

# 2006 xA ELECTRICAL WIRING DIAGRAM

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# A INTRODUCTION

This manual consists of the following 13 sections:

No.	Section	Description
A	INDEX	Index of the contents of this manual.
	INTRODUCTION	Brief explanation of each section.
B	HOW TO USE THIS MANUAL	Instructions on how to use this manual.
C	TROUBLE-SHOOTING	Describes the basic inspection procedures for electrical circuits.
D	ABBREVIATIONS	Defines the abbreviations used in this manual.
E	GLOSSARY OF TERMS AND SYMBOLS	Defines the symbols and functions of major parts.
F	RELAY LOCATIONS	Shows position of the Electronic Control Unit, Relays, Relay Block, etc. This section is closely related to the system circuit.
G	ELECTRICAL WIRING ROUTING	Describes position of Parts Connectors, Splice points, Ground points, etc. This section is closely related to the system circuit.
H	INDEX	Index of the system circuits.
	SYSTEM CIRCUITS	Electrical circuits of each system are shown from the power supply through ground points. Wiring connections and their positions are shown and classified by code according to the connection method. (Refer to the section, "How to use this manual"). The "System Outline" and "Service Hints" useful for troubleshooting are also contained in this section.
I	GROUND POINT	Shows ground positions of all parts described in this manual.
J	POWER SOURCE (Current Flow Chart)	Describes power distribution from the power supply to various electrical loads.
K	CONNECTOR LIST	Describes the form of the connectors for the parts appeared in this book. This section is closely related to the system circuit.
L	PART NUMBER OF CONNECTORS	Indicates the part number of the connectors used in this manual.
M	OVERALL ELECTRICAL WIRING DIAGRAM	Provides circuit diagrams showing the circuit connections.

## FOREWORD

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

Applicable models: NCP61 Series

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

Manual Name	Pub. No.
● 2006 SCION xA Repair Manual	RM00D0U
● 2006 SCION New Car Features	NM0060U

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.

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### 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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This manual provides information on the electrical circuits installed on vehicles by dividing them into a circuit for each system.

The actual wiring of each system circuit is shown from the point where the power source is received from the battery as far as each ground point. (All circuit diagrams are shown with the switches in the OFF position.)

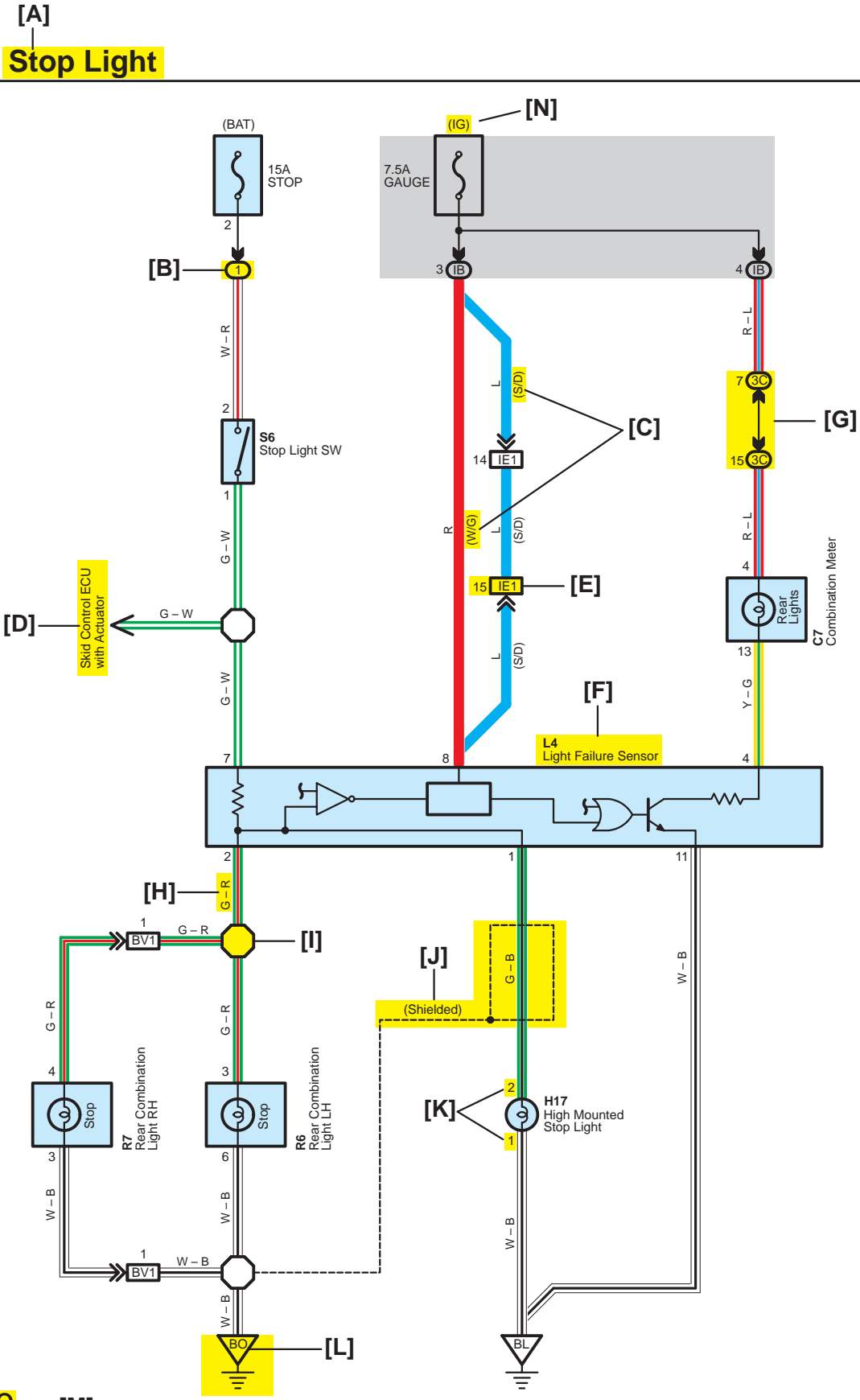
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Point section). See the System Outline to understand the circuit operation.

When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors and ground points of each system circuit. Internal wiring for each junction block is also provided for better understanding of connection within a junction block.

Wiring related to each system is indicated in each system circuit by arrows (from\_\_, to\_\_). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

# B HOW TO USE THIS MANUAL

\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.



50 — [M]

**[A]** : System Title

**[B]** : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

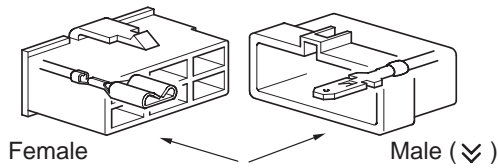
Example: ① Indicates Relay Block No.1

**[C]** : ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.

**[D]** : Indicates related system.

**[E]** : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows ( ⇨ ).

Outside numerals are pin numbers.



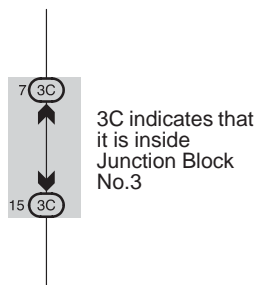
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

When more than one code has the first and second letters in common, followed by numbers (e.g, IH1, IH2), this indicates the same type of wiring harness and wiring harness connector.

**[F]** : Represents a part (all parts are shown in sky blue). The code is the same as the code used in parts position.

**[G]** : 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:



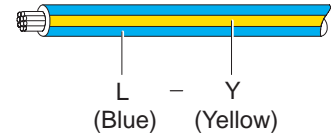
**[H]** : Indicates the wiring color.

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 |            |                  |

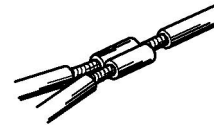
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



**[I]** : Indicates a wiring Splice Point

Example:



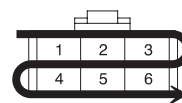
**[J]** : Indicates a shielded cable.



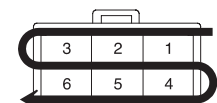
**[K]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example: Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

**[L]** : Indicates a ground point.

The first letter of the code for each ground point(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

**[M]** : Page No.

**[N]** : Indicates the ignition key position(s) when the power is supplied to the fuse(s).

## B HOW TO USE THIS MANUAL

### [O] System Outline

Current is applied at all times through the STOP fuse to TERMINAL 2 of the stop light SW.  
When the ignition SW is turned on, current flows from the GAUGE fuse to TERMINAL 8 of the light failure sensor, and also flows through the rear lights warning light to TERMINAL 4 of the light failure sensor.

#### Stop Light Disconnection Warning

When the ignition SW is turned on and the brake pedal is pressed (Stop light SW on), if the stop light circuit is open, the current flowing from TERMINAL 7 of the light failure sensor to TERMINALS 1, 2 changes, so the light failure sensor detects the disconnection and the warning circuit of the light failure sensor is activated.

As a result, the current flows from TERMINAL 4 of the light failure sensor to TERMINAL 11 to GROUND and turns the rear lights warning light on. By pressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and holds the warning light on until the ignition SW is turned off.

### [P] ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C7	34	L4	36	R7	37
H17	36	R6	37	S6	35

### [Q] ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	18	R/B No.1 (Instrument Panel Brace LH)

### [R] ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
3C	22	Instrument Panel Wire and J/B No.3 (Instrument Panel Brace LH)
IB	20	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

### [S] □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	42	Floor Wire and Instrument Panel Wire (Left Kick Panel)
BV1	50	Luggage Room Wire and Floor Wire (Luggage Room Left)

### [T] ▽ : Ground Points

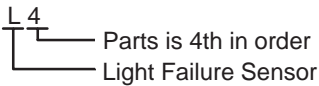
Code	See Page	Ground Points Location
BL	50	Under the Left Center Pillar
BO	50	Back Panel Center

**[O]** : Explains the system outline.

**[P]** : Indicates the reference page showing the position on the vehicle of the parts in the system circuit.

Example : Part "L4" (Light Failure Sensor) is on page 36 of the manual.

\* The letter in the code is from the first letter of the part, and the number indicates its order in parts starting with that letter.

Example : L 4  


**[Q]** : Indicates the reference page showing the position on the vehicle of Relay Block Connectors in the system circuit.

Example : Connector "1" is described on page 18 of this manual and is installed on the left side of the instrument panel.

**[R]** : Indicates the reference page showing the position on the vehicle of J/B and Wire Harness in the system circuit.

Example : Connector "3C" connects the Instrument Panel Wire and J/B No.3. It is described on page 22 of this manual, and is installed on the instrument panel left side.

**[S]** : Indicates the reference page describing the wiring harness and wiring harness connector (the female wiring harness is shown first, followed by the male wiring harness).

Example : Connector "IE1" connects the floor wire (female) and Instrument panel wire (male). It is described on page 42 of this manual, and is installed on the left side kick panel.

**[T]** : Indicates the reference page showing the position of the ground points on the vehicle.

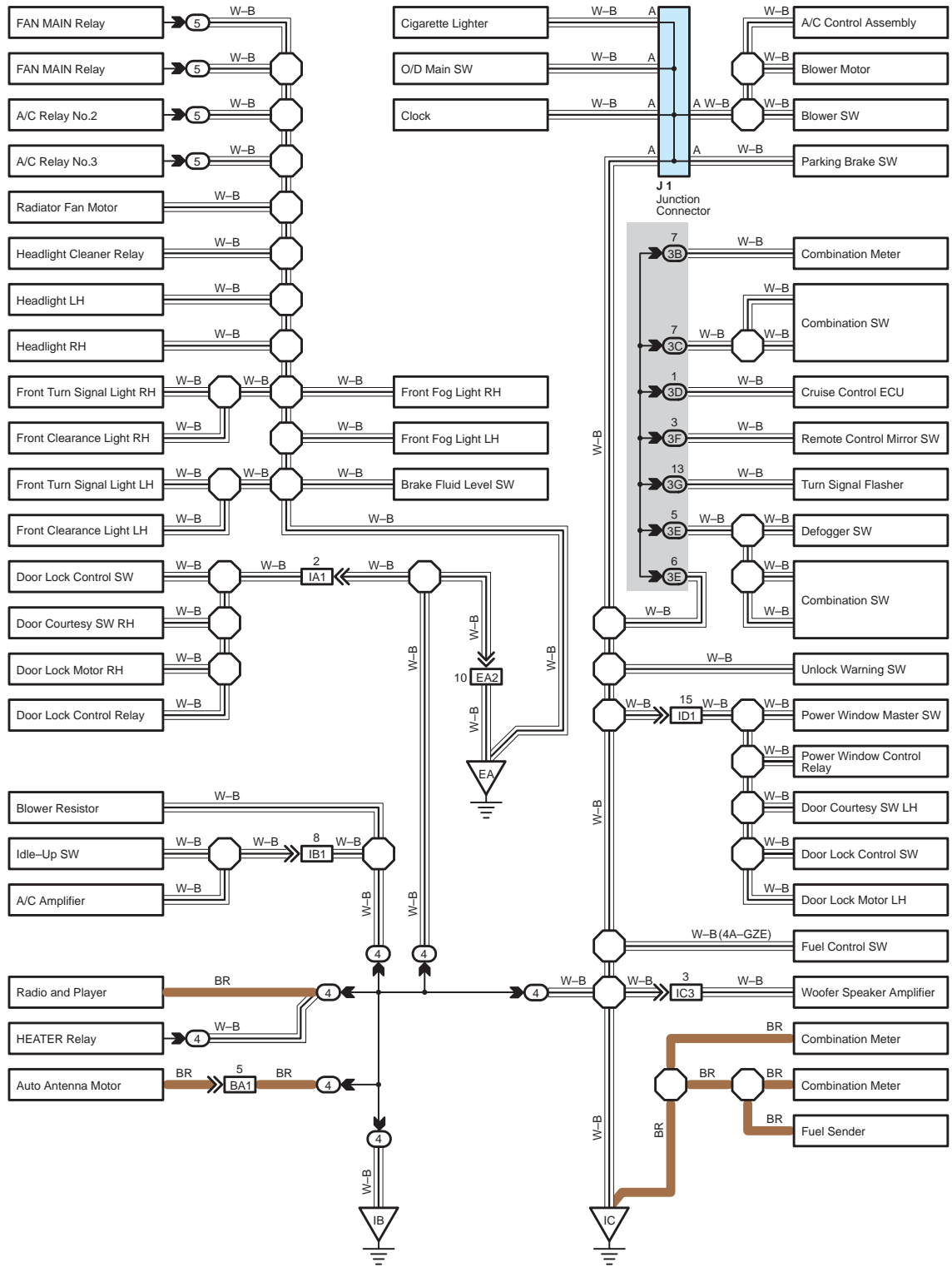
Example : Ground point "BO" is described on page 50 of this manual and is installed on the back panel center.



# B HOW TO USE THIS MANUAL

The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points (  $\nabla_{EA}$ ,  $\nabla_{IB}$  and  $\nabla_{IC}$  shown below) can also be checked this way.

## I GROUND POINT

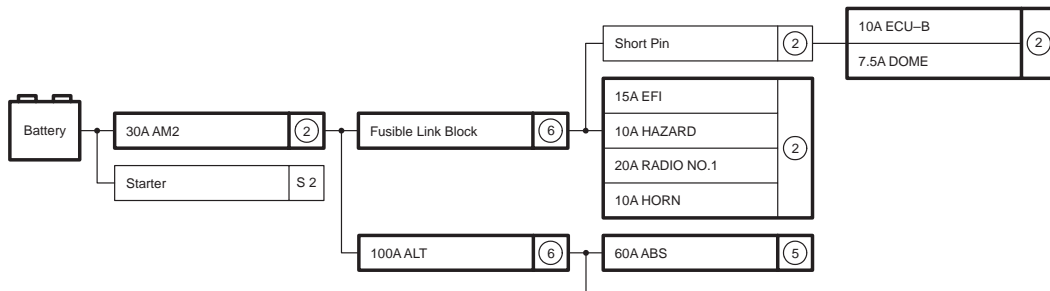


\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

The "Current Flow Chart" section, describes which parts each power source (fuses, fusible links, and circuit breakers) transmits current to. In the Power Source circuit diagram, the conditions when battery power is supplied to each system are explained. Since all System Circuit diagrams start from the power source, the power source system must be fully understood.

## J POWER SOURCE (Current Flow Chart)

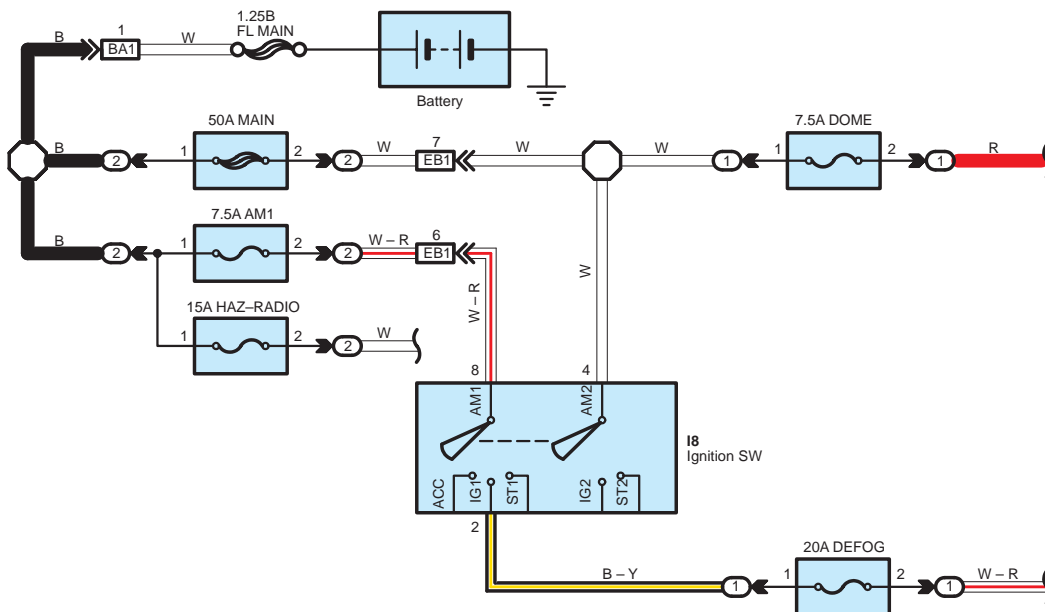
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuses, etc.) and other parts



### Engine Room R/B (See Page 20)

Fuse	System	Page
20A STOP	ABS	194
	ABS and Traction Control	187
	Cruise Control	180
	Electronically Controlled Transmission	166
	Multiplex Communication System	210
10A DOME	Cigarette Lighter	214
	Combination Meter	230
	Headlight	112
	Interior Light	122
	Key Reminder and Seat Belt Warning	
	Light Auto Turn Off System	

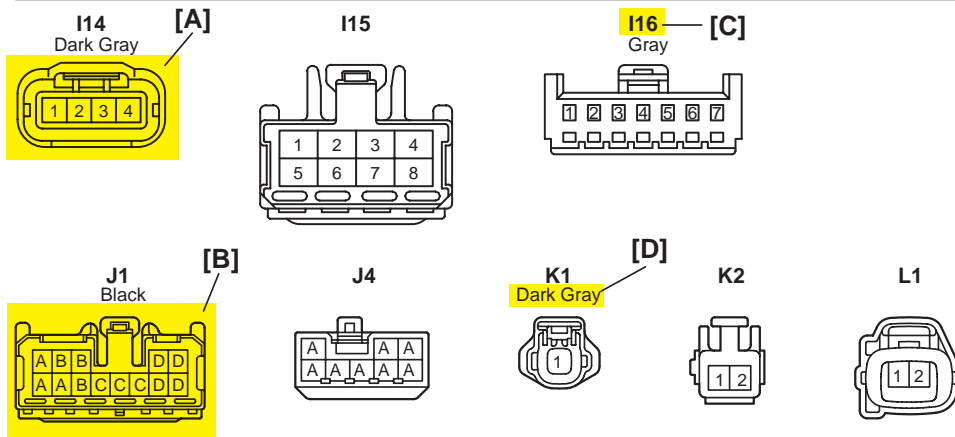
## Power Source



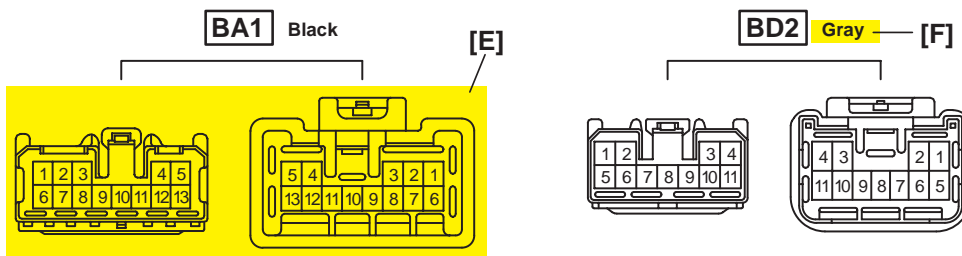
\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

## B HOW TO USE THIS MANUAL

### K CONNECTOR LIST

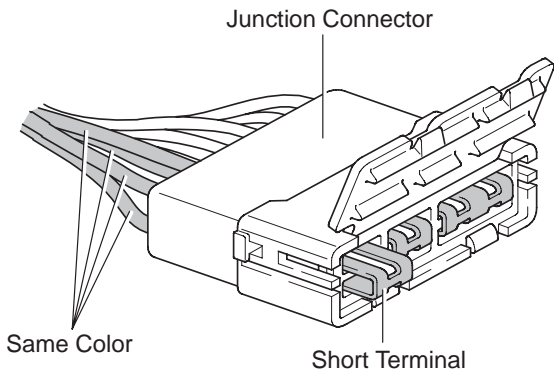


### K CONNECTOR LIST



**[A]** : Indicates connector to be connected to a part. (The numeral indicates the pin No.)

**[B]** : Junction Connector  
Indicates a connector which is connected to a short terminal.



Junction connector in this manual include a short terminal which is connected to a number of wire harnesses. Always perform inspection with the short terminal installed. (When installing the wire harnesses, the harnesses can be connected to any position within the short terminal grouping. Accordingly, in other vehicles, the same position in the short terminal may be connected to a wire harness from a different part.)

Wire harness sharing the same short terminal grouping have the same color.

**[C]** : Parts Code  
The first letter of the code is taken from the first letter of part, and the numbers indicates its order in parts which start with the same letter.

**[D]** : Connector Color  
Connectors not indicated are milky white in color.

**[E]** : Indicates the connector shapes which are used to join wire harnesses.  
On Left : Female connector shapes  
On Right : Male connector shapes  
Numbers indicate pin numbers.

**[F]** : Indicates connector colors. (Connectors with not indicated colors are white)

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	D 4	Diode (Courtesy)	90980-11608
A 2	A/C Condenser Fan Motor	90980-11237	D 5	Diode (Interior Light)	90980-10962
A 3	A/C Condenser Fan Relay	90980-10940	D 6	Diode (Moon Roof)	90980-11608
A 4	A/C Condenser Fan Resistor	90980-10928	D 7	Door Lock Control Relay	90980-10848
A 5	A/C Magnetic Clutch	90980-11271	D 8	Door Lock Control SW LH	90980-11148
A 6	A/T Oil Temp. Sensor	90980-11413	D 9	Door Lock Control SW RH	
[A]	ABS Actuator [B]	909-[C] 151	D10	Door Courtesy SW LH	90980-11097
A 8	ABS Actuator	90980-11009	D11	Door Courtesy SW RH	
A 9	ABS Speed Sensor Front LH	90980-10941	D12	Door Courtesy SW Front LH	90980-11156
A10	ABS Speed Sensor Front RH	90980-11002	D13	Door Courtesy SW Front RH	
A11	Airbag Sensor Front LH	90980-11856	D14	Door Courtesy SW Rear LH	
A12	Airbag Sensor Front RH		D15	Door Courtesy SW Rear RH	
A13	Airbag Sensor Front LH	90980-11194	D16	Door Courtesy Lock and Unlock SW LH	90980-11170
		90980-11194			

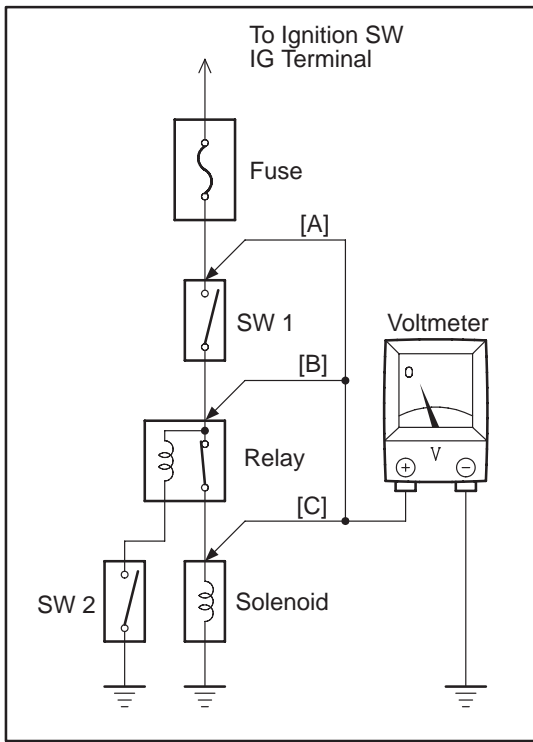
[A] : Part Code

[B] : Part Name

[C] : Part Number  
Toyota Part Number are indicated.

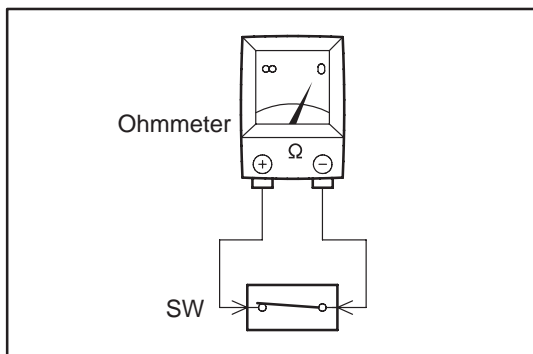
Not all of the above part numbers of the connector are established for the supply.

# C TROUBLESHOOTING



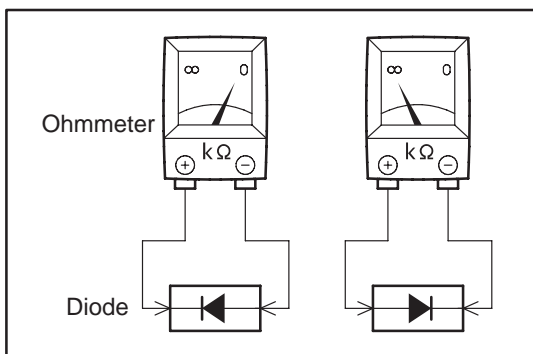
## VOLTAGE CHECK

- (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.

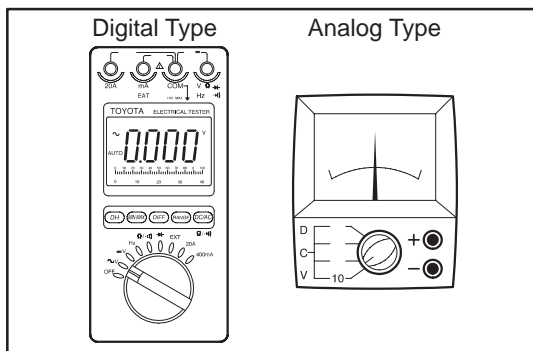


## CONTINUITY AND RESISTANCE CHECK

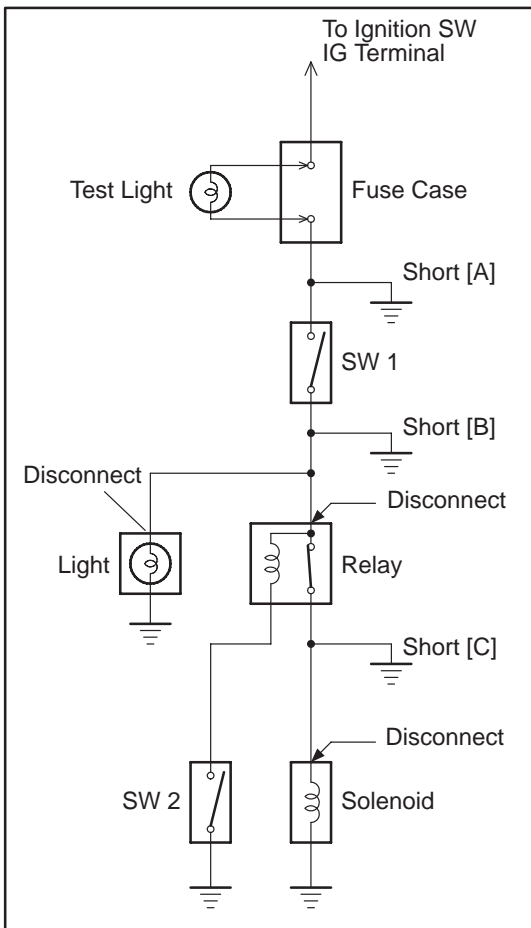
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



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 diode 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

- Remove the blown fuse and disconnect all loads of the fuse.
- Connect a test light in place of the fuse.
- 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)

- 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.
- Find the exact location of the short by lightly shaking the problem wire along the body.

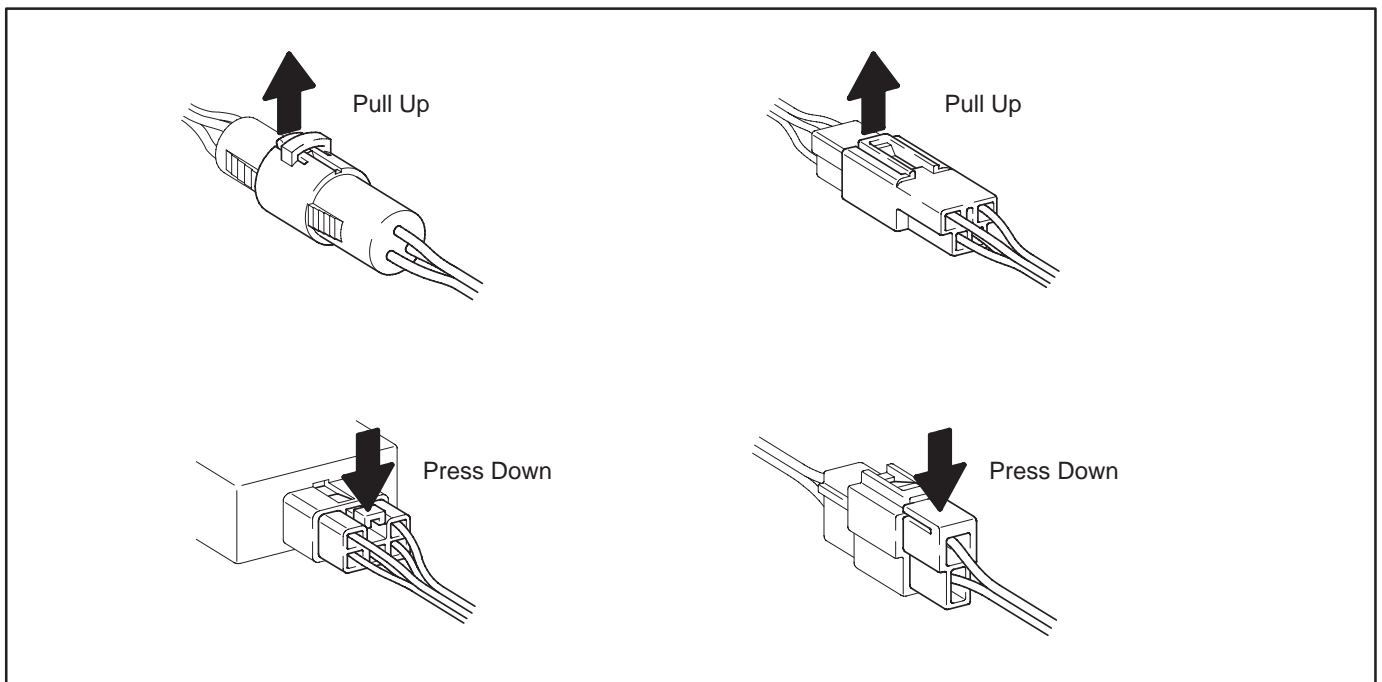
## CAUTION:

- 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.)
- 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).

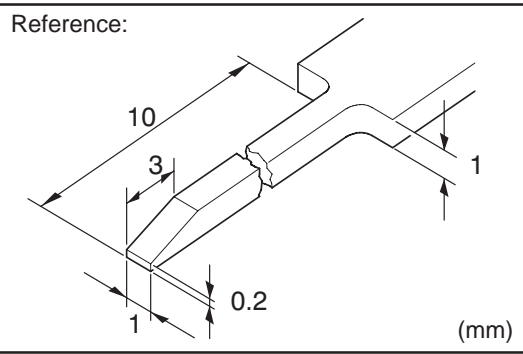
## DISCONNECTION OF MALE AND FEMALE CONNECTORS

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.



# C TROUBLESHOOTING



## 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

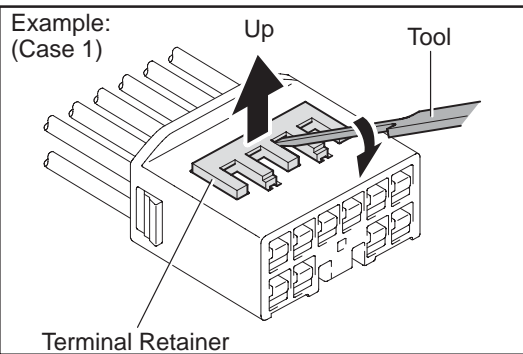
### 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

(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.**

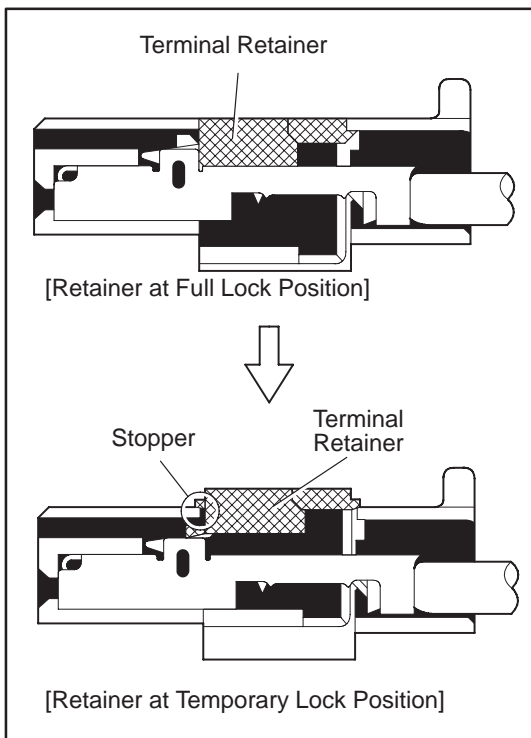


#### [A] For Non-Waterproof Type Connector

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

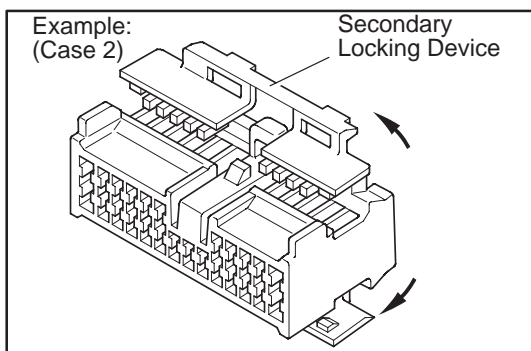
#### "Case 1"

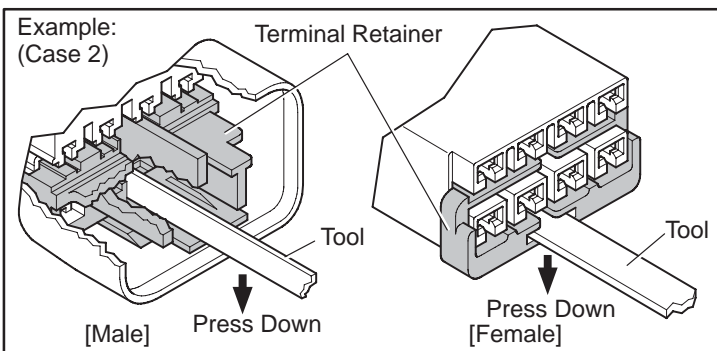
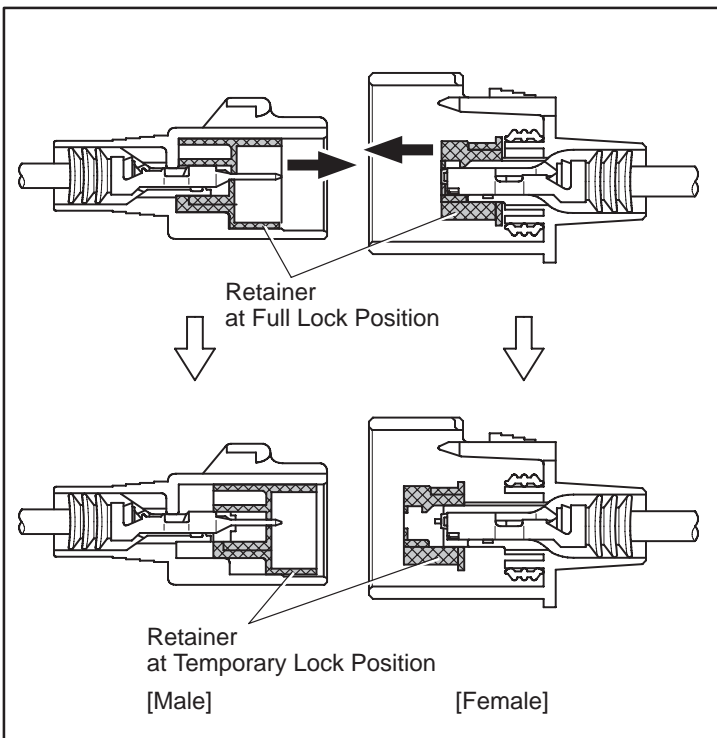
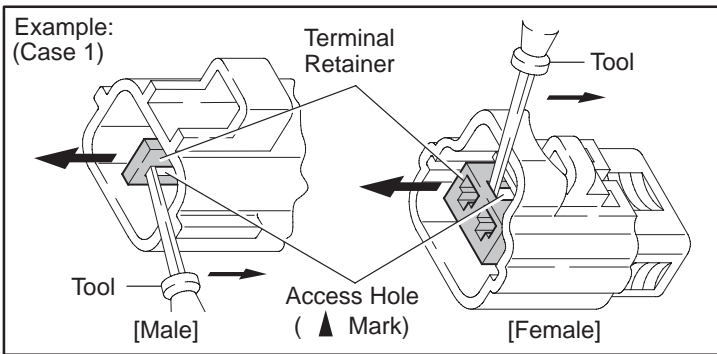
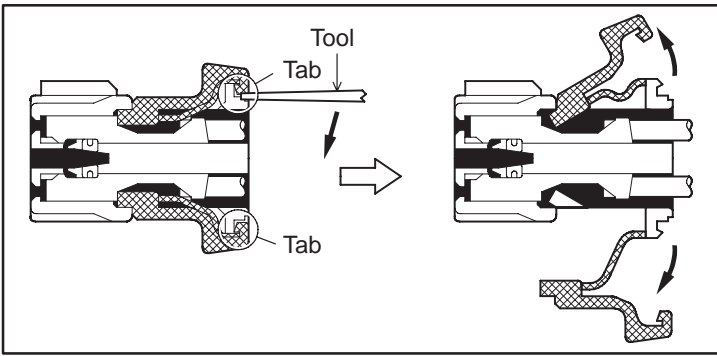
Raise the terminal retainer up to the temporary lock position.



#### "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.

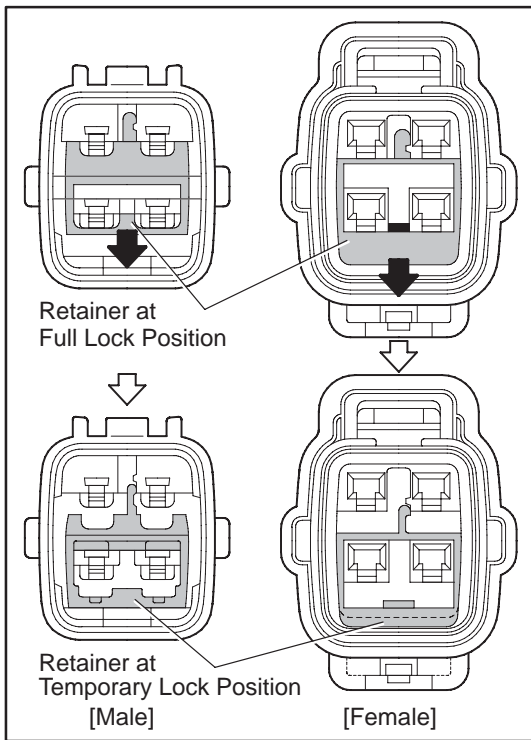
HINT : The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

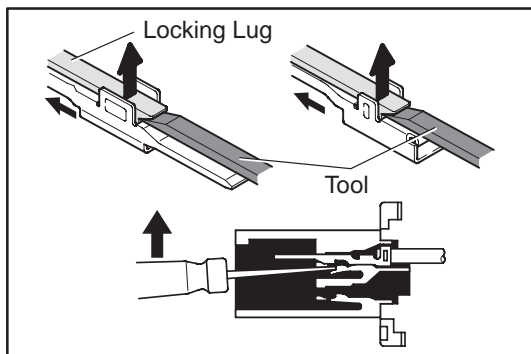
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



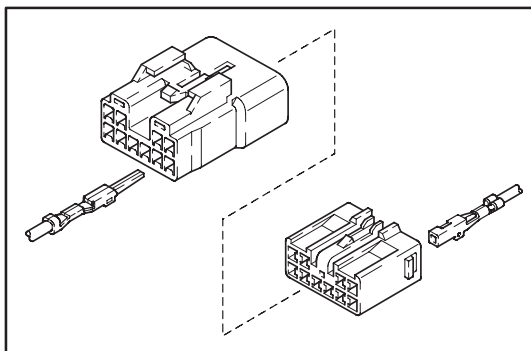
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

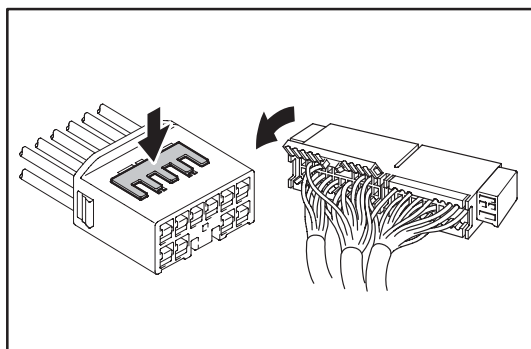


### 4. INSTALL TERMINAL TO CONNECTOR

(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

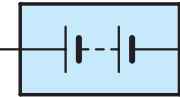

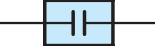



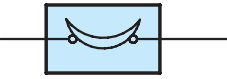


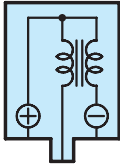




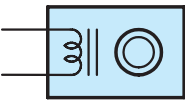

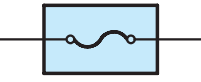


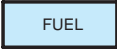

**ABBREVIATIONS**

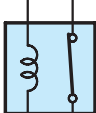
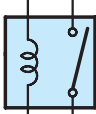
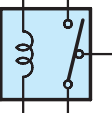
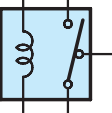
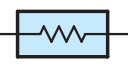
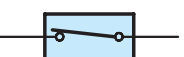
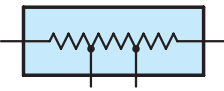
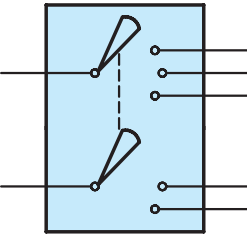
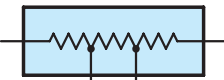
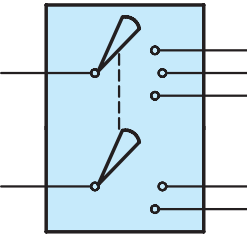

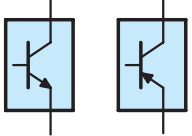

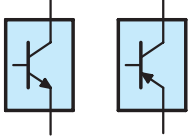

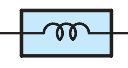
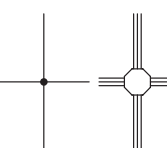


The following abbreviations are used in this manual.

A/C	=	Air Conditioning
A/T	=	Automatic Transaxle
ABS	=	Anti-Lock Brake System
CAN	=	Controller Area Network
ECU	=	Electronic Control Unit
ESA	=	Electronic Spark Advance
IAC	=	Idle Air Control
IC	=	Integrated Circuit
INT	=	Intermittent
J/B	=	Junction Block
LCD	=	Liquid Crystal Display
LH	=	Left-Hand
M/T	=	Manual Transaxle
O/D	=	Overdrive
PTC	=	Positive Temperature Coefficient
R/B	=	Relay Block
RH	=	Right-Hand
SFI	=	Sequential Multiport Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRAC	=	Traction Control
TVIP	=	TOYOTA Vehicle Intrusion Protection
VSC	=	Vehicle Stability Control
VSV	=	Vacuum Switching Valve
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.

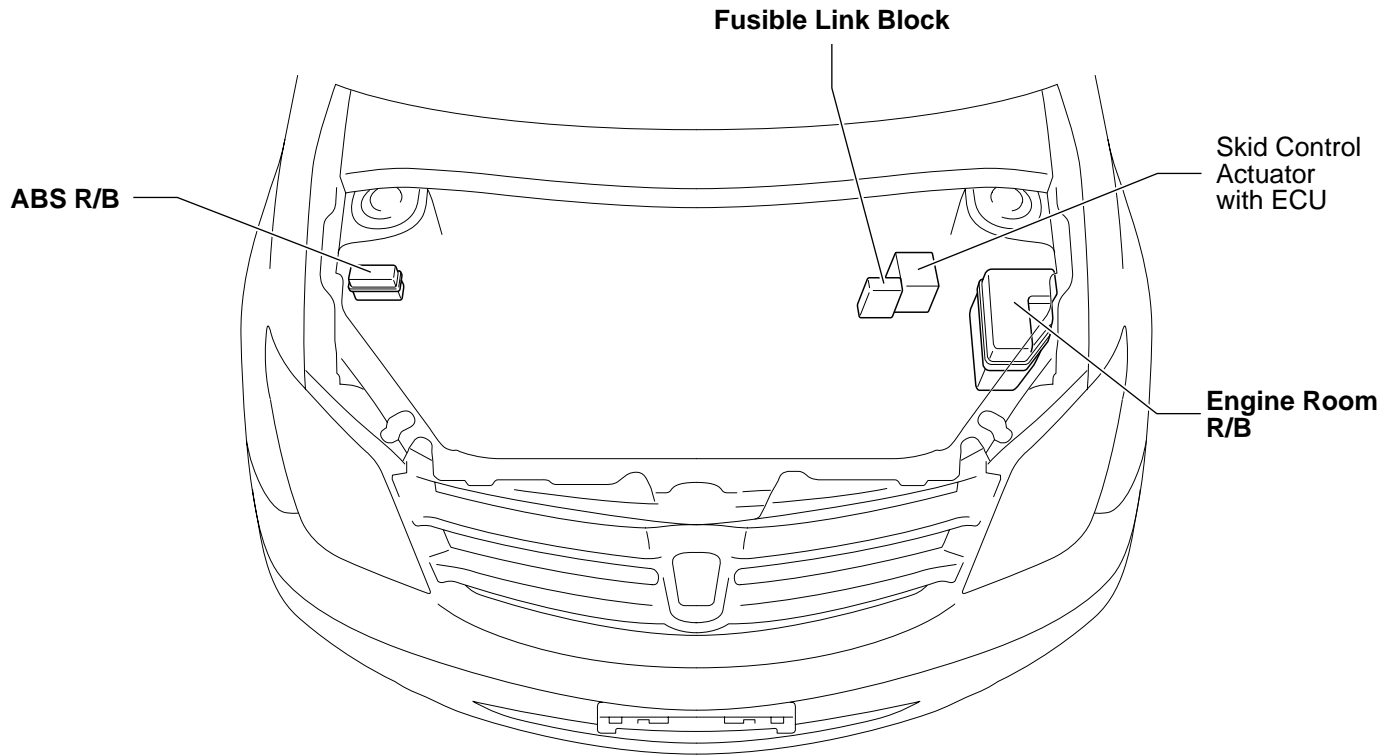
# E GLOSSARY OF TERMS AND SYMBOLS

 <p><b>BATTERY</b> Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.</p>	 <p><b>GROUND</b> The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.</p>
 <p><b>CAPACITOR (Condenser)</b> A small holding unit for temporary storage of electrical voltage.</p>	<p><b>HEADLIGHTS</b> 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</p> <p><b>1. SINGLE FILAMENT</b> </p> <p><b>2. DOUBLE FILAMENT</b> </p>
 <p><b>CIGARETTE LIGHTER</b> An electric resistance heating element.</p>	
 <p><b>CIRCUIT BREAKER</b> 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.</p>	 <p><b>HORN</b> An electric device which sounds a loud audible signal.</p>
 <p><b>DIODE</b> A semiconductor which allows current flow in only one direction.</p>	 <p><b>IGNITION COIL</b> Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs.</p>
 <p><b>DIODE, ZENER</b> 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.</p>	 <p><b>LIGHT</b> Current flow through a filament causes the filament to heat up and emit light.</p>
 <p><b>PHOTODIODE</b> The photodiode is a semiconductor which controls the current flow according to the amount of light.</p>	 <p><b>LED (LIGHT EMITTING DIODE)</b> Upon current flow, these diodes emit light without producing the heat of a comparable light.</p>
 <p><b>DISTRIBUTOR, IIA</b> Channels high-voltage current from the ignition coil to the individual spark plugs.</p>	 <p><b>METER, ANALOG</b> Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration.</p>
 <p><b>FUSE</b> A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.</p>  <p><b>FUSIBLE LINK</b> (for Medium Current Fuse) A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. The numbers indicate the cross-section surface area of the wires.</p>  <p>(for High Current Fuse or Fusible Link)</p>	 <p><b>METER, DIGITAL</b> Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.</p>
	 <p><b>MOTOR</b> A power unit which converts electrical energy into mechanical energy, especially rotary motion.</p>

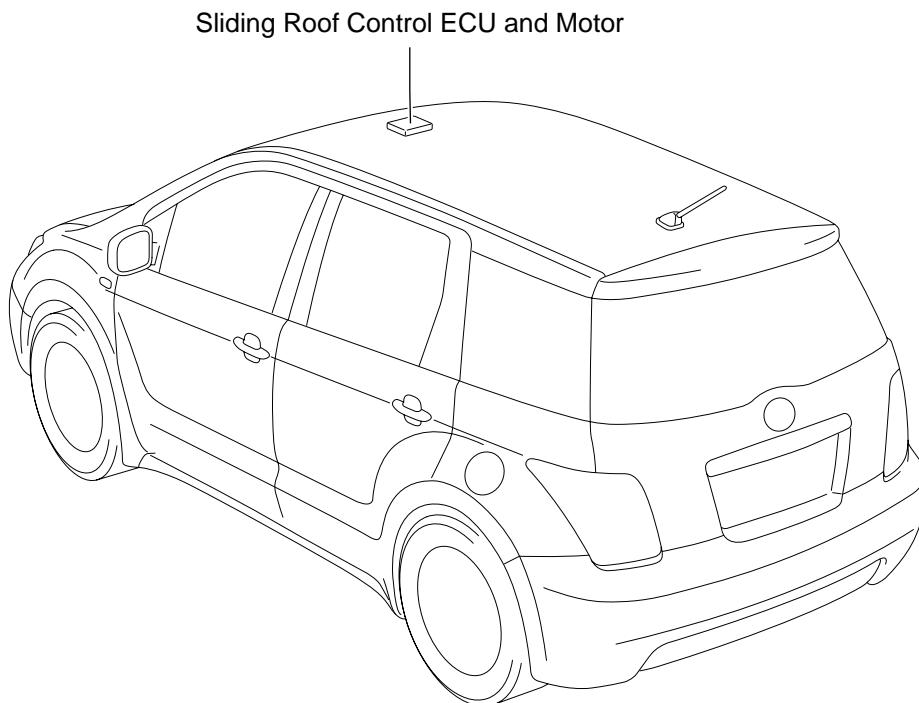
 <p><b>RELAY</b> Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p> <p><b>1. NORMALLY CLOSED</b></p>  <p><b>2. NORMALLY OPEN</b></p>	 <p><b>SPEAKER</b> An electromechanical device which creates sound waves from current flow.</p>
 <p><b>RELAY, DOUBLE THROW</b> A relay which passes current through one set of contacts or the other.</p>	<p><b>SWITCH, MANUAL</b> Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.</p>  <p><b>1. NORMALLY OPEN</b></p>  <p><b>2. NORMALLY CLOSED</b></p>
 <p><b>RESISTOR</b> An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.</p>	<p><b>SWITCH, DOUBLE THROW</b> A switch which continuously passes current through one set of contacts or the other.</p> 
 <p><b>RESISTOR, TAPPED</b> A resistor which supplies two or more different non adjustable resistance values.</p>	<p><b>SWITCH, IGNITION</b> A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.</p> 
 <p><b>RESISTOR, VARIABLE or RHEOSTAT</b> A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.</p>	<p><b>SWITCH, WIPER PARK</b> Automatically returns wipers to the stop position when the wiper switch is turned off.</p> 
 <p><b>SENSOR (Thermistor)</b> A resistor which varies its resistance with temperature.</p>	<p><b>TRANSISTOR</b> A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base".</p> 
 <p><b>SENSOR, SPEED</b> Uses magnetic impulses to open and close a switch to create a signal for activation of other components. (Reed Switch Type)</p>	<p><b>WIRES</b> 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.</p>  <p><b>(1) NOT CONNECTED</b></p>  <p><b>(2) SPLICED</b></p>
 <p><b>SHORT PIN</b> Used to provide an unbroken connection within a junction block.</p>	
 <p><b>SOLENOID</b> An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p>	

# F RELAY LOCATIONS

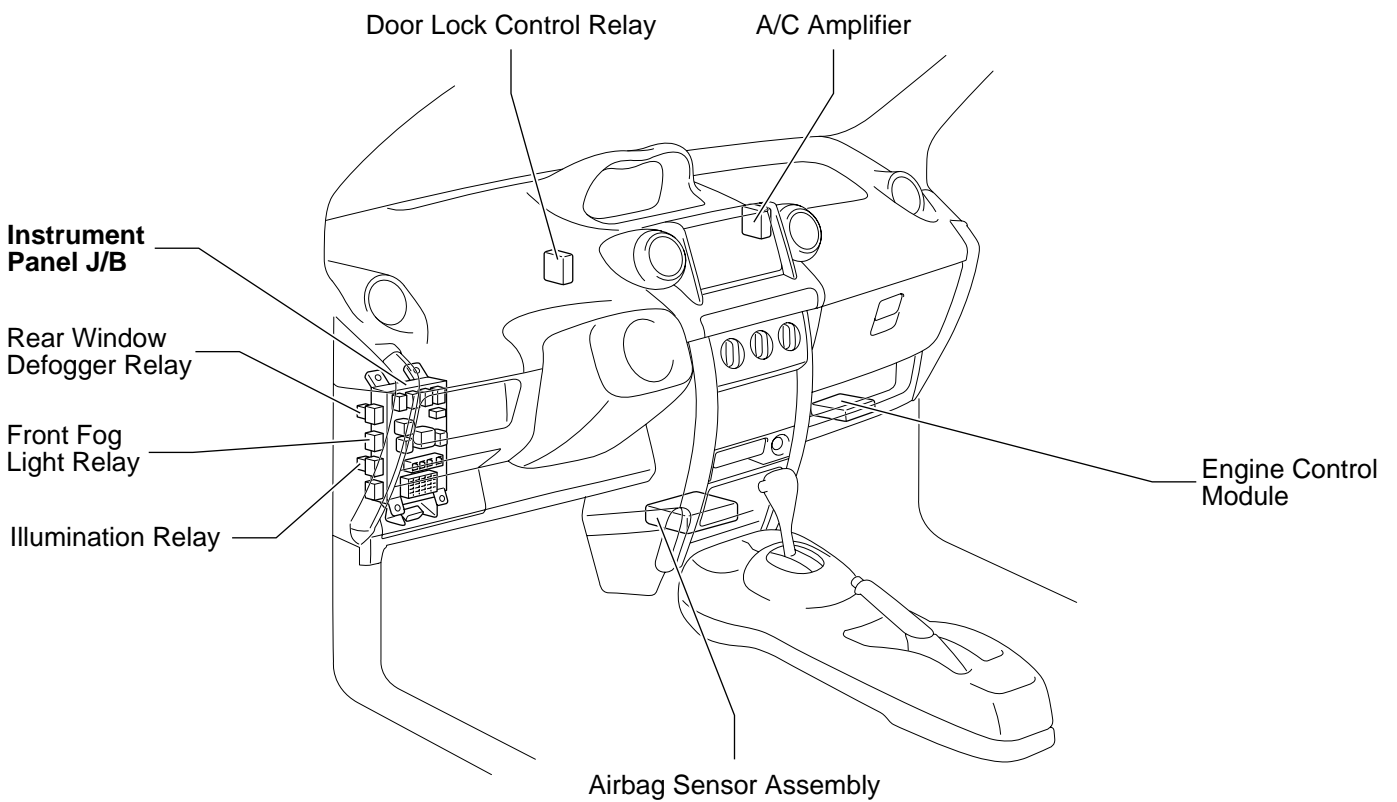
## [Engine Compartment]



## [Body]



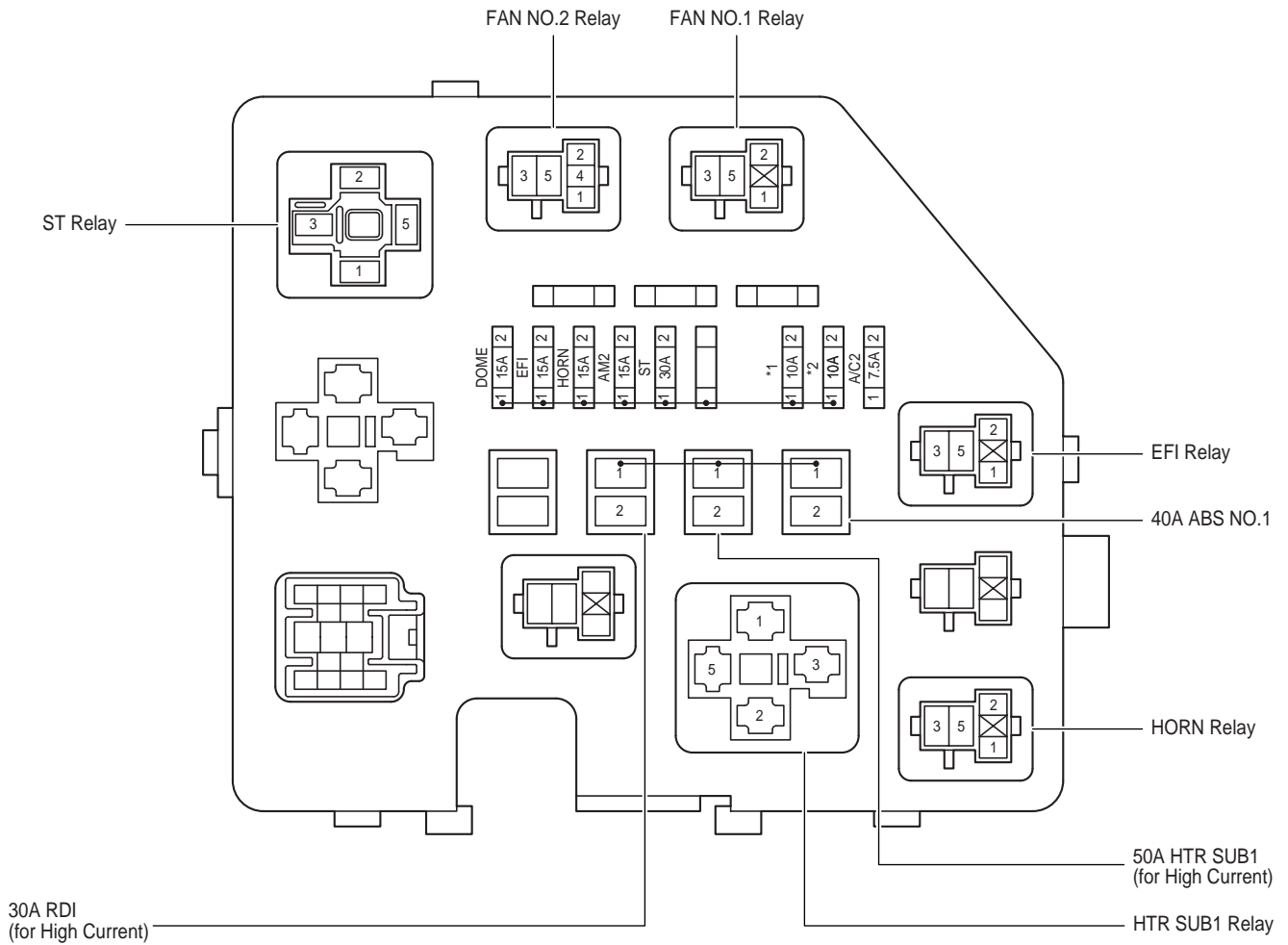
[Instrument Panel]



# F RELAY LOCATIONS

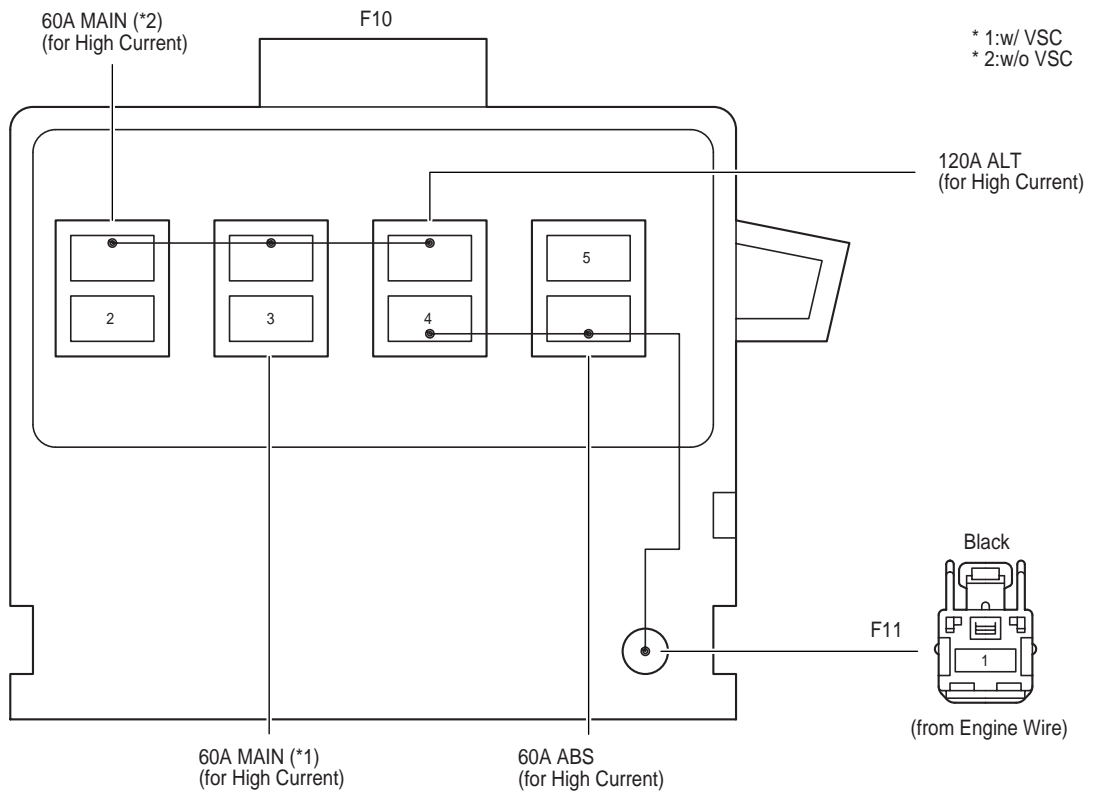
② : Engine Room R/B      Engine Compartment Left (See Page 20)

\* 1:H-LP LH / H-LP LO LH  
 \* 2:H-LP RH / H-LP LO RH



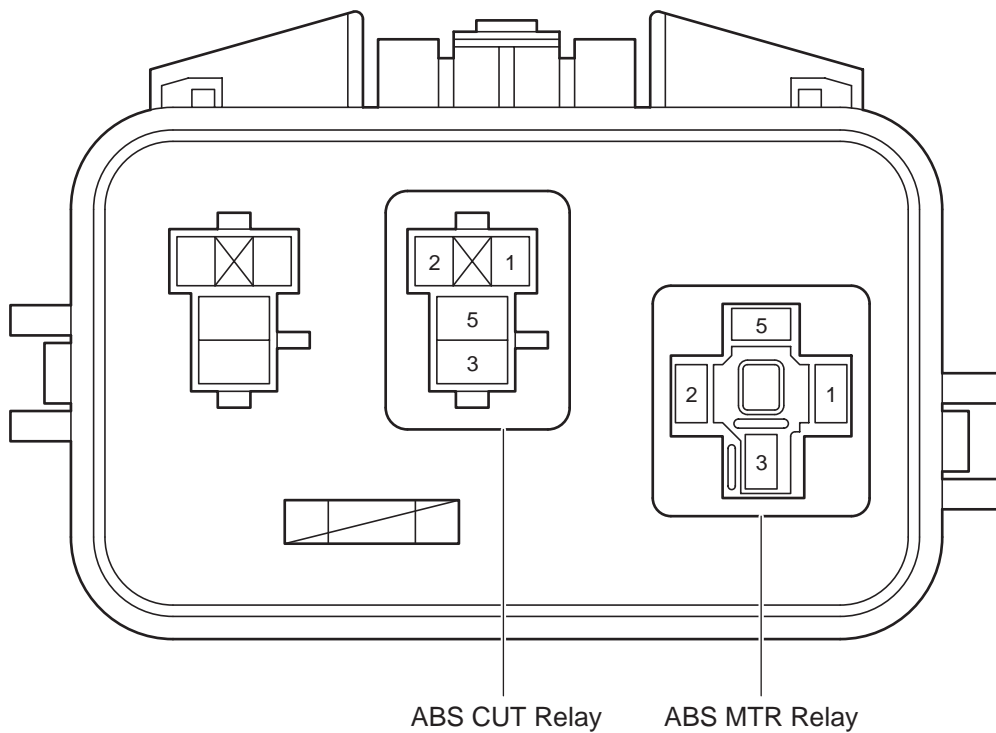
**Fusible Link Block**

**Engine Compartment Left (See Page 20)**



**③ : ABS R/B**

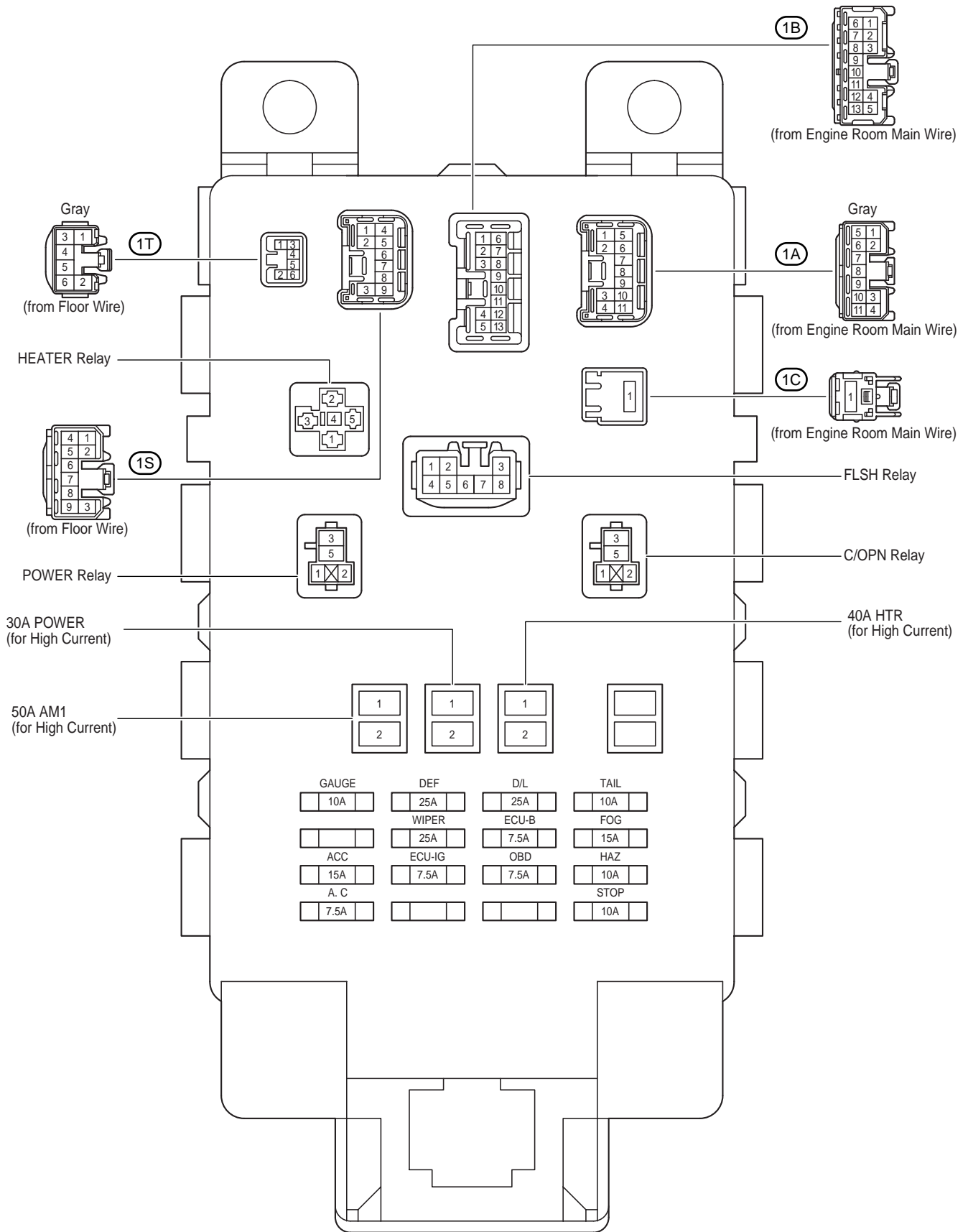
**Engine Compartment Right (See Page 20)**

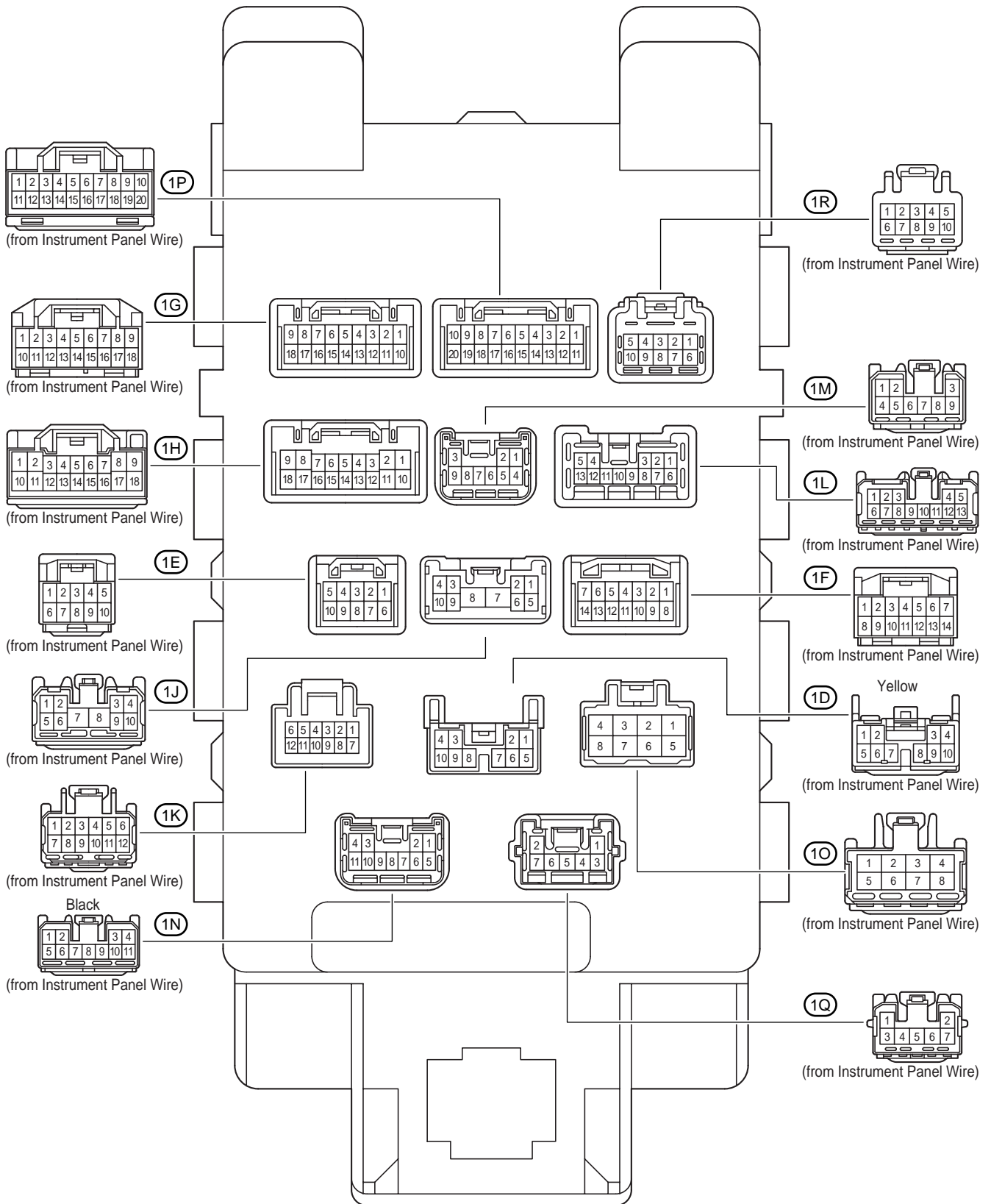




# F RELAY LOCATIONS

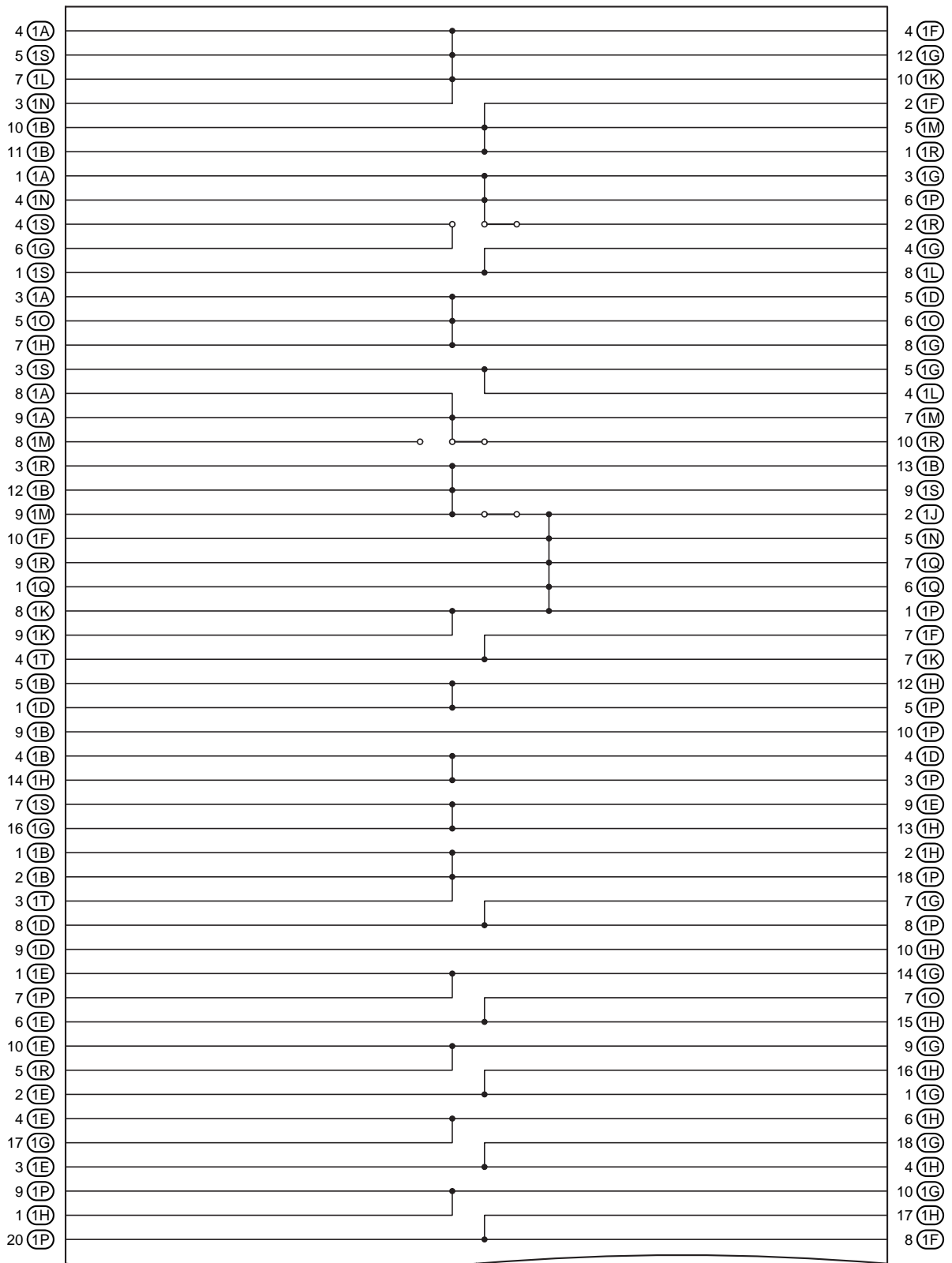
○ : Instrument Panel J/B      Lower Finish Panel (See Page 21)





