2003 GX 470
ELECTRICAL WIRING DIAGRAM

	Section Code	Page
INTRODUCTION	A	2
HOW TO USE THIS MANUAL	B	3
TROUBLESHOOTING	C	12
ABBREVIATIONS	D	17
GLOSSARY OF TERMS AND SYMBOLS	E	18
RELAY LOCATIONS	F	20
ELECTRICAL WIRING ROUTING	G	36
SYSTEM CIRCUITS	H	NO TAG
GROUND POINT	I	382
POWER SOURCE (Current Flow Chart)	J	392
CONNECTOR LIST	K	402
PART NUMBER OF CONNECTORS	L	416
OVERALL ELECTRICAL WIRING DIAGRAM	M	422

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FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2003 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.
● 2003 LEXUS GX 470 Repair Manual Volume 1 Volume 2	 RM1006U1 RM1006U2
● 2003 LEXUS GX 470 New Car Features	NCF235U

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.

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.)

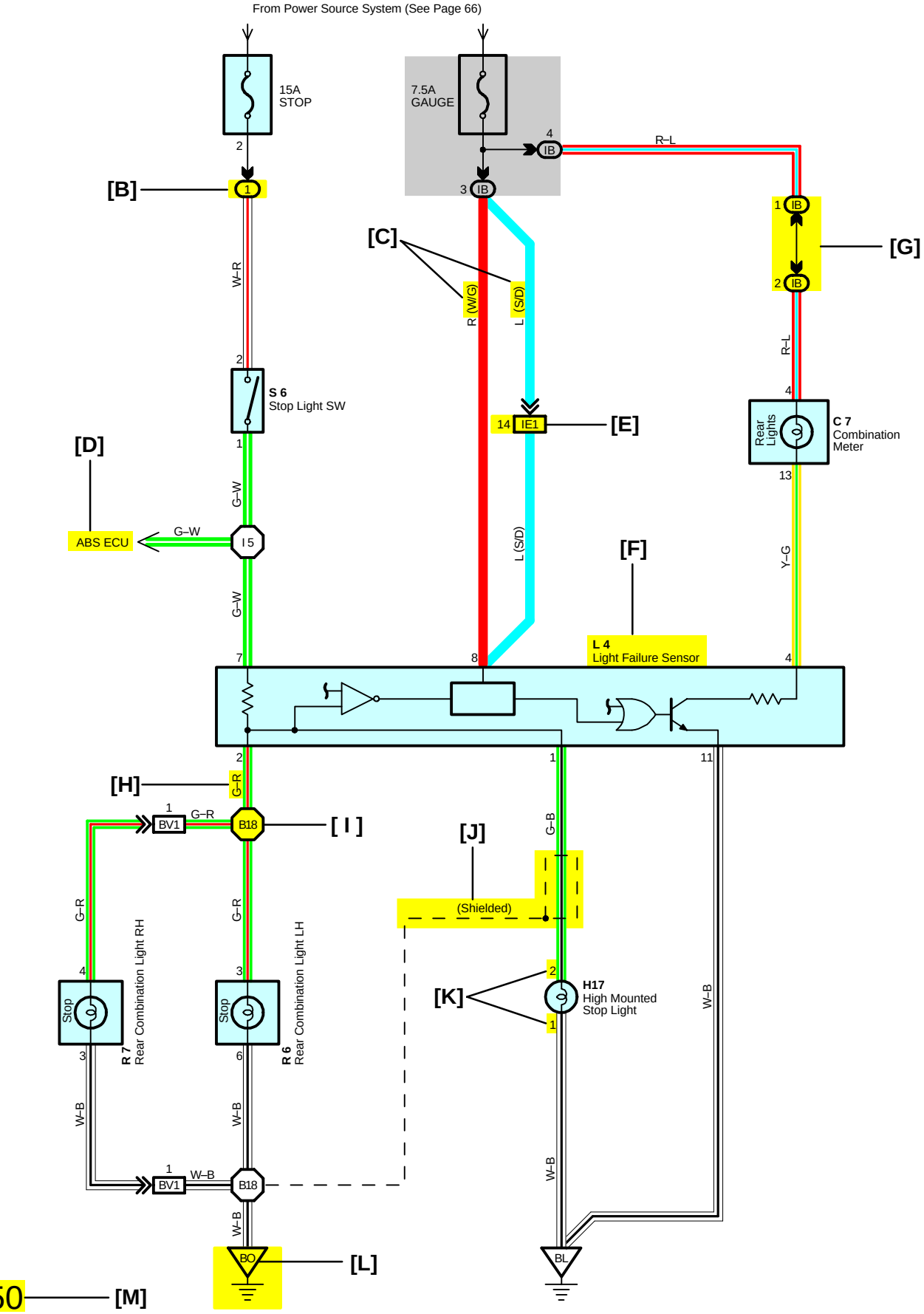
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Point section). See the System Outline to understand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

[A]

Stop Light

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



[A] : System Title

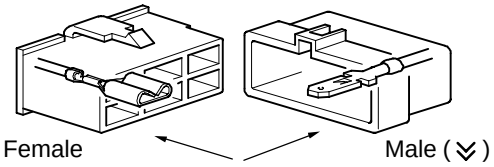
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

Example: (1) Indicates Relay Block No.1

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

[D] : Indicates related system.

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



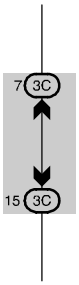
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

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

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

Example:



3C indicates that it is inside Junction Block No.3

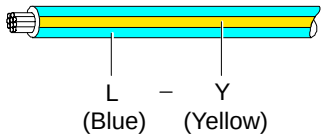
[H] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

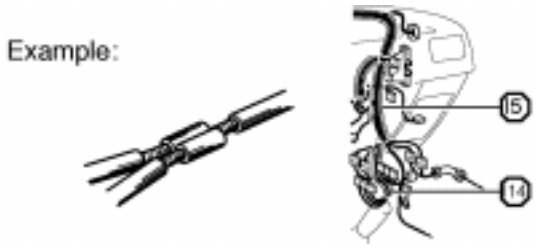
B	= Black	W	= White	BR	= Brown
L	= Blue	V	= Violet	SB	= Sky Blue
R	= Red	G	= Green	LG	= Light Green
P	= Pink	Y	= Yellow	GR	= Gray
O	= Orange				

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

Example: L – Y

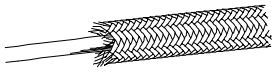


[I] : Indicates a wiring Splice Point (Codes are "E" for the Engine Room, "I" for the Instrument Panel, and "B" for the Body).



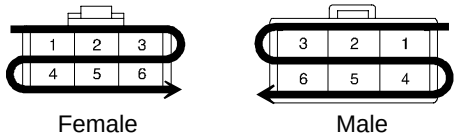
The Location of splice Point I 5 is indicated by the shaded section.

[J] : Indicates a shielded cable.



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

Example:



[L] : Indicates a ground point.

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

[M] : Page No.

[N] **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**

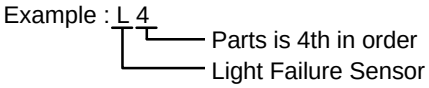
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

[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.



[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.

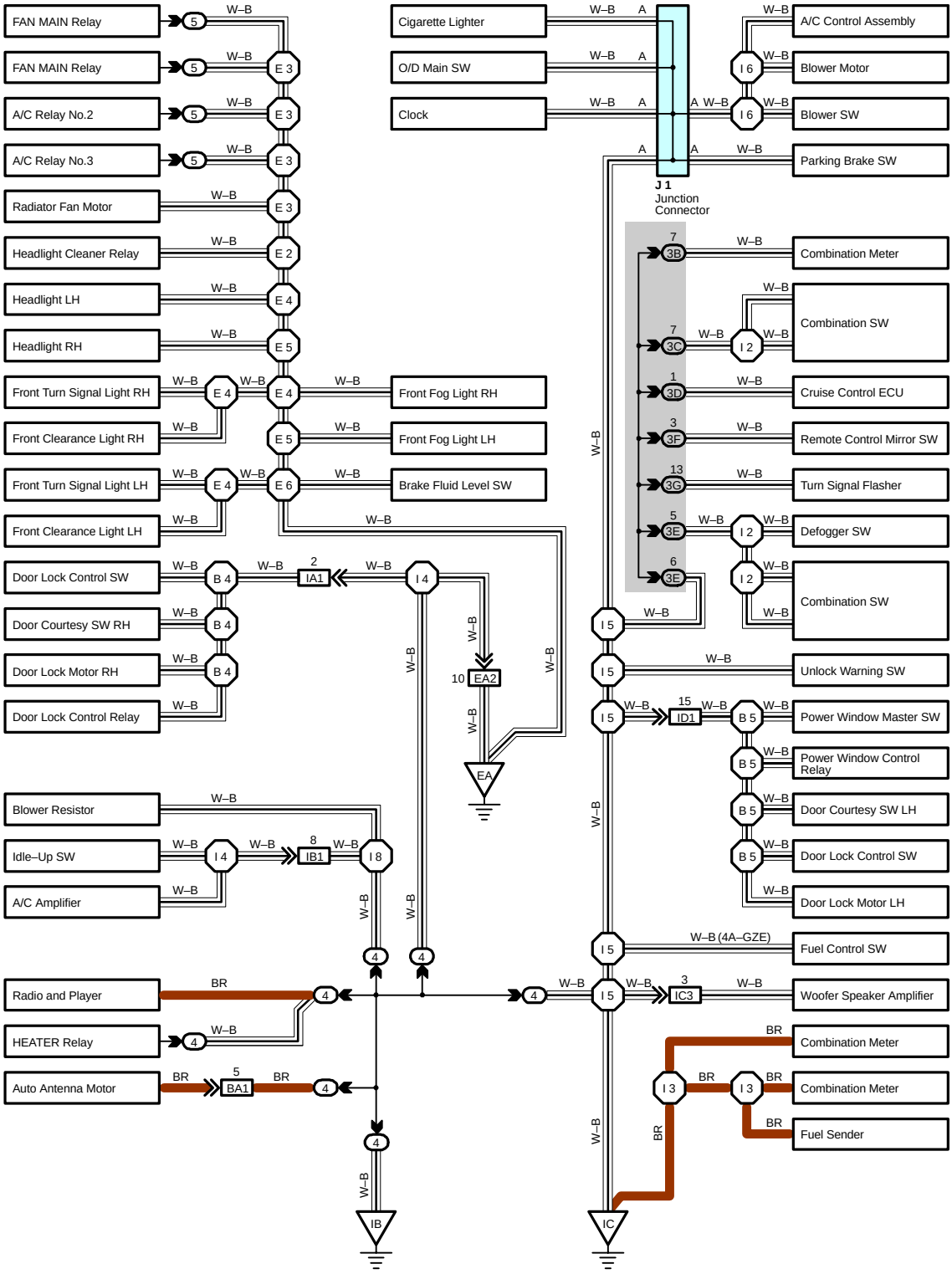
[U] : Indicates the reference page showing the position of the splice points on the vehicle.

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

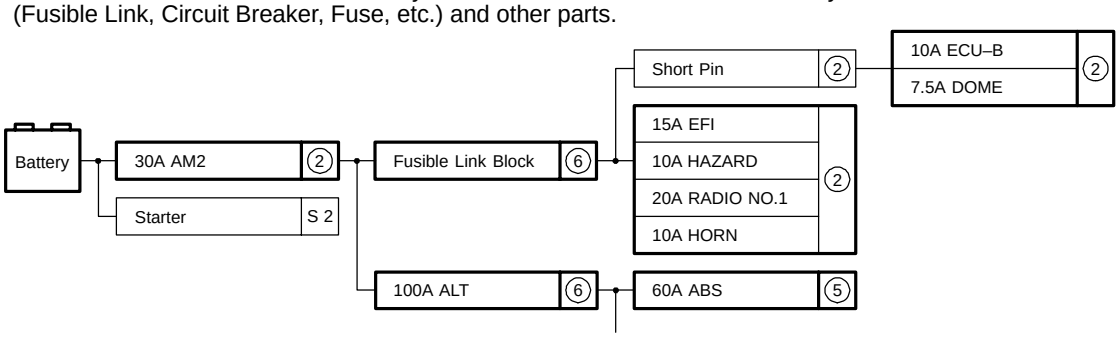


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

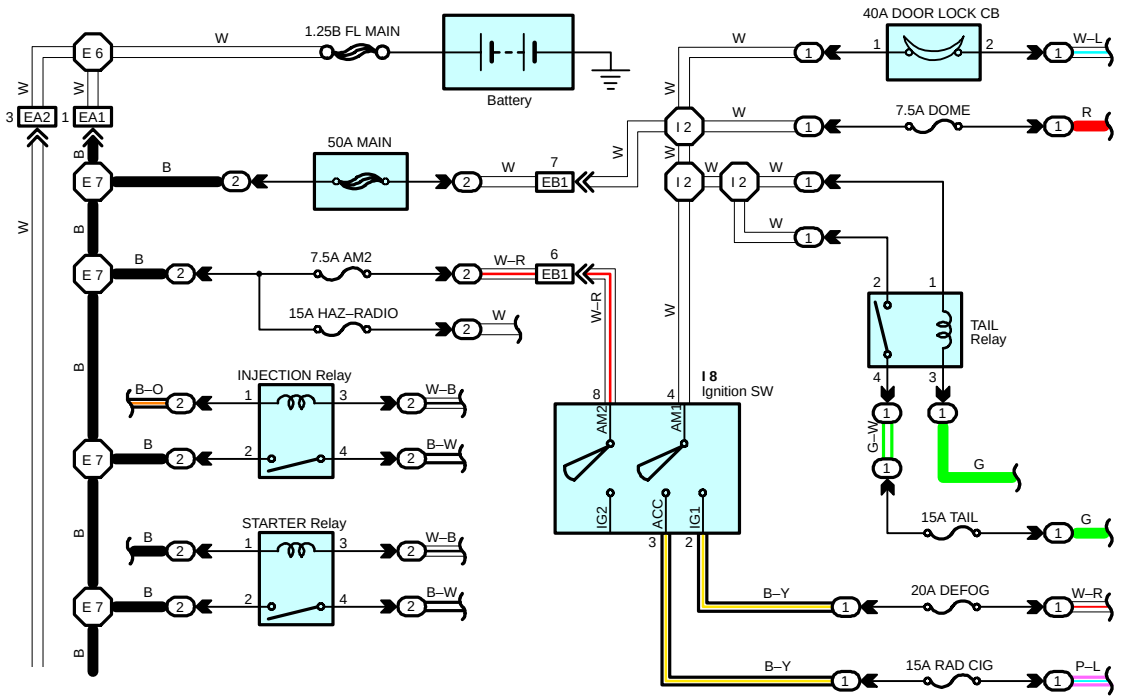
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

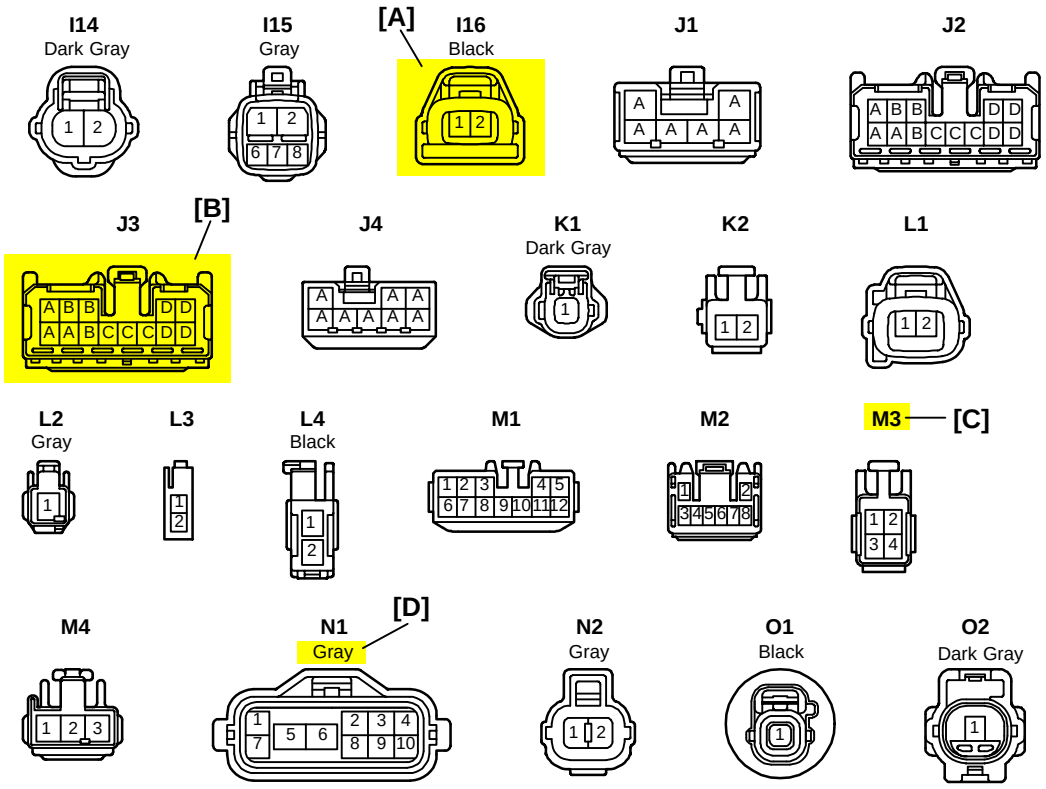
Fuse		System	Page
20A	STOP	ABS ABS and Traction Control Cruise Control Electronically Controlled Transmission Multiplex Communication System	194 187 180 166 210
10A	DOME	Cigarette Lighter Combination Meter Headlight Interior Light Key Reminder and Seat Belt Warning Light Auto Turn Off	214 230 112 122

Power Source



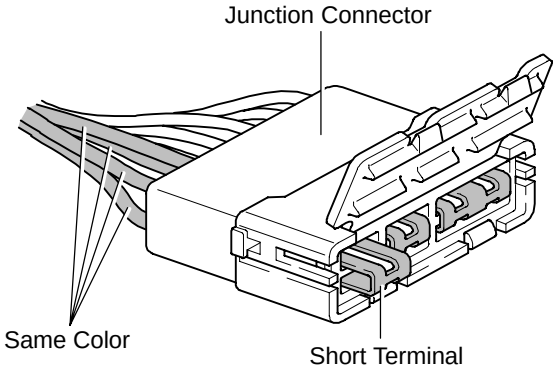
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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
A 1	A/C Ambient Temp. Sensor	90980–11070
A 2	A/C Condenser Fan Motor	90980–11237
A 3	A/C Condenser Fan Relay	90980–10940
A 4	A/C Condenser Fan Resistor	90980–10928
A 5	A/C Magnetic Clutch	90980–11271
A 6	A/T Oil Temp. Sensor	90980–11413
A 7	ABS Actuator	90980–11151
A 8	ABS Actuator	90980–11009
A 9	ABS Speed Sensor Front LH	90980–10941
A10	ABS Speed Sensor Front RH	90980–11002
A11	Airbag Sensor Front LH	90980–11856
A12	Airbag Sensor Front RH	
A13	Airbag Spiral	90980–11194
		90980–11[illegible]

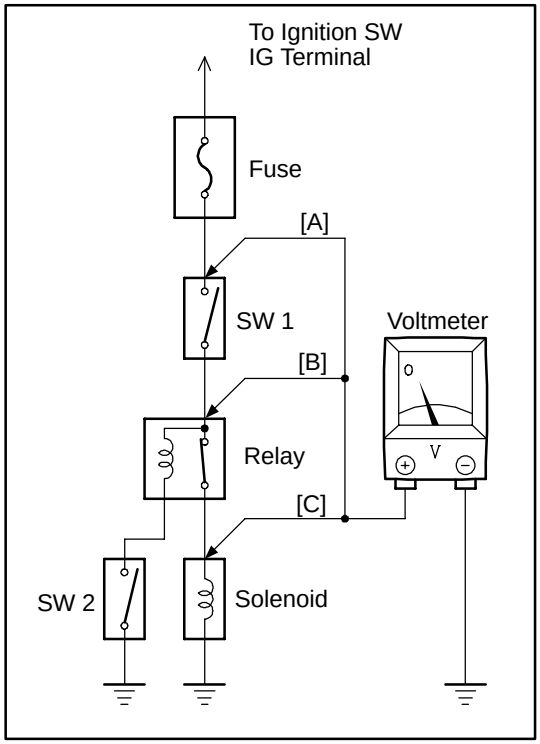
Code	Part Name	Part Number
D 4	Diode (Courtesy)	90980–11608
D 5	Diode (Interior Light)	90980–10962
D 6	Diode (Moon Roof)	90980–11608
D 7	Door Lock Control Relay	90980–10848
D 8	Door Lock Control SW LH	90980–11148
D 9	Door Lock Control SW RH	
D10	Door Courtesy SW LH	90980–11097
D11	Door Courtesy SW RH	
D12	Door Courtesy SW Front LH	90980–11156
D13	Door Courtesy SW Front RH	
D14	Door Courtesy SW Rear LH	
D15	Door Courtesy SW Rear RH	
D16	Door Key Unlock and Unlock SW LH	90980–11170
	[illegible] 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.

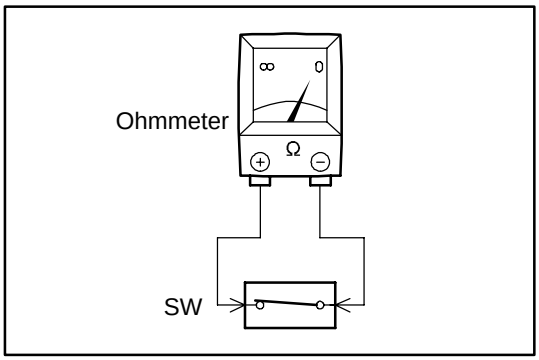


VOLTAGE CHECK

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

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

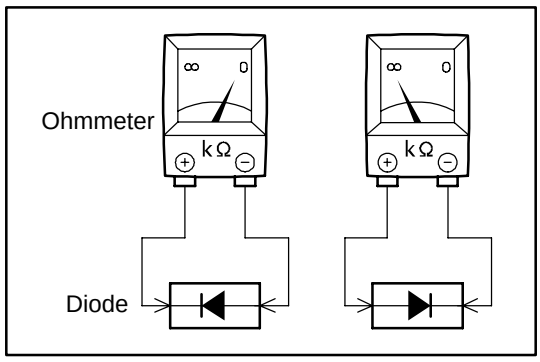
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

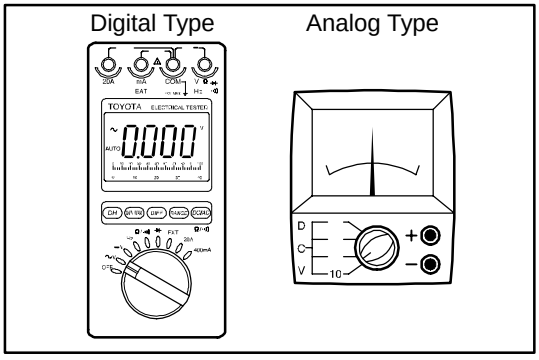
(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

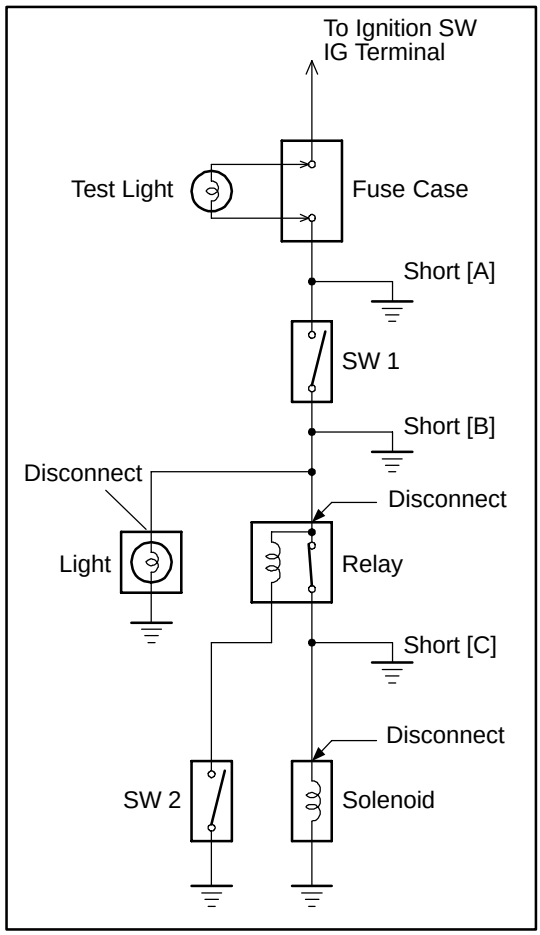
(b) Contact the two leads of an ohmmeter to each of the check points.



