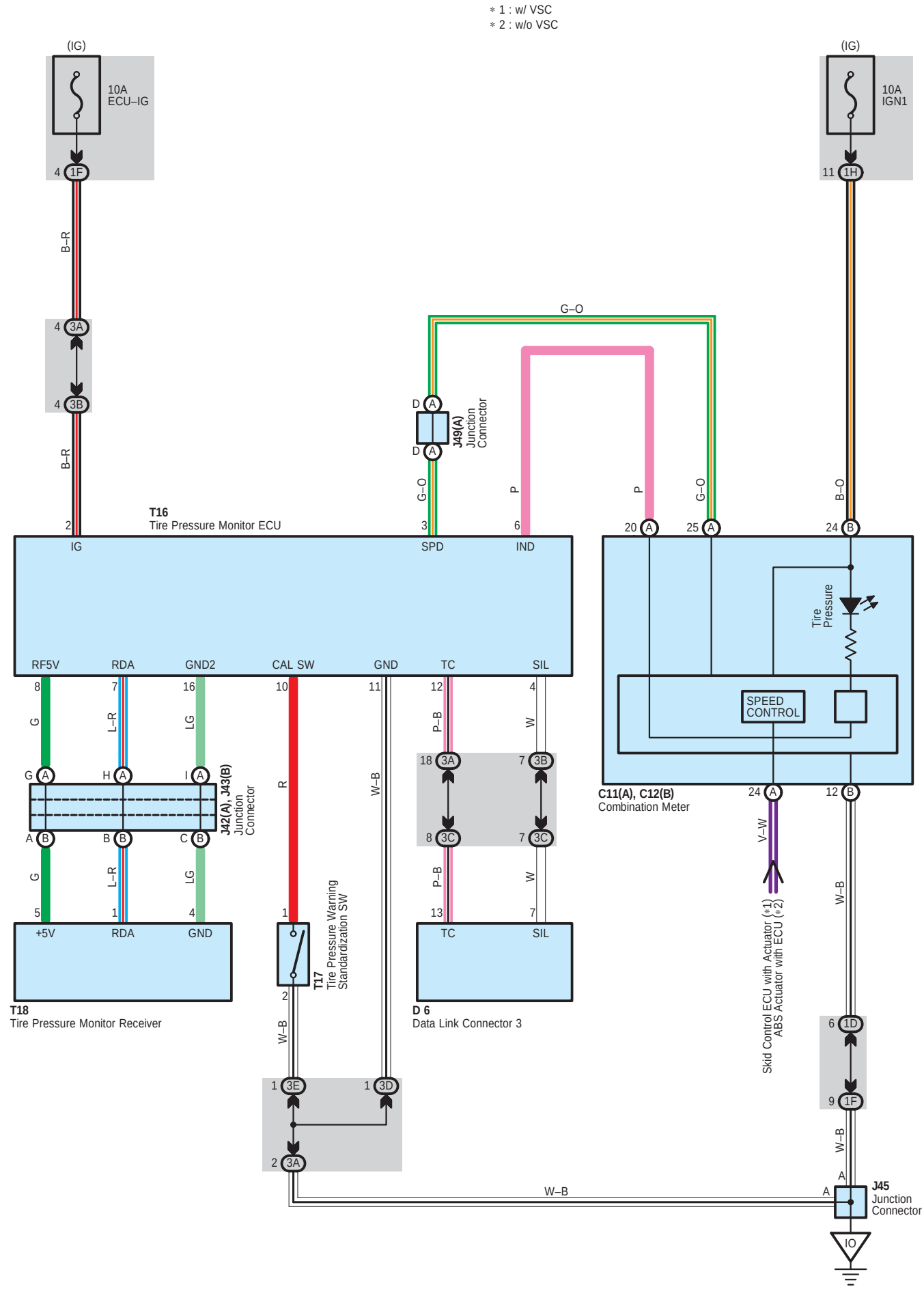
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IJ4 | | |
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL3 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| BP1 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |

# Tire Pressure Warning System (Double Cab)



**System Outline**

The air pressure sensor installed in the tire wheel detects the tire air pressure and transmits signals to the vehicle side receiver. When the detected tire air pressure is below a specified level, the warning light in the combination meter comes on to inform the driver.
Press the tire pressure warning standardization SW for 3 seconds with the ignition SW at ON position after the tire pressure is adjusted to the specified value. It will lead the tire pressure monitor ECU to control and warn the pressure according to the specified value.
Warnings when the tire pressure is low
* When the tire air pressure is below a specified level, the warning light in the combination meter comes on.

**: Parts Location**

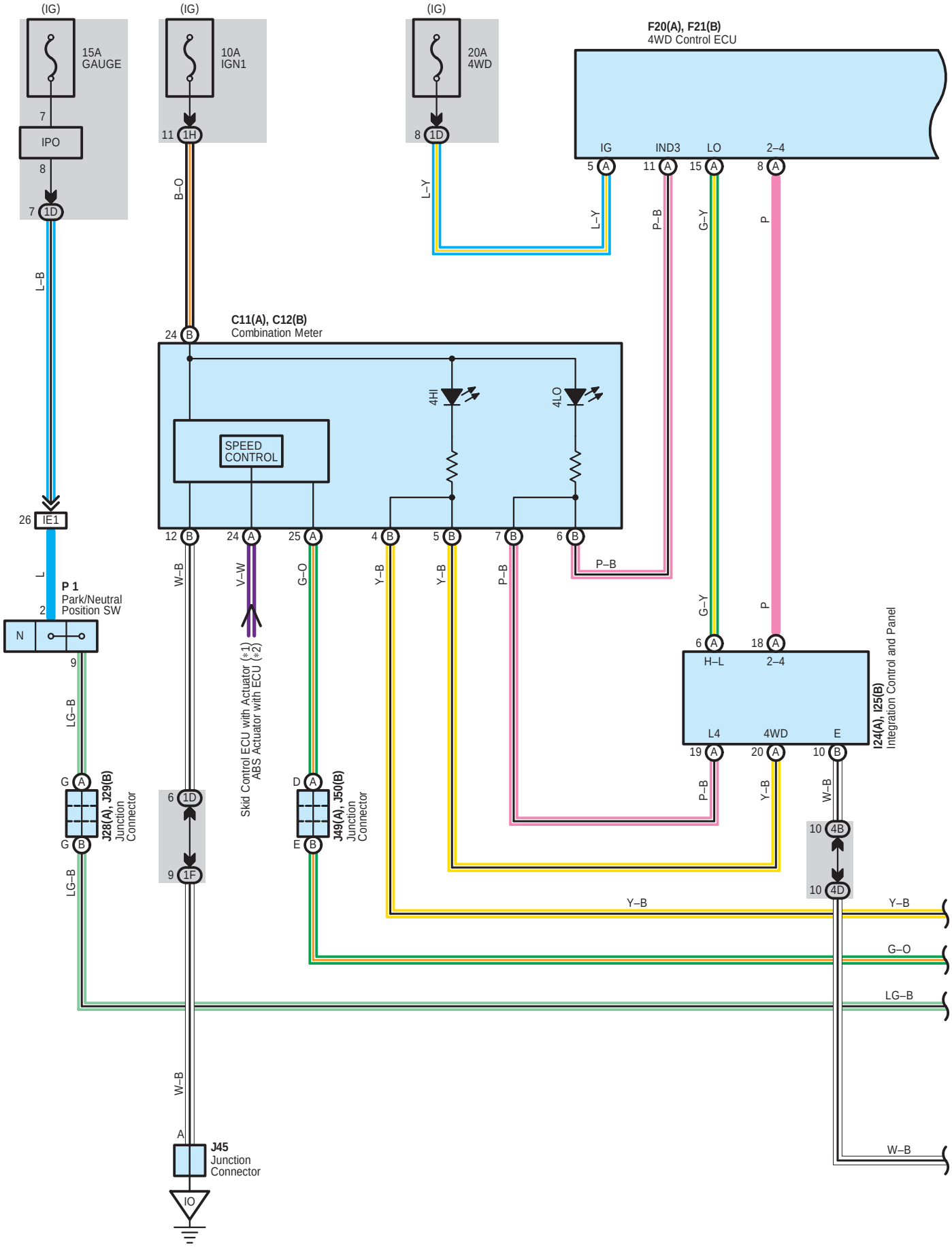
| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C11 A | 72 | J43 B | 74 | T17 | 75 |
| C12 B | 72 | J45 | 74 | T18 | 77 |
| D6 | 73 | J49 A | 74 | | |
| J42 A | 74 | T16 | 75 | | |

**: Junction Block and Wire Harness Connector**

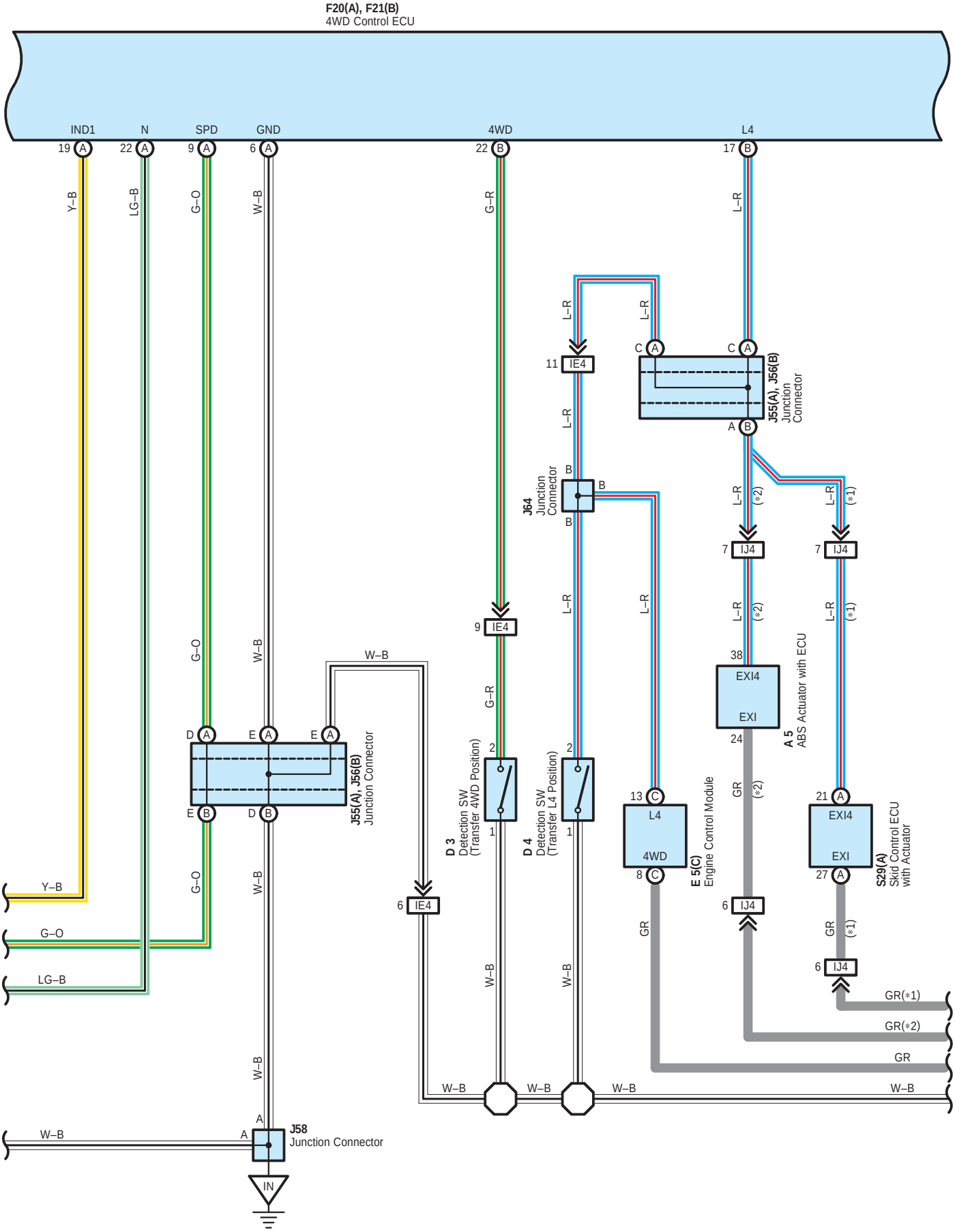
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1H | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3C | | |
| 3D | | |
| 3E | | |

**: Ground Points**

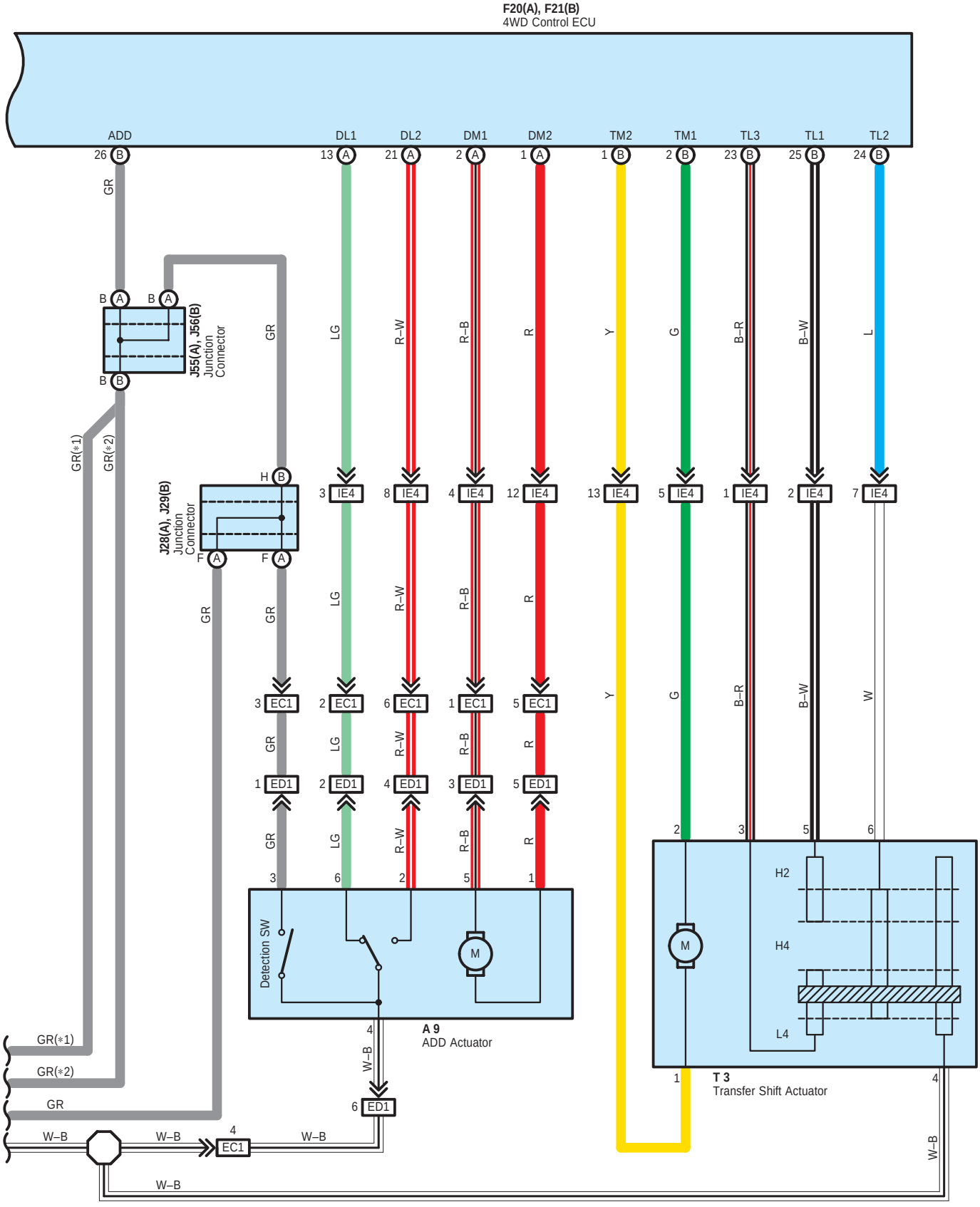
| Code | See Page | Ground Points Location |
|---|---|---|
| IO | 92 | Left Kick Panel |


(IG)
15A GAUGE
7
IPO
8
7 1D
L–B
26 IE1
L
P 1
Park/Neutral Position SW
2
N
9
LG–B
G A
G B
J28(A), J29(B) Junction Connector
LG–B
(IG)
10A IGN1
11 1H
B–O
24 B
C11(A), C12(B)
Combination Meter
SPEED CONTROL
4HI
4LO
12 B
24 A
25 A
4 B
5 B
7 B
6 B
W–B
V–W
G–O
Y–B
Y–B
P–B
P–B
Skid Control ECU with Actuator (*1)
ABS Actuator with ECU (*2)
6 1D
9 1F
W–B
A
J45 Junction Connector
IO
D A
E B
J49(A), J50(B) Junction Connector
(IG)
20A 4WD
8 1D
L–Y
F20(A), F21(B)
4WD Control ECU
IG
IND3
LO
2–4
5 A
11 A
15 A
8 A
L–Y
P–B
G–Y
P
G–Y
P
6 A
18 A
H–L
2–4
L4
4WD
E
19 A
20 A
10 B
I24(A), I25(B)
Integration Control and Panel
P–B
Y–B
W–B
10 4B
10 4D
Y–B
Y–B
G–O
LG–B
W–B

＊1 : w/ VSC
＊2 : w/o VSC



＊1 : w/ VSC
＊2 : w/o VSC



**System Outline**

In the conventional system, the 2–4 select SW and the transfer shift lever was used to shift the mode between H–L. In this system, the transfer shift lever is not used, and the H–L mode shift can be done by the transfer shift actuator.
The mode can be changed by the touch select 2–4 SW and touch select high–low in the integration control and panel.
The shift range is controlled according to the vehicle speed sensor and Park/Neutral position SW, and the indicator light is turned ON to inform the driver if any of the following conditions are detected:

* The shift is not completed even though 3 seconds have elapsed after transfer operation.
* The vehicle speed is above approximately 100 km/h (63 mph) when shifting from H2 to H4.
* The vehicle speed is below approximately 5 km/h (3 mph) or the A/T shift lever is in a position other than N position, when shifting from H4 to L4 or visa versa, and from L4 to H2.

**Transfer Operation**

H2 to H4
When the touch select 2–4 SW in the integration control and panel is turned ON, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD (H4 position.)
When the system shifts to 4WD, the detection SW (Transfer 4WD position) is turned ON, and the current flows from 4WD control ECU TERMINAL (A) 2 to ADD actuator TERMINAL 5 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (A) 1 to GROUND, and the ADD actuator is activated, and the ADD is connected. When the ADD is connected, the detection SW (ADD position SW) is turned ON, and the 4HI Indicator light comes ON.
H4 to H2
When the touch select 2–4 SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the transfer shifts to 2WD (H2 position.)
When the system shifts to 2WD, the detection SW (Transfer 4WD position) is turned OFF, and the current flows from 4WD control ECU TERMINAL (A) 1 to ADD actuator TERMINAL 1 to motor to TERMINAL 5 to 4WD control ECU TERMINAL (A) 2 to GROUND, and the ADD actuator is activated, and the ADD is disconnected. When the ADD is disconnected, the detection SW (ADD position SW) is turned OFF, and the 4HI indicator Light turns OFF.
H4 to L4
When the touch select high–low SW in the integration control and panel is turned ON, a signal is input into TERMINAL (A) 15 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD LO position (L4 position.)
The 4HI Indicator is turned OFF and the 4LO indicator is turned ON.
L4 to H4
When the touch select high–low SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 15 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the transfer shifts to 4WD HI position (H4 Position.)
The 4HI indicator is turned ON and the 4LO indicator is turned OFF.
The shift is not completed even though 3 seconds have elapsed after transfer operation.

* The vehicle speed is above approximately 100 km/h (63 mph) when shifting from H2 to H4.
* The vehicle speed is below approximately 5 km/h (3 mph) or the A/T Shift Lever is in a position other than N position, when shifting from H4 to L4 or visa versa, and from L4 to H2.

L4 to H2
When the touch select 2–4 SW in the integration control and panel is turned OFF, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 1 to transfer shift actuator TERMINAL 1 to motor to TERMINAL 2 to 4WD control ECU TERMINAL (B) 2 to GROUND, and the detection SW (Transfer L4 position) is turned OFF.
Furthermore, the motor rotates to shift the transfer to 2WD (H2 position.)
When the system shifts to 2WD, the detection SW (Transfer 4WD position) is turned OFF, and the current flows from 4WD control ECU TERMINAL (A) 1 to ADD actuator TERMINAL 1 to motor to TERMINAL 5 to 4WD control ECU TERMINAL (A) 2 to GROUND, and the ADD actuator is activated, and the ADD is disconnected. When the ADD is disconnected, the detection SW (ADD position SW) is turned OFF, and the 4LO indicator light turns OFF.

H2 to L4
When the touch select 2–4 SW in the integration control and panel is turned ON, and the touch select high–low SW is turned ON, a signal is input into TERMINAL (A) 8 of the 4WD control ECU.
The 4WD control ECU is activated by this, and the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND, and the transfer shifts to 4WD (H4 position.)
When the system shifts to 4WD, the detection SW (Transfer 4WD position) is turned ON, and the current flows from 4WD control ECU TERMINAL (A) 2 to ADD actuator TERMINAL 5 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (A) 1 to GROUND, and the ADD actuator is activated, and the ADD is connected. Then a signal is input into TERMINAL (A) 15 of the 4WD control ECU and the 4WD control ECU is activated by this, so the current flows from the 4WD control ECU TERMINAL (B) 2 to transfer shift actuator TERMINAL 2 to motor to TERMINAL 1 to 4WD control ECU TERMINAL (B) 1 to GROUND. The transfer shifts to 4WD LO position (L4 position), and the 4LO indicator light comes ON.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A5 | 70 | F21 B | 73 | J55 A | 74 |
| A9 | 70 | I24 A | 73 | J56 B | 74 |
| C11 A | 72 | I25 B | 73 | J58 | 74 |
| C12 B | 72 | J28 A | 74 | J64 | 74 |
| D3 | 70 | J29 B | 74 | P1 | 71 |
| D4 | 70 | J45 | 74 | S29 A | 71 |
| E5 C | 73 | J49 A | 74 | T3 | 71 |
| F20 A | 73 | J50 B | 74 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1H | | |
| 4B | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4D | | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EC1 | 90 | Engine No.2 Wire and Engine Wire (Near the Starter) |
| ED1 | 90 | Engine No.2 Wire and Differential Wire (Near the Transmission) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IE4 | | |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |

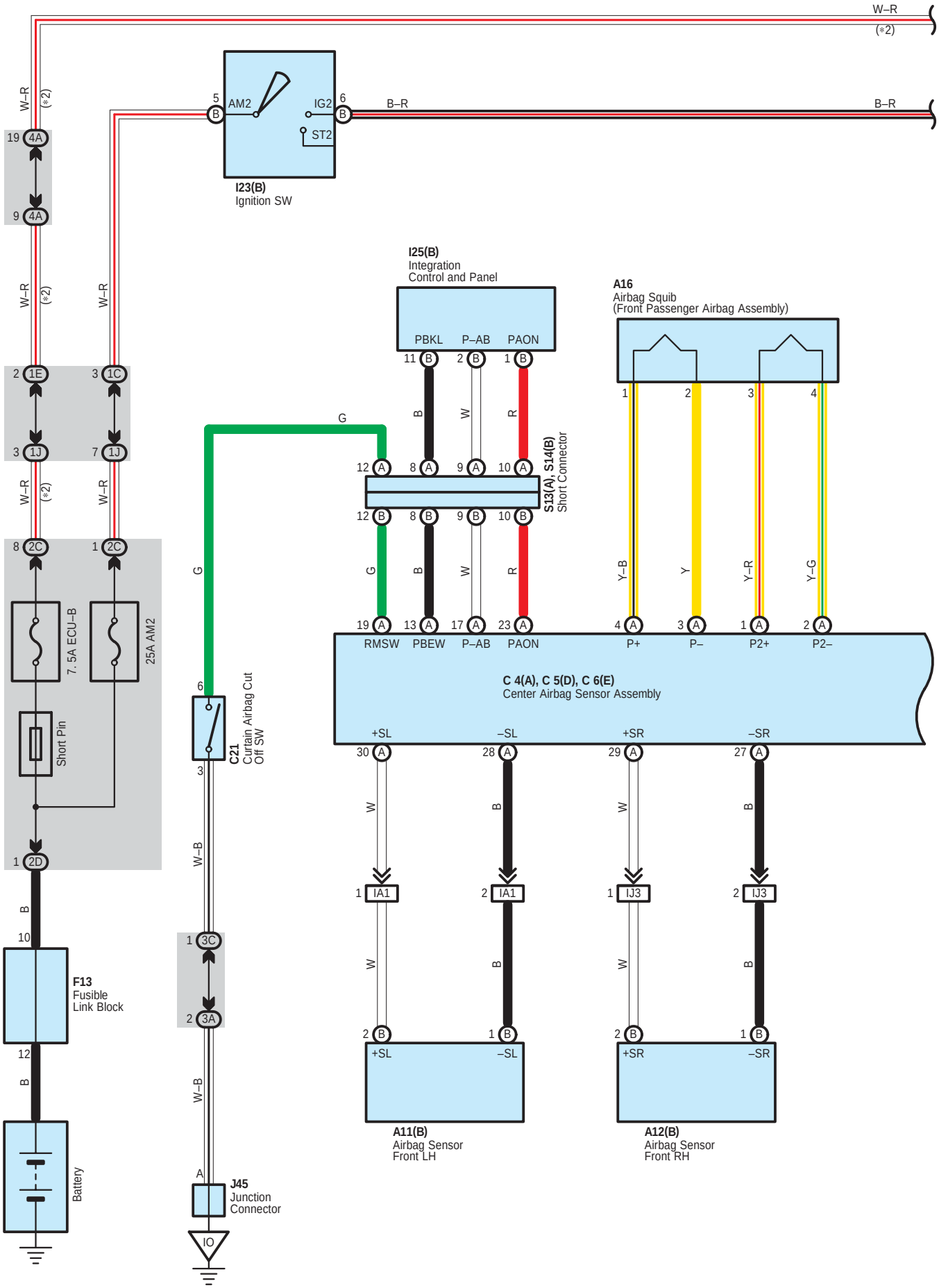
**▽ : Ground Points**

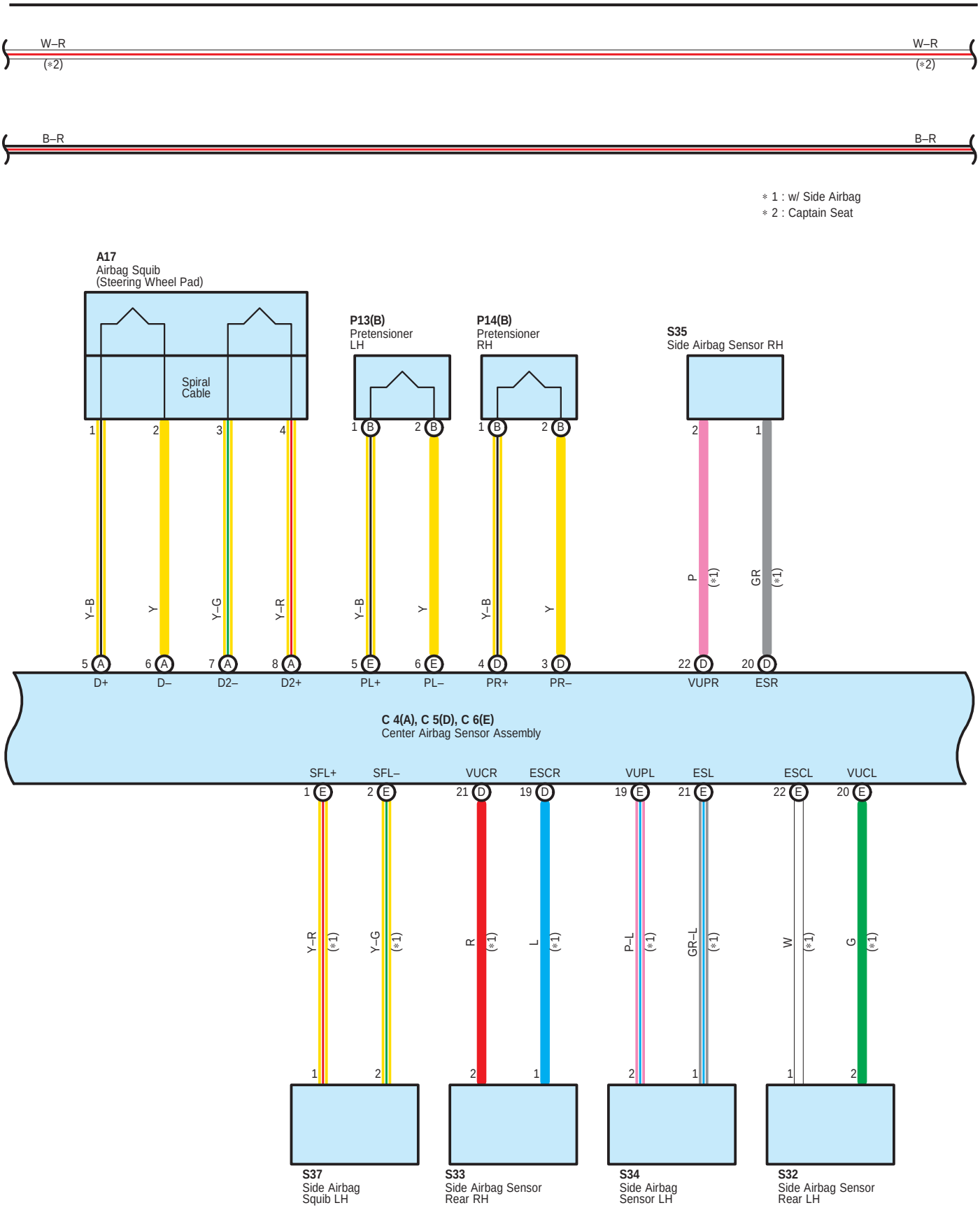
| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |

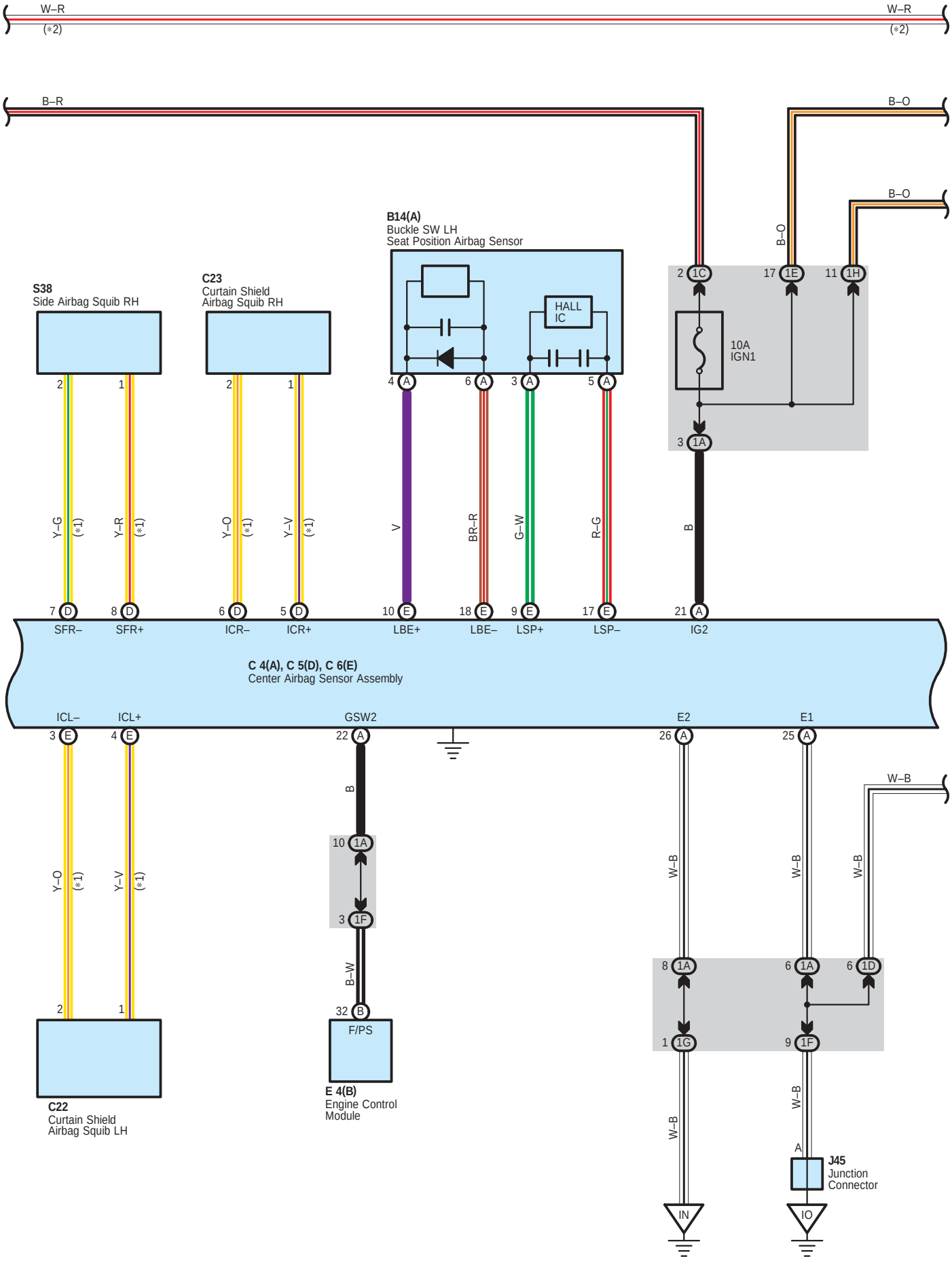
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

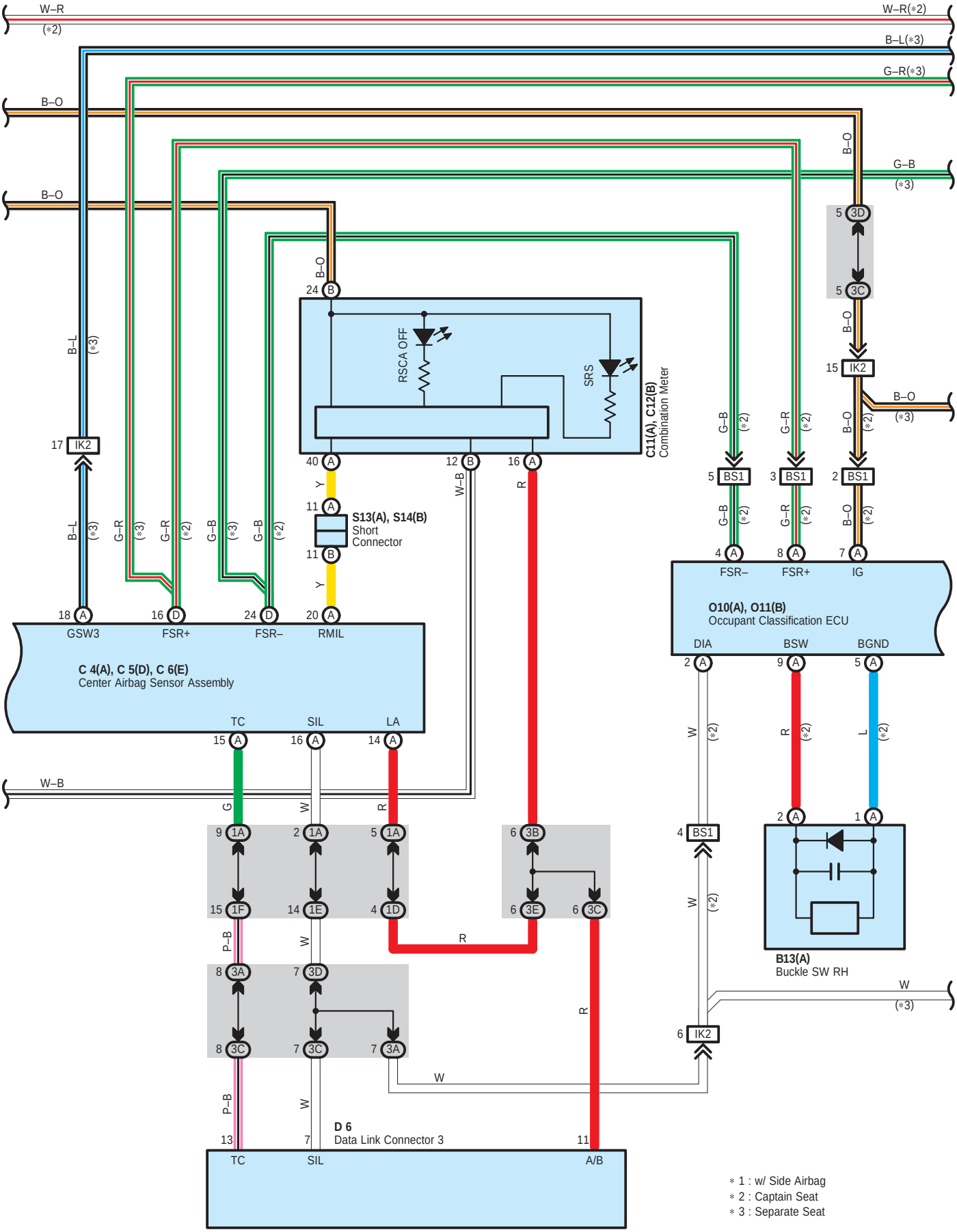
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is 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.

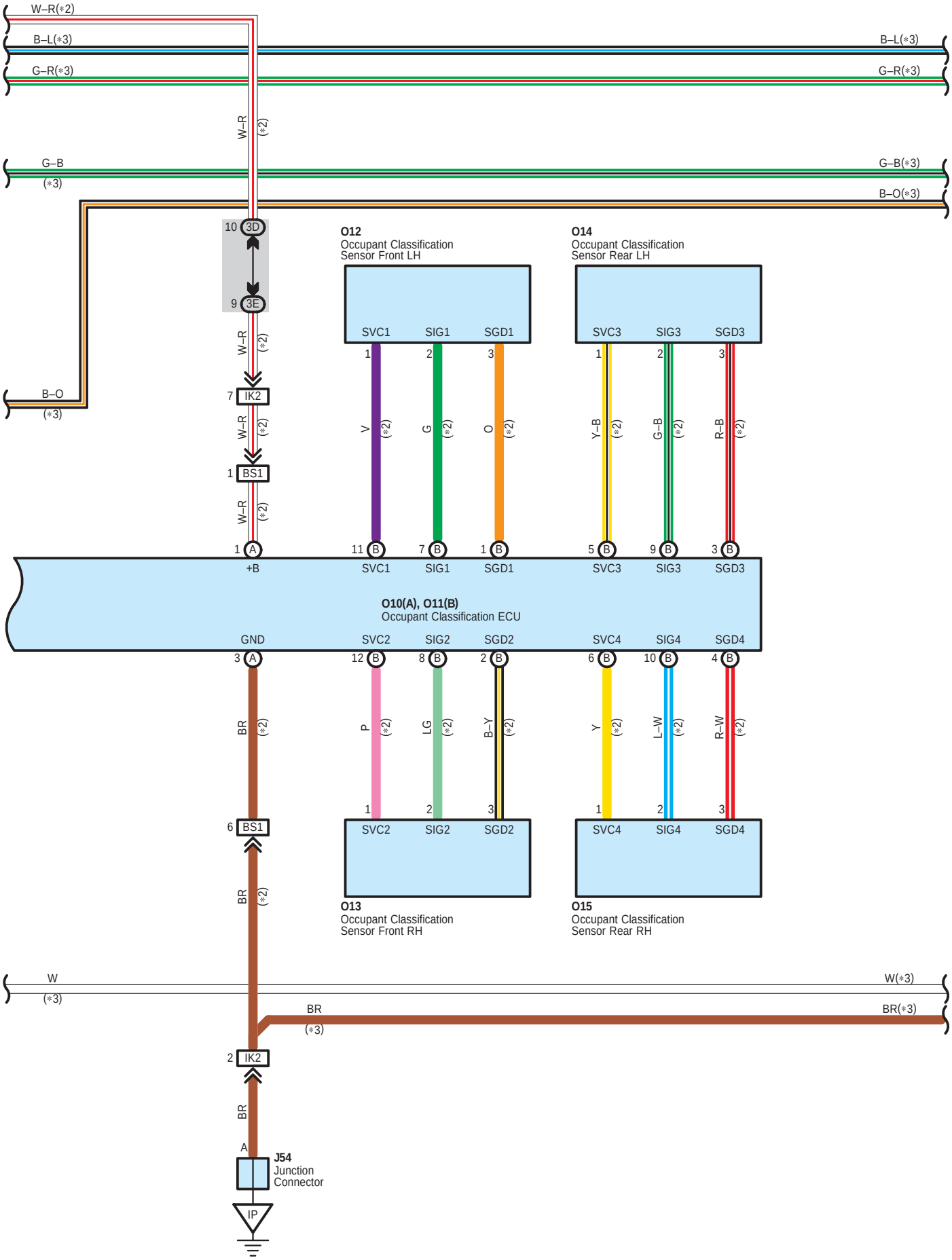
* Steering wheel pad
* Front passenger airbag assembly
* Side airbag assembly
* Curtain shield airbag assembly
* Seat belt pretensioner
* Center airbag sensor assembly
* Front airbag sensor assembly
* Side airbag sensor assembly
* Rear airbag sensor assembly

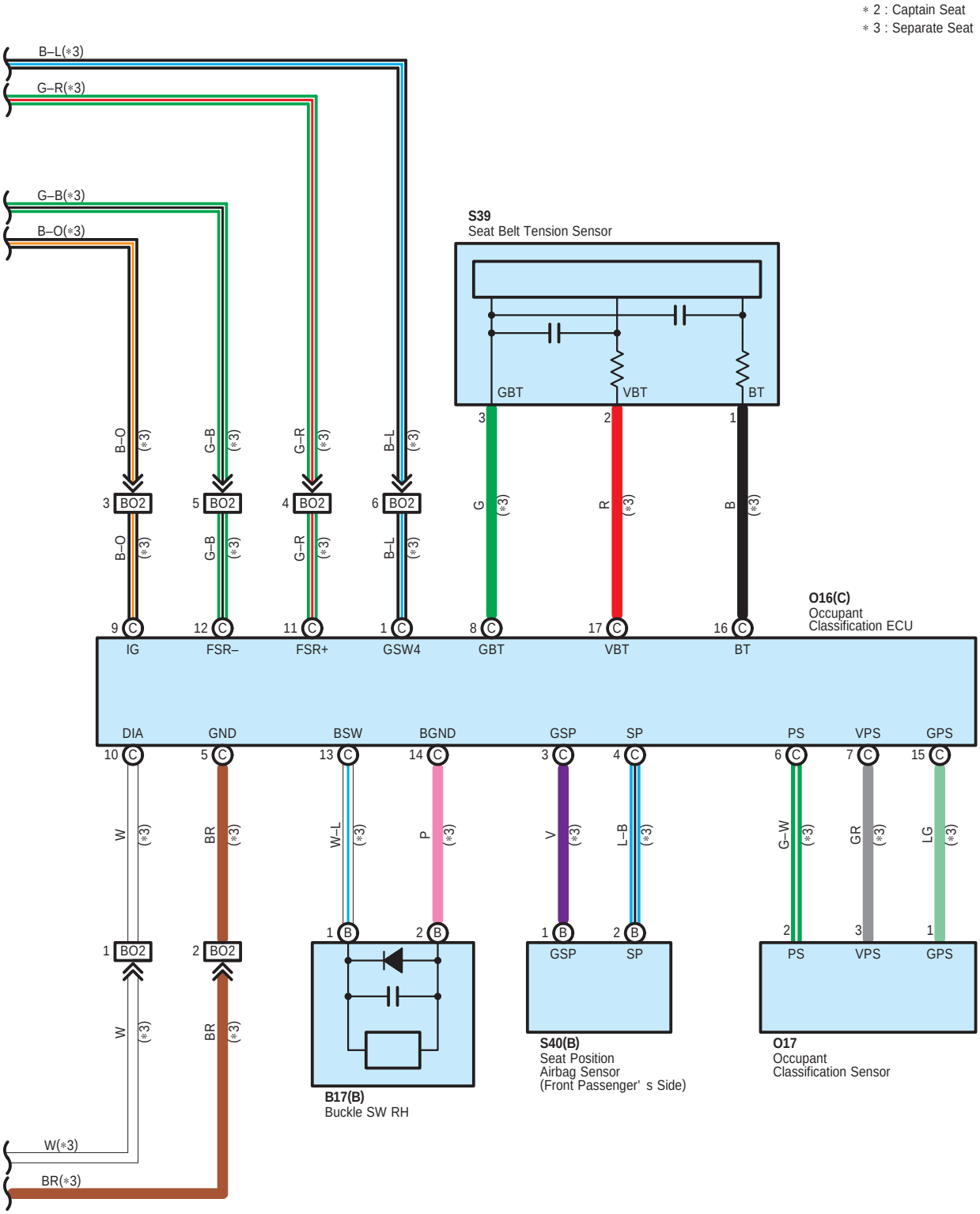

W–R
(*2)
B–R
B–R
5 B AM2
IG2 6 B
ST2
I23(B)
Ignition SW
19 4A
9 4A
2 1E
3 1J
3 1C
7 1J
8 2C
1 2C
1 2D
7. 5A ECU–B
25A AM2
Short Pin
10 B
F13
Fusible
Link Block
12 B
Battery
G
6
3
C21
Curtain Airbag Cut
Off SW
W–B
1 3C
2 3A
A
J45
Junction
Connector
IO
I25(B)
Integration
Control and Panel
PBKL P–AB PAON
11 B 2 B 1 B
12 A 8 A 9 A 10 A
S13(A), S14(B)
Short Connector
12 B 8 B 9 B 10 B
19 A 13 A 17 A 23 A
RMSW PBEW P–AB PAON
A16
Airbag Squib
(Front Passenger Airbag Assembly)
1 2 3 4
Y–B Y Y–R Y–G
4 A 3 A 1 A 2 A
P+ P– P2+ P2–
C 4(A), C 5(D), C 6(E)
Center Airbag Sensor Assembly
+SL –SL +SR –SR
30 A 28 A 29 A 27 A
W B W B
1 IA1 2 IA1 1 IJ3 2 IJ3
W B W B
2 B 1 B 2 B 1 B
+SL –SL +SR –SR
A11(B)
Airbag Sensor
Front LH
A12(B)
Airbag Sensor
Front RH


W–R
(*2)
W–R
(*2)
B–R
B–R
* 1 : w/ Side Airbag
* 2 : Captain Seat
A17
Airbag Squib
(Steering Wheel Pad)
Spiral
Cable
P13(B)
Pretensioner
LH
P14(B)
Pretensioner
RH
S35
Side Airbag Sensor RH
Y–B
Y
Y–G
Y–R
P
GR
(*1)
D+
D–
D2–
D2+
PL+
PL–
PR+
PR–
VUPR
ESR
C 4(A), C 5(D), C 6(E)
Center Airbag Sensor Assembly
SFL+
SFL–
VUCR
ESCR
VUPL
ESL
ESCL
VUCL
Y–R
Y–G
R
L
P–L
GR–L
W
G
S37
Side Airbag
Squib LH
S33
Side Airbag Sensor
Rear RH
S34
Side Airbag
Sensor LH
S32
Side Airbag Sensor
Rear LH


W–R
(*2)
W–R
(*2)
B–R
B–O
B–O
B–O
B14(A)
Buckle SW LH
Seat Position Airbag Sensor
HALL IC
S38
Side Airbag Squib RH
C23
Curtain Shield
Airbag Squib RH
2 1C
17 1E
11 1H
10A
IGN1
3 1A
Y–G (*1)
Y–R (*1)
Y–O (*1)
Y–V (*1)
V
BR–R
G–W
R–G
B
7 D
8 D
6 D
5 D
10 E
18 E
9 E
17 E
21 A
SFR–
SFR+
ICR–
ICR+
LBE+
LBE–
LSP+
LSP–
IG2
C 4(A), C 5(D), C 6(E)
Center Airbag Sensor Assembly
ICL–
ICL+
GSW2
E2
E1
3 E
4 E
22 A
26 A
25 A
W–B
10 1A
3 1F
B–W
32 B
F/PS
8 1A
6 1A
6 1D
1 1G
9 1F
C22
Curtain Shield
Airbag Squib LH
E 4(B)
Engine Control
Module
J45
Junction
Connector
IN
IO


W–R
(*2)
W–R(*2)
B–L(*3)
G–R(*3)
B–O
G–B
(*3)
B–L
G–R
W–B
RSCA OFF
SRS
C11(A), C12(B)
Combination Meter
S13(A), S14(B)
Short
Connector
C 4(A), C 5(D), C 6(E)
Center Airbag Sensor Assembly
GSW3
FSR+
FSR–
RMIL
O10(A), O11(B)
Occupant Classification ECU
DIA
BSW
BGND
FSR–
FSR+
IG
B13(A)
Buckle SW RH
D 6
Data Link Connector 3
TC
SIL
A/B
IK2
BS1
1A
1D
1E
1F
3A
3B
3C
3D
3E
* 1 : w/ Side Airbag
* 2 : Captain Seat
* 3 : Separate Seat


W–R(∗2)
B–L(∗3)
G–R(∗3)
B–L(∗3)
G–R(∗3)
W–R
(∗2)
G–B
(∗3)
G–B(∗3)
B–O(∗3)
B–O
(∗3)
10 3D
9 3E
W–R
(∗2)
7 IK2
W–R
(∗2)
1 BS1
W–R
(∗2)
1 A
+B
O12
Occupant Classification
Sensor Front LH
SVC1
SIG1
SGD1
1
2
3
V
G
O
(∗2)
11 B
7 B
1 B
SVC1
SIG1
SGD1
O14
Occupant Classification
Sensor Rear LH
SVC3
SIG3
SGD3
1
2
3
Y–B
G–B
R–B
(∗2)
5 B
9 B
3 B
SVC3
SIG3
SGD3
O10(A), O11(B)
Occupant Classification ECU
GND
SVC2
SIG2
SGD2
SVC4
SIG4
SGD4
3 A
12 B
8 B
2 B
6 B
10 B
4 B
BR
P
LG
B–Y
Y
L–W
R–W
(∗2)
6 BS1
BR
(∗2)
1
2
3
SVC2
SIG2
SGD2
SVC4
SIG4
SGD4
O13
Occupant Classification
Sensor Front RH
O15
Occupant Classification
Sensor Rear RH
W
(∗3)
W(∗3)
BR
(∗3)
BR(∗3)
2 IK2
BR
A
J54
Junction
Connector
IP


＊2 : Captain Seat
＊3 : Separate Seat
B–L(＊3)
G–R(＊3)
G–B(＊3)
B–O(＊3)
S39
Seat Belt Tension Sensor
GBT
VBT
BT
3
2
1
G (＊3)
R (＊3)
B (＊3)
B–O (＊3)
G–B (＊3)
G–R (＊3)
B–L (＊3)
3 BO2
5 BO2
4 BO2
6 BO2
O16(C)
Occupant
Classification ECU
9 C IG
12 C FSR–
11 C FSR+
1 C GSW4
8 C GBT
17 C VBT
16 C BT
DIA
GND
BSW
BGND
GSP
SP
PS
VPS
GPS
10 C
5 C
13 C
14 C
3 C
4 C
6 C
7 C
15 C
W (＊3)
BR (＊3)
W–L (＊3)
P (＊3)
V (＊3)
L–B (＊3)
G–W (＊3)
GR (＊3)
LG (＊3)
1 BO2
2 BO2
1 B
2 B
1 B
2 B
2
3
1
GSP
SP
PS
VPS
GPS
W(＊3)
BR(＊3)
B17(B)
Buckle SW RH
S40(B)
Seat Position
Airbag Sensor
(Front Passenger' s Side)
O17
Occupant
Classification Sensor

# SRS (Double Cab)

**System Outline**

* The system reaches an ignition judgment to deploy the following device based on the signals received from the front airbag sensor and deceleration sensor.
  – Driver Airbag
  – Front Passenger Airbag
  – Seat Belt Pretensioner
* The system reaches an ignition judgment to deploy the following device based on the signals received from the side airbag sensors.
  – Side Airbags
  – Curtain Shield Airbags
* The dual–stage SRS airbag system has been used for the driver and front passenger airbags. This system controls the optimal airbag inflation by judging the extent of impact, seat position (driver seat), whether or not the seat belt is fastened (driver seat) and information from the front passenger occupant classification system.
* The front passenger occupant classification system judges whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, according to the load applied to the front passenger seat and whether the seat belt is buckled. Based on the results, it restricts the deployment of the front passenger airbag, front passenger side airbag, and front passenger seat belt pretensioner. In addition, the system informs the driver of the result of the judgment through the use of the AIRBAG ON/OFF indicator lights.
* The front passenger occupant classification system judges whether the front passenger seat is occupied by an adult or child (with child seat) or is unoccupied, according to the load applied to the front passenger seat, seat position (passenger), the load applied to the belt tension sensor (passenger), and whether the seat belt is buckled (passenger). Based on the results, it restricts the deployment of the front passenger airbag, front passenger side airbag, and front passenger seat belt pretensioner. In addition, the system informs the driver of the result of the judgment through the use of the AIRBAG ON/OFF indicator lights.
* A Roll Sensing Curtain Shield Airbag system has been adopted in order to deploy the curtain shield airbags and the pretensioners, in the event that the vehicle rolls over.
* A Roll Sensing Curtain Shield Airbag cutoff SW is provided near the driver side to enable the driver to disable this system.
* The airbag sensor assembly transmits a signal to the engine control module in order to stop the fuel pump when the airbag is deployed.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A11 B | 70 | C23 | 76 | O17 | 79 (*2) |
| A12 B | 70 | D6 | 73 | P13 B | 77 |
| A16 | 72 | E4 B | 73 | P14 B | 77 |
| A17 | 72 | F13 | 70 | S13 A | 75 |
| B13 A | 78 (*1) | I23 B | 73 | S14 B | 75 |
| B14 A | 76 | I25 B | 73 | S32 | 77 |
| | 78 (*1) | J45 | 74 | S33 | 77 |
| B17 B | 79 (*2) | J54 | 74 | S34 | 77 |
| C4 A | 72 | O10 A | 78 (*1) | S35 | 77 |
| C5 D | 72 | O11 B | 78 (*1) | S37 | 77 |
| C6 E | 72 | O12 | 78 (*1) | | 78 (*1) |
| C11 A | 72 | O13 | 78 (*1) | S38 | 78 (*1) |
| C12 B | 72 | O14 | 78 (*1) | | 79 (*2) |
| C21 | 72 | O15 | 78 (*1) | S39 | 79 (*2) |
| C22 | 76 | O16 C | 79 (*2) | S40 B | 79 (*2) |

* 1 : Captain Seat  * 2 : Separate Seat

: **Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1C | | |
| 1D | | |
| 1E | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2D | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3C | | |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |

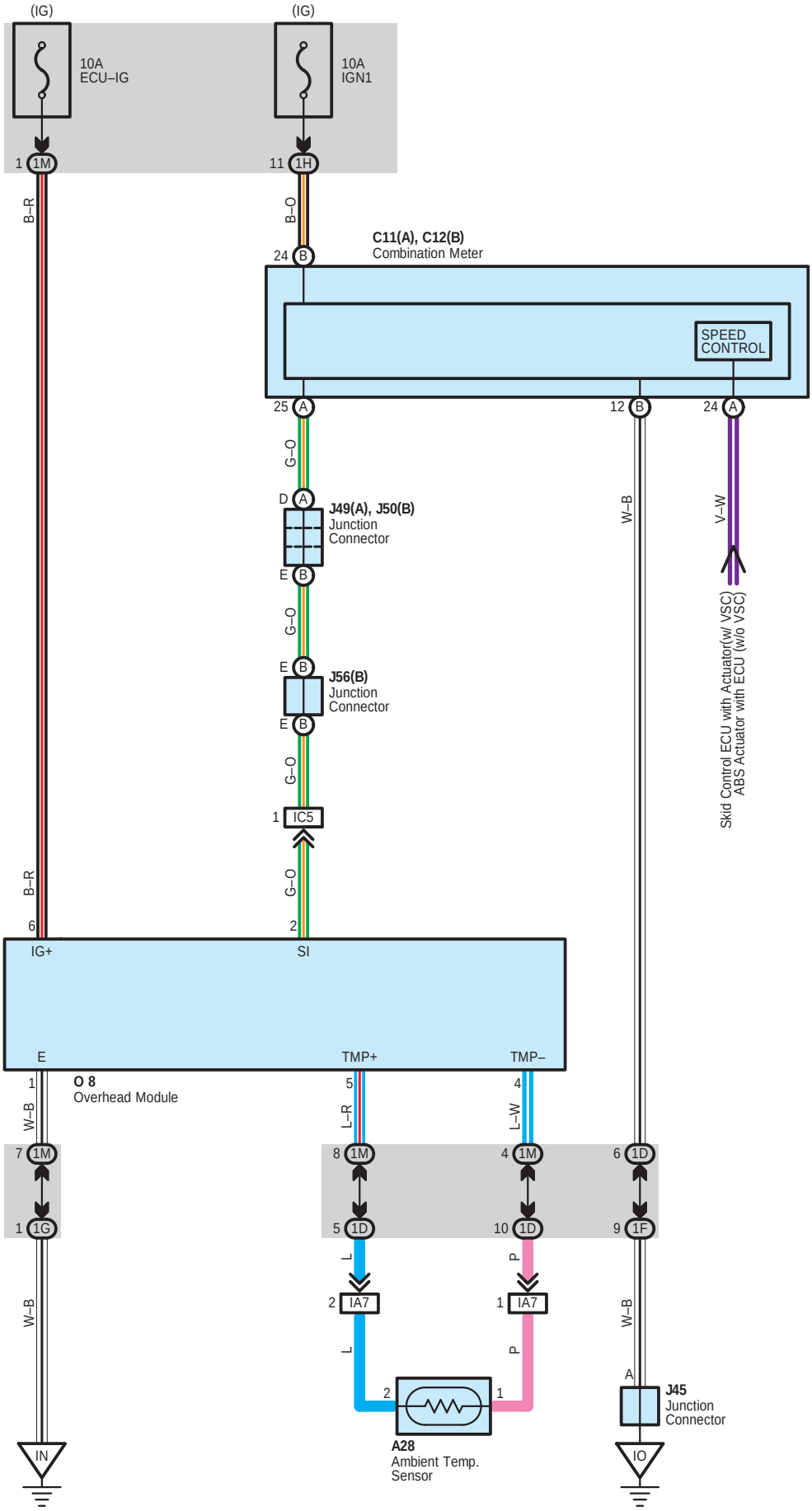
: **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA1 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IJ3 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| BO2 | 97 (*2) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |
| BS1 | 96 (*1) | |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| IP | 92 | Instrument Panel Brace LH |

* 1 : Captain Seat * 2 : Separate Seat


(IG)
(IG)
10A
ECU–IG
10A
IGN1
1
1M
11
1H
B–R
B–O
24
B
C11(A), C12(B)
Combination Meter
SPEED
CONTROL
25
A
12
B
24
A
G–O
W–B
V–W
D
A
J49(A), J50(B)
Junction
Connector
E
B
G–O
E
B
J56(B)
Junction
Connector
E
B
G–O
1
IC5
G–O
Skid Control ECU with Actuator(w/ VSC)
ABS Actuator with ECU (w/o VSC)
B–R
6
2
IG+
SI
E
TMP+
TMP–
1
O 8
Overhead Module
5
4
W–B
L–R
L–W
7
1M
8
1M
4
1M
6
1D
1
1G
5
1D
10
1D
9
1F
L
P
2
IA7
1
IA7
W–B
L
P
W–B
2
1
A
J45
Junction
Connector
A28
Ambient Temp.
Sensor
IN
IO

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| A28 | | 70 | J45 | | 74 | J56 | B | 74 |
| C11 | A | 72 | J49 | A | 74 | O8 | | 76 |
| C12 | B | 72 | J50 | B | 74 | | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 1G | | |
| 1H | | |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |

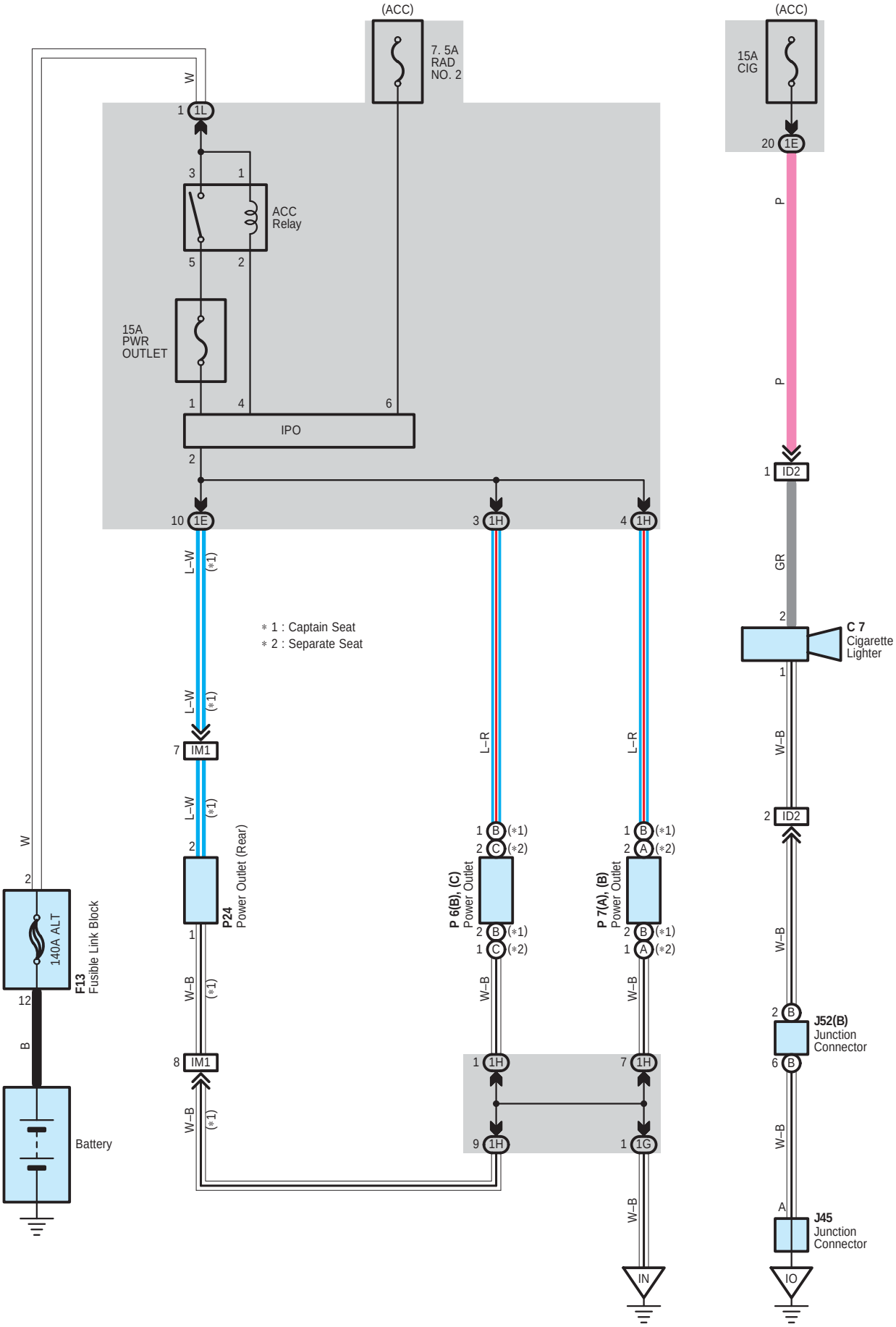
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA7 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IC5 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |

# Cigarette Lighter and Power Outlet – 12V (Double Cab)



## : Parts Location

| Code | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|
| C7 | 72 | J52 | B | 74 | P7 | A | 75 |
| F13 | 70 | P6 | B | 75 | | B | 75 |
| J45 | 74 | | C | 75 | P24 | | 75 |

## : Junction Block and Wire Harness Connector

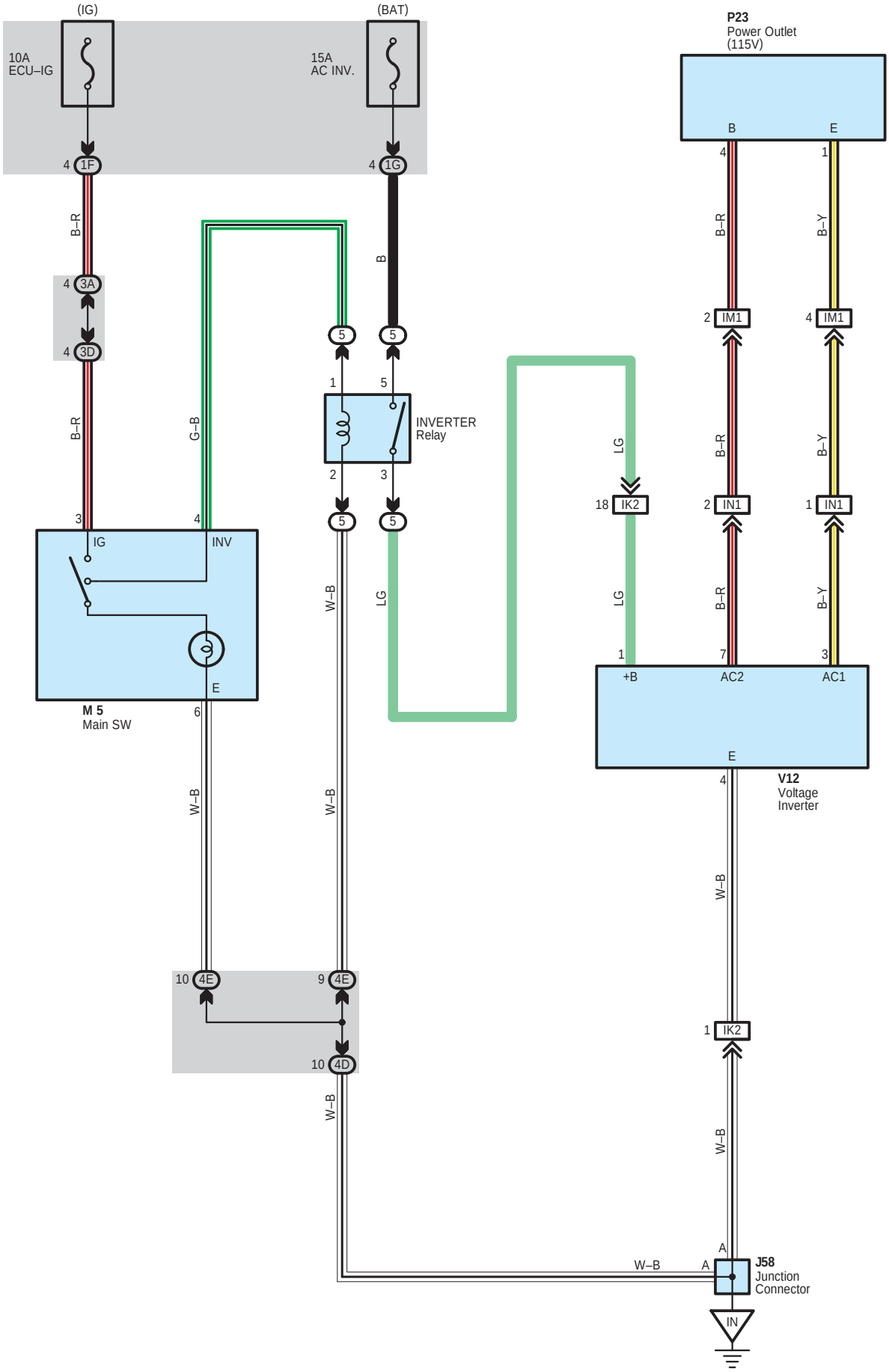
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1G | | |
| 1H | | |
| 1L | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |

## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| ID2 | 92 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |
| IM1 | 92 | Console Box Wire and Cowl Wire (Rear Console) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |


(IG)
(BAT)
10A
ECU–IG
15A
AC INV.
P23
Power Outlet
(115V)
B
E
4
1F
4
1G
B–R
B
B–R
B–Y
4
3A
4
3D
2
IM1
4
IM1
5
5
1
5
INVERTER
Relay
G–B
LG
B–R
B–Y
2
3
18
IK2
2
IN1
1
IN1
3
4
5
5
IG
INV
LG
W–B
LG
B–R
B–Y
1
7
3
+B
AC2
AC1
E
M 5
Main SW
6
E
V12
Voltage
Inverter
4
W–B
W–B
W–B
10
4E
9
4E
1
IK2
10
4D
W–B
W–B
A
W–B
A
J58
Junction
Connector
IN

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| J58 | 74 | P23 | 75 | | |
| M5 | 75 | V12 | 77 | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 5 | 43 | Driver Side R/B (Under the Instrument Panel J/B) |

**: Junction Block and Wire Harness Connector**

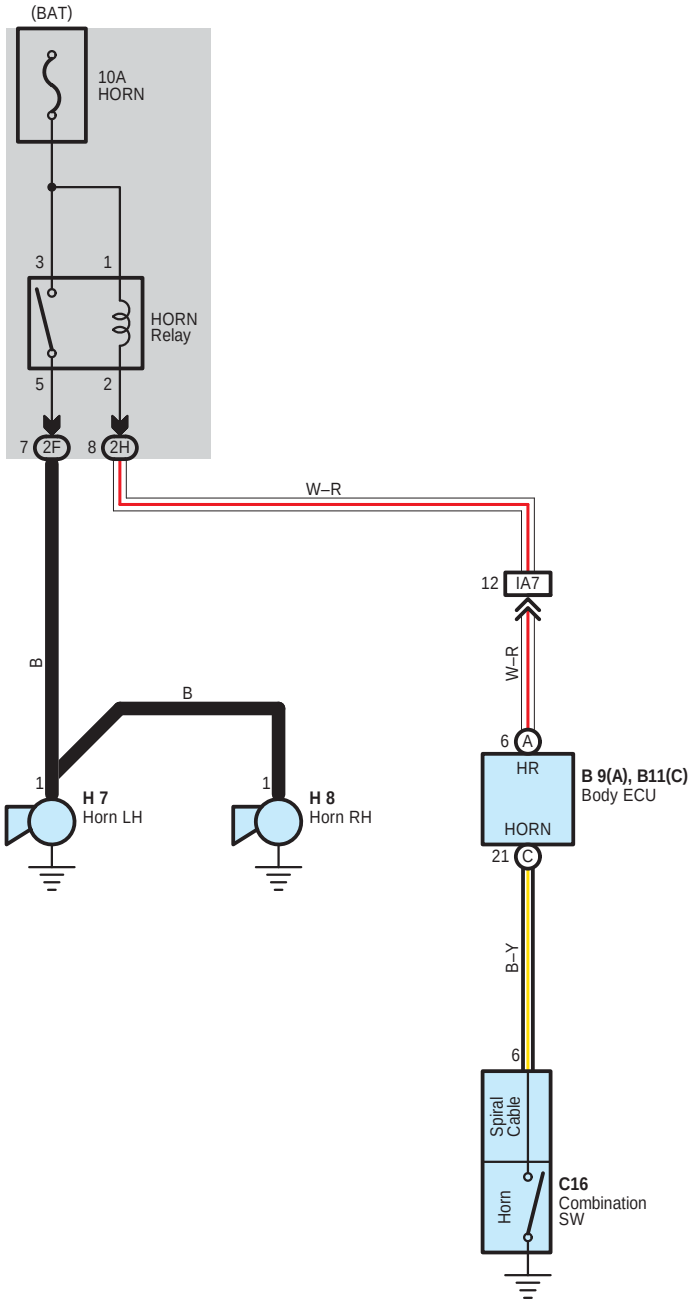
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1G | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 4D | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4E | | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IM1 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| IN1 | 92 | Cowl Wire and Floor Wire (Rear Console) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |


(BAT)
10A
HORN
3
1
HORN
Relay
5
2
7
2F
8
2H
W–R
12
IA7
W–R
B
B
6
A
HR
HORN
B 9(A), B11(C)
Body ECU
21
C
B–Y
6
Spiral
Cable
Horn
C16
Combination
SW
1
H 7
Horn LH
1
H 8
Horn RH

**○ : Parts Location**

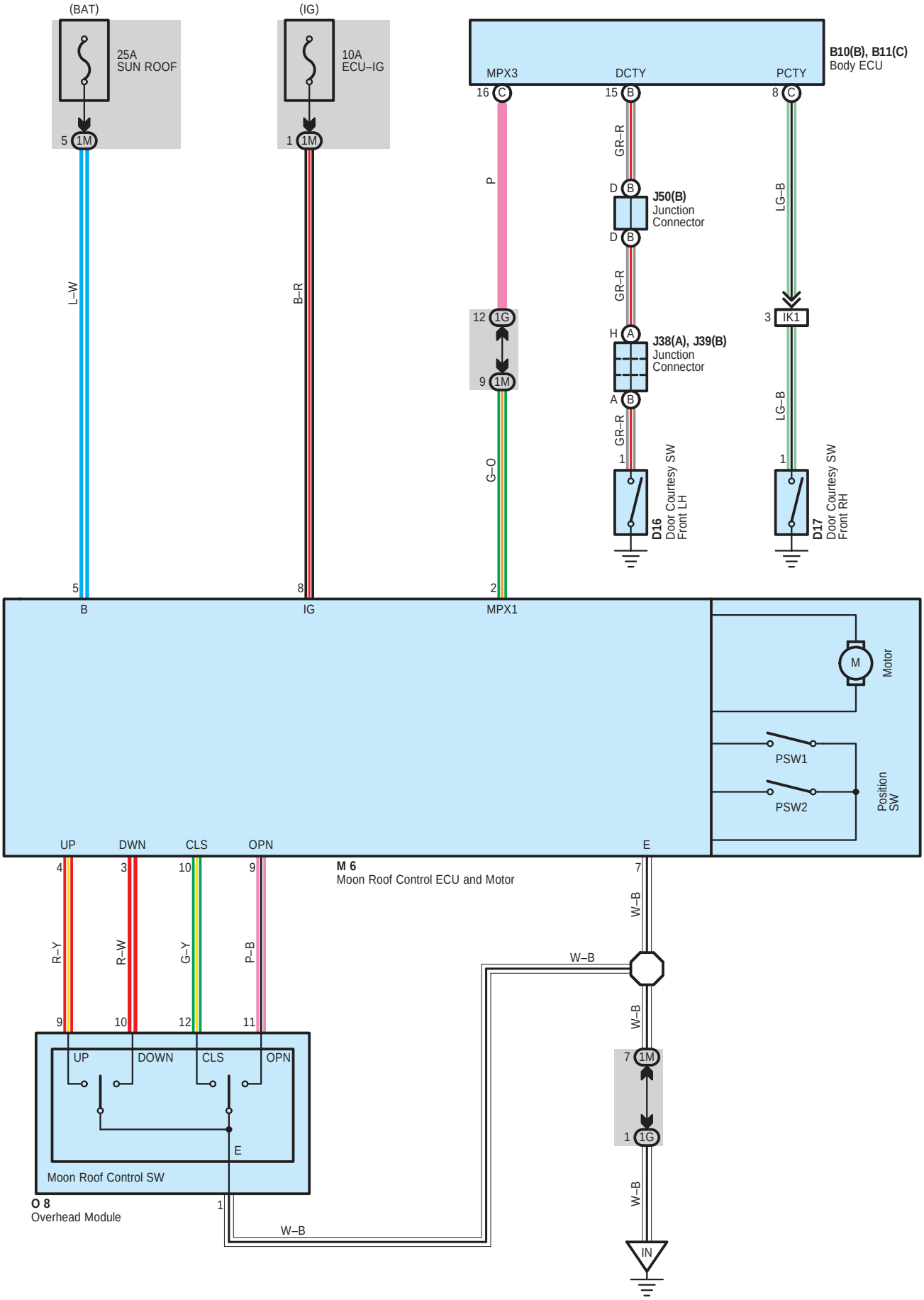
| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| B9 | A | 72 | C16 | 72 | H8 | 70 |
| B11 | C | 72 | H7 | 70 | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 2F | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2H | | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA7 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |


(BAT)
25A
SUN ROOF
5 1M
L–W
5
B
(IG)
10A
ECU–IG
1 1M
B–R
8
IG
B10(B), B11(C)
Body ECU
MPX3
DCTY
PCTY
16 C
15 B
8 C
P
GR–R
LG–B
D B
J50(B)
Junction
Connector
D B
GR–R
LG–B
12 1G
9 1M
H A
J38(A), J39(B)
Junction
Connector
A B
3 IK1
GR–R
LG–B
G–O
1
D16
Door Courtesy SW
Front LH
1
D17
Door Courtesy SW
Front RH
2
MPX1
M
Motor
PSW1
PSW2
Position
SW
UP
DWN
CLS
OPN
E
4
3
10
9
7
M 6
Moon Roof Control ECU and Motor
W–B
R–Y
R–W
G–Y
P–B
W–B
9
10
12
11
7 1M
1 1G
UP
DOWN
CLS
OPN
E
Moon Roof Control SW
O 8
Overhead Module
1
W–B
W–B
IN

**System Outline**

The moon roof can be operated by the moon roof control SW, when the ignition SW is at ON position or during the key–off operation.

**1. Jam Protection Function**

During close or tilt down operation, if the system detects a load, the motor rotates in the opposite direction.

**2. Key–Off Operation**

With all the doors closed, within 43 seconds after the ignition switch has been turned to OFF from ON, the moon roof can be operated. However, if the front door is opened, the moon roof cannot be operated.

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| B10 | B | 72 | D17 | | 76 | J50 | B | 74 |
| B11 | C | 72 | J38 | A | 74 | M6 | | 76 |
| D16 | | 76 | J39 | B | 74 | O8 | | 76 |

**: Junction Block and Wire Harness Connector**

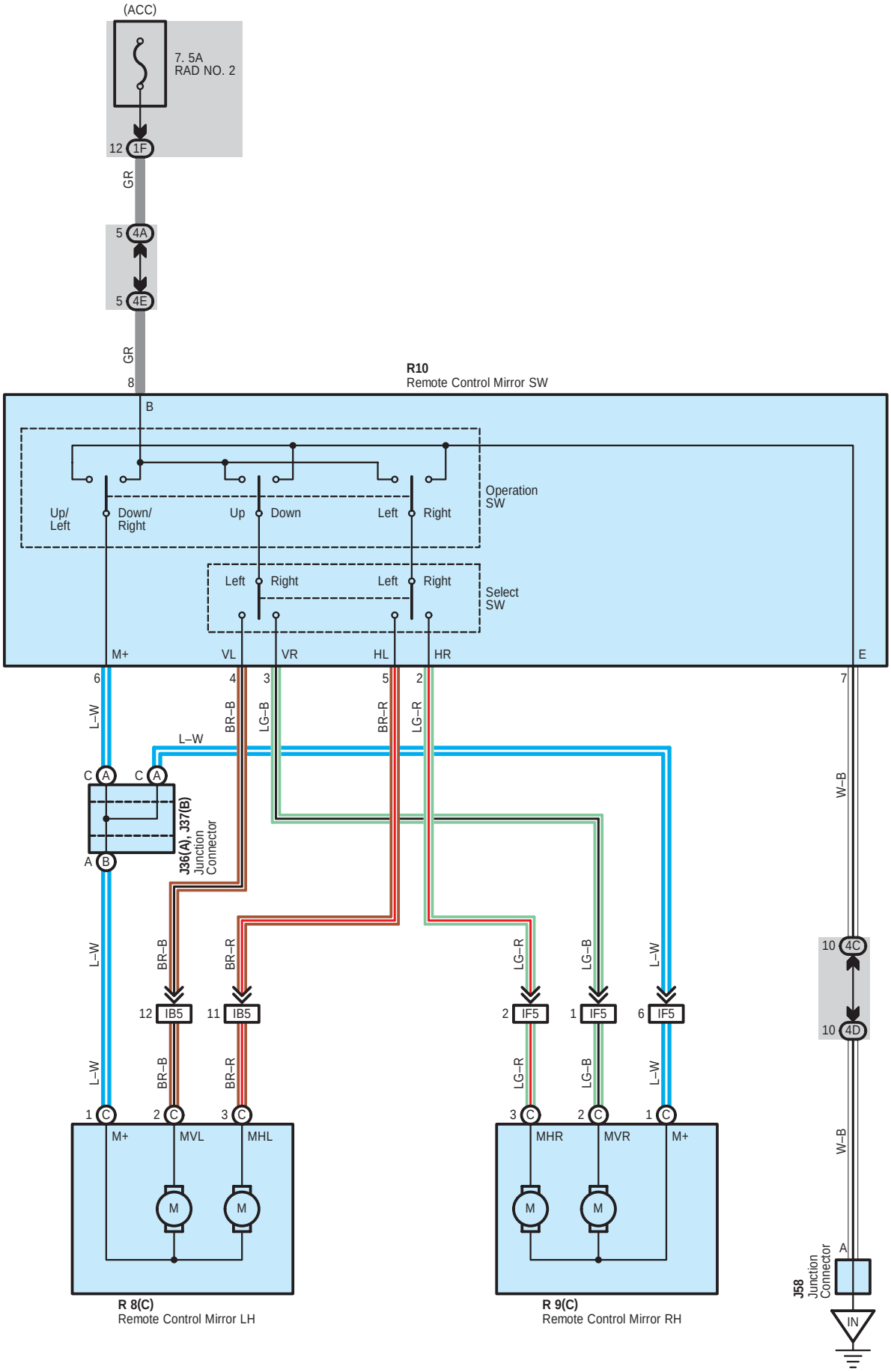
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |


(ACC)
7. 5A
RAD NO. 2
12 1F
GR
5 4A
5 4E
GR
8
R10
Remote Control Mirror SW
B
Operation
SW
Up/
Left
Down/
Right
Up
Down
Left
Right
Select
SW
Left
Right
Left
Right
M+
VL
VR
HL
HR
E
6
4
3
5
2
7
L–W
BR–B
LG–B
BR–R
LG–R
W–B
L–W
C A
C A
A B
J36(A), J37(B)
Junction
Connector
BR–B
BR–R
LG–R
LG–B
L–W
12 IB5
11 IB5
2 IF5
1 IF5
6 IF5
10 4C
10 4D
L–W
BR–B
BR–R
LG–R
LG–B
L–W
1 C
2 C
3 C
3 C
2 C
1 C
M+
MVL
MHL
MHR
MVR
M+
M
M
M
M
W–B
J58
Junction
Connector
A
IN
R 8(C)
Remote Control Mirror LH
R 9(C)
Remote Control Mirror RH

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| J36 | A | 74 | J58 | | 74 | R9 | C | 77 |
| J37 | B | 74 | R8 | C | 77 | R10 | | 75 |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |
| 4E | | |

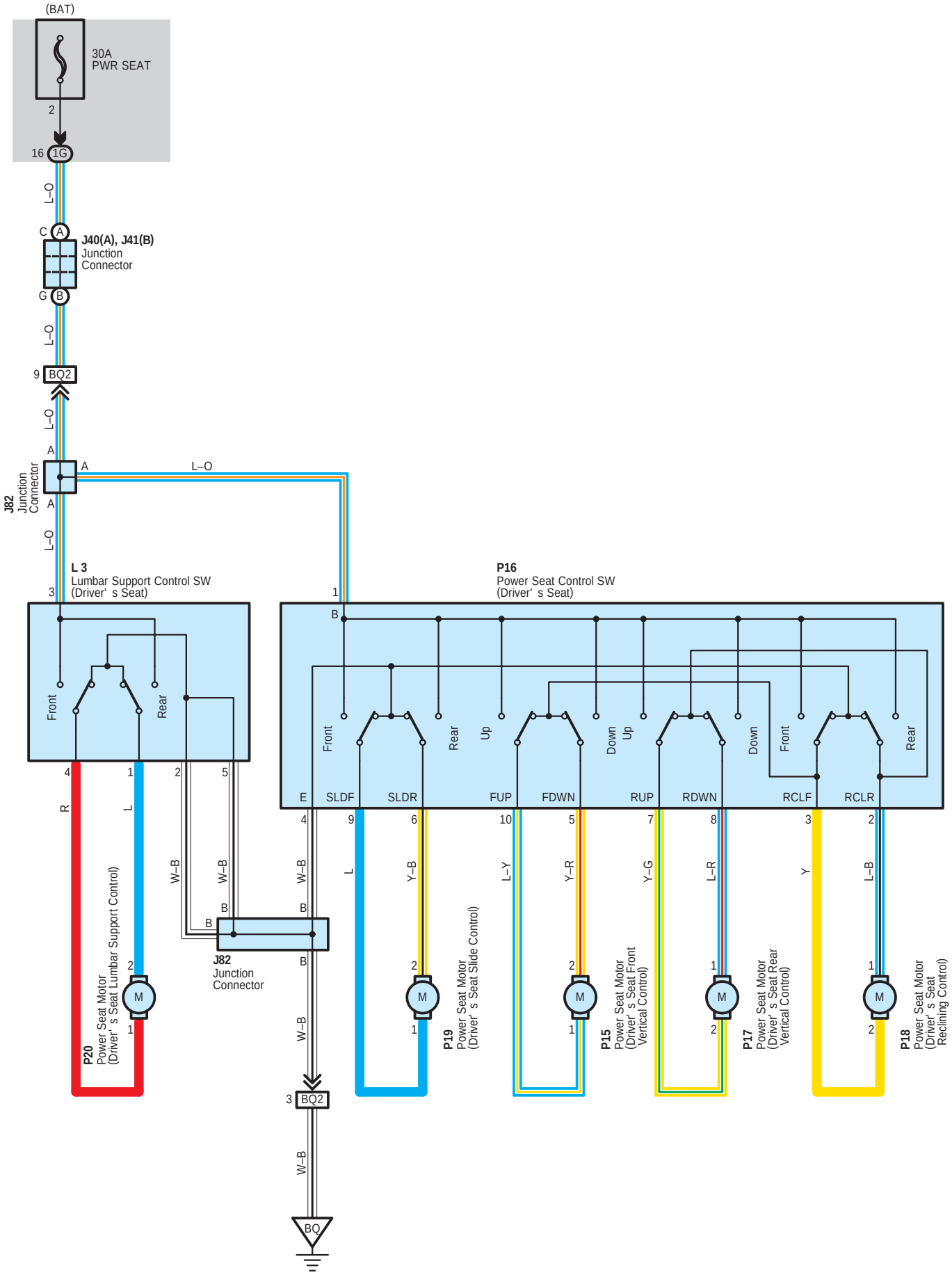
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF5 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |

# Power Seat (Double Cab)



**: Parts Location**

| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| J40 | A | 74 | P15 | 78 (*1) | P19 | 78 (*1) |
| J41 | B | 74 | P16 | 78 (*1) | P20 | 78 (*1) |
| J82 | | 78 (*1) | P17 | 78 (*1) | | |
| L3 | | 78 (*1) | P18 | 78 (*1) | | |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |

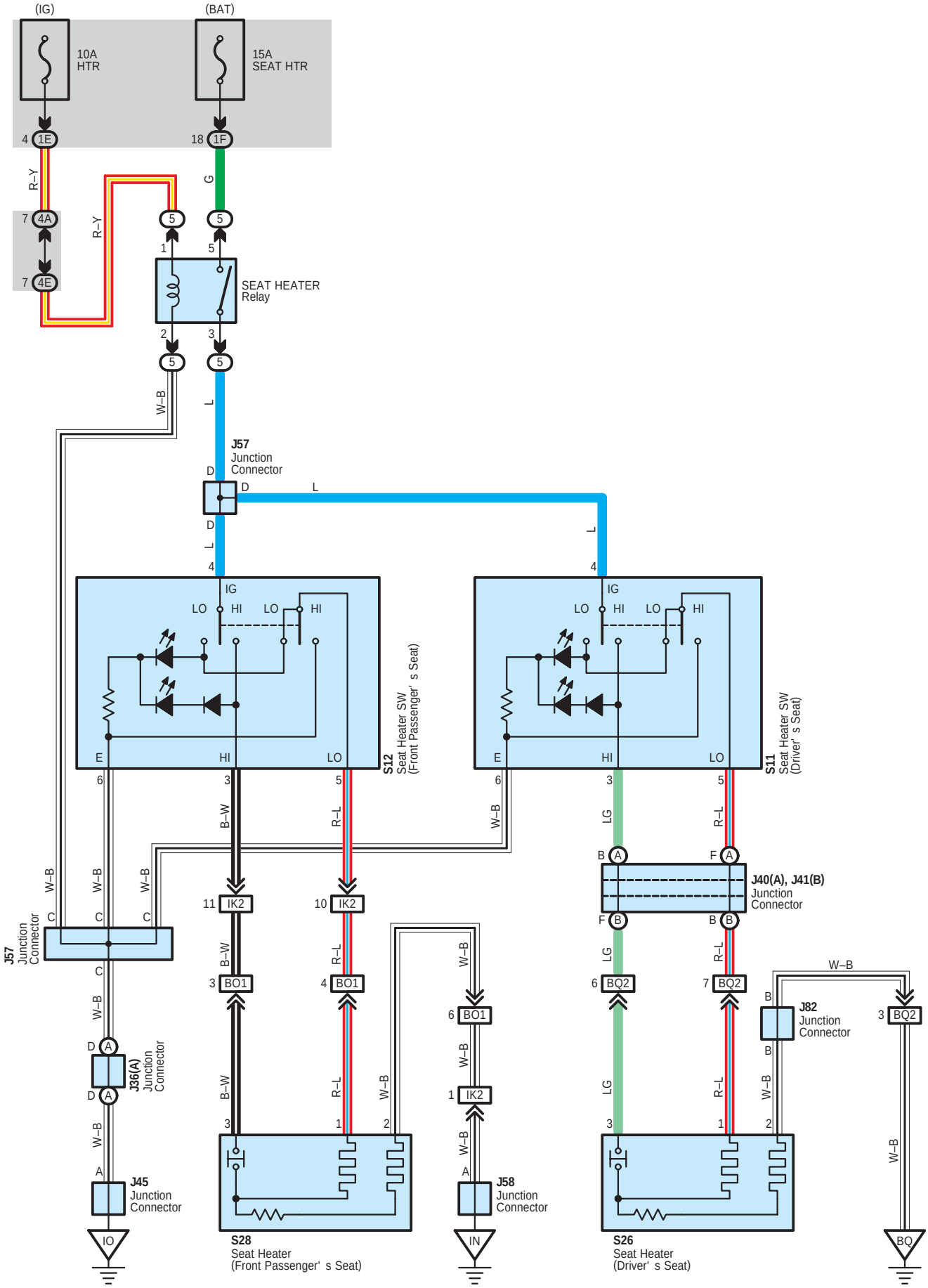
**: Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| BQ2 | 96 (*1) | Floor No.2 Wire and Seat No.2 Wire (Under the Driver's Seat) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| BQ | 94 | Left Side of Center Pillar |

* 1 : Captain Seat * 2 : Separate Seat


(IG)
(BAT)
10A
HTR
15A
SEAT HTR
4 1E
18 1F
R–Y
G
7 4A
7 4E
R–Y
1
5
5
5
SEAT HEATER
Relay
2
3
5
5
W–B
L
J57
Junction
Connector
D
D
L
D
L
4
4
IG
LO
HI
LO
HI
E
HI
LO
S12
Seat Heater SW
(Front Passenger' s Seat)
S11
Seat Heater SW
(Driver' s Seat)
6
3
5
6
3
5
B–W
R–L
W–B
LG
R–L
B
A
F
A
J40(A), J41(B)
Junction
Connector
F
B
B
B
J57
Junction
Connector
C
C
C
W–B
W–B
W–B
11
IK2
10
IK2
LG
R–L
6
BQ2
7
BQ2
W–B
B
J82
Junction
Connector
3
BQ2
3
BO1
4
BO1
6
BO1
B–W
R–L
W–B
W–B
B
W–B
D
A
D
A
J36(A)
Junction
Connector
1
IK2
LG
R–L
W–B
3
1
2
3
1
2
W–B
A
J45
Junction
Connector
IO
S28
Seat Heater
(Front Passenger' s Seat)
J58
Junction
Connector
IN
S26
Seat Heater
(Driver' s Seat)
BQ

### : Parts Location

| Code | | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|---|
| J36 | A | 74 | J57 | 74 | S12 | 75 |
| J40 | A | 74 | J58 | 74 | S26 | 78 (*1) |
| J41 | B | 74 | J82 | 78 (*1) | S28 | 78 (*1) |
| J45 | | 74 | S11 | 75 | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 5 | 43 | Driver Side R/B (Under the Instrument Panel J/B) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1F | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4E | | |

### : Connector Joining Wire Harness and Wire Harness

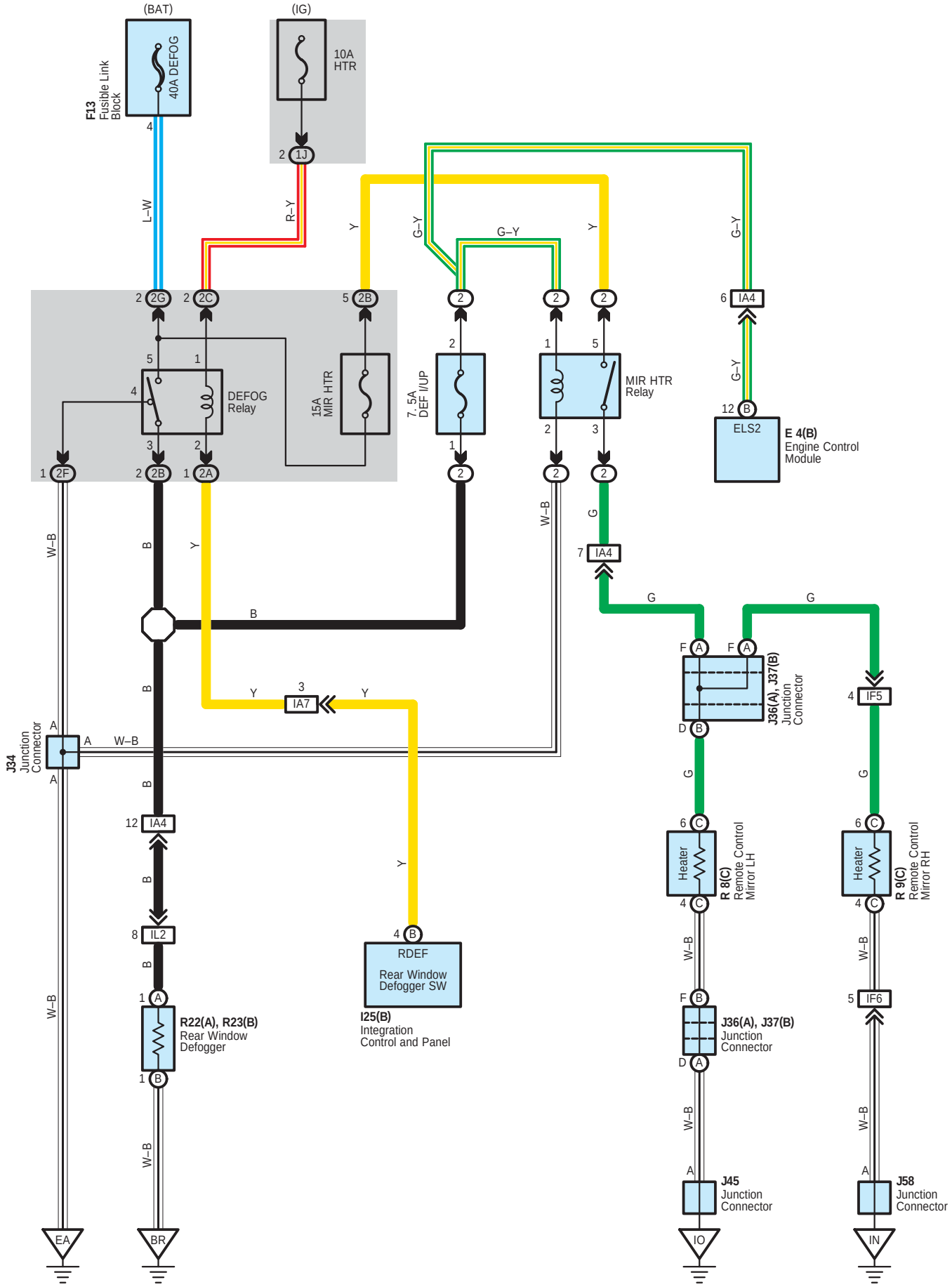
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| BO1 | 96 (*1) | Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat) |
| BQ2 | 96 (*1) | Floor No.2 Wire and Seat No.2 Wire (Under the Driver's Seat) |

### : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BQ | 94 | Left Side of Center Pillar |

* 1 : Captain Seat  * 2 : Separate Seat

# Rear Window Defogger and Mirror Heater (Double Cab)



**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| E4 | B | 73 | J36 | A | 74 | R8 | C | 77 |
| F13 | | 70 | J37 | B | 74 | R9 | C | 77 |
| I25 | B | 73 | J45 | | 74 | R22 | A | 77 |
| J34 | | 71 | J58 | | 74 | R23 | B | 77 |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

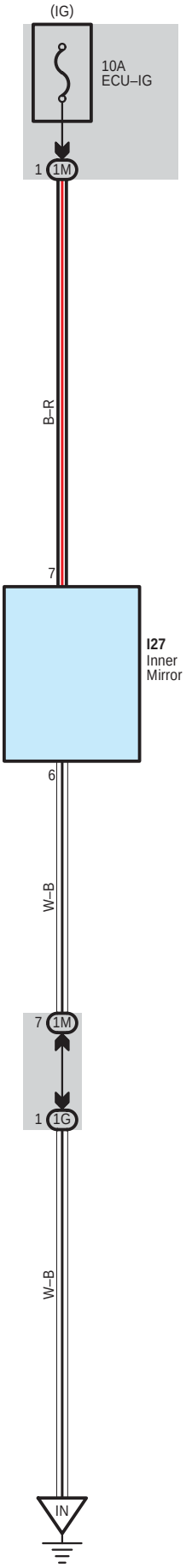
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 2C | | |
| 2F | | |
| 2G | | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IF5 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IF6 | | |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| BR | 94 | Back Panel Left |


(IG)
10A
ECU–IG
1
1M
B–R
7
I27
Inner
Mirror
6
W–B
7
1M
1
1G
W–B
IN

○ : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| I27 | 76 | | | | |

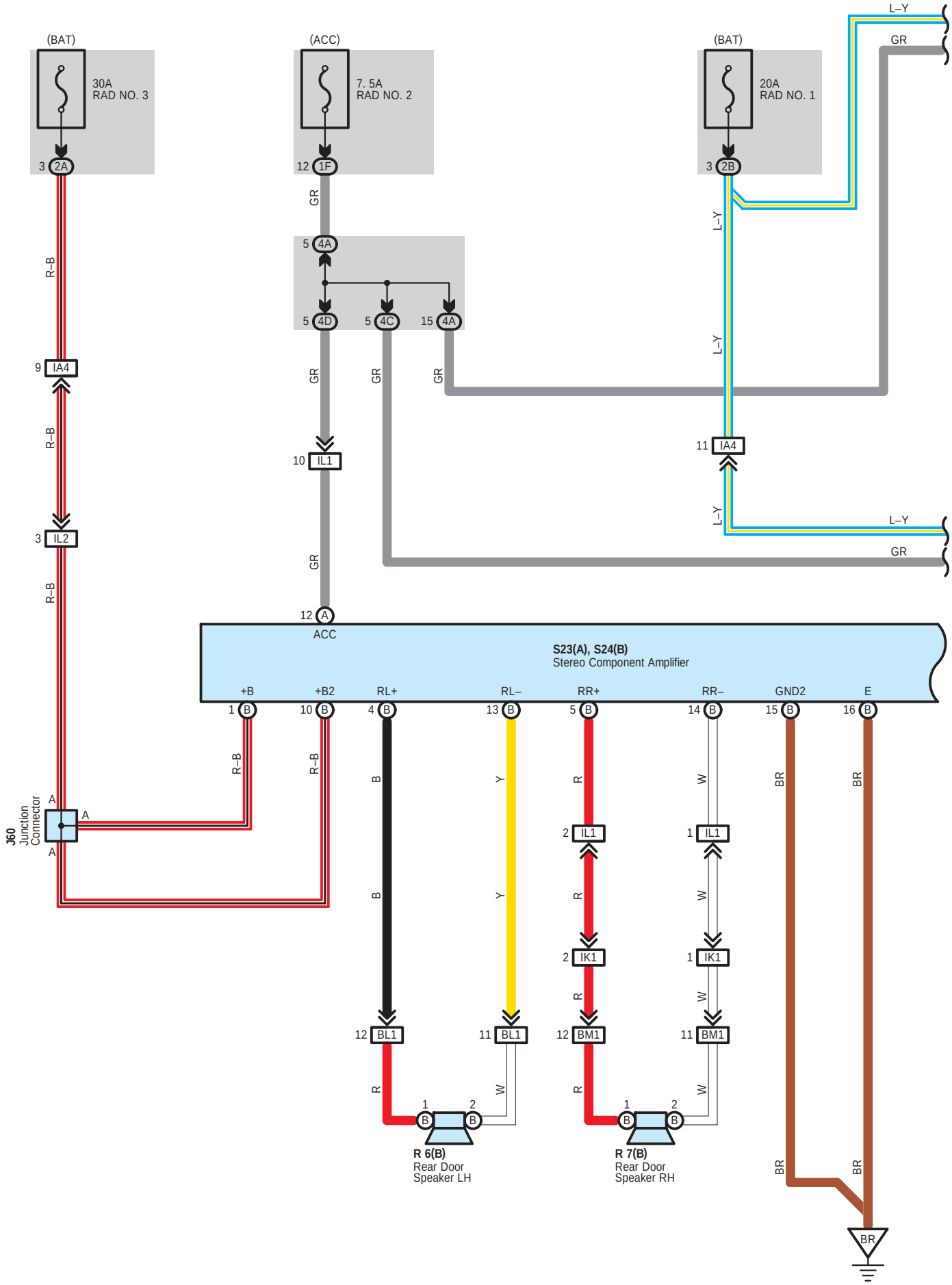
: **Junction Block and Wire Harness Connector**

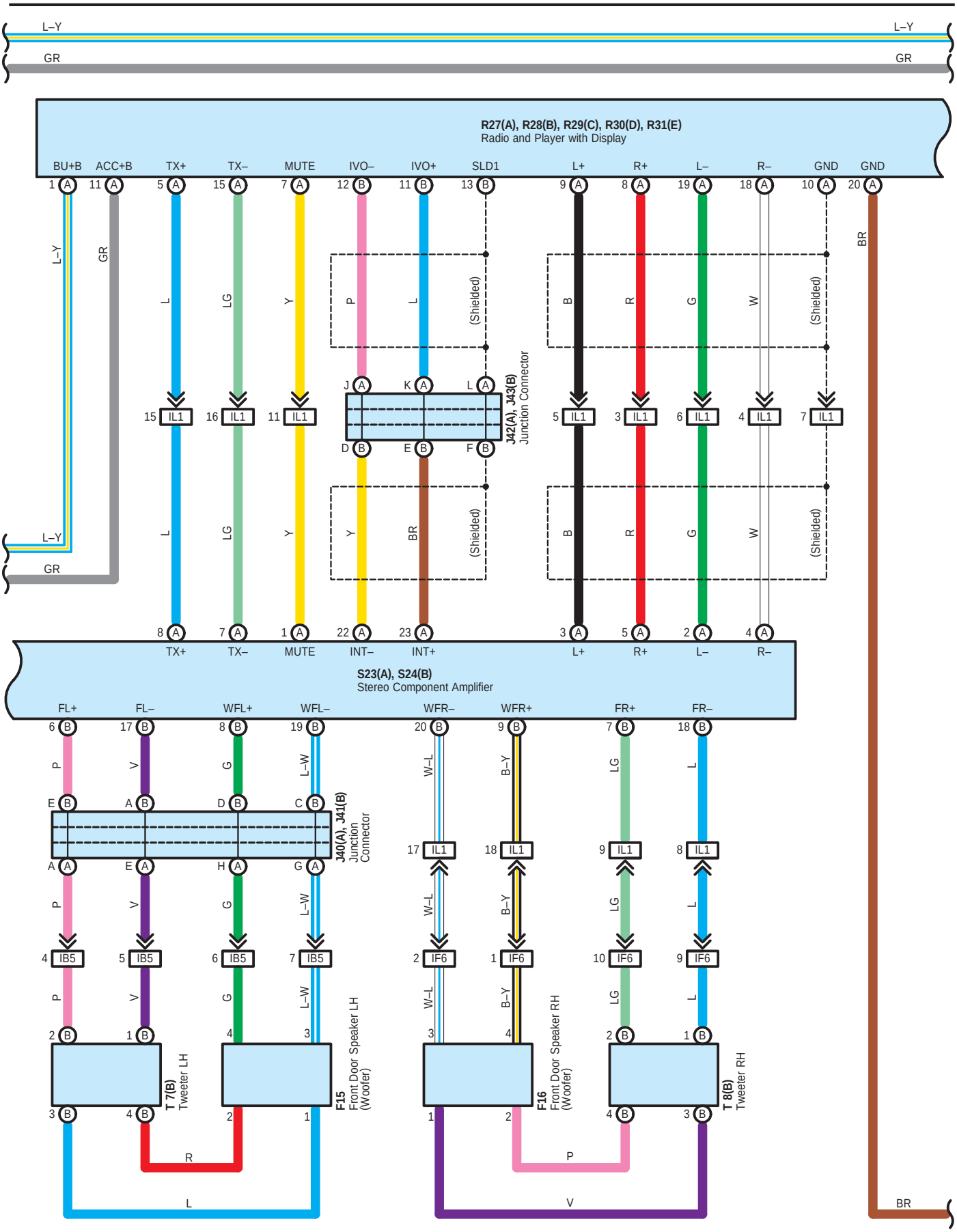
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1G | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |

▽ : **Ground Points**

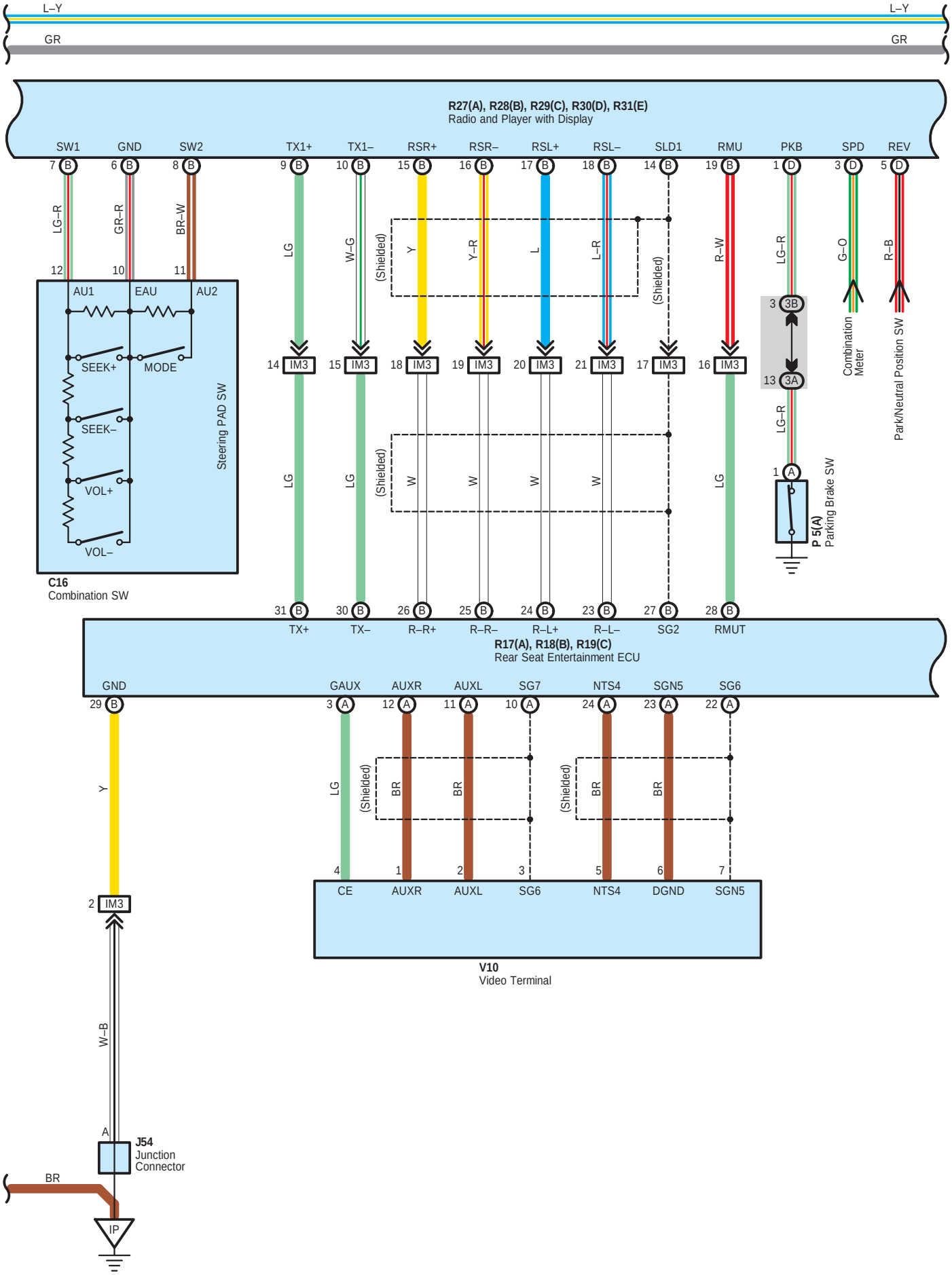
| Code | See Page | Ground Points Location |
|---|---|---|
| IN | 92 | Right Kick Panel |

