

# 2006 xB

# 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 xB.

This manual applies to the models listed below. It covers all information in the previously issued Pub. No. EM0090U, and includes all production changes effective Dec. 2005 or later.

Applicable models: NCP31 Series

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

| Manual Name                   | Pub. No. |
|-------------------------------|----------|
| ● 2006 SCION xB Repair Manual | RM0091U  |
| ● 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.)

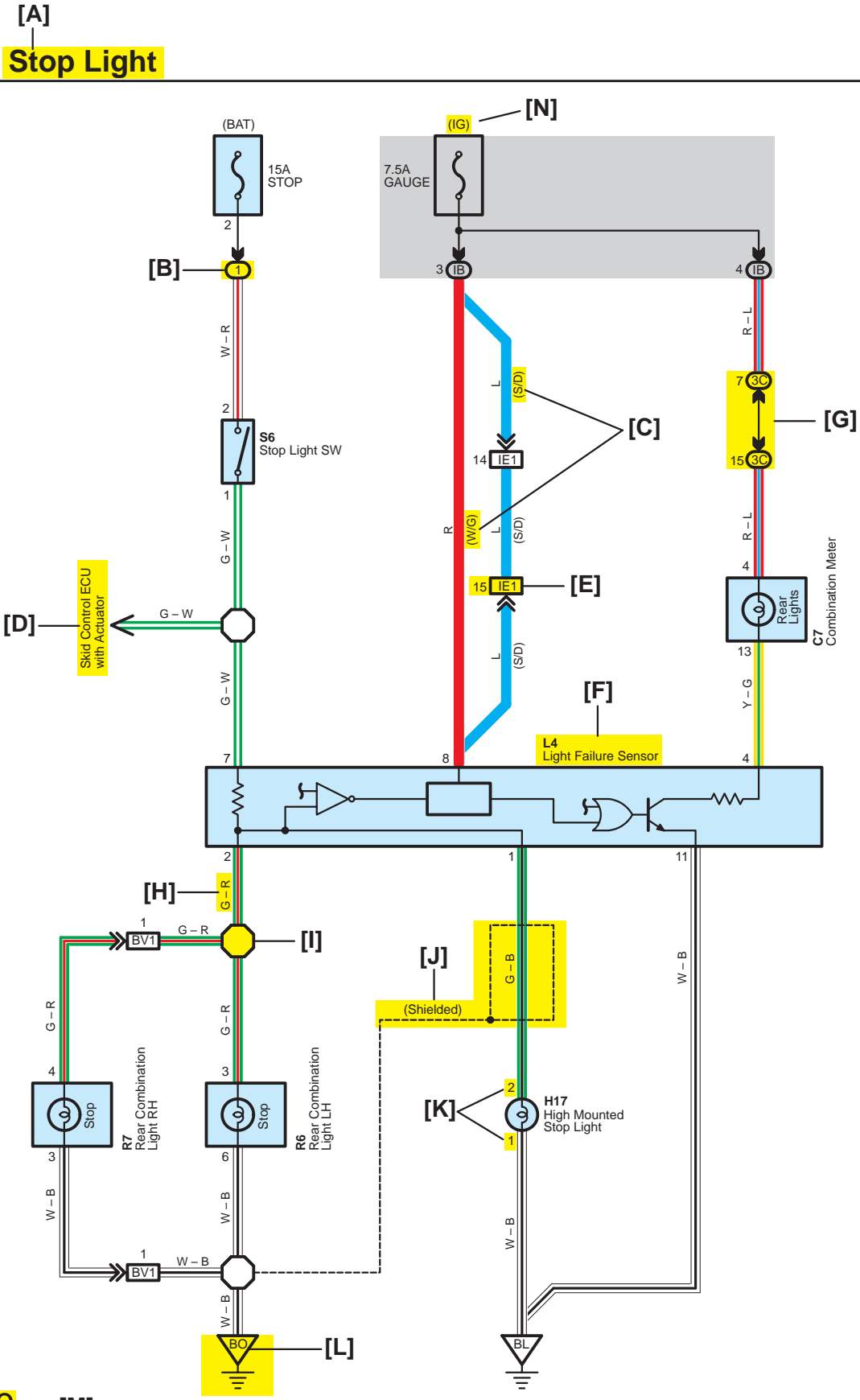
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Point section). See the System Outline to understand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



**[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

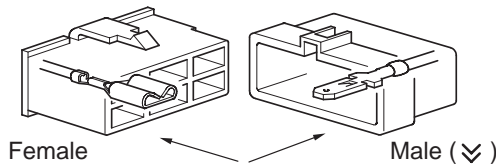
Example: ① Indicates Relay Block No.1

**[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.



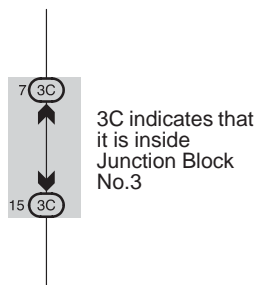
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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:



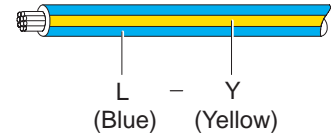
**[H]** : Indicates the wiring color.

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

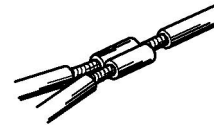
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



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

Example:



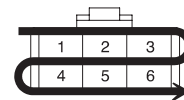
**[J]** : Indicates a shielded cable.



**[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

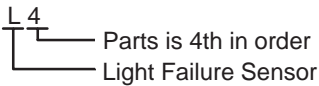
| Code | See Page | Ground Points Location       |
|------|----------|------------------------------|
| BL   | 50       | Under the Left Center Pillar |
| BO   | 50       | Back Panel Center            |

**[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.

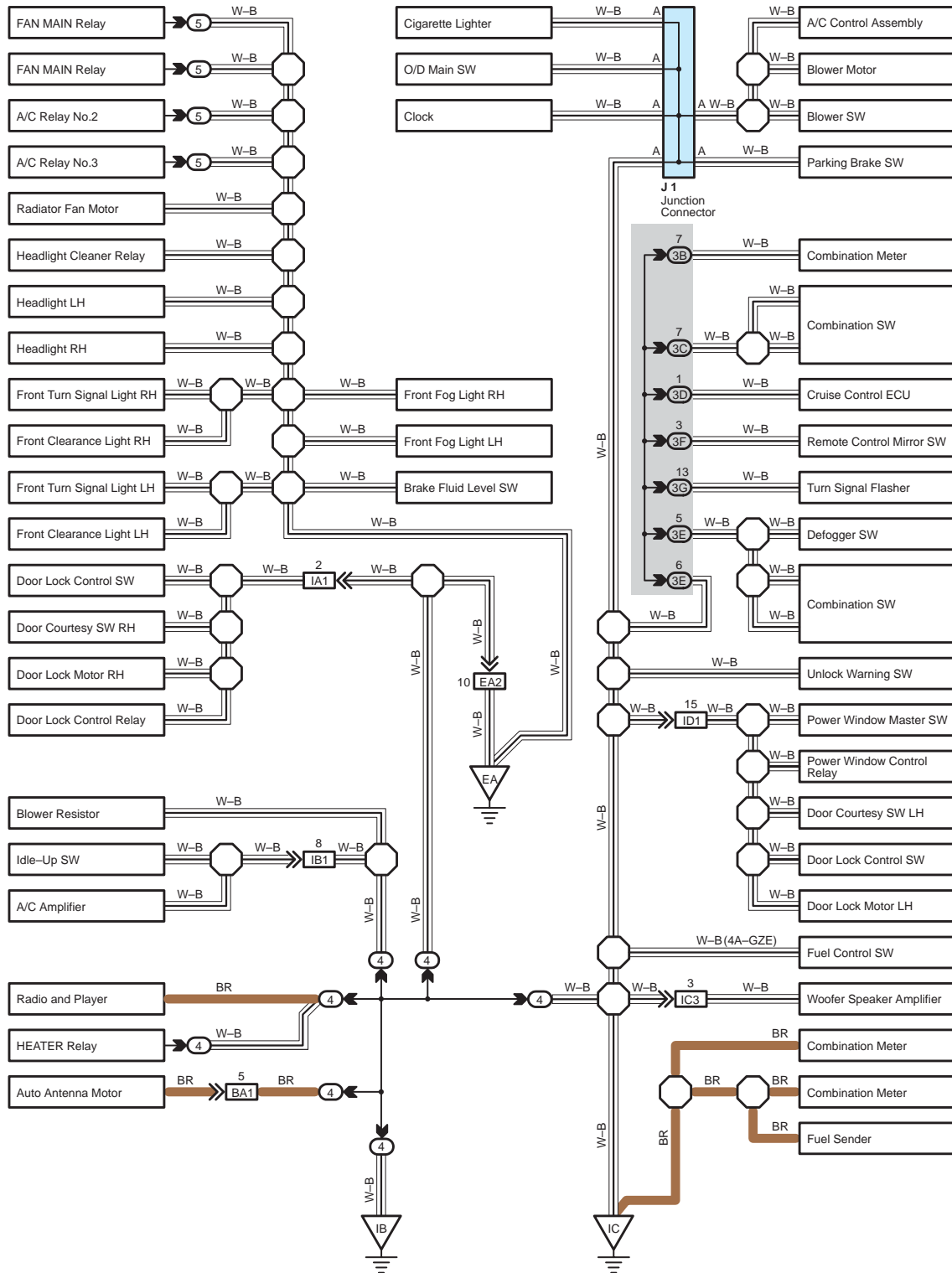
Example : Ground point "BO" is described on page 50 of this manual and is installed on the back panel center.



# 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

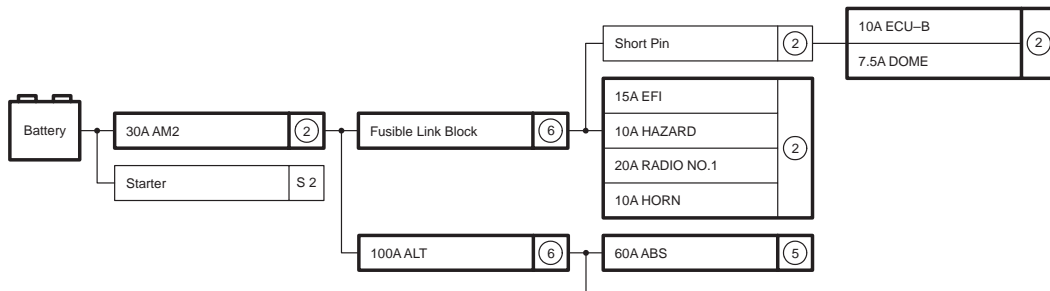


\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

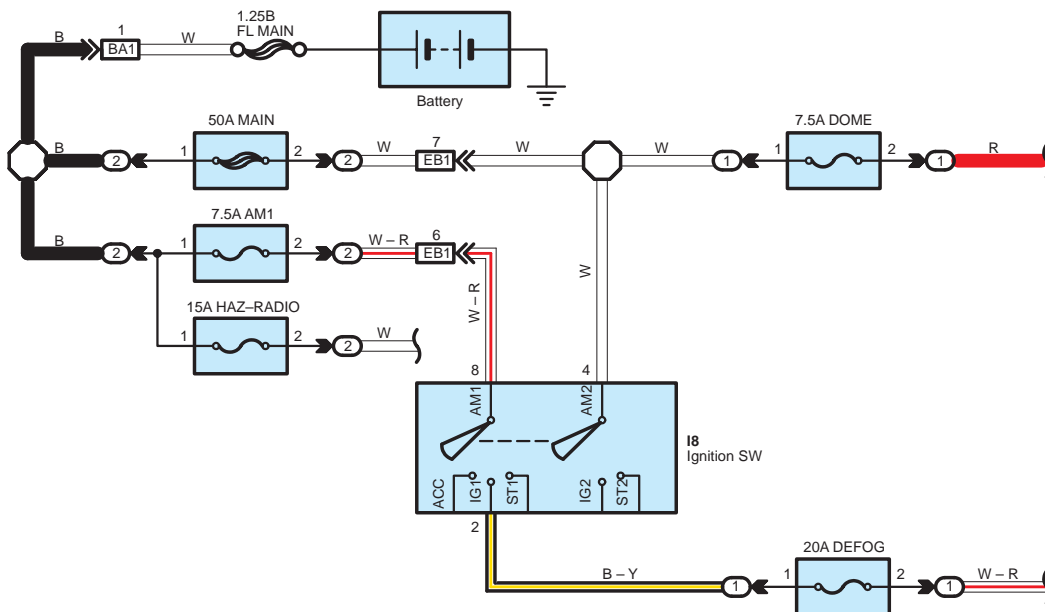
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuses, etc.) and other parts



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

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

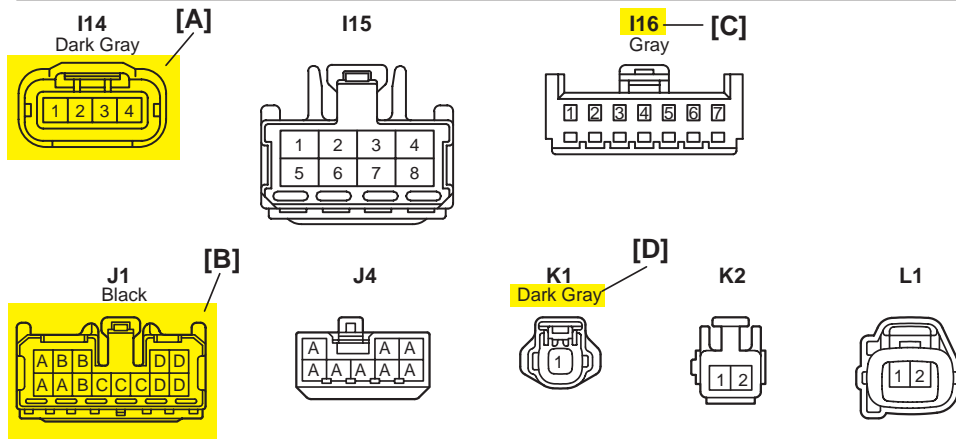
## Power Source



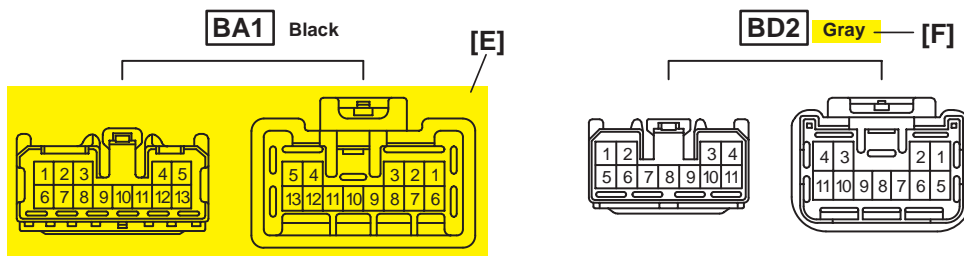
\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

# B HOW TO USE THIS MANUAL

## K CONNECTOR LIST

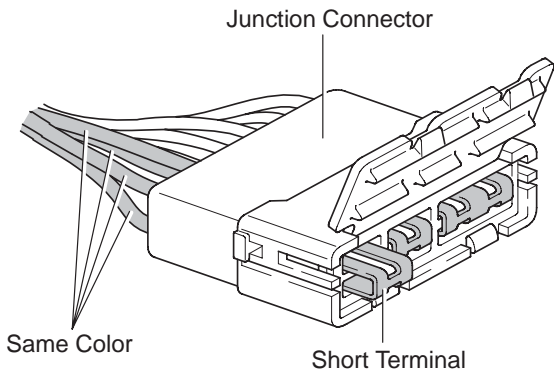


## K CONNECTOR LIST



**[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 |      |                                     |             |

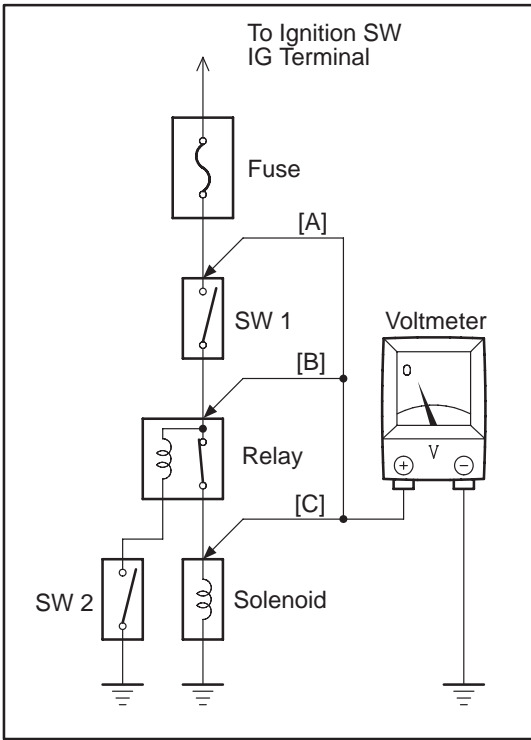
[A] : Part Code

[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



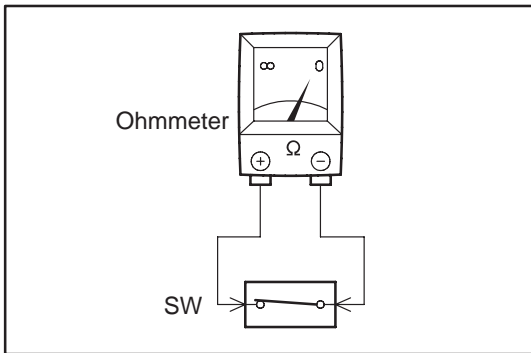
## VOLTAGE CHECK

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

Example:

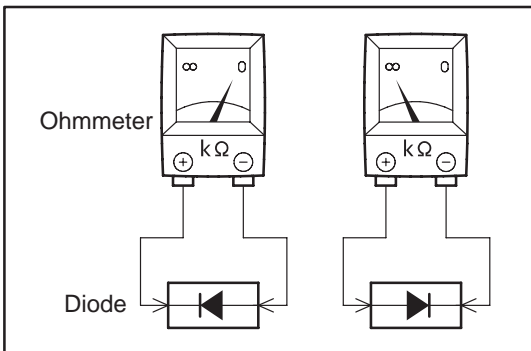
- [A] – Ignition SW on
- [B] – Ignition SW and SW 1 on
- [C] – Ignition SW, SW 1 and Relay on (SW 2 off)

- (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

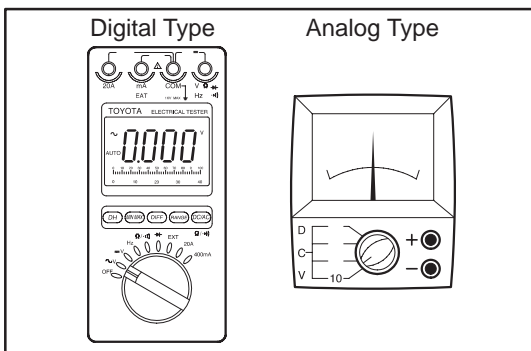
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



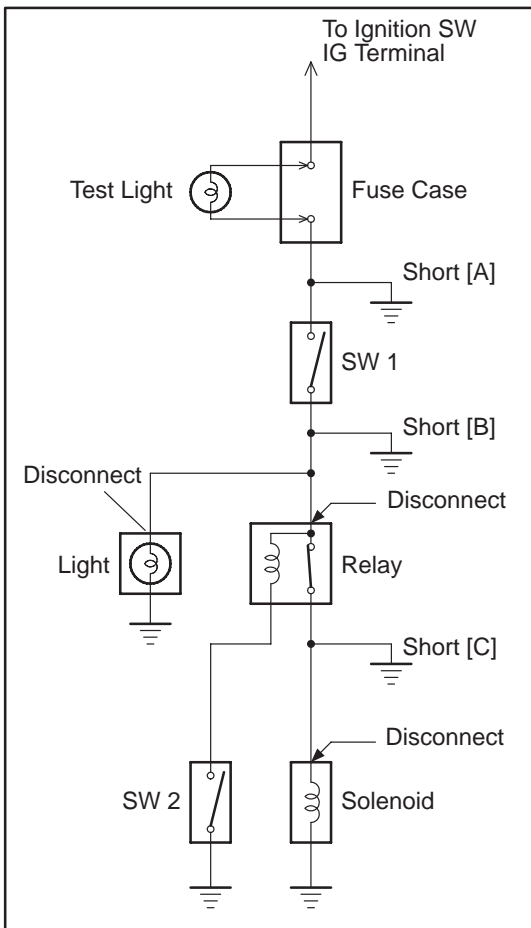
If the circuit has diodes, reverse the two leads and check again.

When contacting the negative lead to the diode positive side and the positive lead to the 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 k $\Omega$ /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.

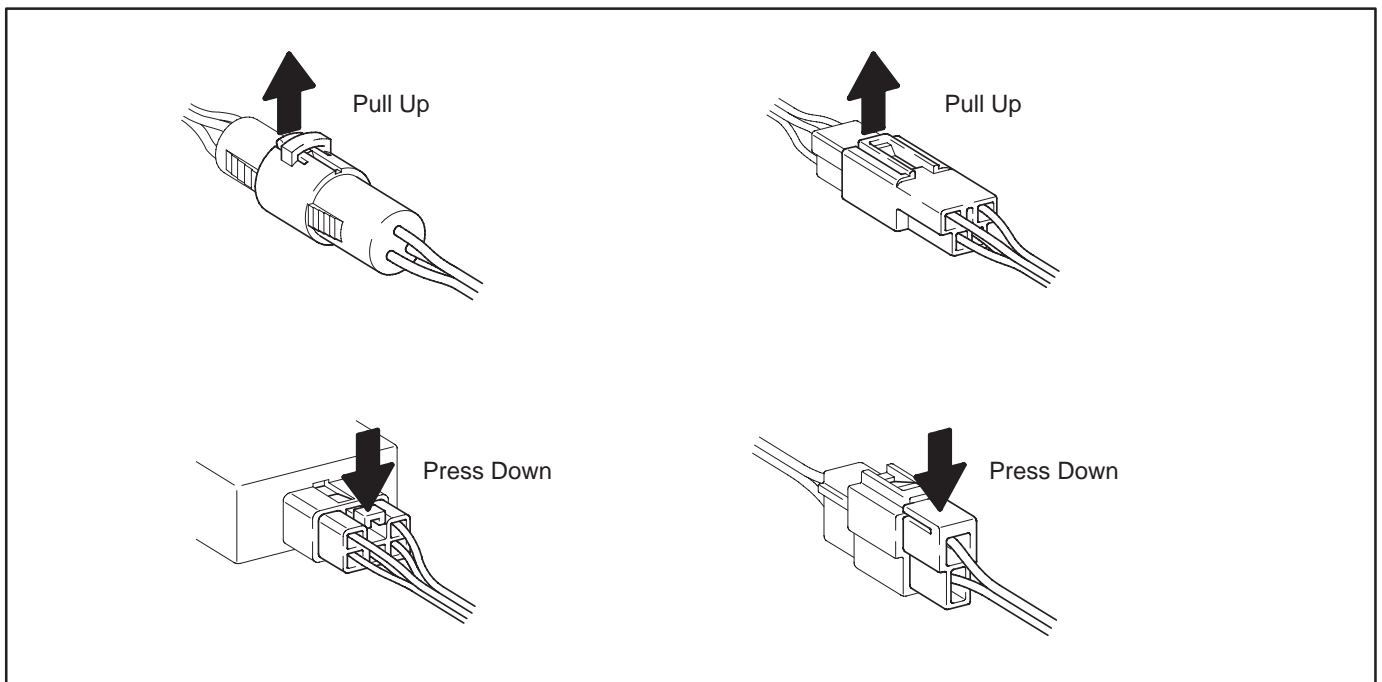
## CAUTION:

- 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).

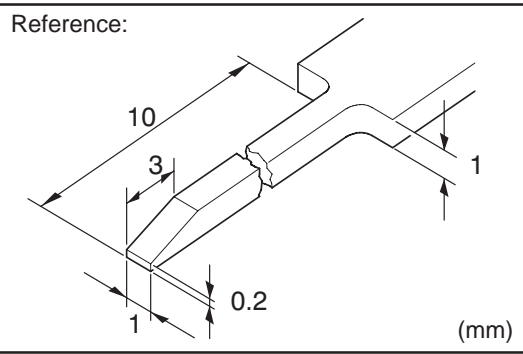
## DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

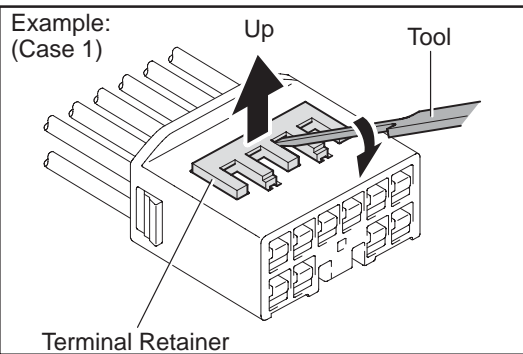
### 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

(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.**

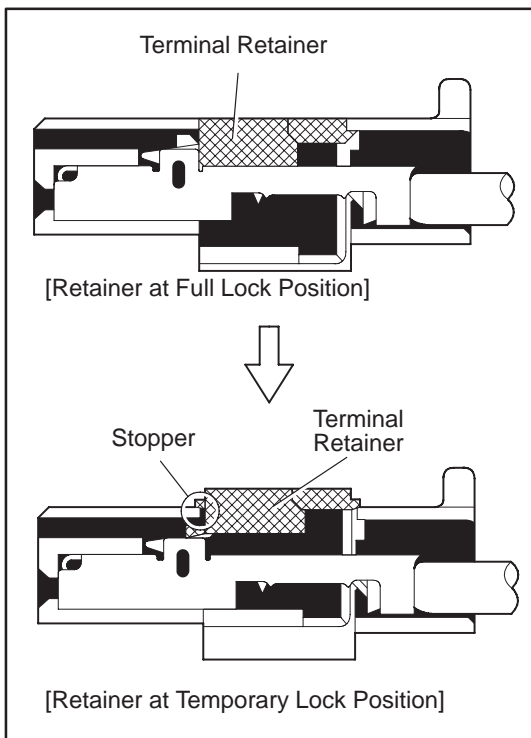


#### [A] For Non-Waterproof Type Connector

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

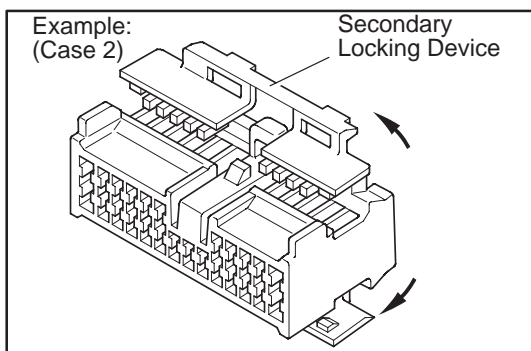
#### "Case 1"

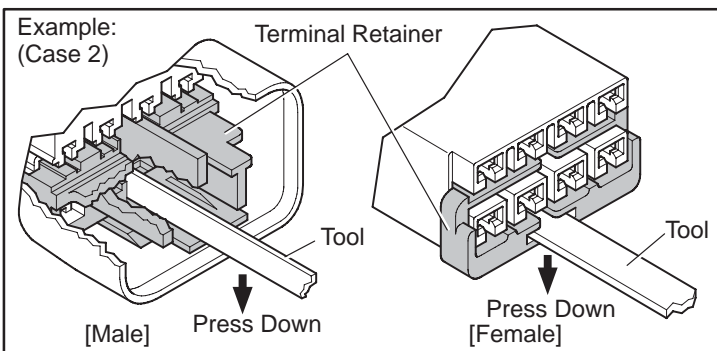
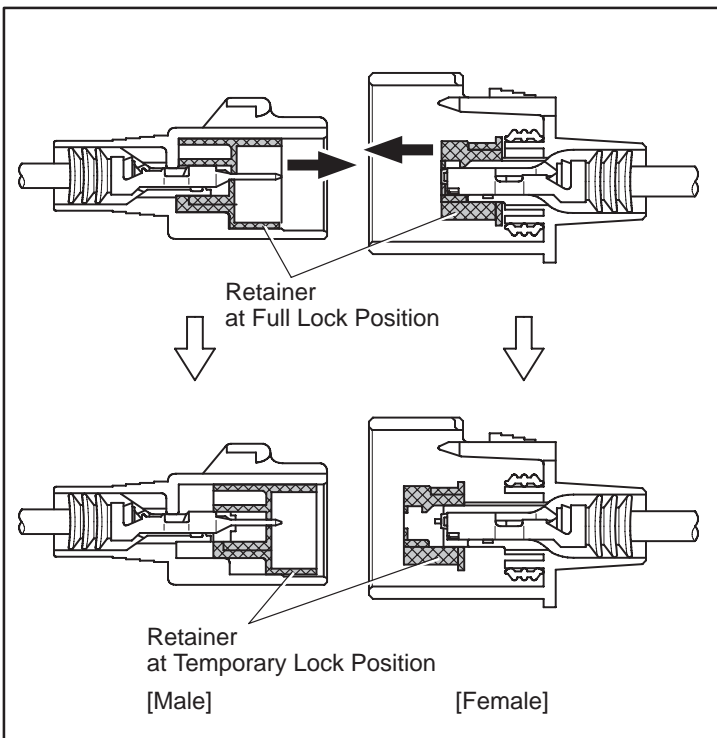
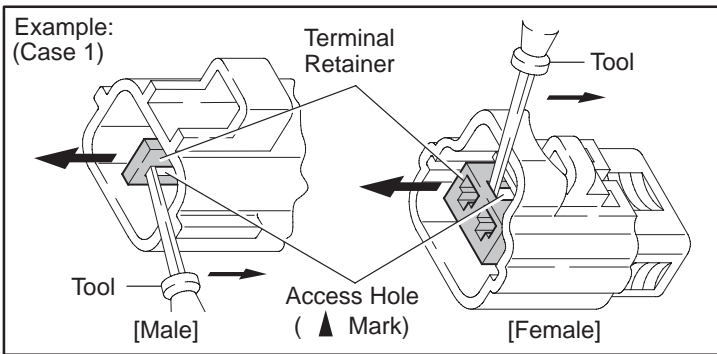
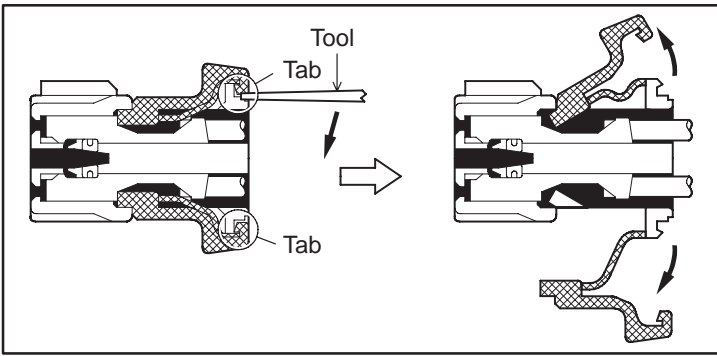
Raise the terminal retainer up to the temporary lock position.



#### "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.

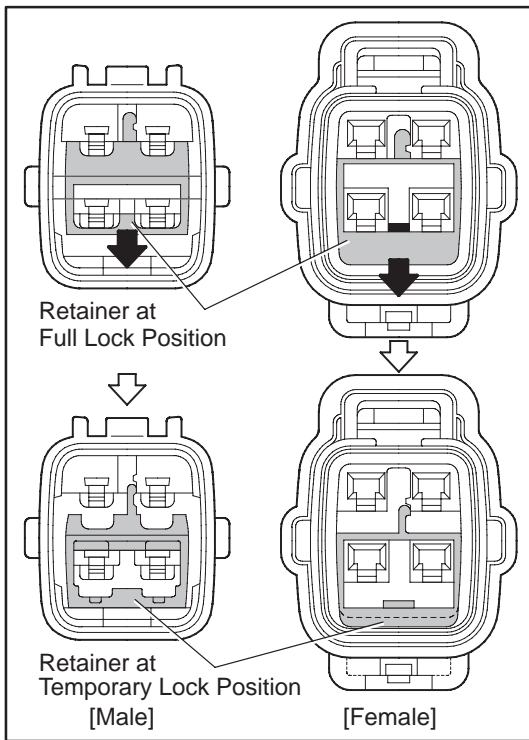
HINT : The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

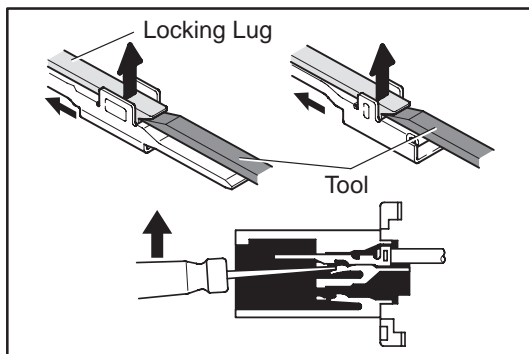
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



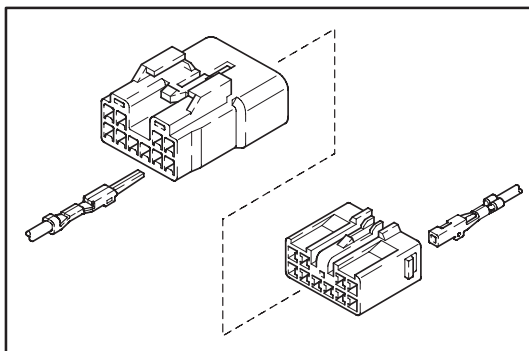
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

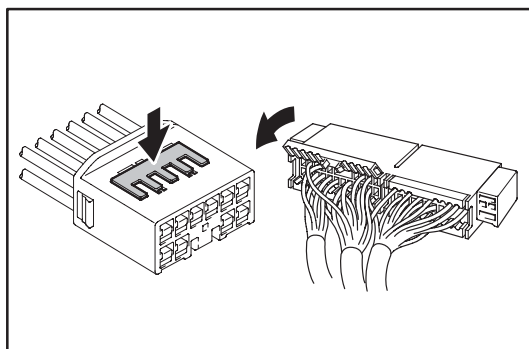


### 4. INSTALL TERMINAL TO CONNECTOR

(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

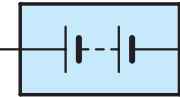

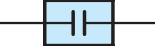



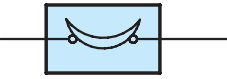


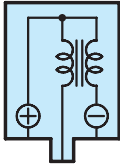




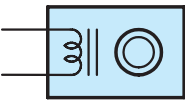

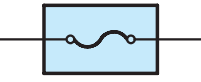


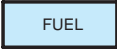

**ABBREVIATIONS**

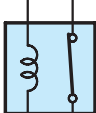
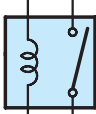
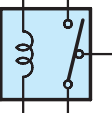
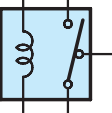
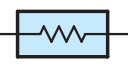
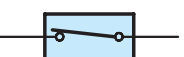
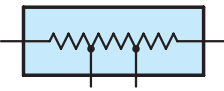
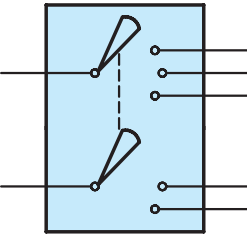
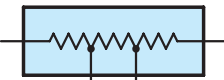
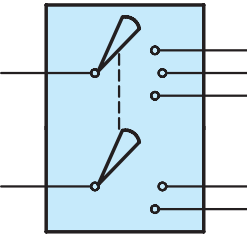

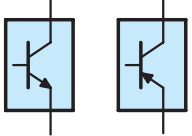

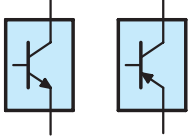

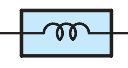
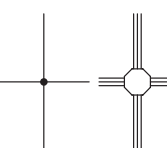


The following abbreviations are used in this manual.

|       |   |                                     |
|-------|---|-------------------------------------|
| A/C   | = | Air Conditioning                    |
| A/T   | = | Automatic Transaxle                 |
| ABS   | = | Anti-Lock Brake System              |
| CAN   | = | Controller Area Network             |
| CPU   | = | Central Processing Unit             |
| 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                           |
| 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              |

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

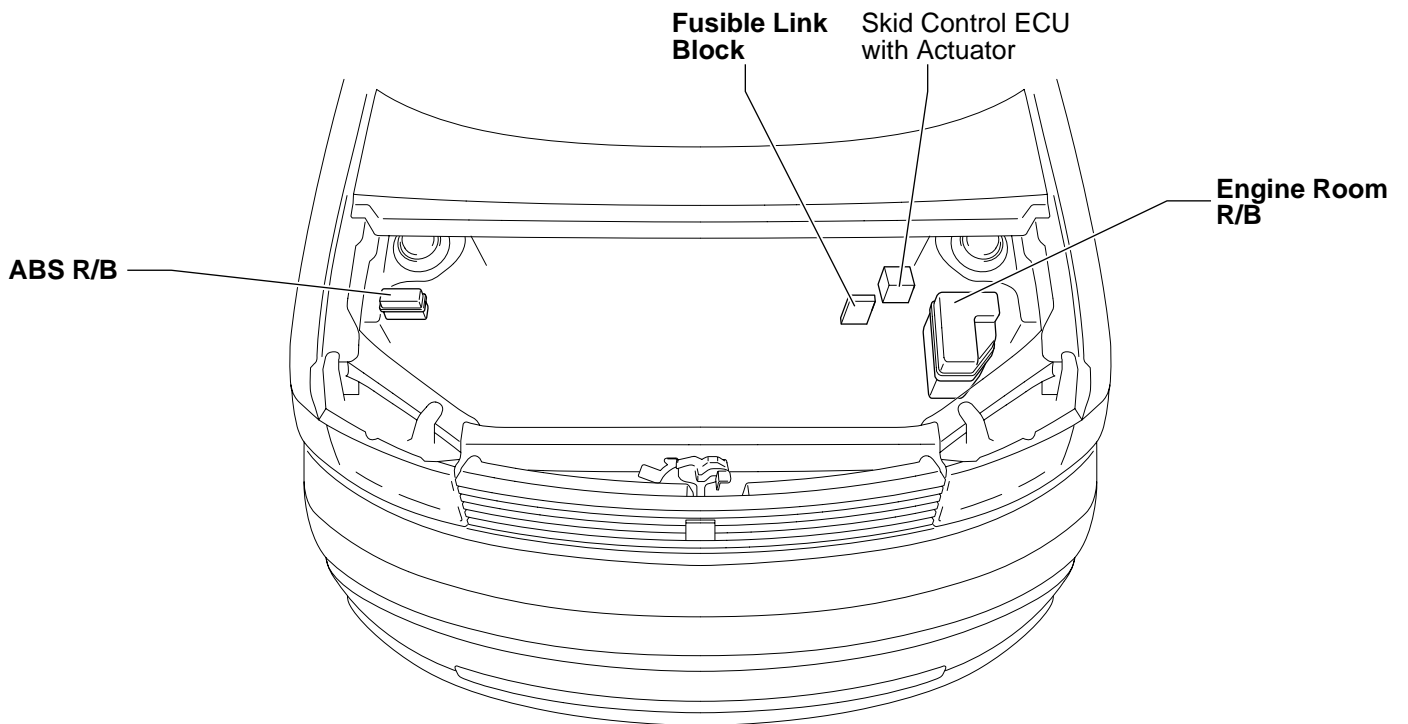
# E GLOSSARY OF TERMS AND SYMBOLS

|   |   |
|---|---|
|  <p><b>BATTERY</b><br/>Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.</p>  |  <p><b>GROUND</b><br/>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><br/>A small holding unit for temporary storage of electrical voltage.</p>   | <p><b>HEADLIGHTS</b><br/>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><br/></p> <p><b>2. DOUBLE FILAMENT</b><br/></p> |
|  <p><b>CIGARETTE LIGHTER</b><br/>An electric resistance heating element.</p>   |   |
|  <p><b>CIRCUIT BREAKER</b><br/>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><br/>An electric device which sounds a loud audible signal.</p>   |
|  <p><b>DIODE</b><br/>A semiconductor which allows current flow in only one direction.</p>   |  <p><b>IGNITION COIL</b><br/>Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs.</p>   |
|  <p><b>DIODE, ZENER</b><br/>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><br/>Current flow through a filament causes the filament to heat up and emit light.</p>   |
|  <p><b>PHOTODIODE</b><br/>The photodiode is a semiconductor which controls the current flow according to the amount of light.</p>  |  <p><b>LED (LIGHT EMITTING DIODE)</b><br/>Upon current flow, these diodes emit light without producing the heat of a comparable light.</p>  |
|  <p><b>DISTRIBUTOR, IIA</b><br/>Channels high-voltage current from the ignition coil to the individual spark plugs.</p>  |  <p><b>METER, ANALOG</b><br/>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><br/>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><br/>(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><br/>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><br/>A power unit which converts electrical energy into mechanical energy, especially rotary motion.</p>   |

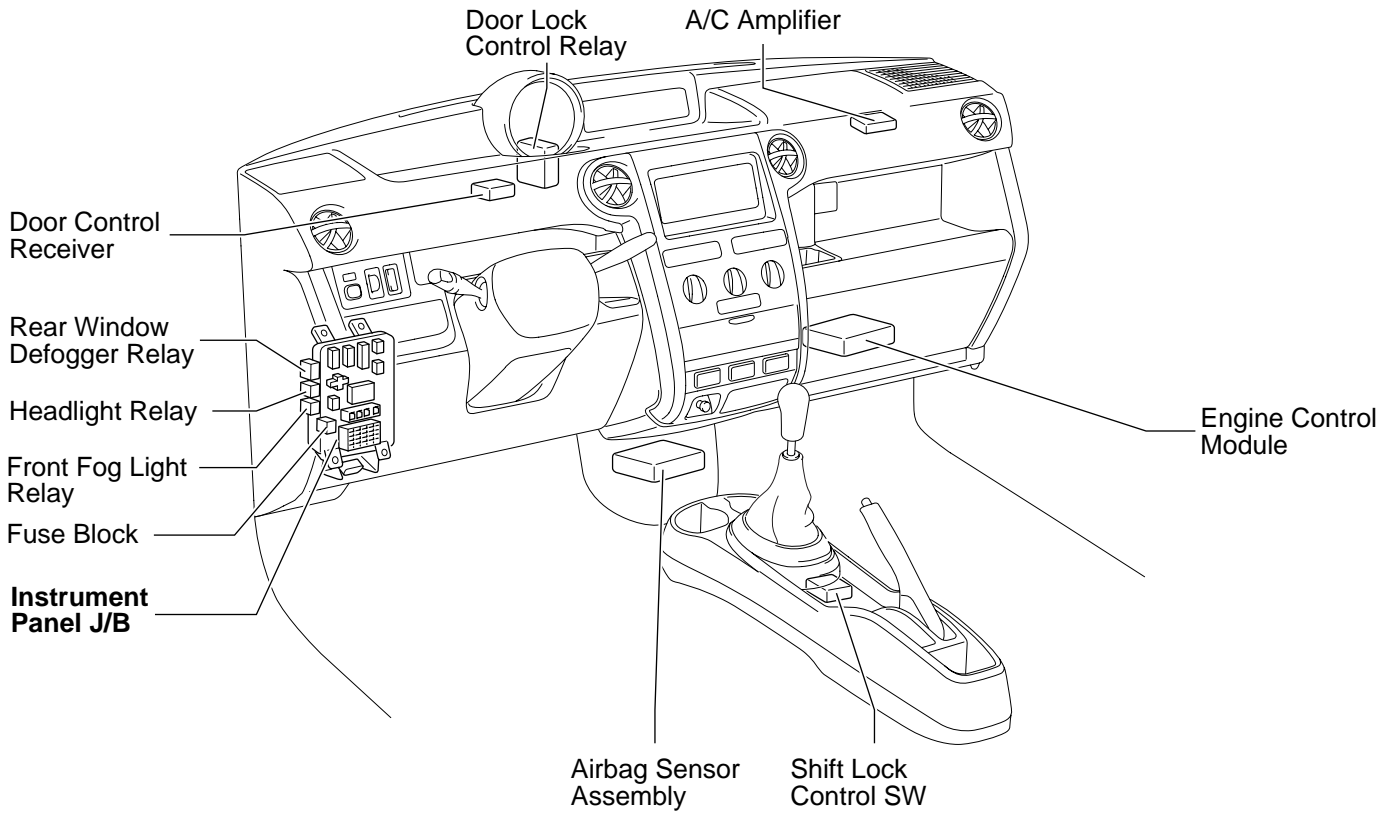
|  |   |
|--|---|
|  <p><b>RELAY</b><br/>Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p> <p><b>1. NORMALLY CLOSED</b></p>  <p><b>2. NORMALLY OPEN</b></p> |  <p><b>SPEAKER</b><br/>An electromechanical device which creates sound waves from current flow.</p>  |
|  <p><b>RELAY, DOUBLE THROW</b><br/>A relay which passes current through one set of contacts or the other.</p>   | <p><b>SWITCH, MANUAL</b><br/>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><br/>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><br/>A switch which continuously passes current through one set of contacts or the other.</p>   |
|  <p><b>RESISTOR, TAPPED</b><br/>A resistor which supplies two or more different non adjustable resistance values.</p>  | <p><b>SWITCH, IGNITION</b><br/>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><br/>A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.</p>  | <p><b>SWITCH, WIPER PARK</b><br/>Automatically returns wipers to the stop position when the wiper switch is turned off.</p>    |
|  <p><b>SENSOR (Thermistor)</b><br/>A resistor which varies its resistance with temperature.</p>   | <p><b>TRANSISTOR</b><br/>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><br/>Uses magnetic impulses to open and close a switch to create a signal for activation of other components.<br/>(Reed Switch Type)</p>  | <p><b>WIRES</b><br/>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><br/>Used to provide an unbroken connection within a junction block.</p>  |   |
|  <p><b>SOLENOID</b><br/>An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p>  |   |

# F RELAY LOCATIONS

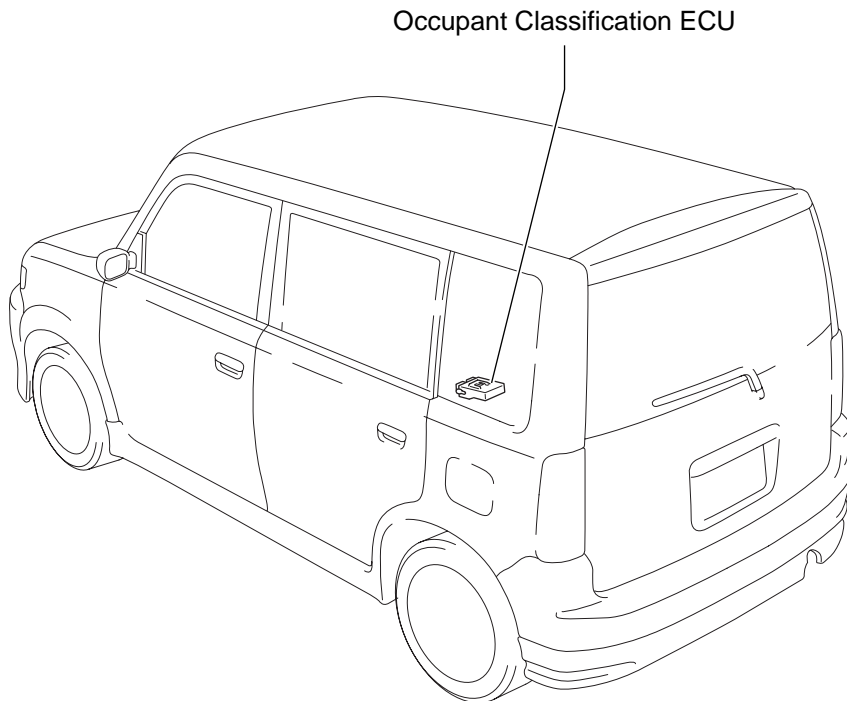
[Engine Compartment]



[Instrument Panel]

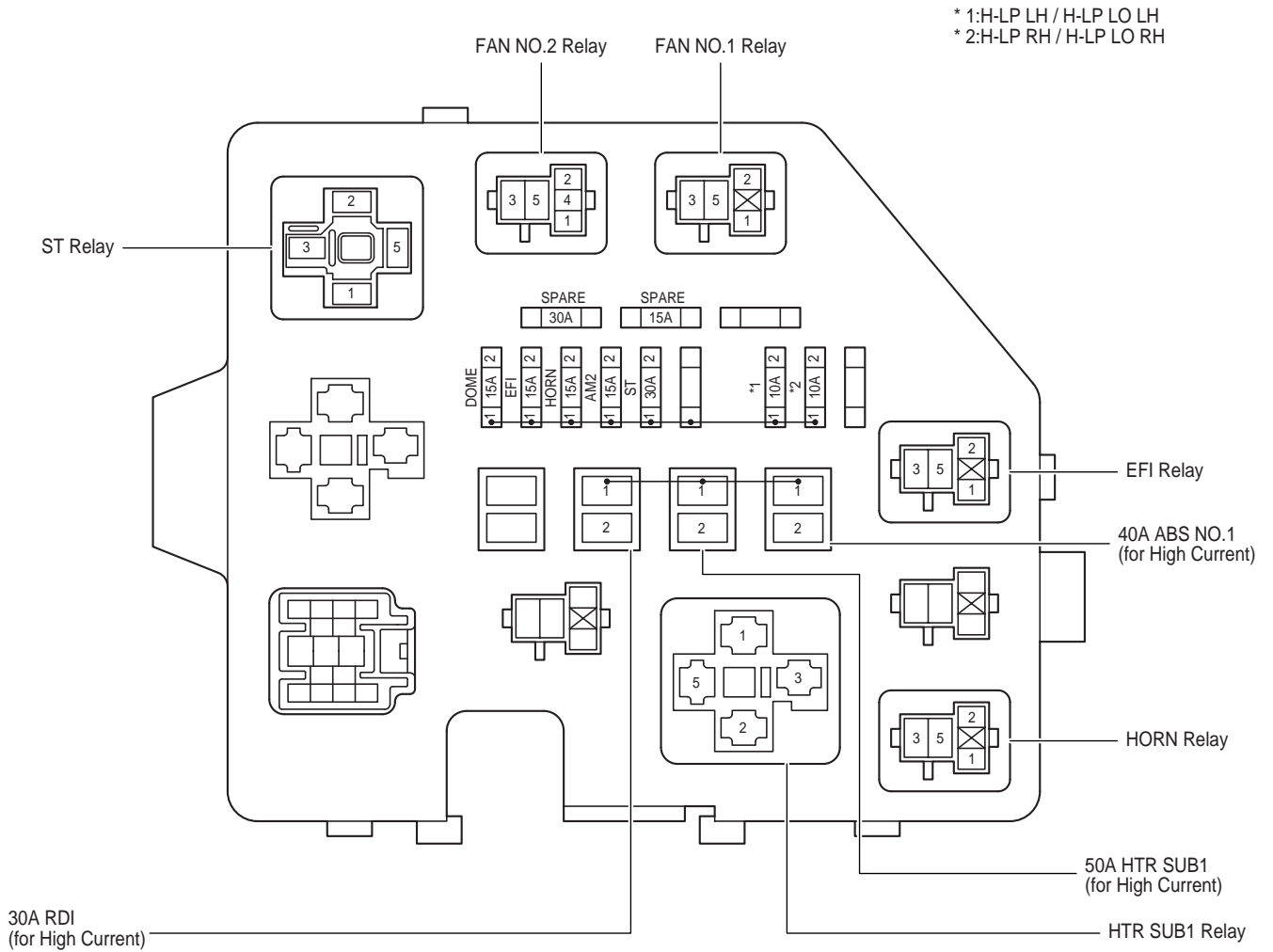


[Body]



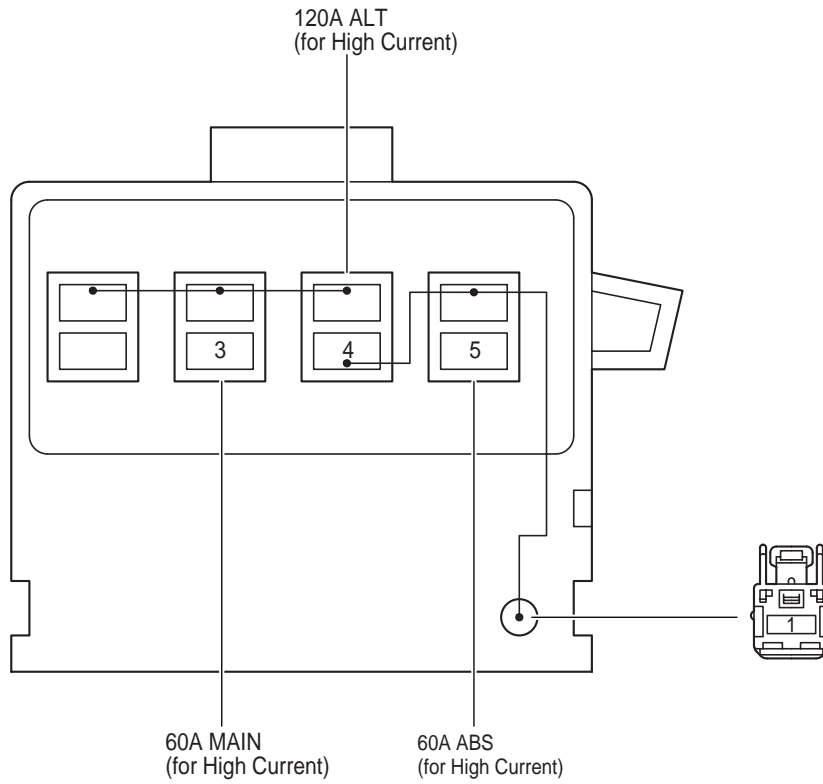
# F RELAY LOCATIONS

① : Engine Room R/B      Engine Compartment Left (See Page 20)



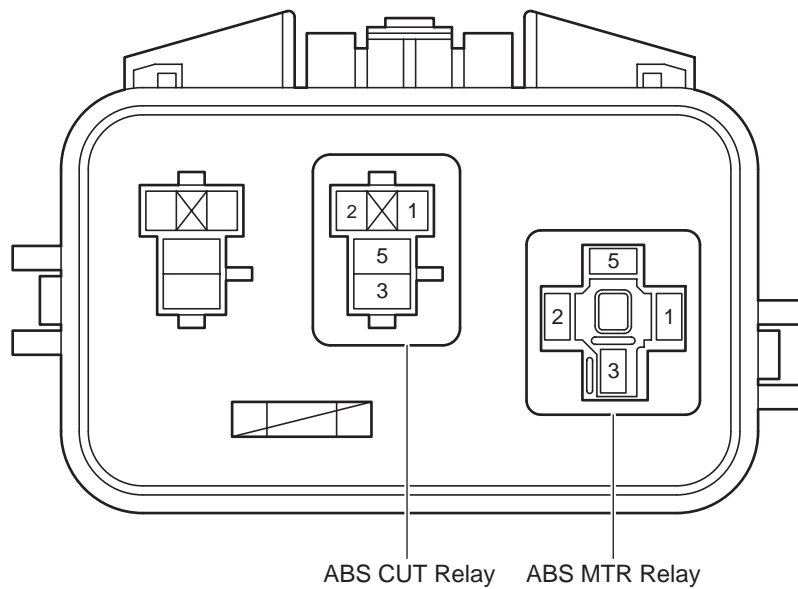
**Fusible Link Block**

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



**② : ABS R/B**

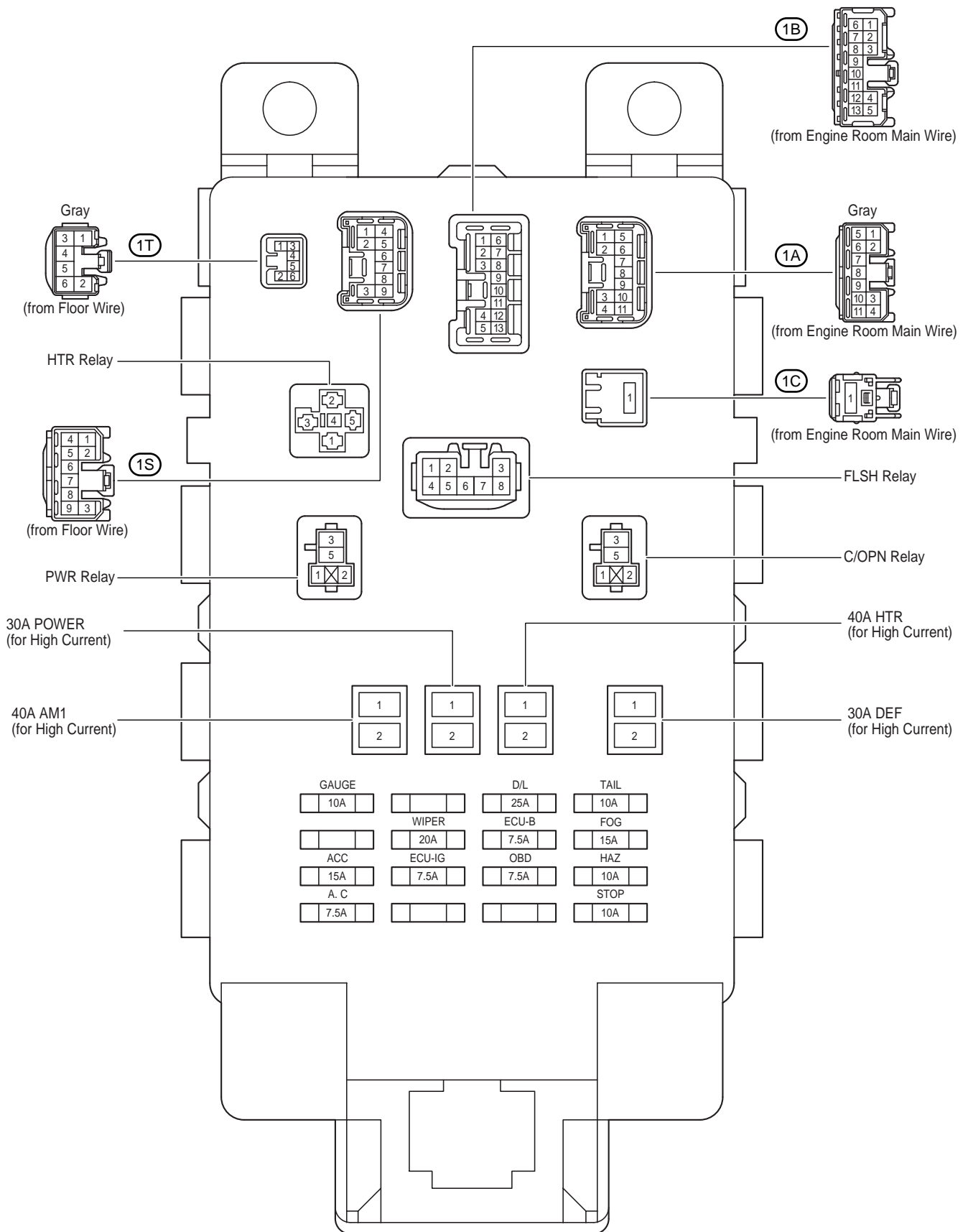
**Engine Compartment Right (See Page 20)**

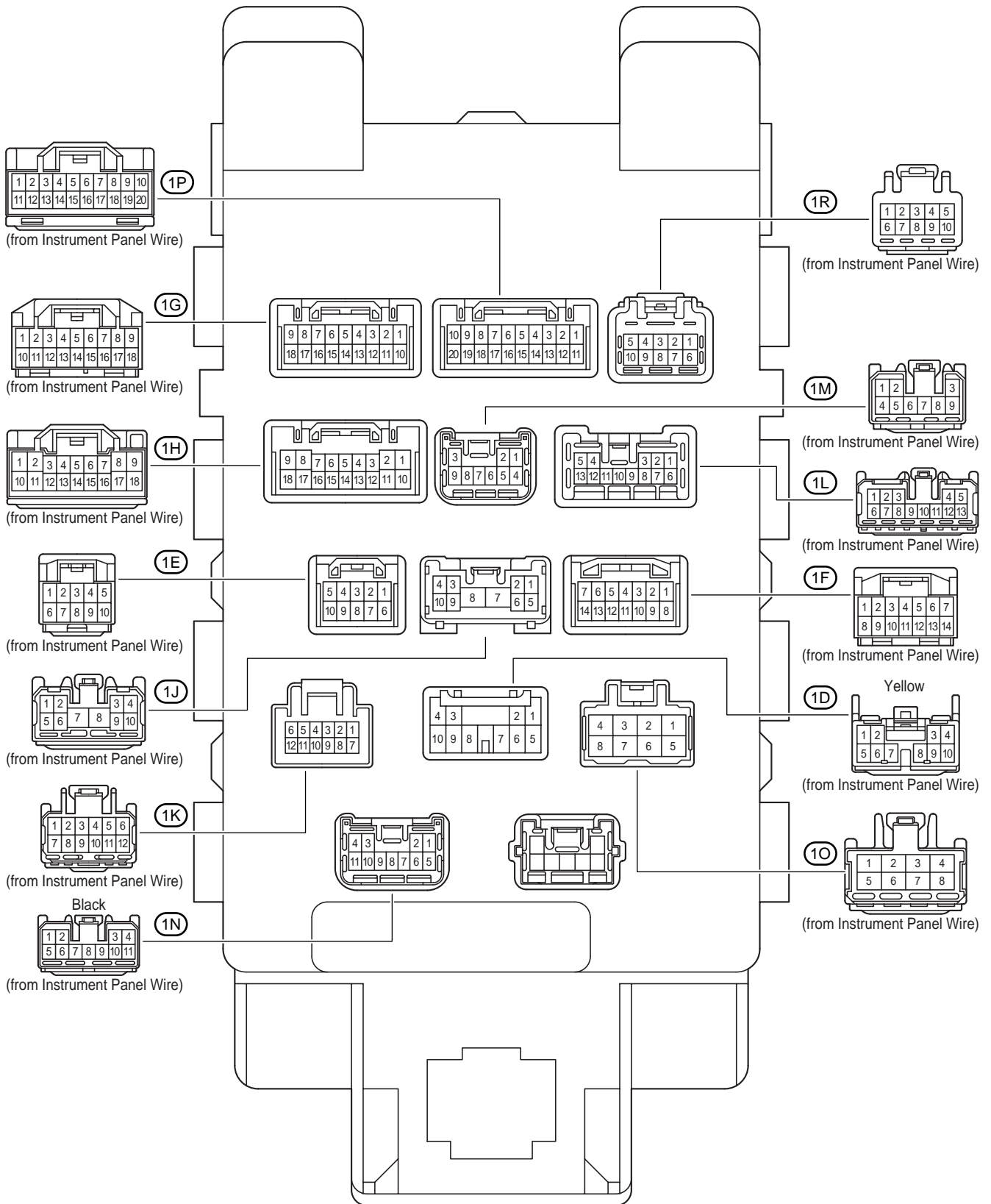




# F RELAY LOCATIONS

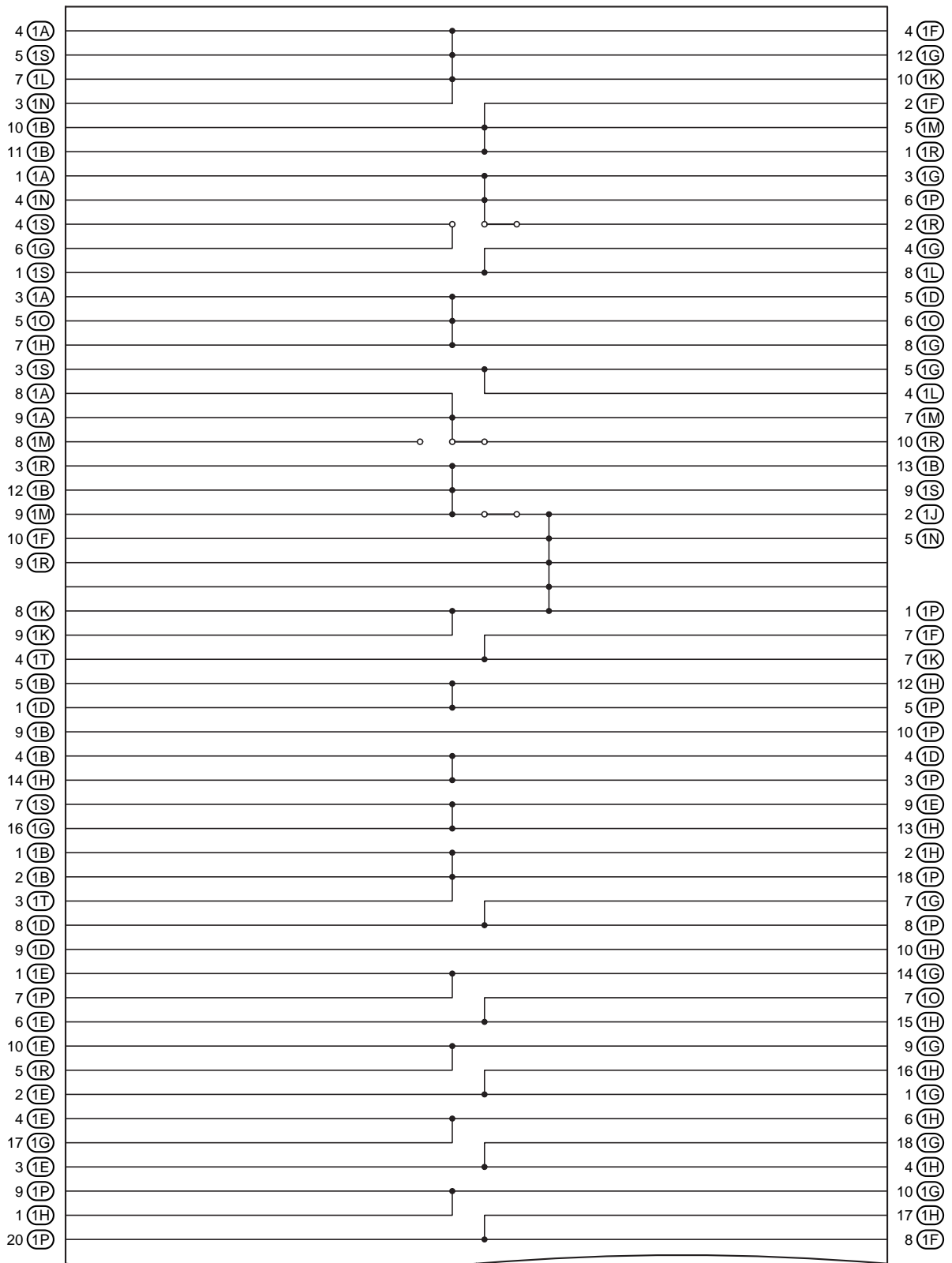
 : Instrument Panel J/B     Lower Finish Panel (See Page 21)





# F RELAY LOCATIONS

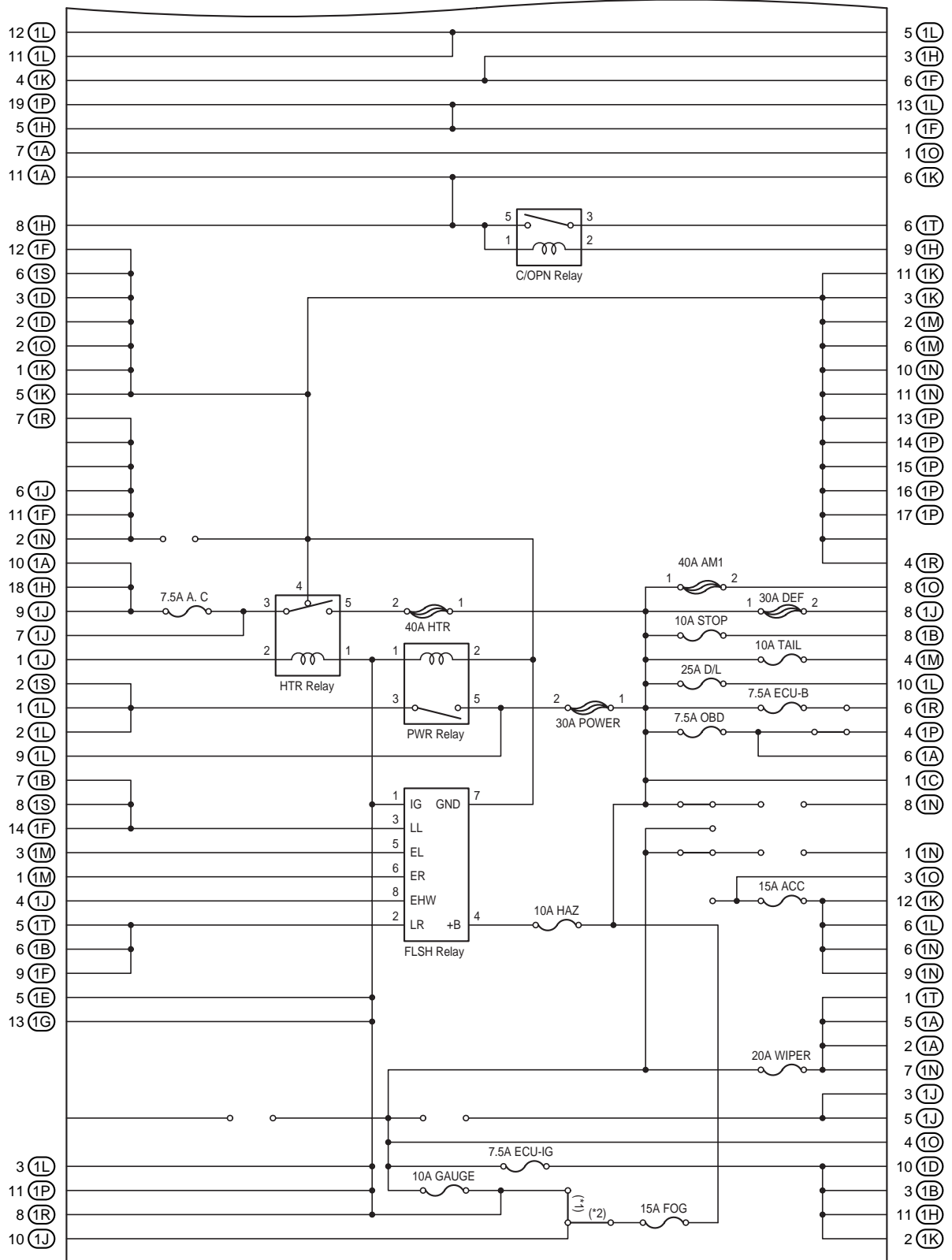
## [Instrument Panel J/B Inner Circuit]



(Cont. next page)

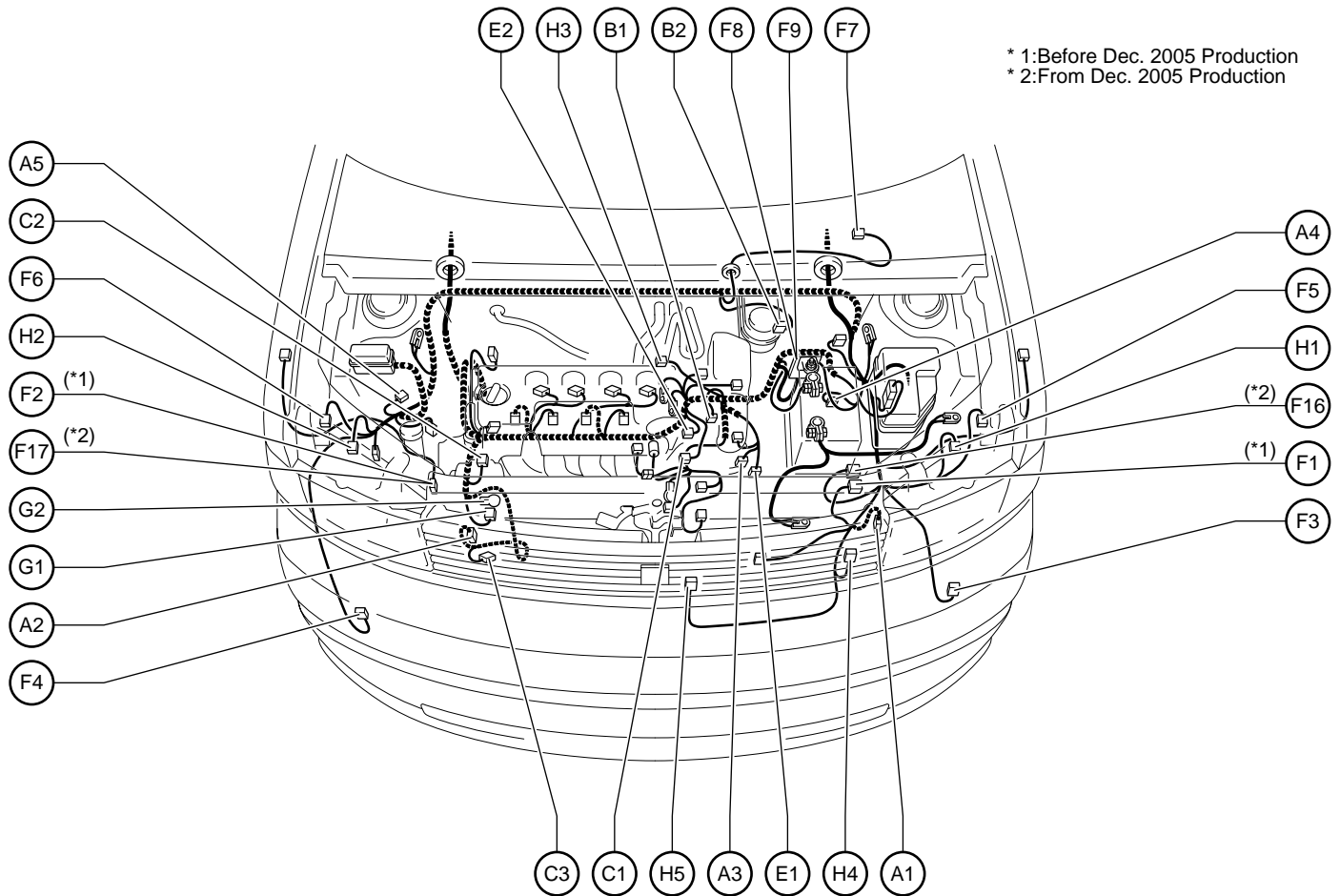
(Cont'd)