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

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





FINDING A SHORT CIRCUIT

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

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

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

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

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

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

CAUTION:

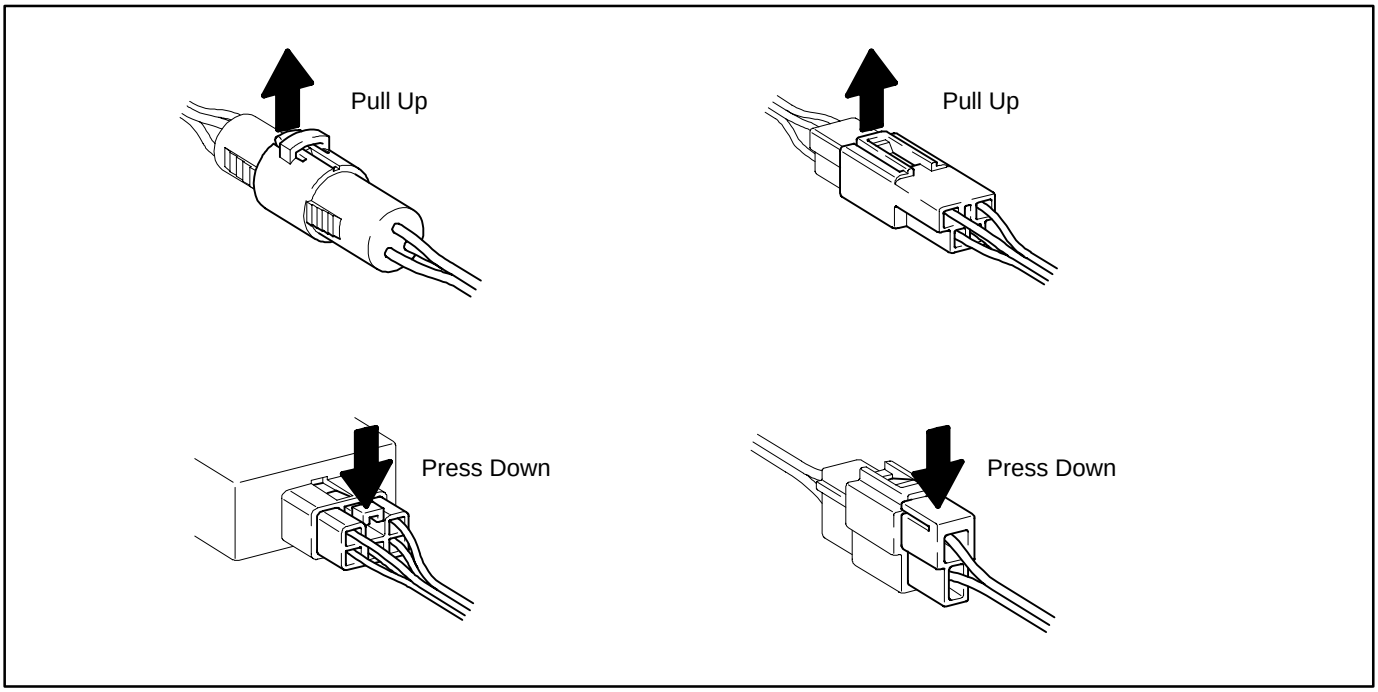
(a) Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

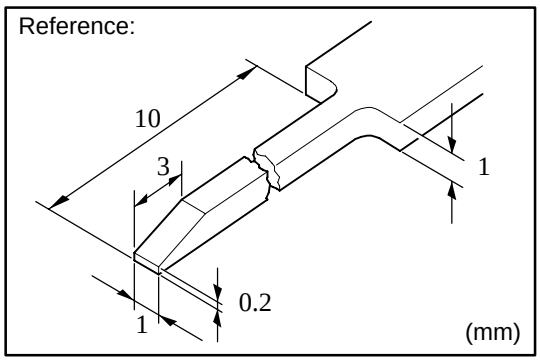
(b) When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).

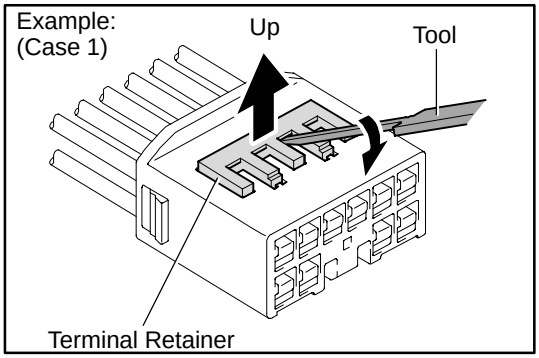
DISCONNECTION OF MALE AND FEMALE CONNECTORS

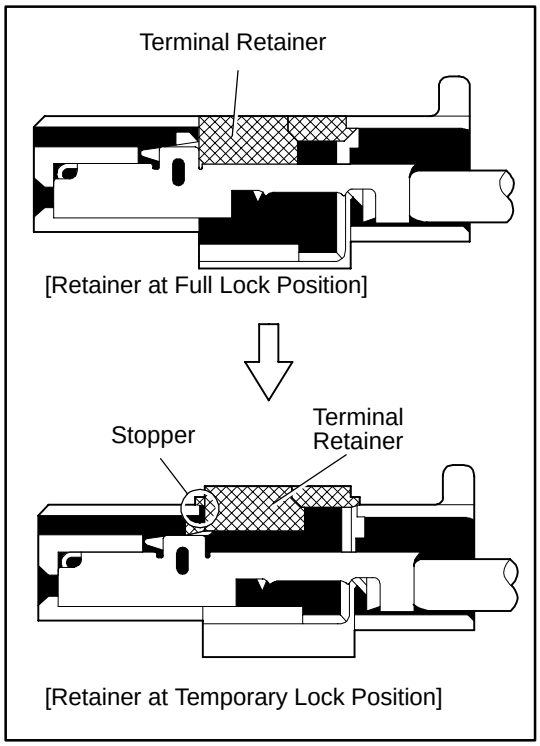
To pull apart the connectors, pull on the connector itself, not the wire harness.

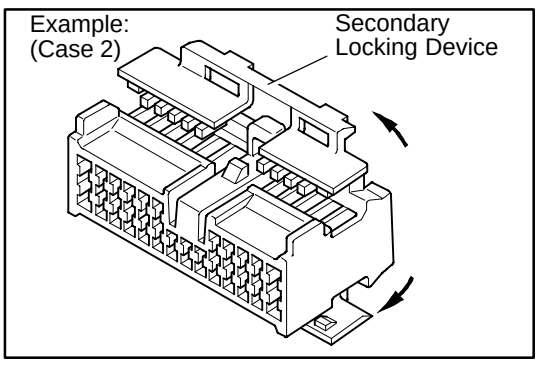
HINT : Check to see what kind of connector you are disconnecting before pulling apart.











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

1. PREPARE THE SPECIAL TOOL

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

2. DISCONNECT CONNECTOR

3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

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

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

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

   [A] For Non–Waterproof Type Connector

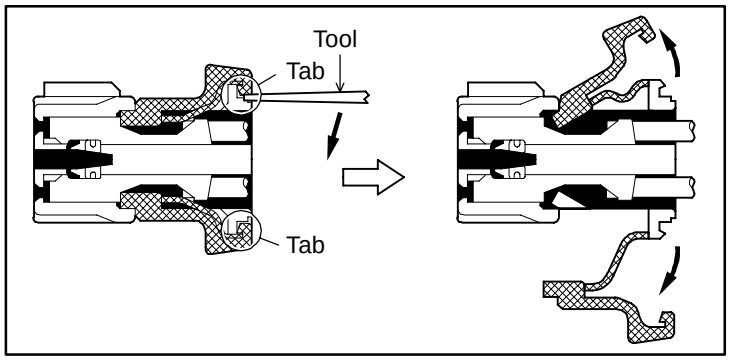
   HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

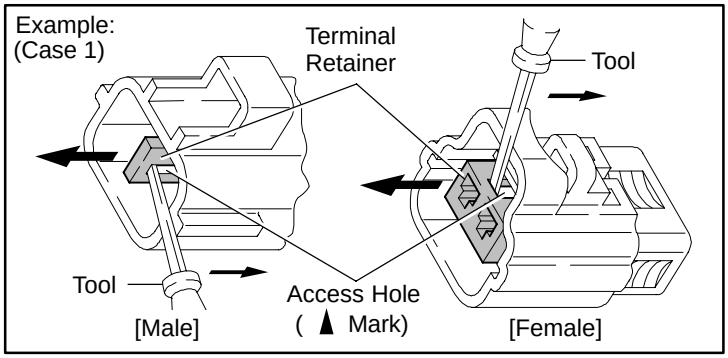
   "Case 1"

   Raise the terminal retainer up to the temporary lock position.

   "Case 2"

   Open the secondary locking device.



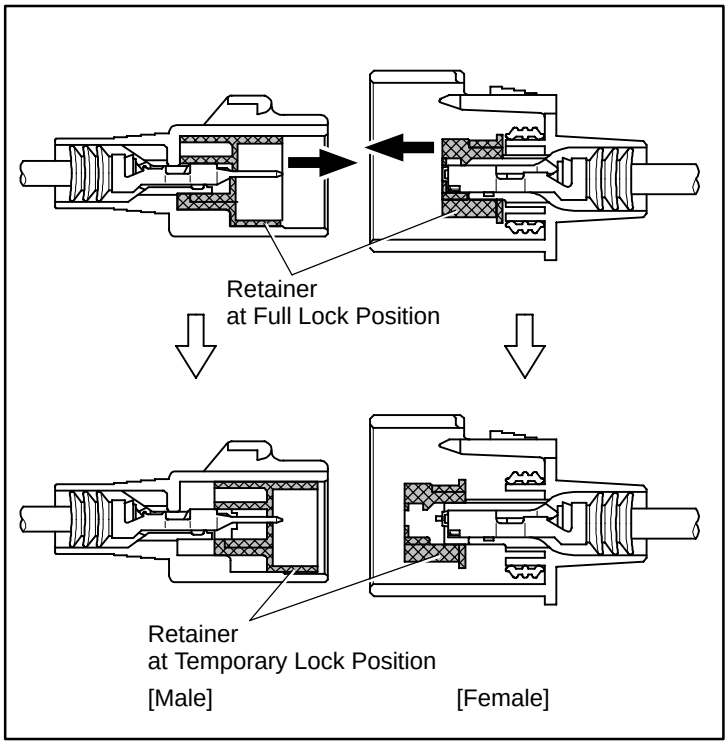


[B] For Waterproof Type Connector

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

Example:

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

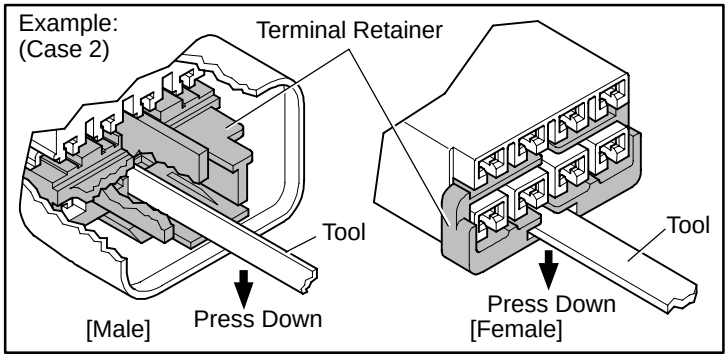


”Case 1”

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

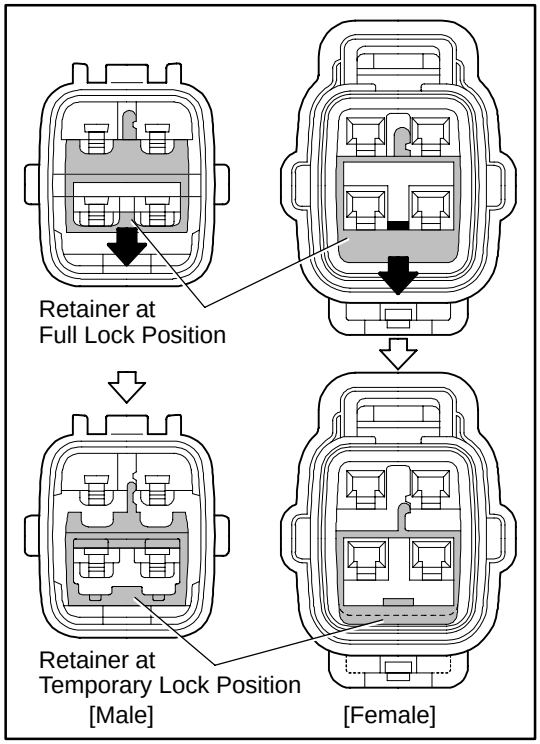
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

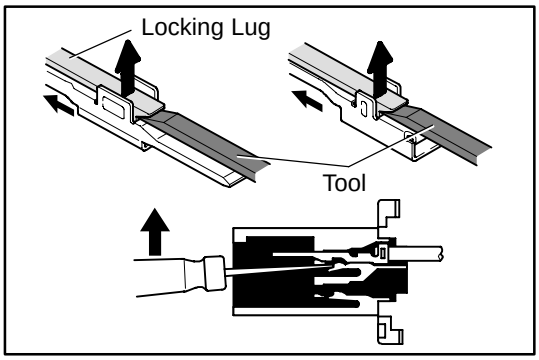


”Case 2”

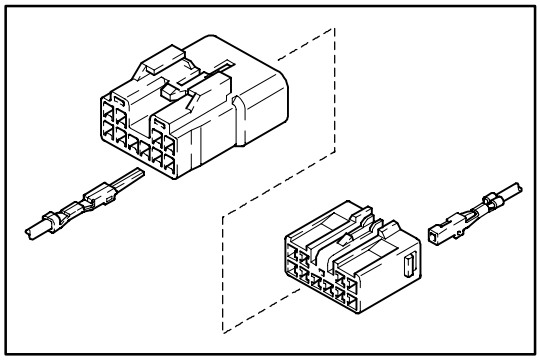
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



Push the terminal retainer down to the temporary lock position.



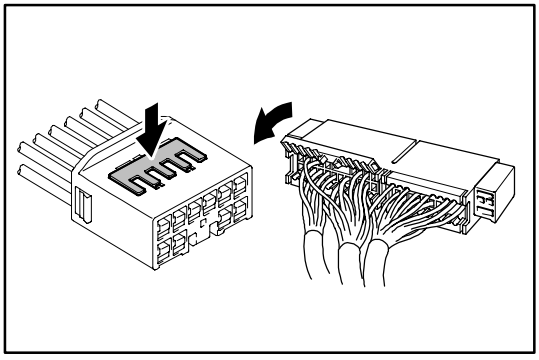
(c) Release the locking lug from terminal and pull the terminal out from rear.



4. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

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



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

5. CONNECT CONNECTOR

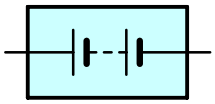
ABBREVIATIONS

The following abbreviations are used in this manual.

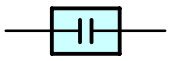
A/C	=	Air Conditioning
A/T	=	Automatic Transmission
ABS	=	Anti–Lock Brake System
ACIS	=	Acoustic Control Induction System
BA	=	Brake Assist
CD	=	Compact Disc
COMB.	=	Combination
DIFF.	=	Differential
DVD	=	Digital Versatile Disc
ECU	=	Electronic Control Unit
ESA	=	Electronic Spark Advance
ETCS–i	=	Electronic Throttle Control System–intelligent
EVAP	=	Evaporative Emission
J/B	=	Junction Block
LH	=	Left–Hand
MFI	=	Multiport Fuel Injection
MPX	=	Multiplex
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
w/	=	With
w/o	=	Without

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

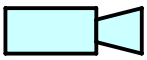
E GLOSSARY OF TERMS AND SYMBOLS



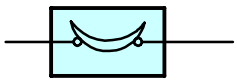
BATTERY
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.



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



CIGARETTE LIGHTER
An electric resistance heating element.



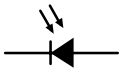
CIRCUIT BREAKER
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.



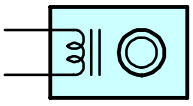
DIODE
A semiconductor which allows current flow in only one direction.



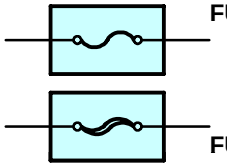
DIODE, ZENER
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



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



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



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

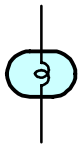
(for Medium Current Fuse)

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

(for High Current Fuse or Fusible Link)



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

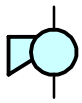


1. SINGLE FILAMENT

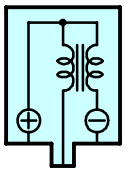


2. DOUBLE FILAMENT

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



HORN
An electric device which sounds a loud audible signal.



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



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



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



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



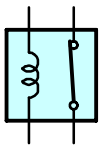
METER, DIGITAL
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.



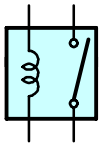
MOTOR
A power unit which converts electrical energy into mechanical energy, especially rotary motion.

RELAY

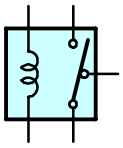
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.



1. NORMALLY CLOSED

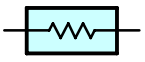


2. NORMALLY OPEN



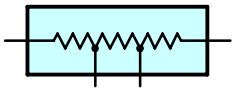
RELAY, DOUBLE THROW

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



RESISTOR

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



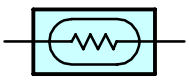
RESISTOR, TAPPED

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



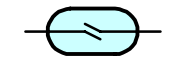
RESISTOR, VARIABLE or RHEOSTAT

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



SENSOR (Thermistor)

A resistor which varies its resistance with temperature.



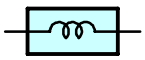
(Reed Switch Type)

SENSOR, SPEED

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

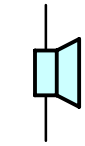
SHORT PIN

Used to provide an unbroken connection within a junction block.



SOLENOID

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

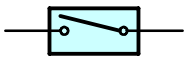


SPEAKER

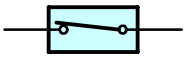
An electromechanical device which creates sound waves from current flow.

SWITCH, MANUAL

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



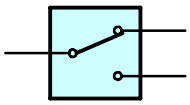
1. NORMALLY OPEN



2. NORMALLY CLOSED

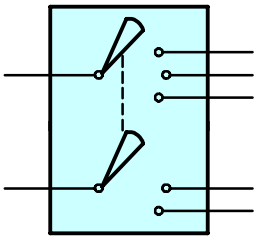
SWITCH, DOUBLE THROW

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



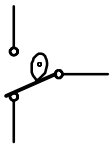
SWITCH, IGNITION

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



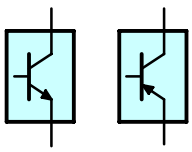
SWITCH, WIPER PARK

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



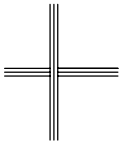
TRANSISTOR

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

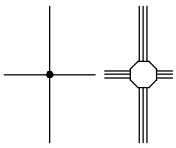


WIRES

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.