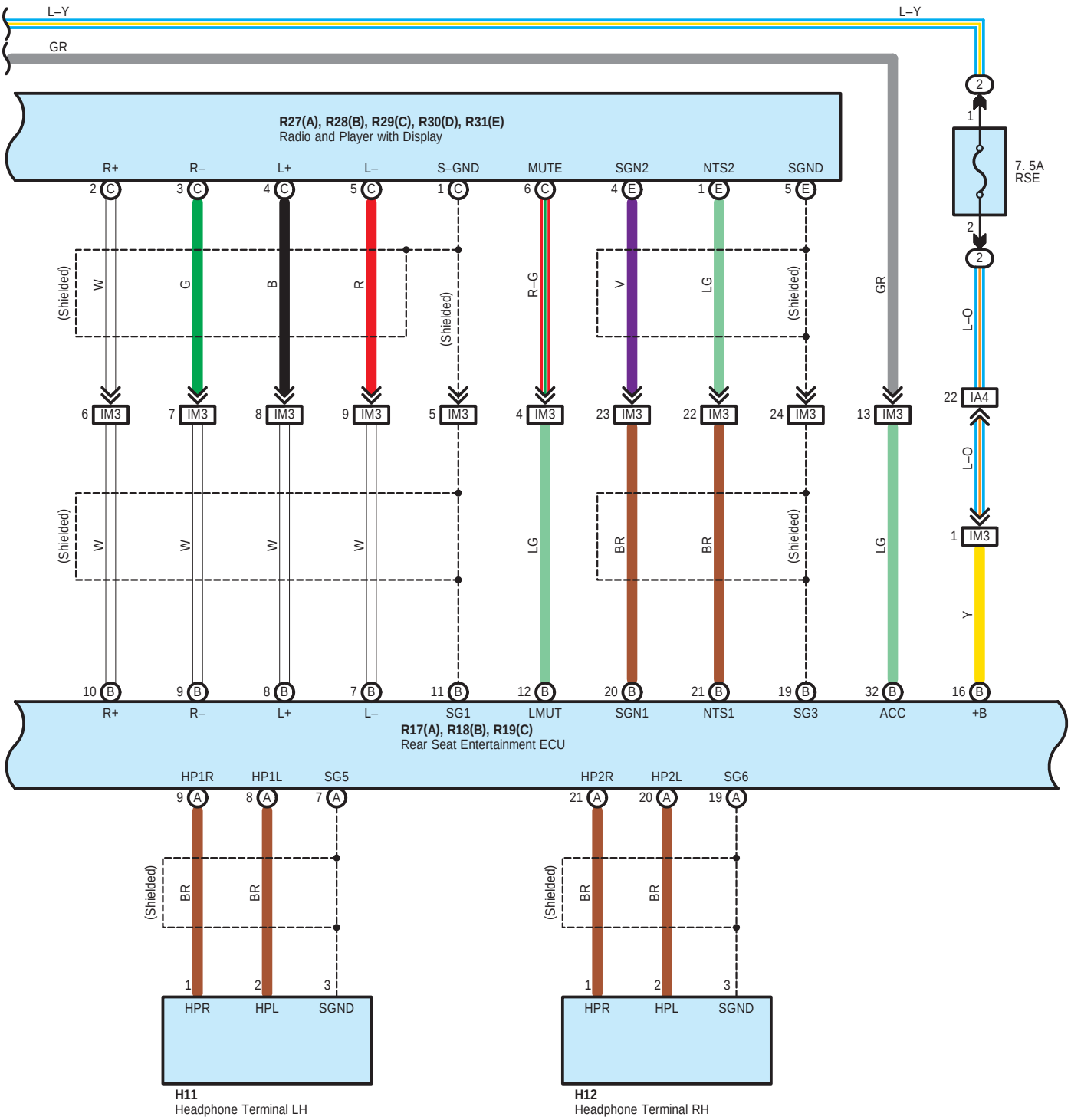
# Navigation and Audio System with RSES (Double Cab)

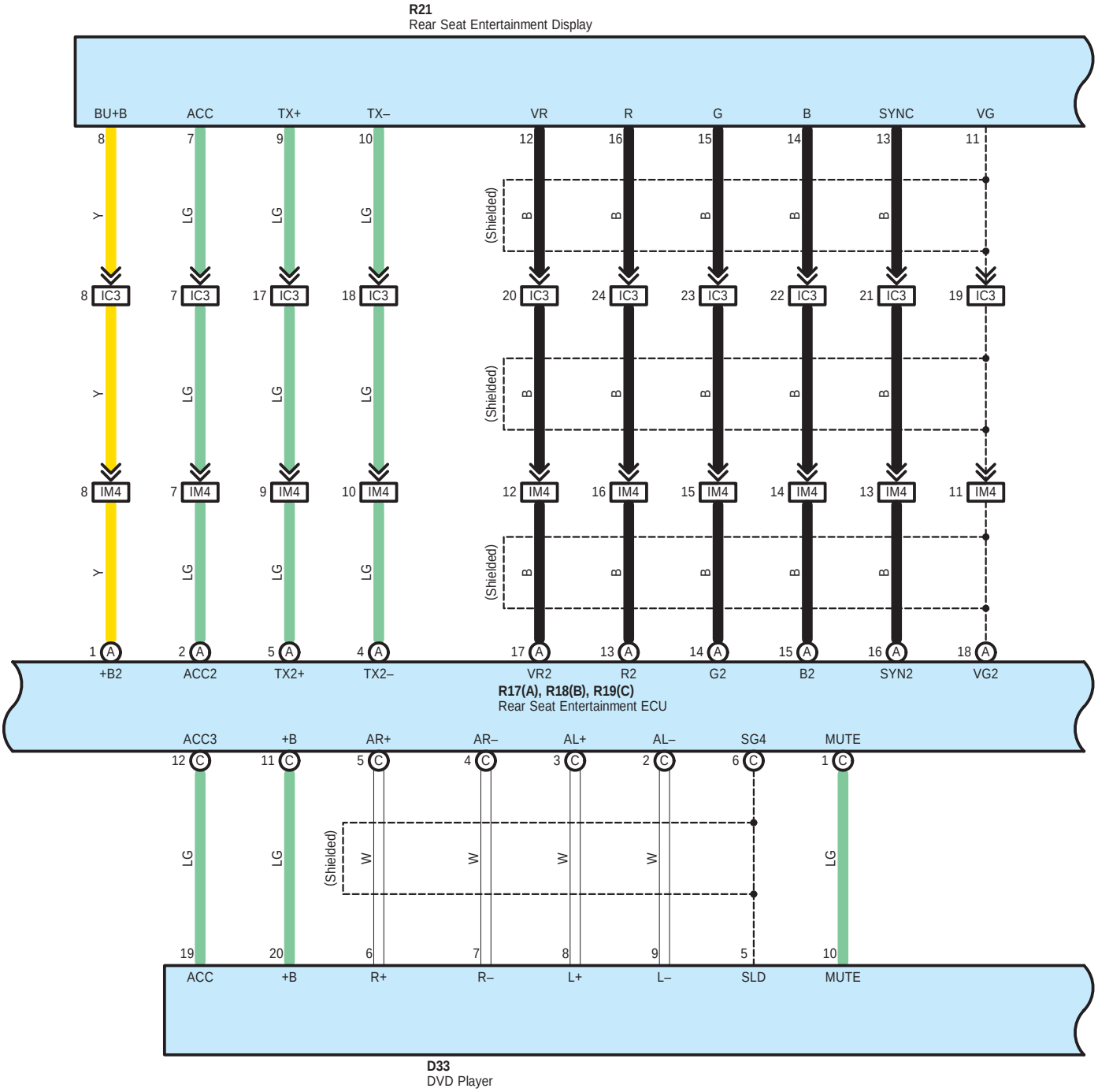


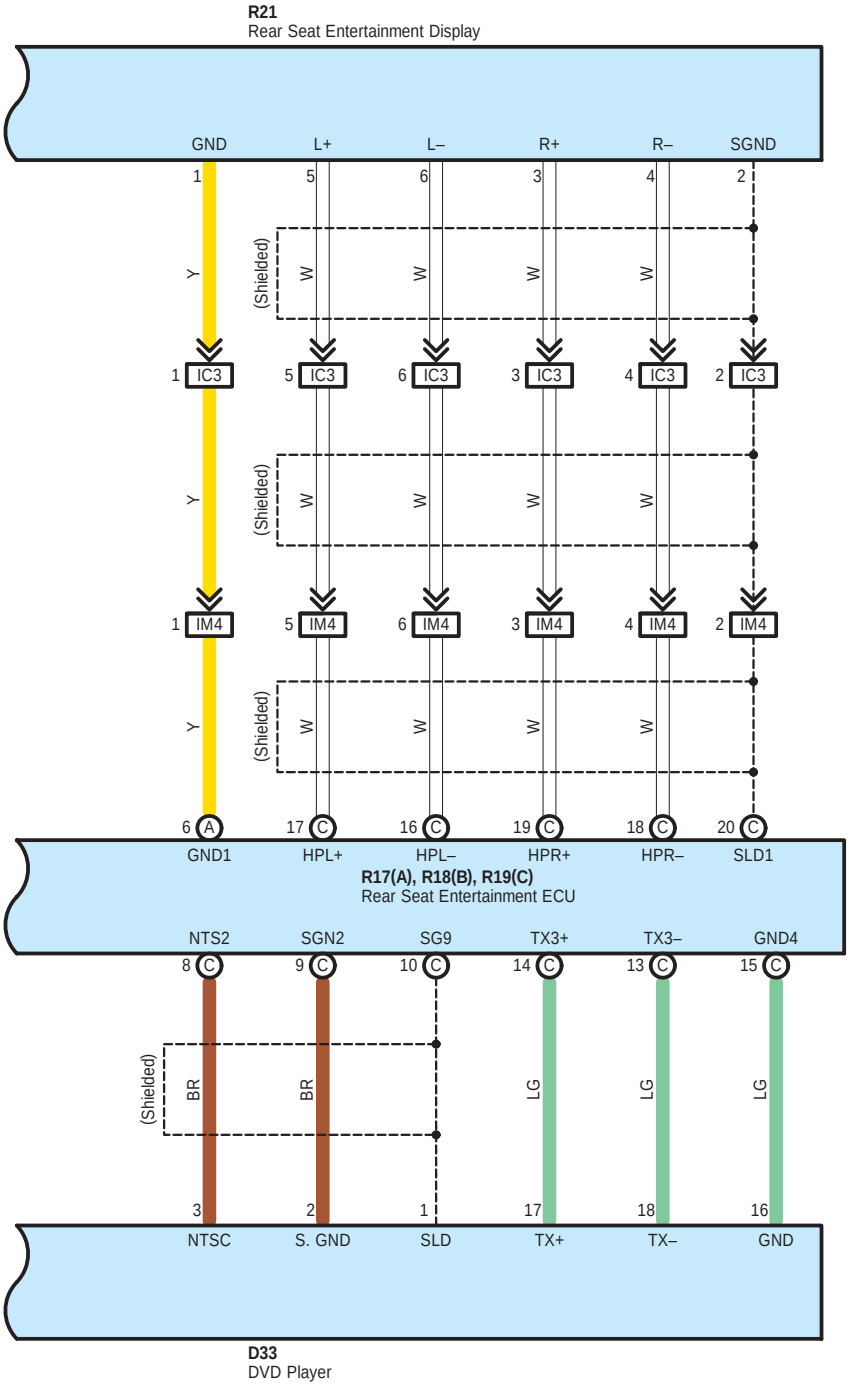

L–Y
GR
R27(A), R28(B), R29(C), R30(D), R31(E)
Radio and Player with Display
BU+B
ACC+B
TX+
TX–
MUTE
IVO–
IVO+
SLD1
L+
R+
L–
R–
GND
GND
(Shielded)
J42(A), J43(B)
Junction Connector
S23(A), S24(B)
Stereo Component Amplifier
FL+
FL–
WFL+
WFL–
WFR–
WFR+
FR+
FR–
J40(A), J41(B)
Junction Connector
T 7(B)
Tweeter LH
F15
Front Door Speaker LH
(Woofer)
F16
Front Door Speaker RH
(Woofer)
T 8(B)
Tweeter RH
BR

# Navigation and Audio System with RSES (Double Cab)




L–Y
GR
L–Y
R27(A), R28(B), R29(C), R30(D), R31(E)
Radio and Player with Display
R+
R–
L+
L–
S–GND
MUTE
SGN2
NTS2
SGND
(Shielded)
W
G
B
R
R–G
V
LG
GR
L–O
7. 5A
RSE
IM3
IA4
BR
Y
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
R+
R–
L+
L–
SG1
LMUT
SGN1
NTS1
SG3
ACC
+B
HP1R
HP1L
SG5
HP2R
HP2L
SG6
HPR
HPL
SGND
H11
Headphone Terminal LH
H12
Headphone Terminal RH


R21
Rear Seat Entertainment Display
BU+B
ACC
TX+
TX–
VR
R
G
B
SYNC
VG
(Shielded)
IC3
IM4
+B2
ACC2
TX2+
TX2–
VR2
R2
G2
B2
SYN2
VG2
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
ACC3
+B
AR+
AR–
AL+
AL–
SG4
MUTE
ACC
+B
R+
R–
L+
L–
SLD
MUTE
D33
DVD Player


R21
Rear Seat Entertainment Display
GND
L+
L–
R+
R–
SGND
1
5
6
3
4
2
Y
W
(Shielded)
IC3
IM4
6 A
17 C
16 C
19 C
18 C
20 C
GND1
HPL+
HPL–
HPR+
HPR–
SLD1
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
NTS2
SGN2
SG9
TX3+
TX3–
GND4
8 C
9 C
10 C
14 C
13 C
15 C
BR
LG
3
2
1
17
18
16
NTSC
S. GND
SLD
TX+
TX–
GND
D33
DVD Player

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C16 | | 72 | J54 | | 74 | R28 | B | 75 |
| D33 | | 73 | J60 | | 76 | R29 | C | 75 |
| F15 | | 76 | P5 | A | 75 | R30 | D | 75 |
| F16 | | 76 | R6 | B | 77 | R31 | E | 75 |
| H11 | | 73 | R7 | B | 77 | S23 | A | 77 |
| H12 | | 73 | R17 | A | 75 | S24 | B | 77 |
| J40 | A | 74 | R18 | B | 75 | T7 | B | 77 |
| J41 | B | 74 | R19 | C | 75 | T8 | B | 77 |
| J42 | A | 74 | R21 | | 77 | V10 | | 75 |
| J43 | B | 74 | R27 | A | 75 | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |

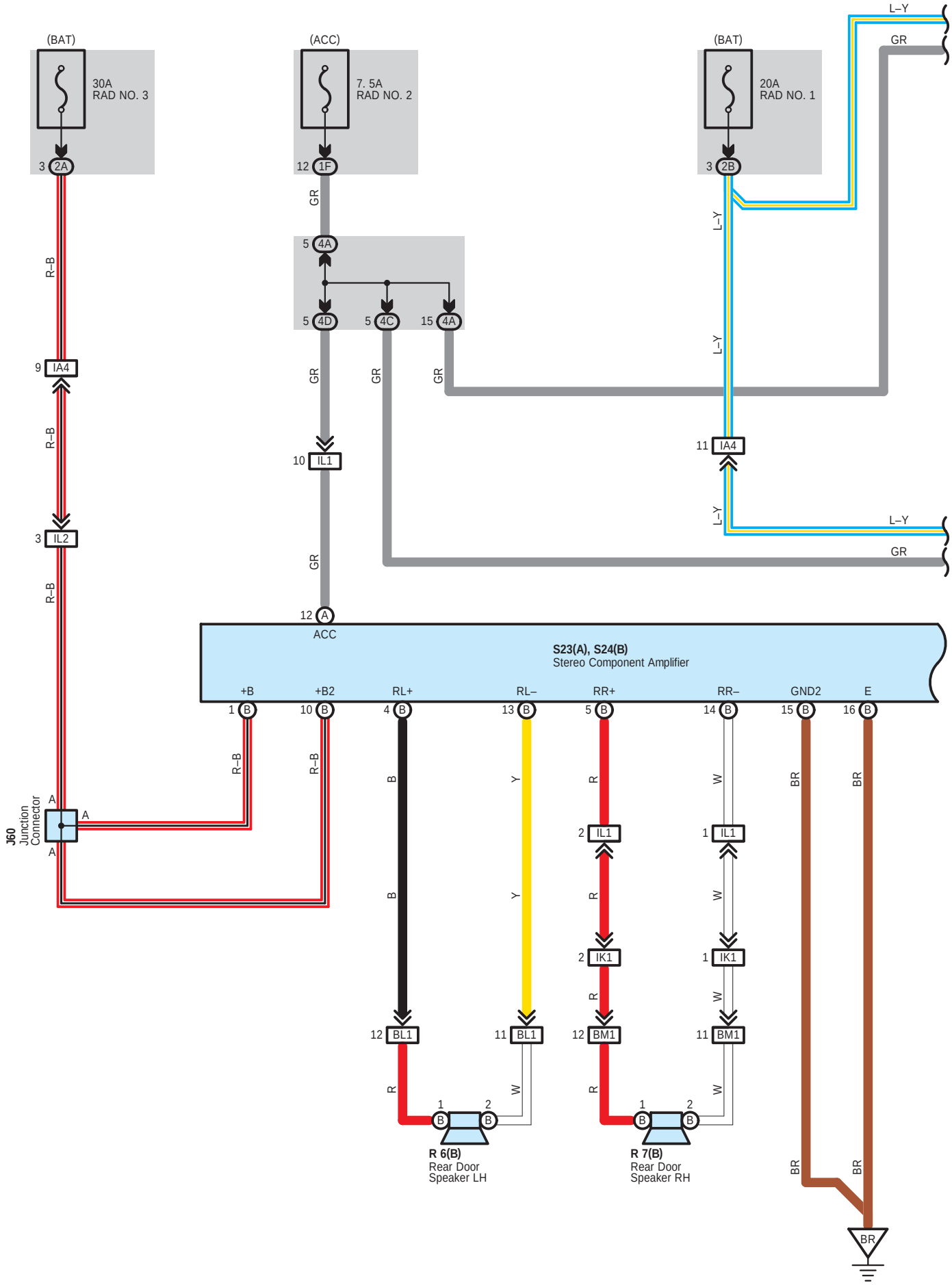
**: Connector Joining Wire Harness and Wire Harness**

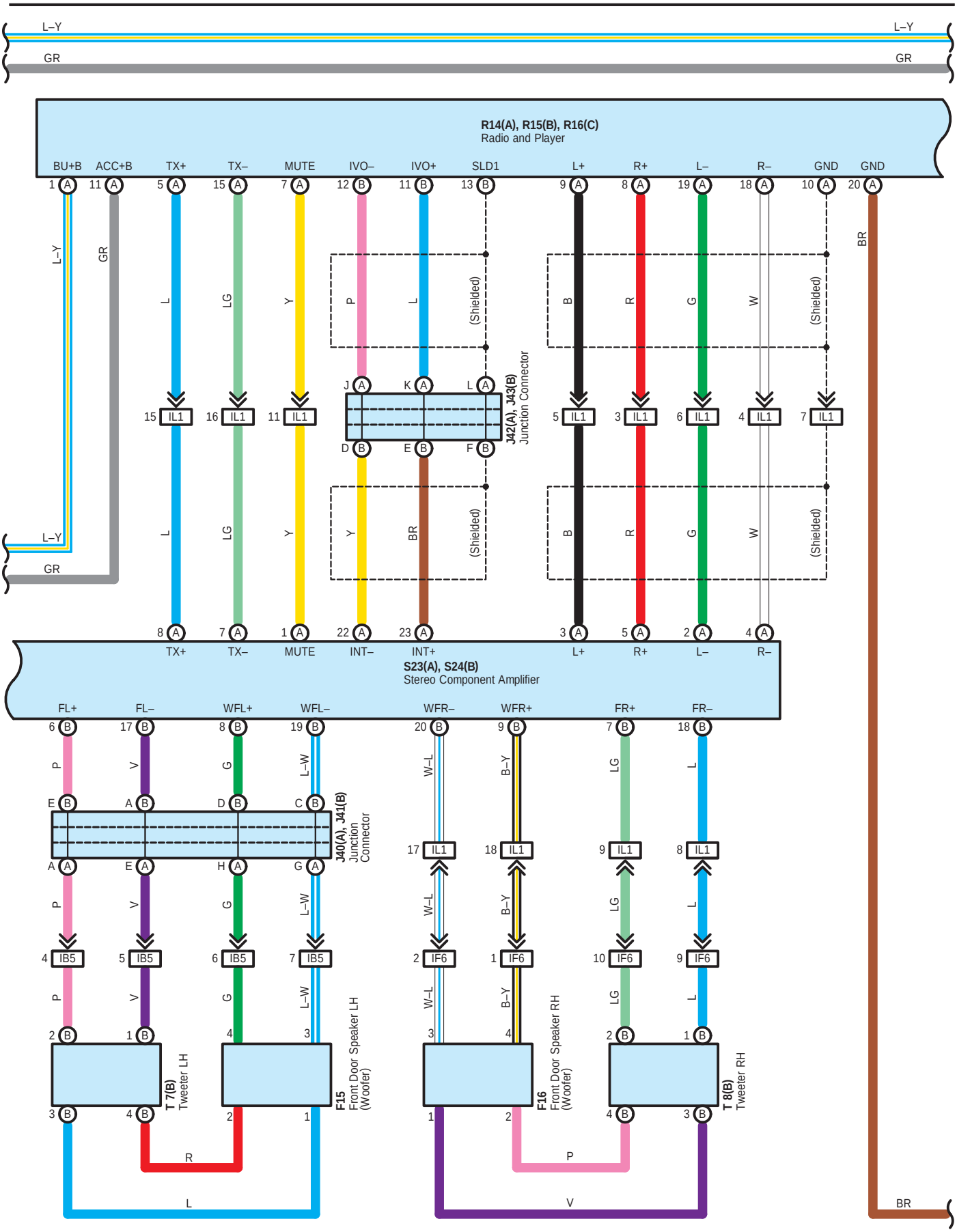
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IC3 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL1 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| IM3 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| IM4 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**: Ground Points**

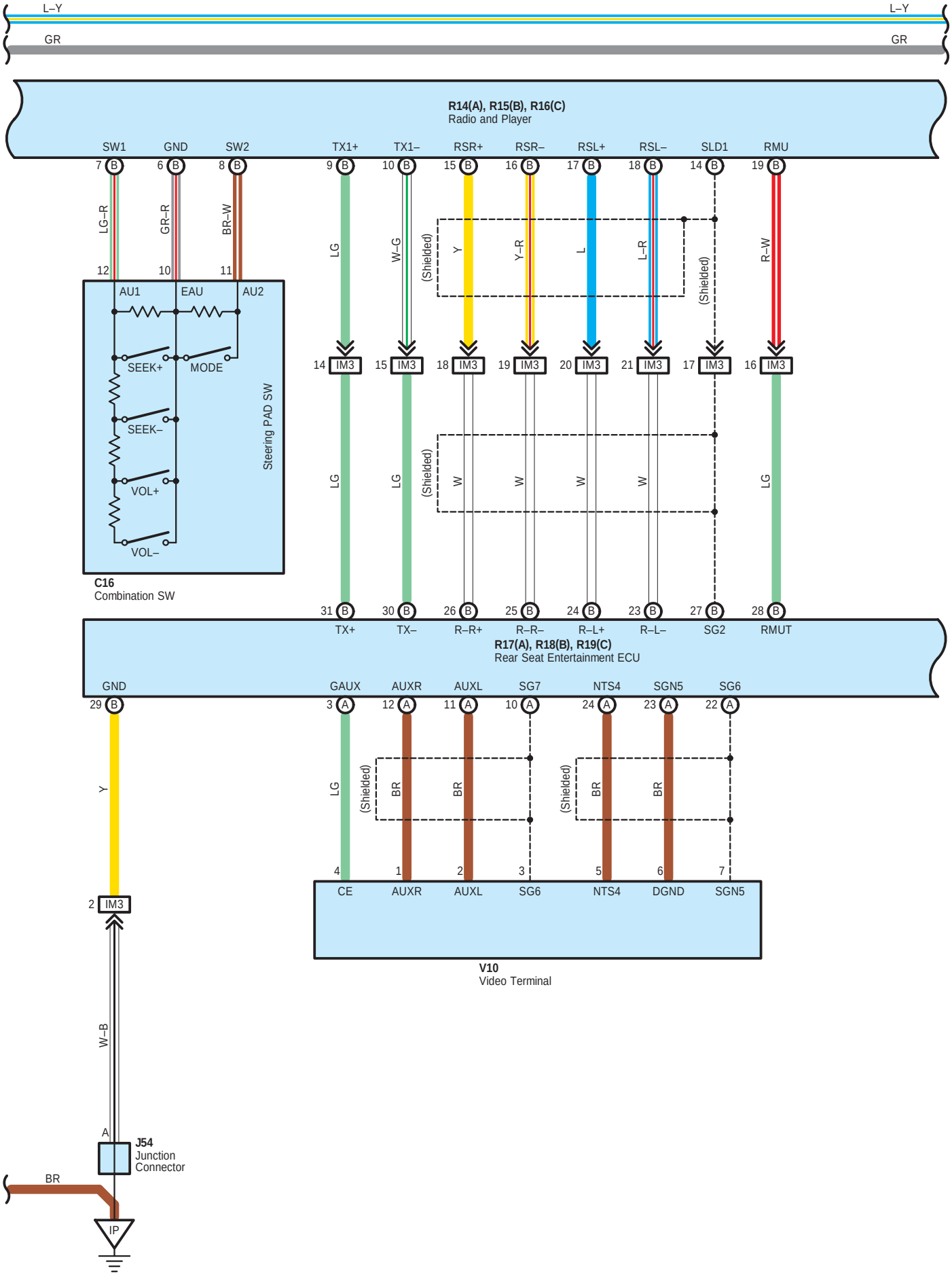
| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |
| BR | 94 | Back Panel Left |

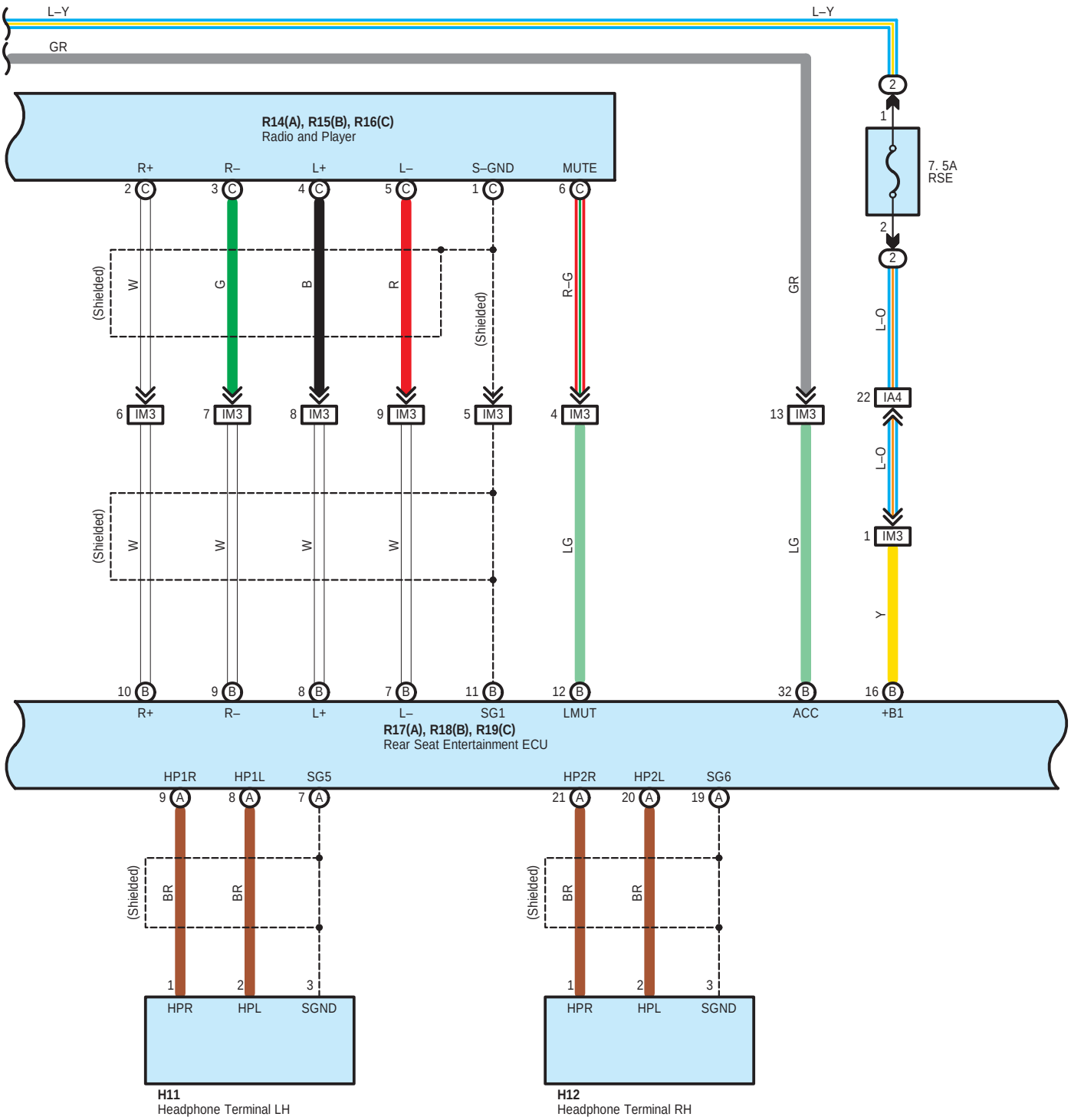
# Audio System with RSES (Double Cab)

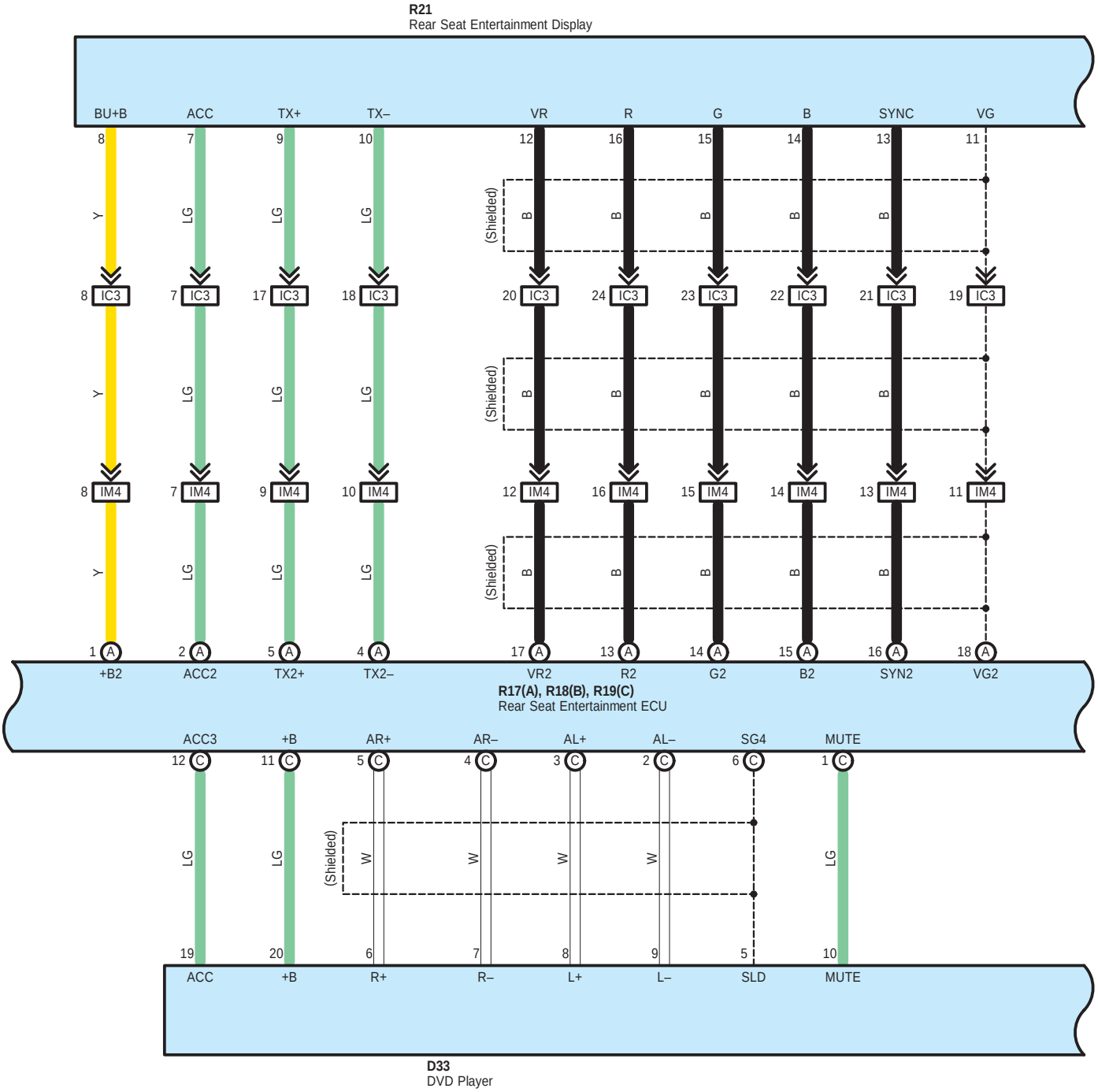


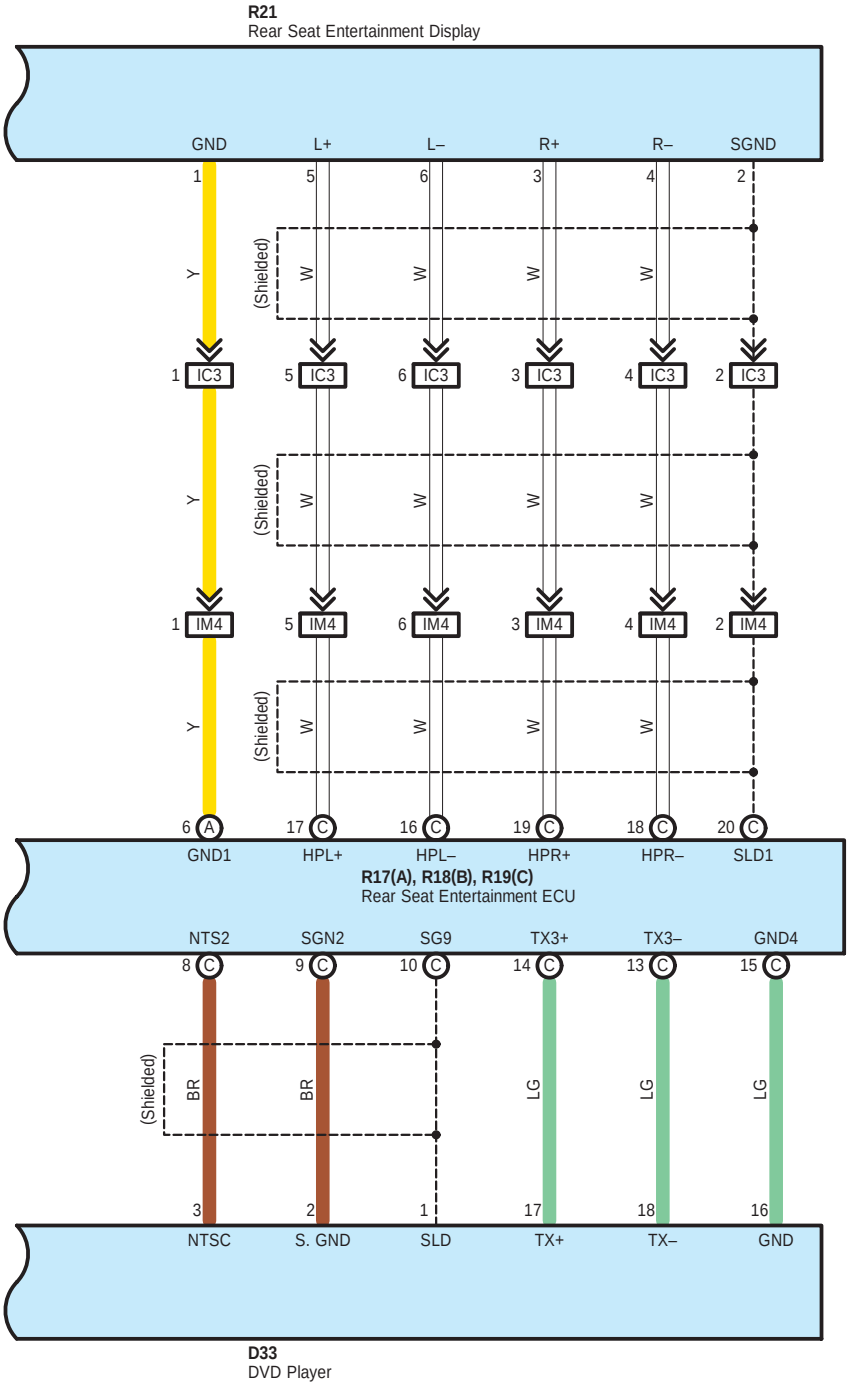

L–Y
GR
R14(A), R15(B), R16(C)
Radio and Player
BU+B
ACC+B
TX+
TX–
MUTE
IVO–
IVO+
SLD1
L+
R+
L–
R–
GND
GND
J42(A), J43(B)
Junction Connector
(Shielded)
S23(A), S24(B)
Stereo Component Amplifier
INT–
INT+
FL+
FL–
WFL+
WFL–
WFR–
WFR+
FR+
FR–
J40(A), J41(B)
Junction Connector
F15
Front Door Speaker LH
(Woofer)
T 7(B)
Tweeter LH
F16
Front Door Speaker RH
(Woofer)
T 8(B)
Tweeter RH
BR
R
P
V
L

# Audio System with RSES (Double Cab)




L–Y
GR
L–Y
R14(A), R15(B), R16(C)
Radio and Player
R+
R–
L+
L–
S–GND
MUTE
2 C
3 C
4 C
5 C
1 C
6 C
(Shielded)
W
G
B
R
(Shielded)
R–G
GR
2
1
7. 5A
RSE
2
2
L–O
22 IA4
L–O
1 IM3
Y
6 IM3
7 IM3
8 IM3
9 IM3
5 IM3
4 IM3
13 IM3
(Shielded)
W
W
W
W
LG
LG
10 B
9 B
8 B
7 B
11 B
12 B
32 B
16 B
R+
R–
L+
L–
SG1
LMUT
ACC
+B1
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
HP1R
HP1L
SG5
HP2R
HP2L
SG6
9 A
8 A
7 A
21 A
20 A
19 A
(Shielded)
BR
BR
(Shielded)
BR
BR
1
2
3
1
2
3
HPR
HPL
SGND
HPR
HPL
SGND
H11
Headphone Terminal LH
H12
Headphone Terminal RH


R21
Rear Seat Entertainment Display
BU+B
ACC
TX+
TX–
VR
R
G
B
SYNC
VG
(Shielded)
+B2
ACC2
TX2+
TX2–
VR2
R2
G2
B2
SYN2
VG2
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
ACC3
+B
AR+
AR–
AL+
AL–
SG4
MUTE
ACC
+B
R+
R–
L+
L–
SLD
MUTE
D33
DVD Player


R21
Rear Seat Entertainment Display
GND
L+
L–
R+
R–
SGND
1
5
6
3
4
2
Y
W
(Shielded)
IC3
IM4
6 A
17 C
16 C
19 C
18 C
20 C
GND1
HPL+
HPL–
HPR+
HPR–
SLD1
R17(A), R18(B), R19(C)
Rear Seat Entertainment ECU
NTS2
SGN2
SG9
TX3+
TX3–
GND4
8 C
9 C
10 C
14 C
13 C
15 C
BR
LG
3
2
1
17
18
16
NTSC
S. GND
SLD
TX+
TX–
GND
D33
DVD Player

# Audio System with RSES (Double Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C16 | 72 | J43 B | 74 | R18 B | 75 |
| D33 | 73 | J54 | 74 | R19 C | 75 |
| F15 | 76 | J60 | 76 | R21 | 77 |
| F16 | 76 | R6 B | 77 | S23 A | 77 |
| H11 | 73 | R7 B | 77 | S24 B | 77 |
| H12 | 73 | R14 A | 75 | T7 B | 77 |
| J40 A | 74 | R15 B | 75 | T8 B | 77 |
| J41 B | 74 | R16 C | 75 | V10 | 75 |
| J42 A | 74 | R17 A | 75 | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |

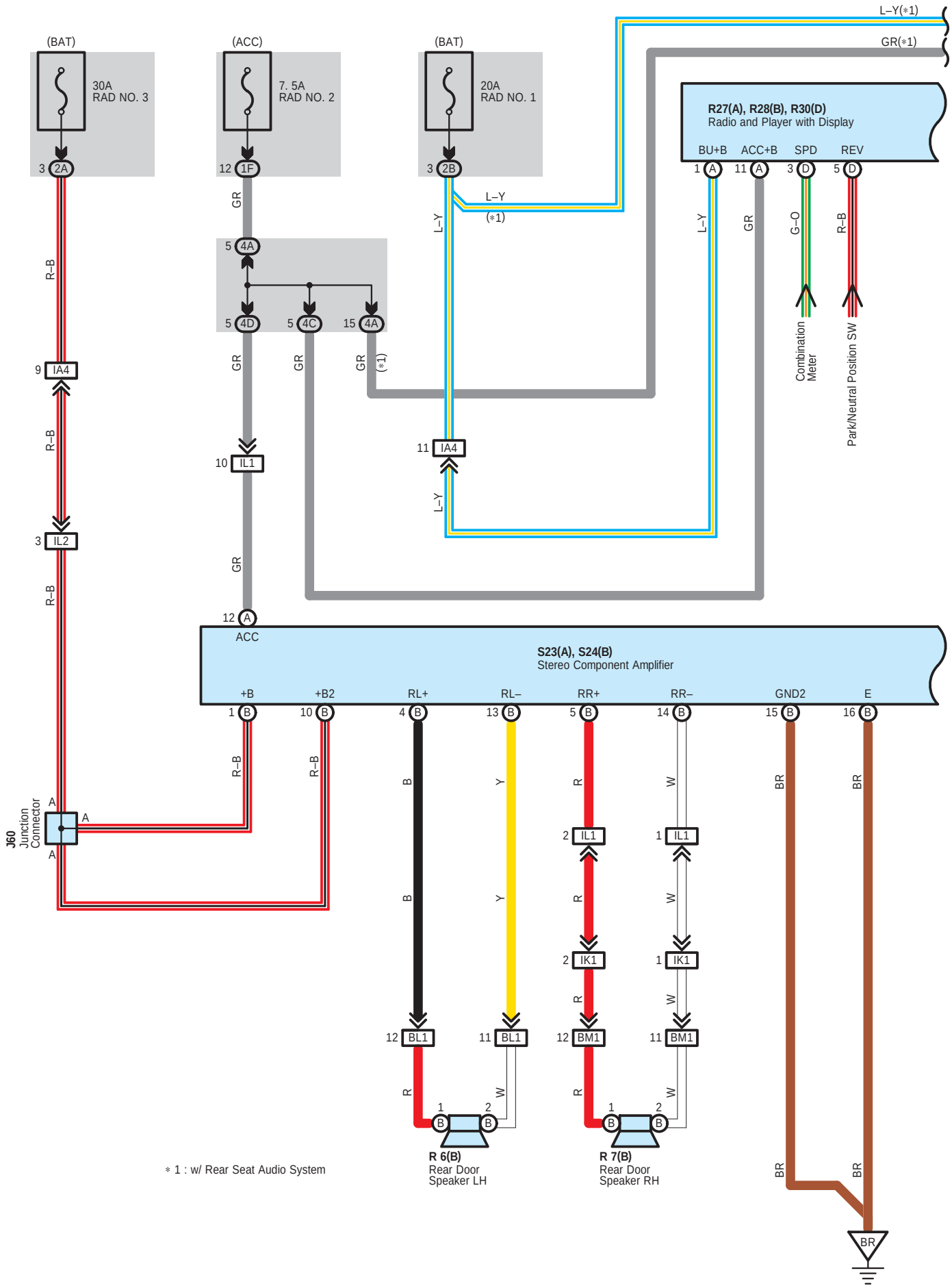
**: Connector Joining Wire Harness and Wire Harness**

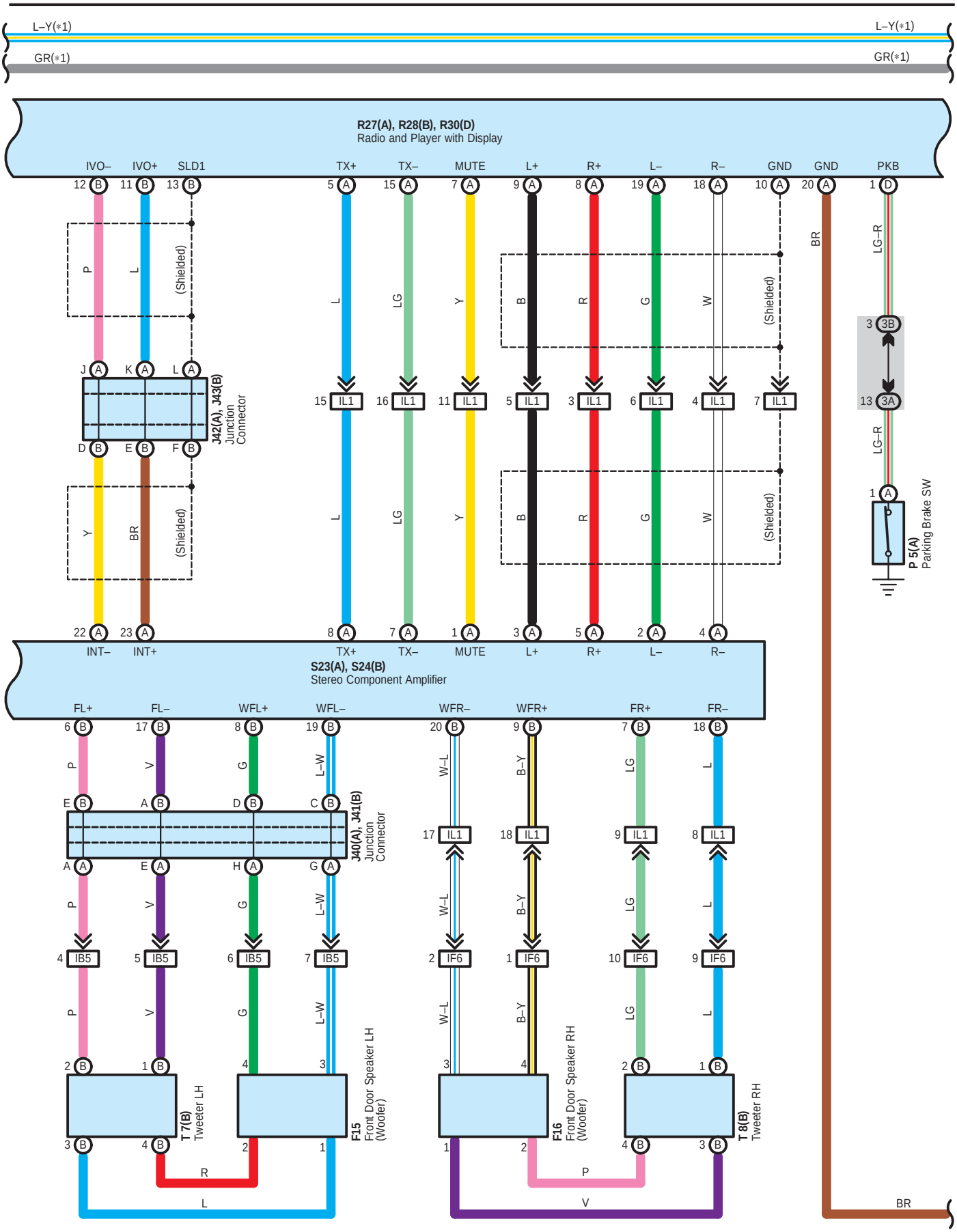
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IC3 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL1 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| IM3 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| IM4 | | |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**: Ground Points**

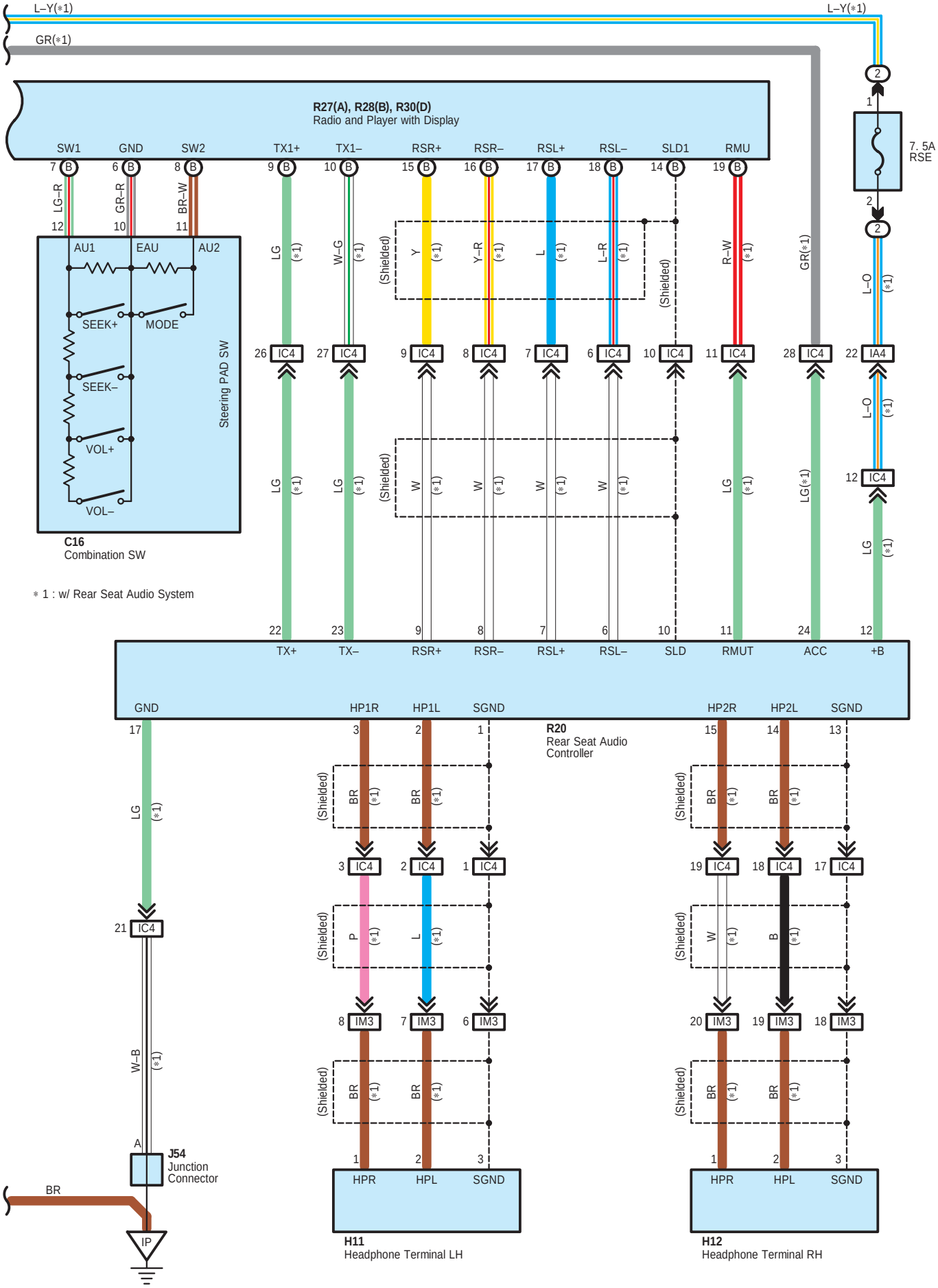
| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |
| BR | 94 | Back Panel Left |

# Navigation and Audio System with 8 Speaker (Double Cab)




L–Y(*1)
GR(*1)
L–Y(*1)
GR(*1)
R27(A), R28(B), R30(D)
Radio and Player with Display
IVO–
IVO+
SLD1
TX+
TX–
MUTE
L+
R+
L–
R–
GND
GND
PKB
J42(A), J43(B)
Junction Connector
(Shielded)
S23(A), S24(B)
Stereo Component Amplifier
INT–
INT+
J40(A), J41(B)
Junction Connector
FL+
FL–
WFL+
WFL–
WFR–
WFR+
FR+
FR–
T 7(B)
Tweeter LH
F15
Front Door Speaker LH (Woofer)
F16
Front Door Speaker RH (Woofer)
T 8(B)
Tweeter RH
P 5(A)
Parking Brake SW
IL1
IB5
IF6
3B
3A

# Navigation and Audio System with 8 Speaker (Double Cab)



### : Parts Location

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C16 | | 72 | J43 | B | 74 | R28 | B | 75 |
| F15 | | 76 | J54 | | 74 | R30 | D | 75 |
| F16 | | 76 | J60 | | 76 | S23 | A | 77 |
| H11 | | 73 | P5 | A | 75 | S24 | B | 77 |
| H12 | | 73 | R6 | B | 77 | T7 | B | 77 |
| J40 | A | 74 | R7 | B | 77 | T8 | B | 77 |
| J41 | B | 74 | R20 | | 77 | | | |
| J42 | A | 74 | R27 | A | 75 | | | |

### : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

### : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |

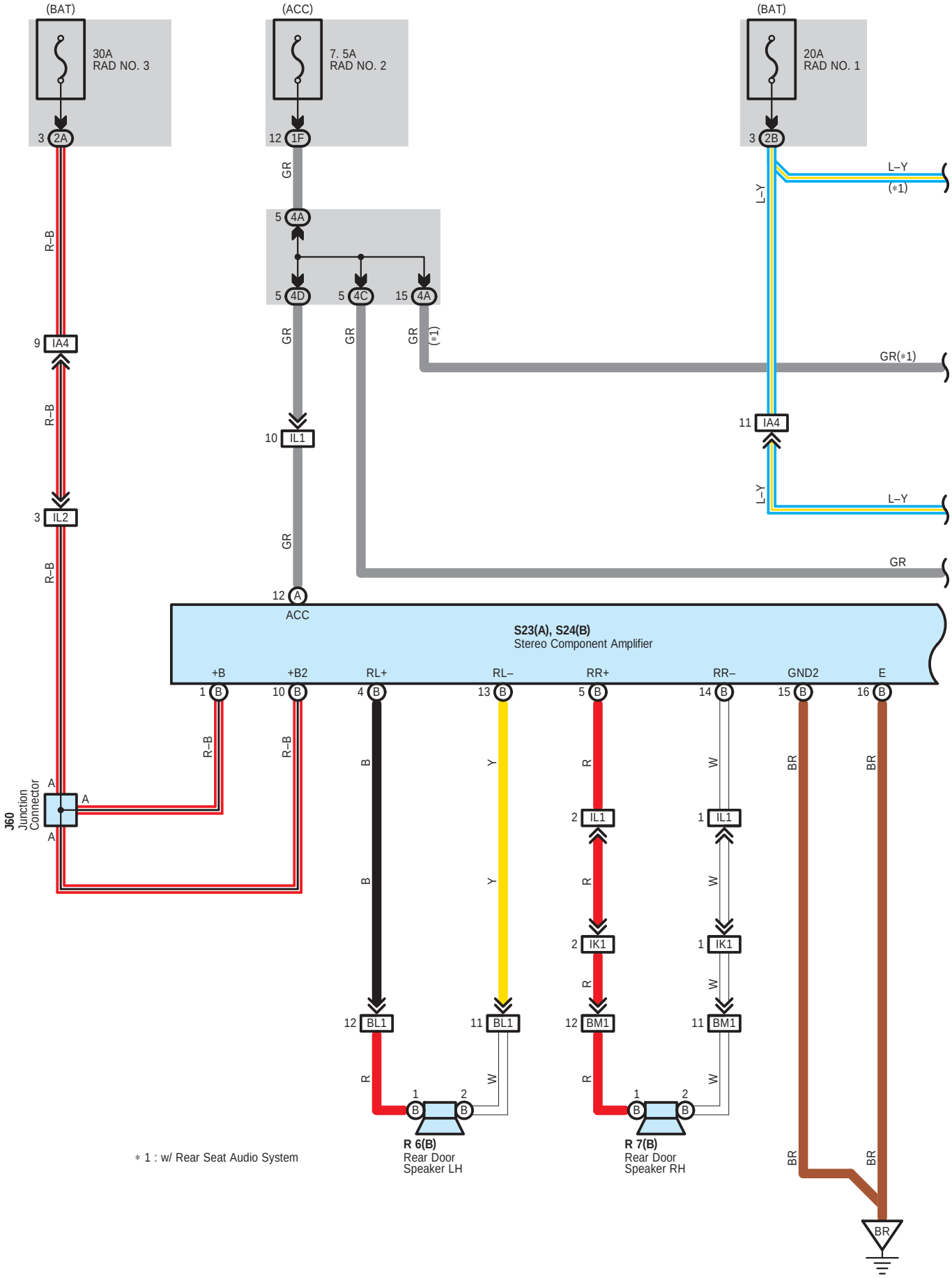
### : Connector Joining Wire Harness and Wire Harness

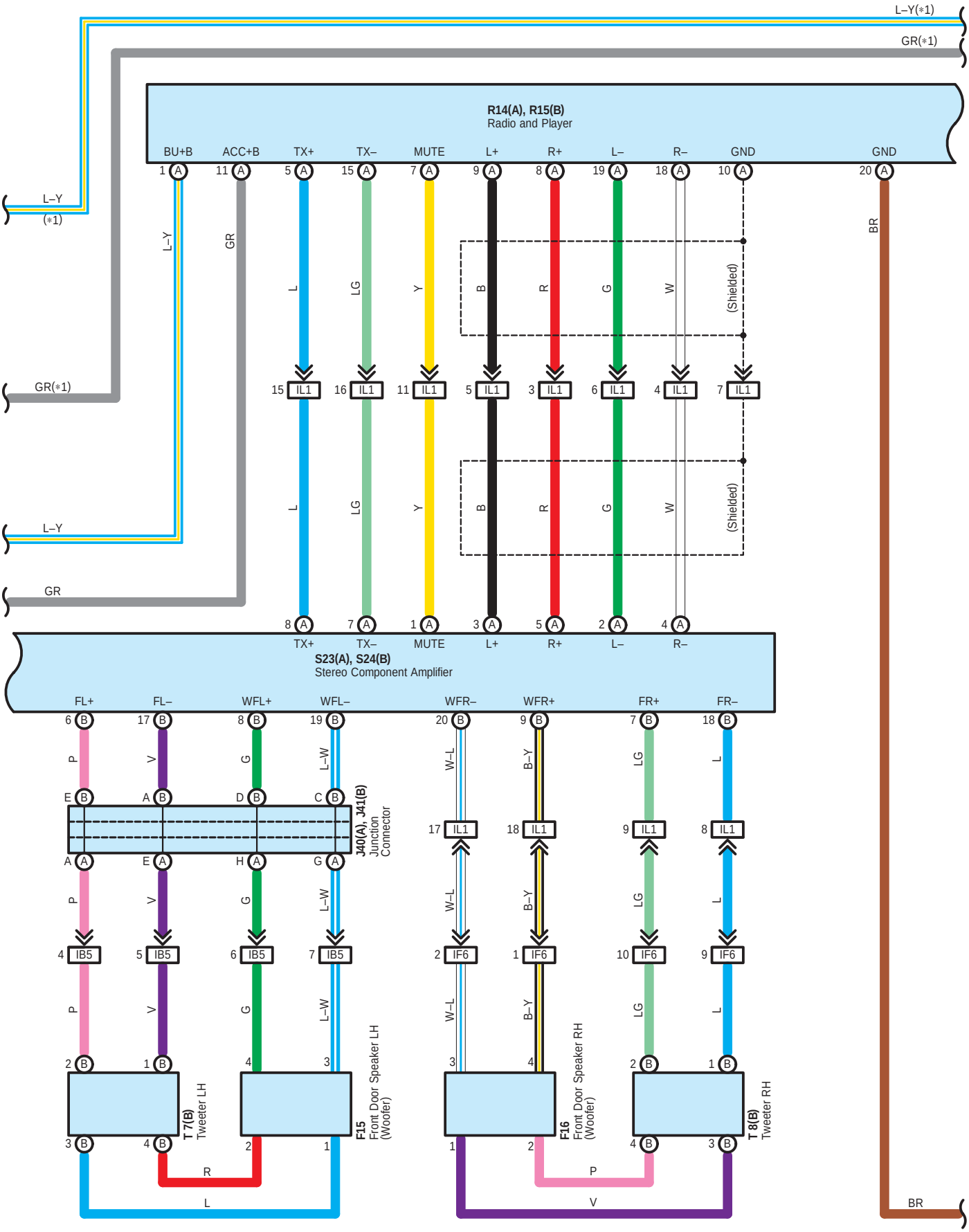
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IC4 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL1 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| IM3 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

### : Ground Points

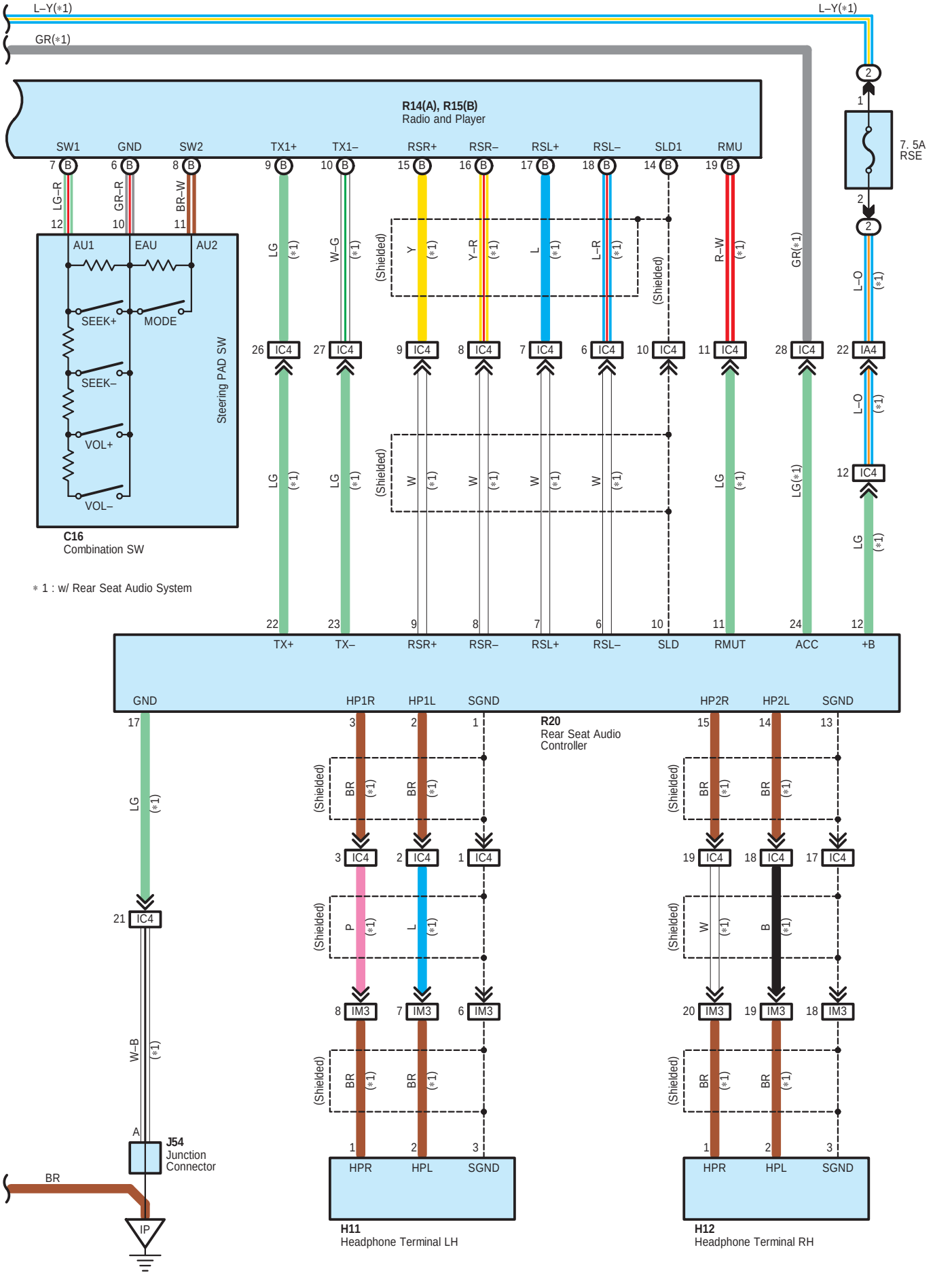
| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |
| BR | 94 | Back Panel Left |

# Audio System with 8 Speaker (Double Cab)




L–Y(*1)
GR(*1)
R14(A), R15(B)
Radio and Player
BU+B
ACC+B
TX+
TX–
MUTE
L+
R+
L–
R–
GND
GND
L–Y
(*1)
GR(*1)
L–Y
GR
L
LG
Y
B
R
G
W
(Shielded)
BR
IL1
S23(A), S24(B)
Stereo Component Amplifier
FL+
FL–
WFL+
WFL–
WFR–
WFR+
FR+
FR–
J40(A), J41(B)
Junction Connector
IB5
IF6
T 7(B)
Tweeter LH
F15
Front Door Speaker LH (Woofer)
F16
Front Door Speaker RH (Woofer)
T 8(B)
Tweeter RH
P
V
G
L–W
W–L
B–Y
R
L
P
BR

# Audio System with 8 Speaker (Double Cab)



## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| C16 | 72 | J41 B | 74 | R15 B | 75 |
| F15 | 76 | J54 | 74 | R20 | 77 |
| F16 | 76 | J60 | 76 | S23 A | 77 |
| H11 | 73 | R6 B | 77 | S24 B | 77 |
| H12 | 73 | R7 B | 77 | T7 B | 77 |
| J40 A | 74 | R14 A | 75 | T8 B | 77 |

## : Relay Blocks

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 2A | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2B | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |
| 4D | | |

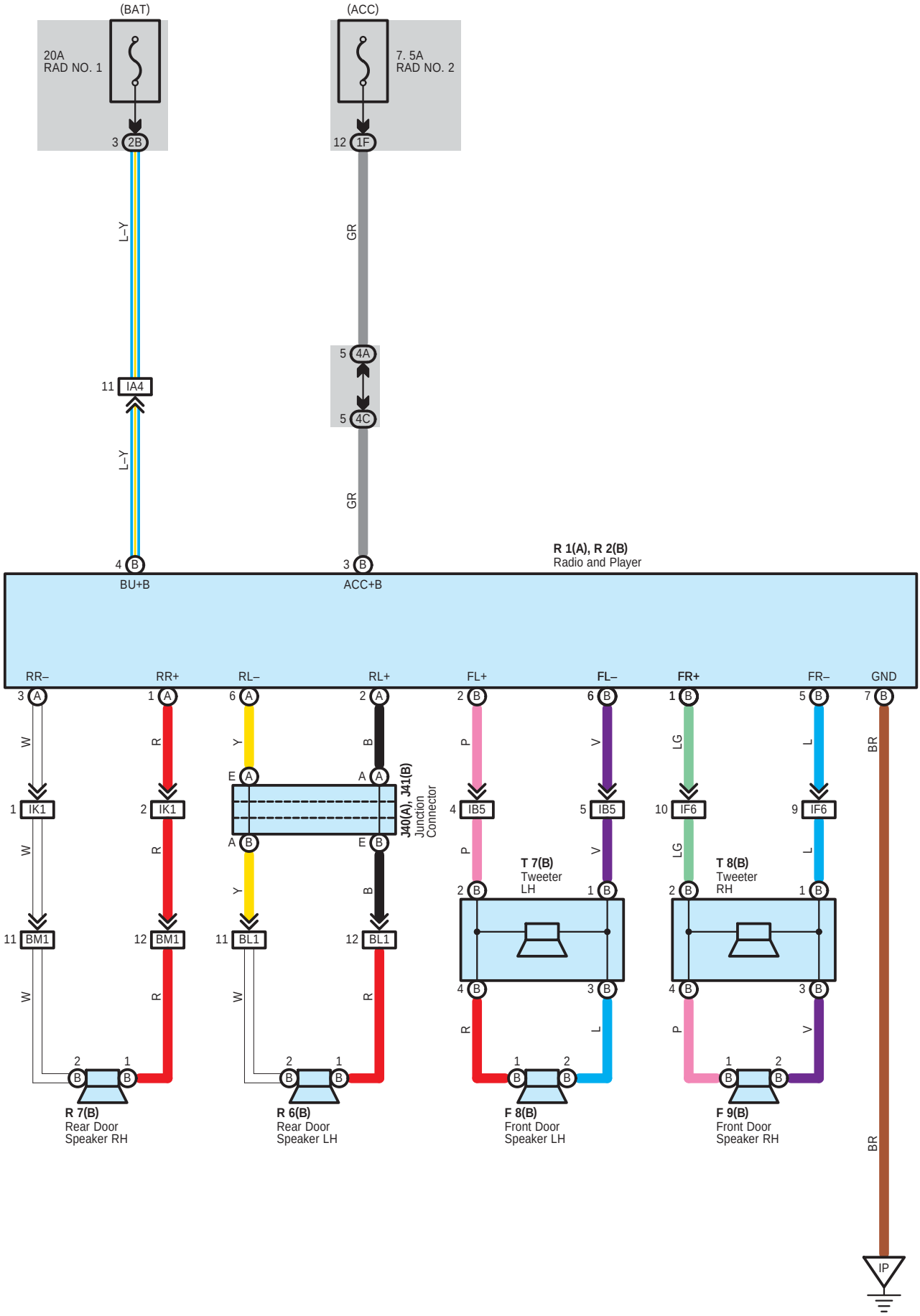
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IC4 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL1 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| IL2 | 92 | Floor No.2 Wire and Cowl Wire (Right Kick Panel) |
| IM3 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |
| BR | 94 | Back Panel Left |

# Audio System with 6 Speaker (Double Cab)



**○ : Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| F8 | B | 76 | R1 | A | 75 | T7 | B | 77 |
| F9 | B | 76 | R2 | B | 75 | T8 | B | 77 |
| J40 | A | 74 | R6 | B | 77 | | | |
| J41 | B | 74 | R7 | B | 77 | | | |

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

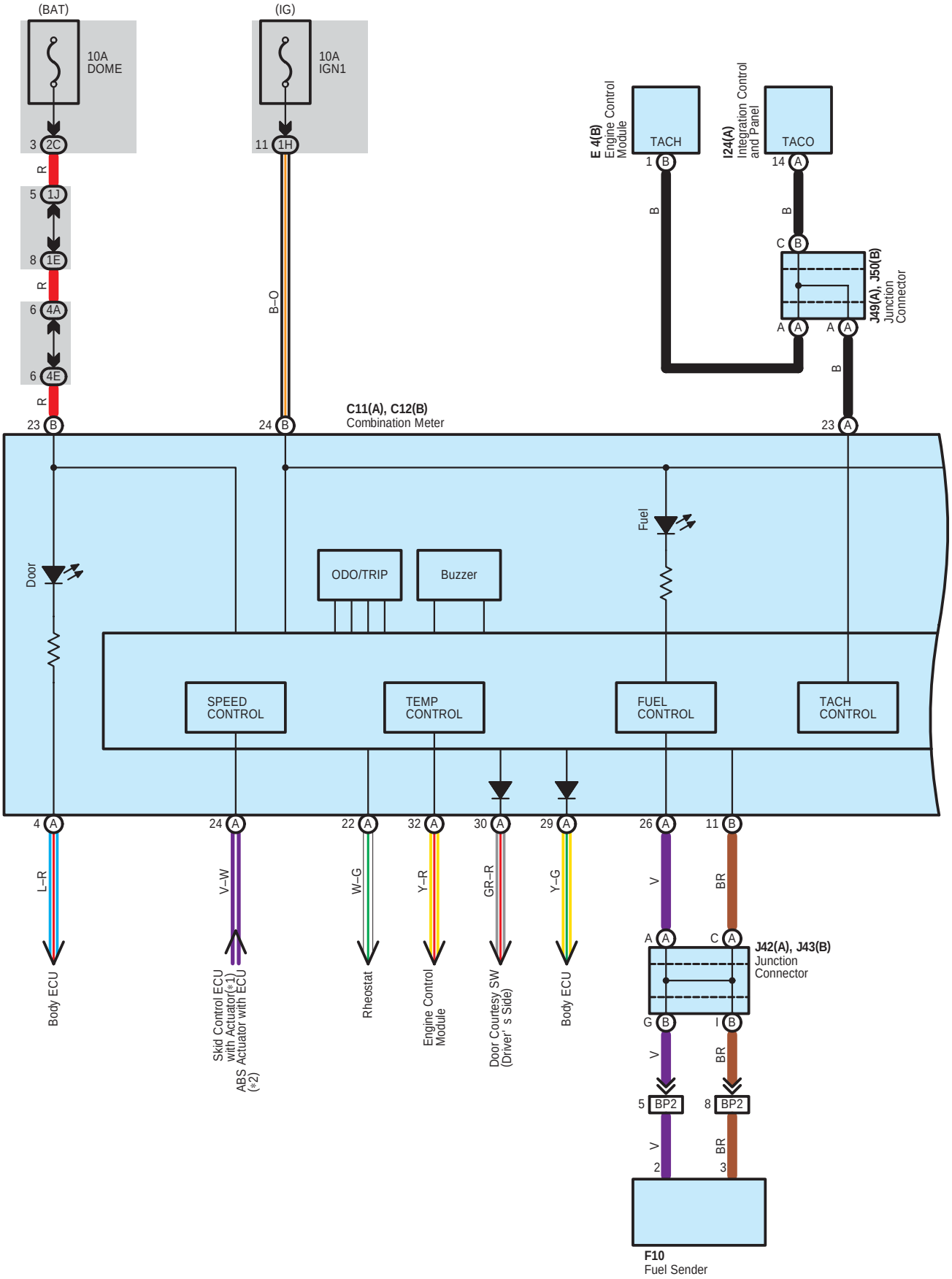
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 2B | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4C | | |

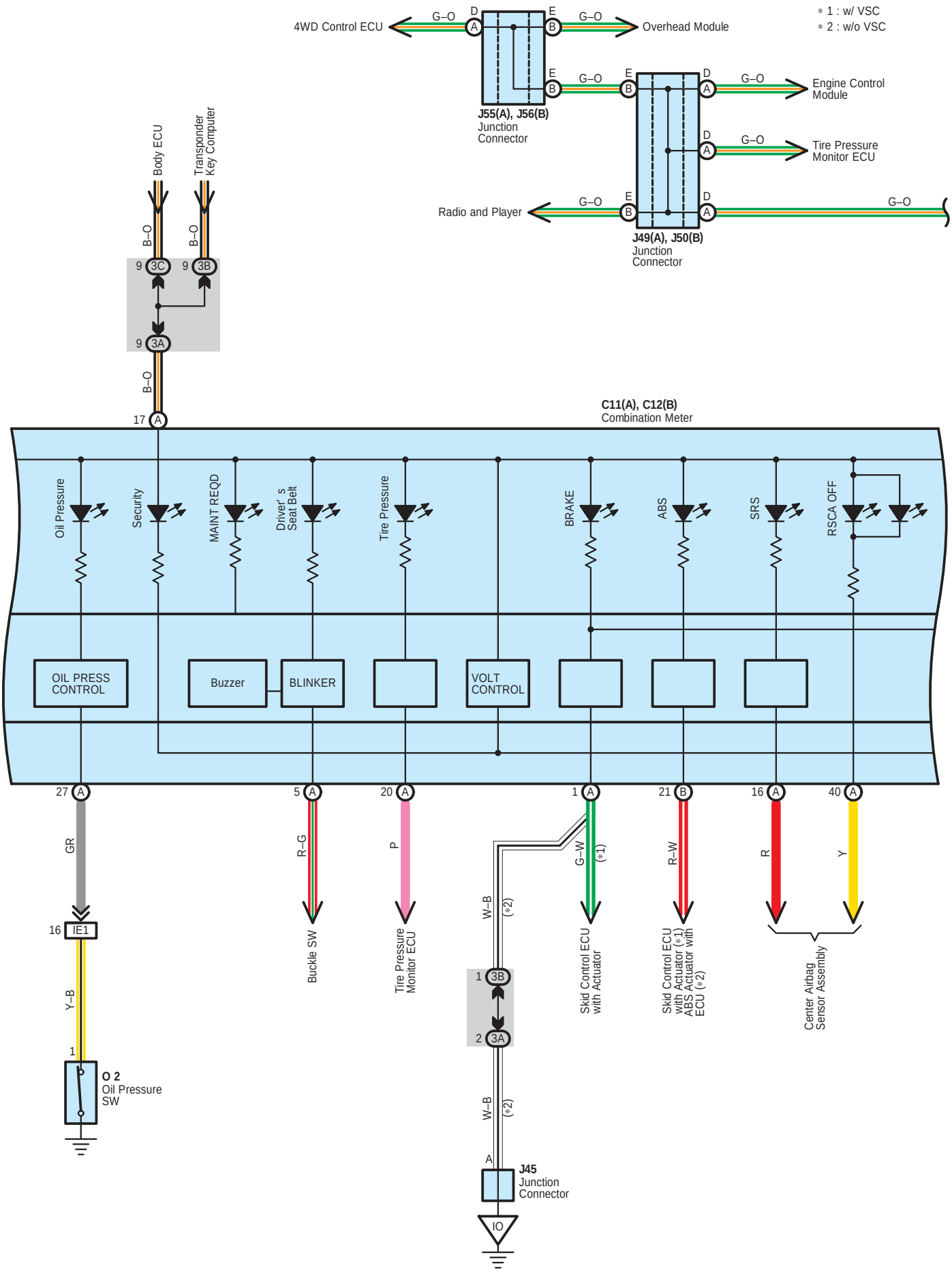
**▭ : Connector Joining Wire Harness and Wire Harness**

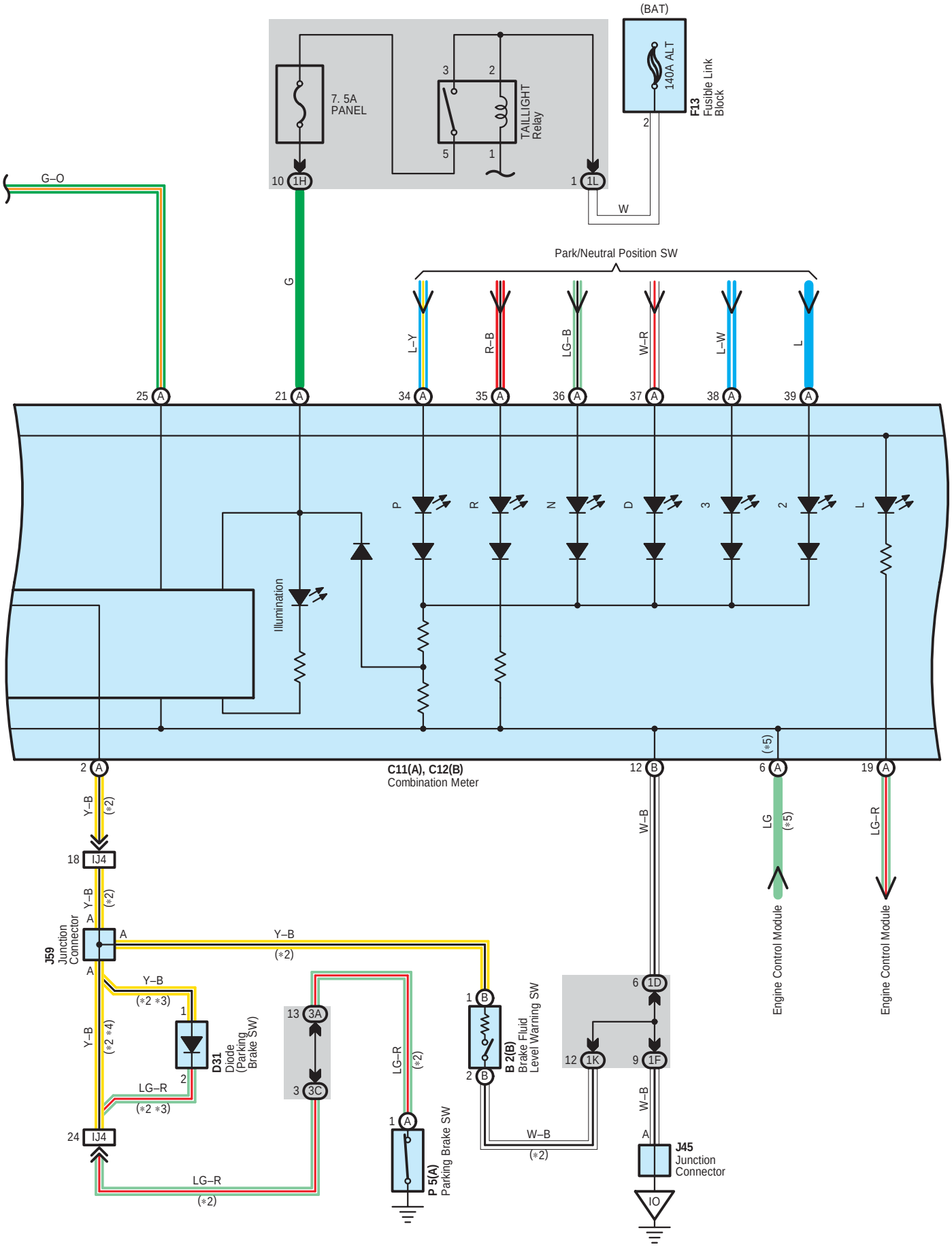
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB5 | 92 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IK1 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |

**▽ : Ground Points**

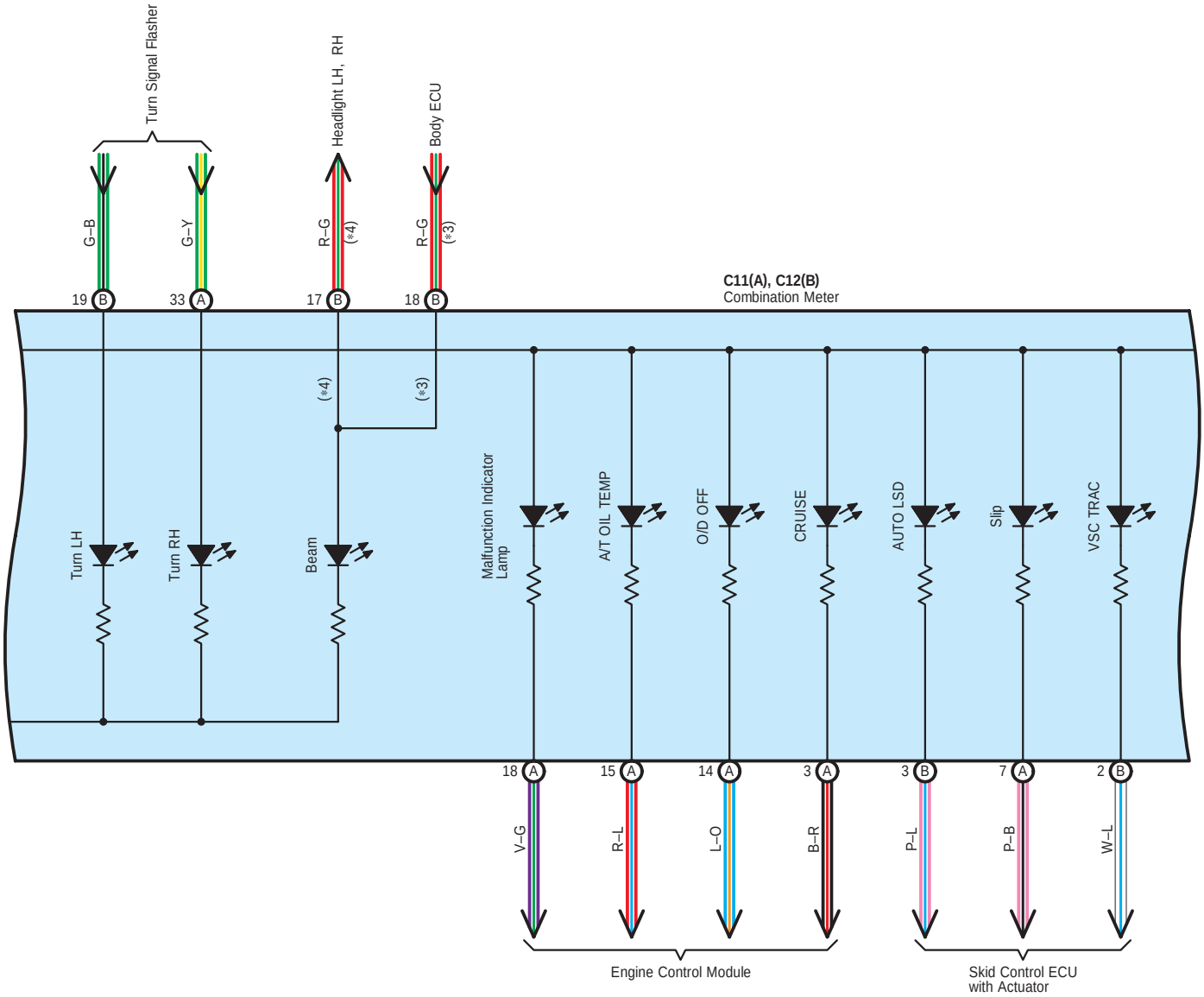
| Code | See Page | Ground Points Location |
|---|---|---|
| IP | 92 | Instrument Panel Brace LH |

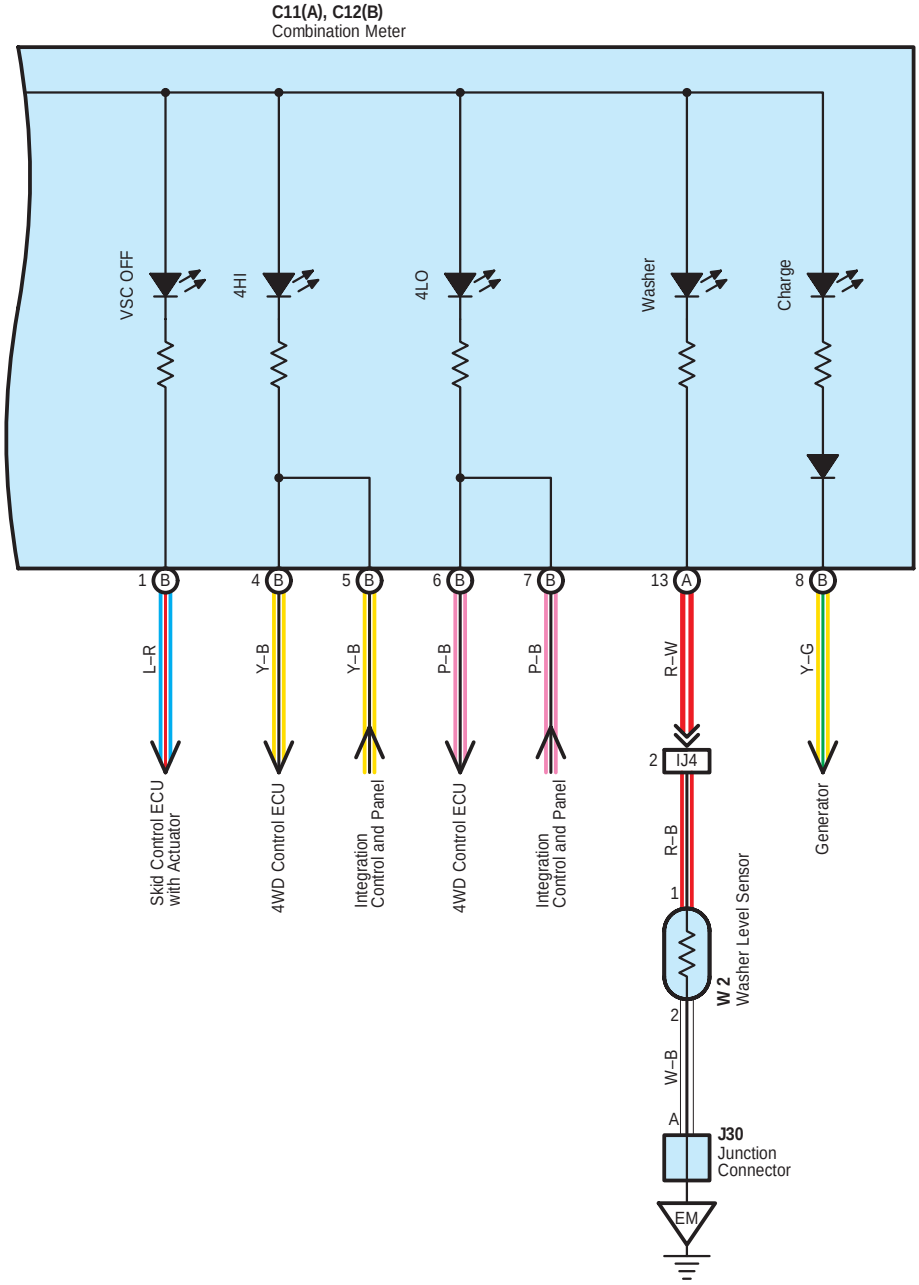

(BAT)
10A
DOME
3 2C
R
5 1J
8 1E
R
6 4A
6 4E
R
23 B
(IG)
10A
IGN1
11 1H
B–O
24 B
C11(A), C12(B)
Combination Meter
E 4(B)
Engine Control
Module
TACH
1 B
I24(A)
Integration Control
and Panel
TACO
14 A
B
C B
J49(A), J50(B)
Junction
Connector
A A
A A
B
23 A
Door
ODO/TRIP
Buzzer
Fuel
SPEED
CONTROL
TEMP
CONTROL
FUEL
CONTROL
TACH
CONTROL
4 A
24 A
22 A
32 A
30 A
29 A
26 A
11 B
L–R
V–W
W–G
Y–R
GR–R
Y–G
V
BR
Body ECU
Skid Control ECU
with Actuator(*1)
ABS Actuator with ECU
(*2)
Rheostat
Engine Control
Module
Door Courtesy SW
(Driver' s Side)
Body ECU
A A
C A
J42(A), J43(B)
Junction
Connector
G B
I B
V
BR
5 BP2
8 BP2
V
BR
2
3
F10
Fuel Sender


* 1 : w/ VSC
* 2 : w/o VSC
4WD Control ECU
G–O
Overhead Module
Engine Control Module
Tire Pressure Monitor ECU
Radio and Player
J55(A), J56(B) Junction Connector
J49(A), J50(B) Junction Connector
Body ECU
Transponder Key Computer
B–O
3C
3B
3A
17
C11(A), C12(B) Combination Meter
Oil Pressure
Security
MAINT REQD
Driver's Seat Belt
Tire Pressure
BRAKE
ABS
SRS
RSCA OFF
OIL PRESS CONTROL
Buzzer
BLINKER
VOLT CONTROL
27
5
20
1
21
16
40
GR
16
IE1
Y–B
1
O 2
Oil Pressure SW
R–G
Buckle SW
P
Tire Pressure Monitor ECU
W–B
(*2)
G–W
(*1)
Skid Control ECU with Actuator
R–W
Skid Control ECU with Actuator (*1) ABS Actuator with ECU (*2)
R
Y
Center Airbag Sensor Assembly
1
3B
2
3A
A
J45
Junction Connector
IO


(BAT)
140A ALT
F13
Fusible Link Block
7. 5A
PANEL
TAILLIGHT
Relay
3
2
5
1
10 1H
1 1L
2
W
G–O
G
Park/Neutral Position SW
L–Y
R–B
LG–B
W–R
L–W
L
25 A
21 A
34 A
35 A
36 A
37 A
38 A
39 A
P
R
N
D
3
2
L
Illumination
C11(A), C12(B)
Combination Meter
2 A
12 B
6 A
19 A
(*5)
Y–B
(*2)
18 IJ4
24 IJ4
J59
Junction Connector
A
Y–B
(*2 *3)
(*2 *4)
LG–R
(*2 *3)
D31
Diode
(Parking Brake SW)
13 3A
3 3C
LG–R
(*2)
1 A
P 5(A)
Parking Brake SW
1 B
2 B
B 2(B)
Brake Fluid Level Warning SW
W–B
(*2)
W–B
6 1D
12 1K
9 1F
A
J45
Junction Connector
IO
LG
(*5)
LG–R
Engine Control Module
Engine Control Module

∗ 2 : w/o VSC
∗ 3 : w/ Daytime Running Light
∗ 4 : w/o Daytime Running Light
∗ 5 : w/ Engine Immobiliser System




C11(A), C12(B)
Combination Meter
VSC OFF
4HI
4LO
Washer
Charge
1 B
4 B
5 B
6 B
7 B
13 A
8 B
L–R
Y–B
Y–B
P–B
P–B
R–W
Y–G
Skid Control ECU with Actuator
4WD Control ECU
Integration Control and Panel
4WD Control ECU
Integration Control and Panel
2 IJ4
Generator
R–B
1
W 2
Washer Level Sensor
2
W–B
A
J30
Junction Connector
EM

## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| B2 B | 70 | I24 A | 73 | J55 A | 74 |
| C11 A | 72 | J30 | 71 | J56 B | 74 |
| C12 B | 72 | J42 A | 74 | J59 | 74 |
| D31 | 73 | J43 B | 74 | O2 | 71 |
| E4 B | 73 | J45 | 74 | P5 A | 75 |
| F10 | 76 | J49 A | 74 | W2 | 71 |
| F13 | 70 | J50 B | 74 | | |

## : Junction Block and Wire Harness Connector

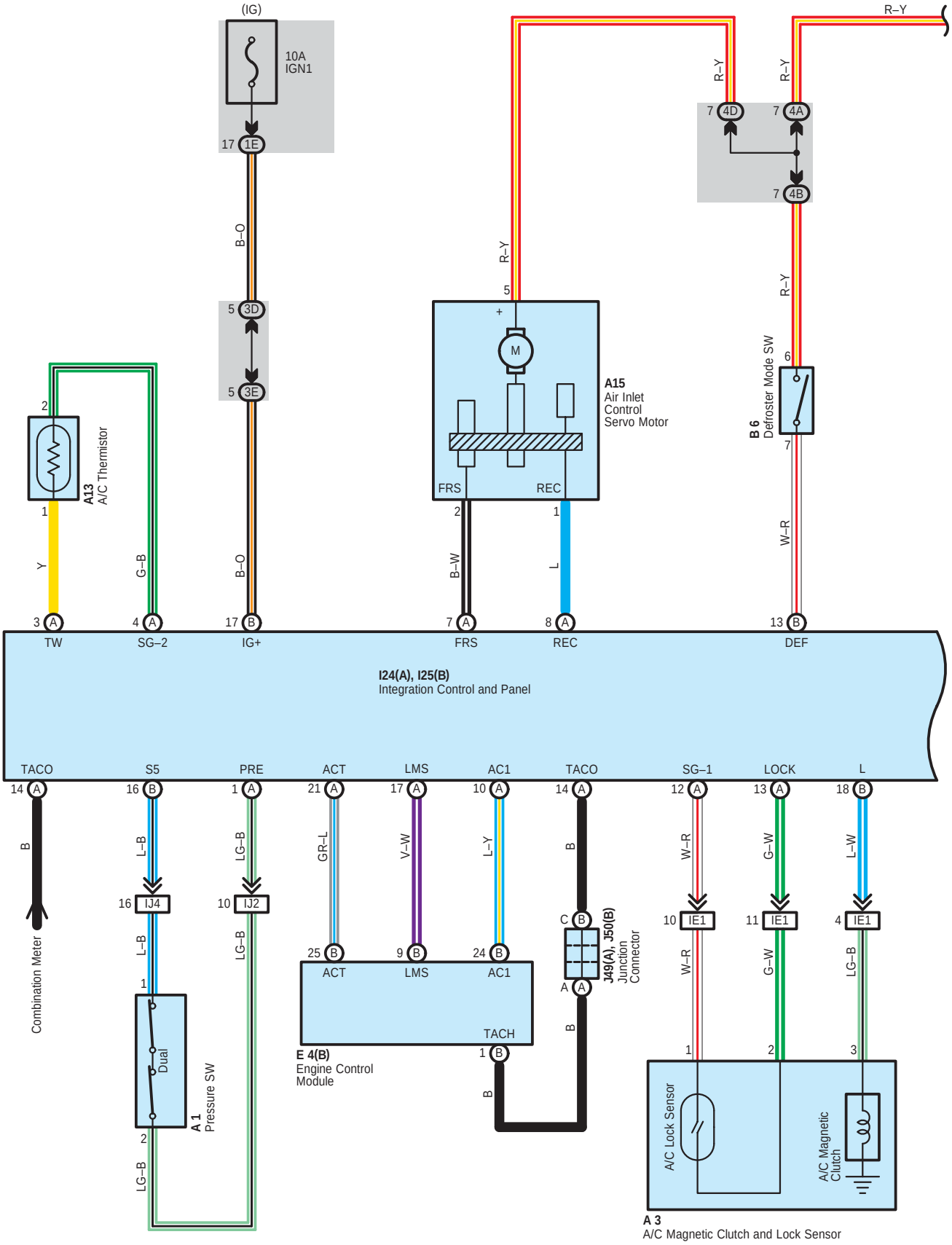
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1D | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1E | | |
| 1F | | |
| 1H | | |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1K | | |
| 1L | | |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3C | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4E | | |

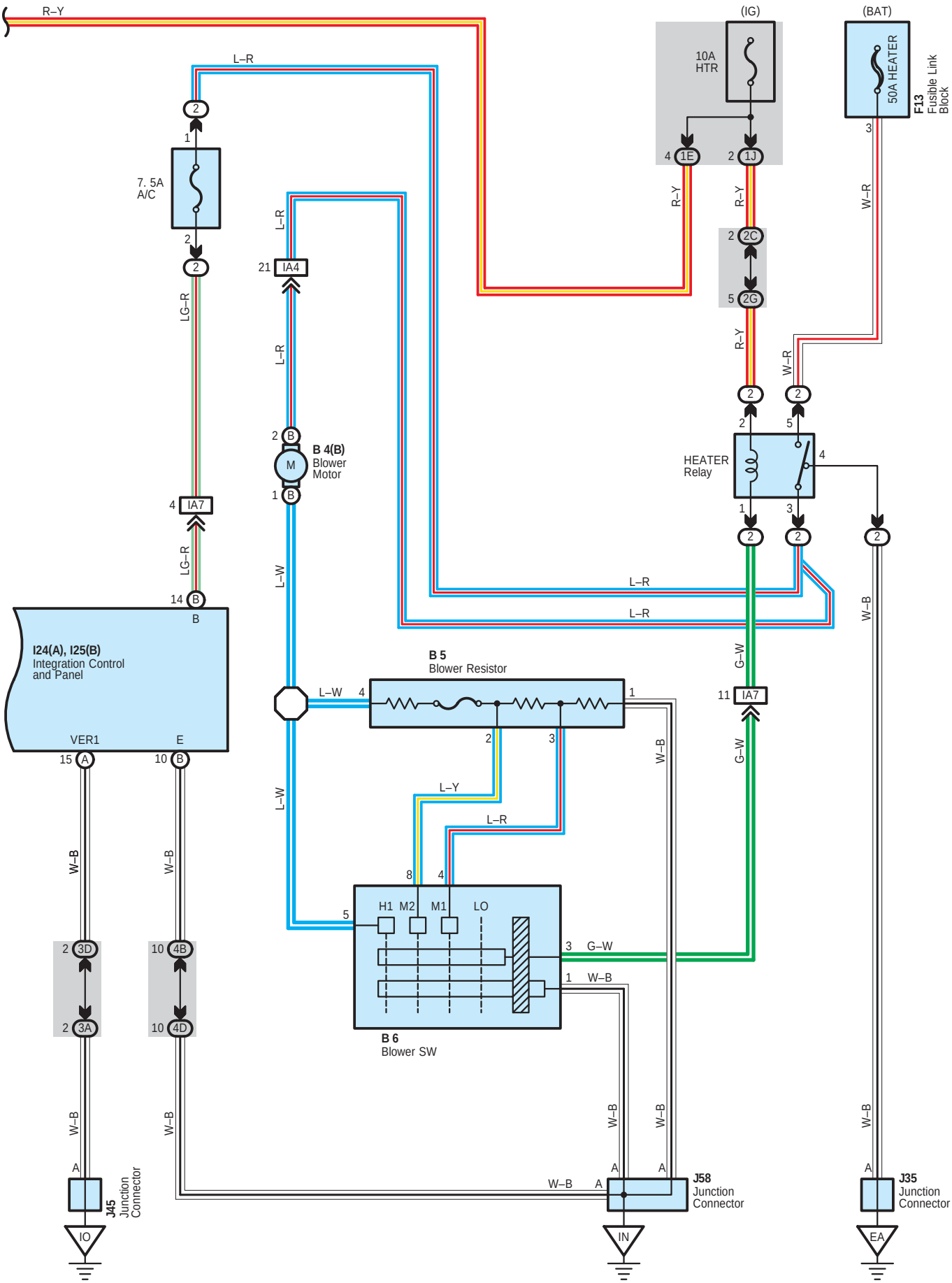
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| BP2 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |

## : Ground Points

| Code | See Page | Ground Points Location |
|---|---|---|
| EM | 90 | Radiator Side Support RH |
| IO | 92 | Left Kick Panel |


(IG)
10A
IGN1
17 1E
B–O
5 3D
5 3E
B–O
17 B
IG+
R–Y
5
+
M
FRS
REC
A15
Air Inlet
Control
Servo Motor
2
B–W
7 A
FRS
1
L
8 A
REC
R–Y
7 4D
7 4A
7 4B
R–Y
R–Y
6
7
B 6
Defroster Mode SW
W–R
13 B
DEF
2
A13
A/C Thermistor
1
Y
3 A
TW
G–B
4 A
SG–2
I24(A), I25(B)
Integration Control and Panel
TACO
14 A
B
Combination Meter
S5
16 B
L–B
16 IJ4
L–B
1
Dual
A 1
Pressure SW
2
LG–B
PRE
1 A
LG–B
10 IJ2
LG–B
ACT
21 A
GR–L
25 B
ACT
LMS
17 A
V–W
9 B
LMS
AC1
10 A
L–Y
24 B
AC1
TACH
1 B
B
E 4(B)
Engine Control
Module
TACO
14 A
B
C B
A A
J49(A), J50(B)
Junction
Connector
B
SG–1
12 A
W–R
10 IE1
W–R
1
LOCK
13 A
G–W
11 IE1
G–W
2
L
18 B
L–W
4 IE1
LG–B
3
A/C Lock Sensor
A/C Magnetic
Clutch
A 3
A/C Magnetic Clutch and Lock Sensor


R–Y
L–R
(IG)
(BAT)
10A
HTR
50A HEATER
F13
Fusible Link
Block
7. 5A
A/C
4 1E
2 1J
3
R–Y
R–Y
W–R
2 2C
5 2G
R–Y
W–R
2
2
2
5
4
HEATER
Relay
1
3
2
2
2
L–R
21 IA4
L–R
2 B
M
1 B
B 4(B)
Blower
Motor
4 IA7
LG–R
LG–R
14 B
B
L–W
L–R
L–R
W–B
G–W
11 IA7
G–W
I24(A), I25(B)
Integration Control
and Panel
VER1
E
15 A
10 B
B 5
Blower Resistor
L–W
4
1
2
3
W–B
L–Y
L–R
L–W
8
4
5
H1
M2
M1
LO
3
G–W
1
W–B
B 6
Blower SW
W–B
W–B
2 3D
2 3A
10 4B
10 4D
W–B
W–B
W–B
W–B
W–B
W–B
A
A
A
A
A
J45
Junction
Connector
J58
Junction
Connector
J35
Junction
Connector
IO
IN
EA

**System Outline**

**1. Heater Blower Motor Operation**

Current is applied at all times through the HEATER fuse to TERMINAL 5 of the HTR relay.
When the ignition SW is turned on, current flows through the HTR fuse to TERMINAL 2 of the HTR relay to the coil side to TERMINAL 1 to TERMINAL 3 of the blower SW.

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

* Medium speed operation (Operation at M1, M2)
When the blower SW is moved to M1 position, current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, turning the HTR relay to switch on. This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 4 of the blower resistor to TERMINAL 3 to TERMINAL 4 of the blower SW to TERMINAL 1 to GROUND. At this time, the blower resistance of the blower resistor is less than at low speed, so the blower motor rotates at medium low speed.
When the blower SW is moved to M2 position, current flows through the motor flows from TERMINAL 4 of the blower resistor to TERMINAL 2 to TERMINAL 8 of the blower SW to TERMINAL 1 to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

* High speed operation
When the blower SW is moved to HIGH position, current flows to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, turning the HTR relay to switch on.
This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 5 of the blower SW to TERMINAL 1 to GROUND, causing the blower motor to rotate at high speed.

**2. Operation of Air Inlet Control Servo Motor**

* Switching from FRESH to RECIRC
With the ignition SW turned on, current flows from the HTR fuse to TERMINAL 5 of the air inlet control servo motor. When the RECIRC/FRESH SW is switched to the RECIRC side, current flows from TERMINAL 5 of the air inlet control servo motor to TERMINAL 1 to TERMINAL (A) 8 of the integration control and panel to TERMINAL (B) 10 to GROUND. The motor rotates and the damper moves to the RECIRC side. When it is in the RECIRC position, current is cut inside the servo motor and the damper stops at that position.

* Switching from RECIRC to FRESH
With the ignition SW turned on, when the RECIRC/FRESH SW is switched to the FRESH side, current flows from TERMINAL 5 of the air inlet control servo motor to TERMINAL 2 to TERMINAL (A) 7 of the integration control and panel to TERMINAL (B) 10 to GROUND, the motor rotates and the damper moves to the FRESH side. when it is in the FRESH position, current is cut inside the servo motor and the damper stops at that position. When the ignition SW turned on, and mode SW (Integration control and panel) is at DEF or F/DEF position, it causes the damper to move to the FRESH side. Whether the RECIRC/FRESH SW (Integration control and panel) is on or not.

**3. Air Conditioning Operation**

When the blower SW is on, current flows from the HTR fuse to the HTR relay (Coil side) to TERMINAL 3 of the blower SW to TERMINAL 1 to GROUND, activating the HTR relay. This causes current to flow from the HEATER fuse to the HTR relay (Point side) to A/C fuse to TERMINAL (B) 14 of the A/C SW (Integration control and panel). When the A/C SW (Integration Control and panel) is turned on. Current flows from the A/C fuse to TERMINAL (B) 14 of the integration control and panel to TERMINAL (B) 18 to A/C magnetic clutch. Causing The compressor to operate.
When blower SW is on and mode SW (Integration control and panel) is at DEF or F/DEF position, it causes A/C to run whether A/C SW (Integration control and panel) is on or not.