\* 1: Before Dec. 2005 Production  
 \* 2: From Dec. 2005 Production



# G ELECTRICAL WIRING ROUTING

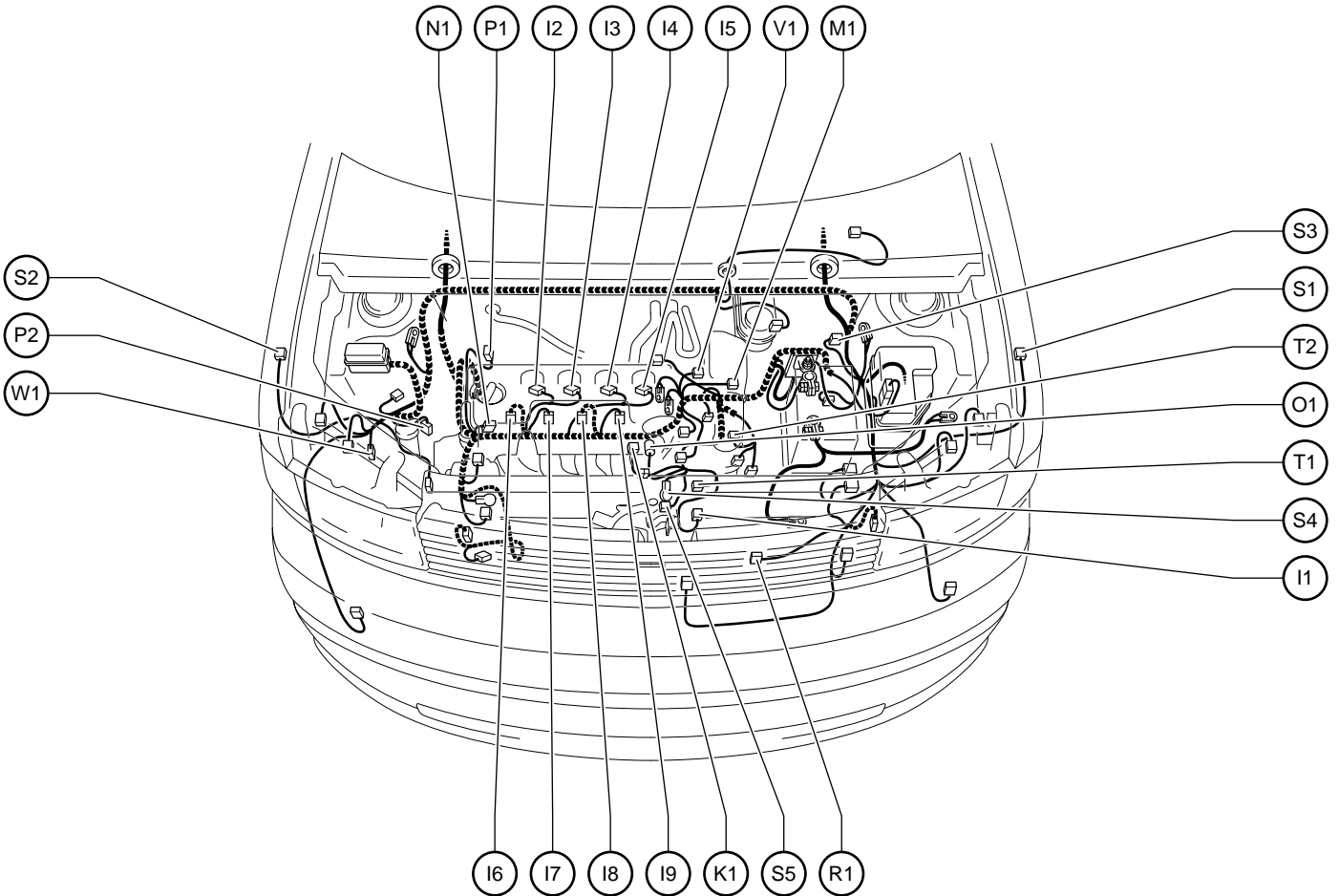
## Position of Parts in Engine Compartment



\* 1: Before Dec. 2005 Production  
 \* 2: From Dec. 2005 Production

- |  |  |
|--|--|
| A 1 A/C Condenser Fan Resistor   | F 1 Front Airbag Sensor LH                               |
| A 2 A/C Magnetic Valve   | F 2 Front Airbag Sensor RH                               |
| A 3 A/T Indicator Light SW<br>Back-Up Light SW<br>Park/Neutral Position SW | F 3 Front Fog Light LH                                   |
| A 4 ABS Speed Sensor Front LH  | F 4 Front Fog Light RH                                   |
| A 5 ABS Speed Sensor Front RH  | F 5 Front Parking Light LH<br>Front Turn Signal Light LH |
| B 1 Back-Up Light SW   | F 6 Front Parking Light RH<br>Front Turn Signal Light RH |
| B 2 Brake Fluid Level Warning SW   | F 7 Front Wiper Motor                                    |
| C 1 Camshaft Position Sensor   | F 8 Fusible Link Block                                   |
| C 2 Camshaft Timing Oil Control Valve                                      | F 9 Fusible Link Block                                   |
| C 3 Crankshaft Position Sensor   | F 16 Front Airbag Sensor LH                              |
| E 1 Electronically Controlled Transmission Solenoid                        | F 17 Front Airbag Sensor RH                              |
| E 2 Engine Coolant Temp. Sensor  | 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 Power Steering Oil Pressure Sensor  
 P 2 Pressure Sensor

R 1 Radiator Fan Motor

S 1 Side Turn Signal Light LH

S 2 Side Turn Signal Light RH

S 3 Skid Control ECU with Actuator

S 4 Starter

S 5 Starter

T 1 Throttle Position Sensor

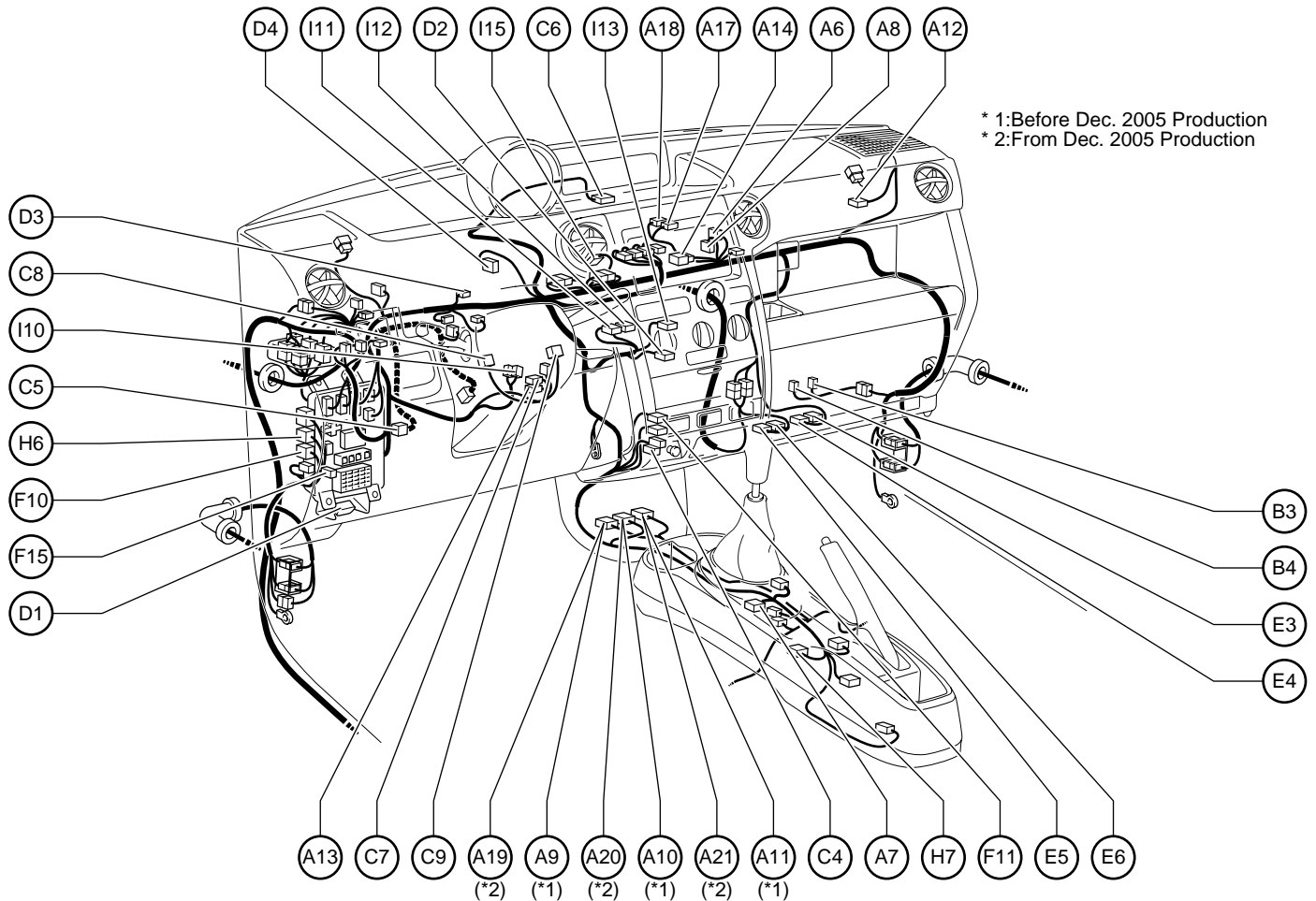
T 2 Turbine Speed Sensor

V 1 VSV (Purge)

W 1 Washer Motor

# G ELECTRICAL WIRING ROUTING

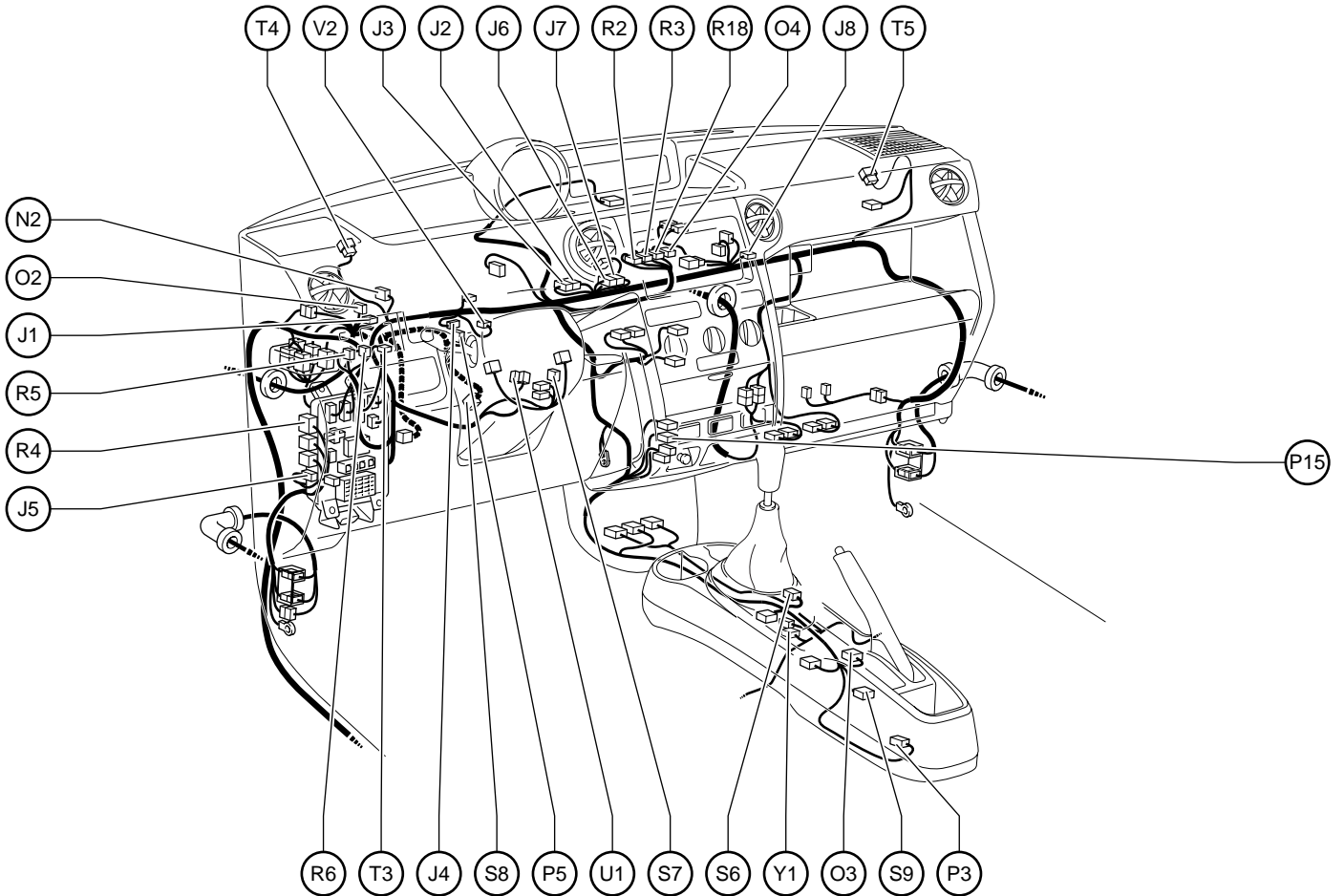
## Position of Parts in Instrument Panel



\* 1: Before Dec. 2005 Production  
 \* 2: From Dec. 2005 Production

- |   |  |
|---|--|
| A 6 A/C Thermistor                                    | D 1 Data Link Connector 3  |
| A 7 A/T Shift Lever Illumination<br>O/D Main SW       | D 2 Defroster Mode Detection SW<br>Inlet Air Position Detection SW |
| A 8 Air Inlet Servo Motor                             | D 3 Door Control Receiver  |
| A 9 Airbag Sensor Assembly                            | D 4 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's Airbag Assembly) | E 5 Engine Control Module  |
| A 13 Airbag Squib (Steering Wheel Pad)                | E 6 Engine Control Module  |
| A 14 Antenna Amplifier                                | F 10 Front Fog Light Relay   |
| A 17 A/C Amplifier                                    | F 11 Front Fog Light SW  |
| A 18 A/C Amplifier                                    | F 15 Fuse Block  |
| A 19 Airbag Sensor Assembly                           | H 6 Headlight Relay  |
| A 20 Airbag Sensor Assembly                           | H 7 Heated Oxygen Sensor (Bank 1 Sensor 2)                         |
| A 21 Airbag Sensor Assembly                           | I 10 Ignition SW   |
| B 3 Blower Motor                                      | I 11 Integration Control and Panel                                 |
| B 4 Blower Resistor                                   | I 12 Integration Control and Panel                                 |
| C 4 Cigarette Lighter                                 | I 13 Integration Control and Panel                                 |
| C 5 Clutch Start SW                                   | I 15 Integration Control and Panel                                 |
| C 6 Combination Meter                                 |  |
| C 7 Combination SW                                    |  |
| C 8 Combination SW                                    |  |
| C 9 Combination SW                                    |  |

## Position of Parts in Instrument Panel



J 1 Junction Connector  
 J 2 Junction Connector  
 J 3 Junction Connector  
 J 4 Junction Connector  
 J 5 Junction Connector  
 J 6 Junction Connector  
 J 7 Junction Connector  
 J 8 Junction Connector

N 2 Noise Filter (Rear Window Defogger No.1)

O 2 Option Connector (TVIP)  
 O 3 Option Connector (IPOD Unit)  
 O 4 Option Connector (Radio and Player)

P 3 Parking Brake SW  
 P 5 PTC Heater  
 P15 Passenger Seat Belt Warning Lamp

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  
 R18 Radio and Player

S 6 Shift Lock Control SW  
 S 7 Steering Sensor  
 S 8 Stop Light SW  
 S 9 Stereo Jack Adapter

T 3 TRAC OFF SW  
 T 4 Tweeter LH  
 T 5 Tweeter RH

U 1 Unlock Warning SW

V 2 VSC Buzzer

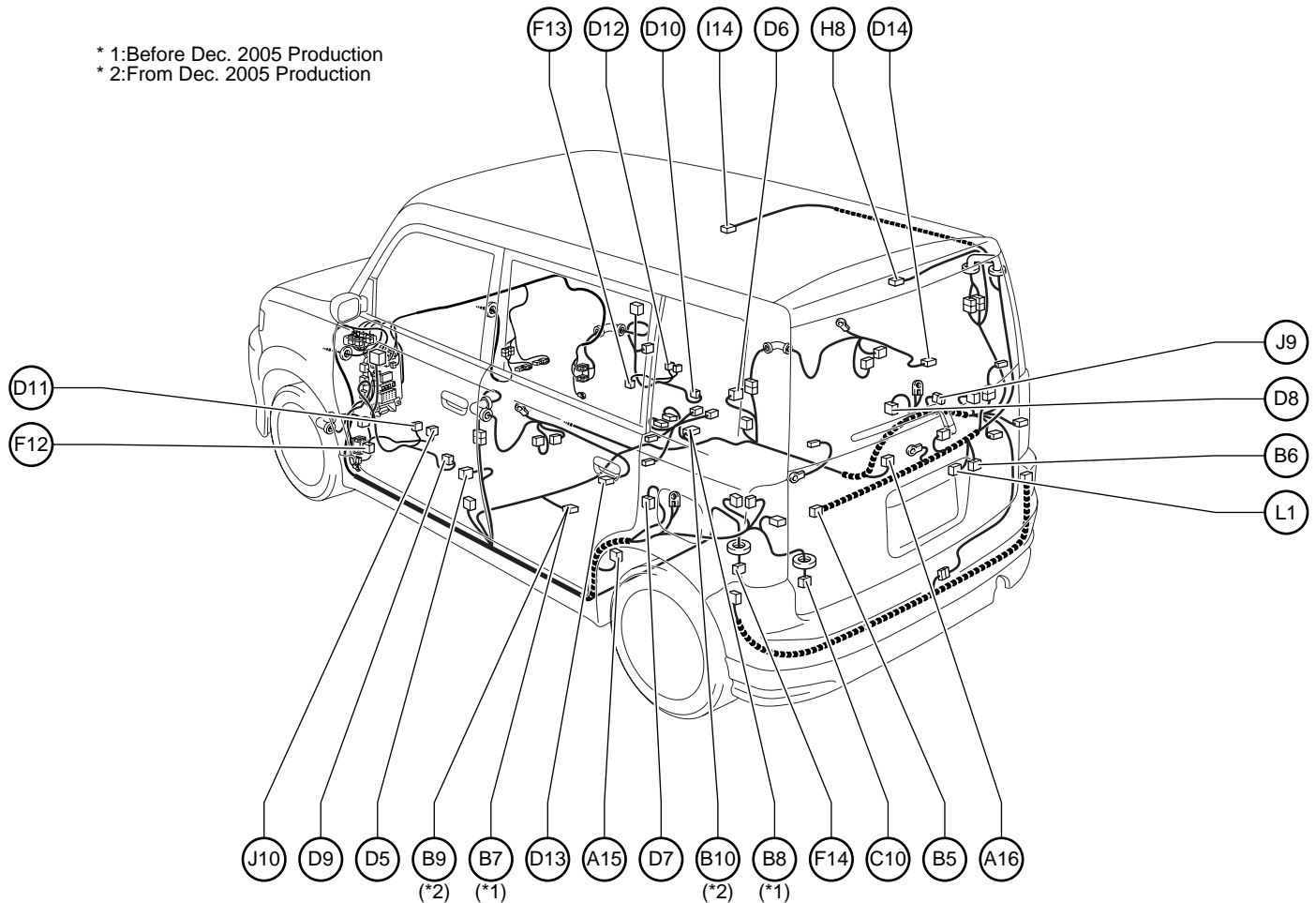
Y 1 Yaw Rate Sensor



# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body

\* 1: Before Dec. 2005 Production  
 \* 2: From Dec. 2005 Production



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 Back Door Opener SW  
 B 7 Buckle SW LH  
 Seat Position Sensor  
 B 8 Buckle SW RH  
 Occupant Detection Sensor  
 B 9 Buckle SW LH  
 Seat Position Sensor  
 B 10 Buckle SW RH

C 10 Canister Pump Module

D 5 Door Courtesy SW Front LH  
 D 6 Door Courtesy SW Front RH  
 D 7 Door Courtesy SW Rear LH  
 D 8 Door Courtesy SW Rear RH  
 D 9 Door Key Lock and Unlock SW Front LH  
 Door Lock Motor Front LH  
 Door Unlock Detection SW Front LH  
 D 10 Door Key Lock and Unlock SW Front RH  
 Door Lock Motor Front RH  
 D 11 Door Lock Control SW Front LH  
 Power Window Master SW  
 D 12 Door Lock Control SW Front RH  
 D 13 Door Lock Motor Rear LH  
 D 14 Door Lock Motor Rear RH

F 12 Front Door Speaker LH  
 F 13 Front Door Speaker RH  
 F 14 Fuel Pump  
 Fuel Sender

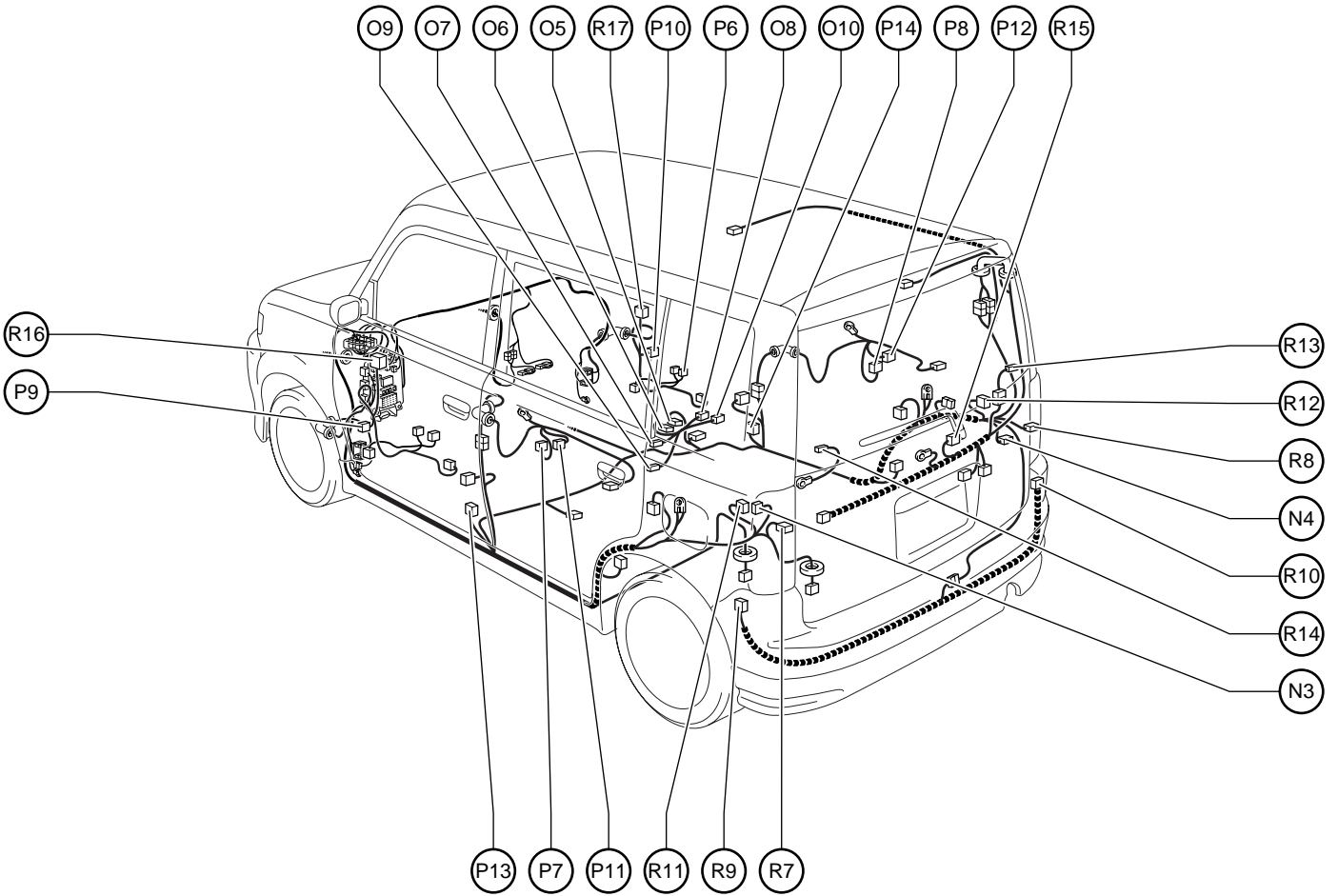
H 8 High Mounted Stop Light

I 14 Interior Light

J 9 Junction Connector  
 J 10 Junction Connector

L 1 License Plate Light

## Position of Parts in Body



N 3 Noise Filter (Fuel Pump)

N 4 Noise Filter  
(Stop Light and Rear Window Defogger No.2)

O 5 Occupant Classification ECU

O 6 Occupant Classification ECU

O 7 Occupant Classification Sensor Front LH

O 8 Occupant Classification Sensor Front RH

O 9 Occupant Classification Sensor Rear LH

O10 Occupant Classification Sensor Rear RH

P 6 Power Window Control SW Front RH

P 7 Power Window Control SW Rear LH

P 8 Power Window Control SW Rear RH

P 9 Power Window Motor Front LH

P10 Power Window Motor Front RH

P11 Power Window Motor Rear LH

P12 Power Window Motor Rear RH

P13 Pretensioner LH

P14 Pretensioner RH

R 7 Rear Combination Light LH

R 8 Rear Combination Light RH

R 9 Rear Side Marker Light LH

R10 Rear Side Marker Light RH

R11 Rear Speaker LH

R12 Rear Speaker RH

R13 Rear Window Defogger

R14 Rear Window Defogger

R15 Rear Wiper Motor

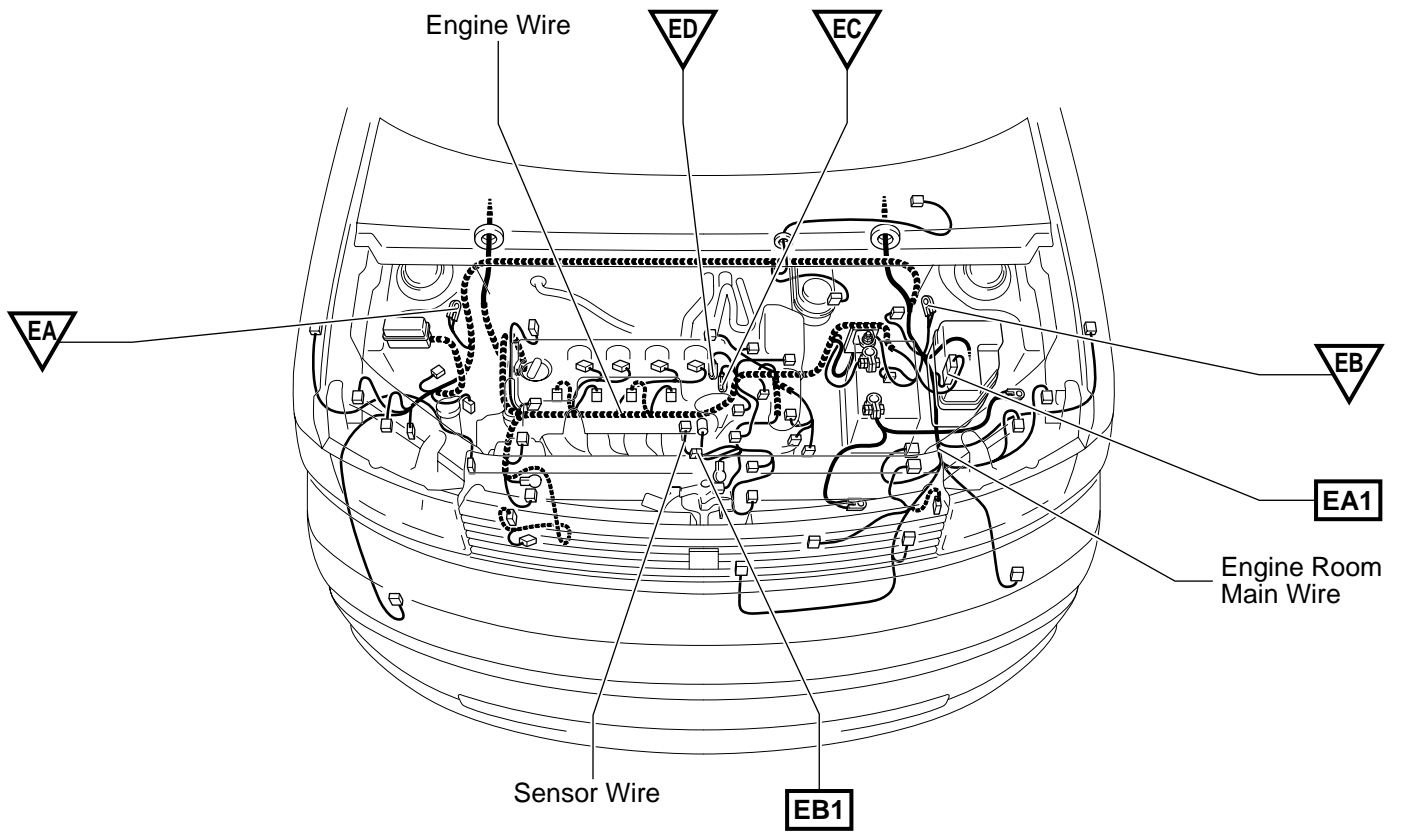
R16 Remote Control Mirror LH

R17 Remote Control Mirror RH

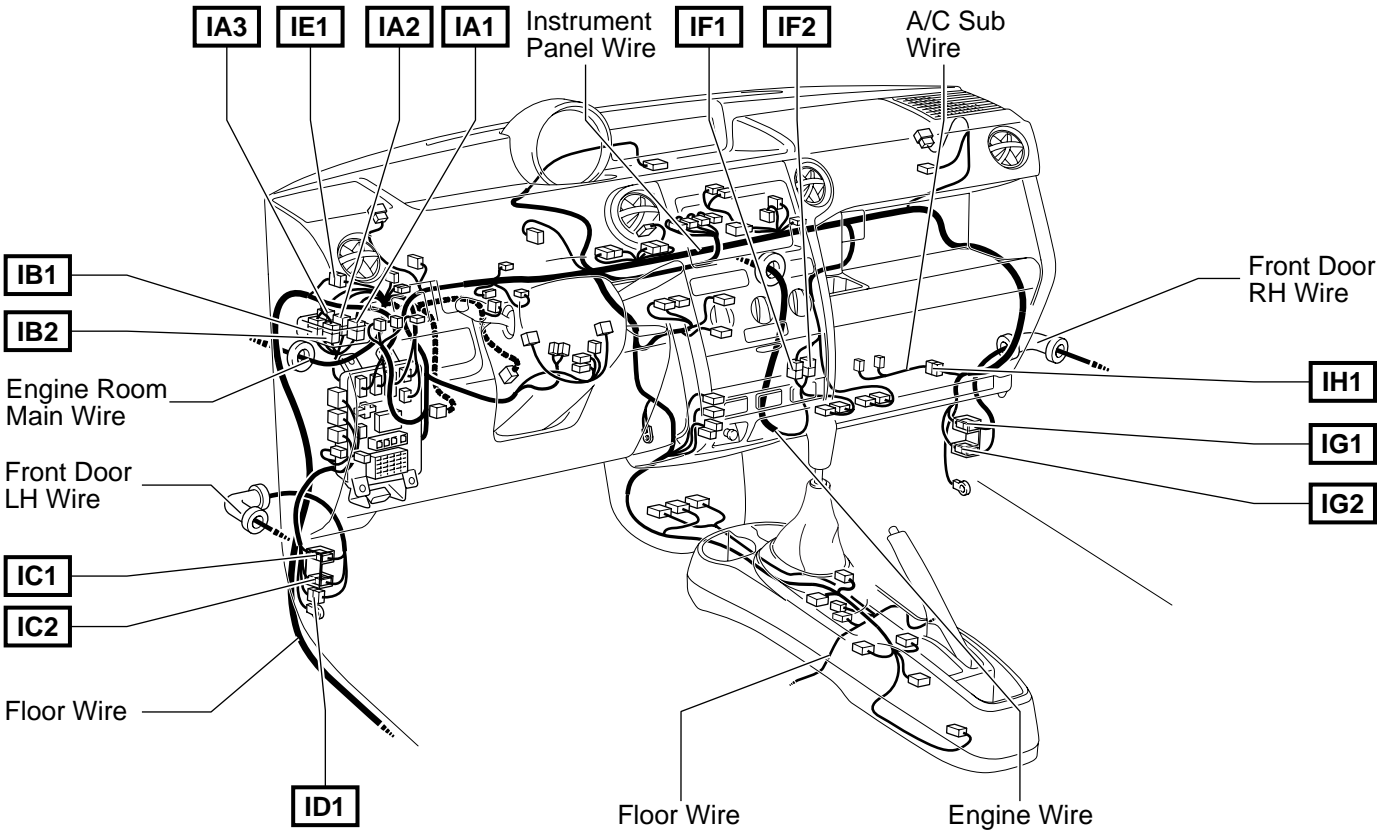
## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

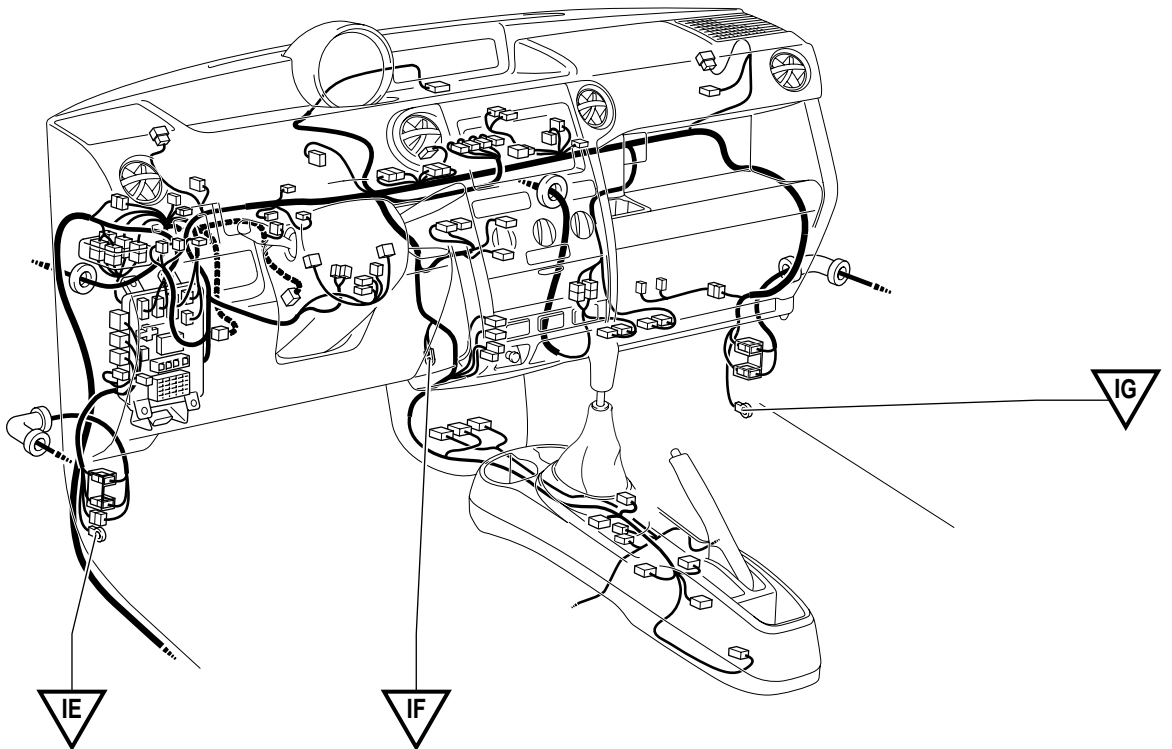
▽ : Location of Ground Points



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



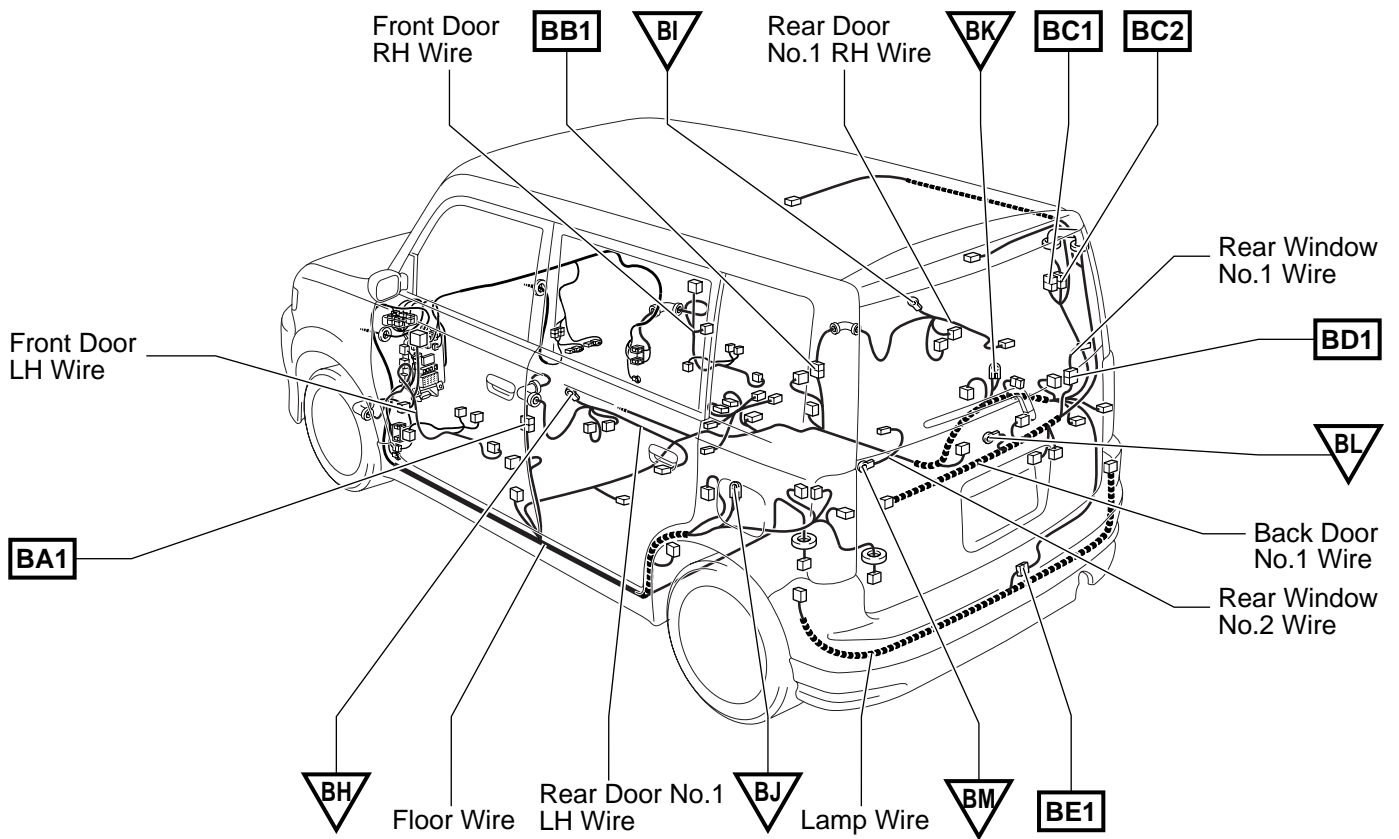
**▽ : Location of Ground Points**



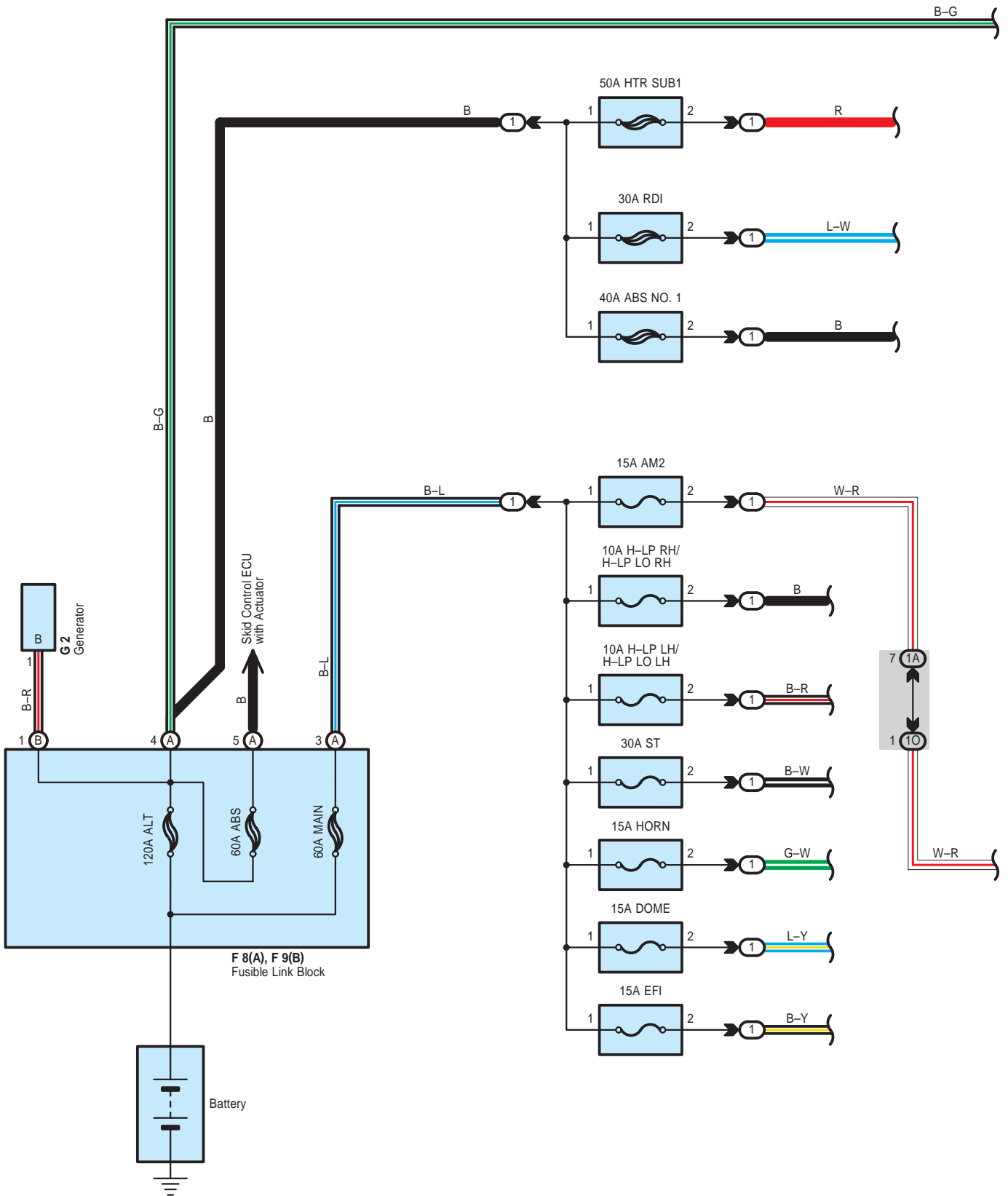
# G ELECTRICAL WIRING ROUTING

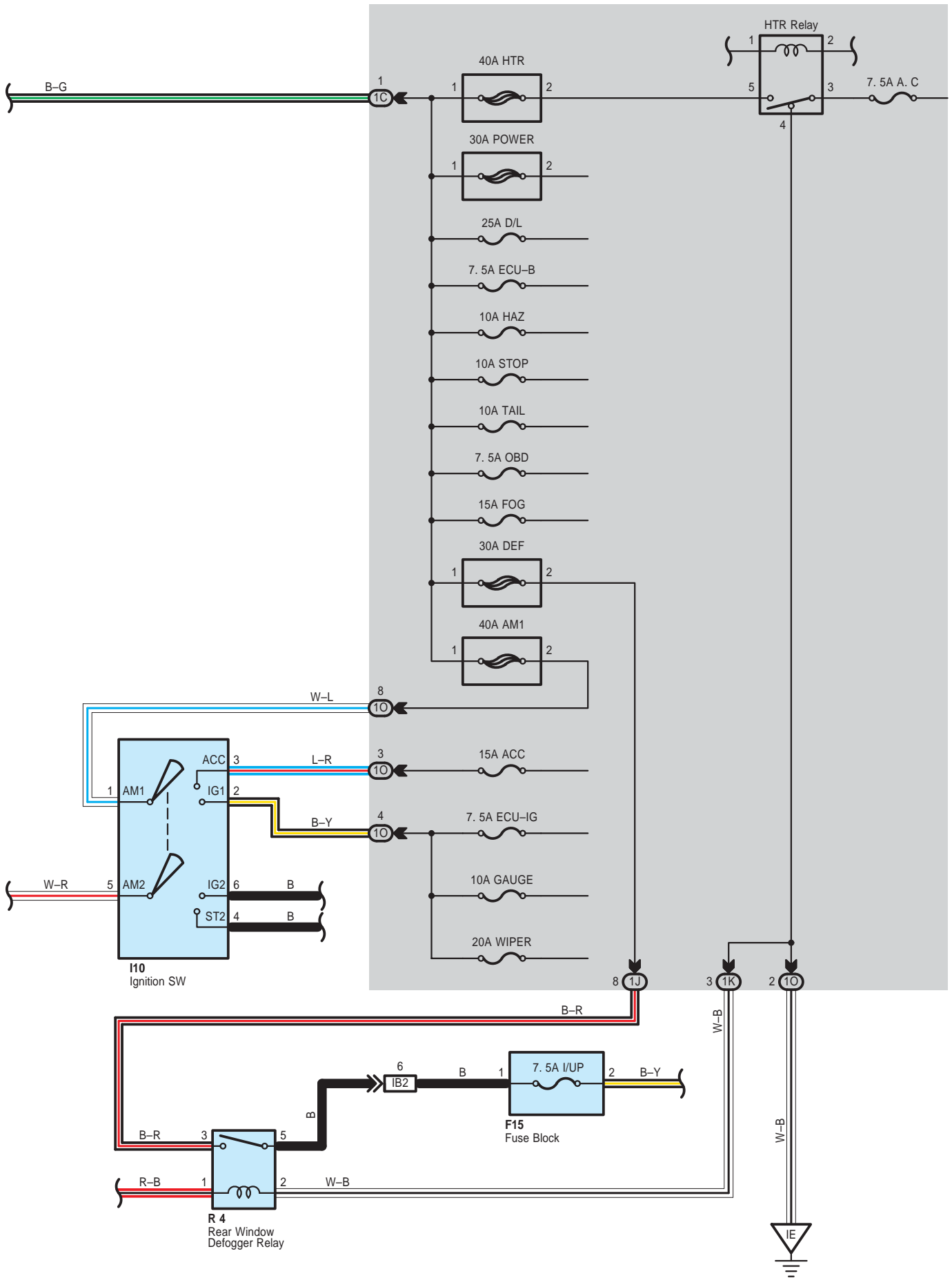
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points



# Power Source





# Power Source

## : Parts Location

| Code |   | See Page | Code |    | See Page | Code |  | See Page |
|------|---|----------|------|----|----------|------|--|----------|
| F8   | A | 28       | F15  | 30 | I10      | 30   |  |          |
| F9   | B | 28       | G2   | 28 | R4       | 31   |  |          |

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

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

## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)         |
|------|----------|--|
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

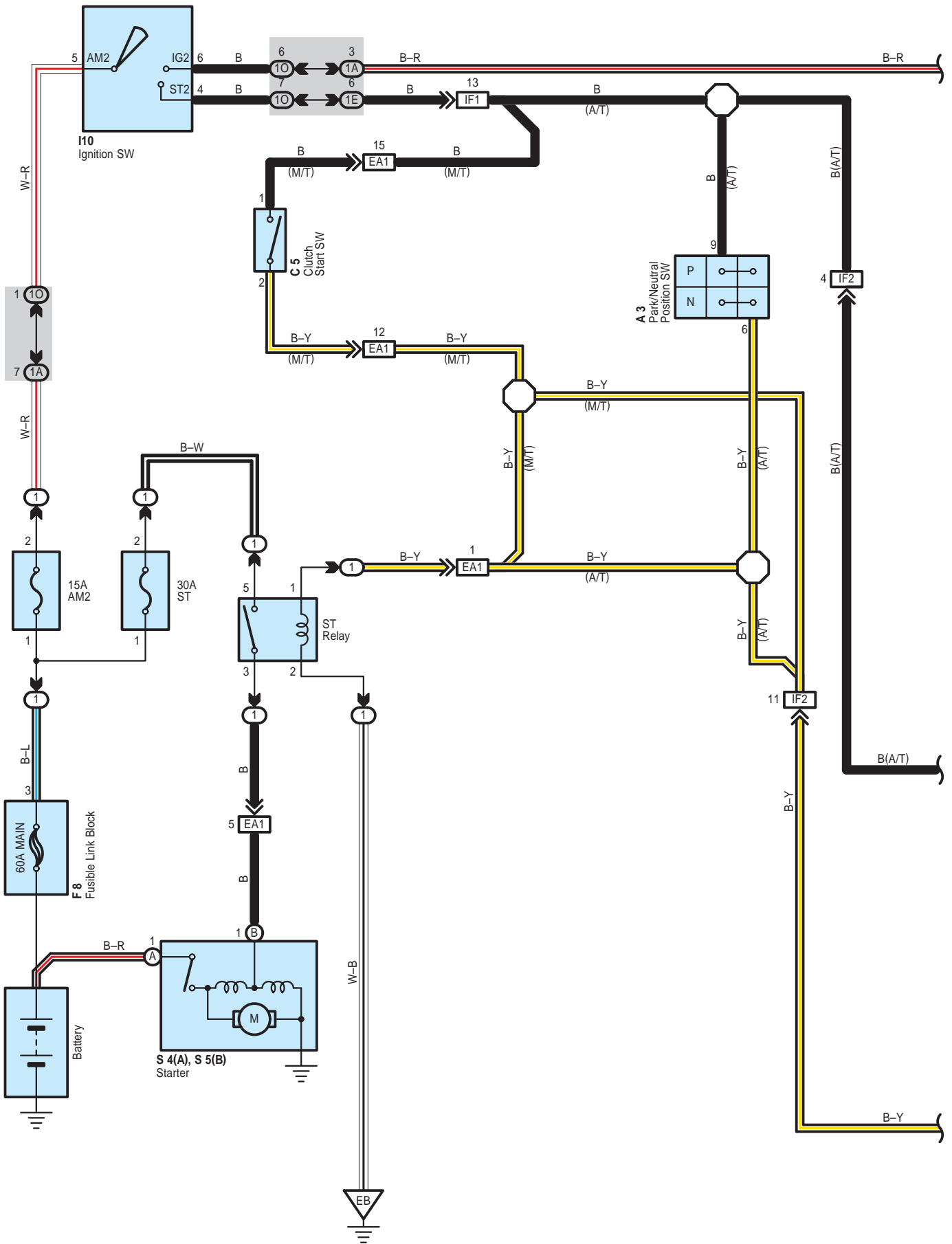
## : Ground Points

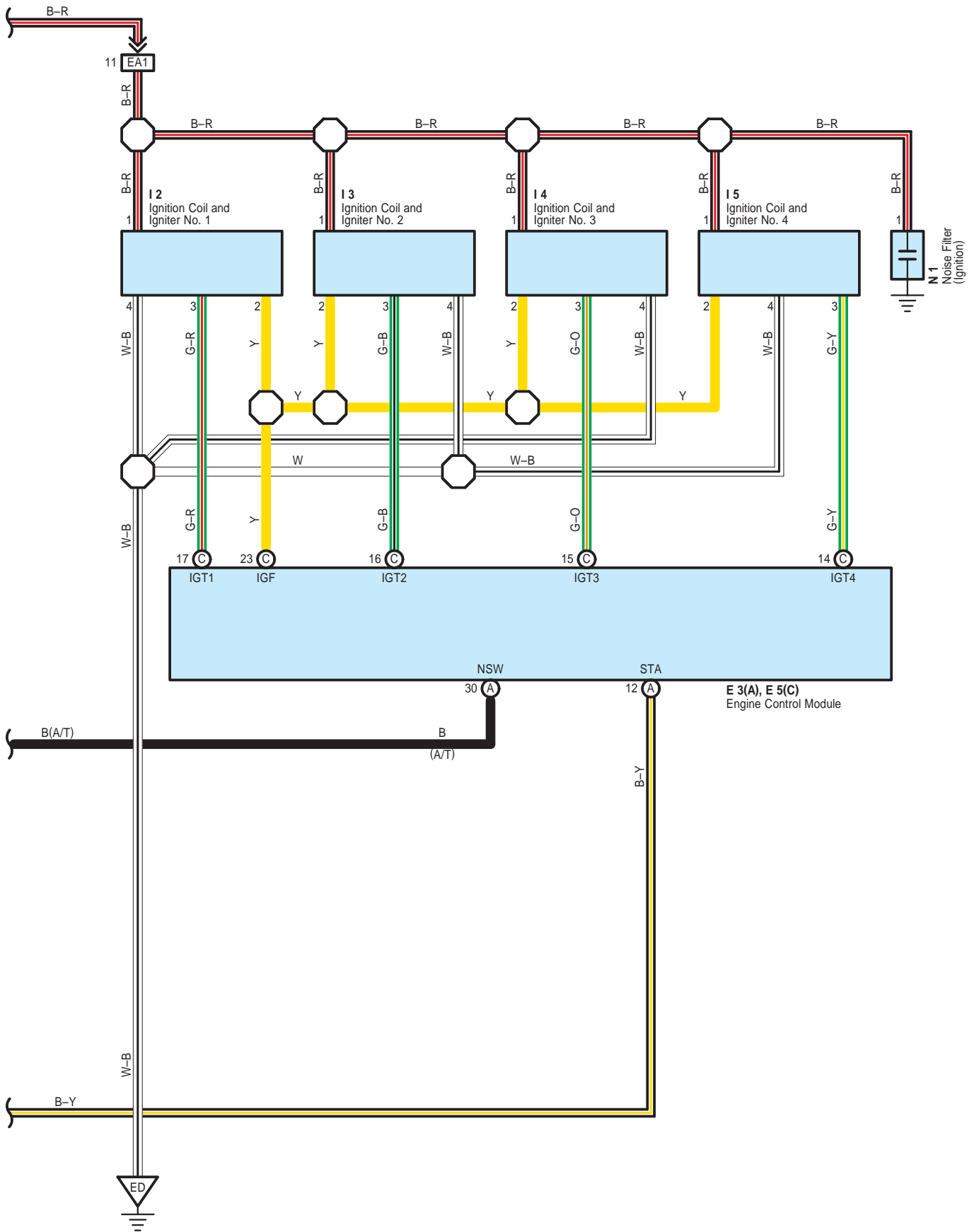
| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |





# Starting and Ignition





# Starting and Ignition

## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A3   | 28       | I2   | 29       | N1   | 29       |
| C5   | 30       | I3   | 29       | S4   | A 29     |
| E3   | A 30     | I4   | 29       | S5   | B 29     |
| E5   | C 30     | I5   | 29       |      |          |
| F8   | 28       | I10  | 30       |      |          |

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and 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

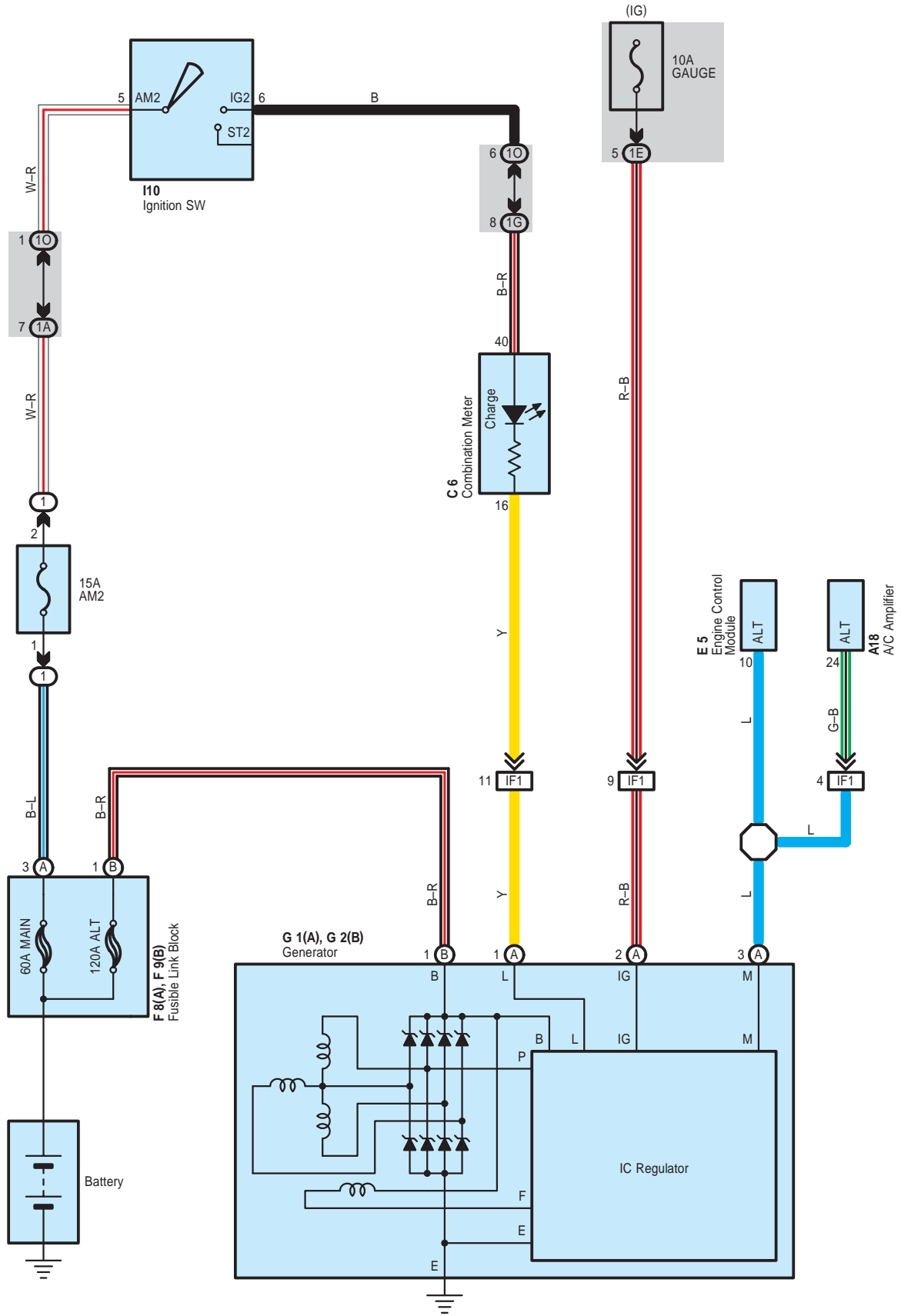
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)        |
|------|----------|---|
| EA1  | 34       | Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B) |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)      |
| IF2  |          |   |

## : Ground Points

| Code | See Page | Ground Points Location  |
|------|----------|-------------------------|
| EB   | 34       | Front Left Fender Apron |
| ED   | 34       | Engine Block            |



# Charging



: **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |   |    |
|------|----------|------|----------|------|----------|---|----|
| A18  | 30       | F8   | A        | 28   | G2       | B | 28 |
| C6   | 30       | F9   | B        | 28   | I10      |   | 30 |
| E5   | 30       | G1   | A        | 28   |          |   |    |

: **Relay Blocks**

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

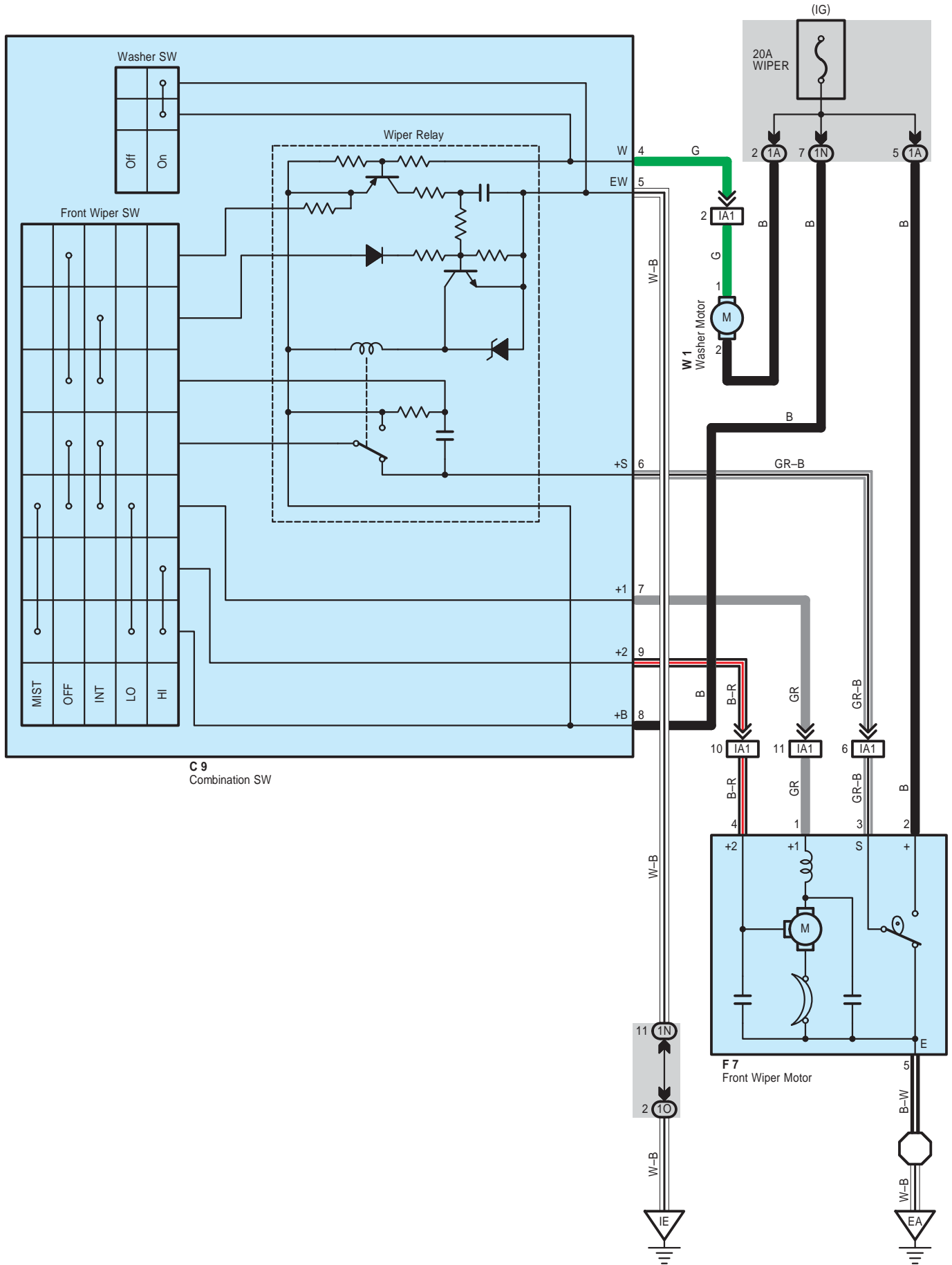
: **Junction Block and Wire Harness Connector**

| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and 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)   |
|------|----------|--|
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box) |

# 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 |
|------|----------|------|----------|------|----------|
| C9   | 30       | F7   | 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   |          |   |

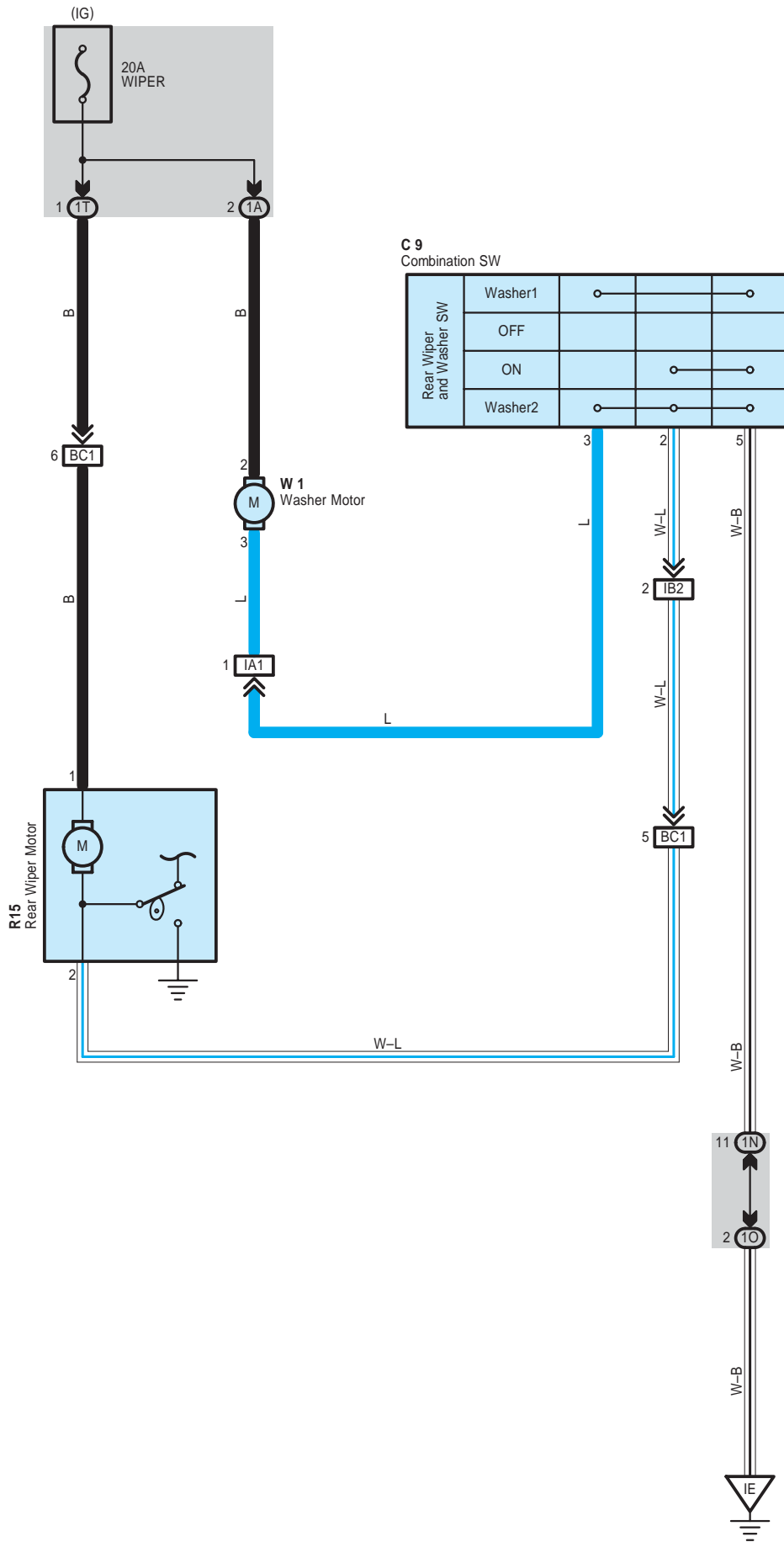
## □ : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

## ▽ : Ground Points

| Code | See Page | Ground Points Location   |
|------|----------|--------------------------|
| EA   | 34       | Front Right Fender Apron |
| IE   | 35       | 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 |
|------|----------|------|----------|------|----------|
| C9   | 30       | R15  | 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)            |

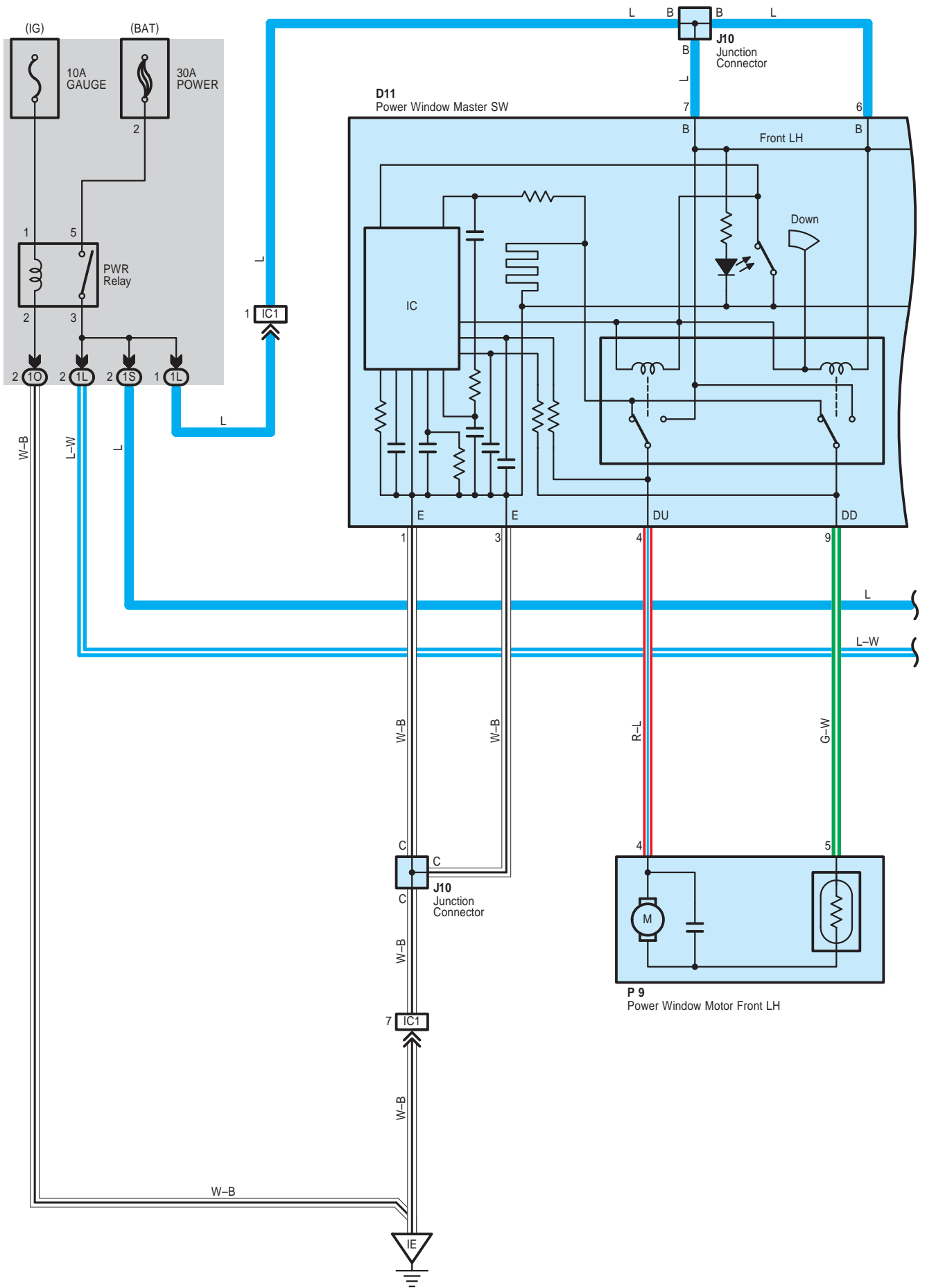
## : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| BC1  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar)           |

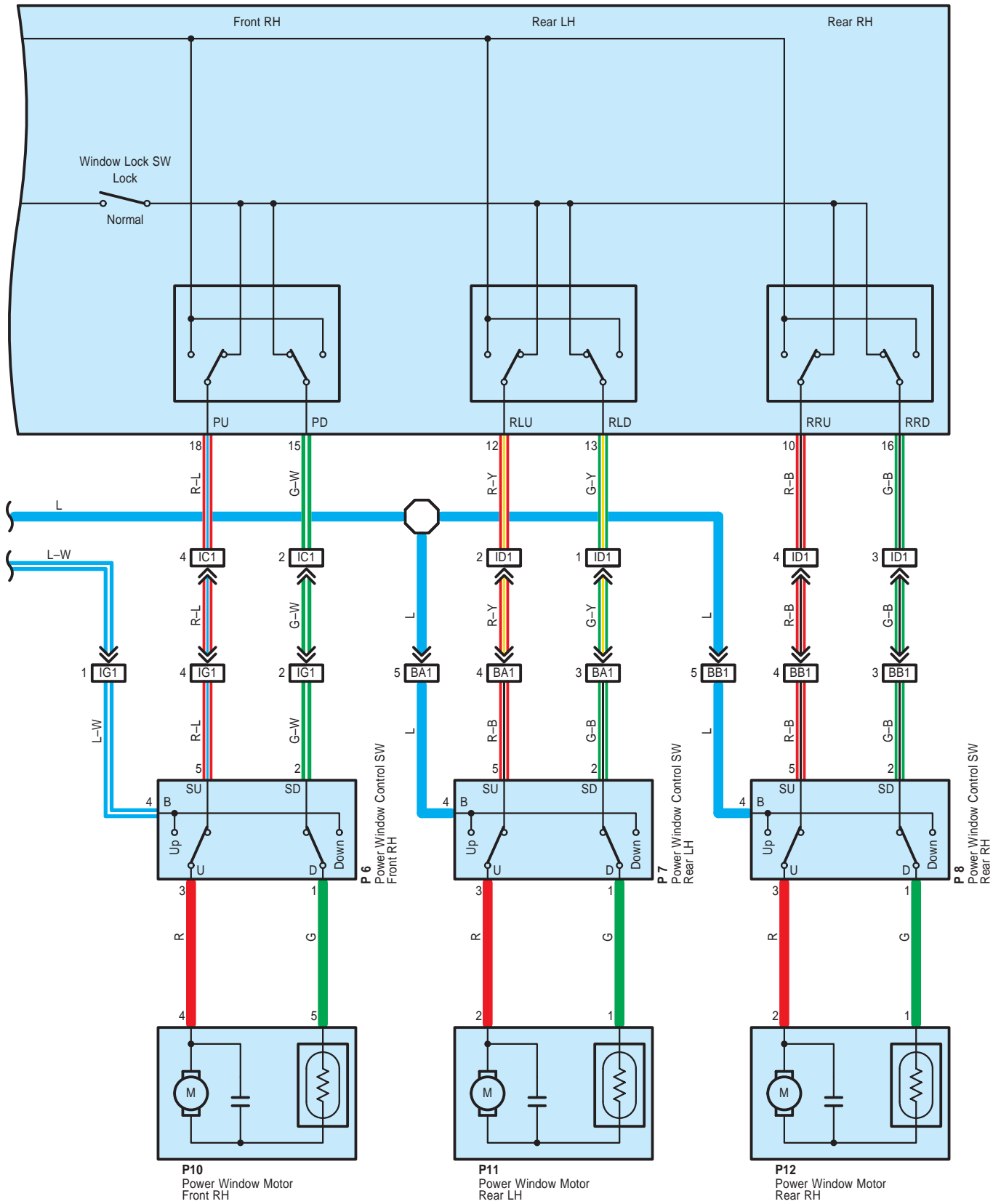
## : Ground Points

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |

# Power Window



D11  
Power Window Master SW



# Power Window

## System Outline

When the ignition SW is turned on, the current flows from the GAUGE fuse through the PWR relay to GROUND, thus the PWR relay is turned on and the current flows through the POWER fuse to TERMINAL 5 of the PWR 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 |
|------|----------|------|----------|------|----------|
| D11  | 32       | P7   | 33       | P10  | 33       |
| J10  | 32       | P8   | 33       | P11  | 33       |
| P6   | 33       | P9   | 33       | P12  | 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)            |