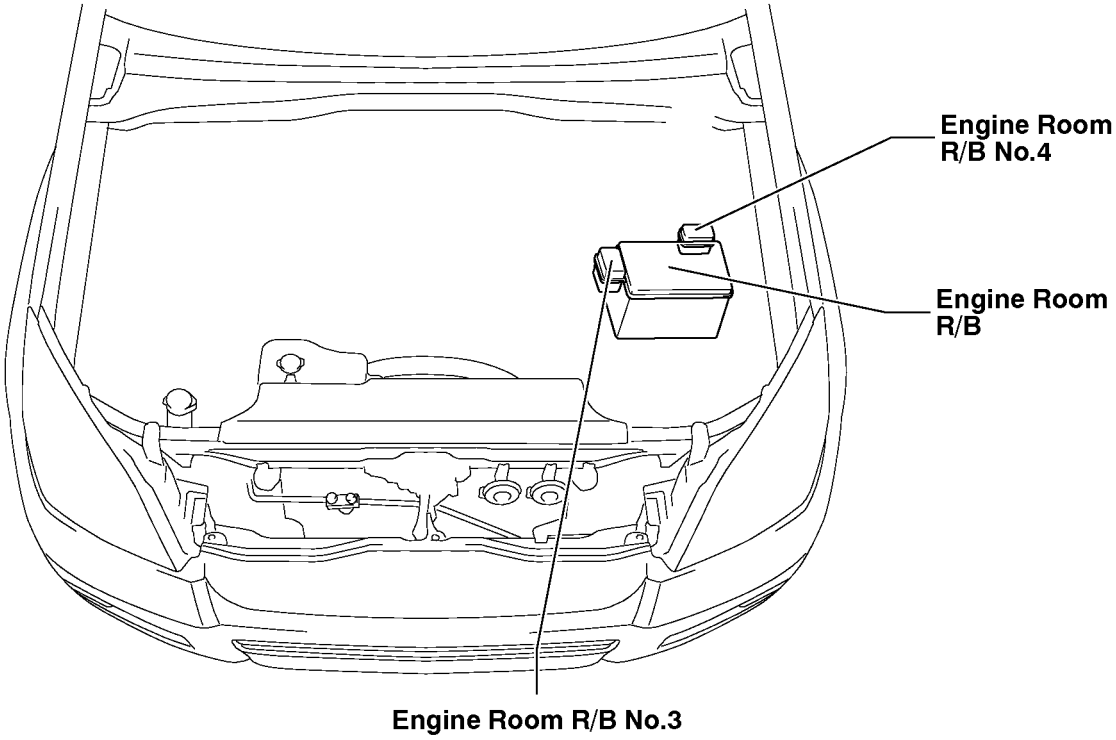


(1) NOT CONNECTED

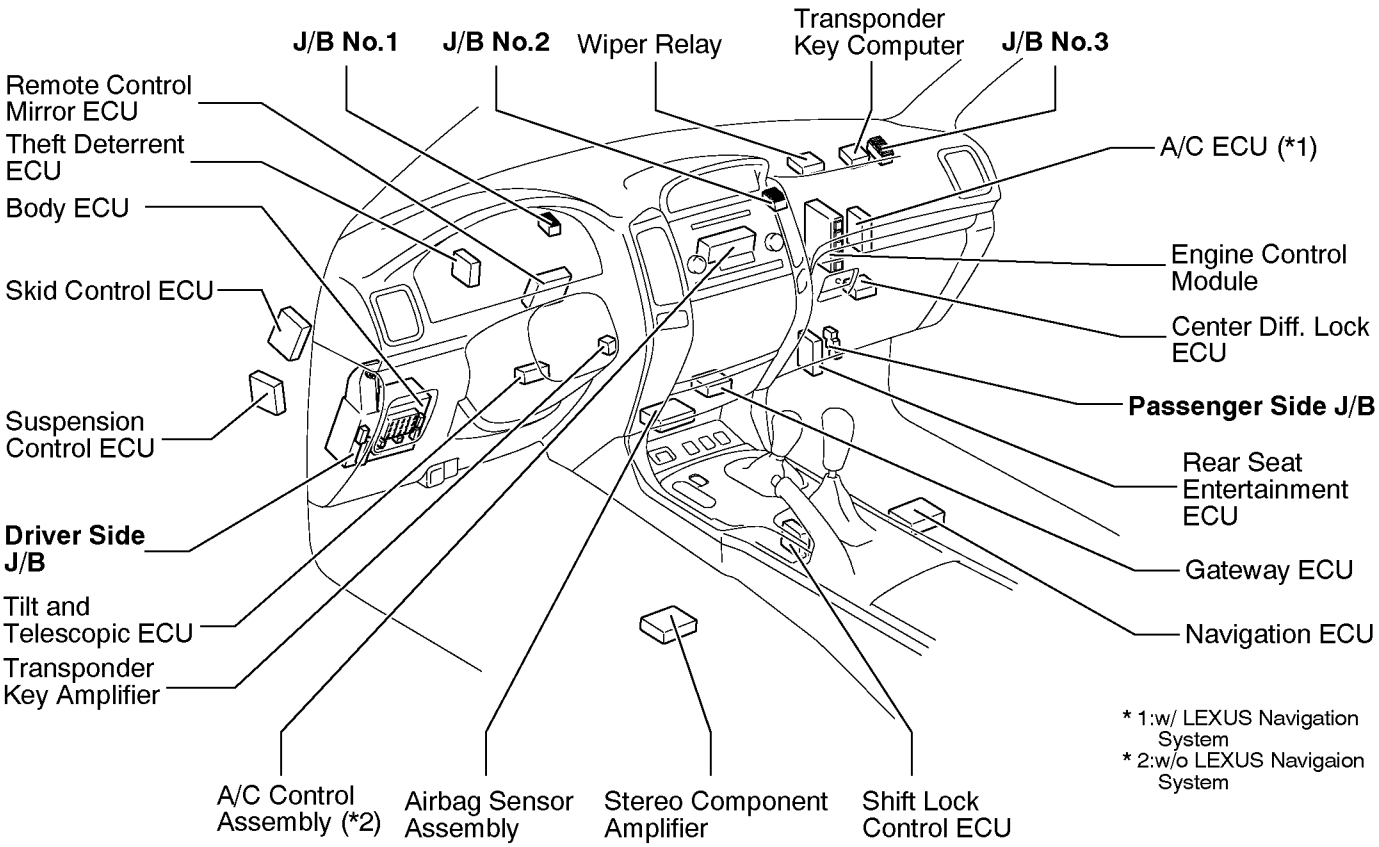


(2) SPLICED

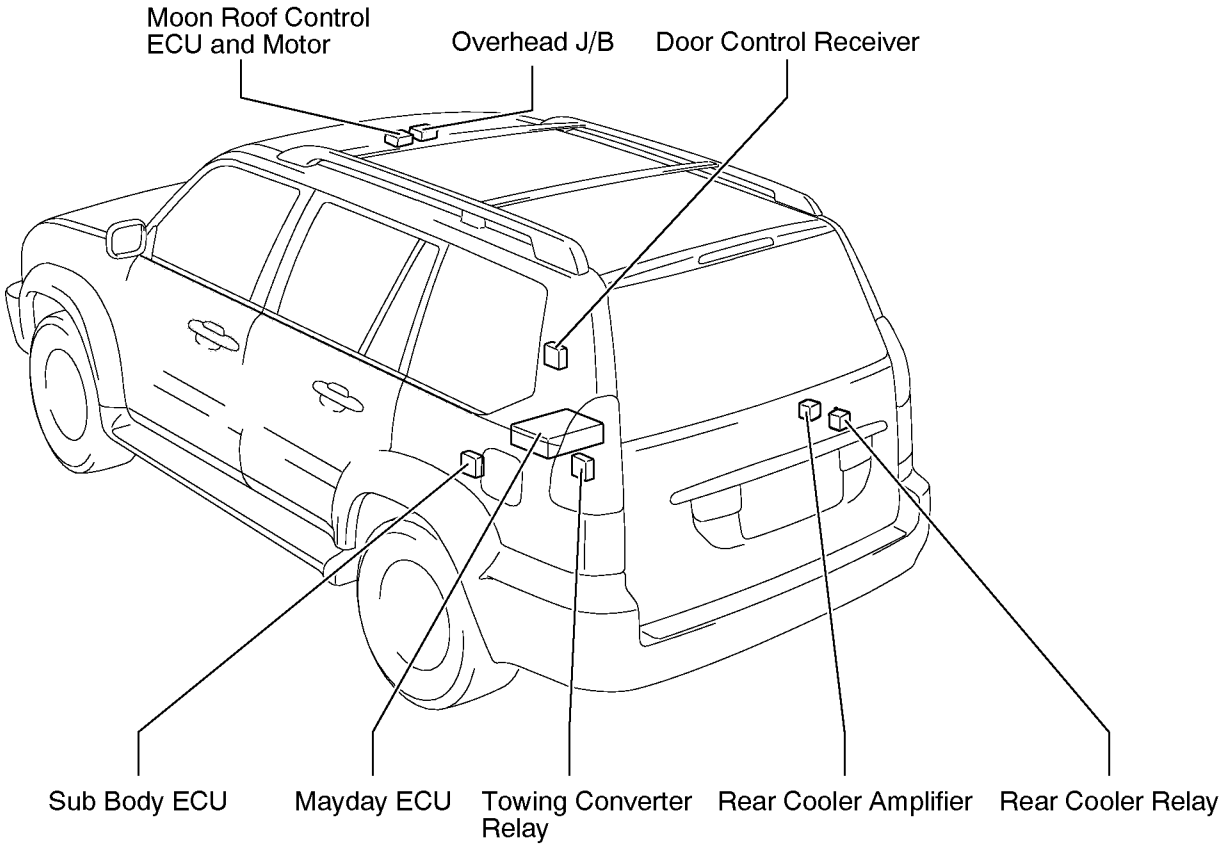
[Engine Compartment]



[Instrument Panel]



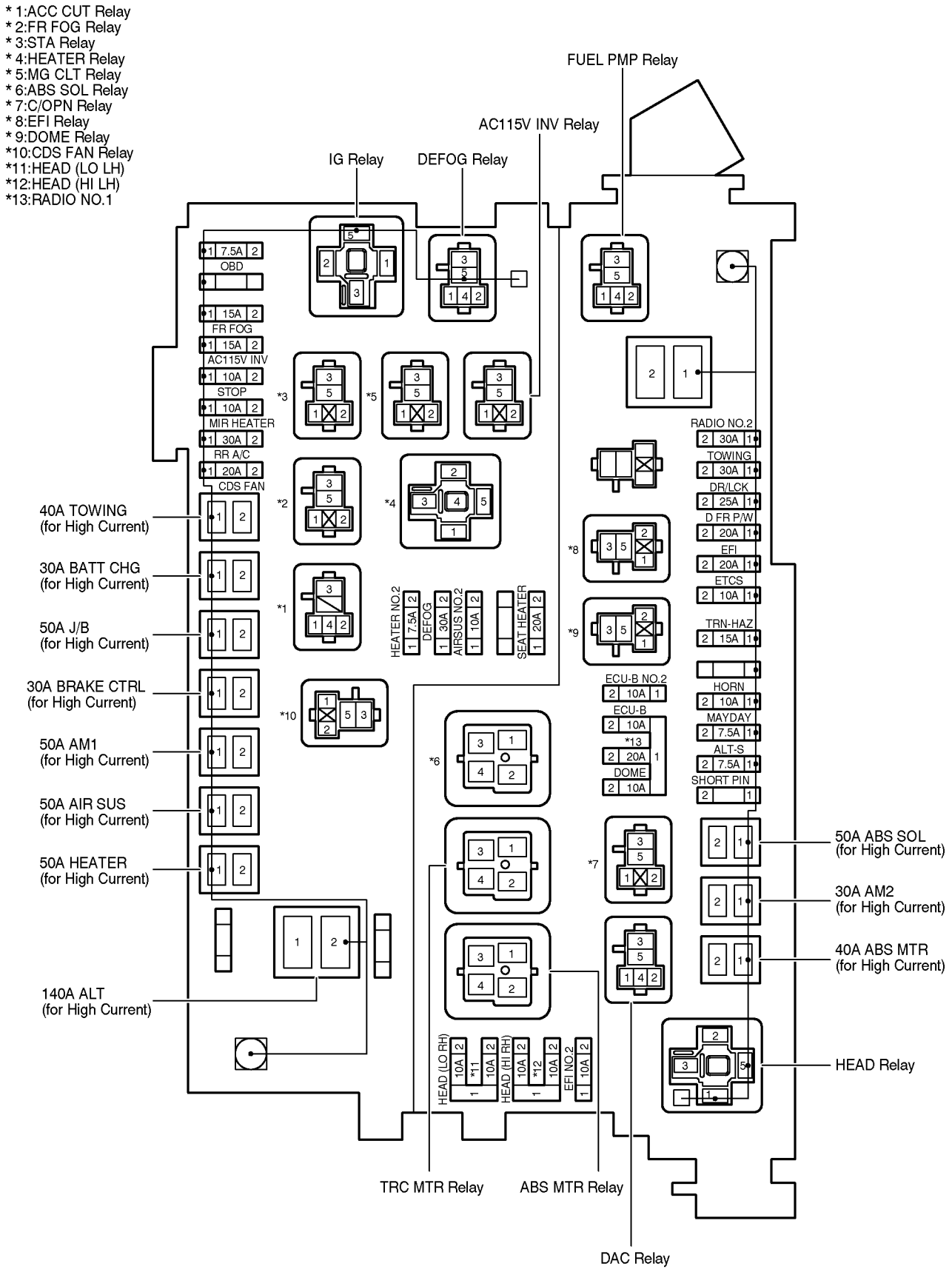
[Body]



F RELAY LOCATIONS

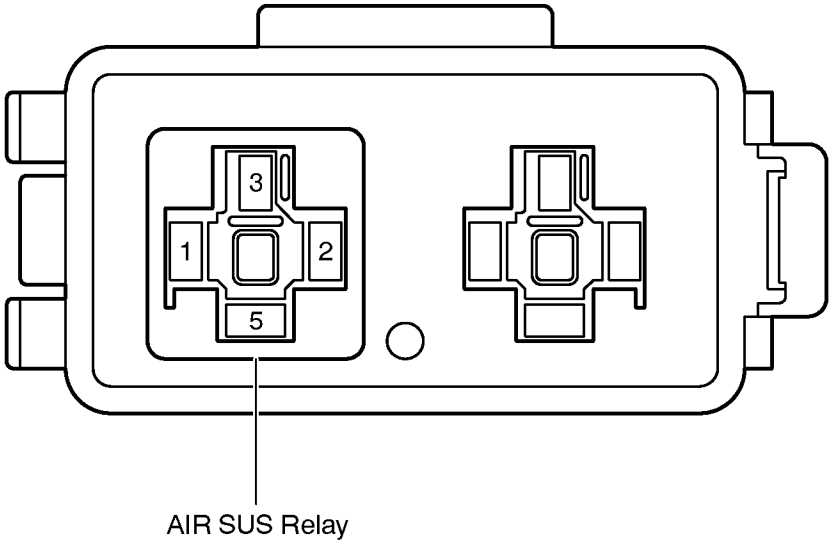
② : Engine Room R/B

Engine Compartment Left (See Page 20)



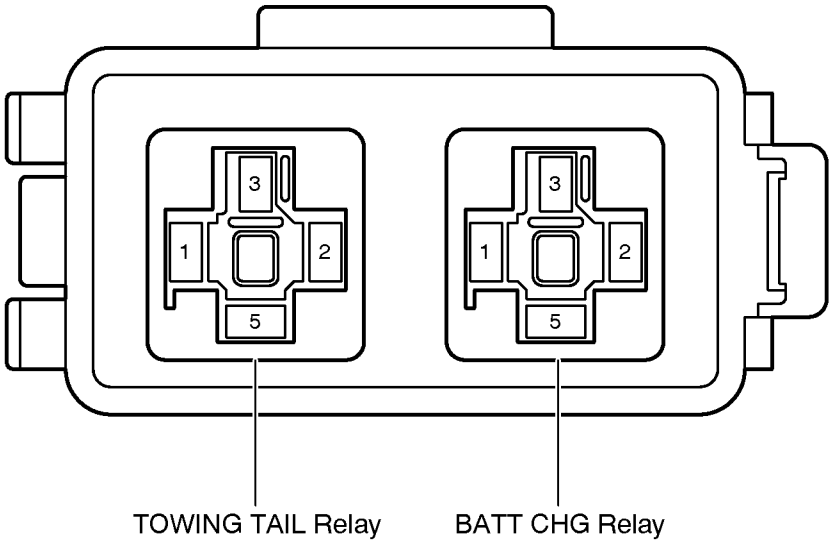
③ : Engine Room R/B No.3

Engine Compartment Left (See Page 20)



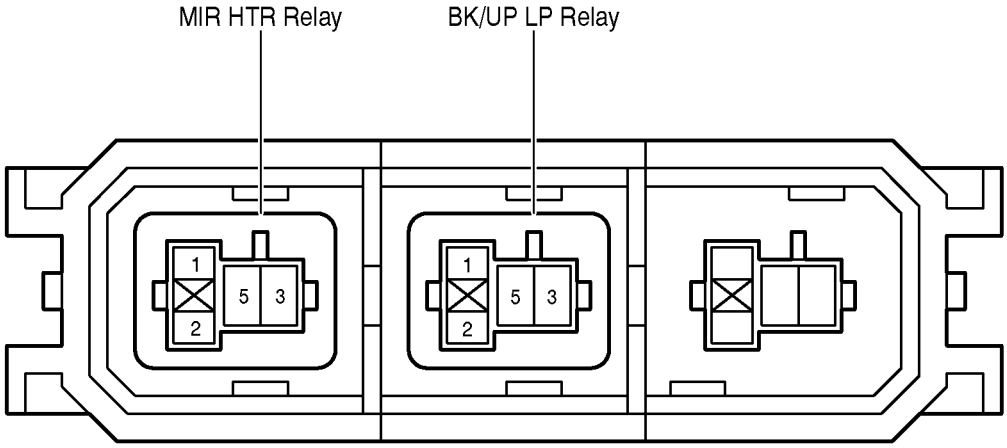
④ : Engine Room R/B No.4

Engine Compartment Left (See Page 20)



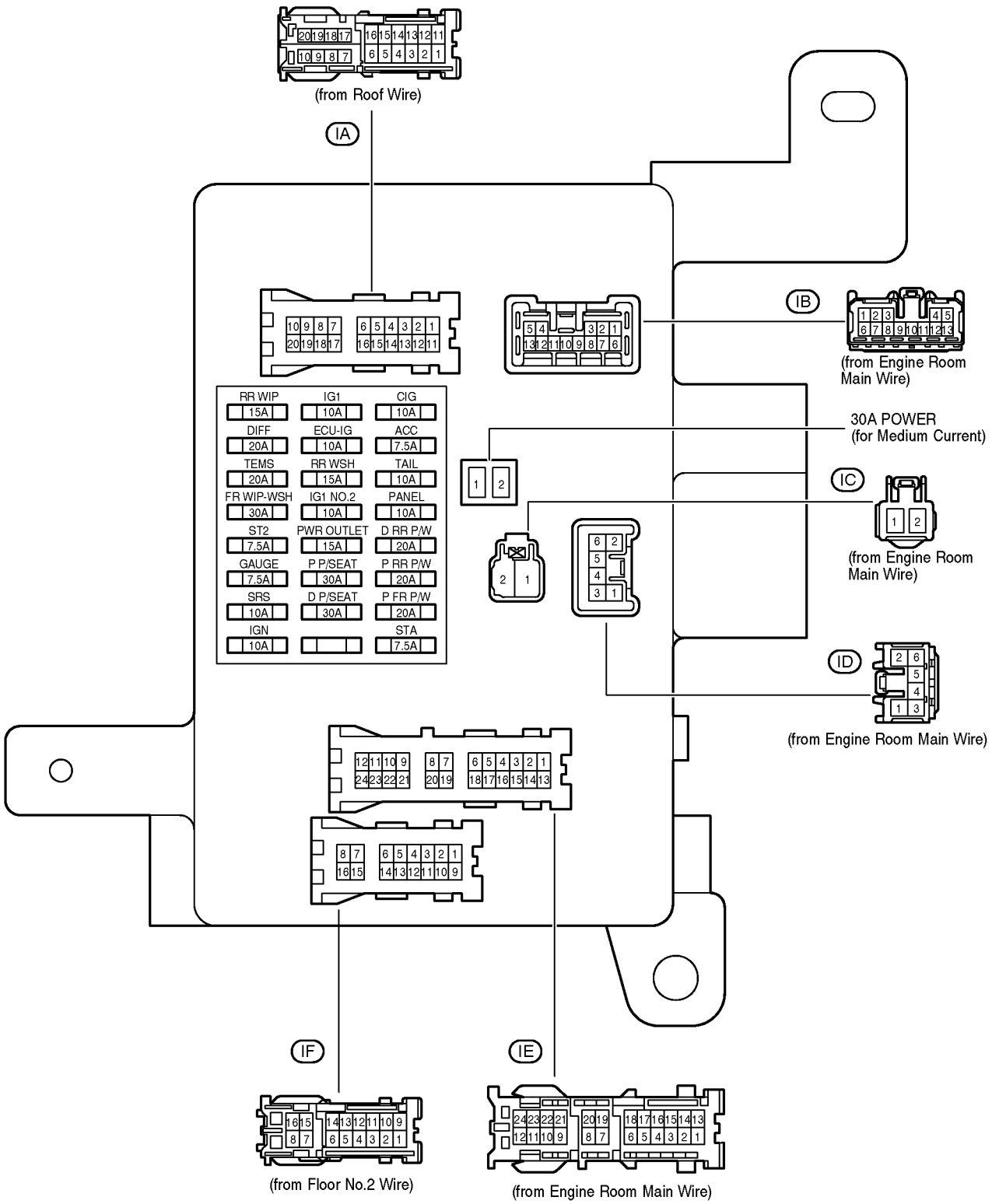
F RELAY LOCATIONS

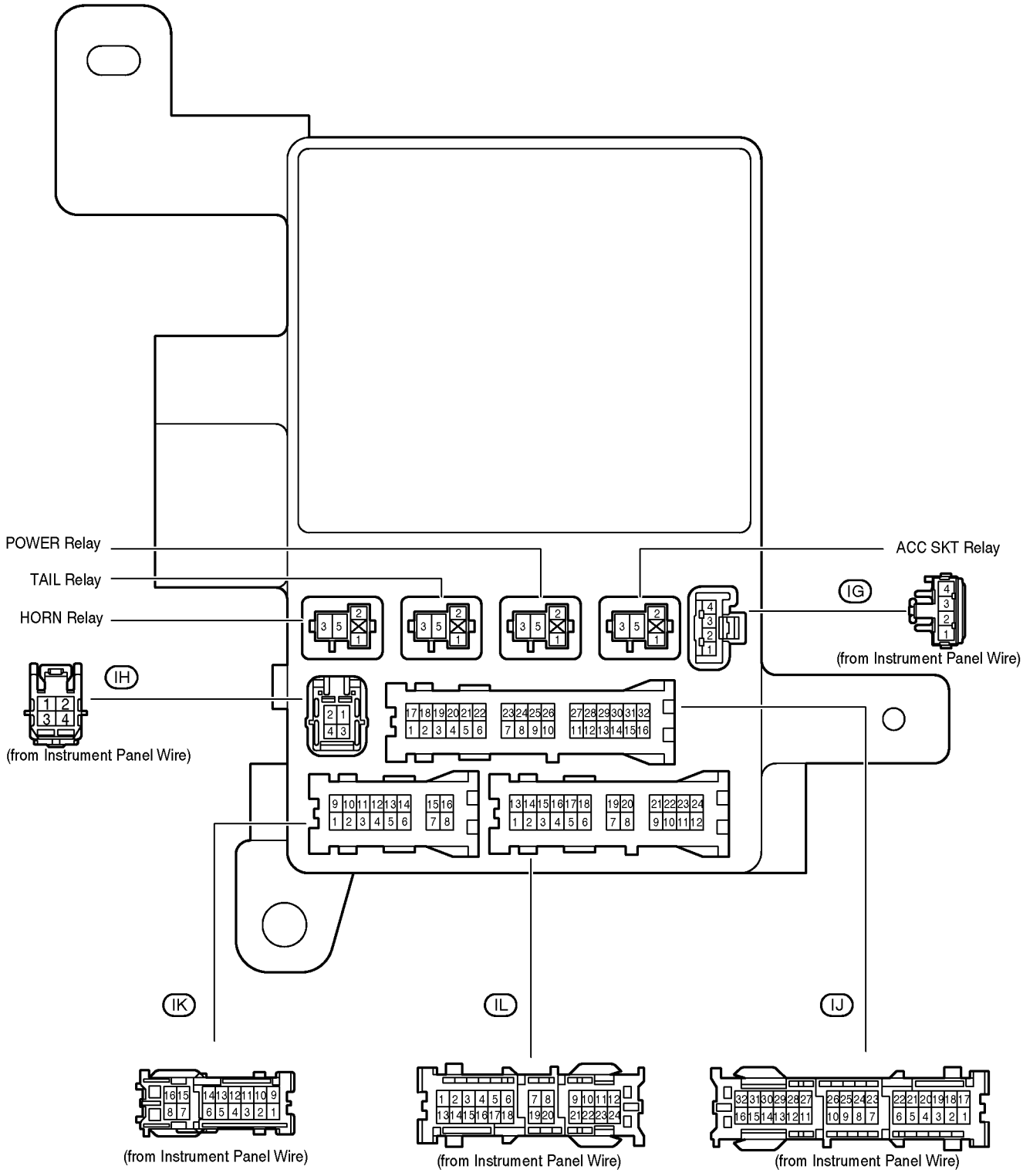
⑤ : Passenger Side R/B	Right Kick Panel (See Page 21)



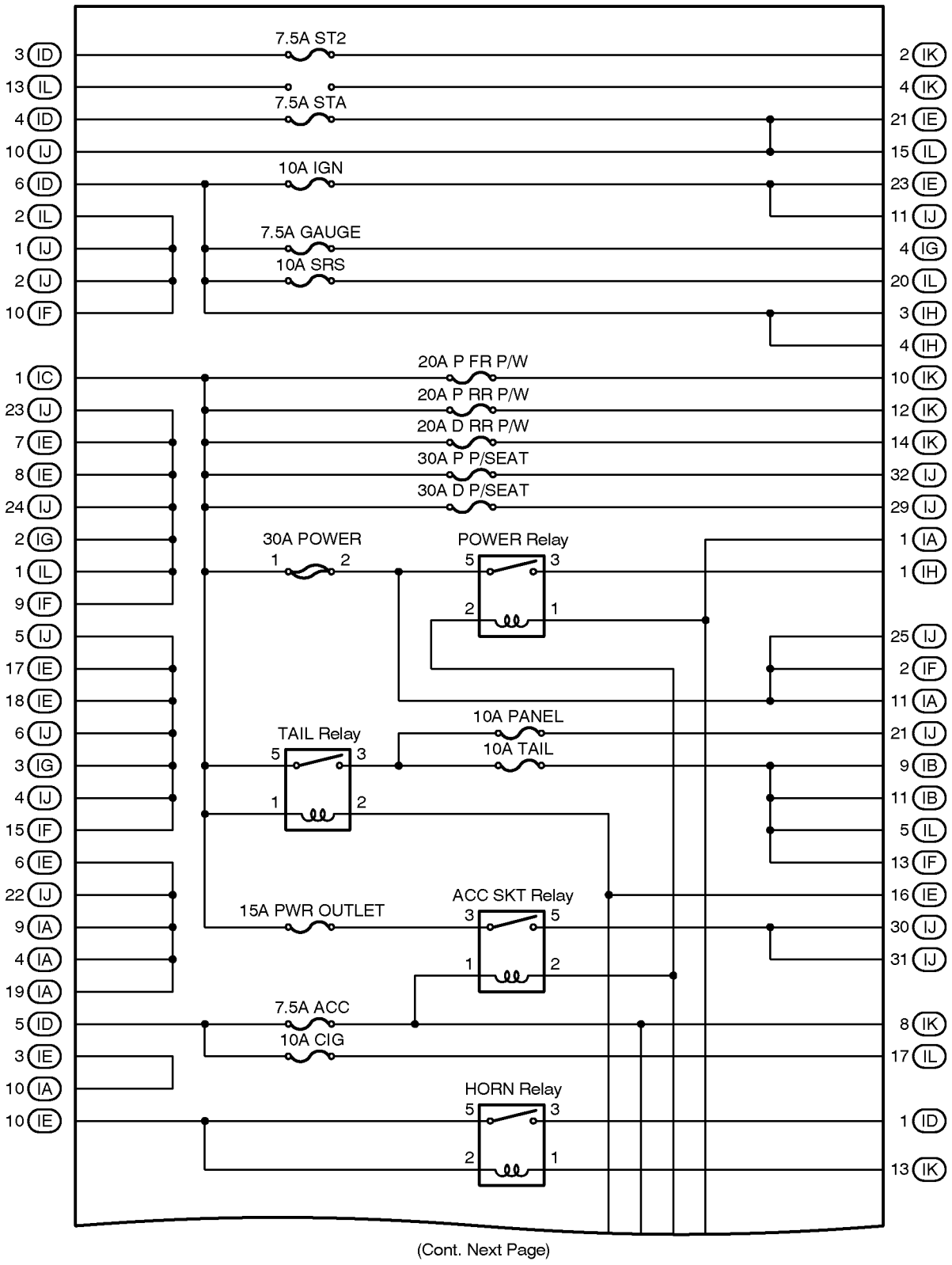
F RELAY LOCATIONS

: Driver Side J/B	Lower Finish Panel (See Page 23)

