

FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2005 GX 470.

Applicable models: UZJ120 Series

For service specifications and repair procedures of the above models other than those listed in this manual, refer to the following manuals;

Manual Name	Pub. No.
● 2005 LEXUS GX 470 Repair Manual	RM1164U
● 2005 LEXUS New Car Features	NCF273U

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

When handling supplemental restraint system components (removal, installation or inspection, etc.), always follow the direction given in the repair manuals listed above to prevent accidents and supplemental restraint system malfunction.

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2005 GX 470 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.

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.

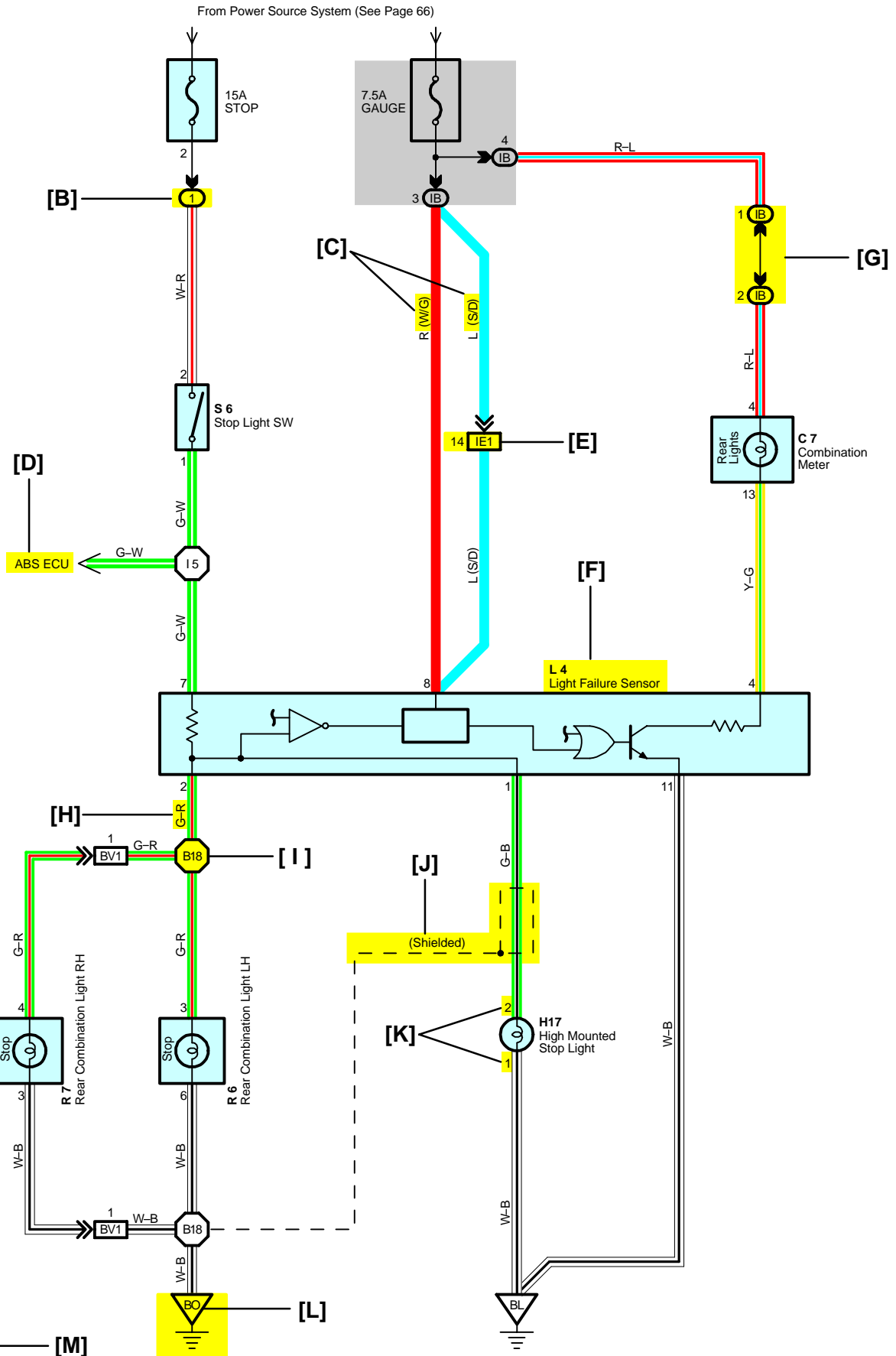
When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground 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] Stop Light



[A] : System Title

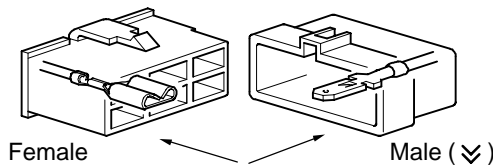
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

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.



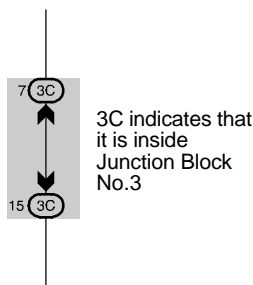
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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:



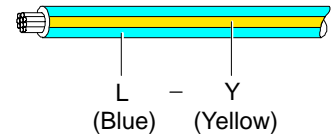
[H] : Indicates the wiring color.

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

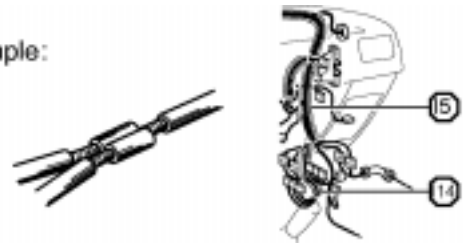
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



[I] : Indicates a wiring Splice Point (Codes are "E" for the Engine Room, "I" for the Instrument Panel, and "B" for the Body).

Example:



The Location of splice Point I 5 is indicated by the shaded section.

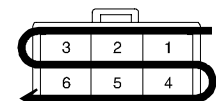
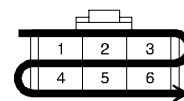
[J] : Indicates a shielded cable.



[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.

B HOW TO USE THIS MANUAL

[N] 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.

[O] Service Hints

S6 Stop Light SW

2-1 : Closed with the brake pedal depressed

L4 Light Failure Sensor

1, 2, 7-Ground : Approx. 12 volts with the stop light SW on

4, 8-Ground : Approx. 12 volts with the ignition SW at ON position

11-Ground : Always continuity

[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)
IB	20	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
3C	22	Instrument Panel Wire and J/B No.3 (Instrument Panel Brace LH)

[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

[U] ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

[N] : Explains the system outline.

[O] : Indicates values or explains the function for reference during troubleshooting.

[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
└──┬──┘ Parts is 4th in order
 └──┘ Light Failure Sensor

[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.

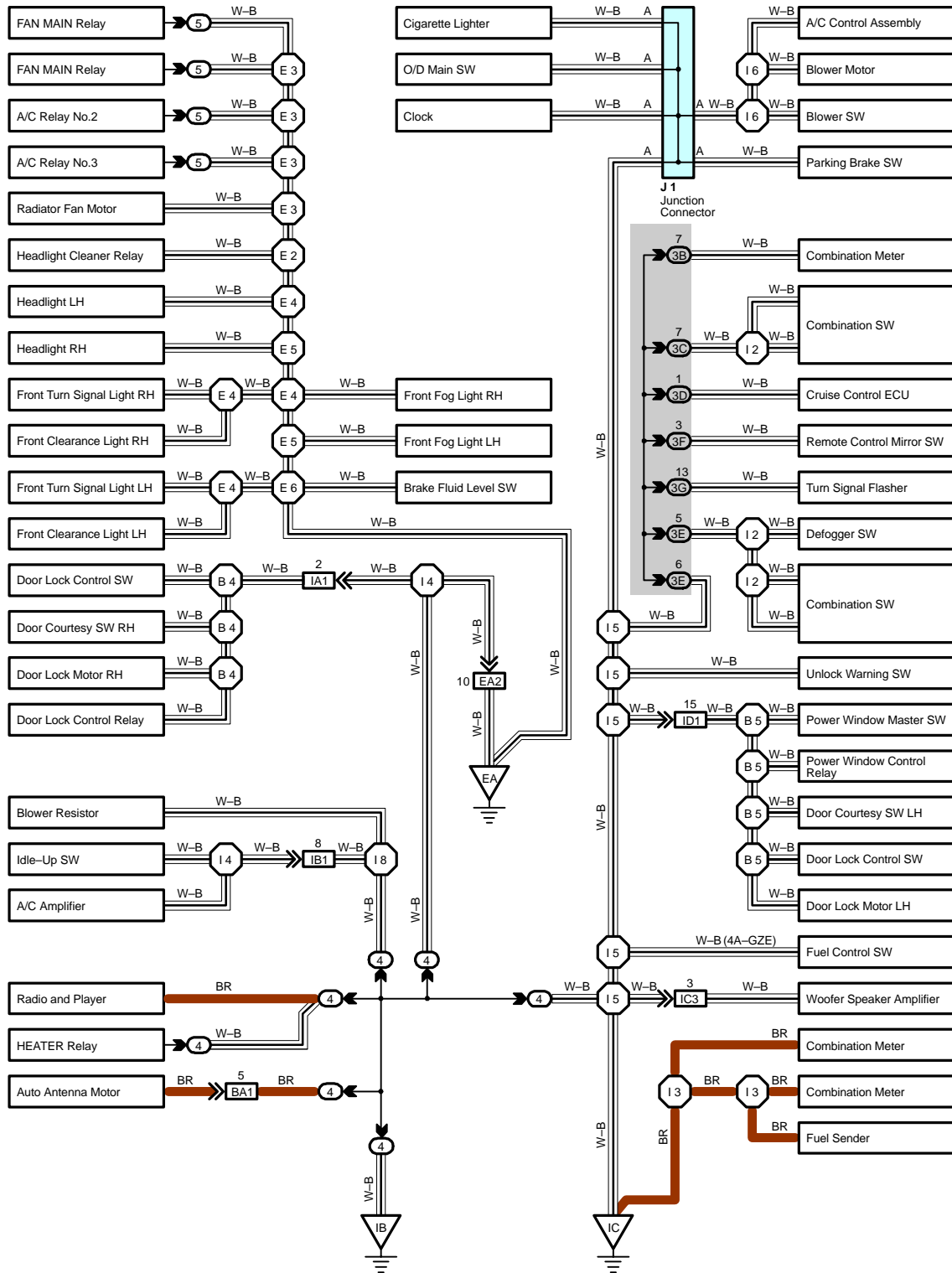
[U] : Indicates the reference page showing the position of the splice points on the vehicle.

Example : Splice point "I5" is on the Cowl Wire Harness and is described on page 44 of this manual.

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 (∇_{EA} , ∇_{IB} and ∇_{IC} shown below) can also be checked this way.

I GROUND POINT

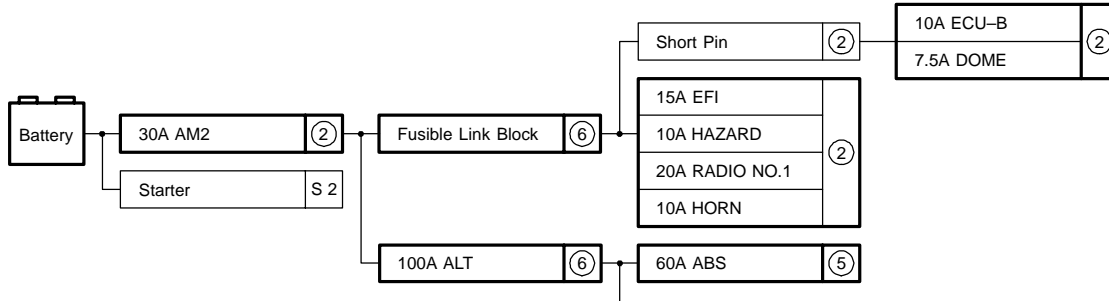


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

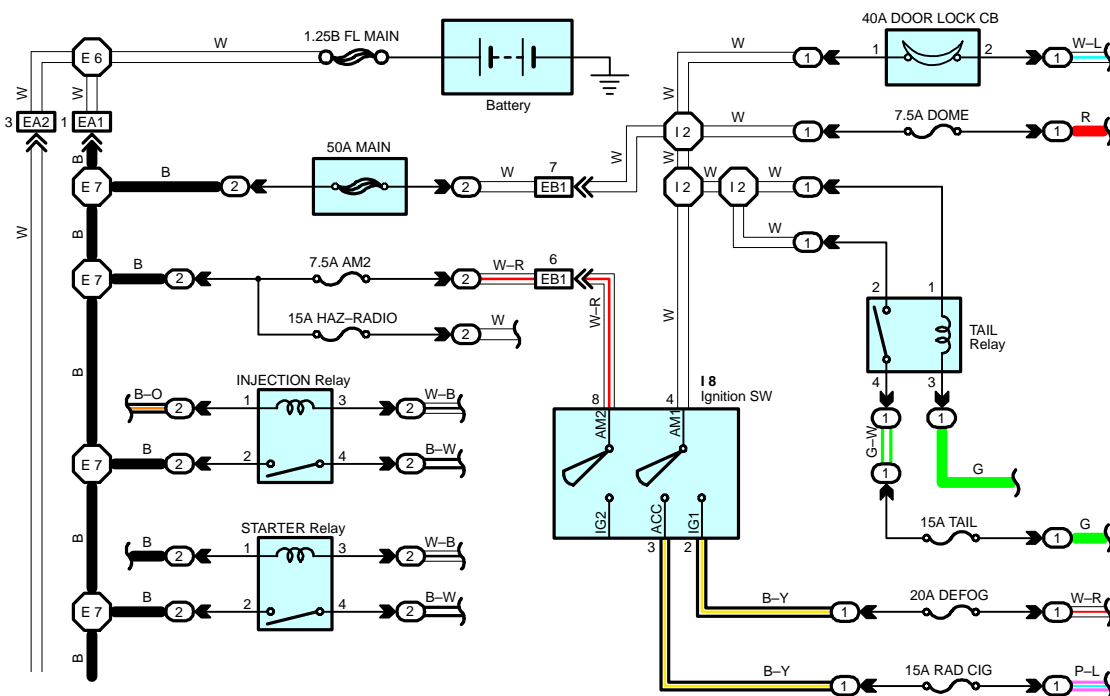
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

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

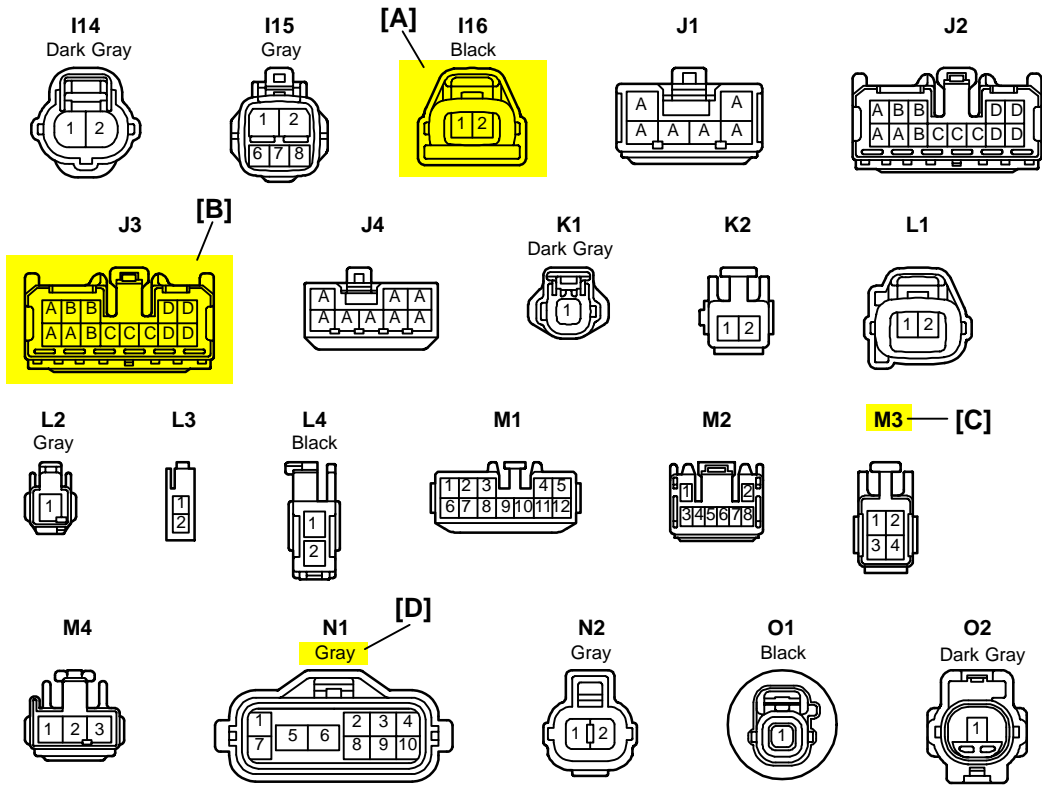
Power Source



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

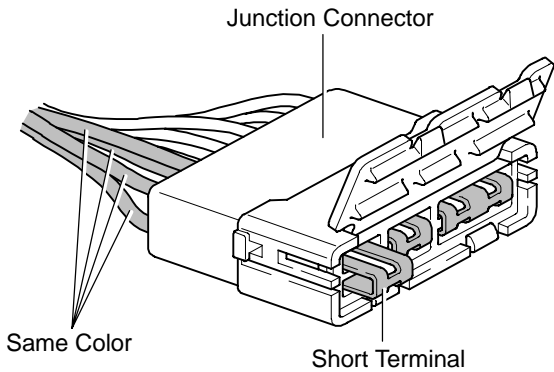
B HOW TO USE THIS MANUAL

K CONNECTOR LIST



[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.

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 Actual [B]	909-151	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	90980-11194	D16	Door Lock and Unlock SW LH	90980-11170
		90980-11194		Door Lock and Unlock SW RH	

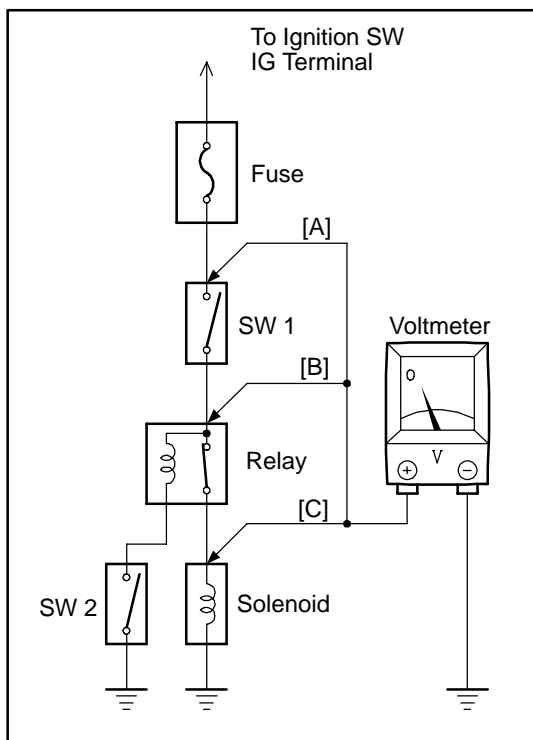
[A] : Part Code

[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:

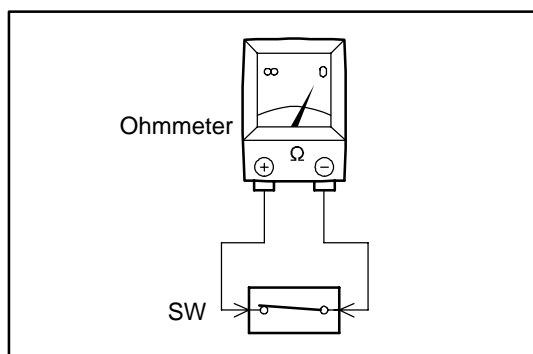
[A] – Ignition SW on

[B] – Ignition SW and SW 1 on

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

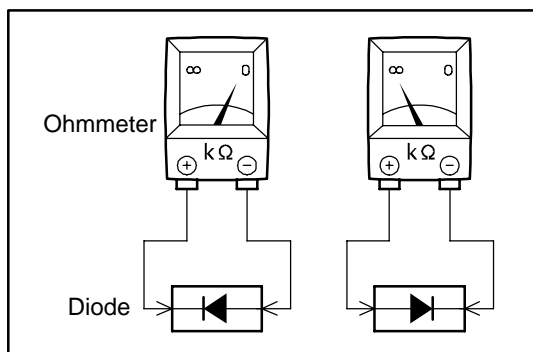
- (b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.

This check can be done with a test light instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

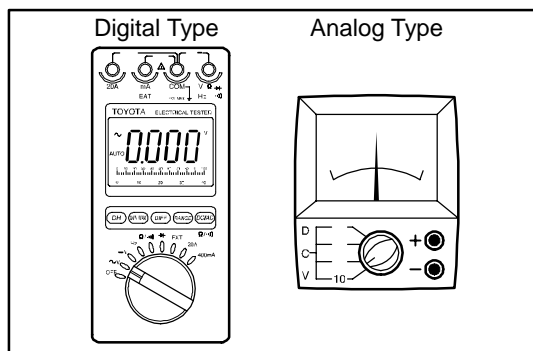
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



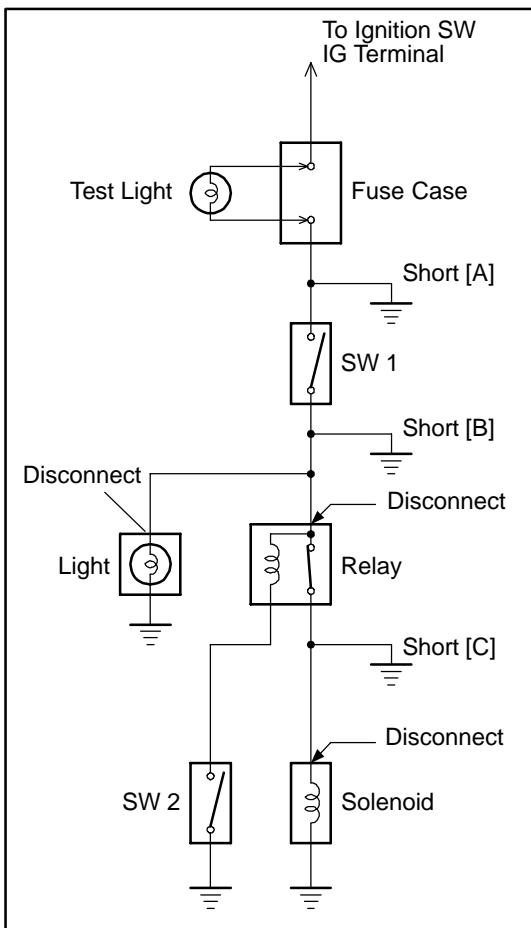
If the circuit has diodes, reverse the two leads and check again.

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 Ω /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.

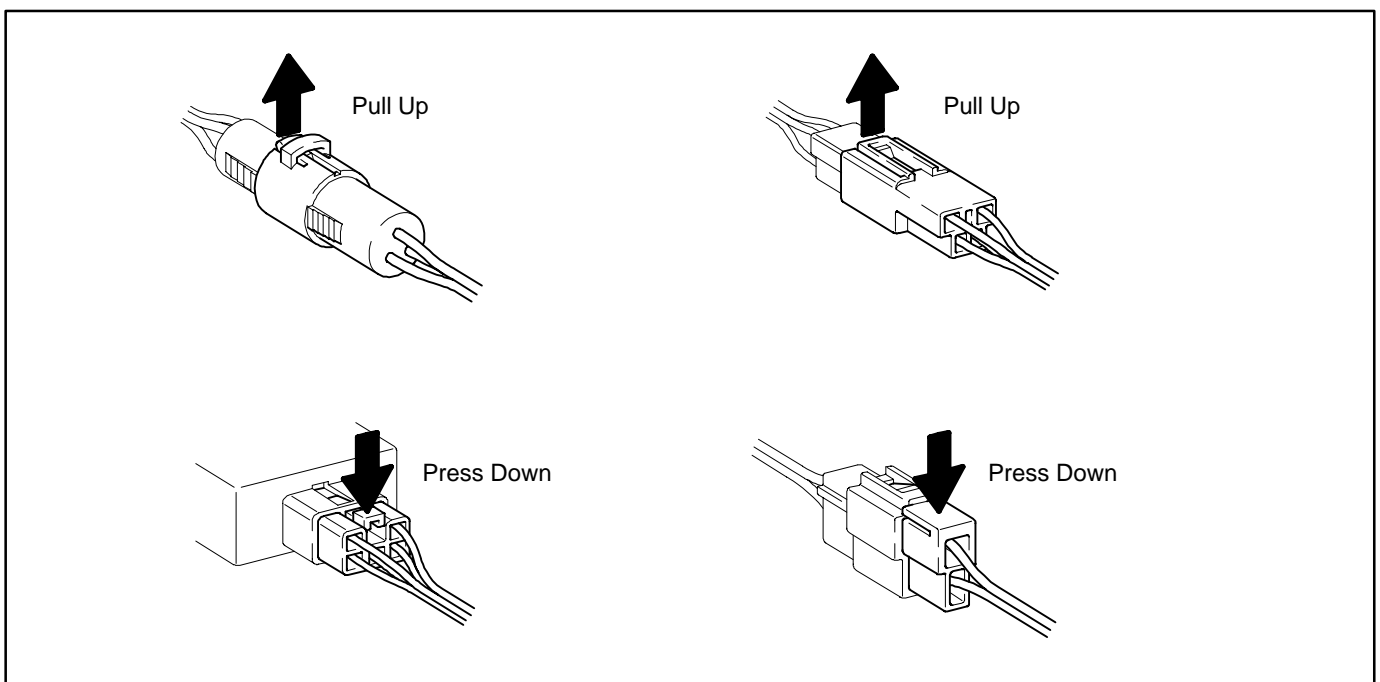
CAUTION:

- 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).

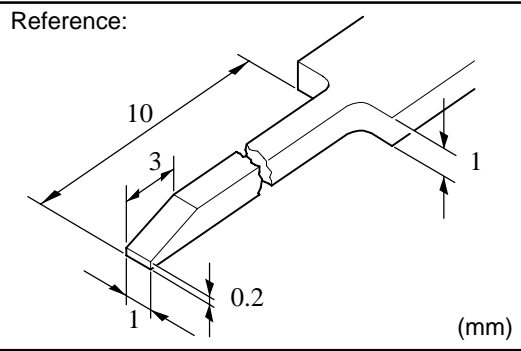
DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

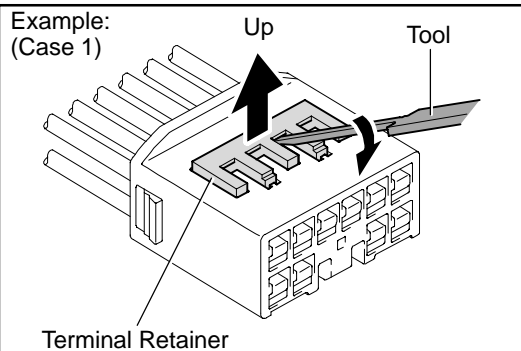
3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

(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.

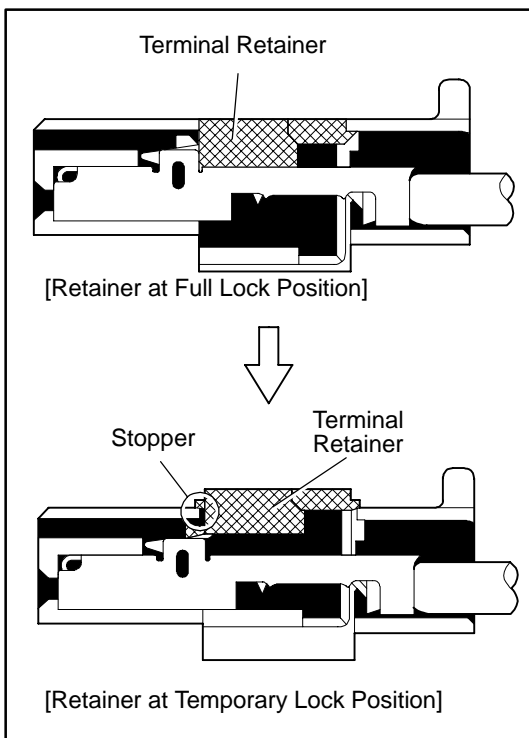


[A] For Non-Waterproof Type Connector

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

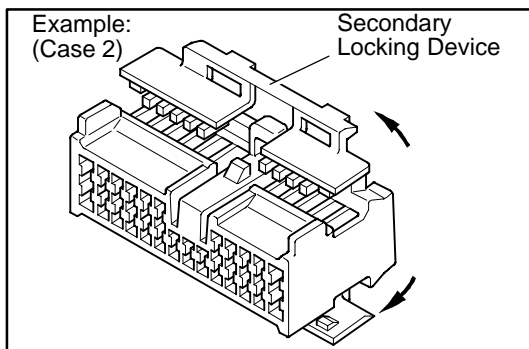
"Case 1"

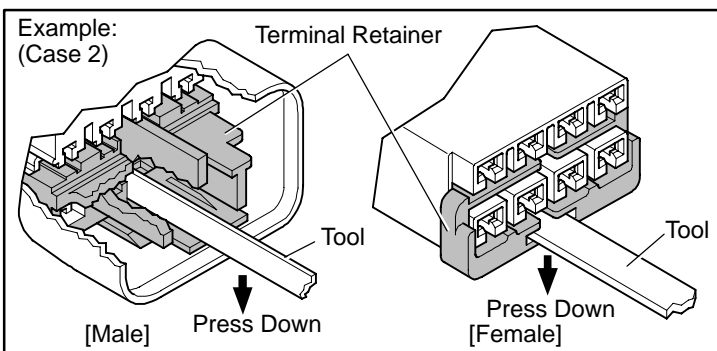
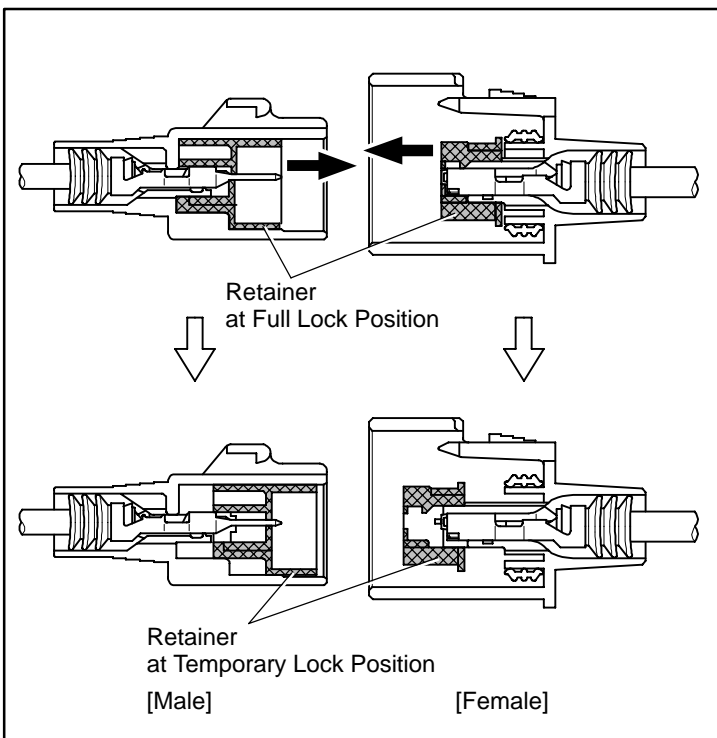
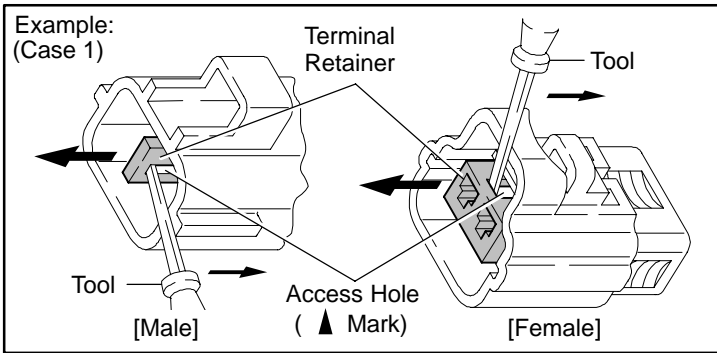
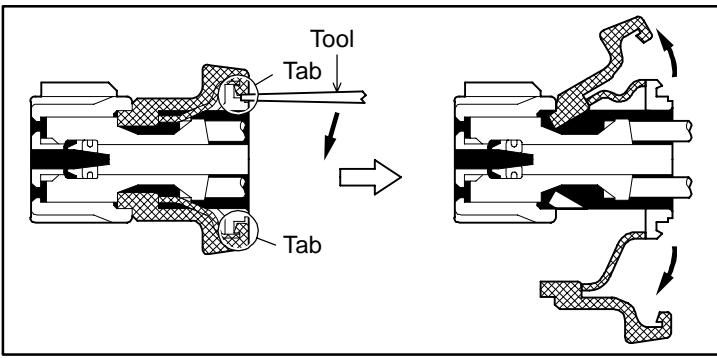
Raise the terminal retainer up to the temporary lock position.



"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).

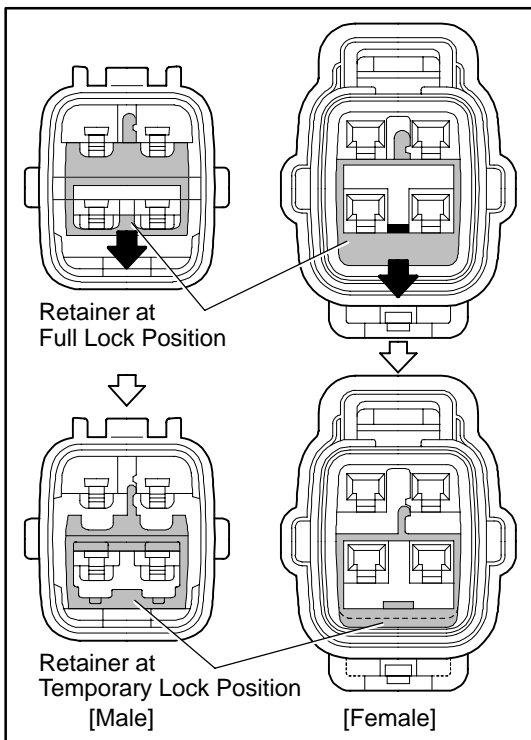
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

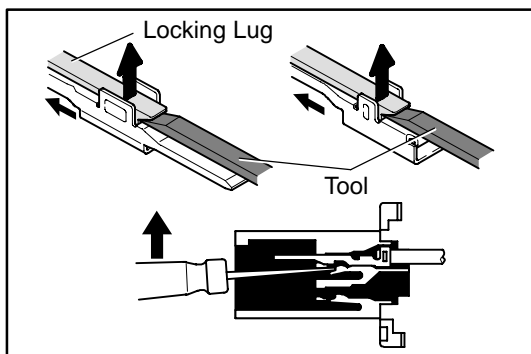
"Case 2"

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

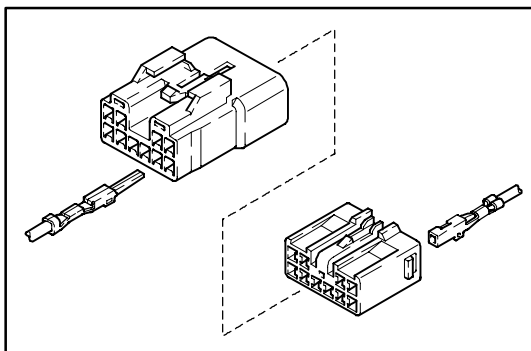
C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

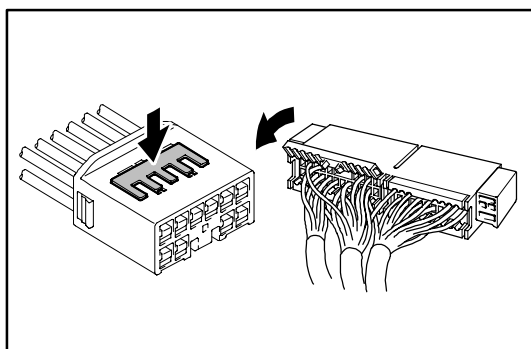


4. INSTALL TERMINAL TO CONNECTOR

(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

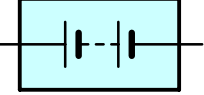

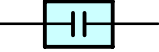
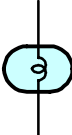

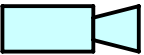



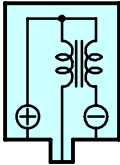




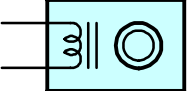

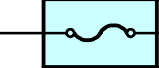
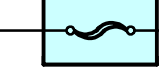
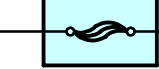
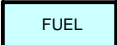

ABBREVIATIONS

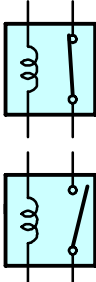

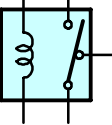
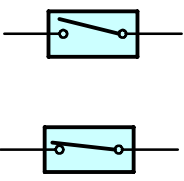
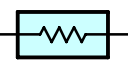
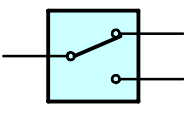
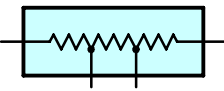
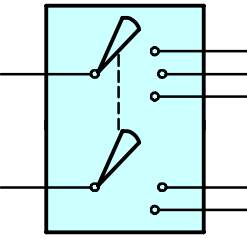

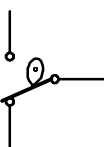

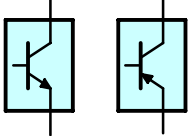
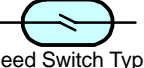
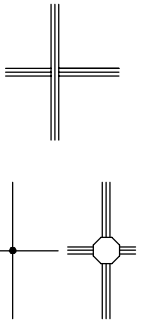
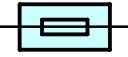
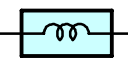
The following abbreviations are used in this manual.

A/C	=	Air Conditioning
A/T	=	Automatic Transmission
ABS	=	Anti-Lock Brake System
ACIS	=	Acoustic Control Induction System
BEAN	=	Body Electronics Area Network
CAN	=	Controller Area Network
CD	=	Compact Disc
DIFF.	=	Differential
DVD	=	Digital Versatile Disc
EC	=	Electrochromic
ECU	=	Electronic Control Unit
ESA	=	Electronic Spark Advance
ETCS-i	=	Electronic Throttle Control System-intelligent
EVAP	=	Evaporative Emission
IC	=	Integrated Circuit
INT	=	Intermittent
J/B	=	Junction Block
LH	=	Left-Hand
R/B	=	Relay Block
RH	=	Right-Hand
SFI	=	Sequential Multiport Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRAC	=	Traction Control
VSC	=	Vehicle Stability Control
VSV	=	Vacuum Switching Valve
VVT	=	Variable Valve Timing
VVT-i	=	Variable Valve Timing-intelligent
w/	=	With
w/o	=	Without

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

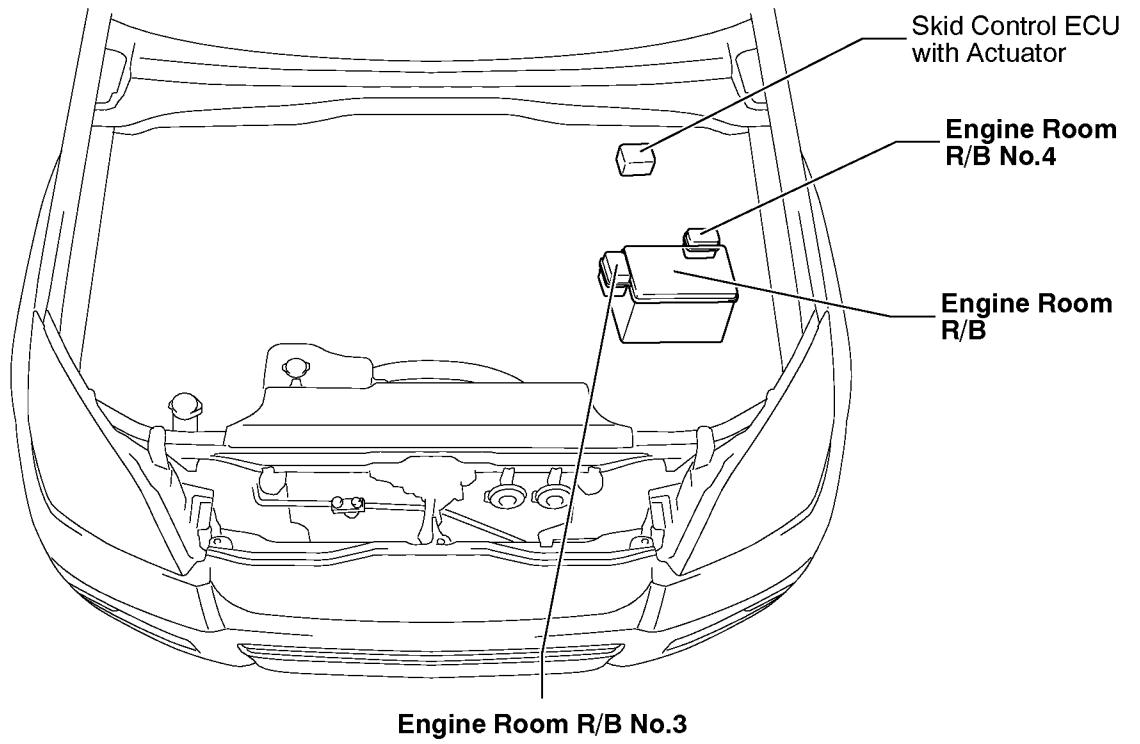
E GLOSSARY OF TERMS AND SYMBOLS

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

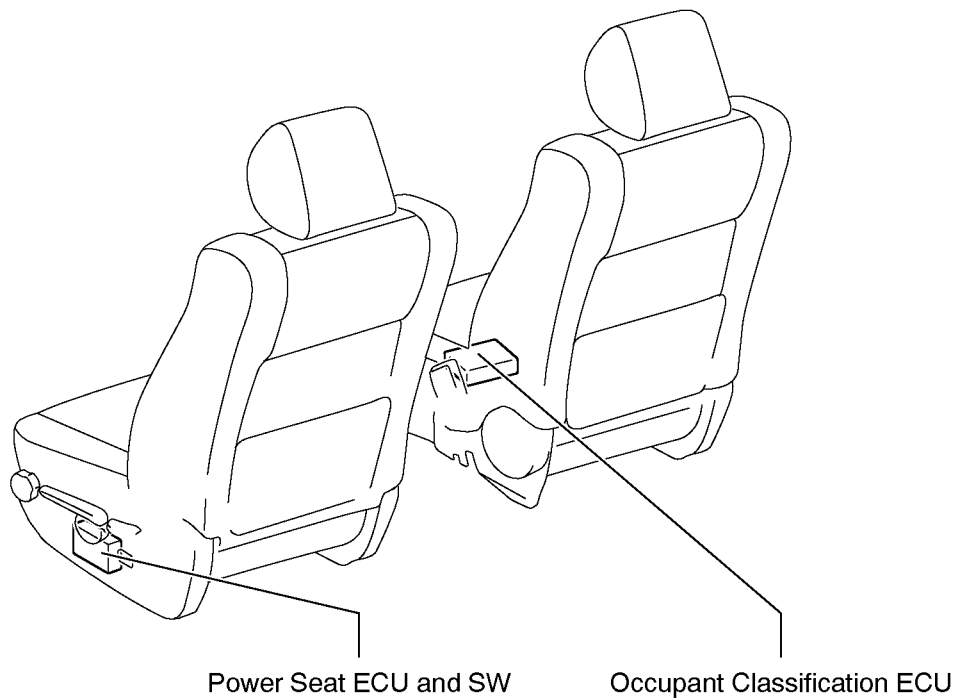
 <p>RELAY Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p> <p>1. NORMALLY CLOSED</p> <p>2. NORMALLY OPEN</p>	 <p>SPEAKER An electromechanical device which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

F RELAY LOCATIONS

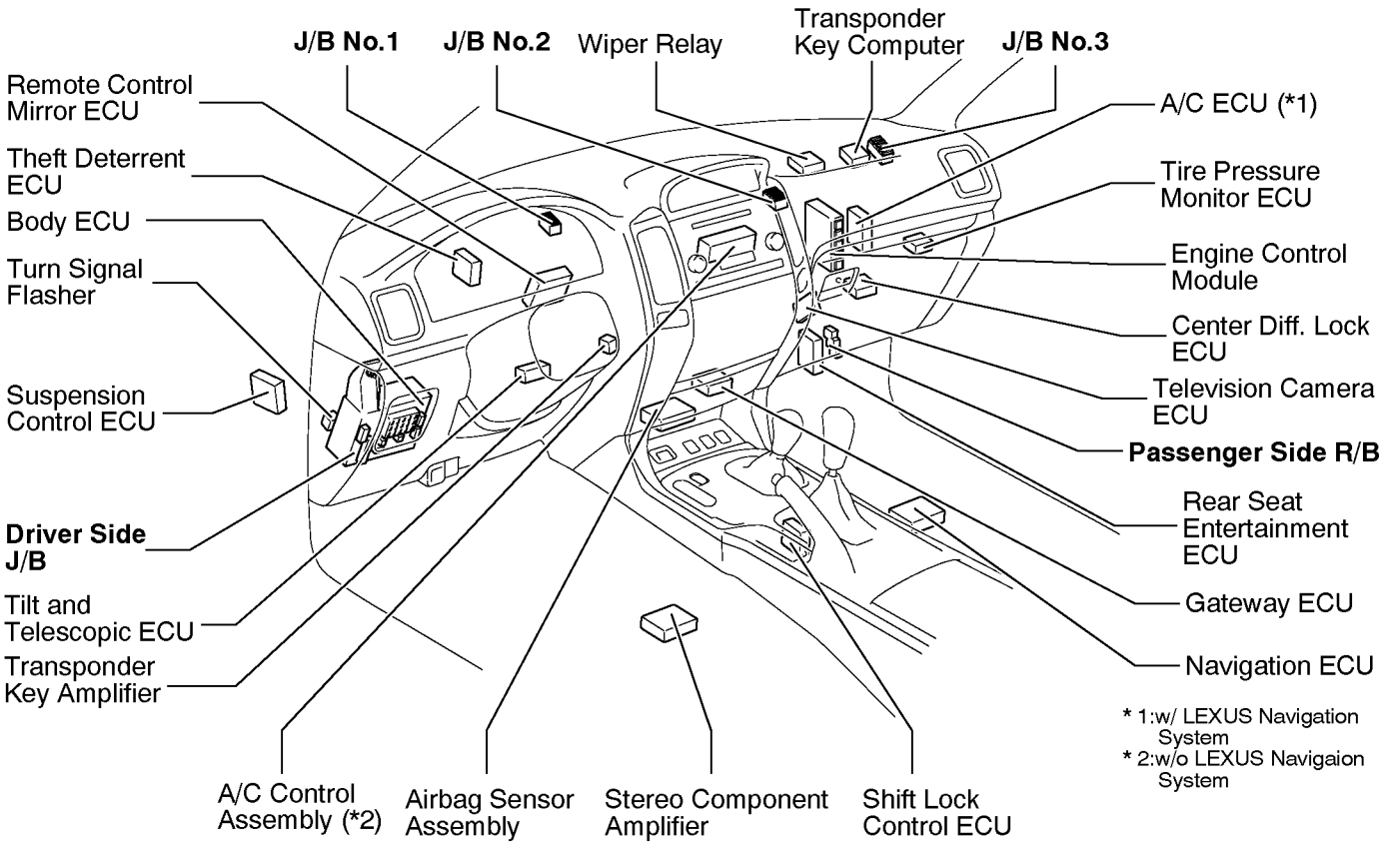
[Engine Compartment]



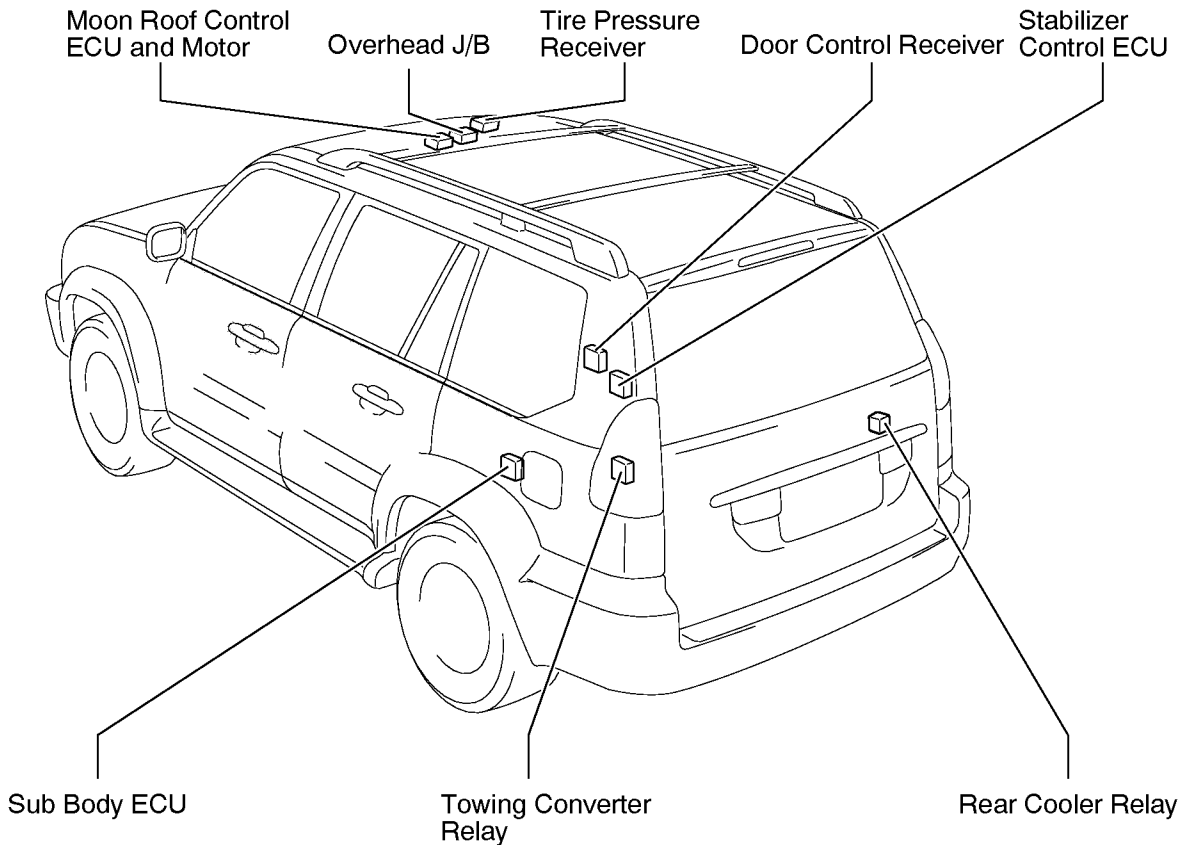
[Seat]



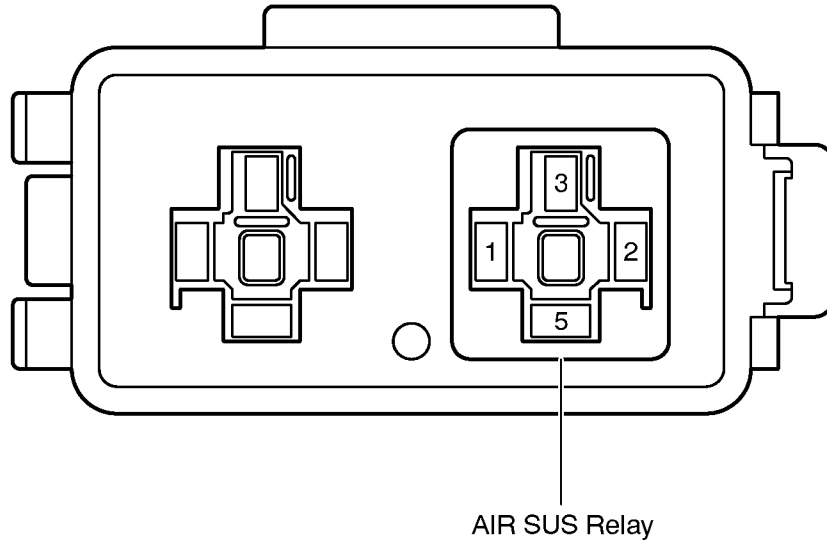
[Instrument Panel]



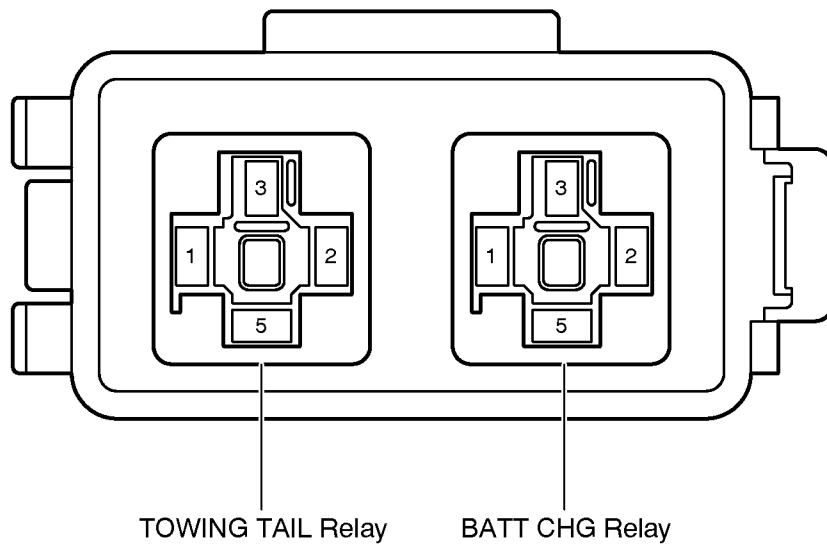
[Body]



③ : Engine Room R/B No.3 [Engine Compartment Left \(See Page 20\)](#)



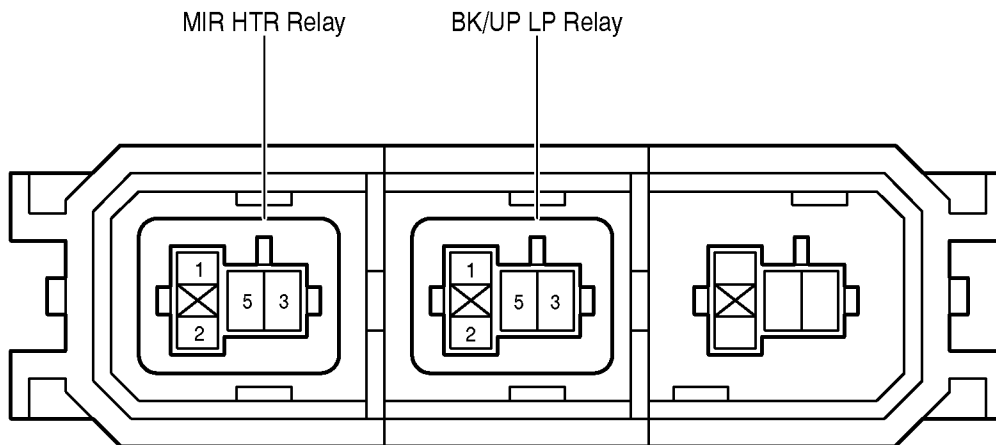
④ : Engine Room R/B No.4 [Engine Compartment Left \(See Page 20\)](#)



F RELAY LOCATIONS

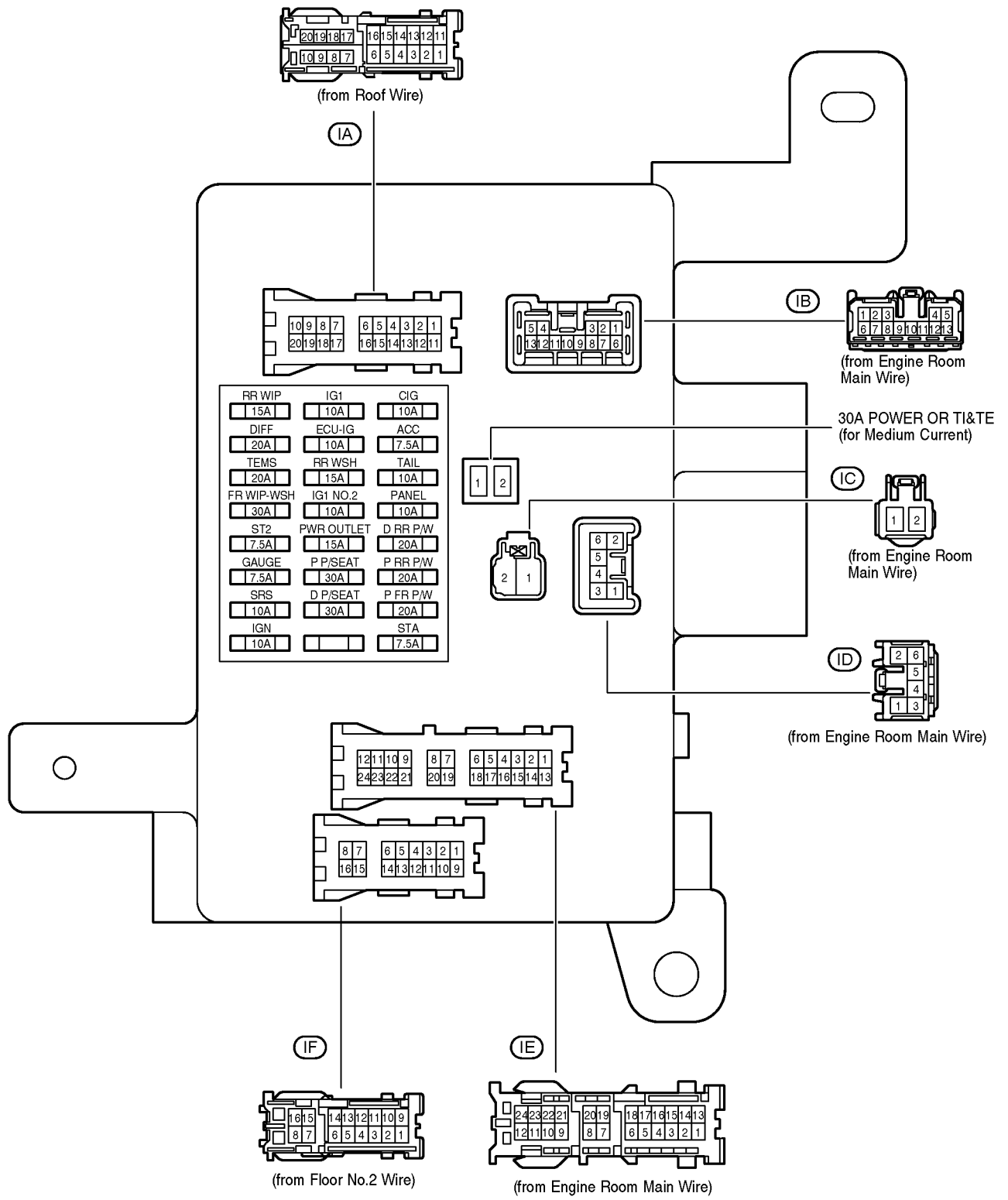
⑤ : Passenger Side R/B

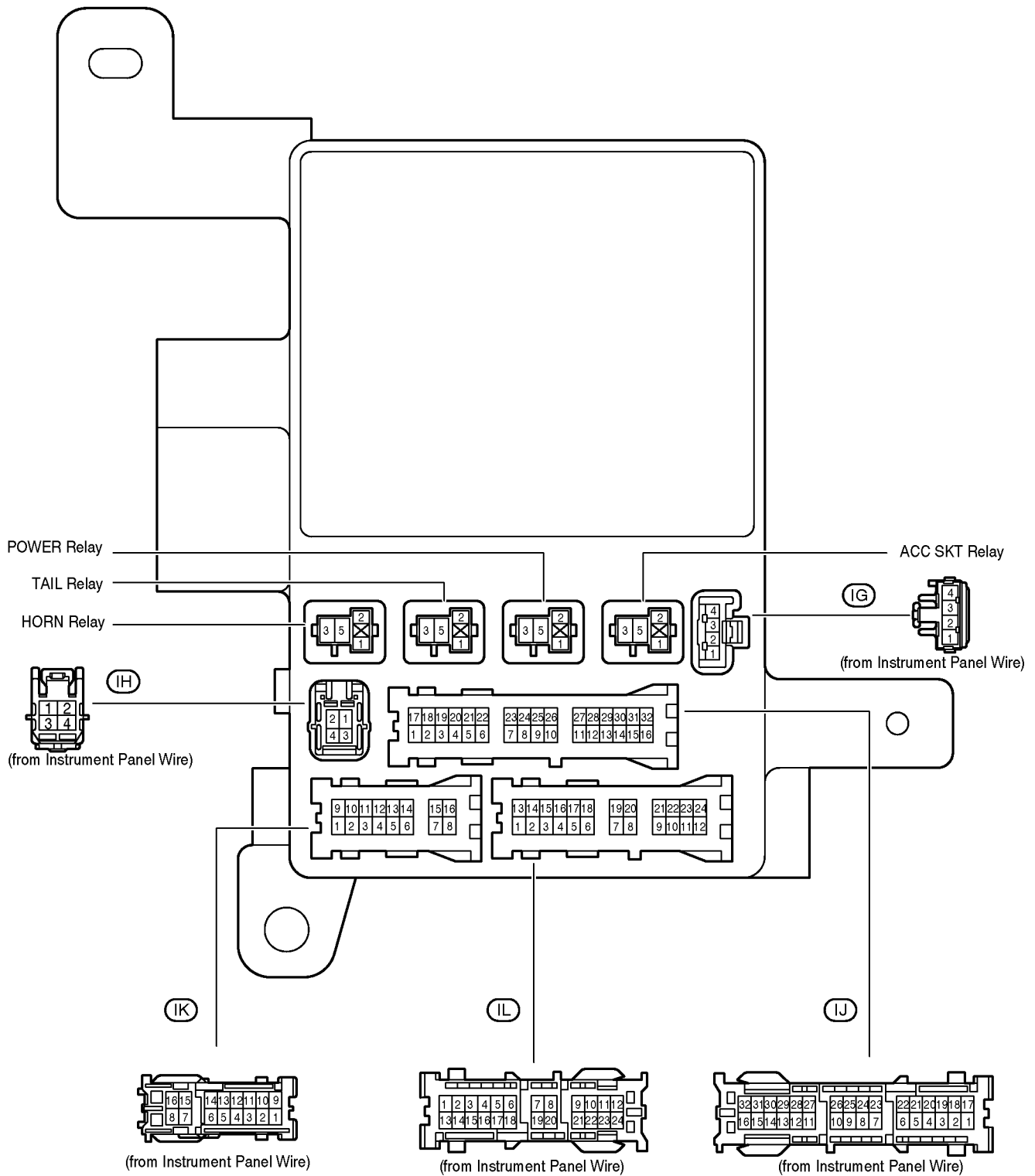
[Right Kick Panel \(See Page 21\)](#)



F RELAY LOCATIONS

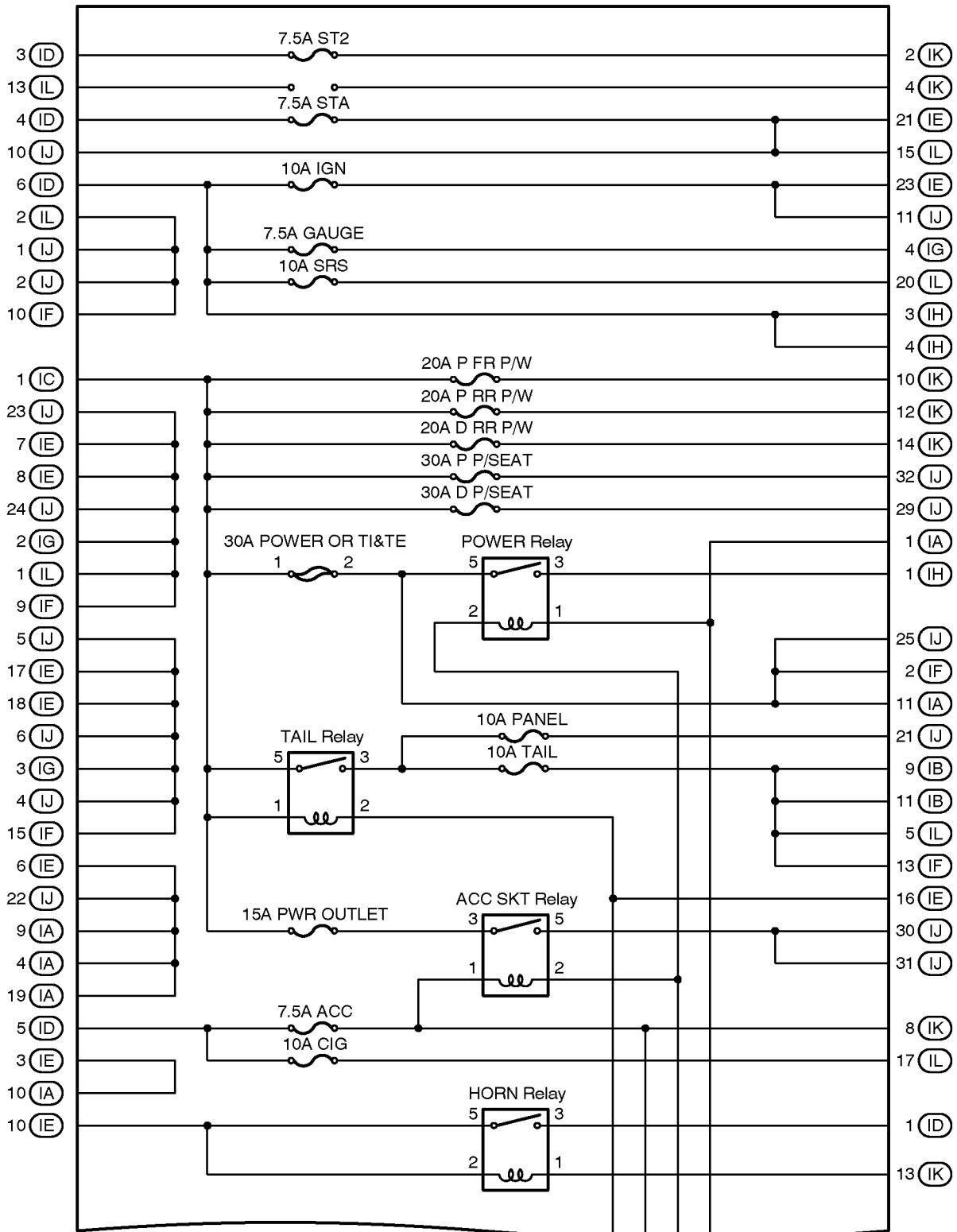
○ : Driver Side J/B Lower Finish Panel (See Page 21)





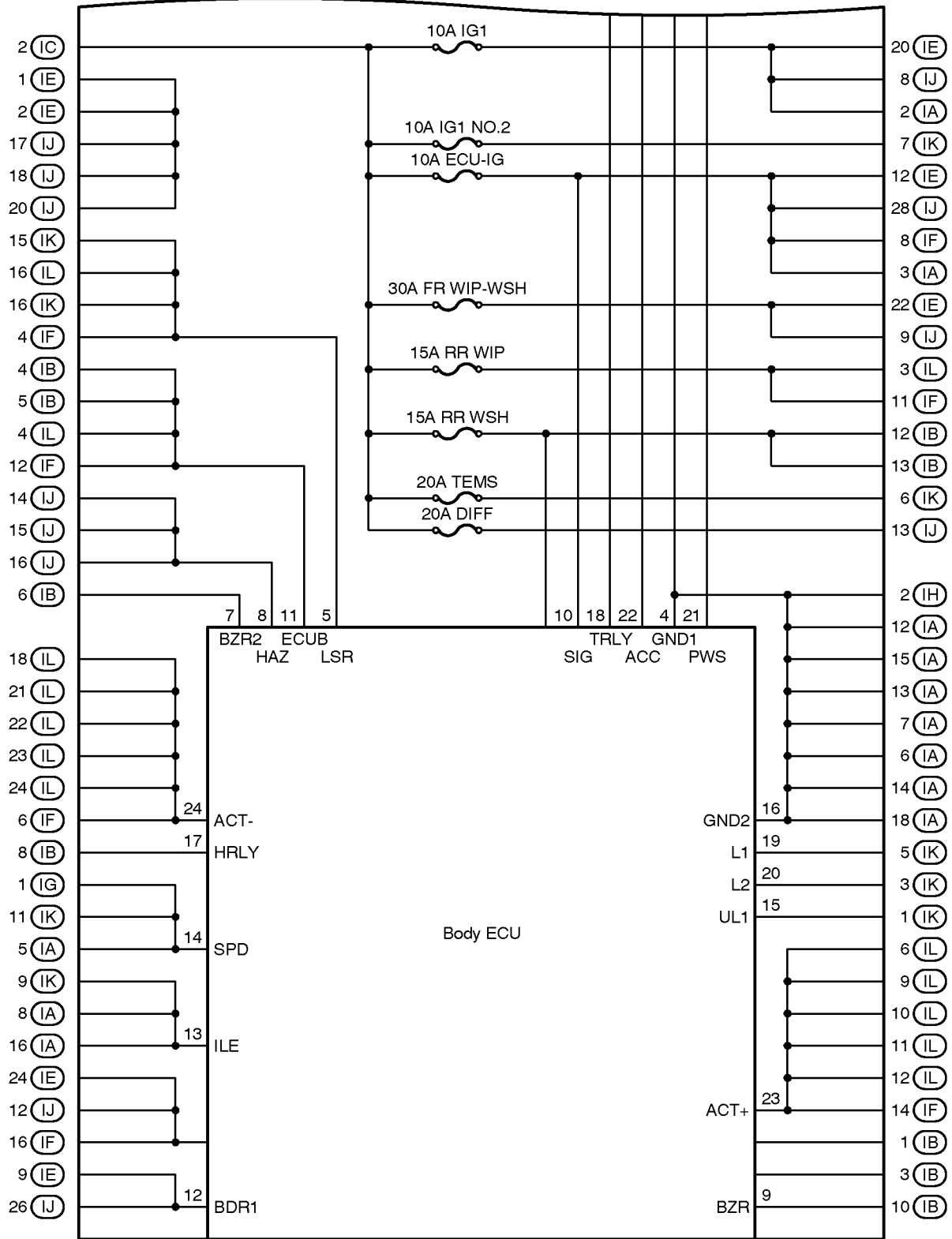
F RELAY LOCATIONS

[Driver Side J/B Inner Circuit]



(Cont. Next Page)

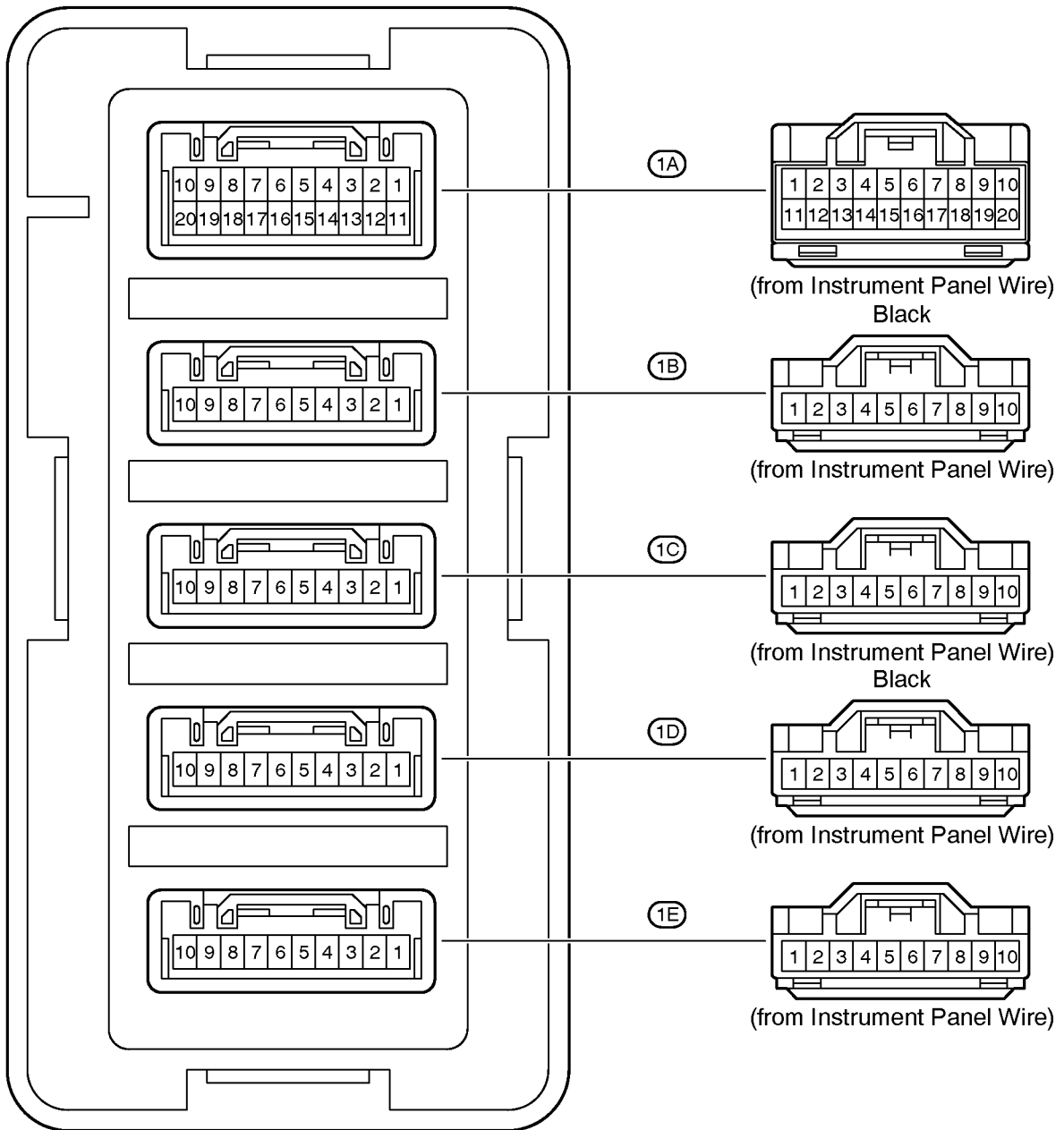
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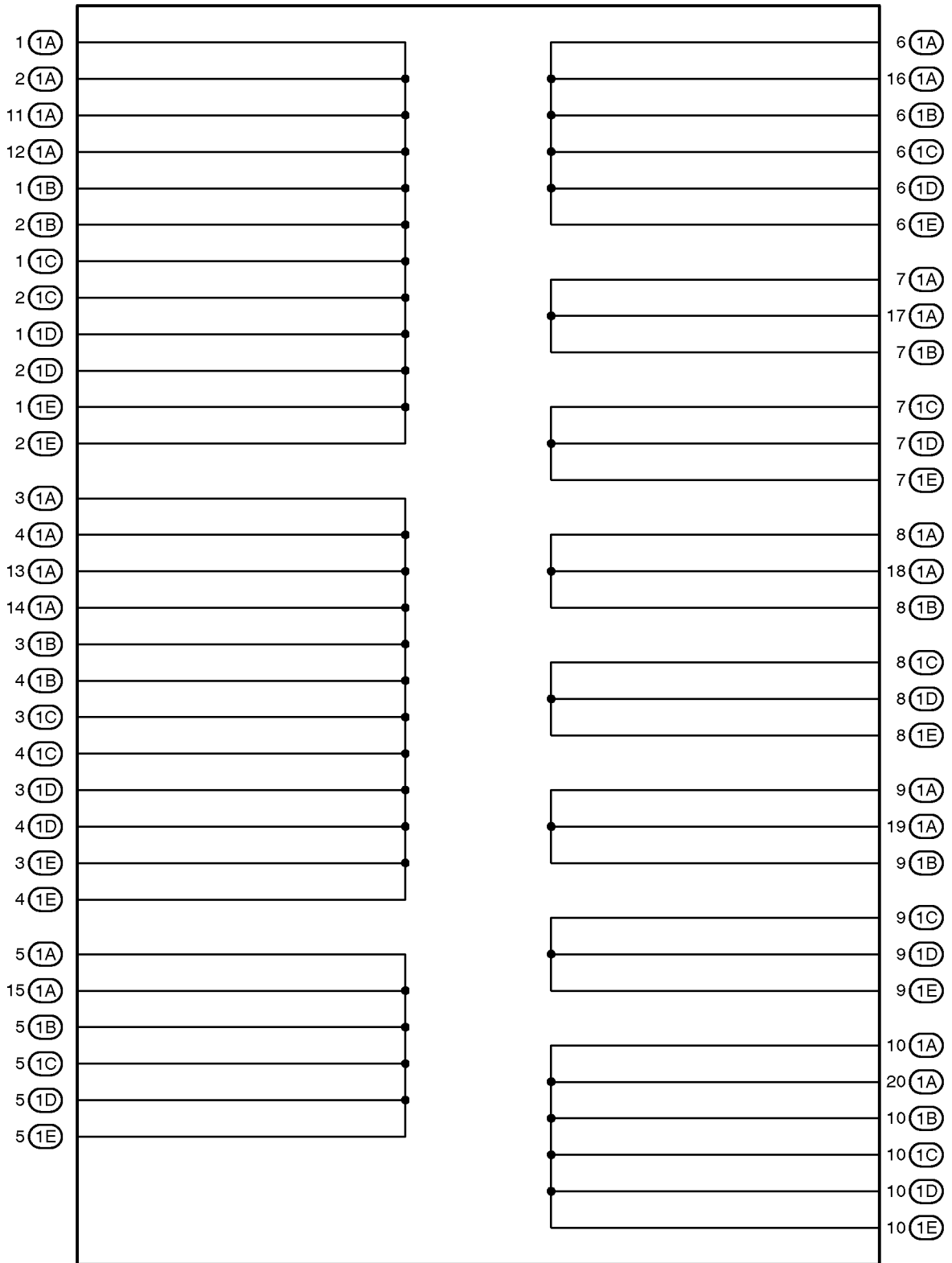
F RELAY LOCATIONS

○ : J/B No.1

Instrument Panel Reinforcement Left (See Page 21)



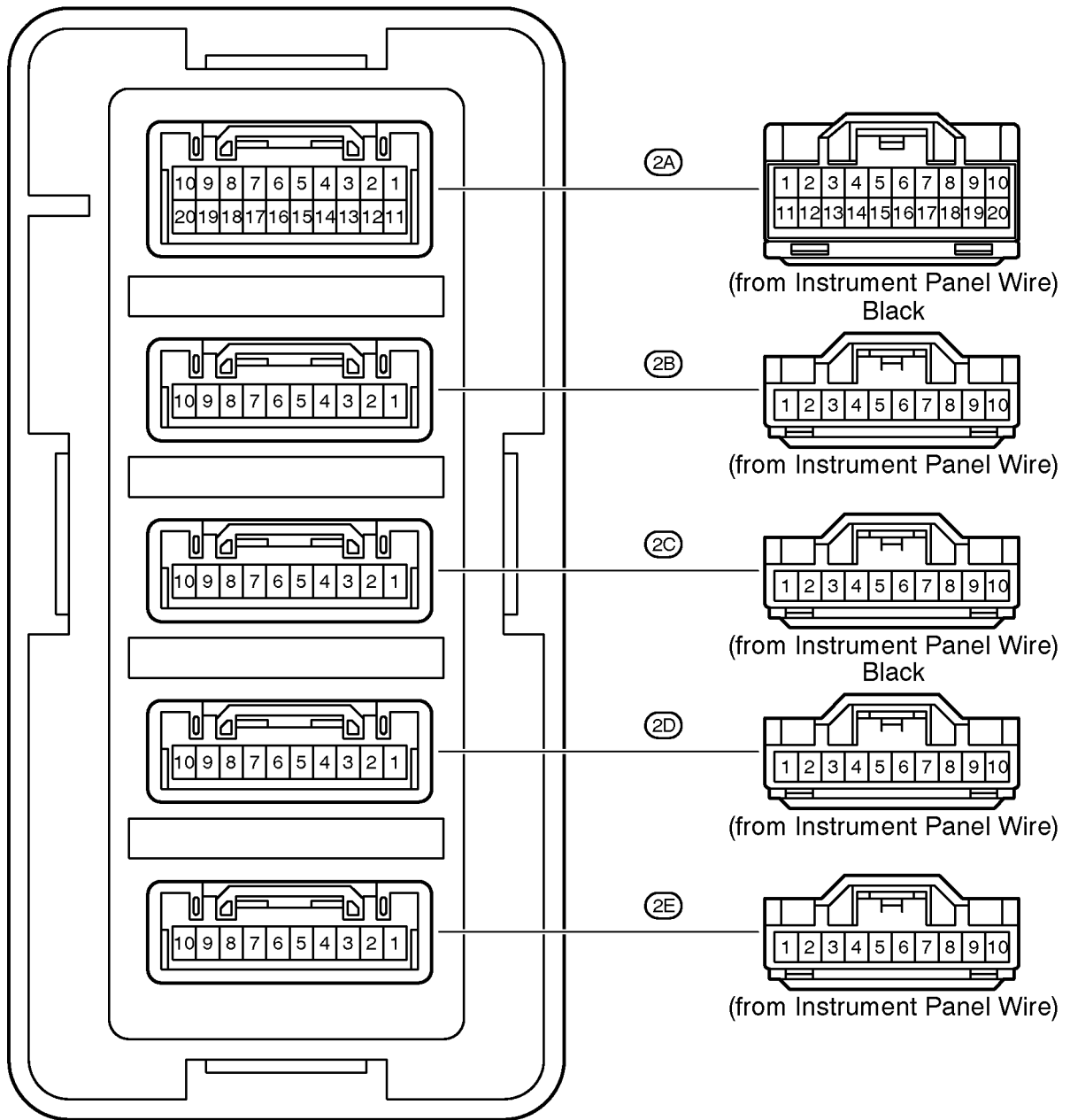
[J/B No.1 Inner Circuit]



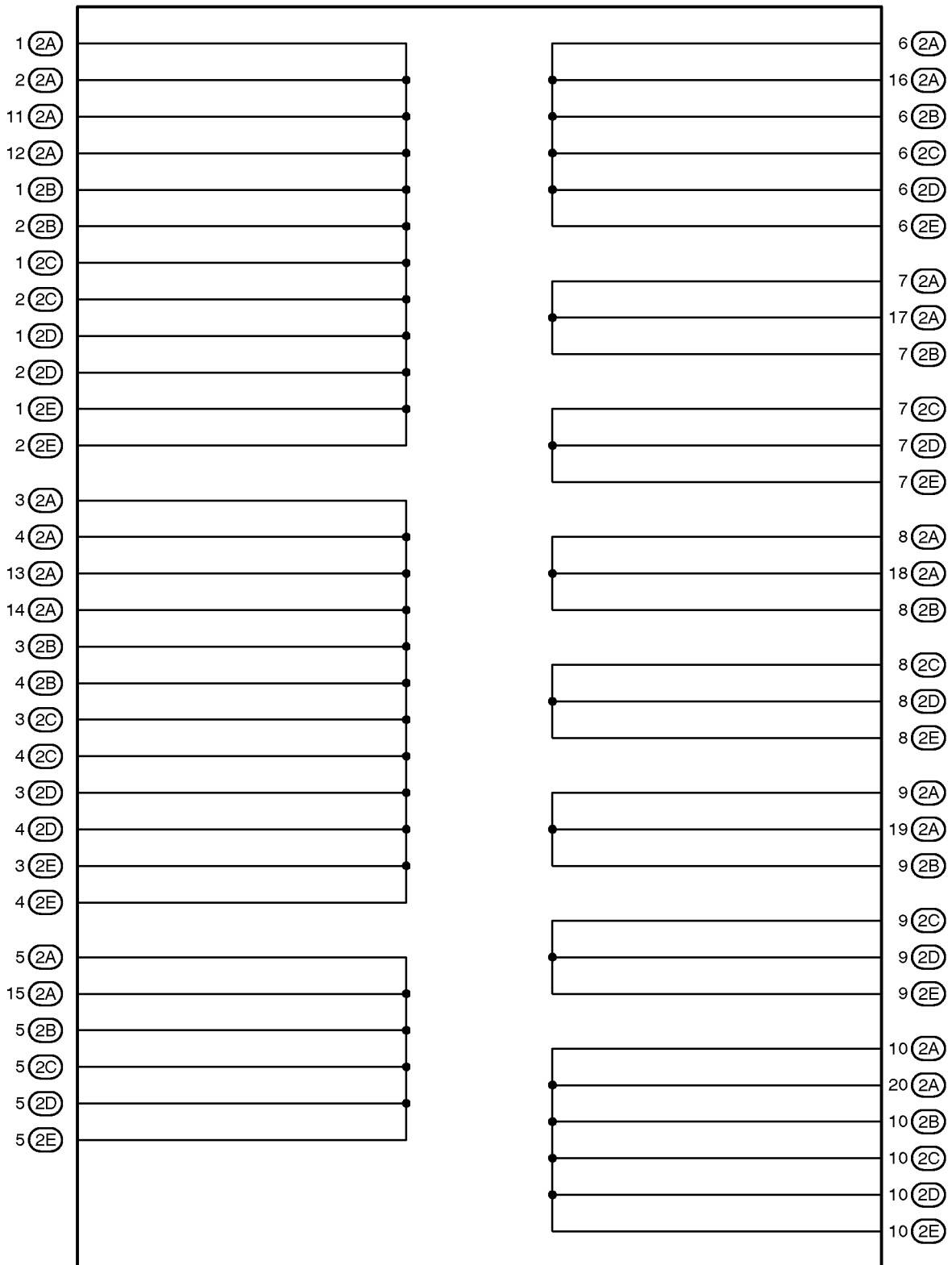
F RELAY LOCATIONS

○ : J/B No.2

Instrument Panel Reinforcement Center (See Page 21)



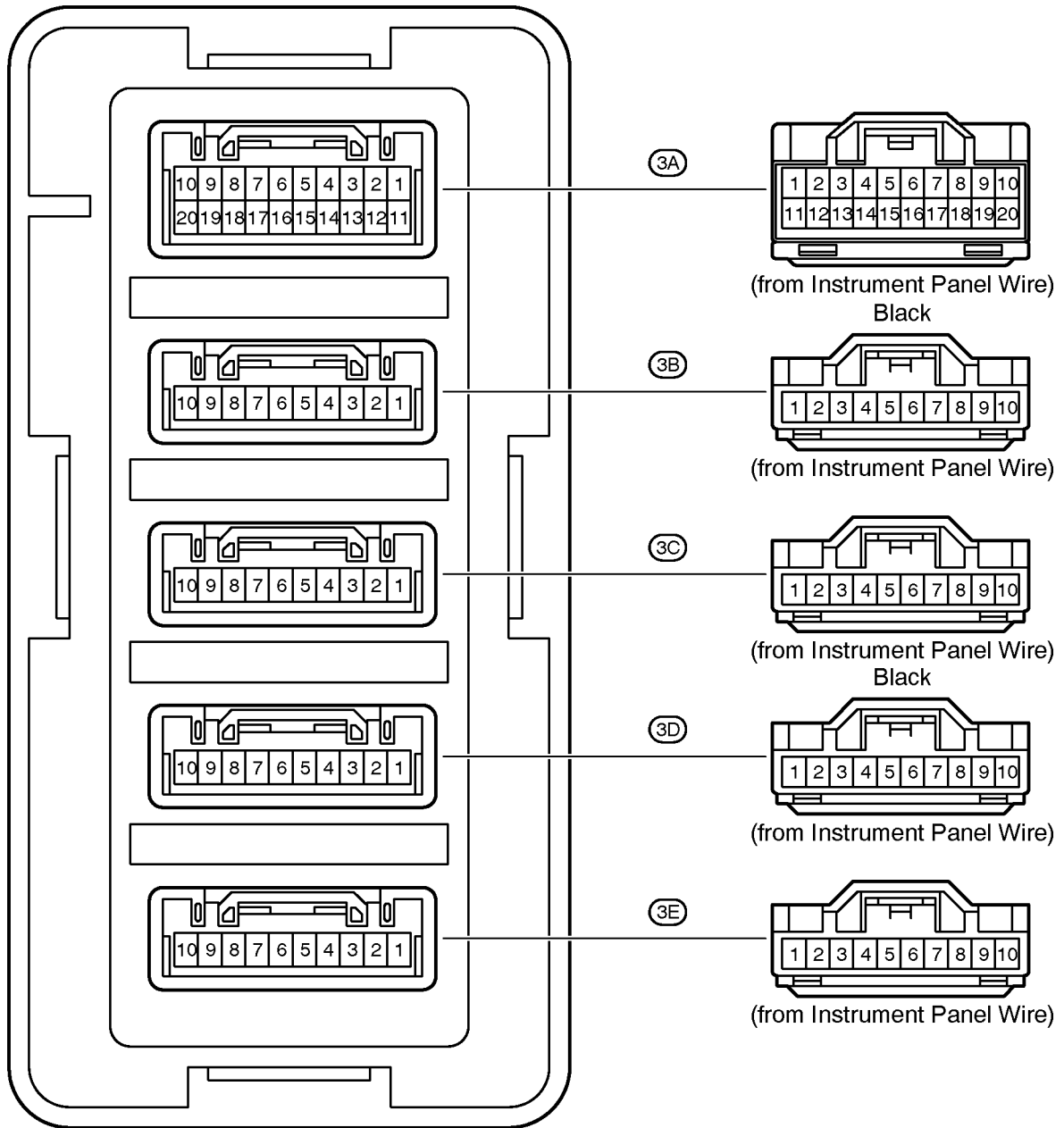
[J/B No.2 Inner Circuit]



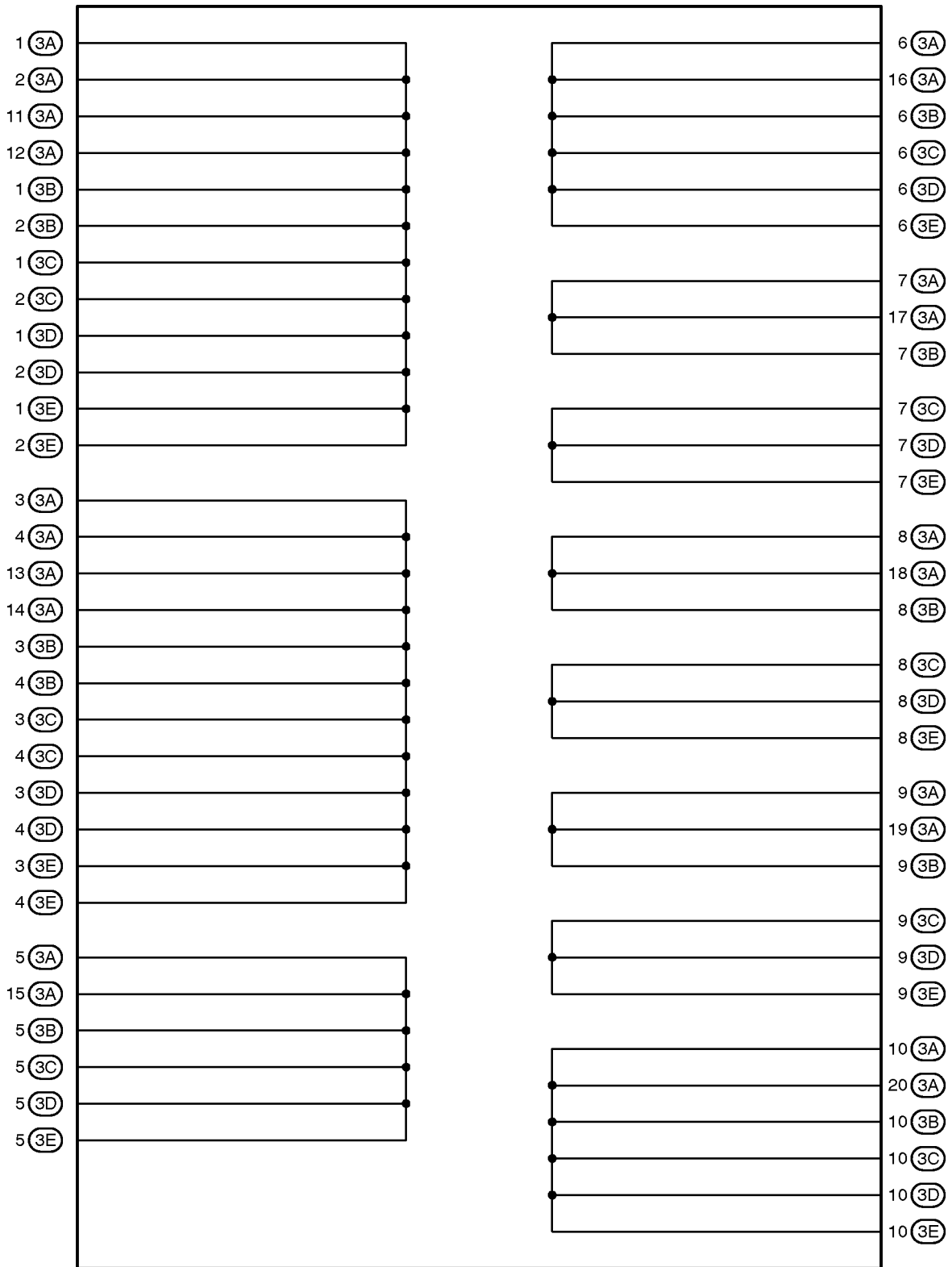
F RELAY LOCATIONS

○ : J/B No.3

Instrument Panel Reinforcement Right (See Page 21)

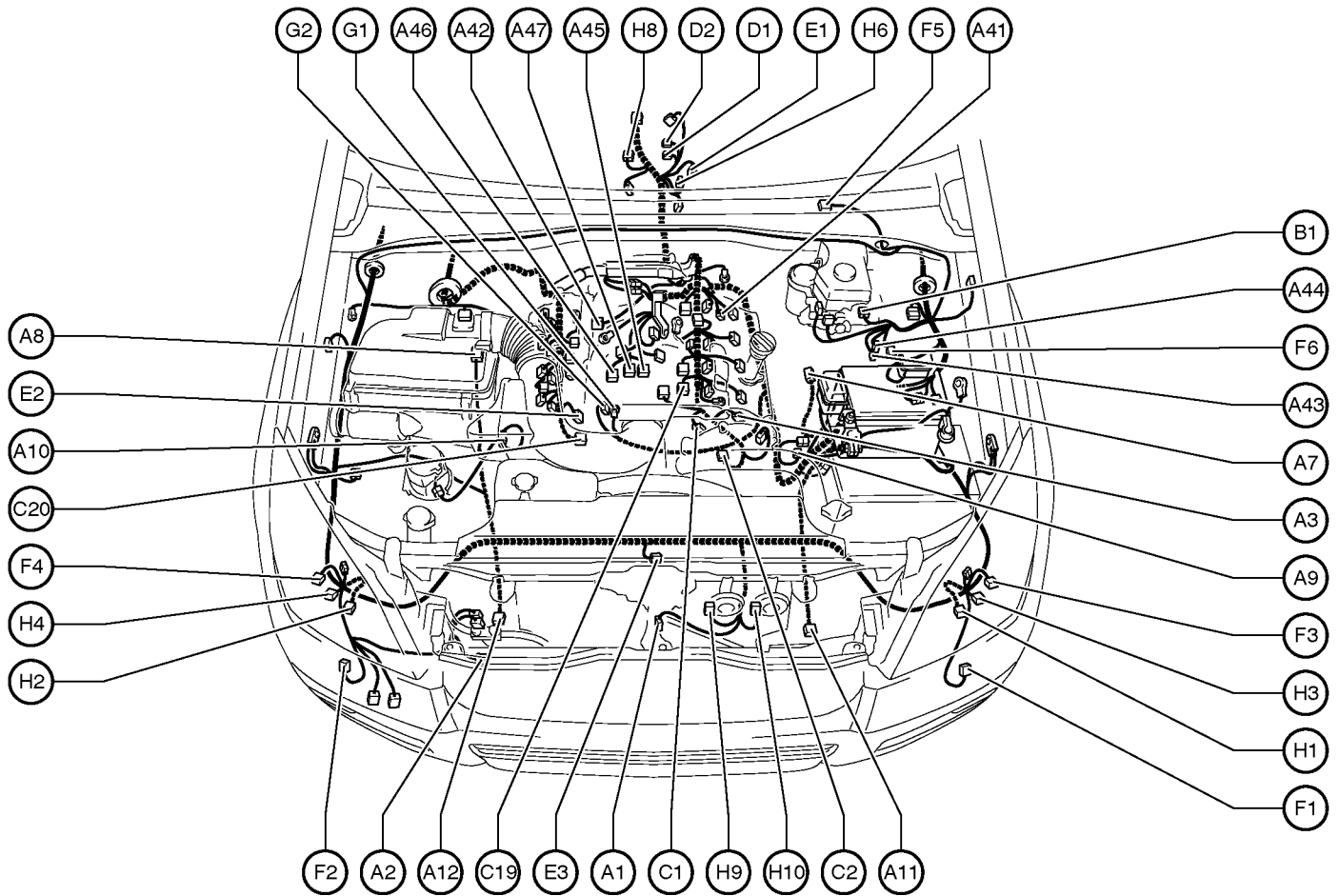


[J/B No.3 Inner Circuit]



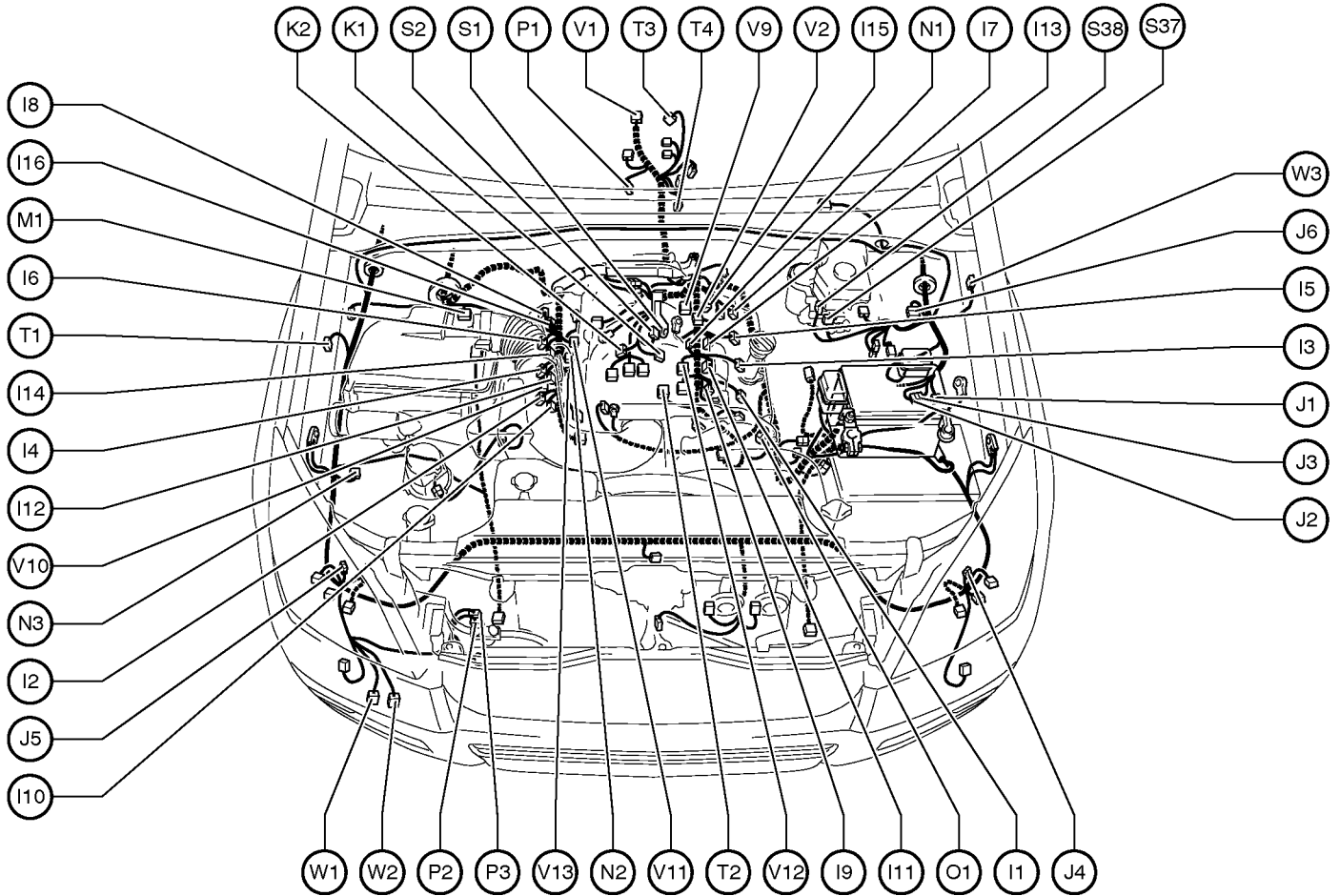
G ELECTRICAL WIRING ROUTING

Position of Parts in Engine Compartment



- | | |
|----------------------------------------------|----------------------------------------------------------------------------------------|
| A 1 A/C Ambient Temp. Sensor | E 1 Electronically Controlled Transmission Solenoid |
| A 2 A/C Condenser Fan Motor | E 2 Engine Coolant Temp. Sensor |
| A 3 A/C Lock Sensor
A/C Magnetic Clutch | E 3 Engine Hood Courtesy SW |
| A 7 ABS Speed Sensor Front LH | F 1 Front Fog Light LH |
| A 8 ABS Speed Sensor Front RH | F 2 Front Fog Light RH |
| A 9 Absorber Control Actuator Front LH | F 3 Front Parking Light LH
Front Side Marker Light LH
Front Turn Signal Light LH |
| A 10 Absorber Control Actuator Front RH | F 4 Front Parking Light RH
Front Side Marker Light RH
Front Turn Signal Light RH |
| A 11 Airbag Sensor Front LH | F 5 Front Wiper Motor |
| A 12 Airbag Sensor Front RH | F 6 Fuel Pump Resistor |
| A 41 Air Fuel Ratio Sensor (Bank 1 Sensor 1) | G 1 Generator |
| A 42 Air Fuel Ratio Sensor (Bank 2 Sensor 1) | G 2 Generator |
| A 43 Air Injection Control Driver | H 1 Headlight High LH |
| A 44 Air Injection Control Driver | H 2 Headlight High RH |
| A 45 Air Pressure Sensor | H 3 Headlight Low LH |
| A 46 Air Pump | H 4 Headlight Low RH |
| A 47 Air Switching Valve | H 6 Heated Oxygen Sensor (Bank 1 Sensor 2) |
| B 1 Brake Fluid Level Warning SW | H 8 Heated Oxygen Sensor (Bank 2 Sensor 2) |
| C 1 Camshaft Position Sensor | H 9 Horn (High) |
| C 2 Crankshaft Position Sensor | H 10 Horn (Low) |
| C 19 Camshaft Timing Oil Control Valve LH | |
| C 20 Camshaft Timing Oil Control Valve RH | |
| D 1 Detection SW (Transfer L4 Position) | |
| D 2 Detection SW (Transfer Neutral Position) | |

Position of Parts in Engine Compartment



- I 1 Ignition Coil and Igniter No.1
- I 2 Ignition Coil and Igniter No.2
- I 3 Ignition Coil and Igniter No.3
- I 4 Ignition Coil and Igniter No.4
- I 5 Ignition Coil and Igniter No.5
- I 6 Ignition Coil and Igniter No.6
- I 7 Ignition Coil and Igniter No.7
- I 8 Ignition Coil and Igniter No.8
- I 9 Injector No.1
- I 10 Injector No.2
- I 11 Injector No.3
- I 12 Injector No.4
- I 13 Injector No.5
- I 14 Injector No.6
- I 15 Injector No.7
- I 16 Injector No.8

- J 1 Junction Connector
- J 2 Junction Connector
- J 3 Junction Connector
- J 4 Junction Connector
- J 5 Junction Connector
- J 6 Junction Connector

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

- M 1 Mass Air Flow Meter

- N 1 Noise Filter No.1
- N 2 Noise Filter No.2
- N 3 Noise Filter (Condenser Fan)

- O 1 Oil Pressure SW

- P 1 Park/Neutral Position SW
- P 2 Pressure SW
- P 3 Pressure SW

- S 1 Starter
- S 2 Starter
- S37 Skid Control ECU with Actuator
- S38 Skid Control ECU with Actuator

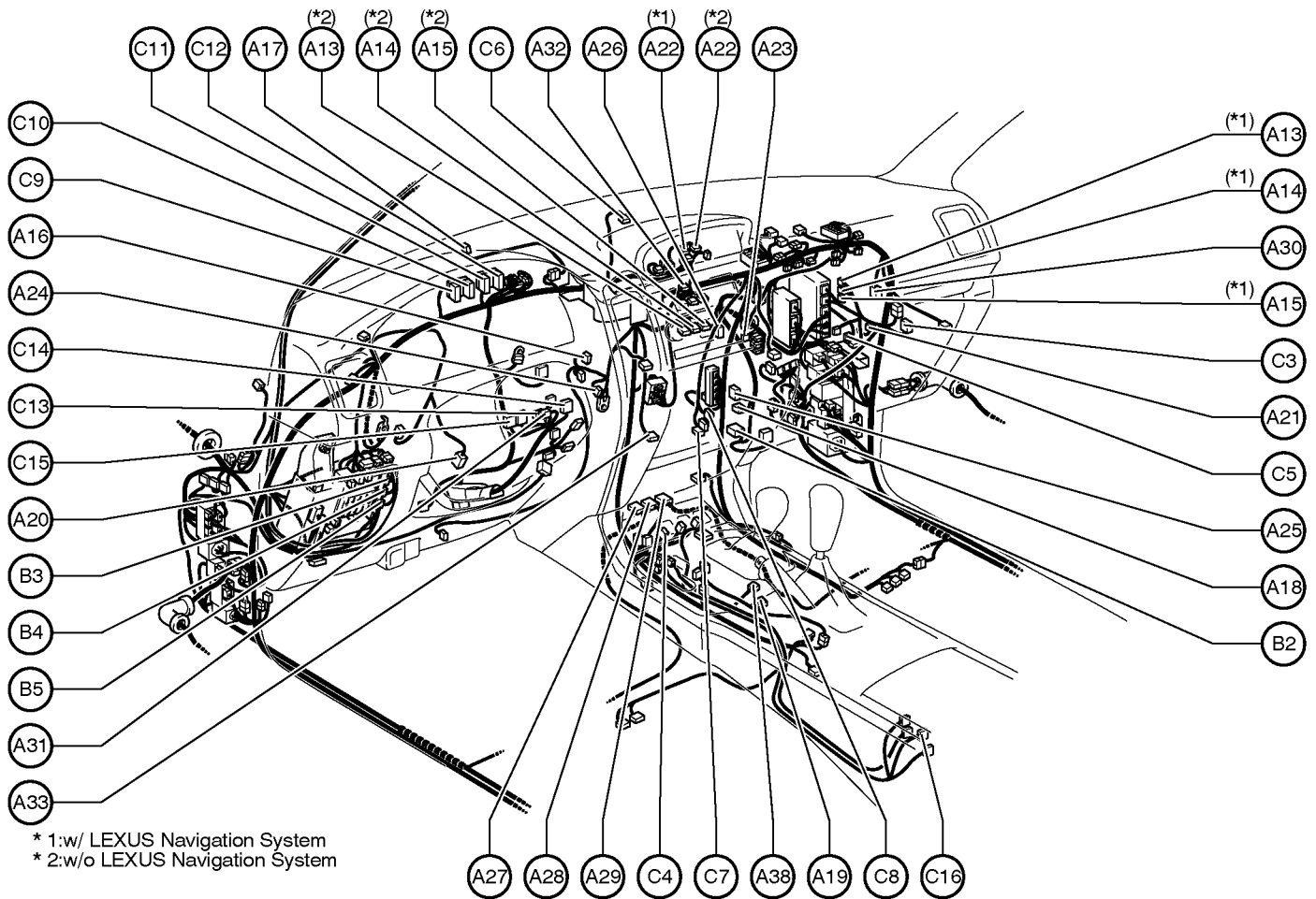
- T 1 Theft Deterrent Horn
- T 2 Throttle Control Motor
Throttle Position Sensor
- T 3 Transfer Actuator
- T 4 Turbine Speed Sensor

- V 1 Vehicle Speed Sensor
(Electronically Controlled Transmission)
- V 2 VSV (EVAP)
- V 9 VSV (ACIS)
- V10 VSV (Air Switching Valve Bank 1)
- V11 VSV (Air Switching Valve Bank 2)
- V12 VVT Sensor LH
- V13 VVT Sensor RH

- W 1 Washer Level Sensor
- W 2 Washer Motor
- W 3 Wireless Door Lock Buzzer

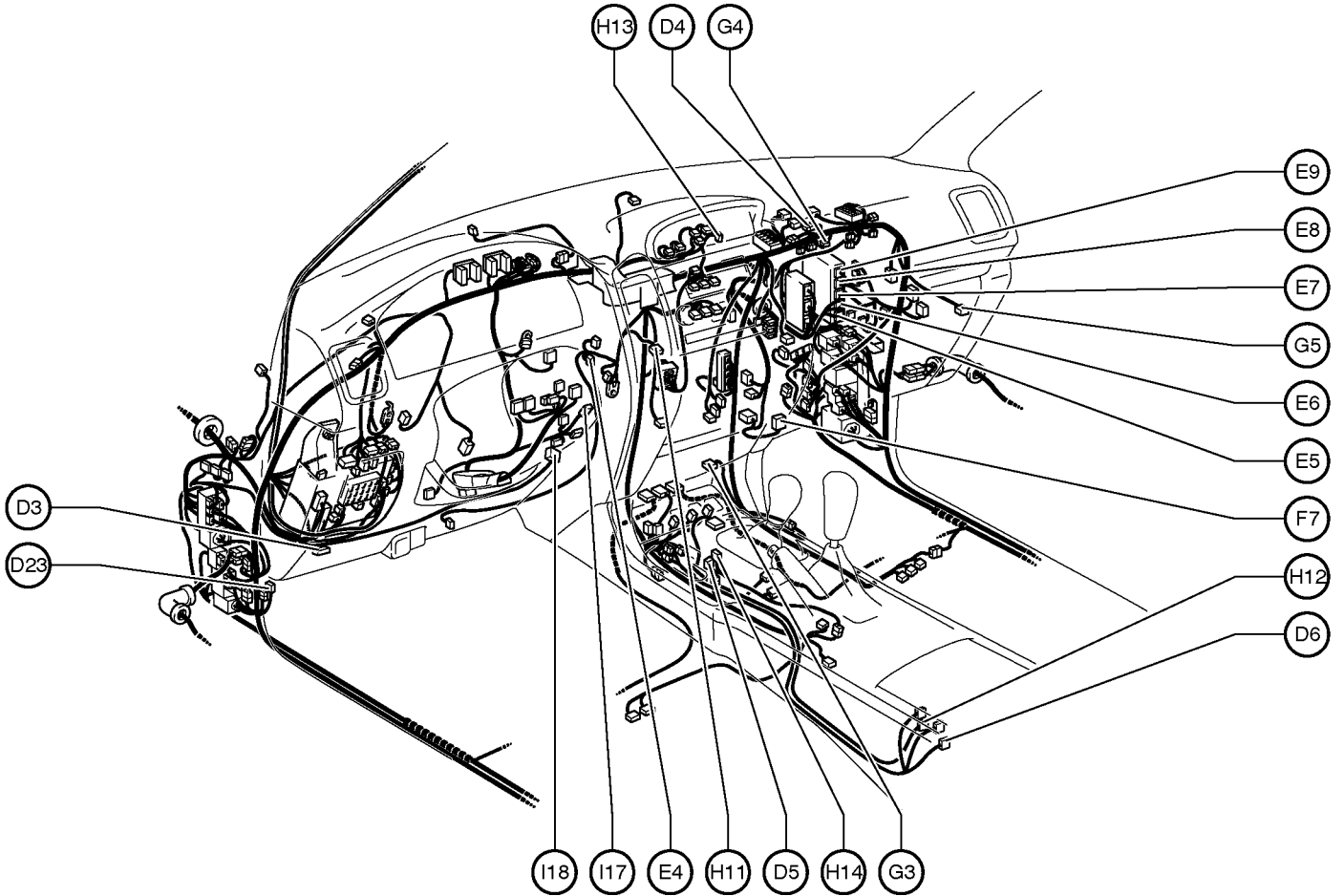
G ELECTRICAL WIRING ROUTING

Position of Parts in Instrument Panel



- | | |
|-------------------------------------------------------------------------------------------------|------------------------------------|
| A 13 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System) | B 2 Blower Motor Linear Controller |
| A 14 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System) | B 3 Body ECU |
| A 15 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System) | B 4 Body ECU |
| A 16 A/C Room Temp. Sensor | B 5 Body ECU |
| A 17 A/C Solar Sensor
Automatic Light Control Sensor | C 3 CD Automatic Changer |
| A 18 A/C Thermistor | C 4 Center Diff. Lock Control SW |
| A 19 A/T Shift Indicator | C 5 Center Diff. Lock ECU |
| A 20 Accel Position Sensor | C 6 Center Speaker |
| A 21 Acceleration Control Sensor Front | C 7 Cigarette Lighter |
| A 22 Accessory Meter | C 8 Cigarette Lighter Illumination |
| A 23 Air Inlet Control Servo Motor | C 9 Combination Meter |
| A 24 Air Mix Control Servo Motor LH | C 10 Combination Meter |
| A 25 Air Mix Control Servo Motor RH | C 11 Combination Meter |
| A 26 Air Vent Mode Control Servo Motor | C 12 Combination Meter |
| A 27 Airbag Sensor Assembly | C 13 Combination SW |
| A 28 Airbag Sensor Assembly | C 14 Combination SW |
| A 29 Airbag Sensor Assembly | C 15 Combination SW |
| A 30 Airbag Squib (Front Passenger Airbag Assembly) | C 16 Console Box Illumination |
| A 31 Airbag Squib (Steering Wheel Pad) | |
| A 32 Antenna Amplifier | |
| A 33 Ashtray Illumination | |
| A 38 Acceleration Sensor | |

Position of Parts in Instrument Panel



D 3 Data Link Connector3
 D 4 Diode (Back-Up Light)
 D 5 Downhill Assist Control SW
 D 6 DVD Player
 D23 Diode (Rear Interior Light)

E 4 Electronically Controlled Transmission Pattern
 Select SW
 E 5 Engine Control Module
 E 6 Engine Control Module
 E 7 Engine Control Module
 E 8 Engine Control Module
 E 9 Engine Control Module

F 7 Front Blower Motor

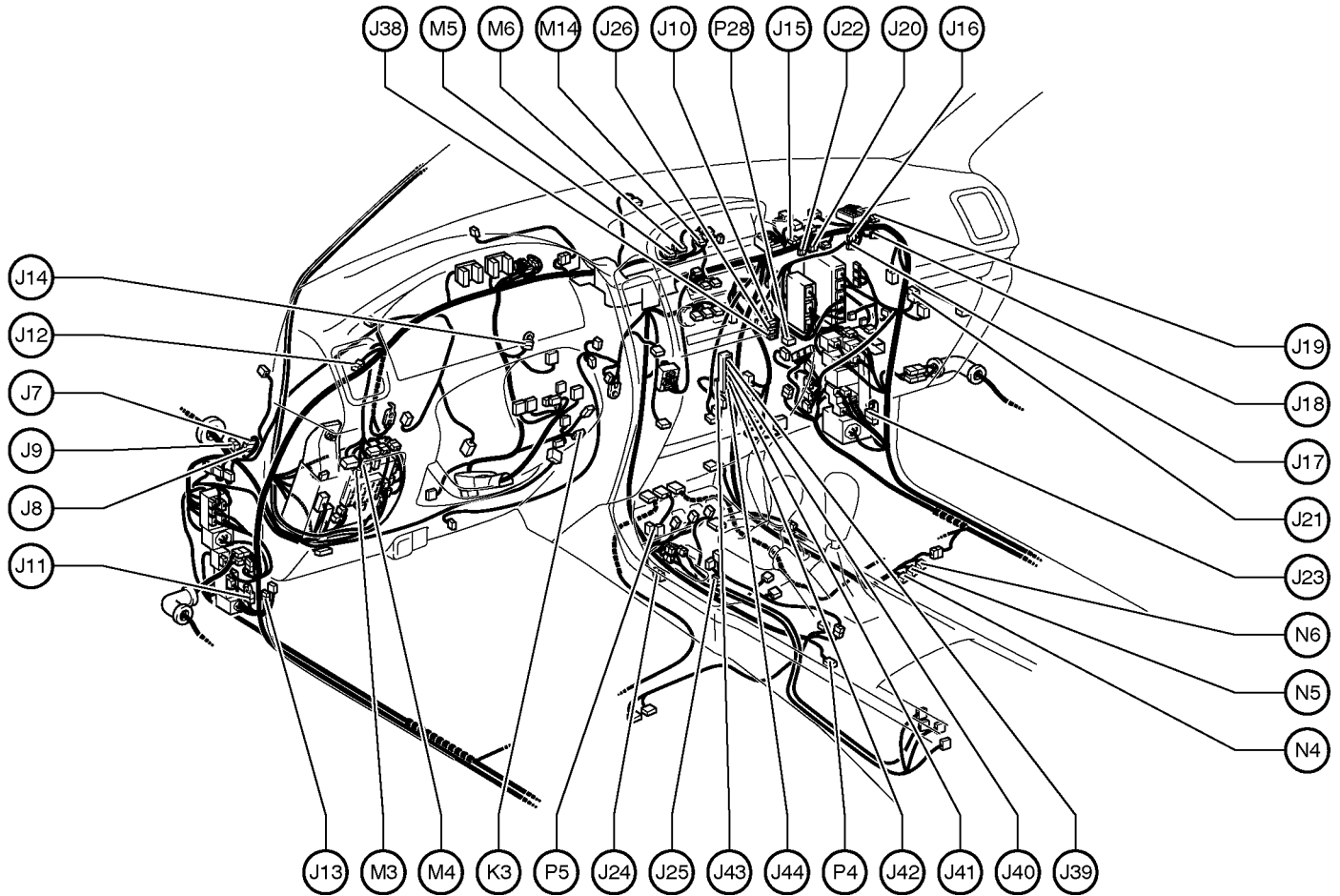
G 3 Gateway ECU
 G 4 Glove Box Light
 G 5 Glove Box Light SW

H 11 Hazard SW
 H 12 Headphone Terminal
 Video Terminal
 H 13 Heater Control SW
 H 14 Height Control and Suspension SW

I 17 Ignition Key Cylinder Light
 Transponder Key Amplifier
 I 18 Ignition SW

G ELECTRICAL WIRING ROUTING

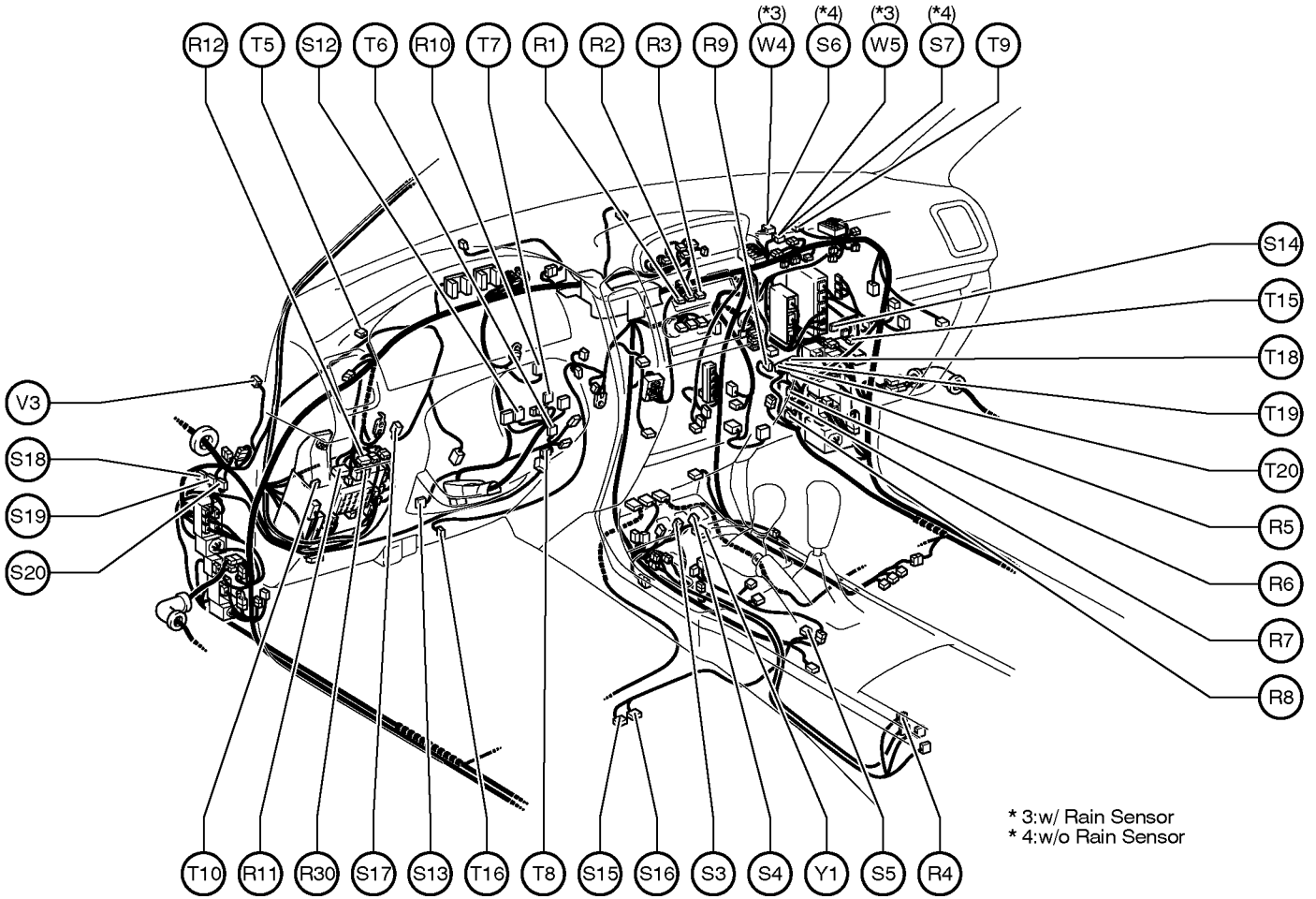
Position of Parts in Instrument Panel



- J 7 Junction Connector
- J 8 Junction Connector
- J 9 Junction Connector
- J 10 Junction Connector
- J 11 Junction Connector
- J 12 Junction Connector
- J 13 Junction Connector
- J 14 Junction Connector
- J 15 Junction Connector
- J 16 Junction Connector
- J 17 Junction Connector
- J 18 Junction Connector
- J 19 Junction Connector
- J 20 Junction Connector
- J 21 Junction Connector
- J 22 Junction Connector
- J 23 Junction Connector
- J 24 Junction Connector
- J 25 Junction Connector
- J 26 Junction Connector
- J 38 Junction Connector
- J 39 Junction Connector
- J 40 Junction Connector
- J 41 Junction Connector
- J 42 Junction Connector
- J 43 Junction Connector
- J 44 Junction Connector

- K 3 Key Interlock Solenoid
Unlock Warning SW
- M 3 Main SW
- M 4 Mirror Heater SW
- M 5 Multi-Display
- M 6 Multi-Display
- M14 Multi-Display
- N 4 Navigation ECU
- N 5 Navigation ECU
- N 6 Navigation ECU
- P 4 Parking Brake SW
- P 5 Power Outlet (Front)
- P28 Passenger Airbag ON-OFF Indicator
Passenger Seat Belt Warning Light

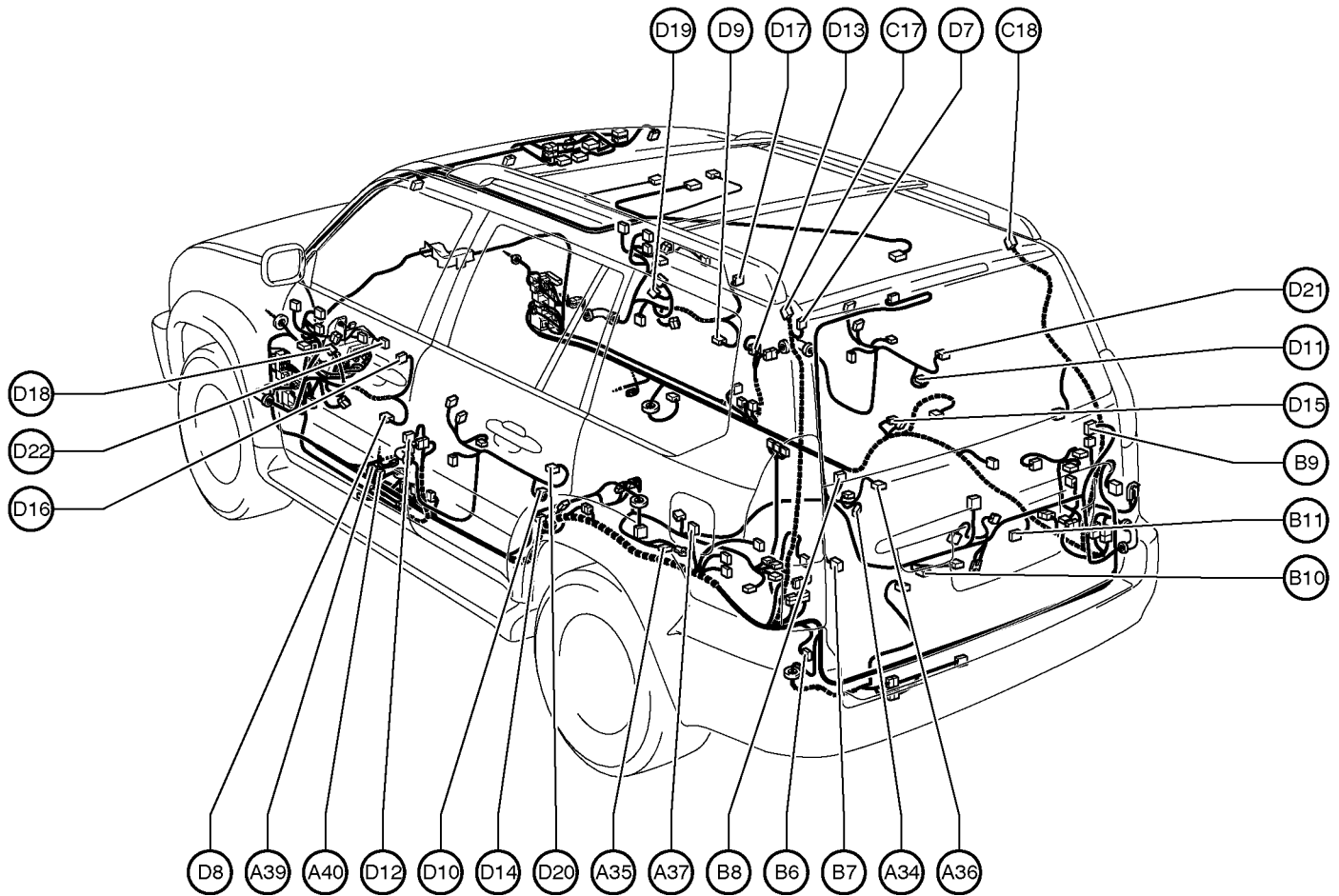
Position of Parts in Instrument Panel



- | | |
|-------------------------------------------------------|--------------------------------|
| R 1 Radio and Player | T 5 Theft Deterrent ECU |
| R 2 Radio and Player | T 6 Tilt and Telescopic ECU |
| R 3 Radio and Player | T 7 Tilt Motor |
| R 4 Rear Cooler SW | T 8 Towing Brake Controller |
| R 5 Rear Seat Entertainment ECU | T 9 Transponder Key Computer |
| R 6 Rear Seat Entertainment ECU | T 10 Turn Signal Flasher |
| R 7 Rear Seat Entertainment ECU | T 15 Tire Pressure Monitor ECU |
| R 8 Rear Seat Entertainment ECU | T 16 Tire Select SW |
| R 9 Rear Seat Entertainment ECU | T 18 Television Camera ECU |
| R 10 Remote Control Mirror ECU | T 19 Television Camera ECU |
| R 11 Remote Control Mirror SW | T 20 Television Camera ECU |
| R 12 Rheostat | |
| R 30 Roll Sensing Curtain Shield Airbag Cut Off SW | V 3 VSC Warning Buzzer |
| S 3 Seat Heater SW Front LH | W 4 Wiper Relay |
| S 4 Seat Heater SW Front RH | W 5 Wiper Relay |
| S 5 Shift Lock Control ECU
Transmission Control SW | Y 1 Yaw Rate Sensor |
| S 6 Short Pin | |
| S 7 Short Pin | |
| S 12 Steering Sensor | |
| S 13 Step Light LH | |
| S 14 Step Light RH | |
| S 15 Stereo Component Amplifier | |
| S 16 Stereo Component Amplifier | |
| S 17 Stop Light SW | |
| S 18 Suspension Control ECU | |
| S 19 Suspension Control ECU | |
| S 20 Suspension Control ECU | |

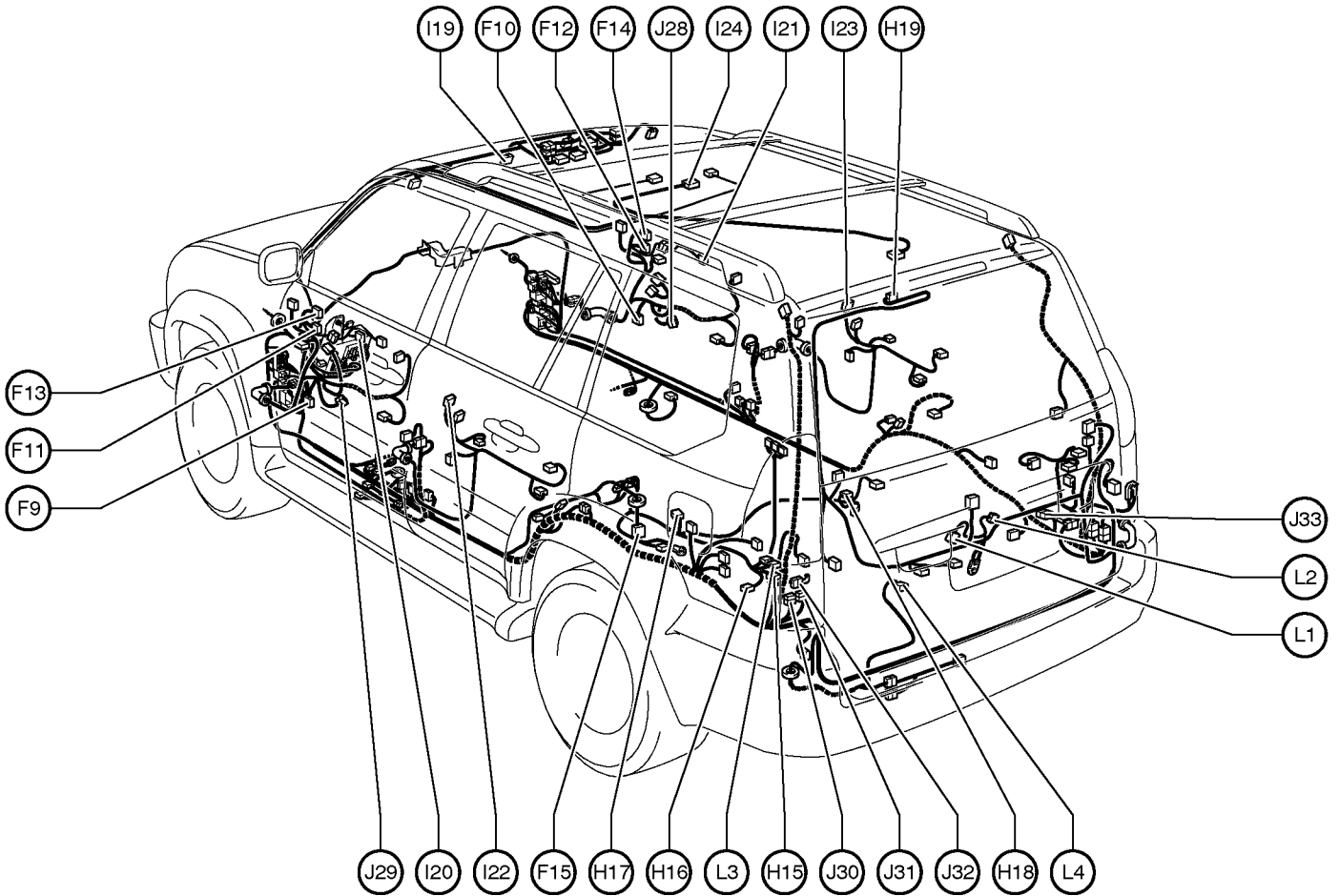
G ELECTRICAL WIRING ROUTING

Position of Parts in Body



- | | |
|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| A 34 ABS Speed Sensor Rear | D 7 Door Control Receiver |
| A 35 Absorber Control Actuator Rear LH | D 8 Door Courtesy Light Front LH |
| A 36 Absorber Control Actuator Rear RH | D 9 Door Courtesy Light Front RH |
| A 37 Acceleration Control Sensor Rear | D 10 Door Courtesy Light Rear LH |
| A 39 Accumulator Pressure Sensor No.1 | D 11 Door Courtesy Light Rear RH |
| A 40 Accumulator Pressure Sensor No.2 | D 12 Door Courtesy SW Front LH |
| B 6 Back Door Courtesy SW | D 13 Door Courtesy SW Front RH |
| B 7 Back Door Key Lock and Unlock SW
Back Door Lock Motor
Back Door Unlock Detection SW | D 14 Door Courtesy SW Rear LH |
| B 8 Back Door Speaker LH | D 15 Door Courtesy SW Rear RH |
| B 9 Back Door Speaker RH | D 16 Door Key Lock and Unlock SW Front LH
Door Lock Motor Front LH
Door Unlock Detection SW Front LH |
| B 10 Back-Up Light LH | D 17 Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH |
| B 11 Back-Up Light RH | D 18 Door Lock Control SW LH
Power Window Master SW |
| C 17 Curtain Shield Airbag Squib LH | D 19 Door Lock Control SW RH |
| C 18 Curtain Shield Airbag Squib RH | D 20 Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH |
| | D 21 Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH |
| | D 22 Driving Position Memory SW |

Position of Parts in Body



F 9 Front Door Speaker LH
 F 10 Front Door Speaker RH
 F 11 Front Door Squawker LH
 F 12 Front Door Squawker RH
 F 13 Front Door Tweeter Speaker LH
 F 14 Front Door Tweeter Speaker RH
 F 15 Fuel Pump
 Fuel Sender

H 15 Height Control Compressor
 H 16 Height Control Exhaust Valve
 H 17 Height Control Sensor Rear LH
 H 18 Height Control Sensor Rear RH
 H 19 High Mounted Stop Light

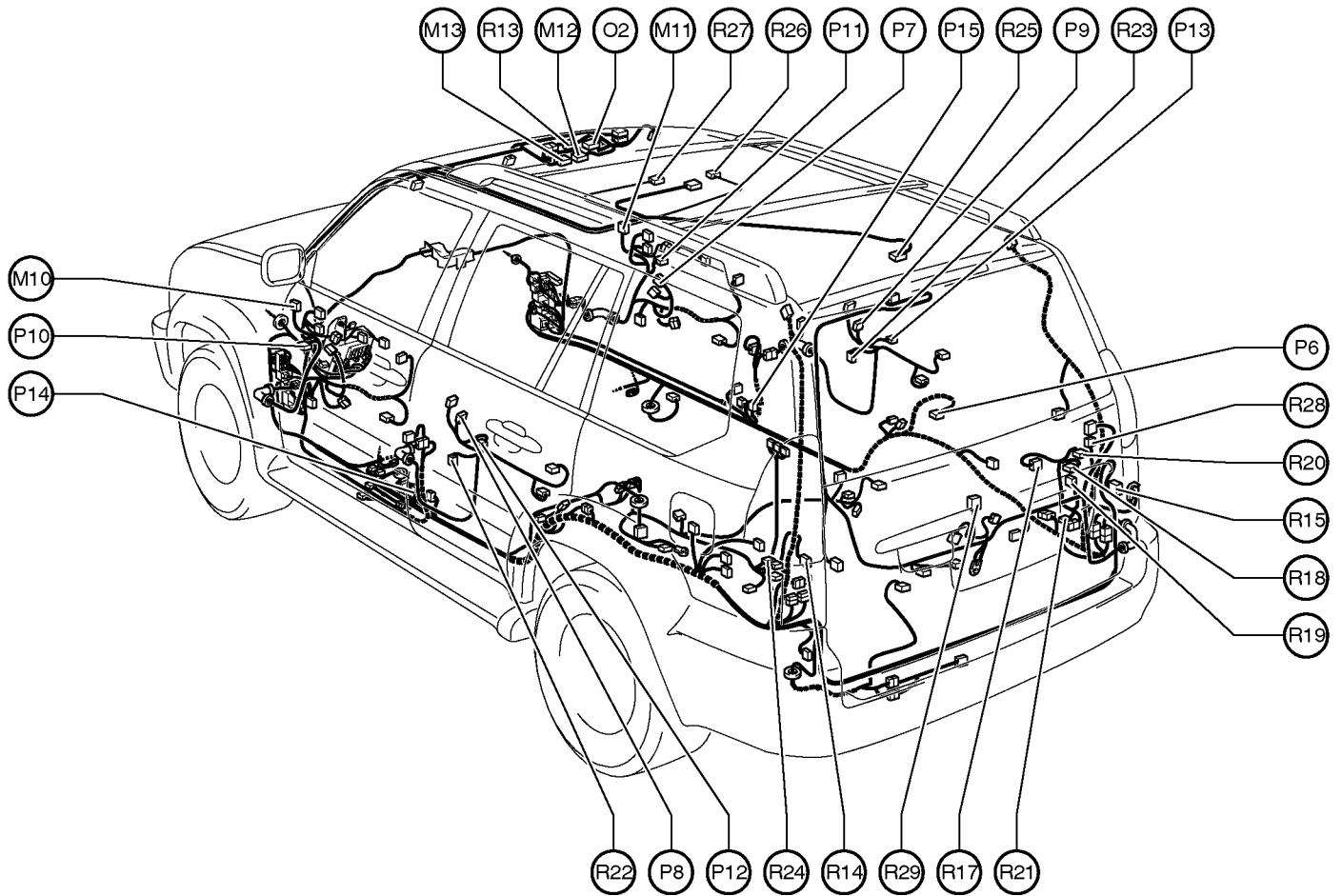
I 19 Inner Mirror
 I 20 Inside Handle Illumination Front LH
 I 21 Inside Handle Illumination Front RH
 I 22 Inside Handle Illumination Rear LH
 I 23 Inside Handle Illumination Rear RH
 I 24 Interior Light

J 28 Junction Connector
 J 29 Junction Connector
 J 30 Junction Connector
 J 31 Junction Connector
 J 32 Junction Connector
 J 33 Junction Connector

L 1 License Plate Light LH
 L 2 License Plate Light RH
 L 3 Low Pressure Tank Valve
 L 4 Leak Detection Pump Assembly

G ELECTRICAL WIRING ROUTING

Position of Parts in Body



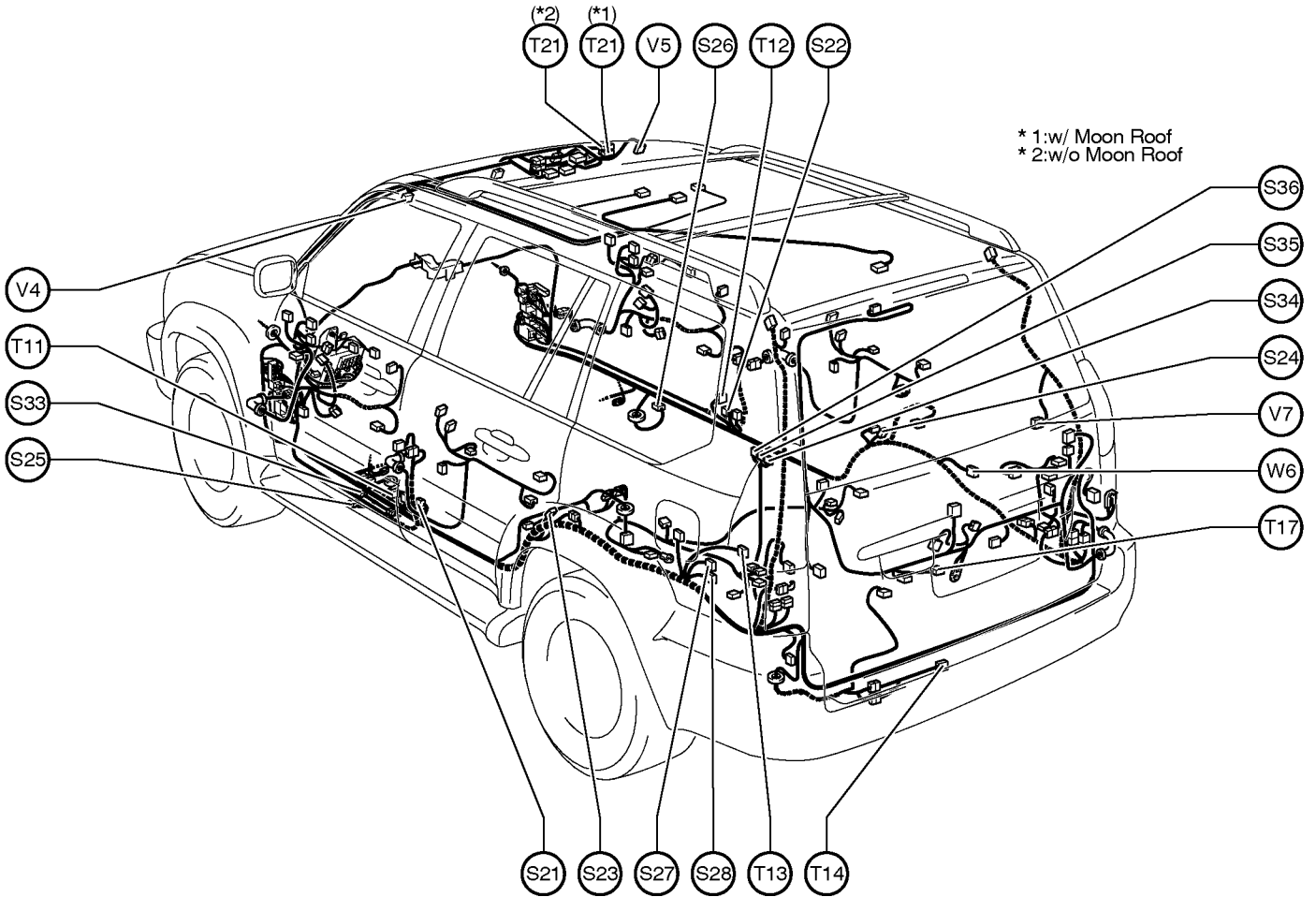
- M10 Mirror Heater LH
Remote Control Mirror LH
- M11 Mirror Heater RH
Remote Control Mirror RH
- M12 Moon Roof Control ECU and Motor
- M13 Coin Box Illumination
Moon Roof Control SW
Personal Light

O 2 Overhead J/B

- P 6 Power Outlet (115V)
- P 7 Power Window Control SW Front RH
- P 8 Power Window Control SW Rear LH
- P 9 Power Window Control SW Rear RH
- P10 Power Window Motor Front LH
- P11 Power Window Motor Front RH
- P12 Power Window Motor Rear LH
- P13 Power Window Motor Rear RH
- P14 Pretensioner LH
- P15 Pretensioner RH

- R13 Rain Sensor
- R14 Rear Combination Light LH
- R15 Rear Combination Light RH
- R17 Rear Cooler Blower Motor
- R18 Rear Cooler Magnetic Valve
- R19 Rear Cooler Power Transistor
- R20 Rear Cooler Relay
- R21 Rear Cooler Thermistor
- R22 Rear Door Speaker LH
- R23 Rear Door Speaker RH
- R24 Rear Height Control Valve
- R25 Rear Interior Light
- R26 Rear Seat Audio Controller
- R27 Rear Seat Entertainment Display
- R28 Rear Window Defogger
- R29 Rear Wiper Motor

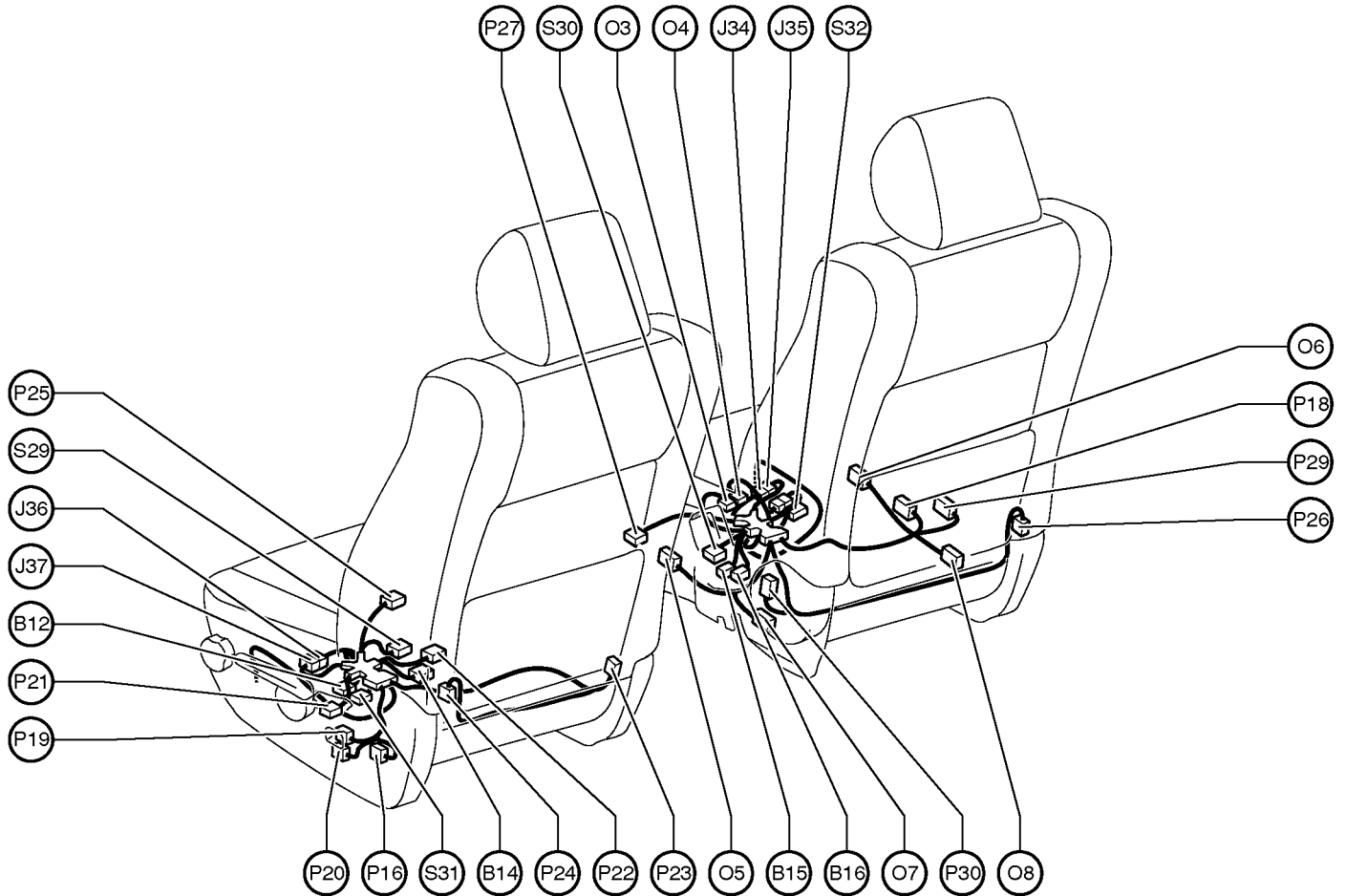
Position of Parts in Body



- | | |
|---------------------------------|----------------------------------|
| S21 Side Airbag Sensor Front LH | T 11 Tension Reducer Solenoid LH |
| S22 Side Airbag Sensor Front RH | T 12 Tension Reducer Solenoid RH |
| S23 Side Airbag Sensor Rear LH | T 13 Towing Converter Relay |
| S24 Side Airbag Sensor Rear RH | T 14 Trailer Socket |
| S25 Side Step Light LH | T 17 Television Camera |
| S26 Side Step Light RH | T 21 Tire Pressure Receiver |
| S27 Sub Body ECU | |
| S28 Sub Body ECU | V 4 Vanity Light LH |
| S33 Stabilizer Control Valve | V 5 Vanity Light RH |
| S34 Stabilizer Control ECU | V 7 Voltage Inverter |
| S35 Stabilizer Control ECU | |
| S36 Stabilizer Control ECU | W 6 Woofer Speaker |

G ELECTRICAL WIRING ROUTING

Position of Parts in Seat



B 12 Buckle SW LH
Seat Position Sensor

B 14 Buckle SW LH

B 15 Buckle SW RH

B 16 Buckle SW RH

J 34 Junction Connector

J 35 Junction Connector

J 36 Junction Connector

J 37 Junction Connector

O 3 Occupant Classification ECU

O 4 Occupant Classification ECU

O 5 Occupant Detection Sensor Front LH

O 6 Occupant Detection Sensor Front RH

O 7 Occupant Detection Sensor Rear LH

O 8 Occupant Detection Sensor Rear RH

P 16 Power Seat Control SW
(Driver's Seat Lumbar Support Control)

P 18 Power Seat Control SW (Front Passenger's Seat)

P 19 Power Seat ECU and SW

P 20 Power Seat ECU and SW

P 21 Power Seat Motor (Driver's Seat Front Vertical Control)

P 22 Power Seat Motor (Driver's Seat Lifter Control)

P 23 Power Seat Motor
(Driver's Seat Lumbar Support Control)

P 24 Power Seat Motor (Driver's Seat Reclining Control)

P 25 Power Seat Motor (Driver's Seat Slide Control)

P 26 Power Seat Motor
(Front Passenger's Seat Reclining Control)

P 27 Power Seat Motor
(Front Passenger's Seat Slide Control)

P 29 Power Seat Control SW
(Front Passenger's Seat Lumbar Support Control)

P 30 Power Seat Motor
(Front Passenger's Seat Lumbar Support Control)

S 29 Seat Heater (Driver's Seat)

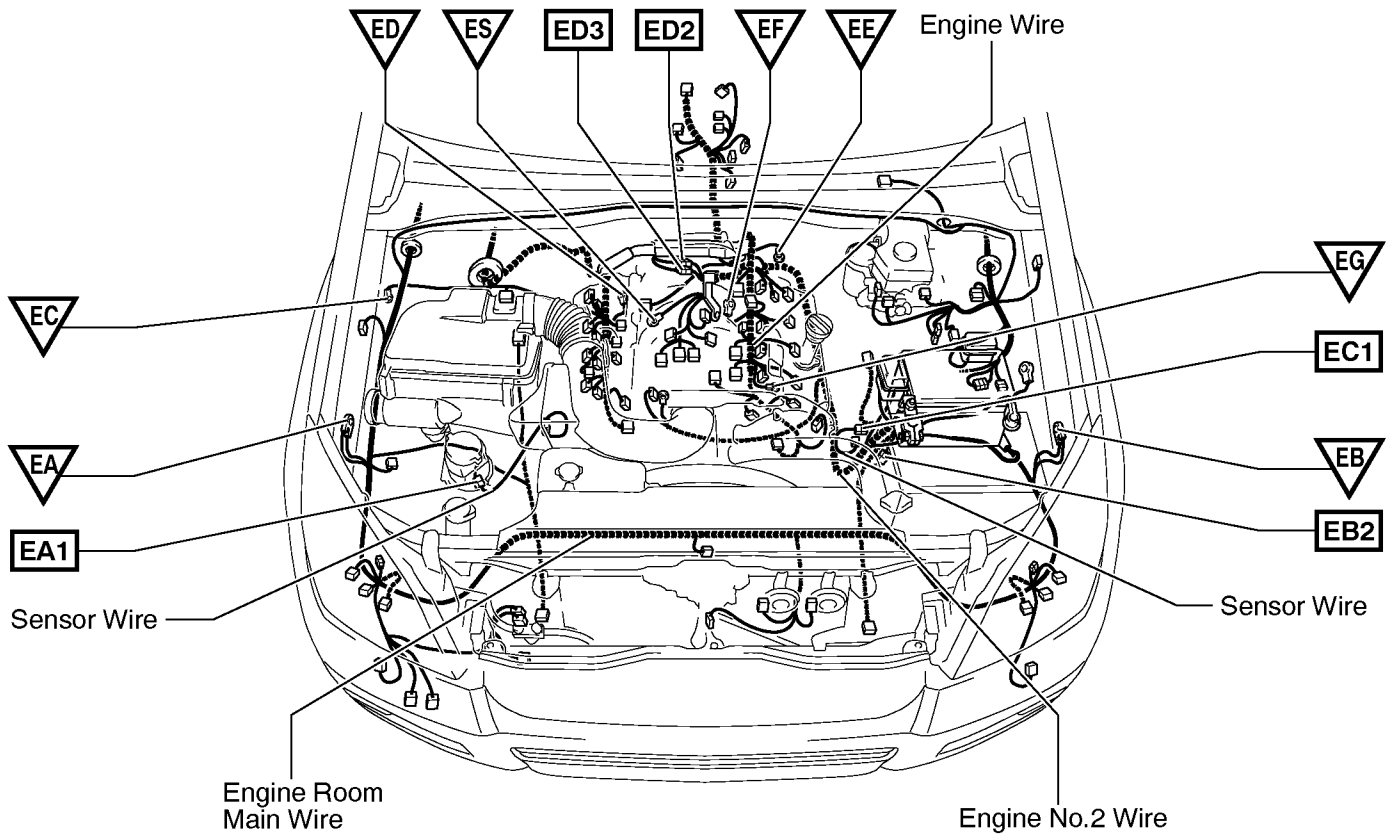
S 30 Seat Heater (Front Passenger's Seat)

S 31 Side Airbag Squib LH

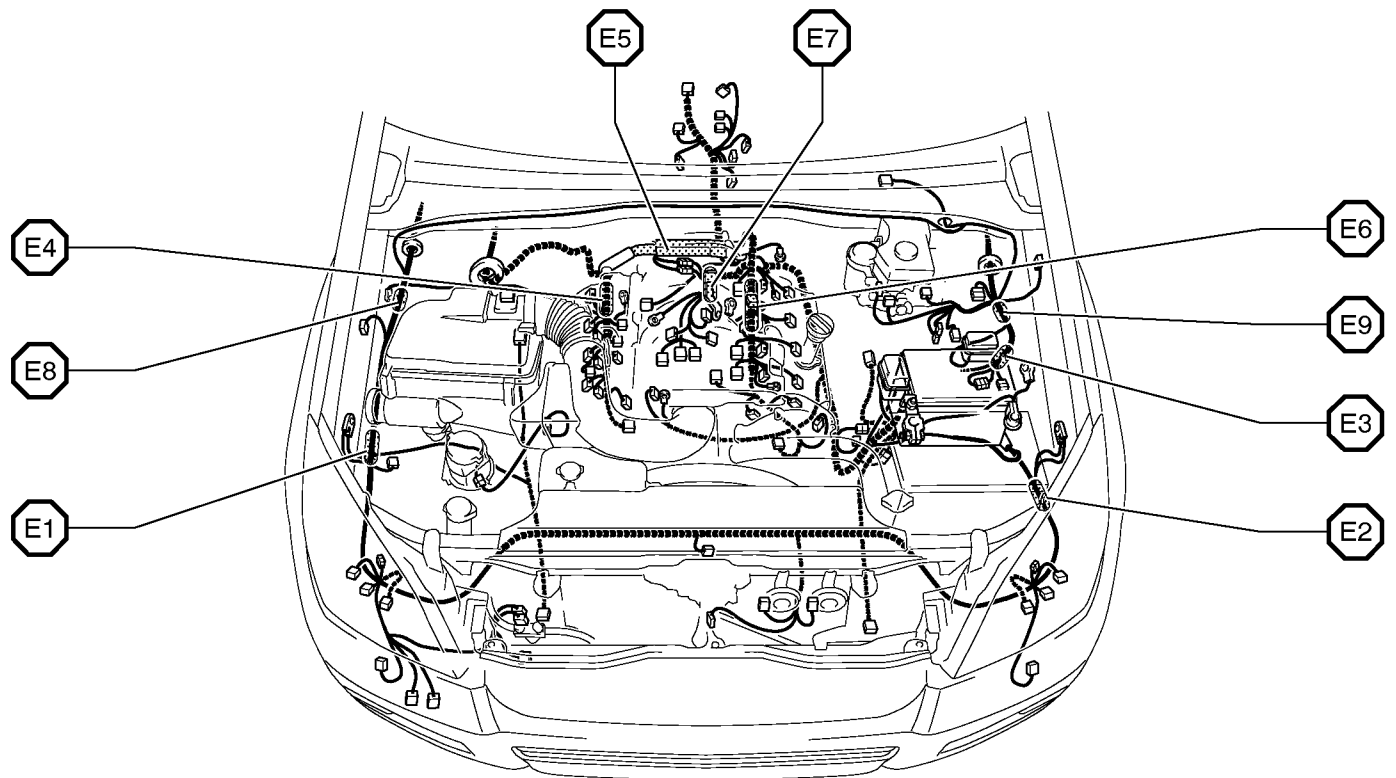
S 32 Side Airbag Squib RH

G ELECTRICAL WIRING ROUTING

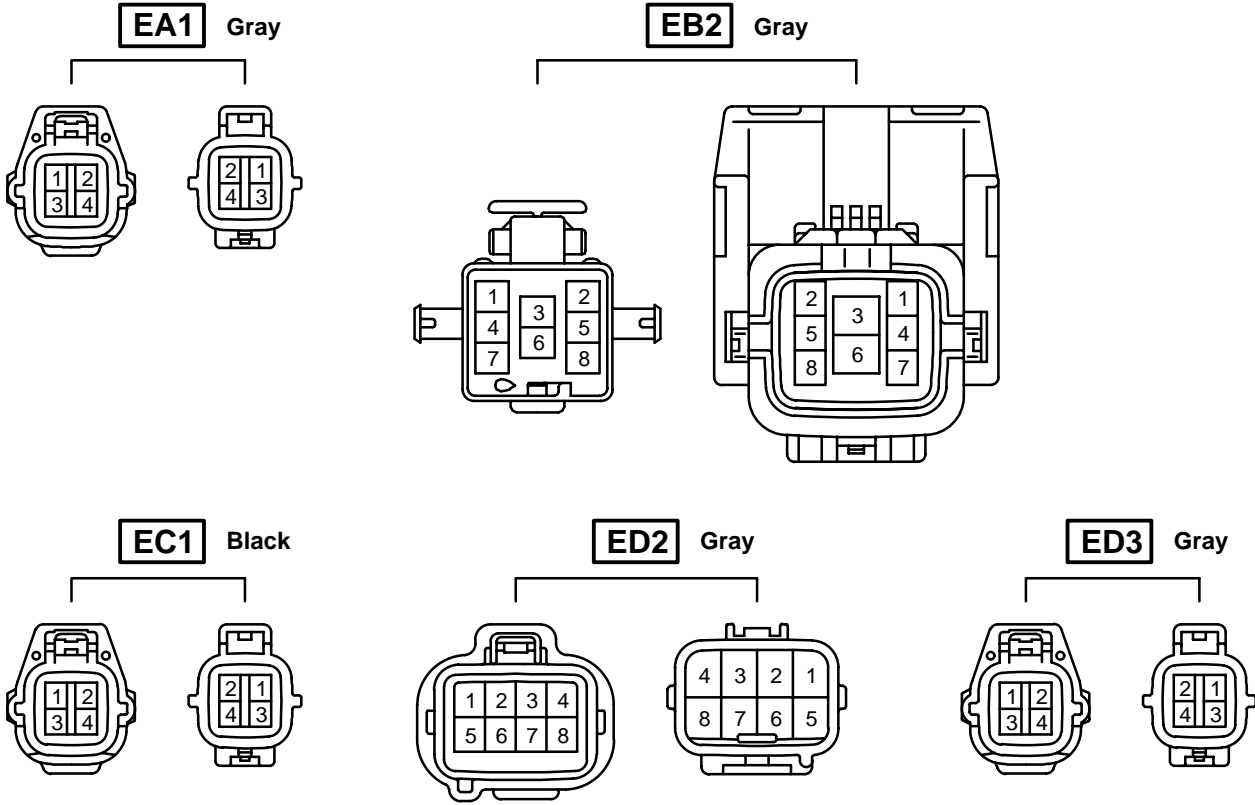
□ : Location of Connector Joining Wire Harness and Wire Harness
 ▽ : Location of Ground Points



○ : Location of Splice Points



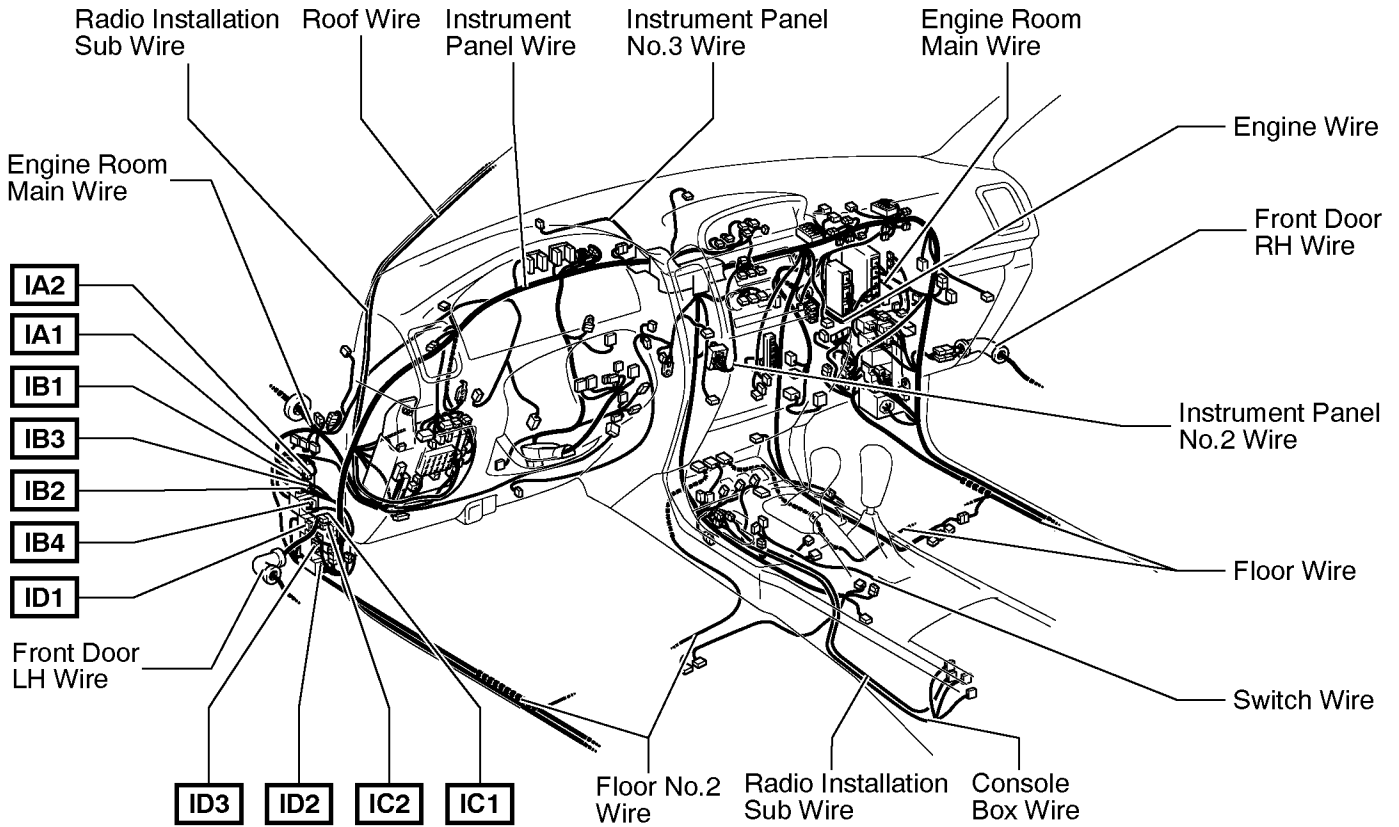
Connector Joining Wire Harness and Wire Harness



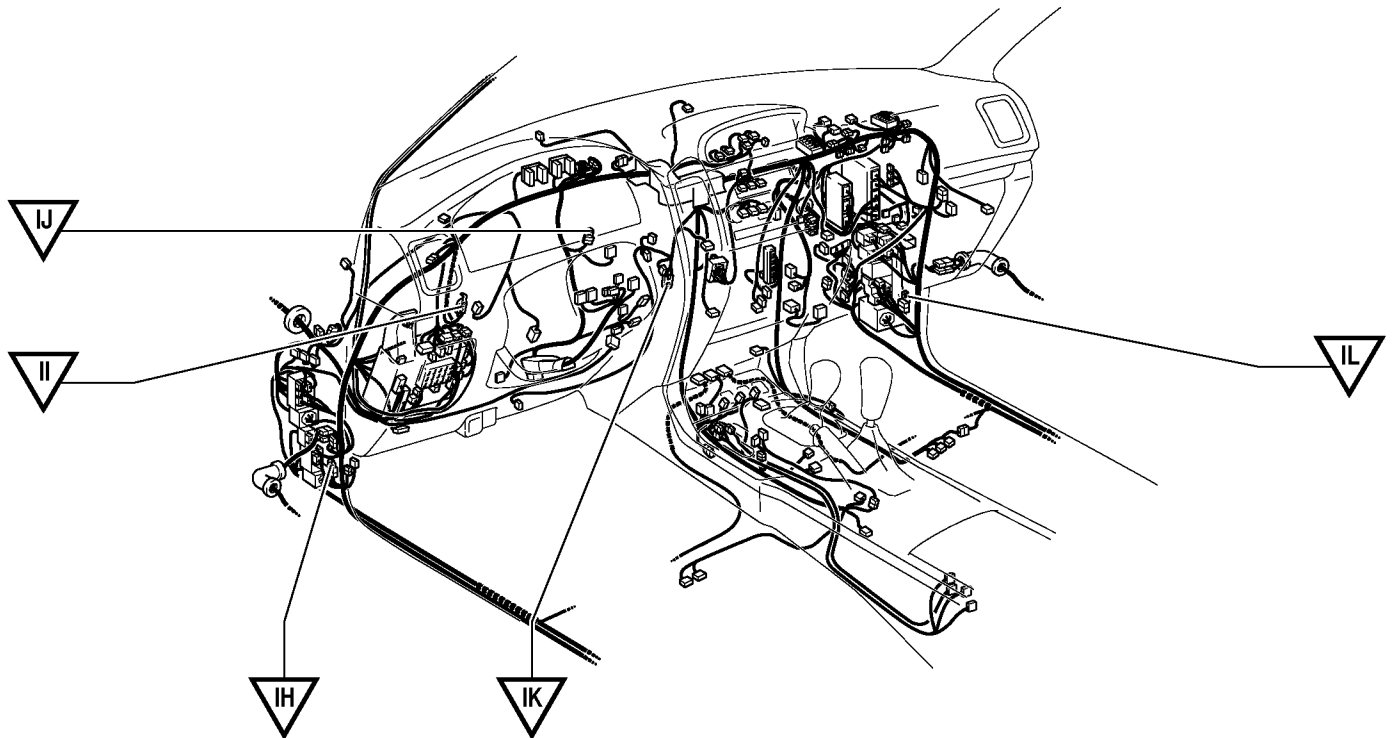
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Sensor Wire and Engine Room Main Wire (Near the Air Cleaner)
EB2	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
EC1	Sensor Wire and Engine Room Main Wire (Near the Engine Room R/B)
ED2	Engine No.2 Wire and Engine Wire (Near the Starter)
ED3	

G ELECTRICAL WIRING ROUTING

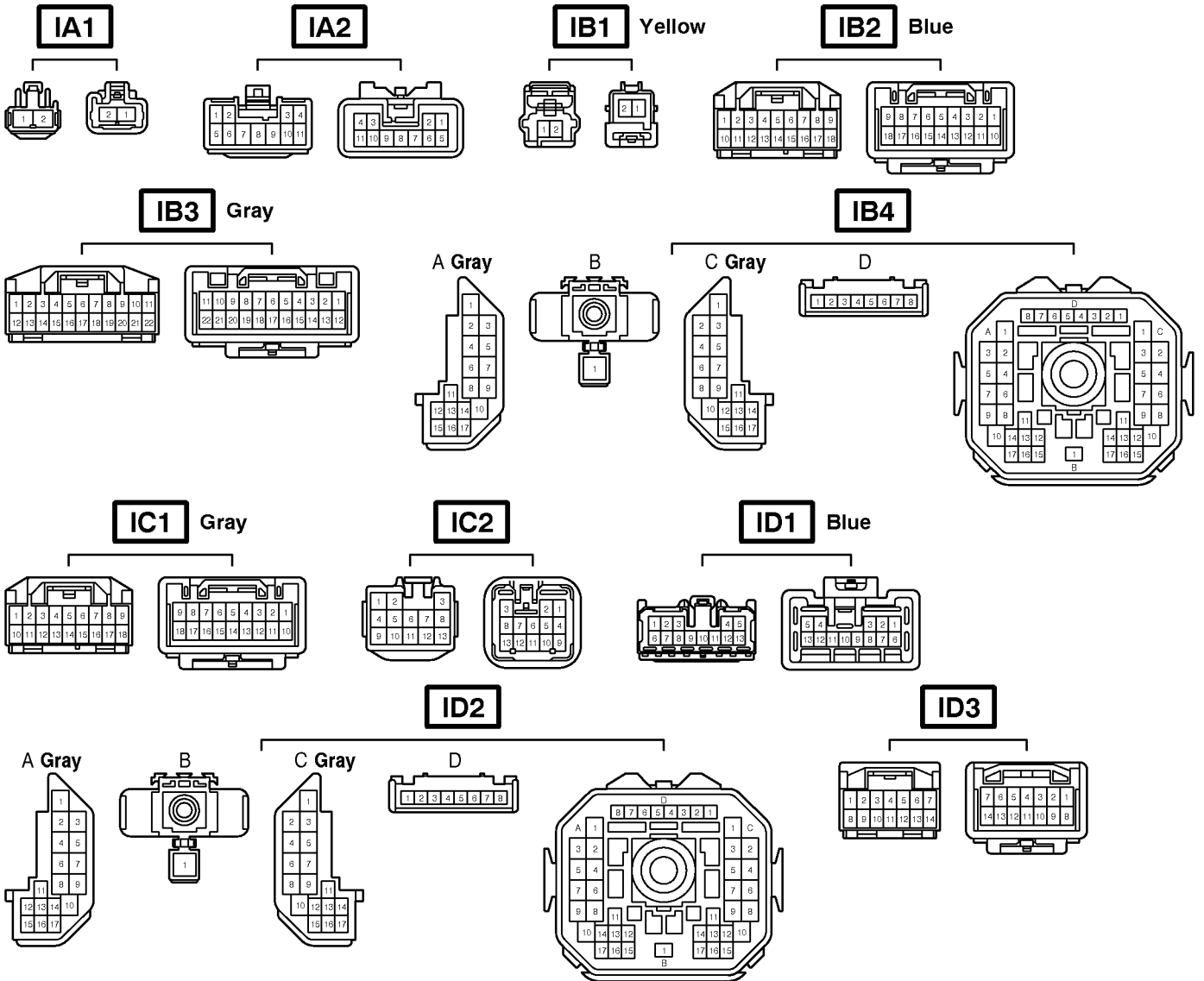
□ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points



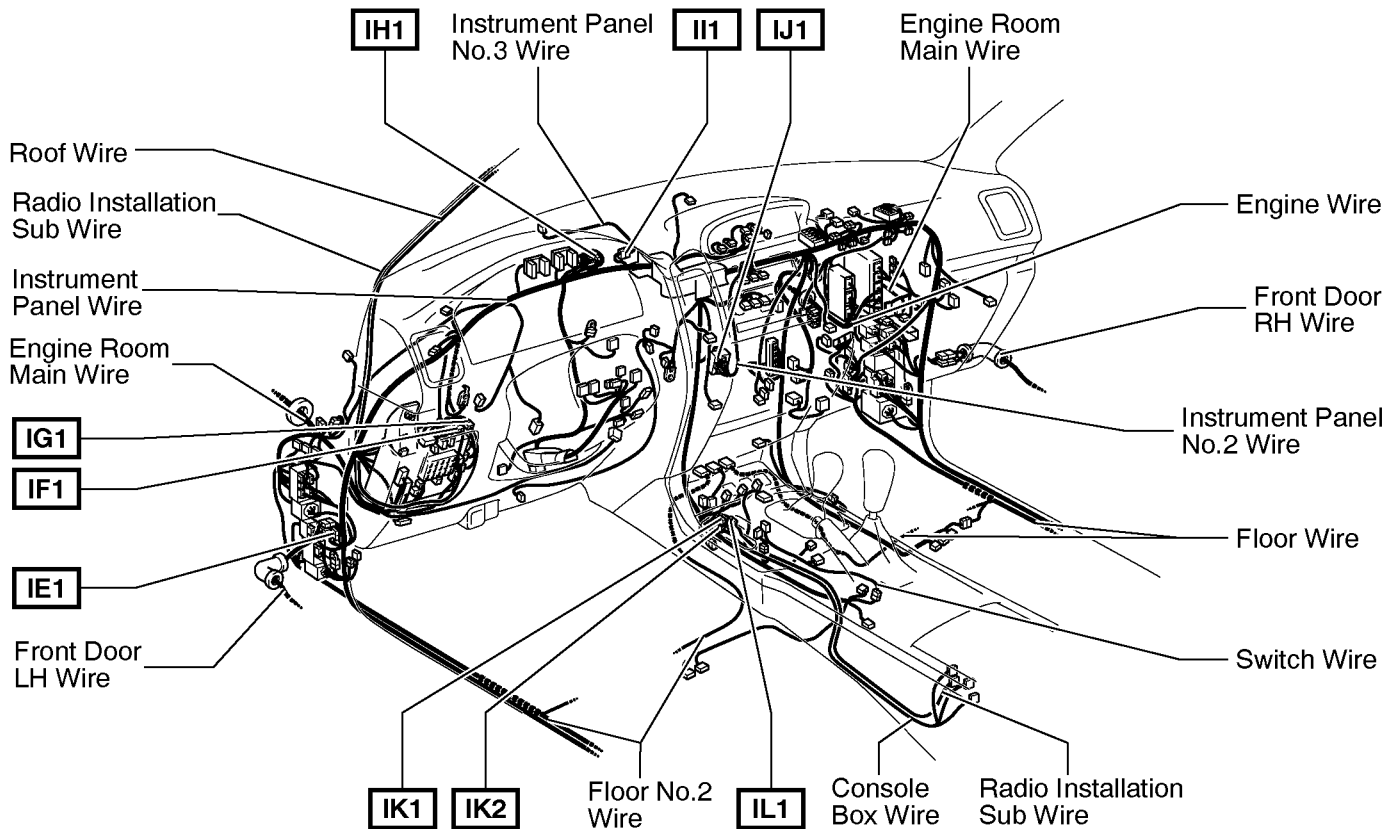
Connector Joining Wire Harness and Wire Harness



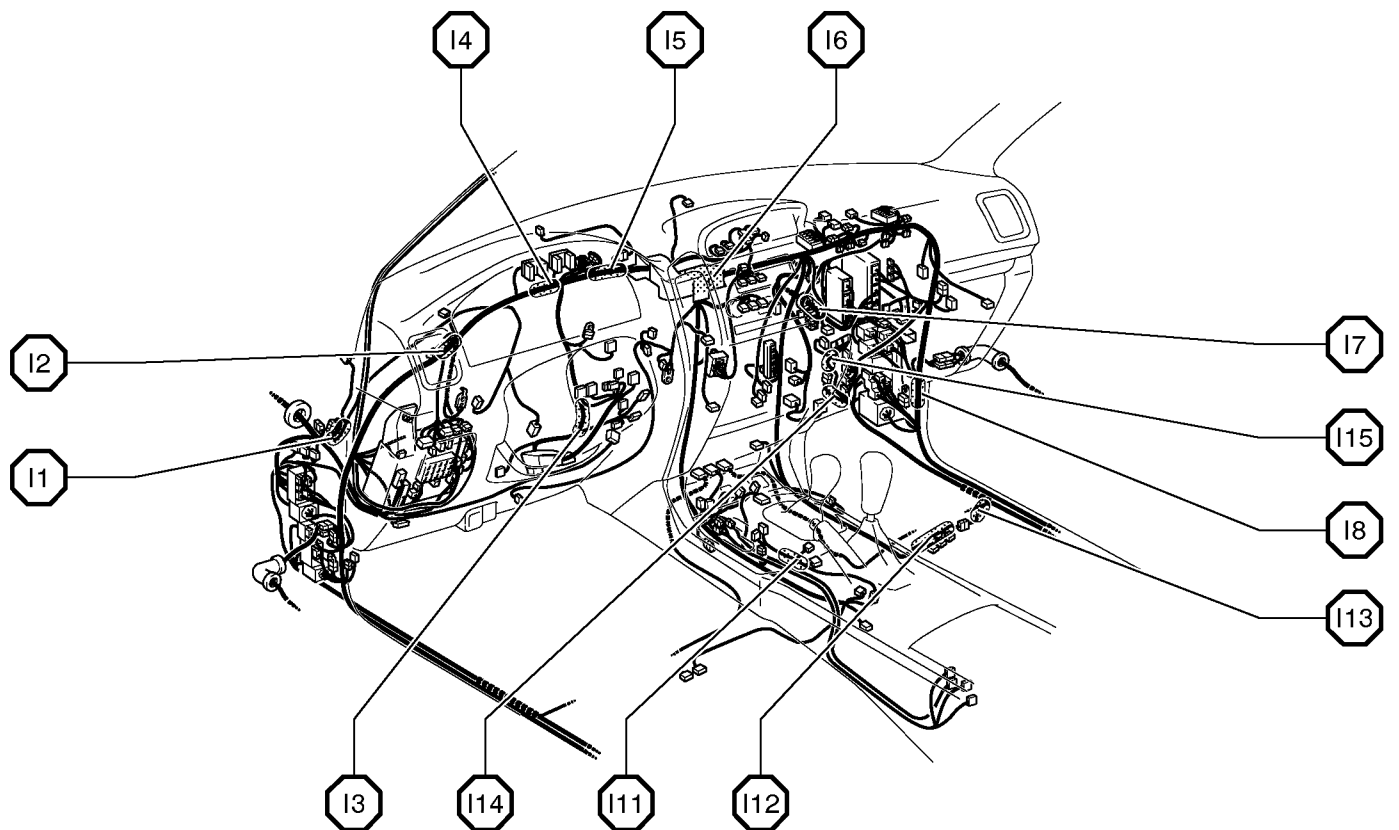
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IA2	
IB1	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB2	
IB3	
IB4	
IC1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	
ID1	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2	
ID3	

G ELECTRICAL WIRING ROUTING

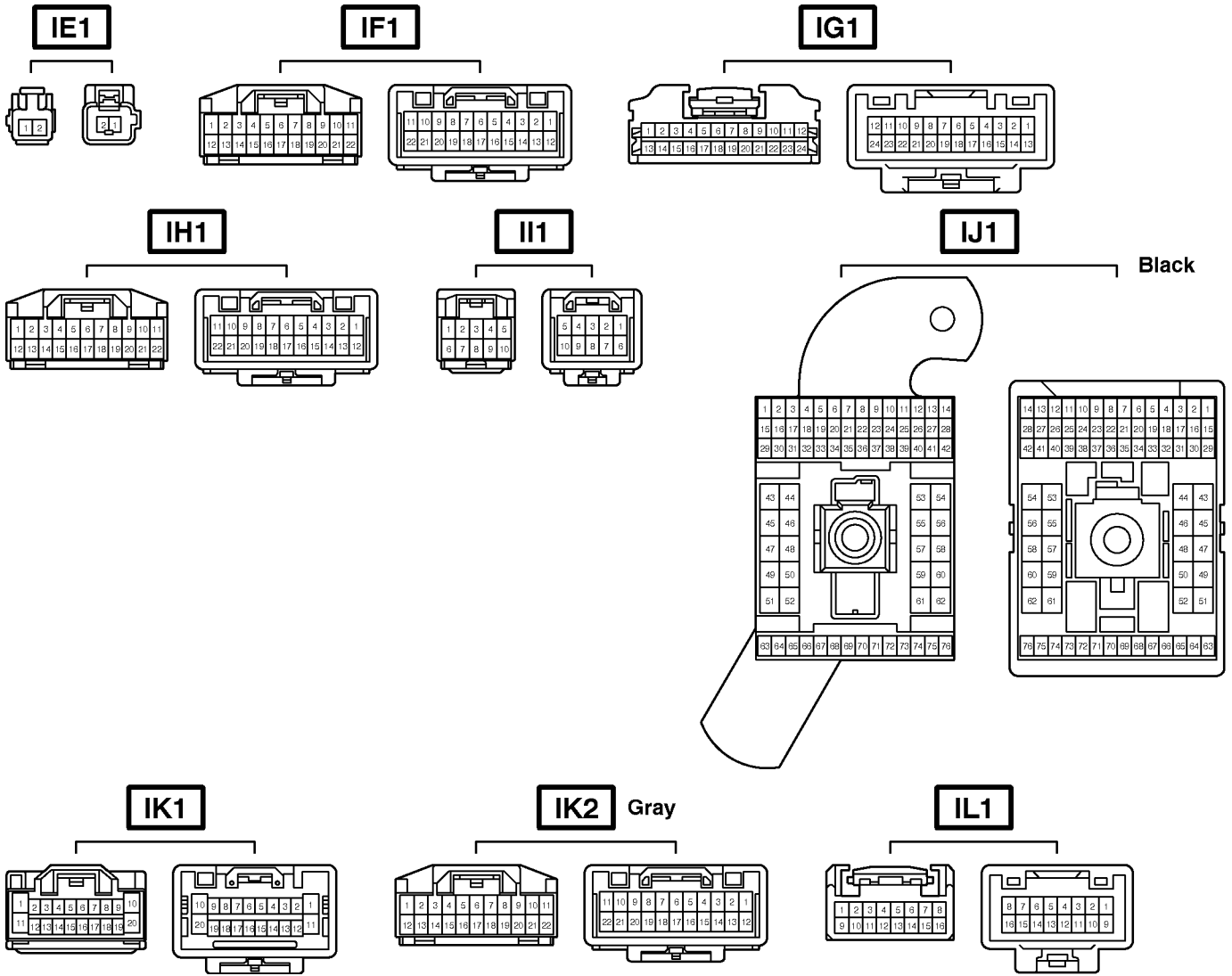
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