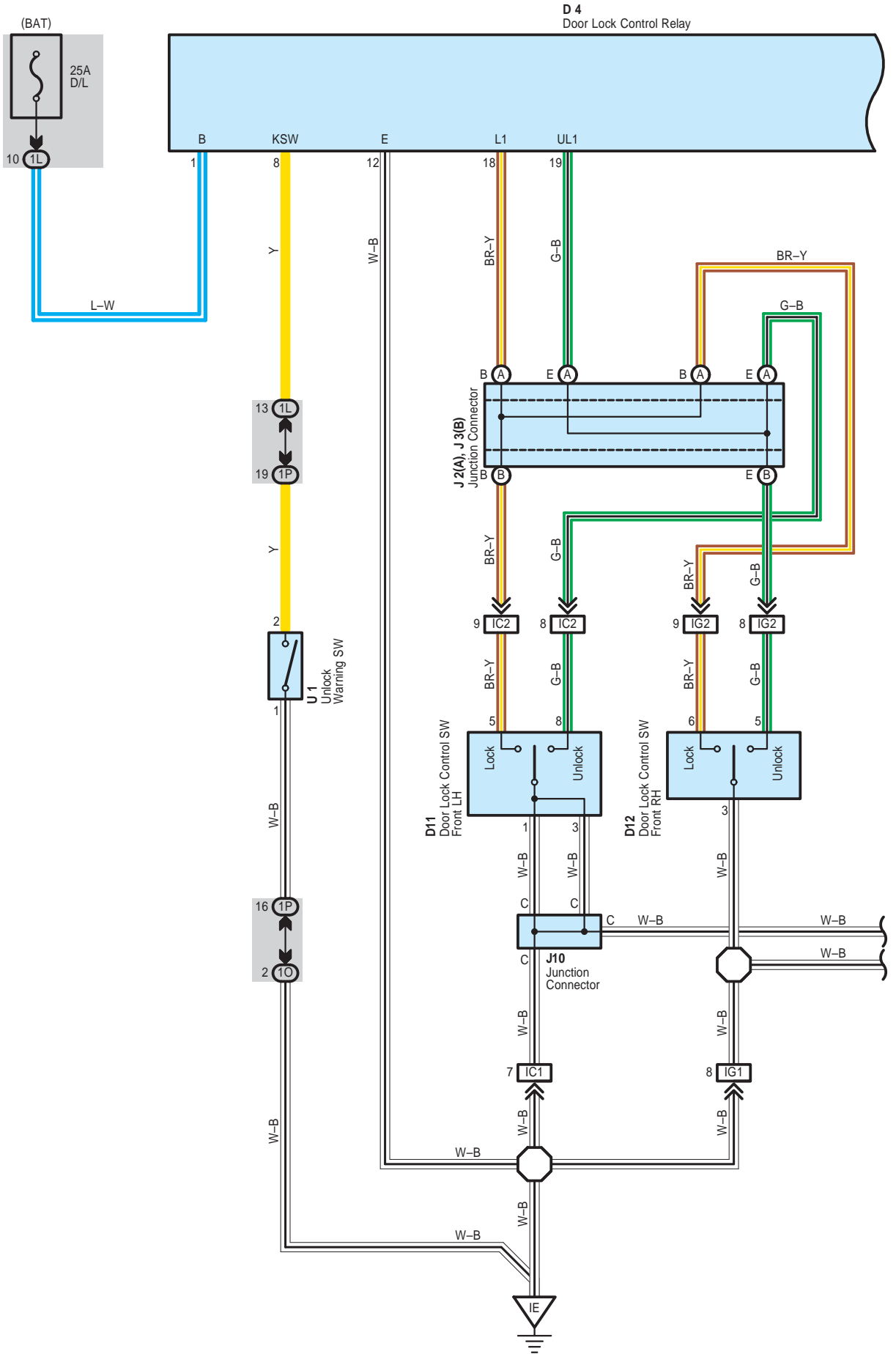
 : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)      |
|------|----------|---|
| IC1  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)  |
| ID1  | 35       | Front Door LH Wire and Floor Wire (Left Kick Panel)             |
| IG1  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel) |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)        |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)        |

 : Ground Points

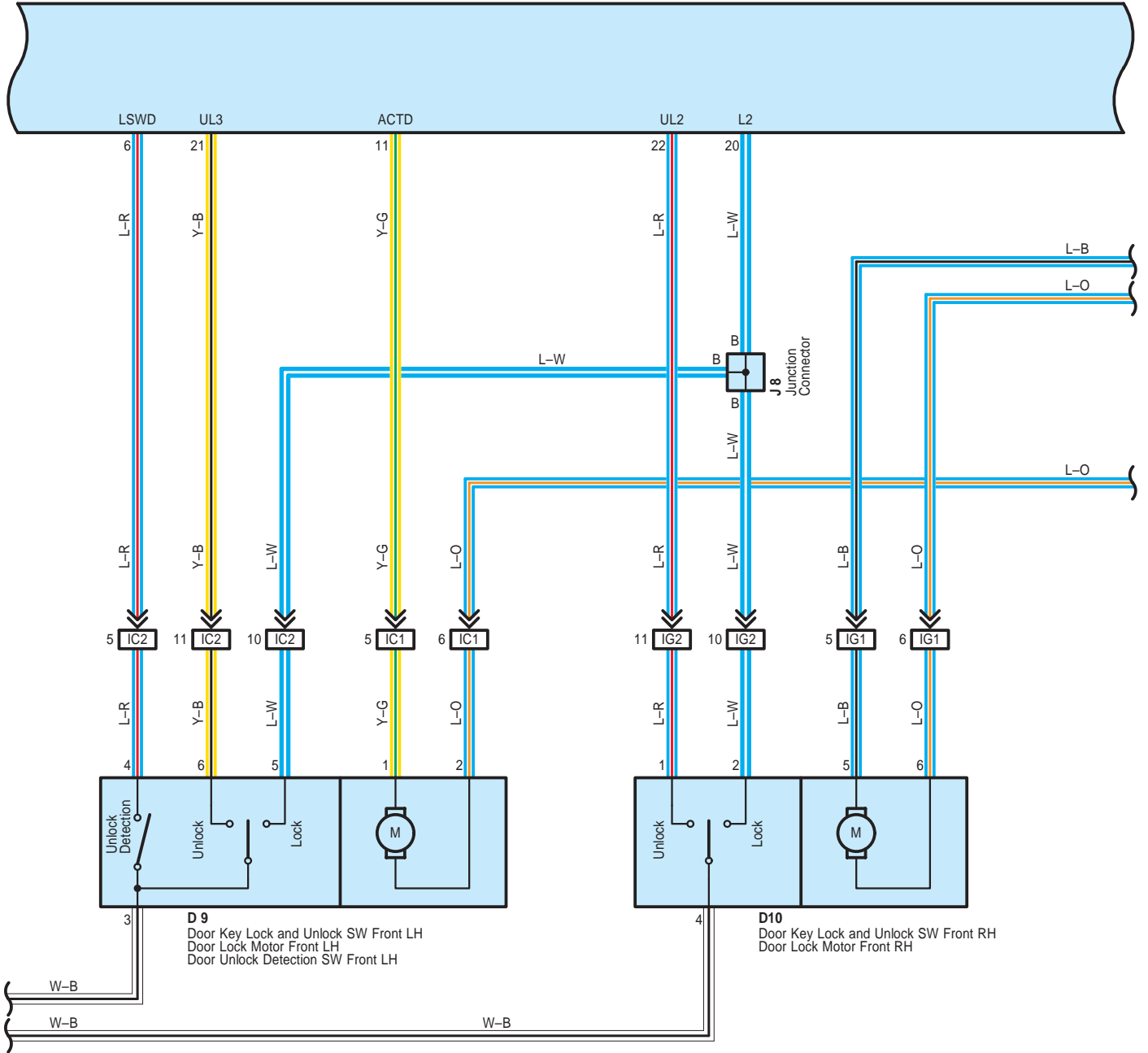
| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |

# Door Lock Control



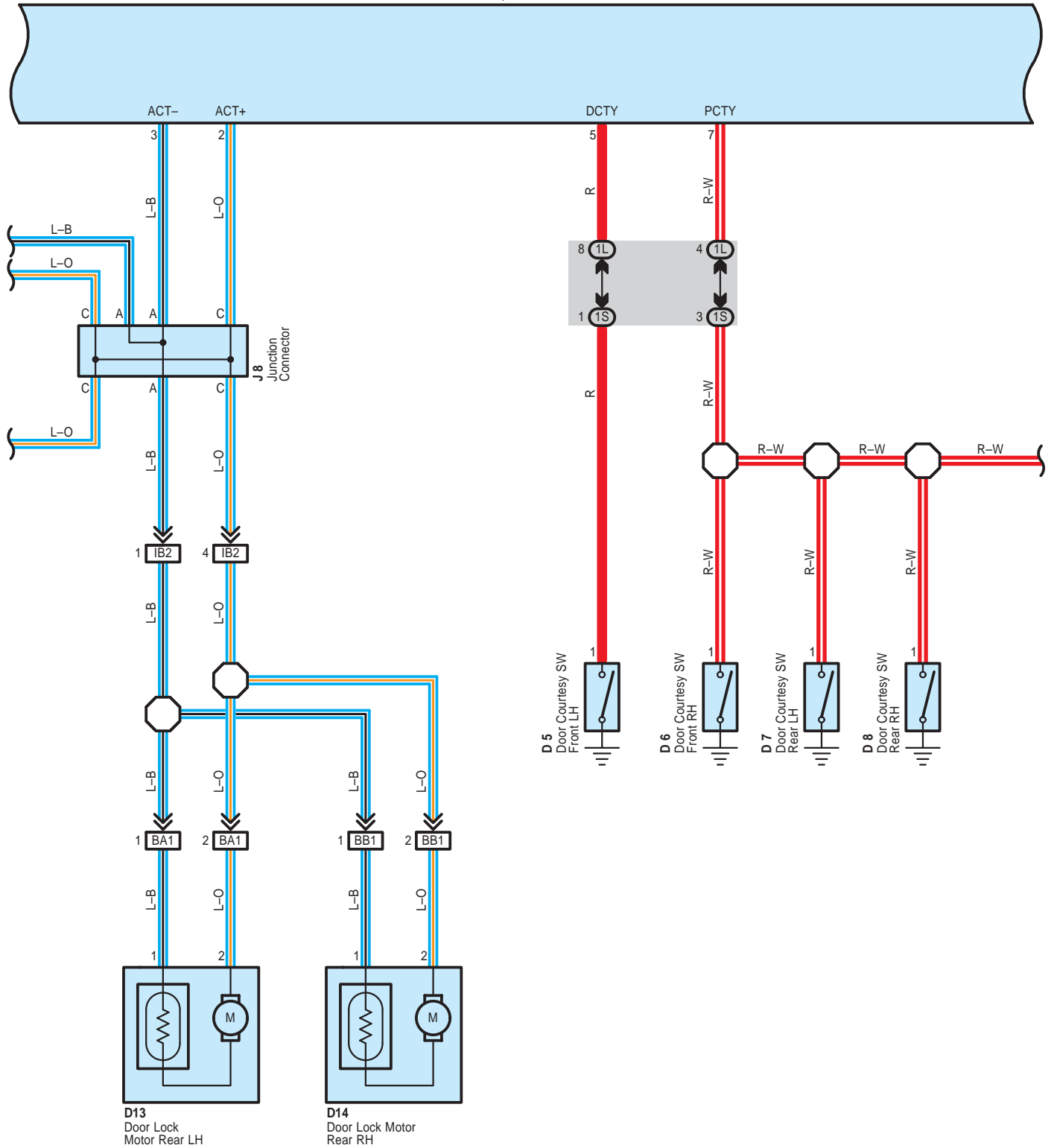


D 4  
Door Lock Control Relay

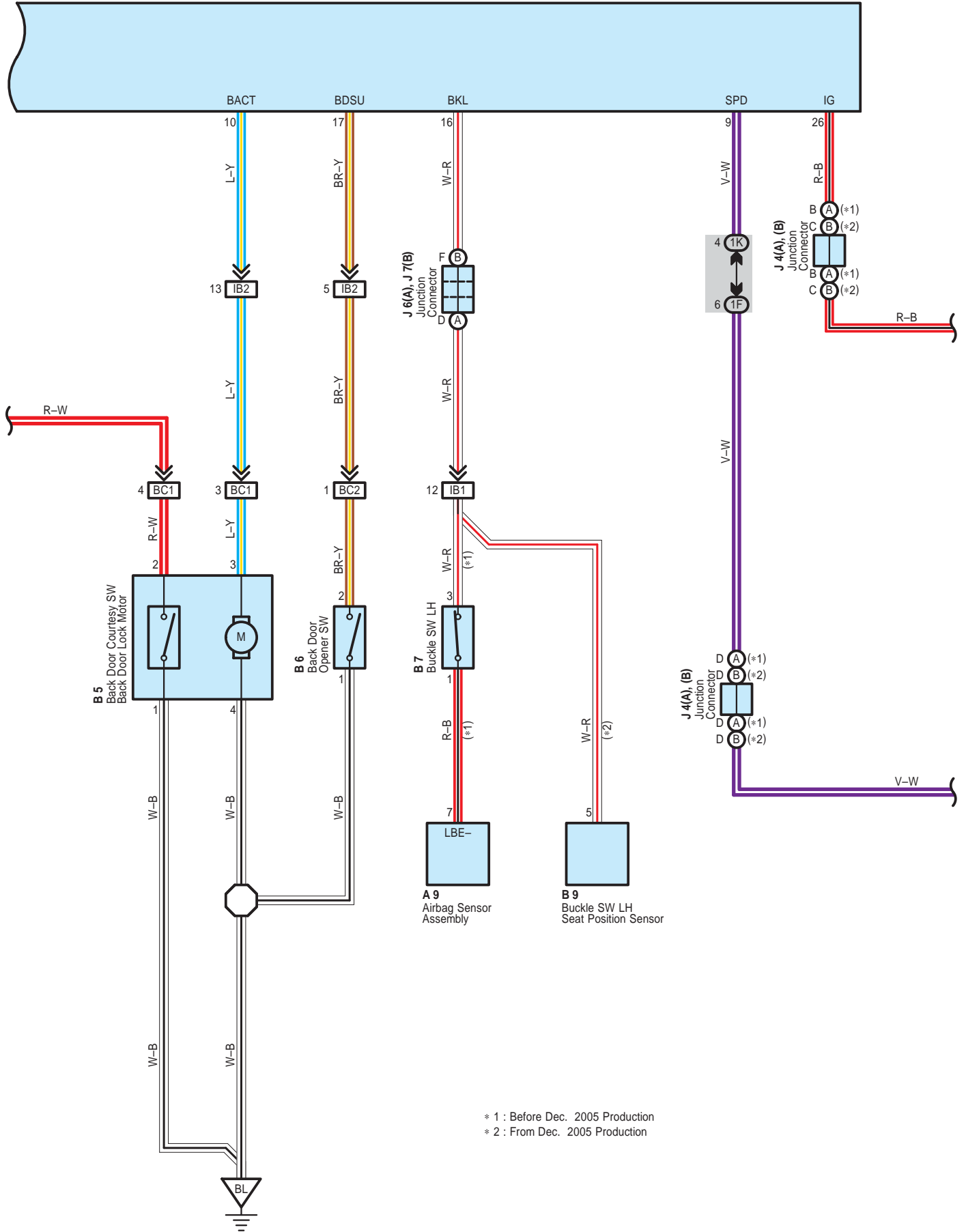


# Door Lock Control

**D 4**  
Door Lock Control Relay

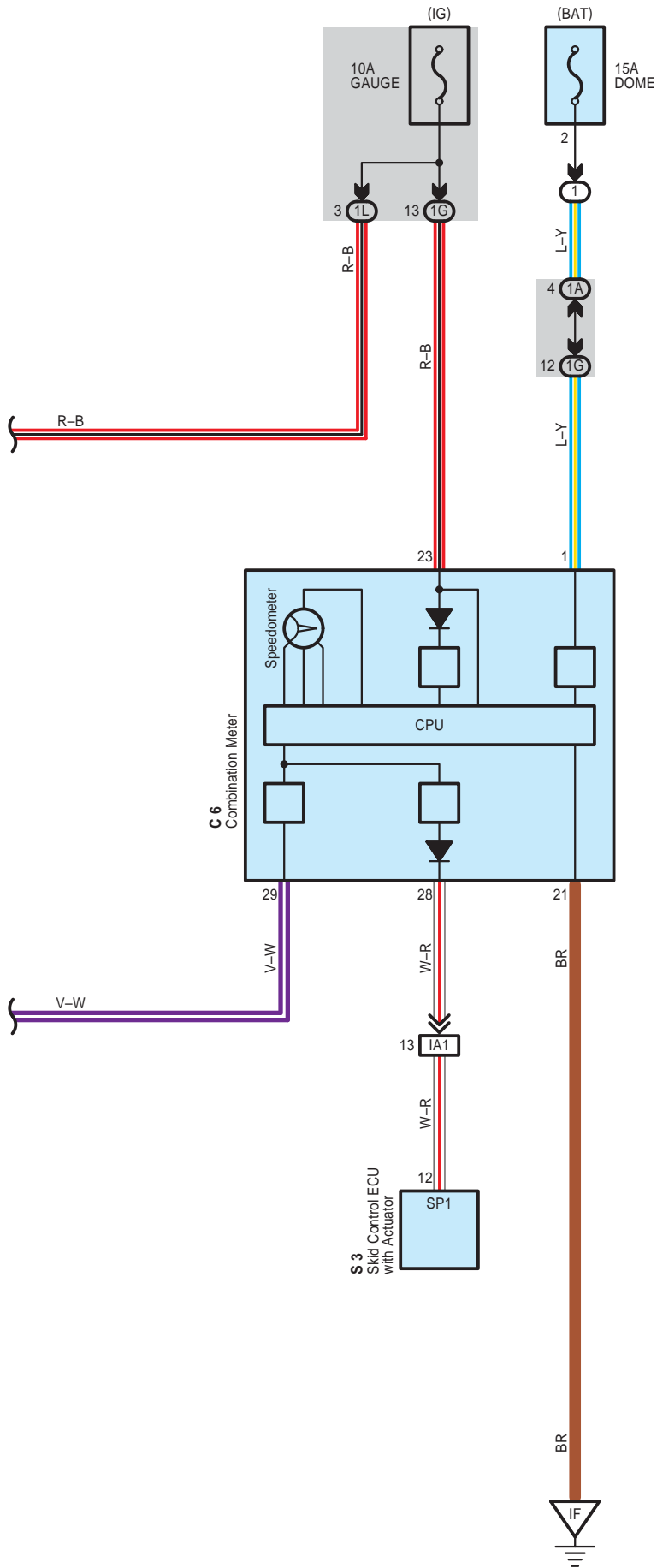


**D 4**  
Door Lock Control Relay



\* 1 : Before Dec. 2005 Production  
\* 2 : From Dec. 2005 Production

# Door Lock Control



## System Outline

The current always flows to TERMINAL 1 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 18 or 20 of the door lock control relay and causes the door lock control relay to function. The current flows from TERMINAL 1 of the door lock control relay to TERMINAL 2 to the door lock motors to TERMINALS 3 and 11 of the door lock control relay to TERMINAL 12 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 19, 21 or 22 of the door lock control relay and causes the door lock control relay to function. The current flows from TERMINAL 1 of the door lock control relay to TERMINALS 3 and 11 to the door lock motors to TERMINAL 2 of the door lock control relay to TERMINAL 12 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 21 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 11 of the door lock control relay to the door lock motors to TERMINAL 2 of the door lock control relay to TERMINAL 12 to GROUND, causing all the other doors are unlocked.

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A9   | 30       | D7   | 32       | J3   | B 31     |
| B5   | 32       | D8   | 32       | J4   | A 31     |
| B6   | 32       | D9   | 32       |      | B 31     |
| B7   | 32       | D10  | 32       | J6   | A 31     |
| B9   | 32       | D11  | 32       | J7   | B 31     |
| C6   | 30       | D12  | 32       | J8   | 31       |
| D4   | 30       | D13  | 32       | J10  | 32       |
| D5   | 32       | D14  | 32       | S3   | 29       |
| D6   | 32       | J2   | A 31     | U1   | 31       |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

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

# Door Lock Control

 : Connector Joining Wire Harness and Wire Harness

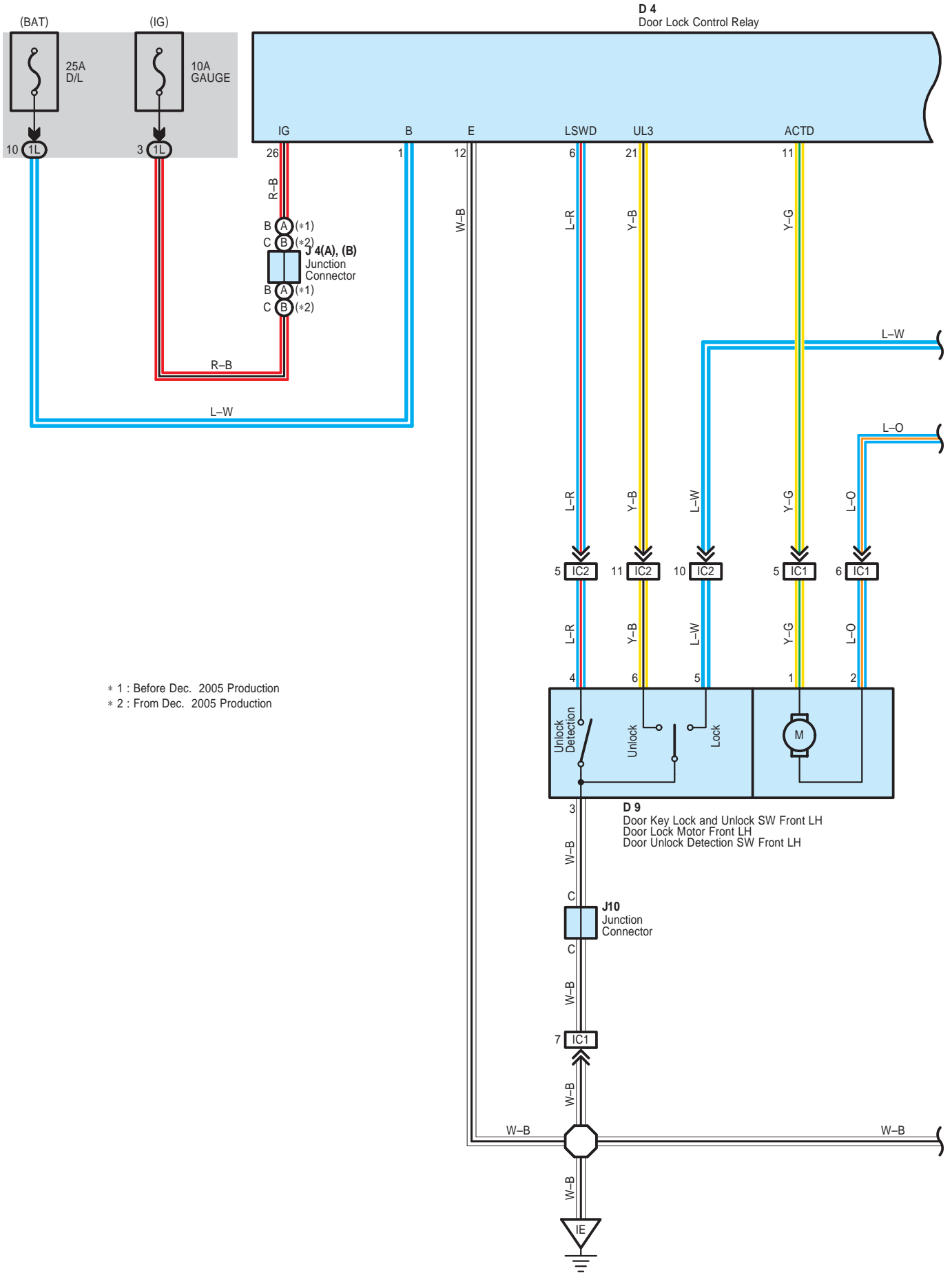
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IB2  |          |   |
| IC1  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)                |
| IC2  |          |   |
| IG1  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)               |
| IG2  |          |   |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)                      |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)                      |
| BC1  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar)           |
| BC2  |          |   |

 : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |
| BL   | 36       | Back Door Center          |



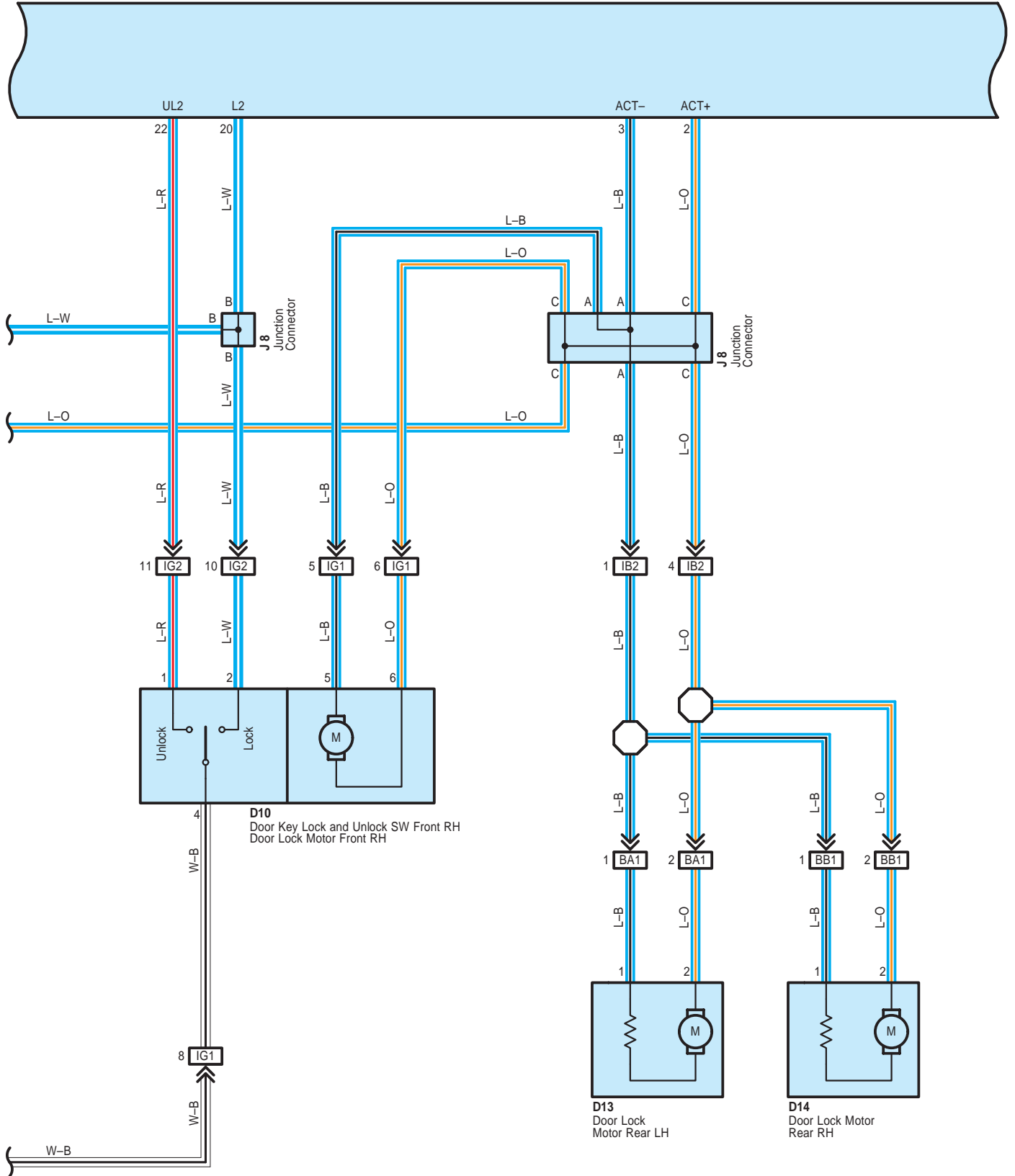
# Wireless Door Lock Control



\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production

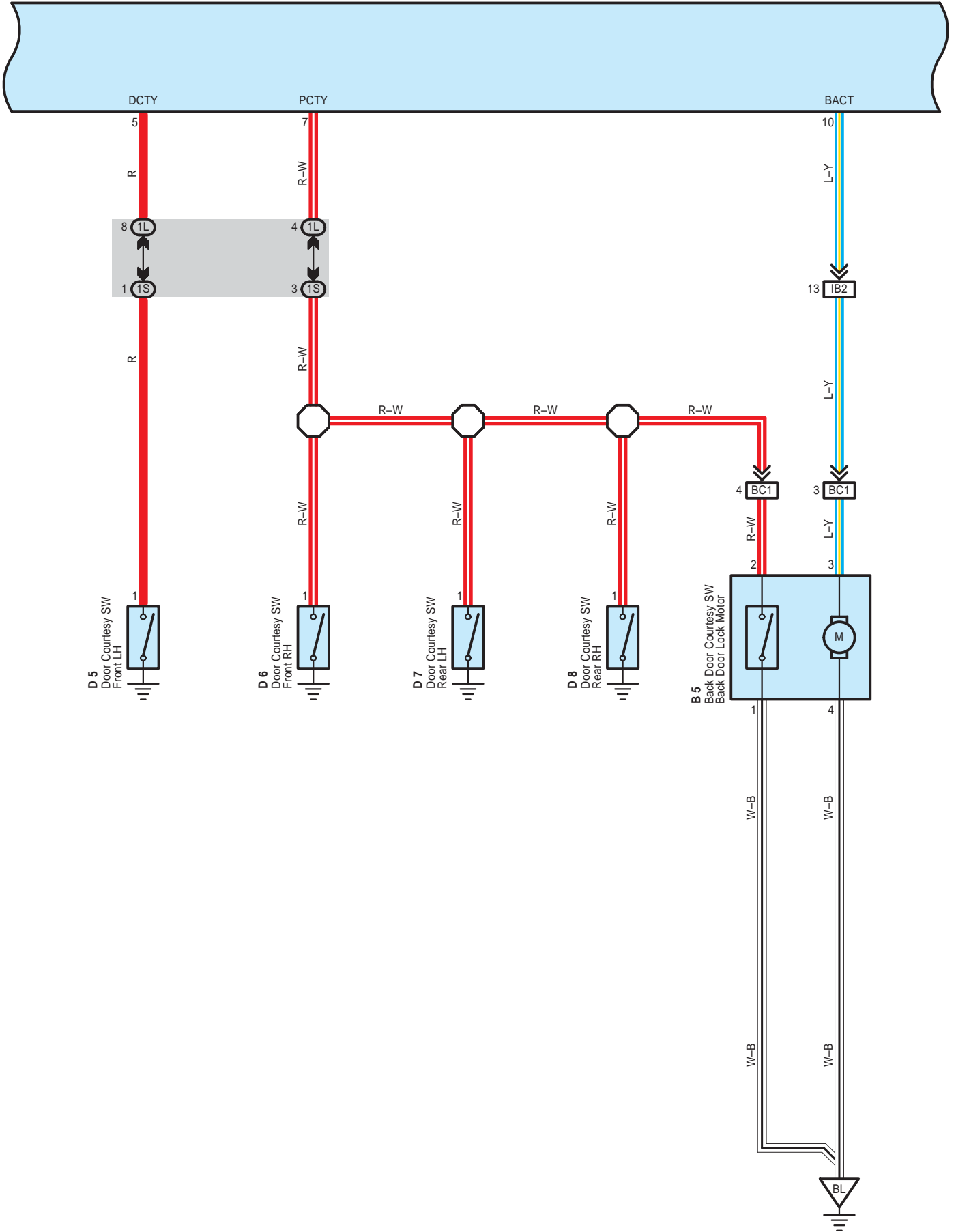


**D 4**  
Door Lock Control Relay

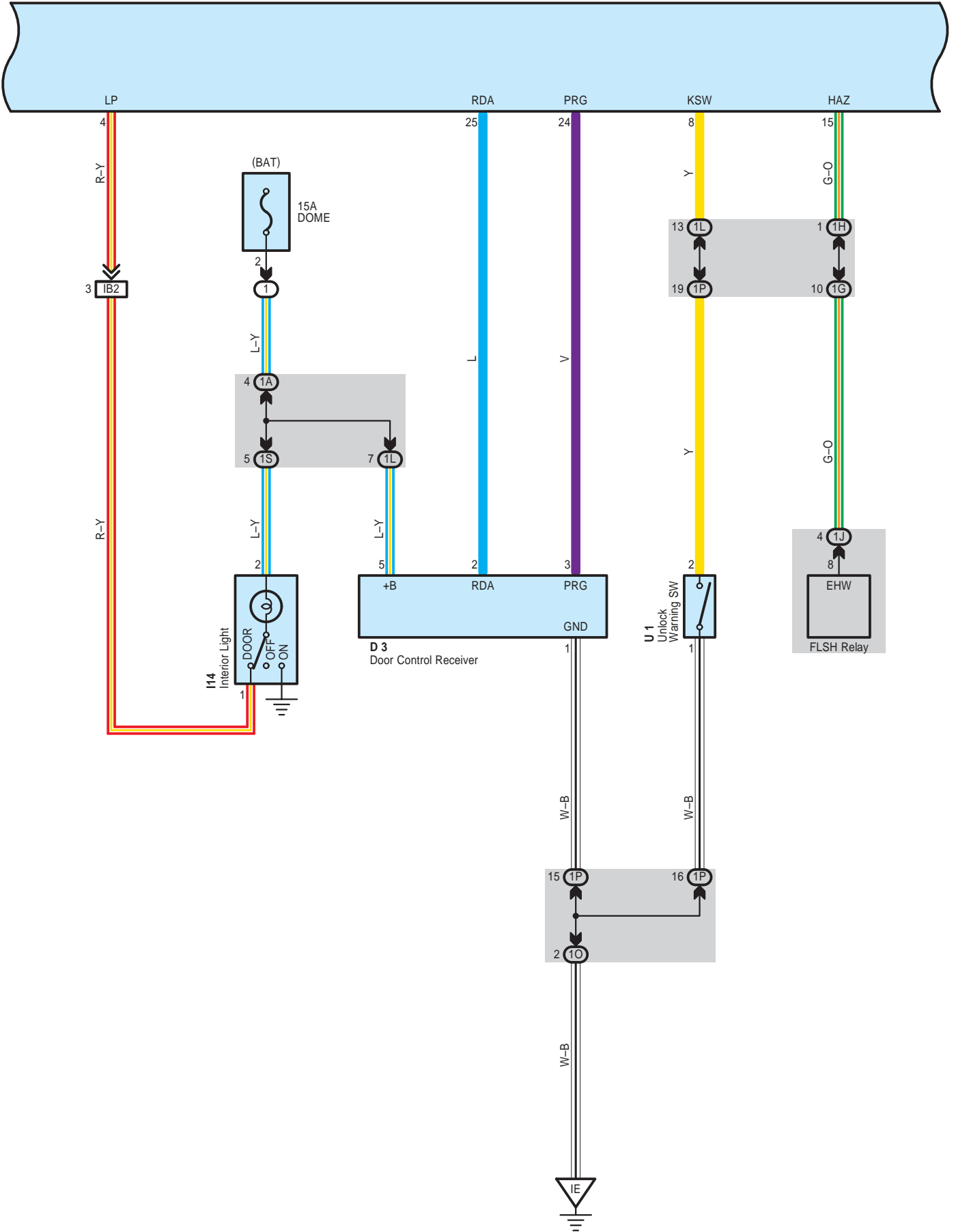


# Wireless Door Lock Control

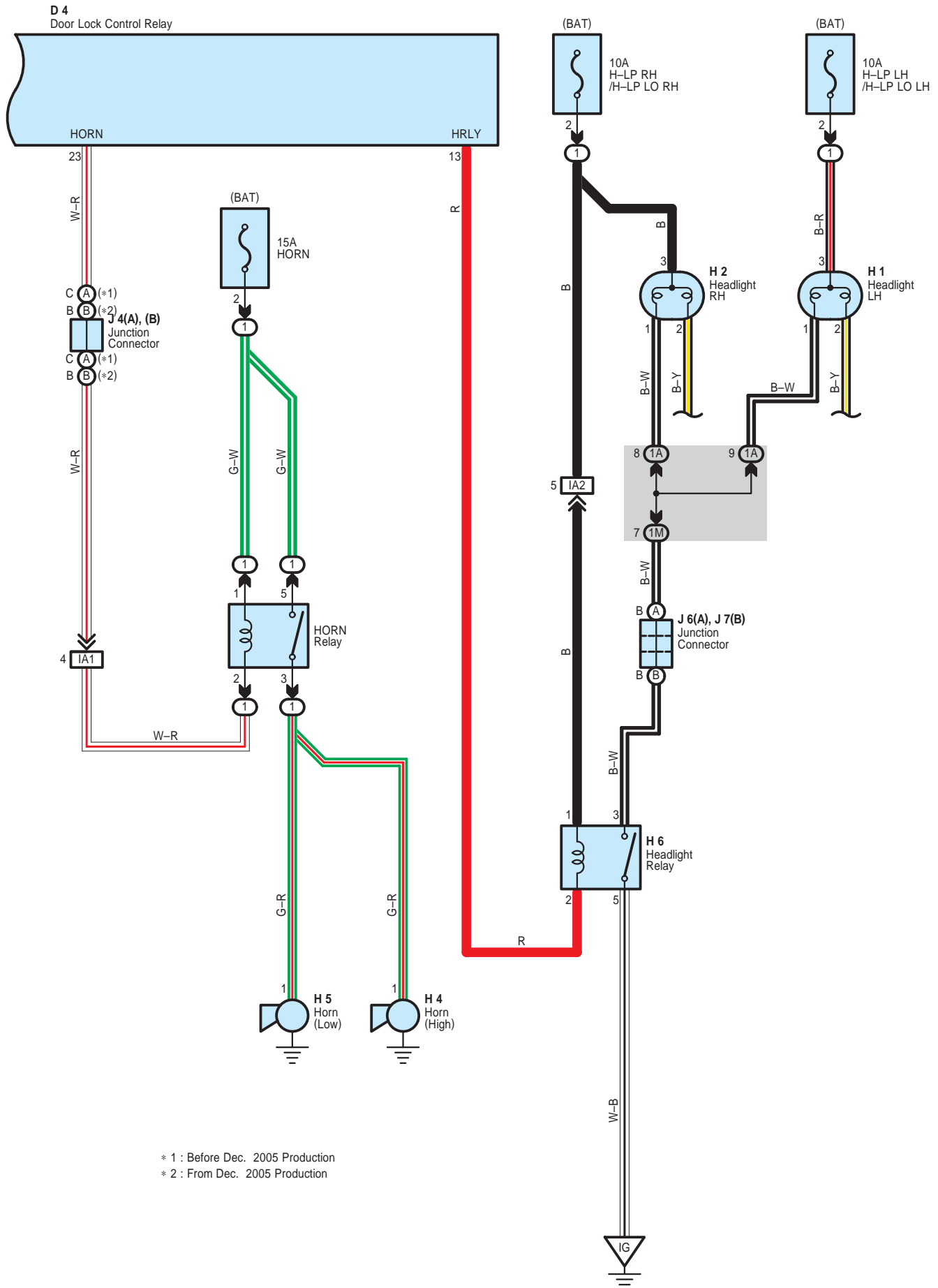
**D 4**  
Door Lock Control Relay



**D 4**  
Door Lock Control Relay



# Wireless Door Lock Control



## System Outline

Door lock control (Lock and unlock) and panic control (Theft alarm and flash) is performed by remote control, without the ignition SW at OFF, using low-power electrical waves emitted by a transmitter.

### 1. Wireless Door Lock or Unlock Normal Operation

With the ignition SW at OFF (Unlock warning SW off) and all the doors completely closed, when the lock or unlock button (Transmitter) is pushed, the wireless door lock control receiver receives the electrical waves from the transmitter, and sends a signal to the door lock control relay causing it to operate.

As a result, the door lock control relay judges whether the door is locked or unlocked based on the signal from the door lock motor and door unlock detection SW, and sends a signal to switch the condition from lock to unlock or vice versa, causing the door lock motor to operate.

### 2. Visual Confirmation of Lock or Unlock

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

### 3. Wireless Door Unlock Operation

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

### 4. Automatic Lock Operation

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

### 5. Wireless Control Stop Function

If a door is open (Door courtesy SW on), a signal is input from the door courtesy SW to the door lock control relay stopping wireless door lock or unlock.

If the ignition key is in the ignition key cylinder (Unlock warning SW on), the unlock warning SW inputs a signal to the door lock control relay stopping wireless door lock or unlock.

### 6. Repeat Function

In case an appropriate lock detection signal is not received after outputting a lock signal when pushing the lock button (Transmitter), 2 seconds later, the door lock control relay output the lock signal again.

### 7. Remote Panic Operation

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

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| B5   | 32       | D10  | 32       | I14  | 32       |
| D3   | 30       | D13  | 32       | J4   | A 31     |
| D4   | 30       | D14  | 32       |      | B 31     |
| D5   | 32       | H1   | 28       | J6   | A 31     |
| D6   | 32       | H2   | 28       | J7   | B 31     |
| D7   | 32       | H4   | 28       | J8   | 31       |
| D8   | 32       | H5   | 28       | J10  | 32       |
| D9   | 32       | H6   | 30       | U1   | 31       |

## ○ : Relay Blocks

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

# Wireless Door Lock Control

## : Junction Block and Wire Harness Connector

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

## : Connector Joining Wire Harness and Wire Harness

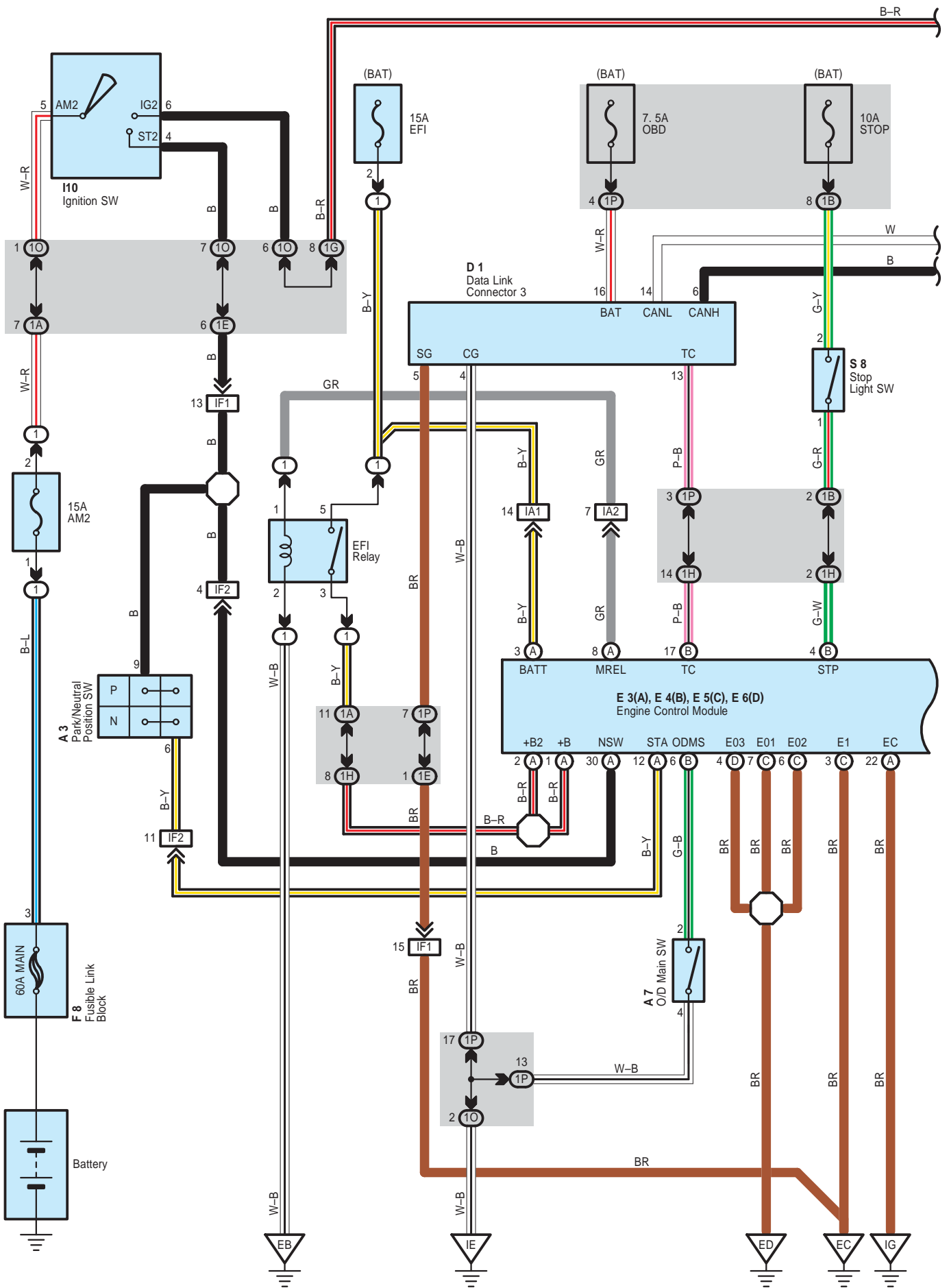
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IC1  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)                |
| IC2  |          |   |
| IG1  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)               |
| IG2  |          |   |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)                      |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)                      |
| BC1  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar)           |

## : Ground Points

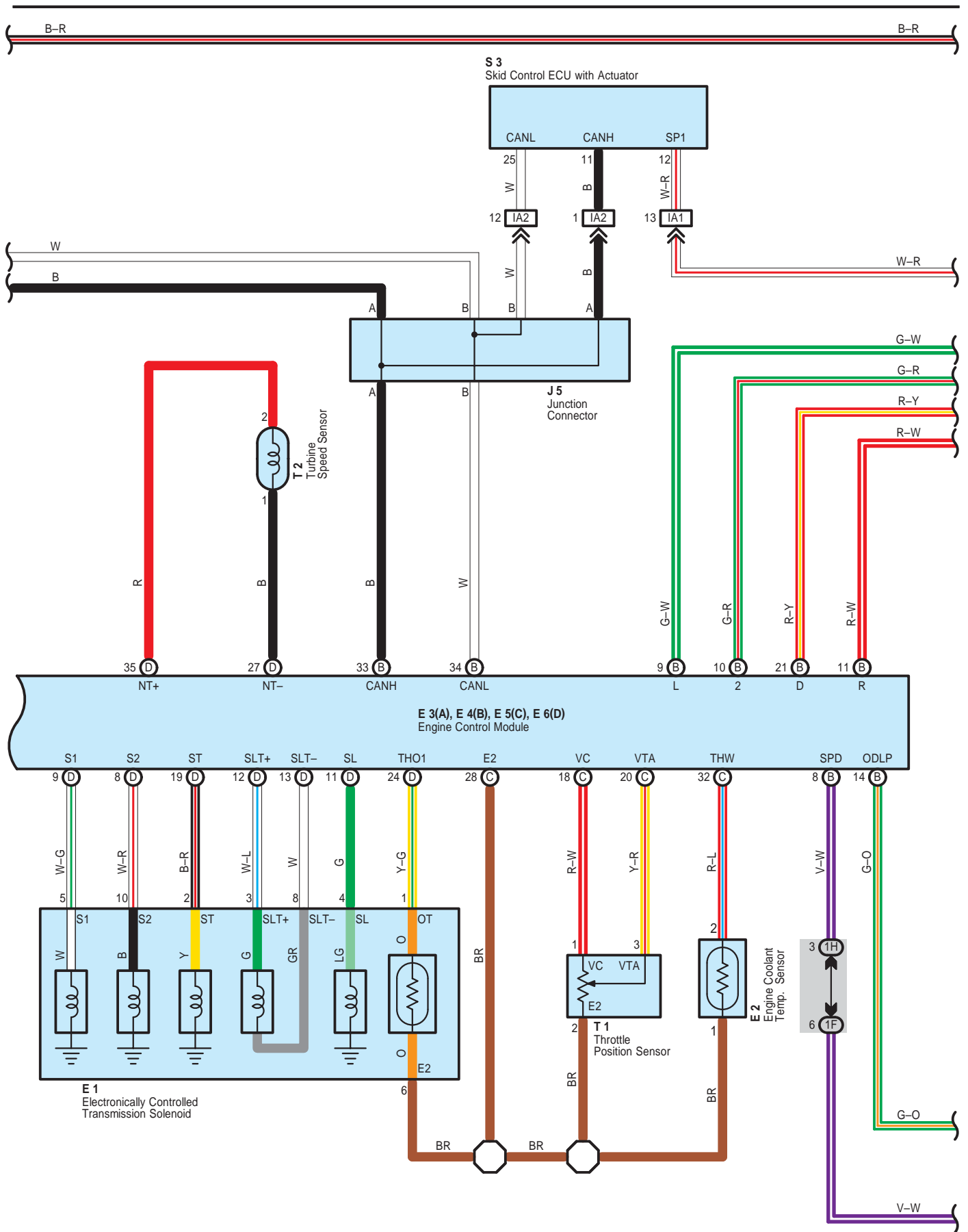
| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |
| IG   | 35       | Right Kick Panel       |
| BL   | 36       | Back Door Center       |



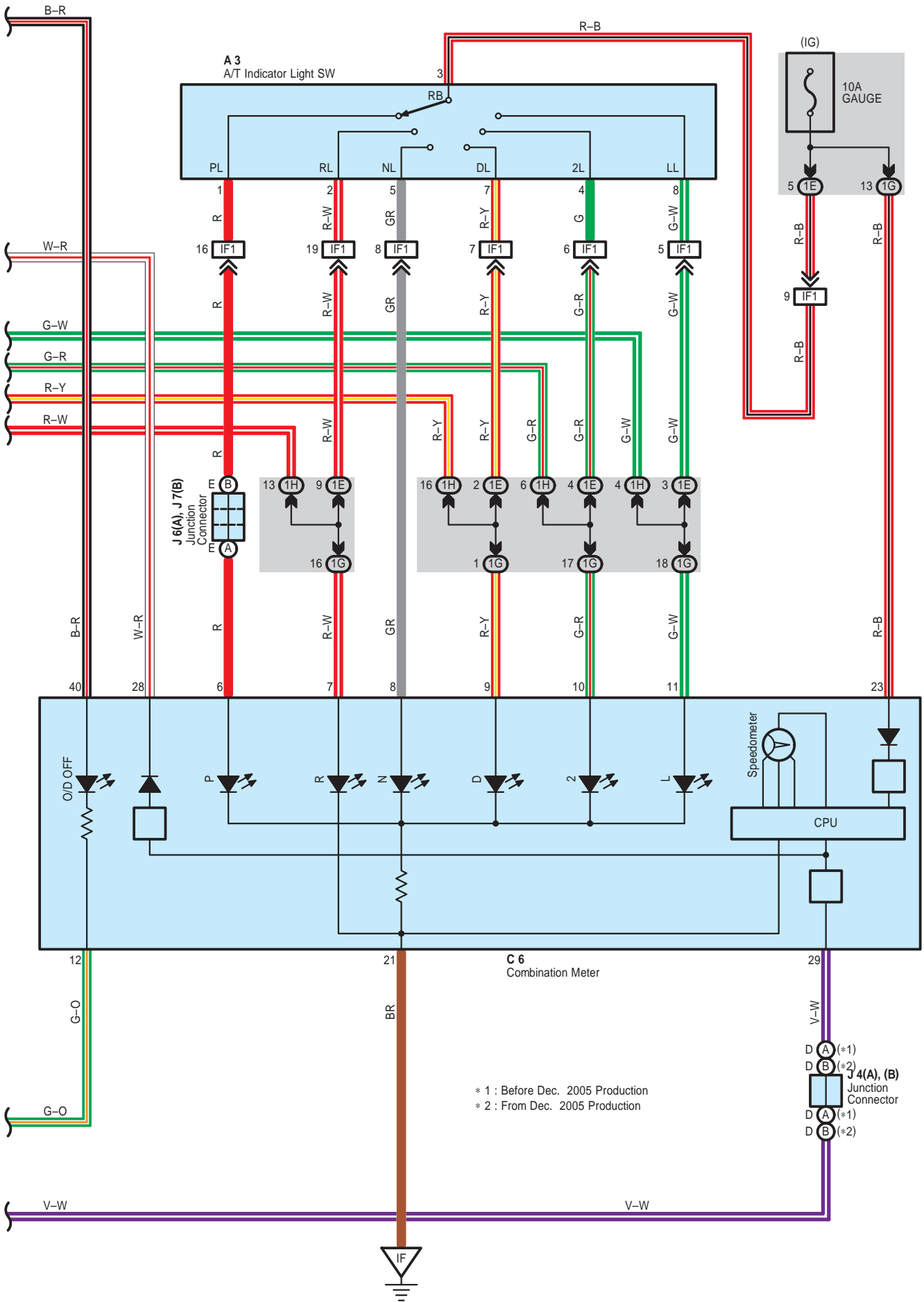
# ECT and A/T Indicator







# 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.

# ECT and A/T Indicator

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A3   | 28       | E4   | B 30     | J5   | 31       |
| A7   | 30       | E5   | C 30     | J6   | A 31     |
| C6   | 30       | E6   | D 30     | J7   | B 31     |
| D1   | 30       | F8   | 28       | S3   | 29       |
| E1   | 28       | I10  | 30       | S8   | 31       |
| E2   | 28       | J4   | A 31     | T1   | 29       |
| E3   | A 30     |      | B 31     | T2   | 29       |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and 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

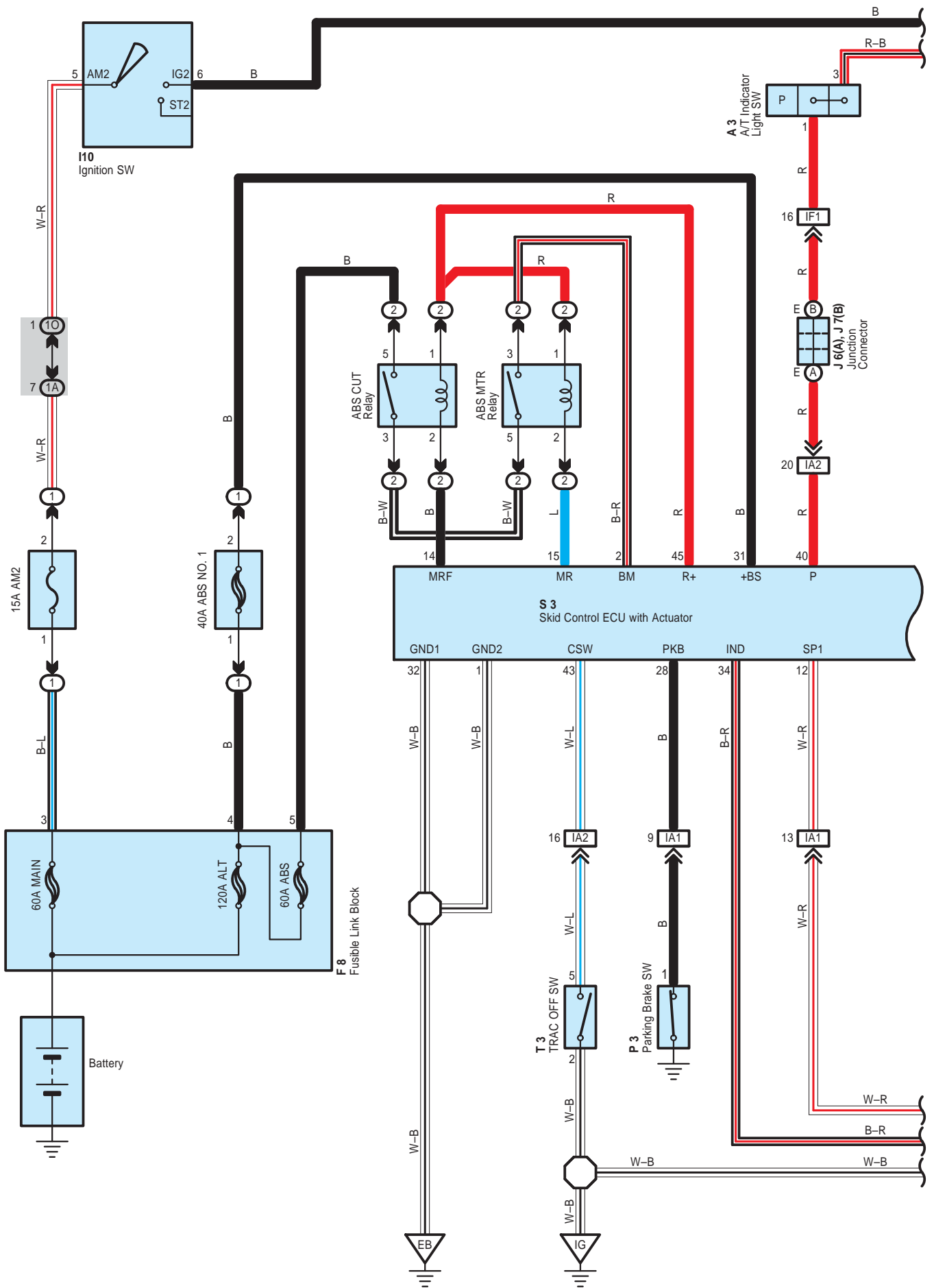
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |
| IF2  |          |   |

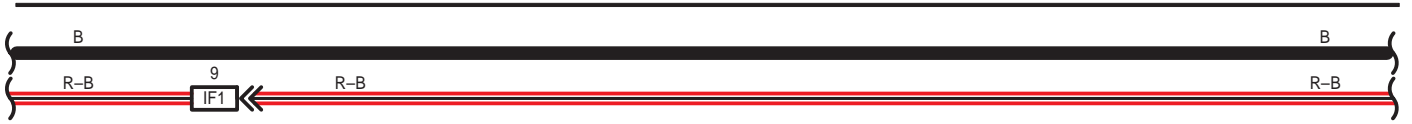
## ▽ : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| EB   | 34       | Front Left Fender Apron   |
| EC   | 34       | Engine Block              |
| ED   |          |                           |
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |
| IG   | 35       | Right Kick Panel          |

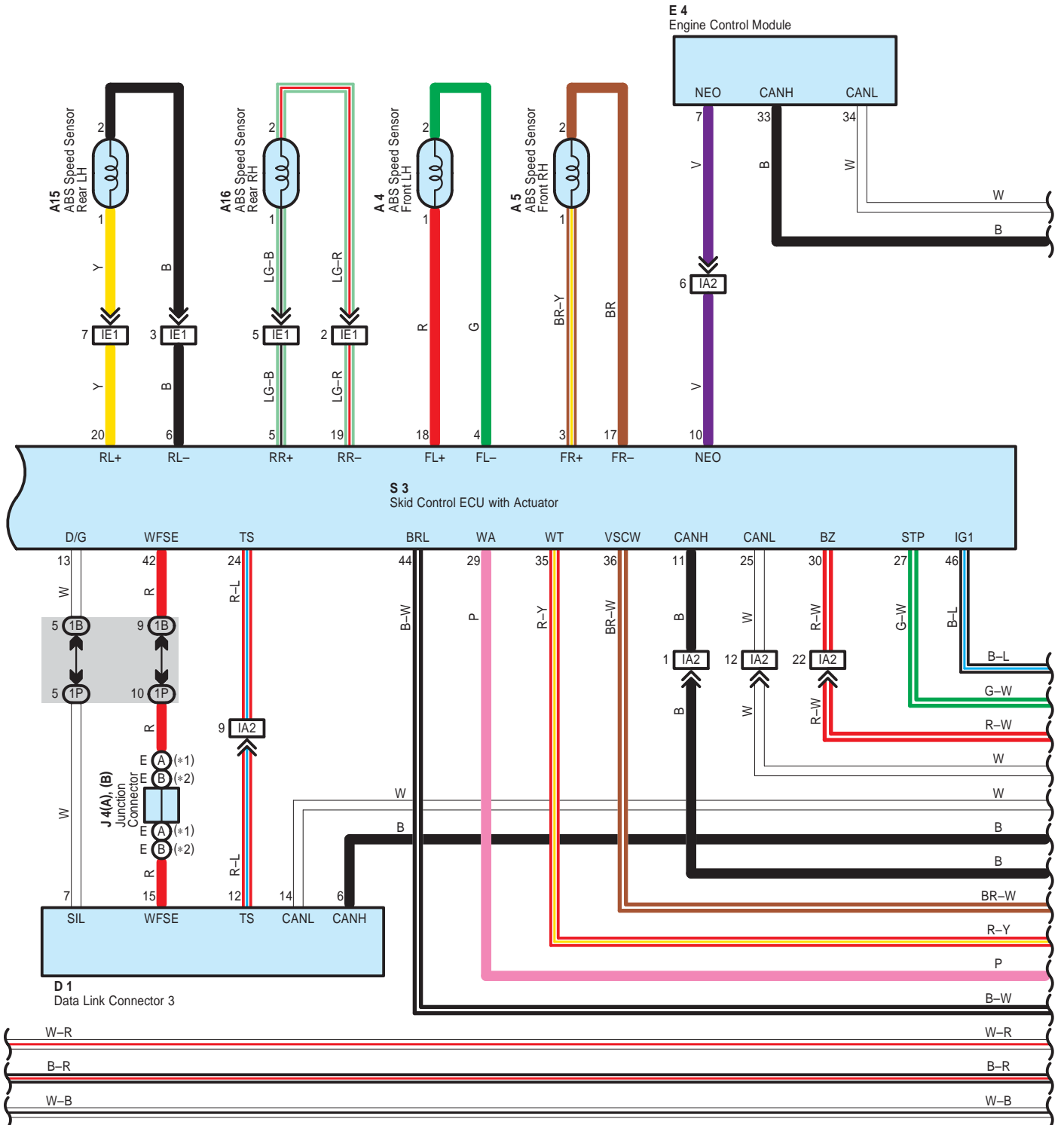


# ABS, TRAC and VSC

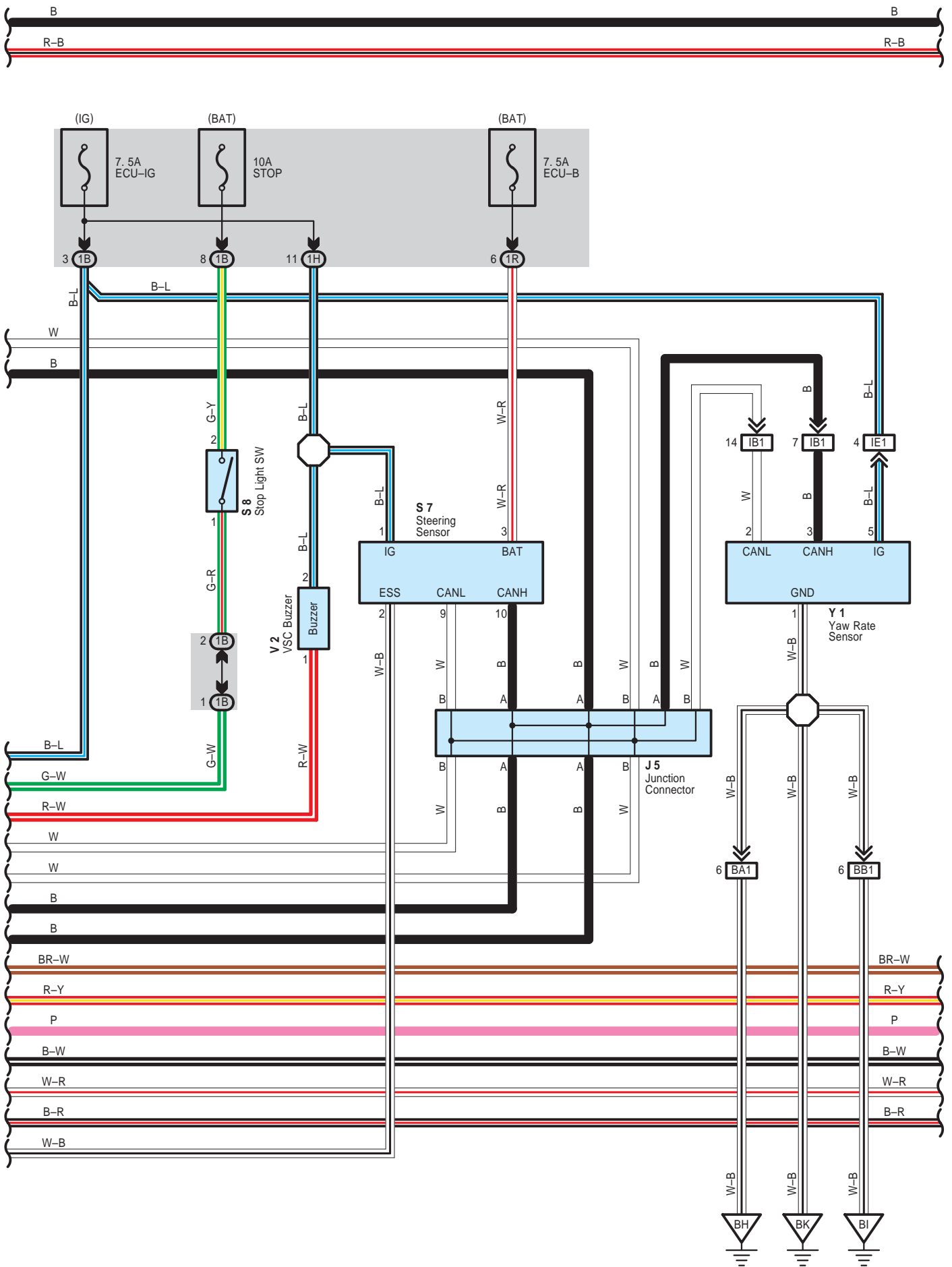




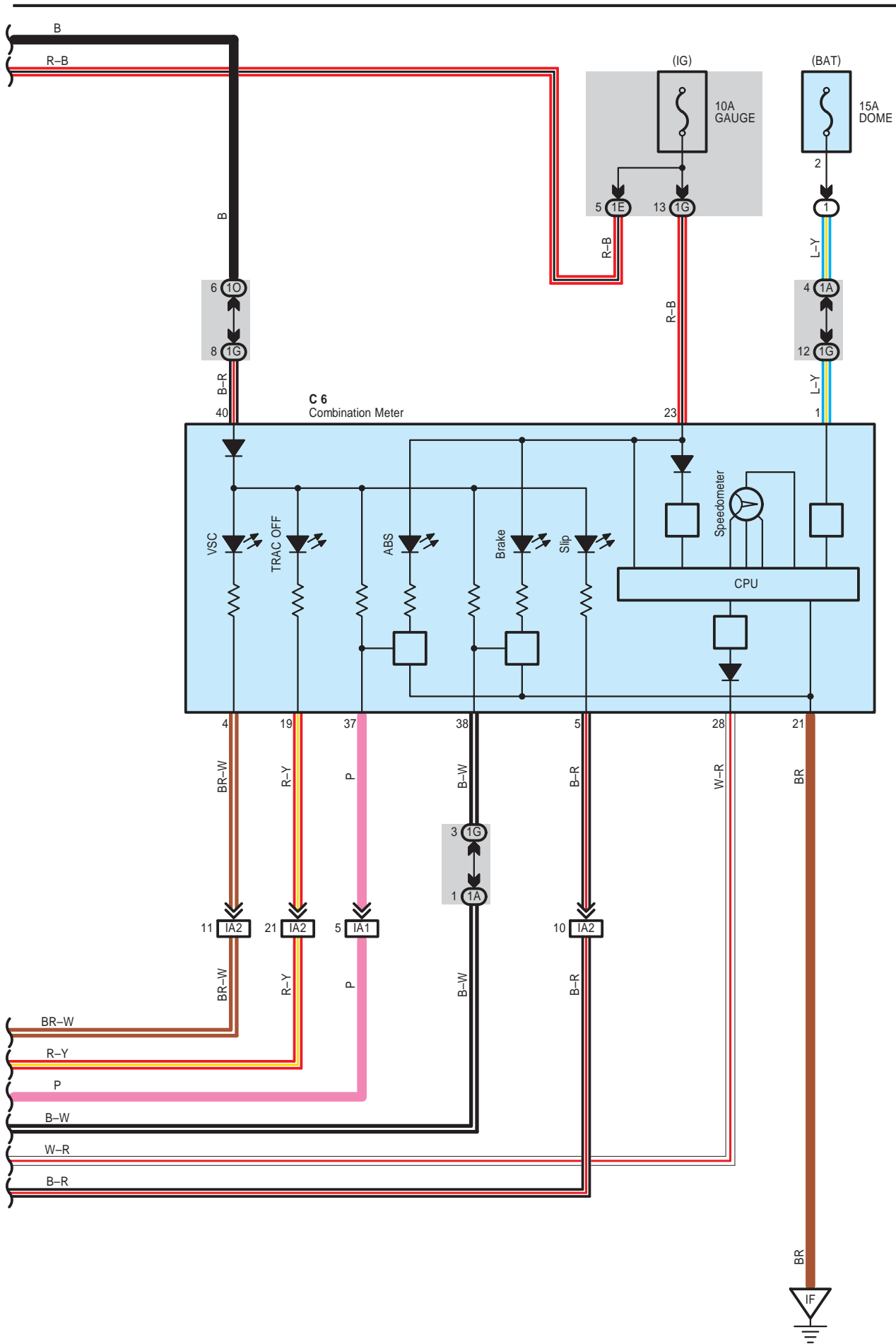
\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



# 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 ECU with actuator controls the solenoids in the actuators using the signals from the sensors to move the brake fluid to the reservoir in order to release the braking pressure applied to the wheel cylinder. If the skid control ECU with actuator detects that the fluid pressure in the wheel cylinder is insufficient, the skid control ECU with actuator 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 ECU with actuator, sensor signals, and/or actuators, the skid control ECU with actuator inhibits the brake actuator control and inputs the error signal to the engine control module. According to the error signal, the brake actuator turns off the solenoid and the engine control module rejects any electronically controlled throttle open request from the VSC system. As a result, the vehicle functions regardless of the ABS, TRAC, and VSC systems.