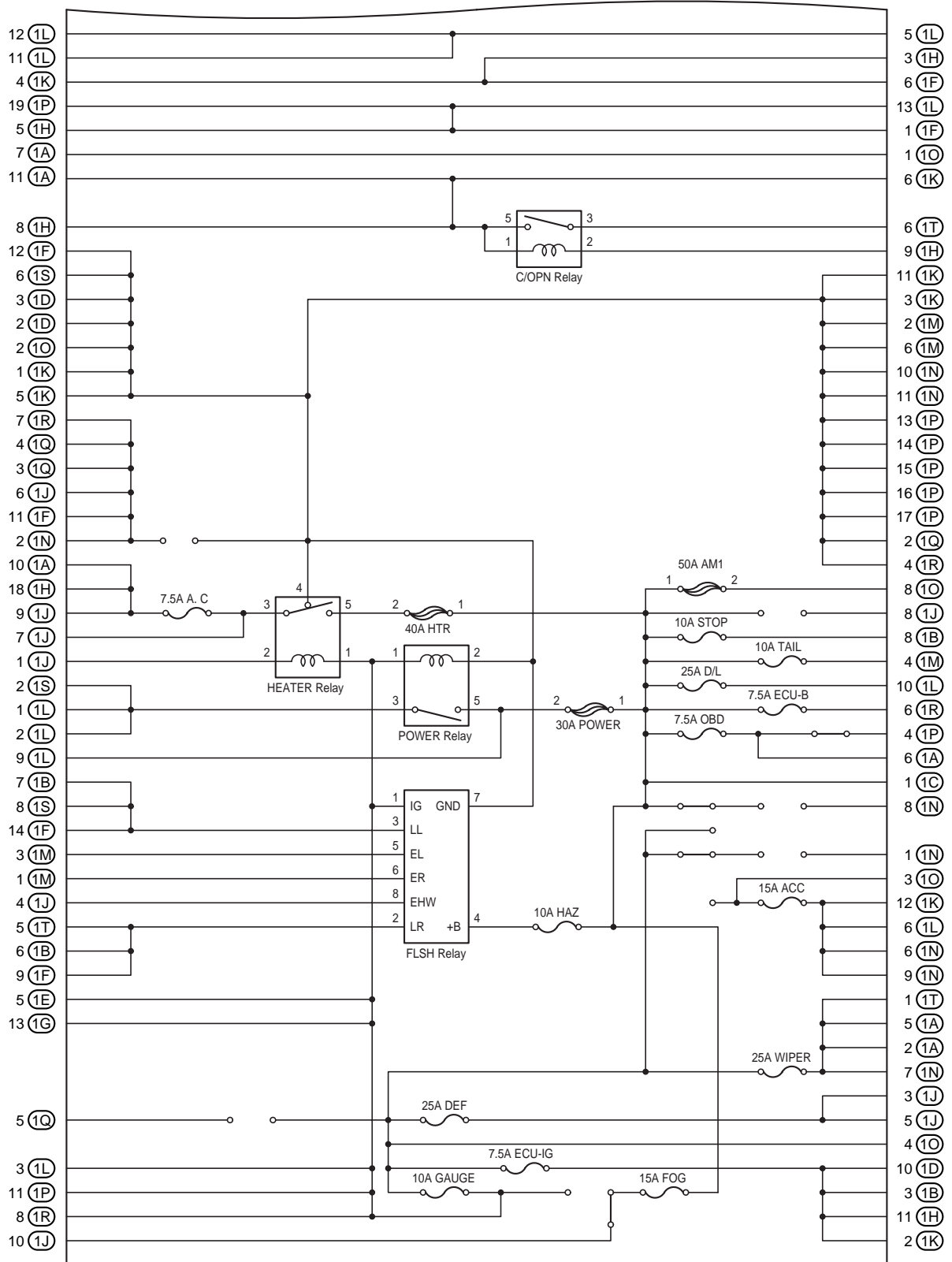
# F RELAY LOCATIONS

## [Instrument Panel J/B Inner Circuit]



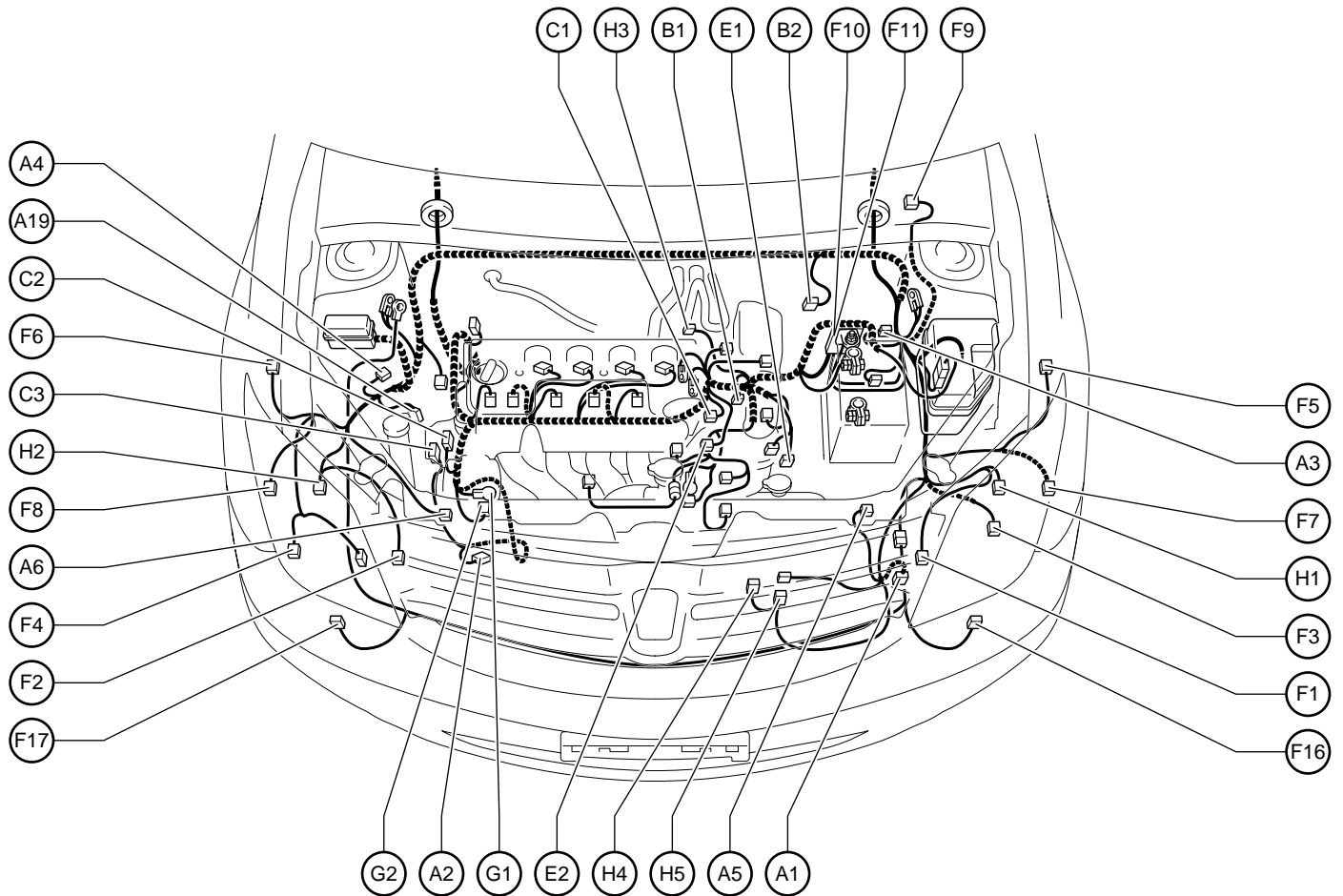
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# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment



A 1 A/C Condenser Fan Resistor  
 A 2 A/C Magnetic Valve  
 A 3 ABS Speed Sensor Front LH  
 A 4 ABS Speed Sensor Front RH  
 A 5 Airbag Sensor Front LH  
 A 6 Airbag Sensor Front RH  
 A19 A/C Pressure Sensor

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

C 1 Camshaft Position Sensor  
 C 2 Camshaft Timing Oil Control Valve  
 C 3 Crankshaft Position Sensor

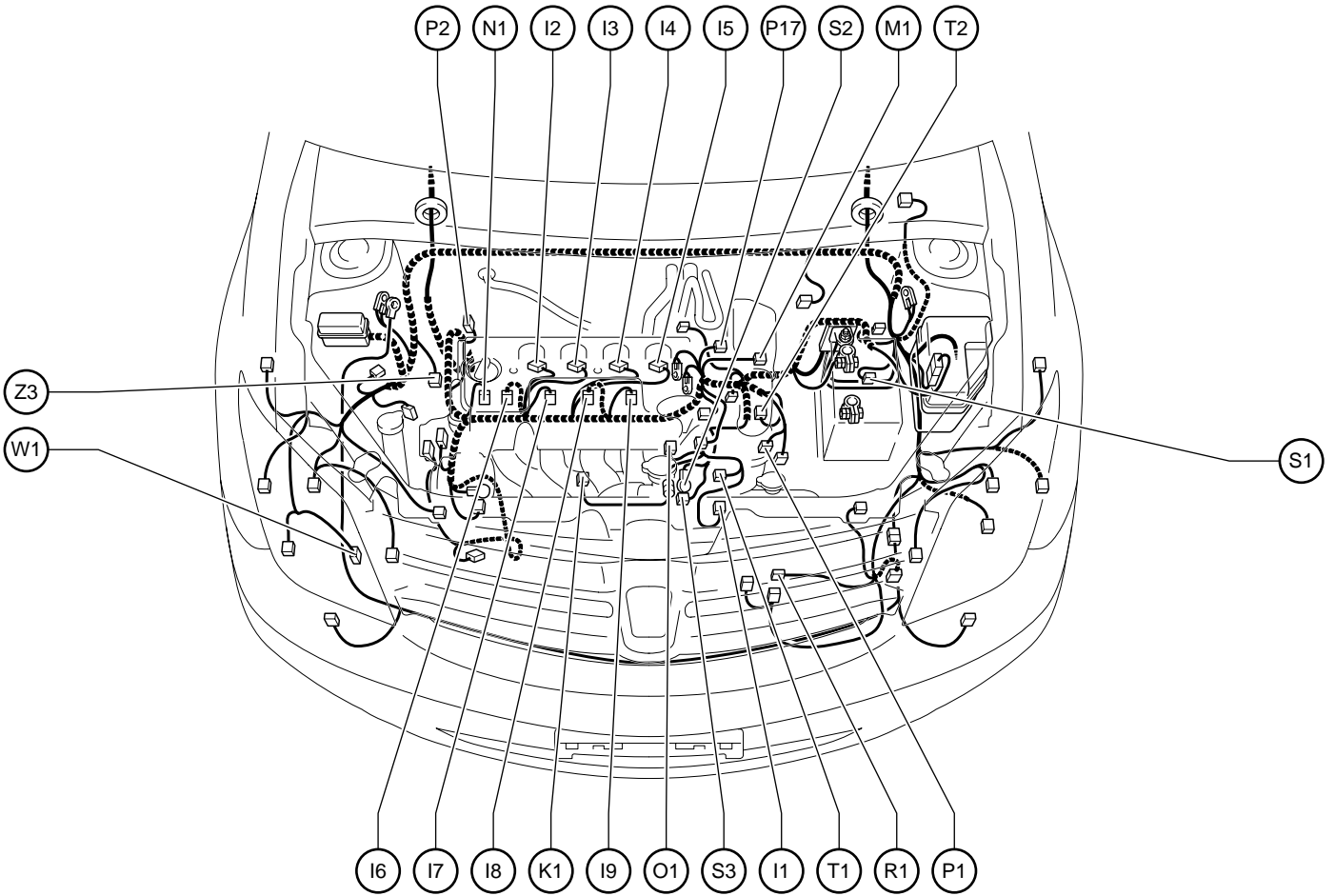
E 1 Electronically Controlled Transmission Solenoid  
 E 2 Engine Coolant Temp. Sensor

F 1 Front Parking Light LH  
 F 2 Front Parking Light RH  
 F 3 Front Side Marker Light LH  
 F 4 Front Side Marker Light RH  
 F 5 Front Side Turn Signal Light LH  
 F 6 Front Side Turn Signal Light RH  
 F 7 Front Turn Signal Light LH  
 F 8 Front Turn Signal Light RH  
 F 9 Front Wiper Motor  
 F10 Fusible Link Block  
 F11 Fusible Link Block  
 F16 Front Fog Light LH  
 F17 Front Fog Light RH

G 1 Generator  
 G 2 Generator

H 1 Headlight LH  
 H 2 Headlight RH  
 H 3 Heated Oxygen Sensor (Bank 1 Sensor 1)  
 H 4 Horn (High)  
 H 5 Horn (Low)

## Position of Parts in Engine Compartment



I 1 Idle Air Control Valve  
 I 2 Ignition Coil and Igniter No.1  
 I 3 Ignition Coil and Igniter No.2  
 I 4 Ignition Coil and Igniter No.3  
 I 5 Ignition Coil and Igniter No.4  
 I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4

K 1 Knock Sensor (Bank 1)

M 1 Mass Air Flow Meter

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Park/Neutral Position SW  
 P 2 Power Steering Oil Pressure Sensor  
 P17 VSV (Purge)

R 1 Radiator Fan Motor

S 1 Skid Control Actuator with ECU

S 2 Starter

S 3 Starter

T 1 Throttle Position Sensor

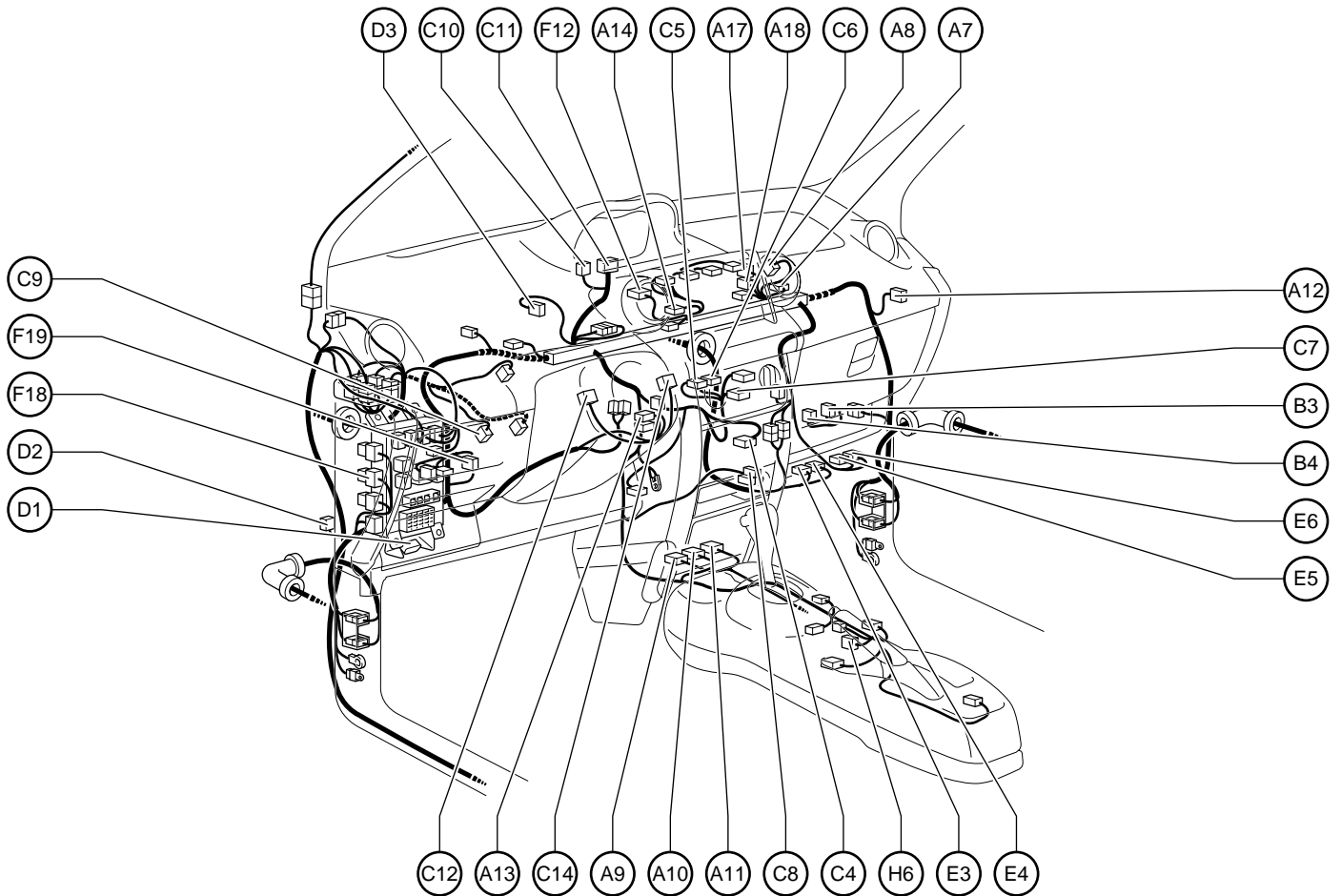
T 2 Turbine Speed Sensor

W 1 Washer Motor

Z 3 Option Connector (TVIP Siren)

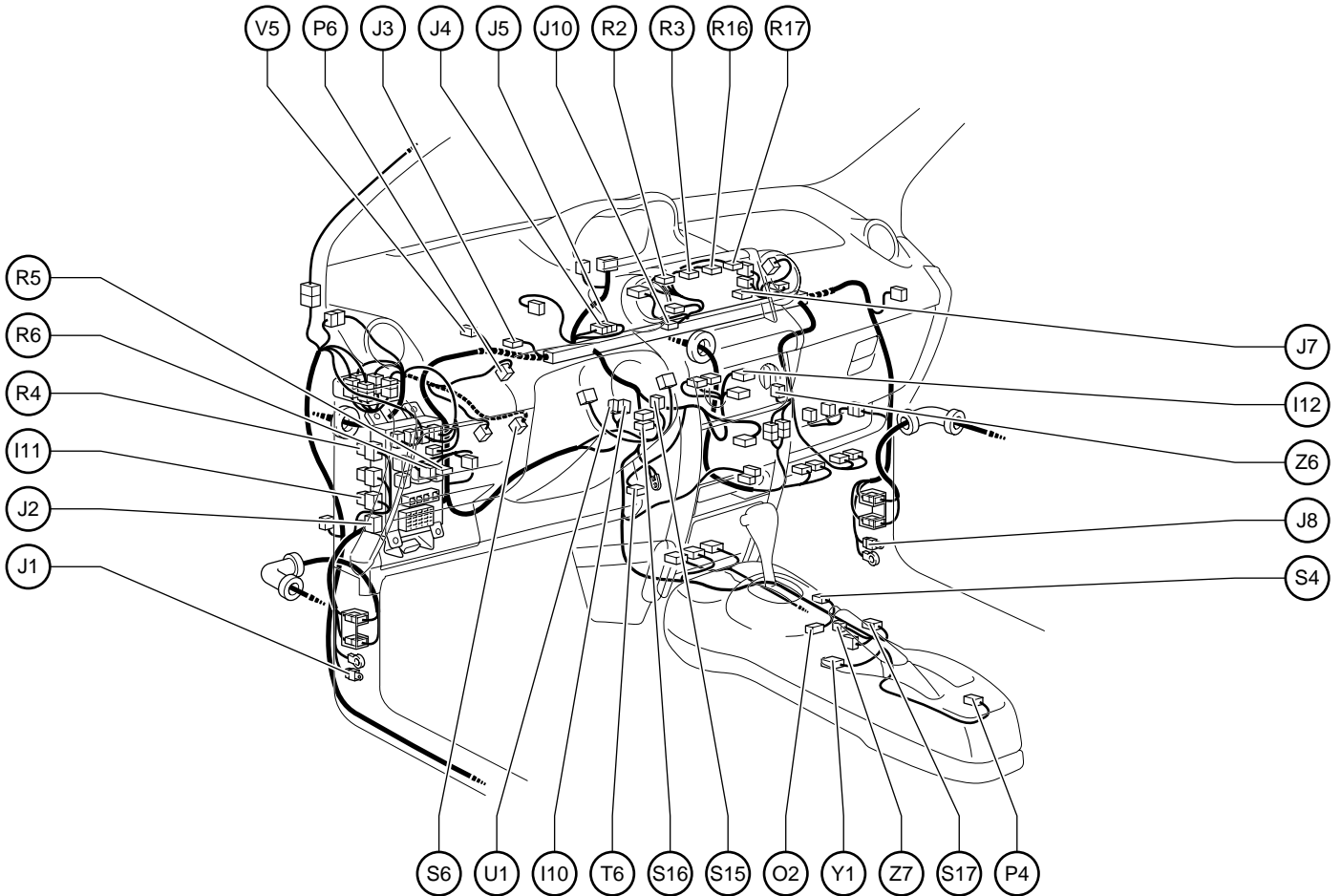
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel



- |   |  |
|---|--|
| A 7 A/C Thermistor                                  | D 1 Data Link Connector 3                  |
| A 8 Air Inlet Control Servo Motor                   | D 2 Diode (Personal Light)                 |
| A 9 Airbag Sensor Assembly                          | D 3 Door Lock Control Relay                |
| A 10 Airbag Sensor Assembly                         | E 3 Engine Control Module                  |
| A 11 Airbag Sensor Assembly                         | E 4 Engine Control Module                  |
| A 12 Airbag Squib (Front Passenger Airbag Assembly) | E 5 Engine Control Module                  |
| A 13 Airbag Squib (Steering Wheel Pad)              | E 6 Engine Control Module                  |
| A 14 Antenna Amplifier                              | F 12 Foot Mode SW                          |
| A 17 A/C Amplifier                                  | Max Cool SW                                |
| A 18 A/C Amplifier                                  | Max Hot SW                                 |
| B 3 Blower Motor                                    | F 18 Front Fog Light Relay                 |
| B 4 Blower Resistor                                 | F 19 Front Fog Light SW                    |
| C 4 Center Cluster Box Illumination                 | H 6 Heated Oxygen Sensor (Bank 1 Sensor 2) |
| C 5 Center Cluster SW                               |  |
| C 6 Center Cluster SW                               |  |
| C 7 Center Cluster SW                               |  |
| C 8 Cigarette Lighter                               |  |
| C 9 Clutch Start SW                                 |  |
| C 10 Combination Meter                              |  |
| C 11 Combination Meter                              |  |
| C 12 Combination SW                                 |  |
| C 14 Combination SW                                 |  |

## Position of Parts in Instrument Panel



I 10 Ignition SW  
I 11 Illumination Relay  
I 12 Inside SW

J 1 Junction Connector  
J 2 Junction Connector  
J 3 Junction Connector  
J 4 Junction Connector  
J 5 Junction Connector  
J 7 Junction Connector  
J 8 Junction Connector  
J 10 Junction Connector

O 2 O/D Main SW  
Shift Lever Position Illumination

P 4 Parking Brake SW  
P 6 PTC Heater

R 2 Radio and Player  
R 3 Radio and Player  
R 4 Rear Window Defogger Relay  
R 5 Remote Control Mirror SW  
R 6 Rheostat  
R16 Radio and Player  
R17 Radio and Player

S 4 Shift Lock Control SW  
S 6 Stop Light SW  
S15 Steering Sensor  
S16 Spiral Cable  
S17 Stereo Jack Adapter

T 6 TRAC Off SW

U 1 Unlock Warning SW

V 5 VSC Warning Buzzer

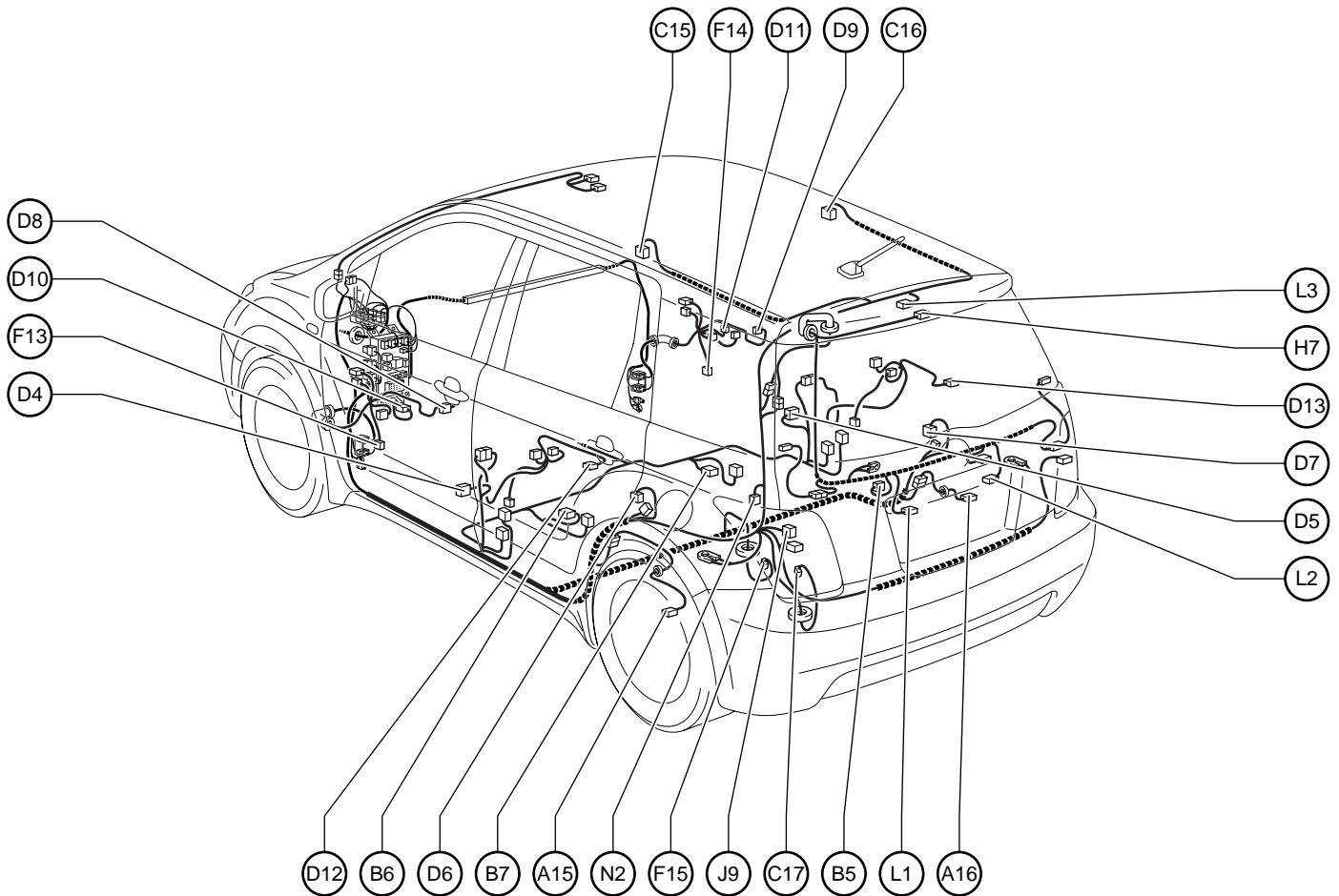
Y 1 Yaw Rate Sensor

Z 6 Option Connector (TVIP ECU)  
Z 7 Option Connector (IPOD Unit)



# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body



A 15 ABS Speed Sensor Rear LH  
A 16 ABS Speed Sensor Rear RH

B 5 Back Door Courtesy SW  
Back Door Lock Motor  
B 6 Buckle SW LH  
B 7 Buckle SW RH

C 15 Curtain Shielded Airbag Squib LH  
C 16 Curtain Shielded Airbag Squib RH  
C 17 Canister Pump Module

D 4 Door Courtesy SW Front LH  
D 5 Door Courtesy SW Front RH  
D 6 Door Courtesy SW Rear LH  
D 7 Door Courtesy SW Rear RH  
D 8 Door Key Lock and Unlock SW Front LH  
Door Lock Motor Front LH  
Door Unlock Detection SW Front LH  
D 9 Door Key Lock and Unlock SW Front RH  
Door Lock Motor Front RH  
D 10 Door Lock Control SW LH  
Power Window Master SW  
D 11 Door Lock Control SW RH  
D 12 Door Lock Motor Rear LH  
D 13 Door Lock Motor Rear RH

F 13 Front Speaker LH  
F 14 Front Speaker RH  
F 15 Fuel Pump  
Fuel Sender

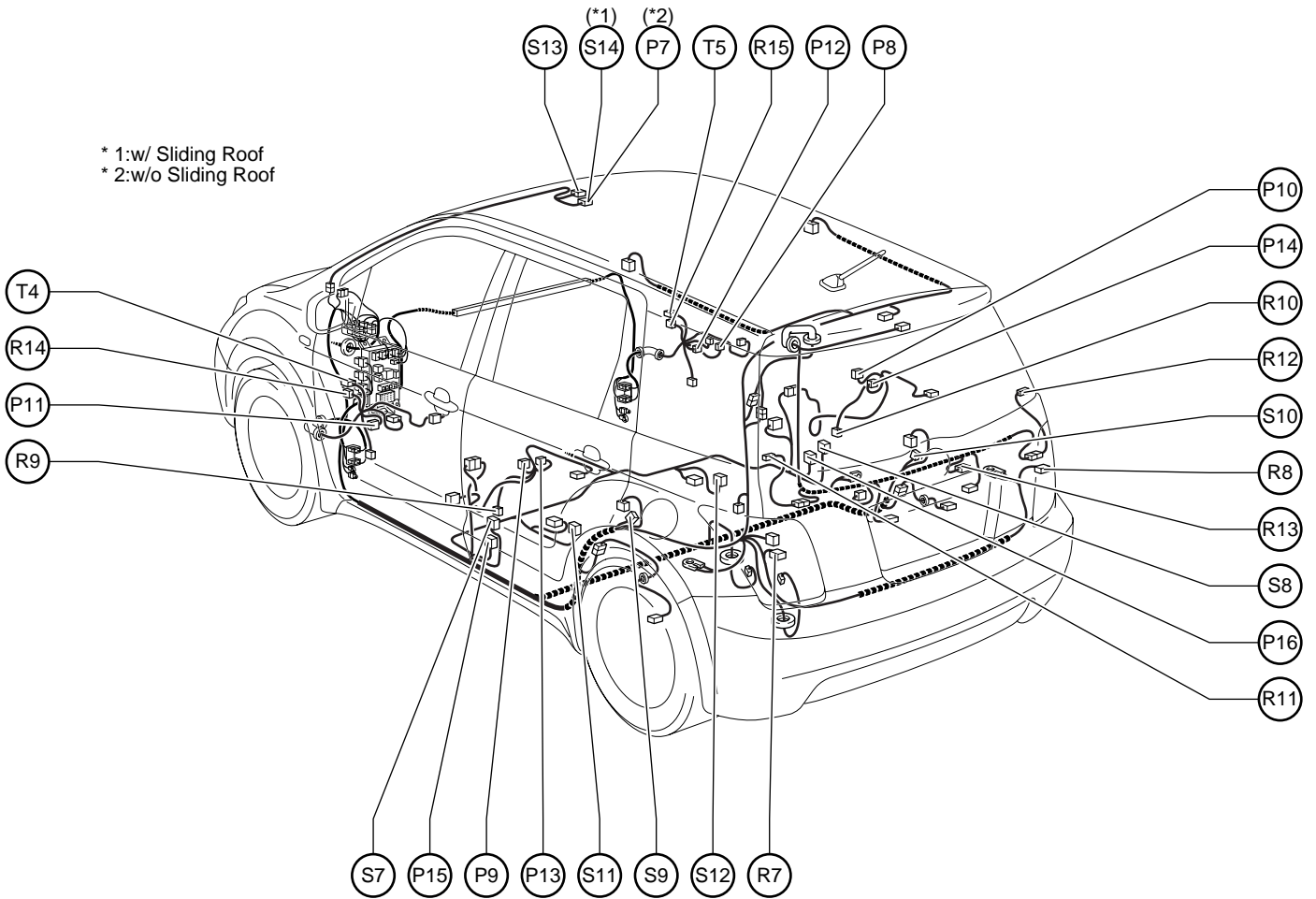
H 7 High Mounted Stop Light

J 9 Junction Connector

L 1 License Plate Light LH  
L 2 License Plate Light RH  
L 3 Luggage Compartment Light

N 2 Noise Filter (Rear Window Defogger)

## Position of Parts in Body



\* 1:w/ Sliding Roof  
\* 2:w/o Sliding Roof

P 7 Personal Light  
P 8 Power Window Control SW Front RH  
P 9 Power Window Control SW Rear LH  
P10 Power Window Control SW Rear RH  
P11 Power Window Motor Front LH  
P12 Power Window Motor Front RH  
P13 Power Window Motor Rear LH  
P14 Power Window Motor Rear RH  
P15 Pretensioner LH  
P16 Pretensioner RH

R 7 Rear Combination Light LH  
R 8 Rear Combination Light RH  
R 9 Rear Speaker LH  
R10 Rear Speaker RH  
R11 Rear Window Defogger  
R12 Rear Window Defogger  
R13 Rear Wiper Motor  
R14 Remote Control Mirror LH  
R15 Remote Control Mirror RH

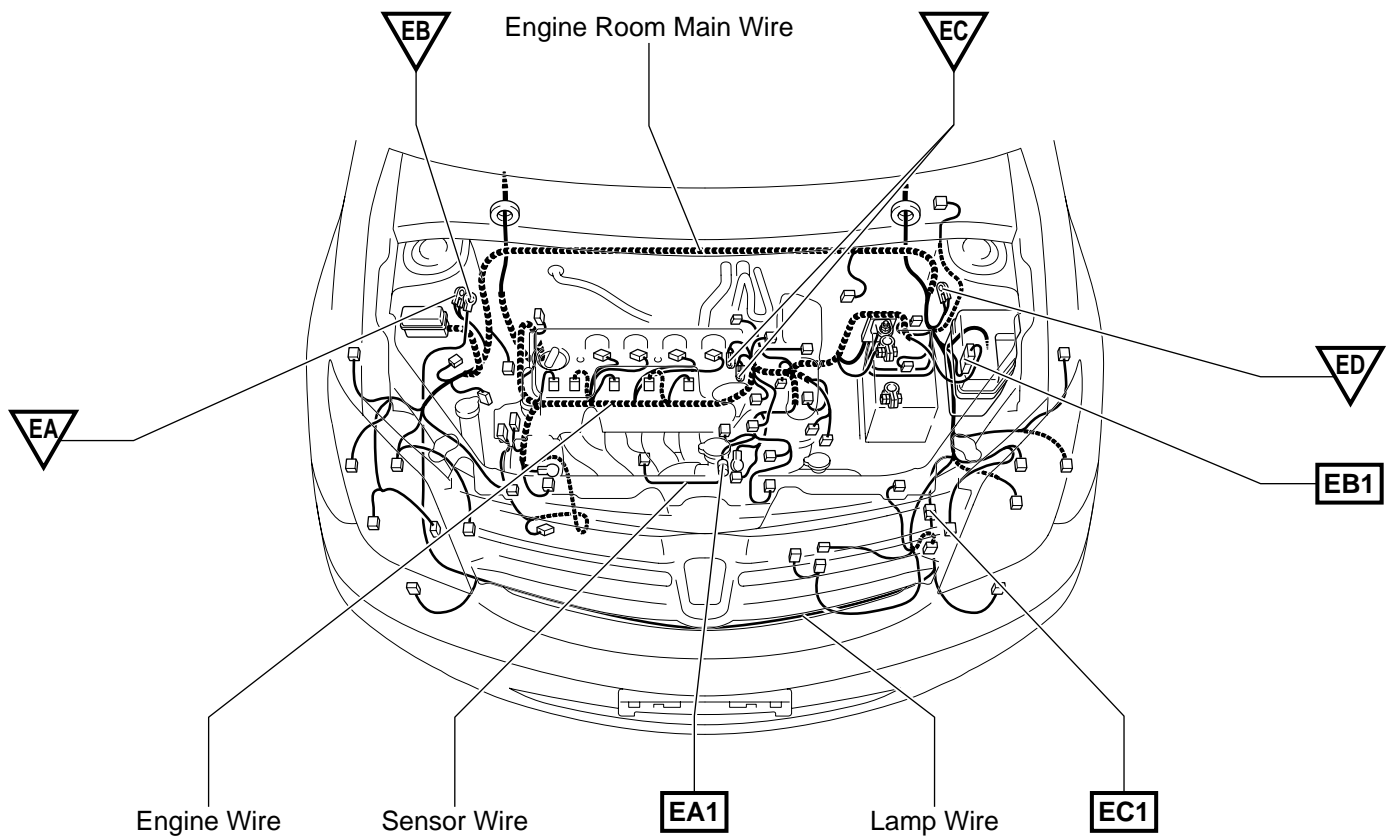
S 7 Side Airbag Sensor Front LH  
S 8 Side Airbag Sensor Front RH  
S 9 Side Airbag Sensor Rear LH  
S10 Side Airbag Sensor Rear RH  
S11 Side Airbag Squib LH  
S12 Side Airbag Squib RH  
S13 Sliding Roof Control ECU and Motor  
S14 Personal Light  
Sliding Roof Control SW

T 4 Tweeter LH  
T 5 Tweeter RH

# G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

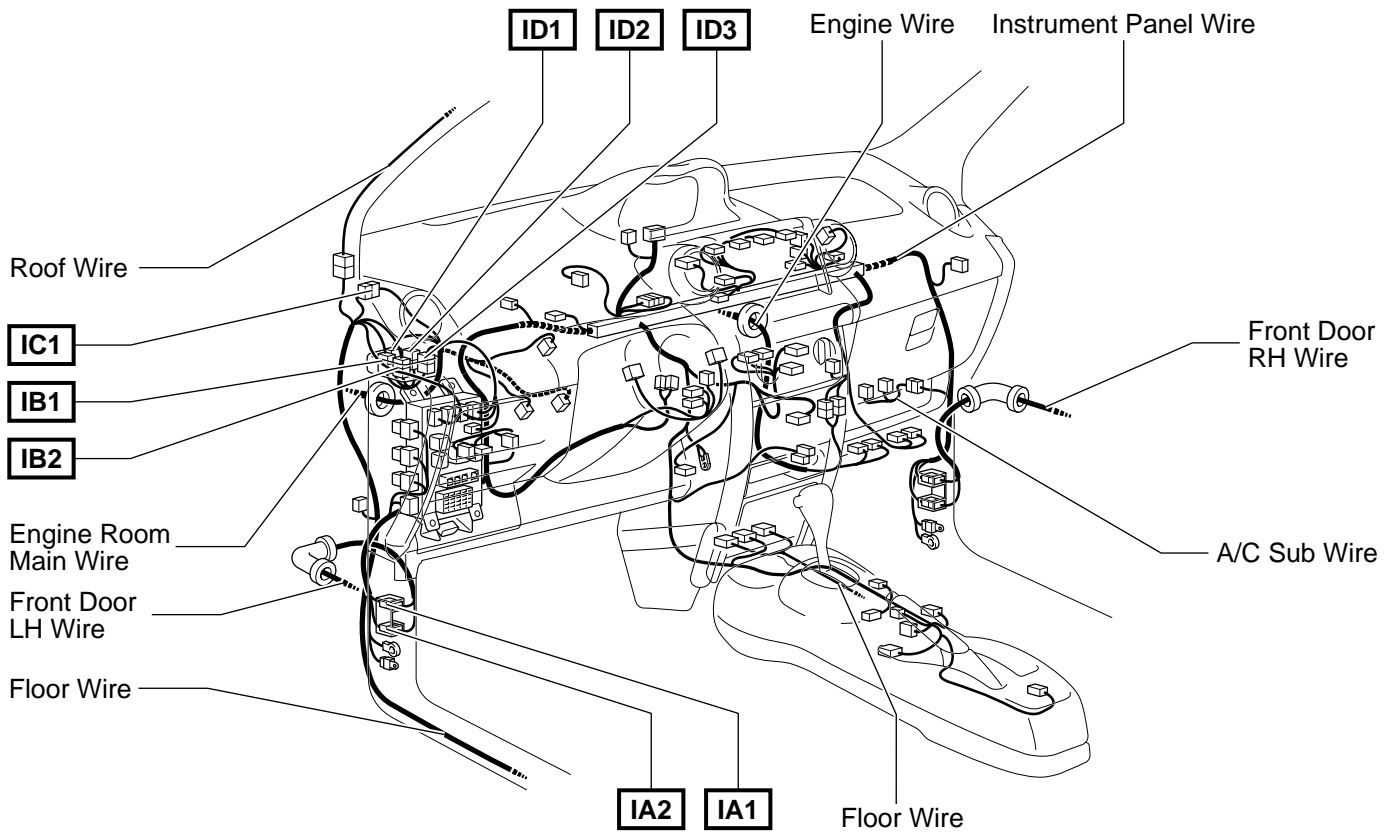
▽ : Location of Ground Points



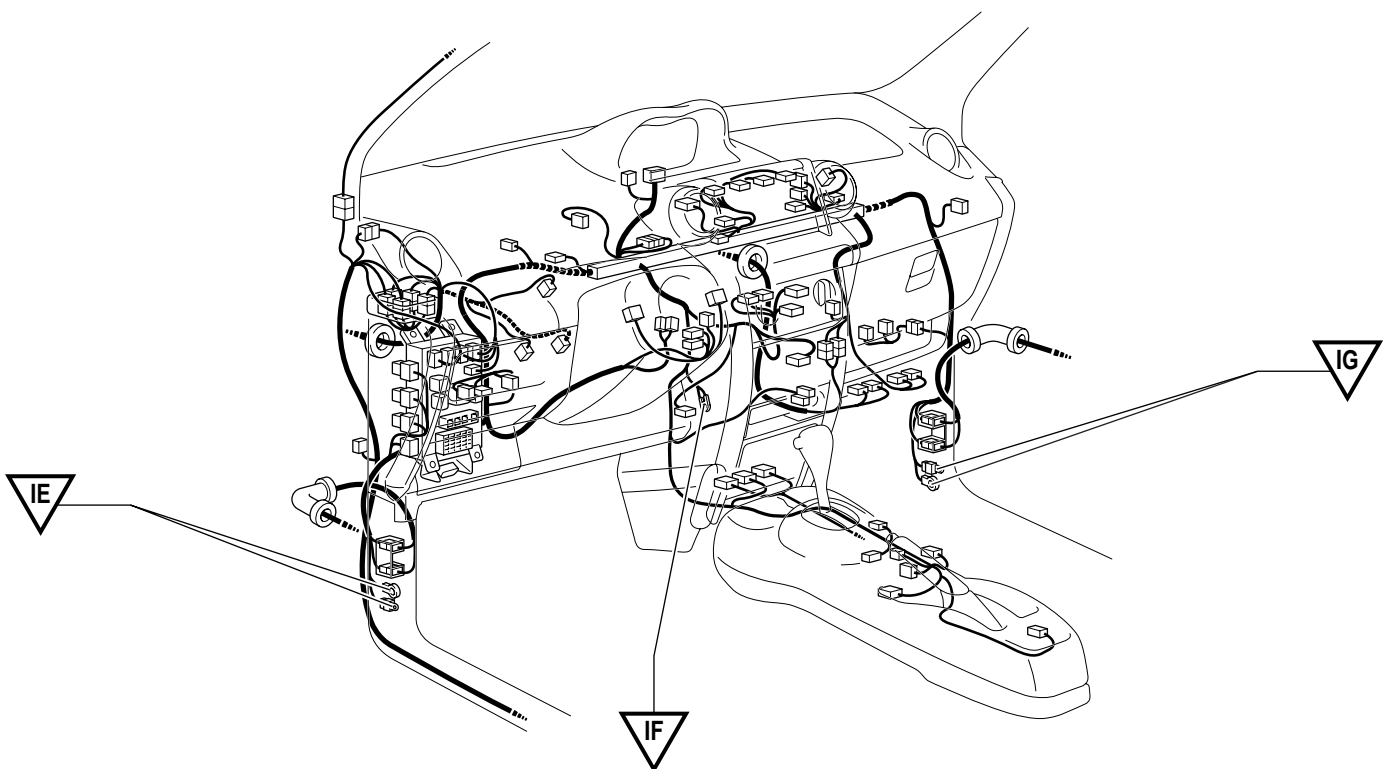


# G ELECTRICAL WIRING ROUTING

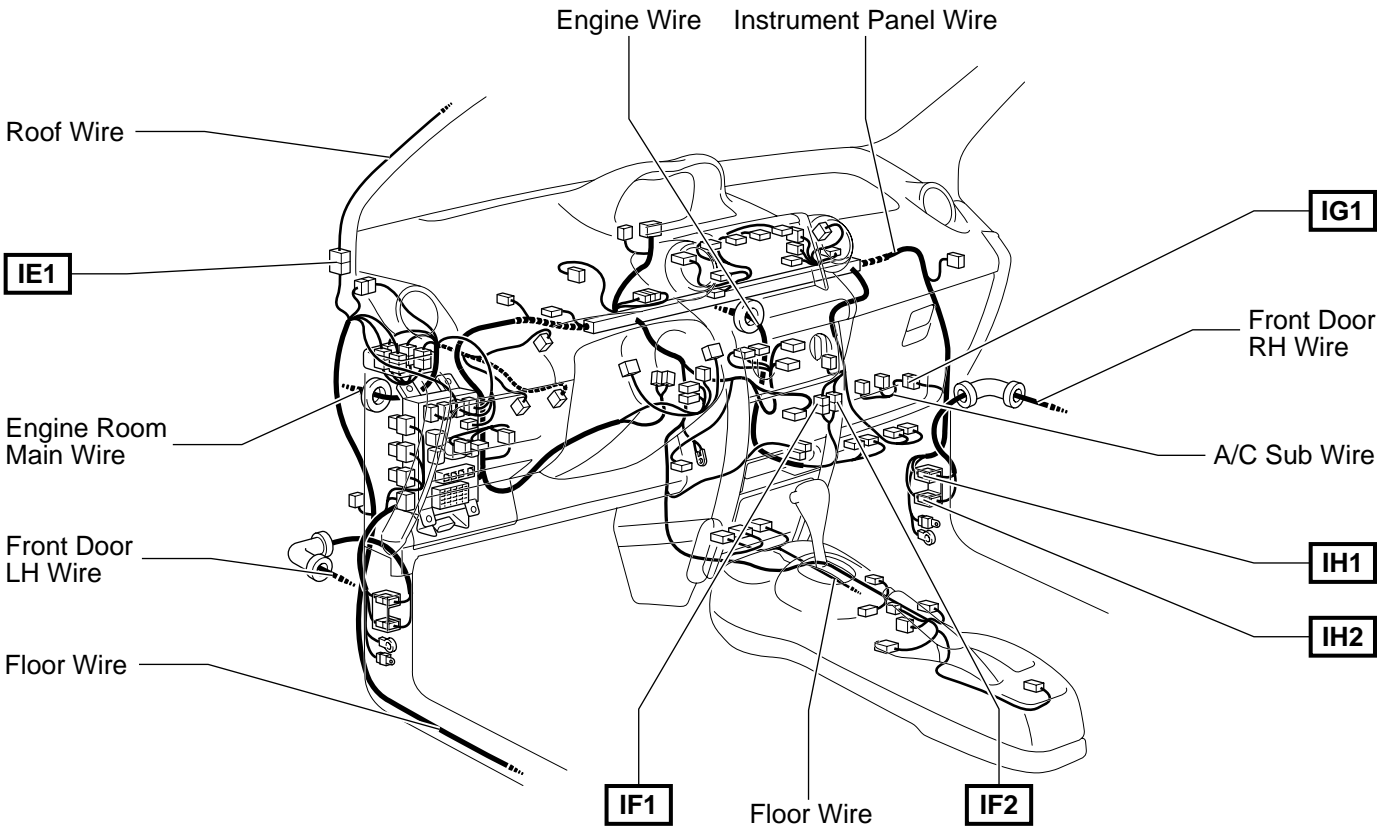
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**▽ : Location of Ground Points**

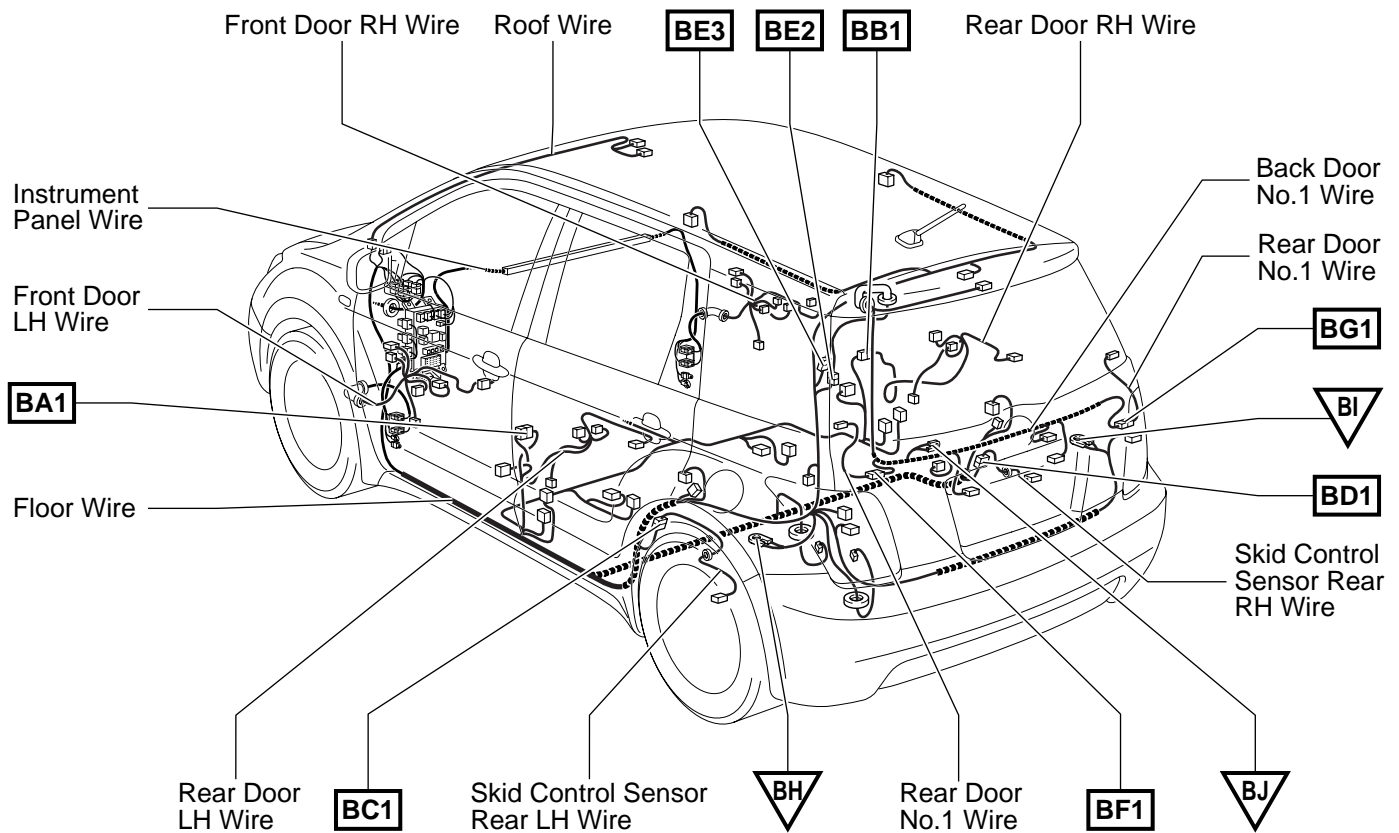


**□ : Location of Connector Joining Wire Harness and Wire Harness**



# G ELECTRICAL WIRING ROUTING

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







# HINT

There are two types of wire harness for the instrument panel on xA.

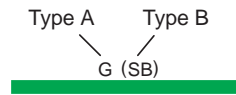
Type A : The wire harness that uses the color-coded wire.

Type B : The wire harness that uses the same colored wire. (Not color-coded)

This means that there is a case where the wire harness used for even the same section may have different colored wire depending on the models.

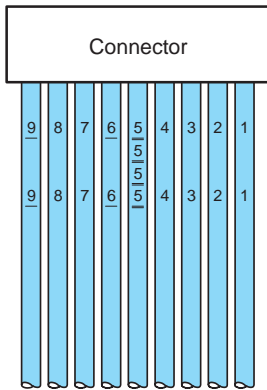
Therefore, the wire colors are also mentioned in this manual as follows.

<Example>



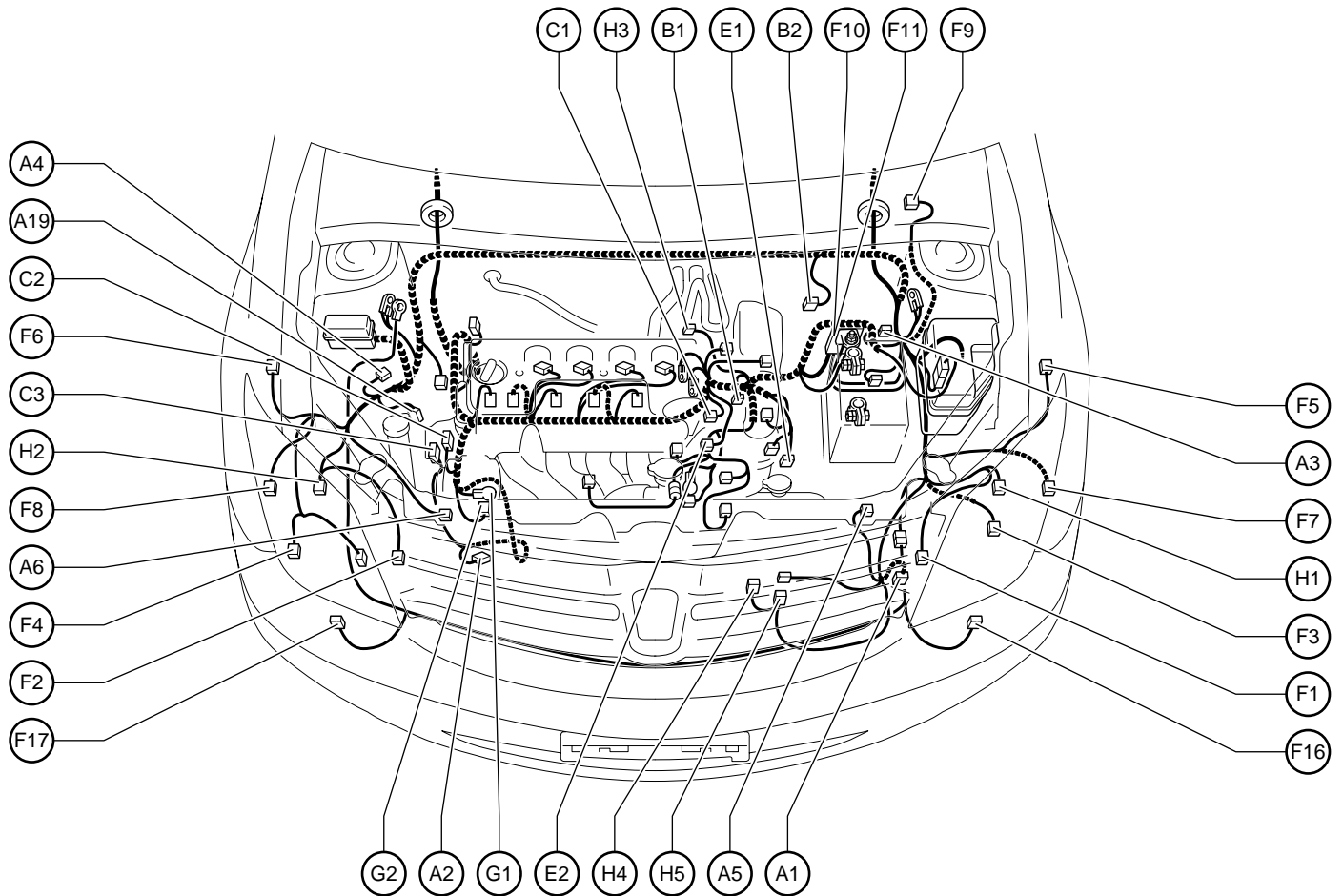
In case of using the same colored wires, each terminal number is printed on the wire as shown in the illustration on the left in order to distinguish each wiring.

Be sure to connect the terminal to the same place as indicated by the terminal number printed on the wire after disconnecting the terminal from the connector.



# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment



A 1 A/C Condenser Fan Resistor  
 A 2 A/C Magnetic Valve  
 A 3 ABS Speed Sensor Front LH  
 A 4 ABS Speed Sensor Front RH  
 A 5 Airbag Sensor Front LH  
 A 6 Airbag Sensor Front RH  
 A19 A/C Pressure Sensor

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

C 1 Camshaft Position Sensor  
 C 2 Camshaft Timing Oil Control Valve  
 C 3 Crankshaft Position Sensor

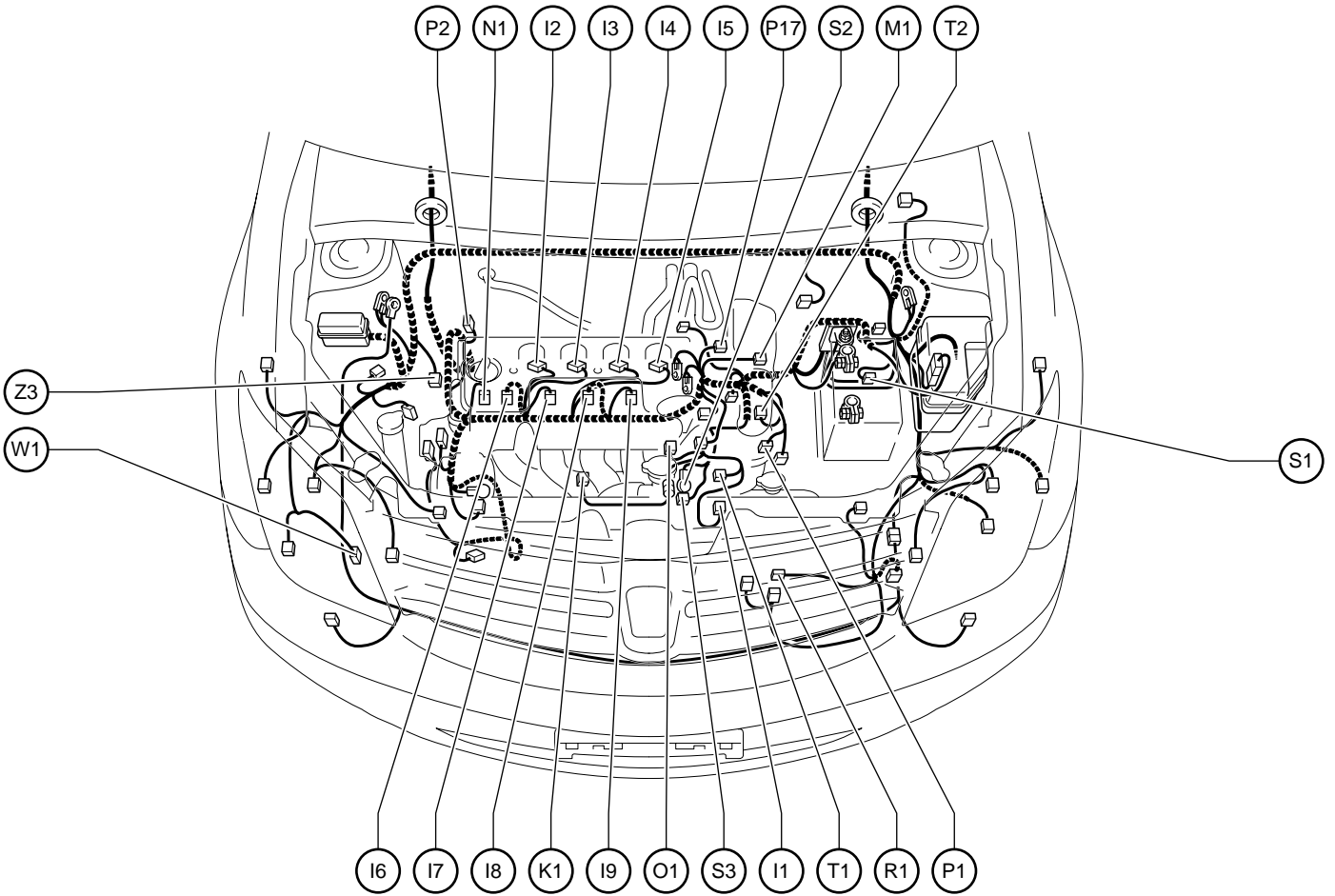
E 1 Electronically Controlled Transmission Solenoid  
 E 2 Engine Coolant Temp. Sensor

F 1 Front Parking Light LH  
 F 2 Front Parking Light RH  
 F 3 Front Side Marker Light LH  
 F 4 Front Side Marker Light RH  
 F 5 Front Side Turn Signal Light LH  
 F 6 Front Side Turn Signal Light RH  
 F 7 Front Turn Signal Light LH  
 F 8 Front Turn Signal Light RH  
 F 9 Front Wiper Motor  
 F 10 Fusible Link Block  
 F 11 Fusible Link Block  
 F 16 Front Fog Light LH  
 F 17 Front Fog Light RH

G 1 Generator  
 G 2 Generator

H 1 Headlight LH  
 H 2 Headlight RH  
 H 3 Heated Oxygen Sensor (Bank 1 Sensor 1)  
 H 4 Horn (High)  
 H 5 Horn (Low)

## Position of Parts in Engine Compartment



I 1 Idle Air Control Valve  
 I 2 Ignition Coil and Igniter No.1  
 I 3 Ignition Coil and Igniter No.2  
 I 4 Ignition Coil and Igniter No.3  
 I 5 Ignition Coil and Igniter No.4  
 I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4

K 1 Knock Sensor (Bank 1)

M 1 Mass Air Flow Meter

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Park/Neutral Position SW  
 P 2 Power Steering Oil Pressure Sensor  
 P17 VSV (Purge)

R 1 Radiator Fan Motor

S 1 Skid Control Actuator with ECU

S 2 Starter

S 3 Starter

T 1 Throttle Position Sensor

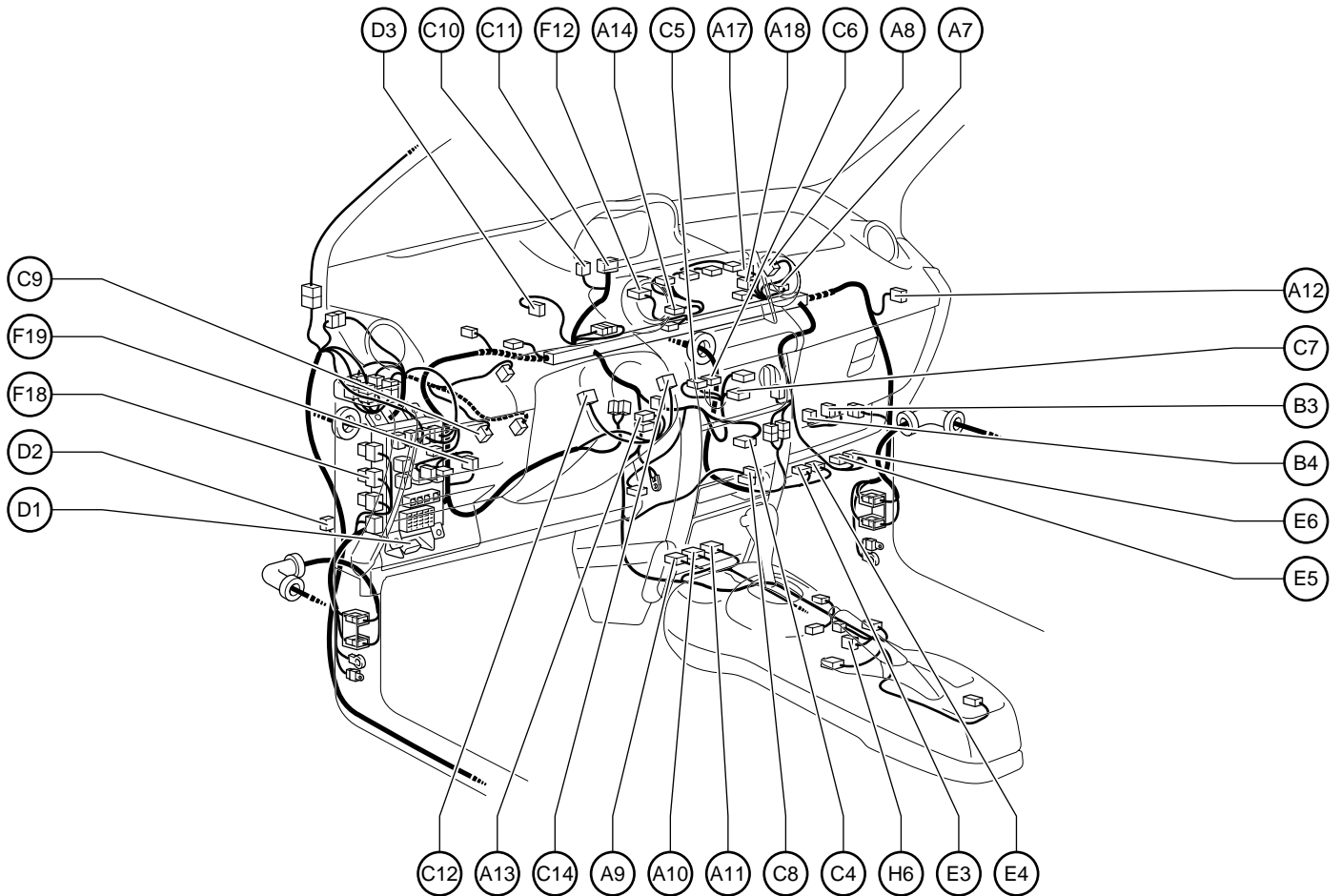
T 2 Turbine Speed Sensor

W 1 Washer Motor

Z 3 Option Connector (TVIP Siren)

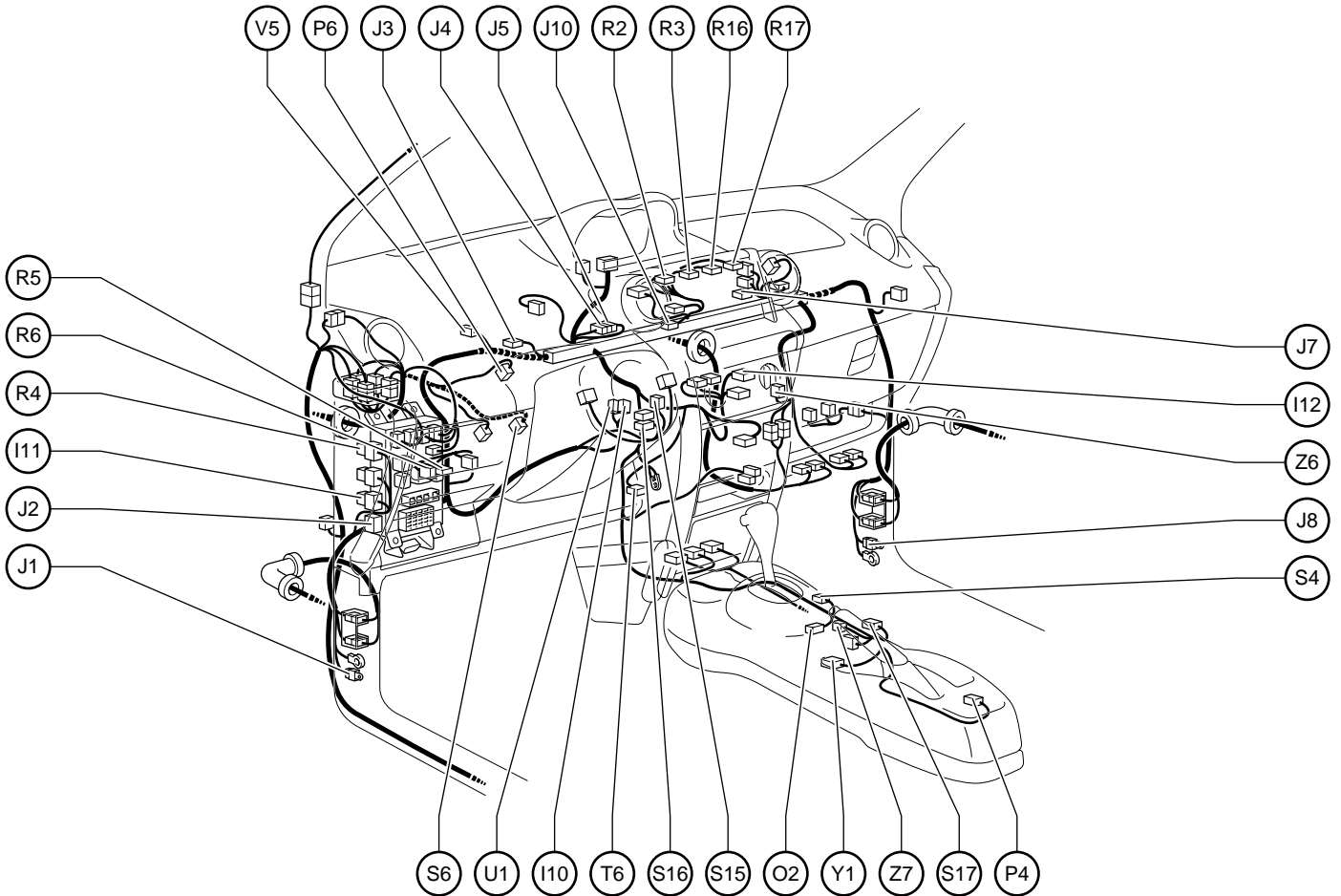
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel



- |   |  |
|---|--|
| A 7 A/C Thermistor                                  | D 1 Data Link Connector 3                  |
| A 8 Air Inlet Control Servo Motor                   | D 2 Diode (Personal Light)                 |
| A 9 Airbag Sensor Assembly                          | D 3 Door Lock Control Relay                |
| A 10 Airbag Sensor Assembly                         | E 3 Engine Control Module                  |
| A 11 Airbag Sensor Assembly                         | E 4 Engine Control Module                  |
| A 12 Airbag Squib (Front Passenger Airbag Assembly) | E 5 Engine Control Module                  |
| A 13 Airbag Squib (Steering Wheel Pad)              | E 6 Engine Control Module                  |
| A 14 Antenna Amplifier                              | F 12 Foot Mode SW                          |
| A 17 A/C Amplifier                                  | Max Cool SW                                |
| A 18 A/C Amplifier                                  | Max Hot SW                                 |
| B 3 Blower Motor                                    | F 18 Front Fog Light Relay                 |
| B 4 Blower Resistor                                 | F 19 Front Fog Light SW                    |
| C 4 Center Cluster Box Illumination                 | H 6 Heated Oxygen Sensor (Bank 1 Sensor 2) |
| C 5 Center Cluster SW                               |  |
| C 6 Center Cluster SW                               |  |
| C 7 Center Cluster SW                               |  |
| C 8 Cigarette Lighter                               |  |
| C 9 Clutch Start SW                                 |  |
| C 10 Combination Meter                              |  |
| C 11 Combination Meter                              |  |
| C 12 Combination SW                                 |  |
| C 14 Combination SW                                 |  |

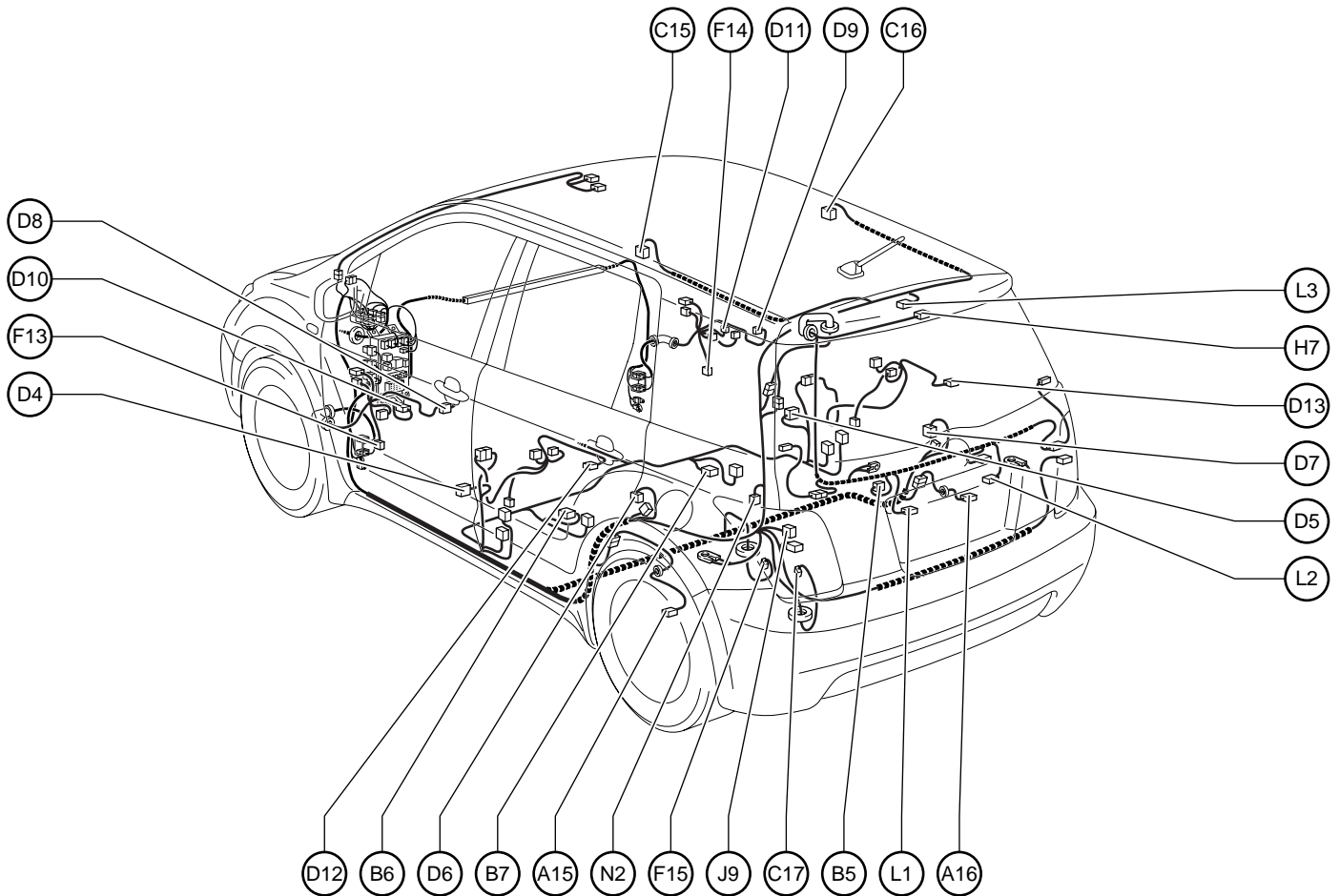
## Position of Parts in Instrument Panel



- |  |                                  |
|--|----------------------------------|
| I 10 Ignition SW                                     | R 2 Radio and Player             |
| I 11 Illumination Relay                              | R 3 Radio and Player             |
| I 12 Inside SW                                       | R 4 Rear Window Defogger Relay   |
| J 1 Junction Connector                               | R 5 Remote Control Mirror SW     |
| J 2 Junction Connector                               | R 6 Rheostat                     |
| J 3 Junction Connector                               | R16 Radio and Player             |
| J 4 Junction Connector                               | R17 Radio and Player             |
| J 5 Junction Connector                               | S 4 Shift Lock Control SW        |
| J 7 Junction Connector                               | S 6 Stop Light SW                |
| J 8 Junction Connector                               | S15 Steering Sensor              |
| J 10 Junction Connector                              | S16 Spiral Cable                 |
| O 2 O/D Main SW<br>Shift Lever Position Illumination | S17 Stereo Jack Adapter          |
| P 4 Parking Brake SW                                 | T 6 TRAC Off SW                  |
| P 6 PTC Heater                                       | U 1 Unlock Warning SW            |
|  | V 5 VSC Warning Buzzer           |
|  | Y 1 Yaw Rate Sensor              |
|  | Z 6 Option Connector (TVIP ECU)  |
|  | Z 7 Option Connector (IPOD Unit) |

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body



A 15 ABS Speed Sensor Rear LH  
 A 16 ABS Speed Sensor Rear RH

B 5 Back Door Courtesy SW  
 Back Door Lock Motor  
 B 6 Buckle SW LH  
 B 7 Buckle SW RH

C 15 Curtain Shielded Airbag Squib LH  
 C 16 Curtain Shielded Airbag Squib RH  
 C 17 Canister Pump Module

D 4 Door Courtesy SW Front LH  
 Door Lock Motor Front LH  
 Door Unlock Detection SW Front LH  
 D 5 Door Courtesy SW Front RH  
 D 6 Door Courtesy SW Rear LH  
 D 7 Door Courtesy SW Rear RH  
 D 8 Door Key Lock and Unlock SW Front LH  
 Door Lock Motor Front LH  
 Door Unlock Detection SW Front LH  
 D 9 Door Key Lock and Unlock SW Front RH  
 Door Lock Motor Front RH  
 D 10 Door Lock Control SW LH  
 Power Window Master SW  
 D 11 Door Lock Control SW RH  
 D 12 Door Lock Motor Rear LH  
 D 13 Door Lock Motor Rear RH

F 13 Front Speaker LH  
 F 14 Front Speaker RH  
 F 15 Fuel Pump  
 Fuel Sender

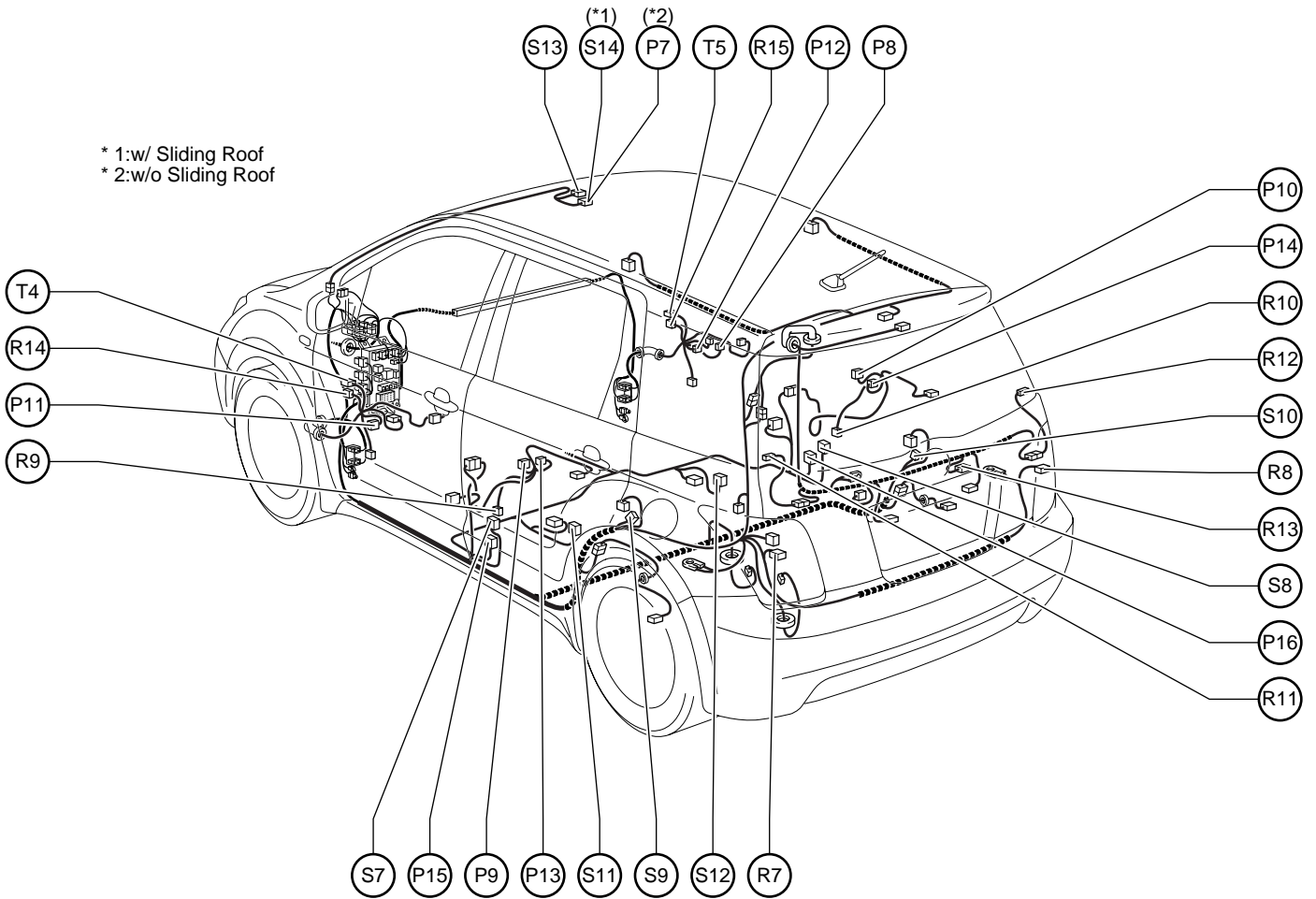
H 7 High Mounted Stop Light

J 9 Junction Connector

L 1 License Plate Light LH  
 L 2 License Plate Light RH  
 L 3 Luggage Compartment Light