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| A1 | 70 | B6 | 72 | J45 | 74 |
| A3 | 70 | E4 B | 73 | J49 A | 74 |
| A13 | 72 | F13 | 70 | J50 B | 74 |
| A15 | 72 | I24 A | 73 | J58 | 74 |
| B4 B | 72 | I25 B | 73 | | |
| B5 | 72 | J35 | 71 | | |

: **Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |

: **Junction Block and Wire Harness Connector**

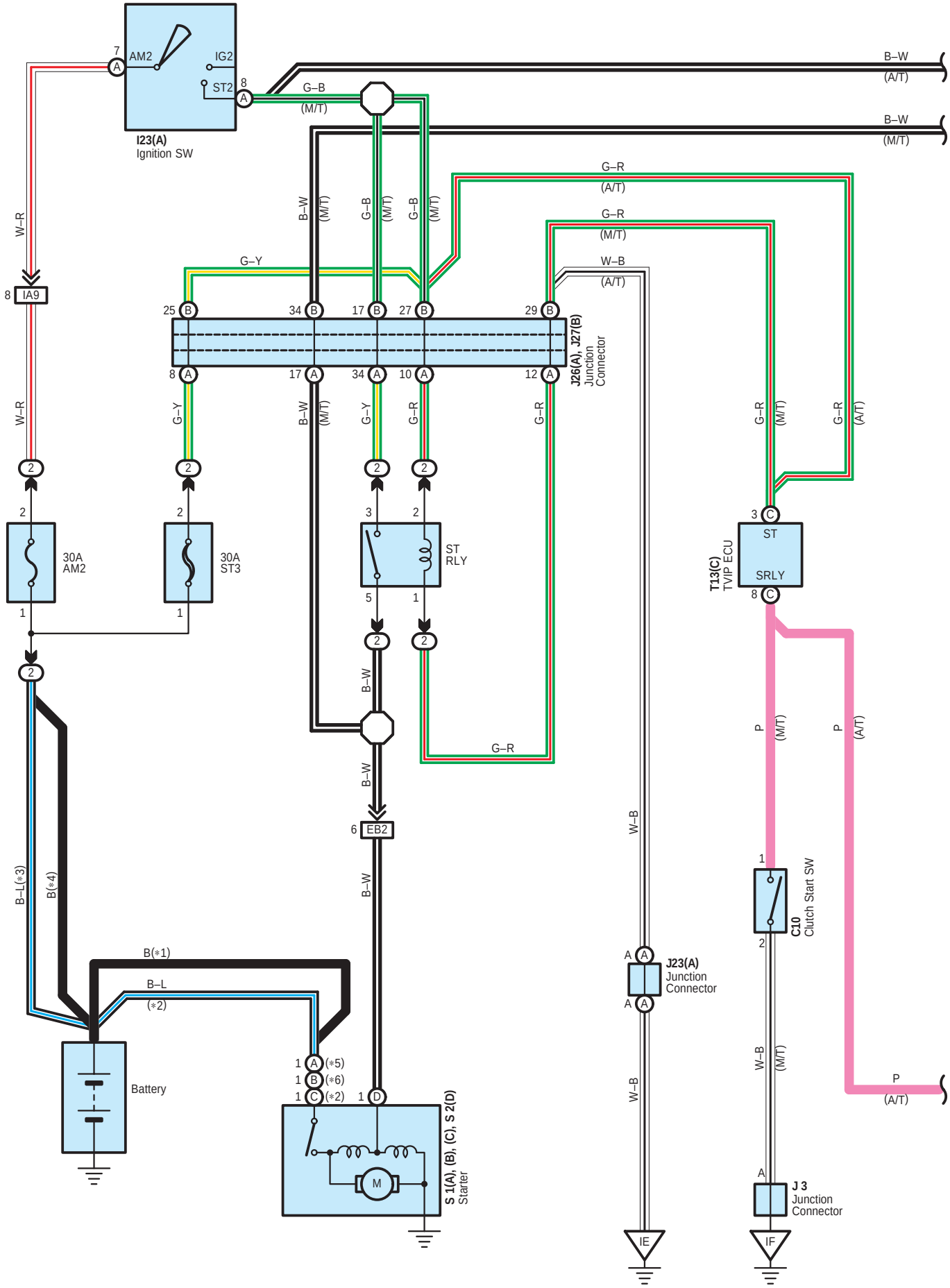
| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1E | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1J | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 2C | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 2G | | |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4D | | |

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

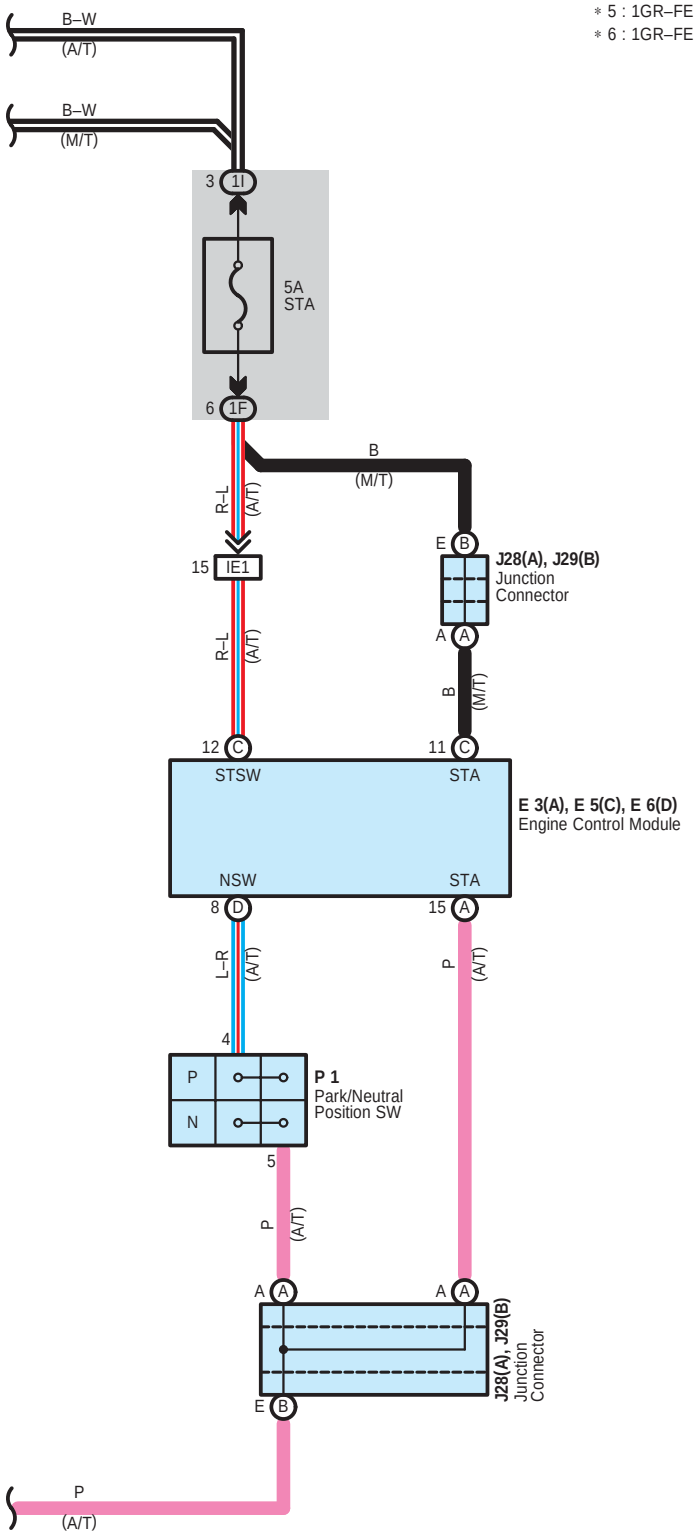
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA7 | | |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IJ2 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IJ4 | | |

: **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| IO | 92 | Left Kick Panel |
| IN | 92 | Right Kick Panel |


I23(A)
Ignition SW
AM2
IG2
ST2
B–W
(A/T)
B–W
(M/T)
G–B
(M/T)
W–R
IA9
G–Y
G–R
(A/T)
G–R
(M/T)
W–B
(A/T)
J26(A), J27(B)
Junction Connector
30A
AM2
30A
ST3
ST
RLY
T13(C)
TVIP ECU
ST
SRLY
P
(M/T)
P
(A/T)
EB2
B–L(*3)
B(*4)
B(*1)
B–L
(*2)
Battery
(*5)
(*6)
(*2)
S 1(A), (B), (C), S 2(D)
Starter
M
J23(A)
Junction Connector
C10
Clutch Start SW
J 3
Junction Connector
IE
IF

∗ 1 : 1GR–FE
∗ 2 : 2UZ–FE
∗ 3 : Towing Package
∗ 4 : Except Towing Package
∗ 5 : 1GR–FE Cold Area Spec.
∗ 6 : 1GR–FE Except Cold Area Spec.



# Starting (Access/Standard Cab)

**: Parts Location**

| Code | | See Page | Code | | See Page | Code | | See Page |
|---|---|---|---|---|---|---|---|---|
| C10 | | 60 | J26 | A | 62 | S1 | B | 59 (1GR–FE) |
| E3 | A | 61 | J27 | B | 62 | | C | 57 (2UZ–FE) |
| E5 | C | 61 | J28 | A | 62 | S2 | D | 57 (2UZ–FE) |
| E6 | D | 61 | J29 | B | 62 | | | 59 (1GR–FE) |
| I23 | A | 61 | P1 | | 57 (2UZ–FE) | T13 | C | 63 |
| J3 | | 62 | | | 59 (1GR–FE) | | | |
| J23 | A | 62 | S1 | A | 59 (1GR–FE) | | | |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1F | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1I | 26 (*1) | |
| | 30 (*2) | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EB2 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Room Main Wire (Under the Engine Room R/B) |
| | 81 (1GR–FE) | |
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |

**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| IE | 82 | Left Kick Panel |
| IF | | |

* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

# 2006 TOYOTA TUNDRA ELECTRICAL WIRING DIAGRAM SYSTEM CIRCUITS

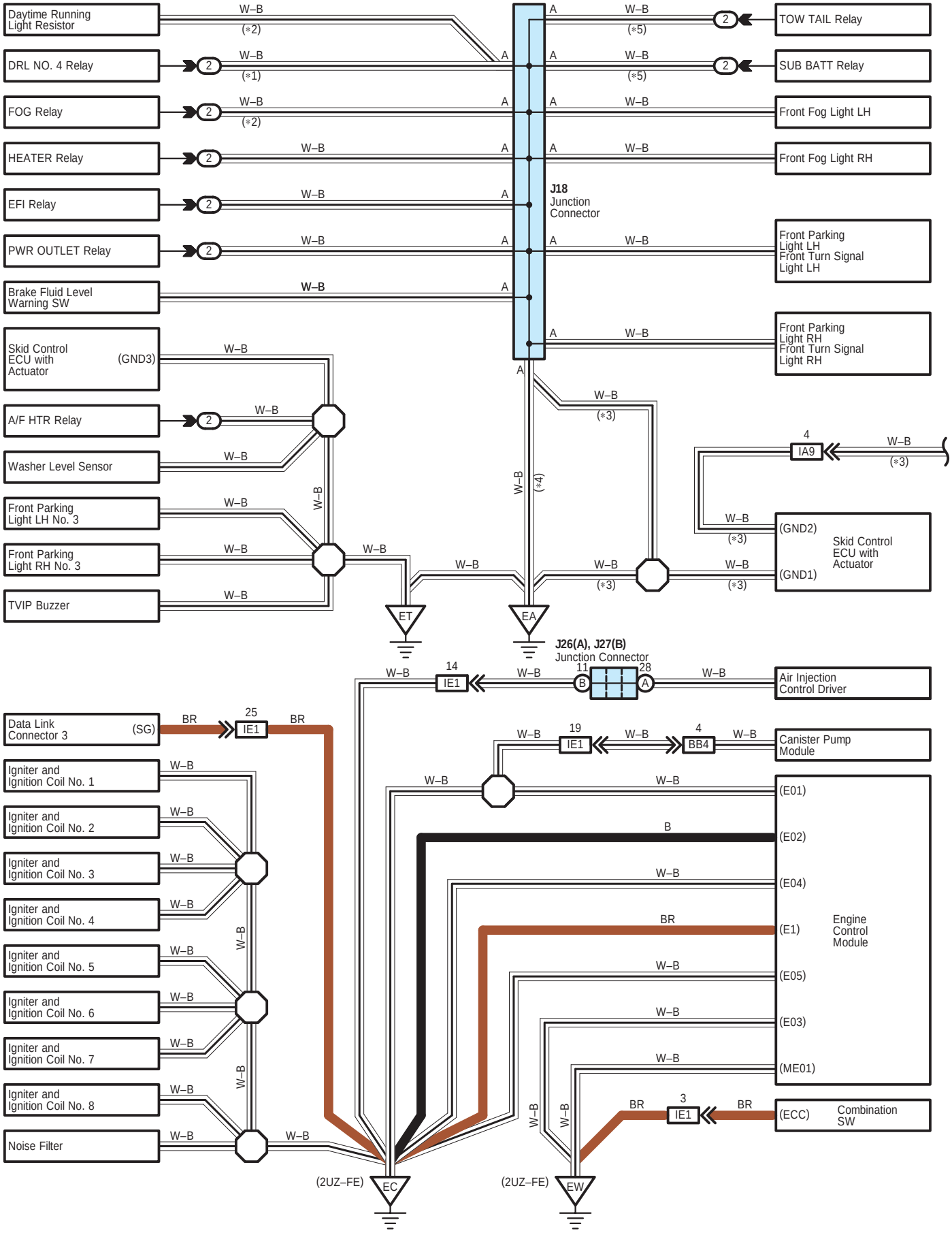
## (ACCESS CAB, STANDARD CAB)

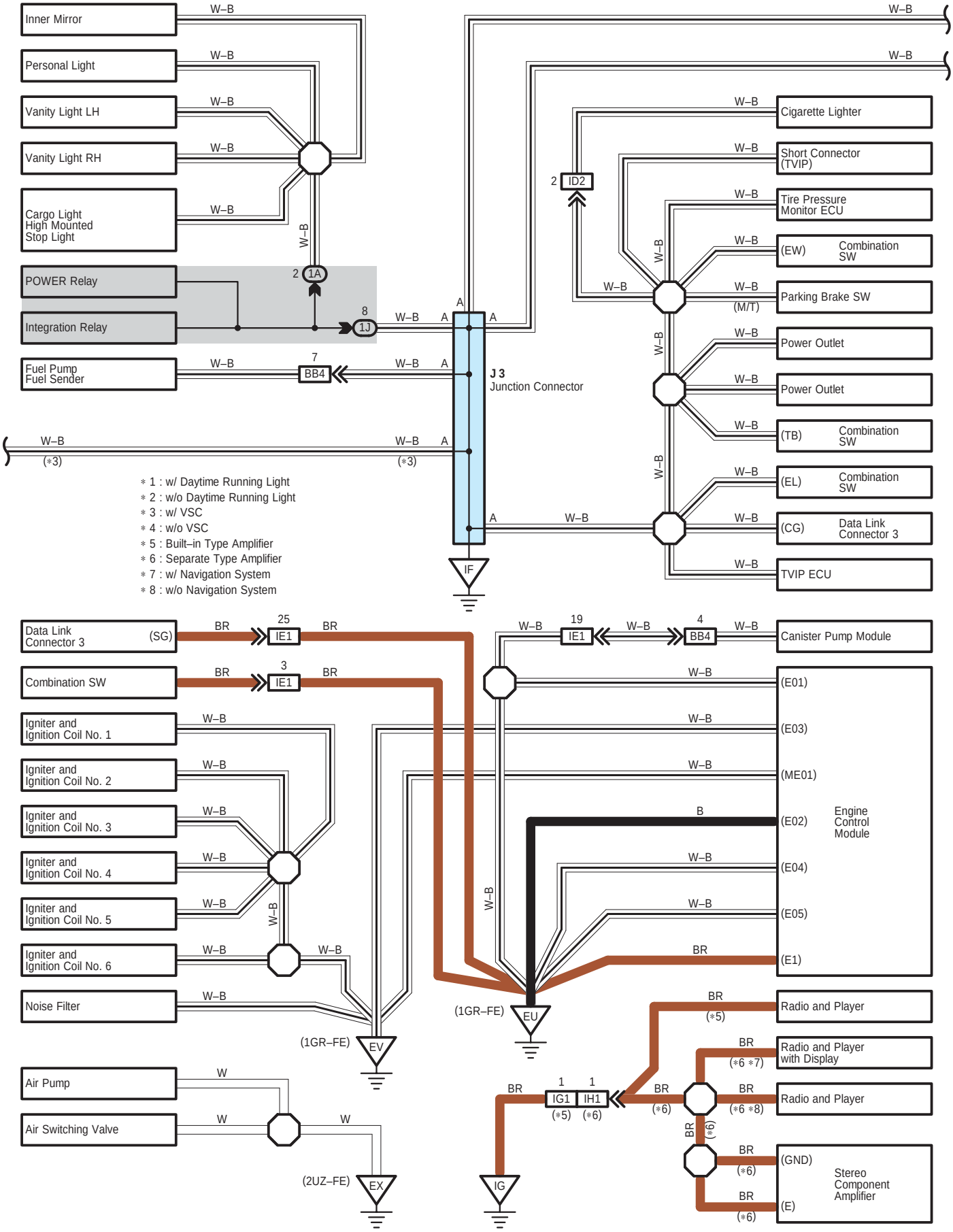

| | Page |
|---|---|
| ABS (w/ VSC) | 208 |
| ABS (w/o VSC) | 216 |
| Air Conditioning | 308 |
| Audio System (Built–in Type Amplifier) | 300 |
| Audio System (Separate Type Amplifier w/ Navigation System) | 292 |
| Audio System (Separate Type Amplifier w/o Navigation System) | 296 |
| Automatic Glare–Resistant EC Mirror | 286 |
| Back–Up Light | 160 |
| Cargo Light | 186 |
| Center Cluster Integration Control System | 188 |
| Charging | 116 |
| Cigarette Lighter | 274 |
| Clock | 276 |
| Combination Meter | 302 |
| Cruise Control (1GR–FE) | 228 |
| Cruise Control (2UZ–FE) | 224 |
| Door Lock Control (w/ Daytime Running Light) | 246 |
| Door Lock Control (w/o Daytime Running Light) | 252 |
| Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| Engine Control (1GR–FE) | 132 |
| Engine Control (2UZ–FE) | 118 |
| Engine Immobiliser System | 146 |
| Fog Light (w/ Daytime Running Light) | 156 |
| Fog Light (w/o Daytime Running Light) | 158 |
| Headlight (w/ Daytime Running Light) | 150 |
| Headlight (w/o Daytime Running Light) | 154 |
| Horn | 278 |
| Ignition (1GR–FE) | 112 |
| Ignition (2UZ–FE) | 108 |
| Illumination | 166 |
| Interior Light | 170 |
| Key Reminder | 270 |
| Light Auto Turn Off System (w/ Daytime Running Light) | 178 |
| Light Auto Turn Off System (w/o Daytime Running Light) | 180 |
| Mirror Heater | 284 |
| Multiplex Communication System (CAN) | 206 |
| Navigation System | 292 |
| Power Outlet | 274 |
| Power Seat | 290 |
| Power Source | 100 |
| Power Window | 266 |
| Remote Control Mirror | 288 |
| Seat Belt Warning | 270 |
| SRS | 233 |
| Starting | 104 |
| Stop Light | 176 |
| Taillight | 162 |
| Tire Pressure Warning System | 220 |
| TRAC | 208 |
| Trailer Towing | 182 |
| Turn Signal and Hazard Warning Light | 174 |
| TVIP | 258 |
| VSC | 208 |
| Wiper and Washer (w/ INT TIME SW) | 280 |
| Wiper and Washer (w/o INT TIME SW) | 282 |
| Wireless Door Lock Control | 258 |
| 4WD | 240 |

## (DOUBLE CAB)

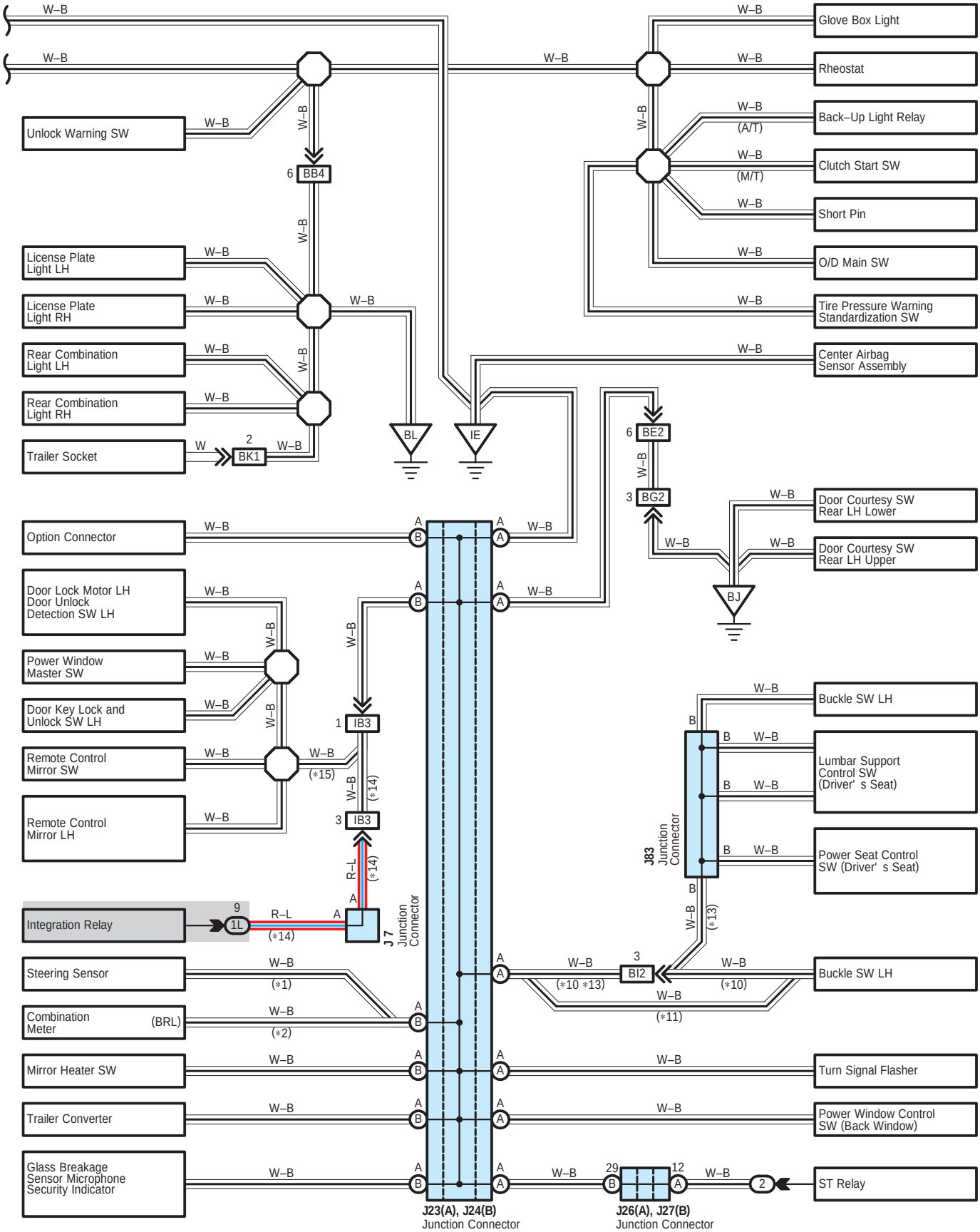

| | Page |
|---|---|
| ABS (w/ VSC) | 444 |
| ABS (w/o VSC) | 450 |
| Accessory Meter | 470 |
| Air Conditioning | 522 |
| Audio System (Rear Seat Entertainment System) | 498 |
| Audio System (w/ Navigation and Rear Seat Entertainment System) | 490 |
| Audio System (6 Speaker) | 514 |
| Audio System (8 Speaker) | 510 |
| Audio System (8 Speaker w/ Navigation System) | 506 |
| Automatic Glare–Resistant EC Mirror | 488 |
| Back–Up Light | 366 |
| Cargo Light | 374 |
| Center Cluster Integration Control System | 370 |
| Charging | 322 |
| Cigarette Lighter | 472 |
| Combination Meter | 516 |
| Cruise Control | 440 |
| Door Lock Control | 416 |
| Electronically Controlled Transmission and A/T Indicator | 434 |
| Engine Control | 324 |
| Engine Immobiliser System | 338 |
| Fog Light (w/ Daytime Running Light) | 348 |
| Fog Light (w/o Daytime Running Light) | 350 |
| Garage Door Opener | 470 |
| Headlight (w/ Daytime Running Light) | 342 |
| Headlight (w/o Daytime Running Light) | 346 |
| Horn | 476 |
| Ignition | 318 |
| Illumination | 356 |
| Interior Light | 404 |
| Key Reminder | 400 |
| Light Auto Turn Off System | 396 |
| Mirror Heater | 486 |
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| Multiplex Communication System (BEAN) | 380 |
| Multiplex Communication System (BEAN Bus) | 376 |
| Multiplex Communication System (CAN) | 378 |
| Navigation System (w/ Rear Seat Entertainment System) | 490 |
| Navigation System (w/o Rear Seat Entertainment System) | 506 |
| Power Outlet (115V) | 474 |
| Power Outlet (12V) | 472 |
| Power Seat | 482 |
| Power Source | 312 |
| Power Window | 410 |
| Rear Window Defogger | 486 |
| Remote Control Mirror | 480 |
| Seat Belt Warning | 400 |
| Seat Heater | 484 |
| SRS | 461 |
| Starting | 316 |
| Stop Light | 368 |
| Taillight | 352 |
| Theft Deterrent | 416 |
| Tire Pressure Warning System | 454 |
| TRAC | 444 |
| Trailer Towing | 362 |
| Turn Signal and Hazard Warning Light | 360 |
| VSC | 444 |
| Wiper and Washer | 432 |
| Wireless Door Lock Control | 424 |
| 4WD | 456 |

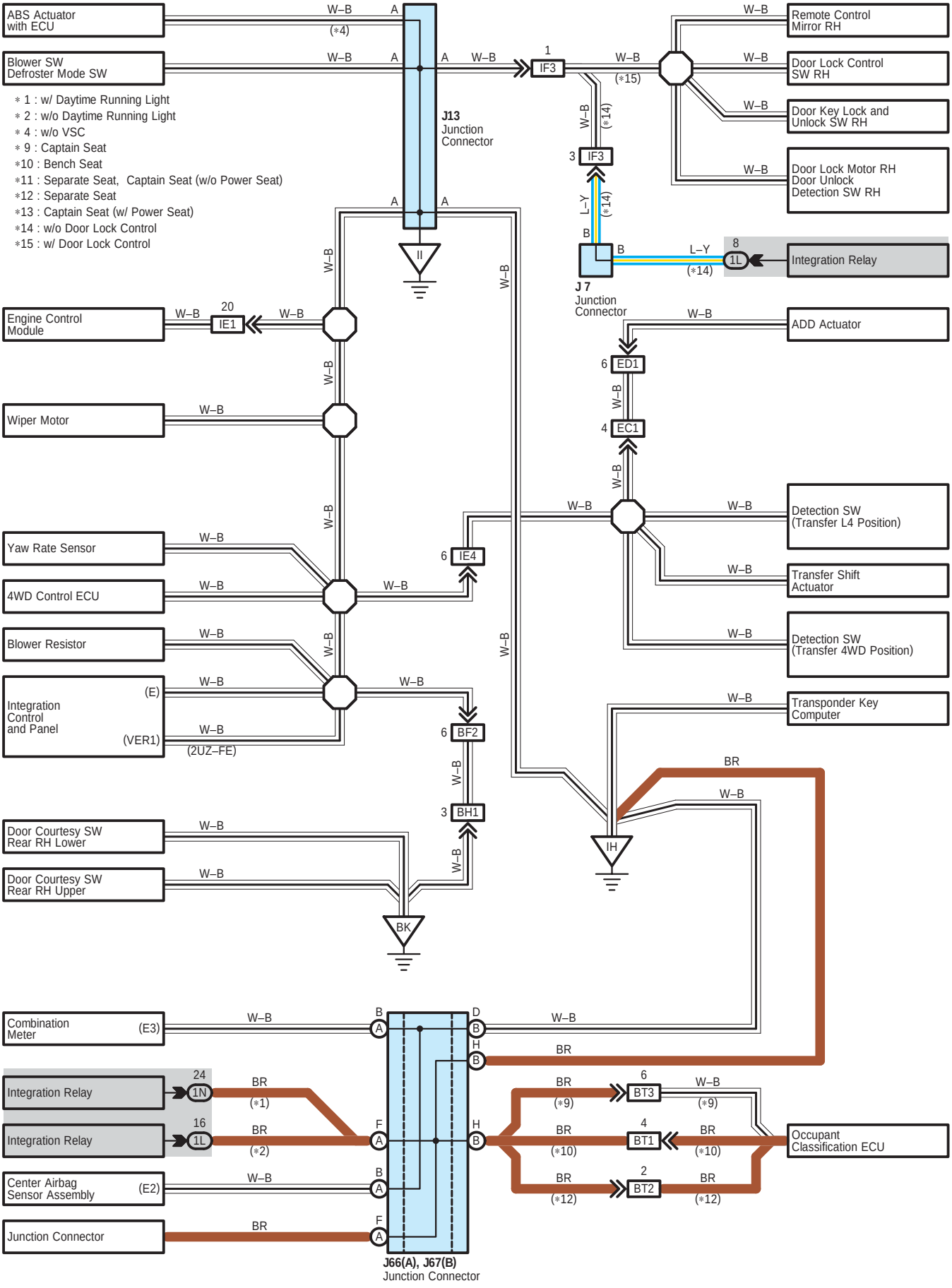
# I GROUND POINT (Access/Standard Cab)




Inner Mirror
Personal Light
Vanity Light LH
Vanity Light RH
Cargo Light
High Mounted
Stop Light
POWER Relay
Integration Relay
Fuel Pump
Fuel Sender
W–B
2 1A
8 1J
7 BB4
A
J 3
Junction Connector
IF
2 ID2
Cigarette Lighter
Short Connector
(TVIP)
Tire Pressure
Monitor ECU
(EW) Combination SW
Parking Brake SW
(M/T)
Power Outlet
Power Outlet
(TB) Combination SW
(EL) Combination SW
(CG) Data Link Connector 3
TVIP ECU
(*3)
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light
* 3 : w/ VSC
* 4 : w/o VSC
* 5 : Built–in Type Amplifier
* 6 : Separate Type Amplifier
* 7 : w/ Navigation System
* 8 : w/o Navigation System
Data Link
Connector 3
(SG)
25 IE1
Combination SW
3 IE1
BR
19 IE1
4 BB4
Canister Pump Module
Igniter and
Ignition Coil No. 1
Igniter and
Ignition Coil No. 2
Igniter and
Ignition Coil No. 3
Igniter and
Ignition Coil No. 4
Igniter and
Ignition Coil No. 5
Igniter and
Ignition Coil No. 6
Noise Filter
(1GR–FE) EV
(1GR–FE) EU
(E01)
(E03)
(ME01)
(E02)
(E04)
(E05)
(E1)
Engine
Control
Module
Radio and Player
(*5)
Radio and Player
with Display
(*6 *7)
Radio and Player
(*6 *8)
IG1 IH1
(*5) (*6)
(GND)
(E)
Stereo
Component
Amplifier
Air Pump
Air Switching Valve
(2UZ–FE) EX
IG

# I GROUND POINT (Access/Standard Cab)




ABS Actuator with ECU
Blower SW Defroster Mode SW
∗ 1 : w/ Daytime Running Light
∗ 2 : w/o Daytime Running Light
∗ 4 : w/o VSC
∗ 9 : Captain Seat
∗10 : Bench Seat
∗11 : Separate Seat, Captain Seat (w/o Power Seat)
∗12 : Separate Seat
∗13 : Captain Seat (w/ Power Seat)
∗14 : w/o Door Lock Control
∗15 : w/ Door Lock Control
J13 Junction Connector
J 7 Junction Connector
Remote Control Mirror RH
Door Lock Control SW RH
Door Key Lock and Unlock SW RH
Door Lock Motor RH Door Unlock Detection SW RH
Integration Relay
ADD Actuator
Engine Control Module
Wiper Motor
Yaw Rate Sensor
4WD Control ECU
Blower Resistor
Integration Control and Panel
Door Courtesy SW Rear RH Lower
Door Courtesy SW Rear RH Upper
Detection SW (Transfer L4 Position)
Transfer Shift Actuator
Detection SW (Transfer 4WD Position)
Transponder Key Computer
Combination Meter
Integration Relay
Integration Relay
Center Airbag Sensor Assembly
Junction Connector
Occupant Classification ECU
J66(A), J67(B) Junction Connector

# I GROUND POINT (Access/Standard Cab)

**: Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| J3 | 62 | J18 | 59 (1GR–FE) | J27 B | 62 |
| J7 | 62 | J23 A | 62 | J66 A | 62 |
| J13 | 62 | J24 B | 62 | J67 B | 62 |
| J18 | 57 (2UZ–FE) | J26 A | 62 | J83 | 66 (*5) |

**: Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 24 | Engine Room R/B (Engine Compartment Left) |

**: Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 26 (*1) | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1J | 26 (*1) | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| | 30 (*2) | |
| 1L | 27 (*1) | |
| 1N | 31 (*2) | |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EC1 | 80 (2UZ–FE) | Engine No.2 Wire and Engine Wire (Near the Starter) |
| ED1 | 80 (2UZ–FE) | Engine No.2 Wire and Differential Wire (Near the Transmission) |
| IA9 | 82 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IB3 | 82 | Front Door LH Wire and Cowl Wire (Left Kick Panel) |
| ID2 | 82 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |
| IE1 | 83 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IE4 | | |
| IF3 | 83 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IG1 | 83 | Cowl Wire and Instrument Panel No.2 Wire (Instrument Panel Brace RH) |
| IH1 | 83 | Cowl Wire and Floor No.3 Wire (Instrument Panel Brace RH) |
| BB4 | 84 (*3) | Frame Wire and Cowl Wire (Under the Driver's Seat) |
| | 85 (*4) | |
| BE2 | 84 (*3) | Floor No.2 Wire and Cowl Wire (Center of Left Rocker Panel) |
| BF2 | 84 (*3) | Floor No.1 Wire and Cowl Wire (Center of Right Rocker Panel) |
| BG2 | 84 (*3) | Floor No.2 Wire and Rear Door No.2 Wire (Under the Left Quarter Panel) |
| BH1 | 84 (*3) | Floor No.1 Wire and Rear Door No.1 Wire (Under the Right Quarter Panel) |
| BI2 | 86 (*5) | Cowl Wire and Seat No.2 Wire (Under the Driver's Seat) |
| | 88 (*7) | |
| BK1 | 84 (*3) | Frame Wire and Frame No.3 Wire (Near the License Plate Light) |
| | 85 (*4) | |
| BT1 | 88 (*7) | Cowl Wire and Seat No.1 Wire (Under the Front Passenger's Seat) |
| BT2 | 87 (*6) | Seat No.1 Wire and Cowl Wire (Under the Front Passenger's Seat) |
| BT3 | 86 (*5) | |

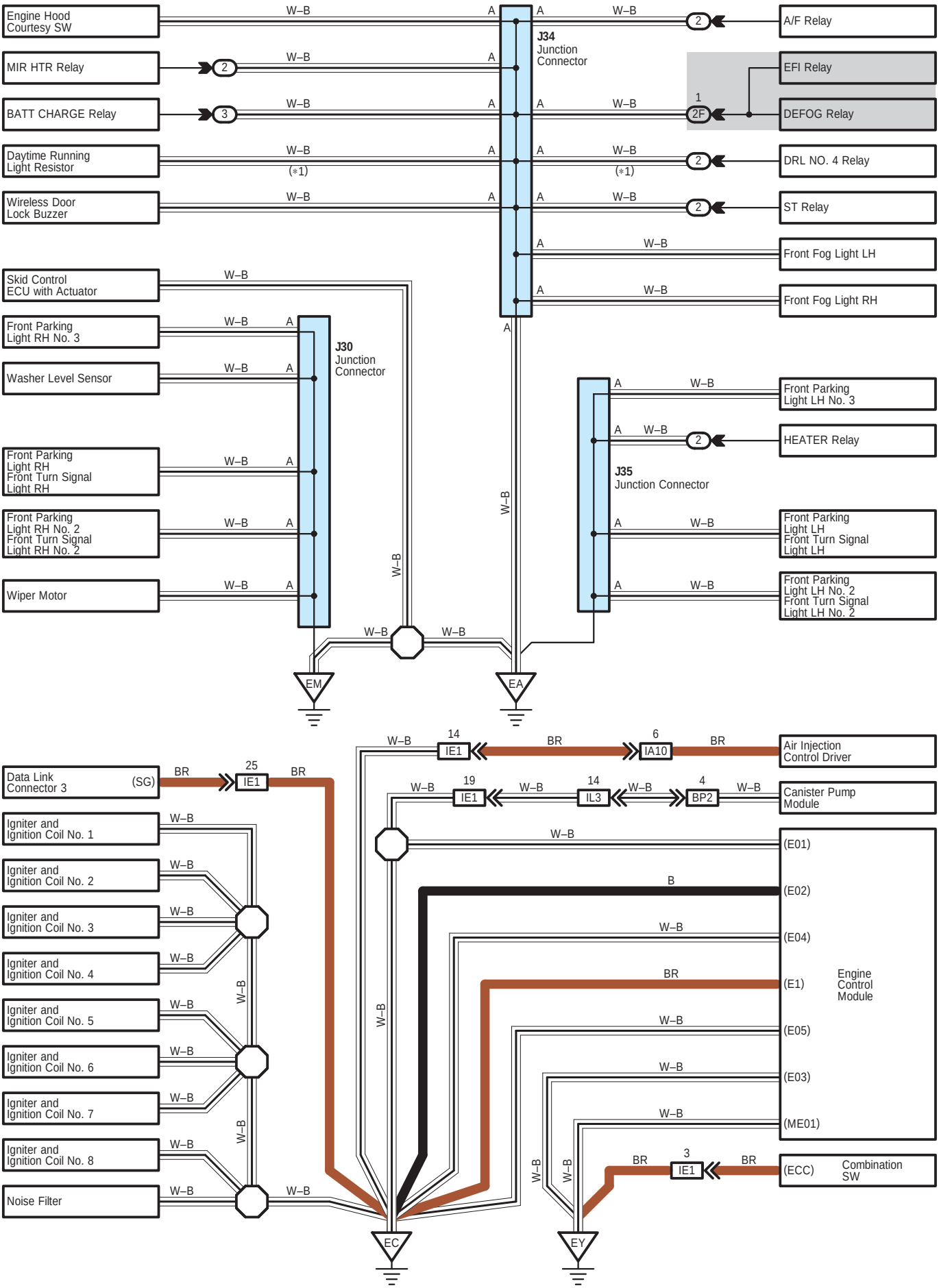
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

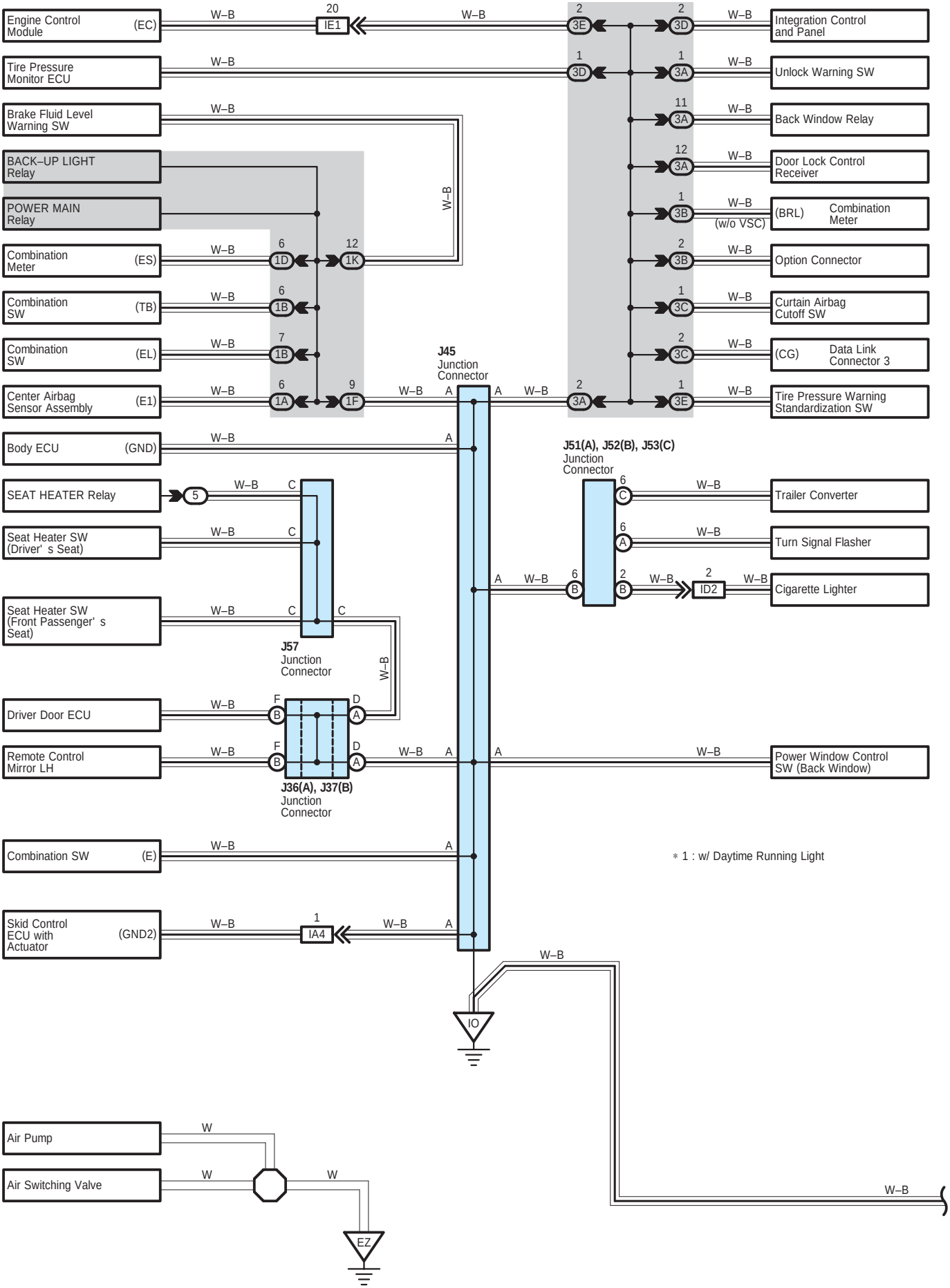
▽ : **Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 80 (2UZ–FE) | Front Left Fender |
| | 81 (1GR–FE) | |
| EC | 80 (2UZ–FE) | Rear Bank of Left Cylinder Head |
| ET | 80 (2UZ–FE) | Front Right Fender |
| | 81 (1GR–FE) | |
| EU | 81 (1GR–FE) | Rear Bank of Right Cylinder Head |
| EV | 81 (1GR–FE) | Rear Bank of Left Cylinder Head |
| EW | 80 (2UZ–FE) | Front Left Side of Cylinder Head |
| EX | 80 (2UZ–FE) | Left Side of Cylinder Block |
| IE | 82 | Left Kick Panel |
| IF | | |
| IG | 82 | Instrument Panel Brace RH |
| IH | 82 | Right Kick Panel |
| II | | |
| BJ | 84 (*3) | Inside of Rear Door LH |
| BK | 84 (*3) | Inside of Rear Door RH |
| BL | 84 (*3) | Surrounding of the Front of the Fuel Tank |
| | 85 (*4) | |

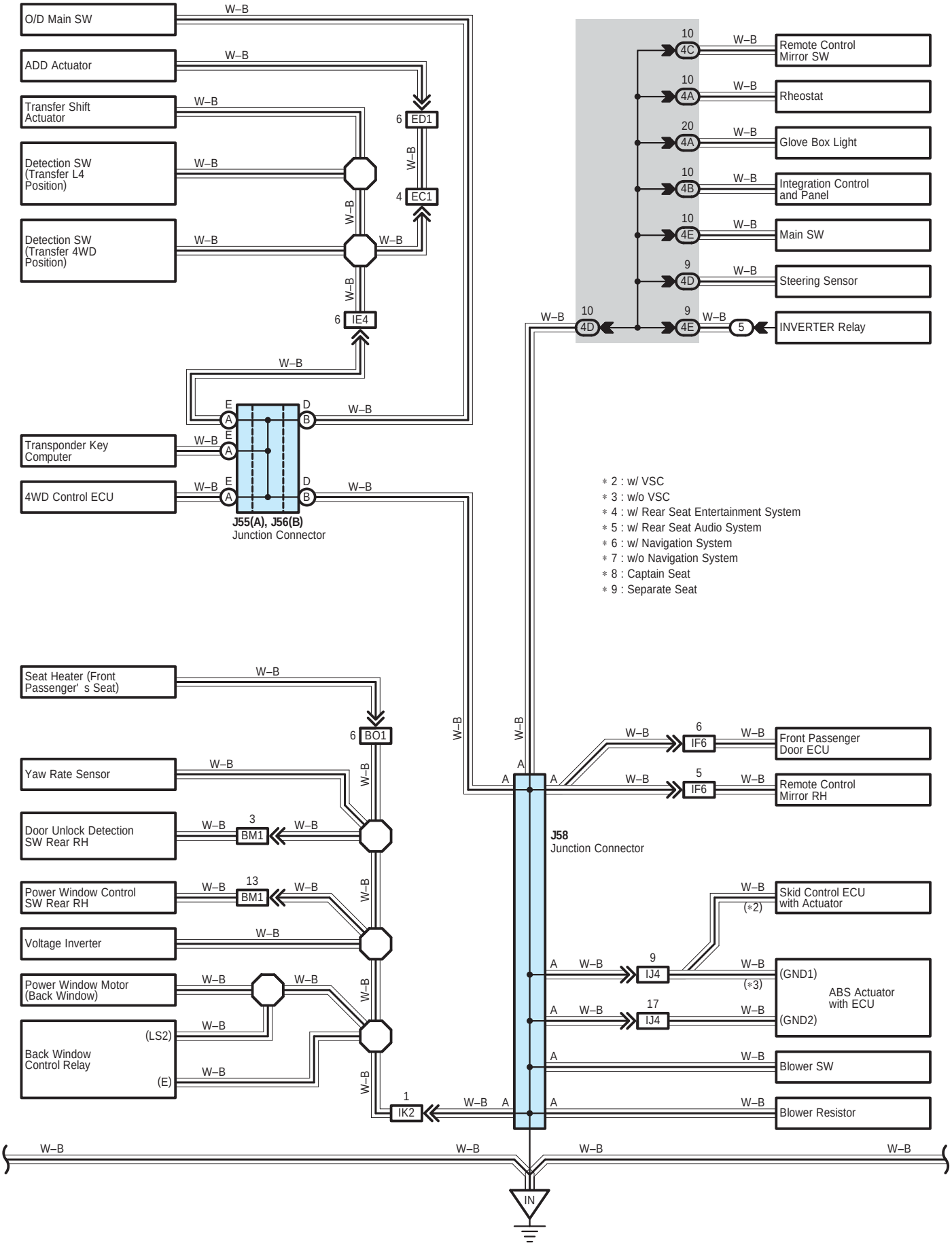
* 1 : w/o Daytime Running Light * 2 : w/ Daytime Running Light * 3 : Access Cab * 4 : Standard Cab * 5 : Access Cab Captain Seat
* 6 : Access Cab Separate Seat * 7 : Standard Cab Bench Seat

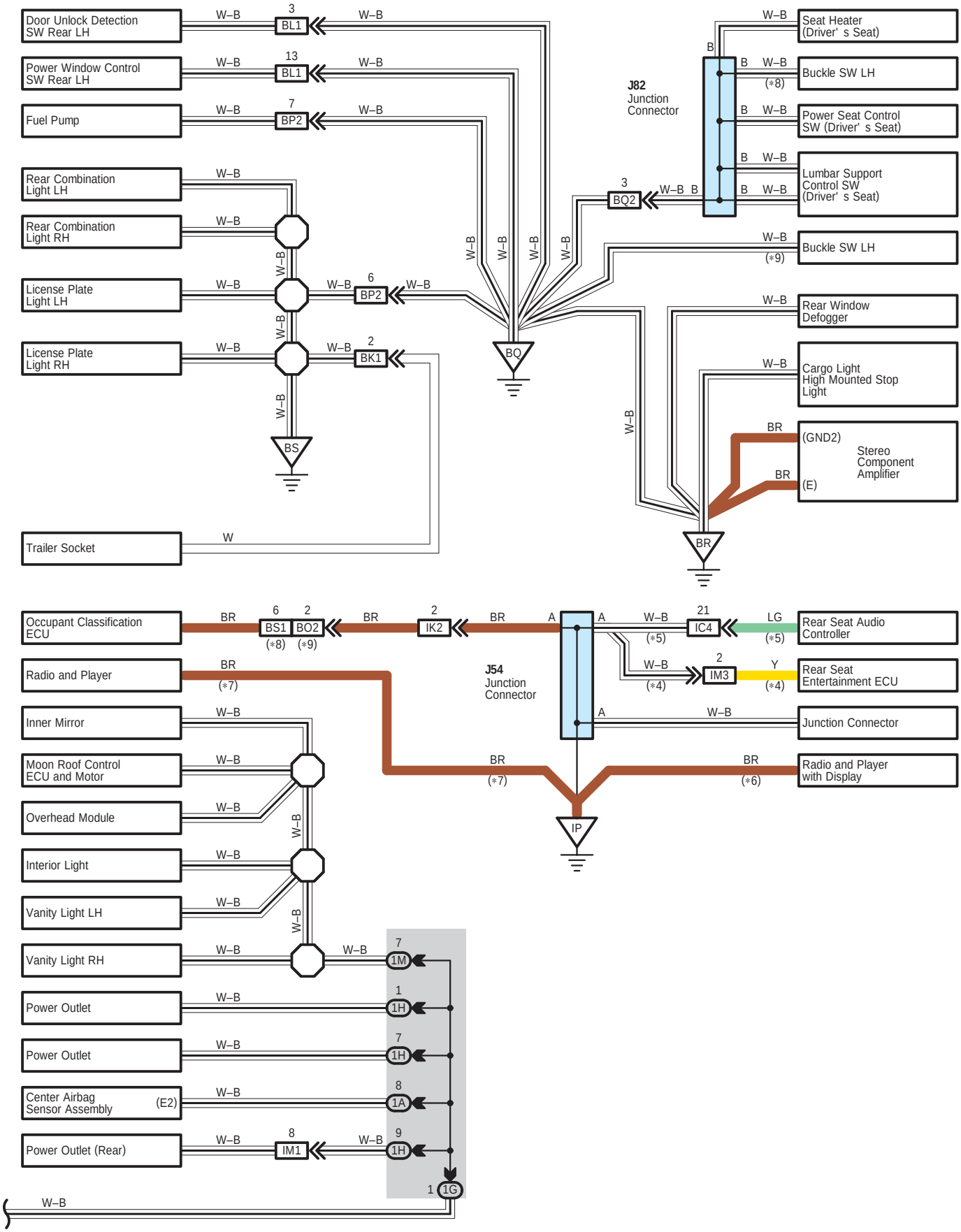
# I GROUND POINT (Double Cab)




Engine Control Module (EC)
Tire Pressure Monitor ECU
Brake Fluid Level Warning SW
BACK–UP LIGHT Relay
POWER MAIN Relay
Combination Meter (ES)
Combination SW (TB)
Combination SW (EL)
Center Airbag Sensor Assembly (E1)
Body ECU (GND)
SEAT HEATER Relay
Seat Heater SW (Driver' s Seat)
Seat Heater SW (Front Passenger' s Seat)
Driver Door ECU
Remote Control Mirror LH
Combination SW (E)
Skid Control ECU with Actuator (GND2)
Air Pump
Air Switching Valve
W–B
W
J45 Junction Connector
J57 Junction Connector
J36(A), J37(B) Junction Connector
J51(A), J52(B), J53(C) Junction Connector
Integration Control and Panel
Unlock Warning SW
Back Window Relay
Door Lock Control Receiver
(BRL) Combination Meter
(w/o VSC)
Option Connector
Curtain Airbag Cutoff SW
(CG) Data Link Connector 3
Tire Pressure Warning Standardization SW
Trailer Converter
Turn Signal Flasher
Cigarette Lighter
Power Window Control SW (Back Window)
IO
EZ
∗ 1 : w/ Daytime Running Light

# I GROUND POINT (Double Cab)




Door Unlock Detection SW Rear LH
Power Window Control SW Rear LH
Fuel Pump
Rear Combination Light LH
Rear Combination Light RH
License Plate Light LH
License Plate Light RH
Trailer Socket
BL1
BP2
BK1
BS
BQ
J82 Junction Connector
BQ2
Seat Heater (Driver' s Seat)
Buckle SW LH
(*8)
Power Seat Control SW (Driver' s Seat)
Lumbar Support Control SW (Driver' s Seat)
Buckle SW LH
(*9)
Rear Window Defogger
Cargo Light High Mounted Stop Light
(GND2)
(E)
Stereo Component Amplifier
BR
Occupant Classification ECU
BS1
BO2
IK2
IC4
Rear Seat Audio Controller
(*5)
Radio and Player
(*7)
J54 Junction Connector
IM3
Rear Seat Entertainment ECU
(*4)
Inner Mirror
Junction Connector
Moon Roof Control ECU and Motor
Overhead Module
Interior Light
Vanity Light LH
Vanity Light RH
Radio and Player with Display
(*6)
IP
1M
1H
1A
1G
Power Outlet
Power Outlet
Center Airbag Sensor Assembly
(E2)
Power Outlet (Rear)
IM1
W–B
W
BR
LG
Y

# I GROUND POINT (Double Cab)

**○ : Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|---|---|---|---|---|---|
| J30 | 71 | J45 | 74 | J55 A | 74 |
| J34 | 71 | J51 A | 74 | J56 B | 74 |
| J35 | 71 | J52 B | 74 | J57 | 74 |
| J36 A | 74 | J53 C | 74 | J58 | 74 |
| J37 B | 74 | J54 | 74 | J82 | 78 (*1) |

**▭ : Relay Blocks**

| Code | See Page | Relay Blocks (Relay Block Location) |
|---|---|---|
| 2 | 42 | Engine Room R/B No.2 (Engine Compartment Left) |
| 3 | 43 | Engine Room R/B No.3 (Engine Compartment Left) |
| 5 | 43 | Driver Side R/B (Under the Instrument Panel J/B) |

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

| Code | See Page | Junction Block and Wire Harness (Connector Location) |
|---|---|---|
| 1A | 49 | Cowl Wire and Driver Side J/B (Lower Finish Panel) |
| 1B | | |
| 1D | | |
| 1F | | |
| 1G | | |
| 1H | | |
| 1K | 49 | Engine Room Main Wire and Driver Side J/B (Lower Finish Panel) |
| 1M | 49 | Roof Wire and Driver Side J/B (Lower Finish Panel) |
| 2F | 45 | Engine Room Main Wire and Engine Room J/B (Engine Compartment Left) |
| 3A | 52 | Cowl Wire and Sub J/B No.3 (Upper the Accelerator Pedal) |
| 3B | | |
| 3C | | |
| 3D | | |
| 3E | | |
| 4A | 54 | Cowl Wire and Sub J/B No.4 (Upper the Accelerator Pedal) |
| 4B | | |
| 4C | | |
| 4D | | |
| 4E | | |

* 1 : Captain Seat  * 2 : Separate Seat

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location) |
|---|---|---|
| EC1 | 90 | Engine No.2 Wire and Engine Wire (Near the Starter) |
| ED1 | 90 | Engine No.2 Wire and Differential Wire (Near the Transmission) |
| IA4 | 92 | Engine Room Main Wire and Cowl Wire (Left Kick Panel) |
| IA10 | | |
| IC4 | 92 | Cowl Wire and Roof Wire (Left Side of Instrument Panel) |
| ID2 | 92 | Cigarette Lighter Wire and Cowl Wire (Instrument Panel Brace LH) |
| IE1 | 93 | Engine Wire and Cowl Wire (Right Side of Instrument Panel) |
| IE4 | | |
| IF6 | 93 | Front Door RH Wire and Cowl Wire (Right Kick Panel) |
| IJ4 | 93 | Engine Room Main Wire and Cowl Wire (Cowl Side Panel RH) |
| IK2 | 93 | Floor Wire and Cowl Wire (Right Kick Panel) |
| IL3 | 93 | Floor No.2 Wire and Cowl Wire (Instrument Panel Brace RH) |
| IM1 | 92 | Console Box Wire and Cowl Wire (Rear Console) |
| IM3 | | |
| BK1 | 94 | Frame Wire and Frame No.3 Wire (Near the License Plate Light) |
| BL1 | 94 | Rear Door No.1 Wire LH and Floor No.2 Wire (Left Side of Center Pillar) |
| BM1 | 94 | Rear Door No.1 Wire RH and Floor Wire (Right Side of Center Pillar) |
| BO1 | 96 (*1) | Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat) |
| BO2 | 97 (*2) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |
| BP2 | 94 | Frame Wire and Floor No.2 Wire (Under the Driver's Seat) |
| BQ2 | 96 (*1) | Floor No.2 Wire and Seat No.2 Wire (Under the Driver's Seat) |
| BS1 | 96 (*1) | Seat No.1 Wire and Floor Wire (Under the Front Passenger's Seat) |

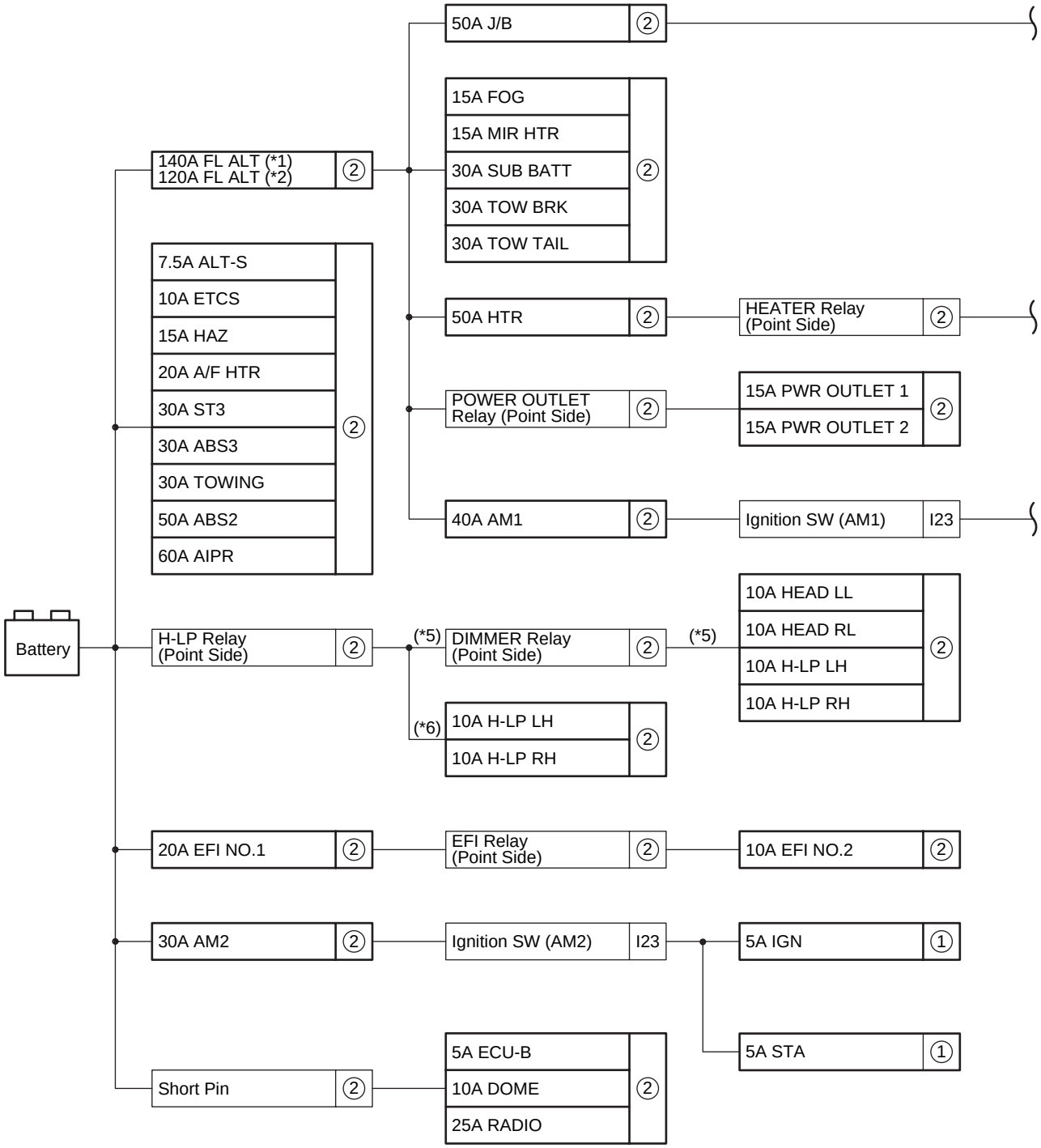
**: Ground Points**

| Code | See Page | Ground Points Location |
|---|---|---|
| EA | 90 | Front Left Fender Apron |
| EC | 90 | Rear Bank of Left Cylinder Head |
| EM | 90 | Radiator Side Support RH |
| EY | 90 | Front Left Side of Cylinder Head |
| EZ | 90 | Left Side of Cylinder Block |
| IN | 92 | Right Kick Panel |
| IO | 92 | Left Kick Panel |
| IP | 92 | Instrument Panel Brace LH |
| BQ | 94 | Left Side of Center Pillar |
| BR | 94 | Back Panel Left |
| BS | 94 | Surrounding of the Front of the Fuel Tank |

* 1 : Captain Seat * 2 : Separate Seat

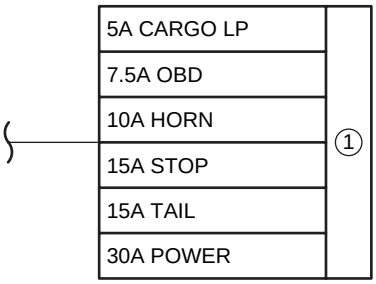
## [Access Cab, Standard Cab]

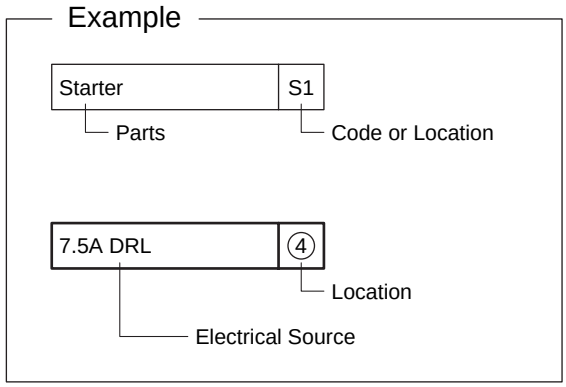
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.




[LOCATION] ① : Driver Side J/B and Integration Relay (See page 26 (*6), 30 (*5))

② : Engine Room R/B (See page 24)

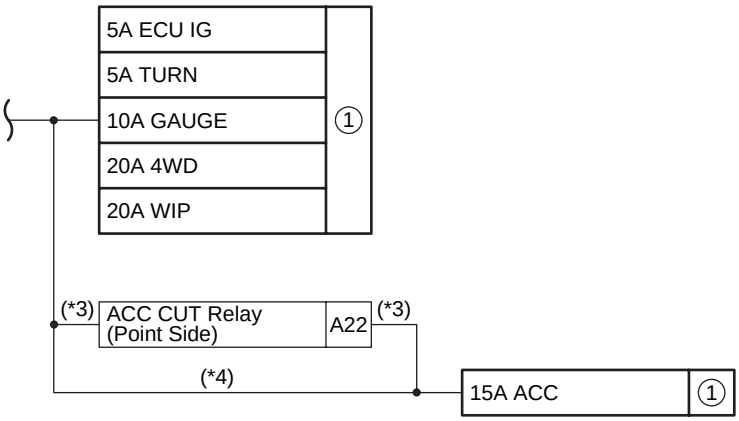






* 1:Towing Package
* 2:Except Towing Package
* 3:A/T
* 4:M/T
* 5:w/ Daytime Running Light
* 6:w/o Daytime Running Light



## [Access Cab, Standard Cab]

## Driver Side J/B (See Page 26 w/o Daytime Running Light, See Page 30 w/ Daytime Running Light)

| Fuse | | System | Page |
|---|---|---|---|
| 5A | CARGO LP | Cargo Light | 186 |
| | | Center Cluster Integration Control System | 188 |
| 5A | ECU IG | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| | | Door Lock Control (w/ Daytime Running Light) | 246 |
| | | Door Lock Control (w/o Daytime Running Light) | 252 |
| | | Headlight (w/ Daytime Running Light) | 150 |
| | | Light Auto Turn Off System (w/ Daytime Running Light) | 178 |
| | | Light Auto Turn Off System (w/o Daytime Running Light) | 180 |
| | | Power Window | 266 |
| | | Stop Light | 176 |
| | | Tire Pressure Warning System | 220 |
| | | TVIP and Wireless Door Lock Control | 258 |
| 5A | IGN | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| | | Air Conditioning | 308 |
| | | Center Cluster Integration Control System | 188 |
| | | Charging | 116 |
| | | Combination Mater | 302 |
| | | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Door Lock Control (w/ Daytime Running Light) | 246 |
| | | Door Lock Control (w/o Daytime Running Light) | 252 |
| | | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Engine Immobiliser System | 146 |
| | | Interior Light | 170 |
| | | Key Reminder and Seat Belt Warning | 270 |
| | | Navigation System and Audio System (Separate Type Amplifier w/ Navigation System) | 292 |
| | | SRS | 233 |
| | | Tire Pressure Warning System | 220 |
| | | Wiper and Washer (w/ INT TIME SW) | 280 |
| | | Wiper and Washer (w/o INT TIME SW) | 282 |
| | | 4WD | 240 |
| 5A | STA | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Engine Control (1GR–FE) | 132 |

* These are the page numbers of the first page on which the related system is shown.

| Fuse | | System | Page |
|---|---|---|---|
| 5A | STA | Engine Control (2UZ–FE) | 118 |
| | | Starting | 104 |
| 5A | TURN | Trailer Towing | 182 |
| | | Turn Signal and Hazard Warning Light | 174 |
| 7.5A | OBD | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| 10A | GAUGE | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| | | Air Conditioning | 308 |
| | | Automatic Glare–Resistant EC Mirror | 286 |
| | | Back–Up Light | 160 |
| | | Center Cluster Integration Control System | 188 |
| | | Charging | 116 |
| | | Combination Mater | 302 |
| | | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Engine Control (1GR–FE) | 132 |
| | | Mirror Heater | 284 |
| | | Navigation System and Audio System (Separate Type Amplifier w/ Navigation System) | 292 |
| | | Tire Pressure Warning System | 220 |
| | | Trailer Towing | 182 |
| | | 4WD | 240 |
| 10A | HORN | Horn | 278 |
| | | TVIP and Wireless Door Lock Control | 258 |
| 15A | ACC | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| | | Audio System (Built–In Type Amplifier) | 300 |
| | | Audio System (Separate Type Amplifier w/o Navigation System) | 296 |
| | | Back–Up Light | 160 |
| | | Center Cluster Integration Control System | 188 |
| | | Cigarette Lighter and Power Outlet | 274 |
| | | Clock | 276 |
| | | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Key Reminder and Seat Belt Warning | 270 |
| | | Navigation System and Audio System (Separate Type Amplifier w/ Navigation System) | 292 |
| | | Remote Control Mirror | 288 |
| | | SRS | 233 |

* These are the page numbers of the first page on which the related system is shown.

## [Access Cab, Standard Cab]

| Fuse | | System | Page |
|---|---|---|---|
| 15A | ACC | Trailer Towing | 182 |
| | | 4WD | 240 |
| 15A | STOP | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| | | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Stop Light | 176 |
| | | Trailer Towing | 182 |
| 15A | TAIL | Center Cluster Integration Control System | 188 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Headlight (w/ Daytime Running Light) | 150 |
| | | Illumination | 166 |
| | | Light Auto Turn Off System (w/ Daytime Running Light) | 178 |
| | | Light Auto Turn Off System (w/o Daytime Running Light) | 180 |
| | | Taillight | 162 |
| | | Trailer Towing | 182 |
| | | TVIP and Wireless Door Lock Control | 258 |
| 20A | WIP | Wiper and Washer (w/ INT TIME SW) | 280 |
| | | Wiper and Washer (w/o INT TIME SW) | 282 |
| 20A | 4WD | 4WD | 240 |
| 30A | POWER | Door Lock Control (w/ Daytime Running Light) | 246 |
| | | Door Lock Control (w/o Daytime Running Light) | 252 |
| | | Power Seat | 290 |
| | | Power Window | 266 |
| | | TVIP and Wireless Door Lock Control | 258 |

## Engine Room R/B (See Page 24)

| Fuse | | System | Page |
|---|---|---|---|
| 5A | ECU–B | ABS (w/ VSC), TRAC and VSC | 208 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Engine Immobiliser System | 146 |
| | | SRS | 233 |
| | | TVIP and Wireless Door Lock Control | 258 |
| 7.5A | ALT–S | Charging | 116 |
| 10A | A/C | Air Conditioning | 308 |
| | | Center Cluster Integration Control System | 188 |

* These are the page numbers of the first page on which the related system is shown.

| Fuse | | System | Page |
|---|---|---|---|
| 10A | DOME | Center Cluster Integration Control System | 188 |
| | | Clock | 276 |
| | | Combination Mater | 302 |
| | | Door Lock Control (w/ Daytime Running Light) | 246 |
| | | Door Lock Control (w/o Daytime Running Light) | 252 |
| | | Interior Light | 170 |
| | | Key Reminder and Seat Belt Warning | 270 |
| | | TVIP and Wireless Door Lock Control | 258 |
| 10A | EFI NO.2 | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| 10A | ETCS | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| 10A | HEAD LL | Fog Light (w/ Daytime Running Light) | 156 |
| | | Headlight (w/ Daytime Running Light) | 150 |
| 10A | HEAD RL | Headlight (w/ Daytime Running Light) | 150 |
| 10A | H–LP LH | Fog Light (w/o Daytime Running Light) | 158 |
| | | Headlight (w/ Daytime Running Light) | 150 |
| | | Headlight (w/o Daytime Running Light) | 154 |
| 10A | H–LP RH | Fog Light (w/o Daytime Running Light) | 158 |
| | | Headlight (w/ Daytime Running Light) | 150 |
| | | Headlight (w/o Daytime Running Light) | 154 |
| 15A | FOG | Fog Light (w/ Daytime Running Light) | 156 |
| | | Fog Light (w/o Daytime Running Light) | 158 |
| 15A | HAZ | Trailer Towing | 182 |
| | | Turn Signal and Hazard Warning Light | 174 |
| 15A | MIR HTR | Mirror Heater | 284 |
| 15A | PWR OUTLET1 | Cigarette Lighter and Power Outlet | 274 |
| 15A | PWR OUTLET2 | Cigarette Lighter and Power Outlet | 274 |
| 20A | A/F HTR | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| 20A | EFI NO.1 | Cruise Control (1GR–FE) | 228 |
| | | Cruise Control (2UZ–FE) | 224 |
| | | Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 200 |
| | | Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 194 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Engine Immobiliser System | 146 |
| 25A | RADIO | Audio System (Built–In Type Amplifier) | 300 |
| | | Audio System (Separate Type Amplifier w/o Navigation System) | 296 |
| | | Navigation System and Audio System (Separate Type Amplifier w/ Navigation System) | 292 |

* These are the page numbers of the first page on which the related system is shown.

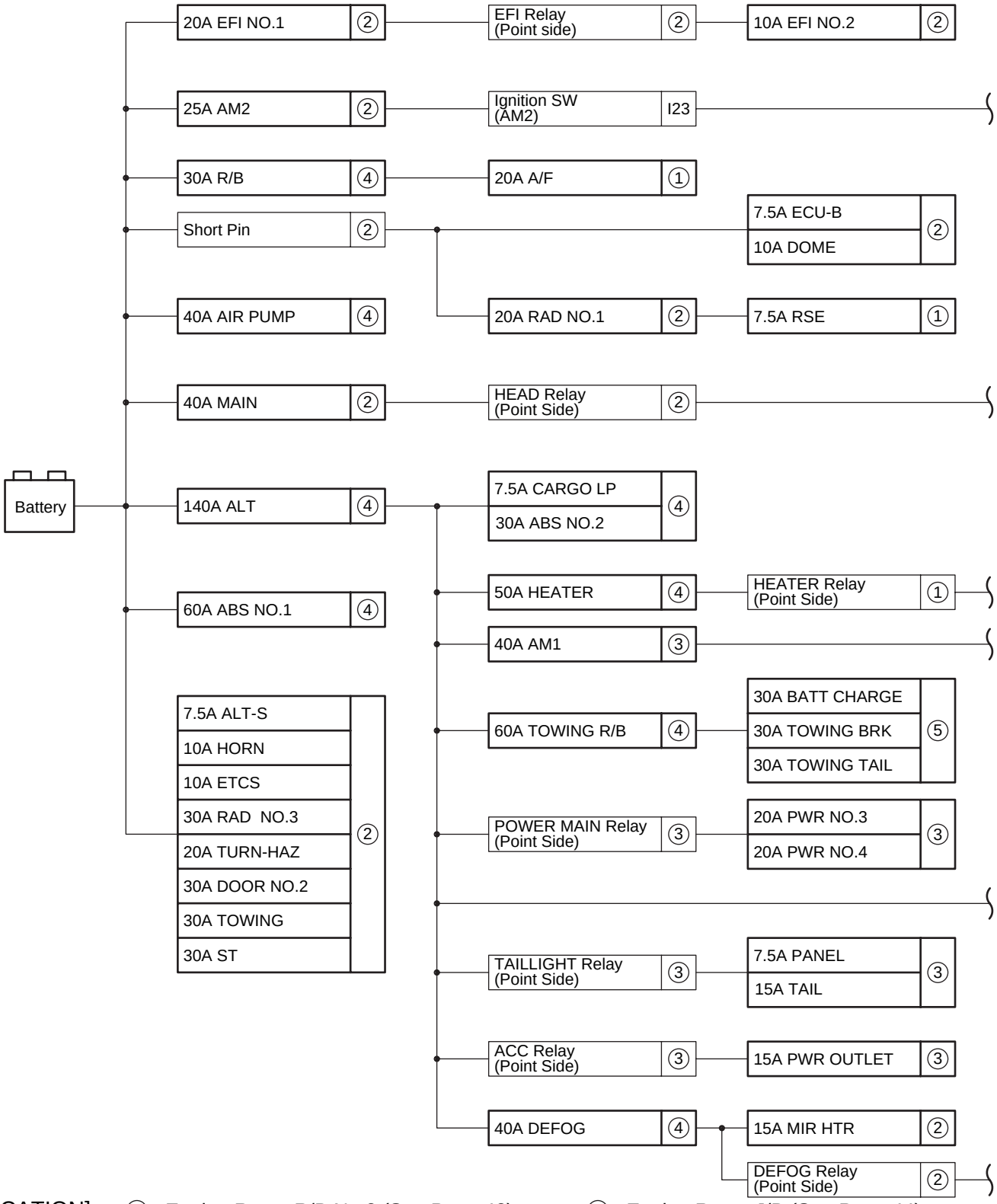
## [Access Cab, Standard Cab]

| Fuse | | System | Page |
|---|---|---|---|
| 30A | ABS3 | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| 30A | AM2 | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Ignition (1GR–FE) | 112 |
| | | Ignition (2UZ–FE) | 108 |
| | | Starting | 104 |
| 30A | ST3 | Starting | 104 |
| 30A | SUB BATT | Trailer Towing | 182 |
| 30A | TOW BRK | Trailer Towing | 182 |
| 30A | TOW TAIL | Trailer Towing | 182 |
| 30A | TOWING | Trailer Towing | 182 |
| 40A | AM1 | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| 50A | ABS2 | ABS (w/ VSC), TRAC and VSC | 208 |
| | | ABS (w/o VSC) | 216 |
| 50A | HTR | Air Conditioning | 308 |
| | | Center Cluster Integration Control System | 188 |
| 50A | J/B | Illumination | 166 |
| | | Taillight | 162 |
| 60A | AIPR | Engine Control (2UZ–FE) | 118 |
| 120A | FL ALT (Except Towing Package) | Charging | 116 |
| | | Cigarette Lighter and Power Outlet | 274 |
| | | Engine Control (1GR–FE) | 132 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Illumination | 166 |
| | | Taillight | 162 |
| 140A | FL ALT (Towing Package) | Charging | 116 |
| | | Cigarette Lighter and Power Outlet | 274 |
| | | Engine Control (2UZ–FE) | 118 |
| | | Illumination | 166 |
| | | Taillight | 162 |

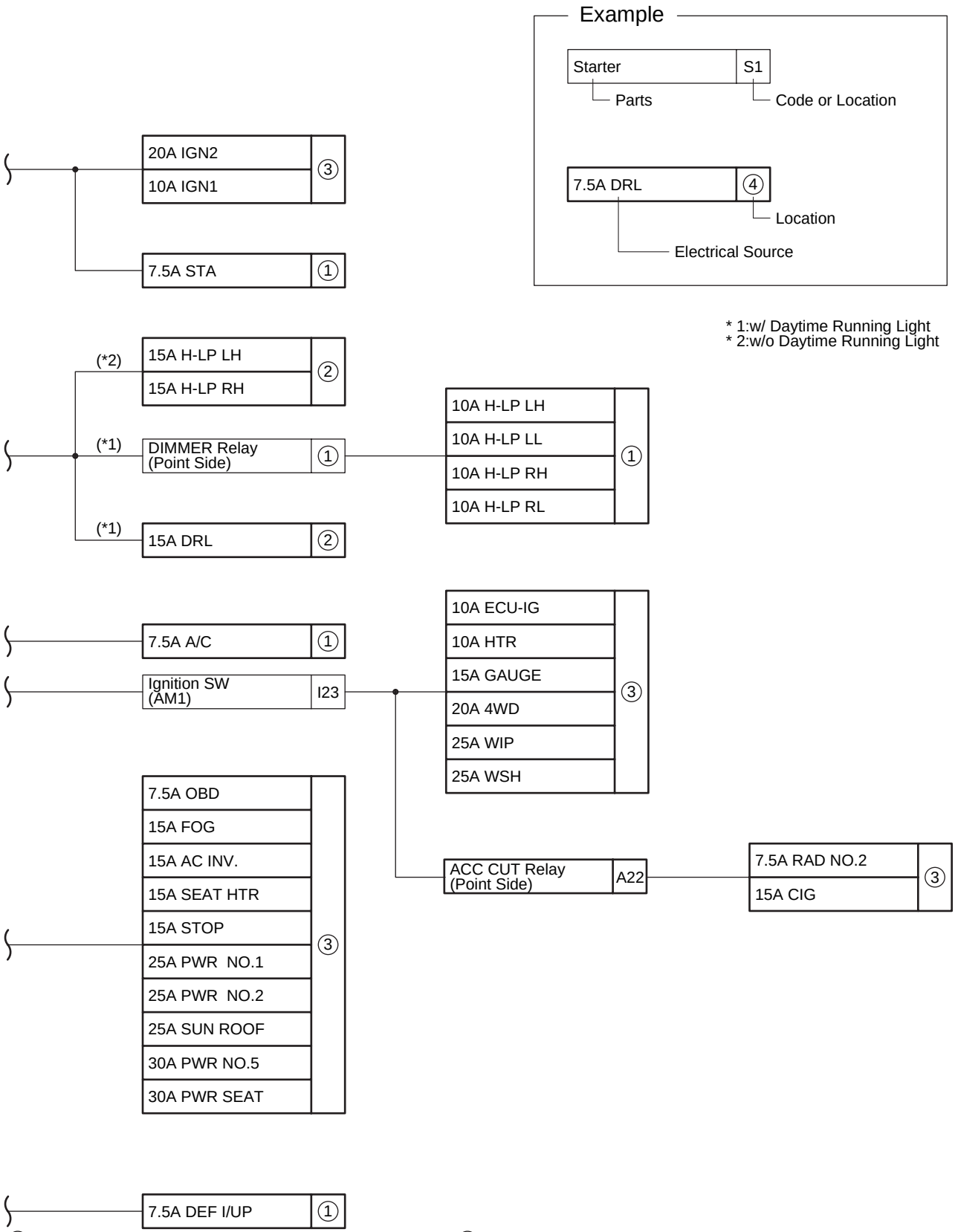
* These are the page numbers of the first page on which the related system is shown.

## [Double Cab]

The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other Parts.




[LOCATION] ① : Engine Room R/B No.2 (See Page 42) ② : Engine Room J/B (See Page 44)
⑤ : Engine Room R/B No.3 (See Page 43)




③ : Driver Side J/B (See Page 48)

④ : Fusible Link Block (F13 on See Page 38)

## [Double Cab]

## Engine Room R/B No.2 (See Page 42)

| Fuse | | System | Page |
|---|---|---|---|
| 7.5A | A/C | Air Conditioning | 522 |
| | | Center Cluster Integration Control System | 370 |
| 7.5A | DEF I/UP | Engine Control | 324 |
| | | Rear Window Defogger and Mirror Heater | 486 |
| 7.5A | STA | Electronically Controlled Transmission and A/T Indicator | 434 |
| | | Engine Control | 324 |
| | | Starting | 316 |
| 10A | H–LP LH | Headlight (w/ Daytime Running Light) | 342 |
| | | Multiplex Communication System (BEAN) | 380 |
| 10A | H–LP LL | Fog Light (w/ Daytime Running Light) | 348 |
| | | Headlight (w/ Daytime Running Light) | 342 |
| | | Multiplex Communication System (BEAN) | 380 |
| 10A | H–LP RH | Headlight (w/ Daytime Running Light) | 342 |
| | | Multiplex Communication System (BEAN) | 380 |
| 10A | H–LP RL | Headlight (w/ Daytime Running Light) | 342 |
| | | Multiplex Communication System (BEAN) | 380 |
| 20A | A/F | Engine Control | 324 |

## Engine Room J/B (See Page 44)

| Fuse | | System | Page |
|---|---|---|---|
| 7.5A | ALT–S | Charging | 322 |
| 7.5A | ECU–B | ABS (w/ VSC), TRAC and VSC | 444 |
| | | Door Lock Control and Theft Deterrent | 416 |
| | | Engine Control | 324 |
| | | Engine Immobiliser System | 338 |
| | | Interior Light | 404 |
| | | Key Reminder and Seat Belt Warning | 400 |
| | | Light Auto Turn Off System | 396 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| | | SRS | 461 |
| | | Wireless Door Lock Control | 424 |
| 10A | DOME | Center Cluster Integration Control System | 370 |
| | | Combination Meter | 516 |
| | | Interior Light | 404 |
| | | Key Reminder and Seat Belt Warning | 400 |
| | | Multiplex Communication System (BEAN) | 380 |
| 10A | EFI NO.2 | Engine Control | 324 |
| 10A | ETCS | Cruise Control | 440 |
| | | Engine Control | 324 |

* These are the page numbers of the first page on which the related system is shown.

| Fuse | | System | Page |
|---|---|---|---|
| 10A | HORN | Door Lock Control and Theft Deterrent | 416 |
| | | Horn | 476 |
| | | Multiplex Communication System (BEAN) | 380 |
| 15A | DRL | Headlight (w/ Daytime Running Light) | 342 |
| | | Multiplex Communication System (BEAN) | 380 |
| 15A | H–LP LH | Fog Light (w/o Daytime Running Light) | 354 |
| | | Headlight (w/o Daytime Running Light) | 346 |
| | | Multiplex Communication System (BEAN) | 380 |
| 15A | H–LP RH | Fog Light (w/o Daytime Running Light) | 350 |
| | | Headlight (w/o Daytime Running Light) | 346 |
| | | Multiplex Communication System (BEAN) | 380 |
| 15A | MIR HTR | Rear Window Defogger and Mirror Heater | 486 |
| 20A | EFI NO.1 | Cruise Control | 440 |
| | | Electronically Controlled Transmission and A/T Indicator | 434 |
| | | Engine Control | 324 |
| | | Engine Immobiliser System | 338 |
| 20A | RAD NO.1 | Audio System (Rear Seat Entertainment System) | 498 |
| | | Audio System (6 Speaker) | 514 |
| | | Audio System (8 Speaker) | 510 |
| | | Navigation System (w/ Rear Seat Entertainment System and Audio System (w/ Navigation and Rear Seat Entertainment System) | 490 |
| | | Navigation System (w/o Rear Seat Entertainment System) and Audio System (8 Speaker w/ Navigation System) | 506 |
| 20A | TURN–HAZ | Trailer Towing | 362 |
| | | Turn Signal and Hazard Warning Light | 360 |
| 25A | AM2 | Engine Control | 324 |
| | | Ignition | 318 |
| | | SRS | 461 |
| | | Starting | 316 |
| 30A | DOOR NO.2 | Door Lock Control and Theft Deterrent | 416 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| | | Wireless Door Lock Control | 424 |
| 30A | RAD NO.3 | Audio System (Rear Seat Entertainment System) | 498 |
| | | Audio System (8 Speaker) | 510 |
| | | Navigation System (w/ Rear Seat Entertainment System and Audio System (w/ Navigation and Rear Seat Entertainment System) | 490 |
| | | Navigation System (w/o Rear Seat Entertainment System) and Audio System (8 Speaker w/ Navigation System) | 506 |
| 30A | ST | Starting | 316 |
| 30A | TOWING | Trailer Towing | 362 |
| 40A | MAIN | Door Lock Control and Theft Deterrent | 416 |
| | | Fog Light (w/ Daytime Running Light) | 348 |
| | | Fog Light (w/o Daytime Running Light) | 350 |

* These are the page numbers of the first page on which the related system is shown.

## J POWER SOURCE (Current Flow Chart)

### [Double Cab]

| Fuse | | System | Page |
|---|---|---|---|
| 40A | MAIN | Headlight (w/ Daytime Running Light) | 342 |
| | | Headlight (w/o Daytime Running Light) | 346 |
| | | Light Auto Turn Off System | 396 |
| | | Multiplex Communication System (BEAN) | 380 |

### Driver Side J/B (See Page 48)

| Fuse | | System | Page |
|---|---|---|---|
| 7.5A | OBD | Engine Control | 324 |
| 7.5A | PANEL | Center Cluster Integration Control System | 370 |
| | | Combination Meter | 516 |
| | | Illumination | 356 |
| 7.5A | RAD NO.2 | Audio System (Rear Seat Entertainment System) | 498 |
| | | Audio System (6 Speaker) | 514 |
| | | Audio System (8 Speaker) | 510 |
| | | Center Cluster Integration Control System | 370 |
| | | Cigarette Lighter and Power Outlet (12V) | 472 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Navigation System (w/ Rear Seat Entertainment System and Audio System (w/ Navigation and Rear Seat Entertainment System) | 490 |
| | | Navigation System (w/o Rear Seat Entertainment System) and Audio System (8 Speaker w/ Navigation System) | 506 |
| | | Remote Control Mirror | 480 |
| 10A | ECU–IG | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| | | Accessory Meter and Garage Door Opener | 470 |
| | | Automatic Glare–Resistant EC Mirror | 488 |
| | | Charging | 322 |
| | | Door Lock Control and Theft Deterrent | 416 |
| | | Interior Light | 404 |
| | | Light Auto Turn Off System | 396 |
| | | Moon Roof | 478 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Outlet (115V) | 474 |
| | | Power Window | 410 |
| | | Stop Light | 368 |
| | | Tire Pressure Warning System | 454 |
| | | Trailer Towing | 362 |
| | | Wireless Door Lock Control | 424 |
| 10A | GAUGE | Cruise Control | 440 |
| | | Electronically Controlled Transmission and A/T Indicator | 434 |
| 10A | HTR | Air Conditioning | 522 |
| | | Center Cluster Integration Control System | 370 |
| | | Engine Control | 324 |

* These are the page numbers of the first page on which the related system is shown.

| Fuse | | System | Page |
|---|---|---|---|
| 10A | HTR | Rear Window Defogger and Mirror Heater | 486 |
| | | Seat Heater | 484 |
| 10A | IGN1 | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| | | Accessory Meter and Garage Door Opener | 470 |
| | | Air Conditioning | 522 |
| | | Center Cluster Integration Control System | 370 |
| | | Charging | 322 |
| | | Combination Meter | 516 |
| | | Cruise Control | 440 |
| | | Electronically Controlled Transmission and A/T Indicator | 434 |
| | | Engine Control | 324 |
| | | Engine Immobiliser System | 338 |
| | | Interior Light | 404 |
| | | Key Reminder and Seat Belt Warning | 400 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | SRS | 461 |
| | | Tire Pressure Warning System | 454 |
| | | 4WD | 456 |
| 15A | AC INV. | Power Outlet (115V) | 474 |
| 15A | CIG | Cigarette Lighter and Power Outlet (12V) | 472 |
| 15A | FOG | Fog Light (w/ Daytime Running Light) | 348 |
| | | Fog Light (w/o Daytime Running Light) | 350 |
| | | Multiplex Communication System (BEAN) | 380 |
| 15A | GAUGE | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| | | Back–Up Light | 366 |
| | | Trailer Towing | 362 |
| | | Turn Signal and Hazard Warning Light | 360 |
| | | 4WD | 456 |
| 15A | PWR OUTLET | Cigarette Lighter and Power Outlet (12V) | 472 |
| 15A | SEAT HTR | Seat Heater | 484 |
| 15A | STOP | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| | | Cruise Control | 440 |
| | | Electronically Controlled Transmission and A/T Indicator | 434 |
| | | Engine Control | 324 |
| | | Stop Light | 368 |
| | | Trailer Towing | 362 |
| 15A | TAIL | Engine Control | 324 |
| | | Taillight | 352 |
| | | Trailer Towing | 362 |
| 20A | IGN2 | Engine Control | 324 |
| | | Ignition | 318 |

* These are the page numbers of the first page on which the related system is shown.

## [Double Cab]

| Fuse | | System | Page |
|---|---|---|---|
| 20A | PWR NO.3 | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| 20A | PWR NO.4 | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| 20A | 4WD | 4WD | 456 |
| 25A | PWR NO.1 | Door Lock Control and Theft Deterrent | 416 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| | | Wireless Door Lock Control | 424 |
| 25A | PWR NO.2 | Door Lock Control and Theft Deterrent | 416 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| | | Wireless Door Lock Control | 424 |
| 25A | SUN ROOF | Moon Roof | 478 |
| 25A | WIP | Wiper and Washer | 432 |
| 25A | WSH | Wiper and Washer | 432 |
| 30A | PWR NO.5 | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| 30A | PWR SEAT | Power Seat | 482 |
| 40A | AM1 | Engine Control | 324 |

## Fusible Link Block (F13 on See Page 38)

| Fuse | | System | Page |
|---|---|---|---|
| 7.5A | CARGO LP | Cargo Light | 374 |
| | | Center Cluster Integration Control System | 370 |
| 30A | ABS NO.2 | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| 40A | ABS NO.1 | ABS (w/ VSC), TRAC and VSC | 444 |
| | | ABS (w/o VSC) | 450 |
| 40A | DEFOG | Engine Control | 324 |
| | | Rear Window Defogger and Mirror Heater | 486 |
| 50A | A/PUMP | Engine Control | 324 |
| 50A | HEATER | Air Conditioning | 522 |
| | | Center Cluster Integration Control System | 370 |
| 140A | ALT | ABS (w/o VSC) | 450 |
| | | Center Cluster Integration Control System | 370 |
| | | Charging | 322 |
| | | Cigarette Lighter and Power Outlet (12V) | 472 |
| | | Combination Meter | 516 |
| | | Door Lock Control and Theft Deterrent | 416 |
| | | Engine Control | 324 |
| | | Illumination | 356 |

* These are the page numbers of the first page on which the related system is shown.

| Fuse | | System | Page |
|---|---|---|---|
| 140A | ALT | Light Auto Turn Off System | 396 |
| | | Multiplex Communication System (BEAN) | 380 |
| | | Power Window | 410 |
| | | Taillight | 352 |
| | | Trailer Towing | 362 |
| | | Wireless Door Lock Control | 424 |

## Engine Room R/B No.3 (See Page 43)

| Fuse | | System | Page |
|---|---|---|---|
| 7.5A | RSE | Audio System (Rear Seat Entertainment System) | 498 |
| | | Audio System (8 Speaker) | 510 |
| | | Navigation System (w/ Rear Seat Entertainment System and Audio System (w/ Navigation and Rear Seat Entertainment System) | 490 |
| | | Navigation System (w/o Rear Seat Entertainment System) and Audio System (8 Speaker w/ Navigation System) | 506 |
| 30A | BATT CHARGE | Trailer Towing | 362 |
| 30A | TOWING BRK | Trailer Towing | 362 |
| 30A | TOWING TAIL | Multiplex Communication System (BEAN) | 380 |
| | | Trailer Towing | 362 |

* These are the page numbers of the first page on which the related system is shown.

# K CONNECTOR LIST

*1 : Access Cab, Standard Cab

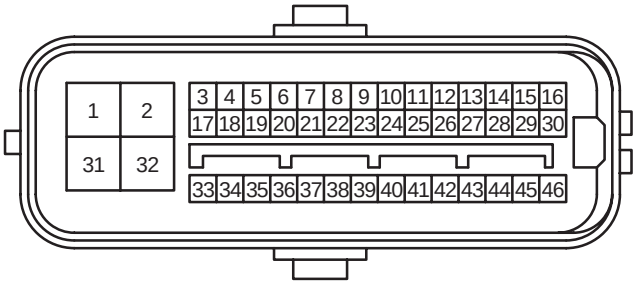
**A 1**
Gray



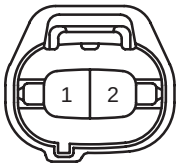

**A 3**
Gray




**A 5**
Gray



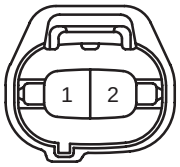

**A 6**
(w/ VSC)




**A 6**
(w/o VSC) Gray



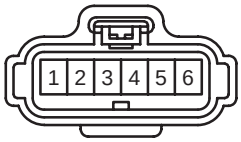

**A 7**
(w/ VSC)




**A 7**
(w/o VSC) Gray




**A 9**
Black




**A10**
Dark Gray




**A11**
(*1) Yellow




**A11**
(Double Cab) Yellow




**A12**
(*1) Yellow



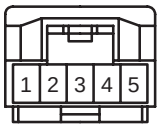

**A12**
(Double Cab) Yellow



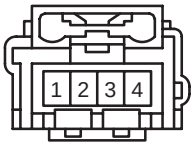

**A13**



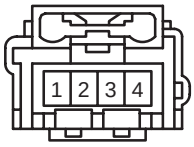

**A15**
Black




**A16**
Yellow




**A17**
Yellow



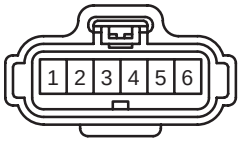

**A18**
Black




**A19**
Gray



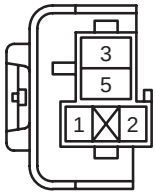

**A20**
(A/T) Black




**A20**
(M/T) Black




**A22**
Gray




**A28**
Black




**A29**
(*1) Black



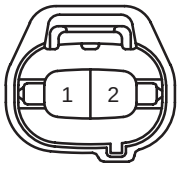

**A29**
(Double Cab)



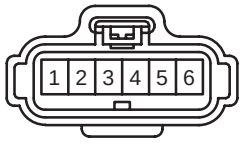

**A30**
Dark Gray



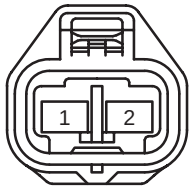

**A31**
Black




**A32**
Black




**A33**
Gray



*1 : Access Cab, Standard Cab
*2 : Captain Seat (w/ Power Seat)
*3 : Separate Seat, Captain Seat (w/o Power Seat)

**A34**
Black




**A35**
Gray



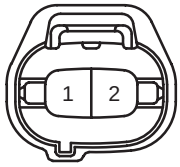

**A36**
Black




**B 1**
Gray



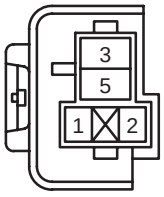

**B 2**
(w/ VSC) Gray



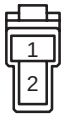

**B 2**
(w/o VSC) Gray



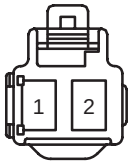

**B 3**




**B 4**
(*1) Black



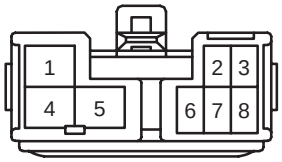

**B 4**
(Double Cab) Black




**B 5**
Black



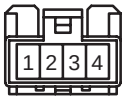

**B 6**
Black



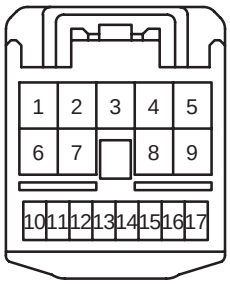

**B 7**
(Bench Seat)



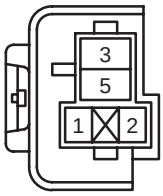

**B 7**
(*2)



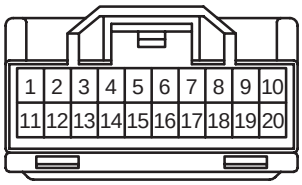

**B 7**
(*3)



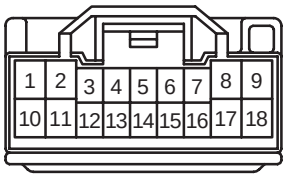

**B 8**



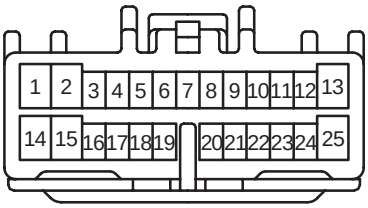

**B 9**



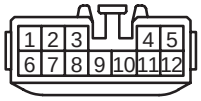

**B10**
Gray




**B11**
Black




**B12**




**B13**
Gray




**B14**




**B16**
Gray




**B17**
(Bench Seat) Gray



# K CONNECTOR LIST

*1 : Access Cab, Standard Cab

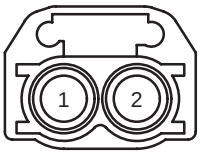
**B17**
(Separate Seat) Black




**C 1**
Gray



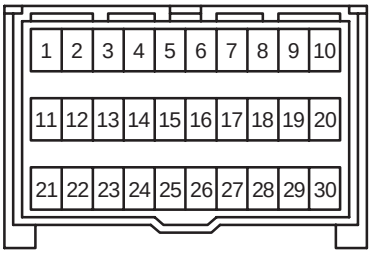

**C 2**
(1GR–FE) Black



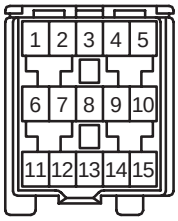

**C 2**
(2UZ–FE) Dark Gray



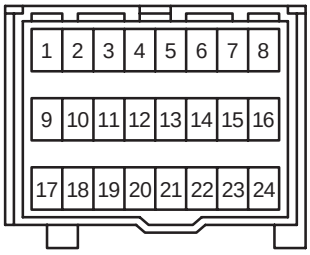

**C 4**
Yellow



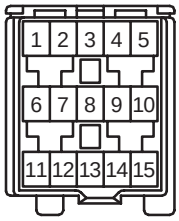

**C 5**
(*1) Yellow



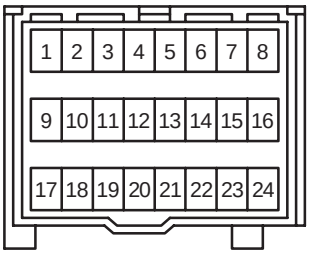

**C 5**
(Double Cab) Yellow




**C 6**
(*1) Yellow




**C 6**
(Double Cab) Yellow




**C 7**



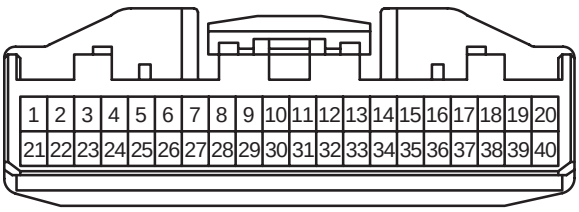

**C 8**
Gray



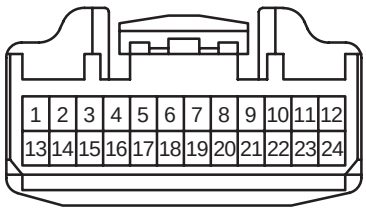

**C10**



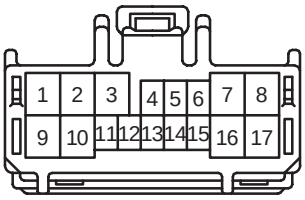

**C11**




**C12**



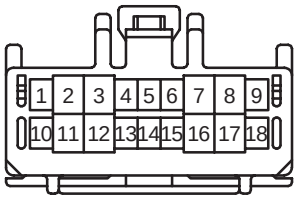

**C15**




**C16**




**C17**
Black




**C19**
Black



*1 : Access Cab, Standard Cab

**C20**
Black




**C21**
Black



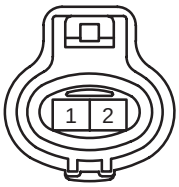

**C22**
Yellow




**C23**
Yellow



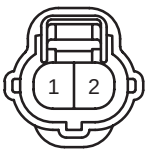

**D 2**
Gray



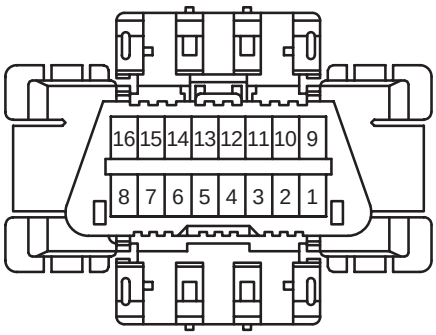

**D 3**
Gray



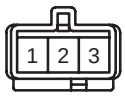

**D 4**
Gray




**D 6**




**D 8**
Gray




**D 9**




**D11**
Black




**D14**
(*1)




**D14**
(Double Cab) Gray




**D15**
(*1)




**D15**
(Double Cab) Gray




**D16**




**D17**




**D18**
Gray




**D19**




**D20**
Gray




**D21**




**D22**
Gray




**D23**
Gray




**D24**




**D25**
Black




**D26**
Black




**D27**
Black




**D28**
Black




**D29**



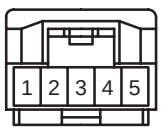

**D30**
Black



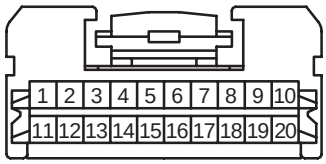

**D31**
Black




**D32**

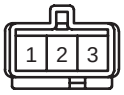



**D33**

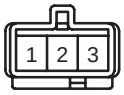


# K CONNECTOR LIST

**D34**
Orange




**D35**
Gray




**D36**
Gray




**D37**
Gray



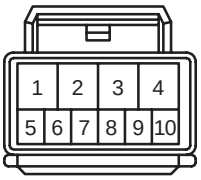

**D38**



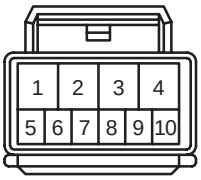

**D39**



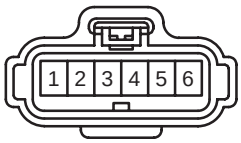

**D40**



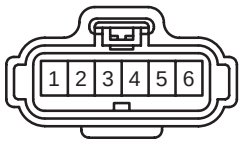

**D41**



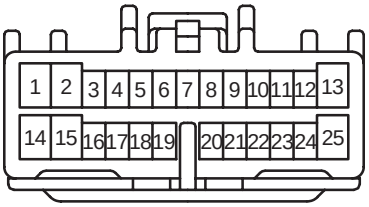

**D42**
Black



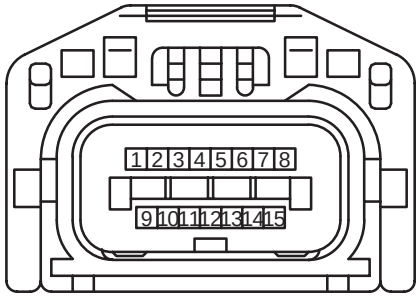

**D43**
Black




**D44**




**E 1**
Gray



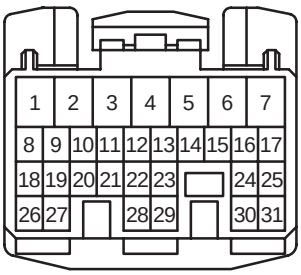

**E 2**
(1GR–FE) Dark Gray



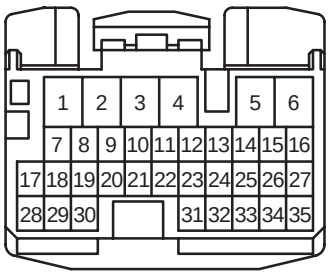

**E 2**
(2UZ–FE) Gray



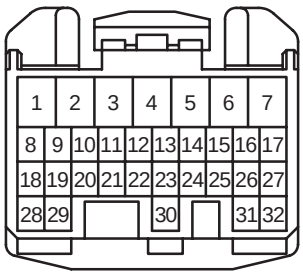

**E 3**



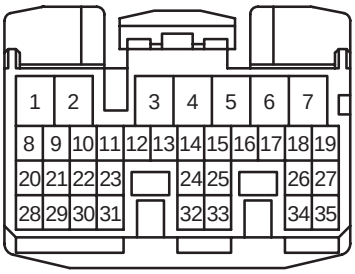

**E 4**



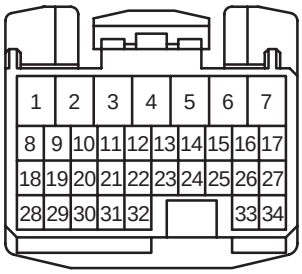

**E 5**




**E 6**




**E 7**




**E 8**
Black




**F 1**
Brown




**F 2**
Brown




**F 3**
Gray



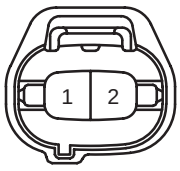

**F 4**
Gray




**F 5**
(1GR–FE) Dark Gray




**F 5**
(2UZ–FE) Black



*1 : Access Cab, Standard Cab

**F 8** (*1)




**F 8** (Double Cab) Gray




**F 9** (*1)




**F 9** (Double Cab) Gray




**F10**




**F11** Gray



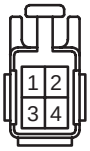

**F12** Gray



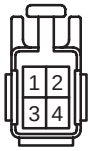

**F13** Black

(See Page 34)