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A3   | 28       | F8   | 28       | S3   | 29       |
| A4   | 28       | I10  | 30       | S7   | 31       |
| A5   | 28       | J4   | A 31     | S8   | 31       |
| A15  | 32       |      | B 31     | T3   | 31       |
| A16  | 32       | J5   | 31       | V2   | 31       |
| C6   | 30       | J6   | A 31     | Y1   | 31       |
| D1   | 30       | J7   | B 31     |      |          |
| E4   | 30       | P3   | 31       |      |          |

 : **Relay Blocks**

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

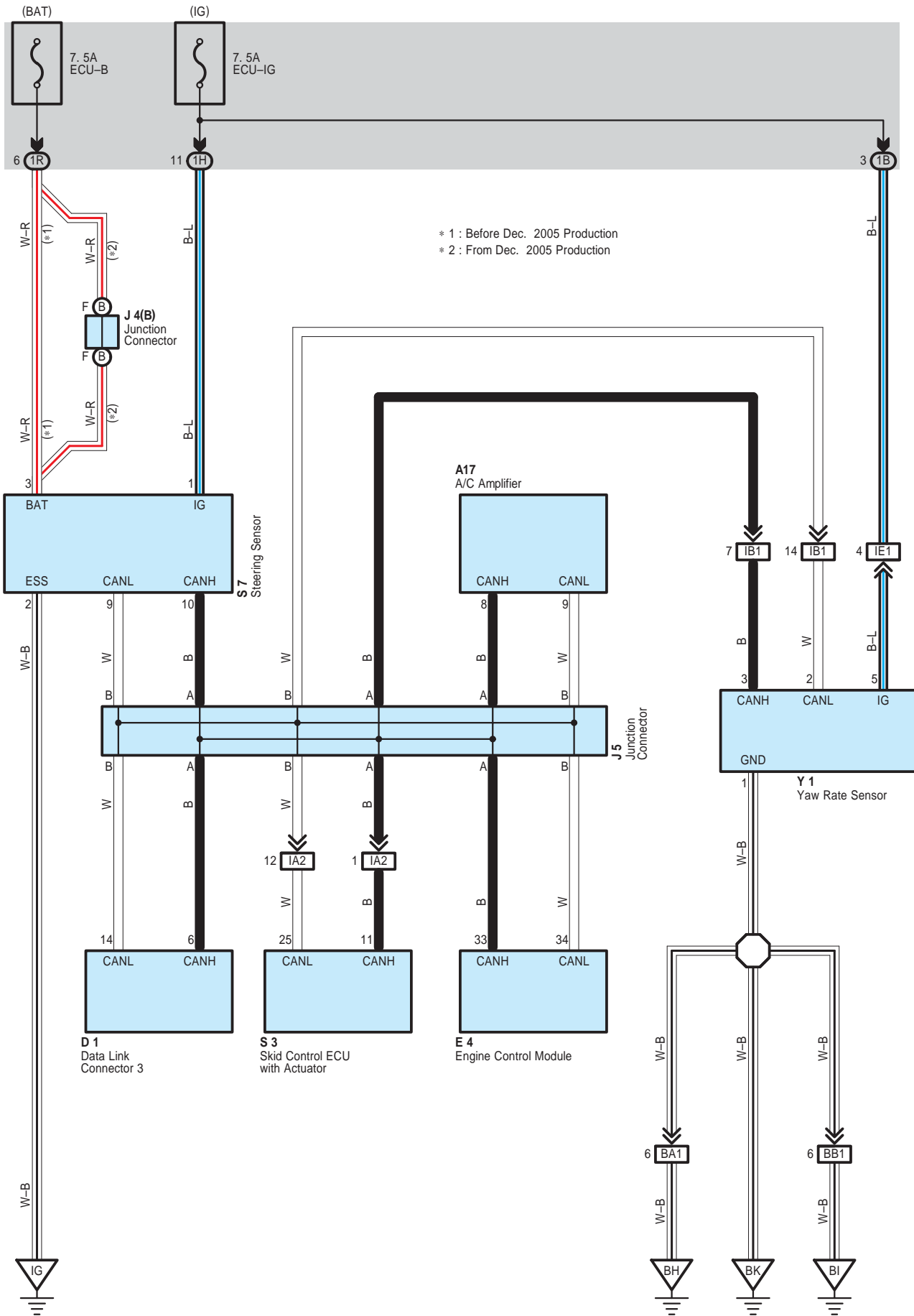
 : **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IE1  | 35       | Engine Room Main Wire and Floor Wire (Left Side of Cowl Panel)                |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)                      |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)                      |

 : **Ground Points**

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| EB   | 34       | Front Left Fender Apron     |
| IF   | 35       | Instrument Panel Brace LH   |
| IG   | 35       | Right Kick Panel            |
| BH   | 36       | Rear Door LH                |
| BI   | 36       | Rear Door RH                |
| BK   | 36       | Rear Quarter Panel Inner RH |

# 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
- \* Electronically Controlled Transmission and A/T Indicator
- \* Engine Control
- \* TRAC
- \* VSC

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |    |
|------|----------|------|----------|------|----------|----|
| A17  | 30       | J4   | B        | 31   | S7       | 31 |
| D1   | 30       | J5   |          | 31   | Y1       | 31 |
| E4   | 30       | S3   |          | 29   |          |    |

## ○ : 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) |
| 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)                    |
|------|----------|---|
| IA2  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IE1  | 35       | Engine Room Main Wire and Floor Wire (Left Side of Cowl Panel)                |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)                      |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)                      |

## ▽ : Ground Points

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| IG   | 35       | Right Kick Panel            |
| BH   | 36       | Rear Door LH                |
| BI   | 36       | Rear Door RH                |
| BK   | 36       | Rear Quarter Panel Inner RH |



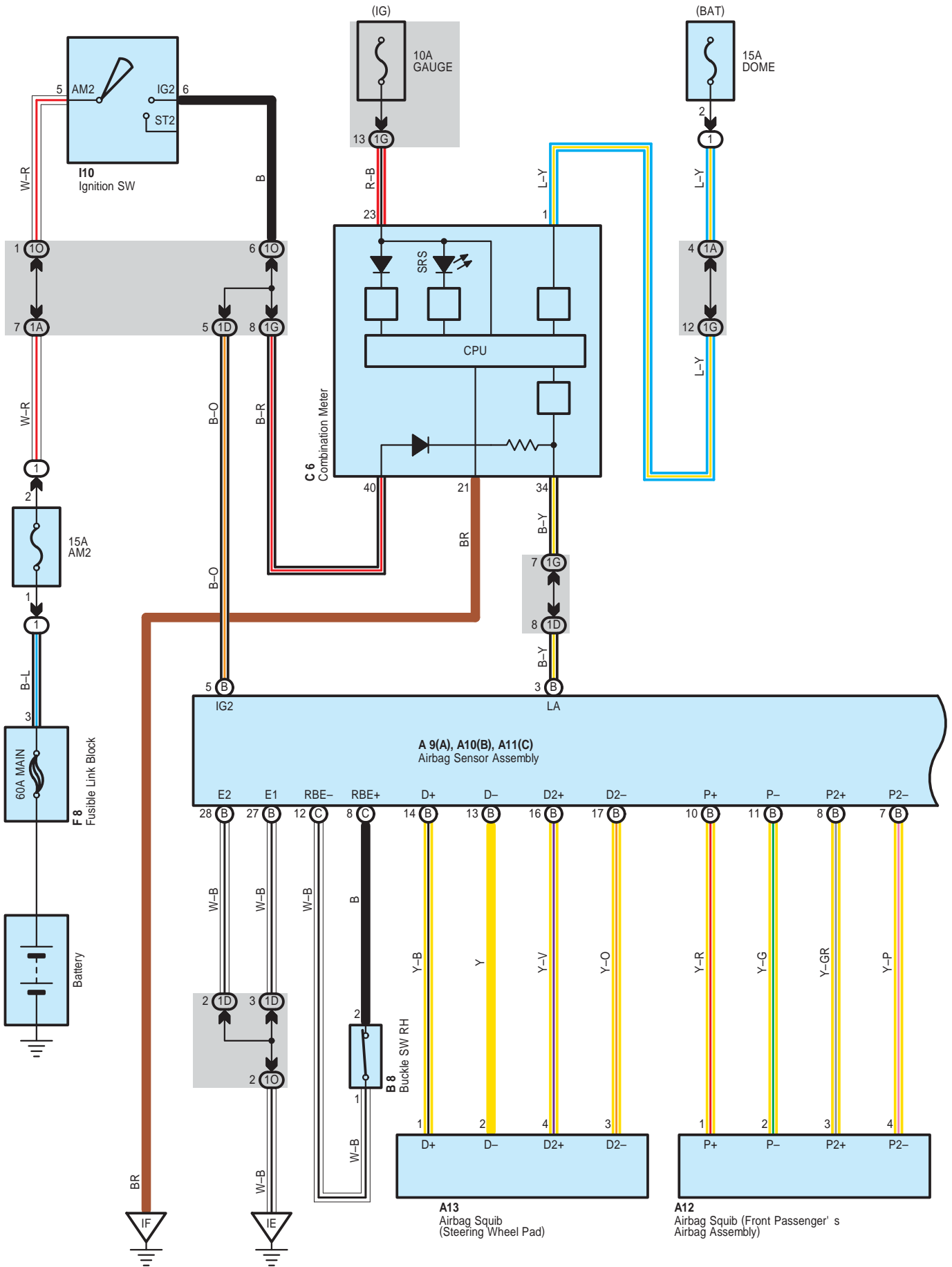
## SRS (Before Dec. 2005 Production)

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.

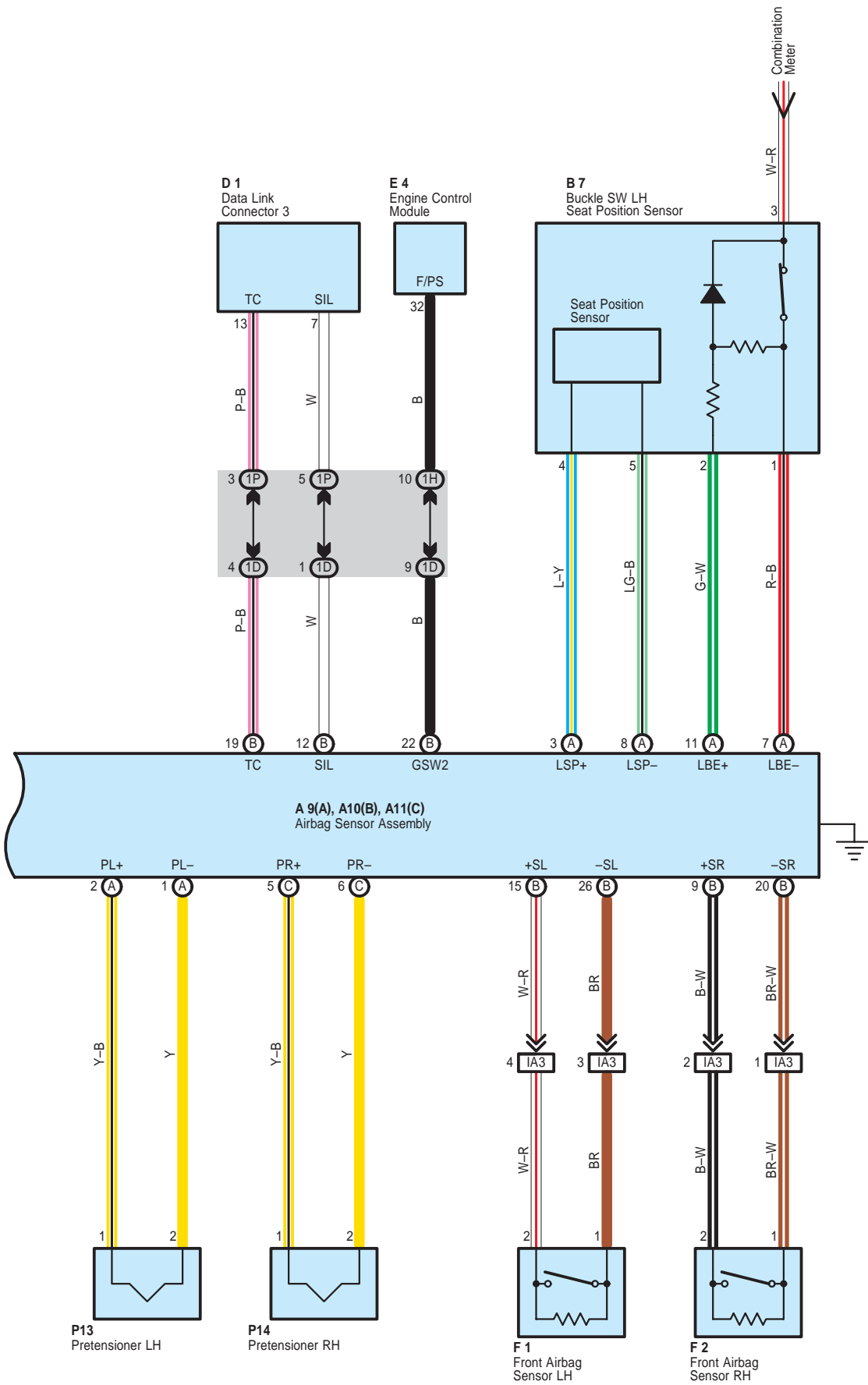
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW is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

# SRS (Before Dec. 2005 Production)







# SRS (Before Dec. 2005 Production)

## 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 (B) 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 (B) 14, (B) 16, (B) 10, (B) 8, (A) 2 and (C) 5 of the airbag sensor assembly to the airbag squibs and the pretensioners to TERMINALS (B) 13, (B) 17, (B) 11, (B) 7, (A) 1 and (C) 6 of the airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them 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. The pretensioners make sure of the seat belt restrainability.

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |    |
|------|----------|------|----------|------|----------|----|
| A9   | A        | 30   | B8       | 32   | F8       | 28 |
| A10  | B        | 30   | C6       | 30   | I10      | 30 |
| A11  | C        | 30   | D1       | 30   | P13      | 33 |
| A12  |          | 30   | E4       | 30   | P14      | 33 |
| A13  |          | 30   | F1       | 28   |          |    |
| B7   |          | 32   | F2       | 28   |          |    |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and 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)                    |
|------|----------|---|
| IA3  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

## ▽ : Ground Points

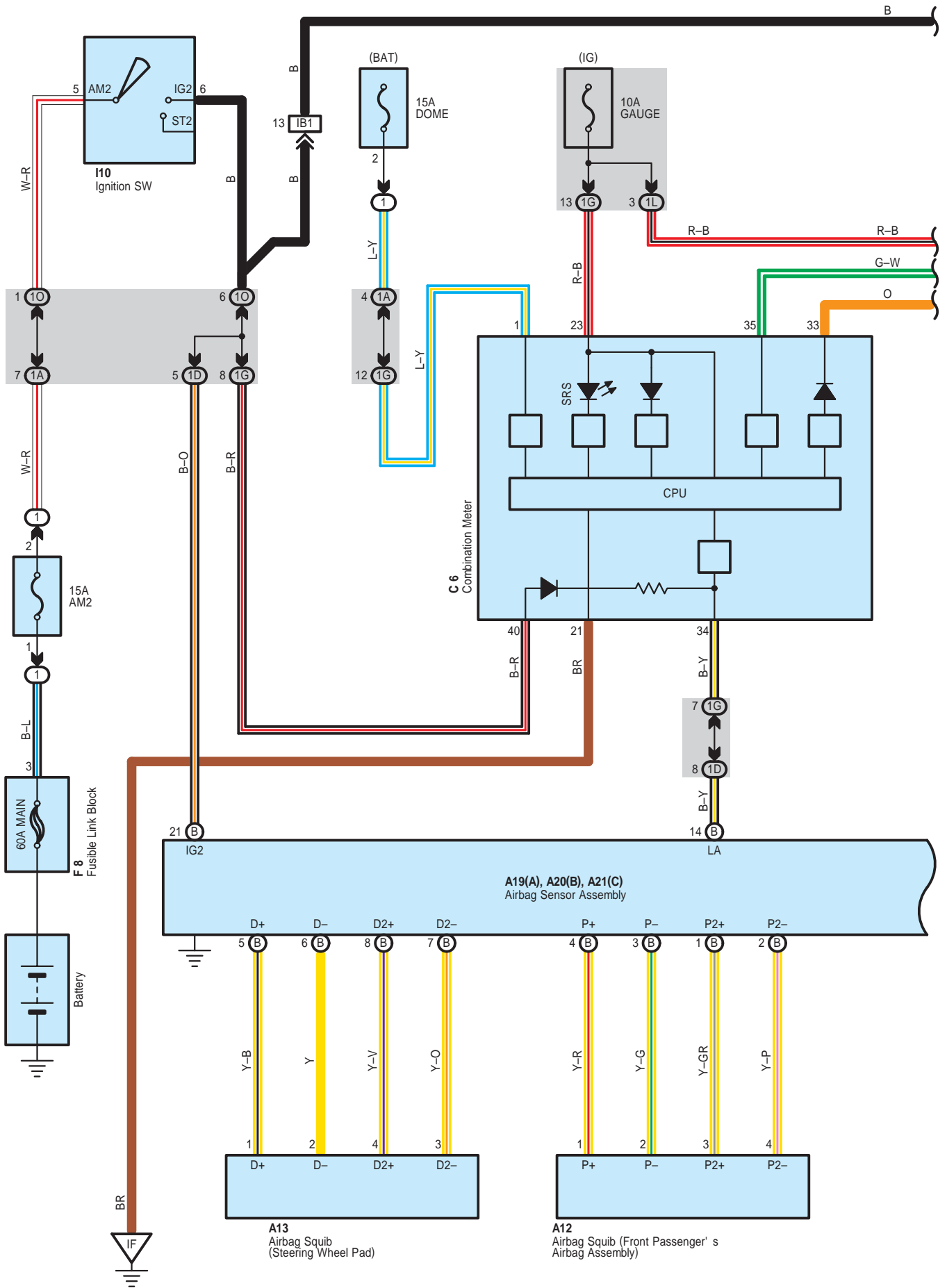
| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |

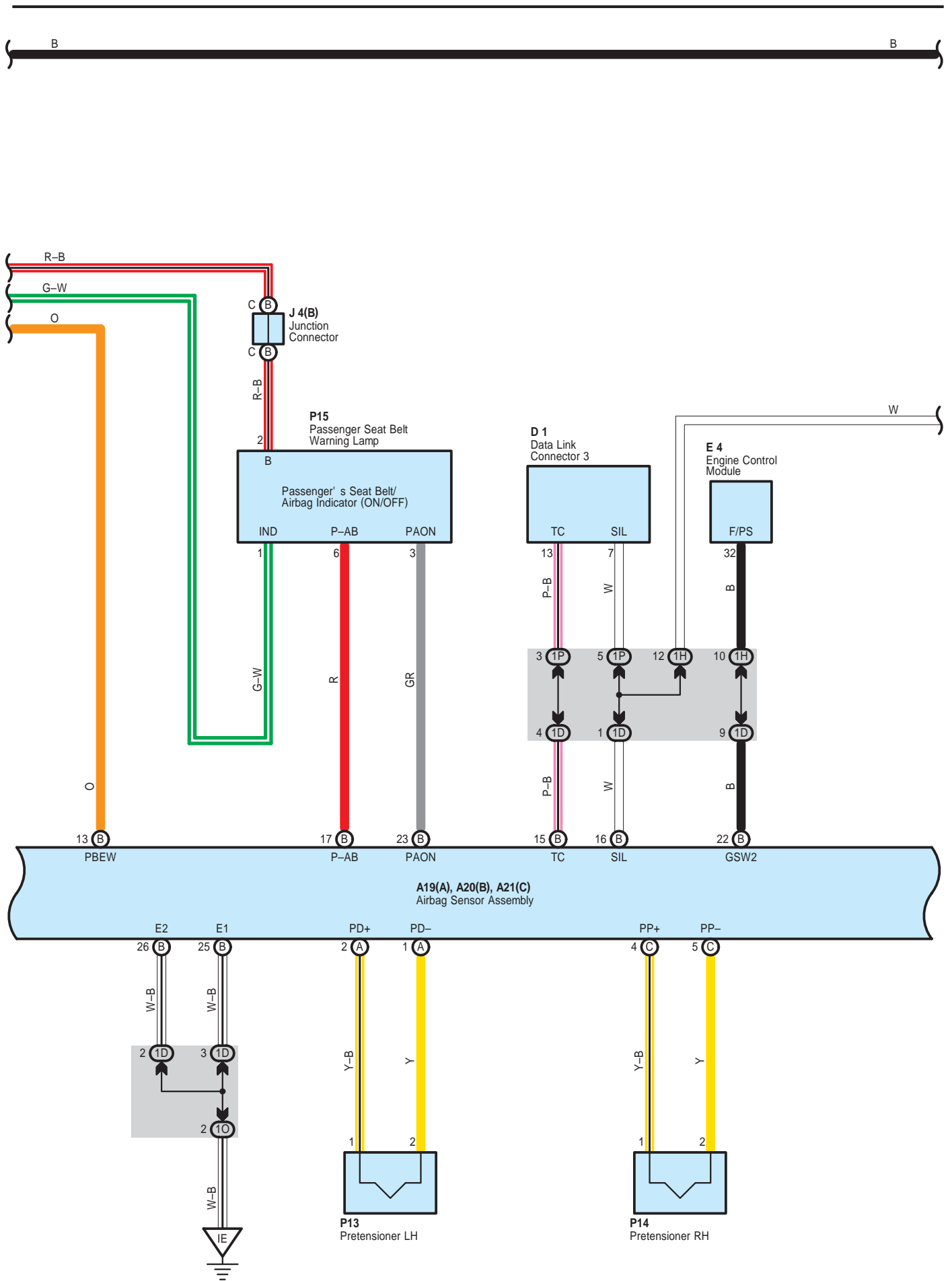
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

- 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 "OFF" 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.

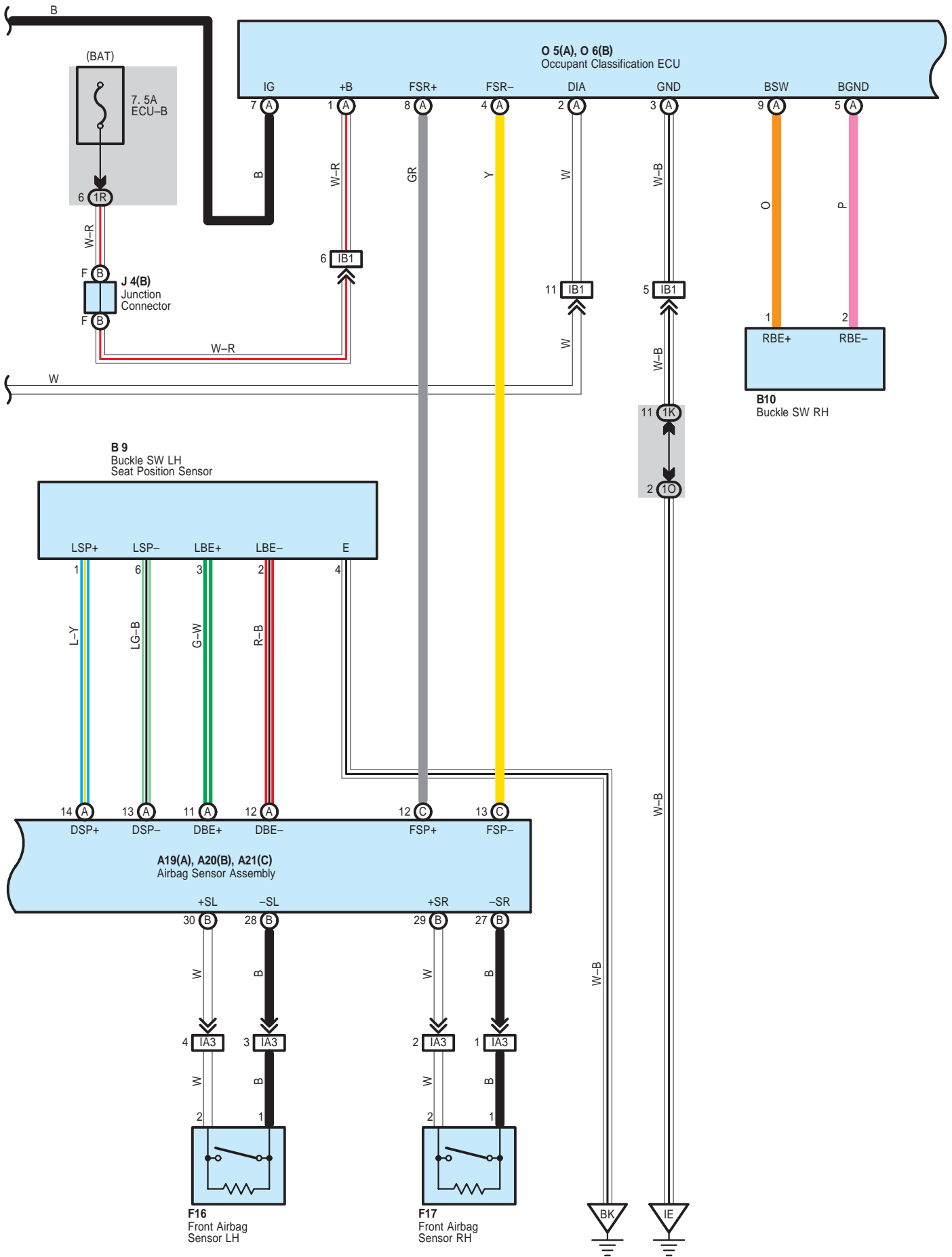
- \* Steering wheel pad
- \* Front passenger airbag assembly
- \* Seat belt pretensioner
- \* Center airbag sensor assembly
- \* Front airbag sensor assembly

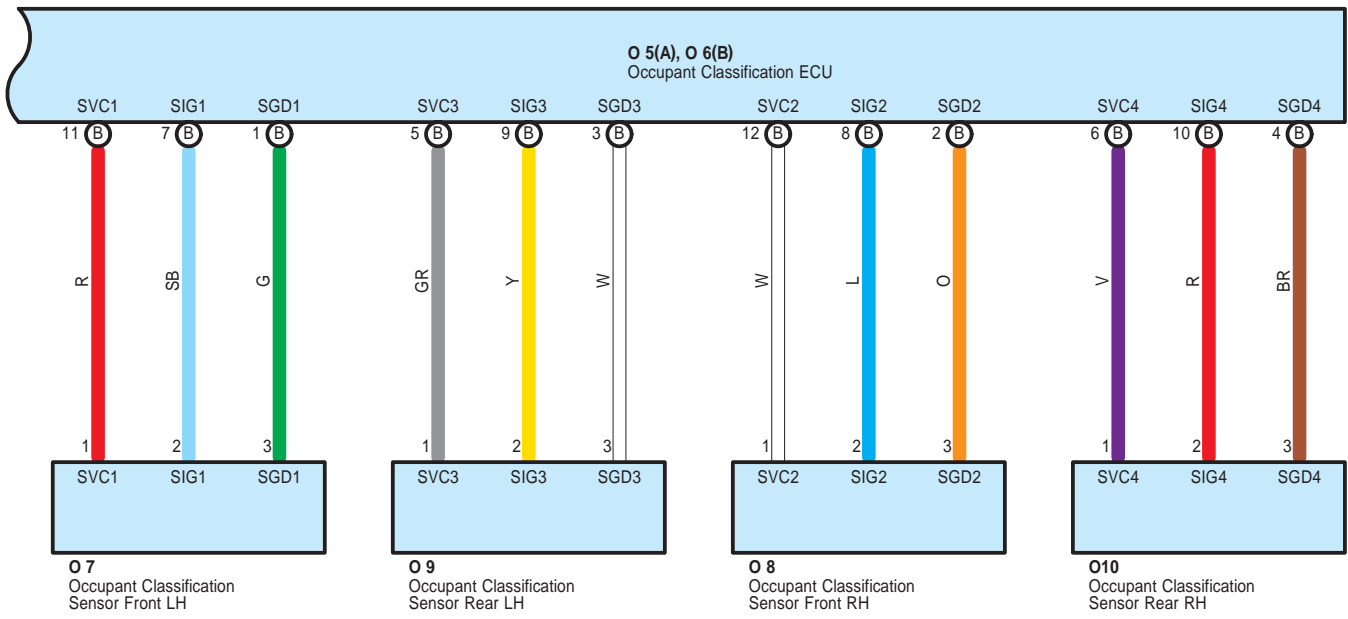
# SRS (From Dec. 2005 Production)





# SRS (From Dec. 2005 Production)





# SRS (From Dec. 2005 Production)

## System Outline

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

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A12  | 30       | D1   | 30       | O6   | B 33     |
| A13  | 30       | E4   | 30       | O7   | 33       |
| A19  | A 30     | F8   | 28       | O8   | 33       |
| A20  | B 30     | F16  | 28       | O9   | 33       |
| A21  | C 30     | F17  | 28       | O10  | 33       |
| B9   | 32       | I10  | 30       | P13  | 33       |
| B10  | 32       | J4   | B 31     | P14  | 33       |
| C6   | 30       | O5   | A 33     | P15  | 31       |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

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

## □ : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA3  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |

## ▽ : Ground Points

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| BK   | 36       | Rear Quarter Panel Inner RH |

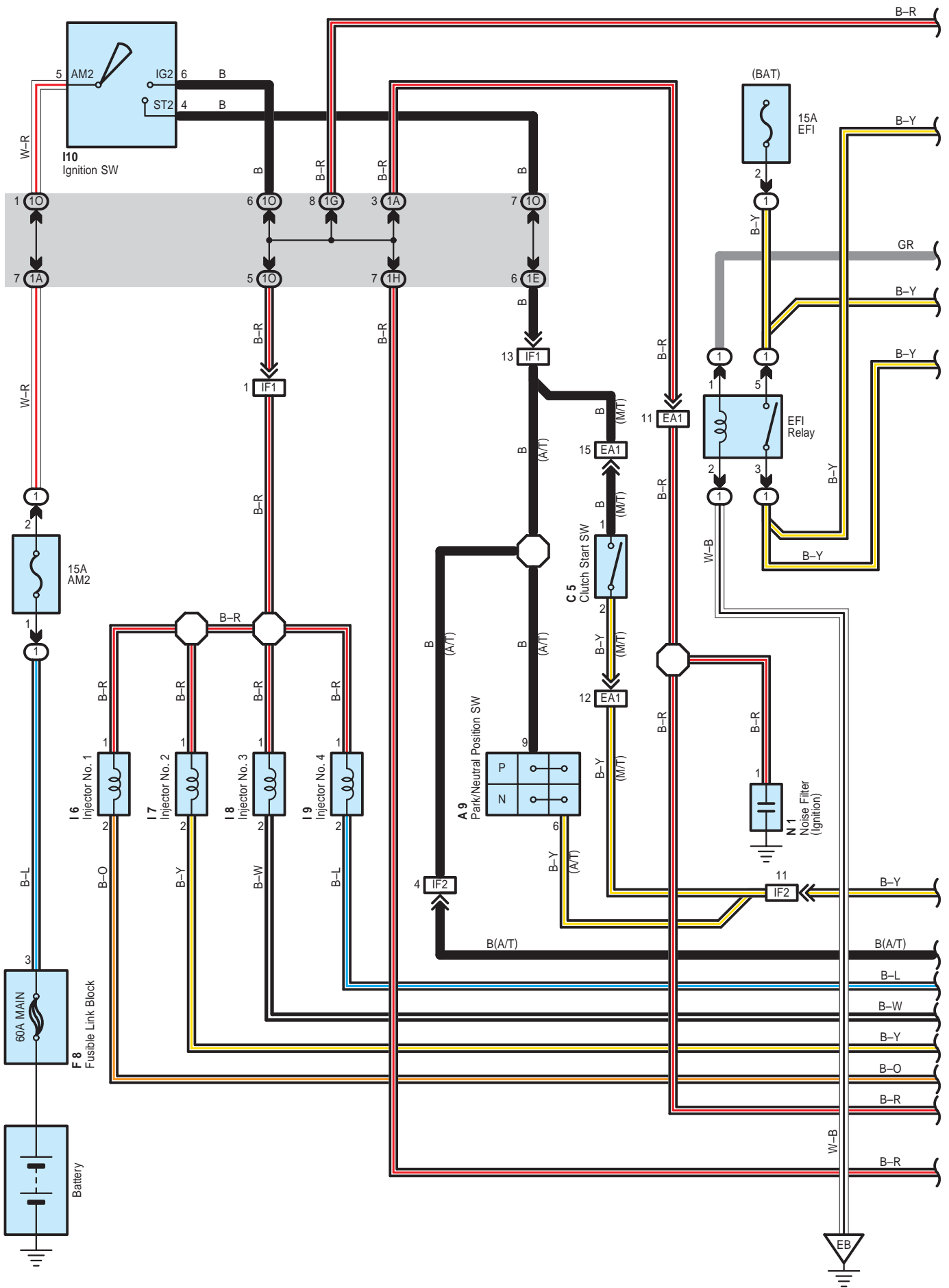


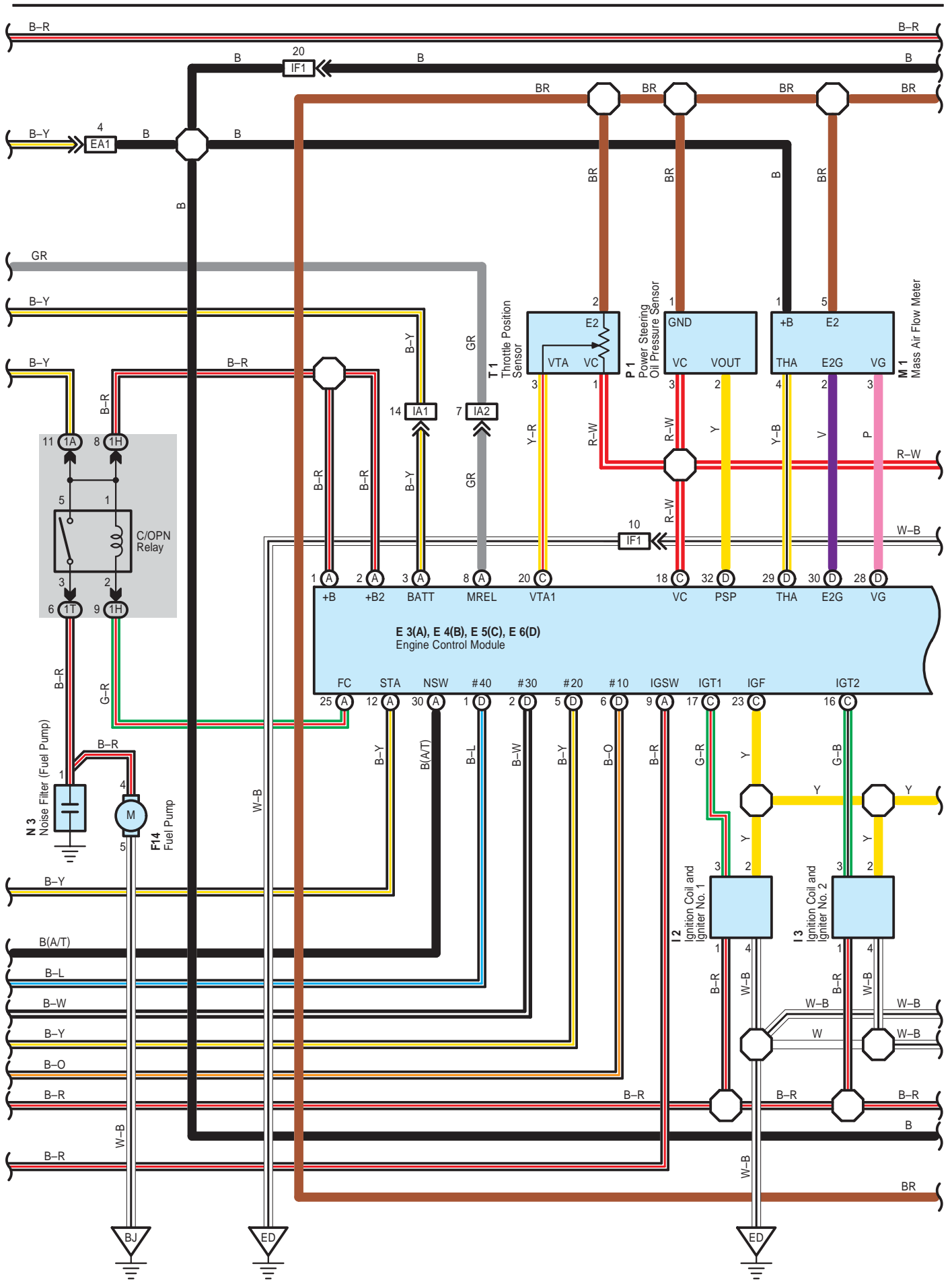


# 2006 xB ELECTRICAL WIRING DIAGRAM SYSTEM CIRCUITS

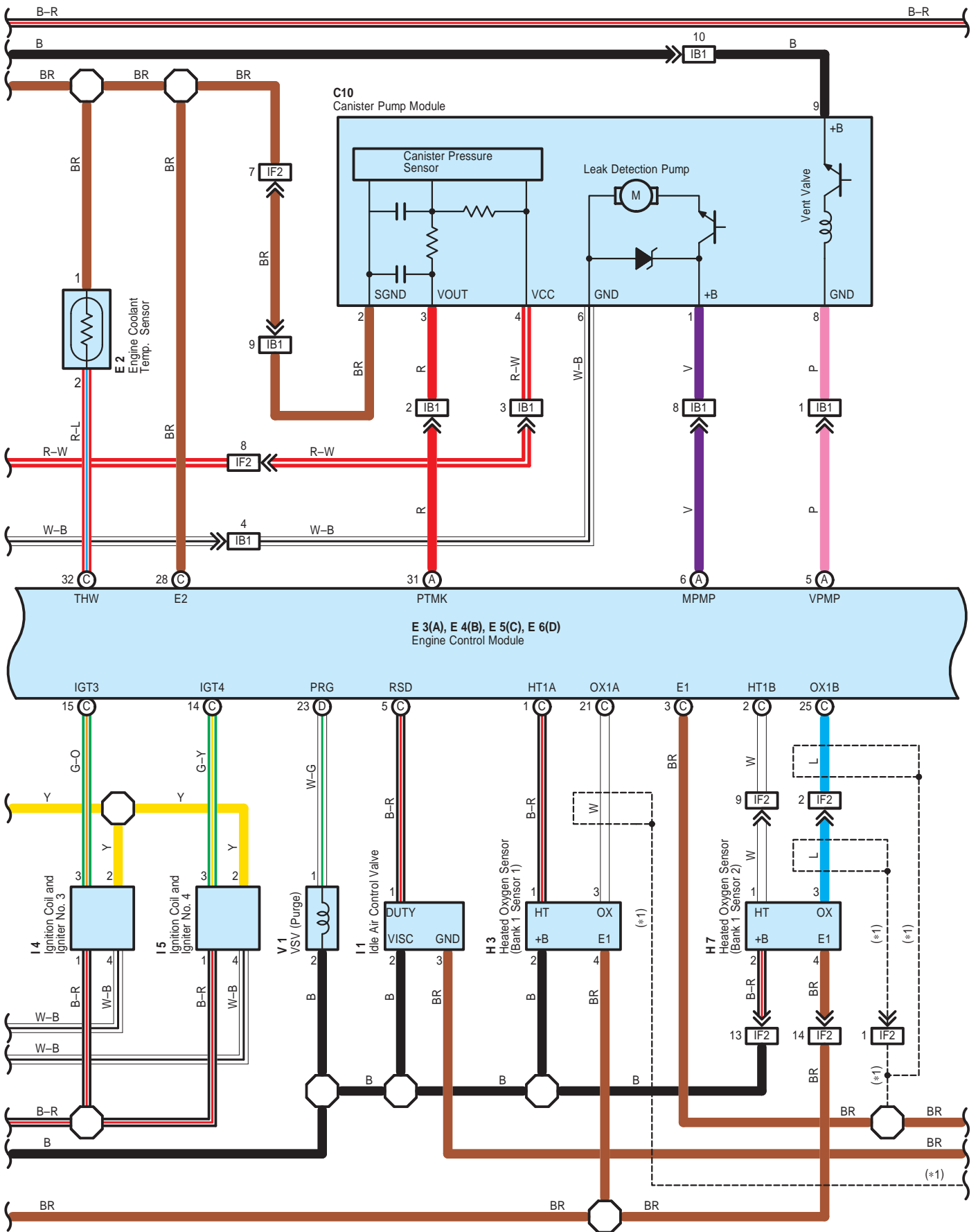
|  | Page |
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| Audio System .....   | 146  |
| Back-Up Light .....  | 72   |
| Charging .....   | 46   |
| Cigarette Lighter .....  | 140  |
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| Rear Wiper and Washer .....                                    | 76   |
| Remote Control Mirror .....                                    | 136  |
| Seat Belt Warning (Before Dec. 2005 Production) .....          | 128  |
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| Starting .....   | 42   |
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| Taillight .....  | 66   |
| TRAC .....   | 104  |
| Turn Signal and Hazard Warning Light .....                     | 62   |
| Two Way Flow Heater .....                                      | 158  |
| VSC .....  | 104  |
| Wireless Door Lock Control .....                               | 90   |

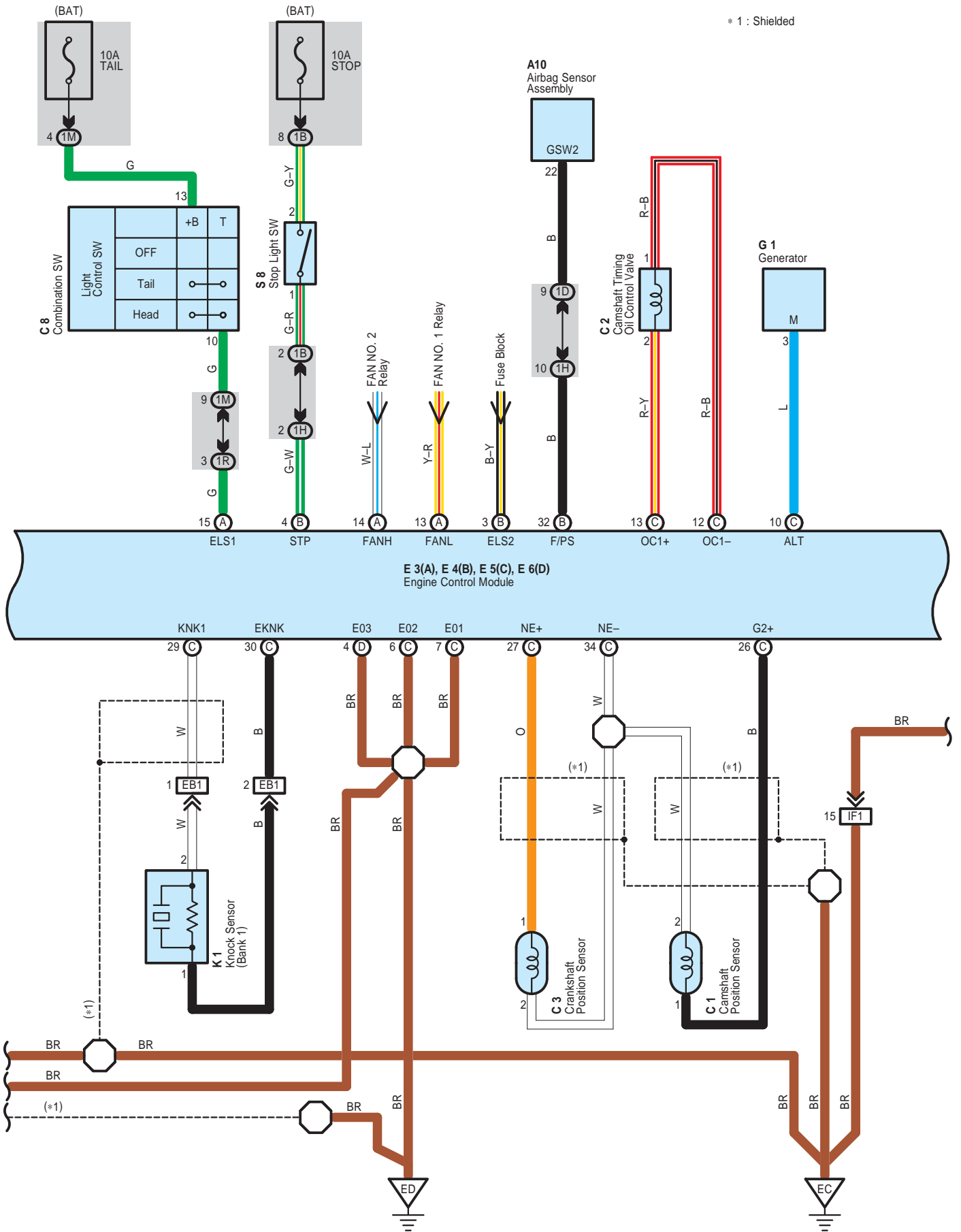
# Engine Control



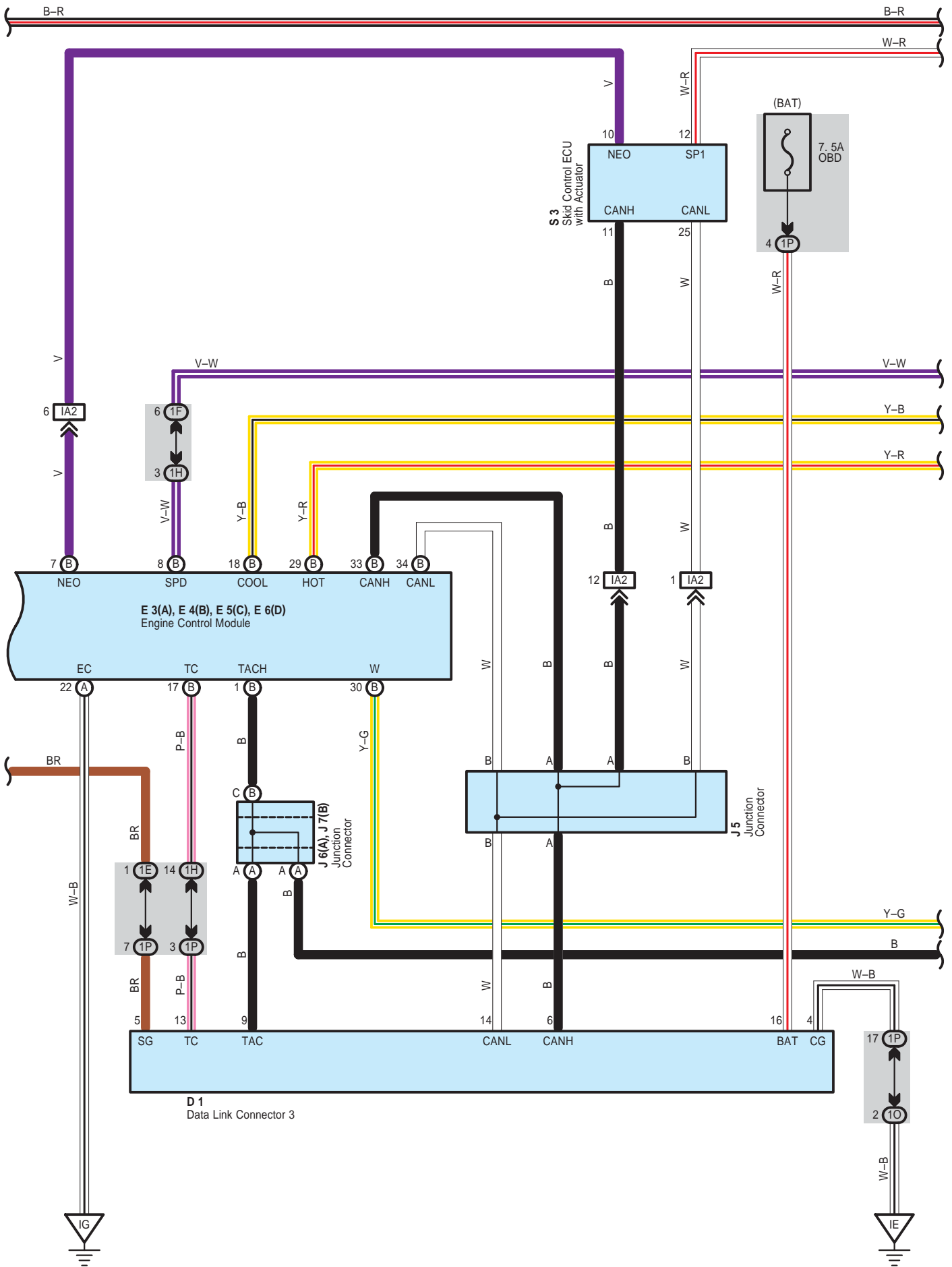


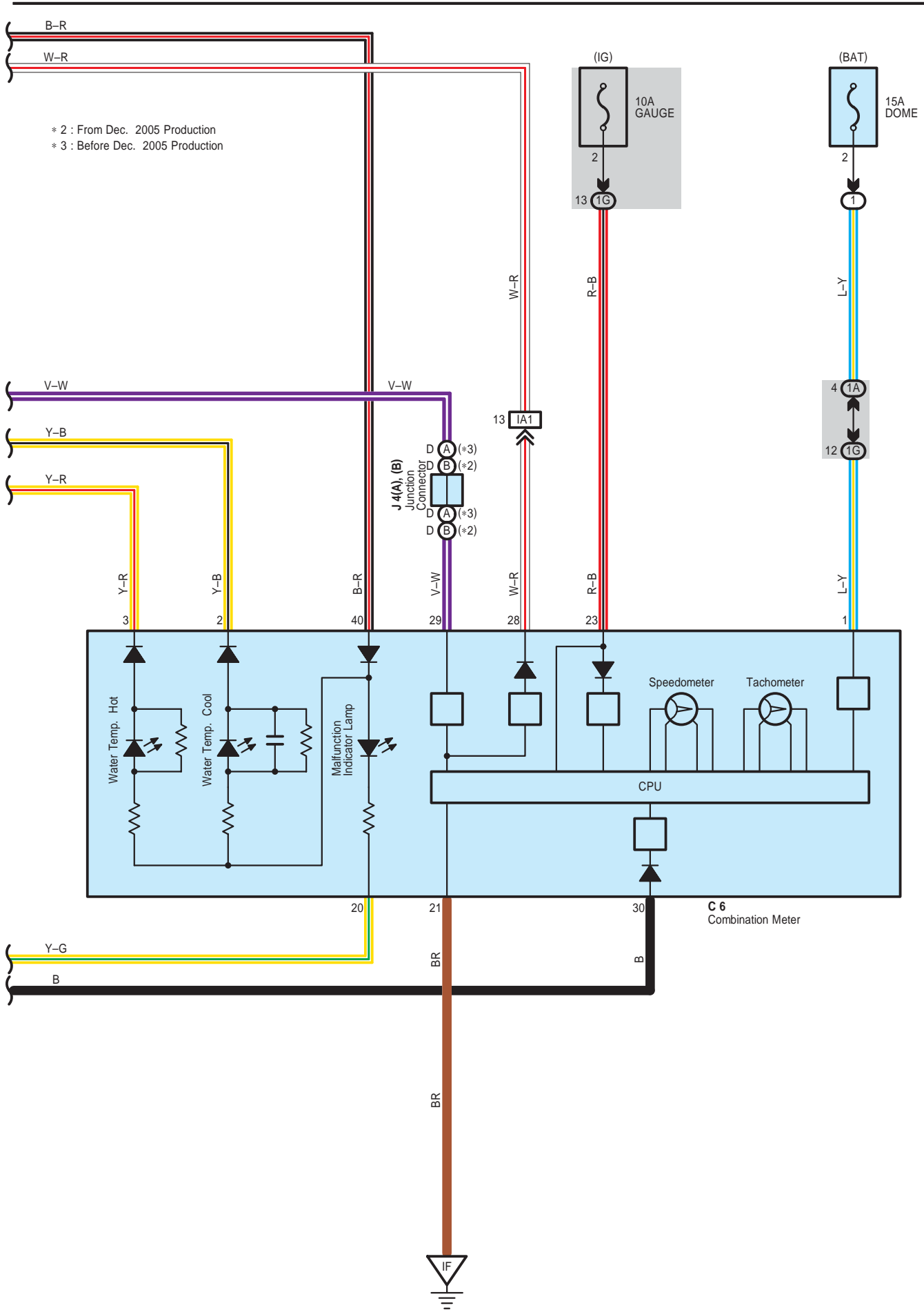
# Engine Control





# Engine Control





SCION xB (EM0091U)



## 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 ECU with actuator.

(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 TERMINALS +B and +B2 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.

(10) Engine knock signal circuit

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

## 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 |
|------|----------|------|----------|------|----------|
| A9   | 30       | F8   | 28       | J4   | A 31     |
| A10  | 30       | F14  | 32       |      | B 31     |
| C1   | 28       | G1   | 28       | J5   | 31       |
| C2   | 28       | H3   | 28       | J6   | A 31     |
| C3   | 28       | H7   | 30       | J7   | B 31     |
| C5   | 30       | I1   | 29       | K1   | 29       |
| C6   | 30       | I2   | 29       | M1   | 29       |
| C8   | 30       | I3   | 29       | N1   | 29       |
| C10  | 32       | I4   | 29       | N3   | 33       |
| D1   | 30       | I5   | 29       | P1   | 29       |
| E2   | 28       | I6   | 29       | S3   | 29       |
| E3   | A 30     | I7   | 29       | S8   | 31       |
| E4   | B 30     | I8   | 29       | T1   | 29       |
| E5   | C 30     | I9   | 29       | V1   | 29       |
| E6   | D 30     | I10  | 30       |      |          |

### ○ : Relay Blocks

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

# Engine Control

## : 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   |          |   |
| 1D   | 25       | Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel) |
| 1E   |          |   |
| 1F   |          |   |
| 1G   |          |   |
| 1H   |          |   |
| 1M   |          |   |
| 1O   |          |   |
| 1P   |          |   |
| 1R   |          |   |
| 1T   | 24       | Floor Wire and Instrument Panel J/B (Lower Finish Panel)            |

## : Connector Joining Wire Harness and Wire Harness

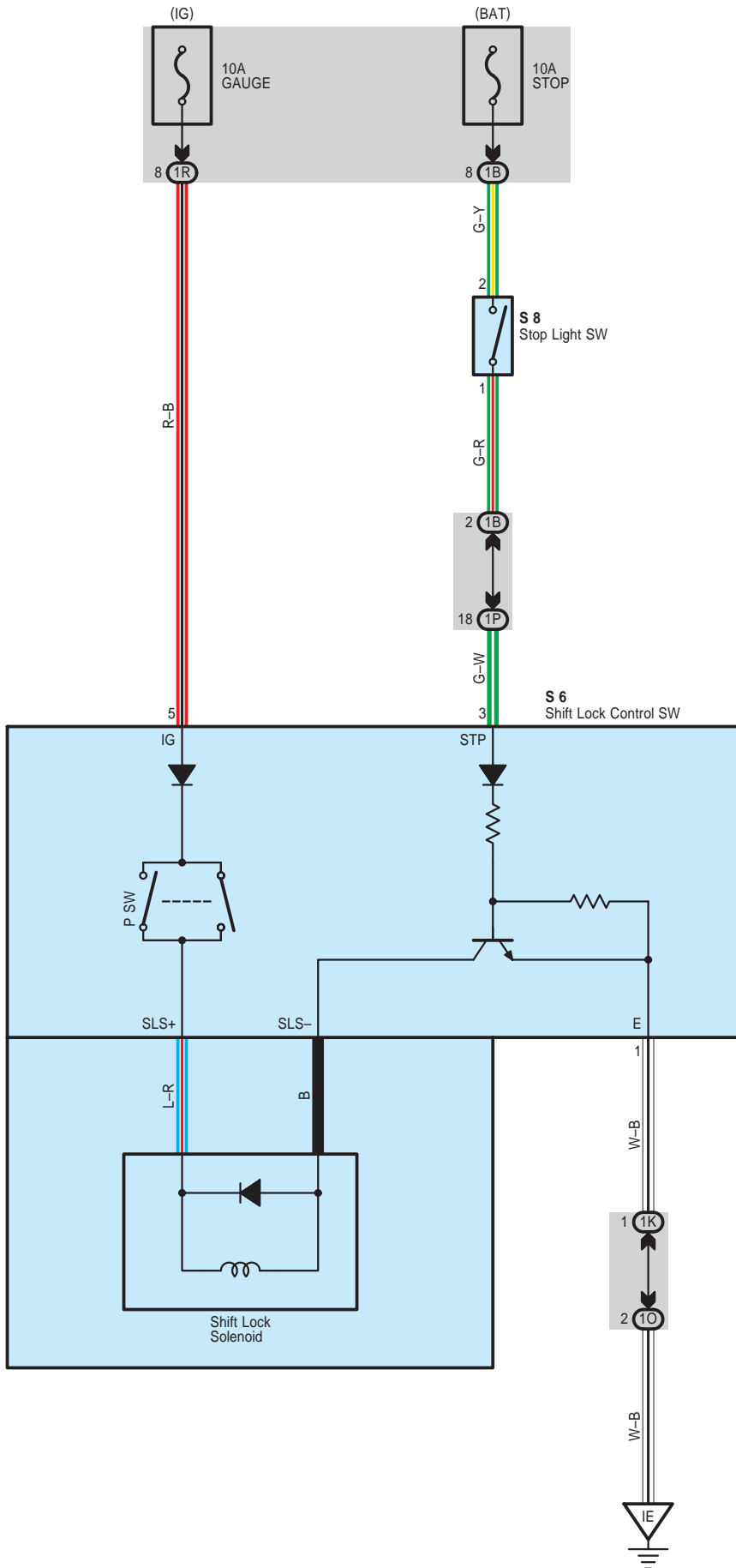
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| EA1  | 34       | Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B)             |
| EB1  | 34       | Engine Wire and Sensor Wire (Near the Starter)                                |
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |
| IF2  |          |   |

## : Ground Points

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| EB   | 34       | Front Left Fender Apron     |
| EC   | 34       | Engine Block                |
| ED   |          |                             |
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| IG   | 35       | Right Kick Panel            |
| BJ   | 36       | Rear Quarter Panel Inner LH |



# 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 ECU.

### Shift Lock Mechanism

With the ignition SW at ON position, when a signal that the brake pedal is depressed (Stop light SW on) and a signal that the shift lever is put in P position (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 |
|------|----------|------|----------|------|----------|
| S6   | 31       | S8   | 31       |      |          |

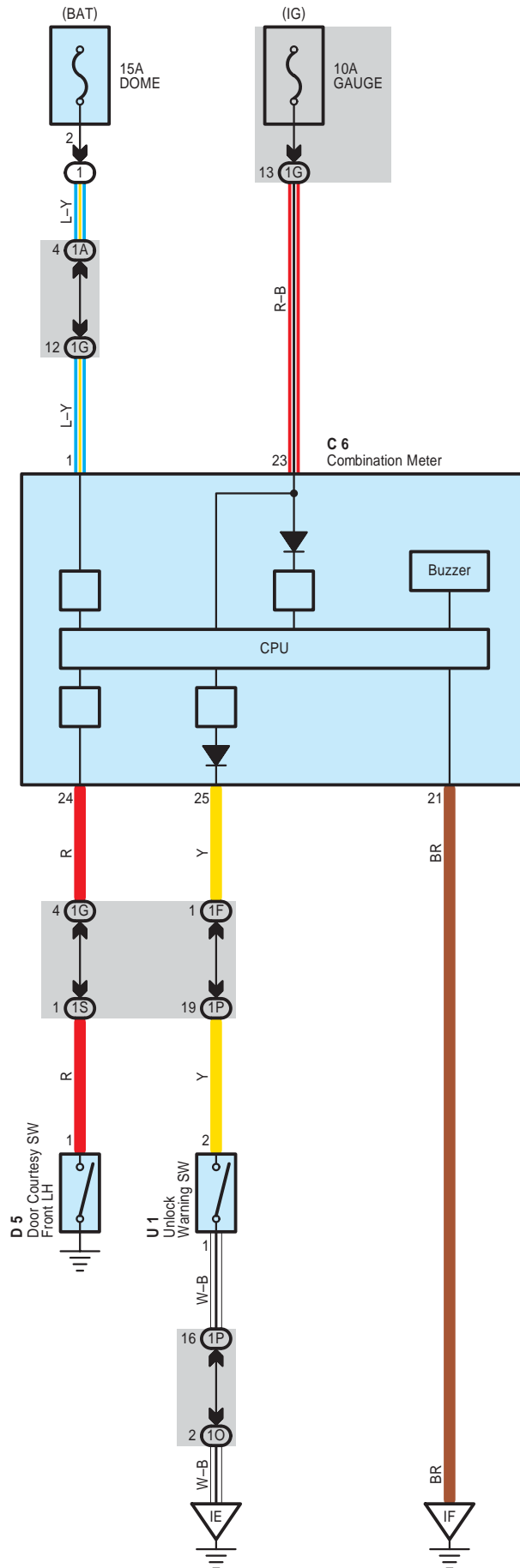
### ○ : Junction Block and Wire Harness Connector

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

### ▽ : Ground Points

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |

# Key Reminder



### System Outline

Current is always applied from the DOME fuse to TERMINAL 1 of the combination meter. When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL 23 of the combination meter.

### 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 25 of the combination meter, and from the door courtesy SW front LH to TERMINAL 24 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 |
|------|----------|------|----------|------|----------|
| C6   | 30       | D5   | 32       | U1   | 31       |

### ○ : Relay Blocks

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

### ○ : Junction Block and Wire Harness Connector

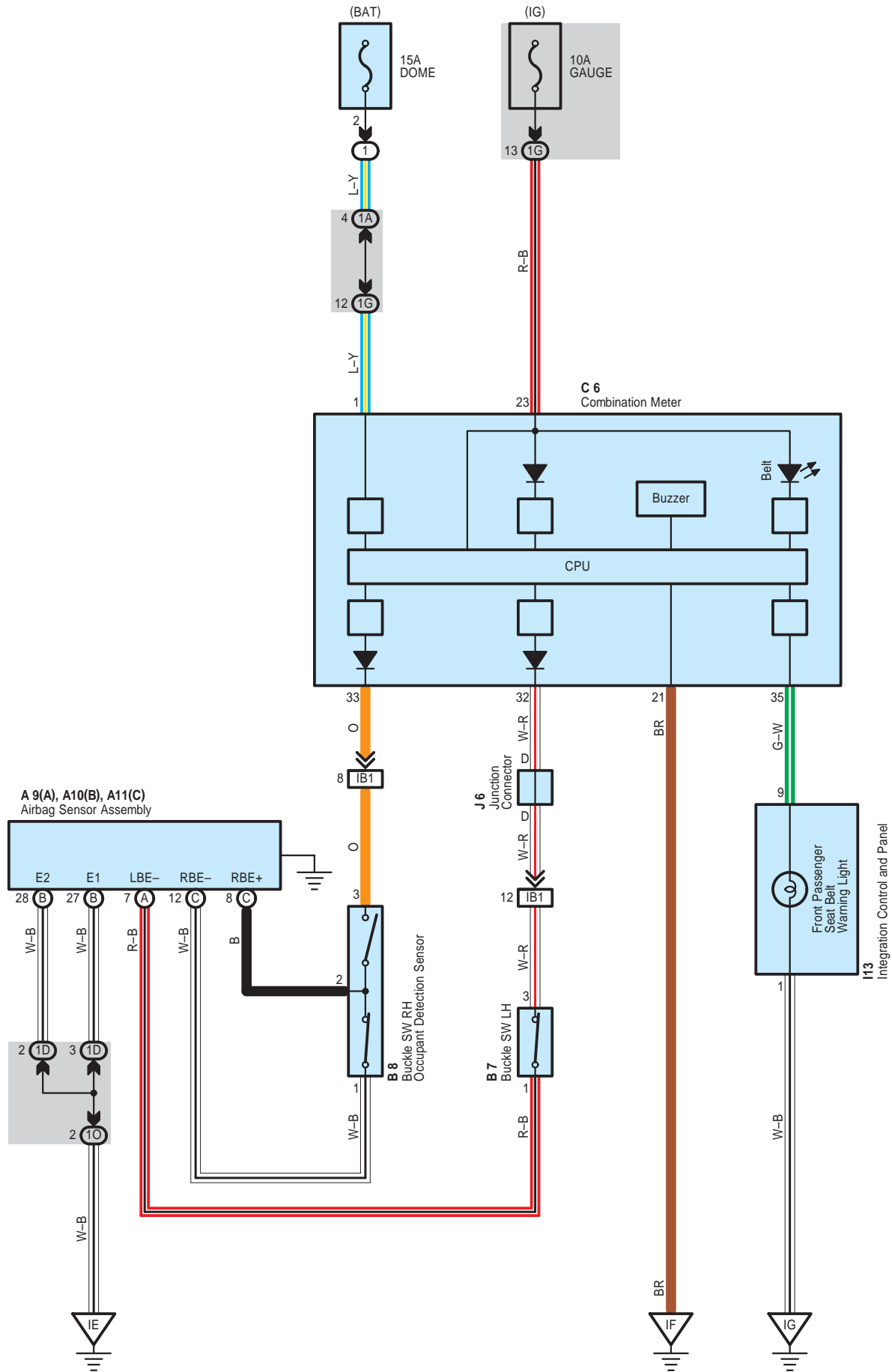
| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel) |
| 1F   | 25       | Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel) |
| 1G  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

### ▽ : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |



# Seat Belt Warning (Before Dec. 2005 Production)



## System Outline

Current is always applied from the DOME fuse to TERMINAL 1 of the combination meter. When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL 23 of the combination meter.

### 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 32 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 33 of the combination meter, and the front passenger seat belt warning light blinks.

## ○ : Parts Location

| Code |   | See Page | Code |  | See Page | Code |  | See Page |
|------|---|----------|------|--|----------|------|--|----------|
| A9   | A | 30       | B7   |  | 32       | I13  |  | 30       |
| A10  | B | 30       | B8   |  | 32       | J6   |  | 31       |
| A11  | C | 30       | C6   |  | 30       |      |  |          |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

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

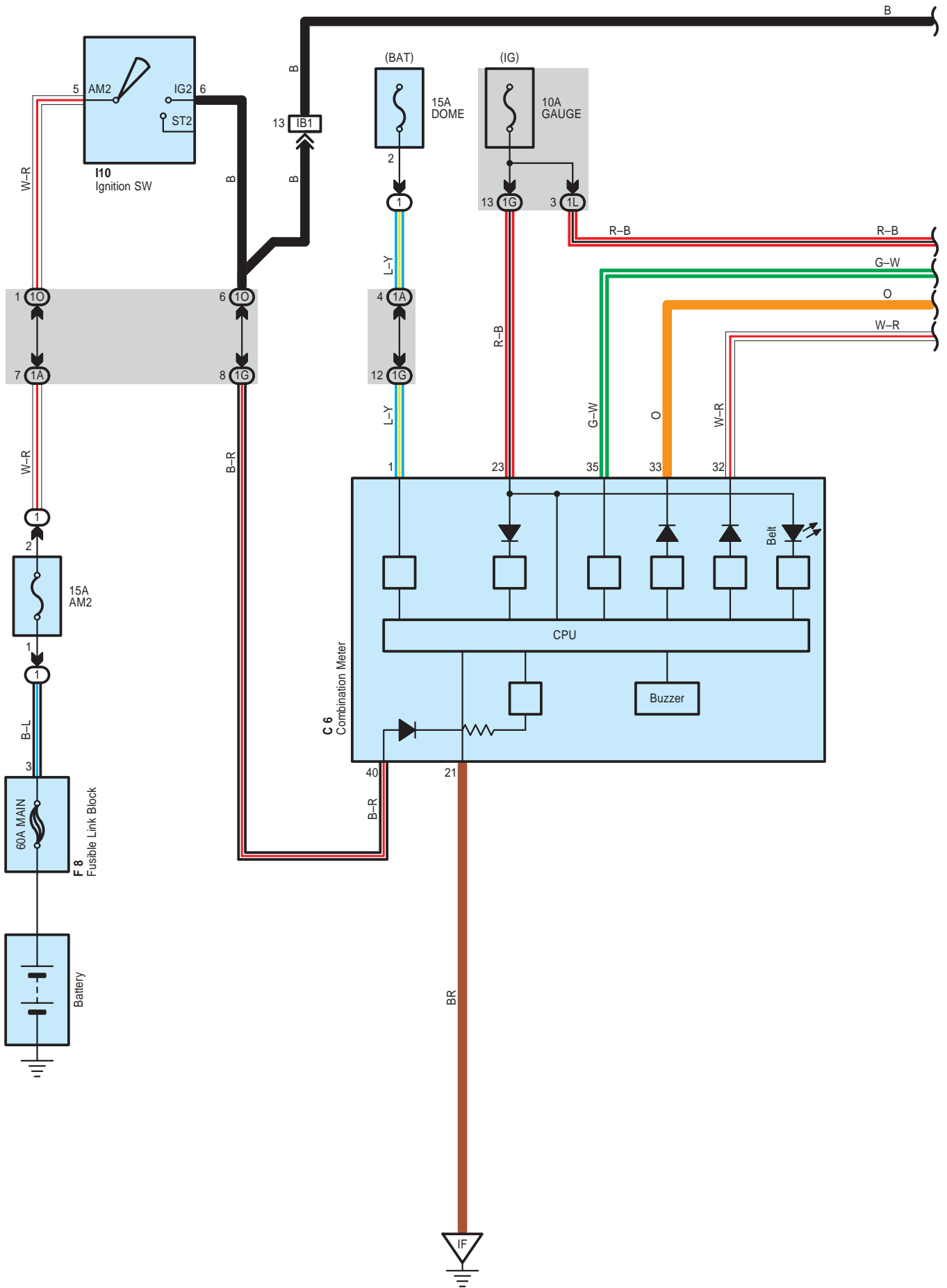
## □ : Connector Joining Wire Harness and Wire Harness

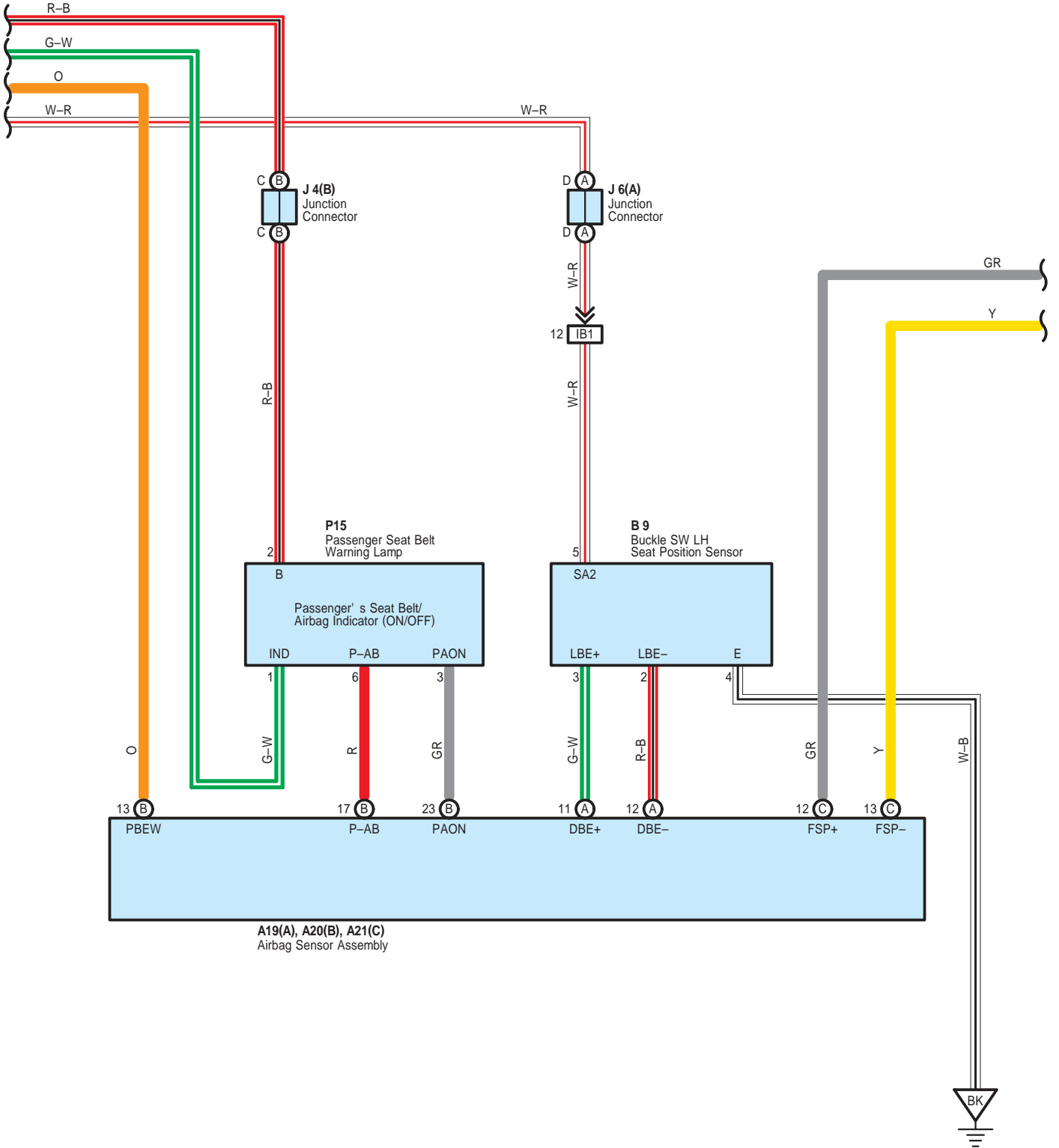
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)         |
|------|----------|--|
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

## ▽ : Ground Points

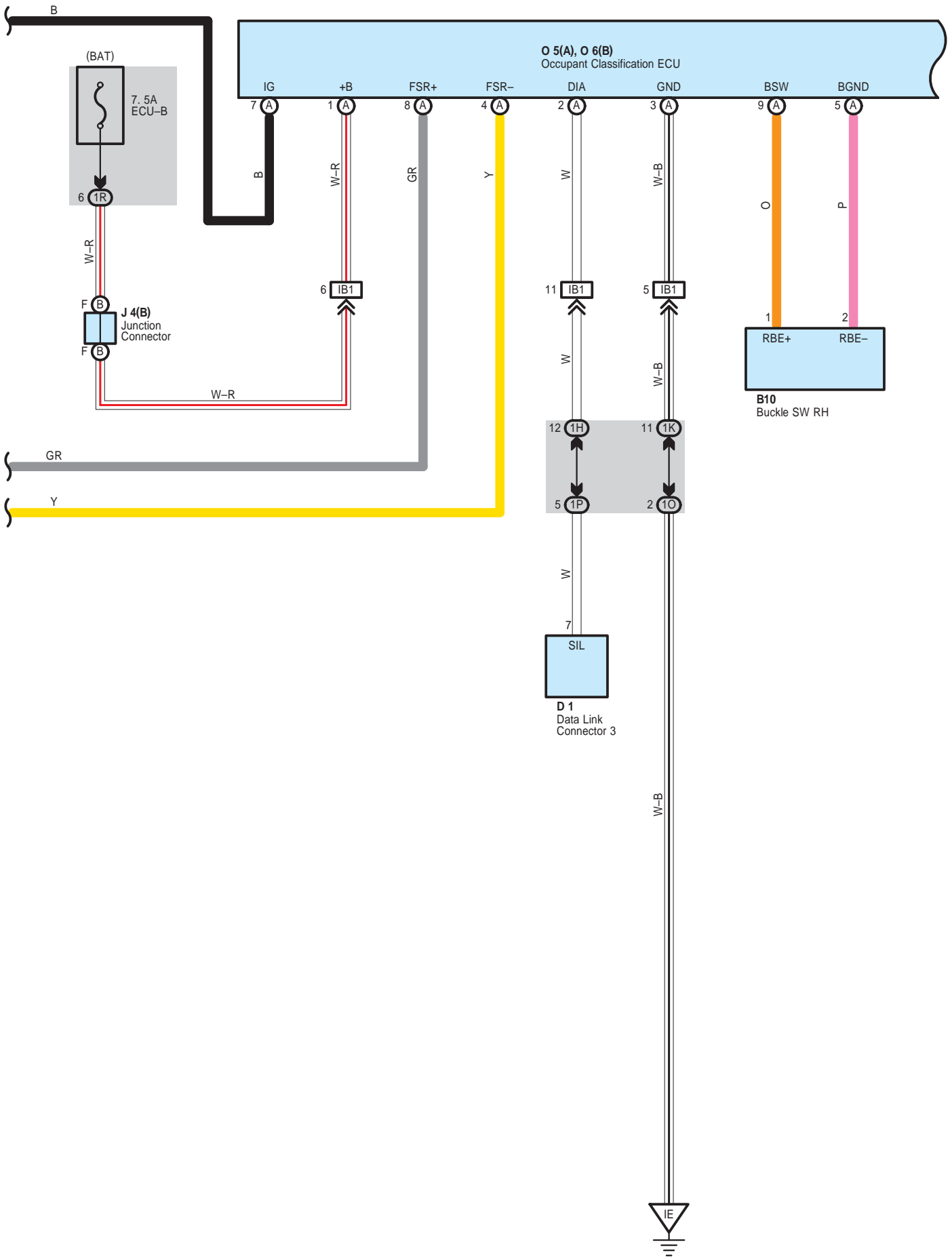
| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |
| IG   | 35       | Right Kick Panel          |

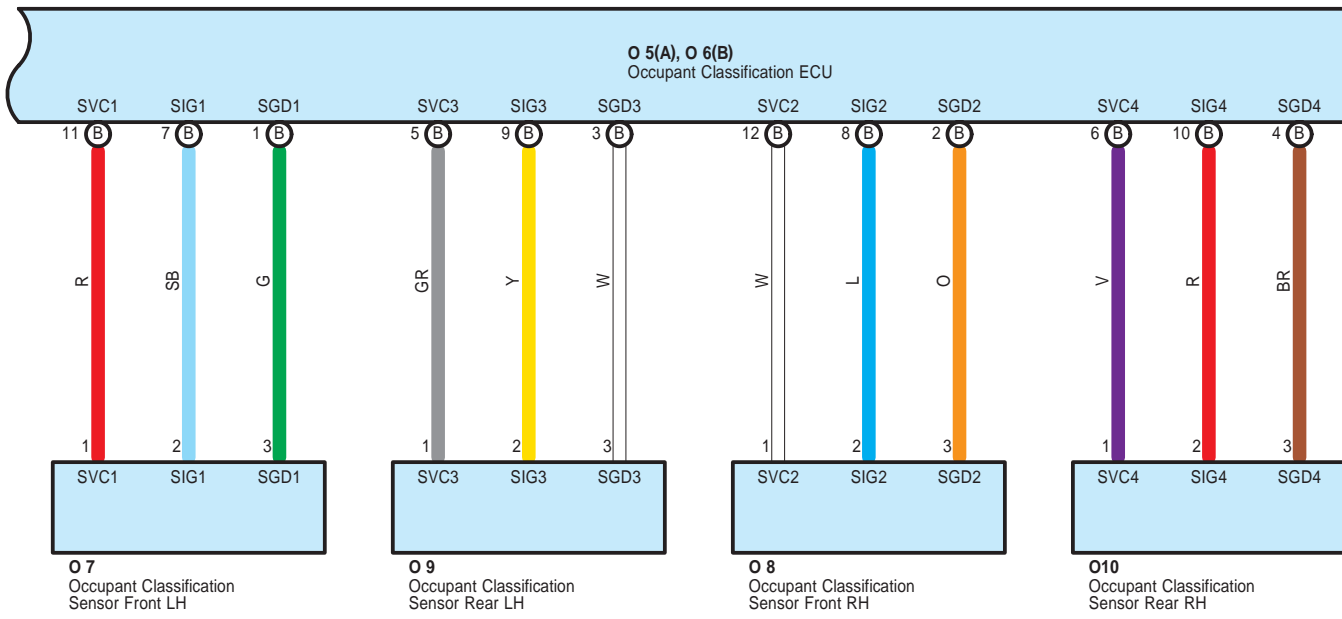
# Seat Belt Warning (From Dec. 2005 Production)





# Seat Belt Warning (From Dec. 2005 Production)





# Seat Belt Warning (From Dec. 2005 Production)

## System Outline

Current is always applied from the DOME fuse to TERMINAL 1 of the combination meter. When the ignition SW is turned to ON position, the current from the GAUGE fuse flows to TERMINAL 23 of the combination meter and flows TERMINAL 2 of the passenger seat belt warning lamp.