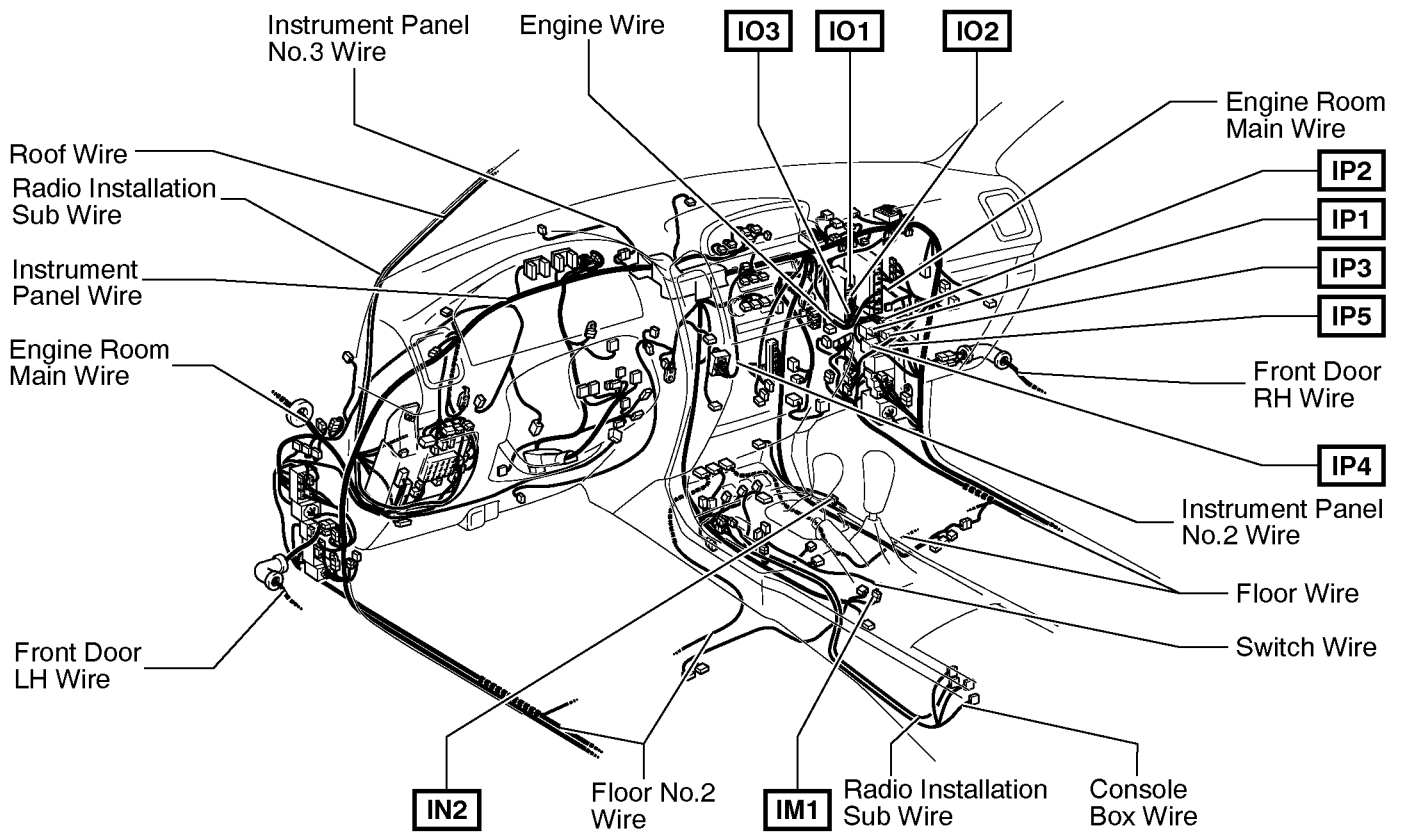
Connector Joining Wire Harness and Wire Harness



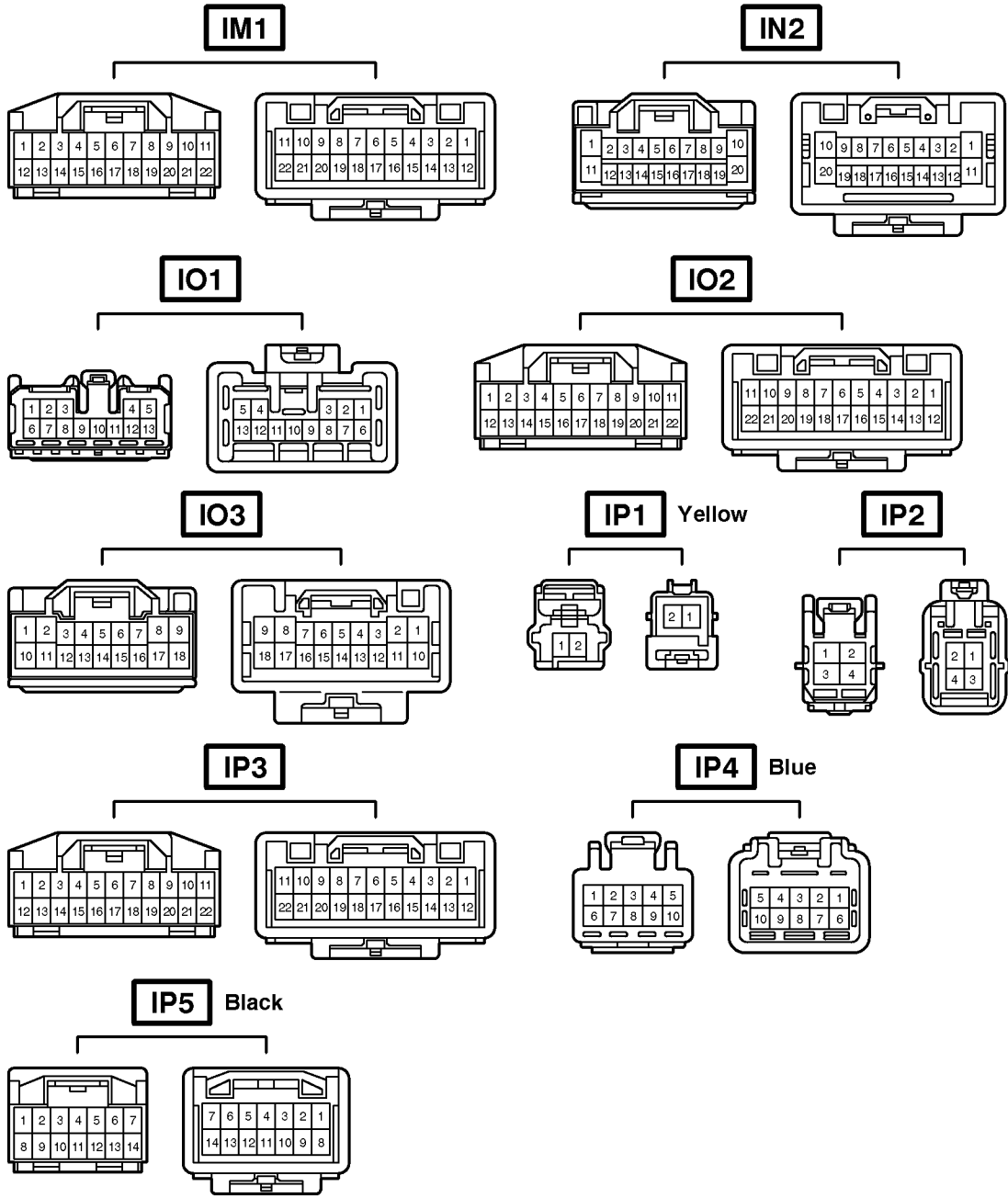
Code	Joining Wire Harness and Wire Harness (Connector Location)
IE1	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IF1	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IG1	Radio Installation Sub Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IJ1	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IK1	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IK2	
IL1	Radio Installation Sub Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)

G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness



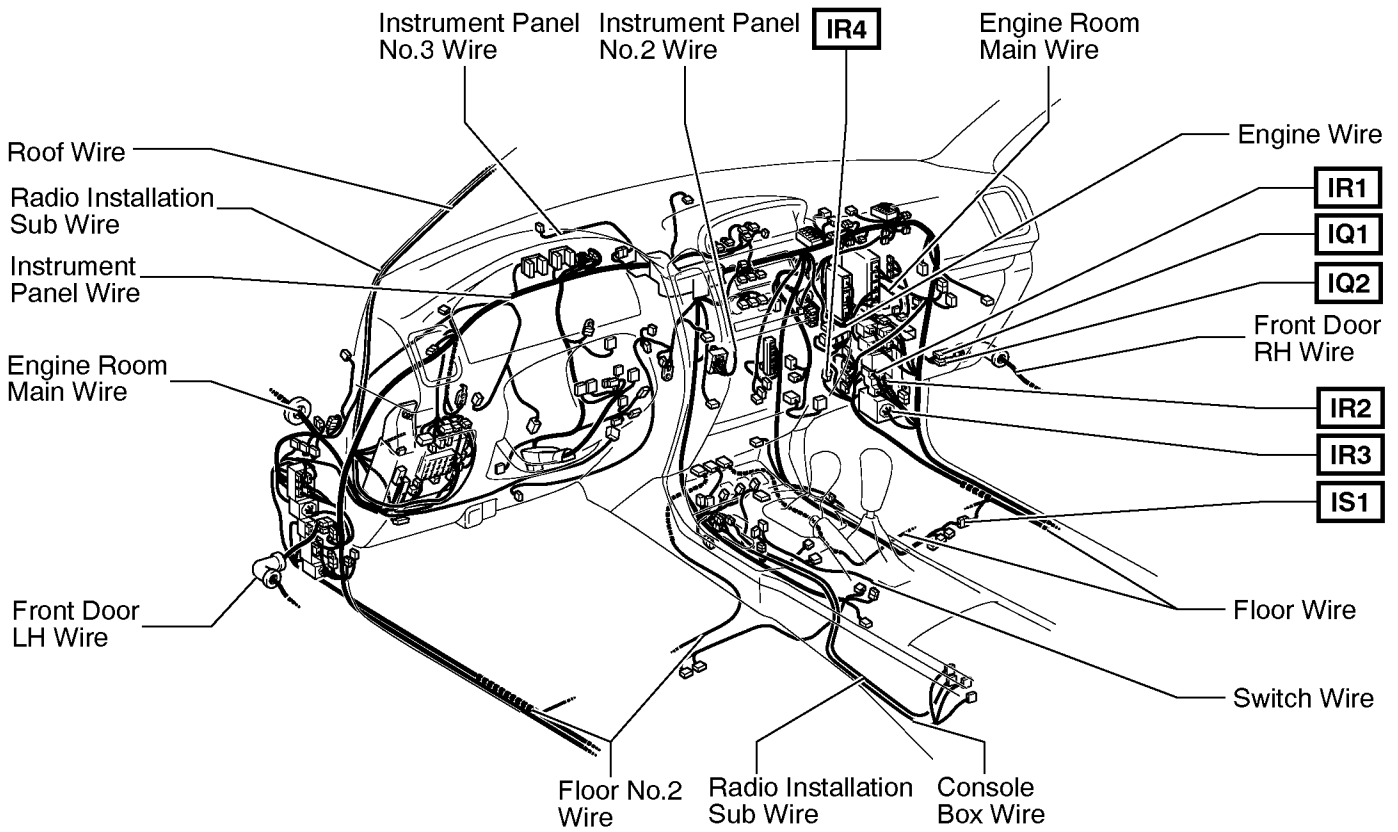
Connector Joining Wire Harness and Wire Harness



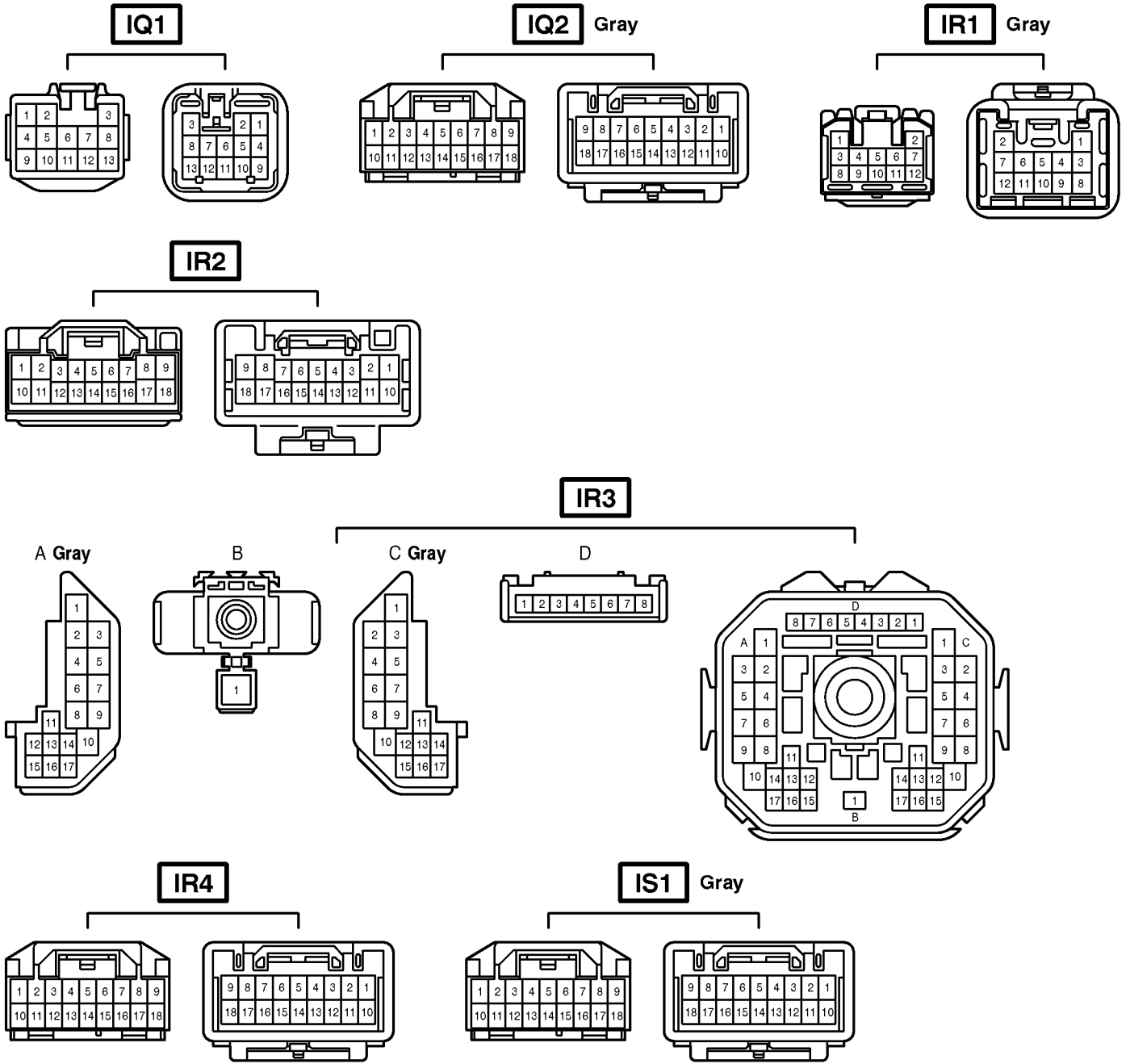
Code	Joining Wire Harness and Wire Harness (Connector Location)
IM1	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IN2	Instrument Panel Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IO1	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2	
IO3	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP1	
IP2	
IP3	
IP4	
IP5	

G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness



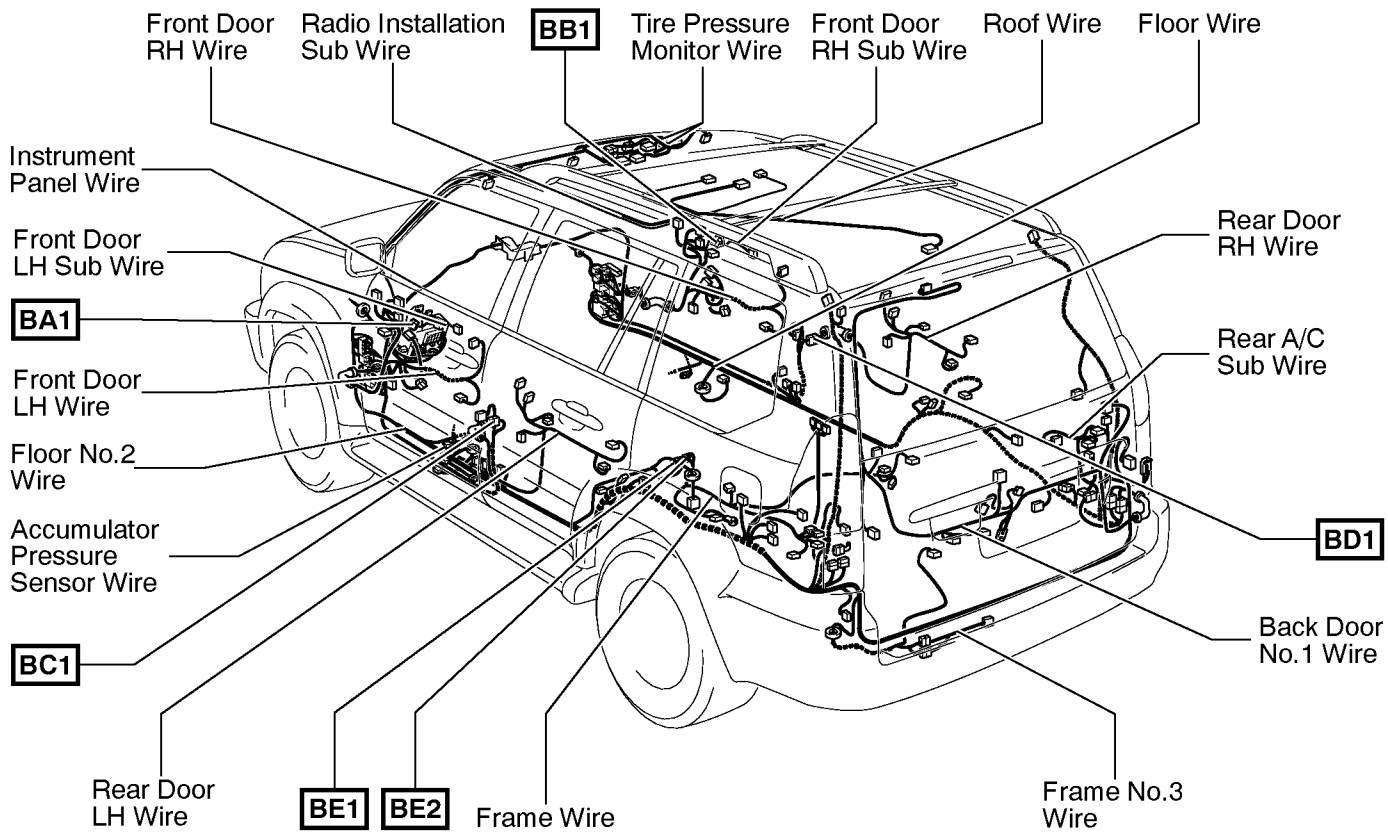
Connector Joining Wire Harness and Wire Harness



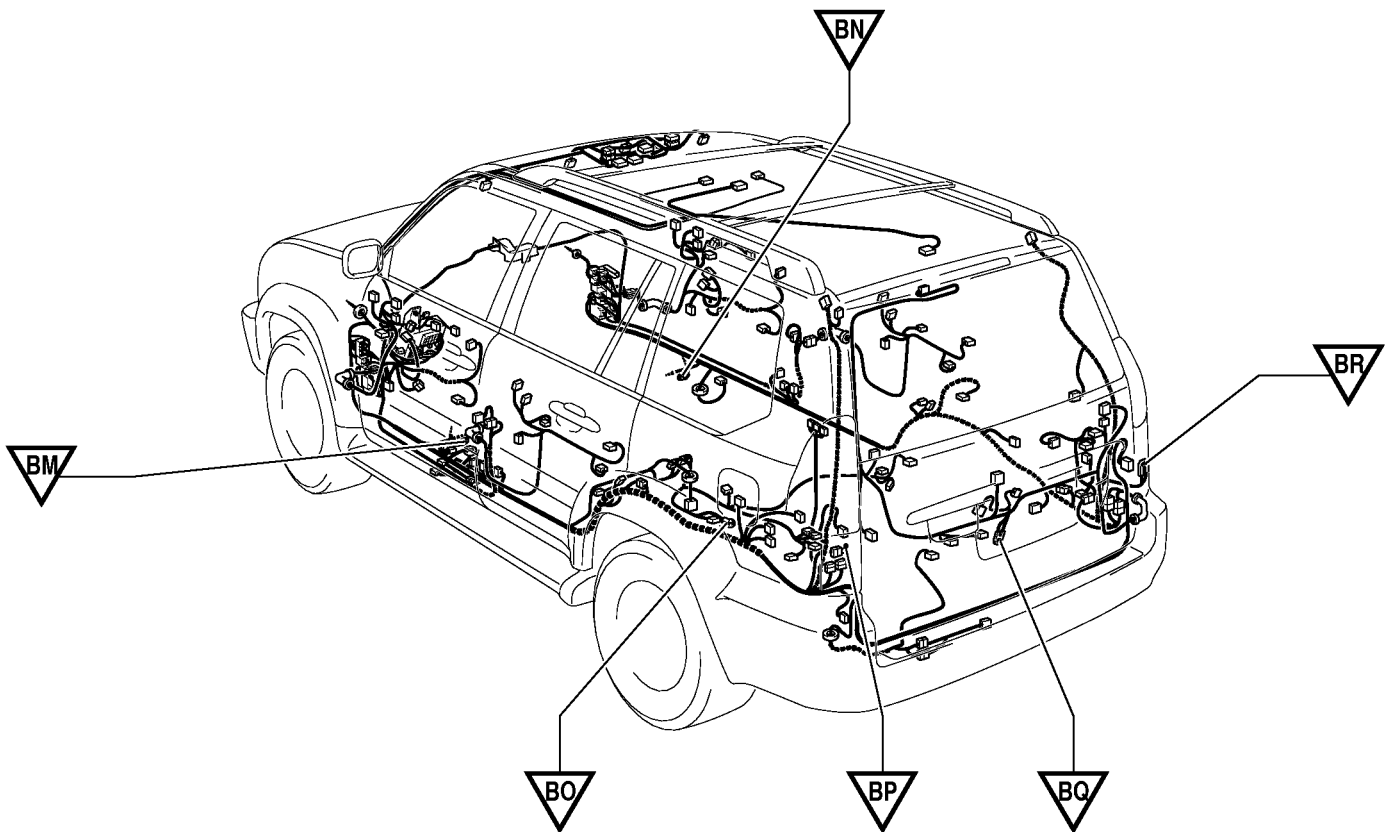
Code	Joining Wire Harness and Wire Harness (Connector Location)
IQ1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2	
IR1	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR2	
IR3	
IR4	
IS1	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)

G ELECTRICAL WIRING ROUTING

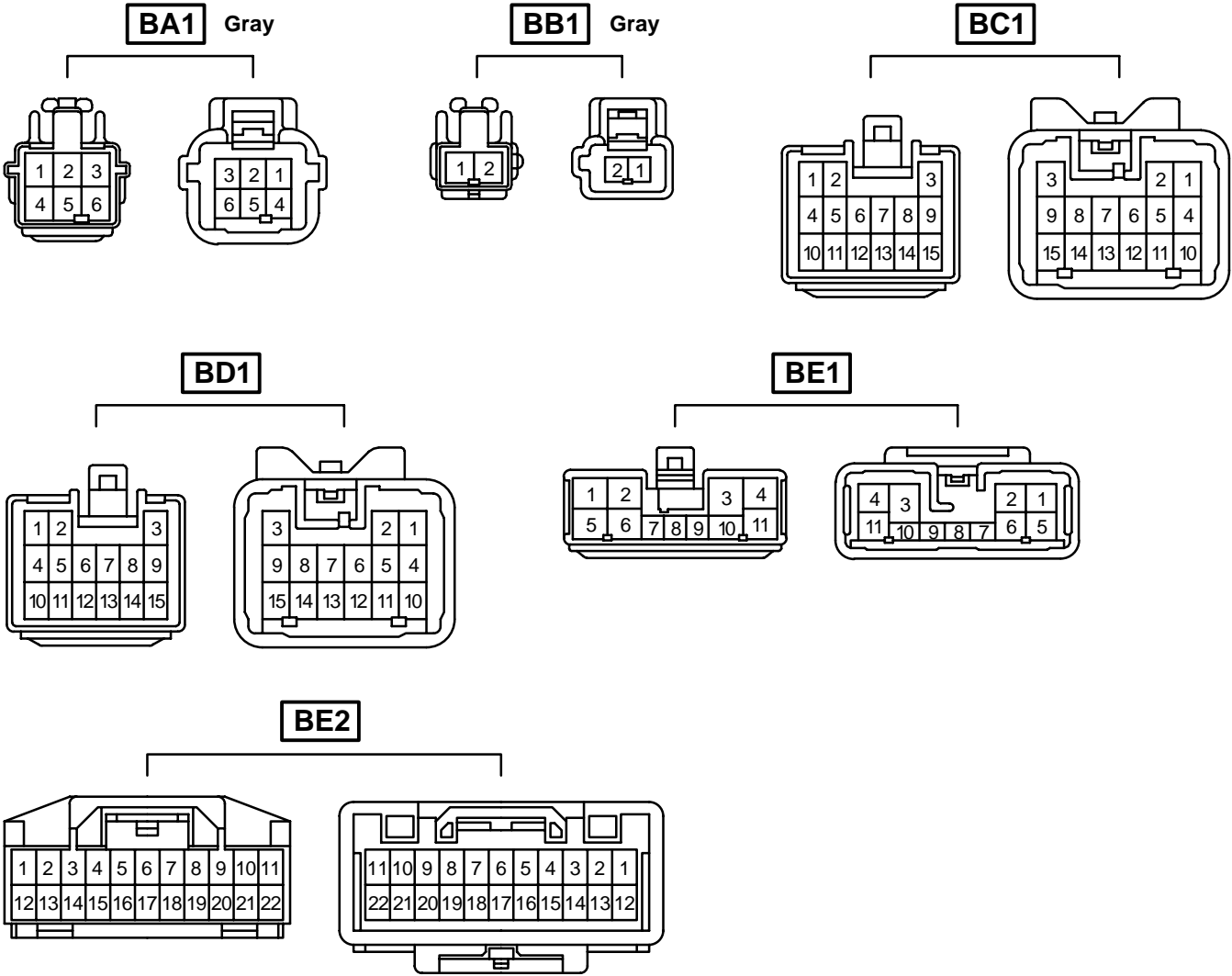
□ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points



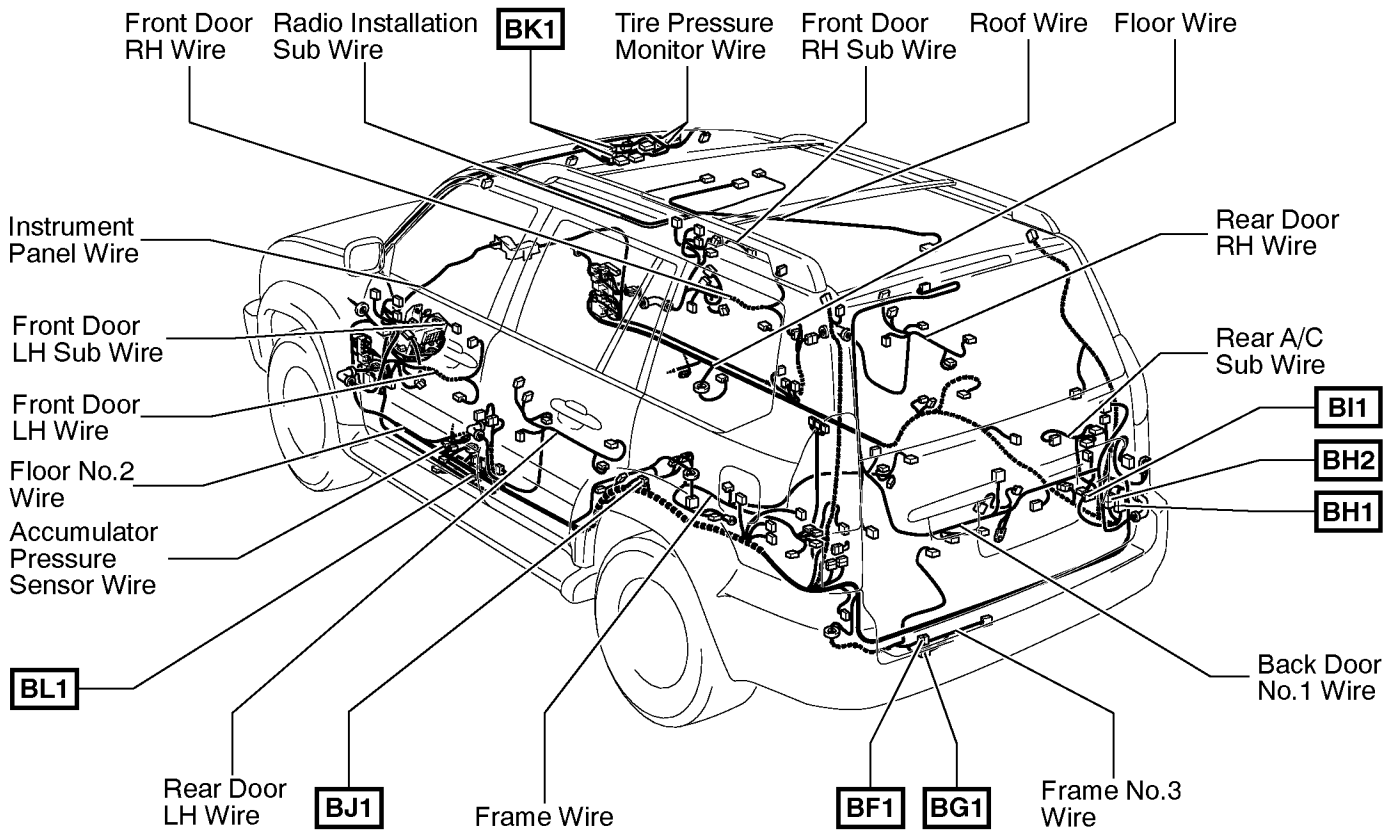
Connector Joining Wire Harness and Wire Harness



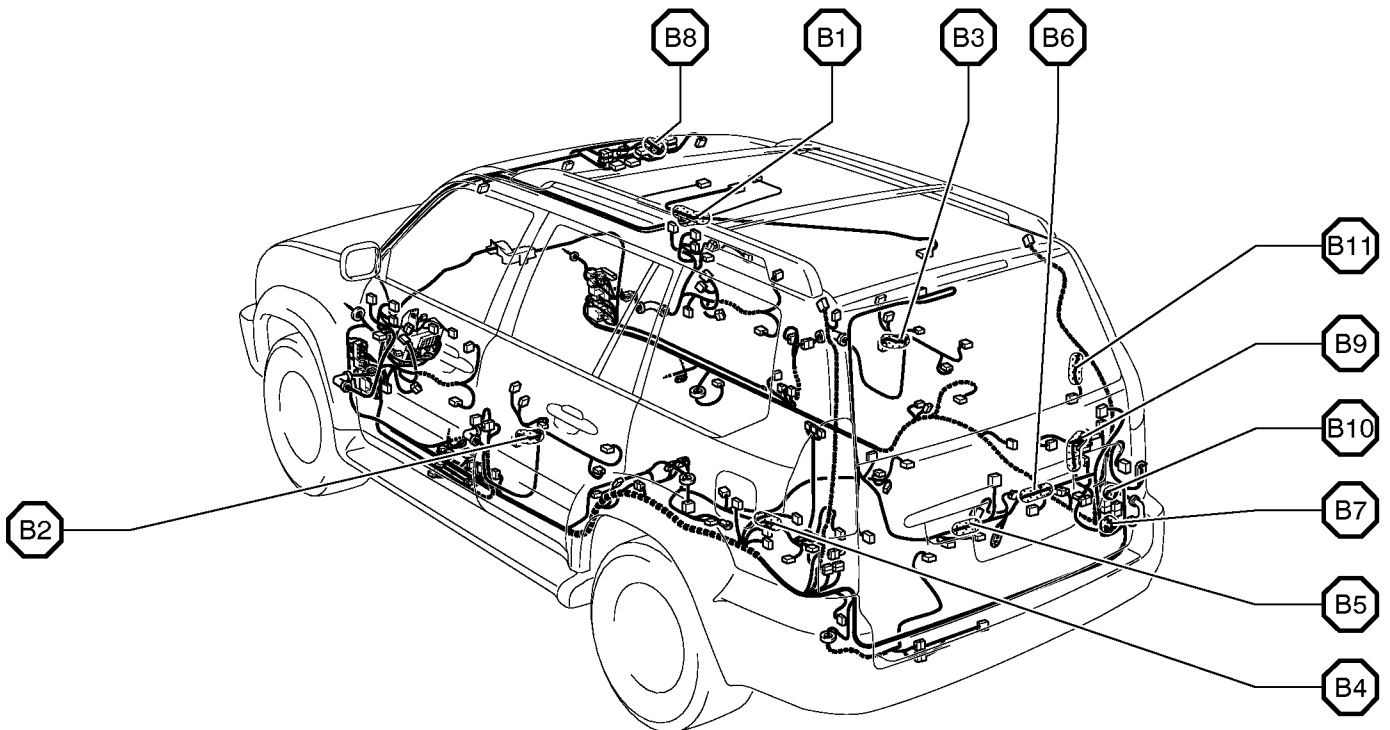
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)
BB1	Front Door RH Wire and Front Door RH Sub Wire (Inside of Front Door RH)
BC1	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BE1	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BE2	

G ELECTRICAL WIRING ROUTING

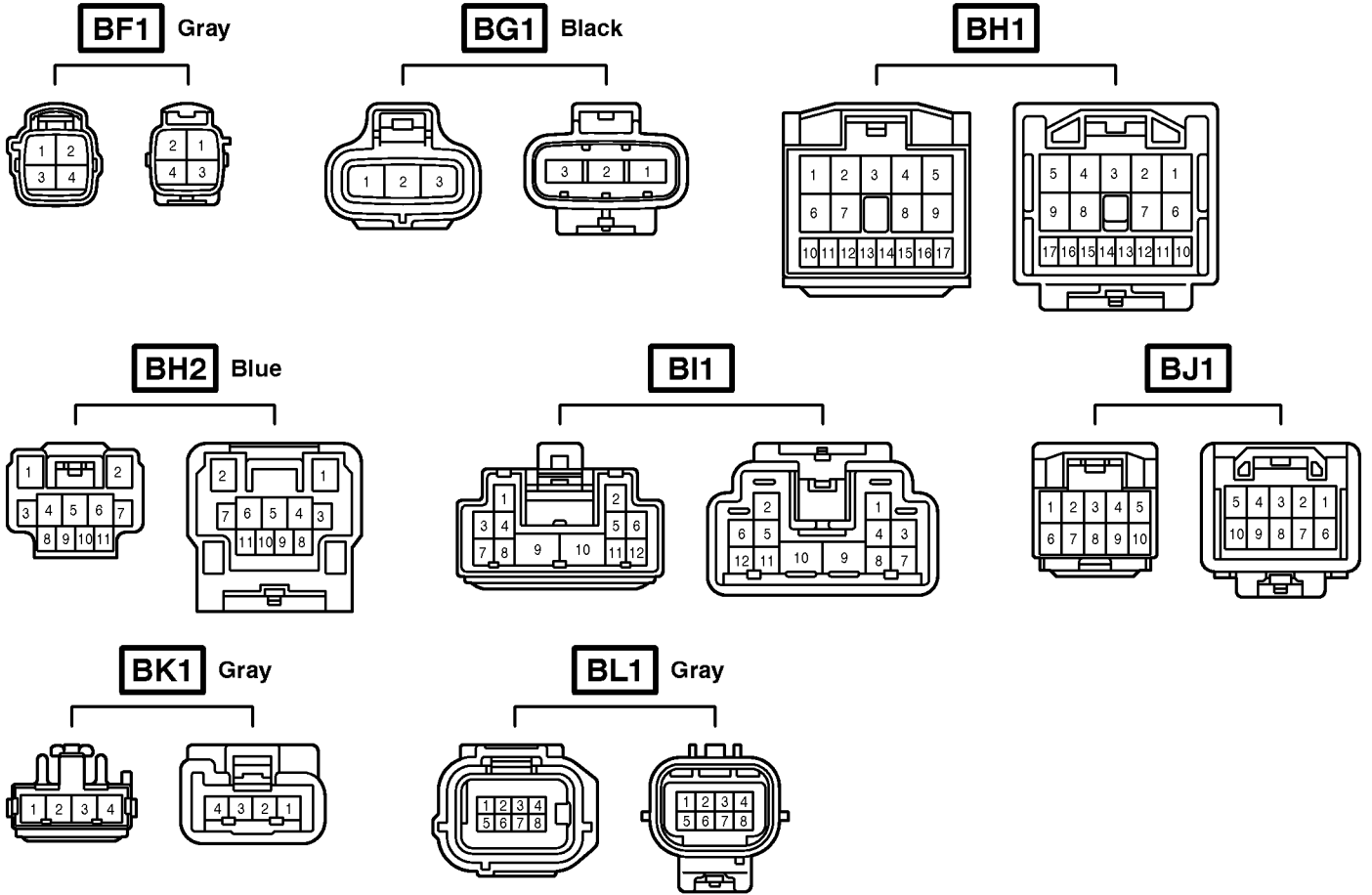
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



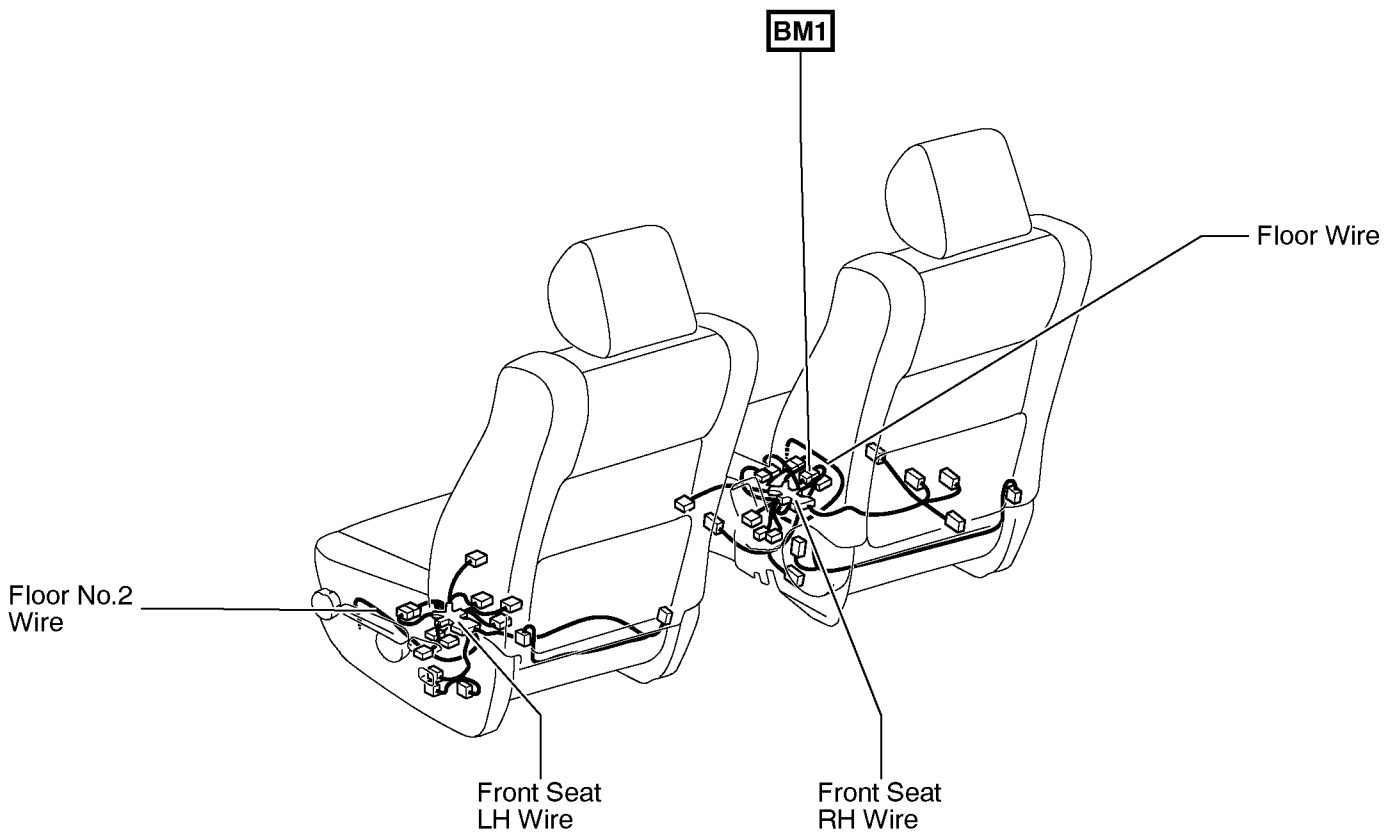
Connector Joining Wire Harness and Wire Harness



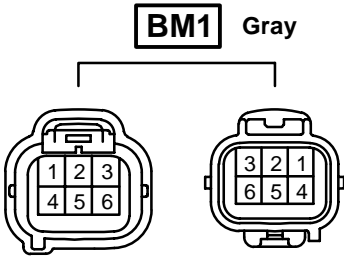
Code	Joining Wire Harness and Wire Harness (Connector Location)
BF1	Floor No.2 Wire and Frame No.3 Wire (Left Side of Rear Floor Crossmember)
BG1	Frame No.3 Wire and Floor No.2 Wire (Left Side of Rear Floor Crossmember)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BH2	
BI1	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BJ1	Floor No.2 Wire and Floor No.2 Wire (Left Side Rear Quarter Panel)
BK1	Roof Wire and Tire Pressure Monitor Wire (Front Side of Roof)
BL1	Floor Wire and Accumulator Pressure Sensor Wire (Main Floor Side Member LH)

G ELECTRICAL WIRING ROUTING

 : Location of Connector Joining Wire Harness and Wire Harness

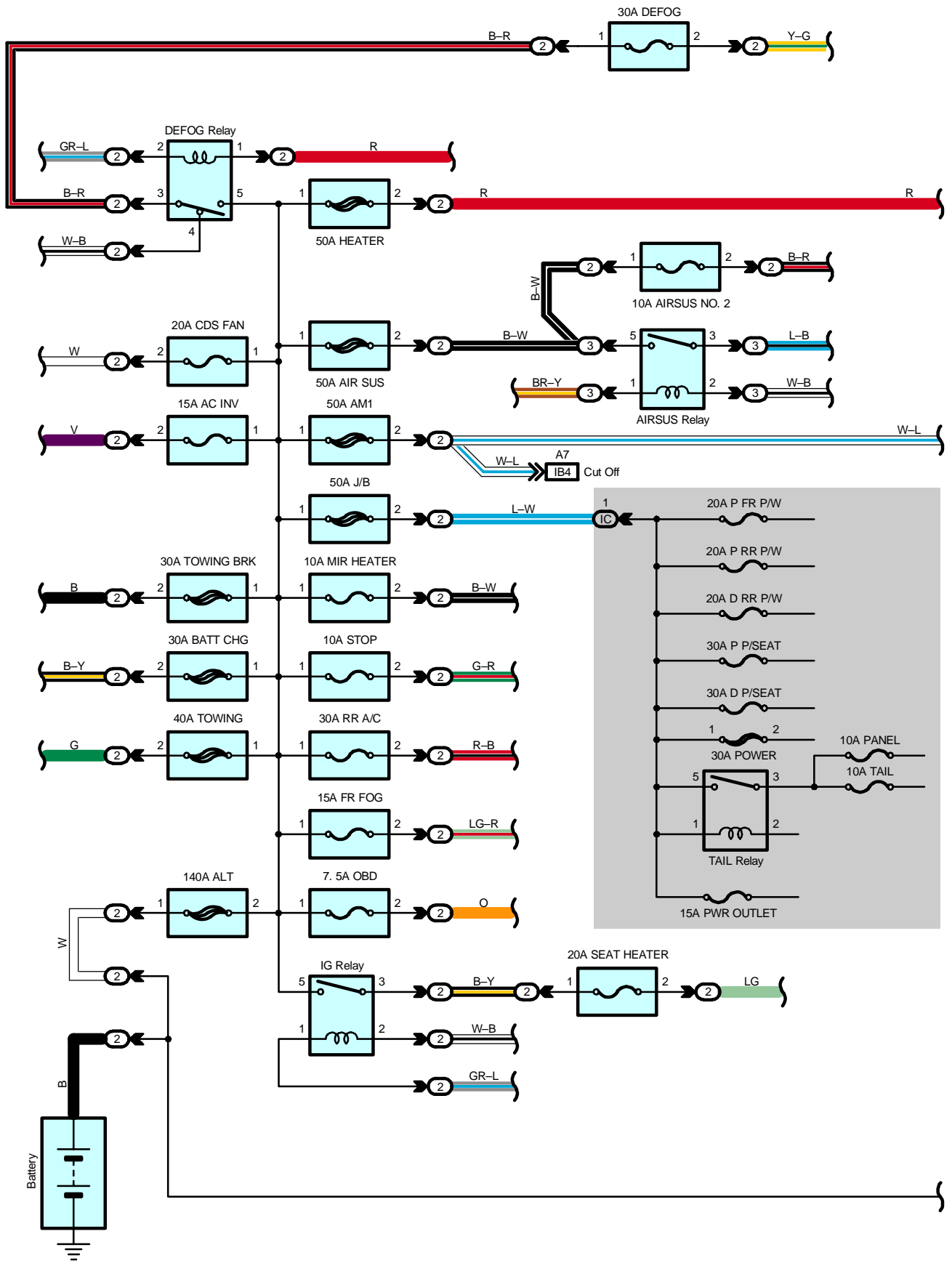


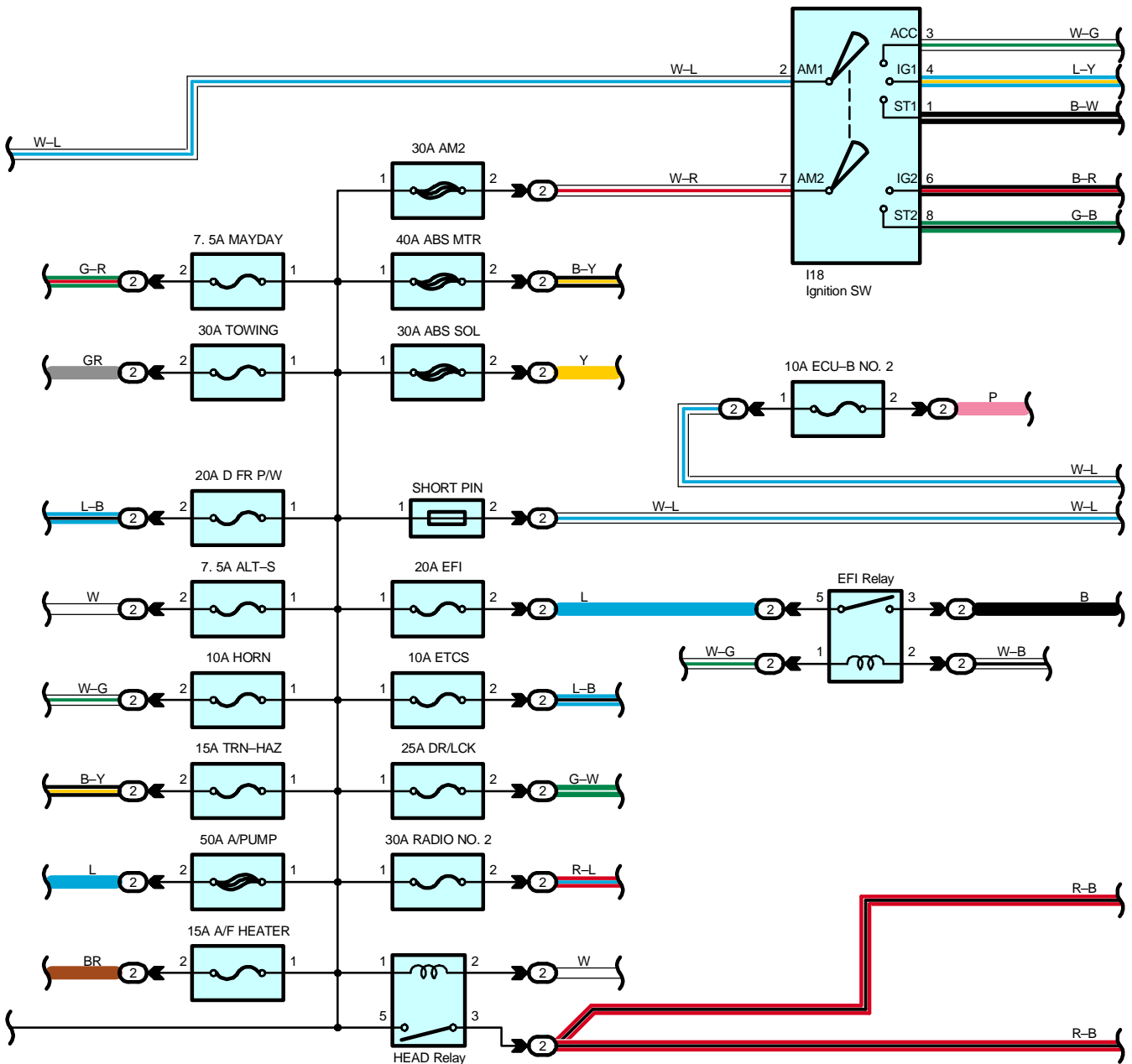
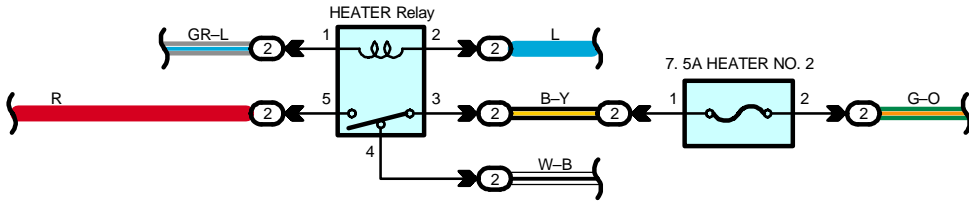
Connector Joining Wire Harness and Wire Harness



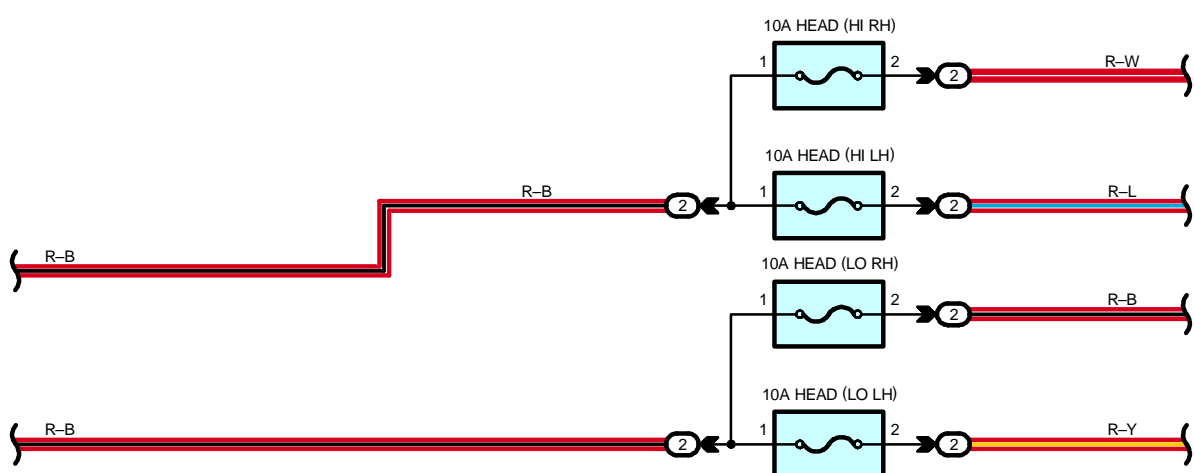
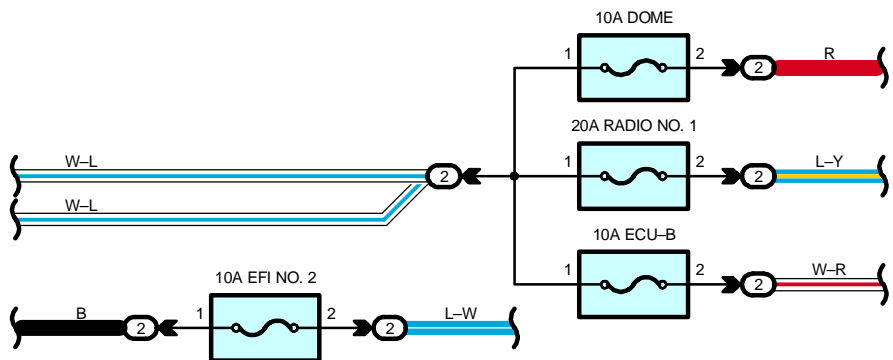
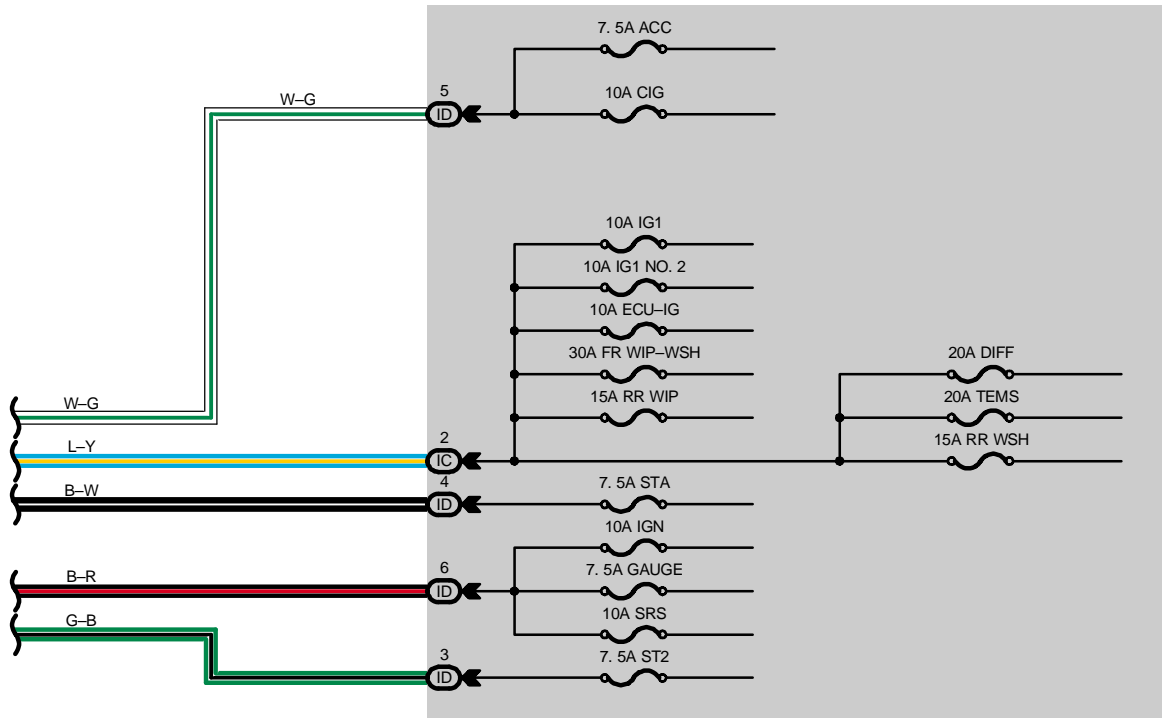
Code	Joining Wire Harness and Wire Harness (Connector Location)
BM1	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

Power Source





Power Source



Service Hints

HEAD Relay

5-3 : Closed with the light control SW at HEAD position or dimmer SW at FLASH position
Closed with the engine running and parking brake released (Parking brake SW off)

I18 Ignition SW

2-3 : Closed with the ignition key at ACC or ON position
2-4 : Closed with the ignition key at ON or ST position
2-1 : Closed with the ignition key at ST position
7-6 : Closed with the ignition key at ON or ST position
7-8 : Closed with the ignition key at ST position

TAIL Relay

3-5 : Closed with the light control SW at TAIL or HEAD position

: Parts Location

Code	See Page	Code	See Page	Code	See Page
I18	39				

: Relay Blocks

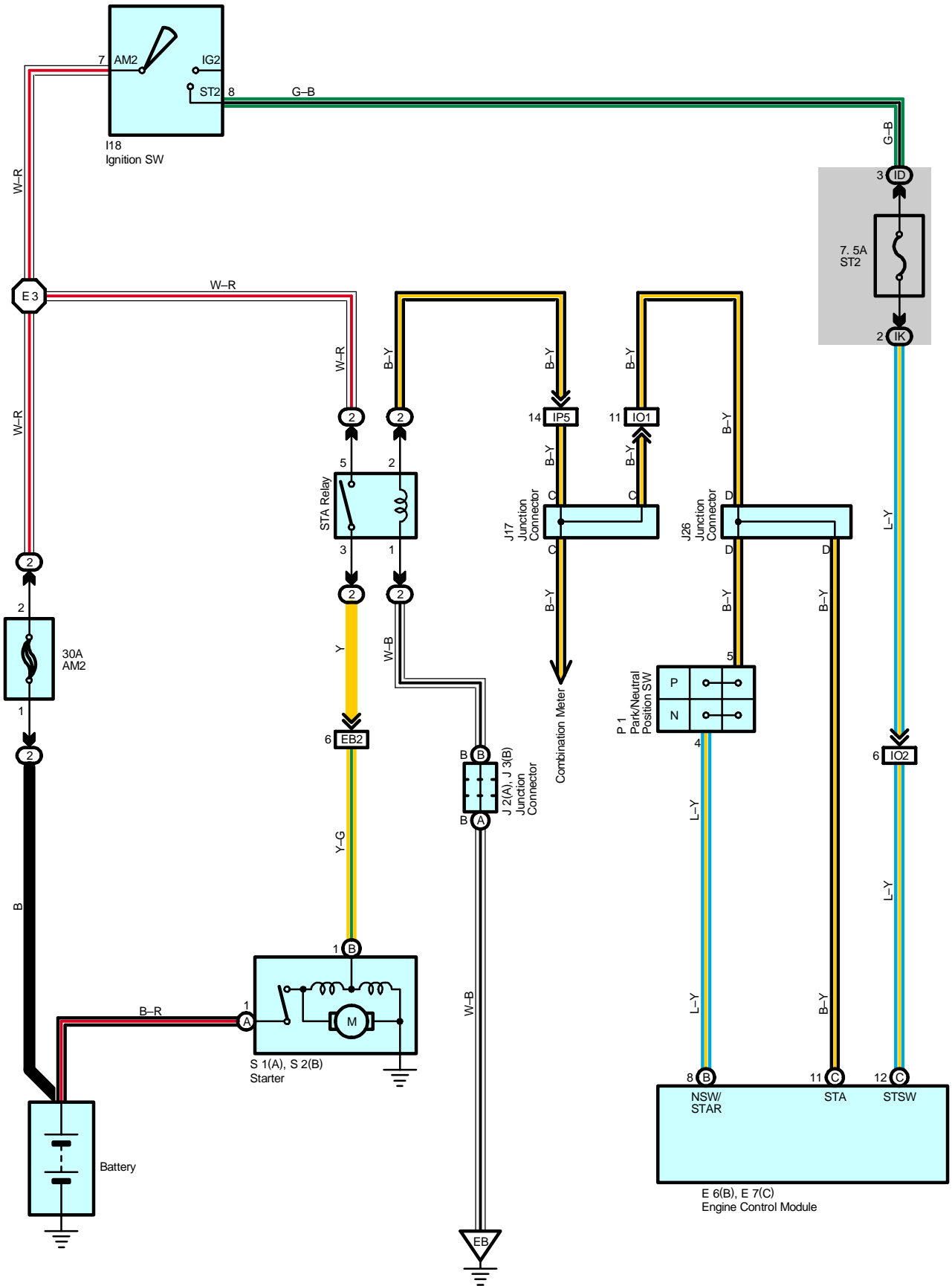
Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.3 (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
ID		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)



Service Hints

I18 Ignition SW

7-8 : Closed with the ignition SW at ST position

P1 Park/Neutral Position SW

5-4 : Closed with the A/T shift lever in P or N position

S1 (A), S2 (B) Starter

Point closed with the neutral start SW at P or N position and the ignition SW at ST position

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
E6	B	39	J3	B	37	S1	A	37
E7	C	39	J17		40	S2	B	37
I18		39	J26		40			
J2	A	37	P1		37			

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB2	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

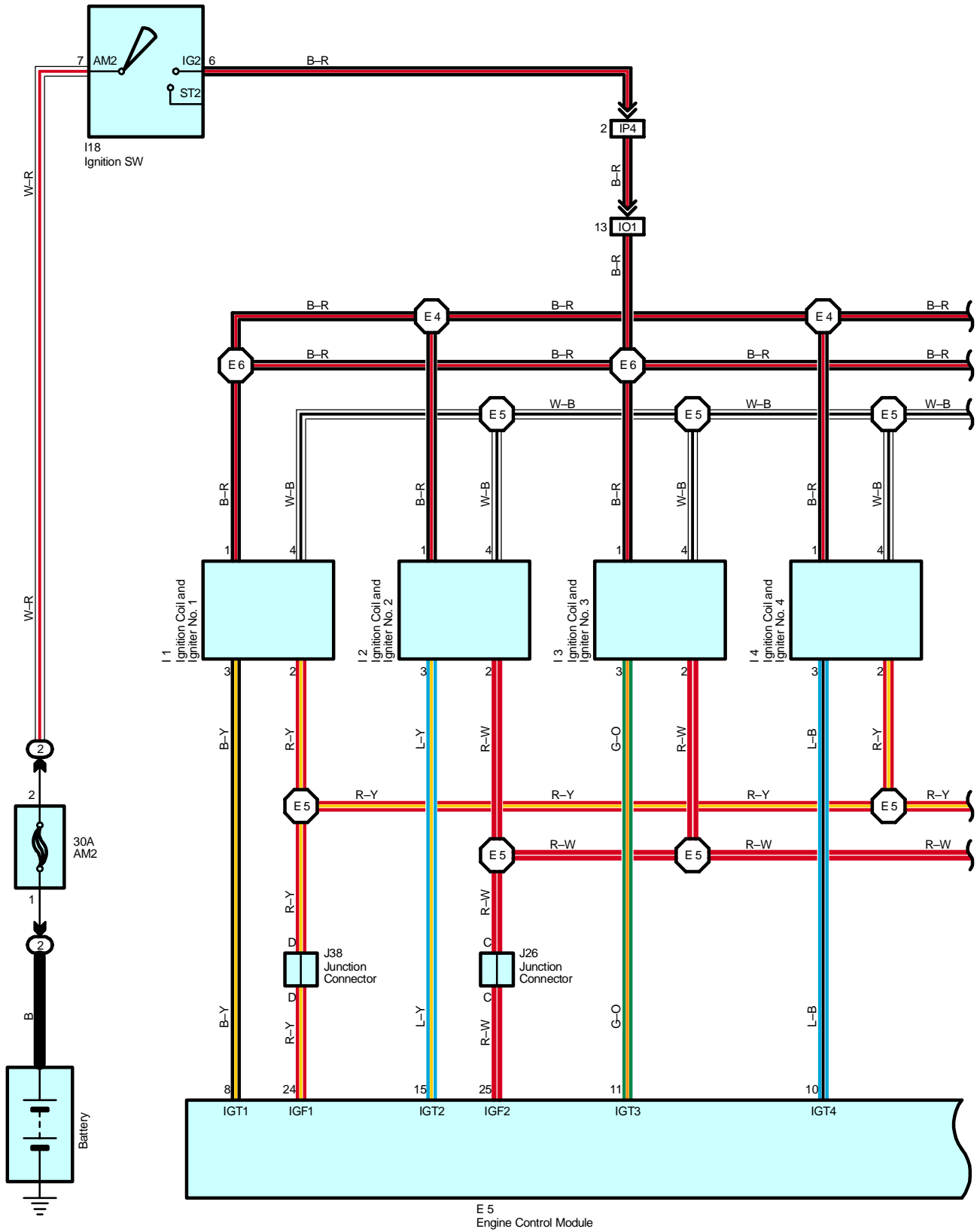
▽ : Ground Points

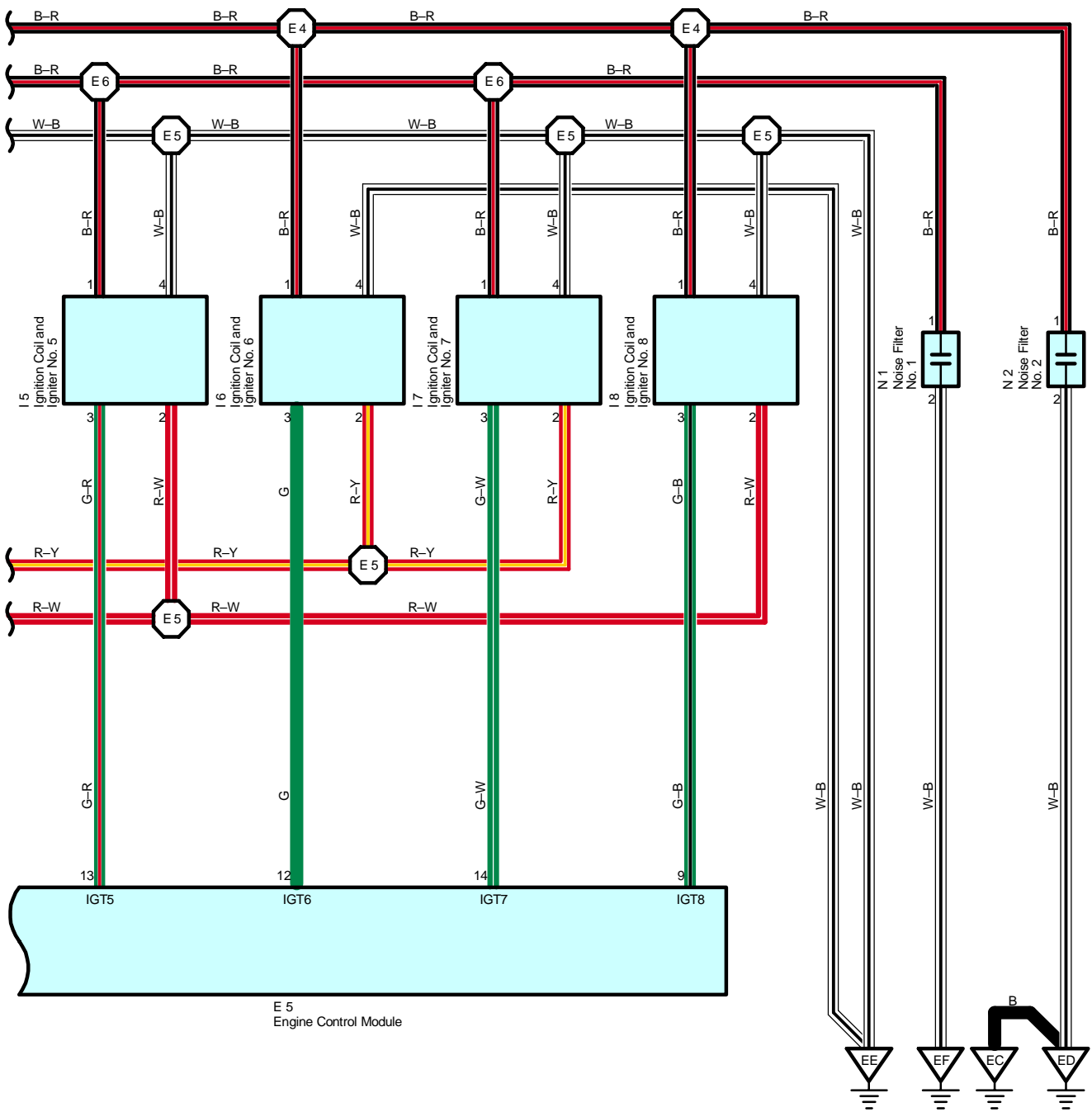
Code	See Page	Ground Points Location
EB	48	Front Left Fender

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	48	Engine Room Main Wire			

Ignition





Ignition

Service Hints

I1, I2, I3, I4, I5, I6, I7, I8 Ignition Coil and Igniter No.1, No.2, No.3, No.4, No.5, No.6, No.7, No.8

1-Ground : Approx. 12 volts with the ignition SW at ON position

4-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E5	39	I5	37	J26	40
I1	37	I6	37	J38	40
I2	37	I7	37	N1	37
I3	37	I8	37	N2	37
I4	37	I18	39		

○ : Relay Blocks

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

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

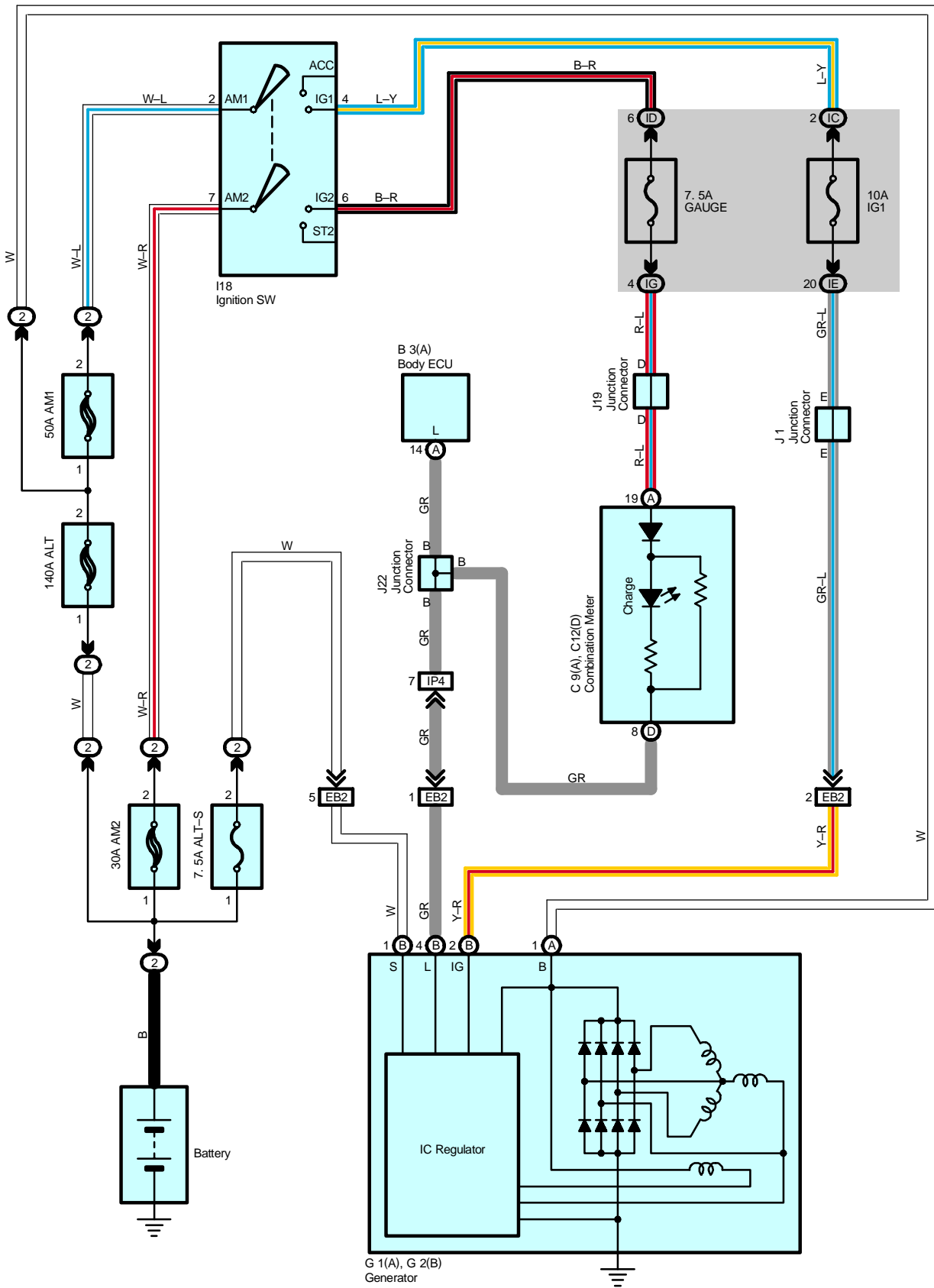
▽ : Ground Points

Code	See Page	Ground Points Location
EC	48	Front Right Fender
ED	48	Rear Bank of Right Cylinder Head
EE	48	Rear Bank of Left Cylinder Head
EF		

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	48	Engine Wire	E6	48	Engine Wire
E5					

Charging



Service Hints**G2 (B) Generator**

- (B) 4-Ground : 13.9–15.1 volts with the engine running at 2000 rpm and 25°C (77°F)
 13.5–14.3 volts with the engine running at 5000 rpm and 115°C (239°F)
- (B) 1-Ground : 0–4 volts with the ignition SW at ON position and the engine not running

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B3	A	38	G1	A	36	J1	37	
C9	A	38	G2	B	36	J19	40	
C12	D	38	I18		39	J22	40	

○ : Relay Blocks

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

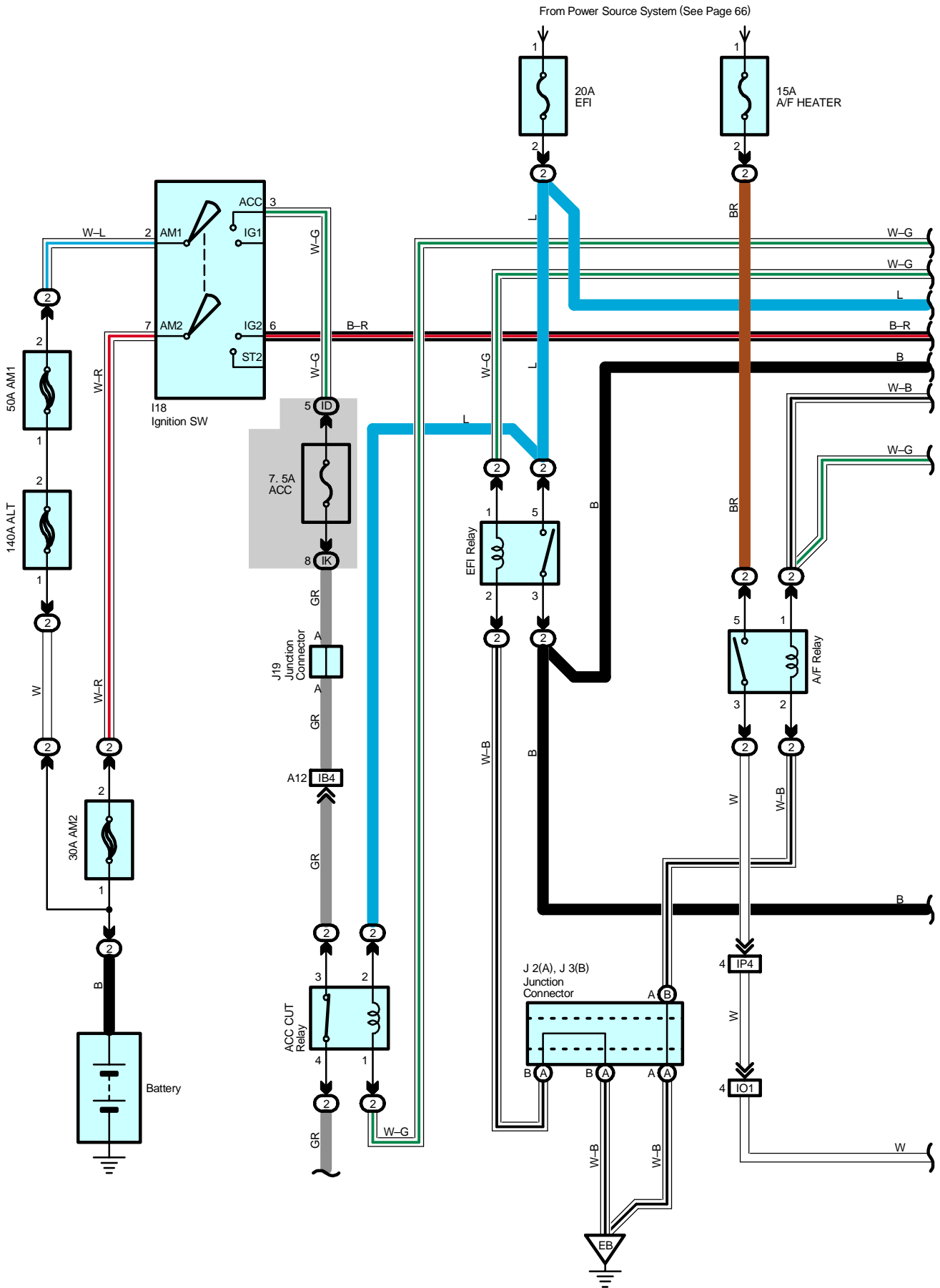
○ : Junction Block and Wire Harness Connector

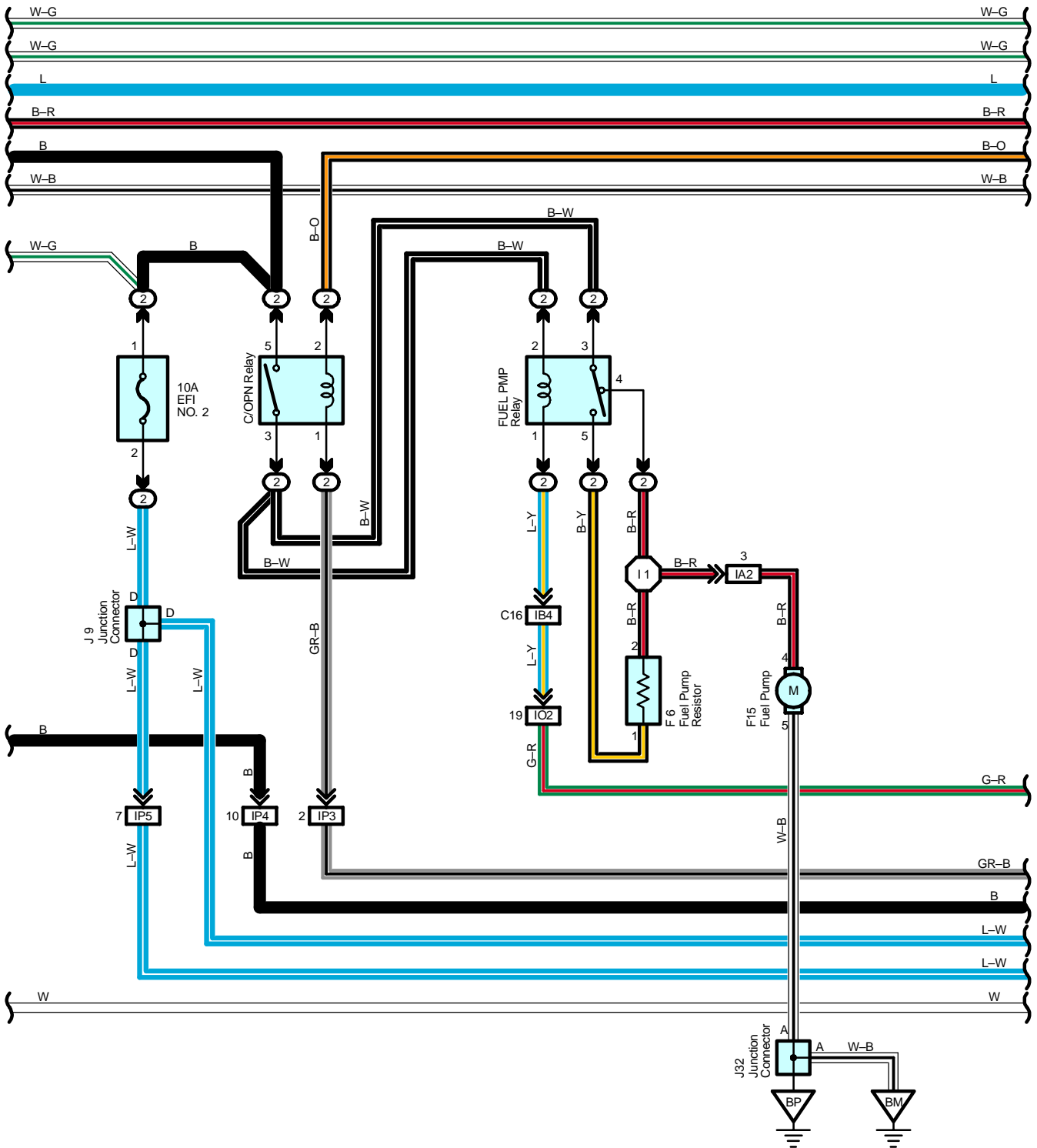
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
ID		
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

□ : Connector Joining Wire Harness and Wire Harness

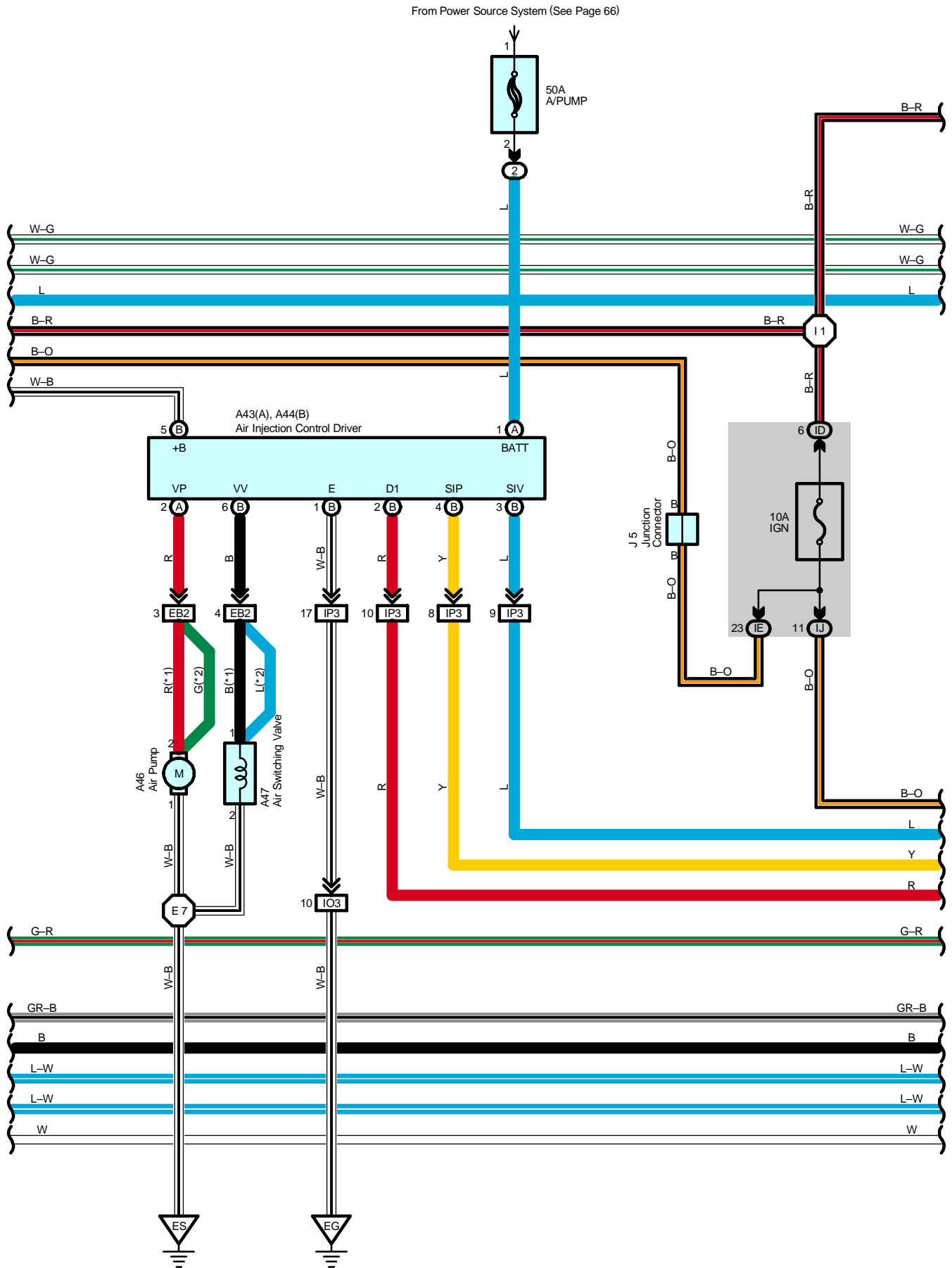
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB2	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

Engine Control

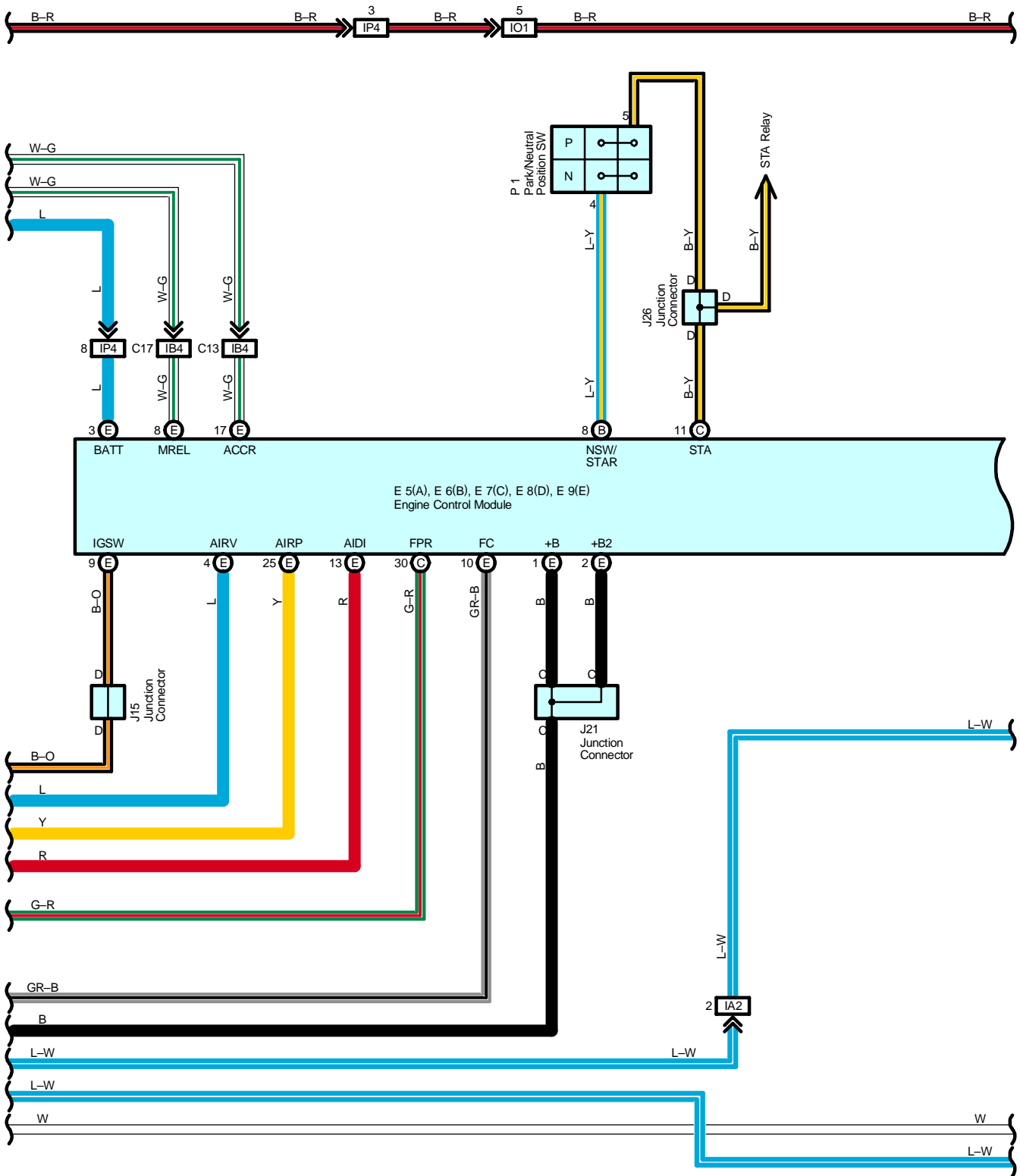




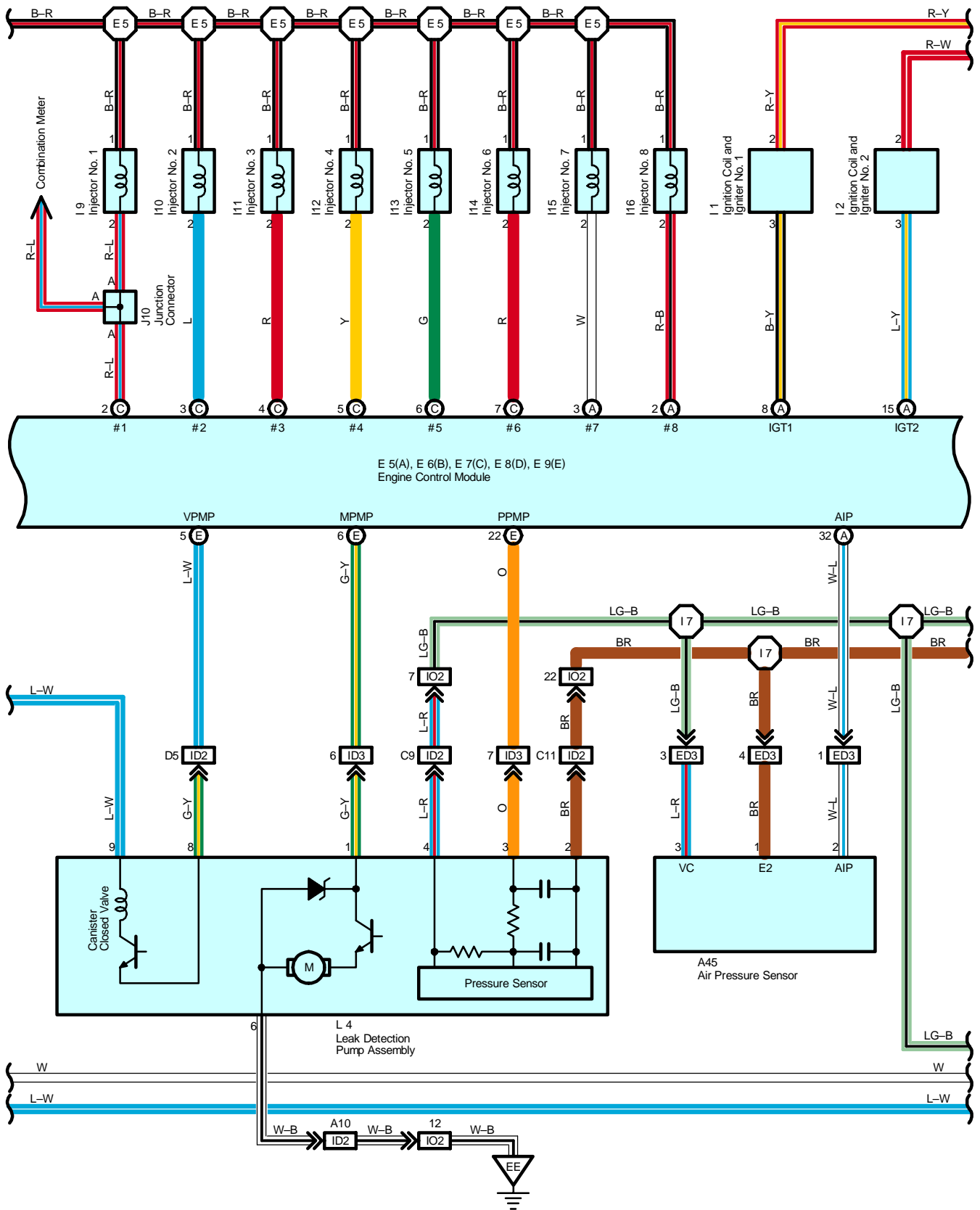
Engine Control

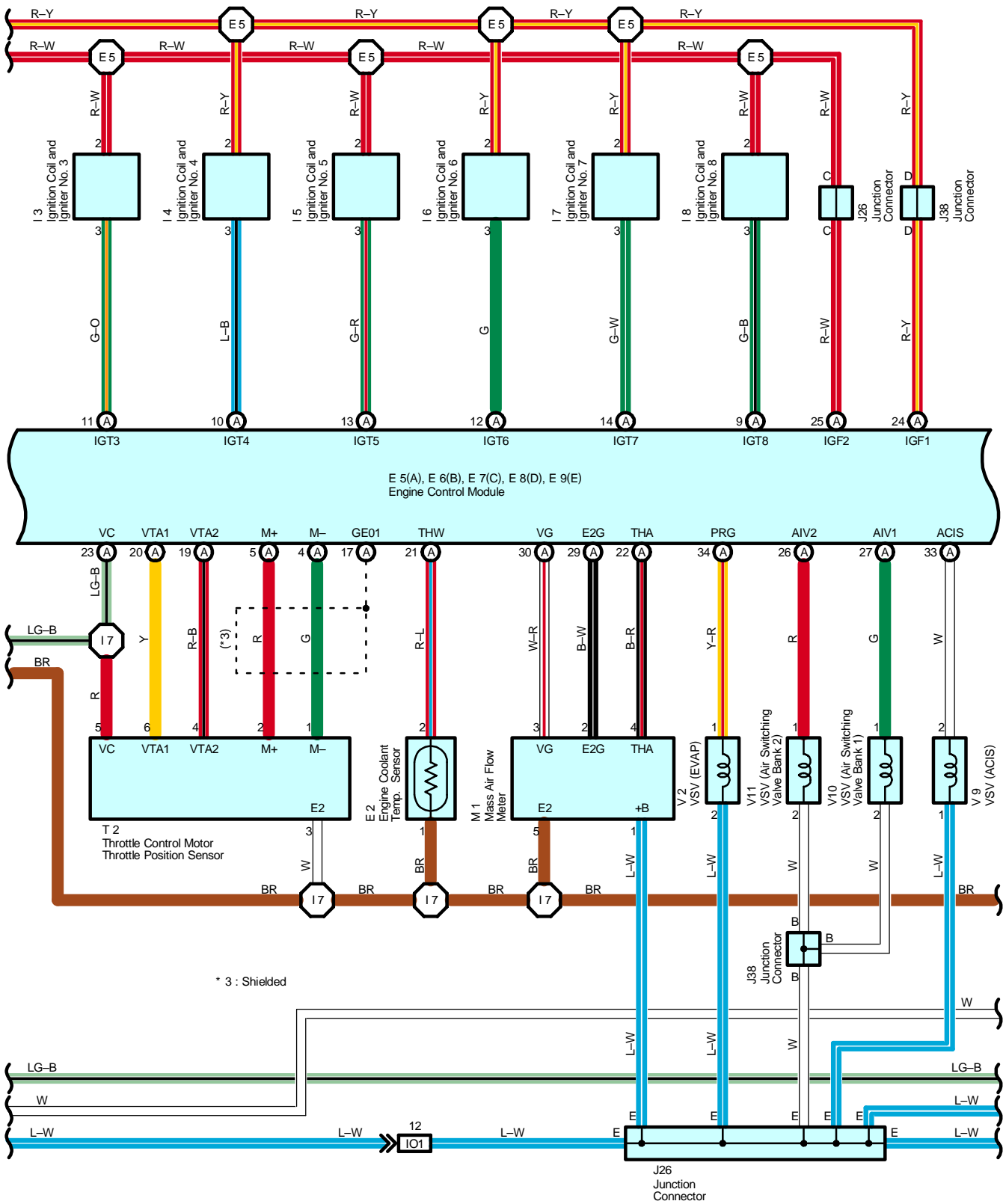


* 1 : w/ Kinetic Dynamic Suspension System
 * 2 : w/o Kinetic Dynamic Suspension System

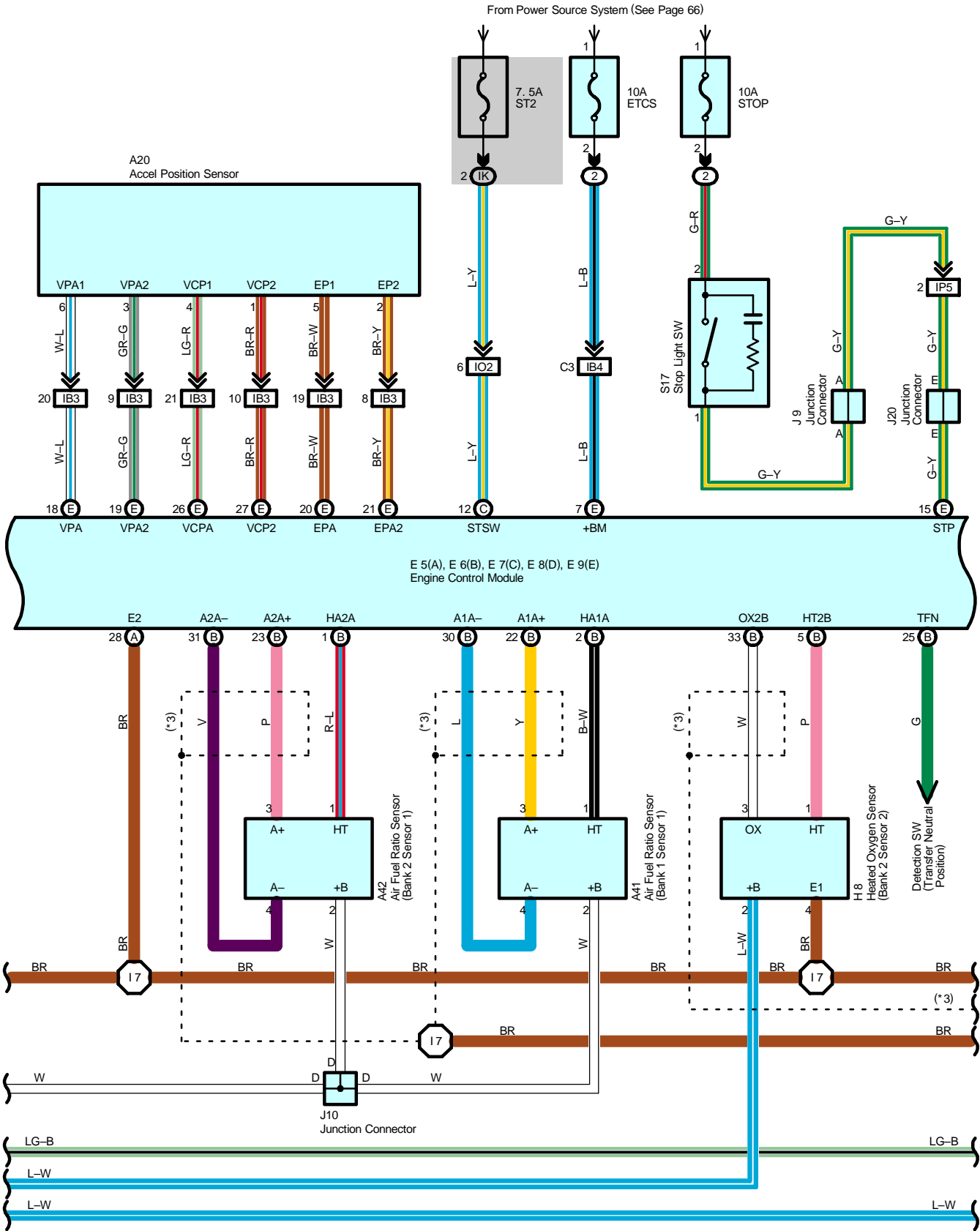


Engine Control



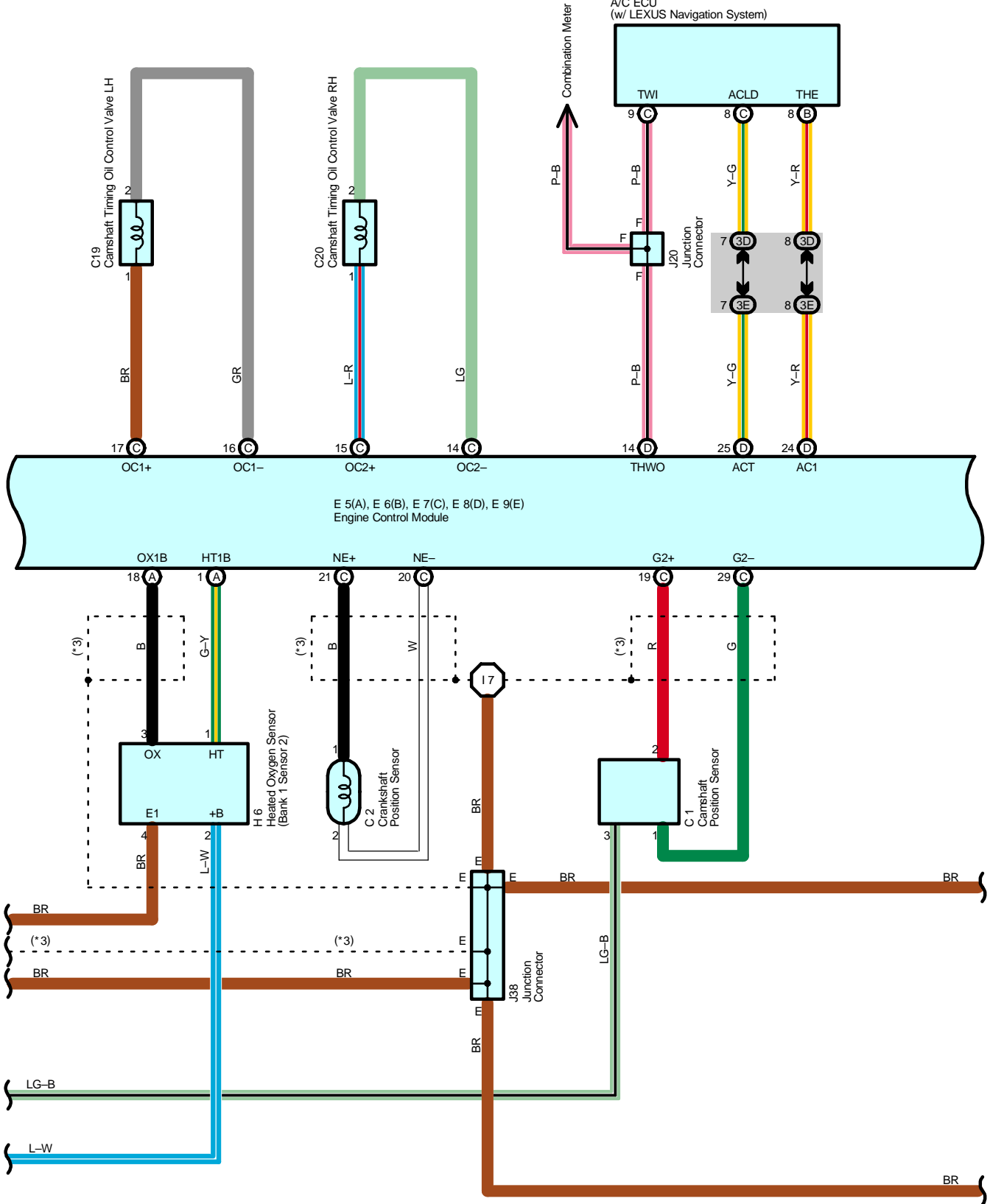


Engine Control

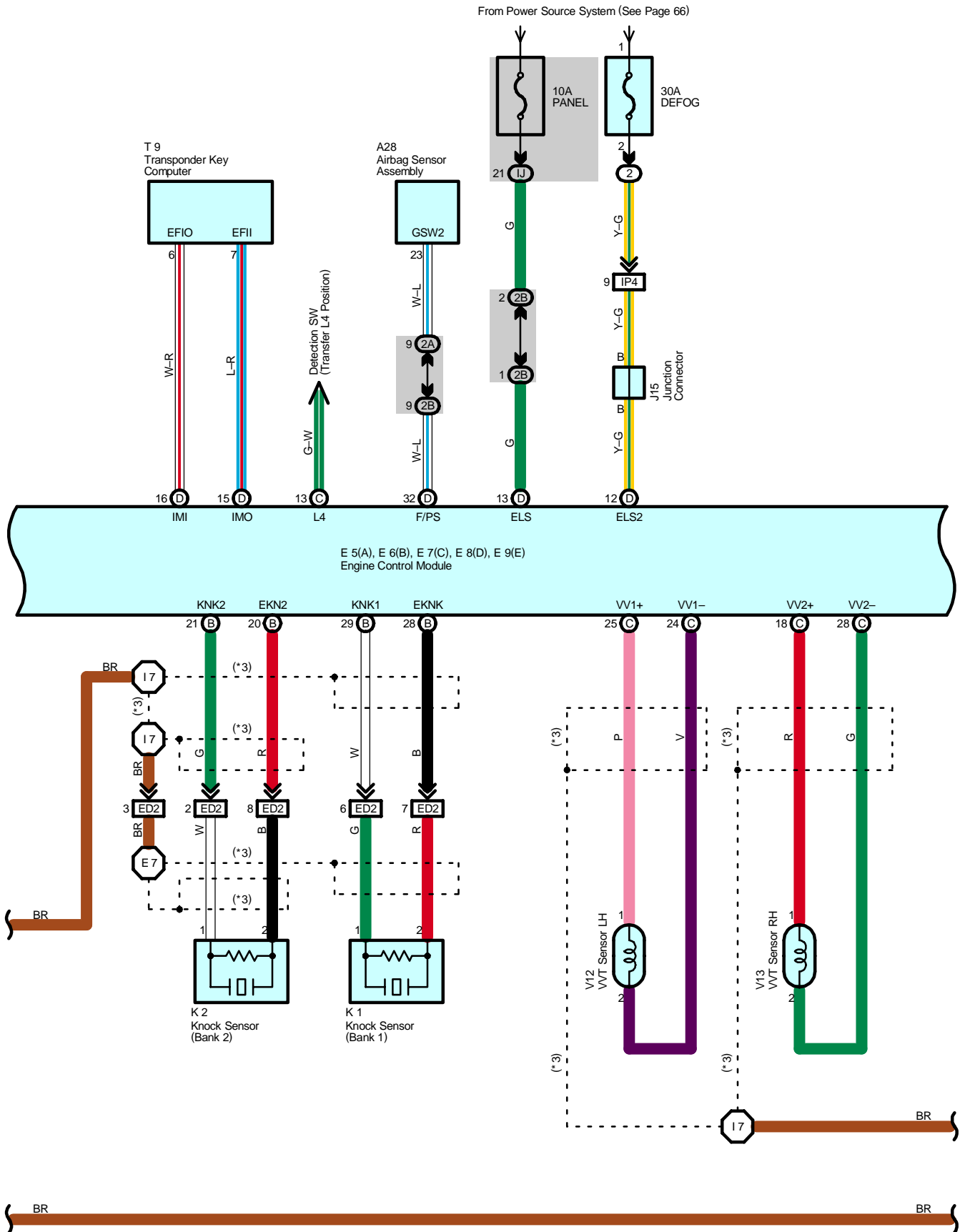


* 3 : Shielded

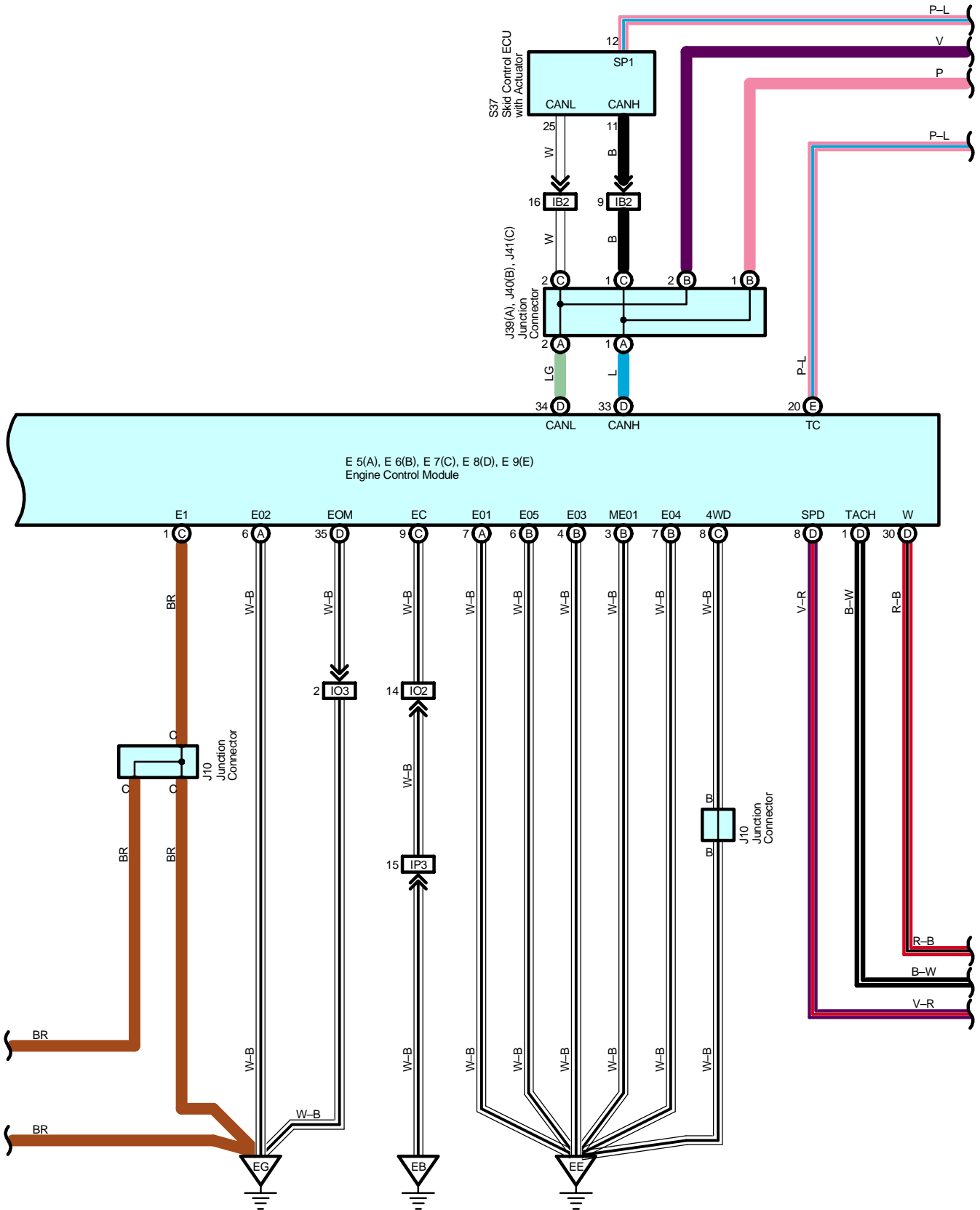
A14(B), A15(C)
A/C Control Assembly
(w/o LEXUS Navigation System)
A/C ECU
(w/ LEXUS Navigation System)

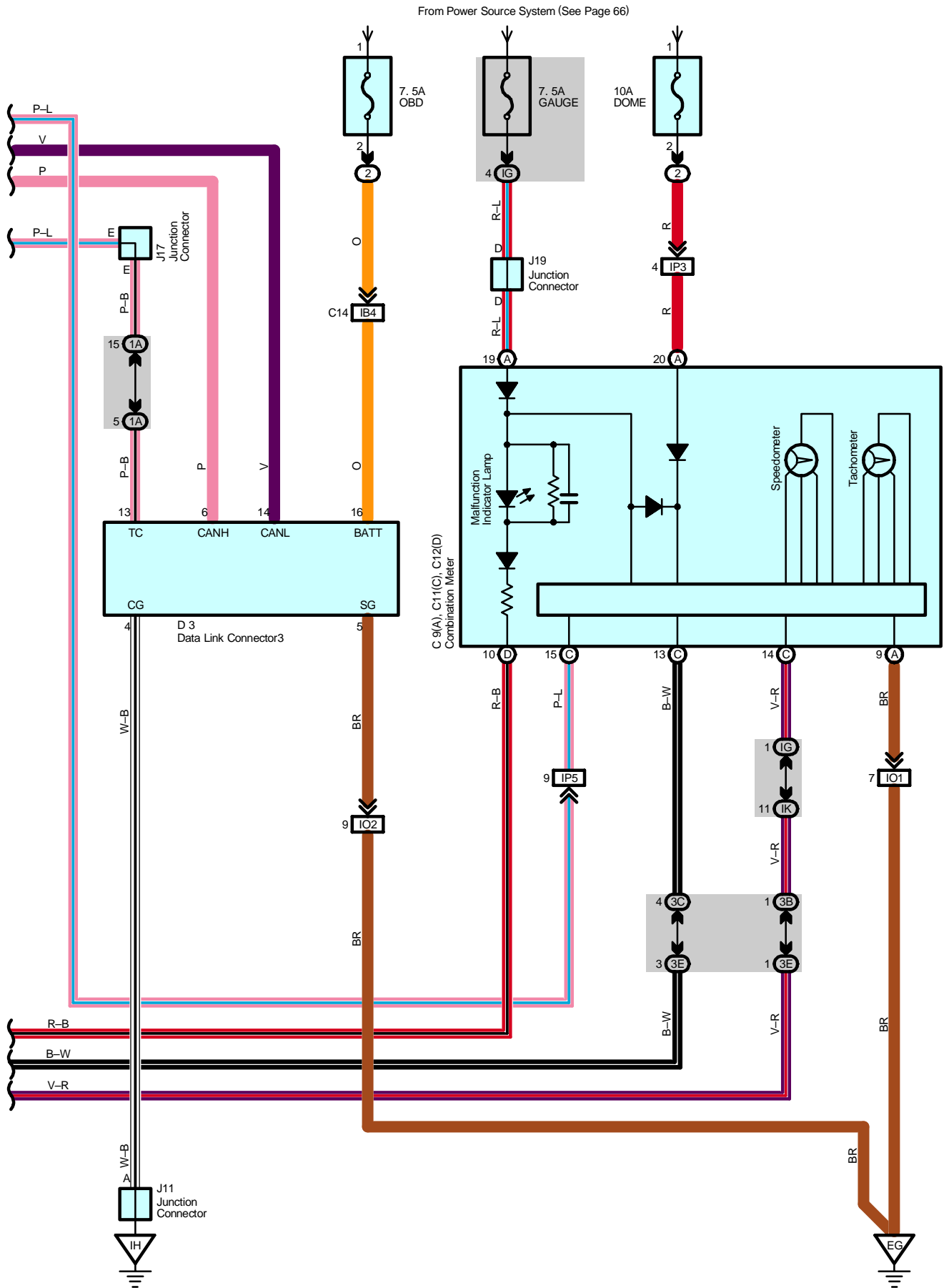


Engine Control



* 3 : Shielded





System Outline

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

1. Input Signals

- (1) Engine coolant temp. signal circuit
The engine coolant temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. is input into TERMINAL THW of the engine control module as a control signal.
- (2) Intake air temp. signal circuit
The intake air temp. sensor is installed in the mass air flow meter and detects the intake air temp., which is input as a control signal to TERMINAL THA of the engine control module.
- (3) Oxygen sensor signal circuit
The oxygen density in the exhaust emission is detected and is input as a control signal from the heated oxygen sensors to TERMINALS OX1B, OX2B of the engine control module.
- (4) RPM signal circuit
The camshaft position is detected by the camshaft position sensor and is input into TERMINAL G2+ of the engine control module as a control signal. Also, the engine RPM is detected by the crankshaft position sensor and the signal is input into TERMINAL NE+ of the engine control module.
- (5) Throttle position sensor signal circuit
The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA1 and VTA2 of the engine control module.
- (6) Vehicle speed 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) Battery signal circuit
Voltage is constantly applied to TERMINAL BATT of the engine control module. When the ignition SW is turned on, the voltage for engine control module start up power supply is applied through the EFI relay, to TERMINALS +B and +B2 of the engine control module. The current from the IGN fuse flows to TERMINAL IGSW of the engine control module, and voltage is constantly applied to TERMINAL +BM.
- (8) Intake air volume signal circuit
The intake air volume is detected by the mass air flow meter, and is input as a control signal to TERMINAL VG of the engine control module.
- (9) Stop light SW signal circuit
The stop light SW is used to detect whether the vehicle is braking or not, and the signal is input into TERMINAL STP of the engine control module as a control signal.
- (10) Starter signal circuit
To confirm whether the engine is cranking, the voltage applied to the starter motor when the engine is cranking is detected, and is input into TERMINAL STA of the engine control module as a control signal.
- (11) Engine knock signal circuit
Engine knocking is detected by the knock sensors, and is input into TERMINALS KNK1 and KNK2 of the engine control module as a control signal.
- (12) Air fuel ratio signal system
The air fuel ratio is detected by air fuel ratio sensor and input as a control signal into TERMINALS A1A+, A2A+ of engine control module.

2. Control System

* SFI system

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

* ESA system

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

* Heated oxygen sensor heater control system

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

* Air fuel ratio sensor heater control system

The air fuel ratio sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emission is low), and warms up the air fuel ratio sensor to improve detection performance of the sensor.

The engine control module evaluates the signals from each sensor, current is output to TERMINALS HA1A and HA2A, controlling the heater.

* Fuel pump control system

The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump with the FUEL PUMP relay.

* ACIS

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

* ETCS-i

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

* Engine start control system

The engine control module allows power to be supplied from the TERMINAL STA to the STA relay via park/neutral position SW until complete combustion is confirmed by engine RPM after the detection of ignition SW ST signal by the TERMINAL STSW.

With this arrangement, engine can be started without holding the ignition key in the ST position. At the same time, the TERMINAL ACCR is controlled so that the engine control module turns off ACC CUT relay, shutting off power to the accessories.

* VVT-i

Controls the intake camshaft to an optimal valve timing in accordance with the engine condition.

* Air Injection System

It is the system to improve exhaust control performance by activating catalyst at early stage, which is realized when air is pressed and sent into the exhaust pipe forcibly by the air injection pump at starting engine in cold condition.

3. Diagnosis System

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

4. Fail-Safe System

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

Service Hints

EFI Relay

5-3 : Closed with the ignition SW at ON position

E2 Engine Coolant Temp. Sensor

1-2 : Approx. 15.0 kΩ (-20°C, -4°F)
 : Approx. 2.45 kΩ (20°C, 68°F)
 : Approx. 0.32 kΩ (80°C, 176°F)
 : Approx. 0.14 kΩ (110°C, 230°F)

E5 (A), E6 (B), E7 (C), E8 (D), E9 (E) Engine Control Module

BATT-E1 : Always 9.0-14.0 volts
 +BM-E1 : Always 9.0-14.0 volts
 IGSW-E1 : 9.0-14.0 volts with the ignition SW at ON position
 +B, +B2-E1 : 9.0-14.0 volts with the ignition SW at ON position
 VC-E1 : 4.5-5.5 volts with the ignition SW at ON position
 VTA2-E1 : 2.0-2.9 volts with the ignition SW on and throttle valve fully closed
 : 4.7-5.1 volts with the ignition SW on and throttle valve fully open
 VTA1-E1 : 0.4-1.0 volts with the ignition SW on and throttle valve fully closed
 : 3.2-4.8 volts with the ignition SW on and throttle valve fully open
 VPA-E1 : 0.3-0.9 volts with the ignition SW on and throttle valve fully closed
 : 3.2-4.8 volts with the ignition SW on and throttle valve fully open
 VPA2-E1 : 1.8-2.7 volts with the ignition SW on and throttle valve fully closed
 : 4.7-5.1 volts with the ignition SW on and throttle valve fully open
 THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)
 THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)
 STA-E1 : 6.0 volts or more with the engine cranking
 W-E1 : 9.0-14.0 volts with the idling and malfunction indicator lamp off
 SPD-E1 : Pulse generation with the vehicle moving
 STP-E1 : 7.5-14.0 volts with the brake pedal depressed

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A14	B	38	F15		43	J15		40
A15	C	38	H6		36	J17		40
A20		38	H8		36	J19		40
A28		38	I1		37	J20		40
A41		36	I2		37	J21		40
A42		36	I3		37	J26		40
A43	A	36	I4		37	J32		43
A44	B	36	I5		37	J38		40
A45		36	I6		37	J39	A	40
A46		36	I7		37	J40	B	40
A47		36	I8		37	J41	C	40
C1		36	I9		37	K1		37
C2		36	I10		37	K2		37
C9	A	38	I11		37	L4		43
C11	C	38	I12		37	M1		37
C12	D	38	I13		37	P1		37
C19		36	I14		37	S17		41
C20		36	I15		37	S37		37
D3		39	I16		37	T2		37
E2		36	I18		39	T9		41
E5	A	39	J2	A	37	V2		37
E6	B	39	J3	B	37	V9		37
E7	C	39	J5		37	V10		37
E8	D	39	J9		40	V11		37
E9	E	39	J10		40	V12		37
F6		36	J11		40	V13		37

Engine Control

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3C		
3D		
3E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB2	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
ED2	48	Engine No.2 Wire and Engine Wire (Near the Starter)
ED3		
IA2	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB3		
IB4		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		

: Ground Points

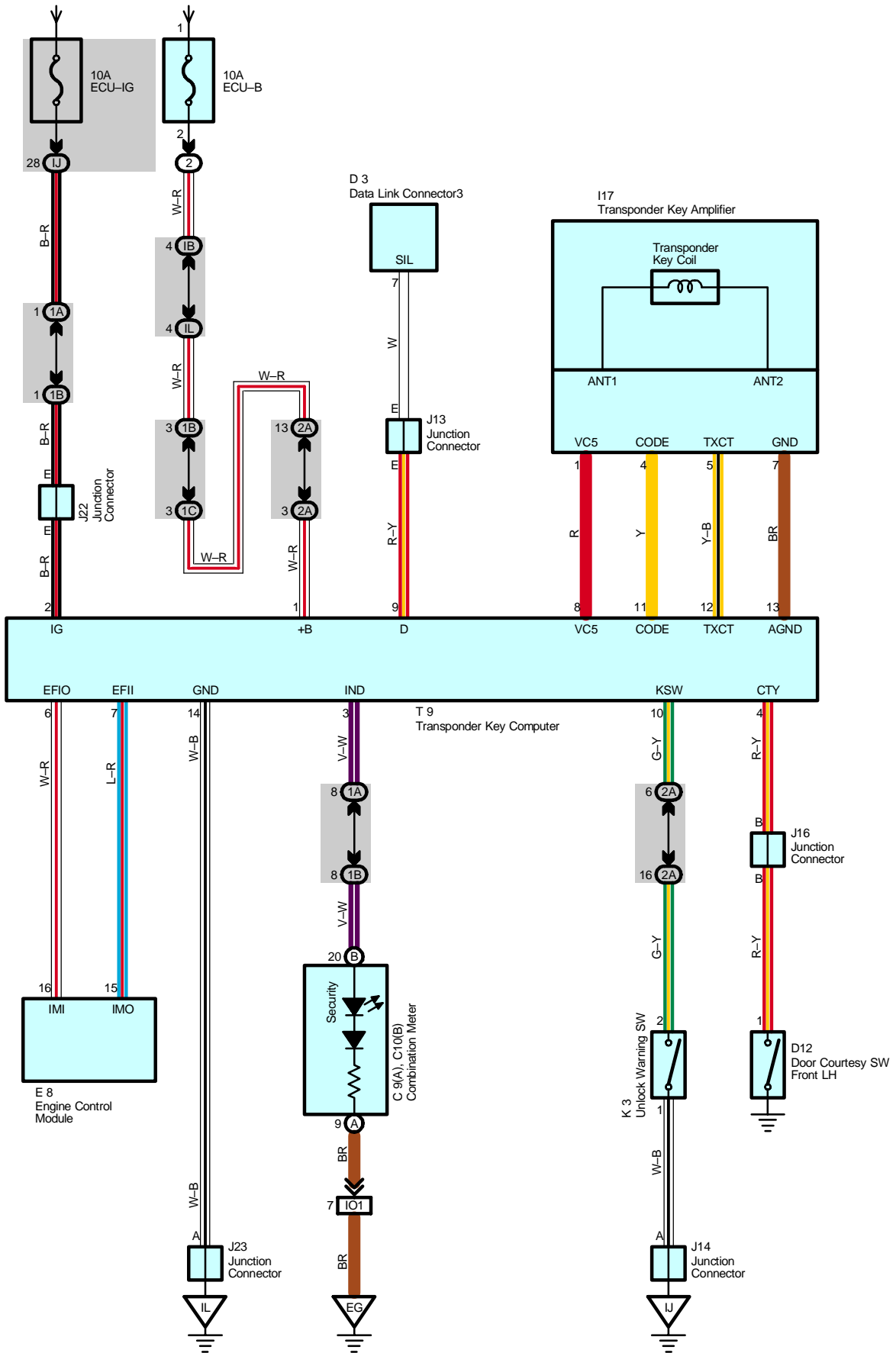
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EE	48	Rear Bank of Left Cylinder Head
EG		
ES	48	Near the Starter
IH	50	Left Kick Panel
BM	58	Under the Driver's Seat
BP	58	Left Quarter Panel Inner

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	48	Engine Wire	I1	52	Engine Room Main Wire
E7	48	Engine No.2 Wire	I7	52	Engine Wire

Engine Immobilizer System

From Power Source System (See Page 66)



Service Hints

T9 Transponder Key Computer

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

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
C9	A	38	I17	39	J23	40
C10	B	38	J13	40	K3	40
	D3	39	J14	40	T9	41
	D12	42	J16	40		
	E8	39	J22	40		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)

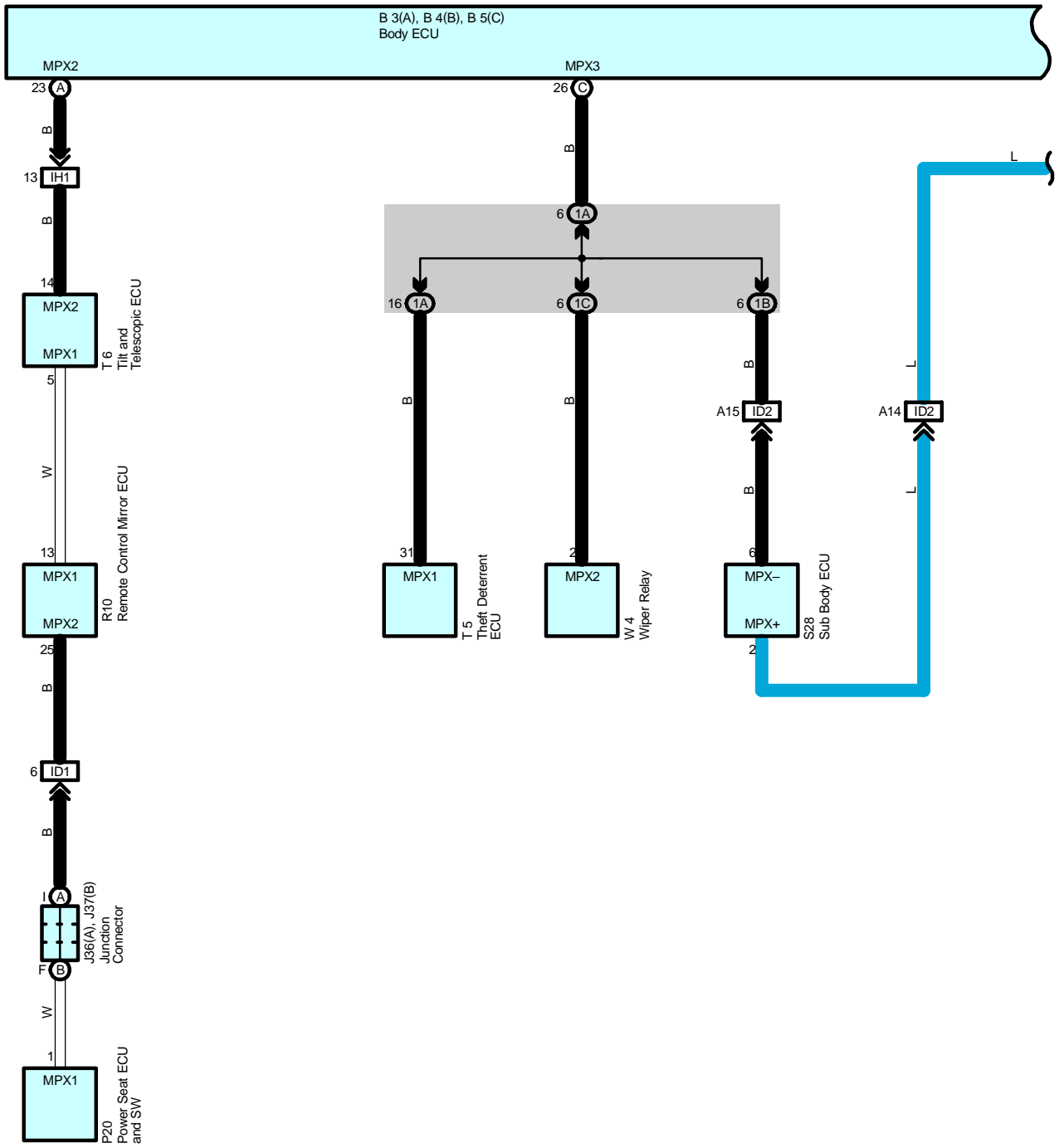
□ : Connector Joining Wire Harness and Wire Harness

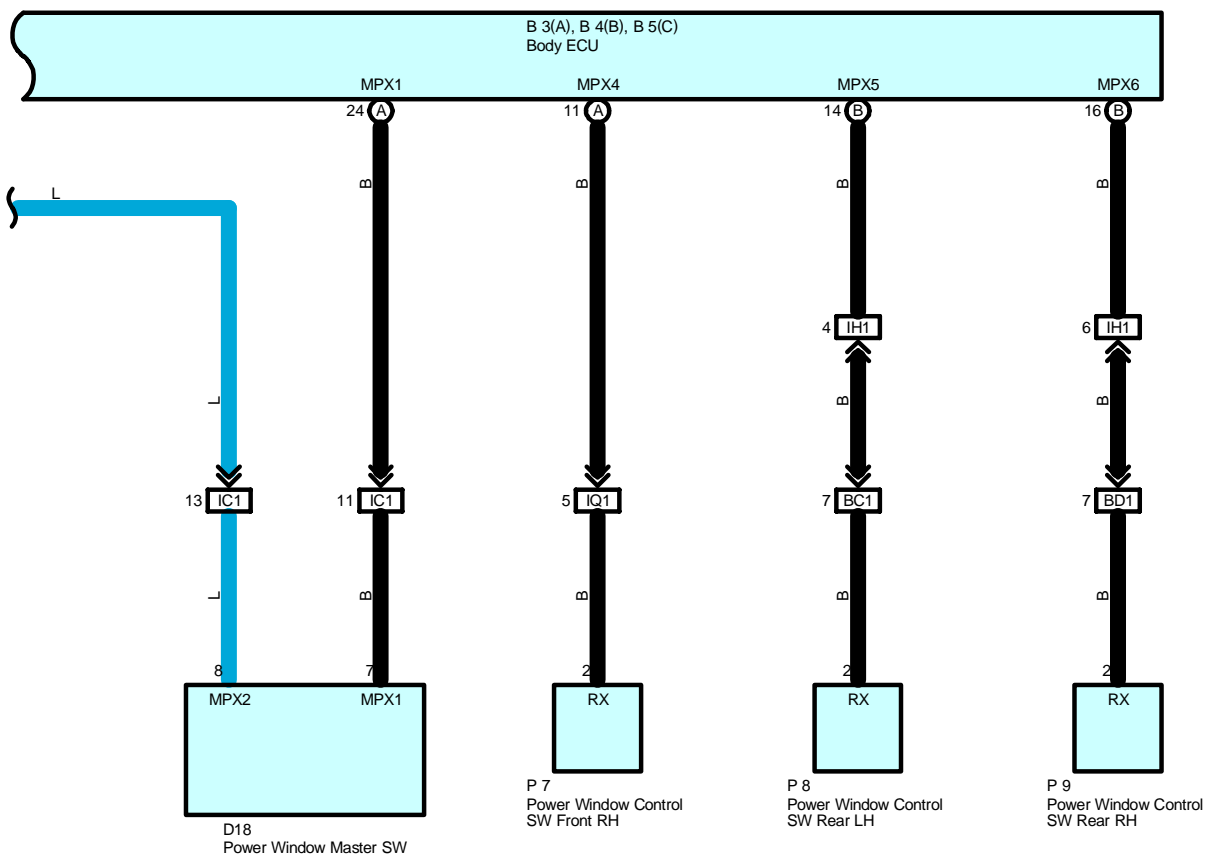
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)

▽ : Ground Points

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

Multiplex Communication System – BEAN Bus





Multiplex Communication System – BEAN Bus

Multiplex Communication System Includes Following Systems

- * Automatic Light Control
- * Door Lock Control
- * Garage Door Opener
- * Headlight
- * Interior Light
- * Key Reminder
- * Light Auto Turn Off System
- * Power Window
- * Rear Wiper and Washer
- * Theft Deterrent
- * Wireless Door Lock Control

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
B3	A	38	J37	B	46	R10	41
B4	B	38	P7		44	S28	45
B5	C	38	P8		44	T5	41
D18		42	P9		44	T6	41
J36	A	46	P20		46	W4	41

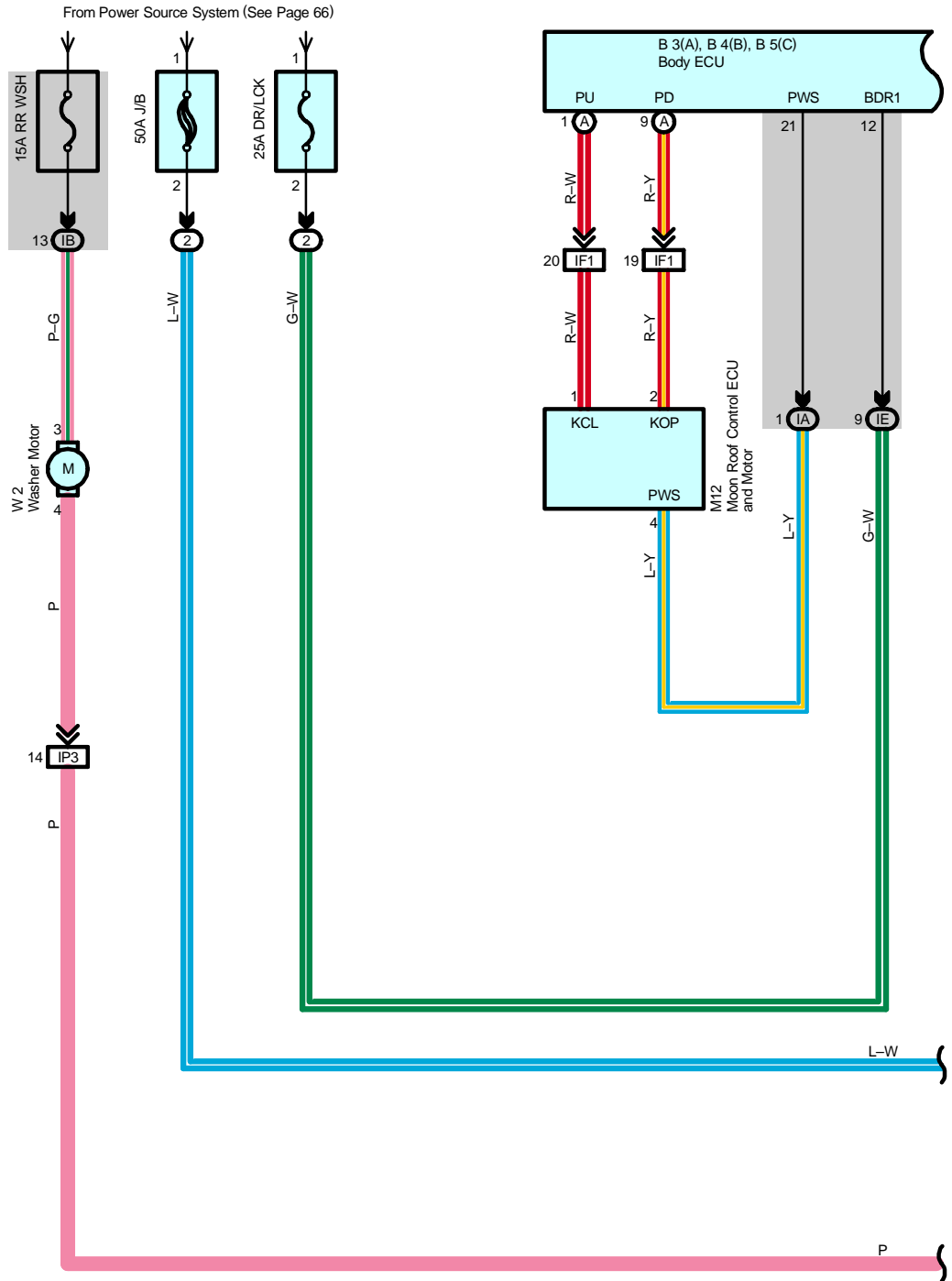
○ : Junction Block and Wire Harness Connector

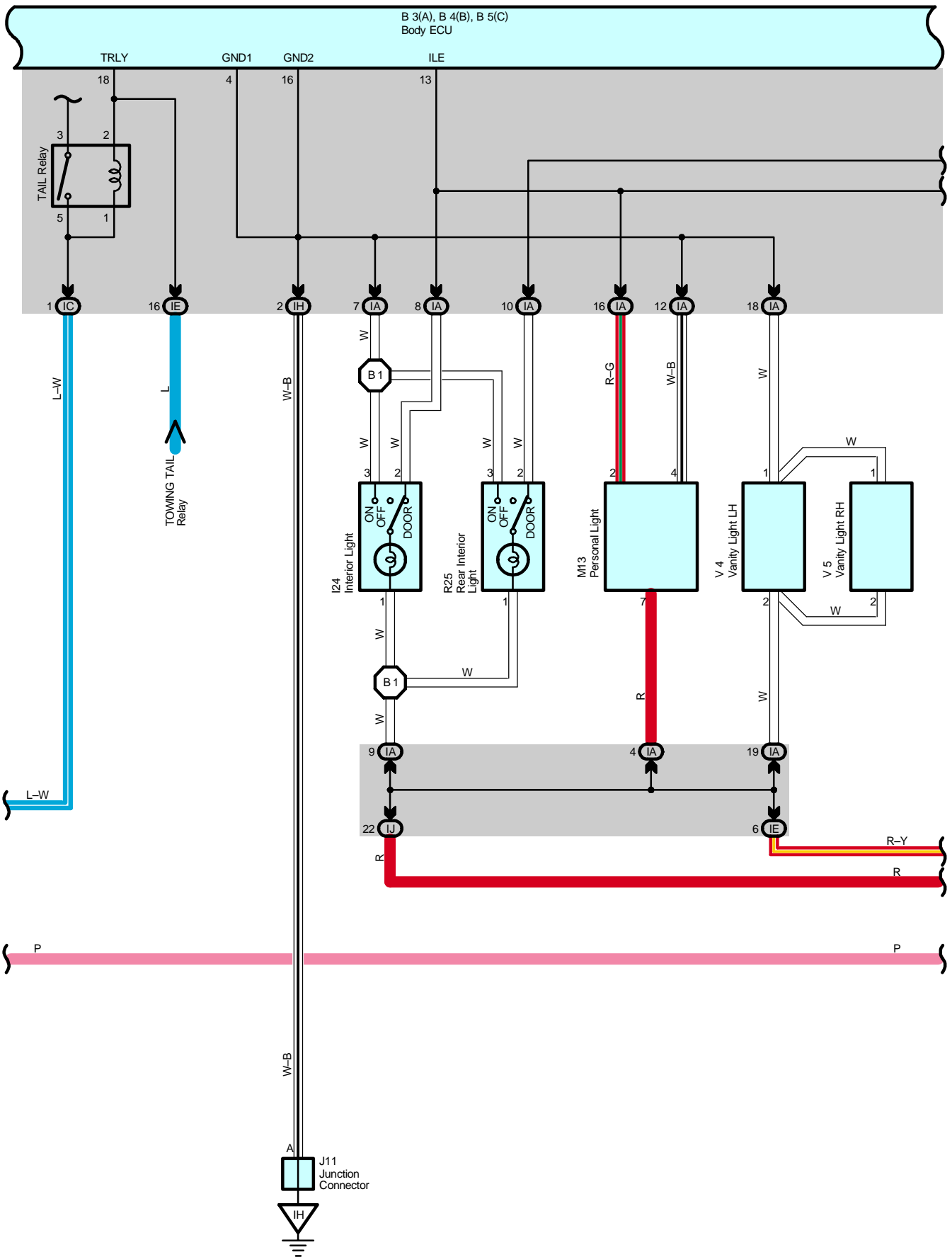
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		

□ : Connector Joining Wire Harness and Wire Harness

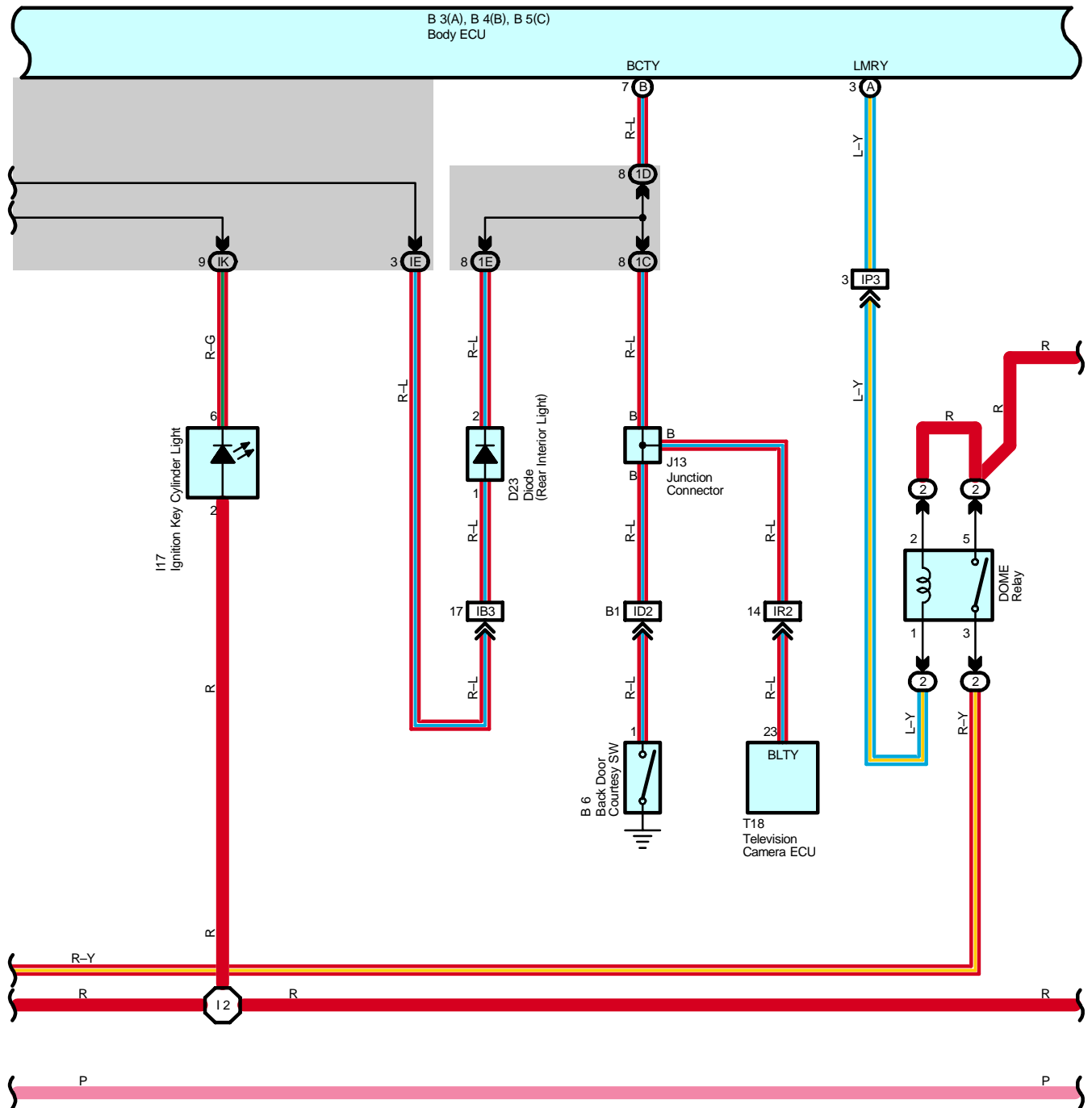
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

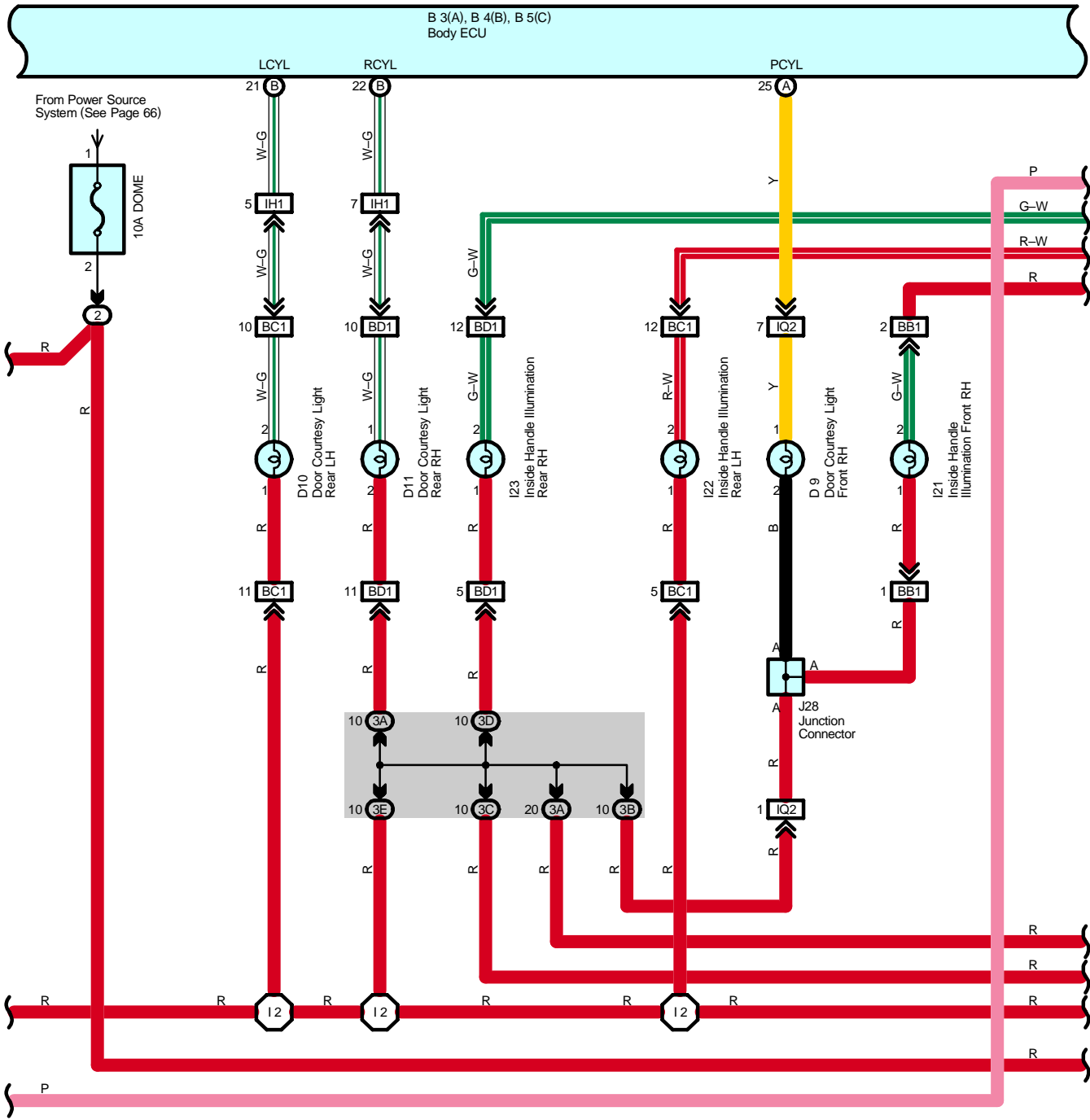
Multiplex Communication System – BEAN



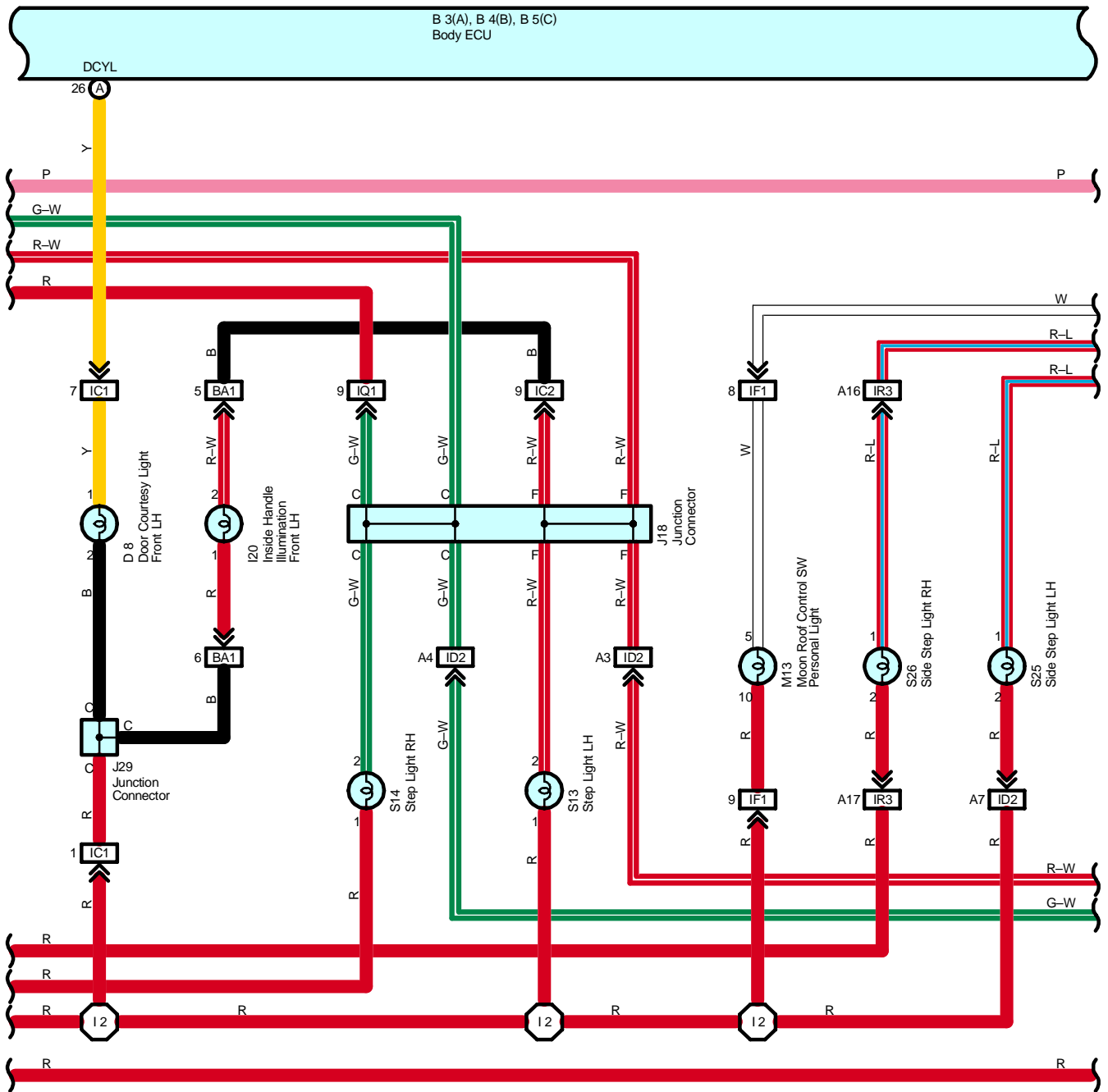


Multiplex Communication System – BEAN



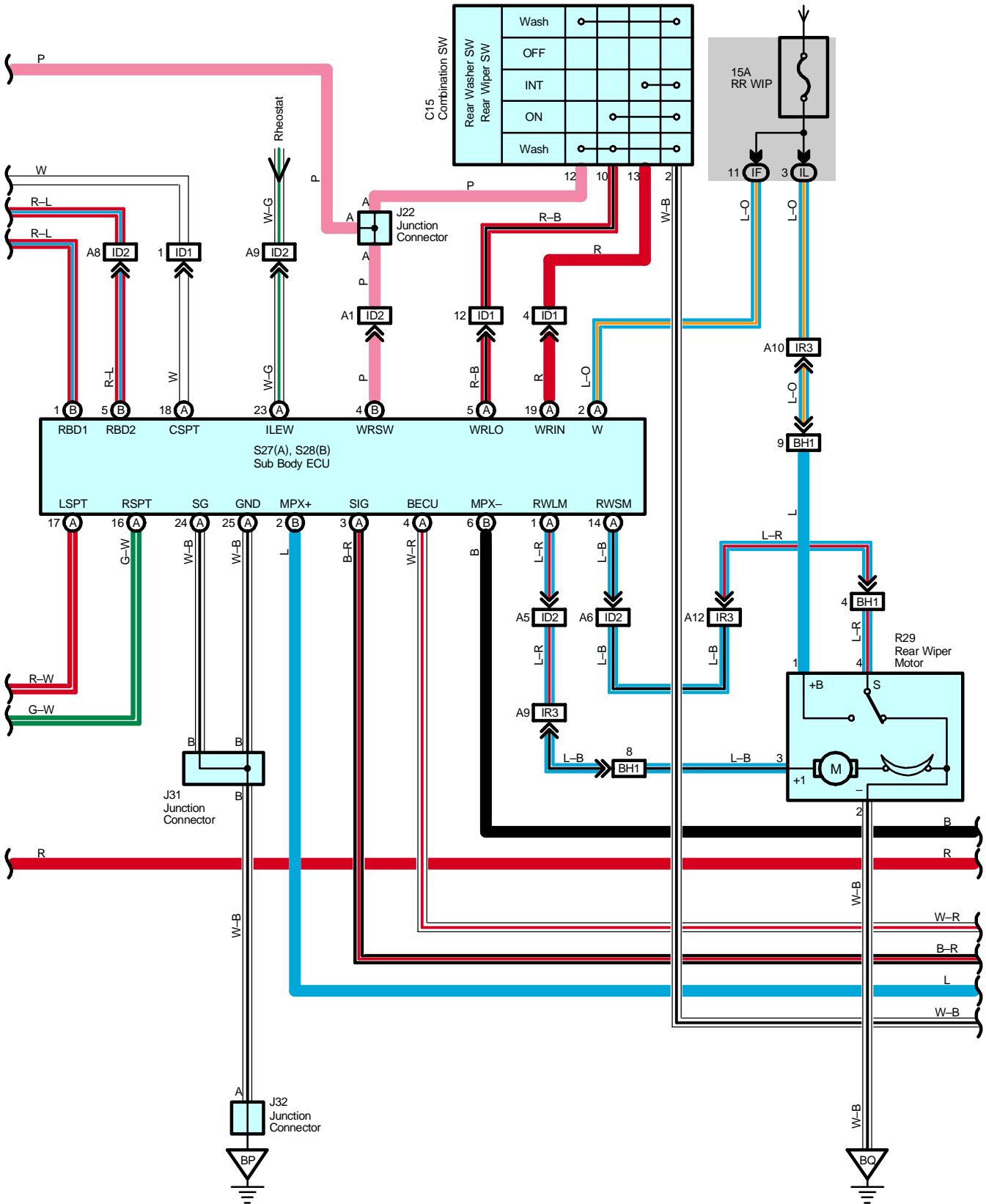


Multiplex Communication System – BEAN

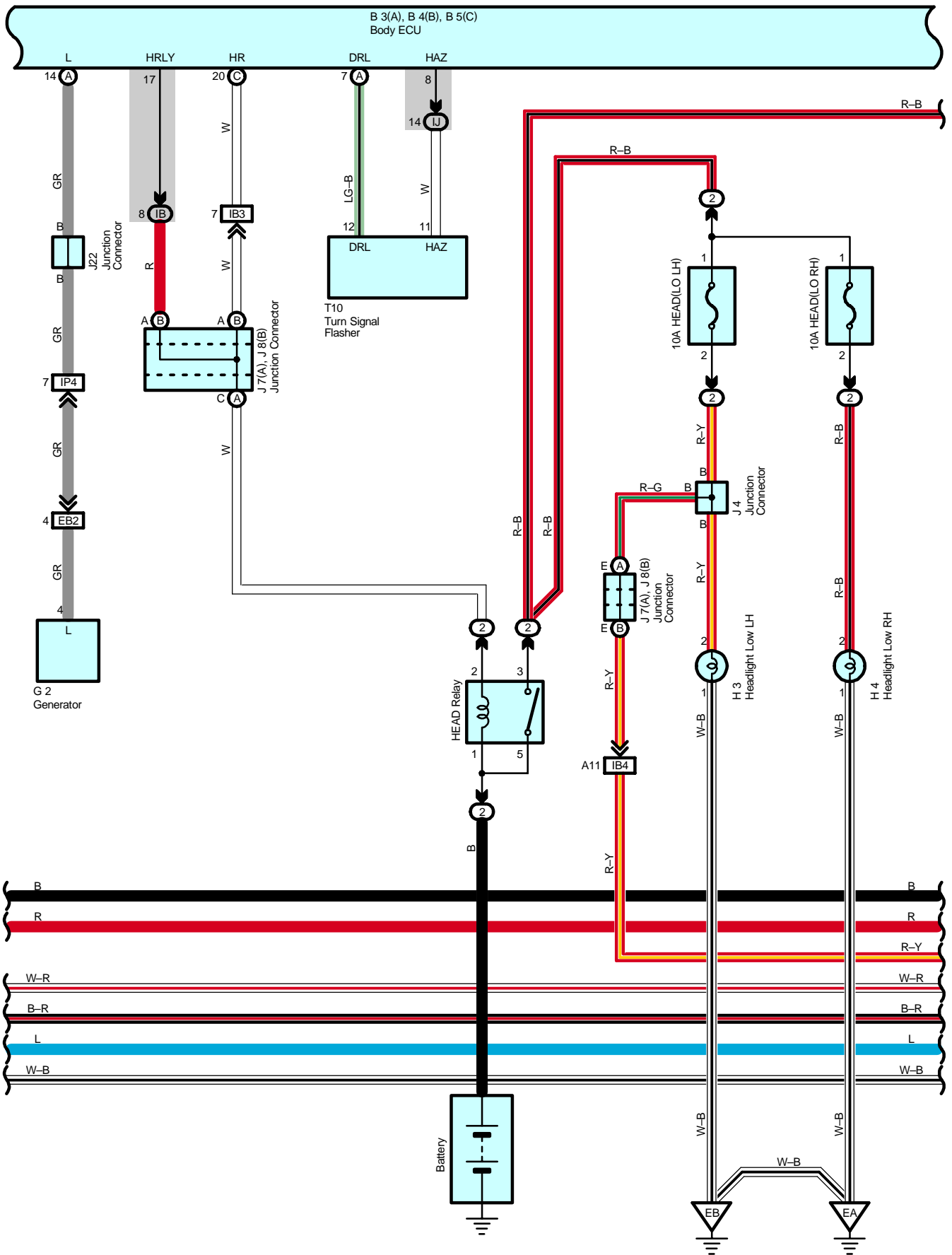


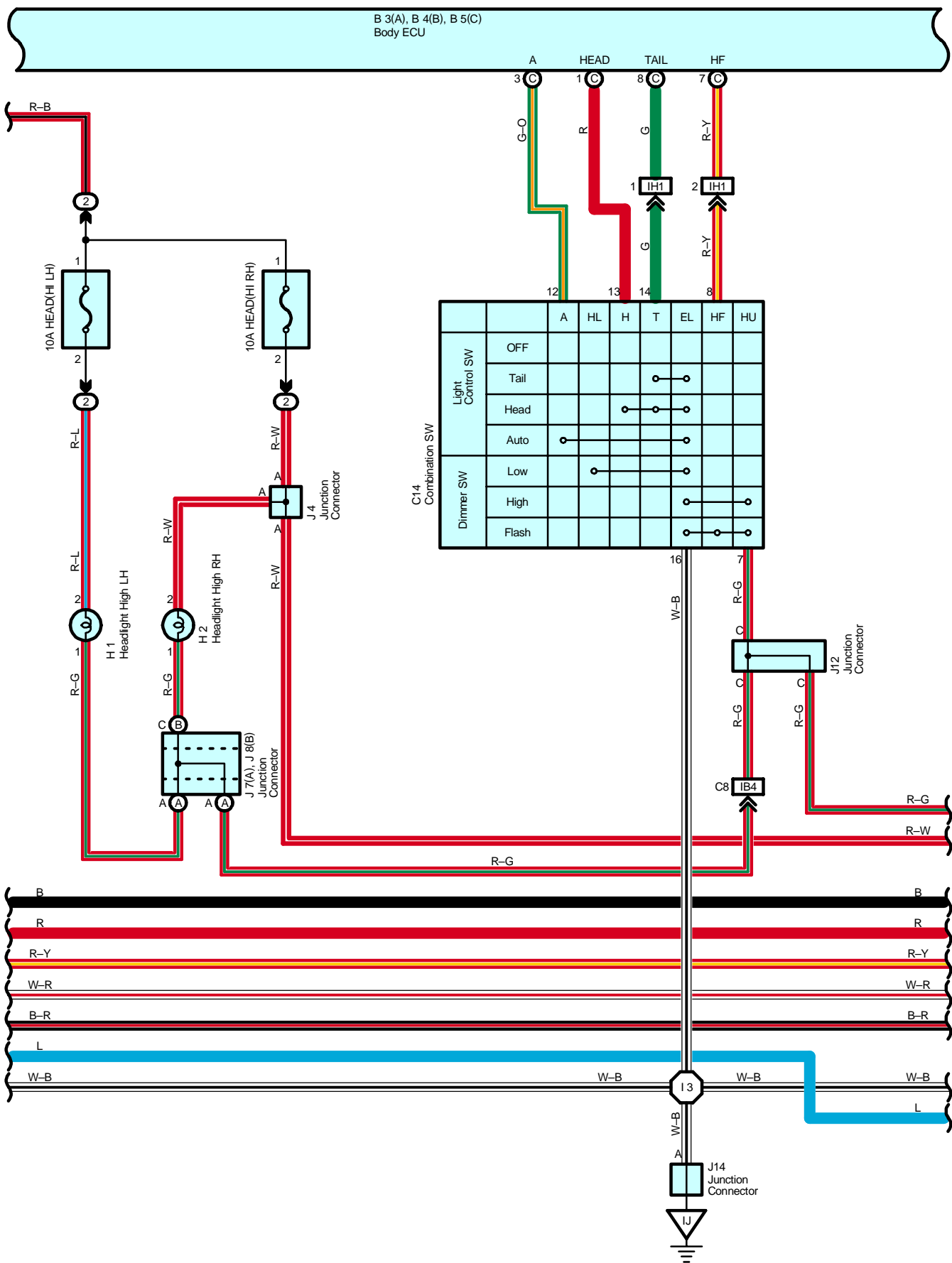
B 3(A), B 4(B), B 5(C)
Body ECU

From Power Source System (See Page 66)

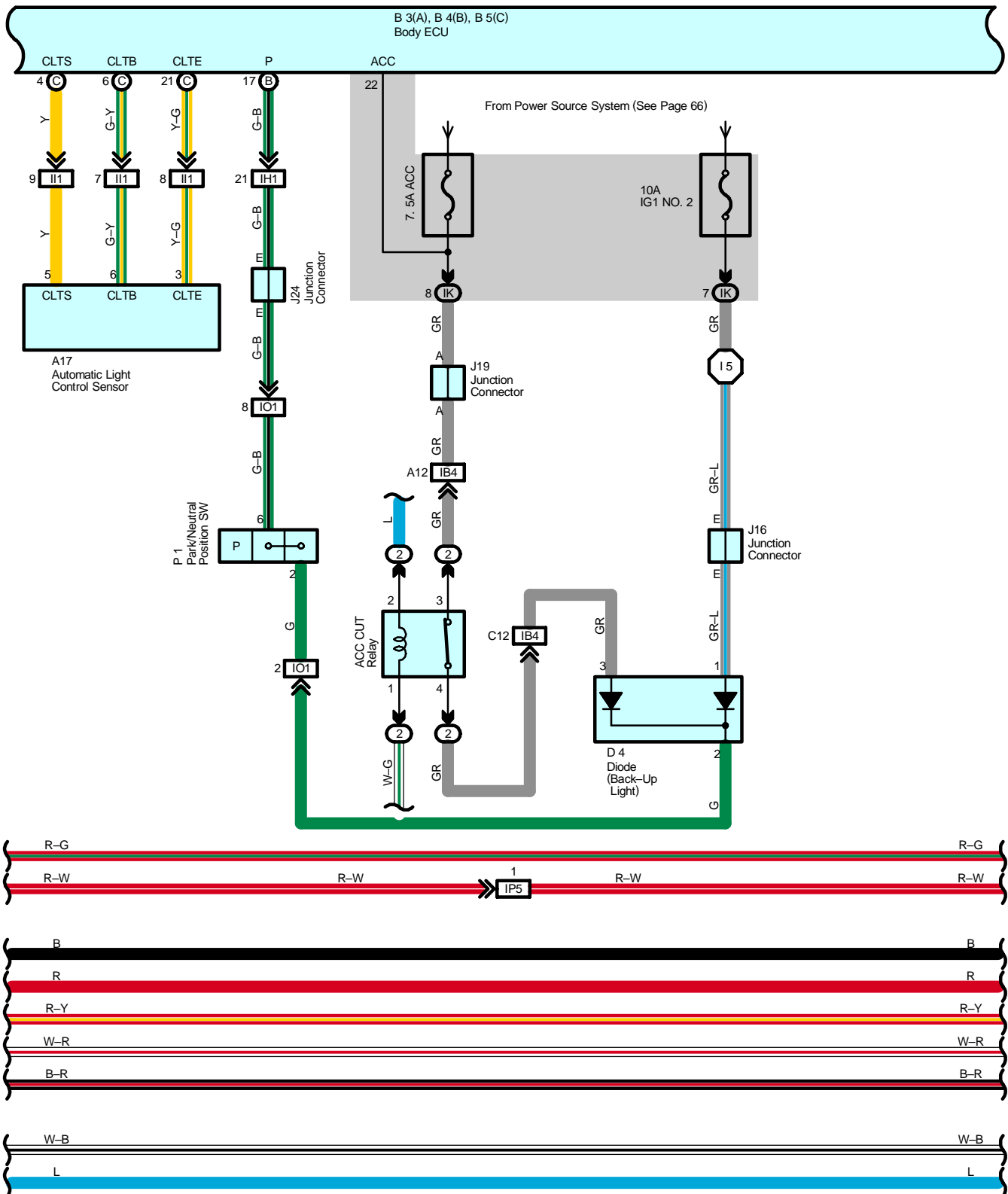


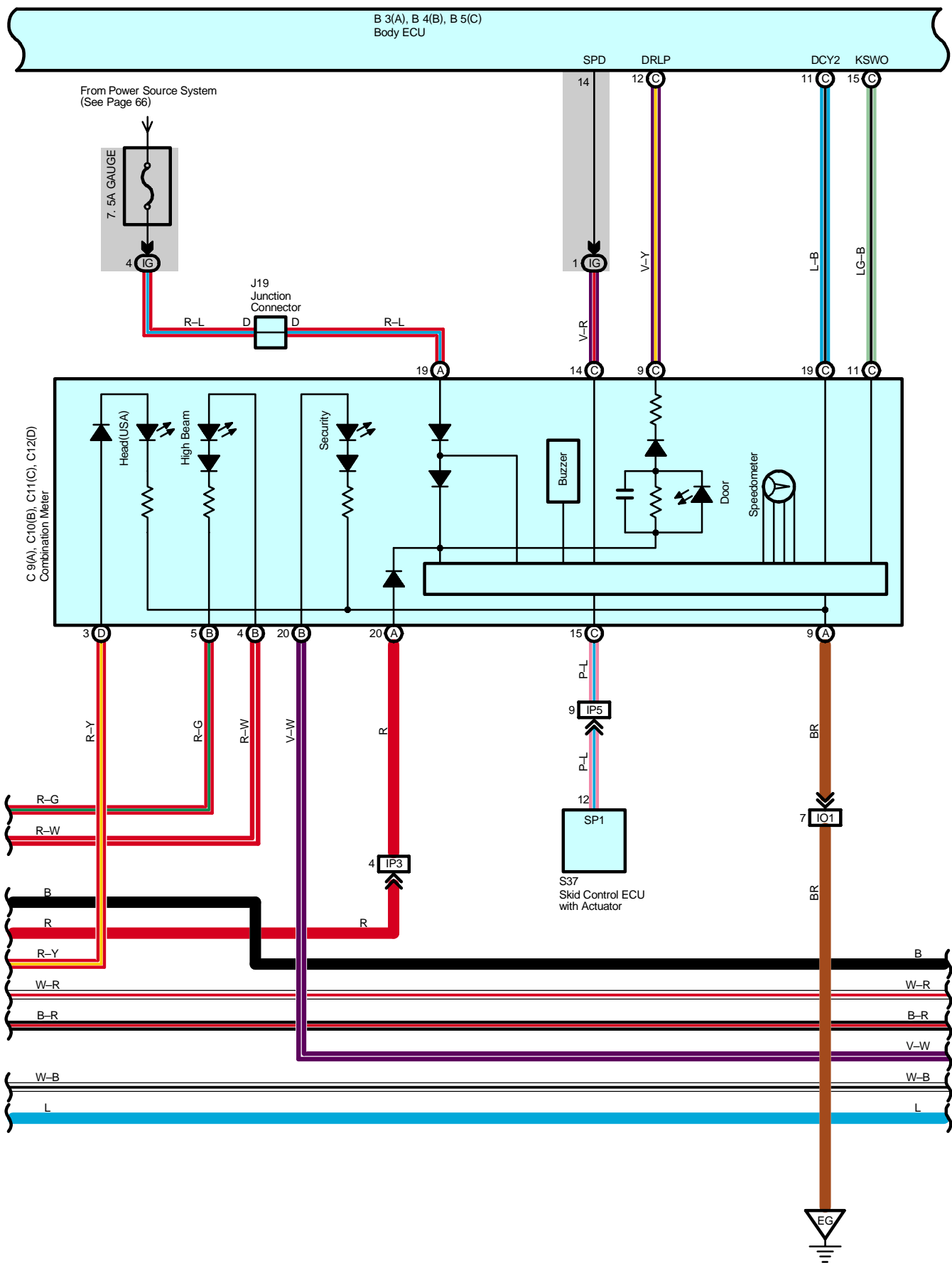
Multiplex Communication System – BEAN



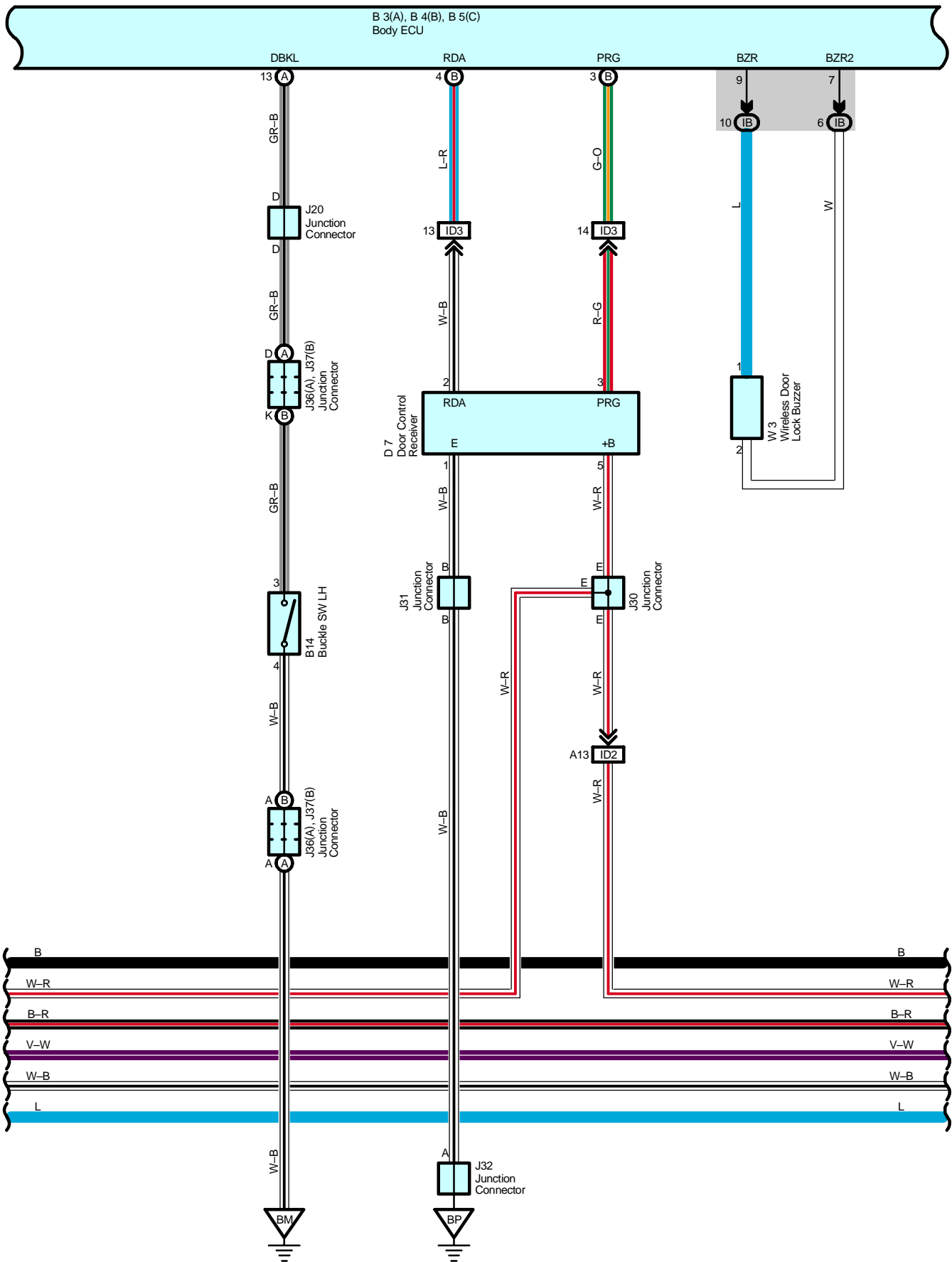


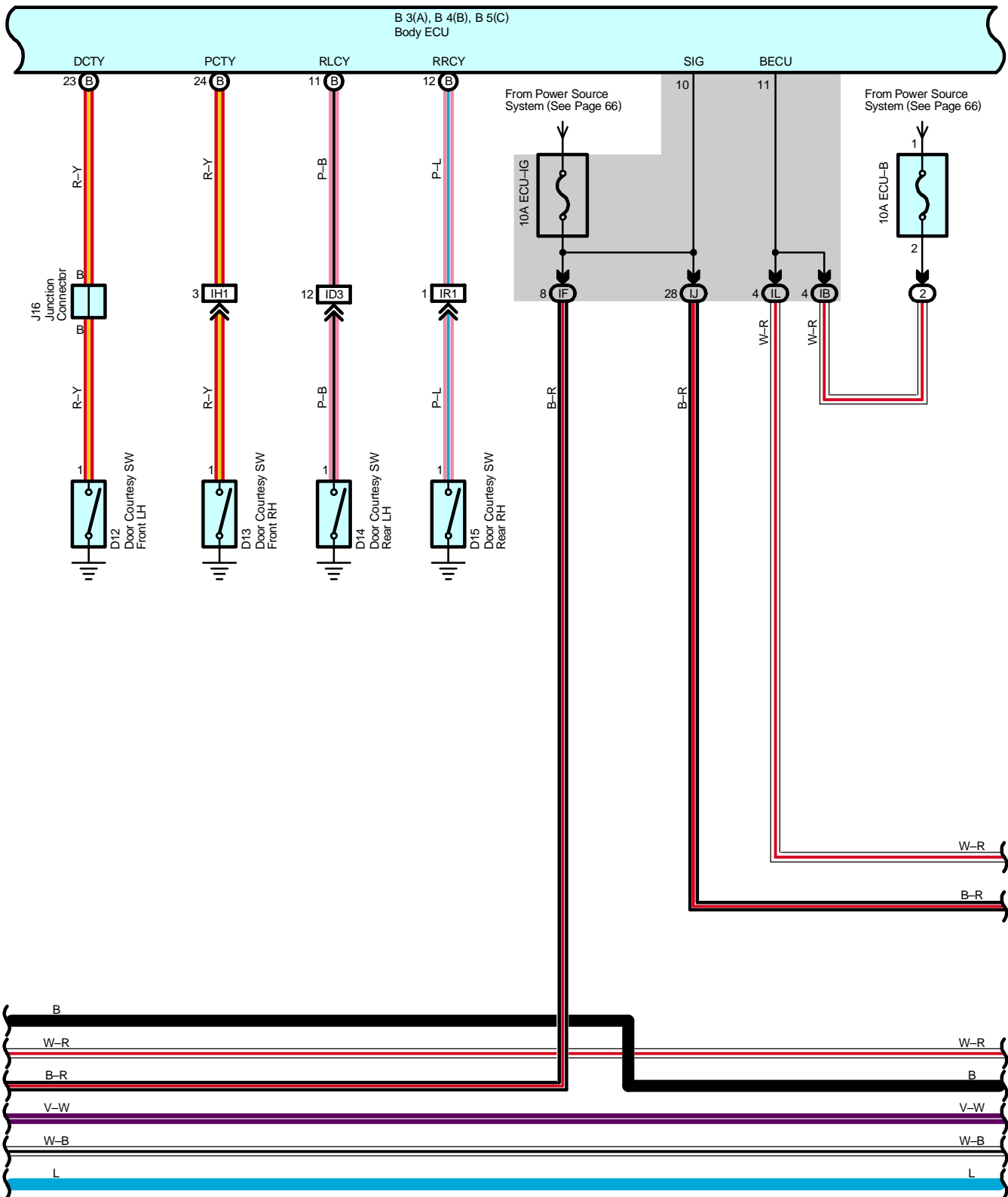
Multiplex Communication System – BEAN



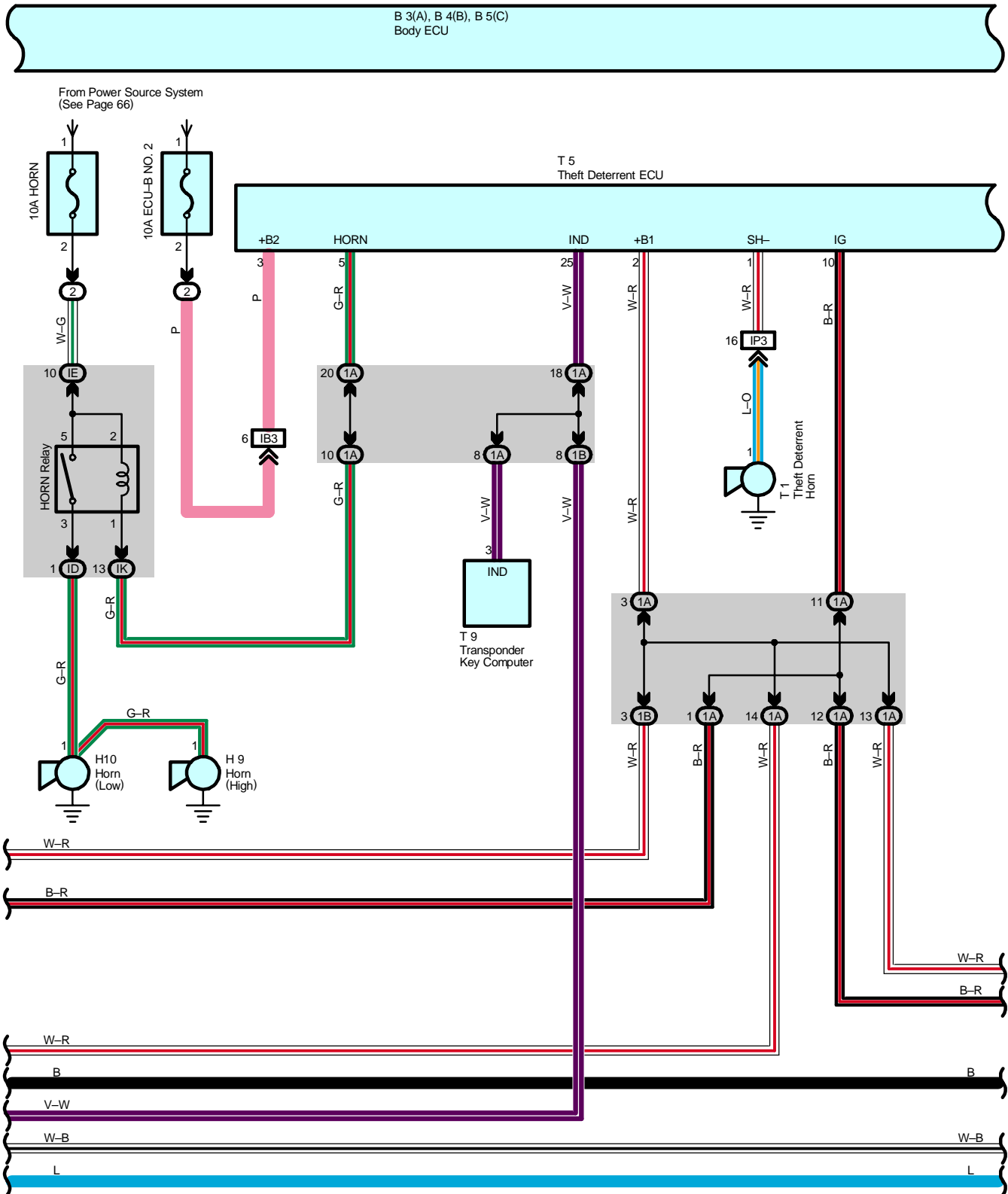


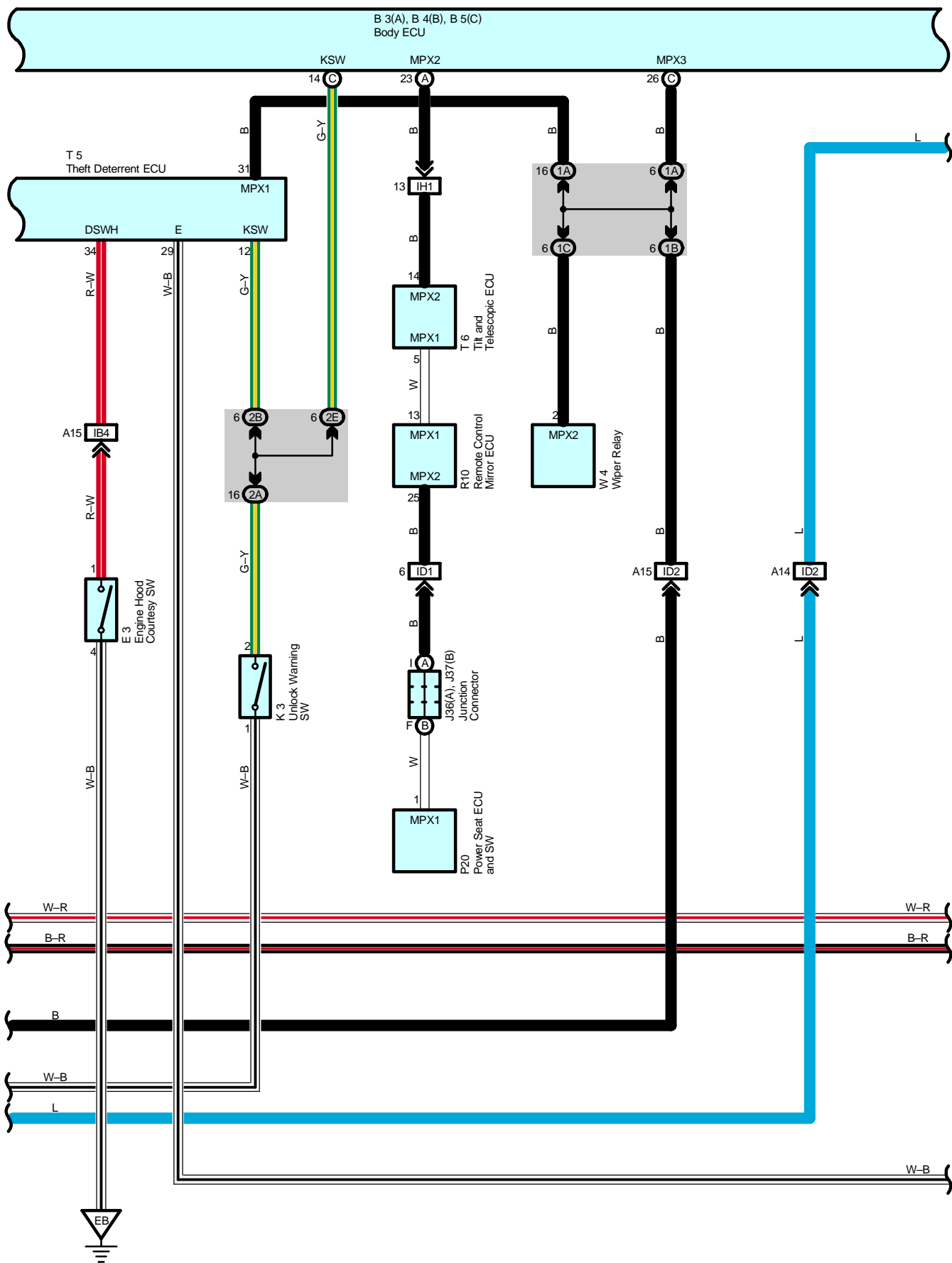
Multiplex Communication System – BEAN



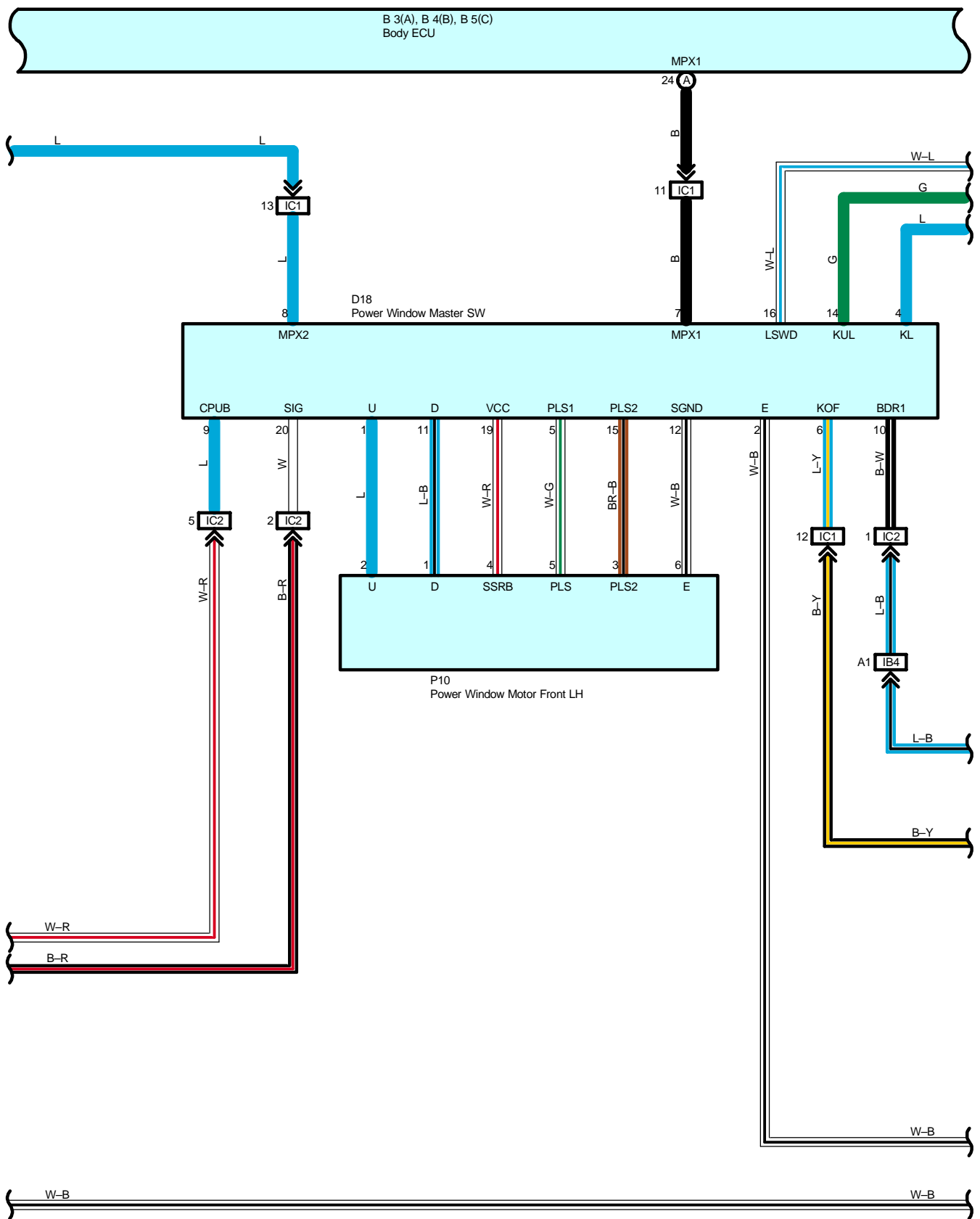


Multiplex Communication System – BEAN

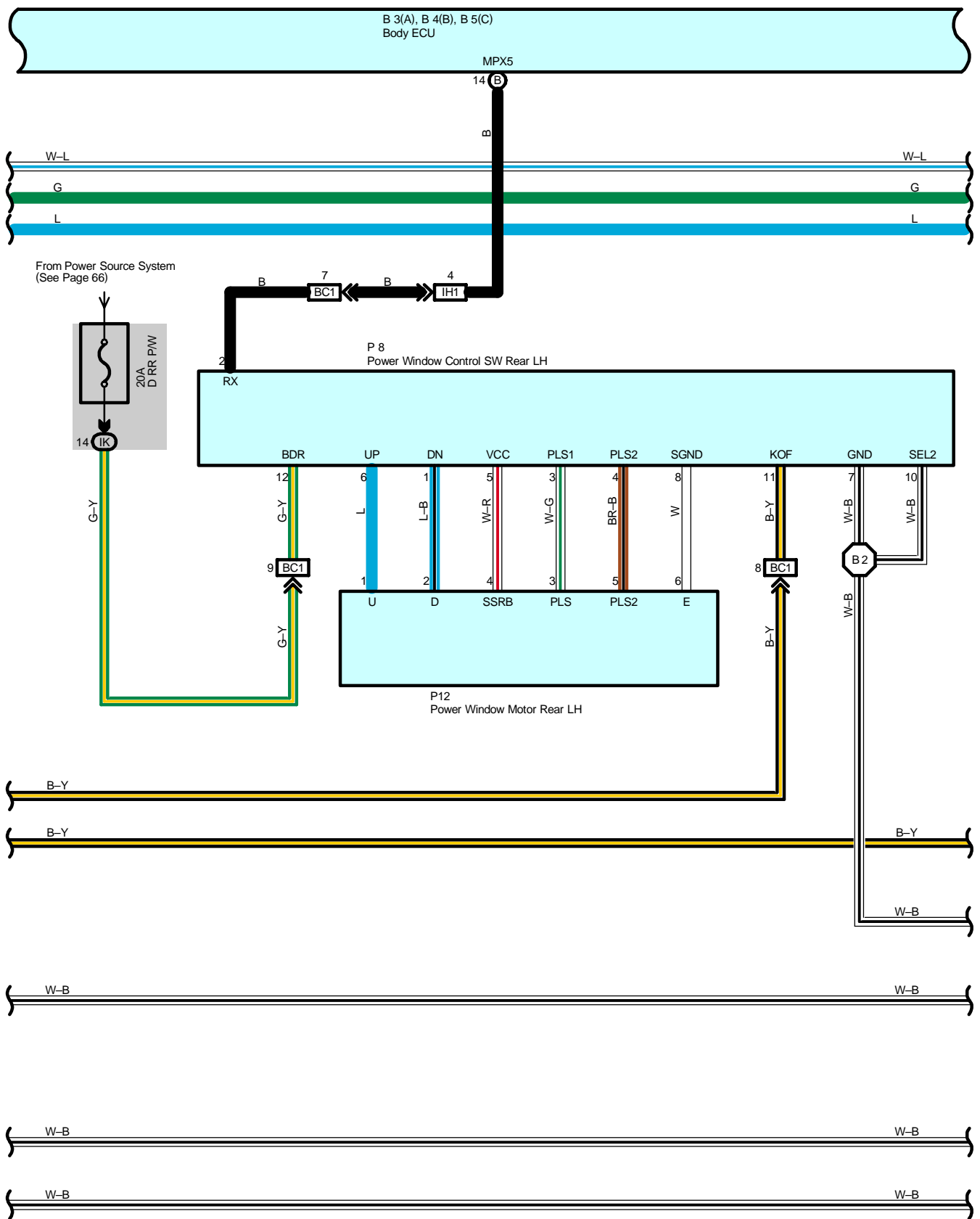


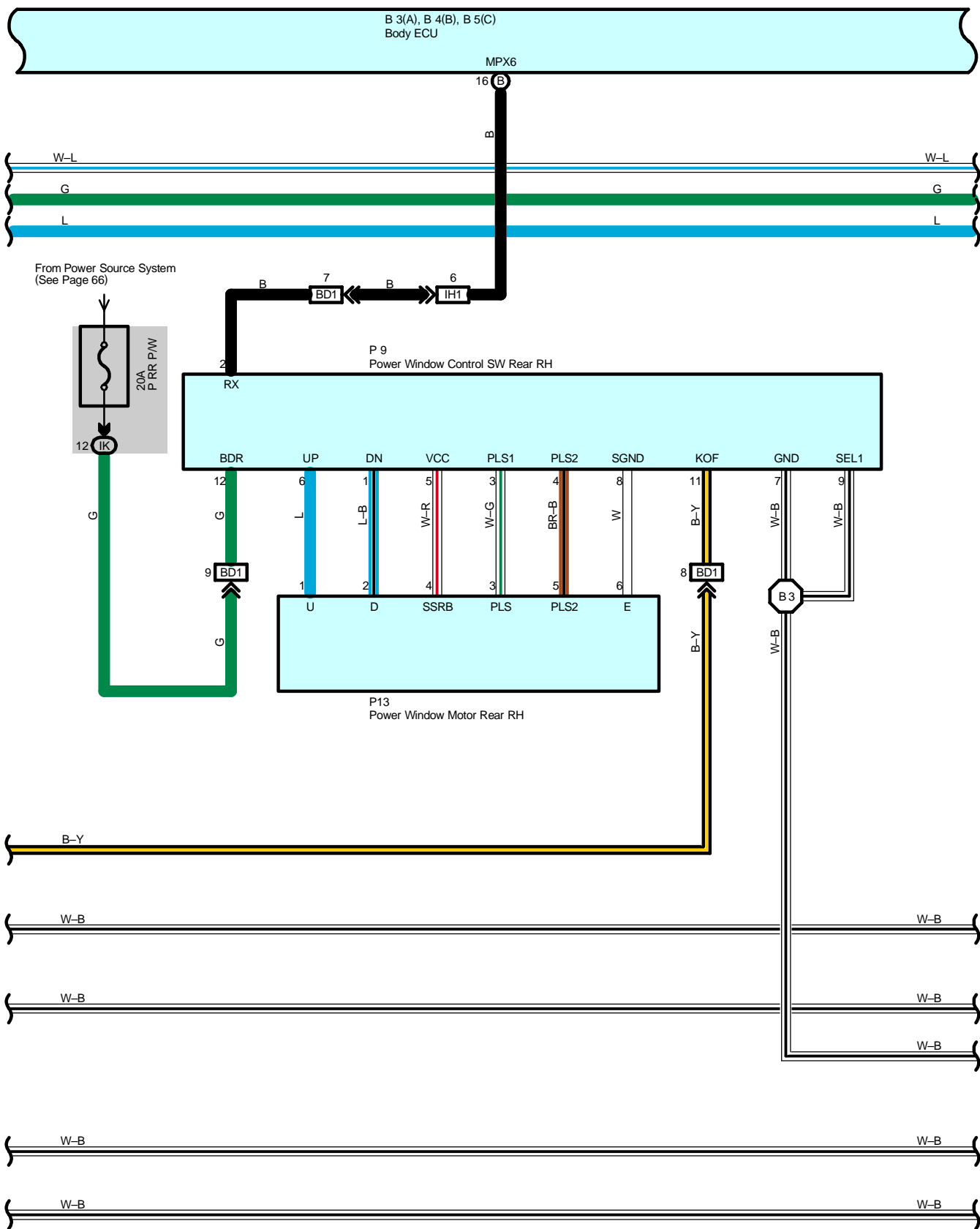


Multiplex Communication System – BEAN

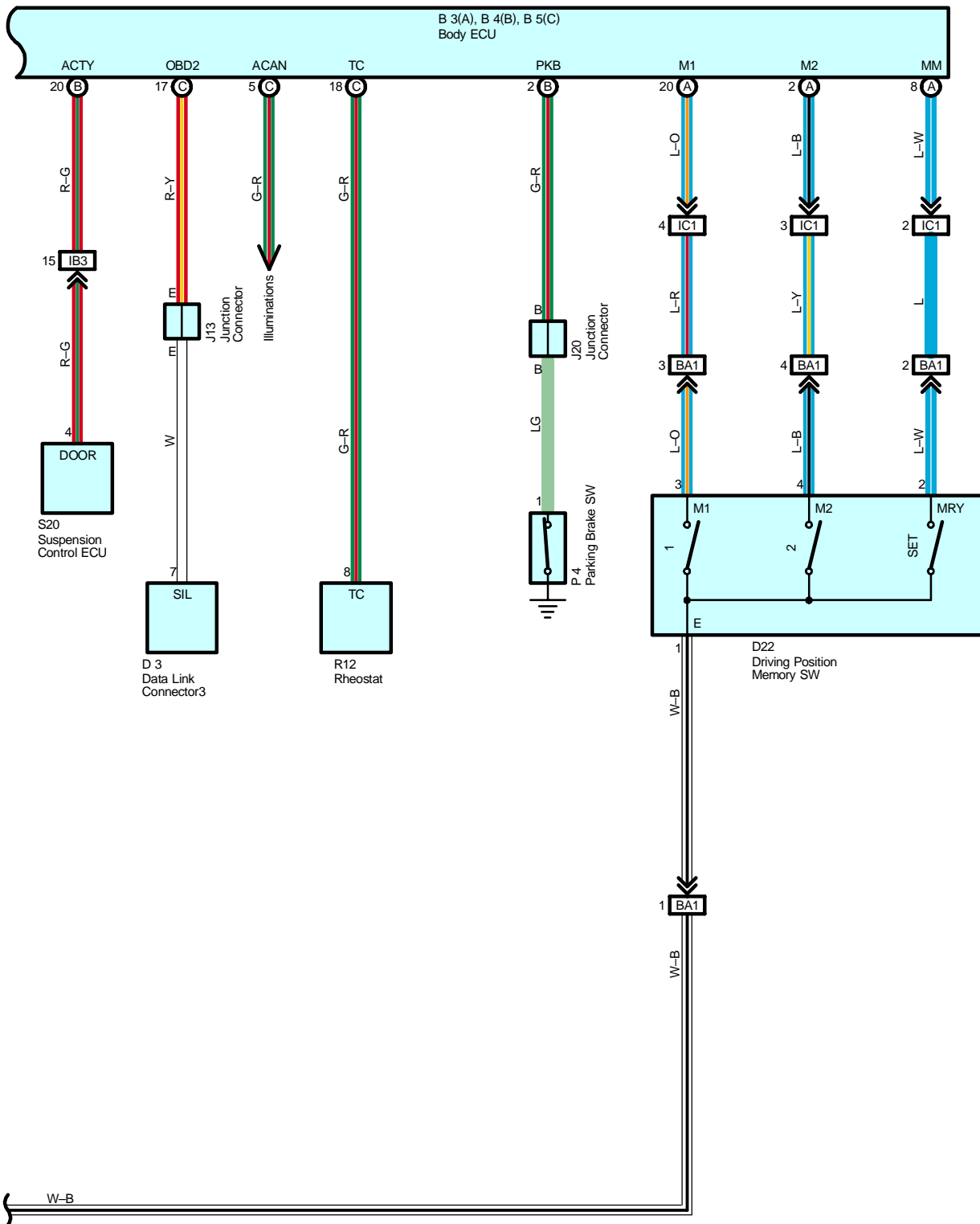


Multiplex Communication System – BEAN





Multiplex Communication System – BEAN



System Outline

Multiplex communication system is controlled by body ECU, theft deterrent ECU, wiper relay, sub body ECU, tilt and telescopic ECU, remote control mirror ECU, power window master SW, power window control SW front RH, rear LH, RH, power seat ECU and SW, etc.