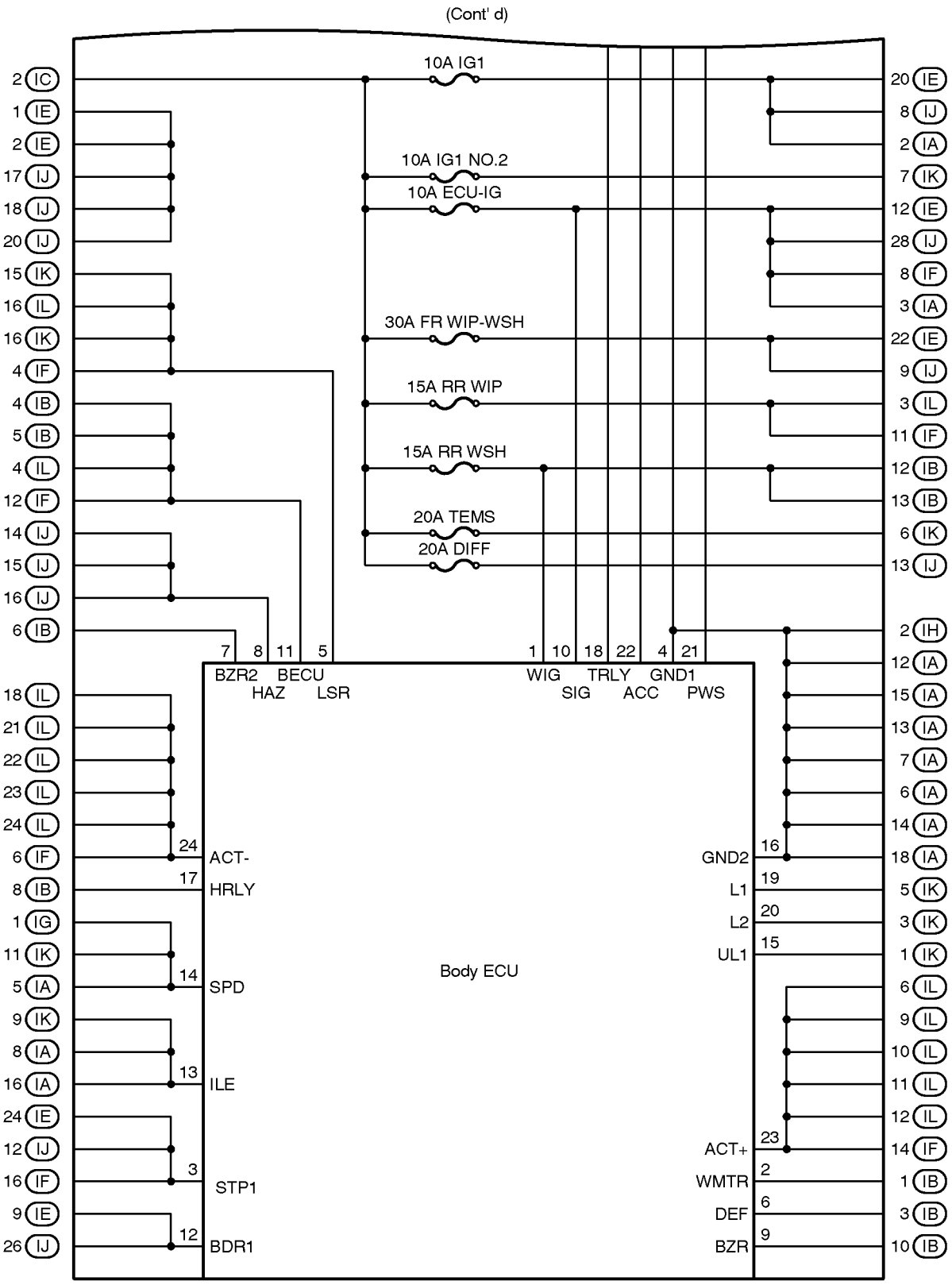



POWER Relay
TAIL Relay
HORN Relay
ACC SKT Relay
IG
(from Instrument Panel Wire)
IH
(from Instrument Panel Wire)
IK
(from Instrument Panel Wire)
IL
(from Instrument Panel Wire)
IJ
(from Instrument Panel Wire)

[Driver Side J/B Inner Circuit]

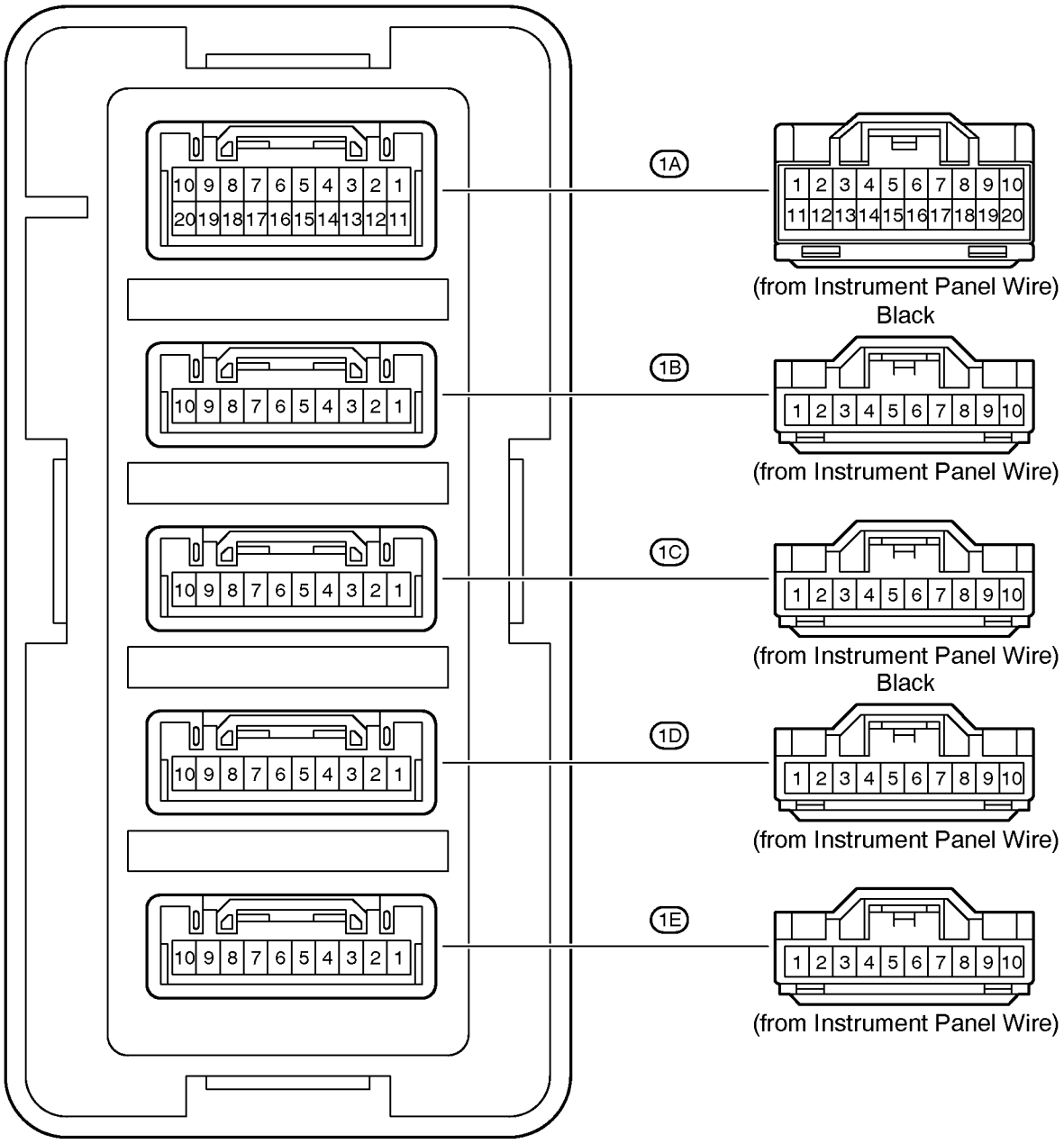


(Cont. Next Page)

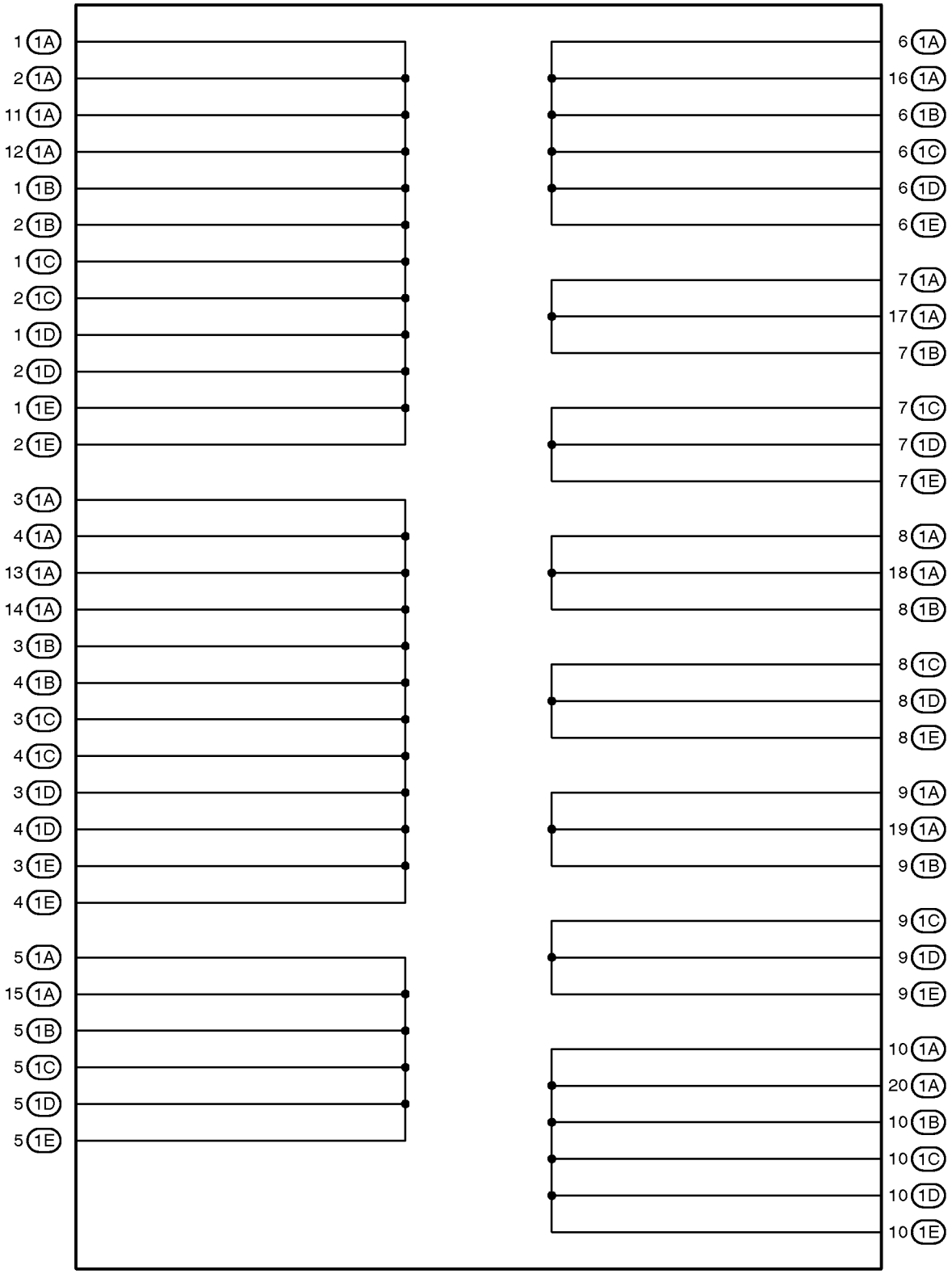

(Cont' d)
10A IG1
10A IG1 NO.2
10A ECU-IG
30A FR WIP-WSH
15A RR WIP
15A RR WSH
20A TEMS
20A DIFF
2 IC
1 IE
2 IE
17 IJ
18 IJ
20 IJ
15 IK
16 IL
16 IK
4 IF
4 IB
5 IB
4 IL
12 IF
14 IJ
15 IJ
16 IJ
6 IB
18 IL
21 IL
22 IL
23 IL
24 IL
6 IF
8 IB
1 IG
11 IK
5 IA
9 IK
8 IA
16 IA
24 IE
12 IJ
16 IF
9 IE
26 IJ
20 IE
8 IJ
2 IA
7 IK
12 IE
28 IJ
8 IF
3 IA
22 IE
9 IJ
3 IL
11 IF
12 IB
13 IB
6 IK
13 IJ
2 IH
12 IA
15 IA
13 IA
7 IA
6 IA
14 IA
18 IA
5 IK
3 IK
1 IK
6 IL
9 IL
10 IL
11 IL
12 IL
14 IF
1 IB
3 IB
10 IB
7 BZR2
8 BECU HAZ
11 LSR
5
1 WIG
10 SIG
18 TRLY
22 ACC
4 GND1
21 PWS
24 ACT-
17 HRLY
14 SPD
13 ILE
3 STP1
12 BDR1
16 GND2
19 L1
20 L2
15 UL1
23 ACT+
2 WMTR
6 DEF
9 BZR
Body ECU

F RELAY LOCATIONS

: J/B No.1	Instrument Panel Reinforcement Left (See Page 21)

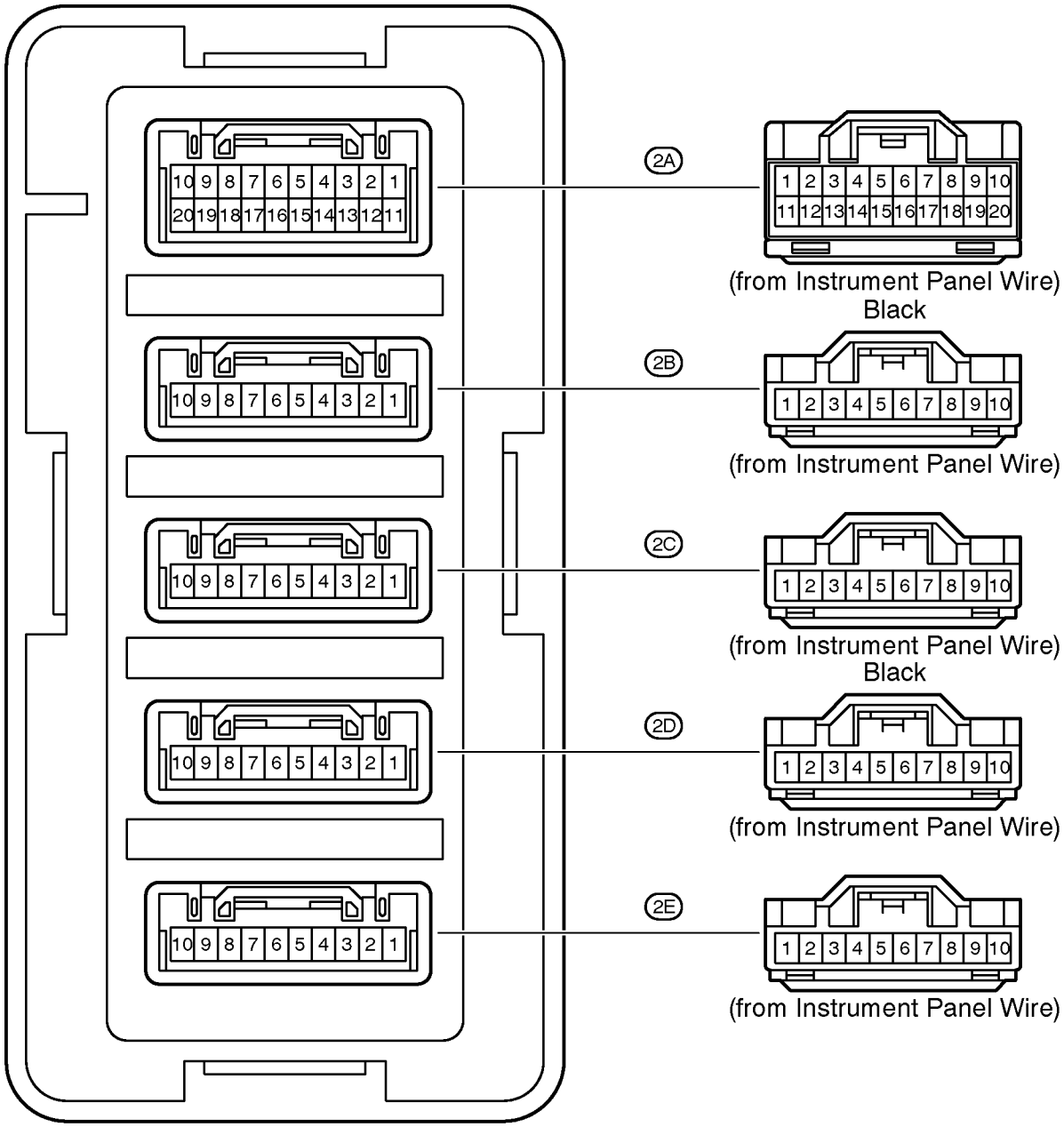


[J/B No.1 Inner Circuit]

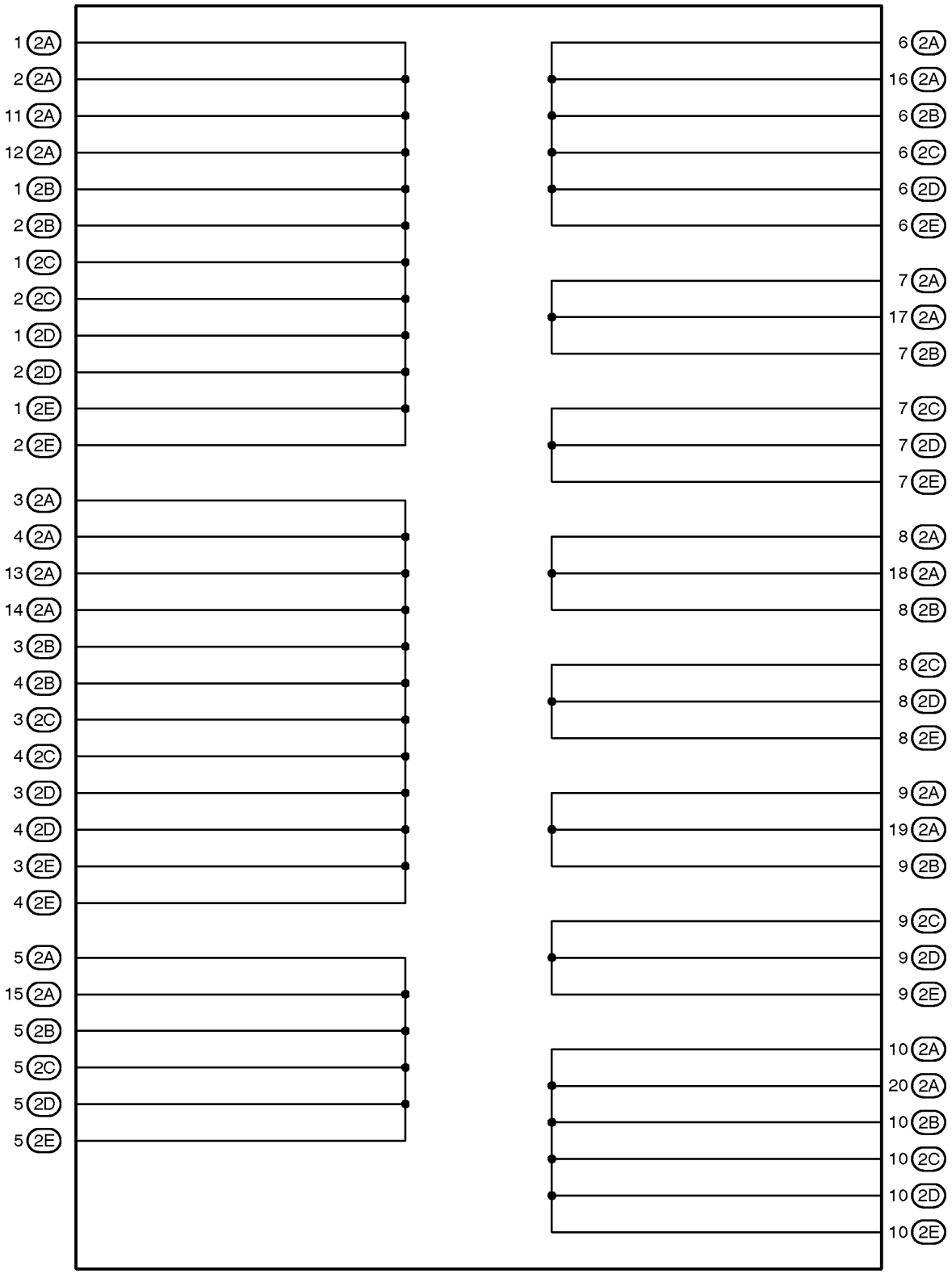


F RELAY LOCATIONS

: J/B No.2	Instrument Panel Reinforcement Center (See Page 21)

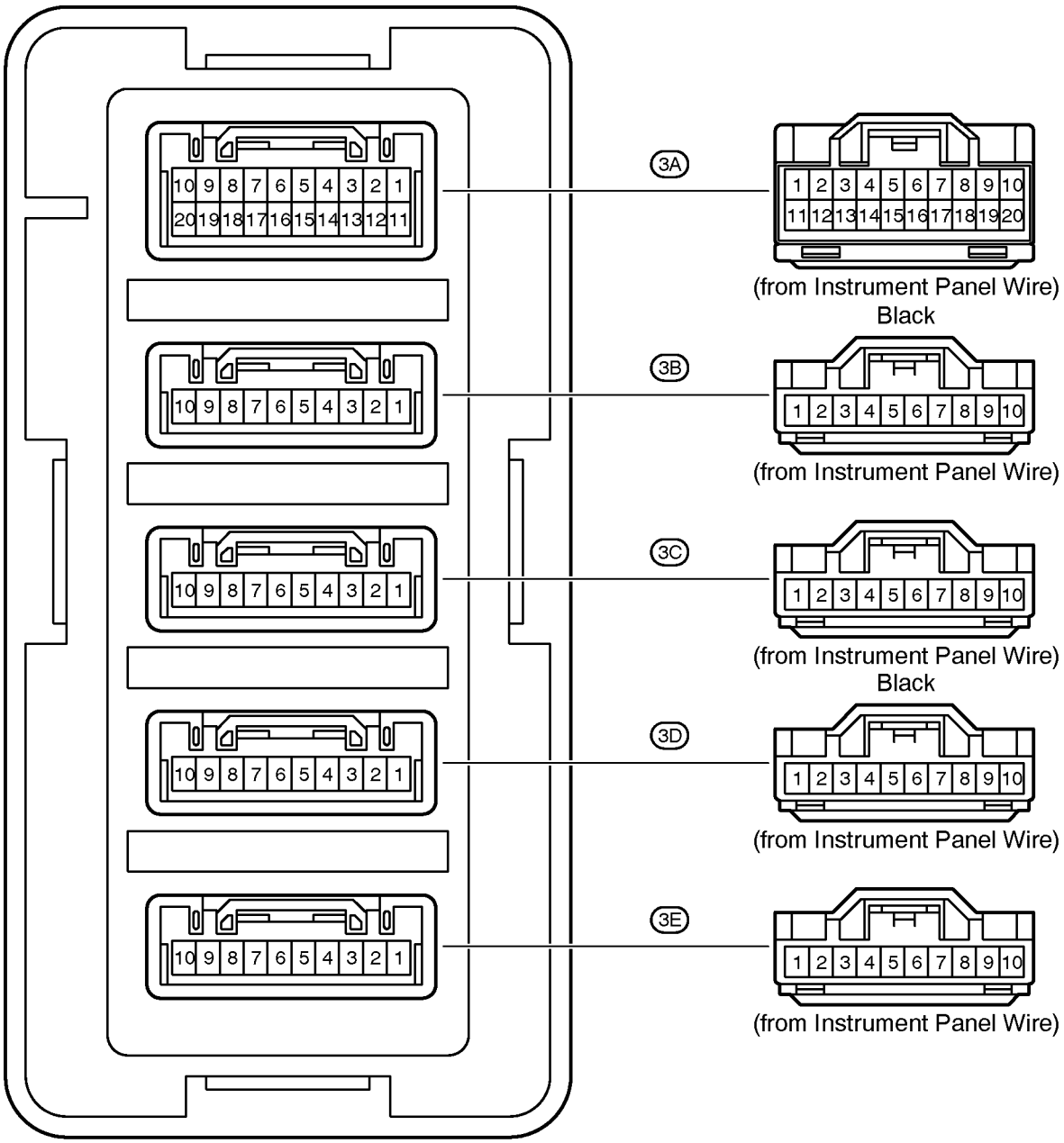


[J/B No.2 Inner Circuit]