### 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 32 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 the occupant classification ECU is installed in the front passenger seat, and determines whether the seat belt is fastened. When not fastened, the signals from the occupant classification ECU is input to TERMINAL 1 of the passenger seat belt warning lamp via the combination meter, and the passenger seat belt warning lamp blinks.

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A19  | A 30     | D1   | 30       | O6   | B 33     |
| A20  | B 30     | F8   | 28       | O7   | 33       |
| A21  | C 30     | I10  | 30       | O8   | 33       |
| B9   | 32       | J4   | B 31     | O9   | 33       |
| B10  | 32       | J6   | A 31     | O10  | 33       |
| C6   | 30       | O5   | A 33     | P15  | 31       |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

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

## □ : Connector Joining Wire Harness and Wire Harness

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)         |
|------|----------|--|
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

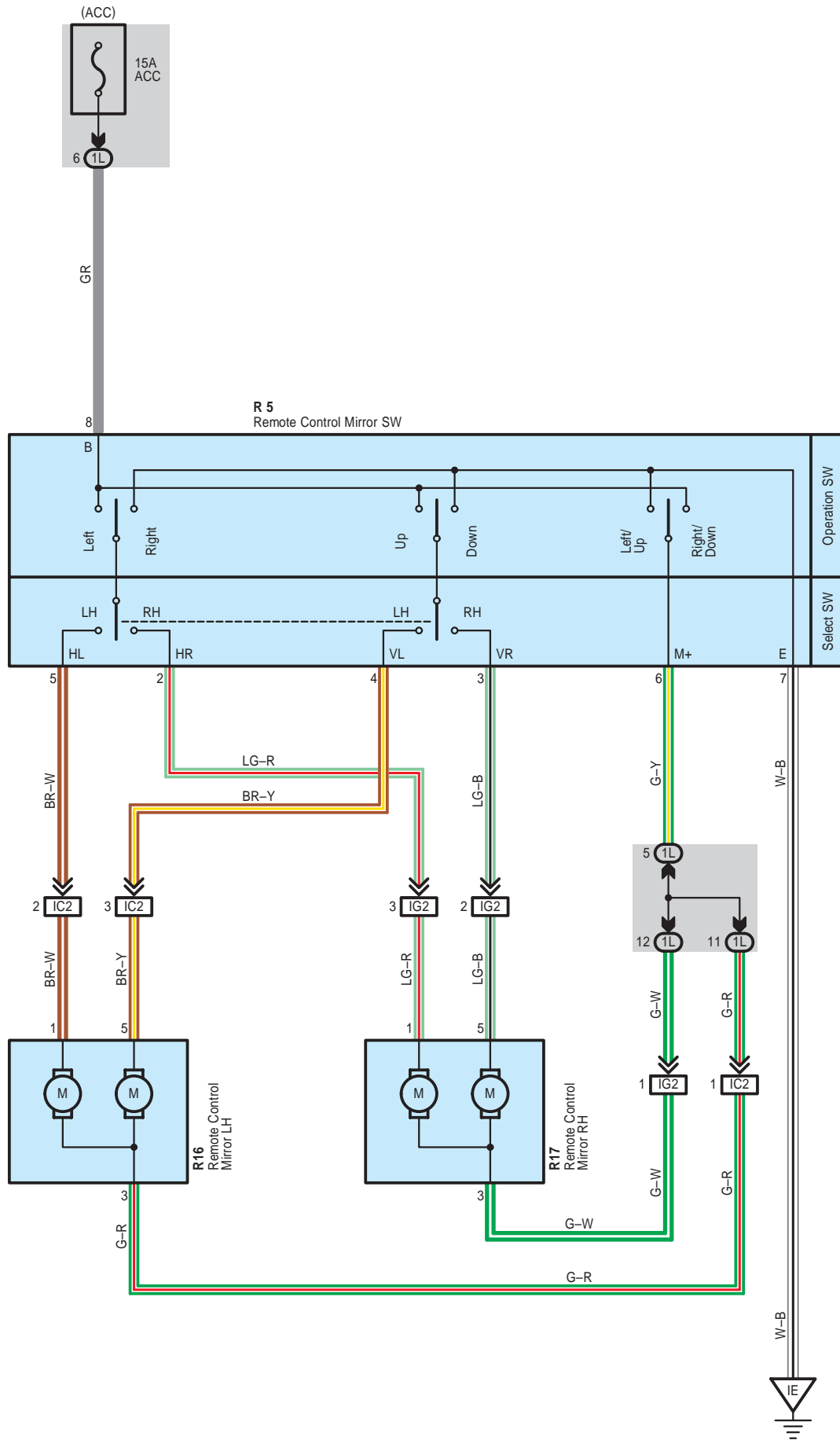
## ▽ : Ground Points

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| BK   | 36       | Rear Quarter Panel Inner RH |





# Remote Control Mirror



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| R5   | 31       | R16  | 33       | R17  | 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) |

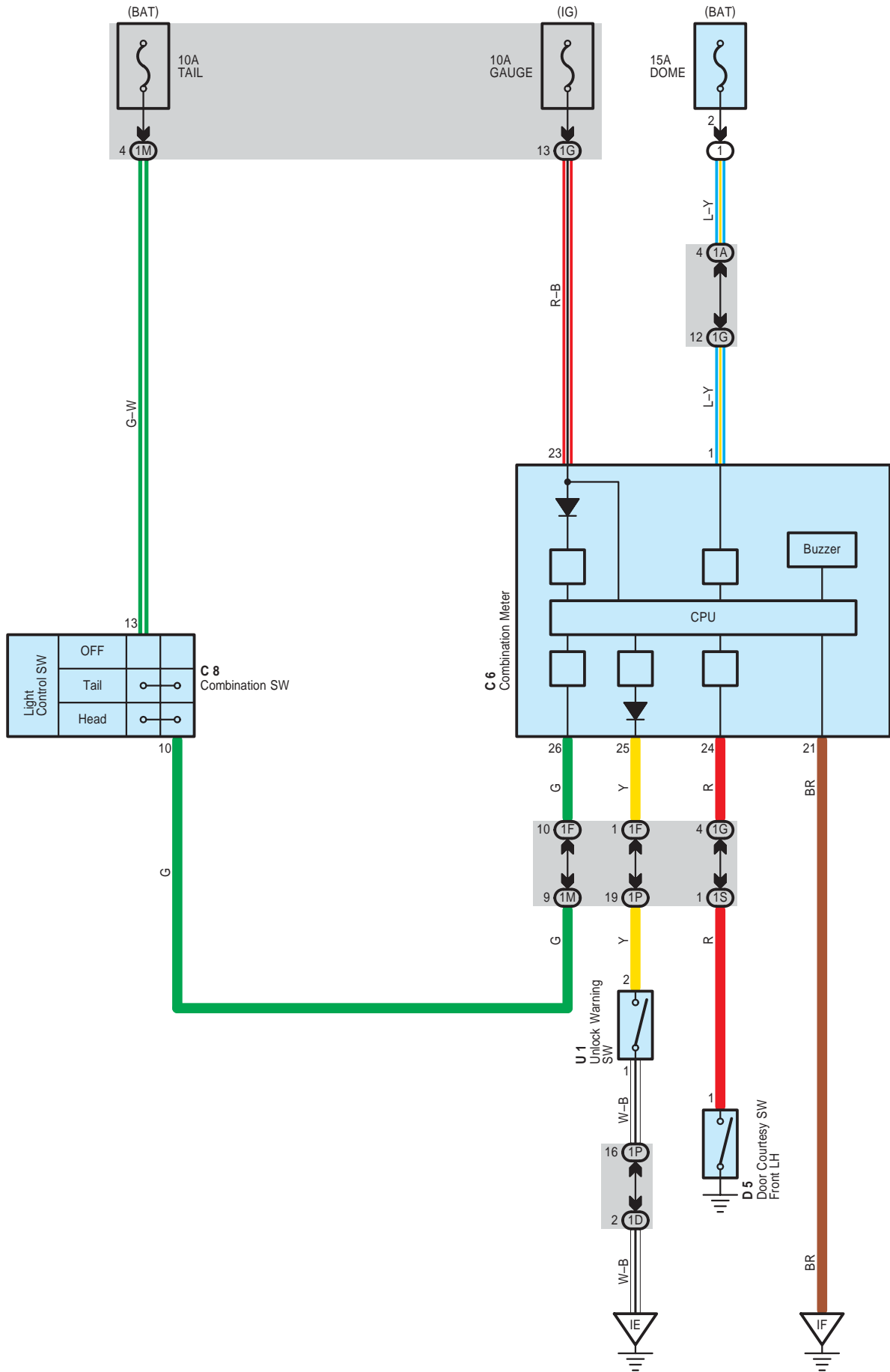
 : **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)      |
|------|----------|---|
| IC2  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)  |
| IG2  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel) |

 : **Ground Points**

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |

# Light Reminder



### System Outline

The current is applied at all times to TERMINAL 1 of the combination meter through the DOME fuse. When the ignition SW is turned to ON position, the current flows to TERMINAL 23 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 26 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, ignition key is not in the key cylinder and the driver's door opened (Door courtesy SW on), the current flows to TERMINAL 23 of the combination meter stops. As a result, the combination meter is activated and current flows from TERMINAL 1 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 |
|------|----------|------|----------|------|----------|
| C6   | 30       | D5   | 32       |      |          |
| C8   | 30       | U1   | 31       |      |          |

### ○ : Relay Blocks

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

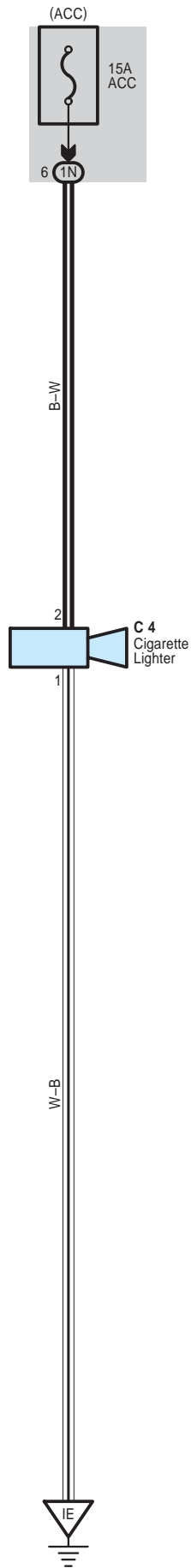
### ○ : Junction Block and Wire Harness Connector

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

### ▽ : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IE   | 35       | Left Kick Panel           |
| IF   | 35       | Instrument Panel Brace LH |

# Cigarette Lighter



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 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| C4   | 30       |      |          |      |          |

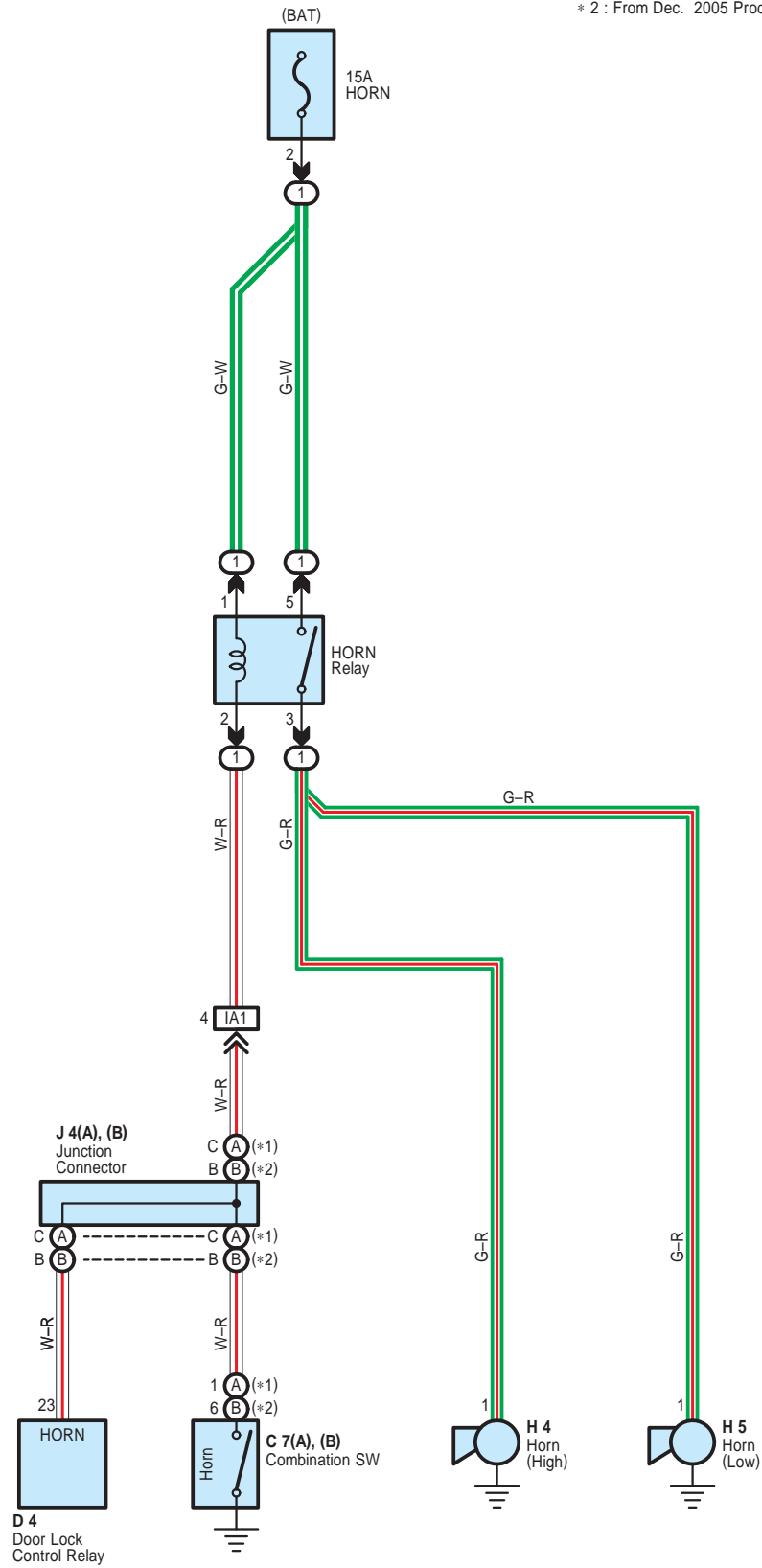
 : **Junction Block and Wire Harness Connector**

| 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 |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |

\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



: **Parts Location**

| Code |   | See Page | Code |    | See Page | Code |    | See Page |
|------|---|----------|------|----|----------|------|----|----------|
| C7   | A | 30       | H4   | 28 | J4       | B    | 31 |          |
|      | B | 30       | H5   | 28 |          |      |    |          |
| D4   |   | 30       | J4   | A  | 31       |      |    |          |

: **Relay Blocks**

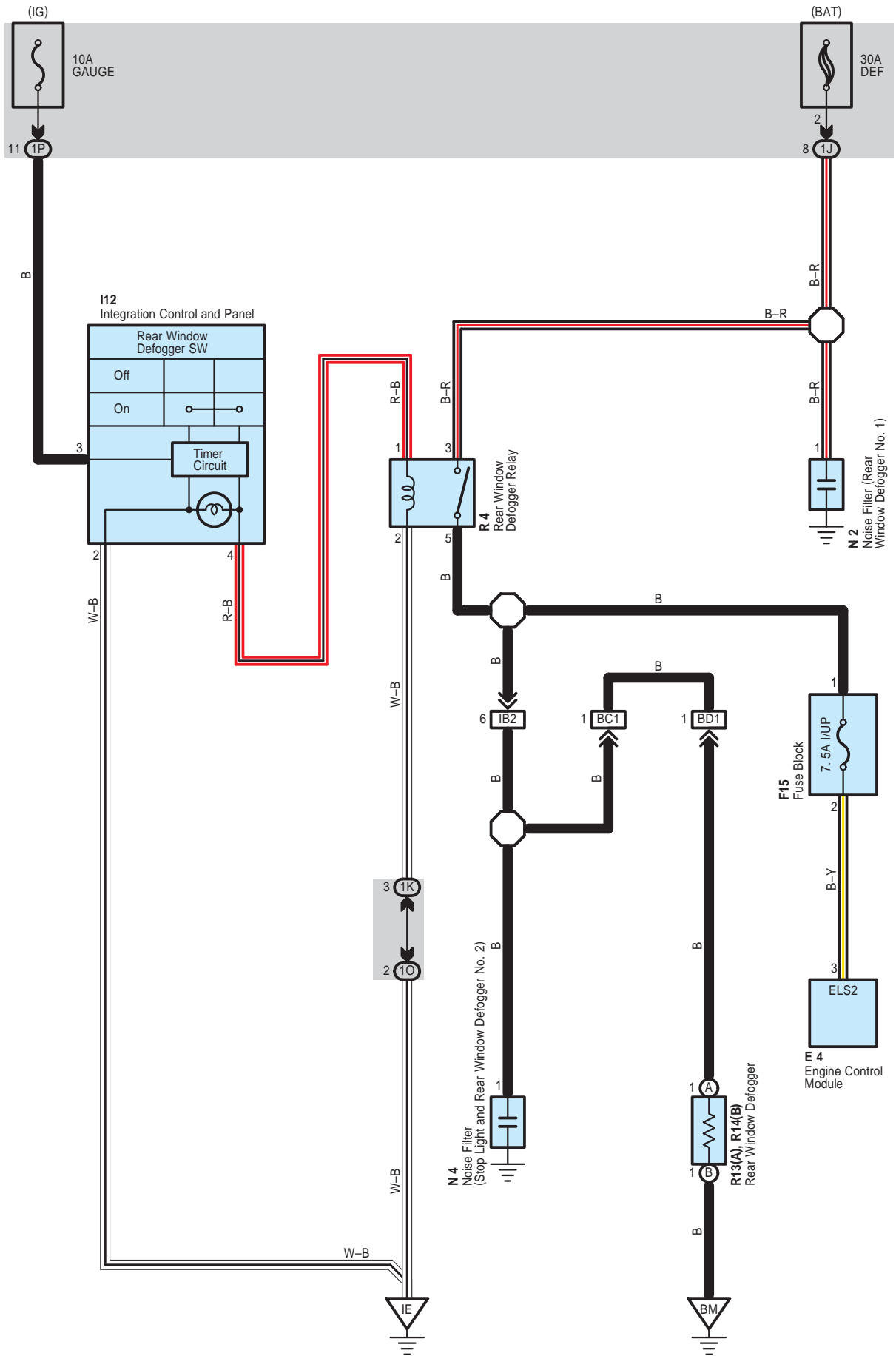
| Code | See Page | Relay Blocks (Relay Block Location)       |
|------|----------|---|
| 1    | 22       | Engine Room R/B (Engine Compartment Left) |

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

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |



# Rear Window Defogger



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| E4   | 30       | N2   | 31       | R13  | A 33     |
| F15  | 30       | N4   | 33       | R14  | B 33     |
| I12  | 30       | R4   | 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) |
| 1K   |          |   |
| 1O   |          |   |
| 1P   |          |   |

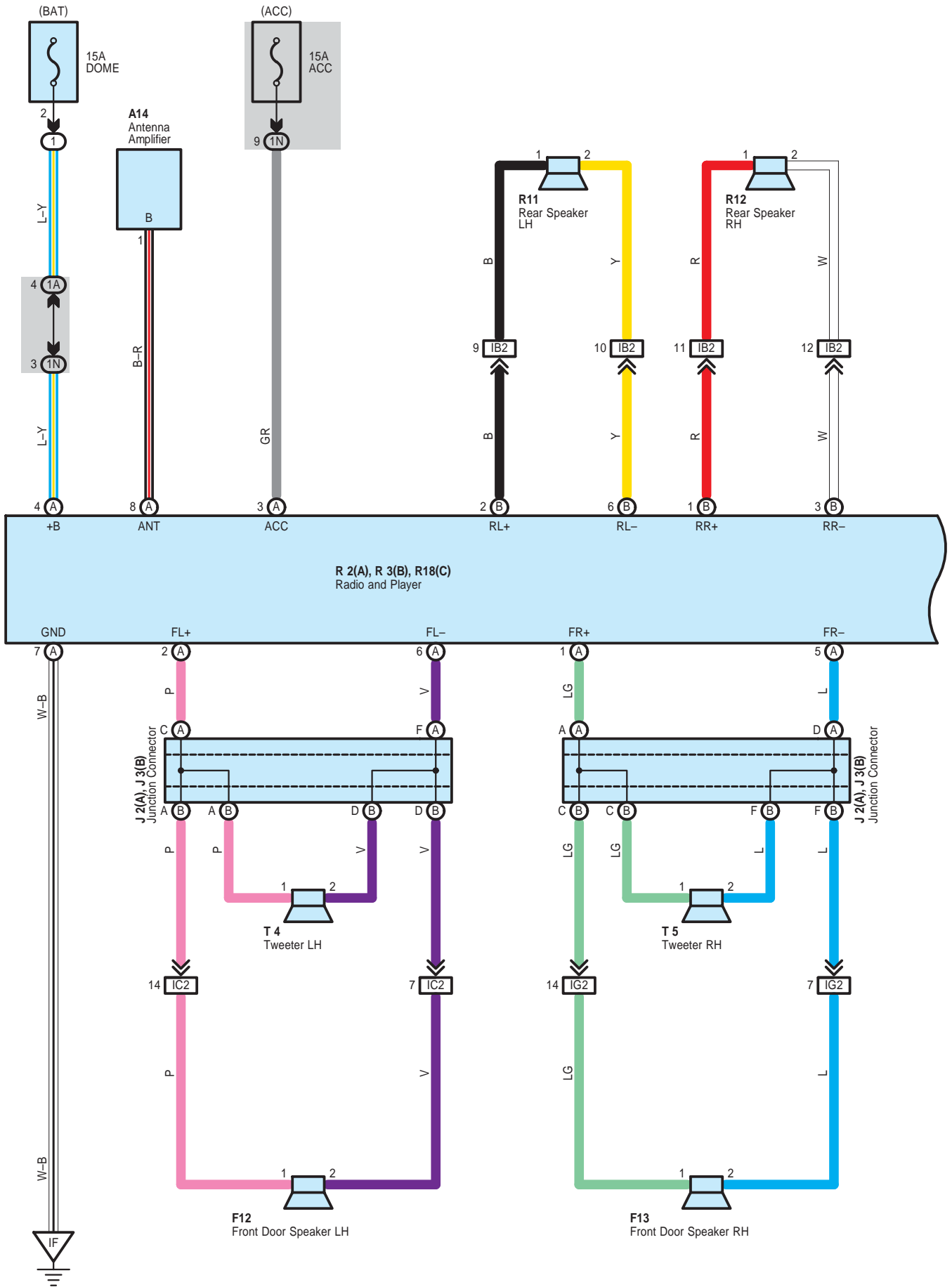
 : **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)              |
|------|----------|---|
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)      |
| BC1  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar)     |
| BD1  | 36       | Back Door No.1 Wire and Rear Window No.1 Wire (Right Side of Back Door) |

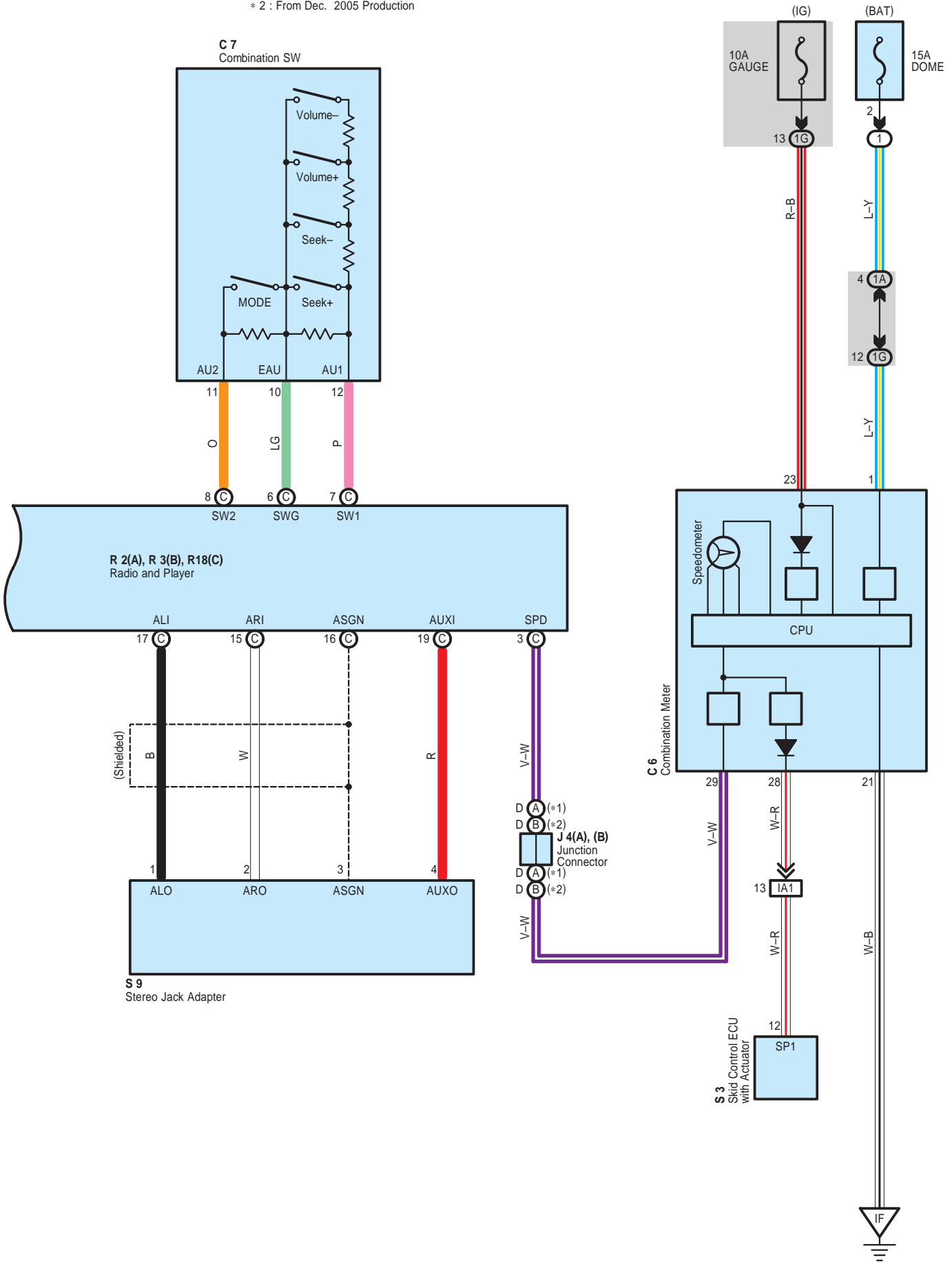
 : **Ground Points**

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |
| BM   | 36       | Back Door LH           |

# Audio System



\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



# Audio System

## ○ : Parts Location

| Code | See Page | Code   | See Page | Code | See Page |
|------|----------|--------|----------|------|----------|
| A14  | 30       | J3     | B 31     | R12  | 33       |
| C6   | 30       | J4     | A 31     | R18  | C 31     |
| C7   | 30       |        | B 31     | S3   | 29       |
| F12  | 32       | R2     | A 31     | S9   | 31       |
| F13  | 32       | R3     | B 31     | T4   | 31       |
| J2   | A 31     | R11 33 |          | T5   | 31       |

## ○ : Relay Blocks

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

## ○ : Junction Block and Wire Harness Connector

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

## □ : Connector Joining Wire Harness and Wire Harness

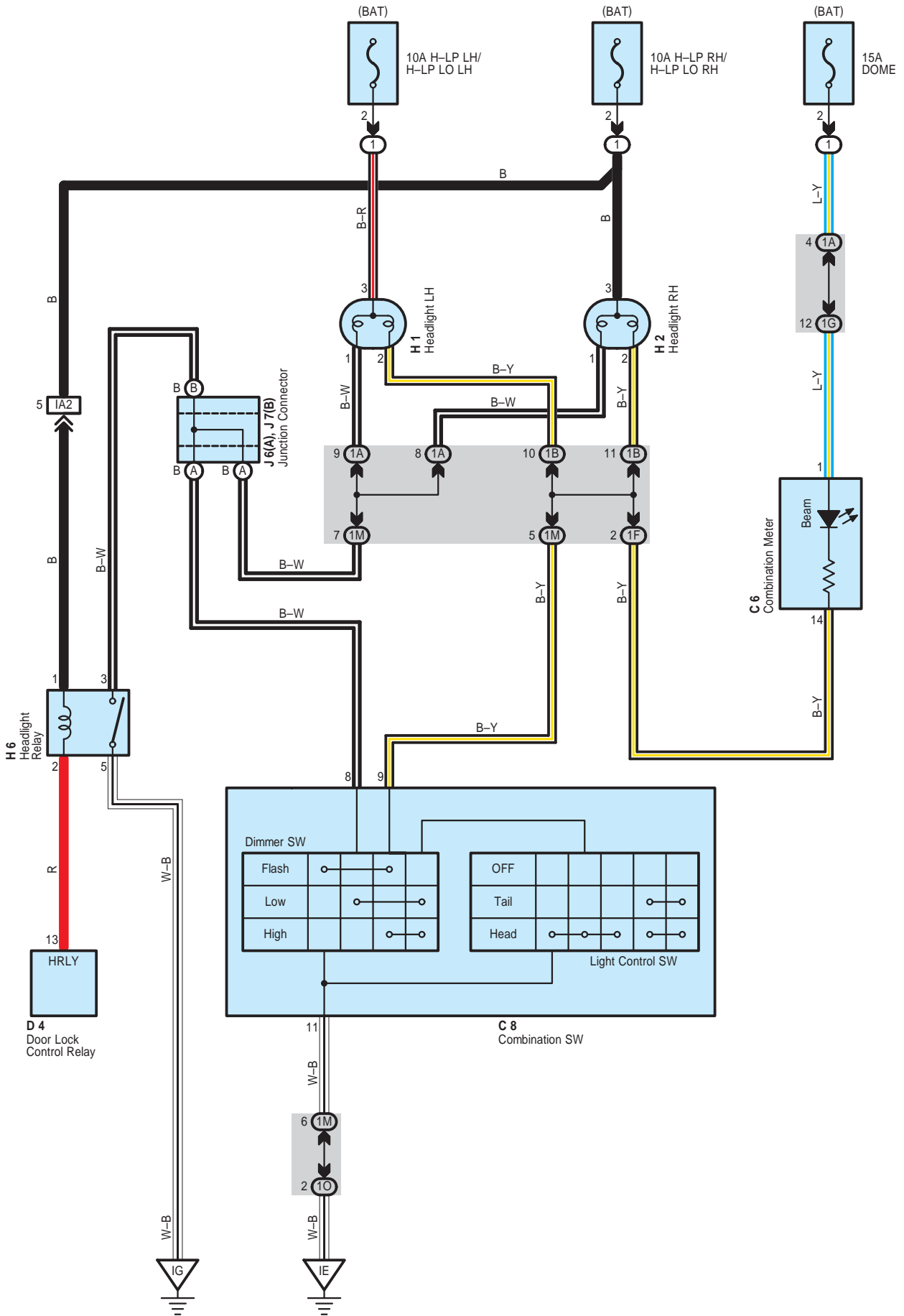
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IC2  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)                |
| IG2  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)               |

## ▽ : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| IF   | 35       | Instrument Panel Brace LH |



# Headlight



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| C6   | 30       | H1   | 28       | J6   | A 31     |
| C8   | 30       | H2   | 28       | J7   | B 31     |
| D4   | 30       | H6   | 30       |      |          |

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

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

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

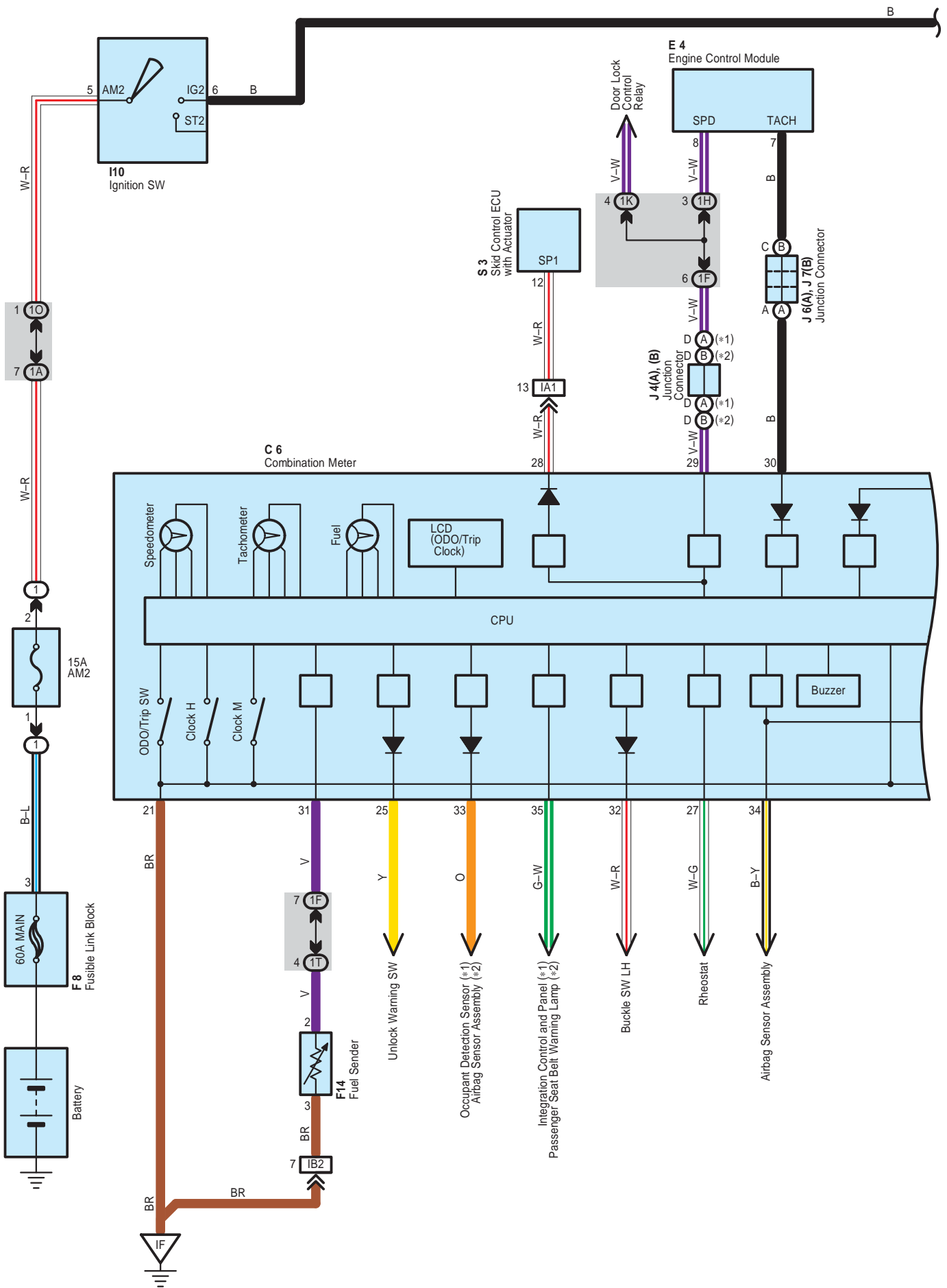
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA2  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

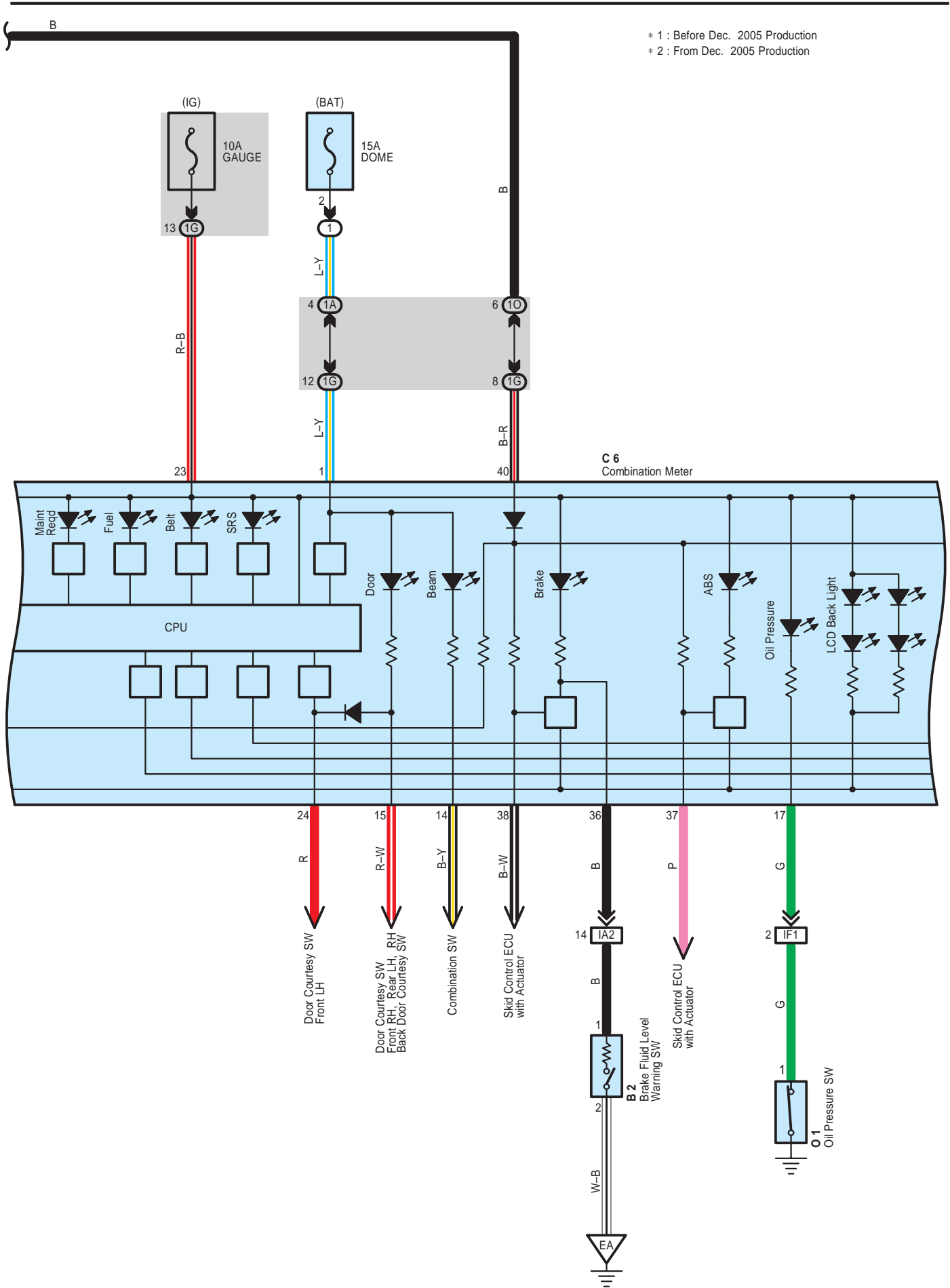
 : **Ground Points**

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |
| IG   | 35       | Right Kick Panel       |

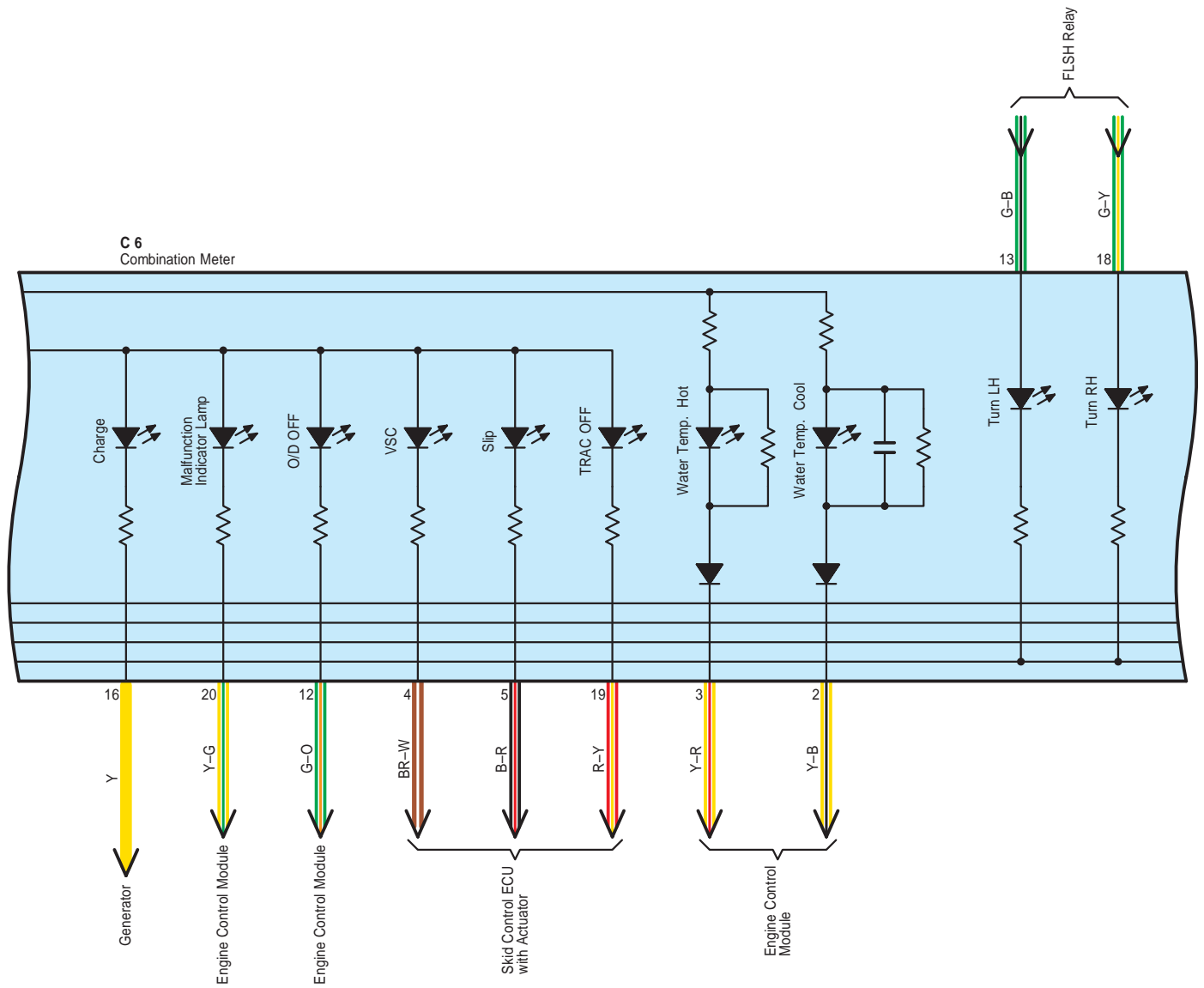


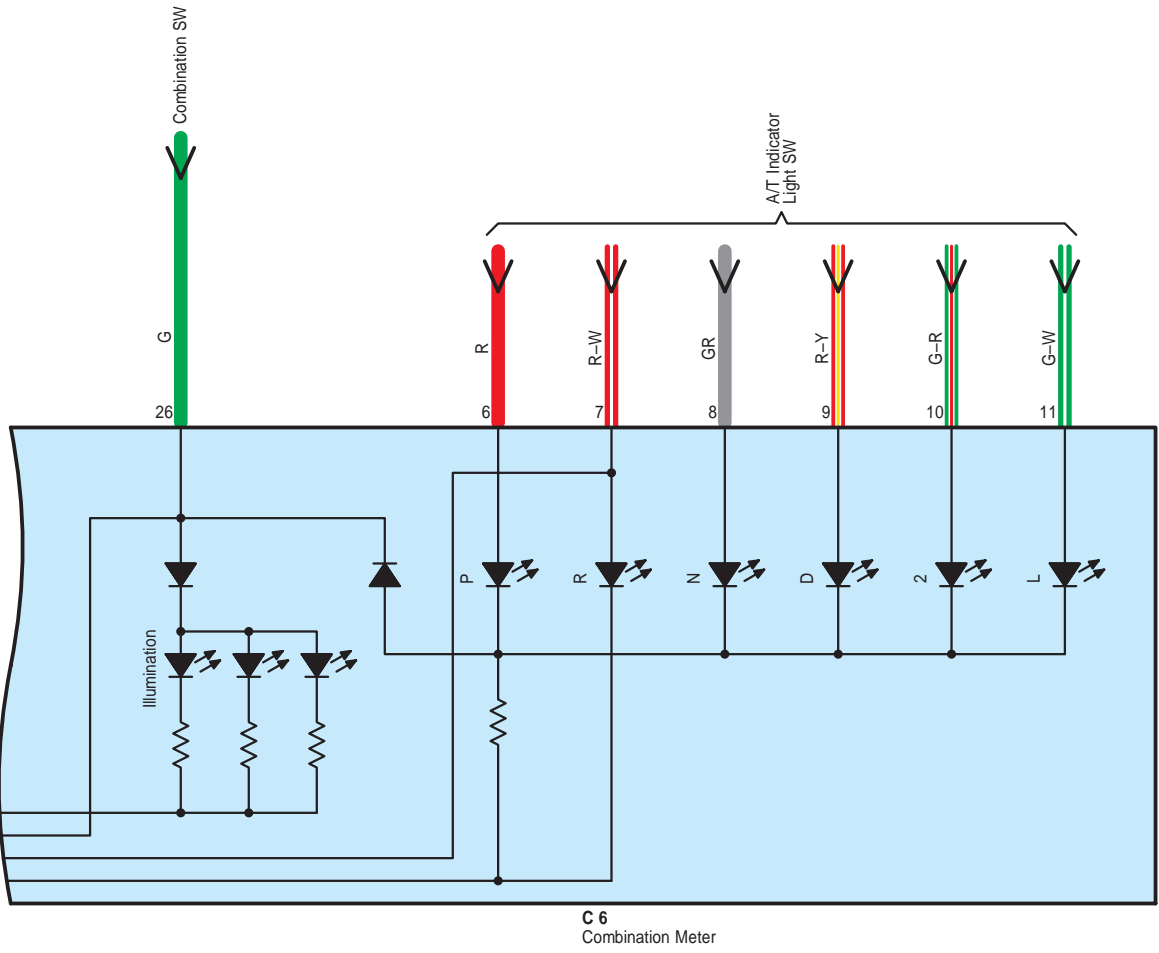
# Combination Meter





# Combination Meter





# Combination Meter

## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| B2   | 28       | F14  | 32       | J6   | A 31     |
| C6   | 30       | I10  | 30       | J7   | B 31     |
| E4   | 30       | J4   | A 31     | O1   | 29       |
| F8   | 28       |      | B 31     | S3   | 29       |

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1A   | 24       | Engine Room Main Wire and 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

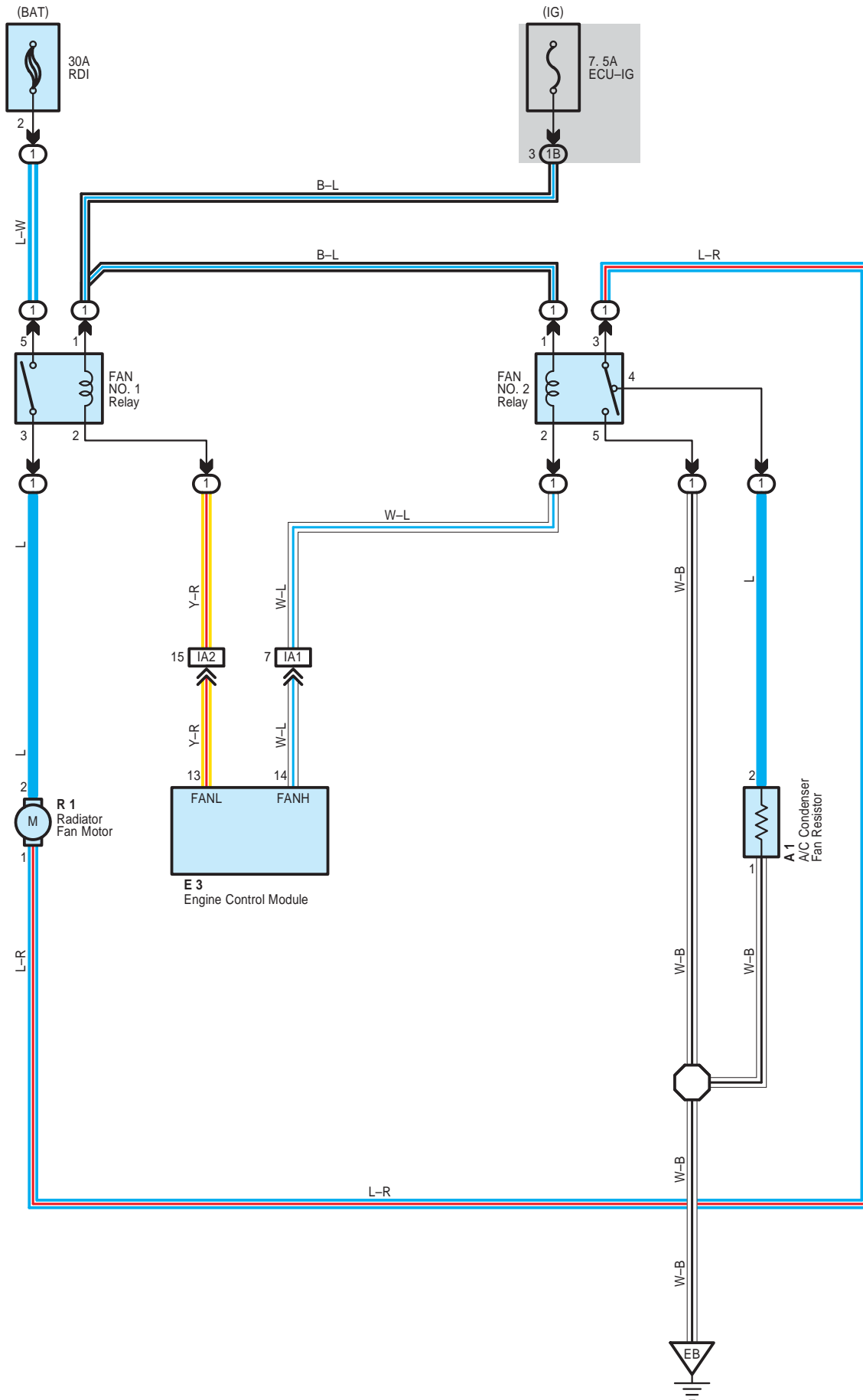
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)            |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |

## : Ground Points

| Code | See Page | Ground Points Location    |
|------|----------|---------------------------|
| EA   | 34       | Front Right Fender Apron  |
| IF   | 35       | Instrument Panel Brace LH |



# Radiator Fan and Condenser Fan



## System Outline

The current is applied at all times through the RDI fuse to TERMINAL 5 of the FAN NO.1 relay. When the ignition SW is turned on, the current flows through the ECU-IG fuse to FAN NO.1 relay (Coil side) to TERMINAL 13 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 14 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 pressure SW (Single) is on or engine control module operated, the FAN NO.1 and NO.2 relay is turned on. As a result, the current flows from the RDI 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       | E3   | 30       | R1   | 29       |

### : Relay Blocks

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

### : Junction Block and Wire Harness Connector

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

### : Connector Joining Wire Harness and Wire Harness

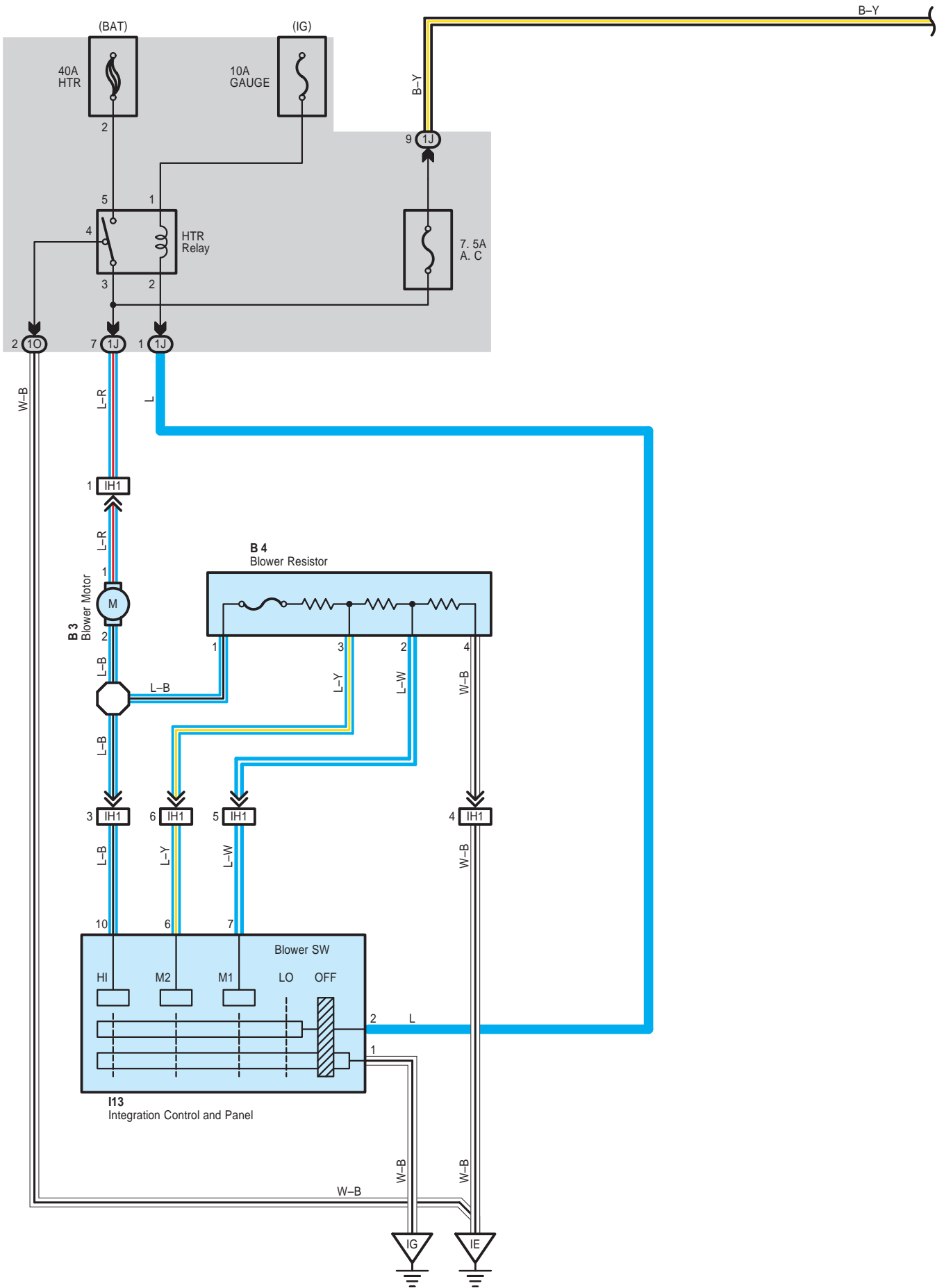
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |

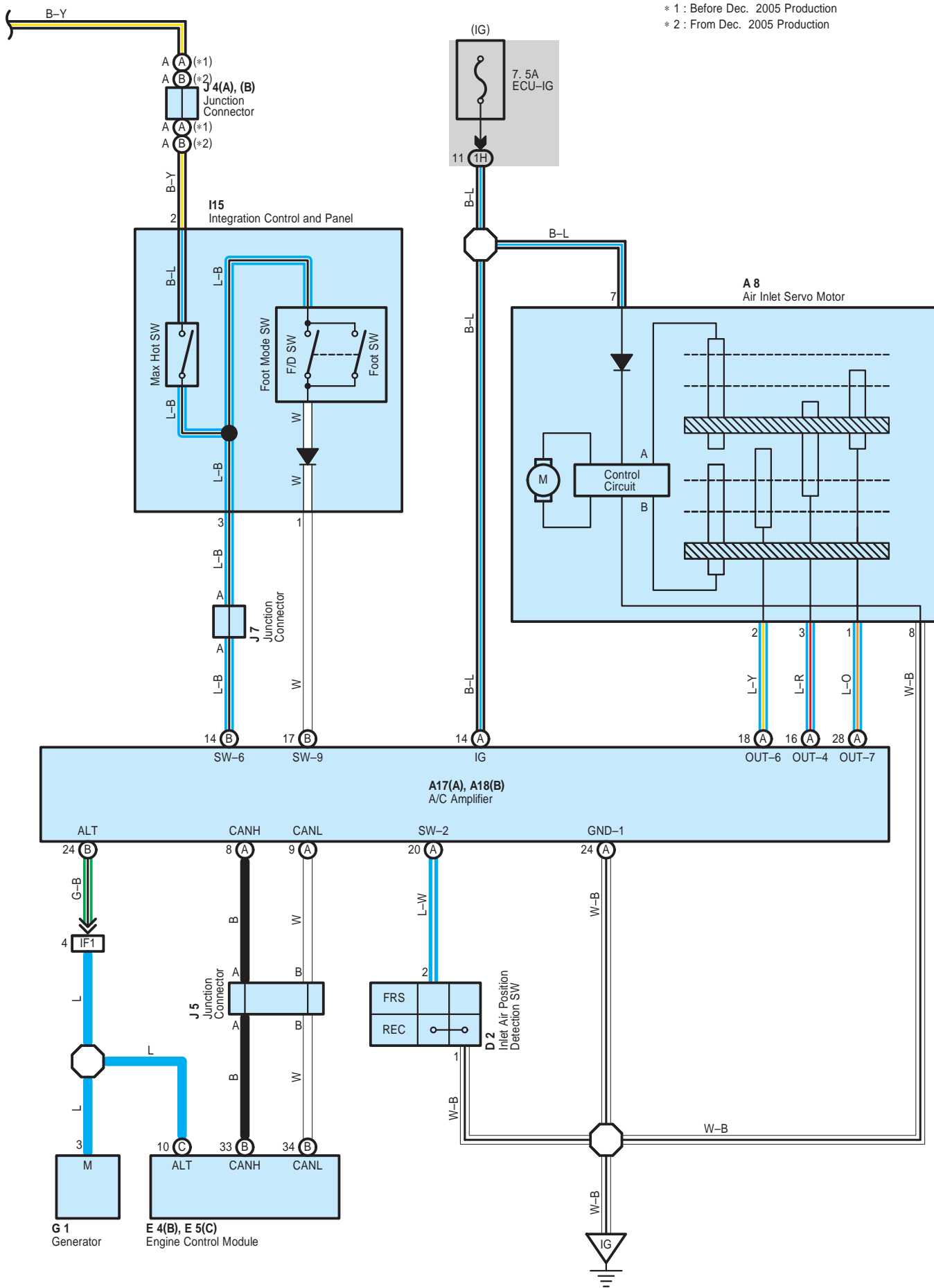
### : Ground Points

| Code | See Page | Ground Points Location  |
|------|----------|-------------------------|
| EB   | 34       | Front Left Fender Apron |



# Two Way Flow Heater





\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production

# 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       | D2   | 30       | I15  | 30       |
| A17  | A 30     | E4   | B 30     | J4   | A 31     |
| A18  | B 30     | E5   | C 30     |      | B 31     |
| B3   | 30       | G1   | 28       | J5   | 31       |
| B4   | 30       | I13  | 30       | J7   | 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)      |
|------|----------|---|
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)    |
| IH1  | 35       | Instrument Panel Wire and A/C Sub Wire (Right Side of A/C Unit) |

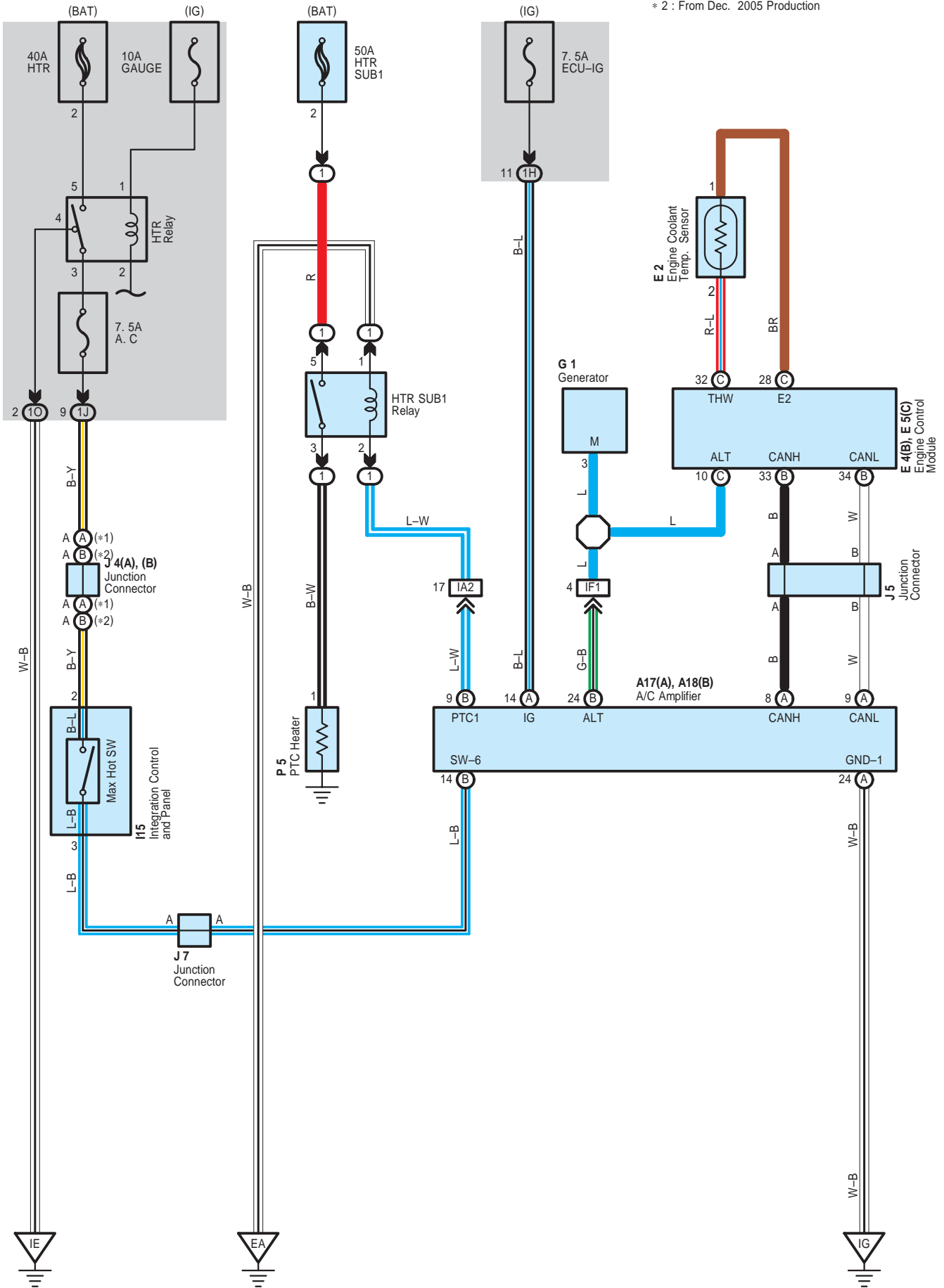
## ▽ : Ground Points

| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| IE   | 35       | Left Kick Panel        |
| IG   | 35       | Right Kick Panel       |



# PTC Heater

\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



### 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       | E5   | C | 30       | J4   | B | 31       |
| A18  | B | 30       | G1   |   | 28       | J5   |   | 31       |
| E2   |   | 28       | I15  |   | 30       | J7   |   | 31       |
| E4   | B | 30       | J4   | A | 31       | P5   |   | 31       |

### ○ : Relay Blocks

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

### ○ : Junction Block and Wire Harness Connector

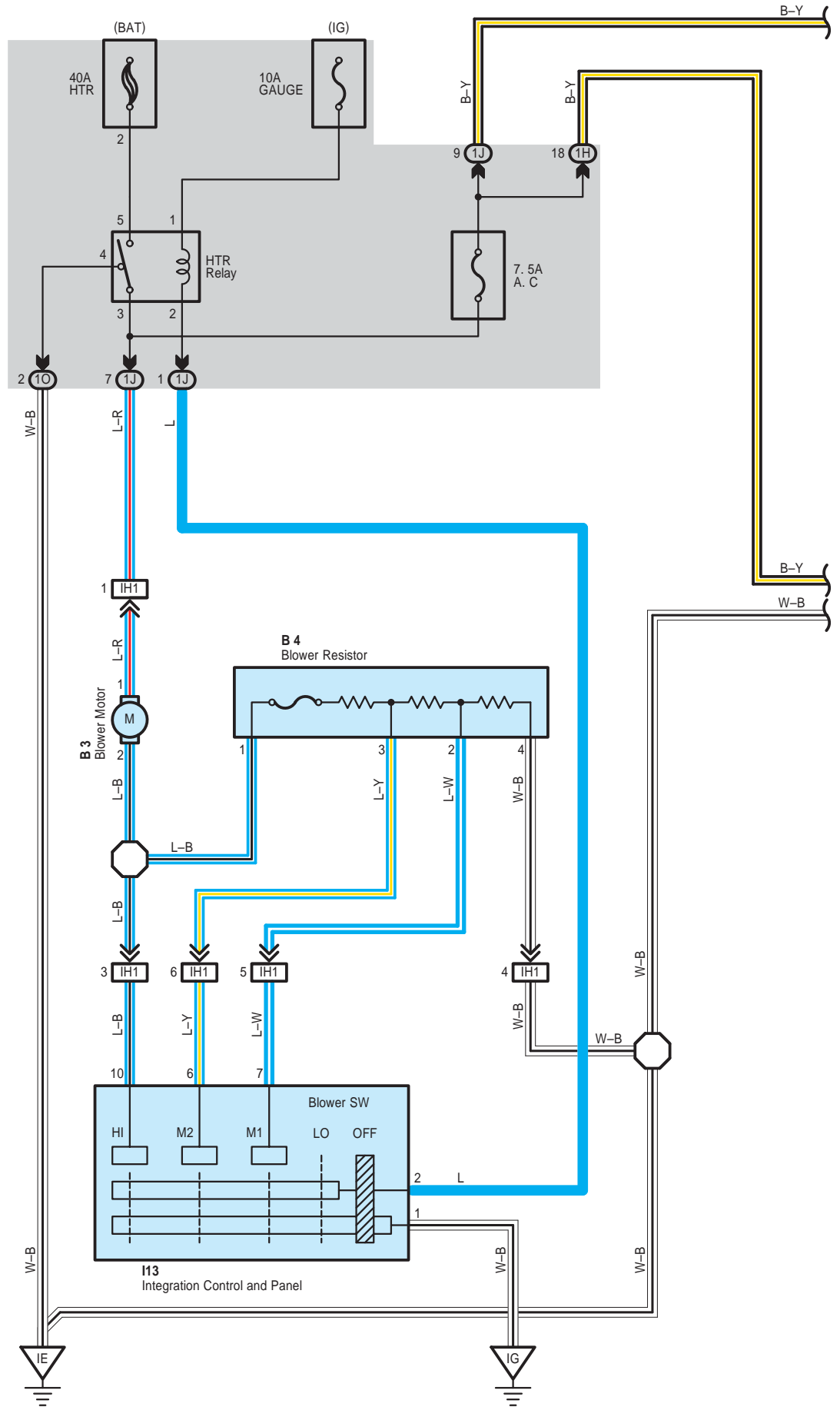
| Code | See Page | Junction Block and Wire Harness (Connector Location)                |
|------|----------|---|
| 1H   | 25       | Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel) |
| 1J   |          |   |
| 1O   |          |   |

### □ : Connector Joining Wire Harness and Wire Harness

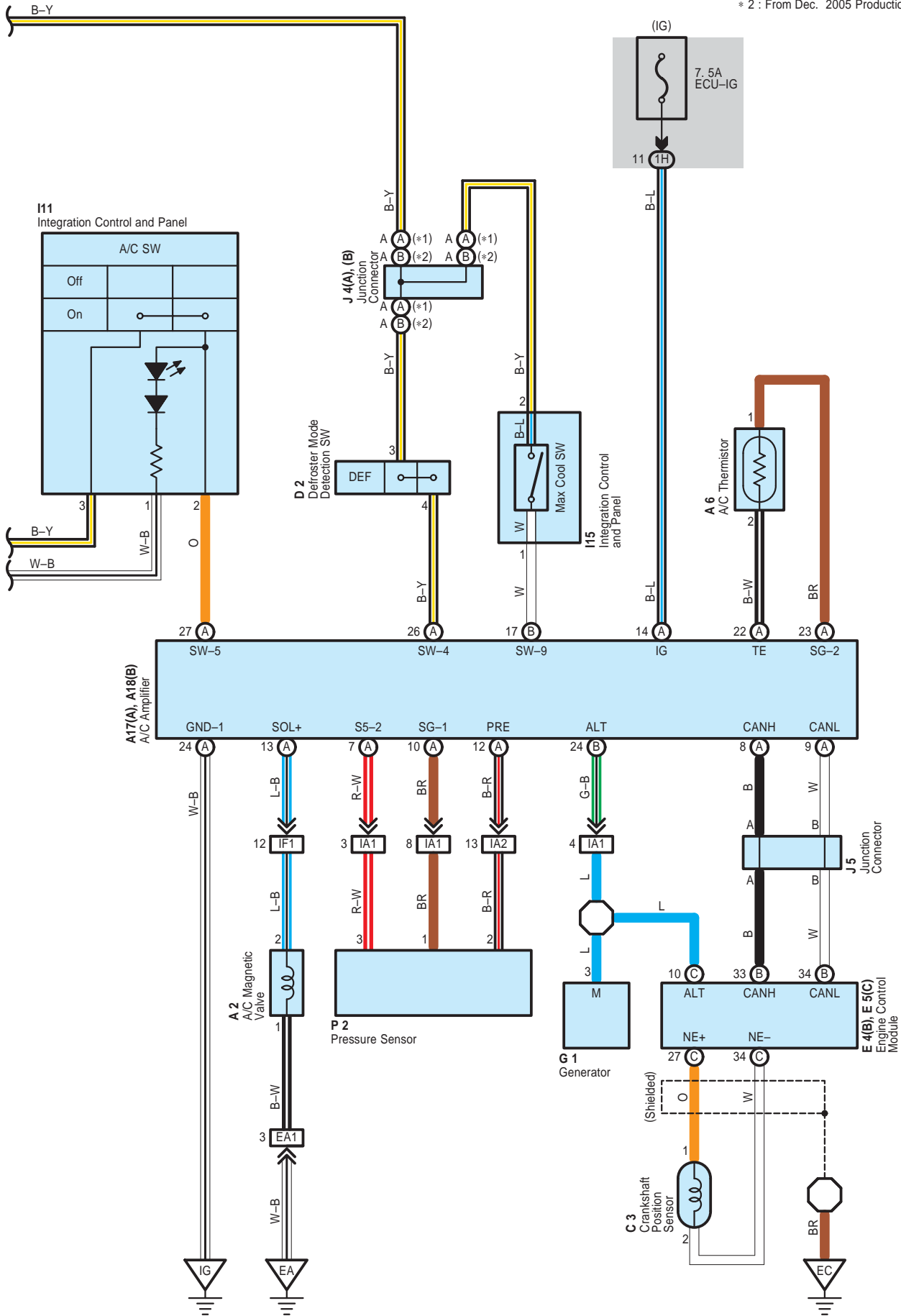
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA2  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |

### ▽ : Ground Points

| Code | See Page | Ground Points Location   |
|------|----------|--------------------------|
| EA   | 34       | Front Right Fender Apron |
| IE   | 35       | Left Kick Panel          |
| IG   | 35       | Right Kick Panel         |



\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production





# 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 2 of the blower SW.

### 1. Heater Blower Motor Operation

#### \* Low speed operation

When the blower SW is moved to LO position, the current flows to TERMINAL 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 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 1 to GROUND. At this time, the blower resistance of the blower resistor is smaller than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, the current 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.