For example, when door is opened, signal from door courtesy SW is transmitted to body ECU and turns on indoor lamp.

See new car features or repair manual for detail.

Service Hints

Body ECU

22–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

11, 12–Ground : Always approx. 12 volts

10–Ground : Approx. 12 volts with the ignition SW at ON position

4, 16–Ground : Always continuity

T5 Theft Deterrent ECU

2, 3–Ground : Always approx. 12 volts

10–Ground : Approx. 12 volts with the ignition SW at ON position

29–Ground : Always continuity

S27 (A) Sub Body ECU

(A) 24, (A) 25–Ground : Always continuity

(A) 4–Ground : Always approx. 12 volts

(A) 3–Ground : Approx. 12 volts with the ignition SW at ON position

Multiplex Communication System – BEAN

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A17	38	H2	36	M13	44
B3 A	38	H3	36	P1	37
B4 B	38	H4	36	P4	40
B5 C	38	H9	36	P7	44
B6	42	H10	36	P8	44
B7	42	I17	39	P9	44
B14	46	I20	43	P10	44
C9 A	38	I21	43	P11	44
C10 B	38	I22	43	P12	44
C11 C	38	I23	43	P13	44
C12 D	38	I24	43	P20	46
C14	38	J4	37	R10	41
C15	38	J7 A	40	R12	41
D3	39	J8 B	40	R25	44
D4	39	J11	40	R29	44
D7	42	J12	40	S13	41
D8	42	J13	40	S14	41
D9	42	J14	40	S20	41
D10	42	J16	40	S25	45
D11	42	J17	40	S26	45
D12	42	J18	40	S27 A	45
D13	42	J19	40	S28 B	45
D14	42	J20	40	S37	37
D15	42	J22	40	T1	37
D16	42	J23	40	T5	41
D17	42	J24	40	T6	41
D18	42	J28	43	T9	41
D19	42	J29	43	T10	41
D20	42	J30	43	T18	41
D21	42	J31	43	V4	45
D22	42	J32	43	V5	45
D23	39	J36 A	46	W2	37
E3	36	J37 B	46	W3	37
G2	36	K3	40	W4	41
H1	36	M12	44		

○ : Relay Blocks

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
ID		
IE		
IF		
IG	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
1D		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3C		
3D		
3E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB2	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
ID3		
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR2		
IR3		
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)
BB1	58	Front Door RH Wire and Front Door RH Sub Wire (Inside of Front Door RH)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

Multiplex Communication System – BEAN

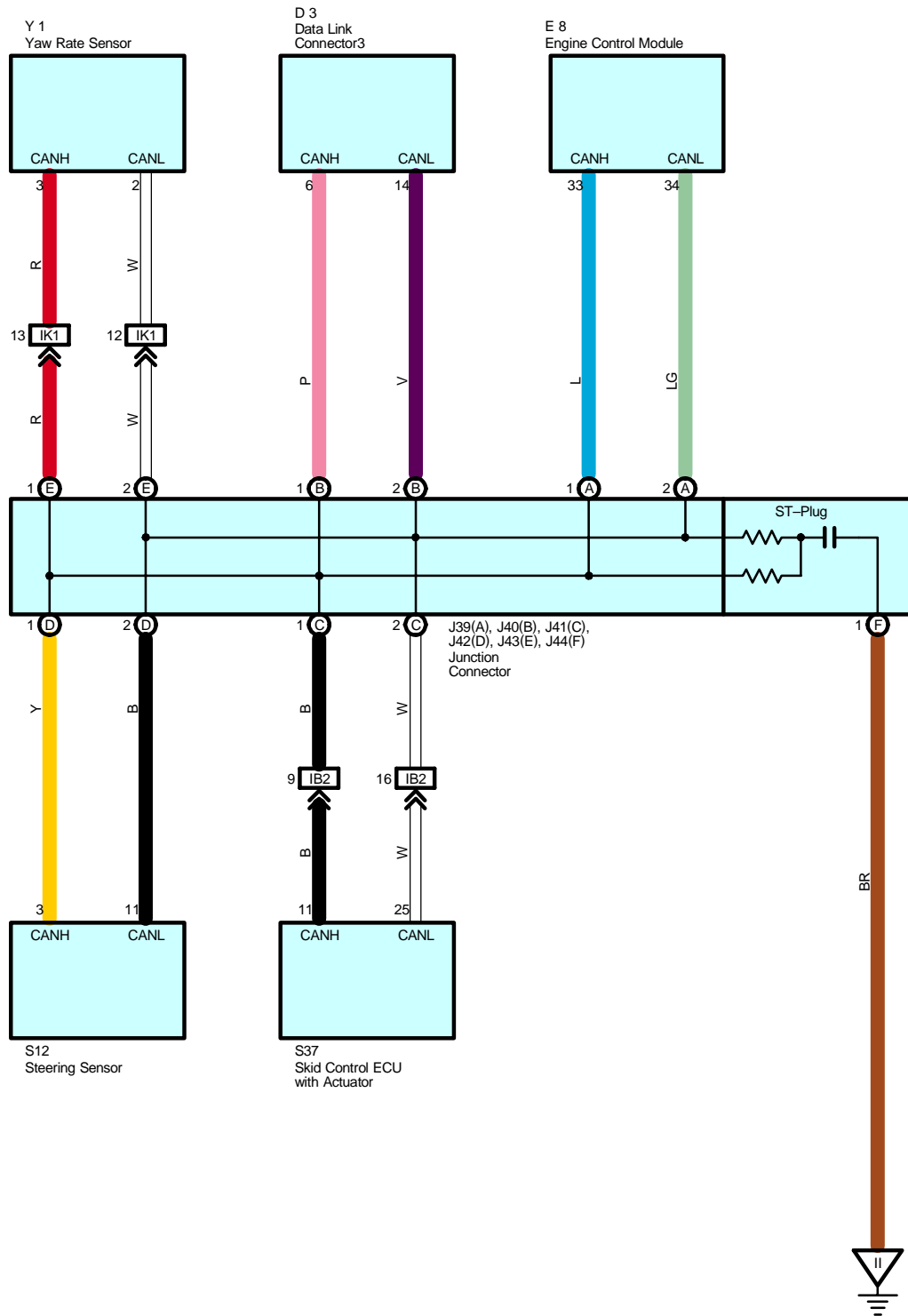
: Ground Points

Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BM	58	Under the Driver's Seat
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	52	Instrument Panel Wire	B1	60	Roof Wire
I3			B2	60	Rear Door LH Wire
I5			B3	60	Rear Door RH Wire

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:

* VSC

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
D3	39	J41	C	40	S12	41	
E8	39	J42	D	40	S37	37	
J39	A	40	J43	E	40	Y1	41
J40	B	40	J44	F	40		

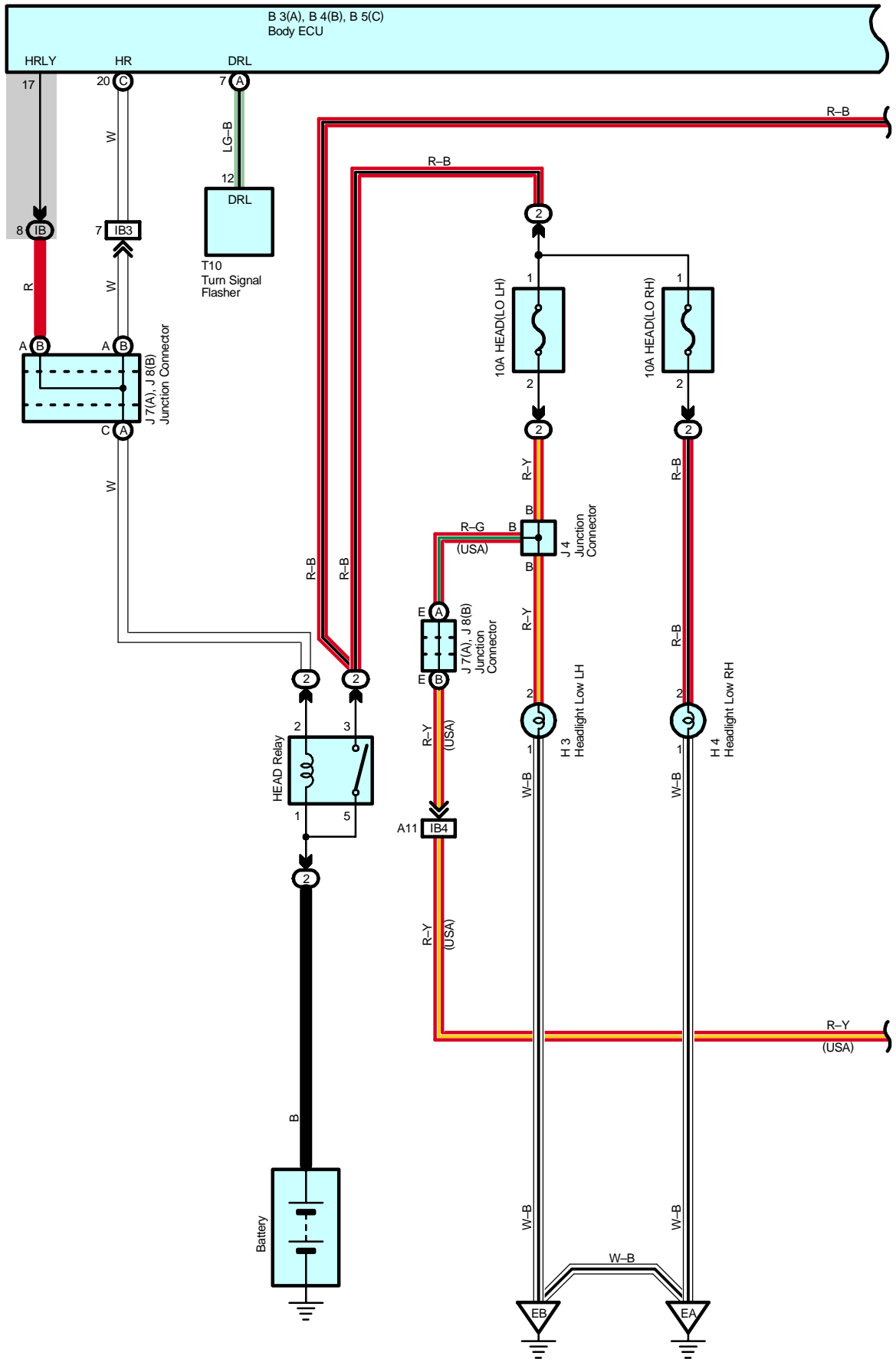
□ : Connector Joining Wire Harness and Wire Harness

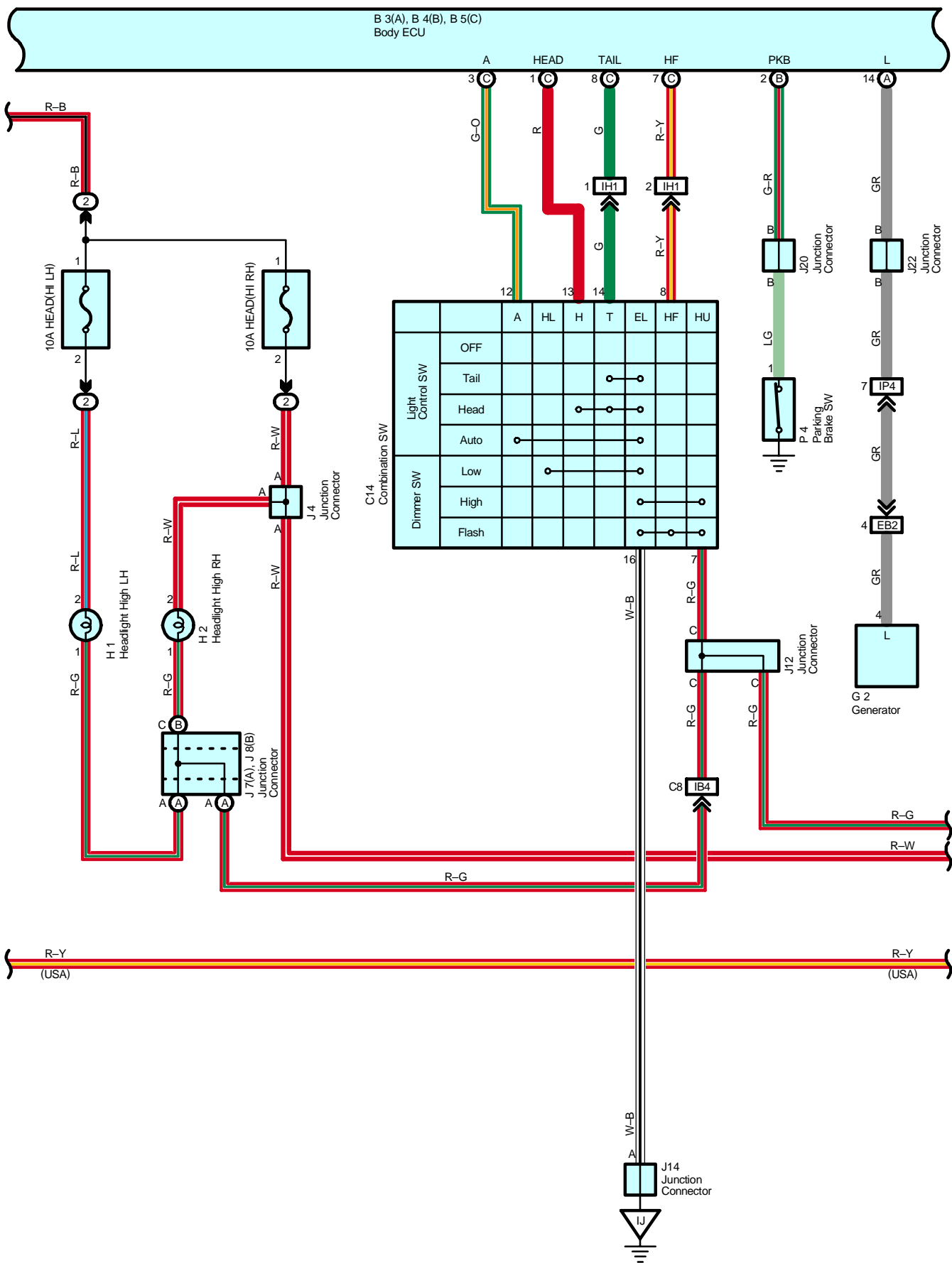
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)

▽ : Ground Points

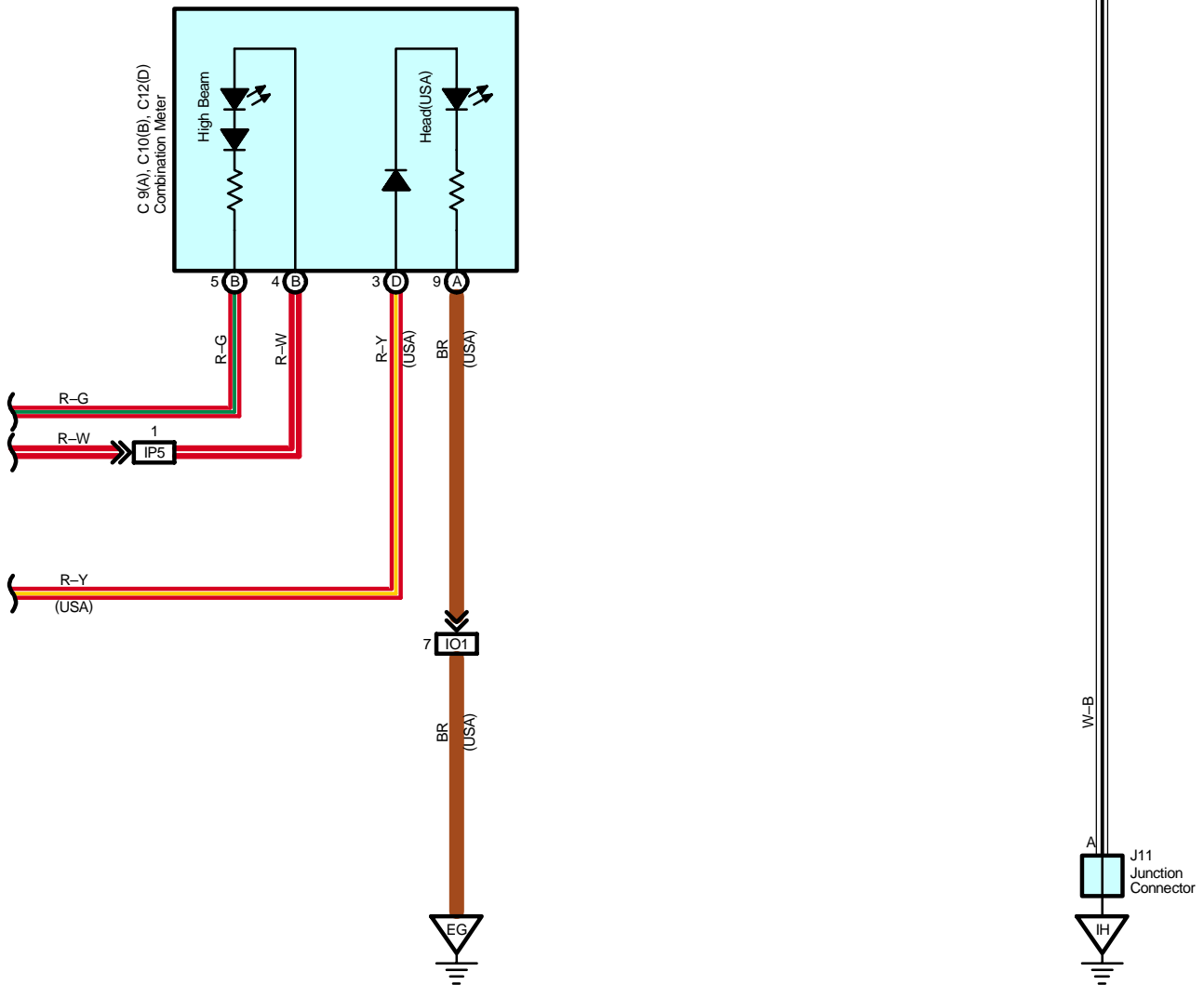
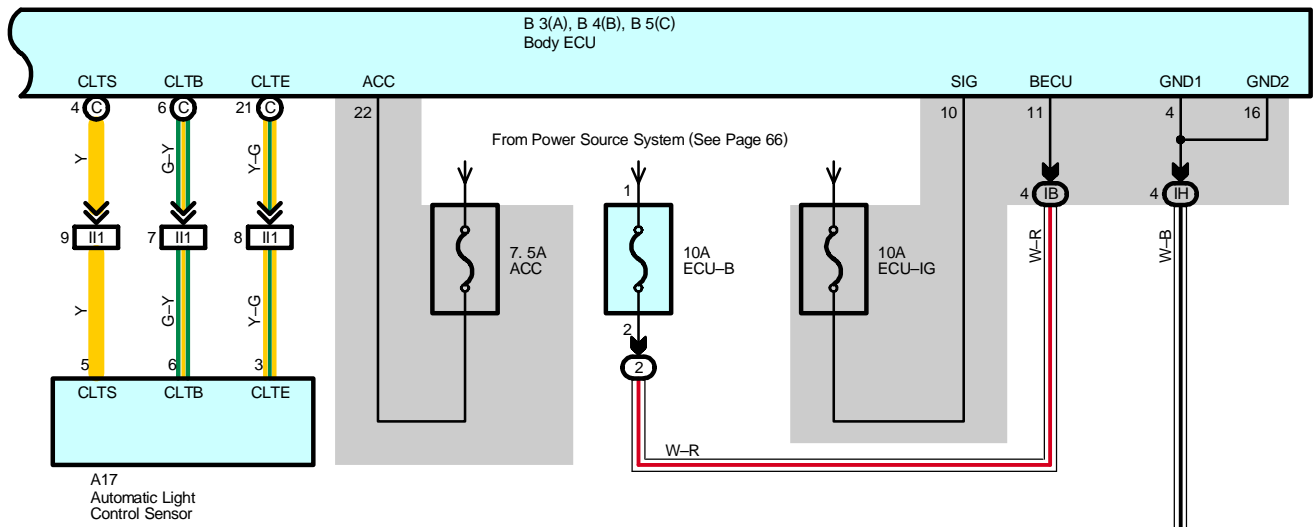
Code	See Page	Ground Points Location
II	50	Near the Left Side of Steering Column

Headlight





Headlight



System Outline

* This system is designed to automatically activate the turn signal lights during the daytime to keep the car highly visible to other vehicles. This system is controlled by the body ECU.

This system makes use of the turn signal lights as daytime running lights.

For this reason, when the turn signal lights are operated, the daytime running lights function is interrupted momentarily, which, however, will be brought back into operation as soon as the interposed operation is over.

* This system is enabled when the conditions given below are met.

- A) Ignition switch ON condition
- B) Turn signal light switch OFF condition
- C) Hazard light switch OFF condition
- D) Light control switch OFF condition
- E) Parking brake switch OFF condition (Parking brake out of operating condition)**

** : This system does not become active when the parking brake switch is ON. However, once the OFF signal of the parking brake switch is input into the body ECU, this system will become active thereafter, regardless of whether the parking brake switch is ON or OFF.

Service Hints

Body ECU

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A17	38	G2	36	J11	40
B3	A 38	H1	36	J12	40
B4	B 38	H2	36	J14	40
B5	C 38	H3	36	J20	40
C9	A 38	H4	36	J22	40
C10	B 38	J4	37	P4	40
C12	D 38	J7	A 40	T10	41
C14	38	J8	B 40		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB2	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		

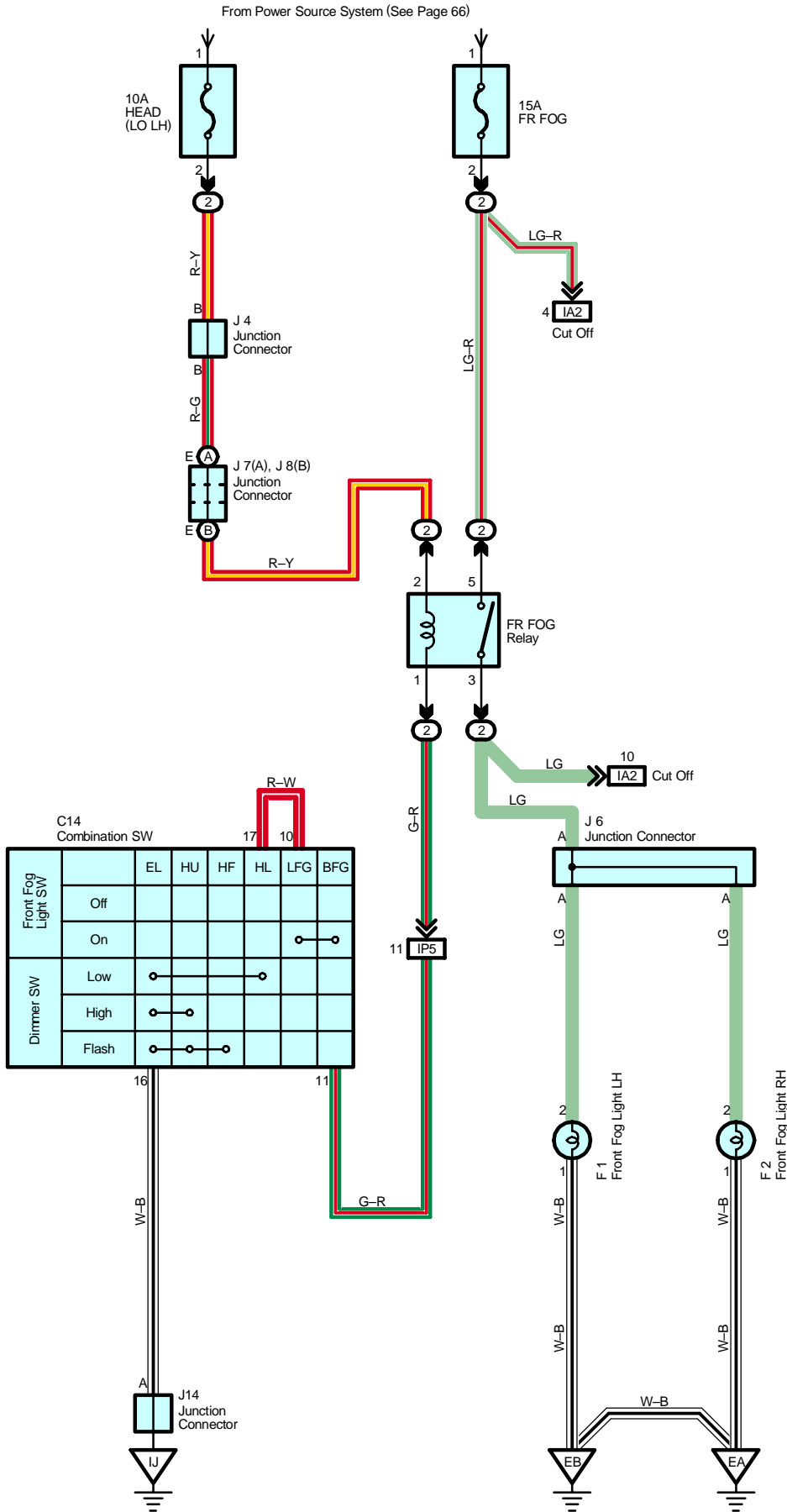
Headlight



: Ground Points

Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

Front Fog Light



Service Hints**FR FOG Relay**

5-3 : Closed with the light control SW at HEAD position, dimmer SW at LOW position and front fog light SW on

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C14	38	J4	37	J8 B	40
F1	36	J6	37	J14	40
F2	36	J7 A	40		

 : **Relay Blocks**

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

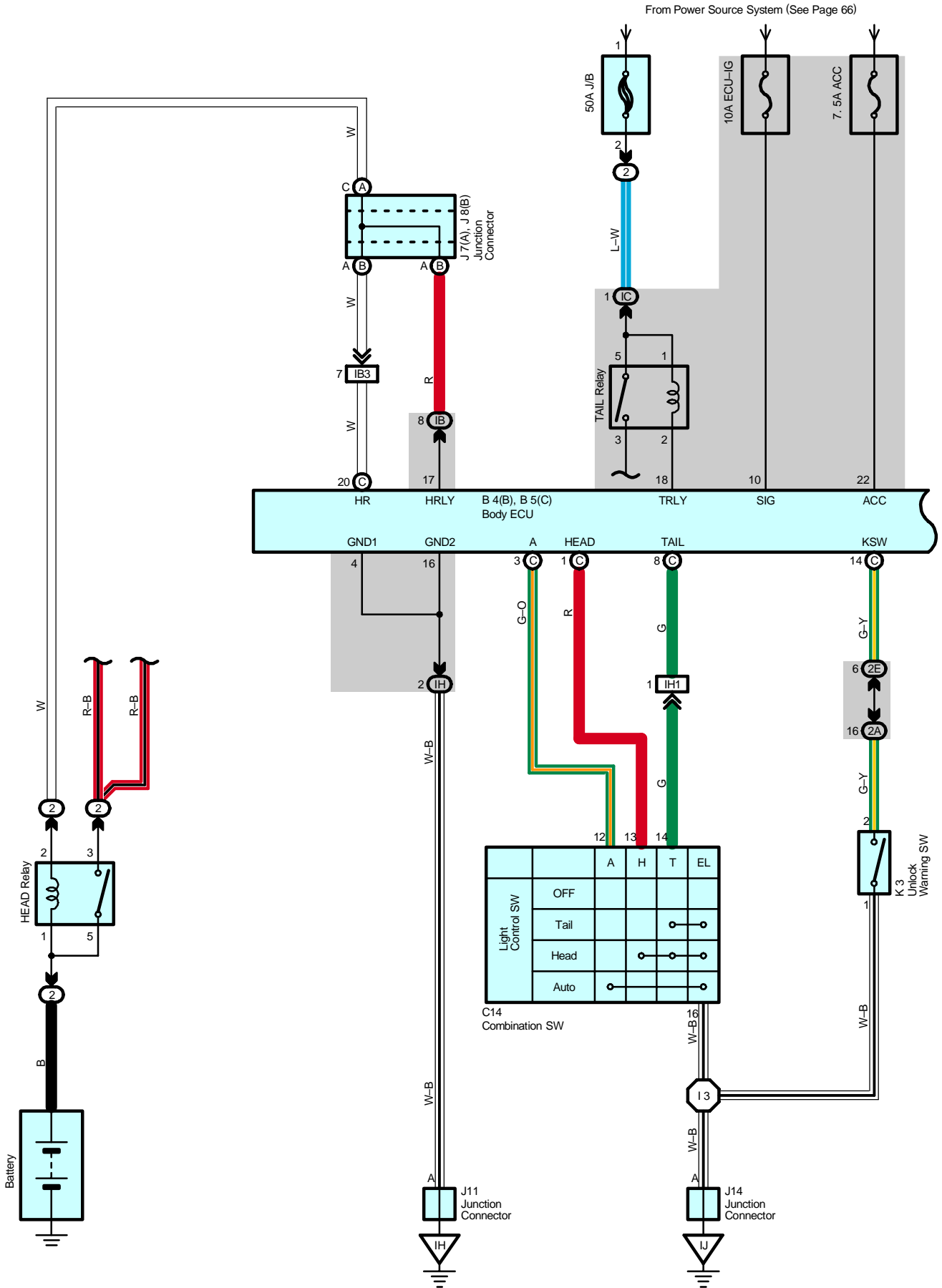
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

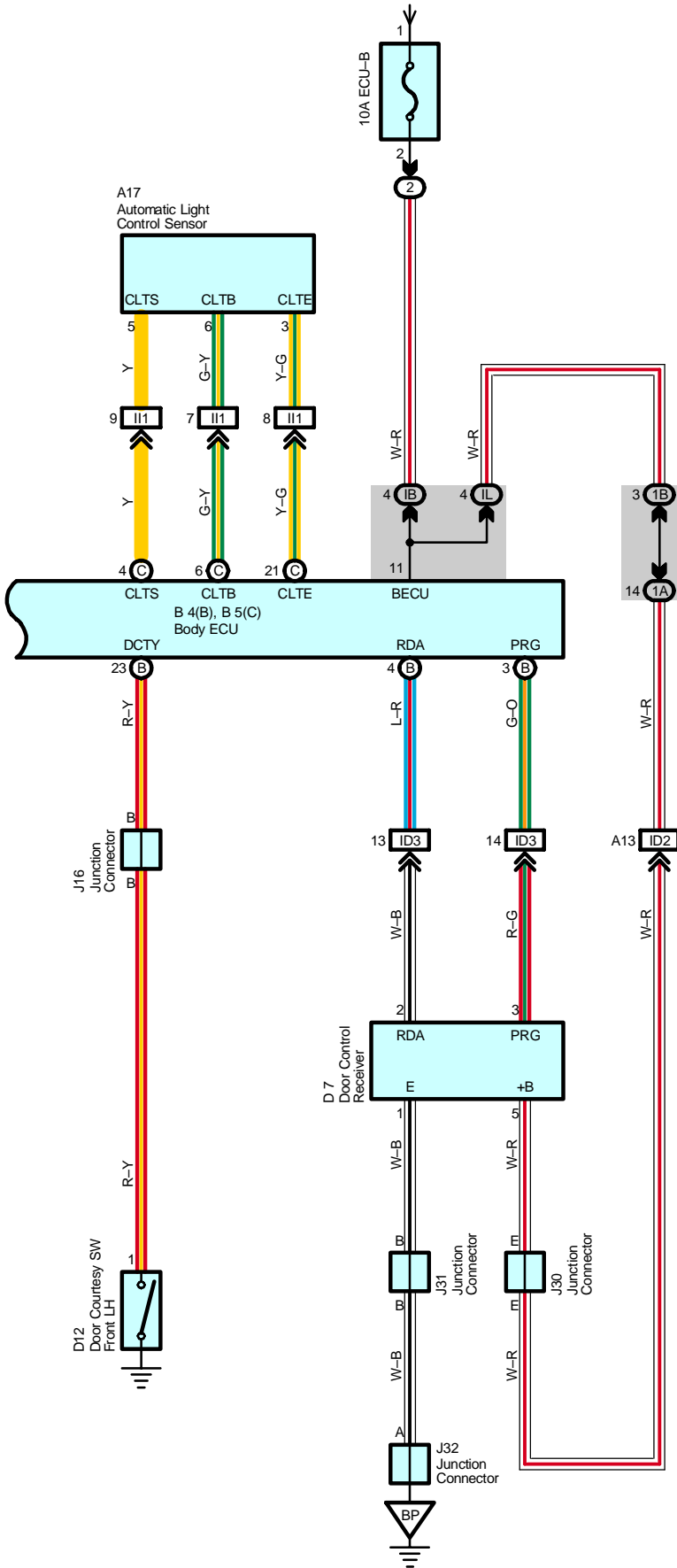
 : **Ground Points**

Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
IJ	50	Near the Right Side of Steering Column

Automatic Light Control



From Power Source System (See Page 66)



Automatic Light Control

System Outline

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

Service Hints

TAIL Relay

5-3 : Closed with the light control SW at HEAD or TAIL position

HEAD Relay

5-3 : Closed with the light control SW at HEAD position or dimmer SW at FLASH position
Closed with the engine running and parking brake released (Parking brake SW off)

Body ECU

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

4, 16-Ground : Always continuity

11-Ground : Always approx. 12 volts

D12 Door Courtesy SW Front LH

1-Ground : Closed with the driver door open

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A17	38	D12	42	J16	40
B4	B 38	J7	A 40	J30	43
B5	C 38	J8	B 40	J31	43
C14	38	J11	40	J32	43
D7	42	J14	40	K3	40

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)

▽ : Ground Points

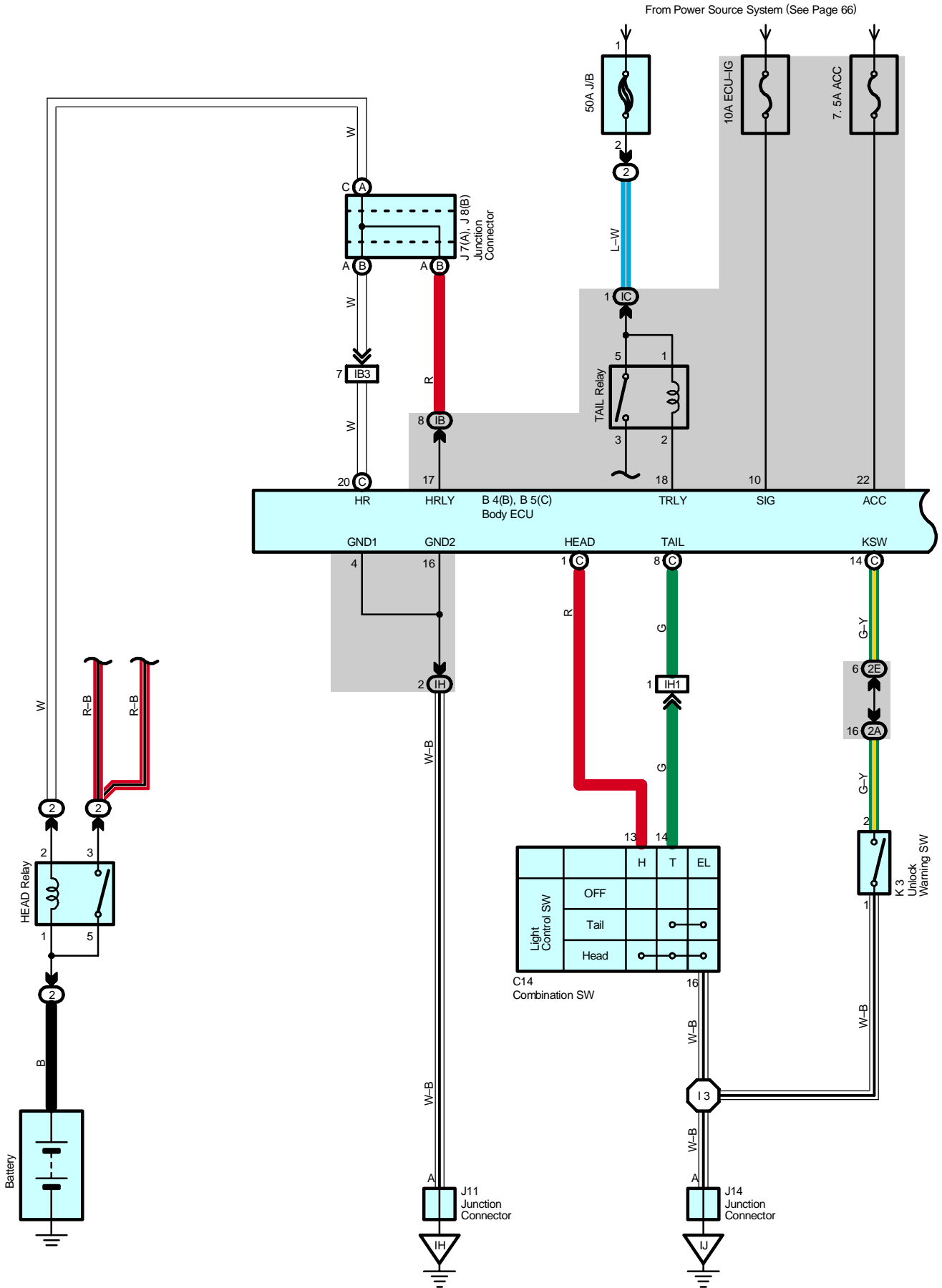
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner



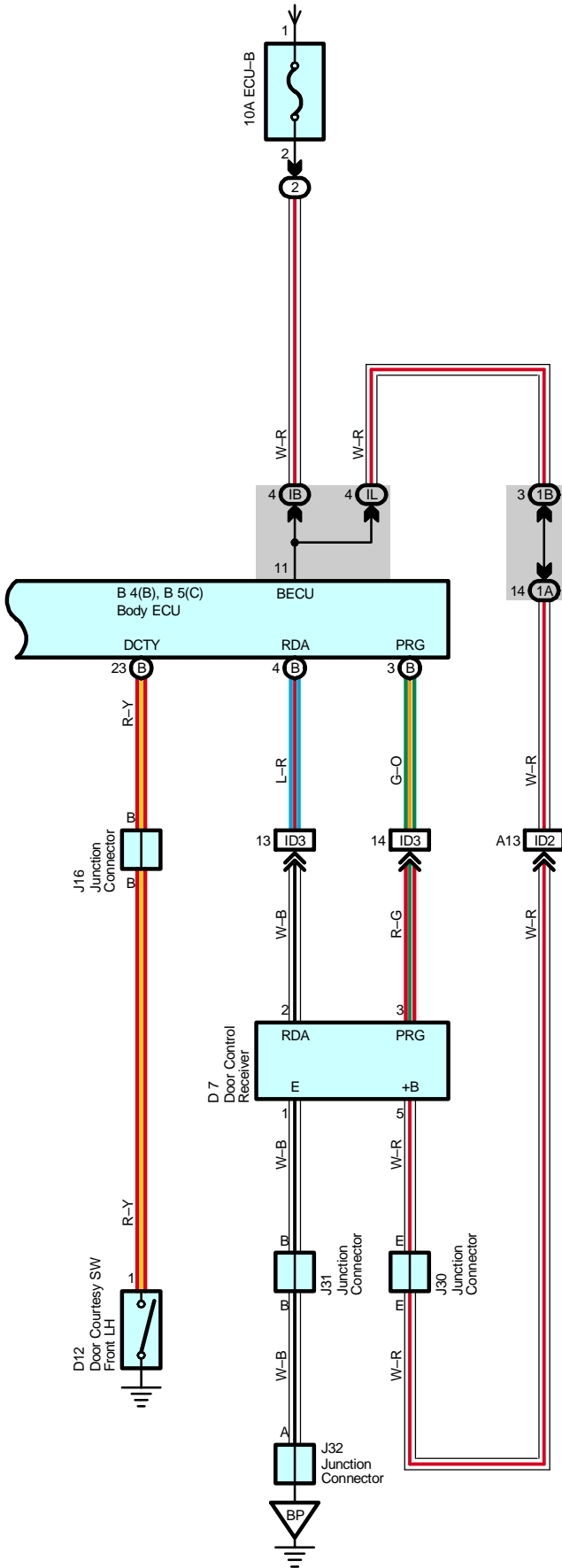
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	52	Instrument Panel Wire			

Light Auto Turn Off System



From Power Source System (See Page 66)



Light Auto Turn Off System

System Outline

With light on and ignition SW turned off, when the driver's door is opened, the body ECU operates and the current is cut off which flows from TERMINAL 18 of the body ECU to TERMINAL (C) 8 in taillight circuit and from TERMINAL 17 to TERMINAL (C) 1 in headlight circuit.
As a result, all lights are turned off automatically.

Service Hints

TAIL Relay

5-3 : Closed with the light control SW at HEAD or TAIL position

HEAD Relay

5-3 : Closed with the light control SW at HEAD position or dimmer SW at FLASH position
Closed with the engine running and parking brake released (Parking brake SW off)

Body ECU

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

D12 Door Courtesy SW Front LH

1-Ground : Closed with the driver door open

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B4	B 38	J7	A 40	J30	43
B5	C 38	J8	B 40	J31	43
C14	38	J11	40	J32	43
D7	42	J14	40	K3	40
D12	42	J16	40		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)

▽ : Ground Points

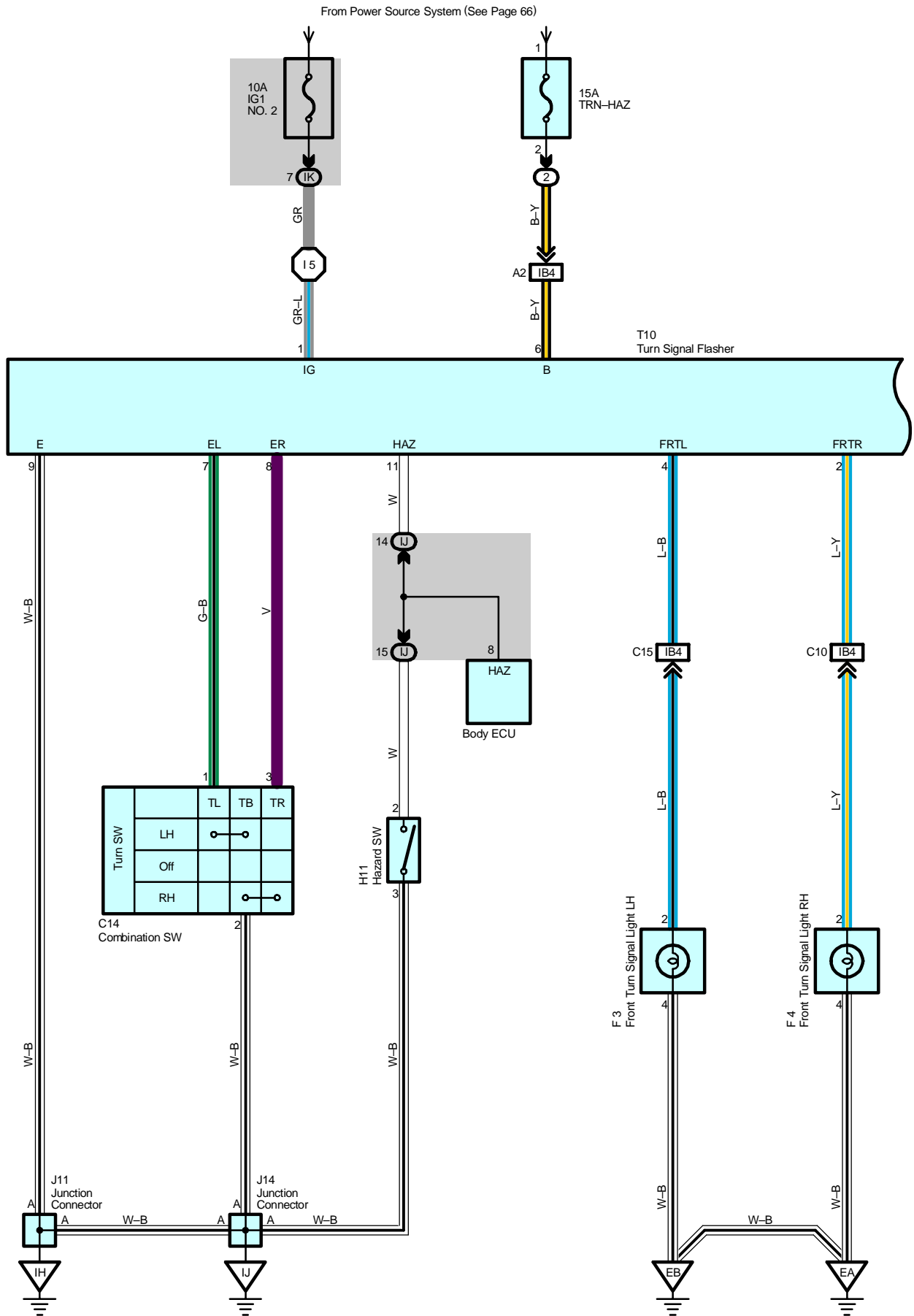
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner

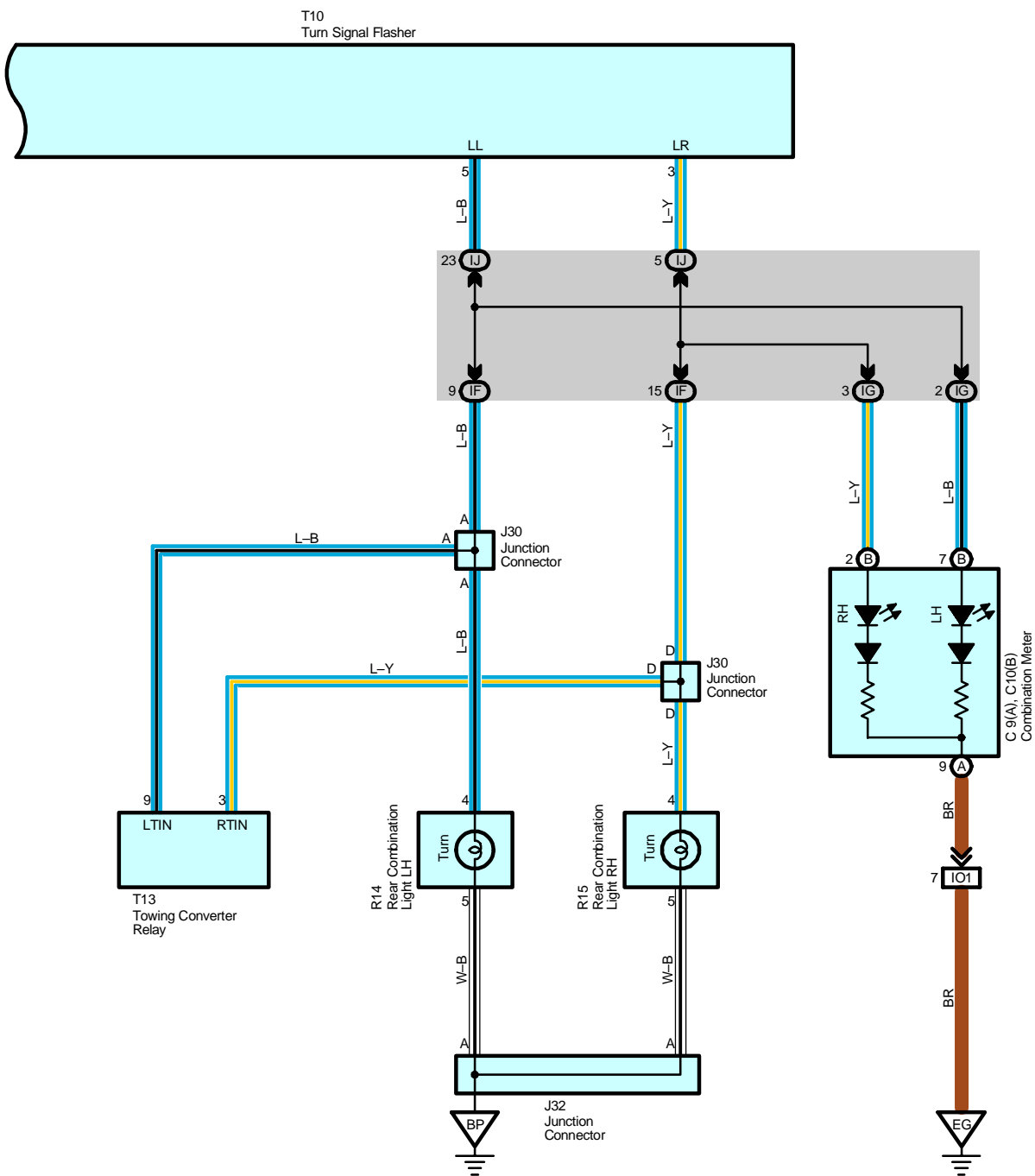


: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	52	Instrument Panel Wire			

Turn Signal and Hazard Warning Light





Turn Signal and Hazard Warning Light

Service Hints

T10 Turn Signal Flasher Relay

1-Ground : Approx. 12 volts with the ignition SW at ON position

9-Ground : Always continuity

6-Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C9	A	38	H11	39	R14	44
C10	B	38	J11	40	R15	44
C14	38	J14	40	T10	41	
F3	36	J30	43	T13	45	
F4	36	J32	43			

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)

▽ : Ground Points

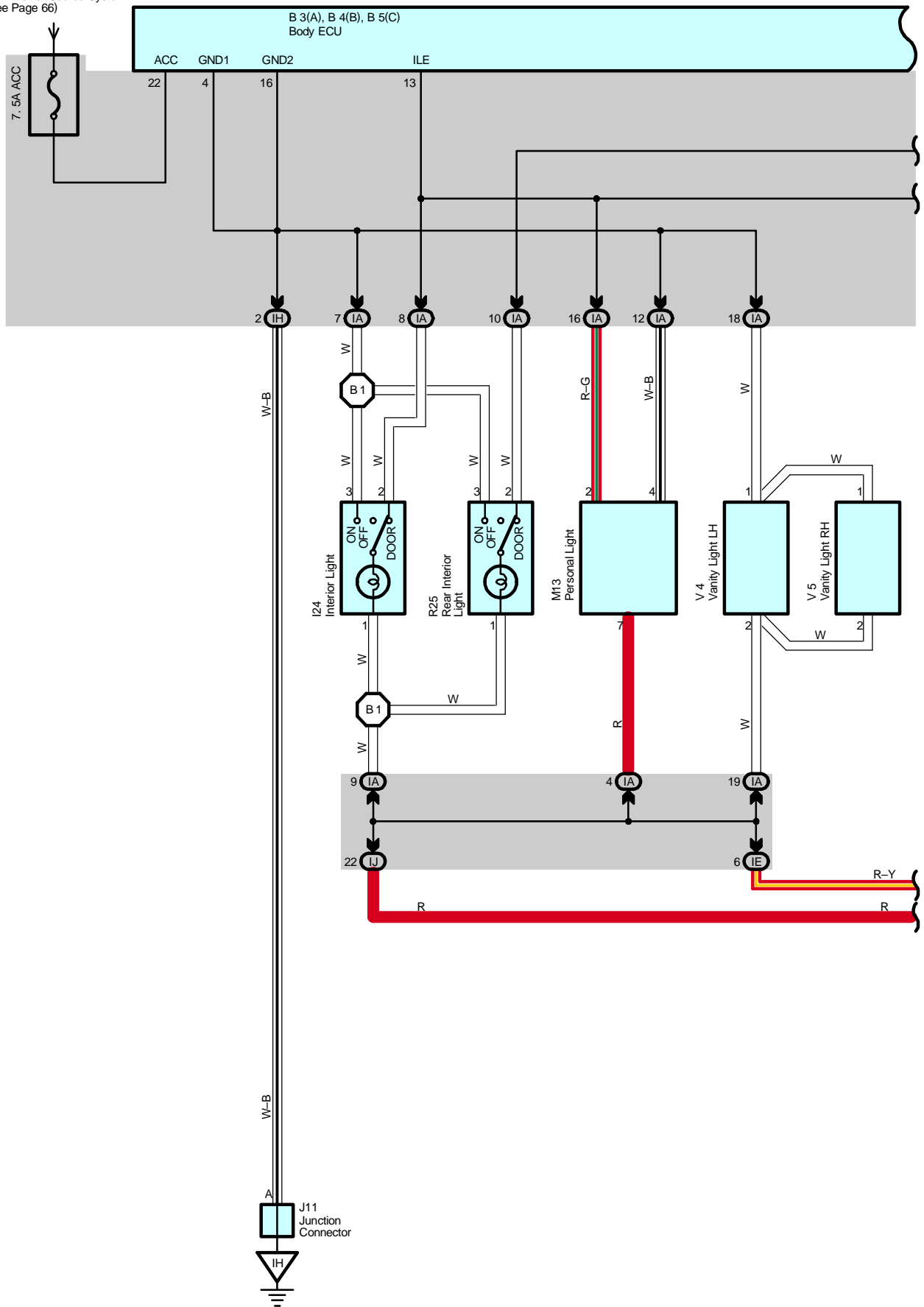
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner

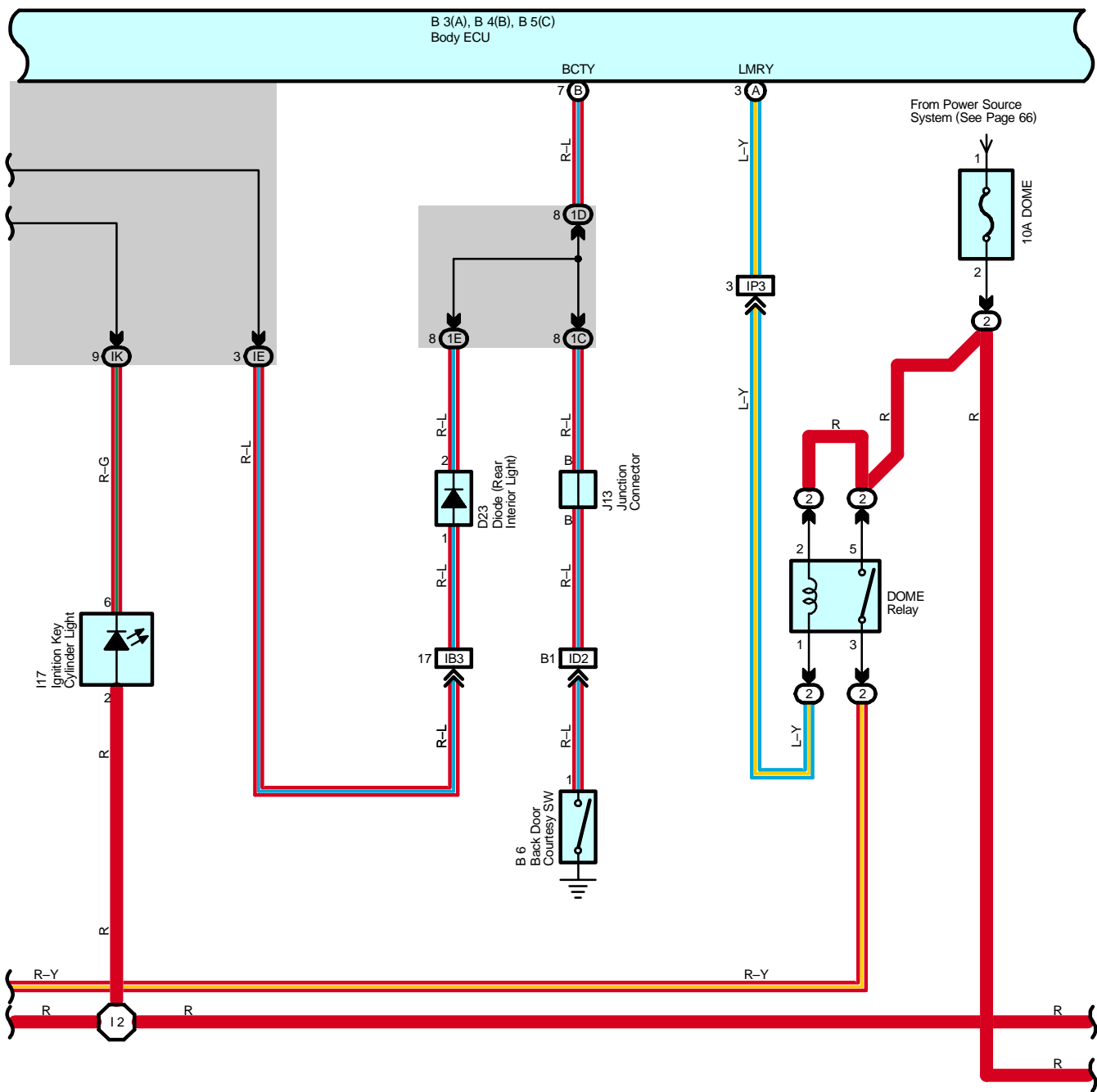
○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire			

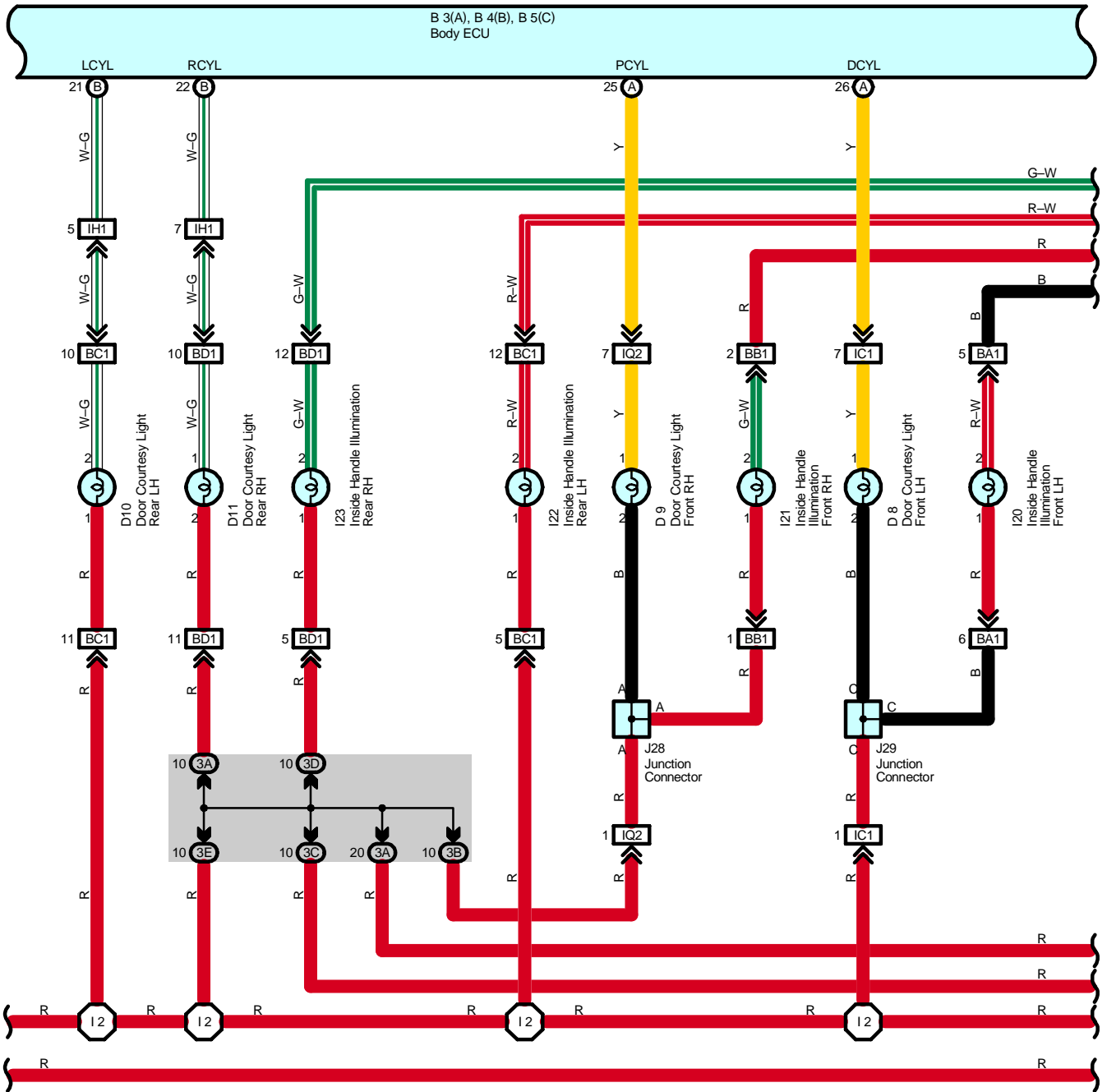
Interior Light

From Power Source System
(See Page 66)

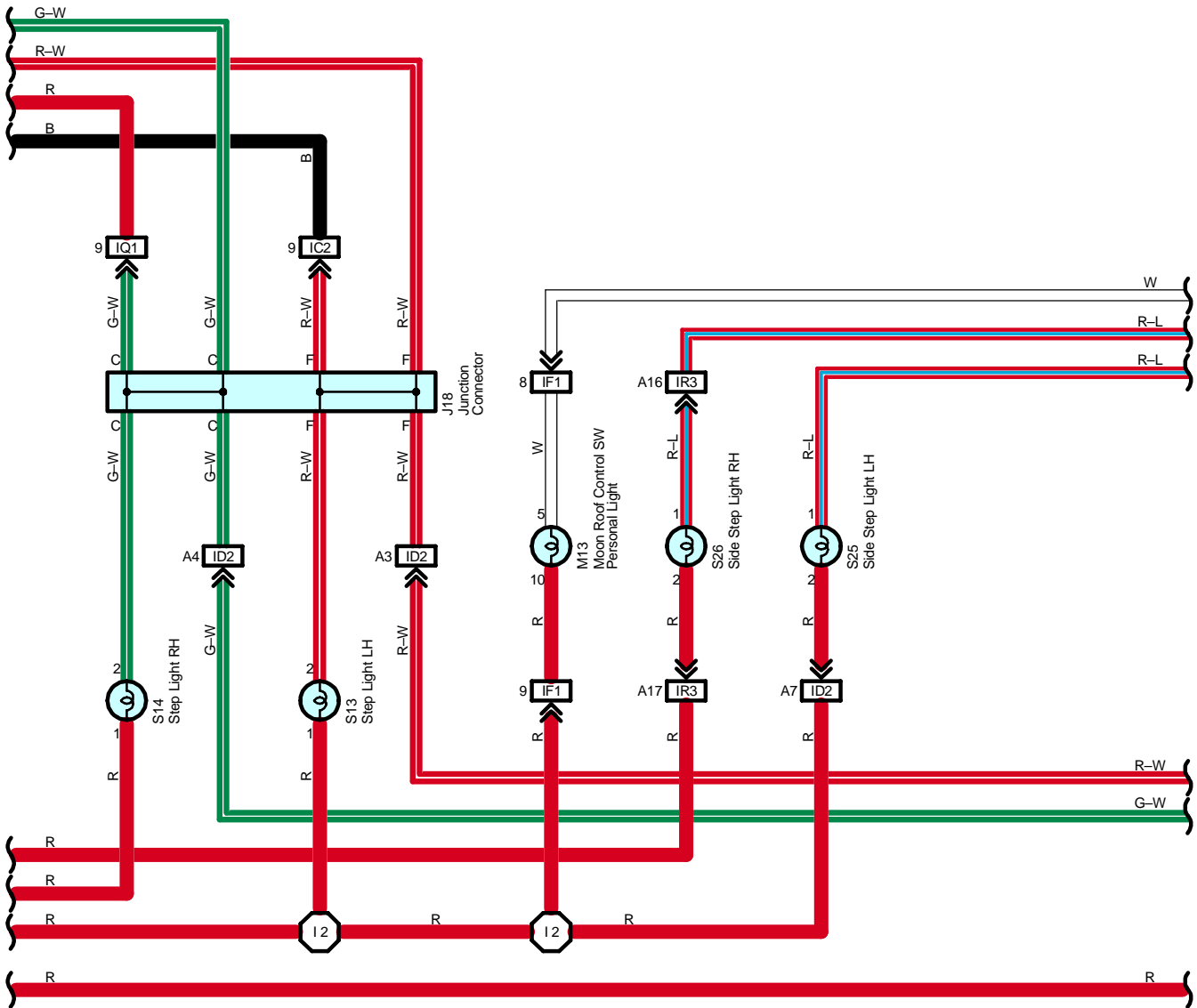




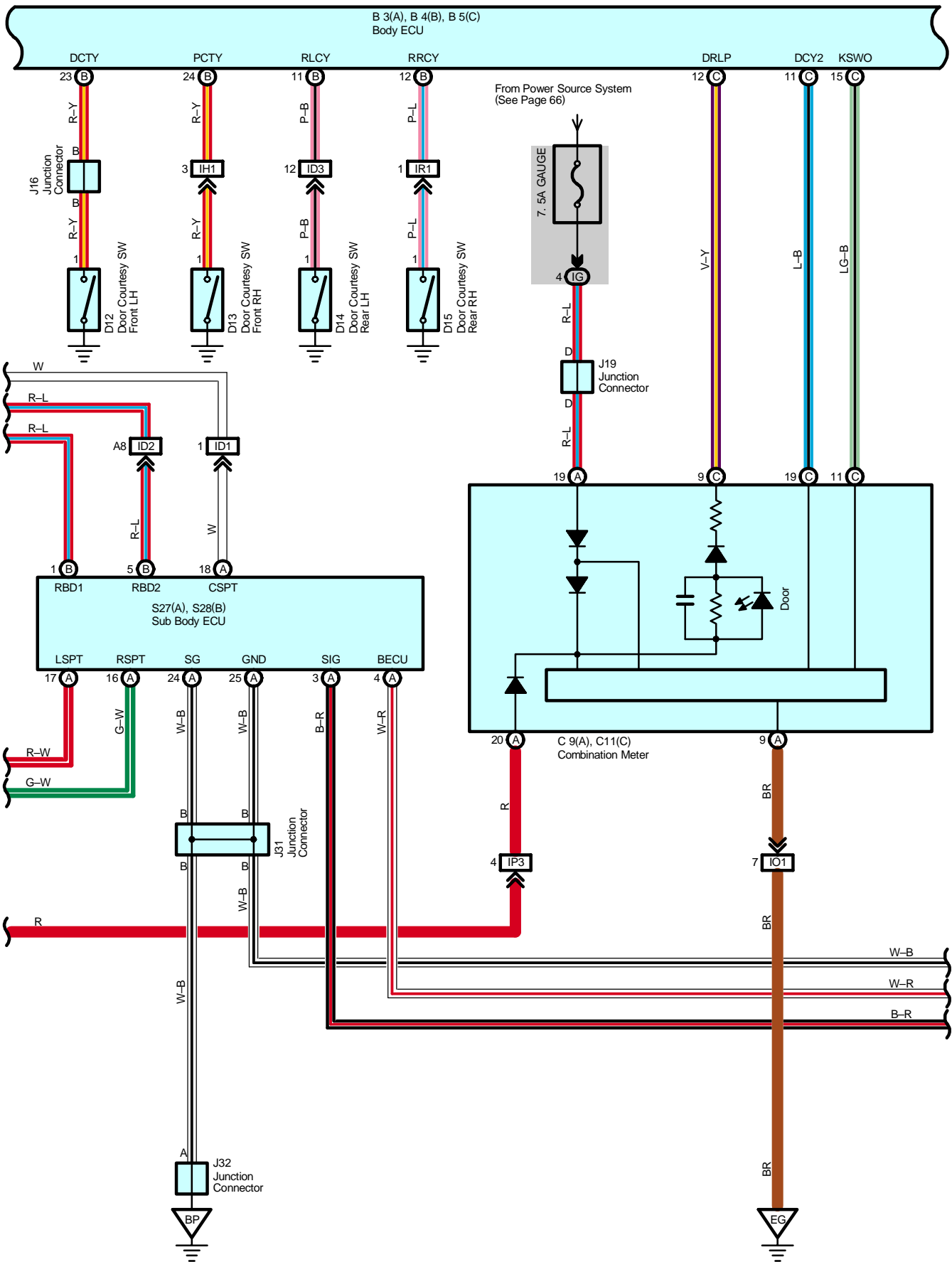
Interior Light

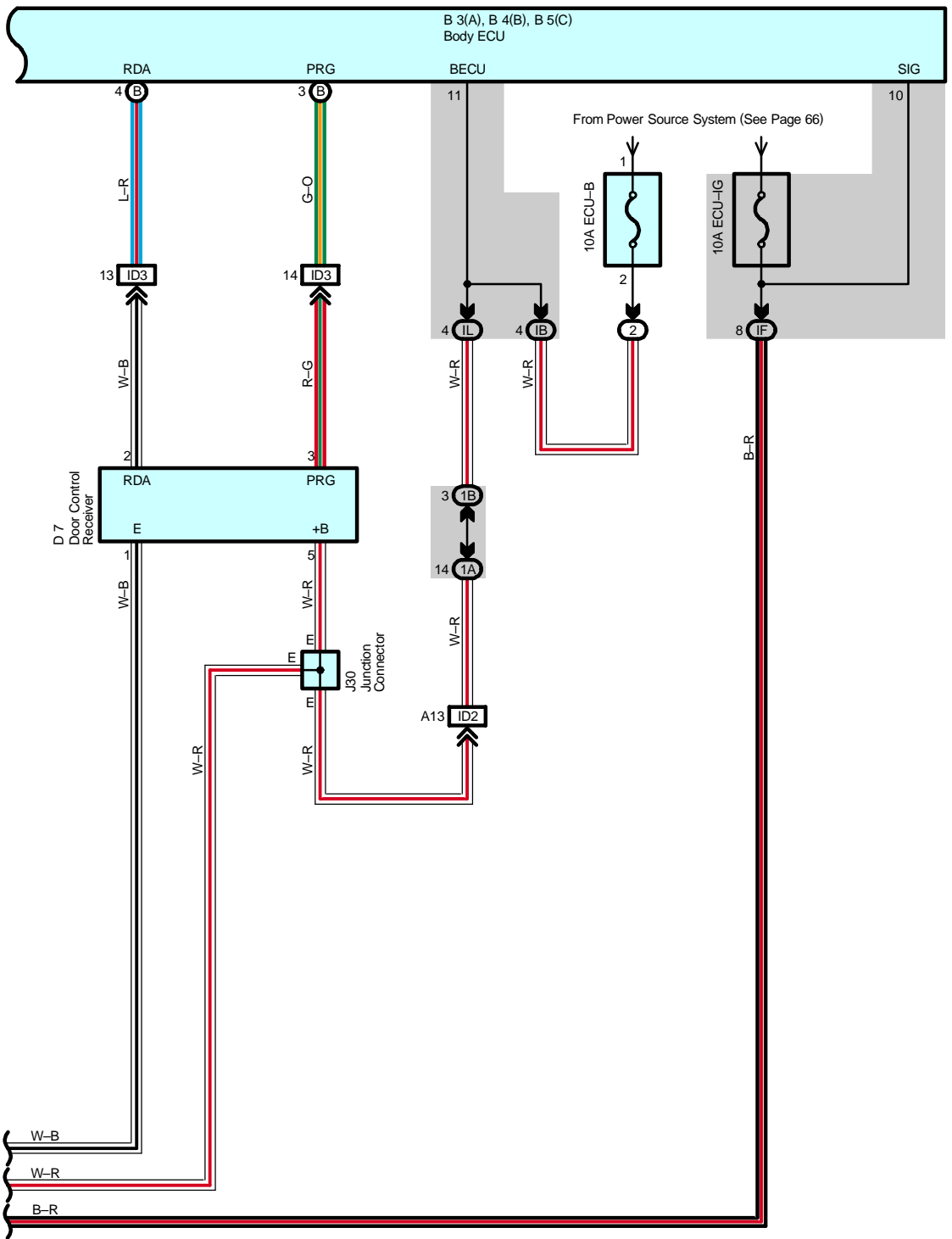


B 3(A), B 4(B), B 5(C)
Body ECU



Interior Light





Interior Light

System Outline

- * The interior light system is controlled by the body ECU and sub-body ECU.
- * This system has following features.

Normal Operation

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

Turn Off Function

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

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

Immediate Turn Off Function at Door Lock

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

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

Illuminated Entry System

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

Service Hints

Body ECU

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B3	A 38	D15	42	J29	43
B4	B 38	D23	39	J30	43
B5	C 38	I17	39	J31	43
B6	42	I20	43	J32	43
C9	A 38	I21	43	M13	44
C11	C 38	I22	43	R25	44
D7	42	I23	43	S13	41
D8	42	I24	43	S14	41
D9	42	J11	40	S25	45
D10	42	J13	40	S26	45
D11	42	J16	40	S27	A 45
D12	42	J18	40	S28	B 45
D13	42	J19	40	V4	45
D14	42	J28	43	V5	45

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IF		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
1E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3C		
3D		
3E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
ID3		
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)
BB1	58	Front Door RH Wire and Front Door RH Sub Wire (Inside of Front Door RH)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

 : **Ground Points**

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
BP	58	Left Quarter Panel Inner

Interior Light

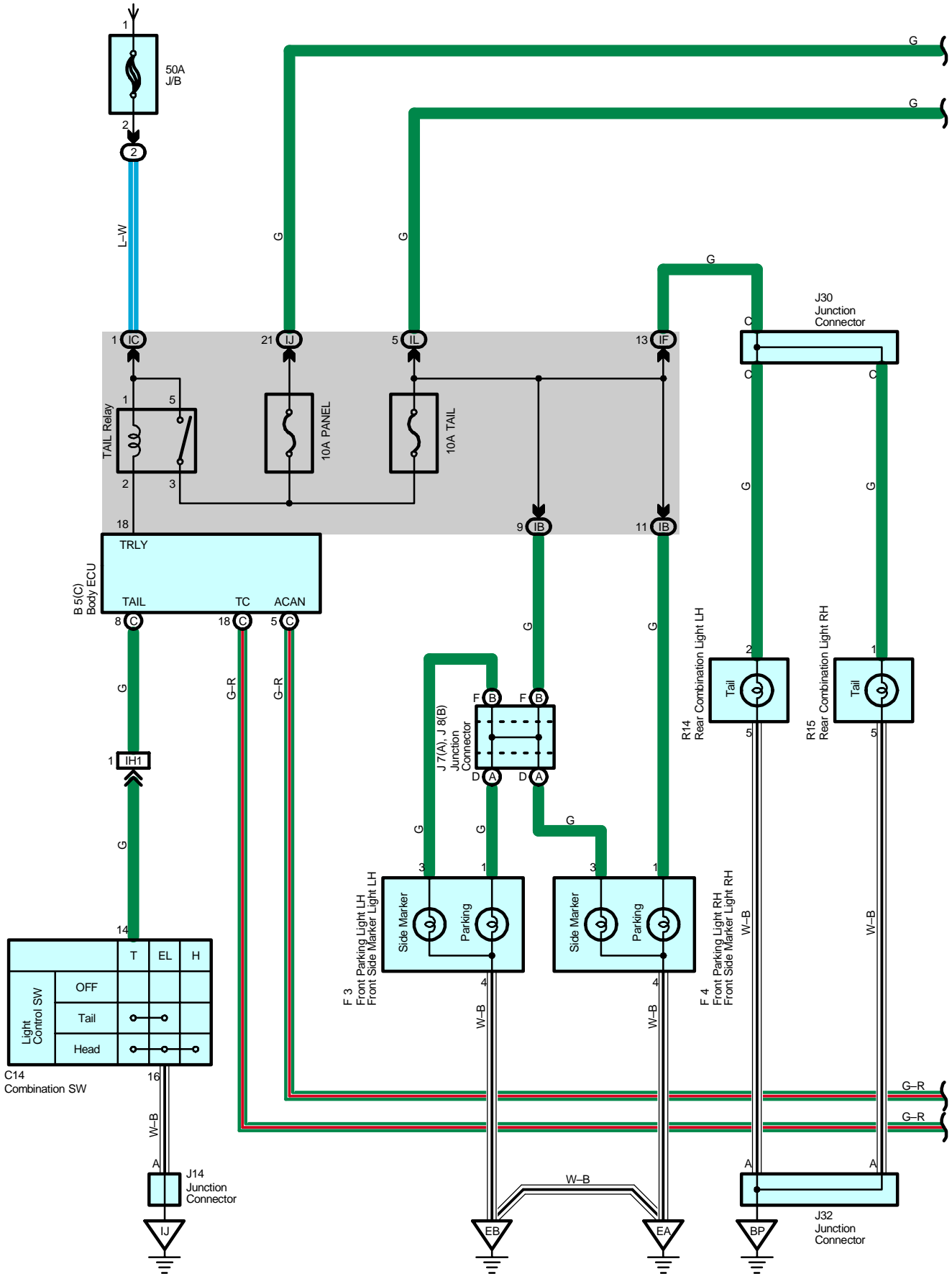


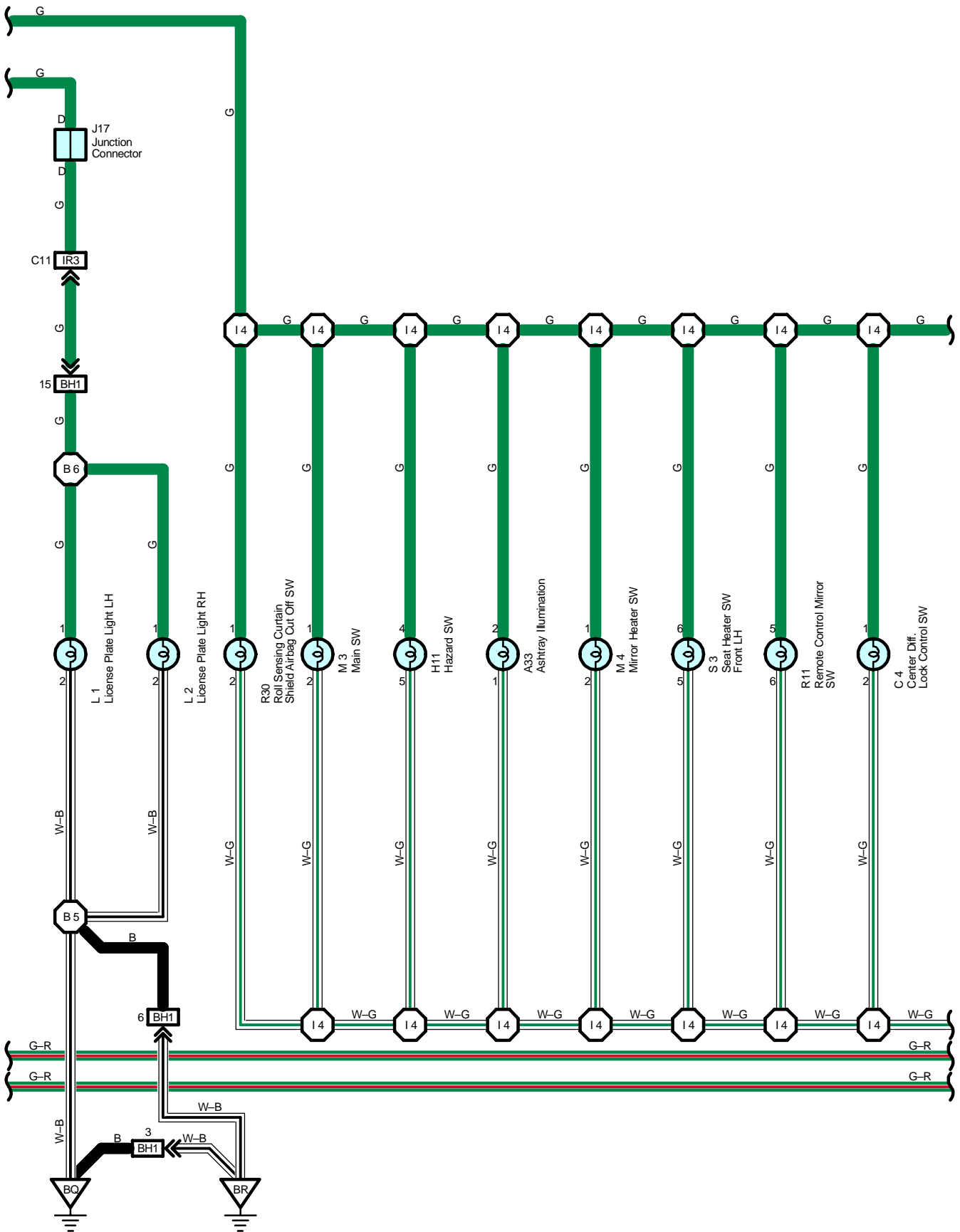
: Splice Points

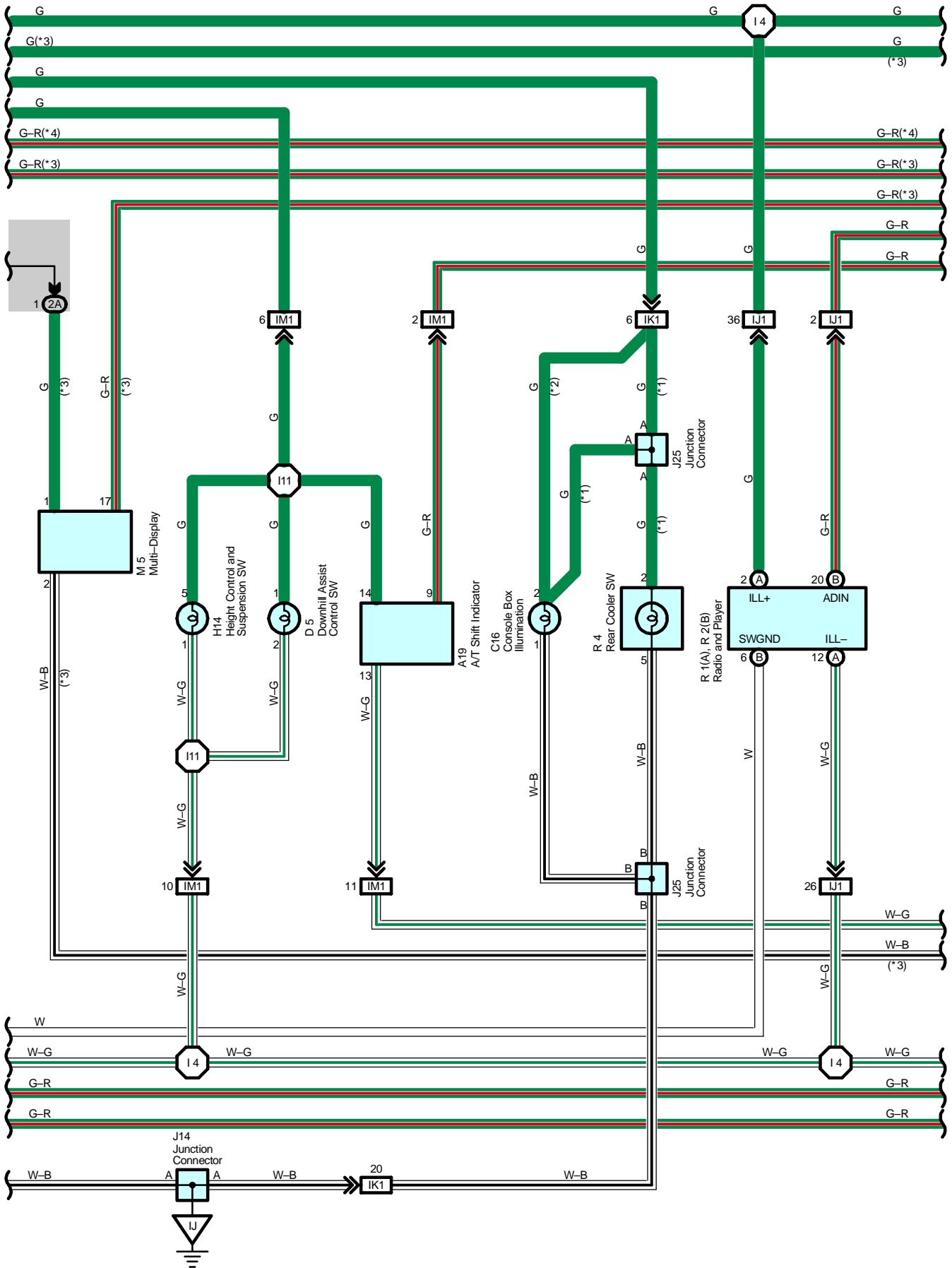
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	52	Instrument Panel Wire	B1	60	Roof Wire

Taillight and Illumination

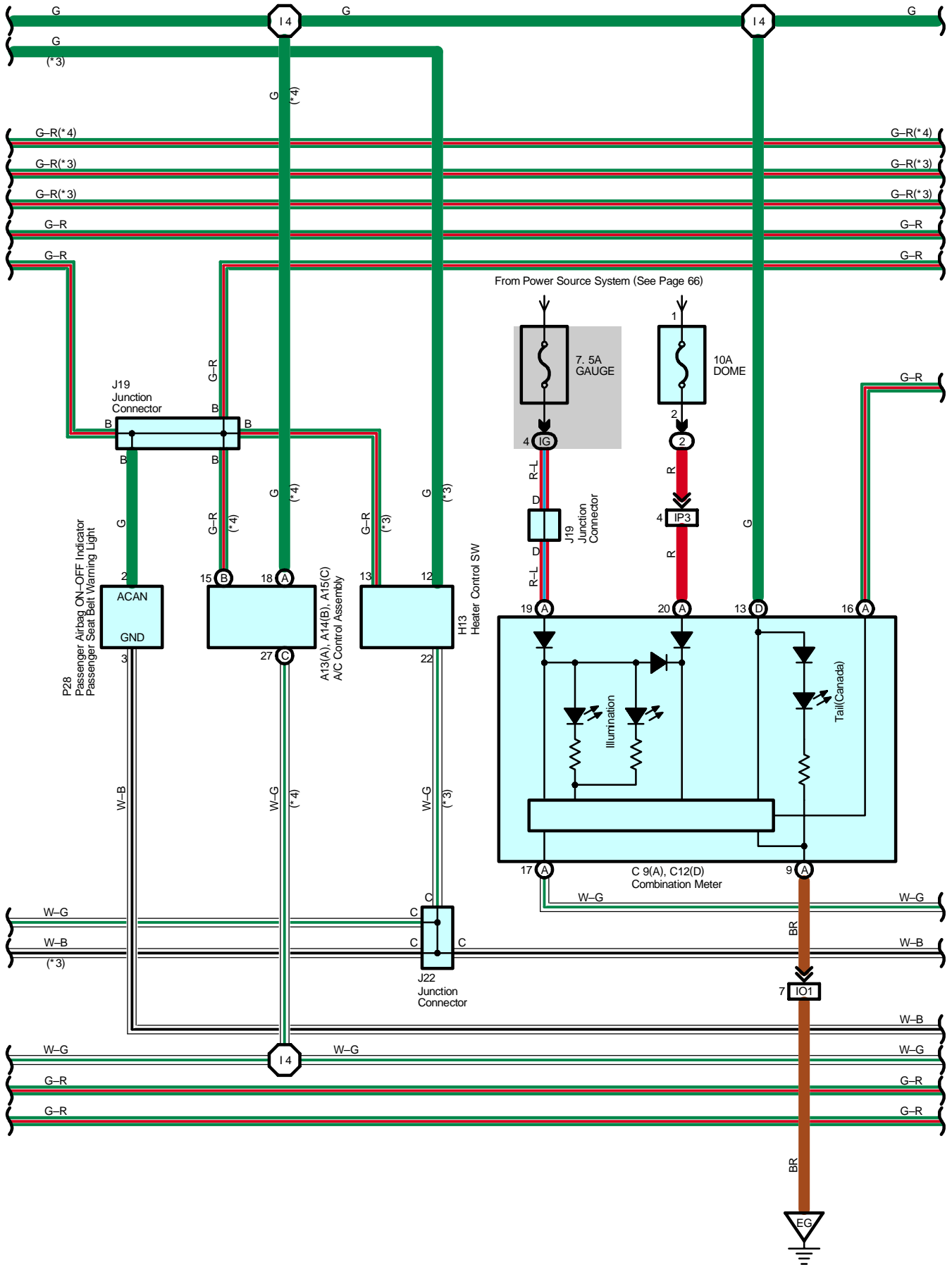
From Power Source System (See Page 66)







Taillight and Illumination



Taillight and Illumination

Service Hints

C14 Combination SW

14-16-Ground : Continuity with the light control SW at TAIL or HEAD position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page			
A13	A	38	F3	36	J32	43		
A14	B	38	F4	36	L1	43		
A15	C	38	G4	39	L2	43		
A19		38	G5	39	M3	40		
A22		38	H11	39	M4	40		
A33		38	H13	39	M5	40		
B5	C	38	H14	39	P28	40		
C4		38	J7	A	40	R1	A	41
C8		38	J8	B	40	R2	B	41
C9	A	38	J11		40	R4		41
C12	D	38	J14		40	R11		41
C13		38	J17		40	R12		41
C14		38	J19		40	R14		44
C16		38	J22		40	R15		44
D5		39	J23		40	R30		41
D19		42	J25		40	S3		41
E4		39	J28		43	S4		41
E8		39	J30		43	S27		45

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3C		
3D		
3E		

 : Connector Joining Wire Harness and Wire Harness

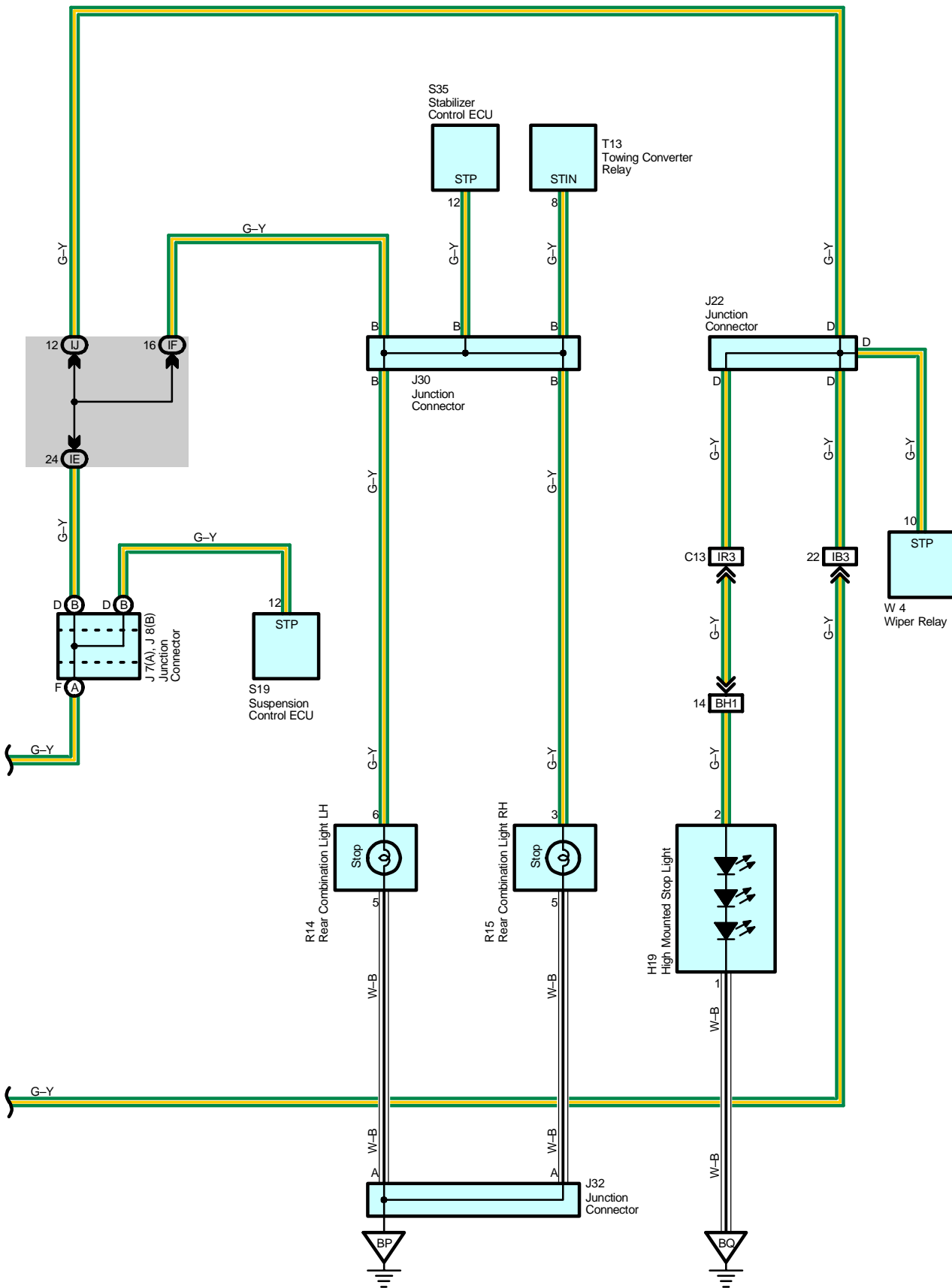
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

 : Ground Points

Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center
BR	58	Right Quarter Panel Inner

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	52	Instrument Panel Wire	I11	52	Switch Wire
I4			B5	60	Back Door No.1 Wire
I5					
I8					



Stop Light

Service Hints

S17 Stop Light SW

2-1 : Closed with the brake pedal depressed

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E9	39	J22	40	S19	41
H19	43	J30	43	S35	45
J1	37	J32	43	S37	37
J7	A 40	R14	44	T8	41
J8	B 40	R15	44	T13	45
J9	40	S5	41	W4	41
J20	40	S17	41		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

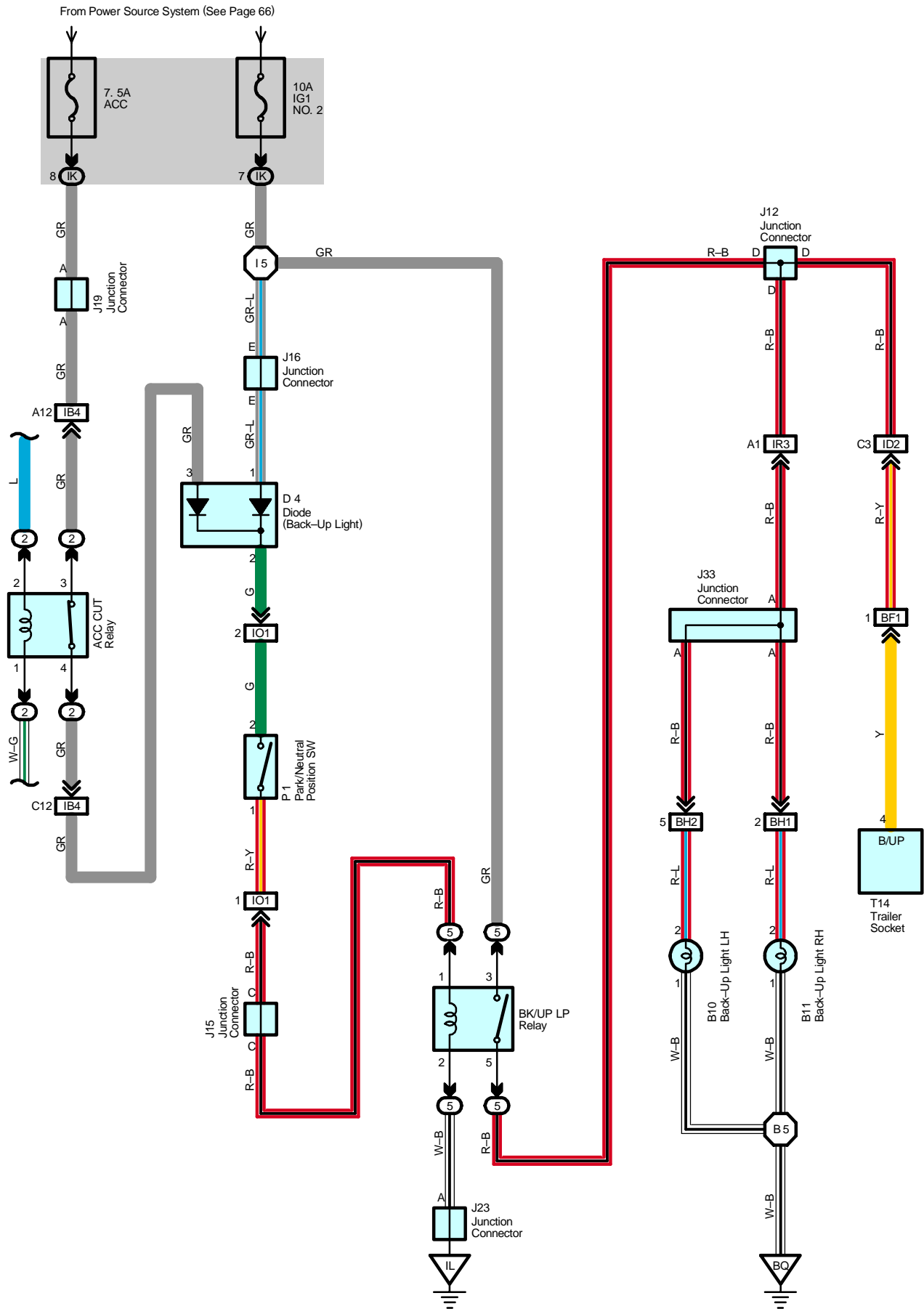
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

▽ : Ground Points

Code	See Page	Ground Points Location
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

Back-Up Light



Service Hints

P1 Park/Neutral Position SW

1-2 : Continuity with the shift lever in R position

: Parts Location

Code	See Page	Code	See Page	Code	See Page
B10	42	J15	40	J33	43
B11	42	J16	40	P1	37
D4	39	J19	40	T14	45
J12	40	J23	40		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
5	24	Passenger Side R/B (Right Kick Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BF1	60	Floor No.2 Wire and Frame No.3 Wire (Left Side of Rear Floor Cross Member)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BH2		

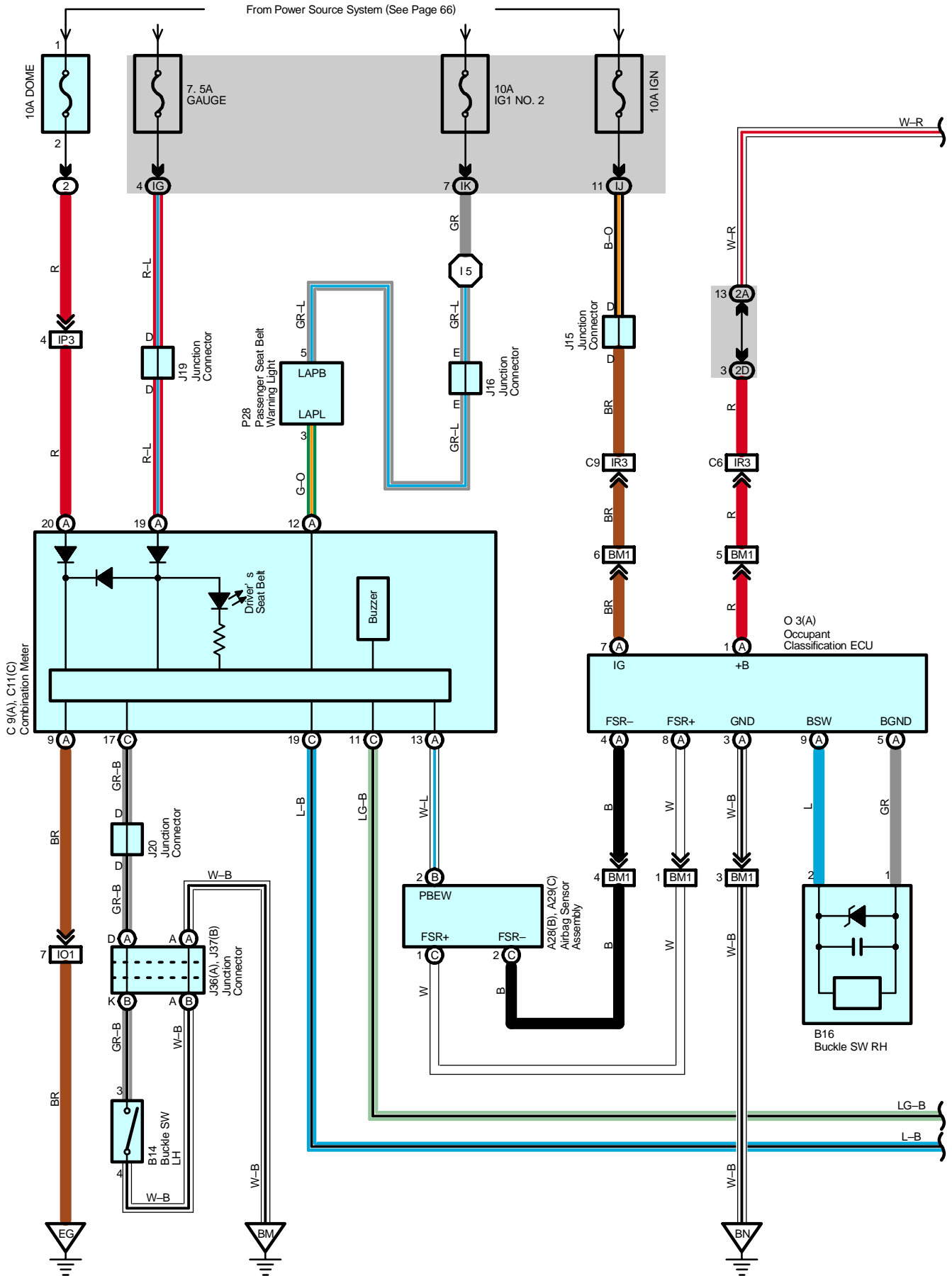
: Ground Points

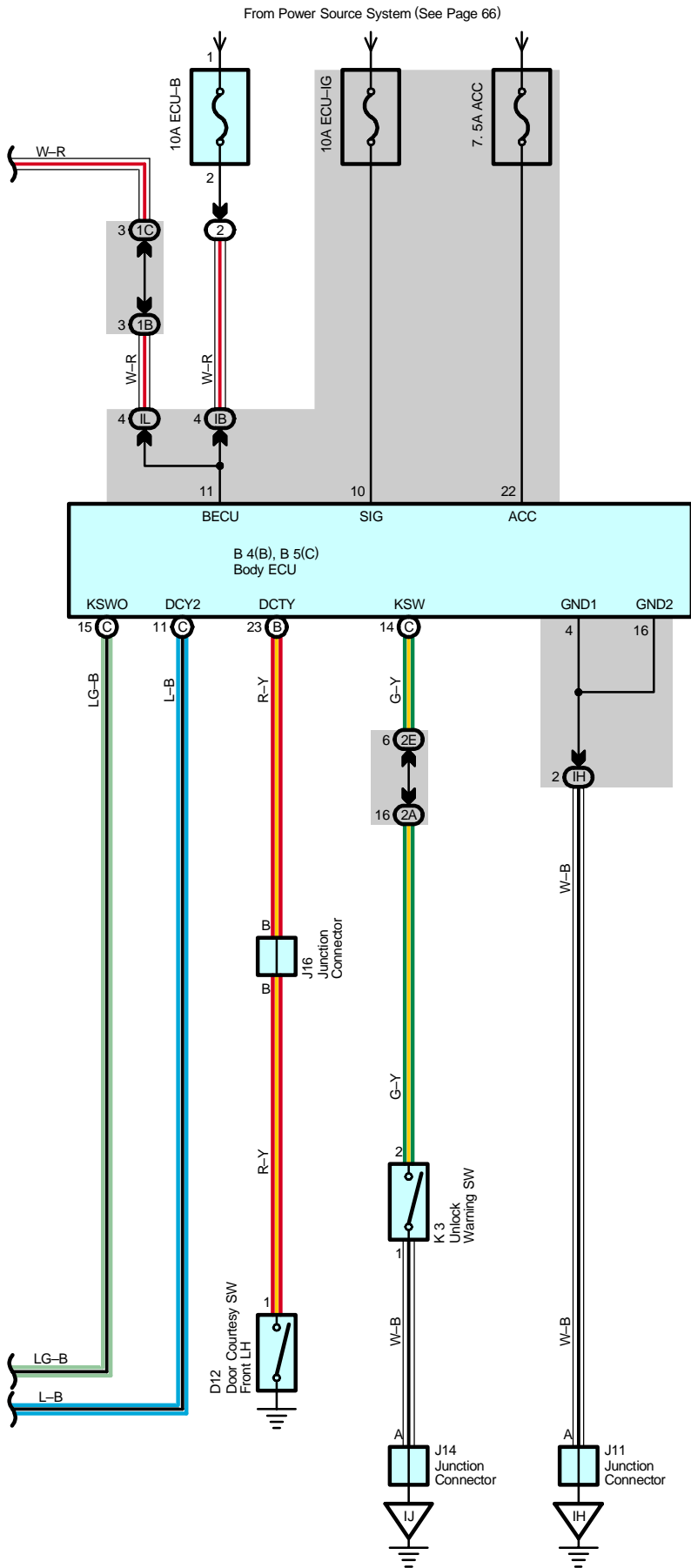
Code	See Page	Ground Points Location
IL	50	Right Kick Panel
BQ	58	Back Door Panel Center

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	B5	60	Back Door No.1 Wire

Key Reminder and Seat Belt Warning





Key Reminder and Seat Belt Warning

System Outline

1. Key Reminder System

With the ignition key inserted in the key cylinder (Unlock warning SW on), the ignition SW still off and driver's door open (Door courtesy SW on), when a signal is input to TERMINAL (B) 23 of the body ECU, the body ECU operates, current flows from TERMINAL (C) 15 of the ECU to TERMINAL (C) 11 of the combination meter to GROUND and key reminder buzzer sounds.

2. Seat Belt Warning System

When the driver has not fastened the seat belt while the ignition SW is ON, the driver seat belt warning light blinks, and a warning buzzer comes on.

Also, in the front passenger seat, a sensor recognizes passenger, and when the passenger has not fastened the seat belt, the front passenger seat belt warning light blinks.

Service Hints

Body ECU

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

10-Ground : Approx. 12 volts with the ignition SW at ON position

4, 16-Ground : Always continuity

11-Ground : Always approx. 12 volts

D12 Door Courtesy SW Front LH

1-Ground : Continuity with the driver door open

K3 Unlock Warning SW

1-2 : Continuity with the ignition key in cylinder

B14 Buckle SW LH

3-4 : Continuity with the driver's seat belt in use

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A28	B 38	C11	C 38	J20	40
A29	C 38	D12	42	J36	A 46
B4	B 38	J11	40	J37	B 46
B5	C 38	J14	40	K3	40
B14	46	J15	40	O3	A 46
B16	46	J16	40	P28	40
C9	A 38	J19	40		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IJ		
IK		
IL		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BM1	62	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

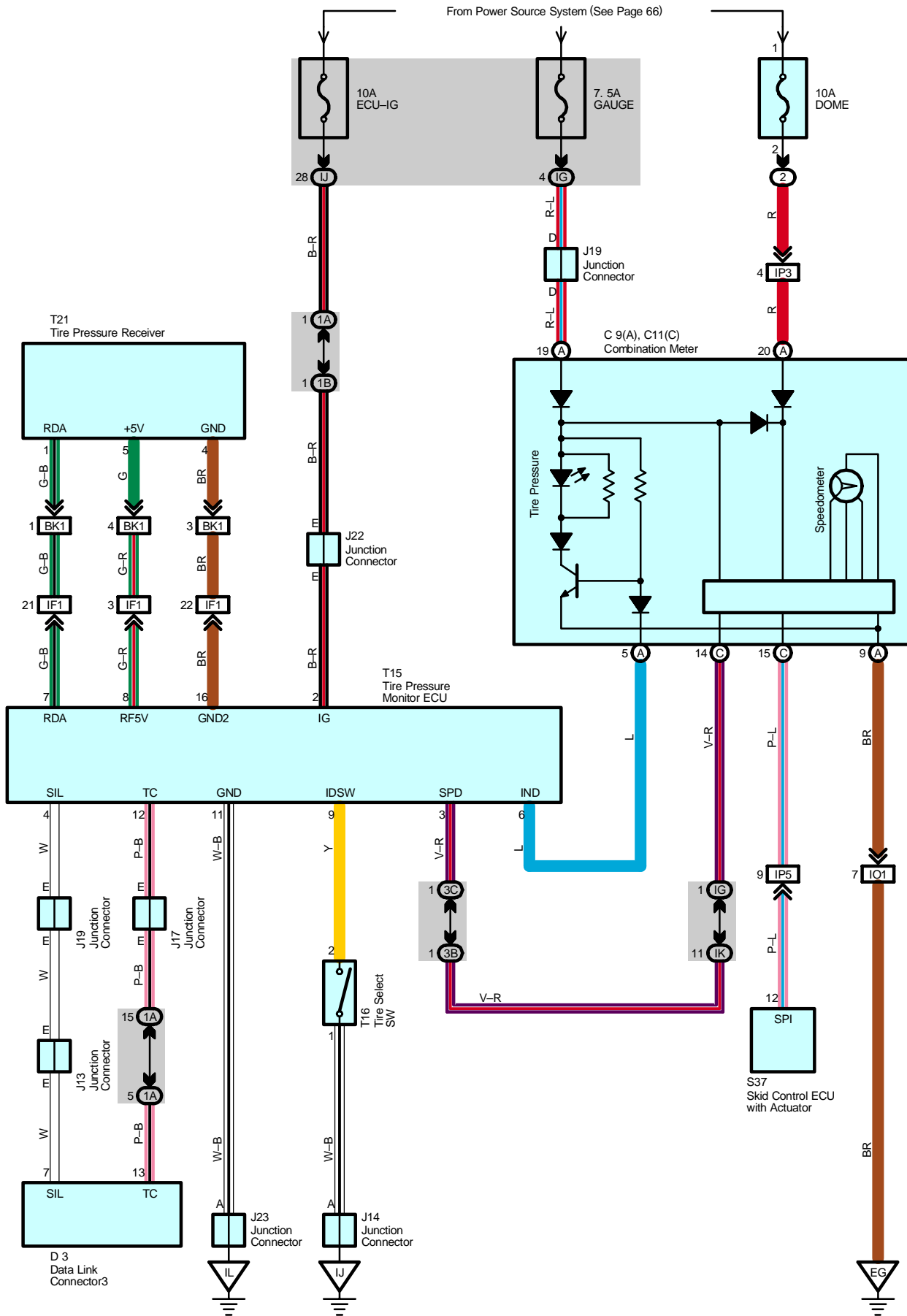
 : **Ground Points**

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BM	58	Under the Driver's Seat
BN	58	Under the Front Passenger's Seat

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire			

Tire Pressure Warning System



System Outline

The air pressure sensor installed in the tire wheel detects the tire air pressure and transmits signals to the vehicle side receiver. When the detected tire air pressure is below a specified level, the warning light in the combination meter comes on to inform the driver.

Warnings when the tire pressure is low

* When the tire air pressure is below a specified level, the warning light in the combination meter comes on.

Service Hints

T15 Tire Pressure Monitor ECU

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

11-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C9	A	38	J17	40	T15	41
C11	C	38	J19	40	T16	41
D3	39	J22	40	T21	45	
J13	40	J23	40			
J14	40	S37	37			

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3C		

□ : Connector Joining Wire Harness and Wire Harness

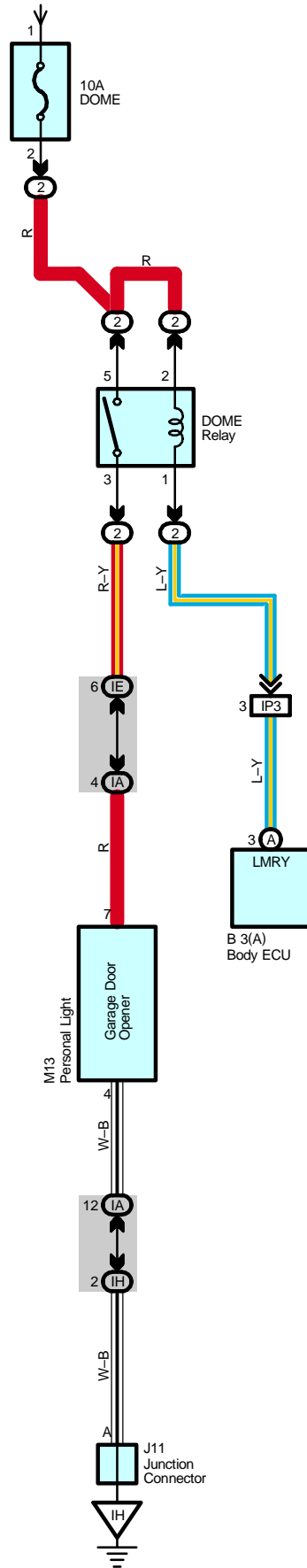
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
BK1	60	Roof Wire and Tire Pressure Monitor Wire (Front Side of Roof)

▽ : Ground Points

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

Garage Door Opener

From Power Source System (See Page 66)



Service Hints

M13 Personal Light

4-Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page	
B3	A	38	J11	40	M13	44

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

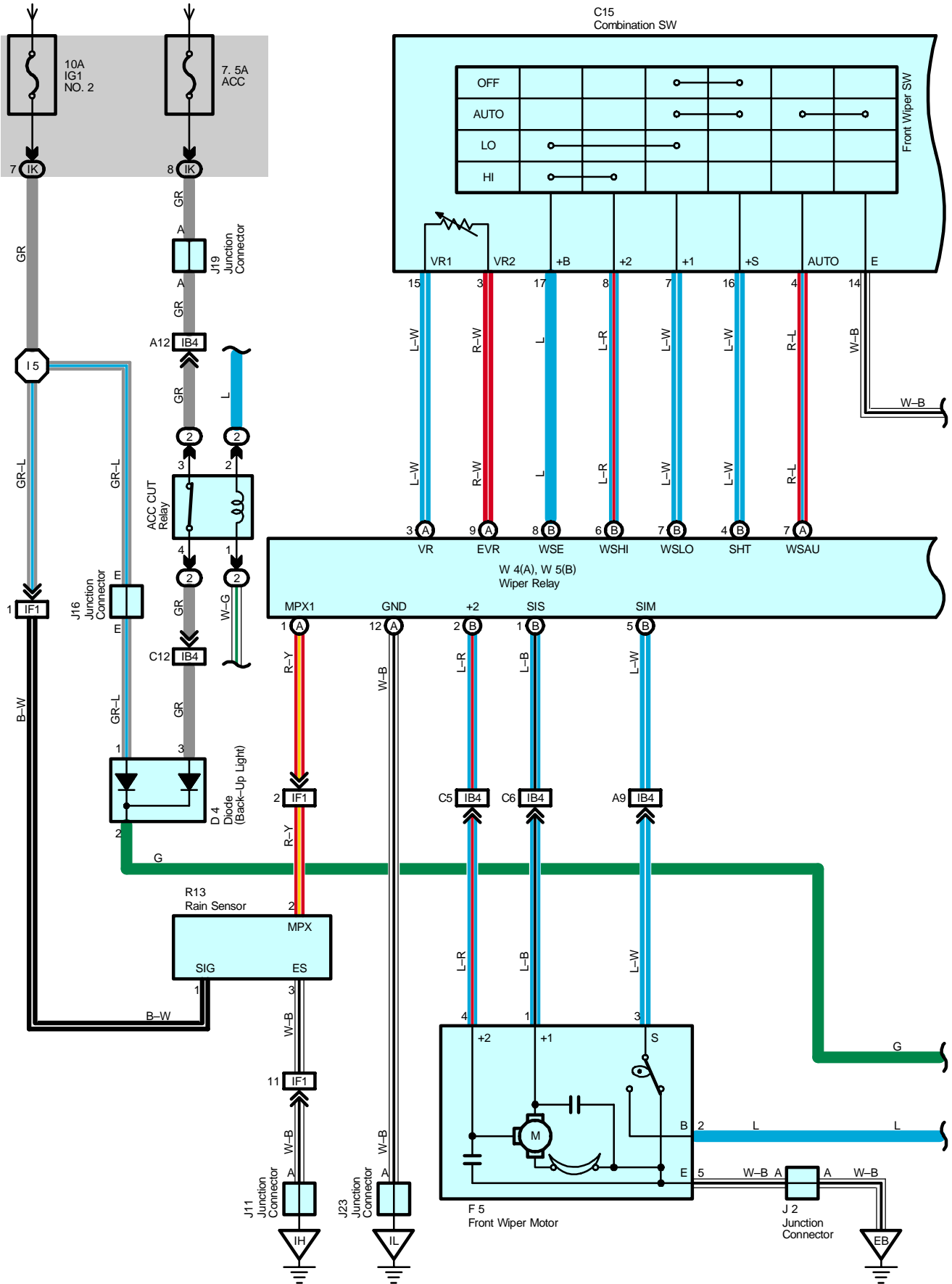
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

: Ground Points

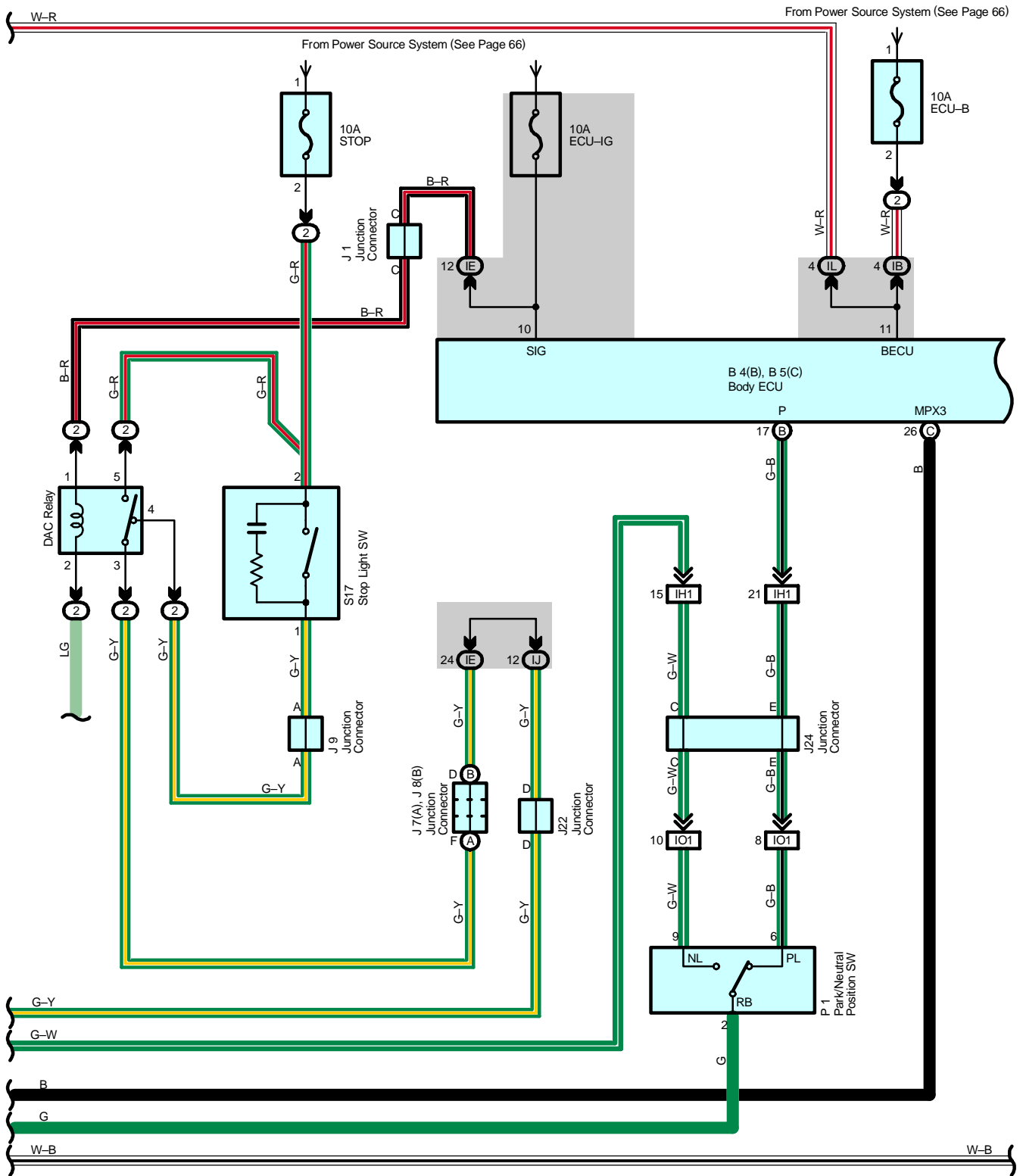
Code	See Page	Ground Points Location
IH	50	Left Kick Panel

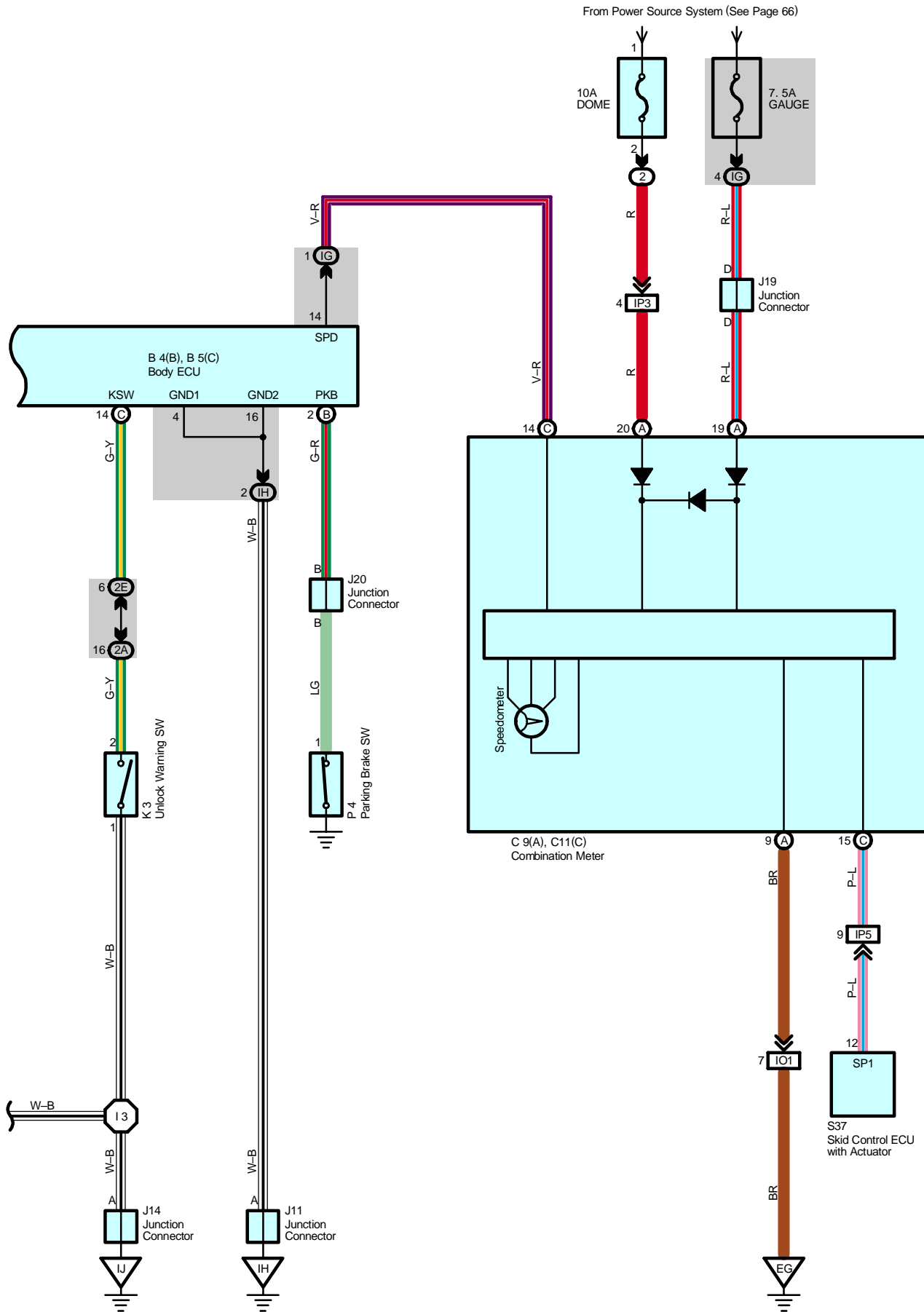
Front Wiper with Rain Sensor and Washer

From Power Source System (See Page 66)



Front Wiper with Rain Sensor and Washer





Front Wiper with Rain Sensor and Washer

System Outline

Auto Wiper Operation

When the front wiper SW is placed to AUTO position, the rain sensor detects the amount of rain of the front windshield, and a signal is output to the wiper relay. The wiper relay automatically controls the intermittent time and operates the wiper, in accordance with the signal.

Service Hints

W4 (A), W5 (B) Wiper Relay

(B)10–Ground : Approx. 12 volts with the ignition SW at ON or ST position

(A) 8–Ground : Always approx. 12 volts

(A)12–Ground : Always continuity

F5 Front Wiper Motor

2–Ground : Approx. 12 volts with the ignition SW at ON or ST position

5–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page			
B4	B	38	J7	A	40	J24	40	
B5	C	38	J8	B	40	K3	40	
C9	A	38	J9		40	P1	37	
C11	C	38	J11		40	P4	40	
C15		38	J14		40	R13	44	
D4		39	J16		40	S17	41	
F5		36	J19		40	S37	37	
J1		37	J20		40	W2	37	
J2		37	J22		40	W4	A	41
J5		37	J23		40	W5	B	41

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		

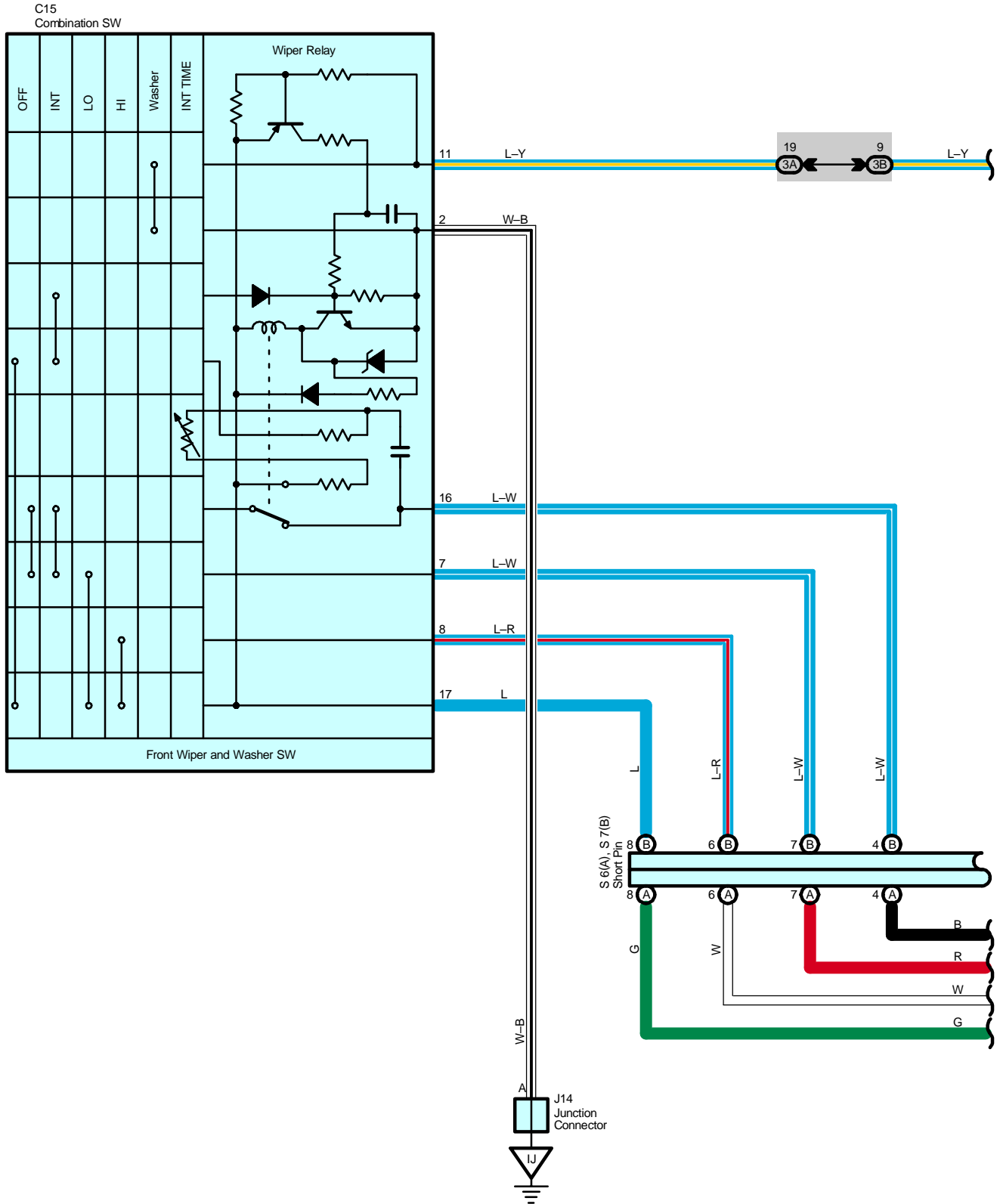
 : **Ground Points**

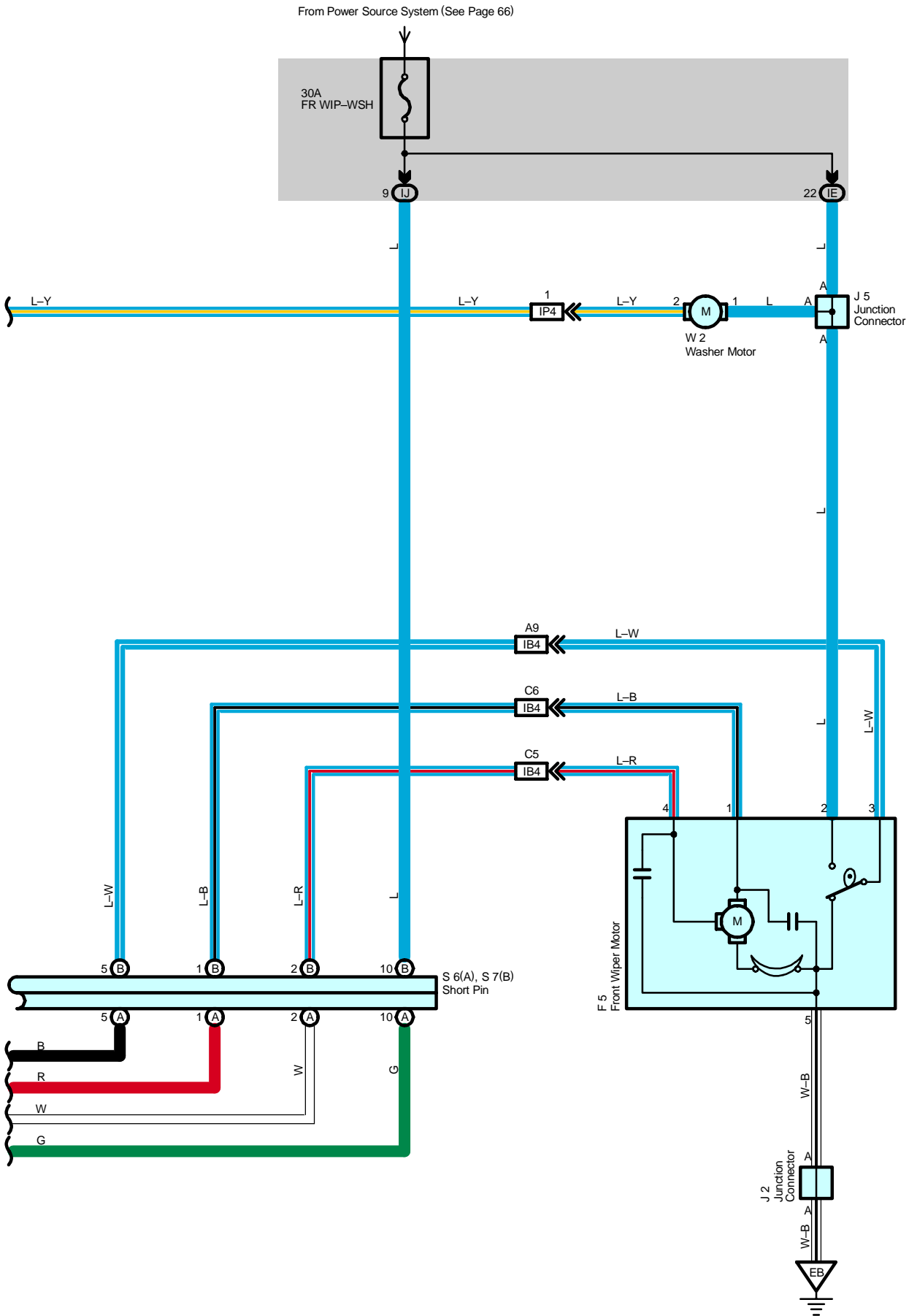
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	52	Instrument Panel Wire	I5	52	Instrument Panel Wire

Front Wiper without Rain Sensor and Washer





Front Wiper without Rain Sensor and Washer

System Outline

With the ignition SW turned on, the current flows to TERMINAL 17 of the front wiper and washer SW, TERMINAL 1 of the washer motor and TERMINAL 2 of the front wiper motor through the FR WIP–WSH fuse.

1. Low Speed Position

With the front wiper and washer SW turned to LO position, the current flows from TERMINAL 17 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 and washer SW turned to HI position, the current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 8 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 and washer SW turned to INT position, the wiper relay operates and current flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This activates the intermittent circuit and the current flows from TERMINAL 17 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. Washer Interlocking Operation

With the front wiper and washer SW pulled to washer position (Washer SW ON position), the current flows from the FR WIP–WSH fuse to TERMINAL 1 of the washer motor to TERMINAL 2 to TERMINAL 11 of the front wiper and washer SW to TERMINAL 2 to GROUND and causes the washer motor to run and the window washer to spray. Simultaneously, current flows from the FR WIP–WSH fuse to TERMINAL 17 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.

Service Hints

C15 Combination SW

- 2–Ground : Always continuity
- 17–Ground : Approx. 12 volts with the ignition SW at ON position
- 7–Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at LO position
Approx. 12 volts every approx. 1 to 10 seconds intermittently with the ignition SW on and the wiper and washer SW at INT position
- 16–Ground : Approx. 12 volts with the ignition SW on and unless the front wiper motor at STOP position
- 8–Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at HI position

F5 Front Wiper Motor

- 2–3 : Closed unless the front wiper motor at STOP position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C15	38	J5	37	S7 B	41
F5	36	J14	40	W2	37
J2	37	S6 A	41		

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

□ : Connector Joining Wire Harness and Wire Harness

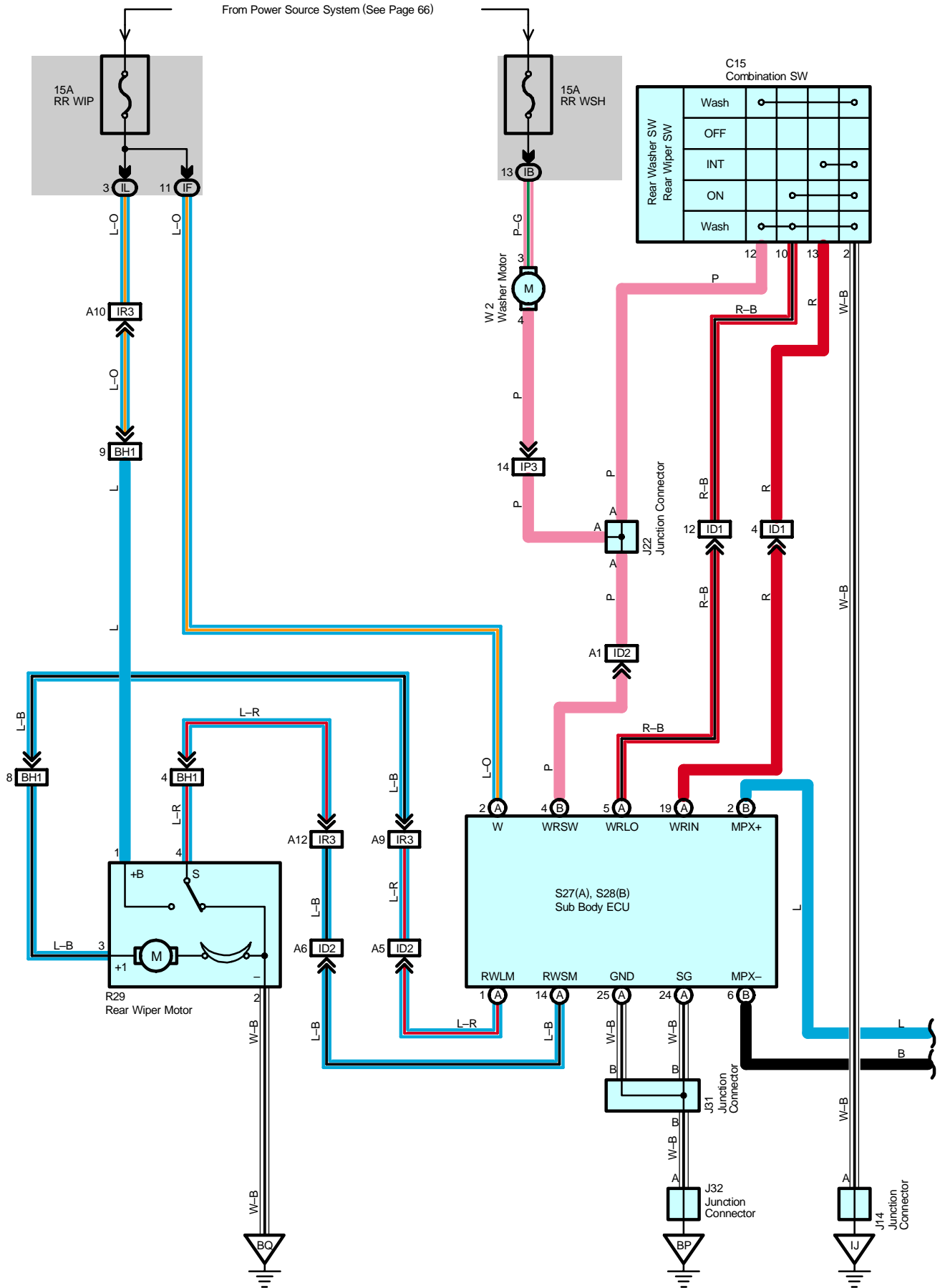
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

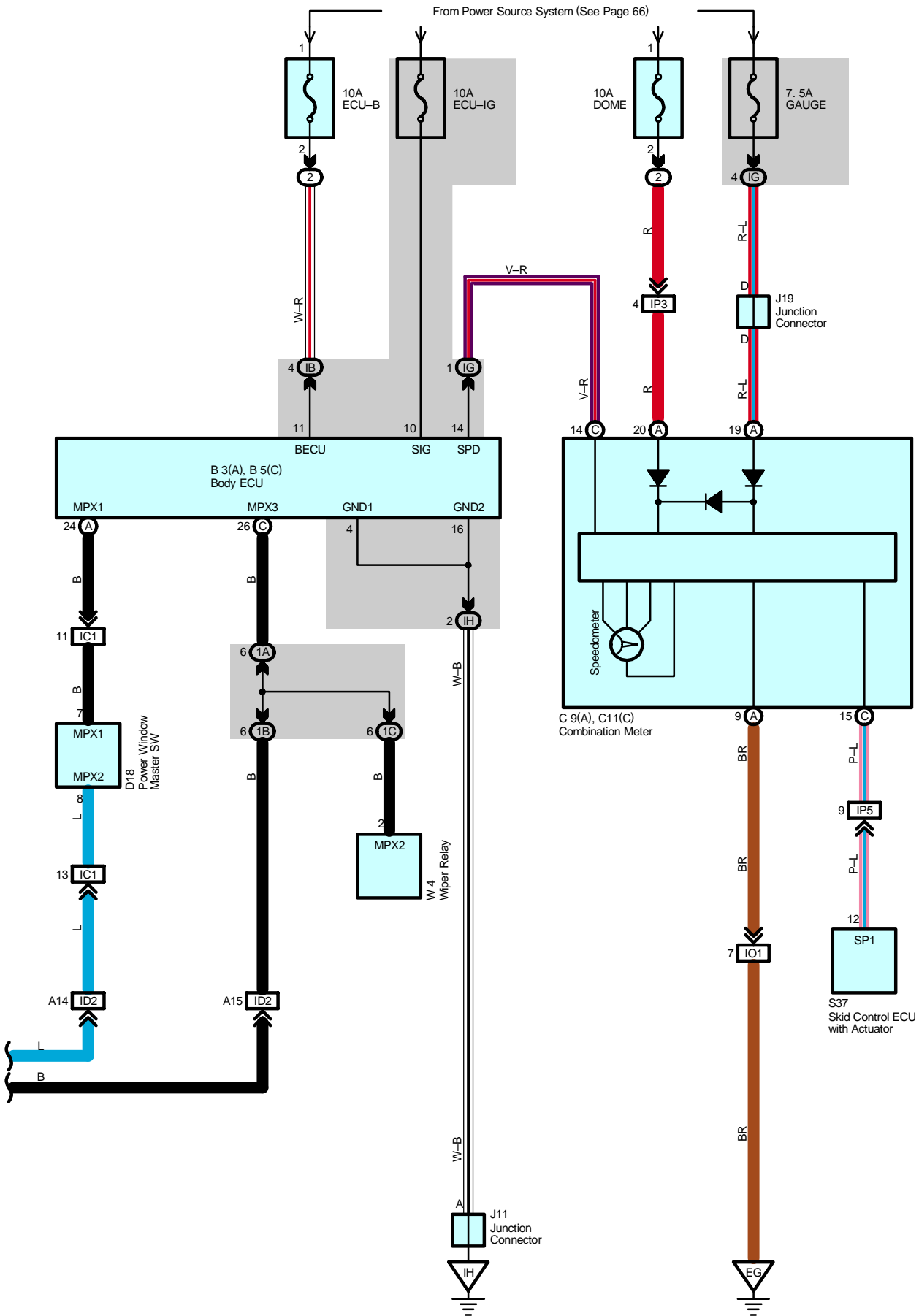


: Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender
IJ	50	Near the Right Side of Steering Column

Rear Wiper and Washer





Rear Wiper and Washer

System Outline

The rear wiper and washer system controlled by the sub-body ECU.
This system has the following function:

1. Rear Wiper Normal Operation Function

If turning the rear wiper and washer switch on to INT or ON mode, the sub-body ECU operates the rear wiper motor and controls in accordance with the selected mode.

2. Washer-Linked Wiper with Drip-Preventive Function

To prevent the fluid from dripping after the washer has been operated, this function operates the wipers once after they have operated in unison with the washer.

3. Vehicle Speed Switching Function

When the rear wiper is operating in the ON mode and the vehicle speed is 0 km/h, the wiper switches to the INT mode.

4. Reverse0-Linked Function

This function operates the rear wiper once by shifting the shift lever to reverse when the front wiper is in operation or when it has been within 17 seconds after the stop of the front wiper.

5. Washer Operation Function

If turning the rear wiper and washer switch on to the washer mode, the sub-body ECU operates the washer motor and controls the washer.

Service Hints

S27 (A) Sub Body ECU

- (A) 2-Ground : Approx. 12 volts with the ignition SW at ON position
- (A)24, (A) 25-Ground: Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B3	A 38	J11	40	R29	44
B5	C 38	J14	40	S27	A 45
C9	A 38	J19	40	S28	B 45
C11	C 38	J22	40	S37	37
C15	38	J31	43	W2	37
D18	42	J32	43	W4	41

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		

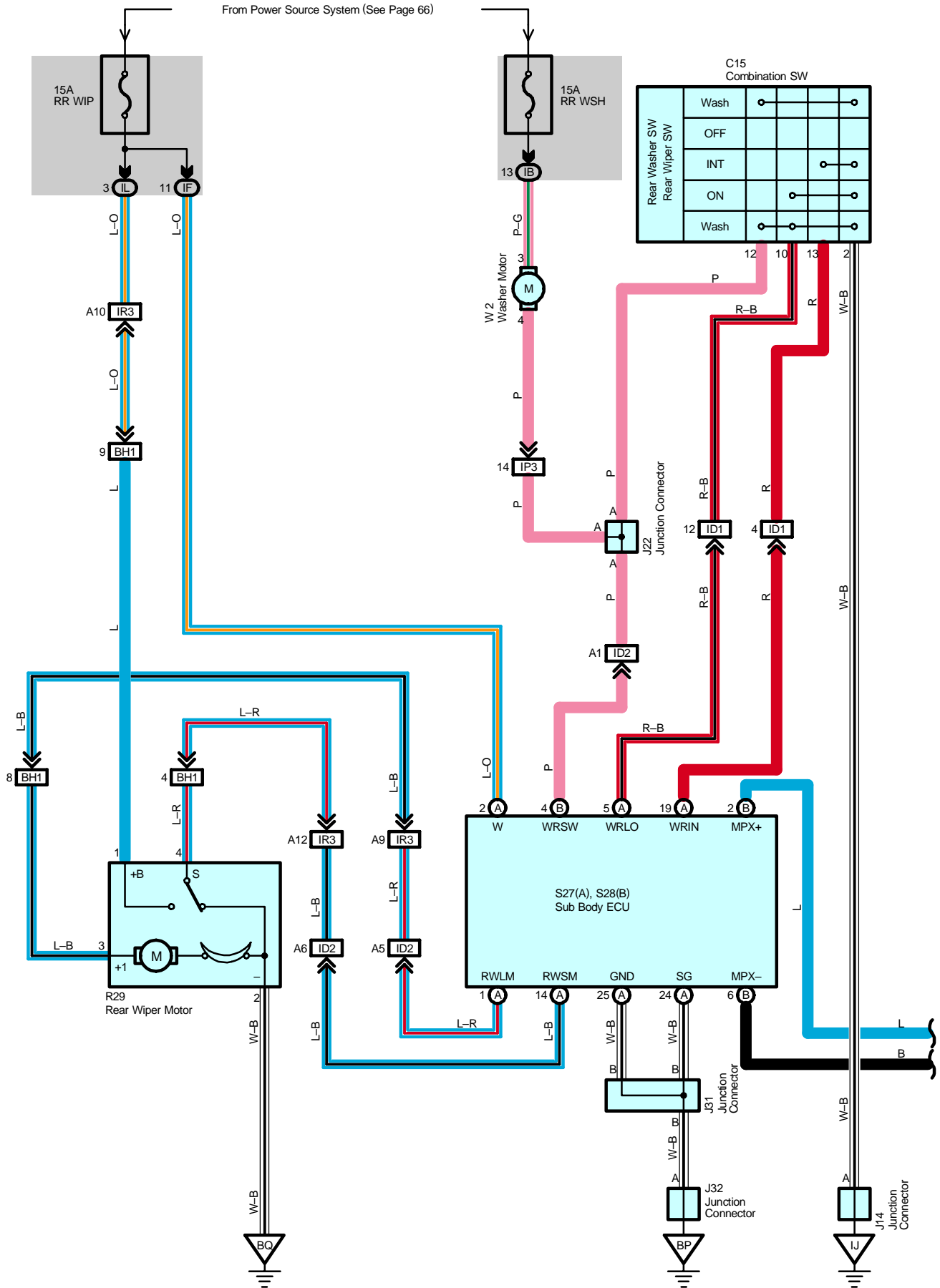
 : **Connector Joining Wire Harness and Wire Harness**

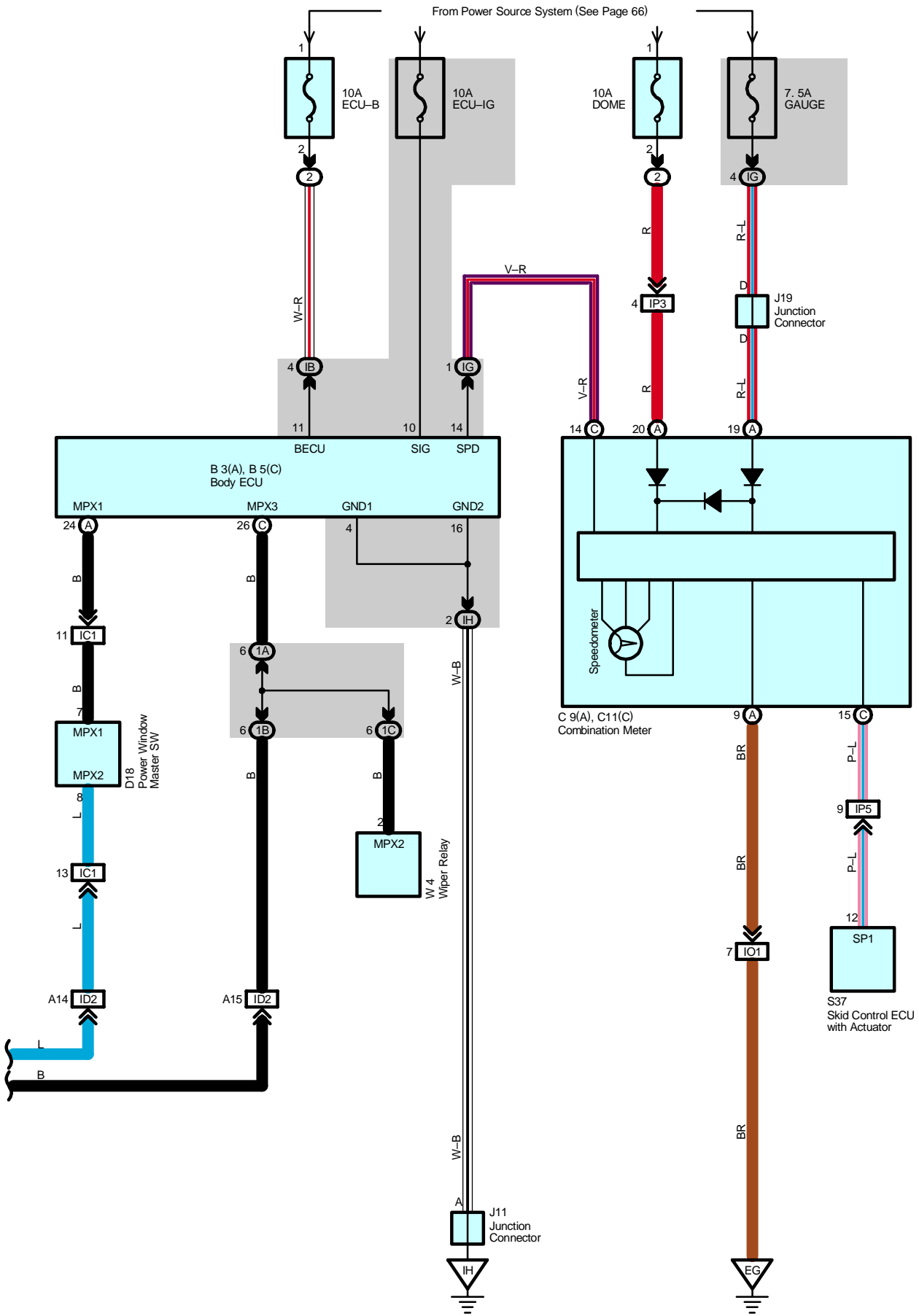
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

 : **Ground Points**

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

Rear Wiper and Washer





Rear Wiper and Washer

System Outline

The rear wiper and washer system controlled by the sub-body ECU.
This system has the following function:

1. Rear Wiper Normal Operation Function

If turning the rear wiper and washer switch on to INT or ON mode, the sub-body ECU operates the rear wiper motor and controls in accordance with the selected mode.

2. Washer-Linked Wiper with Drip-Preventive Function

To prevent the fluid from dripping after the washer has been operated, this function operates the wipers once after they have operated in unison with the washer.

3. Vehicle Speed Switching Function

When the rear wiper is operating in the ON mode and the vehicle speed is 0 km/h, the wiper switches to the INT mode.

4. Reverse0-Linked Function

This function operates the rear wiper once by shifting the shift lever to reverse when the front wiper is in operation or when it has been within 17 seconds after the stop of the front wiper.

5. Washer Operation Function

If turning the rear wiper and washer switch on to the washer mode, the sub-body ECU operates the washer motor and controls the washer.

Service Hints

S27 (A) Sub Body ECU

- (A) 2-Ground : Approx. 12 volts with the ignition SW at ON position
- (A)24, (A) 25-Ground: Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B3	A 38	J11	40	R29	44
B5	C 38	J14	40	S27	A 45
C9	A 38	J19	40	S28	B 45
C11	C 38	J22	40	S37	37
C15	38	J31	43	W2	37
D18	42	J32	43	W4	41

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		

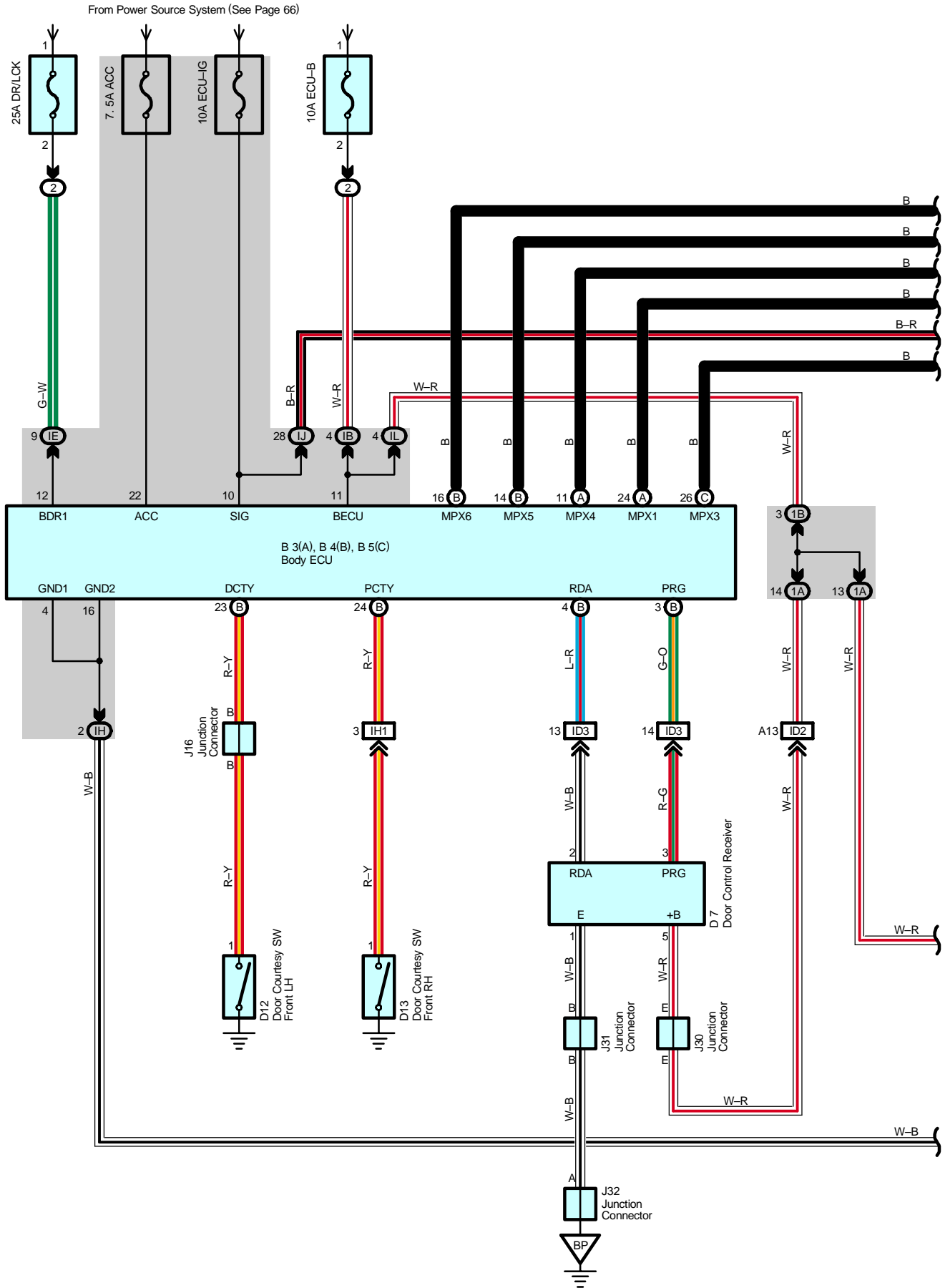
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

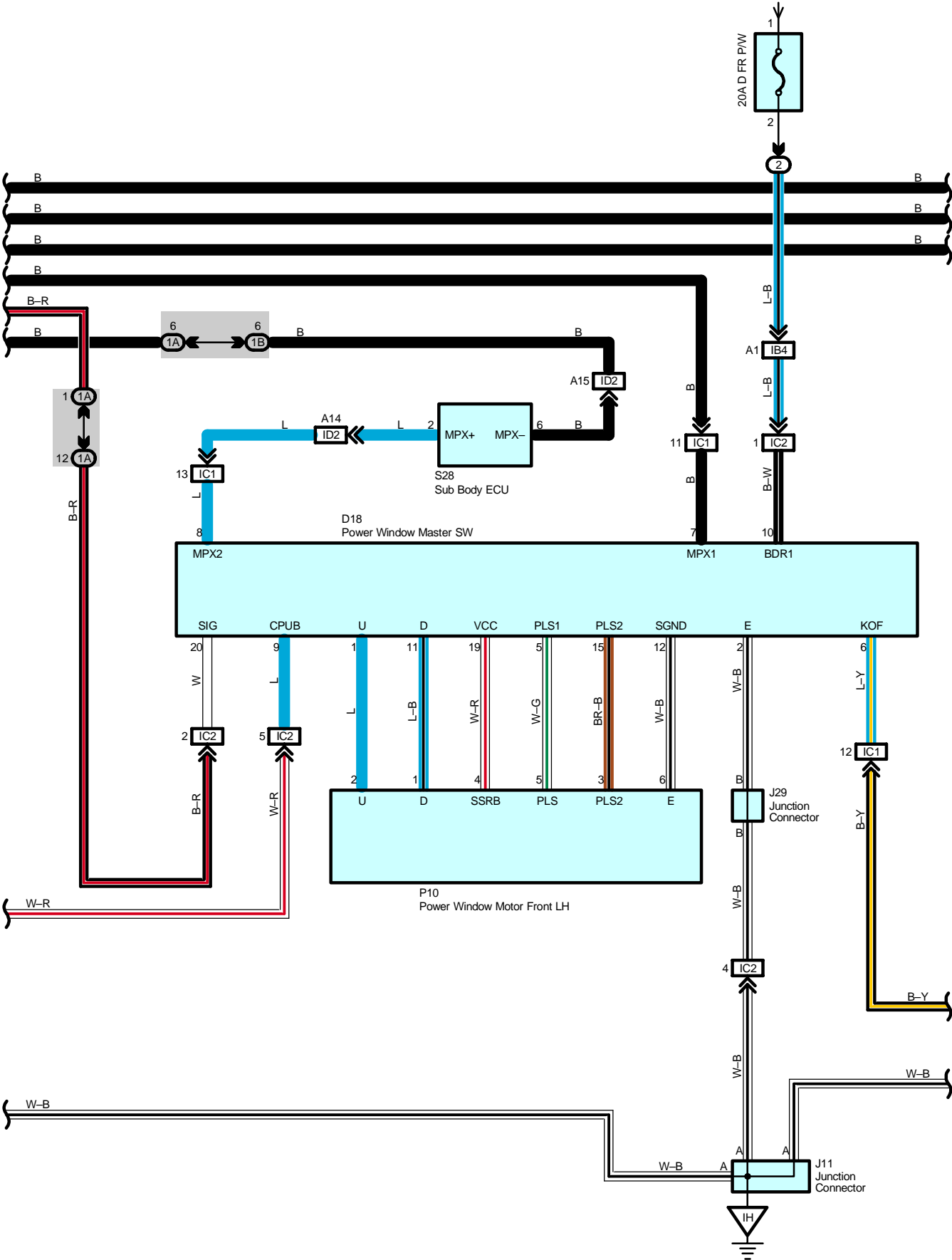
 : **Ground Points**

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

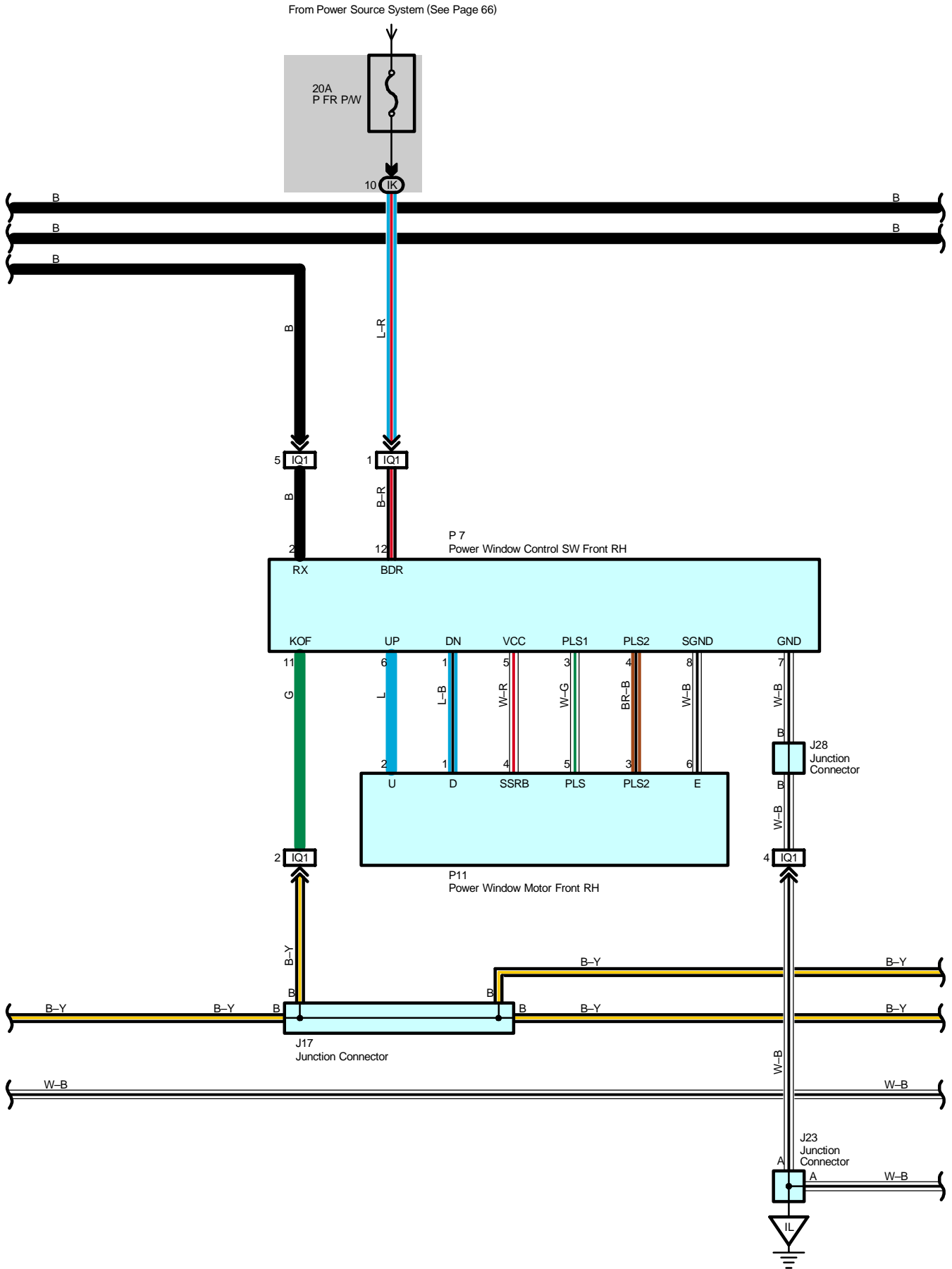
Power Window

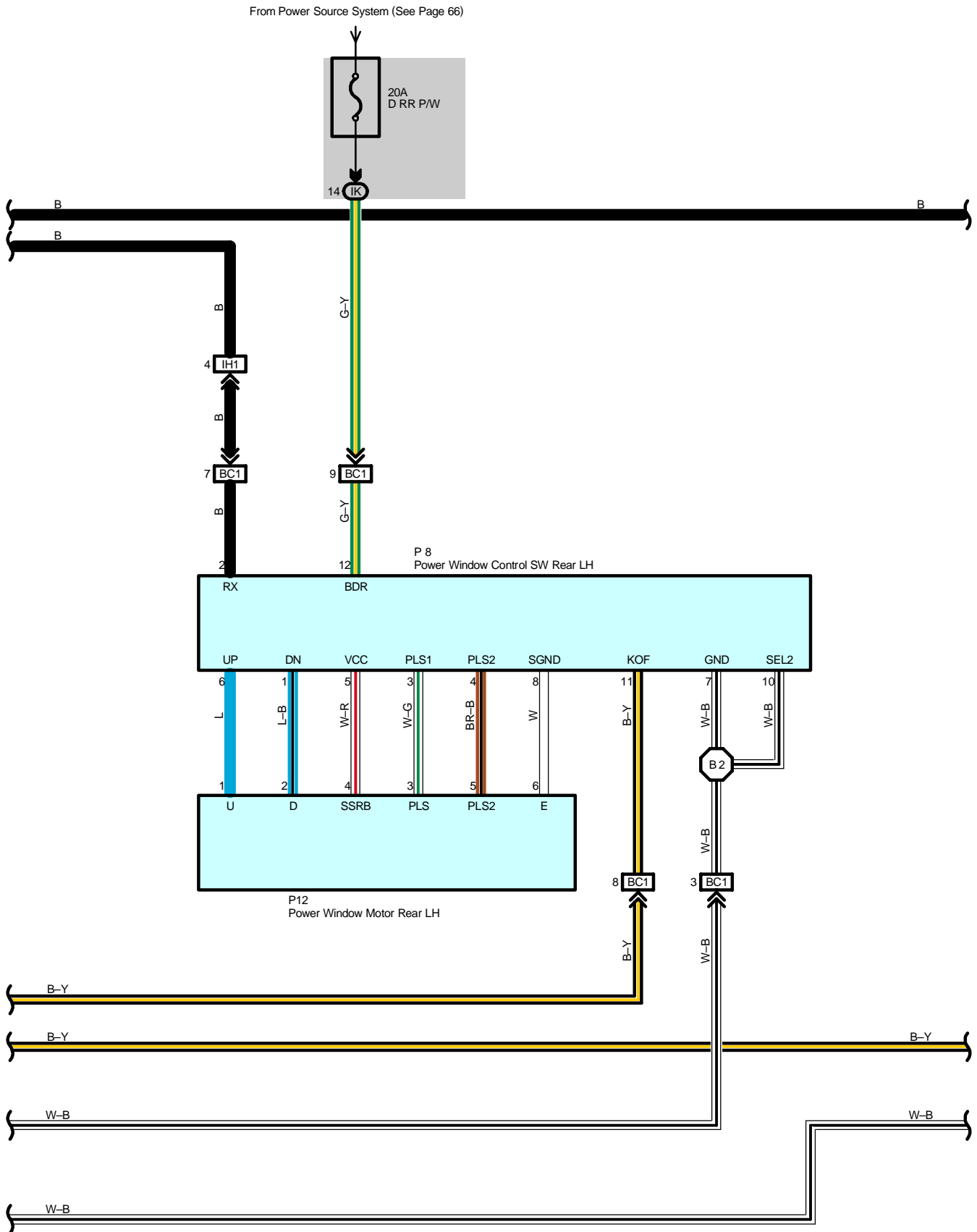


From Power Source System (See Page 66)

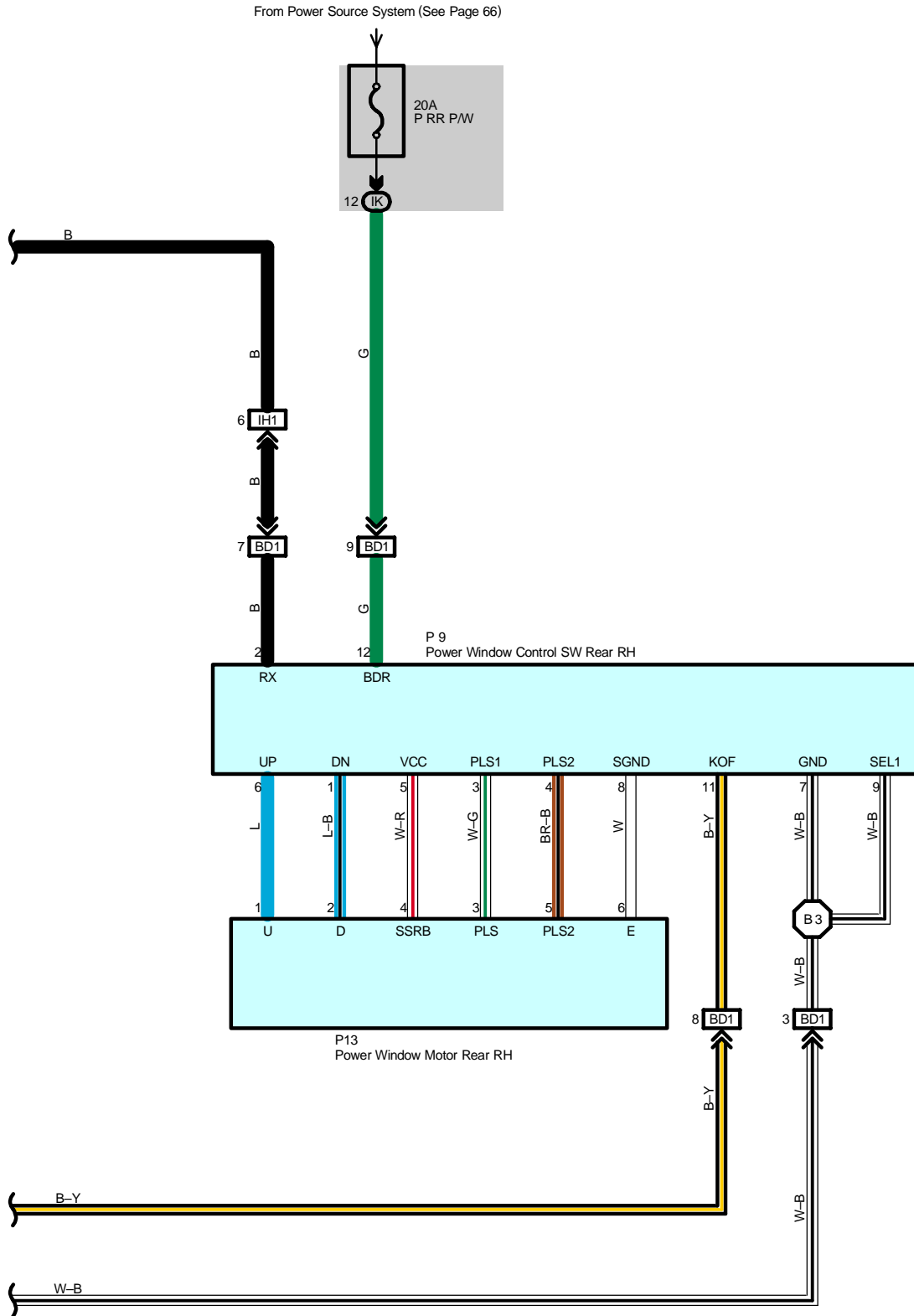


Power Window





Power Window



System Outline

* The power window system is controlled by the body ECU. This system has following features.