N 2 Noise Filter (Rear Window Defogger)

## Position of Parts in Body



\* 1:w/ Sliding Roof  
\* 2:w/o Sliding Roof

P 7 Personal Light  
P 8 Power Window Control SW Front RH  
P 9 Power Window Control SW Rear LH  
P10 Power Window Control SW Rear RH  
P11 Power Window Motor Front LH  
P12 Power Window Motor Front RH  
P13 Power Window Motor Rear LH  
P14 Power Window Motor Rear RH  
P15 Pretensioner LH  
P16 Pretensioner RH

R 7 Rear Combination Light LH  
R 8 Rear Combination Light RH  
R 9 Rear Speaker LH  
R10 Rear Speaker RH  
R11 Rear Window Defogger  
R12 Rear Window Defogger  
R13 Rear Wiper Motor  
R14 Remote Control Mirror LH  
R15 Remote Control Mirror RH

S 7 Side Airbag Sensor Front LH  
S 8 Side Airbag Sensor Front RH  
S 9 Side Airbag Sensor Rear LH  
S10 Side Airbag Sensor Rear RH  
S11 Side Airbag Squib LH  
S12 Side Airbag Squib RH  
S13 Sliding Roof Control ECU and Motor  
S14 Personal Light  
Sliding Roof Control SW

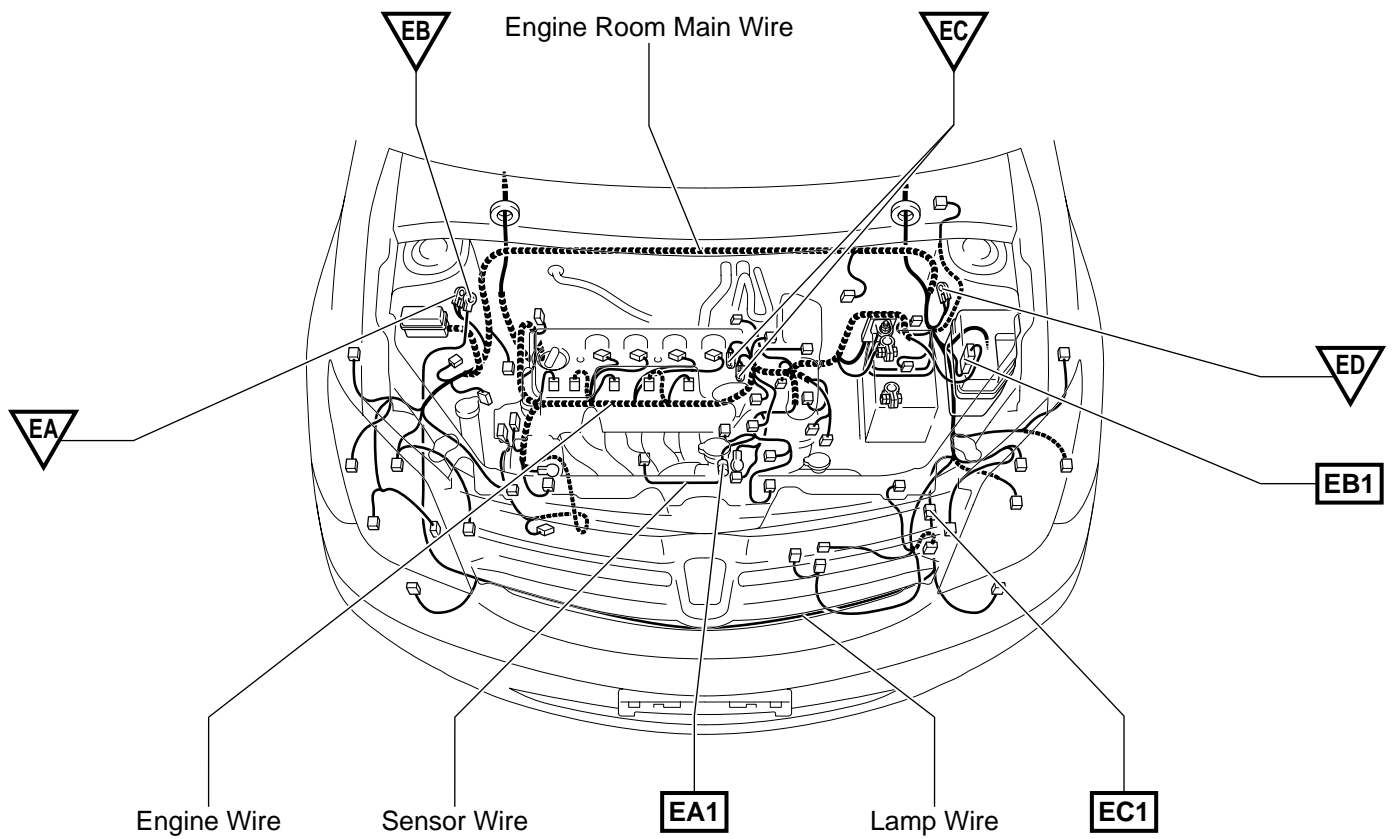
T 4 Tweeter LH  
T 5 Tweeter RH



## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

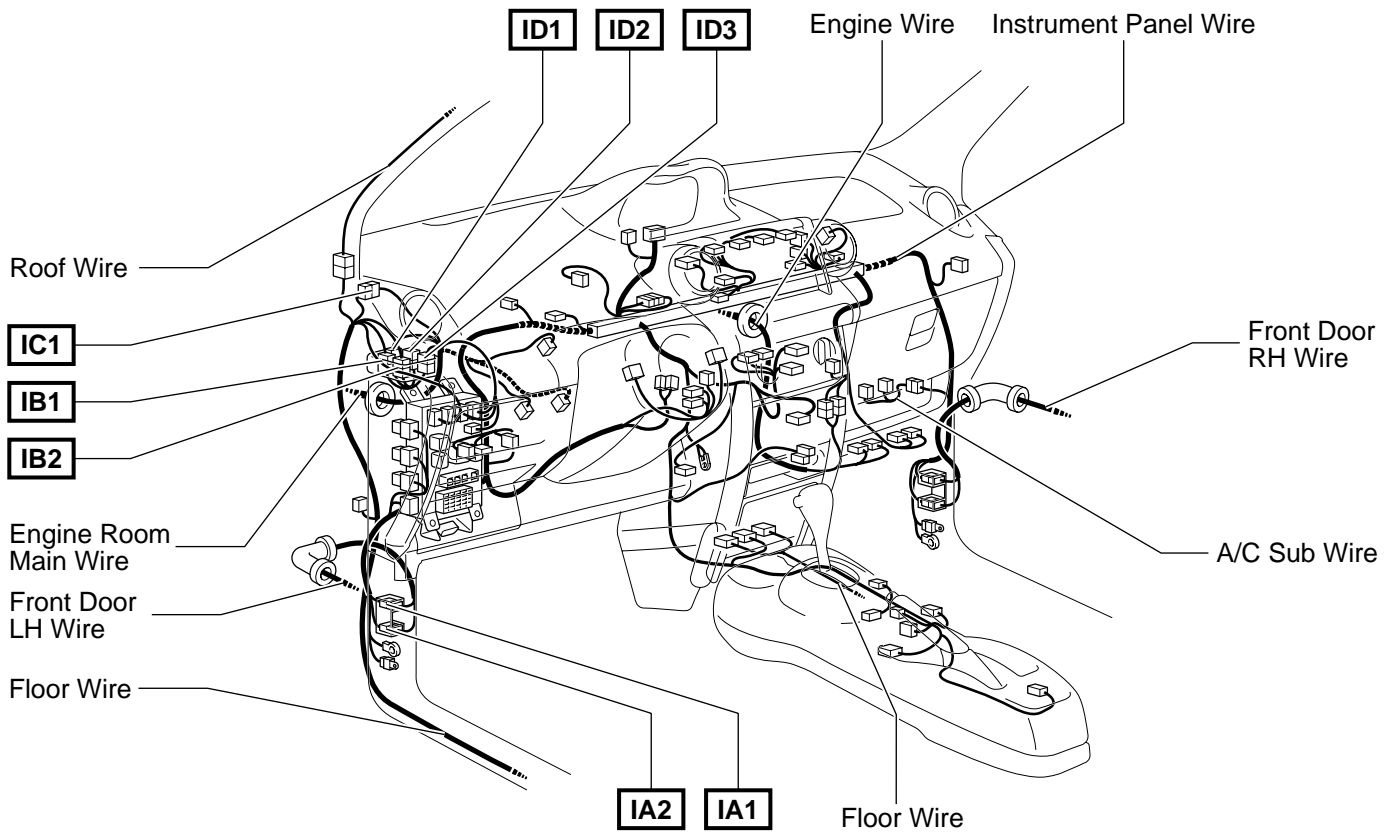




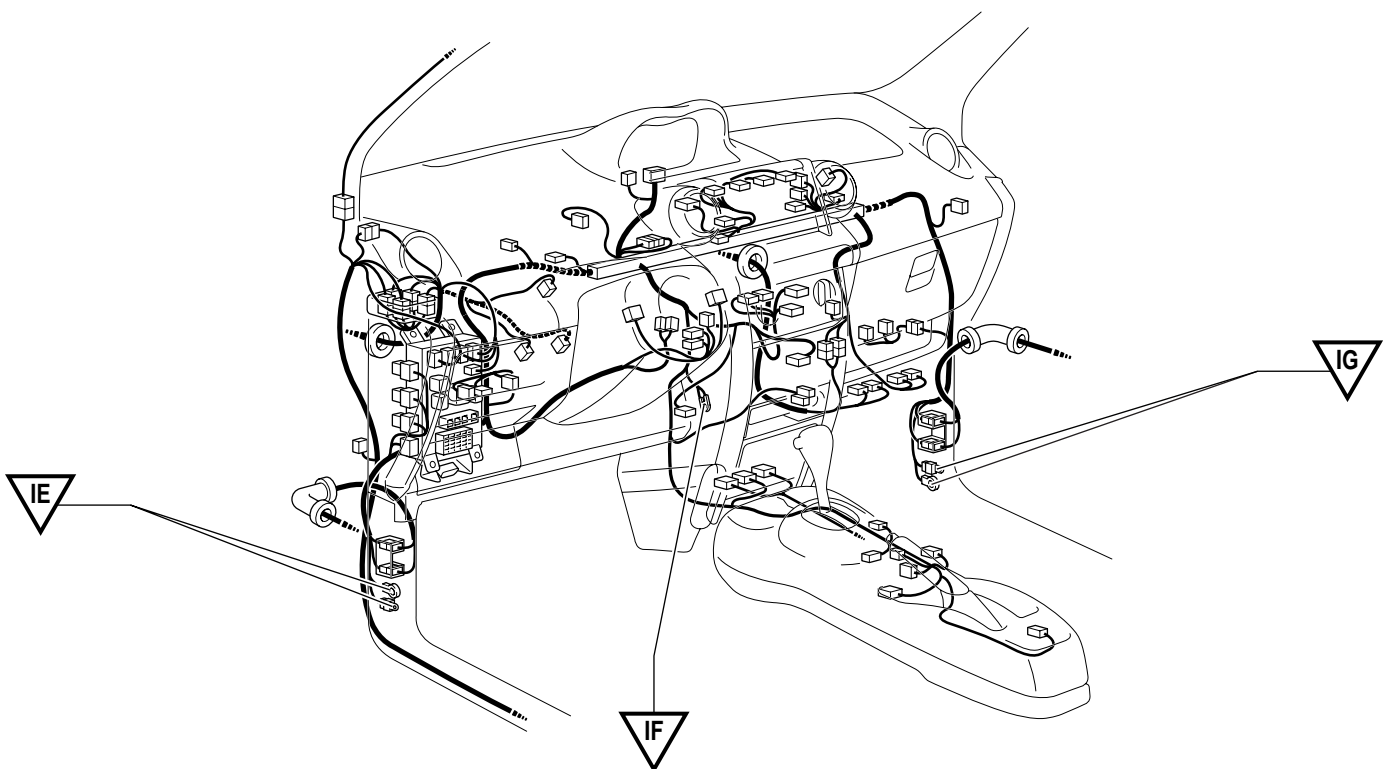


# G ELECTRICAL WIRING ROUTING

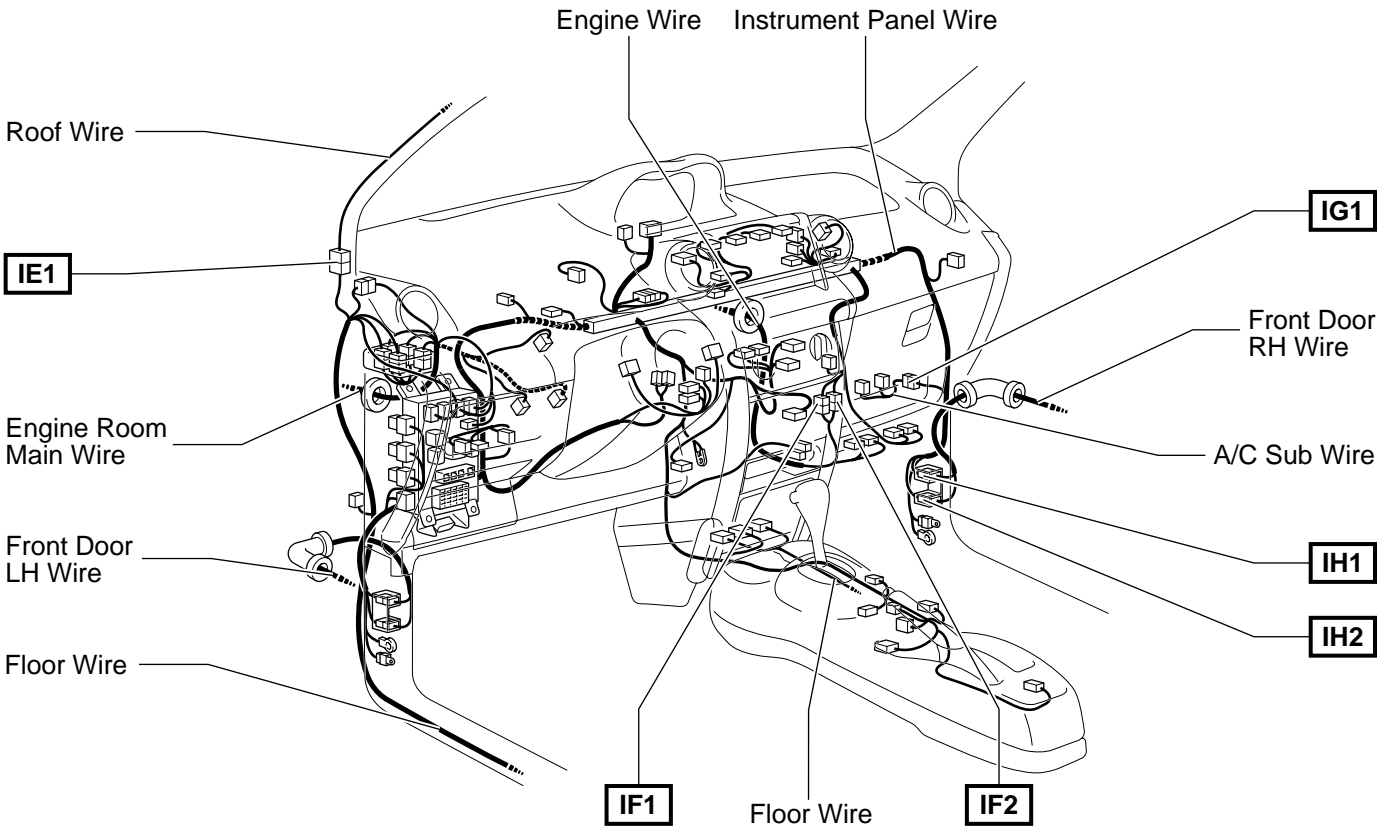
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**▽ : Location of Ground Points**

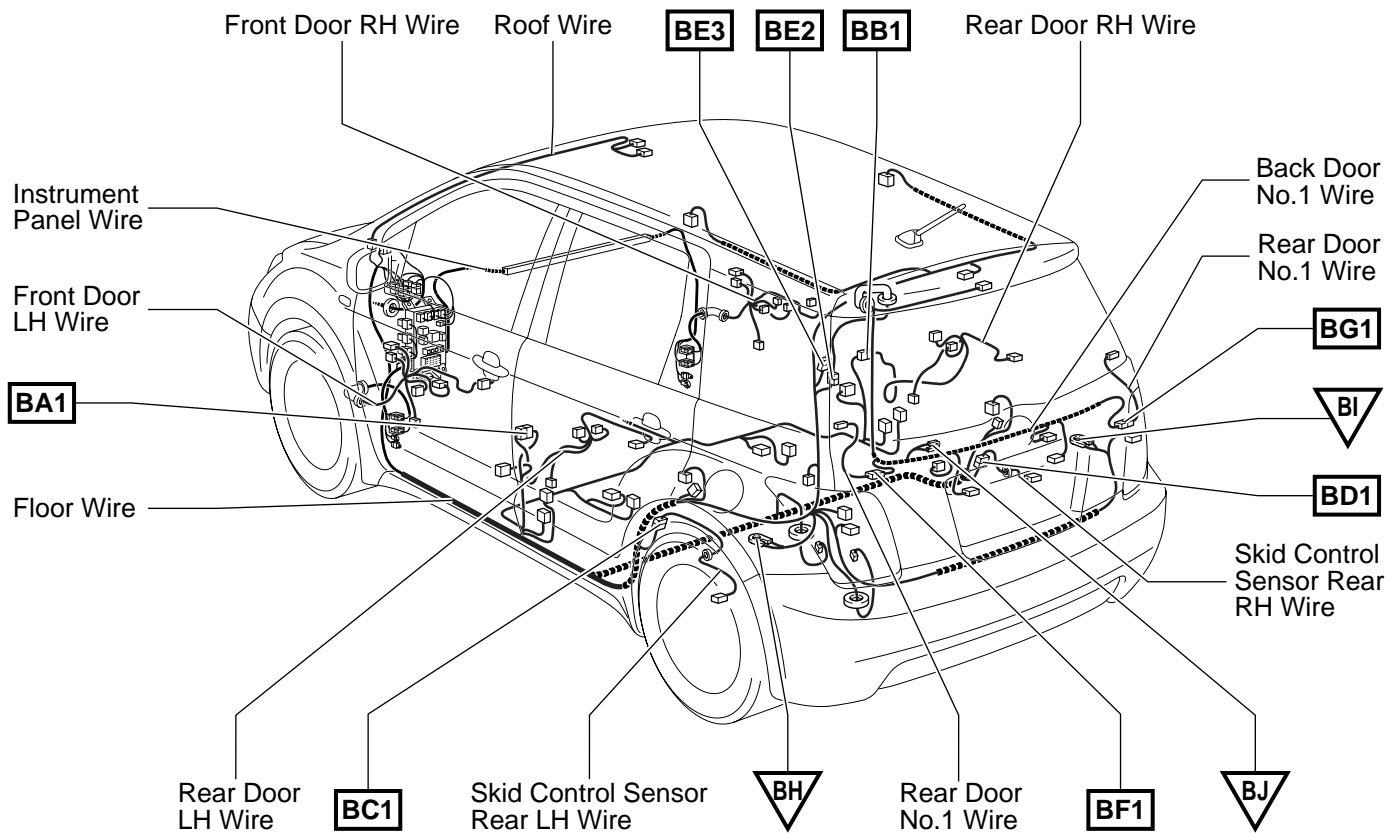


**□ : Location of Connector Joining Wire Harness and Wire Harness**



# G ELECTRICAL WIRING ROUTING

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





# HINT

There are two types of wire harness for the instrument panel on xA.

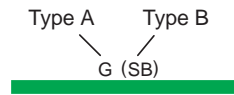
Type A : The wire harness that uses the color-coded wire.

Type B : The wire harness that uses the same colored wire. (Not color-coded)

This means that there is a case where the wire harness used for even the same section may have different colored wire depending on the models.

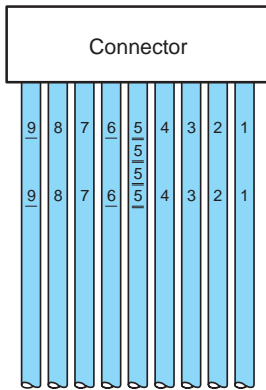
Therefore, the wire colors are also mentioned in this manual as follows.

<Example>

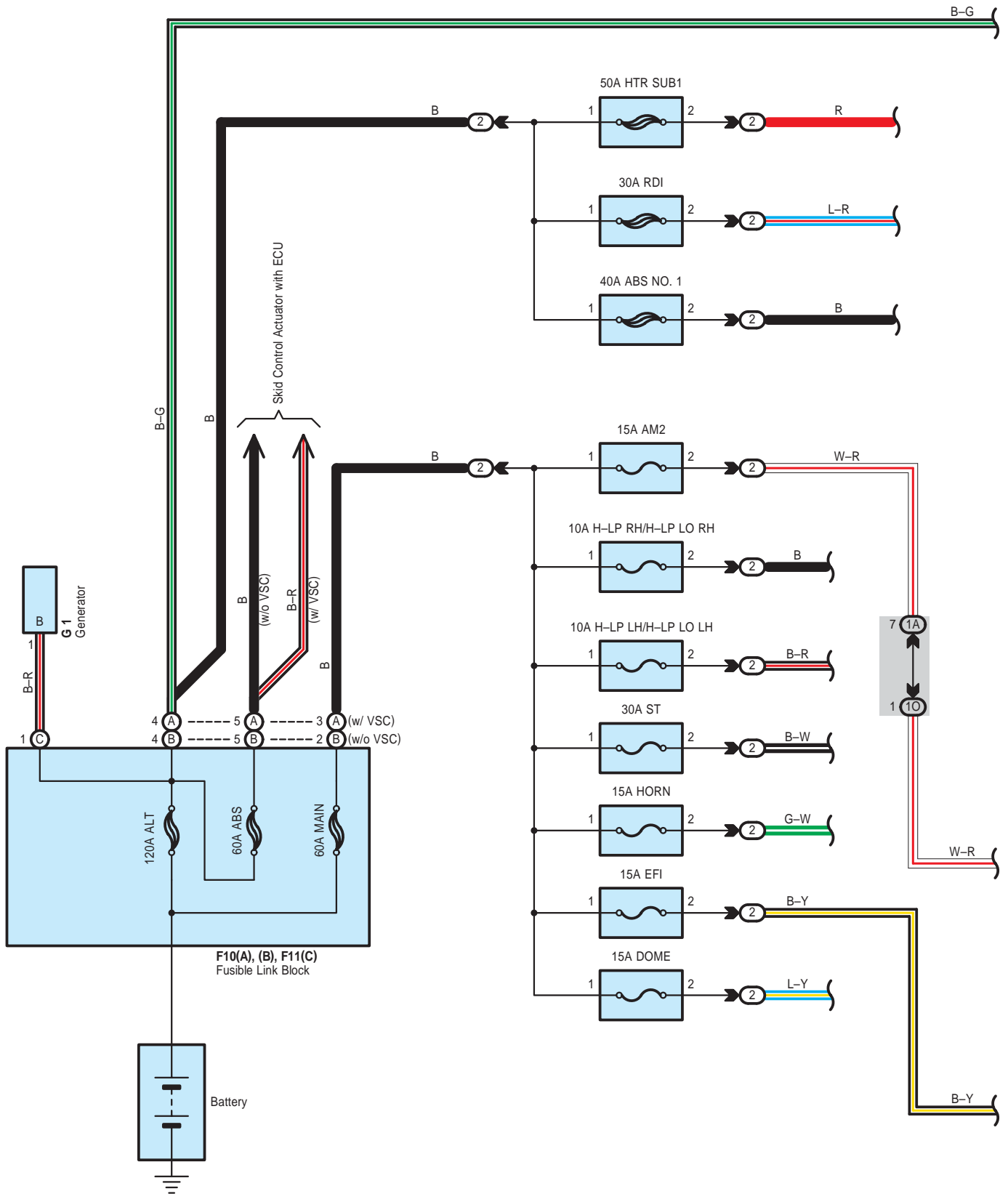


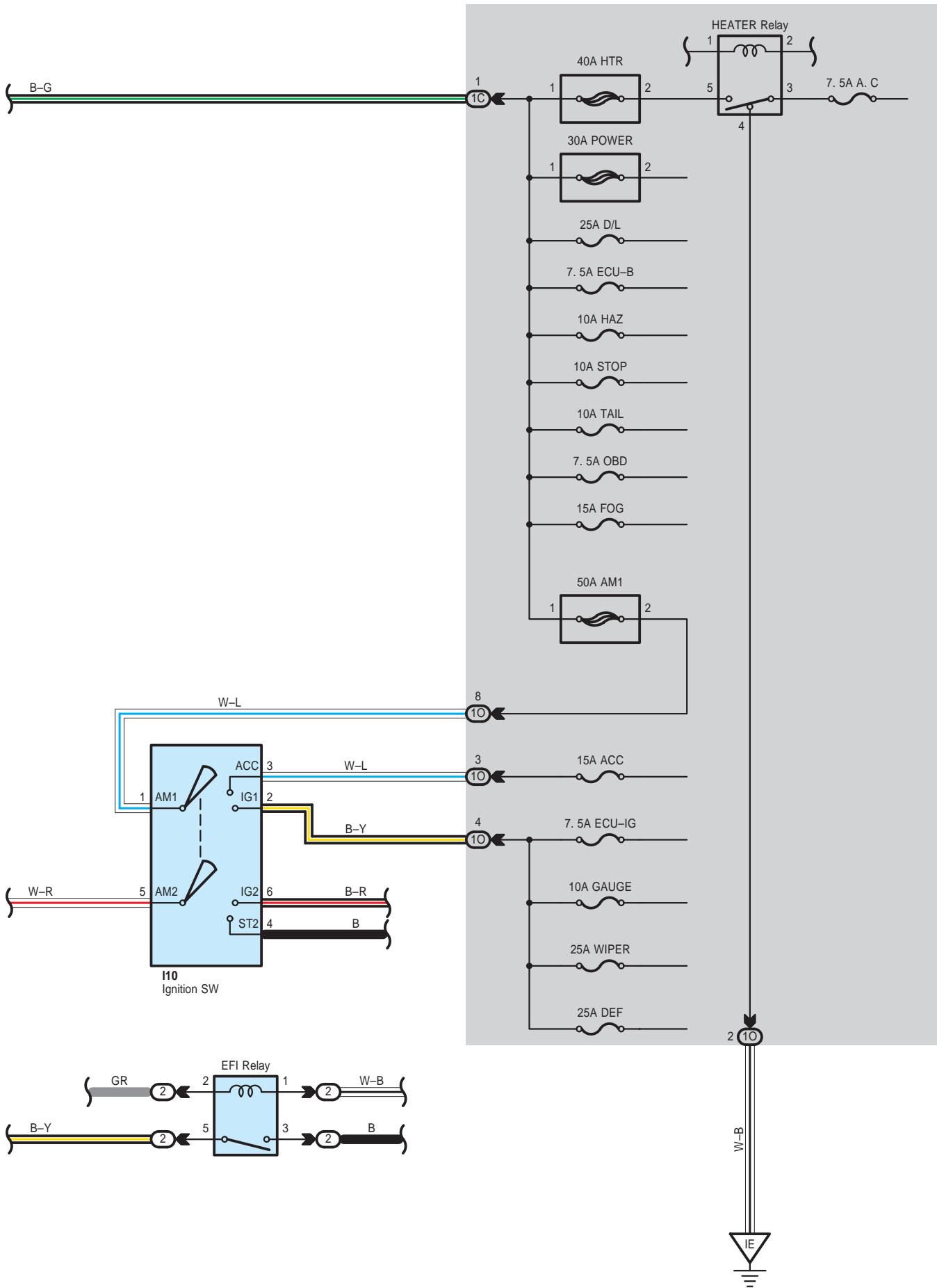
In case of using the same colored wires, each terminal number is printed on the wire as shown in the illustration on the left in order to distinguish each wiring.

Be sure to connect the terminal to the same place as indicated by the terminal number printed on the wire after disconnecting the terminal from the connector.



# Power Source







# Power Source

## : Parts Location

Code		See Page	Code		See Page	Code		See Page
F10	A	28	F11	C	28	I10	31	
	B	28	G1		28			

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

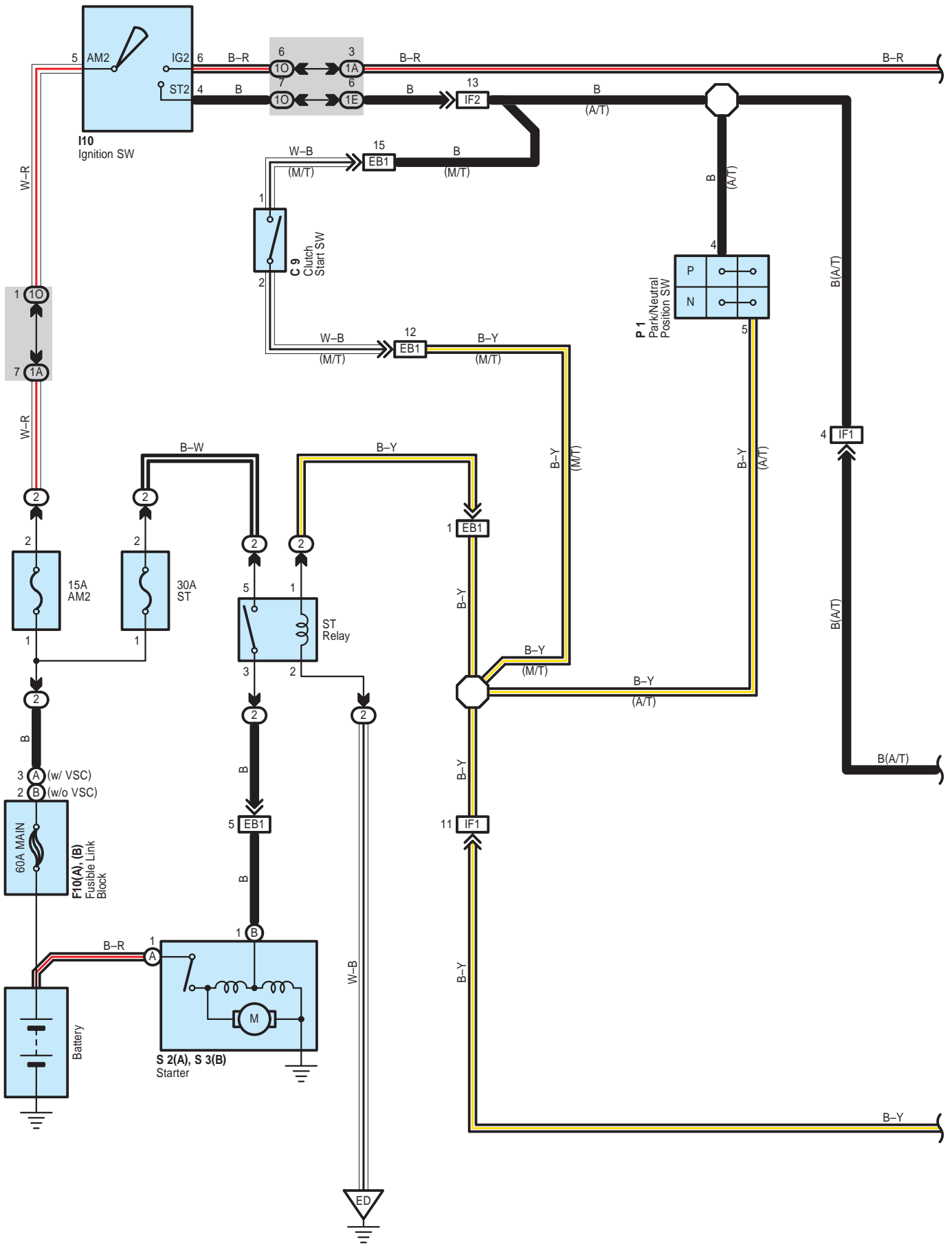
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C		
1O	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

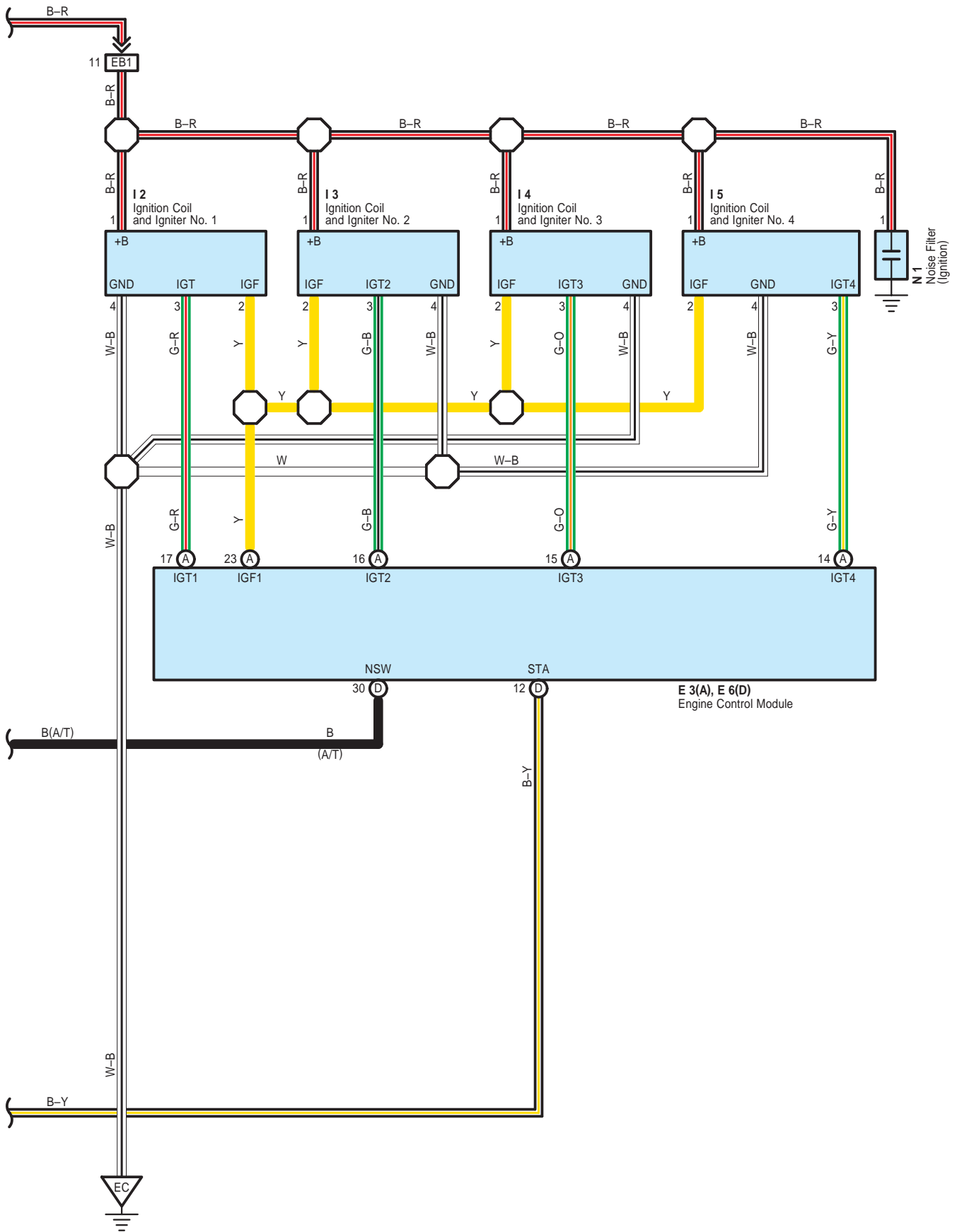
## : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel



# Starting and Ignition





# Starting and Ignition

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
C9	30	I2	29	N1	29
E3	A 30	I3	29	P1	29
E6	D 30	I4	29	S2	A 29
F10	A 28	I5	29	S3	B 29
F10	B 28	I10	31		

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1O		

## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	34	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IF1	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IF2		

## : Ground Points

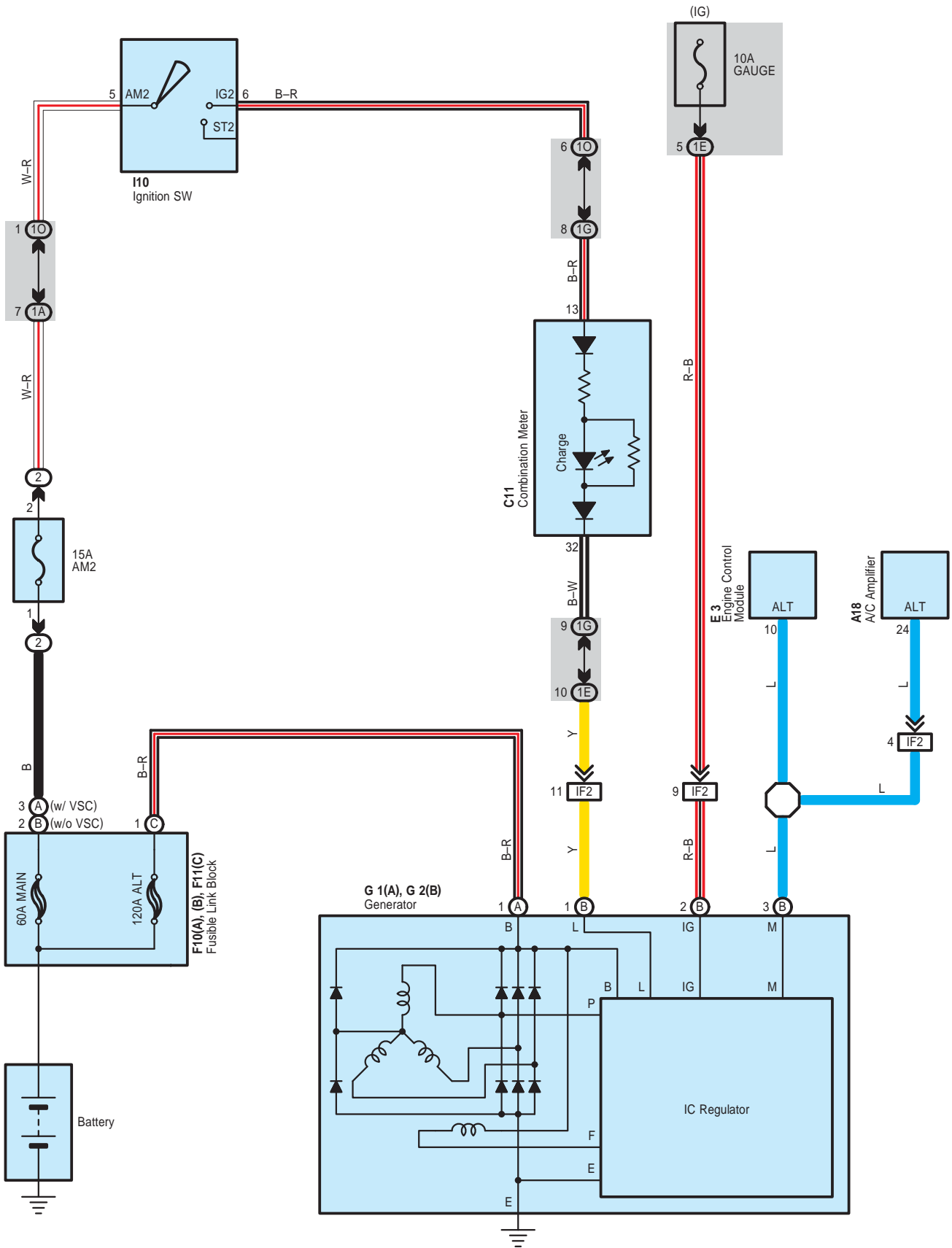
Code	See Page	Ground Points Location
EC	34	Cylinder Head
ED	34	Front Fender Apron LH



# 2006 xA ELECTRICAL WIRING DIAGRAM SYSTEM CIRCUITS

	Page
ABS (w/ VSC) .....	96
ABS (w/o VSC) .....	106
Air Conditioning .....	150
Audio System .....	132
Back-Up Light .....	76
Charging .....	50
Cigarette Lighter .....	126
Combination Meter .....	136
Door Lock Control .....	86
Electronically Controlled Transmission and A/T Indicator .....	90
Engine Control .....	52
Front Fog Light .....	62
Front Wiper and Washer .....	78
Headlight .....	60
Horn .....	128
Ignition .....	46
Illumination .....	70
Interior Light .....	68
Key Reminder .....	120
Light Reminder .....	122
Multiplex Communication System (CAN) .....	104
Power Source .....	42
Power Window .....	82
PTC Heater .....	146
Radiator Fan and Condenser Fan .....	148
Rear Window Defogger .....	130
Rear Wiper and Washer .....	80
Remote Control Mirror .....	124
Seat Belt Warning .....	120
Shift Lock .....	118
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Stop Light .....	74
Taillight .....	70
TRAC .....	96
Turn Signal and Hazard Warning Light .....	64
Two Way Flow Heater .....	142
VSC .....	96

# Charging





: Parts Location

Code	See Page	Code	See Page	Code	See Page
A18	30	F10	A 28	G1	A 28
C11	30		B 28	G2	B 28
E3	30	F11	C 28	I10	31

: Relay Blocks

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

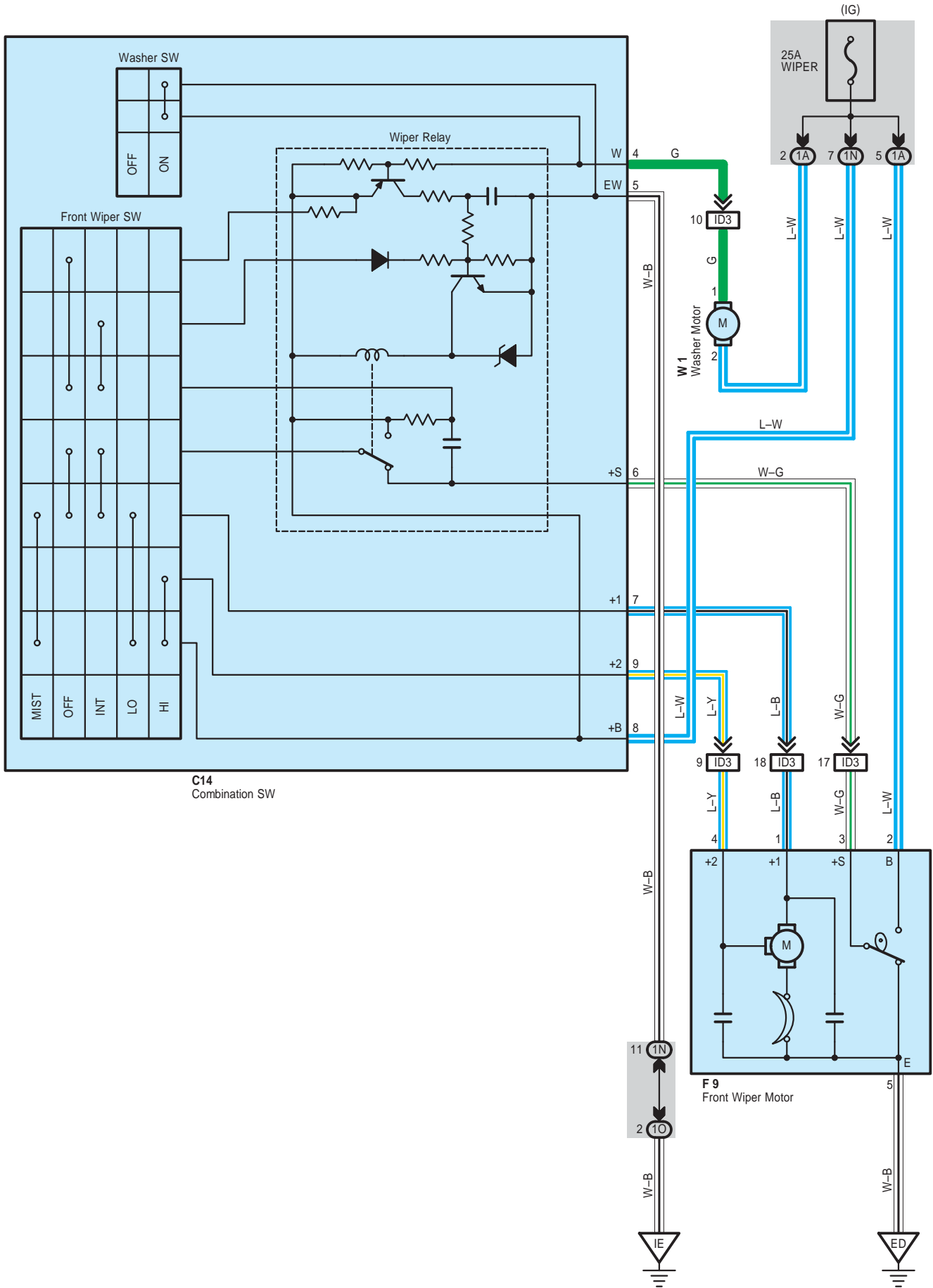
: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1O		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

# Front Wiper and Washer



## System Outline

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

### 1. Low Speed Position

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

### 2. High Speed Position

With the front wiper SW turned to HI position, the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 9 to TERMINAL 4 of the front wiper motor to TERMINAL 5 to GROUND and causes the front wiper motor to run at high speed.

### 3. INT Position

With the front wiper SW turned to INT position, the wiper relay operates and current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 5 to GROUND. This activates the intermittent circuit and the current flows from TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND and the wiper operates. Intermittent operation is controlled by a condenser charge and discharge function in the relay.

### 4. Mist Position

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

### 5. Washer Interlocking Operation

With the washer SW pulled to ON position, the current flows from the WIPER fuse to TERMINAL 2 of the washer motor to TERMINAL 1 to TERMINAL 4 of the front wiper and washer SW to TERMINAL 5 to GROUND and causes the washer motor to run and the window washer to spray. Simultaneously, current flows from the WIPER fuse to TERMINAL 8 of the front wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the front wiper motor to TERMINAL 5 to GROUND, causing the wiper to function.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C14	30	F9	28	W1	29

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1N	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1O		

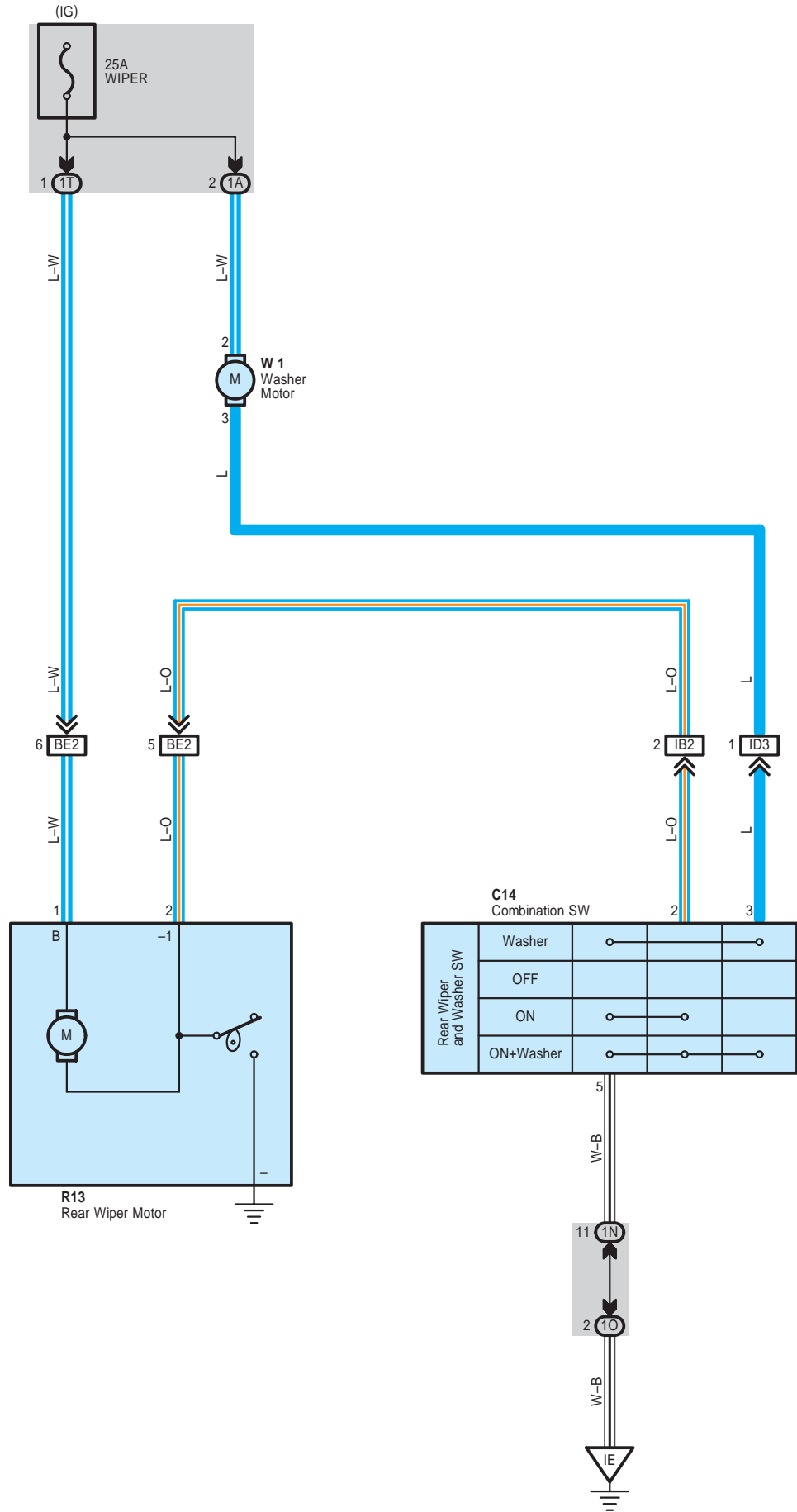
## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

## ▽ : Ground Points

Code	See Page	Ground Points Location
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel

# Rear Wiper and Washer



## System Outline

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

### 1. Rear Wiper Normal Operation

With the ignition SW turned on and rear wiper and washer SW turned to ON position, current flows to TERMINAL 1 of the rear wiper motor to TERMINAL 2 of the rear wiper and washer SW to TERMINAL 5 to GROUND. Causing the rear wiper motor operated.

### 2. Washer Operation

With the ignition SW turned on and the rear wiper and washer SW turned to ON position, when the wiper SW is turned further (ON+ washer position), current flows to TERMINAL 2 of the washer motor to TERMINAL 3 to TERMINAL 3 of the rear wiper and washer SW to TERMINAL 5 to GROUND so that the washer motor rotates and the window washer emits a water, only while the switch is fully turned.

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

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
C14	30	R13	33	W1	29

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1N	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1O		
1T	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

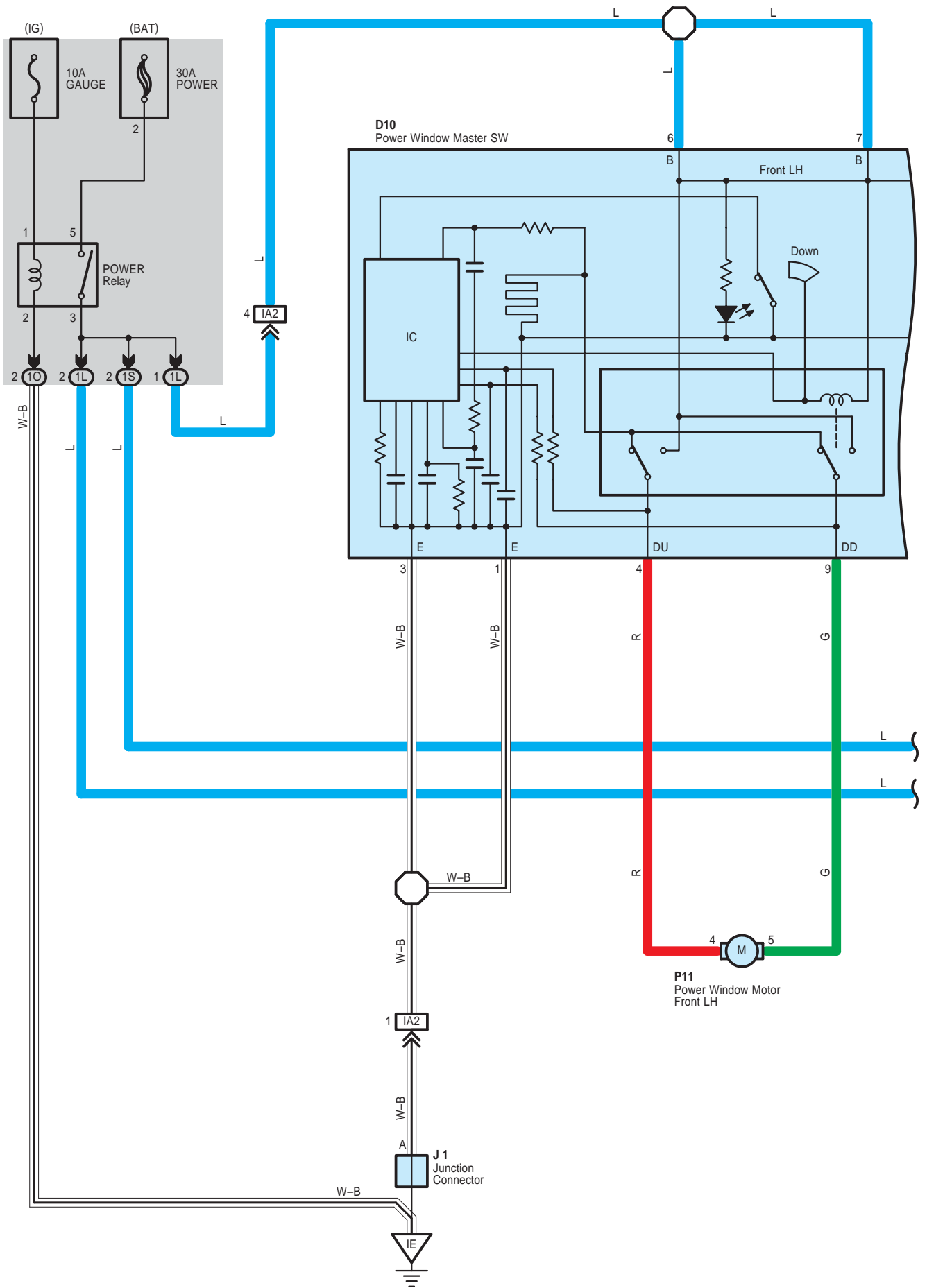
## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
BE2	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)

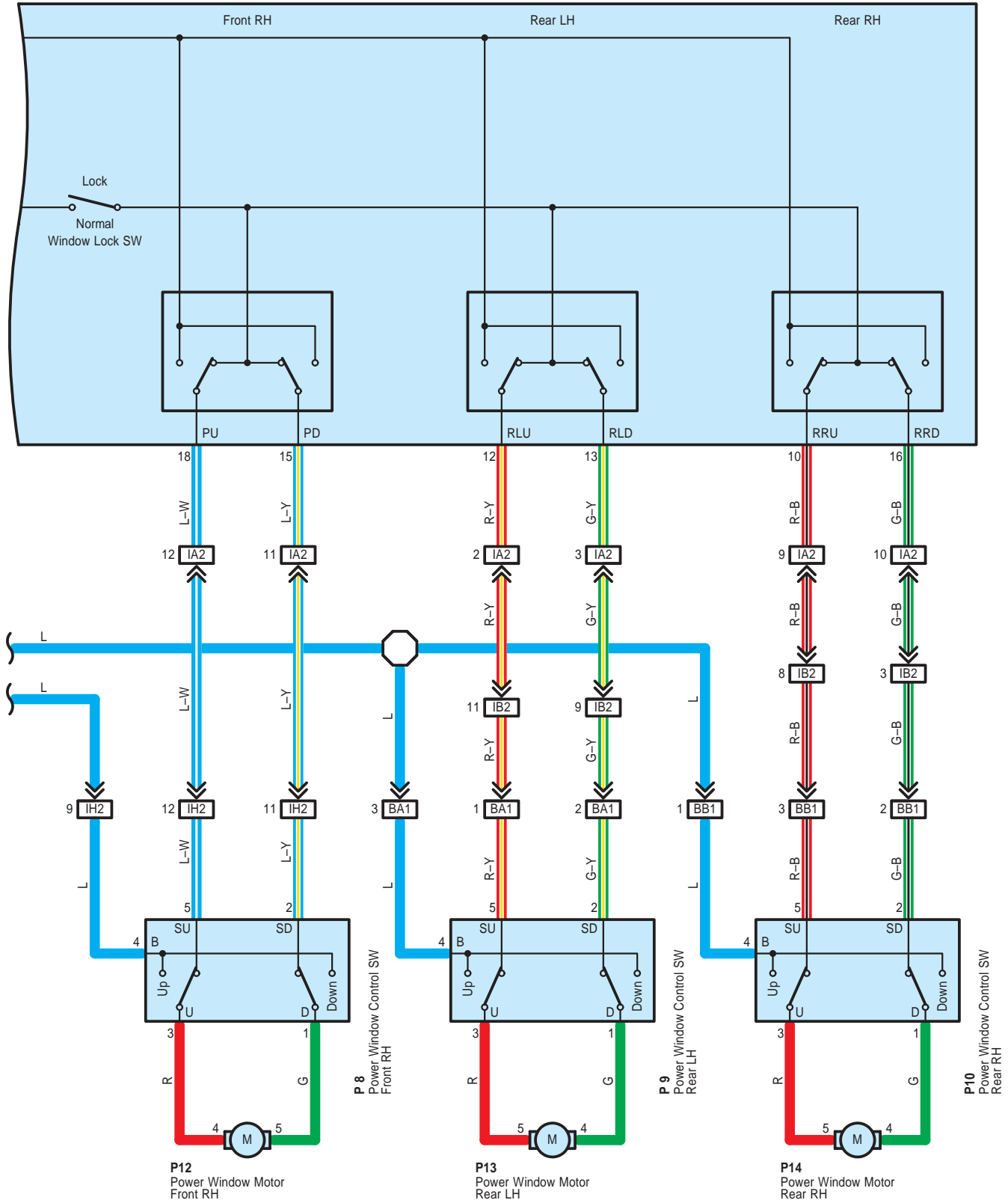
## : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# Power Window



**D10**  
Power Window Master SW



# Power Window

## System Outline

When the ignition SW is turned on, the current flows from the GAUGE fuse through the POWER relay to GROUND, thus the POWER relay is turned on and the current flows through the POWER fuse to TERMINAL 5 of the POWER relay to TERMINAL 3 to TERMINAL B of the power window master SW and TERMINAL B of the power window control SW front RH, Rear LH and RH.

### 1. Manual Operation (Power Window Master SW)

When the power window master SW (Driver's) is pushed down one step, the current flows from TERMINAL B of the power window master SW to TERMINAL DD to TERMINAL 5 of the power window motor front LH to TERMINAL 4 to TERMINAL DU of the power window master SW to TERMINAL E to GROUND, and the motor rotates to open the window. When the power window master SW is pulled up one step, the current flows from TERMINAL B of the power window master SW to TERMINAL DU to TERMINAL 4 of the power window motor front LH to TERMINAL 5 to TERMINAL DD of the power window master SW to TERMINAL E to GROUND, and the motor rotates in the opposite direction from open and closes the window. All the other windows are opened/closed by operating the respective power window master SW. When the window lock SW is pushed to the lock side, the ground circuit to the passenger's window becomes open. As a result, even if Open/Close operation of the passenger's window is attempted, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the passenger's window can not be operated and window lock occurs.

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

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

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

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

### 4. Manual Operation (Power Window Control SW Front RH, Rear LH and RH)

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

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
D10	32	P9	33	P12	33
J1	31	P10	33	P13	33
P8	33	P11	33	P14	33

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1O		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)



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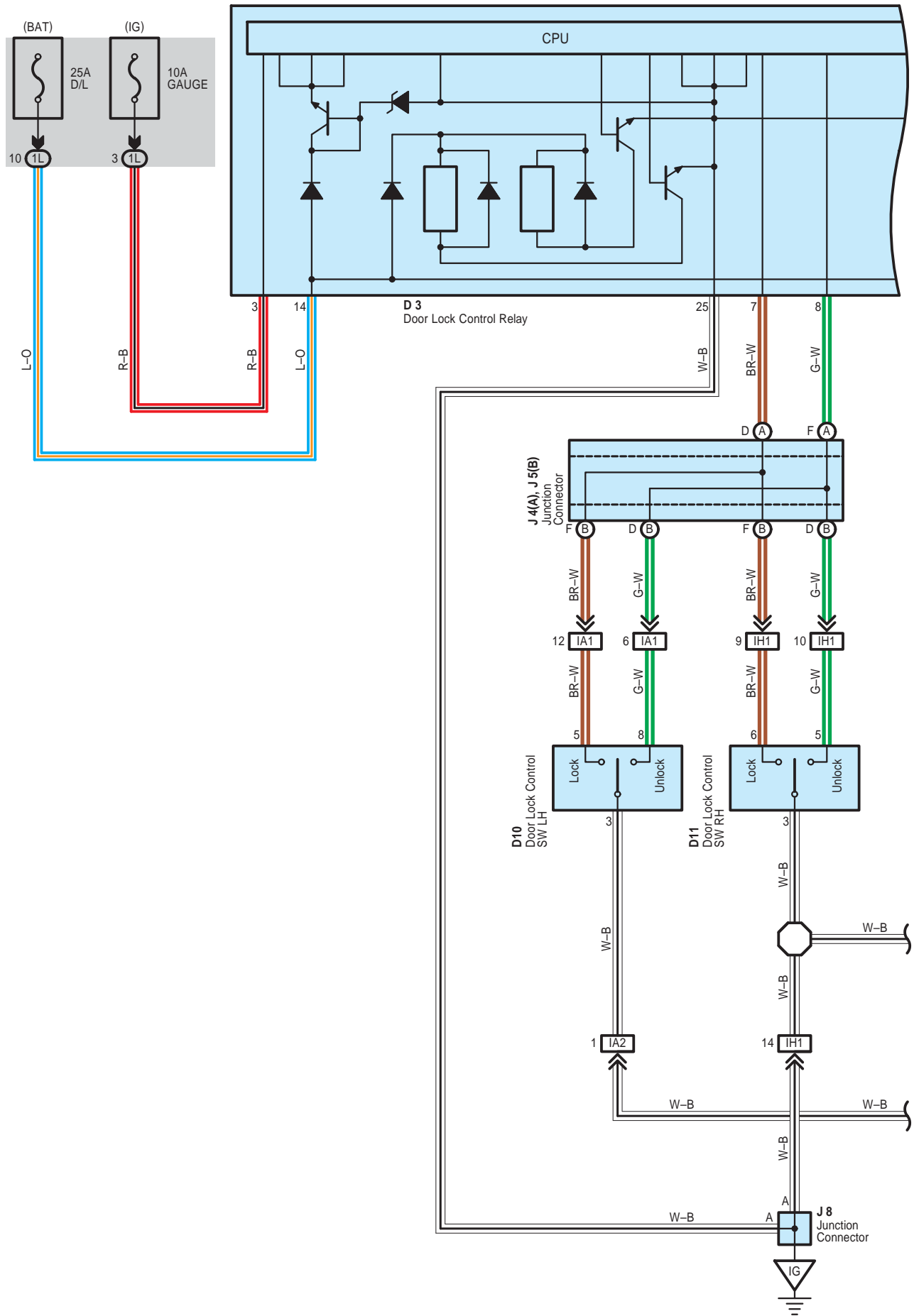
 : **Connector Joining Wire Harness and Wire Harness**

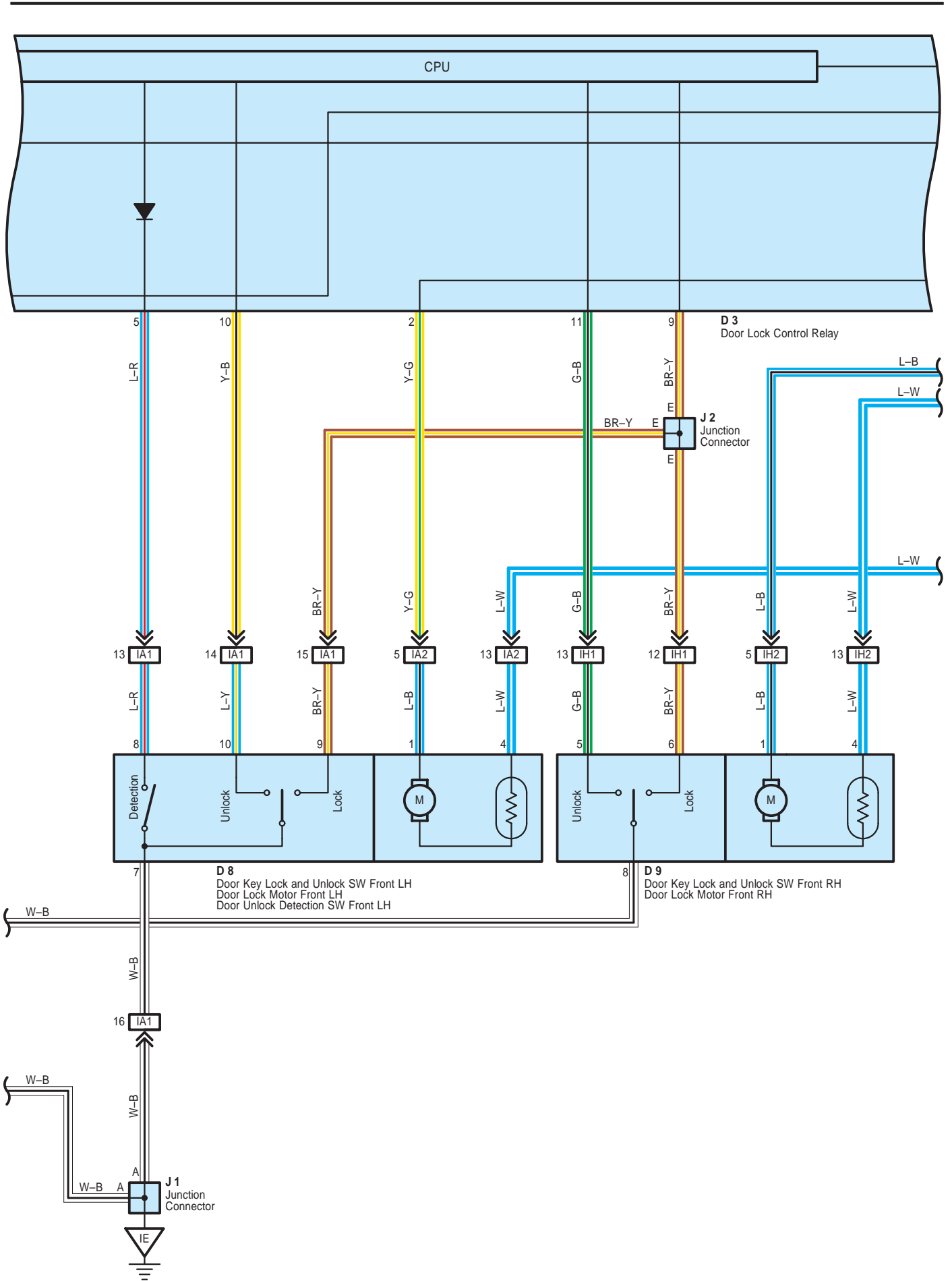
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IH2	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	38	Rear Door LH Wire and Floor Wire (Center Pillar LH)
BB1	38	Rear Door RH Wire and Floor Wire (Center Pillar RH)

 : **Ground Points**

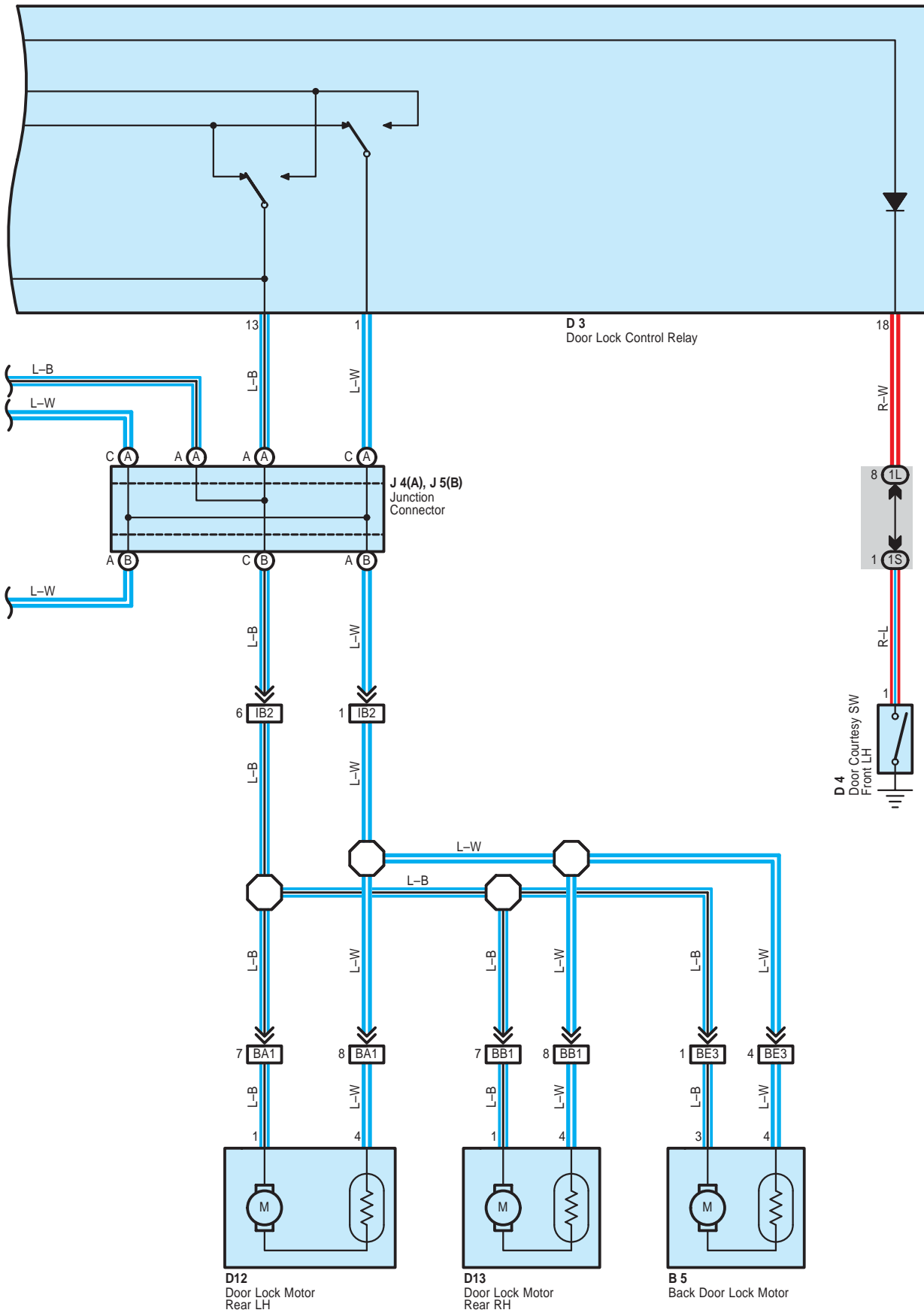
Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# Door Lock Control





# Door Lock Control



## System Outline

The current always flows to TERMINAL 14 of the door lock control relay through the D/L fuse.

### 1. Manual Lock Operation

When the door lock control SW or door key lock and unlock SW are operated to LOCK position, a lock signal is input to TERMINAL 7 or 9 of the door lock control relay and causes the door lock control relay to function. The current flows from TERMINAL 14 of the door lock control relay to TERMINAL 1 to the door lock motors to TERMINALS 2 and 13 of the door lock control relay to TERMINAL 25 to GROUND and the door lock motors locks the door.

### 2. Manual Unlock Operation

When the door lock control SW or door key lock and unlock SW are operated to UNLOCK position, an unlock signal is input to TERMINAL 8, 10 or 11 of the door lock control relay and causes the door lock control relay to function. The current flows from TERMINAL 14 of the door lock control relay to TERMINALS 2 and 13 to the door lock motors to TERMINAL 1 of the door lock control relay to TERMINAL 25 to GROUND and the door lock motors unlocks the door.

### 3. Double Operation Unlock Operation

When the door key lock and unlock SW front LH is turned to the unlock side, only the driver's door is unlocked. By turning the door key lock and unlock SW front LH to the unlock side, a signal is input to TERMINAL 10 of the door lock control relay, and if the signal is input again within 3 seconds by turning the SW to the unlock side again, current flows from TERMINAL 13 of the door lock control relay to the door lock motors to TERMINAL 1 of the door lock control relay to TERMINAL 25 to GROUND, causing all the other doors are unlocked.