### 2. Air Conditioning Operation

When the blower SW is set on, the current flows from the HTR fuse to the HTR relay (Point side) to the A.C fuse to the TERMINAL 3 of the A/C SW. If the A/C SW is turned on, at this time a signal is input into the A/C amplifier. This activates the A/C amplifier.

### 3. DEF or FOOT & DEF Synchronized Control Function

When the blower SW is on and the heater control lever (Air vent mode control lever) turned to DEF position, it causes A/C to run whether A/C SW is on or not.

## ○ : Parts Location

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A2   | 28       | C3   | 28       | I13  | 30       |
| A6   | 30       | D2   | 30       | I15  | 30       |
| A17  | A 30     | E4   | B 30     | J4   | A 31     |
| A18  | B 30     | E5   | C 30     |      | B 31     |
| B3   | 30       | G1   | 28       | J5   | 31       |
| B4   | 30       | I11  | 30       | P2   | 29       |

## ○ : 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**

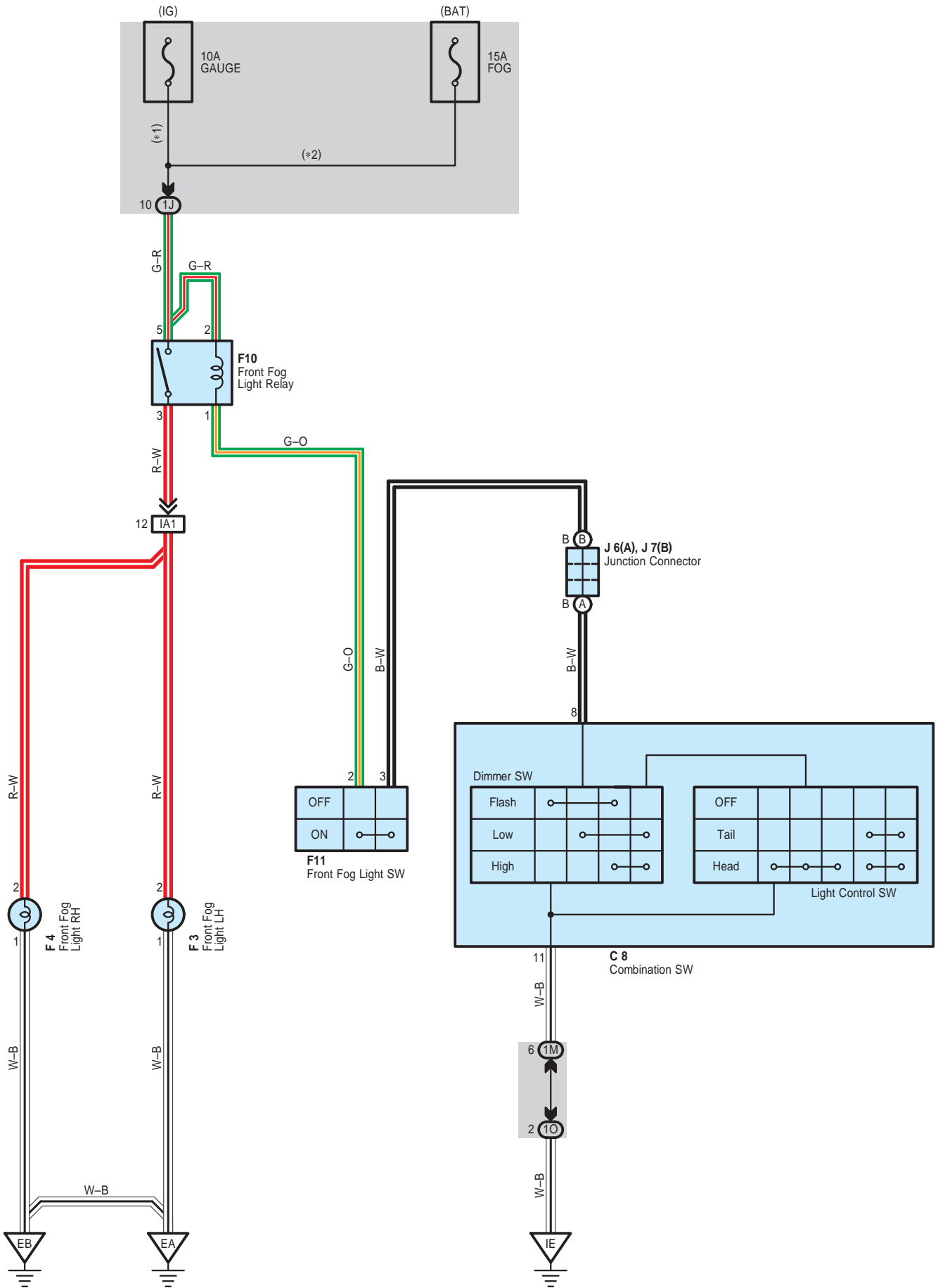
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| EA1  | 34       | Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B)             |
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |
| IA2  |          |   |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)                  |
| IH1  | 35       | Instrument Panel Wire and A/C Sub Wire (Right Side of A/C Unit)               |

 : **Ground Points**

| Code | See Page | Ground Points Location   |
|------|----------|--------------------------|
| EA   | 34       | Front Right Fender Apron |
| EC   | 34       | Engine Block             |
| IE   | 35       | Left Kick Panel          |
| IG   | 35       | Right Kick Panel         |

# Fog Light

\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| C8   | 30       | F10  | 30       | J7   | B 31     |
| F3   | 28       | F11  | 30       |      |          |
| F4   | 28       | J6   | 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   |          |   |

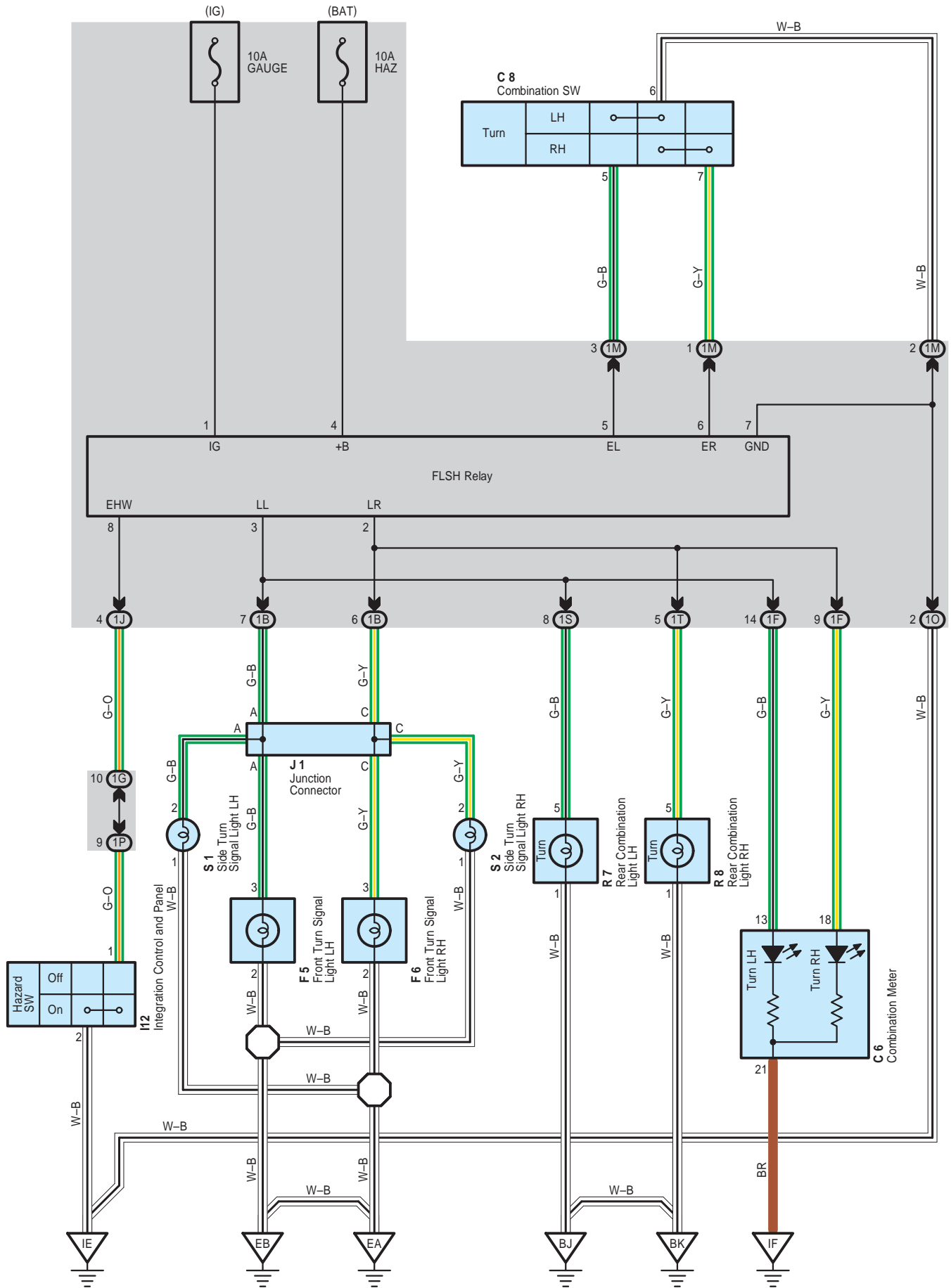
 : **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)                    |
|------|----------|---|
| IA1  | 35       | Engine Room Main Wire and Instrument Panel Wire (Behind the Reinforcement LH) |

 : **Ground Points**

| Code | See Page | Ground Points Location   |
|------|----------|--------------------------|
| EA   | 34       | Front Right Fender Apron |
| EB   | 34       | Front Left Fender Apron  |
| IE   | 35       | Left Kick Panel          |

# Turn Signal and Hazard Warning Light



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| C6   | 30       | I12  | 30       | S1   | 29       |
| C8   | 30       | J1   | 31       | S2   | 29       |
| F5   | 28       | R7   | 33       |      |          |
| F6   | 28       | R8   | 33       |      |          |

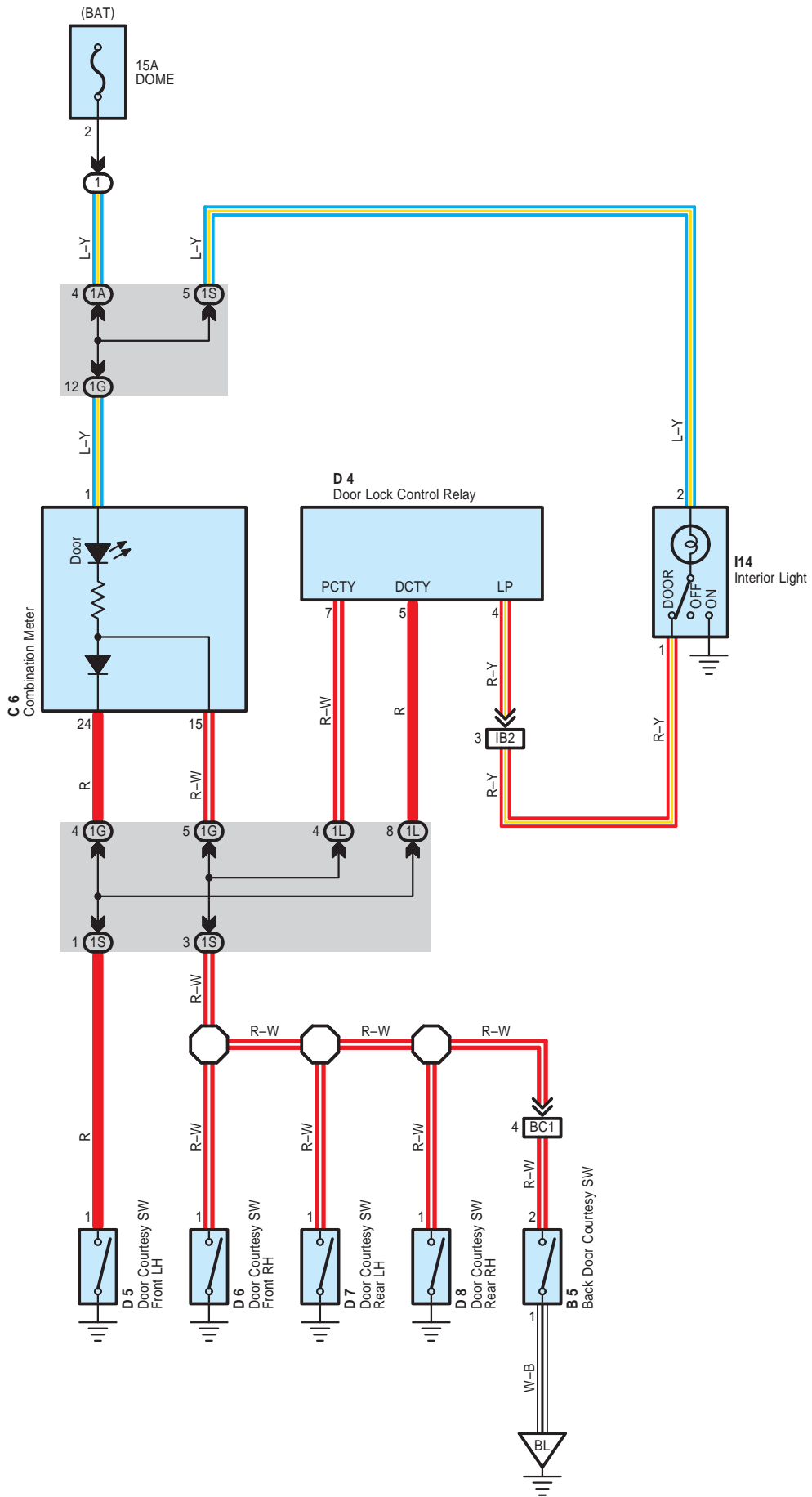
 : **Junction Block and Wire Harness Connector**

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

 : **Ground Points**

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| EA   | 34       | Front Right Fender Apron    |
| EB   | 34       | Front Left Fender Apron     |
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| BJ   | 36       | Rear Quarter Panel Inner LH |
| BK   | 36       | Rear Quarter Panel Inner RH |

# Interior Light



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| B5   | 32       | D5   | 32       | D8   | 32       |
| C6   | 30       | D6   | 32       | I14  | 32       |
| D4   | 30       | D7   | 32       |      |          |

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

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

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

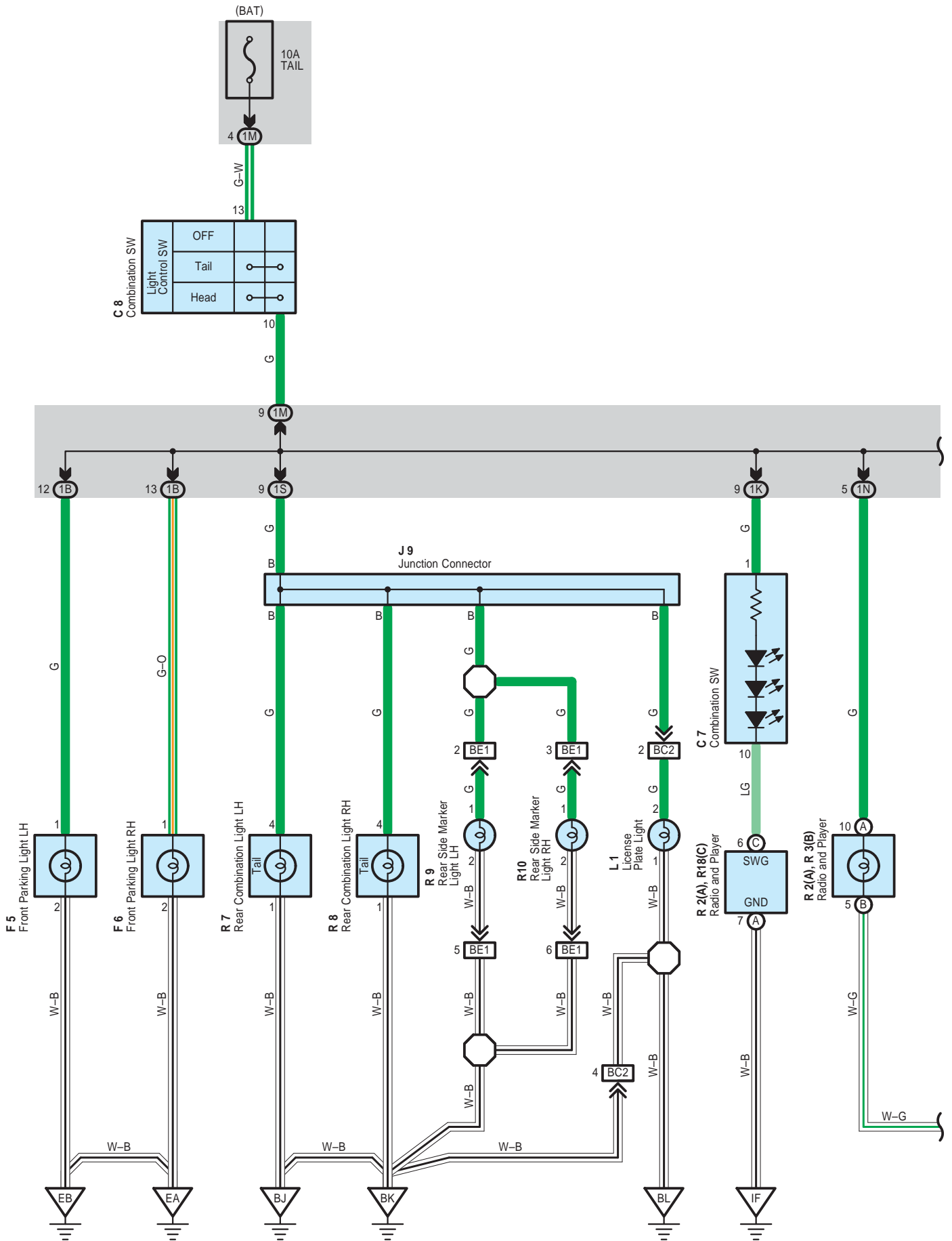
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)          |
|------|----------|---|
| IB2  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)  |
| BC1  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar) |

 : **Ground Points**

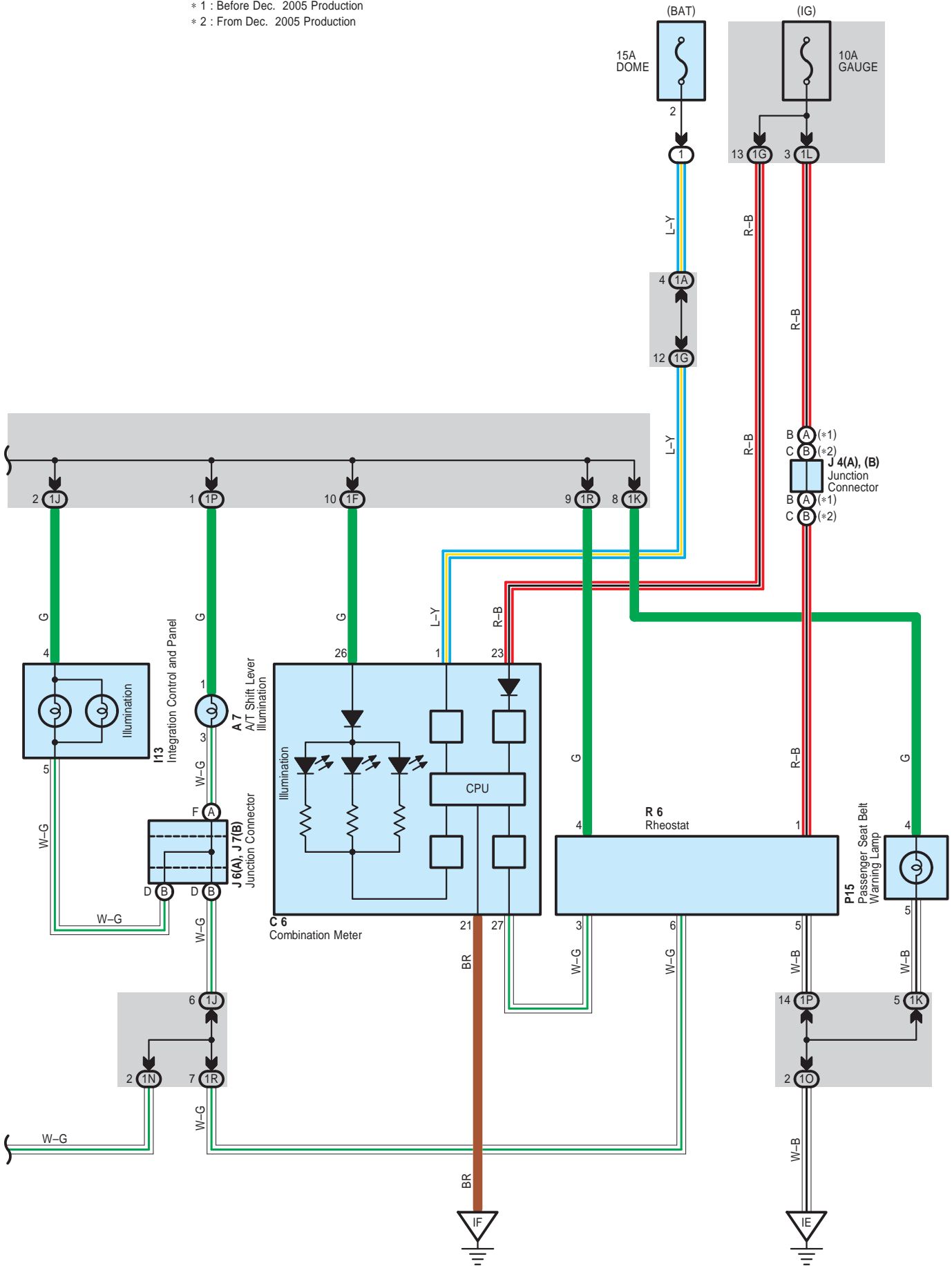
| Code | See Page | Ground Points Location |
|------|----------|------------------------|
| BL   | 36       | Back Door Center       |



# Taillight and Illumination



\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



# Taillight and Illumination

## : Parts Location

| Code | See Page | Code | See Page | Code | See Page |    |
|------|----------|------|----------|------|----------|----|
| A7   | 30       | J4   | B        | 31   | R6       | 31 |
| C6   | 30       | J6   | A        | 31   | R7       | 33 |
| C7   | 30       | J7   | B        | 31   | R8       | 33 |
| C8   | 30       | J9   |          | 32   | R9       | 33 |
| F5   | 28       | L1   |          | 32   | R10      | 33 |
| F6   | 28       | P15  |          | 31   | R18      | 31 |
| I13  | 30       | R2   | A        | 31   |          |    |
| J4   | A        | R3   | B        | 31   |          |    |

## : Relay Blocks

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

## : Junction Block and Wire Harness Connector

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

## : Connector Joining Wire Harness and Wire Harness

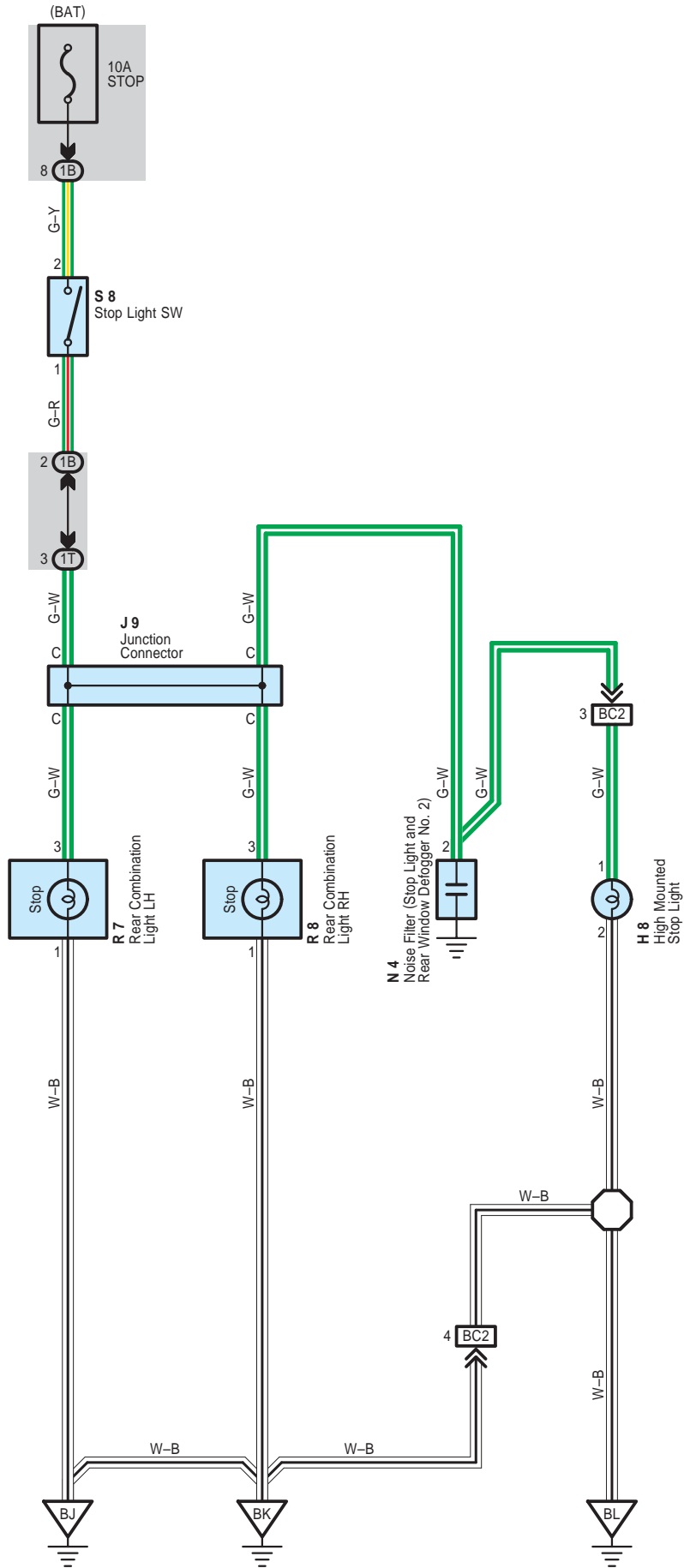
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)          |
|------|----------|---|
| BC2  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar) |
| BE1  | 36       | Floor Wire and Lamp Wire (Back Panel Center)                        |

## : Ground Points

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| EA   | 34       | Front Right Fender Apron    |
| EB   | 34       | Front Left Fender Apron     |
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| BJ   | 36       | Rear Quarter Panel Inner LH |
| BK   | 36       | Rear Quarter Panel Inner RH |
| BL   | 36       | Back Door Center            |



# Stop Light



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| H8   | 32       | N4   | 33       | R8   | 33       |
| J9   | 32       | R7   | 33       | S8   | 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) |
| 1T   | 24       | Floor Wire and Instrument Panel J/B (Lower Finish Panel)            |

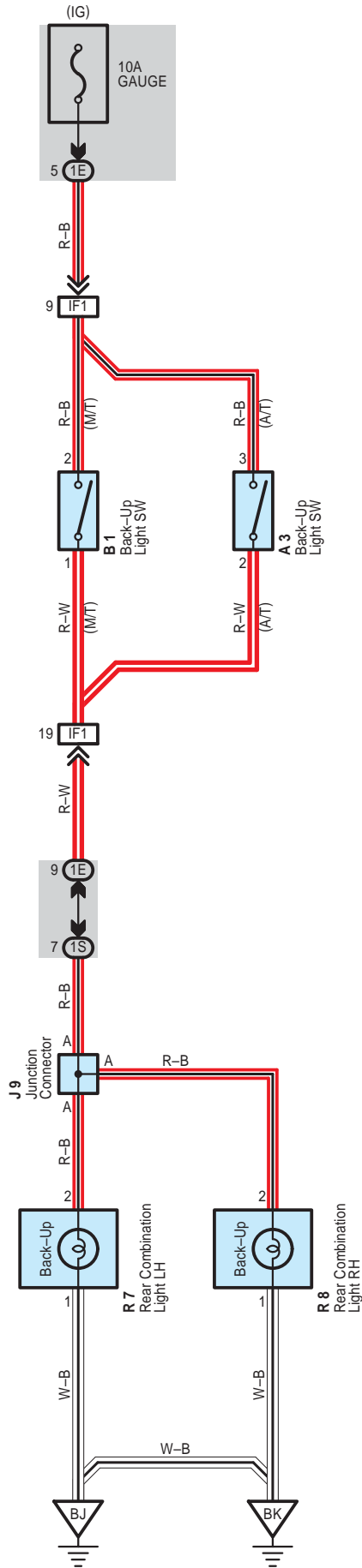
 : **Connector Joining Wire Harness and Wire Harness**

| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)          |
|------|----------|---|
| BC2  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar) |

 : **Ground Points**

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| BJ   | 36       | Rear Quarter Panel Inner LH |
| BK   | 36       | Rear Quarter Panel Inner RH |
| BL   | 36       | Back Door Center            |

# Back-Up Light



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| A3   | 28       | J9   | 32       | R8   | 33       |
| B1   | 28       | 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**

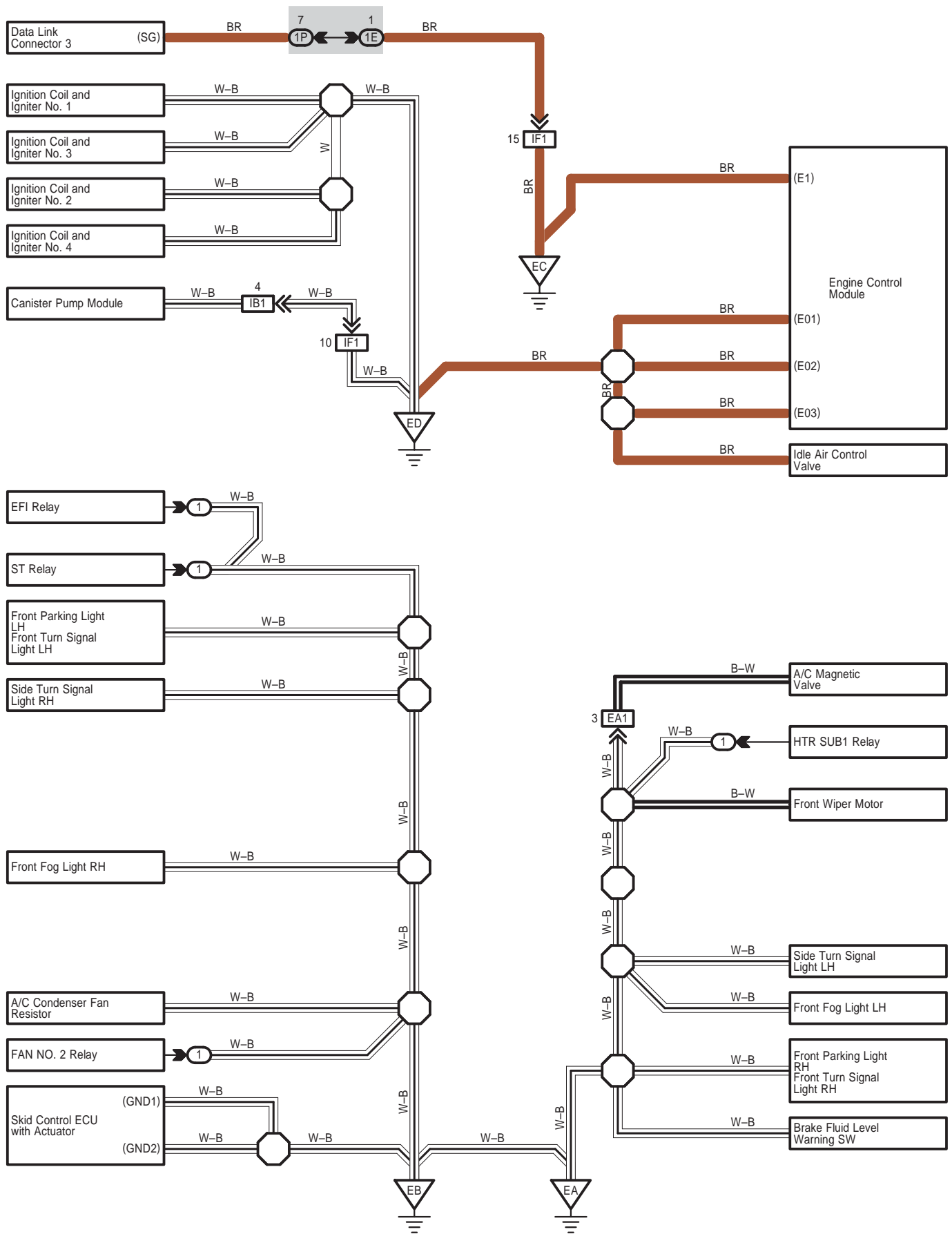
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)   |
|------|----------|--|
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box) |

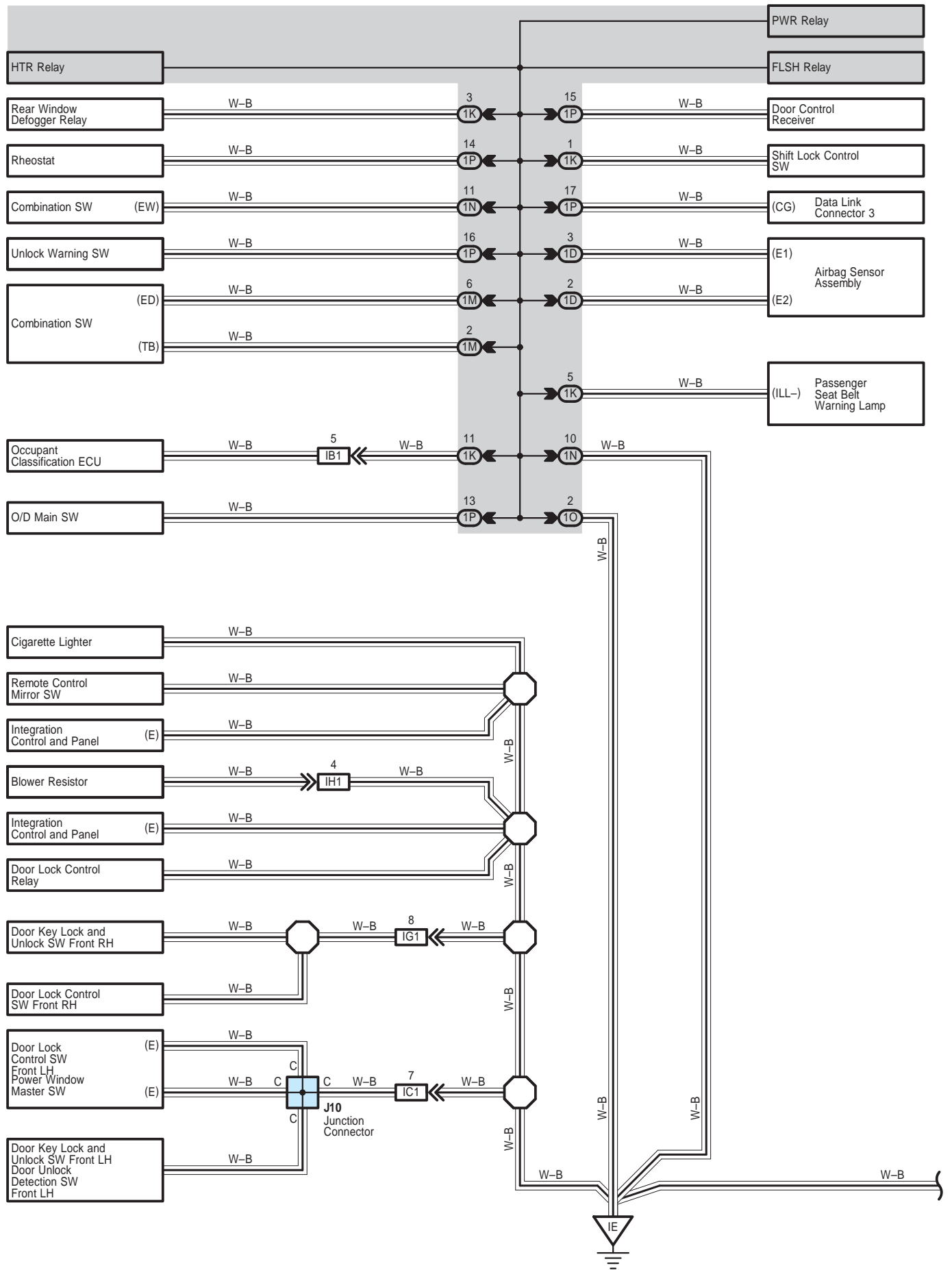
 : **Ground Points**

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| BJ   | 36       | Rear Quarter Panel Inner LH |
| BK   | 36       | Rear Quarter Panel Inner RH |

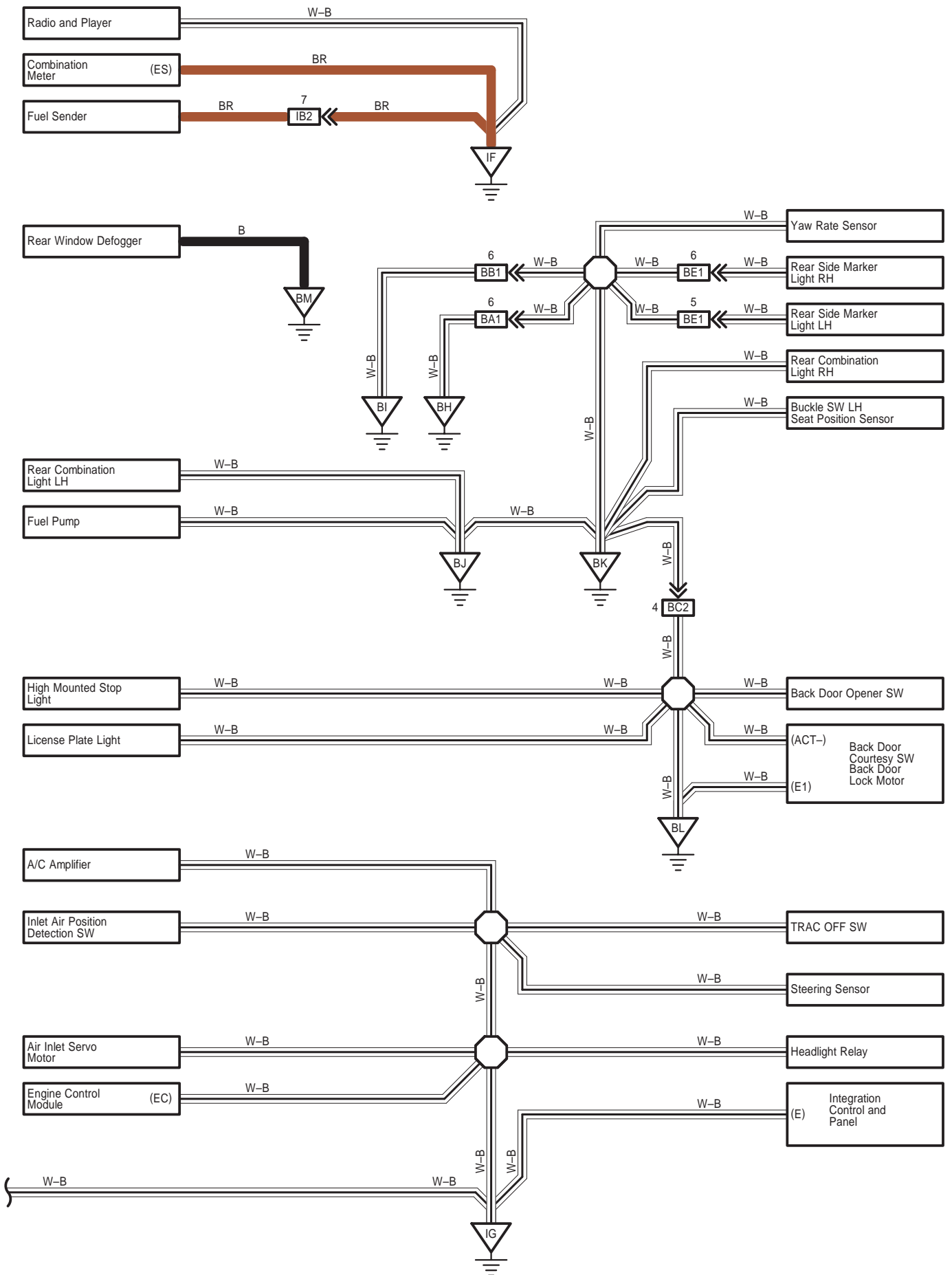


# I GROUND POINT





# I GROUND POINT



 : **Parts Location**

| Code | See Page | Code | See Page | Code | See Page |
|------|----------|------|----------|------|----------|
| J10  | 32       |      |          |      |          |

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

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

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

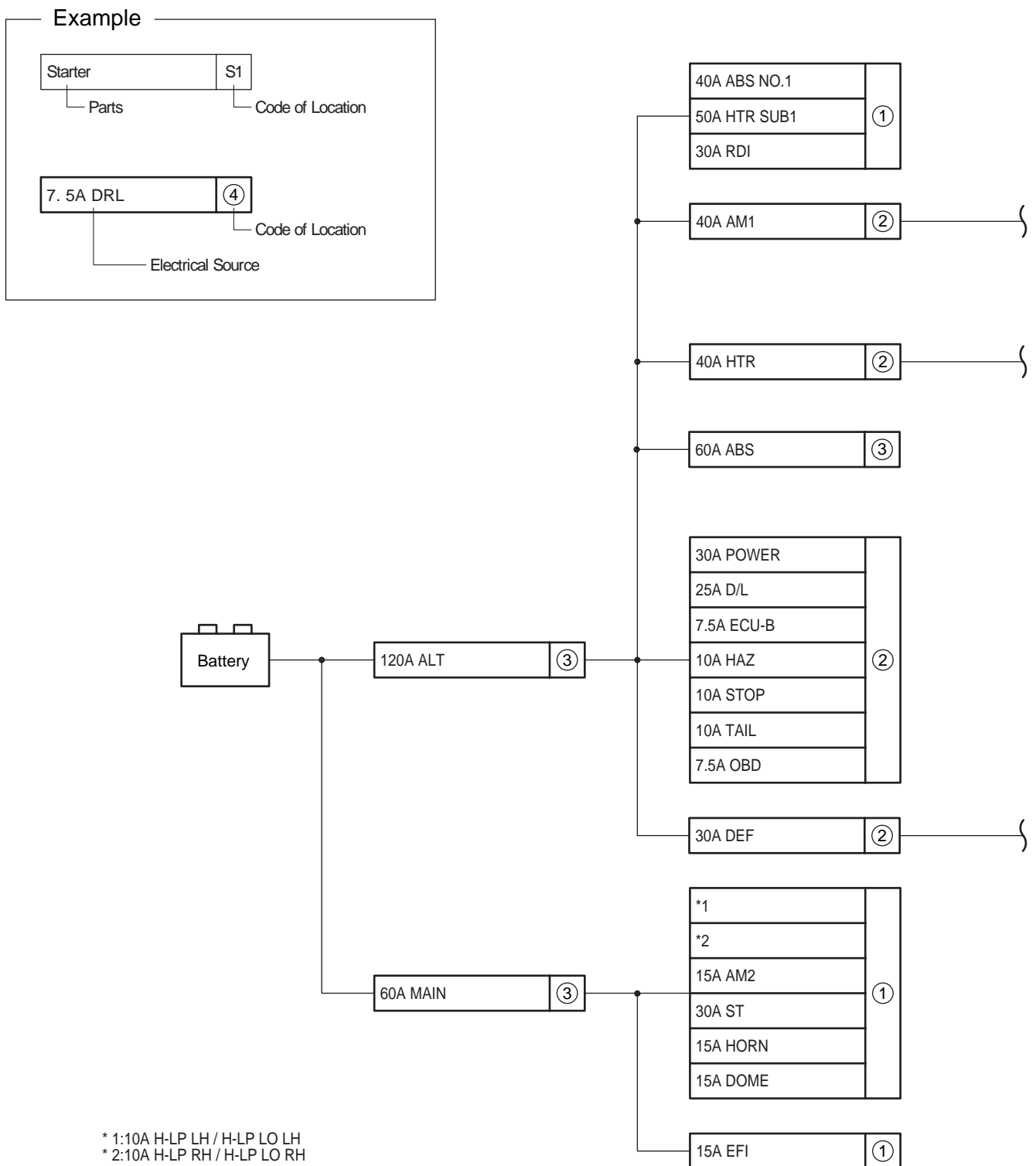
| Code | See Page | Joining Wire Harness and Wire Harness (Connector Location)          |
|------|----------|---|
| EA1  | 34       | Engine Wire and Engine Room Main Wire (Inside of Engine Room R/B)   |
| IB1  | 35       | Floor Wire and Instrument Panel Wire (Behind the Reinforcement LH)  |
| IB2  |          |   |
| IC1  | 35       | Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)      |
| IF1  | 35       | Engine Wire and Instrument Panel Wire (Behind the Glove Box)        |
| IG1  | 35       | Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)     |
| IH1  | 35       | Instrument Panel Wire and A/C Sub Wire (Right Side of A/C Unit)     |
| BA1  | 36       | Rear Door No.1 LH Wire and Floor Wire (Center Pillar LH)            |
| BB1  | 36       | Rear Door No.1 RH Wire and Floor Wire (Center Pillar RH)            |
| BC2  | 36       | Back Door No.1 Wire and Floor Wire (Right Rear Side Quarter Pillar) |
| BE1  | 36       | Floor Wire and Lamp Wire (Back Panel Center)                        |

 : **Ground Points**

| Code | See Page | Ground Points Location      |
|------|----------|-----------------------------|
| EA   | 34       | Front Right Fender Apron    |
| EB   | 34       | Front Left Fender Apron     |
| EC   | 34       | Engine Block                |
| ED   |          |                             |
| IE   | 35       | Left Kick Panel             |
| IF   | 35       | Instrument Panel Brace LH   |
| IG   | 35       | Right Kick Panel            |
| BH   | 36       | Rear Door LH                |
| BI   | 36       | Rear Door RH                |
| BJ   | 36       | Rear Quarter Panel Inner LH |
| BK   | 36       | Rear Quarter Panel Inner RH |
| BL   | 36       | Back Door Center            |
| BM   | 36       | Back Door LH                |

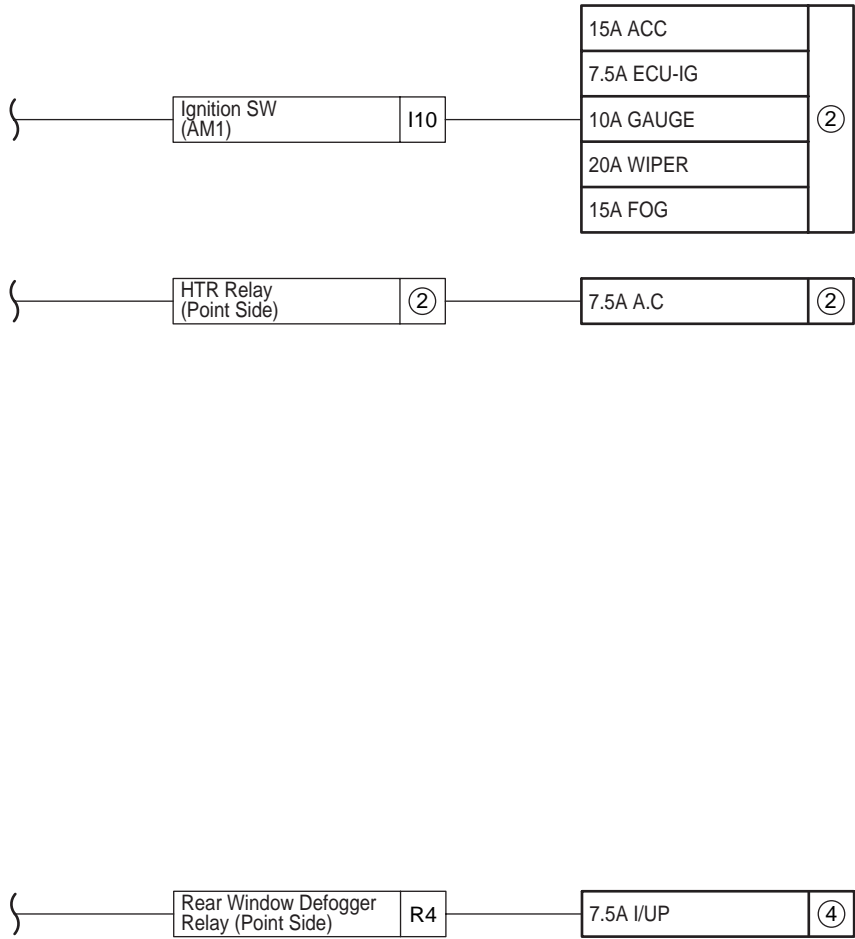
# J POWER SOURCE (Current Flow Chart)

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 : Engine Room R/B (See Page 22)
- ② : Instrument Panel J/B (See Page 24)
- ④ : Fuse Block (F15 on See Page 30)



③ : Fusible Link Block (See Page 23)

## J POWER SOURCE (Current Flow Chart)

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

| Fuse                       |                    | System   | Page |
|----------------------------|--------------------|--|------|
| 7.5A                       | A/C                | Air Conditioning   | 164  |
|                            |                    | PTC Heater   | 162  |
| 10A                        | H-LP LH/H-LP LO LH | Headlight  | 58   |
|                            |                    | Wireless Door Lock Control                               | 90   |
| 10A                        | H-LP RH/H-LP LO RH | Headlight  | 58   |
|                            |                    | Wireless Door Lock Control                               | 90   |
| 15A                        | AM2                | ABS, TRAC and VSC  | 104  |
|                            |                    | Charging   | 46   |
|                            |                    | Combination Meter  | 150  |
|                            |                    | Electronically Controlled Transmission and A/T Indicator | 98   |
|                            |                    | Engine Control   | 48   |
|                            |                    | Seat Belt Warning (From Dec. 2005 Production)            | 130  |
|                            |                    | SRS (Before Dec. 2005 Production)                        | 114  |
|                            |                    | SRS (From Dec. 2005 Production)                          | 118  |
| Starting and Ignition      | 42                 |  |      |
| 15A                        | DOME               | ABS, TRAC and VSC  | 104  |
|                            |                    | Audio System   | 146  |
|                            |                    | Combination Meter  | 150  |
|                            |                    | Door Lock Control  | 82   |
|                            |                    | Engine Control   | 48   |
|                            |                    | Headlight  | 58   |
|                            |                    | Interior Light   | 64   |
|                            |                    | Key Reminder   | 126  |
|                            |                    | Light Reminder   | 138  |
|                            |                    | Seat Belt Warning (Before Dec. 2005 Production)          | 128  |
|                            |                    | Seat Belt Warning (From Dec. 2005 Production)            | 130  |
|                            |                    | SRS (Before Dec. 2005 Production)                        | 114  |
|                            |                    | SRS (From Dec. 2005 Production)                          | 118  |
|                            |                    | Taillight and Illumination                               | 66   |
| Wireless Door Lock Control | 90                 |  |      |
| 15A                        | EFI                | Electronically Controlled Transmission and A/T Indicator | 98   |
|                            |                    | Engine Control   | 48   |
| 15A                        | HORN               | Horn   | 142  |
|                            |                    | Wireless Door Lock Control                               | 90   |
| 30A                        | RDI                | Radiator Fan and Condenser Fan                           | 156  |
| 30A                        | ST                 | Starting and Ignition                                    | 42   |
| 40A                        | ABS NO.1           | ABS, TRAC and VSC  | 104  |
| 50A                        | HTR SUB1           | PTC Heater   | 162  |

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

| Fuse |     | System              | Page |
|------|-----|---------------------|------|
| 7.5A | A.C | Two Way Flow Heater | 158  |

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

| Fuse                                 |        | System   | Page |
|--------------------------------------|--------|--|------|
| 7.5A                                 | ECU-B  | ABS, TRAC and VSC  | 104  |
|                                      |        | Multiplex Communication System (CAN)                     | 110  |
|                                      |        | Seat Belt Warning (From Dec. 2005 Production)            | 130  |
|                                      |        | SRS (From Dec. 2005 Production)                          | 118  |
| 7.5A                                 | ECU-IG | ABS, TRAC and VSC  | 104  |
|                                      |        | Air Conditioning   | 164  |
|                                      |        | Multiplex Communication System (CAN)                     | 110  |
|                                      |        | PTC Heater   | 162  |
|                                      |        | Radiator Fan and Condenser Fan                           | 156  |
|                                      |        | Two Way Flow Heater                                      | 158  |
| 7.5A                                 | OBD    | Electronically Controlled Transmission and A/T Indicator | 98   |
|                                      |        | Engine Control   | 48   |
| 10A                                  | GAUGE  | ABS, TRAC and VSC  | 104  |
|                                      |        | Air Conditioning   | 164  |
|                                      |        | Audio System   | 146  |
|                                      |        | Back-Up Light  | 72   |
|                                      |        | Charging   | 46   |
|                                      |        | Combination Meter  | 150  |
|                                      |        | Door Lock Control  | 82   |
|                                      |        | Electronically Controlled Transmission and A/T Indicator | 98   |
|                                      |        | Engine Control   | 48   |
|                                      |        | Fog Light  | 60   |
|                                      |        | Key Reminder   | 126  |
|                                      |        | Light Reminder   | 138  |
|                                      |        | Power Window   | 78   |
|                                      |        | PTC Heater   | 162  |
|                                      |        | Rear Window Defogger                                     | 144  |
|                                      |        | Seat Belt Warning (Before Dec. 2005 Production)          | 128  |
|                                      |        | Seat Belt Warning (From Dec. 2005 Production)            | 130  |
|                                      |        | Shift Lock   | 124  |
|                                      |        | SRS (Before Dec. 2005 Production)                        | 114  |
|                                      |        | SRS (From Dec. 2005 Production)                          | 118  |
| Taillight and Illumination           | 66     |  |      |
| Turn Signal and Hazard Warning Light | 62     |  |      |
| Two Way Flow Heater                  | 158    |  |      |
| Wireless Door Lock Control           | 90     |  |      |
| 10A                                  | HAZ    | Turn Signal and Hazard Warning Light                     | 62   |
| 10A                                  | STOP   | ABS, TRAC and VSC  | 104  |
|                                      |        | Electronically Controlled Transmission and A/T Indicator | 98   |
|                                      |        | Engine Control   | 48   |
|                                      |        | Shift Lock   | 124  |
|                                      |        | Stop Light   | 70   |

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



## J POWER SOURCE (Current Flow Chart)

| Fuse |       | System                     | Page |
|------|-------|----------------------------|------|
| 10A  | TAIL  | Engine Control             | 48   |
|      |       | Light Reminder             | 138  |
|      |       | Taillight and Illumination | 66   |
| 15A  | ACC   | Audio System               | 146  |
|      |       | Cigarette Lighter          | 140  |
|      |       | Remote Control Mirror      | 136  |
| 15A  | FOG   | Fog Light                  | 60   |
| 20A  | WIPER | Front Wiper and Washer     | 74   |
|      |       | Rear Wiper and Washer      | 76   |
| 25A  | D/L   | Door Lock Control          | 82   |
|      |       | Wireless Door Lock Control | 90   |
| 30A  | DEF   | Rear Window Defogger       | 144  |
| 30A  | POWER | Power Window               | 78   |
| 40A  | HTR   | Air Conditioning           | 164  |
|      |       | PTC Heater                 | 162  |
|      |       | Two Way Flow Heater        | 158  |

### Fusible Link Block (See Page 23)

| Fuse |      | System   | Page |
|------|------|--|------|
| 60A  | ABS  | ABS, TRAC and VSC  | 104  |
| 60A  | MAIN | ABS, TRAC and VSC  | 104  |
|      |      | Charging   | 46   |
|      |      | Combination Meter  | 150  |
|      |      | Electronically Controlled Transmission and A/T Indicator | 98   |
|      |      | Engine Control   | 48   |
|      |      | Seat Belt Warning (From Dec. 2005 Production)            | 130  |
|      |      | SRS (Before Dec. 2005 Production)                        | 114  |
|      |      | SRS (From Dec. 2005 Production)                          | 118  |
| 120A | ALT  | Starting and Ignition                                    | 42   |
|      |      | ABS, TRAC and VSC  | 104  |
|      |      | Charging   | 46   |

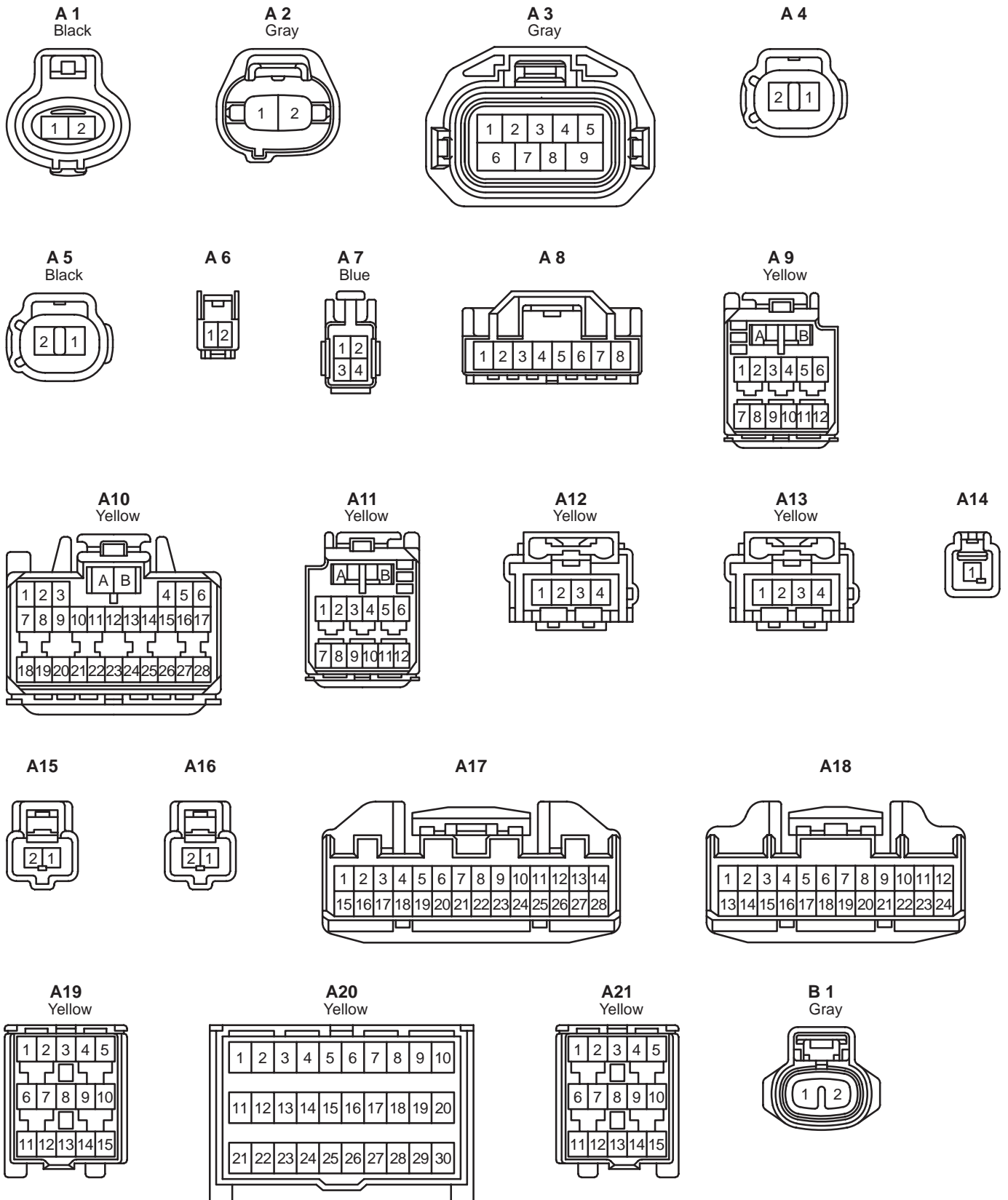
### Fuse Block (F15 on See Page 30)

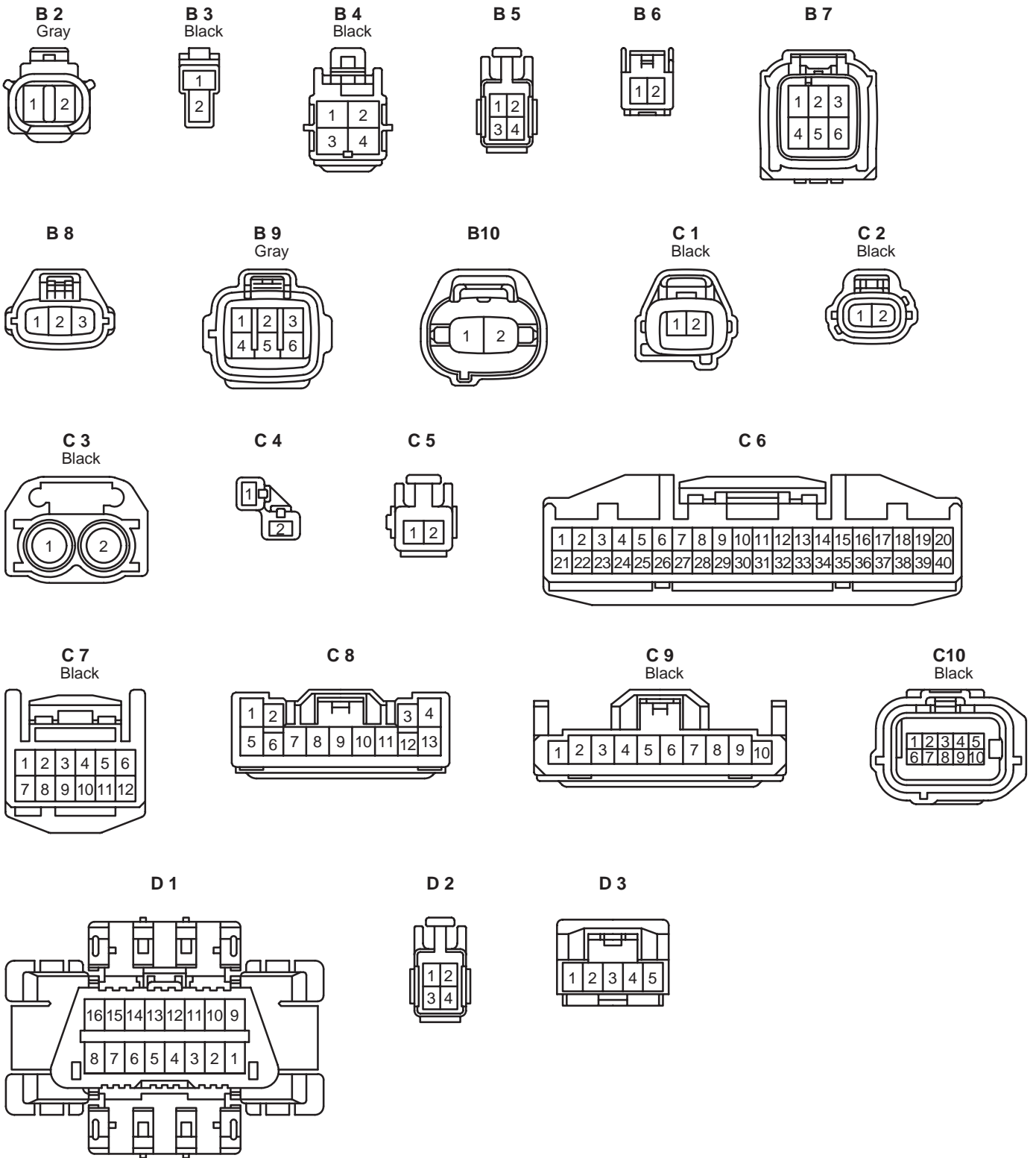
| Fuse |      | System               | Page |
|------|------|----------------------|------|
| 7.5A | I/UP | Rear Window Defogger | 144  |

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



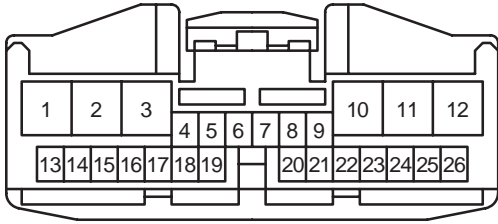
# K CONNECTOR LIST





# K CONNECTOR LIST

**D 4**



**D 5**



**D 6**



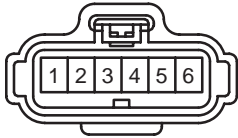
**D 7**



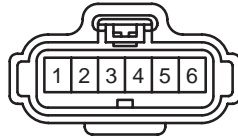
**D 8**



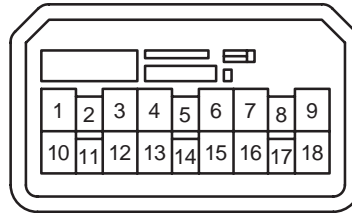
**D 9**  
Black



**D10**  
Black



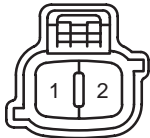
**D11**



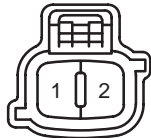
**D12**



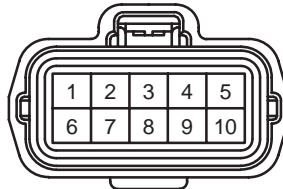
**D13**  
Black



**D14**  
Black



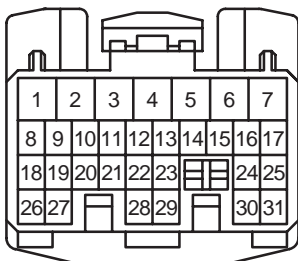
**E 1**  
Gray



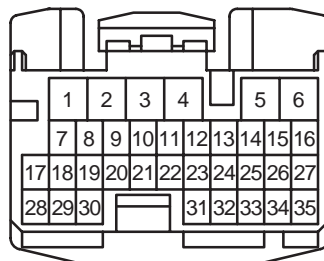
**E 2**  
Gray



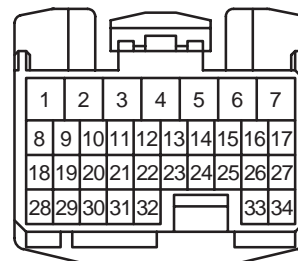
**E 3**



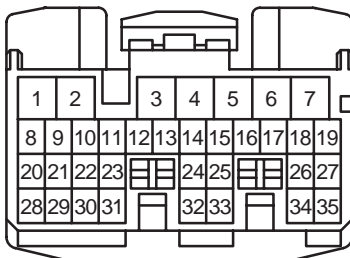
**E 4**  
Black



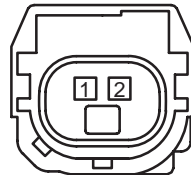
**E 5**



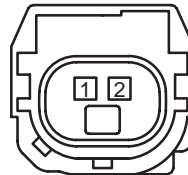
**E 6**



**F 1**  
Yellow

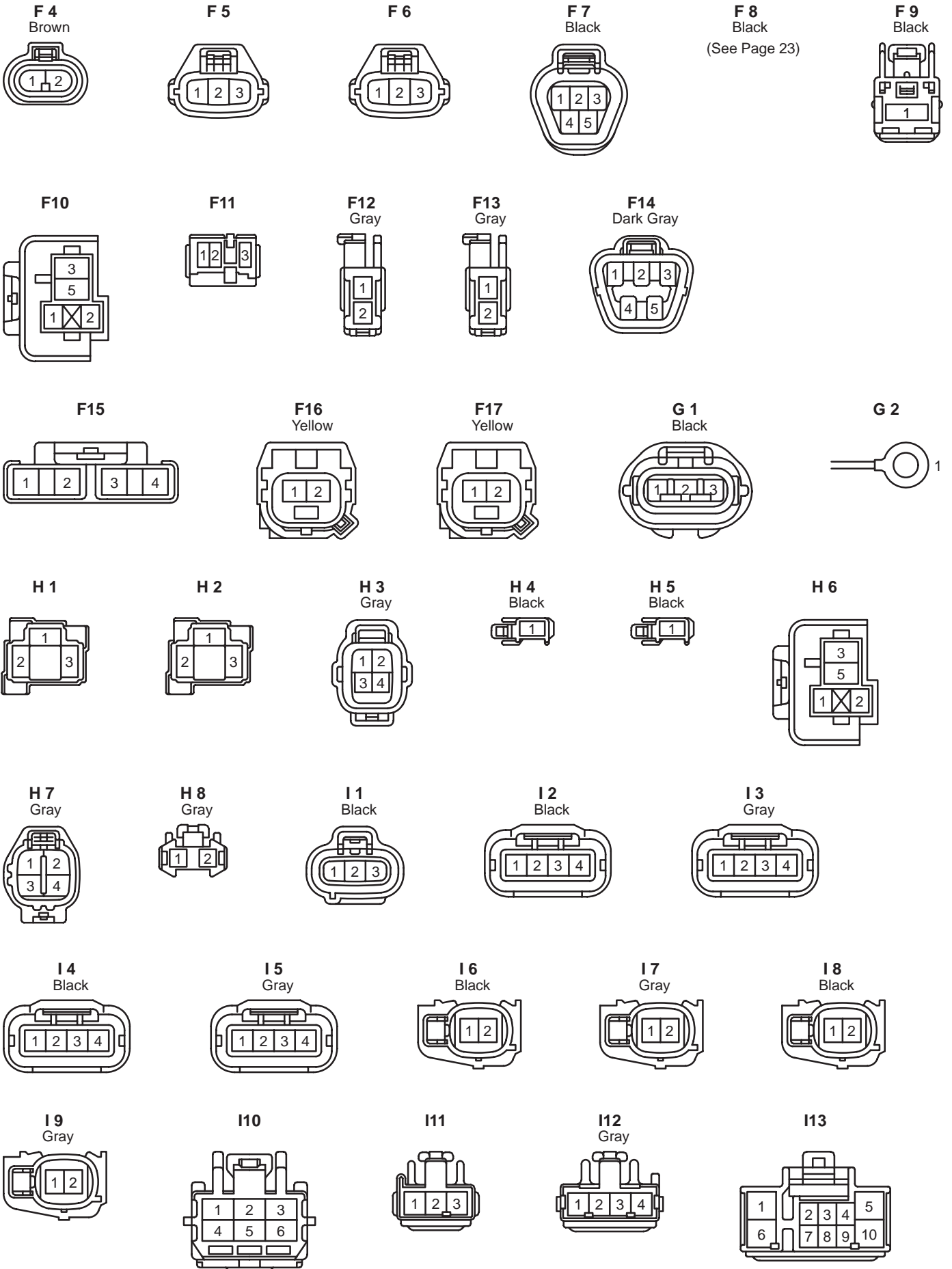


**F 2**  
Yellow



**F 3**  
Brown





# K CONNECTOR LIST

\*1 : Before Dec. 2005 Production

\*2 : From Dec. 2005 Production

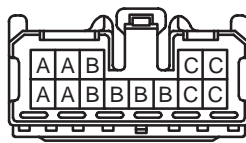
I14



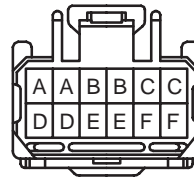
I15



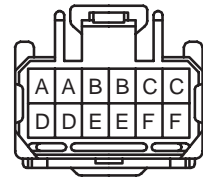
J1



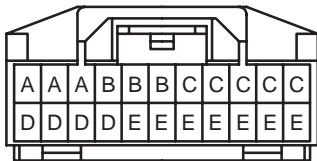
J2  
Black



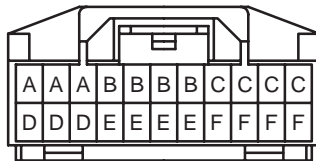
J3  
Black



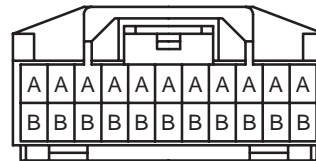
J4  
(\*1)



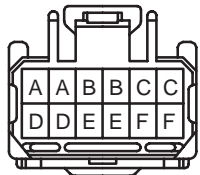
J4  
(\*2)