1. Manual Up and Down Function

This function causes the window to open or close while the power window switch is being pulled halfway up or pushed halfway down. The window stops as soon as the switch is released.

2. One-Touch Auto Up and Down Function

The all doors one-touch auto up and down function enables the window of front doors to be fully opened or closed at a touch of the power window switch.

3. Jam Protection Function

A jam protection function automatically stops the power window and moves it downward if a foreign object gets jammed in the window during one-touch auto-up operation.

4. Remote Control Function

The up and down operations of the front passenger door window and the rear door windows can be controlled by operating the power window master switch.

5. Key-Off Operation Function

The driver's door key-off operation function makes it possible to operate the power window for approximately 45 seconds after the ignition switch is turned to the ACC or LOCK position, if the front doors are not opened.

* When the battery terminal or fuse is disconnected, the glass position of all doors have to be reset to the initial positions, door by door, by the power window control switch in accordance with the following procedure:

- A) Reconnect the battery terminal or fuse.
- B) Turn ON the ignition switch.
- C) Lower the window of each door by the power window switch to open it halfway or more.
- D) Then move the window up by the power window switch to close it fully.
Do not release the switch for at least one second after the window is fully closed.

Service Hints

Body ECU

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

D18 Power Window Master SW

- 9, 10-Ground : Always approx. 12 volts
- 20-Ground : Approx. 12 volts with the ignition SW at ON position
- 2-Ground : Always continuity

P7 Power Window Control SW Front RH

- 12-Ground : Always approx. 12 volts
- 7-Ground : Always continuity

P8 Power Window Control SW Rear LH

- 12-Ground : Always approx. 12 volts
- 7, 10-Ground : Always continuity

P9 Power Window Control SW Rear RH

- 12-Ground : Always approx. 12 volts
- 7, 9-Ground : Always continuity

Power Window

: Parts Location

Code	See Page	Code	See Page	Code	See Page	
B3	A	38	J16	40	P7	44
B4	B	38	J17	40	P8	44
B5	C	38	J23	40	P9	44
D7		42	J28	43	P10	44
D12		42	J29	43	P11	44
D13		42	J30	43	P12	44
D18		42	J31	43	P13	44
J11		40	J32	43	S28	45

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

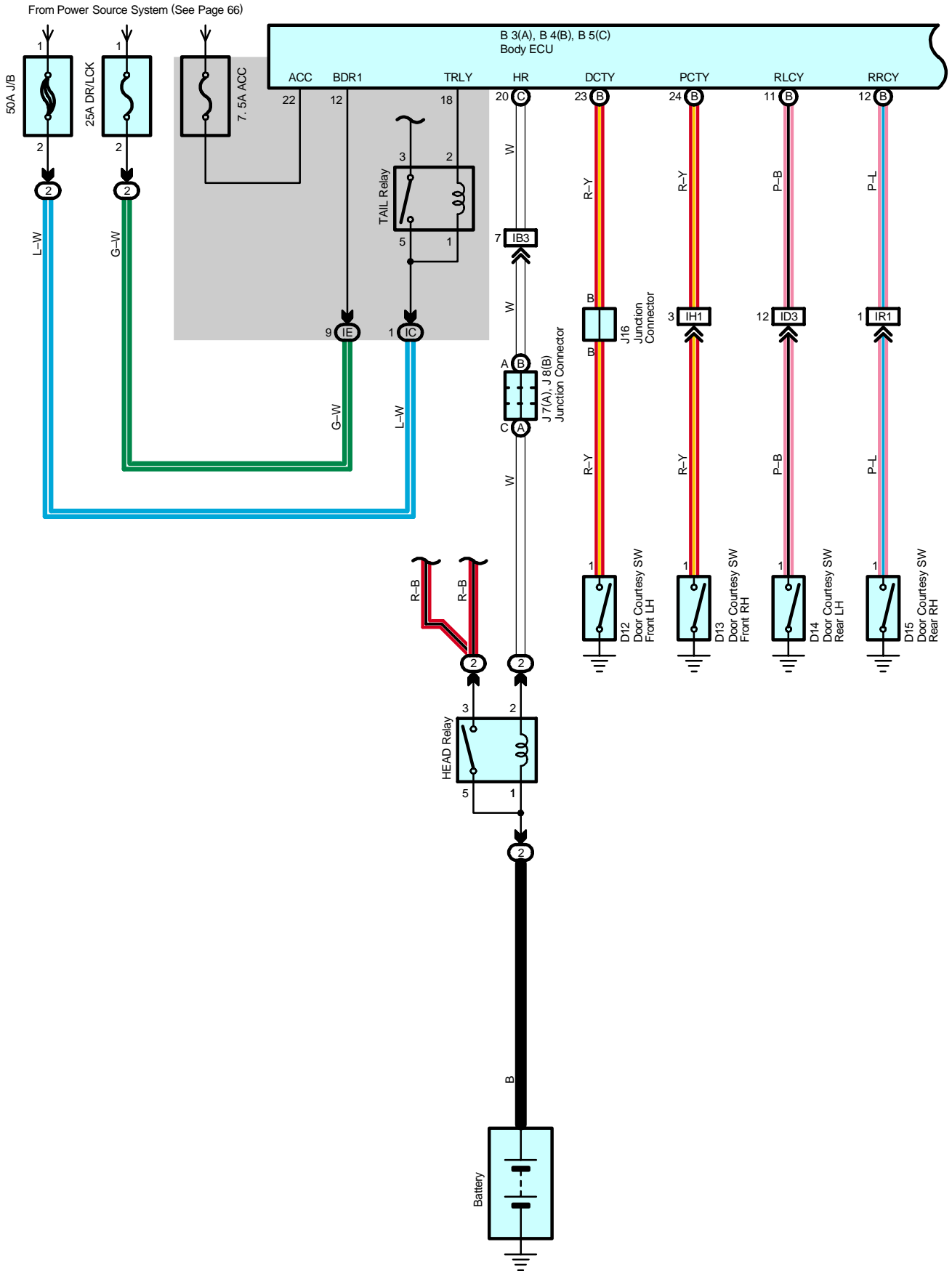
: Ground Points

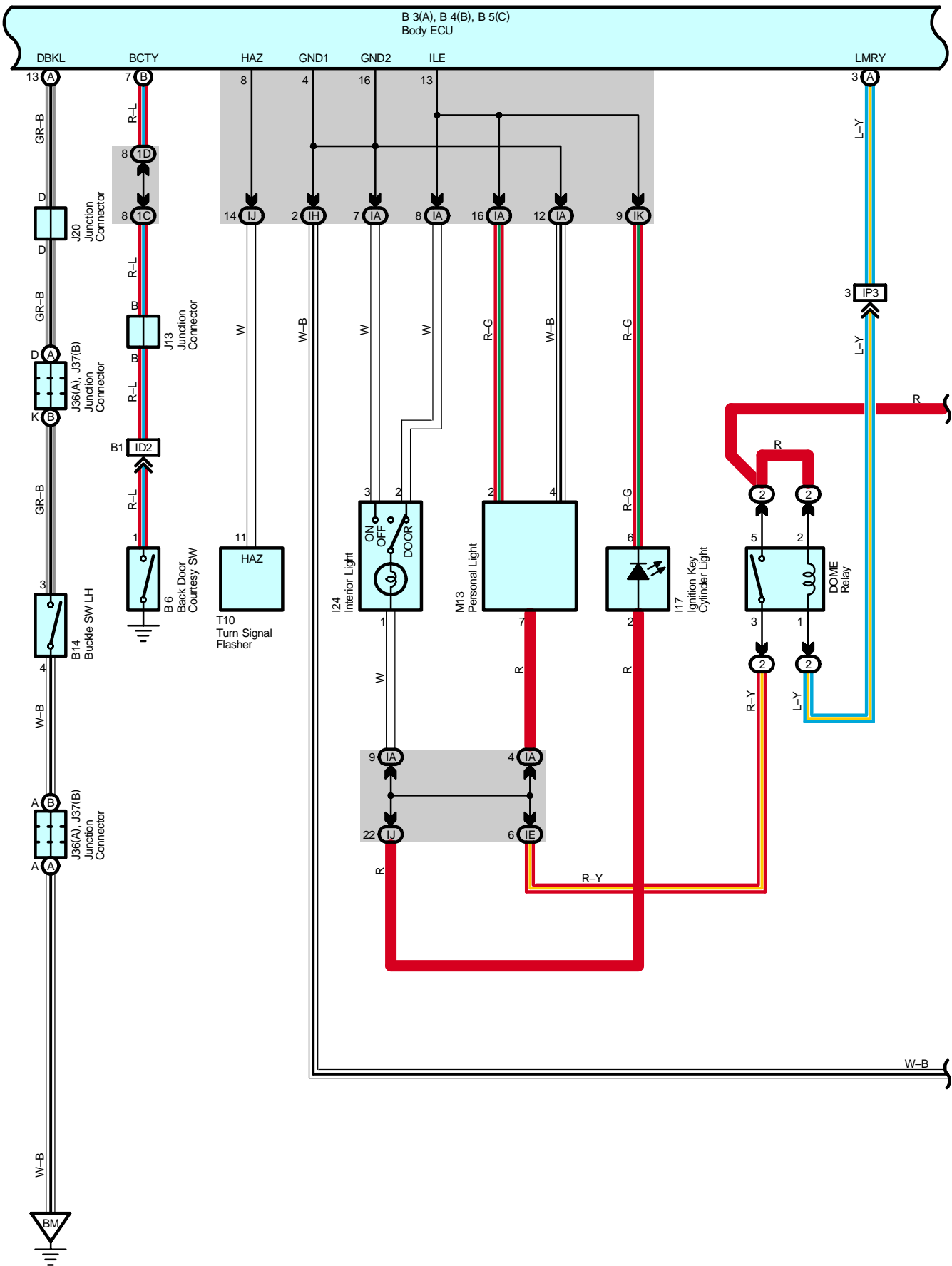
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner

: Splice Points

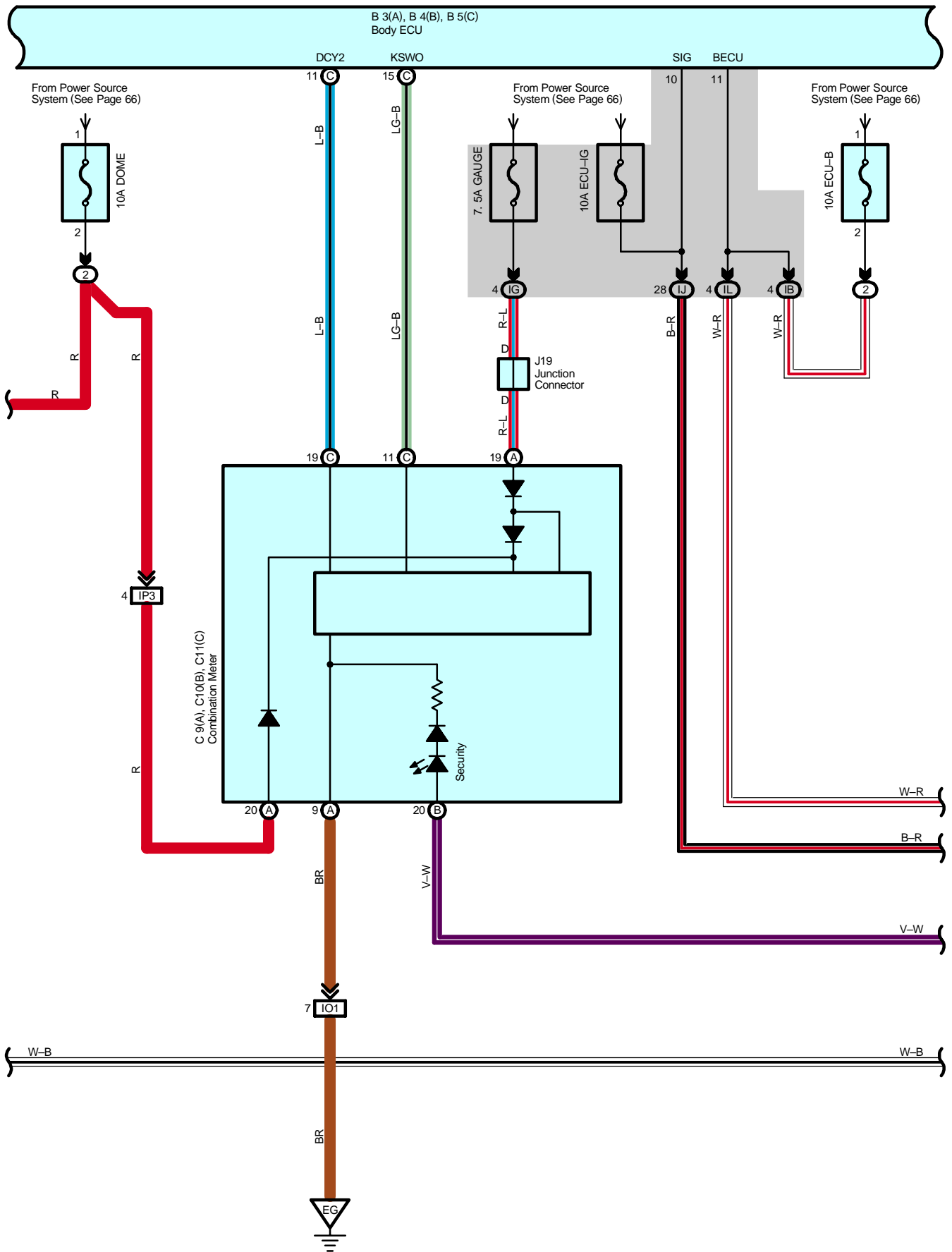
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	60	Rear Door LH Wire	B3	60	Rear Door RH Wire

Door Lock Control and Theft Deterrent

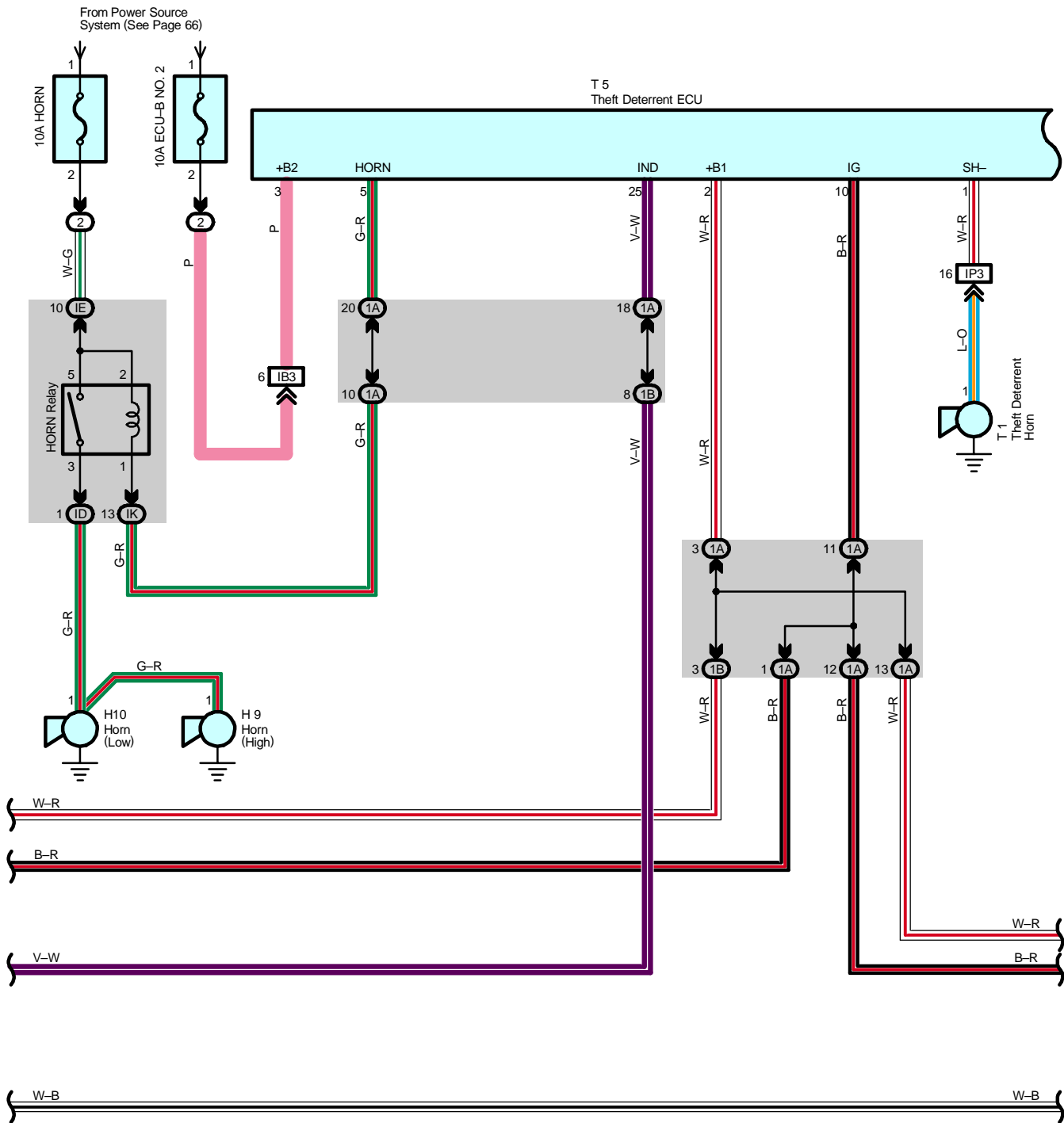




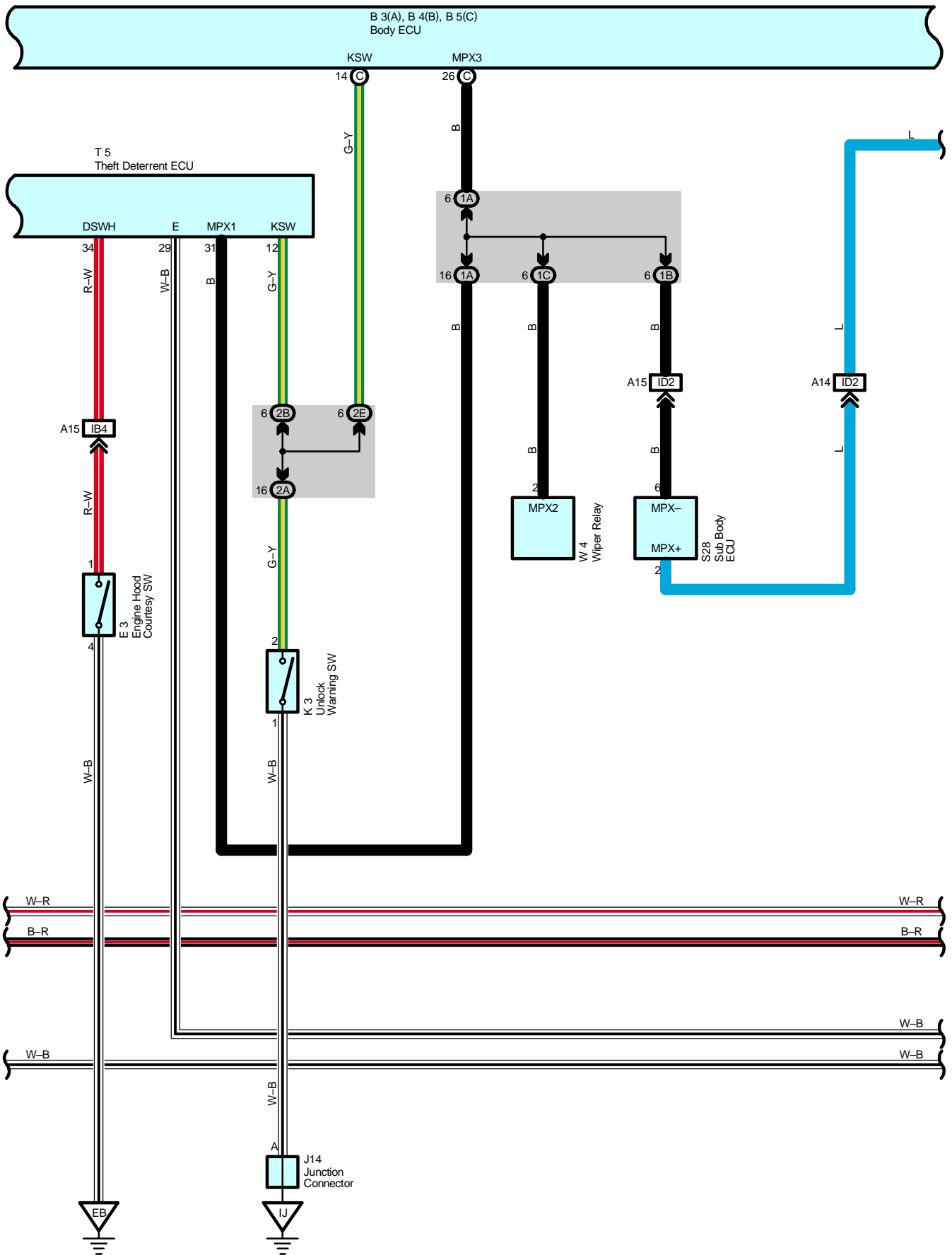
Door Lock Control and Theft Deterrent

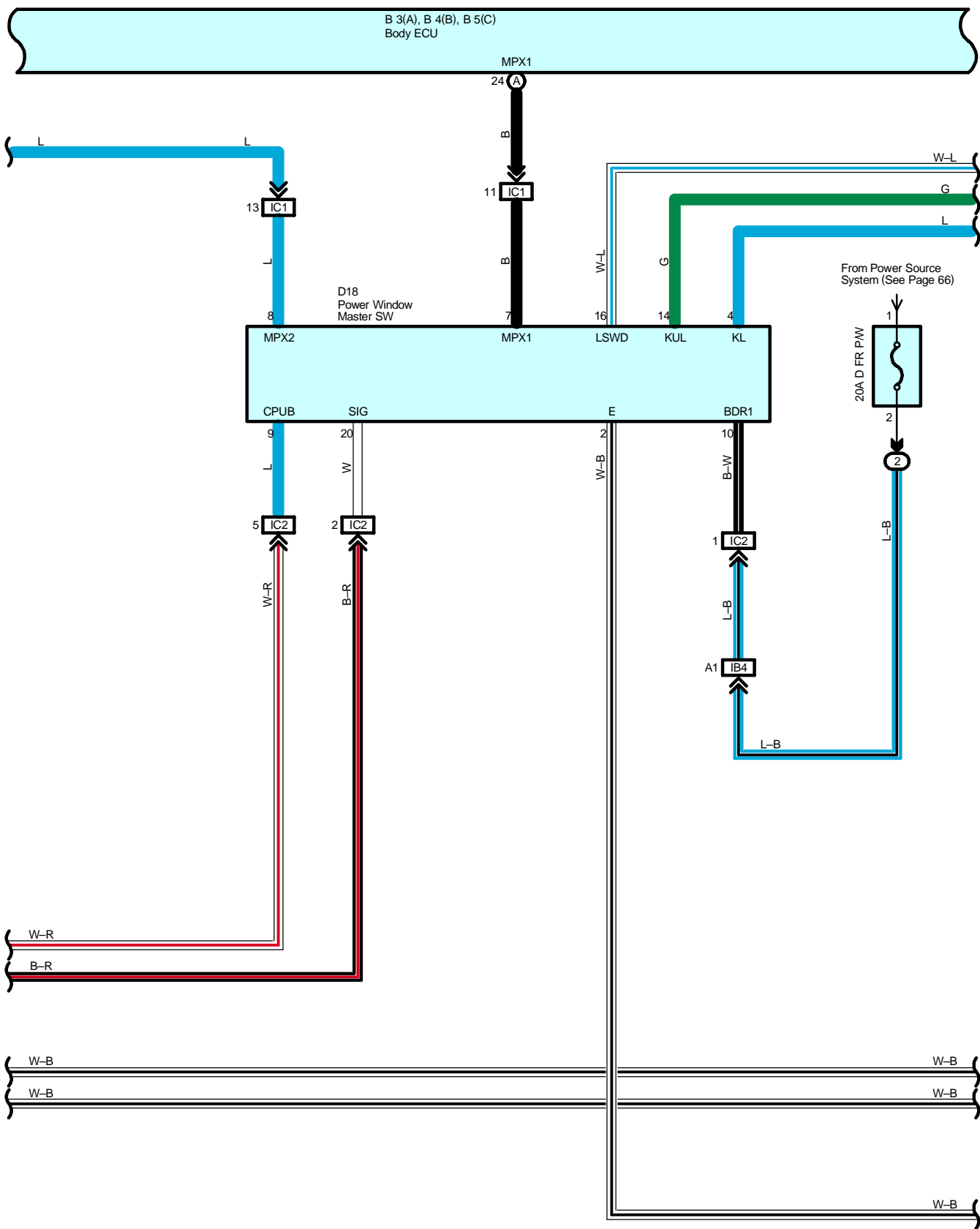


B 3(A), B 4(B), B 5(C)
Body ECU

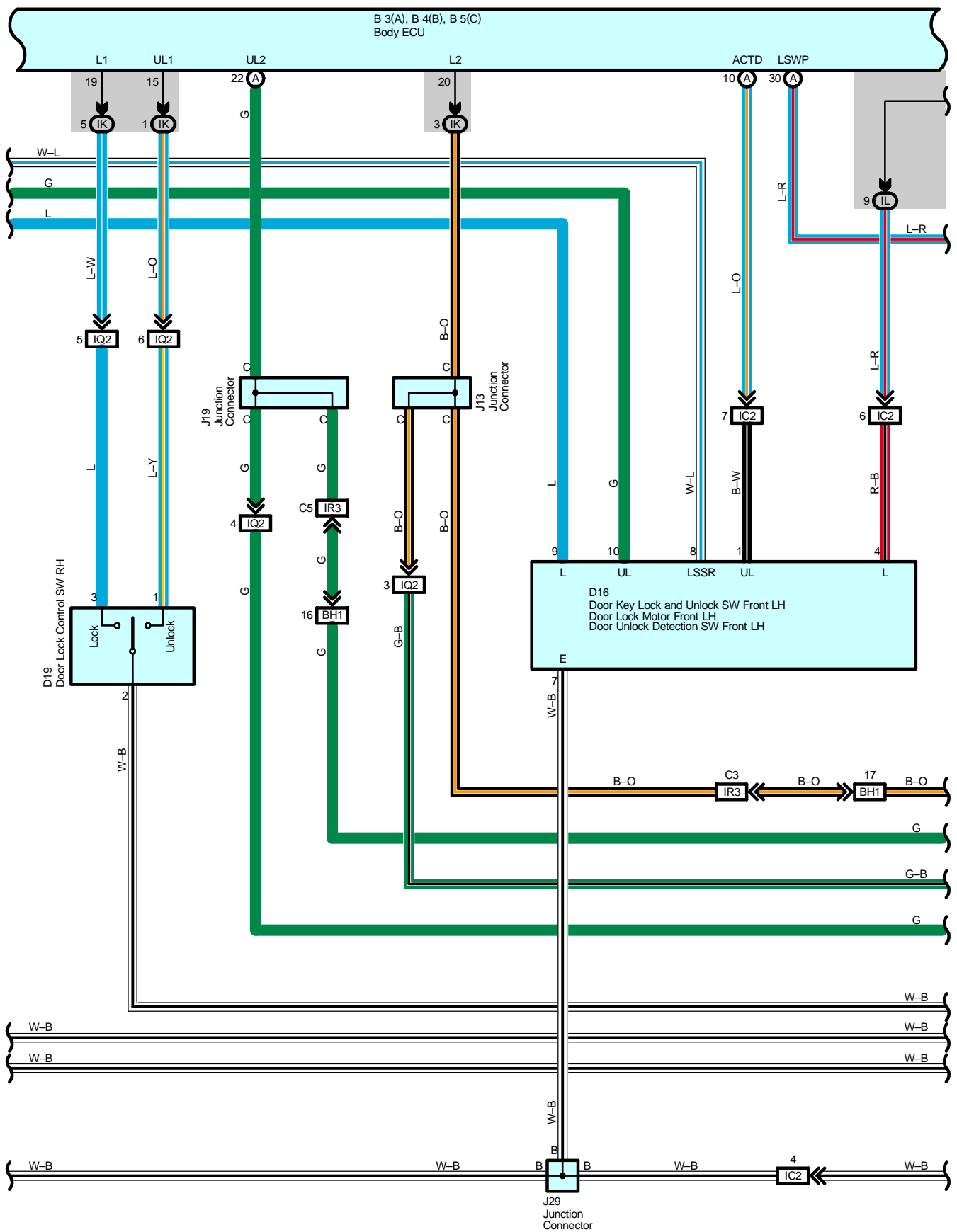


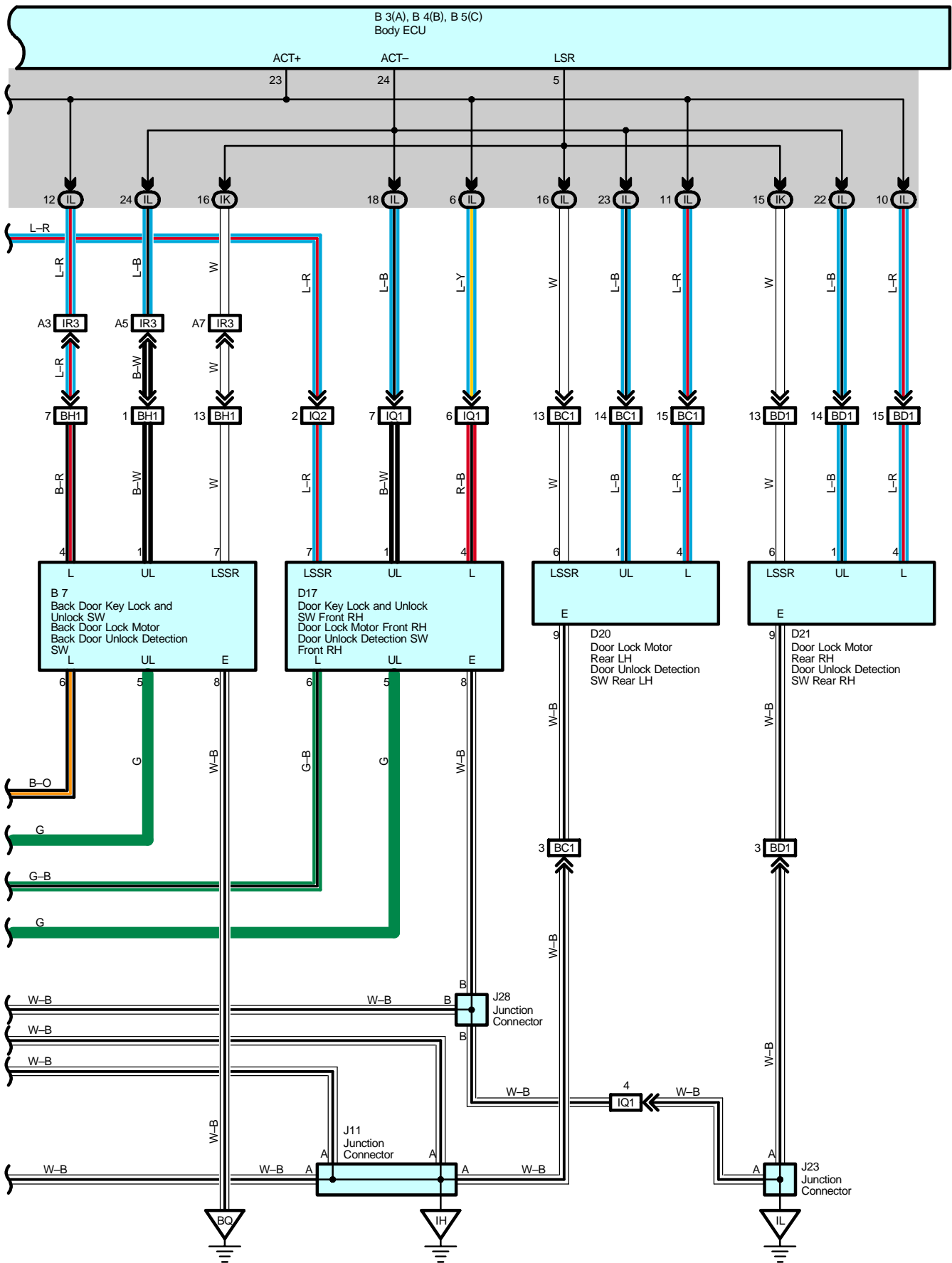
Door Lock Control and Theft Deterrent





Door Lock Control and Theft Deterrent





Door Lock Control and Theft Deterrent

System Outline

Door Lock Control System

The door lock control system is controlled by the body ECU.

This system has following features. However, the adopted function differs depending on the establishment.

1. Manual Lock and Unlock Operation

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

2. Key-Linked Lock and Unlock Function

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

3. Manual Unlock Prohibition Function

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

4. 2-Step Unlock Function

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

5. Key Confine Prevention Function

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

6. Shift-Linked Automatic Door Lock

When the conditions listed below are met consecutively, this function causes all the doors to be automatically locked.

- * The ignition switch is turned from the OFF or ACC position to the ON position.
- * All doors are closed.
- * The shift lever is moved out of P position.
- * Either one of the doors is unlocked.

7. Theft Deterrent System-Linked Door Lock Function

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

Service Hints

Body ECU

11, 12-Ground : Always approx. 12 volts

10-Ground : Approx. 12 volts with the ignition SW at ON position

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

4, 16-Ground : Always continuity

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B3	A	38	D18		42	J19		40
B4	B	38	D19		42	J20		40
B5	C	38	D20		42	J23		40
B6		42	D21		42	J28		43
B7		42	E3		36	J29		43
B14		46	H9		36	J36	A	46
C9	A	38	H10		36	J37	B	46
C10	B	38	I17		39	K3		40
C11	C	38	I24		43	M13		44
D12		42	J7	A	40	S28		45
D13		42	J8	B	40	T1		37
D14		42	J11		40	T5		41
D15		42	J13		40	T10		41
D16		42	J14		40	W4		41
D17		42	J16		40			

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
ID		
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IJ		
IK		
IL	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1A		
1B		
1C		
1D	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2A		
2B		
2E		

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

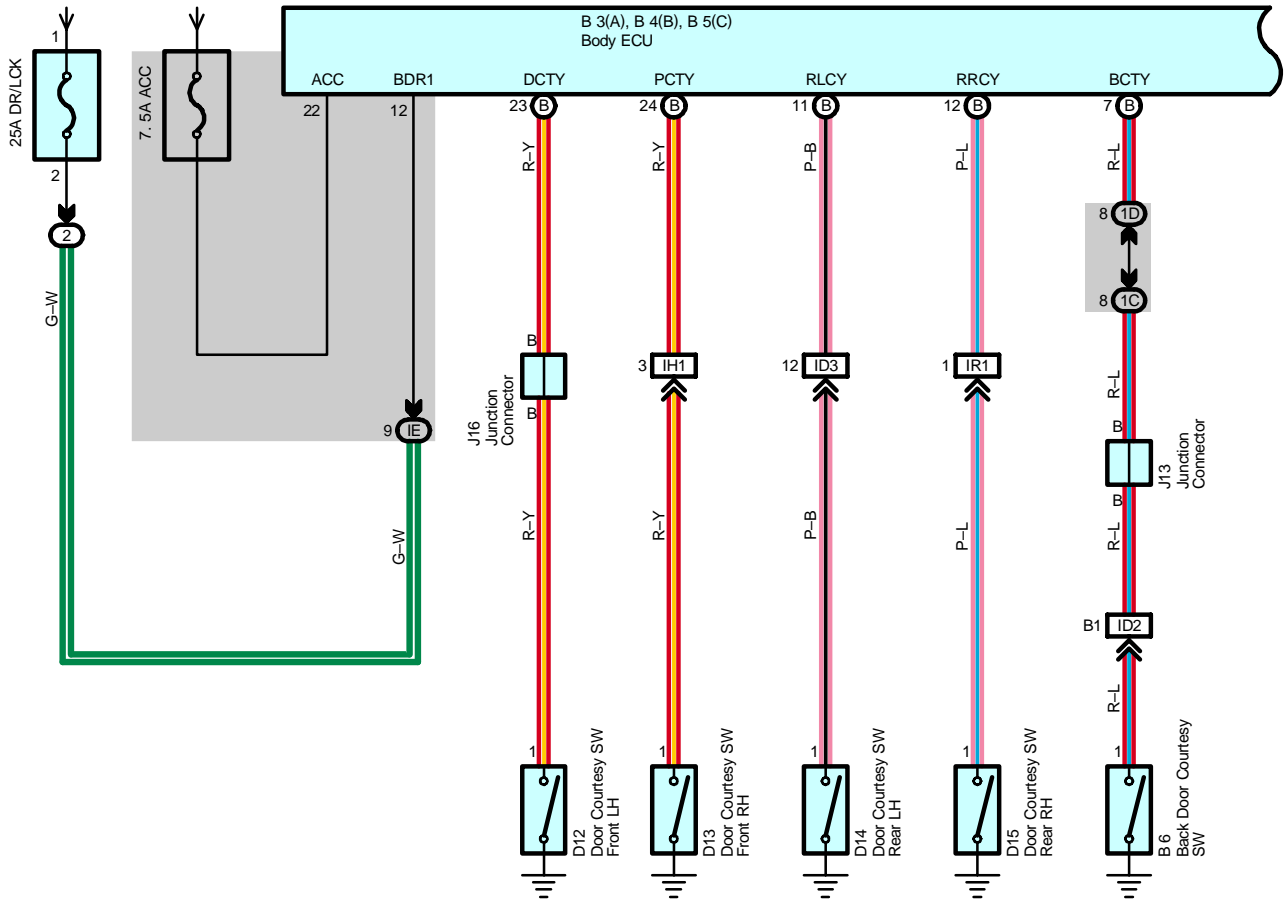
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

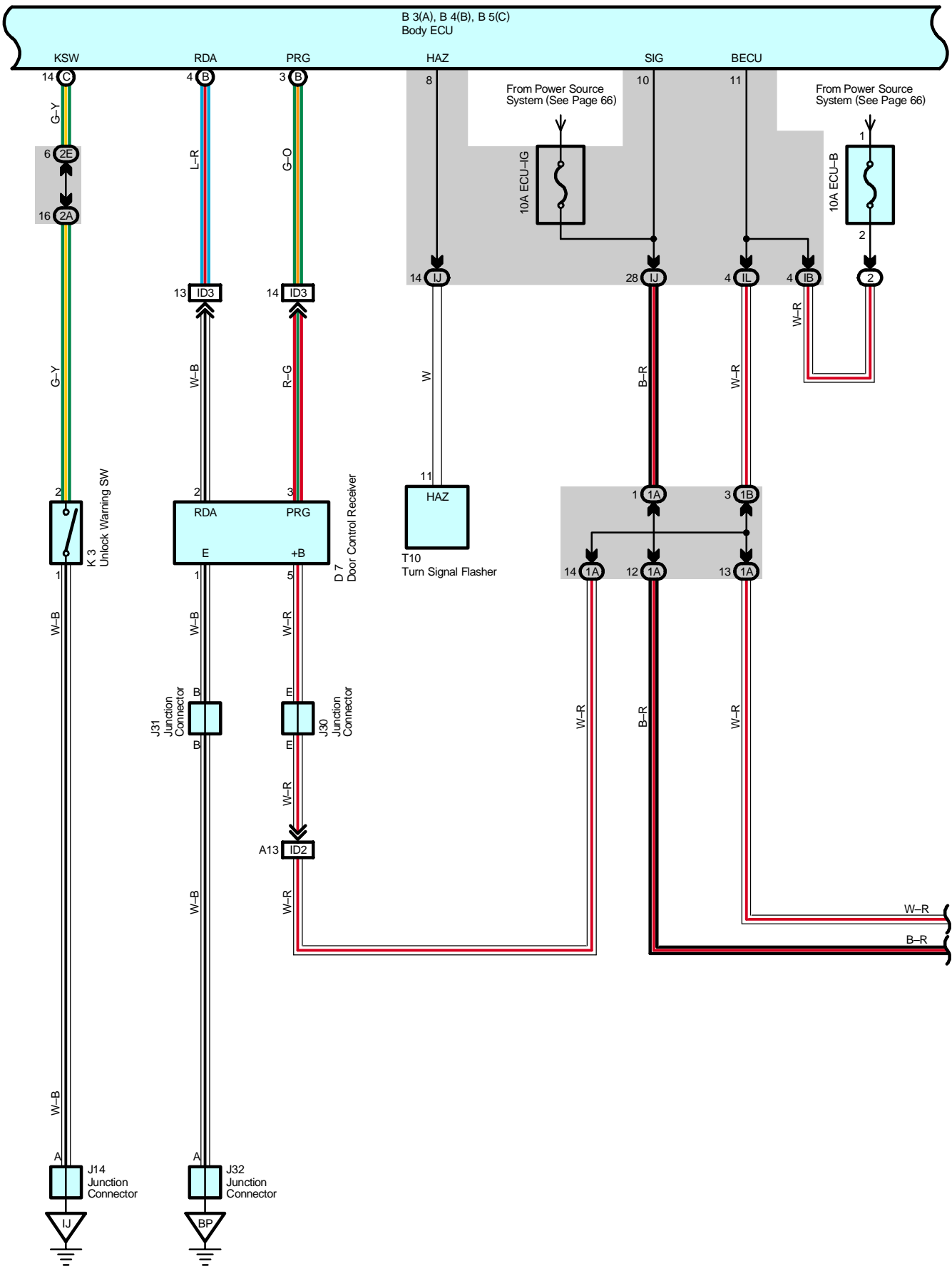
 : **Ground Points**

Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BM	58	Under the Driver's Seat
BQ	58	Back Door Panel Center

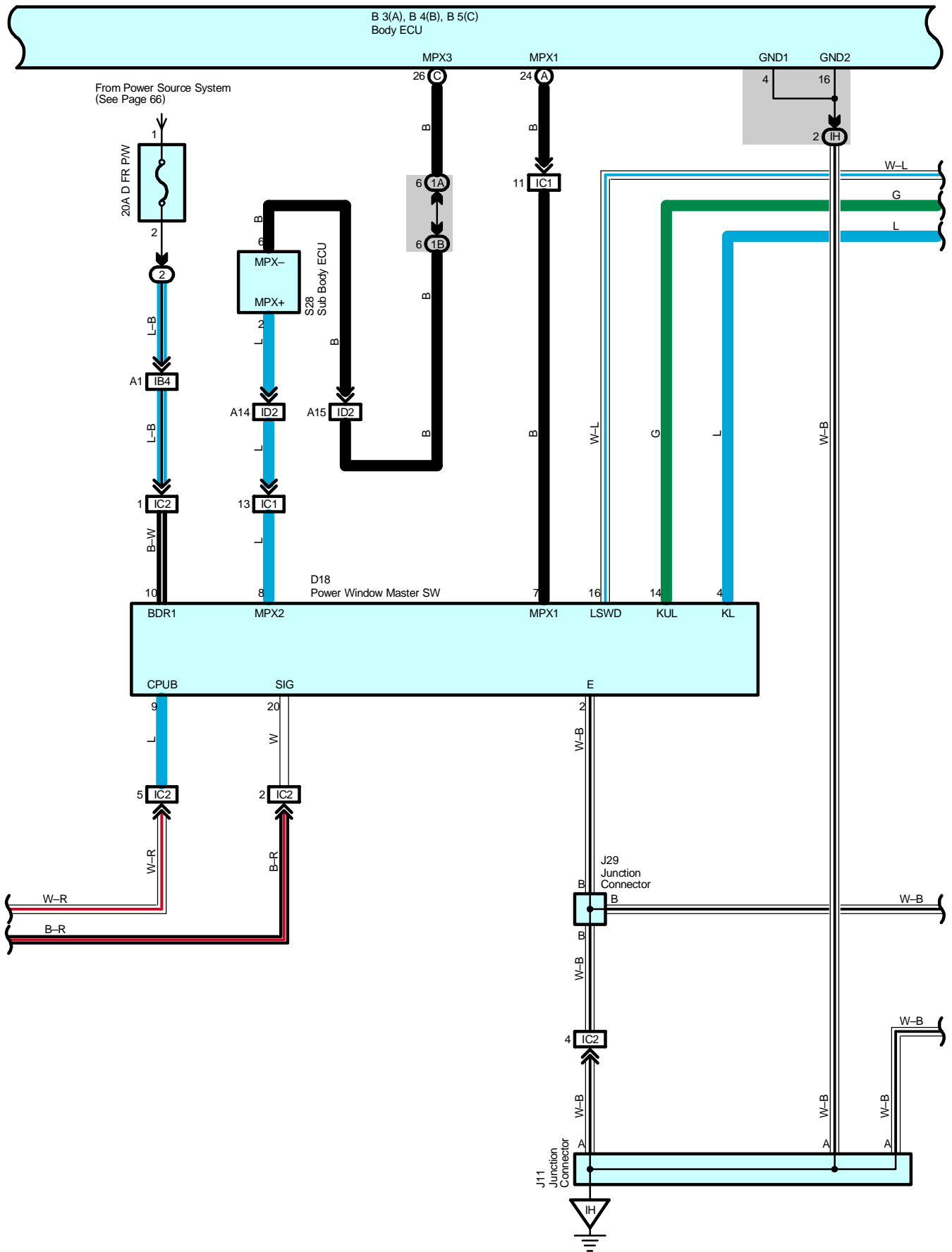
Wireless Door Lock Control

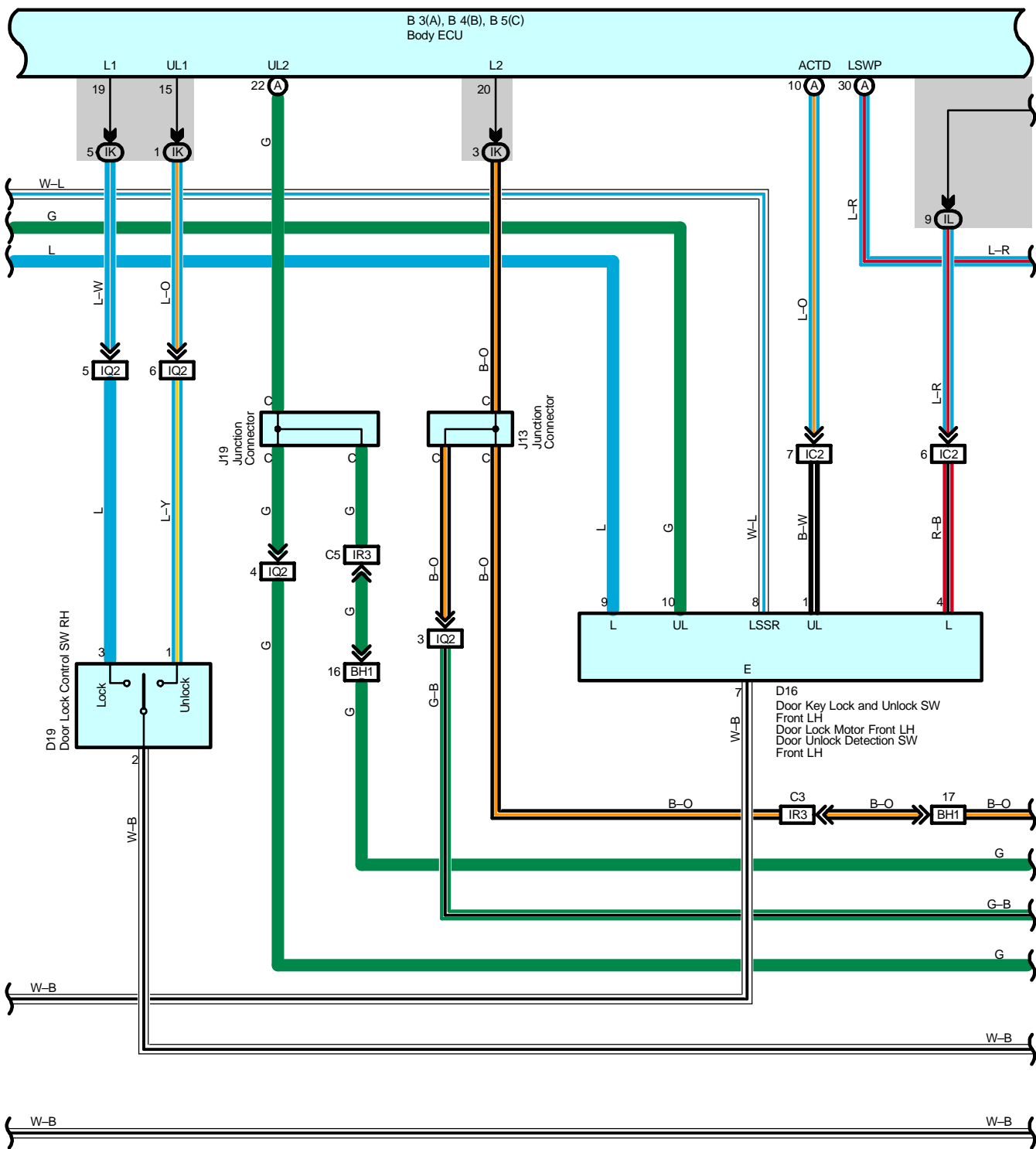
From Power Source System (See Page 66)



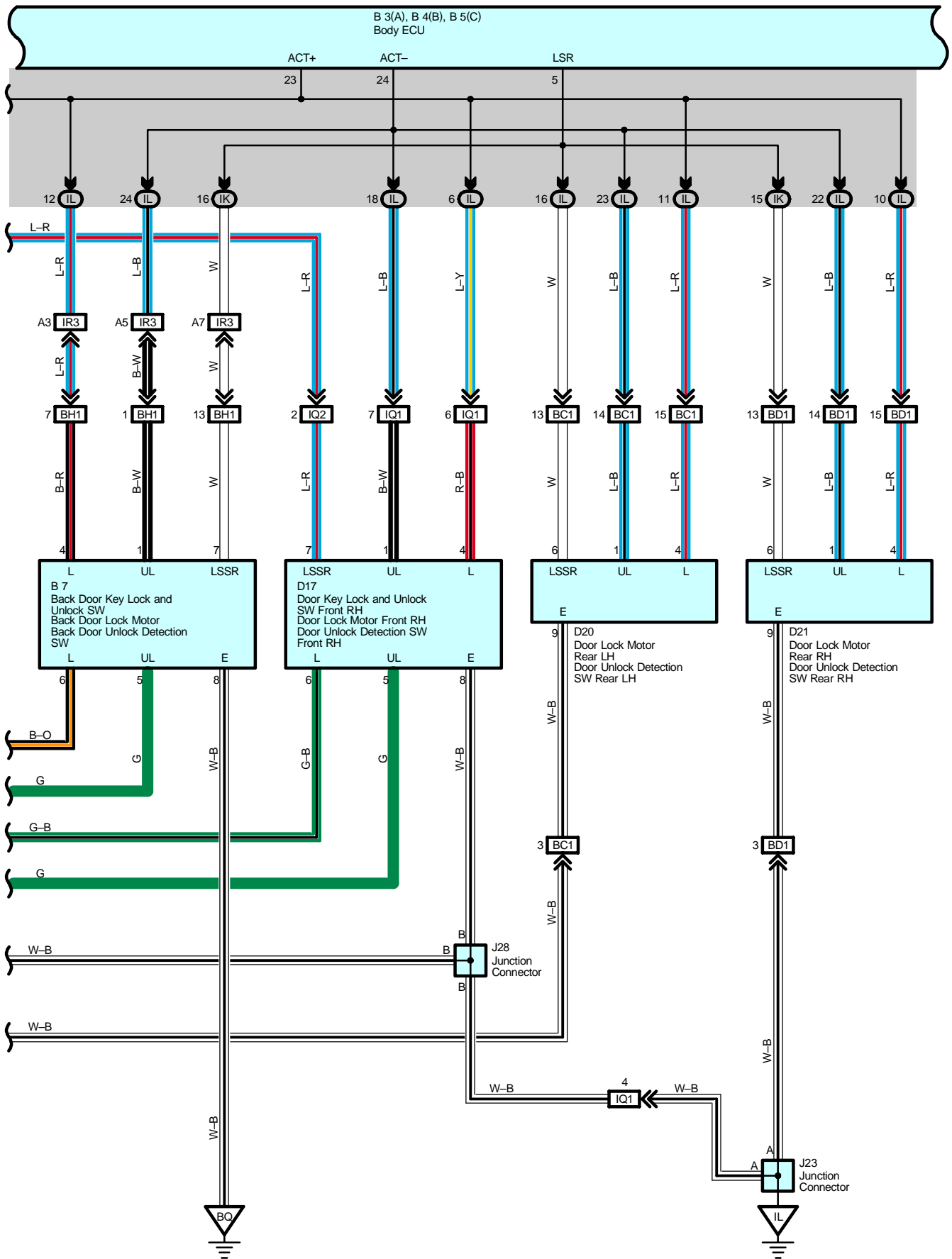


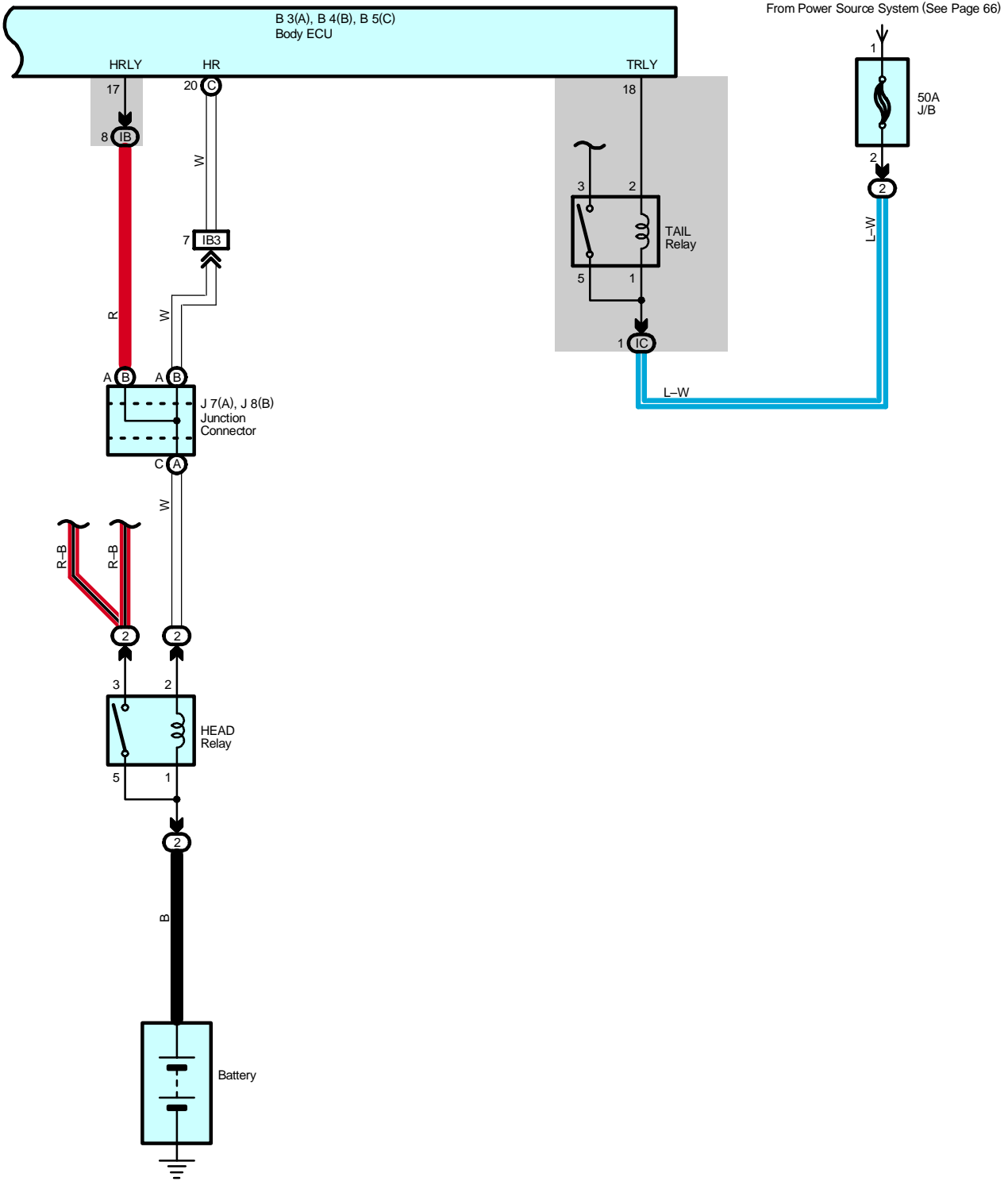
Wireless Door Lock Control





Wireless Door Lock Control





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 key inserted in the door key cylinder, using low-power electrical waves emitted by a transmitter.

1. Normal Operation

* Lock operation

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

* Unlock operation

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

2. Auto Lock Function

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

* Any door is opened.

* The ignition key is inserted into the ignition SW.

* When the lock detection SW of all the doors are locked.

3. Wireless Door Lock Stop Function

If any of the following conditions are detected, the wireless door lock does not function.

Lock operation

* When any door is open (Door courtesy SW on)

* The ignition key is inserted into the ignition SW (Unlock warning SW on)

* Ignition SW is on

Unlock operation

* Ignition SW is on

4. Buzzer Sound Function

During lock operation, when the body ECU receives a lock signal from the door lock detection SW, the wireless door lock buzzer goes on once. During unlock operation, when the body ECU receives an unlock signal from the door lock detection SW, the wireless door lock buzzer goes on twice.

With any door open, when the body ECU receives a lock signal from the transmitter, the wireless door lock buzzer goes on for approx. 10 seconds. If the door is closed, or ignition SW is on, or if the unlock signal is received from the transmitter while the buzzer is on, the buzzer stops.

5. Visual Confirmation of Lock or Unlock

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

6. Remote Panic Operation

Panic will function when doors are locked or unlocked, open or closed. When the panic button (Transmitter) is pushed once, interior lights light up, and theft alarm and horn sounds and turn signal light, headlights and taillight flash. Then, the panic or the unlock button (Transmitter) is pushed once more, interior lights are turned off, sounding and flashing will stop. Panic will not function when ignition key is in ignition key cylinder.

7. Repeat Function

If the lock detection signal in response to the output signal is not received after the body ECU has output the lock signal, the lock signal is output again.

8. Illuminated Entry Function

When the body ECU detects the unlock state after the unlock operation has been made, it turns on the lights, such as the ignition key cylinder light and interior light for approx. 15 sec. If all the doors are locked during this operation, lighting is cancelled and the lights immediately fade out.

Service Hints

Body ECU

11, 12-Ground : Always approx. 12 volts

10-Ground : Approx. 12 volts with the ignition SW at ON position

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

4, 16-Ground : Always continuity

D7 Door Control Receiver

5-Ground : Always approx. 12 volts

1-Ground : Always continuity

 : **Parts Location**

Code		See Page	Code		See Page	Code		See Page
B3	A	38	D17	42	J19	40		
B4	B	38	D18	42	J23	40		
B5	C	38	D19	42	J28	43		
B6		42	D20		42	J29		43
B7		42	D21		42	J30		43
D7		42	J7	A	40	J31		43
D12		42	J8	B	40	J32		43
D13		42	J11		40	K3		40
D14		42	J13		40	S28		45
D15		42	J14		40	T10		41
D16		42	J16		40			

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

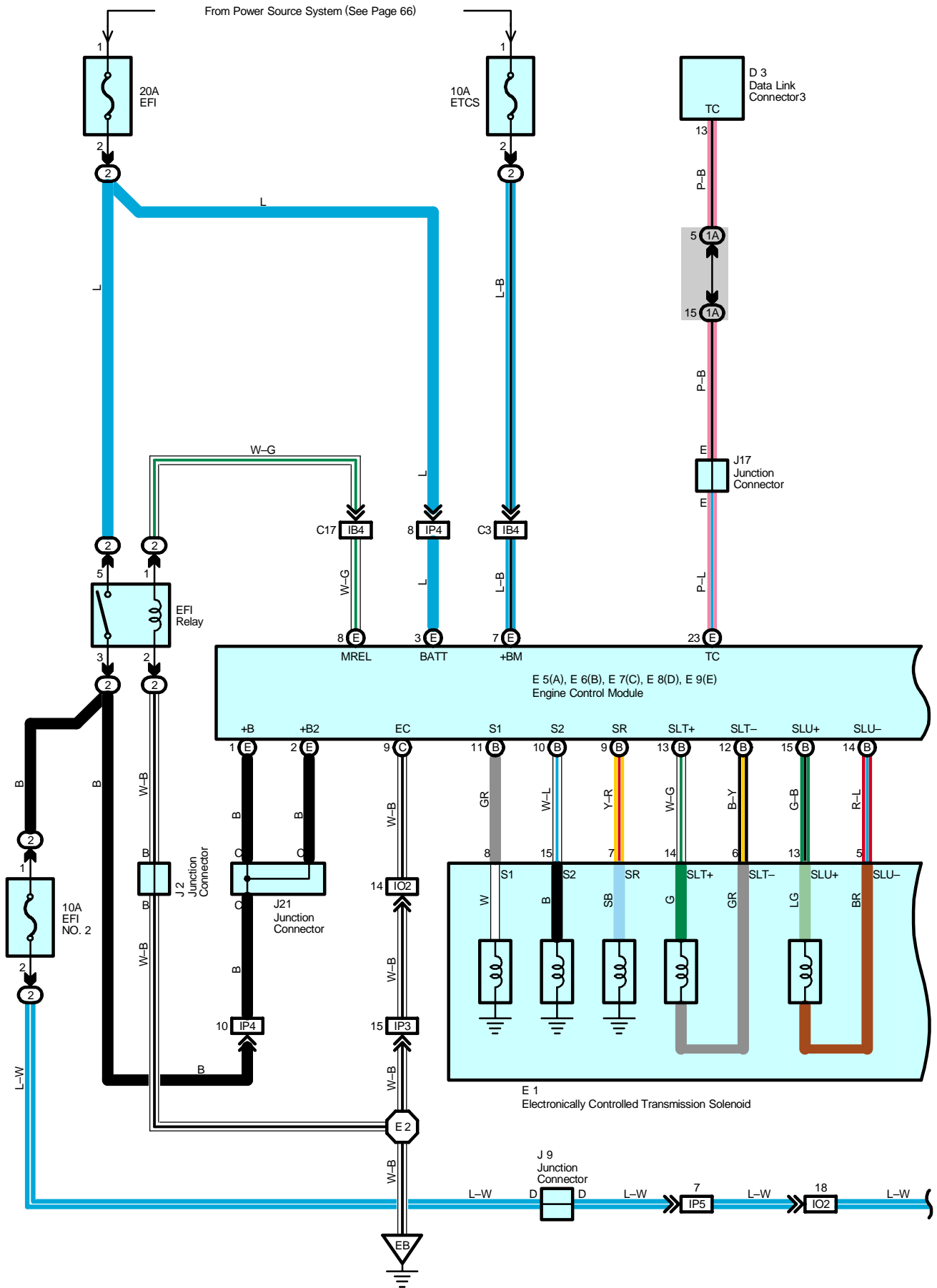
Wireless Door Lock Control



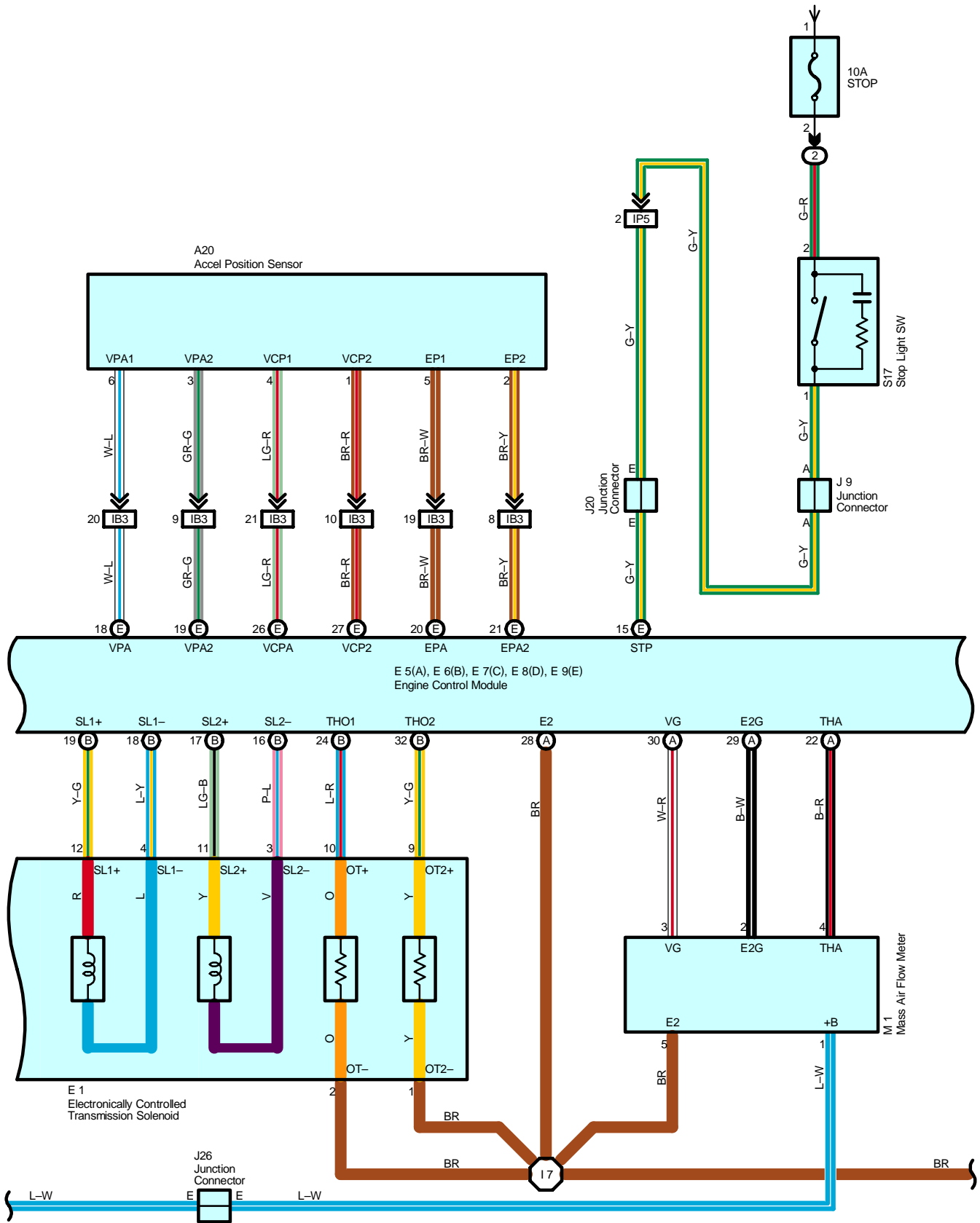
: Ground Points

Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

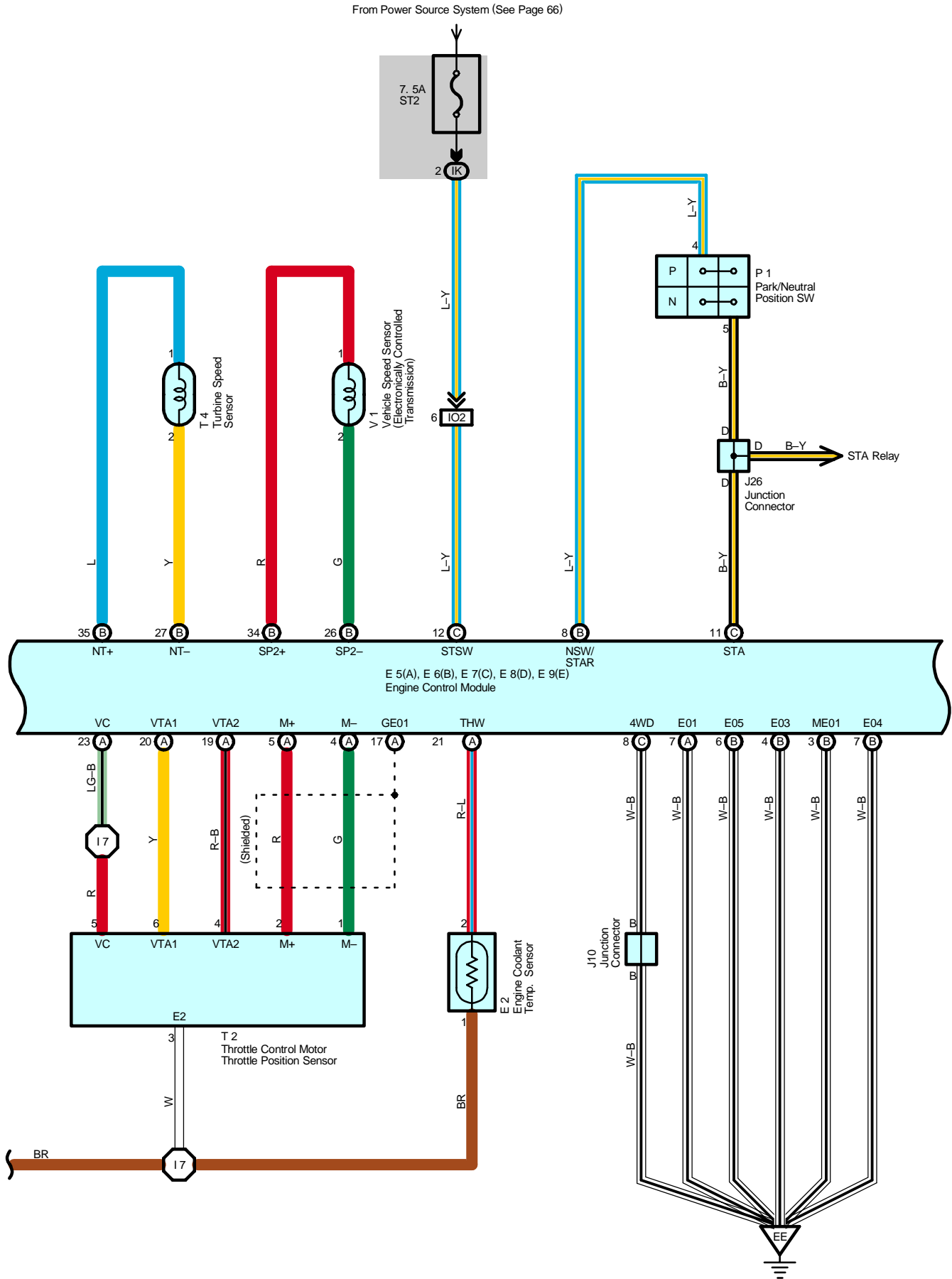
ECT and A/T Indicator



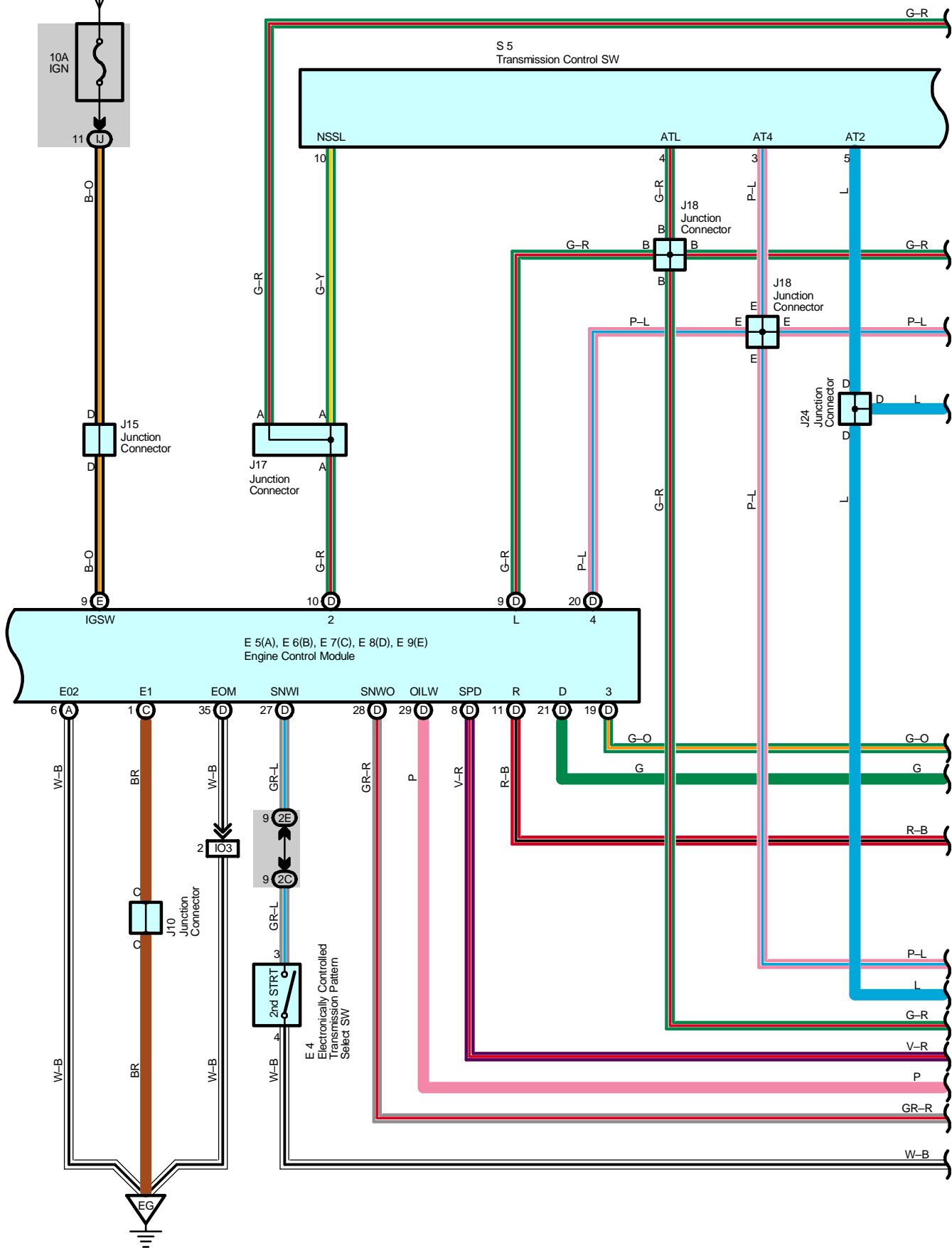
From Power Source System (See Page 66)



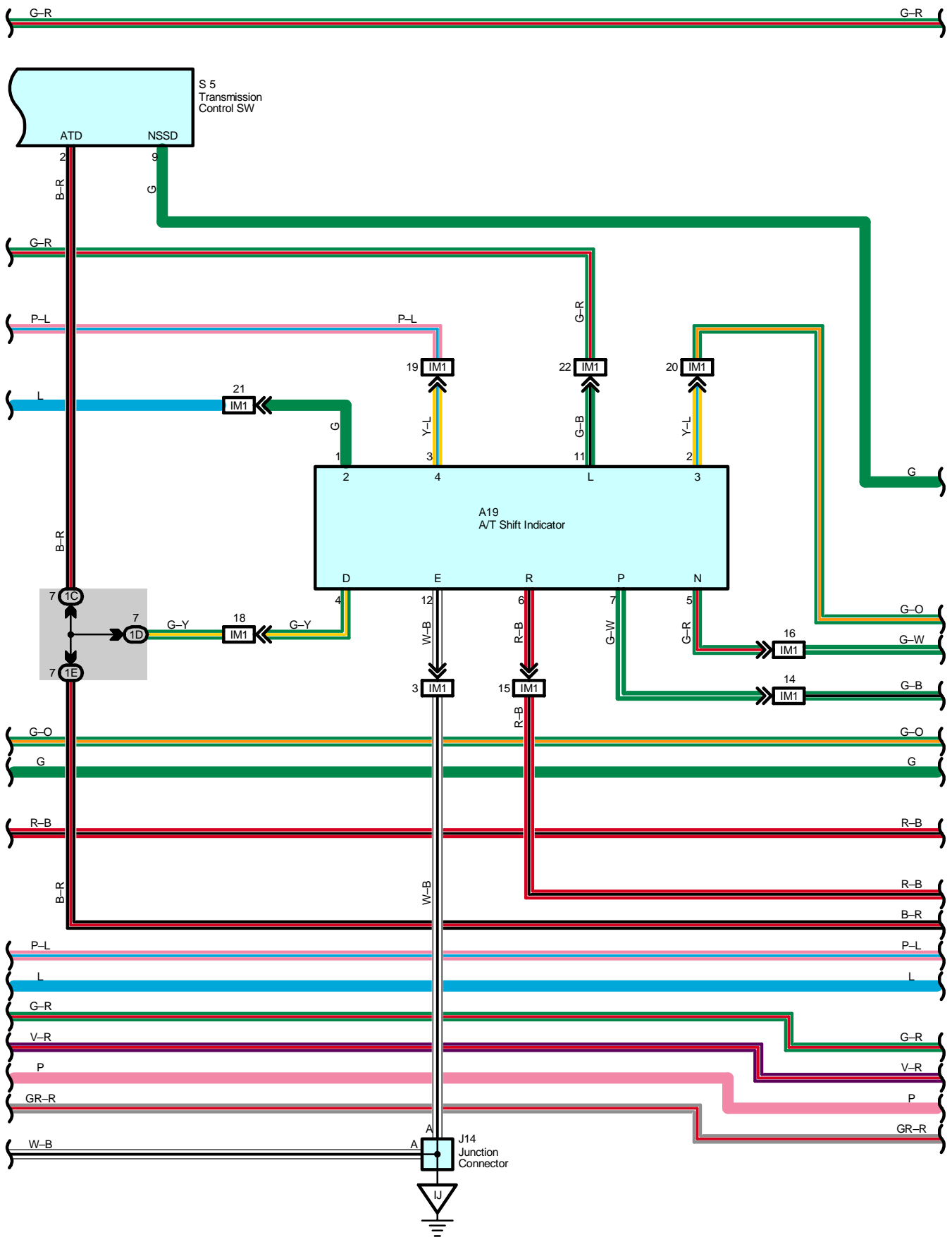
ECT and A/T Indicator

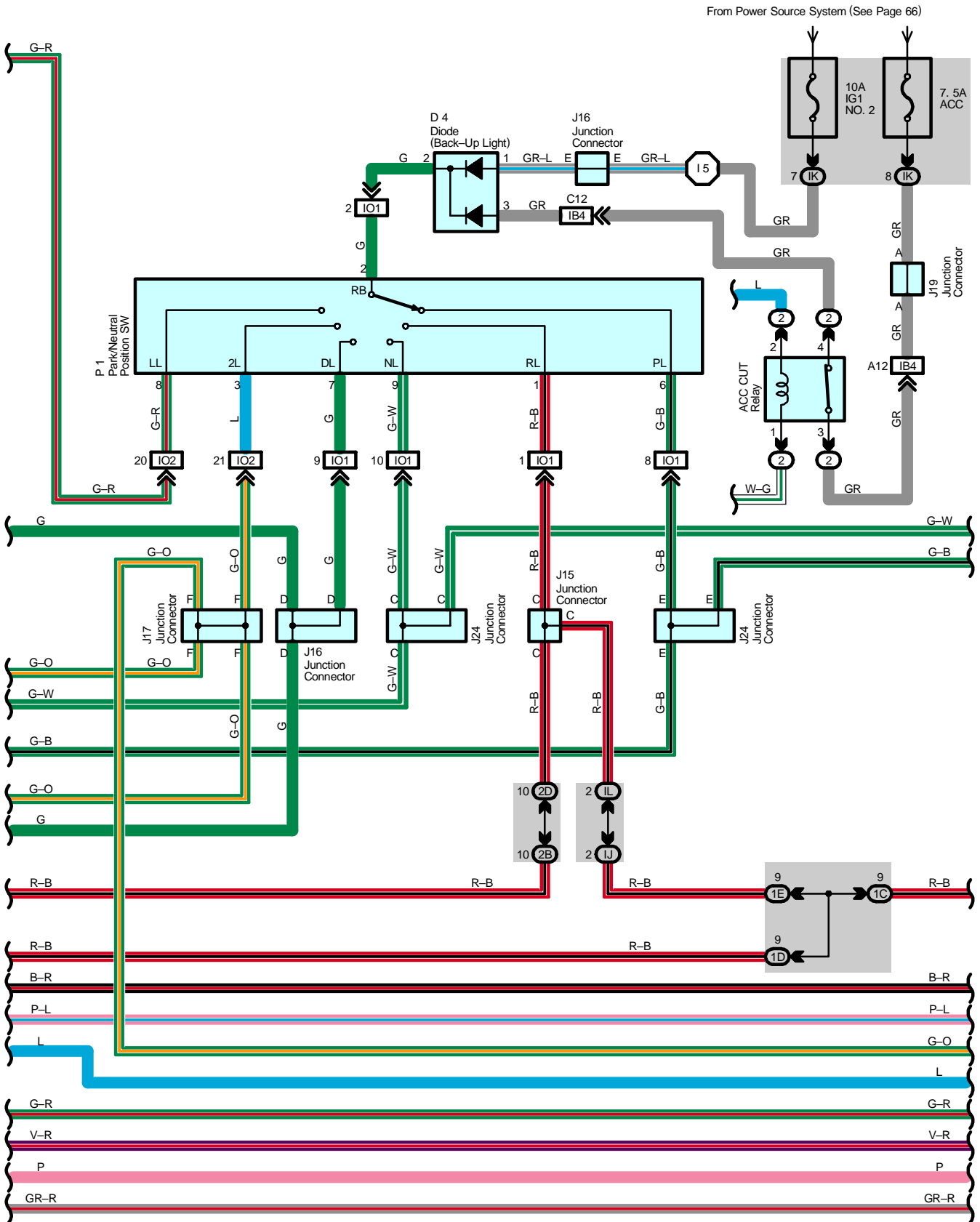


From Power Source System (See Page 66)

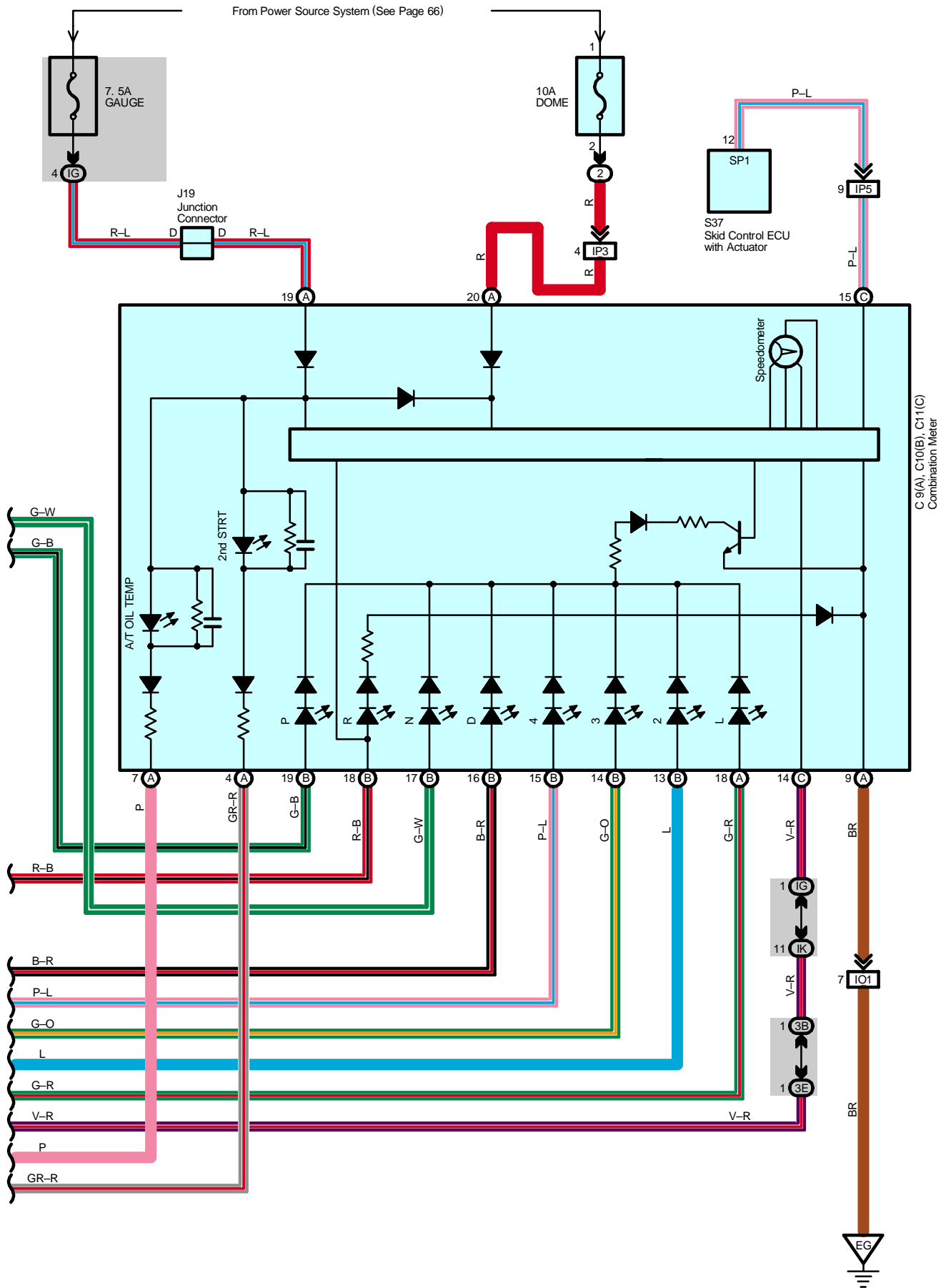


ECT and A/T Indicator





ECT and A/T Indicator



System Outline

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

1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine control module from the engine coolant temp. sensor and the vehicle speed signal from vehicle speed sensor is input to TERMINAL SP2+ of the engine control module. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1 and VTA2 of the engine control module as throttle angle signal.

Based on these signals, the engine control module selects the best shift position for the driving conditions and sends current to the electronically controlled transmission solenoid.

2. Line Hydraulic Pressure Control

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

3. High Response Gear Shifting Control

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

4. Clutch Hydraulic Pressure Control

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

5. Lock-Up and Flexible Lock-Up Control

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

6. Stop Light SW Circuit

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

7. AI-Shift Control

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

Service Hints

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

(E) 9-Ground : Approx. 12 volts with the ignition SW at ON position

(E) 7, (E) 3-Ground : Always approx. 12 volts

(C)12-Ground : Approx. 12 volts with the ignition SW at ST position

(E)15-Ground : Approx. 12 volts with the brake pedal depressed

(A) 6, (A) 7, (B) 3, (B) 4, (B) 6, (B) 7, (C) 1, (C) 8, (C) 9, (D) 35-Ground : Always continuity

P1 Park/Neutral Position SW

2-6 : Closed with the shift lever in P position

2-1 : Closed with the shift lever in R position

2-9 : Closed with the shift lever in N position

2-7 : Closed with the shift lever in D position or 4 position

2-3 : Closed with the shift lever in 3 position

2-8 : Closed with the shift lever in 2 position or L position

ECT and A/T Indicator

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
A19	38	E7	C	39	J20	40	
A20	38	E8	D	39	J21	40	
C9	A	38	E9	E	39	J24	40
C10	B	38	J2	37	J26	40	
C11	C	38	J9	40	M1	37	
D3	39	J10	40	P1	37		
D4	39	J14	40	S5	41		
E1	36	J15	40	S17	41		
E2	36	J16	40	S37	37		
E4	39	J17	40	T2	37		
E5	A	39	J18	40	T4	37	
E6	B	39	J19	40	V1	37	

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
1D		
1E		
2B	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
2D		
2E		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		

▽ : Ground Points

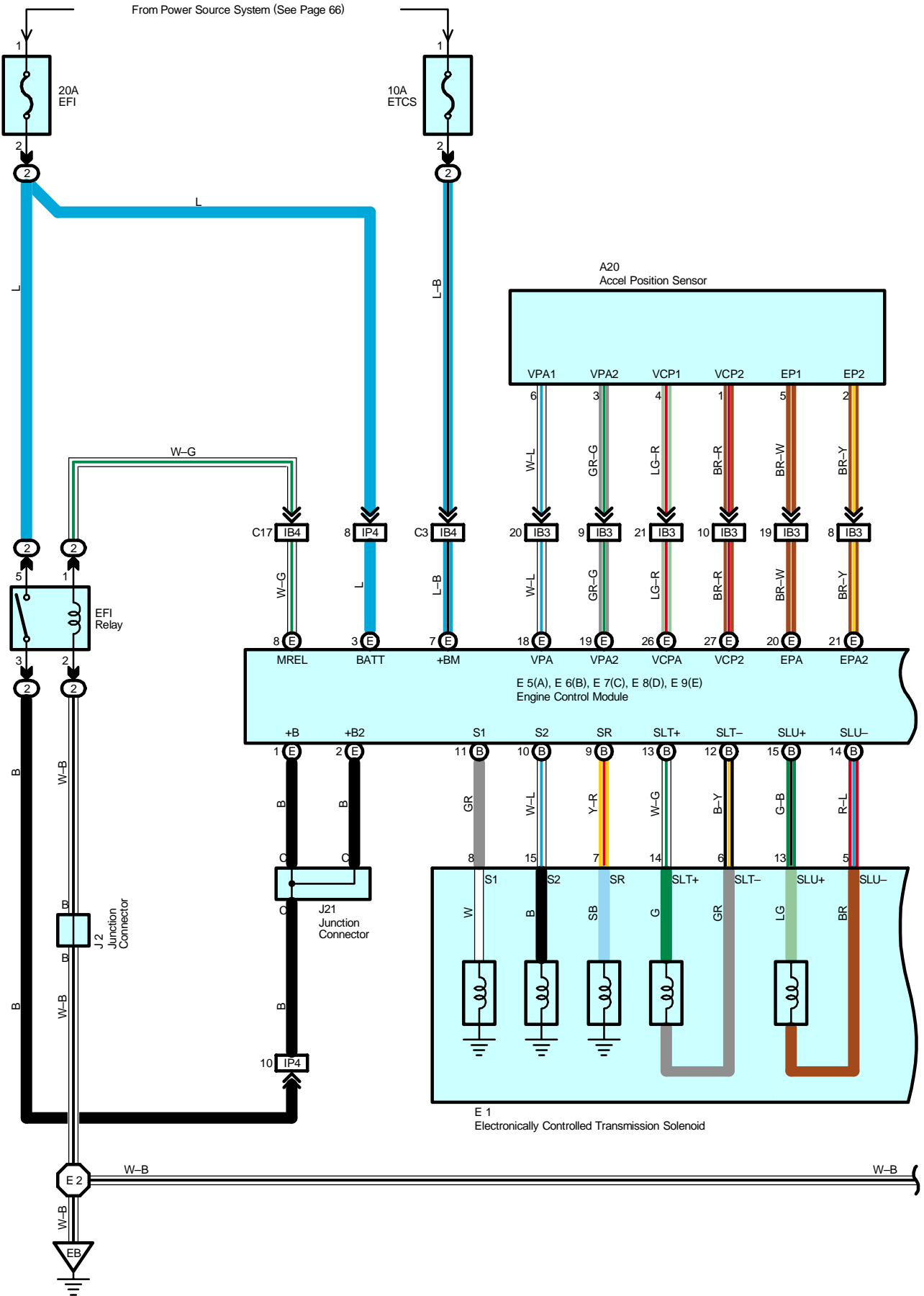
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EE	48	Rear Bank of Left Cylinder Head
EG		
IJ	50	Near the Right Side of Steering Column

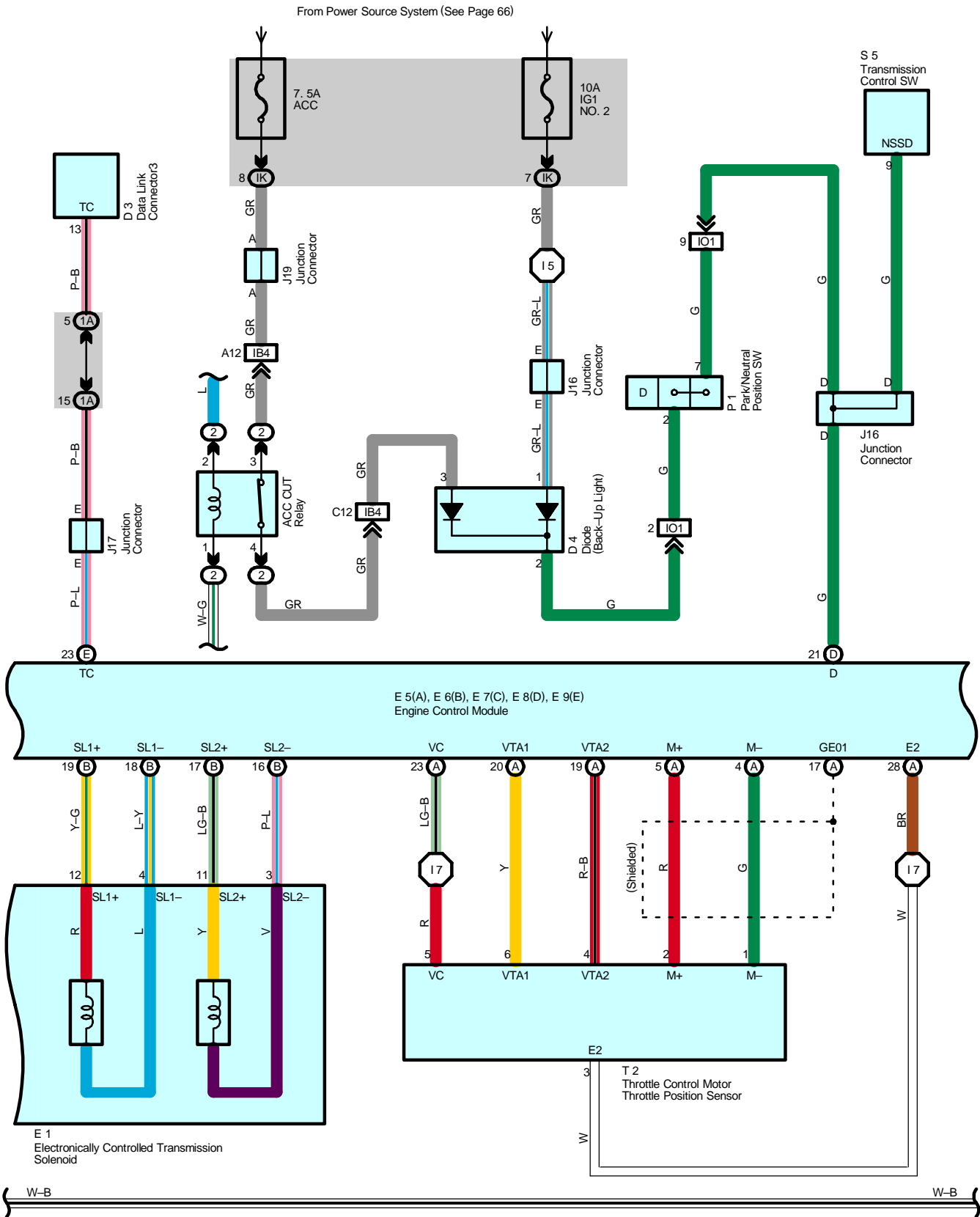


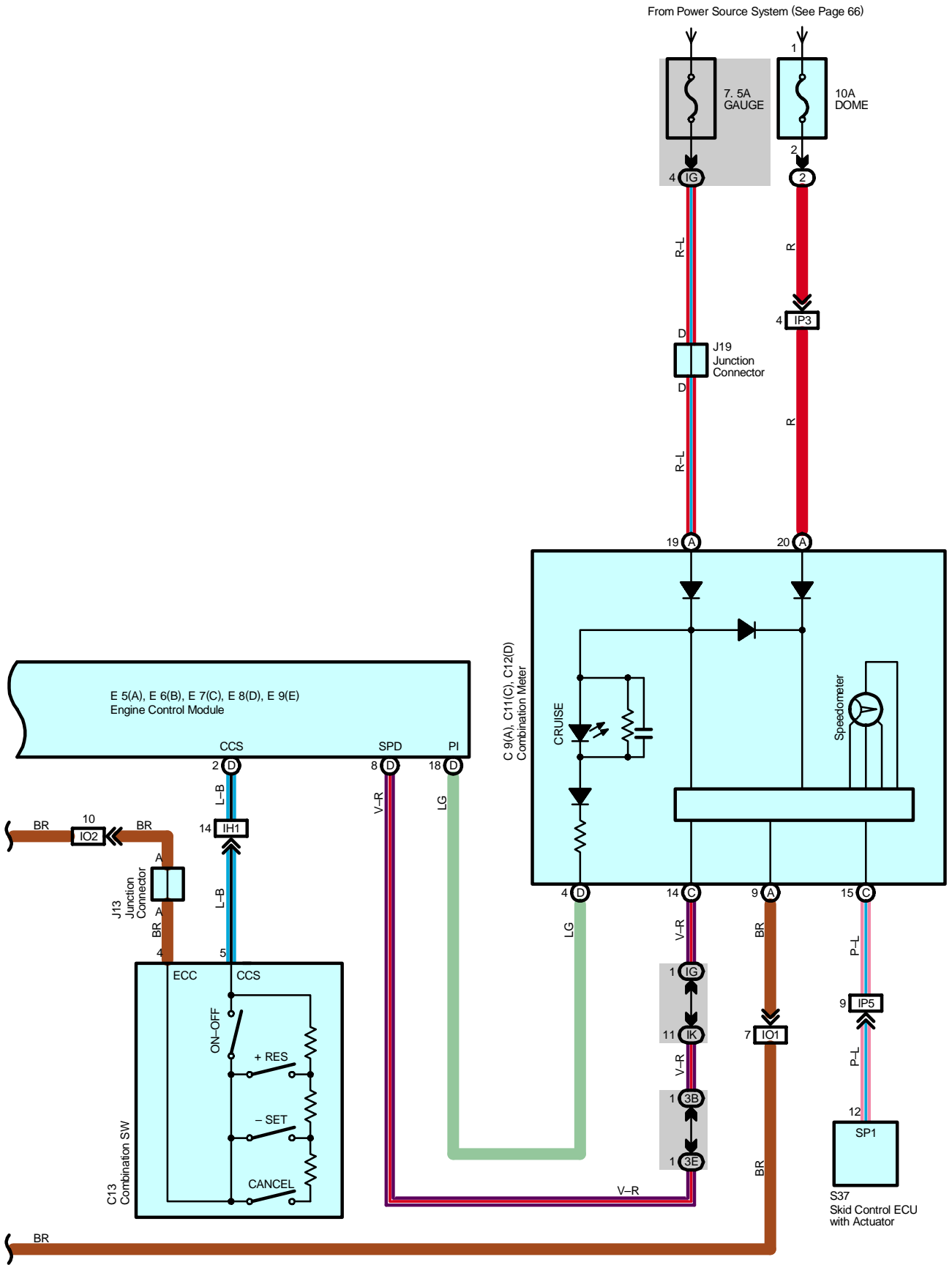
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	48	Engine Room Main Wire	I7	52	Engine Wire
I5	52	Instrument Panel Wire			

Cruise Control







Cruise Control

System Outline

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

1. Set Operation

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

2. Set Speed Control

When the - SET SW is operated with the cruise control main SW turned on during travelling, the constant vehicle speed is controlled.

3. Coast Control

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

4. Accel Control

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

5. Resume Control

When the vehicle speed is above the low speed limit (Approximately 40 km/h, 25 mph) if the cruise control is cancelled, use of the + RES SW accelerates the vehicle to the speed level used before canceling the cruise control.

6. Manual Cancel Mechanism

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

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

7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.

- * The stop light SW wiring is faulty or short-circuited.
- * The vehicle speed signal is faulty.
- * The electronically controlled throttle malfunctions.

8. Overdrive Control Function

Overdrive is sometimes cut off on gradients during cruise control driving. When end of climbing gradient is determined by throttle opening degree information after overdrive is canceled, control is reset to overdrive condition after overdrive resetting timer operation. Also, when overdrive is cut off during accel or resume control, control is reset to overdrive condition when accel or resume control is finished.

Service Hints

E5 (A), E6 (B), E7 (C), E8 (D), E9 (E) Engine Control Module

- (E) 9-Ground : Approx. 12 volts with the ignition SW at ON position
- (E) 7, (E) 3-Ground : Always approx. 12 volts
- (A) 6, (A) 7, (B) 3, (B) 4, (B) 6, (B) 7, (C) 1, (C) 8, (C) 9, (D) 35-Ground : Always continuity
- (E)15-Ground : Approx. 12 volts with the brake pedal depressed
- (D) 2-Ground : Continuity with the cruise control ON-OFF SW at on
 - Approx. 1540 Ω with the CANCEL SW on in cruise control SW
 - Approx. 240 Ω with the + RES SW on in cruise control SW
 - Approx. 630 Ω with the - SET SW on in cruise control SW

C13 Combination SW

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

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
A20	38	E7	C	39	J17	40	
C9	A	38	E8	D	39	J19	40
C11	C	38	E9	E	39	J20	40
C12	D	38	J2	37	J21	40	
C13	38	J5	37	P1	37		
D3	39	J9	40	S5	41		
D4	39	J10	40	S17	41		
E1	36	J13	40	S37	37		
E5	A	39	J15	40	T2	37	
E6	B	39	J16	40			

 : **Relay Blocks**

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		

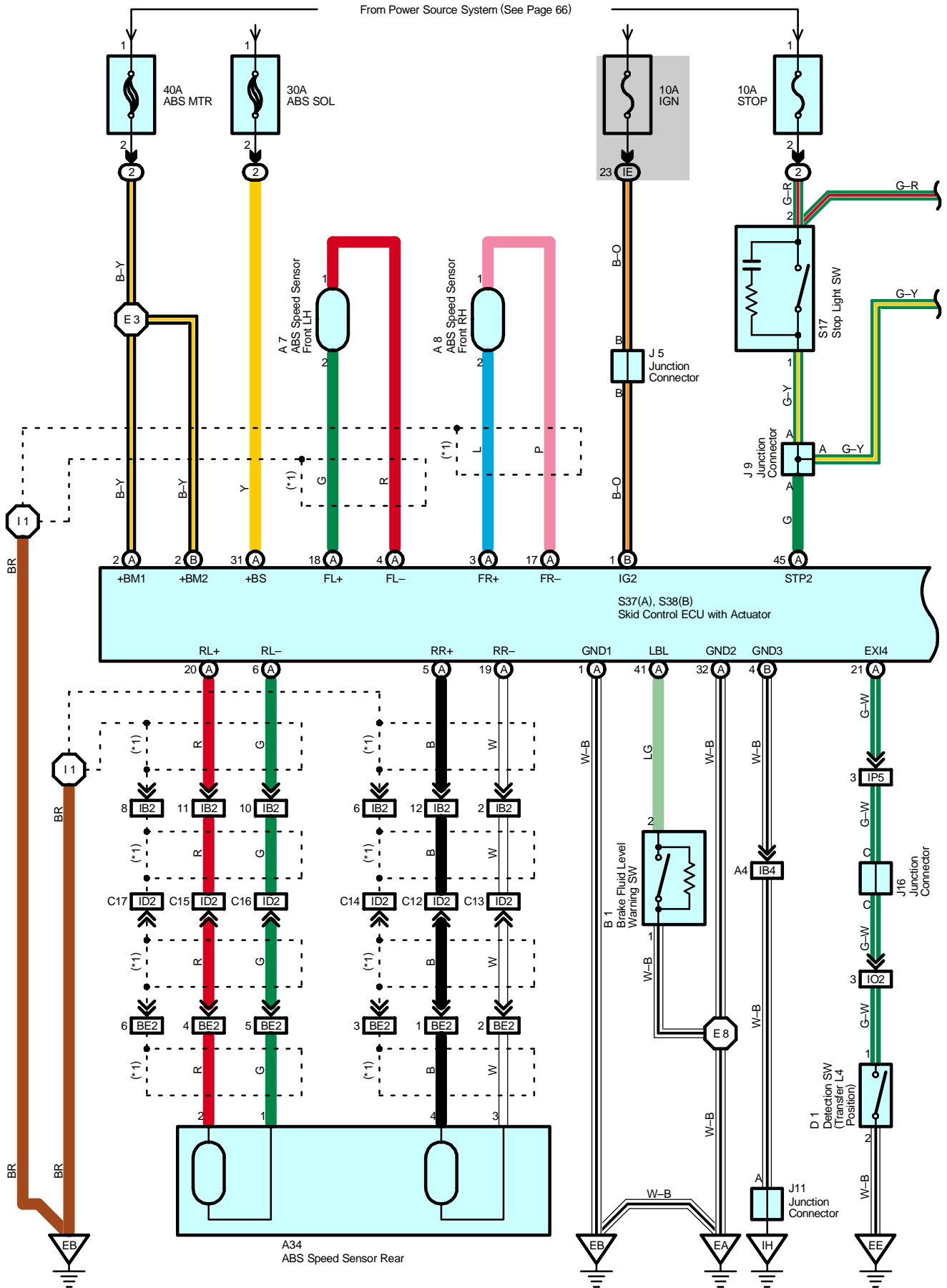
 : **Ground Points**

Code	See Page	Ground Points Location
EB	48	Front Left Fender
EE	48	Rear Bank of Left Cylinder Head
EG		

 : **Splice Points**

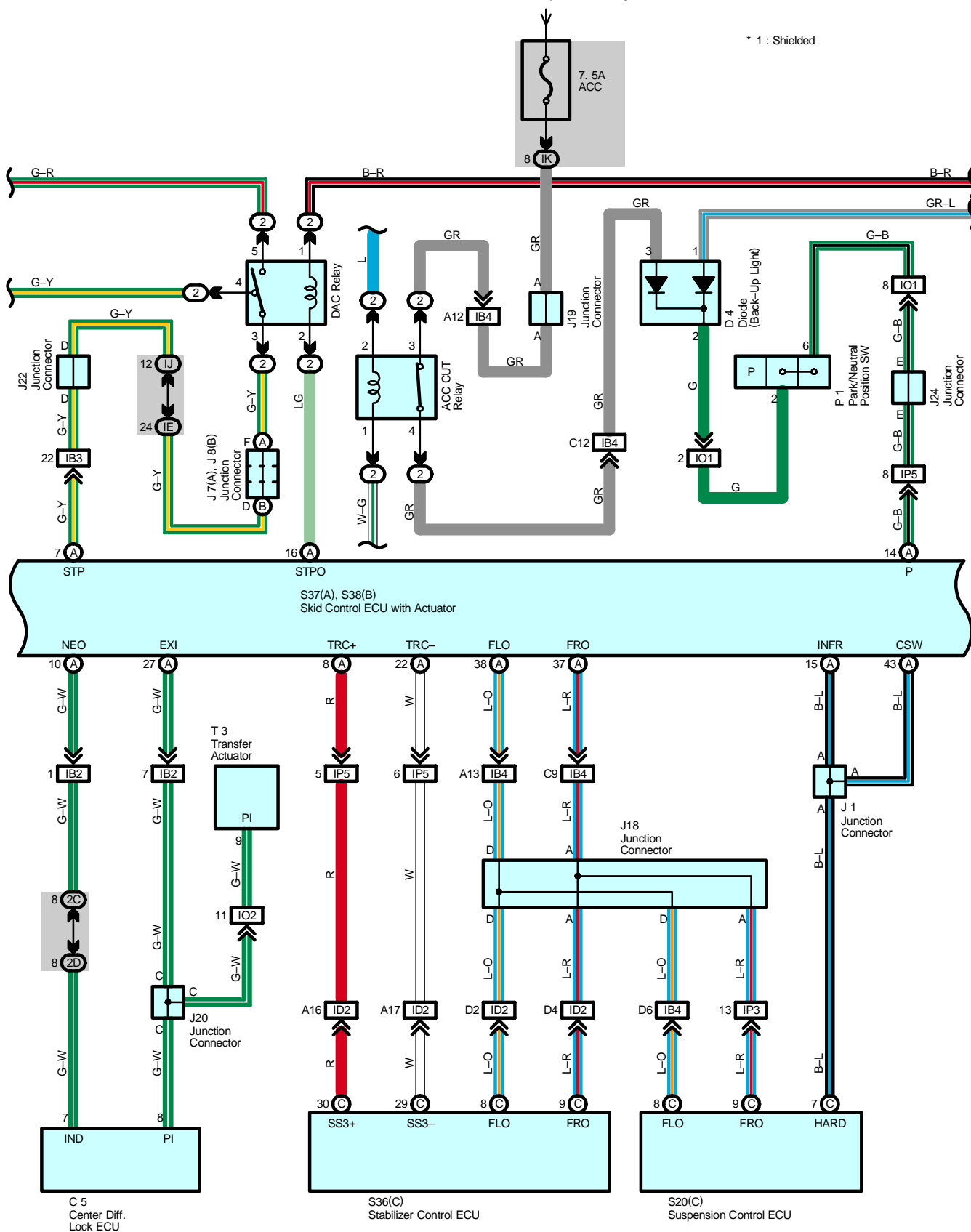
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	48	Engine Room Main Wire	I7	52	Engine Wire
I5	52	Instrument Panel Wire			

ABS, TRAC, VSC, DAC and HAC

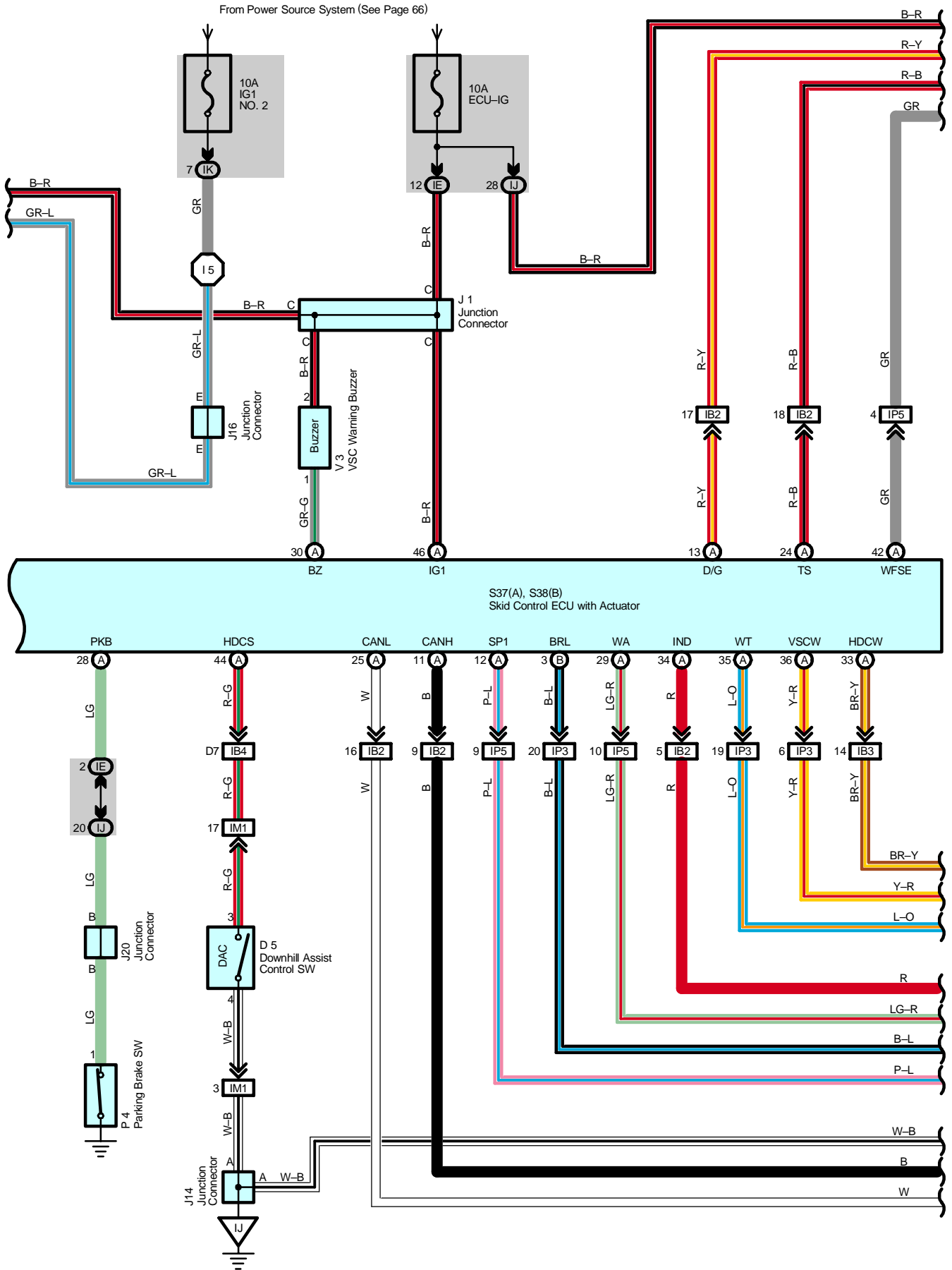


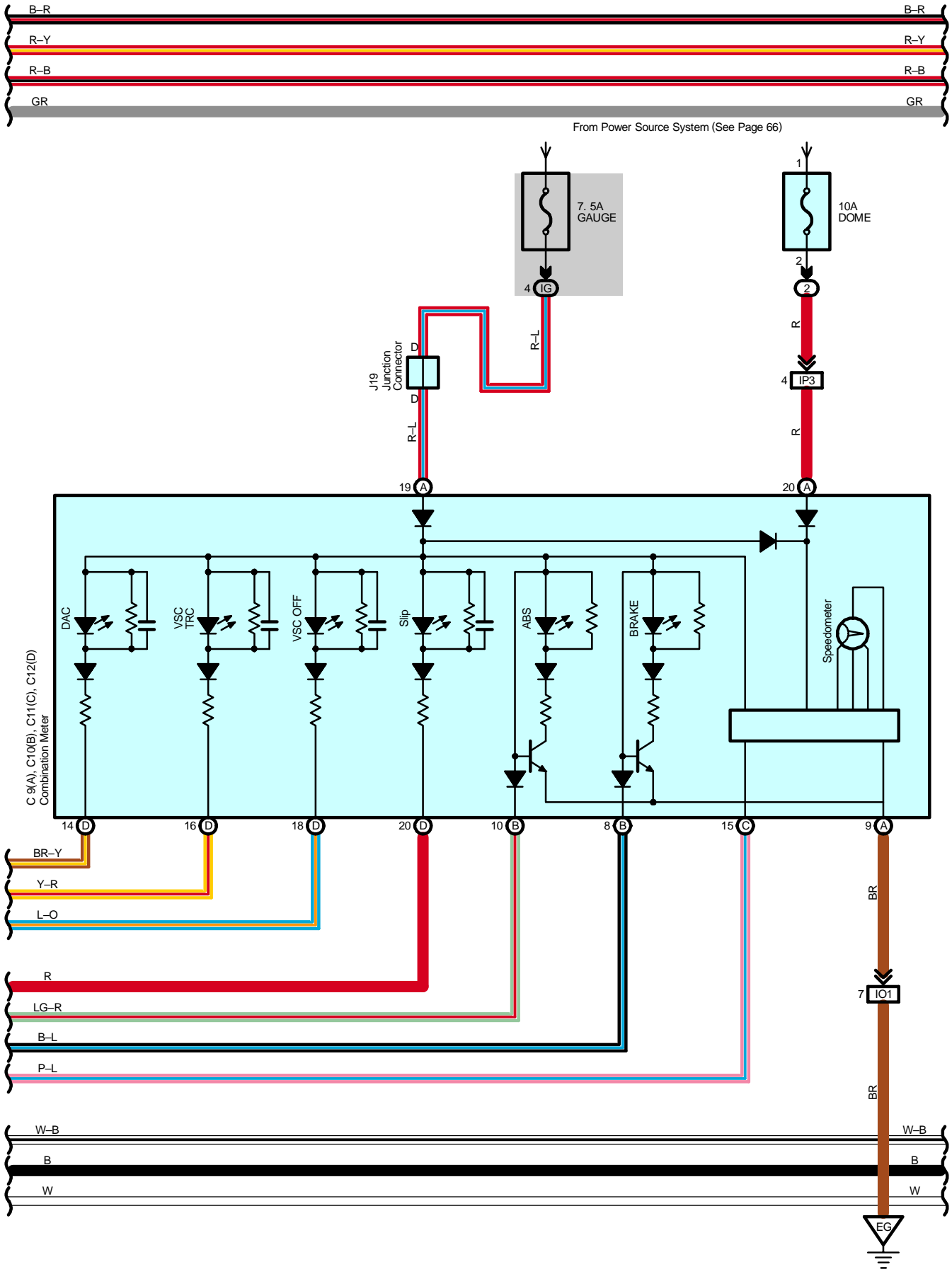
From Power Source System (See Page 66)

* 1 : Shielded

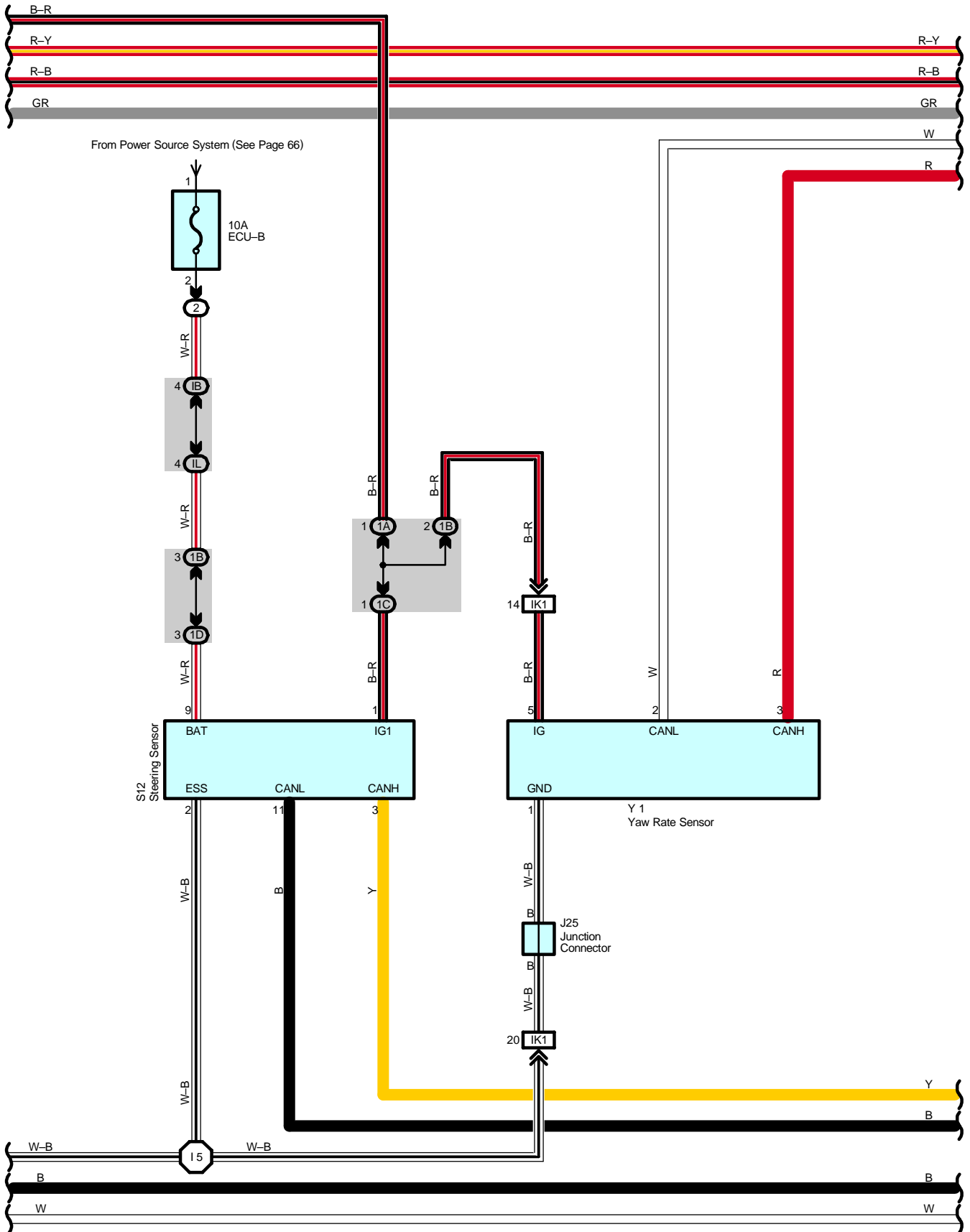


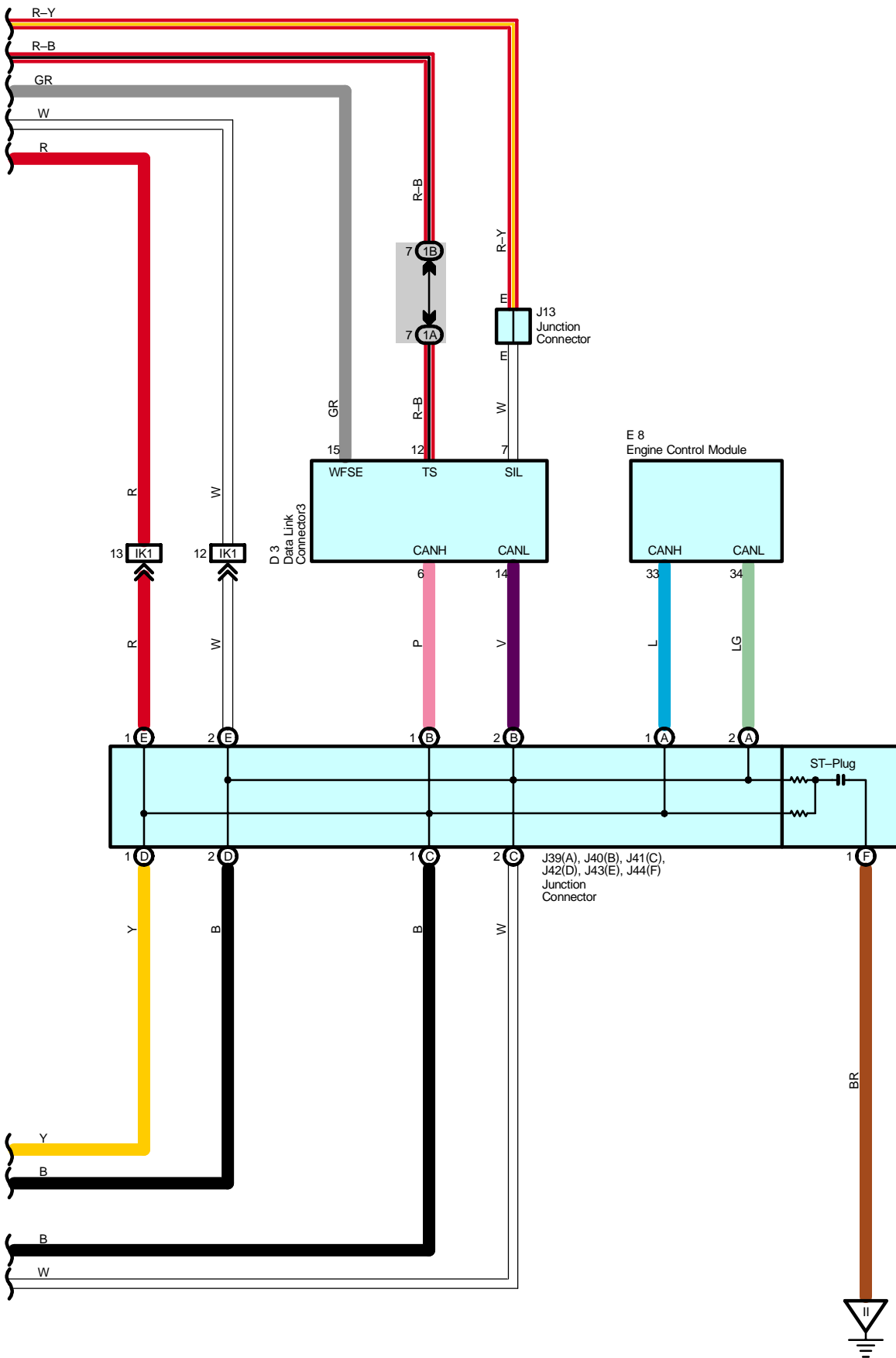
ABS, TRAC, VSC, DAC and HAC





ABS, TRAC, VSC, DAC and HAC





ABS, TRAC, VSC, DAC and HAC

System Outline

1. Normal Operation

The VSC system helps prevent the vehicle from slipping sideways as a result of strong front wheel skid or strong rear wheel skid during cornering.

The followings are two examples that can be considered as circumstances in which the tires exceed their lateral grip limit. The VSC system is designed to help control the vehicle behavior by controlling the engine's output and the brakes at each wheel when the vehicle is under one of the conditions indicated below.

- * When the front wheels lose grip in relation to the rear wheels (Strong front wheel skid tendency).
- * When the rear wheels lose grip in relation to the front wheels (Strong rear wheel skid tendency).

2. Downhill Assist Control Operation

The downhill assist control operation controls braking action of each wheel to help prevent out-of-balance vehicle posture when descending a steep hill or traveling at a speed exceeding the threshold of wheel gripping capability. When the downhill assist control is in operation, the brake system controls vehicle speed within the range of 5 to 7 km/h.

For the downhill assist control to be operative all of the following conditions have to be met:

- * Downhill assist control switch = ON
- * Transfer L4 selected
- * Vehicle speed is 5 km/h or more, but less than 25 km/h.
- * Accelerator pedal OFF
- * Brake pedal OFF

3. Hill-Start Assist Control Operation

When starting on a steep hill for ascending, the hill-start support control automatically puts the brake on momentarily – from the moment when the driver releases his foot from the brake pedal until he steps on the accelerator pedal – to help the driver start the vehicle safely and smoothly.

Please bear in mind, however, that it activates the brake system for only 3 seconds.

For the hill-start support control to be operative all of the following conditions have to be met:

- * Shift position = D, 2, or L
- * Vehicle not moving forward with some wheel(s) slipping
- * Vehicle speed > 0 km/h

Service Hints

S37 (A), S38 (B) Skid Control ECU with Actuator

(A) 1, (A) 32, (B) 4–Ground : Always continuity

(A) 46, (B) 1–Ground : Approx. 12 volts with the ignition SW at ON position

(A) 2, (B) 2–Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	36	J7 A	40	J42 D	40
A8	36	J8 B	40	J43 E	40
A34	42	J9	40	J44 F	40
B1	36	J11	40	P1	37
C5	38	J13	40	P4	40
C9 A	38	J14	40	S12	41
C10 B	38	J16	40	S17	41
C11 C	38	J18	40	S20 C	41
C12 D	38	J19	40	S36 C	45
D1	36	J20	40	S37 A	37
D3	39	J22	40	S38 B	37
D4	39	J24	40	T3	37
D5	39	J25	40	V3	41
E8	39	J39 A	40	Y1	41
J1	37	J40 B	40		
J5	37	J41 C	40		

○ : Relay Blocks

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

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
2C	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB3		
IB4		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
BE2	58	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)

 : **Ground Points**

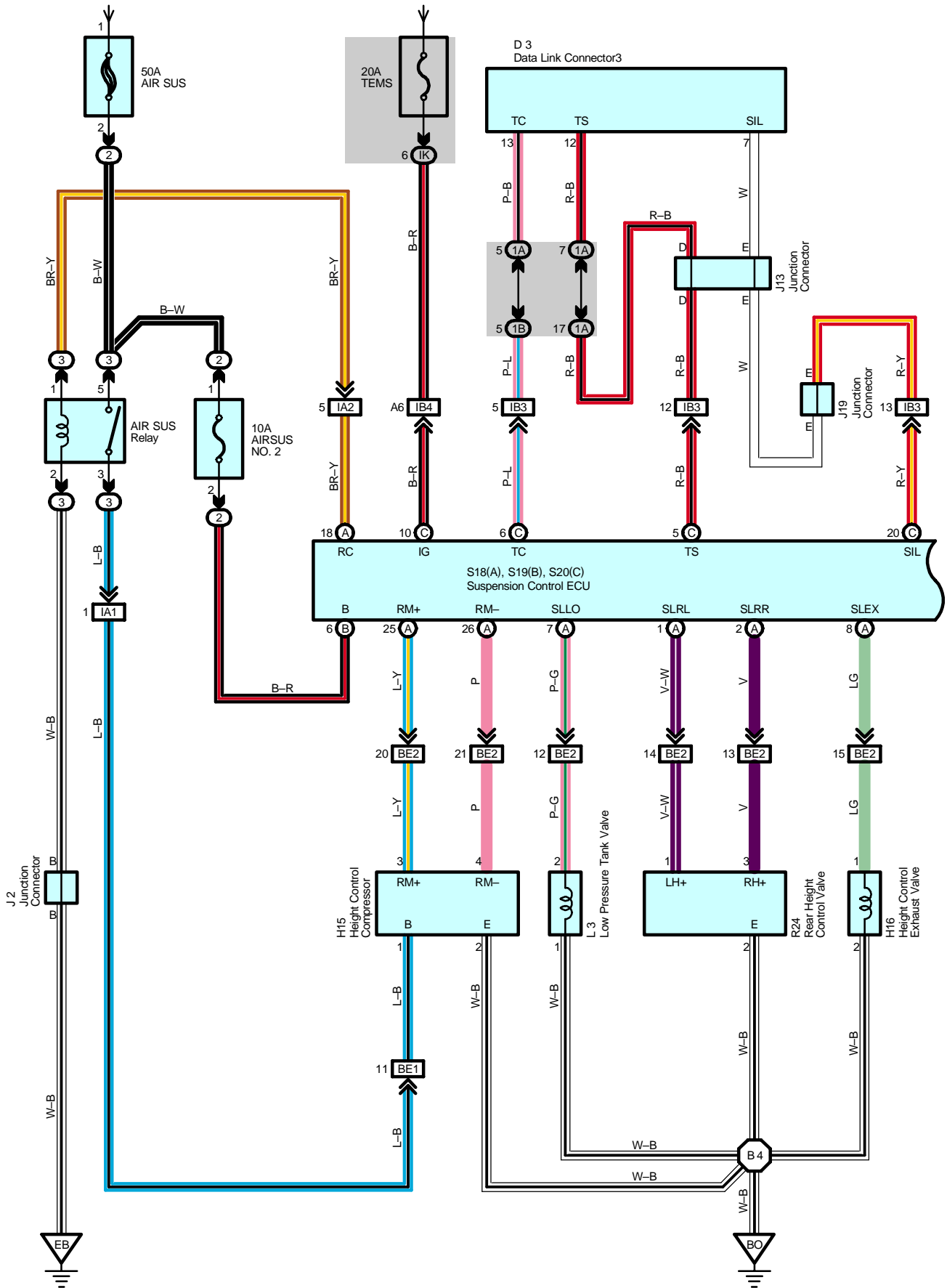
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EE	48	Rear Bank of Left Cylinder Head
EG		
IH	50	Left Kick Panel
II	50	Near the Left Side of Steering Column
IJ	50	Near the Right Side of Steering Column

 : **Splice Points**

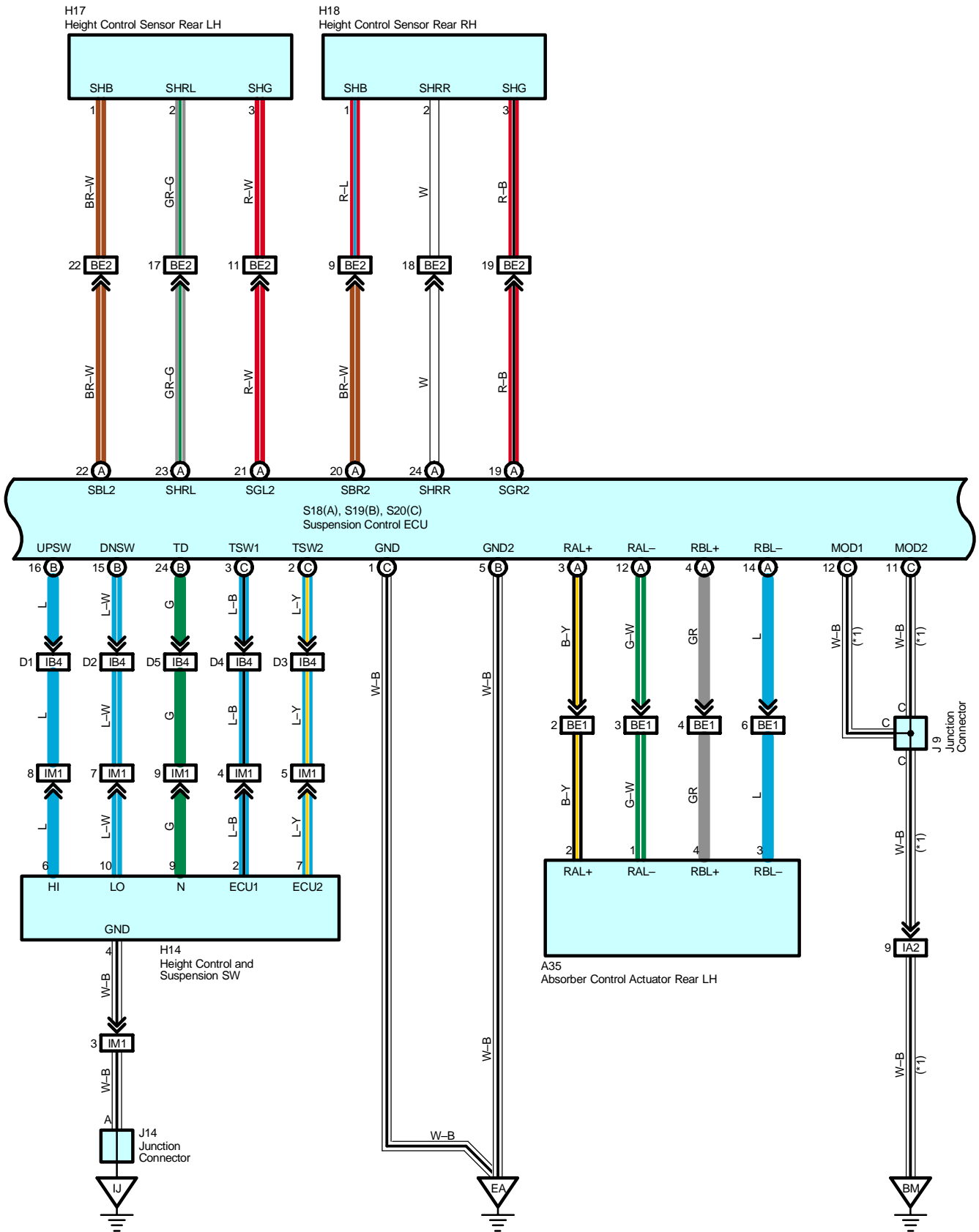
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	48	Engine Room Main Wire	I1	52	Engine Room Main Wire
E8			I5	52	Instrument Panel Wire

Electric Modulated Air Suspension

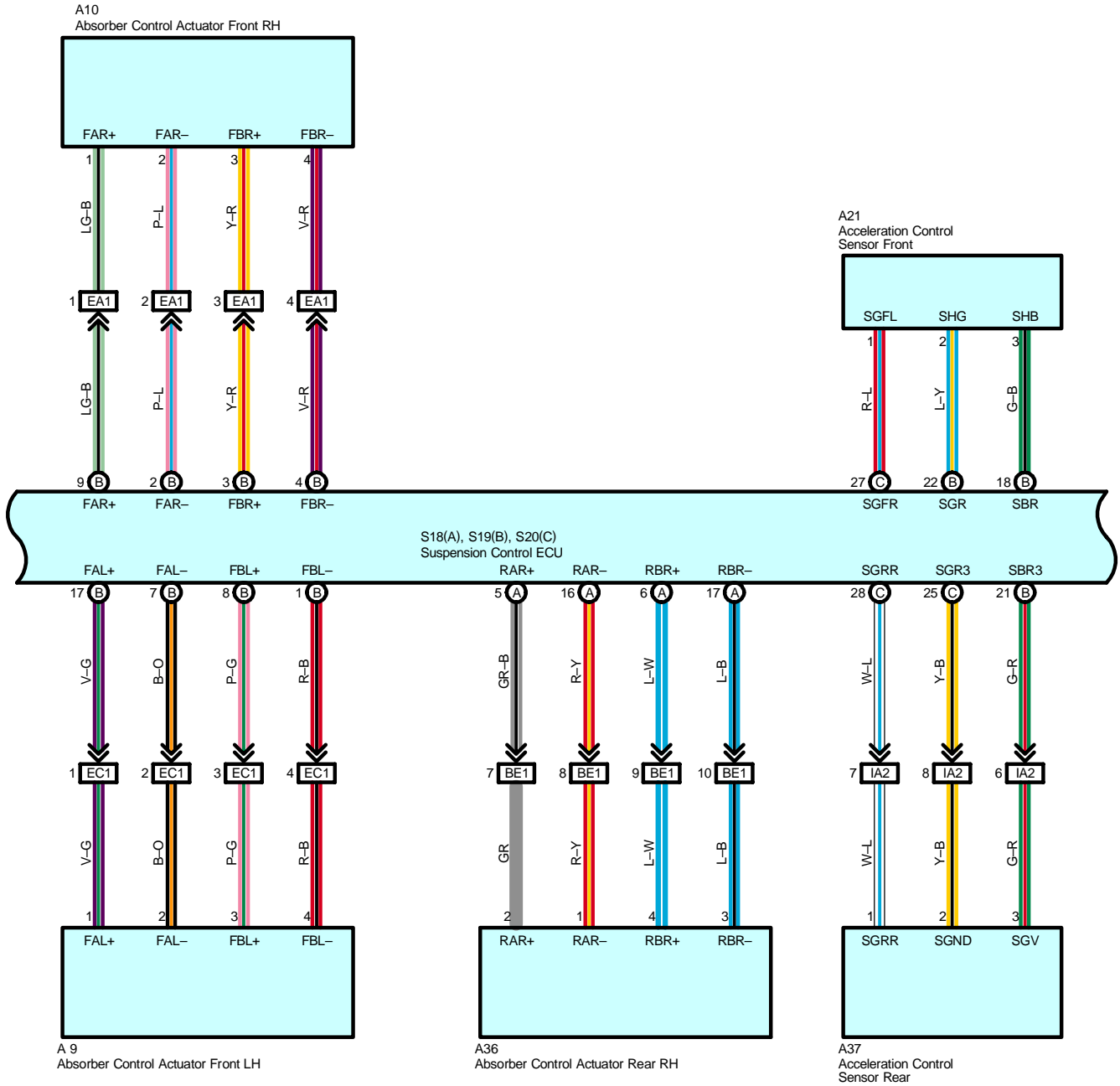
From Power Source System (See Page 66)

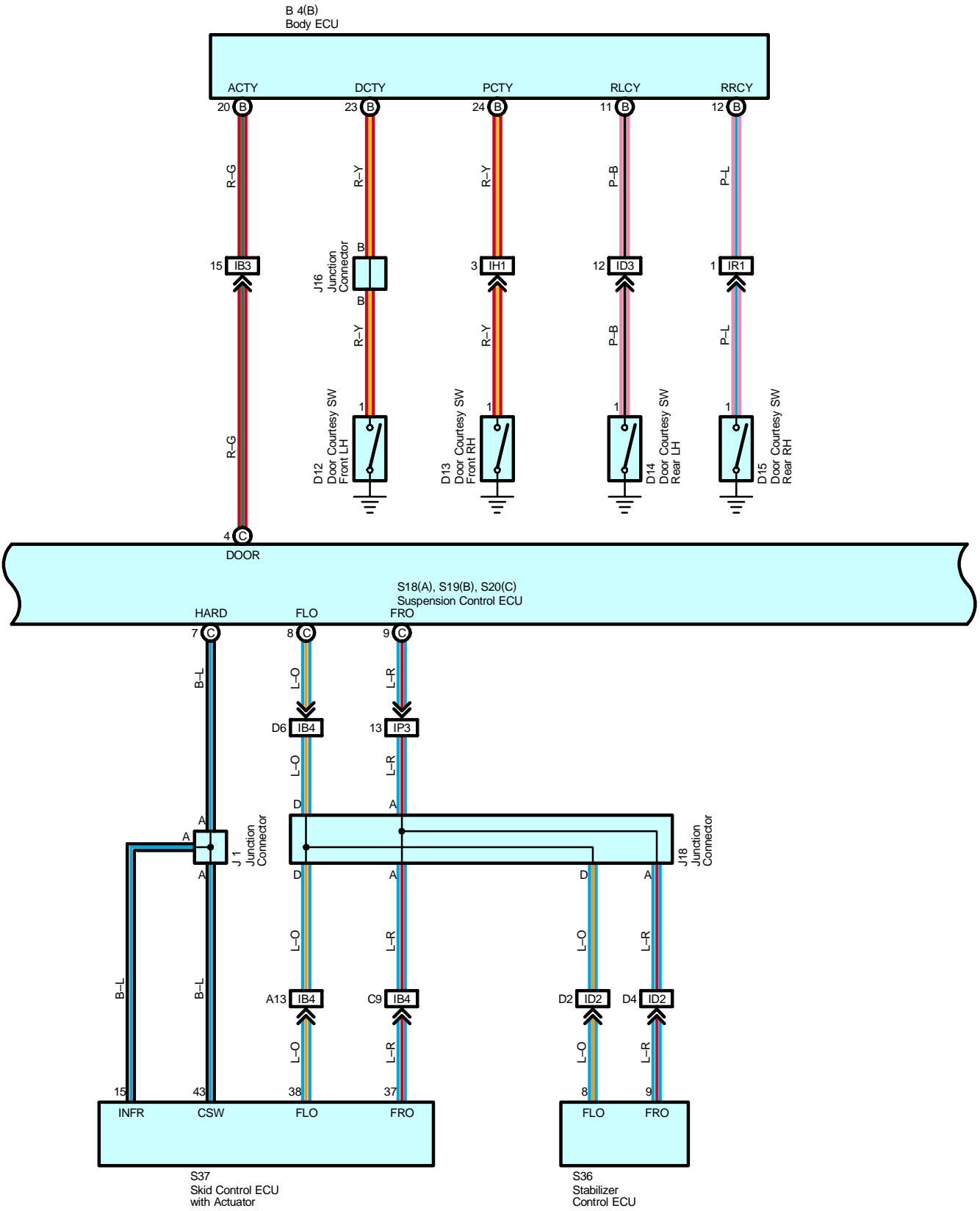


* 1 : Kinetic Dynamic Suspension System

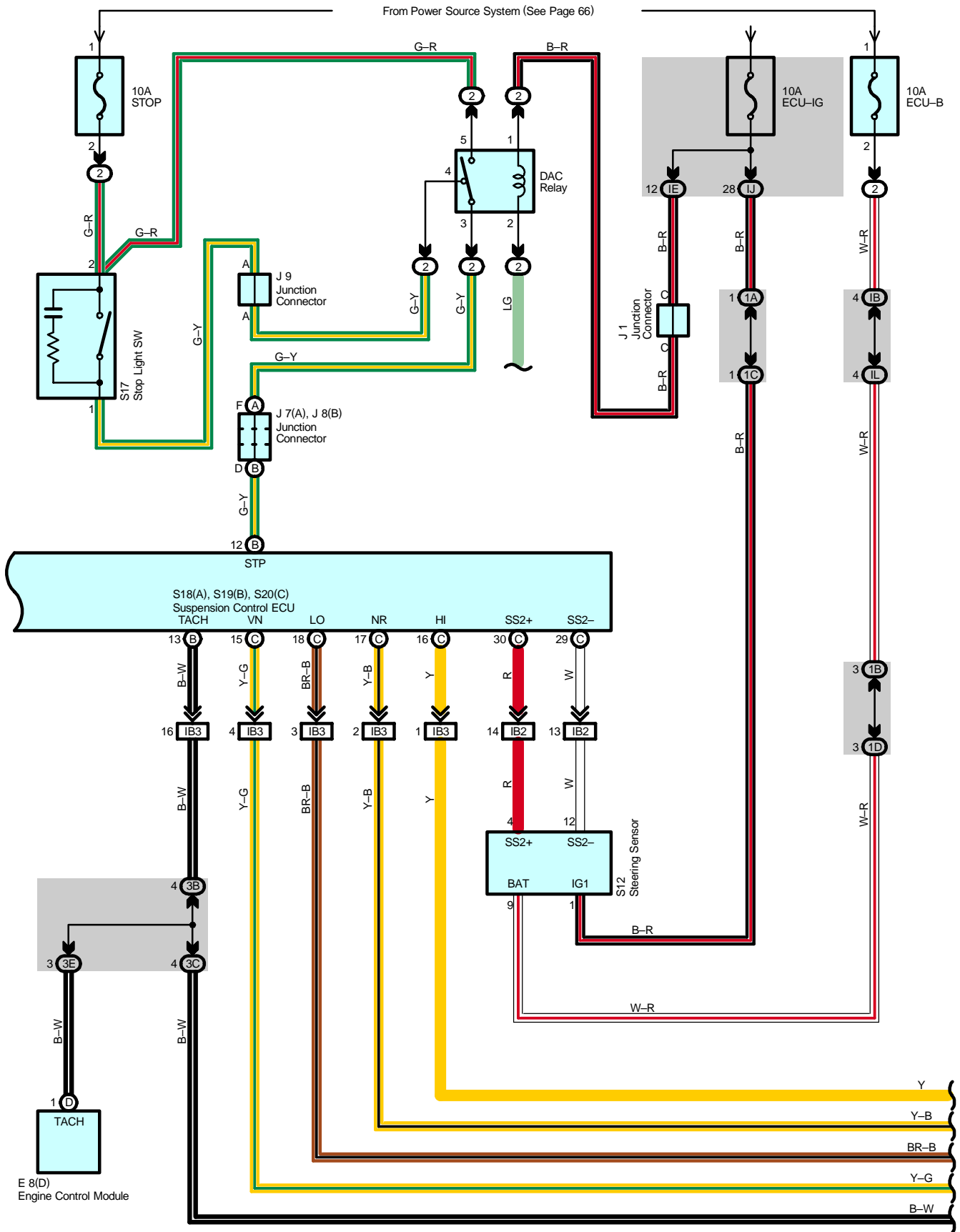


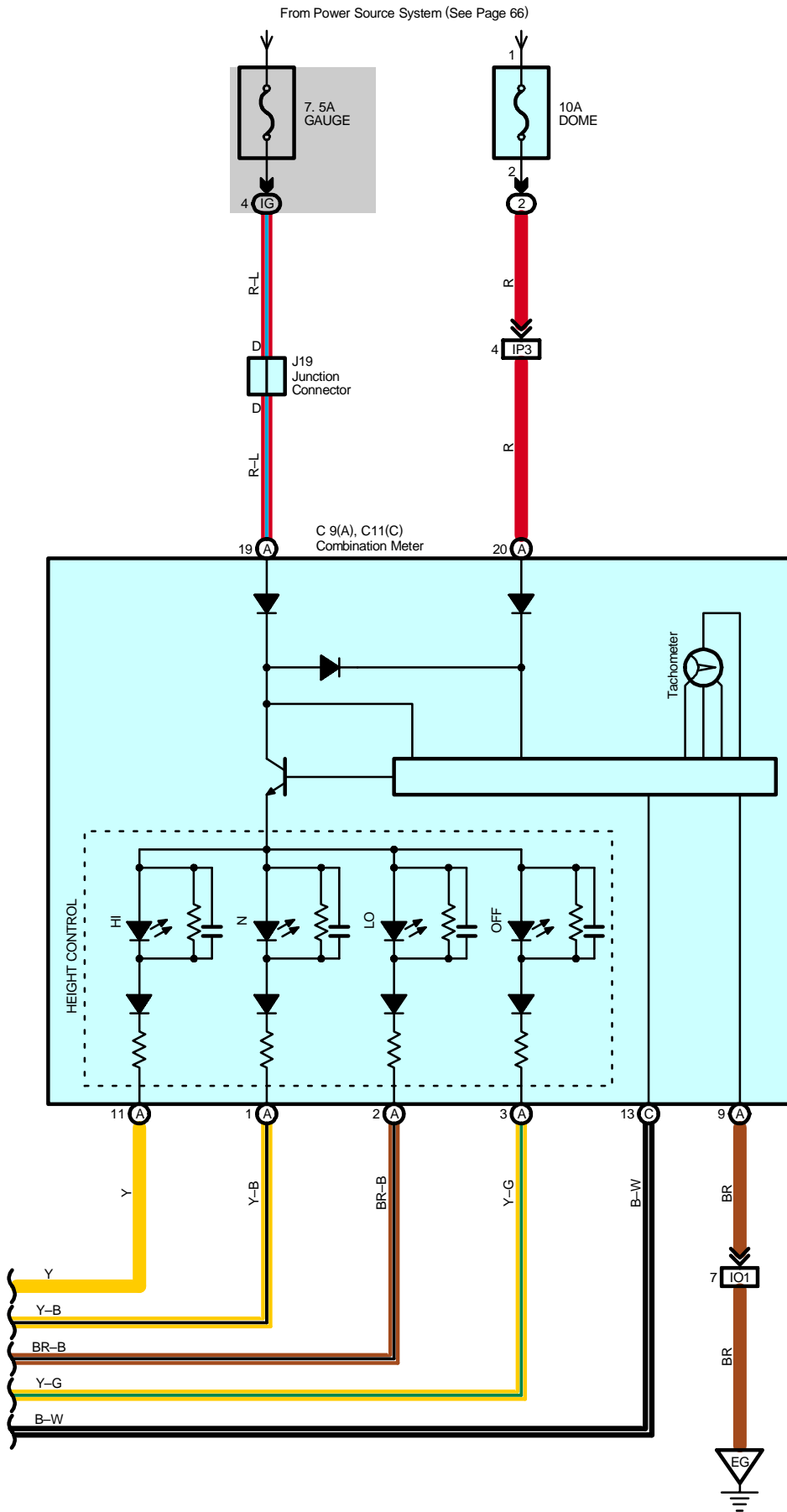
Electric Modulated Air Suspension





Electric Modulated Air Suspension





Electric Modulated Air Suspension

System Outline

- * The electric modulated suspension with height control, is a system designed to maintain a constant ride height by means of an electro-pneumatic system in the rear suspension – to cope with change in load due to possible change in the number of people and/or the weight of cargo the vehicle has to carry. With three driver's-choice height-control switches on the console, the driver can set ride height to any one of the three different ride height modes (High, normal and low): "High mode" for rough terrain and "Low mode" for passenger to get on or get off, and for cargo to be loaded or unloaded.
- * This system has five basic controls as shown below:
- * Auto leveling control
This control maintains a constant rear vehicle ride height regardless of change in load due to possible change in the number of passengers and/or the weight of cargo the vehicle has to carry.
- * Ride height switchover control
This control switches over height mode to the mode selected by the height control switch.
 - * High mode (+ 40 mm / 1.6 in.)
 - * Low mode (– 20 mm / 0.8 in.)
- * Speed sensing control
Regardless of the initial height mode setting, "High mode" or "Low mode," this control automatically switches over vehicle height mode to the optimum "Normal mode":
 - * When the vehicle speed reaches or exceeds 30 km/h with height mode set to "High mode," or;
 - * When the vehicle speed reaches or exceeds 5 km/h with height mode set to "Low mode."
- * Subsequent control after ignition switch off
After the ignition switch is turned OFF, this control lowers the rear vehicle ride height to offset rear vehicle ride height elevation due to passengers getting off, etc.
- * Height control OFF control
Pressing the absorber control switch turns the system OFF, making it possible for the vehicle to be jacked up or towed.

Service Hints

S19 (B), S20 (C) Suspension Control ECU

- (C)10–Ground : Approx. 12 volts with the ignition SW at ON position
- (B) 5, (C) 1, (C) 11, (C) 12–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A9	36	D15	42	J14	40
A10	36	E8 D	39	J16	40
A21	38	H14	39	J18	40
A35	42	H15	43	J19	40
A36	42	H16	43	L3	43
A37	42	H17	43	R24	44
B4 B	38	H18	43	S12	41
C9 A	38	J1	37	S17	41
C11 C	38	J2	37	S18 A	41
D3	39	J7 A	40	S19 B	41
D12	42	J8 B	40	S20 C	41
D13	42	J9	40	S36	45
D14	42	J13	40	S37	37

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.3 (Engine Compartment Left)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3C		
3E		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	48	Sensor Wire and Engine Room Main Wire (Near the Air Cleaner)
EC1	48	Sensor Wire and Engine Room Main Wire (Near the Engine Room R/B)
IA1	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IA2		
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB3		
IB4		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BE1	58	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BE2		

 : **Ground Points**

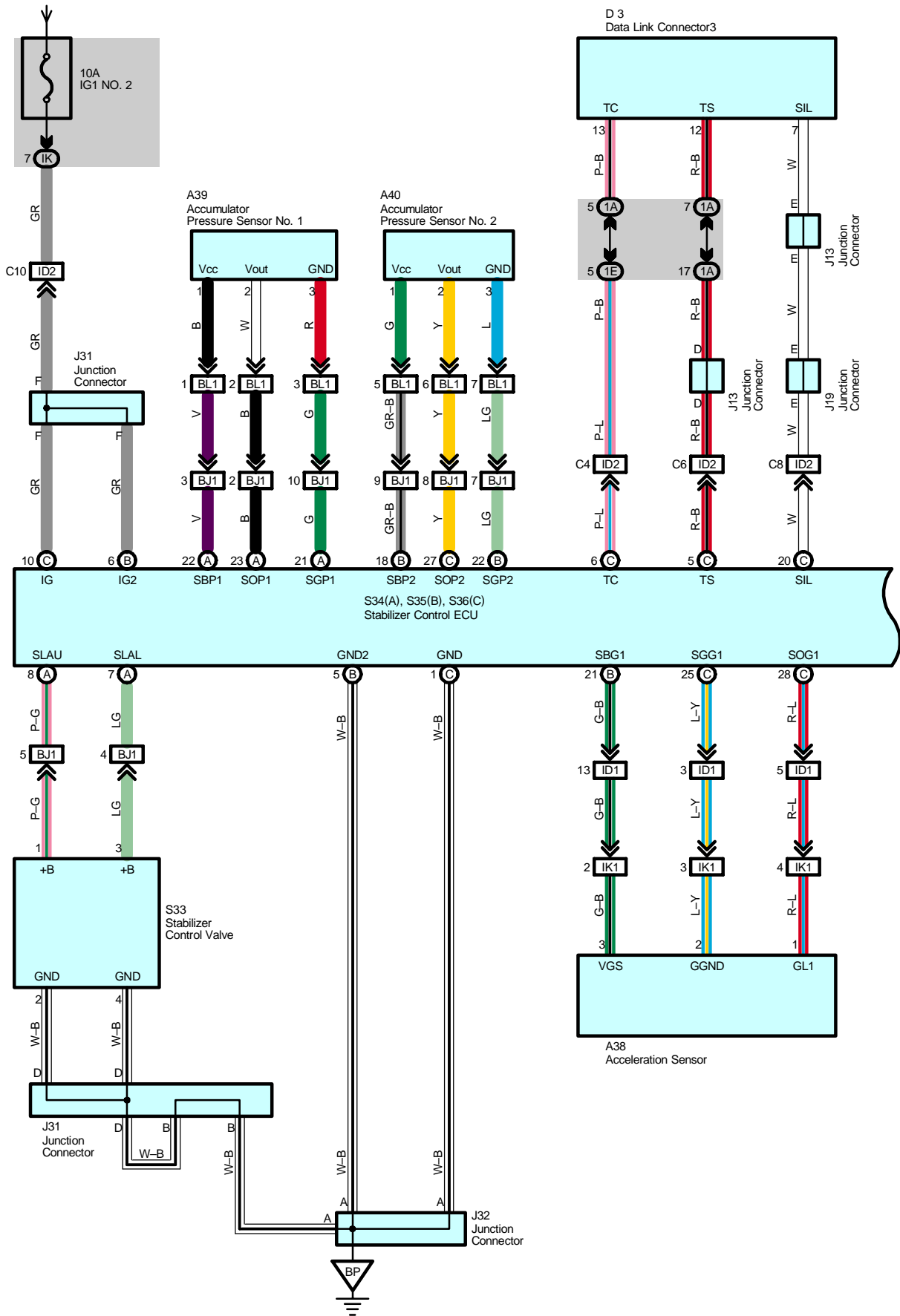
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
BM	58	Under the Driver's Seat
BO	58	Near the Left Side of No.5 Cross Member

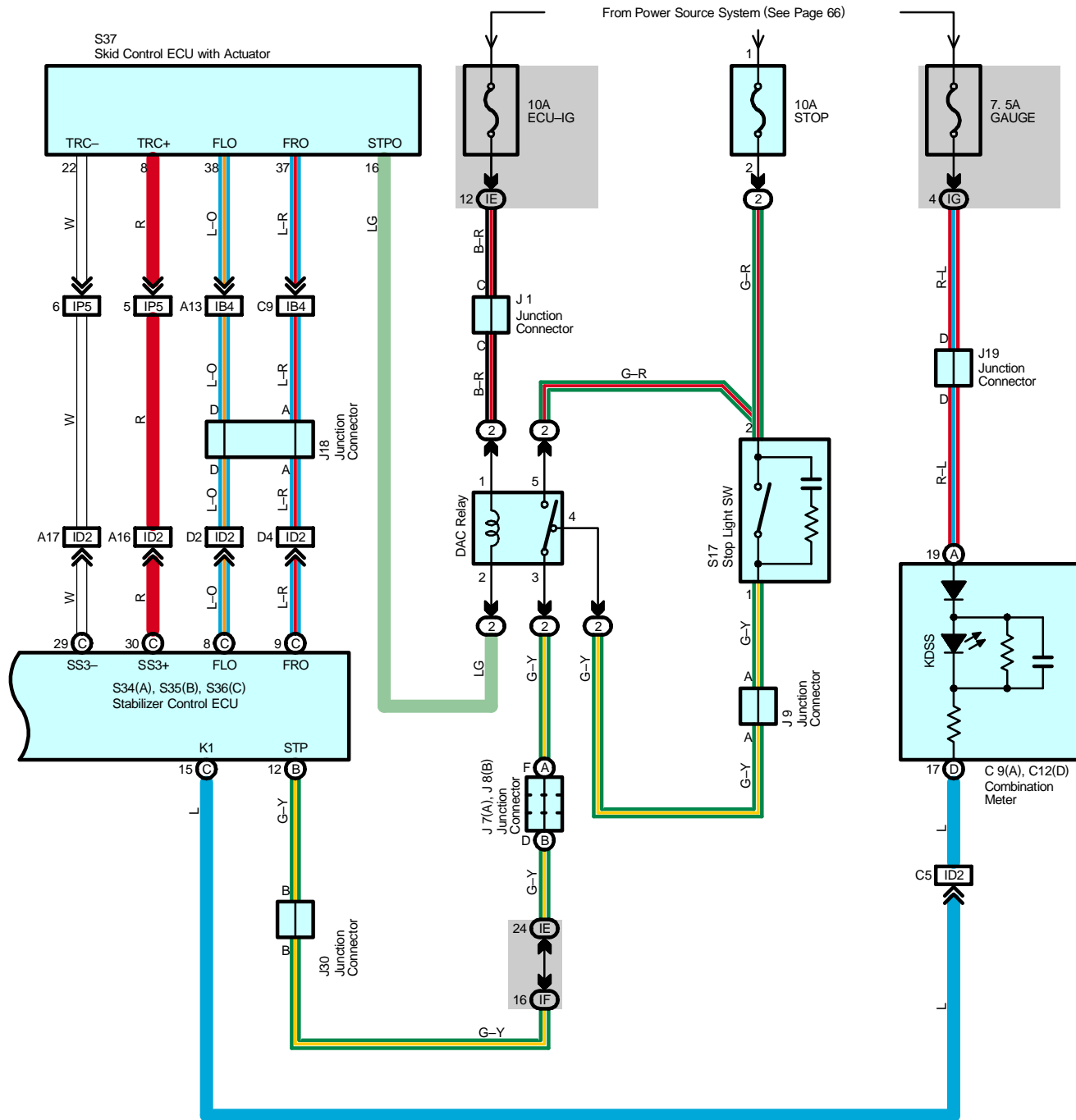
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	60	Frame Wire			

Kinetic Dynamic Suspension System

From Power Source System (See Page 66)





Kinetic Dynamic Suspension System

System Outline

In this system, hydraulic cylinder is added to stabilizer and, front and rear stabilizers are connected with pipes to improve maneuverability and steering.

1. Operation at Rolling

Oil pressure of front and rear cylinder balance out each other, resulting the cylinder not to stroke.
The stabilizer functions as usual to prevent from rolling.

2. Operation at One Side Wheel Lifted Up

As front and rear cylinders stroke in opposite directions each other, the stabilizer hardly functions and does not prevent from stroke.

Service Hints

S35 (B), S36 (C) Stabilizer Control ECU

(C)10, (B) 6–Ground: Approx. 12 volts with the ignition SW at ON or ACC position
(C) 1, (B) 5–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A38	38	J8	40	S17	41
A39	42	J9	40	S33	45
A40	42	J13	40	S34	45
C9	38	J18	40	S35	45
C12	38	J19	40	S36	45
D3	39	J30	43	S37	37
J1	37	J31	43		
J7	40	J32	43		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1E		

□ : Connector Joining Wire Harness and Wire Harness

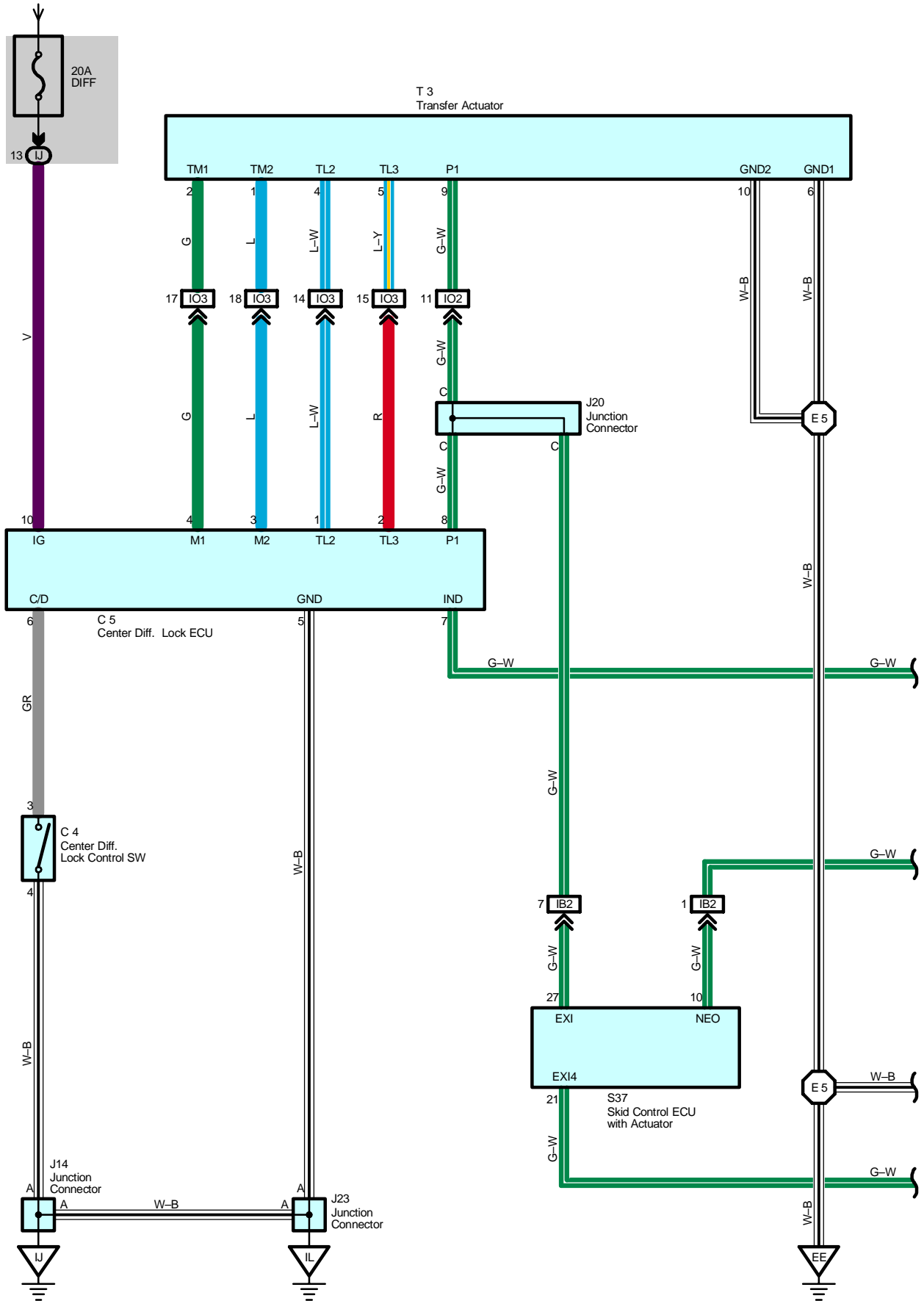
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
BJ1	60	Floor No.2 Wire and Floor No.2 Wire (Left Side Rear Quarter Panel)
BL1	60	Floor Wire and Accumulator Pressure Sensor Wire (Main Floor Side Member LH)

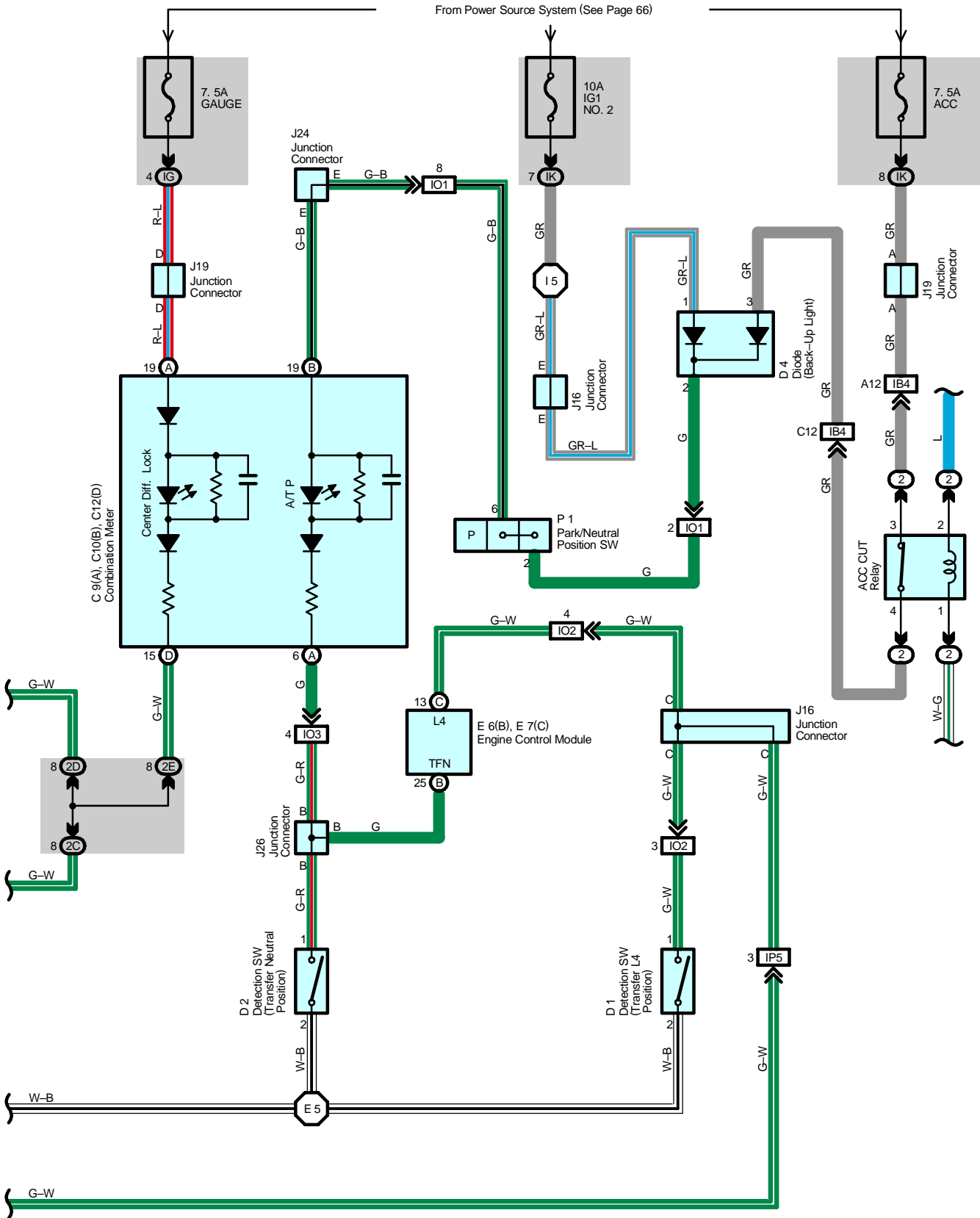
▽ : Ground Points

Code	See Page	Ground Points Location
BP	58	Left Quarter Panel Inner

Center Differential Lock

From Power Source System (See Page 66)





Center Differential Lock

System Outline

Operating the center differential lock control switch located in the center console, the center diff. lock ECU operates the motor in the transfer actuator, slides the shift fork shaft and switches to the differential lock condition or differential free condition.