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
B5	32	D10	32	J2	31
D3	30	D11	32	J4	A 31
D4	32	D12	32	J5	B 31
D8	32	D13	32	J8	31
D9	32	J1	31		

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

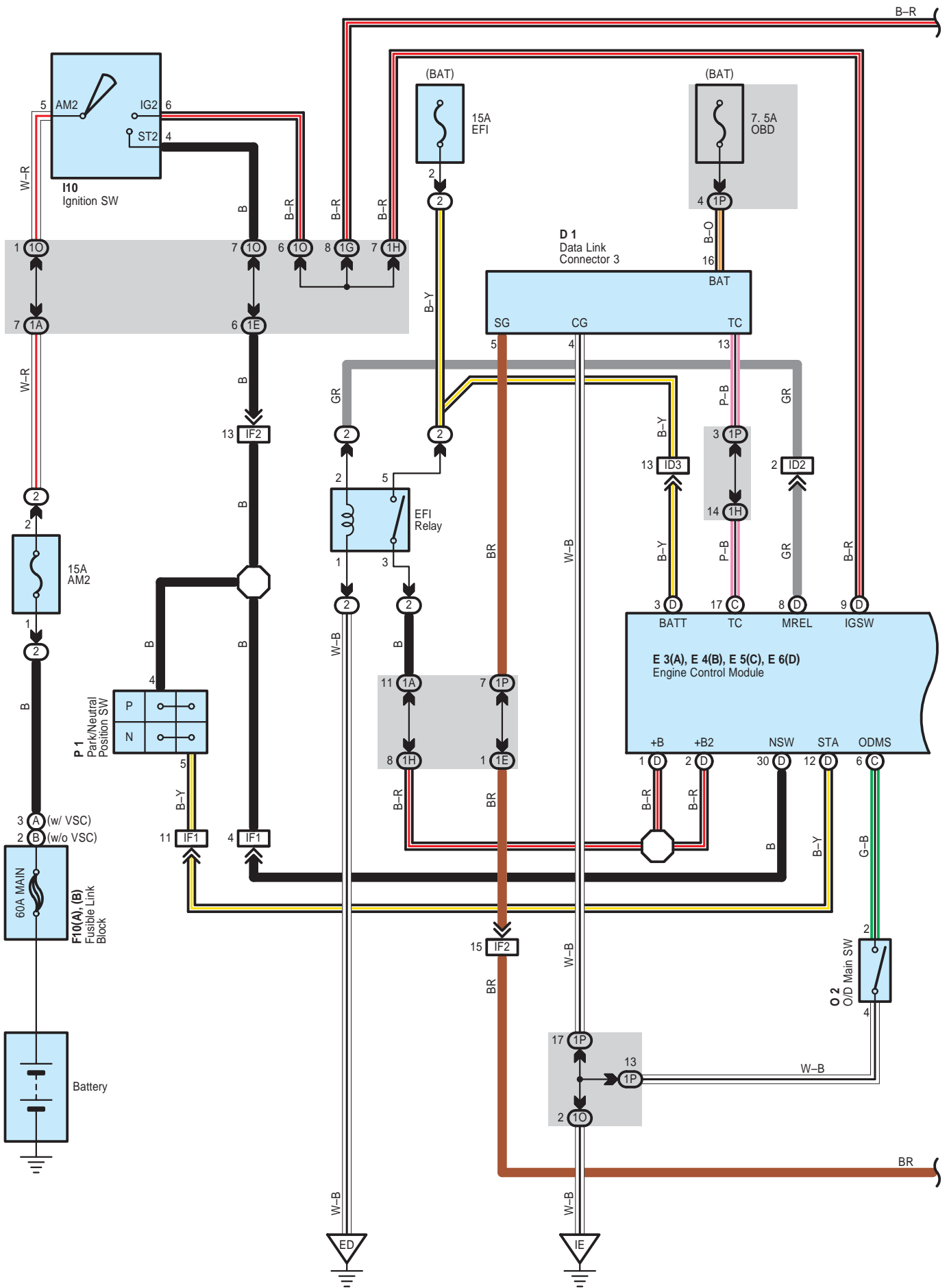
## : Connector Joining Wire Harness and Wire Harness

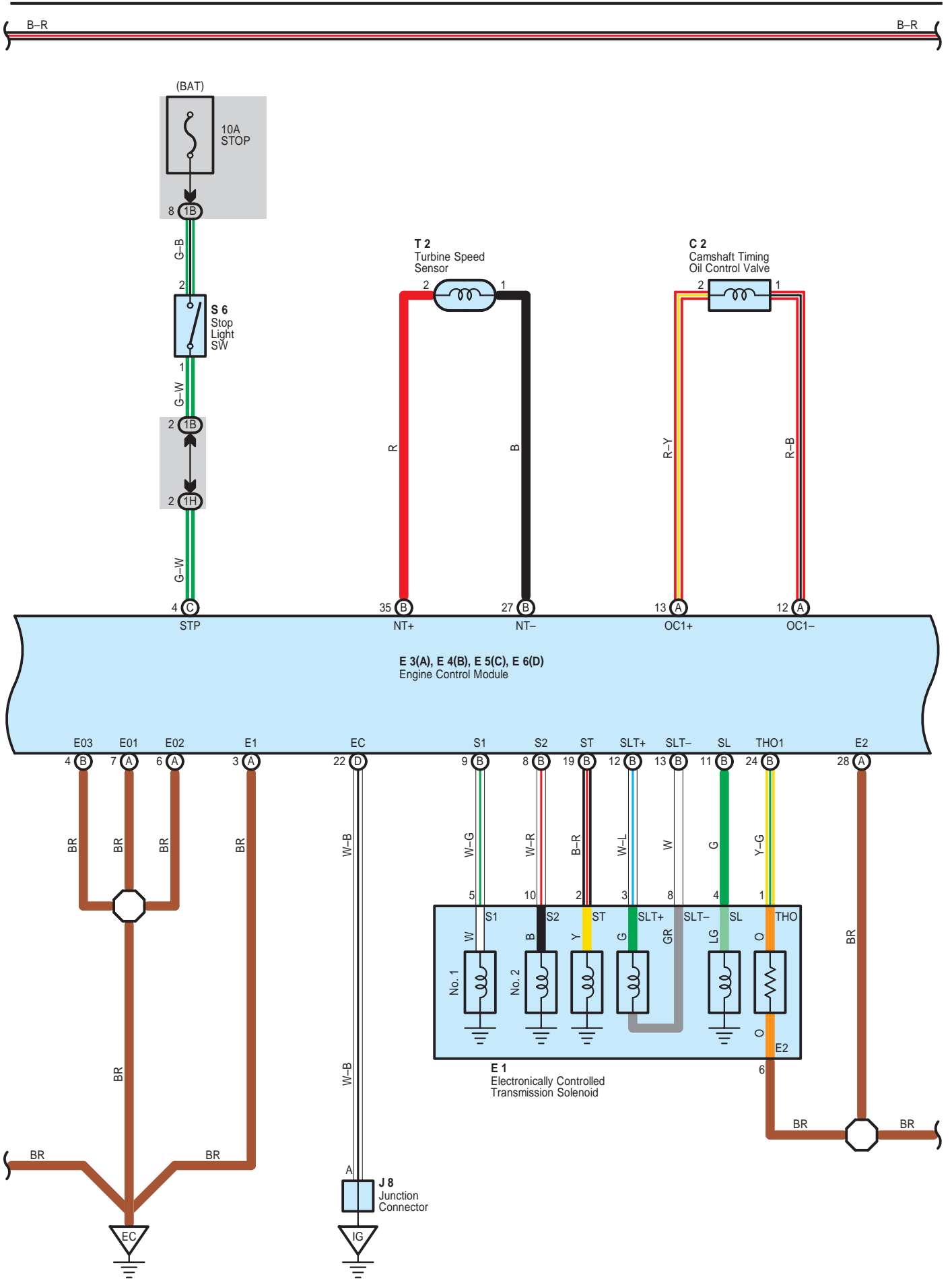
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IB2	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IH1	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IH2		
BA1	38	Rear Door LH Wire and Floor Wire (Center Pillar LH)
BB1	38	Rear Door RH Wire and Floor Wire (Center Pillar RH)
BE3	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)

## : Ground Points

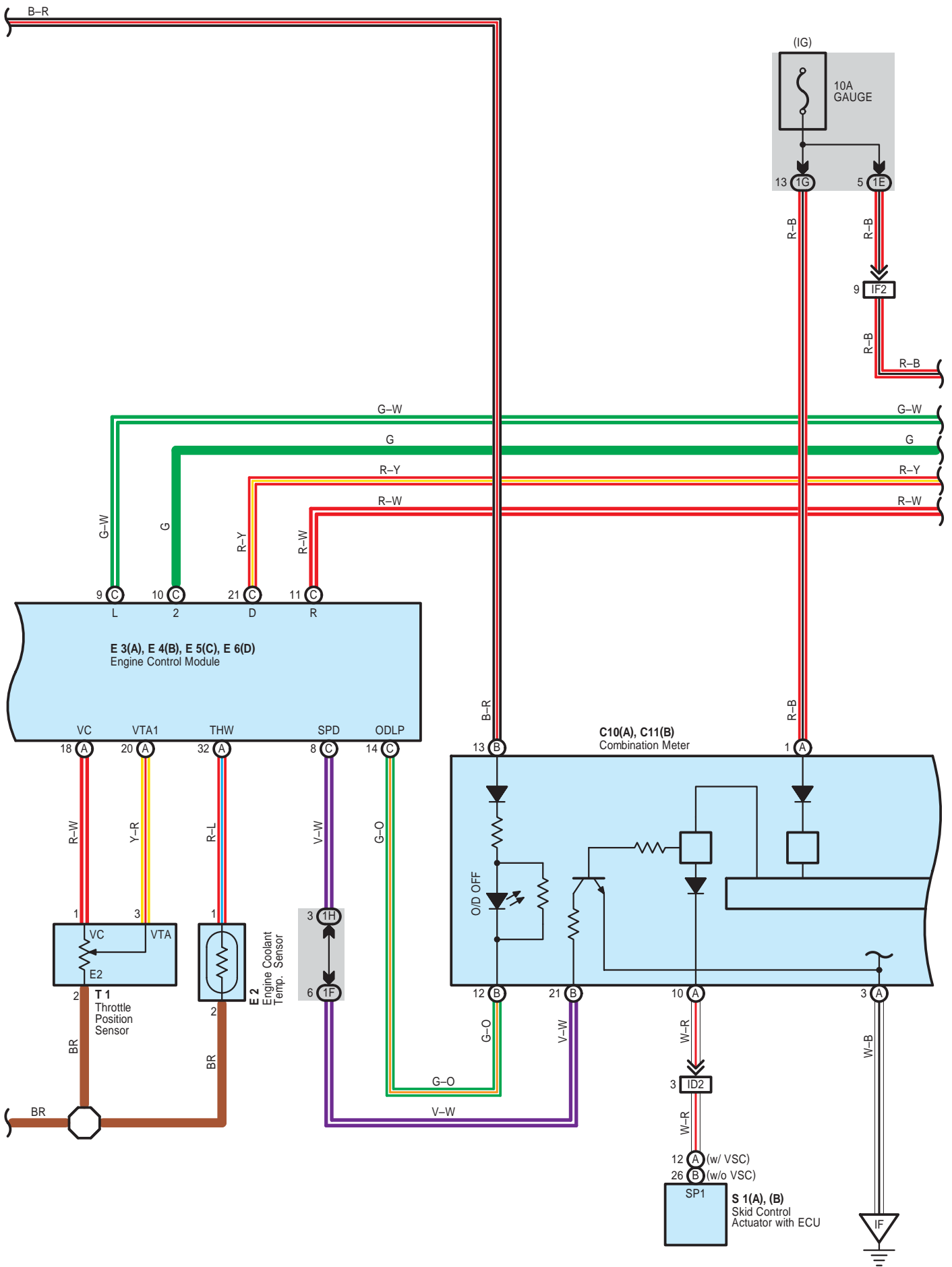
Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IG	36	Right Kick Panel

# ECT and A/T Indicator

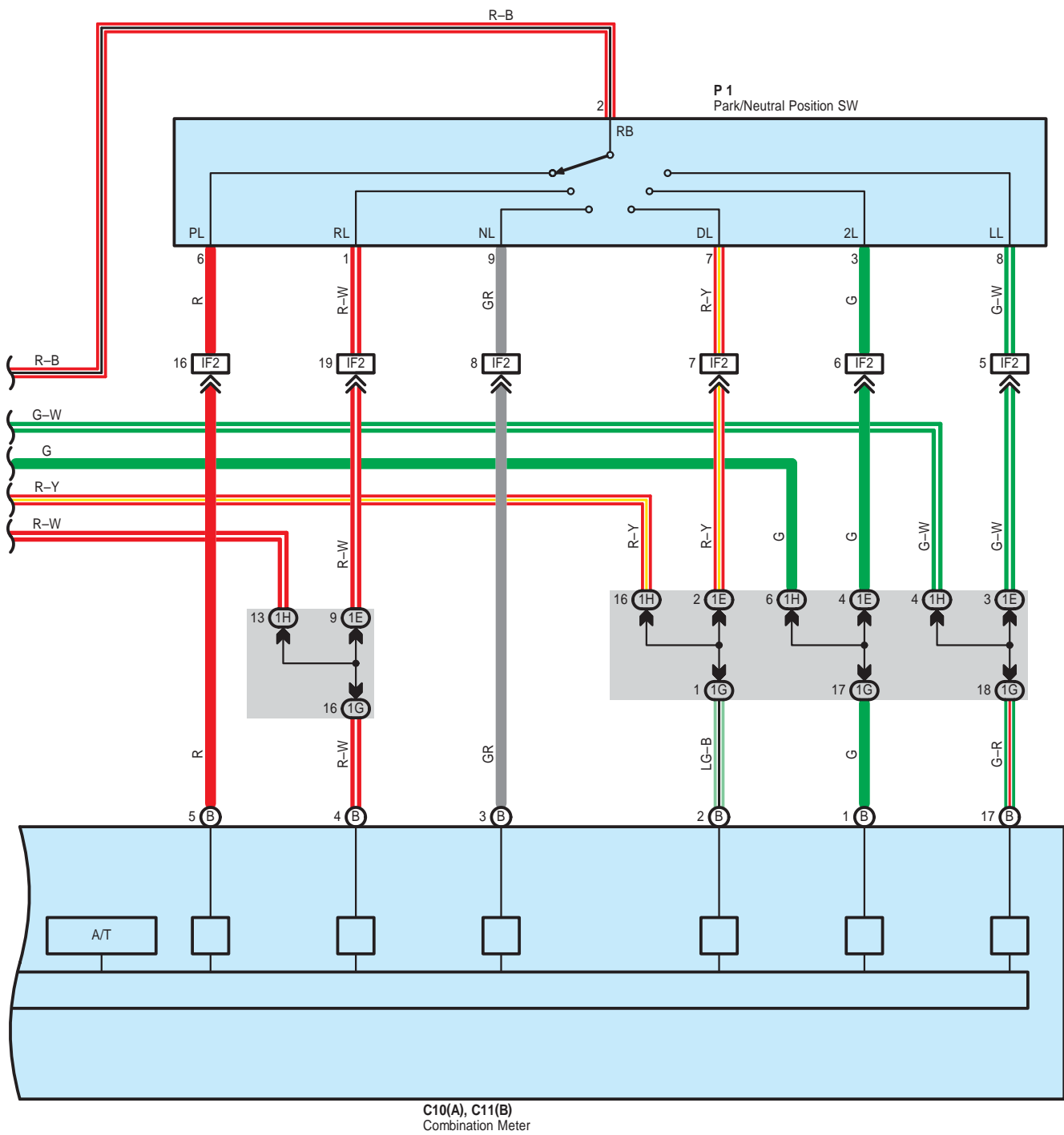




# ECT and A/T Indicator







## System Outline

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

### 1. Gear Shift Operation

During driving, the engine control module selects the shift for each gear which is most appropriate to the driving conditions, based on input signals from the engine coolant temp. sensor to TERMINAL THW of the engine control module, and also the input signals to TERMINAL NT+ of the engine control module from the turbine speed sensor devoted to the direct clutch. Current is then output to the electronically controlled transmission solenoid. When shifting to 1st gear, current flows from TERMINAL S1 of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to GROUND, and from TERMINAL S2 of the engine control module to TERMINAL 10 of the electronically controlled transmission solenoid to GROUND, and continuity to solenoids No.1 and No.2 causes the shift.

For the 2nd gear, current flows from TERMINAL S1 of the engine control module to TERMINAL 5 of the electronically controlled transmission solenoid to GROUND, and continuity to the solenoid No.1 causes the shift.

For the 3rd gear, there is no continuity to either No.1 or No.2 solenoid.

Shifting into 4th gear (Overdrive) takes place when current flows from TERMINAL S2 of the engine control module to TERMINAL 10 of the electronically controlled transmission solenoid to GROUND, and continuity to the solenoid No.2 causes the shift.

### 2. Lock-Up Operation

When the engine control module judges from each signal that lock-up operation conditions have been met, current flows from TERMINAL SL of the engine control module to TERMINAL 4 of the electronically controlled transmission solenoid to GROUND, causing continuity to the lock-up solenoid and causing lock-up operation.

### 3. Clutch Pressure Control

The electronically controlled transmission solenoid is controlled by the current from TERMINAL SL of the engine control module, and controls the accumulator hydraulic pressure.

As a result, the clutch to hydraulic pressure is adjusted precisely, and allows stable shift change.

### 4. Line Pressure Control

The electronically controlled transmission solenoid is controlled by the current from TERMINAL SLT+ of the engine control module, and controls the throttle hydraulic pressure.

As a result, the line pressure can be controlled precisely, and the to hydraulic pressure is adjusted according to the shift change condition, and allows smooth shift change.

### 5. Shifting Control in Uphill/Downhill Traveling

This system determines whether the vehicle is traveling on an incline or decline from the throttle opening angle, vehicle acceleration condition and brake pedal operation, and controls the shift up to O/D to allow smooth driving.

### 6. Clutch to Clutch Control

When shifting from the 3rd gear to the 4th gear, the current from the engine control module TERMINAL ST controls the electronically controlled transmission solenoid, to control the drain orifice hydraulic pressure (Switch orifice). The electronically controlled transmission solenoid is also controlled by the current from the engine control module TERMINAL SLT+, to adjust the hydraulic pressure precisely, which ensures smooth shifting.

### 7. Stop Light SW Circuit

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

### 8. Overdrive Circuit

#### \* Overdrive on

When the engine is turned on from ignition off, the engine control module turns the O/D on. When the O/D main SW is pushed while the O/D is off, a signal is input into TERMINAL ODMS of the engine control module, and the O/D is turned on by the engine control module. In this case, the engine control module controls the gear shift according to the vehicle's driving condition, using the O/D range. At this time, the O/D off indicator light is off.

#### \* Overdrive off

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

 : Parts Location

Code	See Page	Code	See Page	Code	See Page
C2	28	E4	B 30	O2	31
C10	A 30	E5	C 30	P1	29
C11	B 30	E6	D 30	S1	A 29
D1	30	F10	A 28		B 29
E1	28		B 28	S6	31
E2	28	I10	31	T1	29
E3	A 30	J8	31	T2	29

 : Relay Blocks

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

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1B		
1E	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1F		
1G		
1H		
1O		
1P		

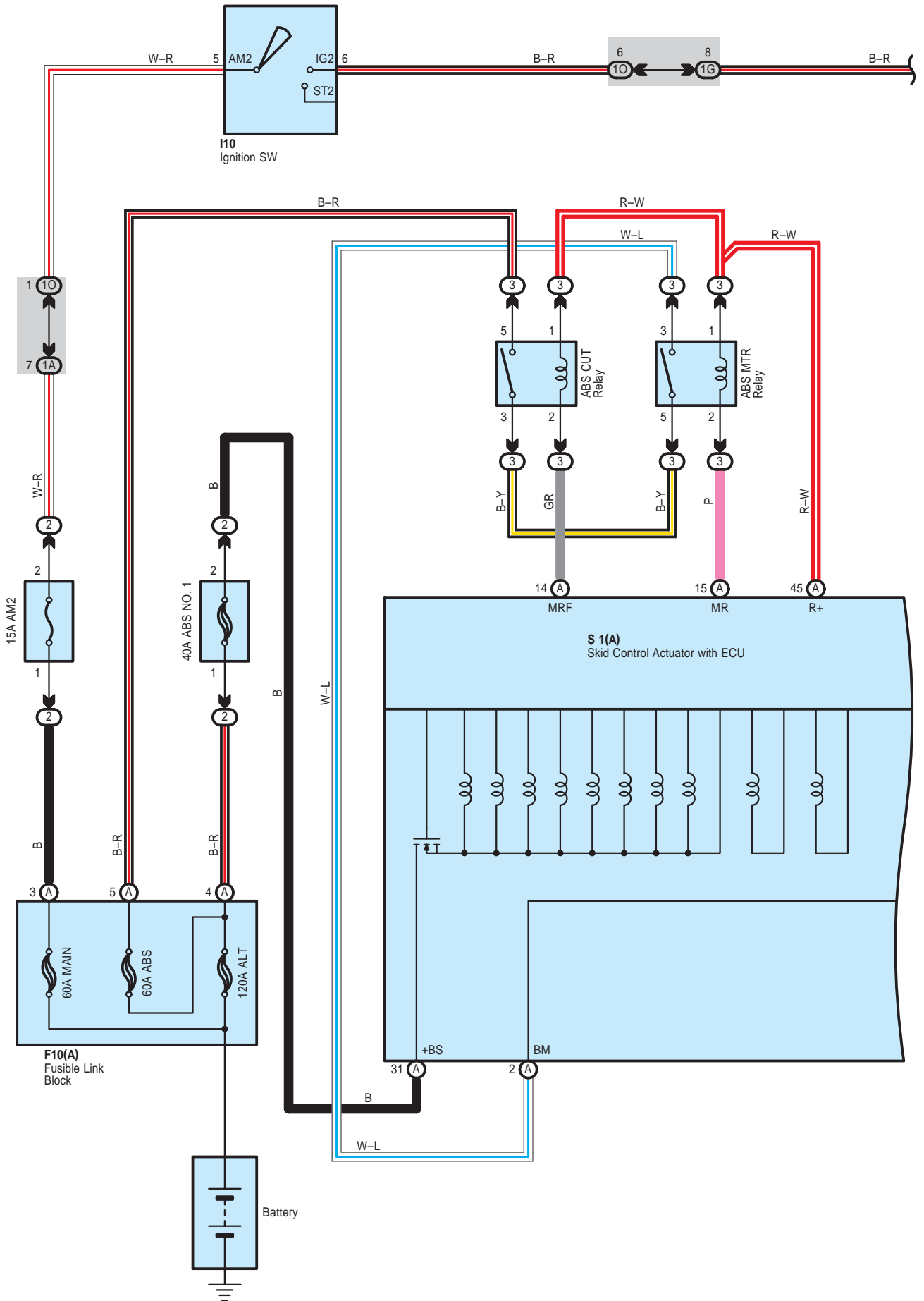
 : Connector Joining Wire Harness and Wire Harness

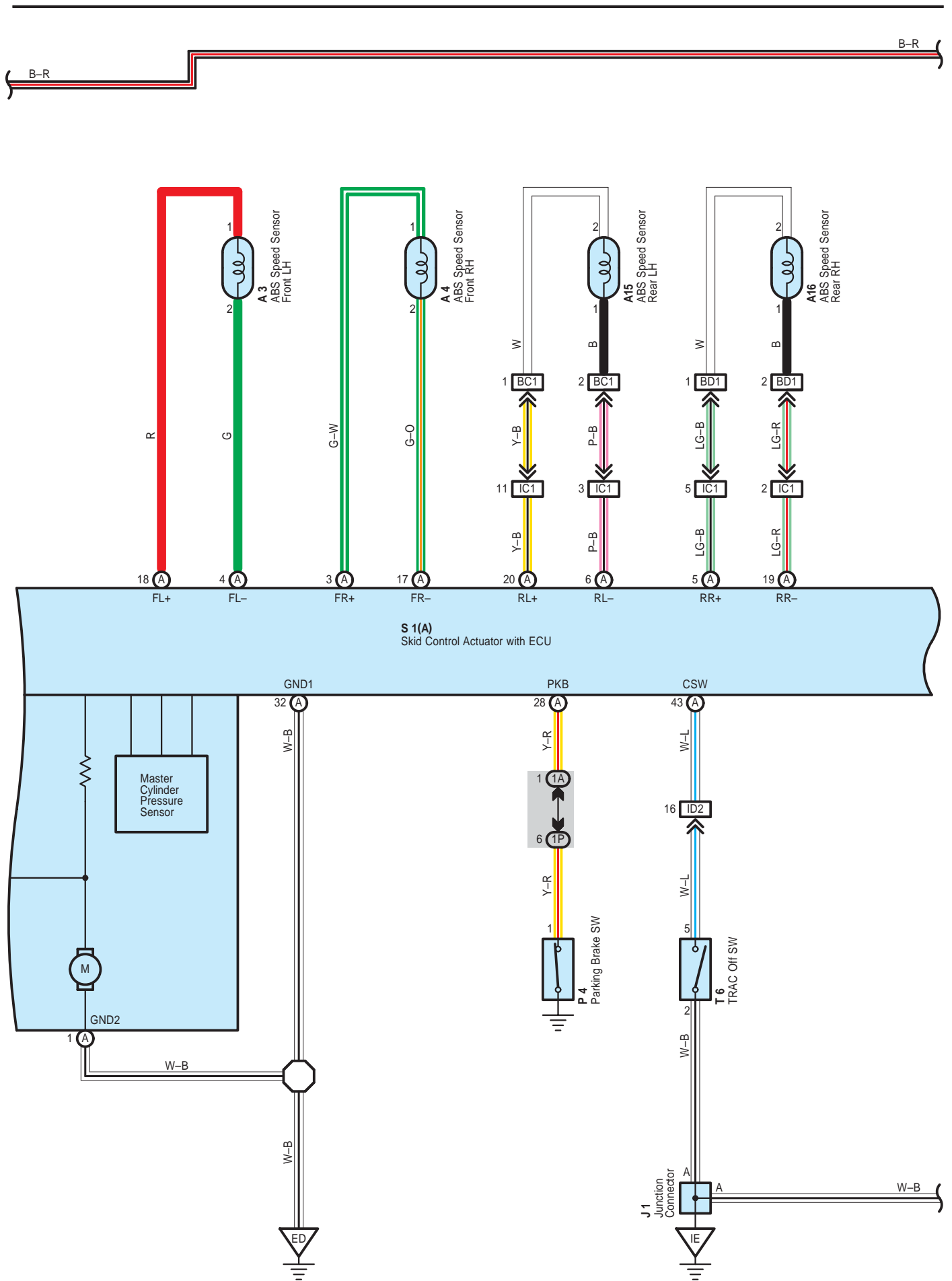
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID3		
IF1	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IF2		

 : Ground Points

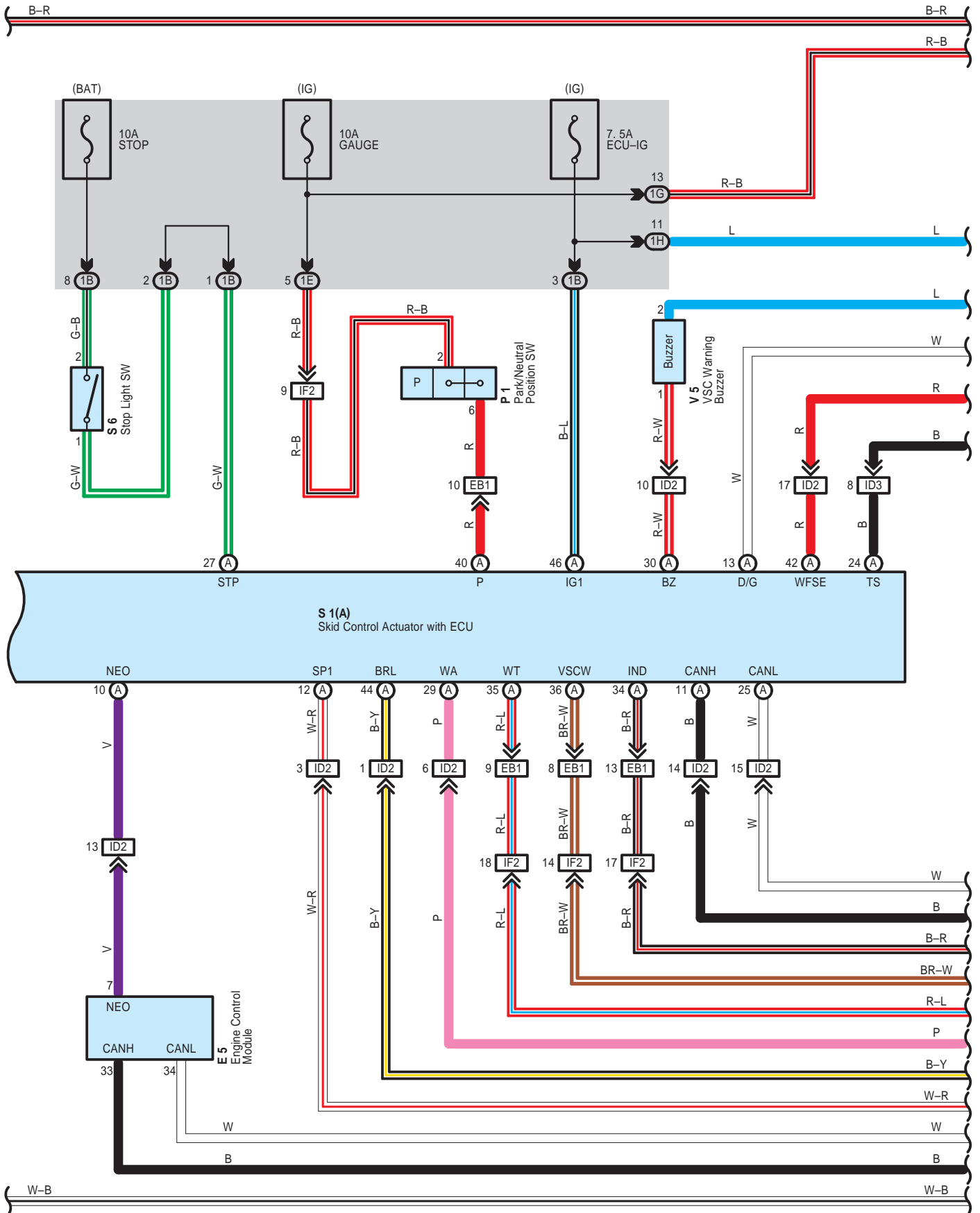
Code	See Page	Ground Points Location
EC	34	Cylinder Head
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
IG	36	Right Kick Panel

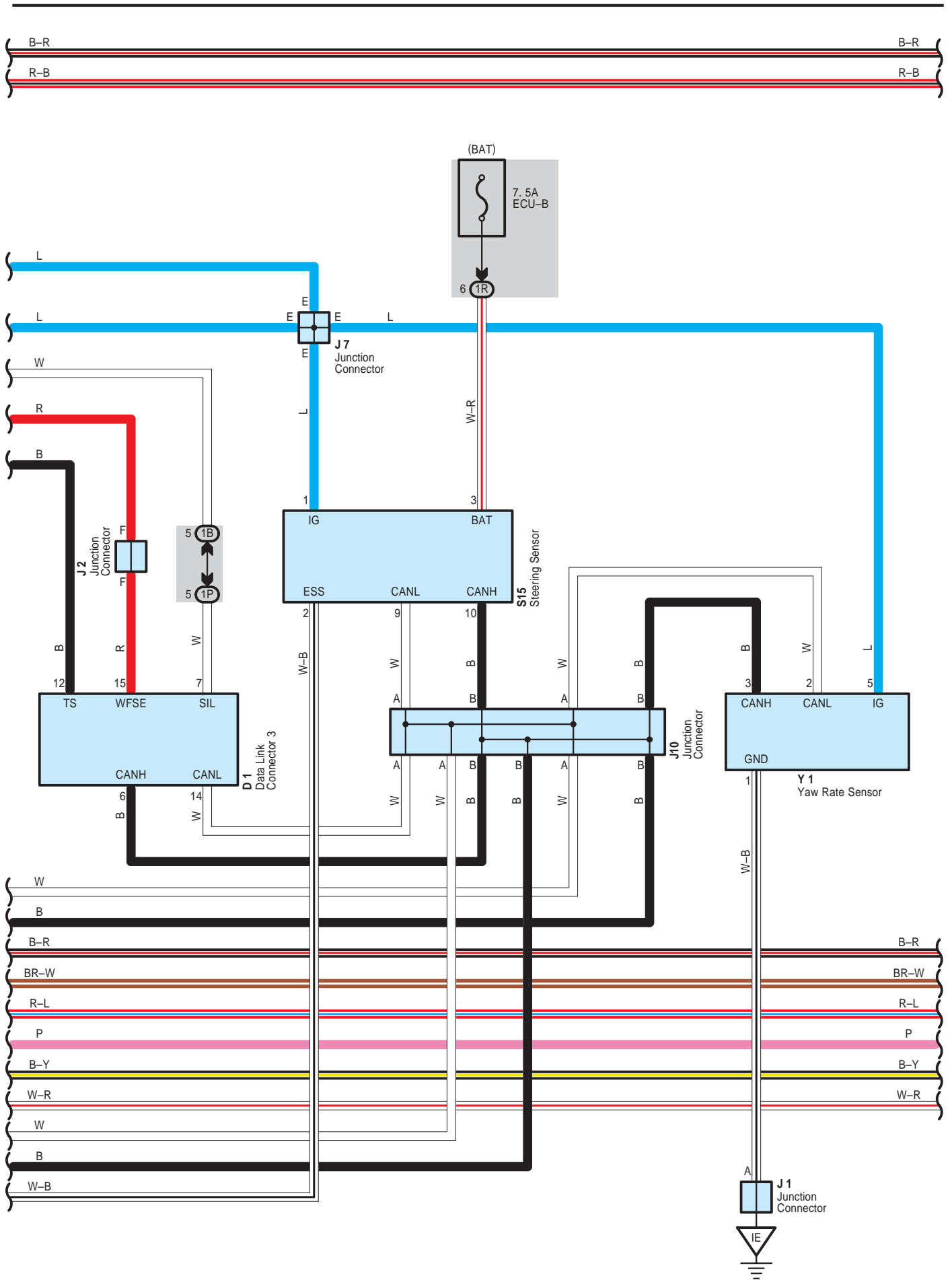
# ABS, TRAC and VSC



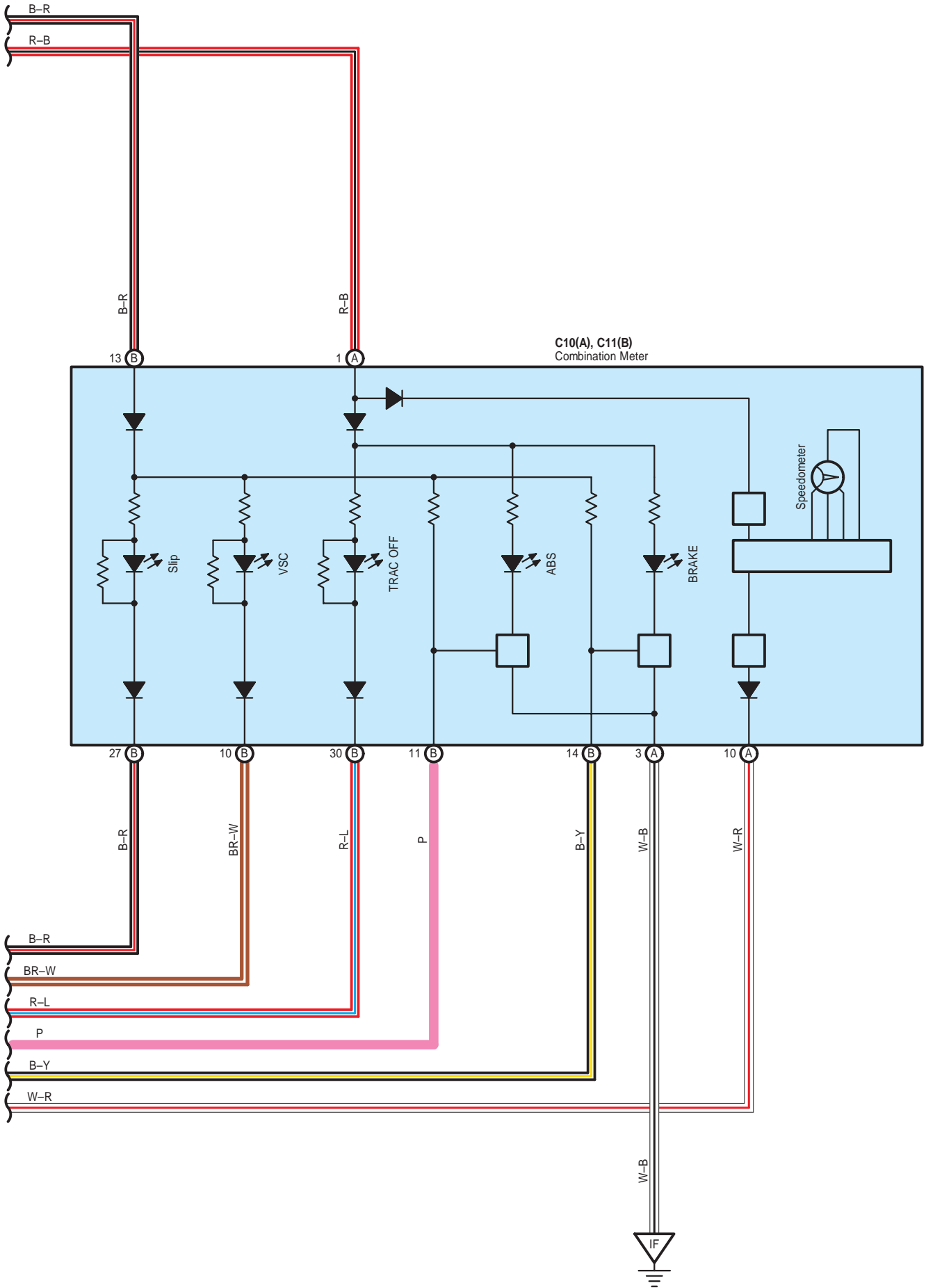


# ABS, TRAC and VSC





# ABS, TRAC and VSC





## 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 actuator with 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 actuator with ECU detects that the fluid pressure in the wheel cylinder is insufficient, the skid control actuator with 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.

TRAC OFF SW

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

VSC system cannot cut off by using TRAC OFF SW.

### 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 actuator with ECU, sensor signals, and/or actuators, the skid control actuator with ECU inhibits the brake actuator control and inputs the error signal to the engine control module. According to the error signal, the brake actuator turns off the solenoid and the engine control module rejects any electronically controlled throttle open request from the VSC system. As a result, the vehicle functions regardless of the ABS, TRAC, and VSC systems.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	28	F10   A	28	S1   A	29
A4	28	I10	31	S6	31
A15	32	J1	31	S15	31
A16	32	J2	31	T6	31
C10   A	30	J7	31	V5	31
C11   B	30	J10	31	Y1	31
D1	30	P1	29		
E5	30	P4	31		

# ABS, TRAC and VSC

## : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	ABS R/B (Engine Compartment Right)

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1B		
1E	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1H		
1O		
1P		
1R		

## : Connector Joining Wire Harness and Wire Harness

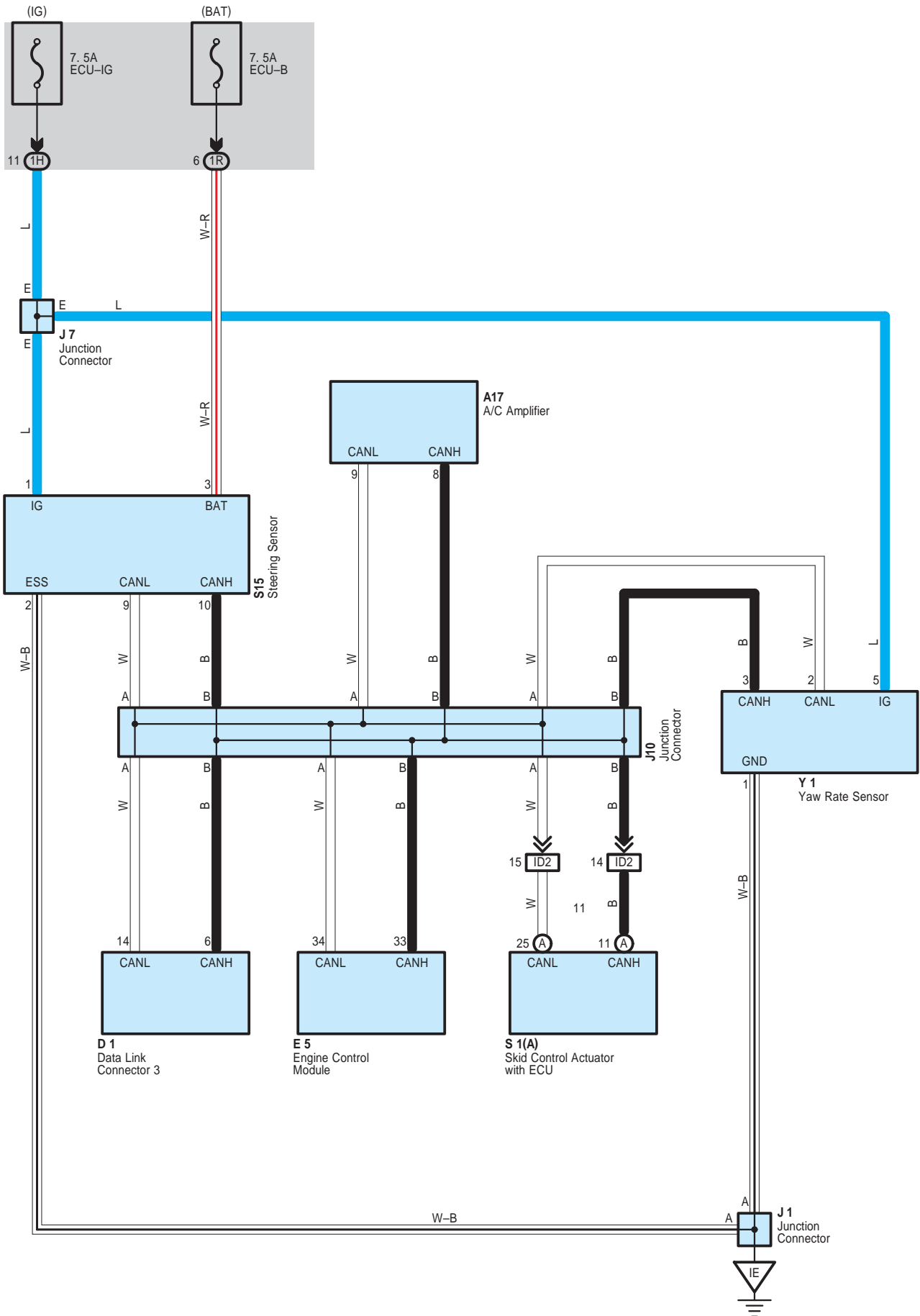
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	34	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IC1	36	Engine Room Main Wire and Floor Wire (Left Side of the Cowl Panel)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID3		
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
BC1	38	Skid Control Sensor Rear LH Wire and Floor Wire (Front Side of the Quarter Wheel House Inner Panel LH)
BD1	38	Skid Control Sensor Rear RH Wire and Floor Wire (Front Side of the Quarter Wheel House Inner Panel RH)

## : Ground Points

Code	See Page	Ground Points Location
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH



# Multiplex Communication System – CAN



## System Outline

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

This system is working for the following systems:

- \* ABS
- \* Air Conditioning
- \* Engine Control
- \* TRAC
- \* VSC

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
A17	30	J1	31	S1   A	29
D1	30	J7	31	S15	31
E5	30	J10	31	Y1	31

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1R		

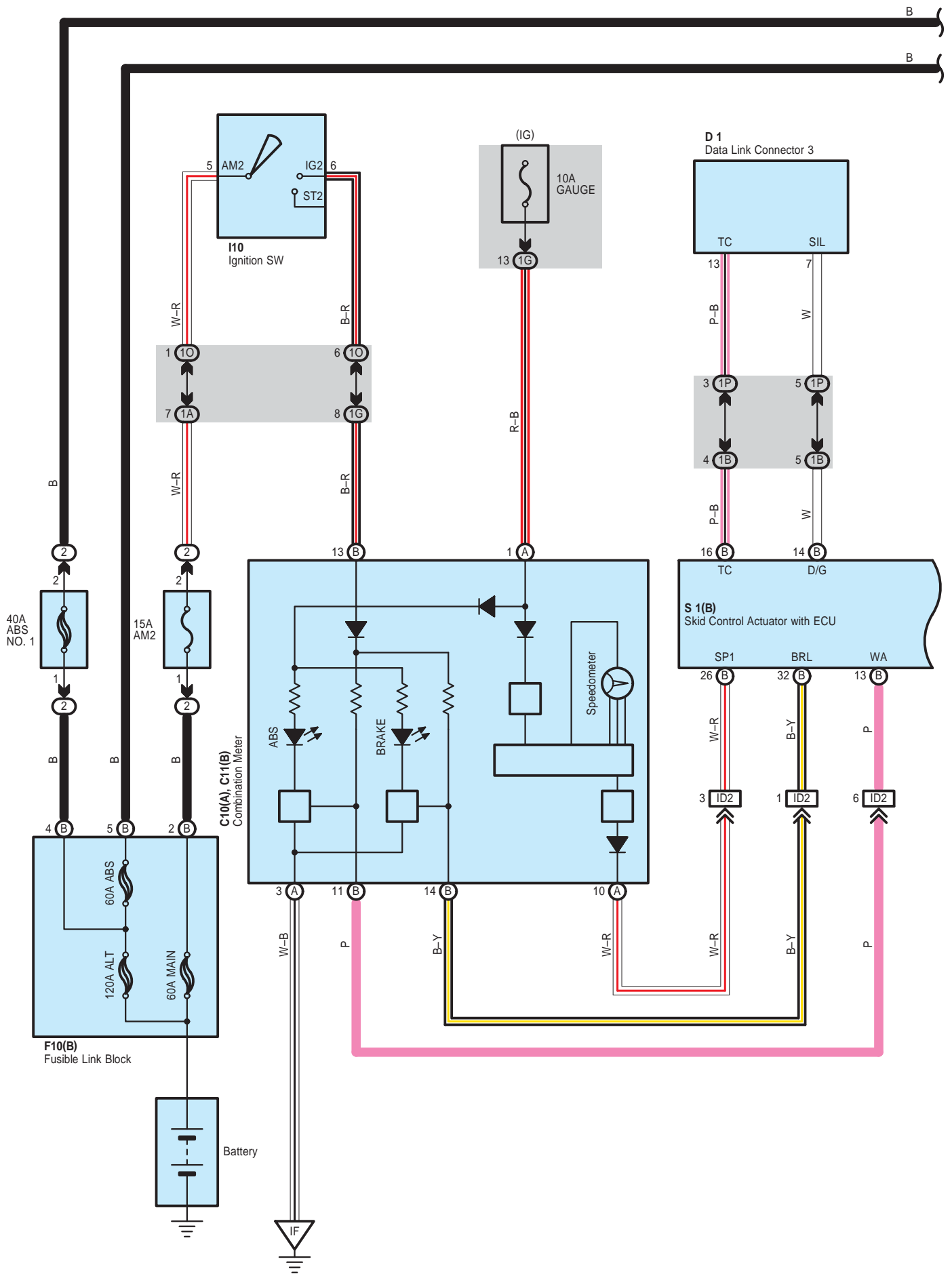
## : Connector Joining Wire Harness and Wire Harness

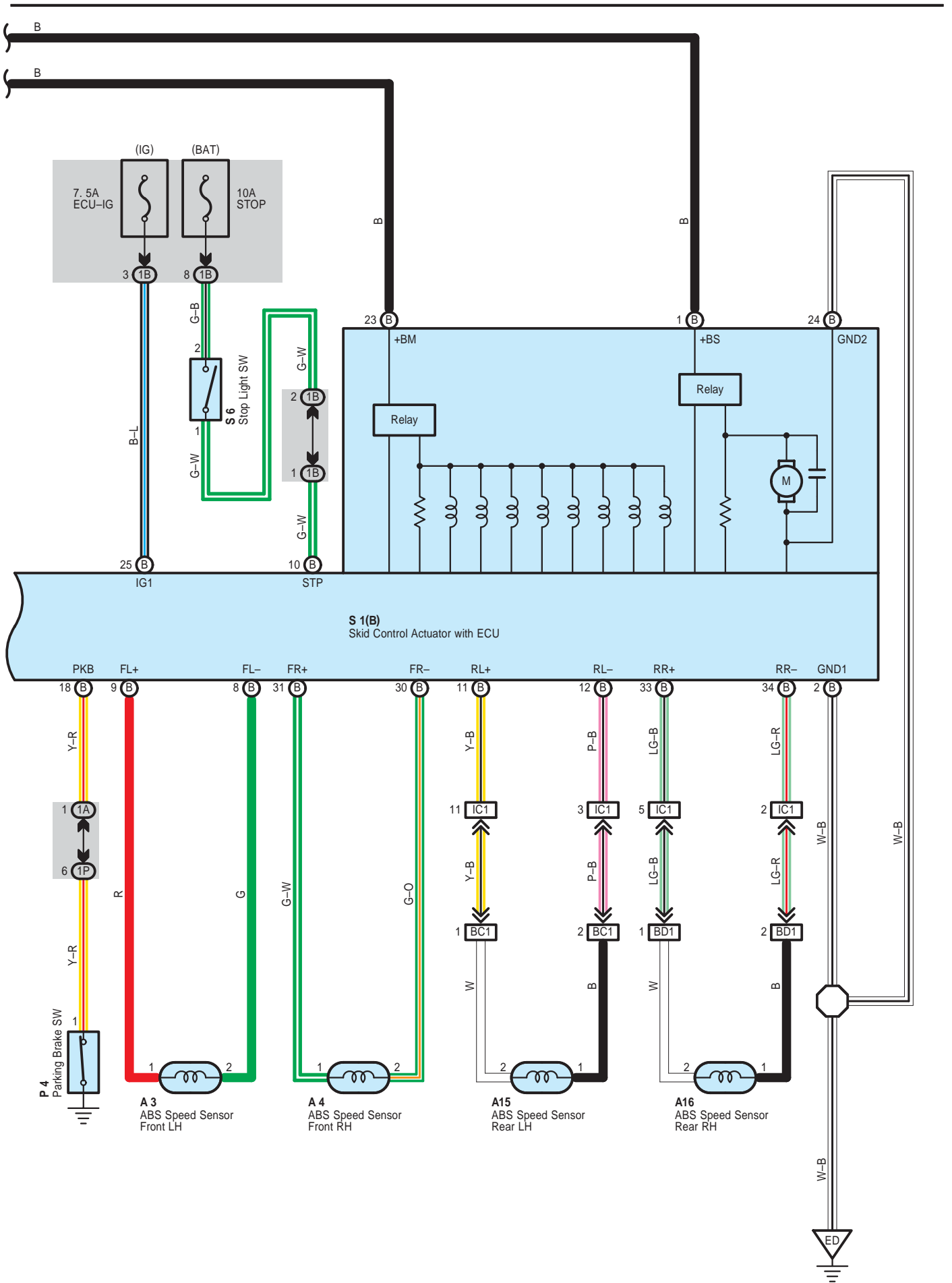
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

## : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# ABS without VSC





# ABS without VSC

## System Outline

This system controls the respective brake fluid pressures acting on the 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 skid control actuator with ECU.

#### (2) Stop light SW signal

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

### 2. System Operation

During sudden braking, the skid control 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 skid control 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 skid control 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		
A3	28	C10	A	30	I10	31	
A4	28	C11	B	30	P4	31	
A15	32	D1		30	S1	B	29
A16	32	F10	B	28	S6	31	

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1B		
1G		
1O	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	36	Engine Room Main Wire and Floor Wire (Left Side of the Cowl Panel)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
BC1	38	Skid Control Sensor Rear LH Wire and Floor Wire (Front Side of the Quarter Wheel House Inner Panel LH)
BD1	38	Skid Control Sensor Rear RH Wire and Floor Wire (Front Side of the Quarter Wheel House Inner Panel RH)

## ▽ : Ground Points

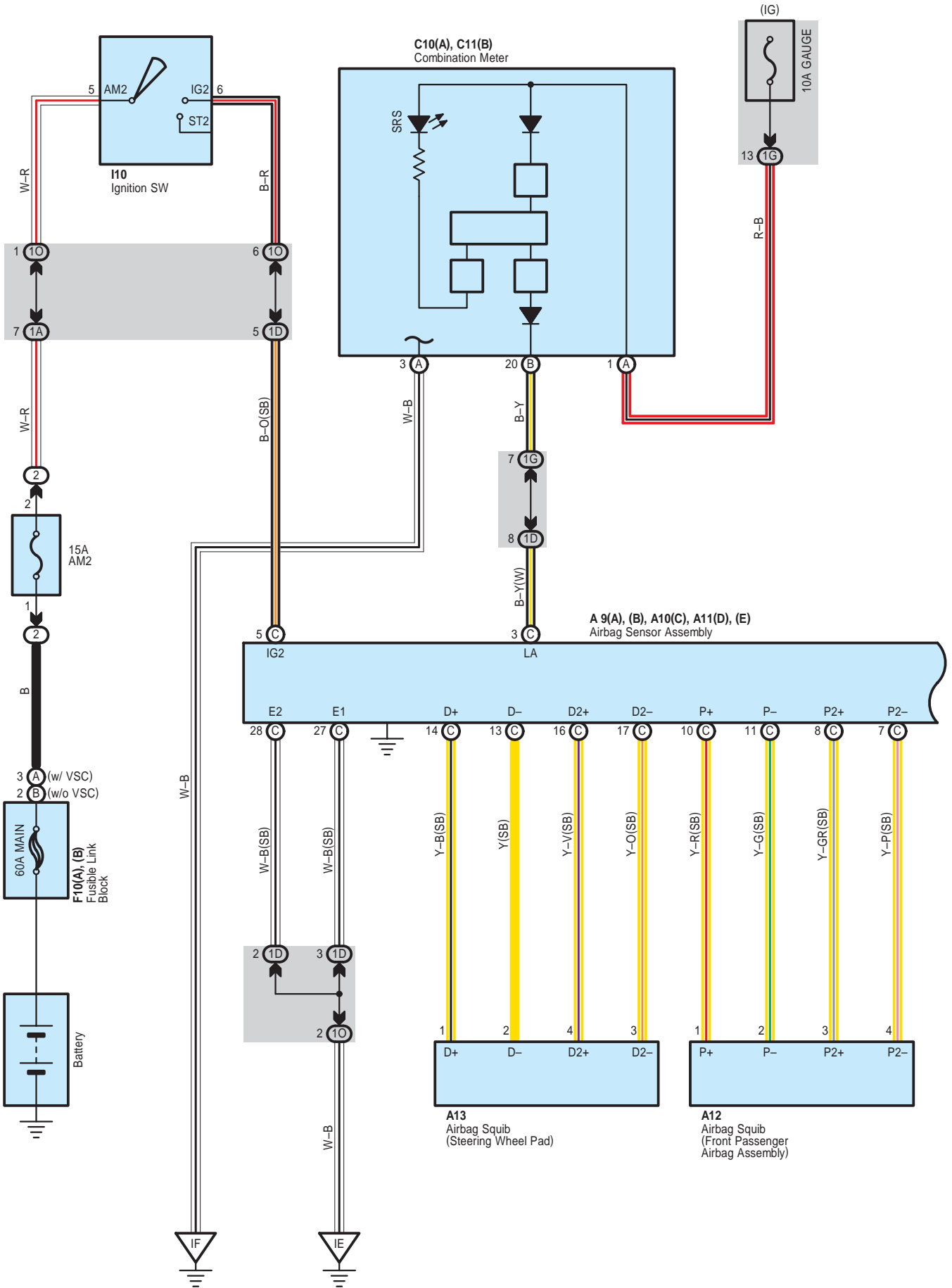
Code	See Page	Ground Points Location
ED	34	Front Fender Apron LH
IF	36	Instrument Panel Brace LH



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.

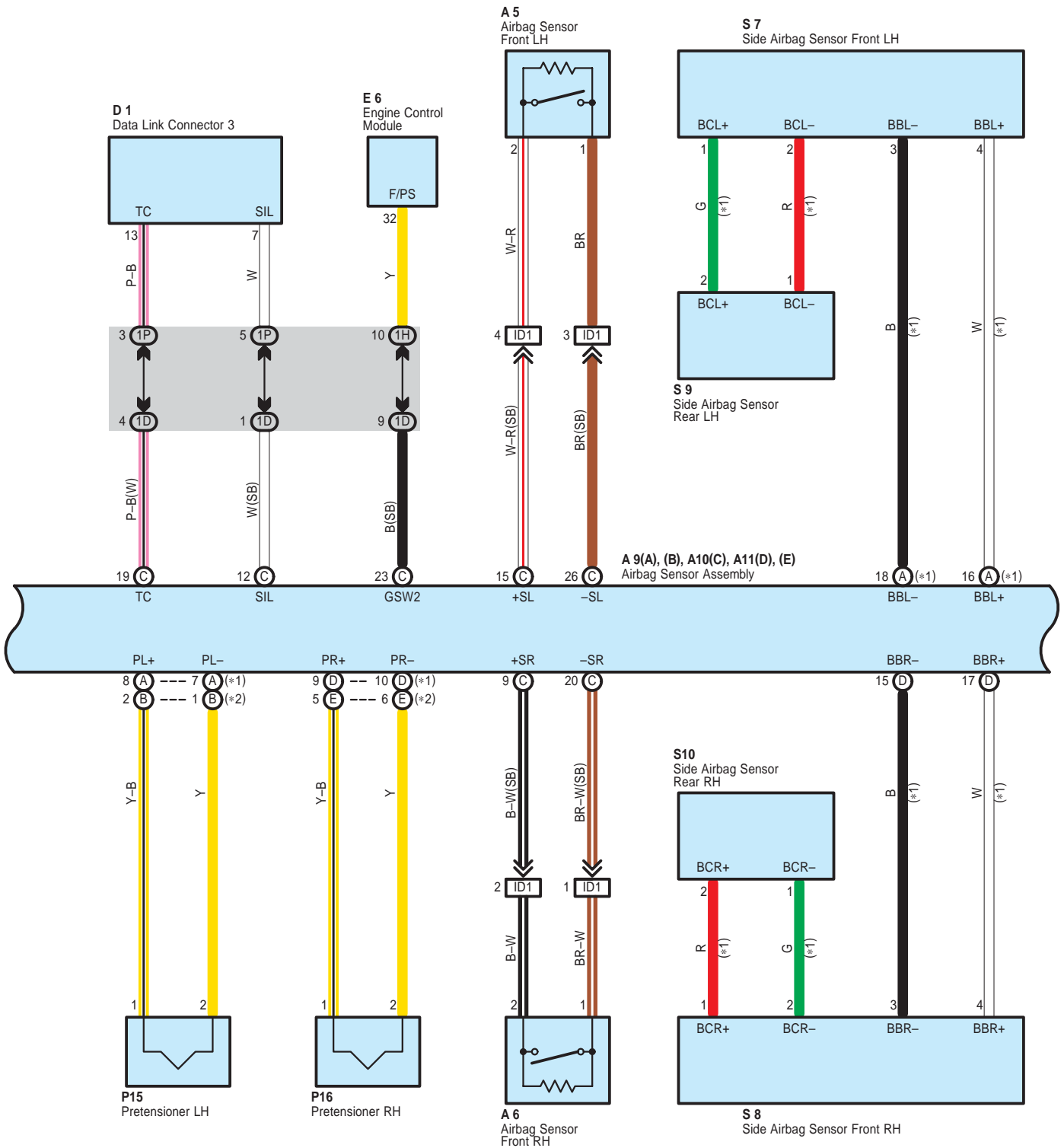
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is 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 k $\Omega$ /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

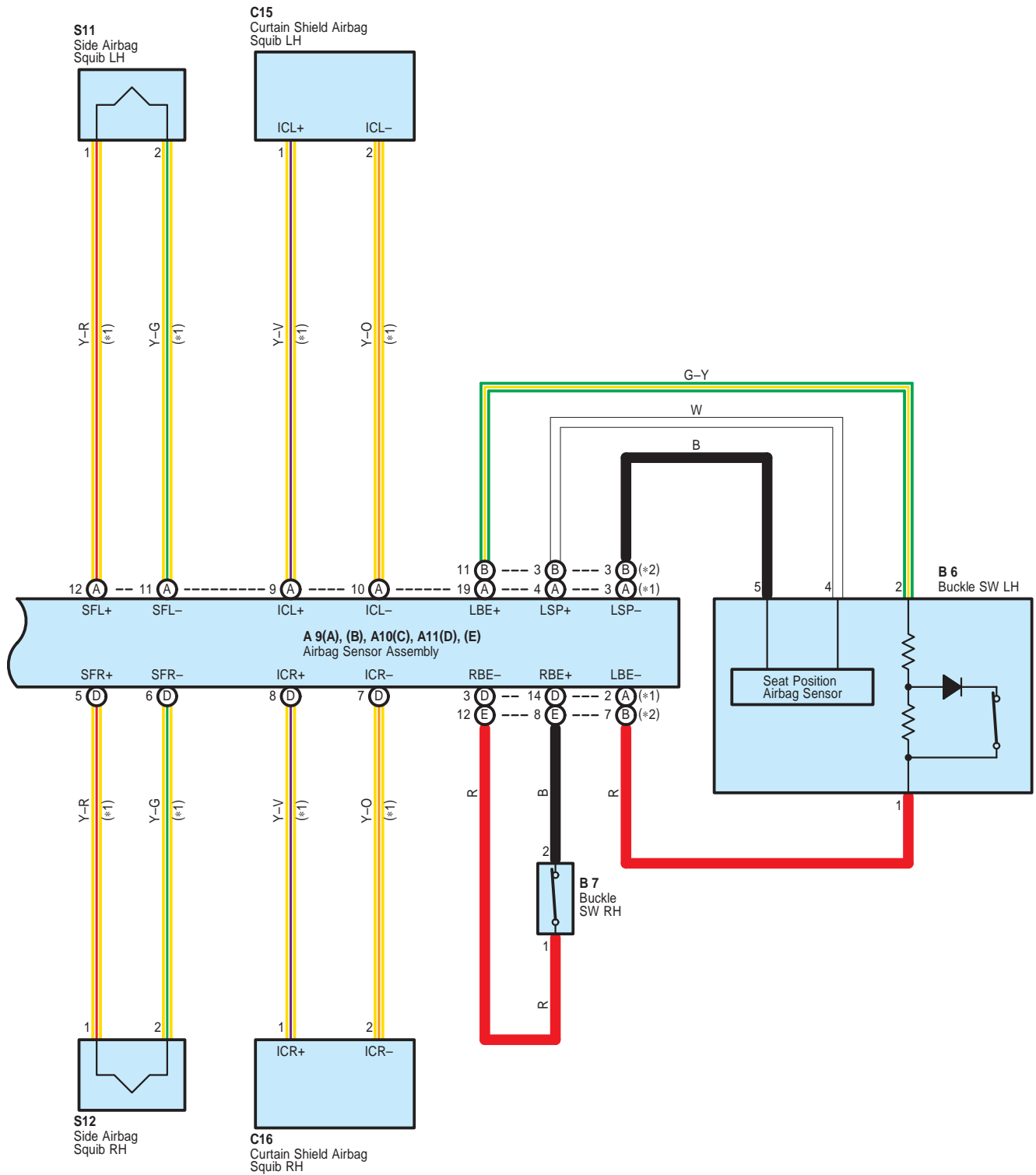


Note :  
 Since there is a case where the different wire color is used depending on the vehicle,  
 a wire color code like " G(SB)" is used in this manual.  
 Please refer to page 40 for details.

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



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



## System Outline

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

When the ignition SW is turned to ON, the current from the ignition SW flows to TERMINAL (C) 5 of the airbag sensor assembly.

If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the ignition SW flows to TERMINALS (C) 14, (C) 16, (C) 10, (C) 8, (A) 8 (w/ side airbag) or (B) 2 (w/o side airbag) and (D) 9 (w/ side airbag) or (E) 5 (w/o side airbag) of the airbag sensor assembly to the airbag squibs and the pretensioners to TERMINALS (C) 13, (C) 17, (C) 11, (C) 7, (A) 7 (w/ side airbag) or (B) 1 (w/o side airbag) and (D) 10 (w/ side airbag) or (E) 6 (w/o side airbag) of the airbag sensor assembly to TERMINAL (C) 27, (C) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them to operate.

When the side impact also exceeds a set level, the current from the ignition SW flows to TERMINALS (A) 12, (D) 5, (A) 9 and (D) 8 of the airbag sensor assembly to the side airbag squibs and the curtain shield airbag squibs TERMINALS (A) 11, (D) 6, (A) 10 and (D) 7 of the airbag sensor assembly to TERMINAL (C) 27, (C) 28 or BODY GROUND to GROUND, causing side airbag squibs and curtain shield airbag squibs to operate.

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

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

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

The curtain shield airbag can ease an impact on the head of the front and rear passengers and reduce risks of injury.

The pretensioners make sure of the seat belt restrainability.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A5	28	B7	32	P15	33
A6	28	C10	A 30	P16	33
A9	A 30	C11	B 30	S7	33
	B 30	C15	32	S8	33
A10	C 30	C16	32	S9	33
A11	D 30	D1	30	S10	33
	E 30	E6	30	S11	33
A12	30	F10	A 28	S12	33
A13	30		B 28		
B6	32	I10	31		

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1D	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1H		
1O		
1P		

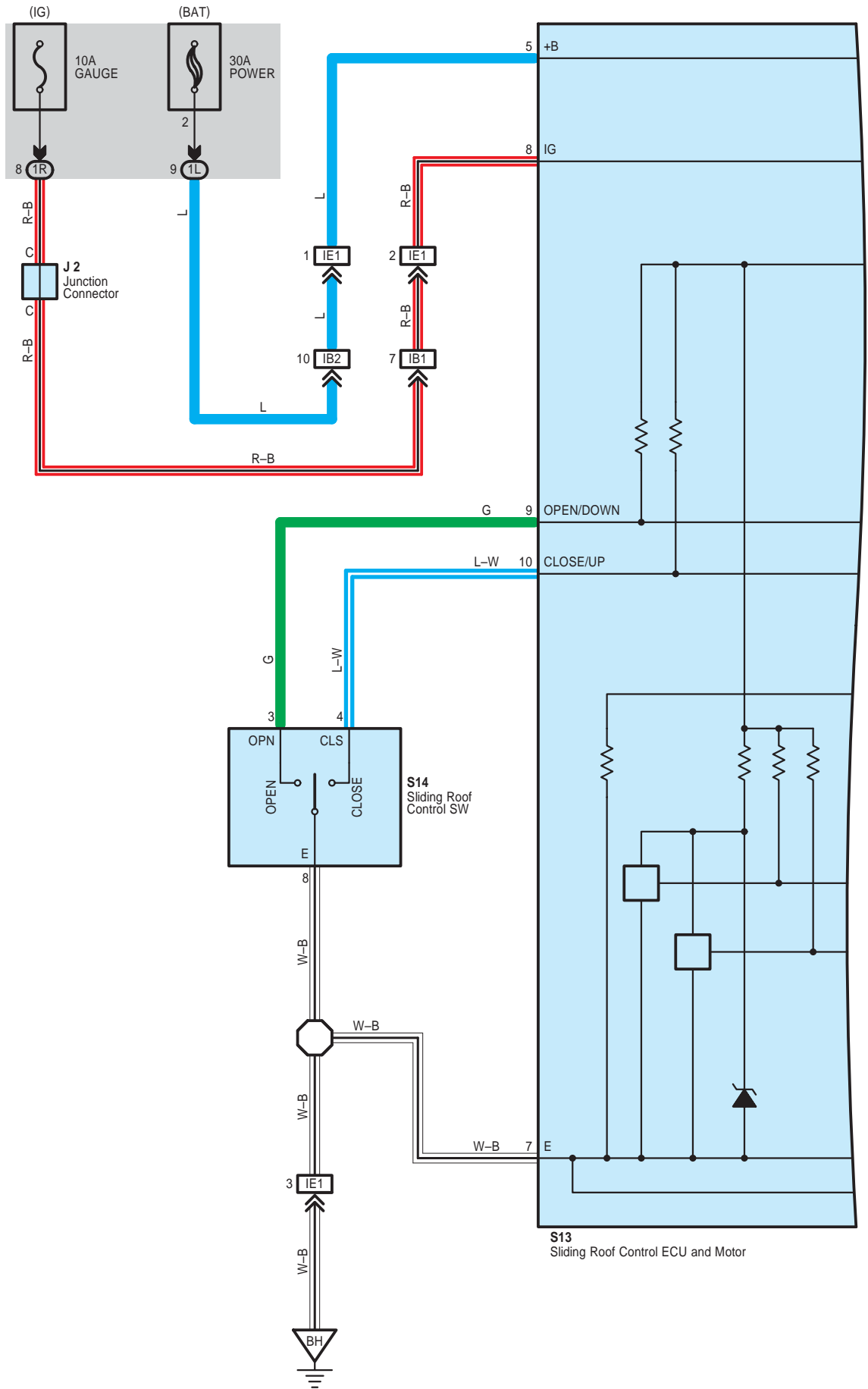
## □ : Connector Joining Wire Harness and Wire Harness

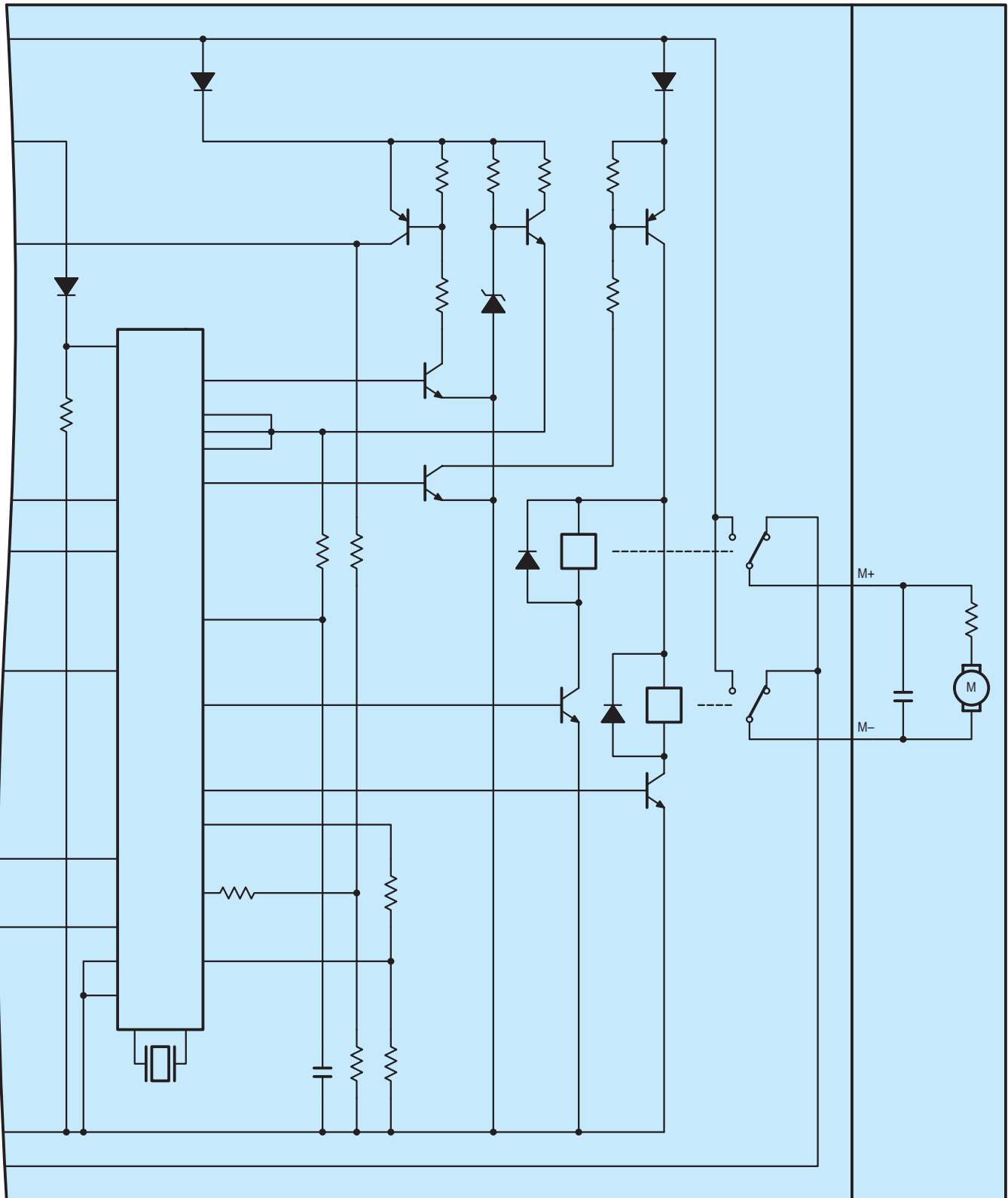
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

## ▽ : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH

# Sliding Roof





S13  
Sliding Roof Control ECU and Motor

# Sliding Roof

## System Outline

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

### 1. Slide Open Operation

The sliding roof fully opens automatically by pressing the OPEN button of the sliding roof control SW once. The sliding roof opens half and stops the operation once. If the sliding roof control switch is pressed again when the sliding roof is operating, the movement of the sliding roof stops.

### 2. Slide Close Operation

If you keep pressing the CLOSE button of the sliding roof control SW when the sliding roof is closes.

### 3. Tilt Up Operation

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

### 4. Tilt Down Operation

If you press the OPEN button when the TILT UP of the sliding roof control SW is pressed, the sliding roof is tilted down.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J2	31	S13	33	S14	33

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1R		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IB2		
IE1	37	Roof Wire and Floor Wire (Upper Side of the Cowl Side Panel LH)

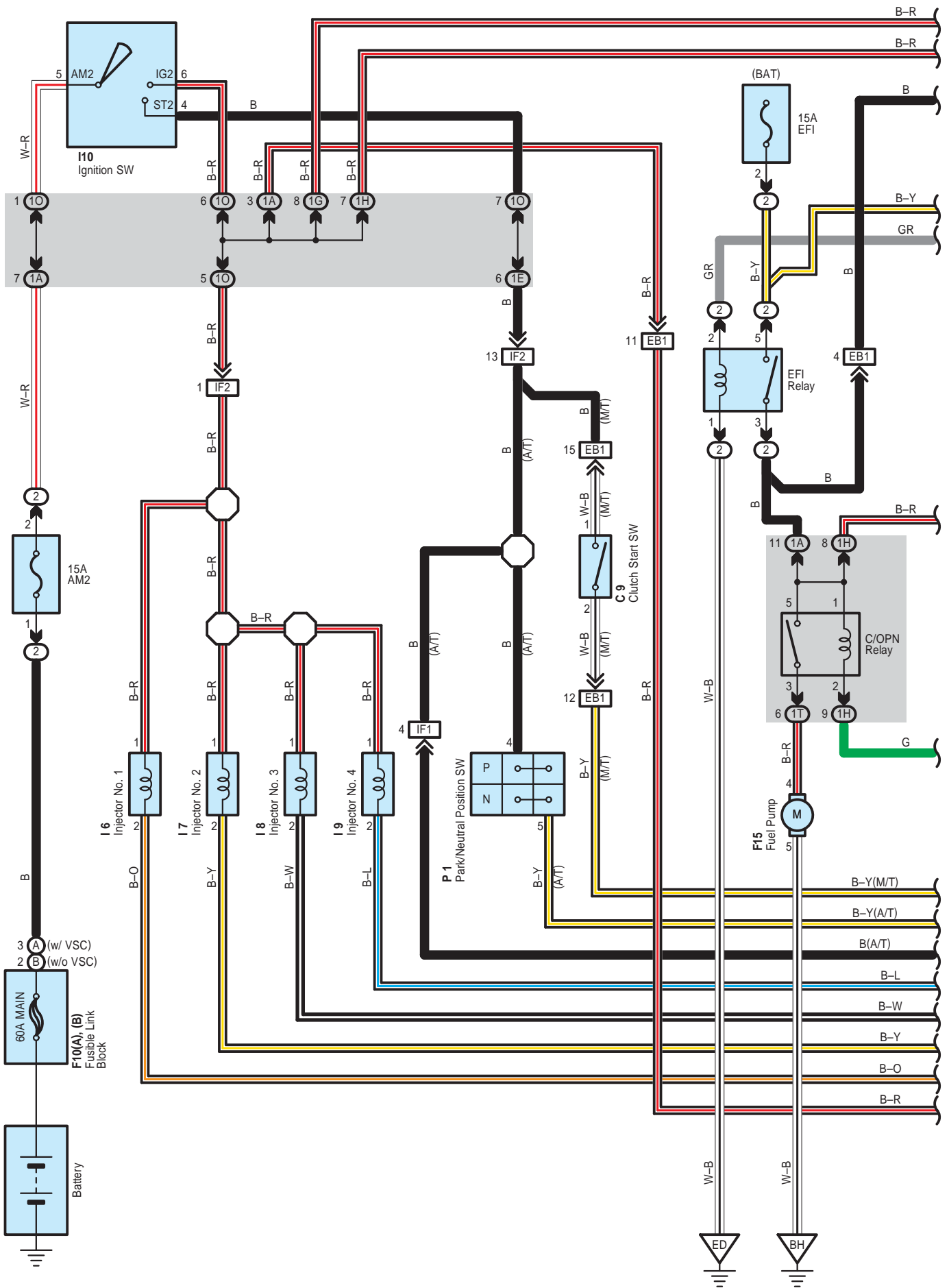
## ▽ : Ground Points

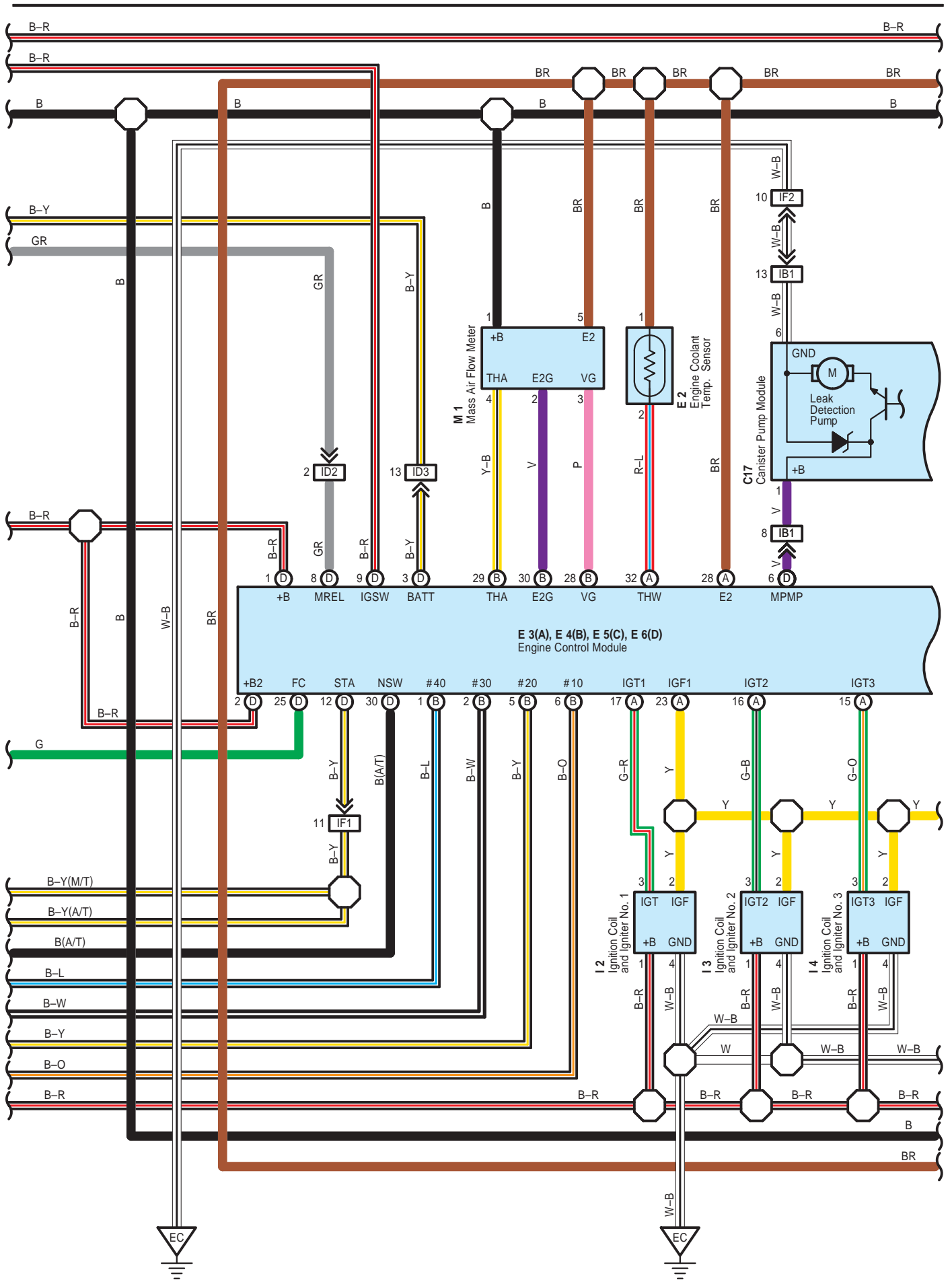
Code	See Page	Ground Points Location
BH	38	Left Quarter Pillar



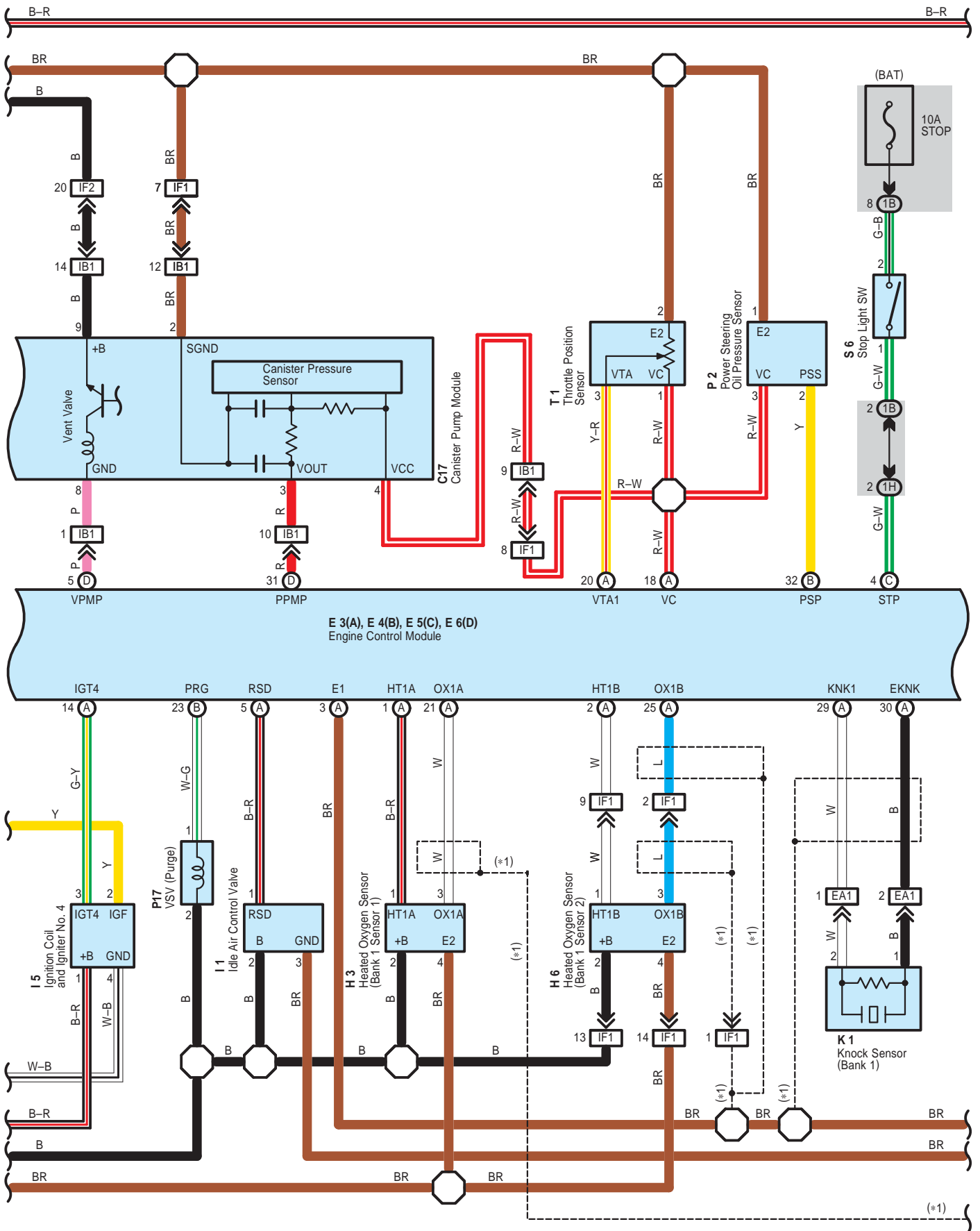


# Engine Control



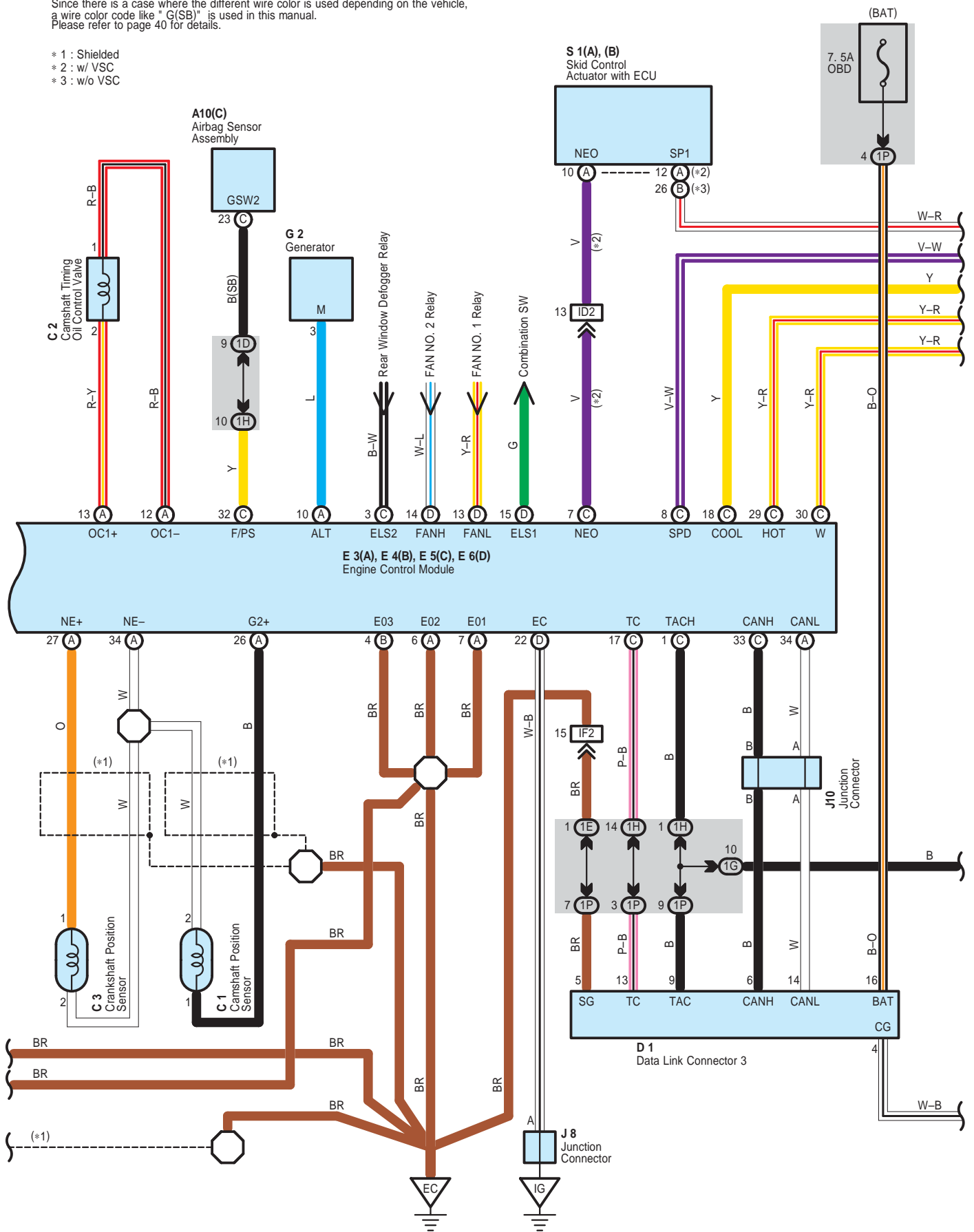


# Engine Control

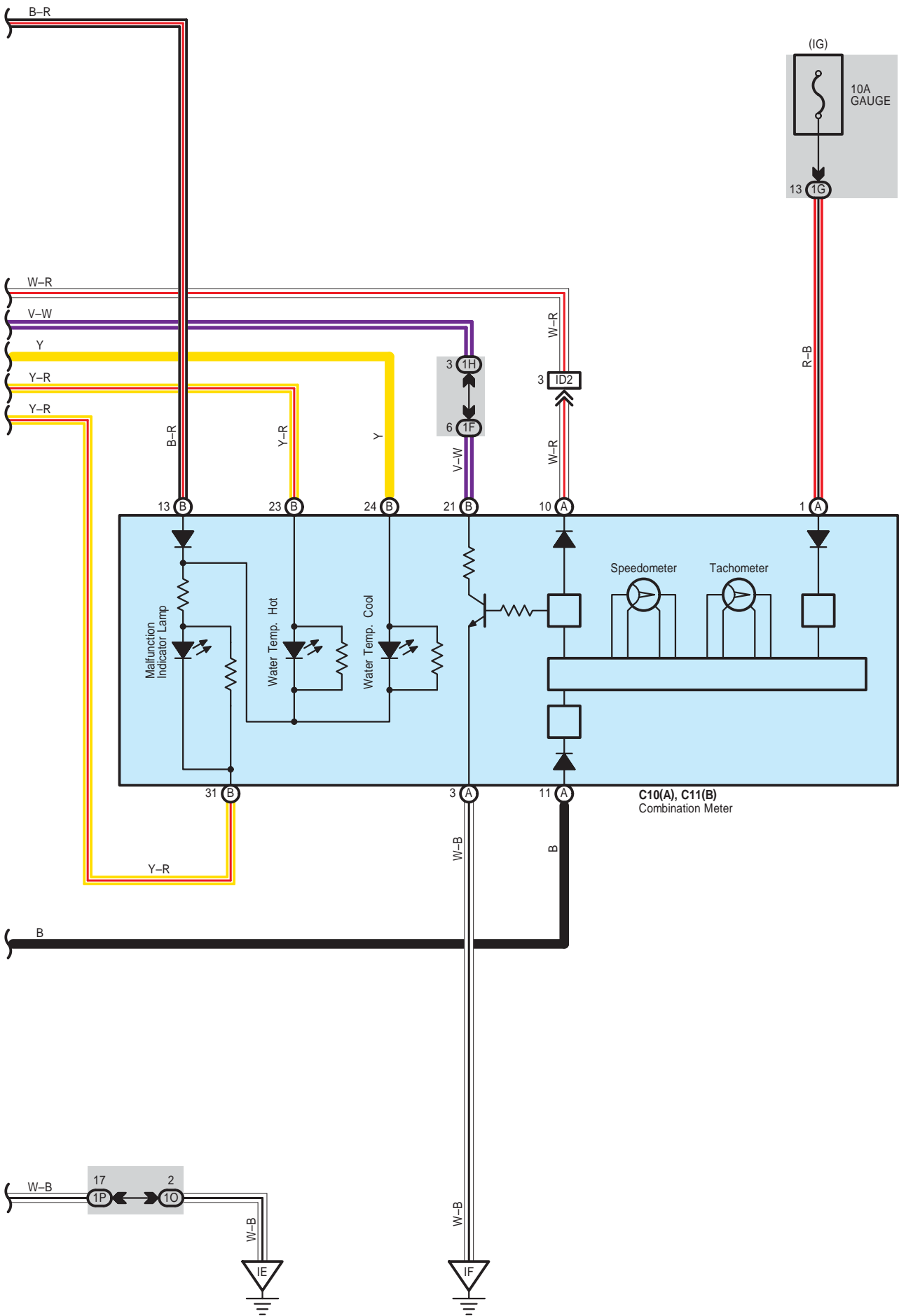


Note :  
 Since there is a case where the different wire color is used depending on the vehicle,  
 a wire color code like "G(SB)" is used in this manual.  
 Please refer to page 40 for details.