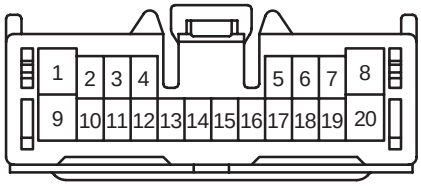
**F15**




**F16**




**F17**




**F18** (*1) Gray




**F18** (Double Cab) Gray



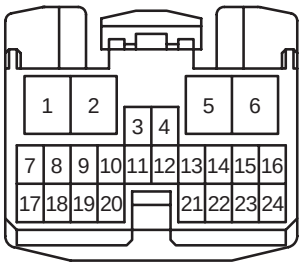

**F19** (*1) Gray



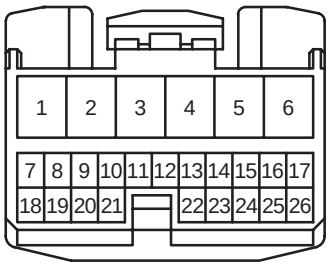

**F19** (Double Cab) Gray



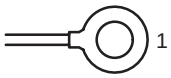

**F20**




**F21**




**G 1** (1GR–FE)




**G 1** (2UZ–FE)




**G 2** (1GR–FE) Green



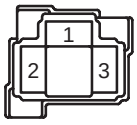

**G 2** (2UZ–FE) Black



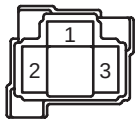

**G 3**




**H 1**




**H 2**




**H 4** Dark Gray




**H 6** Dark Gray




**H 7** Black



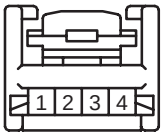

**H 8** Black



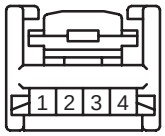

**H10**



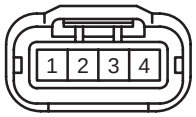

**H11**




**H12**



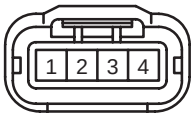

**I 3** Black



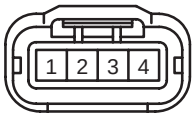
# K CONNECTOR LIST

*1 : Access Cab, Standard Cab

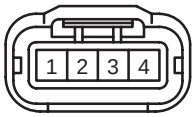
**I 4**
Black



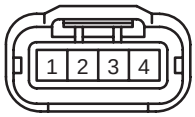

**I 5**
Black



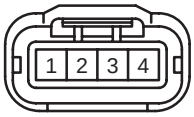

**I 6**
Black



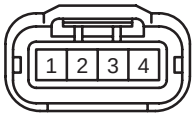

**I 7**
Black



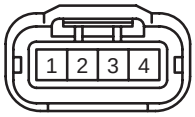

**I 8**
Black



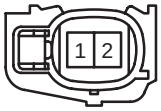

**I 9**
Black



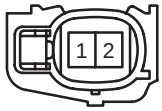

**I10**
Black



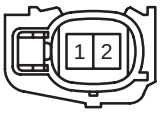

**I14**
Gray



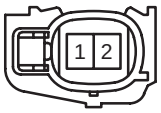

**I15**
Gray



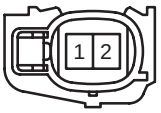

**I16**
Gray



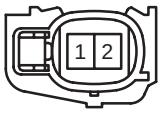

**I17**
Gray



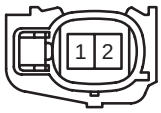

**I18**
Gray



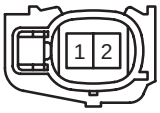

**I19**
Gray




**I20**
Gray



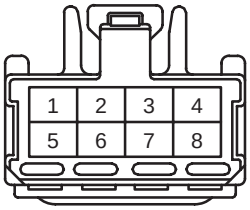

**I21**
Gray



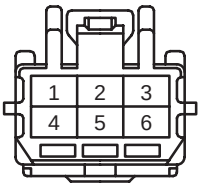

**I22**



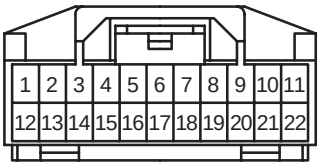

**I23**
(*1)



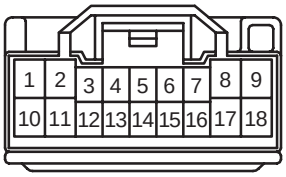

**I23**
(Double Cab)




**I24**



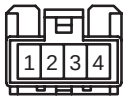

**I25**



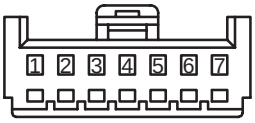

**I26**
(*1)



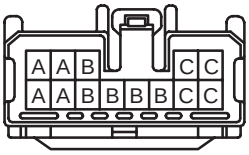

**I26**
(Double Cab)



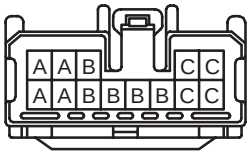

**I27**
Black



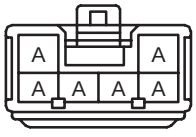

**J 1**



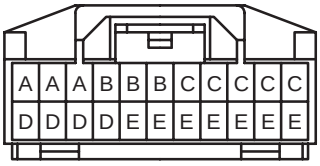

**J 2**



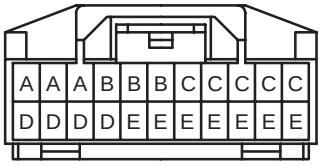

**J 3**



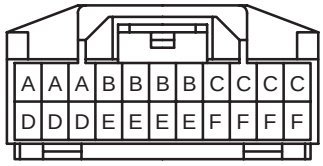

**J 4**



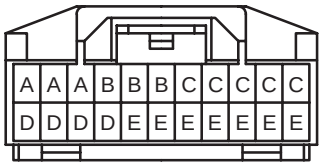

**J 5**



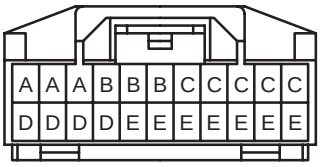

**J 7**
Black



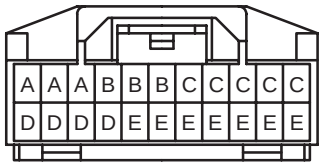
**J 8**



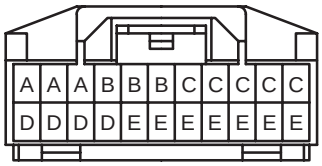

**J 9**



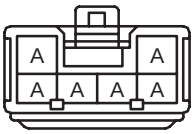

**J10**



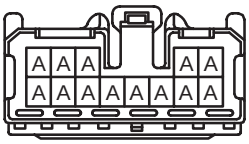

**J12**



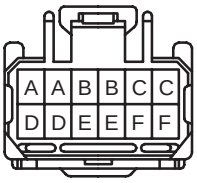

**J13**



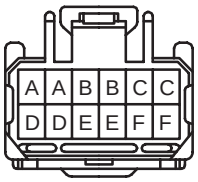

**J18**
Black




**J21**



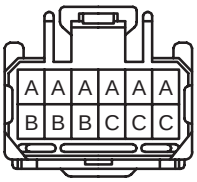

**J22**



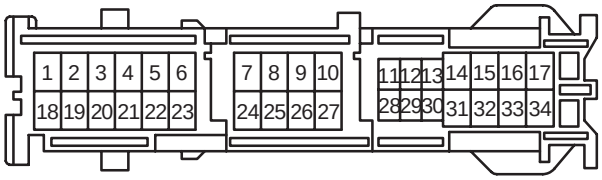

**J23**
Gray



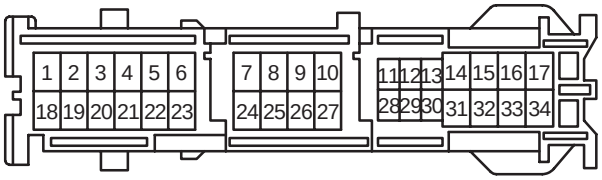

**J24**
Gray



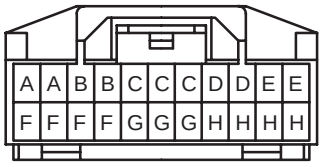

**J26**



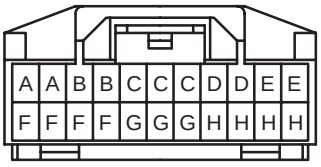

**J27**




**J28**
Blue



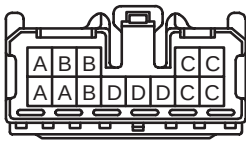

**J29**
Blue



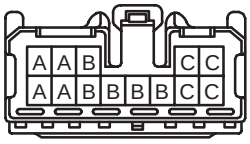

**J30**
Gray



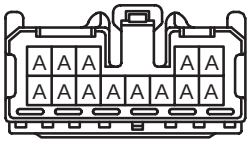

**J31**
Blue




**J32**



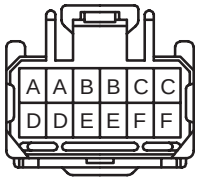

**J34**
Black




**J35**
Gray

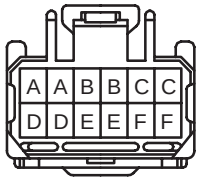



**J36**

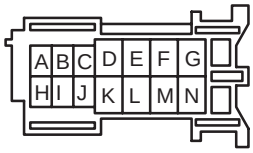


# K CONNECTOR LIST

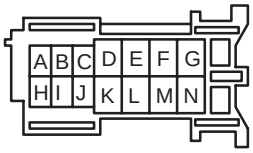
**J37**



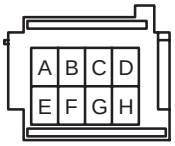

**J38**



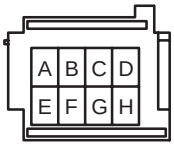

**J39**



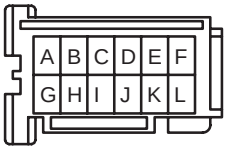

**J40**



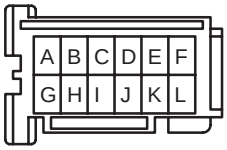

**J41**



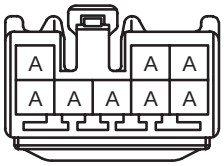

**J42**



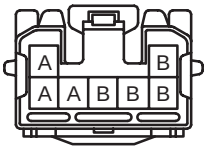

**J43**



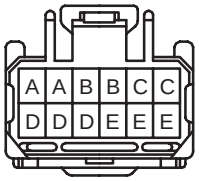

**J45**



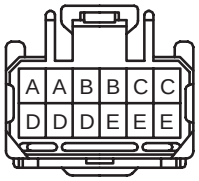

**J46**



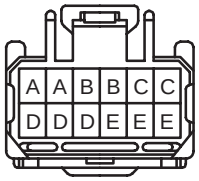

**J47**
Black



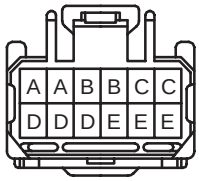

**J48**
Black



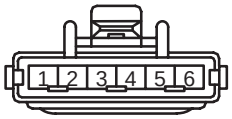

**J49**
Black



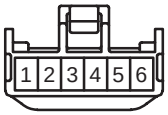

**J50**
Black



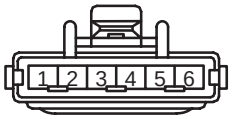

**J51**



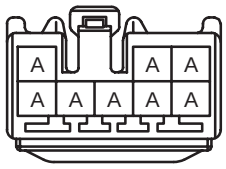

**J52**
Black



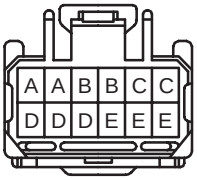

**J53**



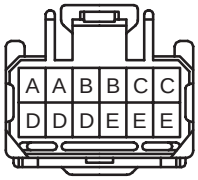

**J54**



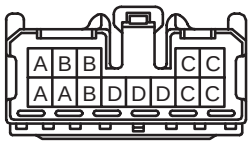

**J55**
Black



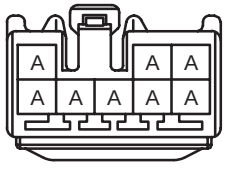

**J56**
Black




**J57**
Blue




**J58**




**J59**
Black



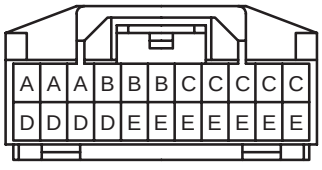

**J60**
Black



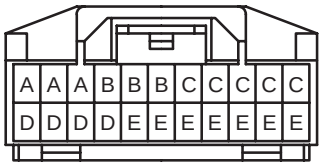

**J63**
Black



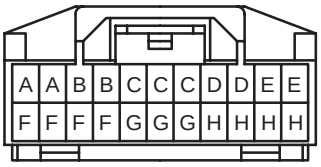

**J64**



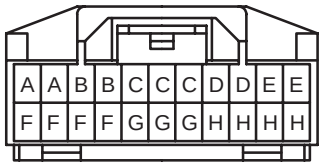
**J65**



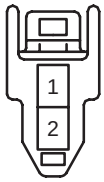

**J66**
Blue



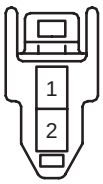

**J67**
Blue



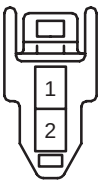

**J68**



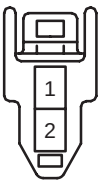

**J69**



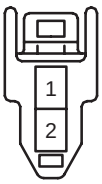

**J70**




**J71**



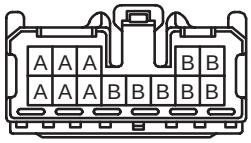

**J72**



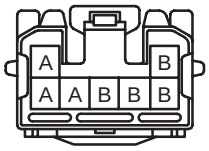

**J73**



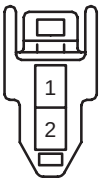

**J74**
Gray



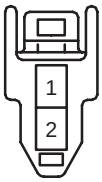

**J75**



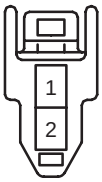

**J76**



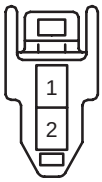

**J77**



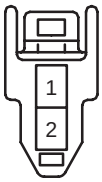

**J78**




**J79**



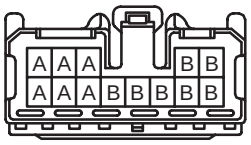

**J80**



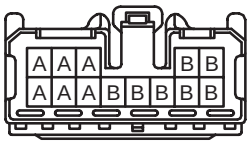

**J81**



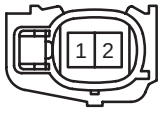

**J82**
Gray



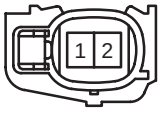

**J83**
Gray



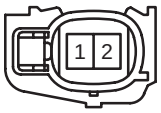

**K 1**
Black




**K 2**
(1GR–FE) Black




**K 2**
(2UZ–FE) Gray



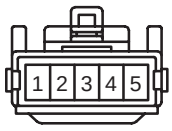

**L 1**
Gray




**L 2**
Gray



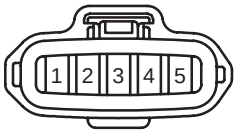

**L 3**




**L 4**
Black




**M 1**
(1GR–FE) Black



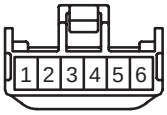

**M 1**
(2UZ–FE) Black



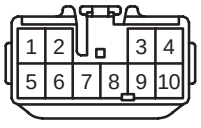

**M 4**
Black




**M 5**
Black



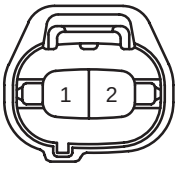

**M 6**




**N 1**
Gray




**O 1**
Black




**O 2**
Gray



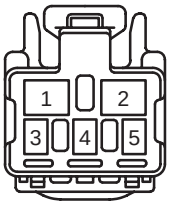

**O 4**



# K CONNECTOR LIST

*1 : Access Cab, Standard Cab
*4 : Double Cab Captain seat
*5 : Double Cab Separate Seat
*6 : Access Cab, Standard Cab, Double Cab Separate Seat

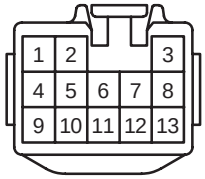
**O 5**



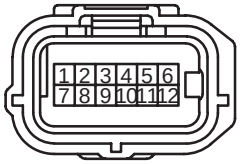

**O 7**



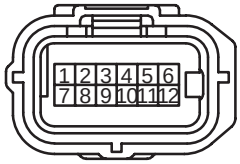

**O 8**




**O10**
Black




**O11**
Gray




**O12**
Gray




**O13**
Black



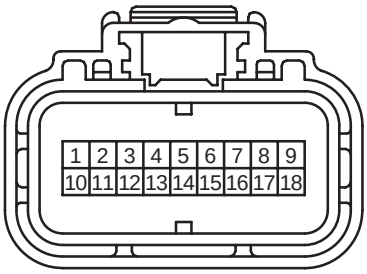

**O14**
Black



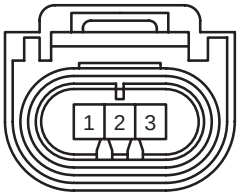

**O15**
Gray



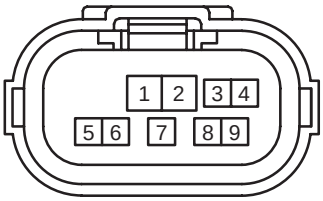

**O16**
Black




**O17**
Dark Gray




**P 1**
Gray



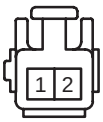

**P 2**
Black




**P 5**
(A/T)




**P 5**
(M/T)




**P 6**
(*1) Blue




**P 6**
(*4)




**P 6**
(*5)




**P 7**
(*6)



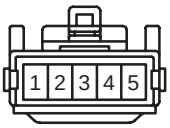

**P 7**
(*4)



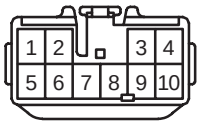

**P 8**




**P 9**



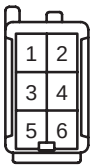

**P10**




**P11**
(*1)



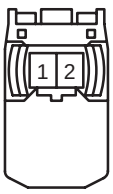

**P11**
(Double Cab)



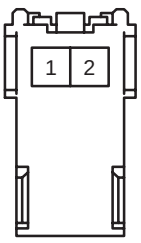

**P12**



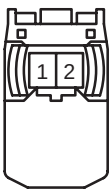

**P13**
(*1) Black



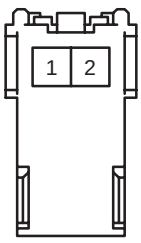

**P13**
(Double Cab) Yellow




**P14**
(*1) Black



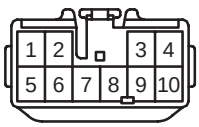

**P14**
(Double Cab) Yellow




**P15**
Black




**P16**

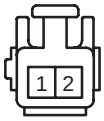


*1 : Access Cab, Standard Cab
*7 : Access Cab, Standard Cab w/ Mirror Heater
*8 : Access Cab, Standard Cab w/o Mirror Heater

**P17**
Black




**P18**
Black




**P19**
Black



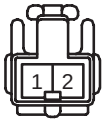

**P20**



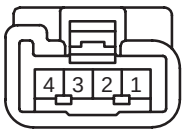

**P21**




**P22**
(*1)




**P22**
(Double Cab)




**P23**
Black




**P24**




**P25**
Gray




**P26**
Gray




**P27**



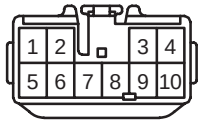

**P28**



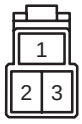

**R 1**




**R 2**




**R 3**




**R 4**
Gray




**R 5**
Gray




**R 6**
(Access Cab)




**R 6**
(Double Cab) Gray



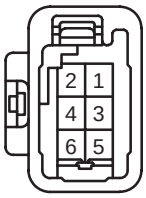

**R 7**
(Access Cab)




**R 7**
(Double Cab) Gray




**R 8**
(*7)



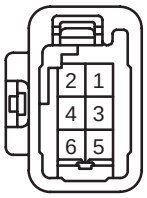

**R 8**
(*8)




**R 8**
(Double Cab)




**R 9**
(*7)



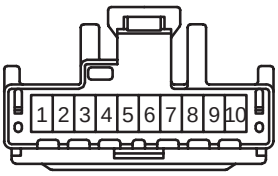

**R 9**
(*8)



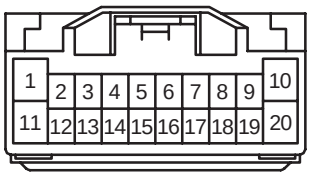

**R 9**
(Double Cab)



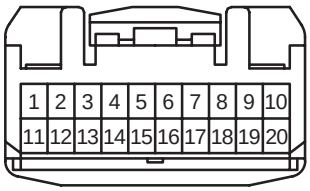

**R10**




**R12**



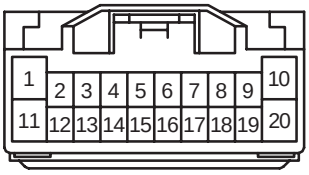

**R13**



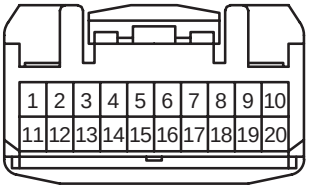
# K CONNECTOR LIST

*9 : 1GR–FE (Cold Area Spec.)
*10 : 1GR–FE (Except Cold Area Spec.)

**R14**



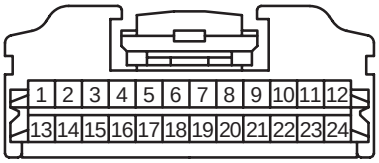

**R15**



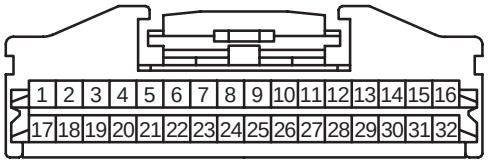

**R16**



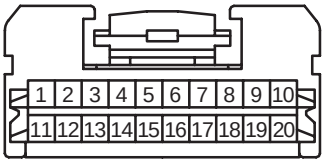

**R17**



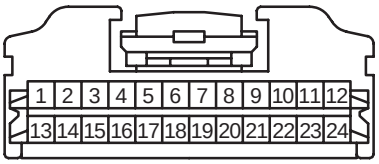

**R18**



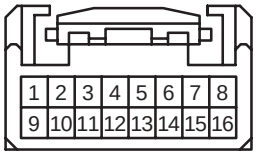

**R19**




**R20**




**R21**



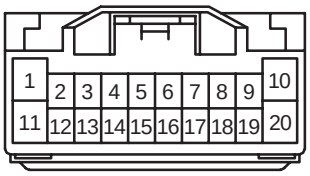

**R22**
Gray



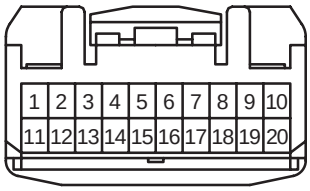

**R23**



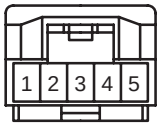

**R24**



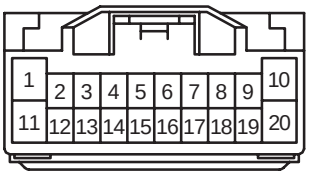

**R25**



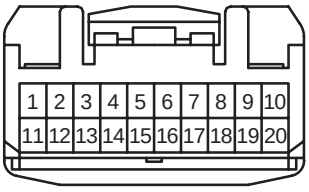

**R26**
Gray




**R27**



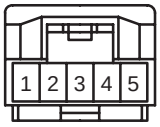

**R28**



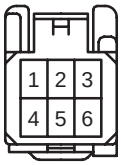

**R29**



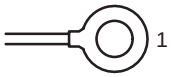

**R30**
Gray



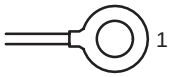

**R31**
Blue



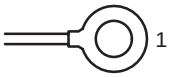

**S 1**
(*9)




**S 1**
(*10)




**S 1**
(2UZ–FE)




**S 2**
Black

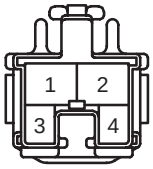


*1 : Access Cab, Standard Cab

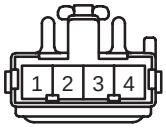
**S 3**
Black




**S 4**
(*1) Blue




**S 4**
(Double Cab)



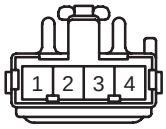

**S 8**




**S 9**




**S10**
Black



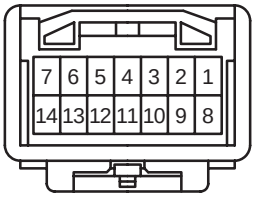

**S11**
Black



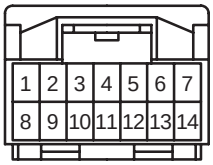

**S12**



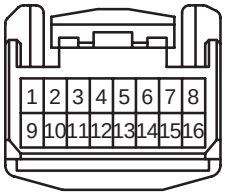

**S13**



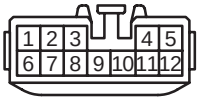

**S14**



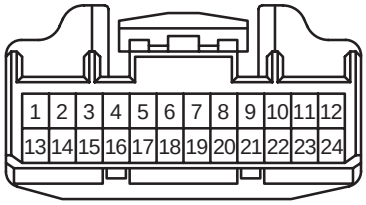

**S19**



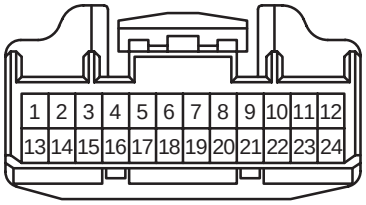

**S20**



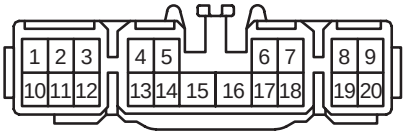

**S21**



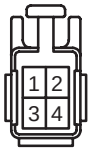

**S23**



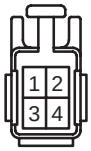

**S24**



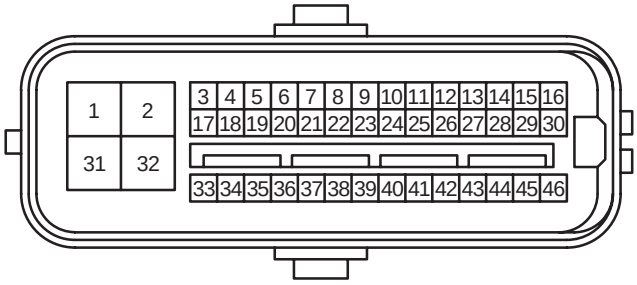

**S26**



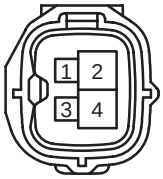

**S28**



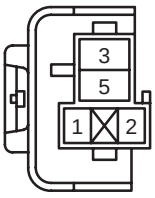

**S29**
Black



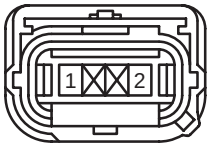

**S30**
Black



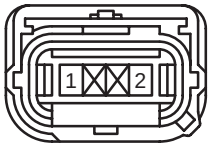

**S31**
Gray



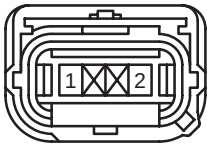

**S32**
Yellow



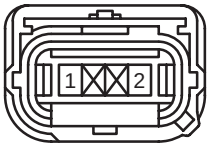

**S33**
Yellow




**S34**
Yellow




**S35**
Yellow




**S37**
Yellow



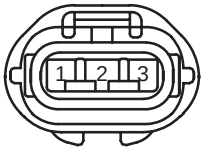
# K CONNECTOR LIST

*1 : Access Cab, Standard Cab
*11 : Except Towing Package

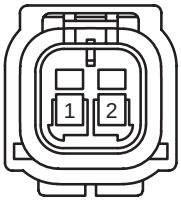
**S38**
Yellow



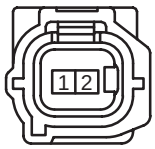

**S39**
Gray




**S40**
(Bench Seat) Black



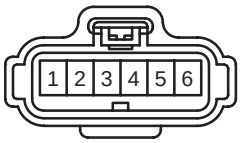

**S40**
(Separate Seat) Black




**S41**
Black



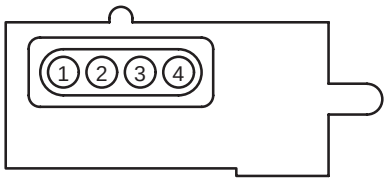

**T 3**
Black



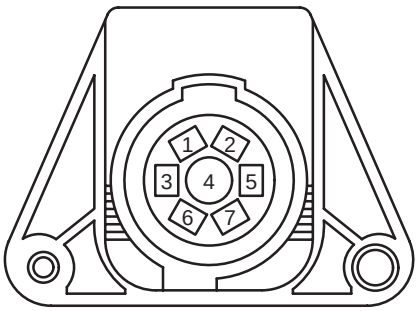

**T 5**
Black




**T 6**
(*11) Black



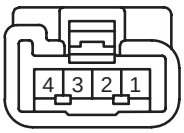

**T 6**
(Towing Package) Black




**T 7**
(*1)



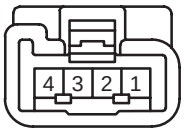

**T 7**
(Double Cab)



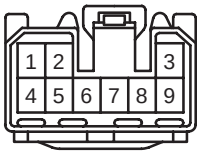

**T 8**
(*1)



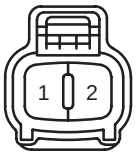

**T 8**
(Double Cab)



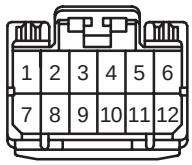

**T 9**



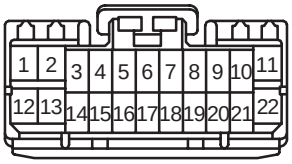

**T10**
Gray




**T11**



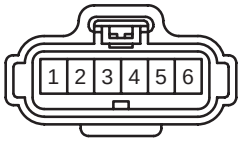

**T12**




**T13**
Black




**T14**
Black

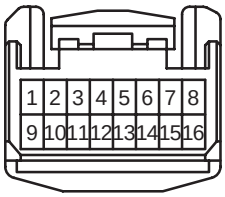



**T15**
Black



*1 : Access Cab, Standard Cab

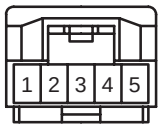
**T16**



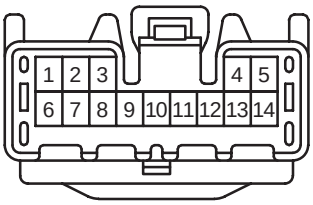

**T17**
Black




**T18**




**T19**




**T20**



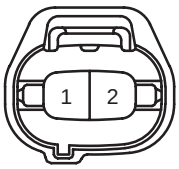

**U 1**



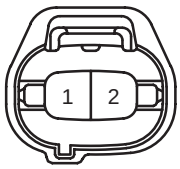

**V 2**
Black



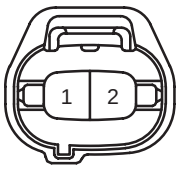

**V 3**
Black




**V 4**
(1GR–FE) Gray




**V 4**
(2UZ–FE) Black




**V 6**
(*1) Blue




**V 6**
(Double Cab)



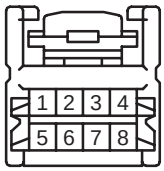

**V 7**
(*1) Blue




**V 7**
(Double Cab)




**V10**



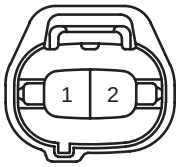

**V11**
Black



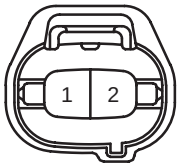

**V12**



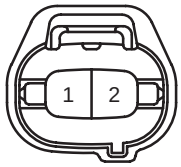

**V13**
Black




**V14**
Brown




**V15**
Brown




**V16**
(1GR–FE) Black




**V16**
(2UZ–FE) Dark Gray




**V17**
(1GR–FE) Black




**V17**
(2UZ–FE) Dark Gray




**W 2**
Dark Gray



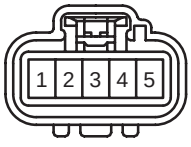

**W 4**
Black



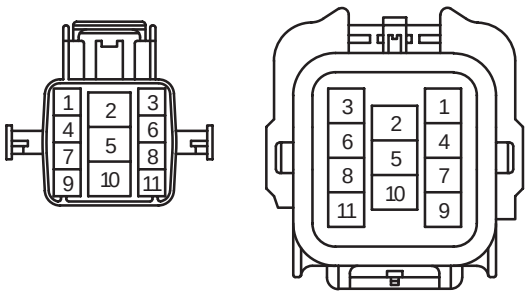

**W 5**
Black



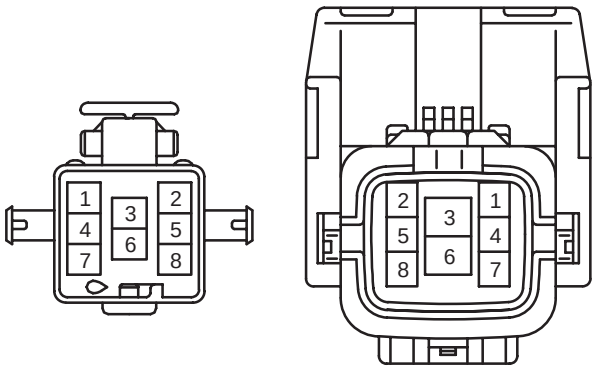

**Y 1**
Black



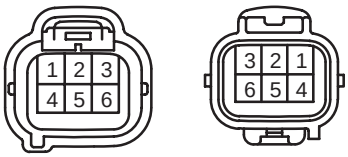
**EA2** Black



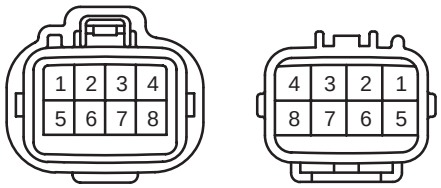

**EB2** Black



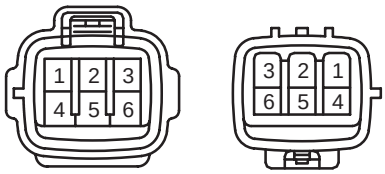

**EC1** Dark Gray



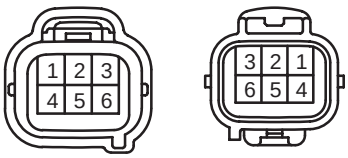

**EC3** Gray



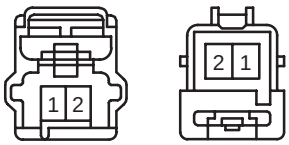

**ED1** Gray



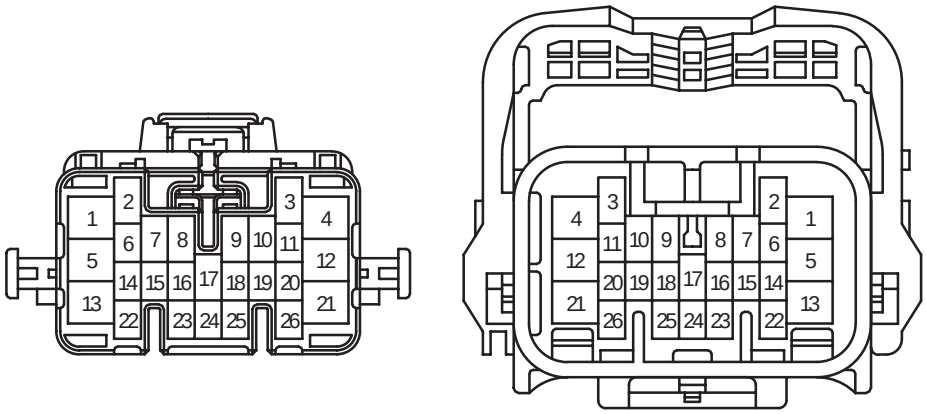

**EF2** Dark Gray



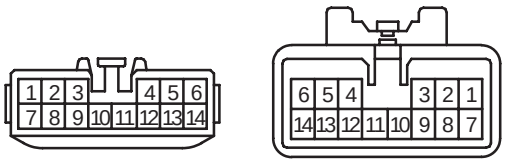

**IA1** Yellow



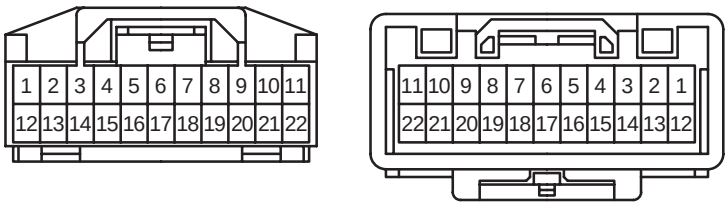

**IA4** Gray



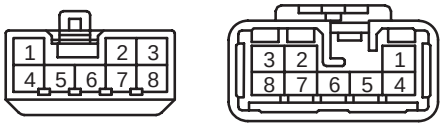
**IA7** Gray



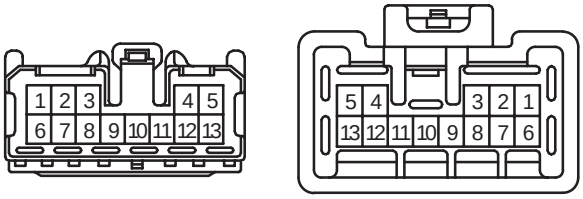

**IA8** Gray



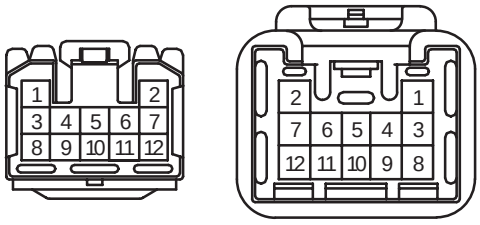

**IA9**



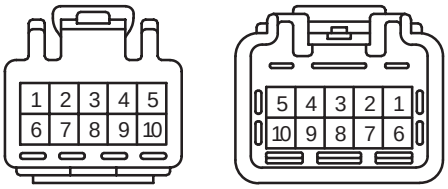

**IA10** Black



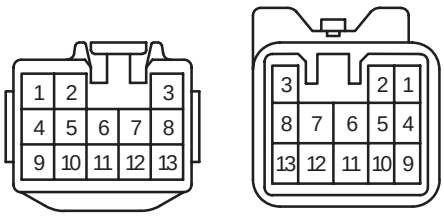

**IB3**



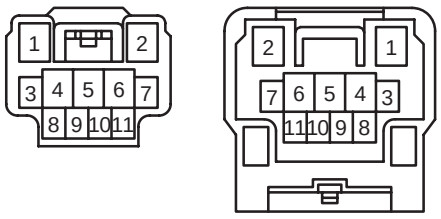

**IB4** Gray



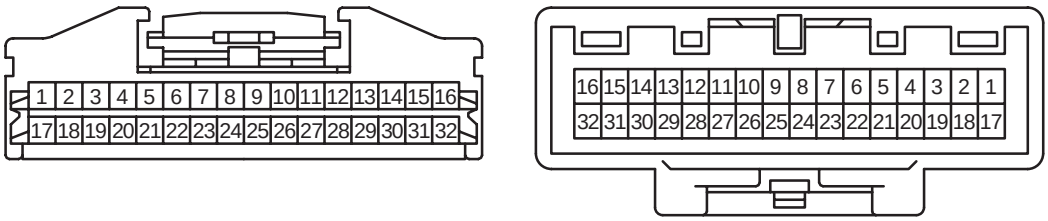

**IB5** Gray



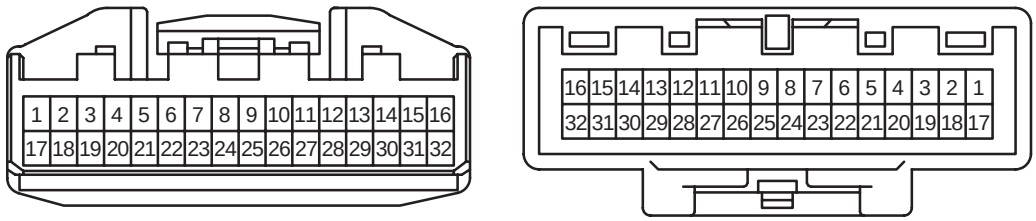

**IC2**



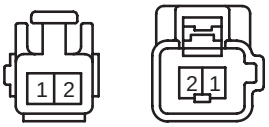

**IC3**



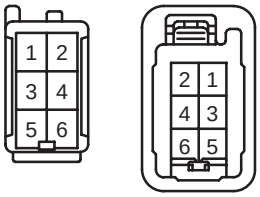
**IC4**



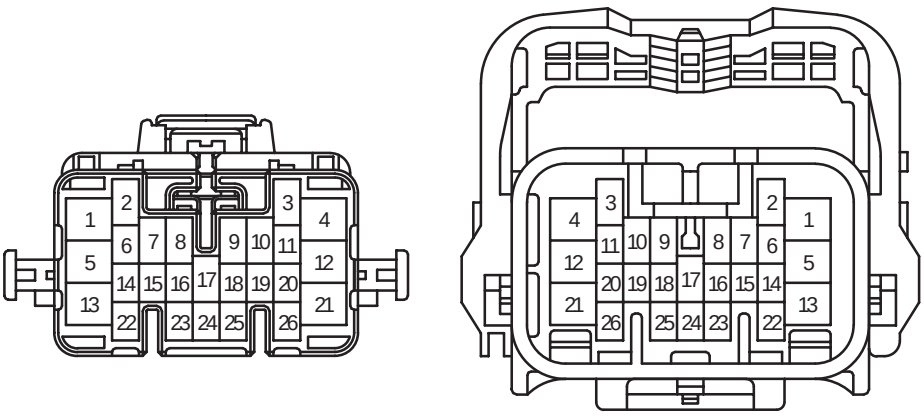

**IC5**



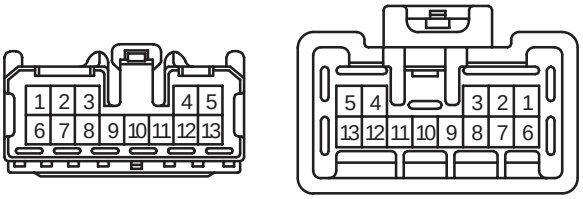

**ID2**



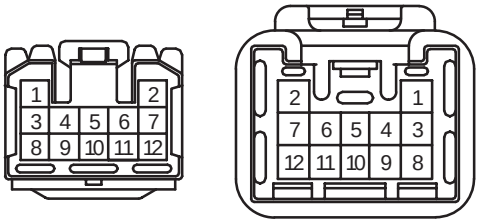

**IE1**



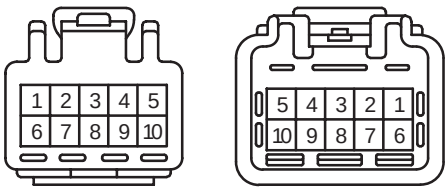

**IE4** Gray



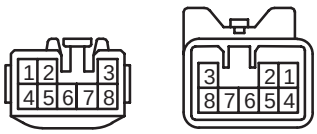

**IF3**



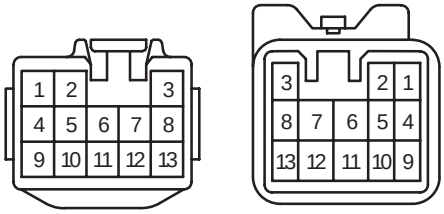
**IF4** Gray



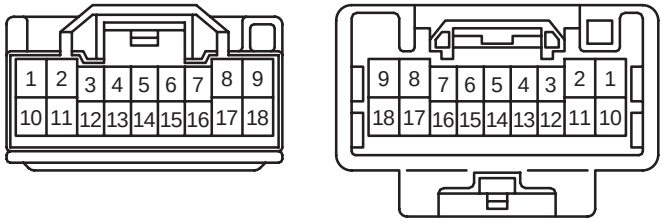

**IF5** Blue



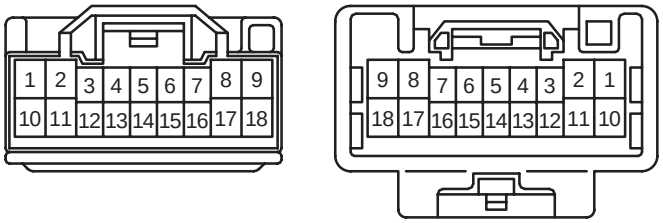

**IF6** Gray



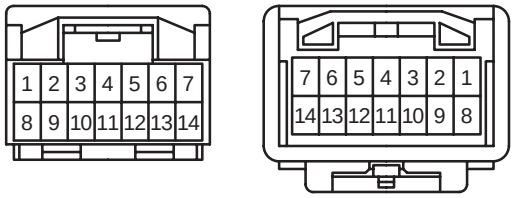

**IG1**



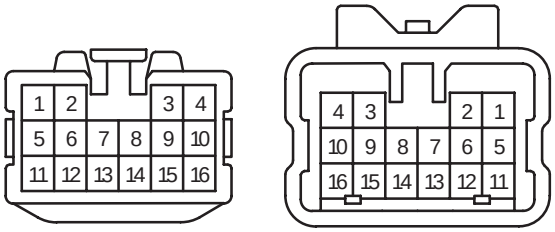

**IH1**



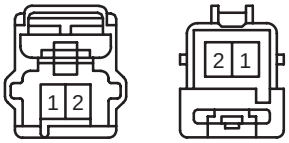

**IJ1**



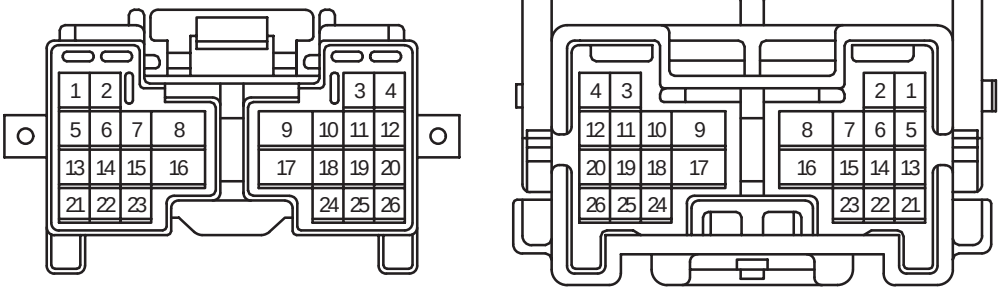

**IJ2** Gray



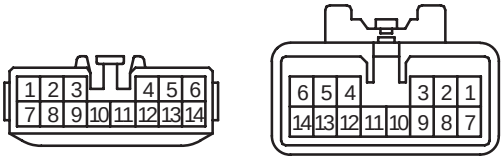

**IJ3** Yellow



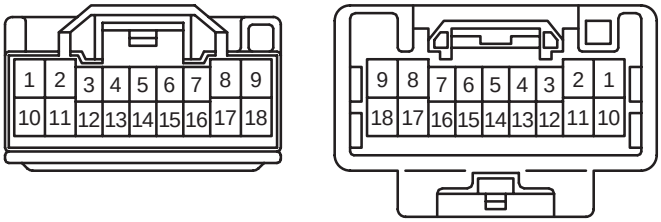
**IJ4**



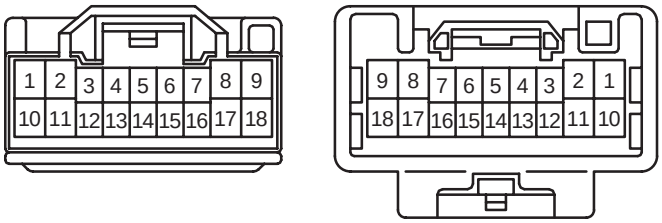

**IK1** Black



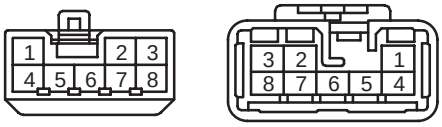

**IK2**



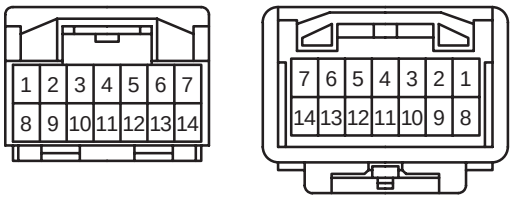

**IL1**



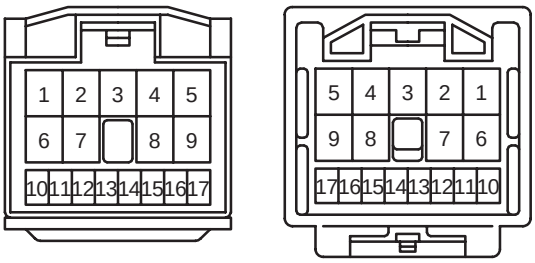

**IL2** Gray



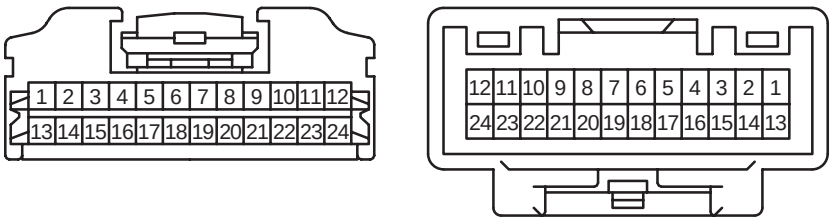

**IL3** Gray



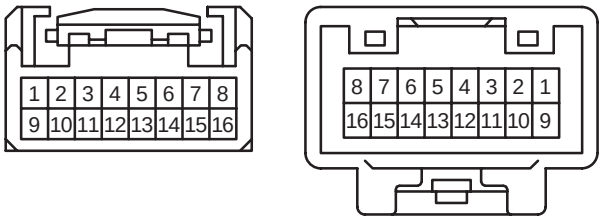

**IM1**



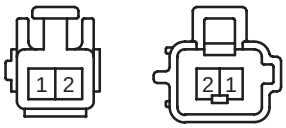
**IM3**



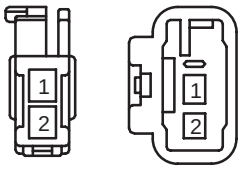

**IM4**



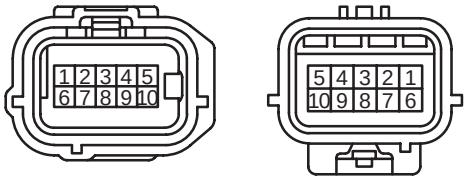

**IN1**



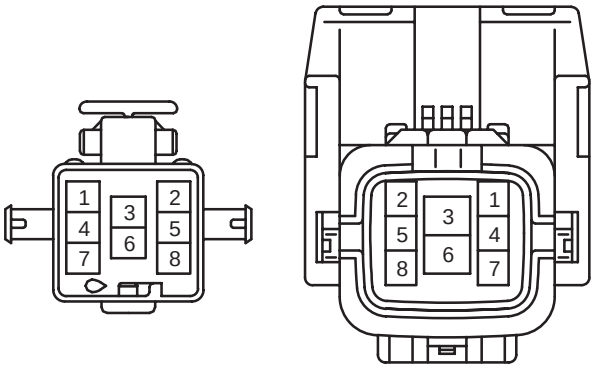

**BA1**



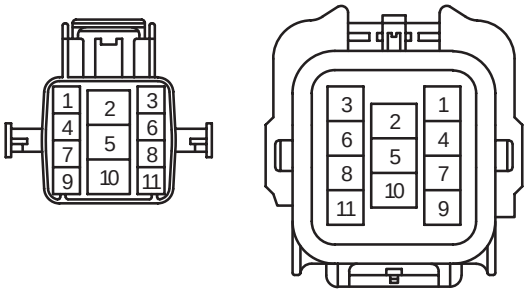

**BB3**



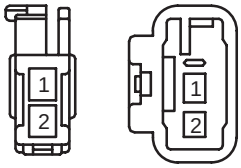

**BB4** Gray




**BB5** Black




**BC1**

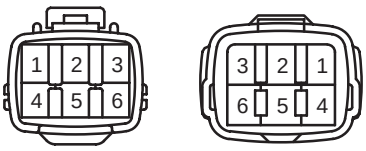



**BE2**

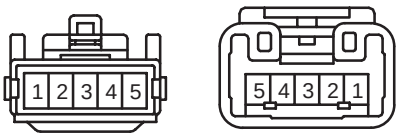


# K CONNECTOR LIST

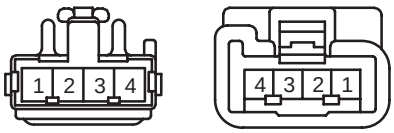
**BF2** Black



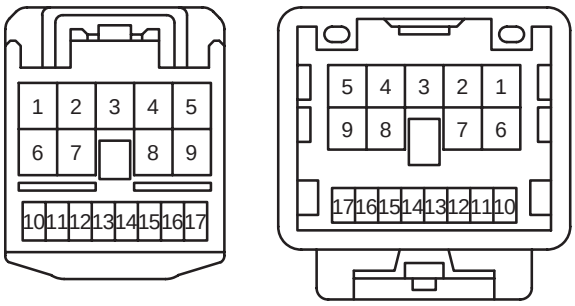

**BG2**




**BH1** Black



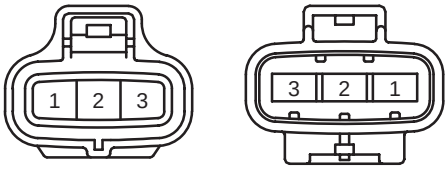

**BI2**



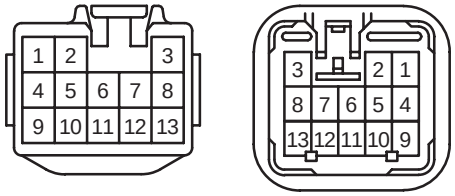

**BK1** Gray



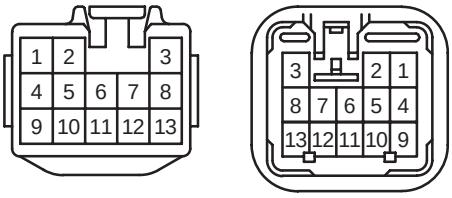

**BK2** Black



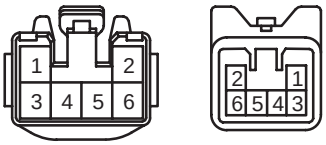

**BL1**



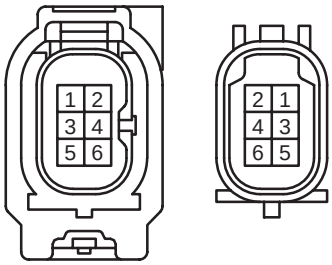

**BM1**



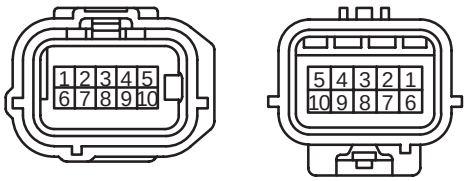

**BO1**



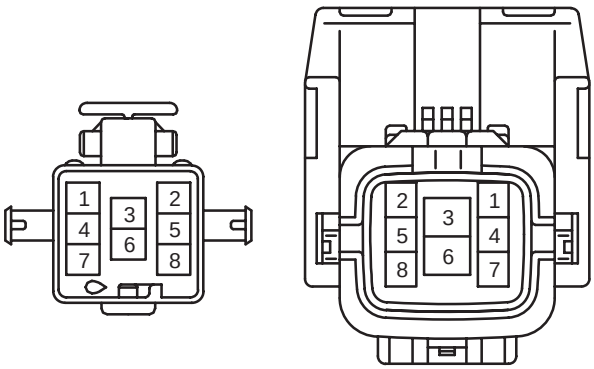

**BO2**



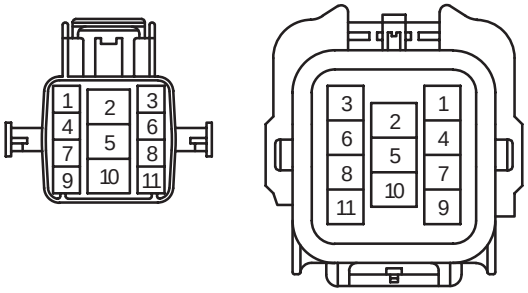
**BP1**



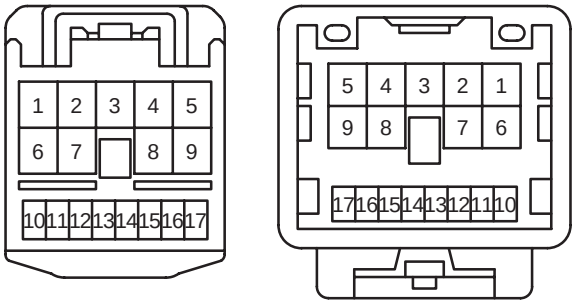

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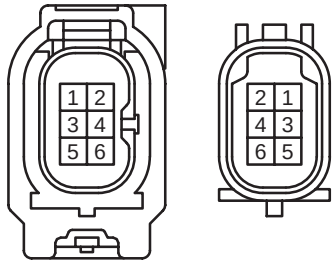

**BP3** Black



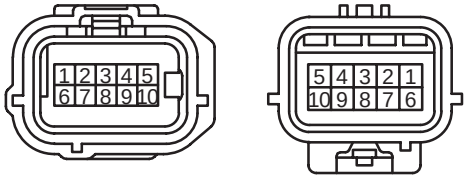

**BQ2**



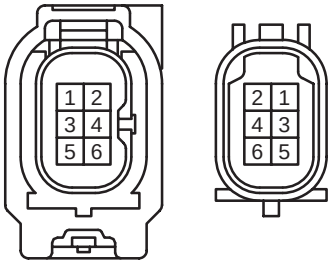

**BS1**



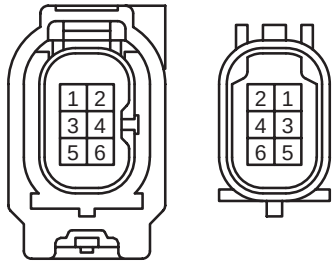

**BT1**



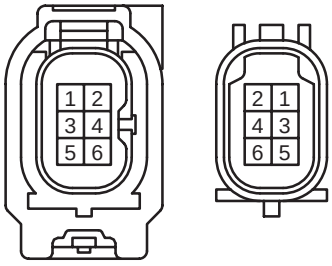

**BT2**




**BT3**




**BU1**



# L PART NUMBER OF CONNECTORS

| Code | Part Name | Part Number |
|---|---|---|
| A 1 | Pressure SW | 90980–11149 |
| A 3 | A/C Magnetic Clutch and Lock Sensor | 90980–11016 |
| A 5 | ABS Actuator with ECU | 90980–12426 |
| A 6 | ABS Speed Sensor Front LH (w/ VSC) | 90980–11156 |
| | ABS Speed Sensor Front LH (w/o VSC) | 90980–11075 |
| A 7 | ABS Speed Sensor Front RH (w/ VSC) | 90980–11156 |
| | ABS Speed Sensor Front RH (w/o VSC) | 90980–11075 |
| A 9 | ADD Actuator | 90980–11858 |
| A10 | Air Fuel Ratio Sensor (Bank 1 Sensor 1) | 90980–10869 |
| A11 | Airbag Sensor Front LH (Access Cab, Standard Cab) | 90980–12490 |
| | Airbag Sensor Front LH (Double Cab) | 90980–11856 |
| A12 | Airbag Sensor Front RH (Access Cab, Standard Cab) | 90980–12490 |
| | Airbag Sensor Front RH (Double Cab) | 90980–11856 |
| A13 | A/C Thermistor | 90980–11918 |
| A15 | Air Inlet Control Servo Motor | 90980–11909 |
| A16 | Airbag Squib (Front Passenger Airbag Assembly) | 90980–12160 |
| A17 | Airbag Squib (Steering Wheel Pad) | |
| A18 | Ashtray Illumination | – |
| A19 | ABS Speed Sensor Rear | 90980–10942 |
| A20 | Accelerator Pedal Position Sensor (A/T) | 90980–11858 |
| | Accelerator Pedal Position Sensor (M/T) | 90980–11144 |
| A22 | ACC Cut Relay | 82660–53010 |
| A28 | Ambient Temp. Sensor | 90980–11070 |
| A29 | ABS Deceleration Sensor | 90980–10845 |
| A30 | Air Fuel Ratio Sensor (Bank 2 Sensor 1) | 90980–10869 |
| A31 | Air Switching Valve | 90980–11149 |
| A32 | Air Injection Control Driver | 90980–11858 |
| A33 | Air Injection Control Driver | 90980–12068 |
| A34 | Air Pressure Sensor | 90980–10845 |
| A35 | Air Pump | 90980–11032 |
| A36 | Airbag Cut Off SW | 90980–12063 |
| B 1 | Back–Up Light SW | 90980–11250 |
| B 2 | Brake Fluid Level Warning SW (w/ VSC) | 90980–11156 |
| | Brake Fluid Level Warning SW (w/o VSC) | 90980–11207 |
| B 3 | Back–Up Light Relay | 82660–20340 |
| B 4 | Blower Motor (Access Cab, Standard Cab) | 90980–10214 |
| | Blower Motor (Double Cab) | 90980–10903 |
| B 5 | Blower Resistor | 90980–10171 |
| B 6 | Blower SW | 90980–10877 |
| | Defroster Mode SW | |
| B 7 | Buckle SW LH (Bench Seat) | 90980–10859 |
| | Buckle SW LH (Captain Seat (w/ Power Seat)) | 90980–11950 |
| | Buckle SW LH (Separate Seat, Captain Seat (w/o Power Seat)) | 90980–12374 |

| Code | Part Name | Part Number |
|---|---|---|
| B 8 | Back Window Relay | 82660–20340 |
| B 9 | Body ECU | 90980–11974 |
| B10 | Body ECU | 90980–11973 |
| B11 | Body ECU | 90980–11877 |
| B12 | Back Window Control Relay | 90980–10803 |
| B13 | Buckle SW RH | 90980–11486 |
| B14 | Buckle SW LH | 90980–12381 |
| | Seat Position Airbag Sensor | |
| B16 | Buckle SW LH | 90980–11486 |
| B17 | Buckle SW RH (Bench Seat) | |
| | Buckle SW RH (Separate Seat) | 90980–11467 |
| C 1 | Camshaft Position Sensor | 90980–11016 |
| C 2 | Crankshaft Position Sensor (1GR–FE) | 90980–12028 |
| | Crankshaft Position Sensor (2UZ–FE) | 90980–11162 |
| C 4 | Center Airbag Sensor Assembly | 90980–12391 |
| C 5 | Center Airbag Sensor Assembly (Access Cab, Standard Cab) | 90980–12449 |
| | Center Airbag Sensor Assembly (Double Cab) | 90980–12390 |
| C 6 | Center Airbag Sensor Assembly (Access Cab, Standard Cab) | 90980–12450 |
| | Center Airbag Sensor Assembly (Double Cab) | 90980–12392 |
| C 7 | Cigarette Lighter | 90980–10760 |
| C 8 | Cigarette Lighter Illumination | 90980–11148 |
| C10 | Clutch Start SW | 90980–10825 |
| C11 | Combination Meter | 90980–12557 |
| C12 | Combination Meter | 90980–12554 |
| C15 | Combination SW | 90980–11672 |
| C16 | Combination SW | 90980–12552 |
| C17 | Combination SW | 90980–11594 |
| C19 | Camshaft Timing Oil Control Valve LH | 90980–11162 |
| C20 | Camshaft Timing Oil Control Valve RH | |
| C21 | Curtain Airbag Cut Off SW | 90980–10797 |
| C22 | Curtain Shield Airbag Squib LH | 90980–11886 |
| C23 | Curtain Shield Airbag Squib RH | |
| D 2 | Daytime Running Light Resistor | 90980–10928 |
| D 3 | Detection SW (Transfer 4WD Position) | 90980–11250 |
| D 4 | Detection SW (Transfer L4 Position) | 90980–11025 |
| D 6 | Data Link Connector 3 | 90980–11665 |
| D 8 | Diode (A/T) | 90980–11071 |
| D 9 | Diode (Door Courtesy) | 90980–11608 |
| D11 | Diode (Power Window System) | 90980–10962 |
| D14 | Door Courtesy Light Front LH | 90980–11148 |
| D15 | Door Courtesy Light Front RH | |
| D16 | Door Courtesy SW Front LH | 90980–10871 |
| D17 | Door Courtesy SW Front RH | |

Note: Not all of the above part numbers of the connector are established for the supply.

| Code | Part Name | Part Number |
|---|---|---|
| D18 | Door Courtesy SW Rear LH Lower | 90980–11003 |
| D19 | Door Courtesy SW Rear LH Upper | |
| D20 | Door Courtesy SW Rear RH Lower | |
| D21 | Door Courtesy SW Rear RH Upper | |
| D22 | Door Key Lock and Unlock SW LH | 90980–11245 |
| D23 | Door Key Lock and Unlock SW RH | |
| D24 | Door Lock Control SW RH | 90980–10797 |
| D25 | Door Lock Motor LH | 90980–11150 |
| | Door Unlock Detection SW LH | |
| D26 | Door Lock Motor RH | |
| | Door Unlock Detection SW RH | |
| D27 | Diode (Step Light) | 90980–10962 |
| D28 | Diode (Door Lock) | |
| D29 | Diode (TVIP) | 90980–11608 |
| D30 | Diode (Unlock Warning) | 90980–10962 |
| D31 | Diode (Parking Brake SW) | |
| D32 | Door Lock Control Receiver | 90980–11909 |
| D33 | DVD Player | 90980–12266 |
| D34 | Diode (Door Courtesy No.1) | 90980–11071 |
| D35 | Diode (Door Courtesy No.2) | |
| D36 | Door Courtesy Light Rear LH | 90980–11148 |
| D37 | Door Courtesy Light Rear RH | |
| D38 | Door Courtesy SW Rear LH | 90980–10871 |
| D39 | Door Courtesy SW Rear RH | |
| D40 | Door Lock Motor Rear LH | 90980–12226 |
| | Door Unlock Detection SW Rear LH | |
| D41 | Door Lock Motor Rear RH | |
| | Door Unlock Detection SW Rear RH | |
| D42 | Door Key Lock and Unlock SW Front LH | 90980–11858 |
| | Door Lock Motor Front LH | |
| | Door Unlock Detection SW Front LH | |
| D43 | Door Key Lock and Unlock SW Front RH | |
| | Door Lock Motor Front RH | |
| | Door Unlock Detection SW Front RH | |
| D44 | Driver Door ECU | 90980–11877 |
| E 1 | Electronically Controlled Transmission Solenoid | 90980–12293 |
| E 2 | Engine Coolant Temp. Sensor | 90980–10735 |
| E 3 | Engine Control Module | 90980–12525 |
| E 4 | Engine Control Module | 90980–12529 |
| E 5 | Engine Control Module | 90980–12526 |
| E 6 | Engine Control Module | 90980–12528 |
| E 7 | Engine Control Module | 90980–12527 |
| E 8 | Engine Hood Courtesy SW | 90980–11189 |
| F 1 | Front Fog Light LH | 90980–11096 |
| F 2 | Front Fog Light RH | |

| Code | Part Name | Part Number |
|---|---|---|
| F 3 | Front Parking Light LH | 90980–11020 |
| | Front Turn Signal Light LH | |
| F 4 | Front Parking Light RH | |
| | Front Turn Signal Light RH | |
| F 5 | Fuel Pump Resistor (1GR–FE) | 90980–10901 |
| | Fuel Pump Resistor (2UZ–FE) | 90980–11156 |
| F 8 | Front Door Speaker LH | 90980–10935 |
| F 9 | Front Door Speaker RH | |
| F10 | Fuel Pump | 90980–11077 |
| | Fuel Sender | |
| F11 | Front Parking Light LH No.2 | 90980–11020 |
| | Front Turn Signal Light LH No.2 | |
| F12 | Front Parking Light RH No.2 | |
| | Front Turn Signal Light RH No.2 | |
| F13 | Fusible Link Block | 82620–0C011 |
| F15 | Front Door Speaker LH (Woofer) | 90980–10795 |
| F16 | Front Door Speaker RH (Woofer) | |
| F17 | Front Passenger Door ECU | 90980–11469 |
| F18 | Front Parking Light LH No.3 (Access Cab, Standard Cab) | 90980–11075 |
| | Front Parking Light LH No.3 (Double Cab) | 90980–11156 |
| F19 | Front Parking Light RH No.3 (Access Cab, Standard Cab) | 90980–11075 |
| | Front Parking Light RH No.3 (Double Cab) | 90980–11156 |
| F20 | 4WD Control ECU | 90980–12560 |
| F21 | 4WD Control ECU | 90980–12561 |
| G 1 | Generator (1GR–FE) | 90980–09372 |
| | Generator (2UZ–FE) | 90980–09365 |
| G 2 | Generator | 90980–11964 |
| G 3 | Glove Box Light | 90980–11148 |
| H 1 | Headlight LH | 90980–11314 |
| H 2 | Headlight RH | |
| H 4 | Heated Oxygen Sensor (Bank 1 Sensor 2) | 90980–11028 |
| H 6 | Heated Oxygen Sensor (Bank 2 Sensor 2) | |
| H 7 | Horn LH | 90980–10619 |
| H 8 | Horn RH | |
| H10 | Cargo Light | 90980–11296 |
| | High Mounted Stop Light | |
| H11 | Headphone Terminal LH | 90980–12263 |
| H12 | Headphone Terminal RH | |
| I 3 | Igniter and Ignition Coil No.1 | 90980–11885 |
| I 4 | Igniter and Ignition Coil No.2 | |
| I 5 | Igniter and Ignition Coil No.3 | |
| I 6 | Igniter and Ignition Coil No.4 | |
| I 7 | Igniter and Ignition Coil No.5 | |
| I 8 | Igniter and Ignition Coil No.6 | |

# L PART NUMBER OF CONNECTORS

| Code | Part Name | Part Number |
|---|---|---|
| I 9 | Igniter and Ignition Coil No.7 | 90980–11885 |
| I10 | Igniter and Ignition Coil No.8 | |
| I14 | Injector No.1 | 90980–11875 |
| I15 | Injector No.2 | |
| I16 | Injector No.3 | |
| I17 | Injector No.4 | |
| I18 | Injector No.5 | |
| I19 | Injector No.6 | |
| I20 | Injector No.7 | |
| I21 | Injector No.8 | |
| I22 | Ignition Key Cylinder Light | 90980–10906 |
| I23 | Ignition SW (Access Cab, Standard Cab) | 90980–11615 |
| | Ignition SW (Double Cab) | 90980–11778 |
| I24 | Integration Control and Panel | 90980–11915 |
| I25 | Integration Control and Panel | 90980–11973 |
| I26 | Interior Light (Access Cab, Standard Cab) | 90980–10935 |
| | Interior Light (Double Cab) | 90980–11950 |
| I27 | Inner Mirror | 90980–11794 |
| J 1 | Junction Connector | 90980–11714 |
| J 2 | Junction Connector | |
| J 3 | Junction Connector | 90980–10976 |
| J 4 | Junction Connector | 90980–11915 |
| J 5 | Junction Connector | |
| J 7 | Junction Connector | |
| J 8 | Junction Connector | |
| J 9 | Junction Connector | |
| J10 | Junction Connector | |
| J12 | Junction Connector | |
| J13 | Junction Connector | 90980–10976 |
| J18 | Junction Connector | 90980–11542 |
| J21 | Junction Connector | 90980–11661 |
| J22 | Junction Connector | |
| J23 | Junction Connector | |
| J24 | Junction Connector | |
| J26 | Junction Connector | 90980–12320 |
| J27 | Junction Connector | |
| J28 | Junction Connector | 90980–11915 |
| J29 | Junction Connector | |
| J30 | Junction Connector | 90980–11194 |
| J31 | Junction Connector | 90980–11542 |
| J32 | Junction Connector | |
| J34 | Junction Connector | |
| J35 | Junction Connector | 90980–11194 |
| J36 | Junction Connector | 90980–11661 |
| J37 | Junction Connector | |

| Code | Part Name | Part Number |
|---|---|---|
| J38 | Junction Connector | 90980–12319 |
| J39 | Junction Connector | |
| J40 | Junction Connector | 90980–12078 |
| J41 | Junction Connector | |
| J42 | Junction Connector | 90980–12076 |
| J43 | Junction Connector | |
| J45 | Junction Connector | 90980–11686 |
| J46 | Junction Connector | 90980–11529 |
| J47 | Junction Connector | 90980–11661 |
| J48 | Junction Connector | |
| J49 | Junction Connector | |
| J50 | Junction Connector | |
| J51 | Junction Connector | 90980–10933 |
| J52 | Junction Connector | 90980–10957 |
| J53 | Junction Connector | 90980–10933 |
| J54 | Junction Connector | 90980–11686 |
| J55 | Junction Connector | 90980–11661 |
| J56 | Junction Connector | |
| J57 | Junction Connector | 90980–11542 |
| J58 | Junction Connector | 90980–11686 |
| J59 | Junction Connector | 90980–11398 |
| J60 | Junction Connector | |
| J63 | Junction Connector | |
| J64 | Junction Connector | 90980–11915 |
| J65 | Junction Connector | |
| J66 | Junction Connector | |
| J67 | Junction Connector | |
| J68 | Junction Connector | 90980–12355 |
| J69 | Junction Connector | |
| J70 | Junction Connector | |
| J71 | Junction Connector | |
| J72 | Junction Connector | |
| J73 | Junction Connector | 90980–10871 |
| J74 | Junction Connector | 90980–11542 |
| J75 | Junction Connector | 90980–11529 |
| J76 | Junction Connector | 90980–12355 |
| J77 | Junction Connector | |
| J78 | Junction Connector | |
| J79 | Junction Connector | |
| J80 | Junction Connector | |
| J81 | Junction Connector | 90980–10871 |
| J82 | Junction Connector | 90980–11542 |
| J83 | Junction Connector | |

Note: Not all of the above part numbers of the connector are established for the supply.

| Code | Part Name | Part Number |
|---|---|---|
| K 1 | Knock Sensor (Bank 1) | 90980–11875 |
| K 2 | Knock Sensor (Bank 2) | |
| L 1 | License Plate Light LH | 90980–11162 |
| L 2 | License Plate Light RH | |
| L 3 | Lumbar Support Control SW (Driver's Seat) | 90980–10789 |
| L 4 | Canister Pump Module | 90980–12380 |
| M 1 | Mass Air Flow Meter (1GR–FE) | 90980–11317 |
| | Mass Air Flow Meter (2UZ–FE) | 90980–12292 |
| M 4 | Mirror Heater SW | 90980–10797 |
| M 5 | Main SW | 90980–10957 |
| M 6 | Moon Roof Control ECU and Motor | 90980–10997 |
| N 1 | Noise Filter | 90980–10843 |
| O 1 | O/D Direct Clutch Speed Sensor | 90980–11156 |
| O 2 | Oil Pressure SW | 90980–11363 |
| O 4 | O/D Main SW | 90980–11470 |
| O 5 | Option Connector | 90980–11603 |
| O 7 | Option Connector (Glass Breakage Sensor) | 90980–10871 |
| O 8 | Overhead Module | 90980–10805 |
| O10 | Occupant Classification ECU | 90980–12356 |
| O11 | Occupant Classification ECU | 90980–12357 |
| O12 | Occupant Classification Sensor Front LH | 90980–12353 |
| O13 | Occupant Classification Sensor Front RH | 90980–12354 |
| O14 | Occupant Classification Sensor Rear LH | |
| O15 | Occupant Classification Sensor Rear RH | 90980–12353 |
| O16 | Occupant Classification ECU | 90980–AA009 |
| O17 | Occupant Classification Sensor | 90980–AA011 |
| P 1 | Park/Neutral Position SW | 90980–12362 |
| P 2 | Power Steering Oil Pressure SW | 90980–11428 |
| P 5 | Parking Brake SW (A/T) | 90980–10871 |
| | Parking Brake SW (M/T) | 90980–10825 |
| P 6 | Power Outlet (Access Cab, Standard Cab) | 90980–10760 |
| | Power Outlet (Double Cab Captain seat) | 90980–10905 |
| | Power Outlet (Double Cab Separate Seat) | 90980–10760 |
| P 7 | Power Outlet (Access Cab, Standard Cab, Double Cab Separate Seat) | 90980–10760 |
| | Power Outlet (Double Cab Captain seat) | 90980–10905 |
| P 8 | Personal Light | 90980–10908 |
| P 9 | Power Window Control SW Front RH | 90980–10789 |
| P10 | Power Window Master SW | 90980–10997 |
| P11 | Power Window Motor Front LH (Access Cab, Standard Cab) | 90980–10860 |
| | Power Window Motor Front LH (Double Cab) | 90980–11011 |
| P12 | Power Window Motor Front RH | 90980–10860 |
| P13 | Pretensioner LH (Access Cab, Standard Cab) | 90980–12452 |
| | Pretensioner LH (Double Cab) | 90980–12253 |

| Code | Part Name | Part Number |
|---|---|---|
| P14 | Pretensioner RH (Access Cab, Standard Cab) | 90980–12452 |
| | Pretensioner RH (Double Cab) | 90980–12253 |
| P15 | Power Seat Motor (Driver's Seat Front Vertical Control) | 90980–10825 |
| P16 | Power Seat Control SW (Driver's Seat) | 90980–10997 |
| P17 | Power Seat Motor (Driver's Seat Rear Vertical Control) | 90980–10825 |
| P18 | Power Seat Motor (Driver's Seat Reclining Control) | |
| P19 | Power Seat Motor (Driver's Seat Slide Control) | |
| P20 | Power Seat Motor (Driver's Seat Lumbar Support Control) | |
| P21 | Power Window Control SW (Back Window) | 90980–10996 |
| P22 | Power Window Motor (Back Window) (Access Cab, Standard Cab) | 90980–10860 |
| | Power Window Motor (Back Window) (Double Cab) | 90980–11012 |
| P23 | Power Outlet (115V) | 90980–10601 |
| P24 | Power Outlet (Rear) | 90980–10760 |
| P25 | Power Window Control SW Rear LH | 90980–10797 |
| P26 | Power Window Control SW Rear RH | |
| P27 | Power Window Motor Rear LH | |
| P28 | Power Window Motor Rear RH | |
| R 1 | Radio and Player | 90980–10996 |
| R 2 | Radio and Player | 90980–10997 |
| R 3 | Rheostat | 90980–10216 |
| R 4 | Rear Combination Light LH | 90980–10988 |
| R 5 | Rear Combination Light RH | |
| R 6 | Rear Door Speaker LH | 90980–10935 |
| R 7 | Rear Door Speaker RH | |
| R 8 | Remote Control Mirror LH (Access Cab, Standard Cab w/ Mirror Heater) | 90980–11452 |
| | Remote Control Mirror LH (Access Cab, Standard Cab w/o Mirror Heater) | 90980–10907 |
| | Remote Control Mirror LH (Double Cab) | 90980–11487 |
| R 9 | Remote Control Mirror LH (Access Cab, Standard Cab w/ Mirror Heater) | 90980–11452 |
| | Remote Control Mirror RH (Access Cab, Standard Cab w/o Mirror Heater) | 90980–10907 |
| | Remote Control Mirror RH (Double Cab) | 90980–11487 |
| R10 | Remote Control Mirror SW | 90980–11657 |
| R12 | Radio and Player | 90980–12038 |
| R13 | Radio and Player | 90980–12259 |
| R14 | Radio and Player | 90980–12038 |
| R15 | Radio and Player | 90980–12259 |
| R16 | Radio and Player | 90980–12552 |
| R17 | Rear Seat Entertainment ECU | 90980–12267 |

# L PART NUMBER OF CONNECTORS

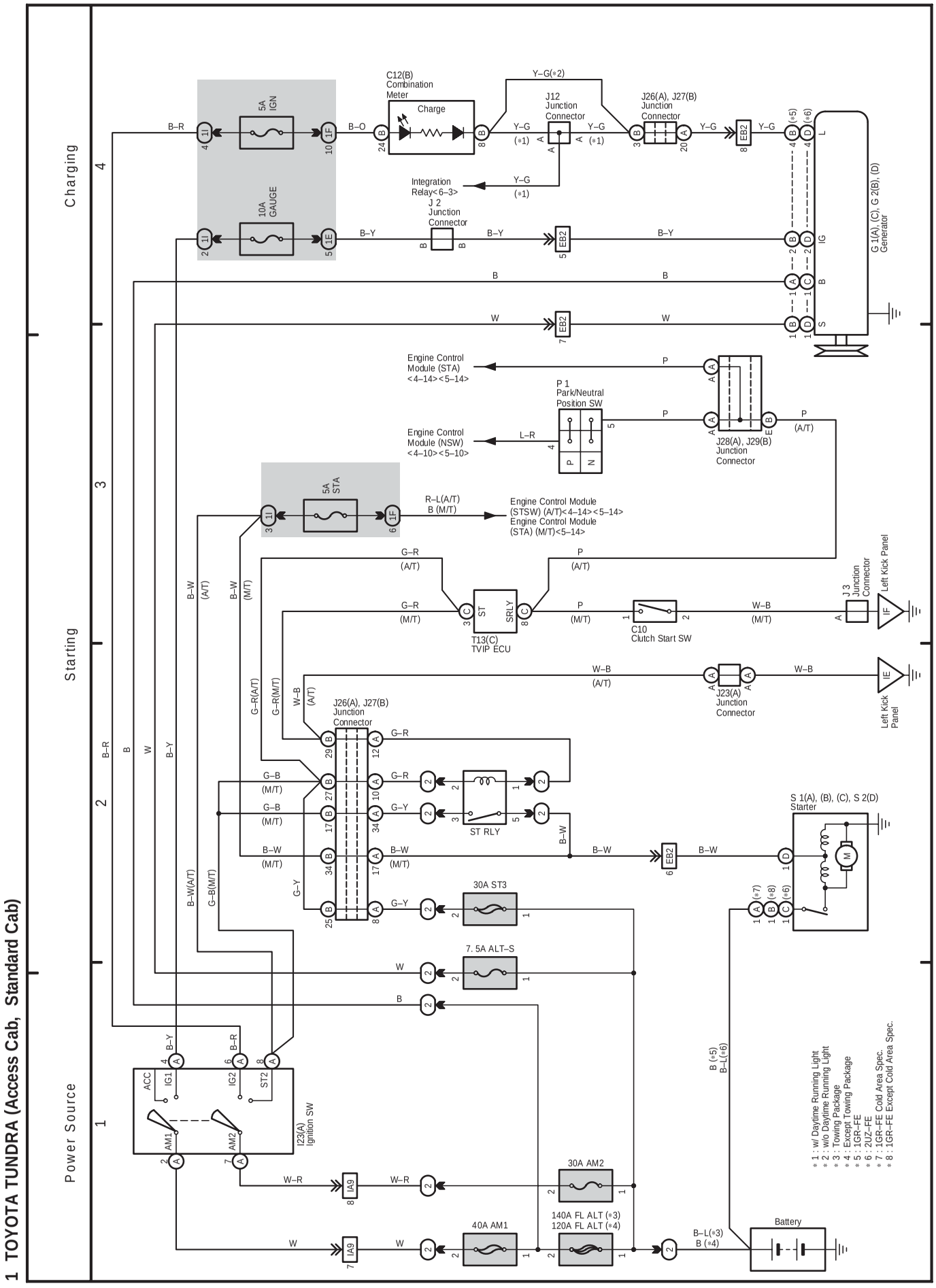
| Code | Part Name | Part Number |
|---|---|---|
| R18 | Rear Seat Entertainment ECU | 90980–12268 |
| R19 | Rear Seat Entertainment ECU | 90980–12266 |
| R20 | Rear Seat Audio Controller | 90980–12267 |
| R21 | Rear Seat Entertainment Display | 90980–12156 |
| R22 | Rear Window Defogger | 90980–10359 |
| R23 | Rear Window Defogger | |
| R24 | Radio and Player with Display | 90980–12038 |
| R25 | Radio and Player with Display | 90980–12259 |
| R26 | Radio and Player with Display | 90980–11909 |
| R27 | Radio and Player with Display | 90980–12038 |
| R28 | Radio and Player with Display | 90980–12259 |
| R29 | Radio and Player with Display | 90980–12552 |
| R30 | Radio and Player with Display | 90980–11909 |
| R31 | Radio and Player with Display | 90980–12209 |
| S 1 | Starter (1GR–FE (Cold Area Spec.)) | 90980–09507 |
| | Starter (1GR–FE (Except Cold Area Spec.)) | 90980–09463 |
| | Starter (2UZ–FE) | 90980–09585 |
| S 2 | Starter | 90980–11400 |
| S 3 | Step Light | 81945–33010 |
| S 4 | Stop Light SW (Access Cab, Standard Cab) | 90980–11118 |
| | Stop Light SW (Double Cab) | 90980–11013 |
| S 8 | Short Pin | 90980–10907 |
| S 9 | Short Connector (TVIP) | 90980–10908 |
| S10 | Glass Breakage Sensor Microphone | 90980–11013 |
| | Security Indicator | |
| S11 | Seat Heater SW (Driver's Seat) | 90980–10797 |
| S12 | Seat Heater SW (Front Passenger's Seat) | 90980–10996 |
| S13 | Short Connector | 90980–11910 |
| S14 | Short Connector | 90980–11911 |
| S19 | Steering Sensor | 90980–12553 |
| S20 | Stereo Component Amplifier | 90980–10803 |
| S21 | Stereo Component Amplifier | 90980–12200 |
| S23 | Stereo Component Amplifier | |
| S24 | Stereo Component Amplifier | 90980–10821 |
| S26 | Seat Heater (Driver's Seat) | 90980–10795 |
| S28 | Seat Heater (Front Passenger's Seat) | |
| S29 | Skid Control ECU with Actuator | 90980–12297 |
| S30 | Skid Control ECU with Actuator | 90980–12294 |
| S31 | Stop Light Relay | 82660–53010 |
| S32 | Side Airbag Sensor Rear LH | 90980–12241 |
| S33 | Side Airbag Sensor Rear RH | |
| S34 | Side Airbag Sensor LH | |
| S35 | Side Airbag Sensor RH | |
| S37 | Side Airbag Squib LH | 90980–11864 |
| S38 | Side Airbag Squib RH | |
| S39 | Seat Belt Tension Sensor | 90980–11349 |

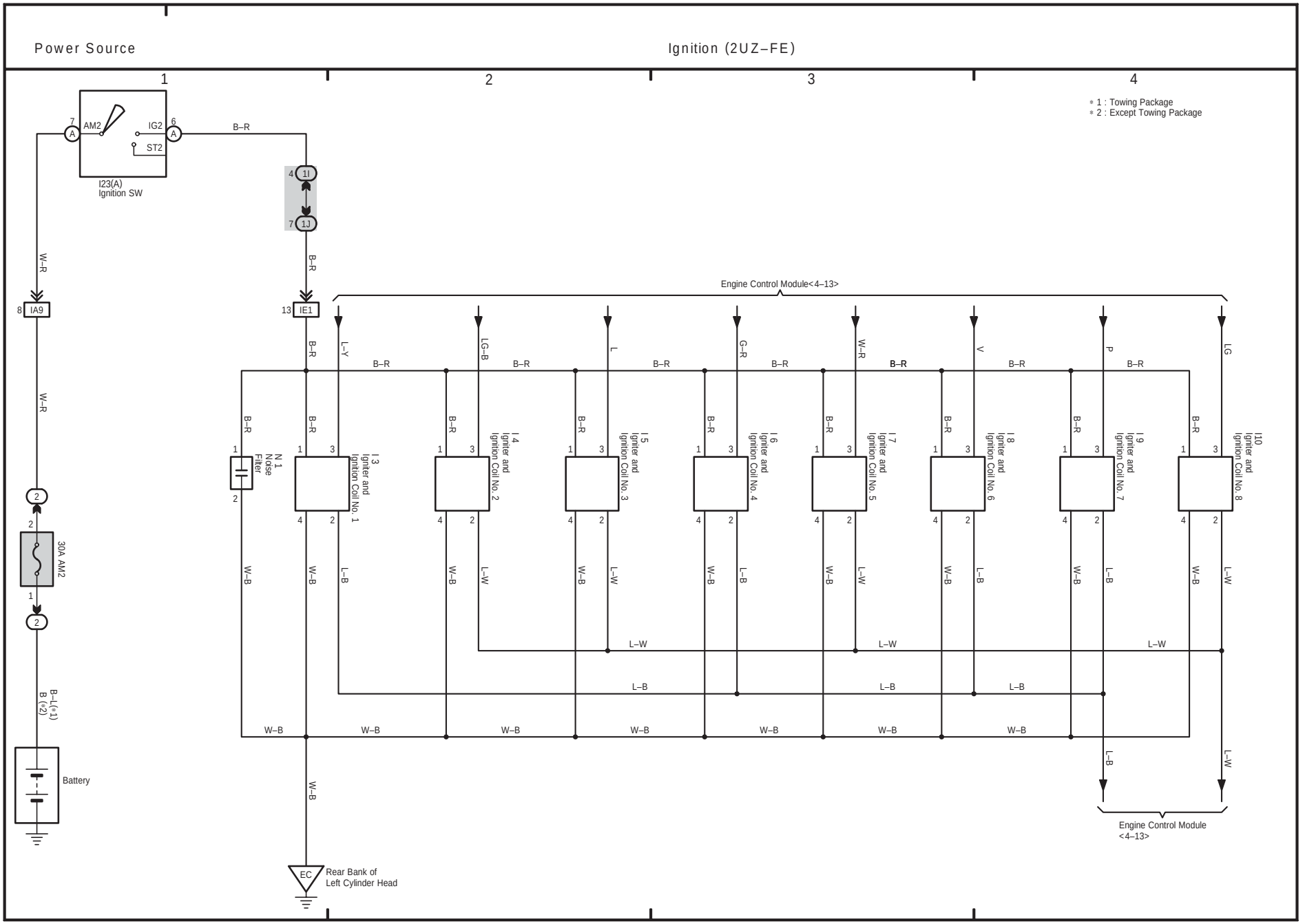
| Code | Part Name | Part Number |
|---|---|---|
| S40 | Seat Position Airbag Sensor (Front Passenger's Side) (Bench Seat) | 90980–12195 |
| | Seat Position Airbag Sensor (Front Passenger's Side) (Separate Seat) | 90980–12416 |
| S41 | Seat Position Airbag Sensor (Driver's Side) | 90980–12416 |
| T 3 | Transfer Shift Actuator | 90980–11858 |
| T 5 | Turn Signal Flasher | 90980–10799 |
| T 6 | Trailer Socket (Except Towing Package) | 82824–34040 |
| | Trailer Socket (Towing Package) | 82824–34050 |
| T 7 | Tweeter LH (Access Cab, Standard Cab) | 90980–10906 |
| | Tweeter LH (Double Cab) | 90980–11012 |
| T 8 | Tweeter RH (Access Cab, Standard Cab) | 90980–10906 |
| | Tweeter RH (Double Cab) | 90980–11012 |
| T 9 | Trailer Converter | 90980–11535 |
| T10 | TVIP Buzzer | 90980–11051 |
| T11 | TVIP ECU | 90980–11424 |
| T12 | TVIP ECU | 90980–11392 |
| T13 | TVIP ECU | 90980–10799 |
| T14 | Throttle Control Motor and Throttle Position Sensor | 90980–11858 |
| T15 | Theft Deterrent Horn | 90980–10619 |
| T16 | Tire Pressure Monitor ECU | 90980–12553 |
| T17 | Tire Pressure Warning Standardization SW | 90980–10906 |
| T18 | Tire Pressure Monitor Receiver | 90980–11909 |
| T19 | Transponder Key Computer | 90980–11556 |
| T20 | Transponder Key Amplifier | 90980–10996 |
| U 1 | Unlock Warning SW | 90980–10860 |
| V 2 | Vehicle Speed Sensor (Combination Meter) | 90980–11143 |
| V 3 | Vehicle Speed Sensor (Electronically Controlled Transmission) | 90980–11156 |
| V 4 | VSV (Purge) | |
| V 6 | Vanity Light LH (Access Cab, Standard Cab) | 90980–11368 |
| | Vanity Light LH (Double Cab) | 90980–11369 |
| V 7 | Vanity Light RH (Access Cab, Standard Cab) | 90980–11368 |
| | Vanity Light RH (Double Cab) | 90980–11369 |
| V10 | Video Terminal | 90980–12264 |
| V11 | VSC Warning Buzzer | 90980–10906 |
| V12 | Voltage Inverter | 90980–10799 |
| V13 | VSV (ACIS) | 90980–11156 |
| V14 | VSV (Air Switching Valve Bank 1) | 90980–11149 |
| V15 | VSV (Air Switching Valve Bank 2) | |
| V16 | VVT Sensor LH (1GR–FE) | 90980–12353 |
| | VVT Sensor LH (2UZ–FE) | 90980–10947 |
| V17 | VVT Sensor RH (1GR–FE) | 90980–12353 |
| | VVT Sensor RH (2UZ–FE) | 90980–10947 |

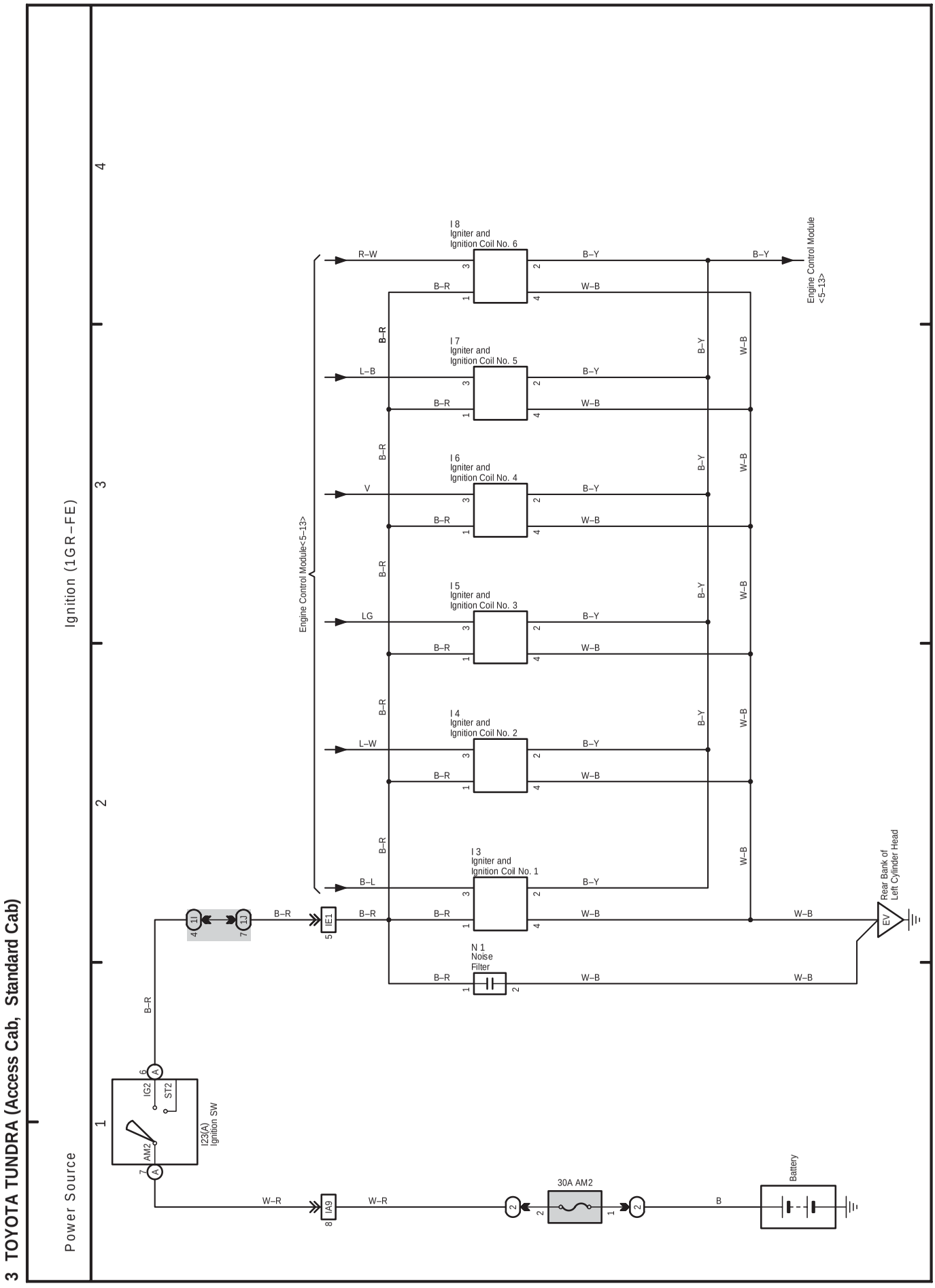
Note: Not all of the above part numbers of the connector are established for the supply.

| Code | Part Name | Part Number |
|---|---|---|
| W 2 | Washer Level Sensor | 90980–11177 |
| | Washer Motor | |
| W 4 | Wiper Motor | 90980–11599 |

| Code | Part Name | Part Number |
|---|---|---|
| W 5 | Wireless Door Lock Buzzer | 90980–11142 |
| Y 1 | Yaw Rate Sensor | 90980–11904 |

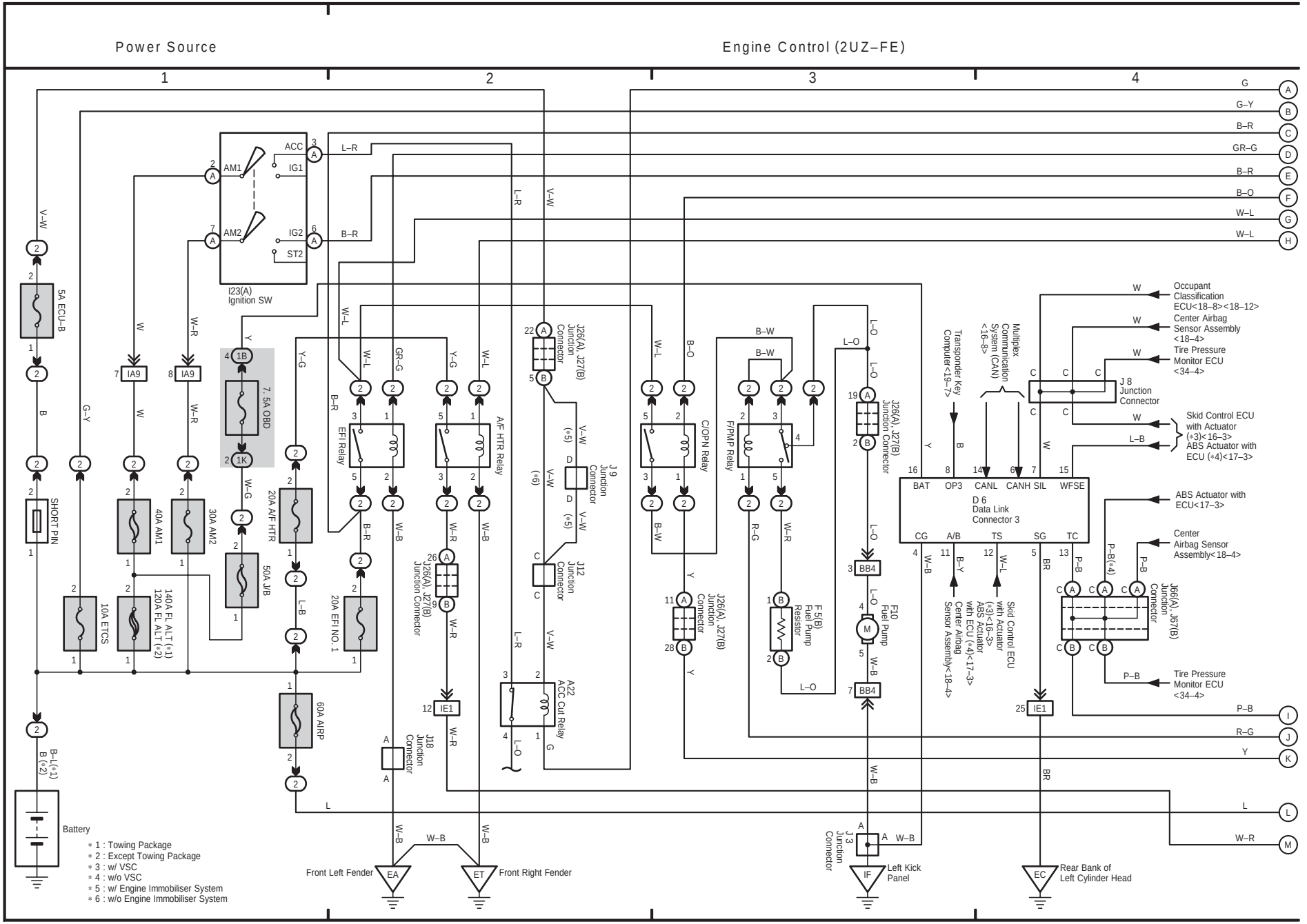

1 TOYOTA TUNDRA (Access Cab, Standard Cab)
Power Source
Starting
Charging
C12(B) Combination Meter
Charge
5A IGN
10A GAUGE
5A STA
J12 Junction Connector
J26(A), J27(B) Junction Connector
J 2 Junction Connector
Integration Relay<6–3>
G 1(A), (C), G 2(B), (D) Generator
Engine Control Module (STA) <4–14><5–14>
Engine Control Module (NSW) <4–10><5–10>
P 1 Park/Neutral Position SW
J28(A), J29(B) Junction Connector
Engine Control Module (STSW) (A/T)<4–14><5–14>
Engine Control Module (STA) (M/T)<5–14>
J 3 Junction Connector
Left Kick Panel
C10 Clutch Start SW
T13(C) TVIP ECU
J23(A) Junction Connector
ST RLY
S 1(A), (B), (C), S 2(D) Starter
30A ST3
7. 5A ALT–S
I23(A) Ignition SW
30A AM2
40A AM1
140A FL ALT (*3)
120A FL ALT (*4)
Battery
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light
* 3 : Towing Package
* 4 : Except Towing Package
* 5 : 1GR–FE
* 6 : 2UZ–FE
* 7 : 1GR–FE Cold Area Spec.
* 8 : 1GR–FE Except Cold Area Spec.