Service Hints

C5 Center Diff. Lock ECU

10-Ground : Approx. 12 volts with the ignition SW at ON position

5-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C4	38	D4	39	J23	40
C5	38	E6	B 39	J24	40
C9	A 38	E7	C 39	J26	40
C10	B 38	J14	40	P1	37
C12	D 38	J16	40	S37	37
D1	36	J19	40	T3	37
D2	36	J20	40		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
2C	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
EE	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

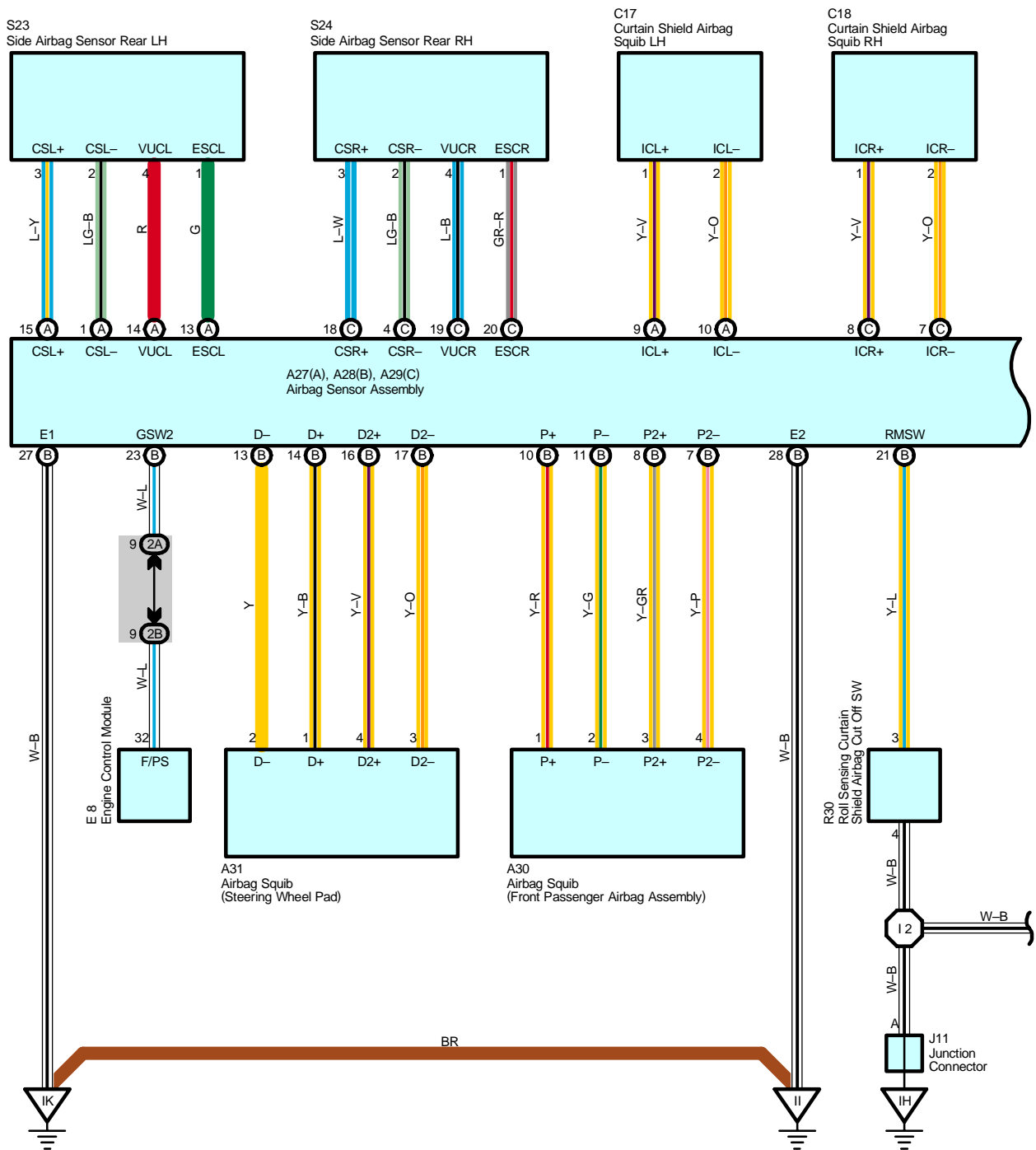
○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	48	Engine Wire	I5	52	Instrument Panel Wire

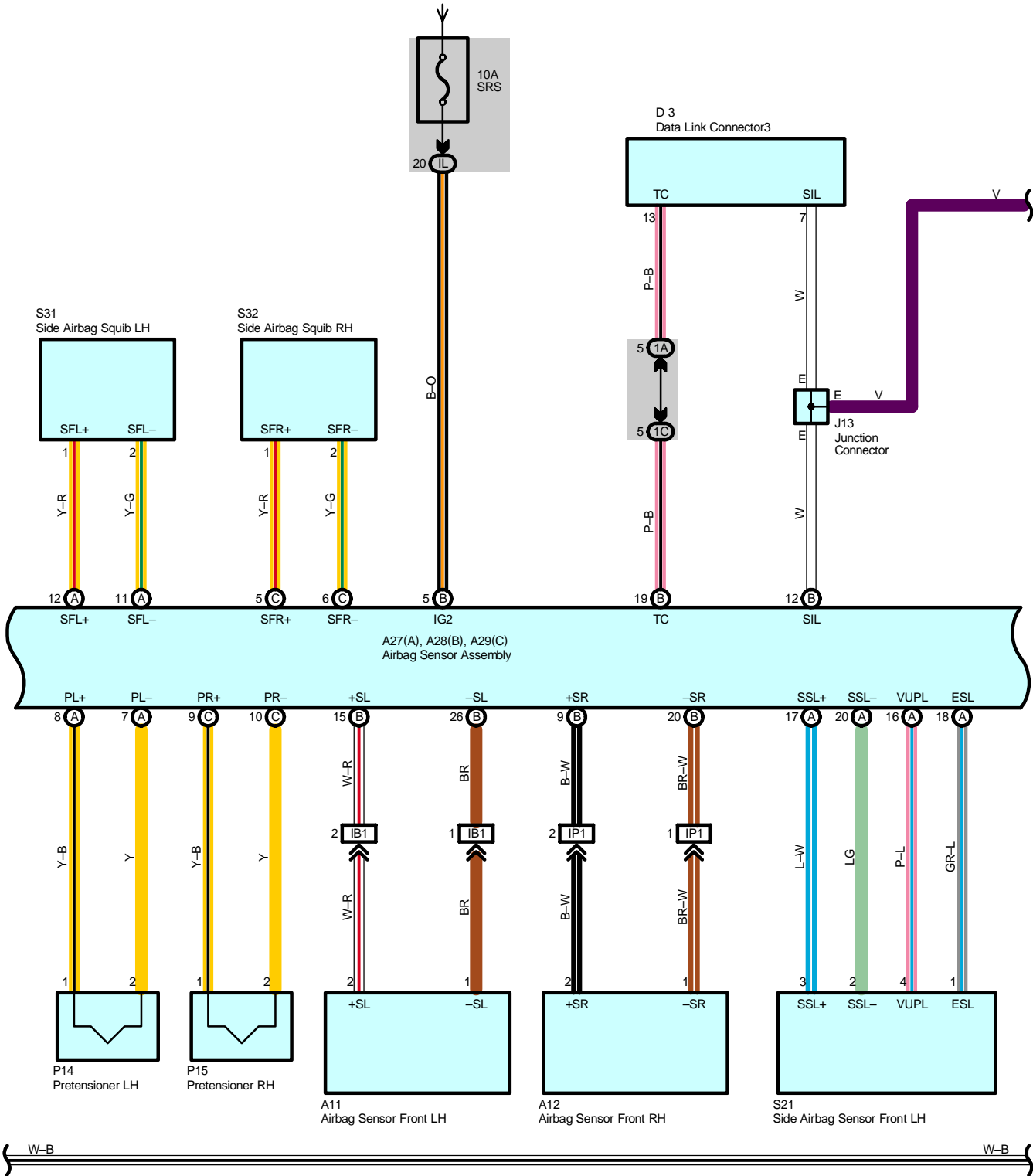
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

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

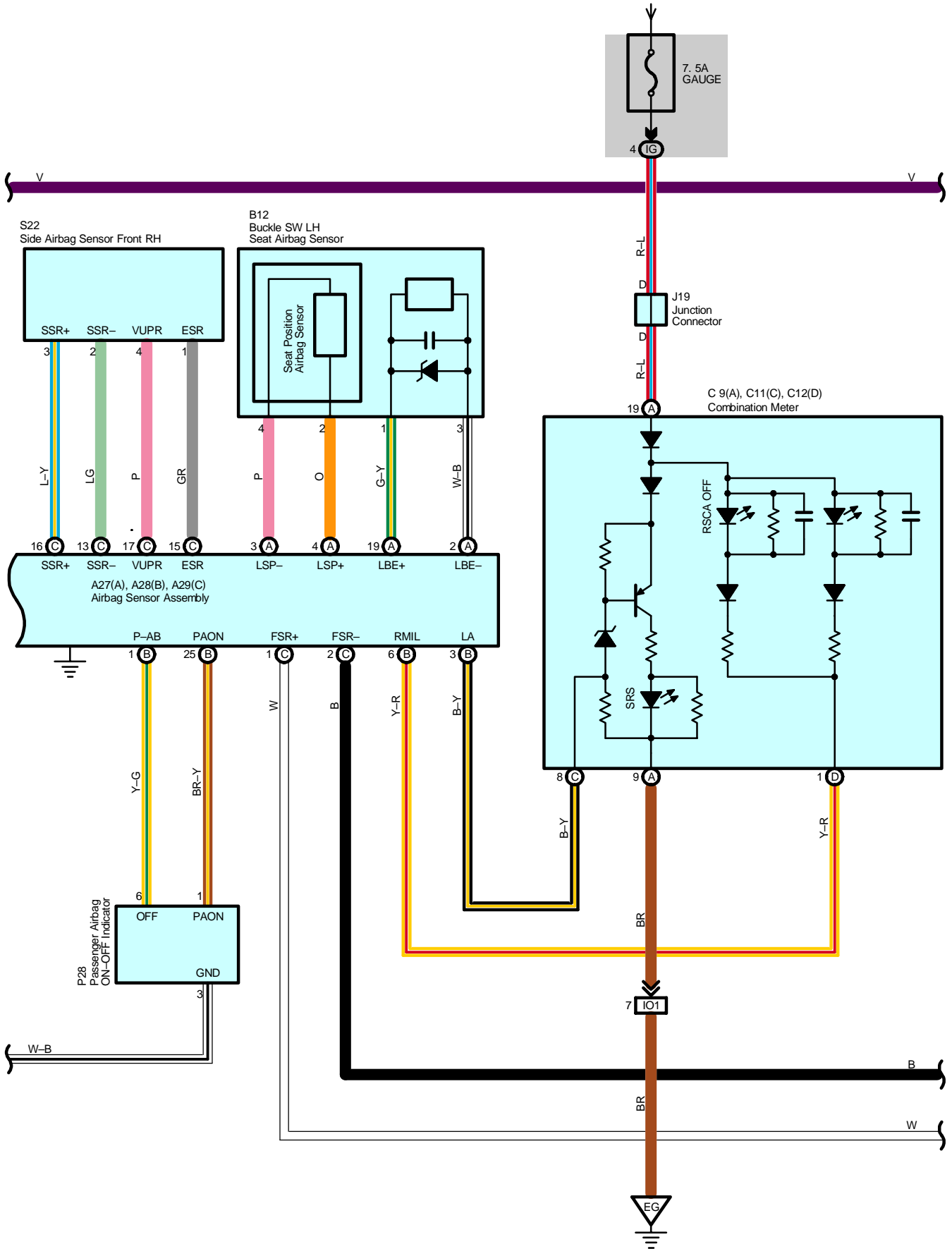
- * Steering wheel pad
- * Front passenger airbag assembly
- * Side airbag assembly
- * Curtain shield airbag assembly
- * Seat belt pretensioner
- * Center airbag sensor assembly
- * Front airbag sensor assembly
- * Side airbag sensor assembly
- * Rear airbag sensor assembly

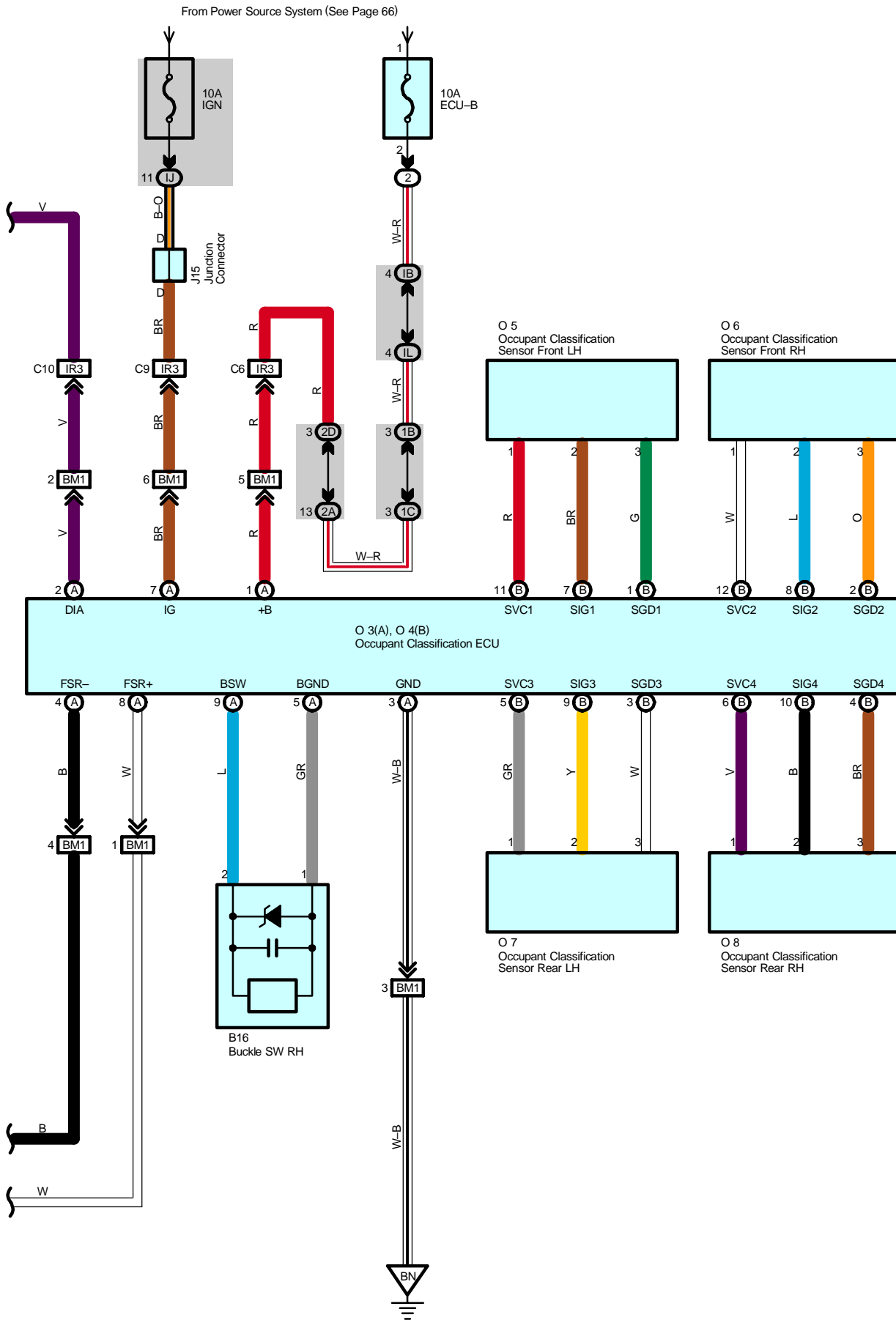


From Power Source System (See Page 66)



From Power Source System (See Page 66)





System Outline

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	36	C17	42	O7	46
A12	36	C18	42	O8	46
A27	A 38	D3	39	P14	44
A28	B 38	E8	39	P15	44
A29	C 38	J11	40	P28	40
A30	38	J13	40	R30	41
A31	38	J15	40	S21	45
B12	46	J19	40	S22	45
B16	46	O3	A 46	S23	45
C9	A 38	O4	B 46	S24	45
C11	C 38	O5	46	S31	46
C12	D 38	O6	46	S32	46

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2D		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP1	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BM1	62	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

 : **Ground Points**

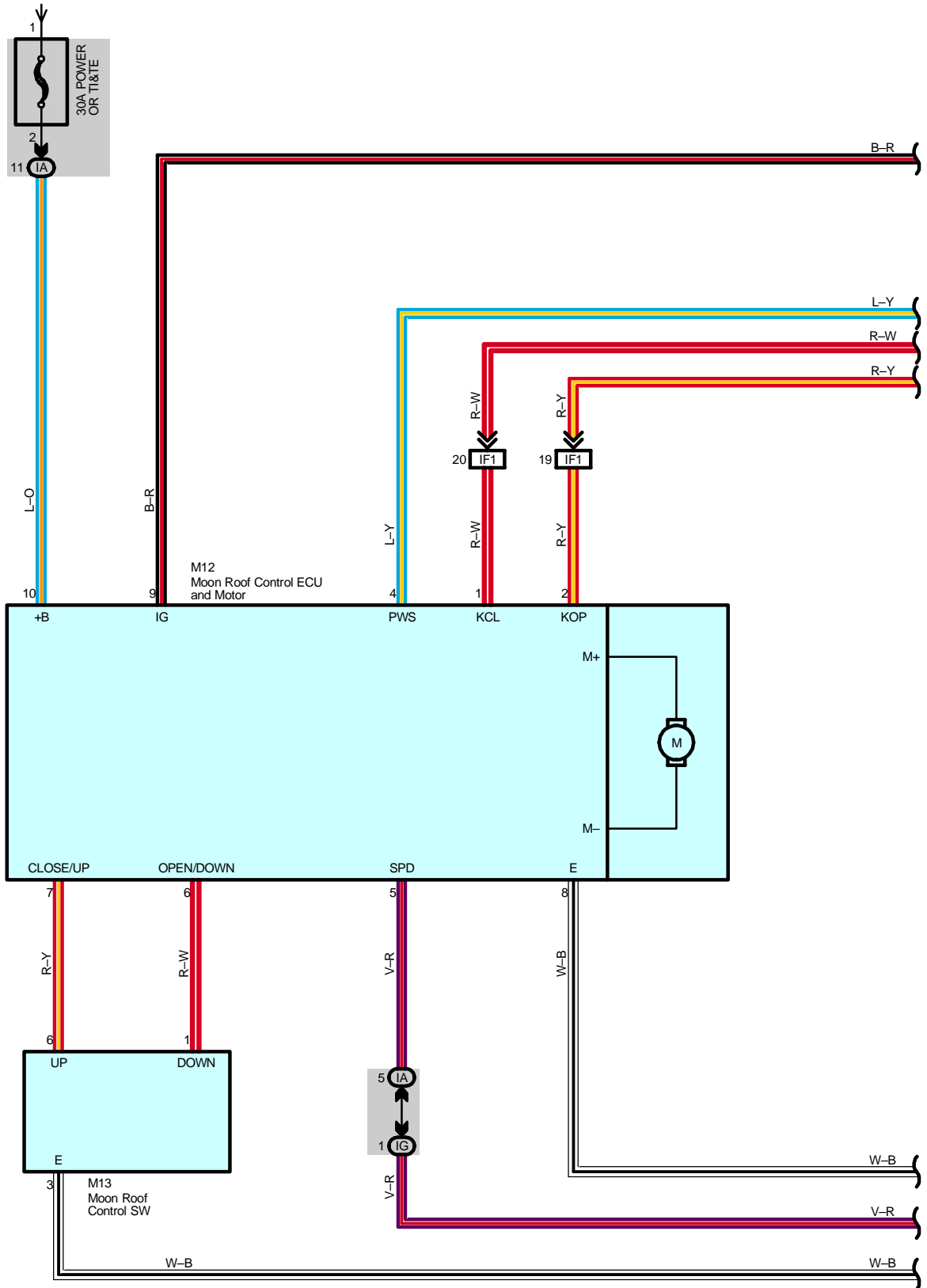
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
II	50	Near the Left Side of Steering Column
IK	50	Instrument Panel Brace LH
BN	58	Under the Front Passenger's Seat

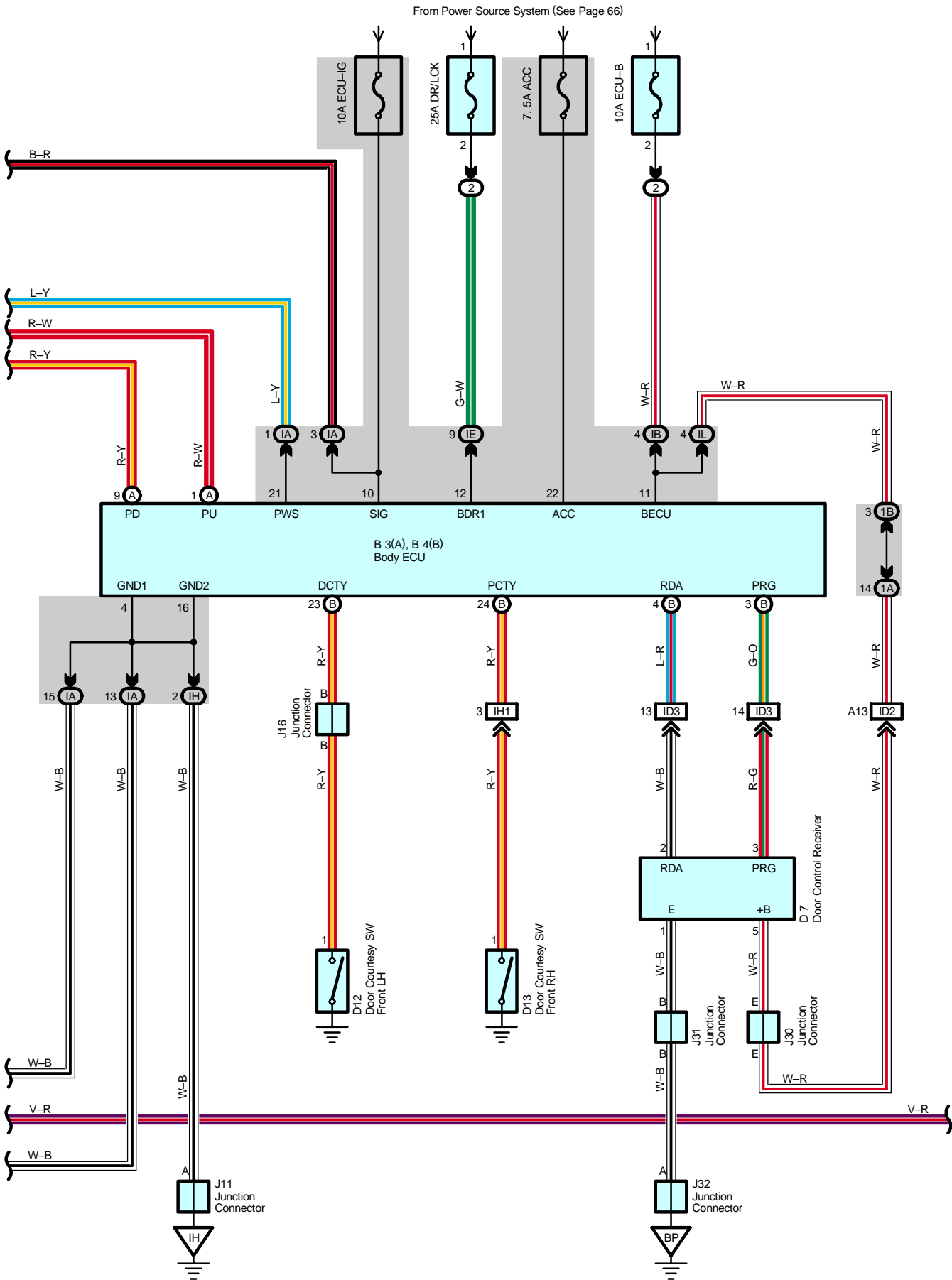
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	52	Instrument Panel Wire			

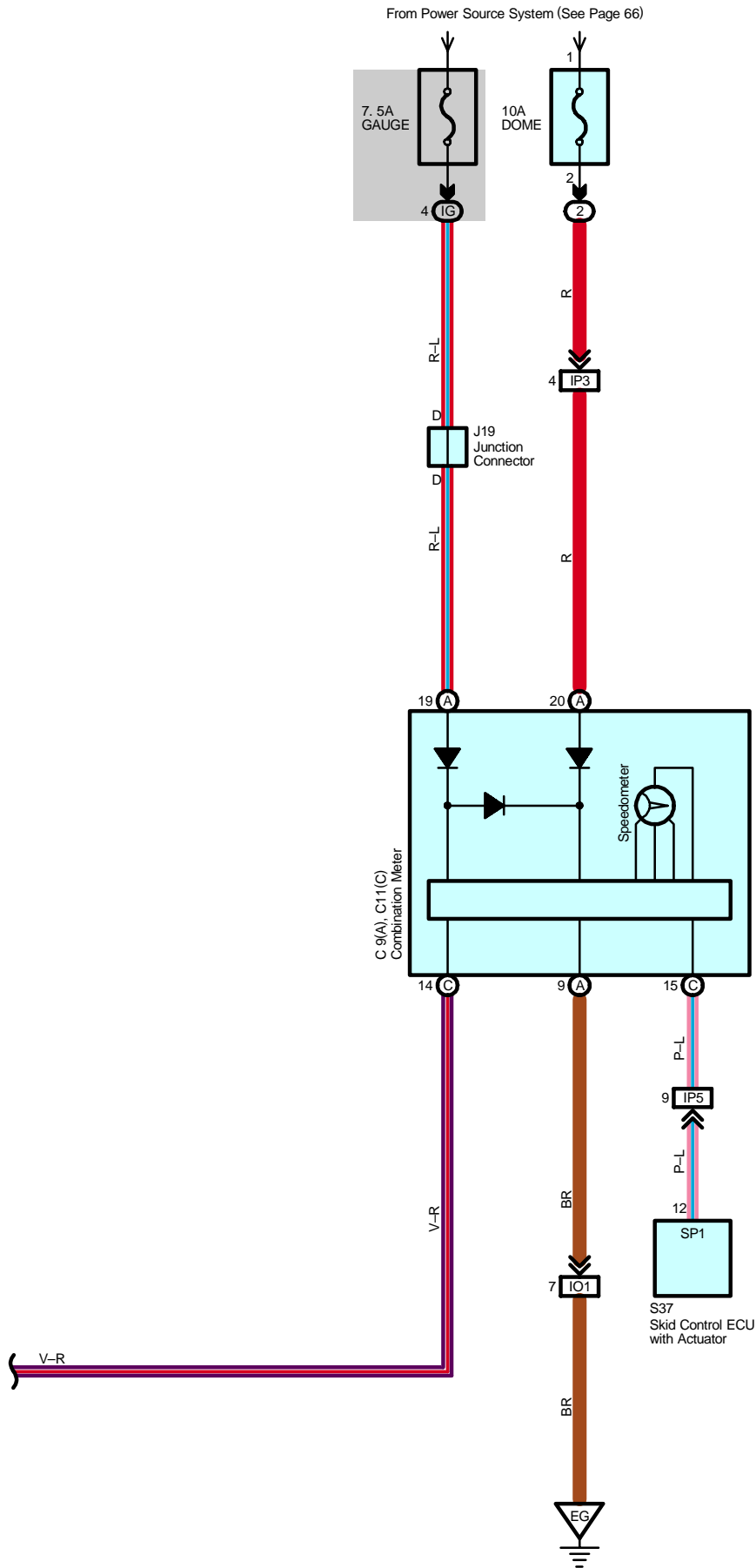
Moon Roof

From Power Source System (See Page 66)





Moon Roof



System Outline

Current is always applied from the POWER fuse to TERMINAL 10 of the moon roof control ECU and motor. With the ignition SW turned on, the current flows to TERMINAL 9 of the moon roof control ECU and motor.

1. Moon Roof Open/Close Operation

For moon roof operation, there are moon roof control switches: "Slide open/tilt down"; and "Slide close/tilt up." When a switch is pressed and held down for a certain period of time, one touch automatic operation takes place in accordance with the function of the switch.

2. Key-Off Operation

Roof remains operable – until about 45 seconds elapse after the ignition SW is turned from ON to OFF or until the driver's seat door is opened and closed, whichever first occurs.

However, if an overload reverse operation was going on at that time, the key-off operation continues until it comes to an end.

3. Overload Reverse Operation

The moon roof control ECU and motor detects jamming of the moon roof by foreign material, if occurred, from abnormal motor speed signal and reverses the moon roof operation.

4. Deflector Control Function

When the roof is slid fully open, the moon roof control ECU and motor automatically adjusts the height of deflector in accordance with the vehicle cruising speed.

* When the battery terminal or fuse is disconnected, the roof position has to be reset to its initial position by the moon roof control SW in accordance with the following procedure:

- (1) Reconnect the battery terminal or fuse.
- (2) Turn ON the ignition switch.
- (3) Operate the moon roof control SW to open the roof halfway or more.
- (4) Then operate the moon roof control SW to fully close the roof.

Do not release the switch for at least one second after the roof is fully closed.

Service Hints

M12 Moon Roof Control ECU and Motor

9-Ground : Approx. 12 volts with the ignition SW at ON position

10-Ground : Always approx. 12 volts

8-Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
B3	A	38	D13	42	J32	43
B4	B	38	J11	40	M12	44
C9	A	38	J16	40	M13	44
C11	C	38	J19	40	S37	37
D7		42	J30	43		
D12		42	J31	43		

○ : Relay Blocks

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

Moon Roof

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		

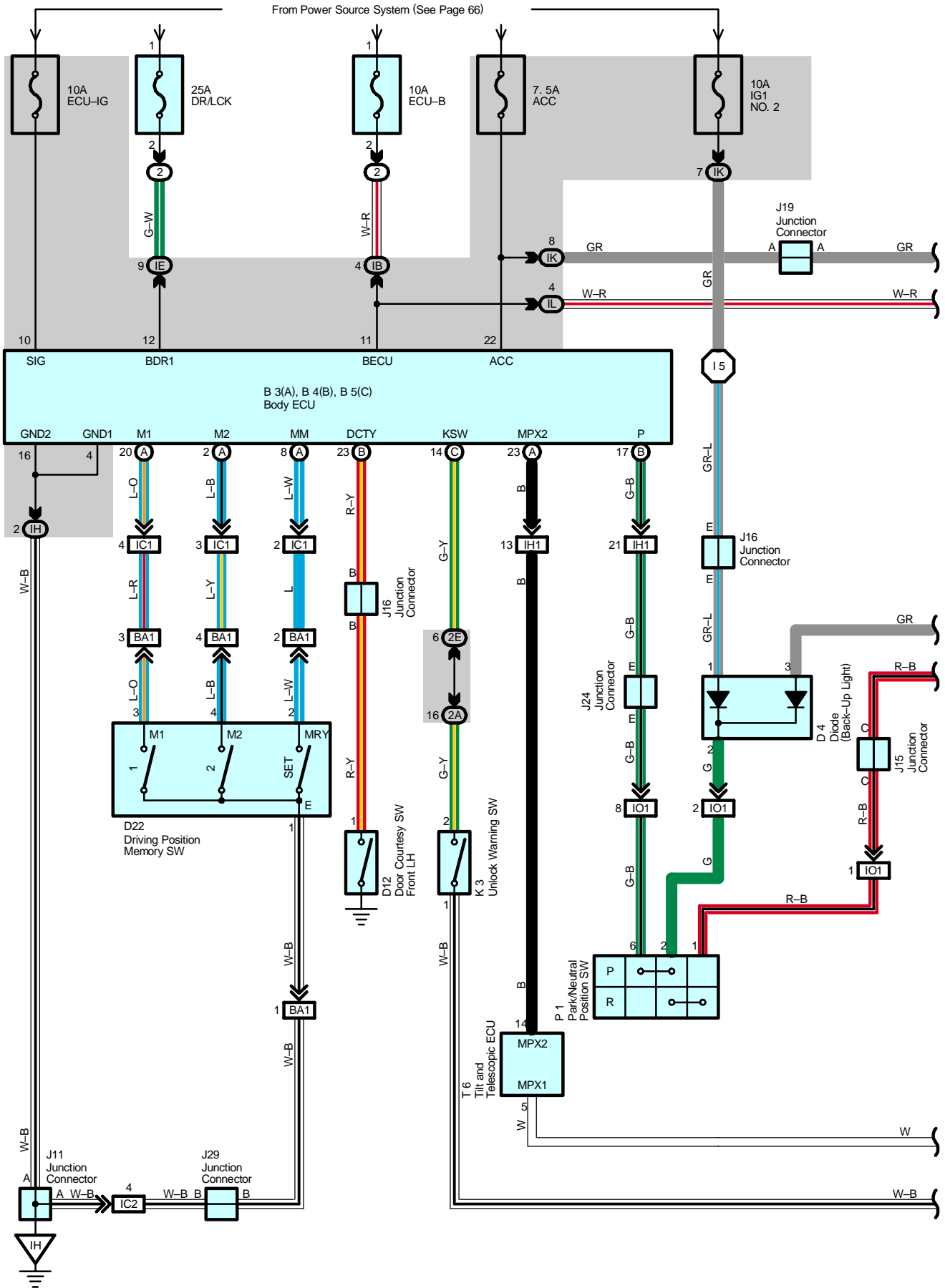
: Connector Joining Wire Harness and Wire Harness

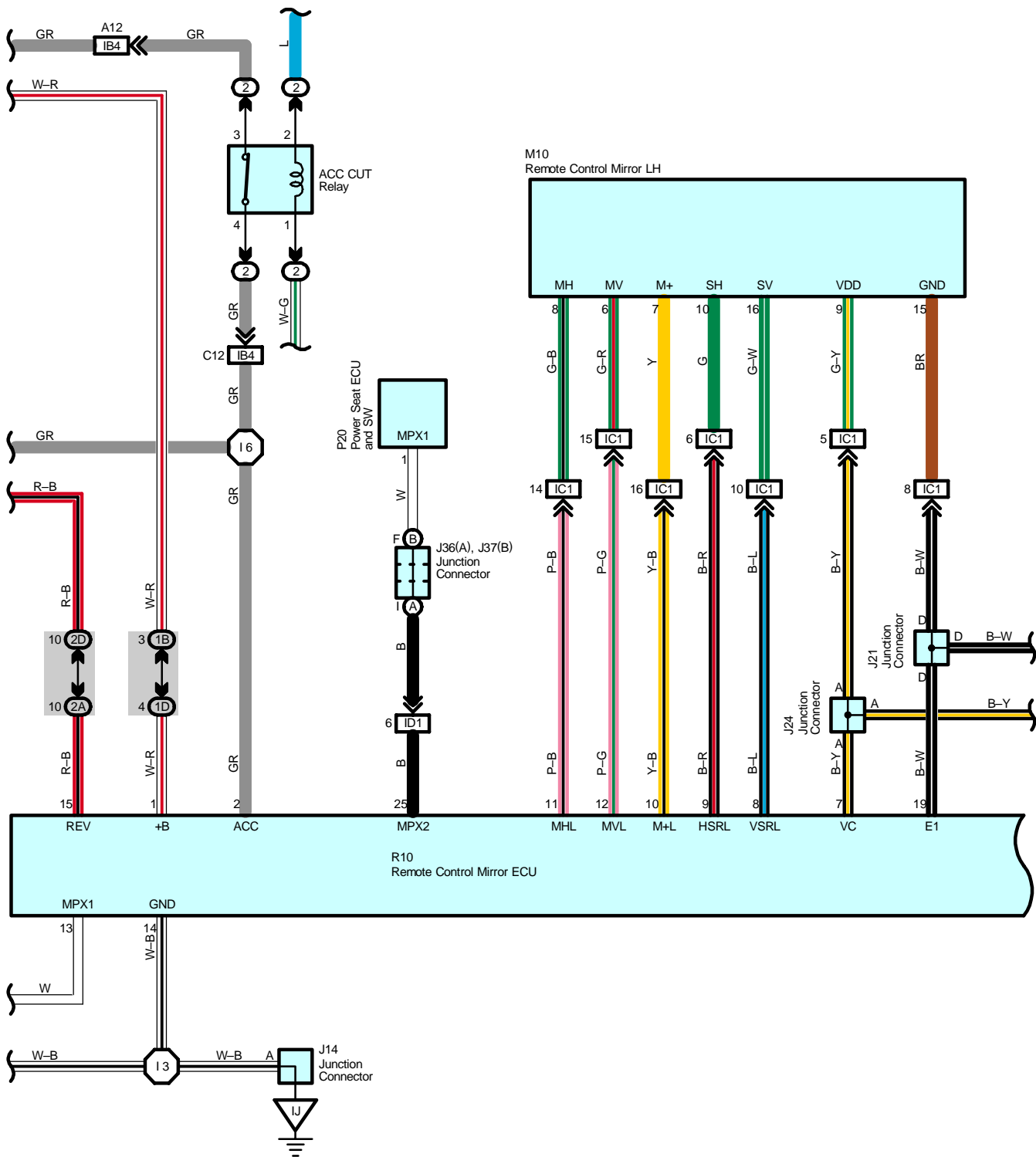
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID3		
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		

: Ground Points

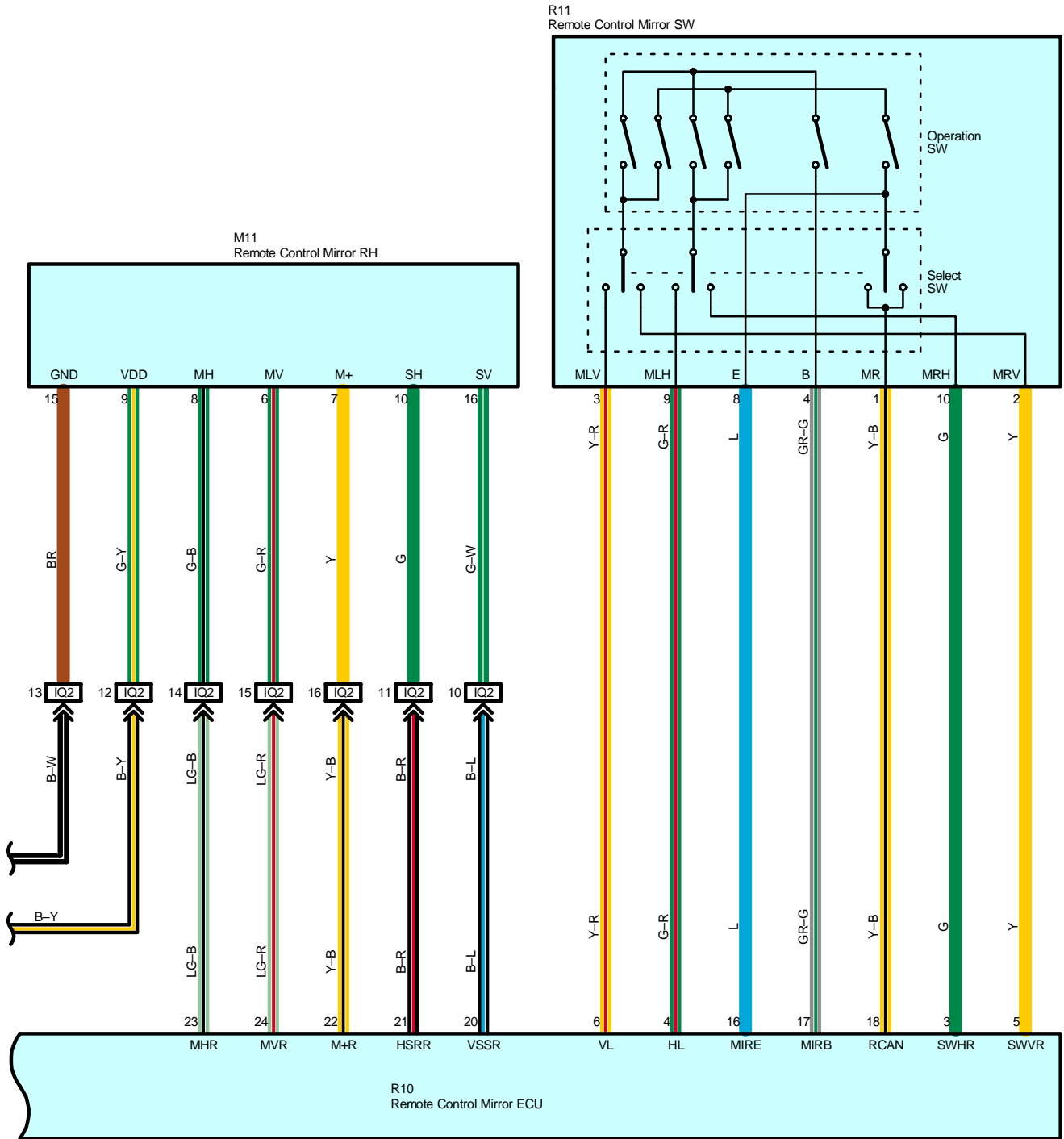
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
BP	58	Left Quarter Panel Inner

Remote Control Mirror





Remote Control Mirror



System Outline

When the ignition SW is turned on, the outer mirrors can be operated. When the remote control mirror SW is operated, a signal is input to the remote control mirror ECU, and the outer mirror can be adjusted to the desired position. In this system, the position sensor detects the number of rotations of each motor (Movement amount of each mirror) and inputs it to the remote control mirror ECU. This makes it possible to store and recall the outer mirror position using the driving position memory SW. The outer mirror position is stored and recalled through communication control of the body ECU. When the remote control mirror SW (Select SW) is moved to the left side from neutral position, while the ignition SW is on and the shift lever is in R position, the outer mirror LH, RH moves downward a little bit. In this case, it is not necessary to operate the remote control mirror SW for approx. 120 seconds.

Service Hints

R10 Remote Control Mirror ECU

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

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B3	A	38	J15		40	K3		40
B4	B	38	J16		40	M10		44
B5	C	38	J19		40	M11		44
D4		39	J21		40	P1		37
D12		42	J24		40	P20		46
D22		42	J29		43	R10		41
J11		40	J36	A	46	R11		41
J14		40	J37	B	46	T6		41

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IQ2	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)

Remote Control Mirror



: Ground Points

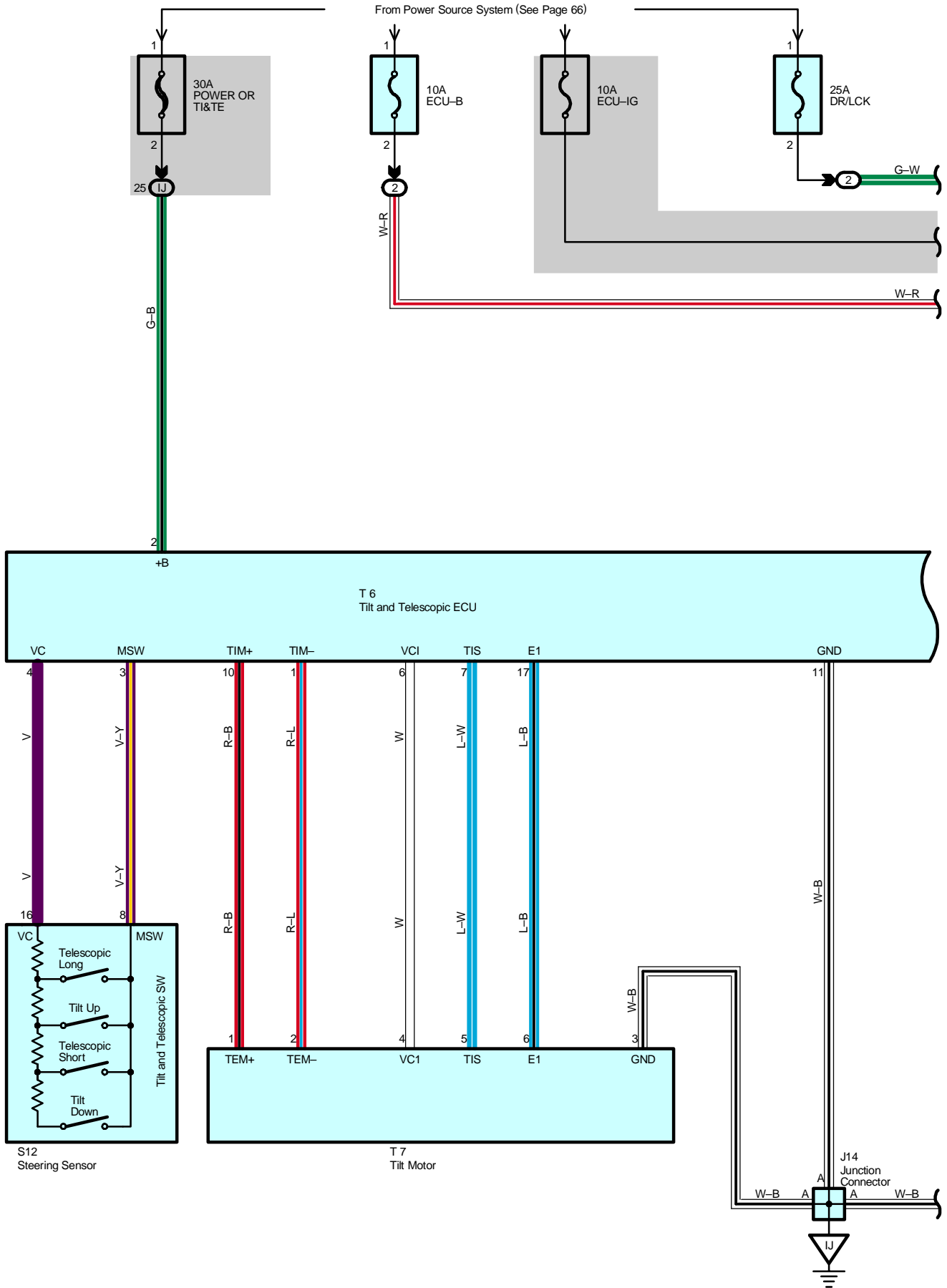
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

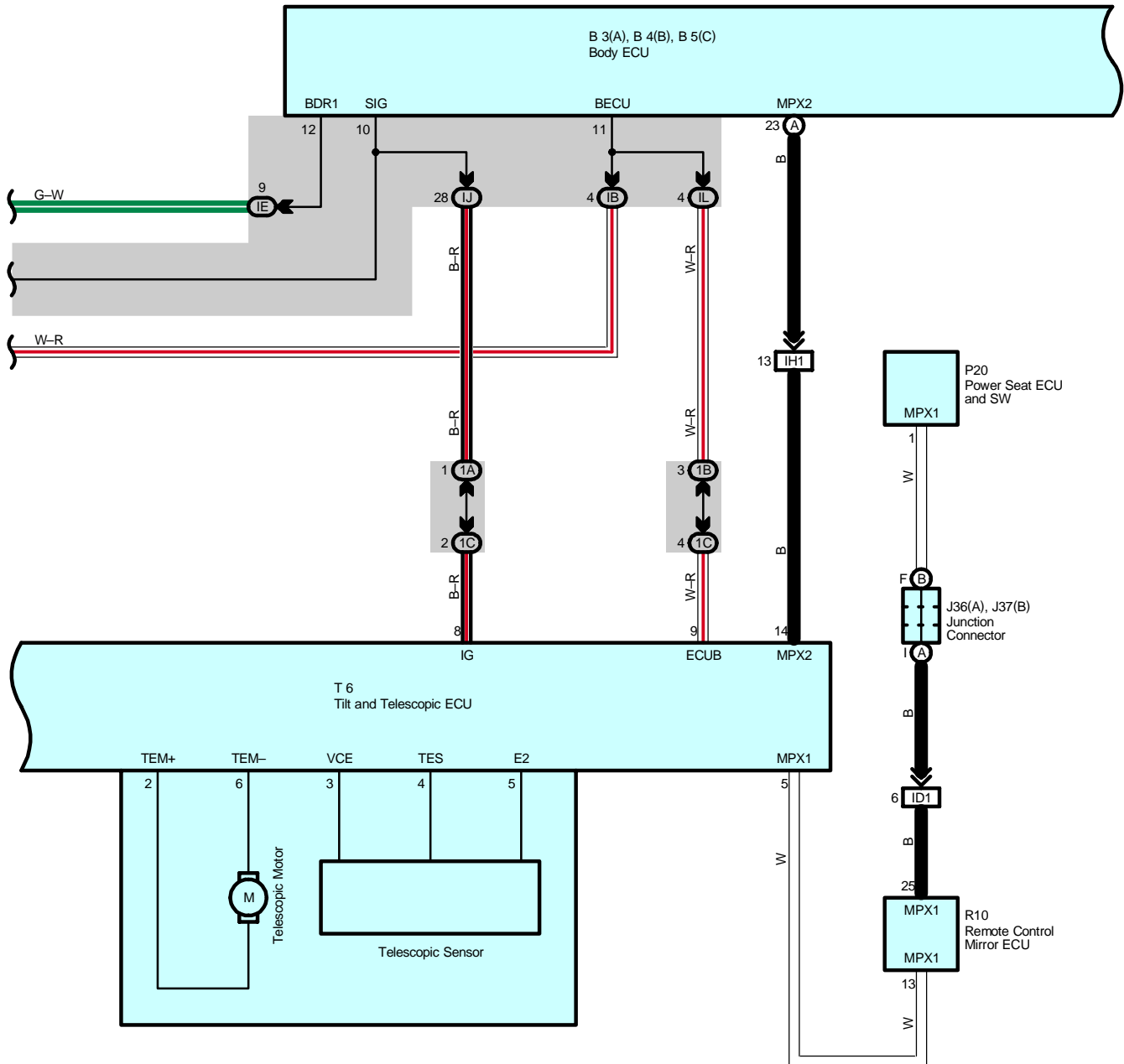


: Splice Points

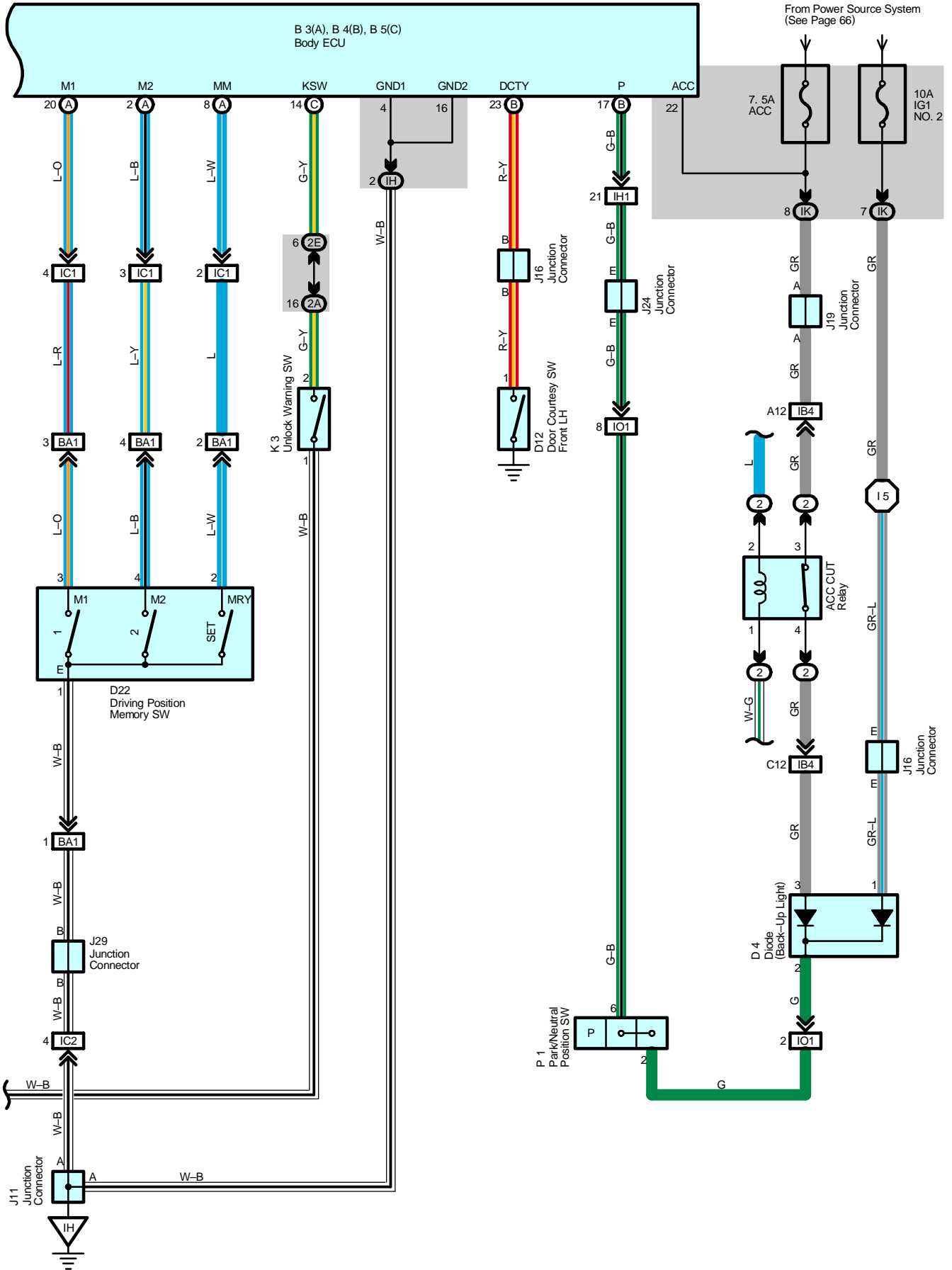
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	52	Instrument Panel Wire	I6	52	Instrument Panel Wire
I5					

Power Tilt and Power Telescopic





Power Tilt and Power Telescopic



System Outline

This system provides the automatic tilt and telescopic mechanisms using the motor drive, tilt and telescopic ECU control, allowing variable steering movement in the back and forth, and vertical directions. This makes it possible to set the steering to the desired steering position, and move the steering to a position where the driver can easily get off the vehicle, allowing easier seating. Additionally, by linking the power seat and remote control mirror, an optimal driving position corresponding to the driver's needs can be stored into the memory.

1. Auto Return Operation

When the ignition key is inserted into the key cylinder (Unlock warning SW on), a signal is input to the tilt and telescopic ECU through communication control of the body ECU etc. This activates the tilt and telescopic ECU to automatically return the steering to the position set before the ignition key has been removed.

2. Auto Away Operation

When the ignition key is turned from on to off and removed from the key cylinder (Unlock warning SW off), a signal is input to the tilt and telescopic ECU through communication control of the body ECU etc. This activates the tilt and telescopic ECU to automatically move the steering to the top tilt step position and maximum telescopic retract position.

3. Driving Position Memory Function

The pulse signals detected by the tilt and telescopic sensors are input to the tilt and telescopic ECU. This makes it possible to store and recall the desired driving position through communication control of the body ECU.

Service Hints

T6 Tilt and Telescopic ECU

- 2, 9-Ground : Always approx. 12 volts
- 8-Ground : Approx. 12 volts with the ignition SW at ON or ST position
- 11-Ground : Always continuity

S12 Steering Sensor

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
B3	A	38	J14	40	K3	40	
B4	B	38	J16	40	P1	37	
B5	C	38	J19	40	P20	46	
D4		39	J24	40	R10	41	
D12		42	J29	43	S12	41	
D22		42	J36	A	46	T6	41
J11		40	J37	B	46	T7	41

○ : Relay Blocks

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

Power Tilt and Power Telescopic

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)

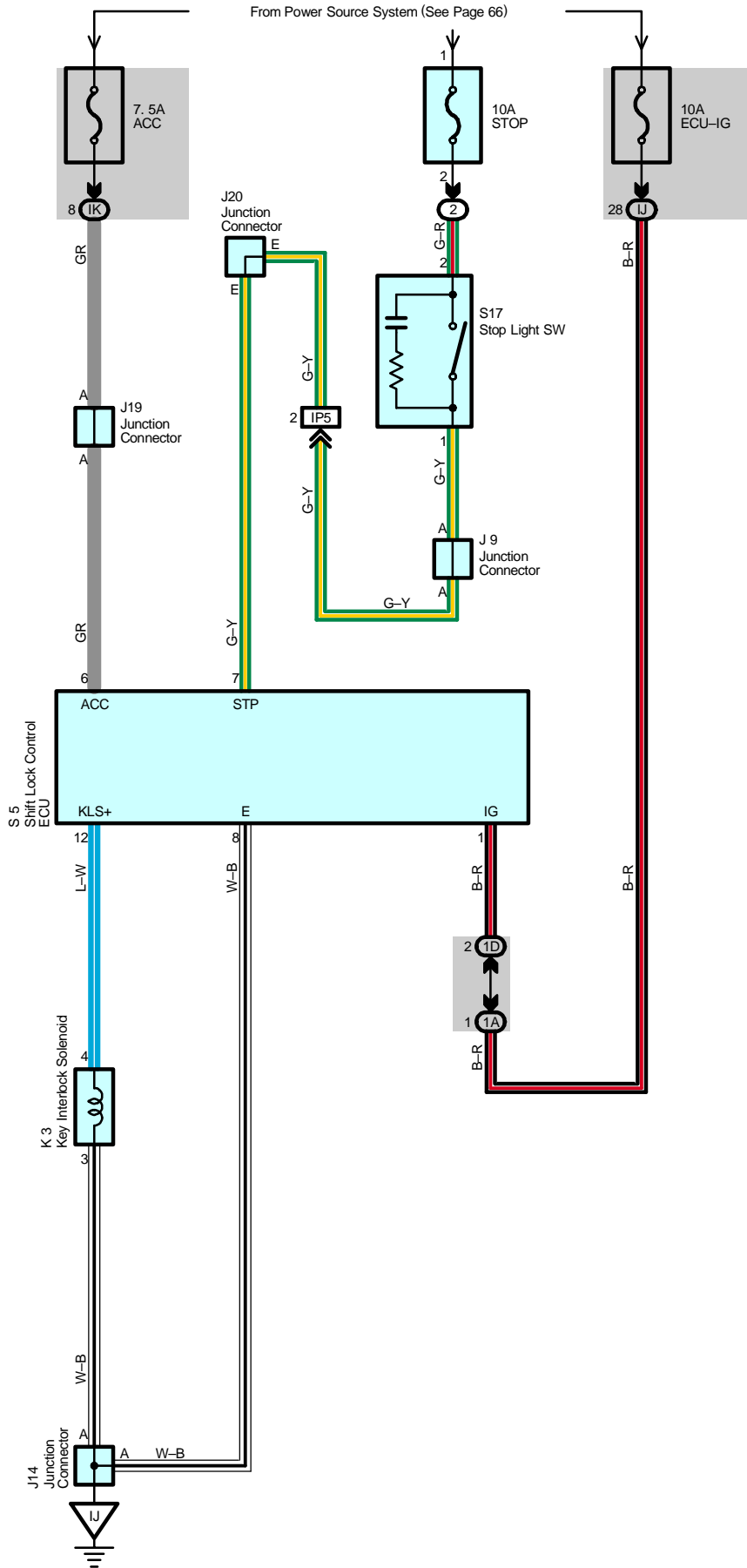
: Ground Points

Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire			

Shift Lock



System Outline

When the ignition SW is turned to ACC position the current from the ACC fuse flows to TERMINAL 6 of the shift lock control ECU. When the ignition SW is turned to ON position, the current from the ECU-IG fuse flows to TERMINAL 1 of the shift lock control ECU.

1. Shift Lock Mechanism

If the brake pedal is depressed with the ignition SW set at ON (The stop light SW is on), the shift lock control ECU is activated, allowing the driver to change the shift lever to a position other than the P position.

2. Key Interlock Mechanism

With the ignition SW at ON or ACC position, when the shift lever is put in P position, the current flowing from TERMINAL 12 of the shift lock control ECU to key interlock solenoid is cut off. This causes the key interlock solenoid to turn off (Lock lever disengages from LOCK position) and the ignition key can be turned from ACC to LOCK position.

Service Hints

S5 Shift Lock Control ECU

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

1-Ground : Approx. 12 volts with the ignition SW at ON position

8-Ground : Always continuity

7-Ground : Approx. 12 volts with the brake pedal depressed

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J9	40	J20	40	S17	41
J14	40	K3	40		
J19	40	S5	41		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		

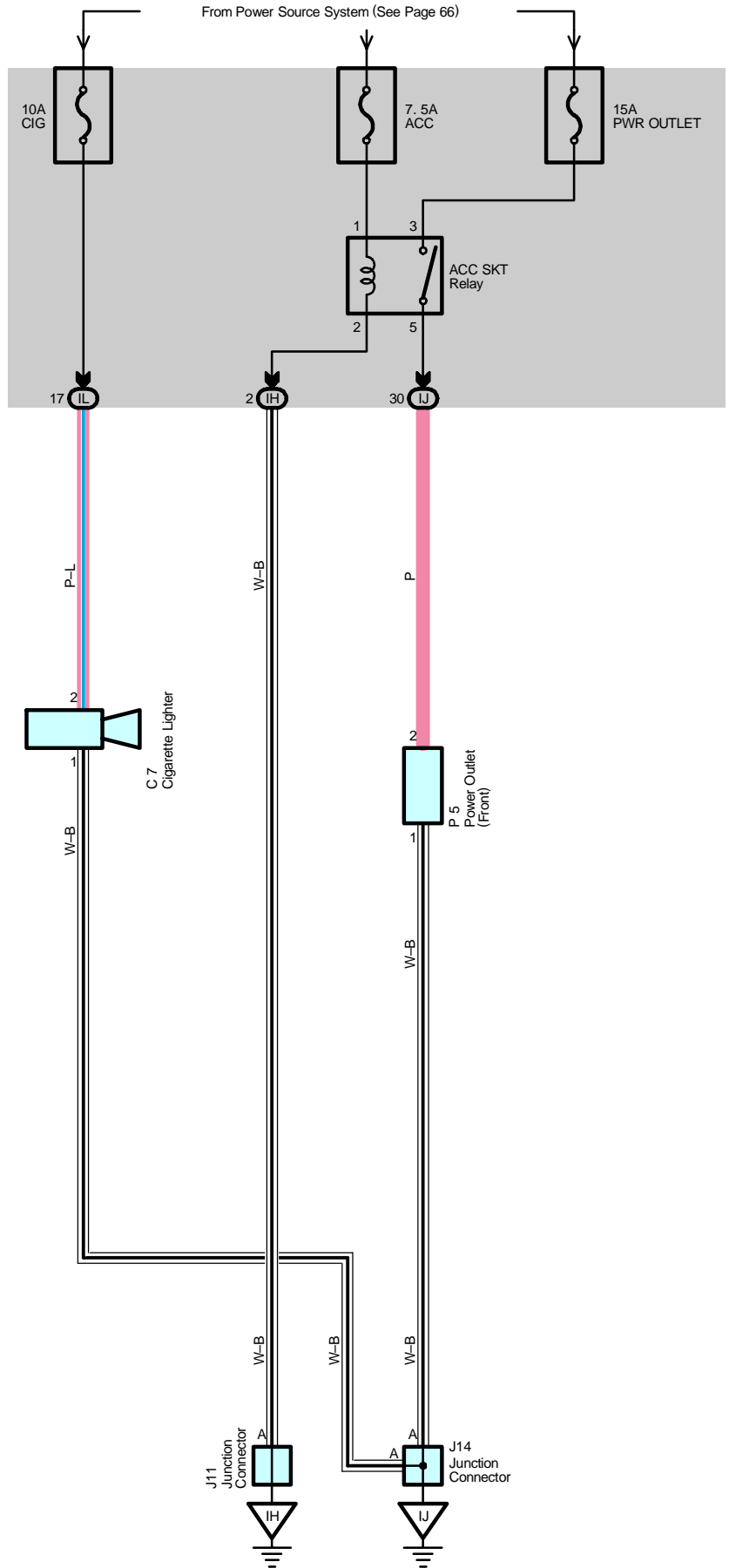
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IJ	50	Near the Right Side of Steering Column

Cigarette Lighter and Power Outlet – 12V



Service Hints

C7 Cigarette Lighter

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

P5 Power Outlet (Front)

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

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C7	38	J14	40		
J11	40	P5	40		

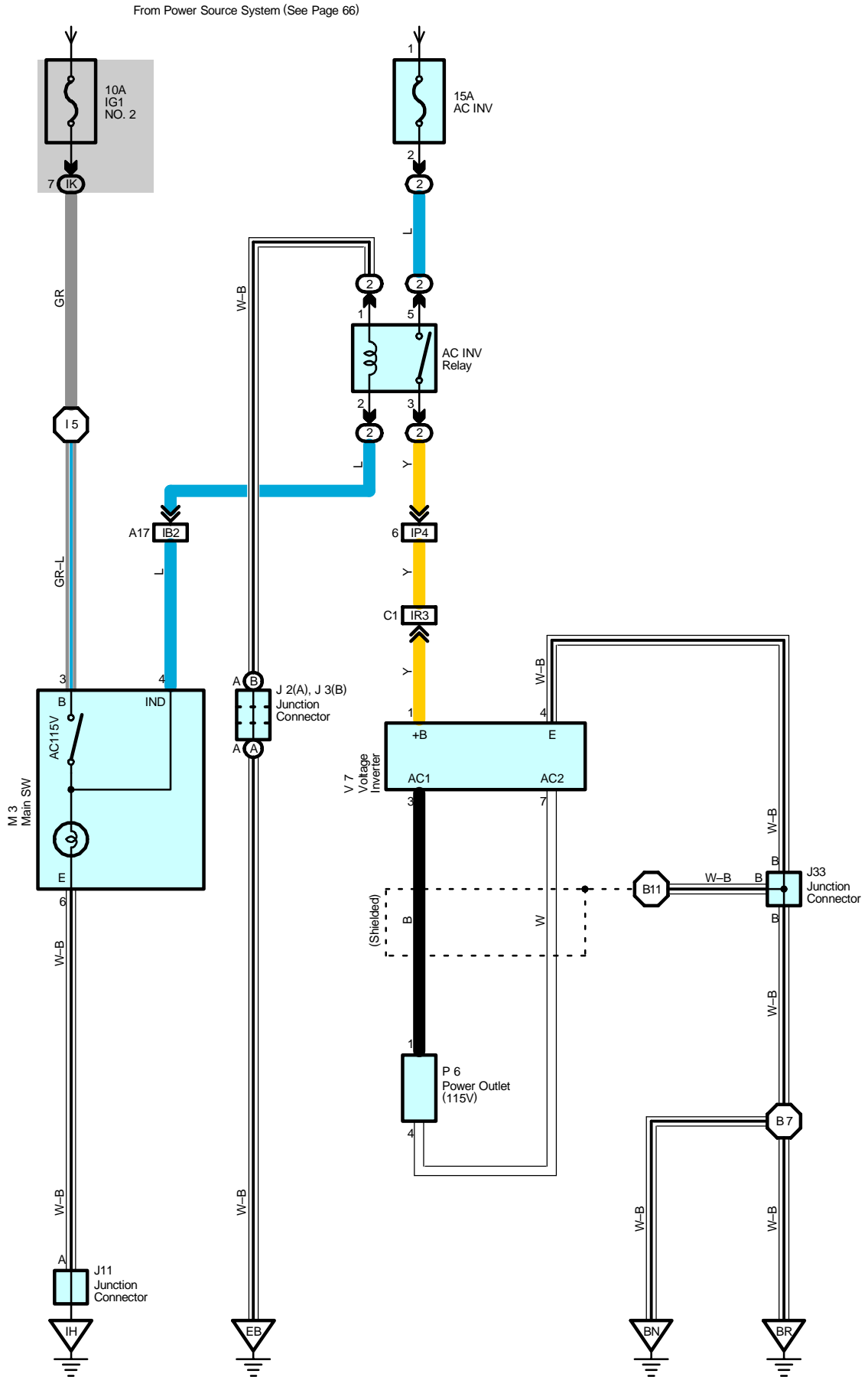
 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IL		

 : **Ground Points**

Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

Power Outlet – 115V



Service Hints

AC INV Relay

3-5 : Closed with the ignition SW at ON position and main SW at on

: Parts Location

Code		See Page	Code	See Page	Code	See Page
J2	A	37	J33	43	V7	45
J3	B	37	M3	40		
J11		40	P6	44		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: Ground Points

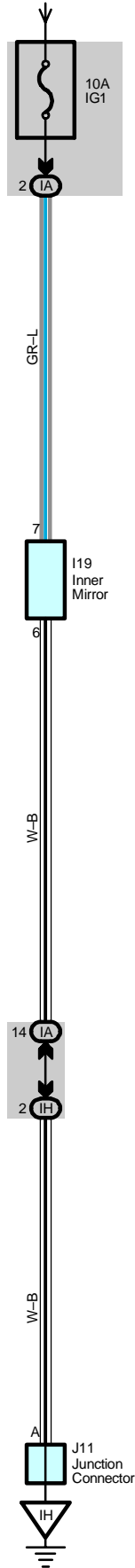
Code	See Page	Ground Points Location
EB	48	Front Left Fender
IH	50	Left Kick Panel
BN	58	Under the Front Passenger's Seat
BR	58	Right Quarter Panel Inner

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	B11	60	Floor Wire
B7	60	Floor Wire			

Automatic Glare-Resistant EC Mirror with Compass

From Power Source System (See Page 66)



Service Hints**I19 Inner Mirror**

7-Ground : Approx. 12 volts with the ignition SW at ON position

6-Ground : Always continuity

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
I19	43	J11	40		

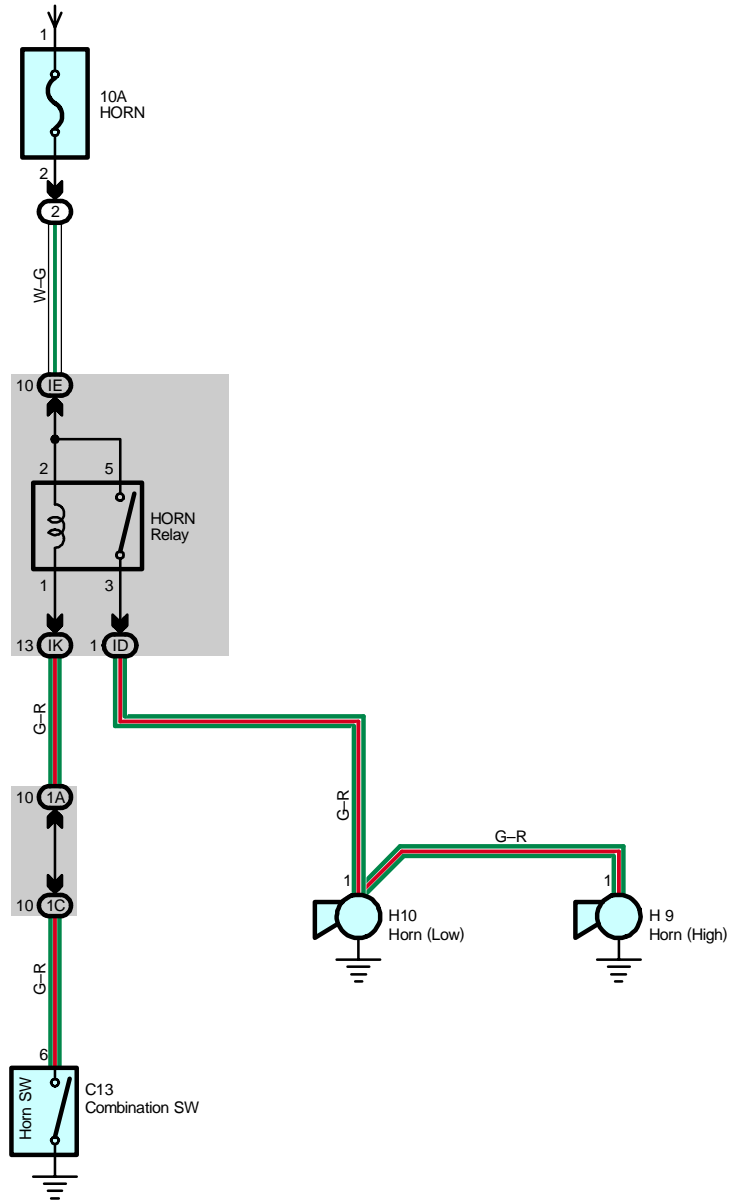
 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

 : **Ground Points**

Code	See Page	Ground Points Location
IH	50	Left Kick Panel

From Power Source System (See Page 66)



Service Hints**HORN Relay**

5-3 : Closed with the horn SW on

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C13	38	H9	36	H10	36

 : **Relay Blocks**

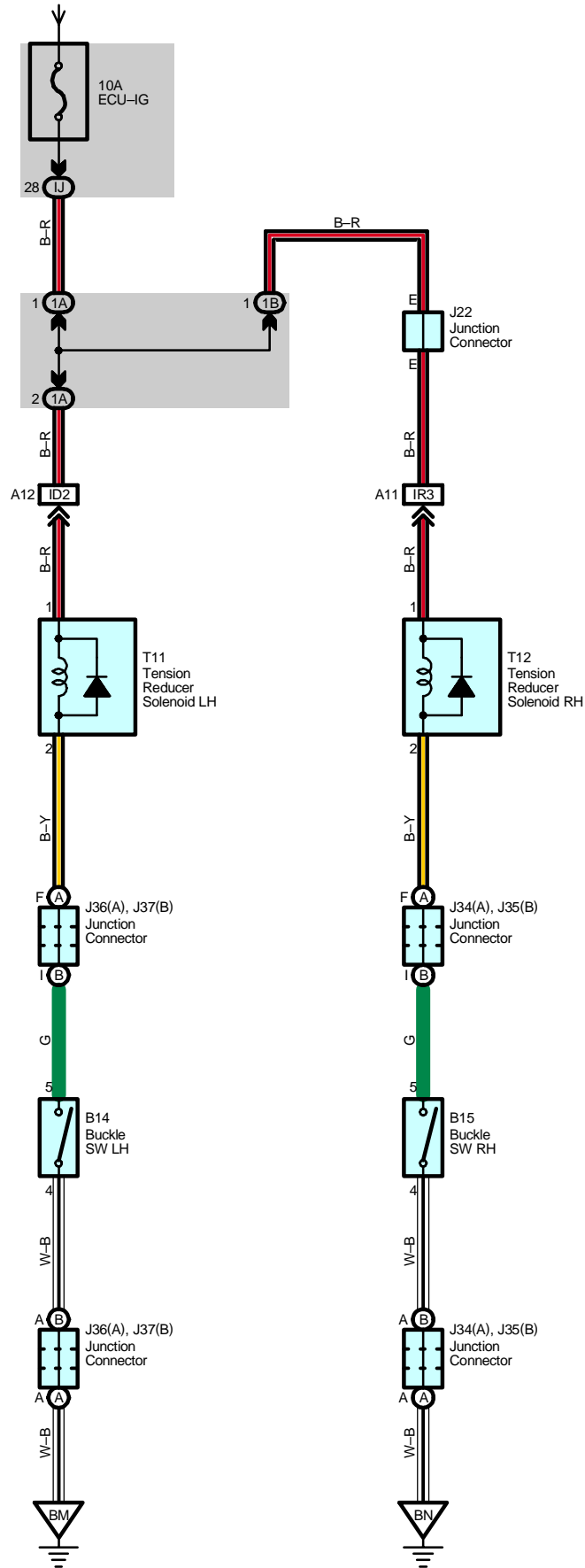
Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		

Electric Tension Reducer

From Power Source System (See Page 66)



Service Hints

B14 Buckle SW LH

5-4 : Closed with the driver seat belt in use

B15 Buckle SW RH

5-4 : Closed with the front passenger seat Belt in use

T11, T12 Tension Reducer Solenoid LH, RH

1-Ground : Approx. 12 volts with the ignition SW at ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B14	46	J34	A 46	J37	B 46
B15	46	J35	B 46	T11	45
J22	40	J36	A 46	T12	45

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		

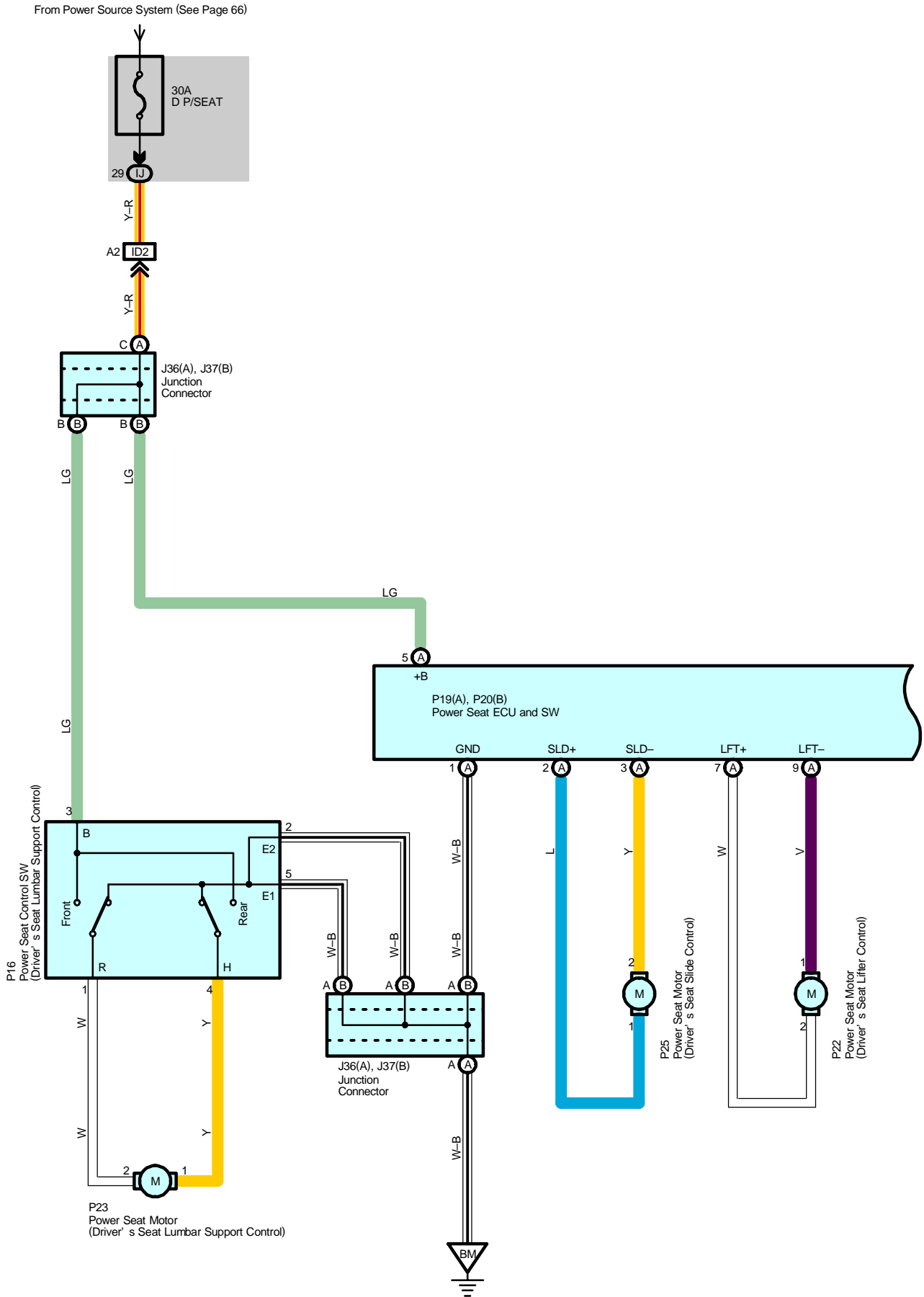
□ : Connector Joining Wire Harness and Wire Harness

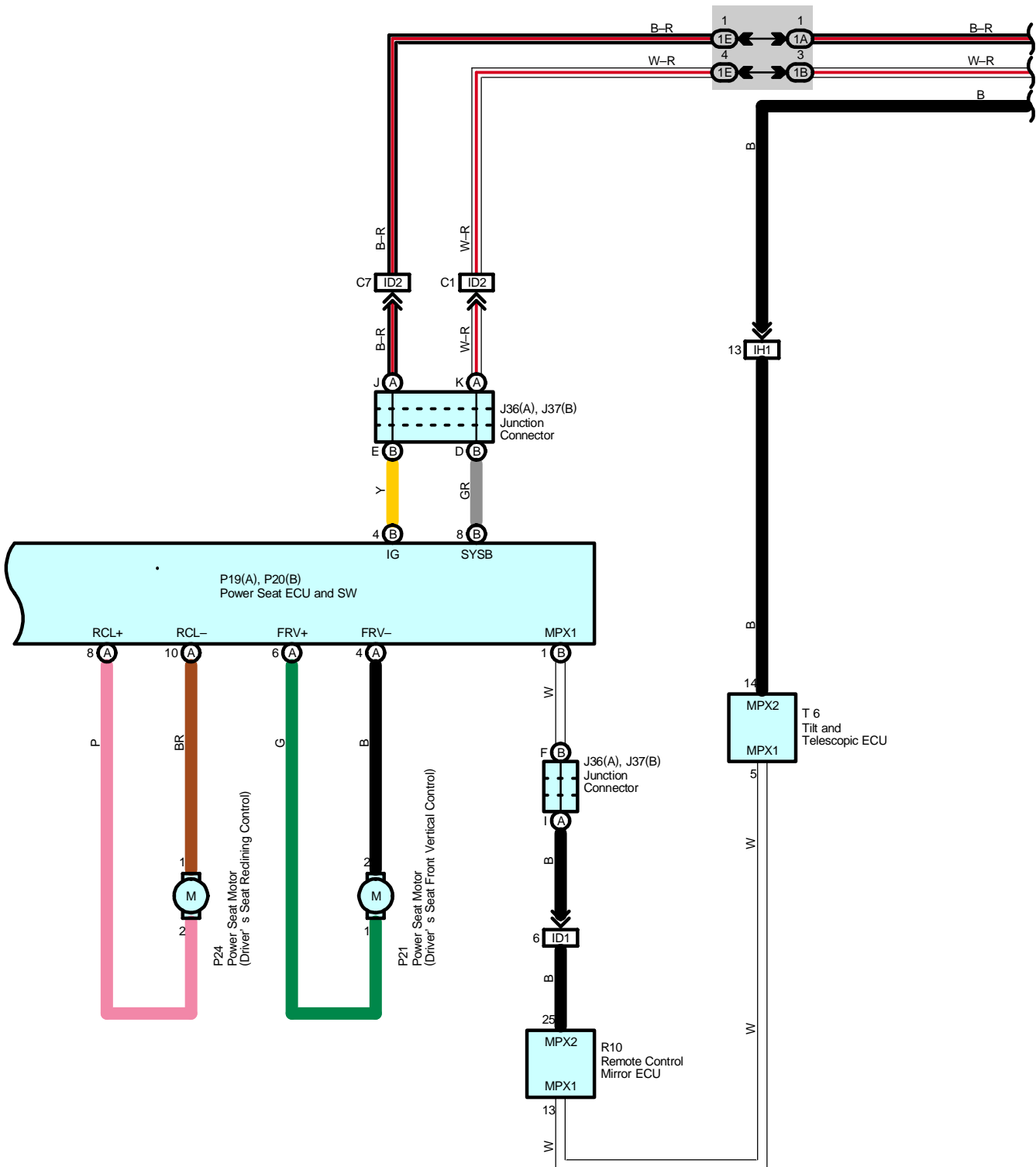
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

▽ : Ground Points

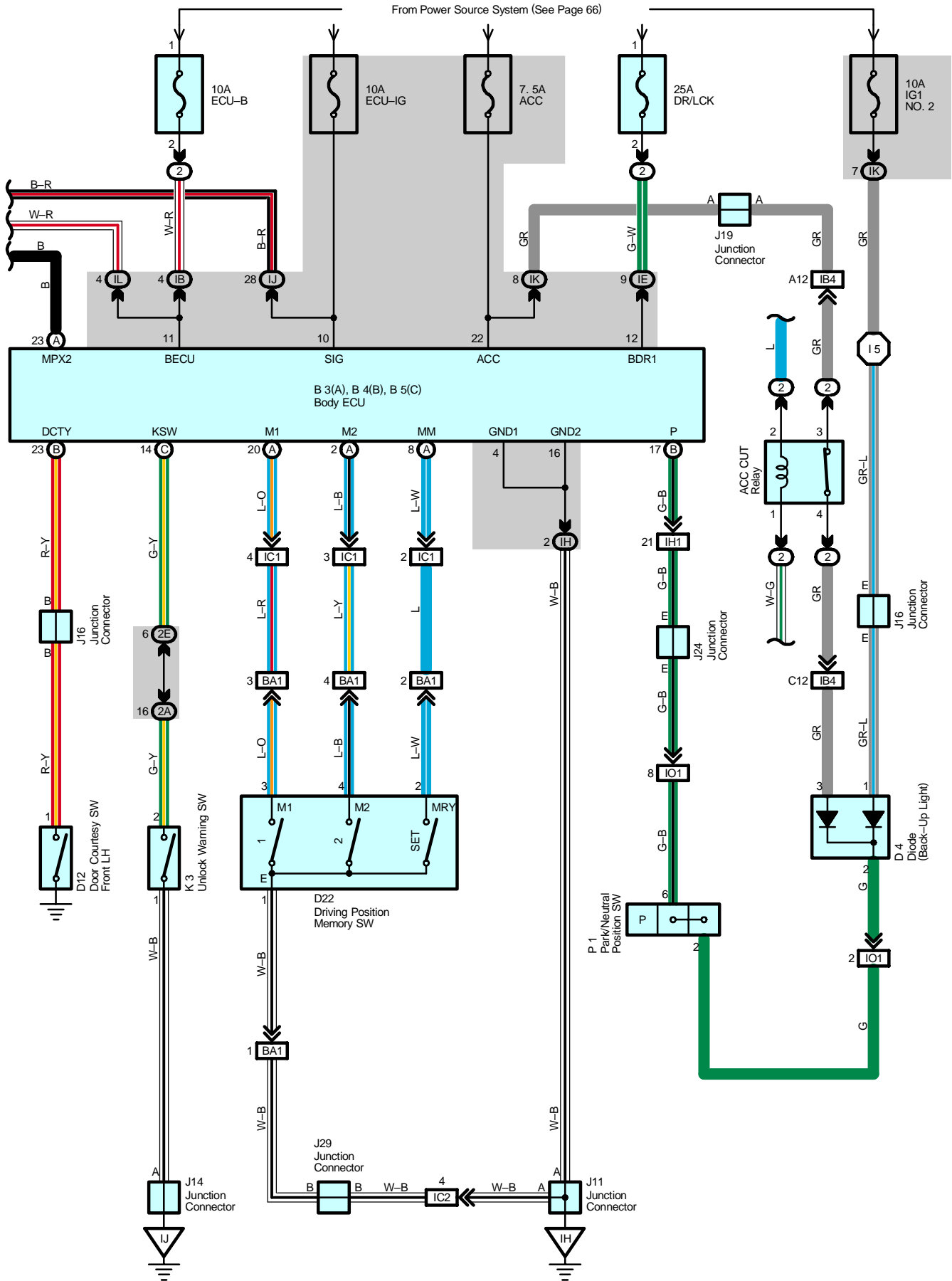
Code	See Page	Ground Points Location
BM	58	Under the Driver's Seat
BN	58	Under the Front Passenger's Seat

Power Seat for Driver's Seat





Power Seat for Driver's Seat



System Outline

- * In the power seat system, the power seat ECU and SW receives the operation signal from the power seat control switch via infrared communication to operate each power seat motor and adjust the seat position.
- * In the event that a malfunction occurs during infrared communication, this system has a fail-safe function to only slide the seat.
- * This system has the following function:
 - * Manual slide operation
 - * Manual reclining control
 - * Manual front vertical control
 - * Manual rear vertical operation
 - * Driving position memory function

Service Hints

P19 (A), P20 (B) Power Seat ECU and SW

- (A) 5, (B) 8-Ground : Always approx. 12 volts
- (B) 4-Ground : Approx. 12 volts with the ignition SW at ON position
- (A) 1-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
B3	A	38	J19	40	P20	B	46
B4	B	38	J24	40	P21		46
B5	C	38	J29	43	P22		46
D4		39	J36	A	46	P23	46
D12		42	J37	B	46	P24	46
D22		42	K3		40	P25	46
J11		40	P1		37	R10	41
J14		40	P16		46	T6	41
J16		40	P19	A	46		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

Power Seat for Driver's Seat

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)

: Ground Points

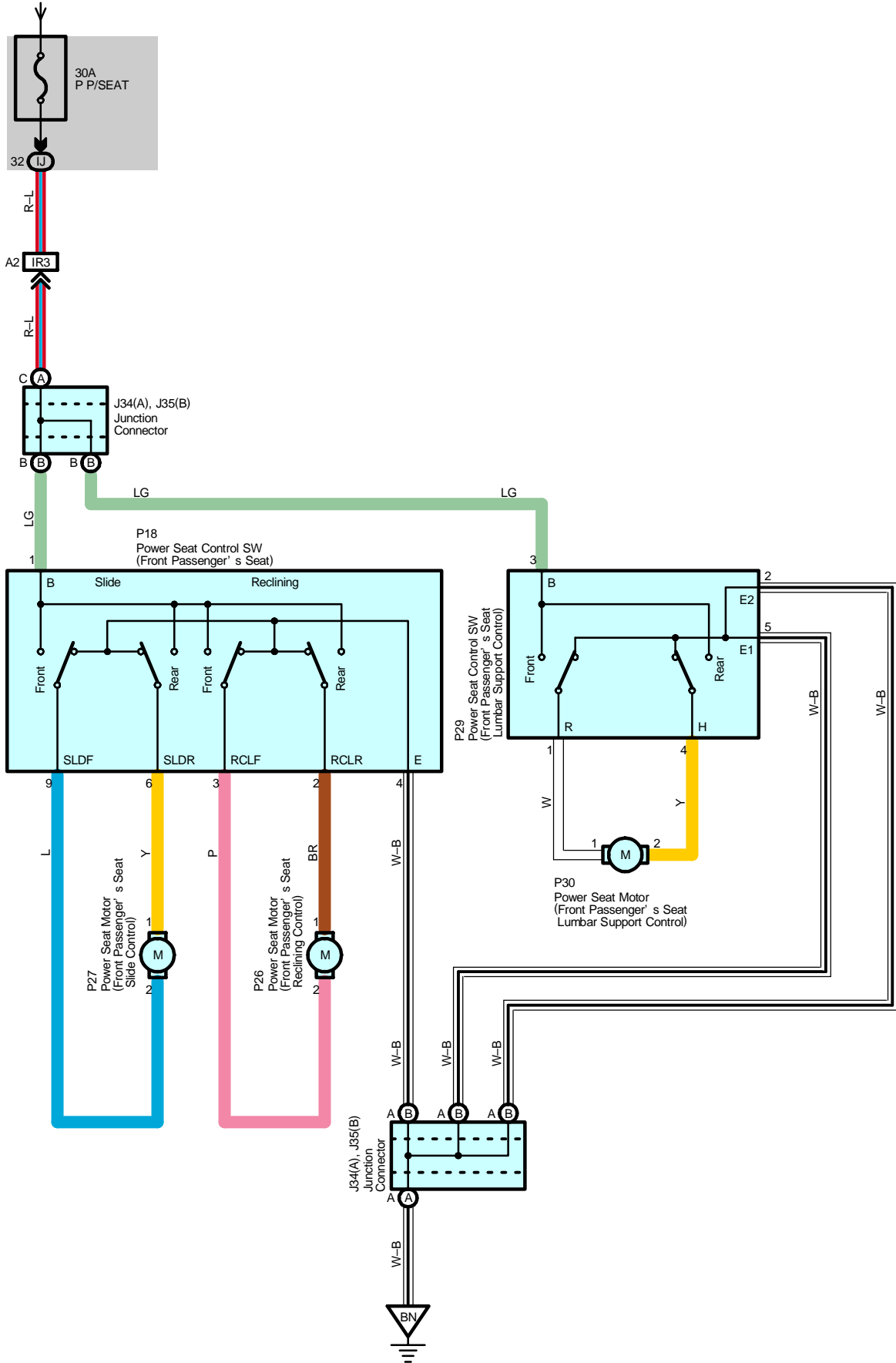
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BM	58	Under the Driver's Seat

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire			

Power Seat for Front Passenger's Seat

From Power Source System (See Page 66)



Service Hints

P18 Power Seat Control SW (Front Passenger's Seat)

- 1-9 : Closed with the front passenger's seat at front slide operation
- 1-6 : Closed with the front passenger's seat at rear slide operation
- 1-3 : Closed with the front passenger's seat at front reclining operation
- 1-2 : Closed with the front passenger's seat at rear reclining operation
- 4-Ground : Always continuity

: Parts Location

Code		See Page	Code	See Page	Code	See Page
J34	A	46	P26	46	P30	46
J35	B	46	P27	46		
P18		46	P29	46		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

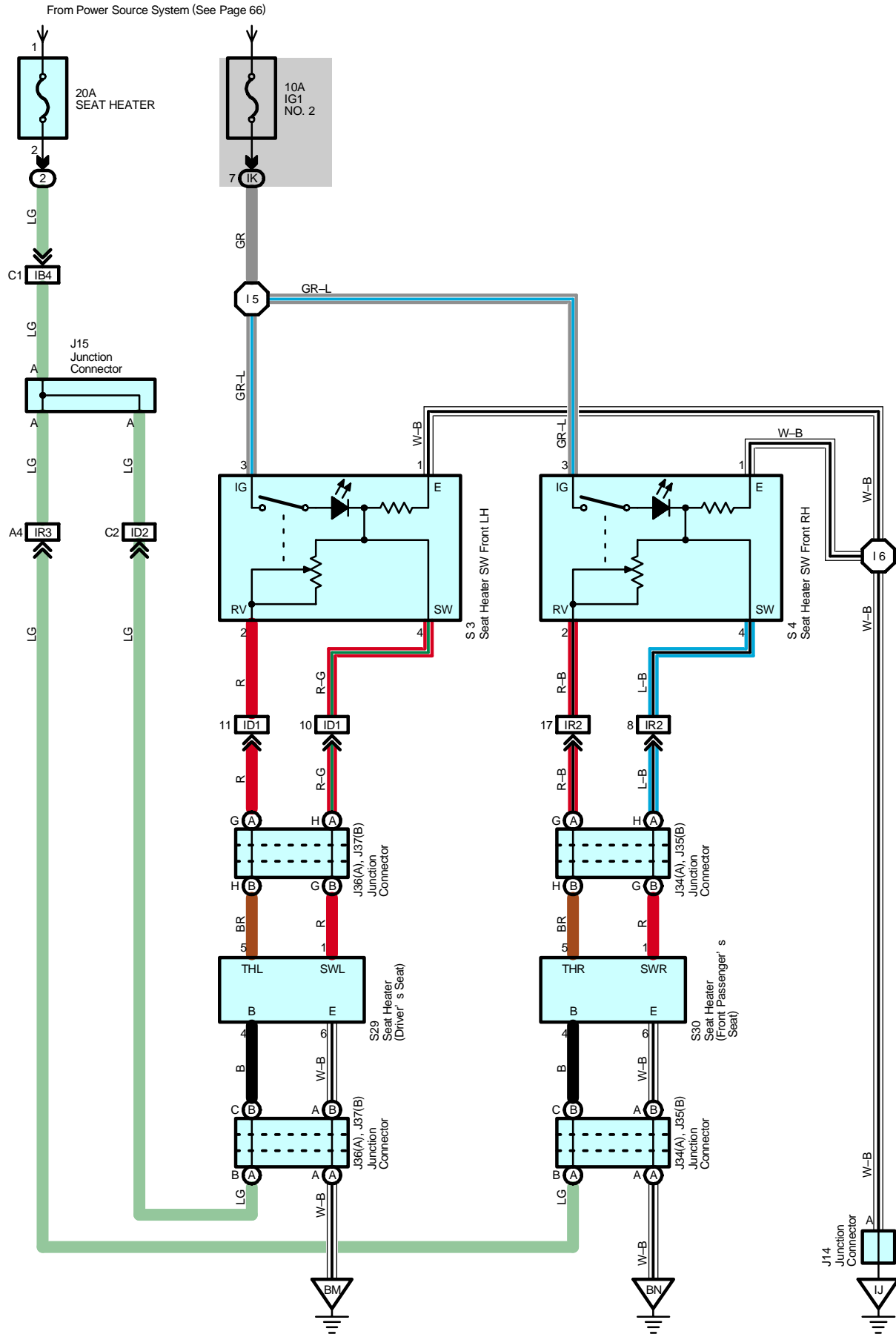
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
BN	58	Under the Front Passenger's Seat

Seat Heater



Service Hints

S3, S4 Seat Heater SW Front LH, RH

3-Ground : Approx. 12 volts with the ignition SW at ON position

1-Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page	
J14	40	J36	A	46	S29	46
J15	40	J37	B	46	S30	46
J34	A	46	S3	41		
J35	B	46	S4	41		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		

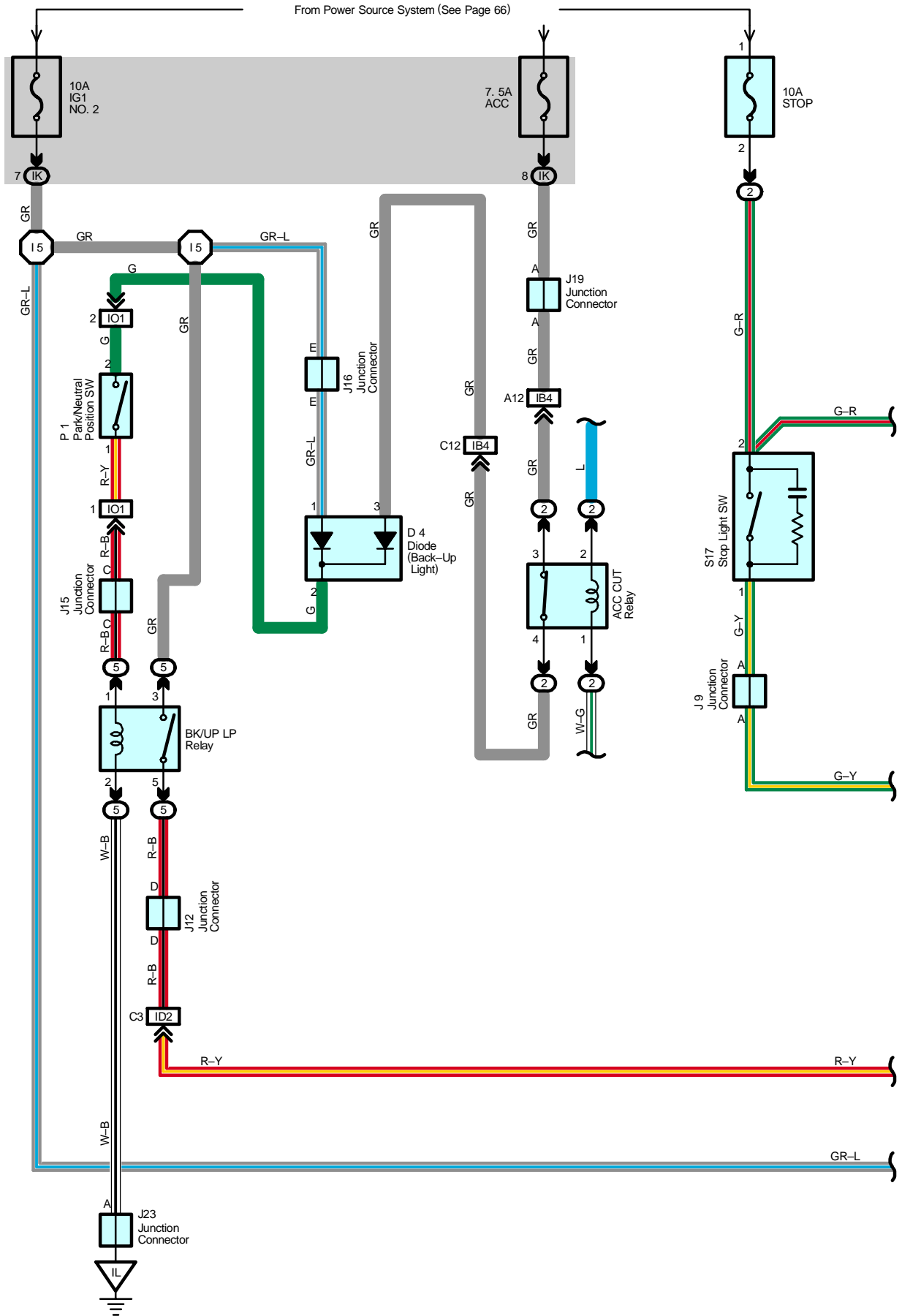
: Ground Points

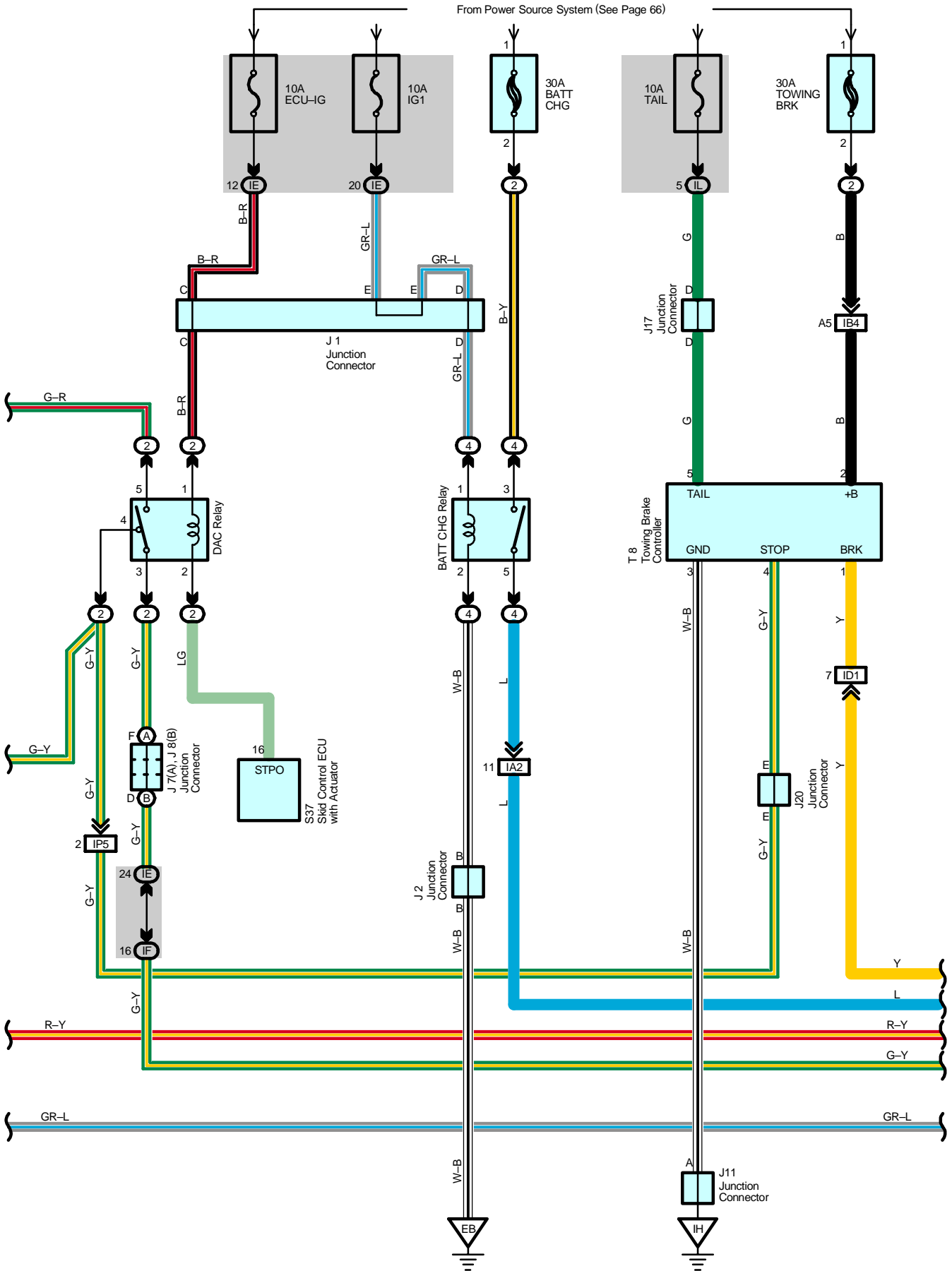
Code	See Page	Ground Points Location
IJ	50	Near the Right Side of Steering Column
BM	58	Under the Driver's Seat
BN	58	Under the Front Passenger's Seat

: Splice Points

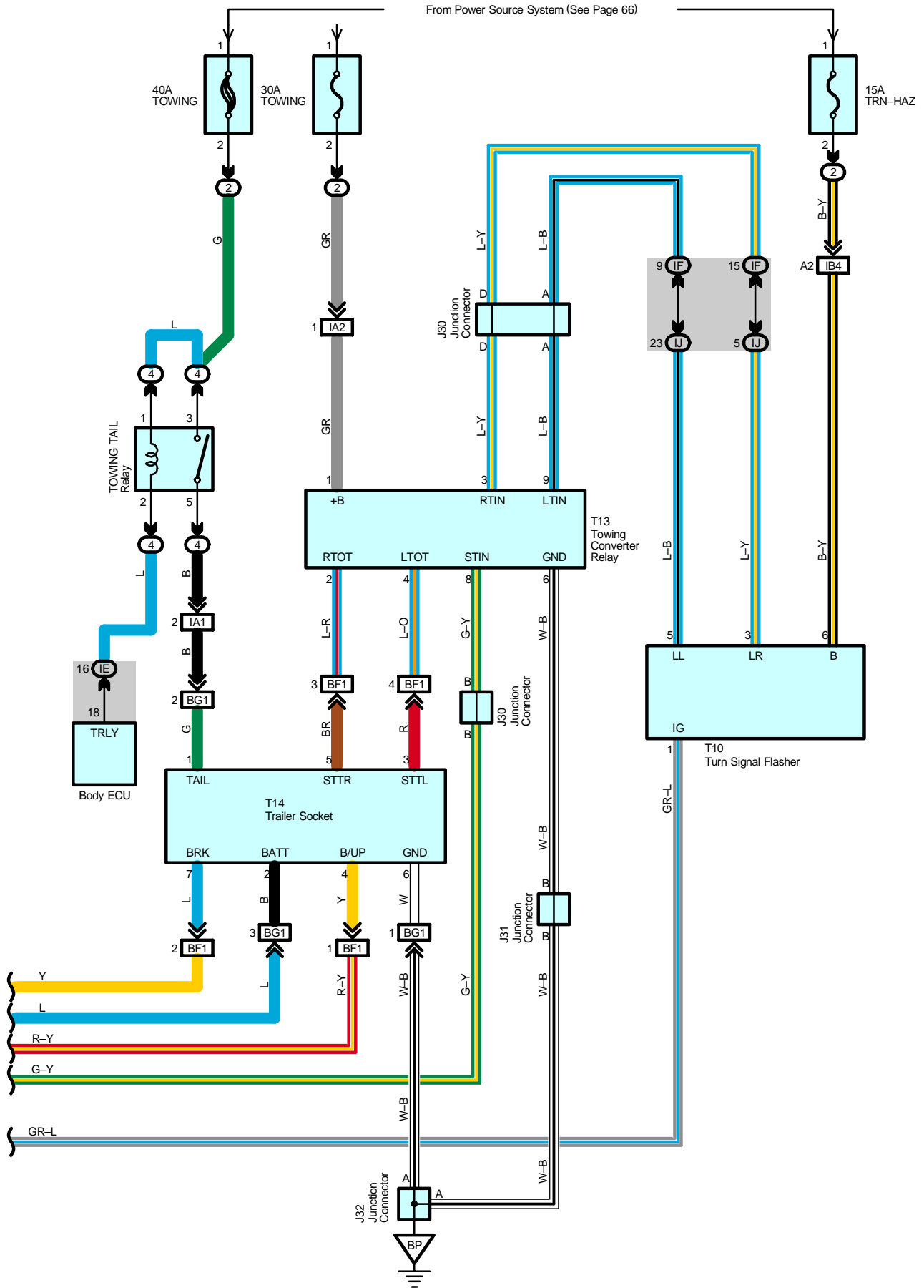
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I6	52	Instrument Panel Wire

Trailer Towing





Trailer Towing



Service Hints

T13 Towing Converter Relay

1-Ground : Always approx. 12 volts

6-Ground : Always continuity

T8 Towing Brake Controller

2-Ground : Always approx. 12 volts

3-Ground : Always continuity

T14 Trailer Socket

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

6-Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
D4	39	J15	40	J32	43
J1	37	J16	40	P1	37
J2	37	J17	40	S17	41
J7	A	J19	40	S37	37
J8	B	J20	40	T8	41
J9	40	J23	40	T10	41
J11	40	J30	43	T13	45
J12	40	J31	43	T14	45

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
4	23	Engine Room R/B No.4 (Engine Compartment Left)
5	24	Passenger Side R/B (Right Kick Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IA2		
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
BF1	60	Floor No.2 Wire and Frame No.3 Wire (Left Side of Rear Floor Cross Member)
BG1	60	Frame No.3 Wire and Floor No.2 Wire (Left Side of Rear Floor Cross Member)

: Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender
IH	50	Left Kick Panel
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner

Trailer Towing

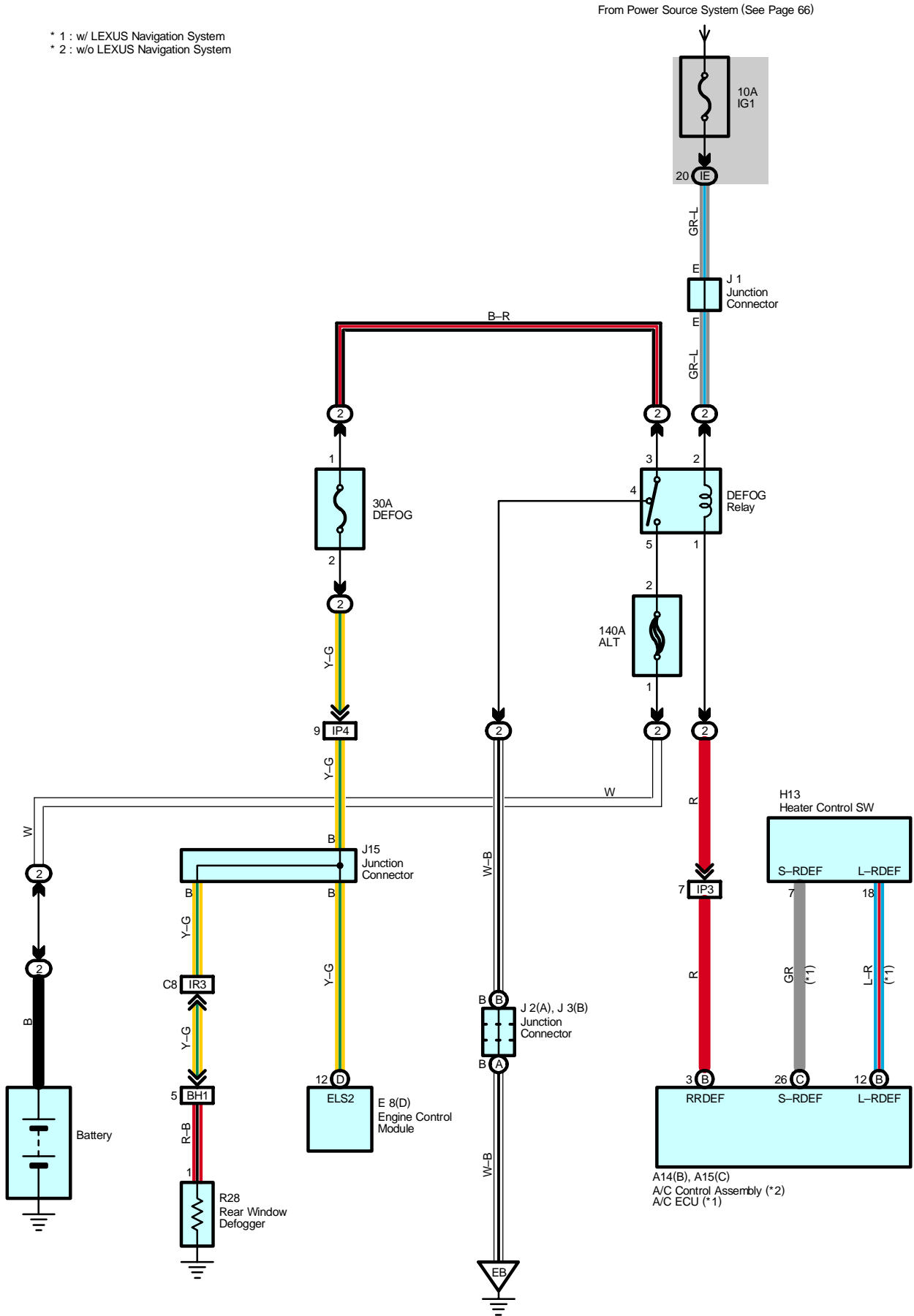


: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
15	52	Instrument Panel Wire			

Rear Window Defogger

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



Service Hints

DEFOG Relay

5-3 : Closed with the ignition SW at ON position and rear window defogger SW
(A/C control assembly (w/o LEXUS navigation system), heater control SW (w/ LEXUS navigation system)) on

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A14	B	38	H13	39	J3	B	37	
A15	C	38	J1	37	J15		40	
E8	D	39	J2	A	37	R28	44	

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)

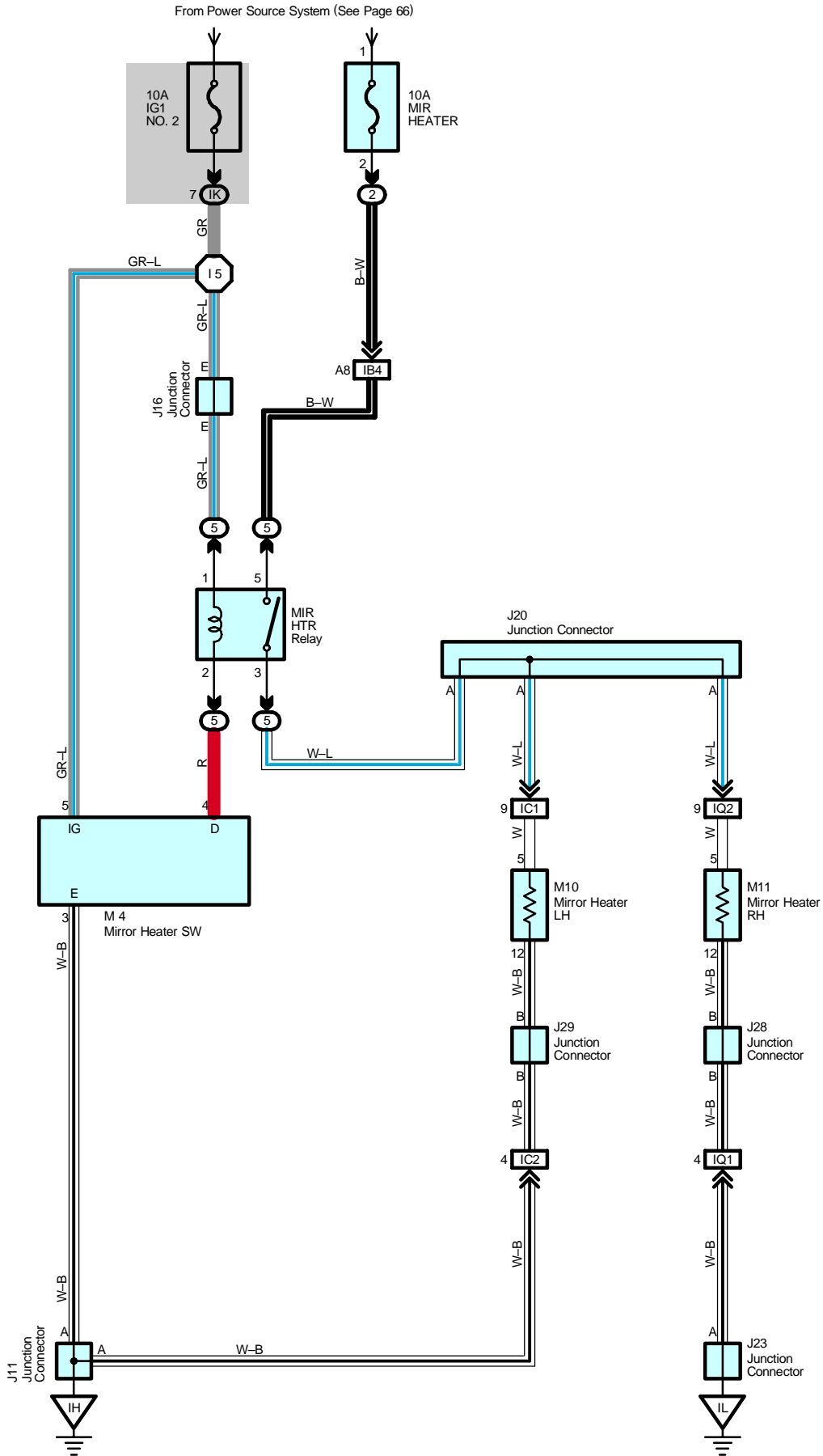
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

: Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender

Mirror Heater



Service Hints

M4 Mirror Heater SW

5-Ground : Approx. 12 volts with the ignition SW at ON position

3-Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
J11	40	J23	40	M4	40
J16	40	J28	43	M10	44
J20	40	J29	43	M11	44

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
5	24	Passenger Side R/B (Right Kick Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		

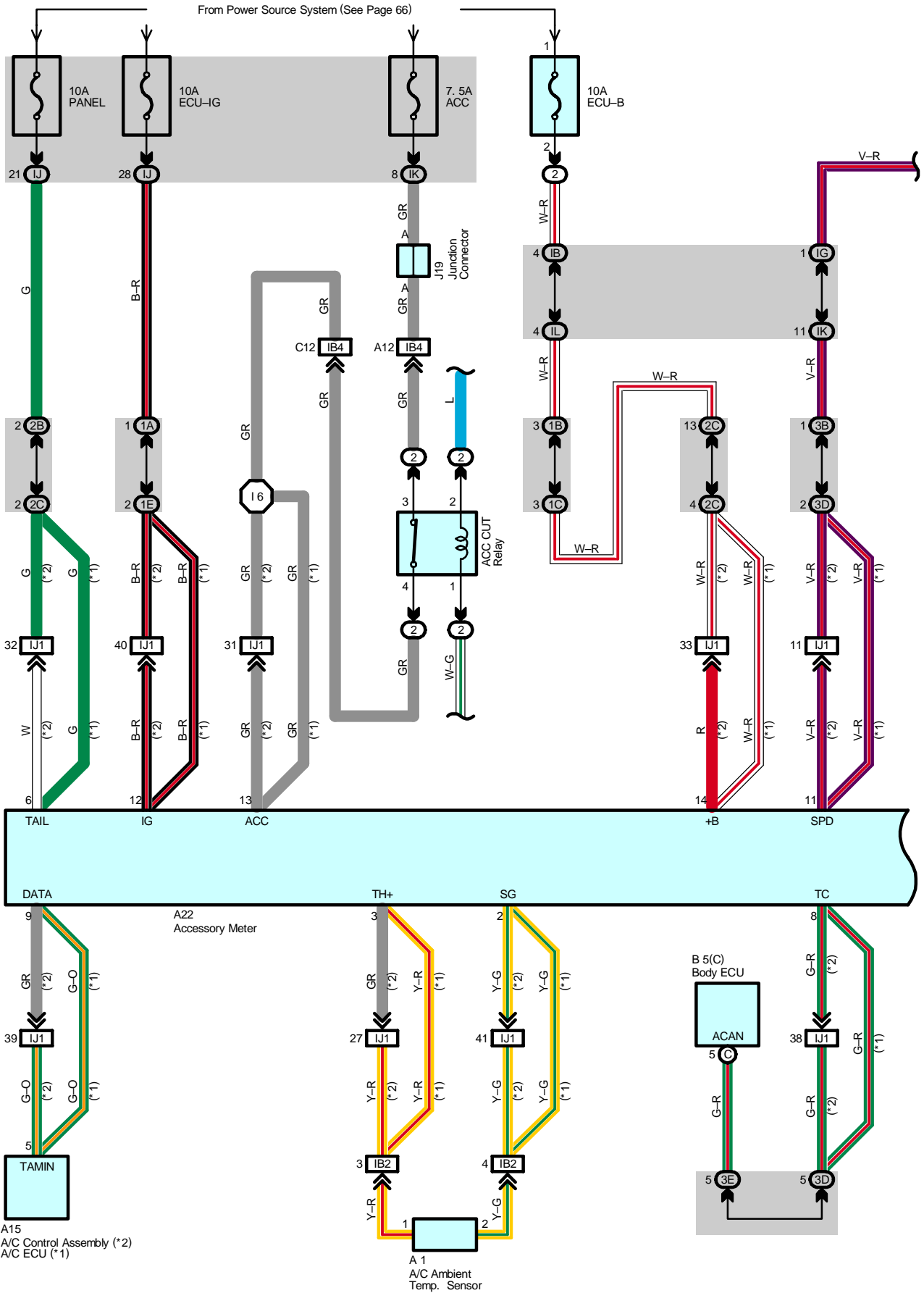
: Ground Points

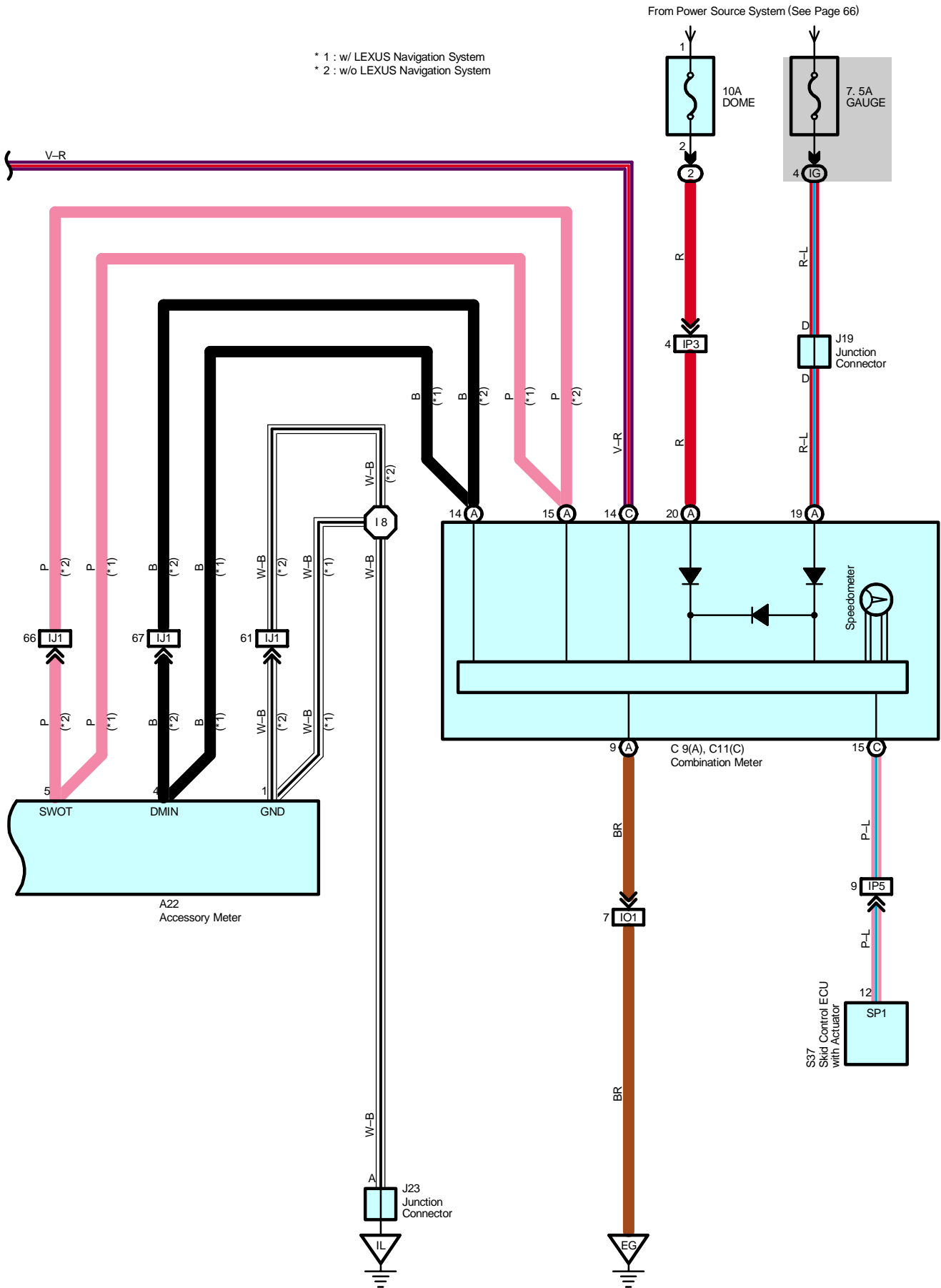
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IL	50	Right Kick Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire			

Accessory Meter





Accessory Meter

Service Hints

A22 Accessory Meter

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	36	B5	C 38	J19	40
A15	38	C9	A 38	J23	40
A22	38	C11	C 38	S37	37

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1E		
2B	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3D		
3E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		

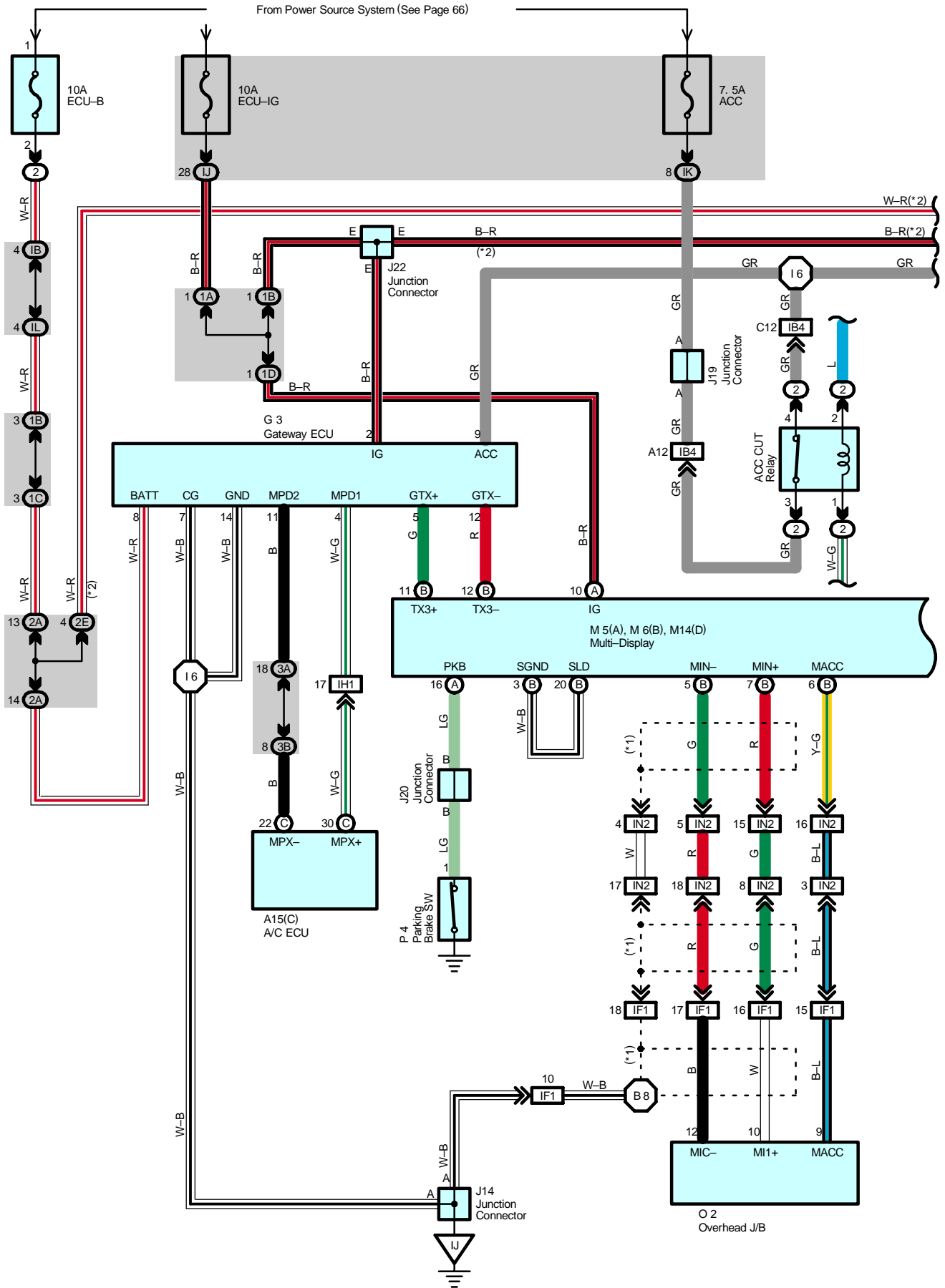
: Ground Points

Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IL	50	Right Kick Panel

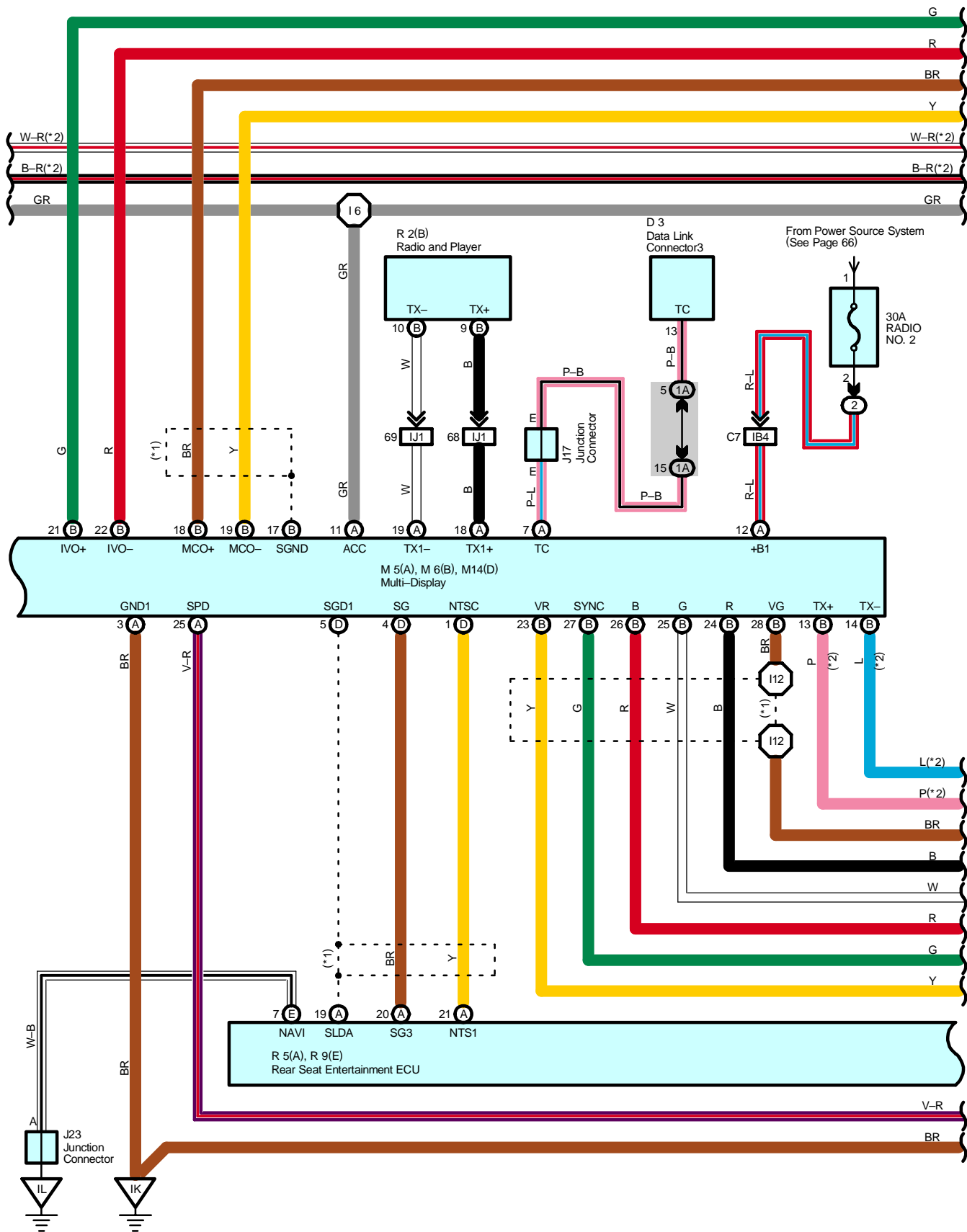
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	I8	52	Instrument Panel Wire

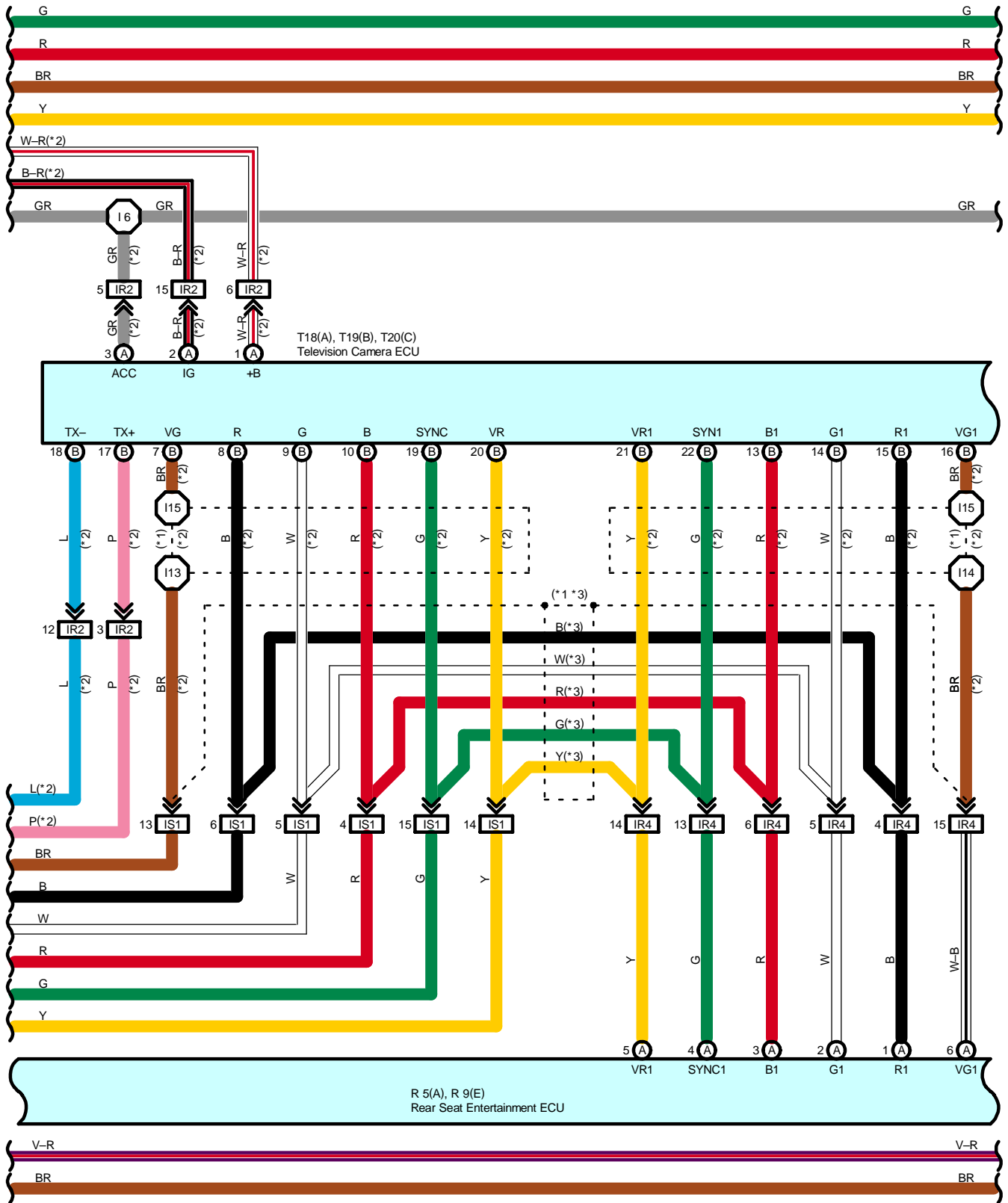
Navigation and Parking Assist with RSES

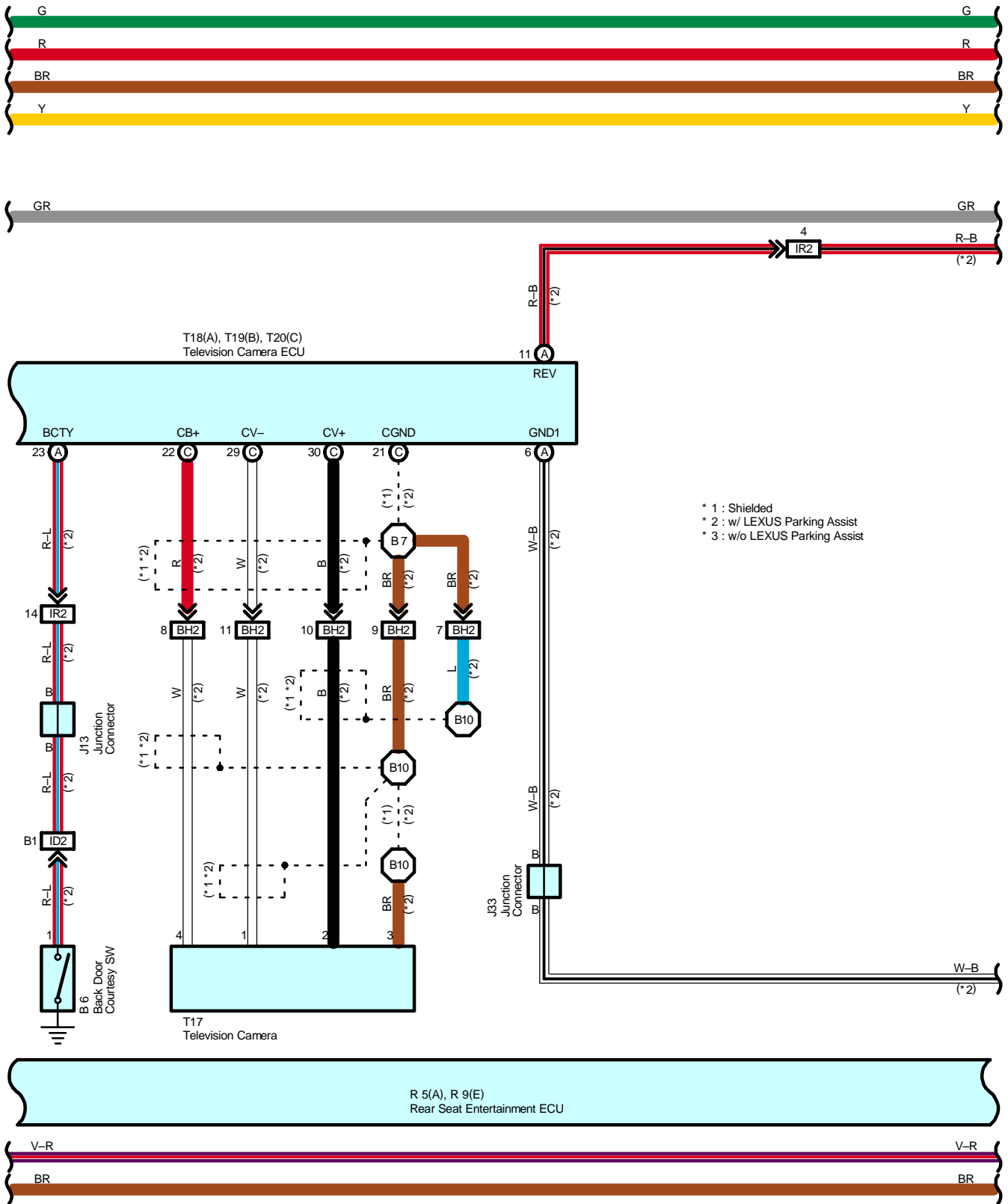


- * 1 : Shielded
- * 2 : w/ LEXUS Parking Assist

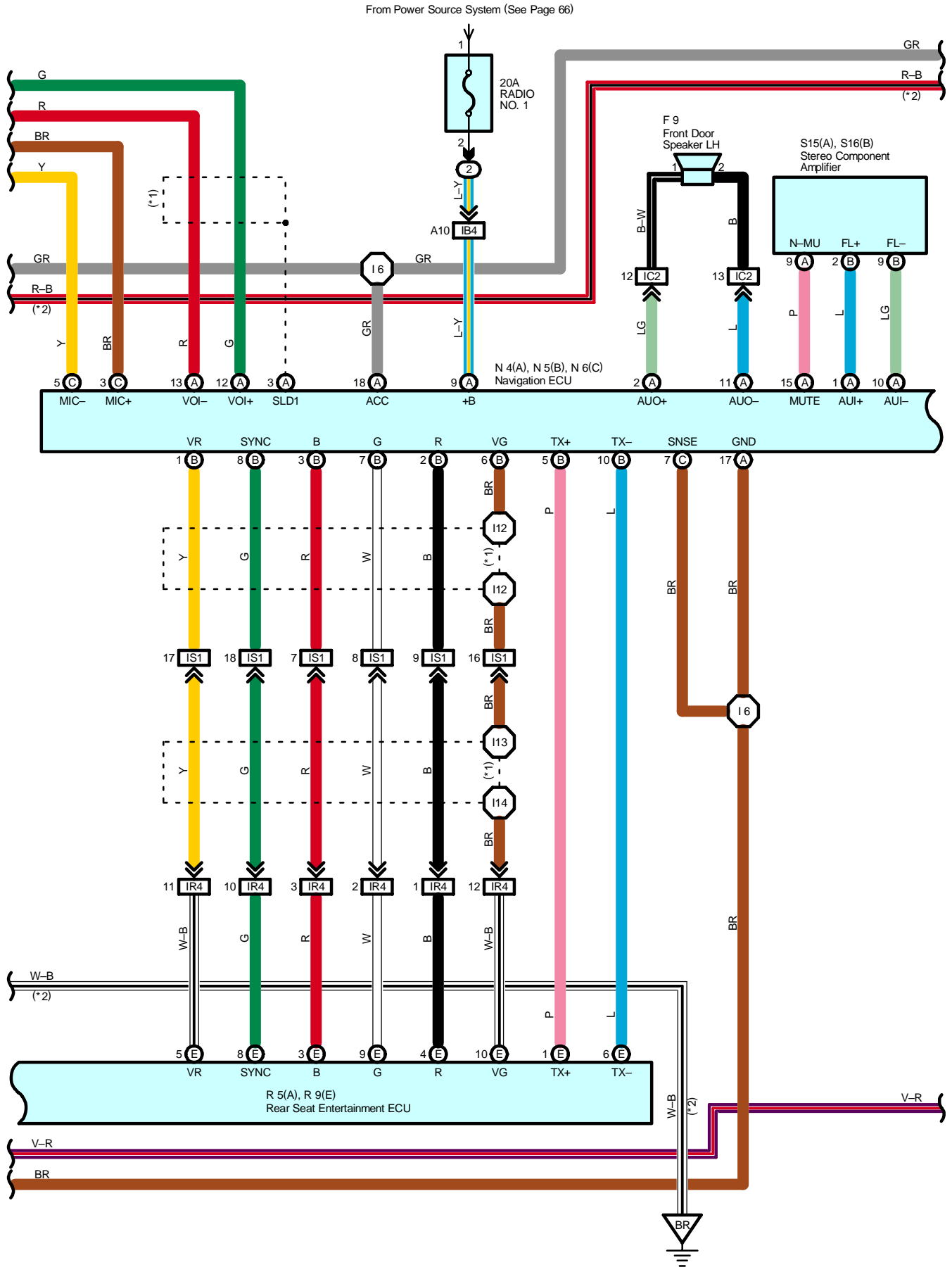


Navigation and Parking Assist with RSES

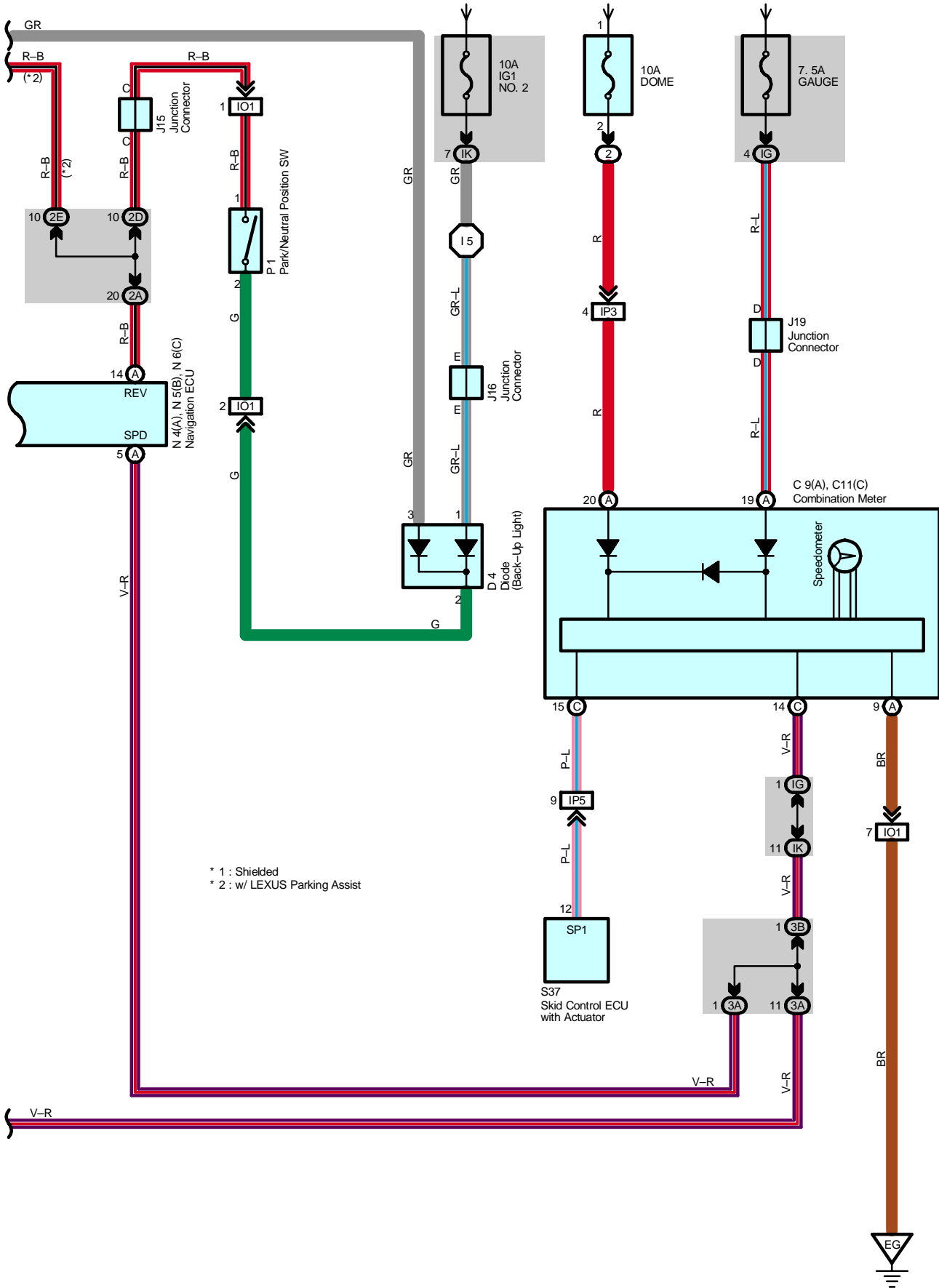




Navigation and Parking Assist with RSES



From Power Source System (See Page 66)



Navigation and Parking Assist with RSES

System Outline

The LEXUS navigation system displays the operating status and instructions for the radio and player. Additionally, the navigation system precisely measures the current vehicle position, displays the map obtained from the map database on the screen, and informs the route to the destination shown on the map using voice guidance.

Service Hints

N4 (A), N6 (C) Navigation ECU

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

T18 (A) Television Camera ECU

- (A) 1–Ground : Always approx. 12 volts
- (A) 3–Ground : Approx. 12 volts with the ignition SW at ON or ACC position
- (A) 6–Ground : Always continuity
- (A) 2–Ground : Approx. 12 volts with the ignition SW at ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A15	C 38	J19	40	P4	40
B6	42	J20	40	R2	B 41
C9	A 38	J22	40	R5	A 41
C11	C 38	J23	40	R9	E 41
D3	39	J33	43	S15	A 41
D4	39	M5	A 40	S16	B 41
F9	43	M6	B 40	S37	37
G3	39	M14	D 40	T17	45
J13	40	N4	A 40	T18	A 41
J14	40	N5	B 40	T19	B 41
J15	40	N6	C 40	T20	C 41
J16	40	O2	44		
J17	40	P1	37		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IN2	54	Instrument Panel Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR4		
IS1	56	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)
BH2	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

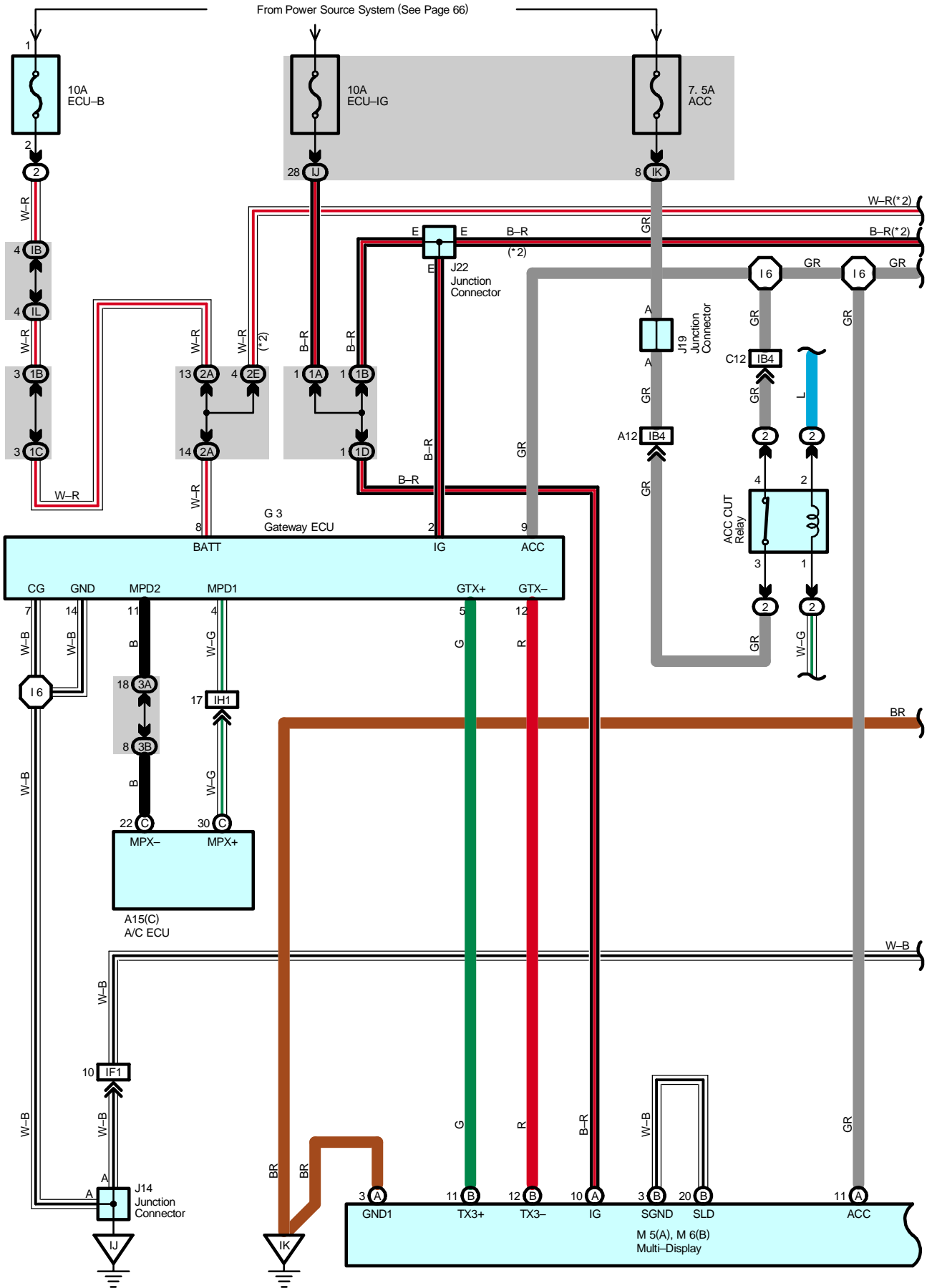
 : Ground Points

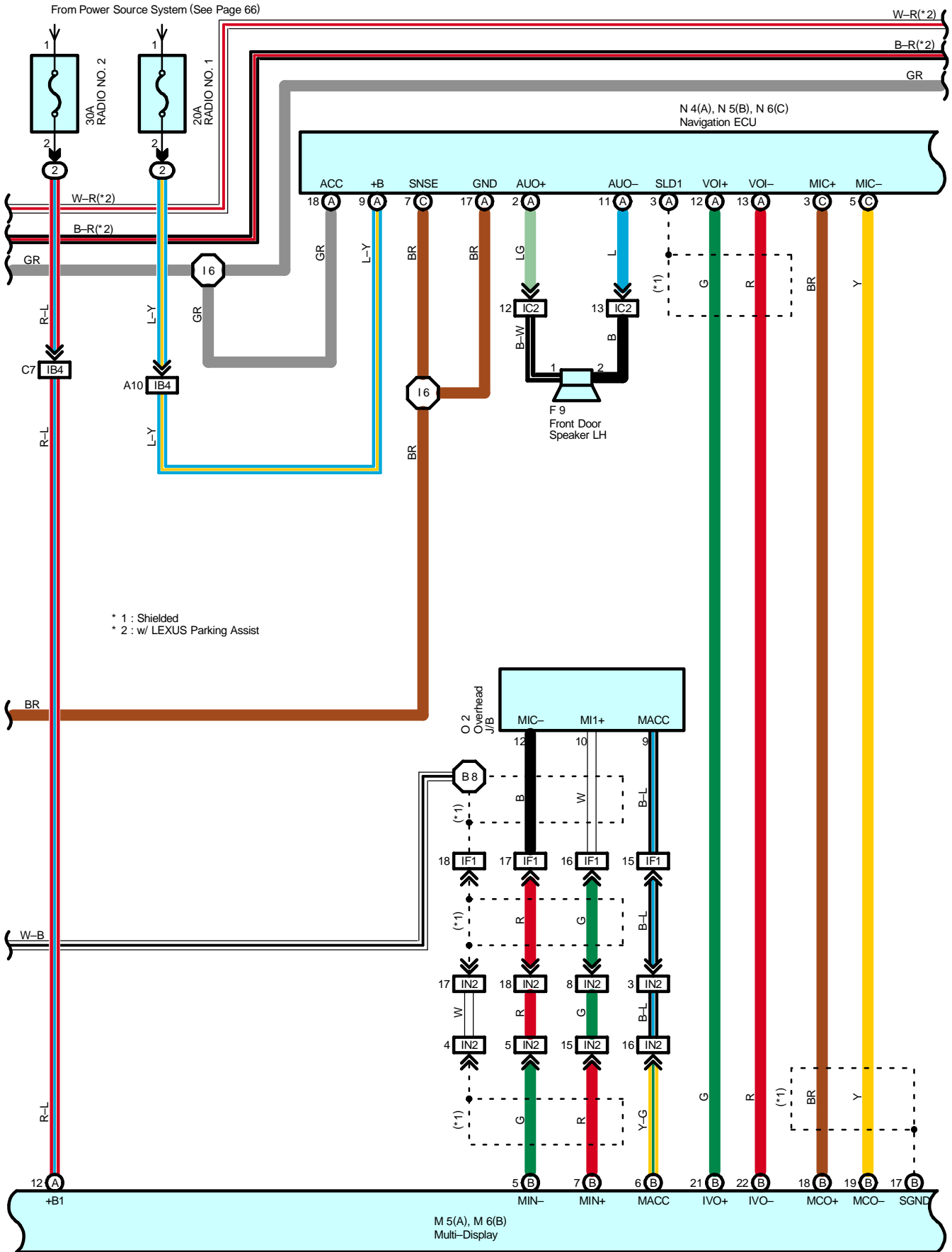
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH
IL	50	Right Kick Panel
BR	58	Right Quarter Panel Inner

 : Splice Points

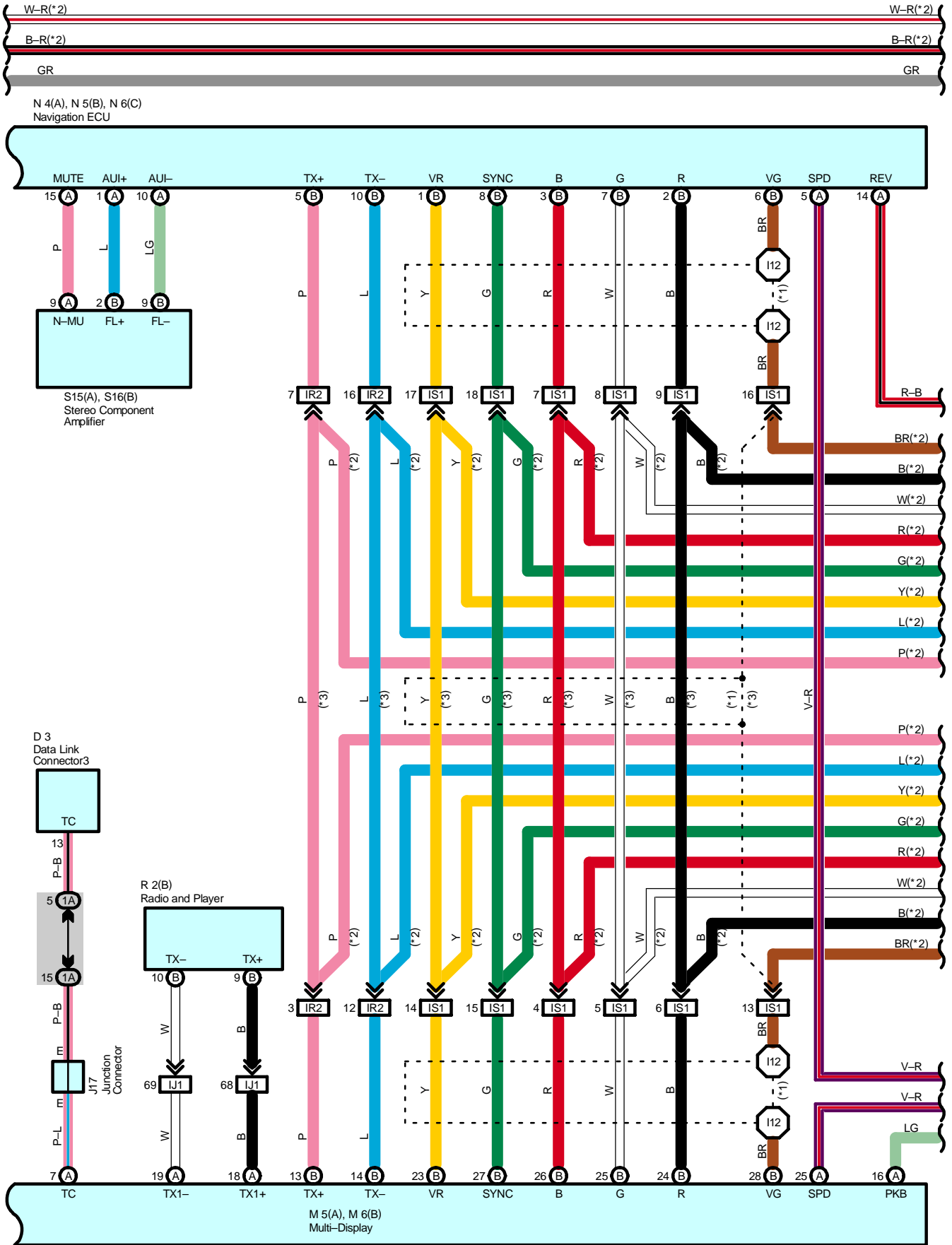
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I15	52	Floor Wire
I6			B7	60	
I12			B8	60	Roof Wire
I13	52	Floor Wire	B10	60	Back Door No.1 Wire
I14					

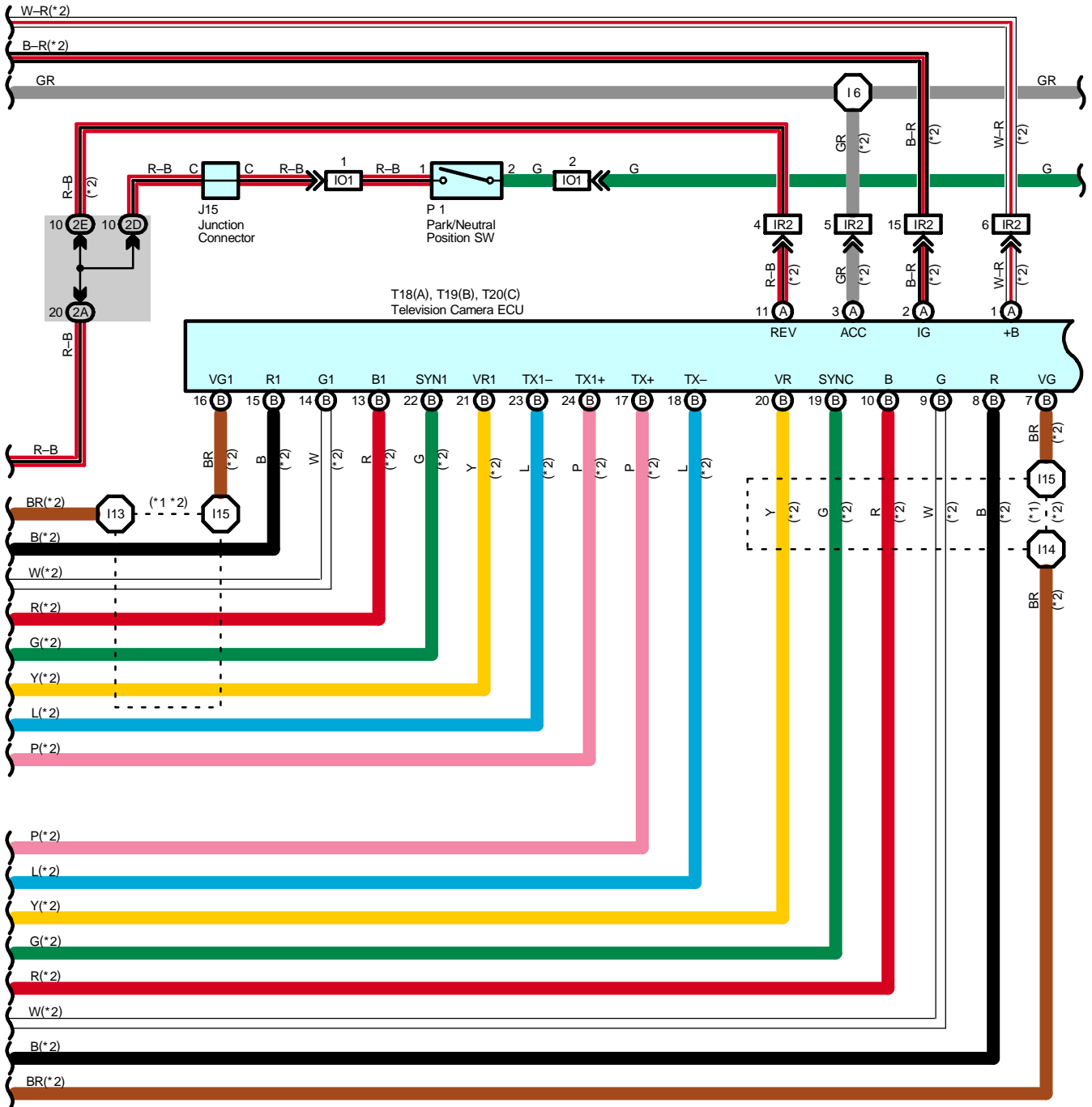
Navigation and Parking Assist without RSES



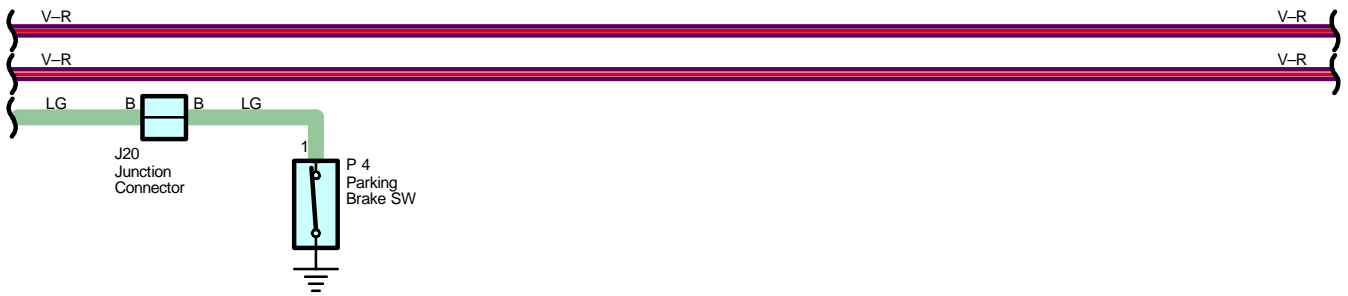


Navigation and Parking Assist without RSES





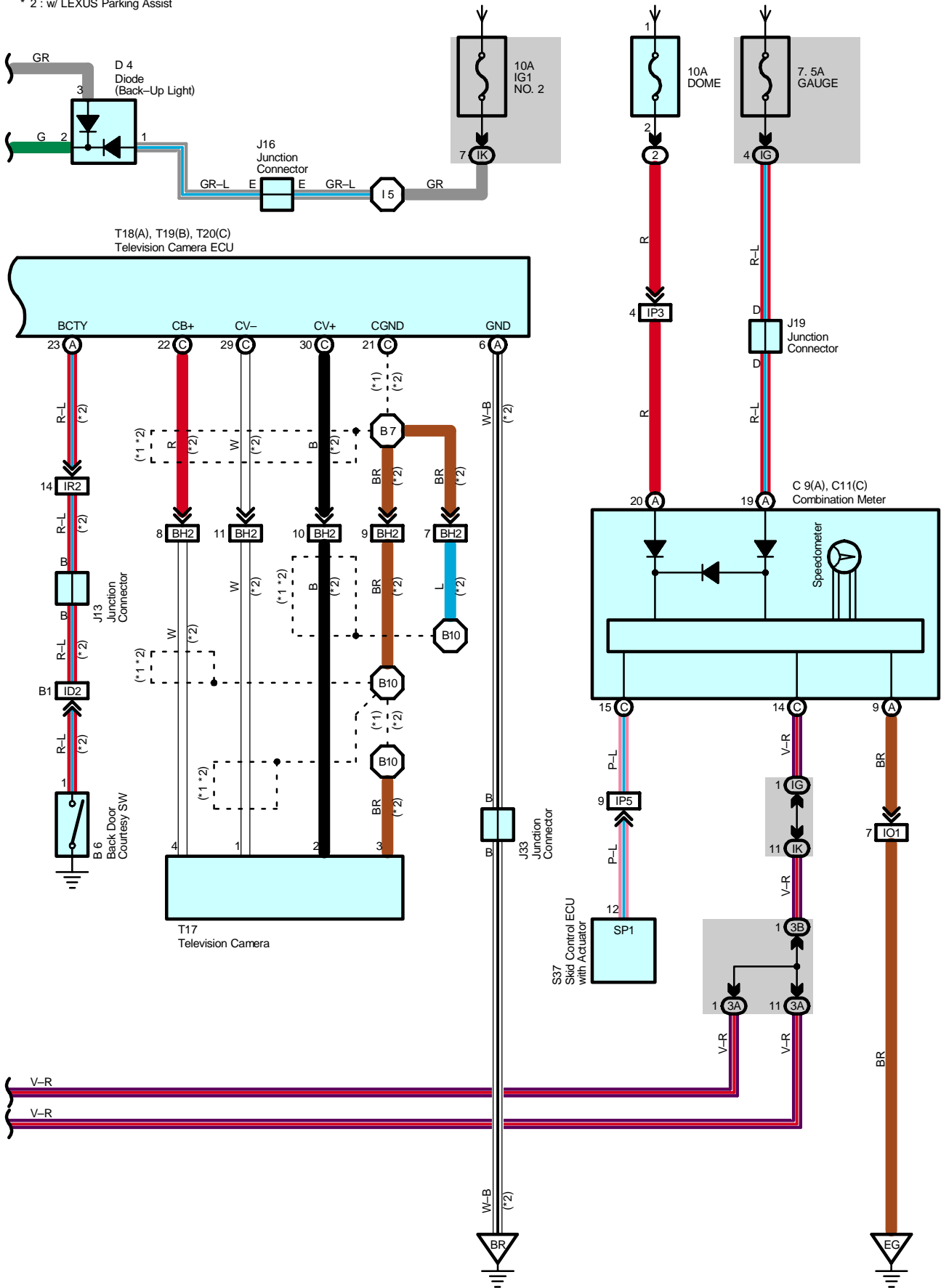
- * 1 : Shielded
- * 2 : w/ LEXUS Parking Assist
- * 3 : w/o LEXUS Parking Assist



Navigation and Parking Assist without RSES

- * 1 : Shielded
- * 2 : w/ LEXUS Parking Assist

From Power Source System (See Page 66)



System Outline

The LEXUS navigation system displays the operating status and instructions for the radio and player. Additionally, the navigation system precisely measures the current vehicle position, displays the map obtained from the map database on the screen, and informs the route to the destination shown on the map using voice guidance.