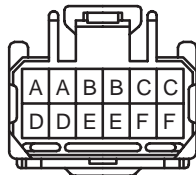
J5



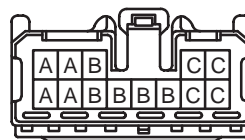
J6



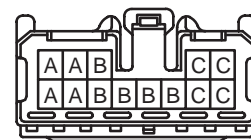
J7



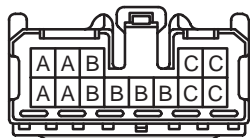
J8



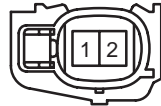
J9



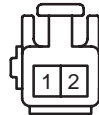
J10



K1  
Black



L1  
Blue



M1  
Black



N1  
Gray



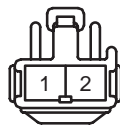
N2



N3



N4



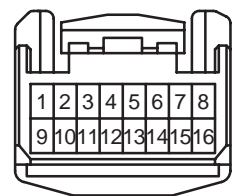
O1  
Gray



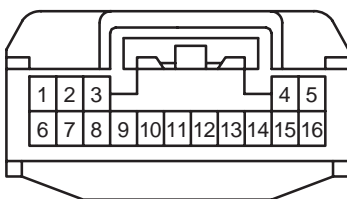
O2



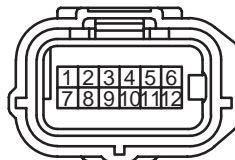
O3



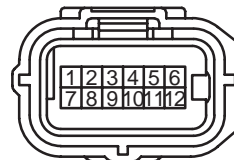
O4



O5  
Black

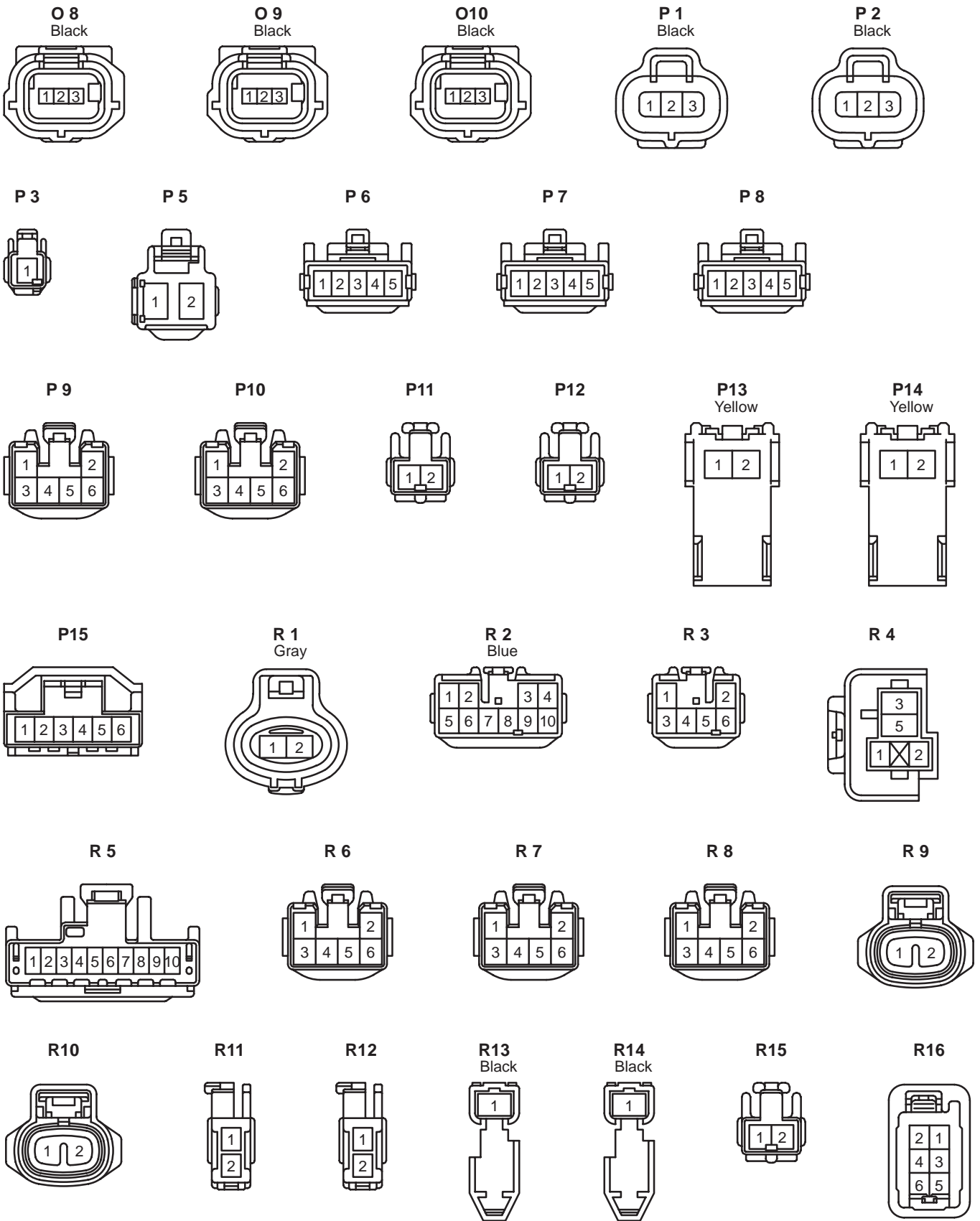


O6  
Gray



O7  
Black

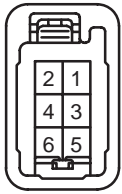




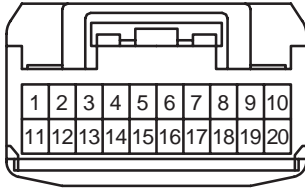


# K CONNECTOR LIST

**R17**



**R18**



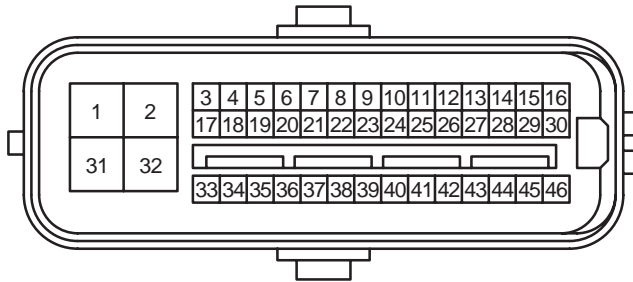
**S1**  
Black



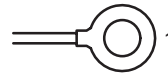
**S2**  
Black



**S3**  
Black



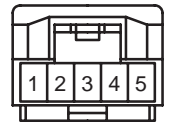
**S4**



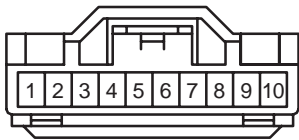
**S5**  
Black



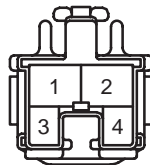
**S6**



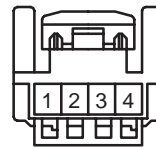
**S7**  
Gray



**S8**  
Black



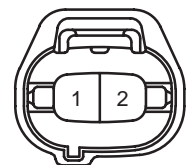
**S9**  
Gray



**T1**  
Black



**T2**  
Black



**T3**  
Black



**T4**  
Blue



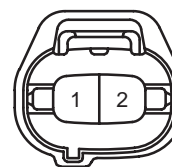
**T5**  
Blue



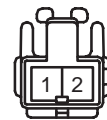
**U1**



**V1**  
Black



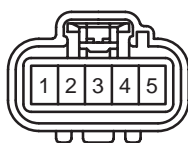
**V2**  
Black



**W1**  
Black



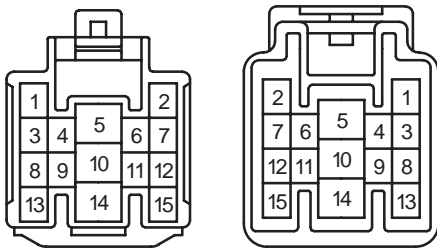
**Y1**  
Black



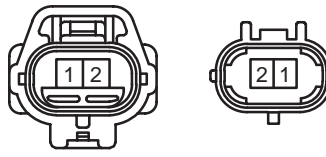


# K CONNECTOR LIST

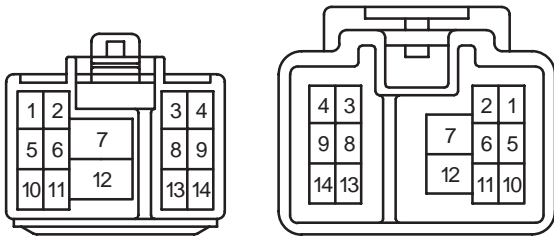
**EA1**



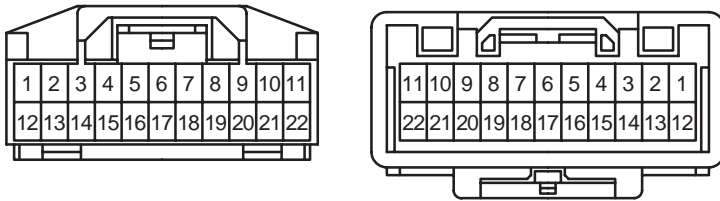
**EB1** Gray



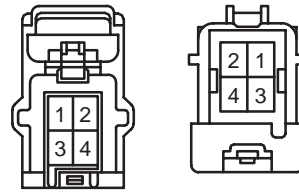
**IA1**



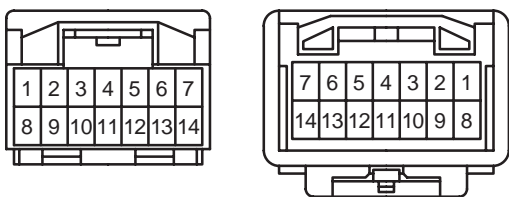
**IA2**



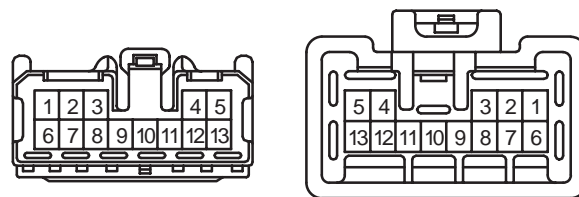
**IA3** Yellow

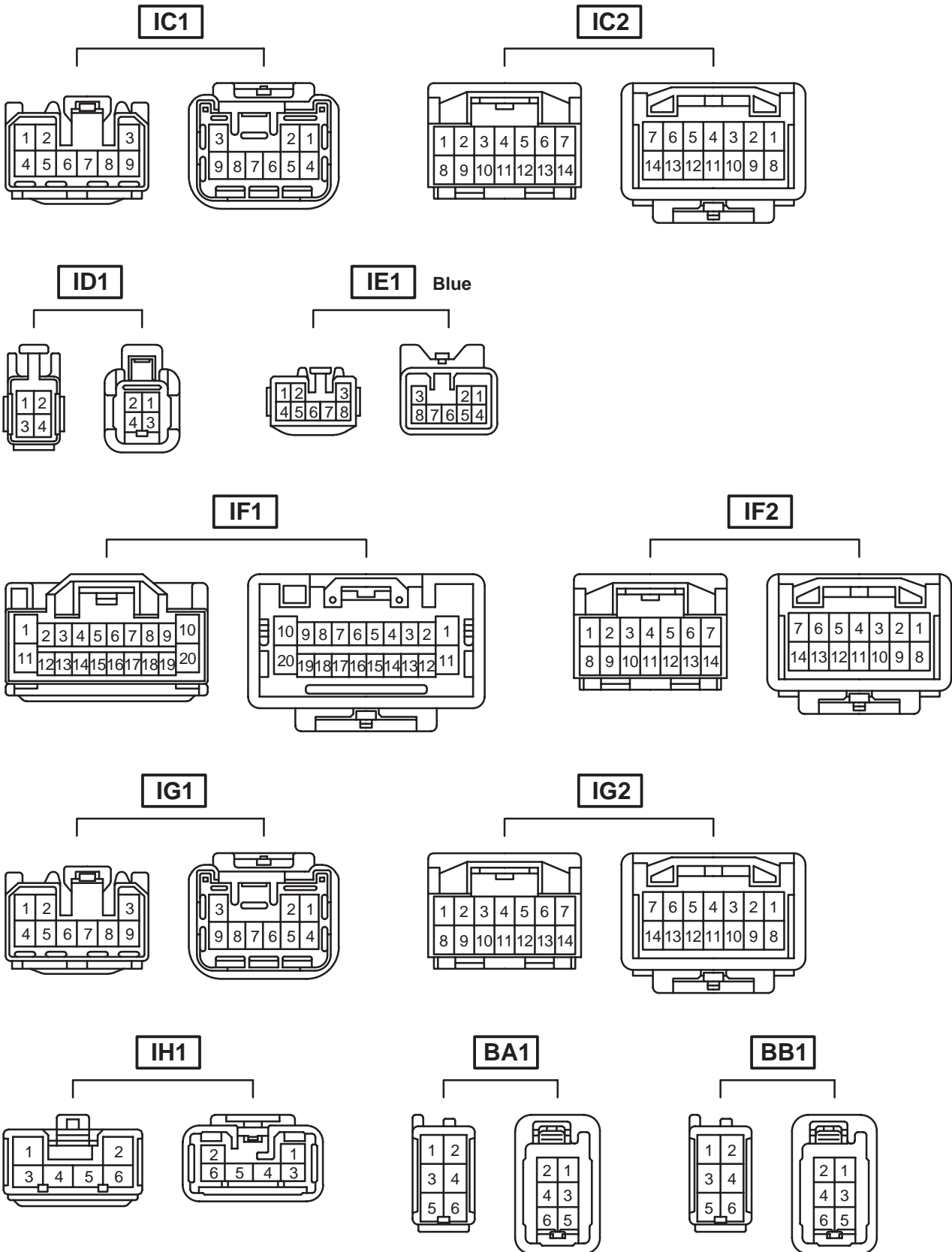


**IB1** Gray



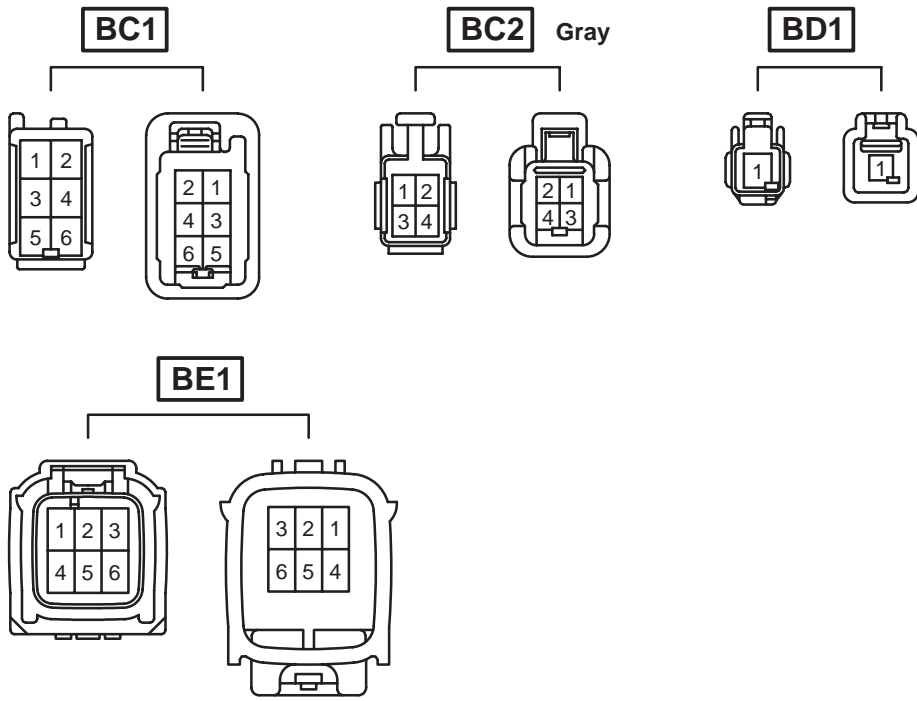
**IB2** Gray





# K CONNECTOR LIST

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## L PART NUMBER OF CONNECTORS

| Code | Part Name  | Part Number                     | Code                              | Part Name                            | Part Number                          |
|------|--|---------------------------------|-----------------------------------|--------------------------------------|--------------------------------------|
| A 1  | A/C Condenser Fan Resistor                       | 90980-10928                     | C 8                               | Combination SW                       | 90980-12007                          |
| A 2  | A/C Magnetic Valve                               | 90980-11156                     | C 9                               | Combination SW                       | 90980-12008                          |
| A 3  | A/T Indicator Light SW                           | 90980-11784                     | C10                               | Canister Pump Module                 | 90980-12380                          |
|      | Back-Up Light SW                                 |                                 | D 1                               | Data Link Connector 3                | 90980-11978                          |
|      | Park/Neutral Position SW                         |                                 | D 2                               | Defroster Mode Detection SW          | 90980-10795                          |
| A 4  | ABS Speed Sensor Front LH                        | Inlet Air Position Detection SW |                                   |                                      |                                      |
| A 5  | ABS Speed Sensor Front RH                        | 90980-11002                     | D 3                               | Door Control Receiver                | 90980-11909                          |
| A 6  | A/C Thermistor                                   | 90980-11918                     | D 4                               | Door Lock Control Relay              | 90980-12203                          |
| A 7  | A/T Shift Lever Illumination                     | 90980-10795                     | D 5                               | Door Courtesy SW Front LH            | 90980-10871                          |
|      | O/D Main SW                                      |                                 | D 6                               | Door Courtesy SW Front RH            |                                      |
| A 8  | Air Inlet Servo Motor                            | 90980-11989                     | D 7                               | Door Courtesy SW Rear LH             |                                      |
| A 9  | Airbag Sensor Assembly                           | 90980-11869                     | D 8                               | Door Courtesy SW Rear RH             |                                      |
| A10  | Airbag Sensor Assembly                           | 90980-11872                     | D 9                               | Door Key Lock and Unlock SW Front LH |                                      |
| A11  | Airbag Sensor Assembly                           | 90980-11867                     |                                   | Door Lock Motor Front LH             |                                      |
| A12  | Airbag Squib (Front Passenger's Airbag Assembly) | 90980-12160                     |                                   | Door Unlock Detection SW Front LH    |                                      |
|      | A13  |                                 | Airbag Squib (Steering Wheel Pad) | D10                                  | Door Key Lock and Unlock SW Front RH |
| A14  | Antenna Amplifier                                | 90980-10870                     | Door Lock Motor Front RH          | 90980-12122                          |                                      |
| A15  | ABS Speed Sensor Rear LH                         | 90980-10859                     | D11                               |                                      | Door Lock Control SW Front LH        |
| A16  | ABS Speed Sensor Rear RH                         |                                 | D12                               | Power Window Master SW               | 90980-10797                          |
| A17  | A/C Amplifier                                    | 90980-12410                     | D13                               | Door Lock Control SW Front RH        | 90980-11019                          |
| A18  | A/C Amplifier                                    | 90980-12200                     | D14                               | Door Lock Motor Rear LH              |                                      |
| A19  | Airbag Sensor Assembly                           | 90980-12449                     | D14                               | Door Lock Motor Rear RH              | 90980-11658                          |
| A20  | Airbag Sensor Assembly                           | 90980-12391                     |                                   | E 1                                  |                                      |
| A21  | Airbag Sensor Assembly                           | 90980-12450                     | E 2                               | Engine Coolant Temp. Sensor          | 90980-10735                          |
| B 1  | Back-Up Light SW                                 | 90980-11250                     | E 3                               | Engine Control Module                | 90980-12142                          |
| B 2  | Brake Fluid Level Warning SW                     | 90980-11207                     | E 4                               | Engine Control Module                | 90980-12146                          |
| B 3  | Blower Motor                                     | 90980-10214                     | E 5                               | Engine Control Module                | 90980-12144                          |
| B 4  | Blower Resistor                                  | 90980-11136                     | E 6                               | Engine Control Module                | 90980-12145                          |
| B 5  | Back Door Courtesy SW                            | 90980-10795                     | F 1                               | Front Airbag Sensor LH               | 90980-12401                          |
|      | Back Door Lock Motor                             |                                 | F 2                               | Front Airbag Sensor RH               |                                      |
| B 6  | Back Door Opener SW                              | 90980-12063                     | F 3                               | Front Fog Light LH                   | 90980-11096                          |
| B 7  | Buckle SW LH                                     | 90980-12257                     | F 4                               | Front Fog Light RH                   |                                      |
|      | Seat Position Sensor                             |                                 | F 5                               | Front Parking Light LH               | 90980-11020                          |
| B 8  | Buckle SW RH                                     | Front Turn Signal Light LH      |                                   |                                      |                                      |
|      | Occupant Detection Sensor                        | F 6                             |                                   | Front Parking Light RH               |                                      |
| B 9  | Buck SW LH                                       |                                 | Front Turn Signal Light RH        | 90980-11599                          |                                      |
|      | Seat Position Sensor                             | 90980-11194                     | F 7                               |                                      |                                      |
| B10  | Buck SW RH                                       | 90980-11156                     | F 8                               | Fusible Link Block                   | 82620-52011                          |
| C 1  | Camshaft Position Sensor                         | 90980-10947                     | F 9                               | Fusible Link Block                   | 90980-11775                          |
| C 2  | Camshaft Timing Oil Control Valve                | 90980-11162                     | F10                               | Front Fog Light Relay                | 82660-20340                          |
| C 3  | Crankshaft Position Sensor                       | 90980-12028                     | F11                               | Front Fog Light SW                   | 90980-10489                          |
| C 4  | Cigarette Lighter                                | 90980-10760                     | F12                               | Front Door Speaker LH                | 90980-10935                          |
| C 5  | Clutch Start SW                                  | 90980-10825                     |                                   | Front Door Speaker RH                |                                      |
| C 6  | Combination Meter                                | 90980-12169                     | F14                               | Fuel Pump                            | 90980-11077                          |
| C 7  | Combination SW                                   | 90980-12183                     |                                   | Fuel Sender                          |                                      |

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              |
|------|---|-------------|-------------|---|--------------------------|
| F15  | Fuse Block  | 82610-20080 | O 2         | Option Connector (TVIP)                 | 90980-10871              |
| F16  | Front Airbag Sensor LH                                  | 90980-12490 | O 3         | Option Connector (IPOD Unit)            | 90980-12553              |
| F17  | Front Airbag Sensor RH                                  |             | O 4         | Option Connector (Radio and Player)     | 90980-12423              |
| G 1  | Generator   | 90980-11349 | O 5         | Occupant Classification ECU             | 90980-12356              |
| G 2  | Generator   | 90980-09373 | O 6         | Occupant Classification ECU             | 90980-12357              |
| H 1  | Headlight LH  | 90980-11314 | O 7         | Occupant Classification Sensor Front LH | 90980-12353              |
| H 2  | Headlight RH  |             | O 8         | Occupant Classification Sensor Rear LH  |                          |
| H 3  | Heated Oxygen Sensor (Bank 1 Sensor 1)                  | 90980-10869 | O 9         | Occupant Classification Sensor Front RH |                          |
| H 4  | Horn (High)   | 90980-10619 | O10         | Occupant Classification Sensor Rear RH  |                          |
| H 5  | Horn (Low)  |             | P 1         | Power Steering Oil Pressure Sensor      | 90980-10845              |
| H 6  | Headlight Relay   | 82660-20340 | P 2         | Pressure Sensor                         |                          |
| H 7  | Heated Oxygen Sensor (Bank 1 Sensor 2)                  | 90980-11028 | P 3         | Parking Brake SW                        | 90980-10871              |
| H 8  | High Mounted Stop Light                                 | 90980-11148 | P 5         | PTC Heater                              | 90980-10903              |
| I 1  | Idle Air Control Valve                                  | 90980-11145 | P 6         | Power Window Control SW Front RH        | 90980-10789              |
| I 2  | Ignition Coil and Igniter No.1                          | 90980-11885 | P 7         | Power Window Control SW Rear LH         |                          |
| I 3  | Ignition Coil and Igniter No.2                          |             | P 8         | Power Window Control SW Rear RH         |                          |
| I 4  | Ignition Coil and Igniter No.3                          |             | P 9         | Power Window Motor Front LH             | 90980-10797              |
| I 5  | Ignition Coil and Igniter No.4                          |             | P10         | Power Window Motor Front RH             |                          |
| I 6  | Injector No.1   | 90980-11875 | P11         | Power Window Motor Rear LH              | 90980-10860              |
| I 7  | Injector No.2   |             | P12         | Power Window Motor Rear RH              |                          |
| I 8  | Injector No.3   |             | P13         | Pretensioner LH                         | 90980-12253              |
| I 9  | Injector No.4   |             | P14         | Pretensioner RH                         |                          |
| I10  | Ignition SW   | 90980-11778 | P15         | Passenger Seat Belt Warning Lamp        | 90980-11986              |
| I11  | Integration Control and Panel                           | 90980-10908 | R 1         | Radiator Fan Motor                      | 90980-10928              |
| I12  | Integration Control and Panel                           | 90980-11013 | R 2         | Radio and Player                        | 90980-10997              |
| I13  | Integration Control and Panel                           | 90980-10993 | R 3         | Radio and Player                        | 90980-10996              |
| I14  | Interior Light  | 90980-10935 | R 4         | Rear Window Defogger Relay              | 82660-20340              |
| I15  | Integration Control and Panel                           | 90980-10908 | R 5         | Remote Control Mirror SW                | 90980-11657              |
| J 1  | Junction Connector                                      | 90980-11542 | R 6         | Rheostat                                | 90980-10797              |
| J 2  | Junction Connector                                      | 90980-11661 | R 7         | Rear Combination Light LH               |                          |
| J 3  | Junction Connector                                      |             | R 8         | Rear Combination Light RH               |                          |
| J 4  | Junction Connector                                      | 90980-11915 | R 9         | Rear Side Marker Light LH               | 90980-11250              |
| J 5  | Junction Connector                                      |             | R10         | Rear Side Marker Light RH               |                          |
| J 6  | Junction Connector                                      | 90980-11661 | R11         | Rear Speaker LH                         | 90980-10935              |
| J 7  | Junction Connector                                      |             | R12         | Rear Speaker RH                         |                          |
| J 8  | Junction Connector                                      | 90980-11542 | R13         | Rear Window Defogger                    | 90980-11853              |
| J 9  | Junction Connector                                      |             | R14         | Rear Window Defogger                    |                          |
| J10  | Junction Connector                                      |             | R15         | Rear Wiper Motor                        | 90980-10860              |
| K 1  | Knock Sensor (Bank 1)                                   |             | 90980-11875 | R16                                     | Remote Control Mirror LH |
| L 1  | License Plate Light                                     | 90980-10825 | R17         | Remote Control Mirror RH                |                          |
| M 1  | Mass Air Flow Meter                                     | 90980-11317 | R18         | Radio and Player                        | 90980-12460              |
| N 1  | Noise Filter (Ignition)                                 | 90980-10843 | S 1         | Side Turn Signal Light LH               | 90980-11162              |
| N 2  | Noise Filter (Rear Window Defogger No.1)                | 90980-10916 | S 2         | Side Turn Signal Light RH               |                          |
| N 3  | Noise Filter (Fuel Pump)                                |             | S 3         | Skid Control ECU with Actuator          | 90980-12297              |
| N 4  | Noise Filter (Stop Light and Rear Window Defogger No.2) |             | S 4         | Starter                                 | 90980-09506              |
| O 1  | Oil Pressure SW   |             | 90980-11363 | S 5                                     | Starter                  |



## L PART NUMBER OF CONNECTORS

| Code | Part Name                | Part Number | Code | Part Name         | Part Number |
|------|--------------------------|-------------|------|-------------------|-------------|
| S 6  | Shift Lock Control SW    | 90980-11909 | T 4  | Tweeter LH        | 90980-10860 |
| S 7  | Steering Sensor          | 90980-12162 | T 5  | Tweeter RH        |             |
| S 8  | Stop Light SW            | 90980-11118 | U 1  | Unlock Warning SW |             |
| S 9  | Stereo Jack Adapter      | 82824-21030 | V 1  | VSV (Purge)       | 90980-11156 |
| T 1  | Throttle Position Sensor | 90980-11261 | V 2  | VSC Buzzer        | 90980-10906 |
| T 2  | Turbine Speed Sensor     | 90980-11156 | W 1  | Washer Motor      | 90980-10981 |
| T 3  | TRAC OFF SW              | 90980-10631 | Y 1  | Yaw Rate Sensor   | 90980-11904 |

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

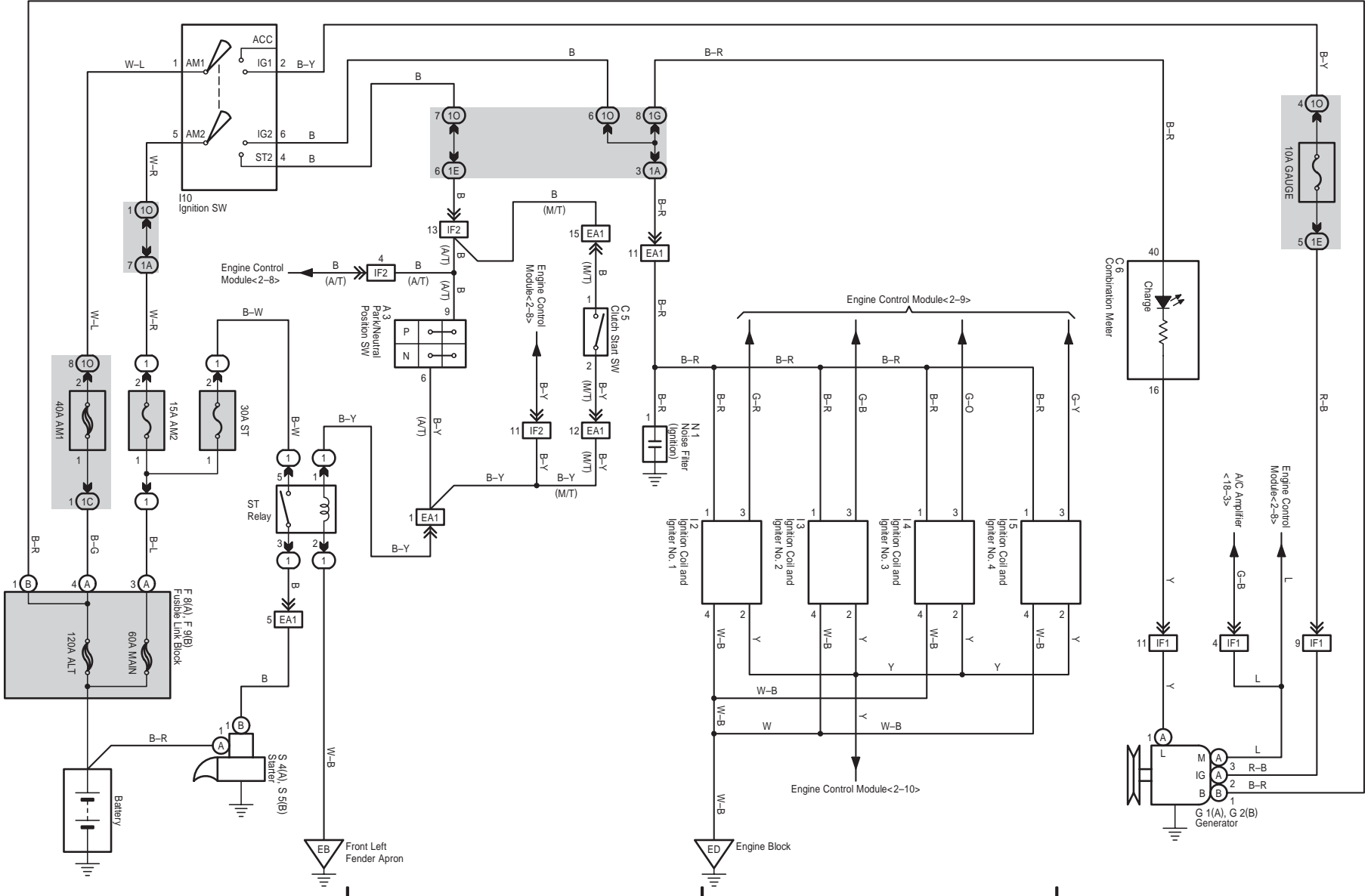


Power Source

Starting and Ignition

Charging

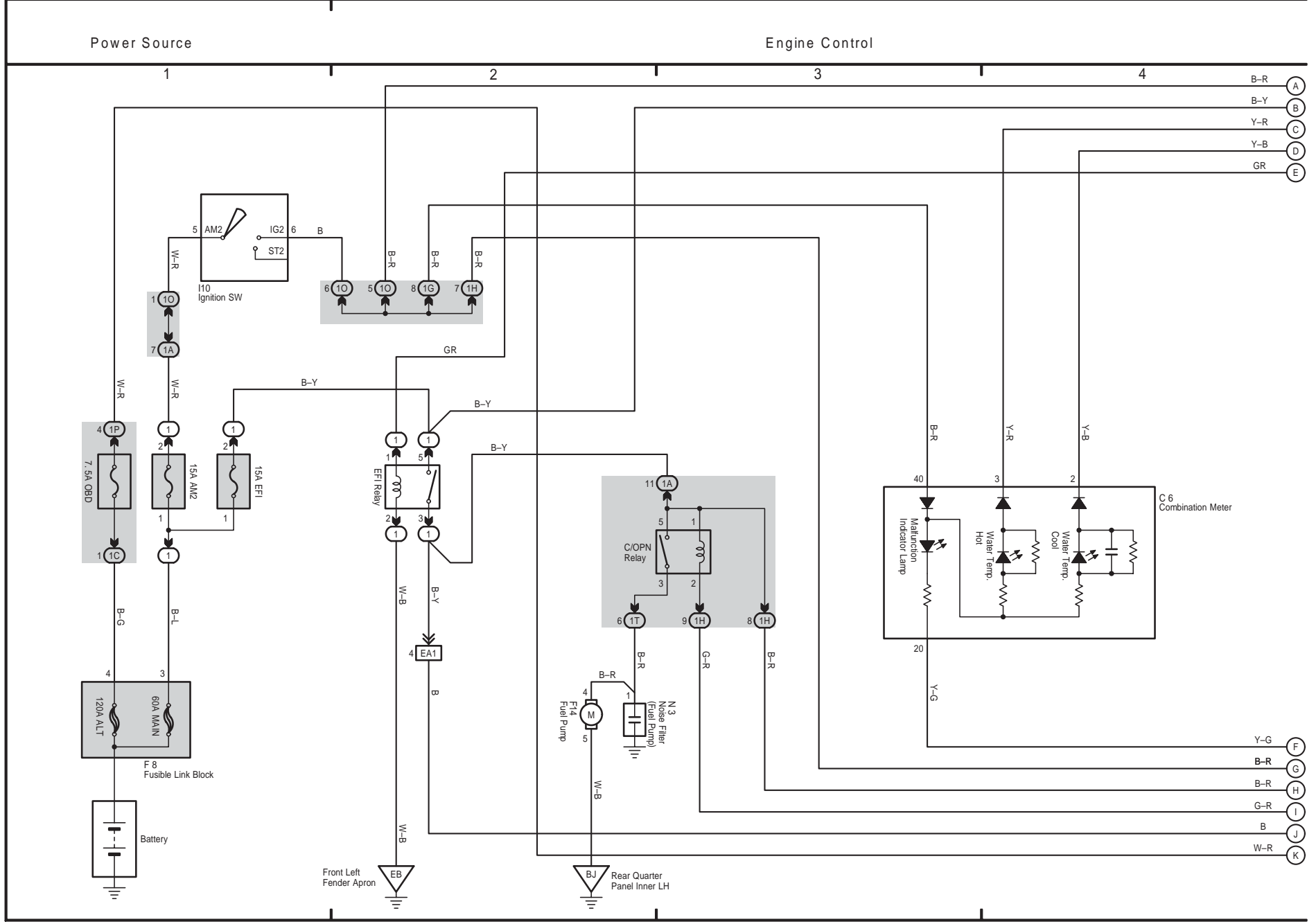
1 2 3 4



SCION xB (EM0091U)

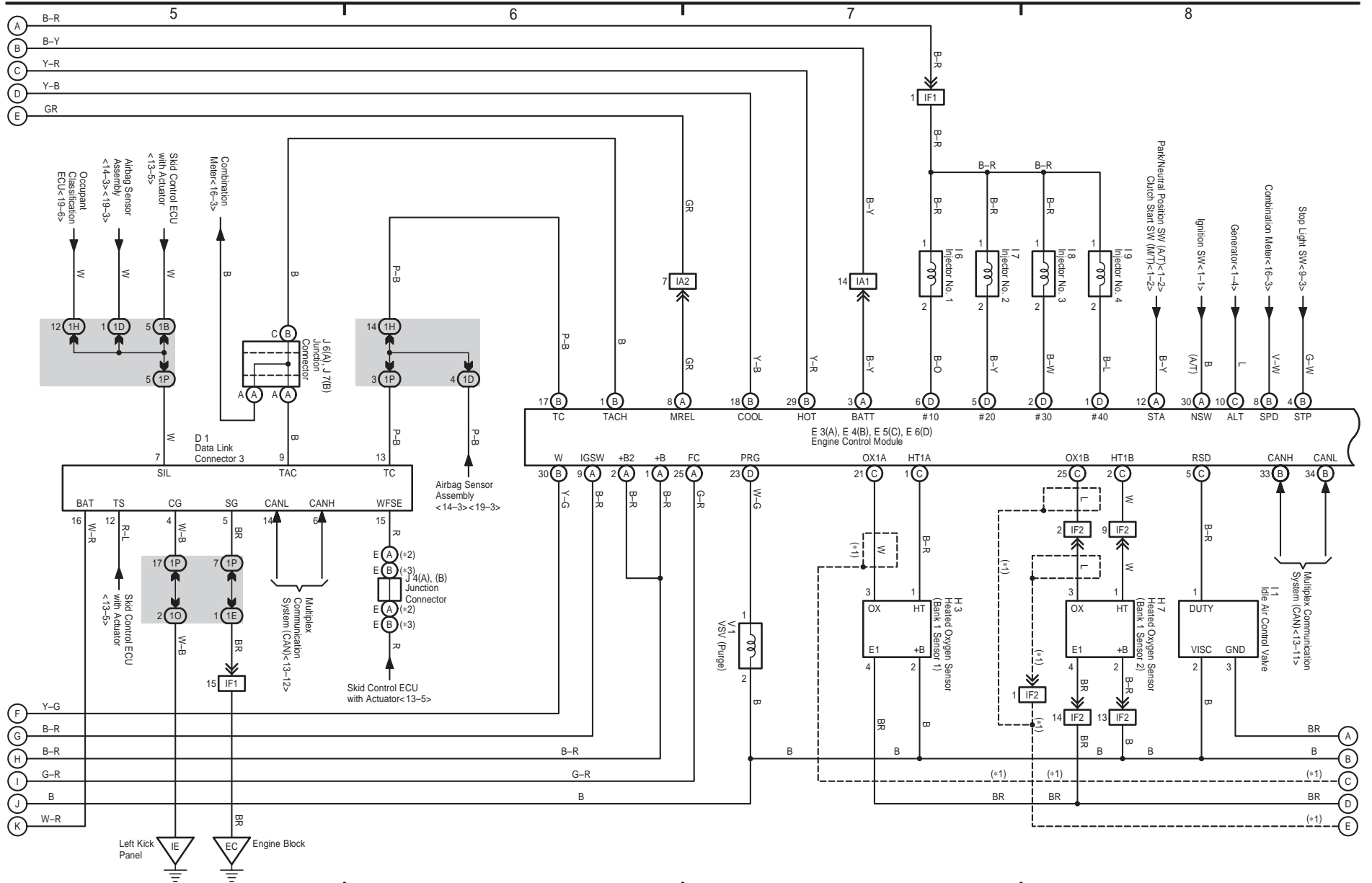


M OVERALL ELECTRICAL WIRING DIAGRAM



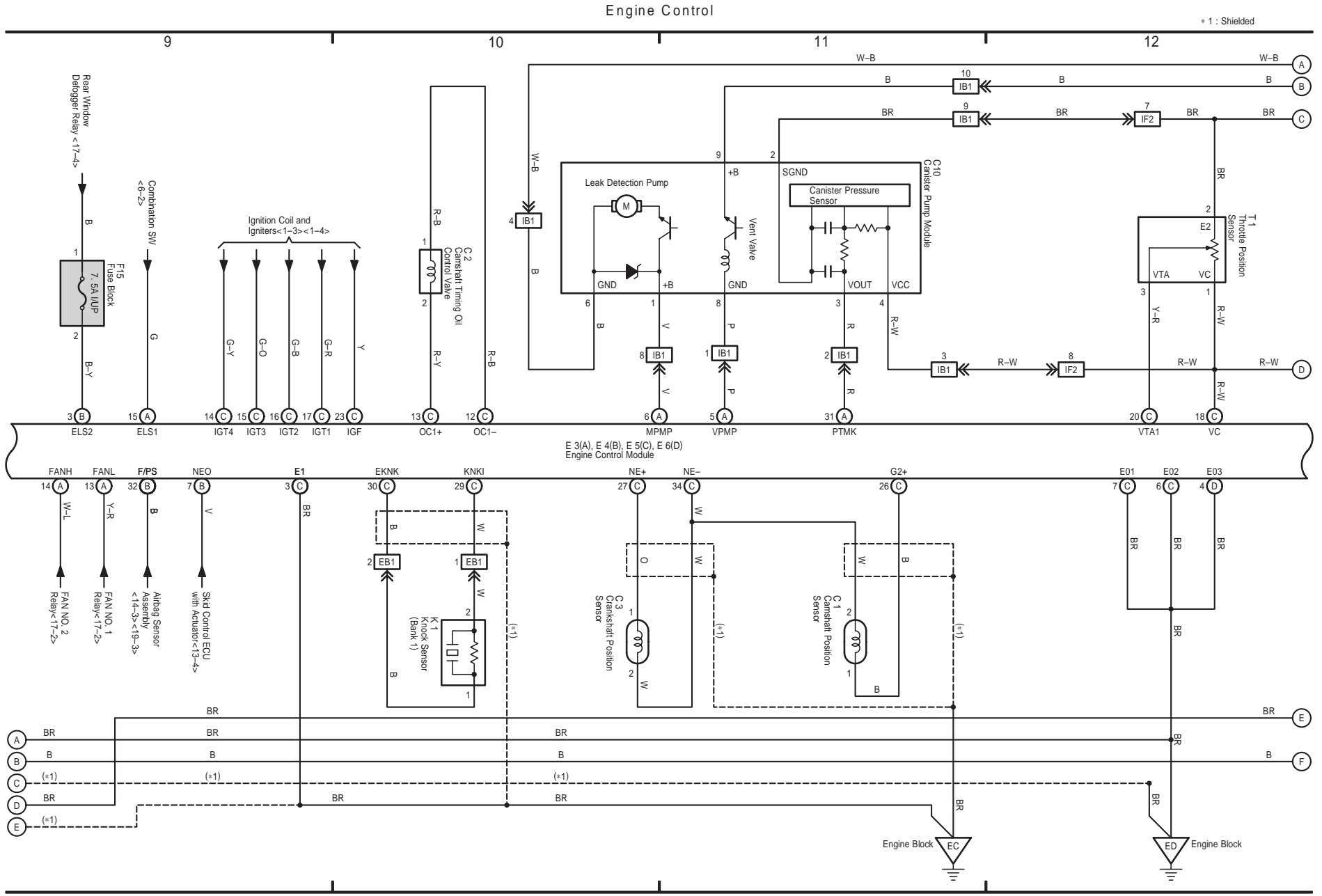
Engine Control

- \* 1 : Shielded
- \* 2 : Before Dec. 2005 Production
- \* 3 : From Dec. 2005 Production

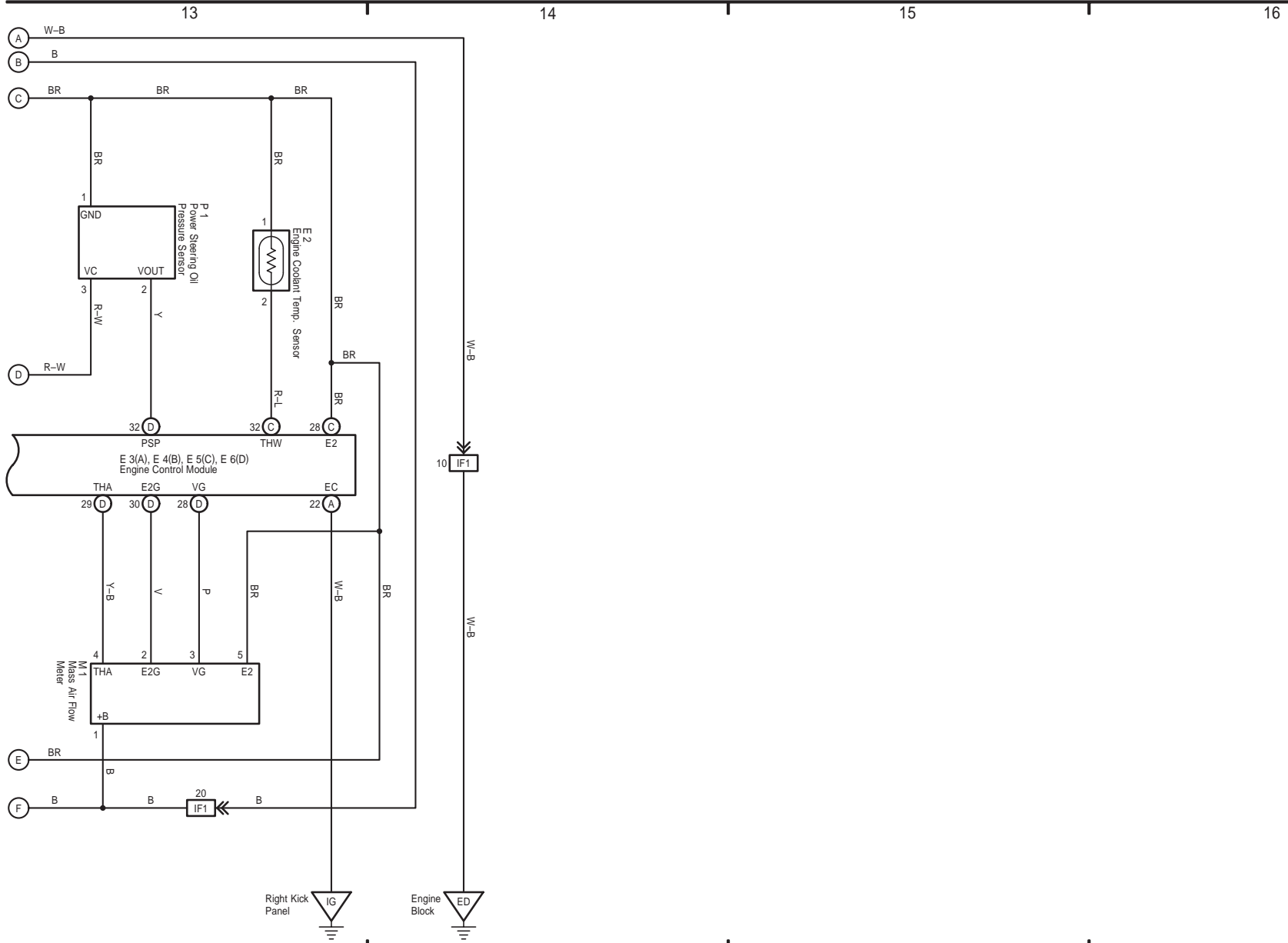


SCION xB (EM0091U)

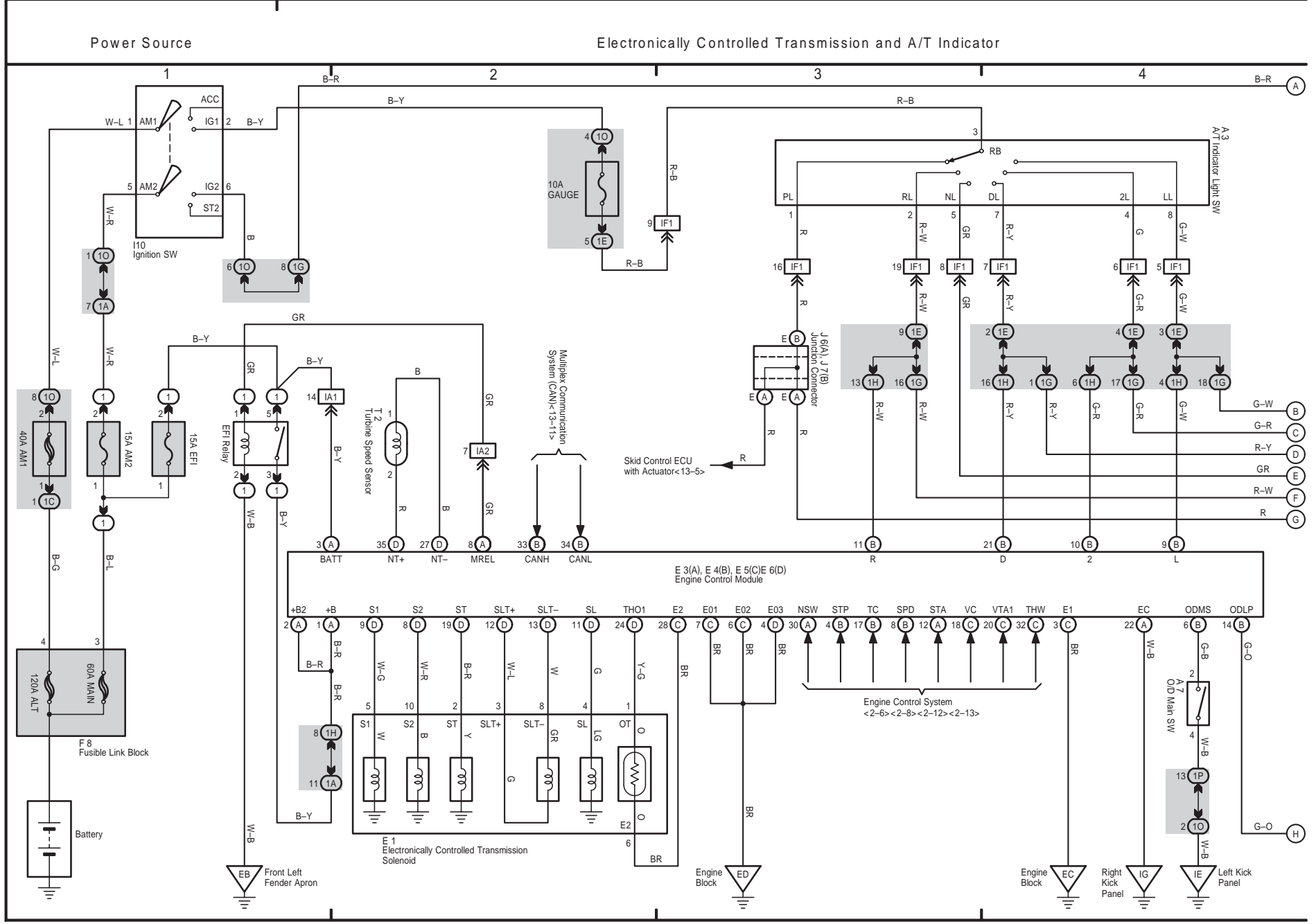




Engine Control

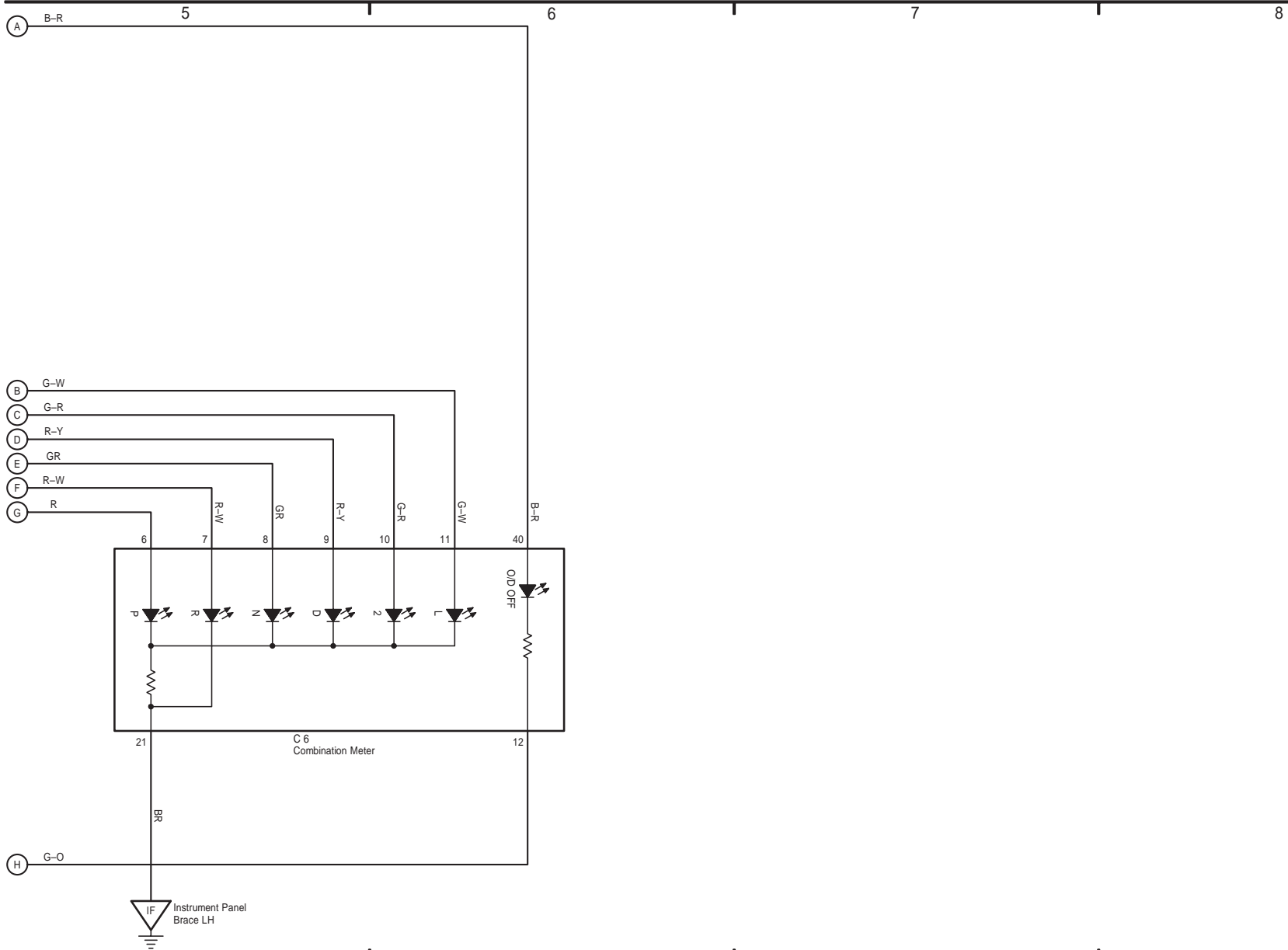


SCION xB (EM0091U)

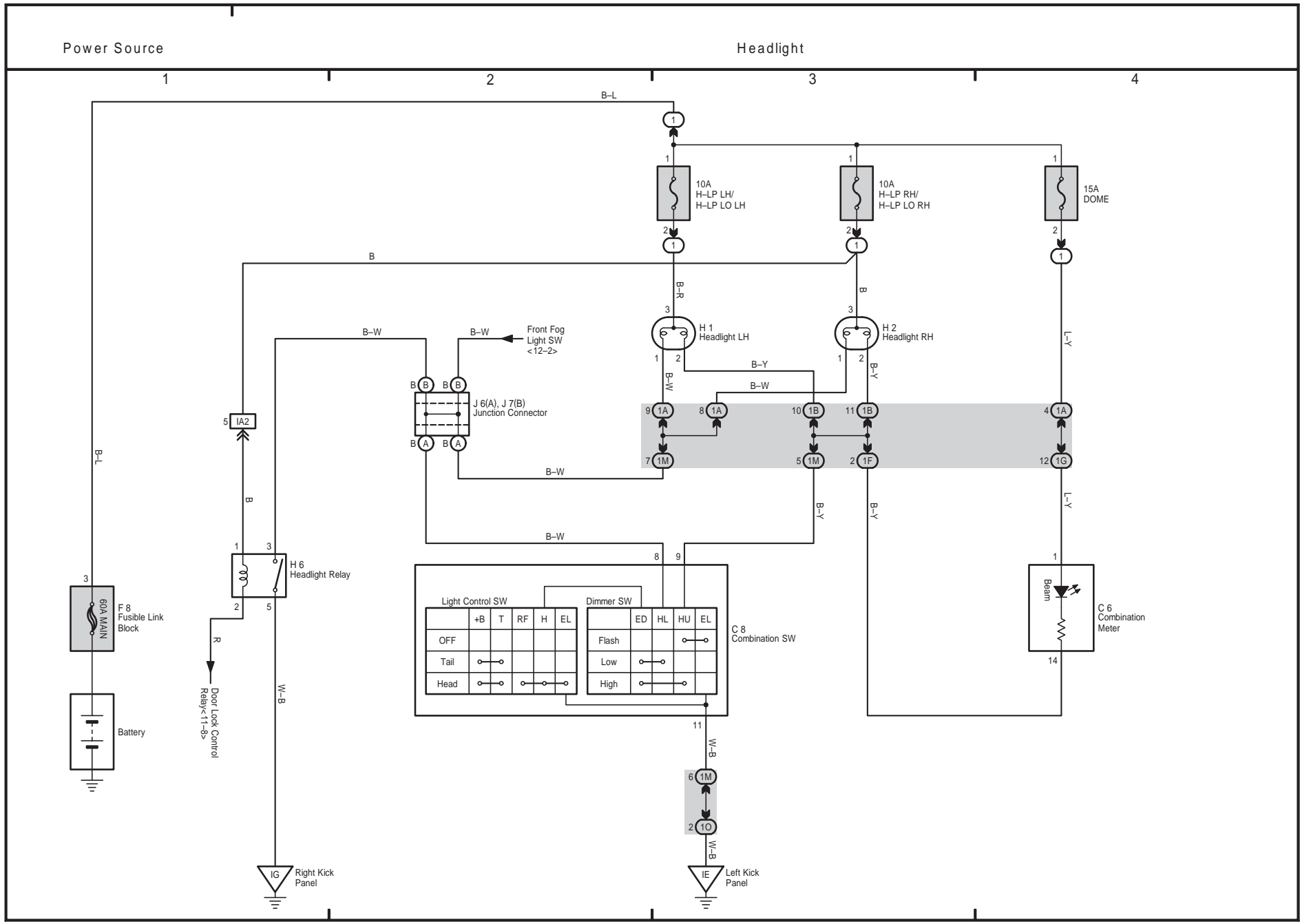


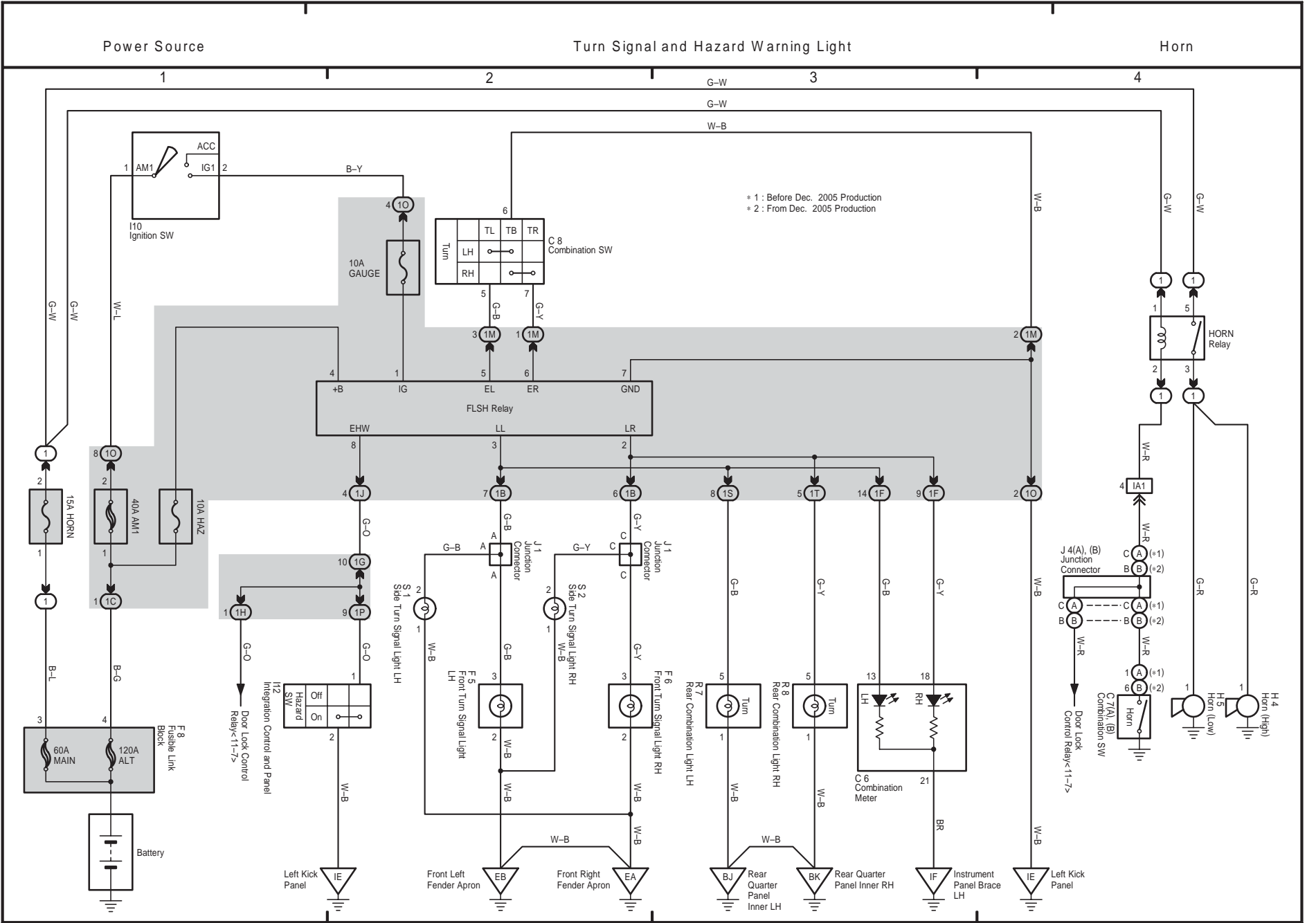


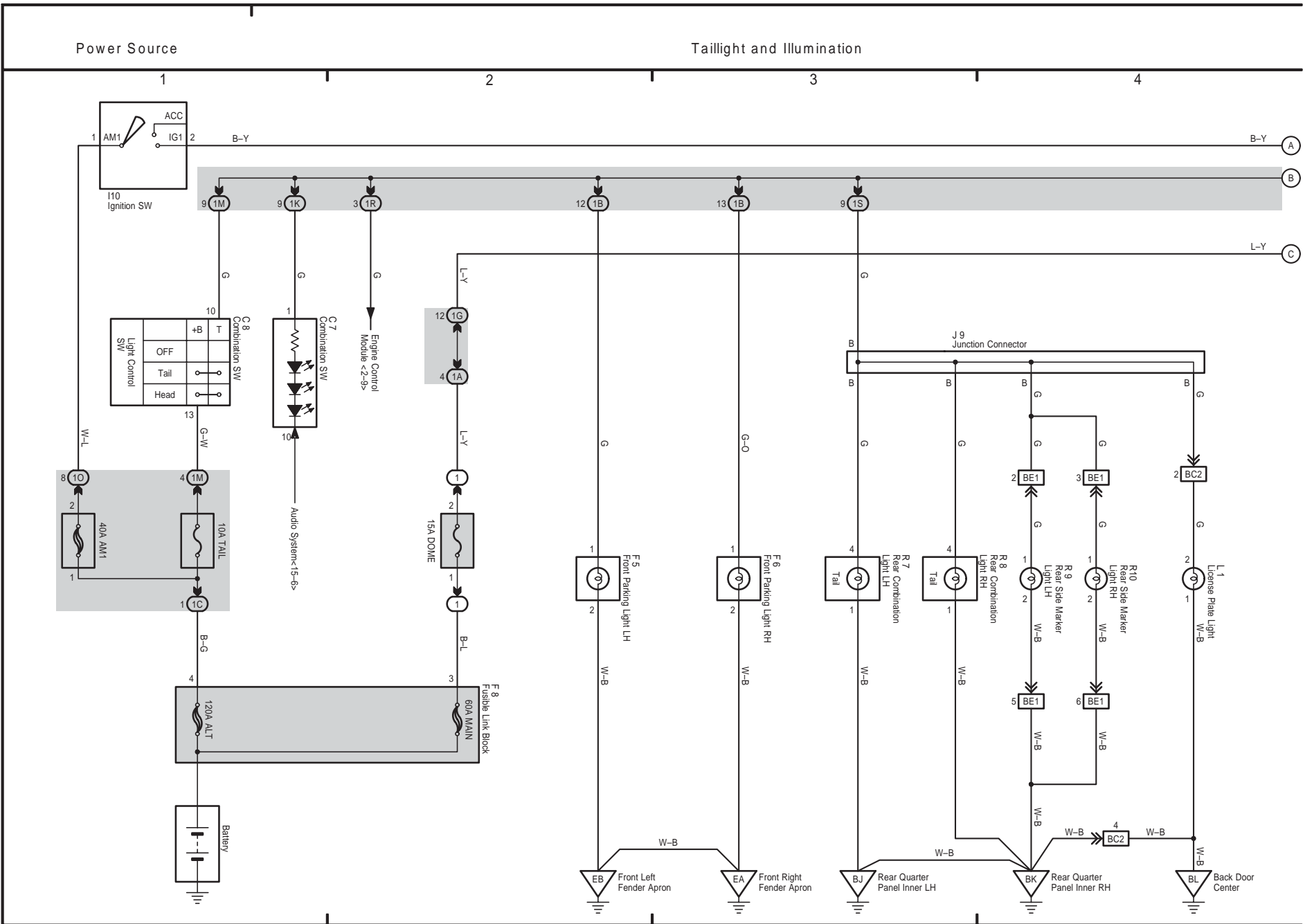
Electronically Controlled Transmission and A/T Indicator



SCION xB (EM0091U)

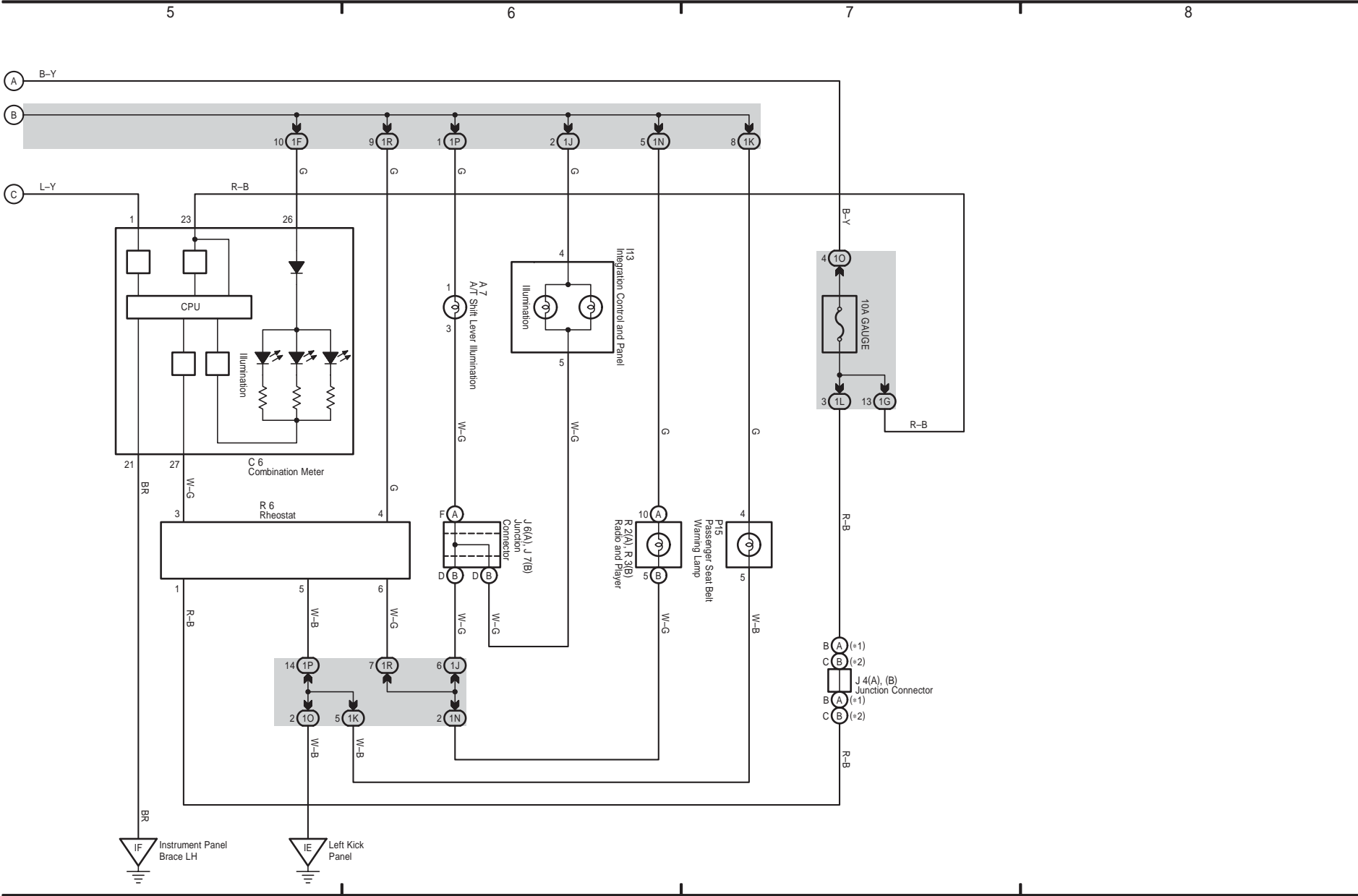






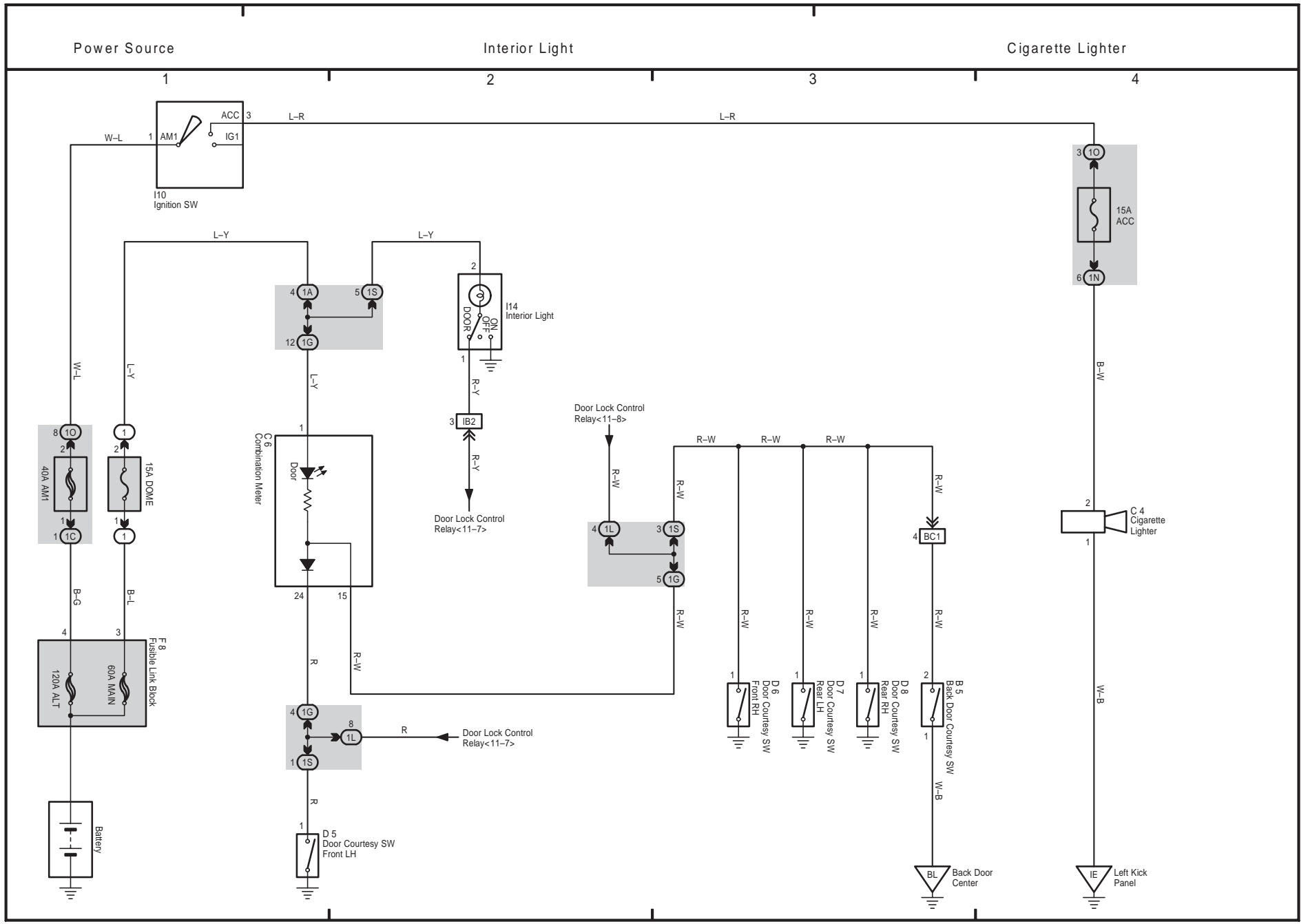
Taillight and Illumination

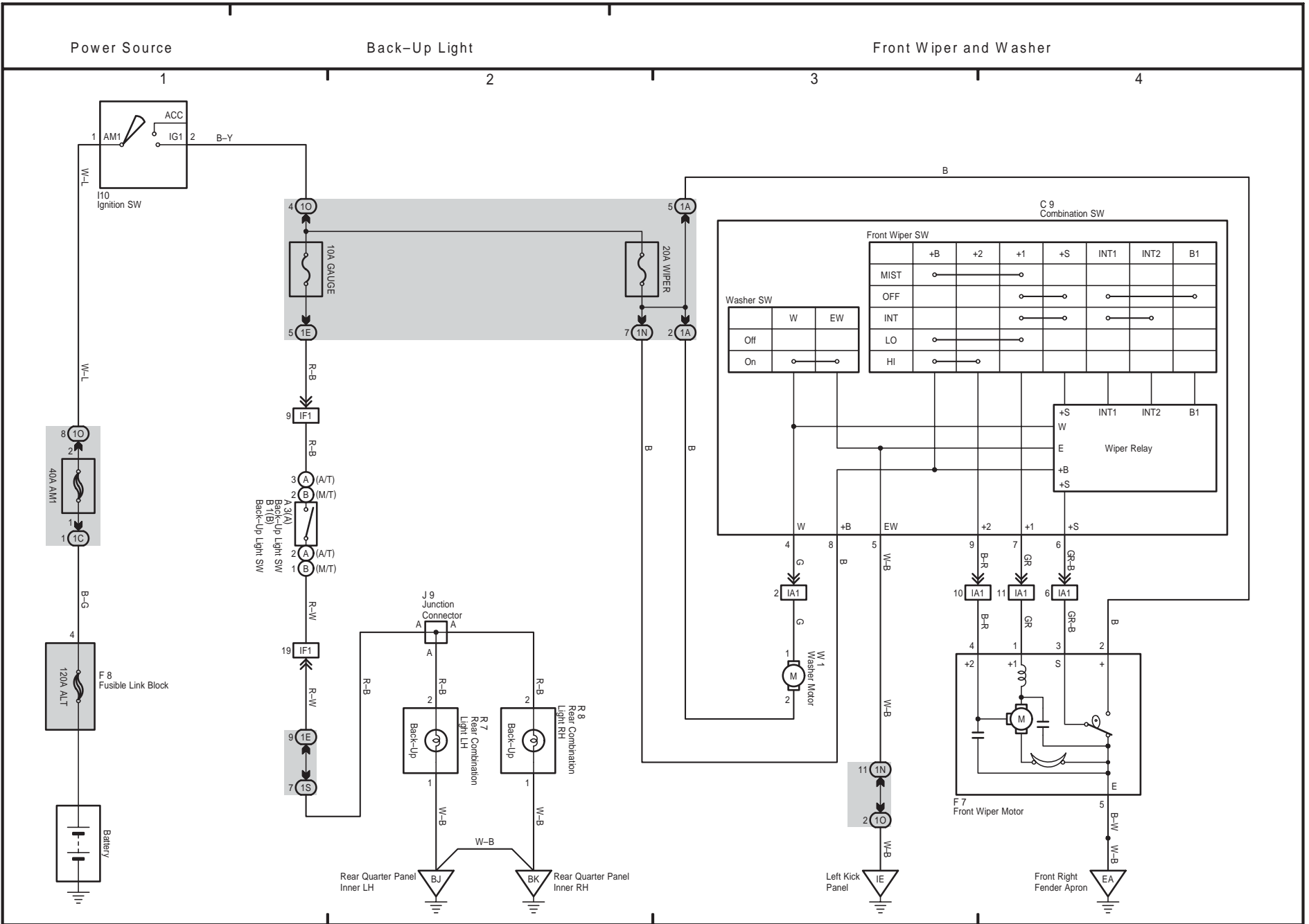
\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