Power Source
Ignition (2UZ–FE)
1
2
3
4
* 1 : Towing Package
* 2 : Except Towing Package
I23(A)
Ignition SW
AM2
IG2
ST2
B–R
1I
1J
W–R
IA9
IE1
B–R
Engine Control Module<4–13>
L–Y
LG–B
L
G–R
W–R
B–R
V
P
LG
N 1
Noise
Filter
I 3
Igniter and
Ignition Coil No. 1
I 4
Igniter and
Ignition Coil No. 2
I 5
Igniter and
Ignition Coil No. 3
I 6
Igniter and
Ignition Coil No. 4
I 7
Igniter and
Ignition Coil No. 5
I 8
Igniter and
Ignition Coil No. 6
I 9
Igniter and
Ignition Coil No. 7
I10
Igniter and
Ignition Coil No. 8
30A AM2
B–L(*1)
B (*2)
Battery
W–B
L–B
L–W
EC
Rear Bank of
Left Cylinder Head
Engine Control Module
<4–13>

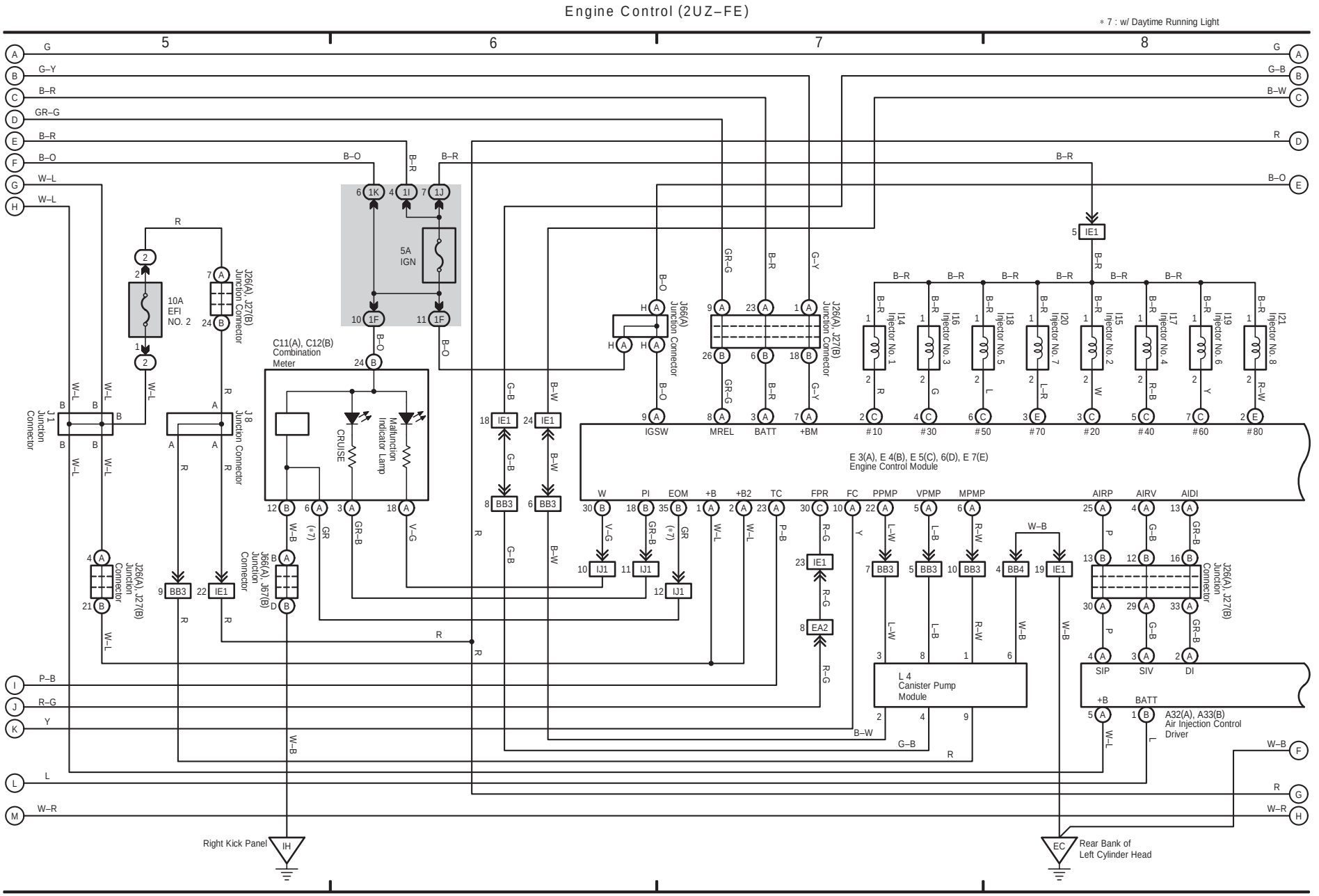

3 TOYOTA TUNDRA (Access Cab, Standard Cab)
Power Source
Ignition (1GR-FE)
1
2
3
4
I8 Igniter and Ignition Coil No. 6
I7 Igniter and Ignition Coil No. 5
I6 Igniter and Ignition Coil No. 4
I5 Igniter and Ignition Coil No. 3
I4 Igniter and Ignition Coil No. 2
I3 Igniter and Ignition Coil No. 1
N1 Noise Filter
Engine Control Module<5-13>
Engine Control Module <5-13>
Rear Bank of Left Cylinder Head
I23(A) Ignition SW
IG2
ST2
AM2
30A AM2
Battery
R-W
L-B
V
LG
L-W
B-L
W-R
B-R
B-Y
W-B
B

## 4 TOYOTA TUNDRA (Access Cab, Standard Cab)

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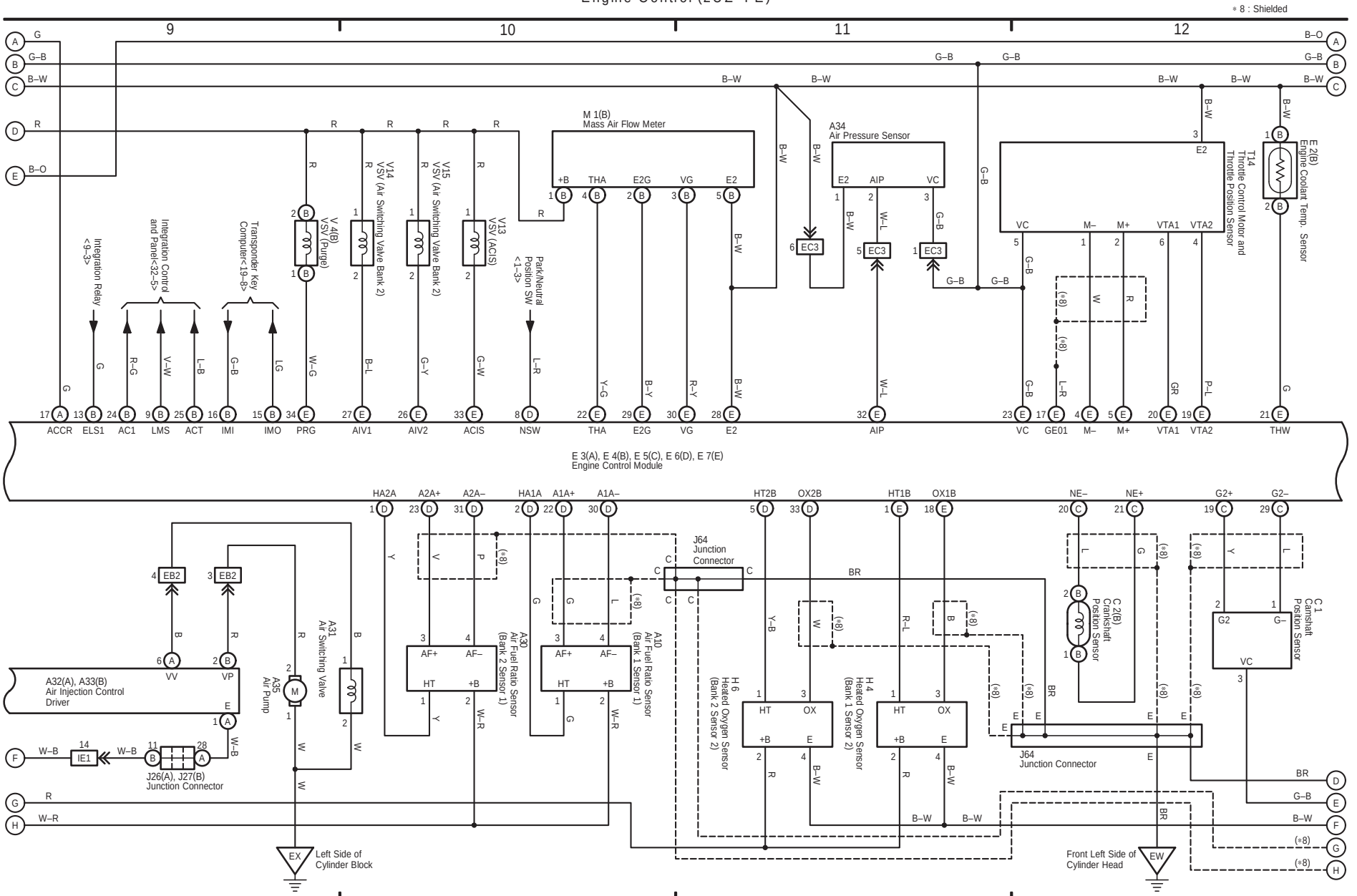


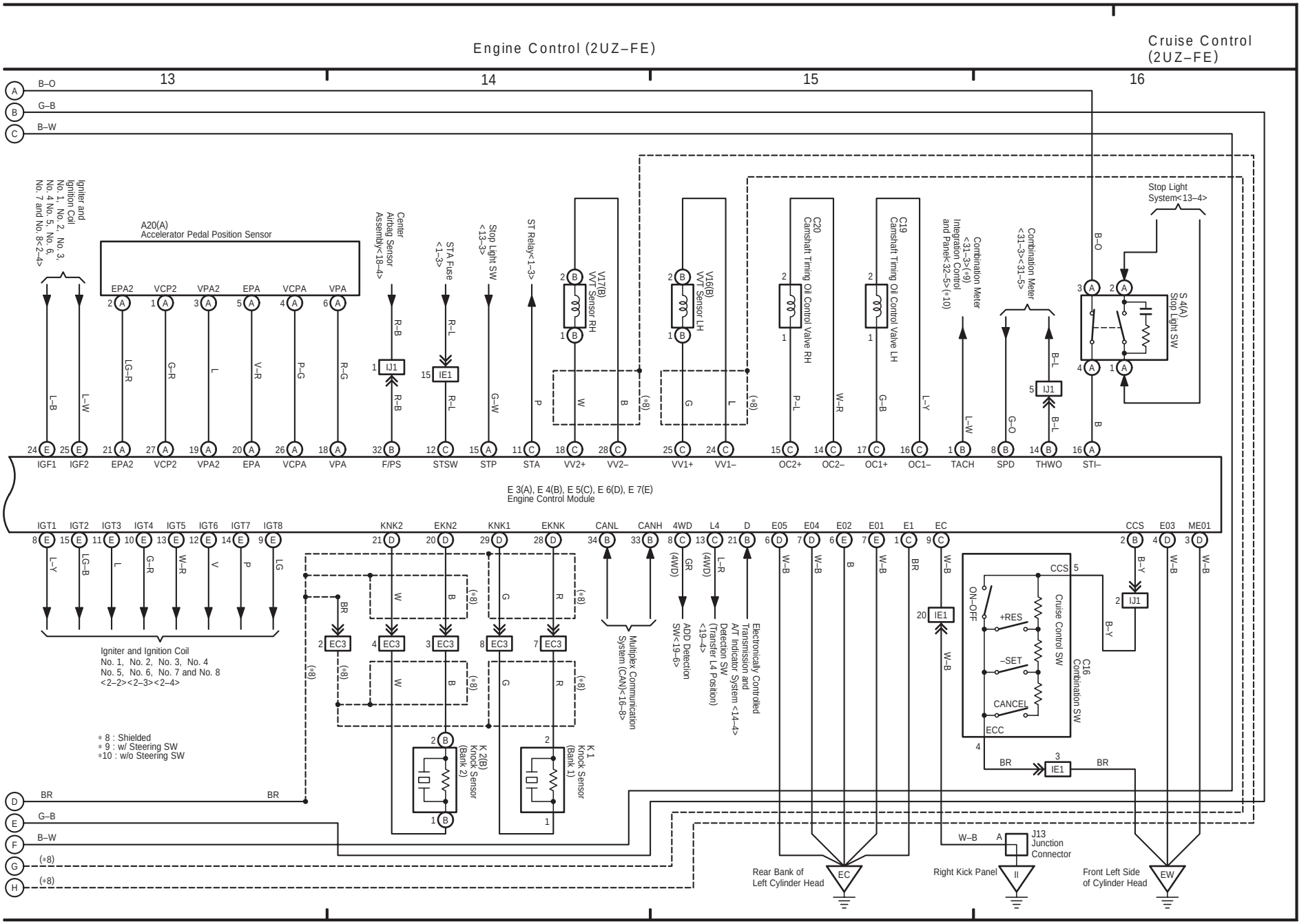
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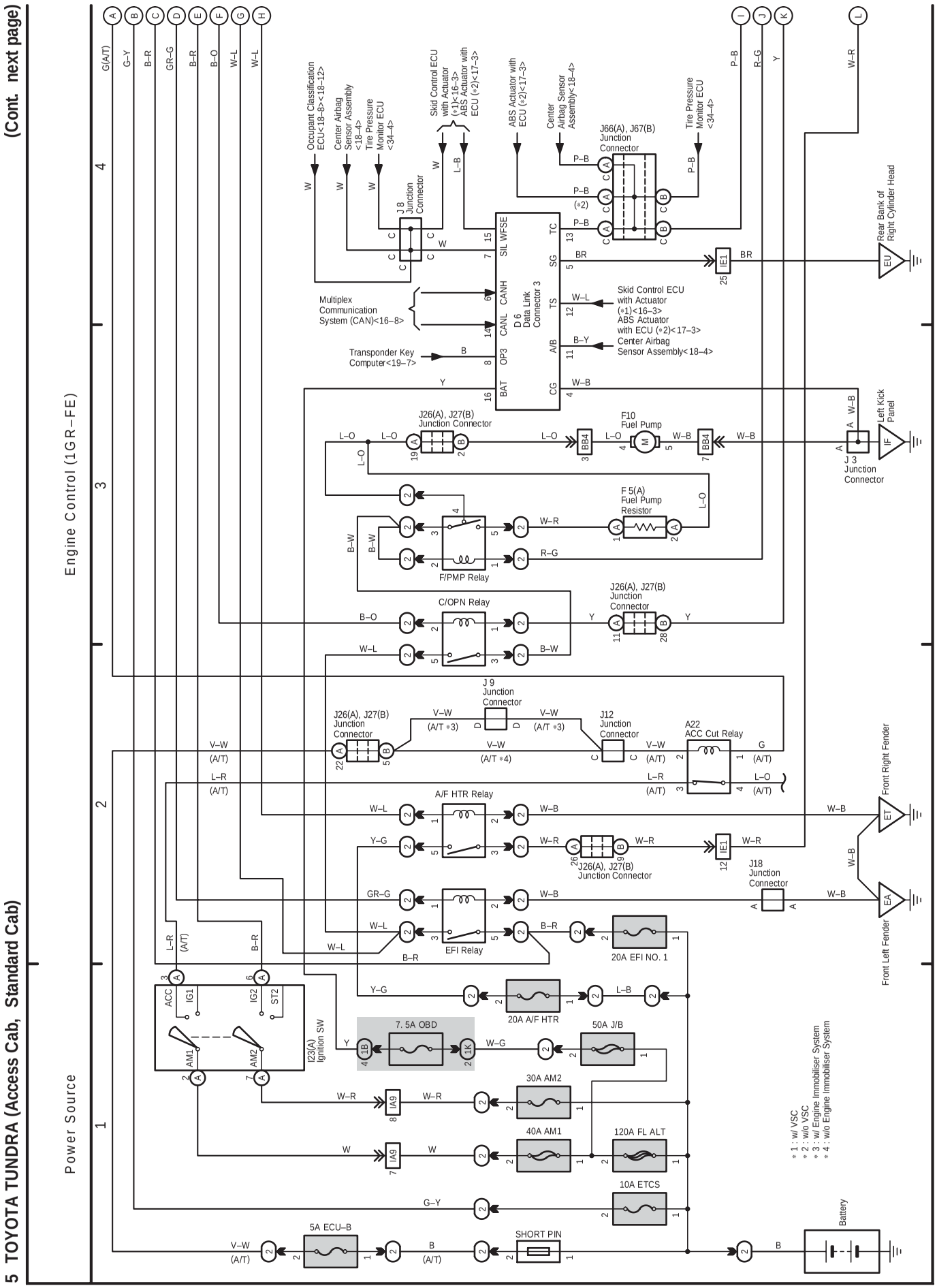


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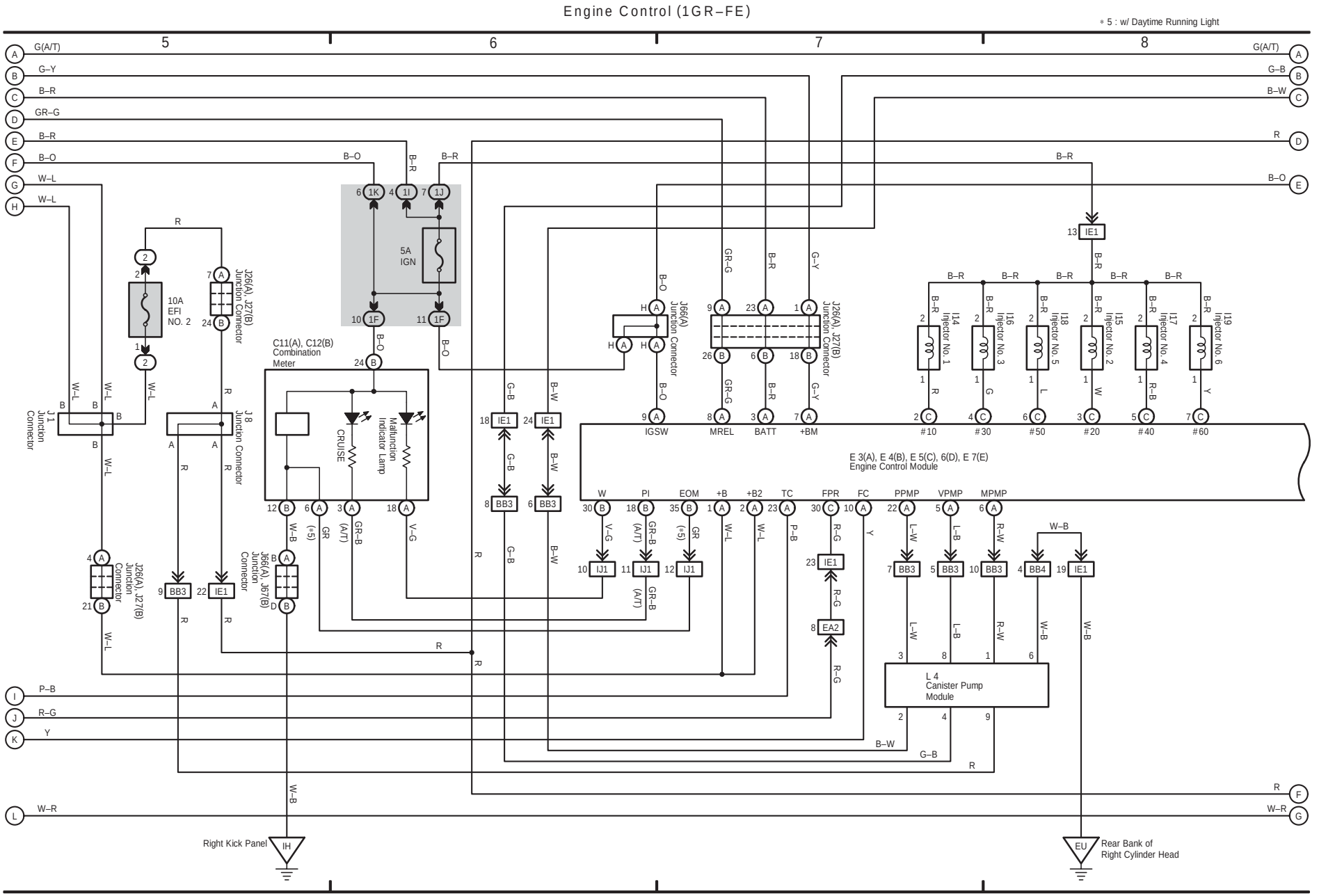
Engine Control (2UZ–FE)

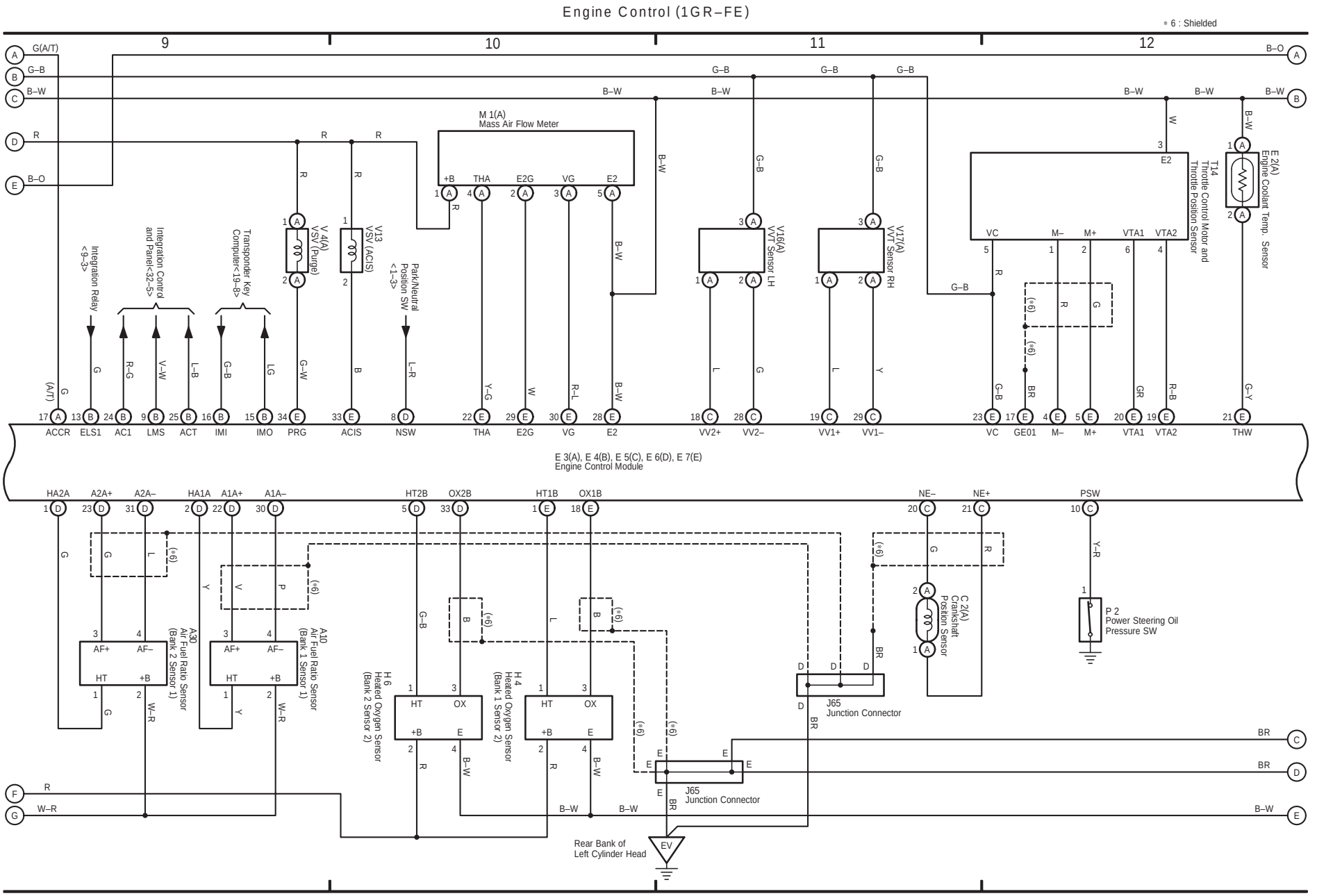


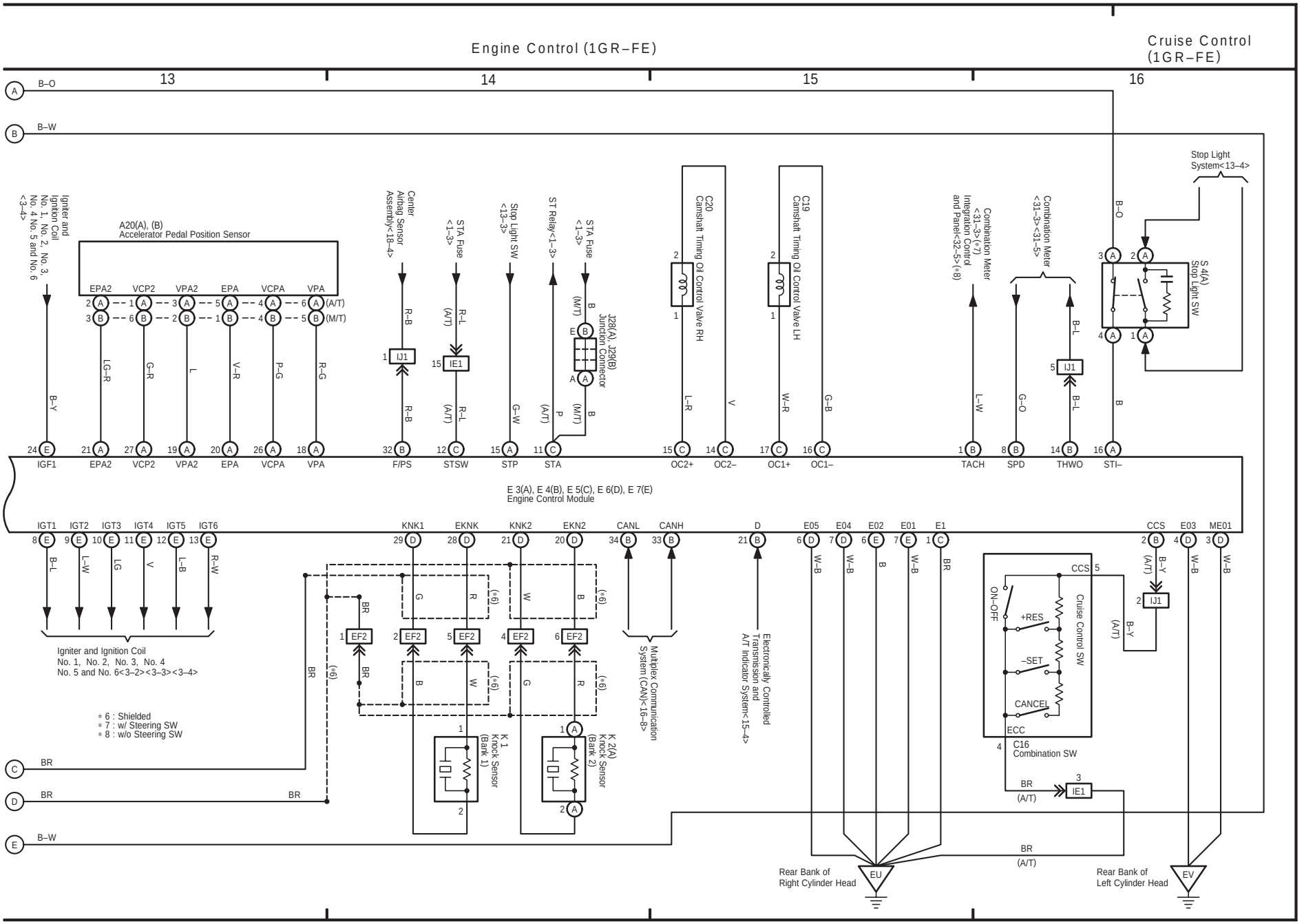

Engine Control (2UZ–FE)
Cruise Control (2UZ–FE)
13
14
15
16
B–O
G–B
B–W
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5, No. 6, No. 7 and No. 8<2–4>
A20(A) Accelerator Pedal Position Sensor
EPA2
VCP2
VPA2
EPA
VCPA
VPA
Center Airbag Sensor Assembly<18–4>
STA Fuse <1–3>
Stop Light SW <13–3>
ST Relay<1–3>
V17(B) VVT Sensor RH
V16(B) VVT Sensor LH
C20 Camshaft Timing Oil Control Valve RH
C19 Camshaft Timing Oil Control Valve LH
Combination Meter Integration Control and Panel<32–5>(*10)
Combination Meter <31–3><31–5>
Stop Light System<13–4>
S 4(A) Stop Light SW
IGF1
IGF2
EPA2
VCP2
VPA2
EPA
VCPA
VPA
F/PS
STSW
STP
STA
VV2+
VV2–
VV1+
VV1–
OC2+
OC2–
OC1+
OC1–
TACH
SPD
THWO
STI–
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E) Engine Control Module
IGT1
IGT2
IGT3
IGT4
IGT5
IGT6
IGT7
IGT8
KNK2
EKN2
KNK1
EKNK
CANL
CANH
4WD
L4
D
E05
E04
E02
E01
E1
EC
CCS
E03
ME01
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5, No. 6, No. 7 and No. 8 <2–2><2–3><2–4>
Multiplex Communication System (CAN)<16–8>
ADD Detection SW<19–6>
Electronically Controlled Transmission and A/T Indicator System <14–4>
Detection SW (Transfer L4 Position) <19–4>
K 2(B) Knock Sensor (Bank 2)
K 1 Knock Sensor (Bank 1)
ON–OFF
+RES
–SET
CANCEL
ECC
Cruise Control SW
C16 Combination SW
J13 Junction Connector
Rear Bank of Left Cylinder Head
Right Kick Panel
Front Left Side of Cylinder Head
EC
II
EW
* 8 : Shielded
* 9 : w/ Steering SW
*10 : w/o Steering SW


(Cont. next page)
5 TOYOTA TUNDRA (Access Cab, Standard Cab)
Power Source
Engine Control (1GR–FE)
Occupant Classification ECU<18–8><18–12>
Center Airbag Sensor Assembly <18–4>
Tire Pressure Monitor ECU <34–4>
Skid Control ECU with Actuator (*1)<16–3> ABS Actuator with ECU (*2)<17–3>
ABS Actuator with ECU (*2)<17–3>
Center Airbag Sensor Assembly<18–4>
Tire Pressure Monitor ECU <34–4>
J66(A), J67(B) Junction Connector
J8 Junction Connector
SIL WFSE
CANH
CANL
OP3
BAT
TC
SG
TS
A/B
CG
D 6 Data Link Connector 3
Multiplex Communication System (CAN)<16–8>
Transponder Key Computer<19–7>
Skid Control ECU with Actuator (*1)<16–3> ABS Actuator with ECU (*2)<17–3>
Center Airbag Sensor Assembly<18–4>
Rear Bank of Right Cylinder Head
J26(A), J27(B) Junction Connector
F10 Fuel Pump
Left Kick Panel
J 3 Junction Connector
F 5(A) Fuel Pump Resistor
F/PMP Relay
C/OPN Relay
J 9 Junction Connector
J12 Junction Connector
A22 ACC Cut Relay
A/F HTR Relay
EFI Relay
Front Right Fender
Front Left Fender
J18 Junction Connector
ACC
IG1
IG2
ST2
AM1
AM2
I23(A) Ignition SW
7. 5A OBD
20A A/F HTR
50A J/B
20A EFI NO. 1
30A AM2
40A AM1
120A FL ALT
10A ETCS
5A ECU–B
SHORT PIN
Battery
* 1 : w/ VSC
* 2 : w/o VSC
* 3 : w/ Engine Immobiliser System
* 4 : w/o Engine Immobiliser System

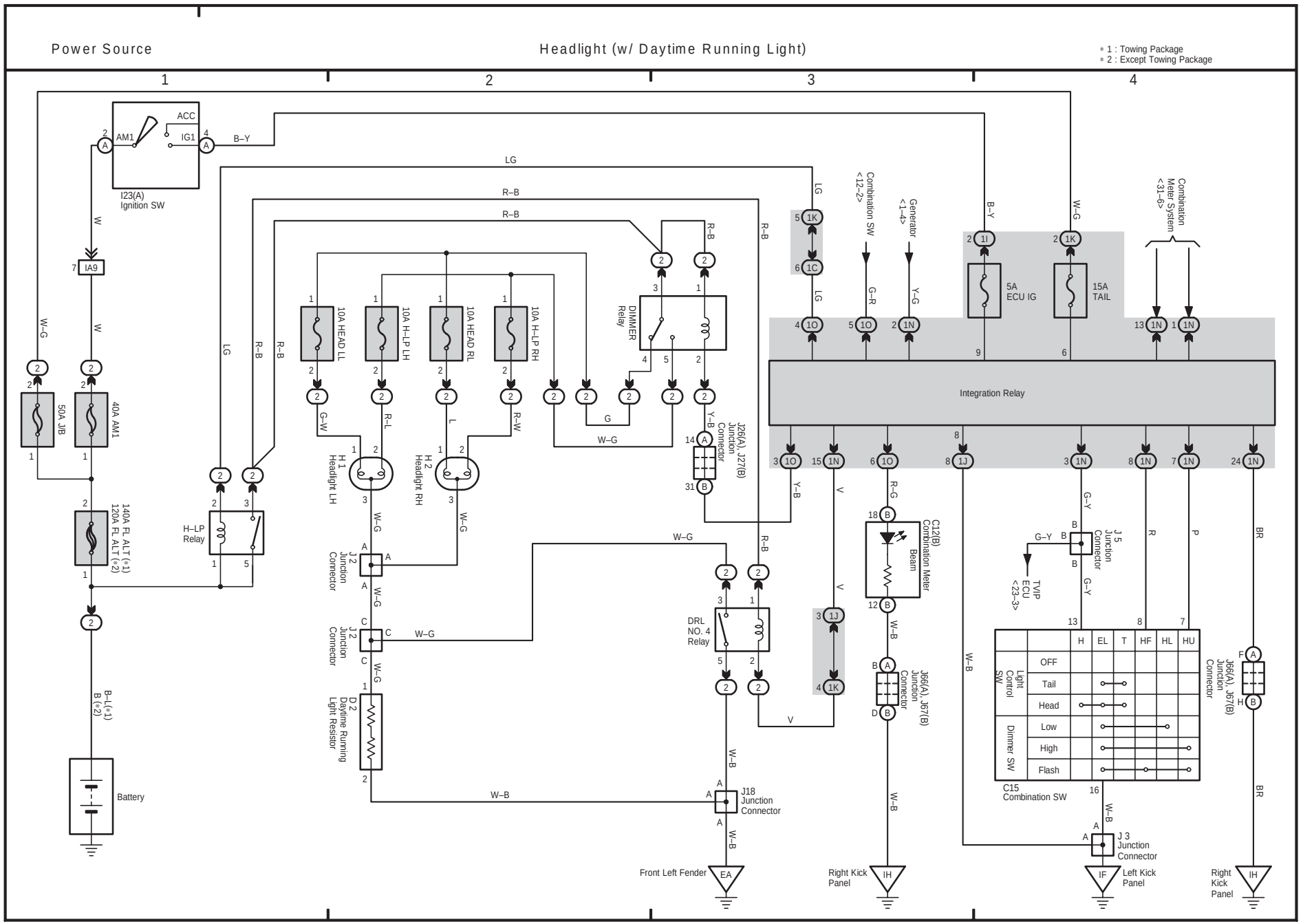
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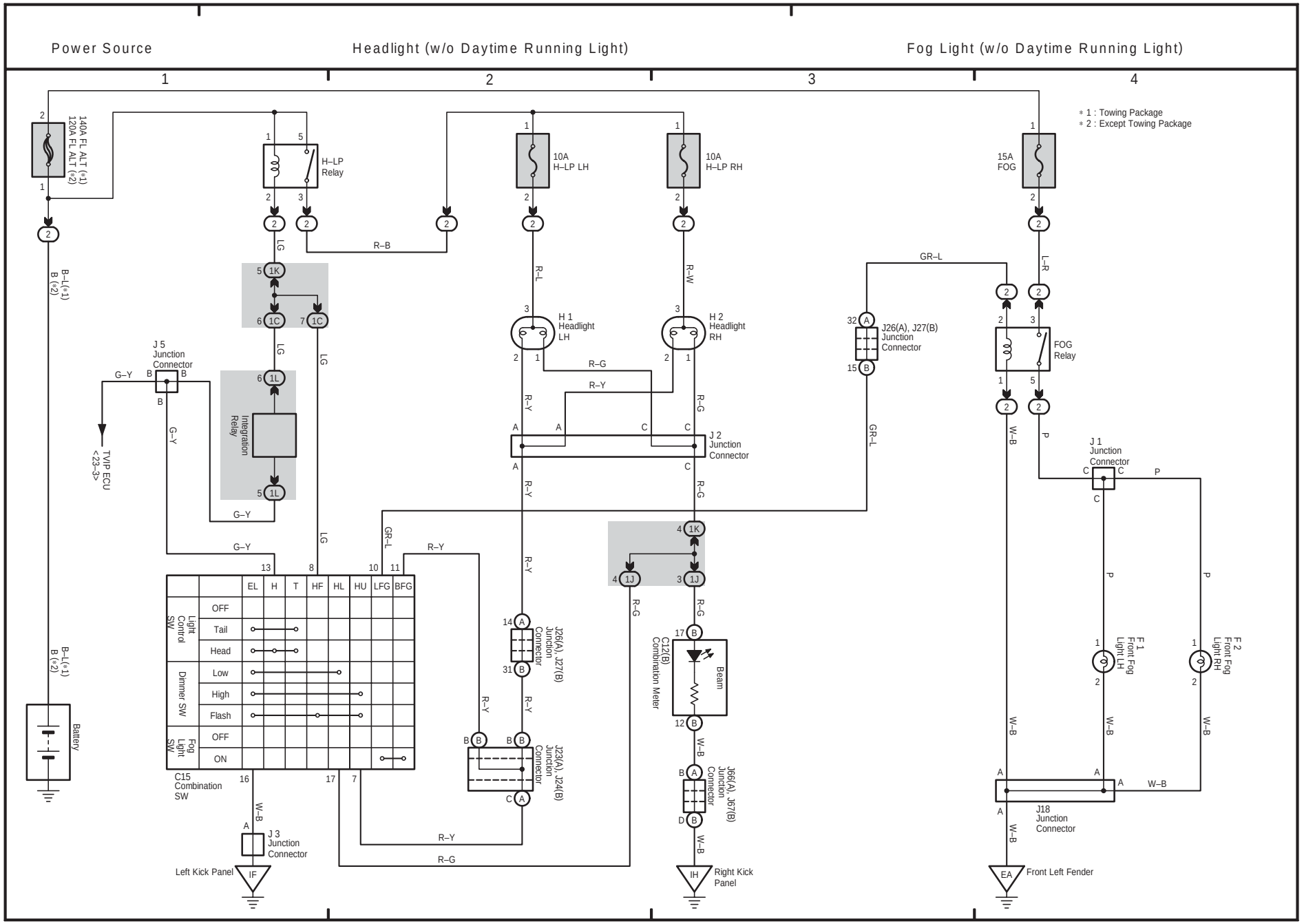



Engine Control (1GR–FE)
* 6 : Shielded
9
10
11
12
G(A/T)
B–O
G–B
B–W
R
M 1(A)
Mass Air Flow Meter
+B
THA
E2G
VG
E2
V 4(A)
VSV (Purge)
V13
VSV (ACIS)
Integration Relay <9–3>
Integration Control and Panel<32–5>
Transponder Key Computer<19–8>
Park/Neutral Position SW <1–3>
V16(A)
VVT Sensor LH
V17(A)
VVT Sensor RH
T14
Throttle Control Motor and Throttle Position Sensor
VC
M–
M+
VTA1
VTA2
E 2(A)
Engine Coolant Temp. Sensor
ACCR
ELS1
AC1
LMS
ACT
IMI
IMO
PRG
ACIS
NSW
THA
E2G
VG
E2
VV2+
VV2–
VV1+
VV1–
VC
GE01
M–
M+
VTA1
VTA2
THW
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
HA2A
A2A+
A2A–
HA1A
A1A+
A1A–
HT2B
OX2B
HT1B
OX1B
NE–
NE+
PSW
A30
Air Fuel Ratio Sensor (Bank 2 Sensor 1)
A10
Air Fuel Ratio Sensor (Bank 1 Sensor 1)
H 6
Heated Oxygen Sensor (Bank 2 Sensor 2)
H 4
Heated Oxygen Sensor (Bank 1 Sensor 2)
C 2(A)
Crankshaft Position Sensor
P 2
Power Steering Oil Pressure SW
J65
Junction Connector
J65
Junction Connector
Rear Bank of Left Cylinder Head
EV

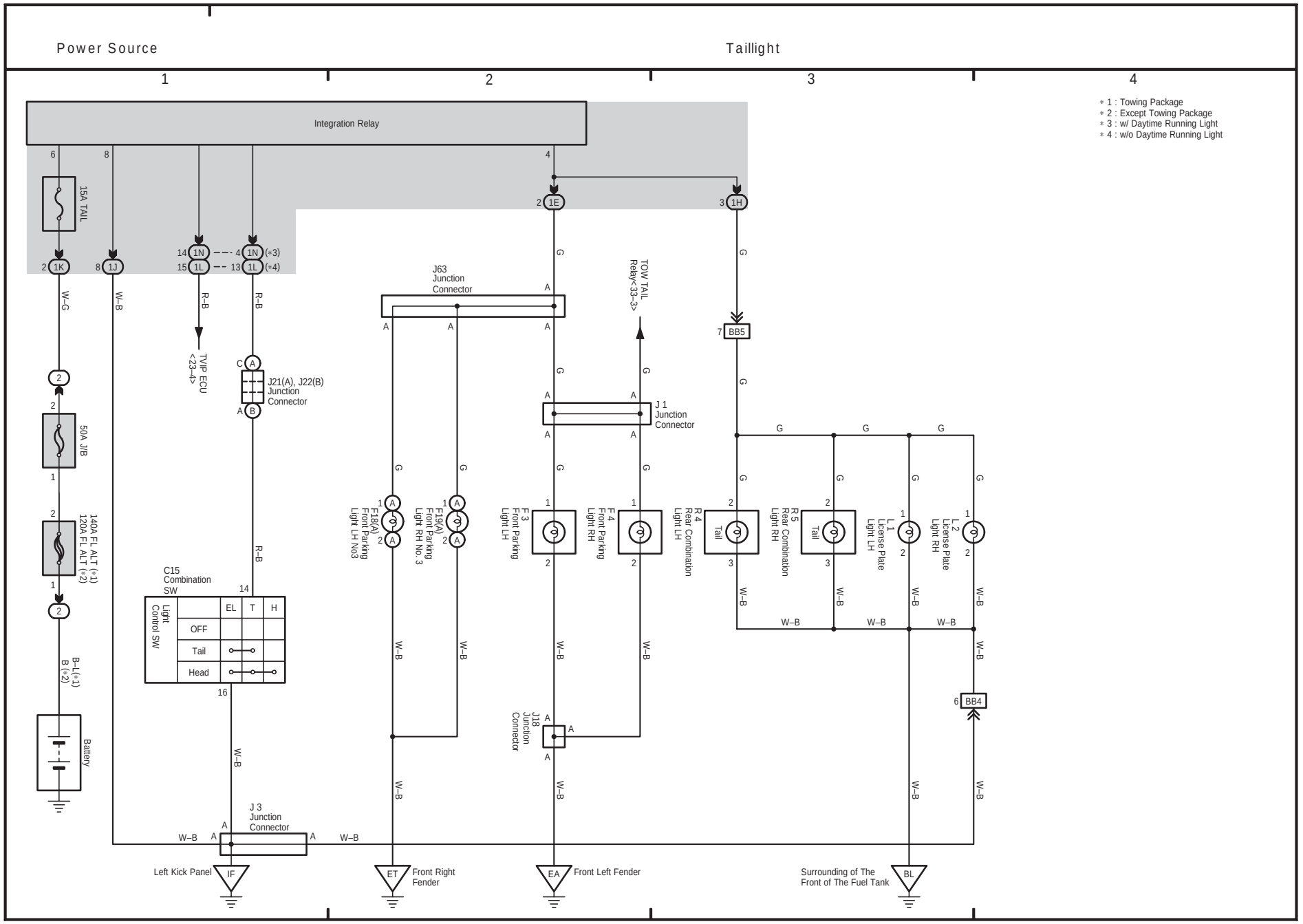

Engine Control (1GR–FE)
Cruise Control (1GR–FE)
13
14
15
16
A20(A), (B) Accelerator Pedal Position Sensor
EPA2 VCP2 VPA2 EPA VCPA VPA
(A/T) (M/T)
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5 and No. 6 <3–4>
Center Airbag Sensor Assembly<18–4>
STA Fuse <1–3>
Stop Light SW <13–3>
ST Relay<1–3>
128(A), 129(B) Junction Connector
C20 Camshaft Timing Oil Control Valve RH
C19 Camshaft Timing Oil Control Valve LH
Combination Meter <31–3><7> Integration Control and Panel<32–5><8>
Combination Meter <31–3><31–5>
Stop Light System<13–4>
S 4(A) Stop Light SW
IGF1 EPA2 VCP2 VPA2 EPA VCPA VPA F/PS STSW STP STA OC2+ OC2– OC1+ OC1– TACH SPD THWO STI–
E 3(A), E 5(C), E 6(D), E 7(E) Engine Control Module
IGT1 IGT2 IGT3 IGT4 IGT5 IGT6 KNK1 EKNK KNK2 EKN2 CANL CANH D E05 E04 E02 E01 E1 CCS E03 ME01
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5 and No. 6<3–2><3–3><3–4>
K 1 Knock Sensor (Bank 1)
K 2(A) Knock Sensor (Bank 2)
Multiplex Communication System (CAN)<16–8>
Electronically Controlled Transmission and A/T Indicator System<15–4>
ON–OFF +RES –SET CANCEL Cruise Control SW
C16 Combination SW
ECC
* 6 : Shielded
* 7 : w/ Steering SW
* 8 : w/o Steering SW
Rear Bank of Right Cylinder Head
Rear Bank of Left Cylinder Head
EU
EV

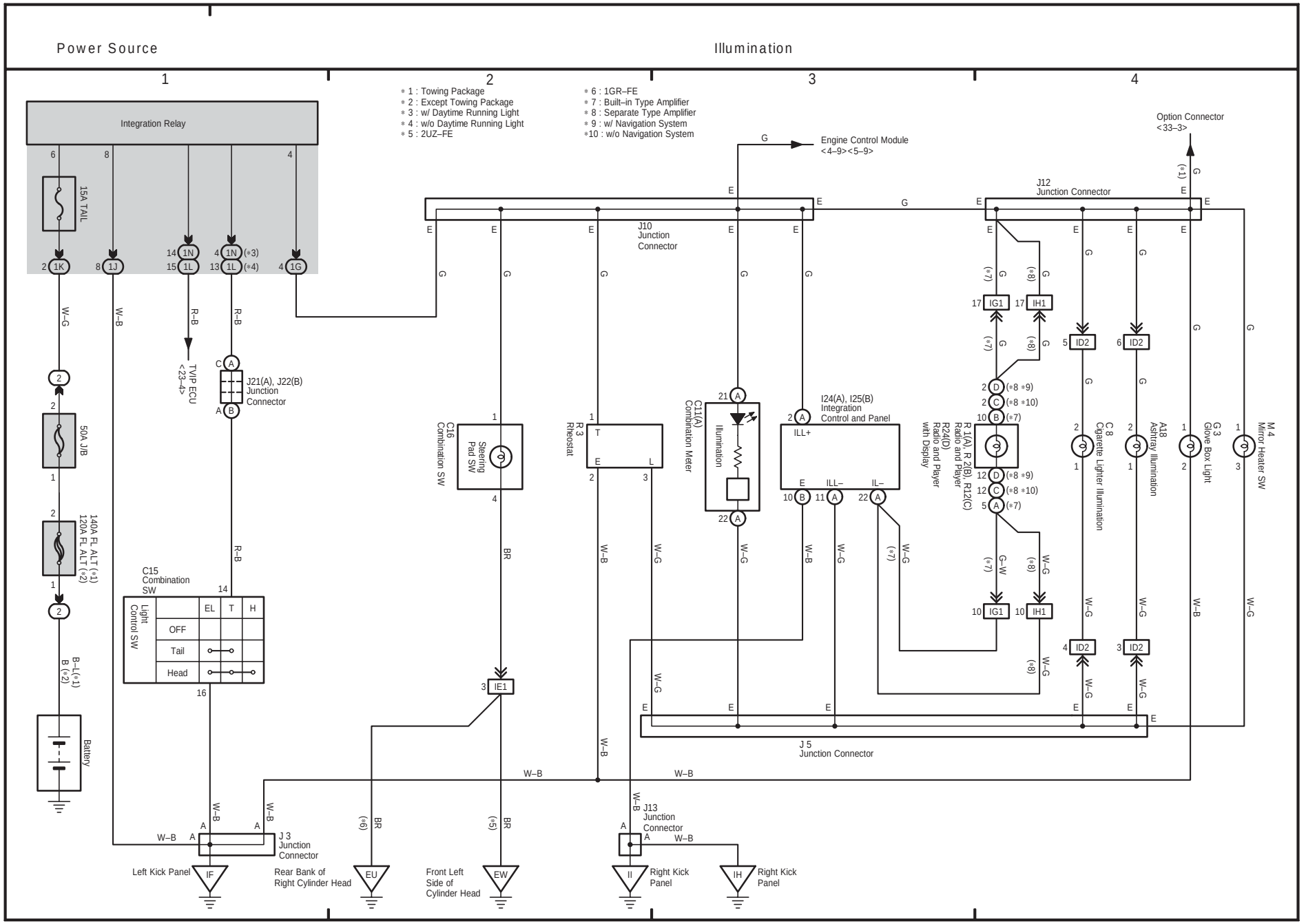
## 6 TOYOTA TUNDRA (Access Cab, Standard Cab)



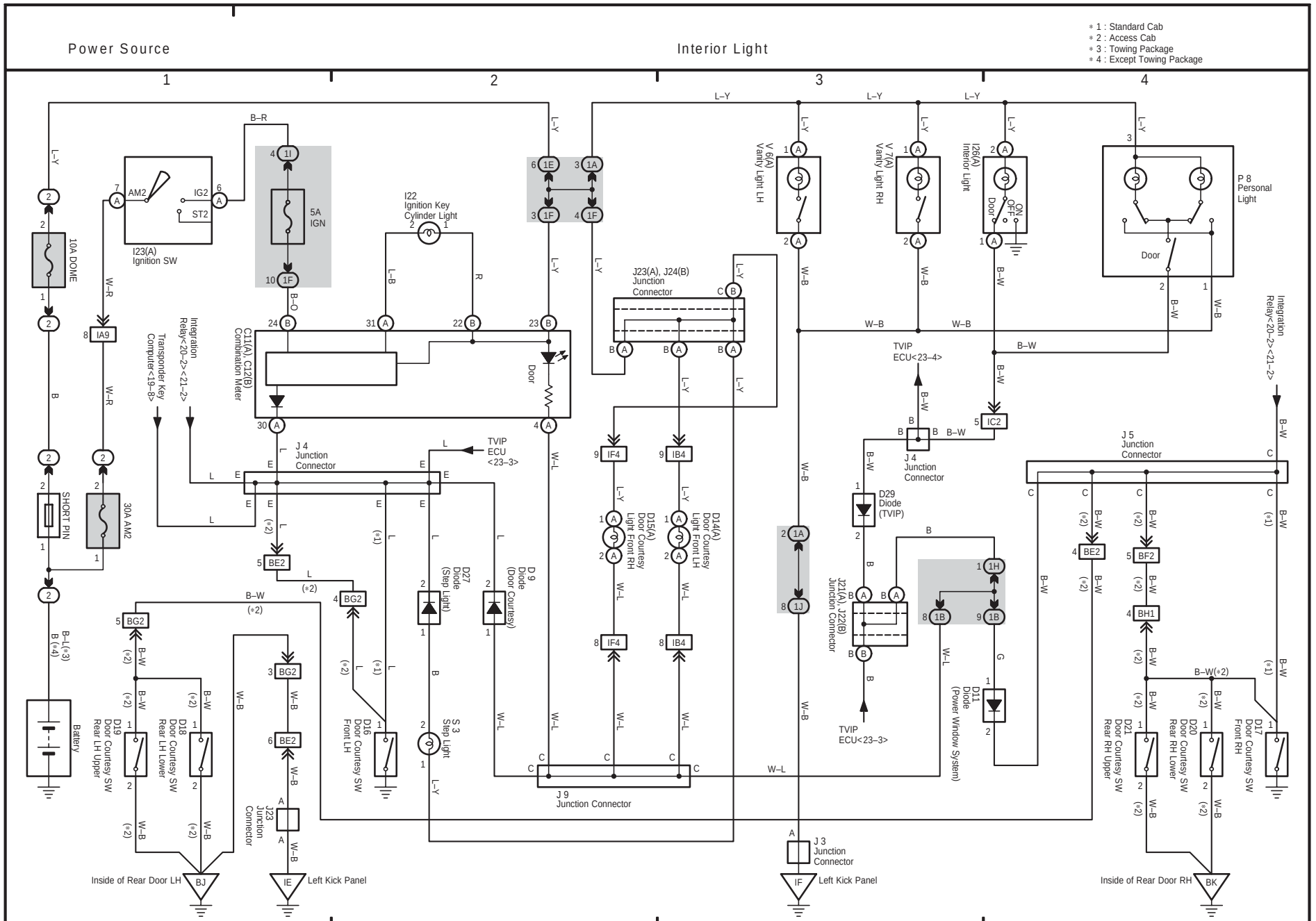

Power Source
Headlight (w/o Daytime Running Light)
Fog Light (w/o Daytime Running Light)
1
2
3
4
* 1 : Towing Package
* 2 : Except Towing Package
140A FL ALT (*1)
120A FL ALT (*2)
H–LP Relay
10A H–LP LH
10A H–LP RH
15A FOG
FOG Relay
H 1 Headlight LH
H 2 Headlight RH
J 5 Junction Connector
Integration Relay
TVIP ECU <23-3>
J 2 Junction Connector
J26(A), J27(B) Junction Connector
J 1 Junction Connector
J18 Junction Connector
J 3 Junction Connector
Left Kick Panel
Right Kick Panel
Front Left Fender
F 1 Front Fog Light LH
F 2 Front Fog Light RH
Battery
C15 Combination SW
C12(B) Combination Meter
Beam
Light Control SW
Dimmer SW
Fog Light SW
OFF
Tail
Head
Low
High
Flash
ON
EL
H
T
HF
HL
HU
LFG
BFG
B–L(*1)
B (*2)
LG
R–B
R–L
R–W
R–G
R–Y
G–Y
GR–L
L–R
W–B
P

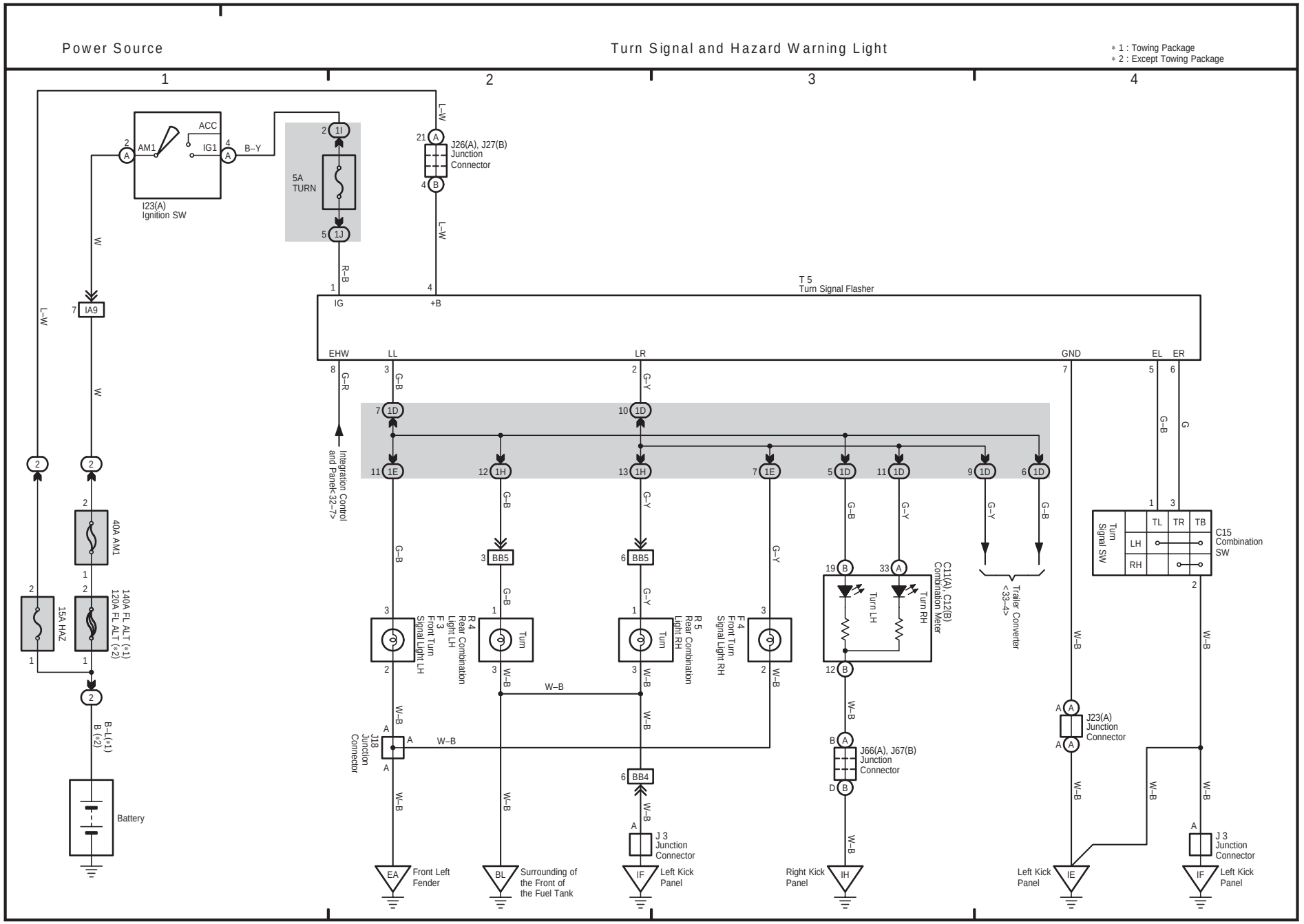
## 8 TOYOTA TUNDRA (Access Cab, Standard Cab)



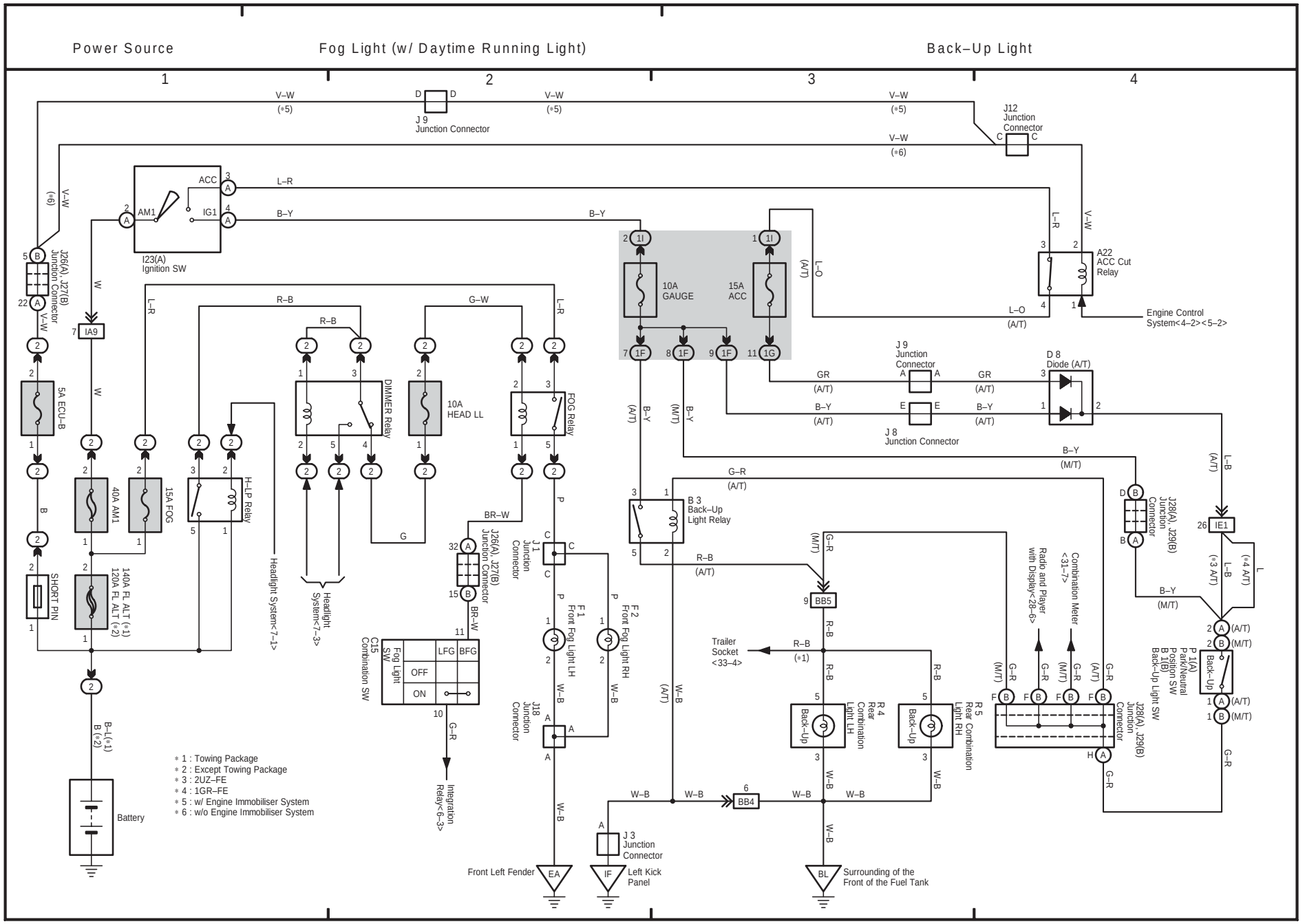

Power Source
Illumination
1
2
3
4
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Daytime Running Light
* 4 : w/o Daytime Running Light
* 5 : 2UZ–FE
* 6 : 1GR–FE
* 7 : Built–in Type Amplifier
* 8 : Separate Type Amplifier
* 9 : w/ Navigation System
*10 : w/o Navigation System
Integration Relay
15A TAIL
50A J/B
140A FL ALT (*1)
120A FL ALT (*2)
Battery
B–(*1)
B (*2)
TVIP ECU <23–4>
J21(A), J22(B) Junction Connector
C15 Combination SW
Light Control SW
EL
T
H
OFF
Tail
Head
C16 Combination SW
Steering Pad SW
R 3 Rheostat
C11(A) Combination Meter
Illumination
I24(A), I25(B) Integration Control and Panel
ILL+
ILL–
IL–
R 1(A), R 2(B), R12(C) Radio and Player
R24(D) Radio and Player with Display
Engine Control Module <4–9><5–9>
Option Connector <33–3>
J10 Junction Connector
J12 Junction Connector
J 5 Junction Connector
J 3 Junction Connector
J13 Junction Connector
C 8 Cigarette Lighter Illumination
A18 Ashtray Illumination
G 3 Glove Box Light
M 4 Mirror Heater SW
IG1
IH1
ID2
IE1
Left Kick Panel
IF
Rear Bank of Right Cylinder Head
EU
Front Left Side of Cylinder Head
EW
Right Kick Panel
II
Right Kick Panel
IH

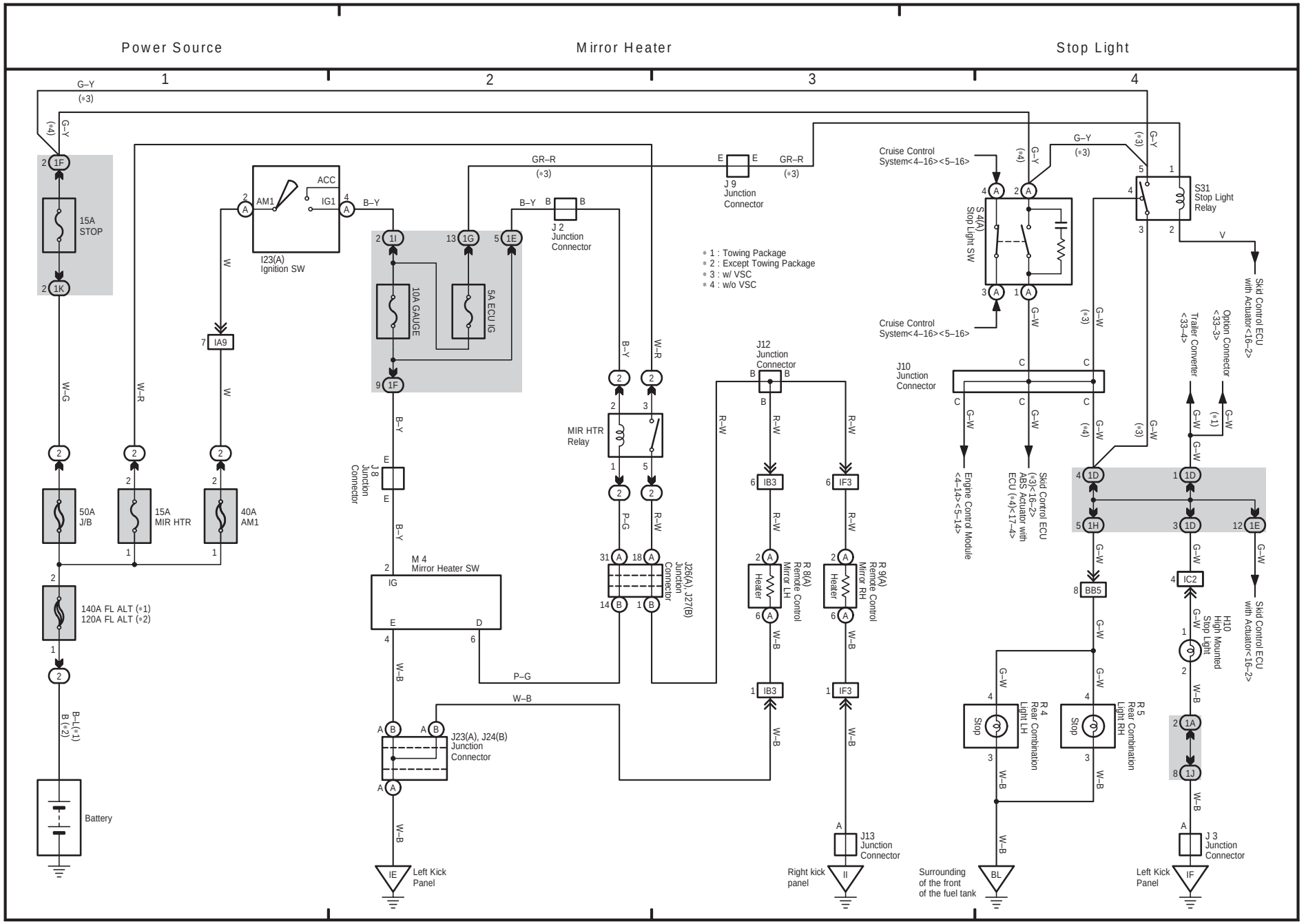
## 10 TOYOTA TUNDRA (Access Cab, Standard Cab)




Power Source
Turn Signal and Hazard Warning Light
* 1 : Towing Package
* 2 : Except Towing Package
1
2
3
4
ACC
AM1
IG1
B–Y
I23(A)
Ignition SW
5A
TURN
J26(A), J27(B)
Junction
Connector
L–W
R–B
W
T 5
Turn Signal Flasher
IG
+B
EHW
LL
LR
GND
EL
ER
G–R
G–B
G–Y
G
IA9
Integration Control
and Panel<32–7>
40A AM1
15A HAZ
140A FL ALT (*1)
120A FL ALT (*2)
B–L(*1)
B (*2)
Battery
R 4
Rear Combination
Light LH
F 3
Front Turn
Signal Light LH
R 5
Rear Combination
Light RH
F 4
Front Turn
Signal Light RH
Turn
BB5
BB4
W–B
J18
Junction
Connector
C11(A), C12(B)
Combination Meter
Turn LH
Turn RH
Trailer Converter
<33–4>
J66(A), J67(B)
Junction
Connector
J23(A)
Junction
Connector
C15
Combination
SW
Turn
Signal SW
TL
TR
TB
LH
RH
J 3
Junction
Connector
EA
Front Left
Fender
BL
Surrounding of
the Front of
the Fuel Tank
IF
Left Kick
Panel
IH
Right Kick
Panel
IE
Left Kick
Panel

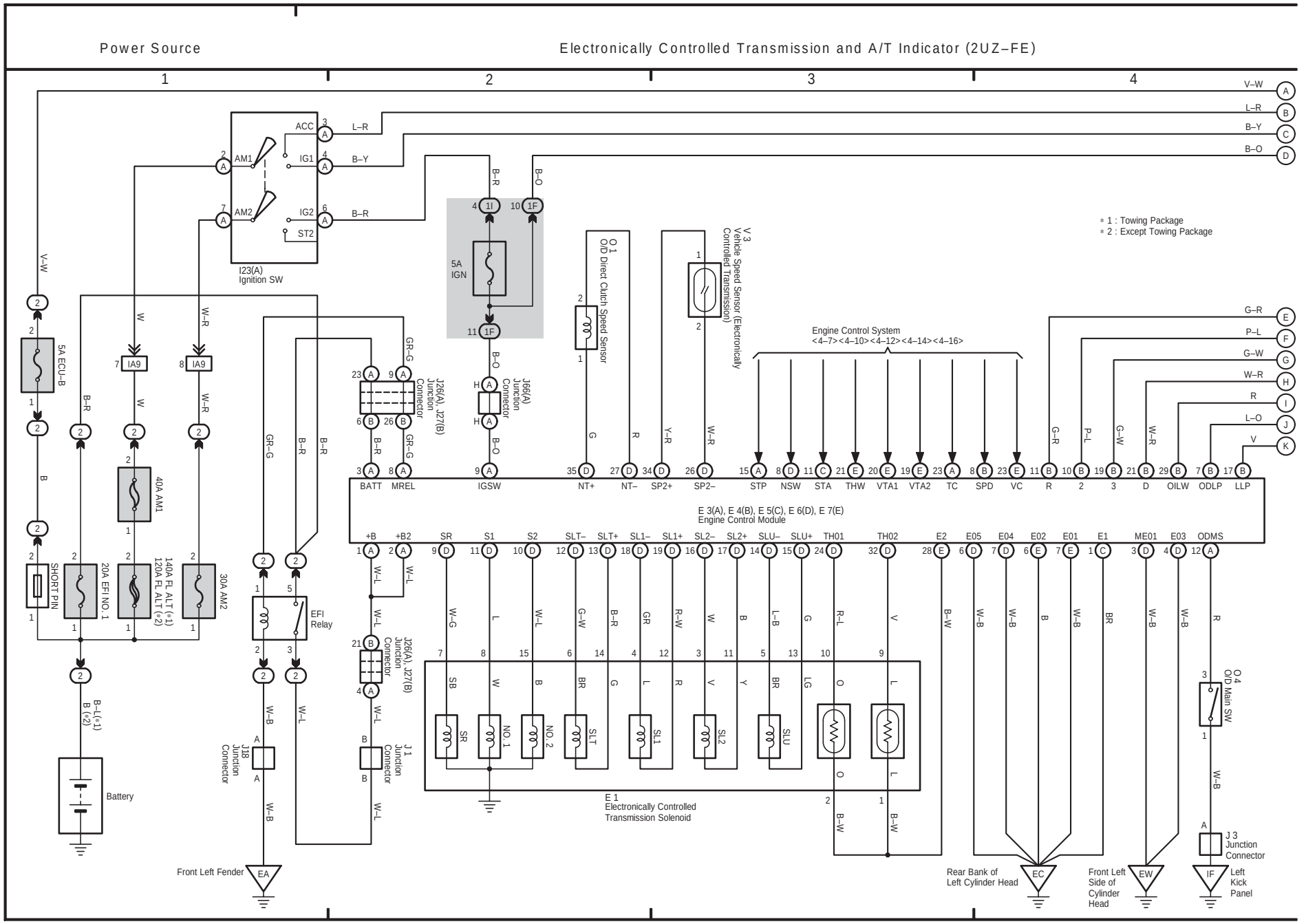
## 12 TOYOTA TUNDRA (Access Cab, Standard Cab)



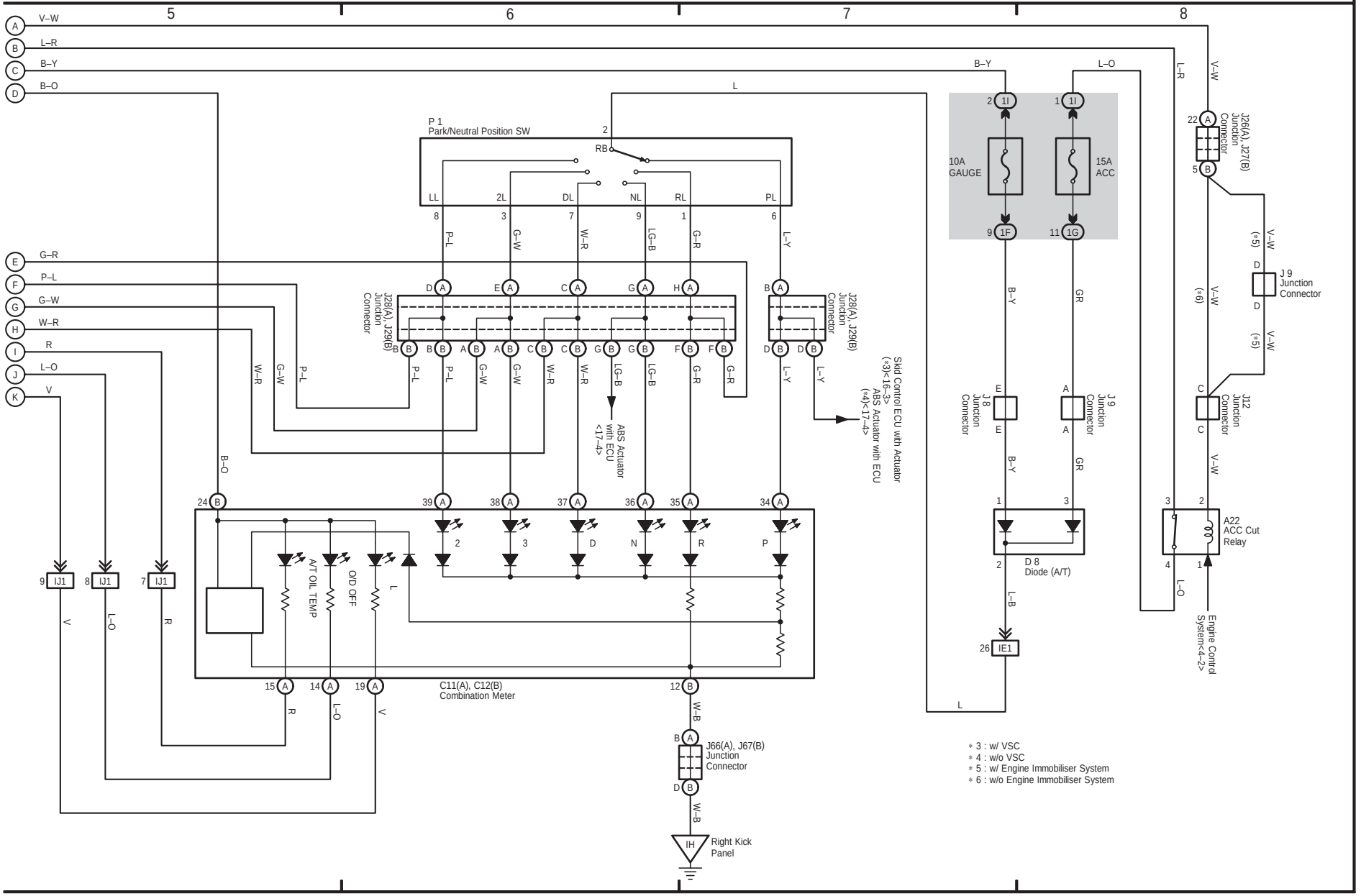

Power Source
Mirror Heater
Stop Light
1
2
3
4
G–Y
(*3)
(*4)
15A STOP
1F
1K
I23(A) Ignition SW
ACC
IG1
AM1
B–Y
W
IA9
GR–R
J 9 Junction Connector
J 2 Junction Connector
10A GAUGE
5A ECU IG
1I
1G
1E
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ VSC
* 4 : w/o VSC
W–G
W–R
50A J/B
15A MIR HTR
40A AM1
140A FL ALT (*1)
120A FL ALT (*2)
B–L (*1)
B (*2)
Battery
J8 Junction Connector
M 4 Mirror Heater SW
IG
P–G
W–B
J23(A), J24(B) Junction Connector
IE
Left Kick Panel
MIR HTR Relay
J12 Junction Connector
R–W
IB3
IF3
R 8(A) Remote Control Mirror LH Heater
R 9(A) Remote Control Mirror RH Heater
J26(A), J27(B) Junction Connector
J13 Junction Connector
Right kick panel
Cruise Control System<4–16><5–16>
S4(A) Stop Light SW
S31 Stop Light Relay
V
J10 Junction Connector
Engine Control Module <4–14><5–14>
Skid Control ECU (*3)<16–2> ABS Actuator with ECU (*4)<17–4>
Option Connector <33–3>
Trailer Converter <33–4>
Skid Control ECU with Actuator<16–2>
1D
1H
1E
BB5
IC2
H10 High Mounted Stop Light
1A
1J
J 3 Junction Connector
IF
R 4 Rear Combination Light LH
R 5 Rear Combination Light RH
Stop
BL
Surrounding of the front of the fuel tank

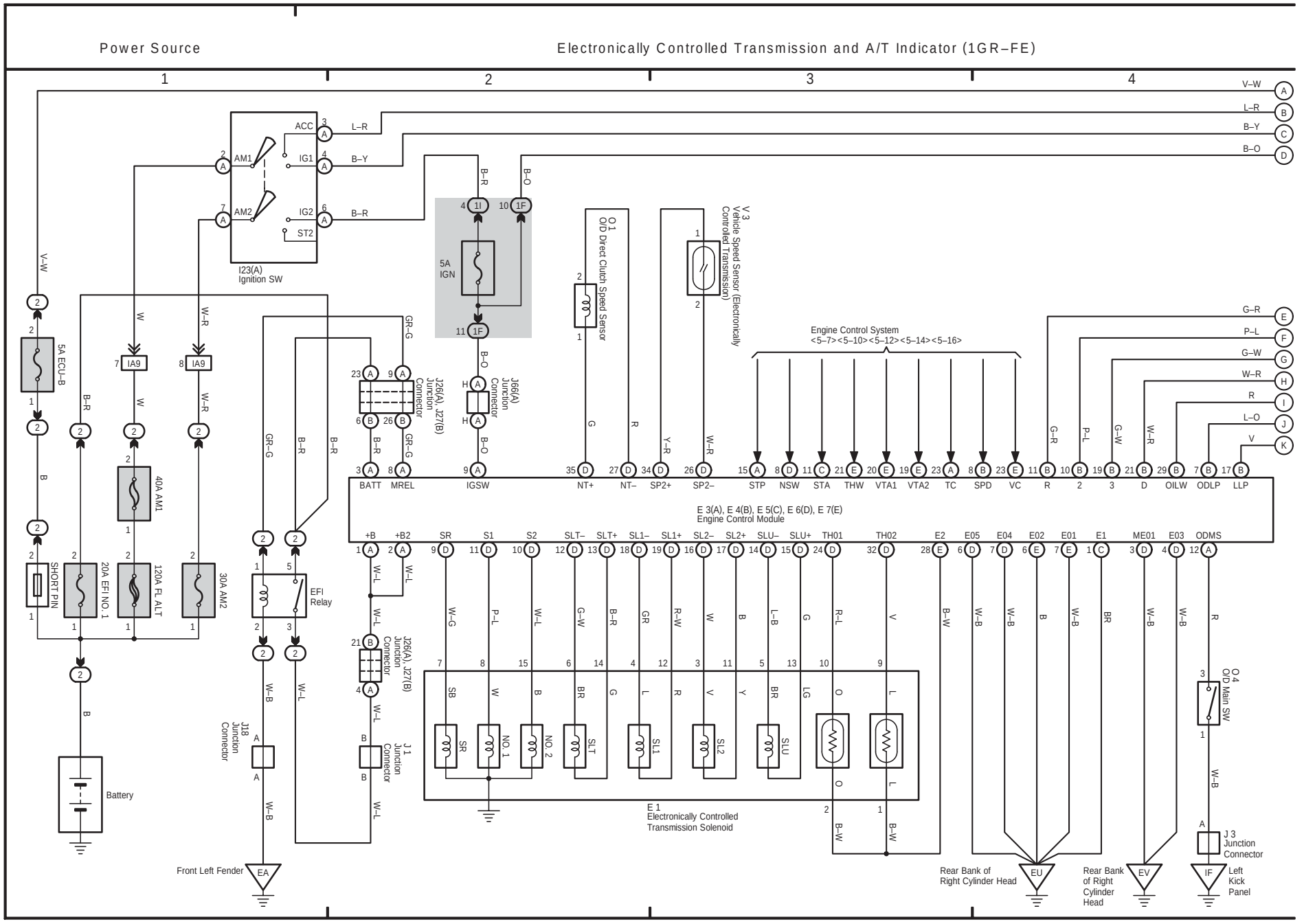
## 14 TOYOTA TUNDRA (Access Cab, Standard Cab)

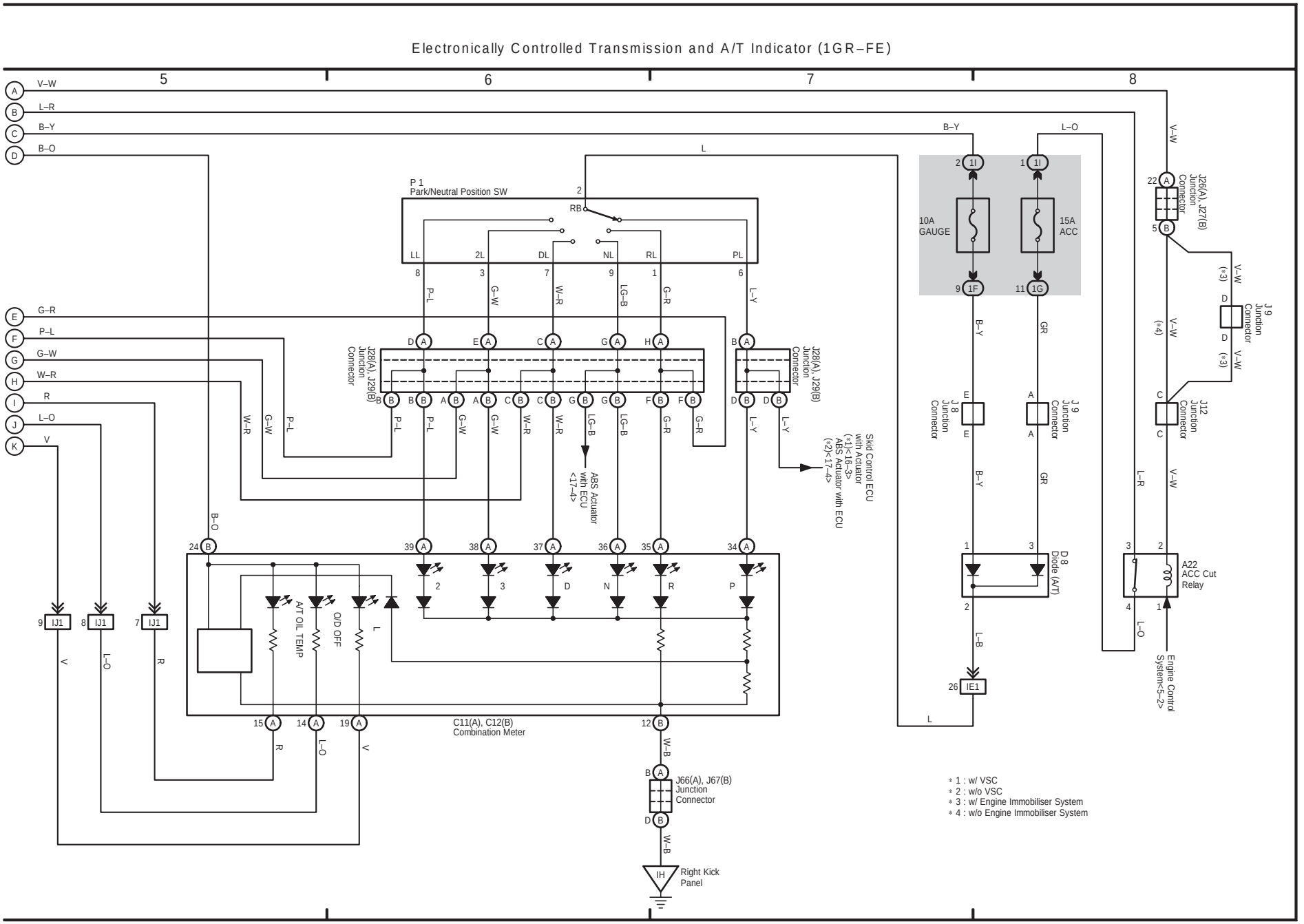
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Electronically Controlled Transmission and A/T Indicator (2UZ–FE)

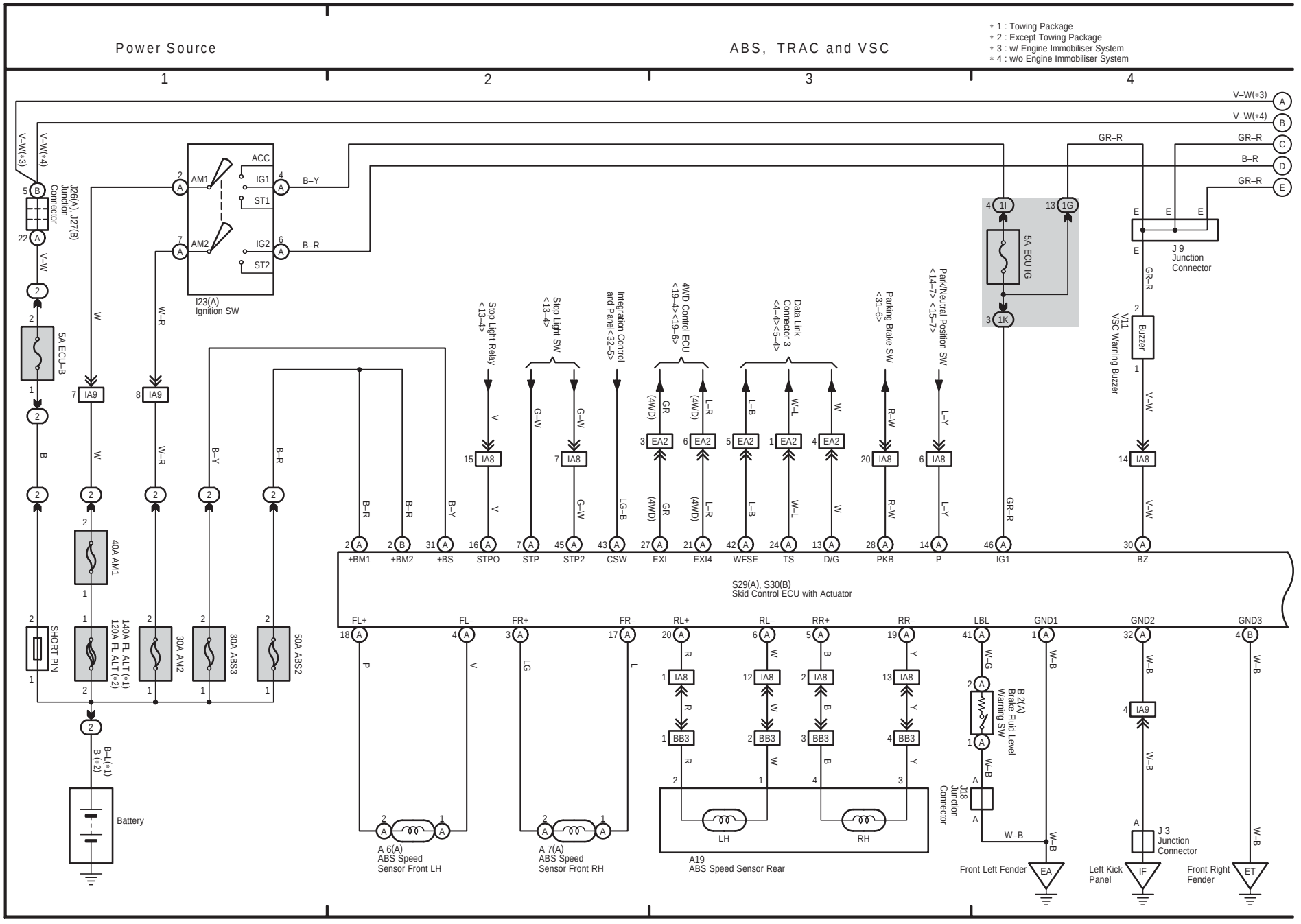


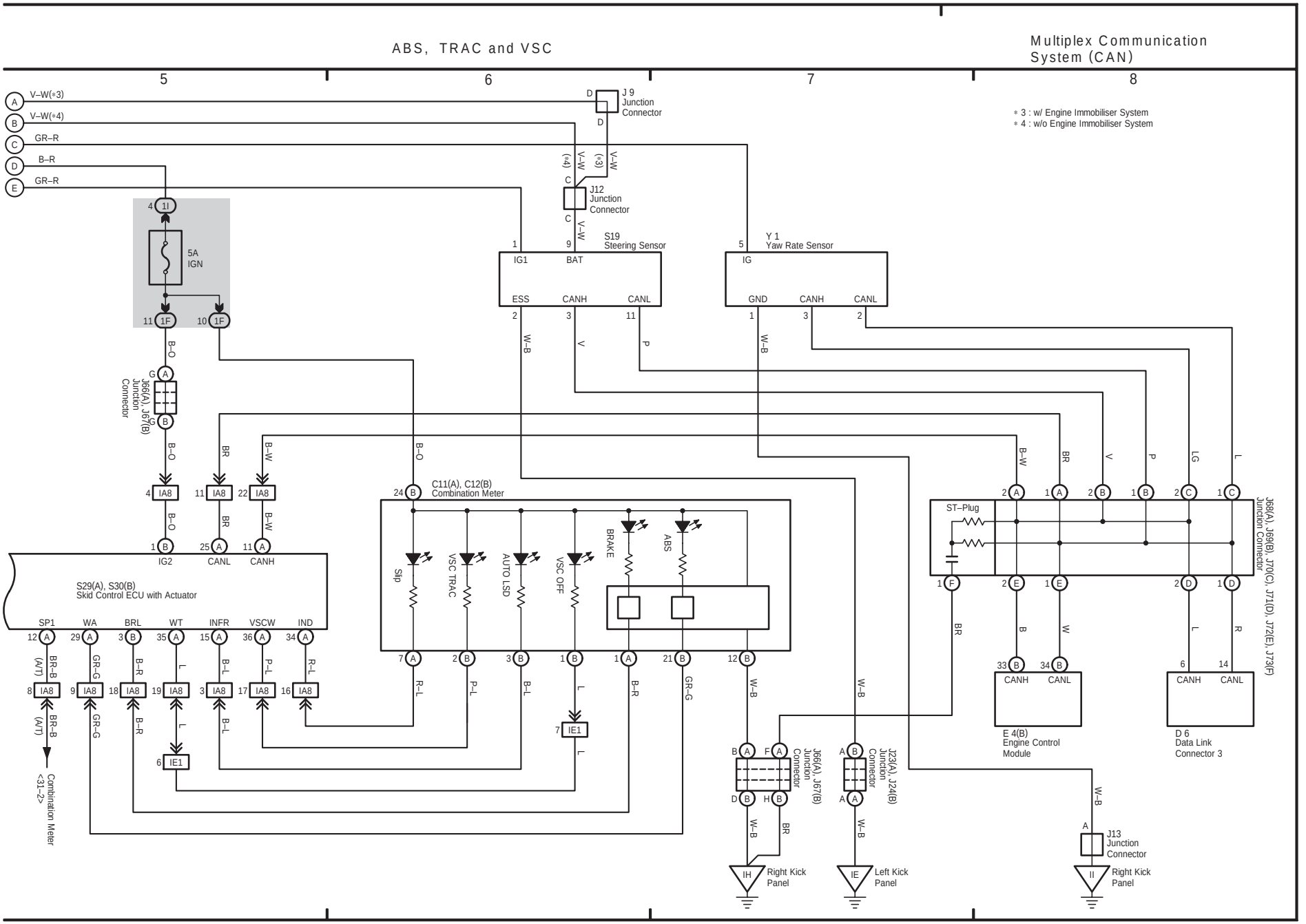

Power Source
Electronically Controlled Transmission and A/T Indicator (1GR–FE)
1
2
3
4
I23(A)
Ignition SW
ACC
AM1
AM2
IG1
IG2
ST2
5A
IGN
5A ECU–B
SHORT PIN
20A EFI NO. 1
40A AM1
120A FL ALT
30A AM2
IA9
EFI
Relay
Battery
J26(A), J27(B)
Junction
Connector
J66(A)
Junction
Connector
J18
Junction
Connector
J 1
Junction
Connector
O 1
O/D Direct Clutch Speed Sensor
V 3
Vehicle Speed Sensor (Electronically
Controlled Transmission)
Engine Control System
<5–7><5–10><5–12><5–14><5–16>
BATT
MREL
IGSW
NT+
NT–
SP2+
SP2–
STP
NSW
STA
THW
VTA1
VTA2
TC
SPD
VC
R
2
3
D
OILW
ODLP
LLP
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E)
Engine Control Module
+B
+B2
SR
S1
S2
SLT–
SLT+
SL1–
SL1+
SL2–
SL2+
SLU–
SLU+
TH01
TH02
E2
E05
E04
E02
E01
E1
ME01
E03
ODMS
E 1
Electronically Controlled
Transmission Solenoid
O 4
O/D Main SW
J 3
Junction
Connector
Front Left Fender
Rear Bank of
Right Cylinder Head
Rear Bank
of Right
Cylinder
Head
Left
Kick
Panel
EA
EU
EV
IF


Electronically Controlled Transmission and A/T Indicator (1GR–FE)
5
6
7
8
P 1
Park/Neutral Position SW
RB
LL
2L
DL
NL
RL
PL
J28(A), J29(B)
Junction
Connector
Skid Control ECU
with Actuator
(*1)<16–3>
ABS Actuator with ECU
(*2)<17–4>
ABS Actuator
with ECU
<17–4>
10A
GAUGE
15A
ACC
J8
Junction
Connector
J9
Junction
Connector
J26(A), J27(B)
Junction
Connector
J12
Junction
Connector
D8
Diode (A/T)
A22
ACC Cut
Relay
Engine Control
System<5–2>
IJ1
A/T OIL TEMP
O/D OFF
C11(A), C12(B)
Combination Meter
J66(A), J67(B)
Junction
Connector
IH
Right Kick
Panel
* 1 : w/ VSC
* 2 : w/o VSC
* 3 : w/ Engine Immobiliser System
* 4 : w/o Engine Immobiliser System

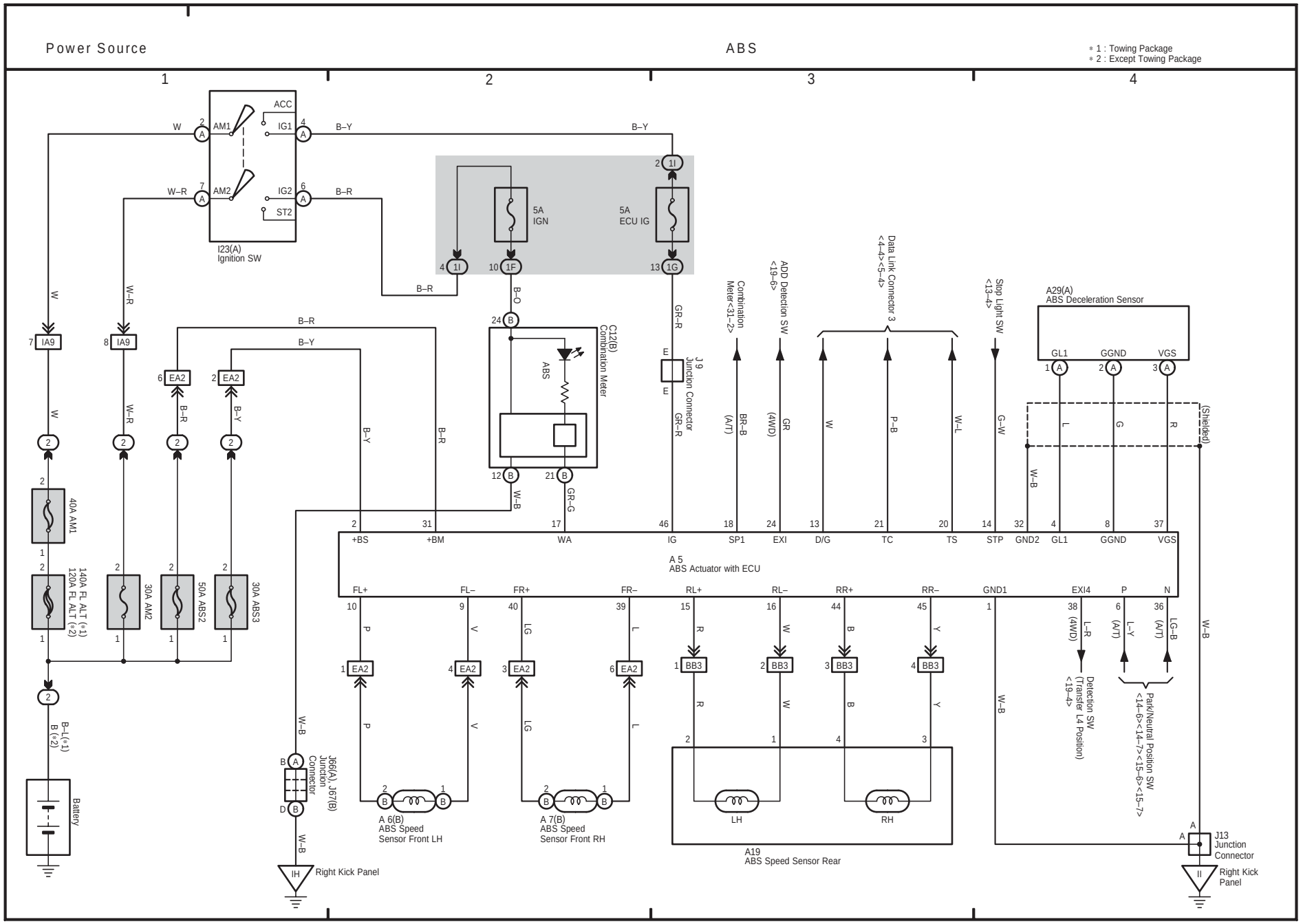
16 TOYOTA TUNDRA (Access Cab, Standard Cab)

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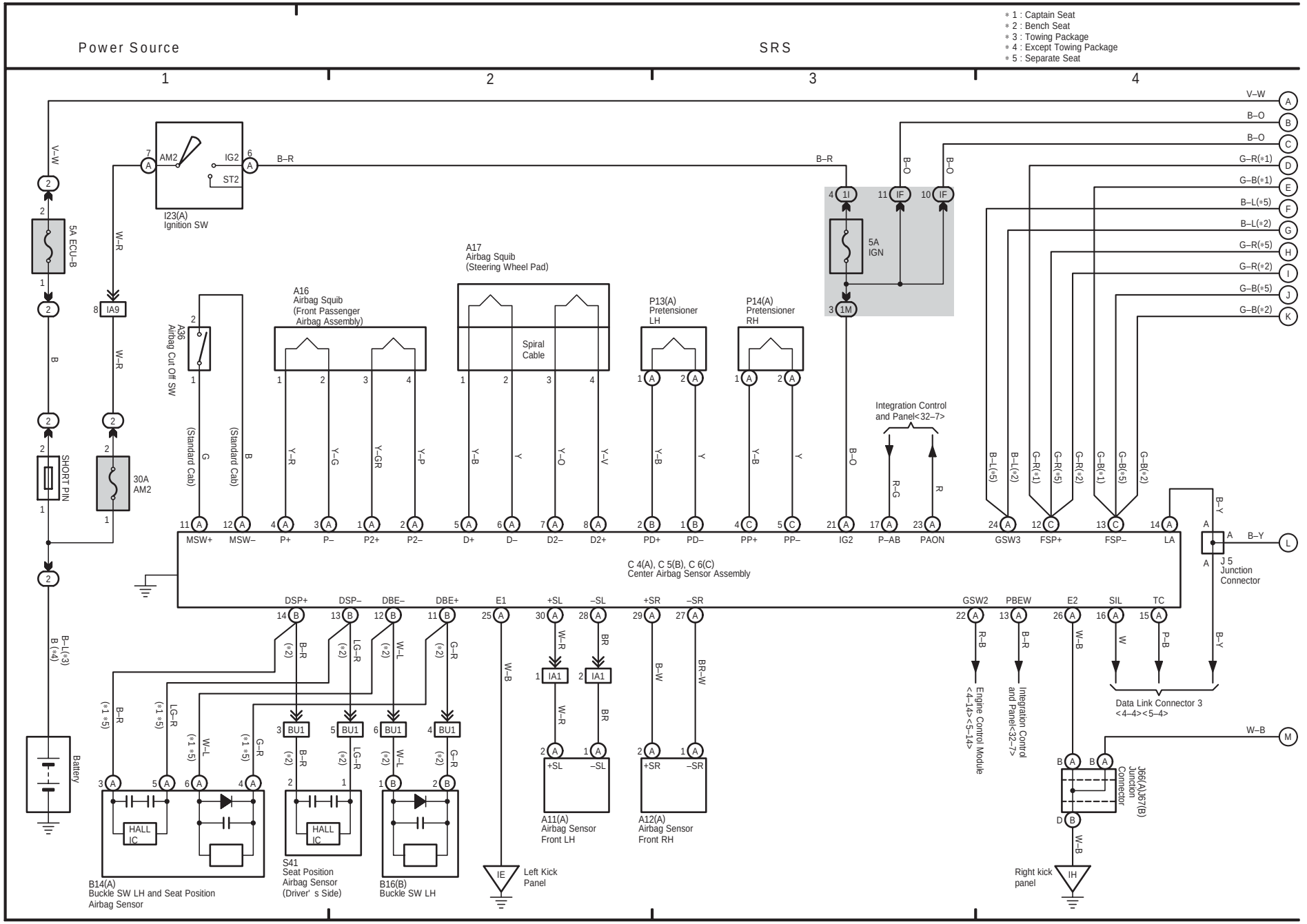


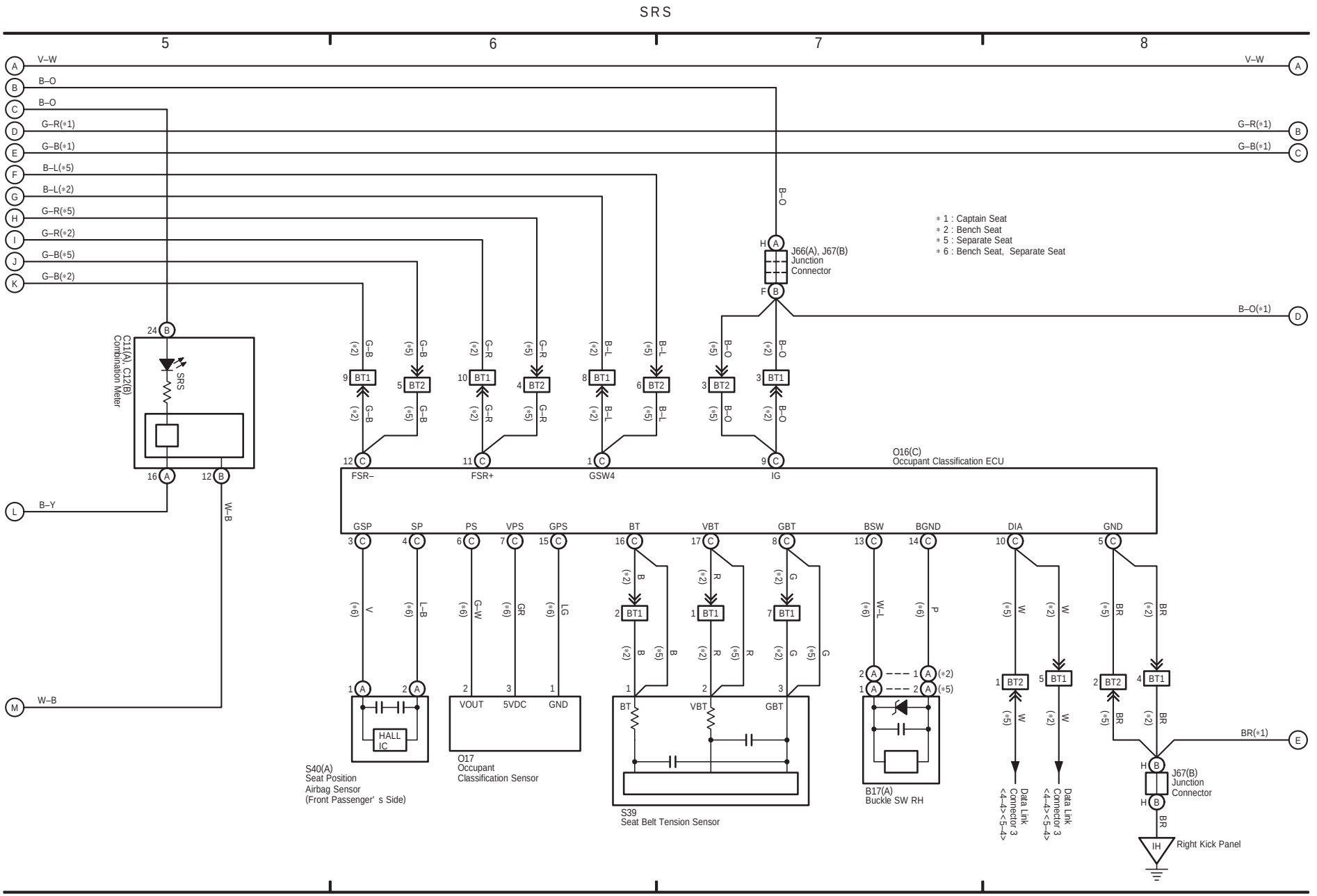

ABS, TRAC and VSC
Multiplex Communication System (CAN)
5
6
7
8
* 3 : w/ Engine Immobiliser System
* 4 : w/o Engine Immobiliser System
V–W(*3)
V–W(*4)
GR–R
B–R
GR–R
J 9 Junction Connector
J12 Junction Connector
5A IGN
S19 Steering Sensor
IG1
BAT
ESS
CANH
CANL
Y 1 Yaw Rate Sensor
IG
GND
J66(A), J67(B) Junction Connector
C11(A), C12(B) Combination Meter
Slip
VSC TRAC
AUTO LSD
VSC OFF
BRAKE
ABS
S29(A), S30(B) Skid Control ECU with Actuator
SP1
WA
BRL
WT
INFR
VSCW
IND
IG2
CANL
CANH
ST–Plug
J68(A), J69(B), J70(C), J71(D), J72(E), J73(F) Junction Connector
E 4(B) Engine Control Module
D 6 Data Link Connector 3
J66(A), J67(B) Junction Connector
J23(A), J24(B) Junction Connector
J13 Junction Connector
Right Kick Panel
Left Kick Panel
Right Kick Panel
Combination Meter <31–2>
W–B
B–O
BR
B–W
V
P
LG
L
B
W
R
BR–B
GR–G
B–R
L
B–L
P–L
R–L

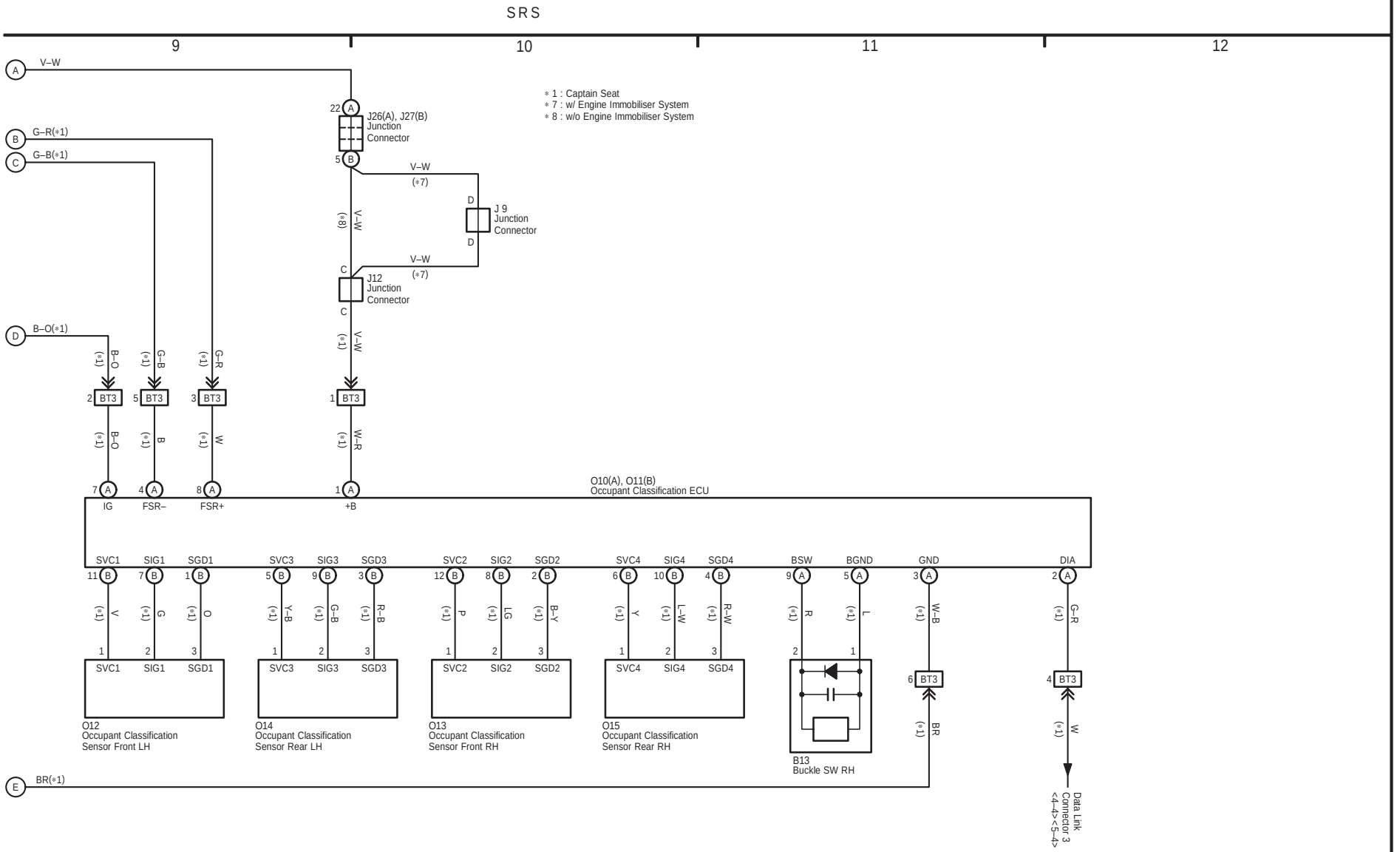
## 17 TOYOTA TUNDRA (Access Cab, Standard Cab)



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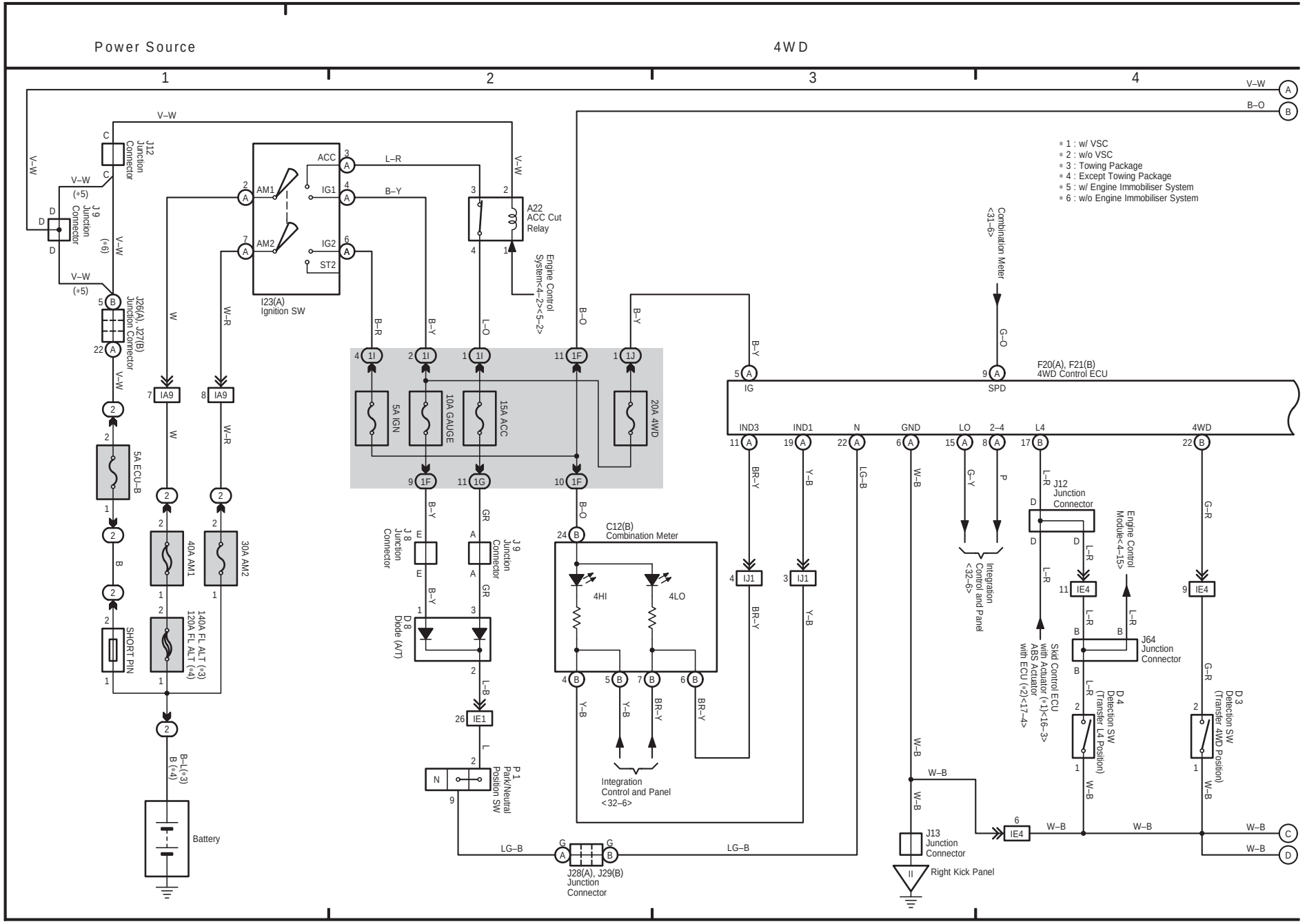


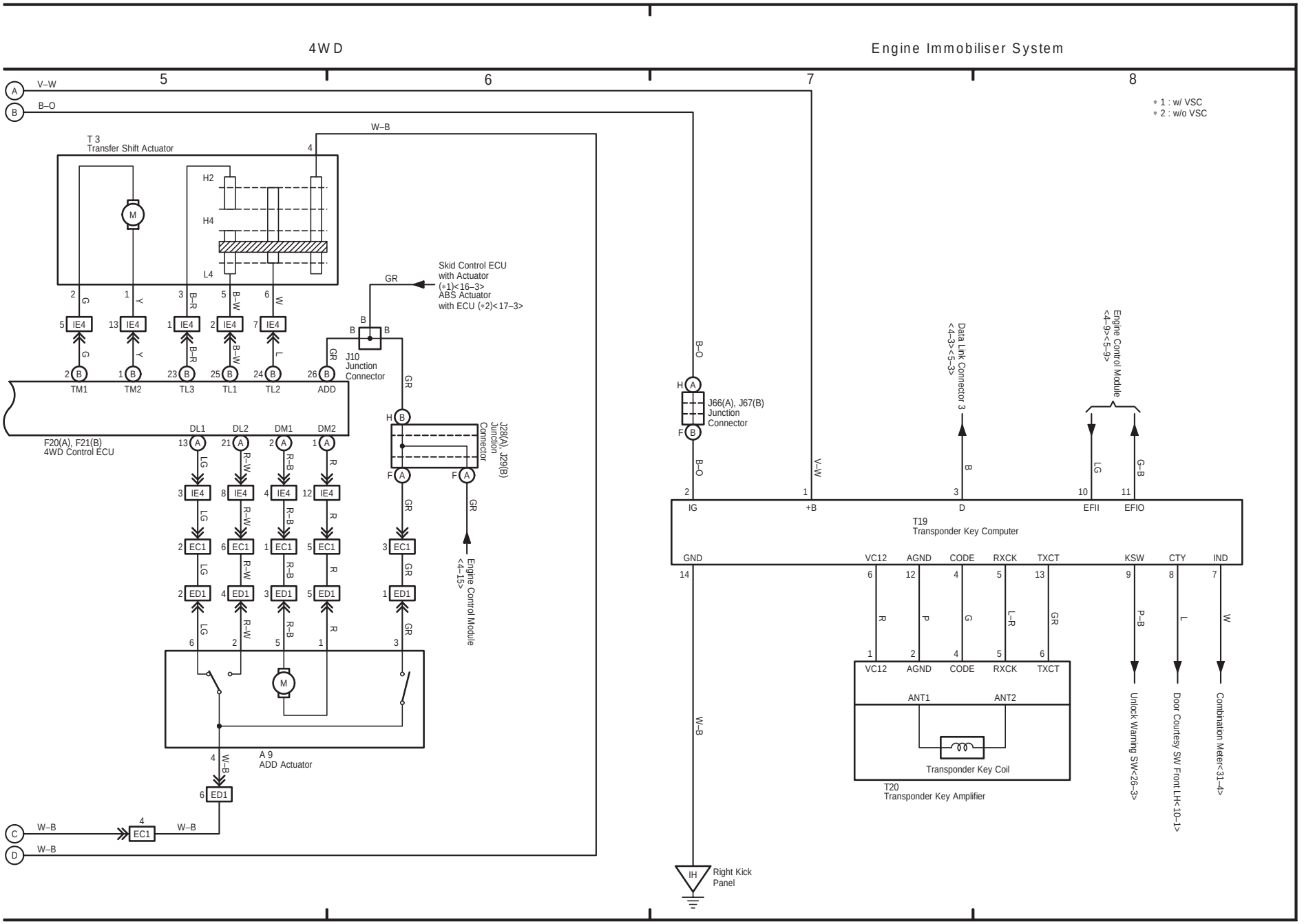

SRS
5
6
7
8
V–W
B–O
B–O
G–R(*1)
G–B(*1)
B–L(*5)
B–L(*2)
G–R(*5)
G–R(*2)
G–B(*5)
G–B(*2)
B–Y
W–B
W–B
V–W
G–R(*1)
G–B(*1)
B–O(*1)
BR(*1)
* 1 : Captain Seat
* 2 : Bench Seat
* 5 : Separate Seat
* 6 : Bench Seat, Separate Seat
J66(A), J67(B) Junction Connector
C11(A), C12(B) Combination Meter
SRS
O16(C) Occupant Classification ECU
FSR–
FSR+
GSW4
IG
GSP
SP
PS
VPS
GPS
BT
VBT
GBT
BSW
BGND
DIA
GND
HALL IC
S40(A) Seat Position Airbag Sensor (Front Passenger' s Side)
VOUT
5VDC
GND
O17 Occupant Classification Sensor
S39 Seat Belt Tension Sensor
B17(A) Buckle SW RH
Data Link Connector 3 <4–4><5–4>
Data Link Connector 3 <4–4><5–4>
J67(B) Junction Connector
IH
Right Kick Panel