- \* 1 : Shielded
- \* 2 : w/ VSC
- \* 3 : w/o VSC



# Engine Control



## System Outline

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

### 1. Input Signals

(1) Engine coolant temp. signal circuit

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

(2) Intake air temp. signal circuit

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

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust gases is detected and input as a control signal into TERMINALS OX1A and OX1B of the engine control module.

(4) RPM signal circuit

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

(5) Throttle signal circuit

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

(6) Vehicle speed signal circuit

The vehicle speed sensor detects the vehicle speed, and the signal is input into TERMINAL SPD of the engine control module via the combination meter, from TERMINAL SP1 of the skid control actuator with ECU.

(7) NSW signal circuit (A/T)

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

(8) 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 to TERMINAL +B of the engine control module via EFI relay.

(9) Starter signal circuit

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

# Engine Control

## 2. Control System

### \* SFI system

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

### \* ESA system

The ESA system monitors the engine condition through the signals, which are input to the engine control module from each sensor. The best ignition timing is detected according to this data and the memorized data in the engine control module, and the control signal is output to TERMINALS IGT1, IGT2, IGT3 and IGT4. This signal controls the ignition coil and igniter to provide the best ignition timing for the driving conditions.

### \* IAC system

The IAC system increases the RPM and provides idling stability for fast idle-up when the engine is cold and when the idle speed has dropped due to electrical load, etc. The engine control module evaluates the signals from each sensor, outputs current to TERMINAL RSD, and controls the idle air control valve.

### \* Fuel pump control system

The engine control module operation outputs to TERMINAL FC and controls the C/OPN relay. Thus controls the fuel pump drive speed in response to conditions.

## 3. Diagnosis System

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

## 4. Fail-Safe System

When a malfunction occurs in any system, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail-safe system either controls the system by using 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	C	30	F10	A	28	I9	29
C1	28	B		28	I10	31	
C2	28	F15	32	J8	31		
C3	28	G2	28	J10	31		
C9	30	H3	28	K1	29		
C10	A	30	H6	30	M1	29	
C11	B	30	I1	29	P1	29	
C17	32	I2	29	P2	29		
D1	30	I3	29	P17	29		
E2	28	I4	29	S1	A	29	
E3	A	30	I5		29	B	29
E4	B	30	I6	29	S6	31	
E5	C	30	I7	29	T1	29	
E6	D	30	I8	29			

### ○ : Relay Blocks

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



 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
10		
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1B		
1D	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1F		
1G		
1H		
1O		
1P		
1T	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

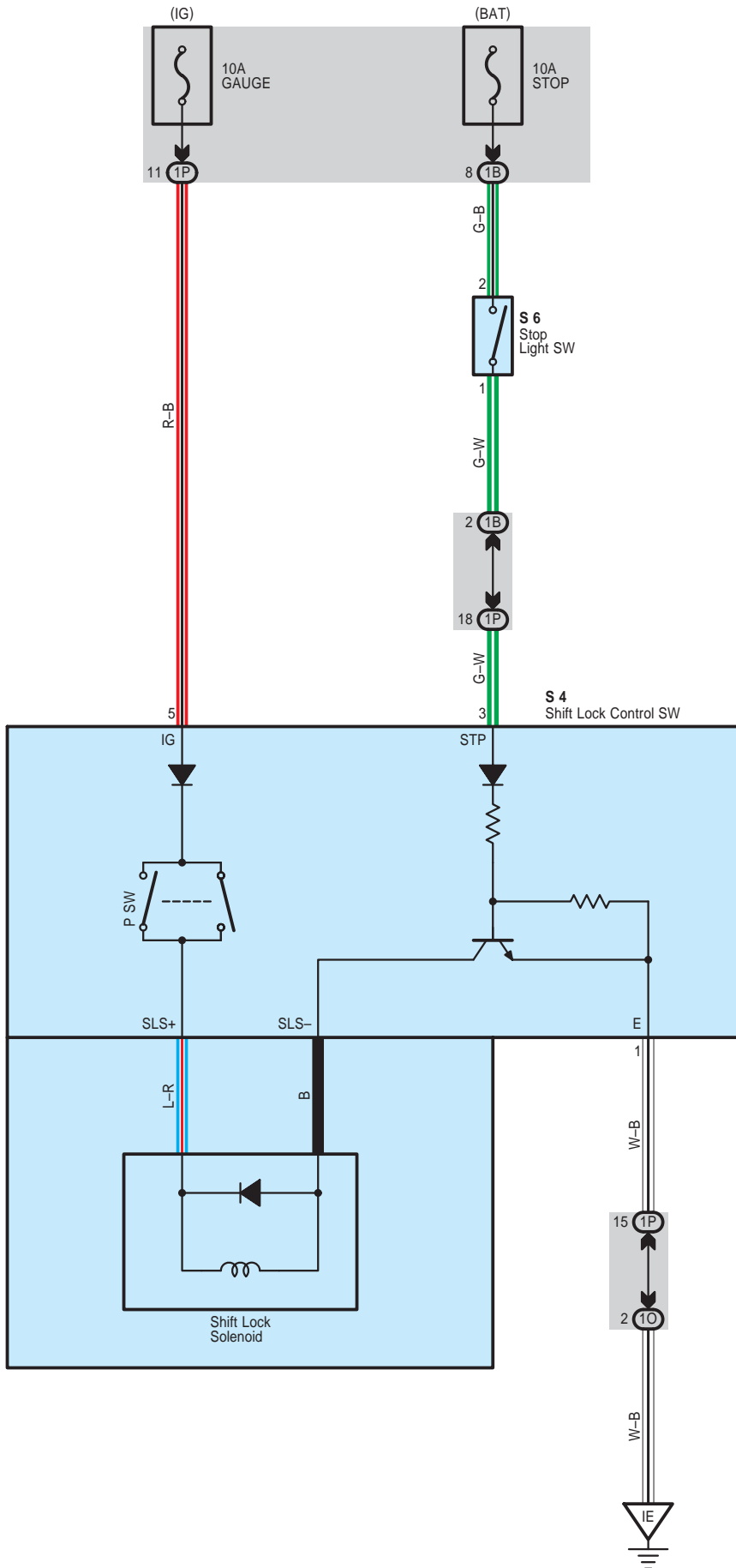
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	34	Engine Wire and Sensor Wire (Near the Starter)
EB1	34	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID3		
IF1	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IF2		

 : **Ground Points**

Code	See Page	Ground Points Location
EC	34	Cylinder Head
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
IG	36	Right Kick Panel
BH	38	Left Quarter Pillar

# Shift Lock



### System Outline

The current is applied at all times through the STOP fuse to TERMINAL 2 of the stop light SW.  
When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL 5 of the shift lock control SW.

### Shift Lock Mechanism

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
S4	31	S6	31		

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1O	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		

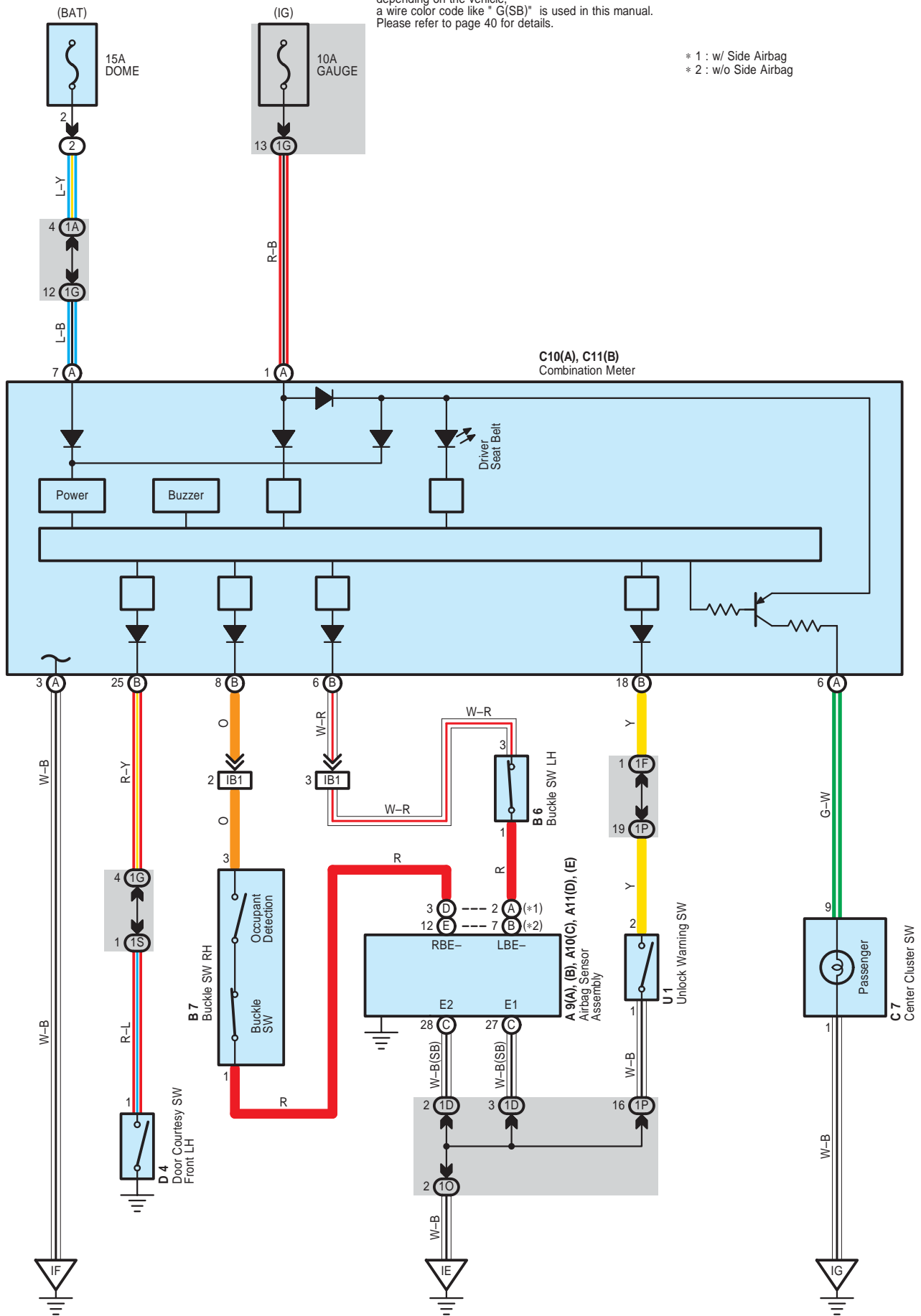
### ▽ : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# Key Reminder and Seat Belt Warning

Note :  
 Since there is a case where the different wire color is used depending on the vehicle, a wire color code like "G(SB)" is used in this manual. Please refer to page 40 for details.

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



## System Outline

Current is always applied from the DOME fuse to TERMINAL (A) 7 of the combination meter. When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL (A) 1 of the combination meter.

### 1. Seat Belt Warning System

When the ignition SW turned on, a signal is input to the combination meter. To determine whether the driver has fastened the seat belt, a signal is input from the buckle SW LH to TERMINAL (B) 6 of the combination meter. When the seat belt is not fastened, the seat belt warning light in the combination meter blinks, and emits a warning sound.

In addition, the front passenger is recognized by a sensor (Occupant detection sensor) is installed in the front passenger seat, and determines whether the seat belt is fastened. When not fastened, the signals from the buckle SW RH is input to TERMINAL (B) 8 of the combination meter, and the front passenger seat belt warning light blinks.

### 2. Key Reminder System

When the driver door is opened with the ignition SW off and ignition key remaining in the key cylinder (Unlock warning SW on), a signal is input from the unlock warning SW to TERMINAL (B) 18 of the combination meter, and from the door courtesy SW front LH to TERMINAL (B) 25 of the combination meter. As a result, the buzzer in the combination meter goes on and warns the driver that the key is remaining in the key cylinder.

### : Parts Location

Code		See Page	Code		See Page	Code		See Page
A9	A	30	A11	E	30	C10	A	30
	B	30		B6	32	C11	B	30
A10	C	30		B7	32		D4	32
A11	D	30		C7	30		U1	31

### : Relay Blocks

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

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1D	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1F		
1G		
1O		
1P		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

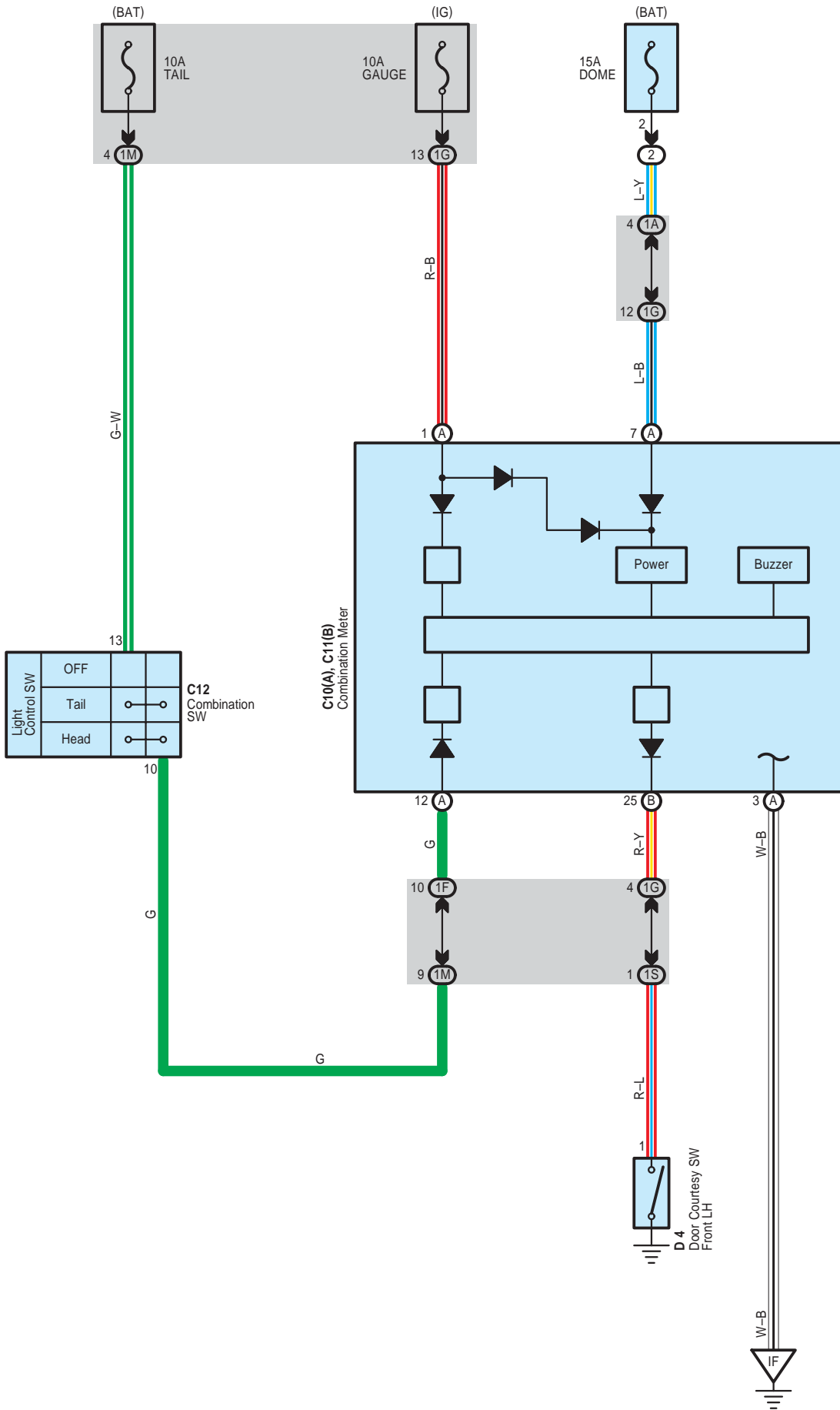
### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

### : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
IG	36	Right Kick Panel

# Light Reminder



### System Outline

The current is applied at all times to TERMINAL (A) 7 of the combination meter through the DOME fuse. When the ignition SW is turned to ON position, the current flows to TERMINAL (A) 1 of the combination meter through the GAUGE fuse. When the light control SW is turned to TAIL or HEAD position, current is applied to TERMINAL (A) 12 of the combination meter through the TAIL fuse.

#### Light Reminder System

When the light control SW is in TAIL or HEAD position, the ignition SW turned to OFF from ON position, the driver's door opened (Door courtesy SW on), the current flows to TERMINAL (A) 1 of the combination meter stops. As a result, the combination meter is activated and current flows from TERMINAL (A) 7 of the combination meter, the buzzer in the combination meter goes on to remind the light is lighting up.

#### ○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
C10	A	30	C12	30		
C11	B	30	D4	32		

#### ○ : Relay Blocks

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

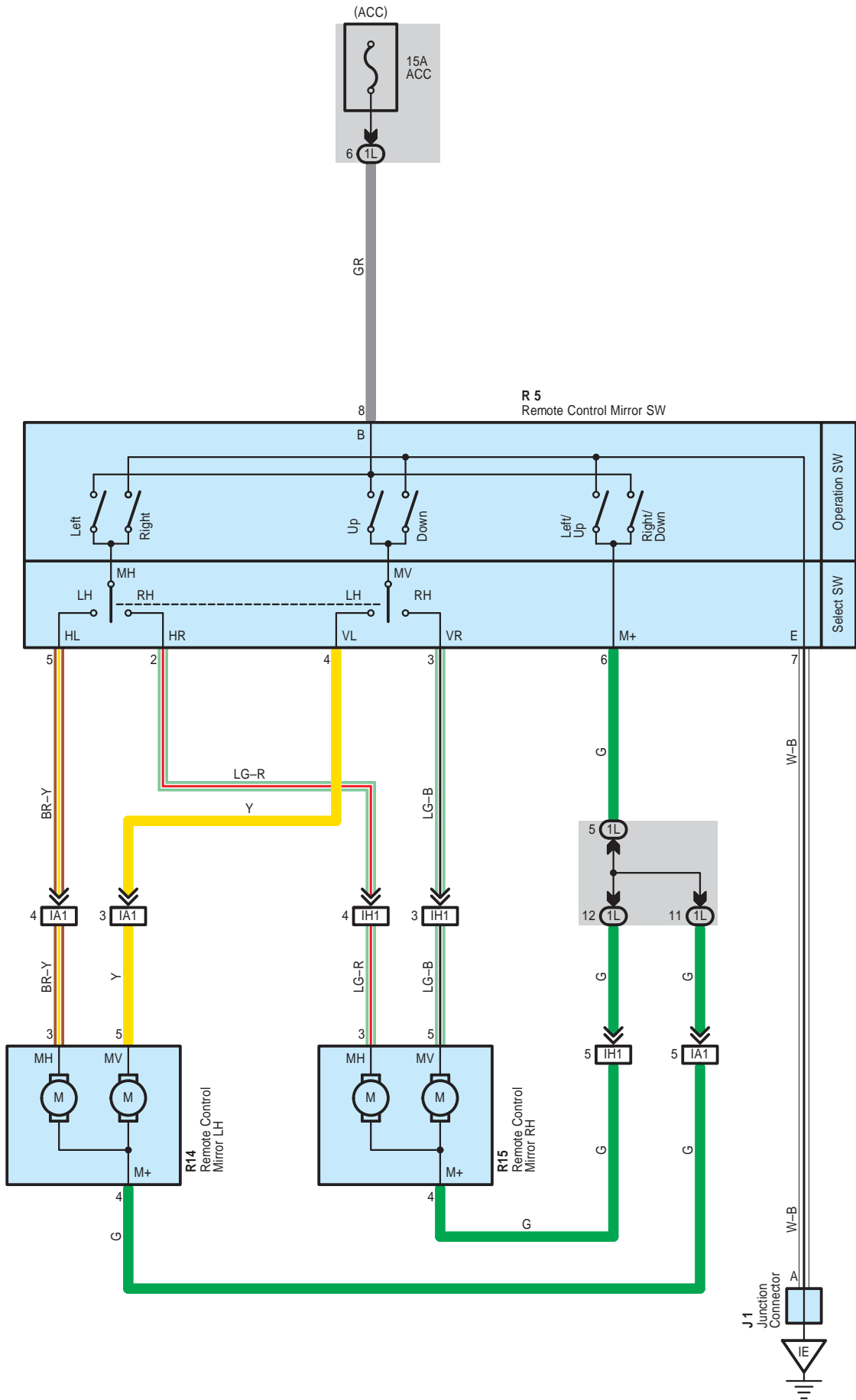
#### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1M		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

#### ▽ : Ground Points

Code	See Page	Ground Points Location
IF	36	Instrument Panel Brace LH

# Remote Control Mirror





 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
J1	31	R14	33		
R5	31	R15	33		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

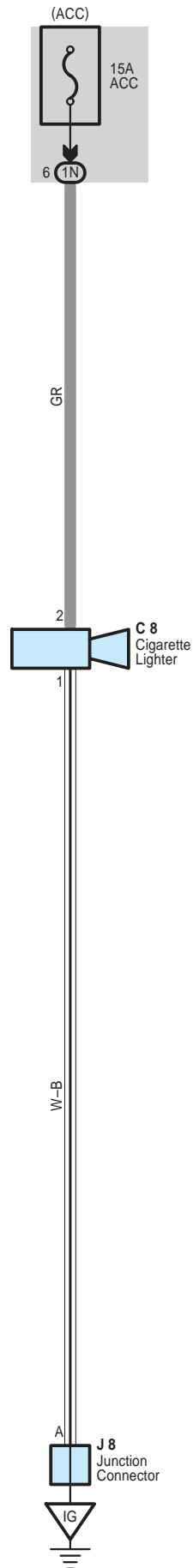
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

 : **Ground Points**

Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# Cigarette Lighter



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○ : **Parts Location**

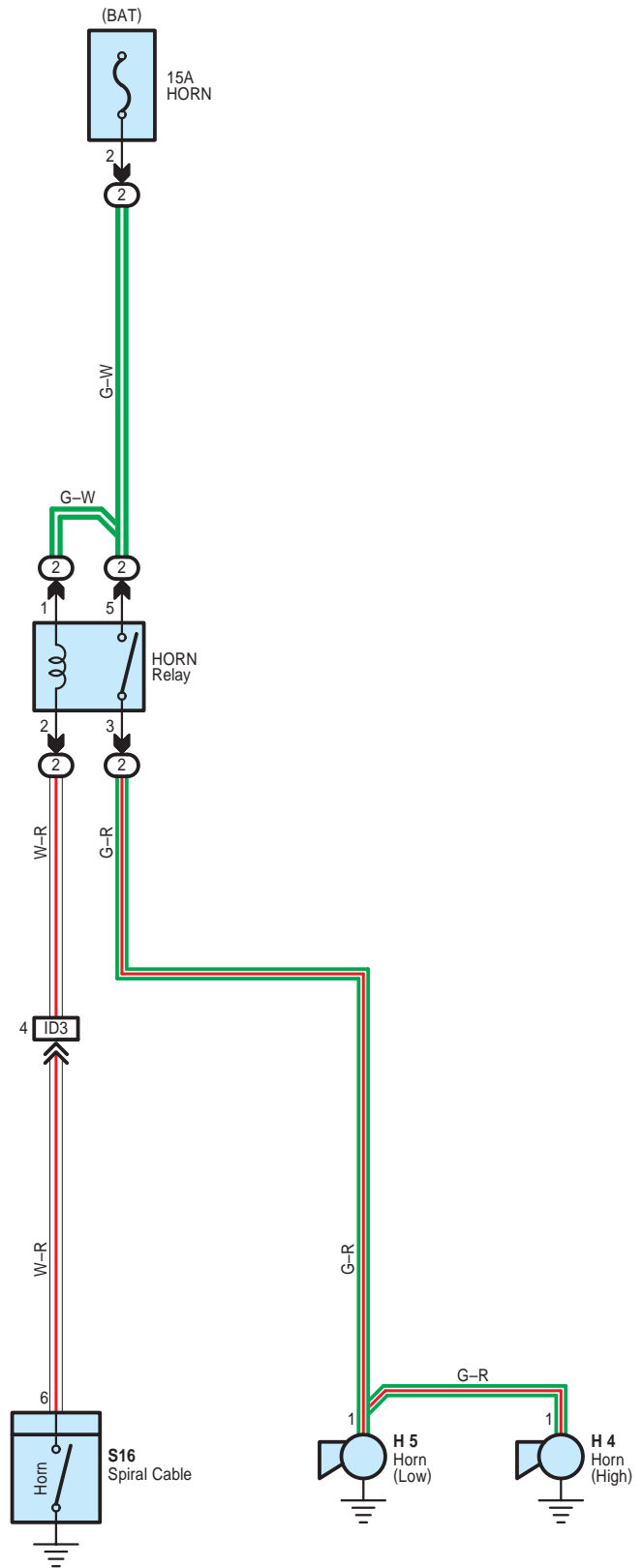
Code	See Page	Code	See Page	Code	See Page
C8	30	J8	31		

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

Code	See Page	Junction Block and Wire Harness (Connector Location)
1N	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IG	36	Right Kick Panel



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: **Parts Location**

Code	See Page	Code	See Page	Code	See Page
H4	28	H5	28	S16	31

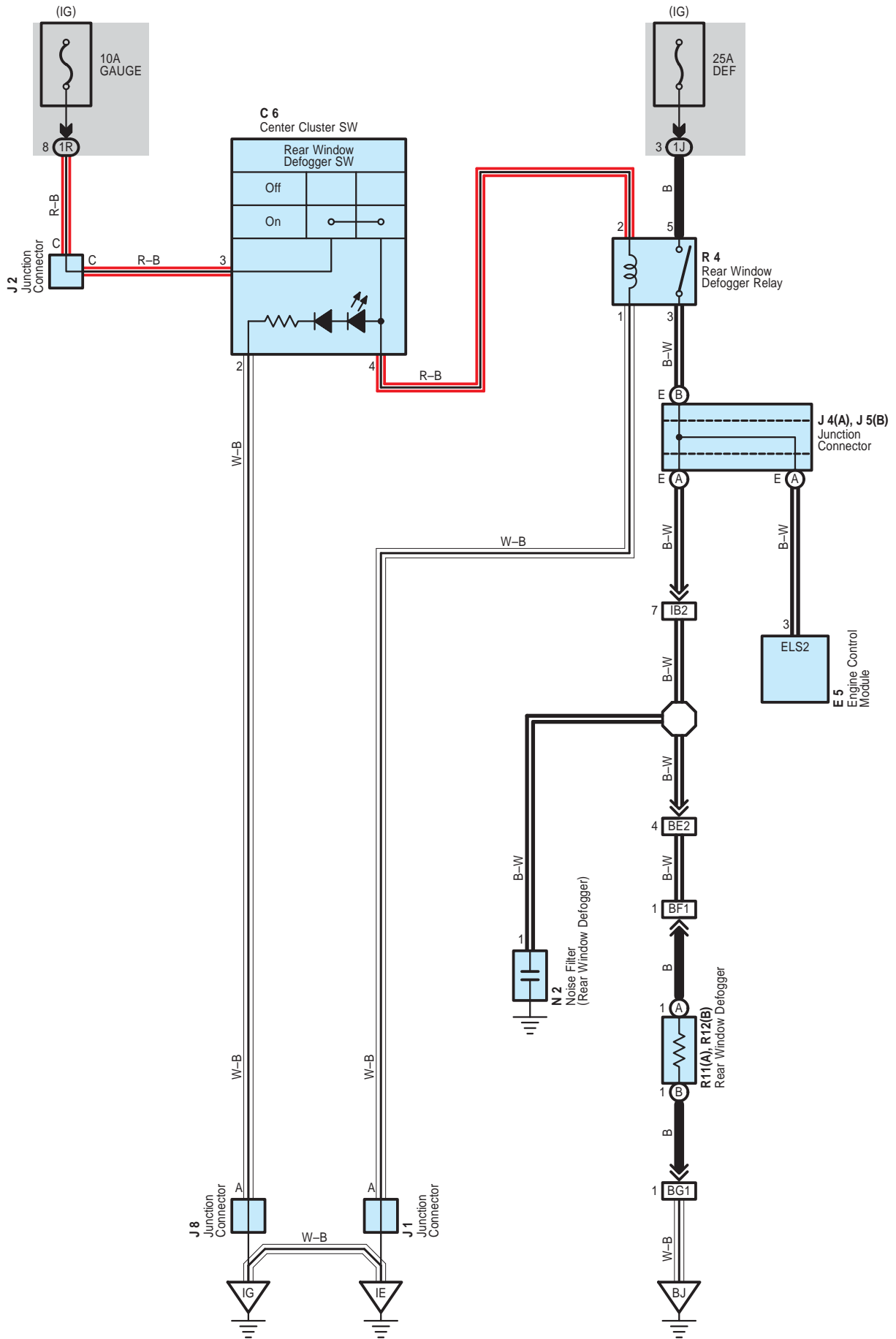
: **Relay Blocks**

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

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


Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

# Rear Window Defogger



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
C6	30	J4	A	31	R4	31	
E5	30	J5	B	31	R11	A	33
J1	31	J8		31	R12	B	33
J2	31	N2		32			

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1J	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1R		

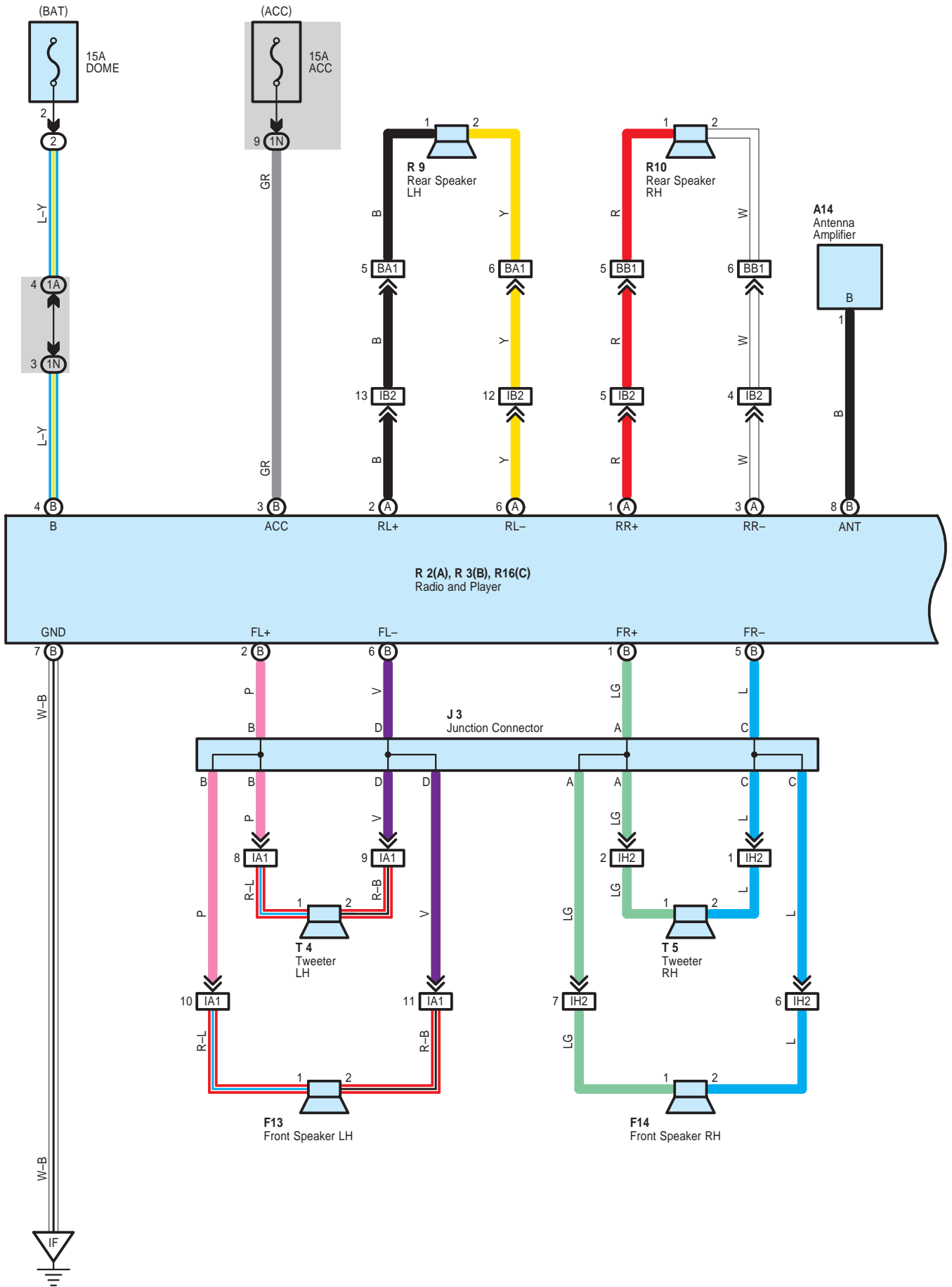
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
BE2	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)
BF1	38	Back Door No.1 Wire and Rear Door No.1 Wire (Left Side of the Back Door Panel)
BG1	38	Back Door No.1 Wire and Rear Door No.1 Wire (Right Side of the Back Door Panel)

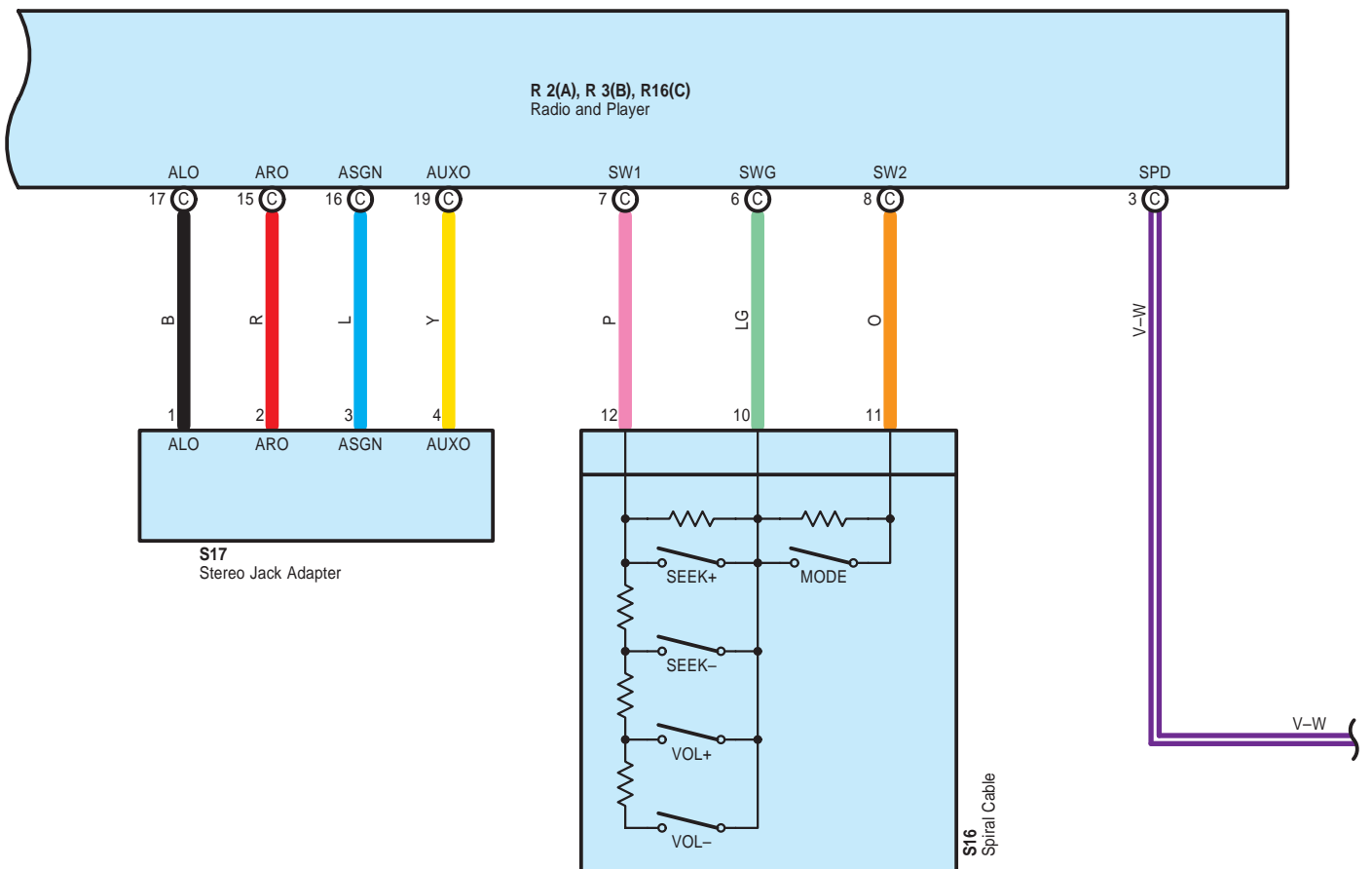
 : **Ground Points**

Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IG	36	Right Kick Panel
BJ	38	Back Door Panel LH

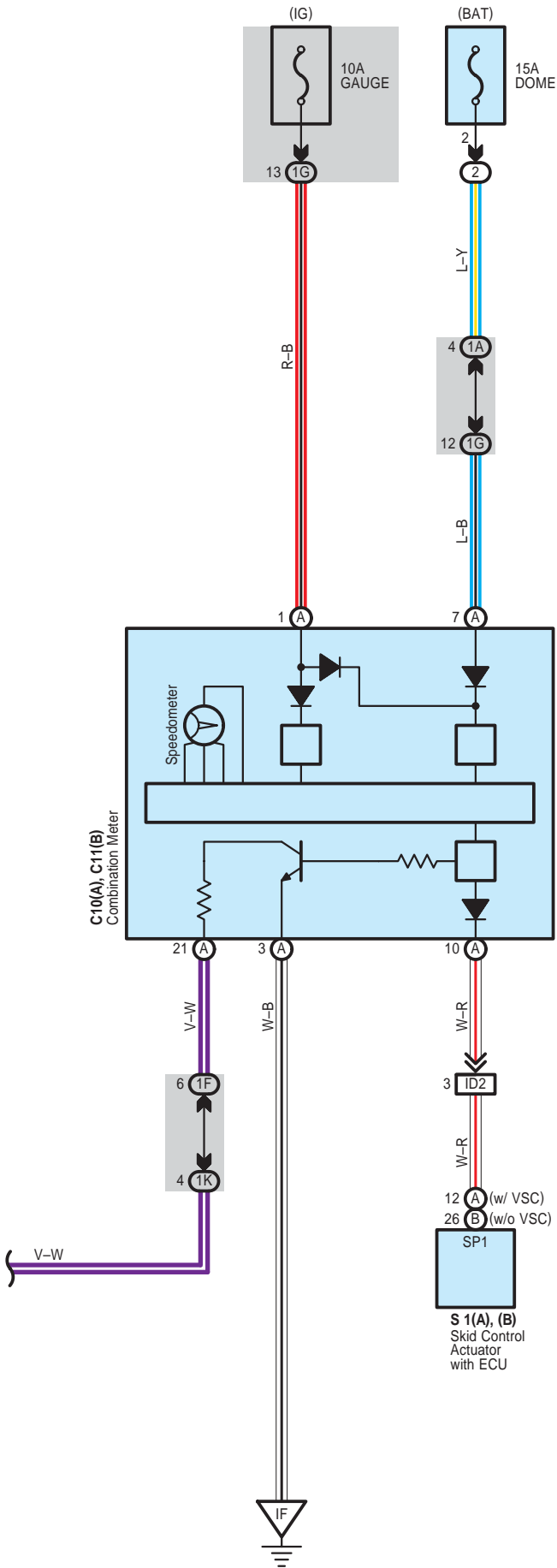
# Audio System







# Audio System



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
A14	30	R2	A	31	S1	B	29
C10	A	30	R3	B	31	S16	31
C11	B	30	R9	33	S17	31	
F13	32	R10	33	T4	33		
F14	32	R16	C	31	T5	33	
J3	31	S1	A	29			

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1K		
1N		

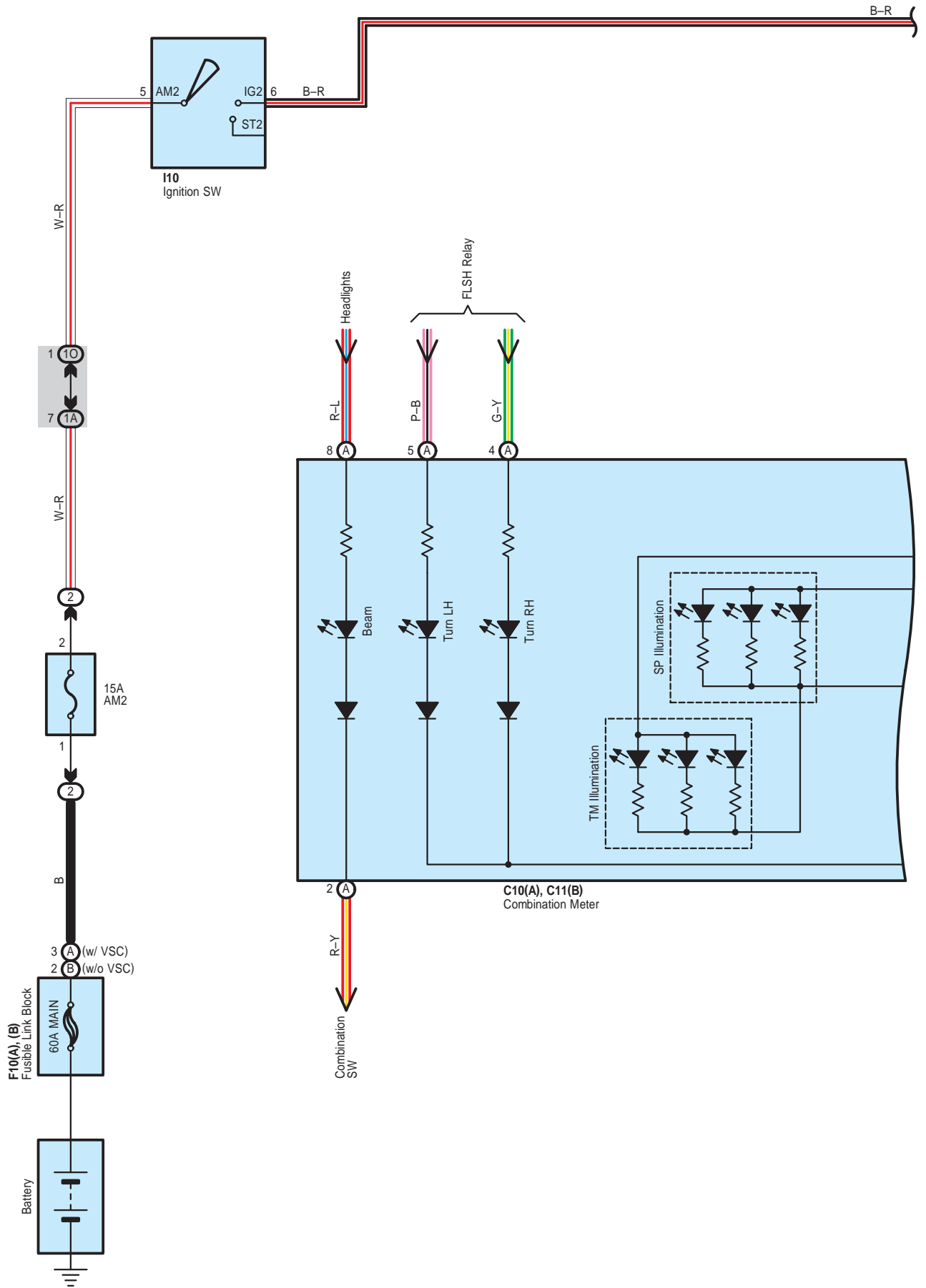
 : **Connector Joining Wire Harness and Wire Harness**

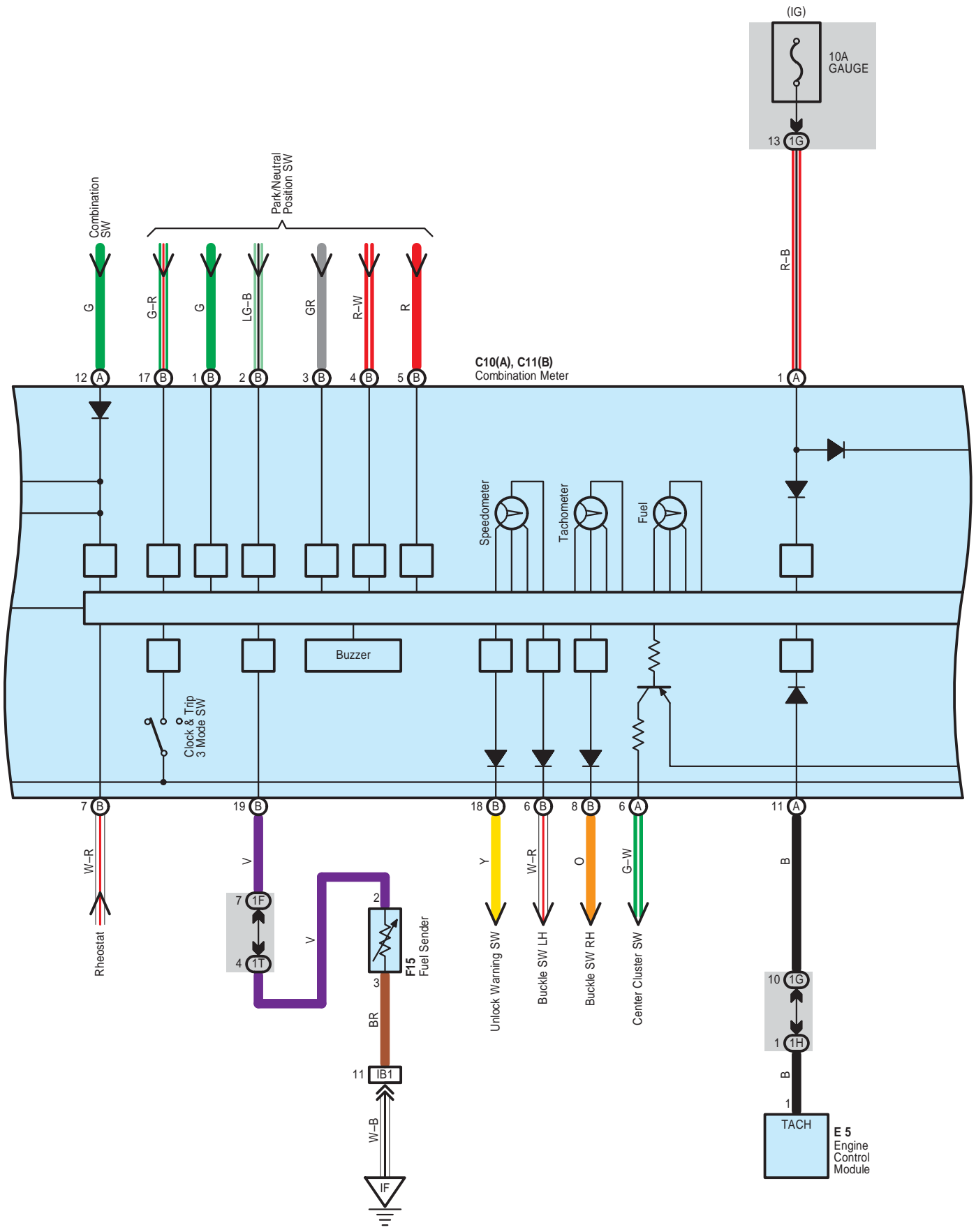
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IH2	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	38	Rear Door LH Wire and Floor Wire (Center Pillar LH)
BB1	38	Rear Door RH Wire and Floor Wire (Center Pillar RH)

 : **Ground Points**

Code	See Page	Ground Points Location
IF	36	Instrument Panel Brace LH

# Combination Meter

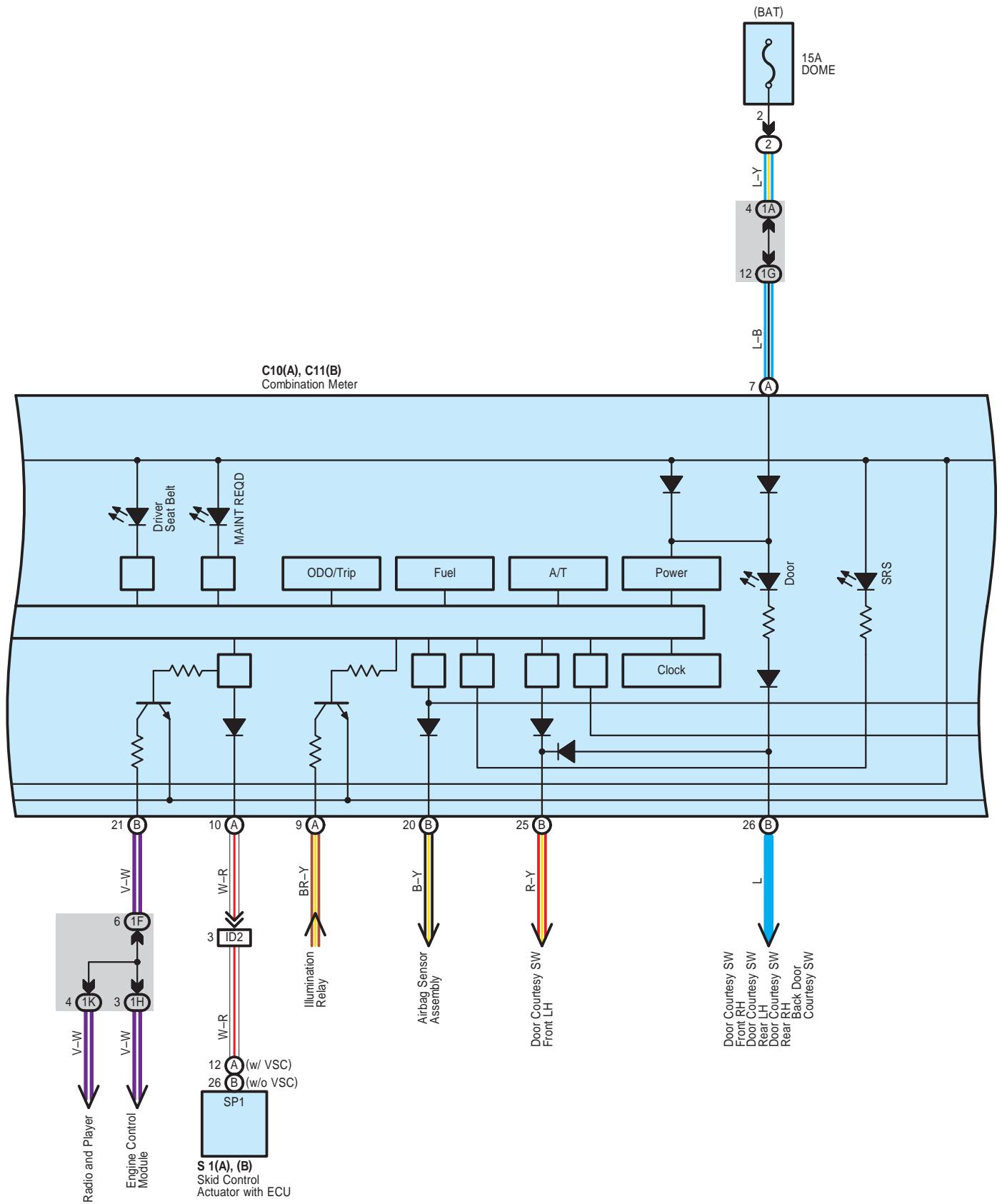


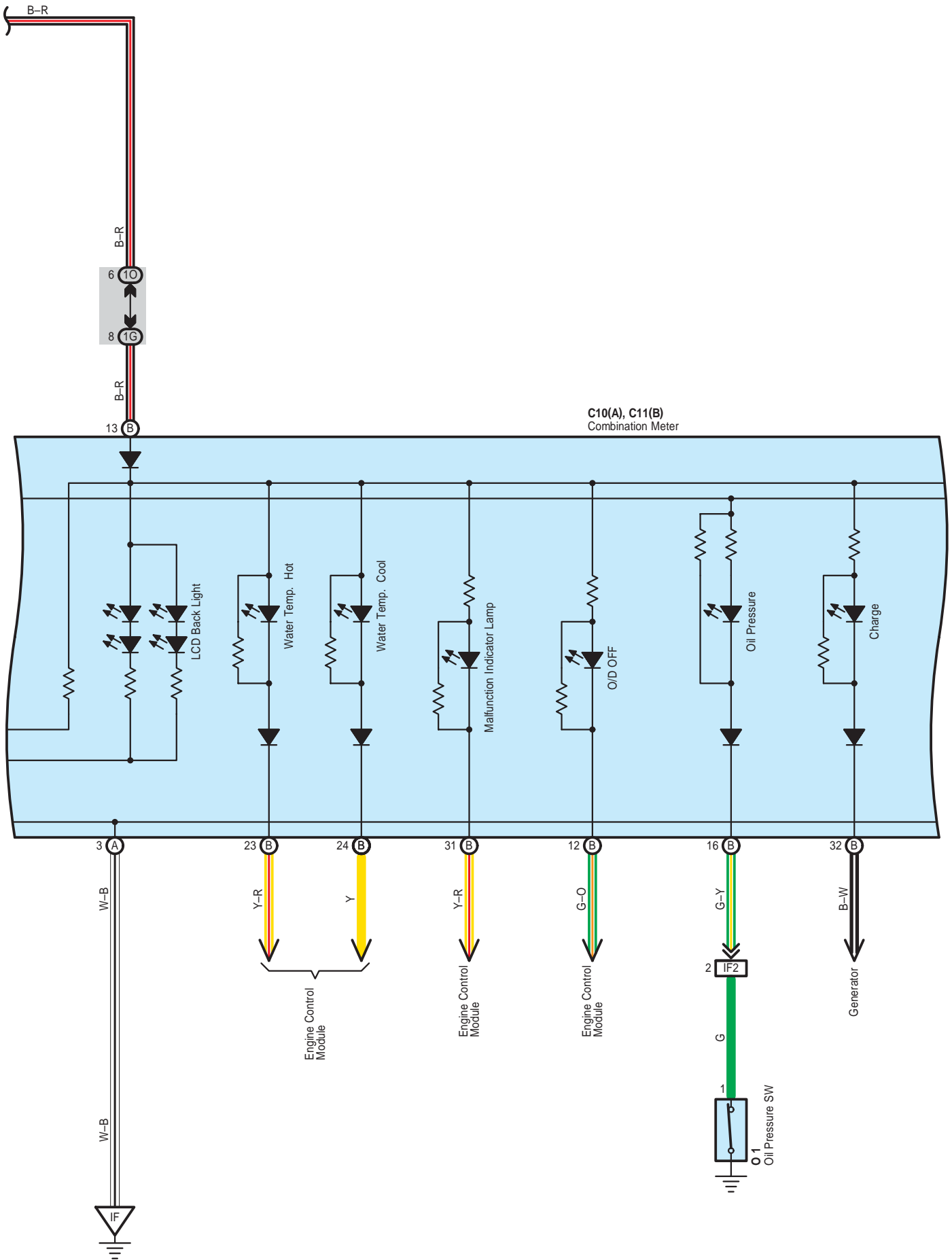


# Combination Meter

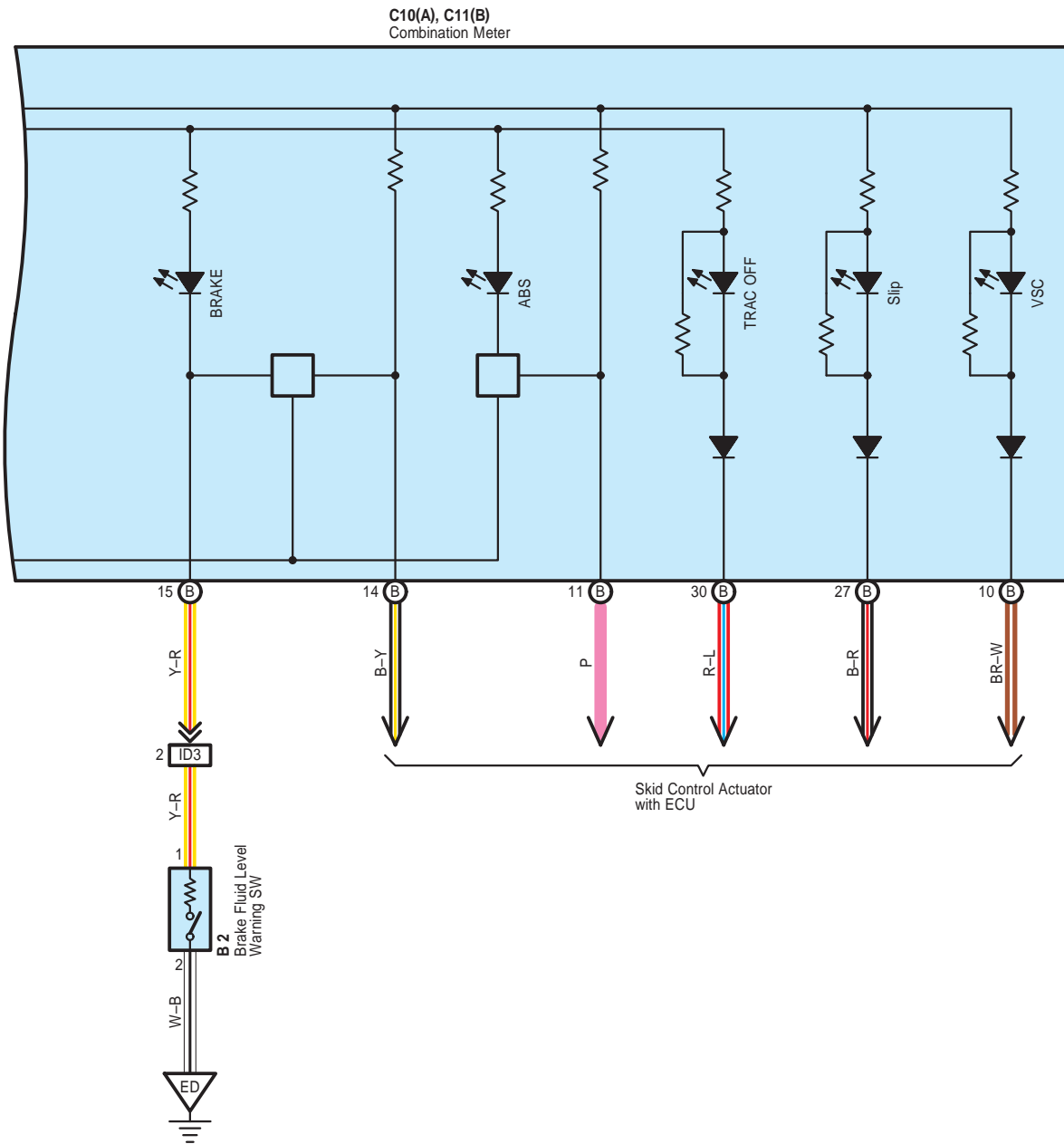
B-R

B-R





# Combination Meter





 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
B2	28	F10	A	28	O1	29	
C10	A		30	B	28	S1	A
C11	B	30	F15	32	B		29
E5	30	I10	31				

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G		
1H		
1K		
1O		
1T	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

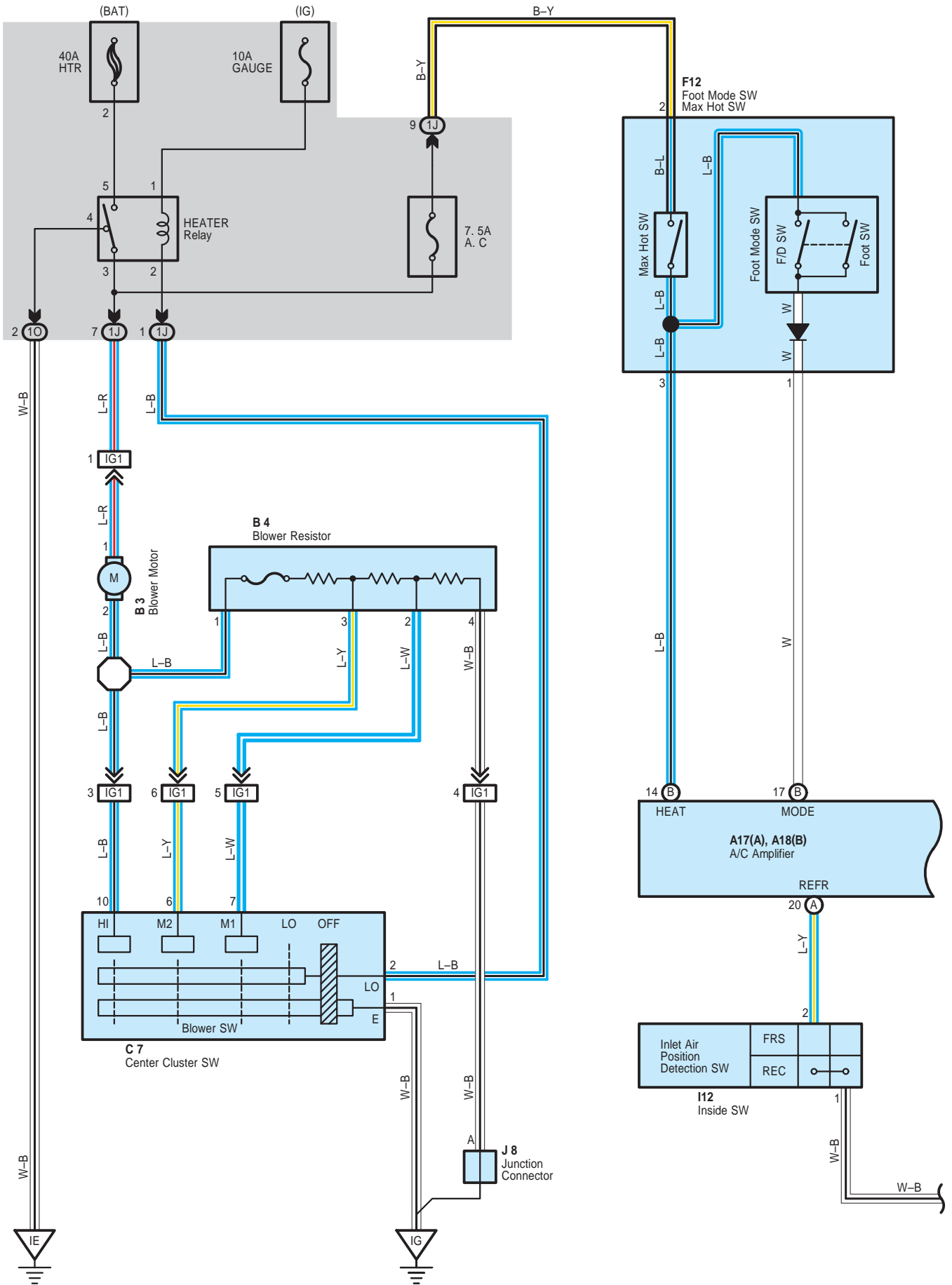
 : **Connector Joining Wire Harness and Wire Harness**

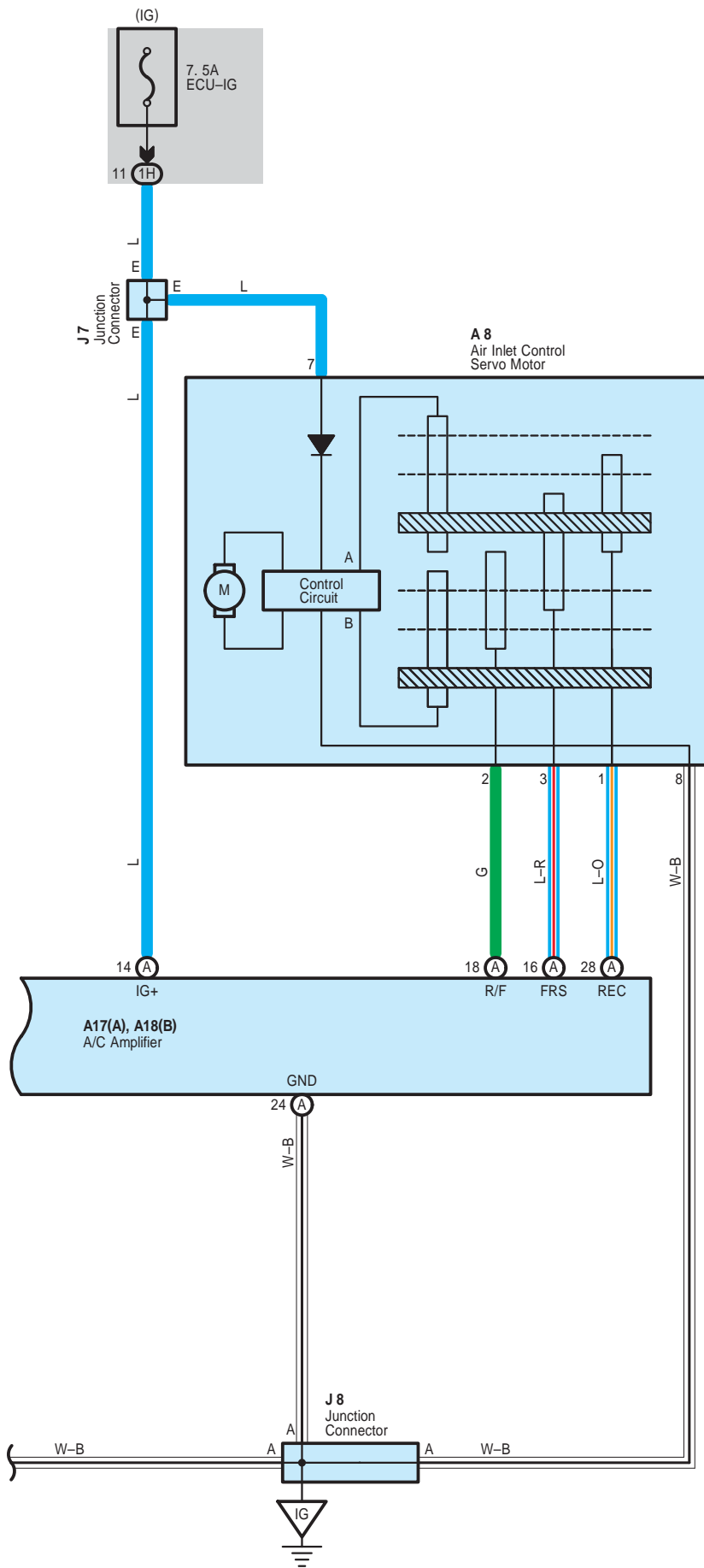
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
ID3		
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

 : **Ground Points**

Code	See Page	Ground Points Location
ED	34	Front Fender Apron LH
IF	36	Instrument Panel Brace LH

# Two Way Flow Heater





# Two Way Flow Heater

## System Outline

When all of the following conditions are met, the recirculation/fresh air inlet damper is switched to the DUAL MODE position.

- \* The recirculation/fresh air switch is at FRESH position
- \* The blower SW is on.
- \* The max hot SW is on.
- \* The foot mode SW is at FOOT or F/D position.

## ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A8		30	B4		30	J7		31
A17	A	30	C7		30	J8		31
A18	B	30	F12		30			
B3		30	I12		31			

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1O		

## □ : Connector Joining Wire Harness and Wire Harness

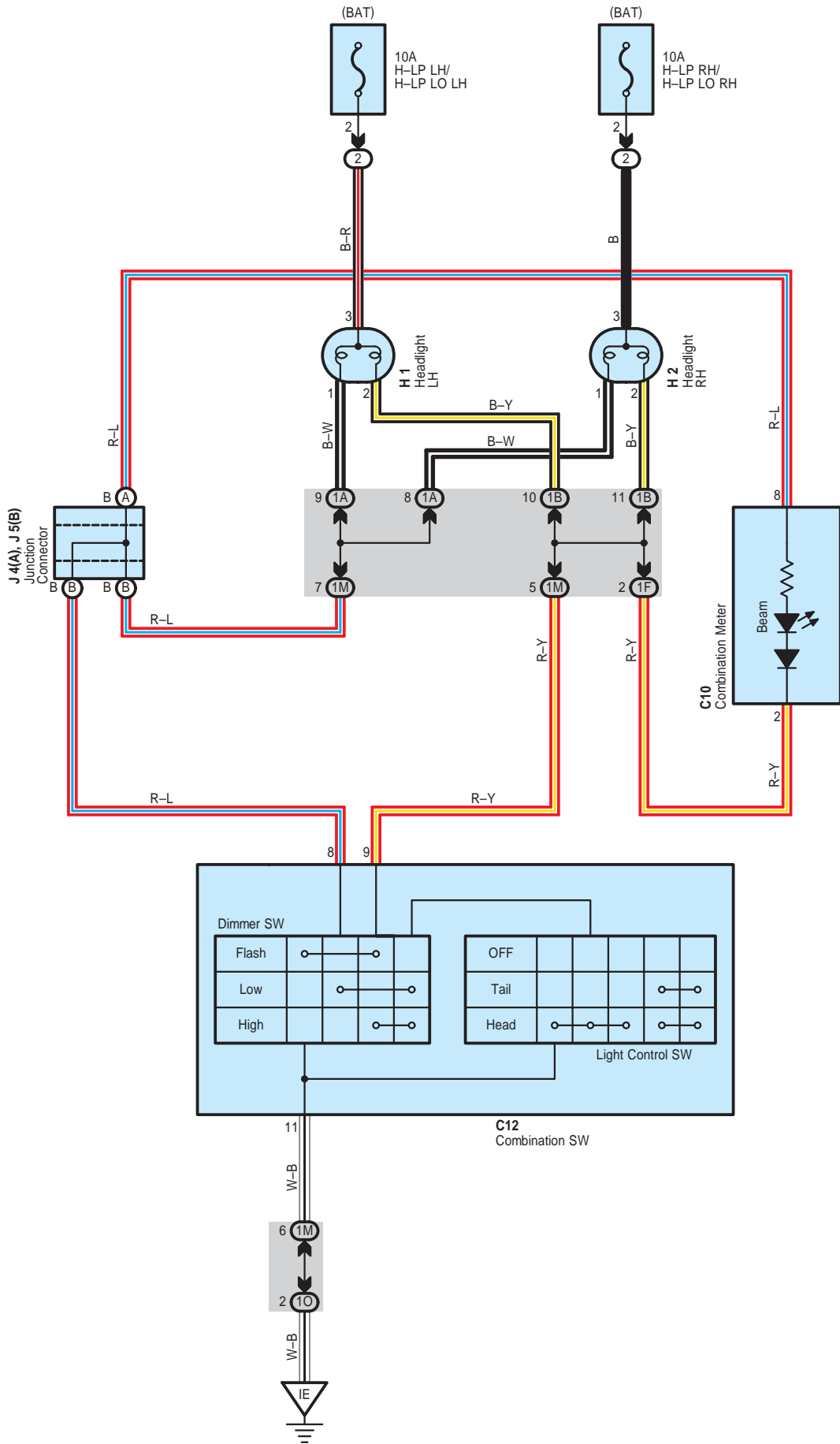
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	37	Instrument Panel Wire and A/C Sub Wire (Right Kick Panel)

## ▽ : Ground Points

Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IG	36	Right Kick Panel



# Headlight



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C10	30	H1	28	J4	A 31
C12	30	H2	28	J5	B 31

 : **Relay Blocks**

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

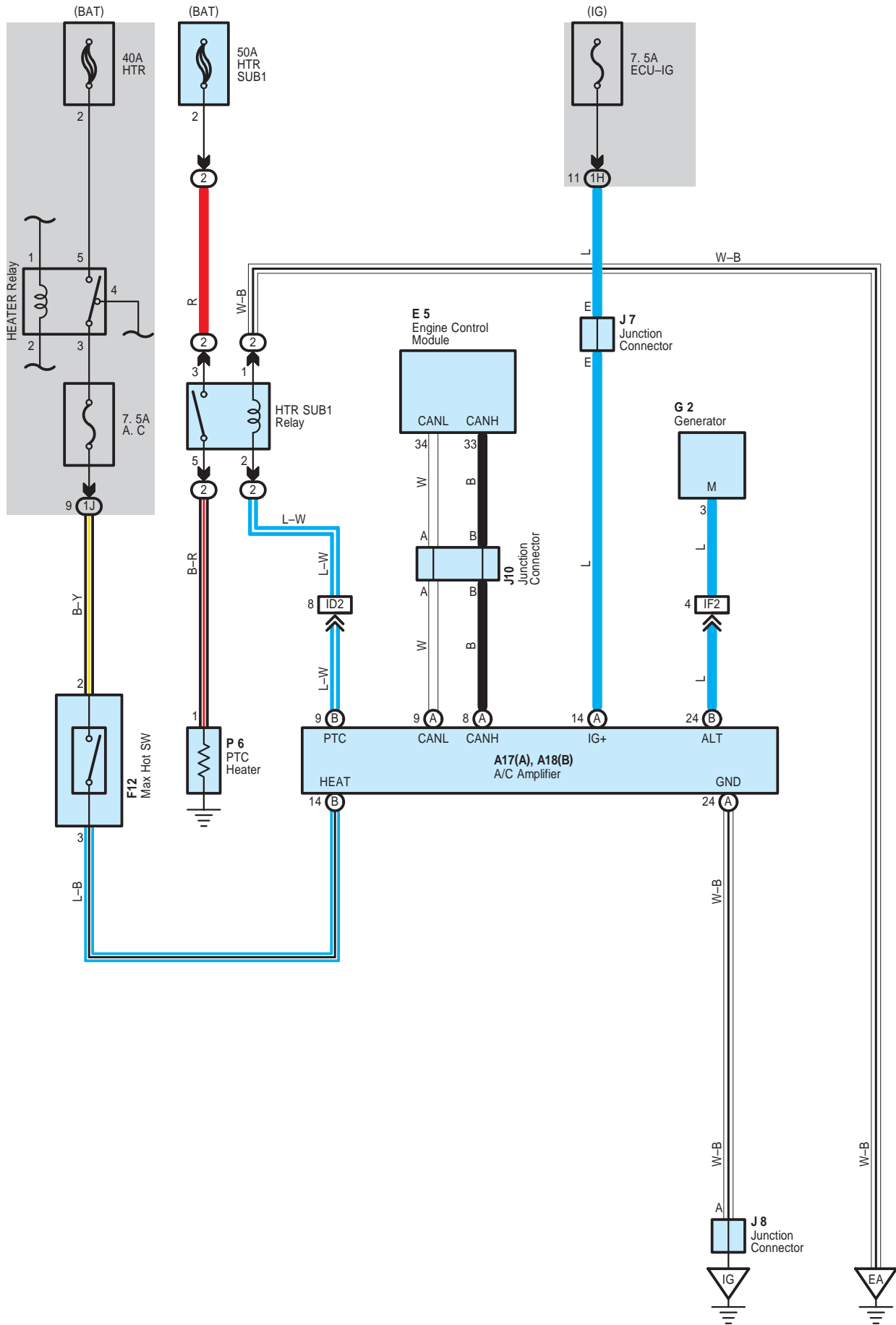
 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1B		
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1M		
1O		

 : **Ground Points**

Code	See Page	Ground Points Location
IE	36	Left Kick Panel

# PTC Heater





## System Outline

When all of the following conditions are met, the PTC heater operates.