Service Hints

N4 (A), N6 (C) Navigation ECU

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

T18 (A) Television Camera ECU

- (A) 1–Ground : Always approx. 12 volts
- (A) 3–Ground : Approx. 12 volts with the ignition SW at ON or ACC position
- (A) 6–Ground : Always continuity
- (A) 2–Ground : Approx. 12 volts with the ignition SW at ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
A15	C	38	J16	40	O2	44	
B6		42	J17	40	P1	37	
C9	A	38	J19	40	P4	40	
C11	C	38	J20	40	R2	B	41
D3		39	J22	40	S15	A	41
D4		39	J33	43	S16	B	41
F9		43	M5	A	S37		37
G3		39	M6	B	T17		45
J13		40	N4	A	T18	A	41
J14		40	N5	B	T19	B	41
J15		40	N6	C	T20	C	41

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

Navigation and Parking Assist without RSES

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IN2	54	Instrument Panel Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IS1	56	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)
BH2	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

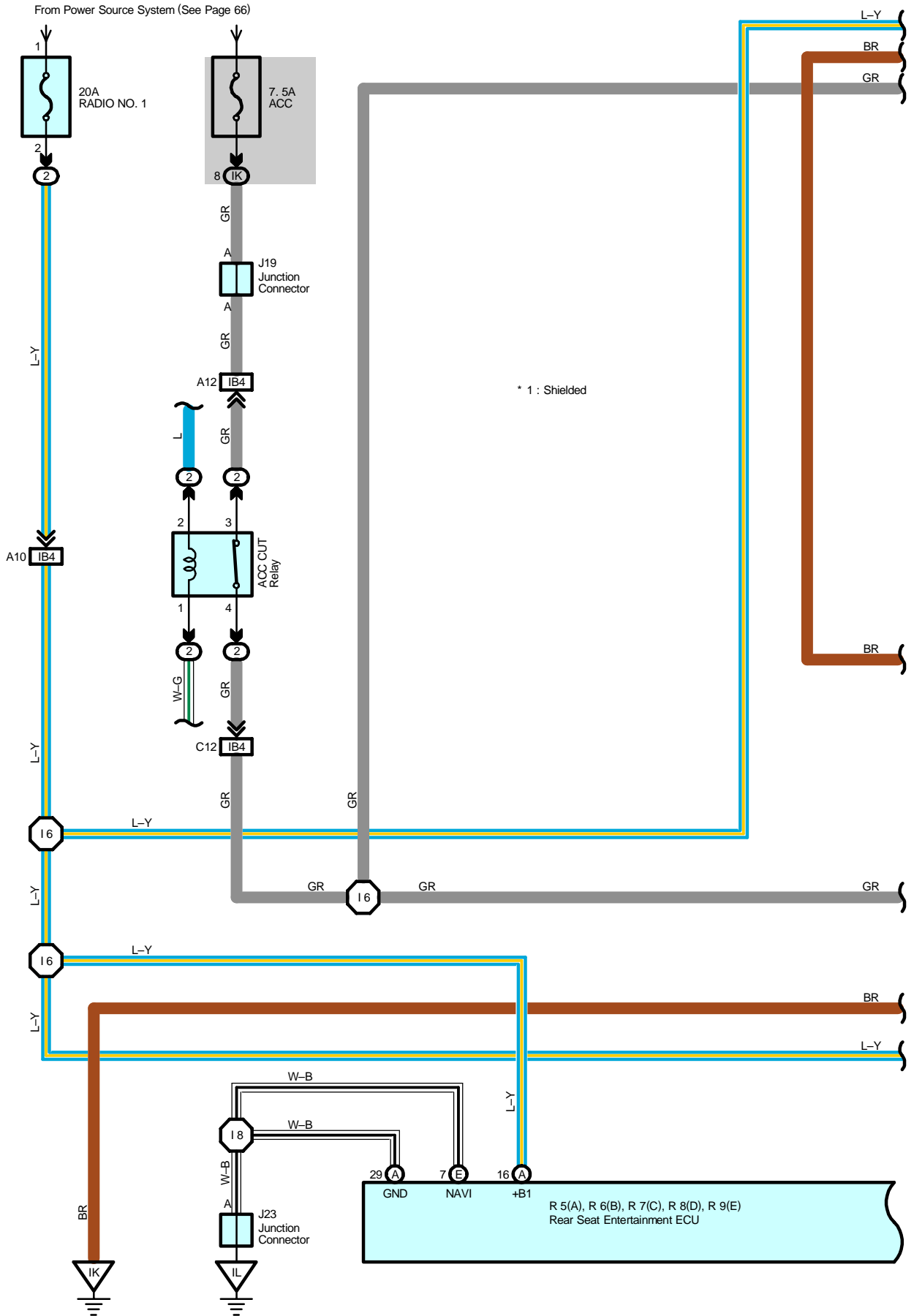
: Ground Points

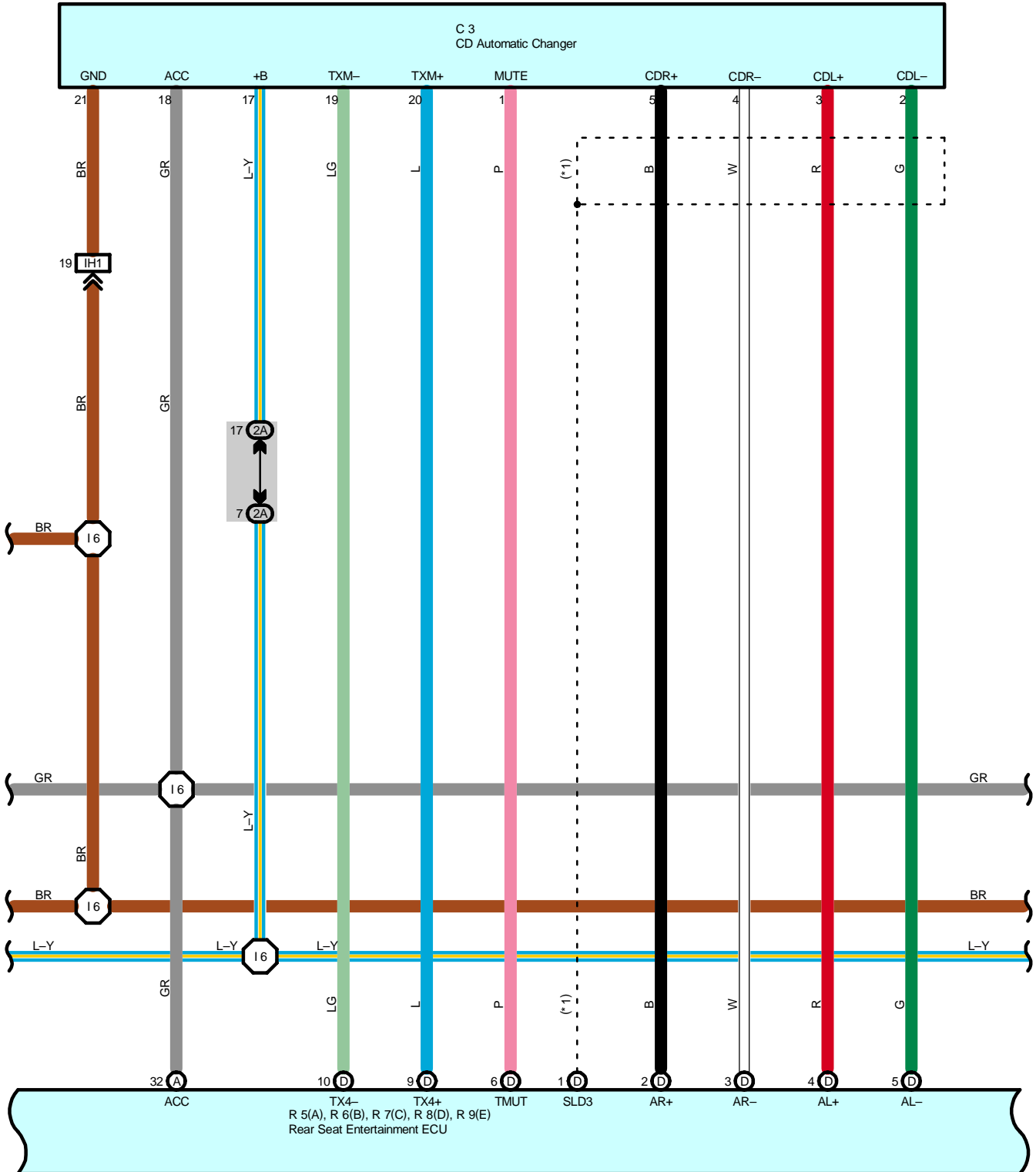
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH
BR	58	Right Quarter Panel Inner

: Splice Points

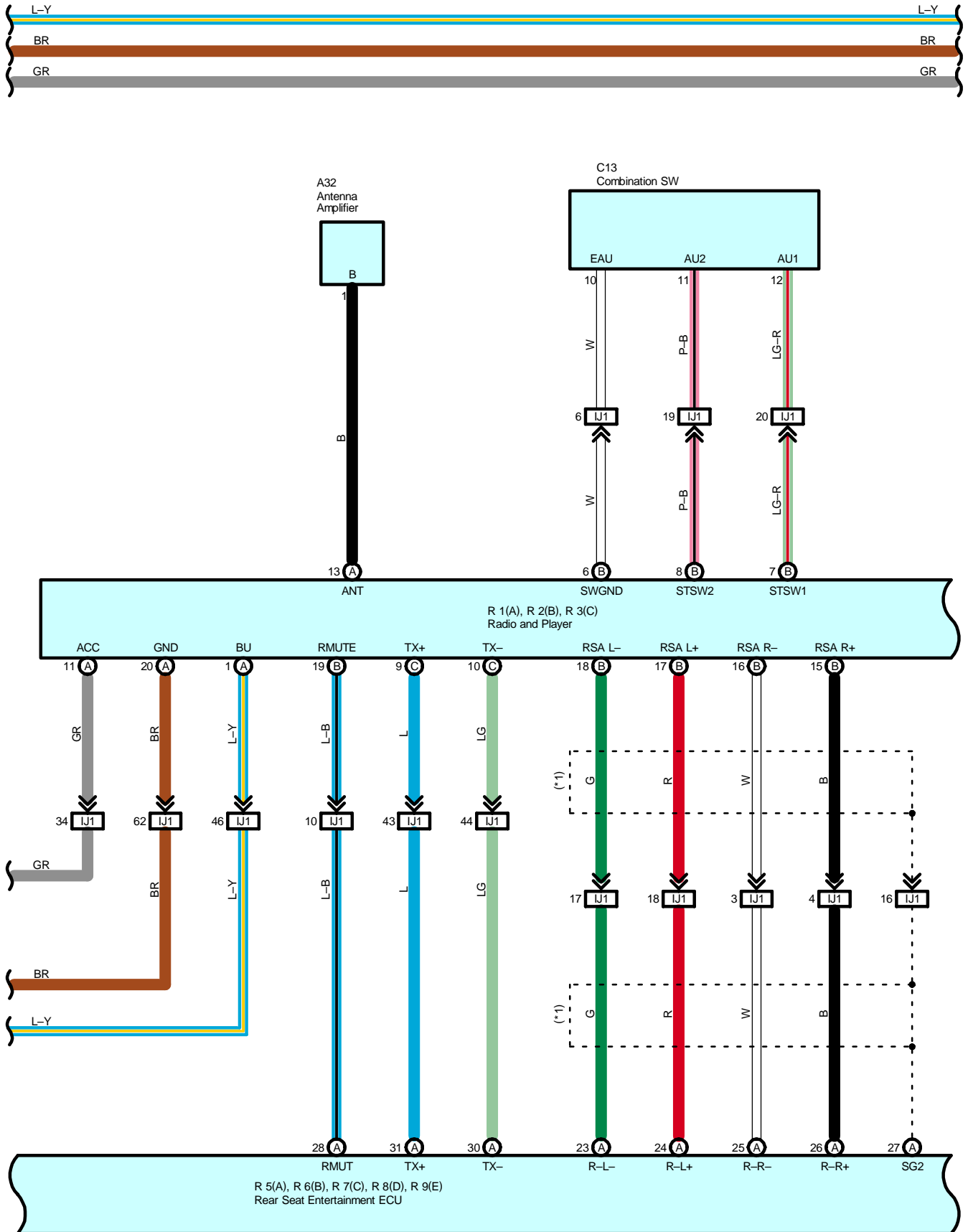
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I15	52	Floor Wire
I6			B7	60	
I12			B8	60	
I13	52	Floor Wire	B10	60	Back Door No.1 Wire
I14					

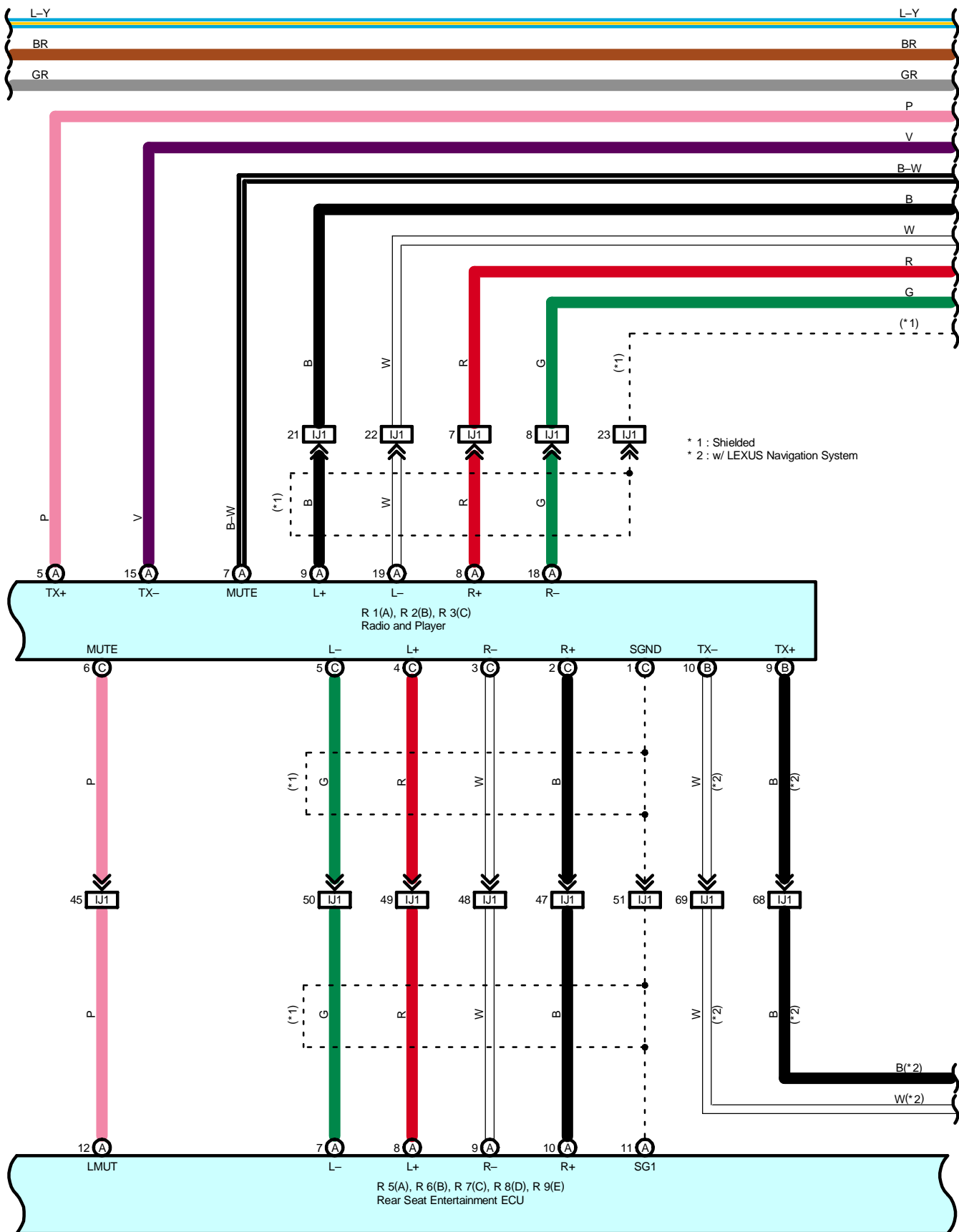
Audio System with RSES



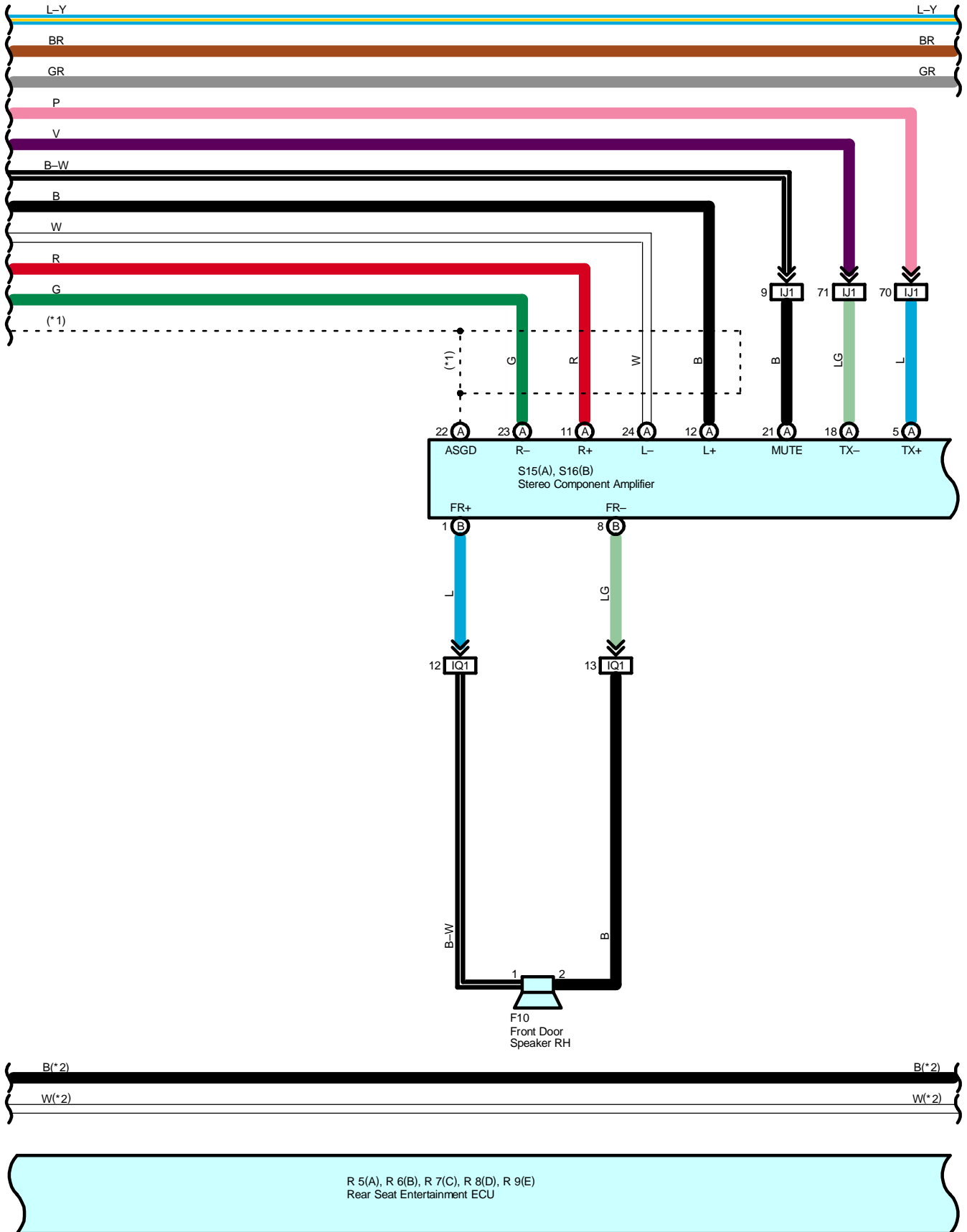


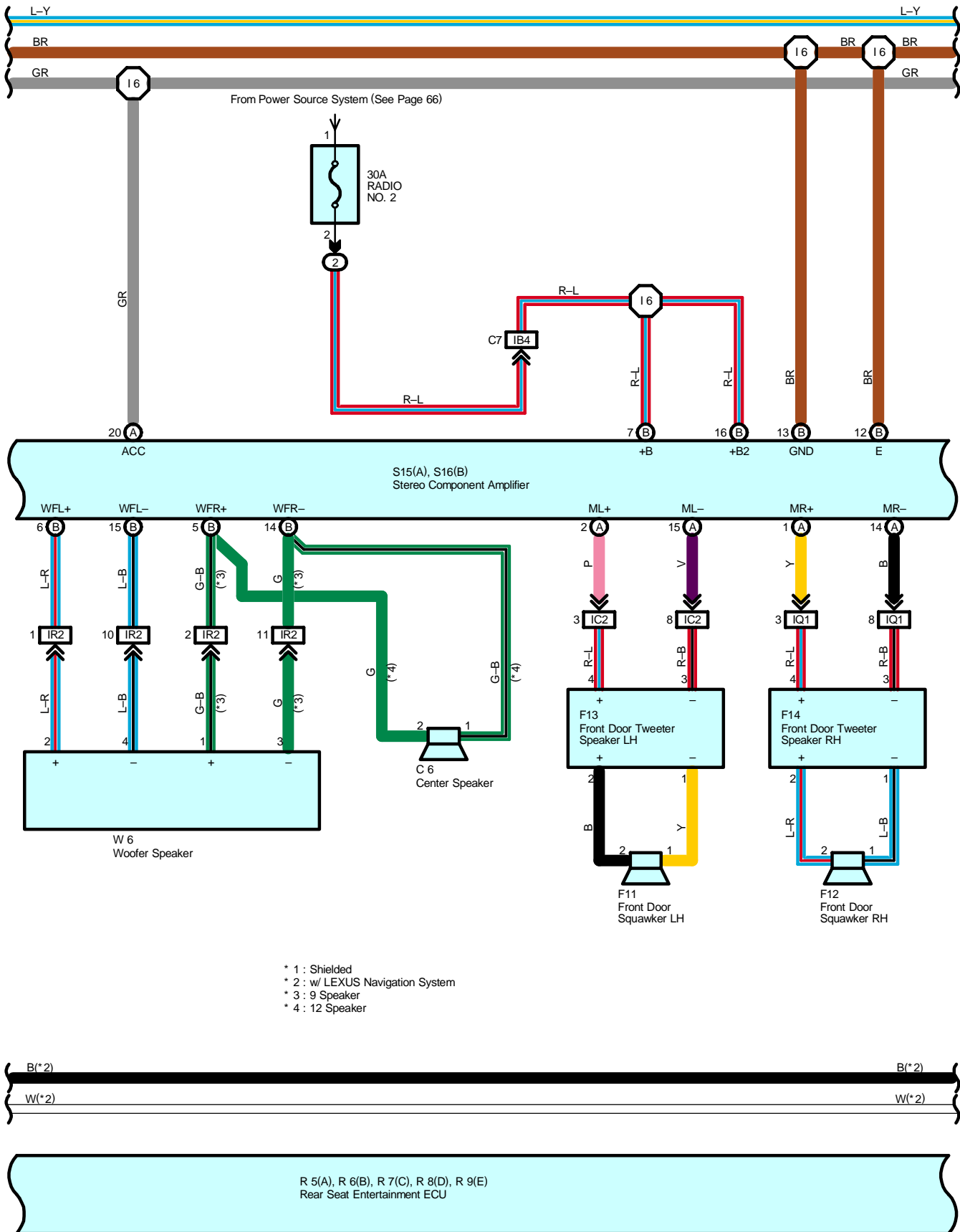
Audion System with RSES





Audio System with RSES

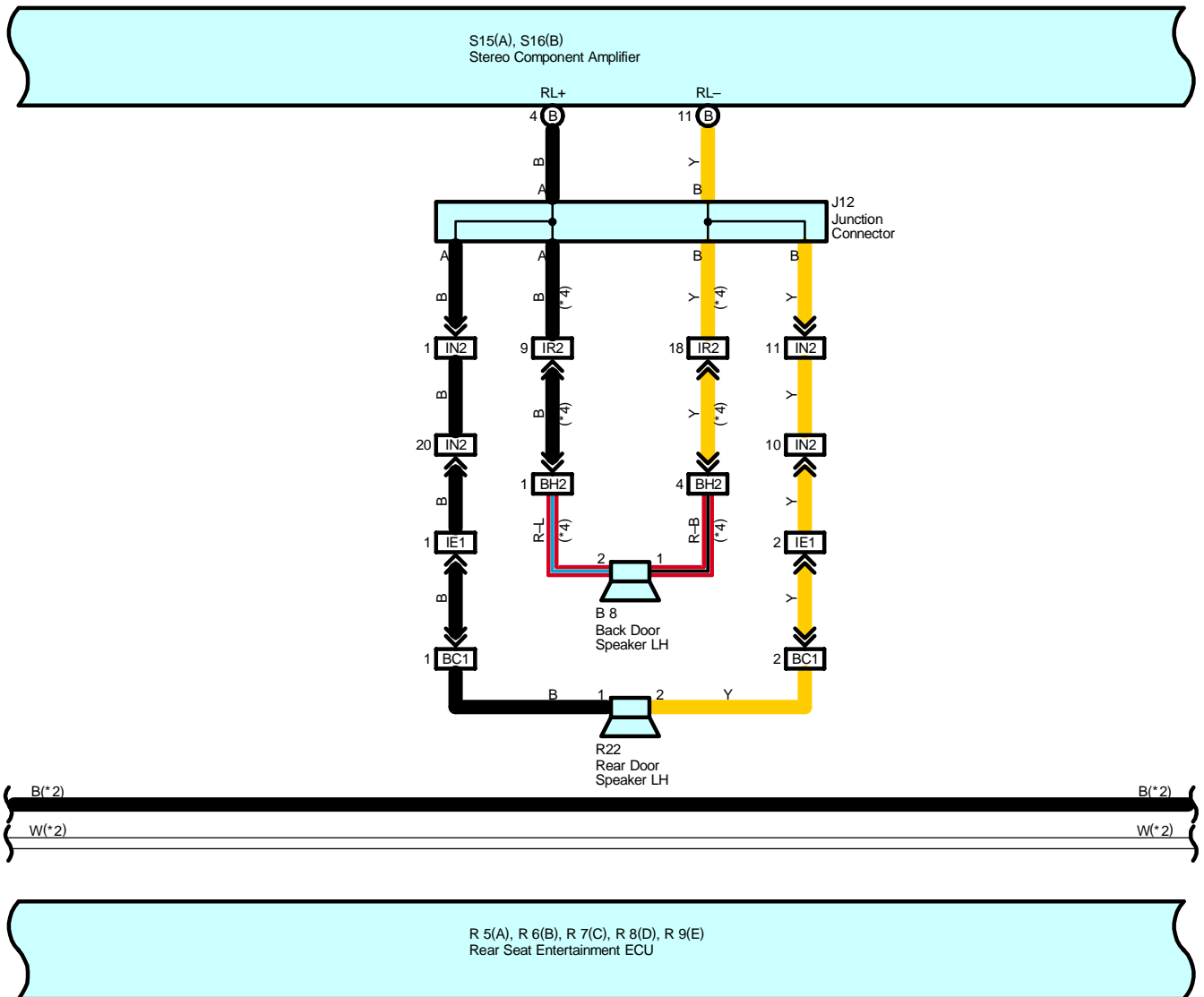




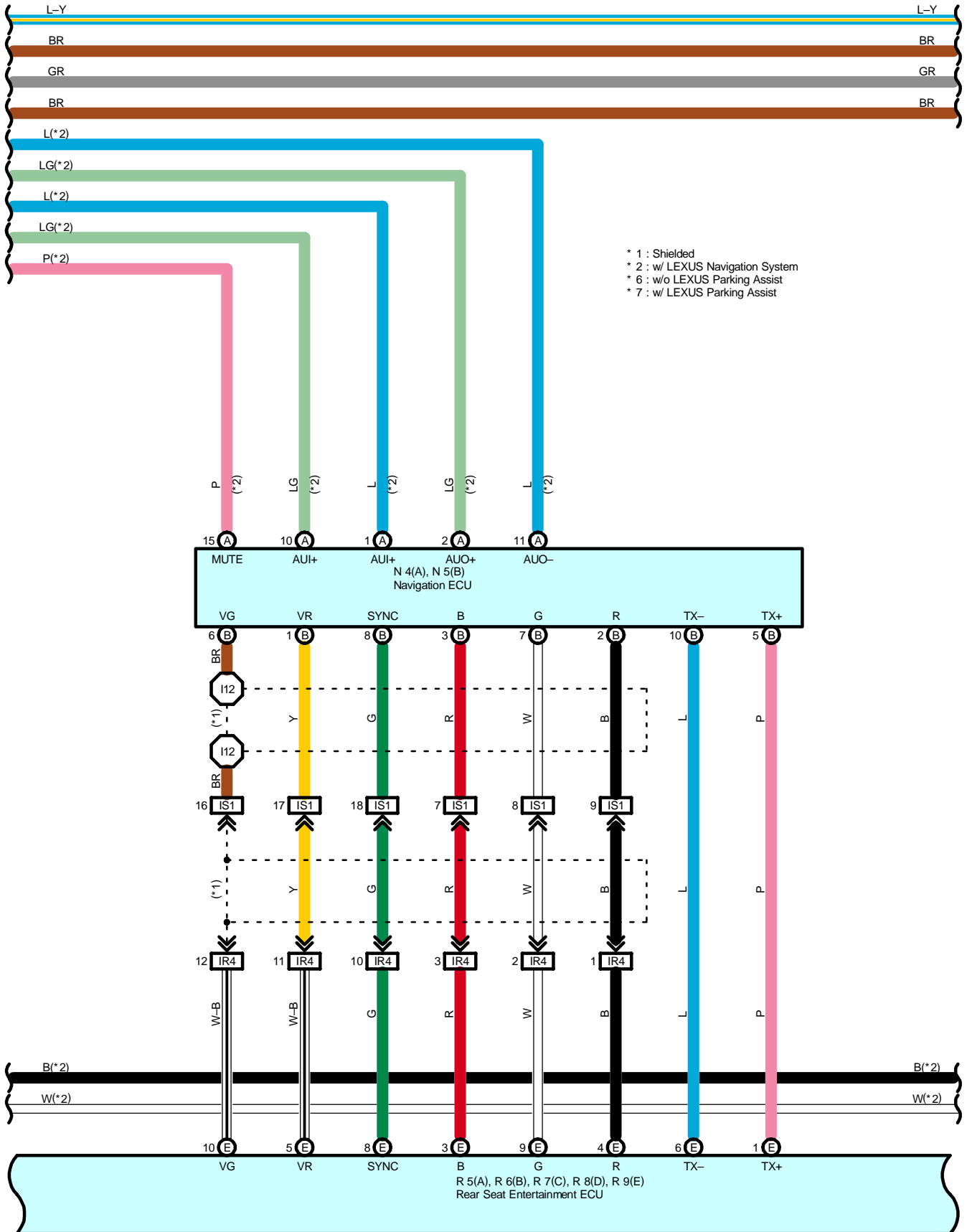
Audio System with RSES



- * 2 : w/ LEXUS Navigation System
- * 4 : 12 Speaker
- * 5 : w/o LEXUS Navigation System

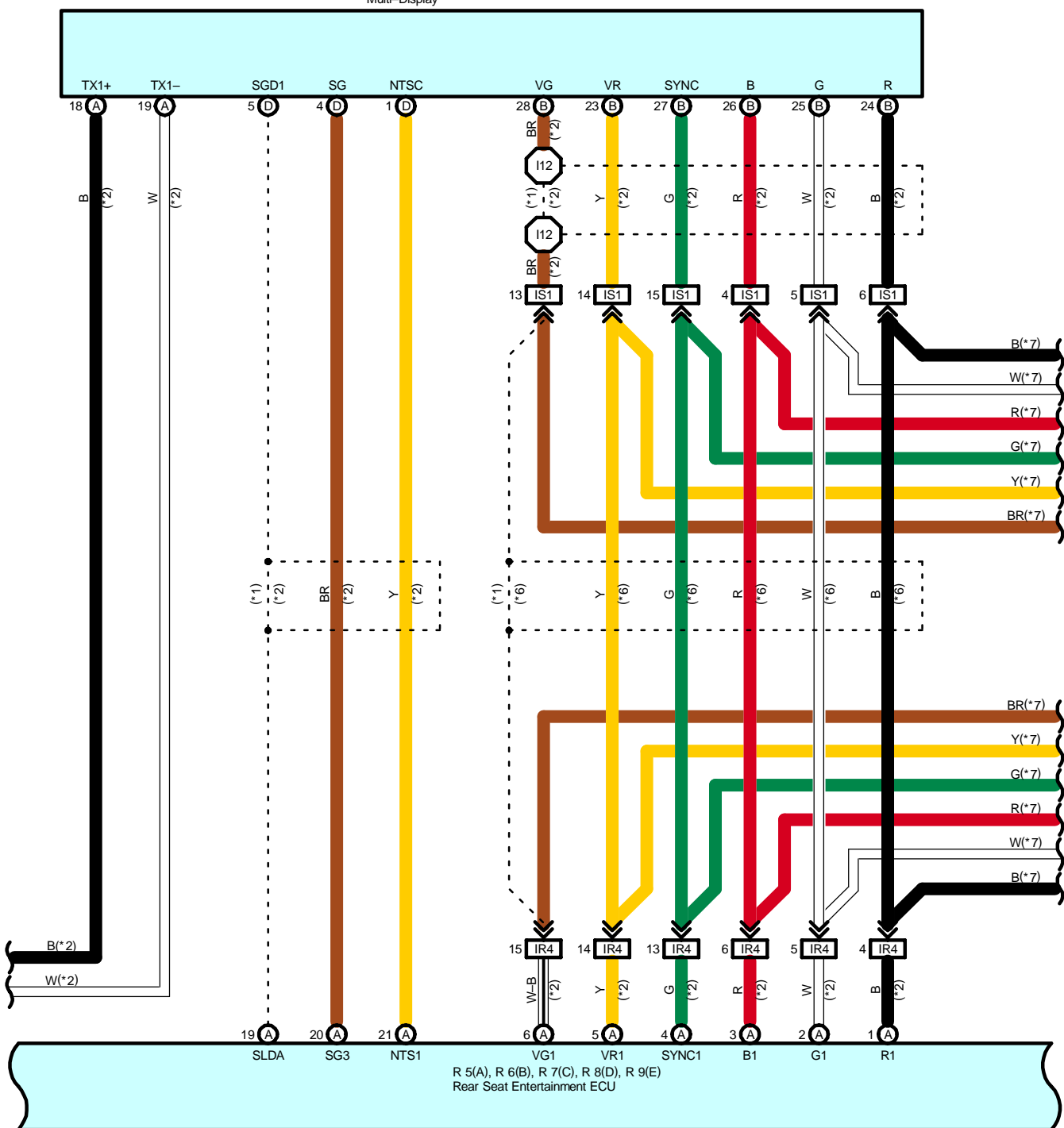


Audio System with RSES

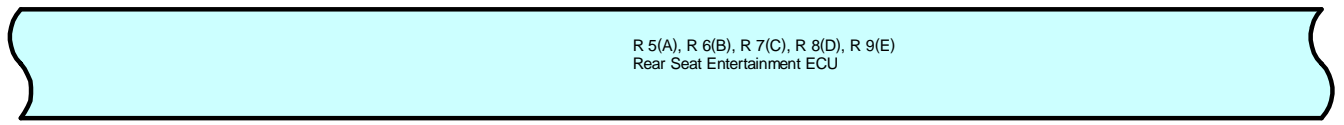
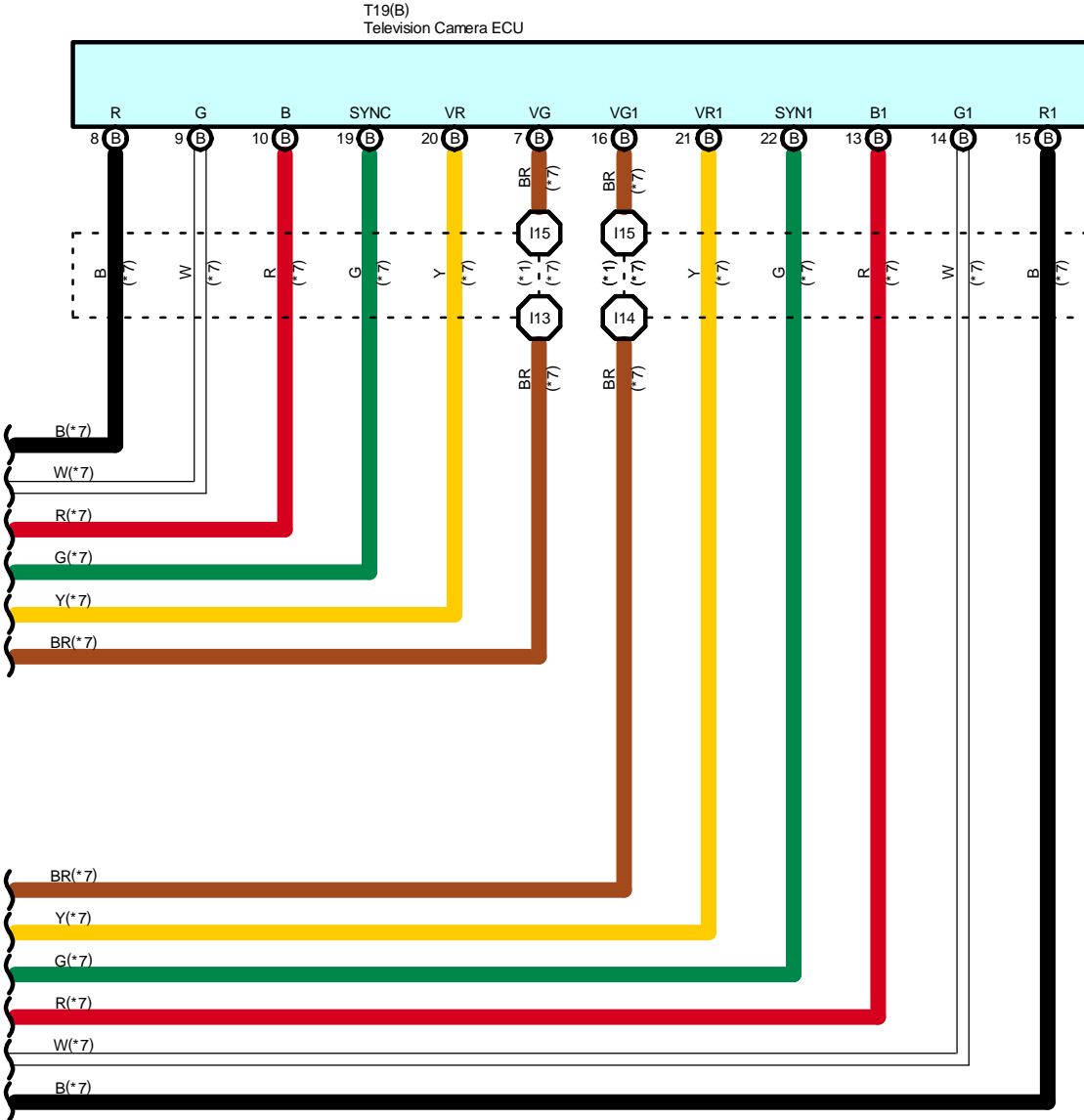


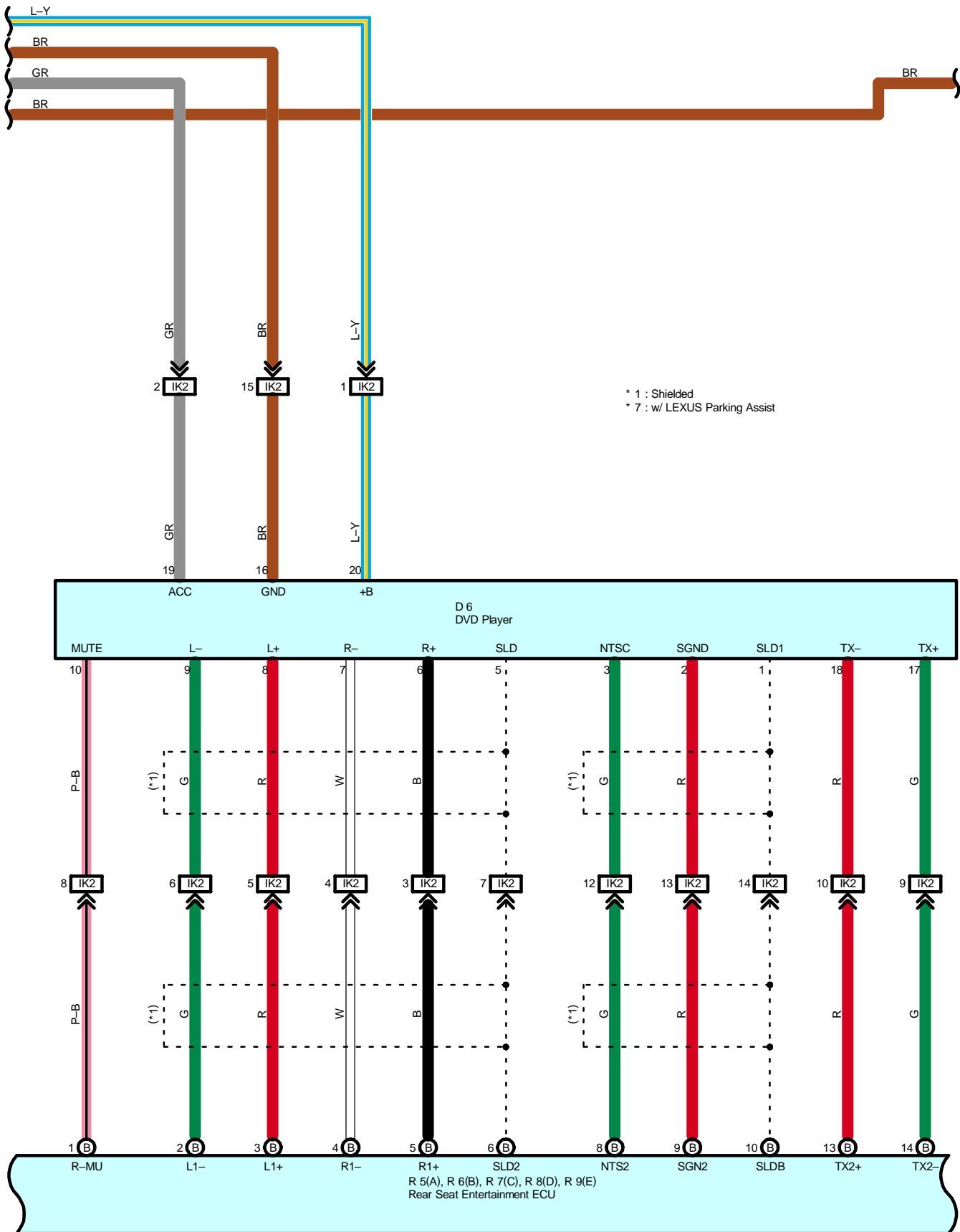


M 5(A), M 6(B), M14(D)
Multi-Display

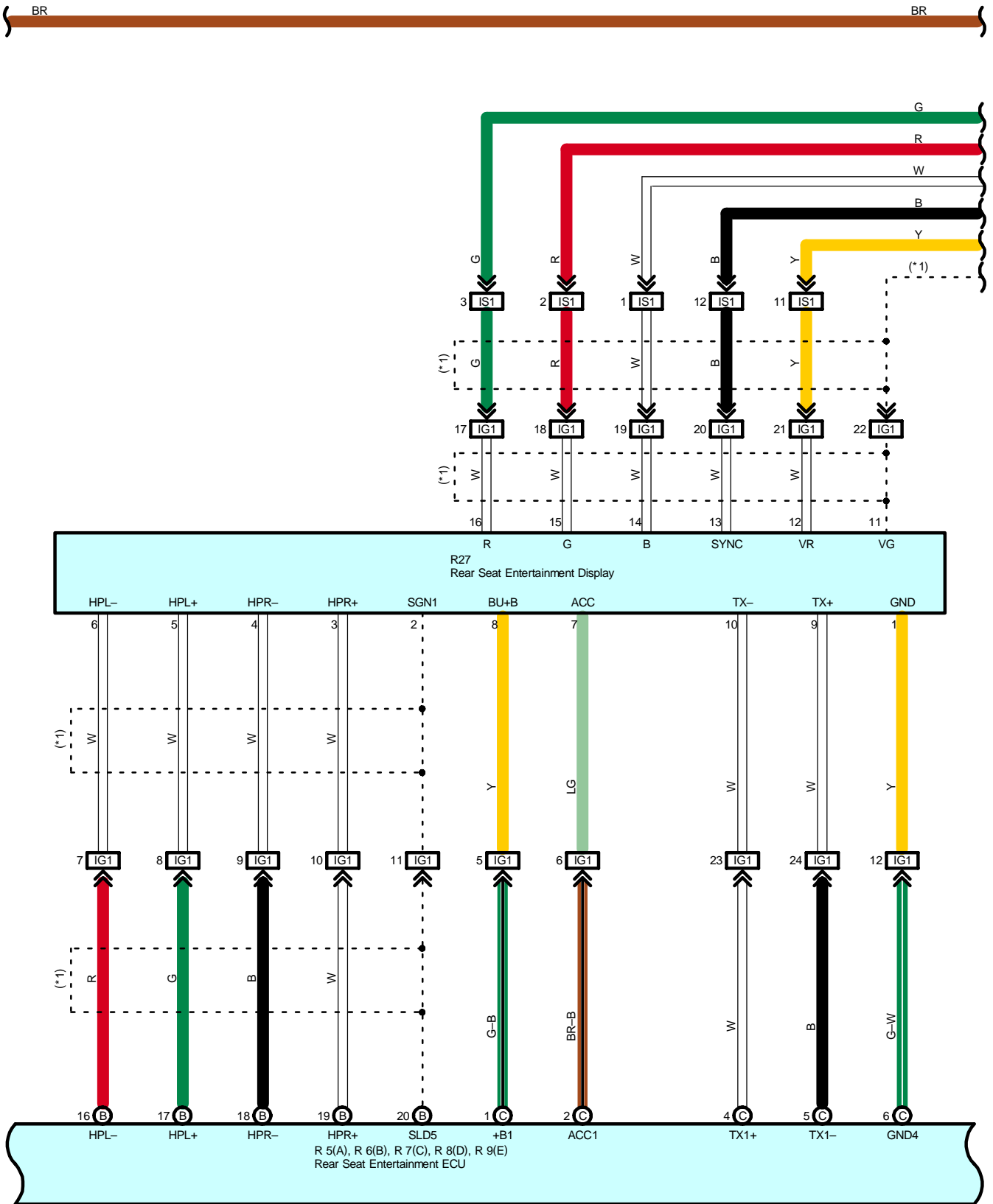


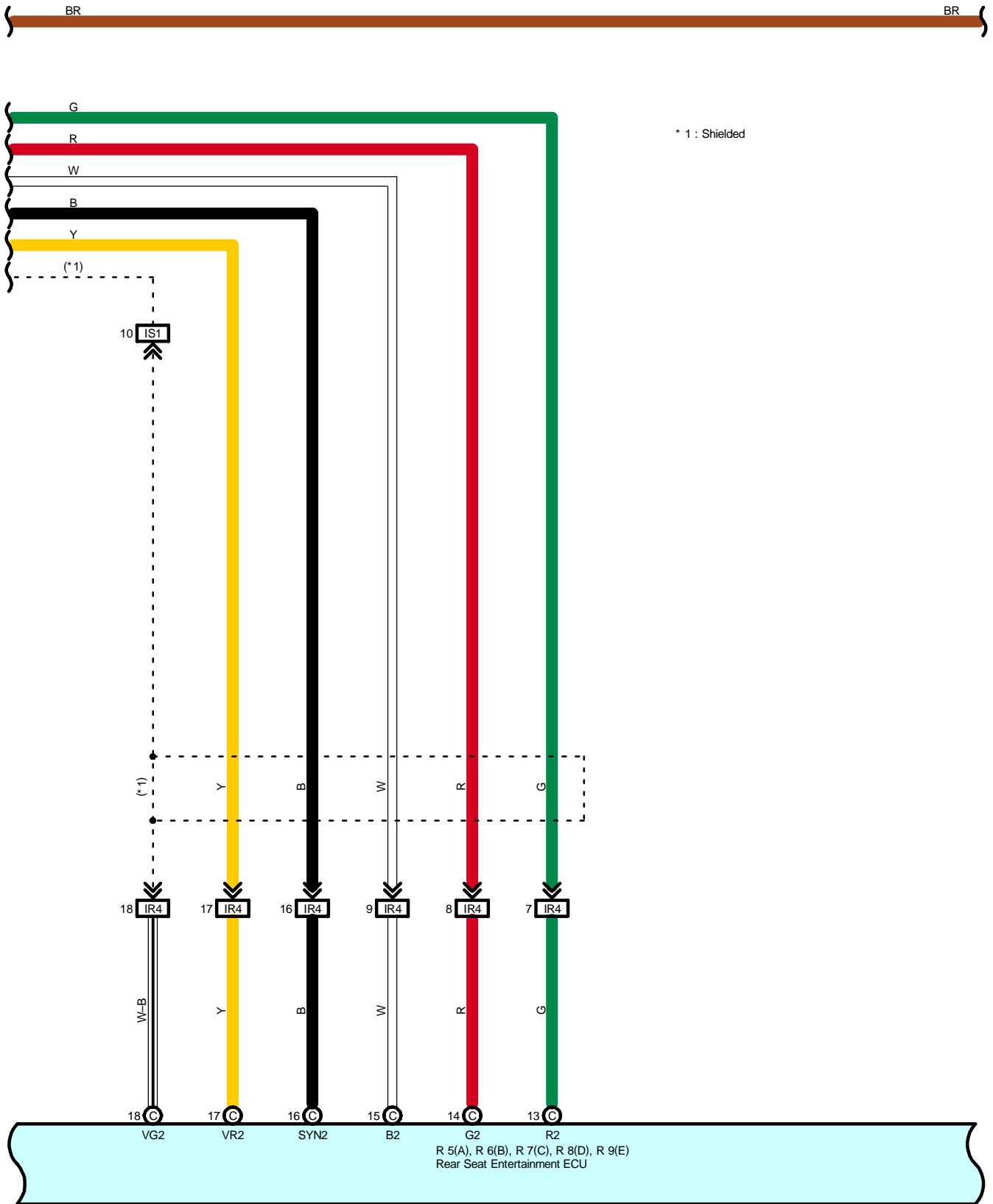
Audio System with RSES



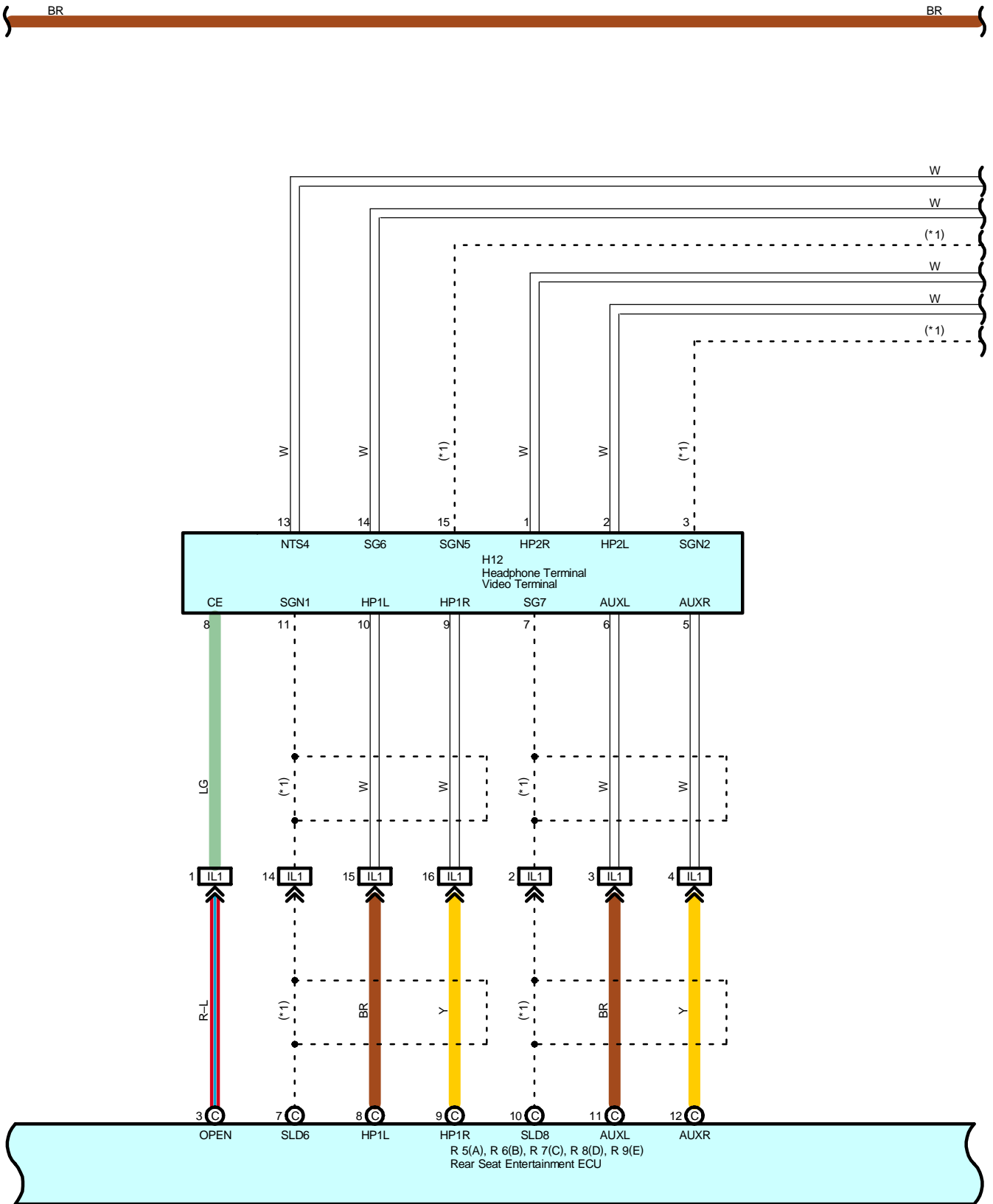


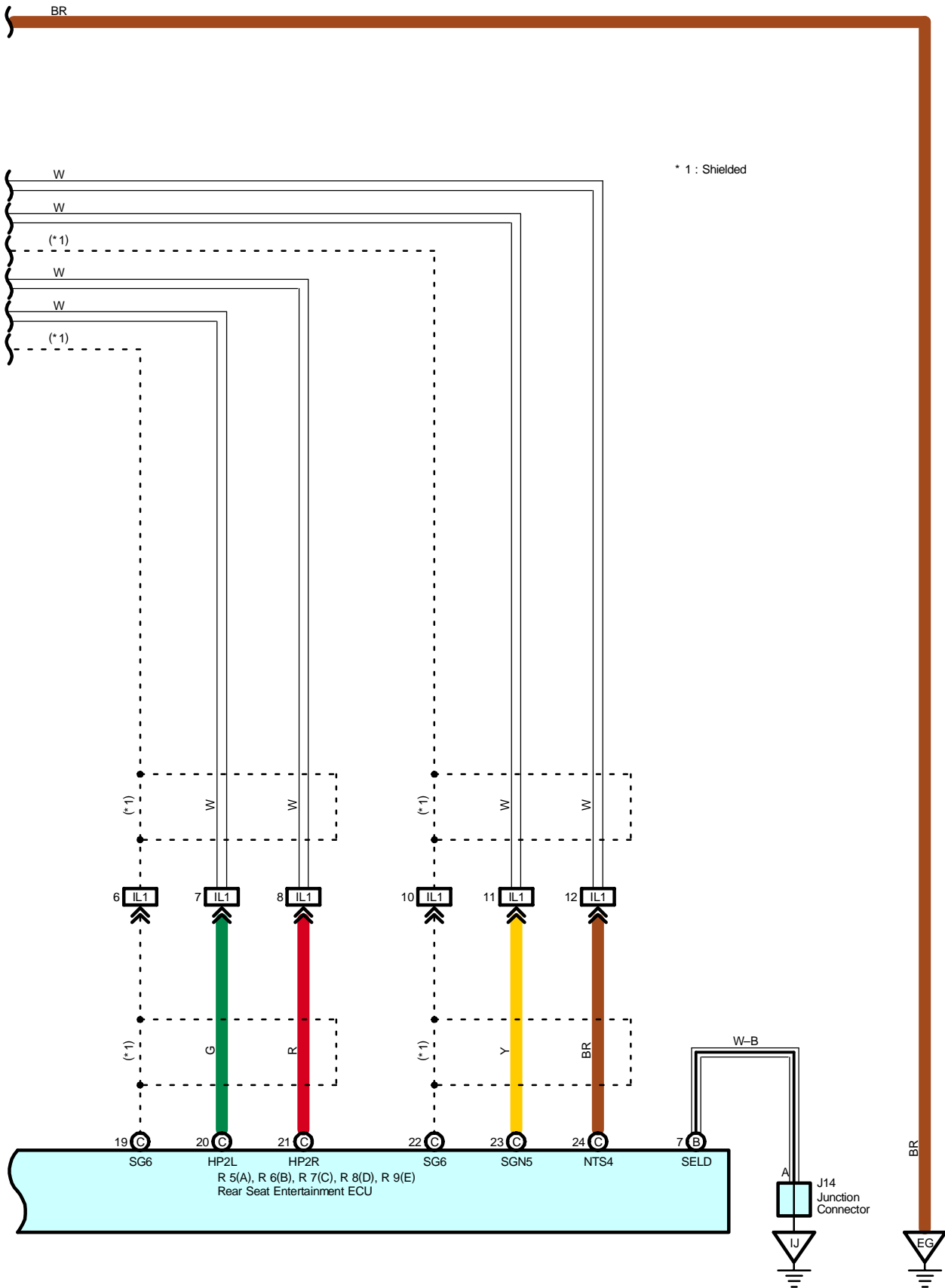
Audio System with RSES





Audio System with RSES





Audio System with RSES

Service Hints

R5 (A), R6 (B), R9 (E) Rear Seat Entertainment ECU

(A)29, (B) 7, (E) 7–Ground : Always continuity
 (A)16–Ground : Always approx. 12 volts
 (A)32–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

C3 CD Automatic Changer

21–Ground : Always continuity
 17–Ground : Always approx. 12 volts
 18–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

R1 (A) Radio and Player

(A)20–Ground : Always continuity
 (A) 1–Ground : Always approx. 12 volts
 (A)11–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

S15 (A), S16 (B) Stereo Component Amplifier

(B)12, (B) 13–Ground: Always continuity
 (B) 7, (B) 16–Ground : Always approx. 12 volts
 (A)20–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

D6 DVD Player

16–Ground : Always continuity
 20–Ground : Always approx. 12 volts
 19–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A32	38	F14	43	R3	C 41
B8	42	H12	39	R5	A 41
B9	42	J12	40	R6	B 41
C3	38	J14	40	R7	C 41
C6	38	J19	40	R8	D 41
C9	A 38	J21	40	R9	E 41
C11	C 38	J23	40	R22	44
C13	38	M5	A 40	R23	44
D6	39	M6	B 40	R27	44
F9	43	M14	D 40	S15	A 41
F10	43	N4	A 40	S16	B 41
F11	43	N5	B 40	S37	37
F12	43	R1	A 41	T19	B 41
F13	43	R2	B 41	W6	45

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IE1	52	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IG1	52	Radio Installation Sub Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IK2	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IL1	52	Radio Installation Sub Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IN2	54	Instrument Panel Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
IR4		
IS1	56	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH2	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

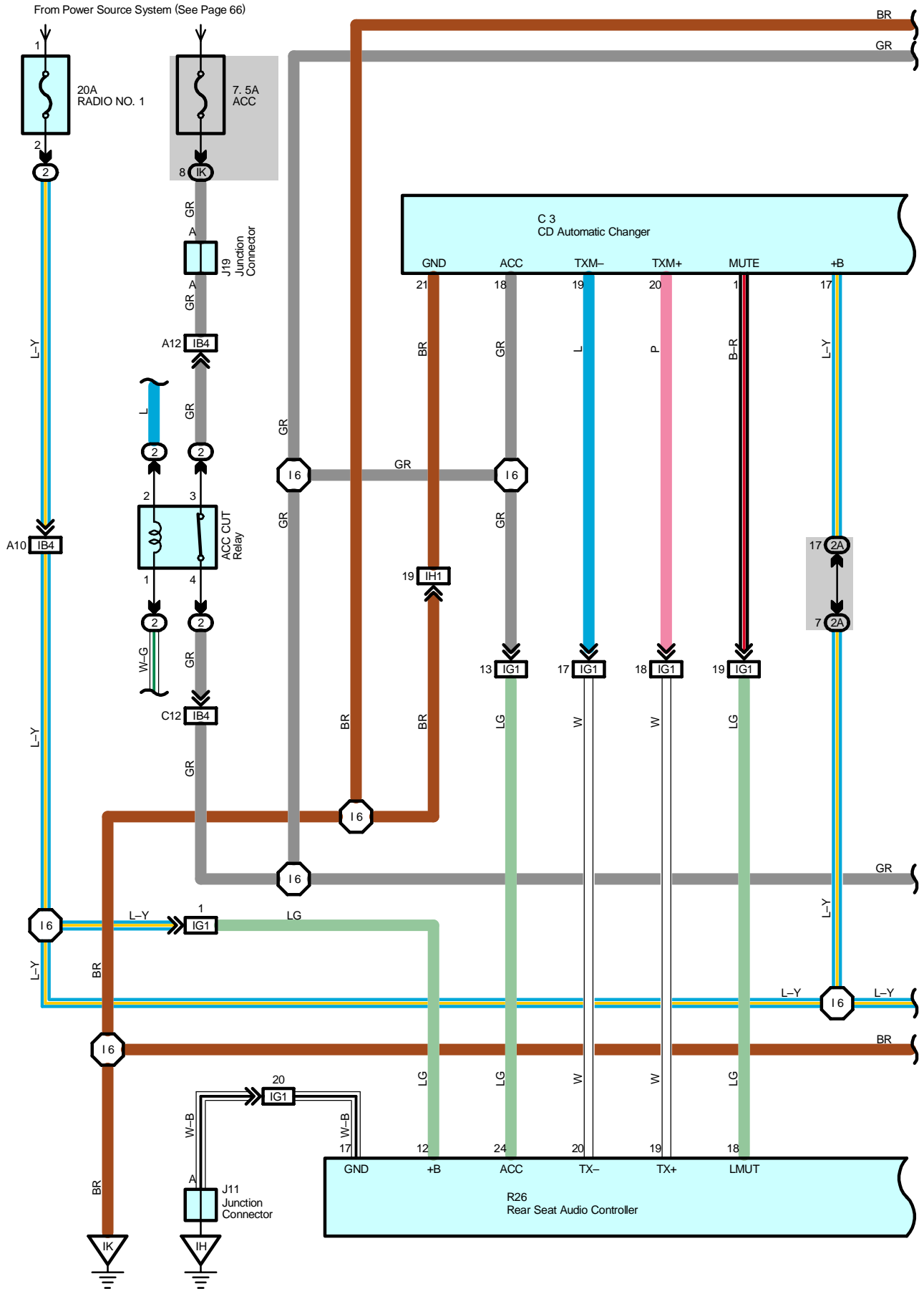
 : **Ground Points**

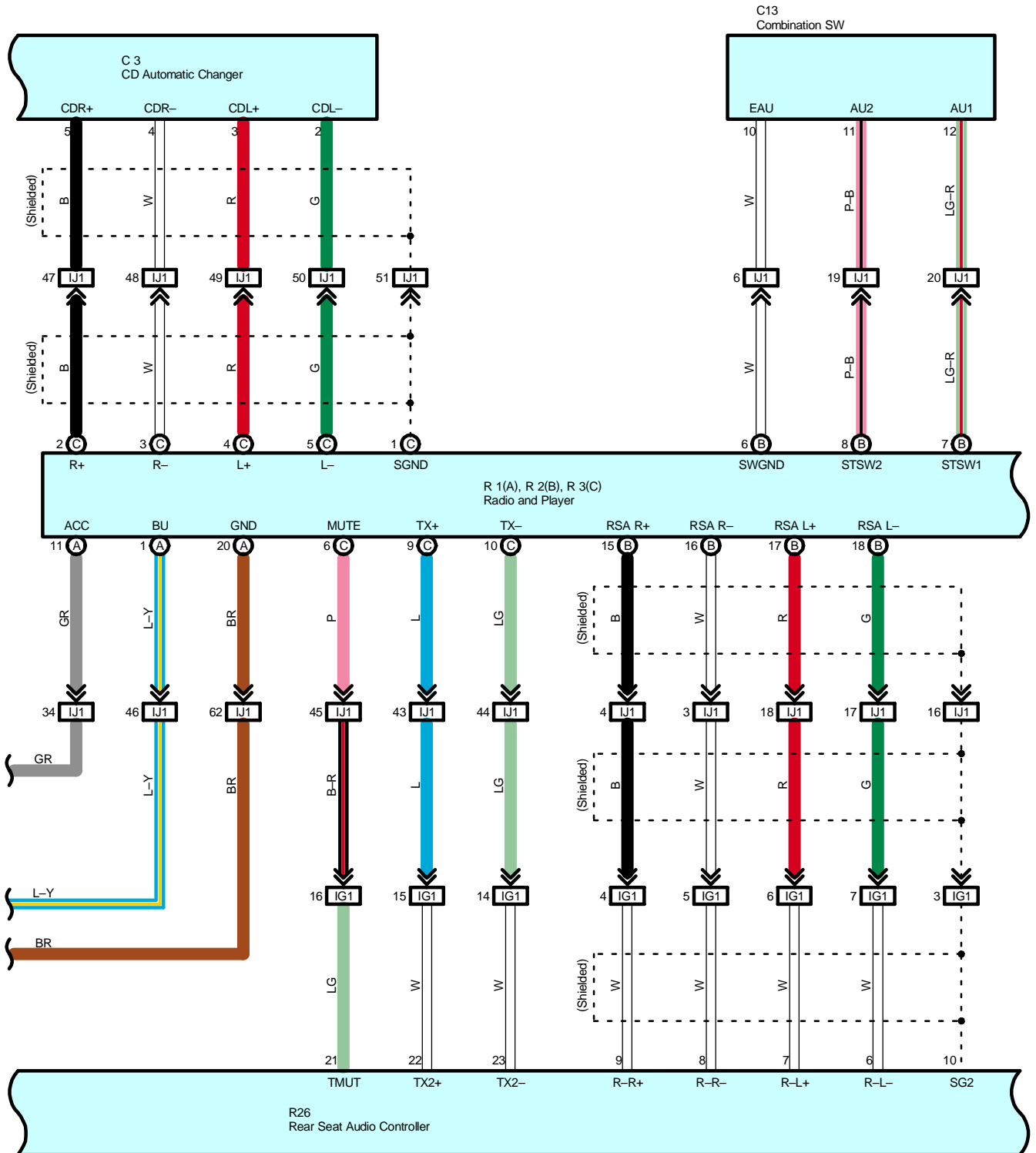
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH
IL	50	Right Kick Panel

 : **Splice Points**

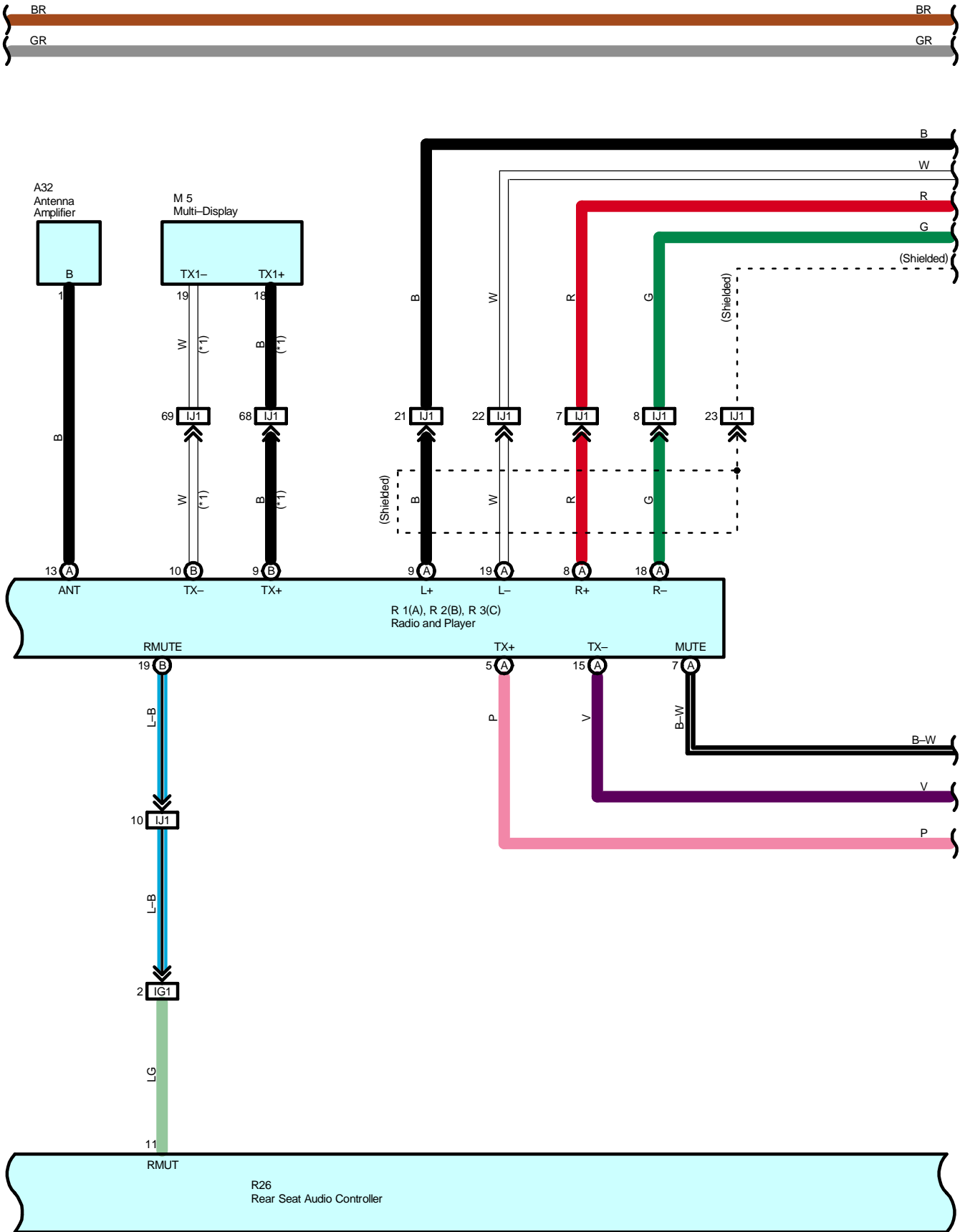
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	I13	52	Floor Wire
I8			I14		
I12			I15		

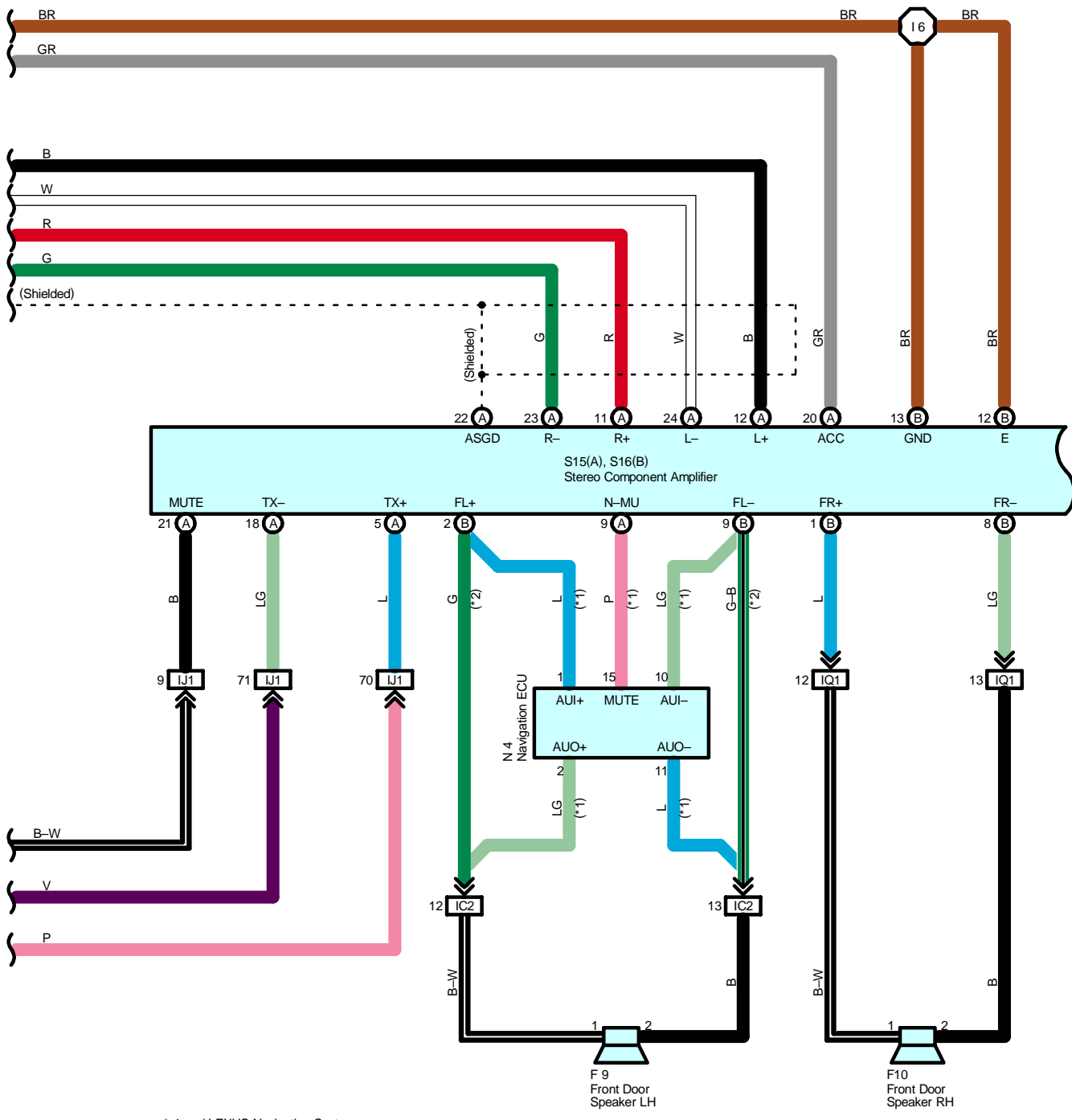
Audio System without RSES



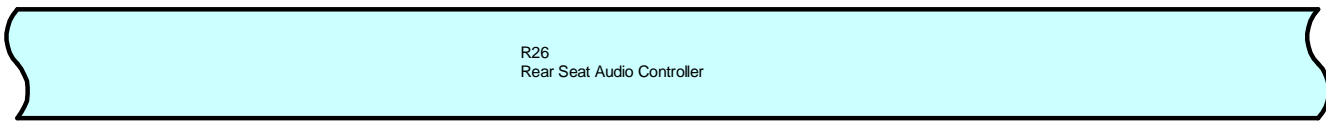


Audio System without RSES



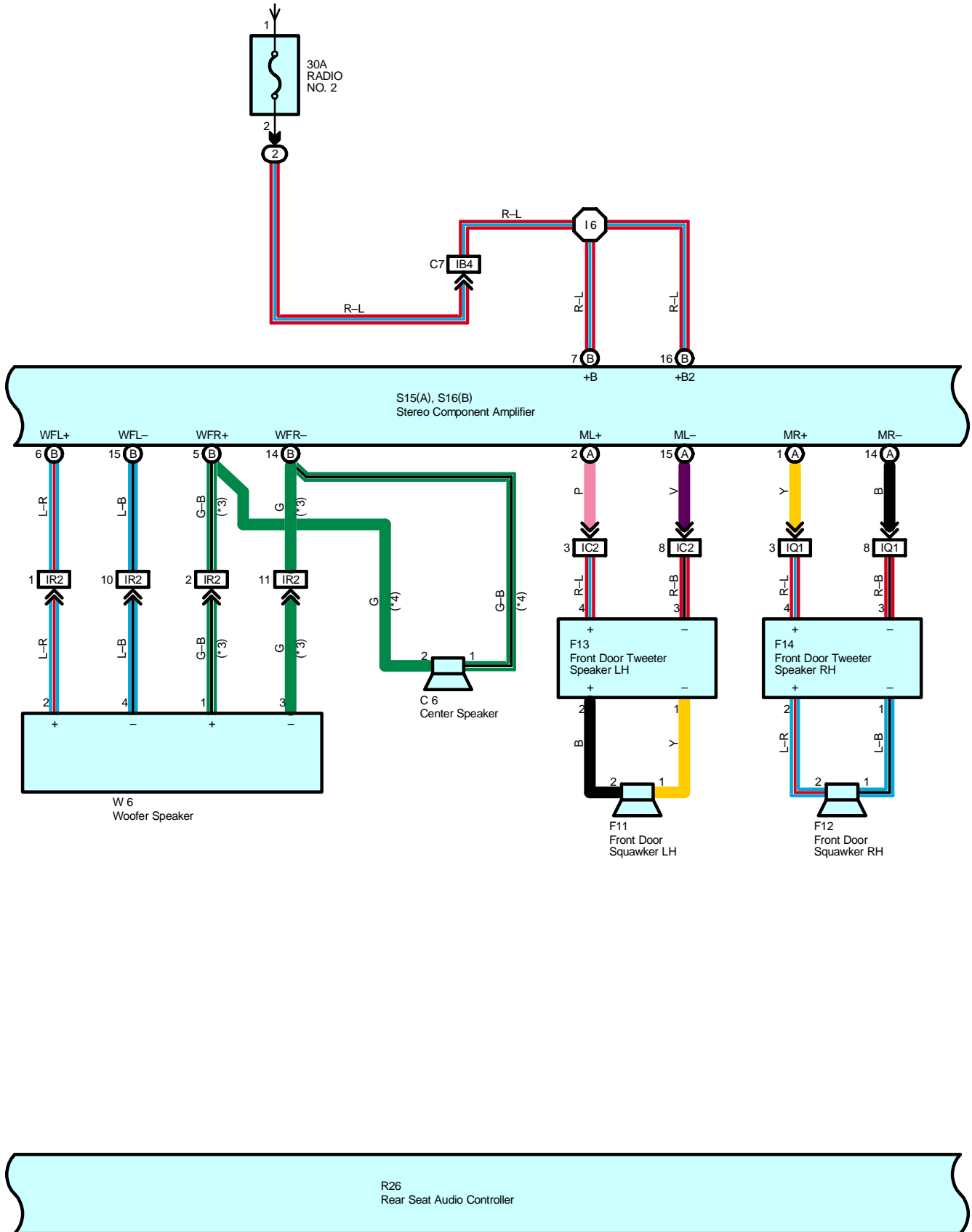


* 1 : w/ LEXUS Navigation System
 * 2 : w/o LEXUS Navigation System

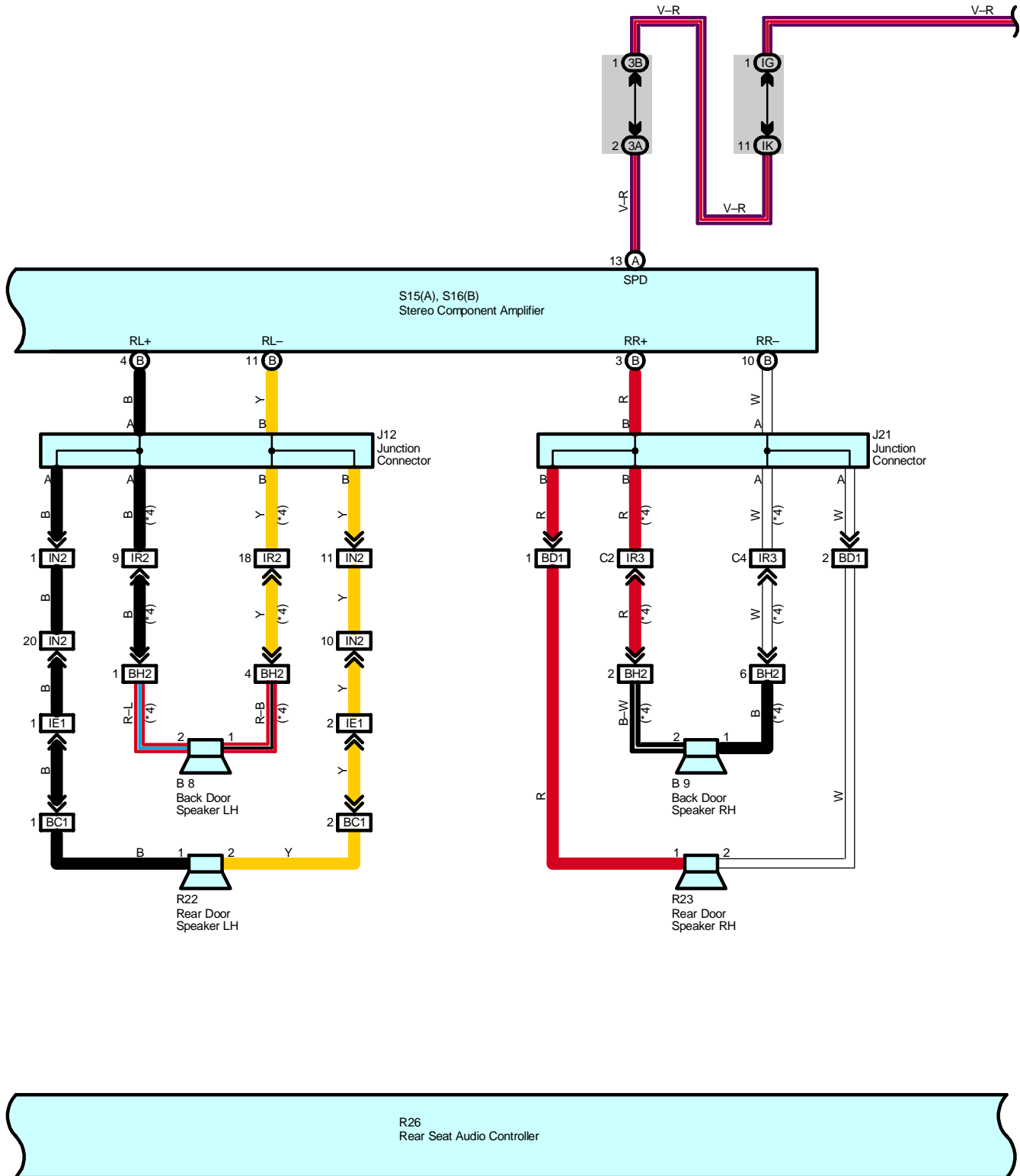


Audio System without RSES

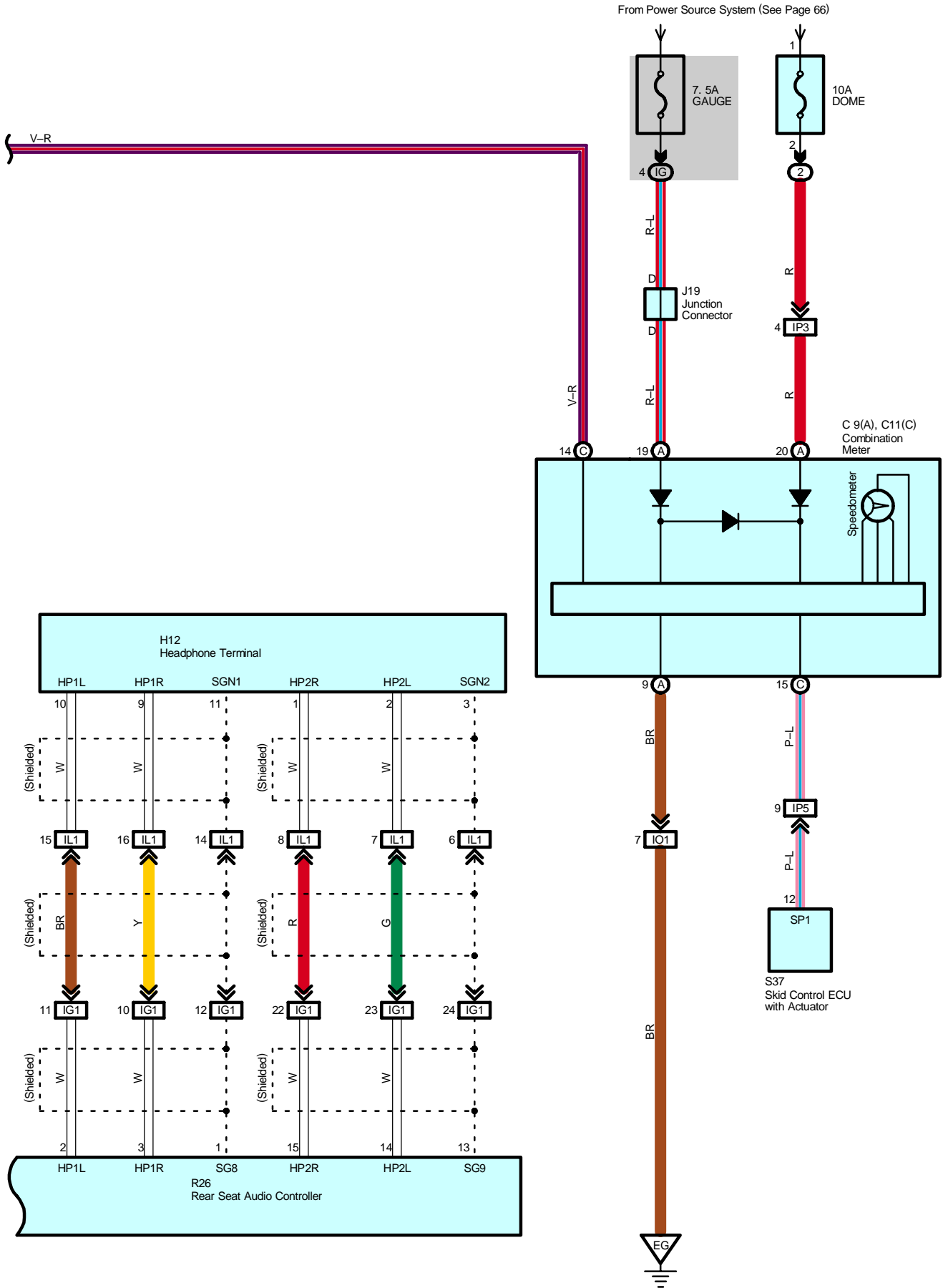
From Power Source System (See Page 66)



* 3 : 9 Speaker
 * 4 : 12 Speaker



Audio System without RSES



Service Hints

R26 Rear Seat Audio Controller

- 17–Ground : Always continuity
- 12–Ground : Always approx. 12 volts
- 24–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

C3 CD Automatic Changer

- 21–Ground : Always continuity
- 17–Ground : Always approx. 12 volts
- 18–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

R1 (A) Radio and Player

- (A)20–Ground : Always continuity
- (A) 1–Ground : Always approx. 12 volts
- (A)11–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

S15 (A), S16 (B) Stereo Component Amplifier

- (B)12, (B) 13–Ground: Always continuity
- (B) 7, (B) 16–Ground : Always approx. 12 volts
- (A)20–Ground : Approx. 12 volts with the ignition SW at ACC or ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A32	38	F12	43	R2	B 41
B8	42	F13	43	R3	C 41
B9	42	F14	43	R22	44
C3	38	H12	39	R23	44
C6	38	J11	40	R26	44
C9	A 38	J12	40	S15	A 41
C11	C 38	J19	40	S16	B 41
C13	38	J21	40	S37	37
F9	43	M5	40	W6	45
F10	43	N4	40		
F11	43	R1	A 41		

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

Audio System without RSES

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IE1	52	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IG1	52	Radio Installation Sub Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IL1	52	Radio Installation Sub Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IN2	54	Instrument Panel Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH2	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

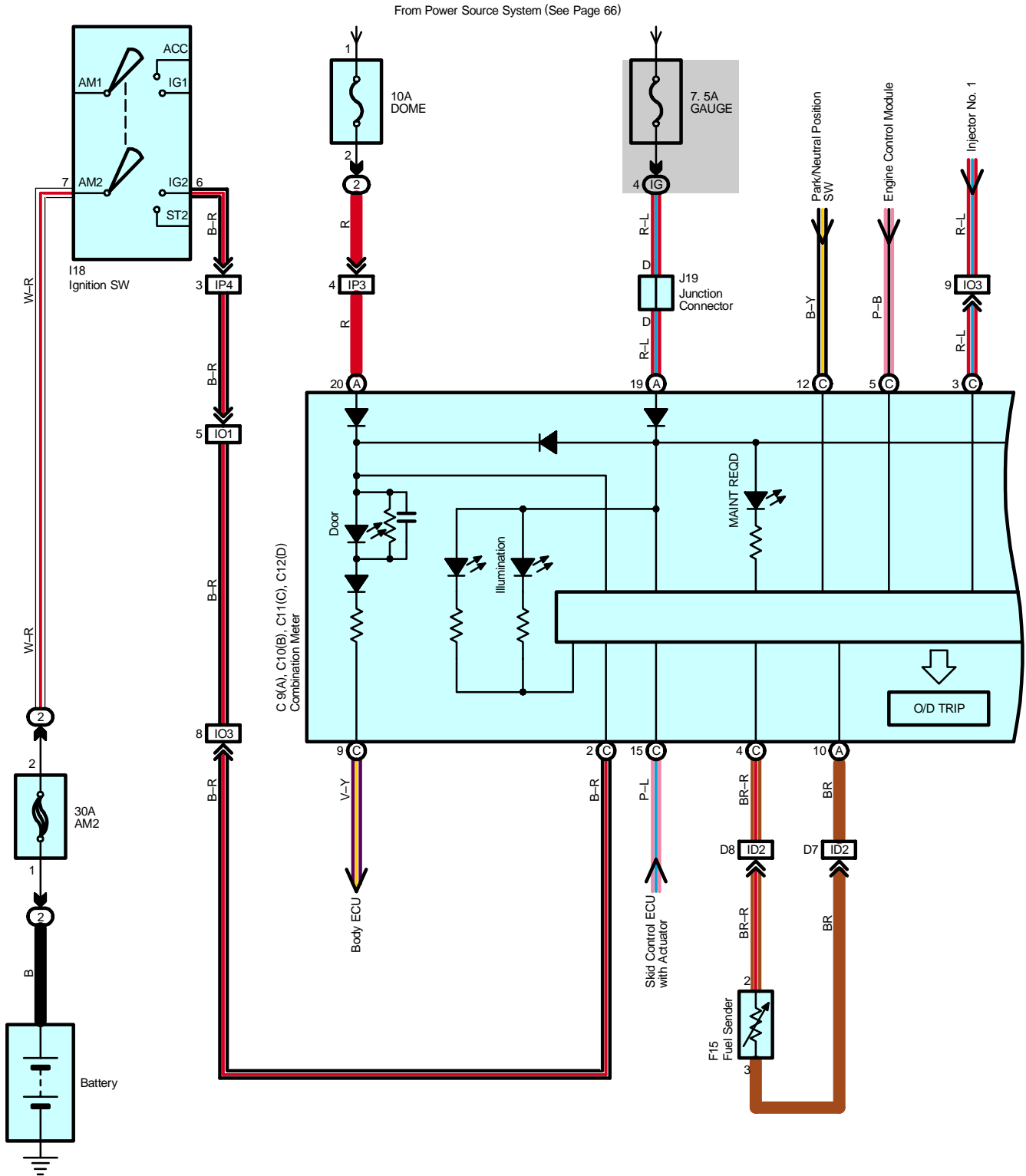
 : Ground Points

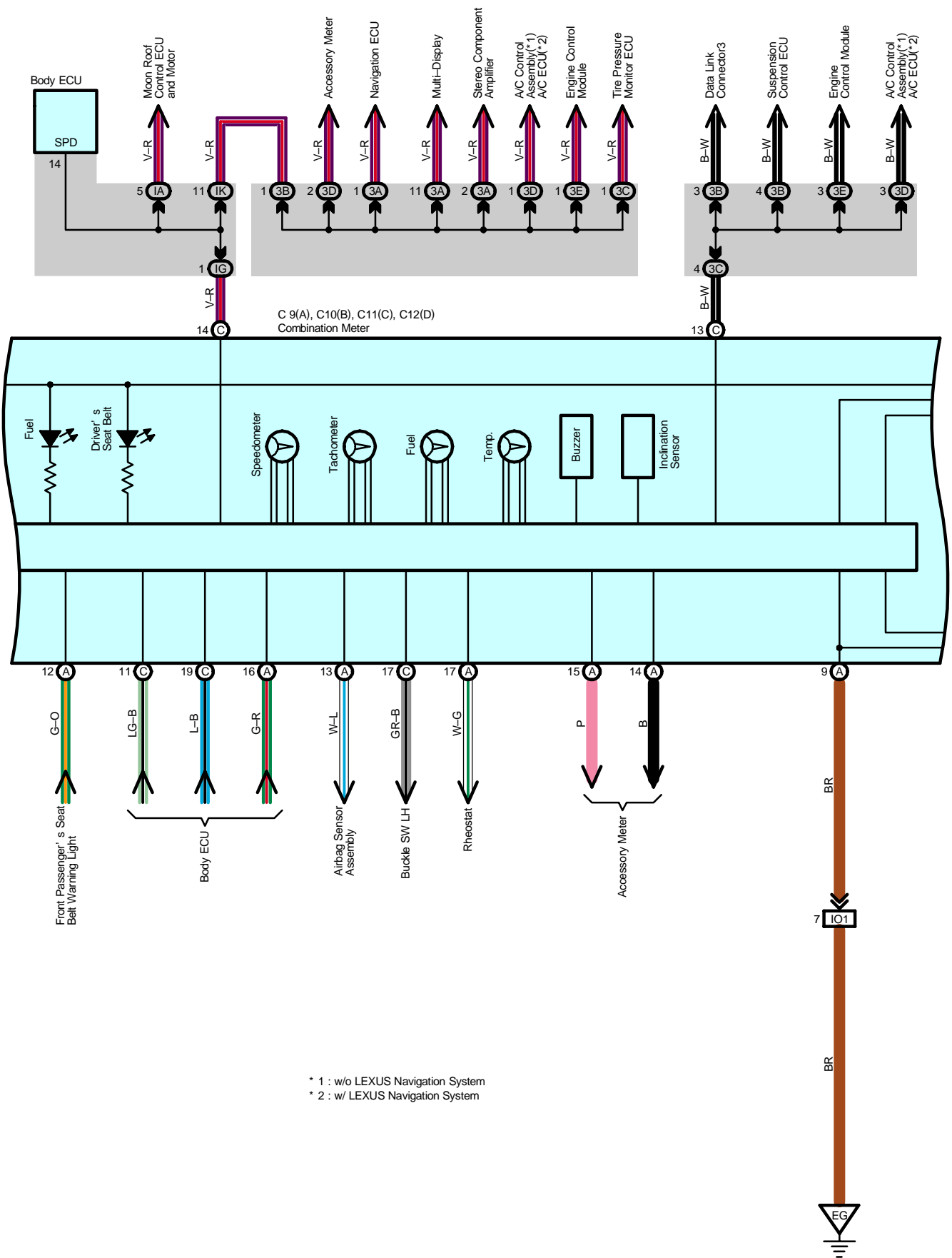
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IK	50	Instrument Panel Brace LH

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire			

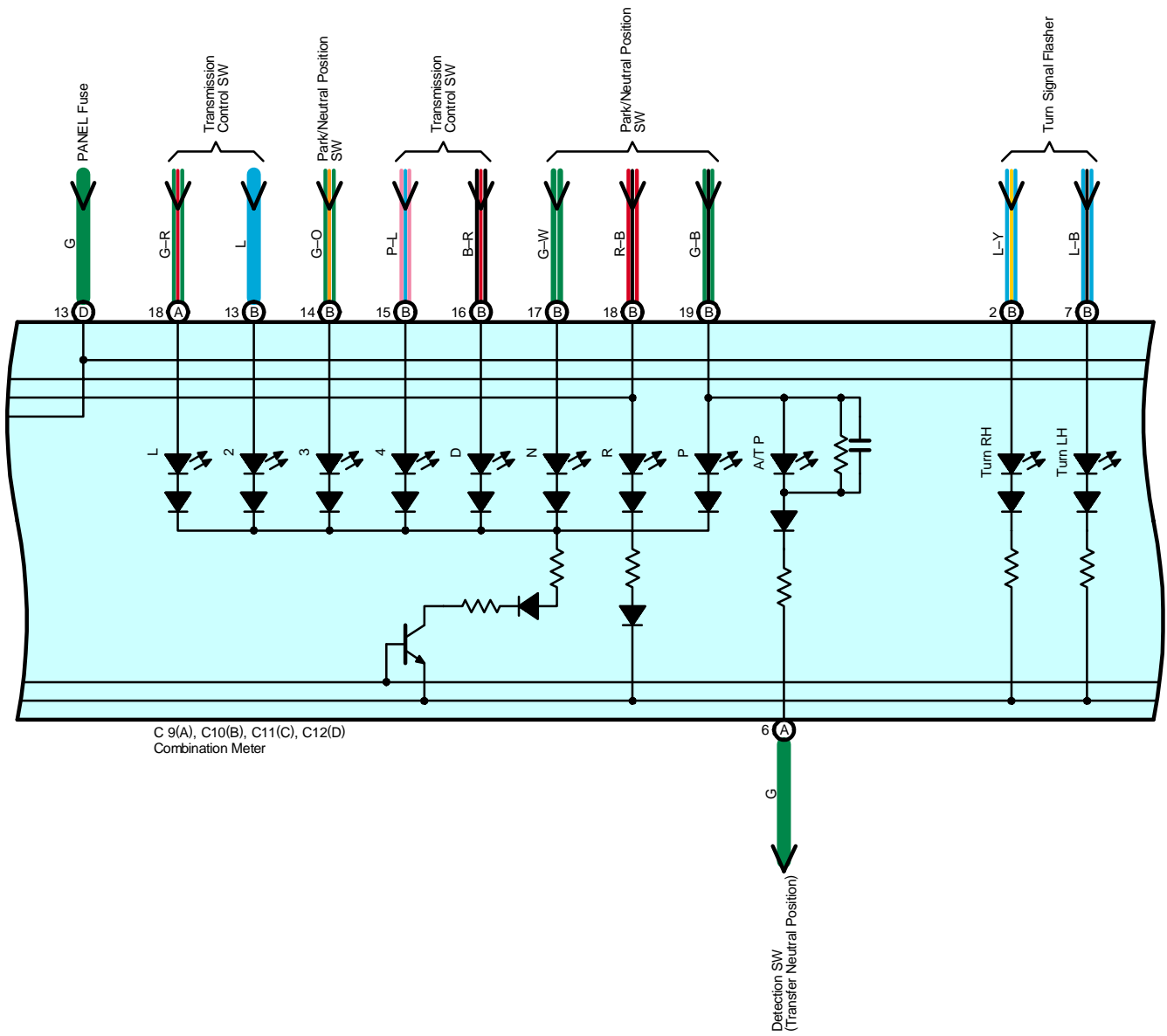
Combination Meter

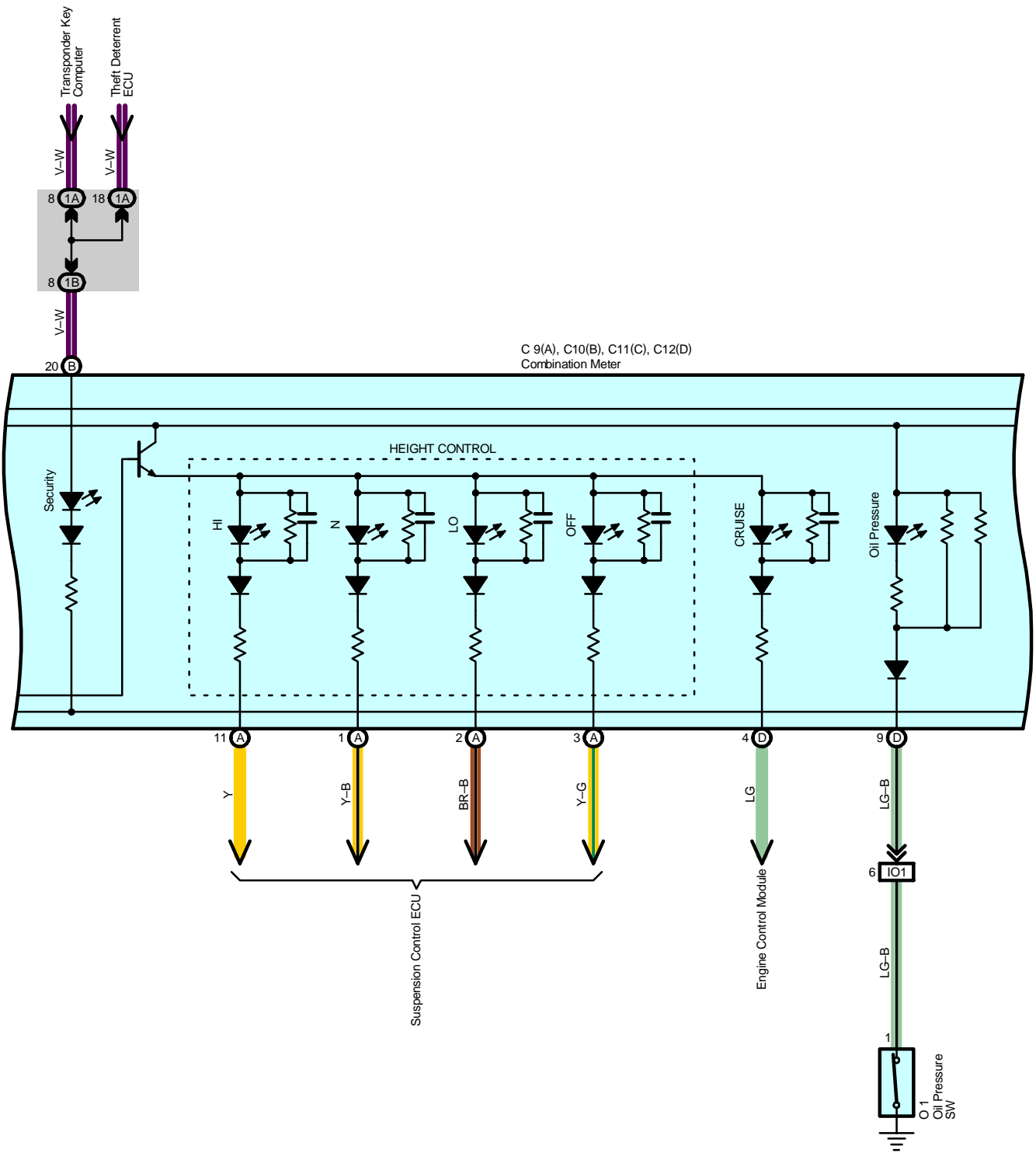




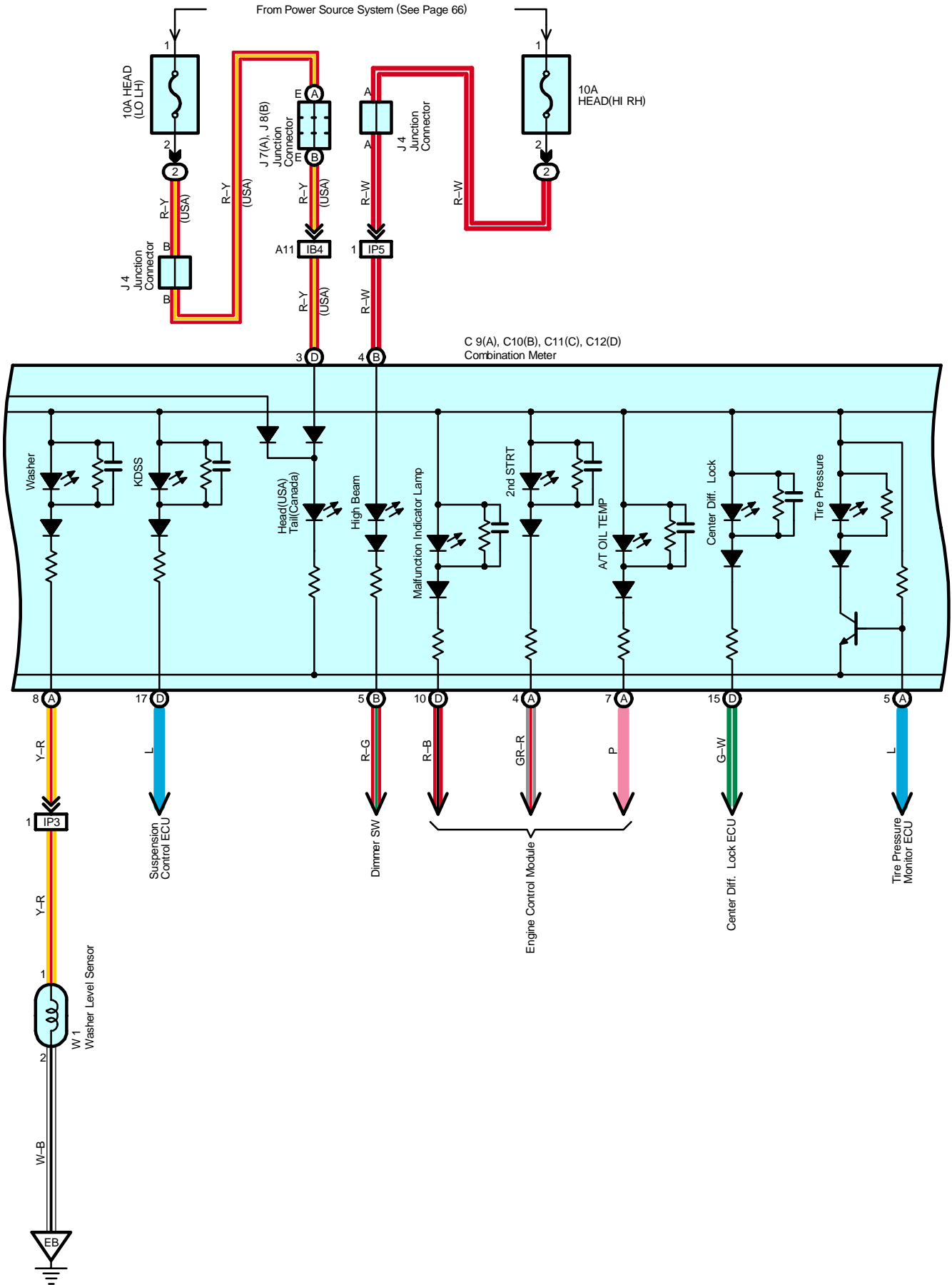
* 1 : w/o LEXUS Navigation System
 * 2 : w/ LEXUS Navigation System

Combination Meter

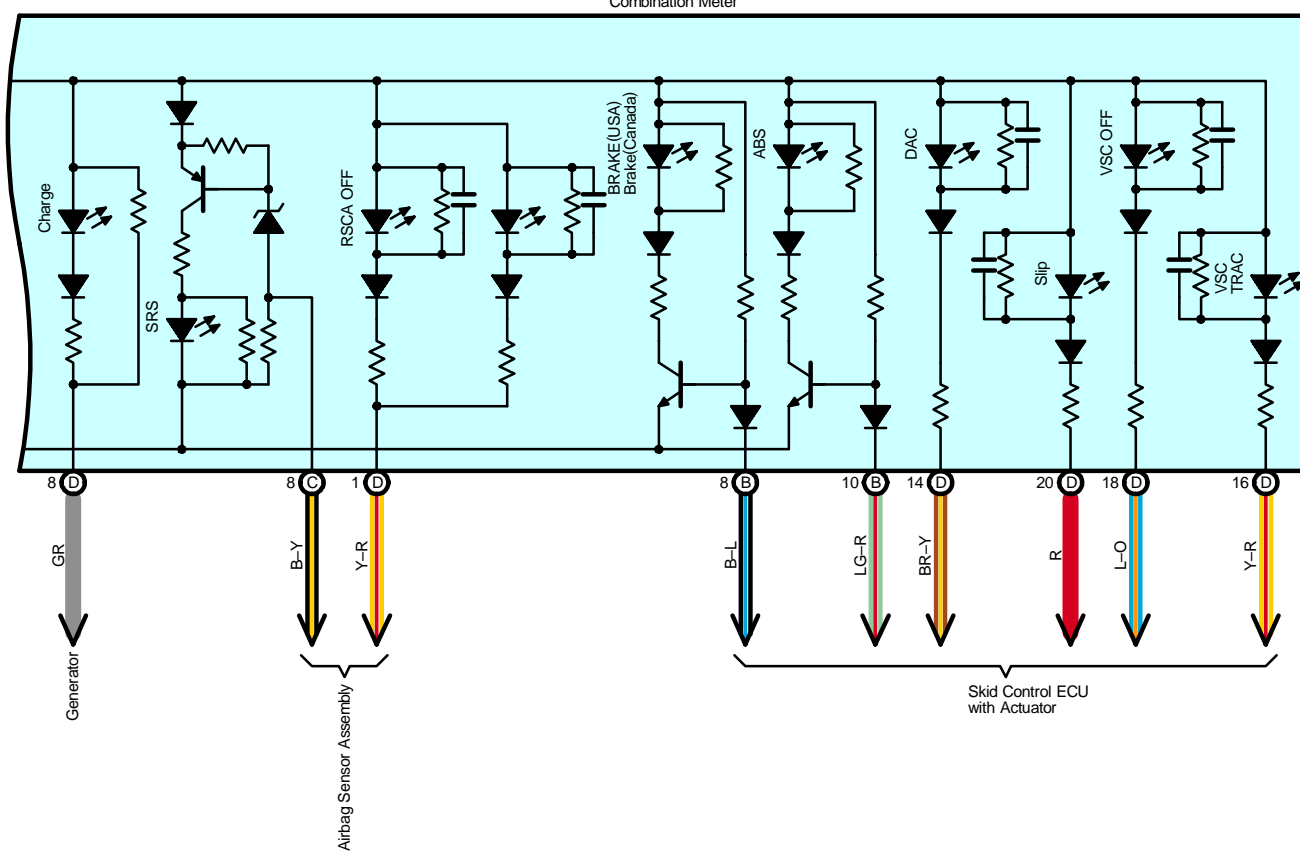




Combination Meter



C 9(A), C10(B), C11(C), C12(D)
Combination Meter



Combination Meter

Service Hints

C9 (A), C12 (D) Combination Meter

(A)19–Ground : Approx. 12 volts with the ignition SW at ON position

(A) 9–Ground : Always continuity

(A)20–Ground : Always approx. 12 volts

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
C9	A	38	F15	43	J8	B	40	
C10	B	38	I18	39	J19		40	
C11	C	38	J4	37	O1		37	
C12	D	38	J7	A	40	W1	37	

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3C		
3D		
3E		

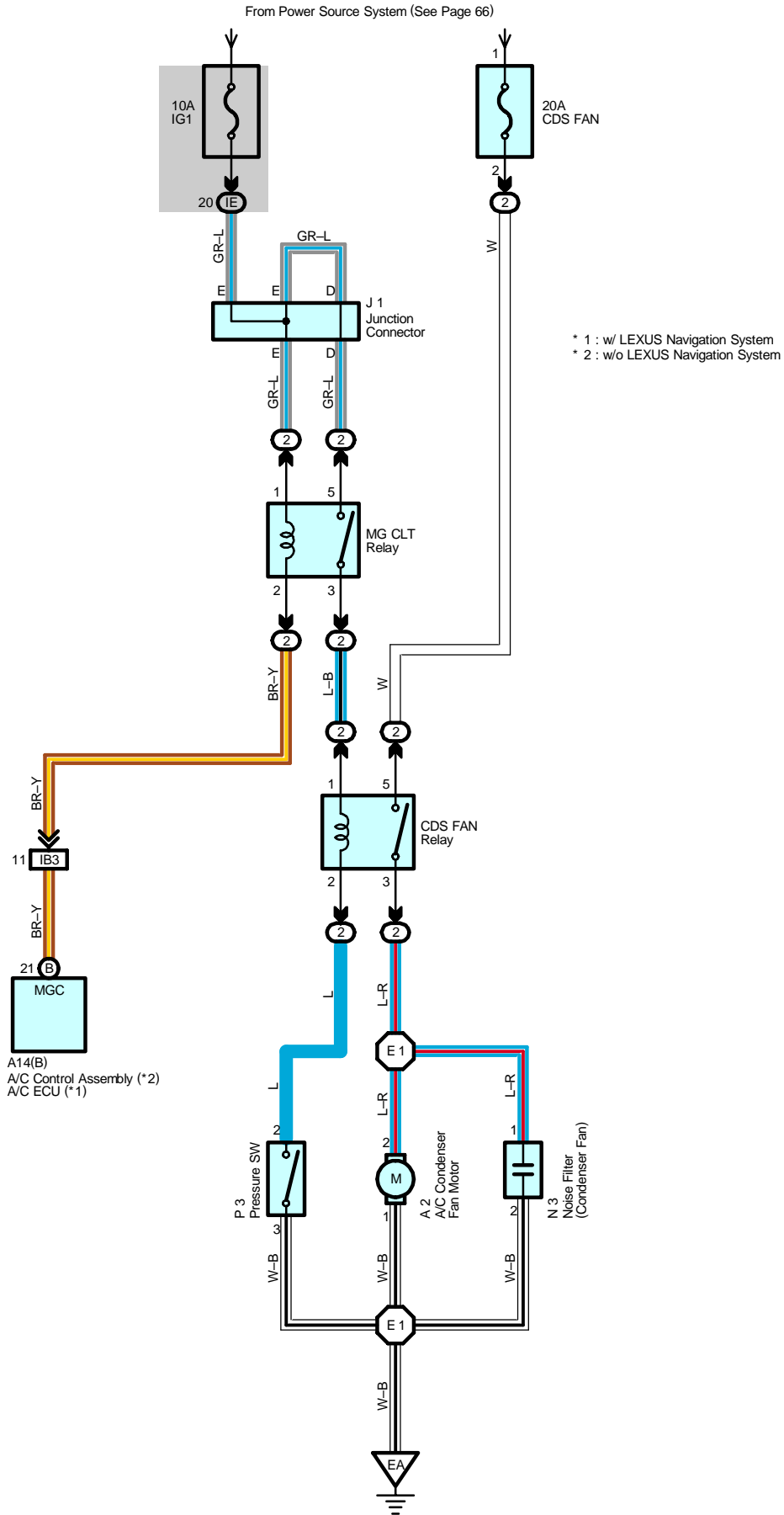
□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP4		
IP5		

▽ : Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head

Condenser Fan



Service Hints

P3 Pressure SW

3-2 : Close above approx. 15.5 kgf/cm² (224 psi, 1520 kpa)

Open below approx. 12.5 kgf/cm² (181 psi, 1225 kpa)

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	36	J1	37	P3	37
A14	B 38	N3	37		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)

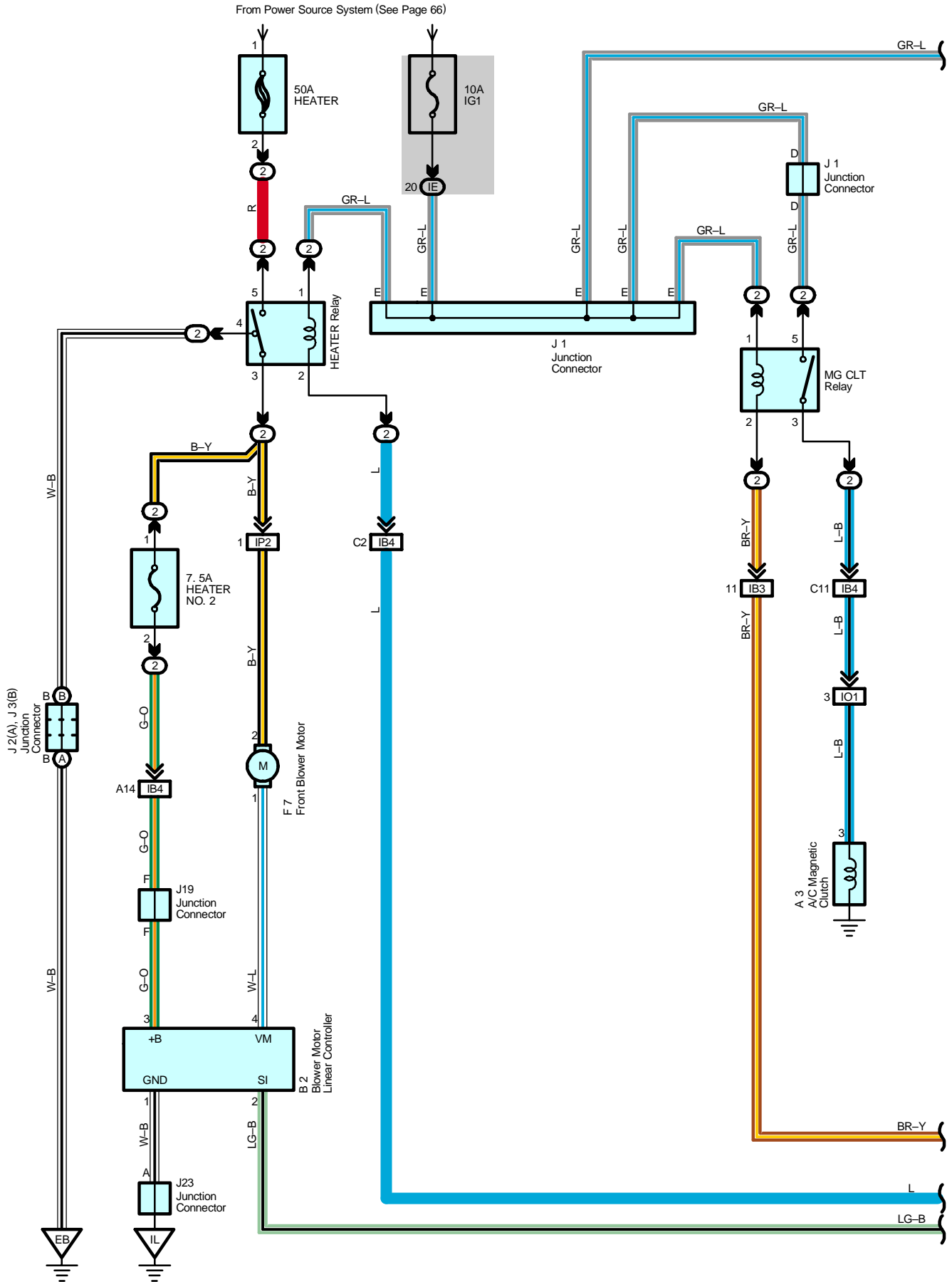
: Ground Points

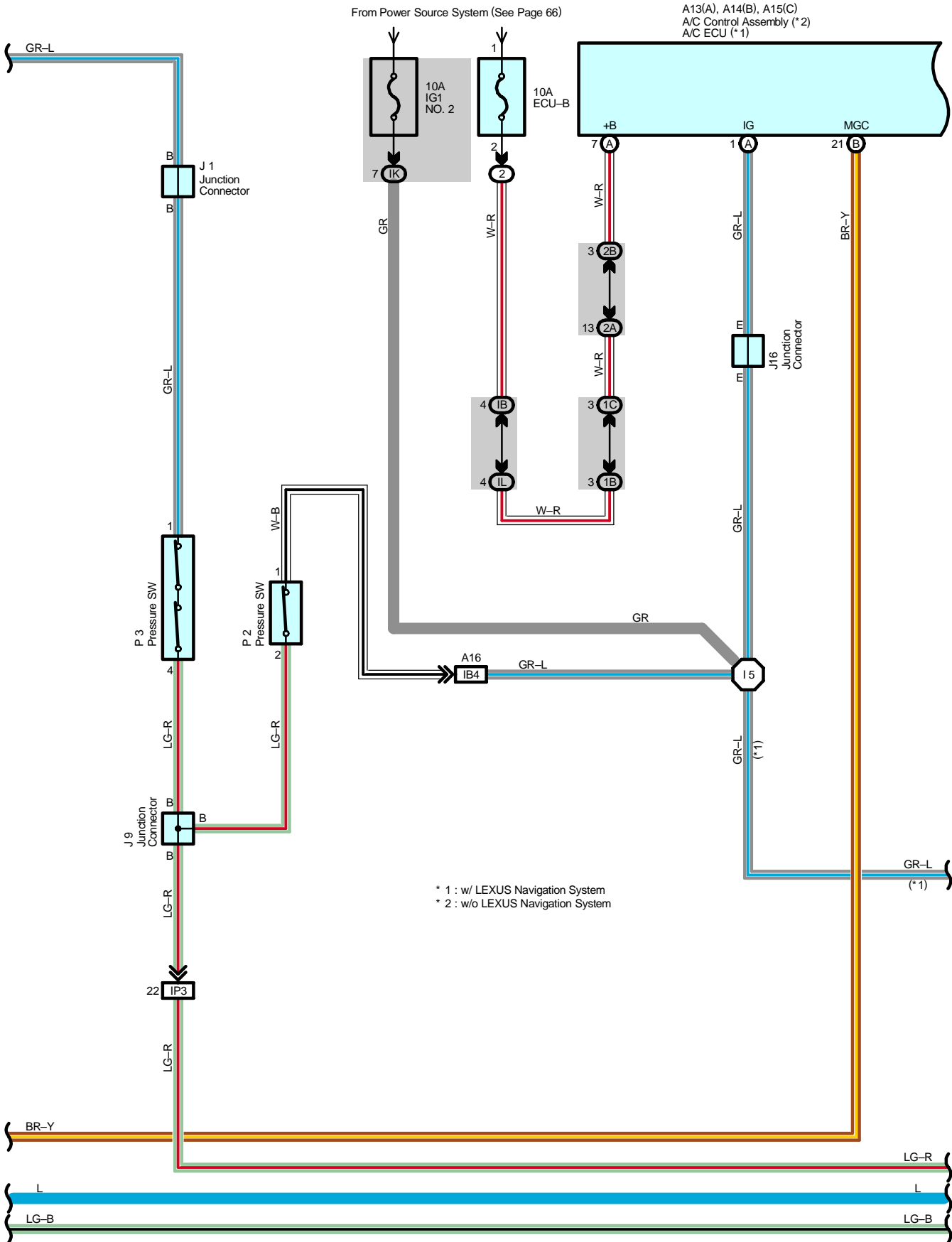
Code	See Page	Ground Points Location
EA	48	Front Right Fender

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	48	Engine Room Main Wire			

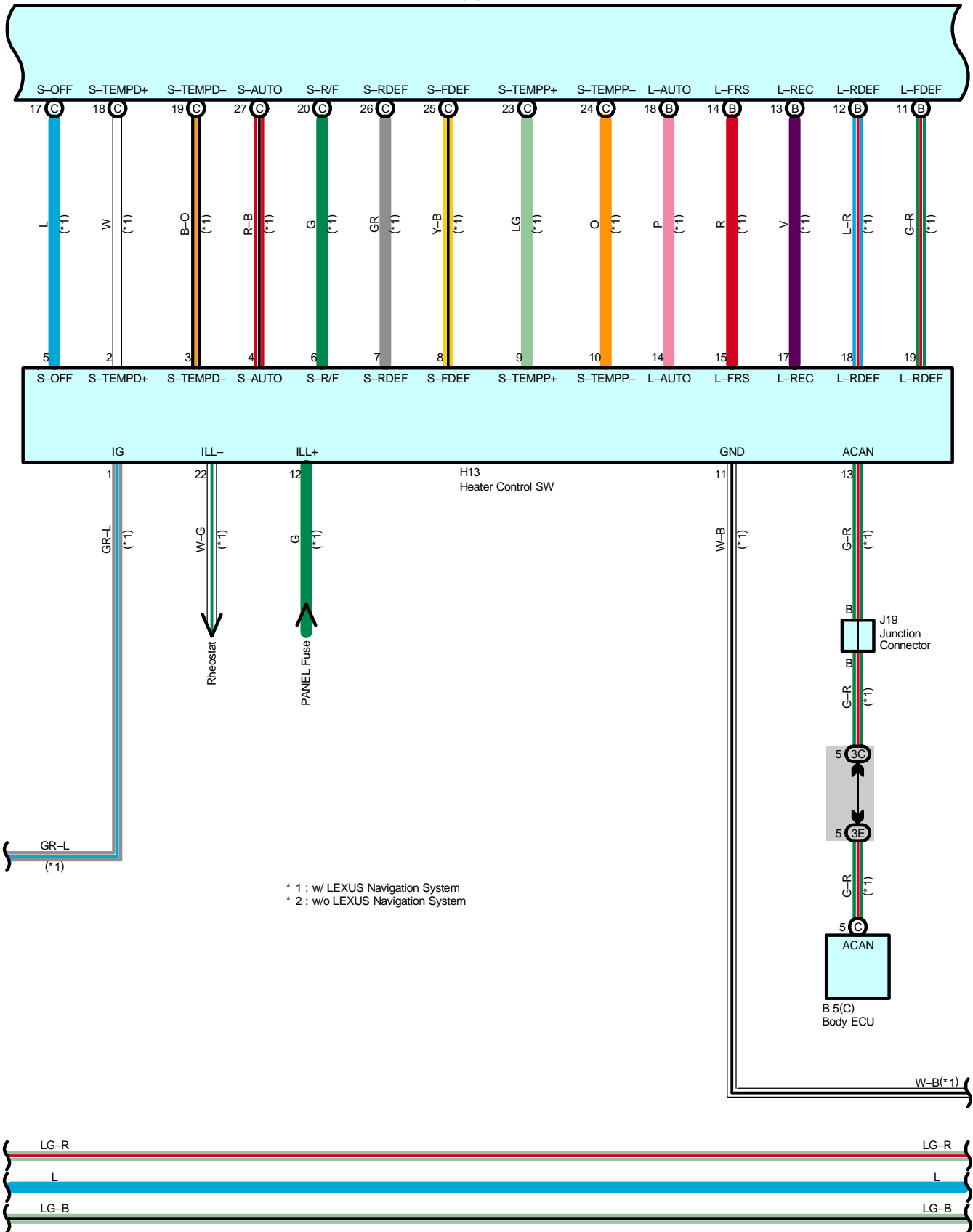
Air Conditioning



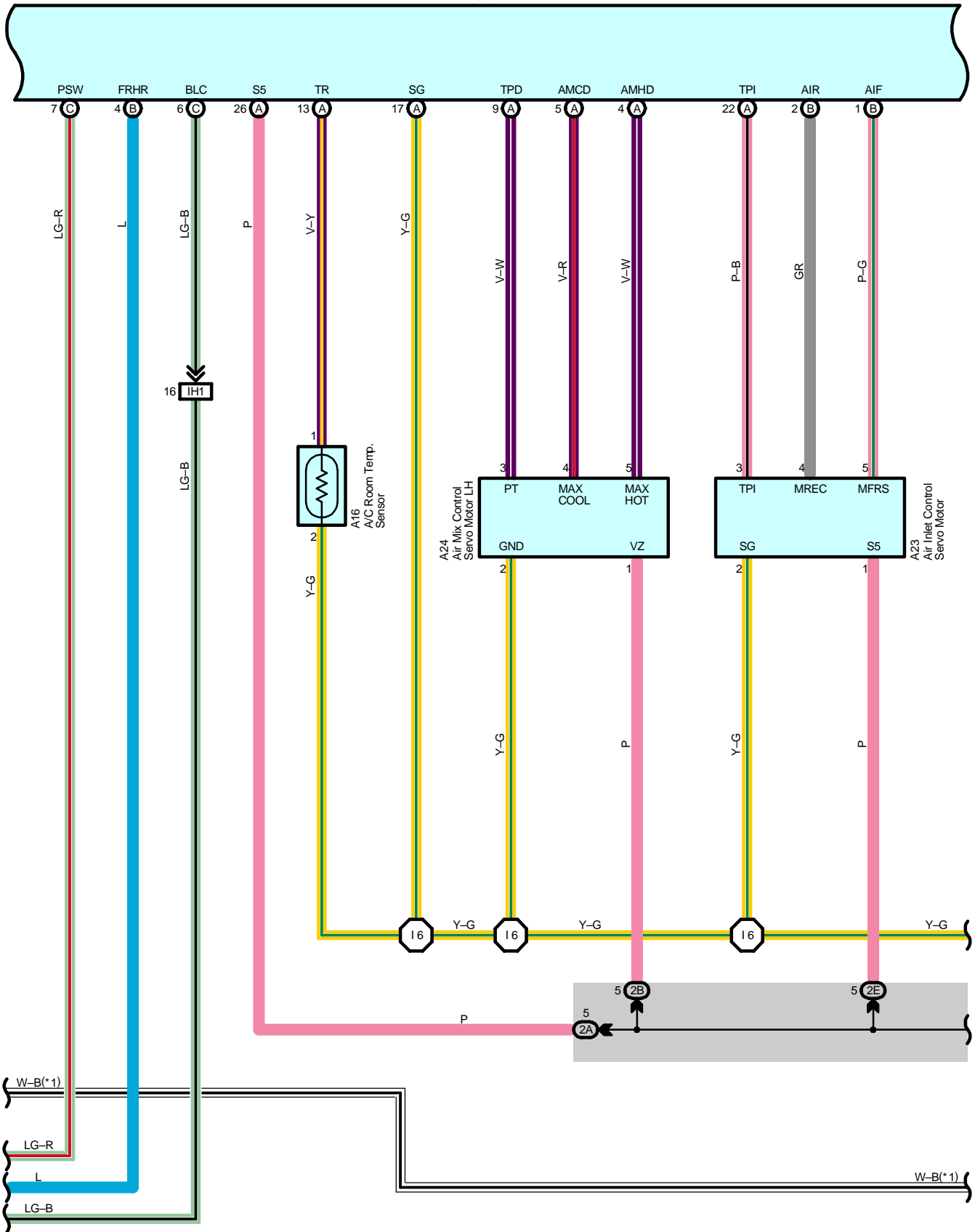


Air Conditioning

A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)

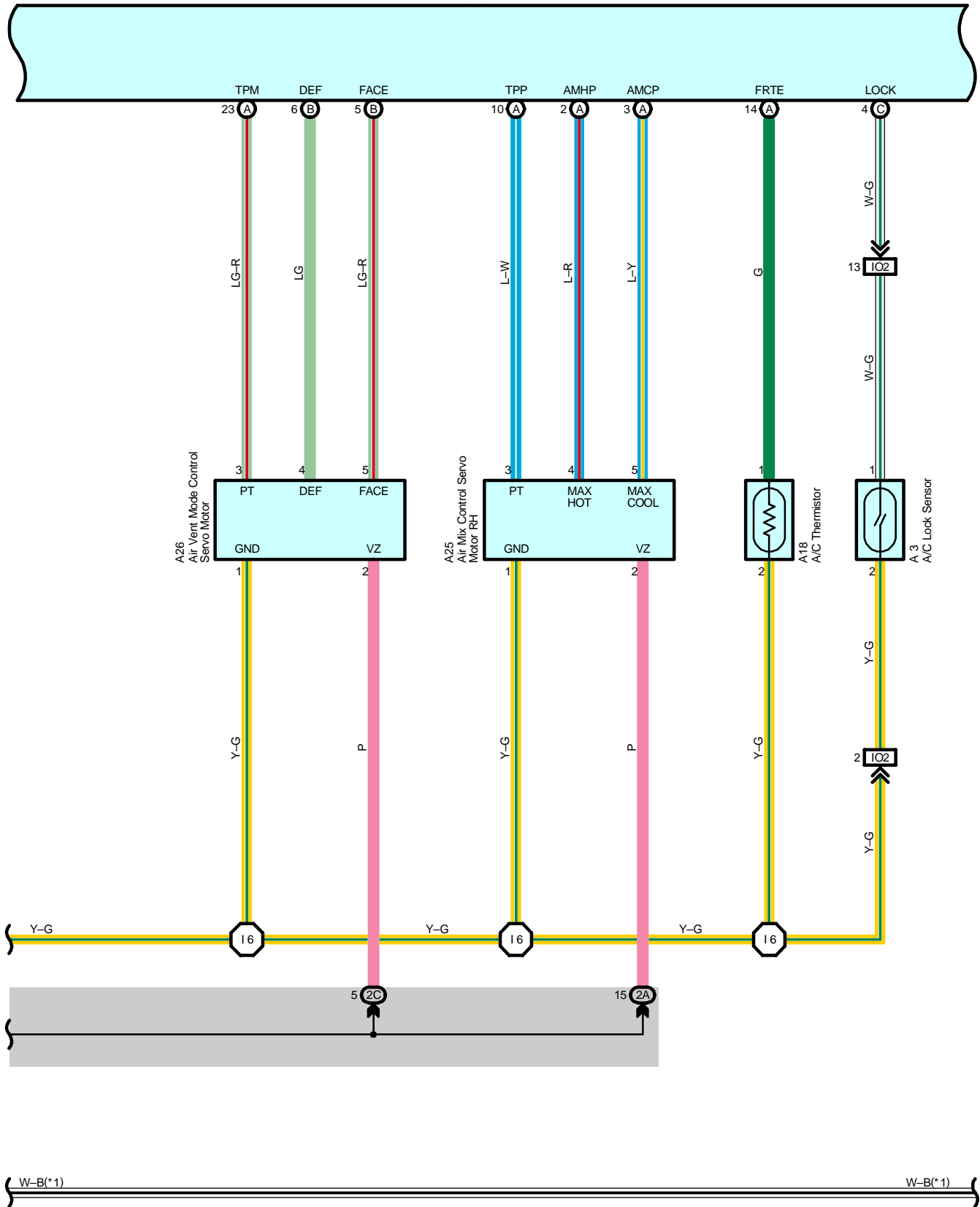


A13(A), A14(B), A15(C)
 A/C Control Assembly (*2)
 A/C ECU (*1)

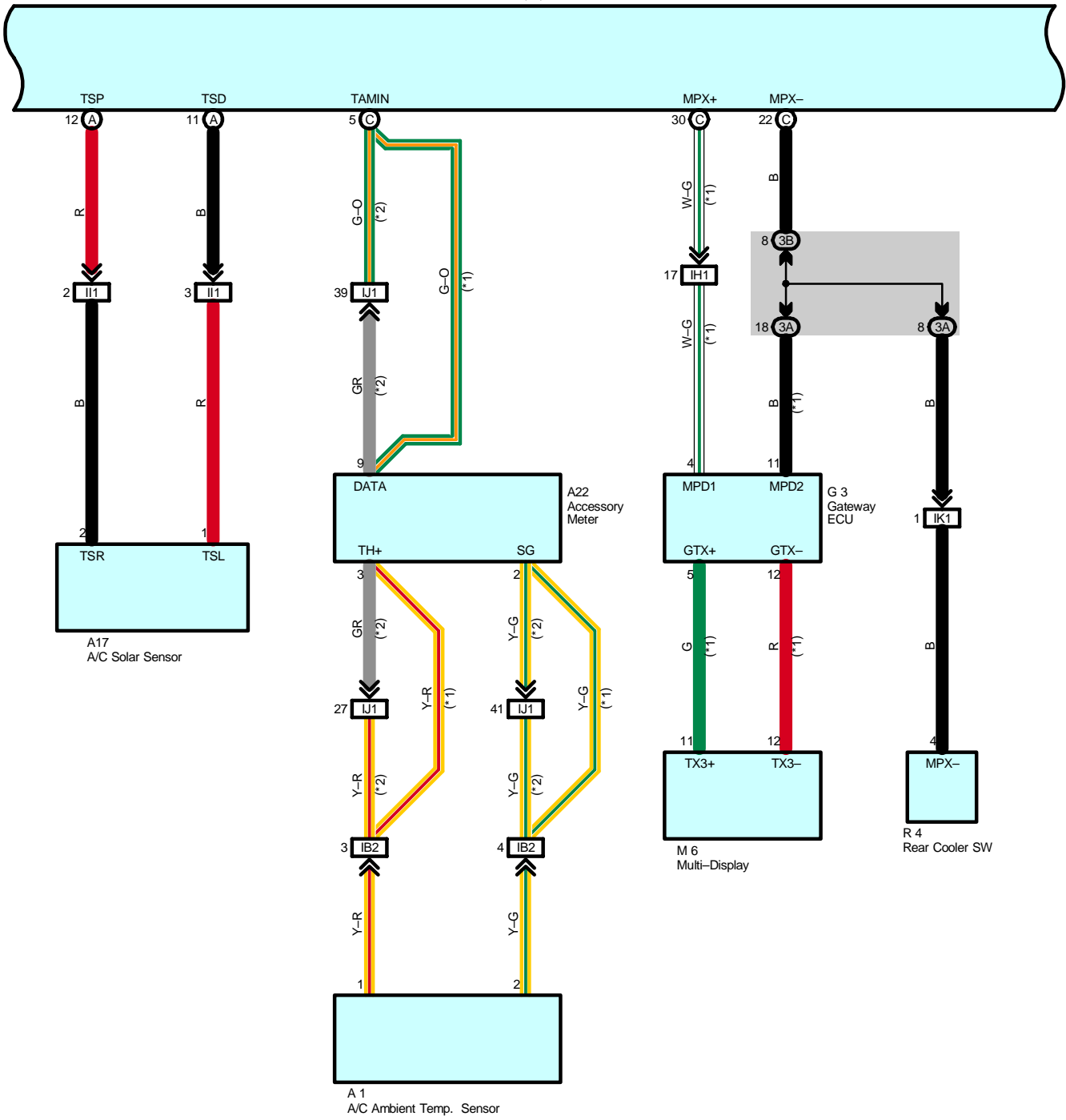


Air Conditioning

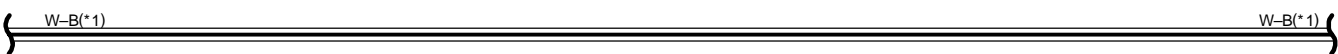
A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)



A13(A), A14(B), A15(C)
 A/C Control Assembly (*2)
 A/C ECU (*1)

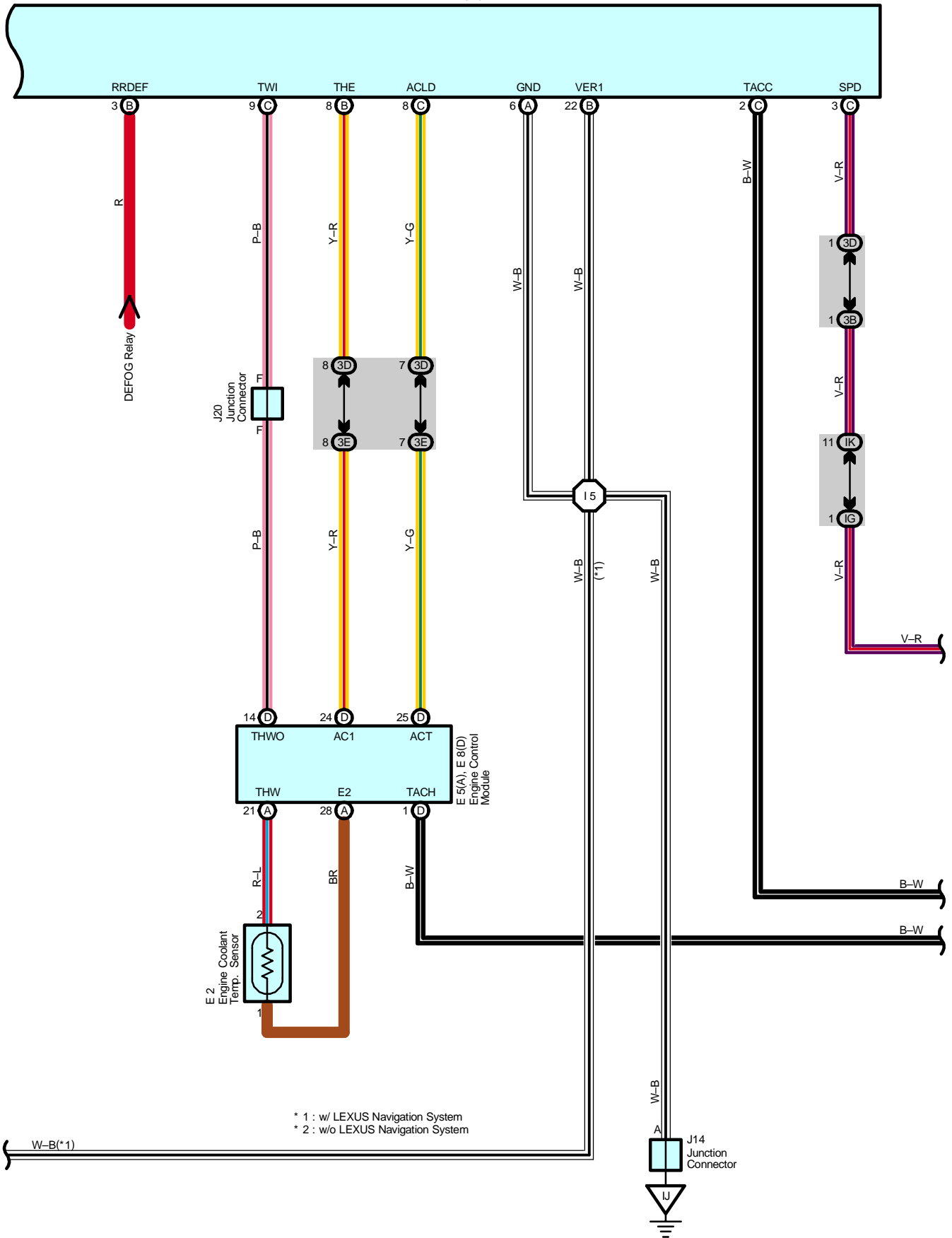


* 1 : w/ LEXUS Navigation System
 * 2 : w/o LEXUS Navigation System

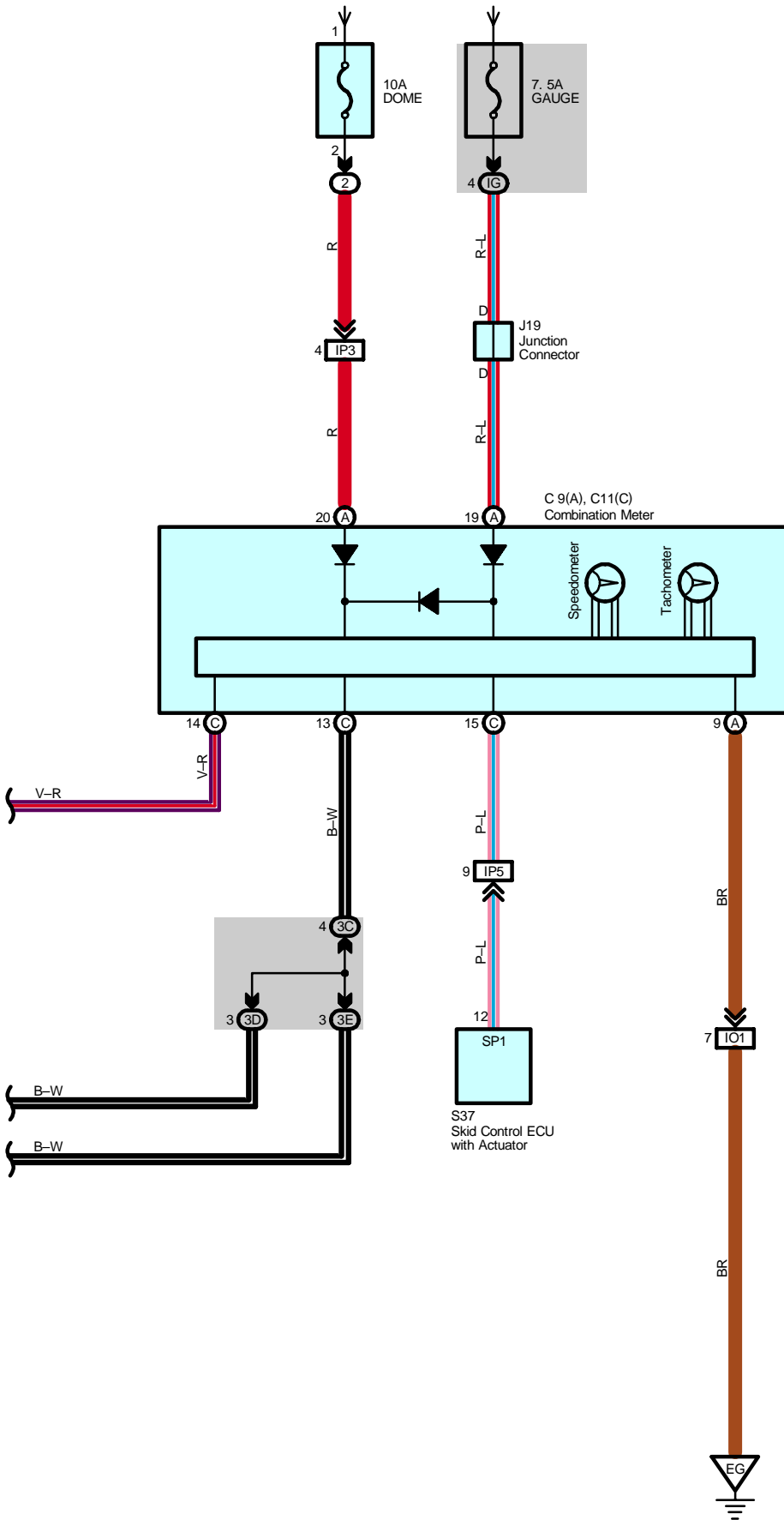


Air Conditioning

A13(A), A14(B), A15(C)
A/C Control Assembly (* 2)
A/C ECU (* 1)



From Power Source System (See Page 66)



Air Conditioning

System Outline

1. Heater Blower Operation

Manual operation

When the blower speed is set to a certain level using the blower control SW, the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) sends the signals to the blower control to control the blower motor speed.

Auto operation

When the auto SW is pushed, the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) sends the signals from various sensors and temperature SW to the blower control to automatically control the blower motor speed.

2. Air Inlet Control Servo Motor Control

When the FRESH/RECIRC select SW is set to RECIRC, the motor in the air inlet control servo motor starts rotating to move the damper toward the RECIRC side. Since the damper position is detected by the TERMINAL TPI of the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system), the motor is continuously rotated until the damper reaches its stop position. When the FRESH/RECIRC select SW is set to FRESH, the motor in the air inlet control servo motor starts rotating to move the damper toward the FRESH side. Since the damper position is detected by the TERMINAL TPI of the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system), the motor is continuously rotated until the damper reaches its stop position.

3. Air Vent Mode Control Servo Motor Control

When the mode select SW is pushed, the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) activates the air vent mode control servo motor. This causes the servo motor to rotate to the position (FACE, BI-LEVEL, FOOT, FOOT/DEF, DEF) selected using the mode select SW, and moves the damper.

4. Air Mix Control Servo Motor Control

When the temperature control SW on the driver's side is pressed, the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) sends a signal to the air mix control servo motor on the driver's side. This signal drives the motor to reach the temperature set by the temperature control SW on the driver's side, and moves the damper. Passenger's side is operated as same as the driver's side.

5. Air Conditioning Operation

The A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) receives various signals, I.E., the engine RPM from the engine control module, outside air temperature signal from the A/C ambient temp. sensor and coolant temperature from the engine control module, etc.

When the engine is started and the A/C SW (A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system)) is on, a signal is input to the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system).

As a result, the ground circuit in A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) is closed and current flows from IG1 fuse to TERMINAL 1 of the MG CLT relay to TERMINAL 2 to TERMINAL MGC of the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) to GROUND, turning the MG CLT relay on, so that the magnetic clutch is on and the A/C compressor operates.

If the A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) detects the following conditions, it stops the air conditioning:

- * Evaporator outlet air is too low.
- * There is a marked difference between the compressor speed and the engine speed.
- * The refrigerant pressure is abnormally high or abnormally low.
- * The engine speed is too low.
- * Rapid acceleration occurs.

Service Hints

P2 Pressure SW

1-2 : Open with the refrigerant pressure at less than approx. 225 kpa (2.3 kgf/cm², 32 psi) or more than approx. 3138 kpa (32 kgf/cm², 455 psi)

A13 (A), A14 (B) A/C Control Assembly (w/o LEXUS Navigation System), A/C ECU (w/ LEXUS Navigation System)

(A) 7-Ground : Always approx. 12 volts

(A) 1-Ground : Approx. 12 volts with the ignition SW at ON position

(B) 22, (A) 6-Ground : Always continuity

 : Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	36	B2	38	J9	40
A3	36	B5	C	J14	40
A13	A	C9	A	J16	40
A14	B	C11	C	J19	40
A15	C	E2		J20	40
A16	38	E5	A	J23	40
A17	38	E8	D	M6	40
A18	38	F7		P2	37
A22	38	G3		P3	37
A23	38	H13		R4	41
A24	38	J1		S37	37
A25	38	J2	A		
A26	38	J3	B		

 : Relay Blocks

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

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2E		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3C		
3D		
3E		

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB3		
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IP2	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP3		
IP5		

Air Conditioning



: Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel



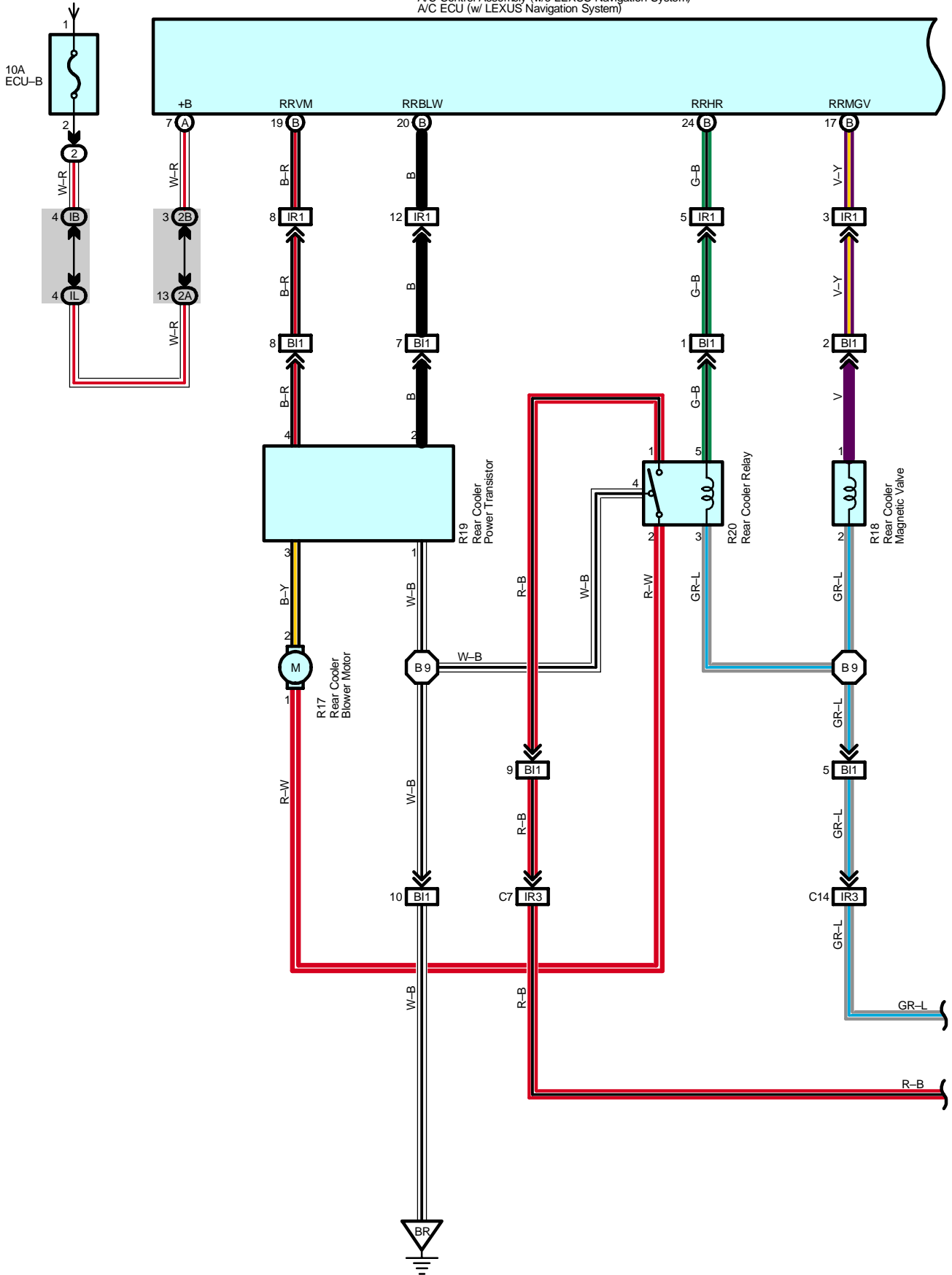
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I6	52	Instrument Panel Wire

Rear Air Conditioning

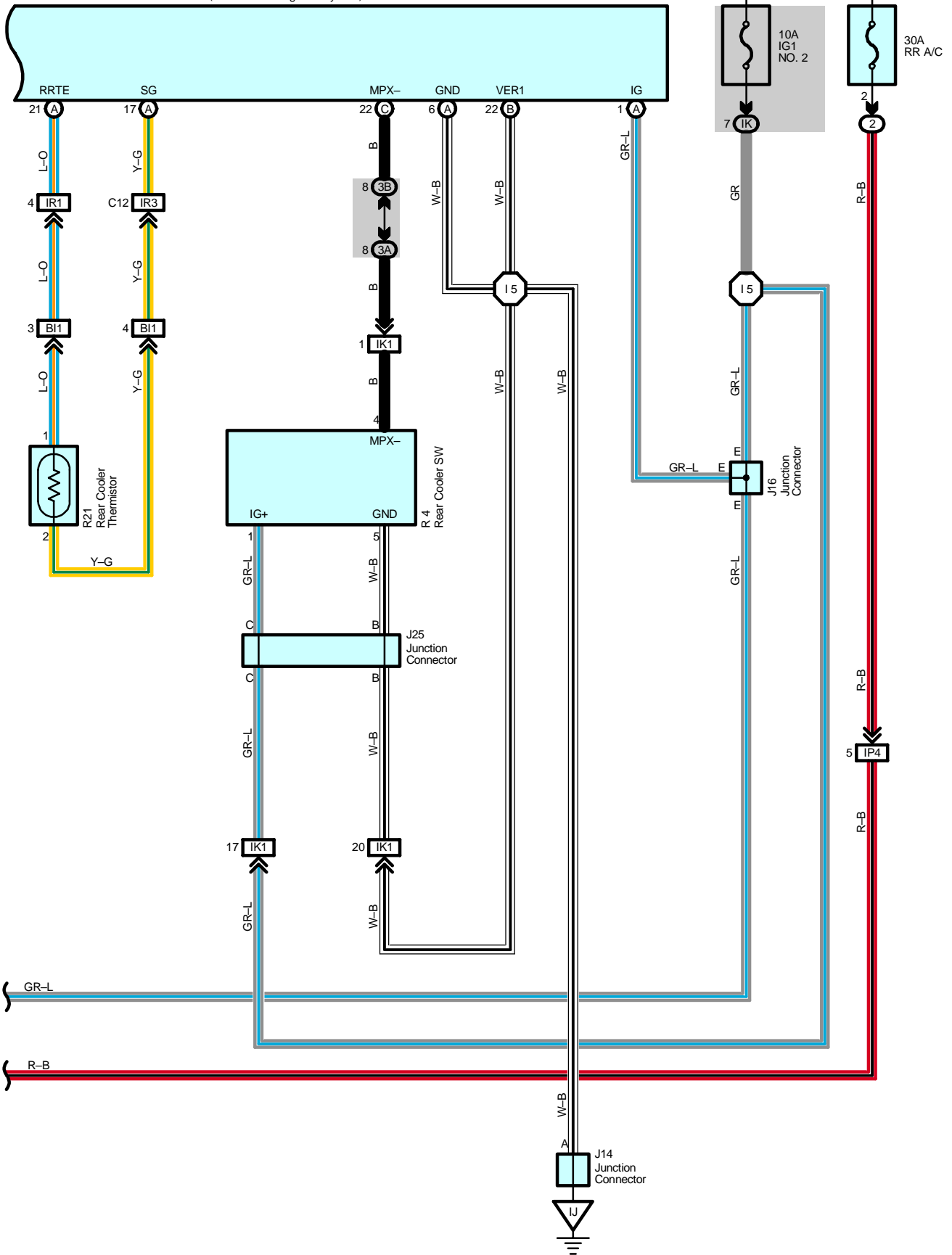
From Power Source System
(See Page 66)

A13(A), A14(B), A15(C)
A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System)



A13(A), A14(B), A15(C)
 A/C Control Assembly (w/o LEXUS Navigation System)
 A/C ECU (w LEXUS Navigation System)

From Power Source System (See Page 66)



Rear Air Conditioning

System Outline

1. Manual Operation

When air volume is set by blower control SW within rear cooler SW, signal is transmitted from rear cooler SW to A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system). A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) controls power transistor, and controls the blower motor at preset air volume.

2. Auto Operation

When blower control SW within rear cooler SW is set to AUTO position, signal is transmitted from rear cooler SW to A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system). A/C control assembly (w/o LEXUS navigation system), A/C ECU (w/ LEXUS navigation system) controls the power transistor based on signal from various sensors, operates the blower motor, and adjusts air volume. It should be noted that auto control applies only when blowout port of front air conditioning is positioned at FACE, and blower is turned off otherwise.

3. Temperature Control

Temperature control of rear air conditioning can be set up to + / -5 °C of front air conditioning temperature setting.

* Rear air conditioning works only when front air conditioning is operating, and only blows air when front air conditioning is off.

Service Hints

A3 (A), A4 (B) A/C Control Assembly (w/o Navigation System), A/C ECU (w/ Navigation System)

(B) 22, (A) 6-Ground : Always continuity

(A) 1-Ground : Approx. 12 volts with the ignition SW at ON position

(A) 7-Ground : Always approx. 12 volts

R4 Rear Cooler SW

1-Ground : Approx. 12 volts with the ignition SW at ON position

5-Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A13	A	38	J16	40	R18	44
A14	B	38	J25	40	R19	44
A15	C	38	R4	41	R20	44
J14	40	R17	44	R21	44	

○ : Relay Blocks

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

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IK	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

□ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR3		
BI1	60	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)



: Ground Points

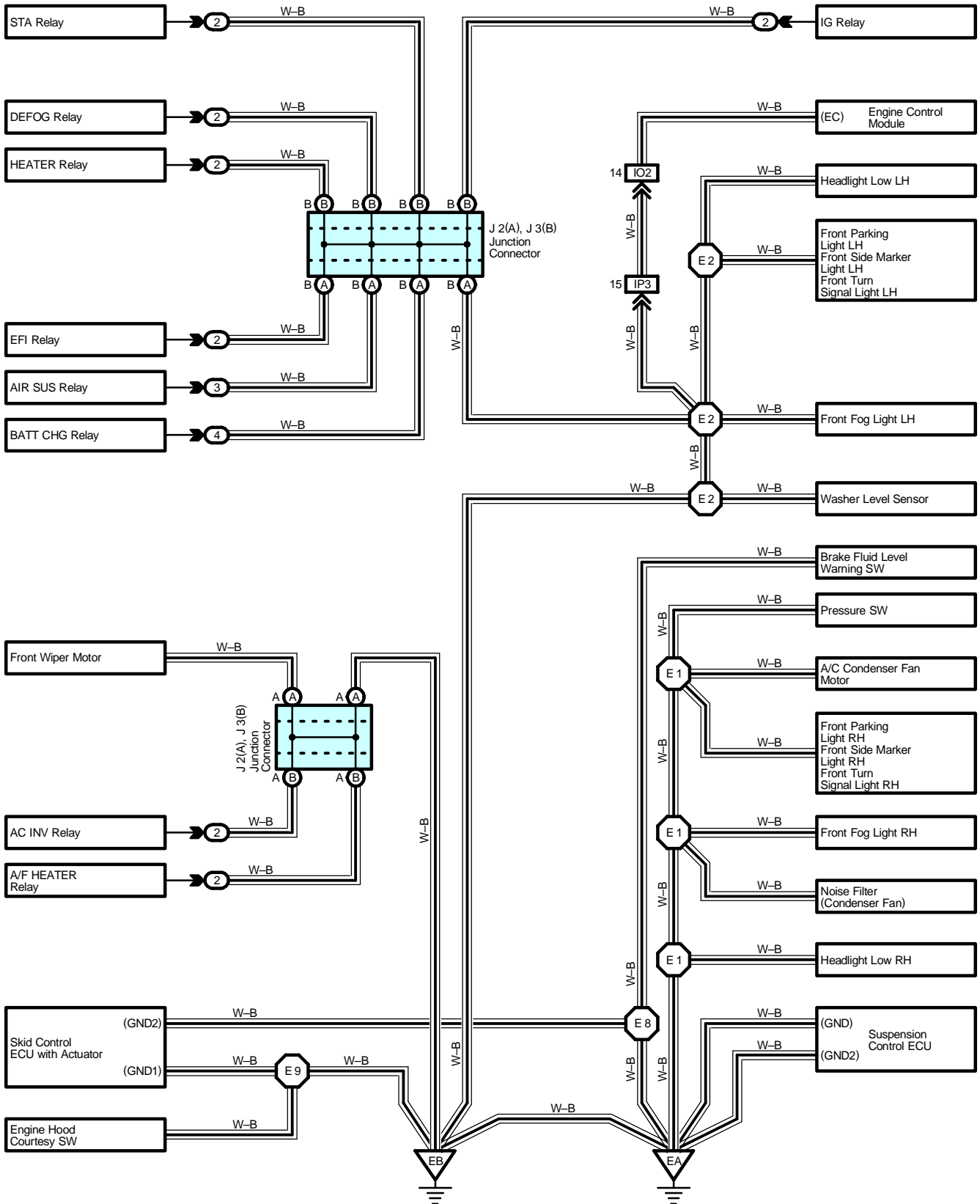
Code	See Page	Ground Points Location
IJ	50	Near the Right Side of Steering Column
BR	58	Right Quarter Panel Inner



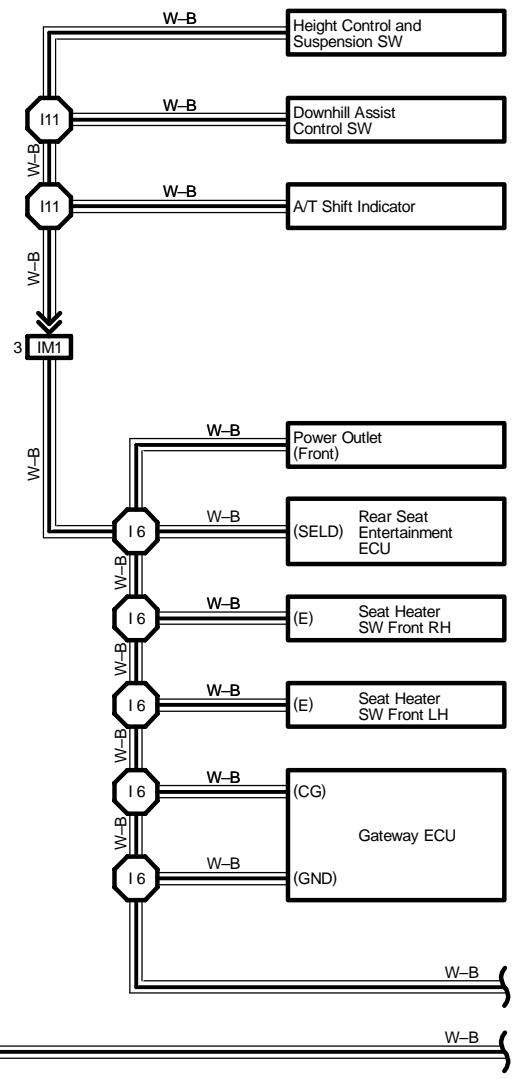
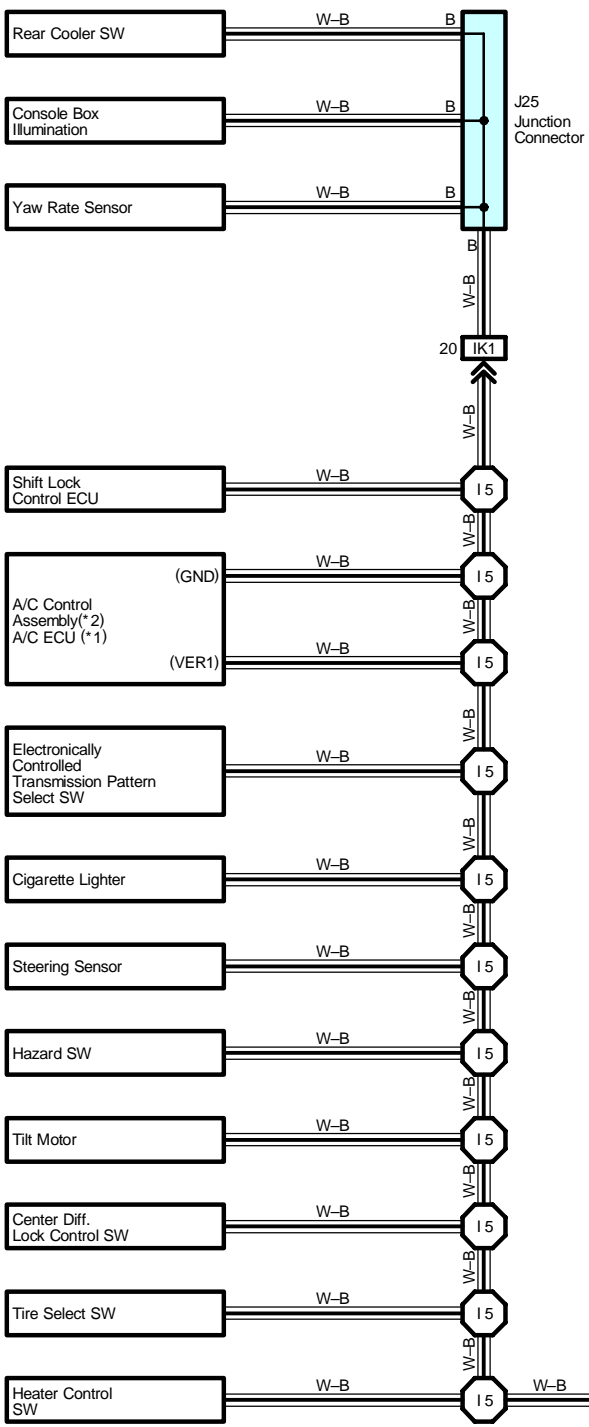
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	B9	60	Rear A/C Sub Wire

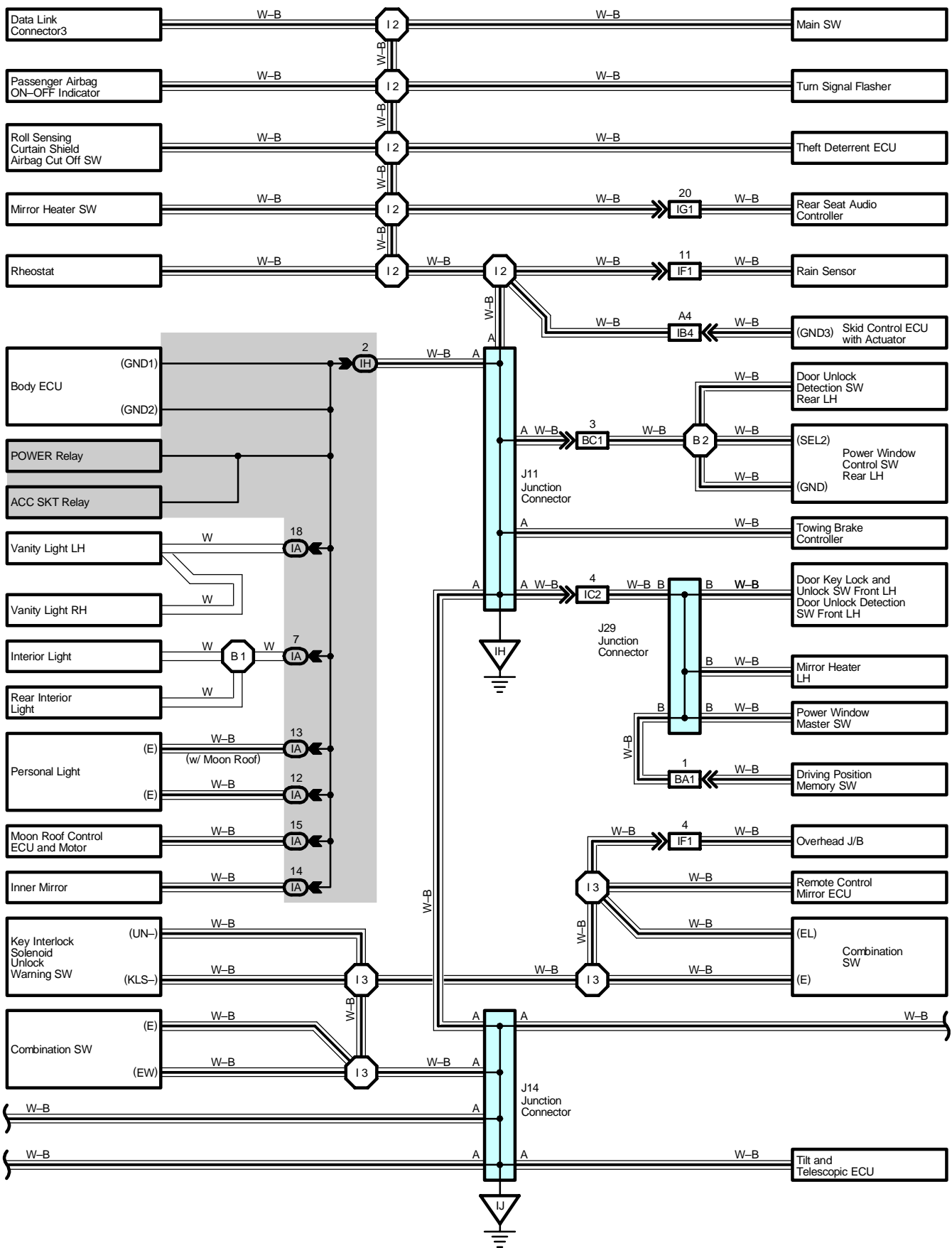
I GROUND POINT

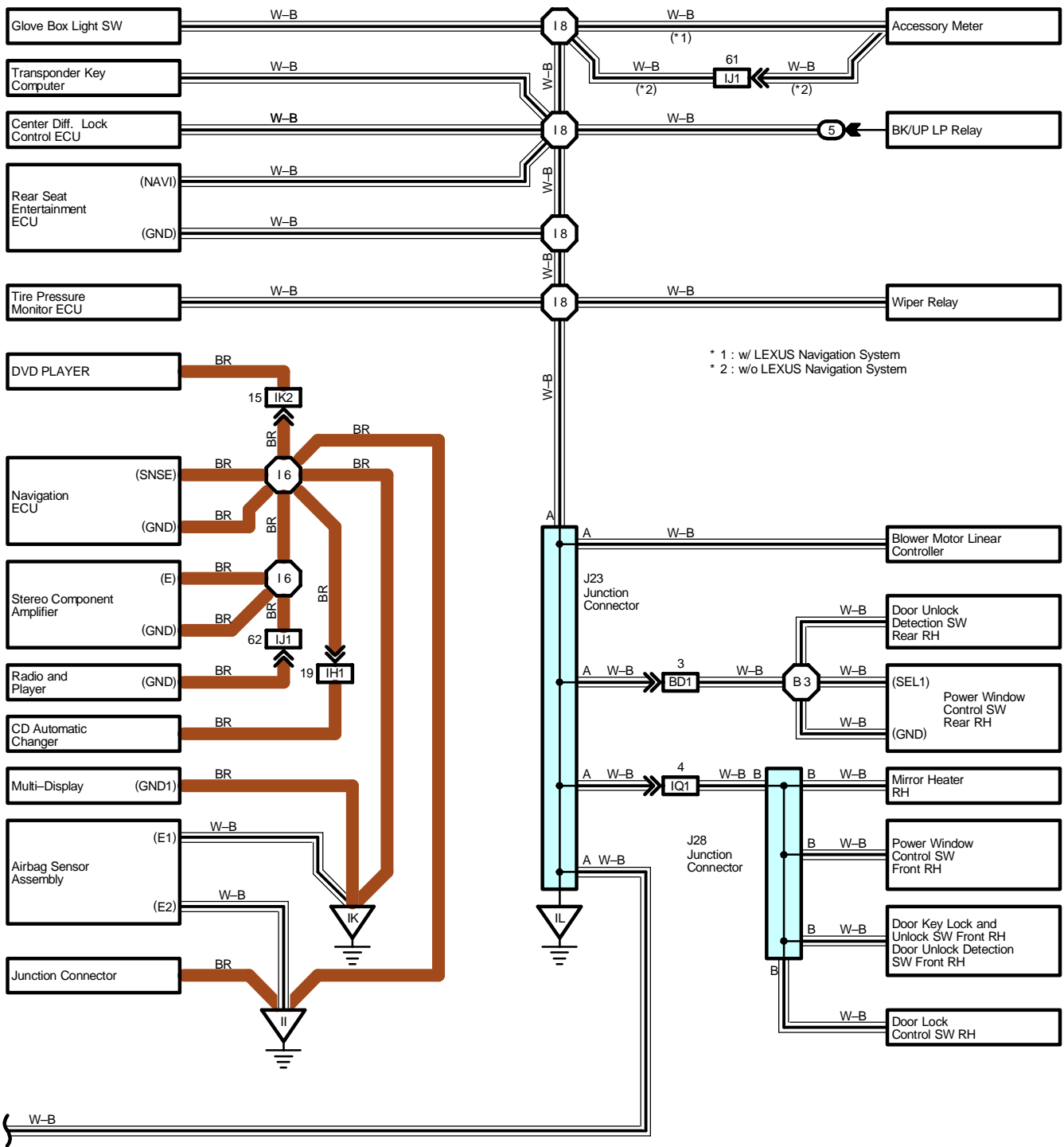


* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System

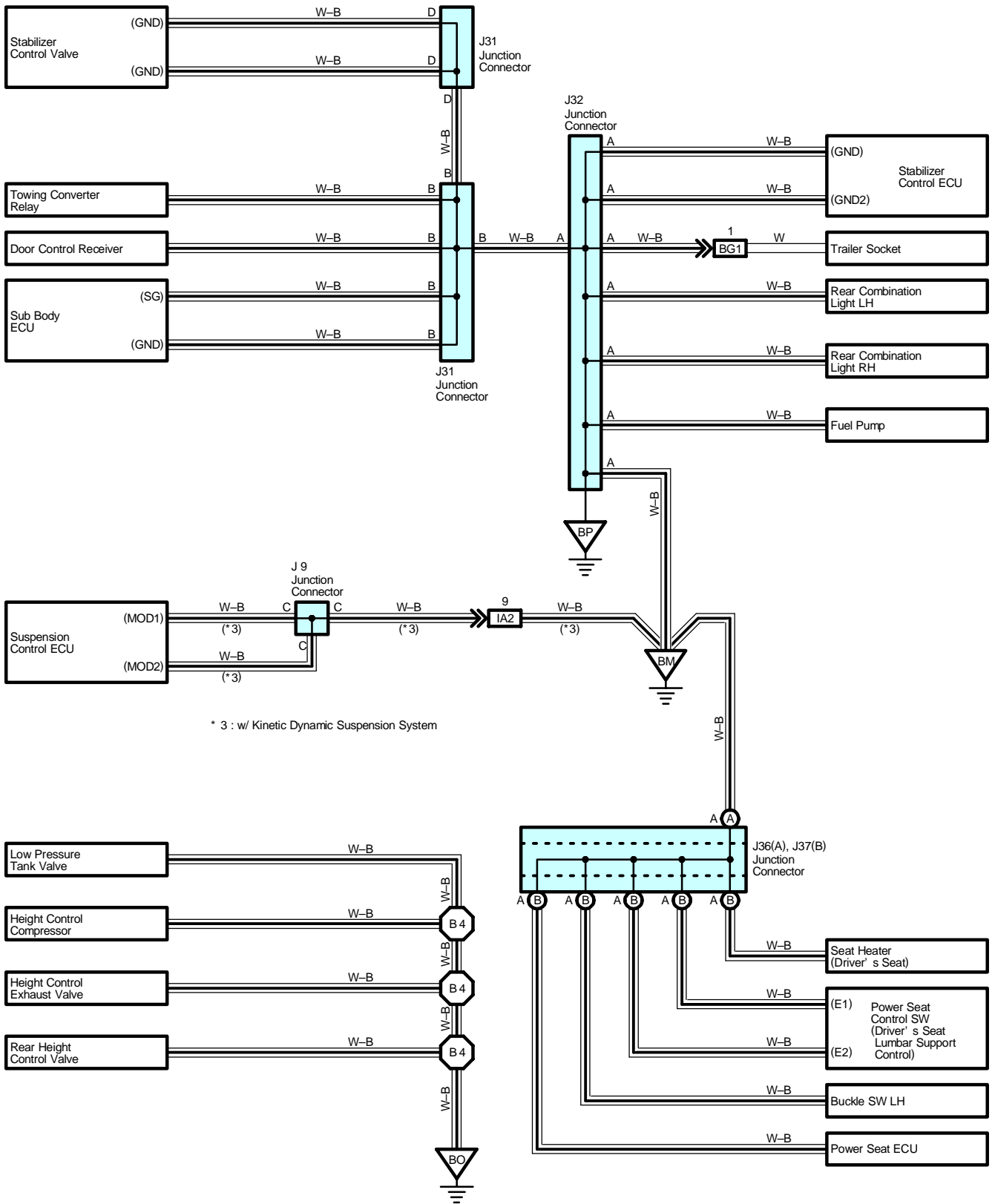


I GROUND POINT

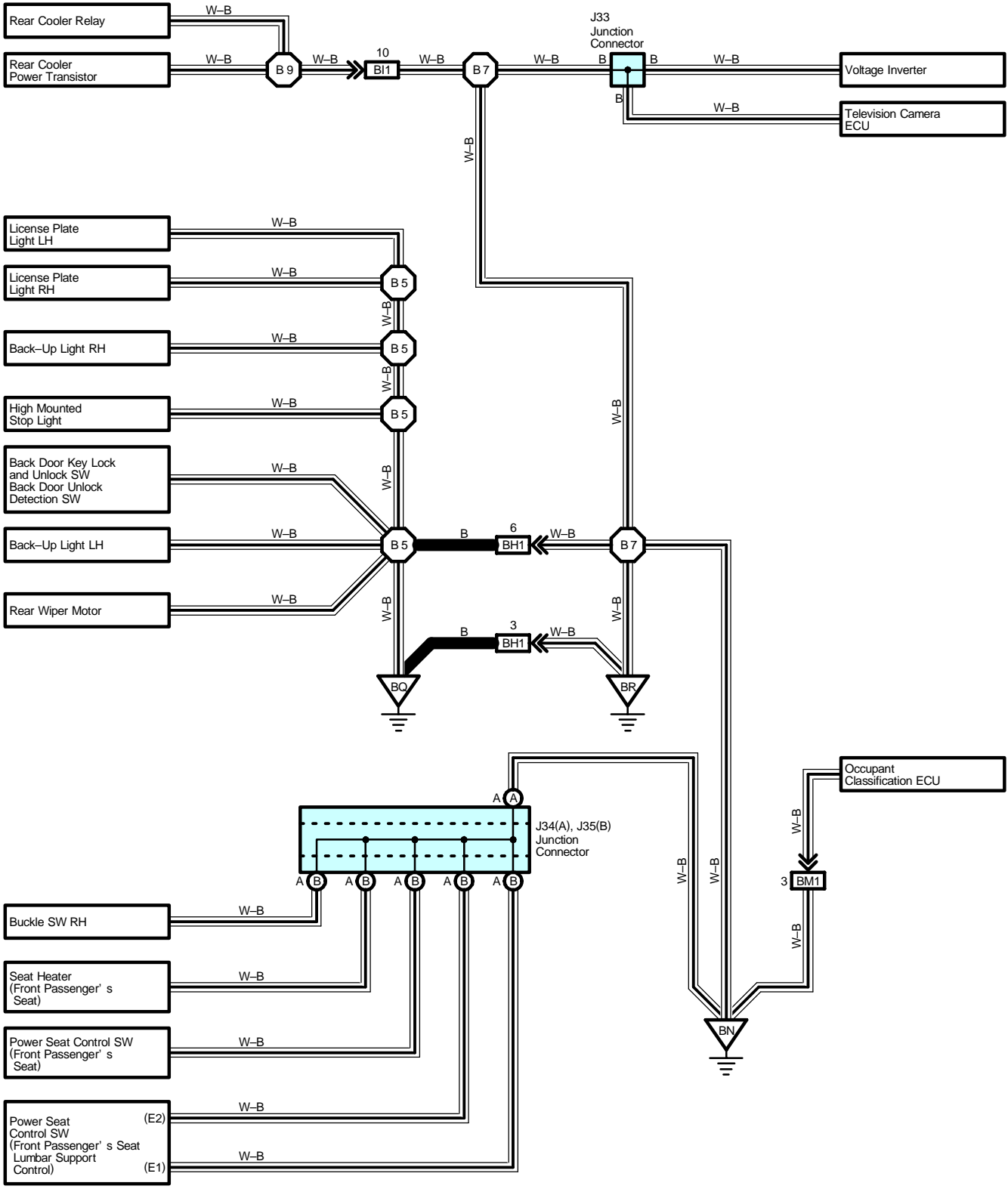




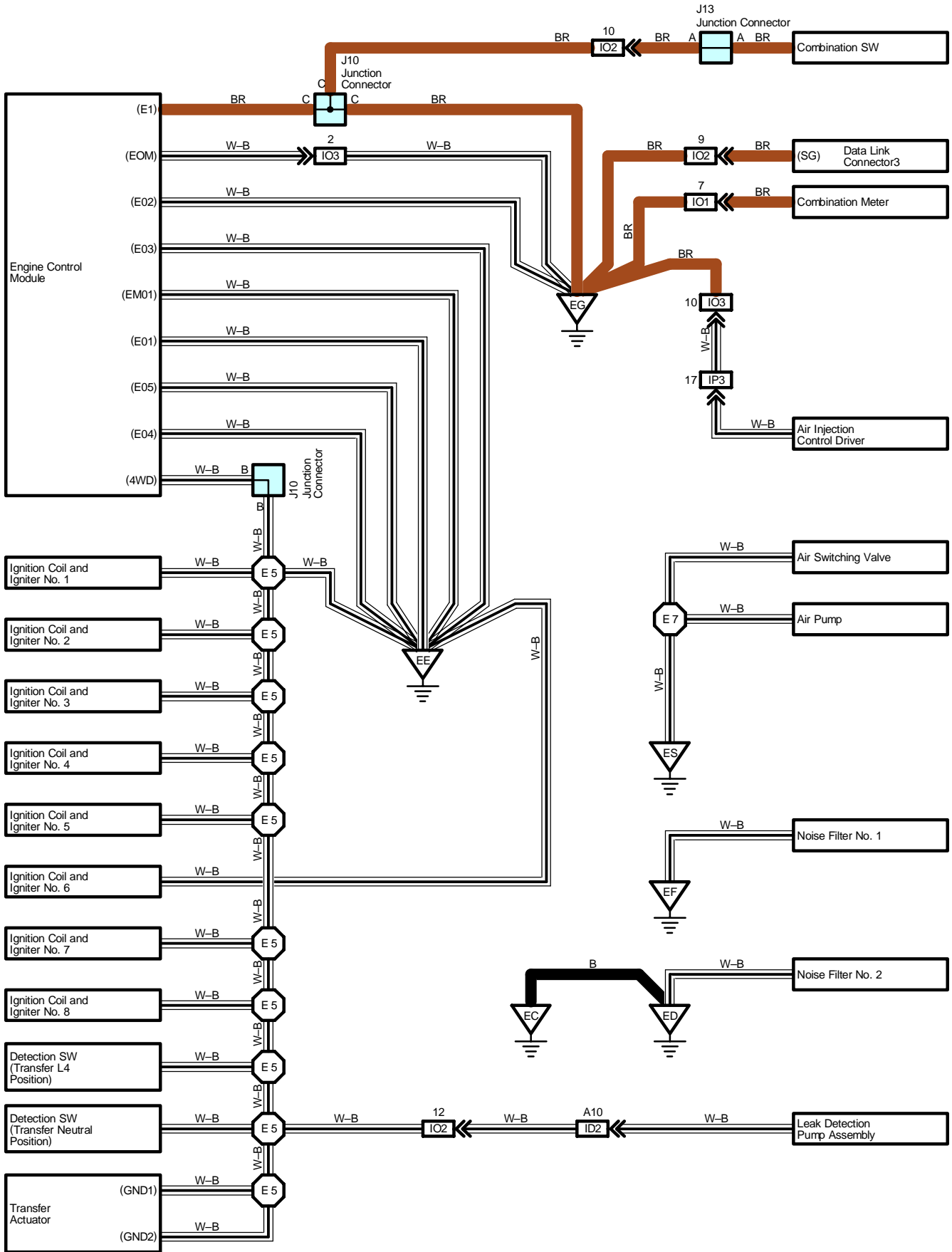
I GROUND POINT



* 3 : w/ Kinetic Dynamic Suspension System



I GROUND POINT



: Parts Location

Code		See Page	Code		See Page	Code		See Page
J2	A	37	J14	40	J32	43		
J3	B	37	J23	40	J33	43		
J9		40	J25	40	J34	A	46	
J10		40	J28	43	J35	B	46	
J11		40	J29	43	J36	A	46	
J13		40	J31	43	J37	B	46	

 : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.3 (Engine Compartment Left)
4	23	Engine Room R/B No.4 (Engine Compartment Left)
5	24	Passenger Side R/B (Right Kick Panel)

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IG1	52	Radio Installation Sub Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IK1	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IK2		
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	58	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	58	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BG1	60	Frame No.3 Wire and Floor No.2 Wire (Left Side of Rear Floor Cross Member)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BI1	60	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BM1	62	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

I GROUND POINT



: Ground Points

Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EC	48	Front Right Fender
ED	48	Rear Bank of Right Cylinder Head
EE	48	Rear Bank of Left Cylinder Head
EF		
EG		
ES	48	Near the Starter
IH	50	Left Kick Panel
II	50	Near the Left Side of Steering Column
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH
IL	50	Right Kick Panel
BM	58	Under the Driver's Seat
BN	58	Under the Front Passenger's Seat
BO	58	Near the Left Side of No.5 Cross Member
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center
BR	58	Right Quarter Panel Inner

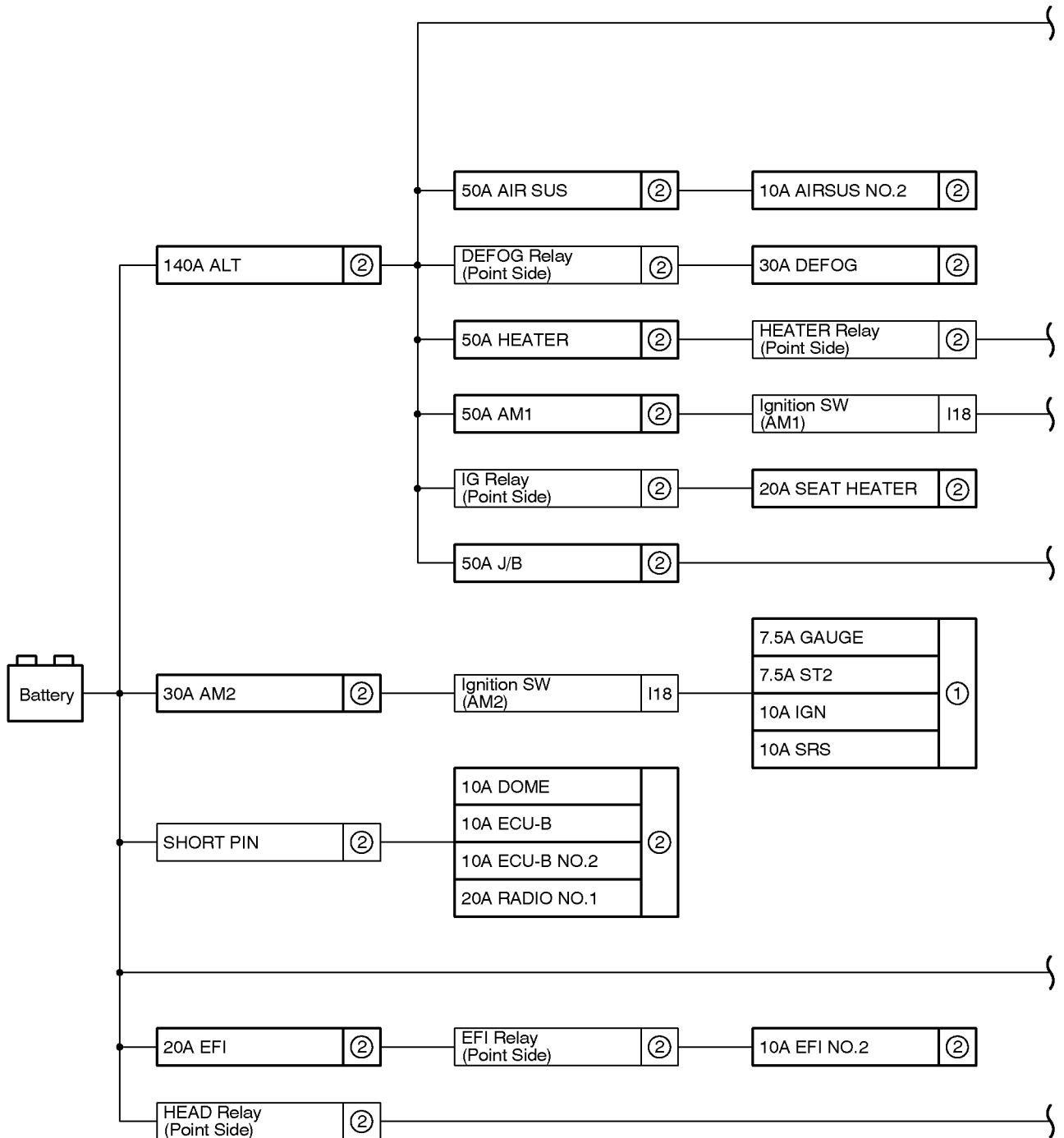


: Splice Points

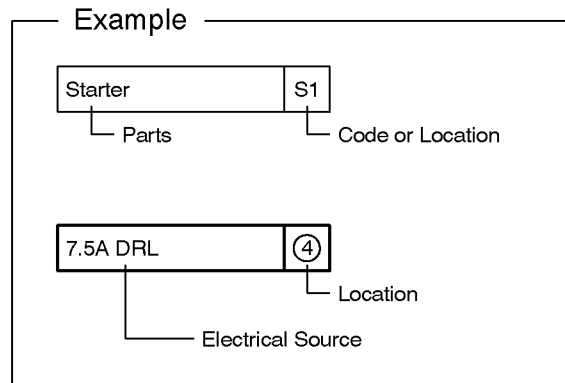
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	48	Engine Room Main Wire	I8	52	Instrument Panel Wire
E2			I11	52	Switch Wire
E5	48	Engine Wire	B1	60	Roof Wire
E7	48	Engine No.2 Wire	B2	60	Rear Door LH Wire
E8	48	Engine Room Main Wire	B3	60	Rear Door RH Wire
E9			B4	60	Frame Wire
I2			B5	60	Back Door No.1 Wire
I3	52	Instrument Panel Wire	B7	60	Floor Wire
I5			B9	60	Rear A/C Sub Wire
I6					

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.



7.5A OBD	②
10A MIR HEATER	
10A STOP	
15A FR FOG	
15A AC INV	
20A CDS FAN	
30A BATT CHG	
30A TOWING BRK	
30A RR A/C	
40A TOWING	



7.5A HEATER NO.2	②
------------------	---

7.5A ACC	①
7.5A STA	
10A CIG	
10A ECU-IG	
10A IG1	
10A IG1 NO.2	
15A RR WIP	
15A RR WSH	
20A DIFF	
20A TEMS	
30A FR WIP-WSH	

TAIL Relay (Point Side)	①	10A PANEL	①
		10A TAIL	

15A PWR OUTLET	①
20A D RR P/W	
20A P FR P/W	
20A P RR P/W	
30A D P/SEAT	
30A P P/SEAT	
30A POWER	

7.5A ALT-S	②
7.5A MAYDAY	
10A ETCS	
10A HORN	
15A A/F HEATER	
15A TRN-HAZ	
20A D FR P/W	
25A DR/LCK	
30A RADIO NO.2	
30A TOWING	
40A ABS MTR	
50A A/PUMP	
50A ABS SOL	

10A HEAD (HI LH)	②
10A HEAD (HI RH)	
10A HEAD (LO LH)	
10A HEAD (LO RH)	

[LOCATION]

- ① : Driver Side J/B (See Page 26)
- ② : Engine Room R/B (See Page 22)

J POWER SOURCE (Current Flow Chart)

Driver Side J/B (See Page 26)

Fuse		System	Page
7.5A	ACC	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Accessory Meter	318
		Audio System (w/ Rear Seat Entertainment System)	338
		Audio System (w/o Rear Seat Entertainment System)	356
		Automatic Light Control	136
		Back-Up Light	170
		Center Differential Lock	258
		Cigarette Lighter and Power Outlet (12V)	288
		Cruise Control	232
		Door Lock Control and Theft Deterrent	202
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Front Wiper and Washer (w/ Rain Sensor)	180
		Headlight	128
		Interior Light	148
		Key Reminder and Seat Belt Warning	172
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Light Auto Turn Off System	140
		Moon Roof	268
		Multiplex Communication System-BEAN	100
		Power Seat (Driver's Seat)	298
		Power Tilt and Power Telescopic	280
		Power Window	194
		Remote Control Mirror	274
		Shift Lock	286
Trailer Towing	308		
Wireless Door Lock Control	212		
7.5A	GAUGE	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Accessory Meter	318
		Air Conditioning	376
		Audio System (w/ Rear Seat Entertainment System)	338
		Audio System (w/o Rear Seat Entertainment System)	356
		Center Differential Lock	258
		Charging	76
		Combination Meter	366
		Cruise Control	232
		Door Lock Control and Theft Deterrent	202

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

Fuse		System	Page
7.5A	GAUGE	Electric Modulated Air Suspension	246
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Front Wiper and Washer (w/ Rain Sensor)	180
		Interior Light	148
		Key Reminder and Seat Belt Warning	172
		Kinetic Dynamic Suspension System	254
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Moon Roof	268
		Multiplex Communication System–BEAN	100
		Rear Wiper and Washer	190
		SRS	261
		Taillight and Illumination	158
Tire Pressure Warning System	176		
7.5A	ST2	Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Starting	70
10A	CIG	Cigarette Lighter and Power Outlet (12V)	288
10A	ECU-IG	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Accessory Meter	318
		Automatic Light Control	136
		Door Lock Control and Theft Deterrent	202
		Electric Modulated Air Suspension	246
		Electric Tension Reducer	296
		Engine Immobilizer System	94
		Front Wiper and Washer (w/ Rain Sensor)	180
		Headlight	128
		Interior Light	148
		Key Reminder and Seat Belt Warning	172
		Kinetic Dynamic Suspension System	254
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Light Auto Turn Off System	140
		Moon Roof	268
		Multiplex Communication System–BEAN	100
Power Seat (Driver's Seat)	298		

* 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	ECU-IG	Power Tilt and Power Telescopic	280
		Power Window	194
		Rear Wiper and Washer	190
		Remote Control Mirror	274
		Shift Lock	286
		Stop Light	166
		Tire Pressure Warning System	176
		Trailer Towing	308
		Wireless Door Lock Control	212
10A	IGN	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Cruise Control	232
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Key Reminder and Seat Belt Warning	172
		SRS	261
10A	IG1	Air Conditioning	376
		Automatic Glare-Resistant EC Mirror and Compass	292
		Charging	76
		Condenser Fan	374
		Rear Window Defogger	314
		Trailer Towing	308
10A	IG1 NO.2	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Air Conditioning	376
		Back-Up Light	170
		Center Differential Lock	258
		Cruise Control	232
		Electronically Controlled Transmission and A/T Indicator	222
		Front Wiper and Washer (w/ Rain Sensor)	180
		Key Reminder and Seat Belt Warning	172
		Kinetic Dynamic Suspension System	254
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Mirror Heater	316
		Multiplex Communication System-BEAN	100
		Power Outlet (115V)	290
		Power Seat (Driver's Seat)	298
		Power Tilt and Power Telescopic	280
		Rear Air Conditioning	388
		Remote Control Mirror	274
Seat Heater	306		

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

Fuse		System	Page
10A	IG1 NO.2	Taillight and Illumination	158
		Trailer Towing	308
		Turn Signal and Hazard Warning Light	144
10A	PANEL	Accessory Meter	318
		Engine Control	78
		Taillight and Illumination	158
10A	SRS	SRS	261
10A	TAIL	Taillight and Illumination	158
		Trailer Towing	308
15A	PWR OUTLET	Cigarette Lighter and Power Outlet (12V)	288
15A	RR WIP	Multiplex Communication System–BEAN	100
		Rear Wiper and Washer	190
15A	RR WSH	Multiplex Communication System–BEAN	100
		Rear Wiper and Washer	190
20A	D RR P/W	Multiplex Communication System–BEAN	100
		Power Window	194
20A	DIFF	Center Differential Lock	258
20A	P FR P/W	Multiplex Communication System–BEAN	100
		Power Window	194
20A	P RR P/W	Multiplex Communication System–BEAN	100
		Power Window	194
20A	TEMS	Electric Modulated Air Suspension	246
30A	D P/SEAT	Power Seat (Driver's Seat)	298
30A	FR WIP–WSH	Front Wiper and Washer (w/ Rain Sensor)	180
		Front Wiper and Washer (w/o Rain Sensor)	186
30A	P P/SEAT	Power Seat (Front Passenger's Seat)	304
30A	POWER OR TI&TE	Moon Roof	268
		Power Tilt and Power Telescopic	280

Engine Room R/B (See Page 22)

Fuse		System	Page
7.5A	ALT–S	Charging	76
7.5A	HEATER NO.2	Air Conditioning	376
7.5A	OBD	Engine Control	78
10A	AIRSUS NO.2	Electric Modulated Air Suspension	246
10A	DOME	ABS, TRAC, VSC, Downhill Assist Control and Hill–Start Assist Control	238
		Accessory Meter	318
		Air Conditioning	376
		Audio System (w/ Rear Seat Entertainment System)	338
		Audio System (w/o Rear Seat Entertainment System)	356
		Combination Meter	366
		Cruise Control	232

* 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	DOME	Door Lock Control and Theft Deterrent	202
		Electric Modulated Air Suspension	246
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Front Wiper and Washer (w/ Rain Sensor)	180
		Garage Door Opener	178
		Interior Light	148
		Key Reminder and Seat Belt Warning	172
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Moon Roof	268
		Multiplex Communication System–BEAN	100
		Rear Wiper and Washer	190
		Taillight and Illumination	158
Tire Pressure Warning System	176		
10A	ECU–B	ABS, TRAC, VSC, Downhill Assist Control and Hill–Start Assist Control	238
		Accessory Meter	318
		Air Conditioning	376
		Automatic Light Control	136
		Door Lock Control and Theft Deterrent	202
		Electric Modulated Air Suspension	246
		Engine Immobilizer System	94
		Front Wiper and Washer (w/ Rain Sensor)	180
		Headlight	128
		Interior Light	148
		Key Reminder and Seat Belt Warning	172
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
		Light Auto Turn Off System	140
		Moon Roof	268
		Multiplex Communication System–BEAN	100
		Power Seat (Driver's Seat)	298
		Power Tilt and Power Telescopic	280
		Power Window	194
		Rear Air Conditioning	388
Rear Wiper and Washer	190		
Remote Control Mirror	274		

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

Fuse		System	Page
10A	ECU-B	SRS	261
		Wireless Door Lock Control	212
10A	ECU-B NO.2	Door Lock Control and Theft Deterrent	202
		Multiplex Communication System-BEAN	100
10A	EFI NO.2	Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
10A	ETCS	Cruise Control	232
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
10A	HEAD(HI LH)	Headlight	128
		Multiplex Communication System-BEAN	100
10A	HEAD(HI RH)	Combination Meter	366
		Headlight	128
		Multiplex Communication System-BEAN	100
10A	HEAD(LO LH)	Combination Meter	366
		Front Fog Light	134
		Headlight	128
		Multiplex Communication System-BEAN	100
10A	HEAD(LO RH)	Headlight	128
		Multiplex Communication System-BEAN	100
10A	HORN	Door Lock Control and Theft Deterrent	202
		Horn	294
		Multiplex Communication System-BEAN	100
10A	MIR HEATER	Mirror Heater	316
10A	STOP	ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control	238
		Cruise Control	232
		Electric Modulated Air Suspension	246
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
		Front Wiper and Washer (w/ Rain Sensor)	180
		Kinetic Dynamic Suspension System	254
		Shift Lock	286
		Stop Light	166
		Trailer Towing	308
15A	AC INV	Power Outlet (115V)	290
15A	A/F HEATER	Engine Control	78
15A	FR FOG	Front Fog Light	134
15A	TRN-HAZ	Trailer Towing	308
		Turn Signal and Hazard Warning Light	144
20A	CDS FAN	Condenser Fan	374
20A	D FR P/W	Door Lock Control and Theft Deterrent	202
		Multiplex Communication System-BEAN	100

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

J POWER SOURCE (Current Flow Chart)

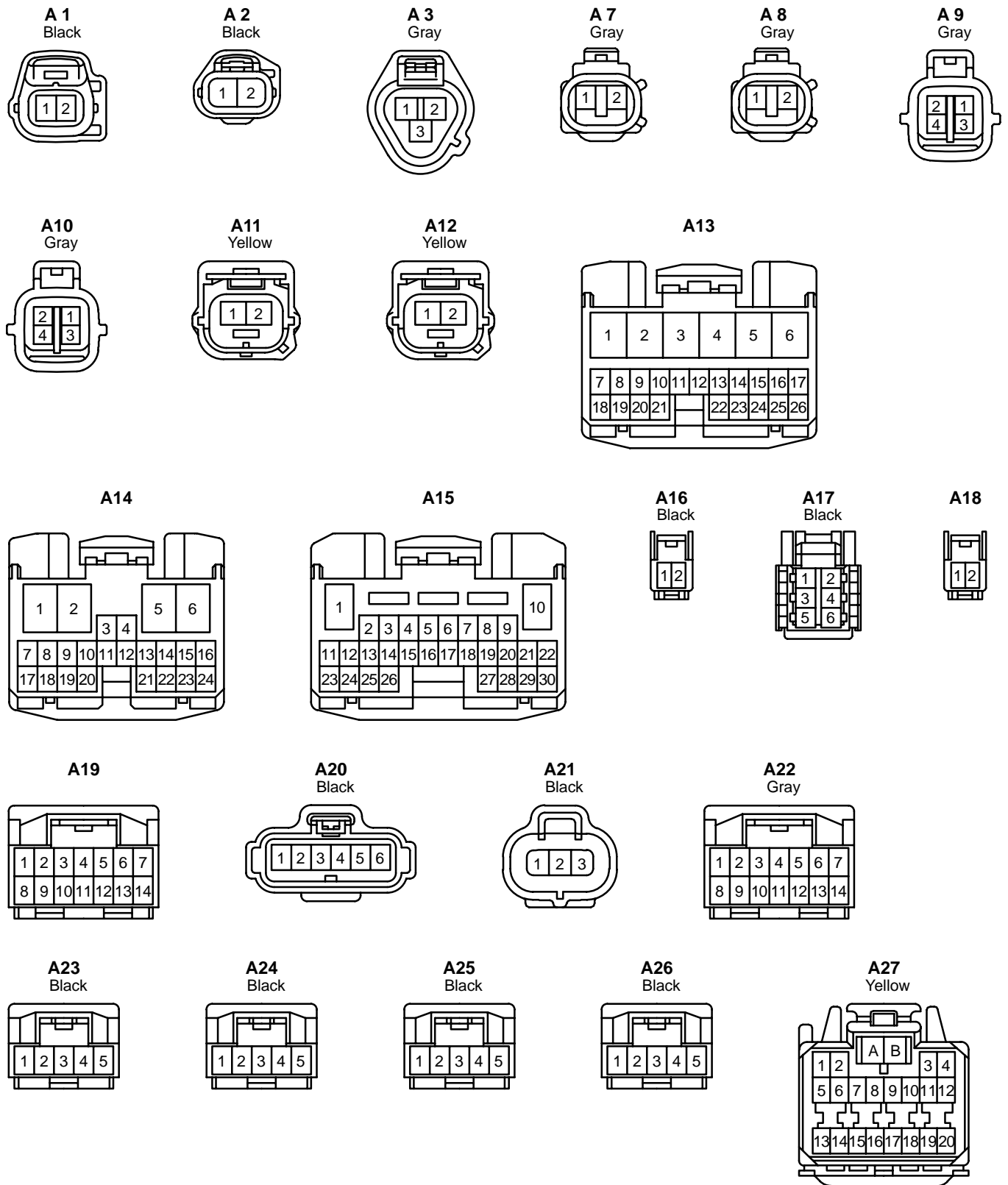
Fuse		System	Page
20A	D FR P/W	Power Window	194
		Wireless Door Lock Control	212
20A	EFI	Cruise Control	232
		Electronically Controlled Transmission and A/T Indicator	222
		Engine Control	78
20A	RADIO NO.1	Audio System (w/ Rear Seat Entertainment System)	338
		Audio System (w/o Rear Seat Entertainment System)	356
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
20A	SEAT HEATER	Seat Heater	306
25A	DR/LCK	Door Lock Control and Theft Deterrent	202
		Moon Roof	268
		Multiplex Communication System–BEAN	100
		Power Seat (Driver's Seat)	298
		Power Tilt and Power Telescopic	280
		Power Window	194
		Remote Control Mirror	274
		Wireless Door Lock Control	212
30A	ABS SOL	ABS, TRAC, VSC, Downhill Assist Control and Hill–Start Assist Control	238
30A	AM2	Charging	76
		Combination Meter	366
		Engine Control	78
		Ignition	72
		Starting	70
30A	BATT CHG	Trailer Towing	308
30A	DEFOG	Engine Control	78
		Rear Window Defogger	314
30A	RADIO NO.2	Audio System (w/ Rear Seat Entertainment System)	338
		Audio System (w/o Rear Seat Entertainment System)	356
		LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System	322
		LEXUS Navigation System without Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System	330
30A	RR A/C	Rear Air Conditioning	388
30A	TOWING	Trailer Towing	308
30A	TOWING BRK	Trailer Towing	308
40A	ABS MTR	ABS, TRAC, VSC, Downhill Assist Control and Hill–Start Assist Control	238
40A	TOWING	Trailer Towing	308

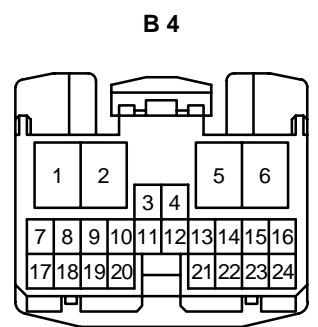
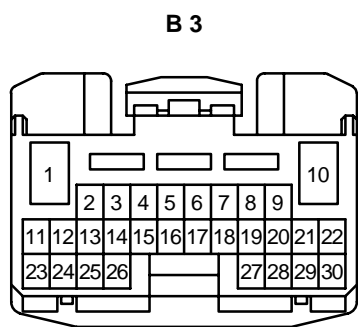
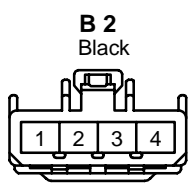
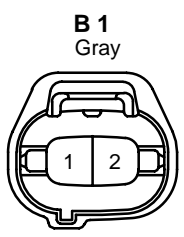
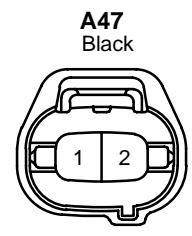
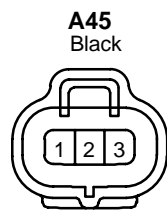
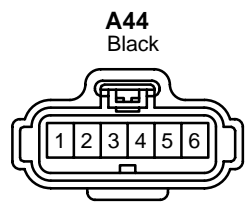
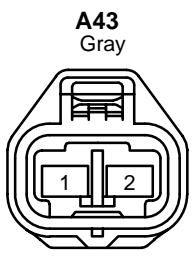
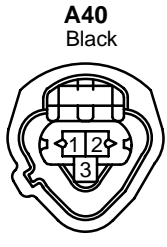
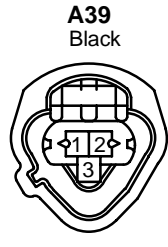
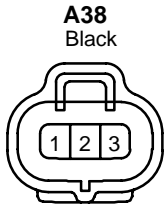
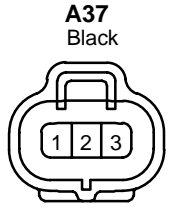
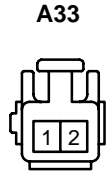
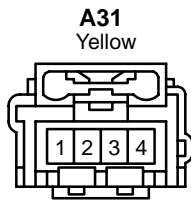
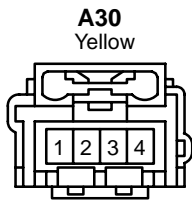
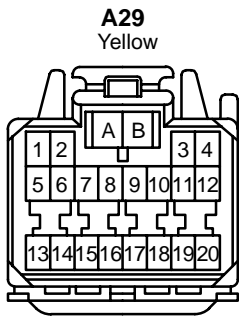
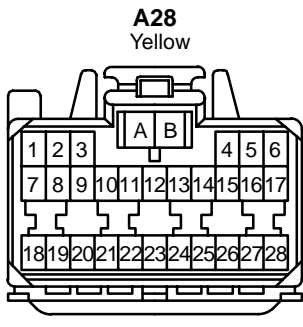
* These are the page numbers of the first page on which the related system is shown.