SRS
9
10
11
12
∗1 : Captain Seat
∗7 : w/ Engine Immobiliser System
∗8 : w/o Engine Immobiliser System
V–W
G–R(∗1)
G–B(∗1)
B–O(∗1)
J26(A), J27(B) Junction Connector
J 9 Junction Connector
J12 Junction Connector
BT3
O10(A), O11(B) Occupant Classification ECU
IG
FSR–
FSR+
+B
SVC1
SIG1
SGD1
SVC3
SIG3
SGD3
SVC2
SIG2
SGD2
SVC4
SIG4
SGD4
BSW
BGND
GND
DIA
O12 Occupant Classification Sensor Front LH
O14 Occupant Classification Sensor Rear LH
O13 Occupant Classification Sensor Front RH
O15 Occupant Classification Sensor Rear RH
B13 Buckle SW RH
Data Link Connector 3 <4–4><5–4>

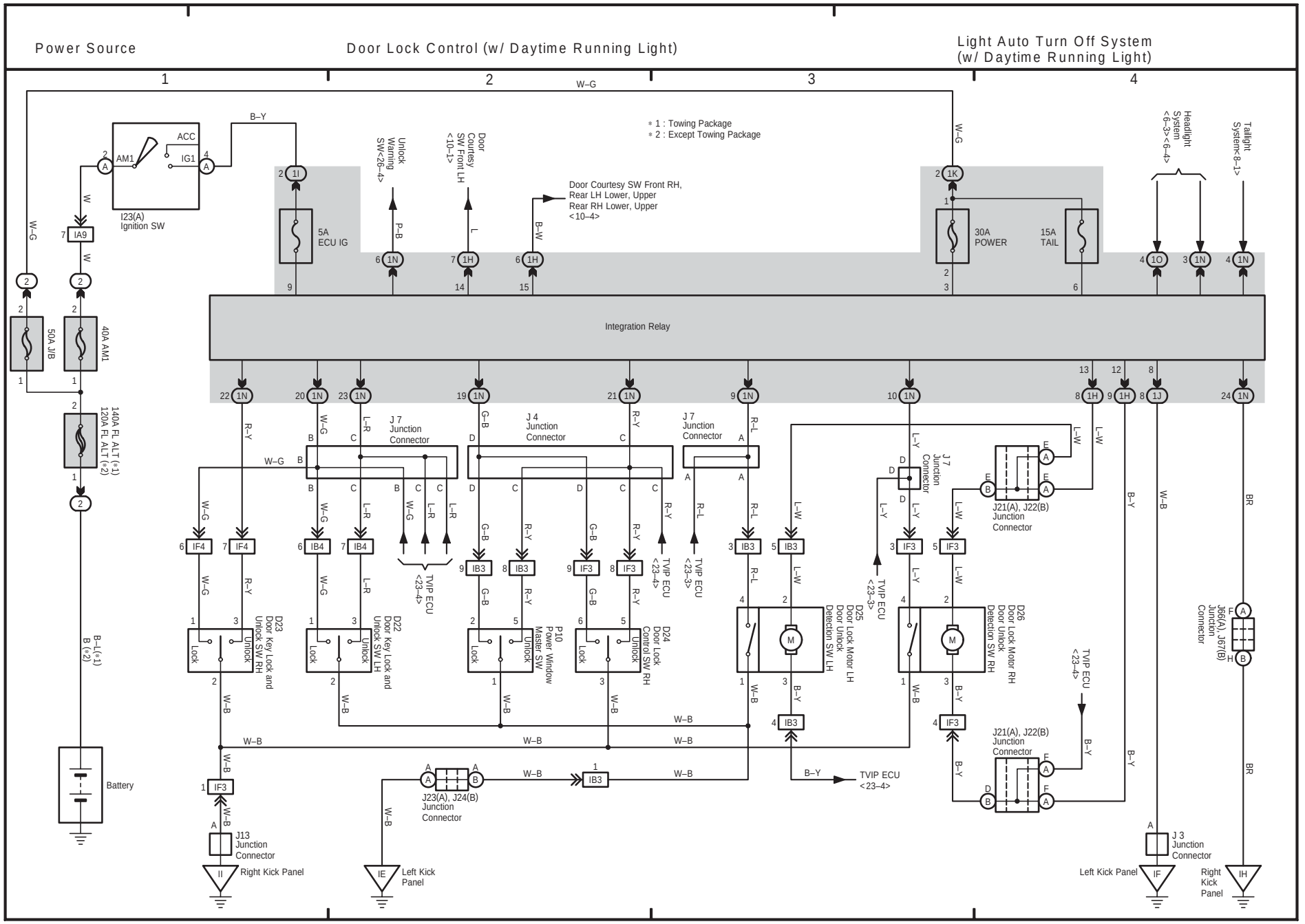
**19 TOYOTA TUNDRA (Access Cab, Standard Cab)**

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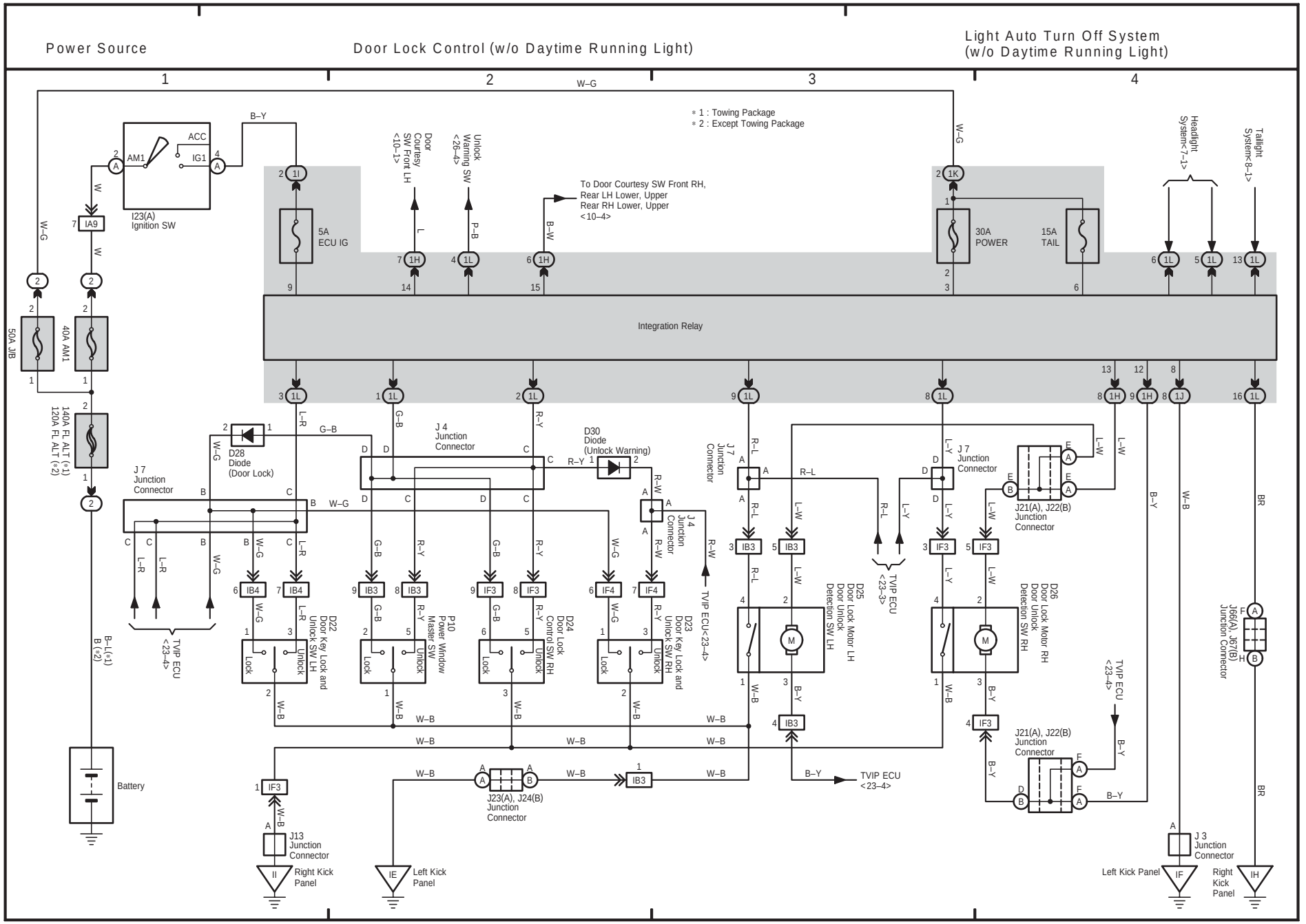



4WD
Engine Immobiliser System
5
6
7
8
* 1 : w/ VSC
* 2 : w/o VSC
T 3
Transfer Shift Actuator
H2
H4
L4
M
Skid Control ECU
with Actuator
(*1)<16–3>
ABS Actuator
with ECU (*2)<17–3>
J10
Junction
Connector
TM1
TM2
TL3
TL1
TL2
ADD
F20(A), F21(B)
4WD Control ECU
DL1
DL2
DM1
DM2
J28(A), J29(B)
Junction
Connector
Engine Control Module
<4–15>
A 9
ADD Actuator
J66(A), J67(B)
Junction
Connector
Data Link Connector 3
<4–3><5–3>
Engine Control Module
<4–9><5–9>
T19
Transponder Key Computer
IG
+B
D
EFII
EFIO
GND
VC12
AGND
CODE
RXCK
TXCT
KSW
CTY
IND
T20
Transponder Key Amplifier
ANT1
ANT2
Transponder Key Coil
Unlock Warning SW<26–3>
Door Courtesy SW Front LH<10–1>
Combination Meter<31–4>
IH
Right Kick
Panel

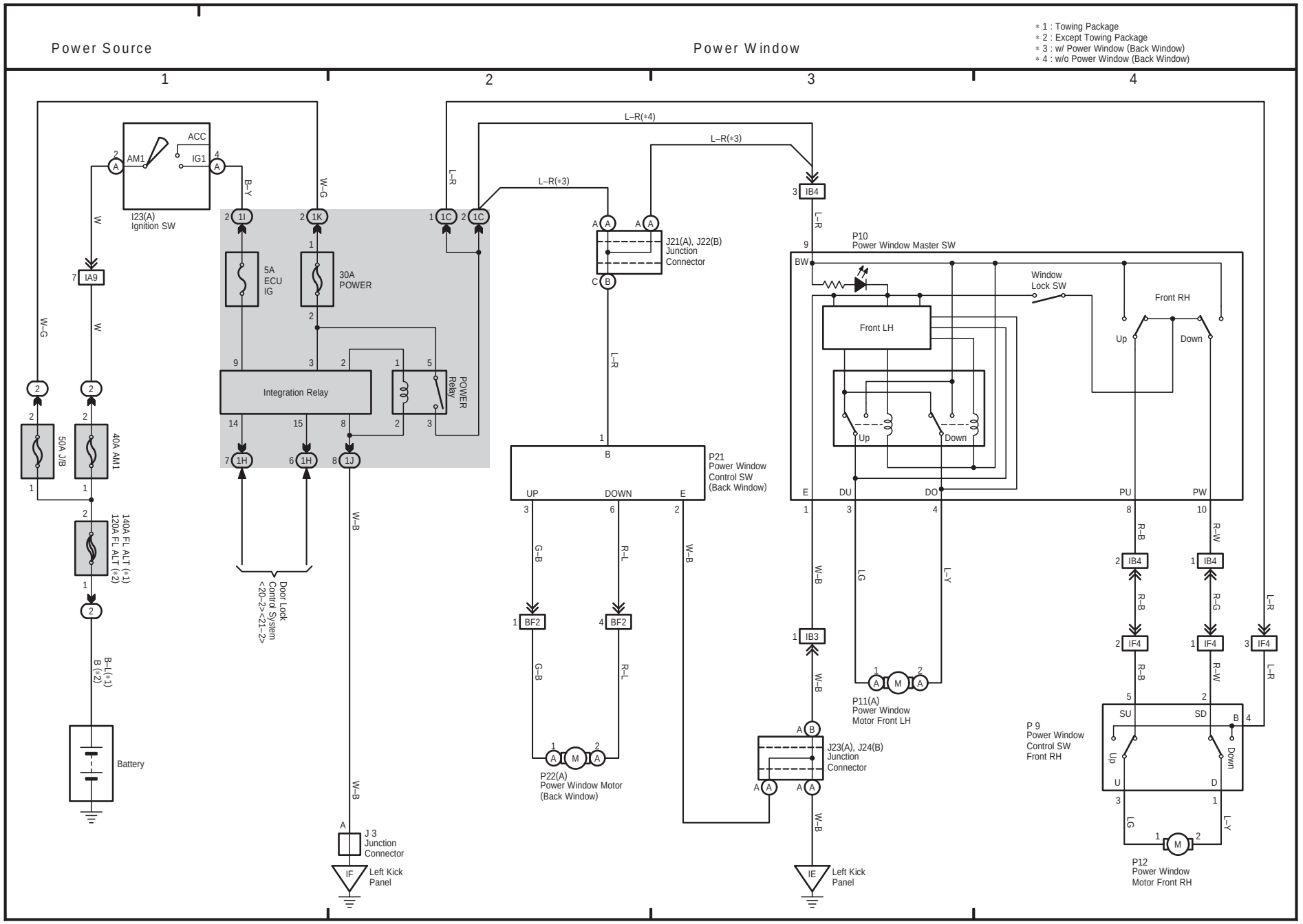
## 20 TOYOTA TUNDRA (Access Cab, Standard Cab)

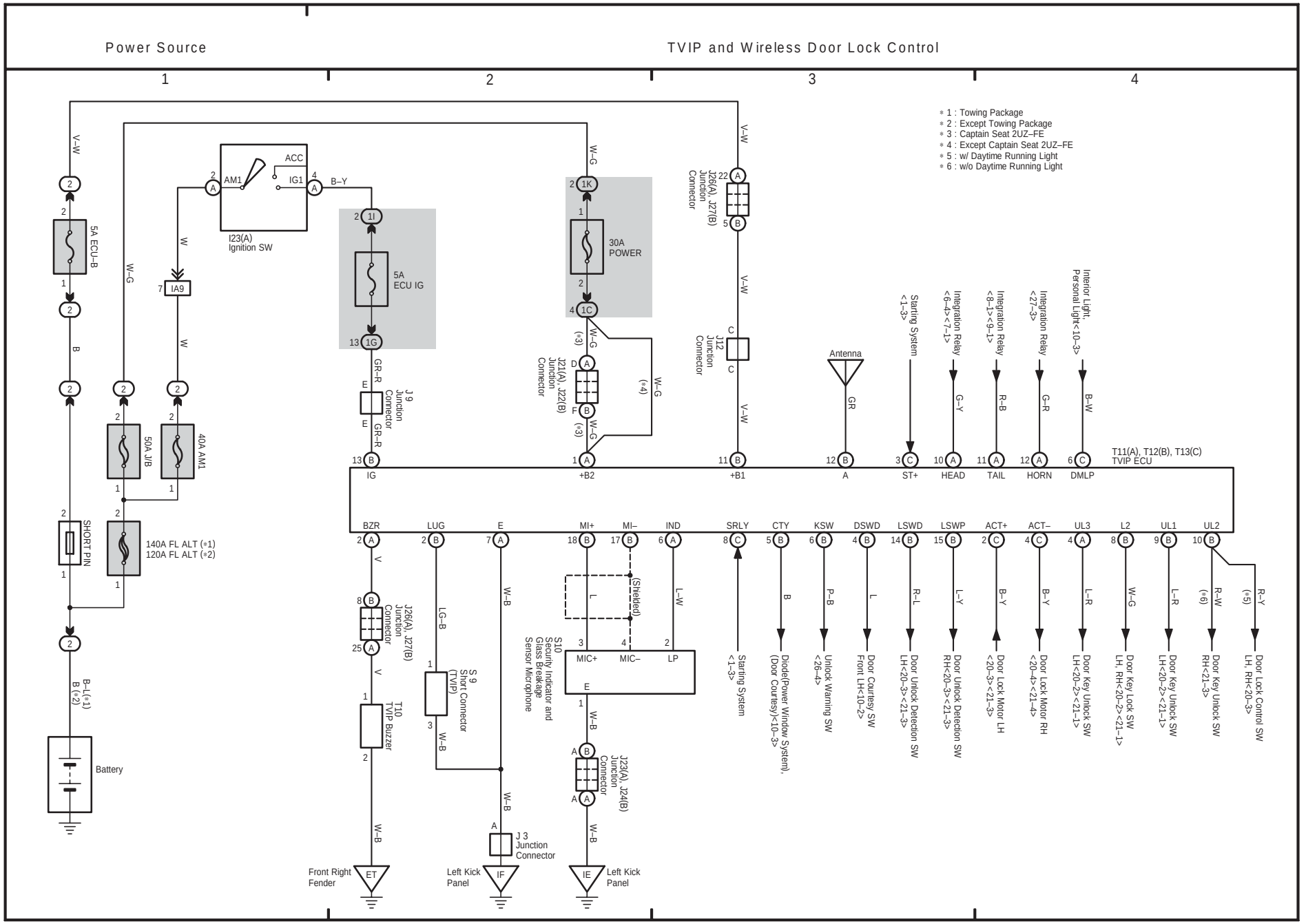


## 21 TOYOTA TUNDRA (Access Cab, Standard Cab)

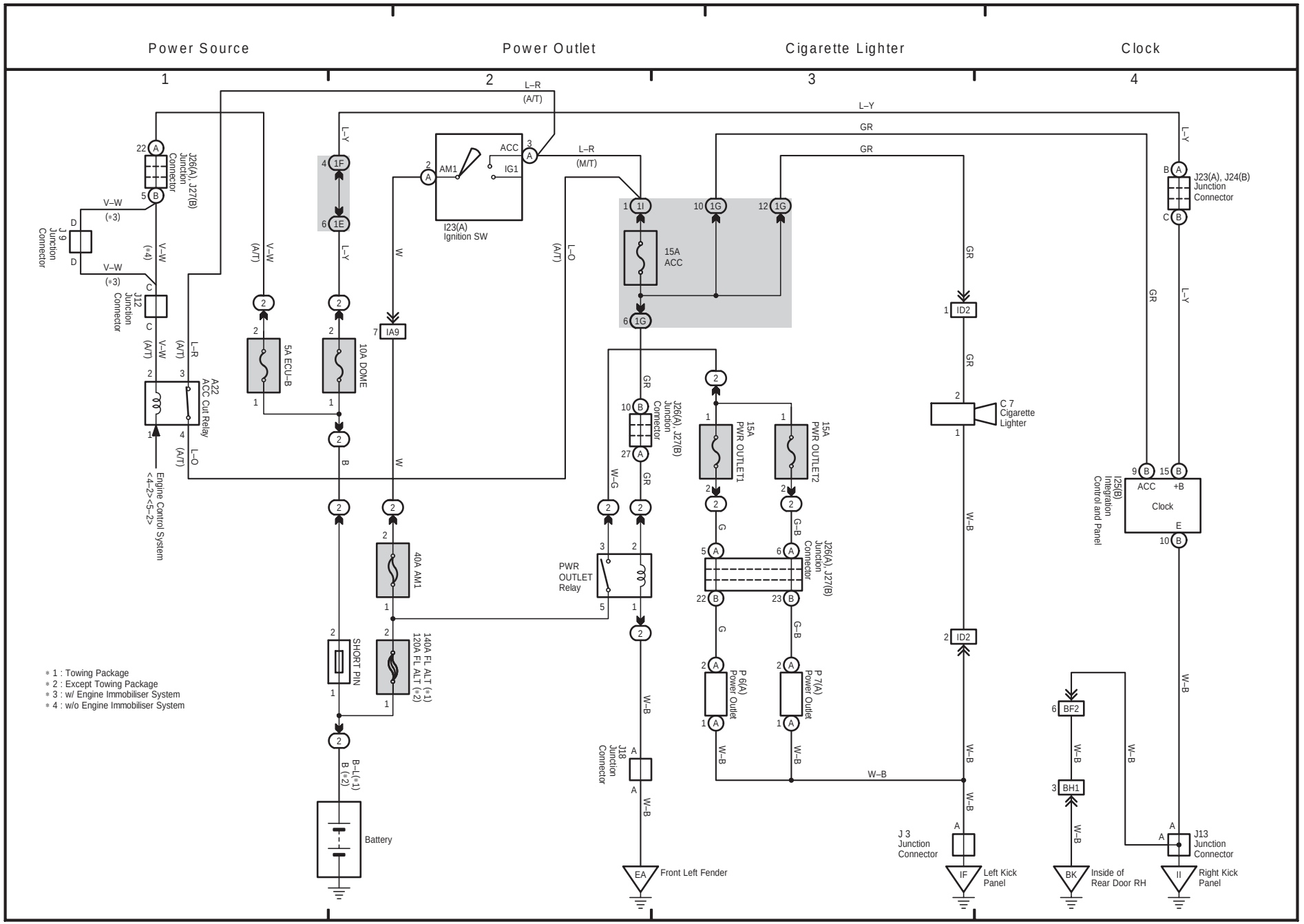


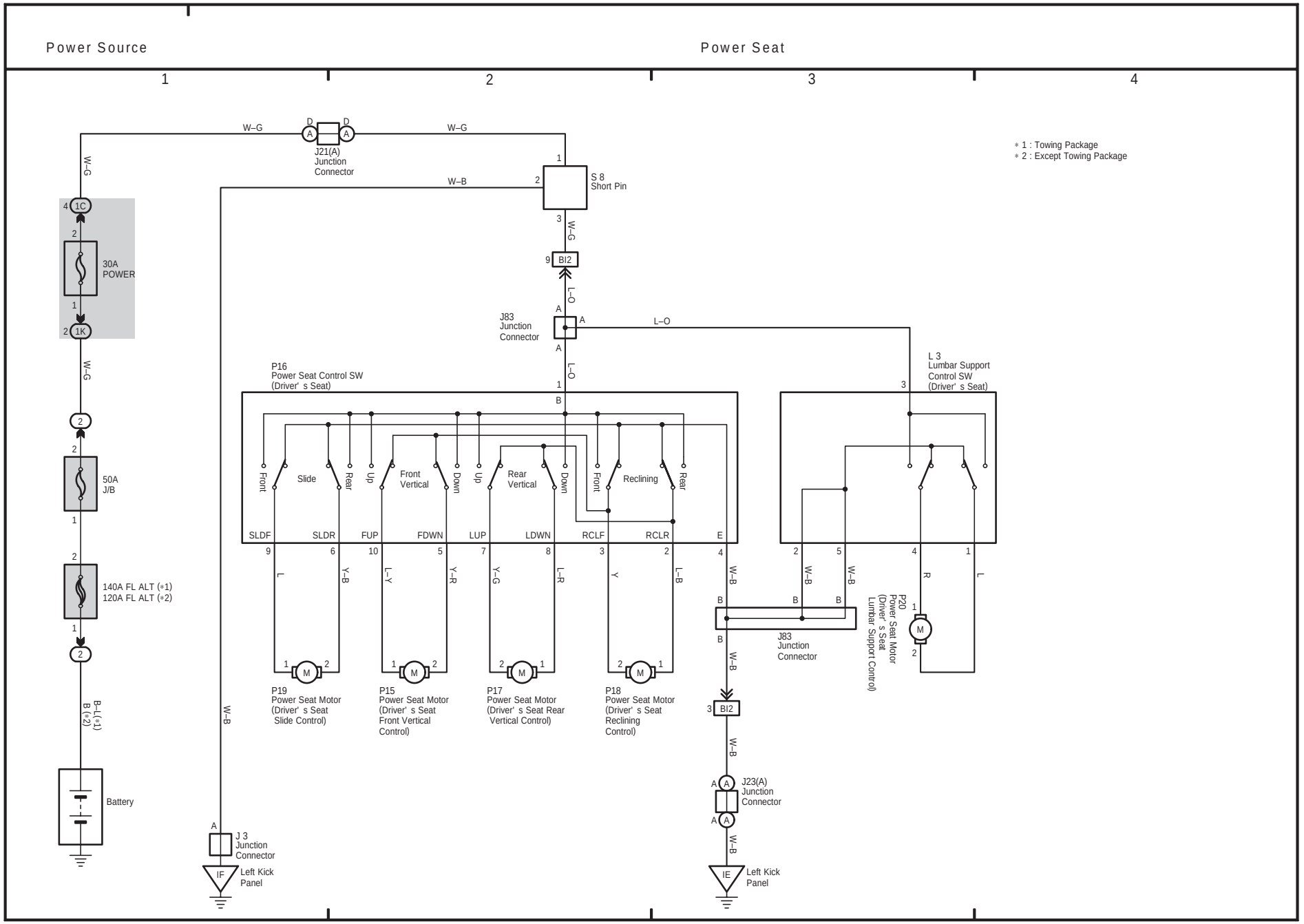
## 22 TOYOTA TUNDRA (Access Cab, Standard Cab)



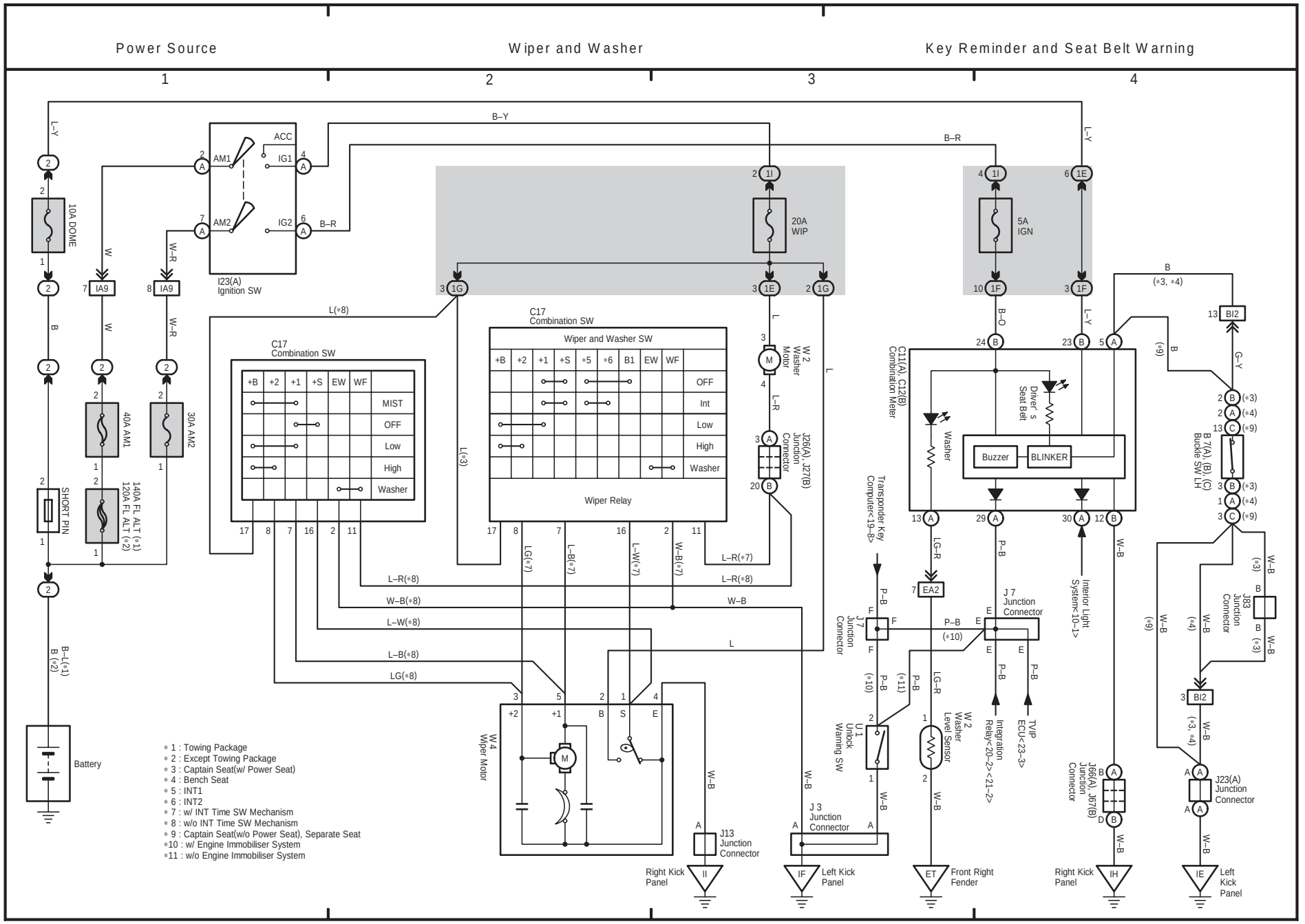

Power Source
TVIP and Wireless Door Lock Control
1
2
3
4
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : Captain Seat 2UZ–FE
* 4 : Except Captain Seat 2UZ–FE
* 5 : w/ Daytime Running Light
* 6 : w/o Daytime Running Light
ACC
AM1
IG1
I23(A)
Ignition SW
5A ECU–B
5A ECU IG
30A POWER
50A J/B
40A AM1
140A FL ALT (*1)
120A FL ALT (*2)
SHORT PIN
Battery
B–L(*1)
B (*2)
J26(A), J27(B) Junction Connector
J12 Junction Connector
J21(A), J22(B) Junction Connector
J 9 Junction Connector
T10 TVIP Buzzer
S 9 Short Connector (TVIP)
S10 Security Indicator and Glass Breakage Sensor Microphone
J 3 Junction Connector
J23(A), J24(B) Junction Connector
Front Right Fender
Left Kick Panel
Left Kick Panel
Antenna
Starting System <1–3>
Integration Relay <6–4><7–1>
Integration Relay <8–1><9–1>
Integration Relay <27–3>
Interior Light, Personal Light<10–3>
T11(A), T12(B), T13(C) TVIP ECU
IG
+B2
+B1
A
ST+
HEAD
TAIL
HORN
DMLP
BZR
LUG
E
MI+
MI–
IND
SRLY
CTY
KSW
DSWD
LSWD
LSWP
ACT+
ACT–
UL3
L2
UL1
UL2
MIC+
MIC–
LP
(Shielded)
Starting System <1–3>
Diode(Power Window System), (Door Courtesy)<10–3>
Unlock Warning SW <26–4>
Door Courtesy SW Front LH<10–2>
Door Unlock Detection SW LH<20–3><21–3>
Door Unlock Detection SW RH<20–3><21–3>
Door Lock Motor LH <20–3><21–3>
Door Lock Motor RH <20–4><21–4>
Door Key Unlock SW LH<20–2><21–1>
Door Key Lock SW LH, RH<20–2><21–1>
Door Key Unlock SW LH<20–2><21–1>
Door Key Unlock SW LH<21–1>
Door Key Unlock SW RH<21–3>
Door Lock Control SW LH, RH<20–3>
Front Right Fender
Left Kick Panel
Left Kick Panel

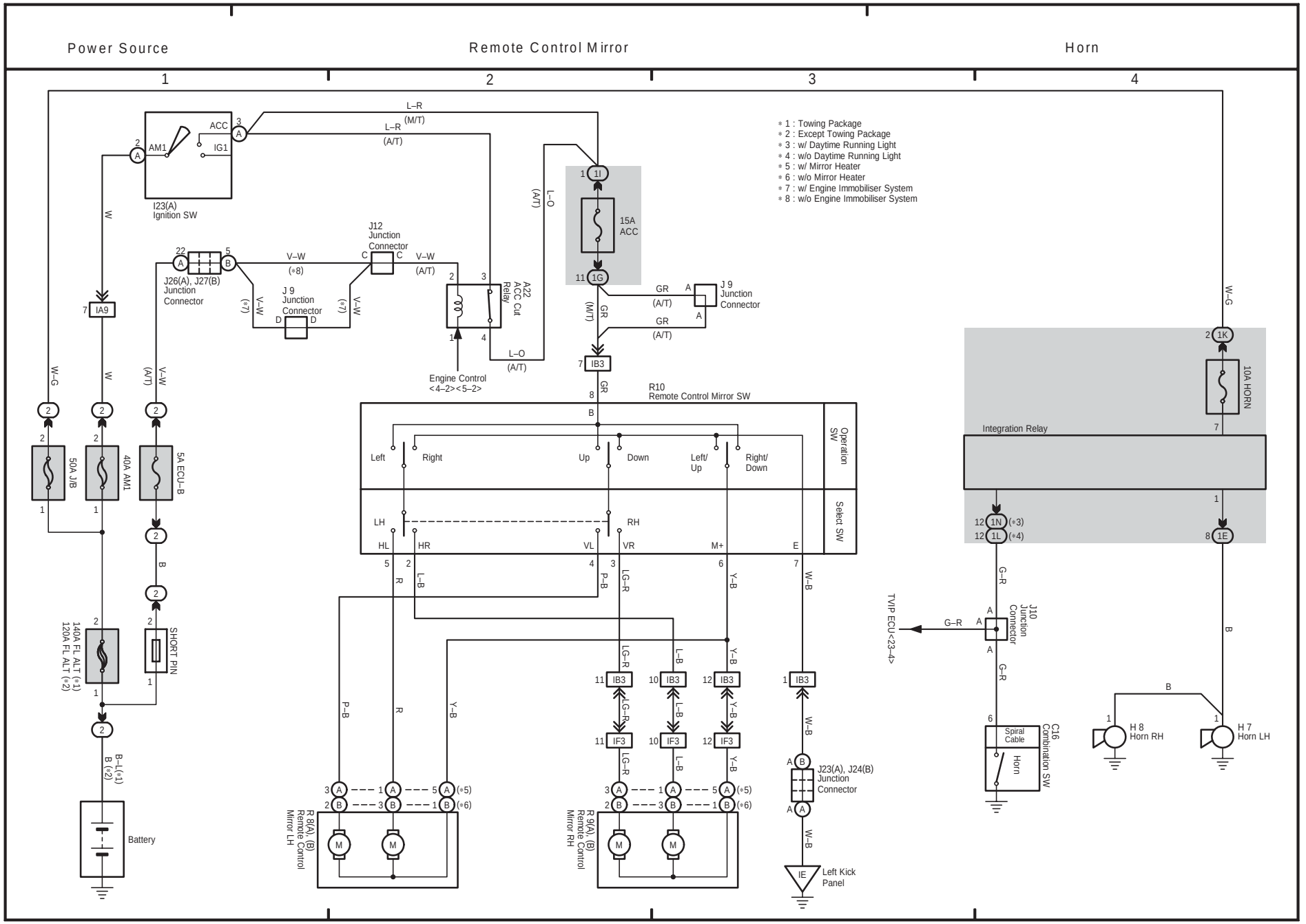
## 24 TOYOTA TUNDRA (Access Cab, Standard Cab)

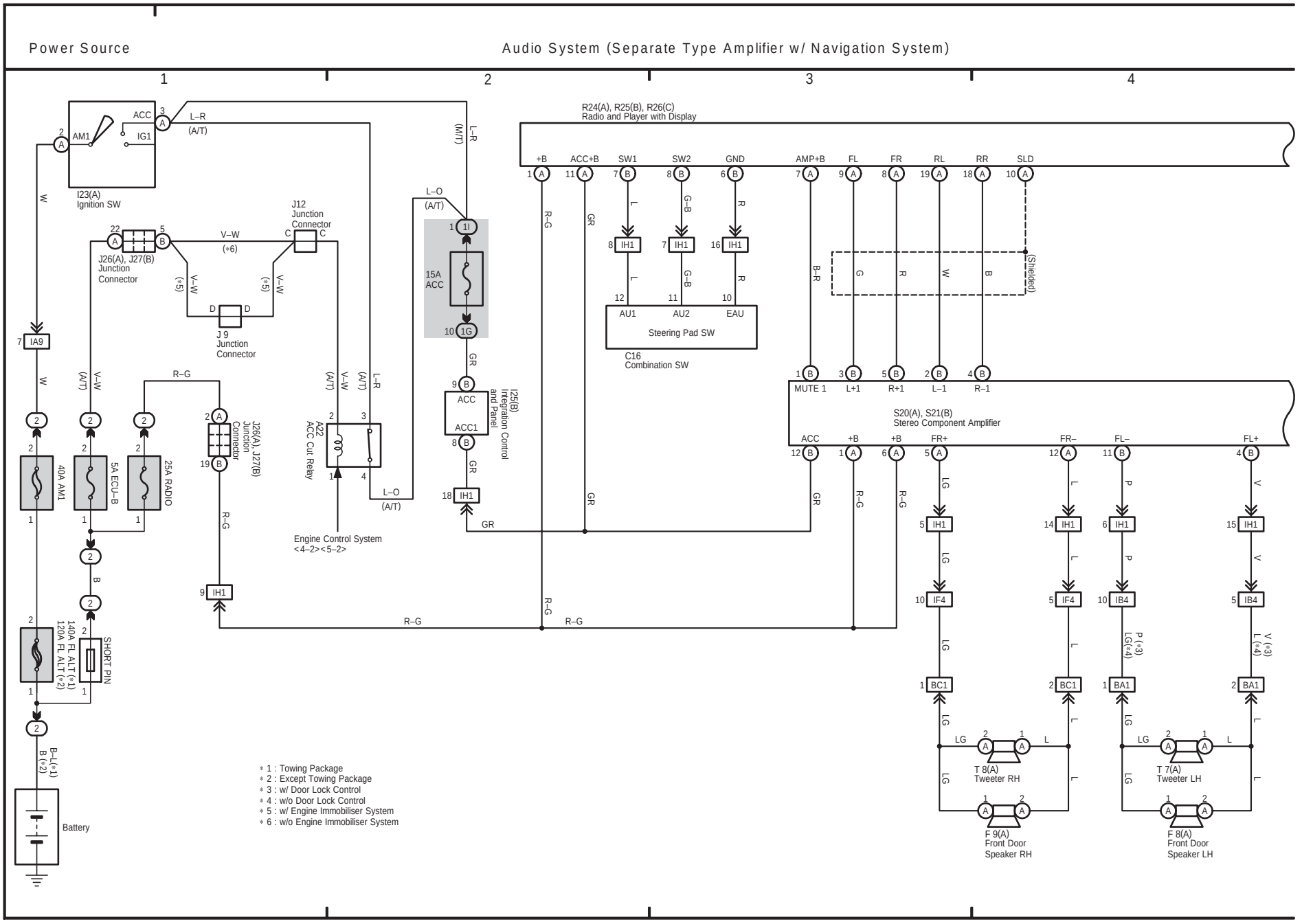



Power Source
Power Seat
1
2
3
4
＊1 : Towing Package
＊2 : Except Towing Package
W–G
W–B
L–O
B–L(＊1)
B (＊2)
J21(A) Junction Connector
S 8 Short Pin
BI2
J83 Junction Connector
P16 Power Seat Control SW (Driver' s Seat)
L 3 Lumbar Support Control SW (Driver' s Seat)
Front
Slide
Rear
Up
Front Vertical
Down
Rear Vertical
Reclining
SLDF
SLDR
FUP
FDWN
LUP
LDWN
RCLF
RCLR
E
P19 Power Seat Motor (Driver' s Seat Slide Control)
P15 Power Seat Motor (Driver' s Seat Front Vertical Control)
P17 Power Seat Motor (Driver' s Seat Rear Vertical Control)
P18 Power Seat Motor (Driver' s Seat Reclining Control)
P20 Power Seat Motor (Driver' s Seat Lumbar Support Control)
30A POWER
50A J/B
140A FL ALT (＊1)
120A FL ALT (＊2)
Battery
J 3 Junction Connector
IF
Left Kick Panel
J23(A) Junction Connector
IE
Left Kick Panel

## 26 TOYOTA TUNDRA (Access Cab, Standard Cab)

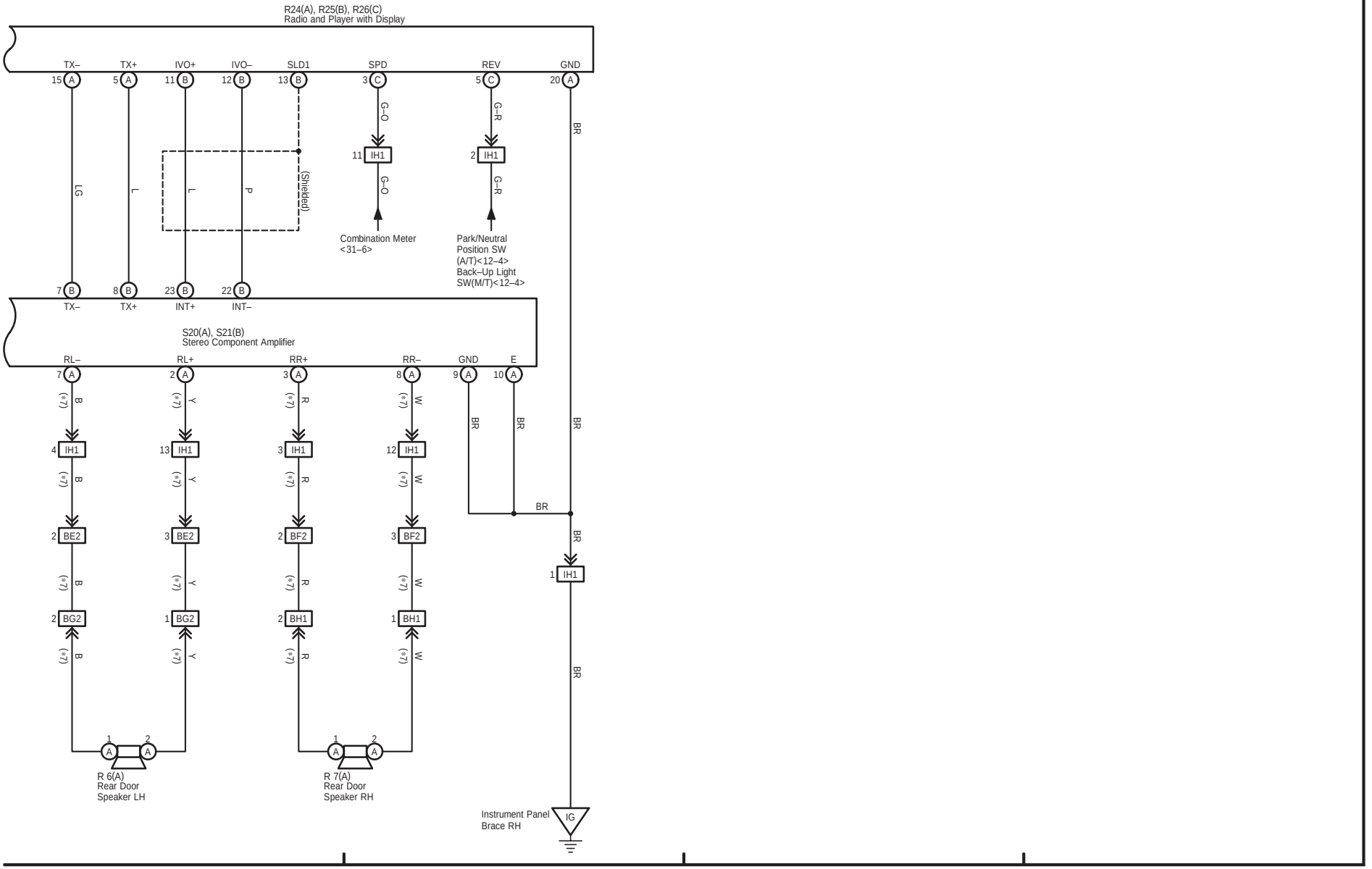



Power Source
Remote Control Mirror
Horn
1
2
3
4
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Daytime Running Light
* 4 : w/o Daytime Running Light
* 5 : w/ Mirror Heater
* 6 : w/o Mirror Heater
* 7 : w/ Engine Immobiliser System
* 8 : w/o Engine Immobiliser System
I23(A) Ignition SW
ACC
IG1
AM1
15A ACC
J12 Junction Connector
J26(A), J27(B) Junction Connector
J 9 Junction Connector
A22 ACC Cut Relay
Engine Control <4–2><5–2>
J 9 Junction Connector
R10 Remote Control Mirror SW
Operation SW
Select SW
Left
Right
Up
Down
Left/ Up
Right/ Down
LH
RH
HL
HR
VL
VR
M+
E
50A JB
40A AM1
5A ECU–B
140A FL ALT (*1)
120A FL ALT (*2)
SHORT PIN
B–L(*1)
B (*2)
Battery
R 8(A), (B) Remote Control Mirror LH
R 9(A), (B) Remote Control Mirror RH
J23(A), J24(B) Junction Connector
Left Kick Panel
Integration Relay
10A HORN
J10 Junction Connector
TV/P ECU<23-4>
Spiral Cable
Horn
C16 Combination SW
H 8 Horn RH
H 7 Horn LH


Power Source
Audio System (Separate Type Amplifier w/ Navigation System)
1
2
3
4
I23(A)
Ignition SW
ACC
IG1
AM1
L–R
(A/T)
(M/T)
J12
Junction
Connector
J26(A), J27(B)
Junction
Connector
V–W
(*6)
(*5)
J 9
Junction
Connector
15A
ACC
IA9
40A AM1
5A ECU–B
25A RADIO
J26(A), J27(B)
Junction
Connector
R–G
A22
ACC Cut Relay
L–O
(A/T)
Engine Control System
<4–2><5–2>
I25(B)
Integration Control
and Panel
ACC
ACC1
GR
R24(A), R25(B), R26(C)
Radio and Player with Display
+B
ACC+B
SW1
SW2
GND
AMP+B
FL
FR
RL
RR
SLD
(Shielded)
AU1
AU2
EAU
Steering Pad SW
C16
Combination SW
MUTE 1
L+1
R+1
L–1
R–1
S20(A), S21(B)
Stereo Component Amplifier
FR+
FR–
FL–
FL+
T 8(A)
Tweeter RH
T 7(A)
Tweeter LH
F 9(A)
Front Door
Speaker RH
F 8(A)
Front Door
Speaker LH
140A FL ALT (*1)
120A FL ALT (*2)
SHORT PIN
B–L (*1)
B (*2)
Battery
* 1 : Towing Package
* 2 : Except Towing Package
* 3 : w/ Door Lock Control
* 4 : w/o Door Lock Control
* 5 : w/ Engine Immobiliser System
* 6 : w/o Engine Immobiliser System

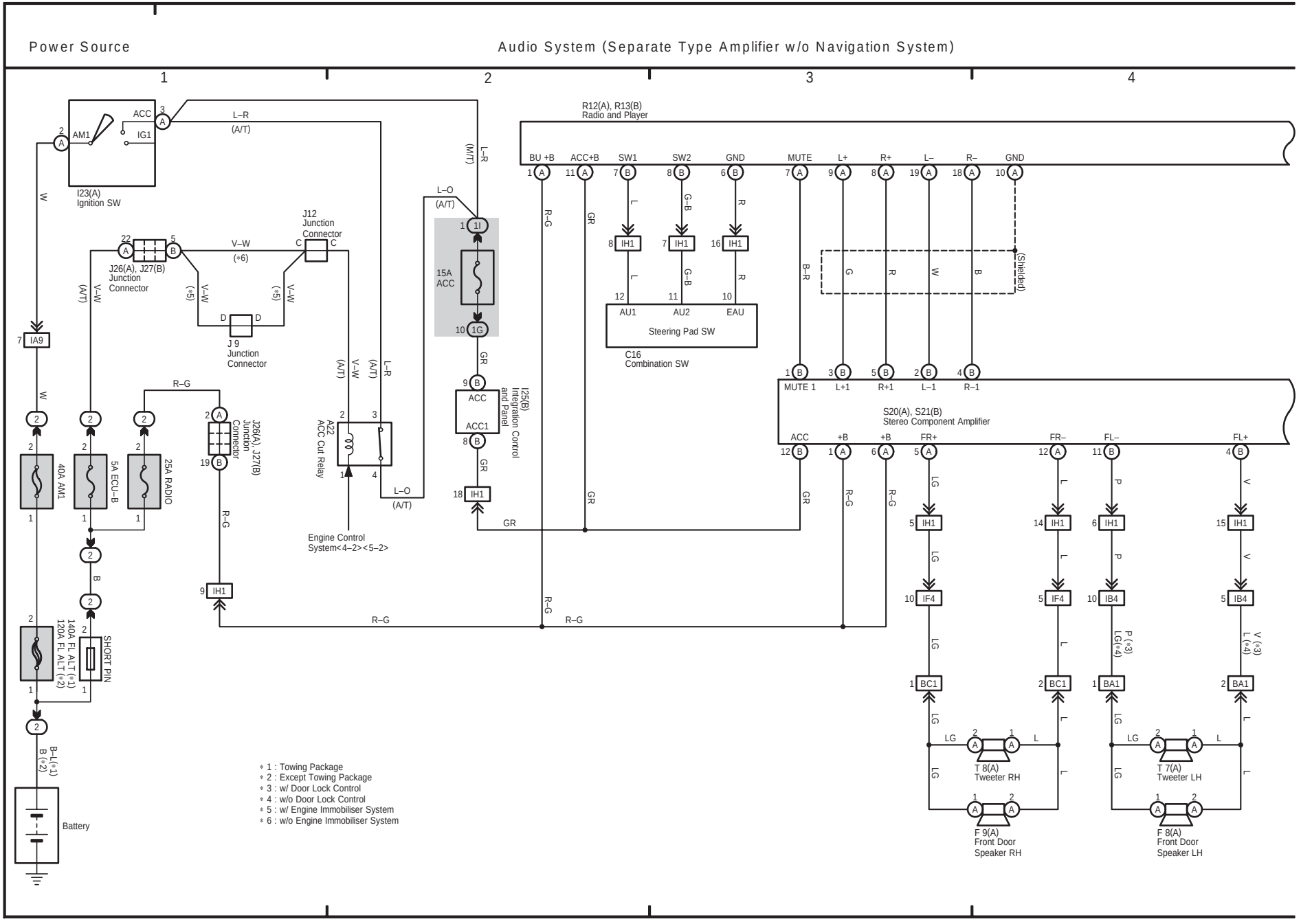
Audio System (Separate Type Amplifier w/ Navigation System)

∗ 7 : Access Cab



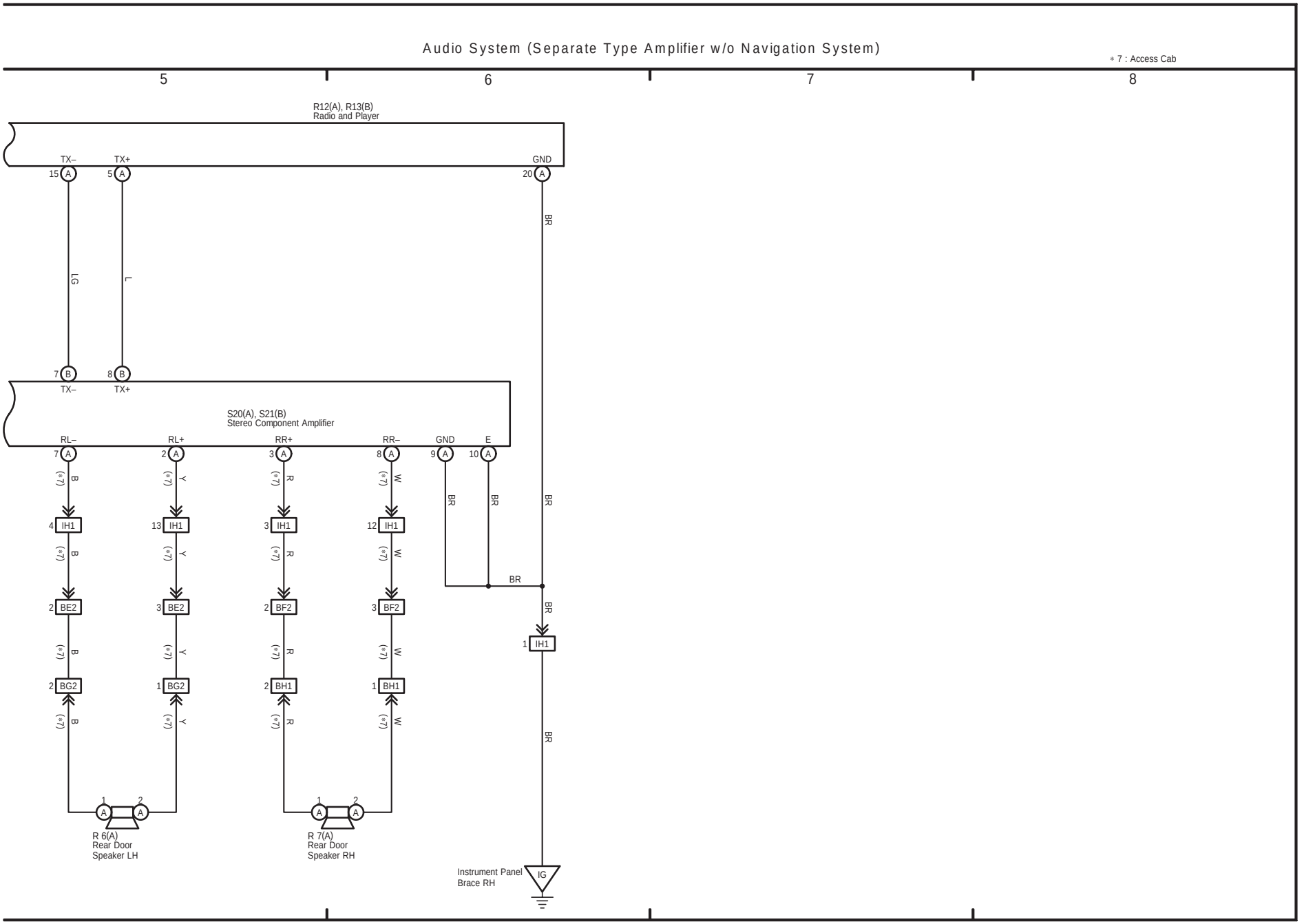
## 29 TOYOTA TUNDRA (Access Cab, Standard Cab)

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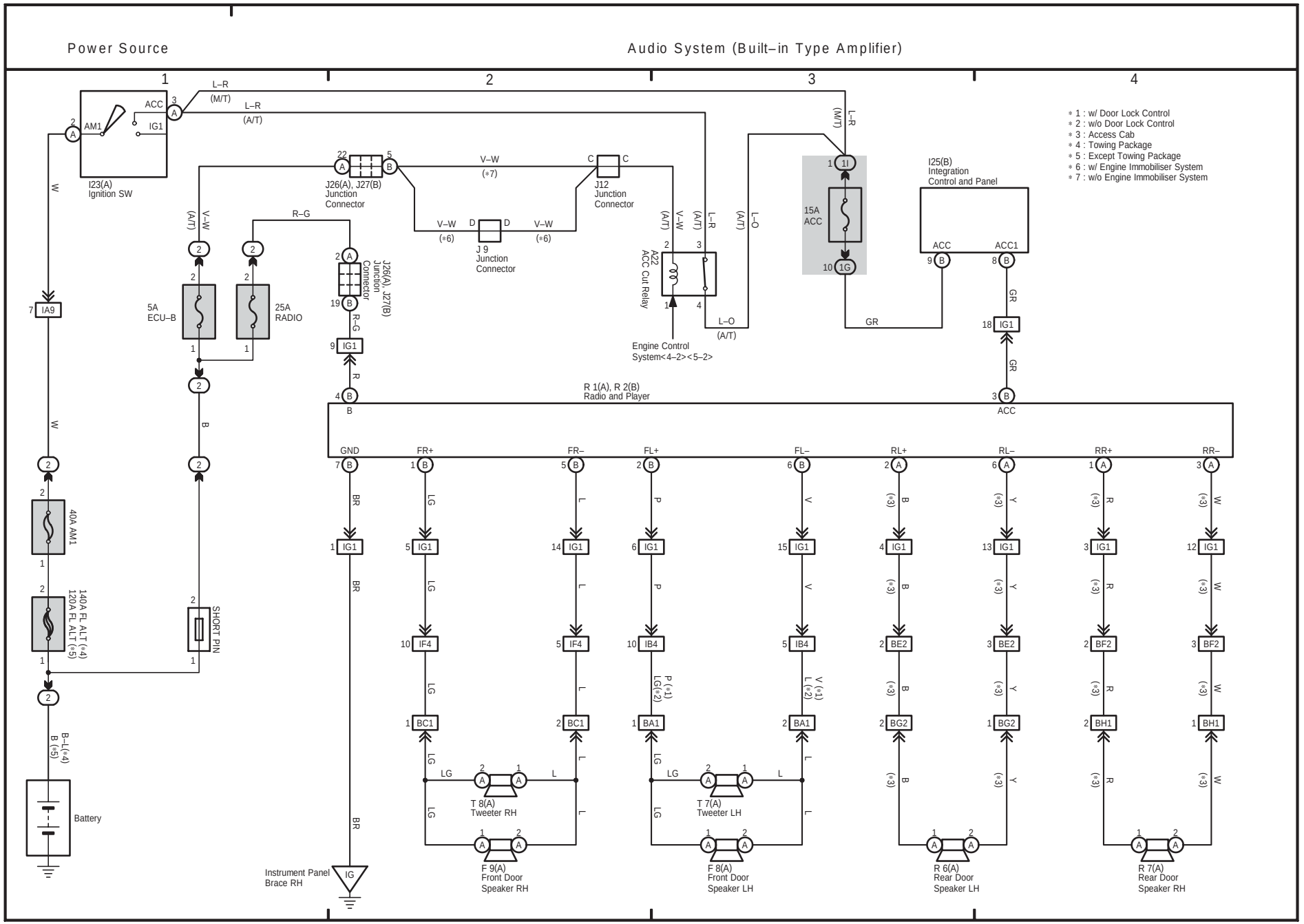


Audio System (Separate Type Amplifier w/o Navigation System)

∗ 7 : Access Cab

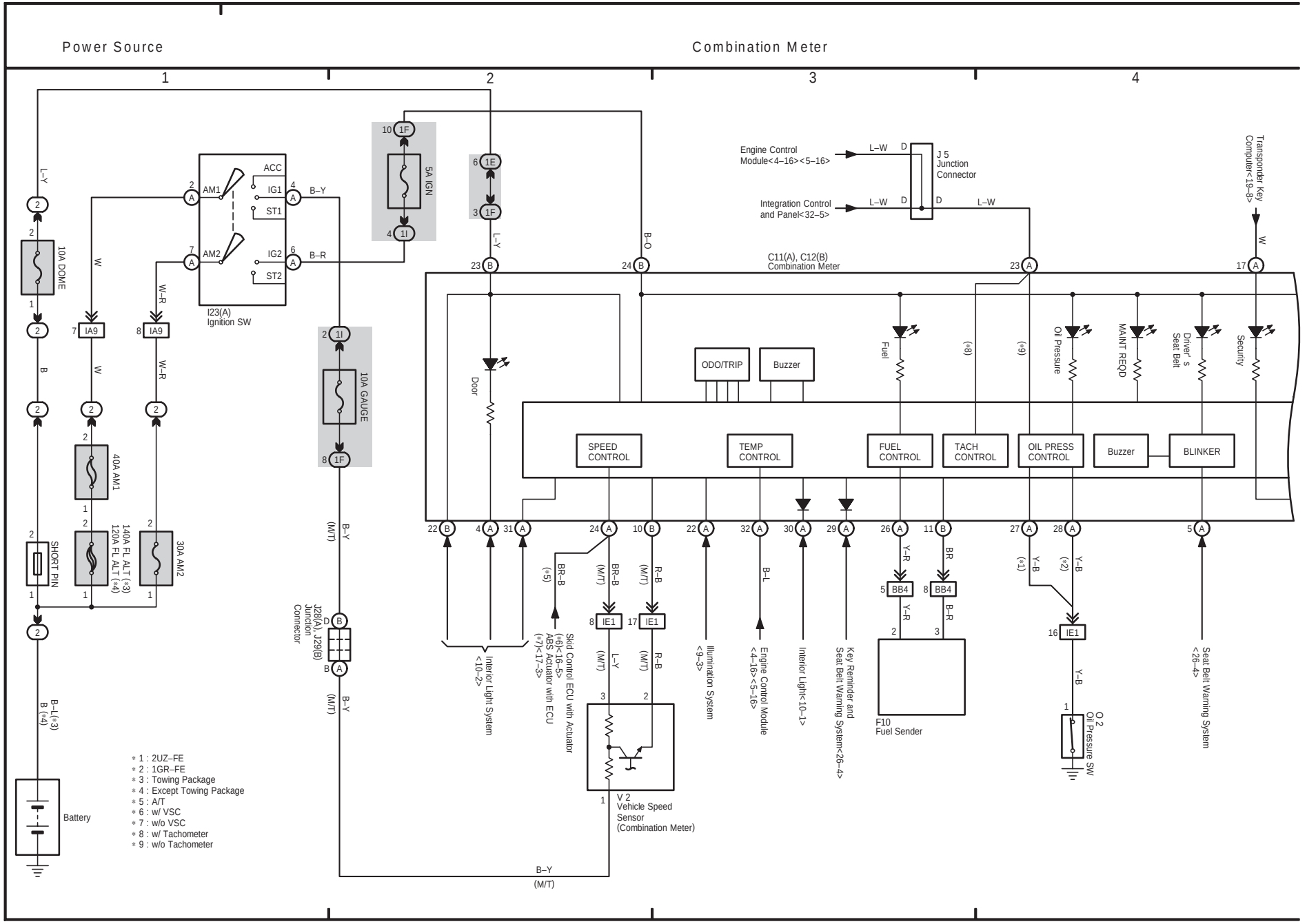


## 30 TOYOTA TUNDRA (Access Cab, Standard Cab)

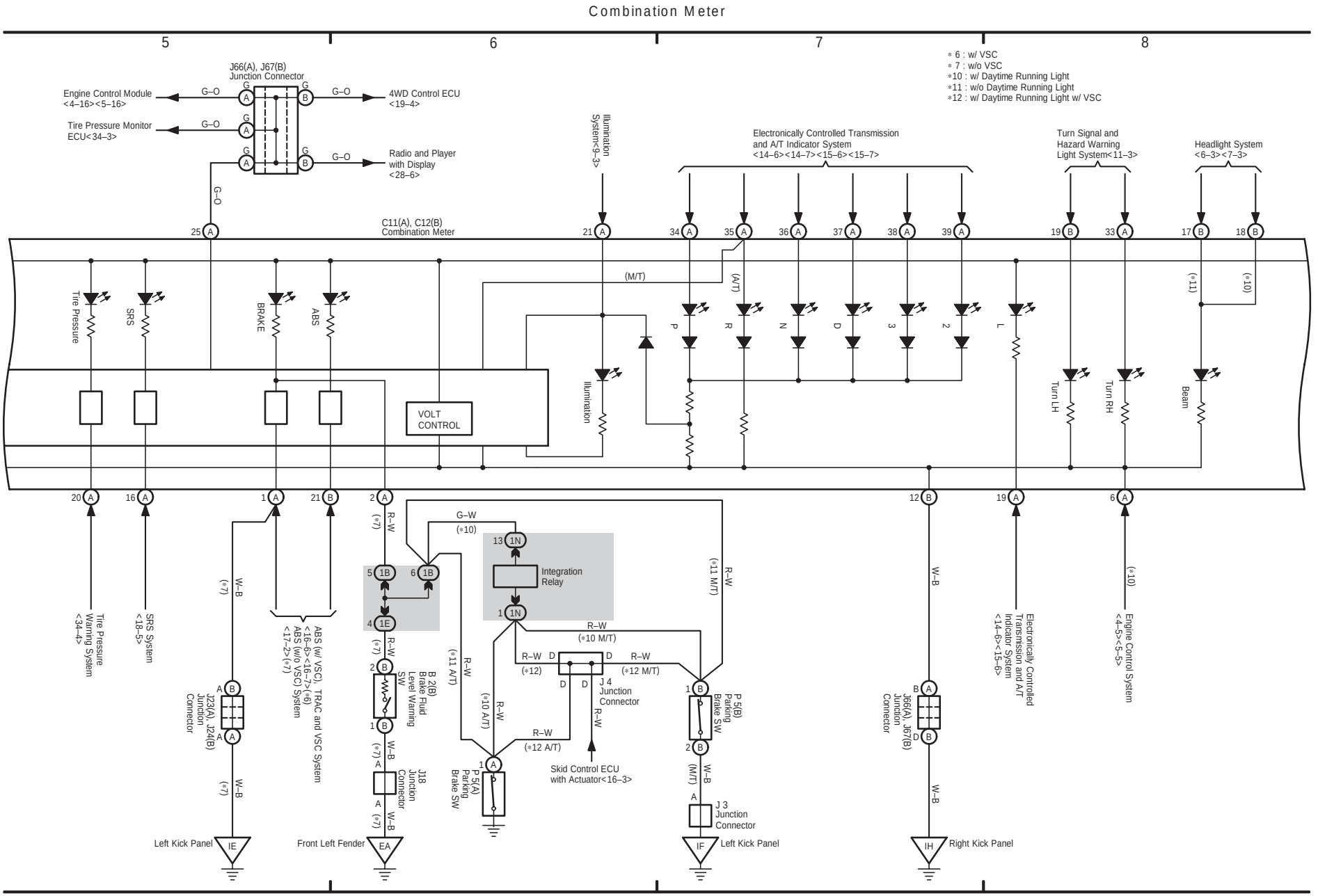


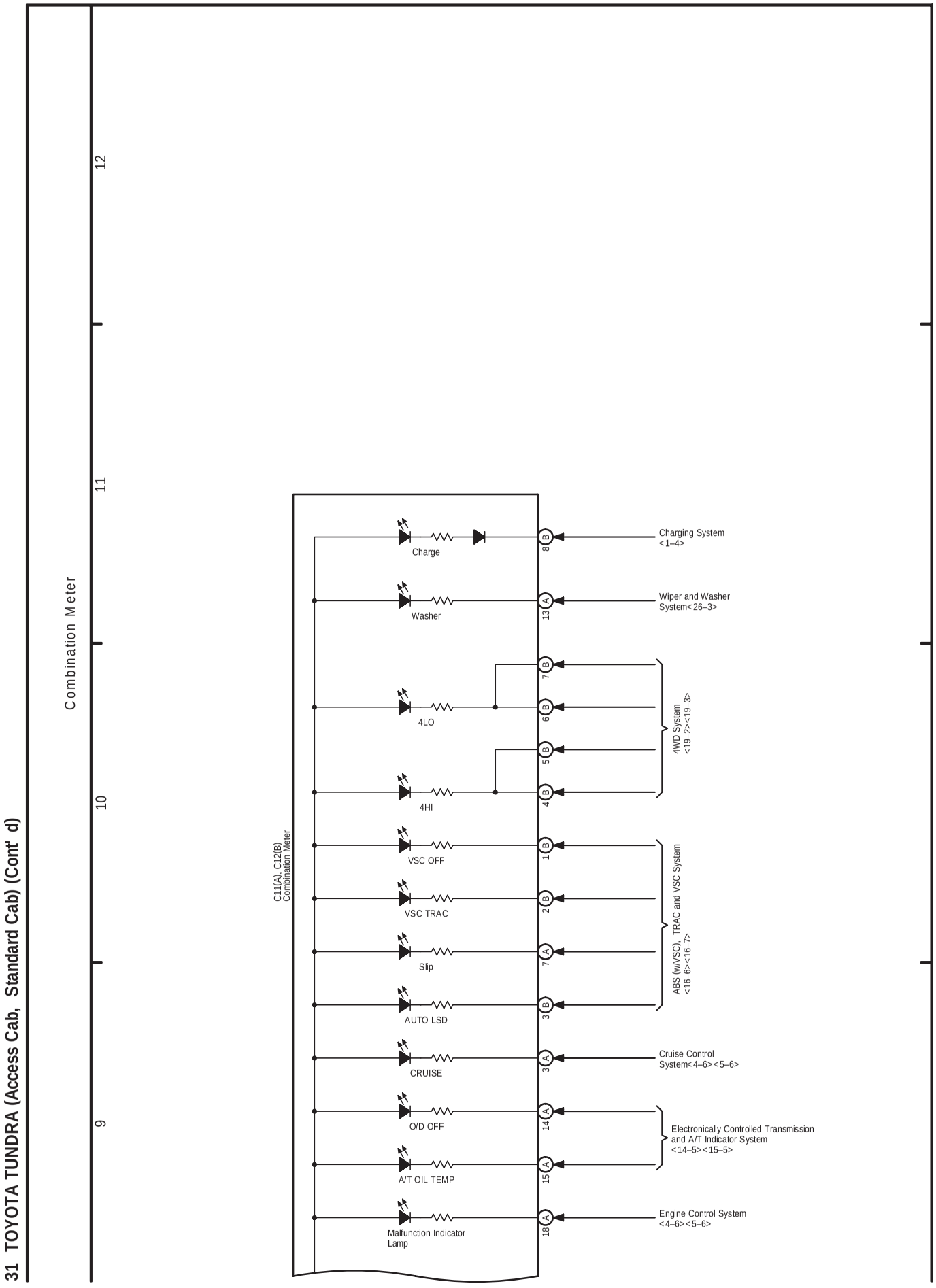
## 31 TOYOTA TUNDRA (Access Cab, Standard Cab)

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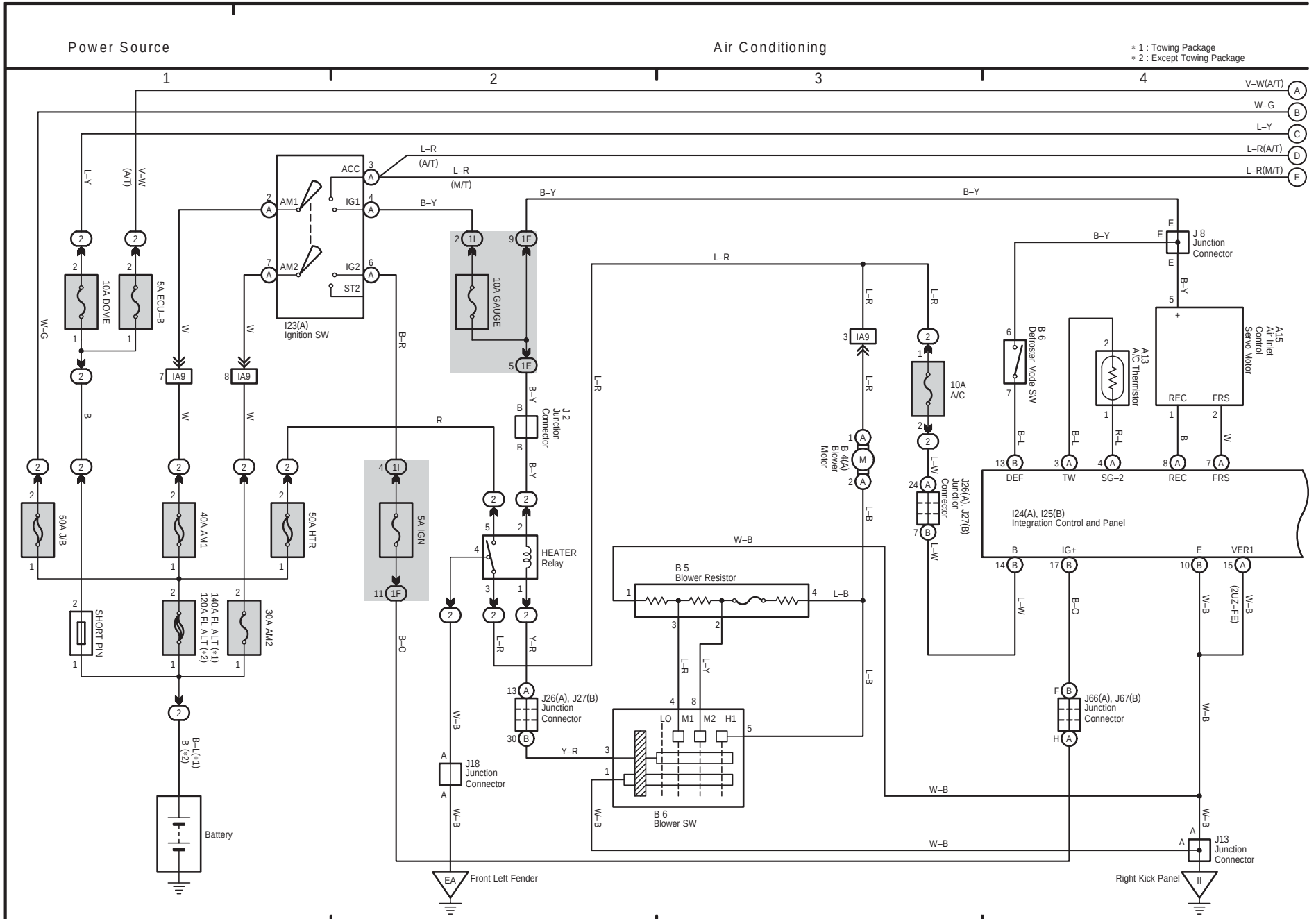
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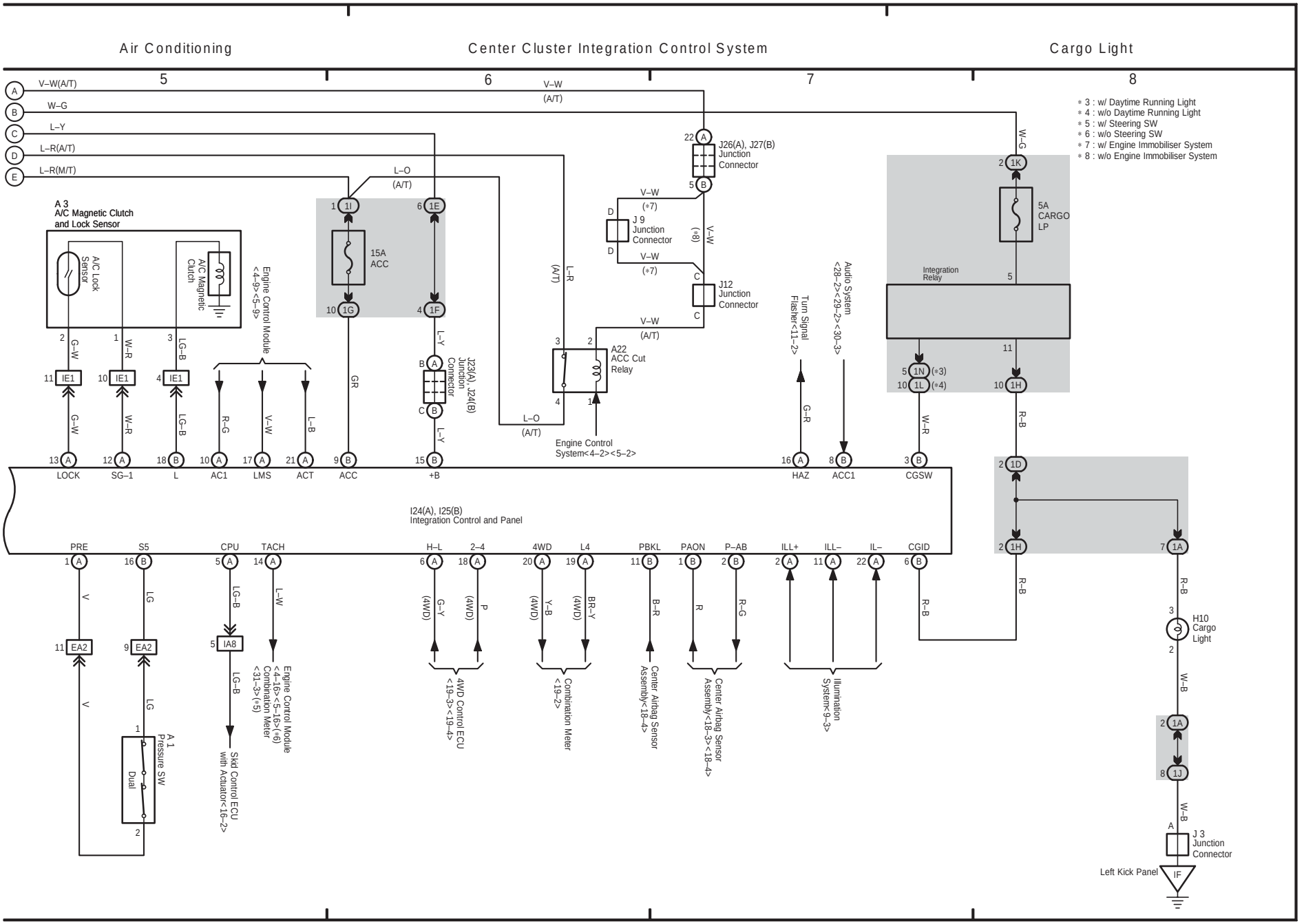



31 TOYOTA TUNDRA (Access Cab, Standard Cab) (Cont' d)
12
11
10
9
Combination Meter
C11(A), C12(B)
Combination Meter
Charge
Washer
4LO
4HI
VSC OFF
VSC TRAC
Slip
AUTO LSD
CRUISE
O/D OFF
A/T OIL TEMP
Malfunction Indicator Lamp
8 B
13 A
7 B
6 B
5 B
4 B
1 B
2 B
7 A
3 B
3 A
14 A
15 A
18 A
Charging System <1–4>
Wiper and Washer System<26–3>
4WD System <19–2><19–3>
ABS (w/VSC), TRAC and VSC System <16–6><16–7>
Cruise Control System<4–6><5–6>
Electronically Controlled Transmission and A/T Indicator System <14–5><15–5>
Engine Control System <4–6><5–6>

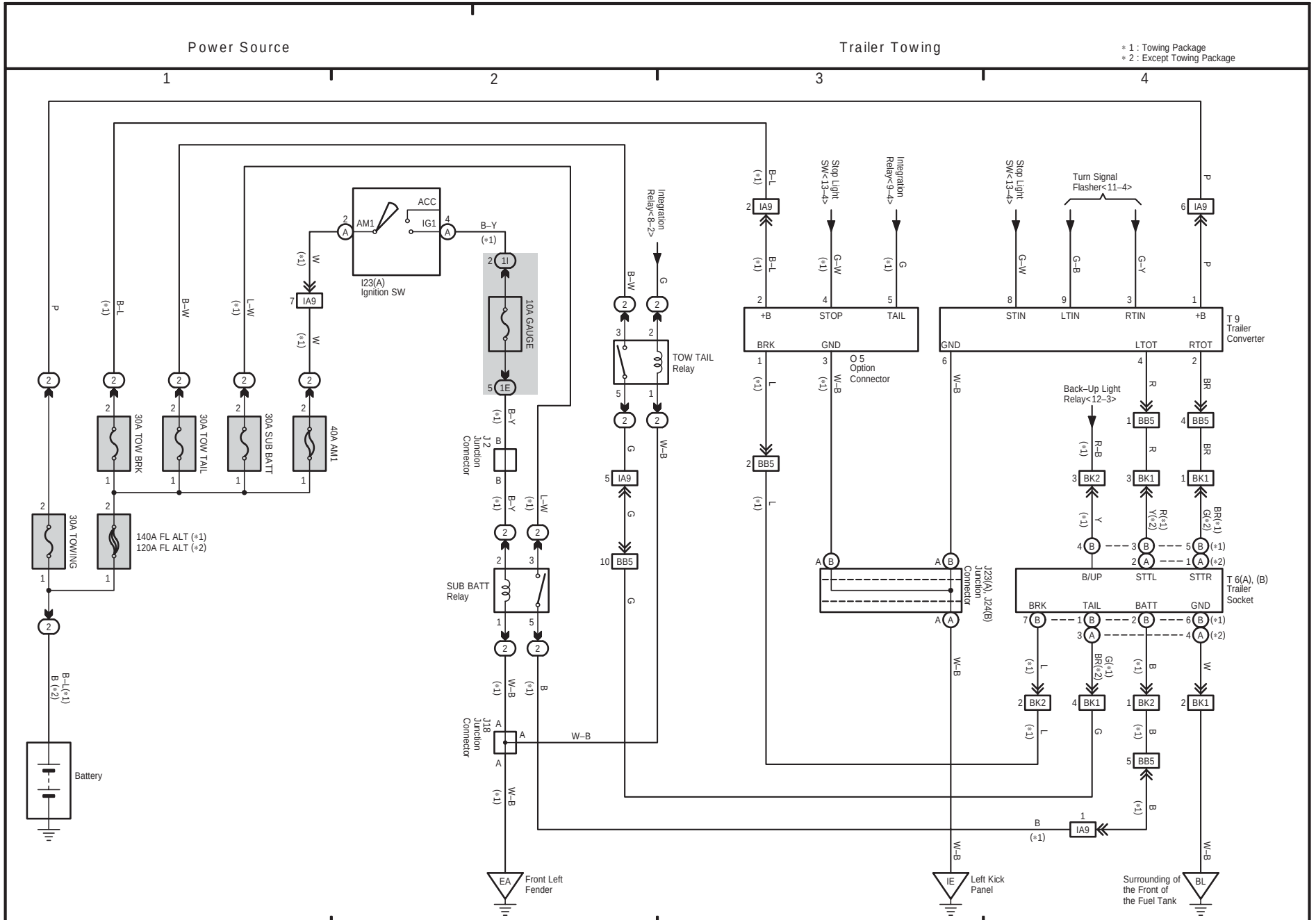
32 TOYOTA TUNDRA (Access Cab, Standard Cab)

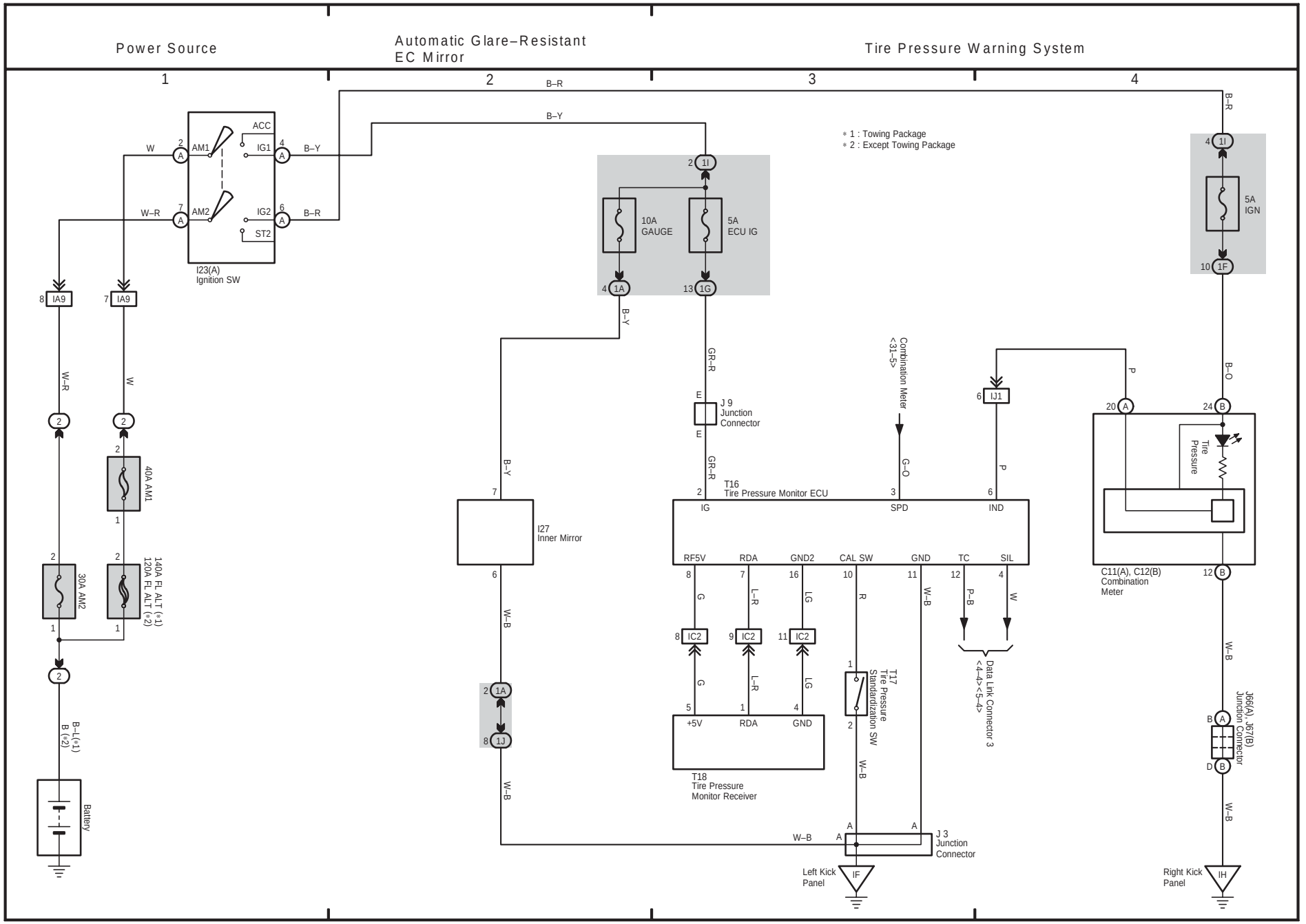
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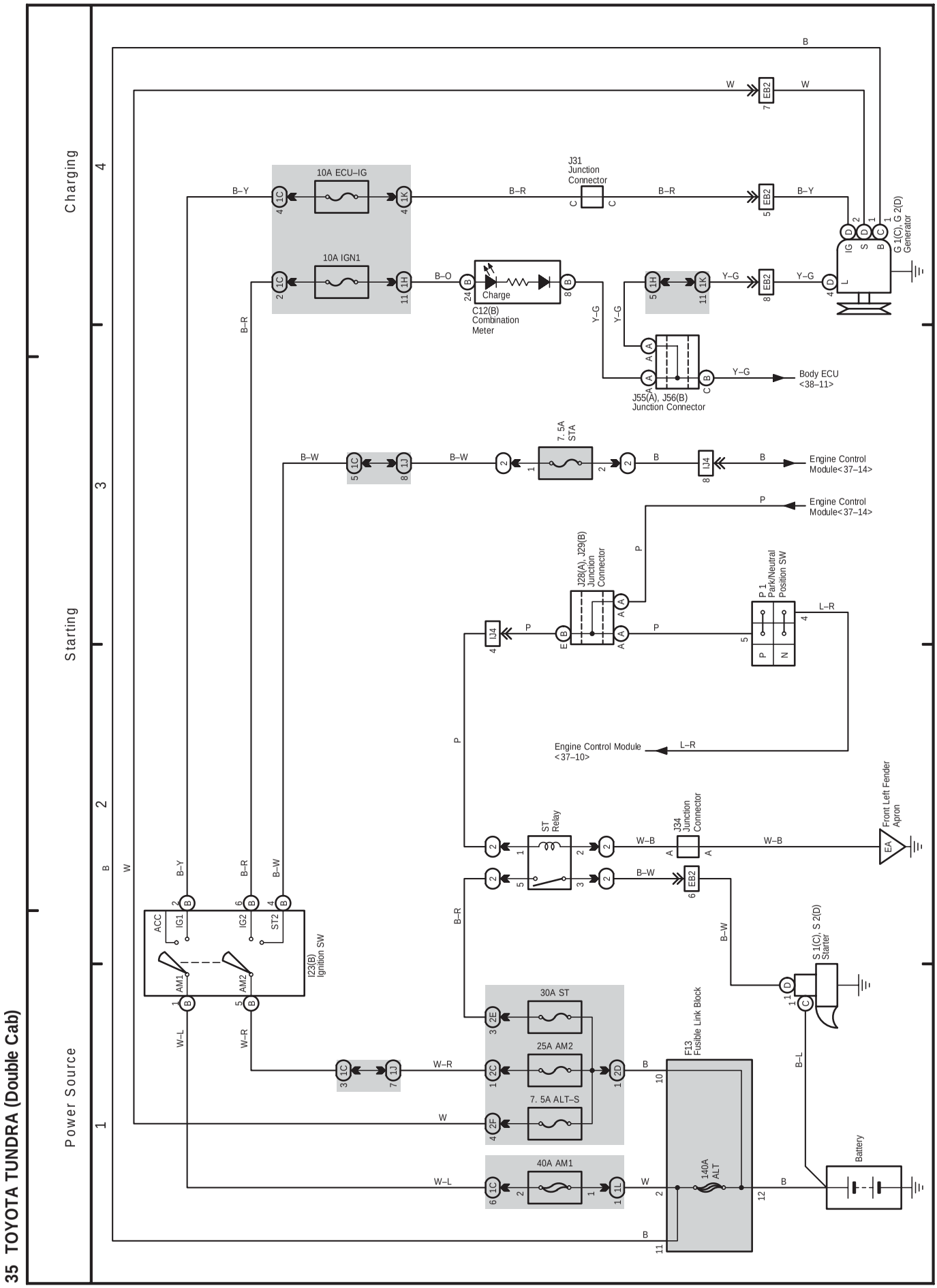


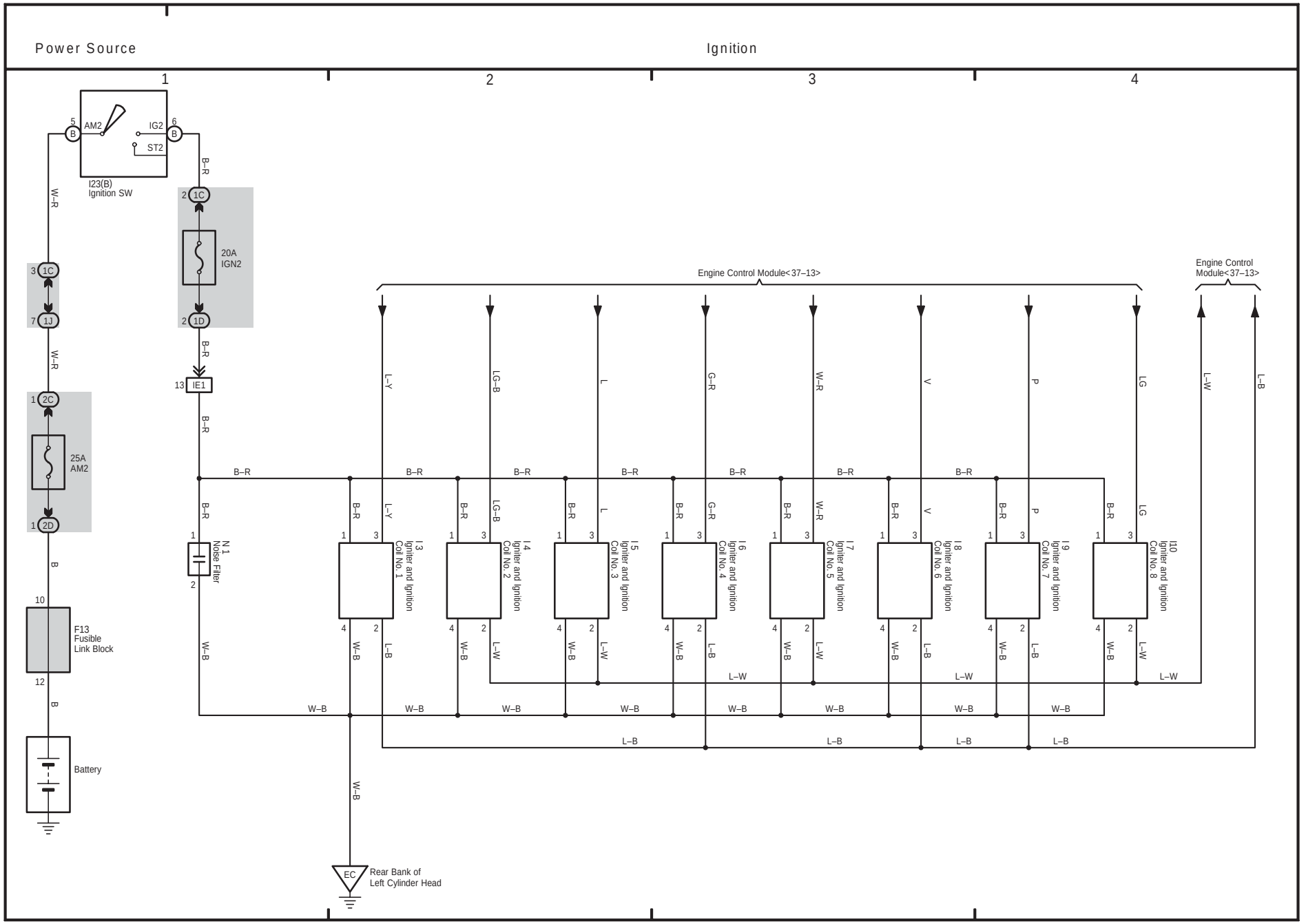

Air Conditioning
Center Cluster Integration Control System
Cargo Light
5
6
7
8
∗ 3 : w/ Daytime Running Light
∗ 4 : w/o Daytime Running Light
∗ 5 : w/ Steering SW
∗ 6 : w/o Steering SW
∗ 7 : w/ Engine Immobiliser System
∗ 8 : w/o Engine Immobiliser System
A 3
A/C Magnetic Clutch and Lock Sensor
A/C Lock Sensor
A/C Magnetic Clutch
Engine Control Module <4–9><5–9>
15A ACC
5A CARGO LP
Integration Relay
J26(A), J27(B) Junction Connector
J 9 Junction Connector
J12 Junction Connector
J23(A), J24(B) Junction Connector
A22 ACC Cut Relay
Engine Control System<4–2><5–2>
Turn Signal Flasher<11–2>
Audio System <28–2><29–2><30–3>
I24(A), I25(B) Integration Control and Panel
LOCK
SG–1
L
AC1
LMS
ACT
ACC
+B
HAZ
ACC1
CGSW
PRE
S5
CPU
TACH
H–L
2–4
4WD
L4
PBKL
PAON
P–AB
ILL+
ILL–
IL–
CGID
A 1 Pressure SW
Skid Control ECU with Actuator<16–2>
Engine Control Module <4–16><5–16>(∗6) Combination Meter <31–3>(∗5)
4WD Control ECU <19–3><19–4>
Combination Meter <19–2>
Center Airbag Sensor Assembly<18–4>
Center Airbag Sensor Assembly<18–3><18–4>
Illumination System<9–3>
H10 Cargo Light
J 3 Junction Connector
Left Kick Panel

## 33 TOYOTA TUNDRA (Access Cab, Standard Cab)



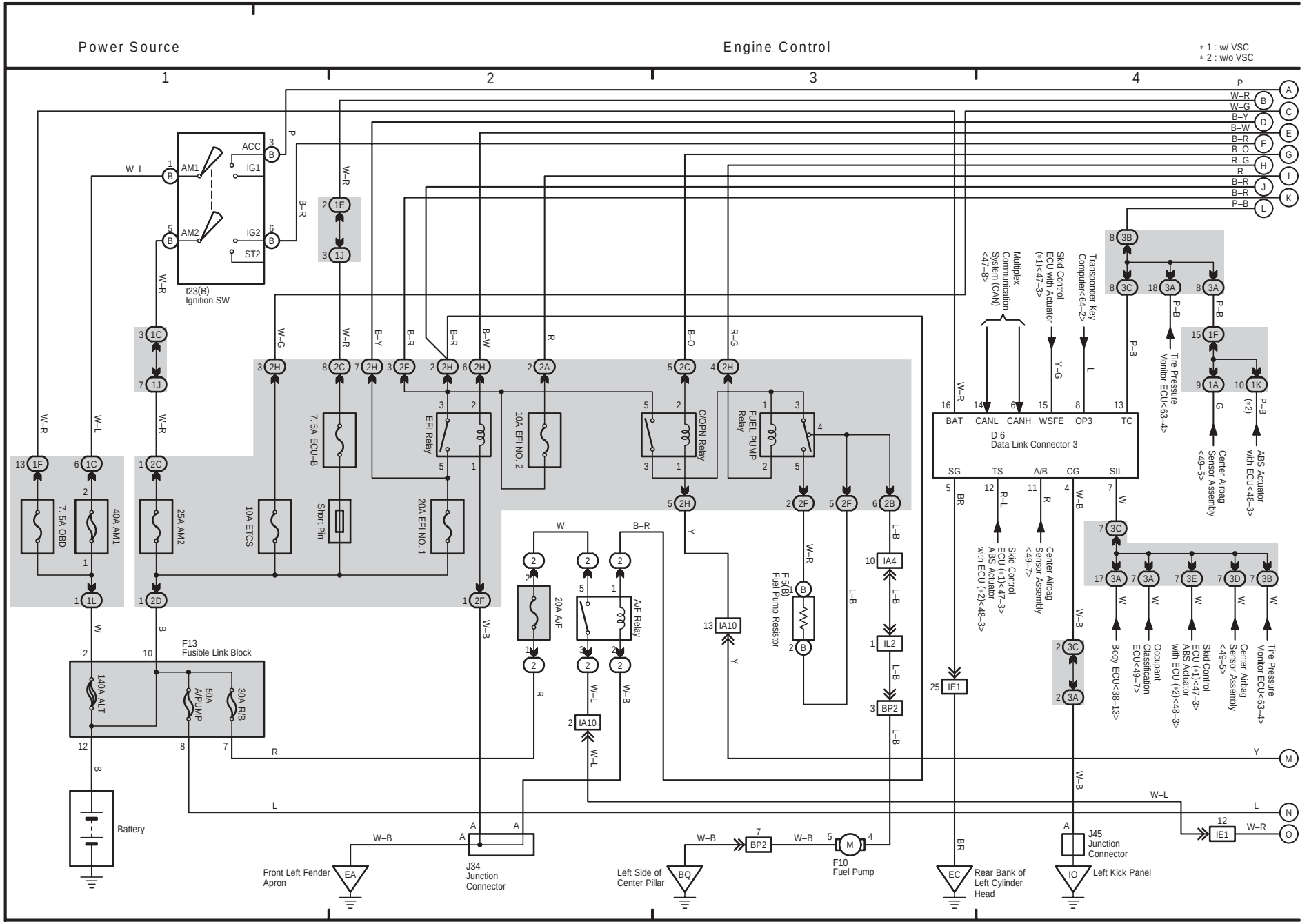

Power Source
Automatic Glare–Resistant EC Mirror
Tire Pressure Warning System
1
2
3
4
B–R
B–Y
* 1 : Towing Package
* 2 : Except Towing Package
ACC
IG1
IG2
ST2
AM1
AM2
W
W–R
I23(A)
Ignition SW
10A GAUGE
5A ECU IG
5A IGN
1I
1F
1A
1G
IA9
40A AM1
30A AM2
140A FL ALT (*1)
120A FL ALT (*2)
B–L (*1)
B (*2)
Battery
GR–R
J 9 Junction Connector
Combination Meter <31–5>
G–O
P
B–O
IJ1
T16
Tire Pressure Monitor ECU
IG
SPD
IND
I27
Inner Mirror
RF5V
RDA
GND2
CAL SW
GND
TC
SIL
G
L–R
LG
R
W–B
P–B
IC2
T17
Tire Pressure Standardization SW
T18
Tire Pressure Monitor Receiver
+5V
Data Link Connector 3 <4–4> <5–4>
C11(A), C12(B)
Combination Meter
Tire Pressure
J66(A), J67(B)
Junction Connector
J 3
Junction Connector
Left Kick Panel
IF
Right Kick Panel
IH


35 TOYOTA TUNDRA (Double Cab)
Power Source
Starting
Charging
10A ECU–IG
10A IGN1
J31 Junction Connector
C12(B) Combination Meter
Charge
G 1(C), G 2(D) Generator
J55(A), J56(B) Junction Connector
Body ECU <38–11>
7. 5A STA
Engine Control Module<37–14>
J28(A), J29(B) Junction Connector
P 1 Park/Neutral Position SW
Engine Control Module <37–10>
ST Relay
J34 Junction Connector
Front Left Fender Apron
I23(B) Ignition SW
ACC
IG1
IG2
ST2
AM1
AM2
30A ST
25A AM2
7. 5A ALT–S
40A AM1
F13 Fusible Link Block
140A ALT
S 1(C), S 2(D) Starter
Battery

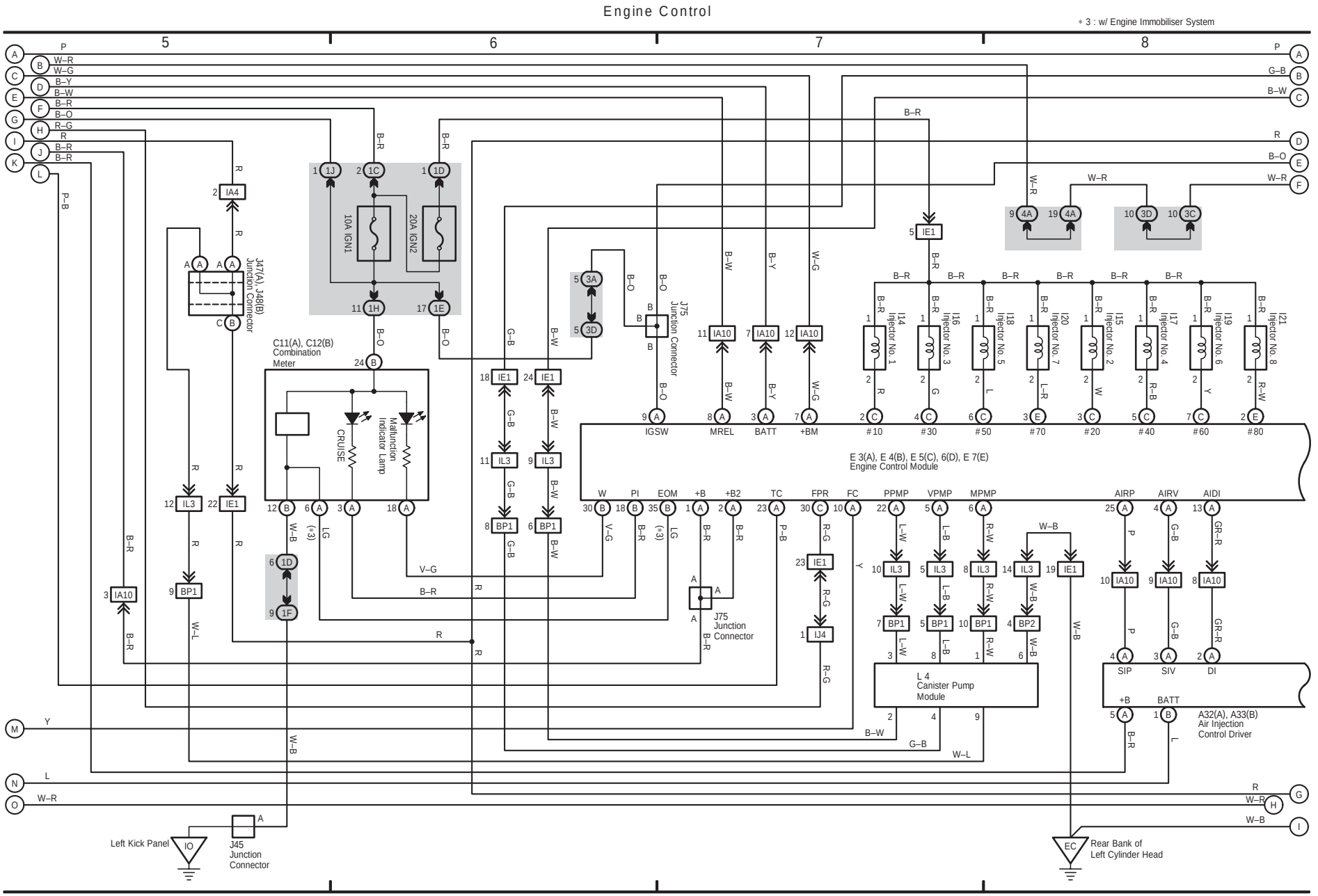

Power Source
Ignition
1
2
3
4
AM2
IG2
ST2
B
I23(B)
Ignition SW
W–R
B–R
1C
20A
IGN2
1D
1J
2C
25A
AM2
2D
IE1
N1
Noise Filter
F13
Fusible
Link Block
Battery
B
W–B
L–B
L–W
L–Y
LG–B
L
G–R
W–R
V
P
LG
Engine Control Module<37–13>
Engine Control Module<37–13>
I3 Igniter and Ignition Coil No. 1
I4 Igniter and Ignition Coil No. 2
I5 Igniter and Ignition Coil No. 3
I6 Igniter and Ignition Coil No. 4
I7 Igniter and Ignition Coil No. 5
I8 Igniter and Ignition Coil No. 6
I9 Igniter and Ignition Coil No. 7
I10 Igniter and Ignition Coil No. 8
EC
Rear Bank of
Left Cylinder Head

37 TOYOTA TUNDRA (Double Cab)

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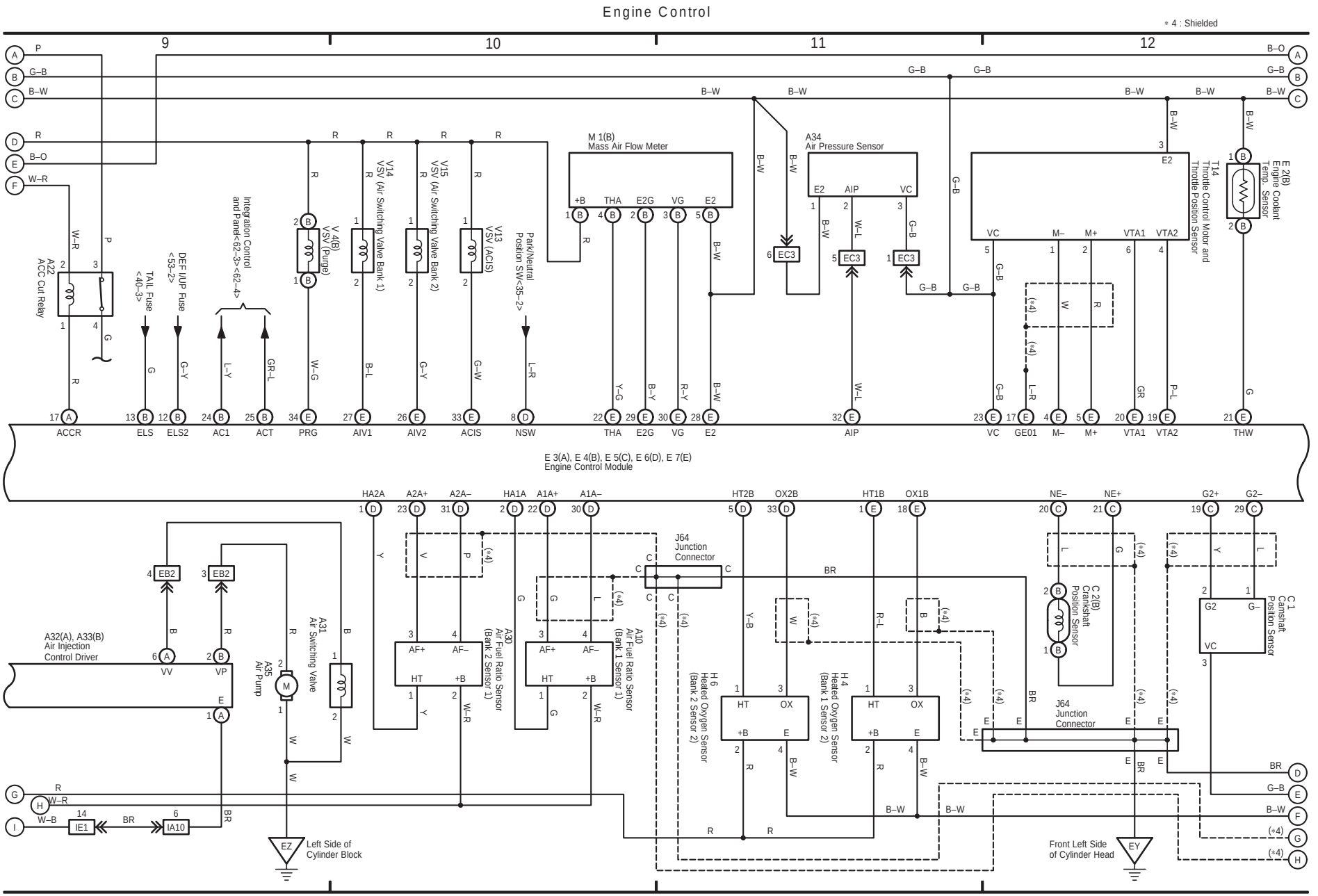