- \* The engine coolant temp. has reached the specified temperature.
- \* The engine RPM has exceeded the specified RPM for more than 5 seconds continuously.
- \* The max hot SW is on.

If any of the above conditions change, the PTC heater stops. The PTC heater is turned on/off according to the generator's charge/discharge condition.

## : Parts Location

Code		See Page	Code	See Page	Code	See Page
A17	A	30	F12	30	J8	31
A18	B	30	G2	28	J10	31
E5		30	J7	31	P6	31

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		

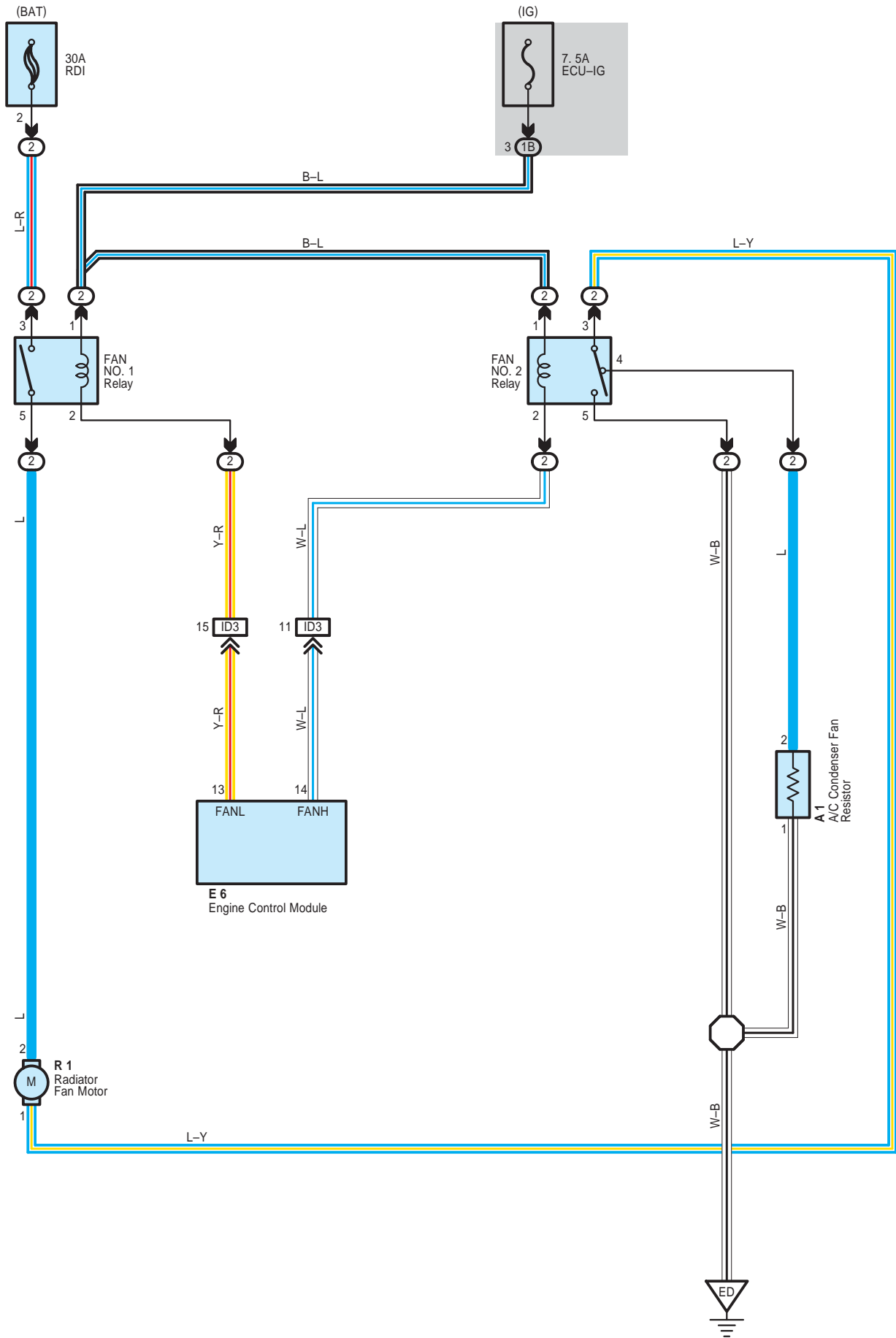
## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

## : Ground Points

Code	See Page	Ground Points Location
EA	34	Front Fender Apron RH
IG	36	Right Kick Panel

# Radiator Fan and Condenser Fan



## System Outline

The current is applied at all times through the RDI fuse to TERMINAL 3 of the FAN NO.1 relay.

When the ignition SW is turned on, the current flows through the ECU-IG fuse to FAN NO.1 relay (Coil side) to TERMINAL 6 of the engine control module. At the same time as this current flow, the current from ECU-IG fuse flows to the FAN NO.2 relay (Coil side) to TERMINAL 7 of the engine control module.

### 1. Low Speed Operation

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

### 2. High Speed Operation

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

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	28	E6	30	R1	29

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)

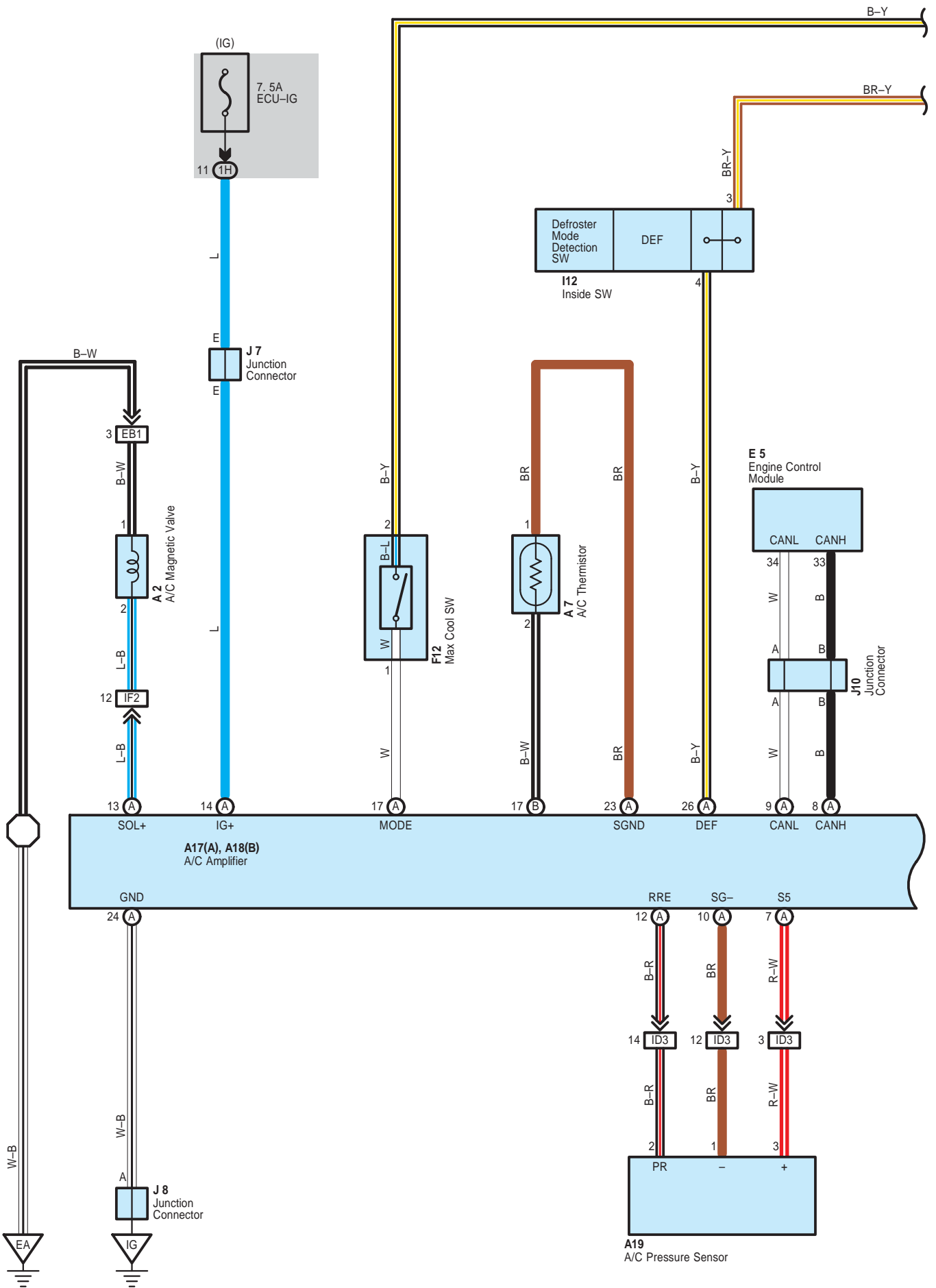
## : Connector Joining Wire Harness and Wire Harness

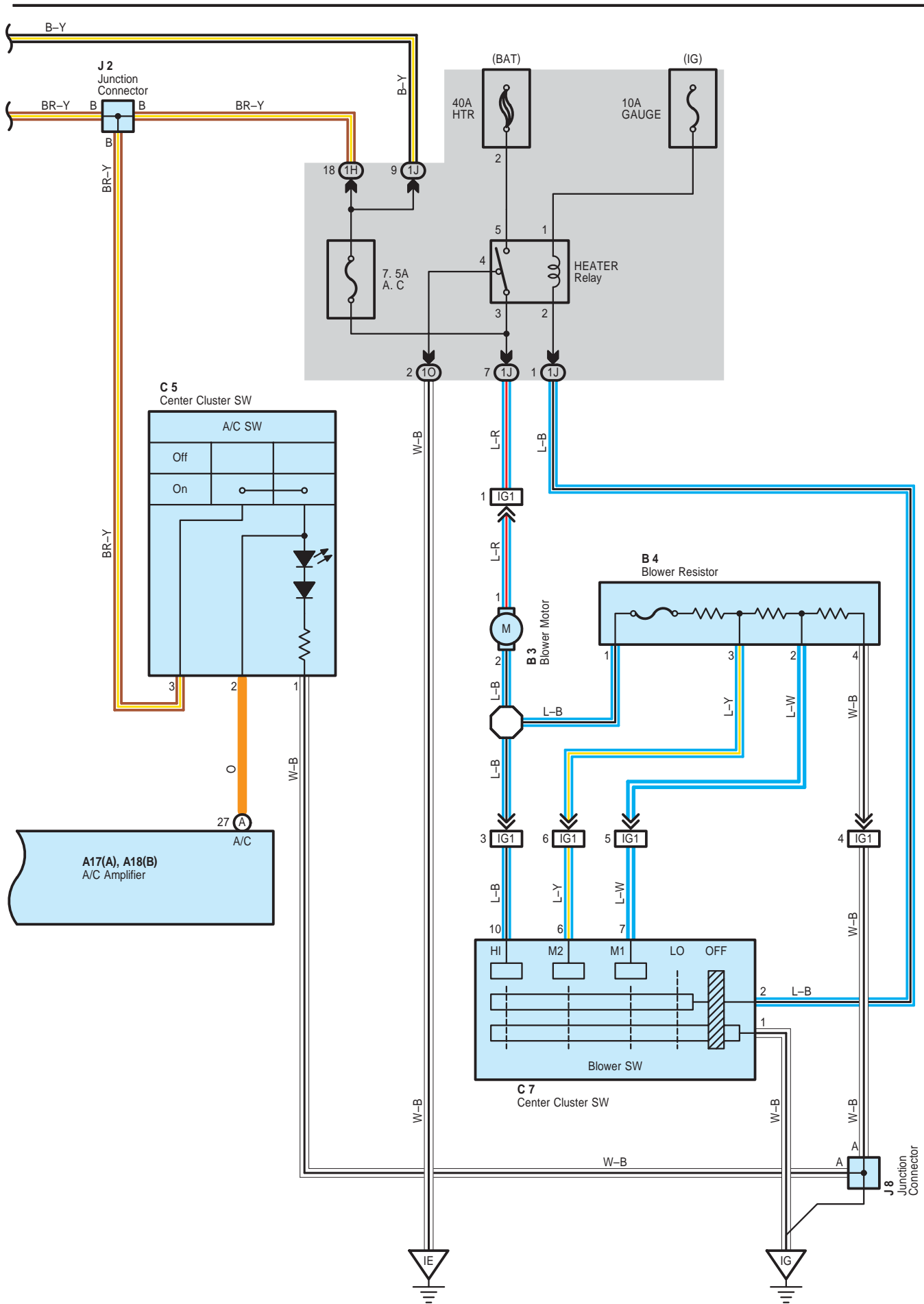
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

## : Ground Points

Code	See Page	Ground Points Location
ED	34	Front Fender Apron LH

# Air Conditioning





# Air Conditioning

## System Outline

Current is applied at all times through the HTR fuse to TERMINAL 5 of the HTR relay.

When the ignition SW is turned on, the current flows through the GAUGE fuse to TERMINAL 1 of the HTR relay to TERMINAL 2 to TERMINAL 6 of the blower SW.

### Blower Motor Operation

#### \* Low speed operation

When the blower SW is moved to LO position, the current flows to TERMINAL 2 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on. This causes the current flows 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 1 of the blower resistor to TERMINAL 4 to GROUND, rotating the blower motor at low speed.

#### \* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, the current flows to TERMINAL 2 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on. This causes the current flows from the FR HTR fuse to TERMINAL 5 of the HTR relay to TERMINAL 3 to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 2 to TERMINAL 7 of the blower SW to TERMINAL 5 to GROUND. At this time, the blower resistance of the blower resistor is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current flows through the HTR relay to TERMINAL 1 of the blower motor to TERMINAL 2 to TERMINAL 1 of the blower resistor to TERMINAL 3 to TERMINAL 6 of the blower SW to TERMINAL 1 to GROUND. At this time, resistance of the blower resistor is smaller than at M1 position, so the blower motor rotates at medium high speed.

#### \* High speed operation

When the blower SW is moved to HI position, the current flows to TERMINAL 2 of the blower SW to TERMINAL 1 to GROUND, causing the HTR relay to turn on.

This causes the current flows 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 10 of the blower SW to TERMINAL 1 to GROUND, rotating the blower motor at high speed.

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A2	28	B4	30	J2	31	
A7	30	C5	30	J7	31	
A17	A	30	C7	30	J8	31
A18	B	30	E5	30	J10	31
A19	28	F12	30			
B3	30	I12	31			

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1O		

## □ : Connector Joining Wire Harness and Wire Harness

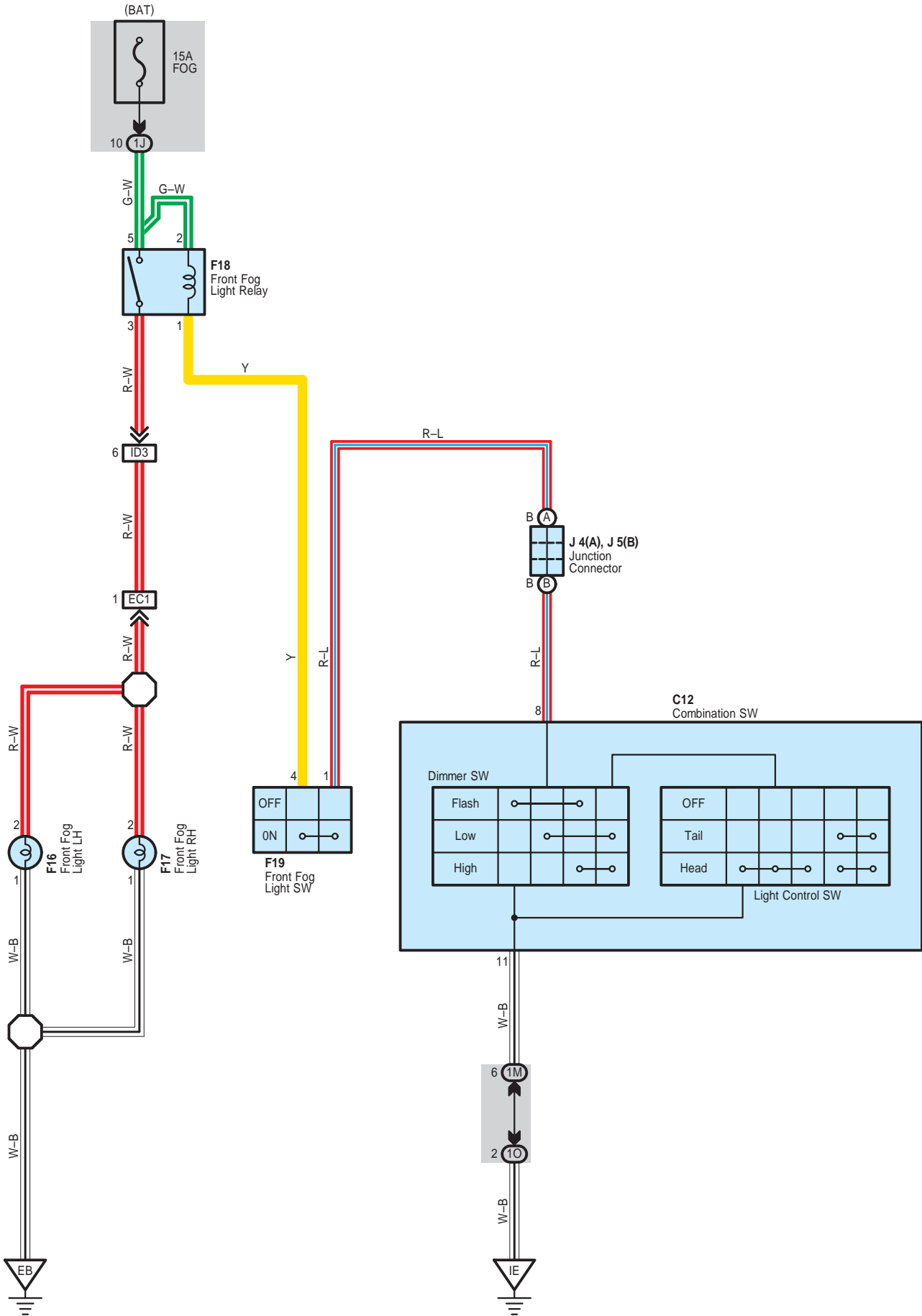
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	34	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IG1	37	Instrument Panel Wire and A/C Sub Wire (Right Kick Panel)

## ▽ : Ground Points

Code	See Page	Ground Points Location
EA	34	Front Fender Apron RH
IE	36	Left Kick Panel
IG	36	Right Kick Panel



# Front Fog Light





 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C12	30	F18	30	J5	B 31
F16	28	F19	30		
F17	28	J4	A 31		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1J	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1M		
1O		

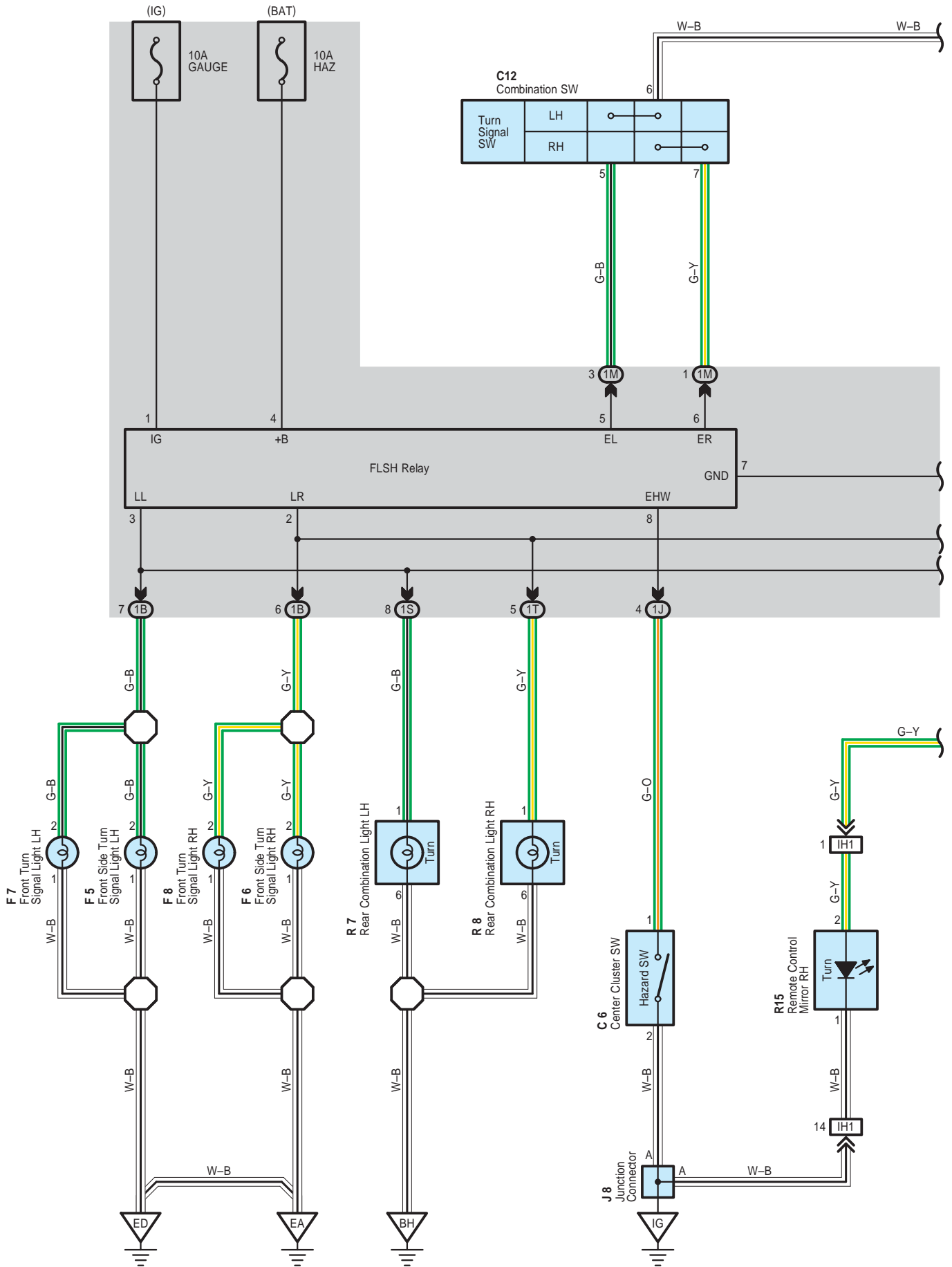
 : **Connector Joining Wire Harness and Wire Harness**

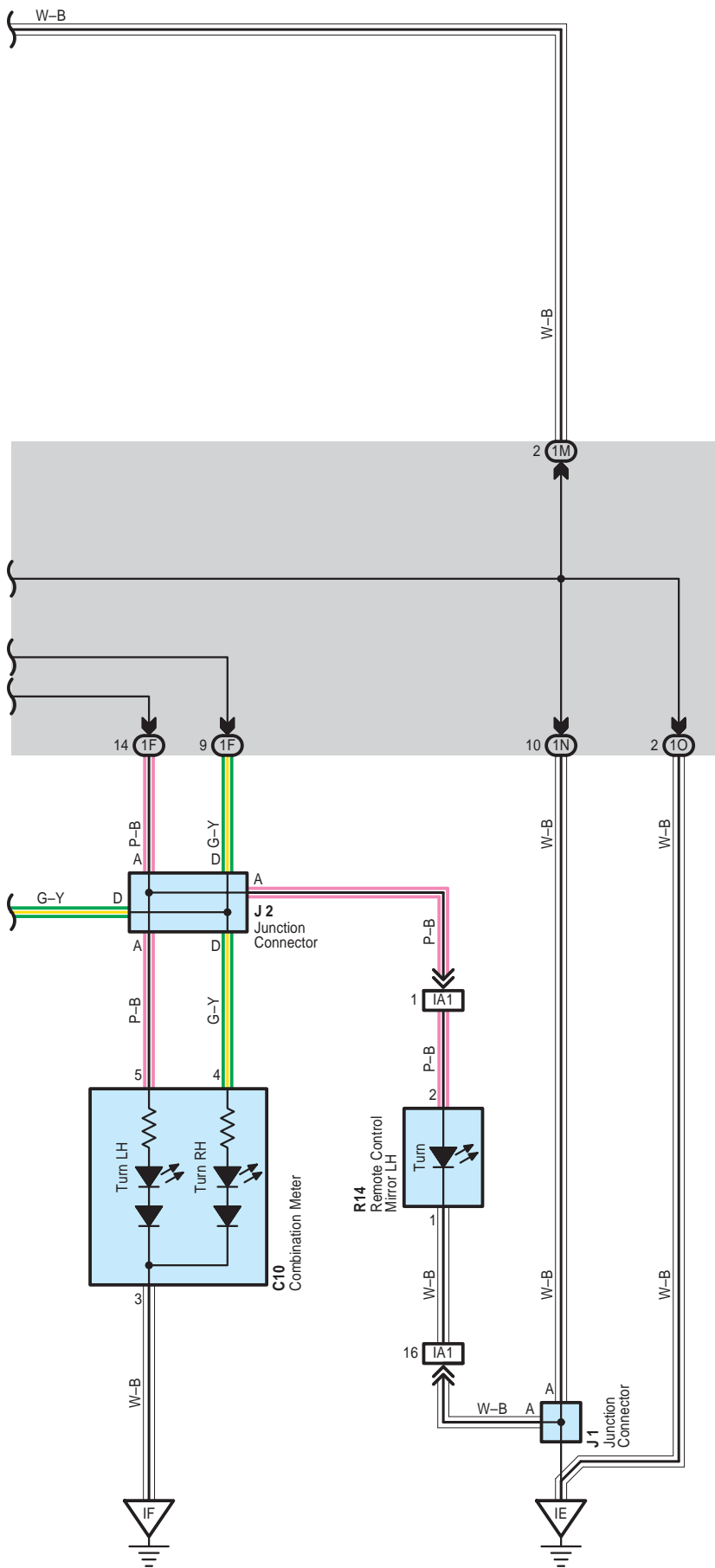
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EC1	34	Engine Room Main Wire and Lamp Wire (Behind the Radiator Side Support LH)
ID3	36	Engine Room Main Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)

 : **Ground Points**

Code	See Page	Ground Points Location
EB	34	Front Fender Apron RH
IE	36	Left Kick Panel

# Turn Signal and Hazard Warning Light





# Turn Signal and Hazard Warning Light

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
C6	30	F7	28	R7	33
C10	30	F8	28	R8	33
C12	30	J1	31	R14	33
F5	28	J2	31	R15	33
F6	28	J8	31		

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1M		
1N		
1O		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1T		

## : Connector Joining Wire Harness and Wire Harness

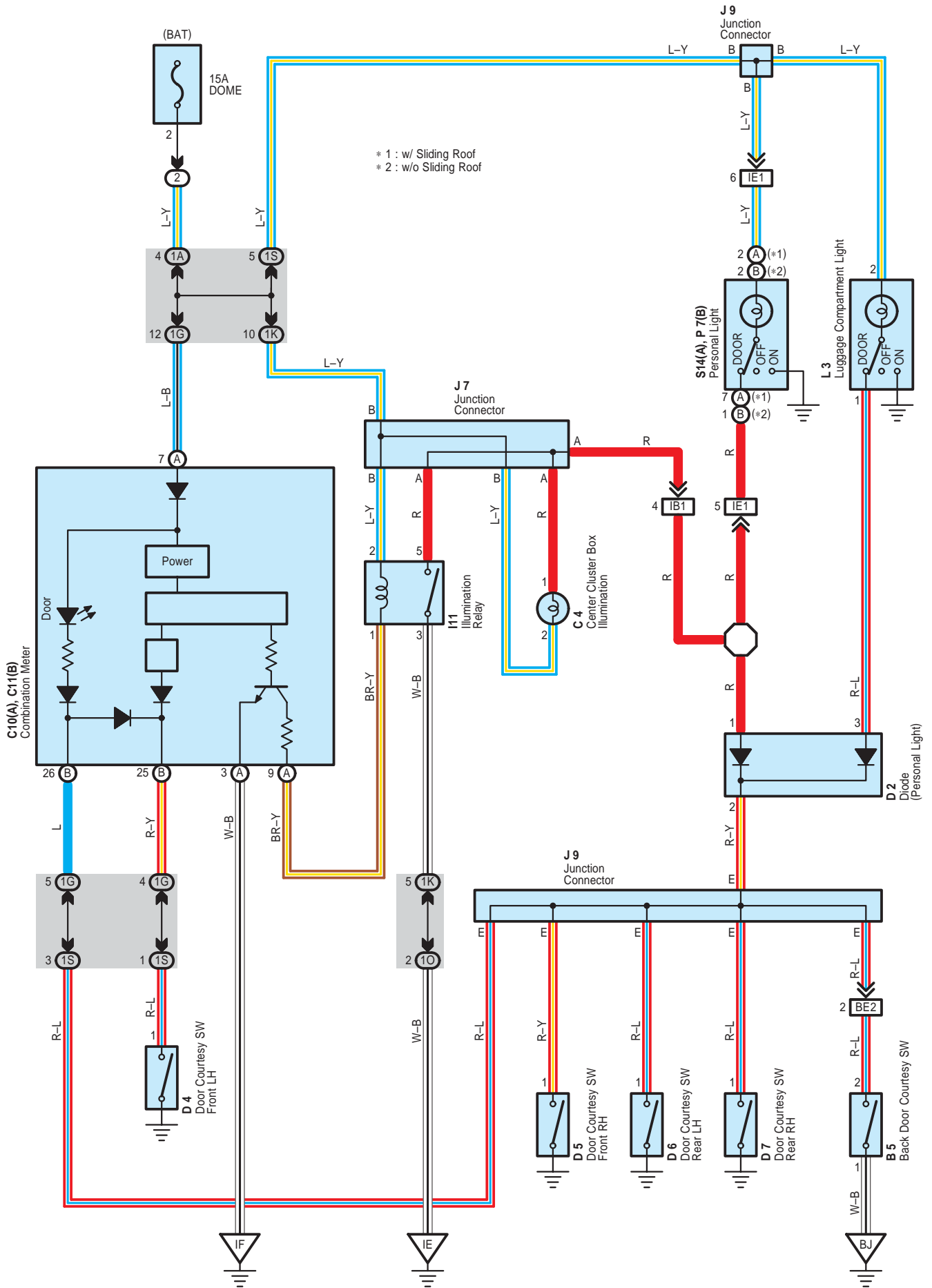
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

## : Ground Points

Code	See Page	Ground Points Location
EA	34	Front Fender Apron RH
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
IG	36	Right Kick Panel
BH	38	Left Quarter Pillar



# Interior Light



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
B5	32	D4	32	J7	31
C4	30	D5	32	J9	32
C10	A 30	D6	32	L3	32
C11	B 30	D7	32	P7	B 33
D2	30	I11	31	S14	A 33

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1G	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1K		
1O		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

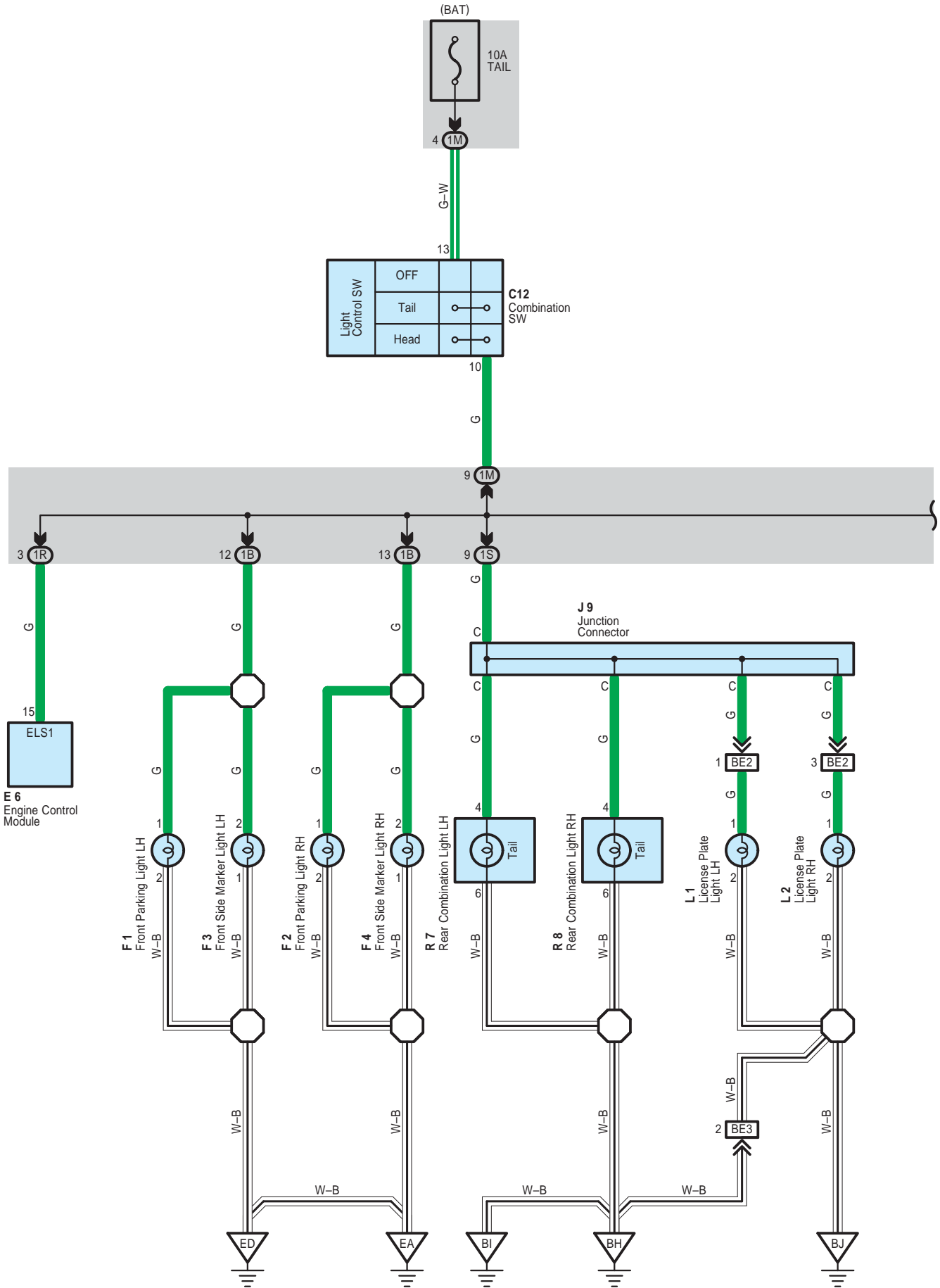
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IE1	37	Roof Wire and Floor Wire (Upper Side of the Cowl Side Panel LH)
BE2	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)

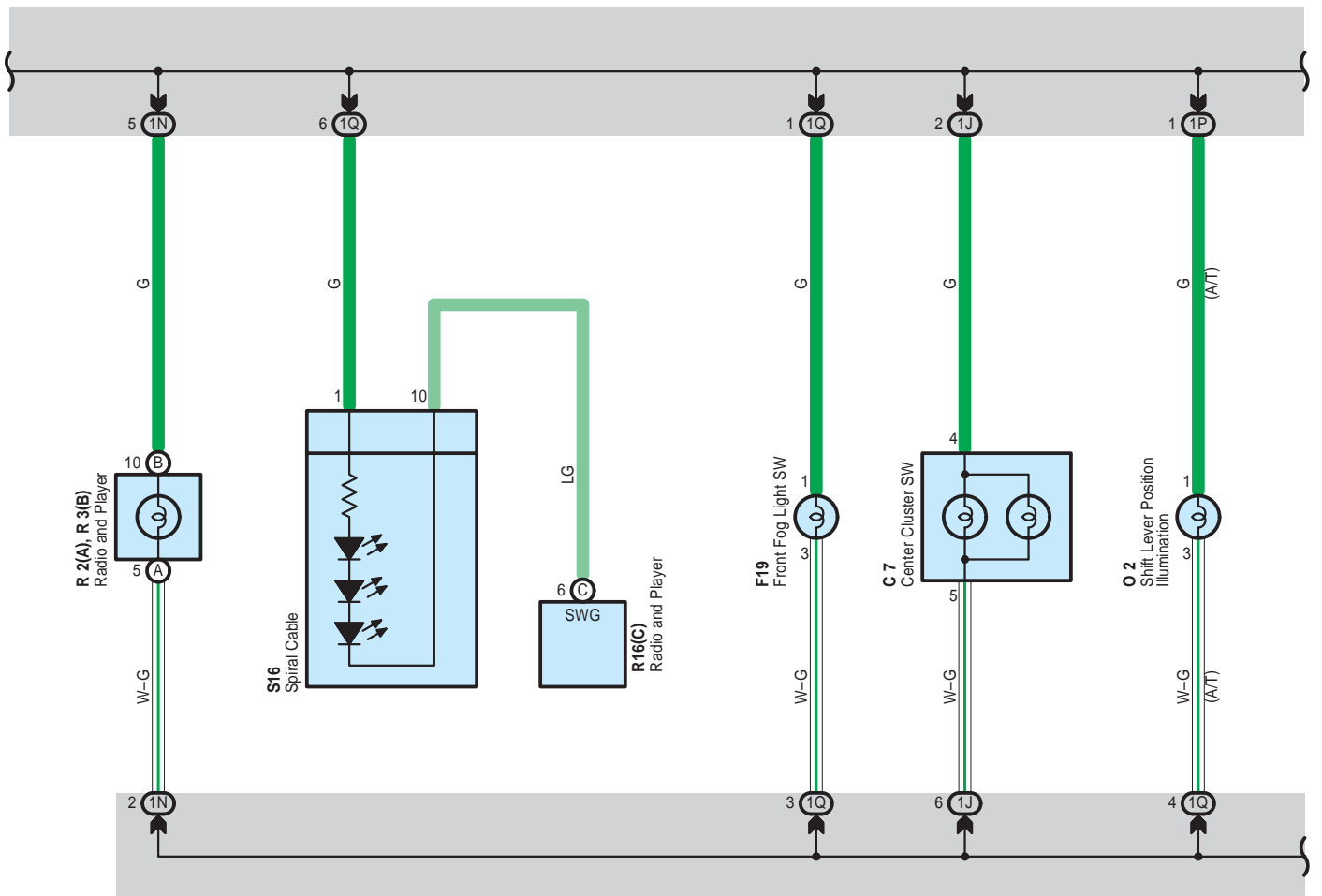
 : **Ground Points**

Code	See Page	Ground Points Location
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
BJ	38	Back Door Panel LH

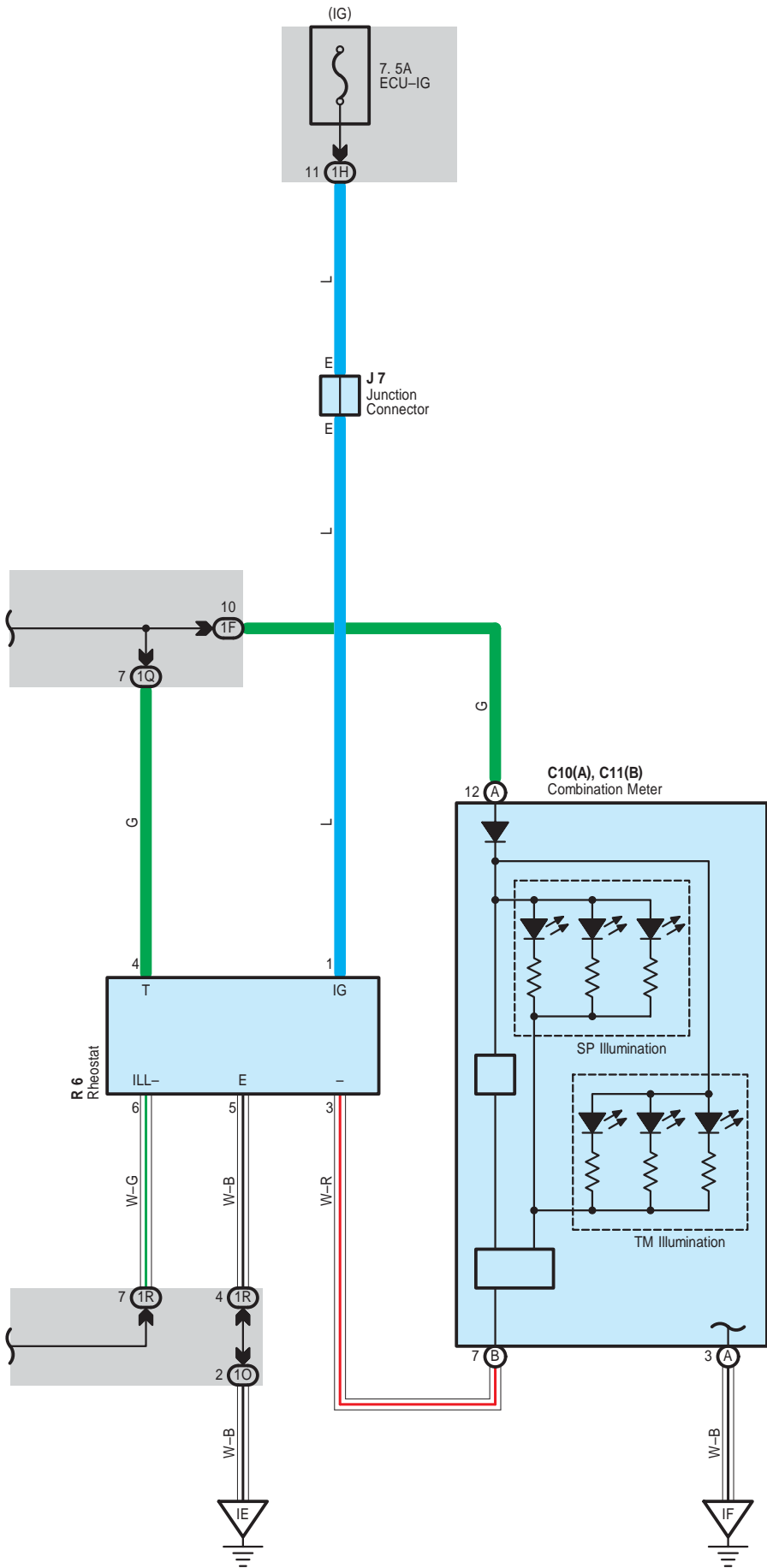
# Taillight and Illumination







# Taillight and Illumination



 : Parts Location

Code	See Page	Code	See Page	Code	See Page
C7	30	F4	28	R3	B 31
C10	A 30	F19	30	R6	31
C11	B 30	J7	31	R7	33
C12	30	J9	32	R8	33
E6	30	L1	32	R16	C 31
F1	28	L2	32	S16	31
F2	28	O2	31		
F3	28	R2	A 31		

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1F	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1H		
1J		
1M		
1N		
1O		
1P		
1Q		
1R		
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

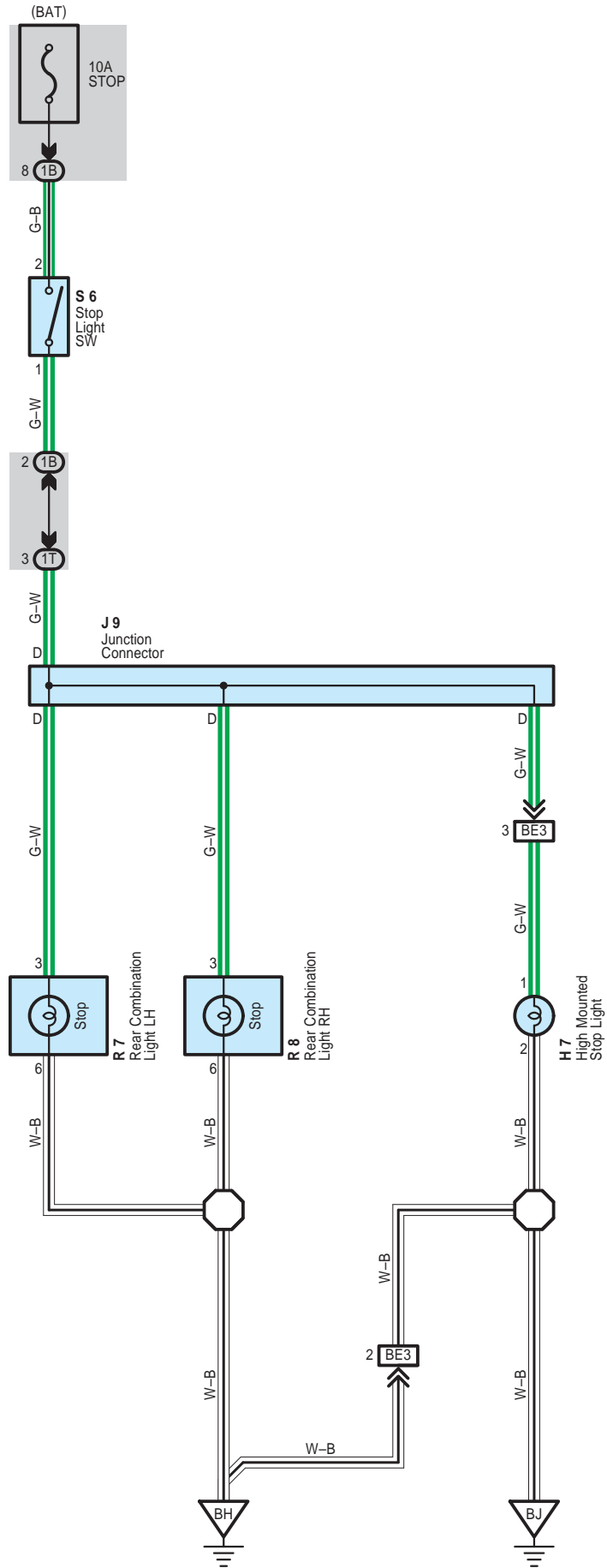
 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BE2	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)
BE3		

 : Ground Points


Code	See Page	Ground Points Location
EA	34	Front Fender Apron RH
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
BH	38	Left Quarter Pillar
BI	38	Right Quarter Pillar
BJ	38	Back Door Panel LH

# Stop Light



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
H7	32	R7	33	S6	31
J9	32	R8	33		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1T	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

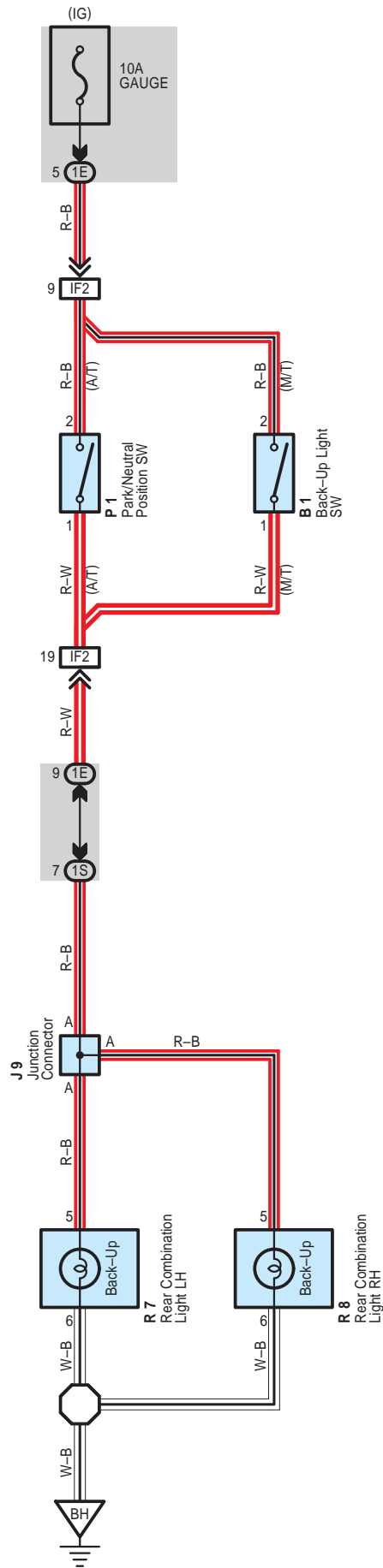
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BE3	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)

 : **Ground Points**

Code	See Page	Ground Points Location
BH	38	Left Quarter Pillar
BJ	38	Back Door Panel LH

# Back-Up Light



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
B1	28	P1	29	R8	33
J9	32	R7	33		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)

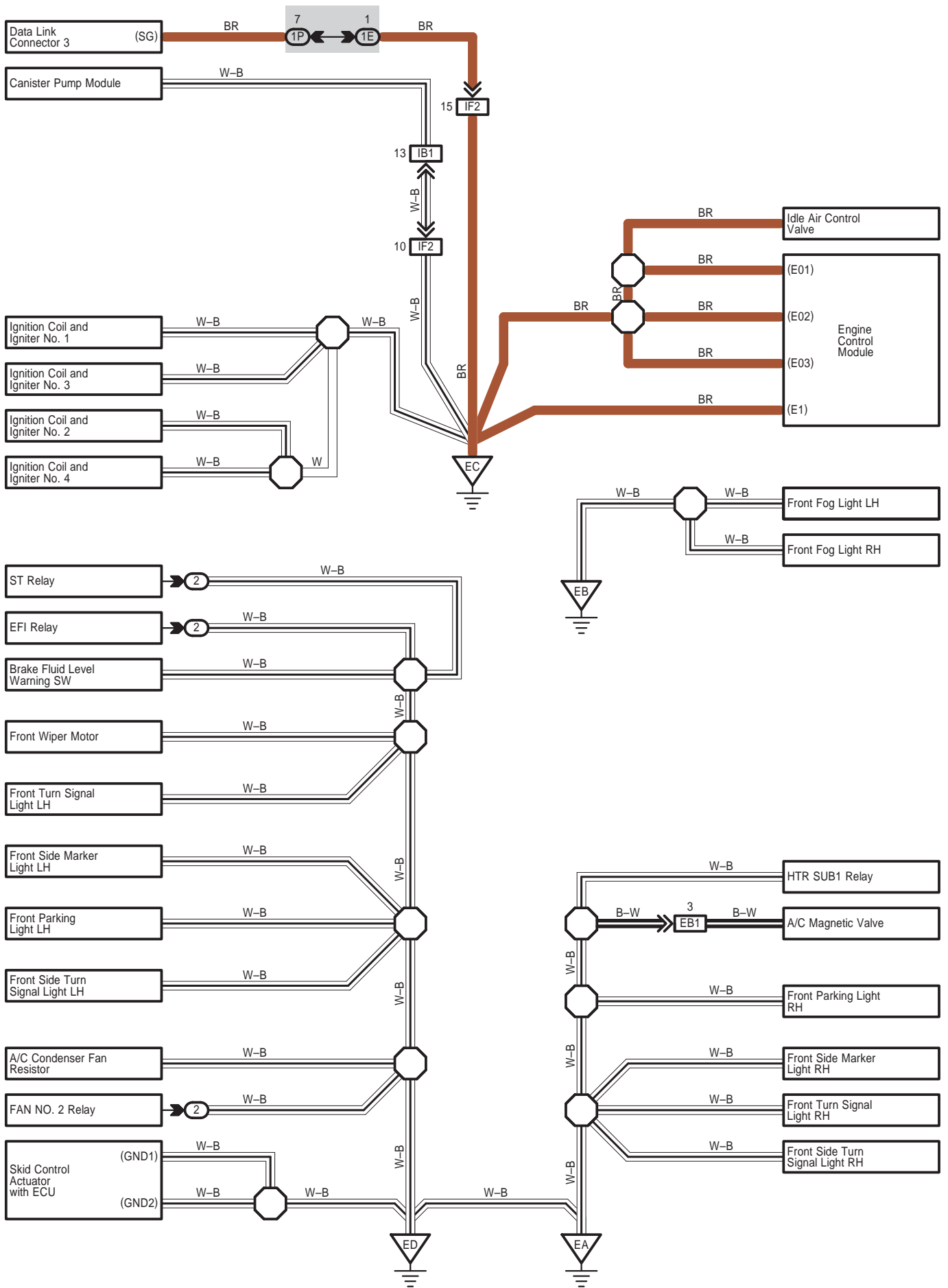
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

 : **Ground Points**

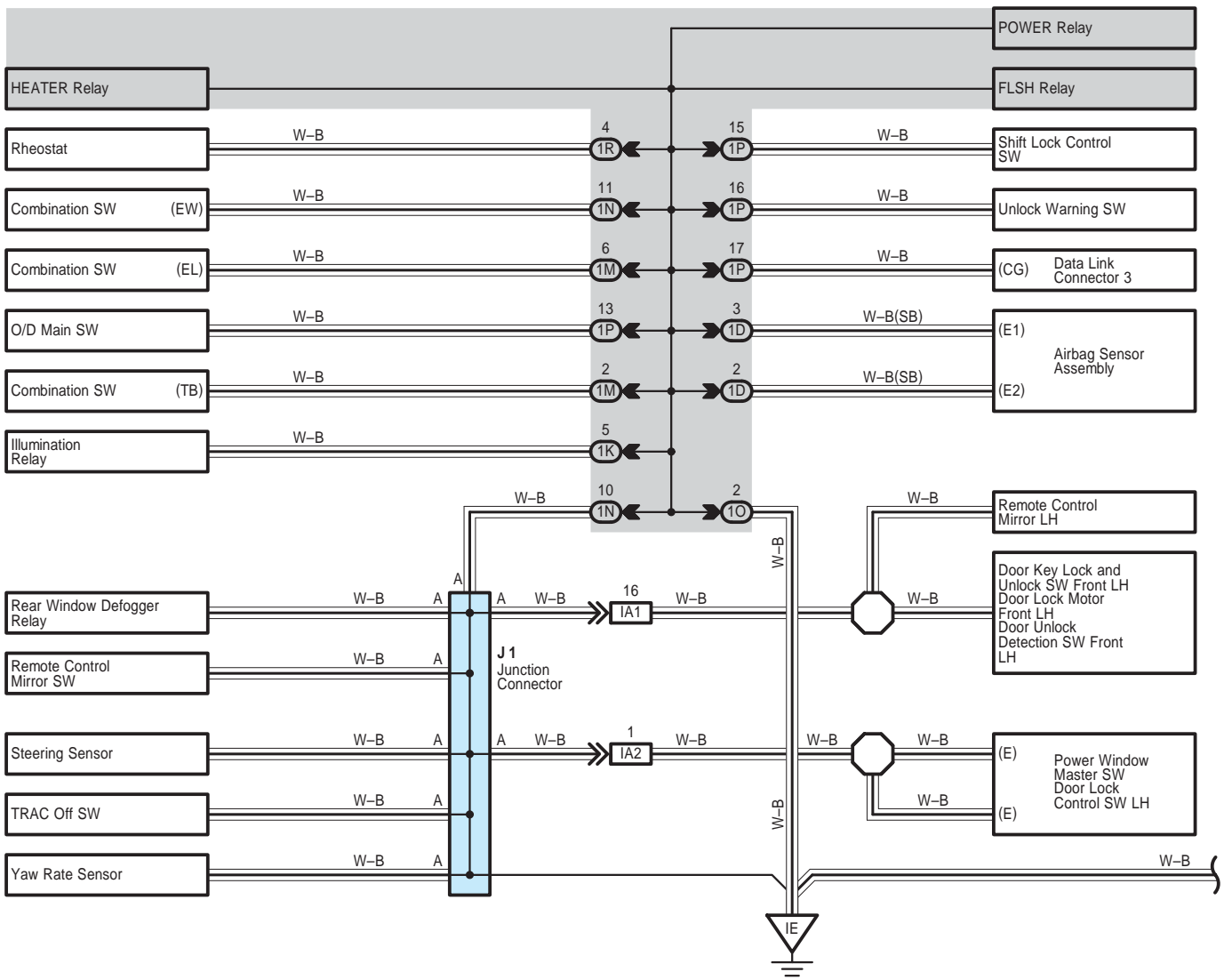
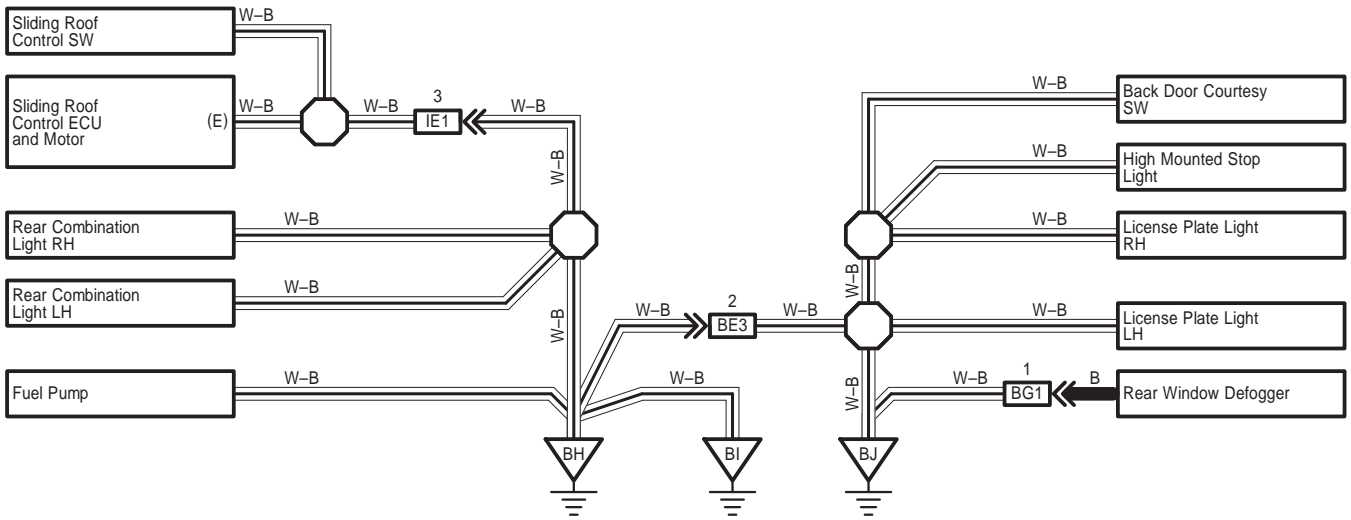
Code	See Page	Ground Points Location
BH	38	Left Quarter Pillar

# I GROUND POINT

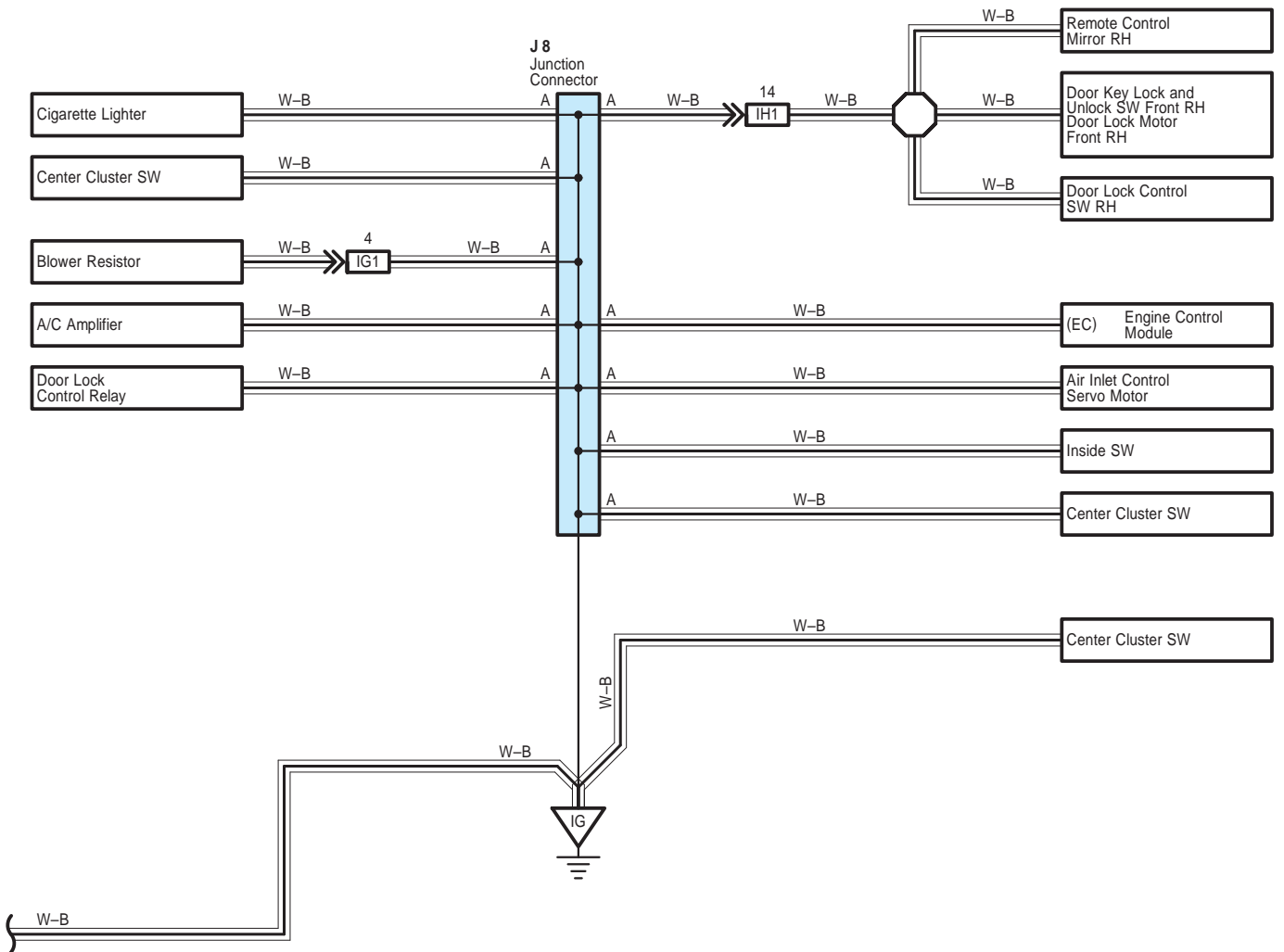
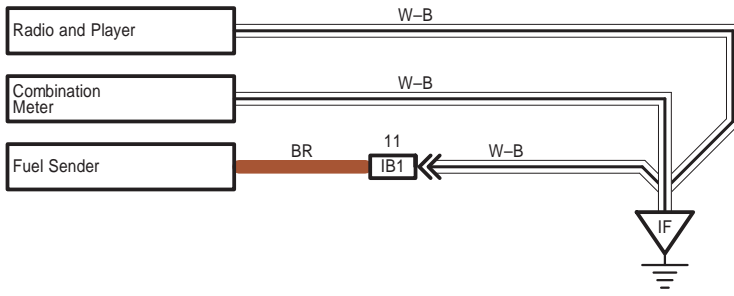




Note :  
 Since there is a case where the different wire color is used depending on the vehicle,  
 a wire color code like "G(SB)" is used in this manual.  
 Please refer to page 40 for details.



# I GROUND POINT



 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
J1	31	J8	31		

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1K		
1M		
1N		
1O		
1P		
1R		

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

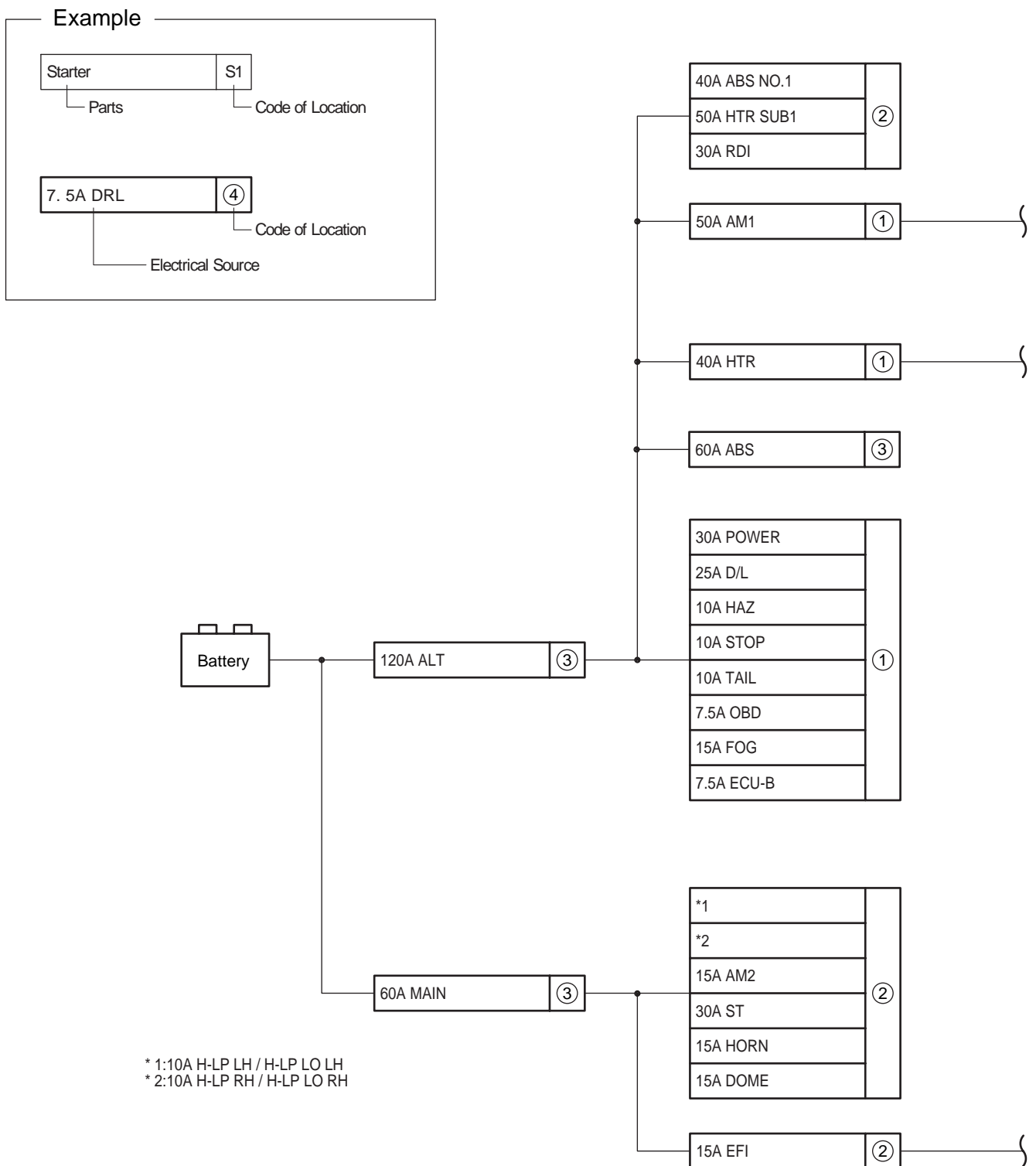
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	34	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B)
IA1	36	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IB1	36	Floor Wire and Instrument Panel Wire (Upper Side of the Instrument Panel J/B)
IE1	37	Roof Wire and Floor Wire (Upper Side of the Cowl Side Panel LH)
IF2	37	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IG1	37	Instrument Panel Wire and A/C Sub Wire (Right Kick Panel)
IH1	37	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BE3	38	Back Door No.1 Wire and Floor Wire (Quarter Panel LH)
BG1	38	Back Door No.1 Wire and Rear Door No.1 Wire (Right Side of the Back Door Panel)

 : **Ground Points**

Code	See Page	Ground Points Location
EA	34	Front Fender Apron RH
EB		
EC	34	Cylinder Head
ED	34	Front Fender Apron LH
IE	36	Left Kick Panel
IF	36	Instrument Panel Brace LH
IG	36	Right Kick Panel
BH	38	Left Quarter Pillar
BI	38	Right Quarter Pillar
BJ	38	Back Door Panel LH

# J POWER SOURCE (Current Flow Chart)

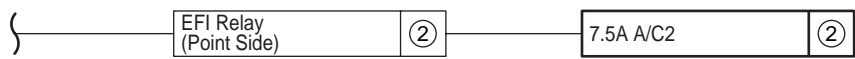
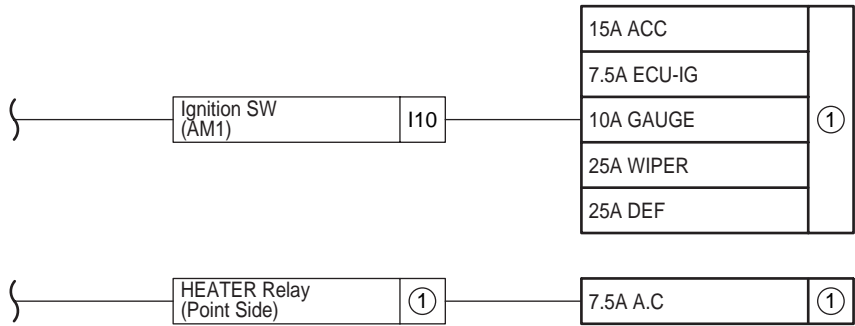
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



**[LOCATION]**

① : Instrument Panel J/B (See Page 24)

② : Engine Room R/B (See Page 22)



③ : Fusible Link Block (See Page 23)

## J POWER SOURCE (Current Flow Chart)

### Instrument Panel J/B (See Page 24)

Fuse		System	Page
7.5A	A.C	Air Conditioning	150
		PTC Heater	146
		Two Way Flow Heater	142
7.5A	ECU-B	ABS (w/ VSC), TRAC and VSC	96
		Multiplex Communication System (CAN)	104
7.5A	ECU-IG	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Air Conditioning	150
		Multiplex Communication System (CAN)	104
		PTC Heater	146
		Radiator Fan and Condenser Fan	148
		Taillight and Illumination	70
7.5A	OBD	Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
10A	GAUGE	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Air Conditioning	150
		Audio System	132
		Back-Up Light	76
		Charging	50
		Combination Meter	136
		Door Lock Control	86
		Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
		Key Reminder and Seat Belt Warning	120
		Light Reminder	122
		Power Window	82
		Rear Window Defogger	130
		Shift Lock	118
		Sliding Roof	114
SRS	109		
10A	HAZ	Turn Signal and Hazard Warning Light	64
		Two Way Flow Heater	142
10A	STOP	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
		Shift Lock	118
		Stop Light	74

\* These are the page numbers of the first page on which the related system is shown.

Fuse		System	Page
10A	TAIL	Light Reminder	122
		Taillight and Illumination	70
15A	ACC	Audio System	132
		Cigarette Lighter	126
		Remote Control Mirror	124
15A	FOG	Front Fog Light	62
25A	DEF	Rear Window Defogger	130
25A	D/L	Door Lock Control	86
25A	WIPER	Front Wiper and Washer	78
		Rear Wiper and Washer	80
30A	POWER	Power Window	82
		Sliding Roof	114
40A	HTR	Air Conditioning	150
		PTC Heater	146
		Two Way Flow Heater	142

### Engine Room R/B (See Page 22)

Fuse		System	Page
10A	H-LP LH/H-LP LO LH	Headlight	60
10A	H-LP RH/H-LP LO RH	Headlight	60
15A	AM2	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Charging	50
		Combination Meter	136
		Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
		SRS	109
		Starting and Ignition	46
15A	DOME	Audio System	132
		Combination Meter	136
		Interior Light	68
		Key Reminder and Seat Belt Warning	120
		Light Reminder	122
15A	EFI	Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
15A	HORN	Horn	128
30A	RDI	Radiator Fan and Condenser Fan	148
30A	ST	Starting and Ignition	46
40A	ABS NO.1	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
50A	HTR SUB1	PTC Heater	146

\* These are the page numbers of the first page on which the related system is shown.

## J POWER SOURCE (Current Flow Chart)

### Fusible Link Block (See Page 23)

Fuse		System	Page
60A	ABS	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
60A	MAIN	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Charging	50
		Combination Meter	136
		Electronically Controlled Transmission and A/T Indicator	90
		Engine Control	52
		SRS	109
Starting and Ignition	46		
120A	ALT	ABS (w/ VSC), TRAC and VSC	96
		ABS (w/o VSC)	106
		Charging	50

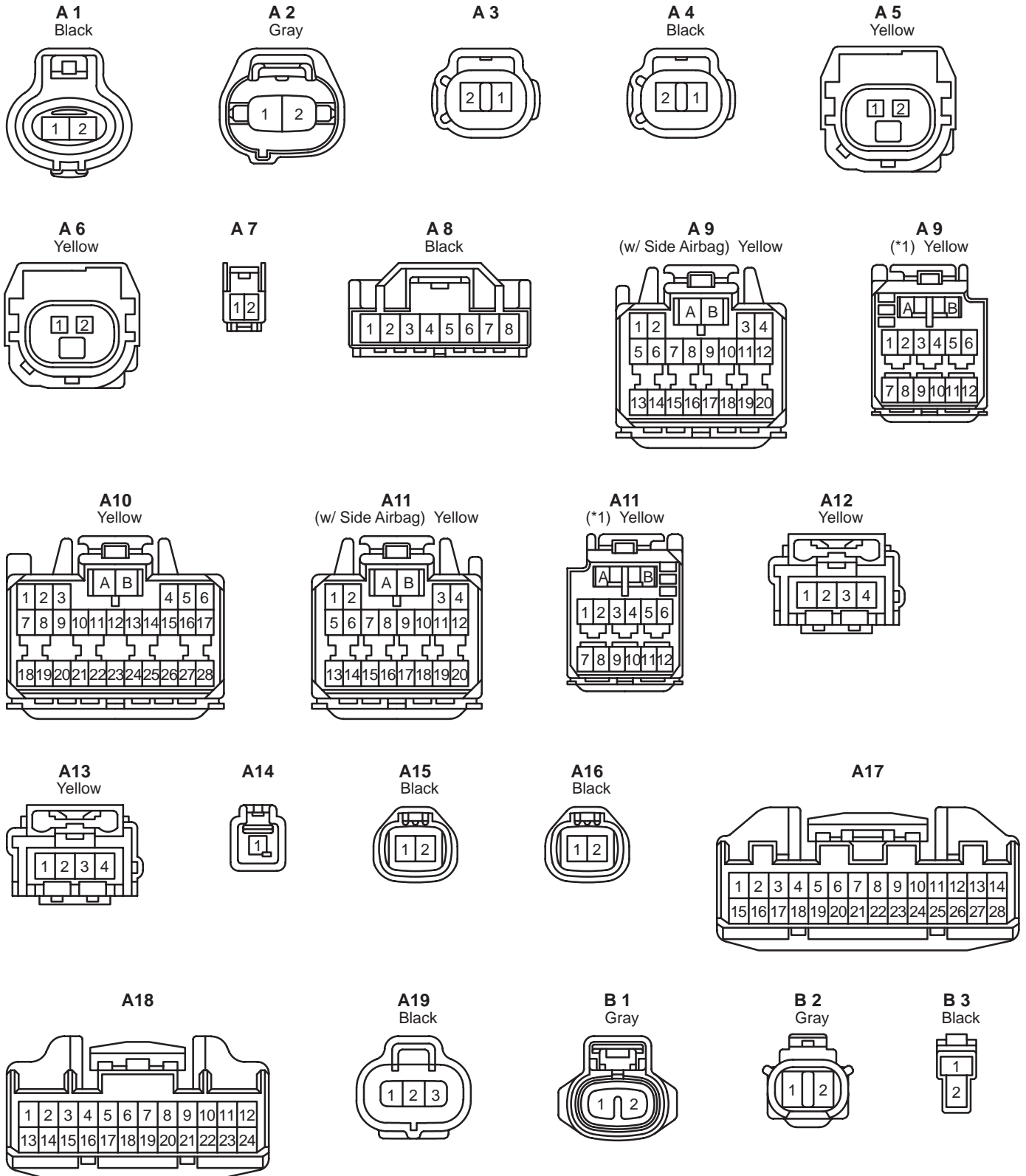
\* These are the page numbers of the first page on which the related system is shown.