Fuse		System	Page
50A	AIR SUS	Electric Modulated Air Suspension	246
50A	AM1	Charging	76
		Engine Control	78
50A	A/PUMP	Engine Control	78
50A	HEATER	Air Conditioning	376
50A	J/B	Automatic Light Control	136
		Door Lock Control and Theft Deterrent	202
		Light Auto Turn Off System	140
		Multiplex Communication System–BEAN	100
		Taillight and Illumination	158
		Wireless Door Lock Control	212
140A	ALT	Engine Control	78
		Rear Window Defogger	314
		Charging	76

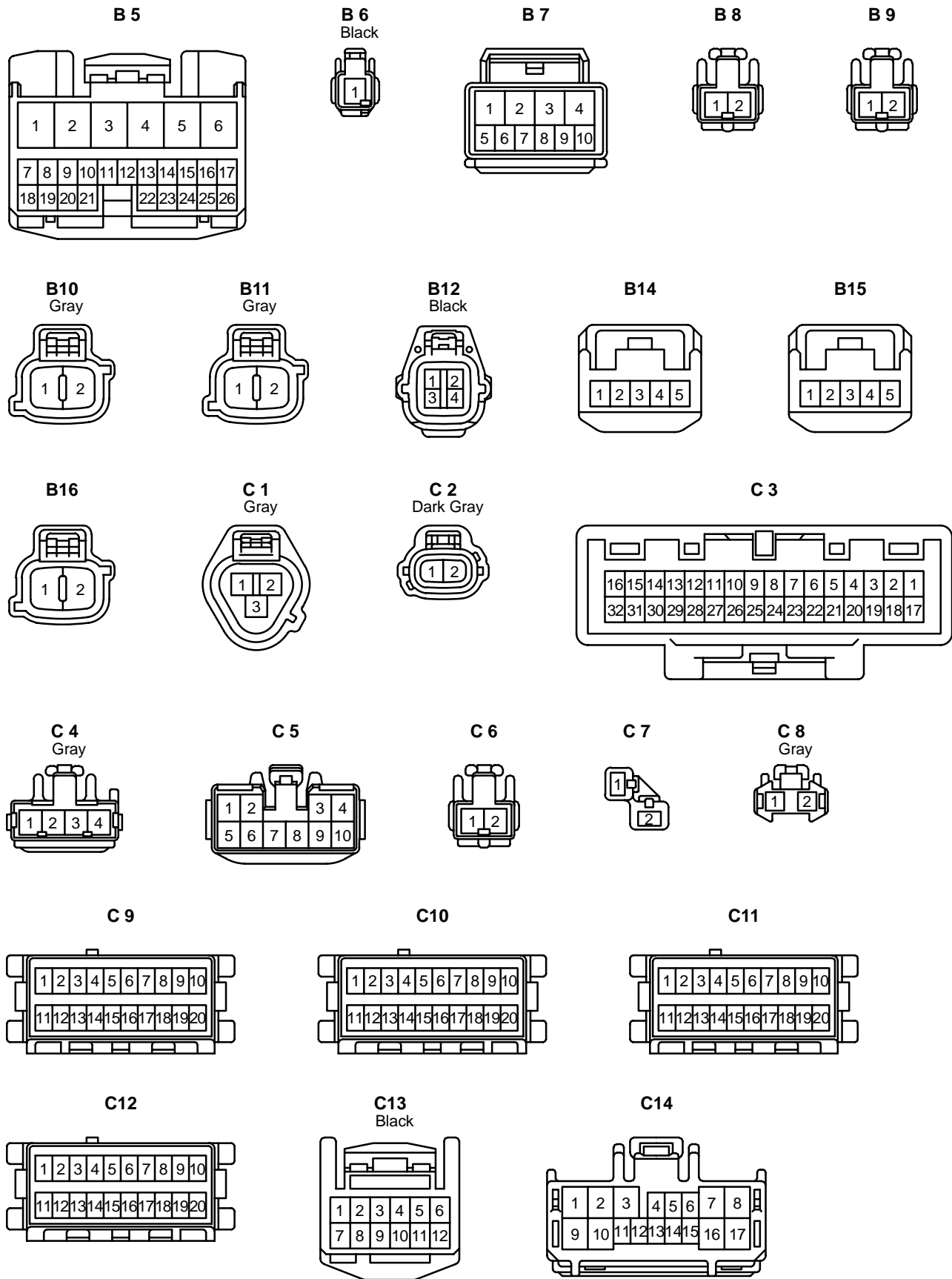
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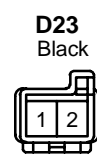
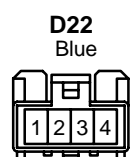
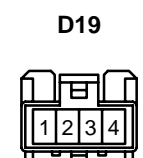
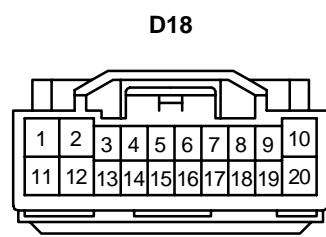
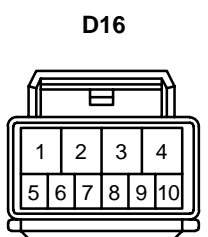
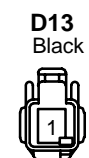
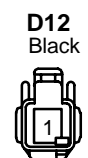
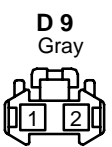
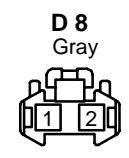
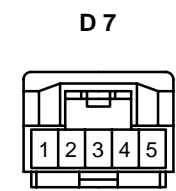
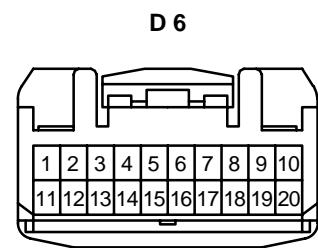
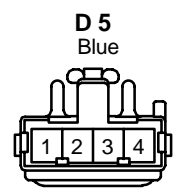
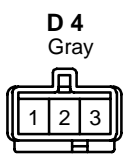
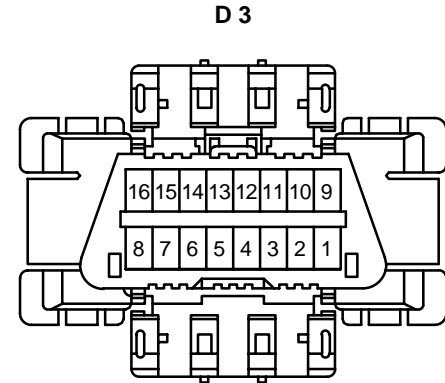
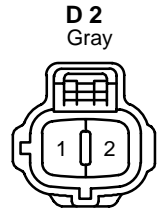
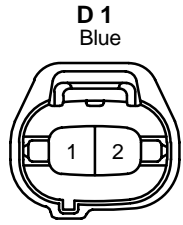
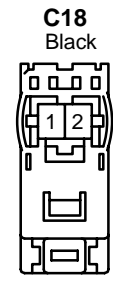
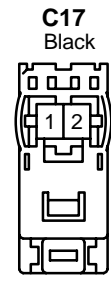
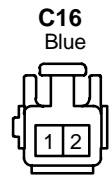
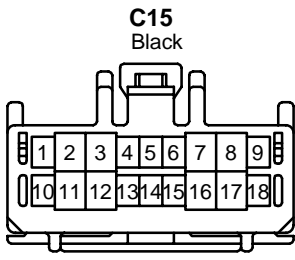
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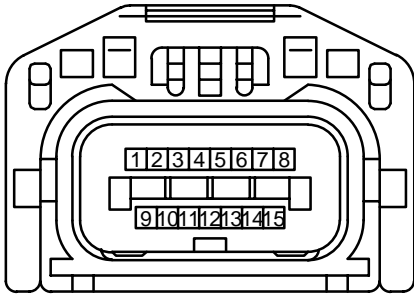
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K CONNECTOR LIST

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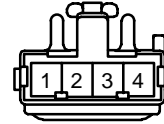
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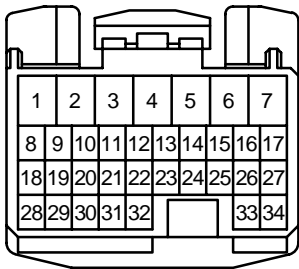
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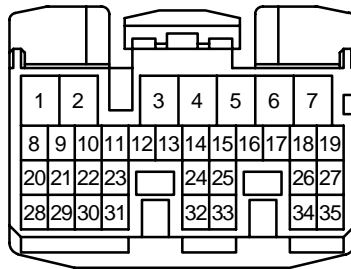
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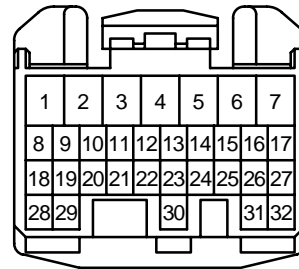
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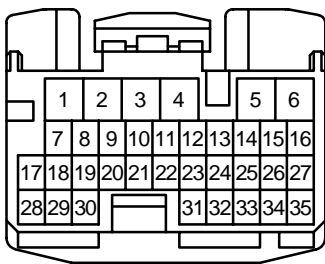
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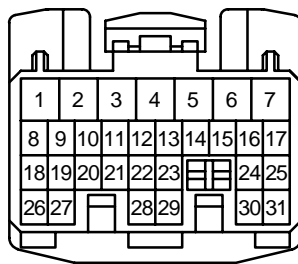
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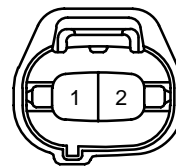
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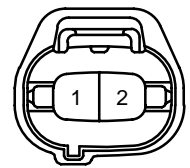
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F 2
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F 3
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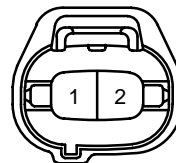
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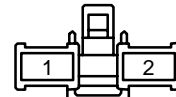
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F 6
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F 7
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F 9



F 10



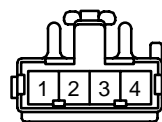
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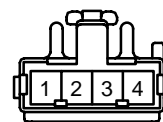
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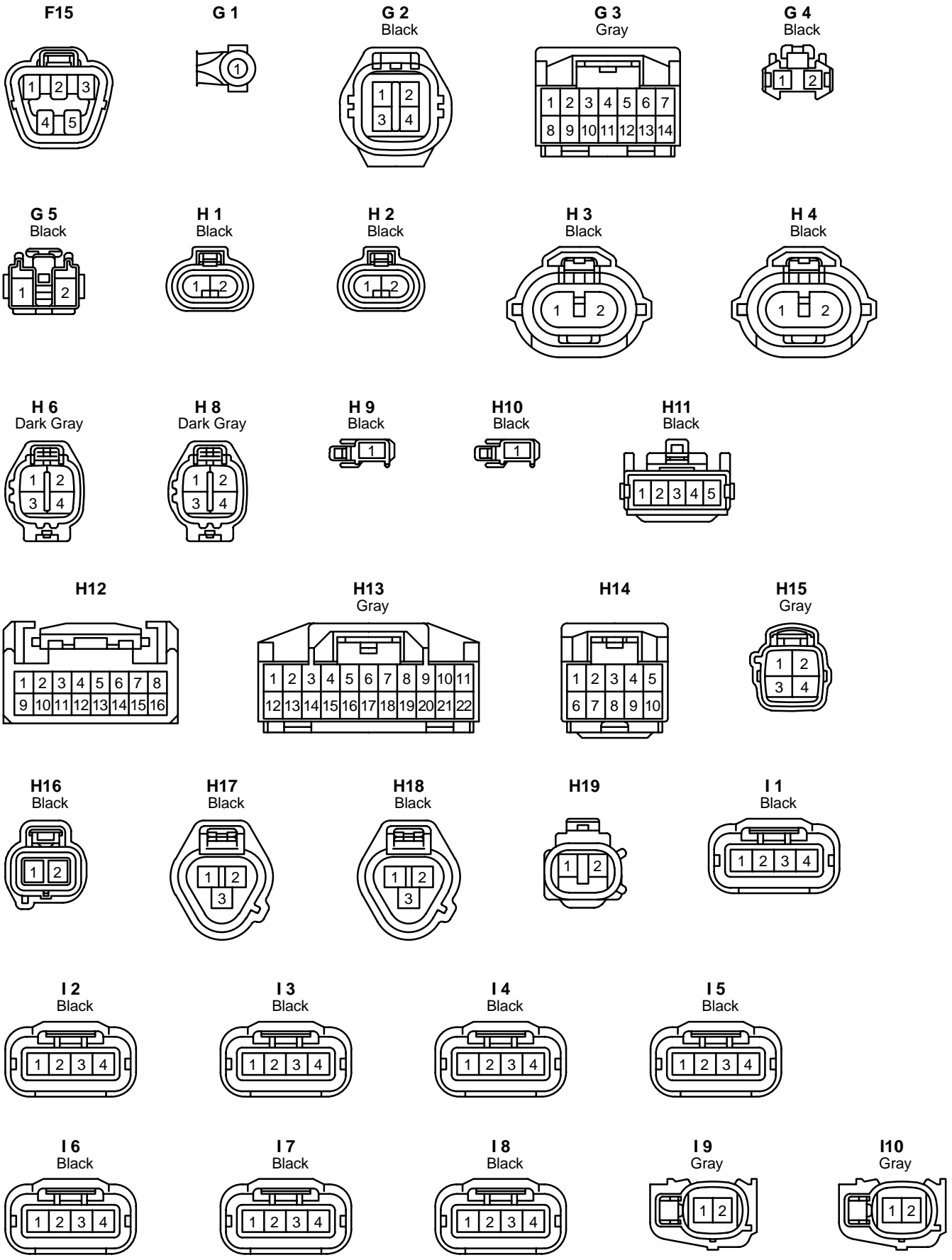


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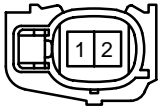
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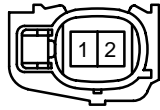


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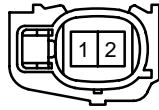
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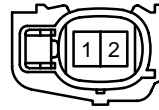
I12
Gray



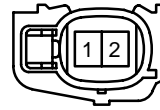
I13
Gray



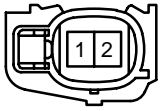
I14
Gray



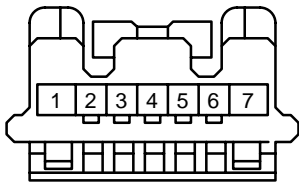
I15
Gray



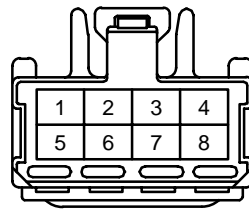
I16
Gray



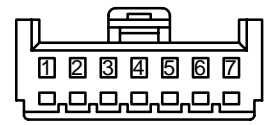
I17
Black



I18



I19
Black



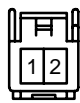
I20



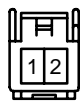
I21



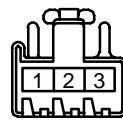
I22



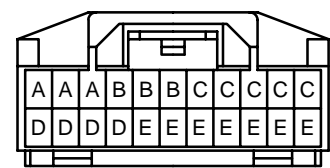
I23



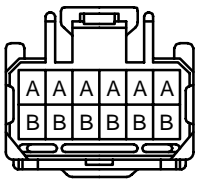
I24



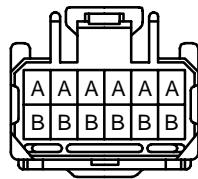
J 1



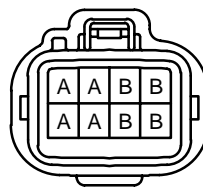
J 2
Blue



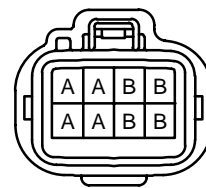
J 3
Blue



J 4
Dark Gray



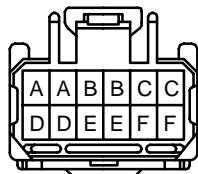
J 5
Dark Gray



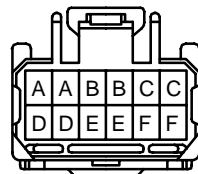
J 6
Dark Gray



J 7



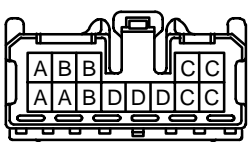
J 8



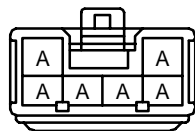
J 9
Black



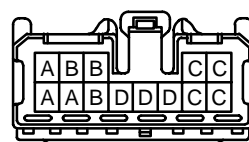
J10
Blue



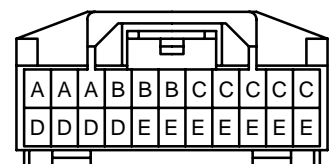
J11



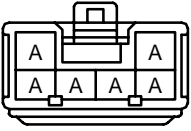
J12
Blue



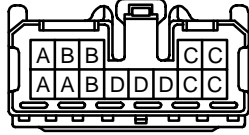
J13



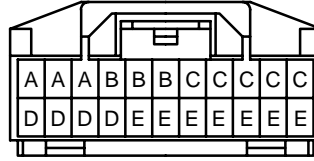
J14



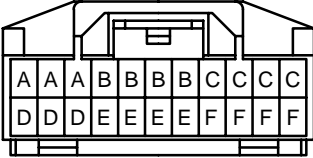
J15
Blue



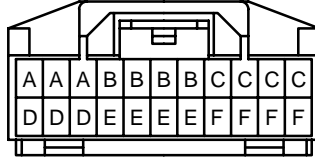
J16



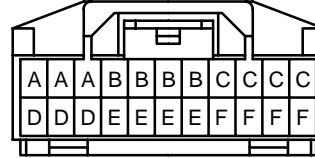
J17
Black



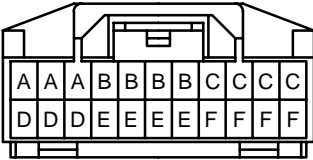
J18
Black



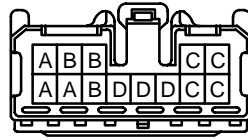
J19
Black



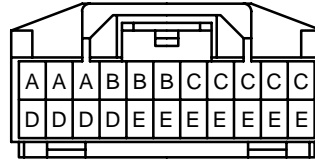
J20
Black



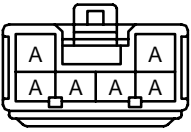
J21
Blue



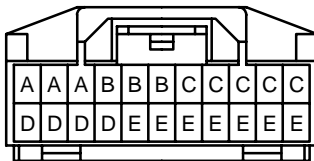
J22



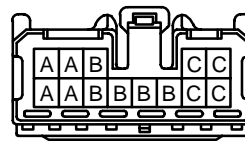
J23



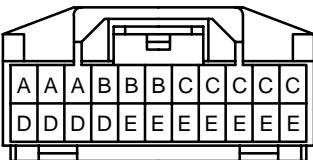
J24



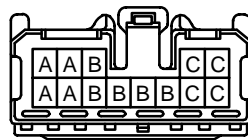
J25



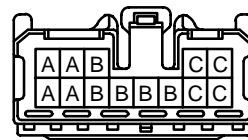
J26



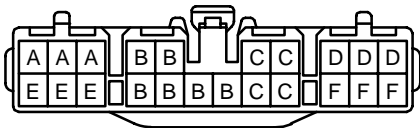
J28



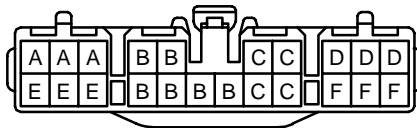
J29



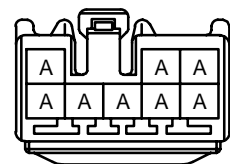
J30



J31

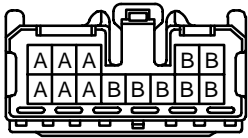


J32

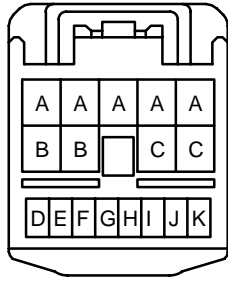


K CONNECTOR LIST

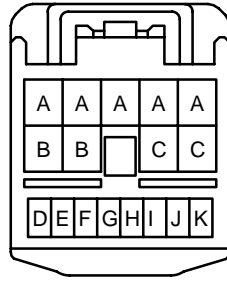
J33



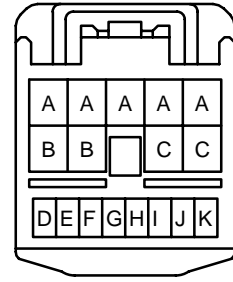
J34



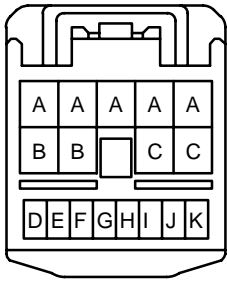
J35



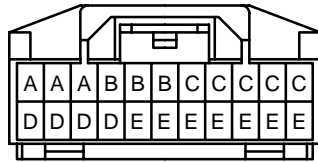
J36



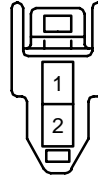
J37



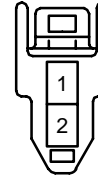
J38



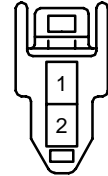
J39



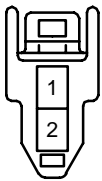
J40



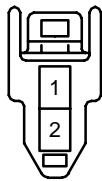
J41



J42



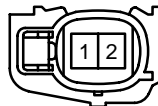
J43



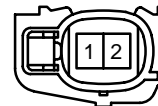
J44



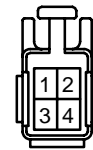
K 1
Black



K 2
Gray



K 3



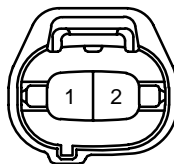
L 1



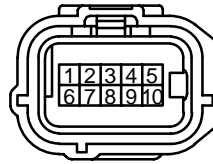
L 2



L 3
Black



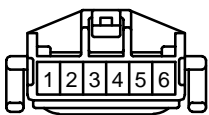
L 4
Black



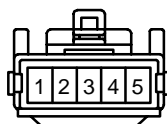
M 1
Black



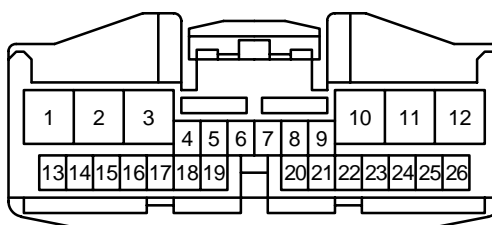
M 3
Black



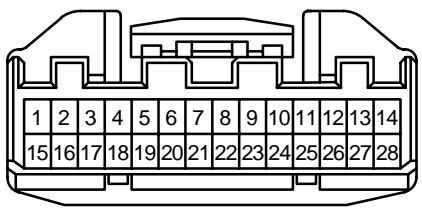
M 4
Black



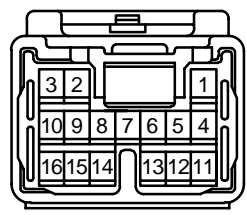
M 5



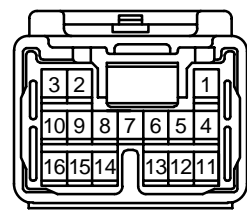
M 6



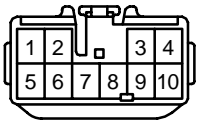
M10



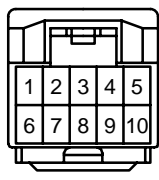
M11



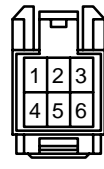
M12



M13



M14



N 1
Gray



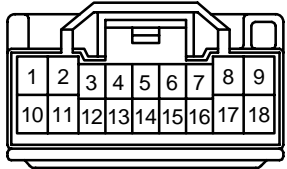
N 2
Gray



N 3
Gray



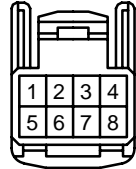
N 4



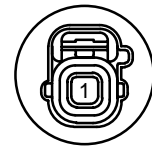
N 5



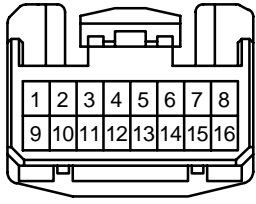
N 6
Black



O 1
Gray



O 2



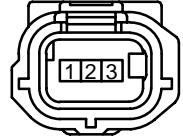
O 3
Black



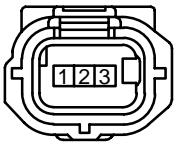
O 4
Gray



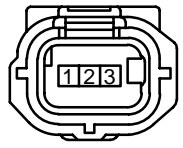
O 5
Black



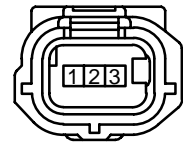
O 6
Gray



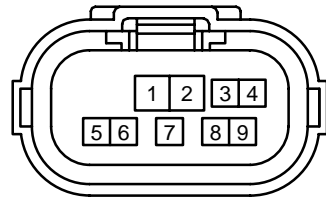
O 7
Gray



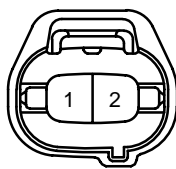
O 8
Black



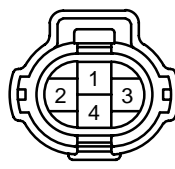
P 1
Gray



P 2
Gray



P 3
Dark Gray



P 4
Black



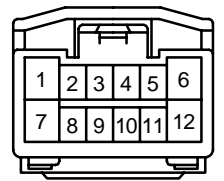
P 5



P 6
Black

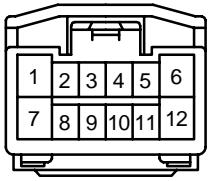


P 7

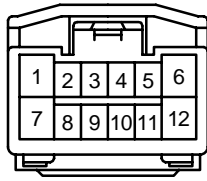


K CONNECTOR LIST

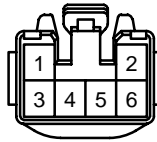
P 8



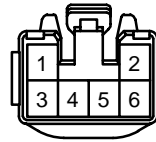
P 9



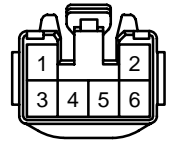
P10
Black



P11
Black



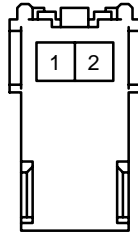
P12
Black



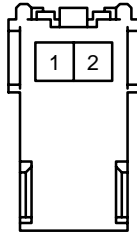
P13
Black



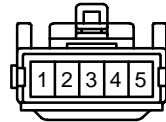
P14
Yellow



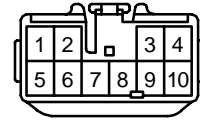
P15
Yellow



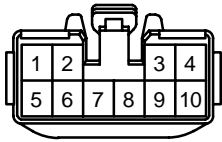
P16



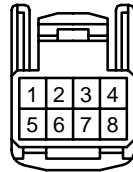
P18
Black



P19



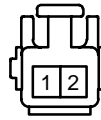
P20



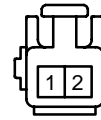
P21
Black



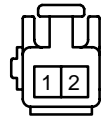
P22
Black



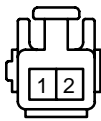
P23
Black



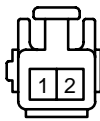
P24
Black



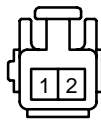
P25
Black



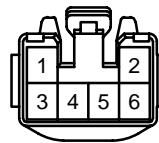
P26



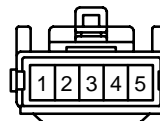
P27



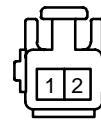
P28



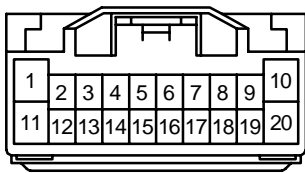
P29



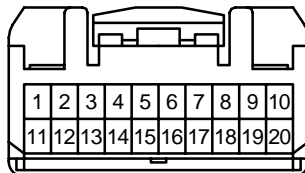
P30
Black



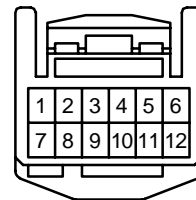
R 1



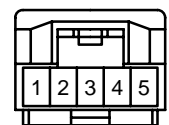
R 2



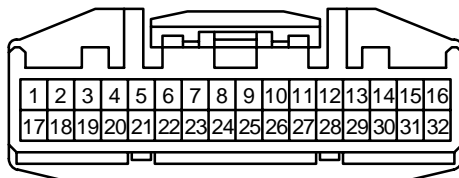
R 3



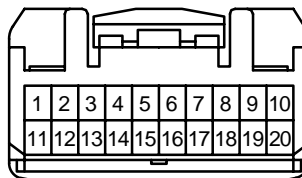
R 4



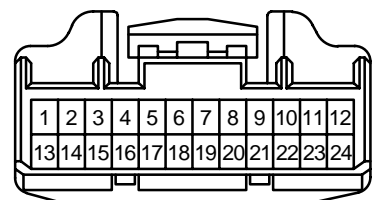
R 5

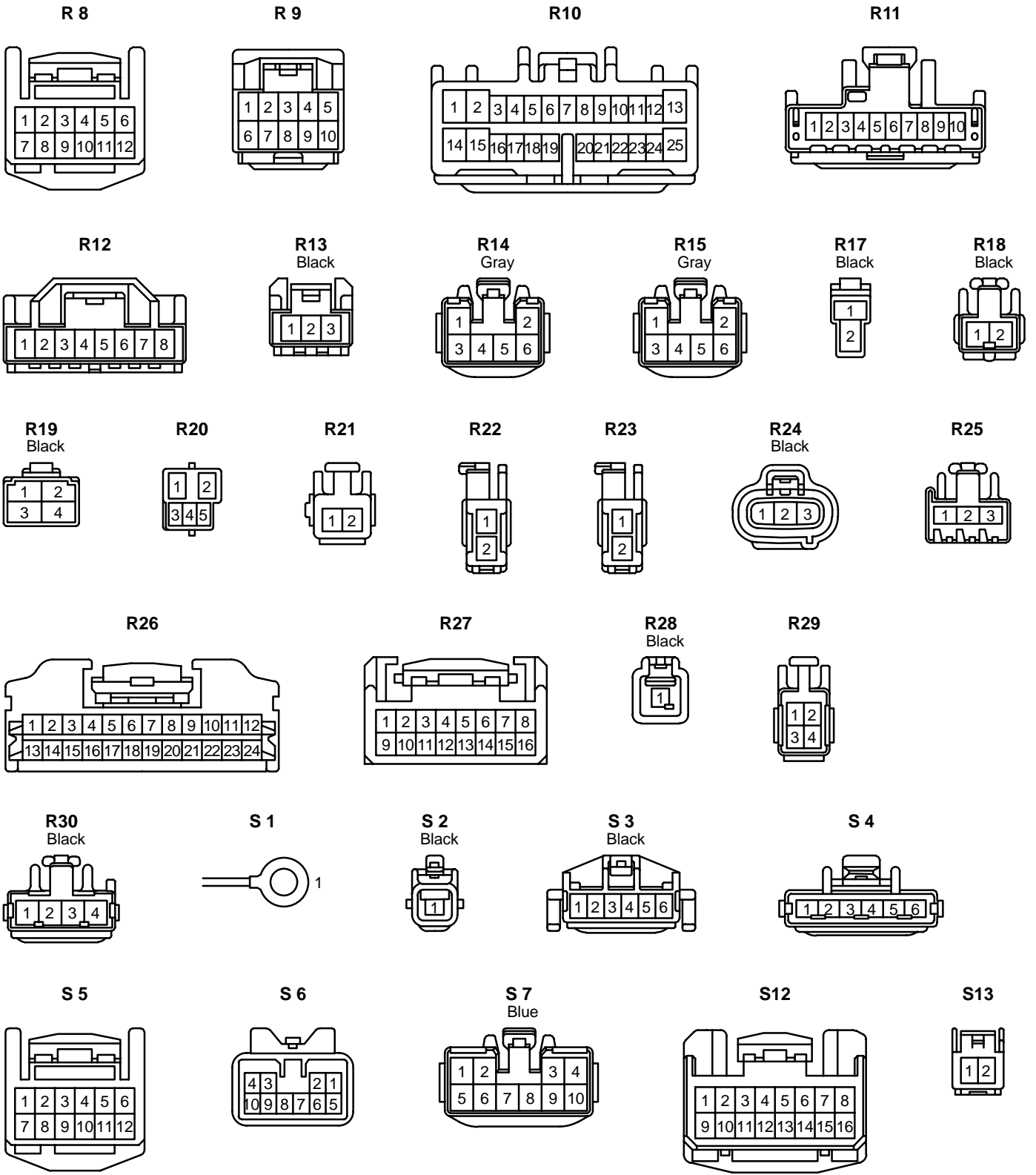


R 6



R 7



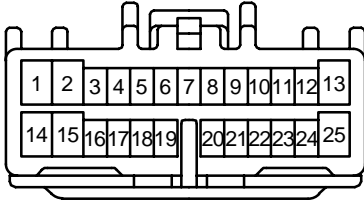


K CONNECTOR LIST

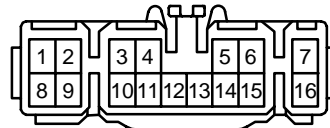
S14



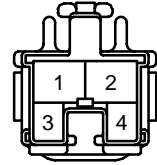
S15



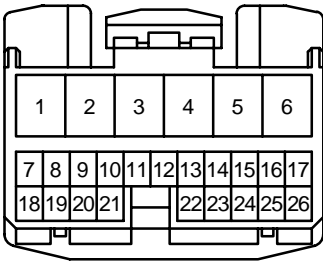
S16



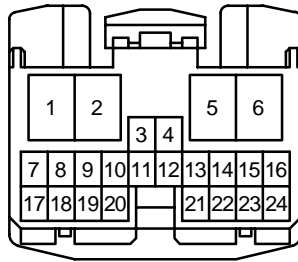
S17
Blue



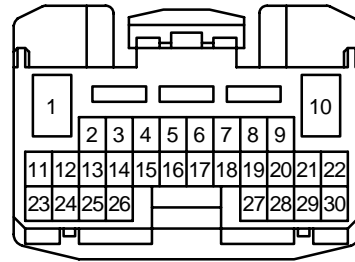
S18



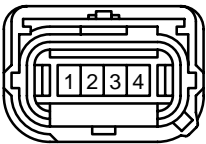
S19



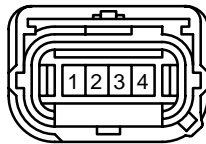
S20



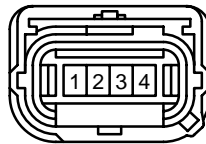
S21
Yellow



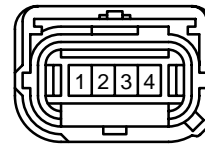
S22
Yellow



S23
Yellow



S24
Yellow



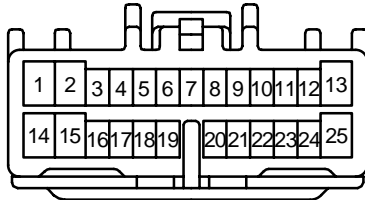
S25



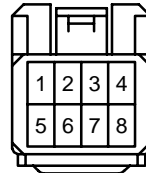
S26



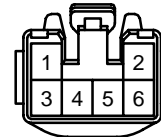
S27



S28



S29



S30



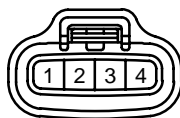
S31
Yellow



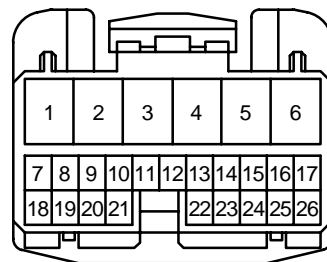
S32
Yellow



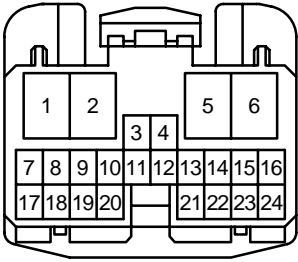
S33
Black



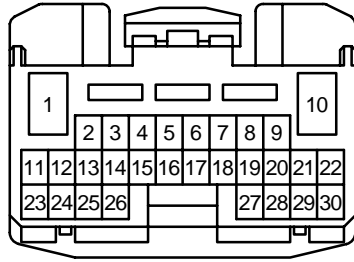
S34
Black



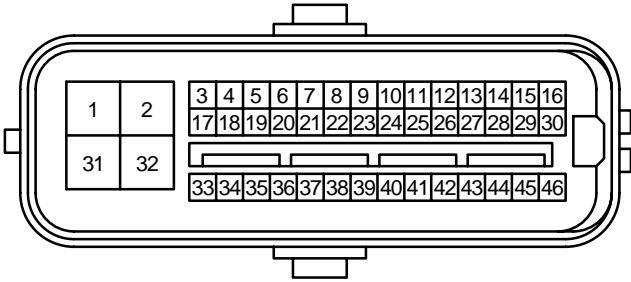
S35
Black



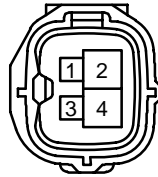
S36



S37
Black



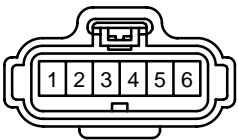
S38
Black



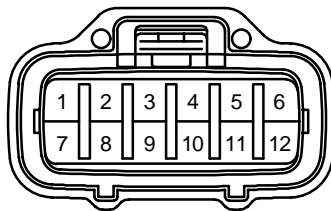
T 1
Black



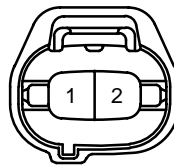
T 2
Black



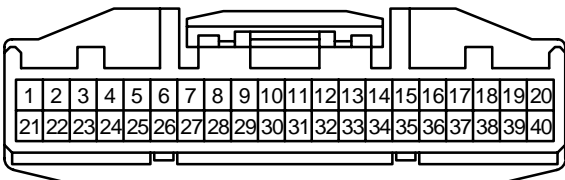
T 3
Black



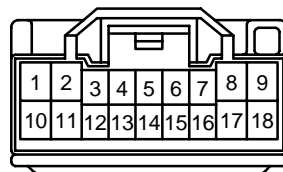
T 4
Black



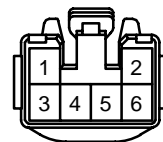
T 5



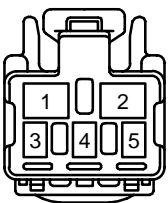
T 6



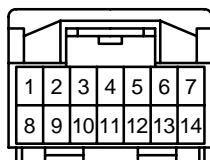
T 7



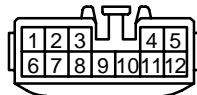
T 8



T 9



T10



T11
Black

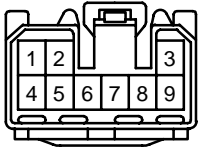


T12
Black

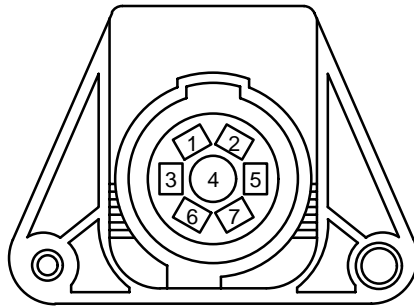


K CONNECTOR LIST

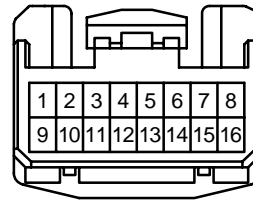
T13



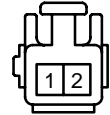
T14
Black



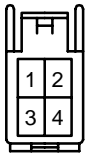
T15



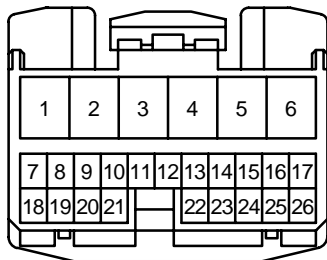
T16
Blue



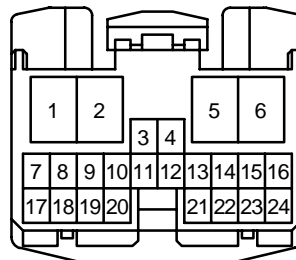
T17



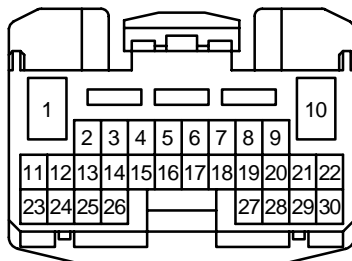
T18
Black



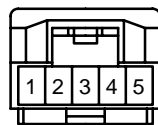
T19



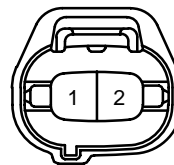
T20



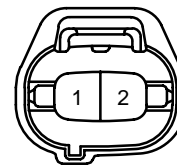
T21



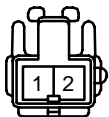
V 1
Black



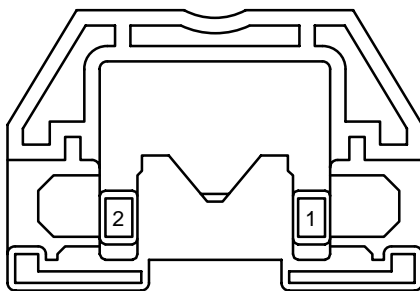
V 2
Black



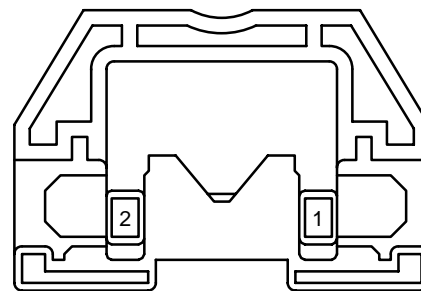
V 3
Black



V 4



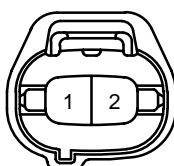
V 5



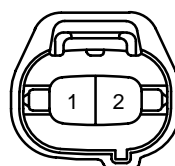
V 7



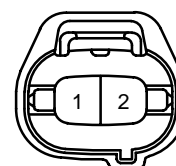
V 9
Black



V10
Brown



V11
Brown



V12
Dark Gray



V13
Dark Gray



W 1
Black



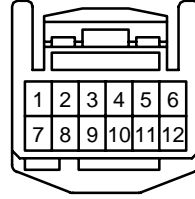
W 2
Dark Gray



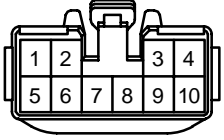
W 3
Gray



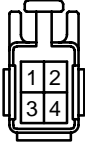
W 4



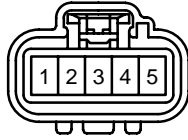
W 5
Blue



W 6



Y 1
Black



L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	A43	Air Injection Control Driver	90980-12068
A 2	A/C Condenser Fan Motor	90980-11237	A44	Air Injection Control Driver	90980-11858
A 3	A/C Lock Sensor	90980-11016	A45	Air Pressure Sensor	90980-10845
	A/C Magnetic Clutch		A46	Air Pump	90980-11032
A 7	ABS Speed Sensor Front LH	90980-11003	A47	Air Switching Valve	90980-11149
A 8	ABS Speed Sensor Front RH		B 1	Brake Fluid Level Warning SW	90980-11156
A 9	Absorber Control Actuator Front LH	90980-11929	B 2	Blower Motor Linear Controller	90980-11676
A10	Absorber Control Actuator Front RH		B 3	Body ECU	90980-12151
A11	Airbag Sensor Front LH	90980-11856	B 4	Body ECU	90980-12149
A12	Airbag Sensor Front RH		B 5	Body ECU	90980-12150
A13	A/C Control Assembly (w/o LEXUS Navigation System)	90980-12150	B 6	Back Door Courtesy SW	90980-10871
	A/C ECU (w/ LEXUS Navigation System)		B 7	Back Door Key Lock and Unlock SW	90980-12226
A14	A/C Control Assembly (w/o LEXUS Navigation System)	Back Door Lock Motor			
	A/C ECU (w/ LEXUS Navigation System)	Back Door Unlock Detection SW			
A15	A/C Control Assembly (w/o LEXUS Navigation System)	90980-12151	B 8	Back Door Speaker LH	90980-10860
	A/C ECU (w/ LEXUS Navigation System)		B 9	Back Door Speaker RH	
A16	A/C Room Temp. Sensor	90980-11918	B10	Back-Up Light LH	90980-11019
A17	A/C Solar Sensor	90980-12056	B11	Back-Up Light RH	
	Automatic Light Control Sensor		B12	Buckle SW LH	90980-10942
A18	A/C Thermistor	90980-11918		Seat Position Sensor	
A19	A/T Shift Indicator	90980-11911	B14	Buckle SW LH	90980-12366
A20	Accel Position Sensor	90980-11858	B15	Buckle SW RH	
A21	Acceleration Control Sensor Front	90980-10845	B16	Buckle SW RH	90980-11019
A22	Accessory Meter	90980-11911	C 1	Camshaft Position Sensor	90980-11016
A23	Air Inlet Control Servo Motor	90980-11909	C 2	Crankshaft Position Sensor	90980-11162
A24	Air Mix Control Servo Motor LH		C 3	CD Automatic Changer	90980-12262
A25	Air Mix Control Servo Motor RH		C 4	Center Diff. Lock Control SW	90980-11013
A26	Air Vent Mode Control Servo Motor		C 5	Center Diff. Lock ECU	90980-10801
A27	Airbag Sensor Assembly	82824-50160	C 6	Center Speaker	90980-10860
A28	Airbag Sensor Assembly	90980-11872	C 7	Cigarette Lighter	90980-10760
A29	Airbag Sensor Assembly	82824-50150	C 8	Cigarette Lighter Illumination	90980-11148
A30	Airbag Squib (Front Passenger Airbag Assembly)	90980-12160	C 9	Combination Meter	82824-35030
	A31		Airbag Squib (Steering Wheel Pad)	C10	Combination Meter
A32	Antenna Amplifier	90980-11146	C11	Combination Meter	82824-35030
A33	Ashtray Illumination	90980-10825	C12	Combination Meter	82824-35040
A34	ABS Speed Sensor Rear	90980-10942	C13	Combination SW	90980-12183
A35	Absorber Control Actuator Rear LH	90980-11930	C14	Combination SW	90980-11672
A36	Absorber Control Actuator Rear RH		C15	Combination SW	90980-11594
A37	Acceleration Control Sensor Rear	90980-10845	C16	Console Box Illumination	90980-10825
A38	Acceleration Sensor		C17	Curtain Shield Airbag Squib LH	90980-12219
A39	Accumulator Pressure Sensor No.1	90980-11451	C18	Curtain Shield Airbag Squib RH	
A40	Accumulator Pressure Sensor No.2		C19	Camshaft Timing Oil Control Valve LH	90980-11162
A41	Air Fuel Ratio Sensor (Bank 1 Sensor 1)	90980-10869	C20	Camshaft Timing Oil Control Valve RH	
A42	Air Fuel Ratio Sensor (Bank 2 Sensor 1)		D 1	Detection SW (Transfer L4 Position)	90980-11156
			D 2	Detection SW (Transfer Neutral Position)	90980-10923
			D 3	Data Link Connector3	90980-11978

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

Code	Part Name	Part Number	Code	Part Name	Part Number	
D 4	Diode (Back-Up Light)	90980-11071	F 6	Fuel Pump Resistor	90980-11156	
D 5	Downhill Assist Control SW	90980-11013	F 7	Front Blower Motor	90980-10385	
D 6	DVD Player	90980-12259	F 9	Front Door Speaker LH	90980-10935	
D 7	Door Control Receiver	90980-11909	F10	Front Door Speaker RH		
D 8	Door Courtesy Light Front LH	90980-11148	F11	Front Door Squawker LH	90980-10860	
D 9	Door Courtesy Light Front RH					
D10	Door Courtesy Light Rear LH					
D11	Door Courtesy Light Rear RH					
D12	Door Courtesy SW Front LH	90980-10871	F12	Front Door Squawker RH	90980-11013	
D13	Door Courtesy SW Front RH					
D14	Door Courtesy SW Rear LH					
D15	Door Courtesy SW Rear RH					
D16	Door Key Lock and Unlock SW Front LH	90980-12226	F15	Fuel Pump	90980-11077	
	Door Lock Motor Front LH		Fuel Sender			
	Door Unlock Detection SW Front LH		G 1	Generator	90980-09365	
D17	Door Key Lock and Unlock SW Front RH		G 2	Generator	90980-11964	
	Door Lock Motor Front RH		G 3	Gateway ECU	90980-11911	
	Door Unlock Detection SW Front RH		G 4	Glove Box Light	90980-11148	
D18	Door Lock Control SW LH	90980-12166	G 5	Glove Box Light SW	90980-11098	
	Power Window Master SW		H 1	Headlight High LH	90980-11095	
	D19	Door Lock Control SW RH	90980-11950	H 2		Headlight High RH
D20	Door Lock Motor Rear LH	90980-12226	H 3	Headlight Low LH	82824-60460	
	Door Unlock Detection SW Rear LH		H 4	Headlight Low RH		
D21	Door Lock Motor Rear RH		90980-11950	H 6	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980-11028
	Door Unlock Detection SW Rear RH			H 8	Heated Oxygen Sensor (Bank 2 Sensor 2)	
D22	Driving Position Memory SW	90980-11950	H 9	Horn (High)	90980-10619	
D23	Diode (Rear Interior Light)	90980-10962	H10	Horn (Low)		
E 1	Electronically Controlled Transmission Solenoid	90980-12293	H11	Hazard SW	90980-10789	
E 2	Engine Coolant Temp. Sensor	90980-10735	H12	Headphone Terminal	90980-12156	
E 3	Engine Hood Courtesy SW	90980-10942		Video Terminal		
E 4	Electronically Controlled Transmission Pattern Select SW	90980-11013	H13	Heater Control SW	90980-11915	
E 5	Engine Control Module	90980-12527	H14	Height Control and Suspension SW	90980-11923	
E 6	Engine Control Module	90980-12528	H15	Height Control Compressor	90980-10990	
E 7	Engine Control Module	90980-12526	H16	Height Control Exhaust Valve	90980-11859	
E 8	Engine Control Module	90980-12146	H17	Height Control Sensor Rear LH	90980-11016	
E 9	Engine Control Module	90980-12142	H18	Height Control Sensor Rear RH		
F 1	Front Fog Light LH	90980-11156	H19	High Mounted Stop Light	90980-11003	
F 2	Front Fog Light RH					
F 3	Front Parking Light LH	90980-10942	I 1	Ignition Coil and Igniter No.1	90980-11885	
	Front Side Marker Light LH		I 2	Ignition Coil and Igniter No.2		
	Front Turn Signal Light LH		I 3	Ignition Coil and Igniter No.3		
F 4	Front Parking Light RH		I 4	Ignition Coil and Igniter No.4		
	Front Side Marker Light RH		I 5	Ignition Coil and Igniter No.5		
	Front Turn Signal Light RH		I 6	Ignition Coil and Igniter No.6		
F 5	Front Wiper Motor	90980-11599	I 7	Ignition Coil and Igniter No.7		
			I 8	Ignition Coil and Igniter No.8		
			I 9	Injector No.1	90980-11875	
			I10	Injector No.2		
			I11	Injector No.3		
			I12	Injector No.4		
			I13	Injector No.5		

L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number	
I14	Injector No.6	90980-11875	J34	Junction Connector	90980-12374	
I15	Injector No.7		J35	Junction Connector		
I16	Injector No.8		J36	Junction Connector		
I17	Ignition Key Cylinder Light	90980-12092	J37	Junction Connector		90980-11915
	Transponder Key Amplifier		J38	Junction Connector		
I18	Ignition SW	90980-11615	J39	Junction Connector	90980-12355	
I19	Inner Mirror	90980-11794	J40	Junction Connector		
I20	Inside Handle Illumination Front LH	90980-12063	J41	Junction Connector		
I21	Inside Handle Illumination Front RH		J42	Junction Connector		
I22	Inside Handle Illumination Rear LH		J43	Junction Connector		
I23	Inside Handle Illumination Rear RH		J44	Junction Connector	90980-10871	
I24	Interior Light	90980-12321	K 1	Knock Sensor (Bank 1)	90980-11875	
J 1	Junction Connector	90980-11915	K 2	Knock Sensor (Bank 2)		
J 2	Junction Connector	90980-11661	K 3	Key Interlock Solenoid	90980-10795	
J 3	Junction Connector			Unlock Warning SW		
J 4	Junction Connector	90980-10891	L 1	License Plate Light LH	90980-11148	
J 5	Junction Connector		L 2	License Plate Light RH		
J 6	Junction Connector		90980-11661	L 3	Low Pressure Tank Valve	90980-11156
J 7	Junction Connector	L 4		Leak Detection Pump Assembly	90980-12380	
J 8	Junction Connector	90980-10803	M 1	Mass Air Flow Meter	90980-12292	
J 9	Junction Connector	90980-10803	M 3	Main SW	90980-10964	
J10	Junction Connector	90980-11542	M 4	Mirror Heater SW	90980-10789	
J11	Junction Connector	90980-10976	M 5	Multi-Display	90980-12203	
J12	Junction Connector	90980-11542	M 6	Multi-Display	90980-12410	
J13	Junction Connector	90980-11915	M10	Mirror Heater LH	90980-11573	
J14	Junction Connector	90980-10976		Remote Control Mirror LH		
J15	Junction Connector	90980-11542	M11	Mirror Heater RH		
J16	Junction Connector	90980-11915		Remote Control Mirror RH		
J17	Junction Connector		M12	Moon Roof Control ECU and Motor	90980-10997	
J18	Junction Connector			M13	Coin Box Illumination	90980-11923
J19	Junction Connector				Moon Roof Control SW	
J20	Junction Connector	90980-11542		Personal Light		
J21	Junction Connector	90980-11542	M14	Multi-Display	90980-12012	
J22	Junction Connector	90980-11915	N 1	Noise Filter No.1	90980-10843	
J23	Junction Connector	90980-10976	N 2	Noise Filter No.2		
J24	Junction Connector	90980-11915	N 3	Noise Filter (Condenser Fan)		
J25	Junction Connector	90980-11542	N 4	Navigation ECU	90980-11973	
J26	Junction Connector	90980-11915	N 5	Navigation ECU	90980-11923	
J28	Junction Connector	90980-11542	N 6	Navigation ECU	90980-12221	
J29	Junction Connector		O 1	Oil Pressure SW	90980-11363	
J30	Junction Connector	90980-11238	O 2	Overhead J/B	90980-12155	
J31	Junction Connector		O 3	Occupant Classification ECU	90980-12356	
J32	Junction Connector	90980-11686	O 4	Occupant Classification ECU	90980-12357	
J33	Junction Connector	90980-11542	O 5	Occupant Detection Sensor Front LH	90980-12353	

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
O 6	Occupant Detection Sensor Front RH	90980-12354	R 7	Rear Seat Entertainment ECU	90980-12200
O 7	Occupant Detection Sensor Rear LH		R 8	Rear Seat Entertainment ECU	90980-12183
O 8	Occupant Detection Sensor Rear RH	90980-12353	R 9	Rear Seat Entertainment ECU	90980-11923
P 1	Park/Neutral Position SW	90980-12362	R10	Remote Control Mirror ECU	90980-11877
P 2	Pressure SW	90980-11149	R11	Remote Control Mirror SW	90980-11657
P 3	Pressure SW	90980-10943	R12	Rheostat	90980-11989
P 4	Parking Brake SW	90980-10871	R13	Rain Sensor	90980-11987
P 5	Power Outlet (Front)	90980-10760	R14	Rear Combination Light LH	90980-10797
P 6	Power Outlet (115V)	90980-10601	R15	Rear Combination Light RH	
P 7	Power Window Control SW Front RH	90980-11947	R17	Rear Cooler Blower Motor	90980-10214
P 8	Power Window Control SW Rear LH		R18	Rear Cooler Magnetic Valve	90980-10860
P 9	Power Window Control SW Rear RH		R19	Rear Cooler Power Transistor	90980-10171
P10	Power Window Motor Front LH	90980-10797	R20	Rear Cooler Relay	90980-10713
P11	Power Window Motor Front RH		R21	Rear Cooler Thermistor	90980-10825
P12	Power Window Motor Rear LH		R22	Rear Door Speaker LH	90980-10935
P13	Power Window Motor Rear RH		R23	Rear Door Speaker RH	
P14	Pretensioner LH	90980-12253	R24	Rear Height Control Valve	90980-11143
P15	Pretensioner RH		R25	Rear Interior Light	90980-12321
P16	Power Seat Control SW (Driver's Seat Lumbar Support Control)	90980-10789	R26	Rear Seat Audio Controller	90980-12267
P18	Power Seat Control SW (Front Passenger's Seat)	90980-10997	R27	Rear Seat Entertainment Display	90980-12156
P19	Power Seat ECU and SW	90980-10801	R28	Rear Window Defogger	90980-10870
P20	Power Seat ECU and SW	90980-12221	R29	Rear Wiper Motor	90980-10795
P21	Power Seat Motor (Driver's Seat Front Vertical Control)	90980-10825	R30	Roll Sensing Curtain Shield Airbag Cut Off SW	90980-11013
P22	Power Seat Motor (Driver's Seat Lifter Control)		S 1	Starter	90980-09585
P23	Power Seat Motor (Driver's Seat Lumbar Support Control)		S 2	Starter	90980-11400
P24	Power Seat Motor (Driver's Seat Reclining Control)		S 3	Seat Heater SW Front LH	90980-10964
P25	Power Seat Motor (Driver's Seat Slide Control)		S 4	Seat Heater SW Front RH	90980-10933
P26	Power Seat Motor (Front Passenger's Seat Reclining Control)		S 5	Shift Lock Control ECU	90980-12183
P27	Power Seat Motor (Front Passenger's Seat Slide Control)			Transmission Control SW	
P28	Passenger Airbag ON-OFF Indicator	90980-10797	S 6	Short Pin	90980-10800
	Passenger Seat Belt Warning Light		S 7	Short Pin	90980-10801
P29	Power Seat Control SW (Front Passenger's Seat Lumbar Support Control)	90980-10789	S12	Steering Sensor	90980-12155
P30	Power Seat Motor (Front Passenger's Seat Lumbar Support Control)	90980-10825	S13	Step Light LH	90980-12063
R 1	Radio and Player	90980-12038	S14	Step Light RH	
R 2	Radio and Player	90980-12259	S15	Stereo Component Amplifier	90980-11877
R 3	Radio and Player	90980-12183	S16	Stereo Component Amplifier	90980-10848
R 4	Rear Cooler SW	90980-11909	S17	Stop Light SW	90980-11118
R 5	Rear Seat Entertainment ECU	90980-12153	S18	Suspension Control ECU	90980-12150
R 6	Rear Seat Entertainment ECU	90980-12259	S19	Suspension Control ECU	90980-12149
			S20	Suspension Control ECU	90980-12151
			S21	Side Airbag Sensor Front LH	90980-12225
			S22	Side Airbag Sensor Front RH	
			S23	Side Airbag Sensor Rear LH	
			S24	Side Airbag Sensor Rear RH	

L PART NUMBER OF CONNECTORS

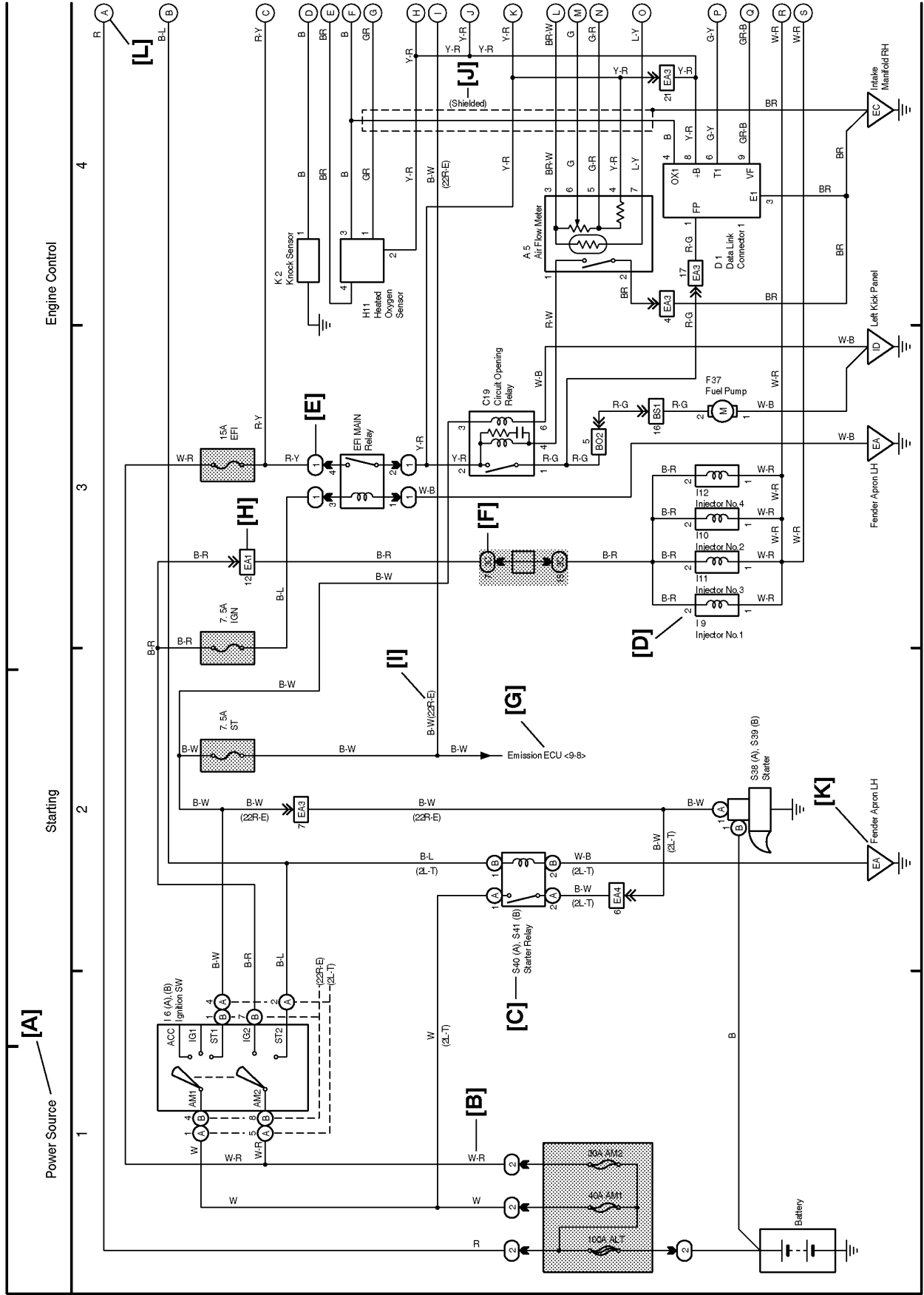
Code	Part Name	Part Number	Code	Part Name	Part Number
S25	Side Step Light LH	90980-11075	V12	VVT Sensor LH	90980-10947
S26	Side Step Light RH		V13	VVT Sensor RH	
S27	Sub Body ECU	90980-11877	W 1	Washer Level Sensor	90980-11068
S28	Sub Body ECU	90980-12113	W 2	Washer Motor	90980-11028
S29	Seat Heater (Driver's Seat)	90980-10797	W 3	Wireless Door Lock Buzzer	90980-11142
S30	Seat Heater (Front Passenger's Seat)		W 4	Wiper Relay	90980-12183
S31	Side Airbag Squib LH	90980-11864	W 5	Wiper Relay	90980-10801
S32	Side Airbag Squib RH		W 6	Woofer Speaker	90980-10795
S33	Stabilizer Control Valve	90980-11150	Y 1	Yaw Rate Sensor	90980-11904
S34	Stabilizer Control ECU	82824-48140			
S35	Stabilizer Control ECU	82824-48130			
S36	Stabilizer Control ECU	90980-12151			
S37	Skid Control ECU with Actuator	90980-12297			
S38	Skid Control ECU with Actuator	90980-12294			
T 1	Theft Deterrent Horn	90980-10619			
T 2	Throttle Control Motor	90980-11858			
	Throttle Position Sensor				
T 3	Transfer Actuator	90980-11664			
T 4	Turbine Speed Sensor	90980-11156			
T 5	Theft Deterrent ECU	90980-12169			
T 6	Tilt and Telescopic ECU	90980-11973			
T 7	Tilt Motor	90980-10797			
T 8	Towing Brake Controller	90980-11603			
T 9	Transponder Key Computer	90980-11911			
T10	Turn Signal Flasher	90980-10803			
T11	Tension Reducer Solenoid LH	90980-12063			
T12	Tension Reducer Solenoid RH				
T13	Towing Converter Relay	90980-11535			
T14	Trailer Socket	82824-34030			
T15	Tire Pressure Monitor ECU	90980-12155			
T16	Tire Select SW	90980-10825			
T17	Television Camera	90980-12211			
T18	Television Camera ECU	90980-12150			
T19	Television Camera ECU	90980-12149			
T20	Television Camera ECU	90980-12151			
T21	Tire Pressure Receiver	90980-11909			
V 1	Vehicle Speed Sensor (Electronically Controlled Transmission)	90980-11156			
V 2	VSV (EVAP)				
V 3	VSC Warning Buzzer	90980-10906			
V 4	Vanity Light LH	90980-12322			
V 5	Vanity Light RH				
V 7	Voltage Inverter	90980-10799			
V 9	VSV (ACIS)	90980-11156			
V10	VSV (Air Switching Valve Bank 1)	90980-11149			
V11	VSV (Air Switching Valve Bank 2)				

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

M OVERALL ELECTRICAL WIRING DIAGRAM

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

HOW TO READ THIS SECTION



[A] : System Title

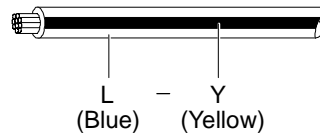
[B] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

- B = Black W = White BR = Brown
- L = Blue V = Violet SB = Sky Blue
- R = Red G = Green LG = Light Green
- P = Pink Y = Yellow GR = Gray
- O = Orange

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

Example: L - Y

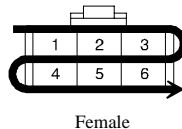


[C] : The position of the parts is the same as shown in the wiring diagram and wire routing.

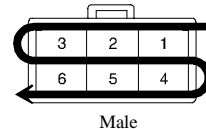
[D] : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example : Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

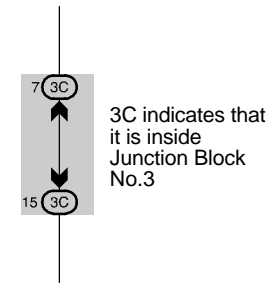
The numbering system for the overall wiring diagram is the same as above

[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 : ① Indicates Relay Block No.1

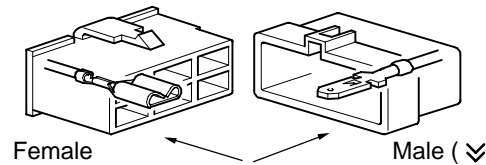
[F] : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

Example:



[G] : Indicates related system.

[H] : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↘). Outside numerals are pin numbers.



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

[J] : Indicates a shielded cable.

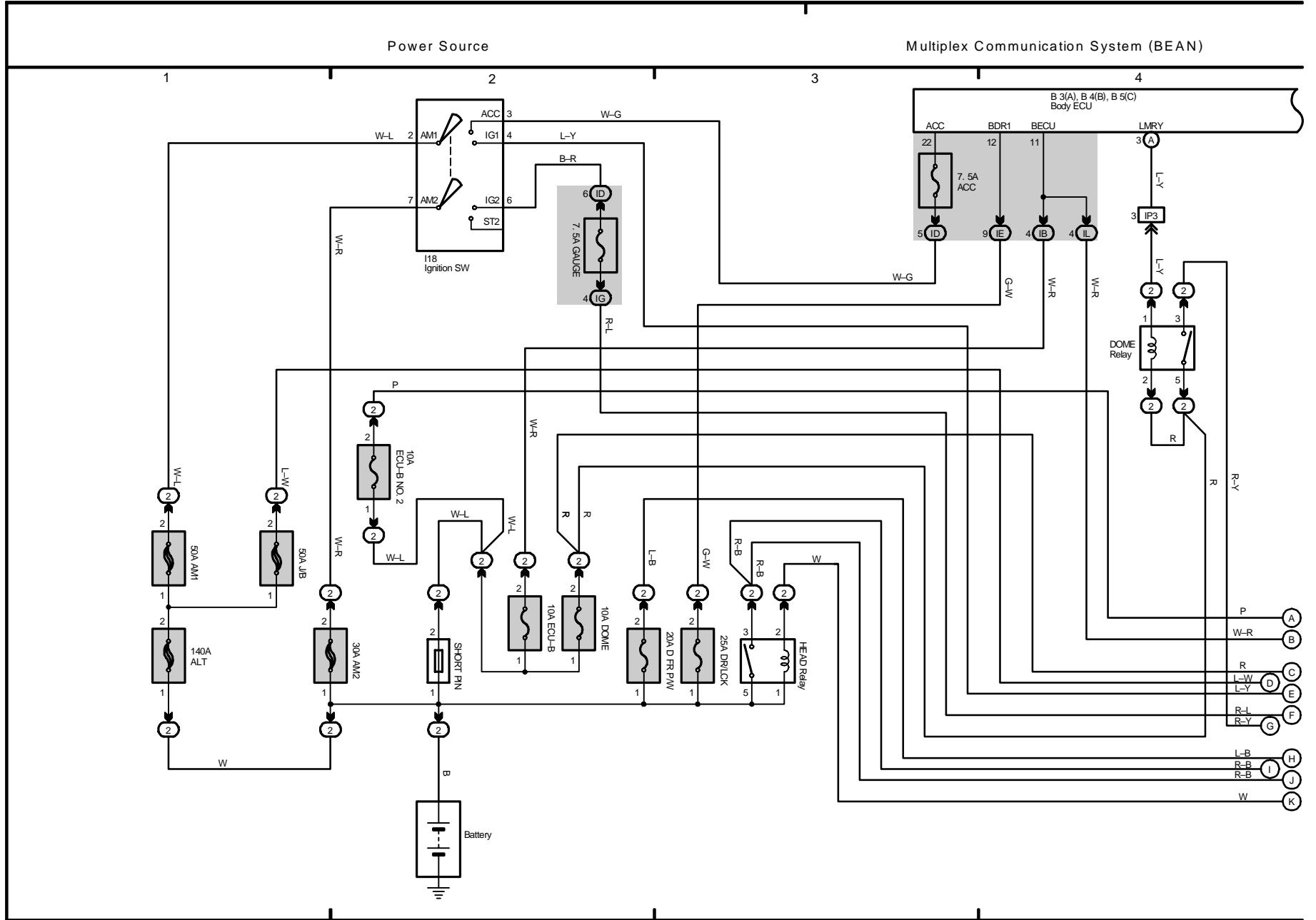


[K] : Indicates and located on ground point.

[L] : The same code occurring on the next page indicates that the wire harness is continuous.

SYSTEM INDEX

SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS	15-2	Mirror Heater	23-2
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Automatic Glare-Resistant EC Mirror with Compass	27-2	* Garage Door Opener	
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		Tire Pressure Warning System	40-2
		TRAC	15-2
		Trailer Towing	9-2
		Turn Signal and Hazard Warning Light	10-2
		VSC	15-2



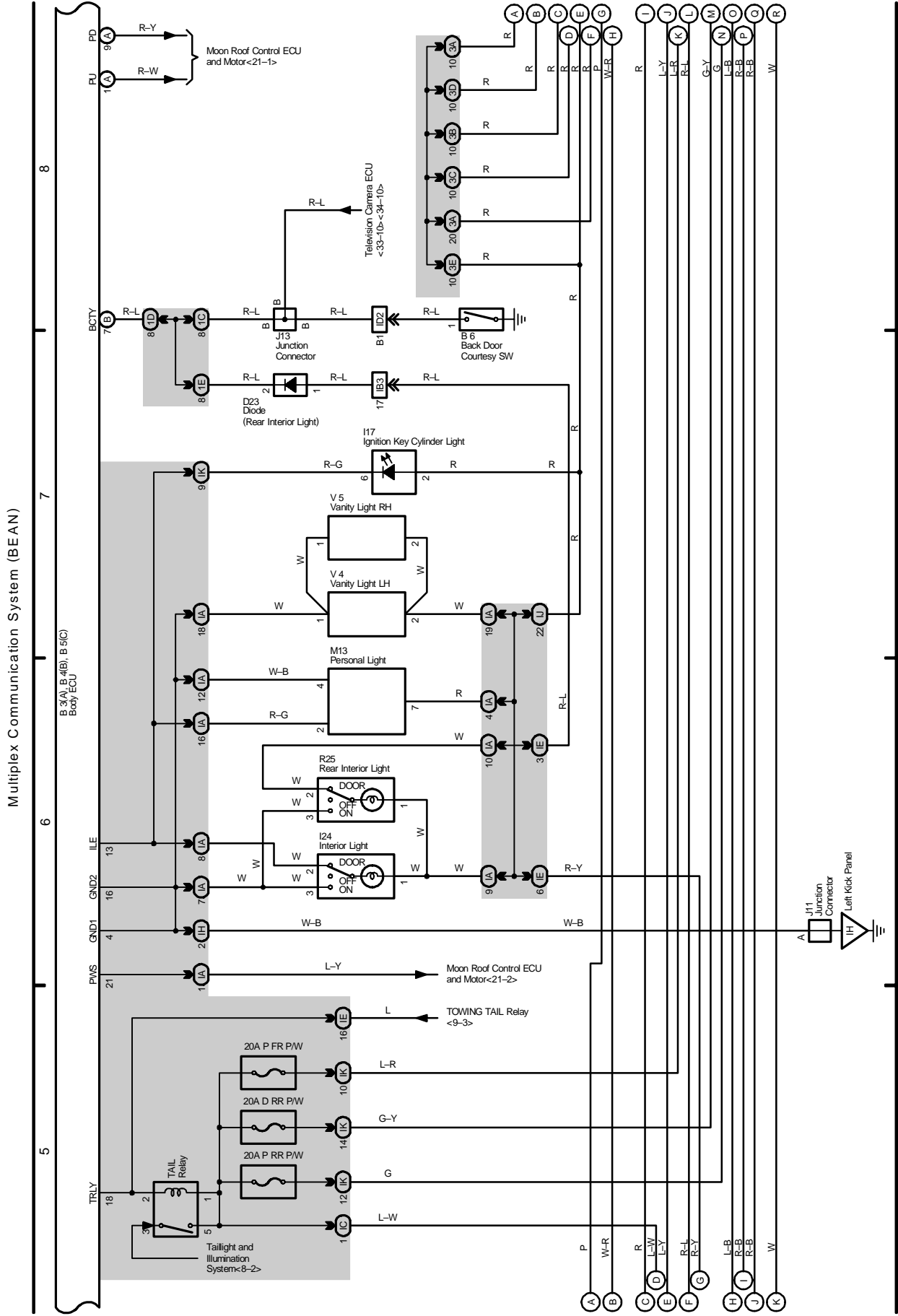
2005 LEXUS GX 470 (EWMD616U)



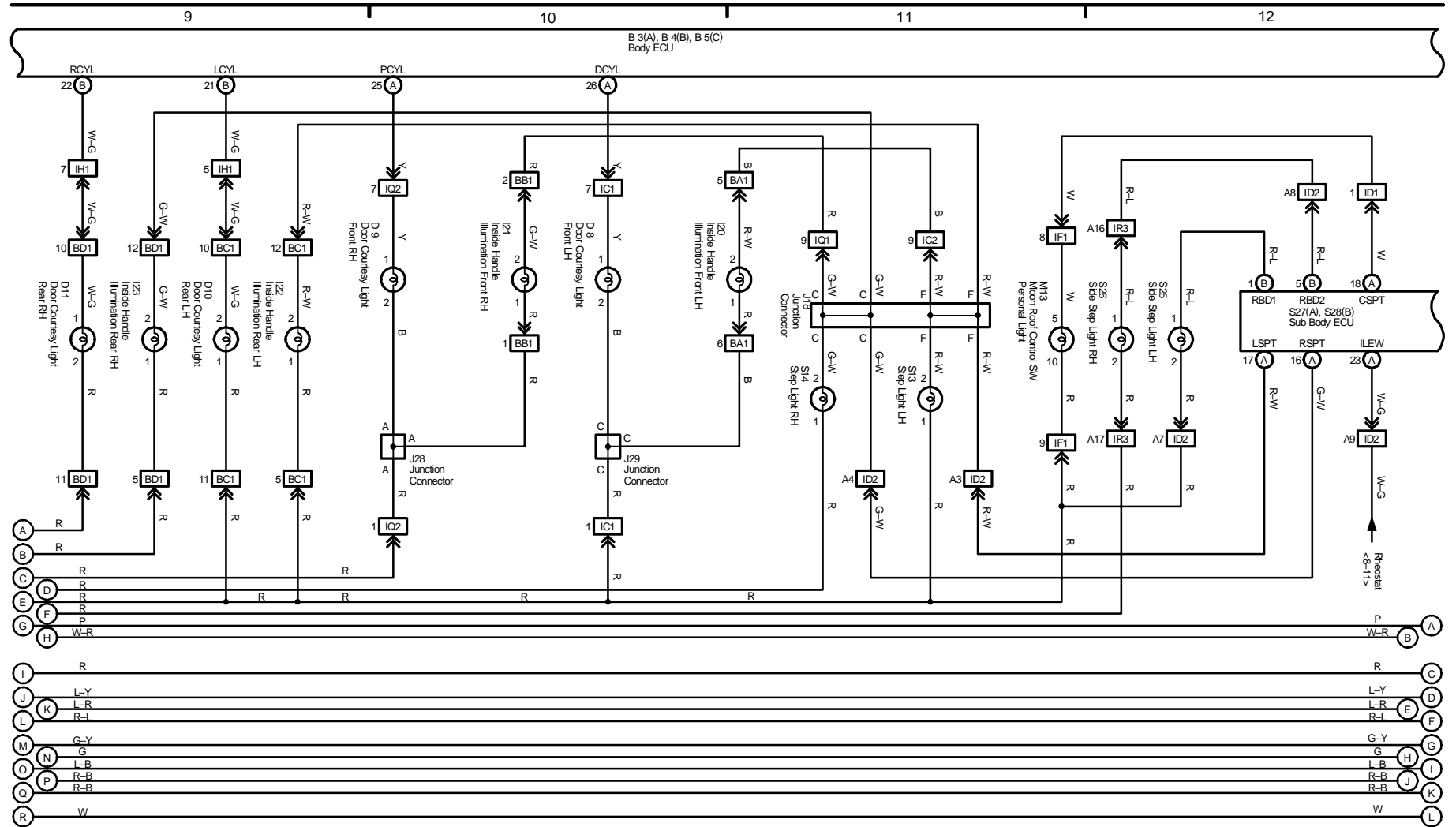
M OVERALL ELECTRICAL WIRING DIAGRAM

1 GX 470 (Cont' d)

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Multiplex Communication System (BEAN)



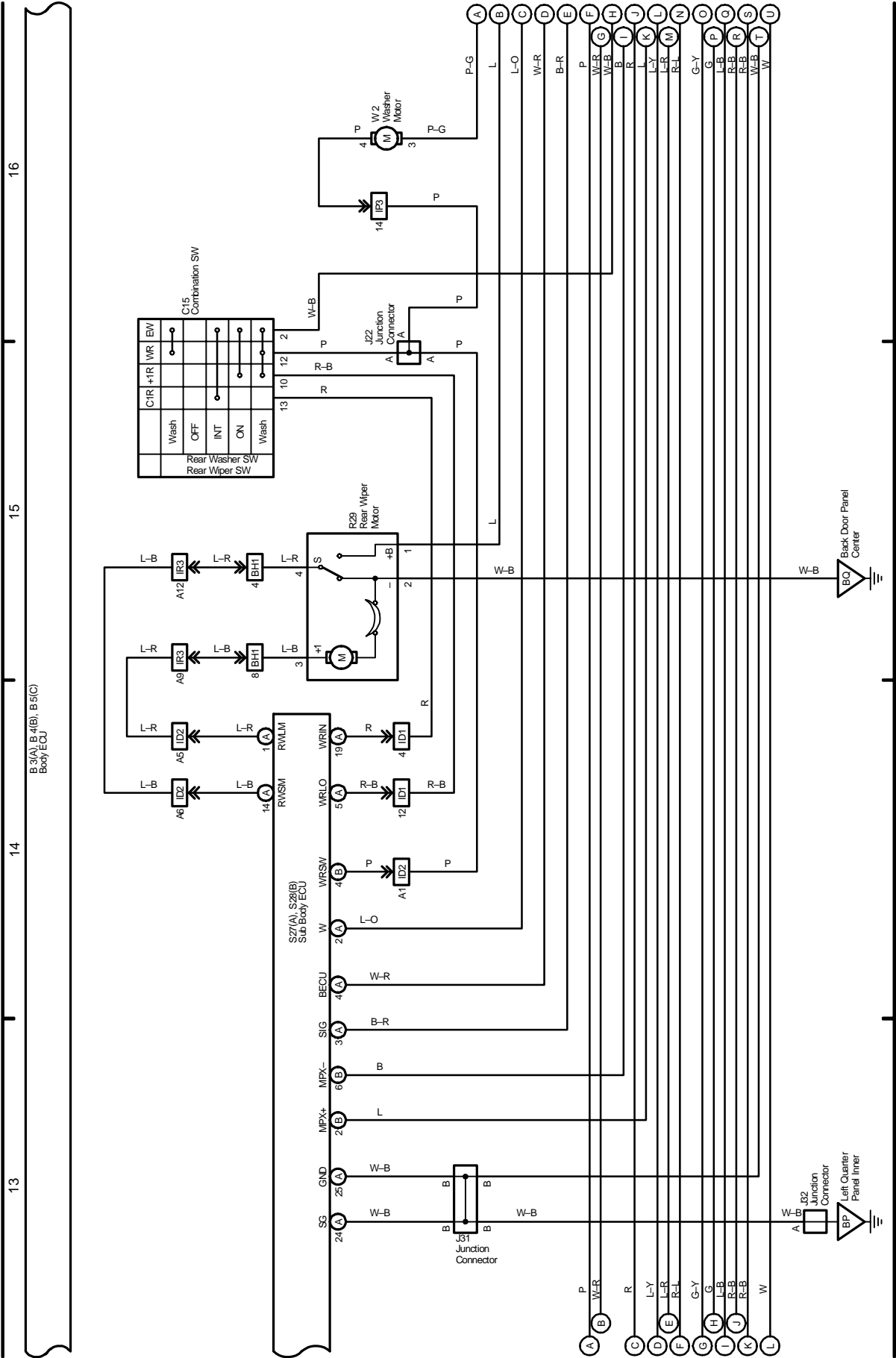
2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

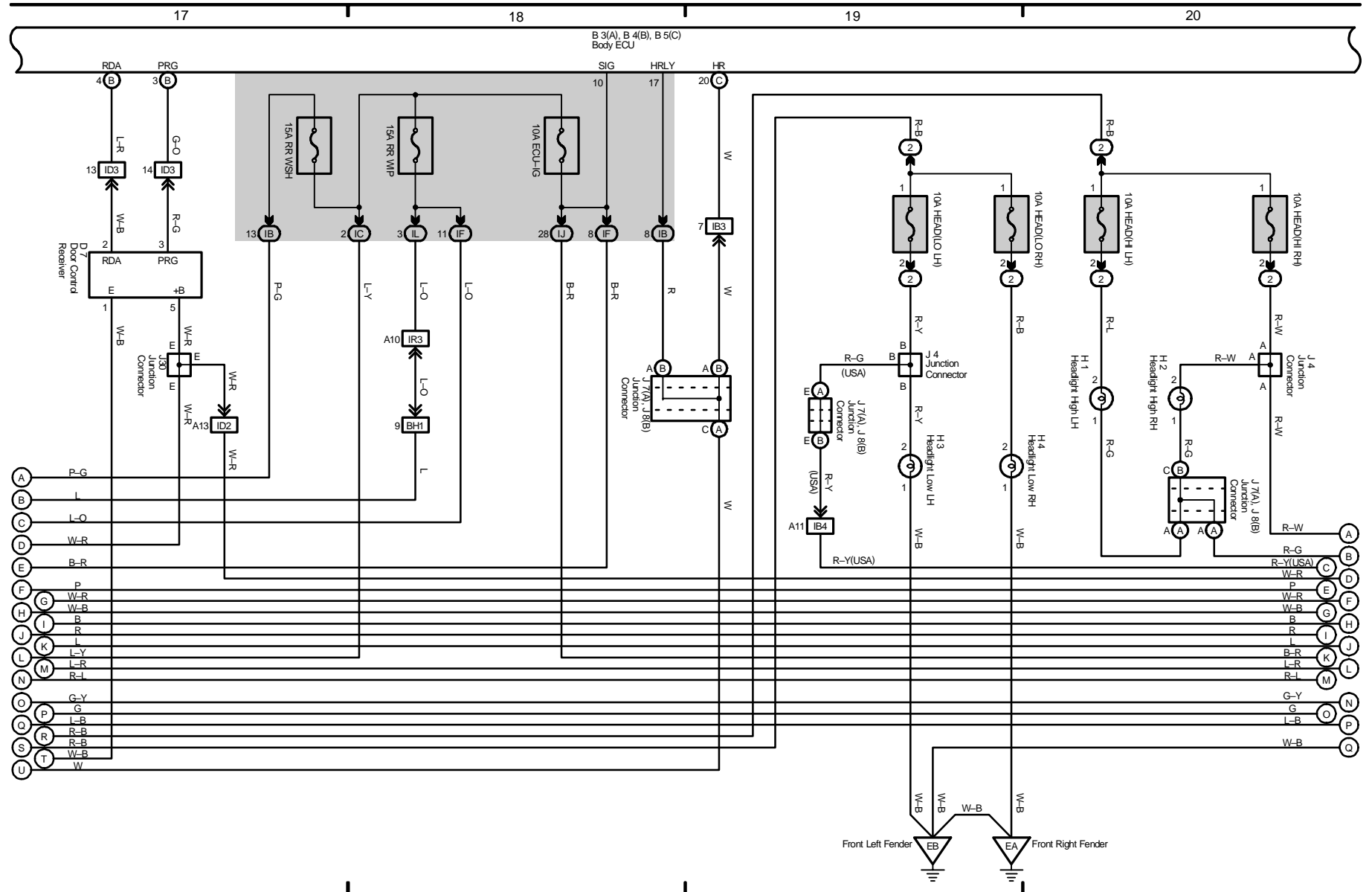
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Multiplex Communication System (BEAN)



Multiplex Communication System (BEAN)



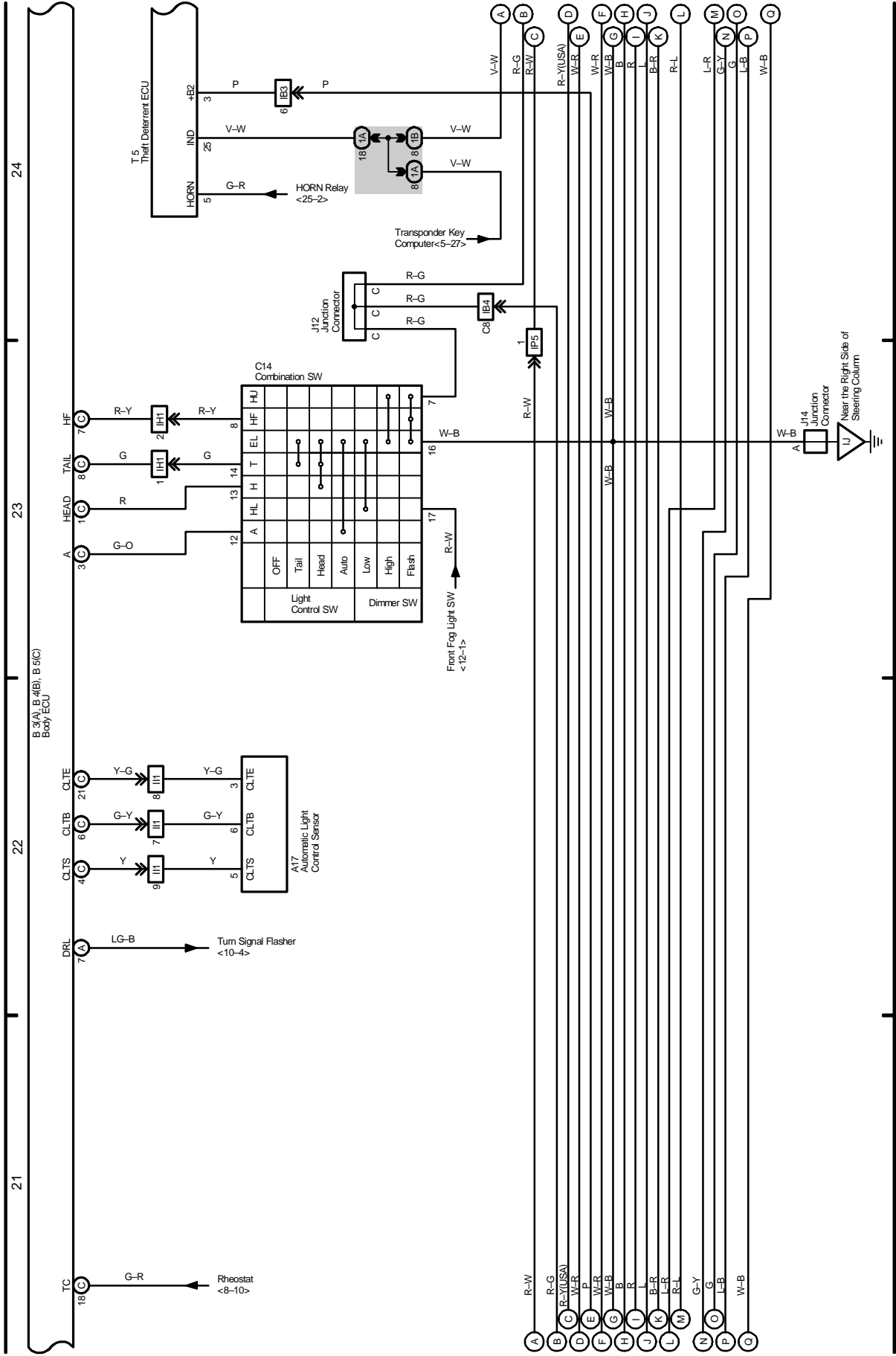
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M OVERALL ELECTRICAL WIRING DIAGRAM

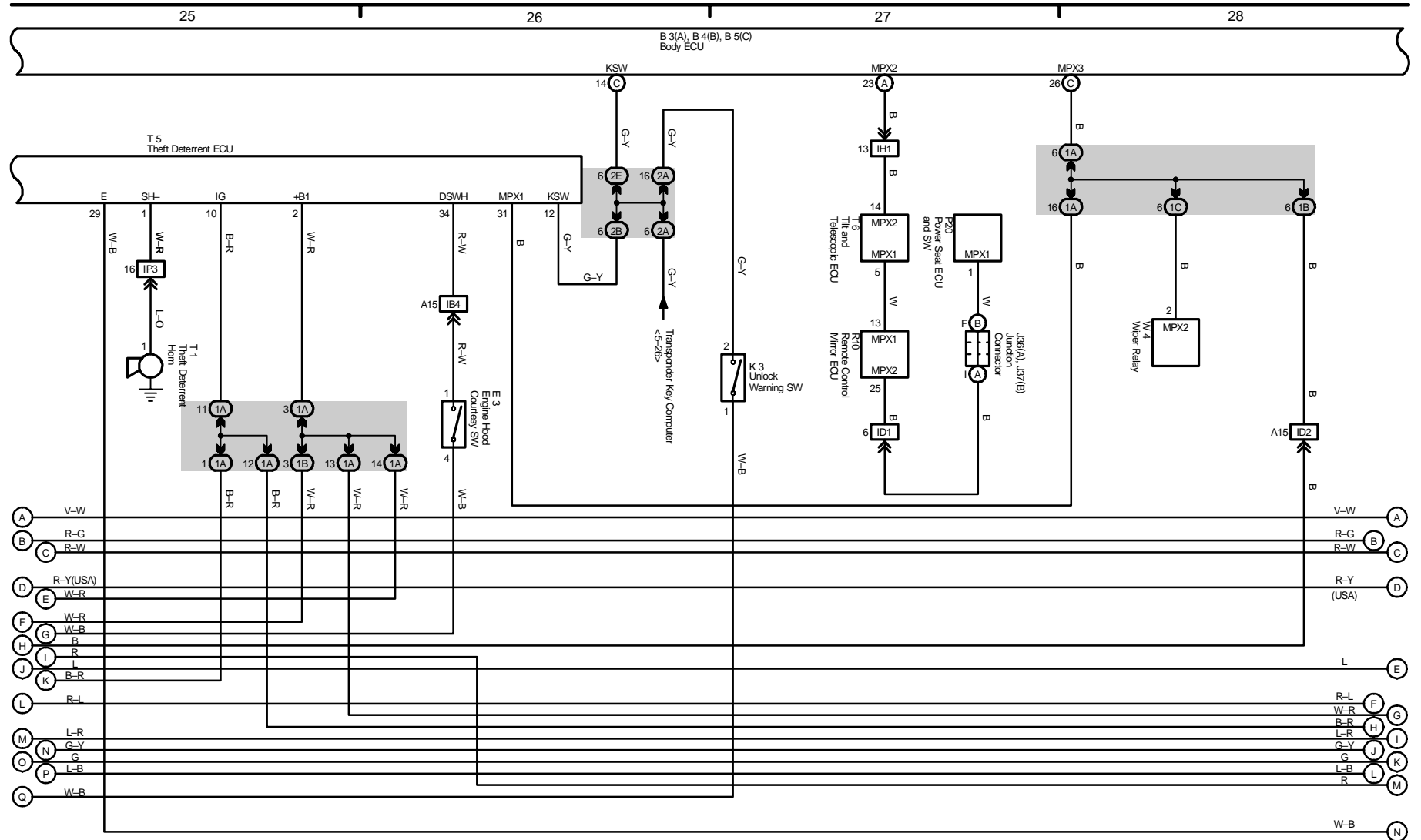
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Multiplex Communication System (BEAN)



Multiplex Communication System (BEAN)



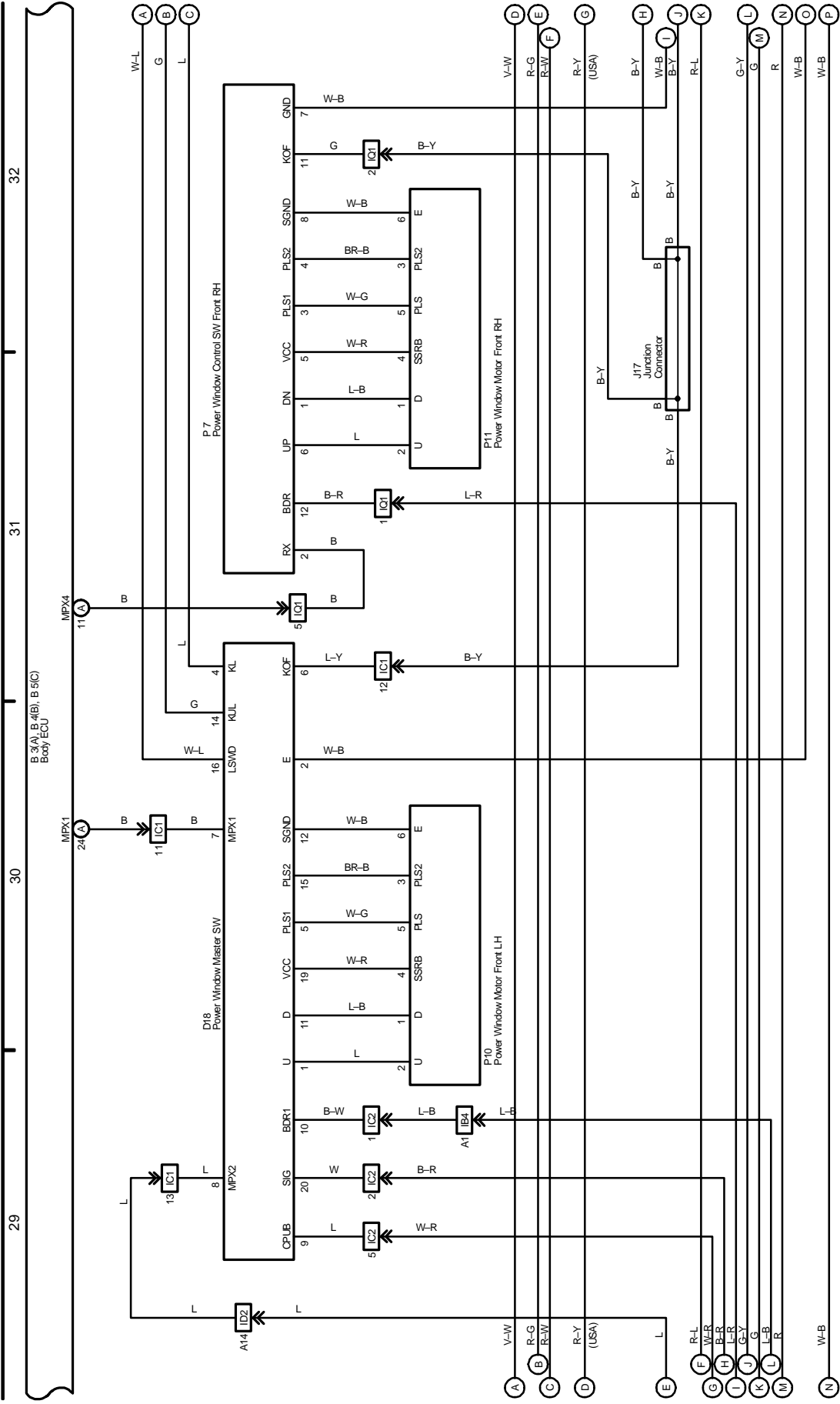
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M OVERALL ELECTRICAL WIRING DIAGRAM

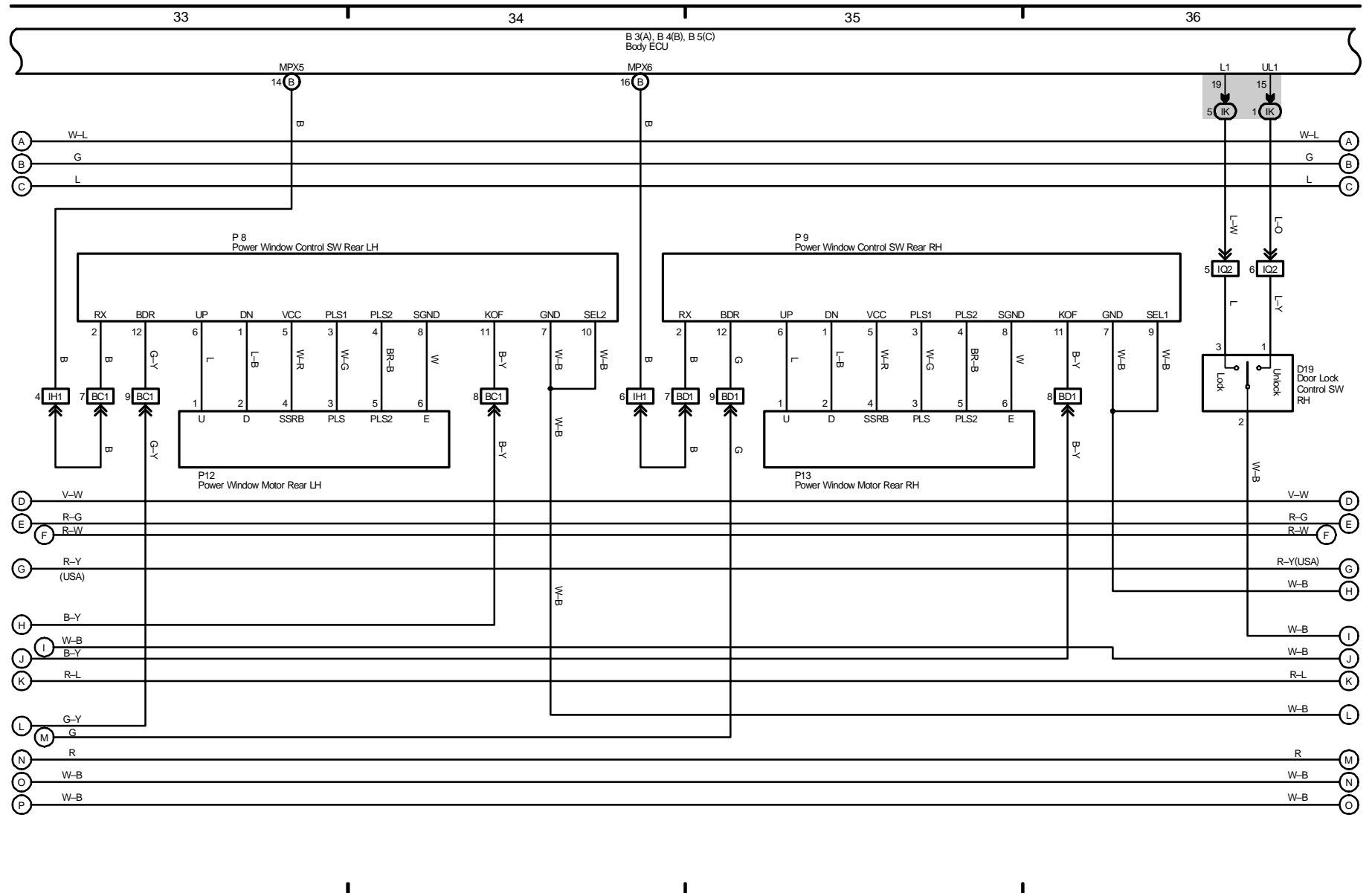
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Multiplex Communication System (BEAN)

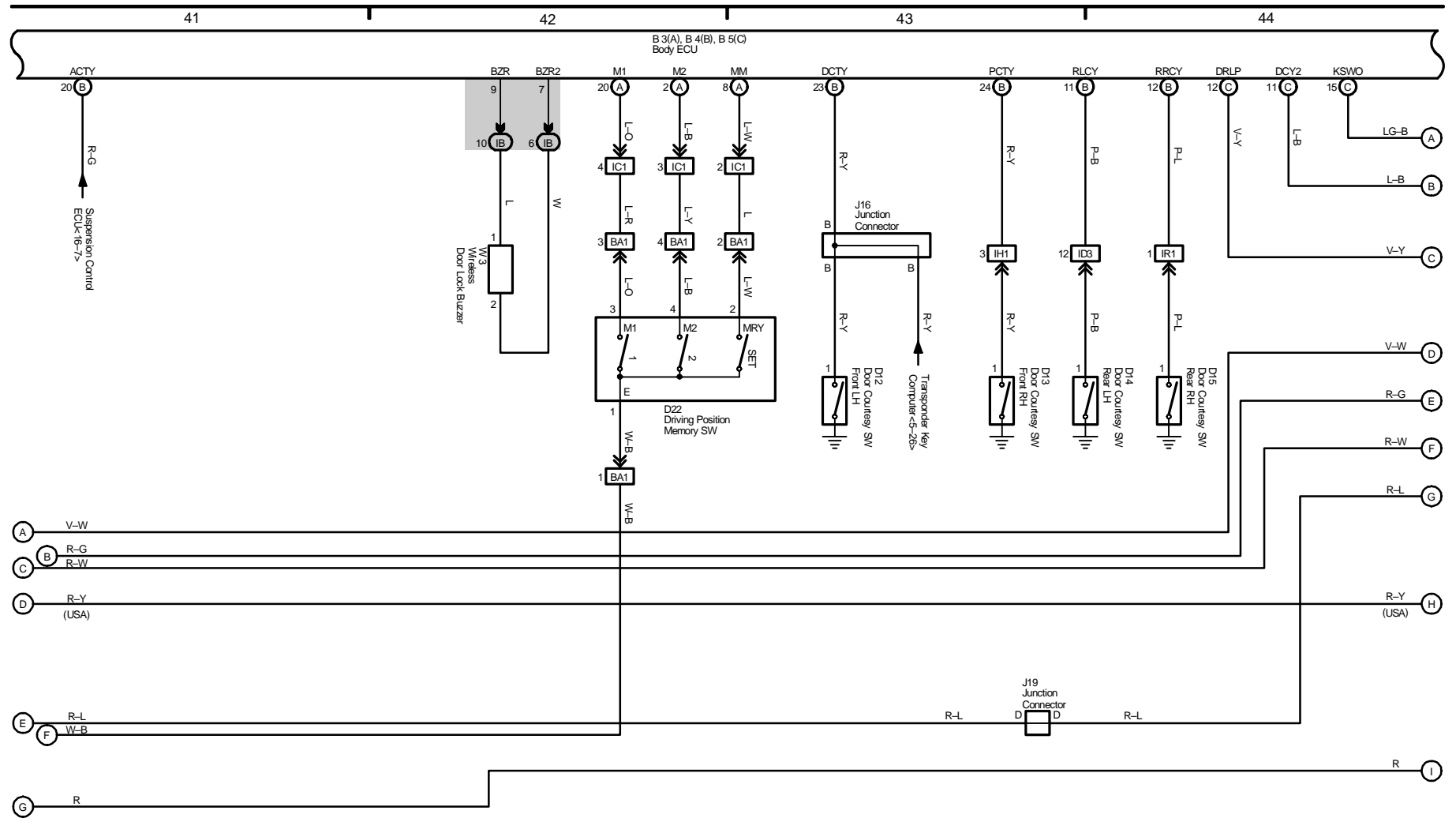


Multiplex Communication System (BEAN)



2005 LEXUS GX 470 (EMD616U)

Multiplex Communication System (BEAN)

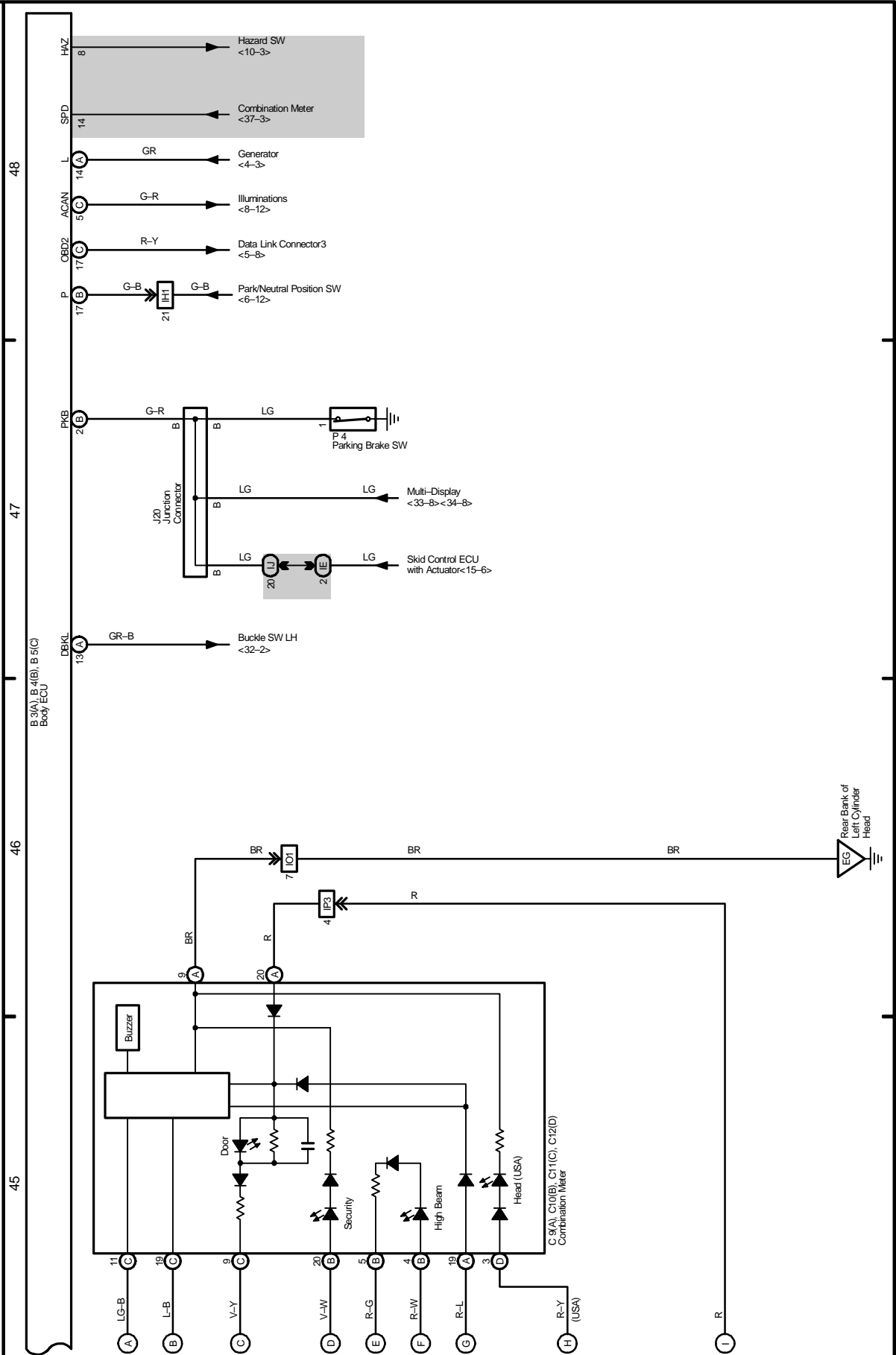


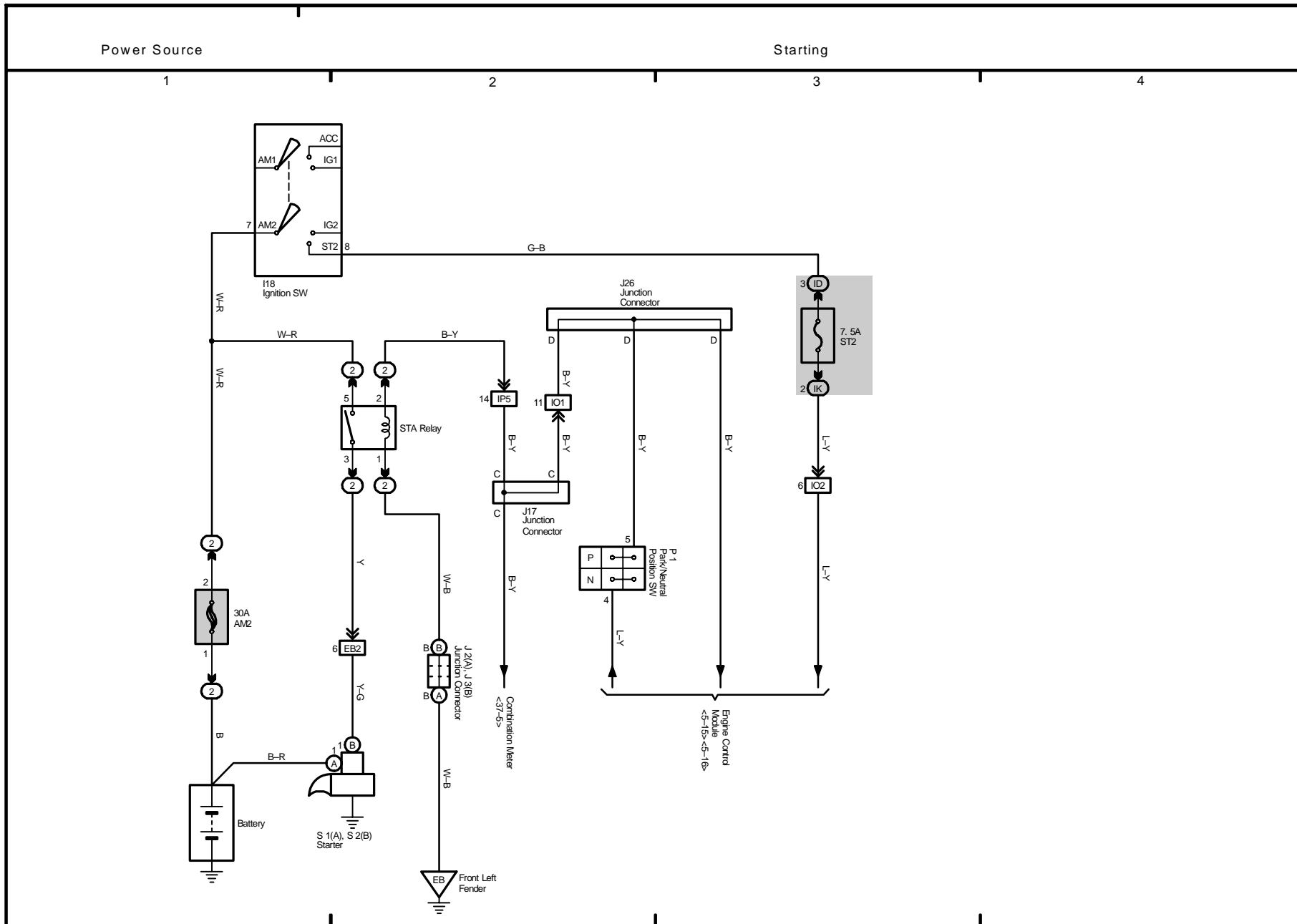
2005 LEXUS GX 470 (EWD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

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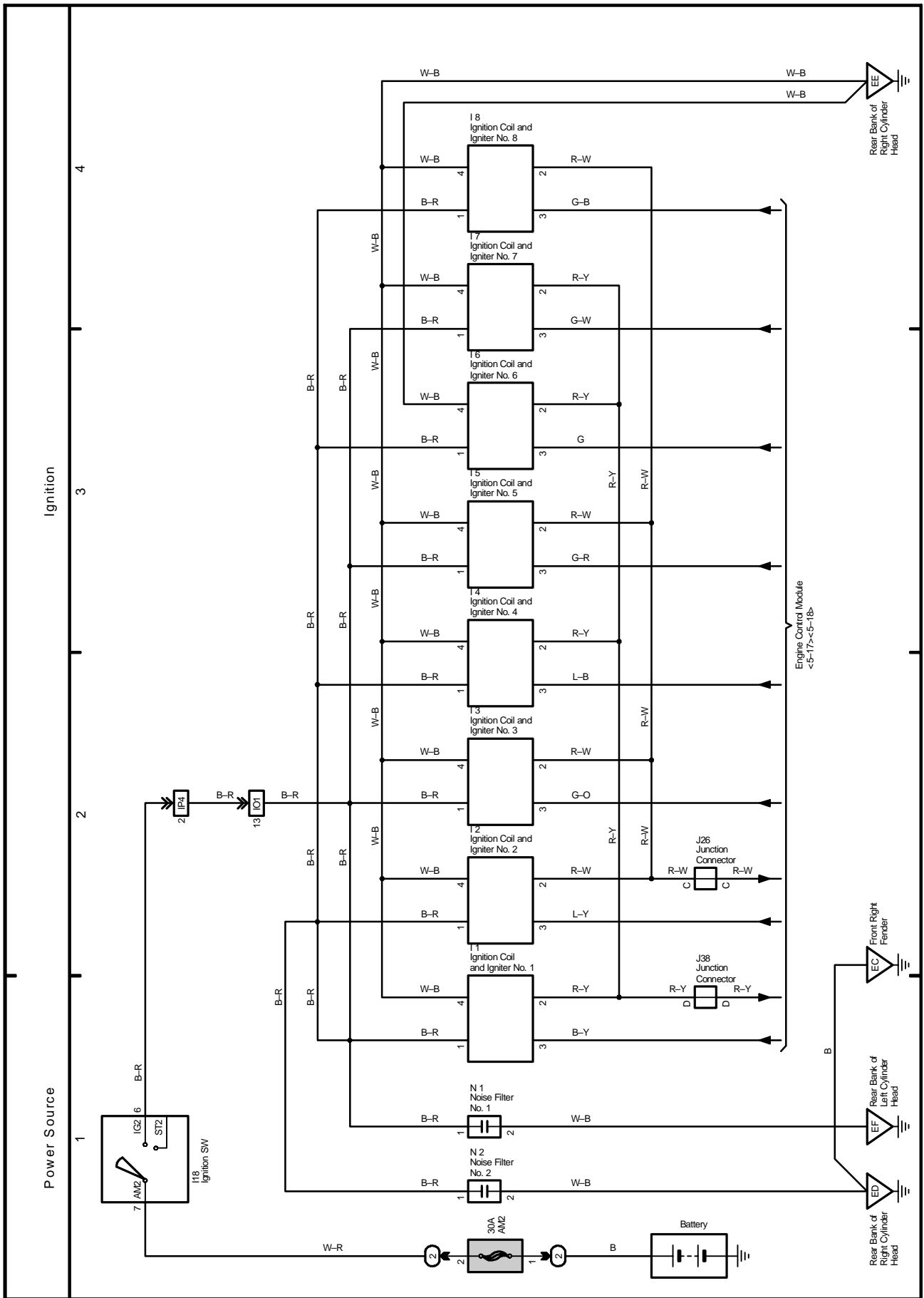
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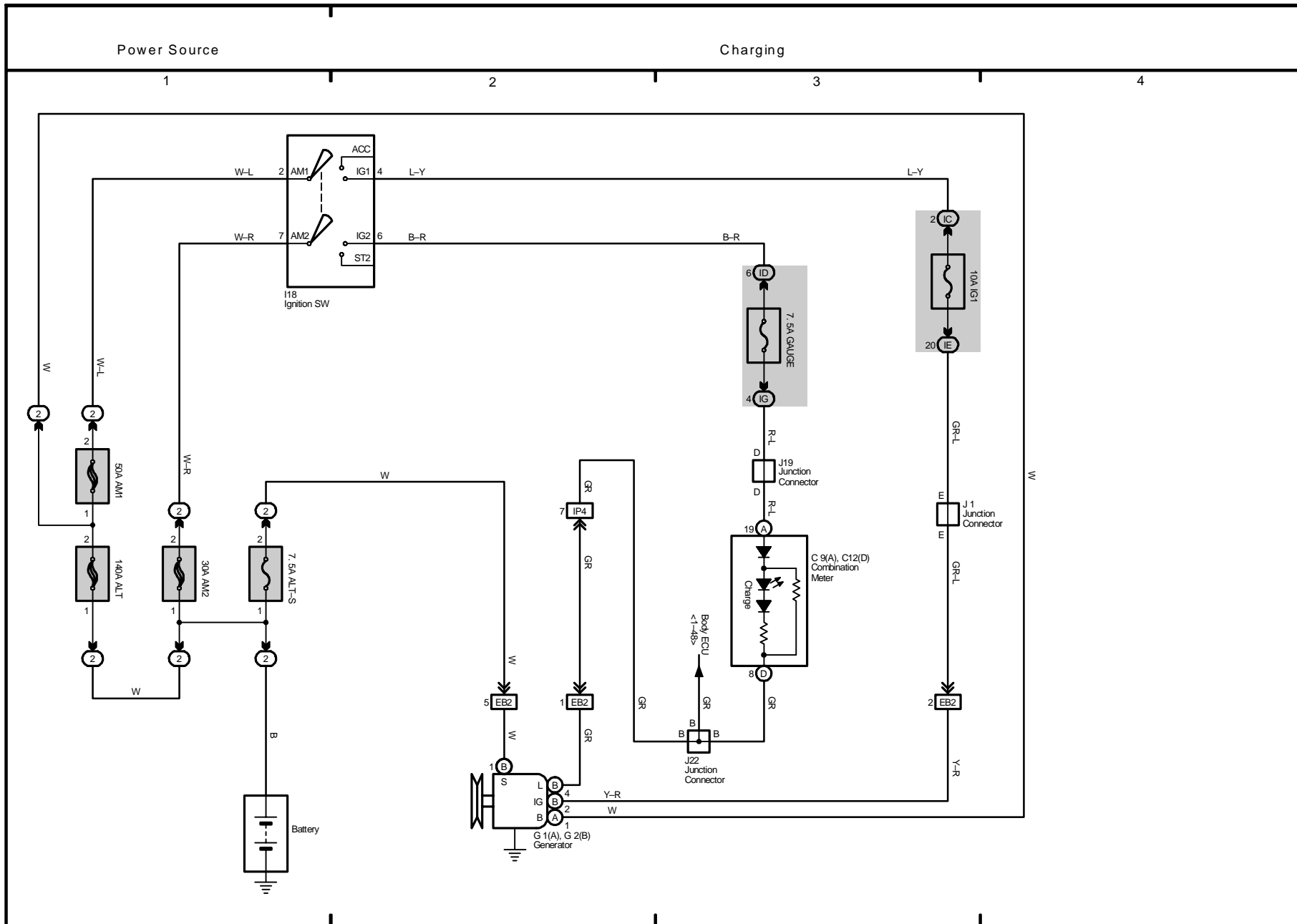




M OVERALL ELECTRICAL WIRING DIAGRAM

3 GX 470

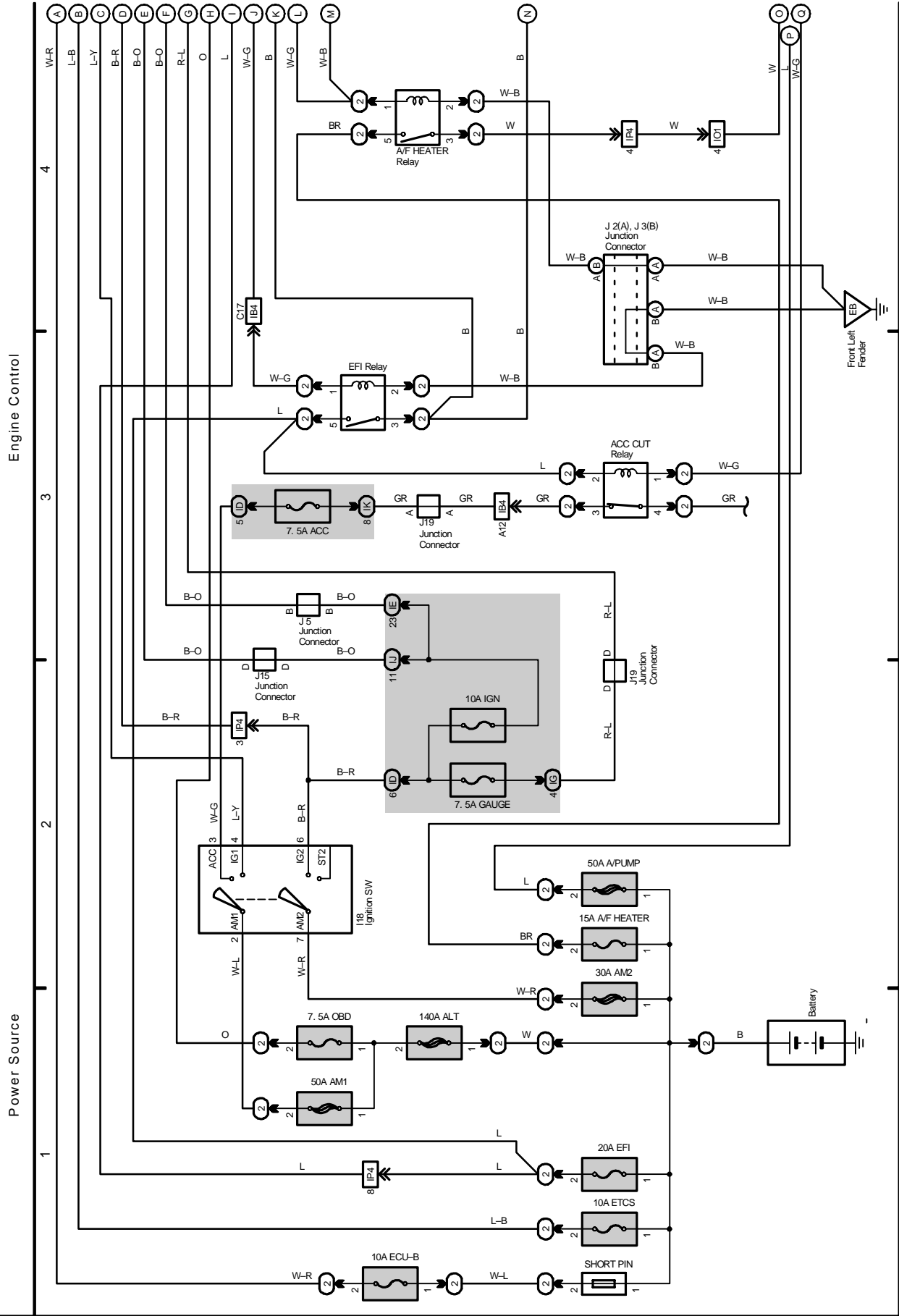




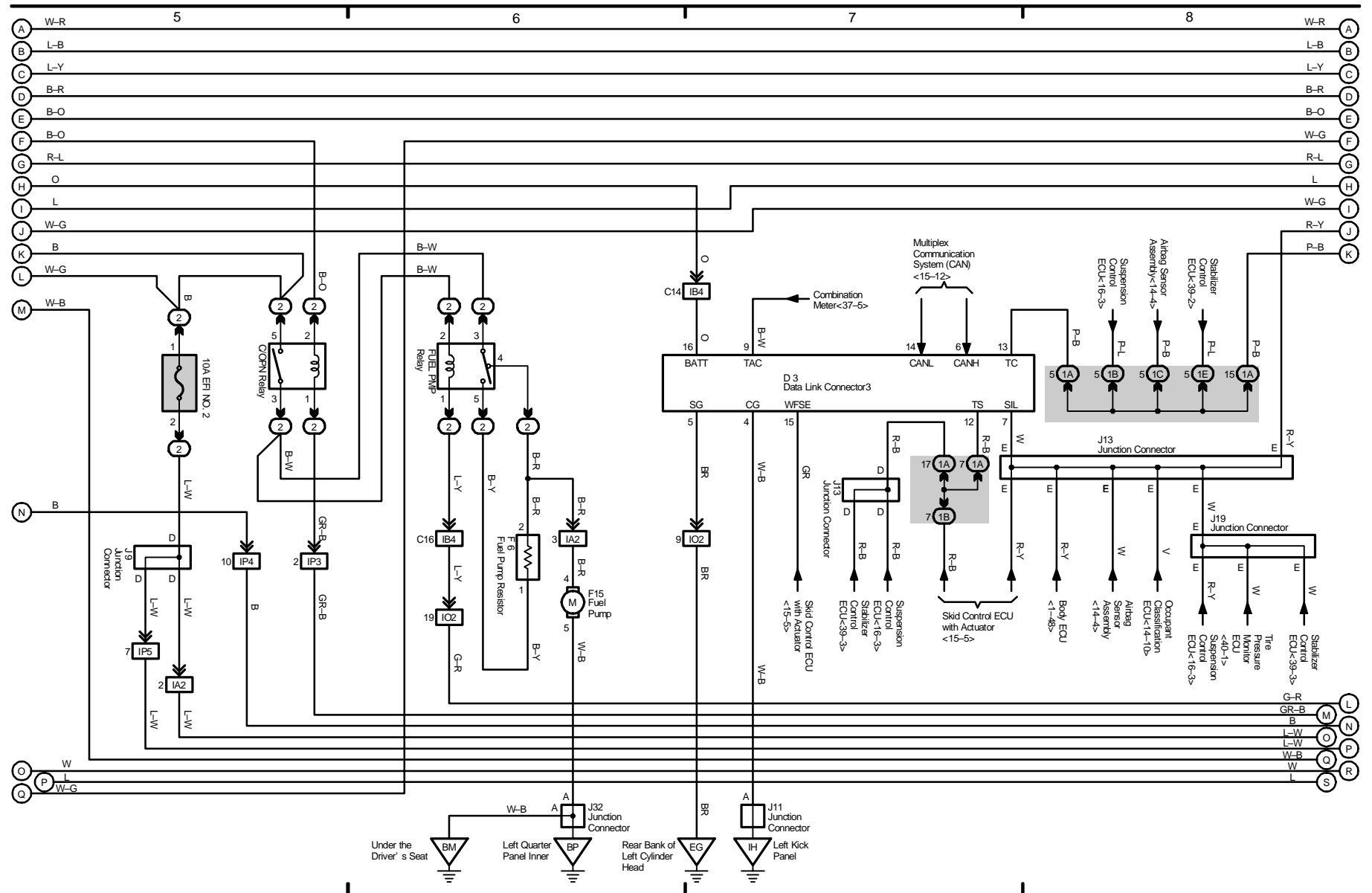
M OVERALL ELECTRICAL WIRING DIAGRAM

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5 GX 470

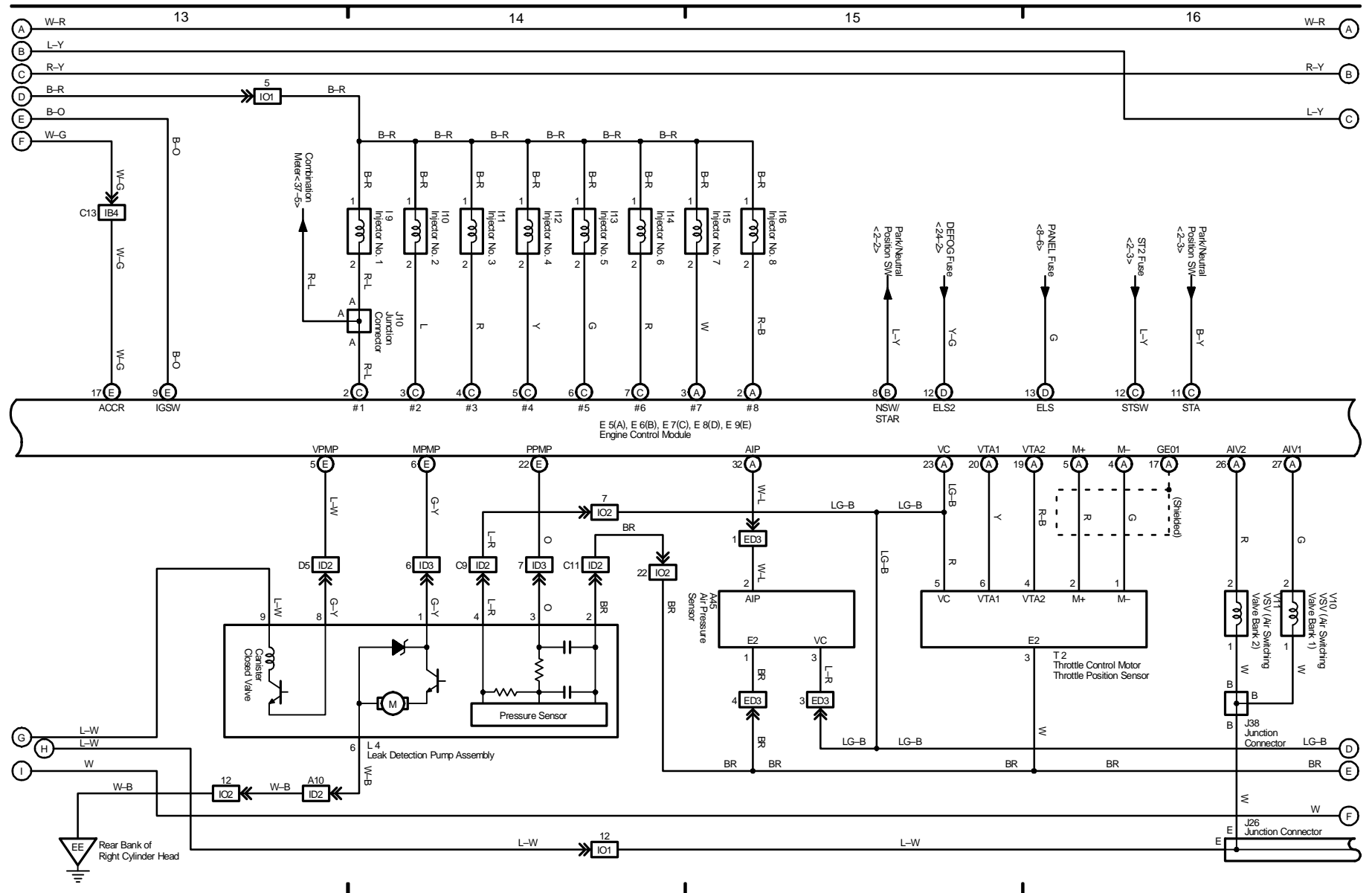


Engine Control



2005 LEXUS GX 470 (EWD616U)

Engine Control



2005 LEXUS GX 470 (EWD616U)

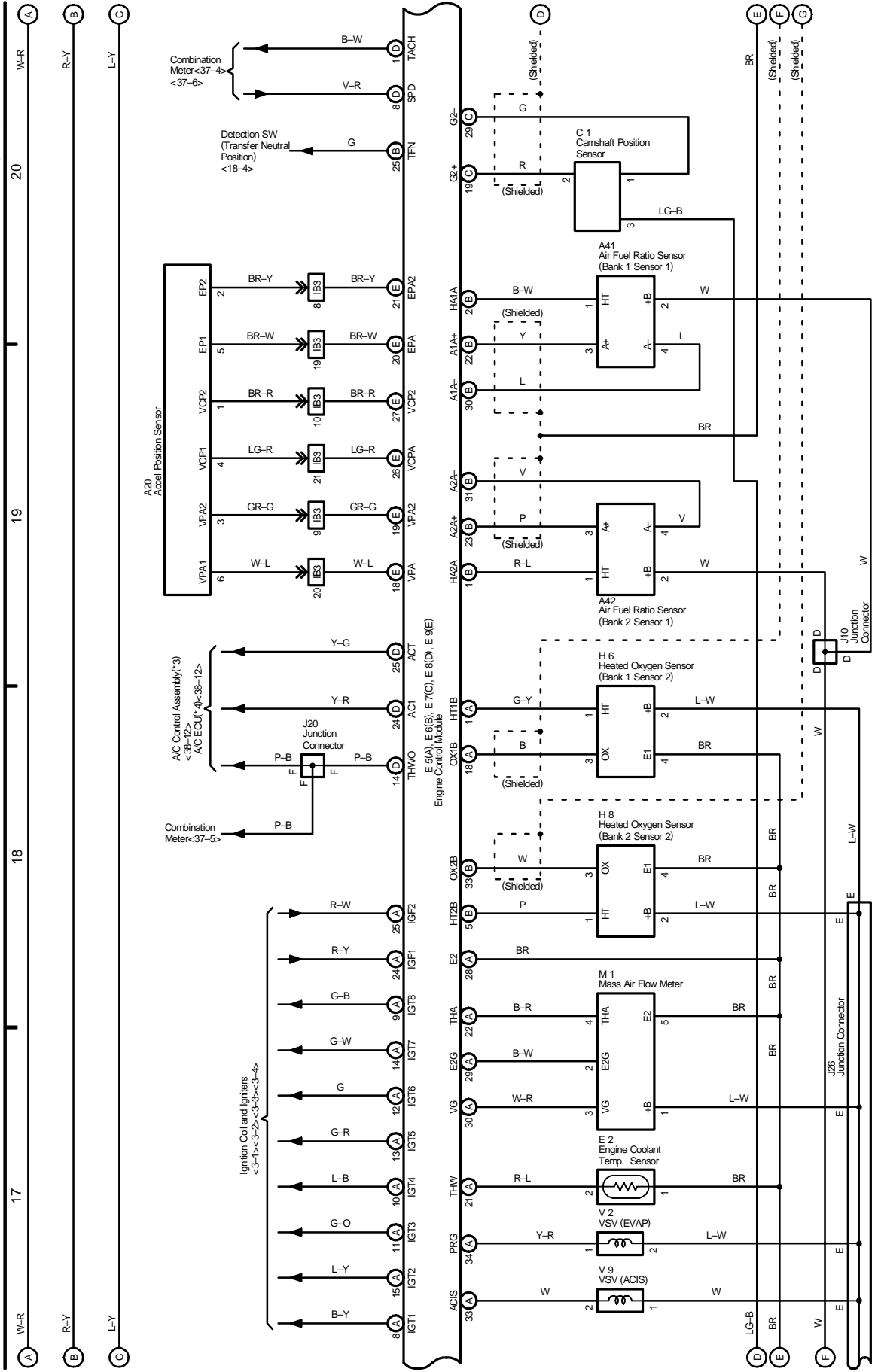
M OVERALL ELECTRICAL WIRING DIAGRAM

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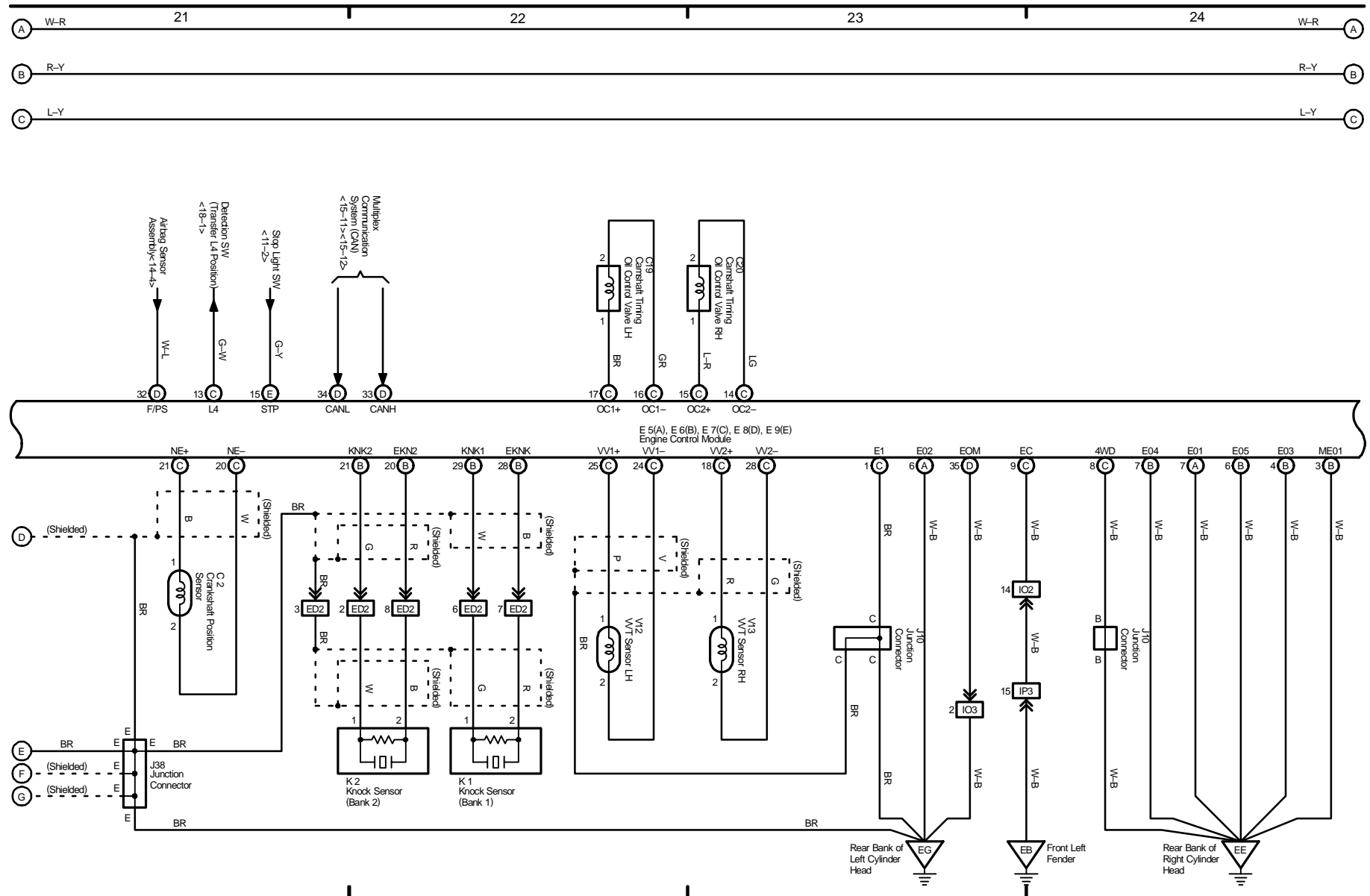
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* 3 : w/o LEXUS Navigation System
 * 4 : w LEXUS Navigation System

Engine Control



Engine Control

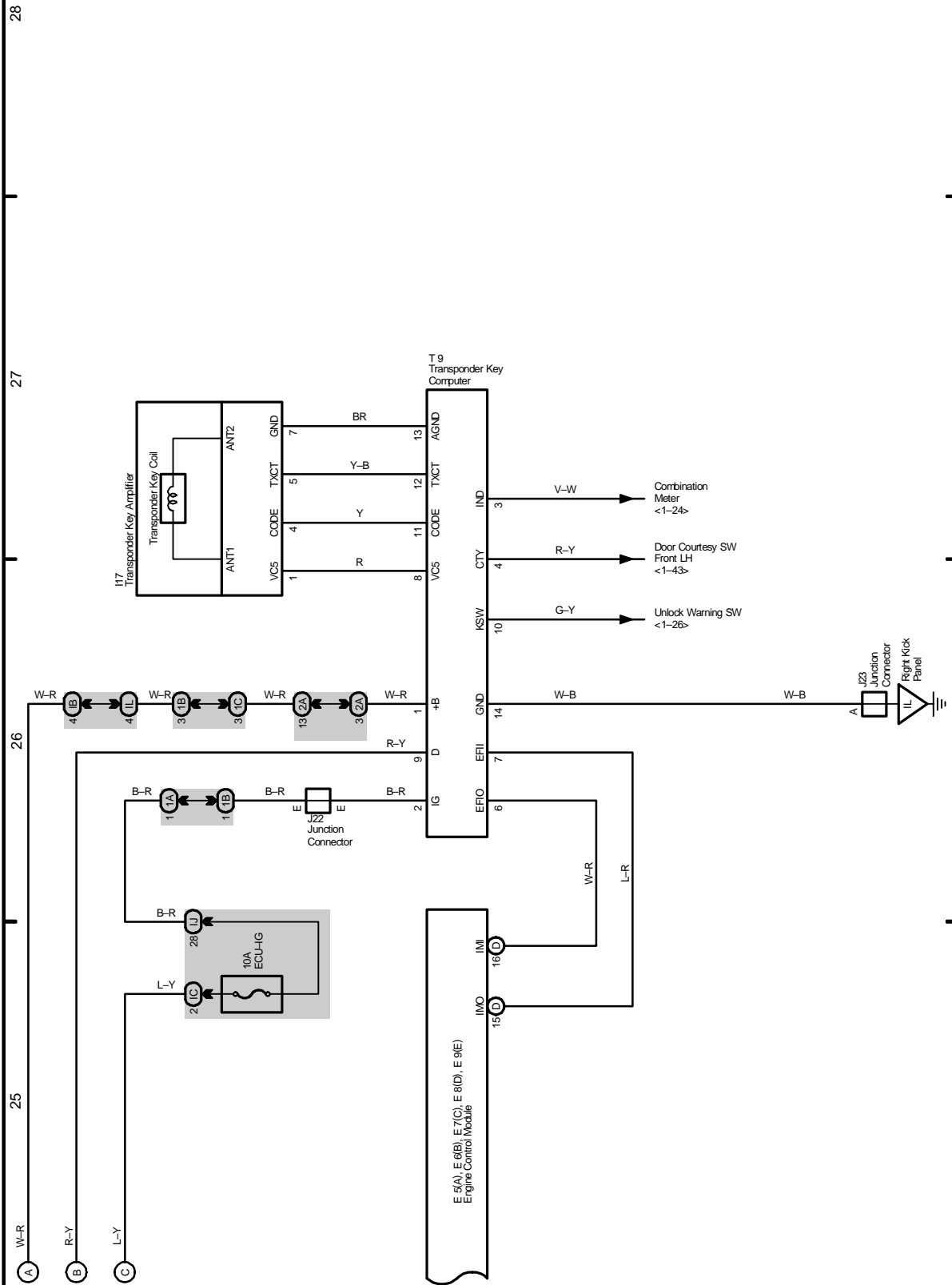


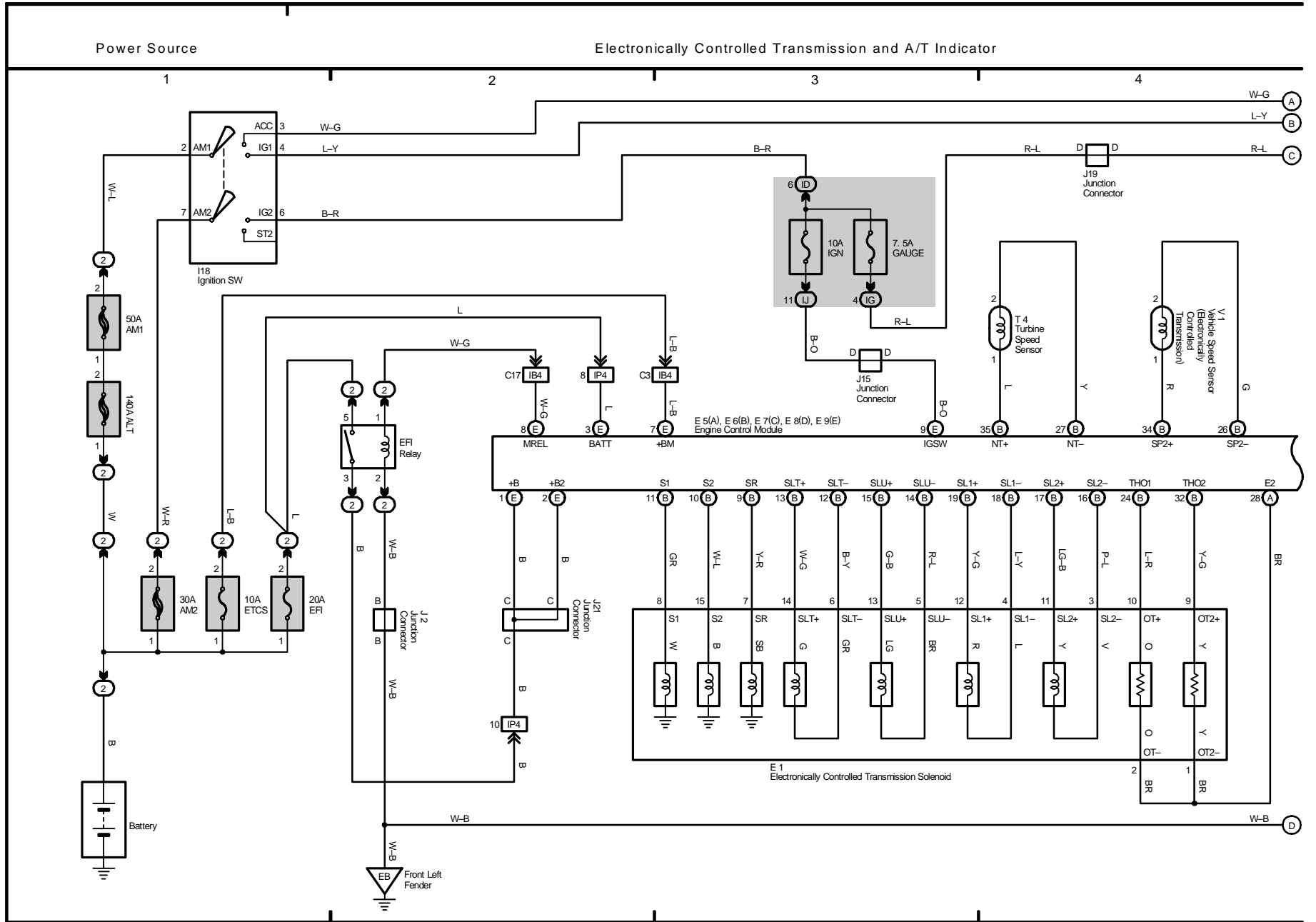
2005 LEXUS GX 470 (EWD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

5 GX 470 (Cont' d)

Engine Immobilizer System





2005 LEXUS GX 470 (EWMD616U)

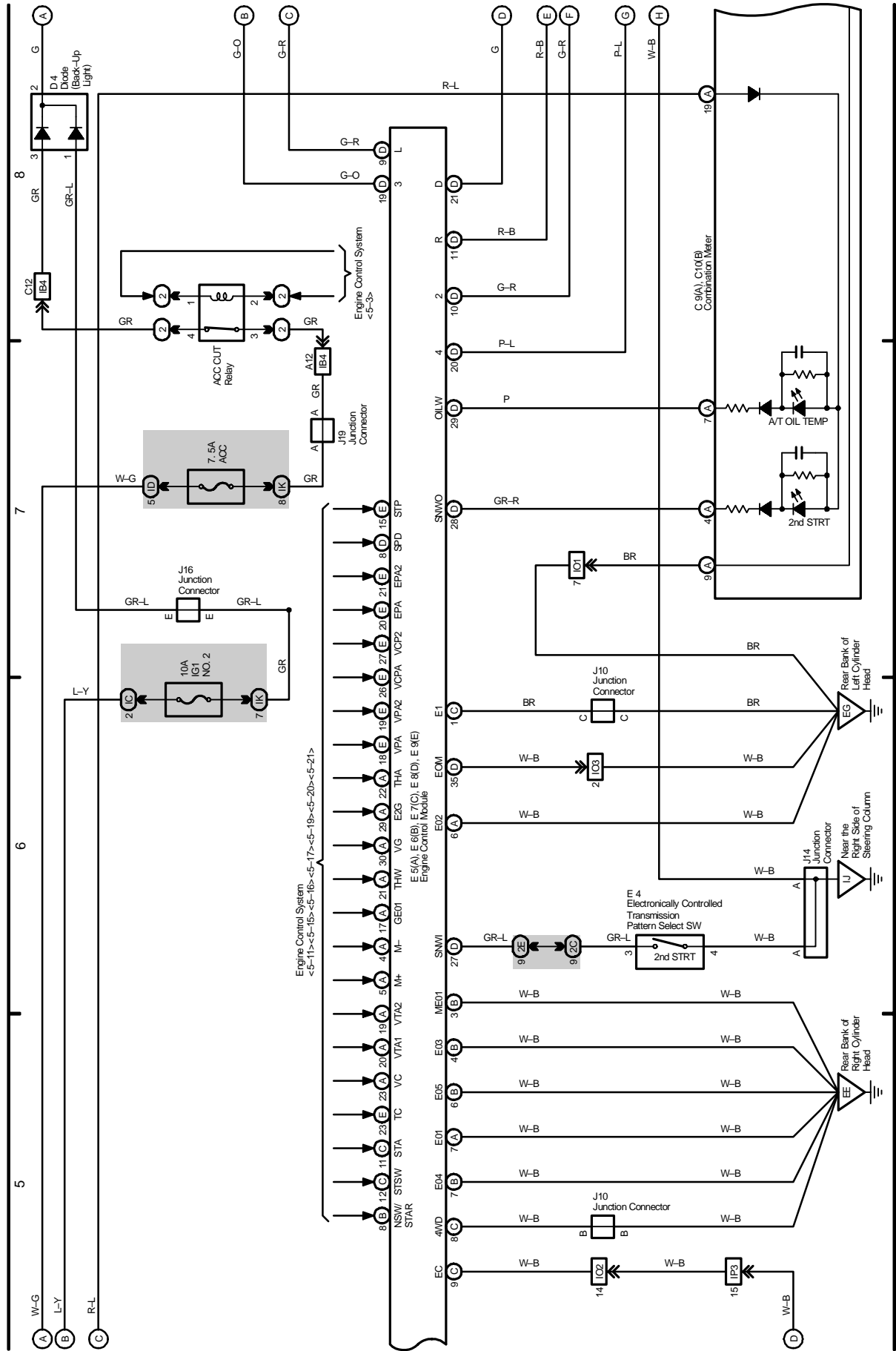


M OVERALL ELECTRICAL WIRING DIAGRAM

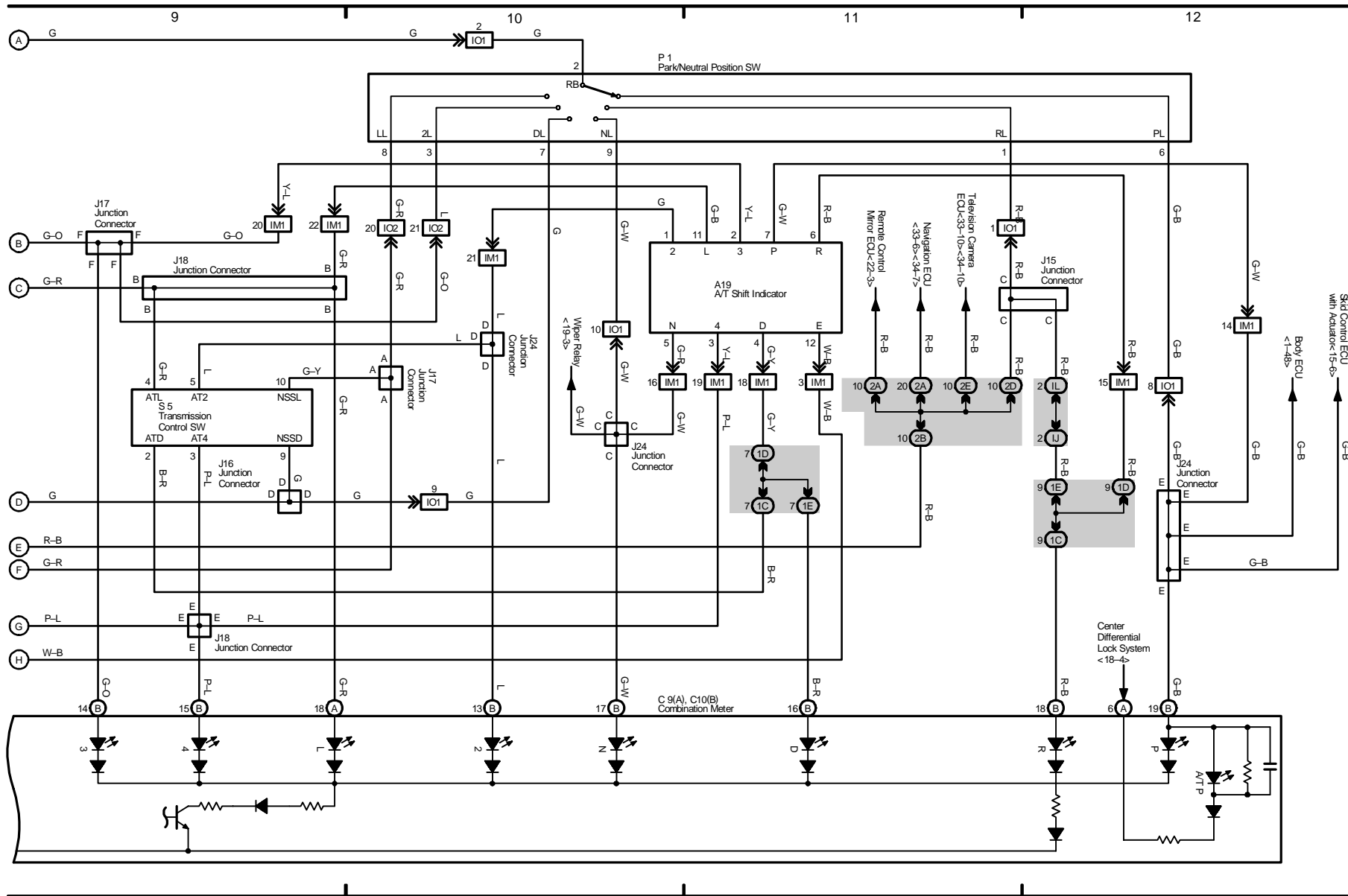
6 GX 470 (Cont' d)

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Electronically Controlled Transmission and A/T Indicator



Electronically Controlled Transmission and A/T Indicator

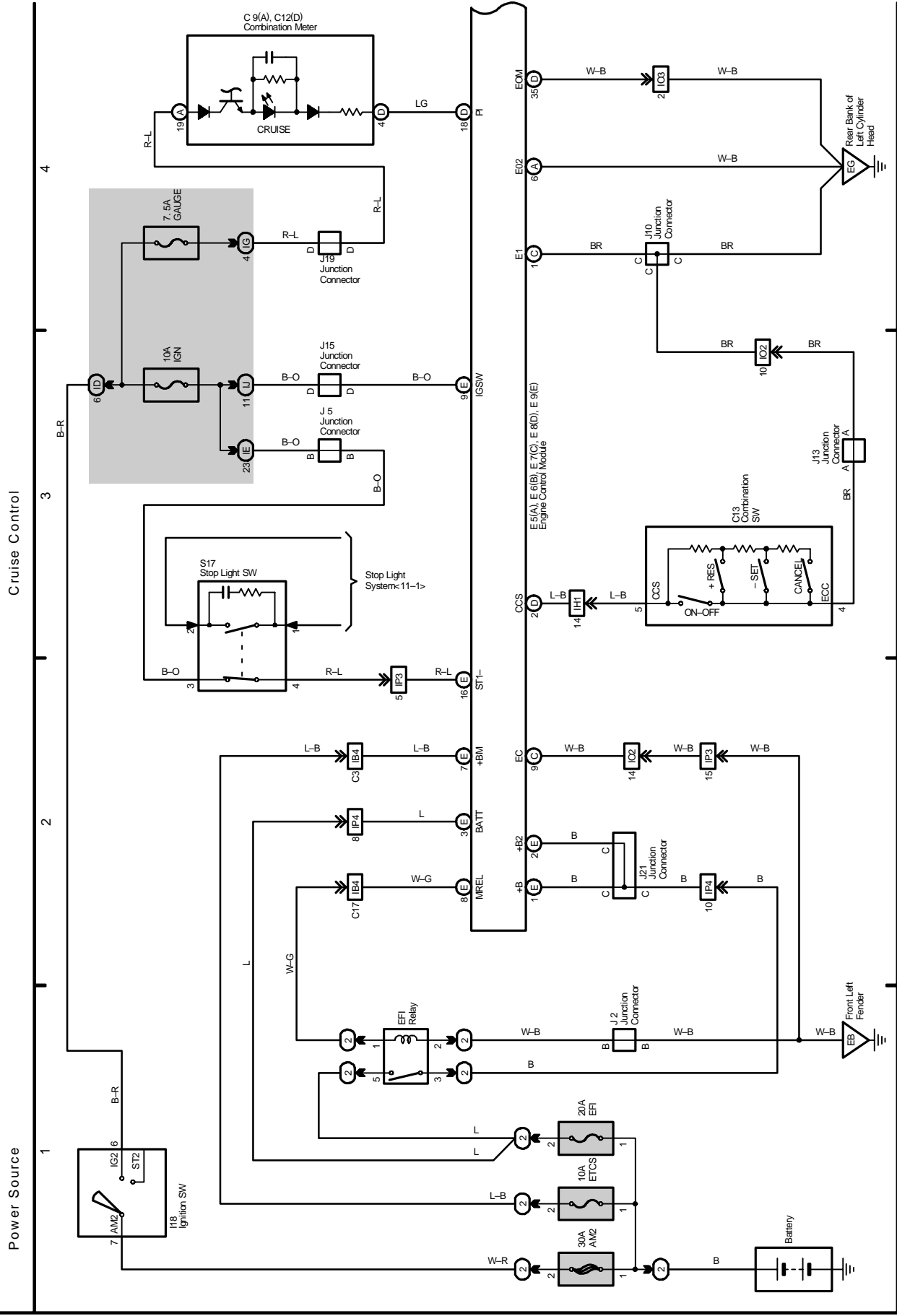


2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

(Cont. next page)

7 GX 470



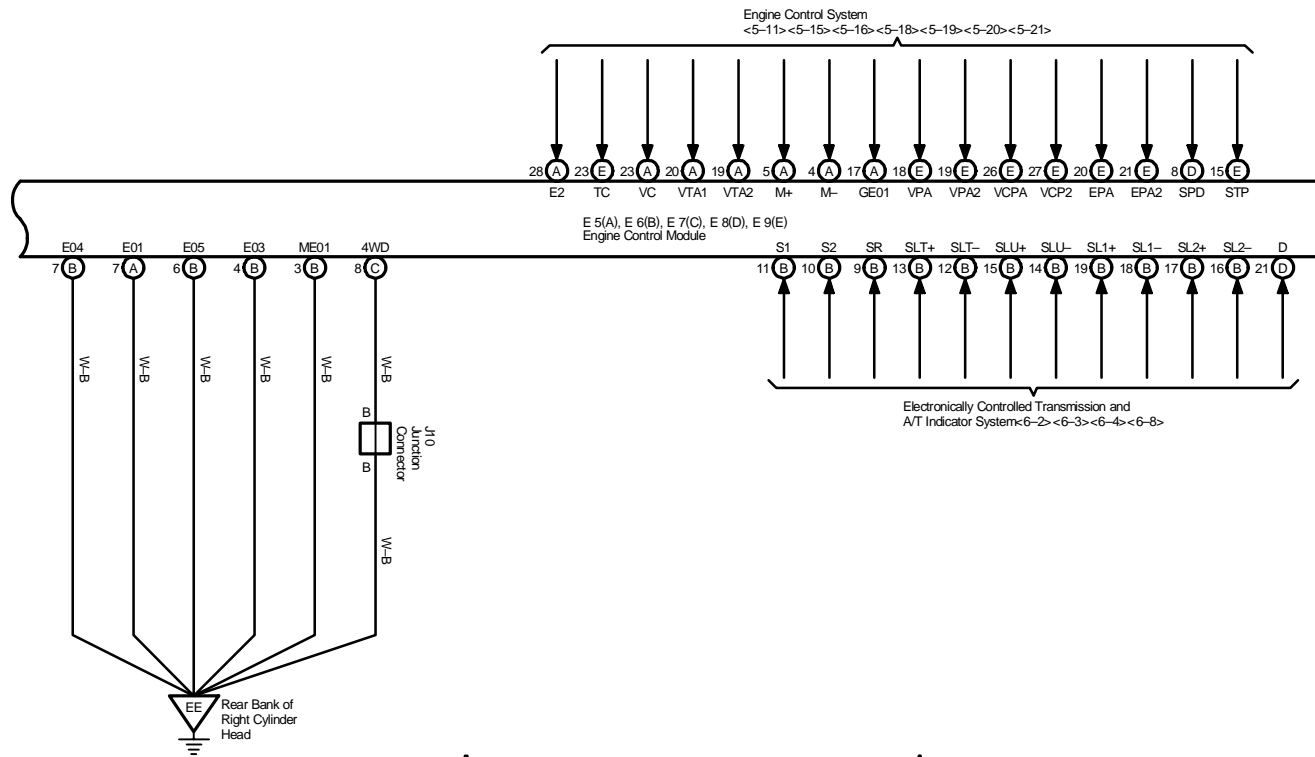
Cruise Control

5

6

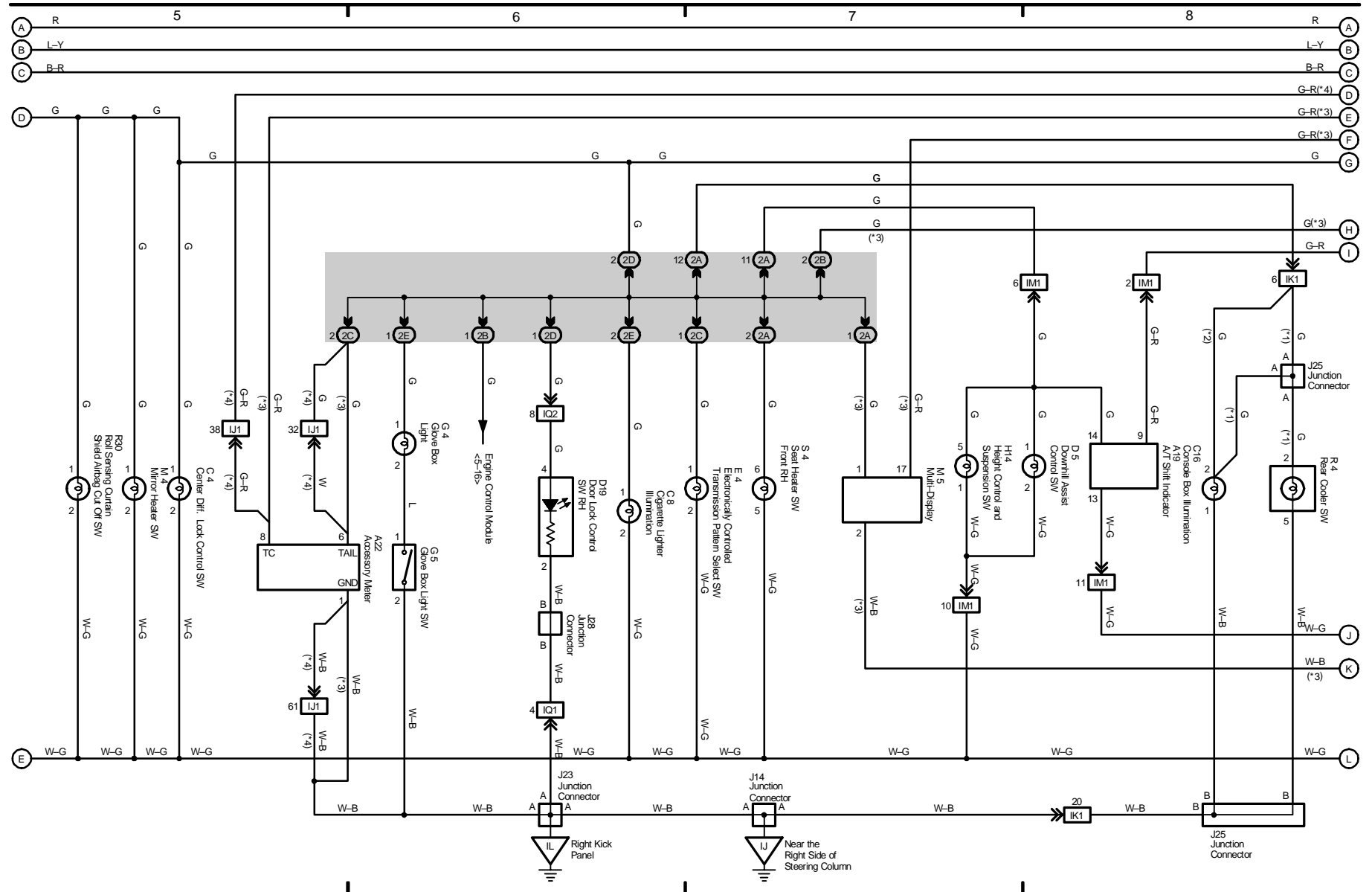
7

8



Taillight and Illumination

- * 1 : w/ Rear A/C
- * 2 : w/o Rear A/C
- * 3 : w/ LEXUS Navigation System
- * 4 : w/o LEXUS Navigation System



2005 LEXUS GX 470 (EWMD616U)

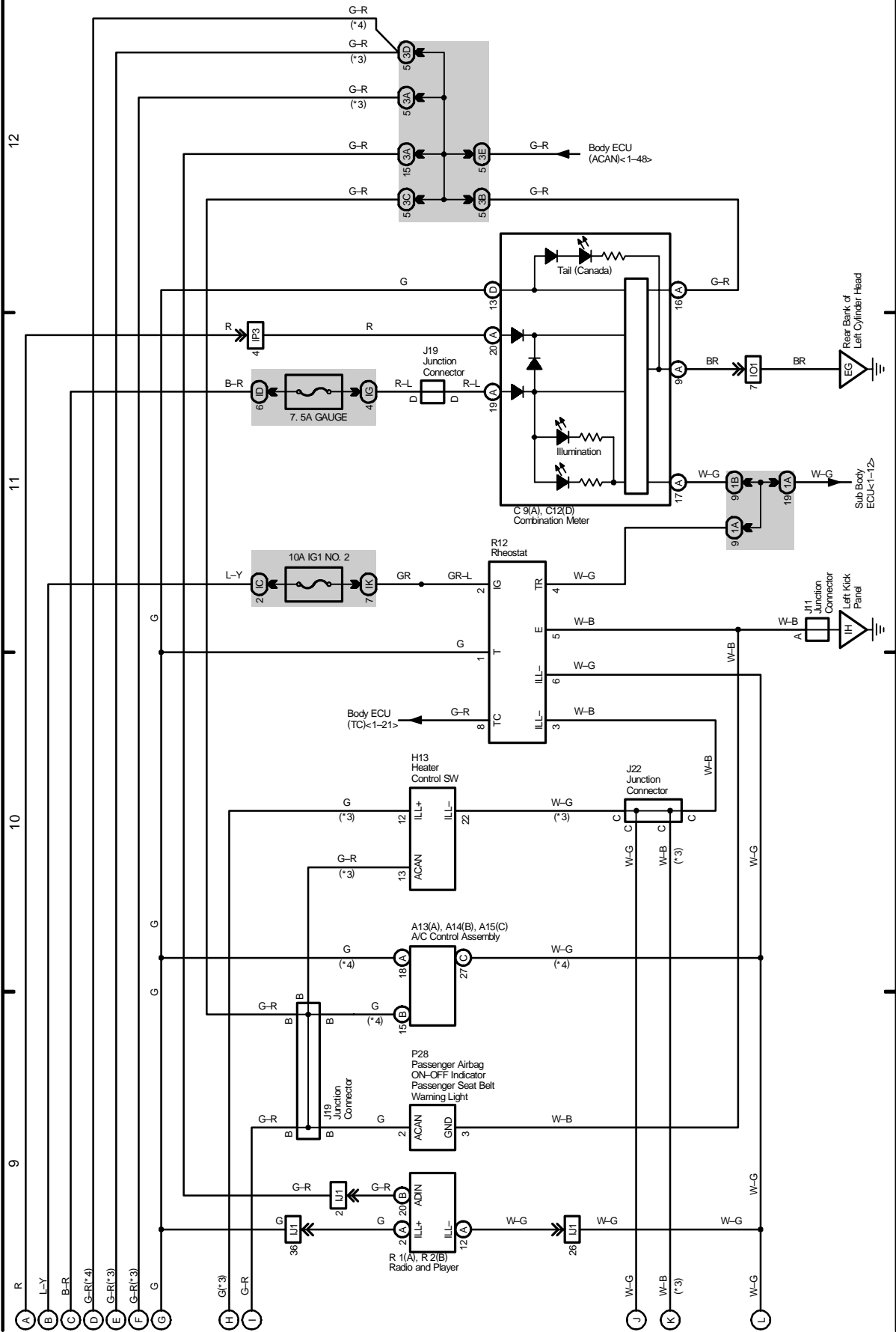


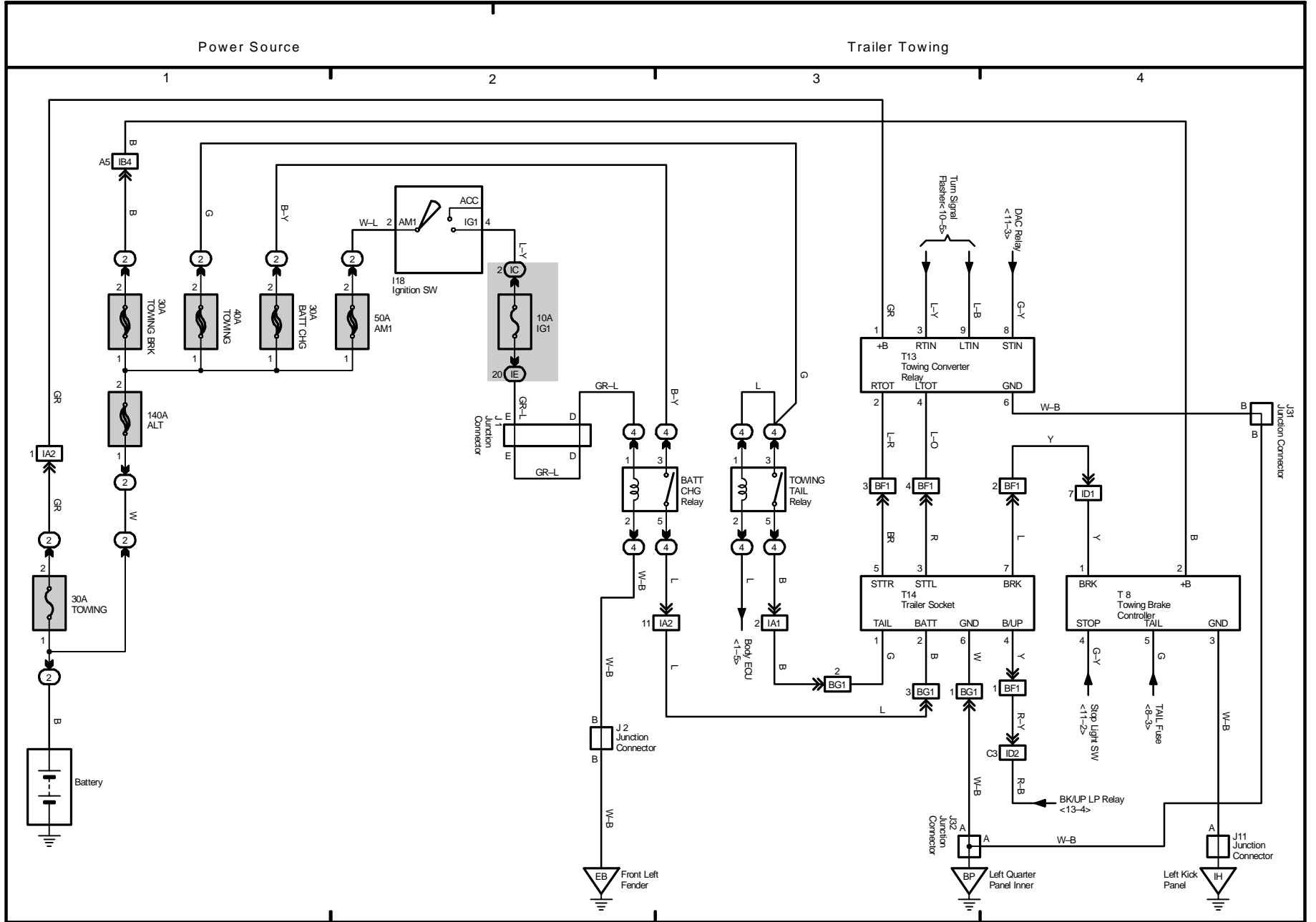
M OVERALL ELECTRICAL WIRING DIAGRAM

8 GX 470 (Cont' d)

Taillight and Illumination

* 3 : w/ LEXUS Navigation System
 * 4 : w/o LEXUS Navigation System



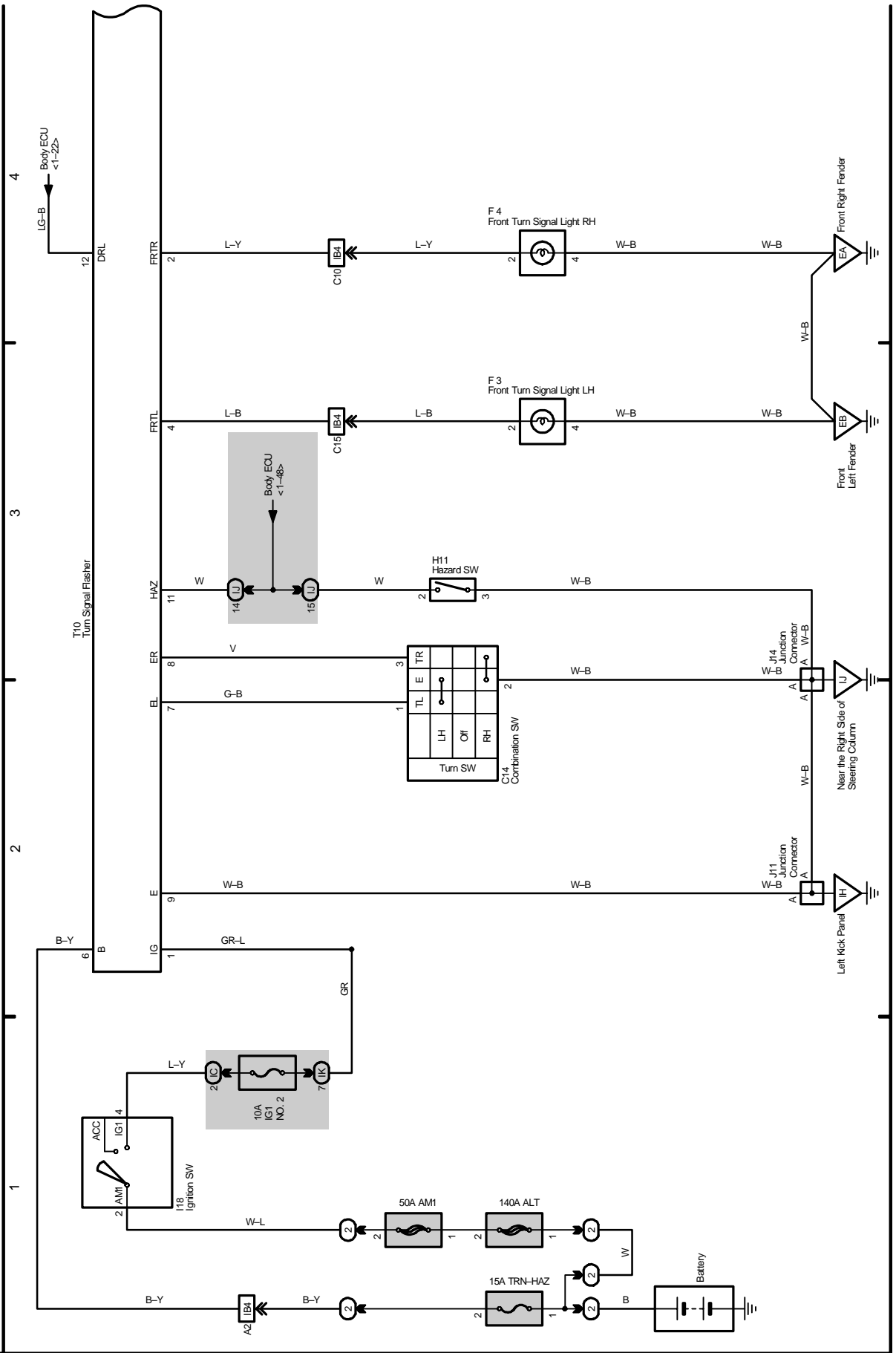


M OVERALL ELECTRICAL WIRING DIAGRAM

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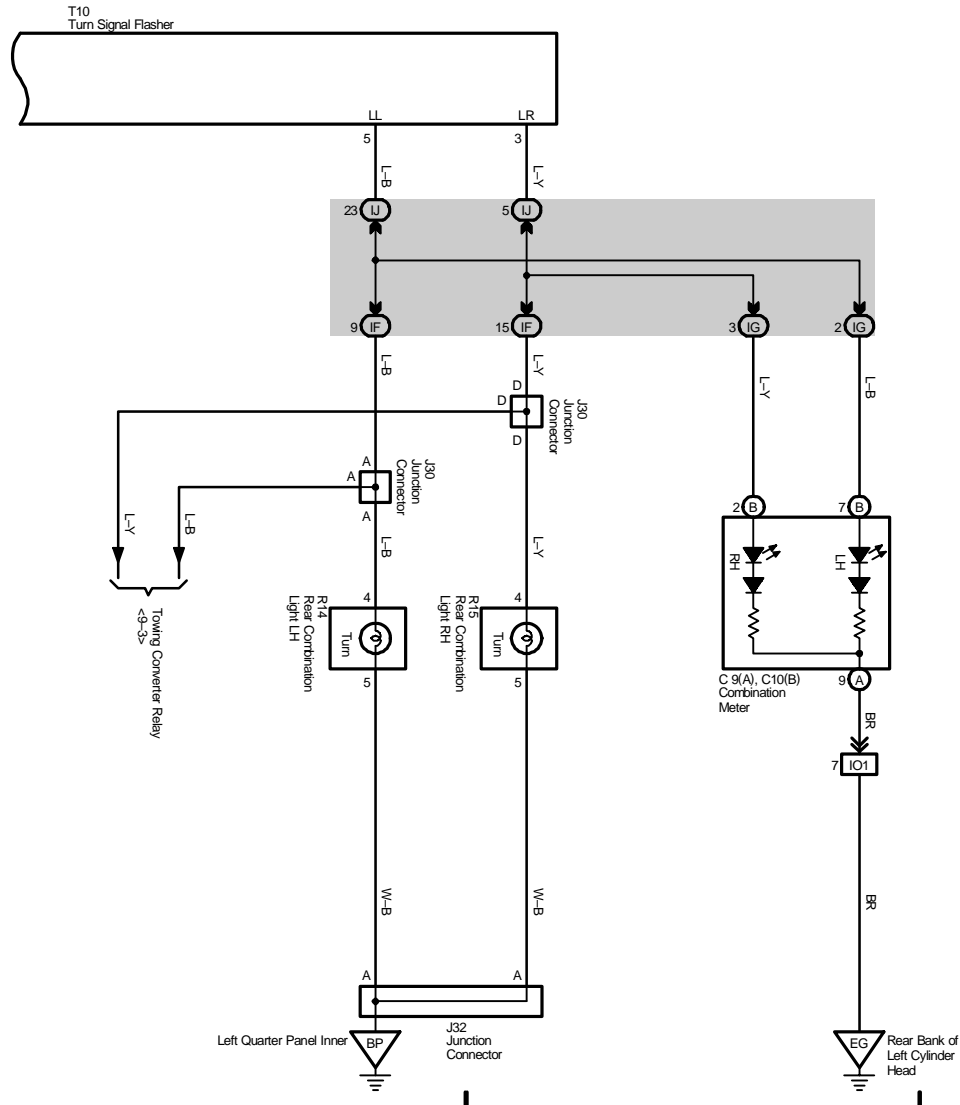
10 GX 470