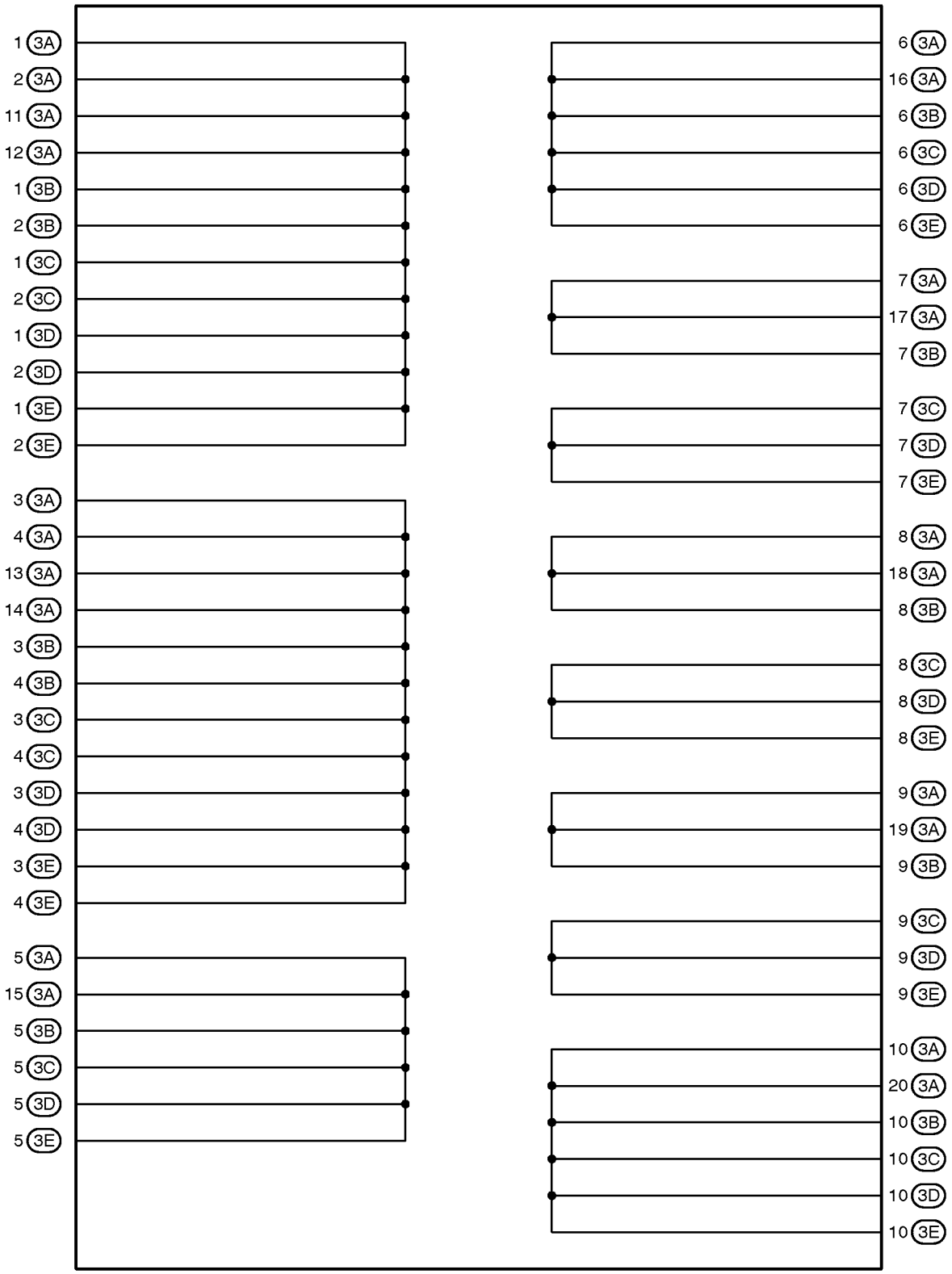


F RELAY LOCATIONS

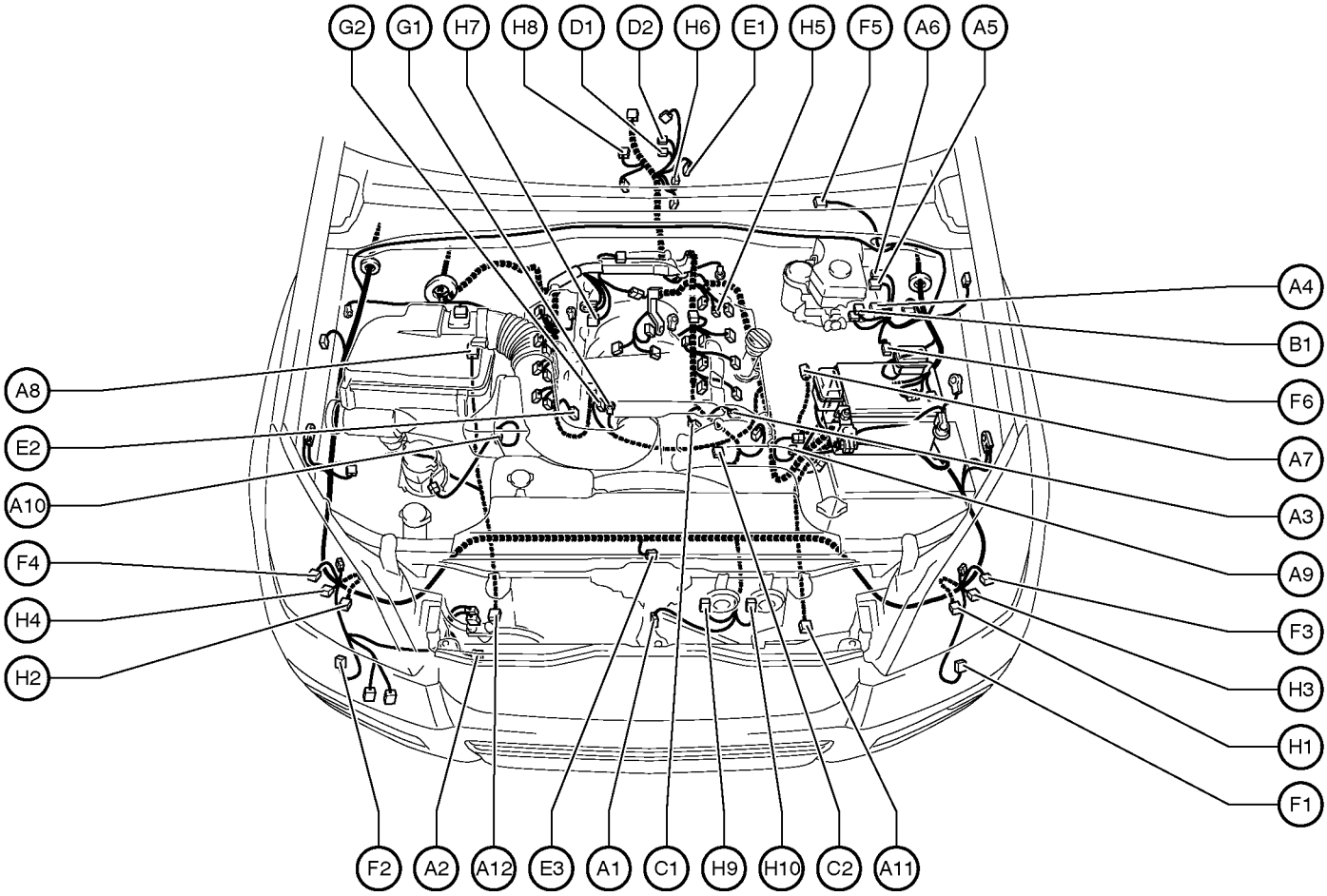
: J/B No.3	Instrument Panel Reinforcement Right (See Page 20)



[J/B No.3 Inner Circuit]



Position of Parts in Engine Compartment



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Lock Sensor
A/C Magnetic Clutch
A 4 ABS & BA & TRAC & VSC Actuator
A 5 ABS & BA & TRAC & VSC Actuator
A 6 ABS & BA & TRAC & VSC Actuator
A 7 ABS Speed Sensor Front LH
A 8 ABS Speed Sensor Front RH
A 9 Absorber Control Actuator Front LH
A10 Absorber Control Actuator Front RH
A11 Airbag Sensor Front LH
A12 Airbag Sensor Front RH

B 1 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 2 Crankshaft Position Sensor

D 1 Detection SW (Transfer L4 Position)
D 2 Detection SW (Transfer Neutral Position)

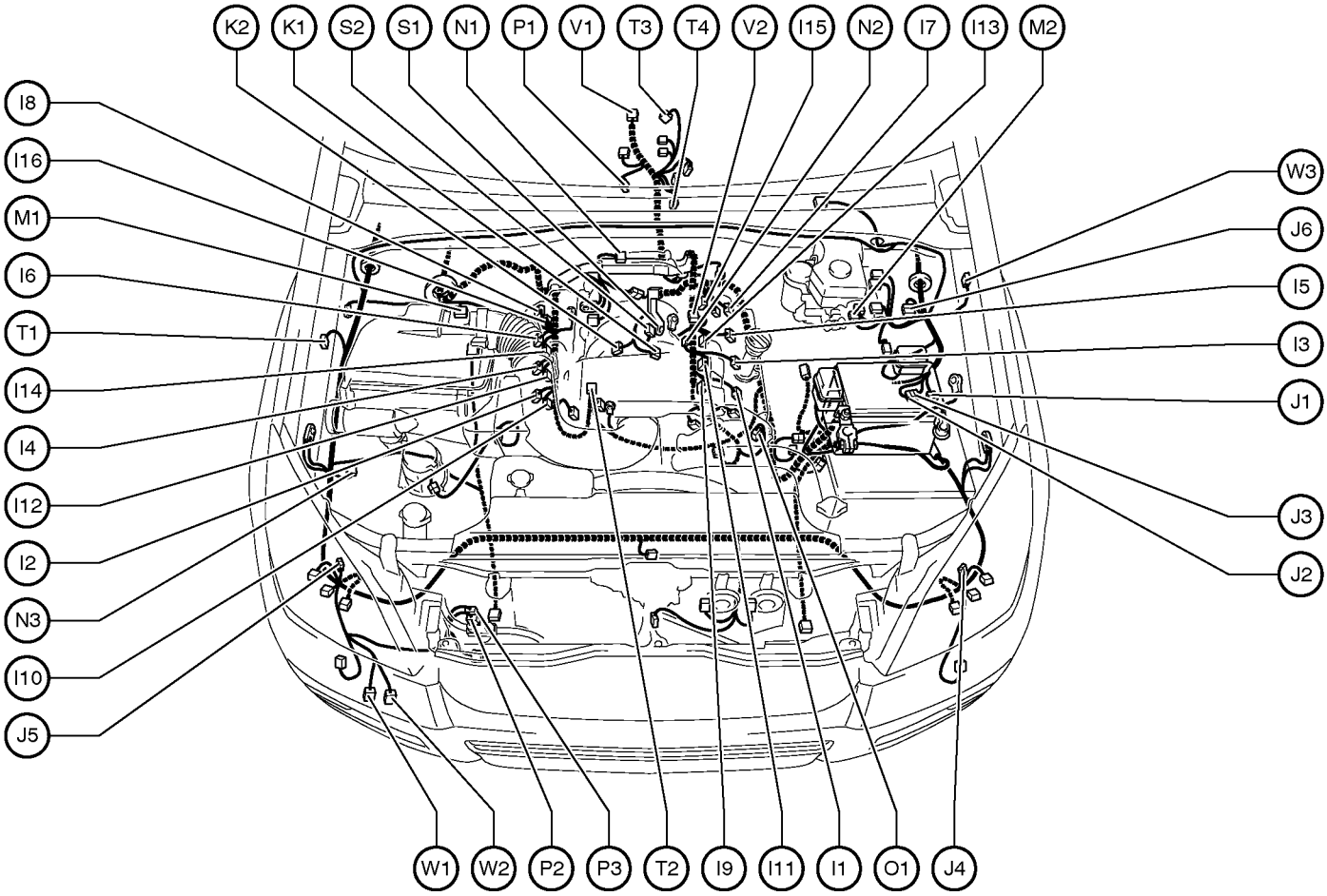
E 1 Electronically Controlled Transmission Solenoid
E 2 Engine Coolant Temp. Sensor
E 3 Engine Hood Courtesy SW

F 1 Front Fog Light LH
F 2 Front Fog Light RH
F 3 Front Parking Light LH
Front Side Marker Light LH
Front Turn Signal Light LH
F 4 Front Parking Light RH
Front Side Marker Light RH
Front Turn Signal Light RH
F 5 Front Wiper Motor
F 6 Fuel Pump Resistor

G 1 Generator
G 2 Generator

H 1 Headlight High LH
H 2 Headlight High RH
H 3 Headlight Low LH
H 4 Headlight Low RH
H 5 Heated Oxygen Sensor (Bank 1 Sensor 1)
H 6 Heated Oxygen Sensor (Bank 1 Sensor 2)
H 7 Heated Oxygen Sensor (Bank 2 Sensor 1)
H 8 Heated Oxygen Sensor (Bank 2 Sensor 2)
H 9 Horn (High)
H10 Horn (Low)

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 LH
K 2 Knock Sensor RH

M 1 Mass Air Flow Meter
M 2 Master Cylinder Pressure Sensor

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

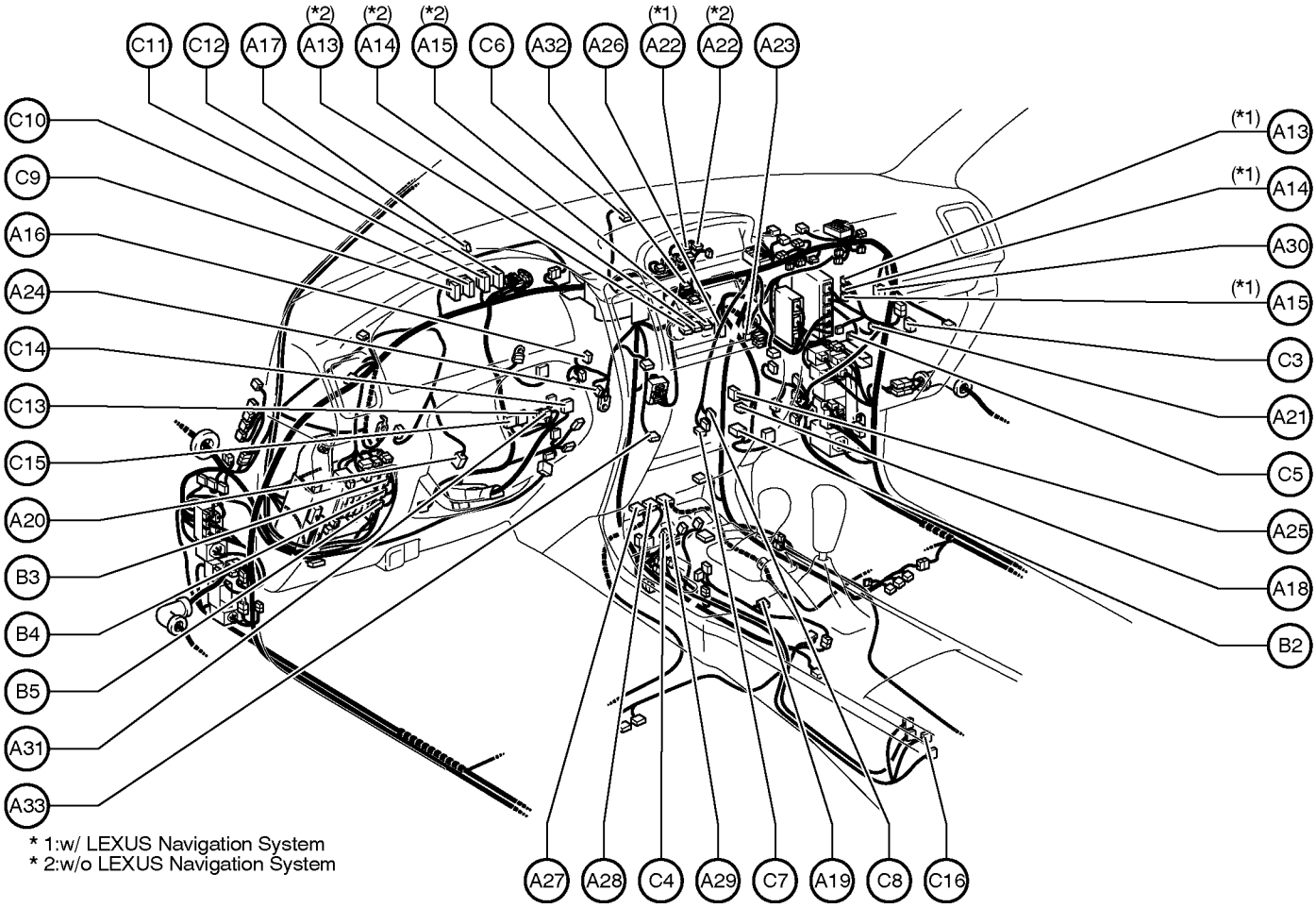
S 1 Starter
S 2 Starter

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)

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

Position of Parts in Instrument Panel

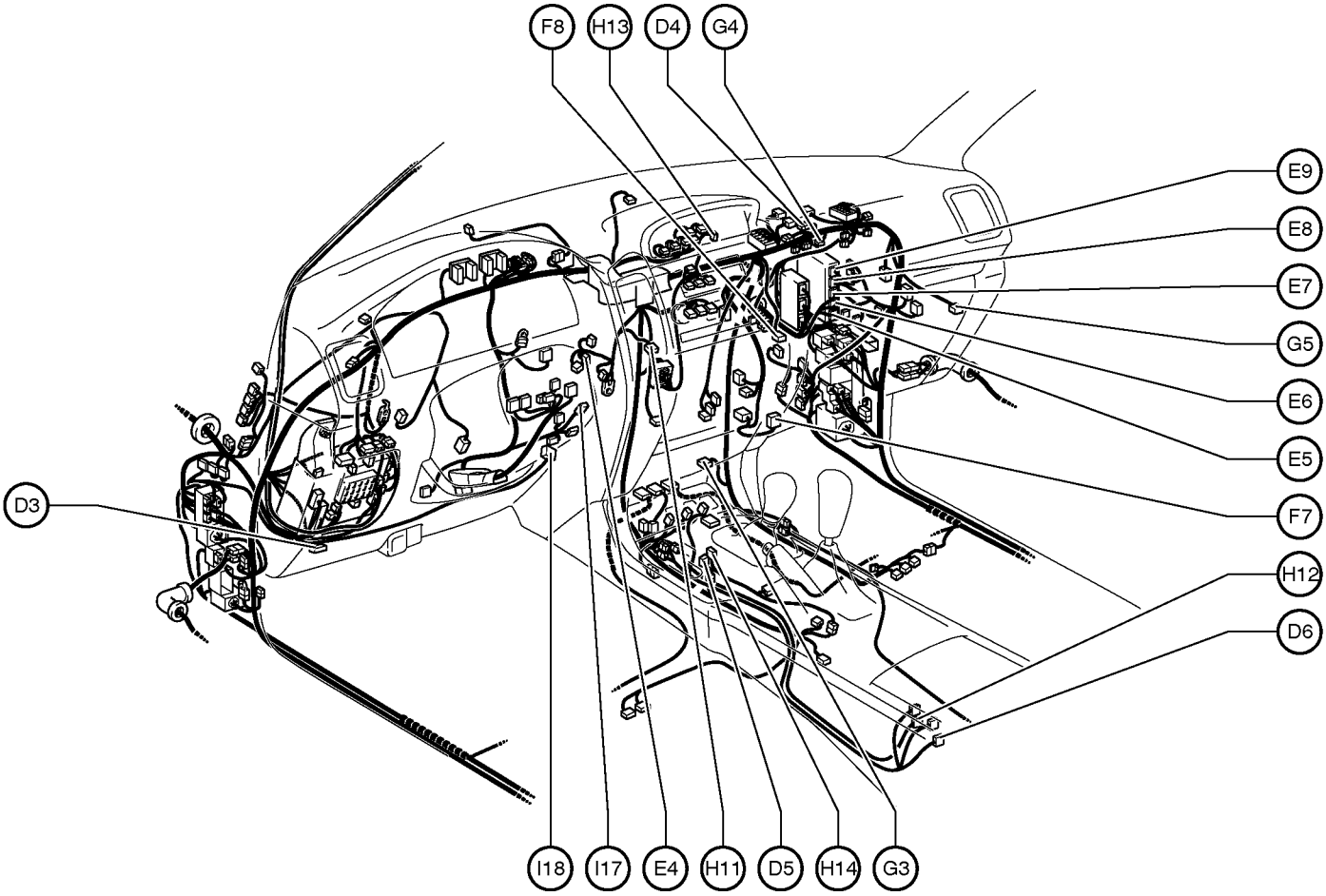


A13 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System)
A14 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System)
A15 A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System)
A16 A/C Room Temp. Sensor
A17 A/C Solar Sensor
Automatic Light Control Sensor
A18 A/C Thermistor
A19 A/T Shift Indicator
A20 Accel Position Sensor
A21 Acceleration Control Sensor Front
A22 Accessory Meter
A23 Air Inlet Control Servo Motor
A24 Air Mix Control Servo Motor LH
A25 Air Mix Control Servo Motor RH
A26 Air Vent Mode Control Servo Motor
A27 Airbag Sensor Assembly
A28 Airbag Sensor Assembly
A29 Airbag Sensor Assembly
A30 Airbag Squib (Front Passenger Airbag Assembly)
A31 Airbag Squib (Steering Wheel Pad)
A32 Antenna Amplifier
A33 Ashtray Illumination

B 2 Blower Motor Linear Controller
B 3 Body ECU
B 4 Body ECU
B 5 Body ECU

C 3 CD Automatic Changer
C 4 Center Diff. Lock Control SW
C 5 Center Diff. Lock ECU
C 6 Center Speaker
C 7 Cigarette Lighter
C 8 Cigarette Lighter Illumination
C 9 Combination Meter
C10 Combination Meter
C11 Combination Meter
C12 Combination Meter
C13 Combination SW
C14 Combination SW
C15 Combination SW
C16 Console Box Illumination