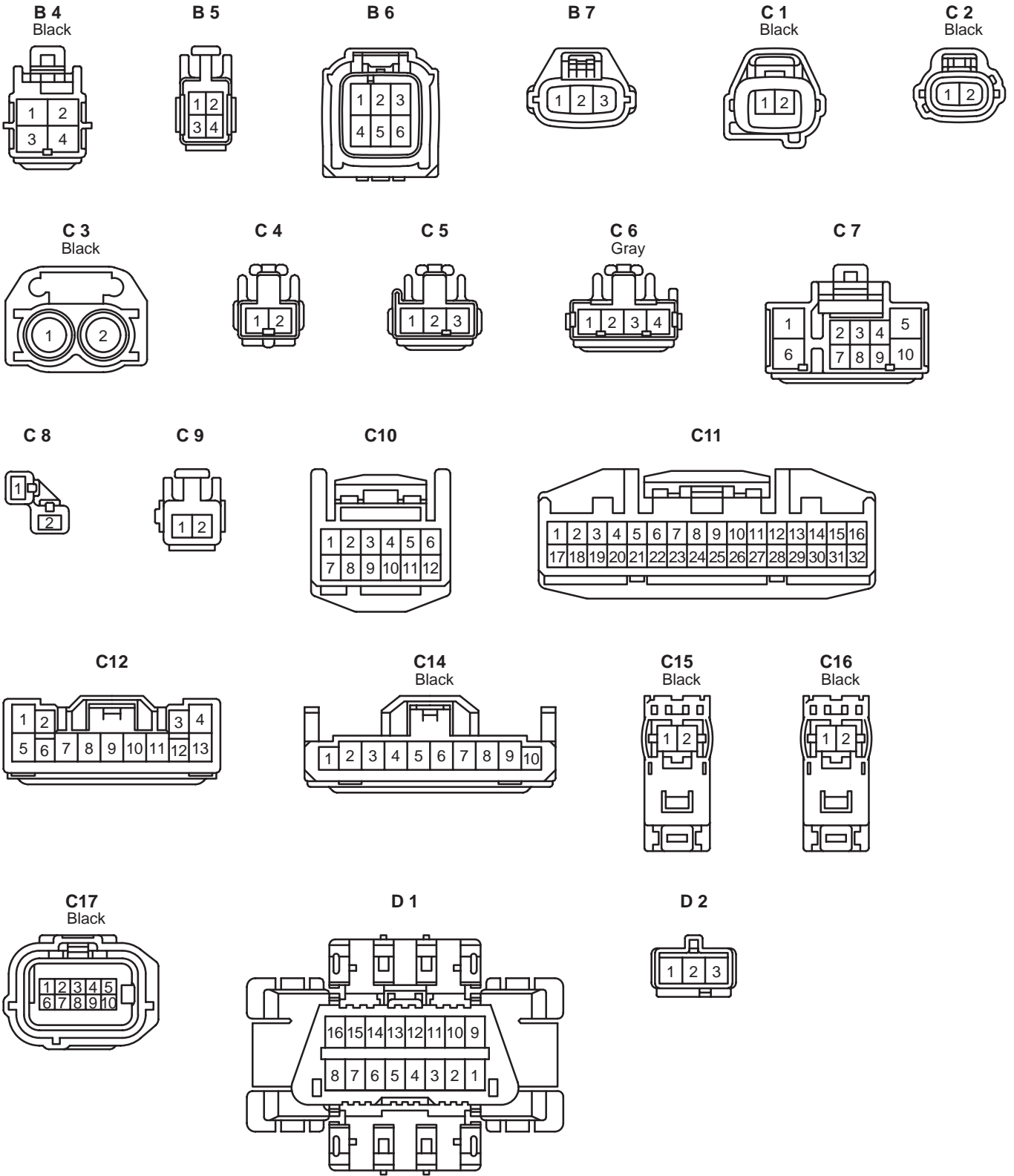




# K CONNECTOR LIST

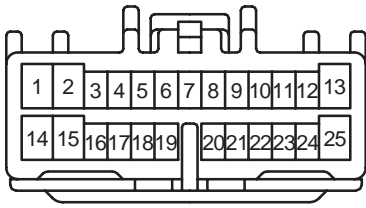
\*1 : w/o Side Airbag





# K CONNECTOR LIST

**D 3**



**D 4**



**D 5**



**D 6**



**D 7**



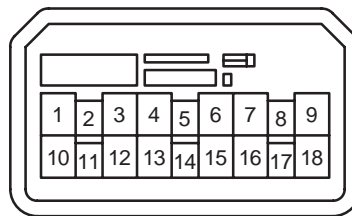
**D 8**



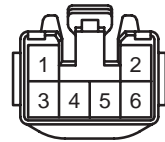
**D 9**



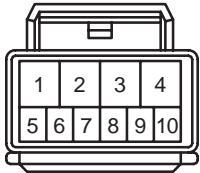
**D10**



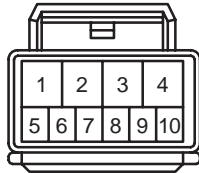
**D11**



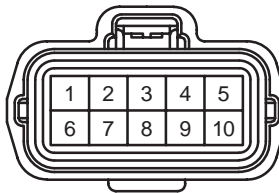
**D12**



**D13**



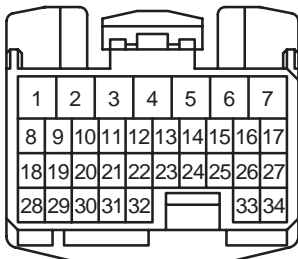
**E 1**  
Gray



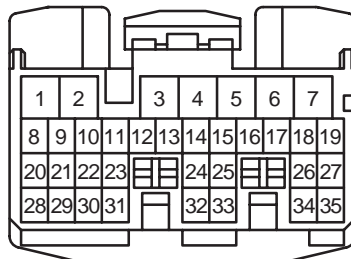
**E 2**  
Gray



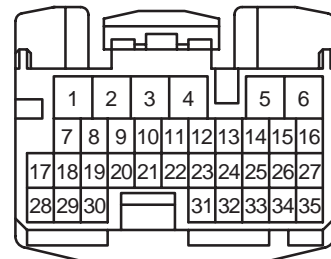
**E 3**



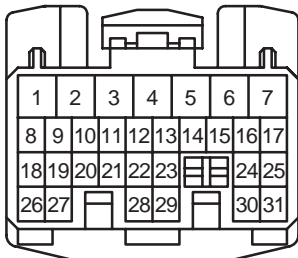
**E 4**



**E 5**



**E 6**



**F 1**  
Brown



**F 2**  
Brown

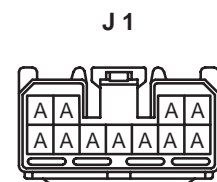
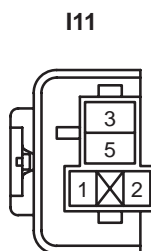
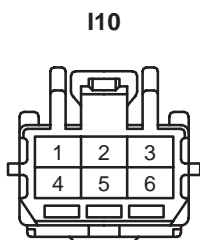
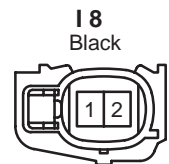
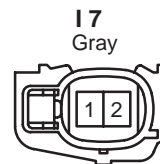
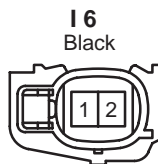
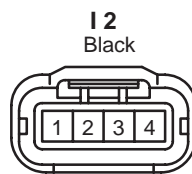
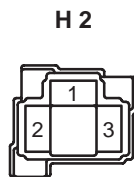
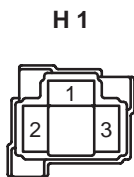
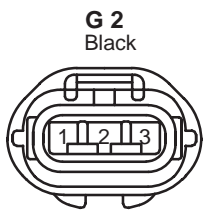
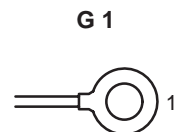
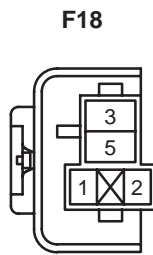
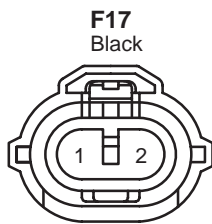
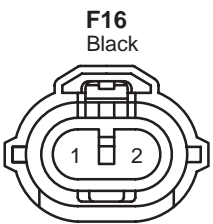
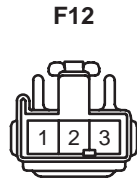
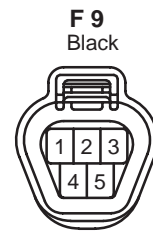
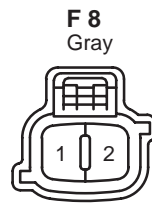
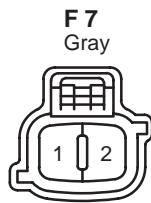


**F 3**



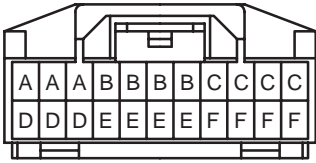
**F 4**





# K CONNECTOR LIST

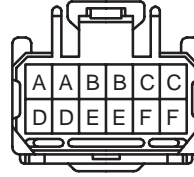
**J2**



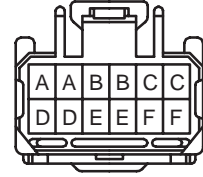
**J3**



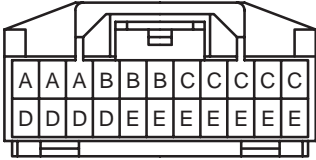
**J4**



**J5**



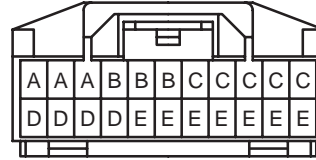
**J7**



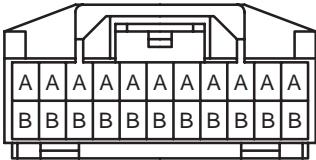
**J8**



**J9**



**J10**



**K1**  
Gray



**L1**  
Gray



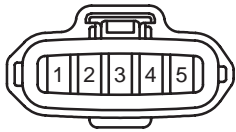
**L2**  
Gray



**L3**



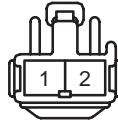
**M1**  
Black



**N1**  
Gray



**N2**



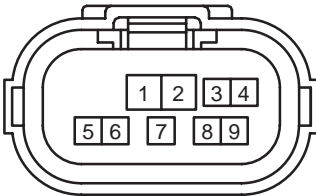
**O1**  
Gray



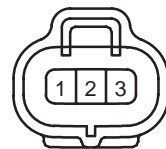
**O2**  
Blue



**P1**  
Gray



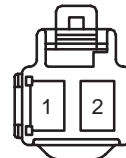
**P2**  
Black



**P4**



**P6**



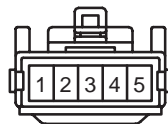
**P7**



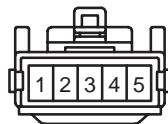
**P8**



**P9**



**P10**

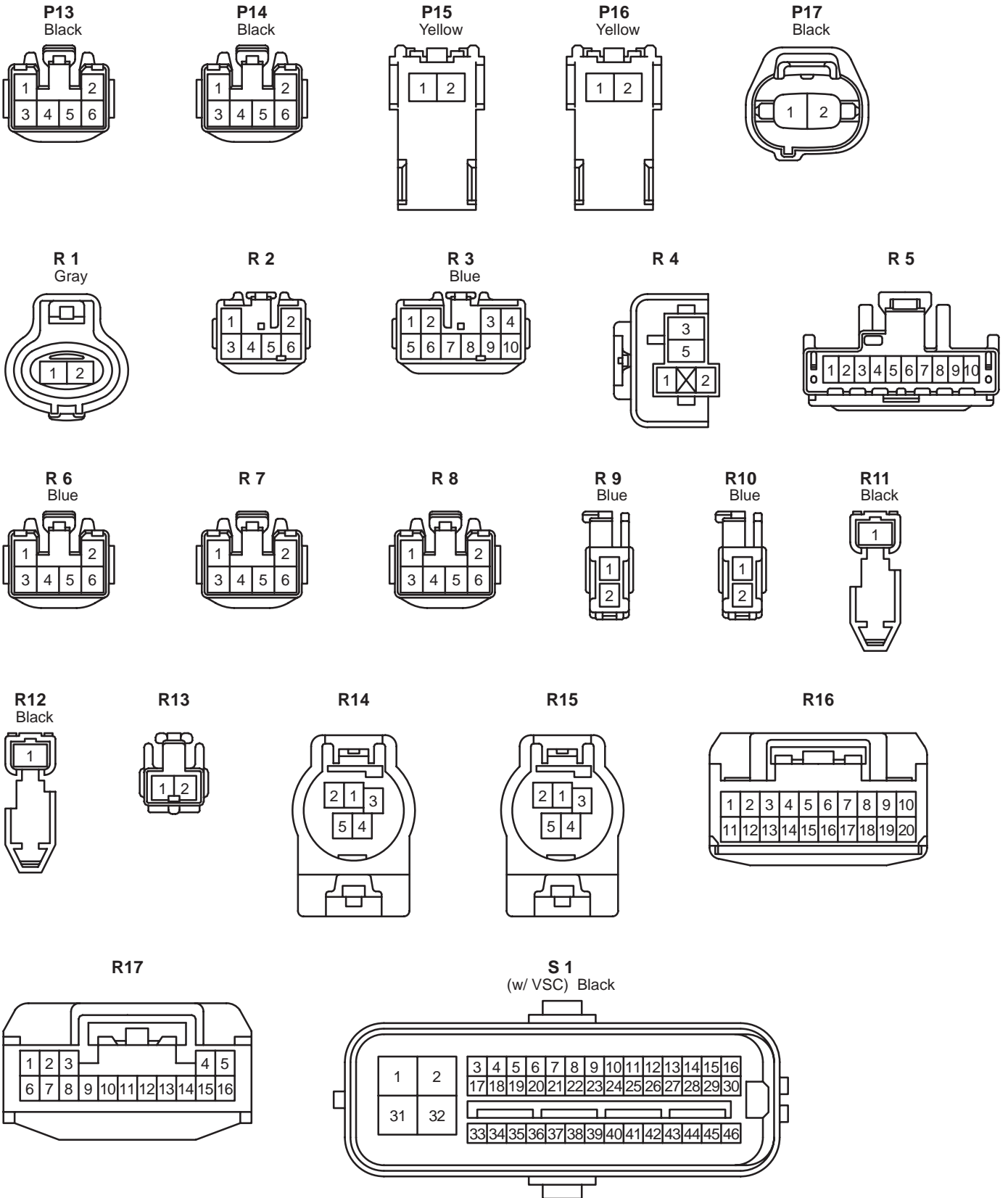


**P11**  
Black

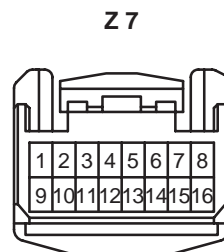
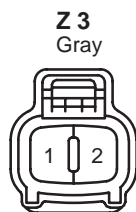
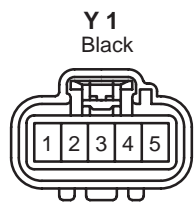
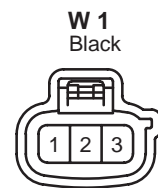
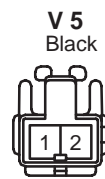
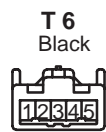
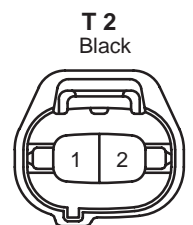
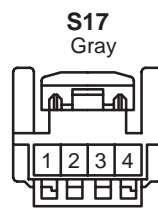
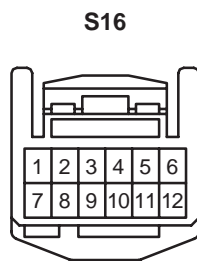
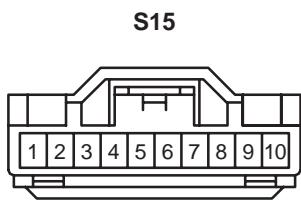
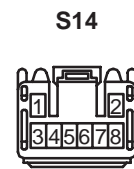
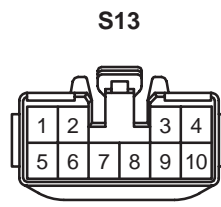
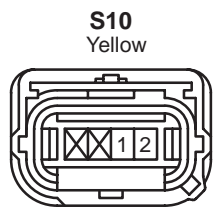
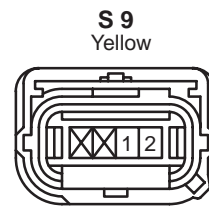
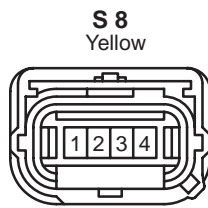
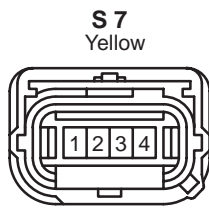
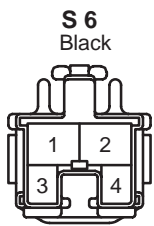
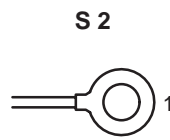
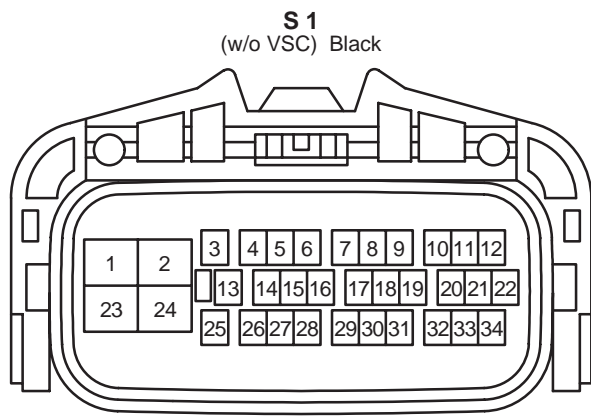


**P12**  
Black





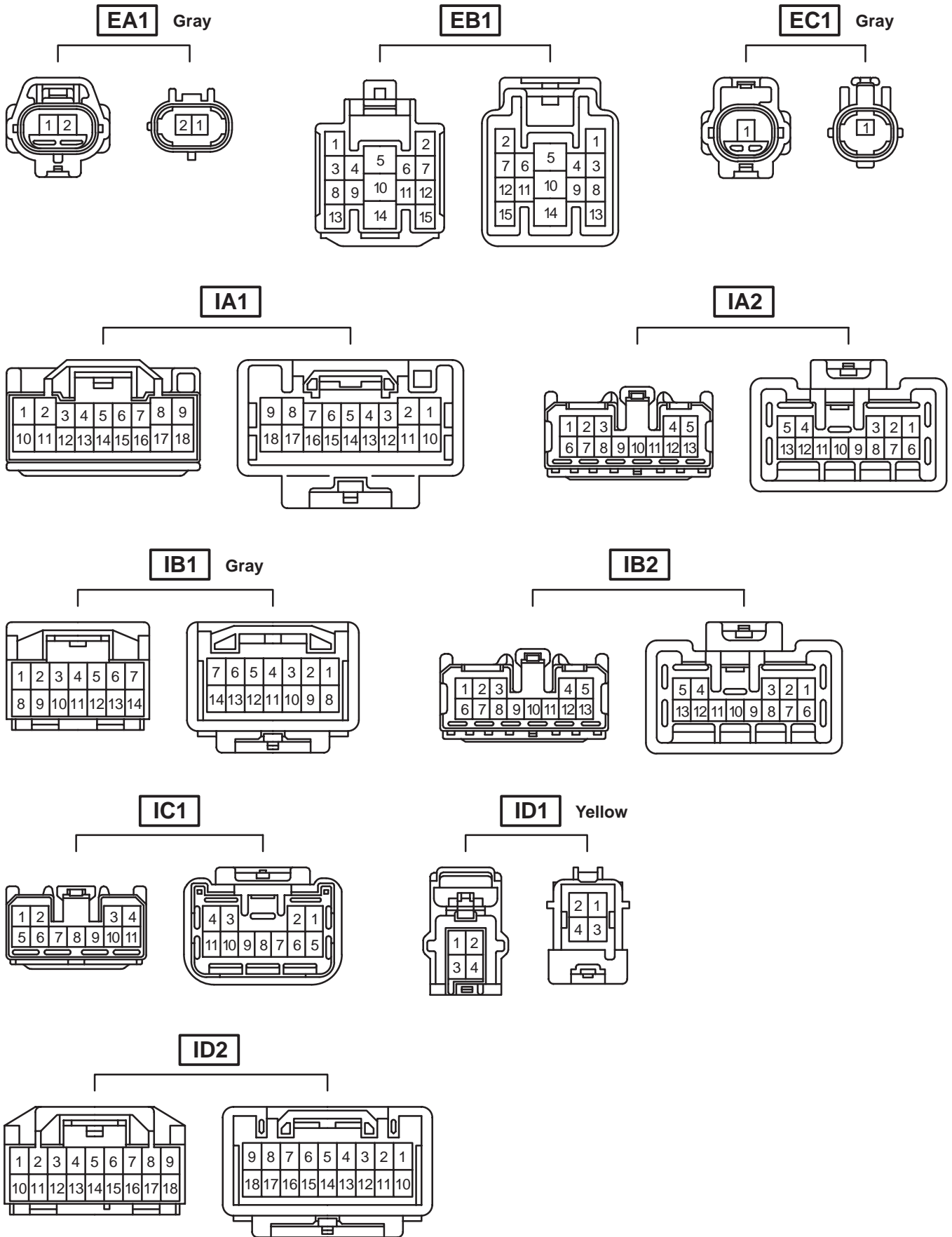
# K CONNECTOR LIST

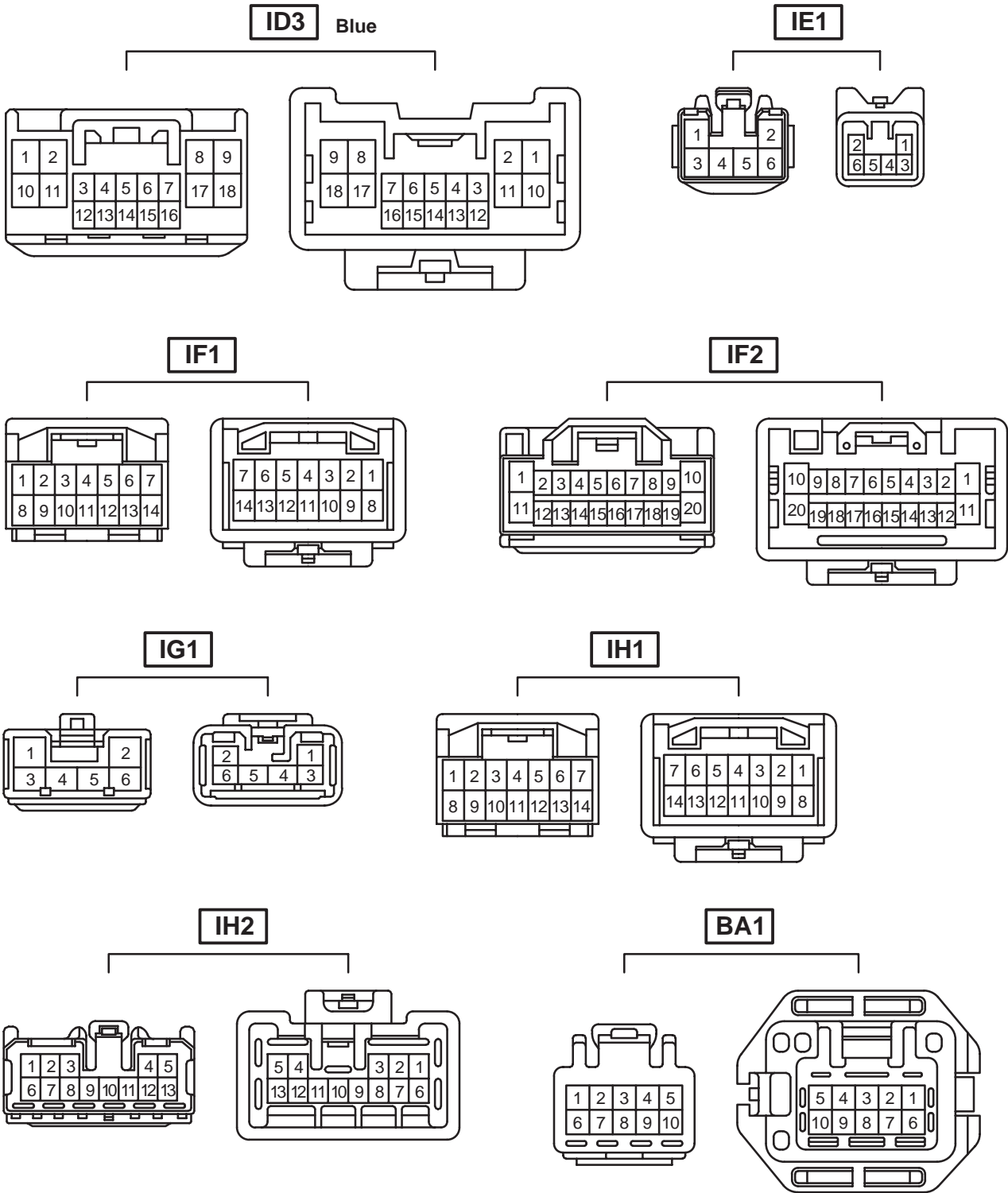




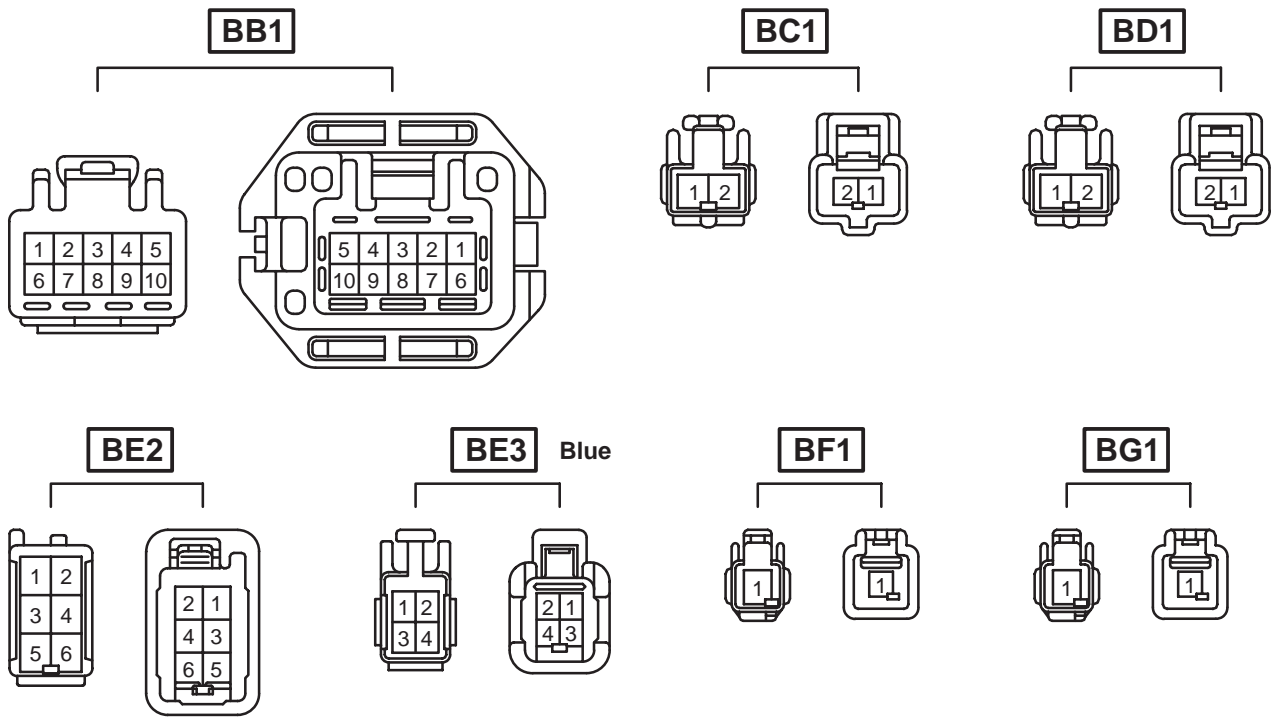


# K CONNECTOR LIST





# K CONNECTOR LIST





## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Condenser Fan Resistor	90980-10928	D 2	Diode (Personal Light)	90980-11071
A 2	A/C Magnetic Valve	90980-11156	D 3	Door Lock Control Relay	90980-11877
A 3	ABS Speed Sensor Front LH	90980-11002	D 4	Door Courtesy SW Front LH	90980-10871
A 4	ABS Speed Sensor Front RH		D 5	Door Courtesy SW Front RH	
A 5	Airbag Sensor Front LH	90980-12401	D 6	Door Courtesy SW Rear LH	
A 6	Airbag Sensor Front RH		D 7	Door Courtesy SW Rear RH	
A 7	A/C Thermistor	90980-11918	D 8	Door Key Lock and Unlock SW Front LH	90980-12226
A 8	Air Inlet Control Servo Motor	90980-11989		Door Lock Motor Front LH	
A 9	Airbag Sensor Assembly (w/ Side Airbag)	82824-50160		Door Unlock Detection SW Front LH	
	Airbag Sensor Assembly (w/o Side Airbag)	90980-11869	D 9	Door Key Lock and Unlock SW Front RH	
A10	Airbag Sensor Assembly	90980-11872		Door Lock Motor Front RH	
A11	Airbag Sensor Assembly (w/ Side Airbag)	82824-50150	D10	Door Lock Control SW LH	
	Airbag Sensor Assembly (w/o Side Airbag)	90980-11867		Power Window Master SW	
A12	Airbag Squib (Front Passenger Airbag Assembly)	90980-12160	D11	Door Lock Control SW RH	90980-10797
A13	Airbag Squib (Steering Wheel Pad)		D12	Door Lock Motor Rear LH	90980-12226
A14	Antenna Amplifier	90980-10870	D13	Door Lock Motor Rear RH	
A15	ABS Speed Sensor Rear LH	90980-11900	E 1	Electronically Controlled Transmission Solenoid	90980-11658
A16	ABS Speed Sensor Rear RH		E 2	Engine Coolant Temp. Sensor	90980-10735
A17	A/C Amplifier	90980-12410	E 3	Engine Control Module	90980-12144
A18	A/C Amplifier	90980-12200	E 4	Engine Control Module	90980-12145
A19	A/C Pressure Sensor	90980-10845	E 5	Engine Control Module	90980-12146
B 1	Back-Up Light SW	90980-11250	E 6	Engine Control Module	90980-12142
B 2	Brake Fluid Level Warning SW	90980-11207	F 1	Front Parking Light LH	90080-98298
B 3	Blower Motor	90980-10214	F 2	Front Parking Light RH	
B 4	Blower Resistor	90980-11136	F 3	Front Side Marker Light LH	90980-11162
B 5	Back Door Courtesy SW	90980-10795	F 4	Front Side Marker Light RH	
	Back Door Lock Motor		F 5	Front Side Turn Signal Light LH	
B 6	Buckle SW LH	90980-12257	F 6	Front Side Turn Signal Light RH	
B 7	Buckle SW RH	90980-11020	F 7	Front Turn Signal Light LH	90980-11019
C 1	Camshaft Position Sensor	90980-10947	F 8	Front Turn Signal Light RH	
C 2	Camshaft Timing Oil Control Valve	90980-11162	F 9	Front Wiper Motor	90980-11599
C 3	Crankshaft Position Sensor	90980-12028	F10	Fusible Link Block	-
C 4	Center Cluster Box Illumination	90980-10860	F11	Fusible Link Block	90980-11775
C 5	Center Cluster SW	90980-10908	F12	Foot Mode SW	90980-10908
C 6	Center Cluster SW	90980-11013		Max Cool SW	
C 7	Center Cluster SW	90980-10993		Max Hot SW	
C 8	Cigarette Lighter	90980-10760	F13	Front Speaker LH	90980-10935
C 9	Clutch Start SW	90980-10825	F14	Front Speaker RH	
C10	Combination Meter	90980-12183	F15	Fuel Pump	90980-11077
C11	Combination Meter	90980-12153		Fuel Sender	
C12	Combination SW	90980-12007	F16	Front Fog Light LH	82824-60460
C14	Combination SW	90980-12008	F17	Front Fog Light RH	
C15	Curtain Shield Airbag Squib LH	90980-12219	F18	Front Fog Light Relay	82660-52030
C16	Curtain Shield Airbag Squib RH		F19	Front Fog Light SW	90980-10601
C17	Canister Pump Module	90980-12380	G 1	Generator	90980-09373
D 1	Data Link Connector 3	90980-11978			

Note: Not all of the above part numbers of the connector are established for the supply.

Code	Part Name	Part Number	Code	Part Name	Part Number
G 2	Generator	90980-11349	P 8	Power Window Control SW Front RH	90980-10789
H 1	Headlight LH	90980-11314	P 9	Power Window Control SW Rear LH	
H 2	Headlight RH		P10	Power Window Control SW Rear RH	
H 3	Heated Oxygen Sensor (Bank 1 Sensor 1)	90980-10869	P11	Power Window Motor Front LH	90980-10797
H 4	Horn (High)	90980-10619	P12	Power Window Motor Front RH	
H 5	Horn (Low)		P13	Power Window Motor Rear LH	
H 6	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980-11028	P14	Power Window Motor Rear RH	
H 7	High Mounted Stop Light	90980-11148	P15	Pretensioner LH	90980-12253
I 1	Idle Air Control Valve	90980-11145	P16	Pretensioner RH	
I 2	Ignition Coil and Igniter No.1	90980-11885	P17	VSV (Purge)	90980-11156
I 3	Ignition Coil and Igniter No.2		R 1	Radiator Fan Motor	90980-10928
I 4	Ignition Coil and Igniter No.3		R 2	Radio and Player	90980-10996
I 5	Ignition Coil and Igniter No.4		R 3	Radio and Player	90980-10997
I 6	Injector No.1	90980-11875	R 4	Rear Window Defogger Relay	82660-52030
I 7	Injector No.2		R 5	Remote Control Mirror SW	90980-11657
I 8	Injector No.3		R 6	Rheostat	90980-10797
I 9	Injector No.4		R 7	Rear Combination Light LH	
I10	Ignition SW	90980-11778	R 8	Rear Combination Light RH	90980-10935
I11	Illumination Relay	82660-52030	R 9	Rear Speaker LH	
I12	Inside SW	90980-10795	R10	Rear Speaker RH	
J 1	Junction Connector	90980-11539	R11	Rear Window Defogger	90980-11853
J 2	Junction Connector	90980-11915	R12	Rear Window Defogger	
J 3	Junction Connector	90980-10803	R13	Rear Wiper Motor	90980-10860
J 4	Junction Connector	90980-11661	R14	Remote Control Mirror LH	82824-48090
J 5	Junction Connector		R15	Remote Control Mirror RH	
J 7	Junction Connector	90980-11915	R16	Radio and Player	90980-12460
J 8	Junction Connector	90980-11539	R17	Radio and Player	90980-12423
J 9	Junction Connector	90980-11915	S 1	Skid Control Actuator with ECU (w/ VSC)	90980-12297
J10	Junction Connector		S 1	Skid Control Actuator with ECU (w/o VSC)	90980-12020
K 1	Knock Sensor (Bank 1)	90980-11166	S 2	Starter	90980-09506
L 1	License Plate Light LH	90980-11148	S 3	Starter	90980-11400
L 2	License Plate Light RH		S 4	Shift Lock Control SW	90980-11909
L 3	Luggage Compartment Light	90980-10935	S 6	Stop Light SW	90980-11118
M 1	Mass Air Flow Meter	90980-11317	S 7	Side Airbag Sensor Front LH	90980-12225
N 1	Noise Filter (Ignition)	90980-10843	S 8	Side Airbag Sensor Front RH	
N 2	Noise Filter (Rear Window Defogger)	90980-10916	S 9	Side Airbag Sensor Rear LH	90980-12352
O 1	Oil Pressure SW	90980-11363	S10	Side Airbag Sensor Rear RH	
O 2	O/D Main SW	90980-10795	S11	Side Airbag Squib LH	90980-11864
	Shift Lever Position Illumination		S12	Side Airbag Squib RH	
P 1	Park/Neutral Position SW	90980-12362	S13	Sliding Roof Control ECU and Motor	90980-10801
P 2	Power Steering Oil Pressure Sensor	90980-10845	S14	Personal Light	90980-11533
P 4	Parking Brake SW	90980-10871		Sliding Roof Control SW	
P 6	PTC Heater	90980-10903	S15	Steering Sensor	90980-12162
P 7	Personal Light	90980-11148	S16	Spiral Cable	90980-12183





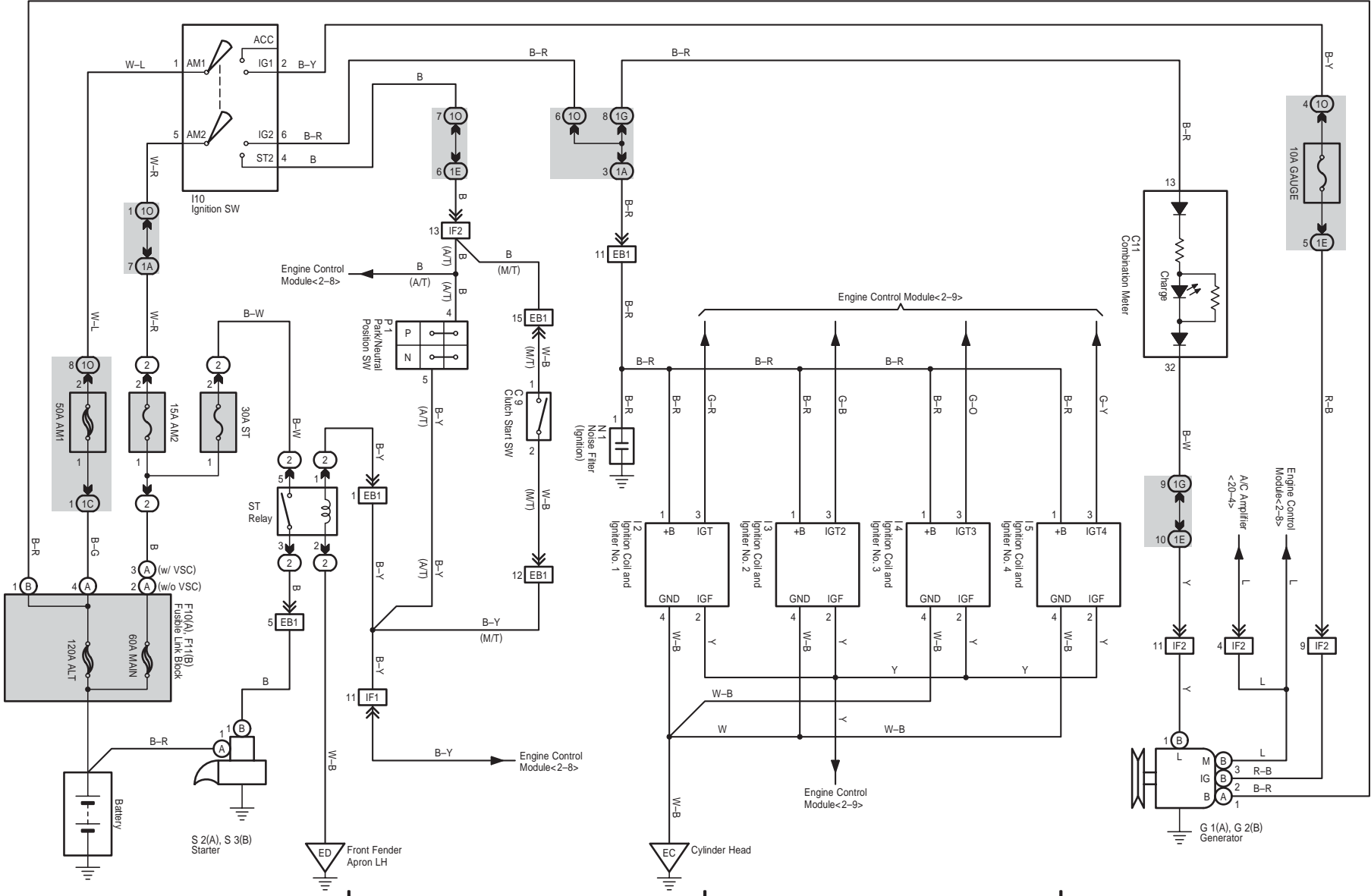


Power Source

Starting and Ignition

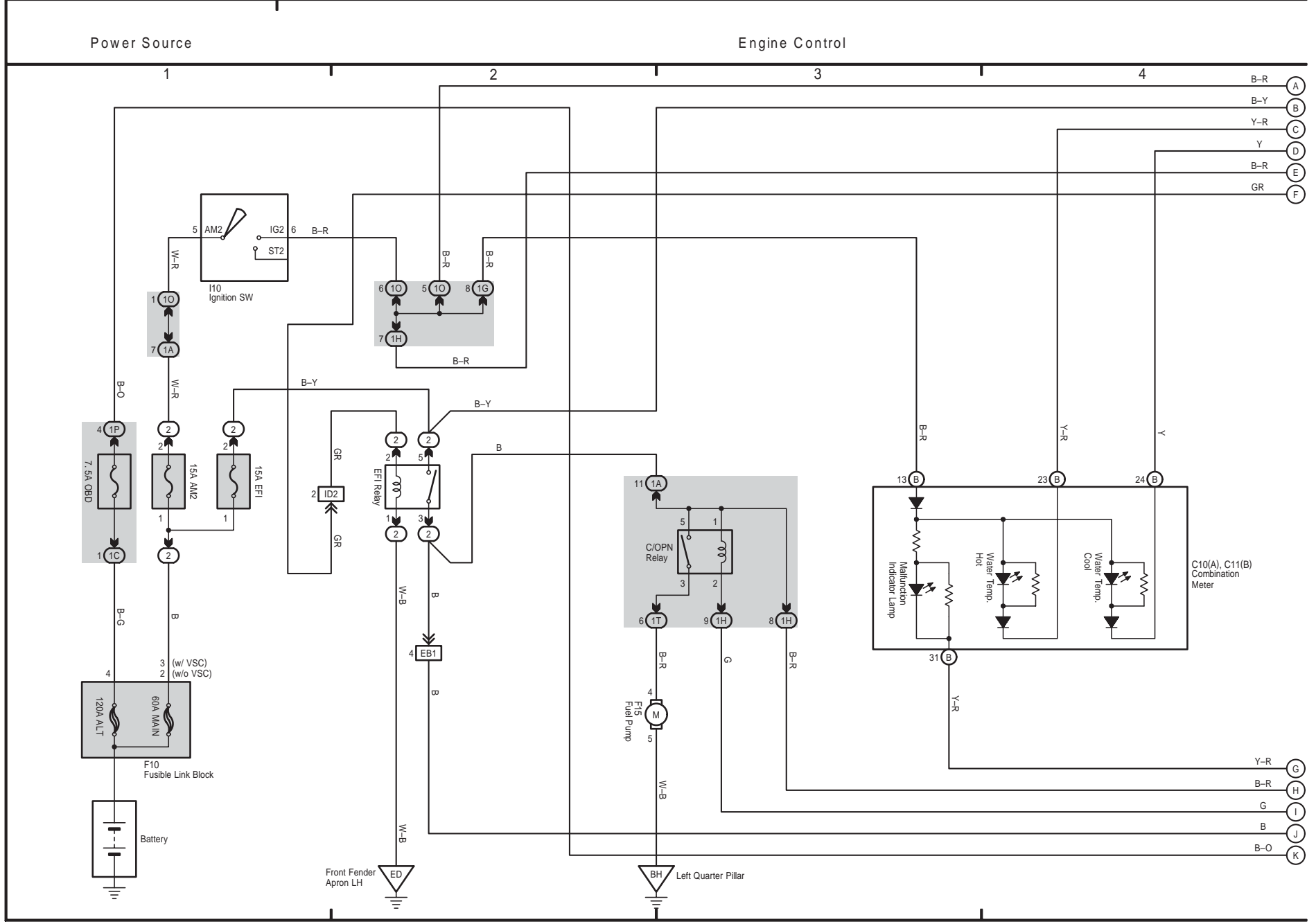
Charging

1 2 3 4



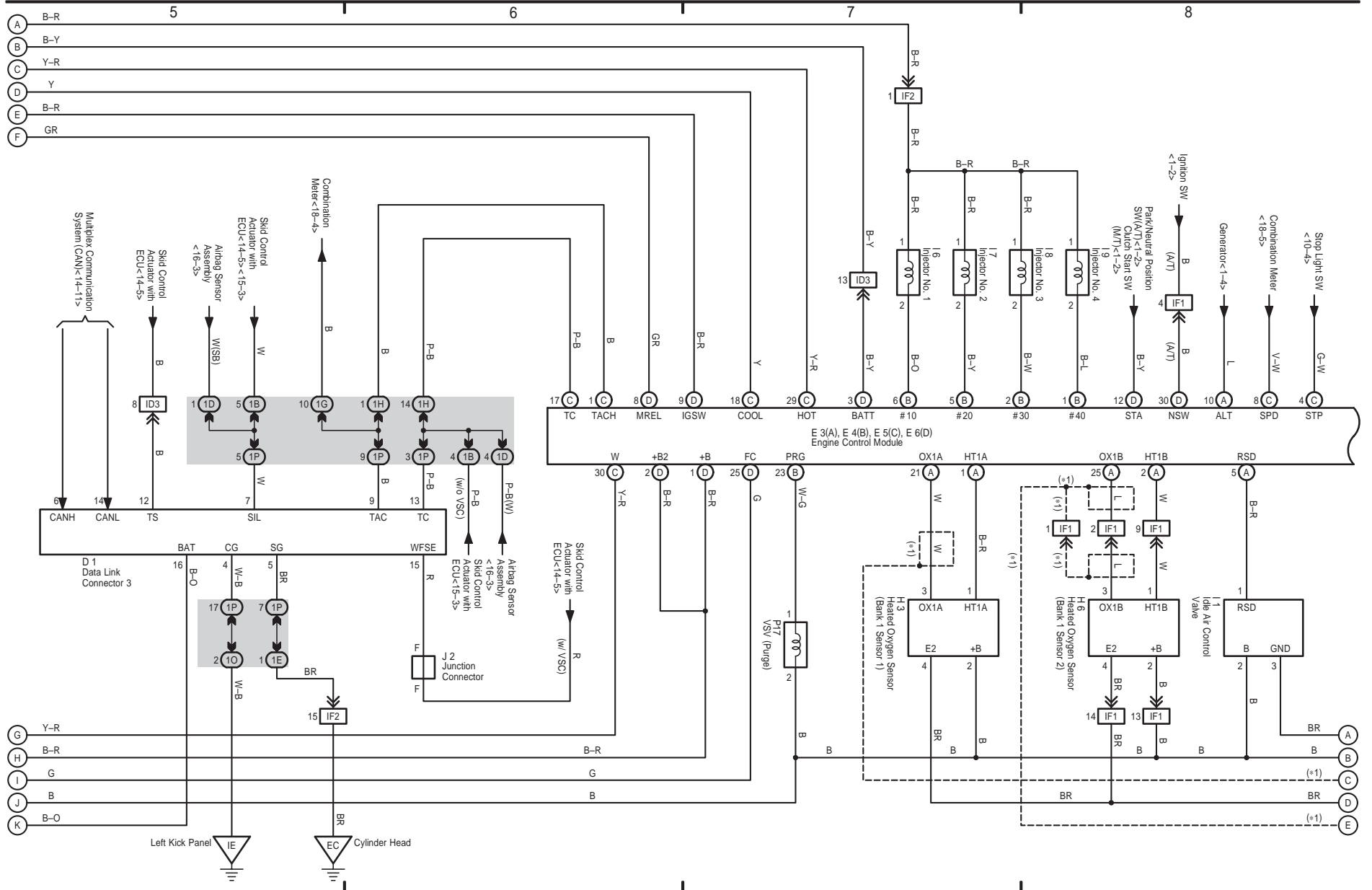
SCION xA (EM00D0U)





Engine Control

\* 1 : Shielded

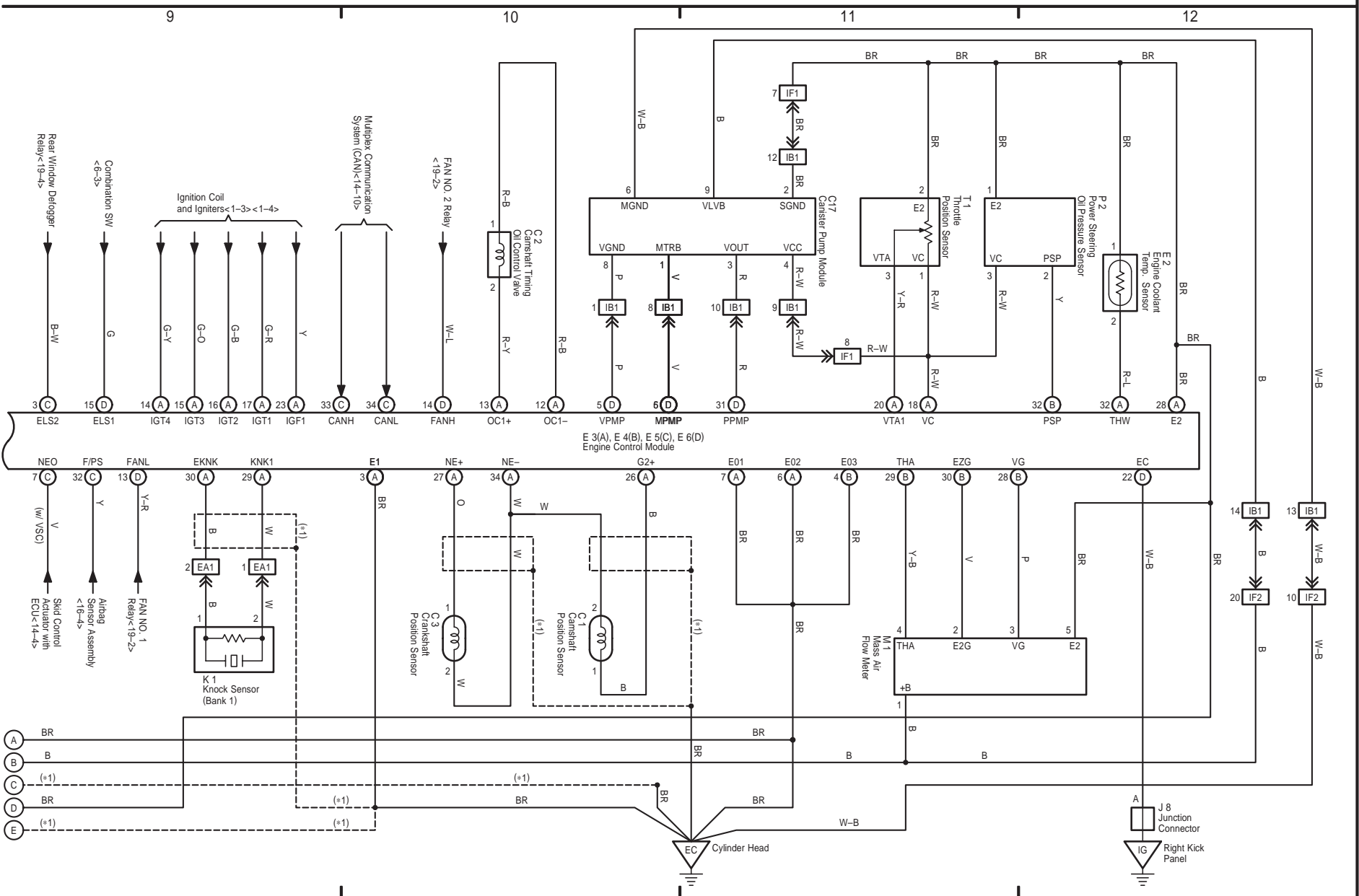


SCION xA (EM00D0U)

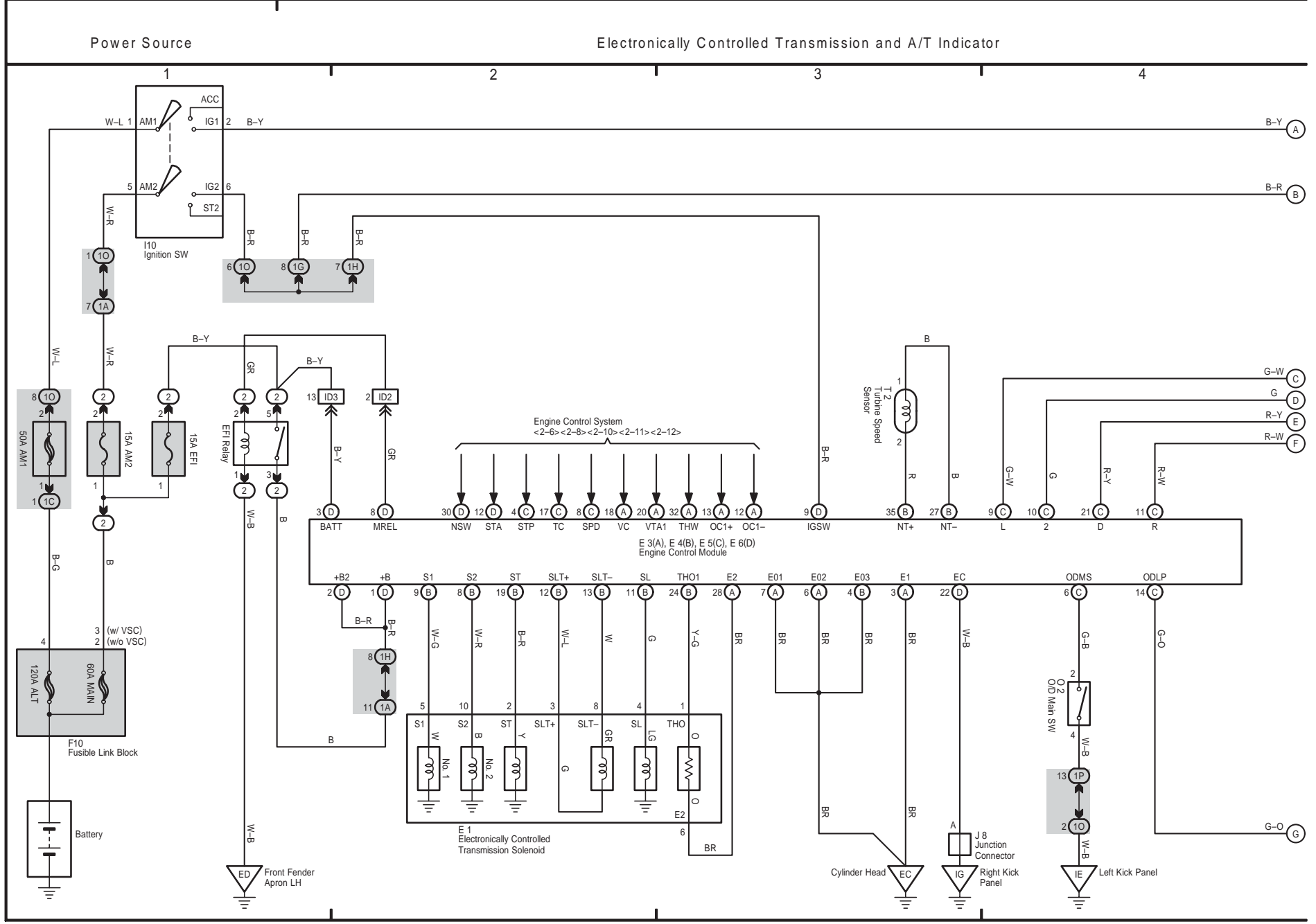


Engine Control

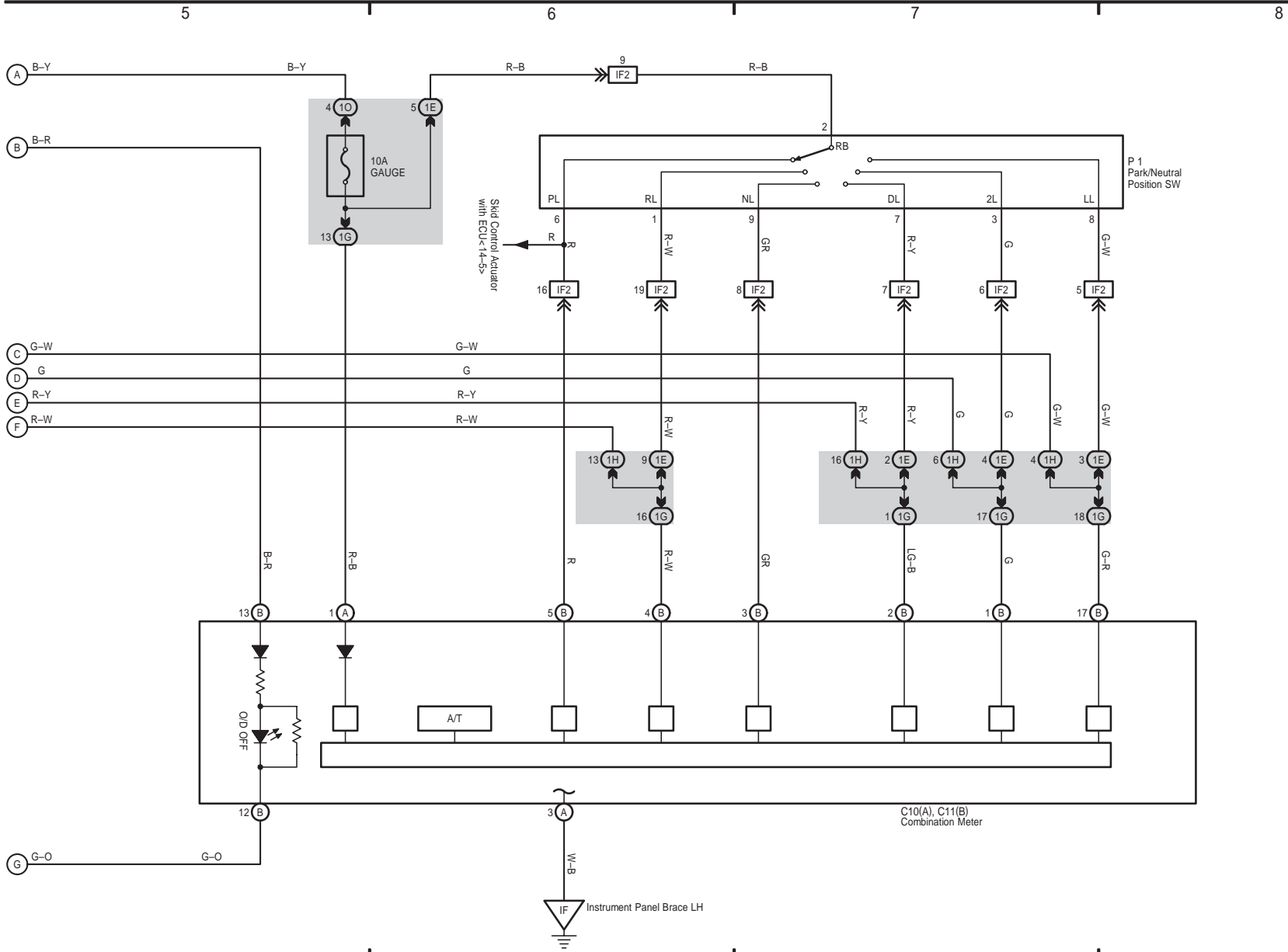
\* 1 : Shielded







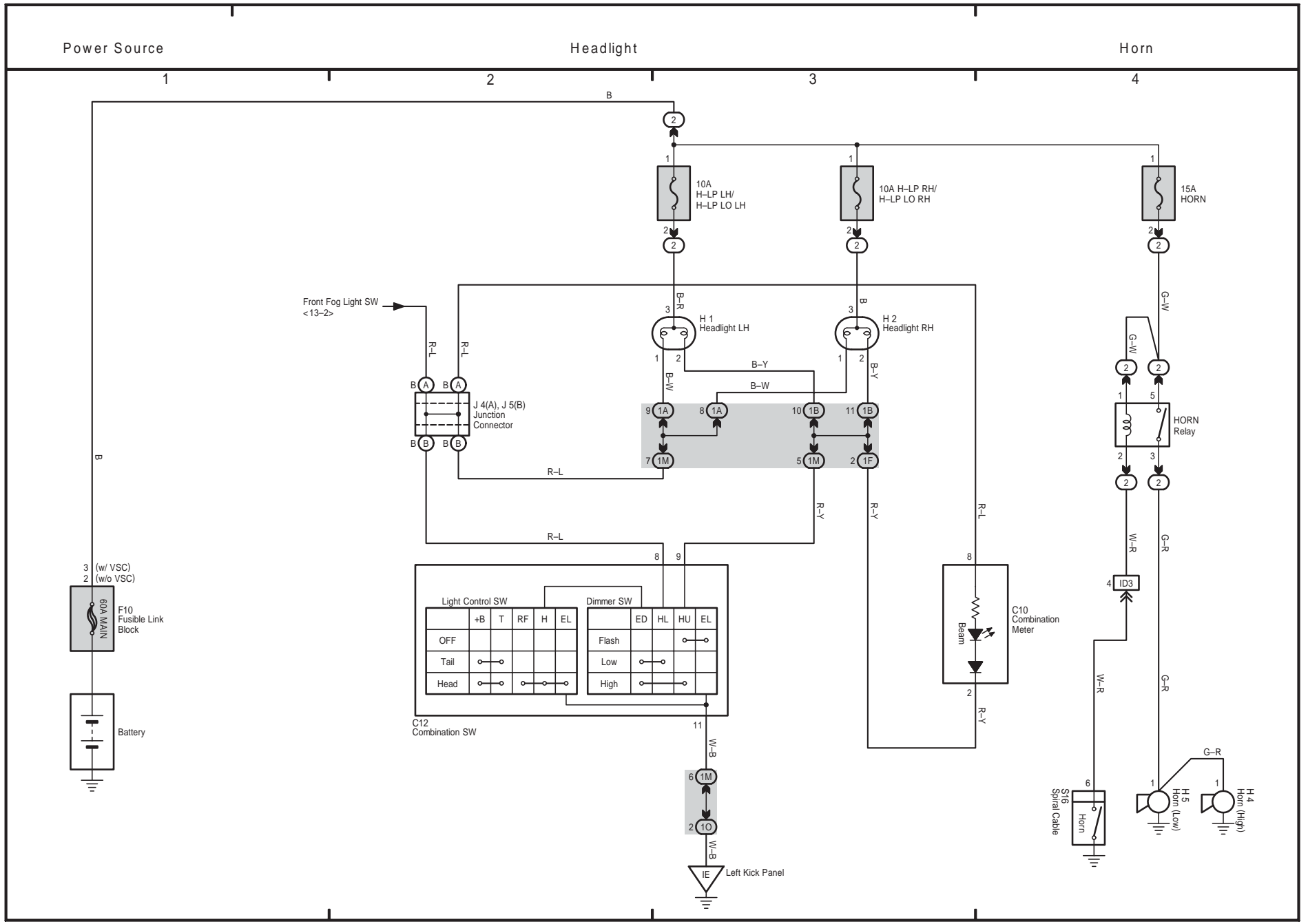
Electronically Controlled Transmission and A/T Indicator



SCION xA (EM00D0U)







Power Source

Headlight

Horn

1

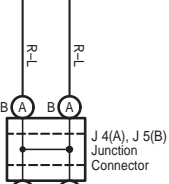
2

3

4

B

Front Fog Light SW  
<13-2>



10A H-LP LH/  
H-LP LO LH

10A H-LP RH/  
H-LP LO RH

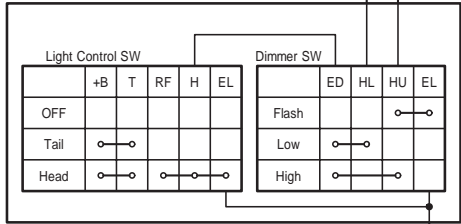
15A HORN

H 1  
Headlight LH

H 2  
Headlight RH

HORN  
Relay

C10  
Combination  
Meter



Beam

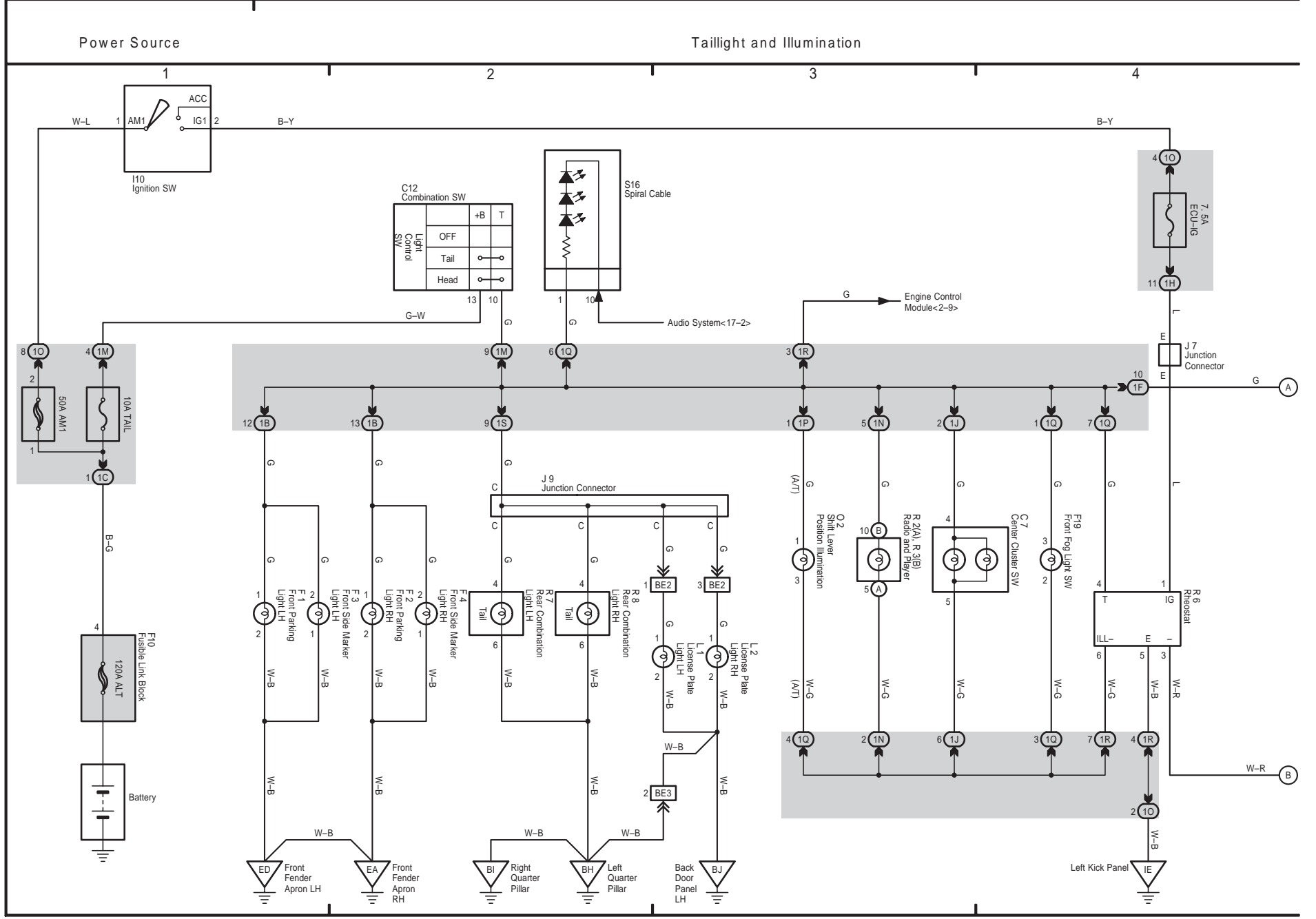
S16  
Horn  
Signal Cable

H 4  
Horn (High)

H 5  
Horn (Low)

Left Kick Panel

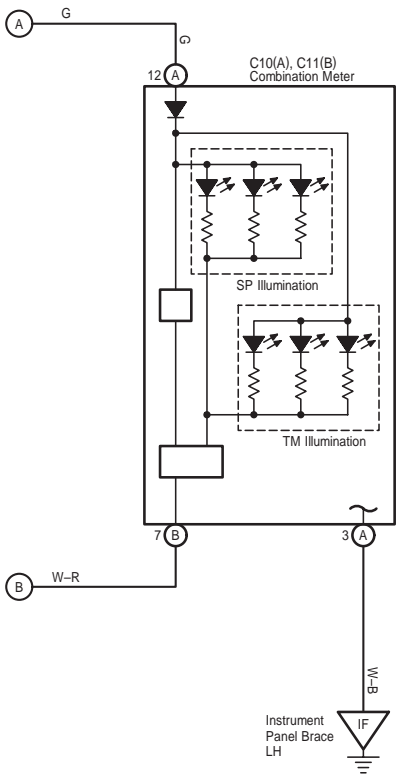




Taillight and Illumination

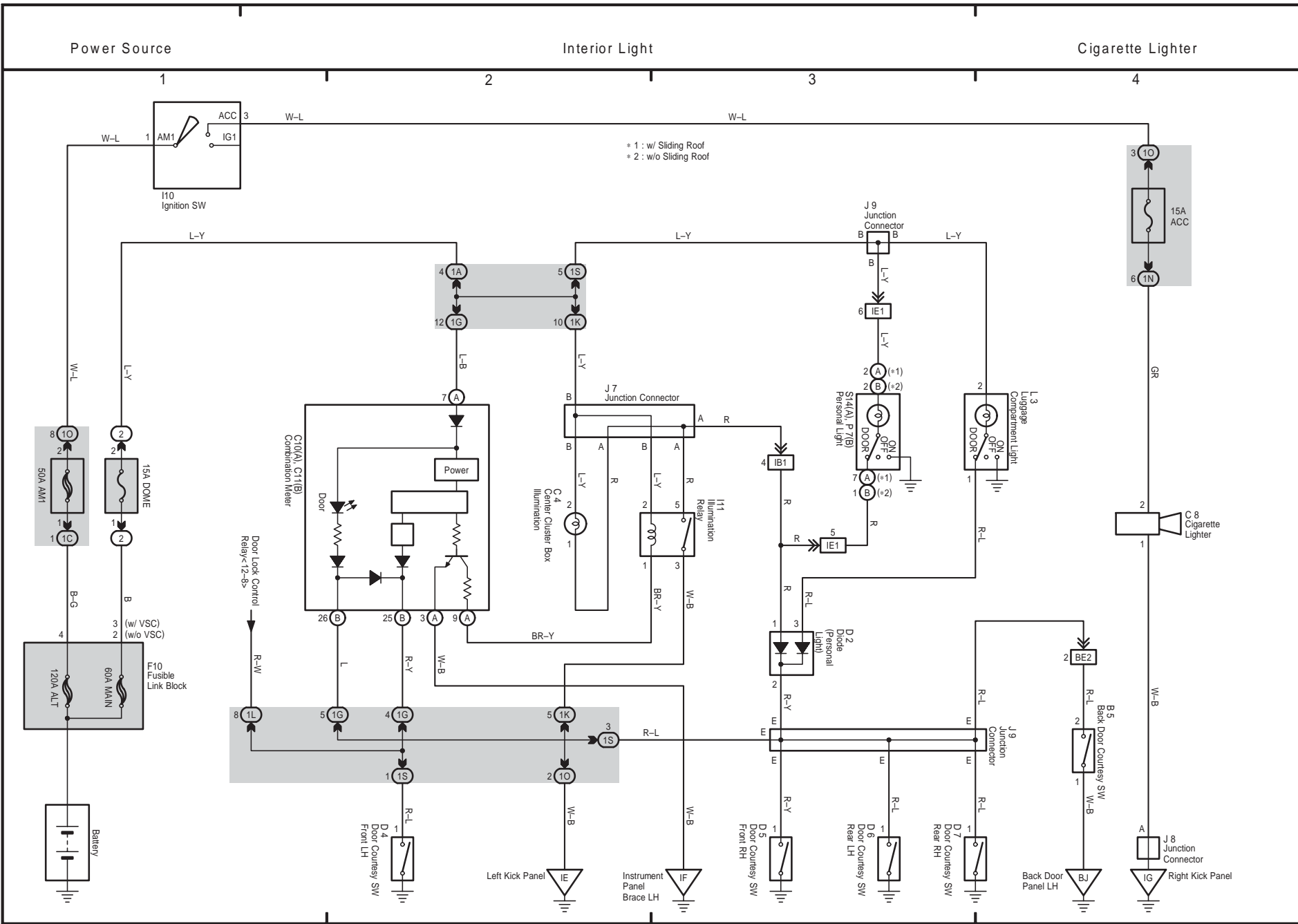
5 6 7 8

SCION xA (EM00D0U)