SCION xB (EM0091U)

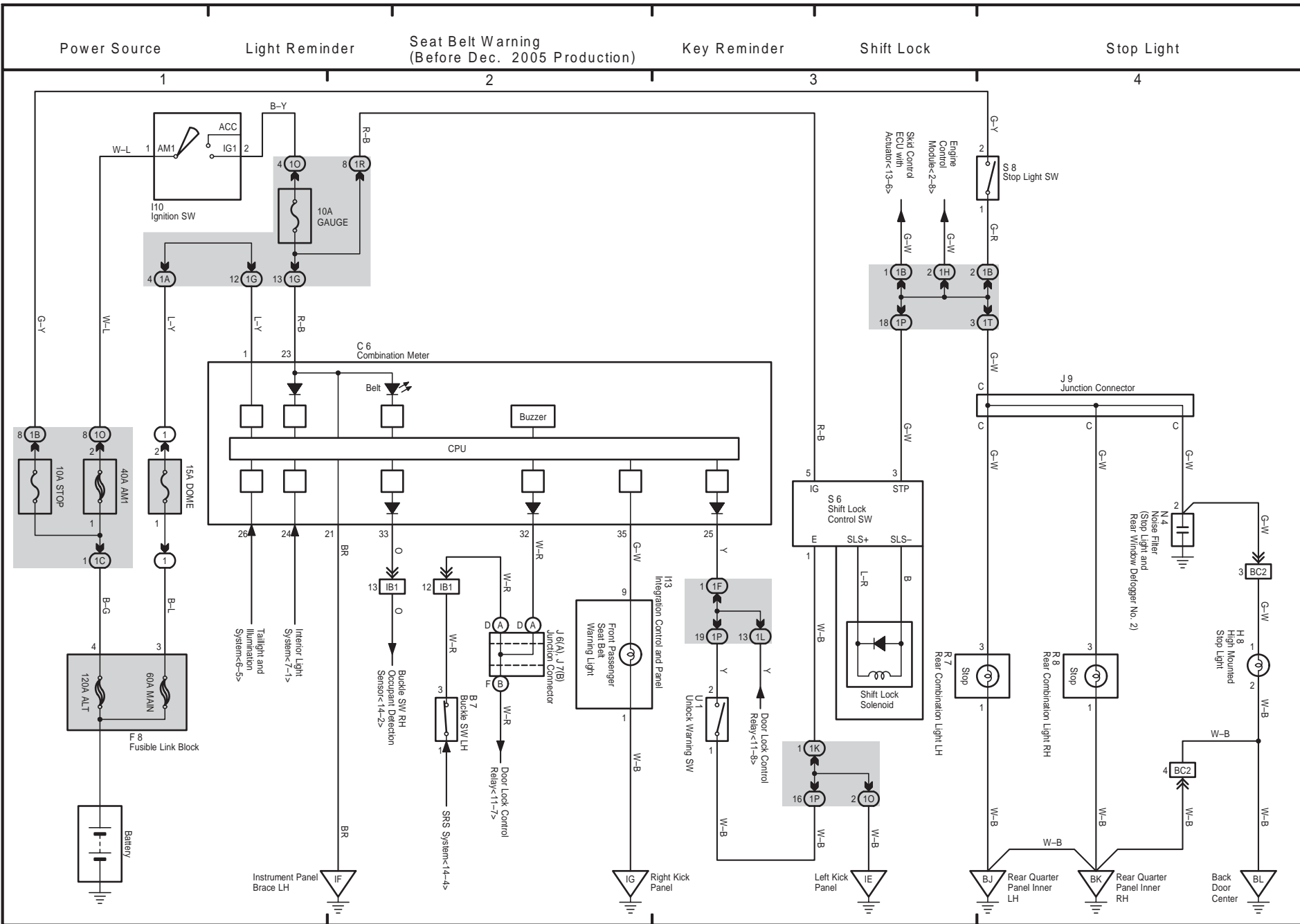






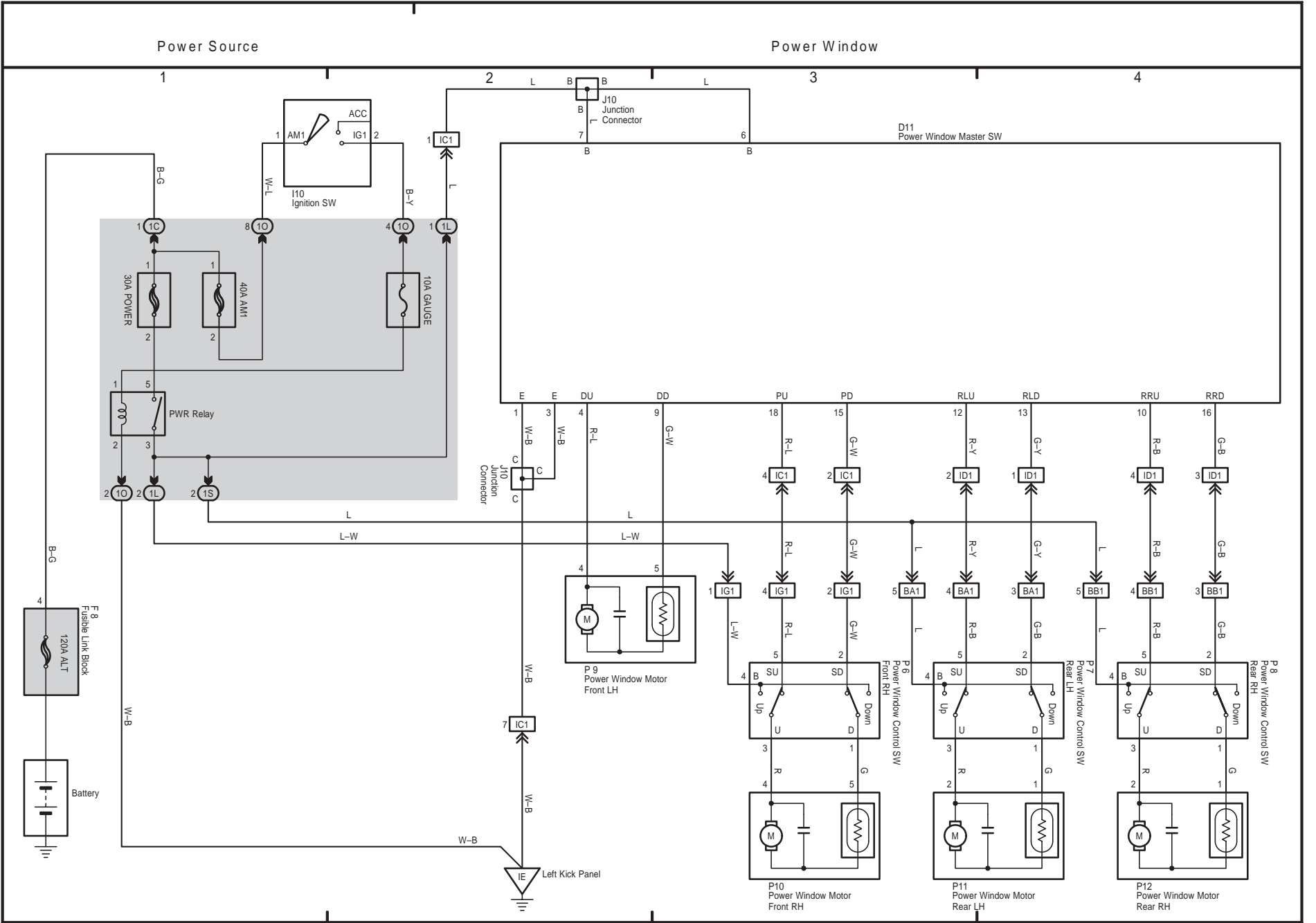
# M OVERALL ELECTRICAL WIRING DIAGRAM

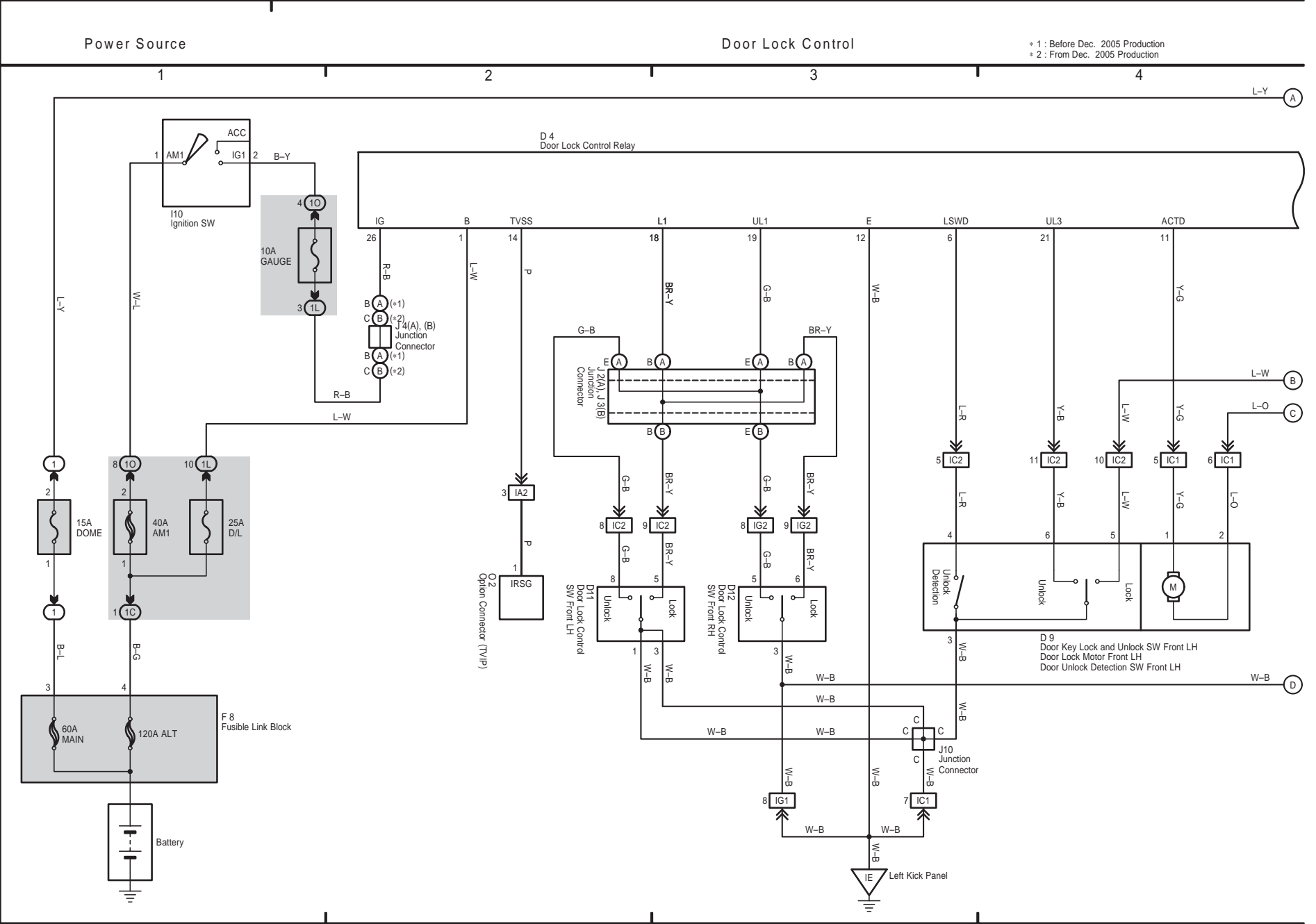
9 xB



SCION xB (EM0091U)

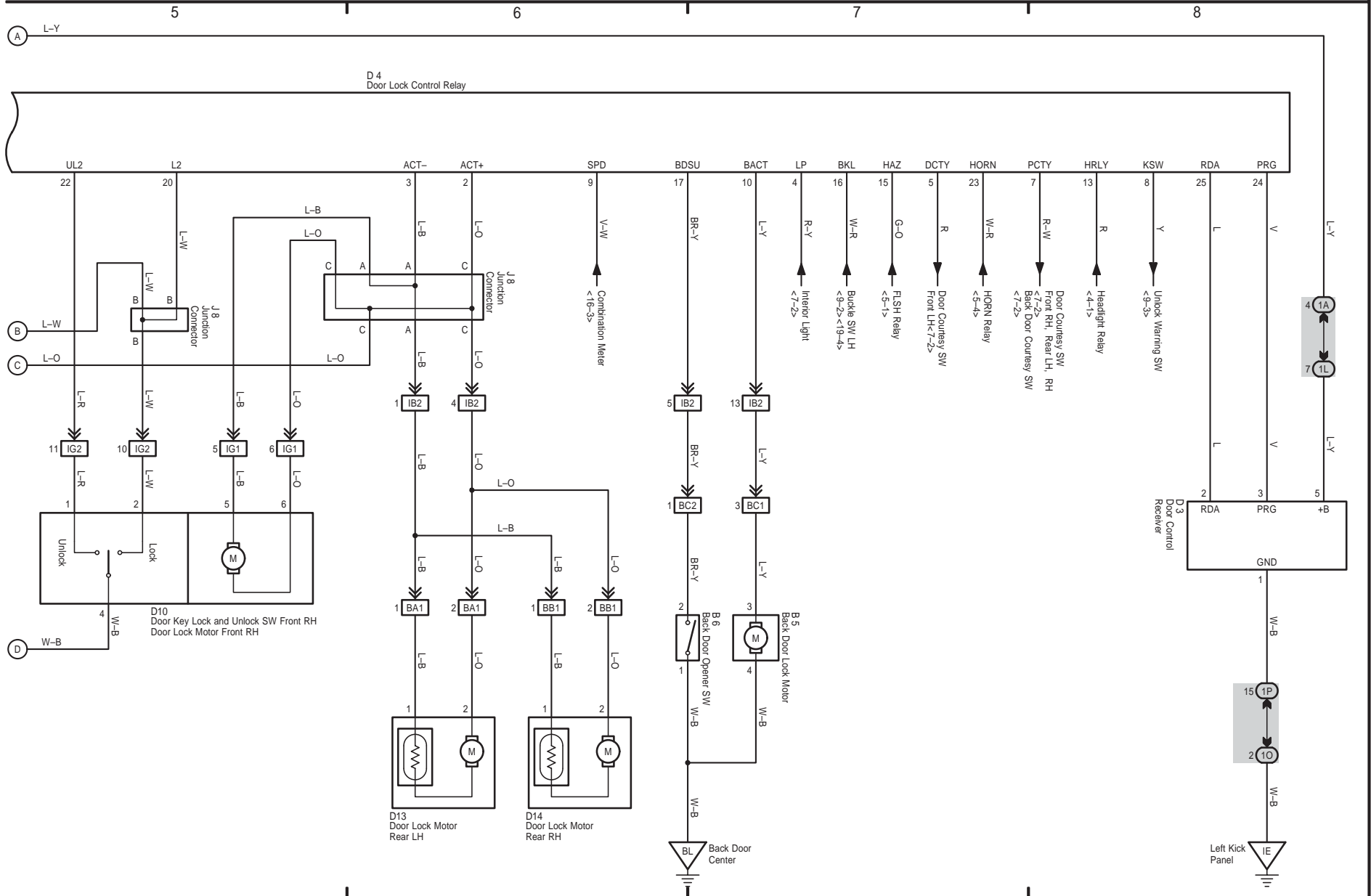






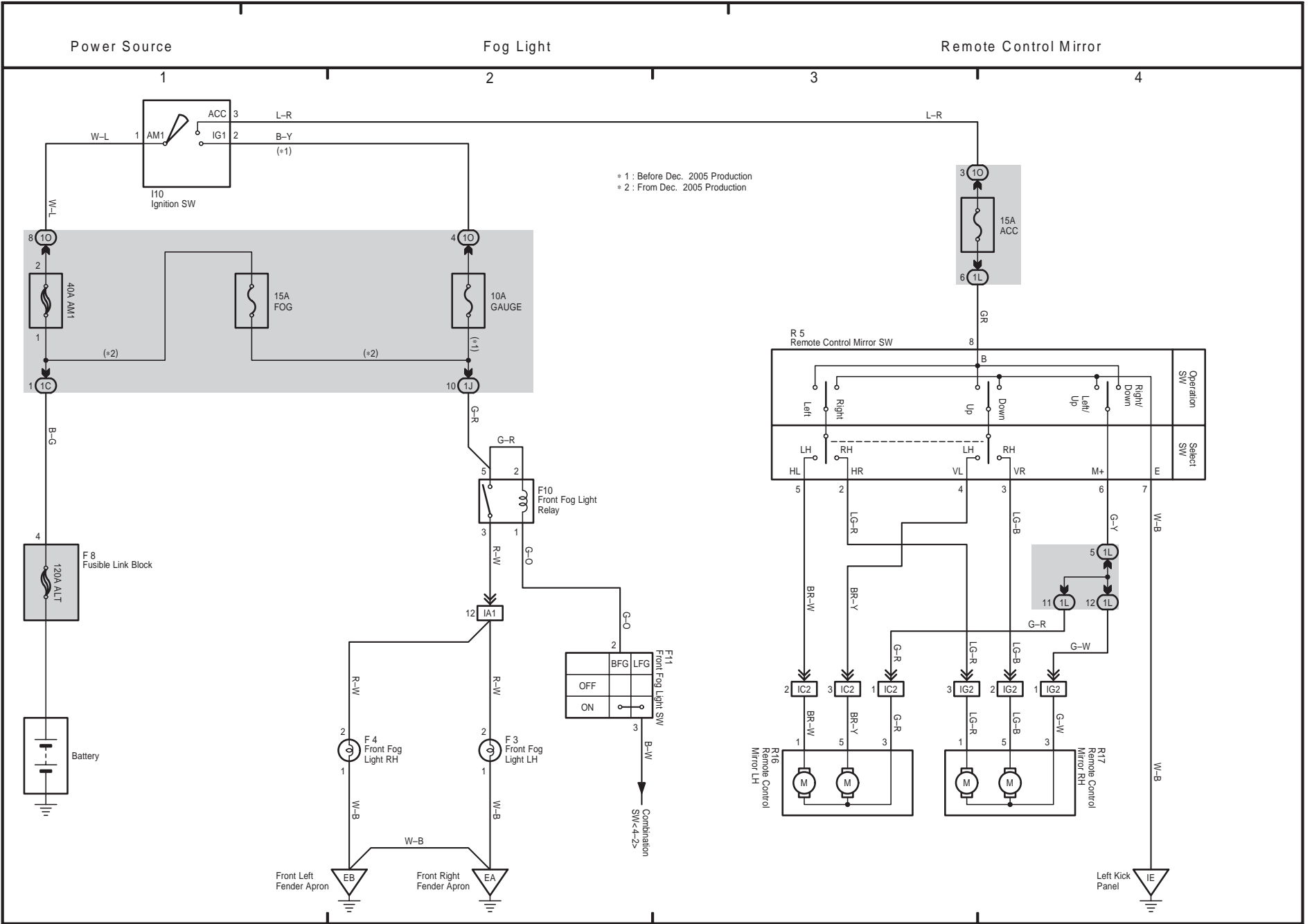
Door Lock Control

Wireless Door Lock Control



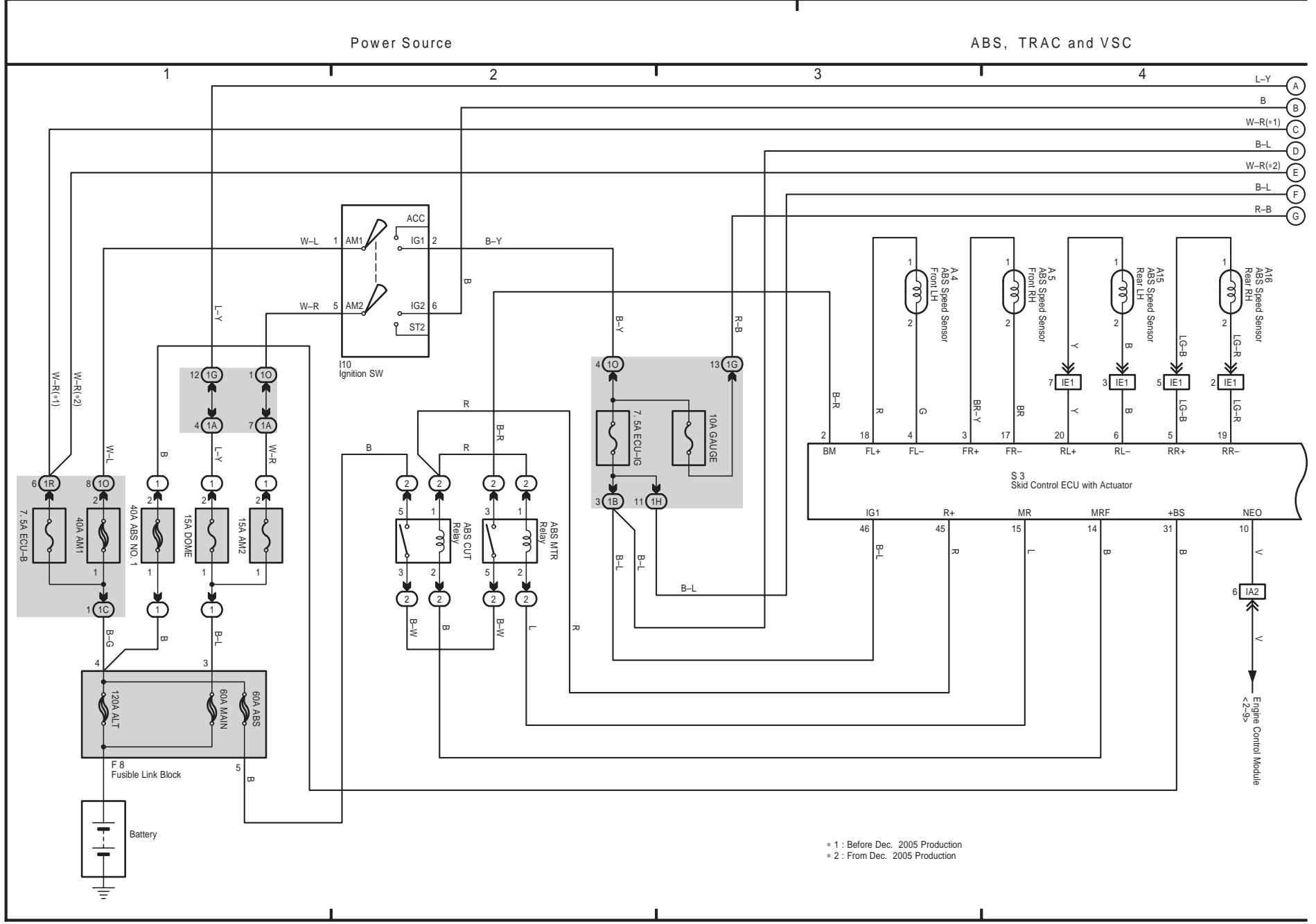
SCION xB (EM0091U)





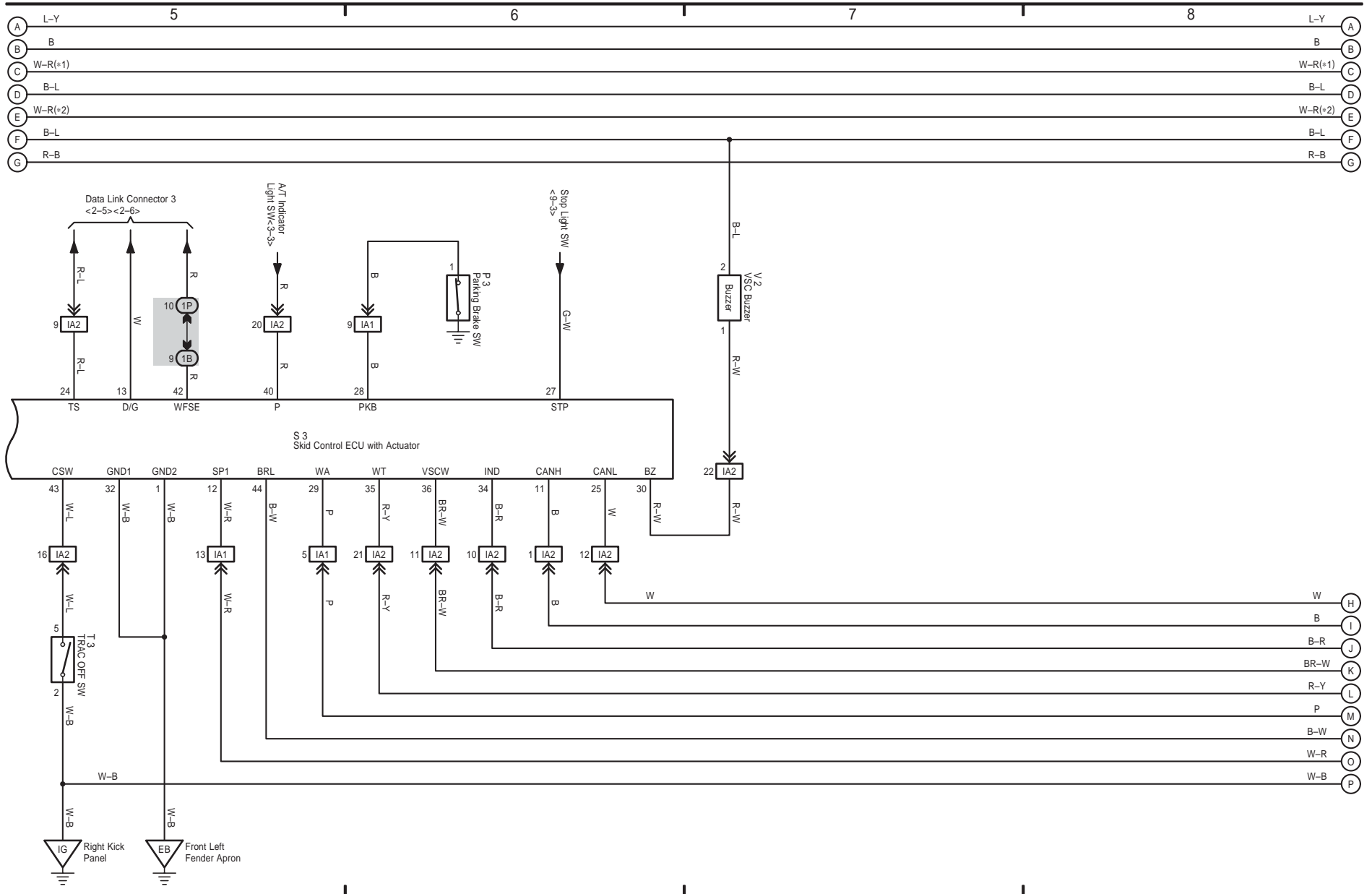


M OVERALL ELECTRICAL WIRING DIAGRAM



ABS, TRAC and VSC

\* 1 : Before Dec. 2005 Production  
 \* 2 : From Dec. 2005 Production



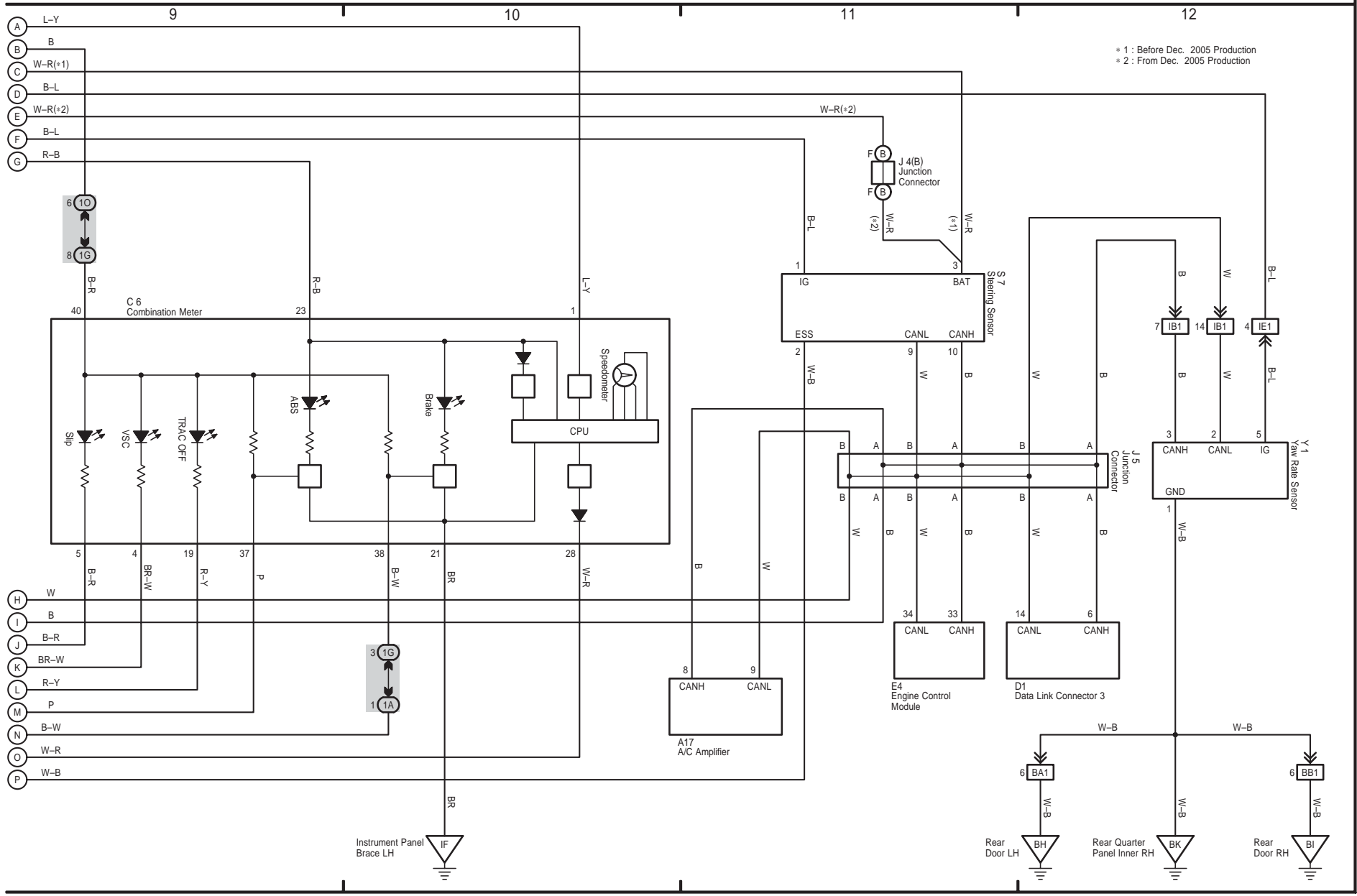
SCION xB (EM0091U)



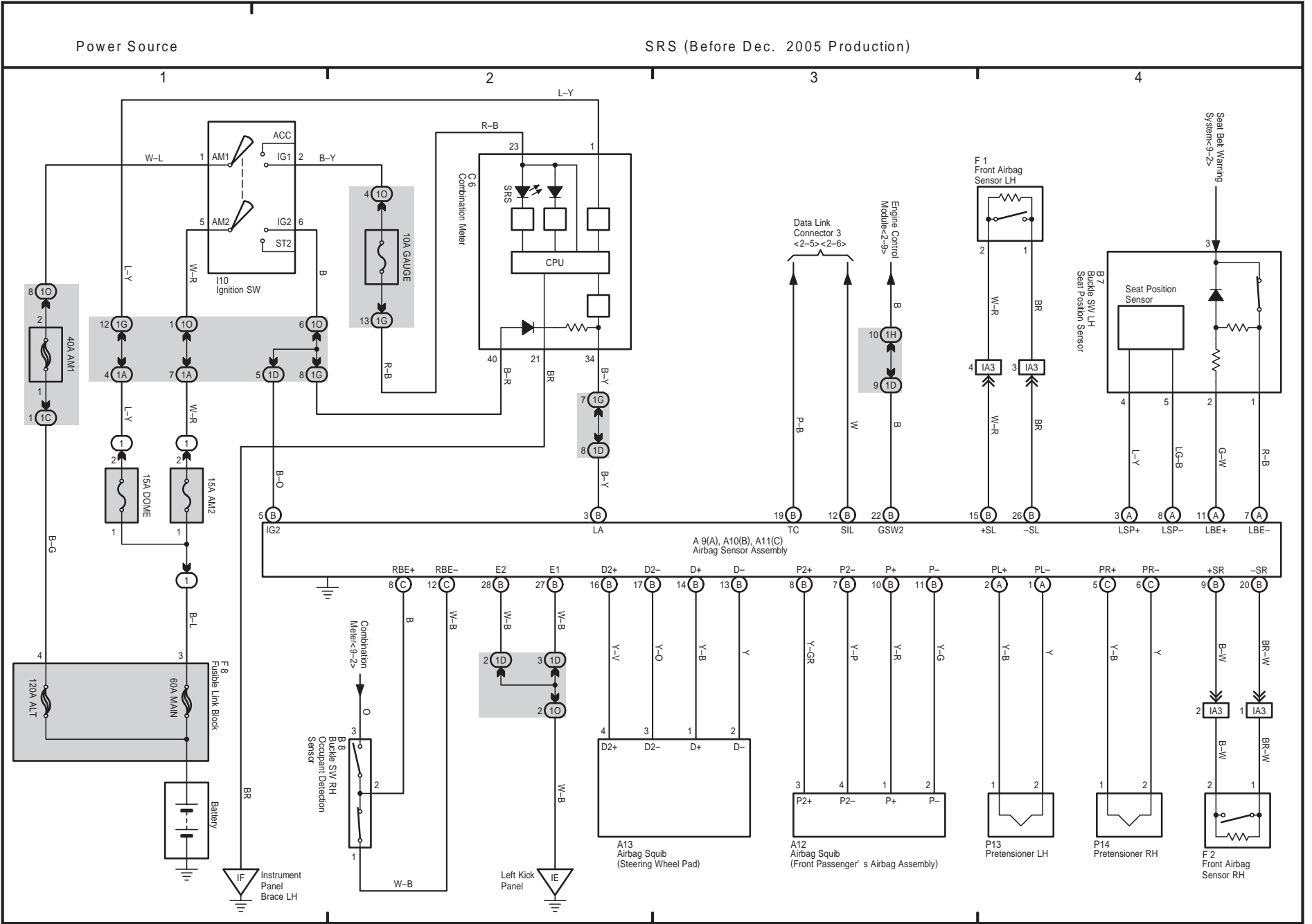
13 xB (Cont' d)

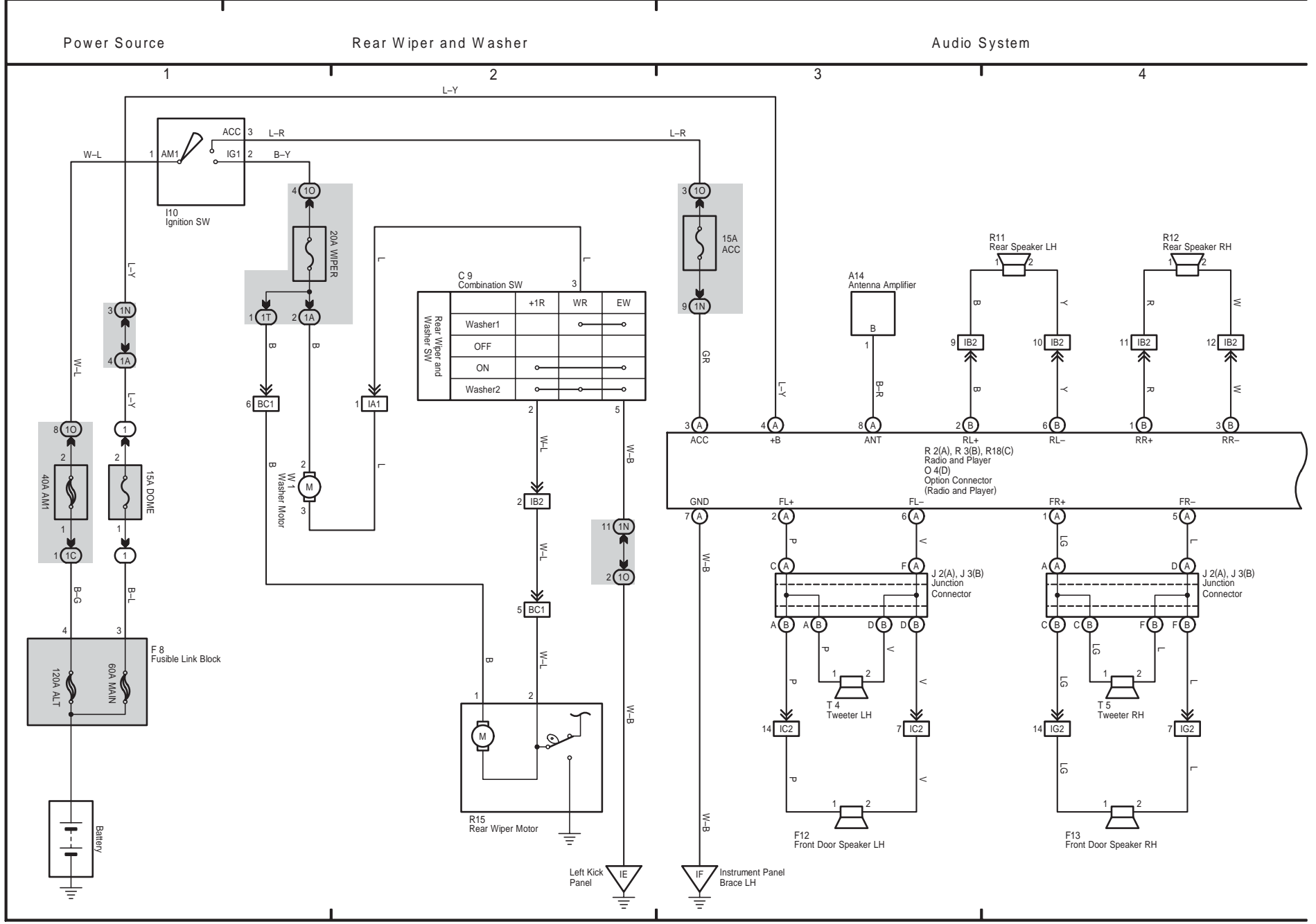
ABS, TRAC and VSC

Multiplex Communication System (CAN)





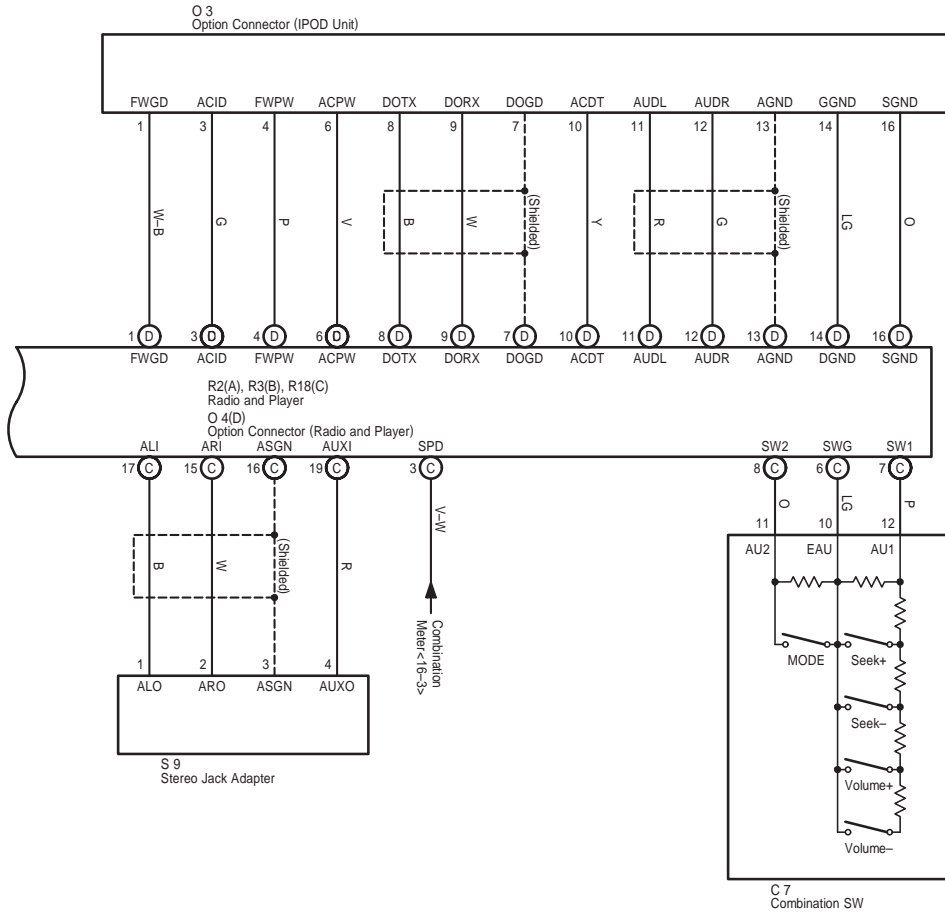


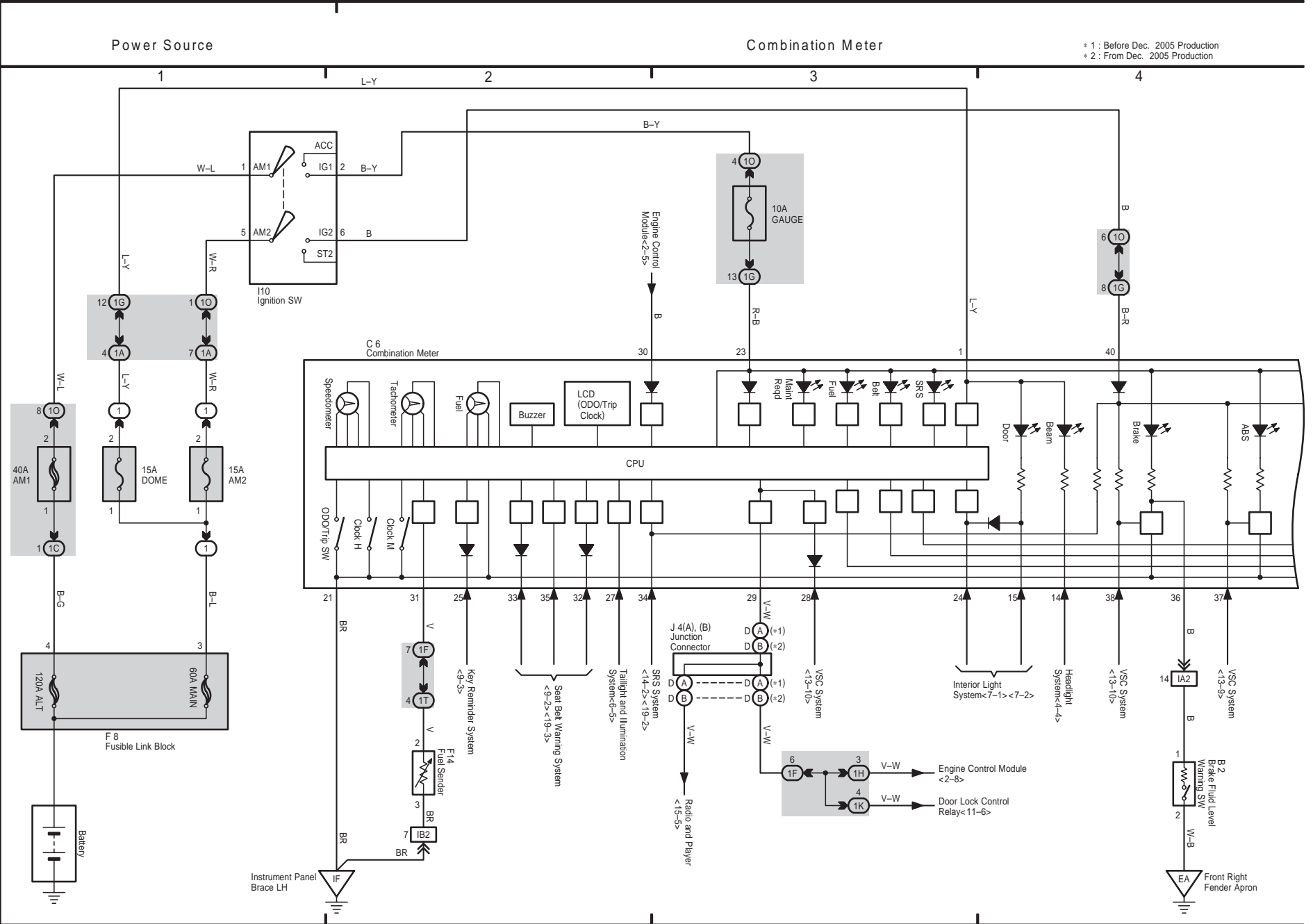


Audio System

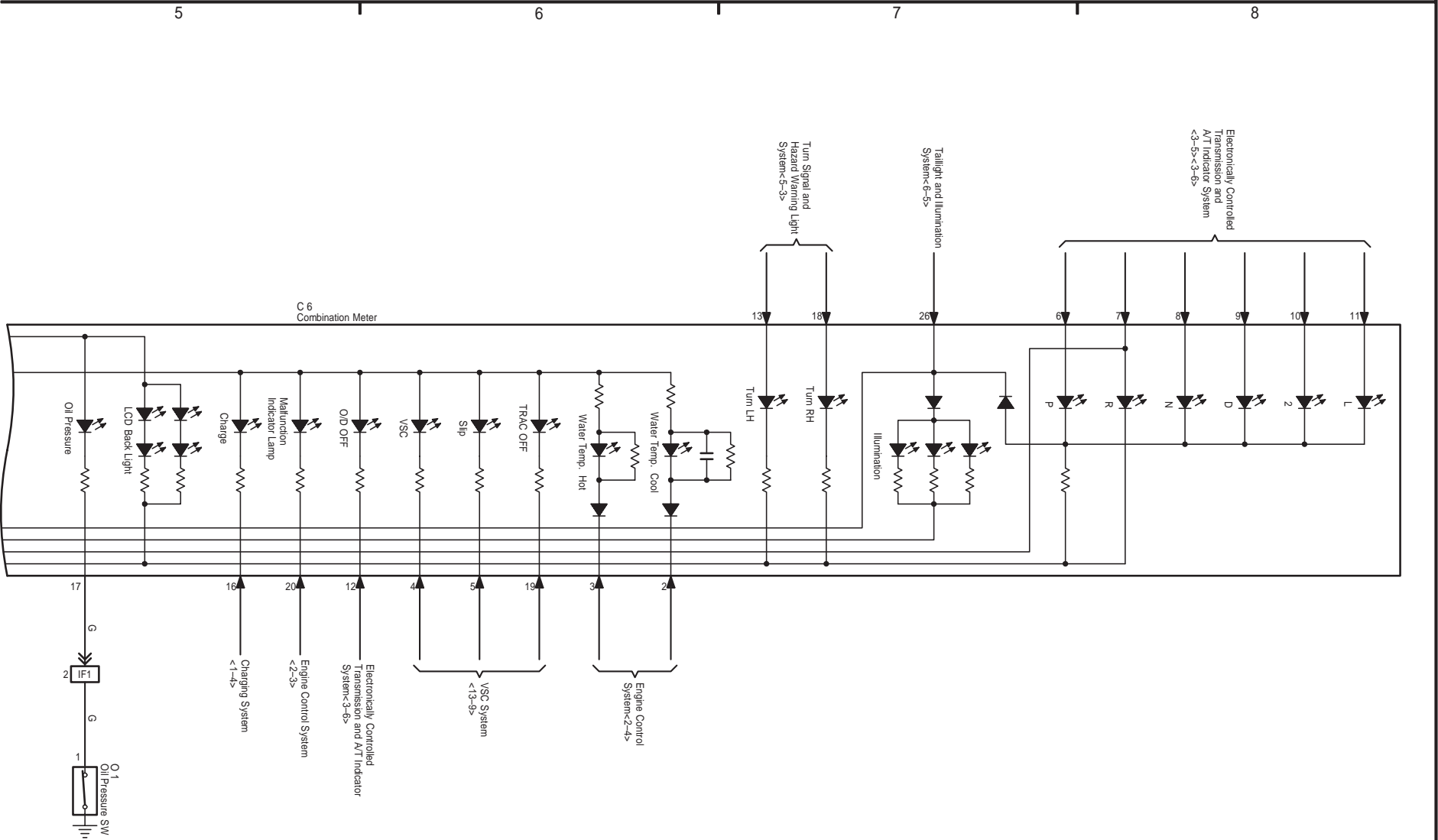
5 6 7 8

SCION xB (EM0091U)





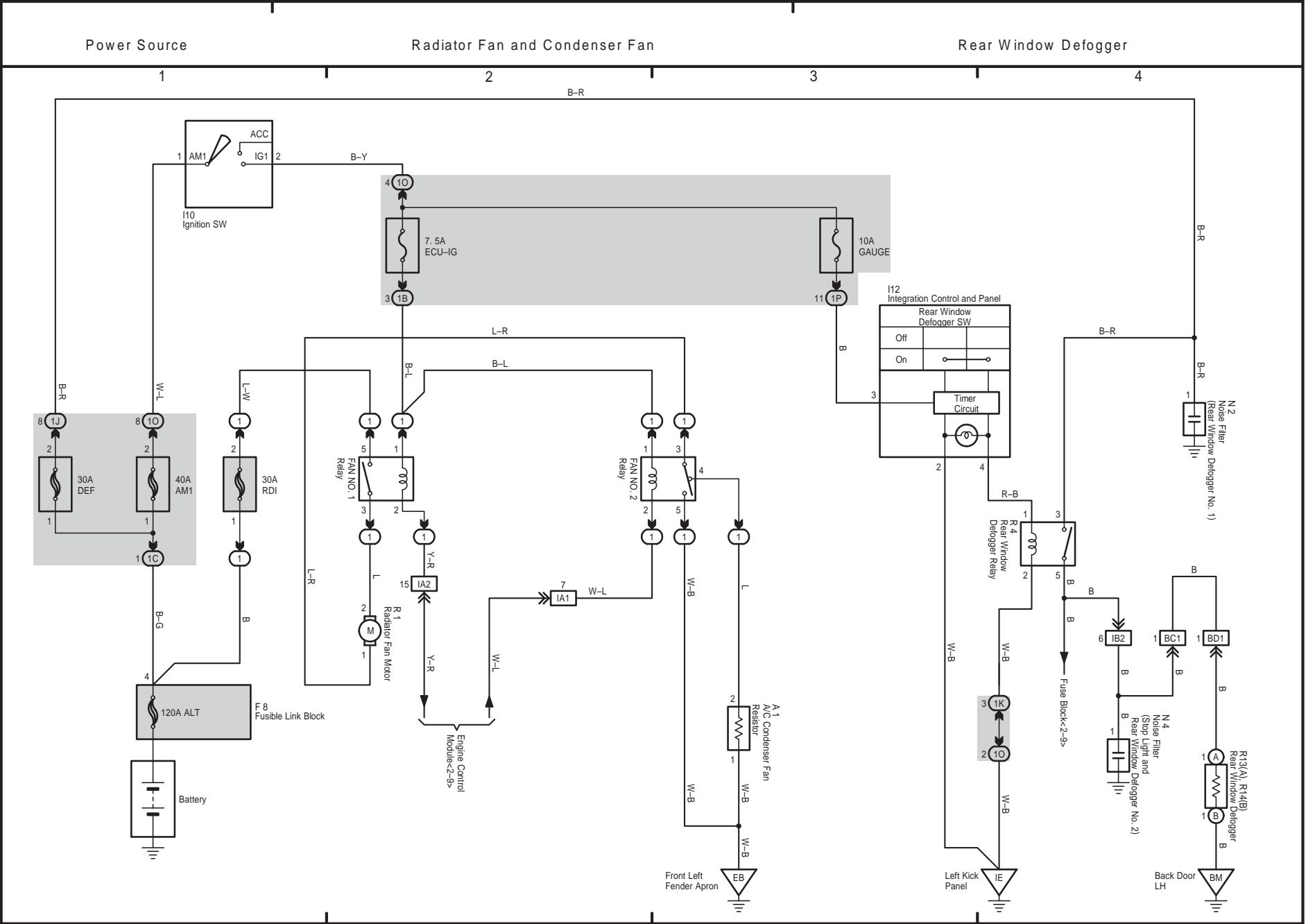
Combination Meter



SCION xB (EM0091U)

M OVERALL ELECTRICAL WIRING DIAGRAM

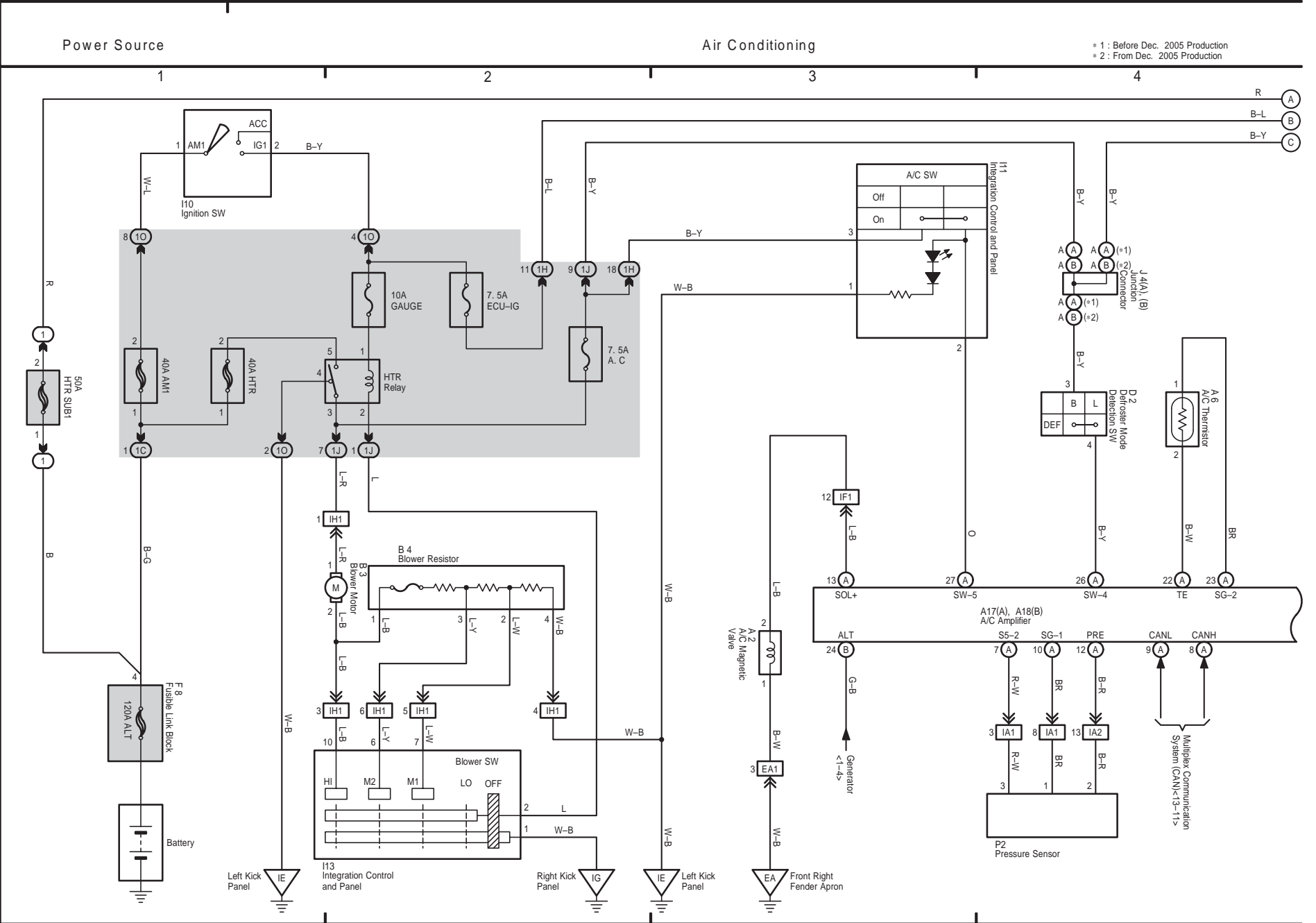
17 xB



SCION xB (EM0091U)

224

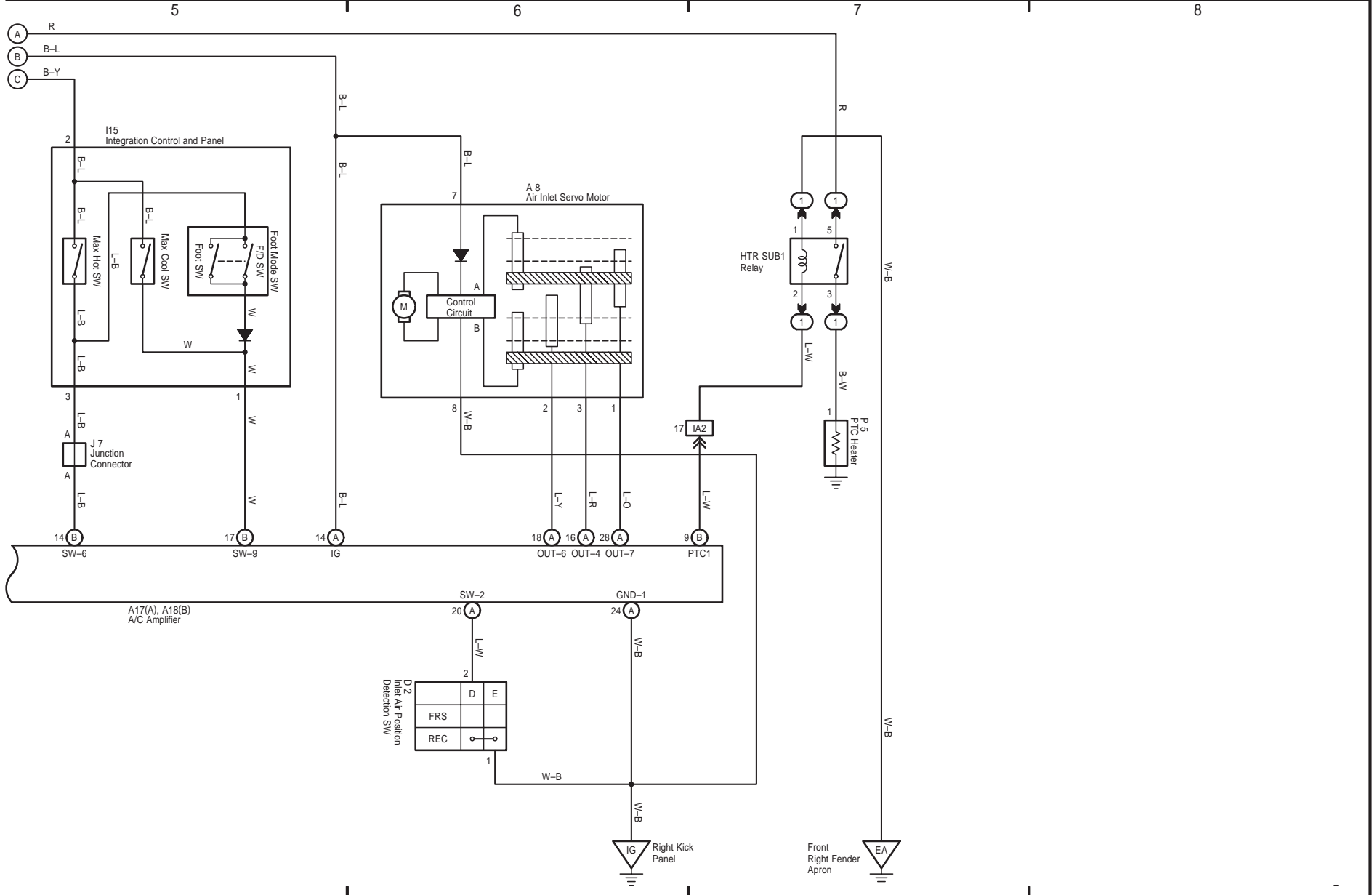






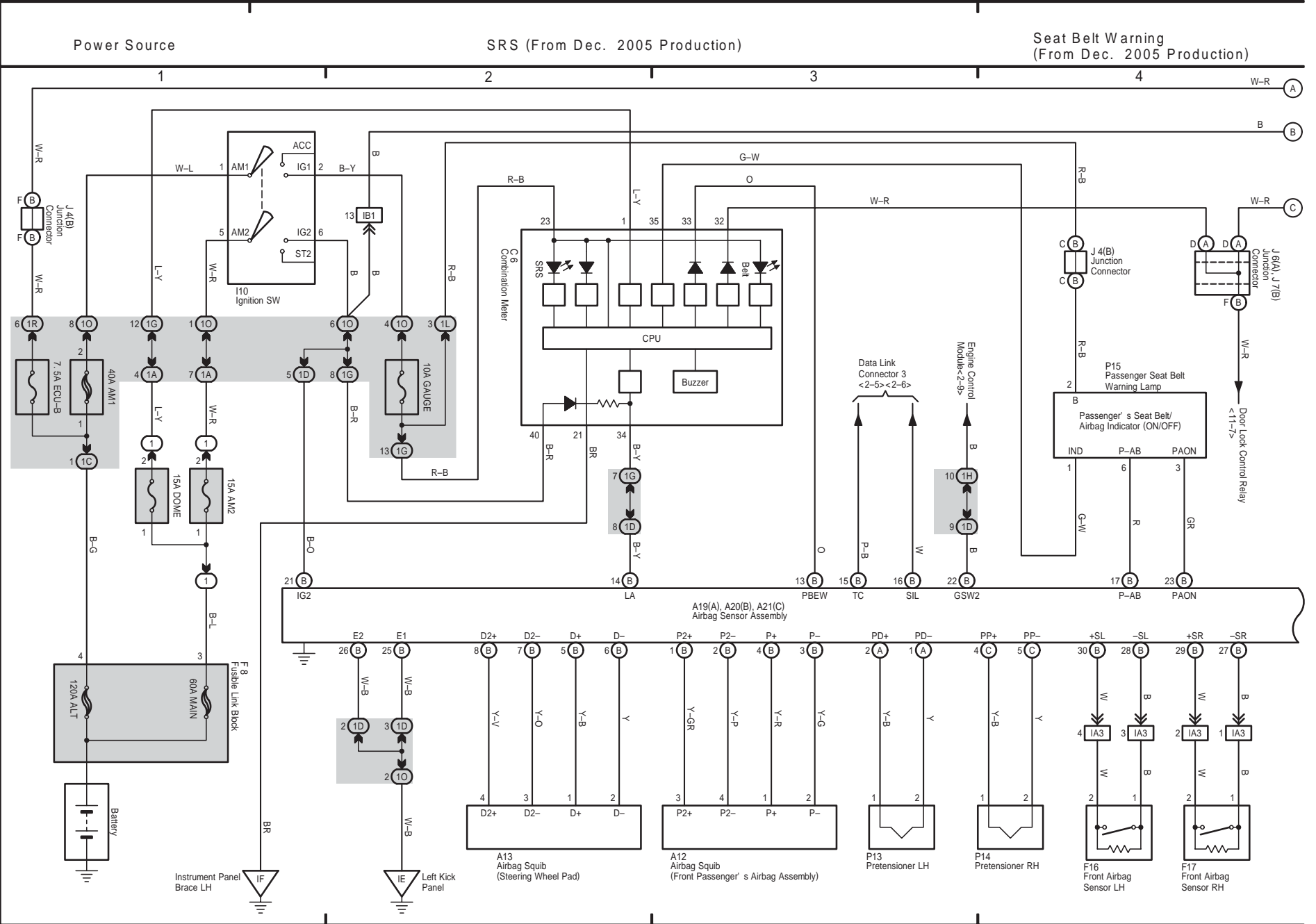
Two Way Flow Heater

PTC Heater

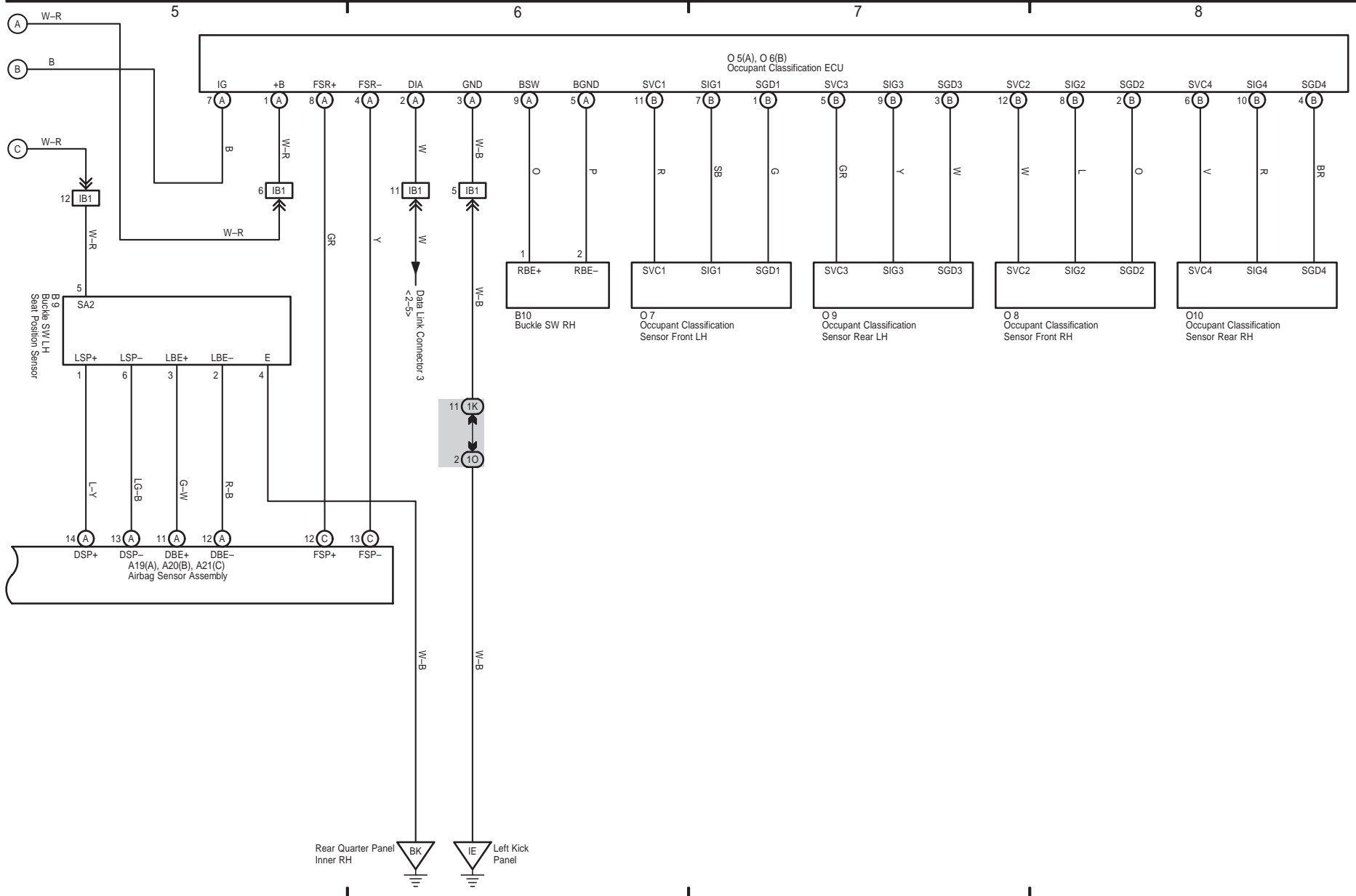


SCION XB (EM0091U)





Seat Belt Warning  
(From Dec. 2005 Production)

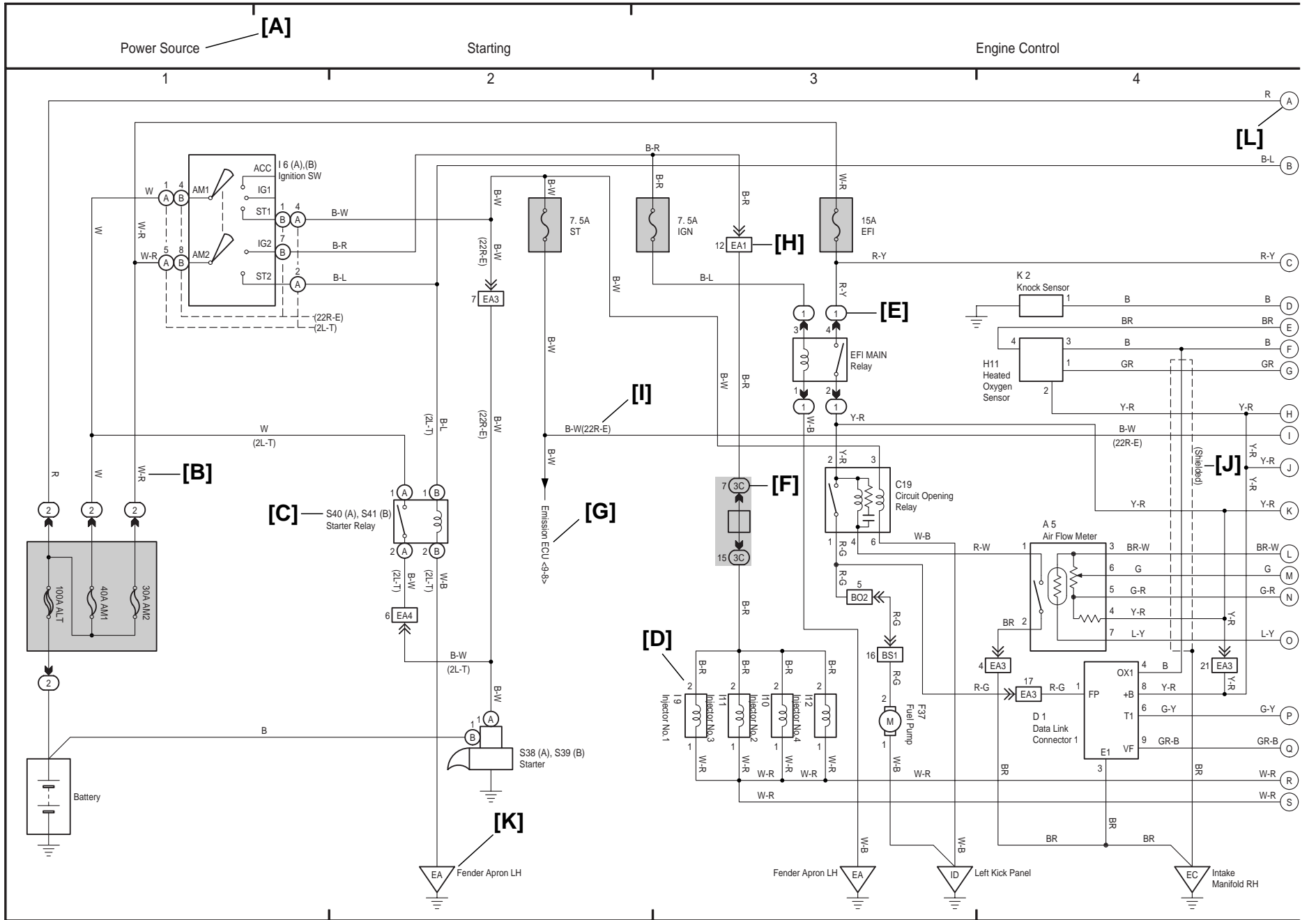


SCION XB (EM0091U)

# 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.

# M OVERALL ELECTRICAL WIRING DIAGRAM



**[A]** : System Title

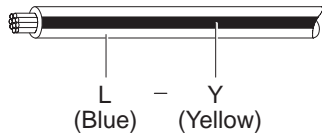
**[B]** : Indicates the wiring color.

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

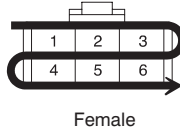


**[C]** : The position of the parts is the same as shown in the wiring diagram and wire routing.

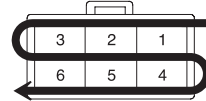
**[D]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example : Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

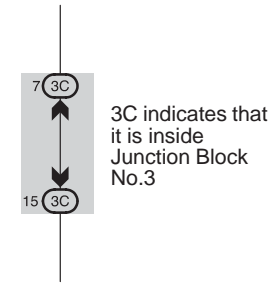
The numbering system for the overall wiring diagram is the same as above

**[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

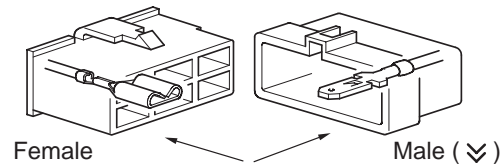
**[F]** : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

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.



**[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.

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| SYSTEMS  | LOCATION | SYSTEMS   | LOCATION |
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| Air Conditioning .....   | 18-2     | Power Window .....                                    | 10-2     |
| Audio System .....   | 15-3     | PTC Heater .....                                      | 18-7     |
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| Cigarette Lighter .....  | 7-4      | Rear Wiper and Washer .....                           | 15-2     |
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