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

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

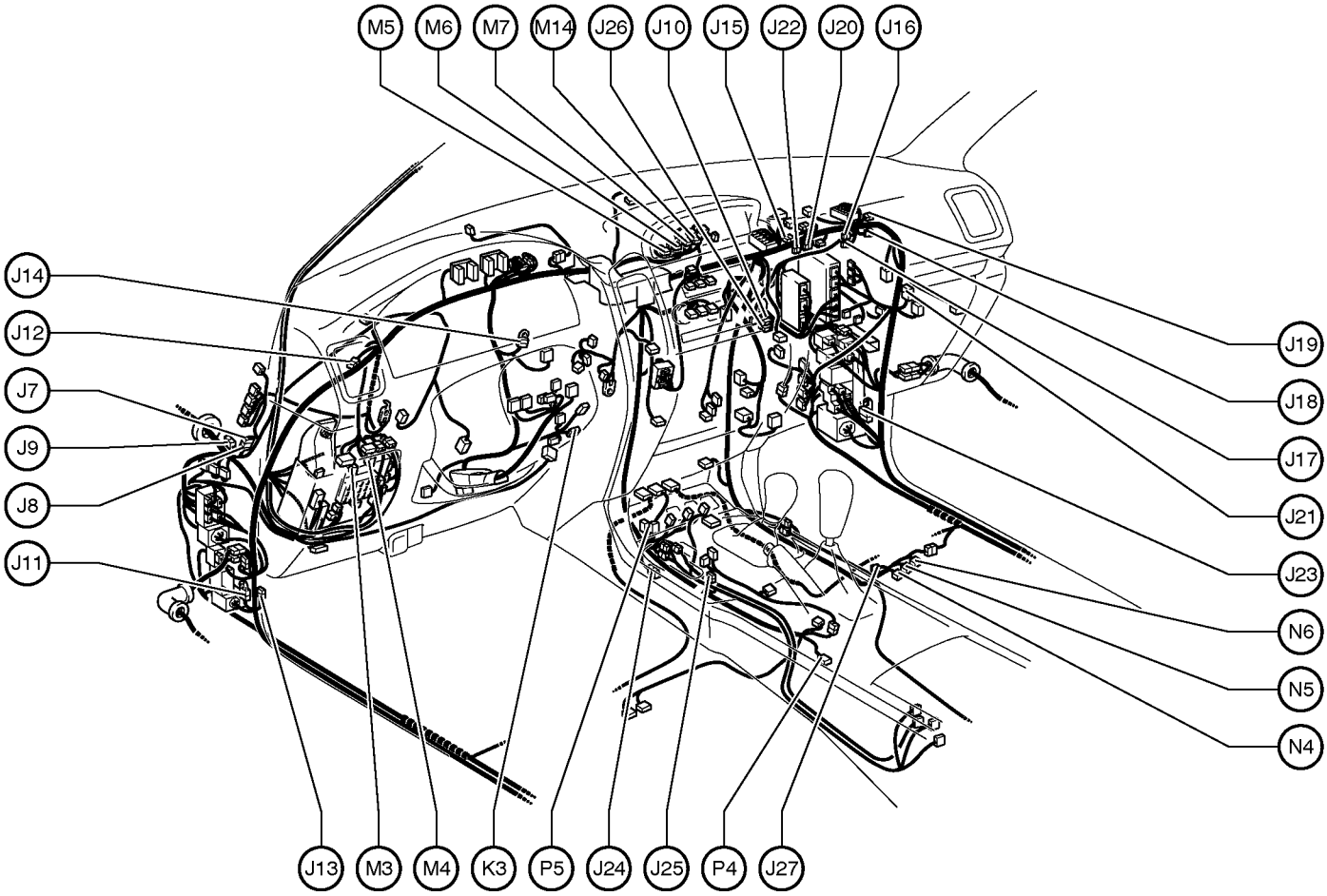
F 7 Front Blower Motor
F 8 Front Passenger's Seat Belt Warning Light

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

H 11 Hazard SW
H12 Headphone Terminal
Video Terminal
H13 Heater Control SW
H14 Height Control and Suspension SW

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

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 27 Junction Connector

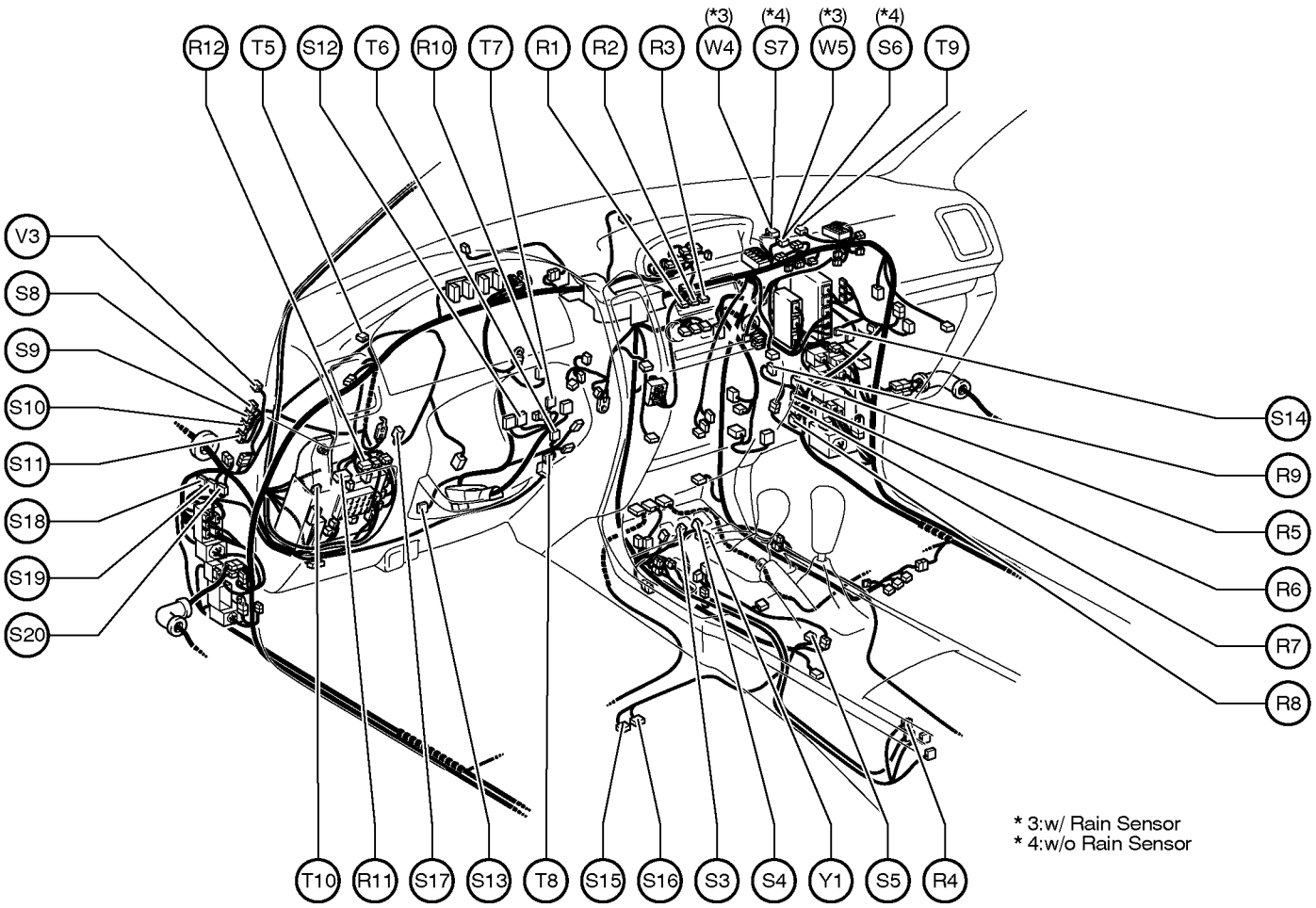
K 3 Key Interlock Solenoid
Unlock Warning SW

M 3 Main SW
M 4 Mirror Heater SW
M 5 Multi–Display
M 6 Multi–Display
M 7 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)

Position of Parts in Instrument Panel



R 1 Radio and Player
R 2 Radio and Player
R 3 Radio and Player
R 4 Rear Cooler SW
R 5 Rear Seat Entertainment ECU
R 6 Rear Seat Entertainment ECU
R 7 Rear Seat Entertainment ECU
R 8 Rear Seat Entertainment ECU
R 9 Rear Seat Entertainment ECU
R10 Remote Control Mirror ECU
R11 Remote Control Mirror SW
R12 Rheostat

S 3 Seat Heater SW Front LH
S 4 Seat Heater SW Front RH
S 5 Shift Lock Control ECU
Transmission Control SW
S 6 Short Pin
S 7 Short Pin
S 8 Skid Control ECU
S 9 Skid Control ECU
S10 Skid Control ECU
S11 Skid Control ECU
S12 Steering Sensor
S13 Step Light LH
S14 Step Light RH
S15 Stereo Component Amplifier
S16 Stereo Component Amplifier
S17 Stop Light SW
S18 Suspension Control ECU
S19 Suspension Control ECU
S20 Suspension Control ECU

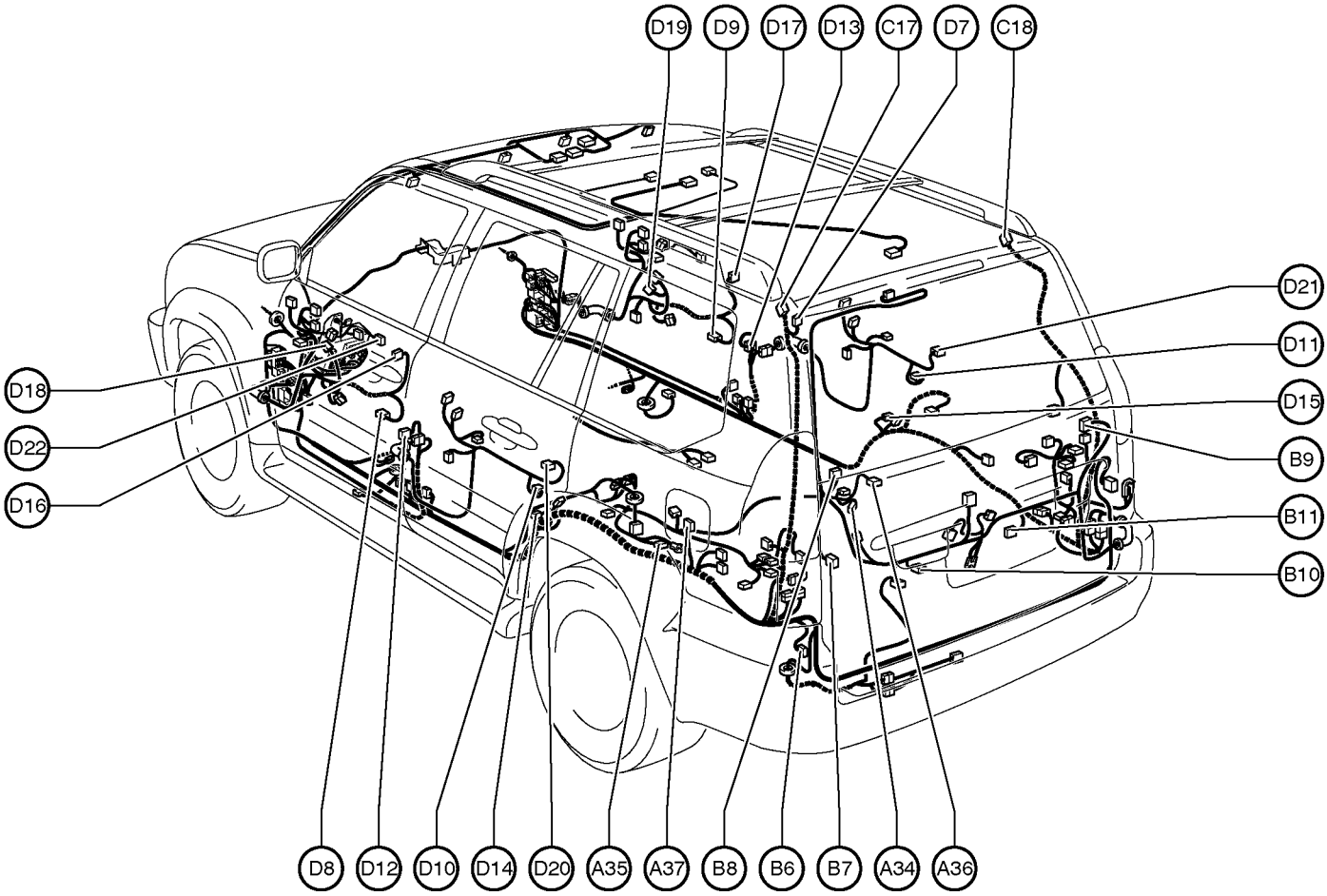
T 5 Theft Deterrent ECU
T 6 Tilt and Telescopic ECU
T 7 Tilt Motor
T 8 Towing Brake Controller
T 9 Transponder Key Computer
T10 Turn Signal Flasher

V 3 VSC Warning Buzzer

W 4 Wiper Relay
W 5 Wiper Relay

Y 1 Yaw Rate Sensor

Position of Parts in Body



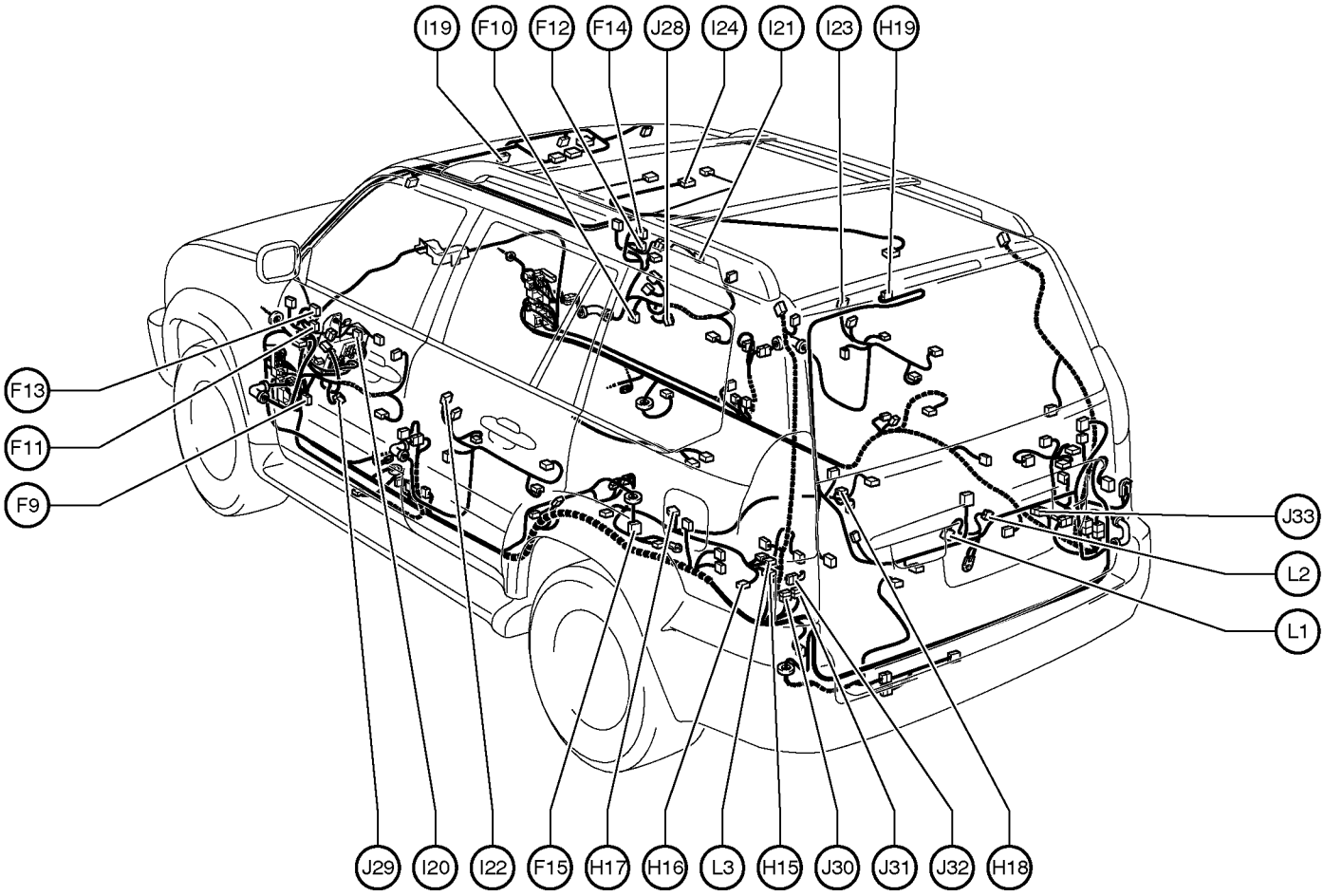
A34 ABS Speed Sensor Rear
A35 Absorber Control Actuator Rear LH
A36 Absorber Control Actuator Rear RH
A37 Acceleration Control Sensor Rear

B 6 Back Door Courtesy SW
B 7 Back Door Key Lock and Unlock SW
Back Door Lock Motor
Back Door Unlock Detection SW
B 8 Back Door Speaker LH
B 9 Back Door Speaker RH
B10 Back–Up Light LH
B11 Back–Up Light RH

C17 Curtain Shield Airbag Squib LH
C18 Curtain Shield Airbag Squib RH

D 7 Door Control Receiver
D 8 Door Courtesy Light Front LH
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
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
Door Lock Motor Front LH
Door Unlock Detection SW Front LH
D17 Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D18 Door Lock Control SW LH
Power Window Master SW
D19 Door Lock Control SW RH
D20 Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
D21 Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH
D22 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

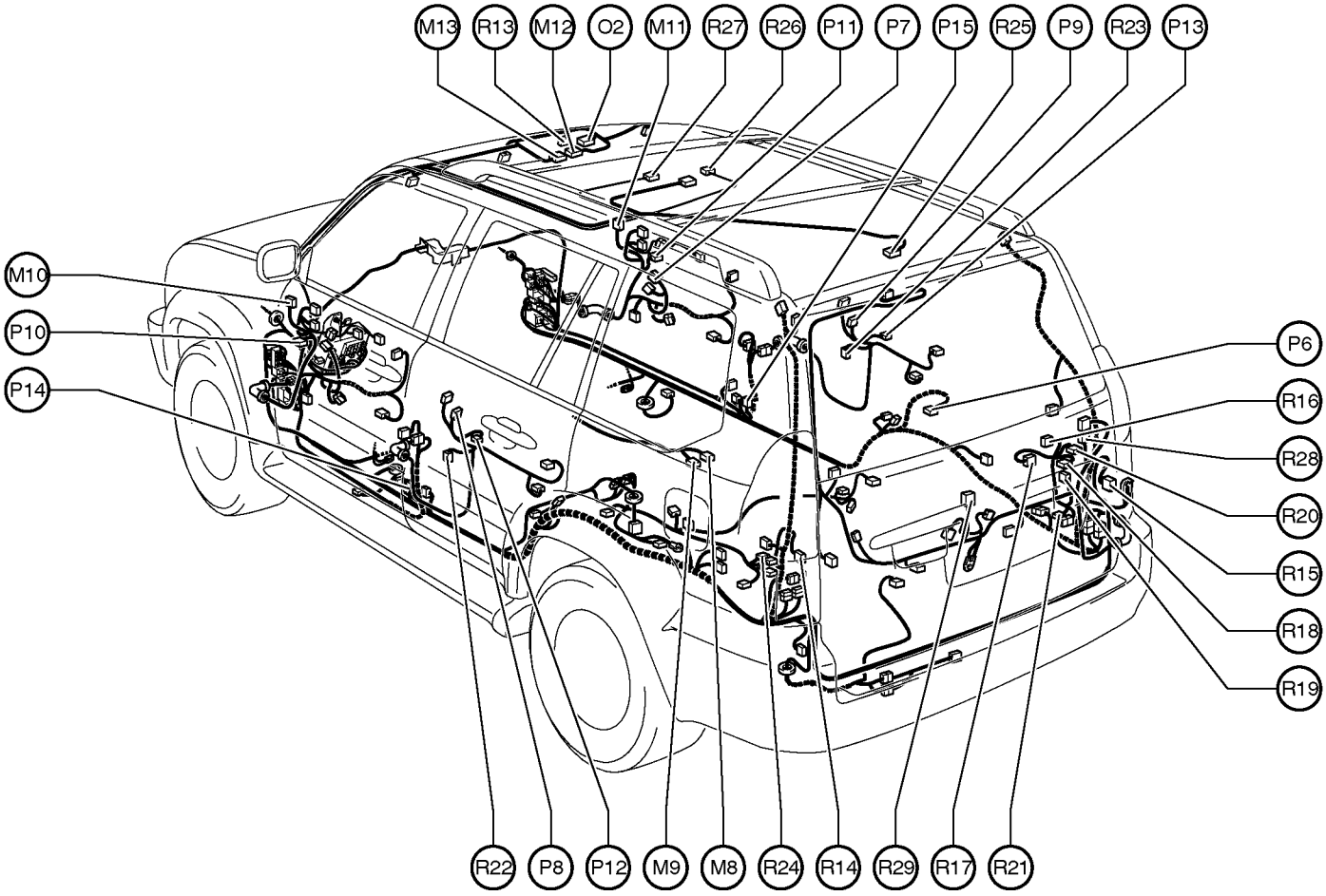
H15 Height Control Compressor
H16 Height Control Exhaust Valve
H17 Height Control Sensor Rear LH
H18 Height Control Sensor Rear RH
H19 High Mounted Stop Light

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

Position of Parts in Body



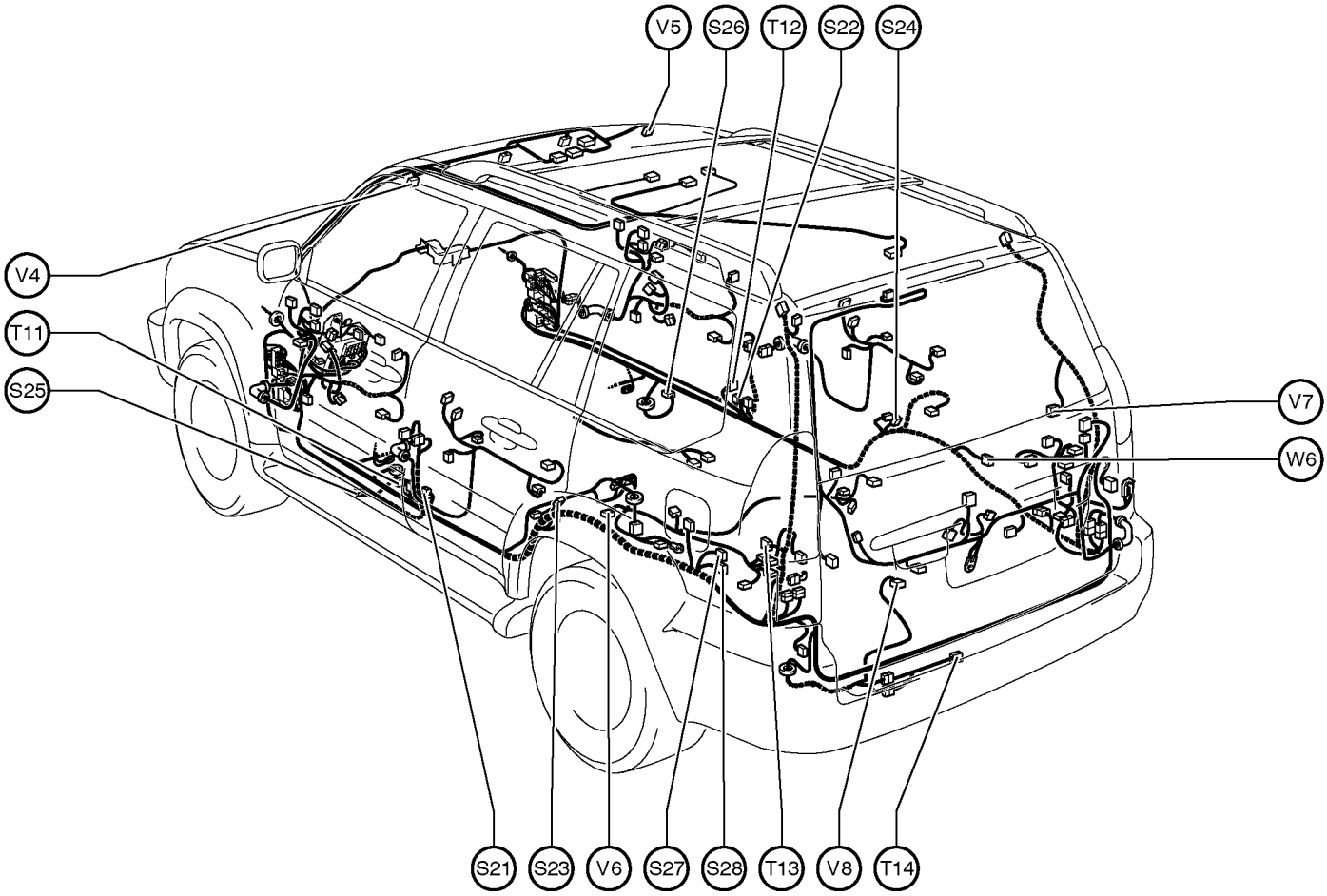
M 8 Mayday ECU
M 9 Mayday ECU
M10 Mirror Heater LH
Remote Control Mirror LH
M11 Mirror Heater RH
Remote Control Mirror RH
M12 Moon Roof Control ECU and Motor
M13 Moon Roof Control SW
Personal Light