Turn Signal and Hazard Warning Light



Turn Signal and Hazard Warning Light

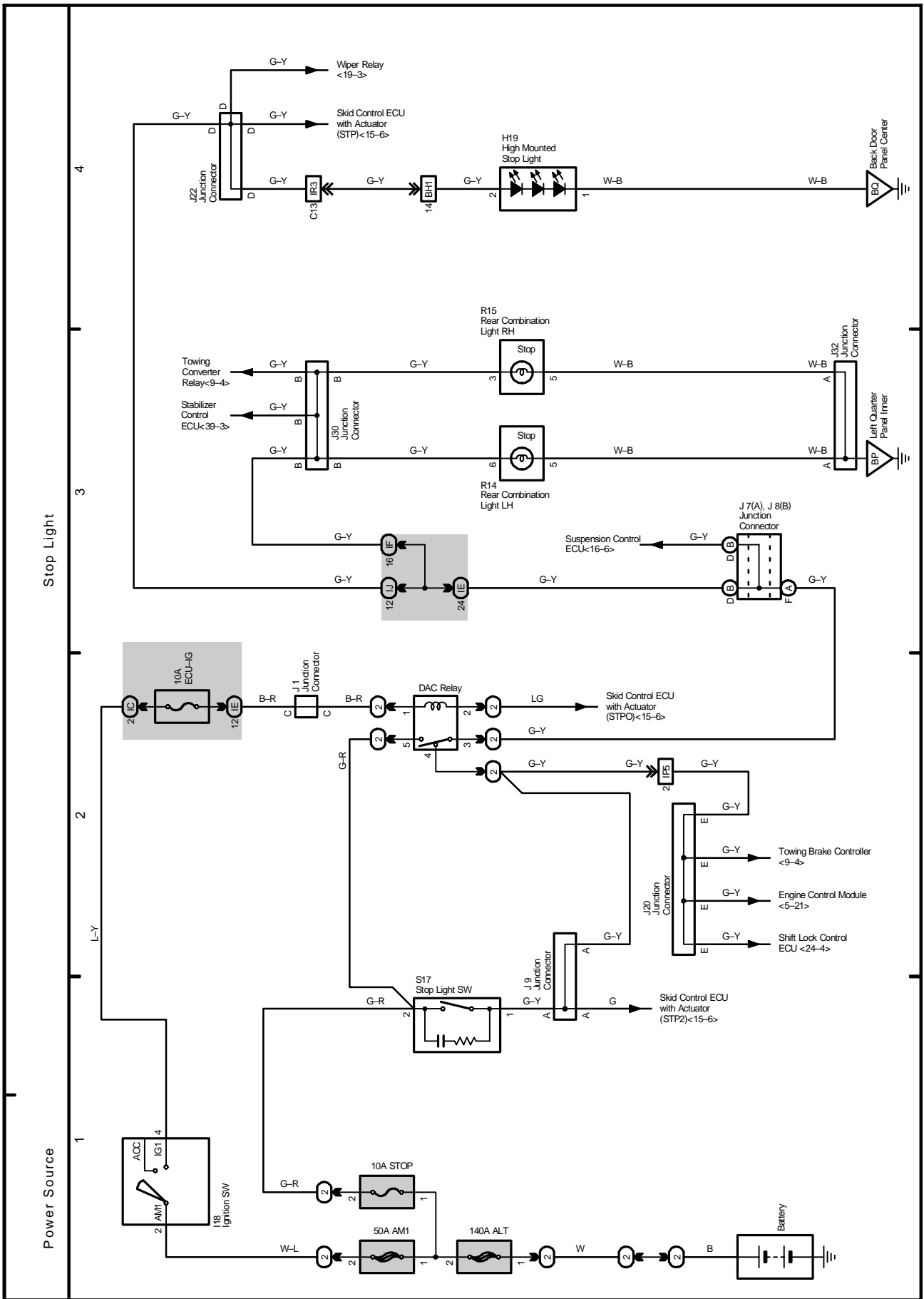
5 6 7 8

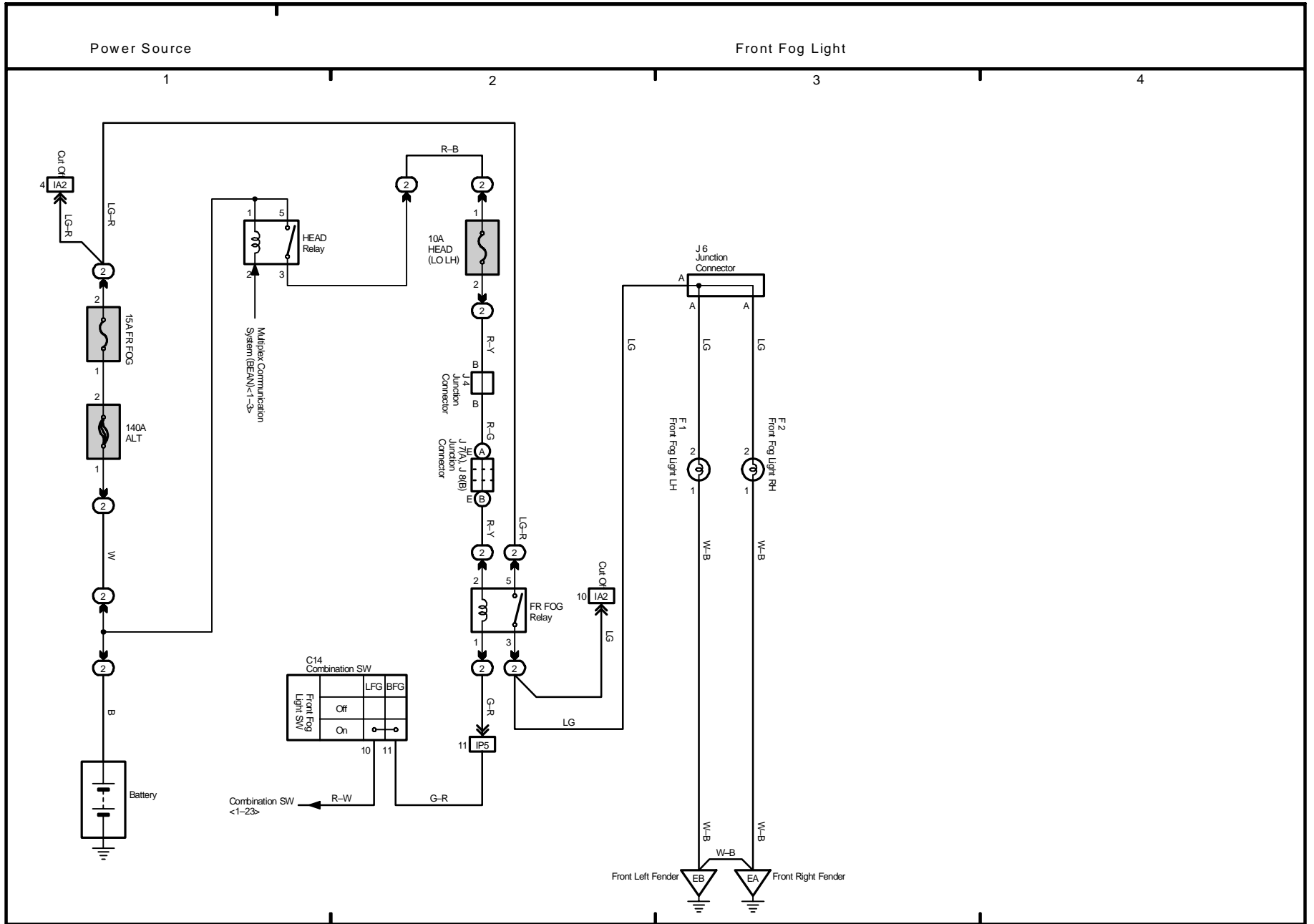


2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

11 GX 470

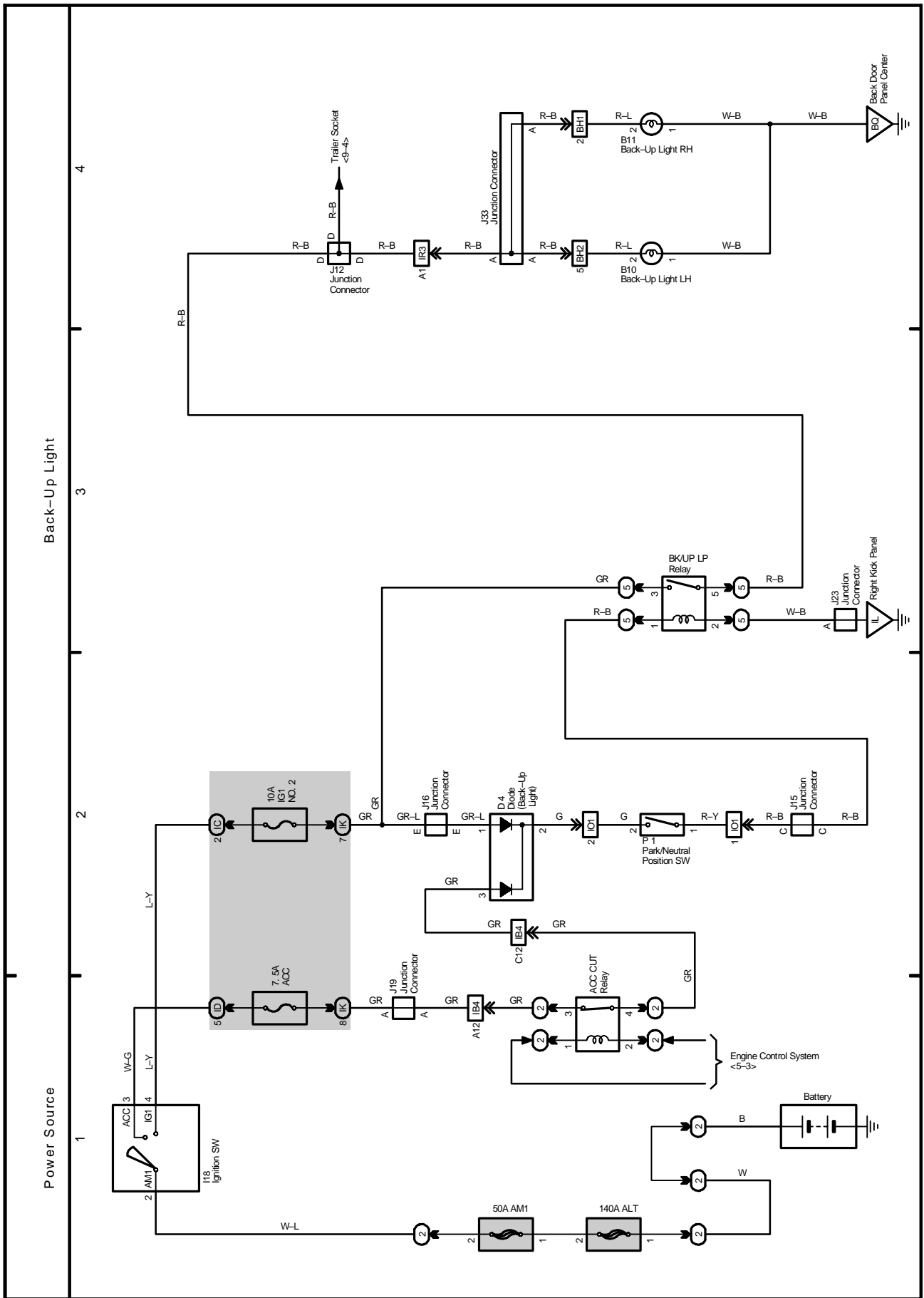




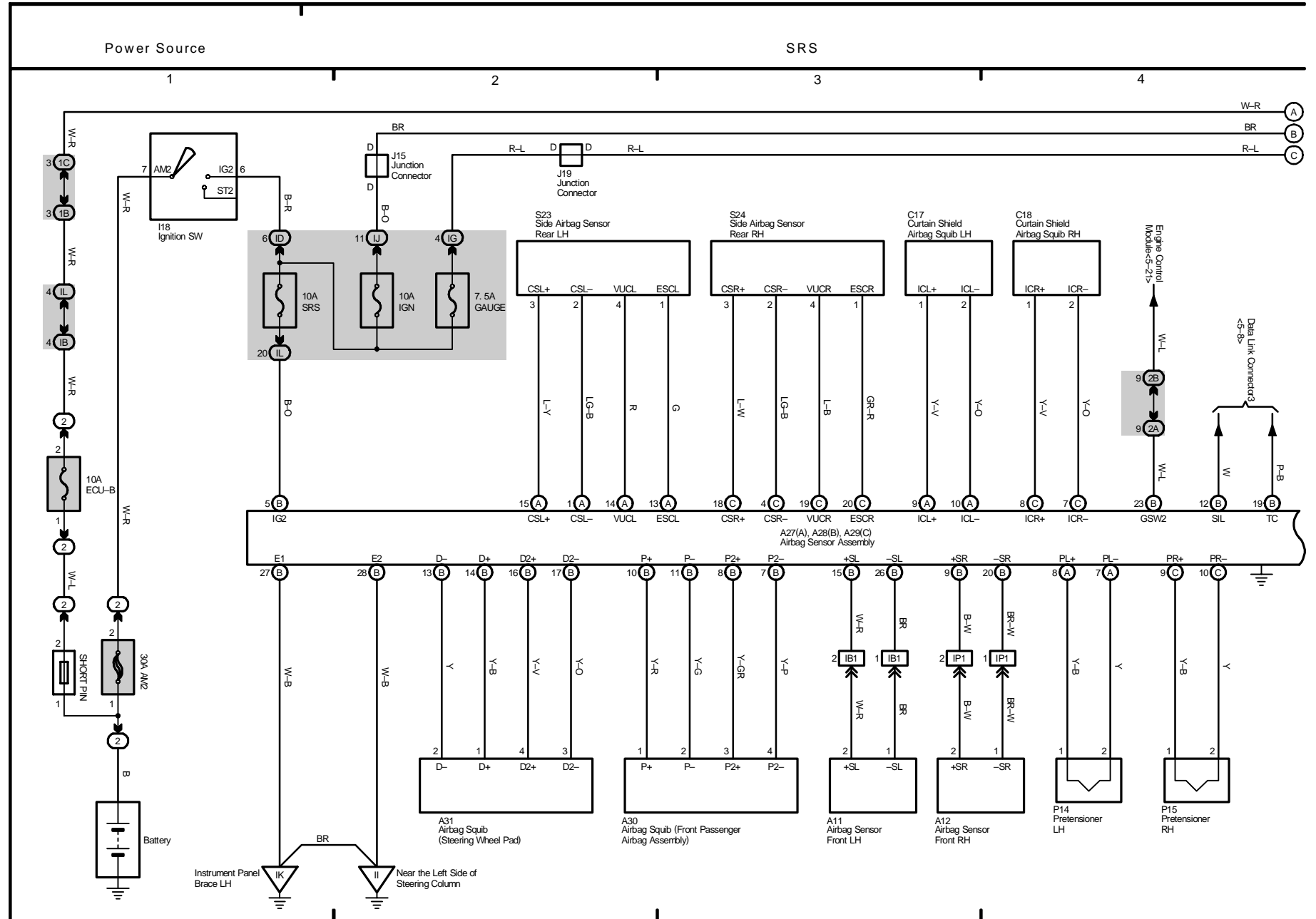
2005 LEXUS GX 470 (EWD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

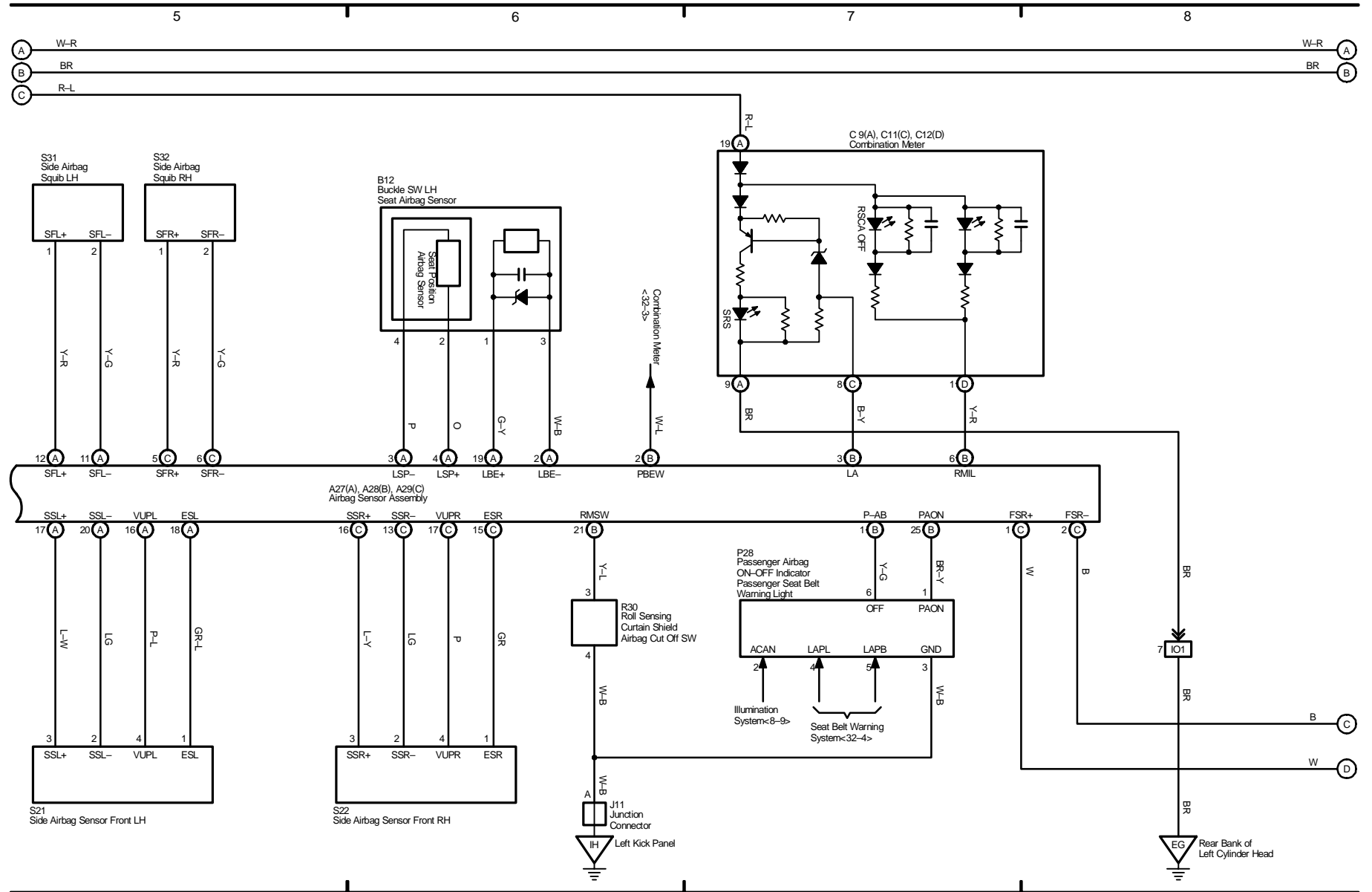
13 GX 470



2005 LEXUS GX 470 (EWMD616U)

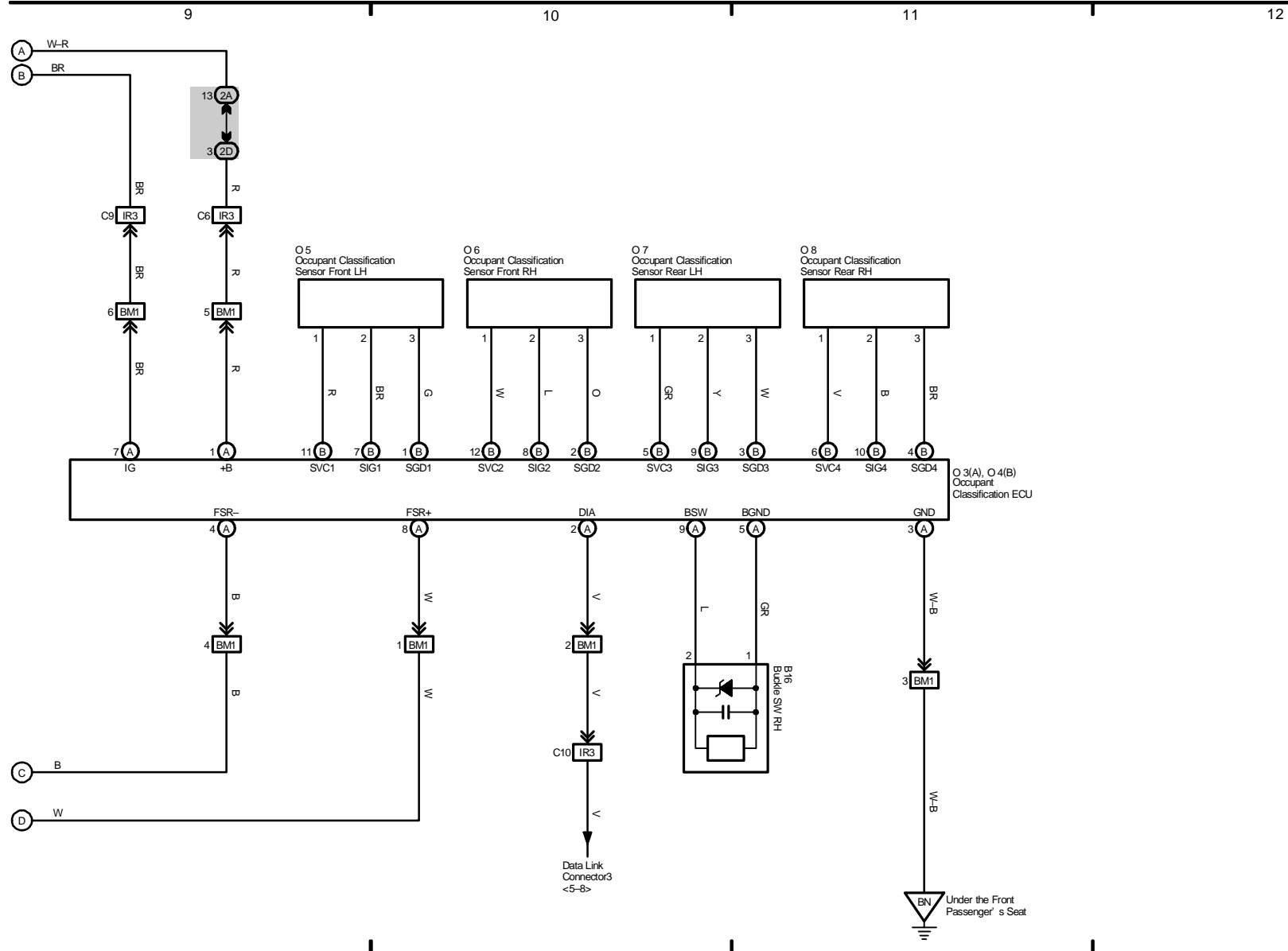


SRS



2005 LEXUS GX 470 (EWD616U)

SRS



2005 LEXUS GX 470 (EWMD616U)

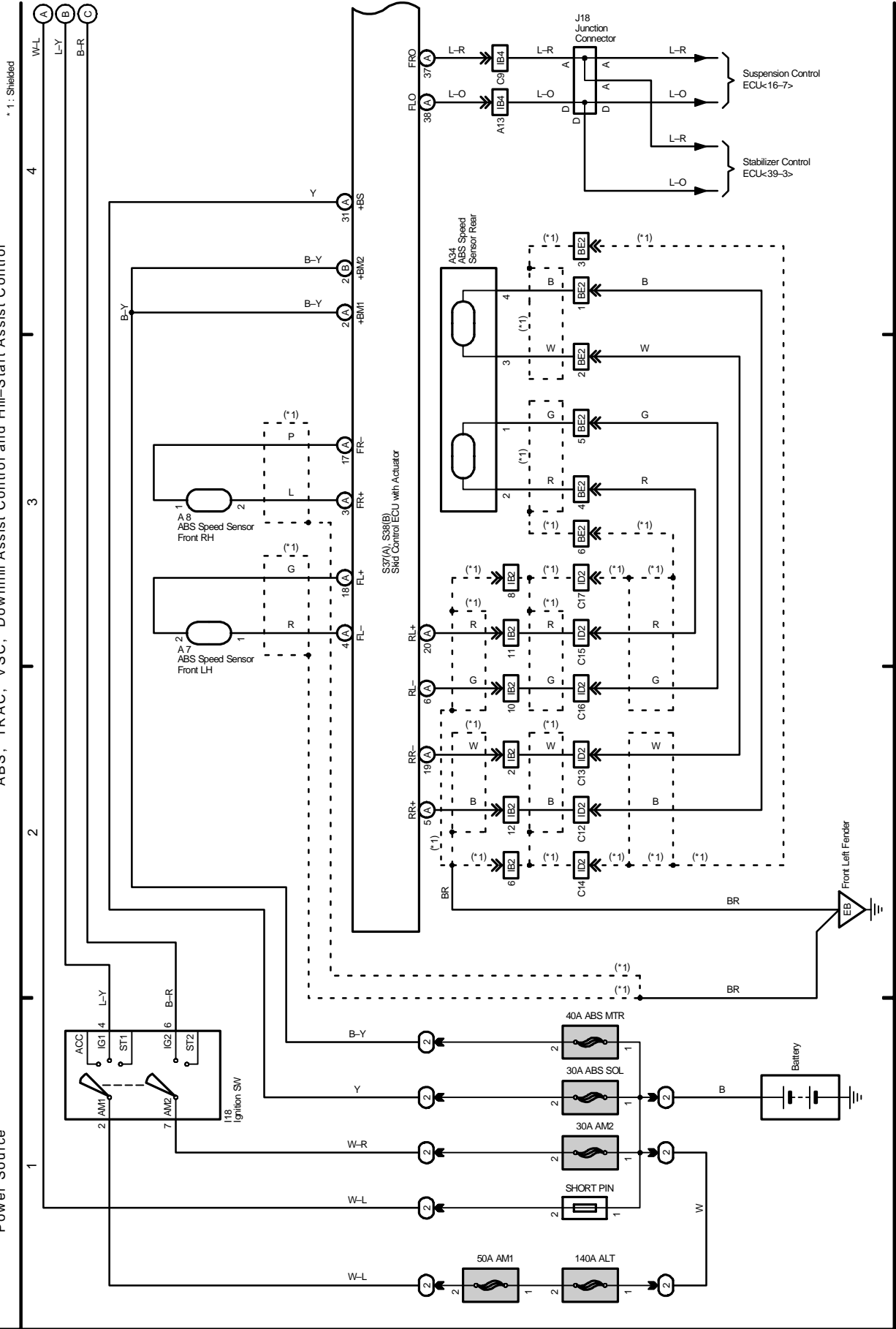
M OVERALL ELECTRICAL WIRING DIAGRAM

(Cont. next page)

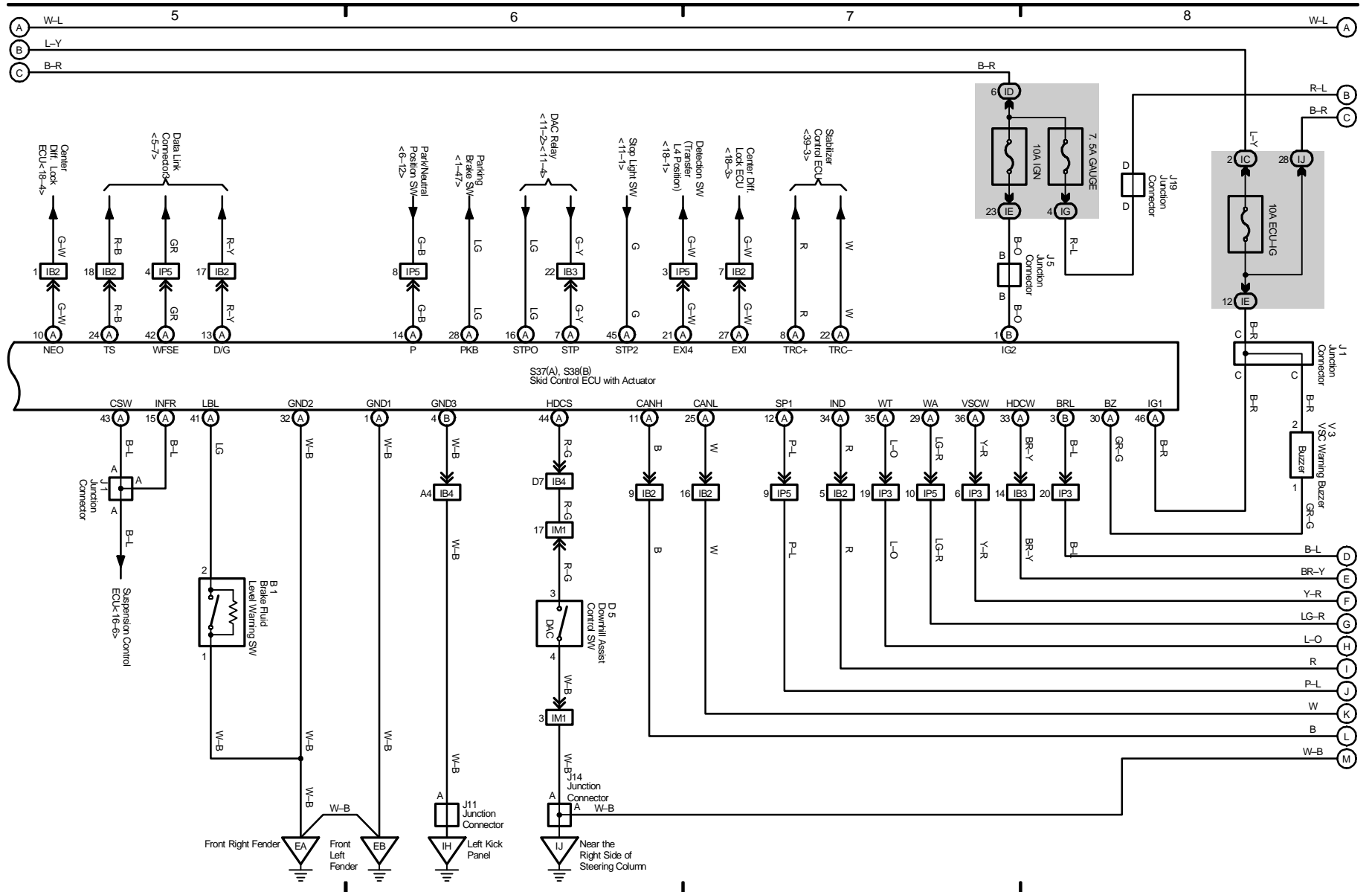
15 GX 470

ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control

Power Source



ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control



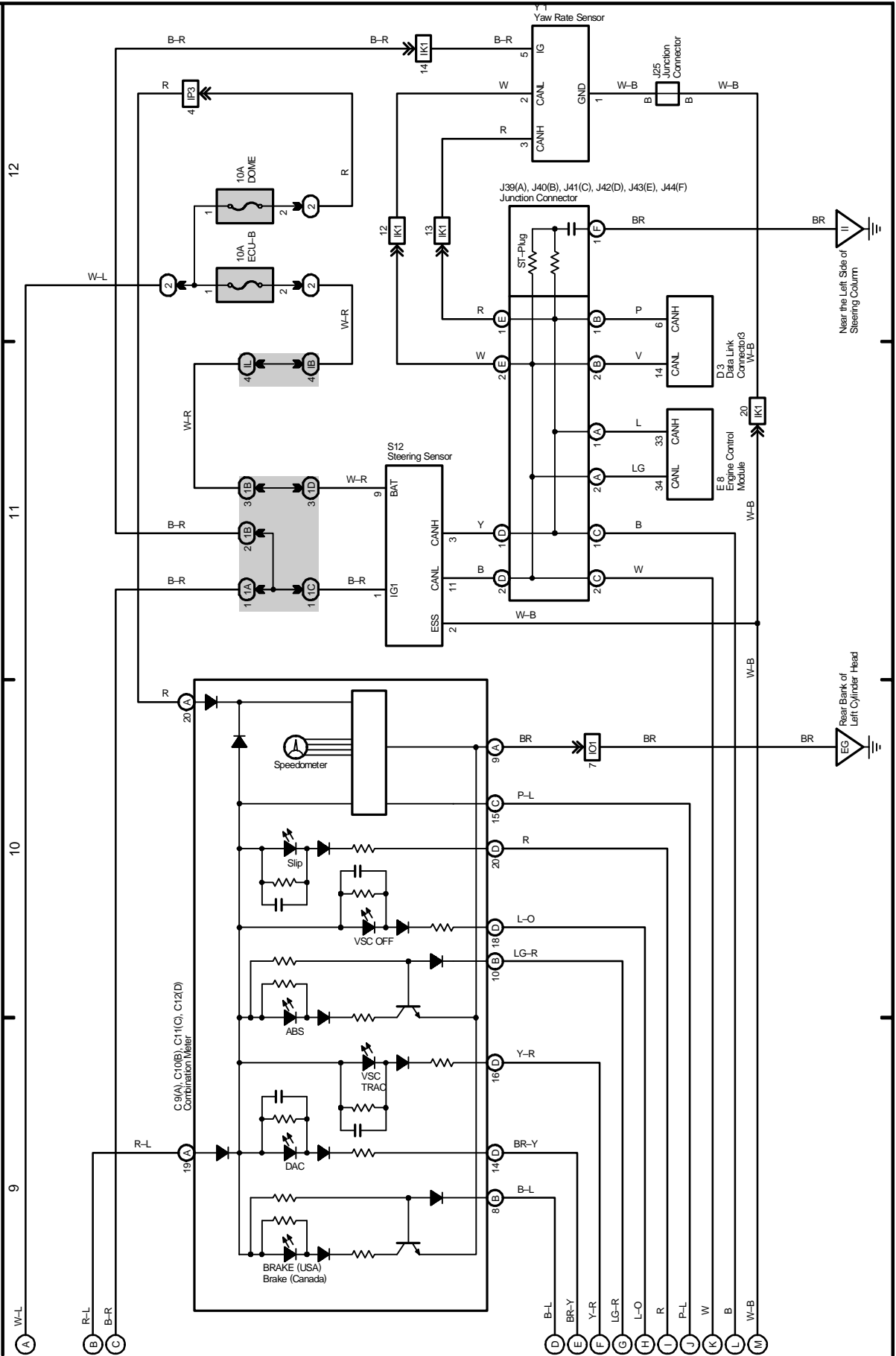
2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

15 GX 470 (Cont' d)

ABS, TRAC, VSC, Downhill Assist Control and Hill-Start Assist Control

Multiplex Communication System (CAN)



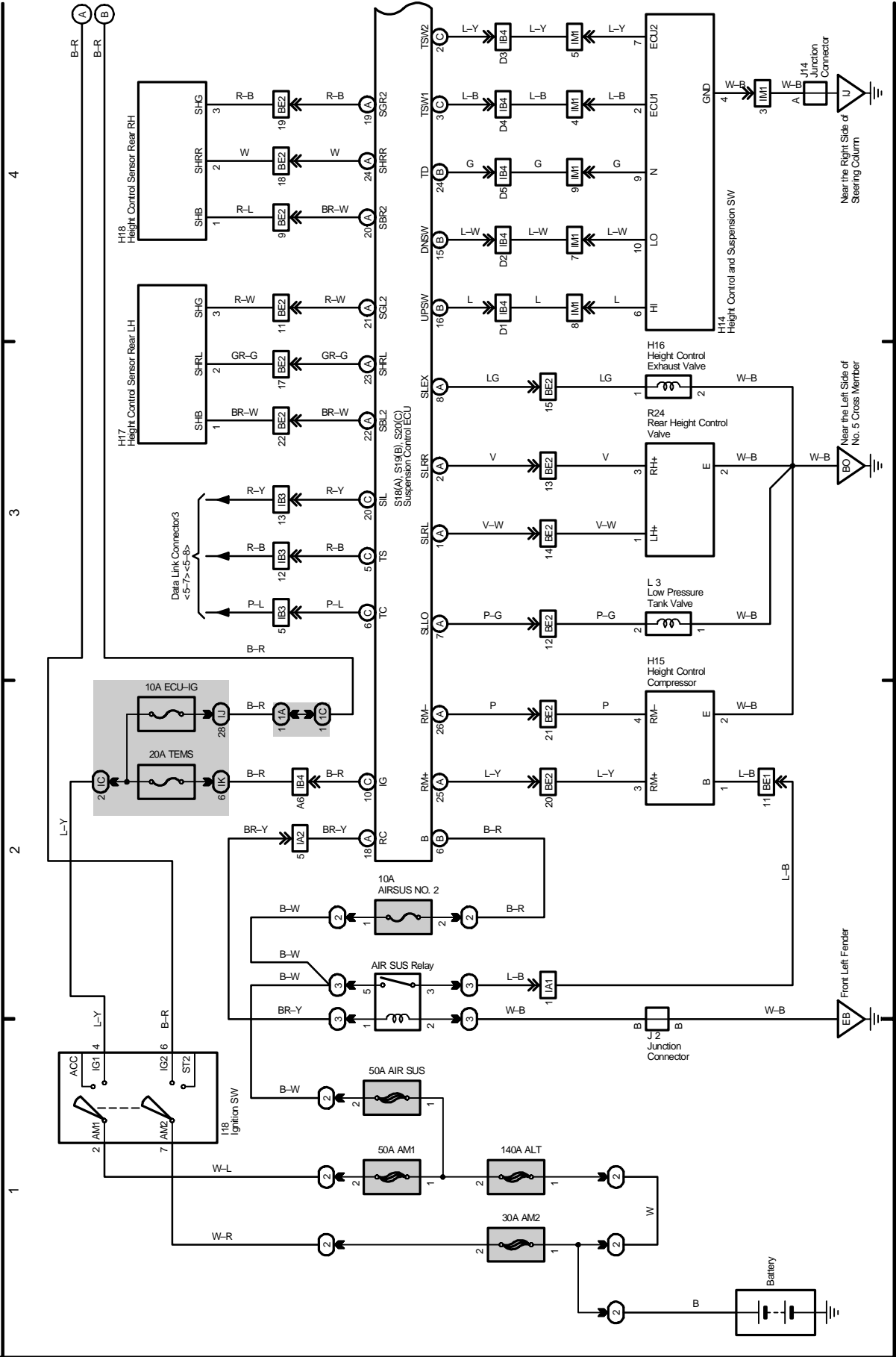
M OVERALL ELECTRICAL WIRING DIAGRAM

(Cont. next page)

16 GX 470

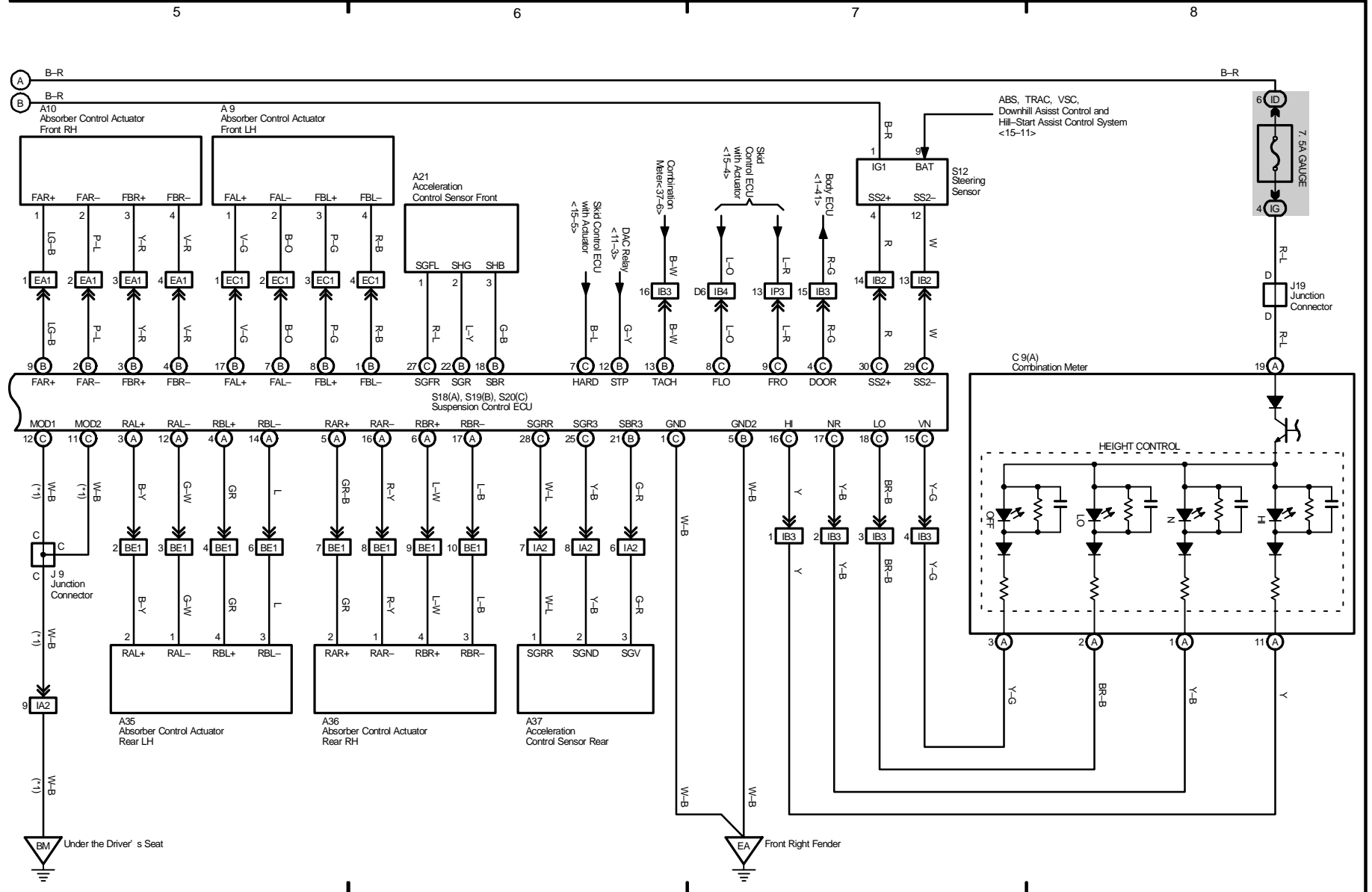
Power Source

Electric Modulated Air Suspension



Electric Modulated Air Suspension

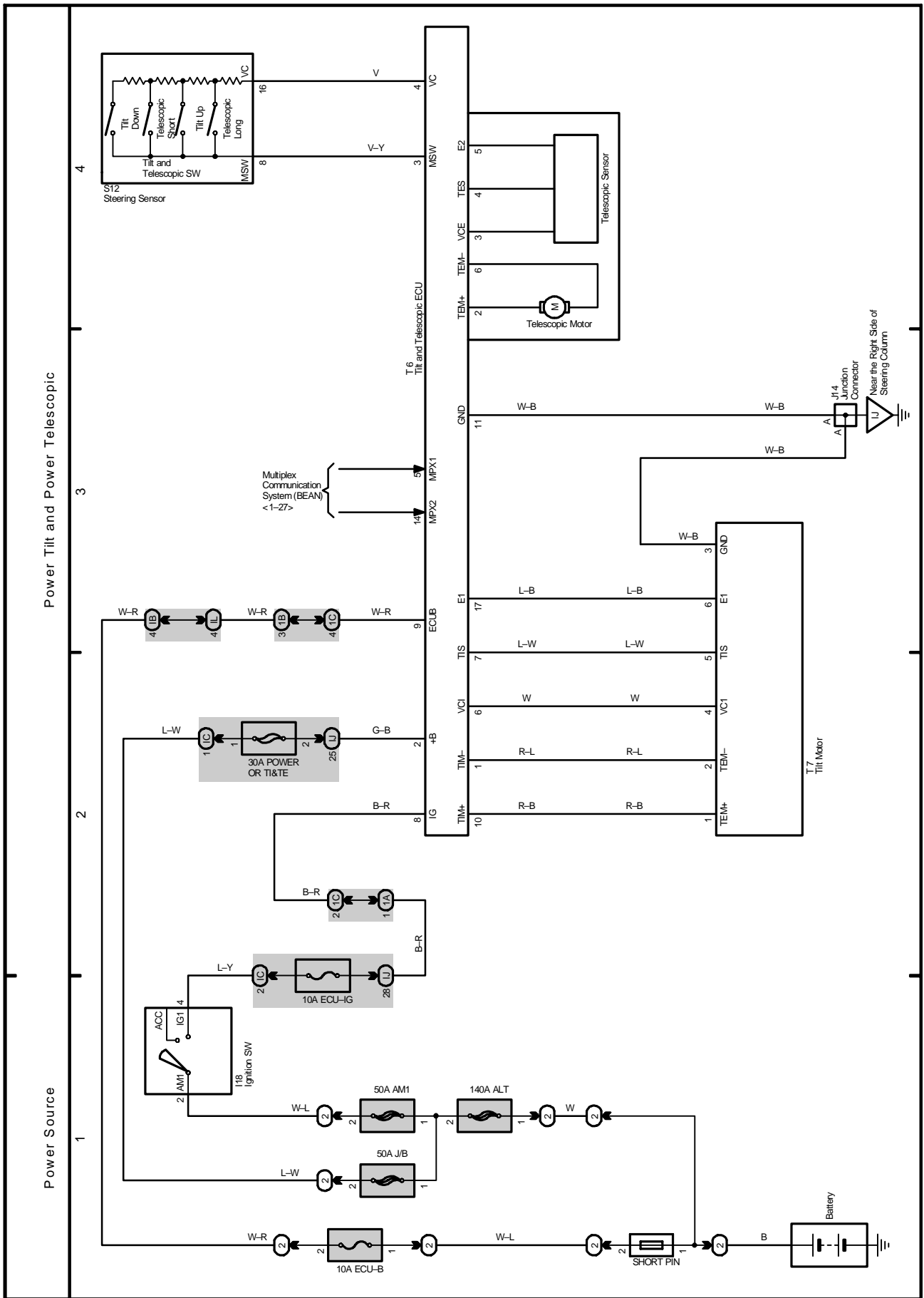
* 1 : w/ Kinetic Dynamic Suspension System



2005 LEXUS GX 470 (EWD616U)

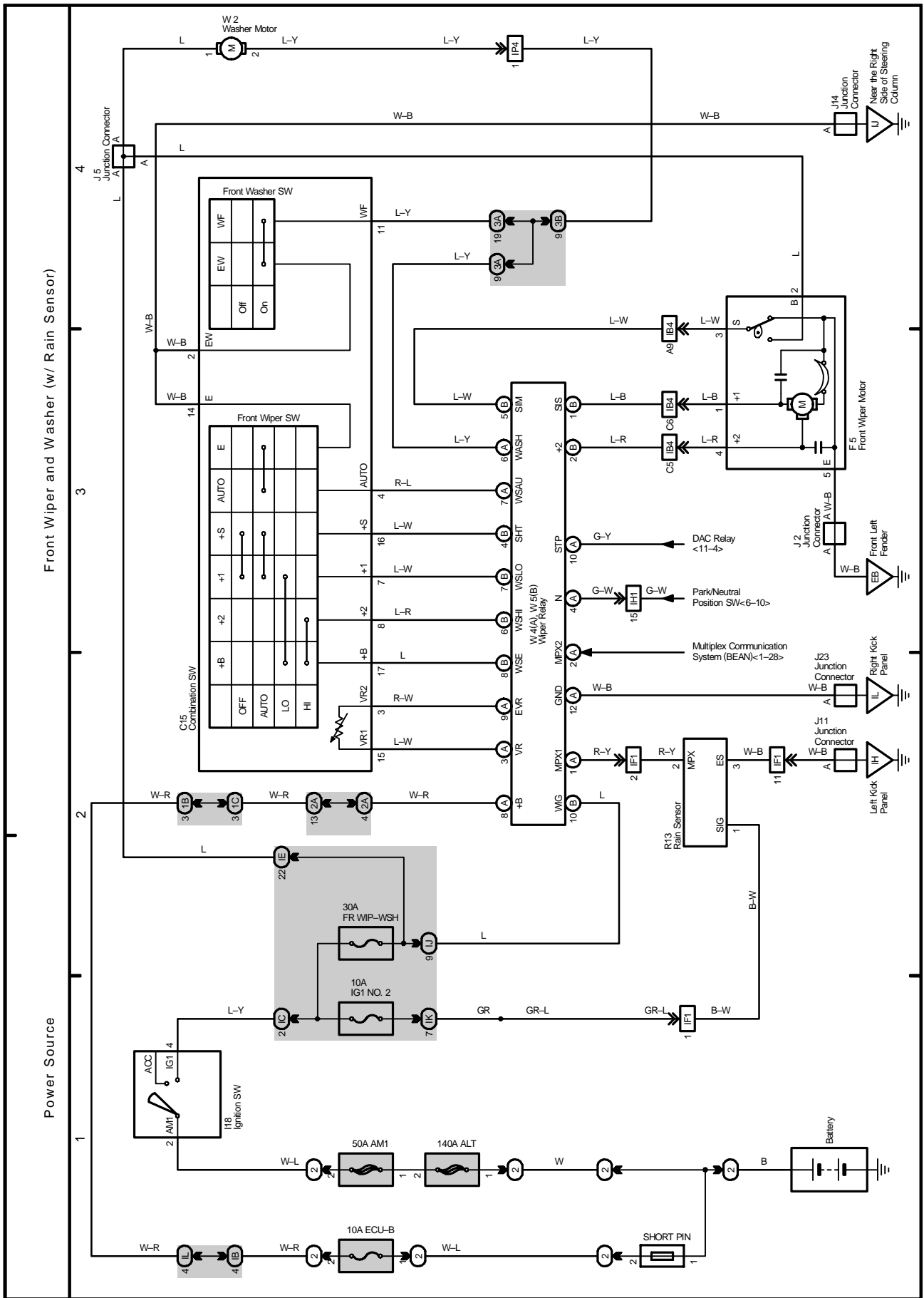
M OVERALL ELECTRICAL WIRING DIAGRAM

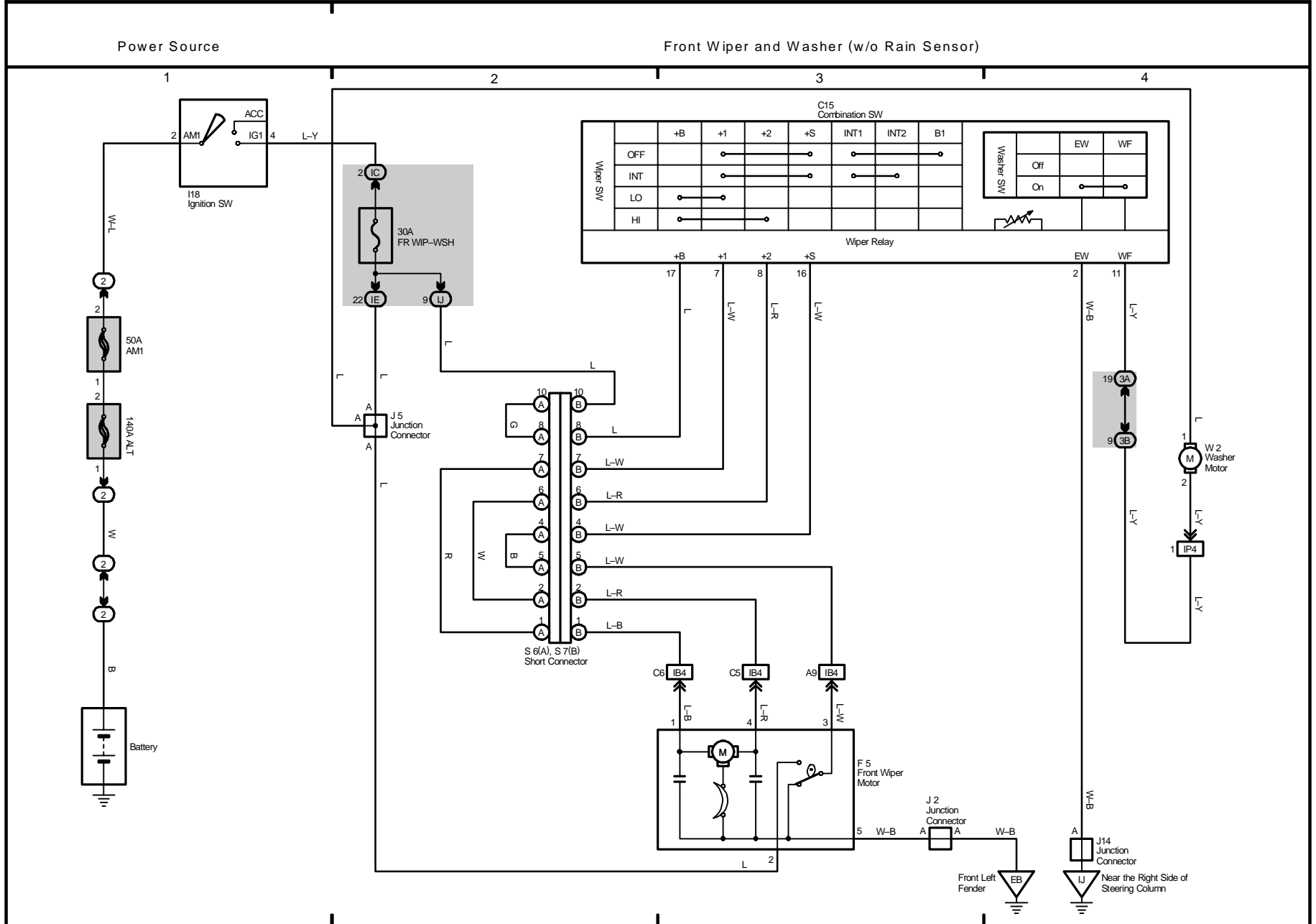
17 GX 470



M OVERALL ELECTRICAL WIRING DIAGRAM

19 GX 470

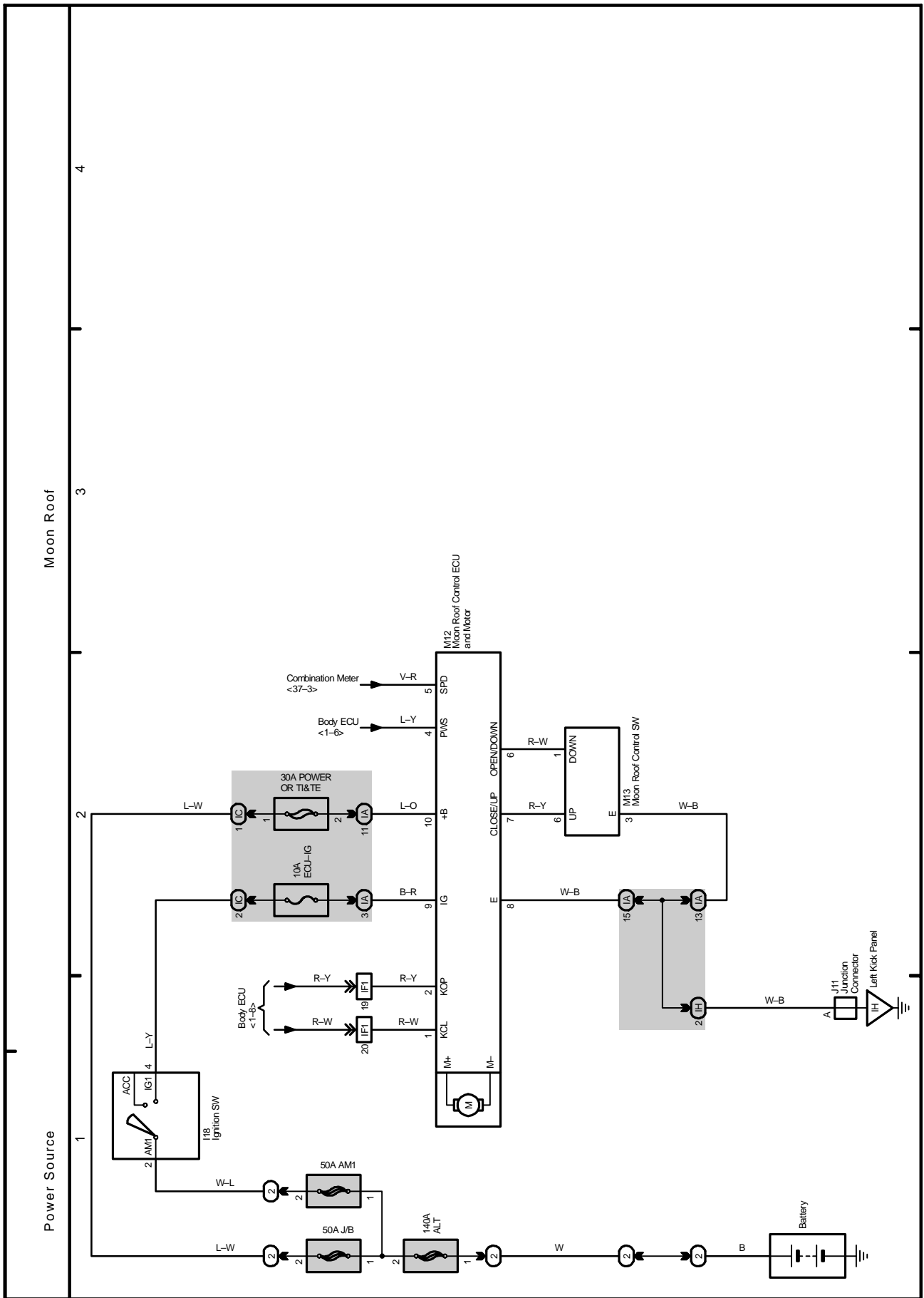




2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

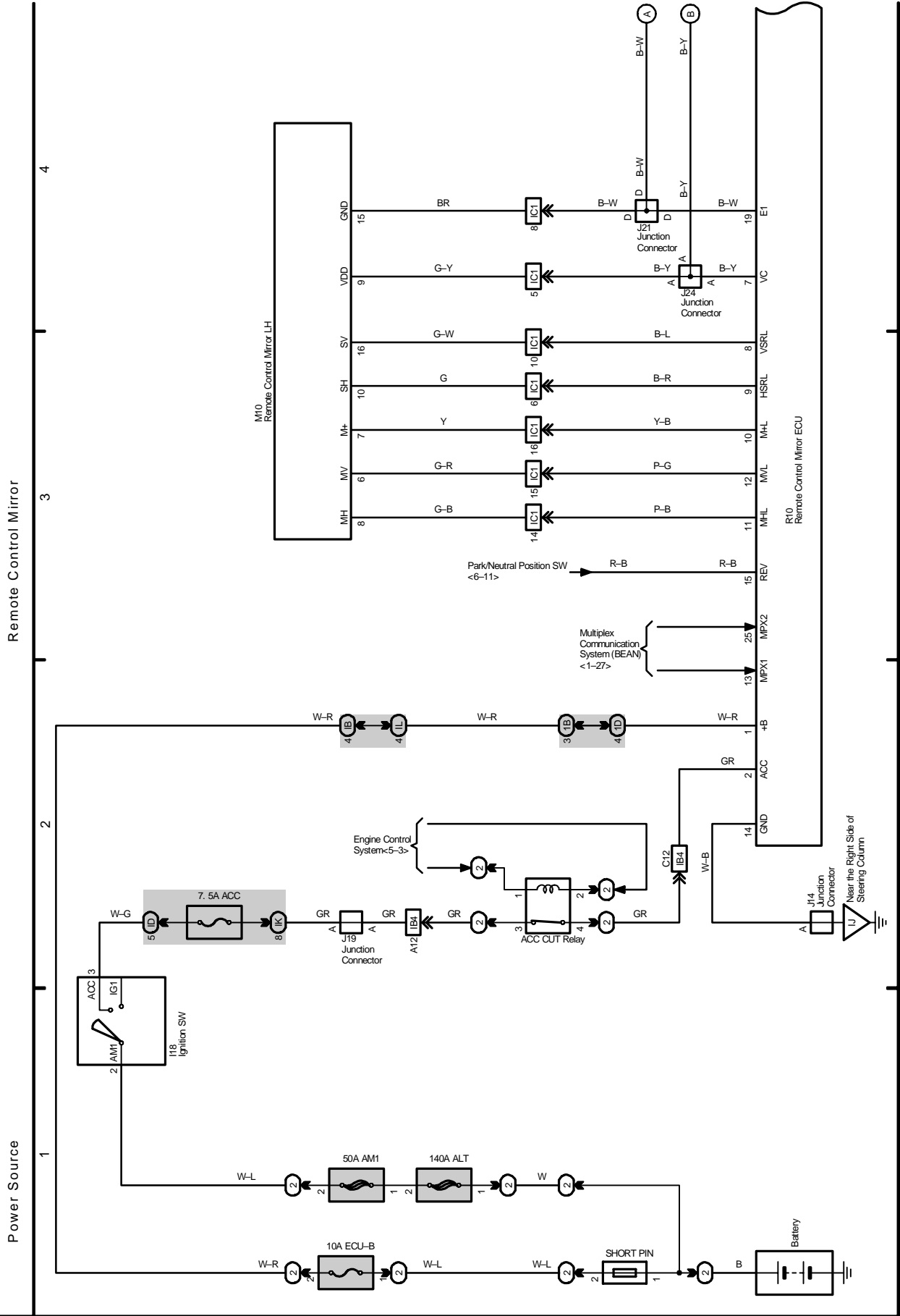
21 GX 470



M OVERALL ELECTRICAL WIRING DIAGRAM

(Cont. next page)

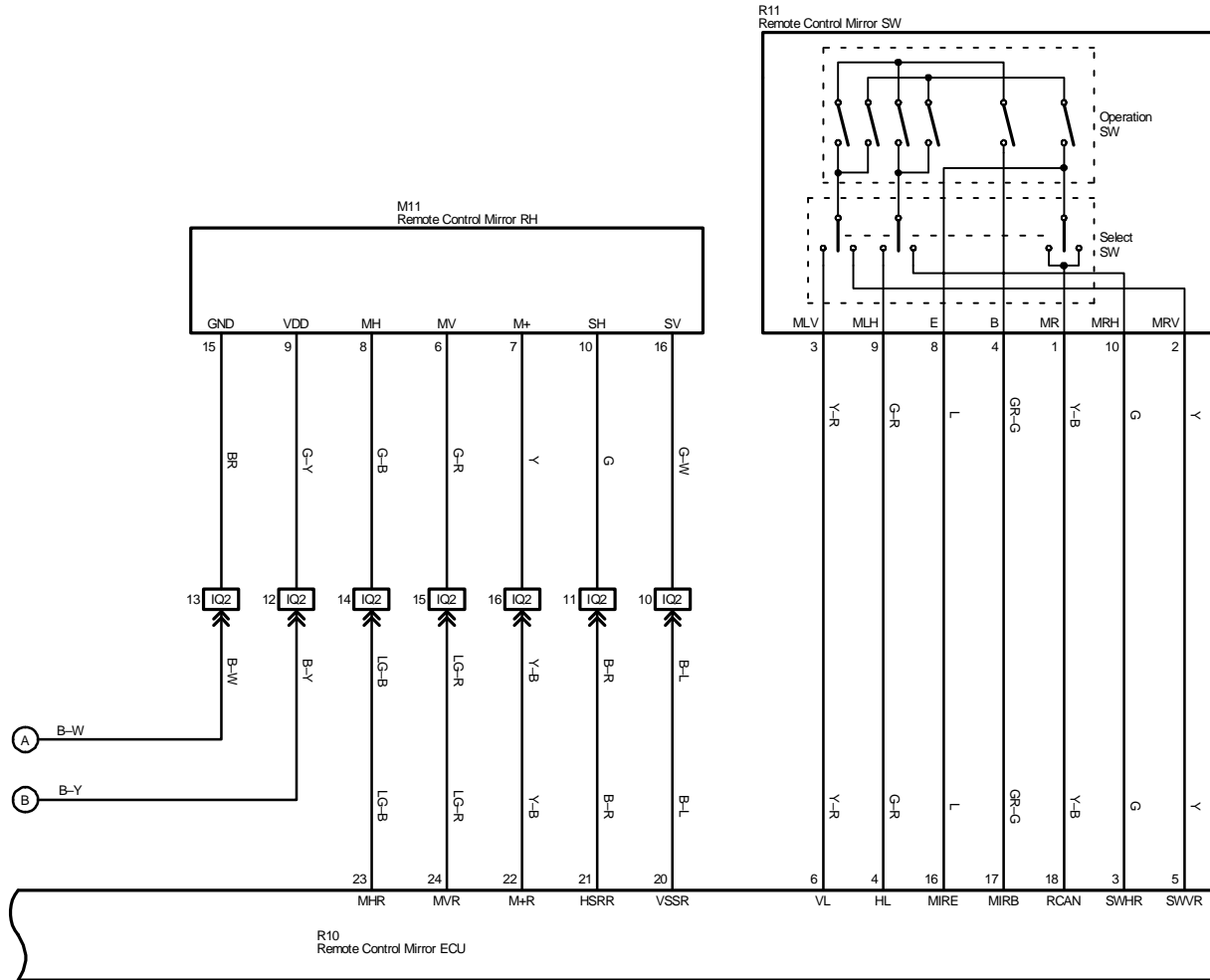
22 GX 470



Remote Control Mirror

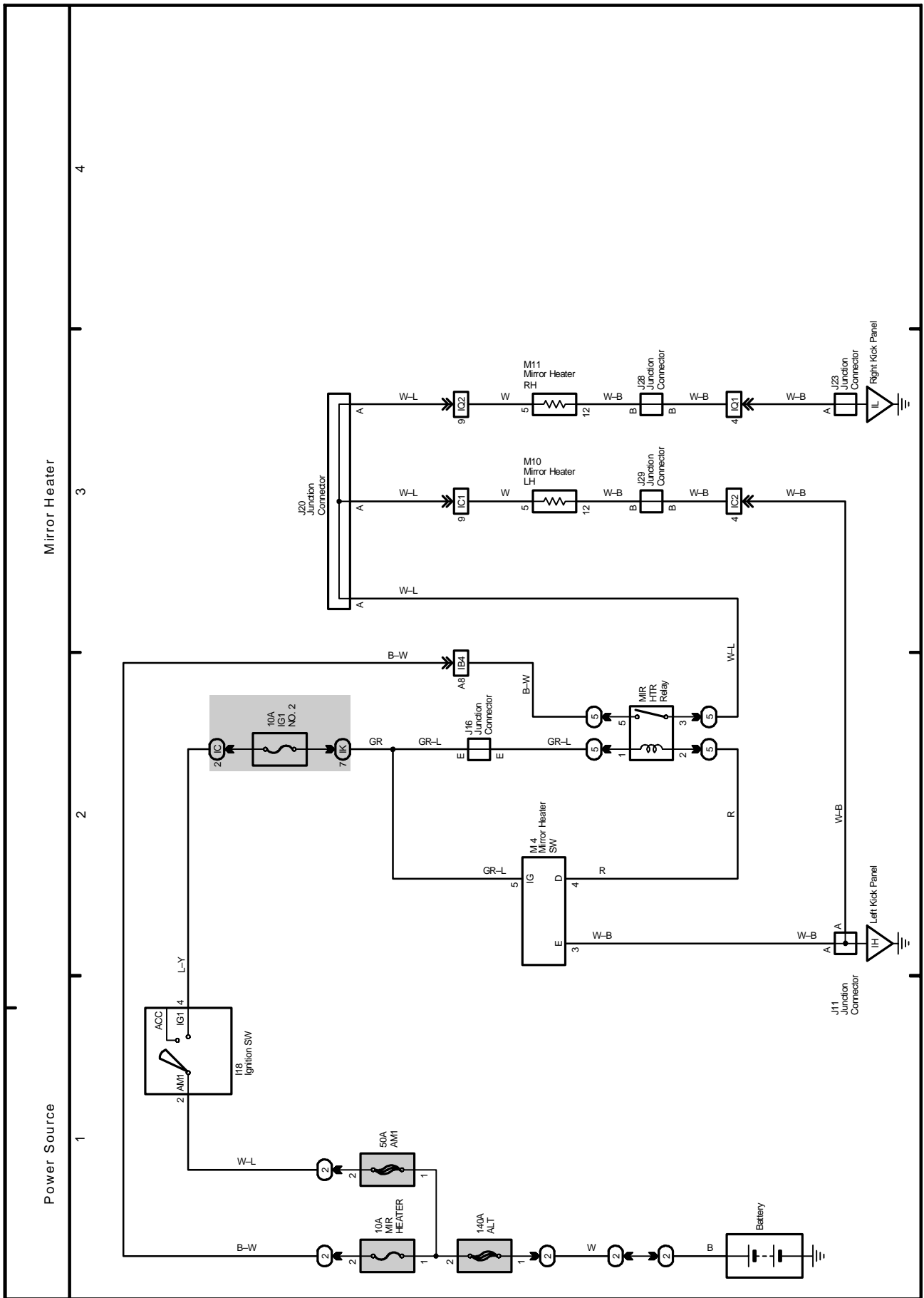
5 6 7 8

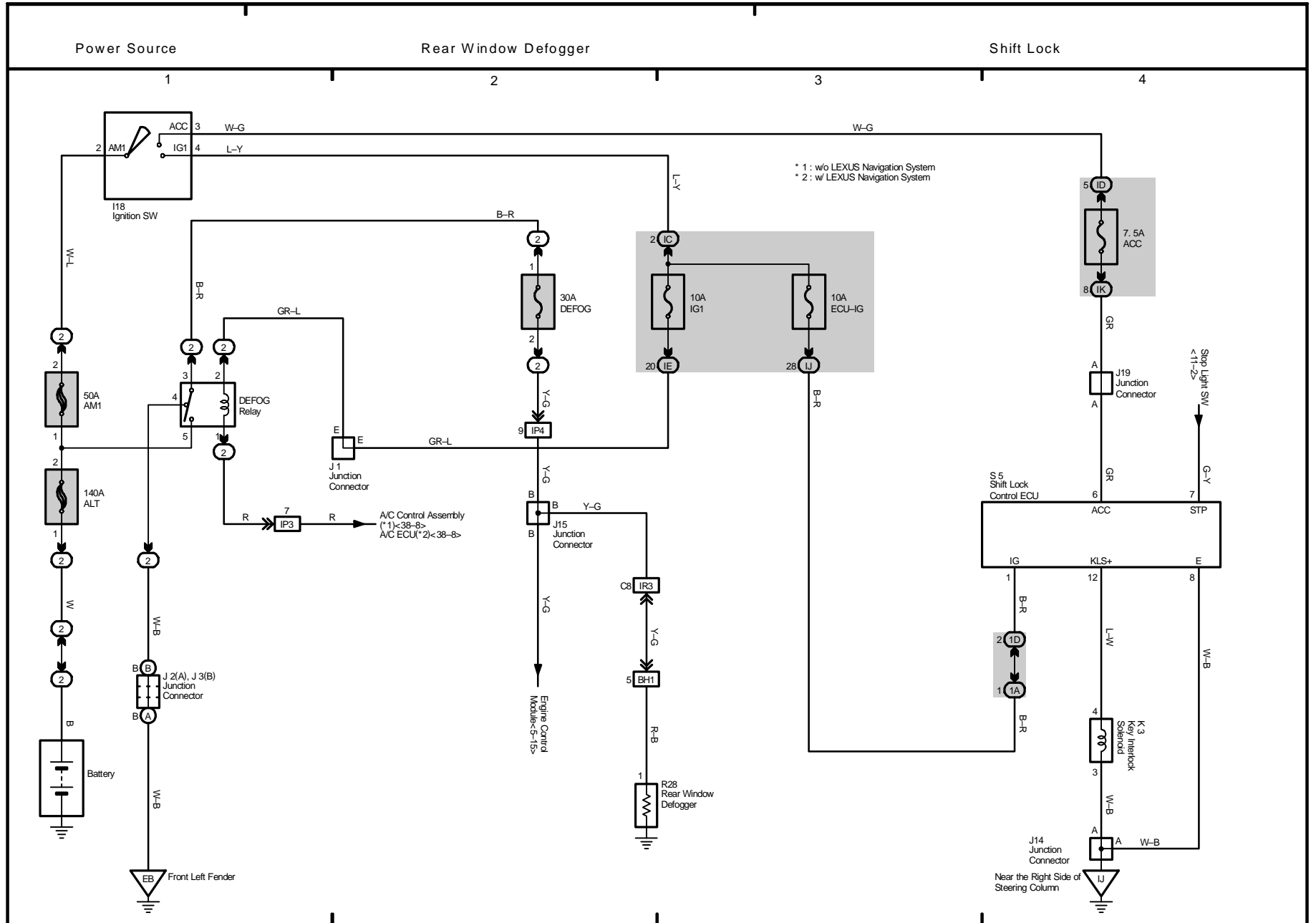
2005 LEXUS GX 470 (EWMD616U)



M OVERALL ELECTRICAL WIRING DIAGRAM

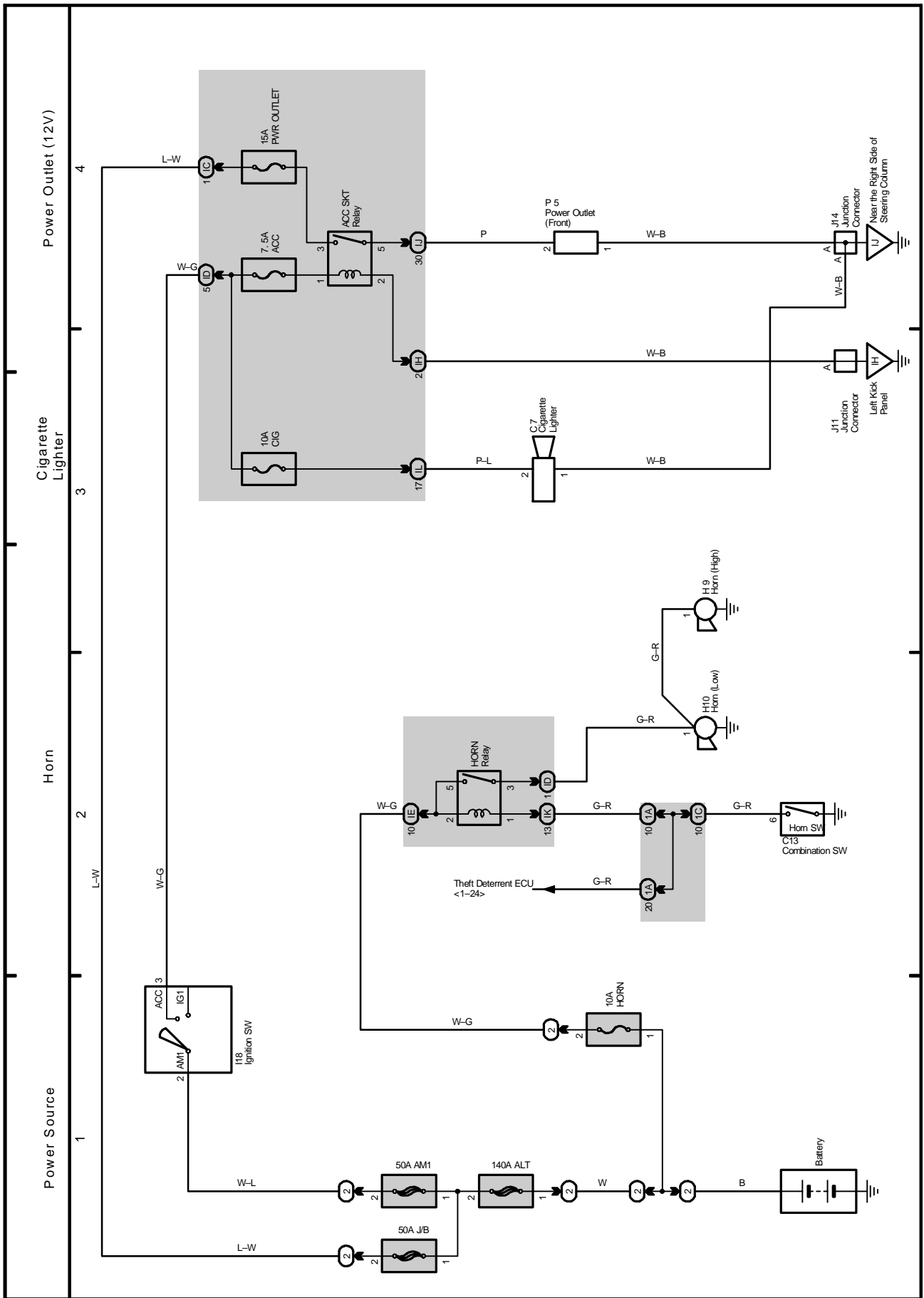
23 GX 470

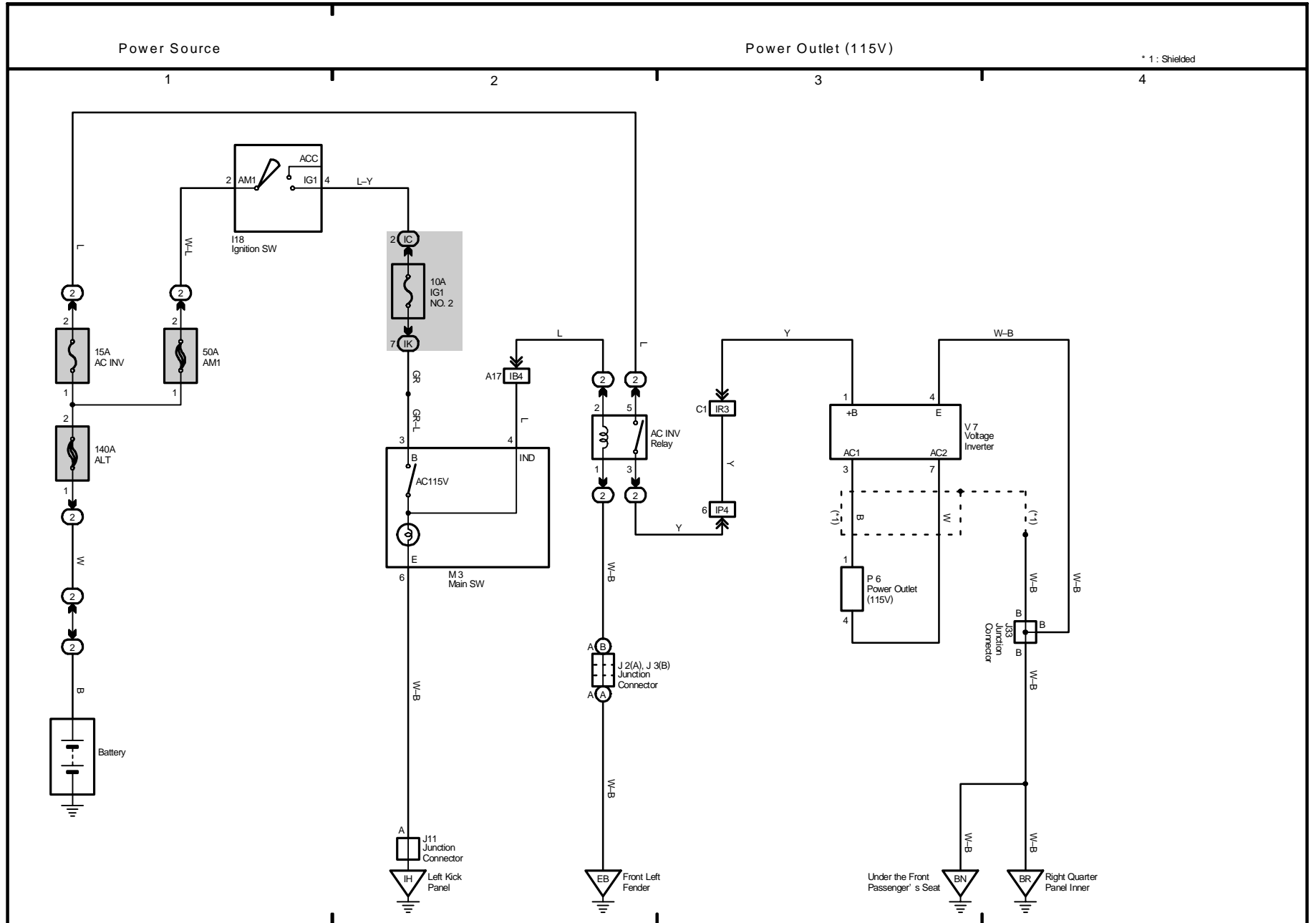




M OVERALL ELECTRICAL WIRING DIAGRAM

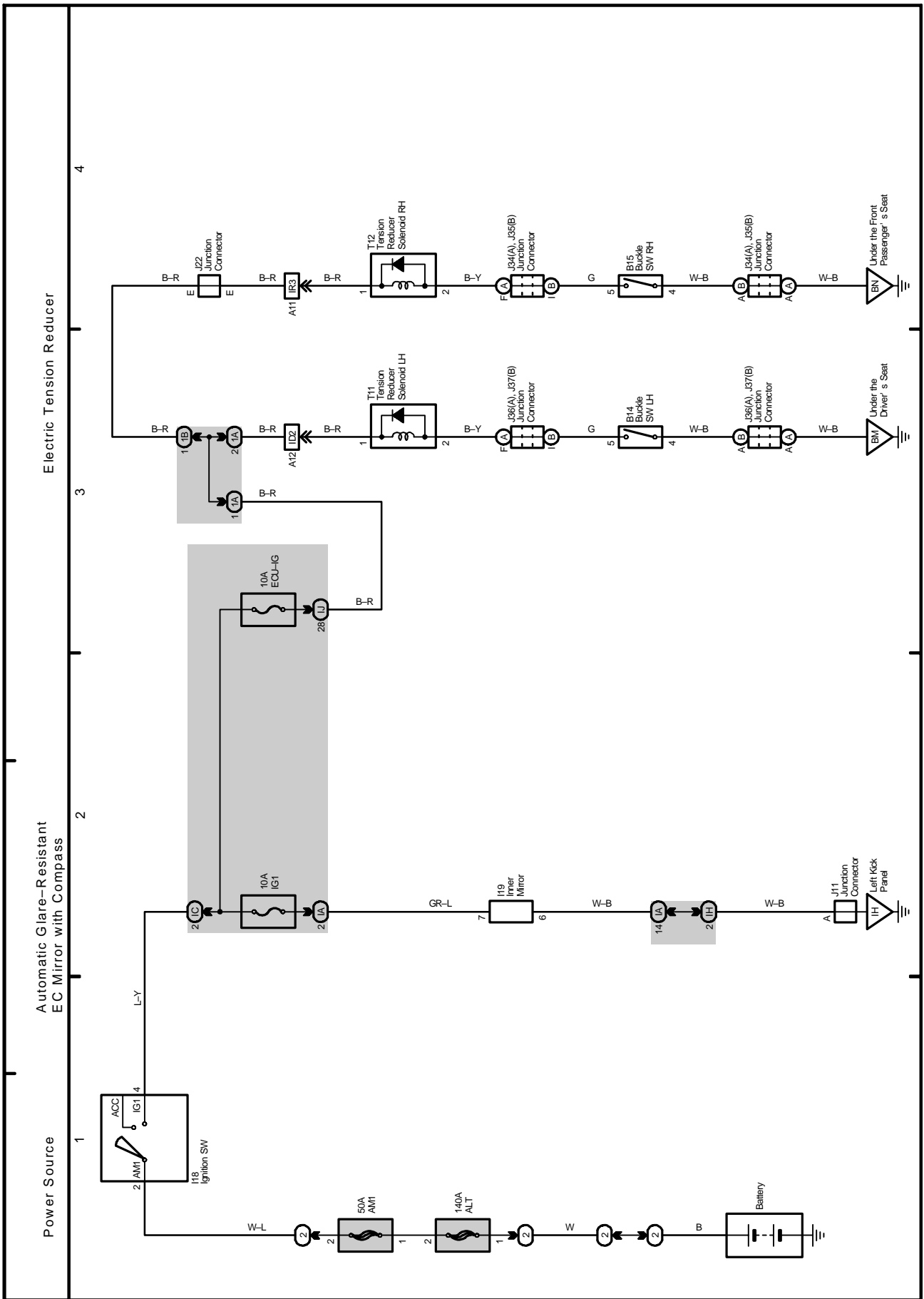
25 GX 470

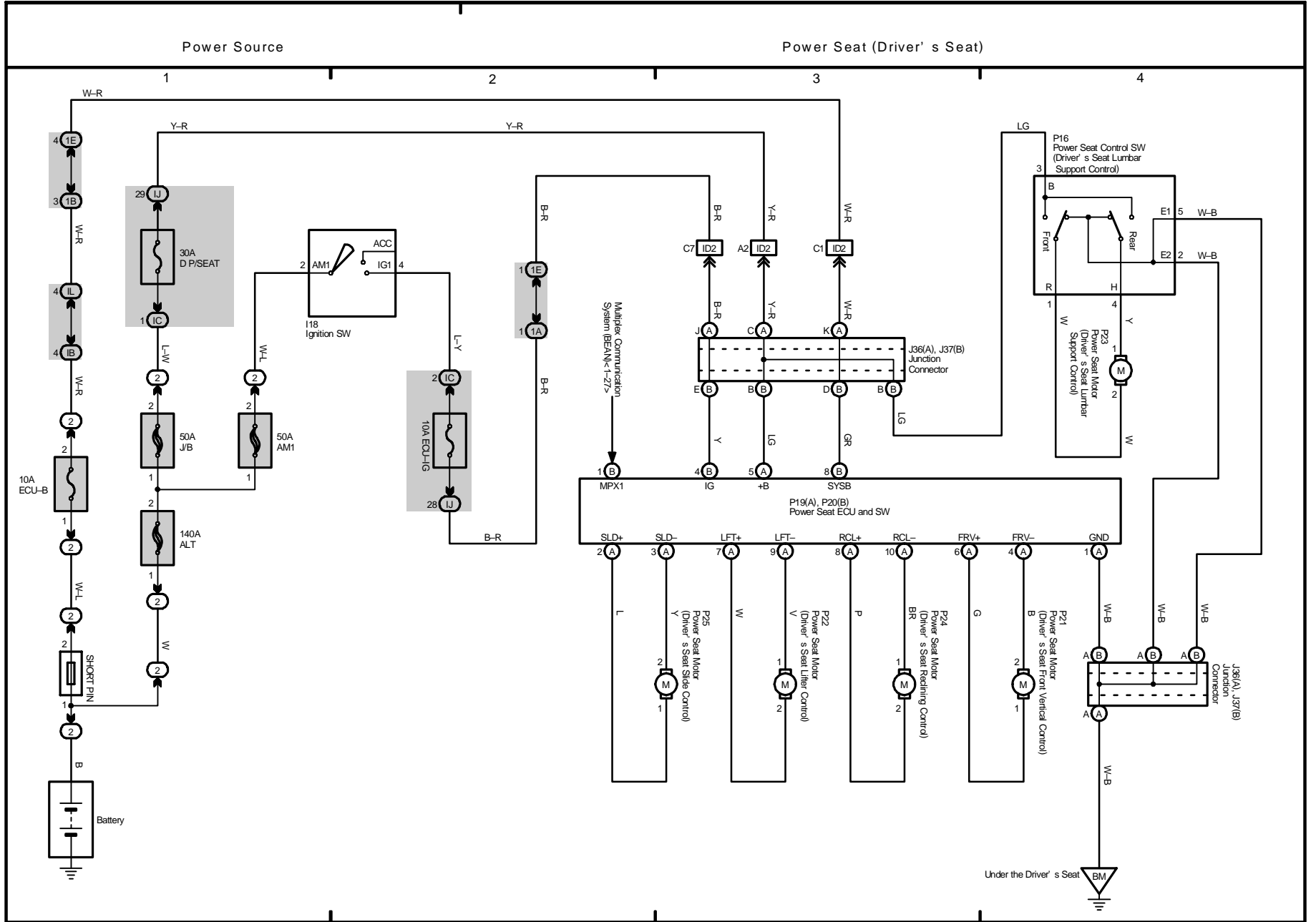




M OVERALL ELECTRICAL WIRING DIAGRAM

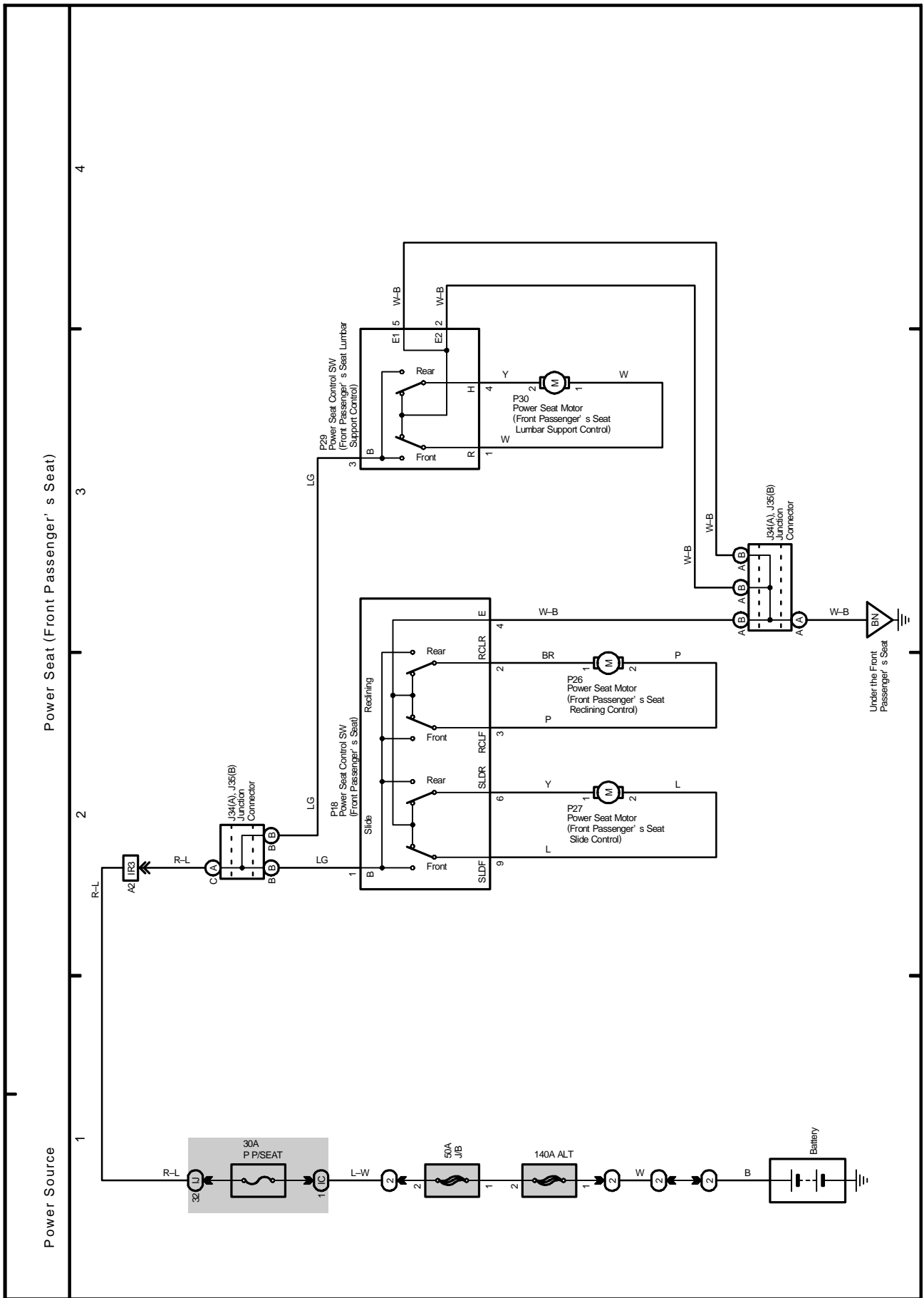
27 GX 470

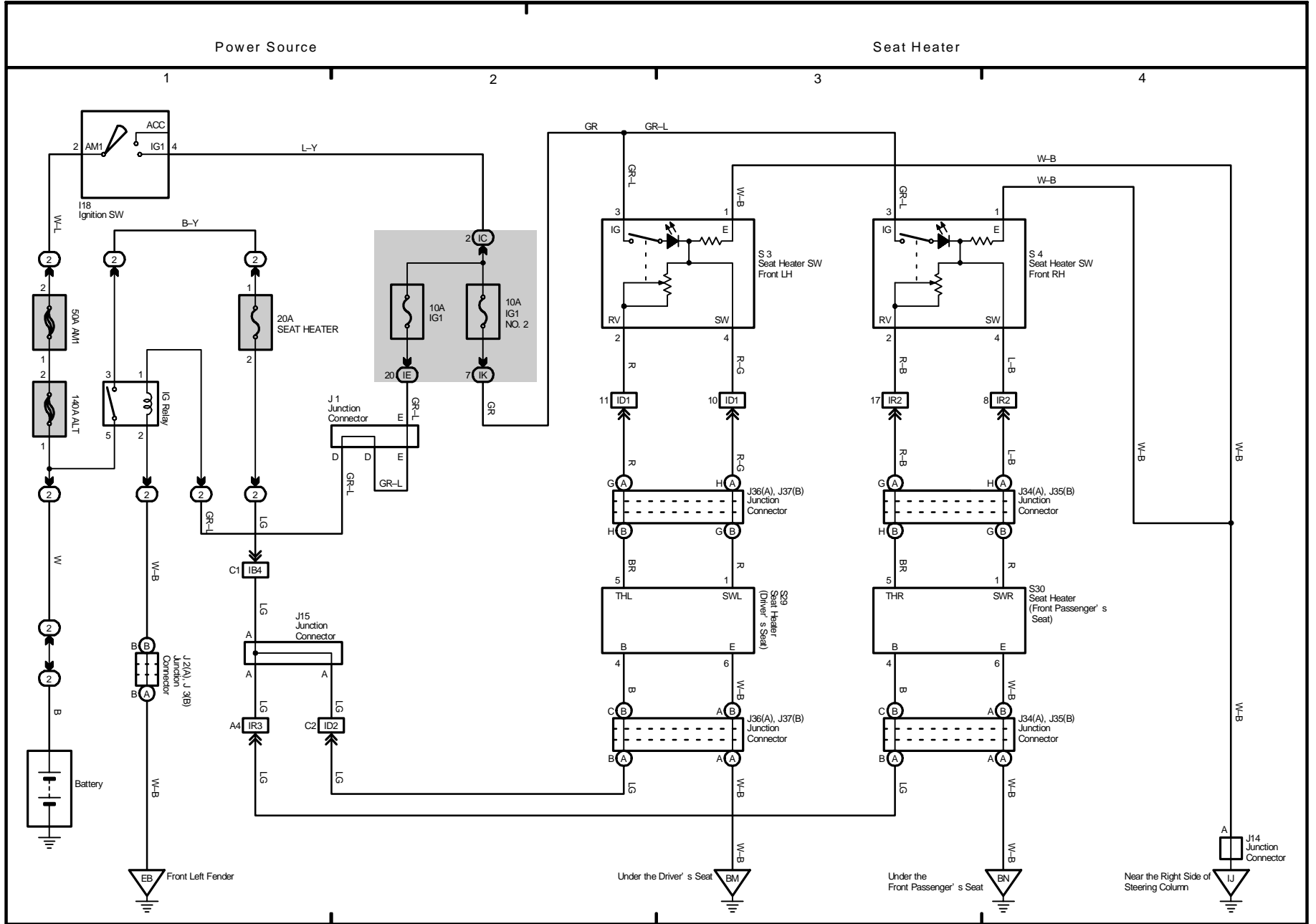




M OVERALL ELECTRICAL WIRING DIAGRAM

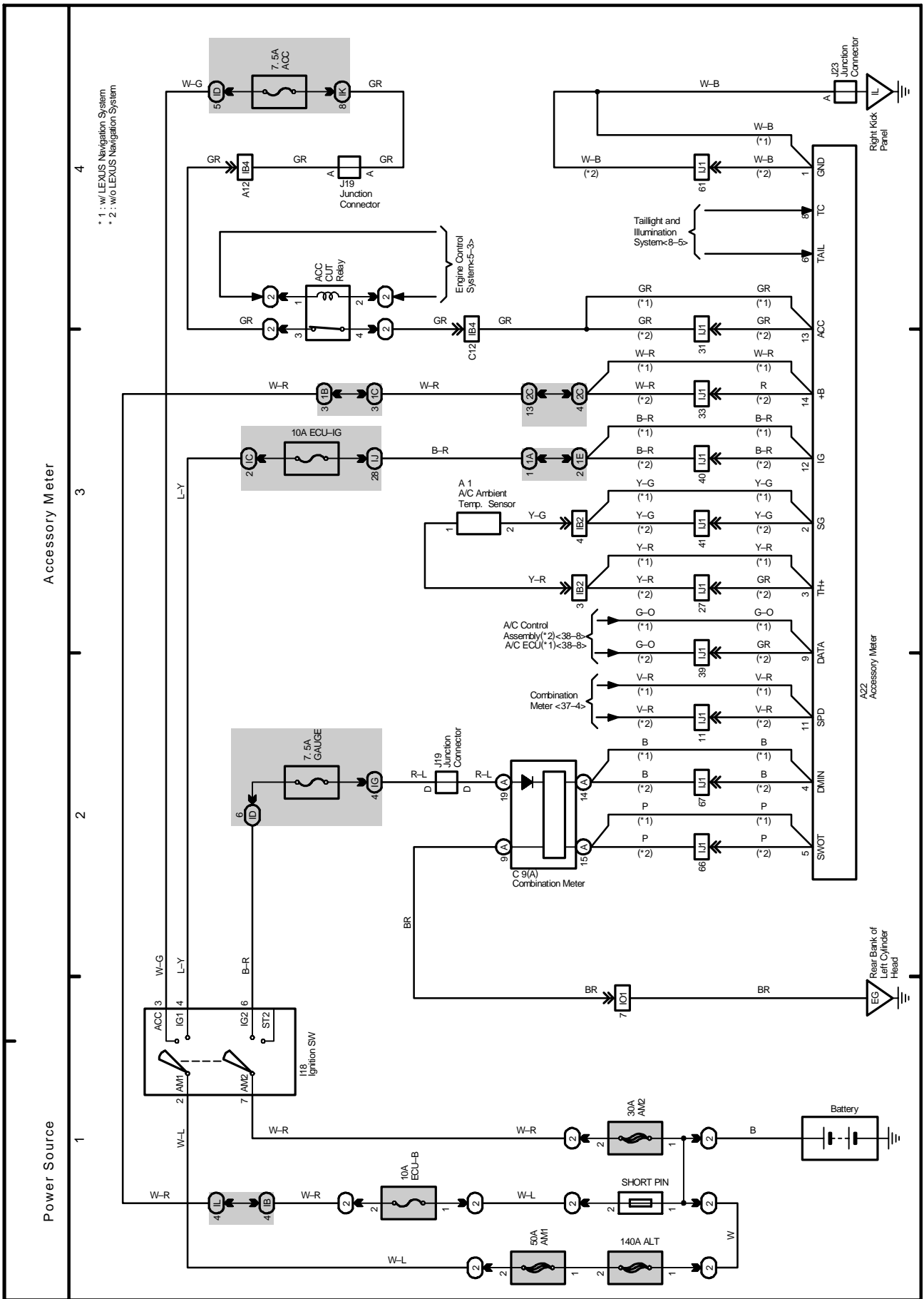
29 GX 470

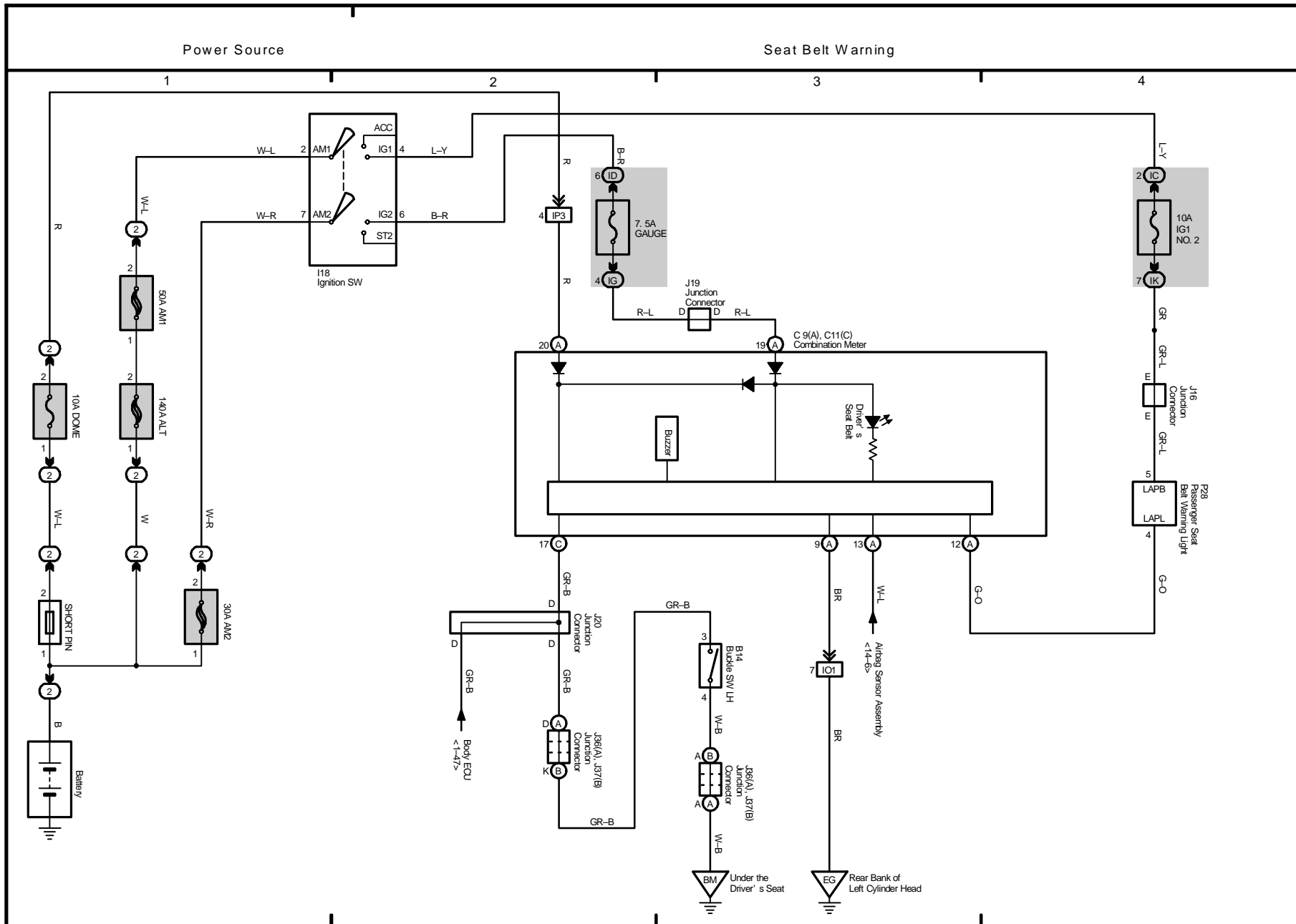




M OVERALL ELECTRICAL WIRING DIAGRAM

31 GX 470



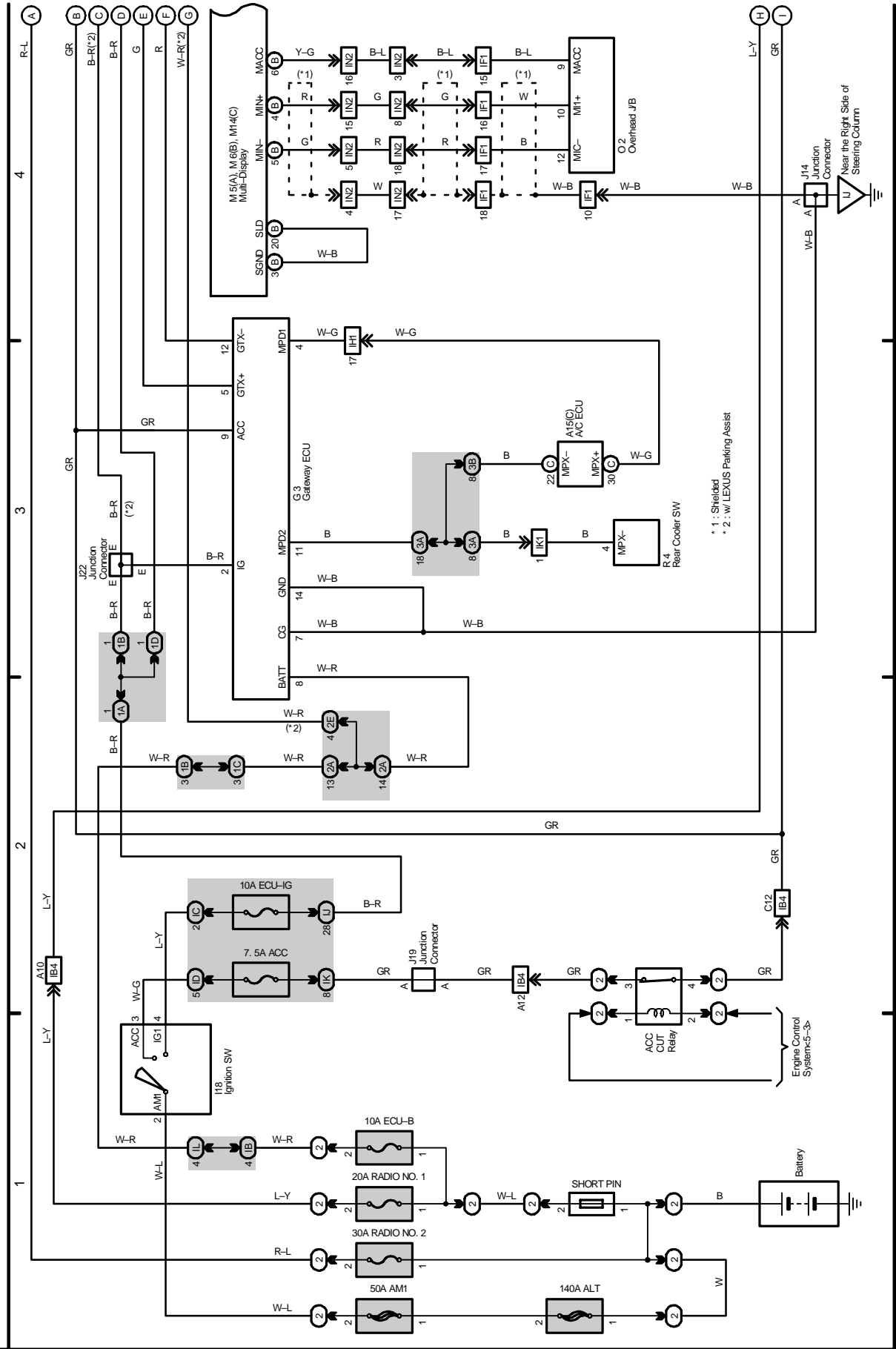


M OVERALL ELECTRICAL WIRING DIAGRAM

33 GX 470

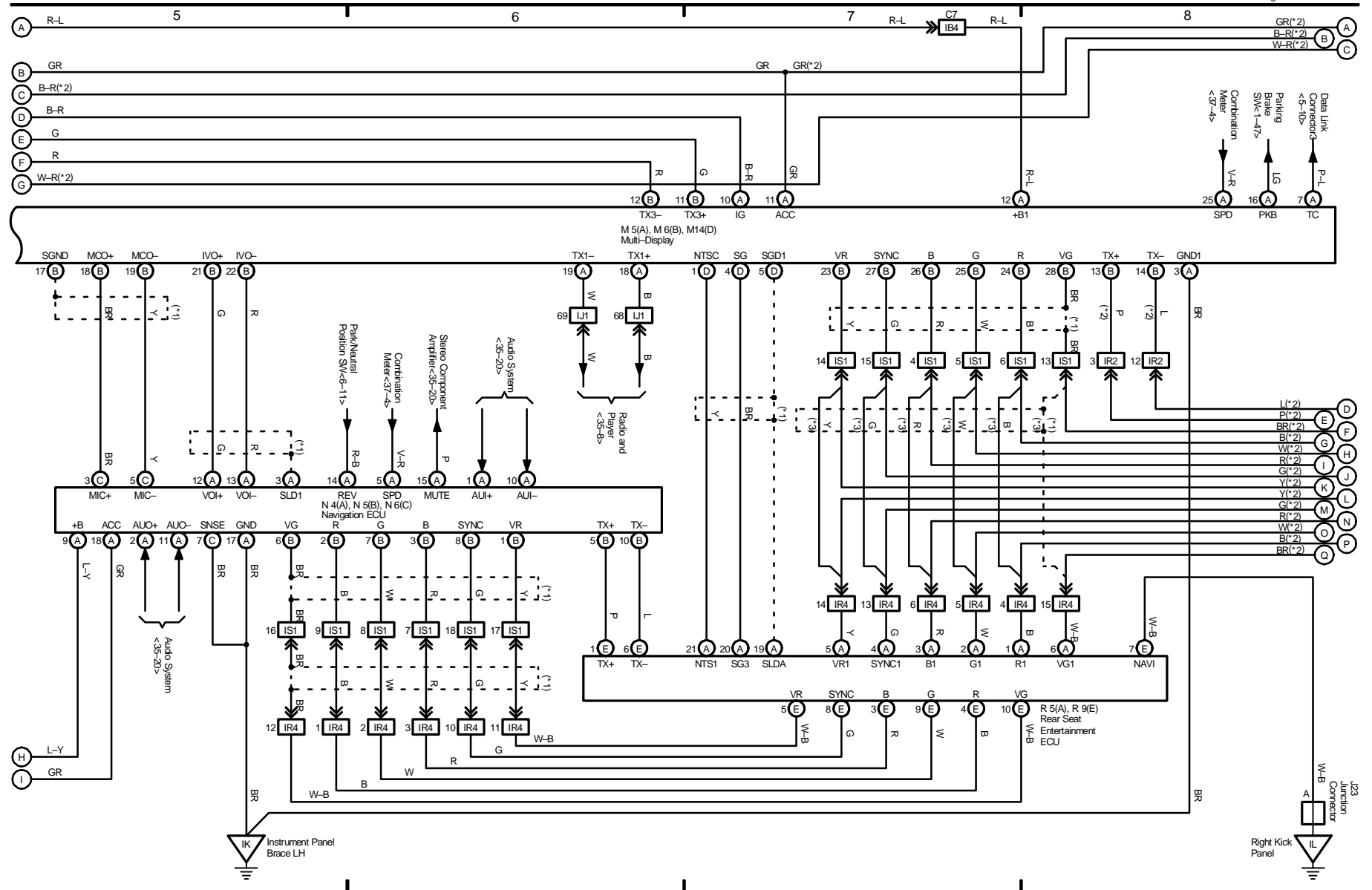
(Cont. next page)

LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System



LEXUS Navigation System with Rear Seat Entertainment System and
LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System

- * 1: Shielded
- * 2: w/ LEXUS Parking Assist
- * 3: w/o LEXUS Parking Assist



2005 LEXUS GX 470 (EWMD616U)

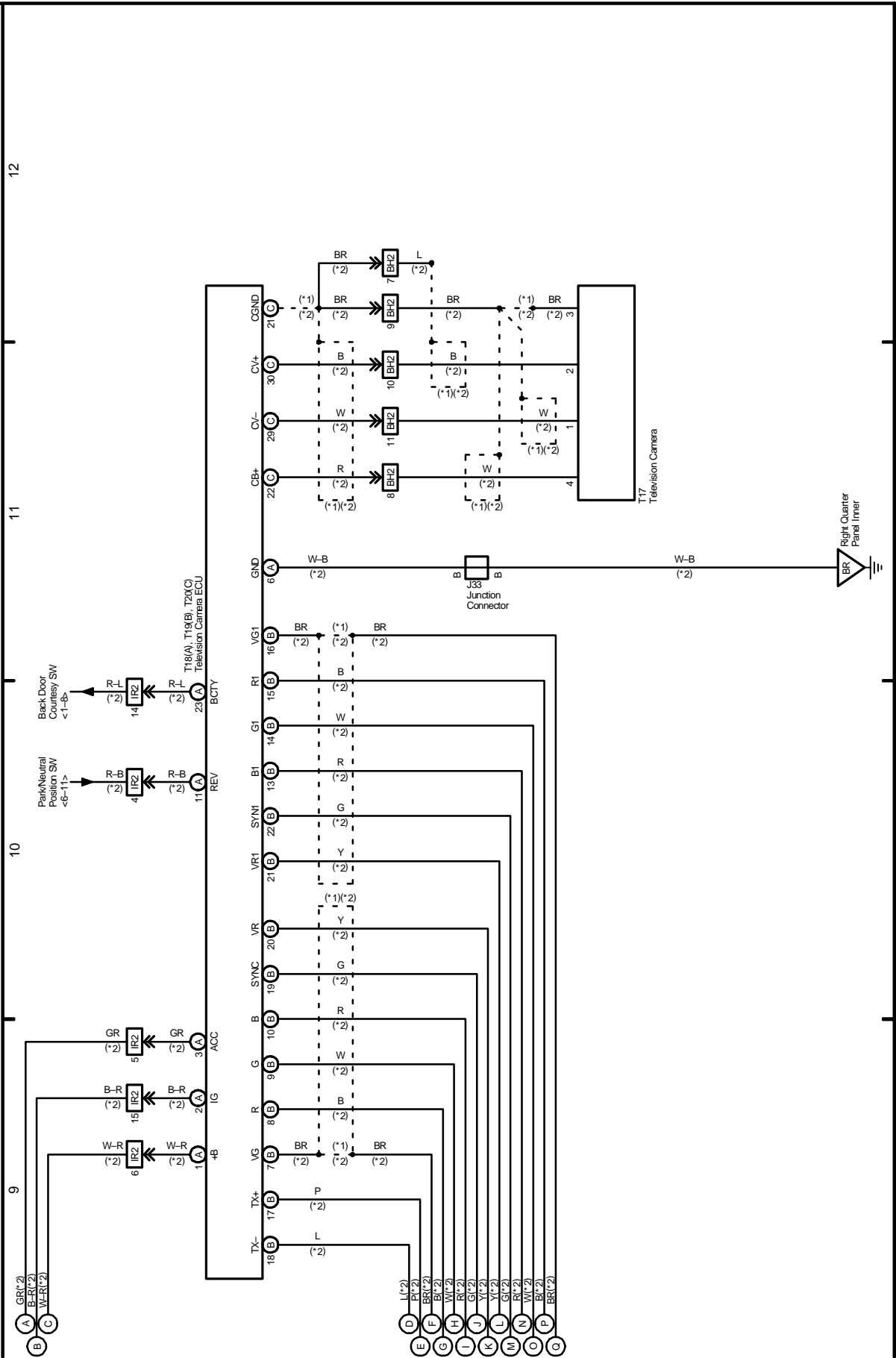


M OVERALL ELECTRICAL WIRING DIAGRAM

33 GX 470 (Cont' d)

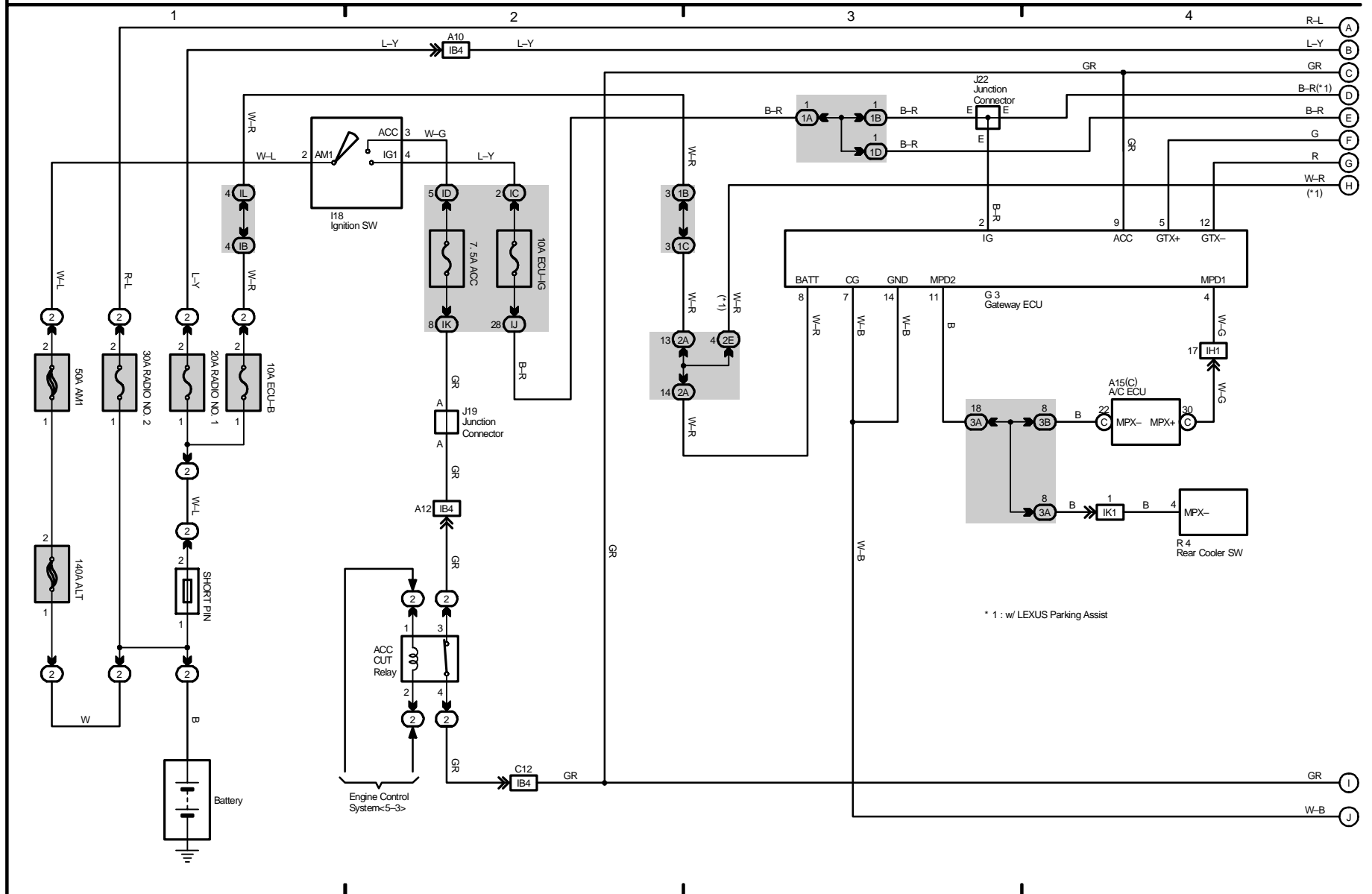
LEXUS Navigation System with Rear Seat Entertainment System and LEXUS Parking Assist (Rear View Monitor) with Rear Seat Entertainment System

*1: Shielded
*2: w/LEXUS Parking Assist



Power Source

LEXUS Navigation System without Rear Seat Entertainment System and
LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System

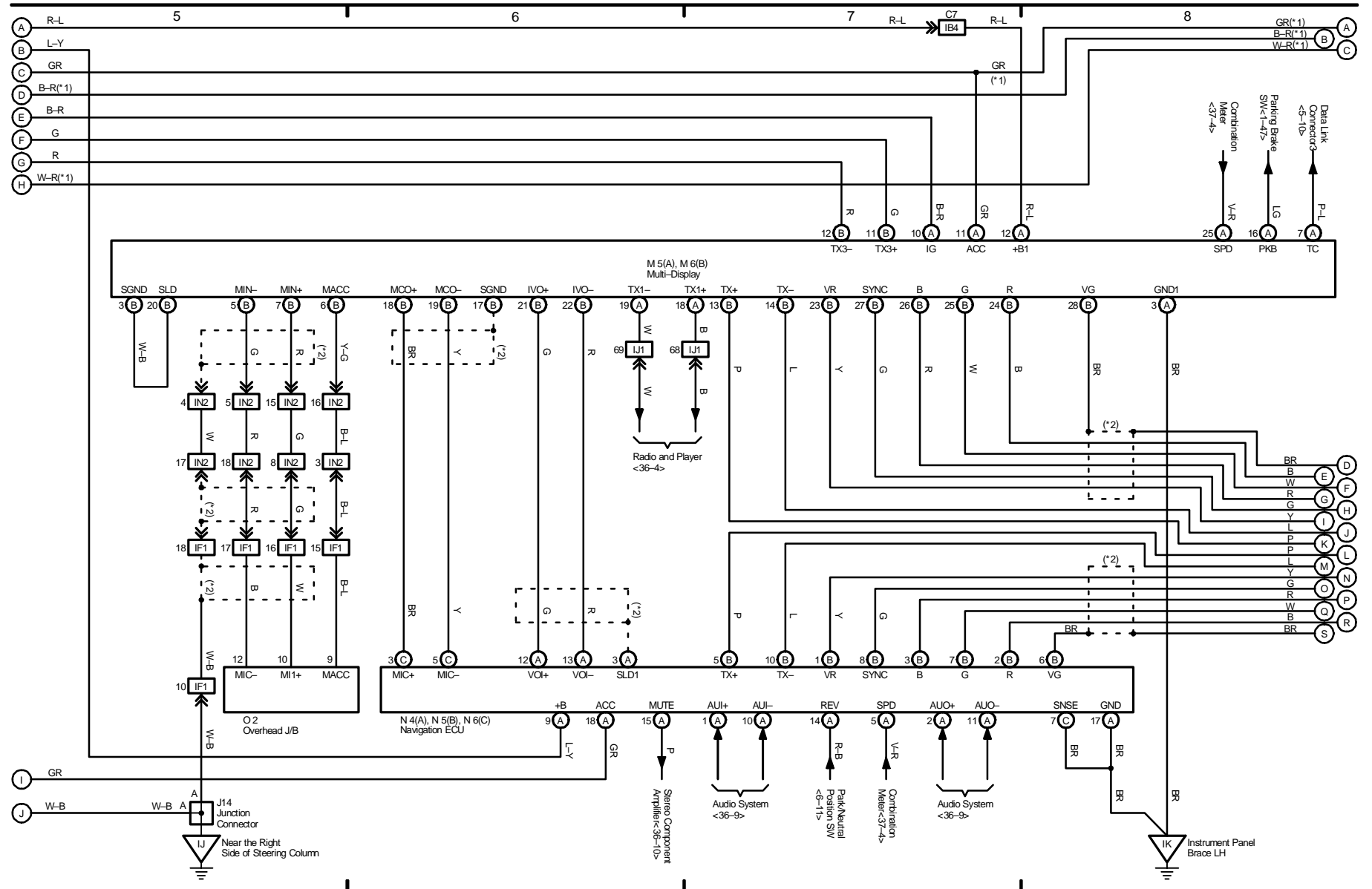


2005 LEXUS GX 470 (EWD616U)



LEXUS Navigation System without Rear Seat Entertainment System and
LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System

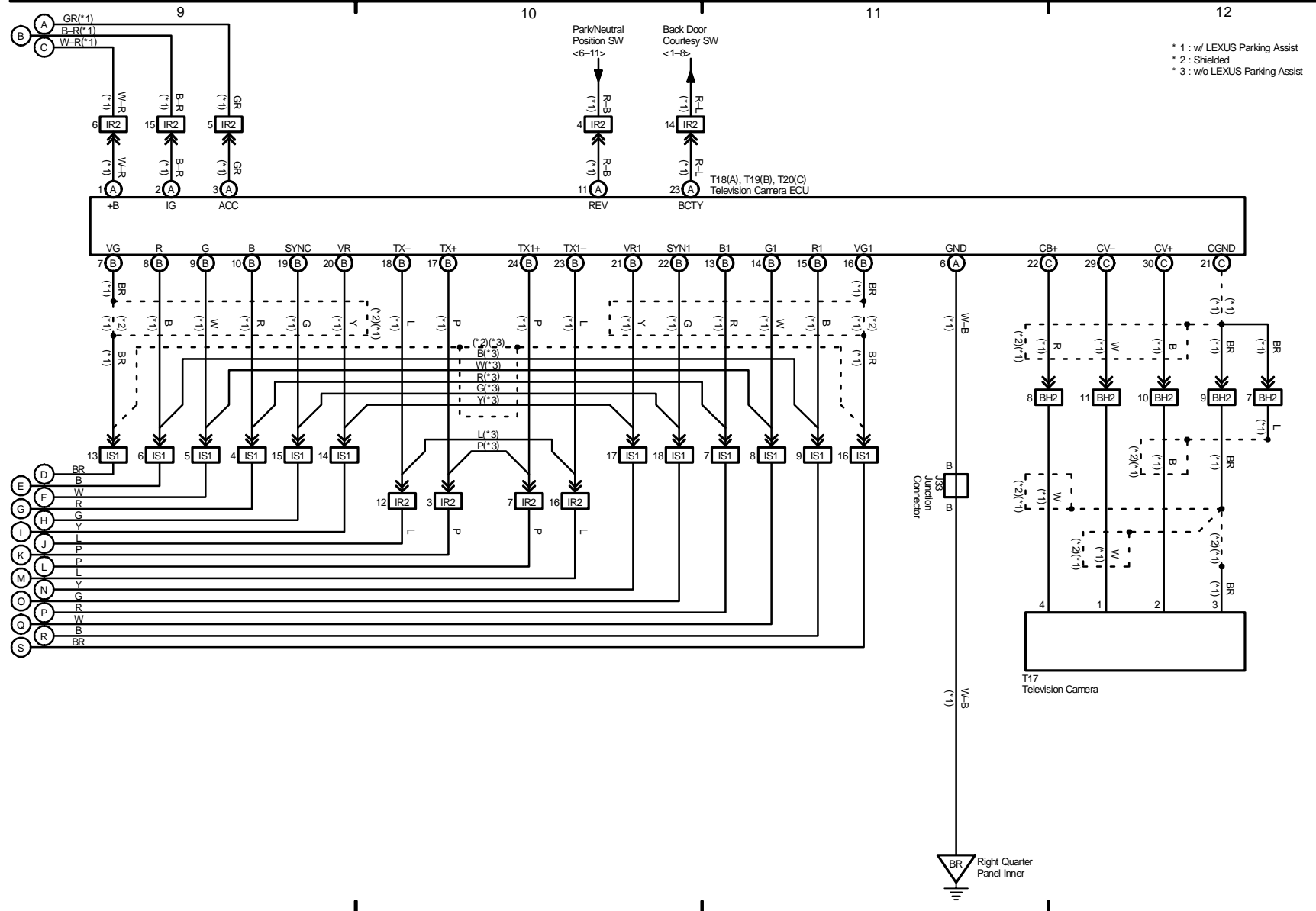
* 1: w/ LEXUS Parking Assist
* 2: Shielded



2005 LEXUS GX 470 (EWD616U)

OVERALL ELECTRICAL WIRING DIAGRAM

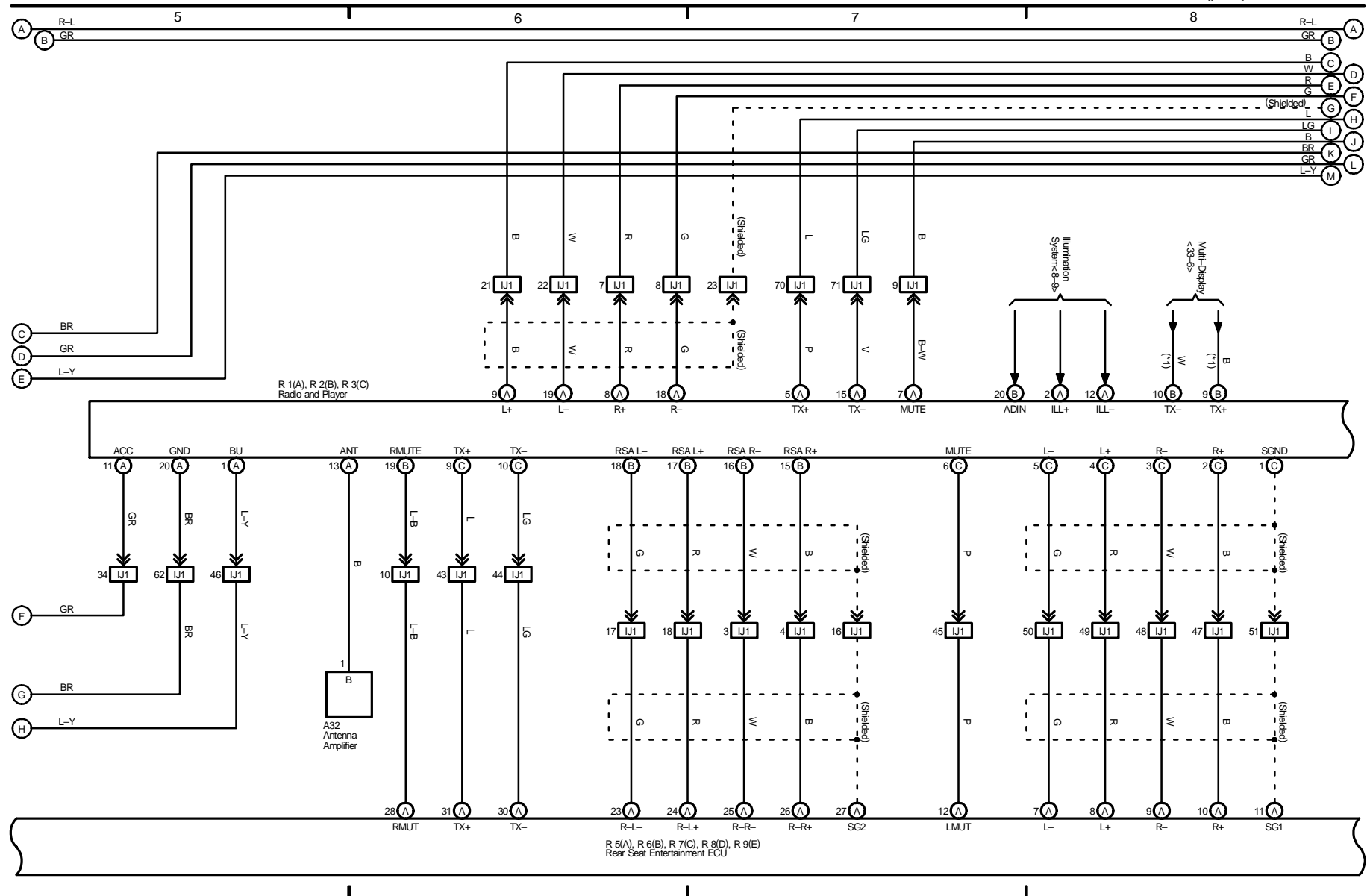
LEXUS Navigation System without Rear Seat Entertainment System and
LEXUS Parking Assist (Rear View Monitor) without Rear Seat Entertainment System



2005 LEXUS GX 470 (EWMD616U)

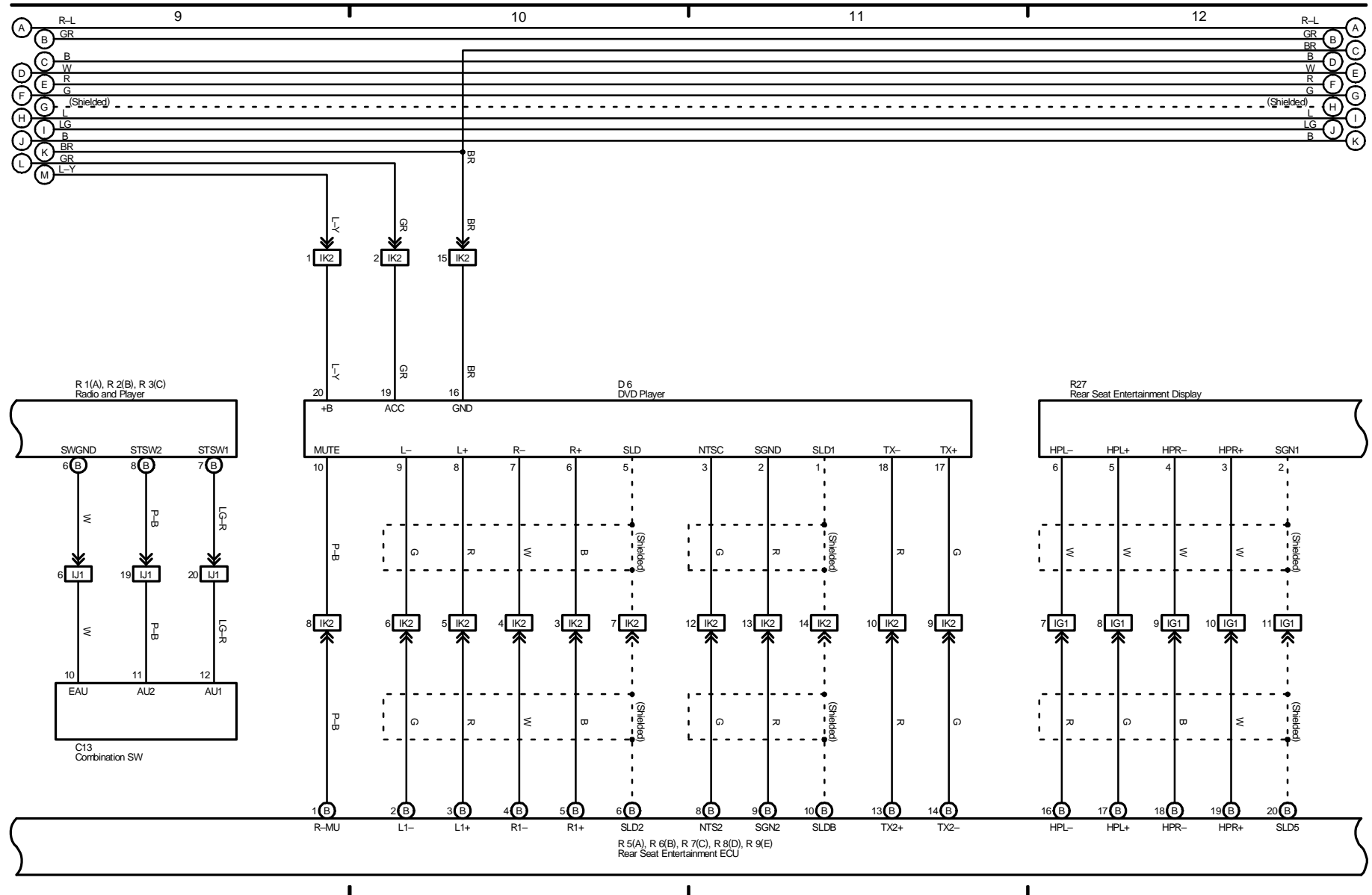
Audio System (w/ Rear Seat Entertainment System)

* 1 : w/ LEXUS Navigation System



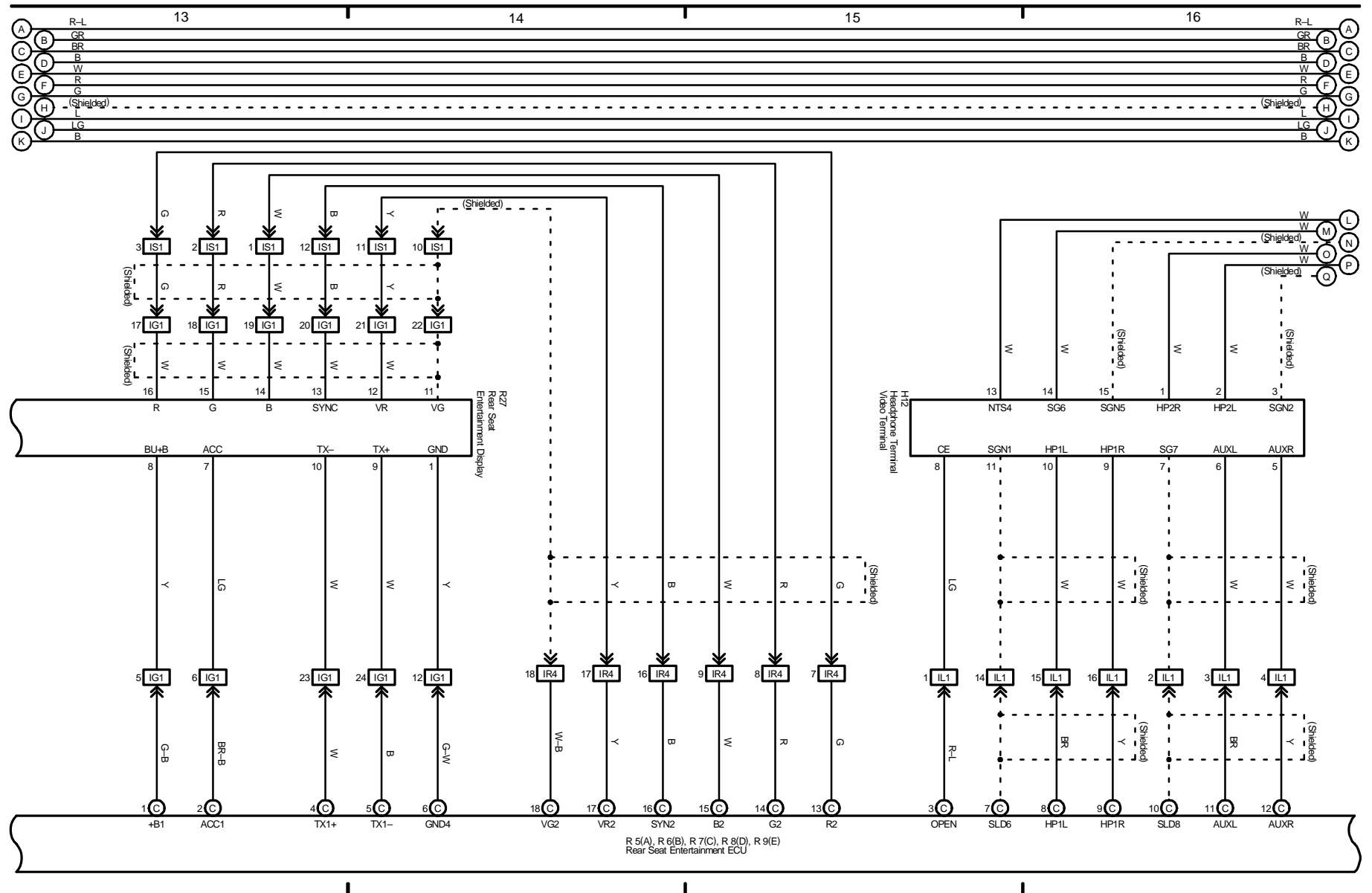
2005 LEXUS GX 470 (EWD616U)

Audio System (w/ Rear Seat Entertainment System)



2005 LEXUS GX 470 (EWD616U)

Audio System (w/ Rear Seat Entertainment System)

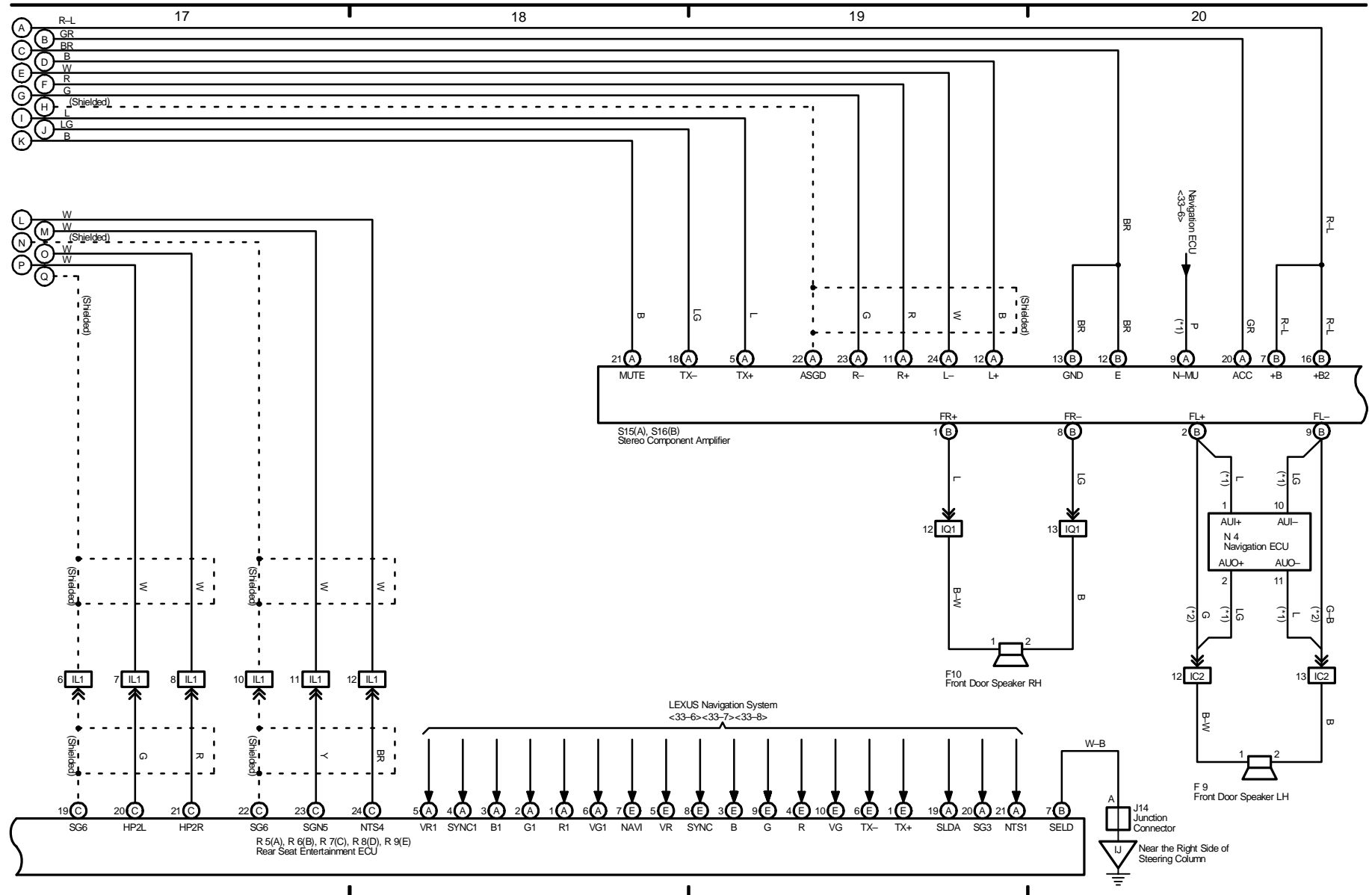


2005 LEXUS GX 470 (EWMD616U)



Audio System (w/ Rear Seat Entertainment System)

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



2005 LEXUS GX 470 (EWD616U)

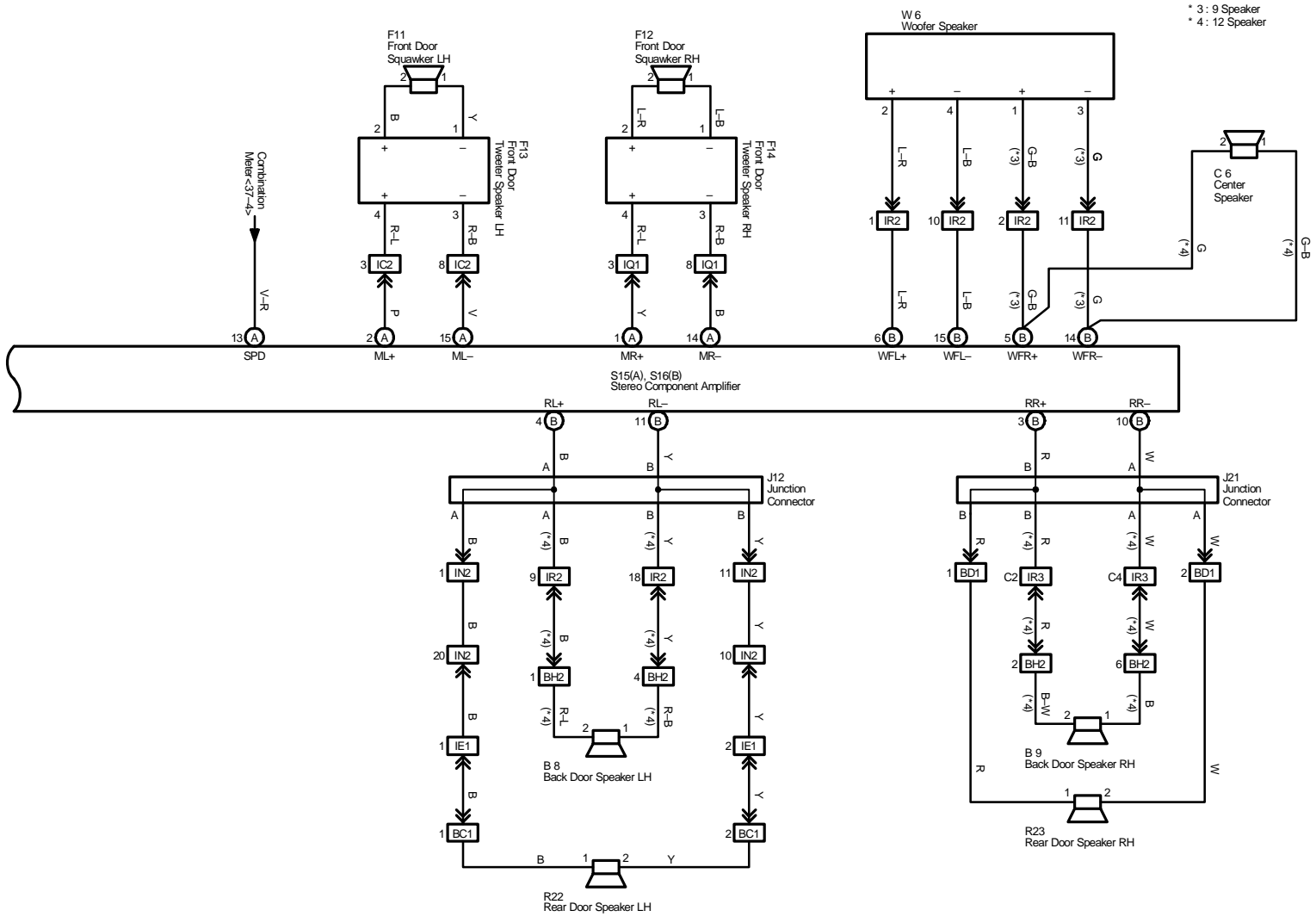
Audio System (w/ Rear Seat Entertainment System)

21

22

23

24



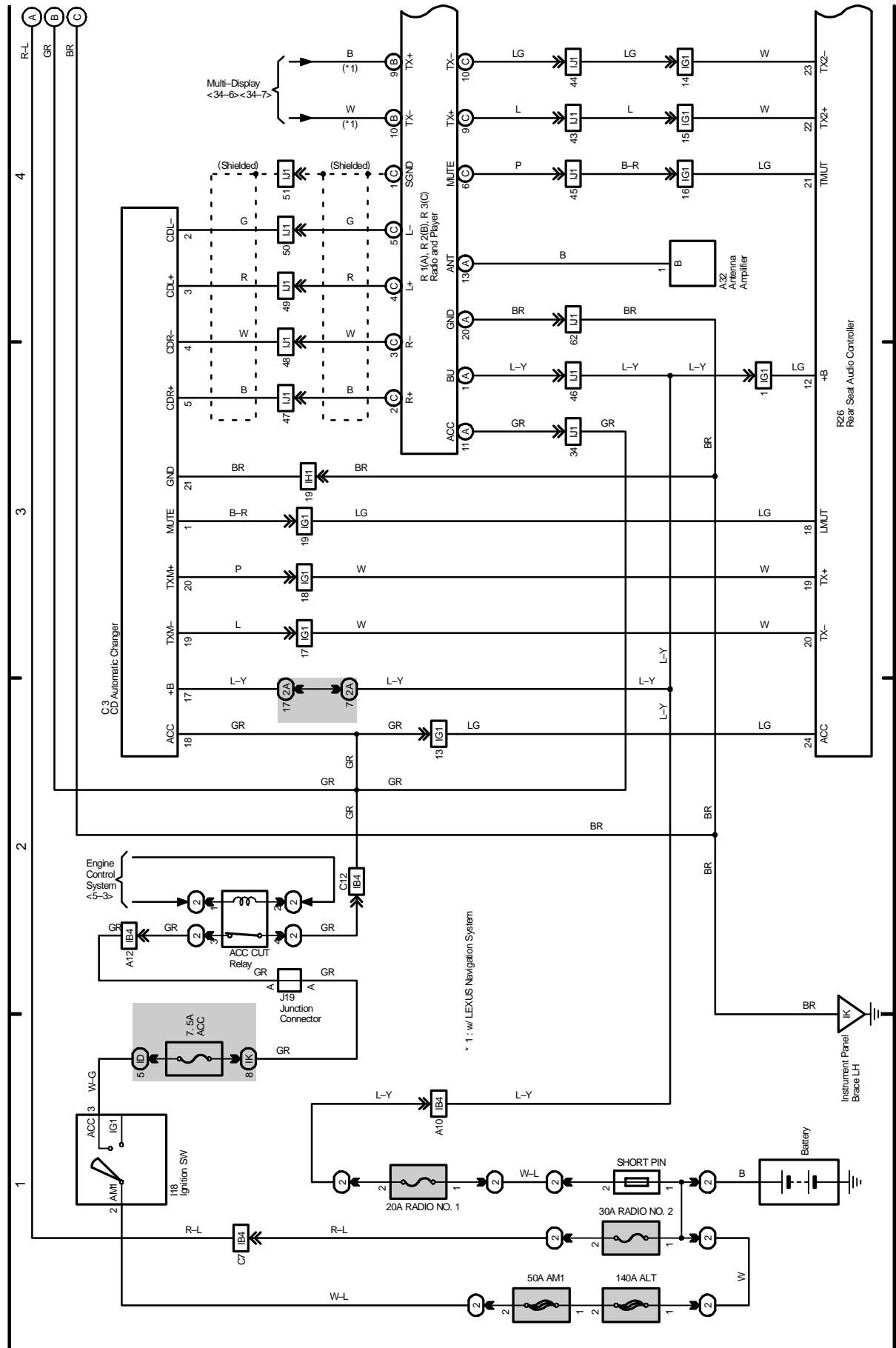
2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM

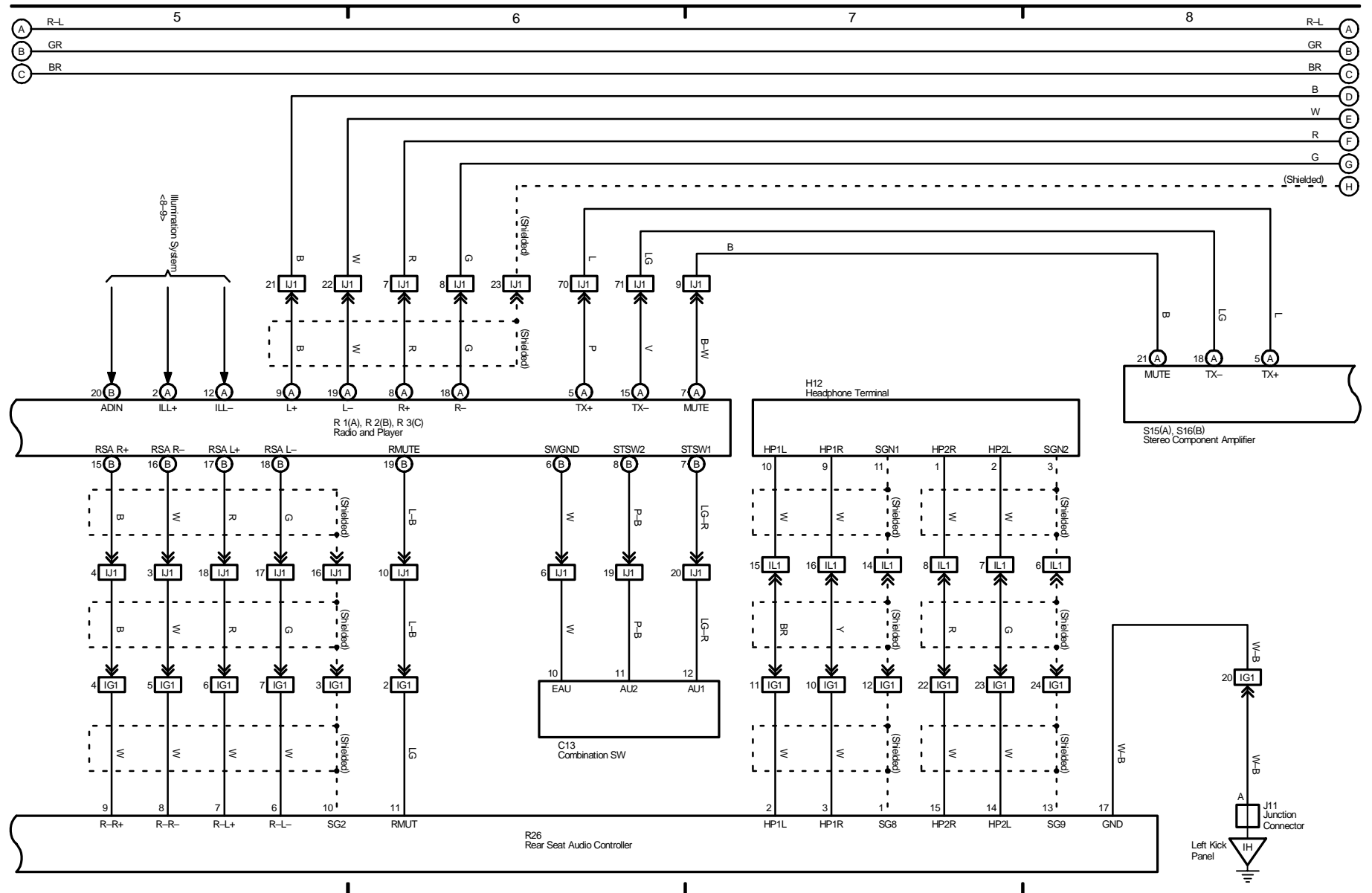
(Cont. next page)

36 GX 470

Audio System (w/o Rear Seat Entertainment System)



Audio System (w/o Rear Seat Entertainment System)



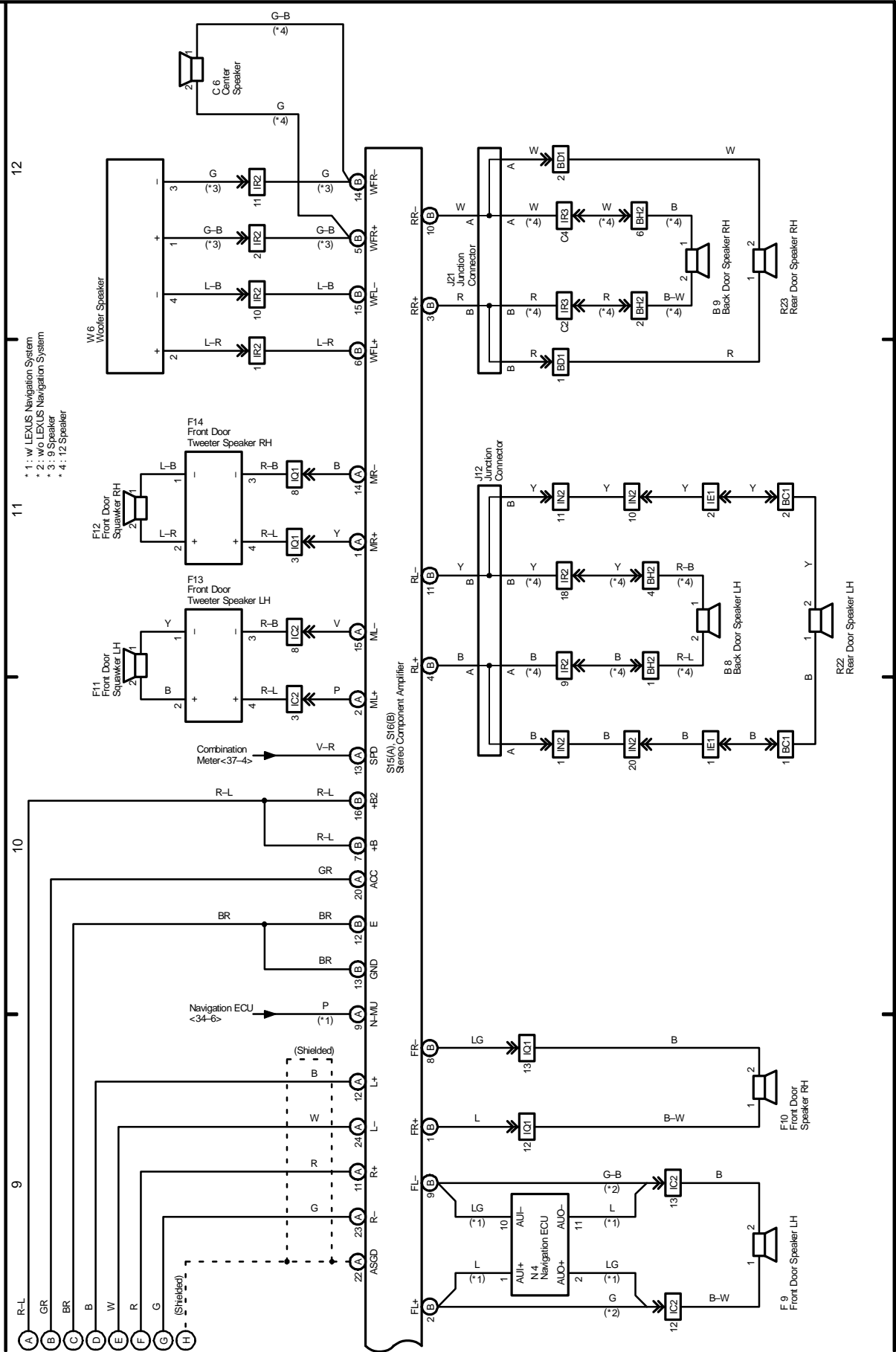
2005 LEXUS GX 470 (EWMD616U)



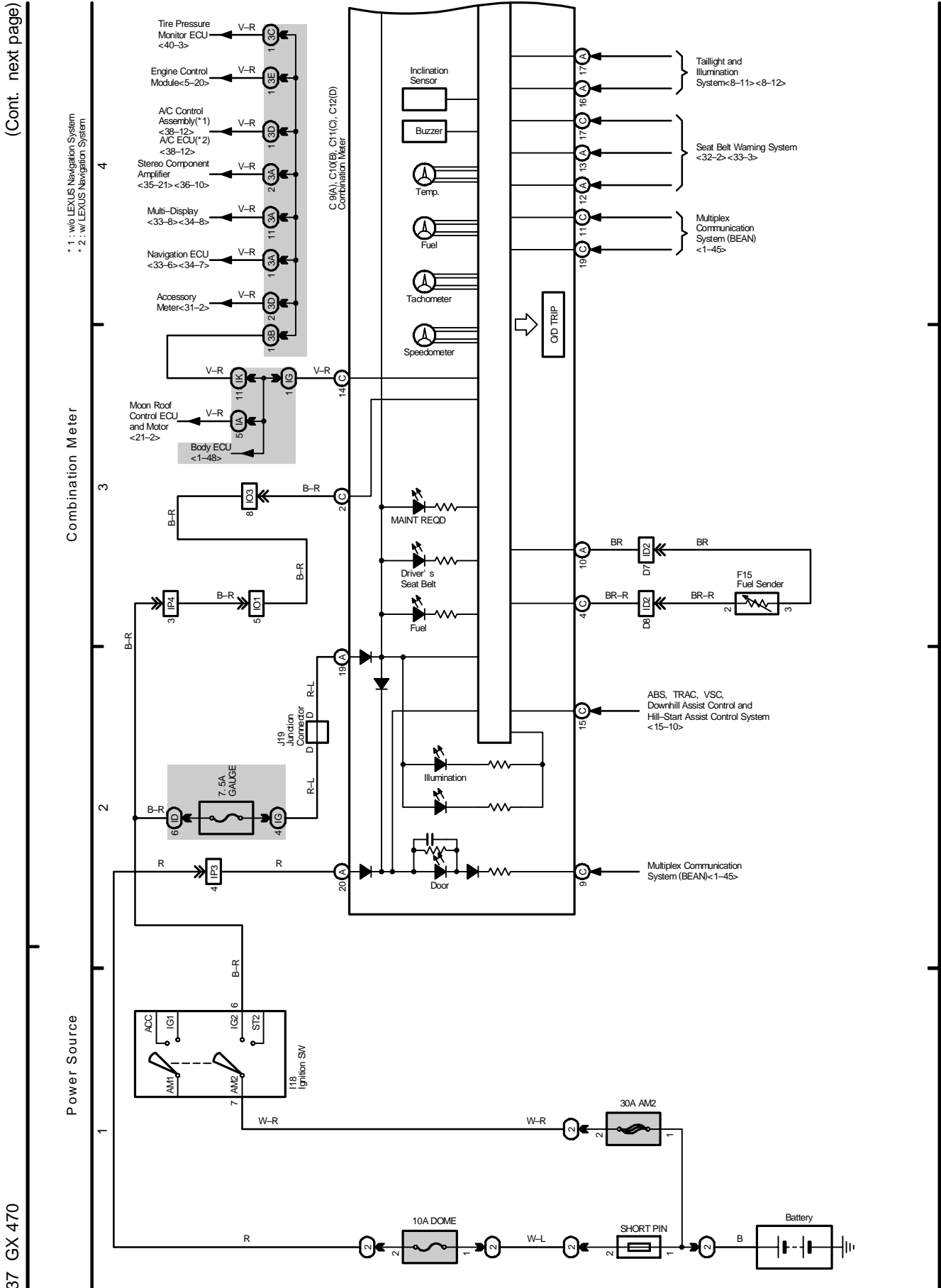
M OVERALL ELECTRICAL WIRING DIAGRAM

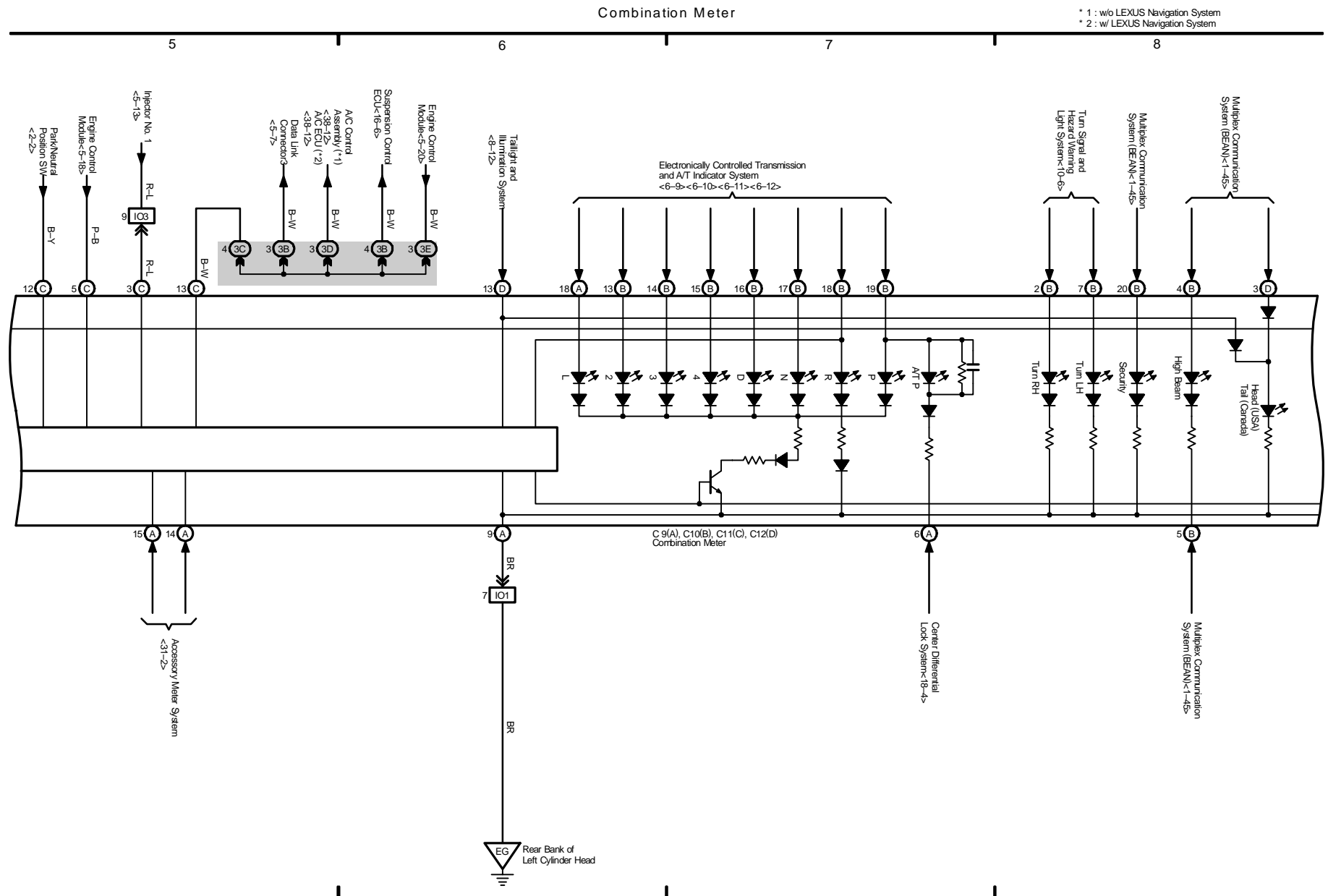
36 GX 470 (Cont' d)

Audio System (w/o Rear Seat Entertainment System)

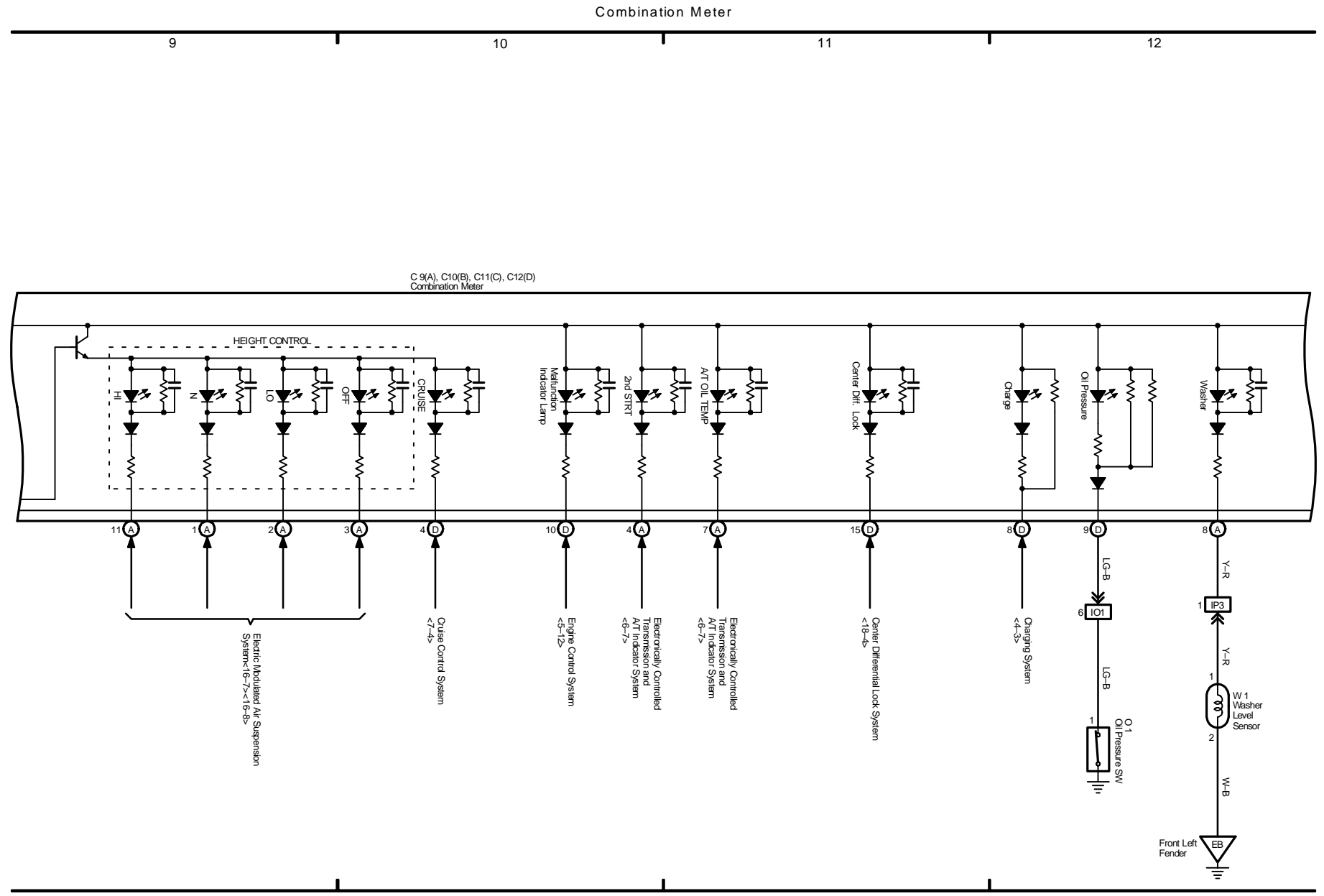


M OVERALL ELECTRICAL WIRING DIAGRAM





2005 LEXUS GX 470 (EWMD616U)



Combination Meter

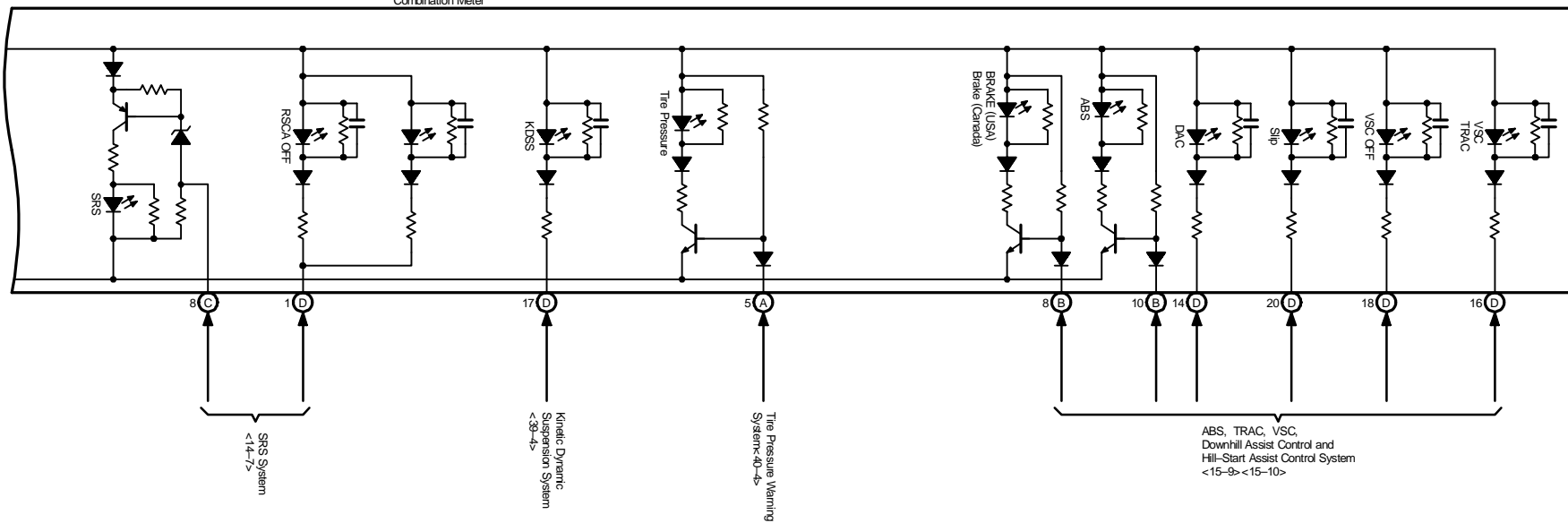
13

14

15

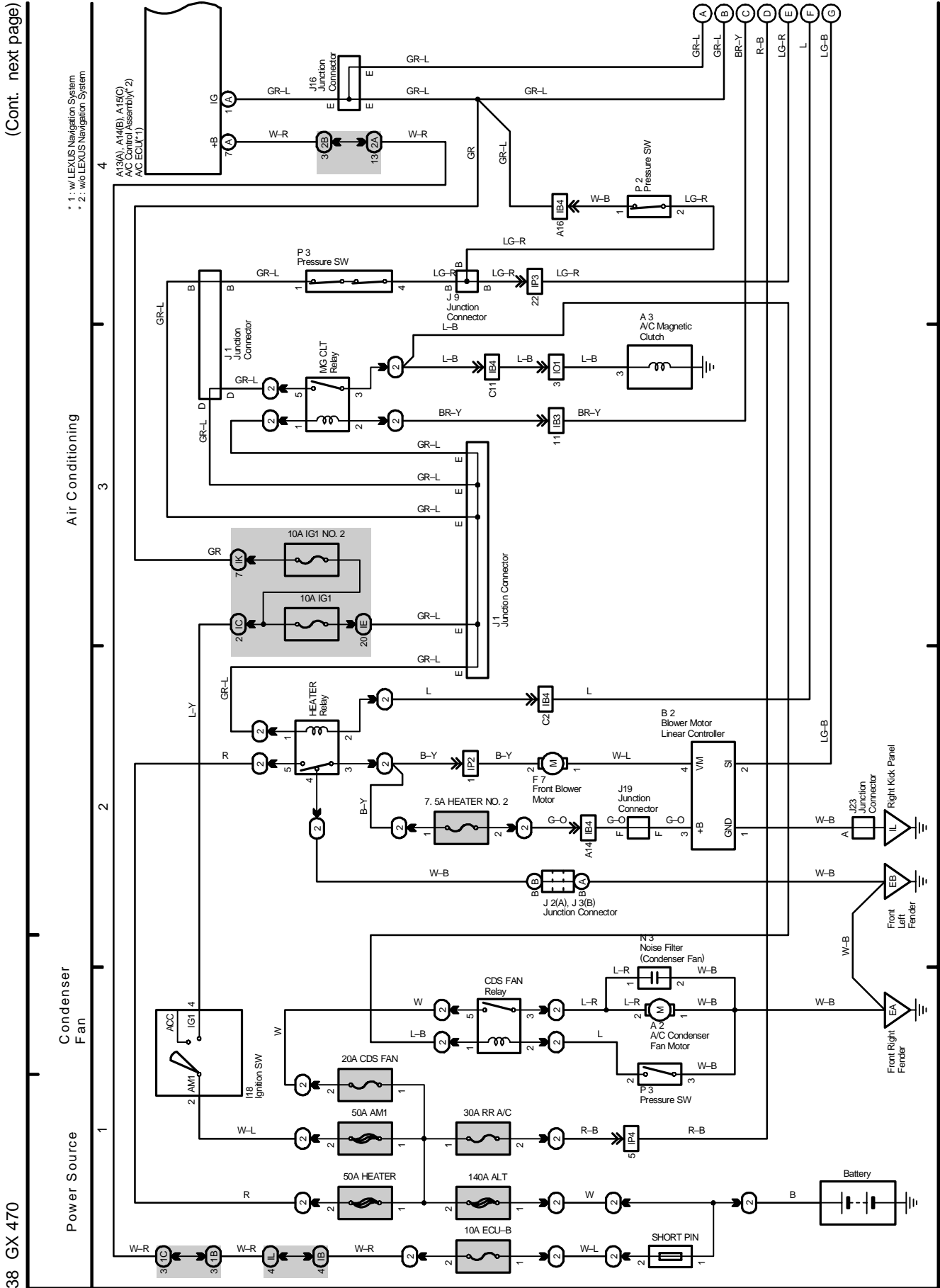
16

C 9(A), C10(B), C11(C), C12(D)
Combination Meter



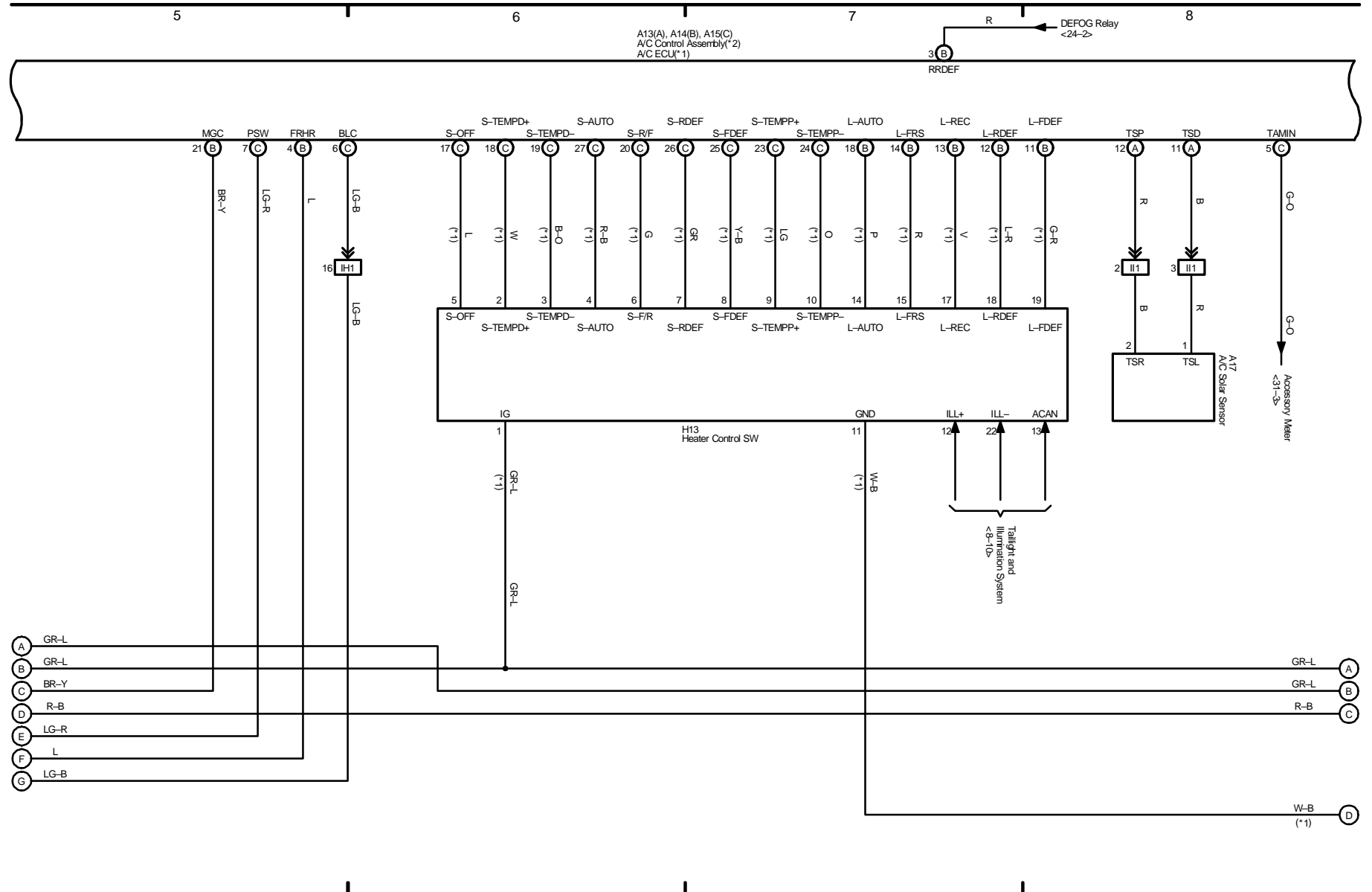
2005 LEXUS GX 470 (EWMD616U)

M OVERALL ELECTRICAL WIRING DIAGRAM



Air Conditioning

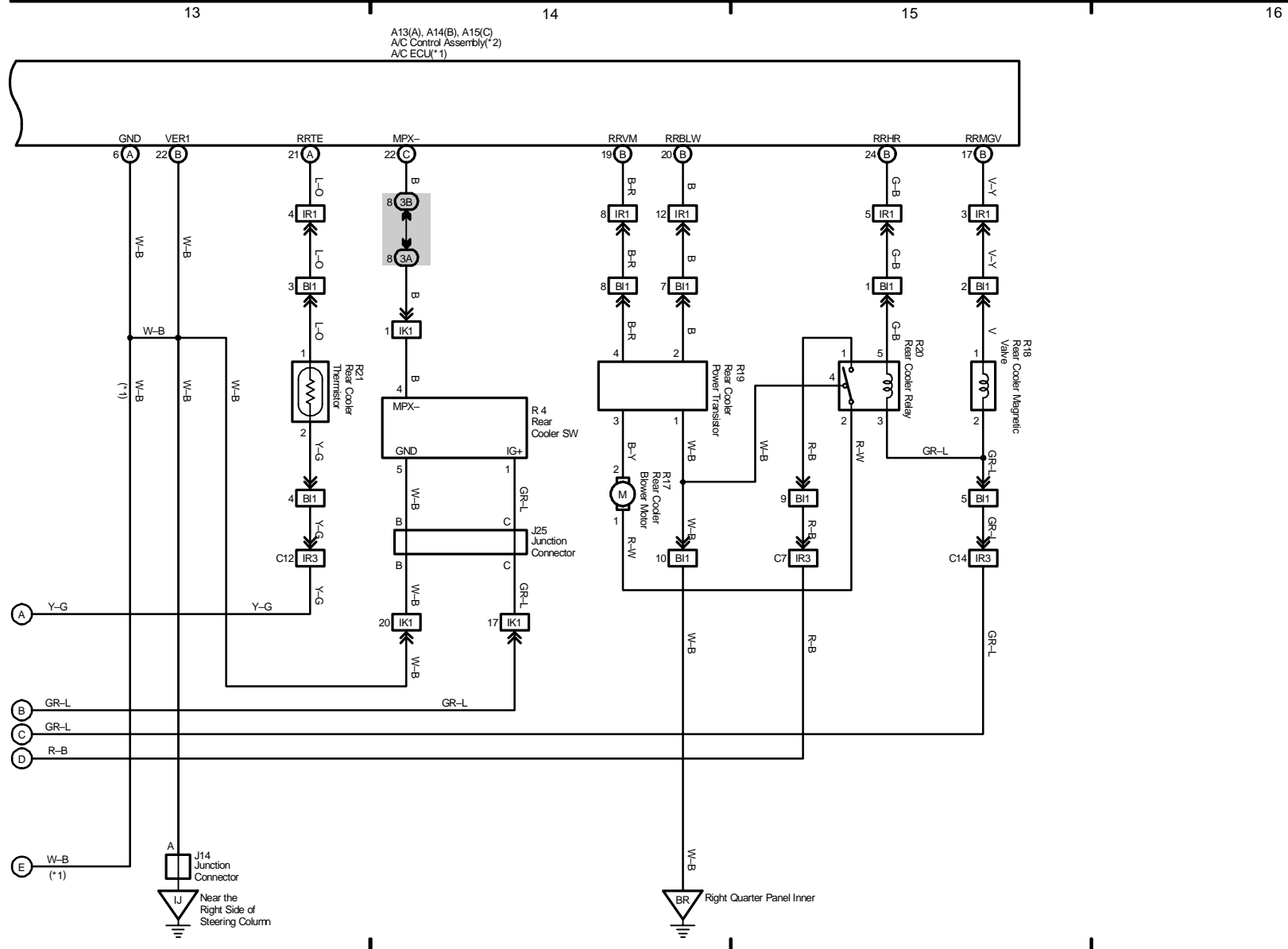
* 1 : w/ LEXUS Navigation System
 * 2 : w/o LEXUS Navigation System



2005 LEXUS GX 470 (EWMD616U)

Rear Air Conditioning

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



2005 LEXUS GX 470 (EWMD616U)