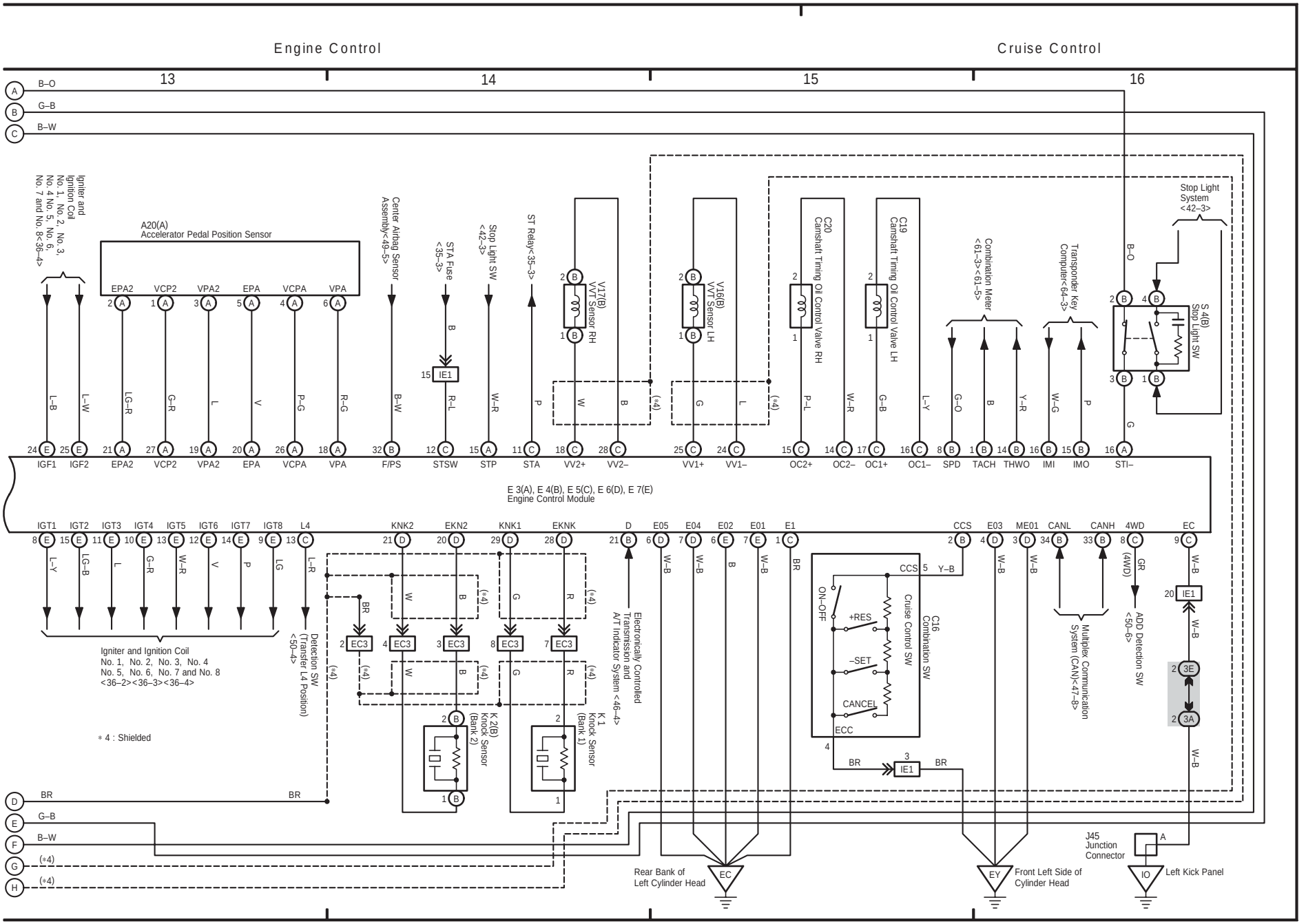
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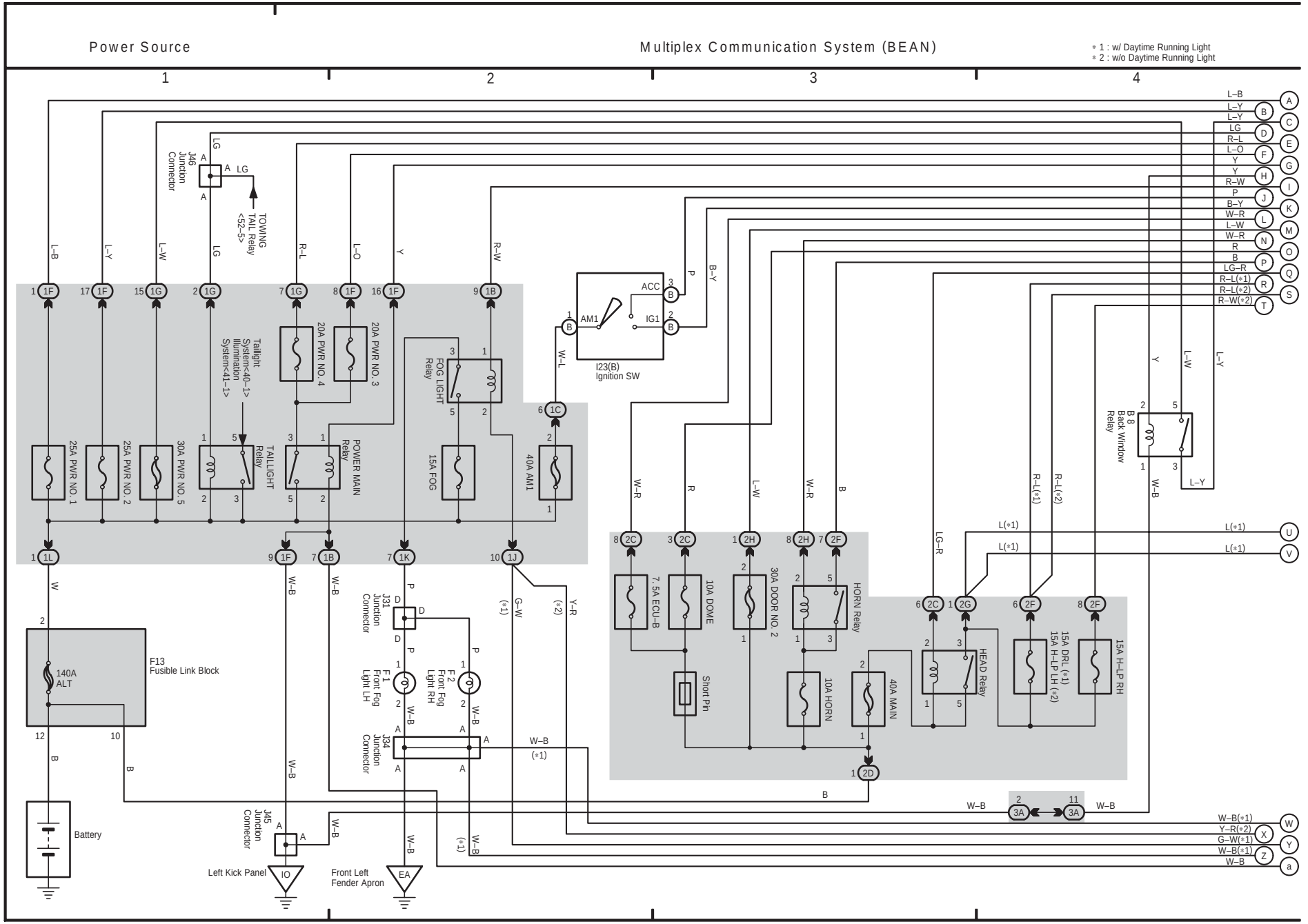
## 37 TOYOTA TUNDRA (Double Cab) (Cont' d)

(Cont. next page)




Engine Control
Cruise Control
13
14
15
16
B–O
G–B
B–W
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5, No. 6, No. 7 and No. 8<36–4>
A20(A) Accelerator Pedal Position Sensor
EPA2 VCP2 VPA2 EPA VCPA VPA
Center Airbag Sensor Assembly<49–5>
STA Fuse <35–3>
Stop Light SW <42–3>
ST Relay<35–3>
V17(B) VVT Sensor RH
V16(B) VVT Sensor LH
C20 Camshaft Timing Oil Control Valve RH
C19 Camshaft Timing Oil Control Valve LH
Combination Meter <61–3><61–5>
Transponder Key Computer<64–3>
Stop Light System <42–3>
S 4(B) Stop Light SW
IGF1 IGF2 EPA2 VCP2 VPA2 EPA VCPA VPA F/PS STSW STP STA VV2+ VV2– VV1+ VV1– OC2+ OC2– OC1+ OC1– SPD TACH THWO IMI IMO STI–
E 3(A), E 4(B), E 5(C), E 6(D), E 7(E) Engine Control Module
IGT1 IGT2 IGT3 IGT4 IGT5 IGT6 IGT7 IGT8 L4 KNK2 EKN2 KNK1 EKNK D E05 E04 E02 E01 E1 CCS E03 ME01 CANL CANH 4WD EC
Igniter and Ignition Coil No. 1, No. 2, No. 3, No. 4 No. 5, No. 6, No. 7 and No. 8 <36–2><36–3><36–4>
Detection SW (Transfer L4 Position) <50–4>
K 2(B) Knock Sensor (Bank 2)
K 1 Knock Sensor (Bank 1)
Electronically Controlled Transmission and A/T Indicator System <46–4>
C16 Combination SW
Cruise Control SW
ON–OFF
+RES
–SET
CANCEL
ECC
Multiplex Communication System (CAN)<47–8>
ADD Detection SW <50–6>
(4WD)
EC3
IE1
3E
3A
∗4 : Shielded
Rear Bank of Left Cylinder Head
Front Left Side of Cylinder Head
J45 Junction Connector
Left Kick Panel

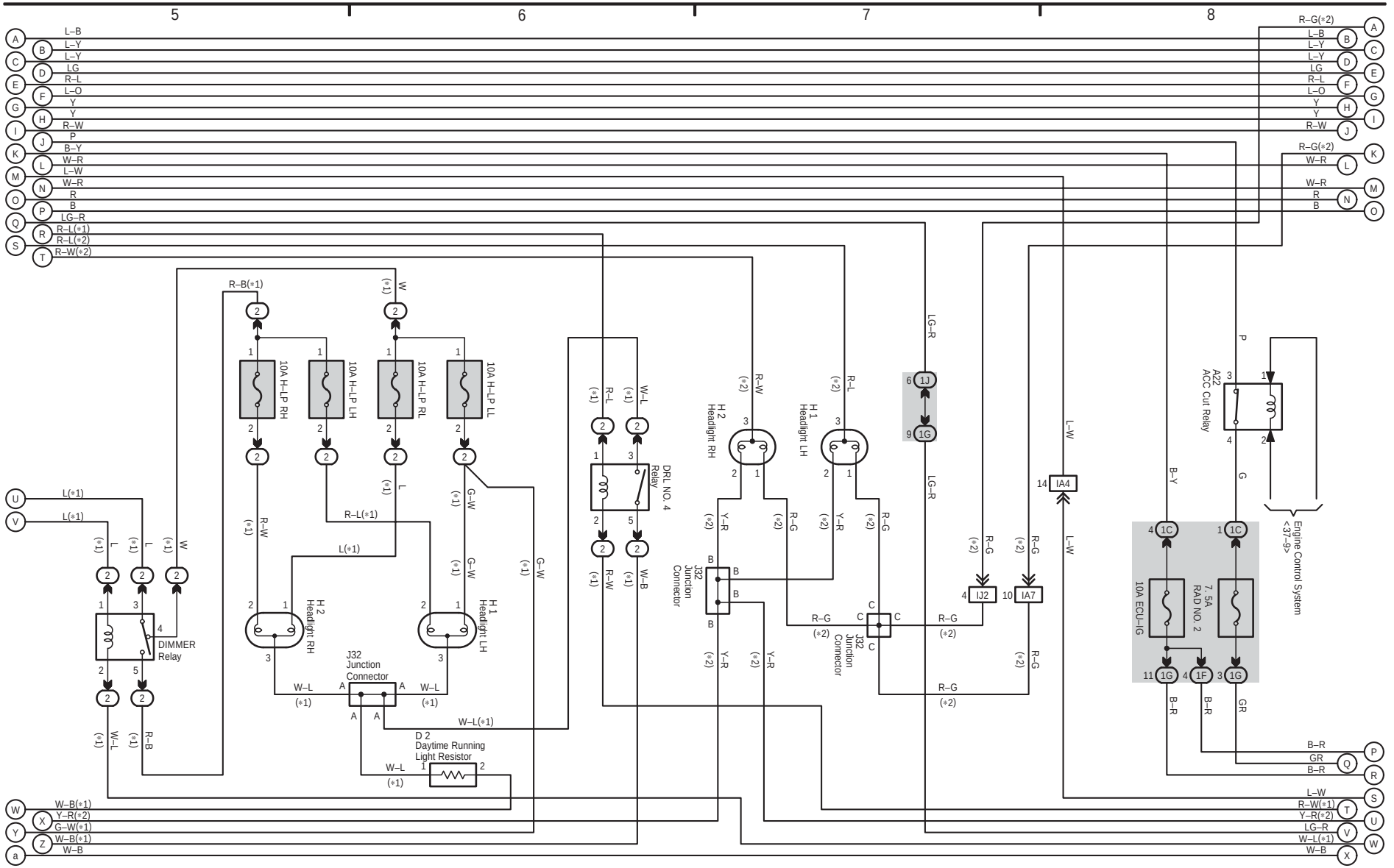
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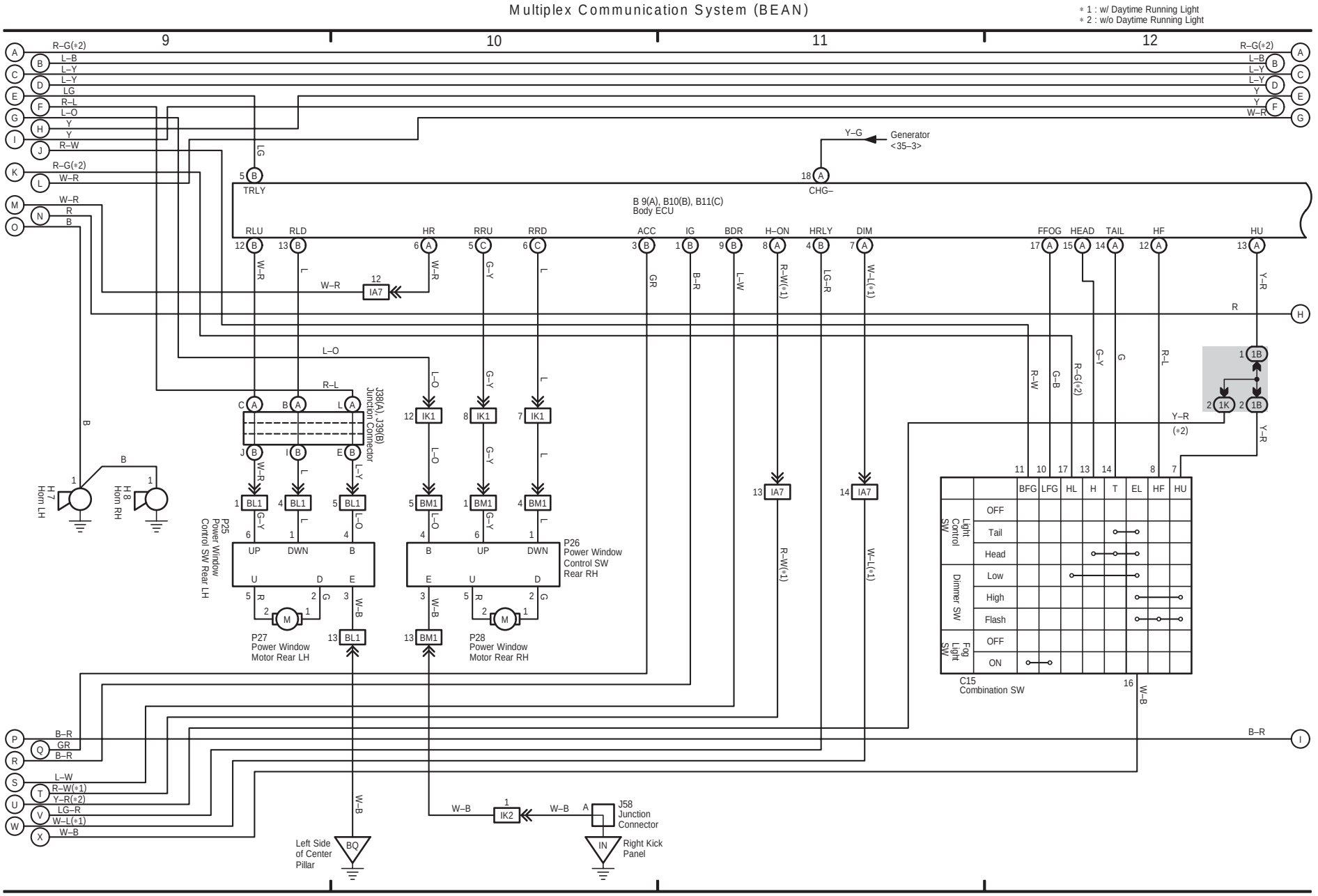


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Multiplex Communication System (BEAN)

∗ 1 : w/ Daytime Running Light
∗ 2 : w/o Daytime Running Light

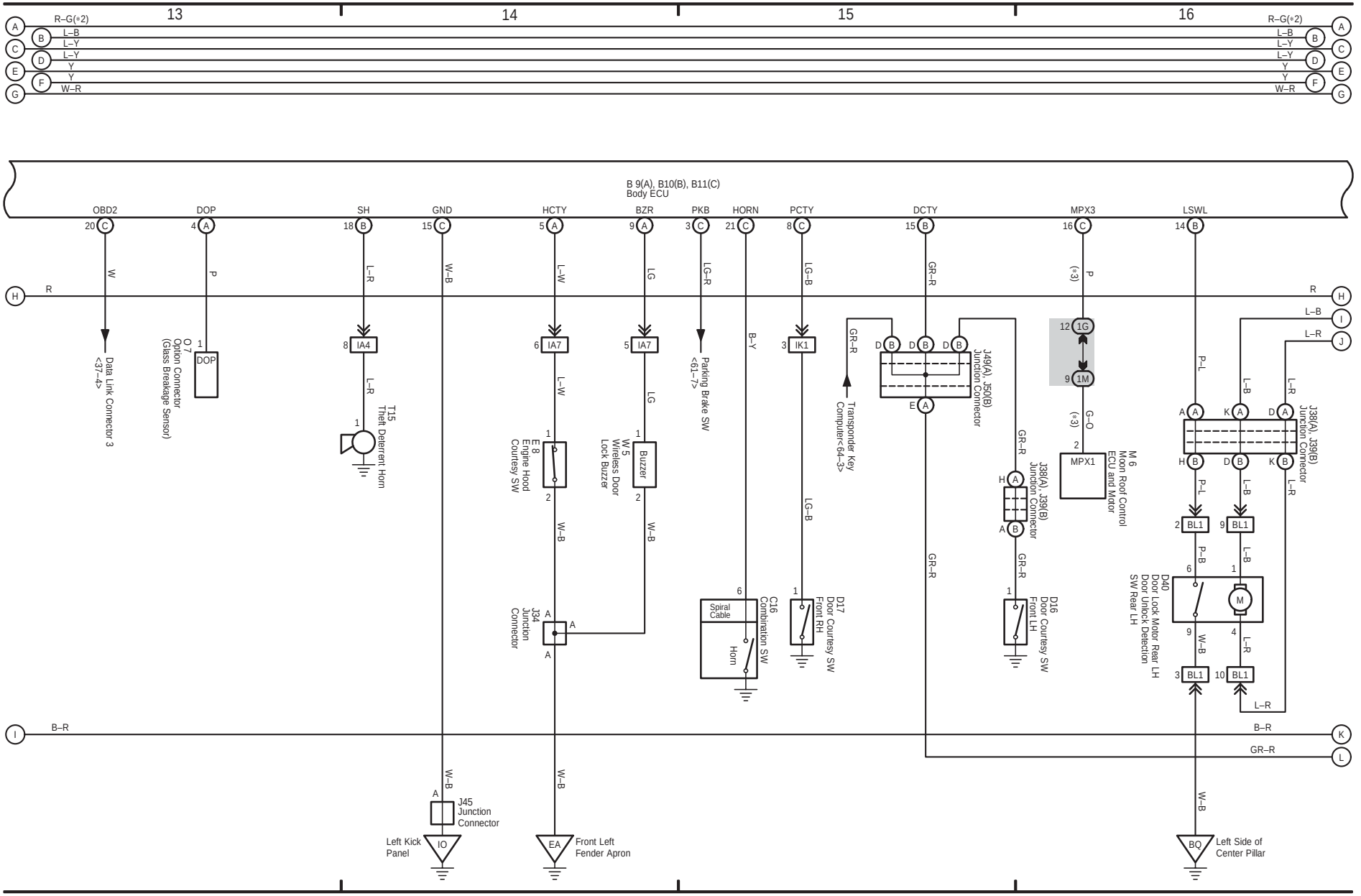



Multiplex Communication System (BEAN)
* 1 : w/ Daytime Running Light
* 2 : w/o Daytime Running Light
9
10
11
12
R–G(*2)
L–B
L–Y
L–Y
LG
R–L
L–O
Y
Y
R–W
R–G(*2)
W–R
W–R
R
B
L–O
R–L
B
TRLY
CHG–
Y–G
Generator
<35–3>
B 9(A), B10(B), B11(C)
Body ECU
RLU
RLD
HR
RRU
RRD
ACC
IG
BDR
H–ON
HRLY
DIM
FFOG
HEAD
TAIL
HF
HU
W–R
L
W–R
G–Y
L
GR
B–R
L–W
R–W(*1)
LG–R
W–L(*1)
Y–R
R
H
R–W
G–B
R–G(*2)
G–Y
G
R–L
Y–R
(*2)
Y–R
J38(A), J39(B)
Junction Connector
L–O
G–Y
L
L–O
G–Y
L
L–Y
G–Y
L
L–O
G–Y
L
H7
Horn LH
H8
Horn RH
P25
Power Window
Control SW Rear LH
P26
Power Window
Control SW
Rear RH
UP
DWN
B
B
UP
DWN
P27
Power Window
Motor Rear LH
P28
Power Window
Motor Rear RH
R–W(*1)
W–L(*1)
C15
Combination SW
BFG
LFG
HL
H
T
EL
HF
HU
Light Control SW
OFF
Tail
Head
Dimmer SW
Low
High
Flash
Fog Light SW
OFF
ON
W–B
B–R
B–R
GR
B–R
L–W
R–W(*1)
Y–R(*2)
LG–R
W–L(*1)
W–B
W–B
W–B
W–B
J58
Junction
Connector
Left Side
of Center
Pillar
Right Kick
Panel

(Cont. next page)

Multiplex Communication System (BEAN)

* 2 : w/o Daytime Running Light
* 3 : w/ Moon Roof

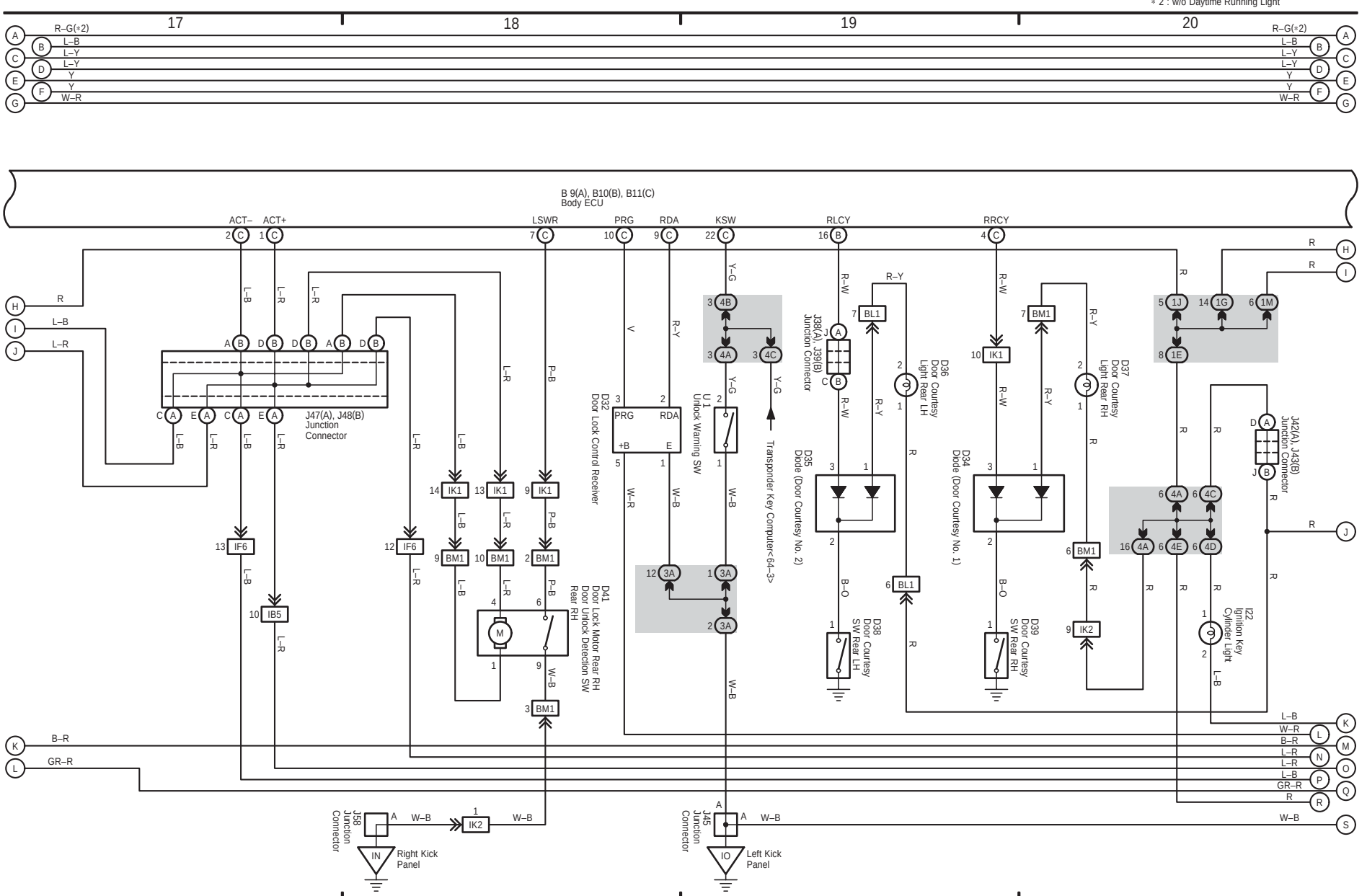


## 38 TOYOTA TUNDRA (Double Cab) (Cont' d)

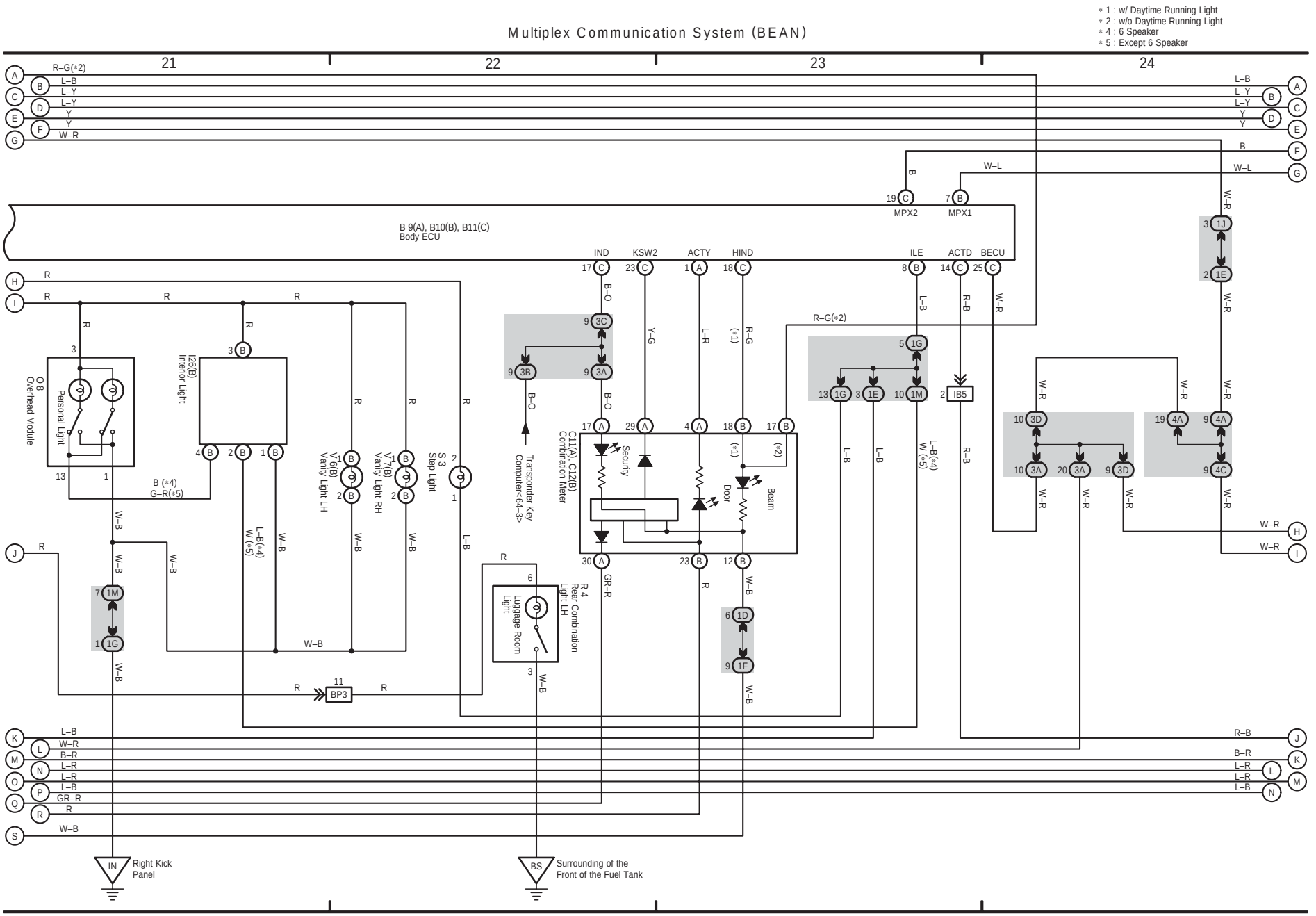
(Cont. next page)

Multiplex Communication System (BEAN)

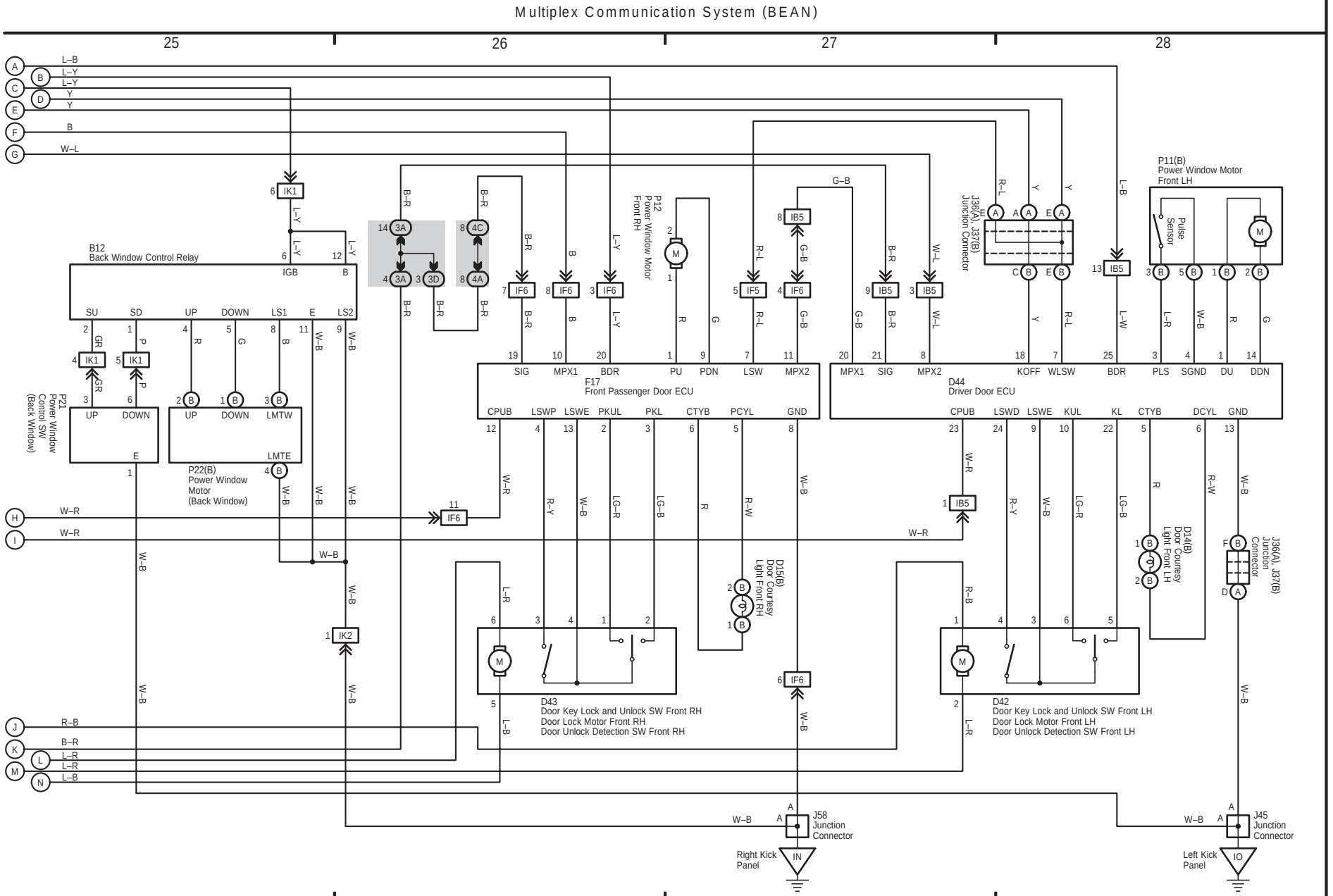
∗ 2 : w/o Daytime Running Light

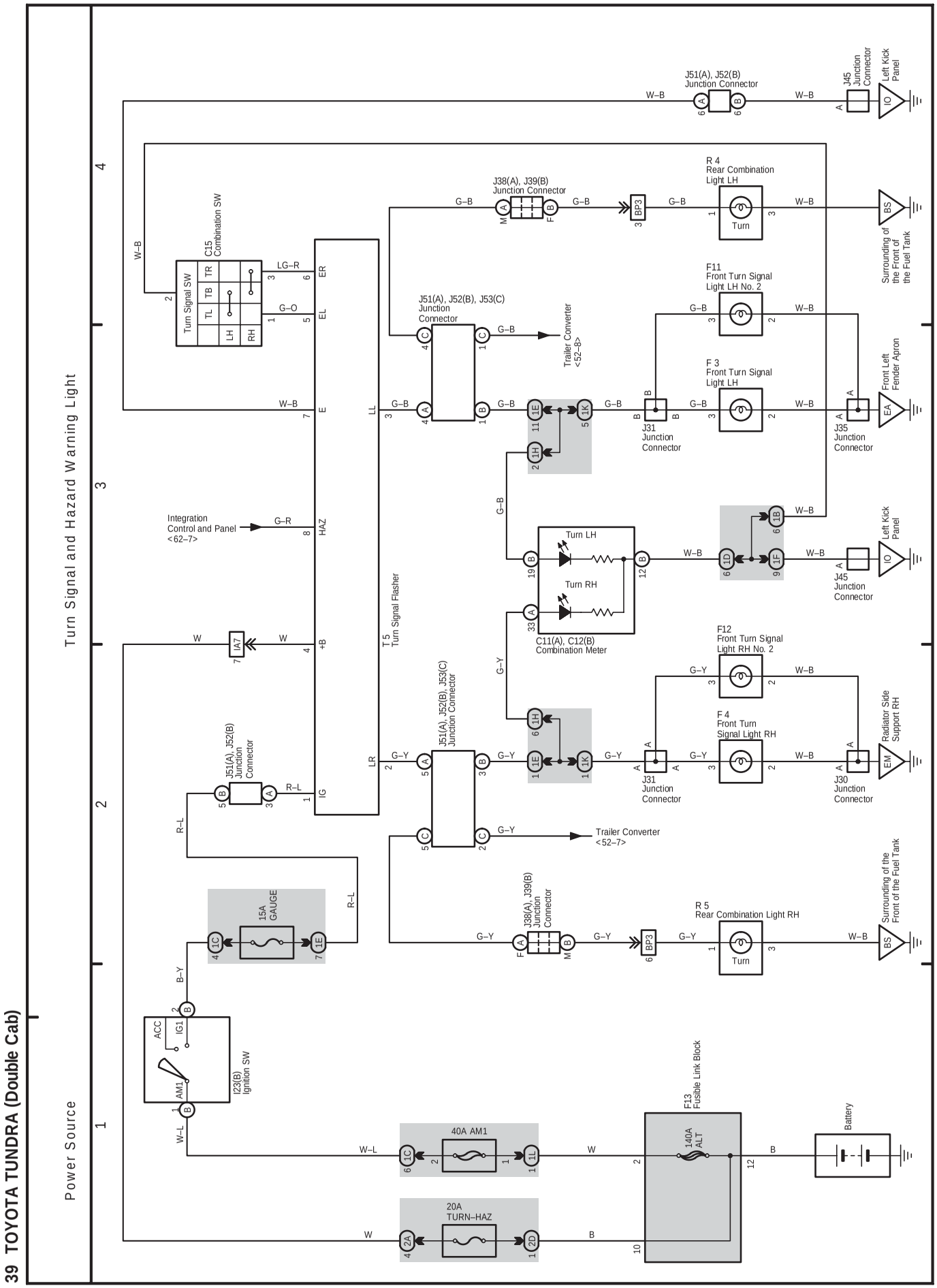


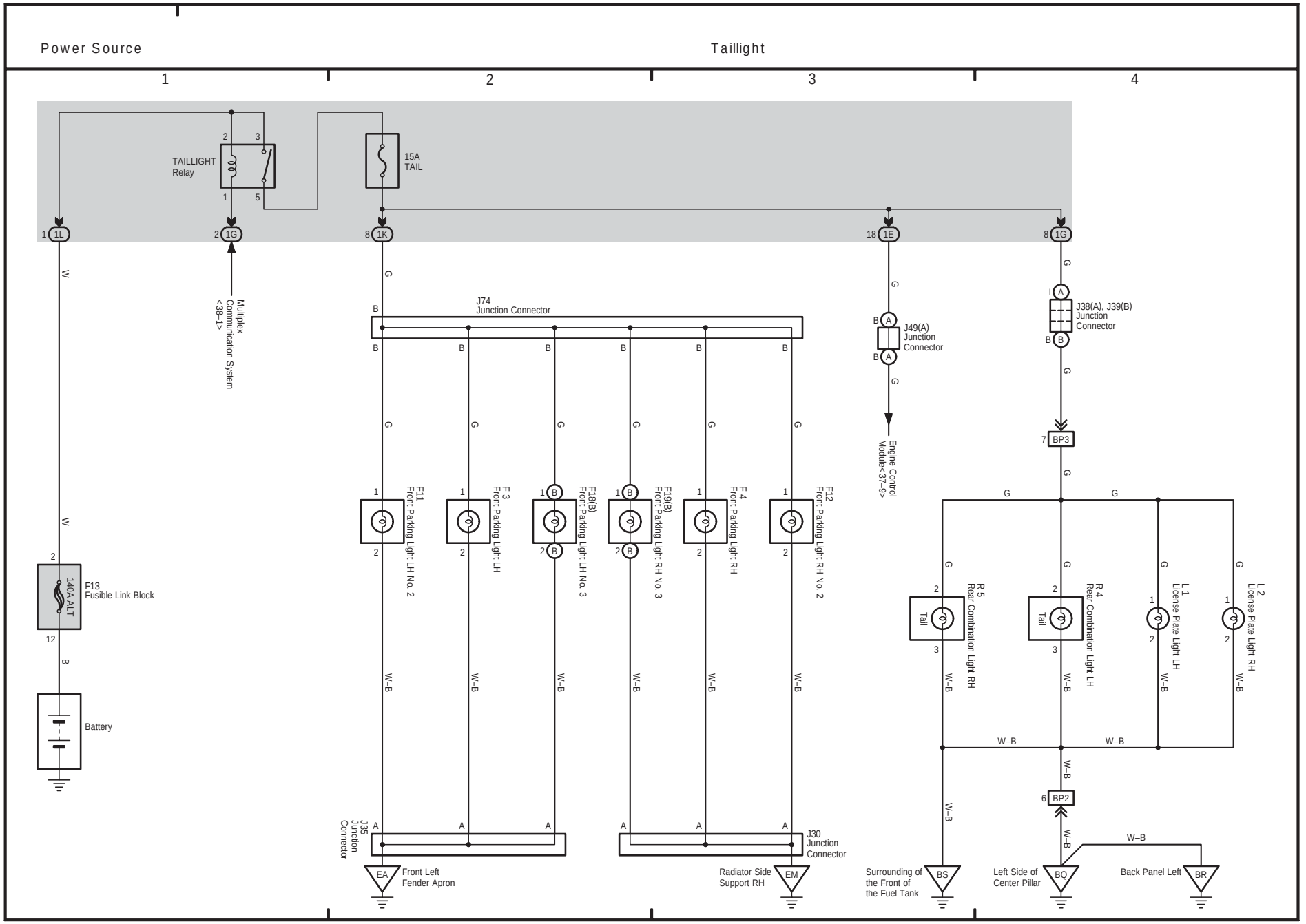
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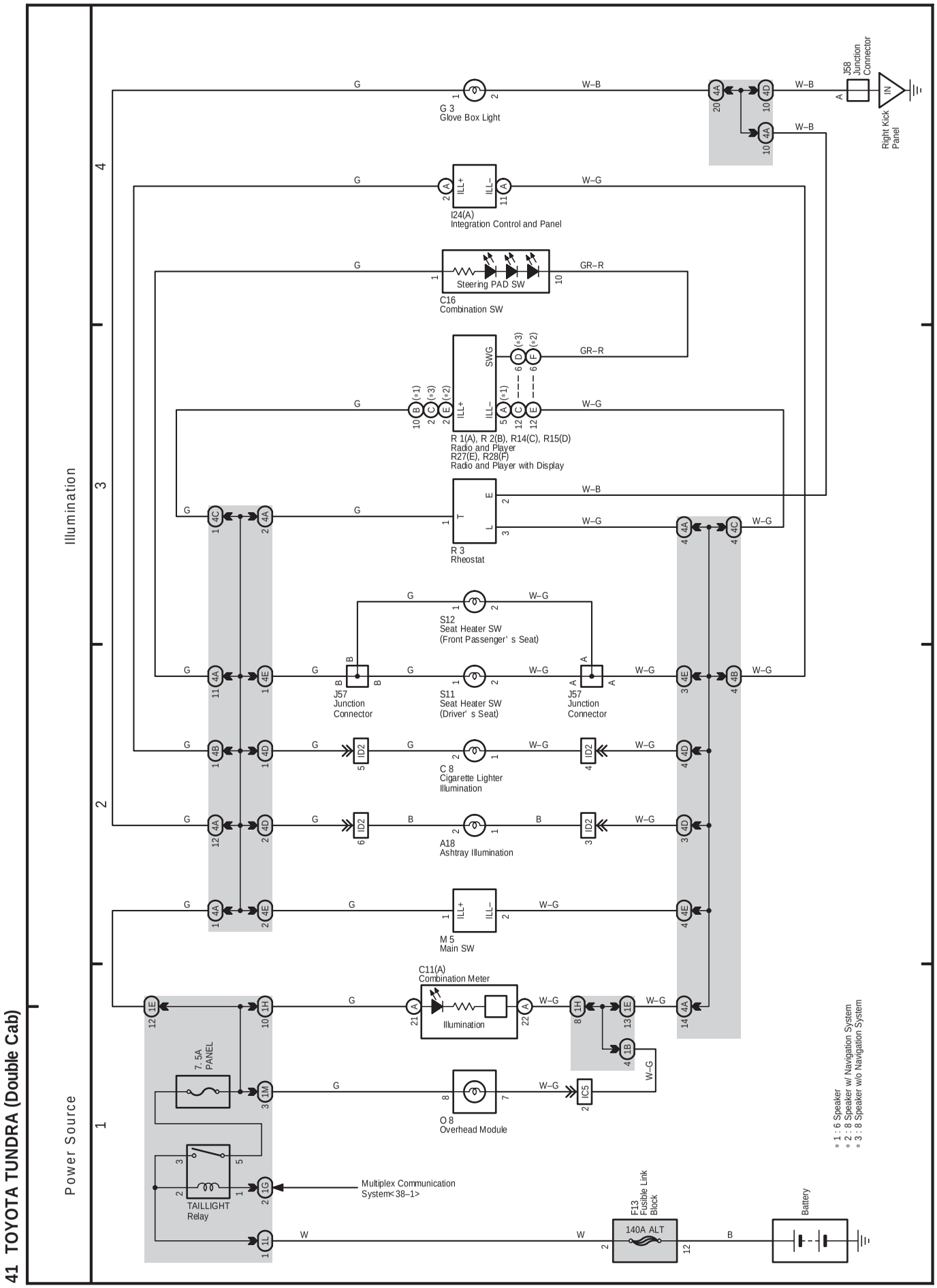


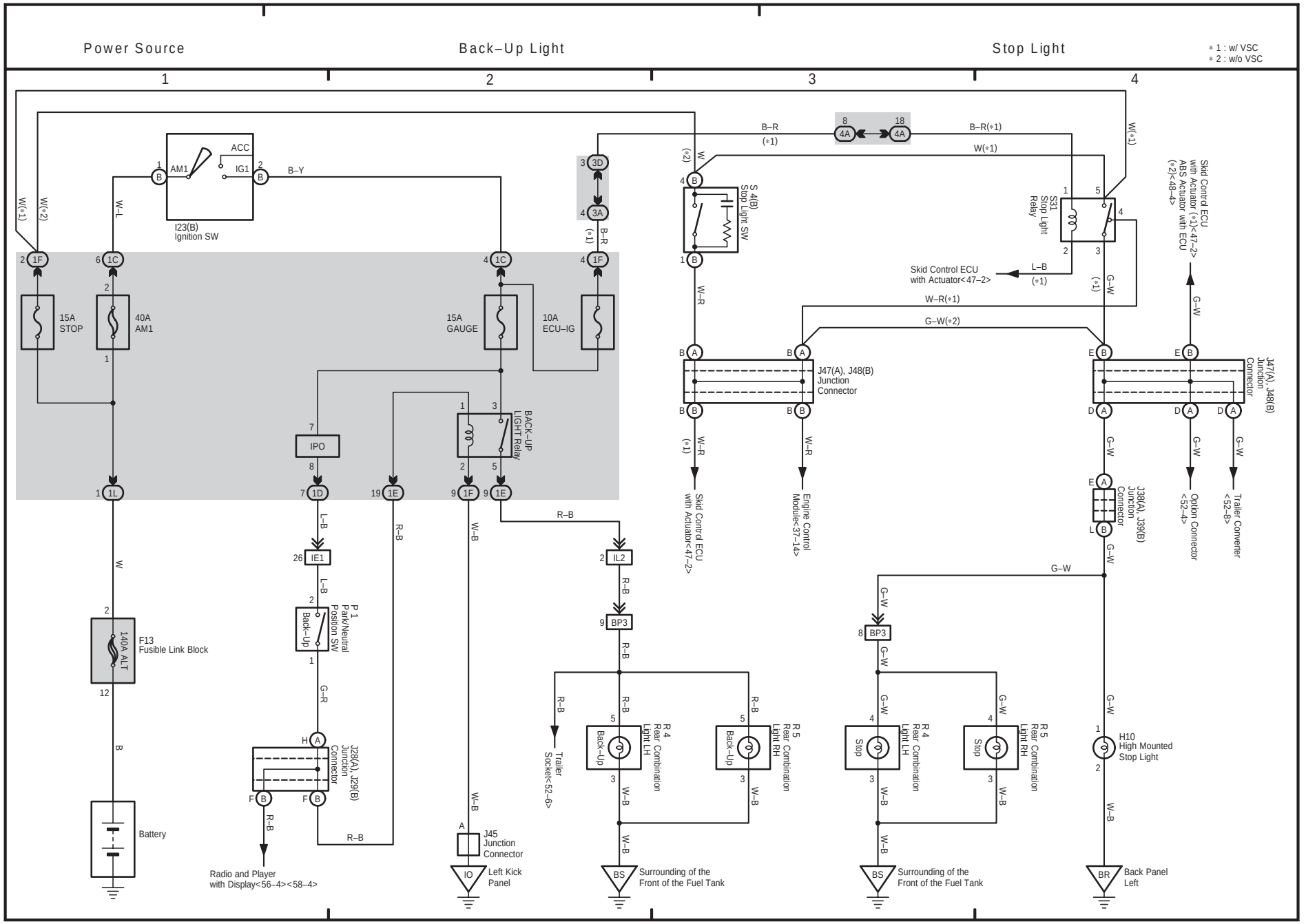
## 38 TOYOTA TUNDRA (Double Cab) (Cont' d)



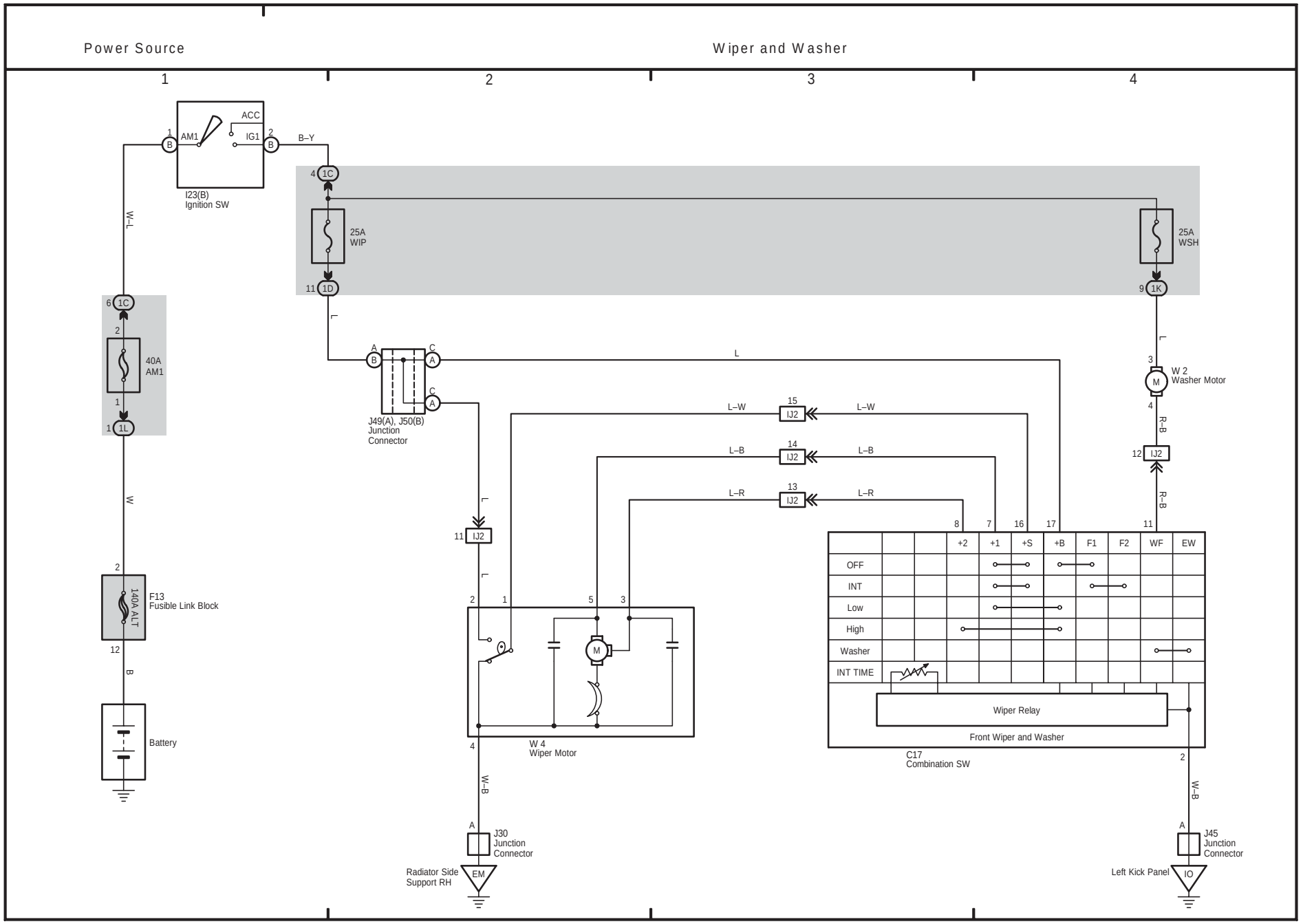

39 TOYOTA TUNDRA (Double Cab)
Power Source
Turn Signal and Hazard Warning Light
1
2
3
4
J51(A), J52(B) Junction Connector
J45 Junction Connector
Left Kick Panel
J38(A), J39(B) Junction Connector
R 4 Rear Combination Light LH
Turn
Surrounding of the Front of the Fuel Tank
C15 Combination SW
Turn Signal SW
F11 Front Turn Signal Light LH No. 2
J51(A), J52(B), J53(C) Junction Connector
Trailer Converter <52–8>
F 3 Front Turn Signal Light LH
J31 Junction Connector
J35 Junction Connector
Front Left Fender Apron
Integration Control and Panel <62–7>
T 5 Turn Signal Flasher
Turn LH
Turn RH
C11(A), C12(B) Combination Meter
F12 Front Turn Signal Light RH No. 2
F 4 Front Turn Signal Light RH
J30 Junction Connector
Radiator Side Support RH
Trailer Converter <52–7>
R 5 Rear Combination Light RH
15A GAUGE
I23(B) Ignition SW
ACC
IG1
AM1
40A AM1
20A TURN–HAZ
F13 Fusible Link Block
140A ALT
Battery

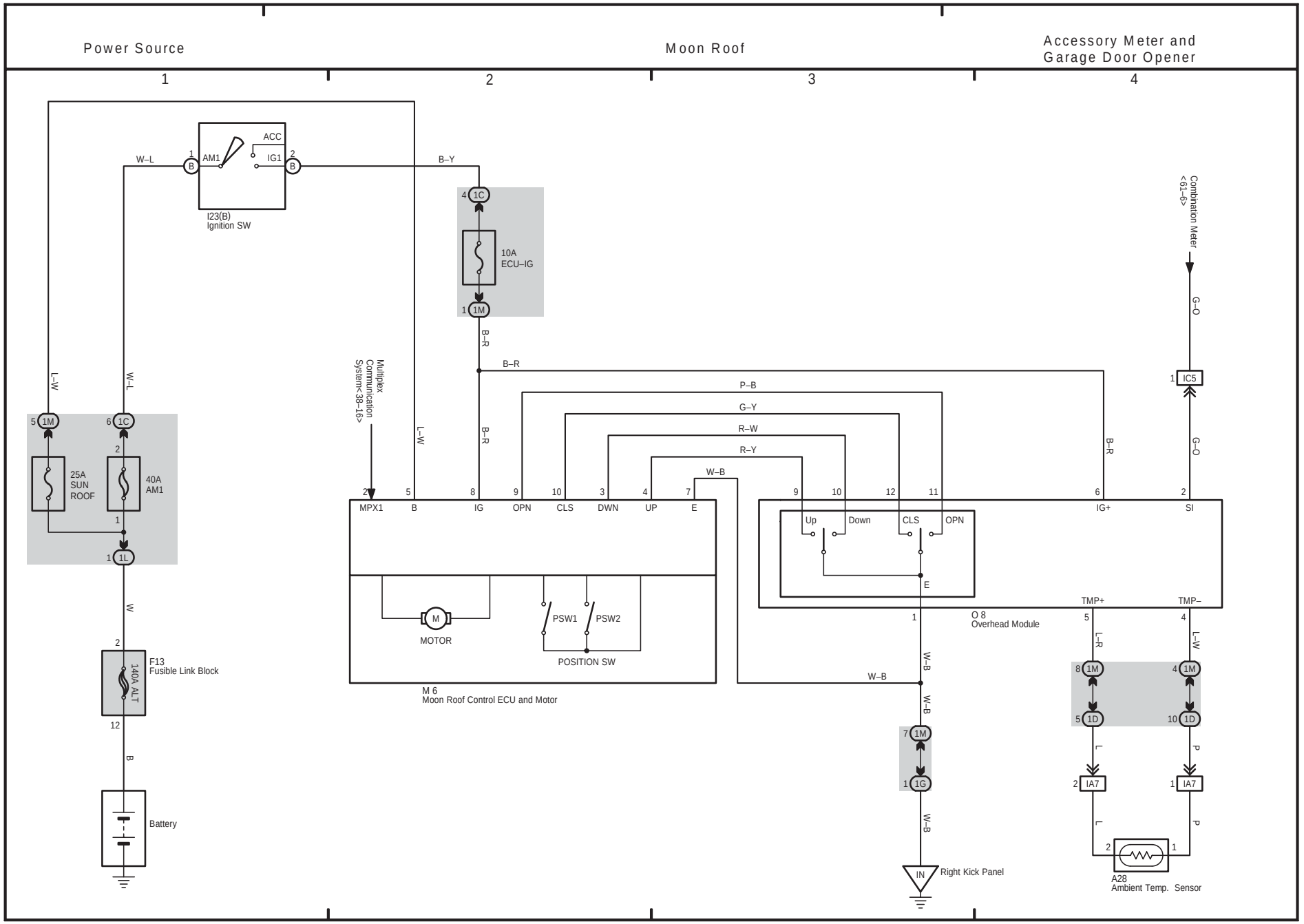

Power Source
Taillight
1
2
3
4
TAILLIGHT Relay
15A TAIL
1L
1G
1K
1E
1G
Multiplex Communication System <38–1>
J74 Junction Connector
J49(A) Junction Connector
J38(A), J39(B) Junction Connector
Engine Control Module<37–9>
BP3
BP2
F13 Fusible Link Block
140A ALT
Battery
F11 Front Parking Light LH No. 2
F3 Front Parking Light LH
F18(B) Front Parking Light LH No. 3
F19(B) Front Parking Light RH No. 3
F4 Front Parking Light RH
F12 Front Parking Light RH No. 2
R5 Rear Combination Light RH
R4 Rear Combination Light LH
L1 License Plate Light LH
L2 License Plate Light RH
Tail
J35 Junction Connector
J30 Junction Connector
EA
Front Left Fender Apron
Radiator Side Support RH
EM
Surrounding of the Front of the Fuel Tank
BS
Left Side of Center Pillar
BQ
Back Panel Left
BR
W
G
B
W–B

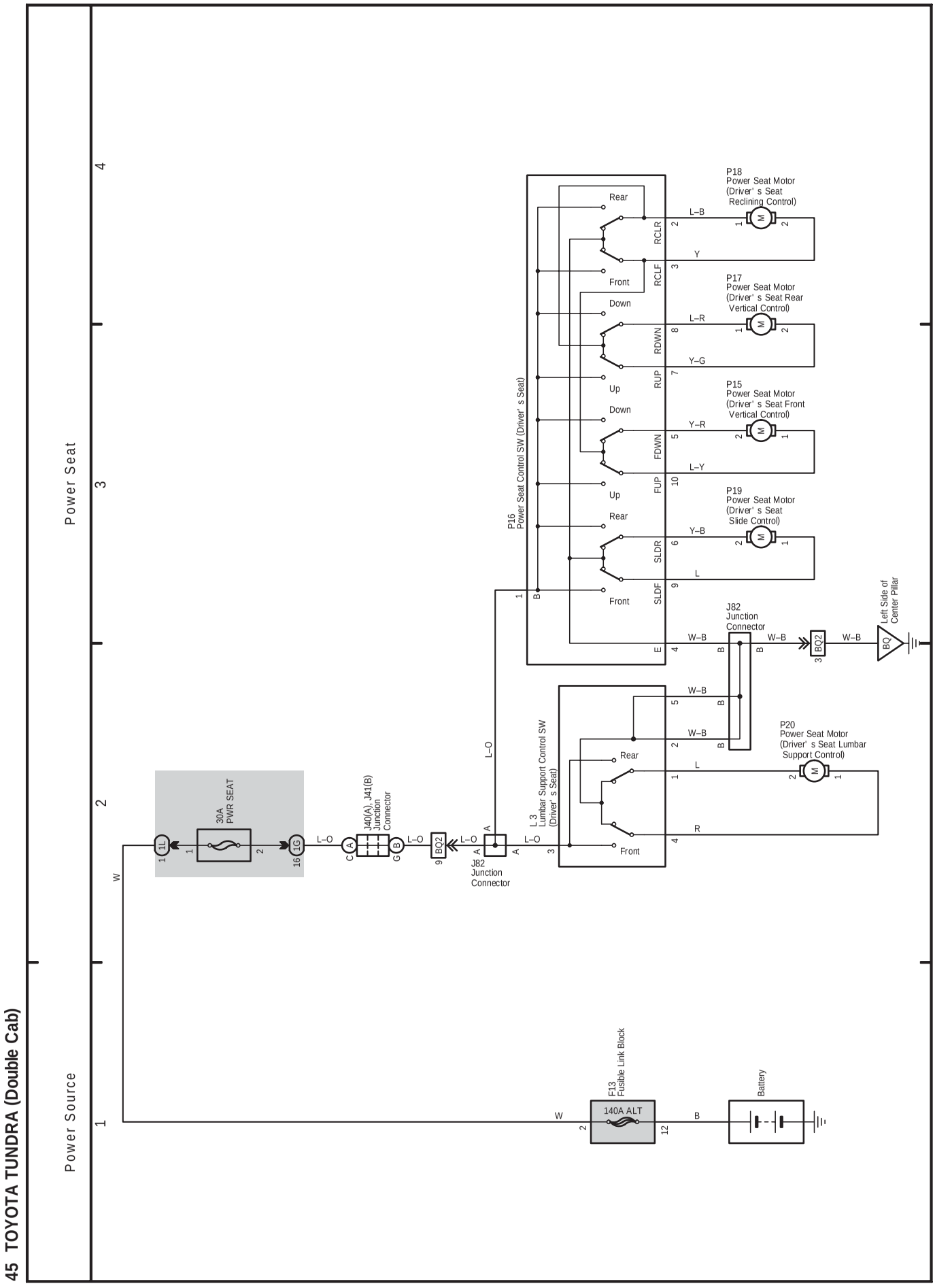

41 TOYOTA TUNDRA (Double Cab)
Power Source
Illumination
G 3
Glove Box Light
J58
Junction
Connector
Right Kick
Panel
I24(A)
Integration Control and Panel
C16
Combination SW
Steering PAD SW
R 1(A), R 2(B), R14(C), R15(D)
Radio and Player
R27(E), R28(F)
Radio and Player with Display
R 3
Rheostat
S12
Seat Heater SW
(Front Passenger' s Seat)
J57
Junction
Connector
S11
Seat Heater SW
(Driver' s Seat)
C 8
Cigarette Lighter
Illumination
A18
Ashtray Illumination
M 5
Main SW
C11(A)
Combination Meter
Illumination
O 8
Overhead Module
7. 5A
PANEL
TAILLIGHT
Relay
Multiplex Communication
System< 38–1>
F13
Fusible Link
Block
140A ALT
Battery
* 1 : 6 Speaker
* 2 : 8 Speaker w/ Navigation System
* 3 : 8 Speaker w/o Navigation System


Power Source
Back–Up Light
Stop Light
1
2
3
4
* 1 : w/ VSC
* 2 : w/o VSC
ACC
AM1
IG1
B–Y
I23(B)
Ignition SW
W(*1)
W(*2)
W–L
15A
STOP
40A
AM1
15A
GAUGE
10A
ECU–IG
IPO
BACK–UP
LIGHT Relay
L–B
R–B
W–B
W–R
G–R
26 IE1
P 1
Park/Neutral
Position SW
Back–Up
J28(A), J29(B)
Junction
Connector
F13
Fusible Link Block
140A ALT
Battery
Radio and Player
with Display<56–4><58–4>
J45
Junction
Connector
IO
Left Kick
Panel
B–R
(*1)
B–R(*1)
W(*1)
W(*2)
S 4(B)
Stop Light SW
S31
Stop Light
Relay
Skid Control ECU
with Actuator<47–2>
L–B
(*1)
G–W
W–R(*1)
G–W(*2)
Skid Control ECU
with Actuator (*1)<47–2>
ABS Actuator with ECU
(*2)<48–4>
J47(A), J48(B)
Junction
Connector
J38(A), J39(B)
Junction
Connector
Option Connector
<52–4>
Trailer Converter
<52–8>
Engine Control
Module<37–14>
Trailer
Socket<52–6>
R 4
Rear Combination
Light LH
R 5
Rear Combination
Light RH
Back–Up
Stop
H10
High Mounted
Stop Light
Surrounding of the
Front of the Fuel Tank
Back Panel
Left

## 43 TOYOTA TUNDRA (Double Cab)

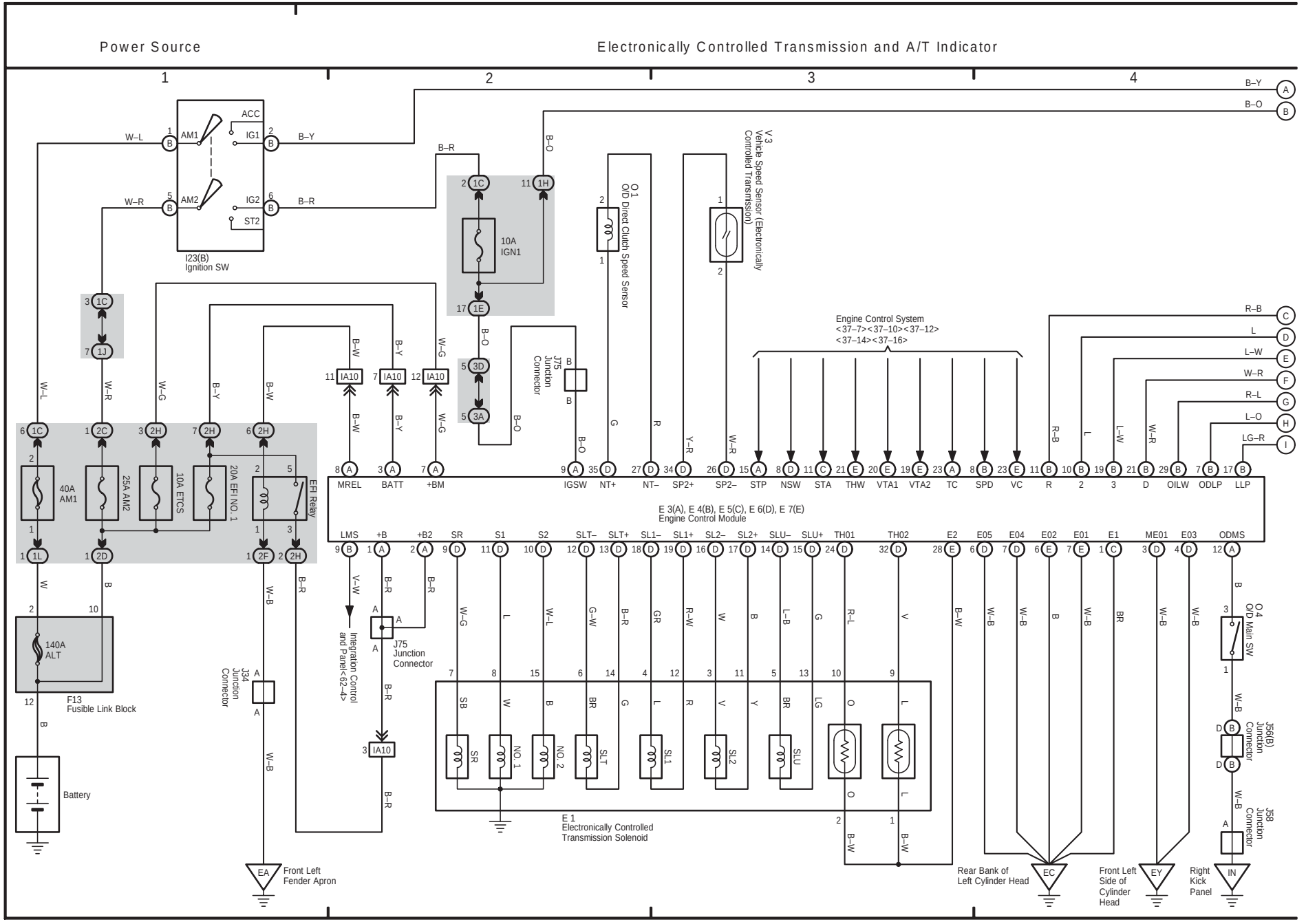



Power Source
Moon Roof
Accessory Meter and Garage Door Opener
1
2
3
4
ACC
AM1
IG1
W–L
B–Y
I23(B)
Ignition SW
10A
ECU–IG
B–R
L–W
W–L
Multiplex Communication System<38–16>
P–B
G–Y
R–W
R–Y
W–B
Combination Meter <61–6>
G–O
IC5
25A
SUN
ROOF
40A
AM1
MPX1
B
IG
OPN
CLS
DWN
UP
E
IG+
SI
Up
Down
CLS
OPN
O 8
Overhead Module
TMP+
TMP–
L–R
L–W
M
MOTOR
PSW1
PSW2
POSITION SW
M 6
Moon Roof Control ECU and Motor
W
F13
Fusible Link Block
140A ALT
B
Battery
IN
Right Kick Panel
L
P
A28
Ambient Temp. Sensor

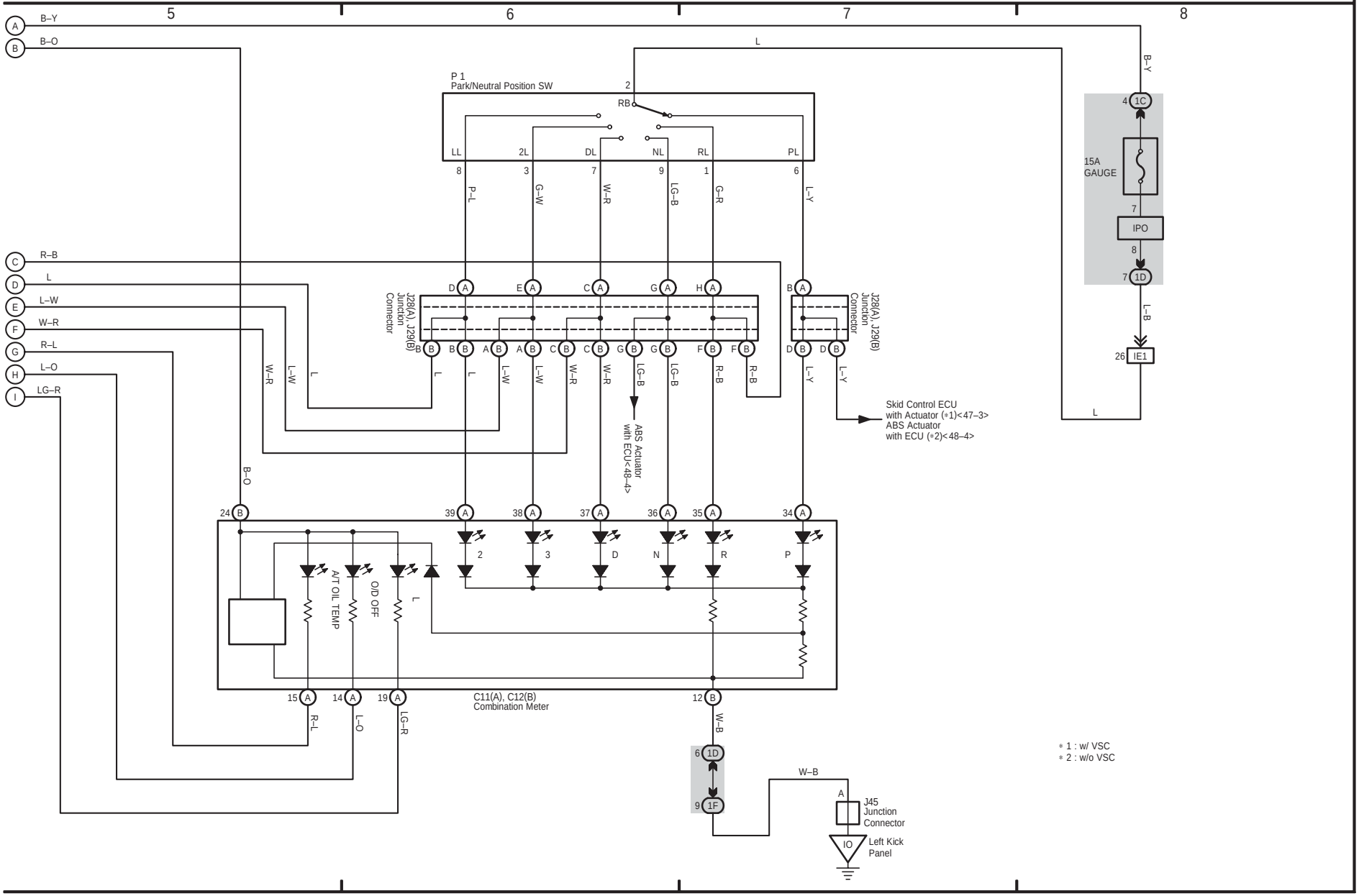

45 TOYOTA TUNDRA (Double Cab)
Power Source
Power Seat
1
2
3
4
F13
Fusible Link Block
140A ALT
Battery
30A
PWR SEAT
J40(A), J41(B)
Junction
Connector
J82
Junction
Connector
BQ2
BQ
Left Side of
Center Pillar
L3
Lumbar Support Control SW
(Driver' s Seat)
P16
Power Seat Control SW (Driver' s Seat)
Rear
Front
Down
Up
RCLR
RCLF
RDWN
RUP
FDWN
FUP
SLDR
SLDF
P18
Power Seat Motor
(Driver' s Seat
Reclining Control)
P17
Power Seat Motor
(Driver' s Seat Rear
Vertical Control)
P15
Power Seat Motor
(Driver' s Seat Front
Vertical Control)
P19
Power Seat Motor
(Driver' s Seat
Slide Control)
P20
Power Seat Motor
(Driver' s Seat Lumbar
Support Control)
W
L–O
L–B
Y
L–R
Y–G
Y–R
L–Y
Y–B
L
W–B
B

46 TOYOTA TUNDRA (Double Cab)

(Cont. next page)

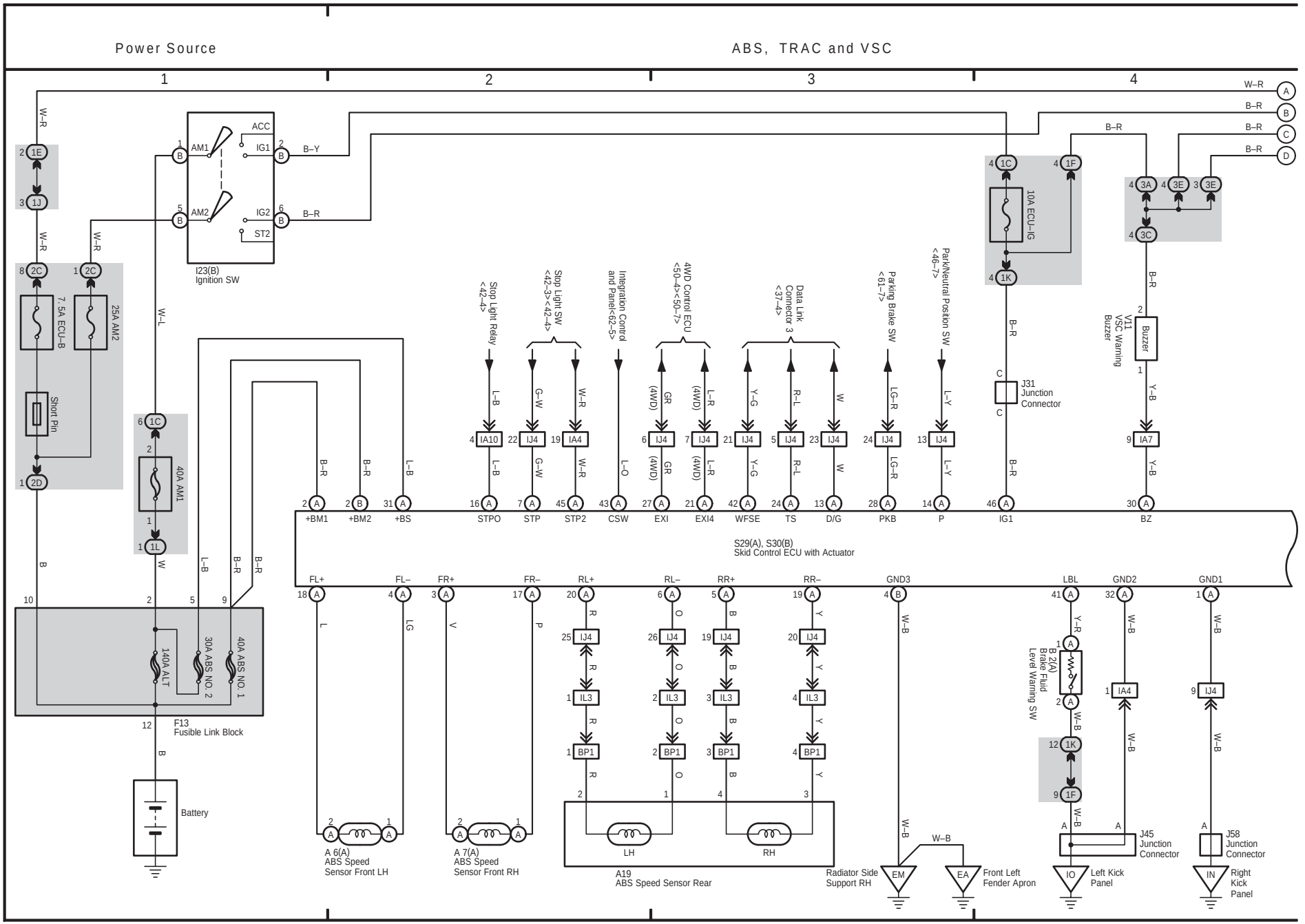


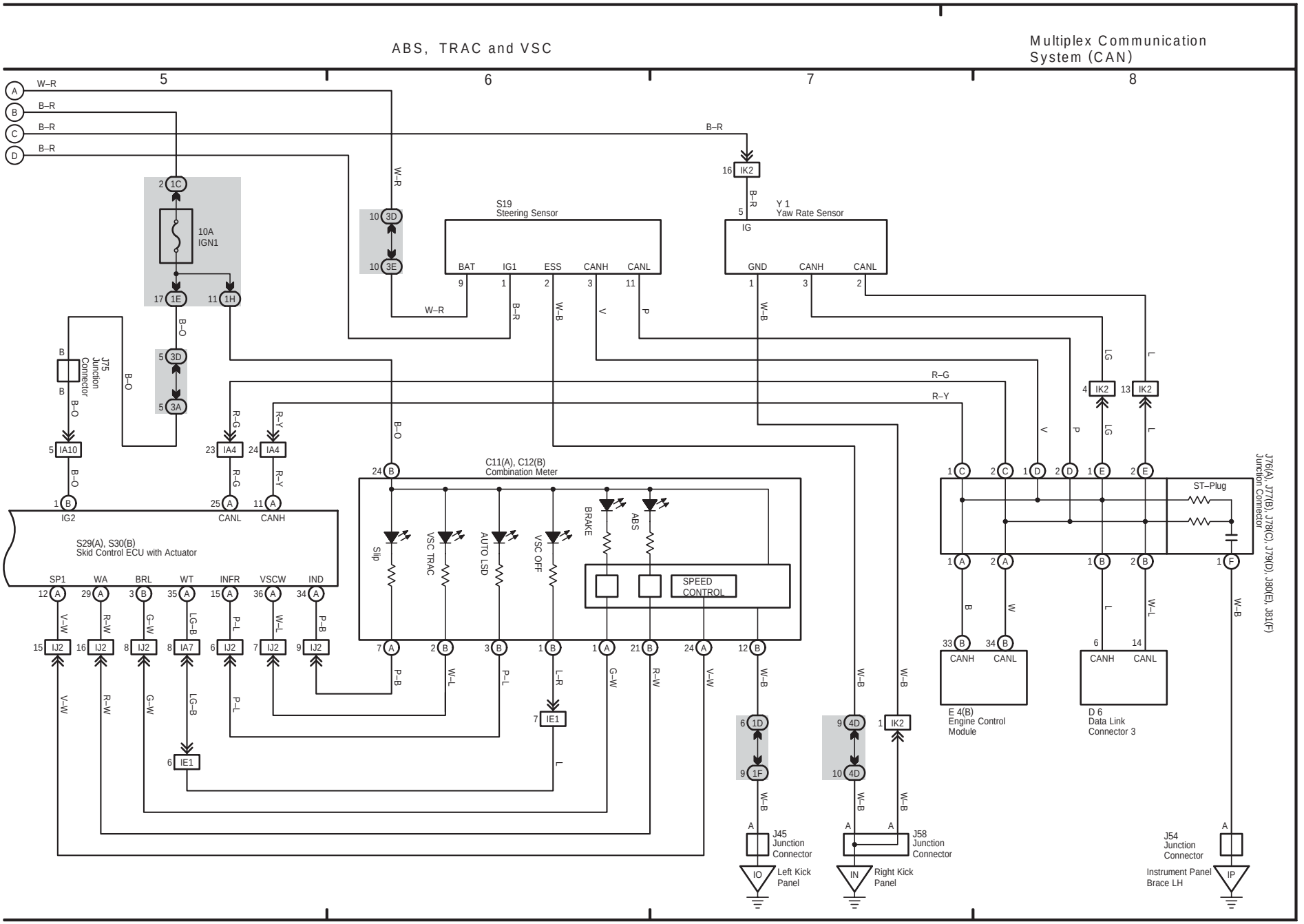
Electronically Controlled Transmission and A/T Indicator



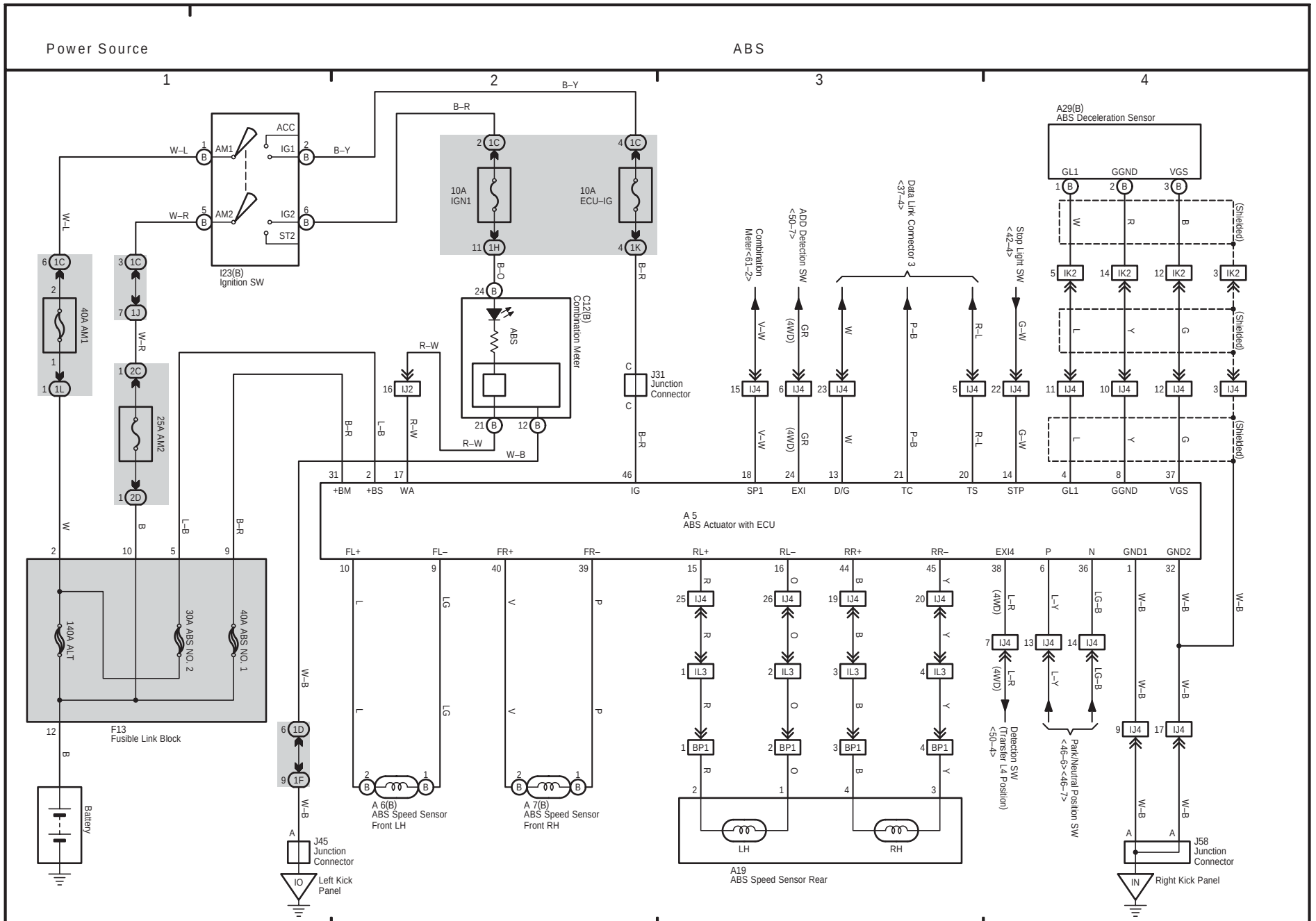
47 TOYOTA TUNDRA (Double Cab)

(Cont. next page)

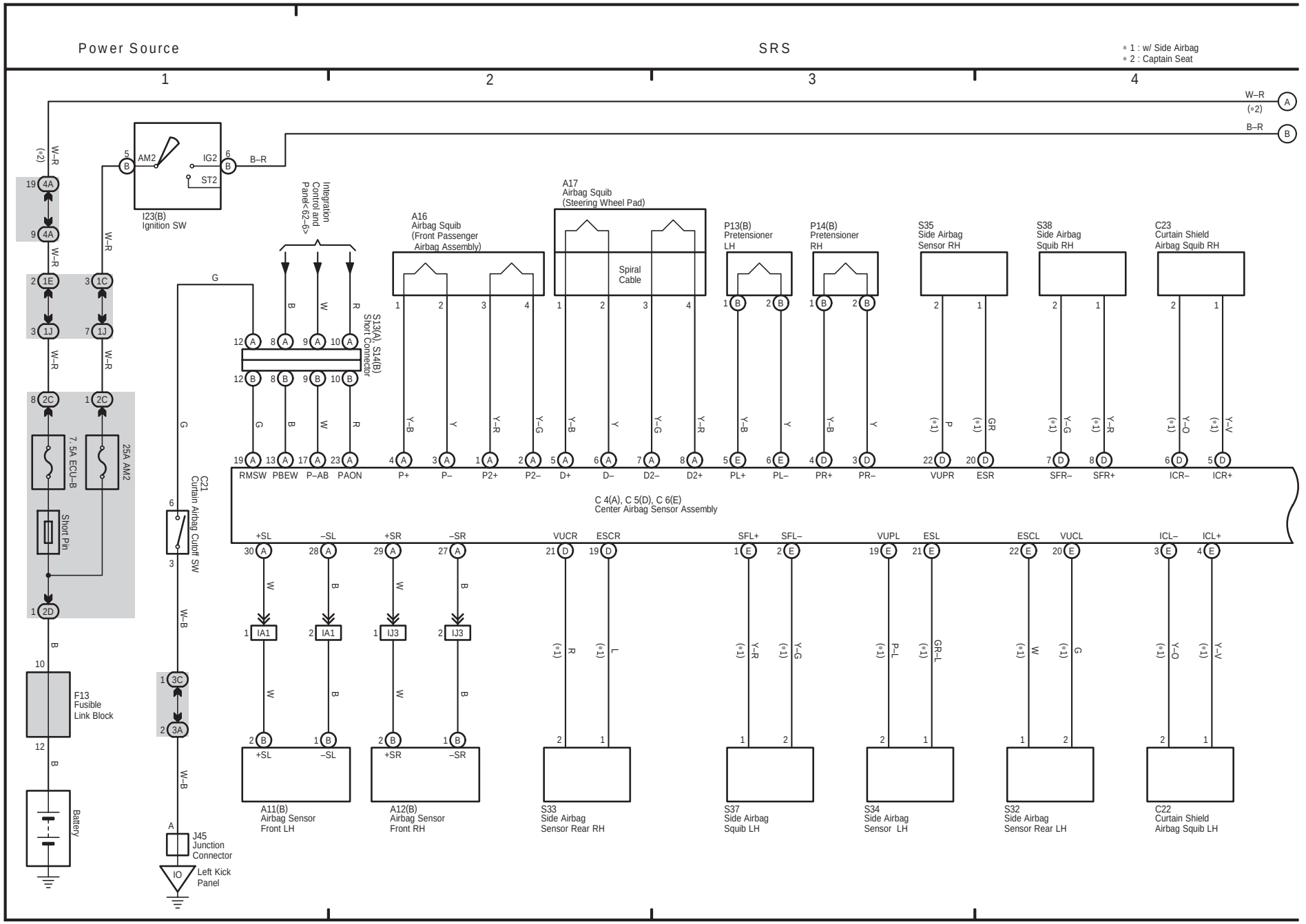



ABS, TRAC and VSC
Multiplex Communication System (CAN)
5
6
7
8
W–R
B–R
B–R
B–R
B–R
16 IK2
B–R
5
Y 1
Yaw Rate Sensor
IG
GND
CANH
CANL
2 1C
10A
IGN1
17 1E
11 1H
10 3D
10 3E
S19
Steering Sensor
BAT
IG1
ESS
CANH
CANL
9
1
2
3
11
W–R
B–R
W–B
V
P
W–B
B–O
5 3D
5 3A
B
J75
Junction
Connector
B
B–O
B–O
5 IA10
1 B
IG2
R–G
R–Y
23 IA4
24 IA4
25 A
CANL
11 A
CANH
R–G
R–Y
B–O
24 B
C11(A), C12(B)
Combination Meter
S29(A), S30(B)
Skid Control ECU with Actuator
SP1
WA
BRL
WT
INFR
VSCW
IND
12 A
29 A
3 B
35 A
15 A
36 A
34 A
V–W
R–W
G–W
LG–B
P–L
W–L
P–B
15 IJ2
16 IJ2
8 IJ2
8 IA7
6 IJ2
7 IJ2
9 IJ2
6 IE1
Slip
VSC TRAC
AUTO LSD
VSC OFF
BRAKE
ABS
SPEED CONTROL
7 A
2 B
3 B
1 B
1 A
21 B
24 A
12 B
P–B
W–L
P–L
L–R
G–W
R–W
V–W
W–B
7 IE1
L
6 1D
9 1F
W–B
A
J45
Junction
Connector
IO
Left Kick
Panel
9 4D
10 4D
W–B
A
A
J58
Junction
Connector
IN
Right Kick
Panel
1 IK2
W–B
R–G
R–Y
4 IK2
13 IK2
LG
L
V
P
LG
L
1 C
2 C
1 D
2 D
1 E
2 E
ST–Plug
J76(A), J77(B), J78(C), J79(D), J80(E), J81(F)
Junction Connector
1 A
2 A
1 B
2 B
1 F
B
W
L
W–L
W–B
33 B
34 B
CANH
CANL
E 4(B)
Engine Control
Module
6
14
CANH
CANL
D 6
Data Link
Connector 3
J54
Junction
Connector
A
Instrument Panel
Brace LH
IP

## 48 TOYOTA TUNDRA (Double Cab)

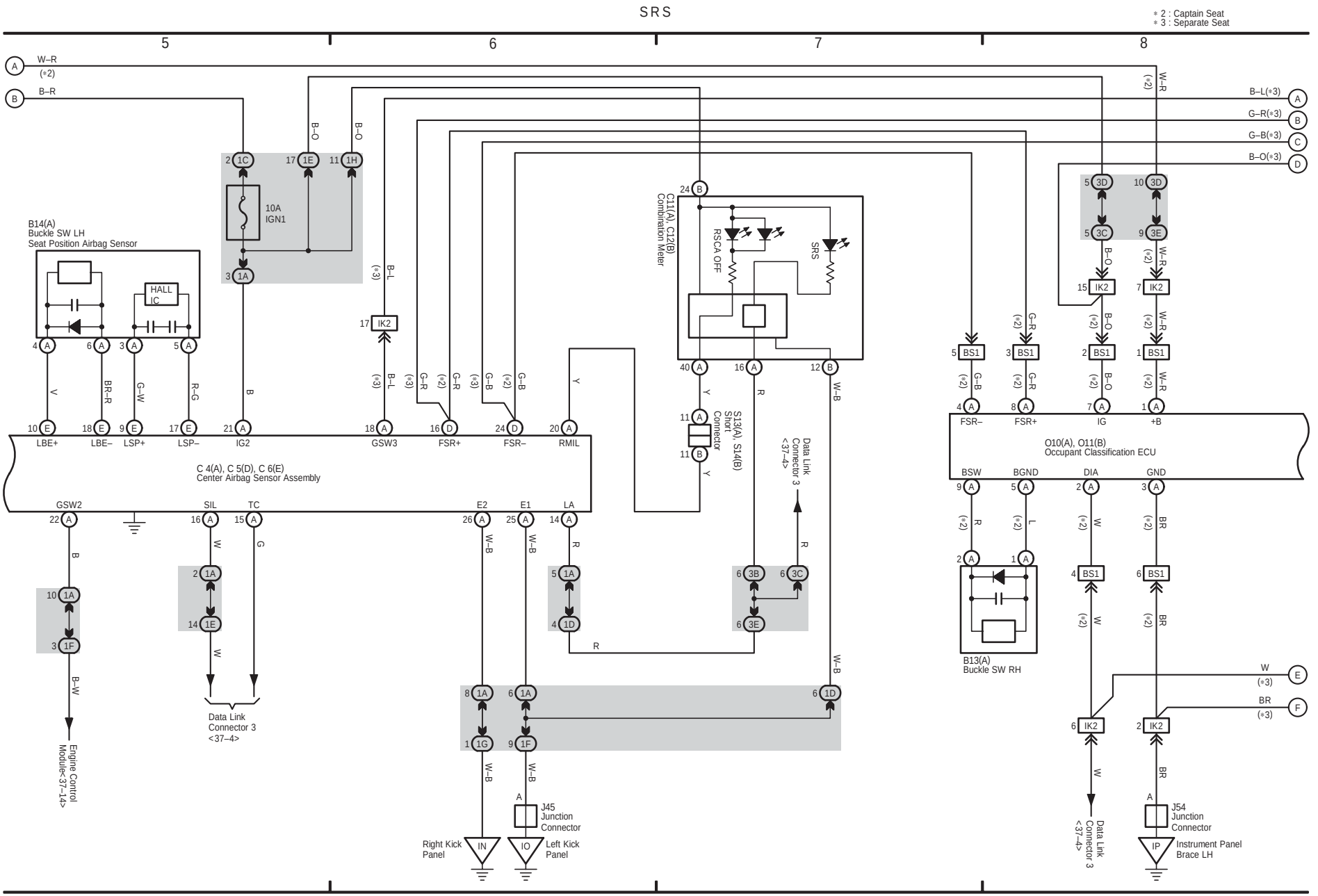


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## 49 TOYOTA TUNDRA (Double Cab) (Cont' d)

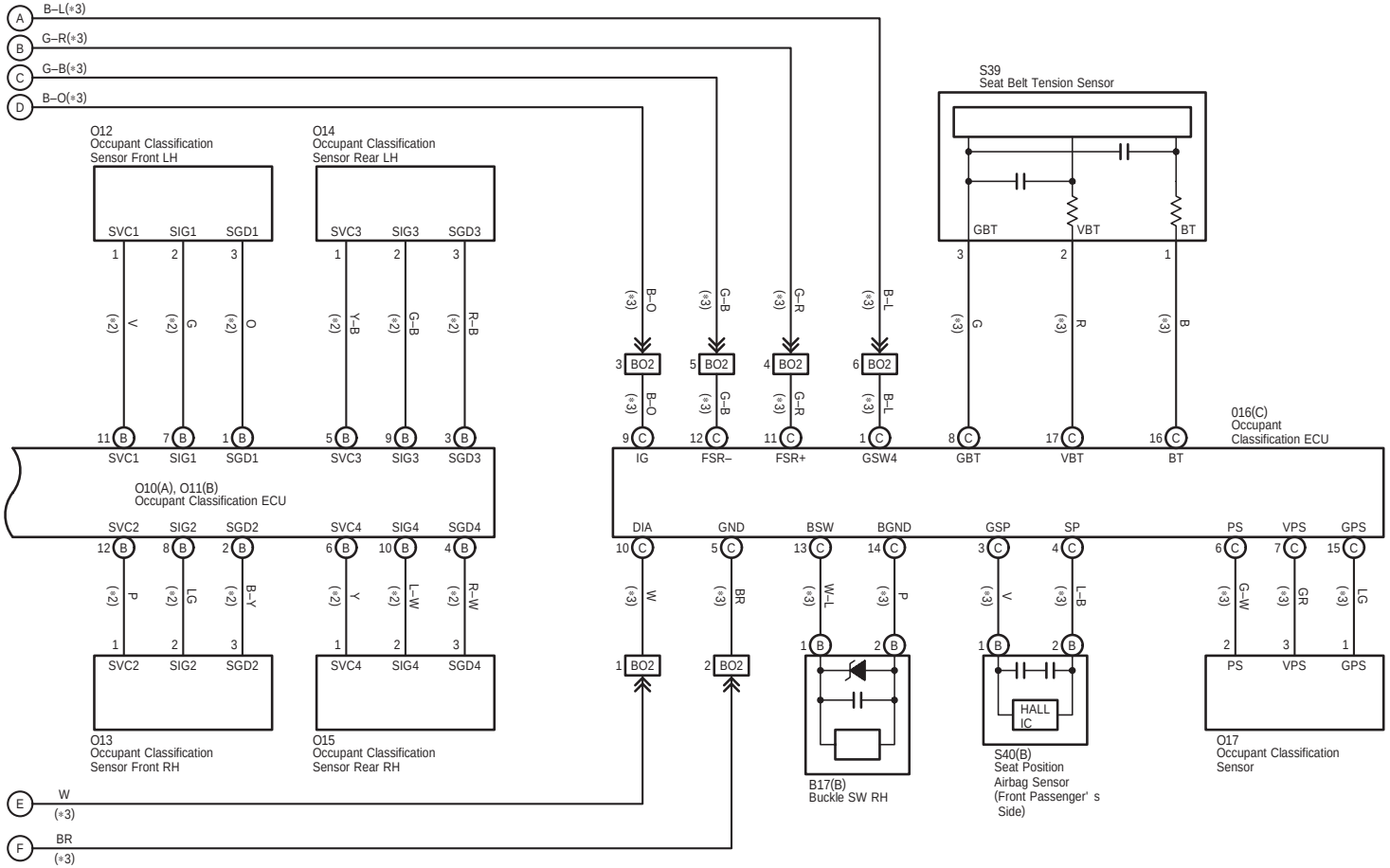
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SRS

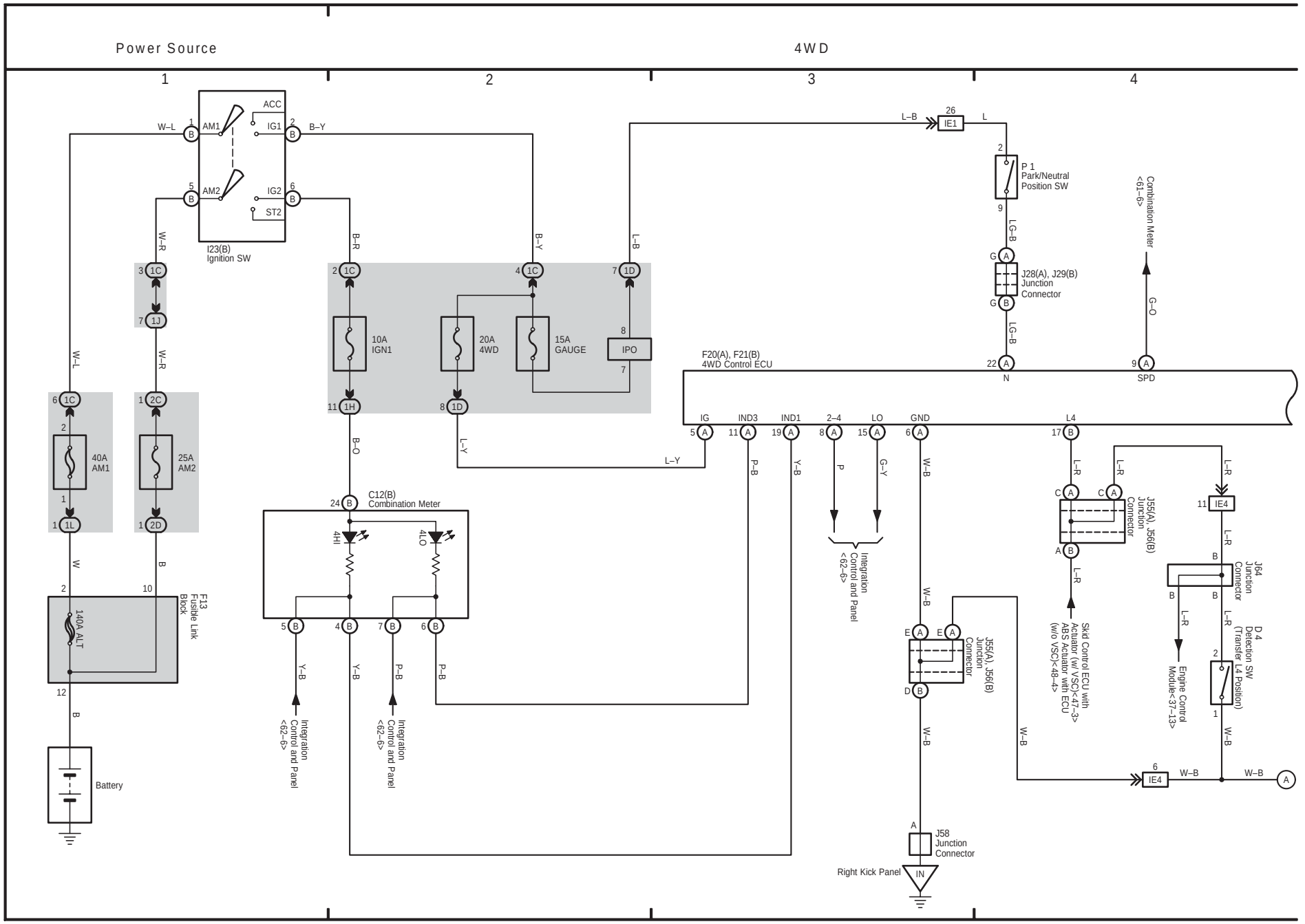
＊2 : Captain Seat
＊3 : Separate Seat

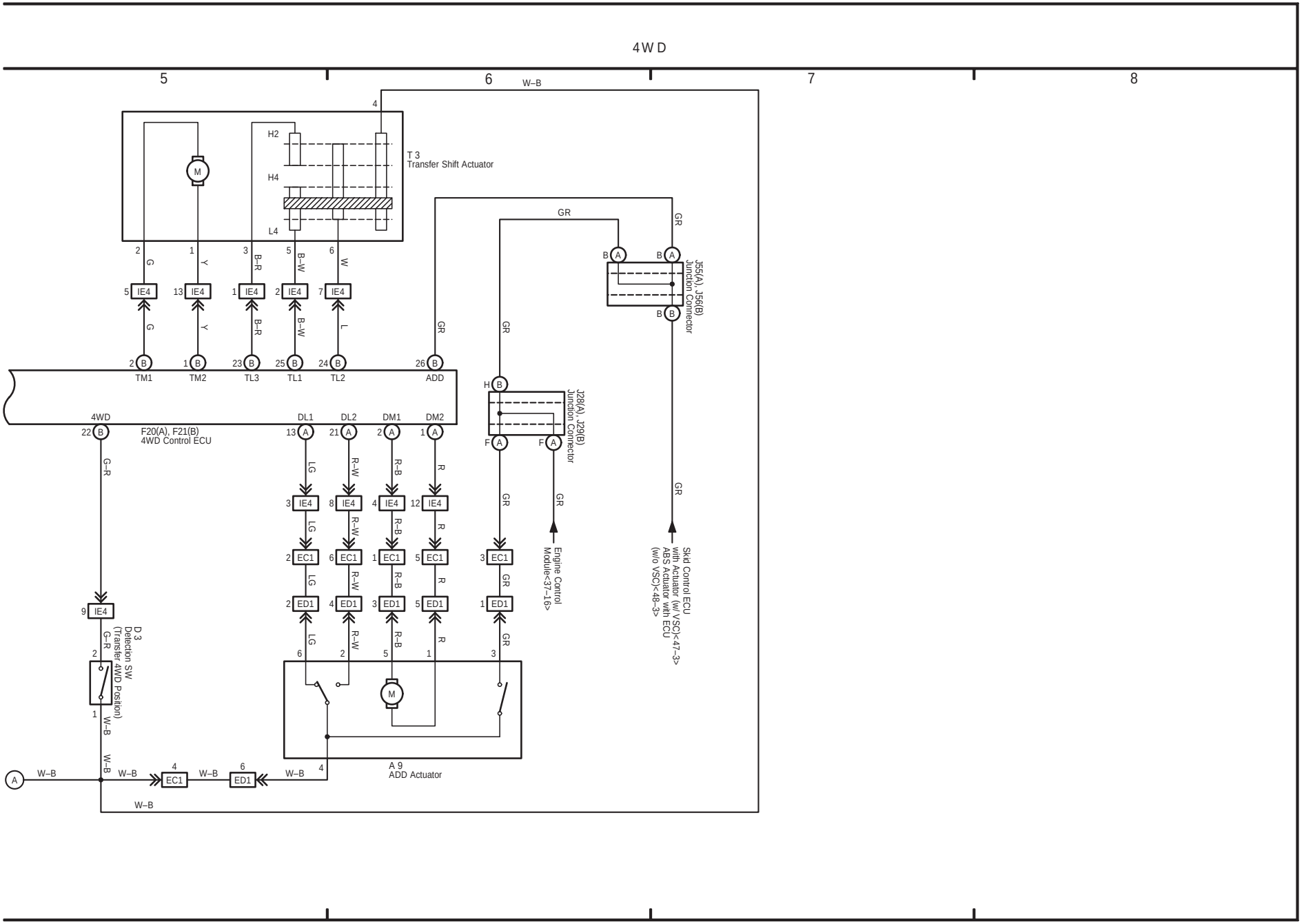
9 10 11 12



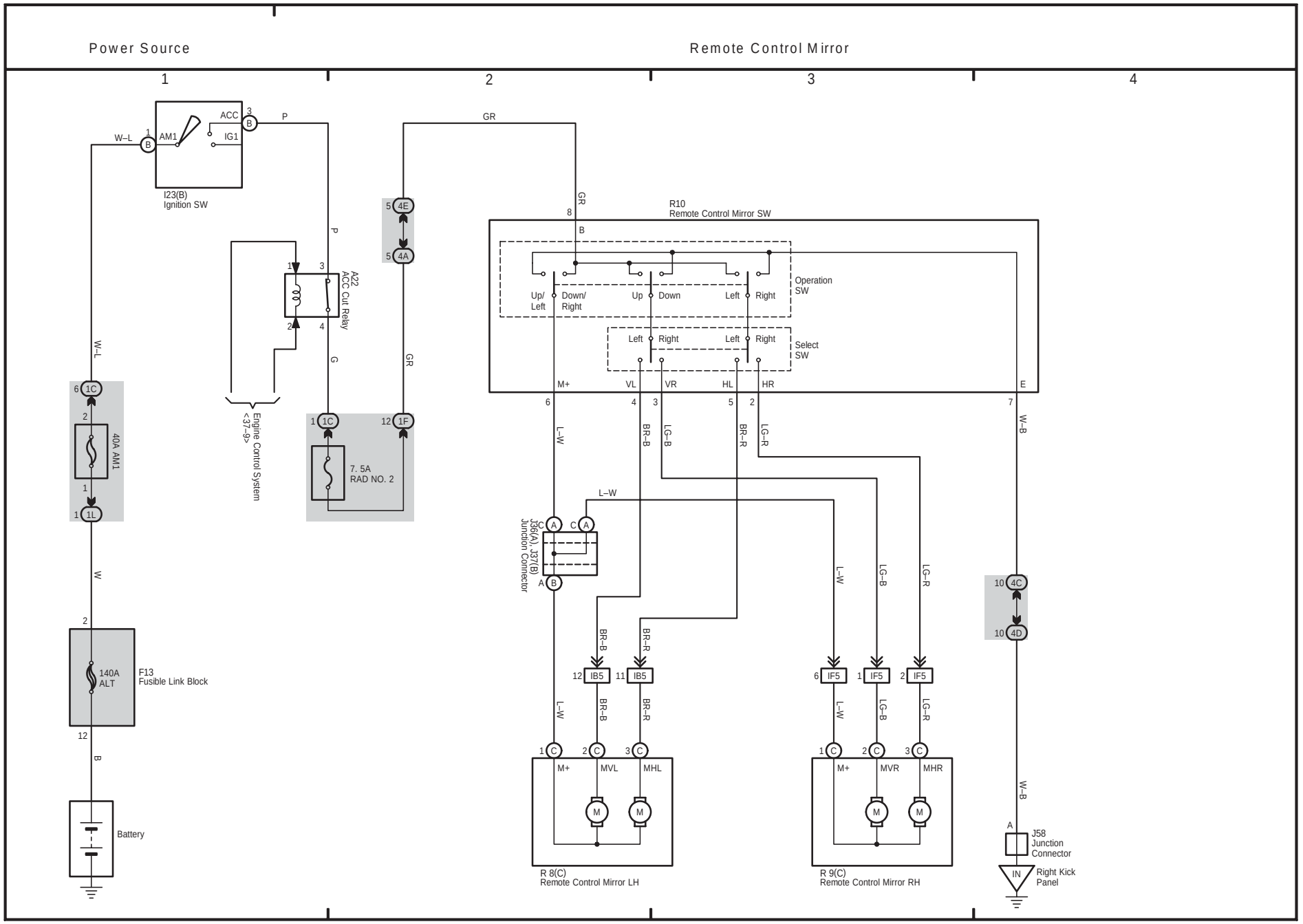
50 TOYOTA TUNDRA (Double Cab)