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
R16 Rear Cooler Amplifier
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



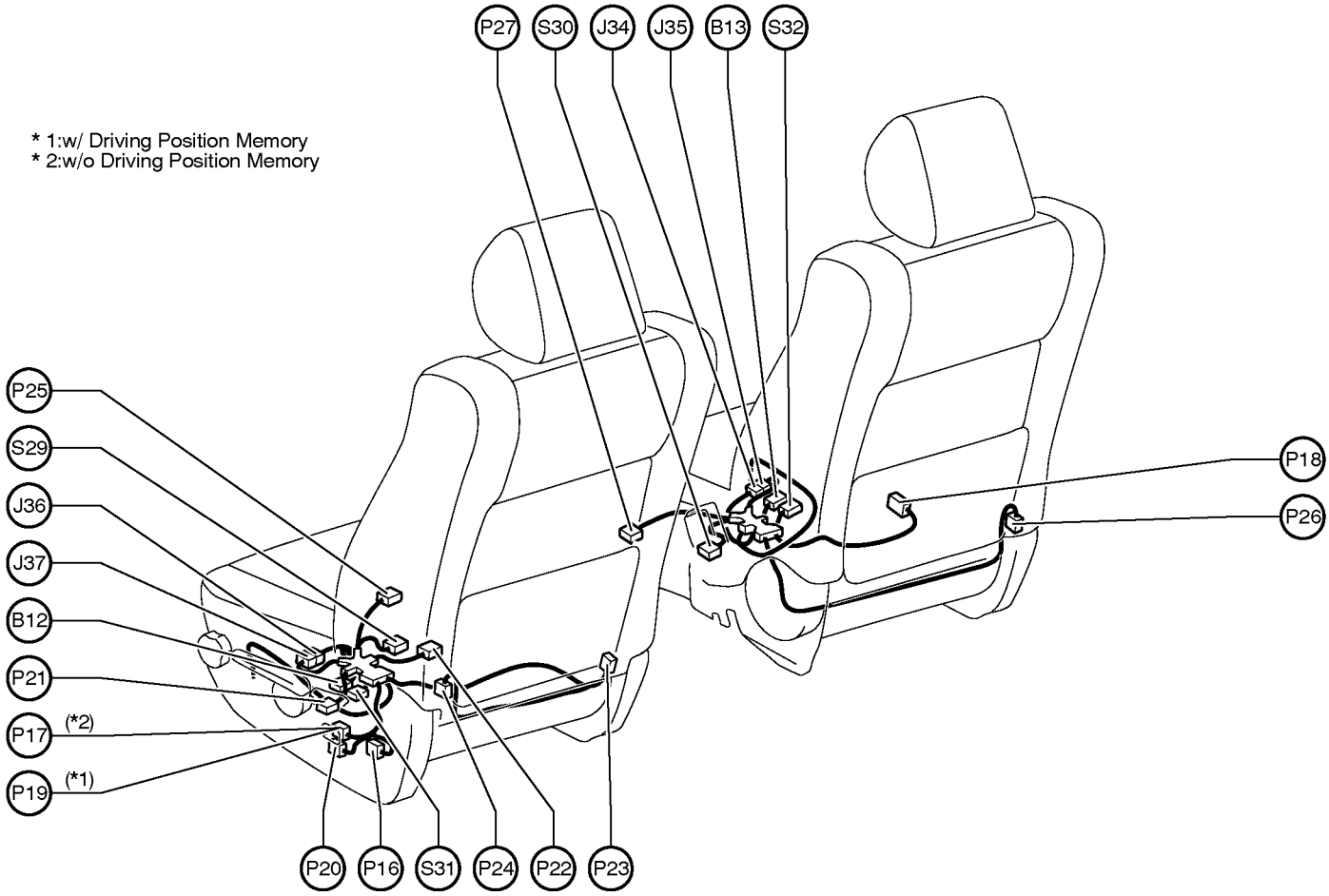
S21 Side Airbag Sensor Front LH
S22 Side Airbag Sensor Front RH
S23 Side Airbag Sensor Rear LH
S24 Side Airbag Sensor Rear RH
S25 Side Step Light LH
S26 Side Step Light RH
S27 Sub Body ECU
S28 Sub Body ECU

T 11 Tension Reducer Solenoid LH
T 12 Tension Reducer Solenoid RH
T 13 Towing Converter Relay
T 14 Trailer Socket

V 4 Vanity Light LH
V 5 Vanity Light RH
V 6 Vapor Pressure Sensor
V 7 Voltage Inverter
V 8 VSV (Canister Closed Valve)

W 6 Woofer Speaker

Position of Parts in Seat



B12 Buckle SW LH
Seat Position Sensor
B13 Buckle SW RH
Occupant Detection Sensor

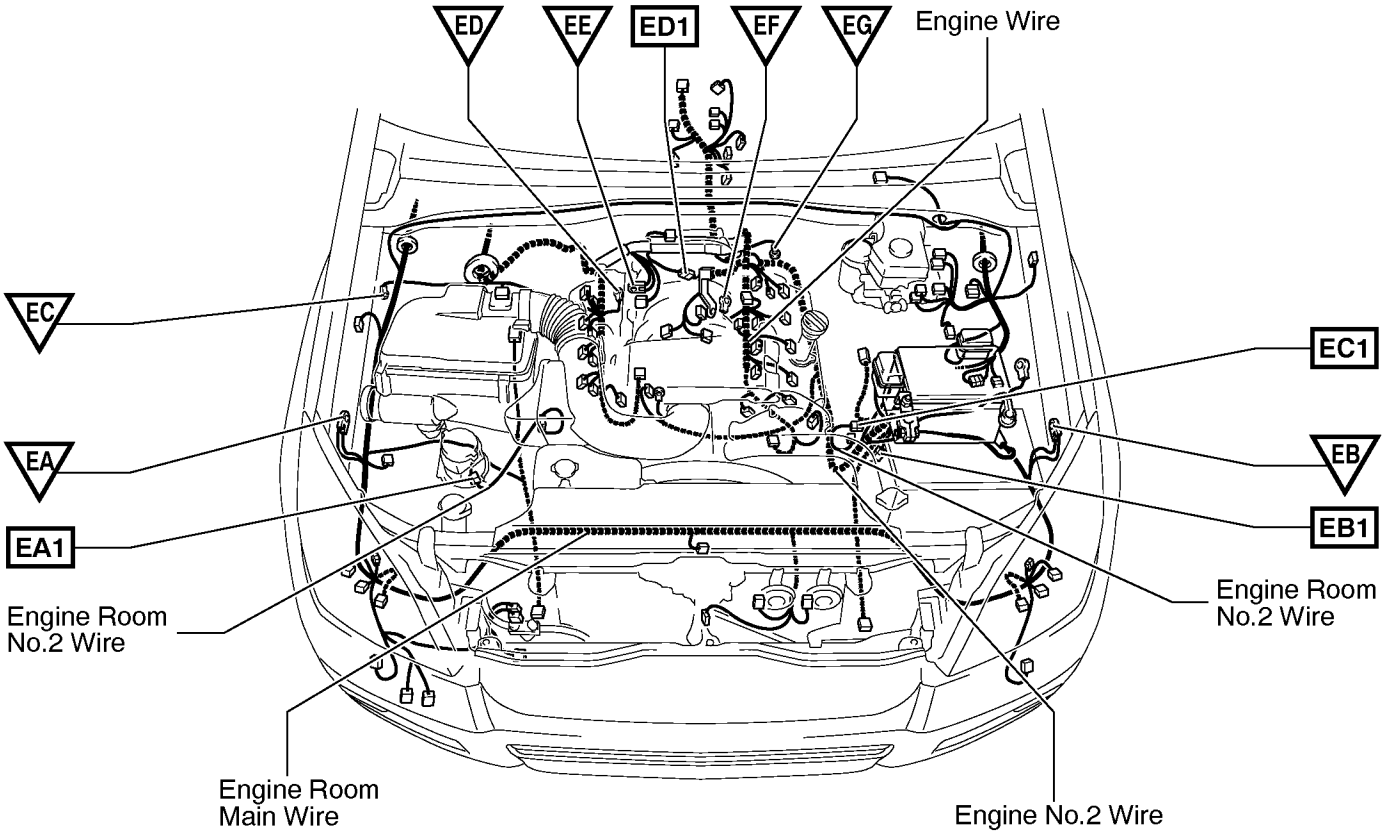
J 34 Junction Connector
J 35 Junction Connector
J 36 Junction Connector
J 37 Junction Connector

P16 Power Seat Control SW
(Driver's Seat Lumbar Support Control)
P17 Power Seat Control SW (Driver's Seat)
P18 Power Seat Control SW (Front Passenger's Seat)
P19 Power Seat ECU
P20 Power Seat ECU
P21 Power Seat Motor (Driver's Seat Front Vertical Control)
P22 Power Seat Motor (Driver's Seat Lifter Control)
P23 Power Seat Motor
(Driver's Seat Lumbar Support Control)
P24 Power Seat Motor (Driver's Seat Reclining Control)
P25 Power Seat Motor (Driver's Seat Slide Control)
P26 Power Seat Motor
(Front Passenger's Seat Reclining Control)
P27 Power Seat Motor
(Front Passenger's Seat Slide Control)

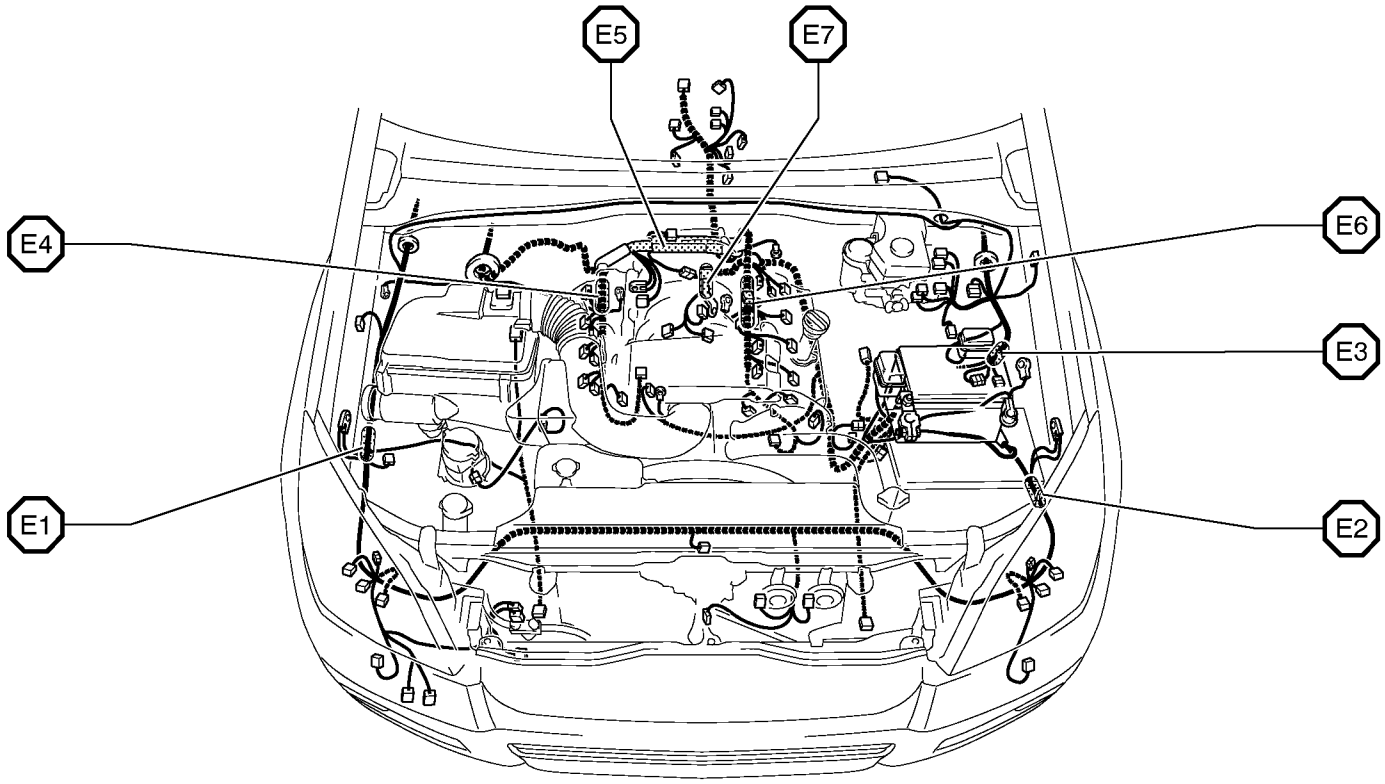
S29 Seat Heater (Driver's Seat)
S30 Seat Heater (Front Passenger's Seat)
S31 Side Airbag Squib LH
S32 Side Airbag Squib RH

▭ : Location of Connector Joining Wire Harness and Wire Harness

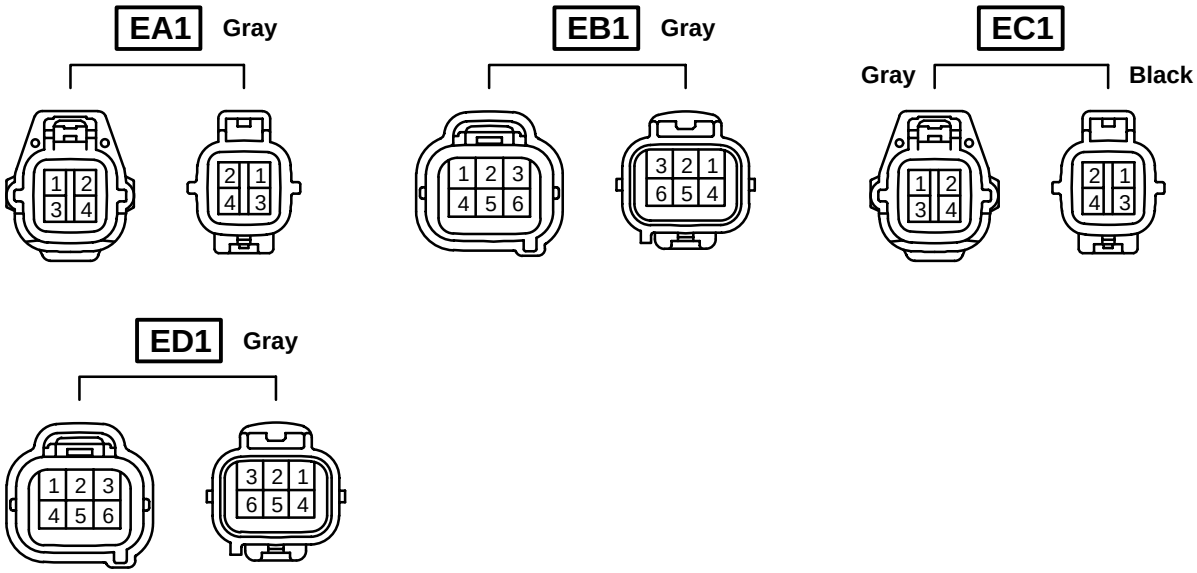
▽ : Location of Ground Points



○ : Location of Splice Points

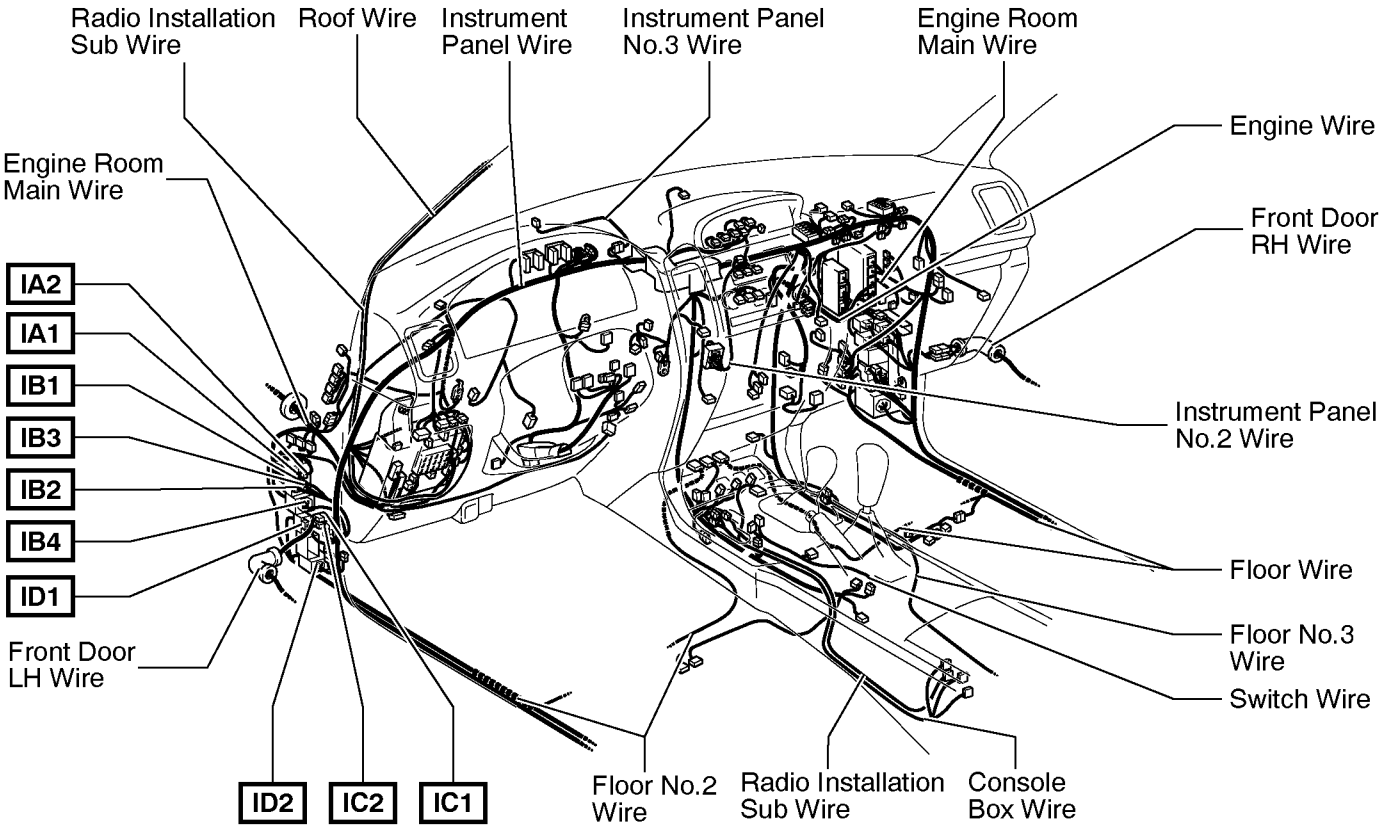


Connector Joining Wire Harness and Wire Harness

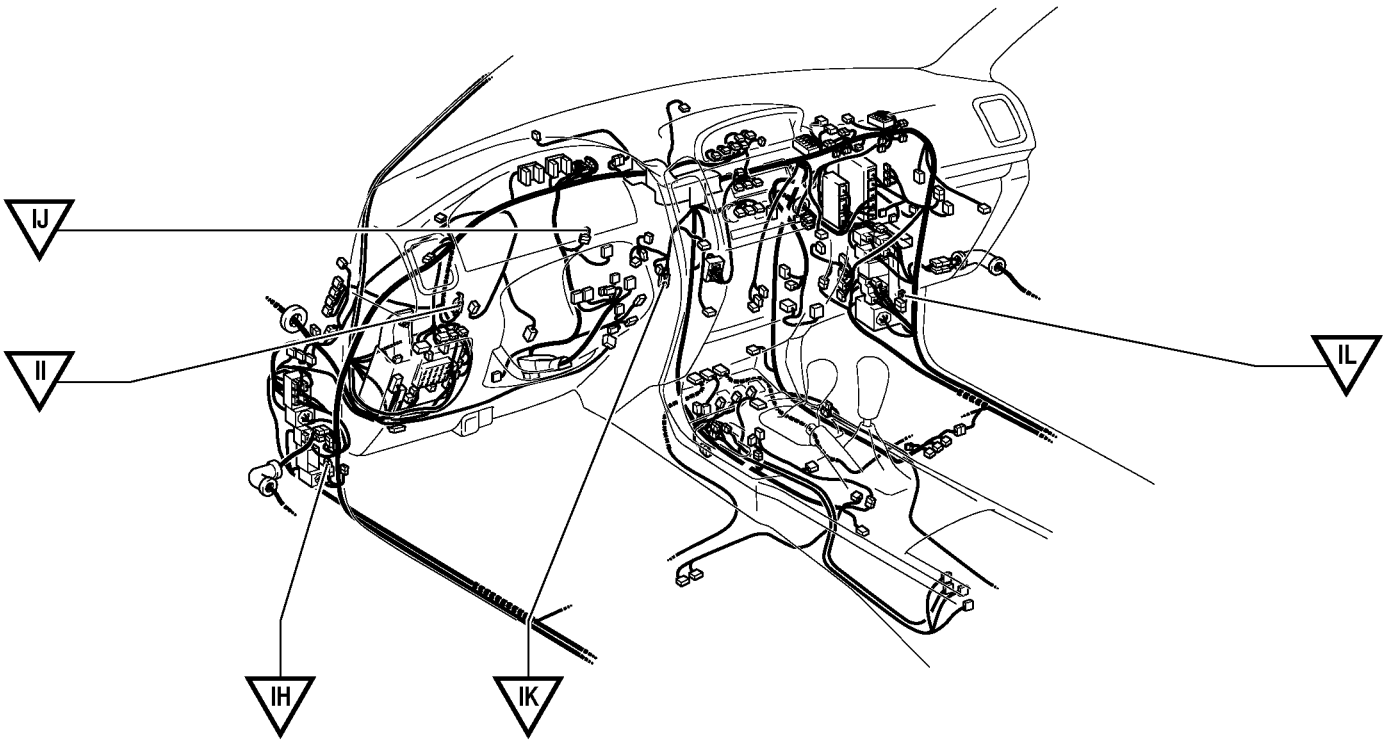


Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Room No.2 Wire and Engine Room Main Wire (Near the Air Cleaner)
EB1	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
EC1	Engine Room No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
ED1	Engine No.2 Wire and Engine Wire (Near the Starter)

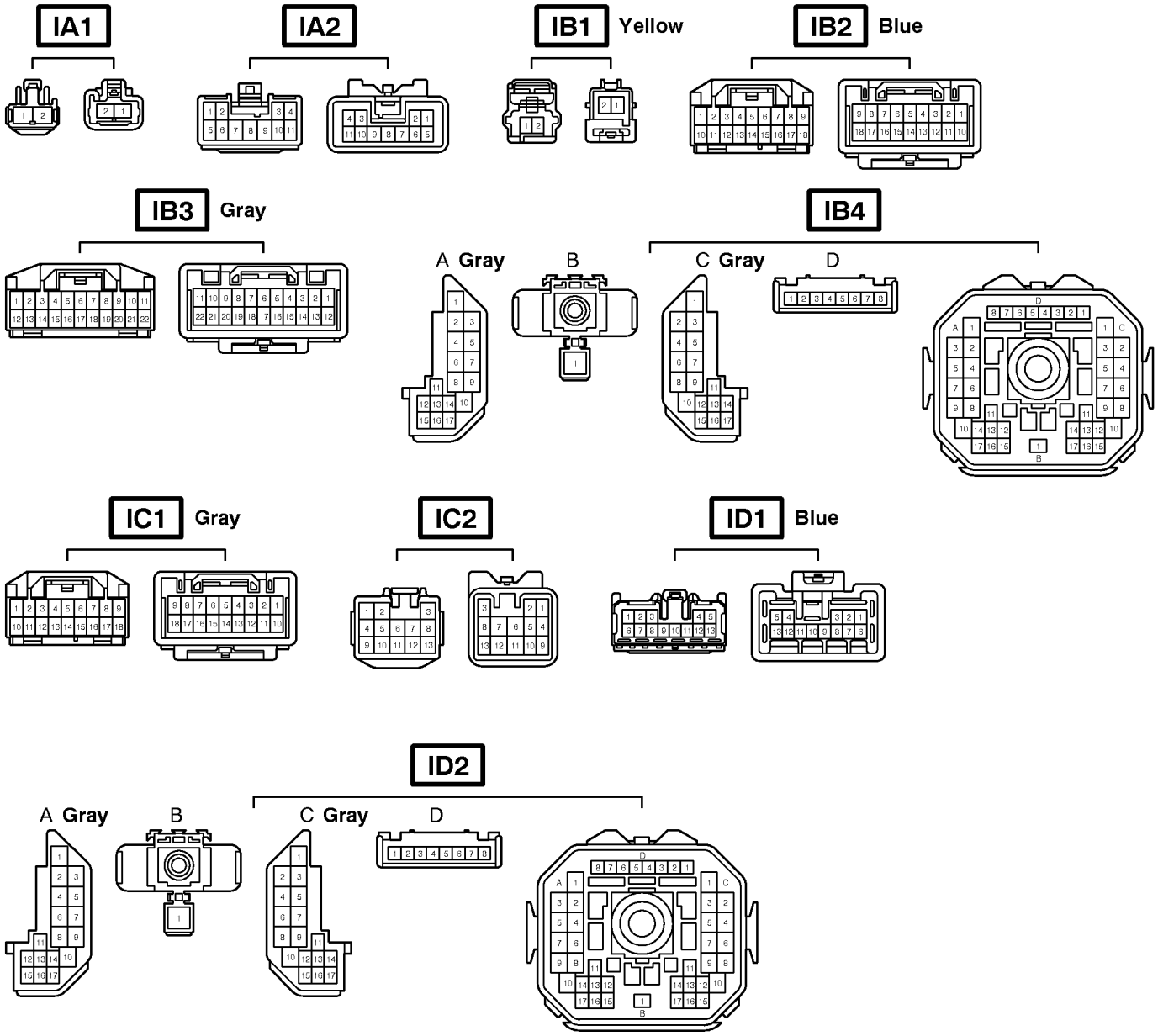
▭ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points