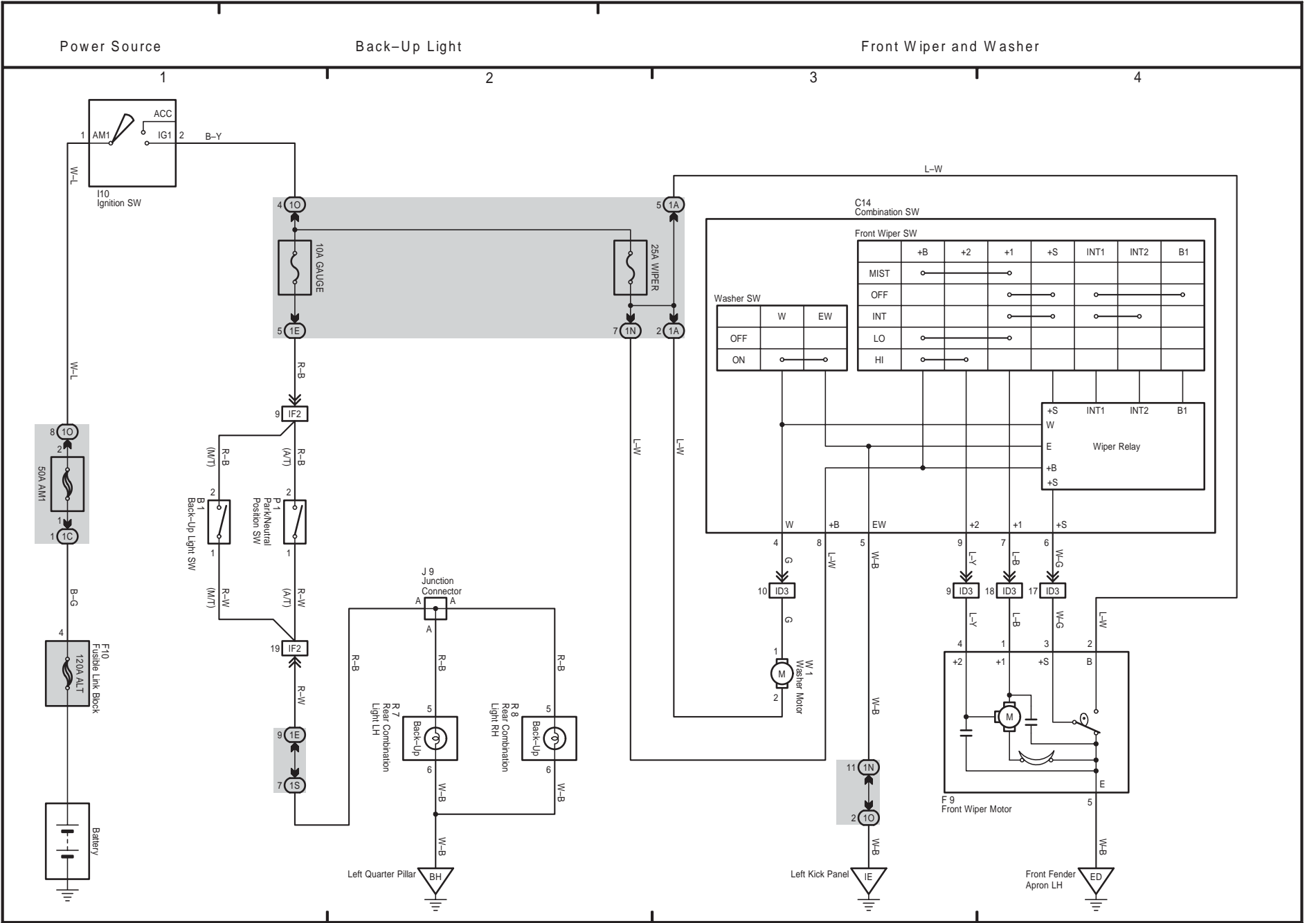


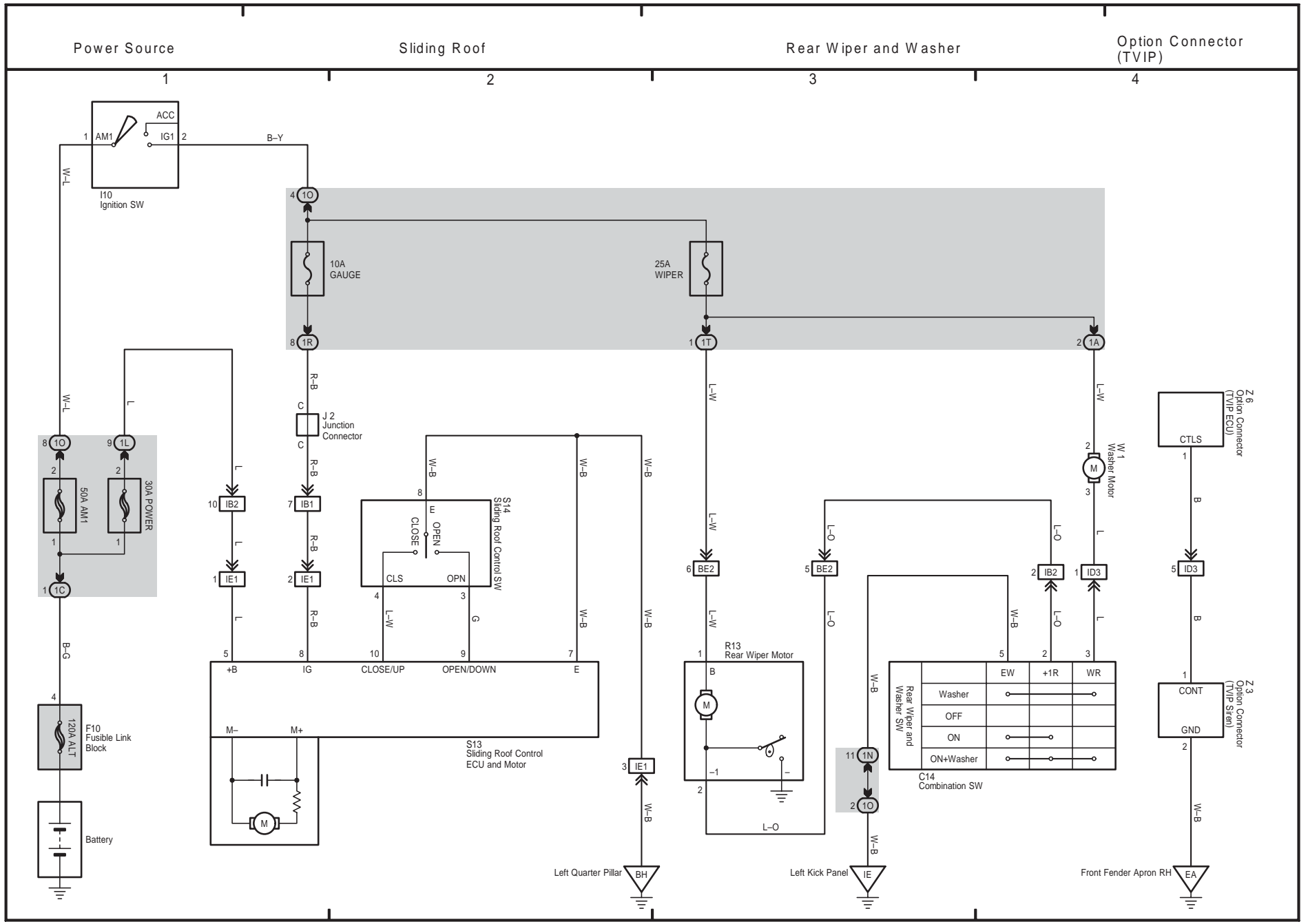
# M OVERALL ELECTRICAL WIRING DIAGRAM

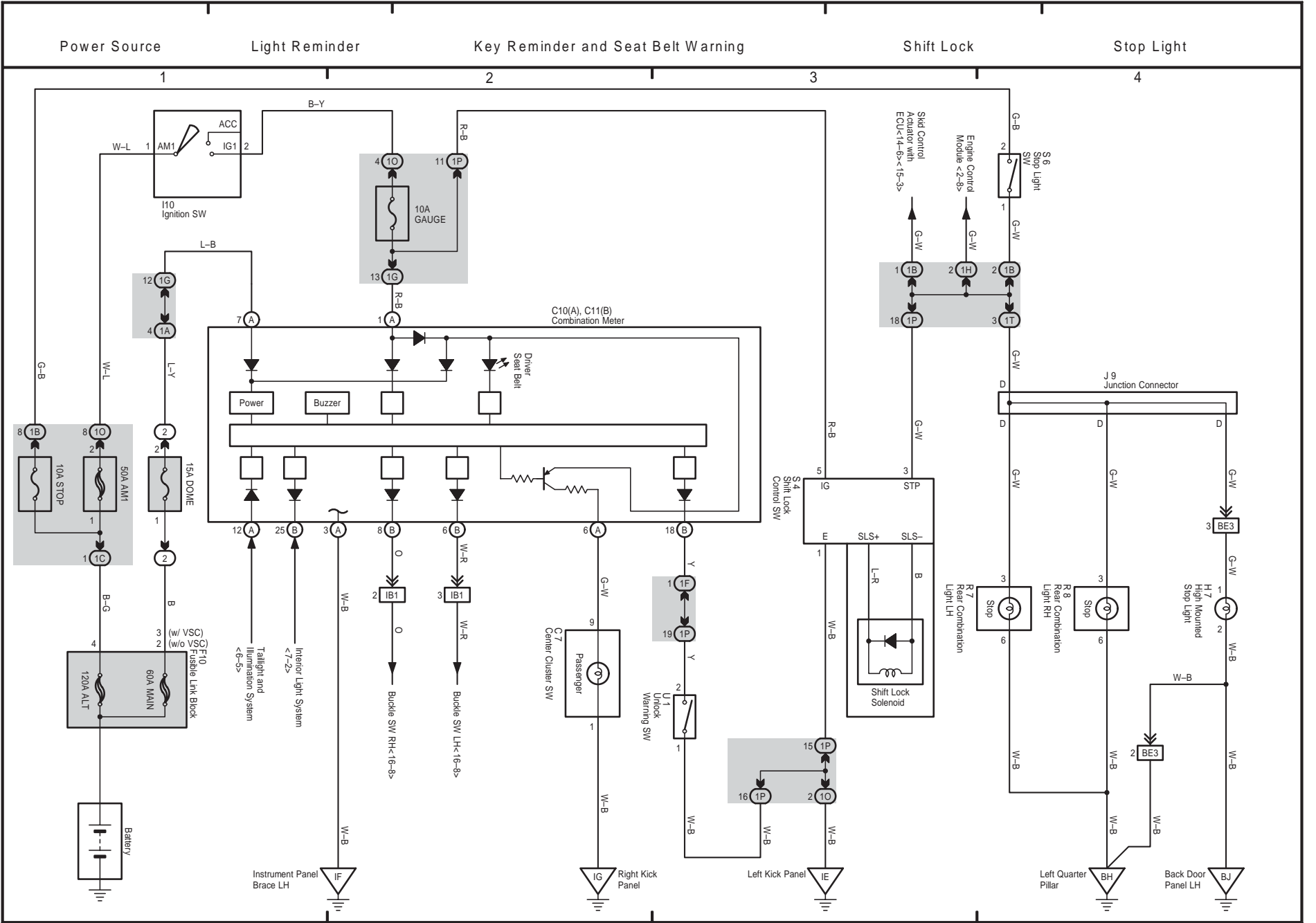
7 xA



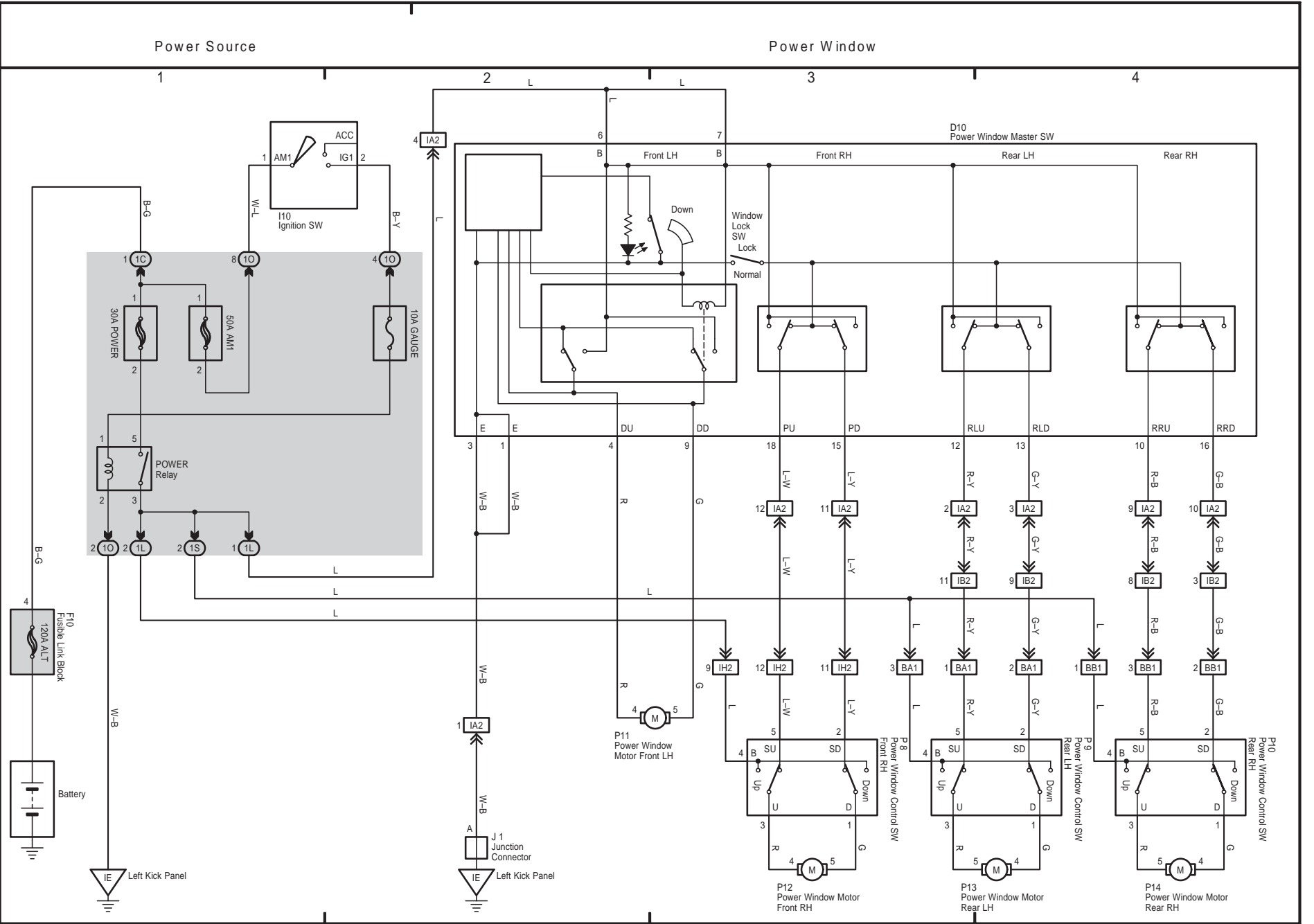
SCION xA (EM00D0U)



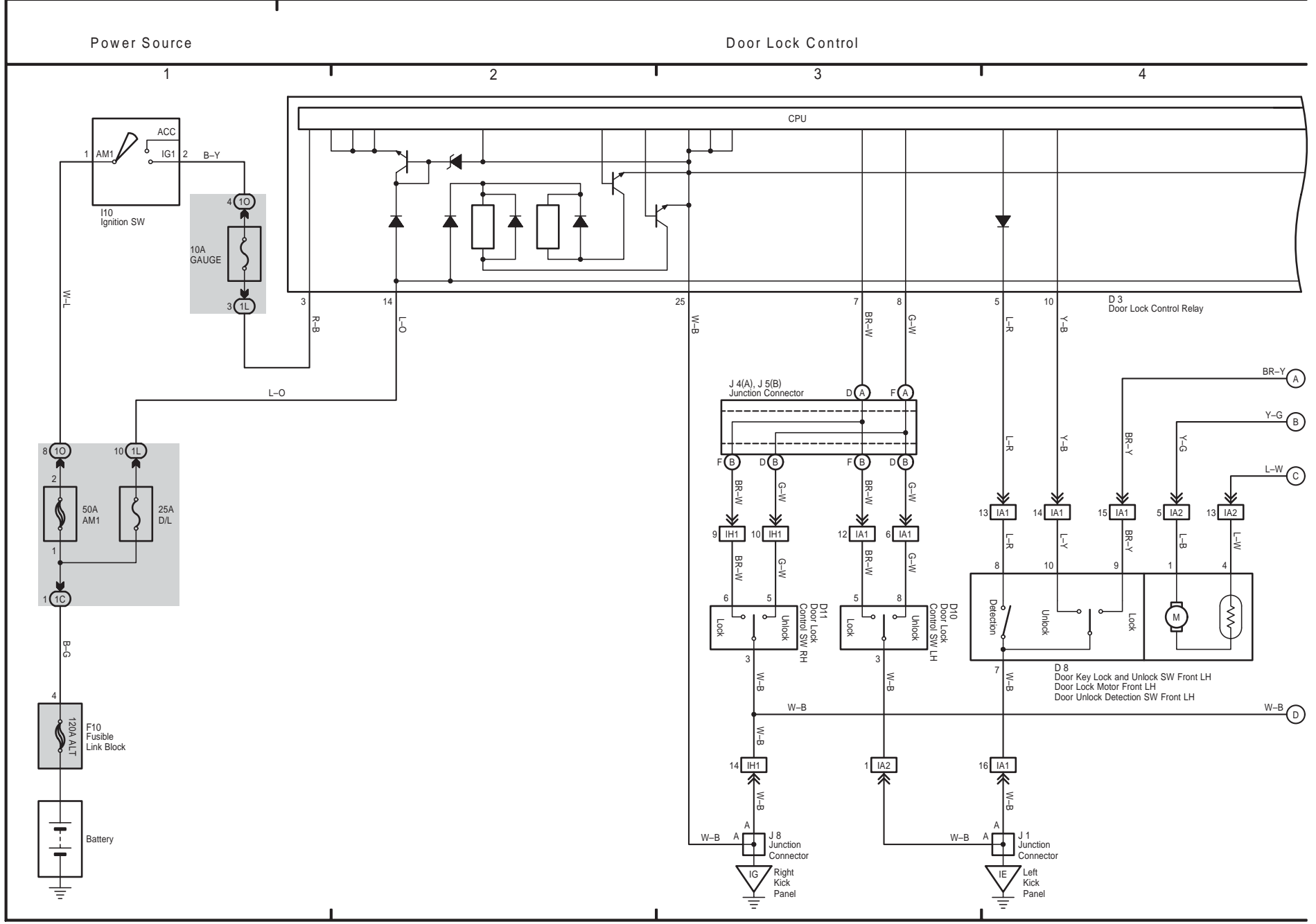




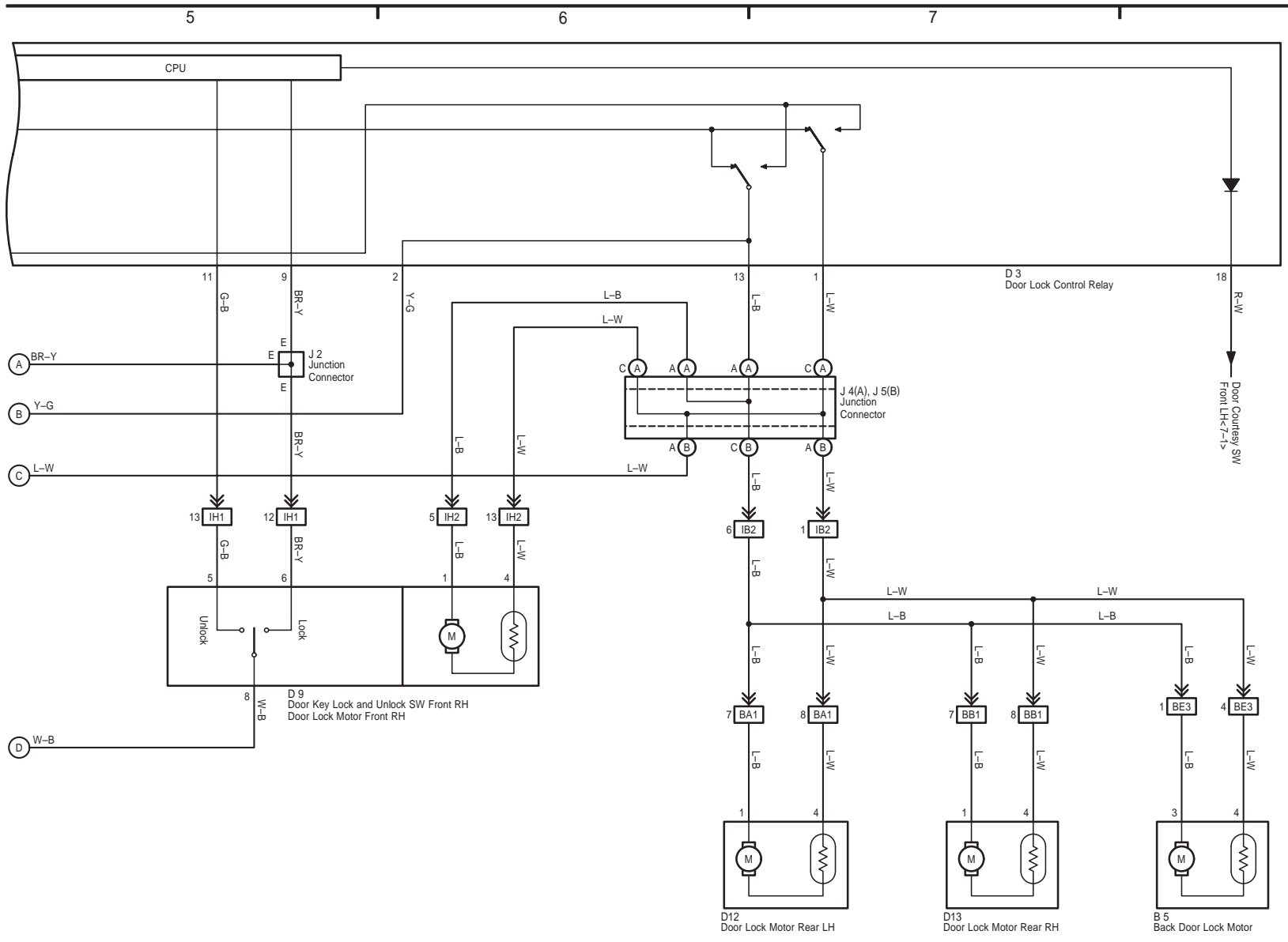






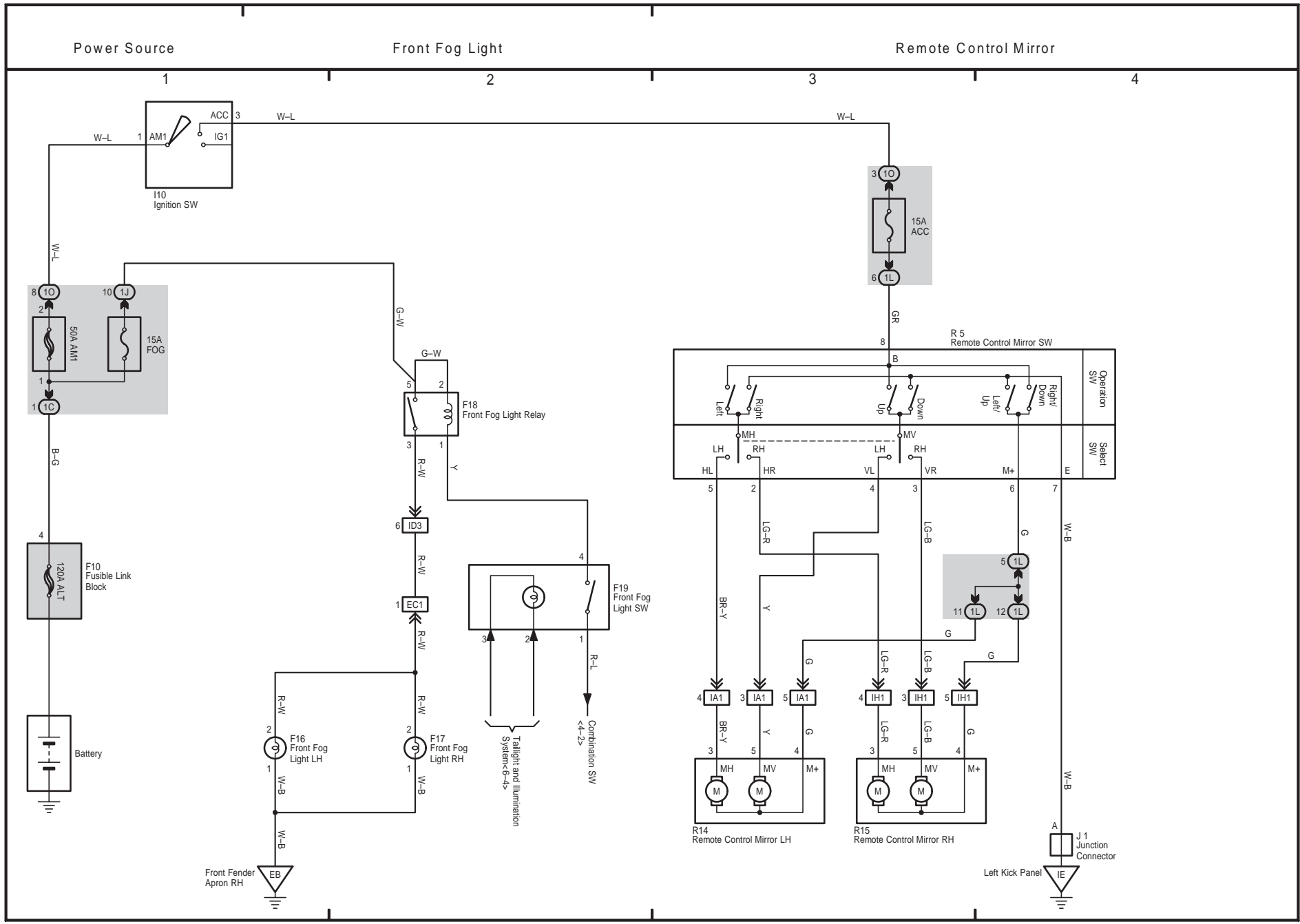


Door Lock Control

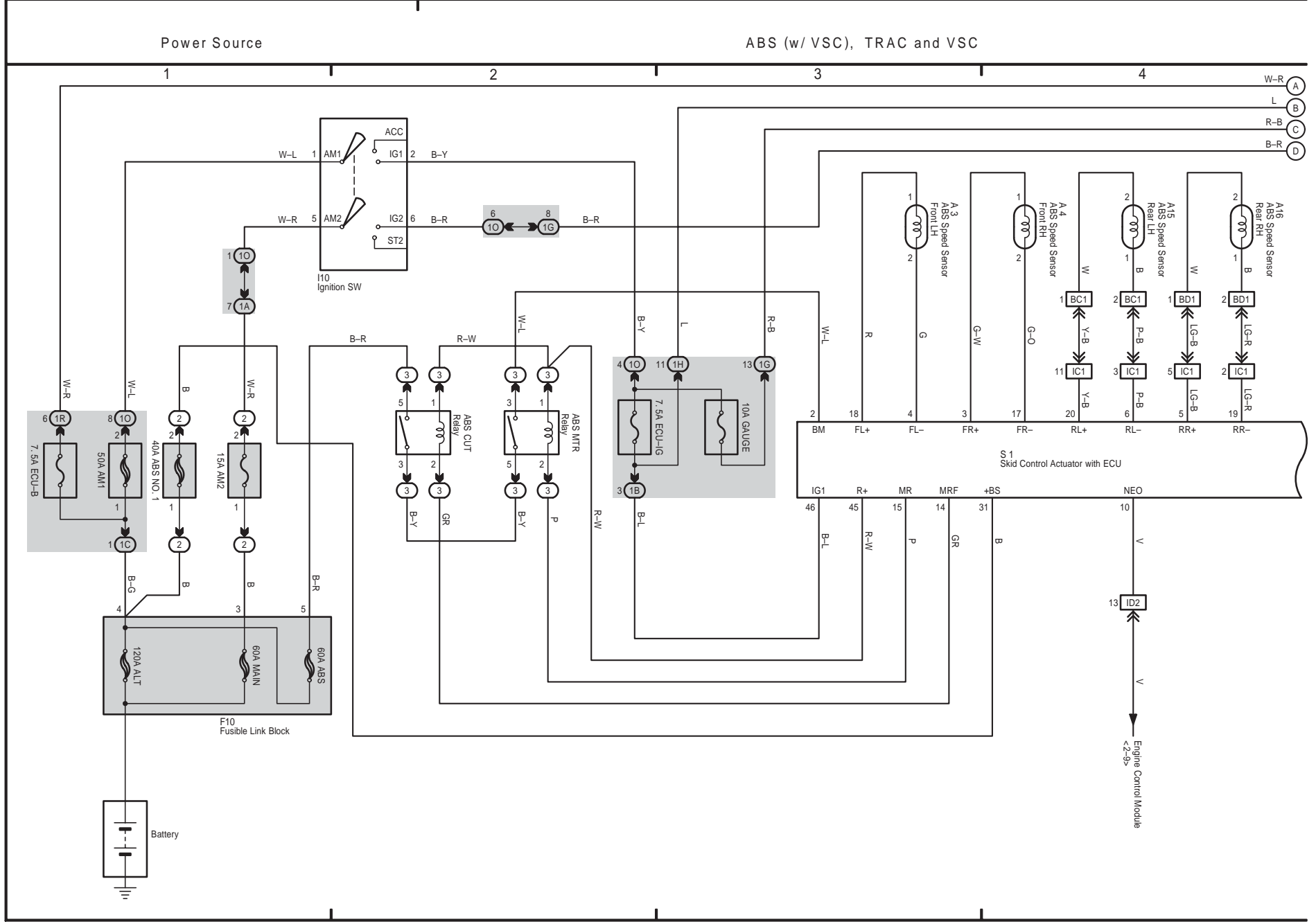


SCION xA (EM00D0U)



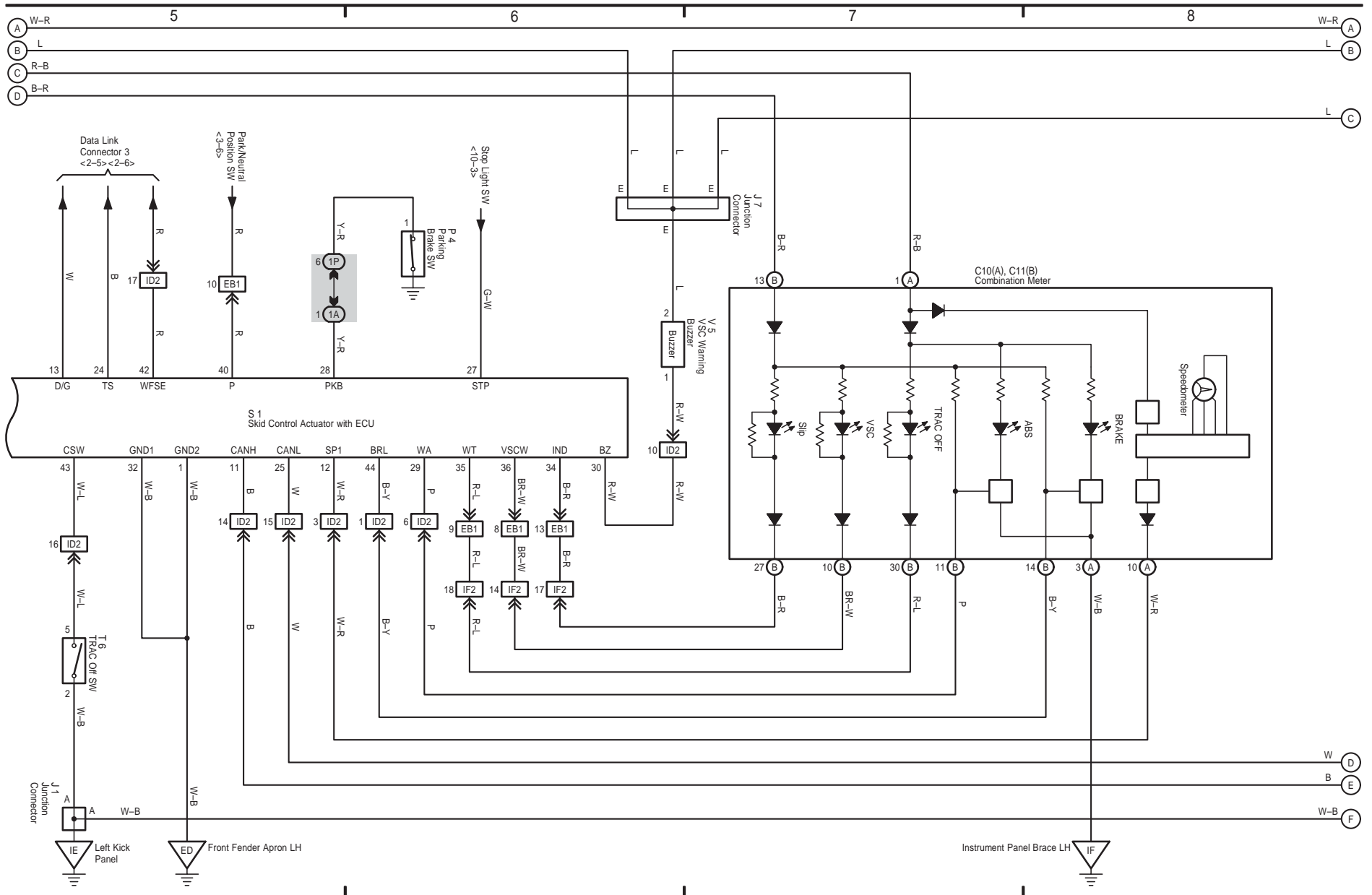






OVERALL ELECTRICAL WIRING DIAGRAM

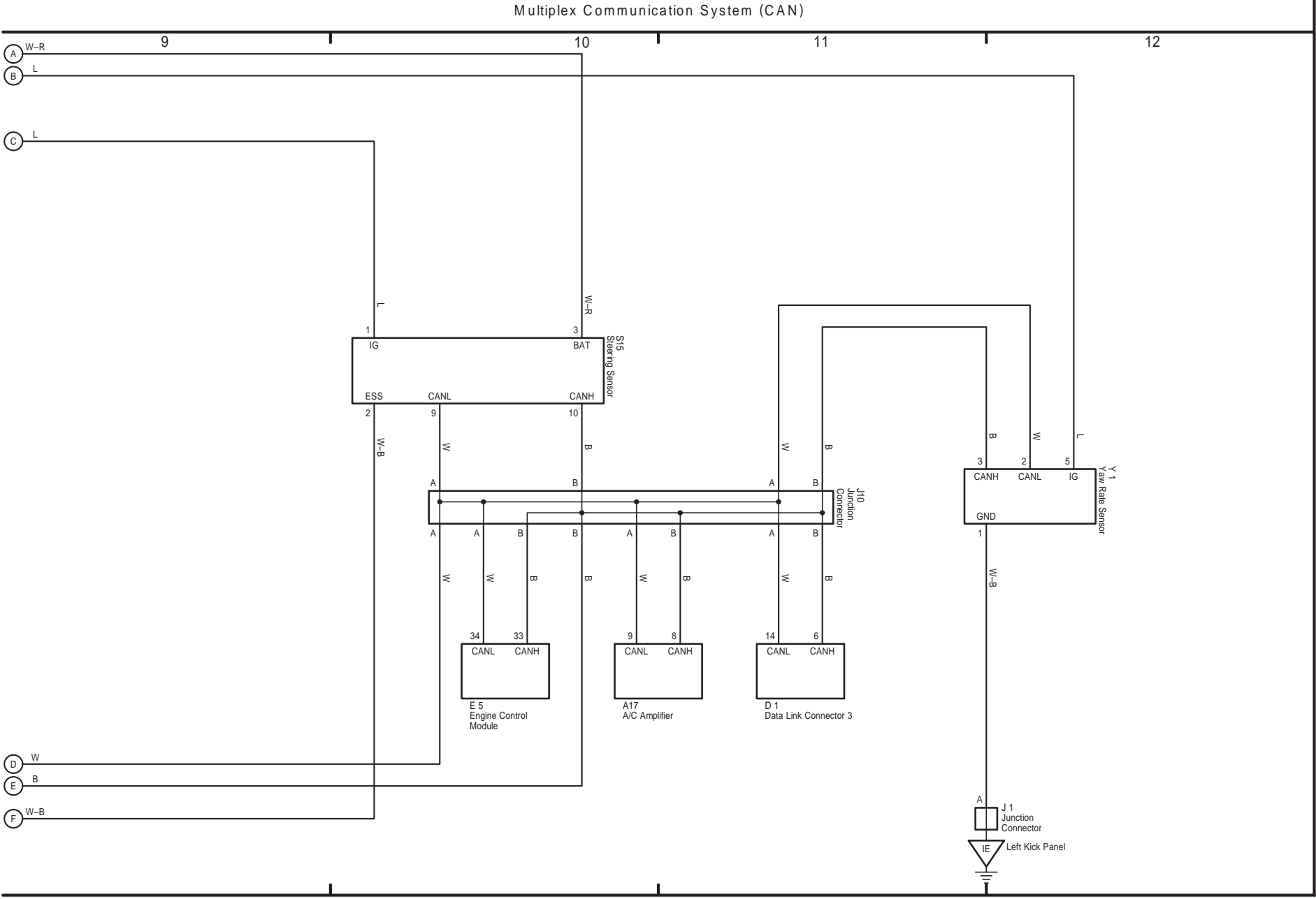
ABS (w/ VSC), TRAC and VSC

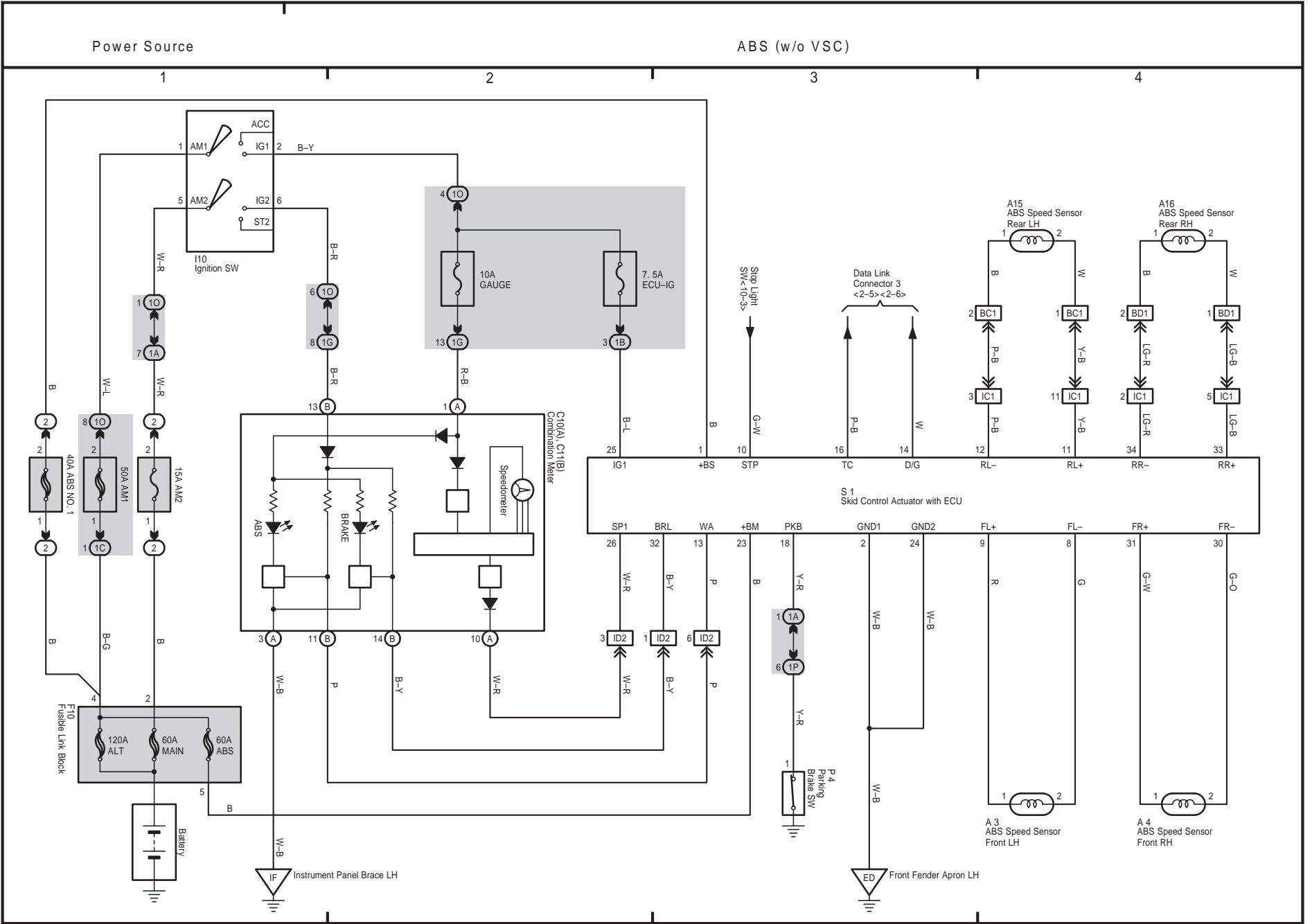


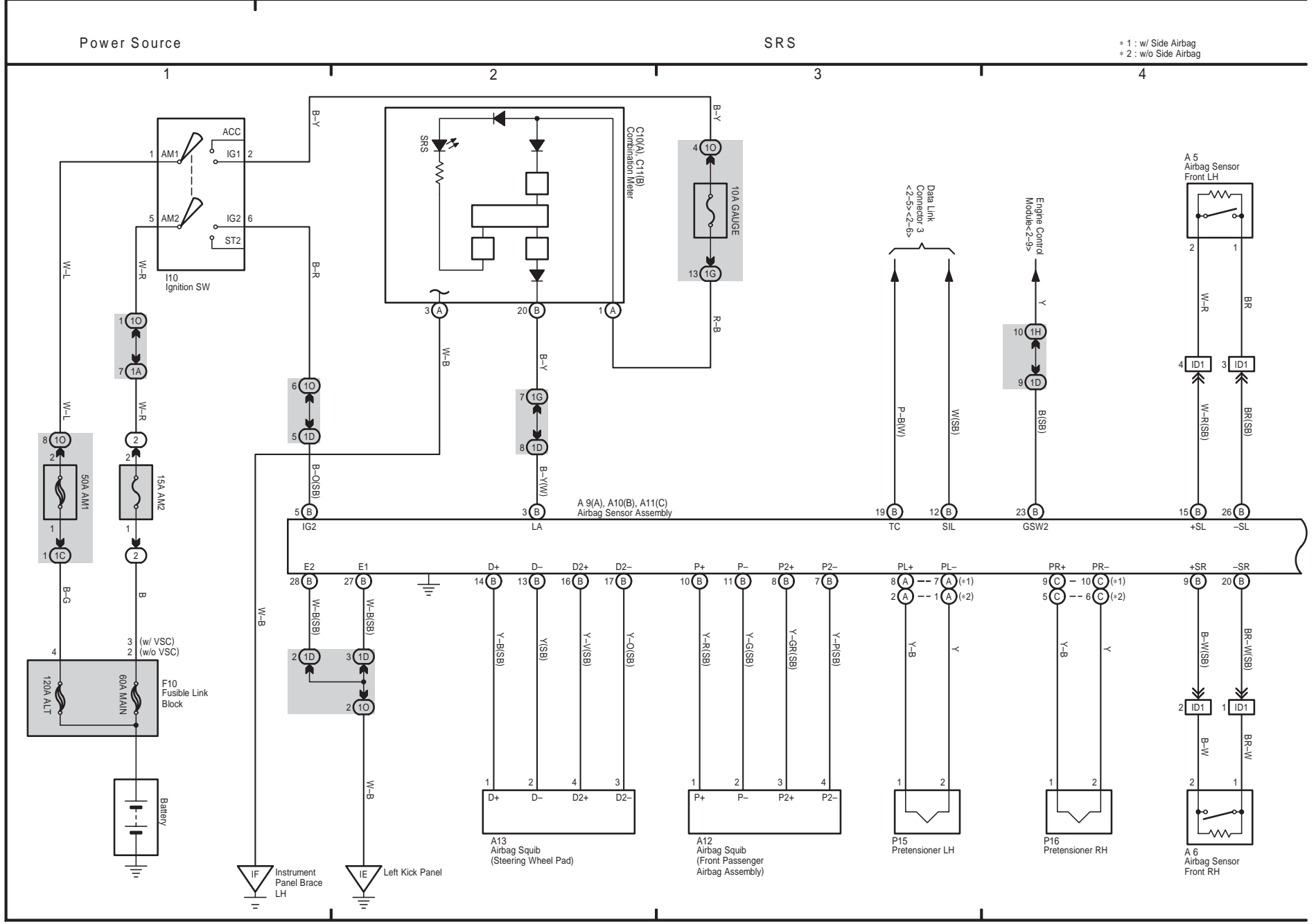
SCION xA (EM00D0U)









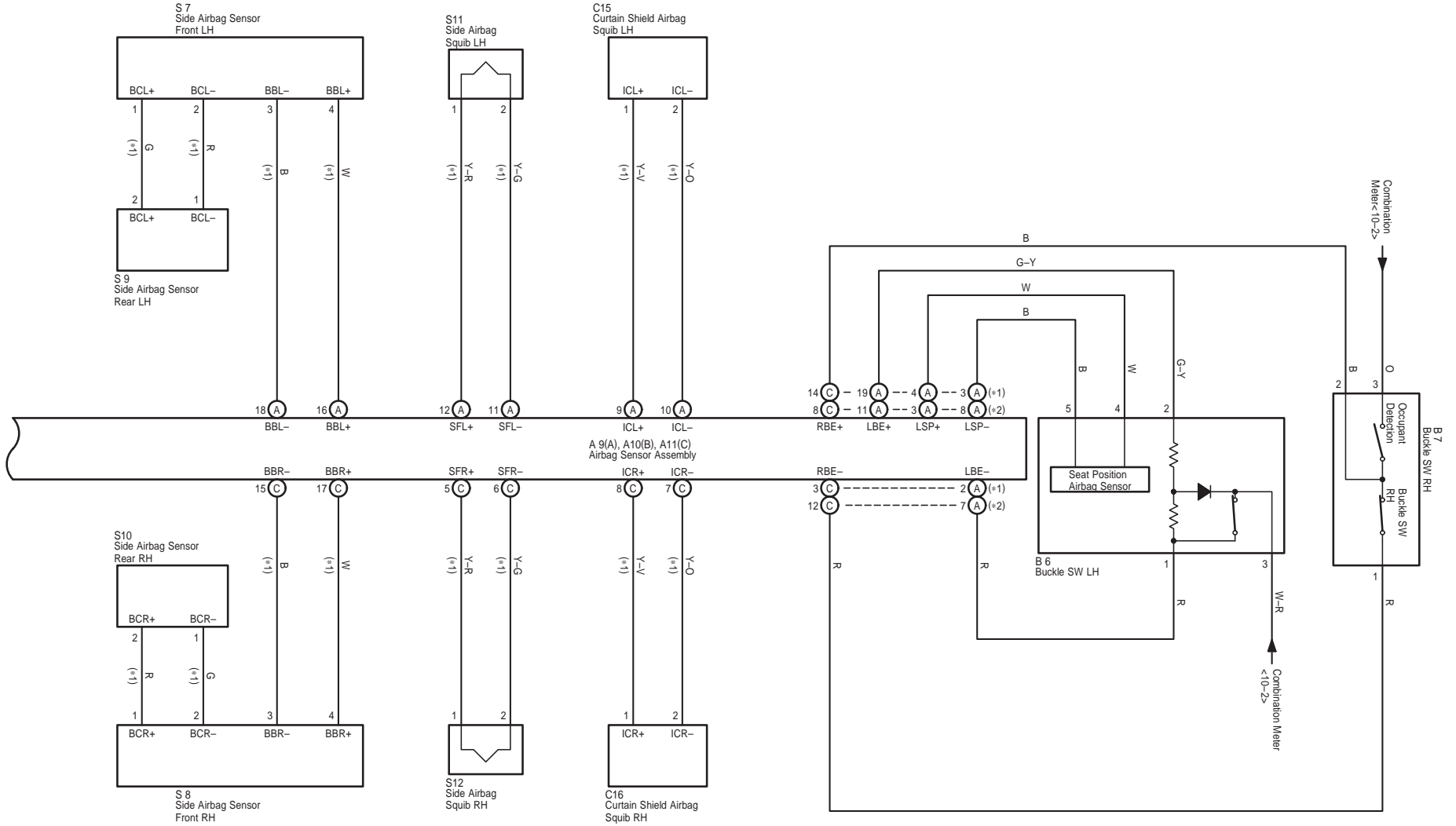


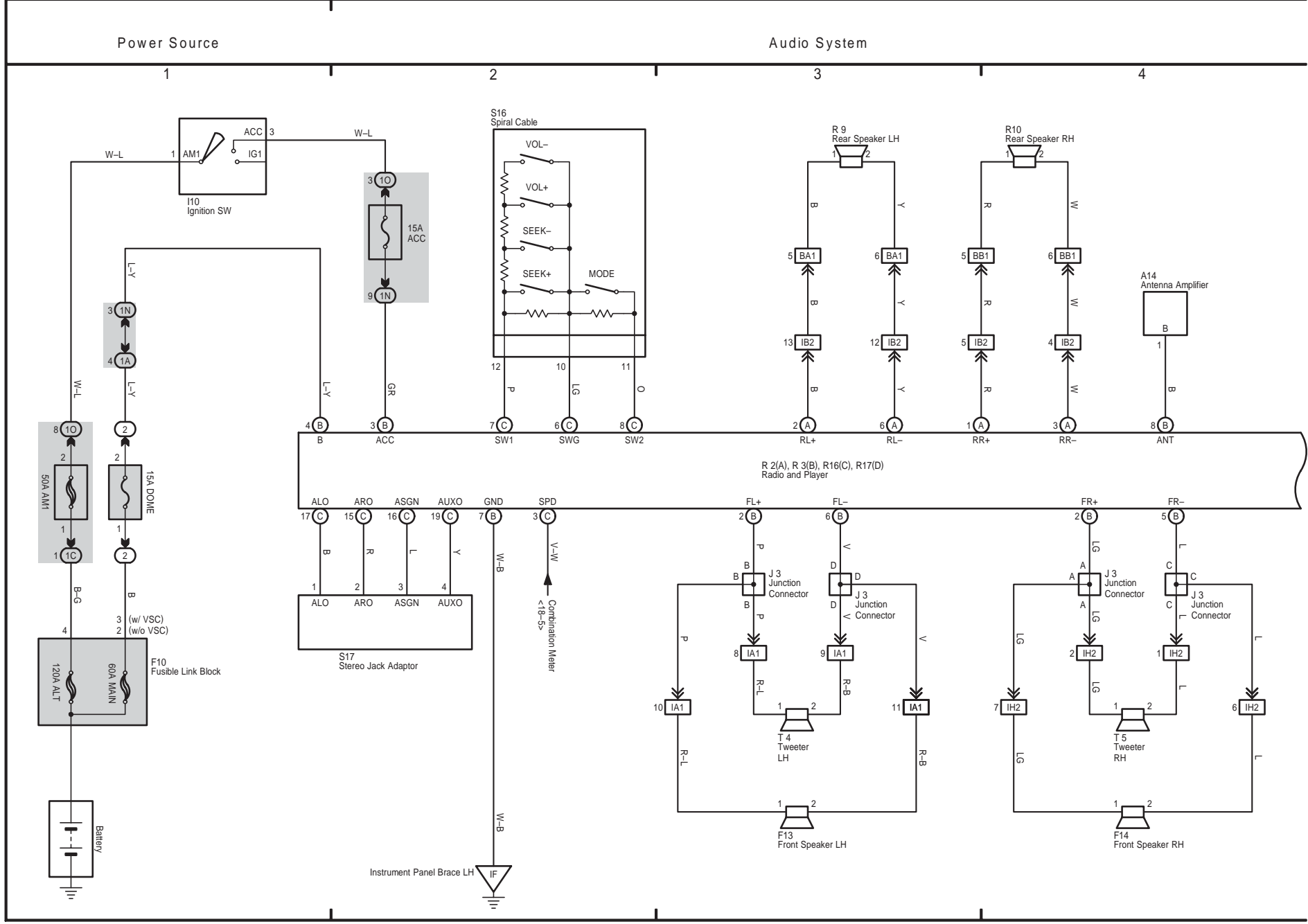
SRS

5 6 7 8

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

SCION xA (EM00D0U)

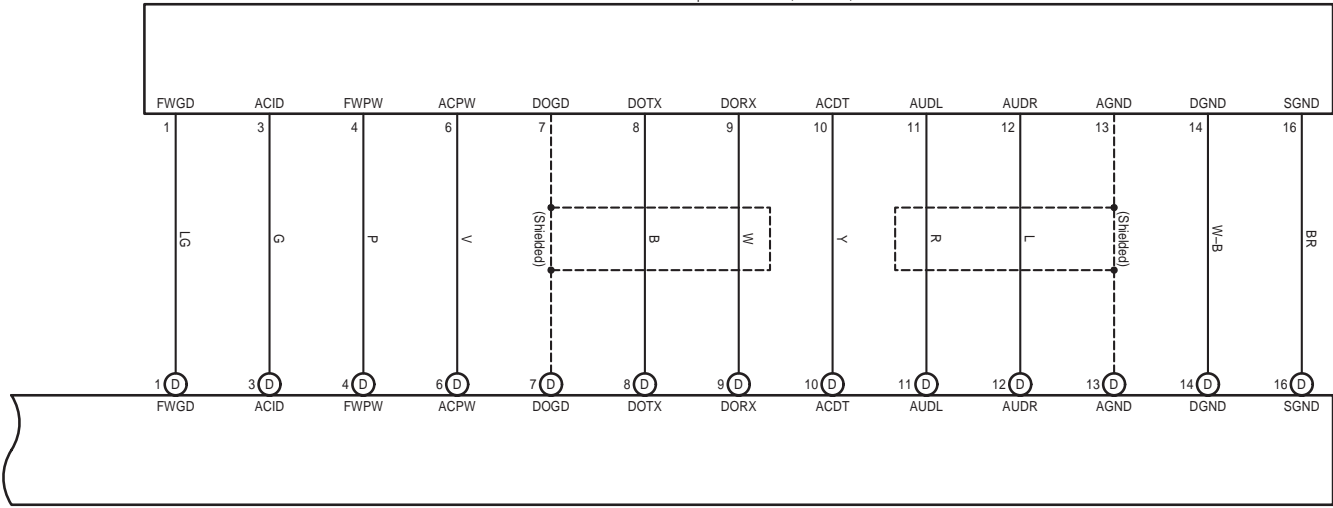




Audio System

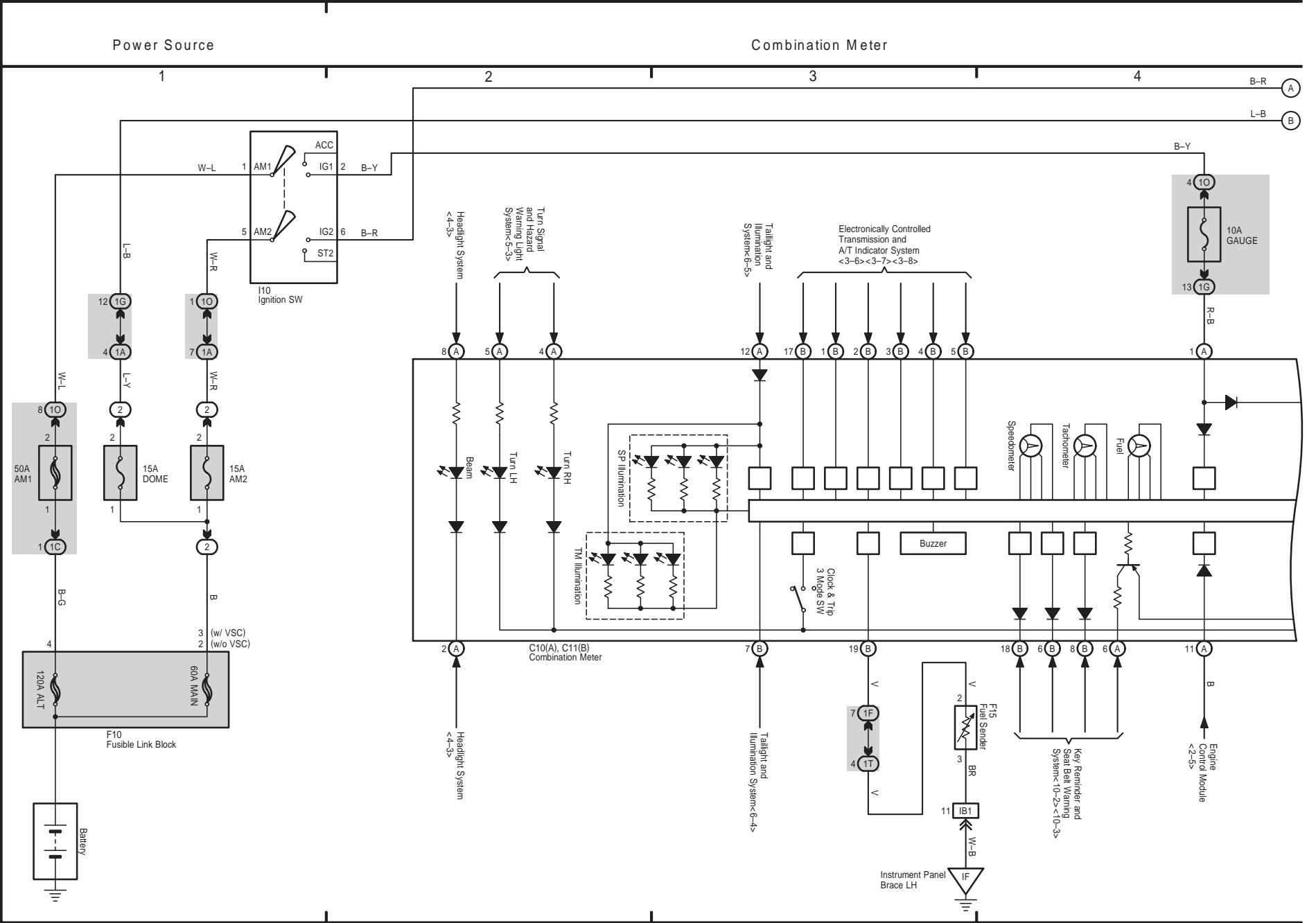
5 6 7 8

Z7  
Option Connector (IPOD Unit)

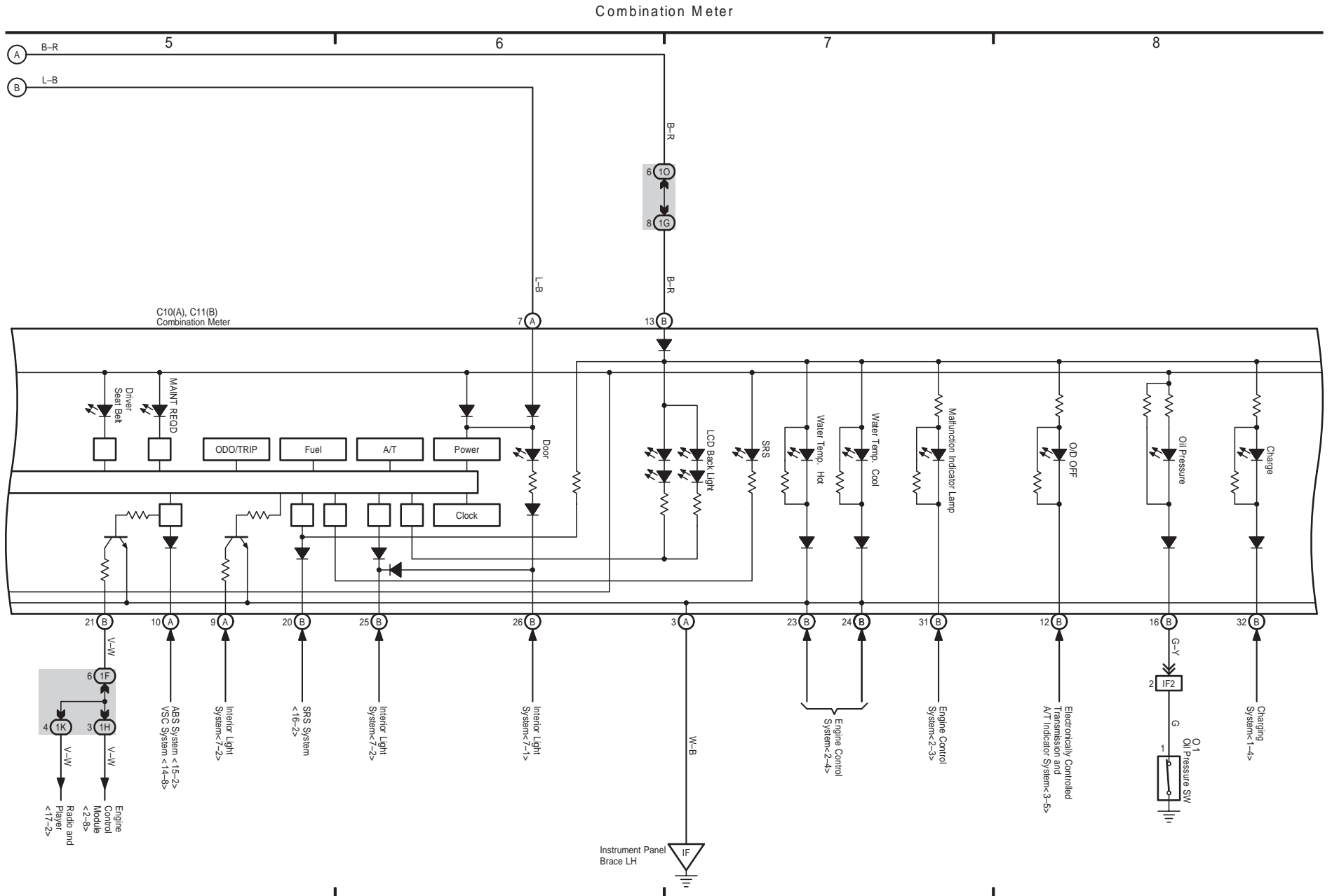


R 2(A), R 3(B), R16(C), R17(D)  
Radio and Player

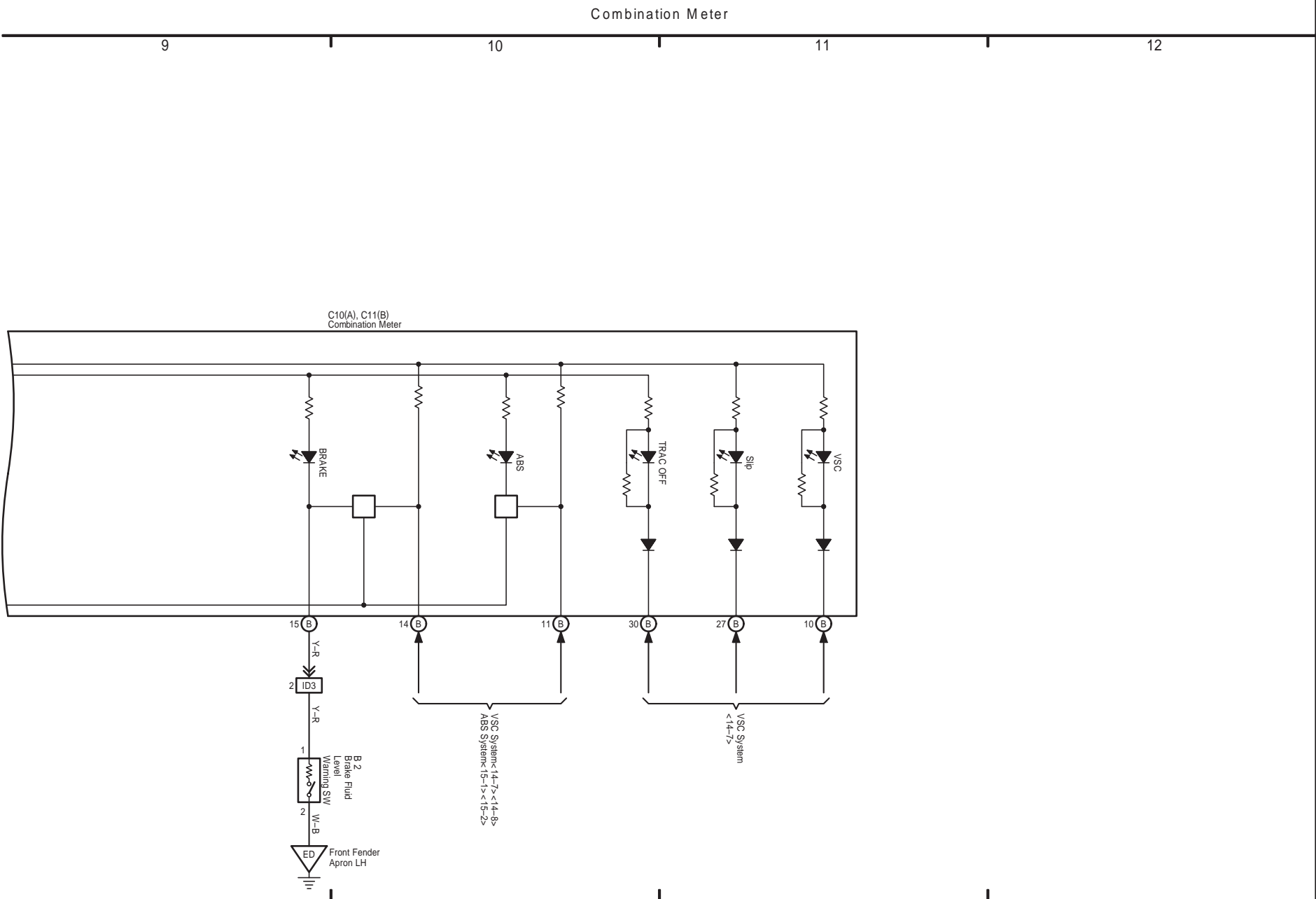
SCION xA (EM00D0U)

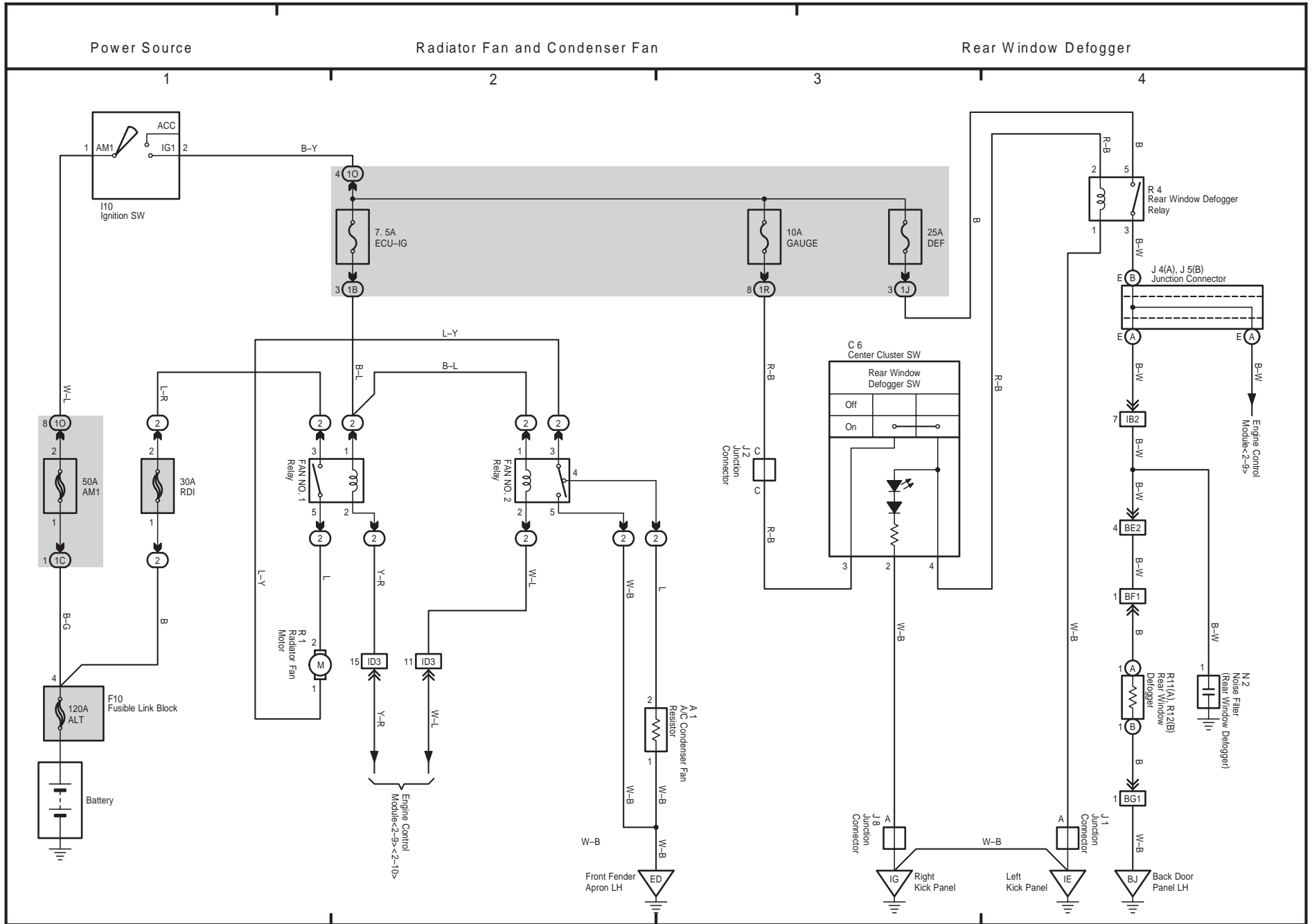


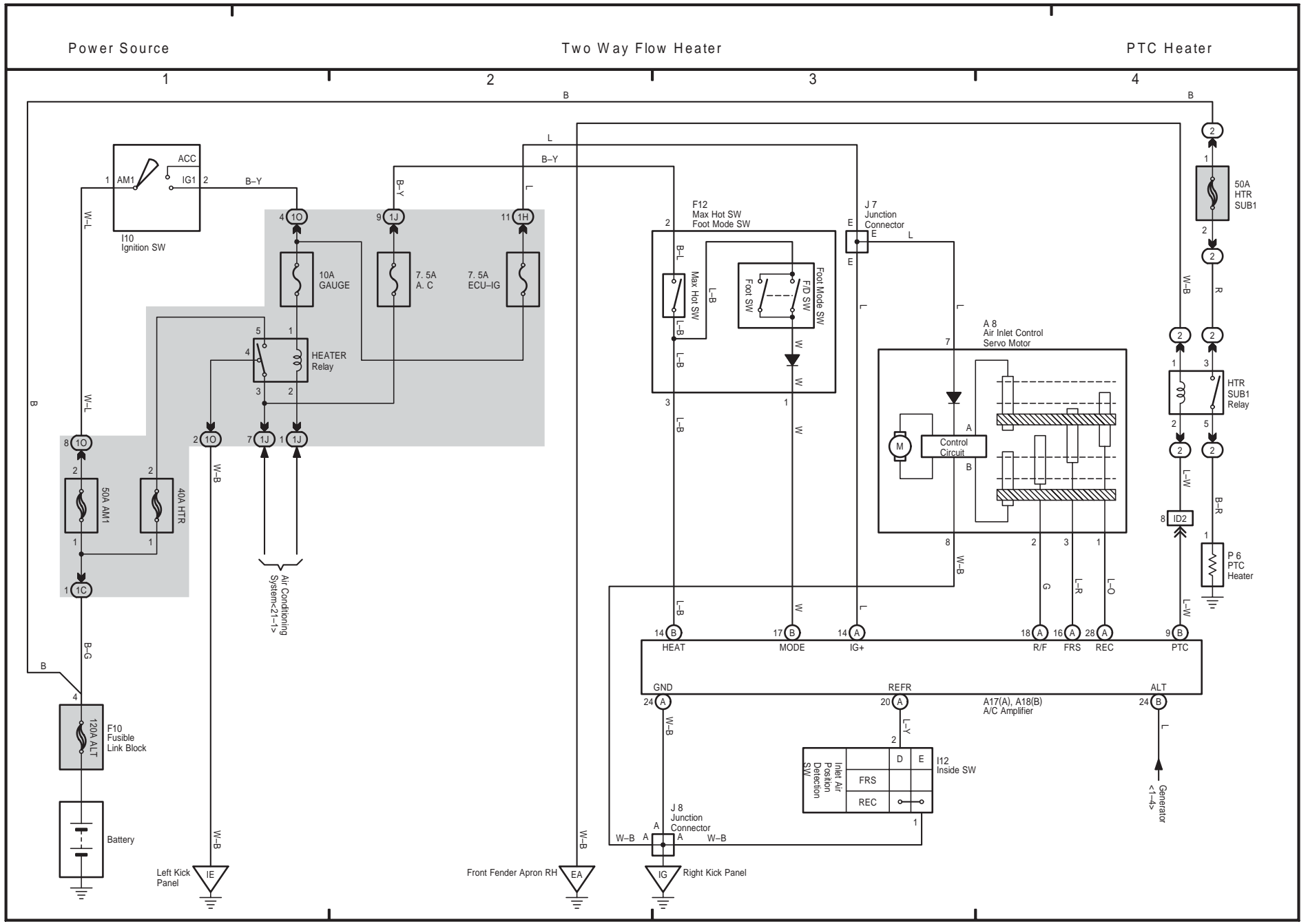
SCION xA (EM00D0U)



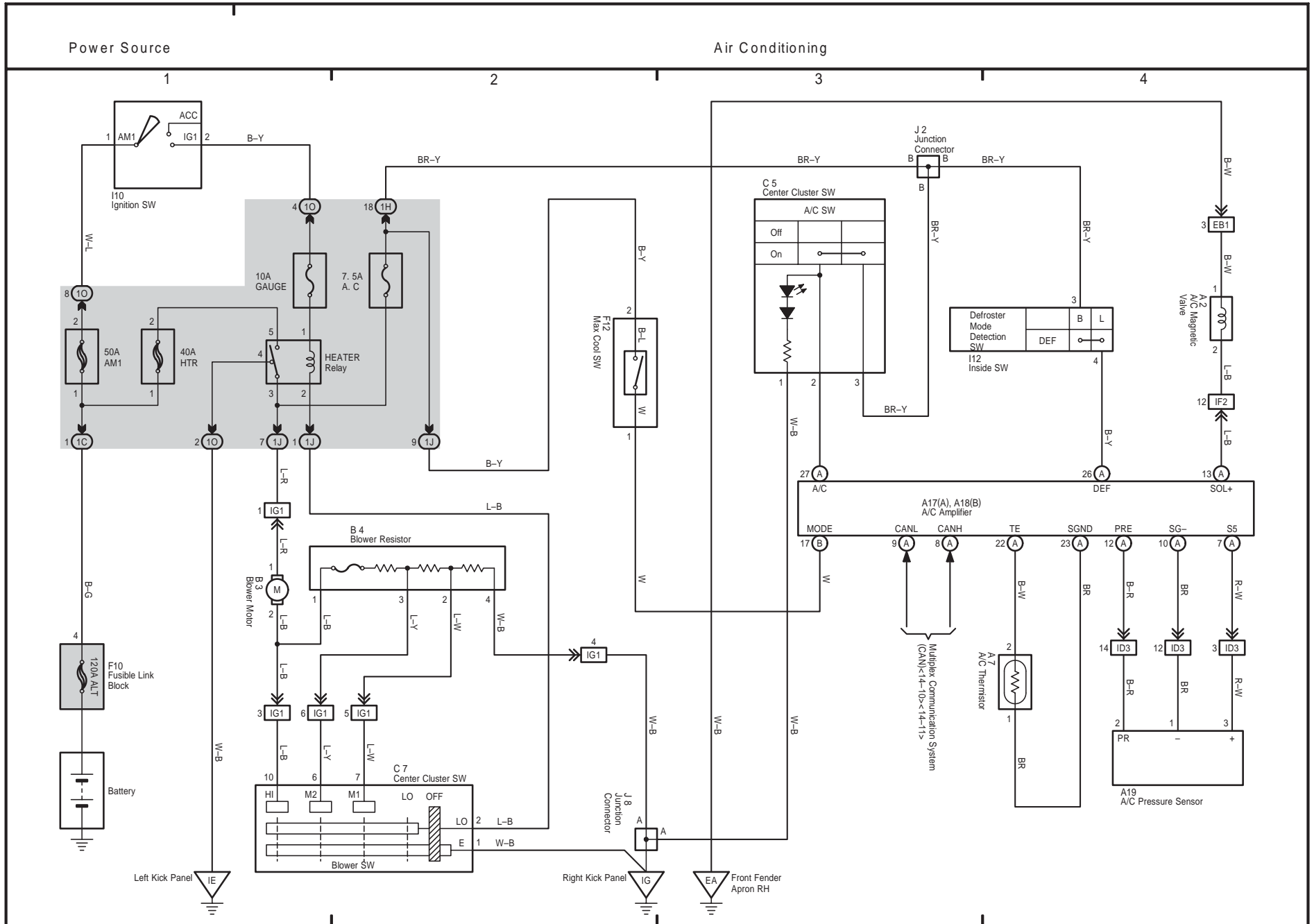








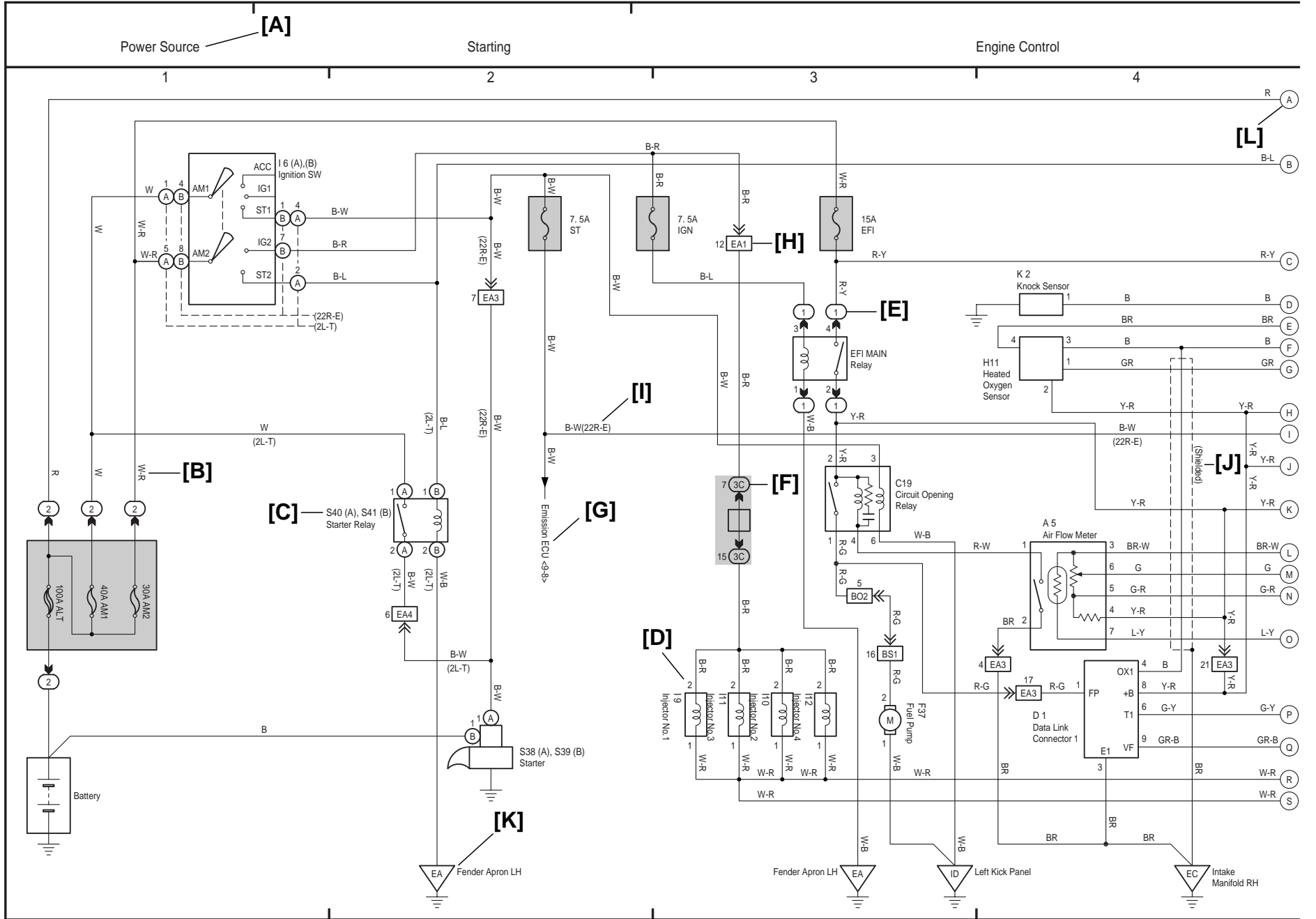
Inlet Air Position Detection SW	D	E	12 Inside SW
	FRS		
	REC		



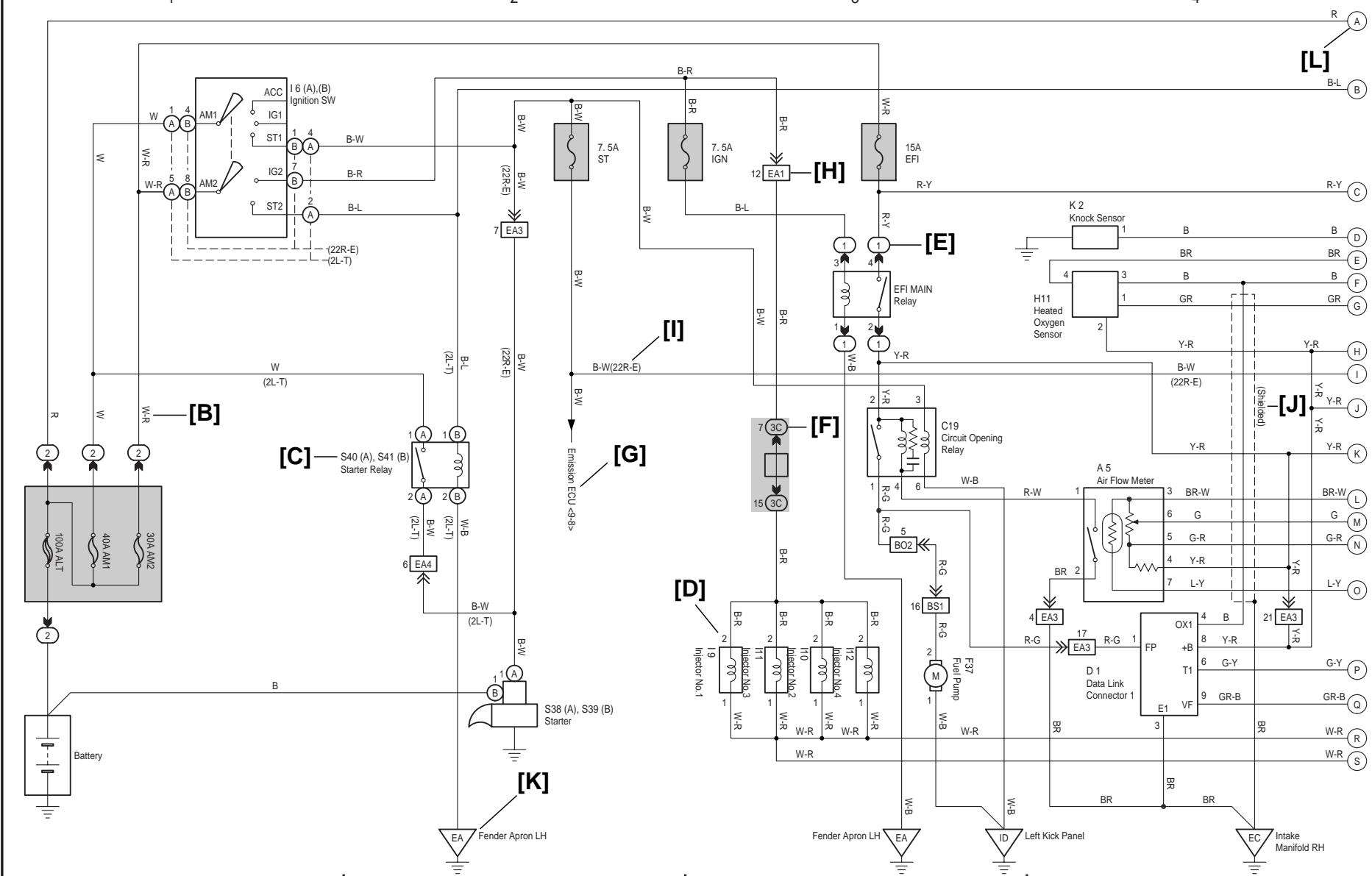
# HOW TO READ THIS SECTION

\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the wiring diagram section.

# OVERALL ELECTRICAL WIRING DIAGRAM



**[A]** Power Source      **[B]** Starting      **[C]** Engine Control



**[A]** : System Title

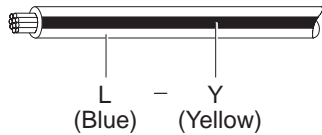
**[B]** : Indicates the wiring color.

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

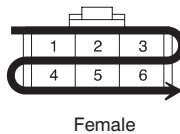


**[C]** : The position of the parts is the same as shown in the wiring diagram and wire routing.

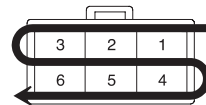
**[D]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example : Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

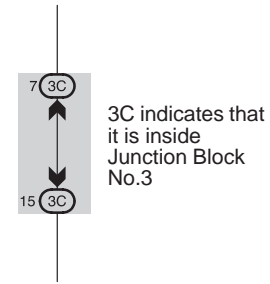
The numbering system for the overall wiring diagram is the same as above

**[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 : Indicates Relay Block No.1

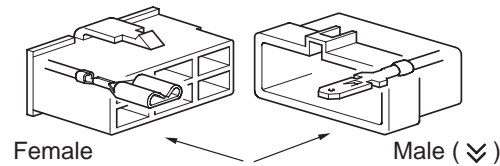
**[F]** : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

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.



Female

Male (↘)

**[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 occurring on the next page indicates that the wire harness is continuous.

# SYSTEM INDEX

SCION xA (EM00D0U)

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Light Reminder .....	10-1	VSC .....	14-2