(Cont. next page)



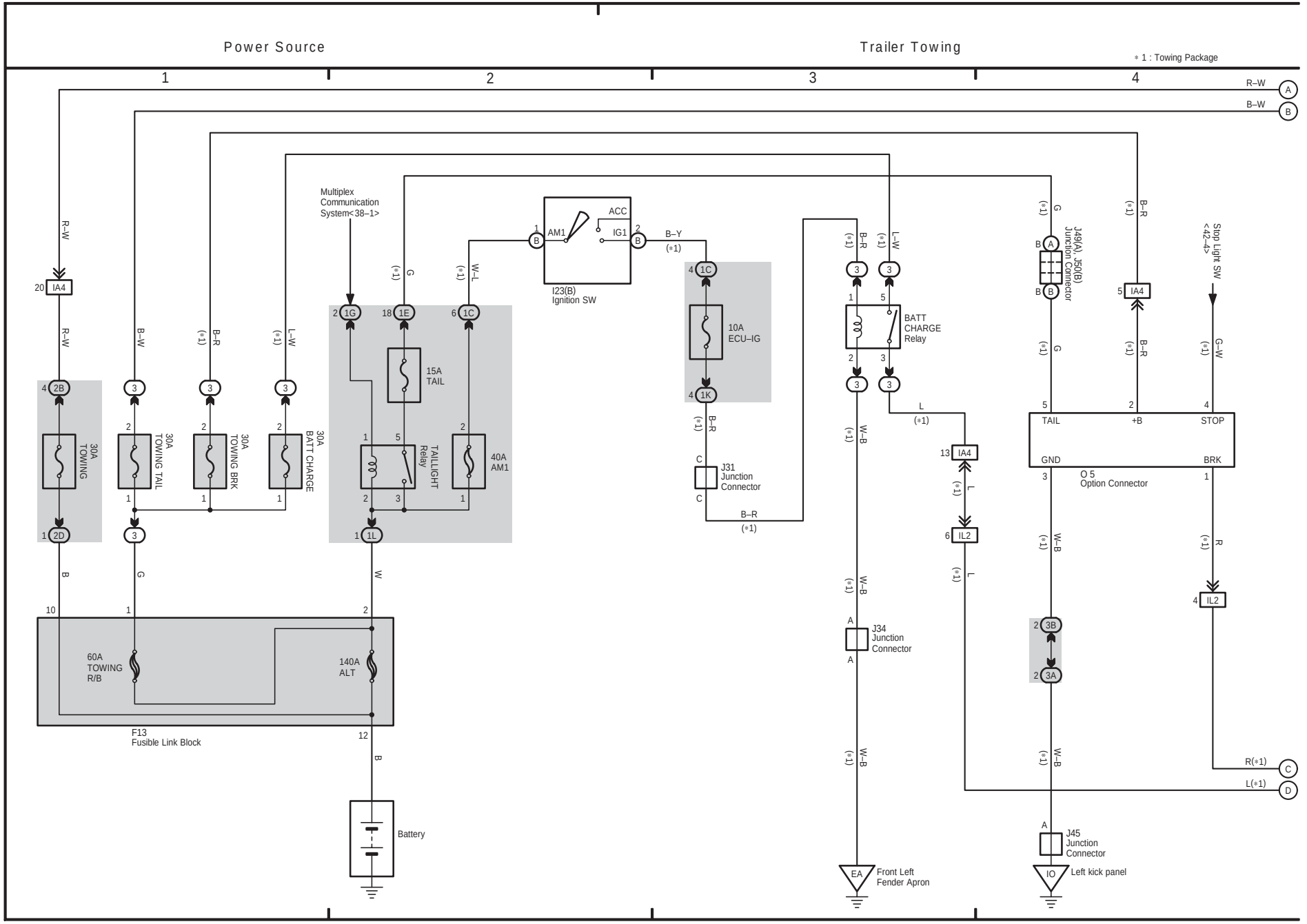

4WD
5
6
7
8
W–B
T 3
Transfer Shift Actuator
H2
H4
L4
M
4
2 G
1 Y
3 B–R
5 B–W
6 W
5 IE4
13 IE4
1 IE4
2 IE4
7 IE4
G
Y
B–R
B–W
L
2 B TM1
1 B TM2
23 B TL3
25 B TL1
24 B TL2
26 B ADD
GR
B A
B A
J55(A), J56(B)
Junction Connector
B B
H B
F A
F A
J28(A), J29(B)
Junction Connector
4WD
22 B
F20(A), F21(B)
4WD Control ECU
G–R
DL1
DL2
DM1
DM2
13 A
21 A
2 A
1 A
LG
R–W
R–B
R
3 IE4
8 IE4
4 IE4
12 IE4
2 EC1
6 EC1
1 EC1
5 EC1
3 EC1
2 ED1
4 ED1
3 ED1
5 ED1
1 ED1
9 IE4
D 3
Detection SW
(Transfer 4WD Position)
2
1
W–B
6
2
5
1
3
A 9
ADD Actuator
A
W–B
4
EC1
6
ED1
Engine Control
Module<37–16>
Skid Control ECU
with Actuator (w/ VSC)<47–3>
ABS Actuator with ECU
(w/o VSC)<48–3>

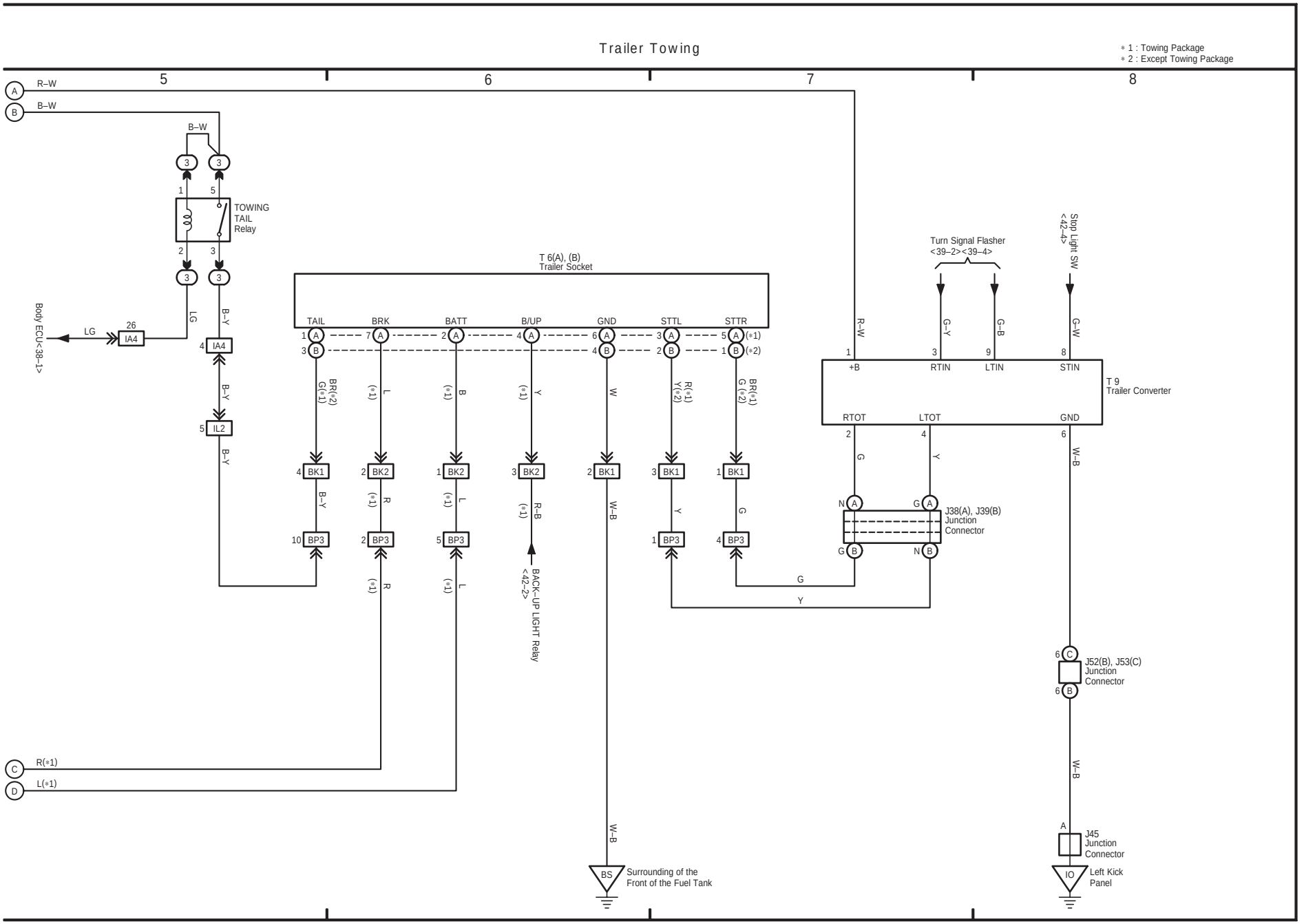
## 51 TOYOTA TUNDRA (Double Cab)



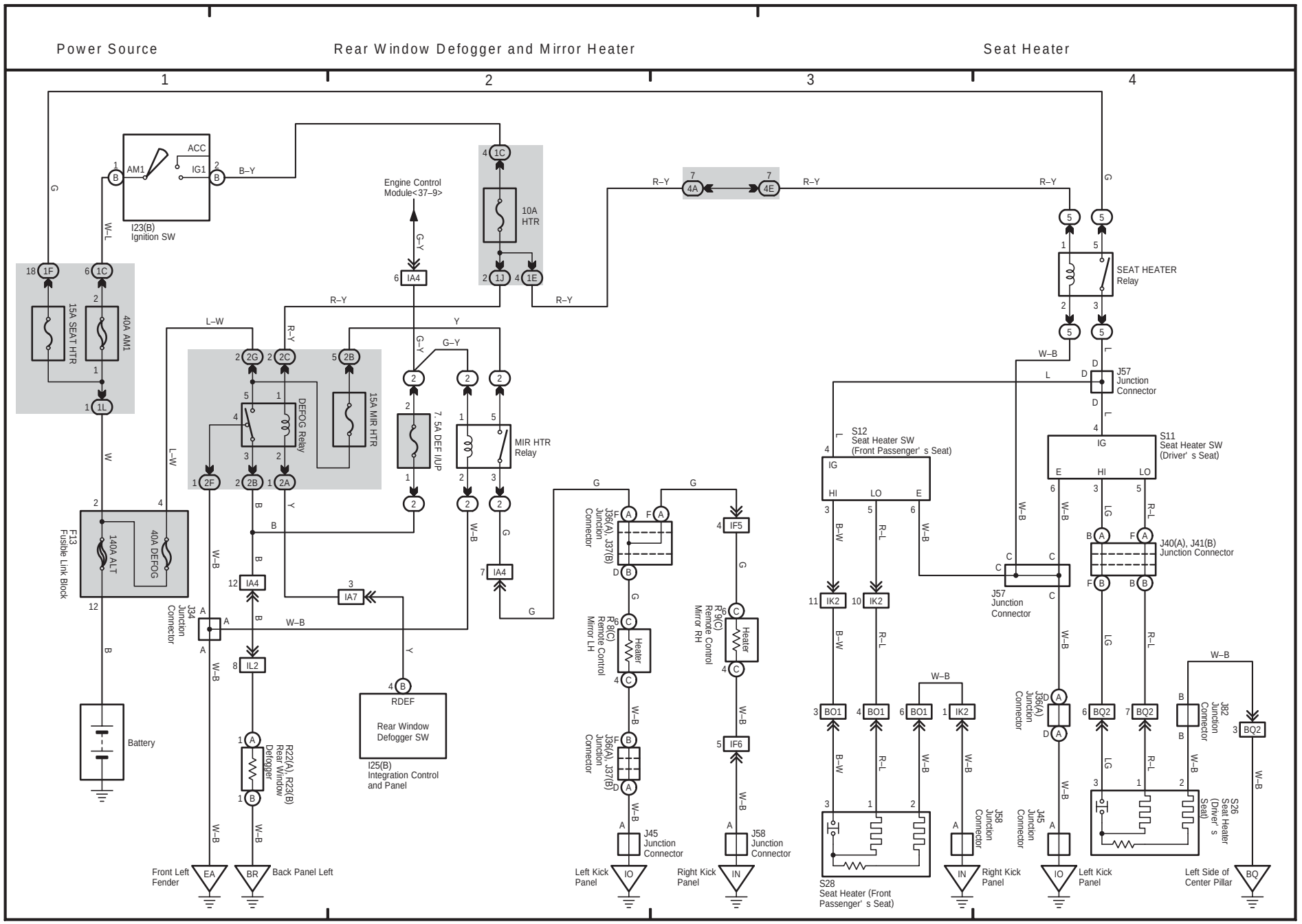
52 TOYOTA TUNDRA (Double Cab)

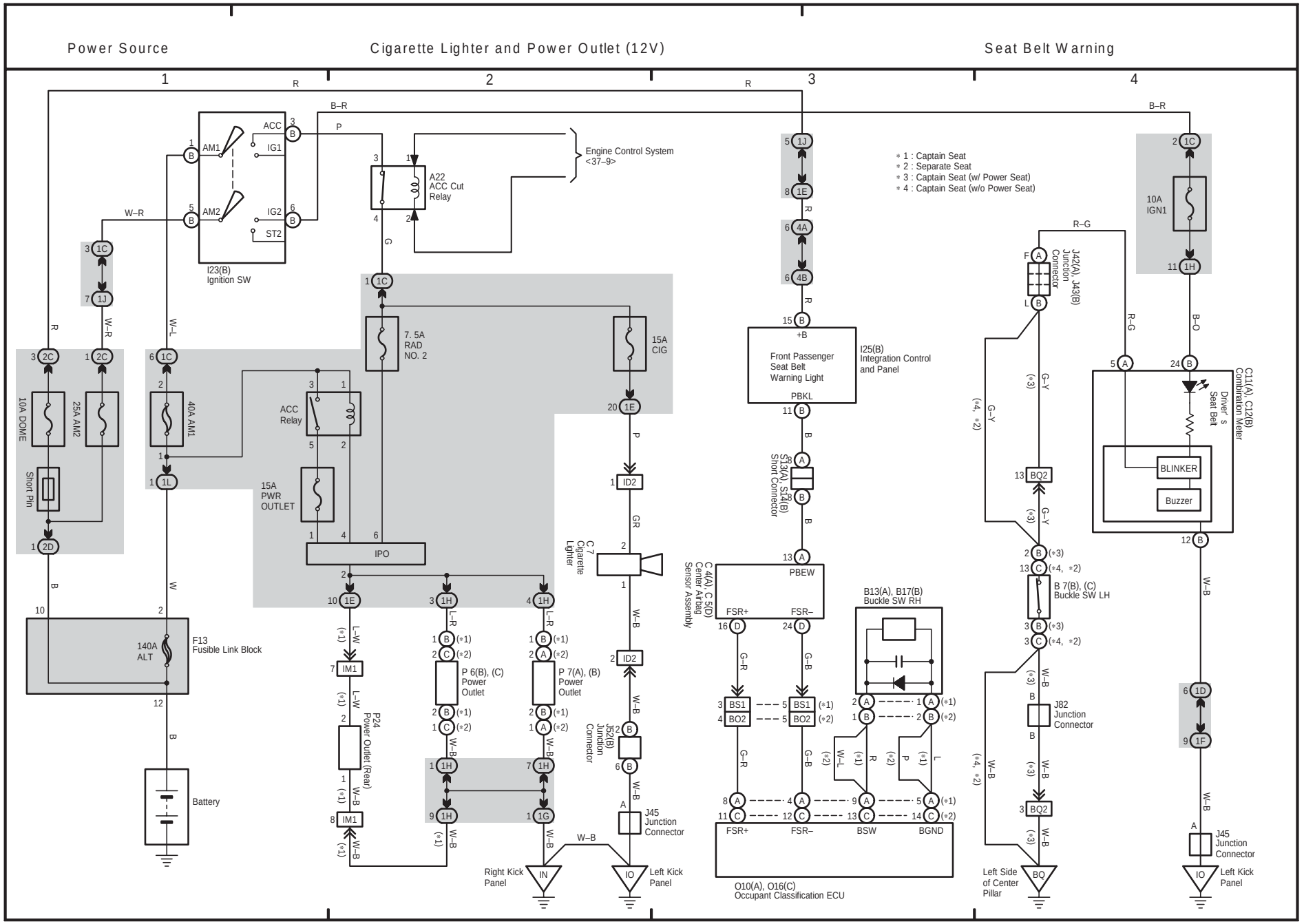
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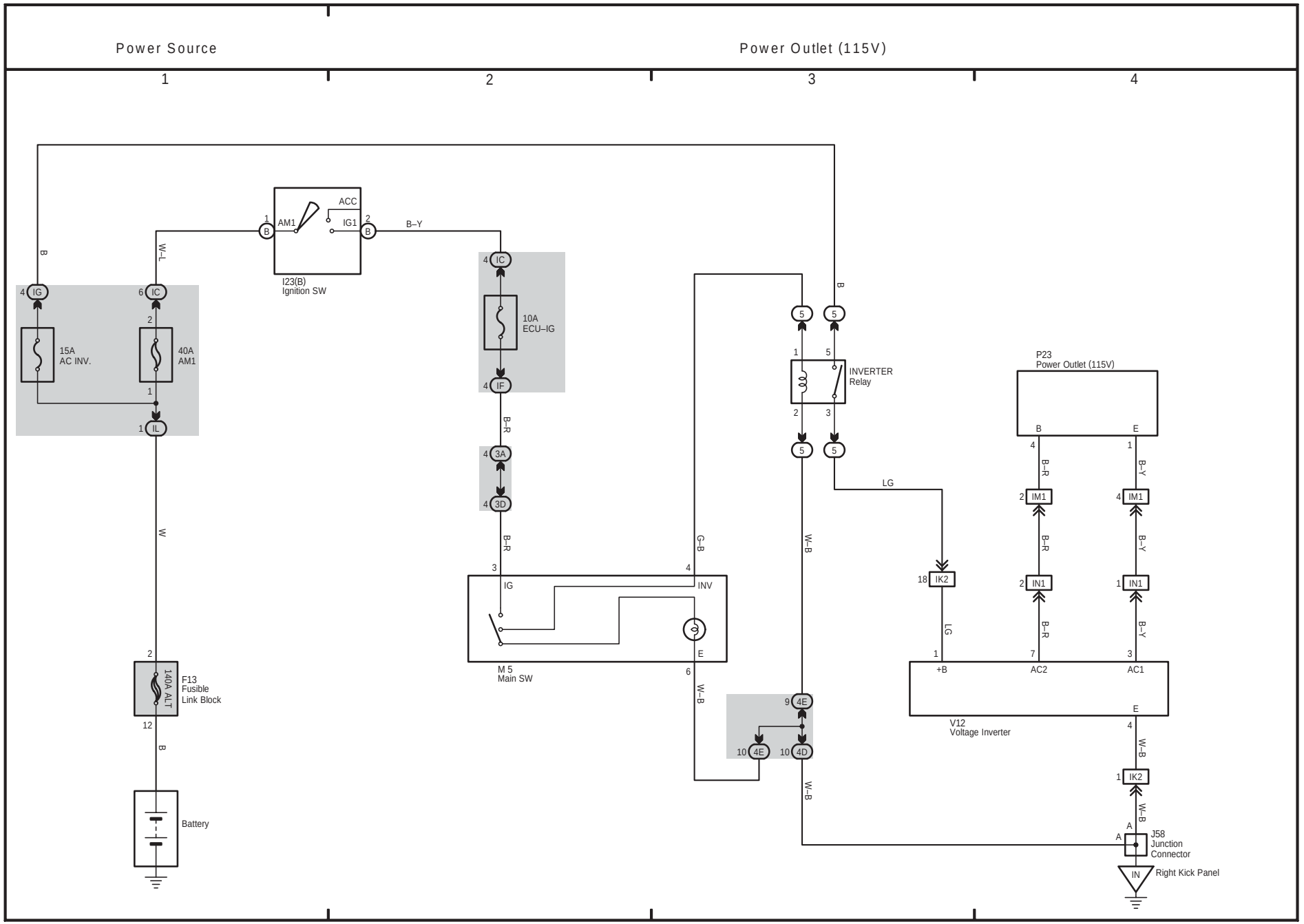

Trailer Towing
* 1 : Towing Package
* 2 : Except Towing Package
5
6
7
8
R–W
B–W
B–W
TOWING TAIL Relay
Body ECU<38–1>
LG
26
IA4
IL2
B–Y
T 6(A), (B) Trailer Socket
TAIL
BRK
BATT
B/UP
GND
STTL
STTR
BR(*2) G(*1)
L (*1)
B (*1)
Y (*1)
W
R(*1) Y(*2)
BR(*1) G(*2)
BK1
BK2
BP3
R–B (*1)
BACK–UP LIGHT Relay <42–2>
R(*1)
L(*1)
W–B
BS
Surrounding of the Front of the Fuel Tank
Turn Signal Flasher <39–2><39–4>
G–Y
G–B
Stop Light SW <42–4>
G–W
+B
RTIN
LTIN
STIN
T 9 Trailer Converter
RTOT
LTOT
GND
G
Y
W–B
J38(A), J39(B) Junction Connector
J52(B), J53(C) Junction Connector
J45 Junction Connector
IO
Left Kick Panel

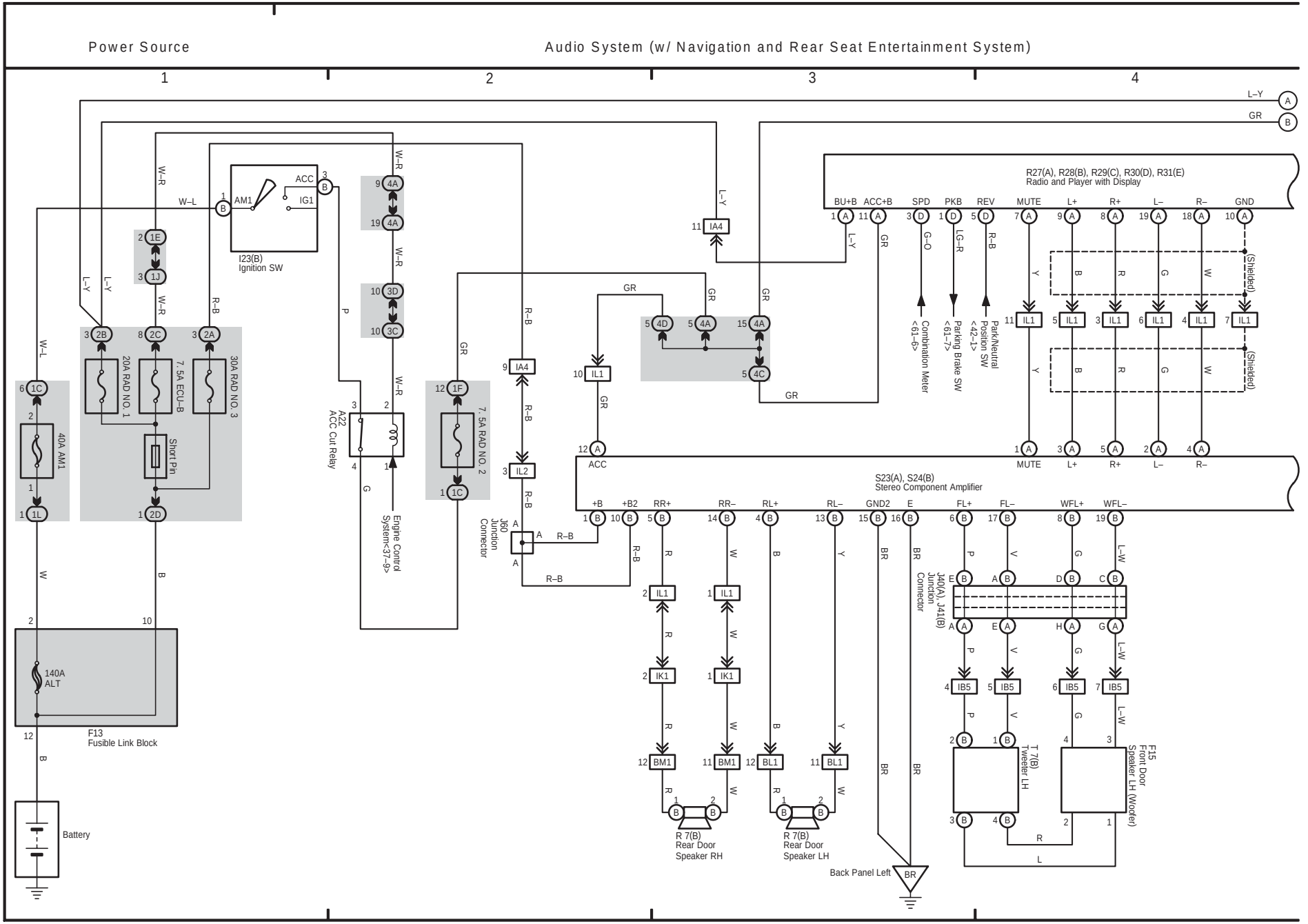
## 53 TOYOTA TUNDRA (Double Cab)




Power Source
Cigarette Lighter and Power Outlet (12V)
Seat Belt Warning
1
2
3
4
R
B–R
P
W–R
W–L
G
ACC
IG1
IG2
ST2
AM1
AM2
I23(B)
Ignition SW
A22
ACC Cut
Relay
Engine Control System
<37–9>
10A DOME
25A AM2
Short Pin
40A AM1
7. 5A
RAD
NO. 2
ACC
Relay
15A
PWR
OUTLET
IPO
15A
CIG
C 7
Cigarette
Lighter
140A
ALT
F13
Fusible Link Block
Battery
P 6(B), (C)
Power
Outlet
P 7(A), (B)
Power
Outlet
P24
Power Outlet (Rear)
J52(B)
Junction
Connector
J45
Junction
Connector
Right Kick
Panel
Left Kick
Panel
IN
IO
* 1 : Captain Seat
* 2 : Separate Seat
* 3 : Captain Seat (w/ Power Seat)
* 4 : Captain Seat (w/o Power Seat)
Front Passenger
Seat Belt
Warning Light
I25(B)
Integration Control
and Panel
S13(A), S14(B)
Short Connector
C 4(A), C 5(D)
Center Airbag
Sensor Assembly
PBKL
PBEW
FSR+
FSR–
BSW
BGND
O10(A), O16(C)
Occupant Classification ECU
B13(A), B17(B)
Buckle SW RH
J42(A), J43(B)
Junction
Connector
B 7(B), (C)
Buckle SW LH
J82
Junction
Connector
Left Side
of Center
Pillar
BQ
10A
IGN1
C11(A), C12(B)
Combination Meter
Driver s
Seat Belt
BLINKER
Buzzer

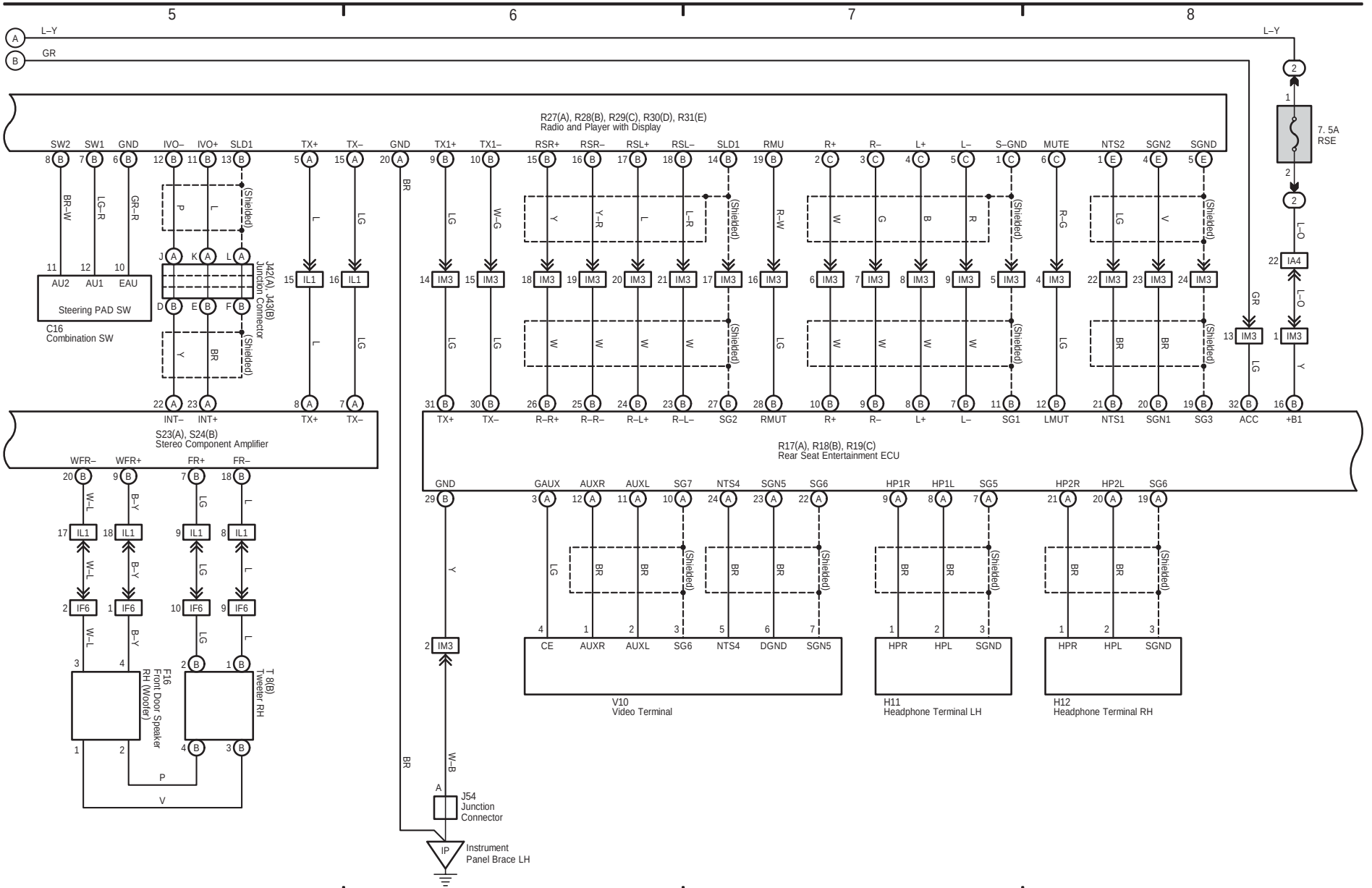
**55 TOYOTA TUNDRA (Double Cab)**




Power Source
Audio System (w/ Navigation and Rear Seat Entertainment System)
1
2
3
4
I23(B)
Ignition SW
ACC
IG1
AM1
A22
ACC Cut Relay
Engine Control System<37–9>
20A RAD NO. 1
7. 5A ECU–B
30A RAD NO. 3
40A AM1
Short Pin
7. 5A RAD NO. 2
J60
Junction Connector
140A
ALT
F13
Fusible Link Block
Battery
R27(A), R28(B), R29(C), R30(D), R31(E)
Radio and Player with Display
BU+B
ACC+B
SPD
PKB
REV
MUTE
L+
R+
L–
R–
GND
Combination Meter <61–6>
Parking Brake SW <61–7>
Park/Neutral Position SW <42–1>
(Shielded)
S23(A), S24(B)
Stereo Component Amplifier
+B
+B2
RR+
RR–
RL+
RL–
GND2
E
FL+
FL–
WFL+
WFL–
140(A), J41(B)
Junction Connector
R 7(B)
Rear Door Speaker RH
R 7(B)
Rear Door Speaker LH
T 7(B)
Tweeter LH
F15
Front Door Speaker LH (Woofer)
Back Panel Left

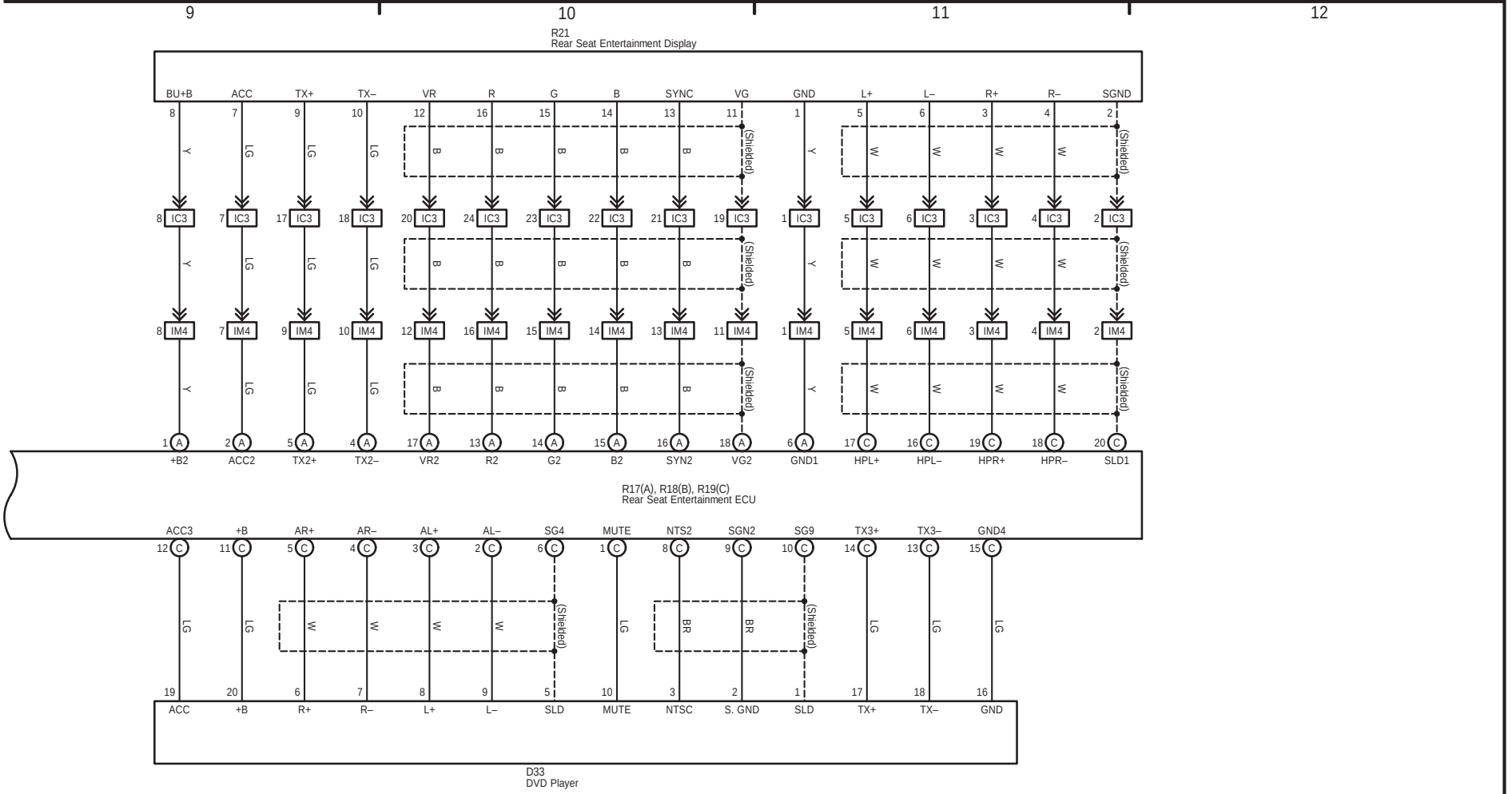
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Audio System (w/ Navigation and Rear Seat Entertainment System)



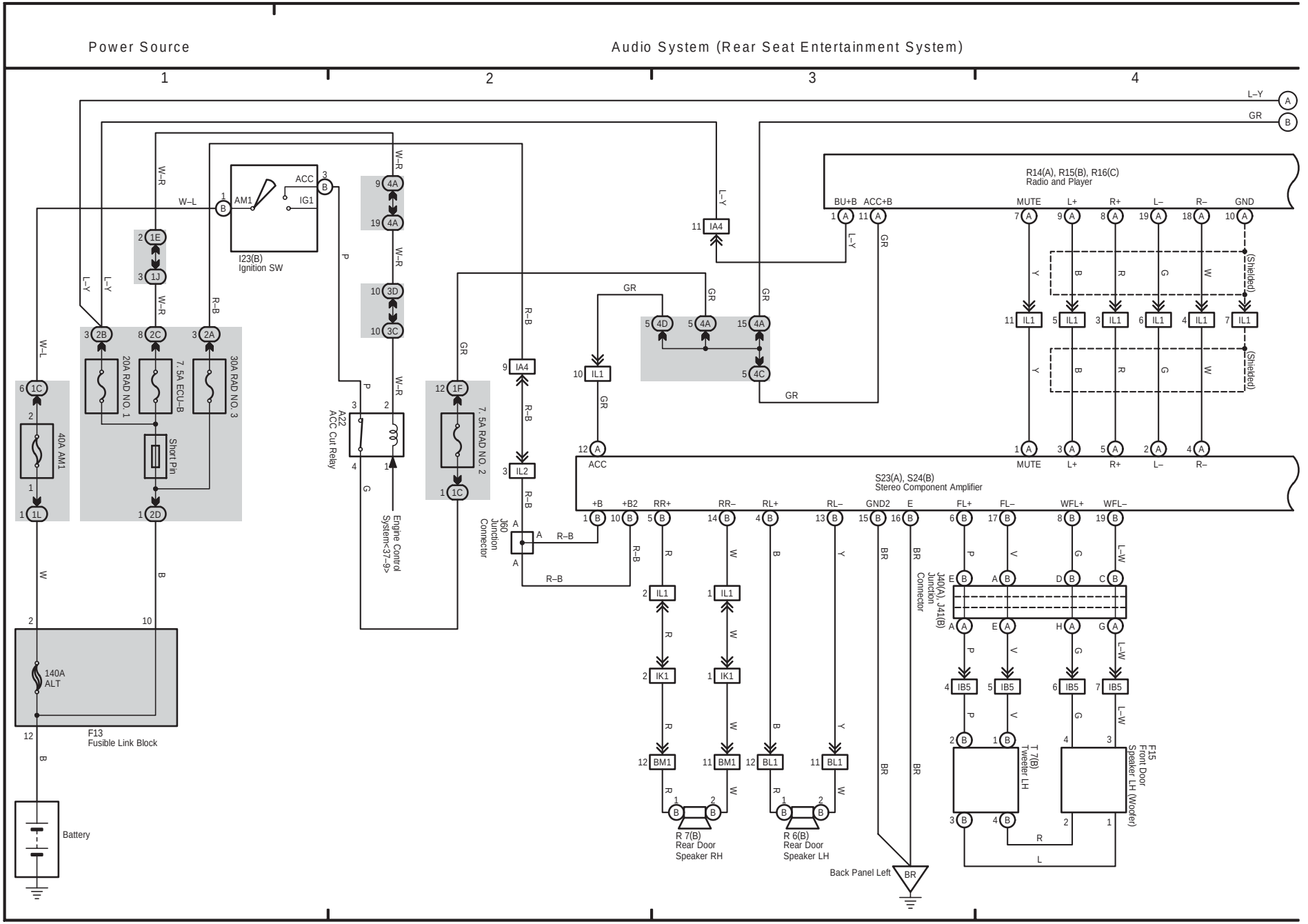
## 56 TOYOTA TUNDRA (Double Cab) (Cont' d)

Audio System (w/ Navigation and Rear Seat Entertainment System)



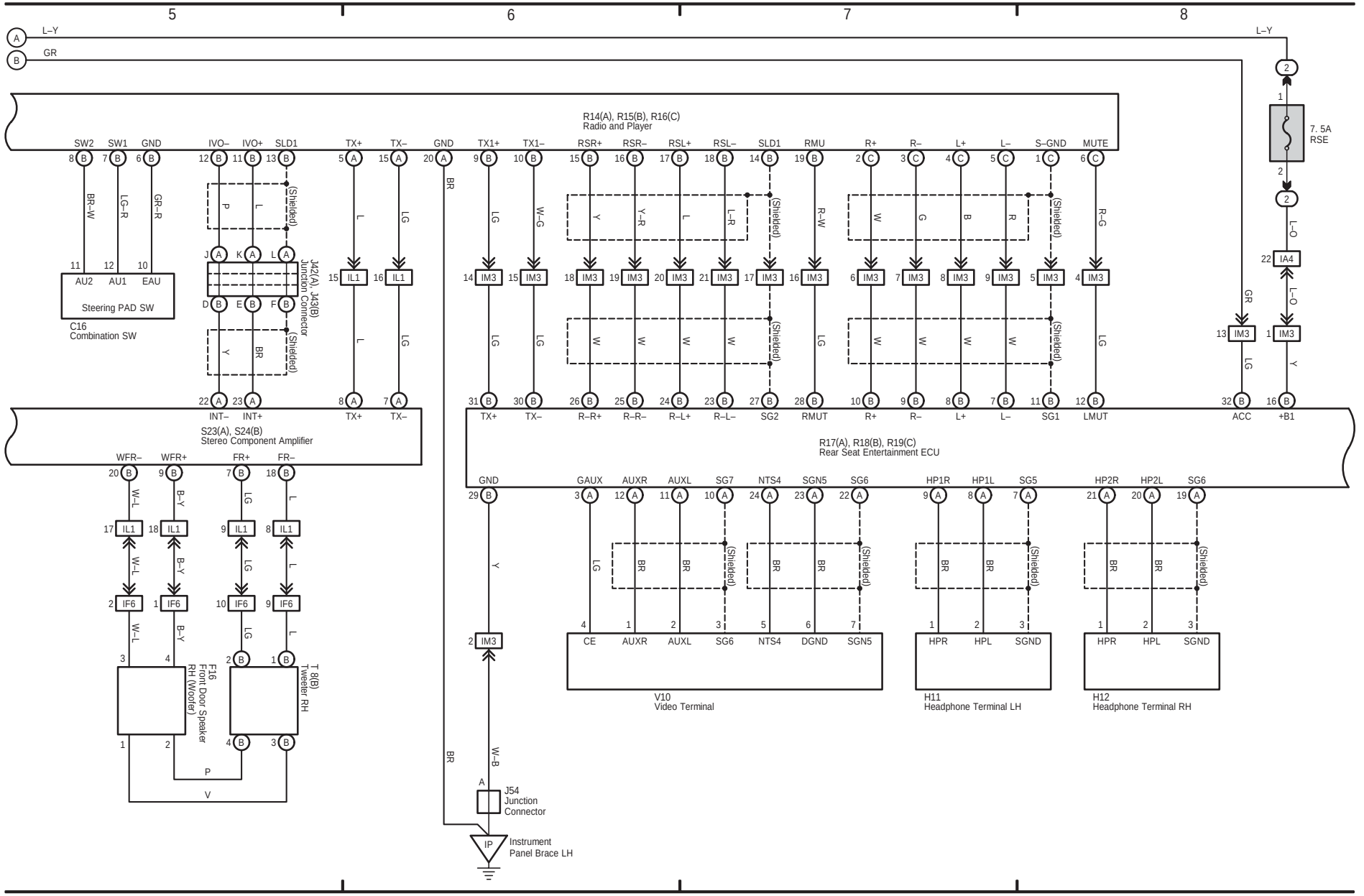
57 TOYOTA TUNDRA (Double Cab)

(Cont. next page)



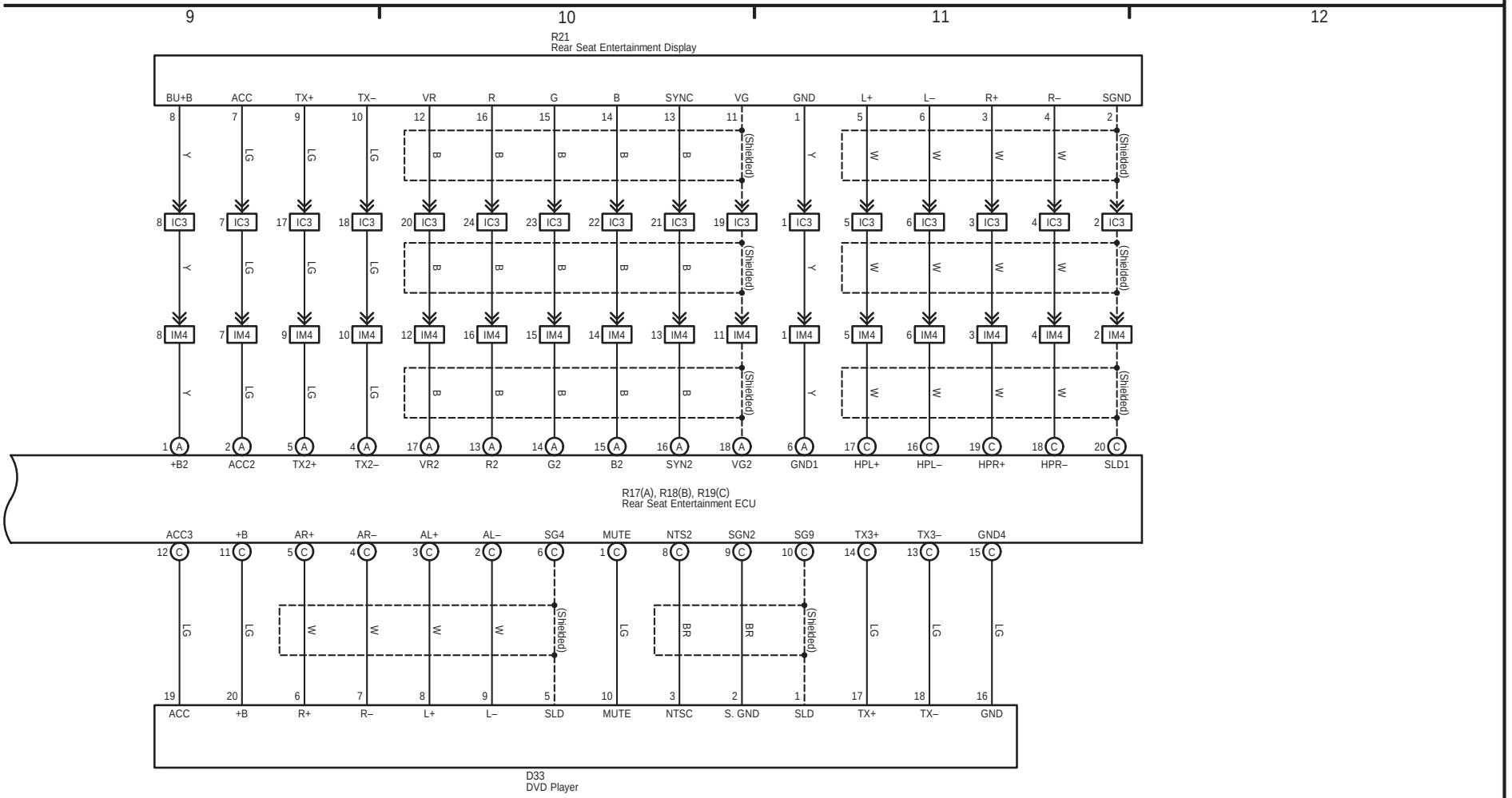
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Audio System (Rear Seat Entertainment System)



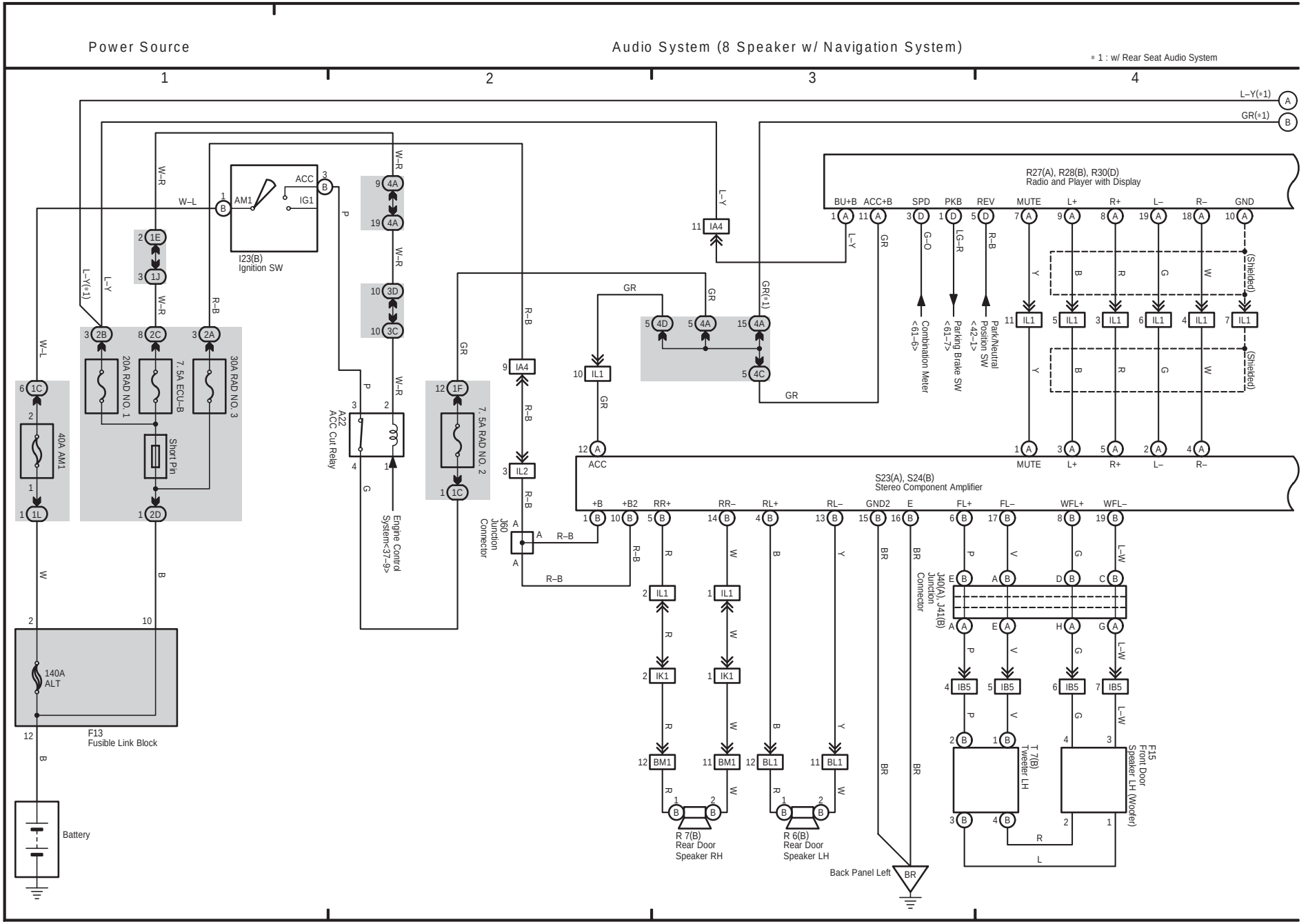
## 57 TOYOTA TUNDRA (Double Cab) (Cont' d)

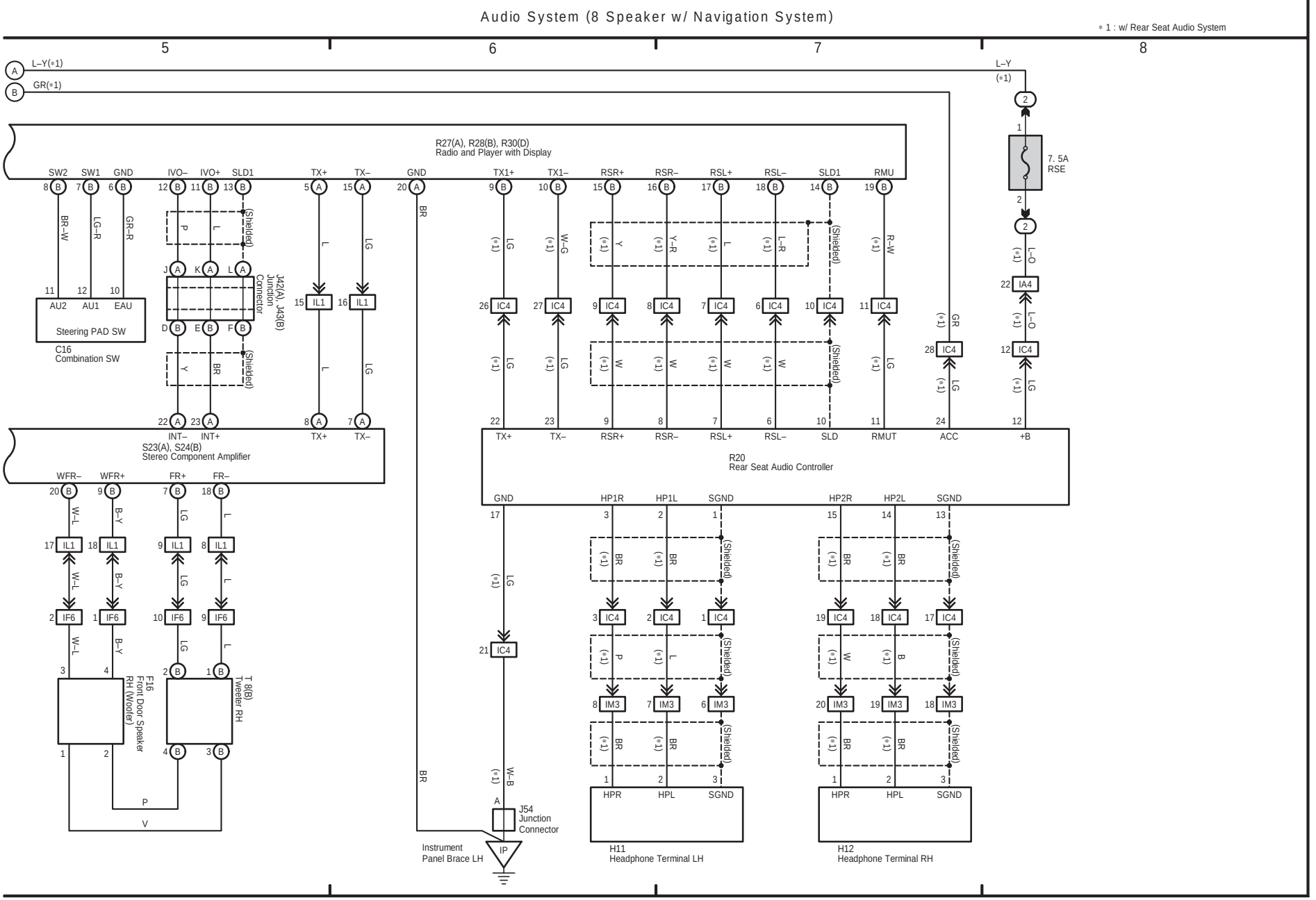
Audio System (Rear Seat Entertainment System)



58 TOYOTA TUNDRA (Double Cab)

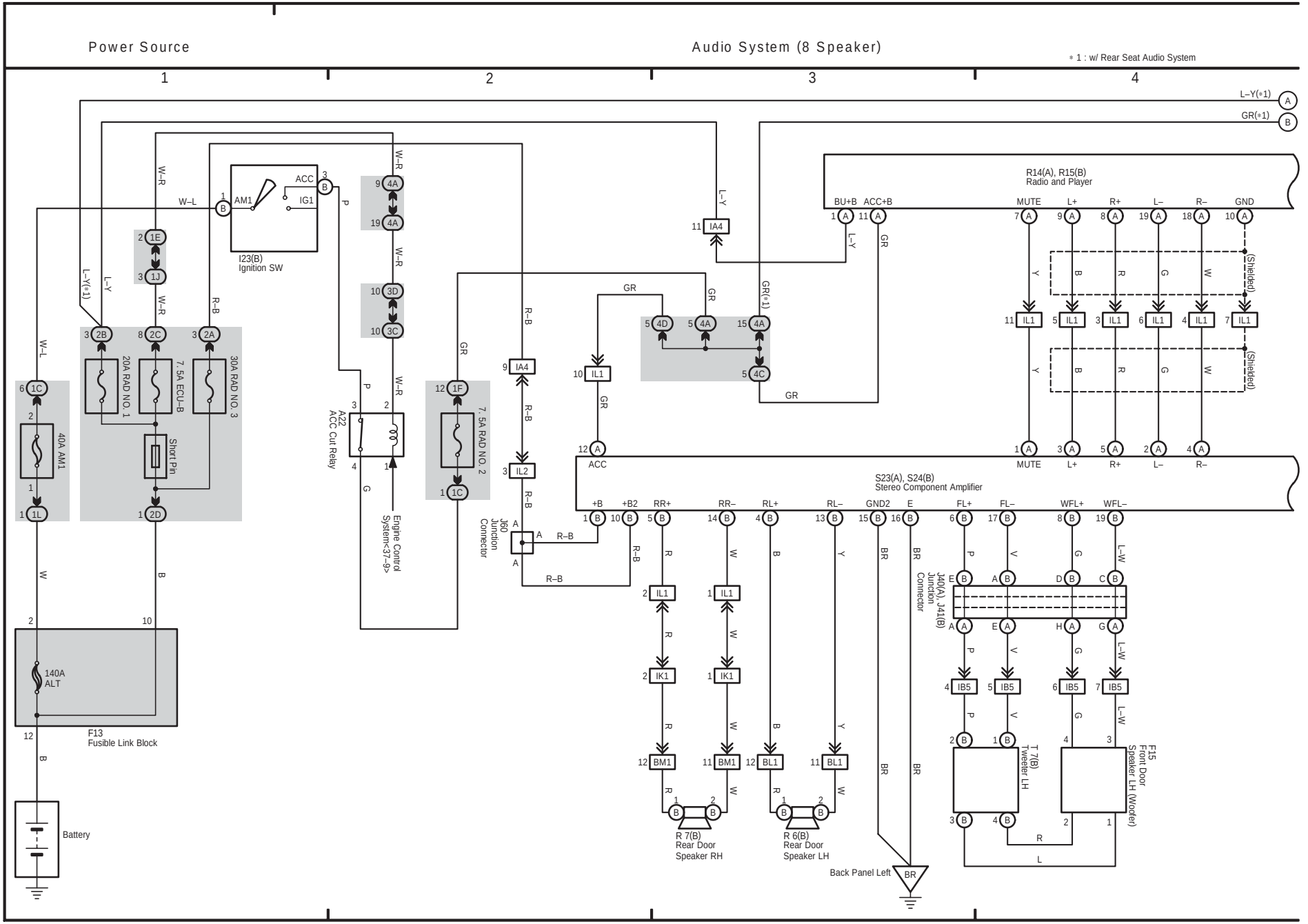
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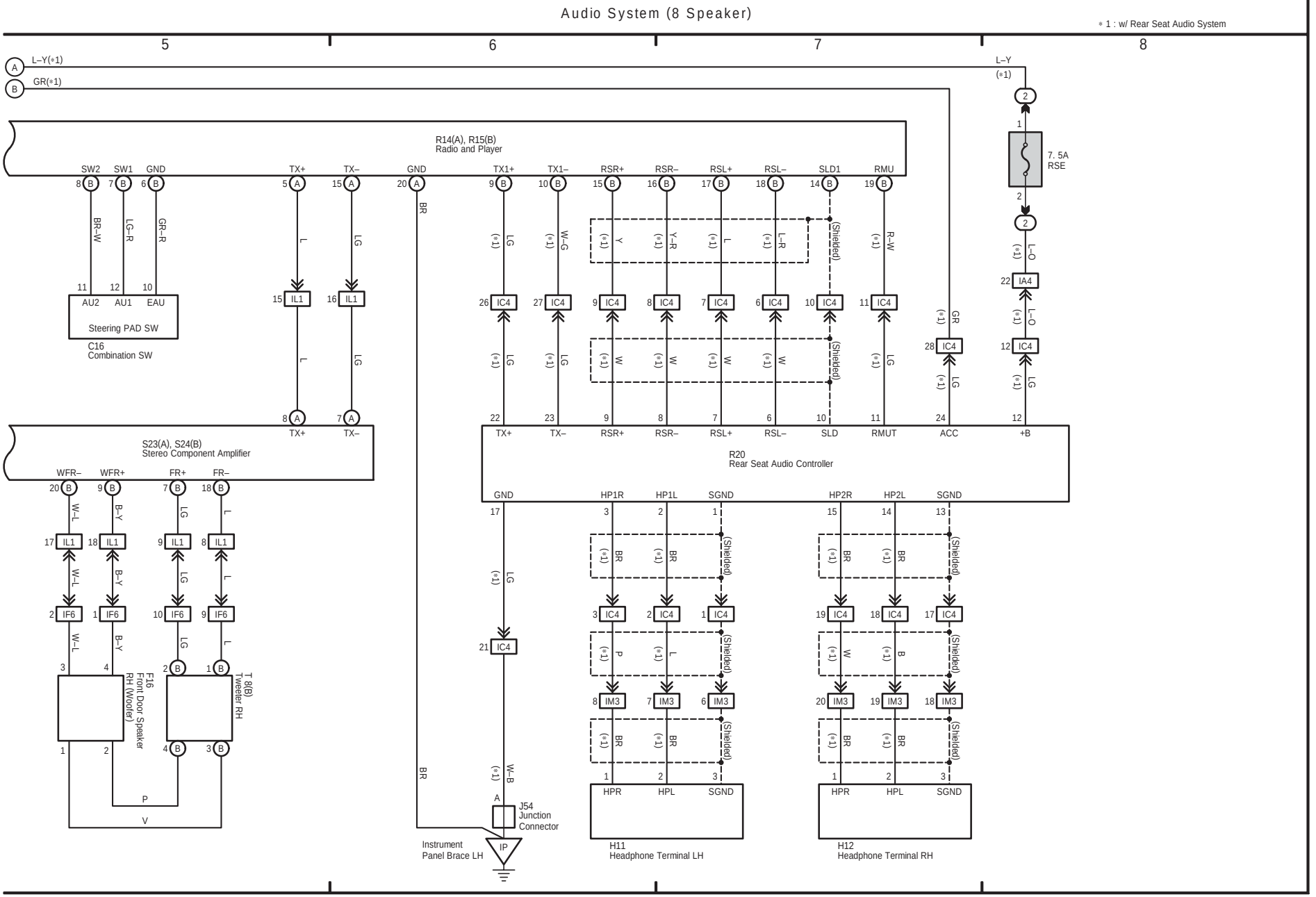



Audio System (8 Speaker w/ Navigation System)
* 1 : w/ Rear Seat Audio System
5
6
7
8
L–Y(*1)
GR(*1)
L–Y
(*1)
7. 5A
RSE
R27(A), R28(B), R30(D)
Radio and Player with Display
SW2 SW1 GND IVO– IVO+ SLD1 TX+ TX– GND TX1+ TX1– RSR+ RSR– RSL+ RSL– SLD1 RMU
BR–W
LG–R
GR–R
AU2 AU1 EAU
Steering PAD SW
C16
Combination SW
J42(A), J43(B)
Junction
Connector
(Shielded)
INT– INT+ TX+ TX–
S23(A), S24(B)
Stereo Component Amplifier
TX+ TX– RSR+ RSR– RSL+ RSL– SLD RMUT ACC +B
R20
Rear Seat Audio Controller
WFR– WFR+ FR+ FR–
F16
Front Door Speaker
RH (Woofer)
T 8(B)
Tweeter RH
GND HP1R HP1L SGND HP2R HP2L SGND
J54
Junction
Connector
Instrument
Panel Brace LH
IP
H11
Headphone Terminal LH
H12
Headphone Terminal RH
HPR HPL SGND

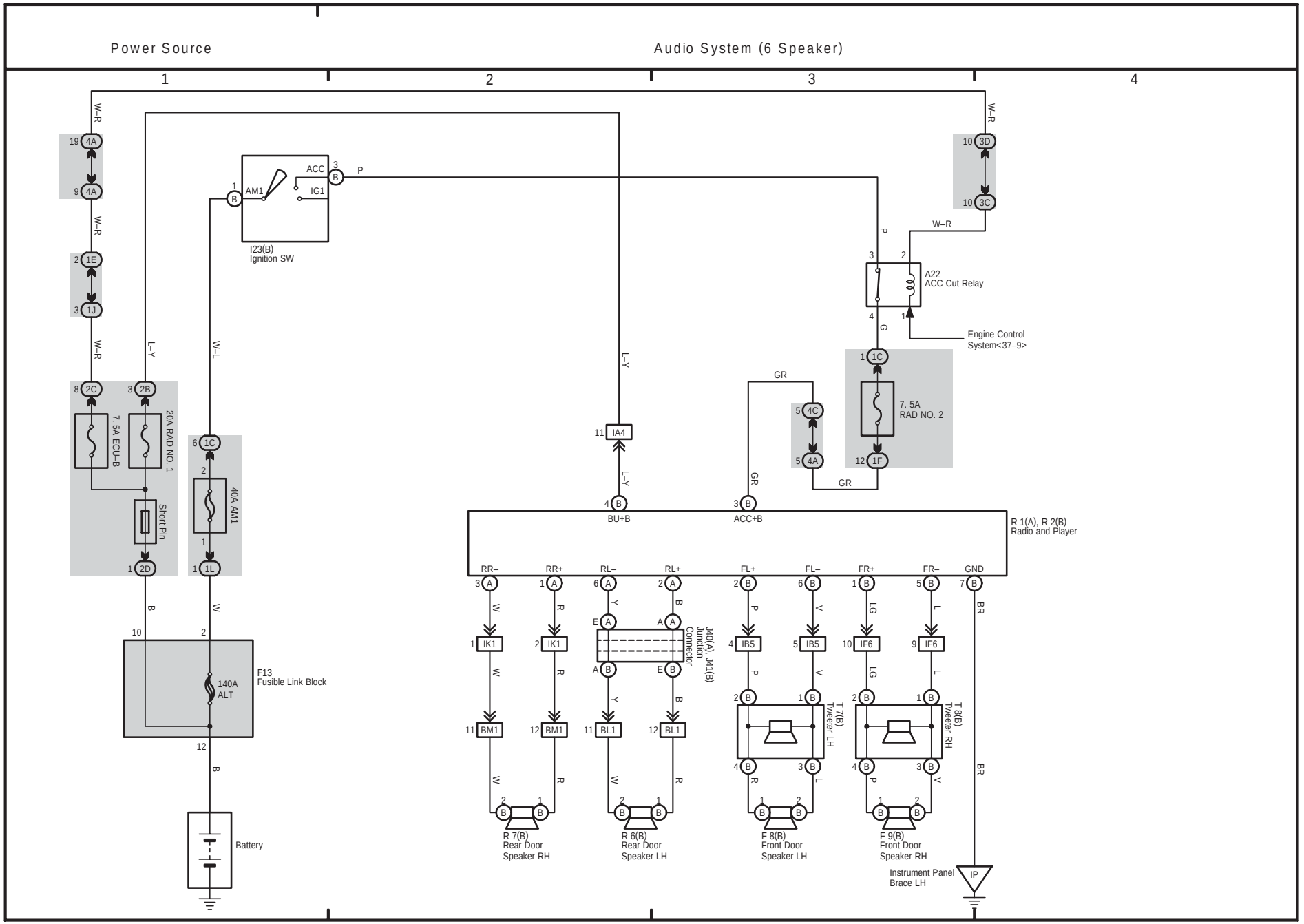
59 TOYOTA TUNDRA (Double Cab)

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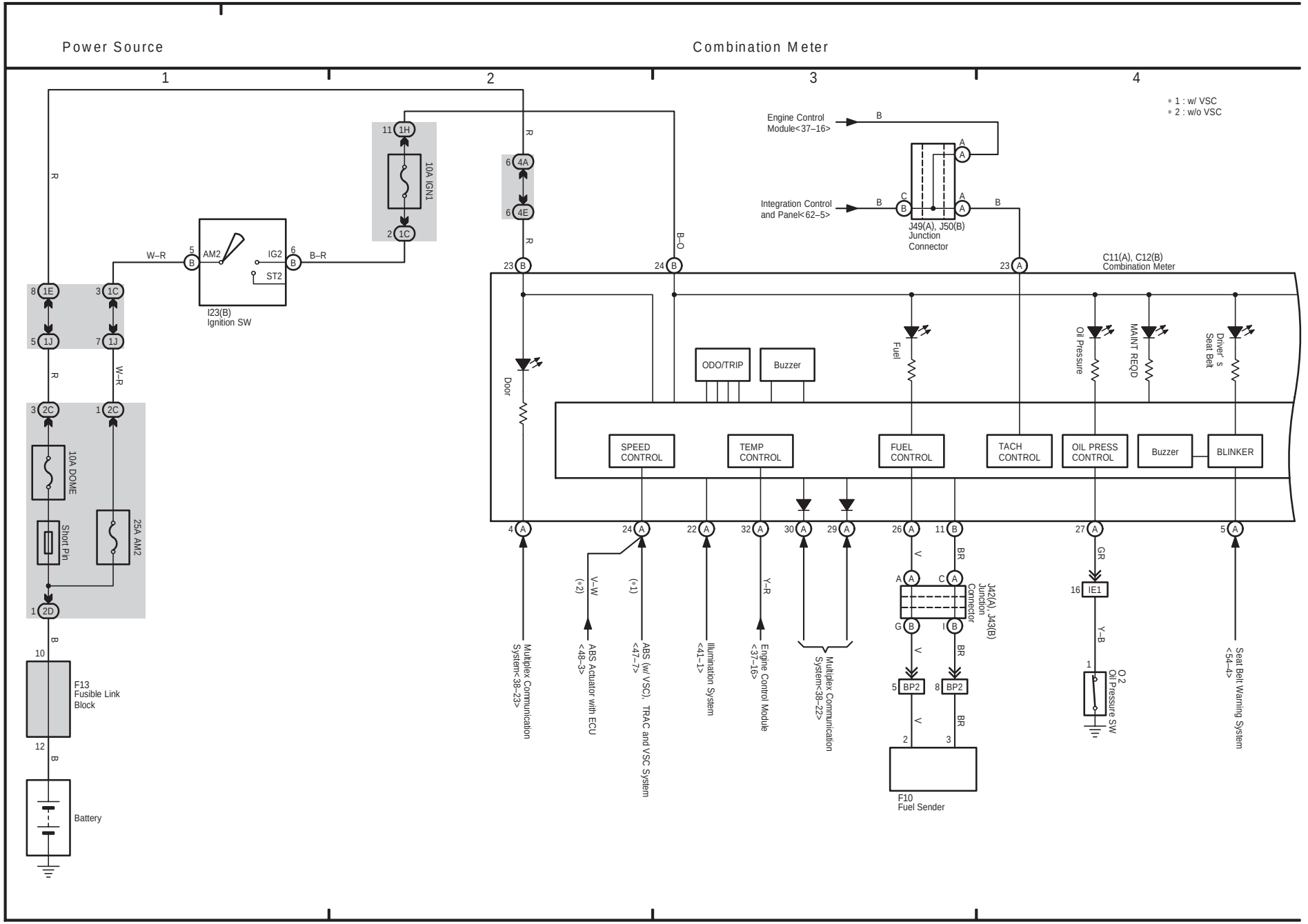

Audio System (8 Speaker)
* 1 : w/ Rear Seat Audio System
5
6
7
8
L–Y(*1)
GR(*1)
L–Y
(*1)
R14(A), R15(B)
Radio and Player
SW2 SW1 GND TX+ TX– GND TX1+ TX1– RSR+ RSR– RSL+ RSL– SLD1 RMU
BR–W LG–R GR–R L LG BR LG W–G Y Y–R L L–R (Shielded) R–W
AU2 AU1 EAU
Steering PAD SW
C16
Combination SW
IL1 IL1 IC4 IC4 IC4 IC4 IC4 IC4 IC4
W W W W (Shielded)
TX+ TX– TX+ TX– RSR+ RSR– RSL+ RSL– SLD RMUT ACC +B
R20
Rear Seat Audio Controller
7. 5A
RSE
L–O
IA4
GR
LG
S23(A), S24(B)
Stereo Component Amplifier
WFR– WFR+ FR+ FR–
W–L B–Y LG L
IL1 IF6
F16
Front Door Speaker
RH (Woofer)
T 8(B)
Tweeter RH
P
V
GND HP1R HP1L SGND HP2R HP2L SGND
BR W–B
J54
Junction
Connector
Instrument
Panel Brace LH
IP
IM3
(Shielded)
HPR HPL SGND
H11
Headphone Terminal LH
H12
Headphone Terminal RH

**60 TOYOTA TUNDRA (Double Cab)**

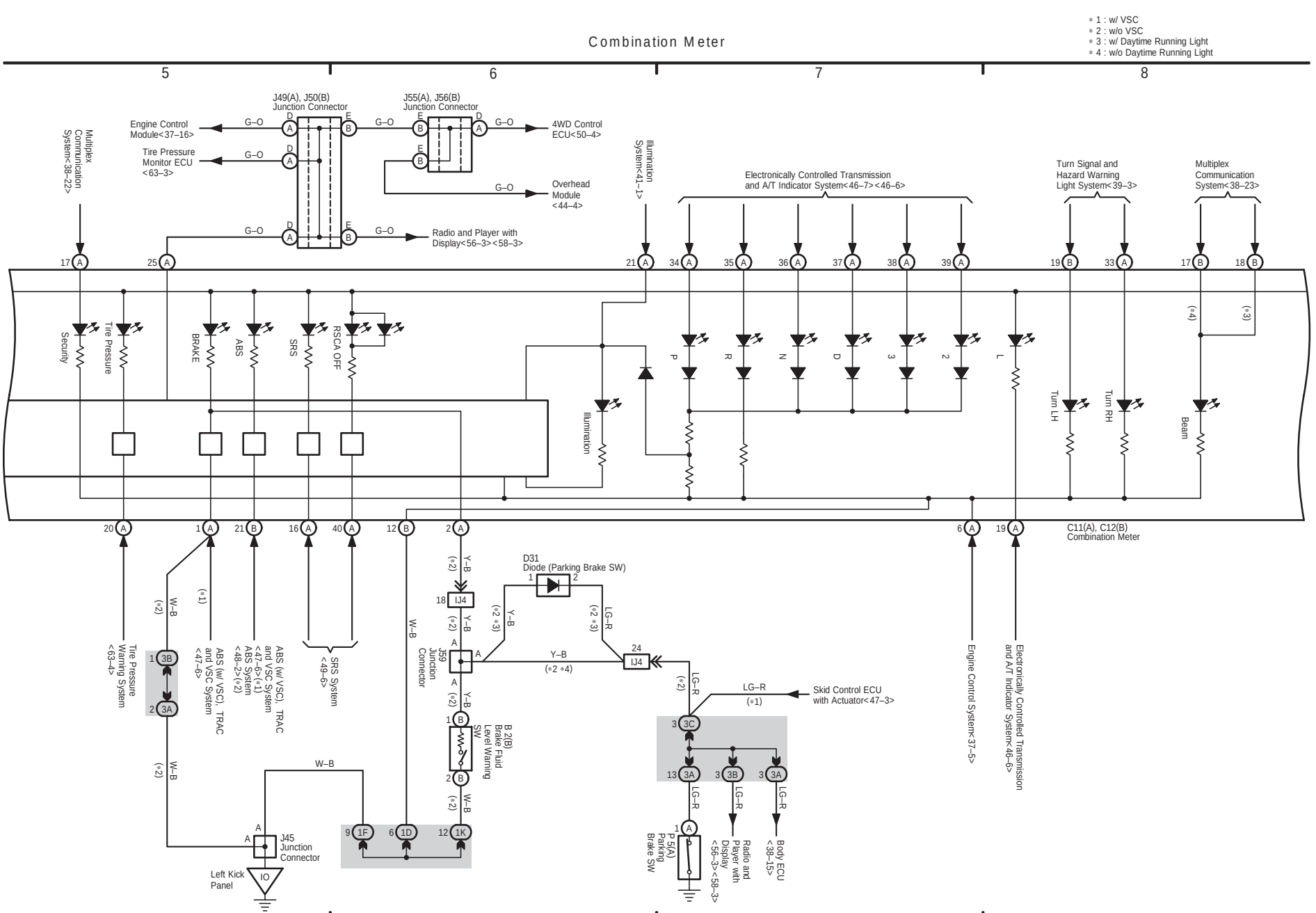


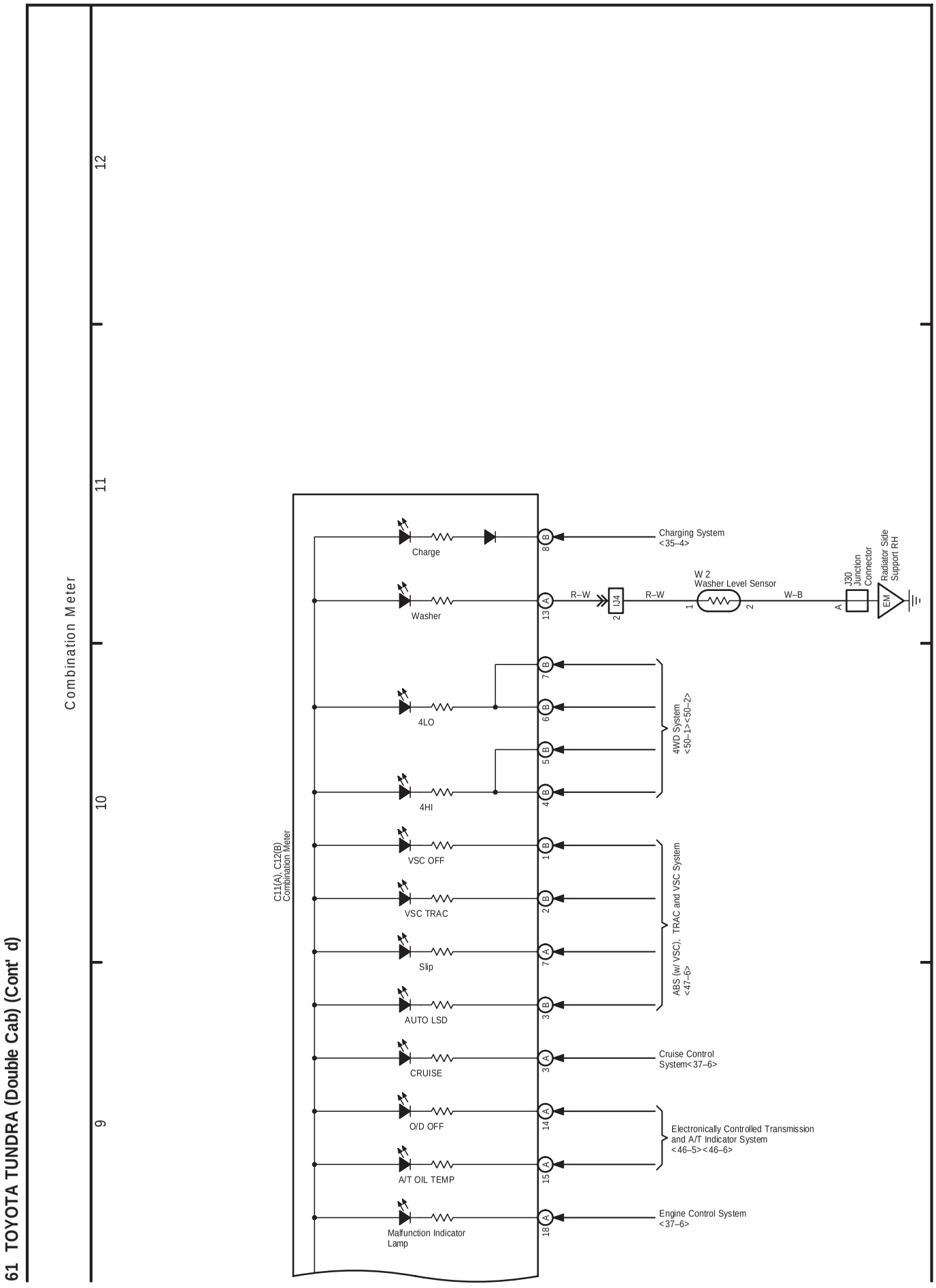
61 TOYOTA TUNDRA (Double Cab)

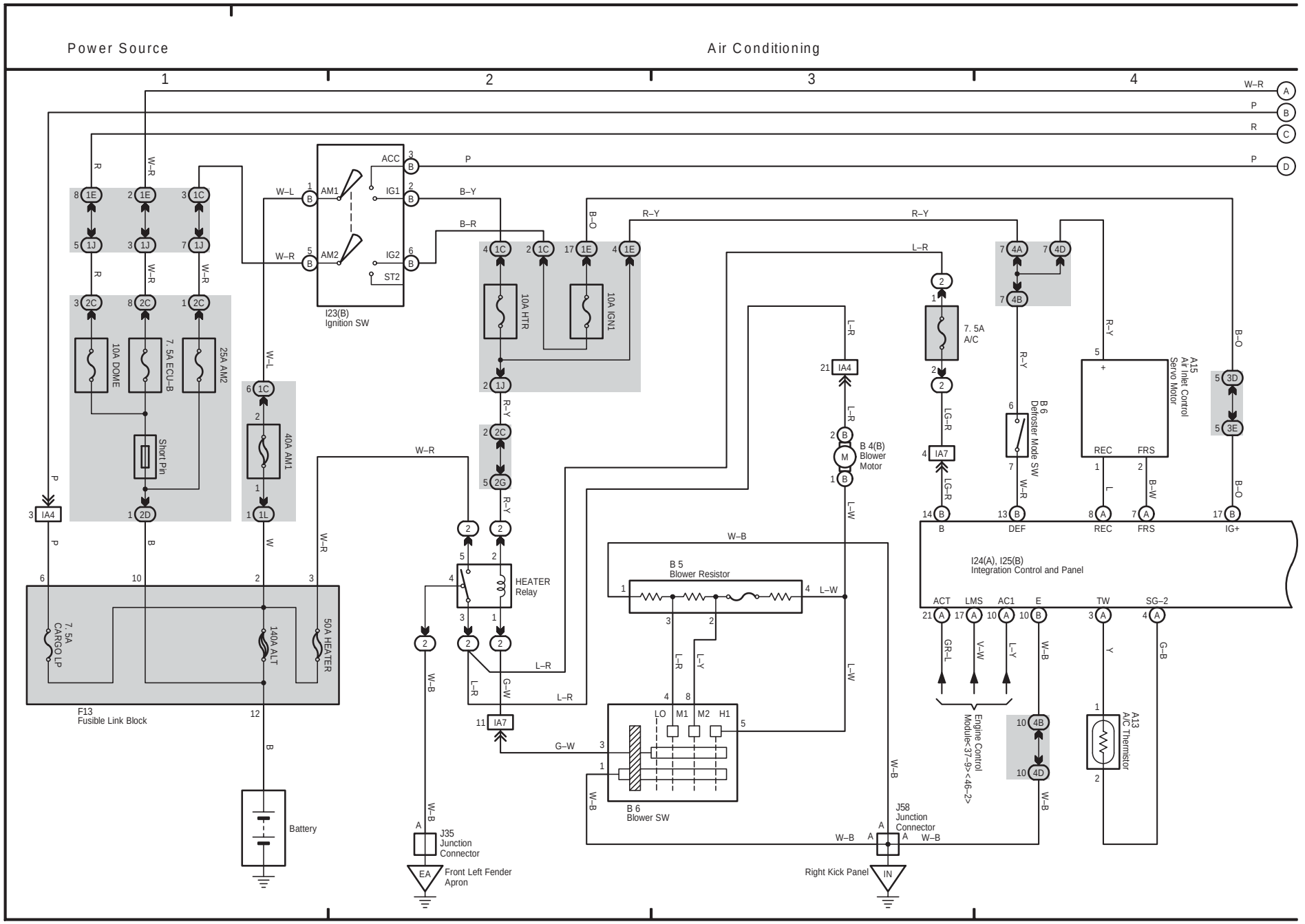
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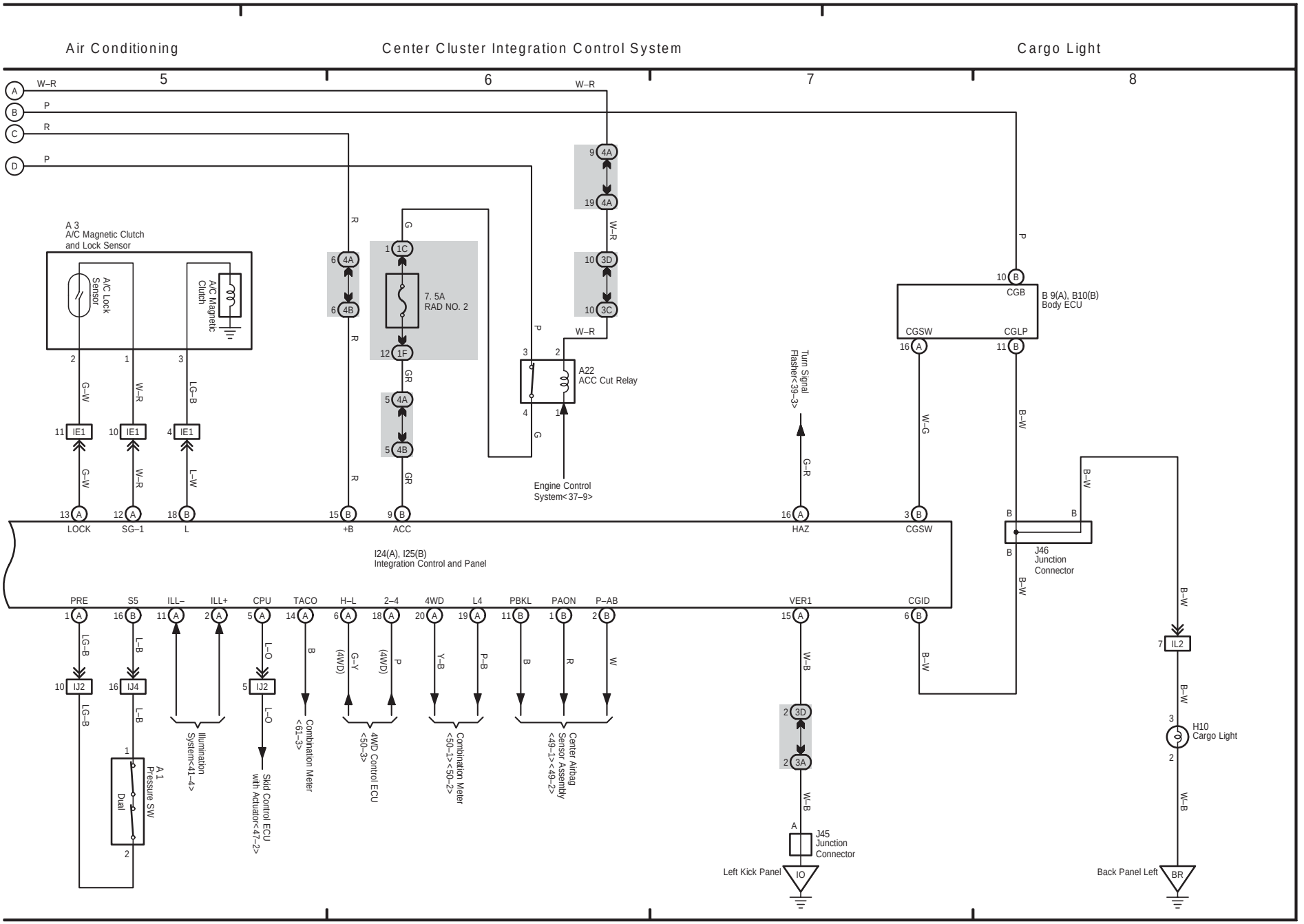


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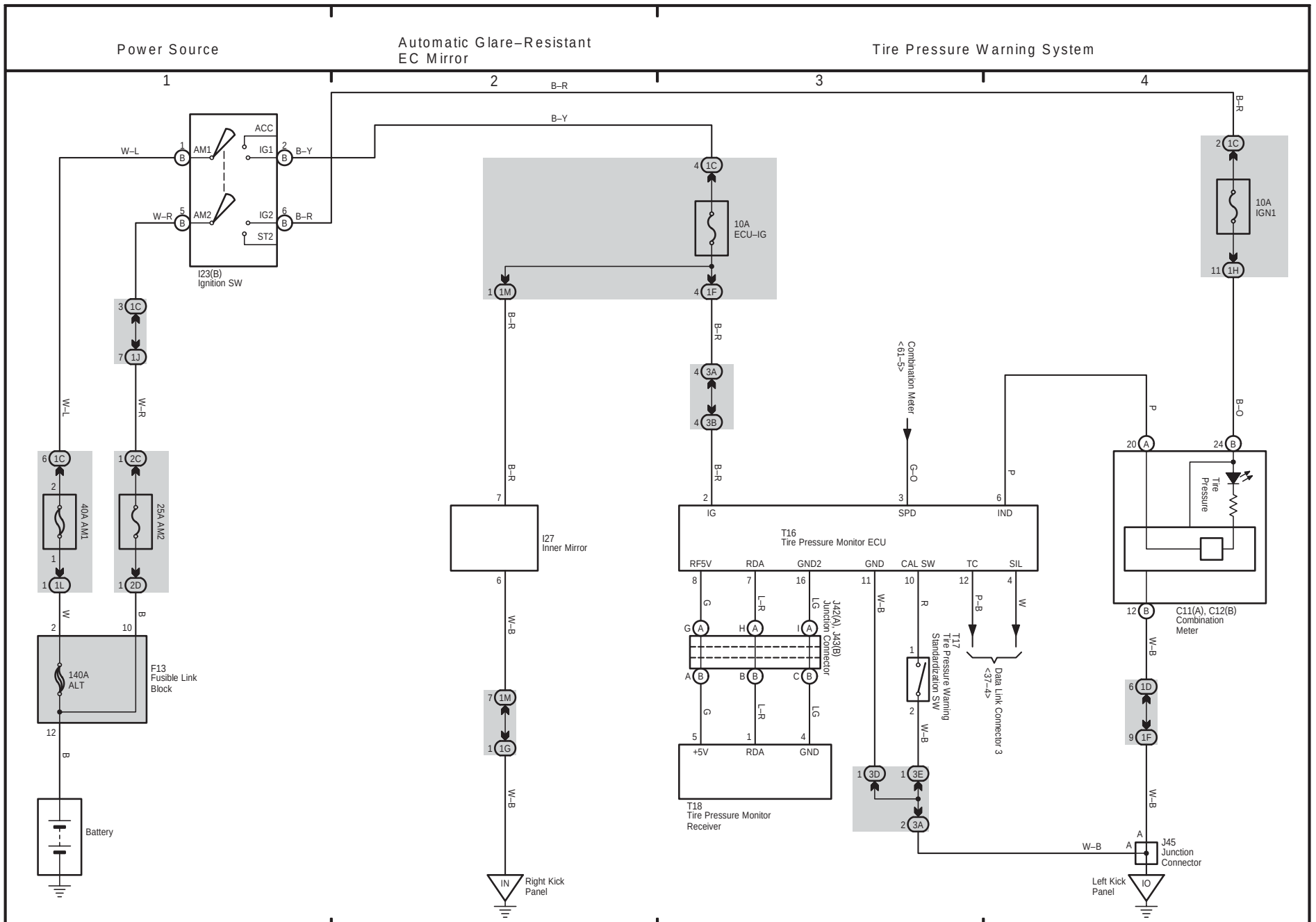


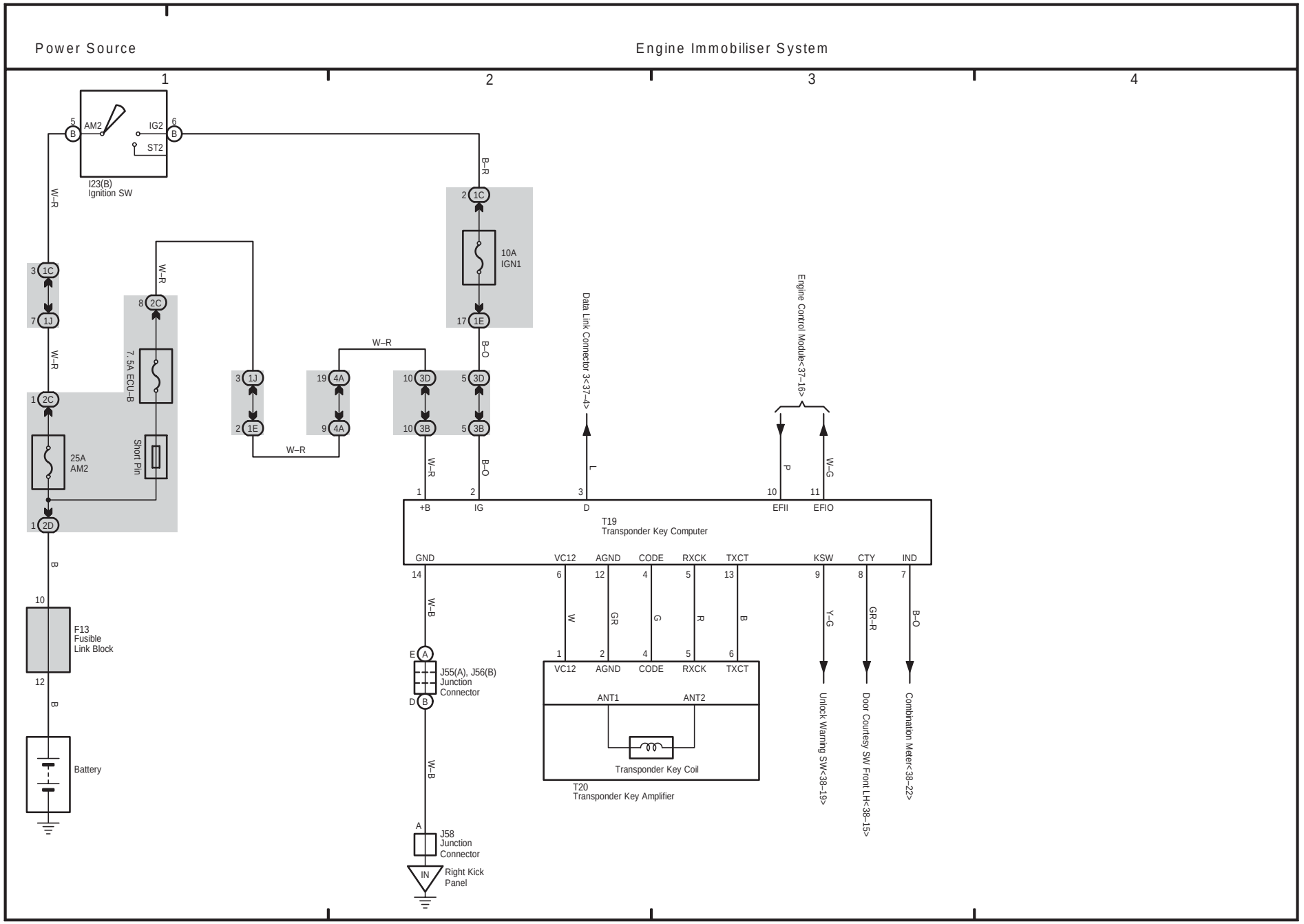

61 TOYOTA TUNDRA (Double Cab) (Cont' d)
12
11
10
9
Combination Meter
C11(A), C12(B)
Combination Meter
Charge
Washer
4LO
4HI
VSC OFF
VSC TRAC
Slip
AUTO LSD
CRUISE
O/D OFF
A/T OIL TEMP
Malfunction Indicator Lamp
Charging System
<35–4>
R–W
IJ4
W 2
Washer Level Sensor
W–B
J30
Junction
Connector
Radiator Side
Support RH
EM
4WD System
<50–1><50–2>
ABS (w/ VSC), TRAC and VSC System
<47–6>
Cruise Control
System<37–6>
Electronically Controlled Transmission
and A/T Indicator System
<46–5><46–6>
Engine Control System
<37–6>


Power Source
Air Conditioning
1
2
3
4
W–R
P
R
P
ACC
IG1
IG2
ST2
AM1
AM2
W–L
B–Y
B–R
B–O
R–Y
L–R
I23(B)
Ignition SW
10A HTR
10A IGN1
7. 5A
A/C
B 6
Defroster Mode SW
A15
Air Inlet Control
Servo Motor
REC
FRS
B 4(B)
Blower
Motor
10A DOME
7. 5A ECU–B
25A AM2
Short Pin
40A AM1
HEATER
Relay
B 5
Blower Resistor
L–W
L–Y
G–W
W–B
LO
M1
M2
H1
B 6
Blower SW
I24(A), I25(B)
Integration Control and Panel
ACT
LMS
AC1
E
TW
SG–2
B
DEF
REC
FRS
IG+
GR–L
V–W
L–Y
W–B
Y
G–B
Engine Control
Module<37–9><46–2>
A13
A/C Thermistor
F13
Fusible Link Block
7. 5A
CARGO LP
140A ALT
50A HEATER
Battery
J35
Junction
Connector
Front Left Fender
Apron
EA
J58
Junction
Connector
Right Kick Panel
IN


Air Conditioning
Center Cluster Integration Control System
Cargo Light
5
6
7
8
A 3
A/C Magnetic Clutch and Lock Sensor
A/C Lock Sensor
A/C Magnetic Clutch
7. 5A
RAD NO. 2
A22
ACC Cut Relay
Engine Control System< 37–9>
Turn Signal Flasher<39–3>
CGB
B 9(A), B10(B)
Body ECU
CGSW
CGLP
J46
Junction Connector
I24(A), I25(B)
Integration Control and Panel
LOCK
SG–1
L
+B
ACC
HAZ
CGSW
PRE
S5
ILL–
ILL+
CPU
TACO
H–L
2–4
4WD
L4
PBKL
PAON
P–AB
VER1
CGID
A1
Pressure SW
Dual
Illumination System<41–4>
Skid Control ECU with Actuator<47–2>
Combination Meter <61–3>
4WD Control ECU <50–3>
Combination Meter <50–1><50–2>
Center Airbag Sensor Assembly <49–1><49–2>
J45
Junction Connector
Left Kick Panel
H10
Cargo Light
Back Panel Left

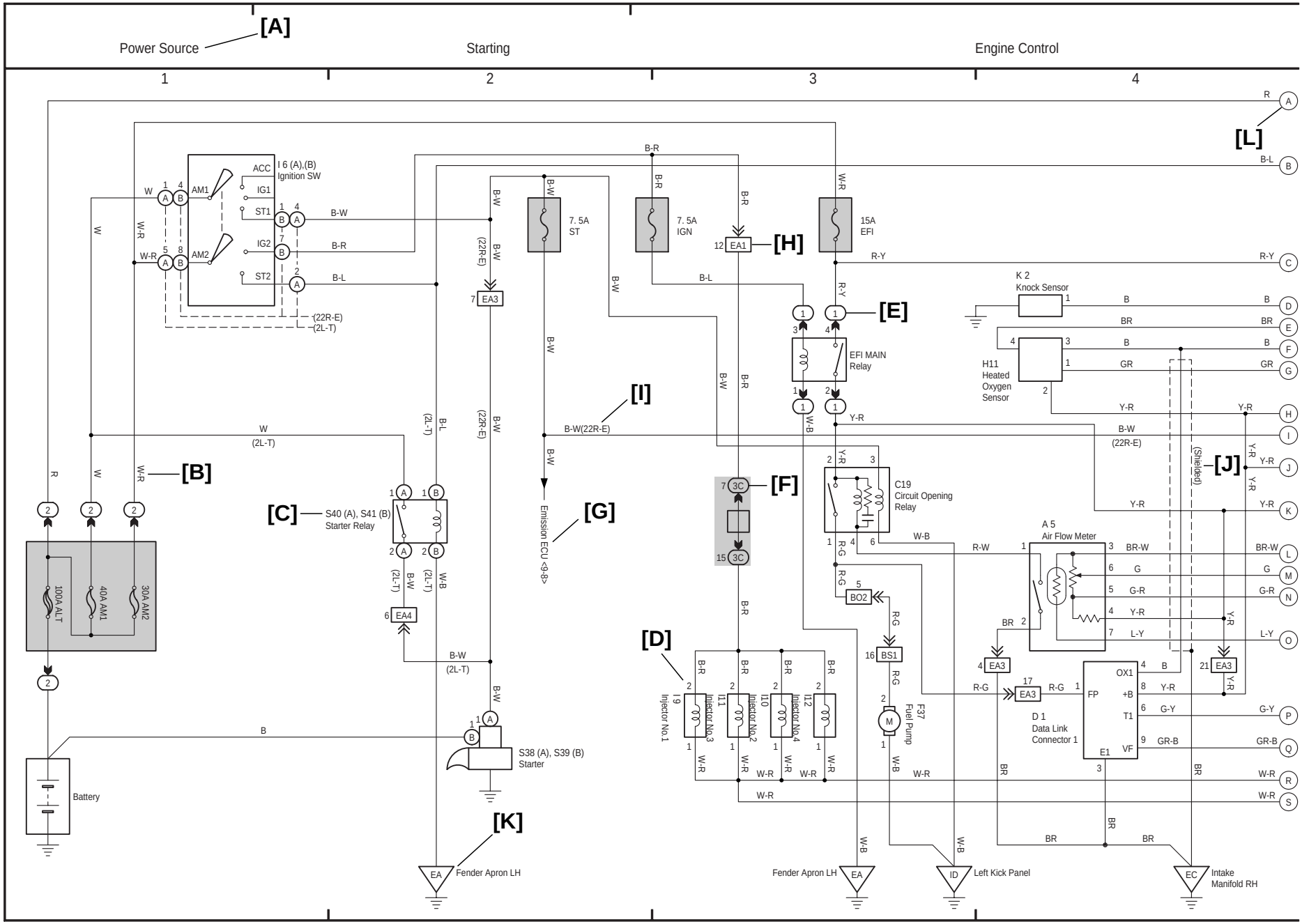
## 63 TOYOTA TUNDRA (Double Cab)




Power Source
Engine Immobiliser System
1
2
3
4
I23(B)
Ignition SW
AM2
IG2
ST2
10A
IGN1
7.5A ECU–B
25A
AM2
Short Pin
F13
Fusible
Link Block
Battery
Data Link Connector 3<37–4>
Engine Control Module<37–16>
T19
Transponder Key Computer
+B
IG
D
EFII
EFIO
GND
VC12
AGND
CODE
RXCK
TXCT
KSW
CTY
IND
J55(A), J56(B)
Junction
Connector
J58
Junction
Connector
Right Kick
Panel
T20
Transponder Key Amplifier
ANT1
ANT2
Transponder Key Coil
Unlock Warning SW<38–19>
Door Courtesy SW Front LH<38–15>
Combination Meter<38–22>

## HOW TO READ THIS SECTION

* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the wiring diagram section.



**[A]** : System Title

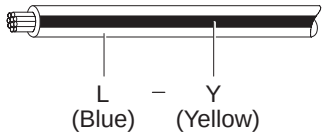
**[B]** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

| | | | | | |
|---|---|---|---|---|---|
| B | = Black | W | = White | BR | = Brown |
| L | = Blue | V | = Violet | SB | = Sky Blue |
| R | = Red | G | = Green | LG | = Light Green |
| P | = Pink | Y | = Yellow | GR | = Gray |
| O | = Orange | | | | |

The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

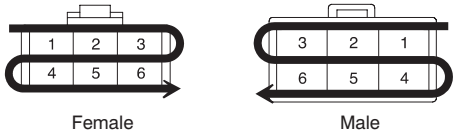
Example: L – Y




**[C]** : The position of the parts is the same as shown in the wiring diagram and wire routing.

**[D]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example : Numbered in order from upper left to lower right / Numbered in order from upper right to lower left



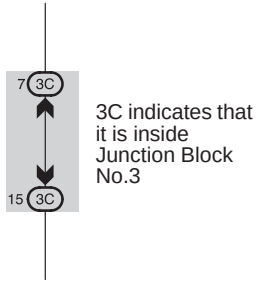

The numbering system for the overall wiring diagram is the same as above

**[E]** : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.

Example : (1) Indicates Relay Block No.1

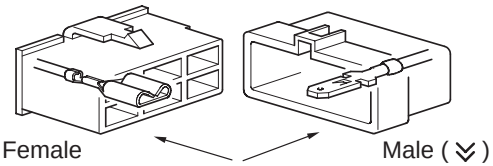
**[F]** : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

Example:




**[G]** : Indicates related system.

**[H]** : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows ( » ). Outside numerals are pin numbers.




**[I]** : ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.

**[J]** : Indicates a shielded cable.



**[K]** : Indicates and located on ground point.

**[L]** : The same code occuring on the next page indicates that the wire harness is continuous.

# SYSTEM INDEX [Access Cab, Standard Cab]


| SYSTEMS | LOCATION |
|---|---|
| ABS (w/ VSC) | 16–2 |
| ABS (w/o VSC) | 17–2 |
| Air Conditioning | 32–2 |
| Audio System (Built–in Type Amplifier) | 30–2 |
| Audio System (Separate Type Amplifier w/ Navigation System) | 28–2 |
| Audio System (Separate Type Amplifier w/o Navigation System) | 29–2 |
| Automatic Glare–Resistant EC Mirror | 34–2 |
| Back–Up Light | 12–3 |
| Cargo Light | 32–8 |
| Center Cluster Integration Control System | 32–6 |
| Charging | 1–4 |
| Cigarette Lighter | 24–3 |
| Clock | 24–4 |
| Combination Meter | 31–2 |
| Cruise Control (1GR–FE) | 5–16 |
| Cruise Control (2UZ–FE) | 4–16 |
| Door Lock Control (w/ Daytime Running Light) | 20–2 |
| Door Lock Control (w/o Daytime Running Light) | 21–2 |
| Electronically Controlled Transmission and A/T Indicator (1GR–FE) | 15–2 |
| Electronically Controlled Transmission and A/T Indicator (2UZ–FE) | 14–2 |
| Engine Control (1GR–FE) | 5–2 |
| Engine Control (2UZ–FE) | 4–2 |
| Engine Immobiliser System | 19–7 |
| Fog Light (w/ Daytime Running Light) | 12–2 |
| Fog Light (w/o Daytime Running Light) | 7–4 |
| Headlight (w/ Daytime Running Light) | 6–2 |
| Headlight (w/o Daytime Running Light) | 7–2 |
| Horn | 27–4 |

| SYSTEMS | LOCATION |
|---|---|
| Ignition (1GR–FE) | 3–2 |
| Ignition (2UZ–FE) | 2–2 |
| Illumination | 9–2 |
| Interior Light | 10–2 |
| Key Reminder | 26–4 |
| Light Auto Turn Off System (w/ Daytime Running Light) | 20–4 |
| Light Auto Turn Off System (w/o Daytime Running Light) | 21–4 |
| Mirror Heater | 13–2 |
| Multiplex Communication System (CAN) | 16–8 |
| Navigation System | 28–2 |
| Power Outlet | 24–2 |
| Power Seat | 25–2 |
| Power Source | 1~34–1 |
| Power Window | 22–2 |
| Remote Control Mirror | 27–2 |
| Seat Belt Warning | 26–4 |
| SRS | 18–2 |
| Starting | 1–2 |
| Stop Light | 13–4 |
| Taillight | 8–2 |
| Tire Pressure Warning System | 34–3 |
| TRAC | 16–2 |
| Trailer Towing | 33–3 |
| Turn Signal and Hazard Warning Light | 11–2 |
| TVIP | 23–2 |
| VSC | 16–2 |
| Wiper and Washer | 26–2 |
| Wireless Door Lock Control | 23–2 |
| 4WD | 19–2 |

# SYSTEM INDEX [Double Cab]


| SYSTEMS | LOCATION |
|---|---|
| ABS (w/ VSC) | 47–2 |
| ABS (w/o VSC) | 48–2 |
| Accessory Meter | 44–4 |
| Air Conditioning | 62–2 |
| Audio System (Rear Seat Entertainment System) | 57–2 |
| Audio System (w/ Navigation and Rear Seat Entertainment System) | 56–2 |
| Audio System (6 Speaker) | 60–2 |
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