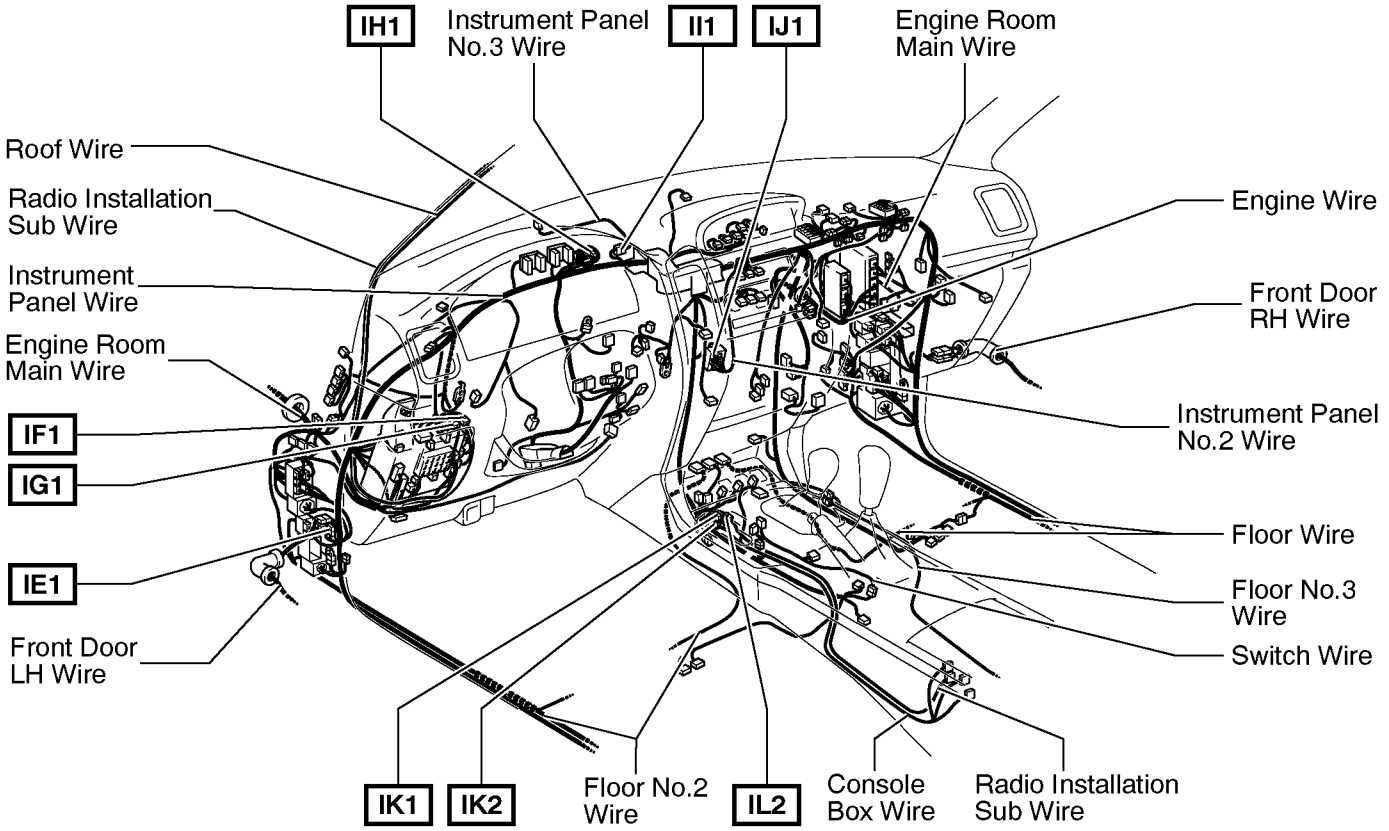


Connector Joining Wire Harness and Wire Harness

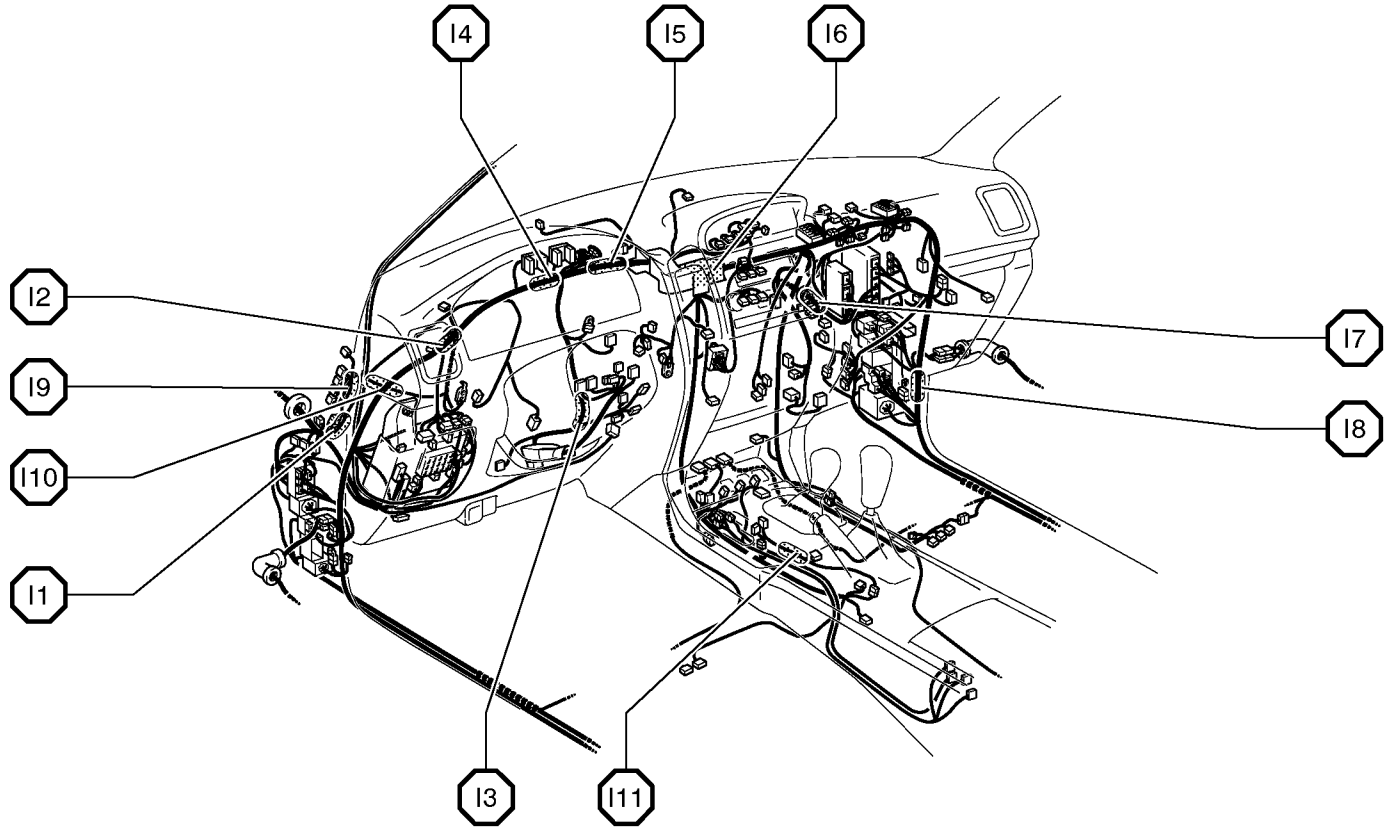


Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IA2	
IB1	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB2	
IB3	
IB4	
IC1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	
ID1	Instrument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

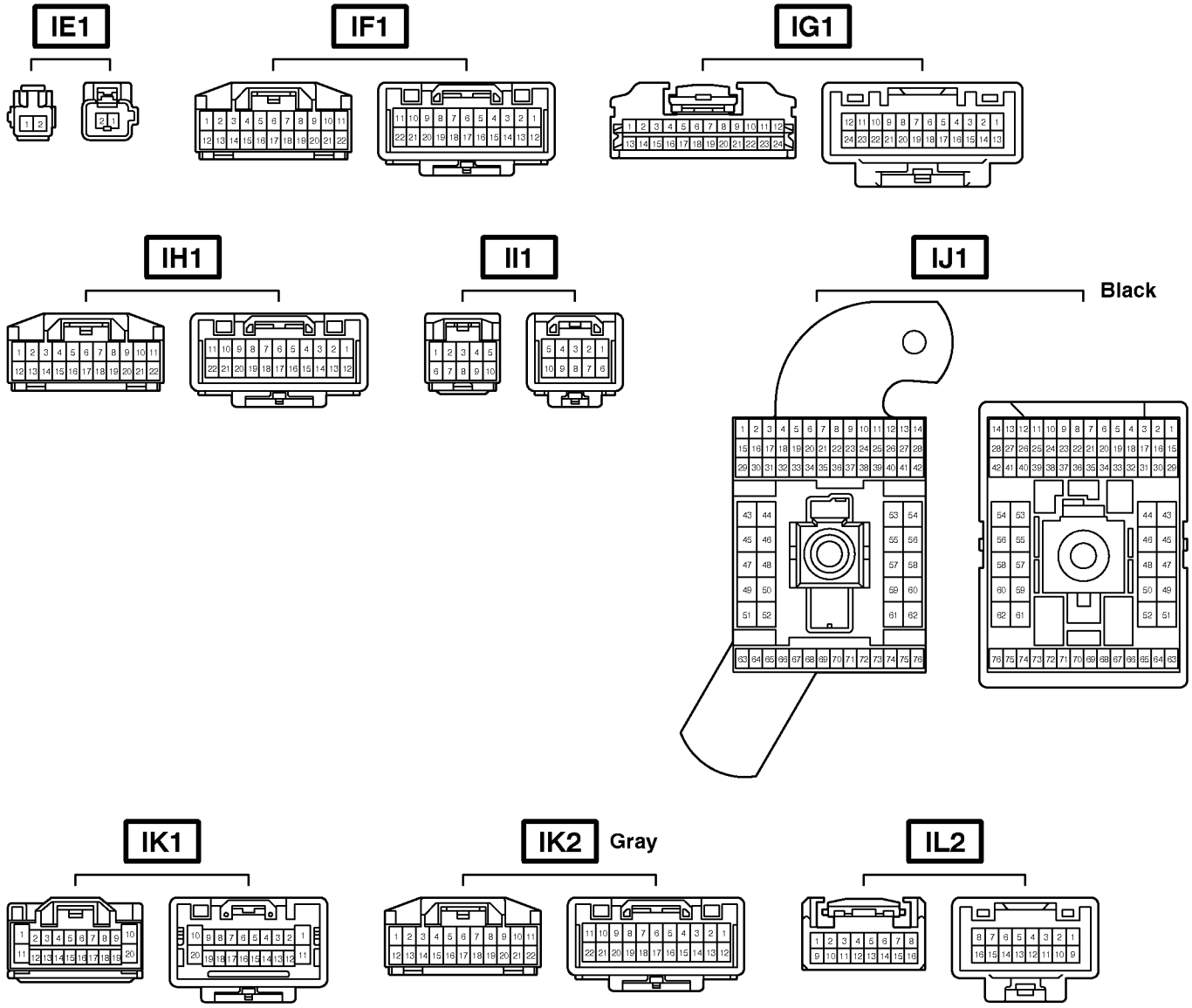
▭ : Location of Connector Joining Wire Harness and Wire Harness



⬡ : Location of Splice Points

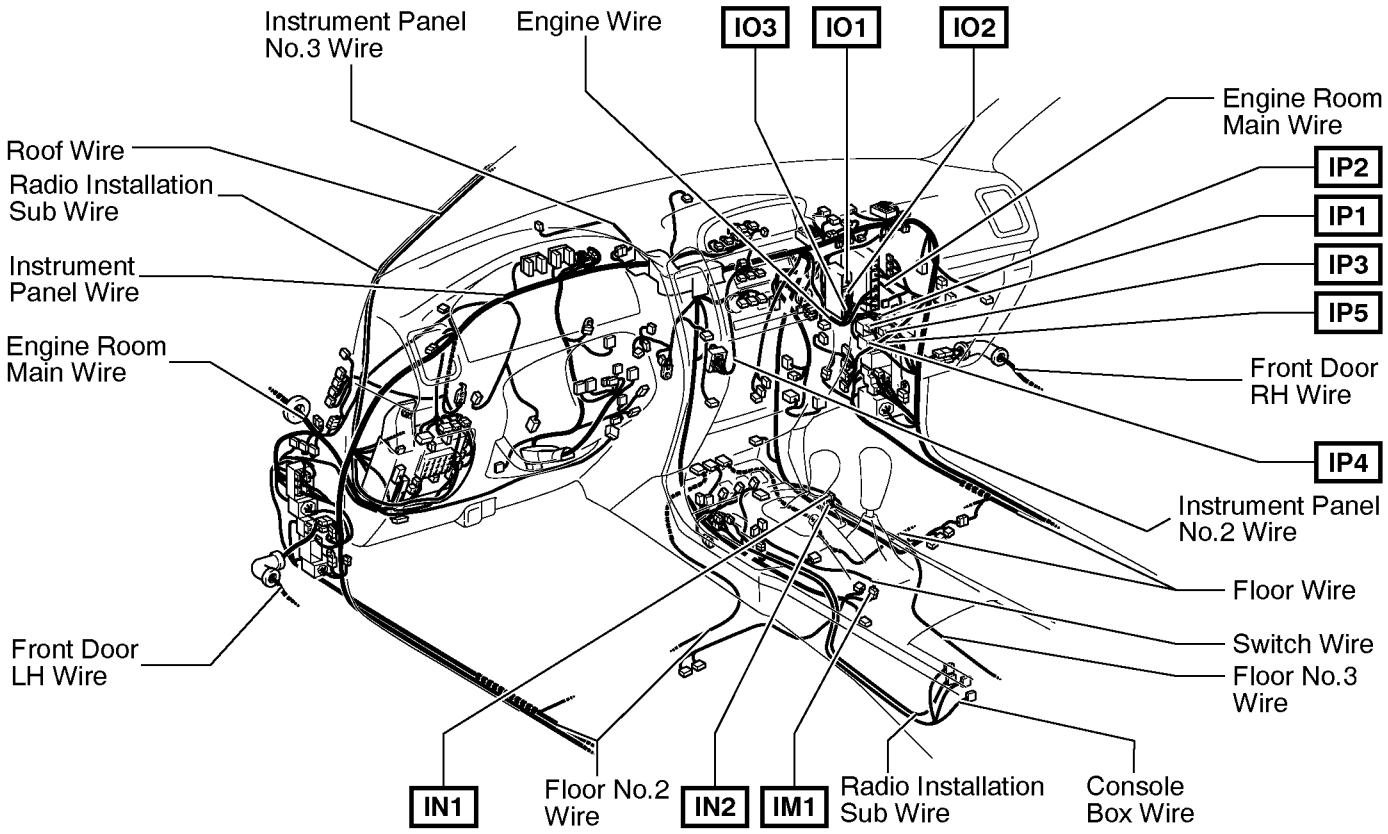


Connector Joining Wire Harness and Wire Harness

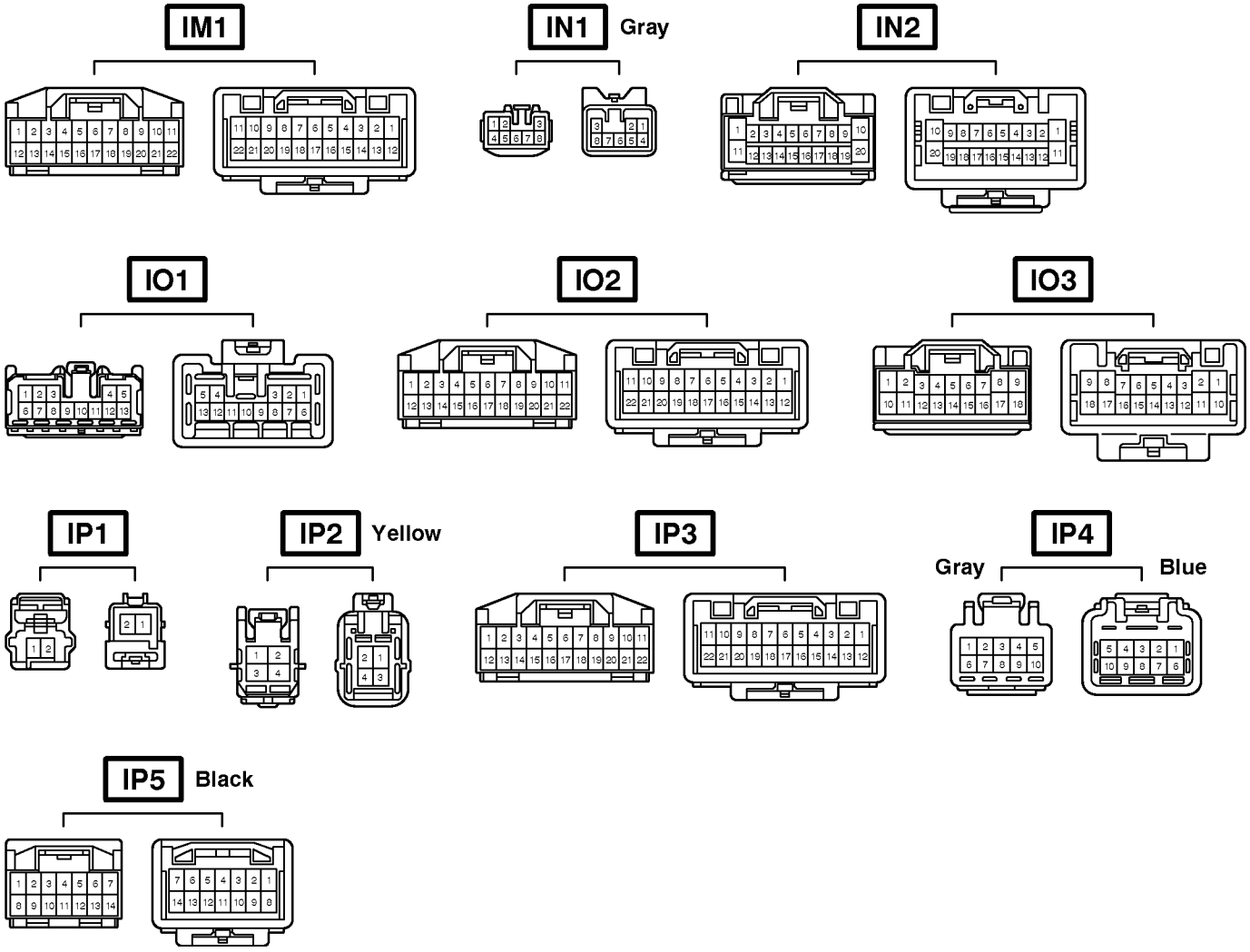


Code	Joining Wire Harness and Wire Harness (Connector Location)
IE1	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IF1	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IG1	Radio Installation Sub Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	Instrument 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)

▭ : Location of Connector Joining Wire Harness and Wire Harness

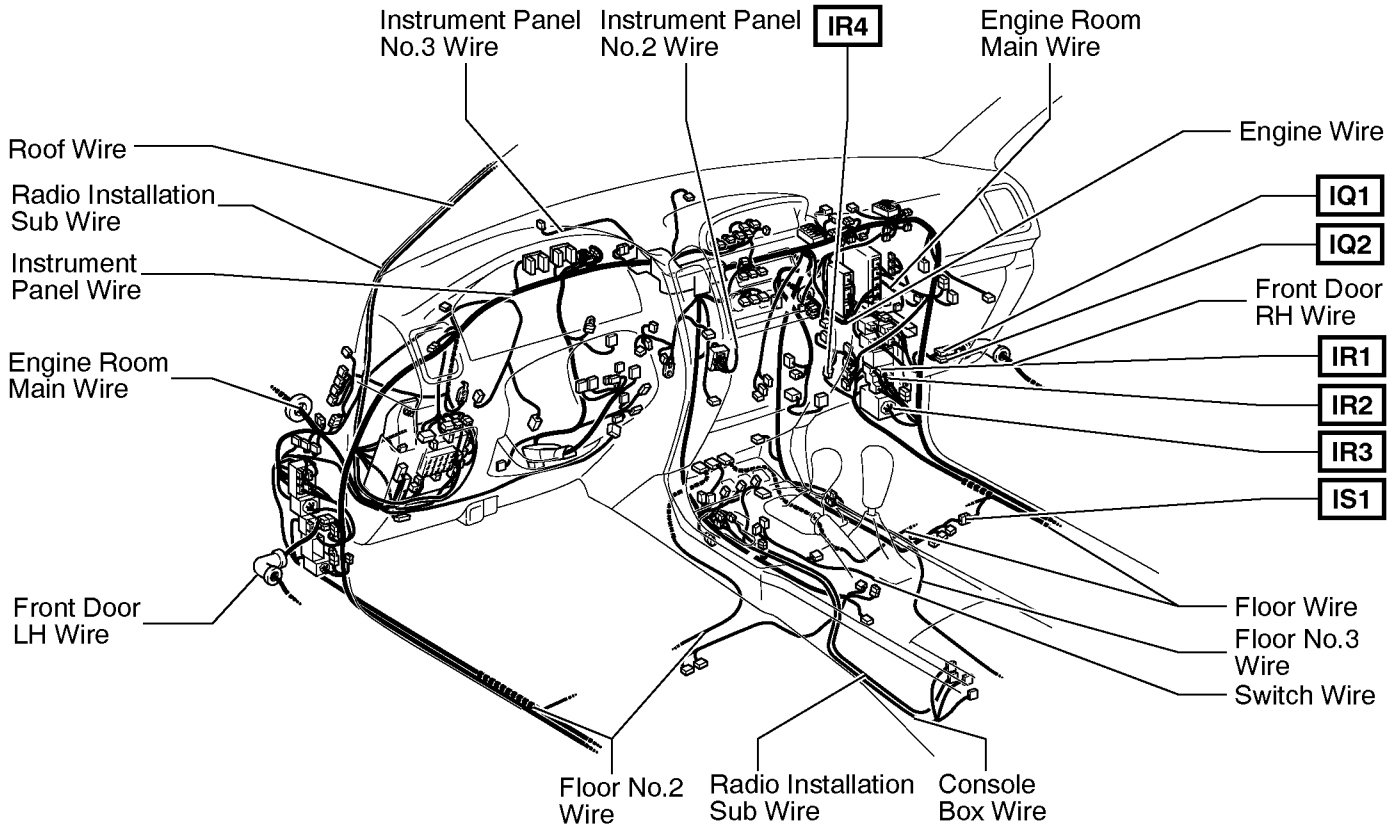


Connector Joining Wire Harness and Wire Harness

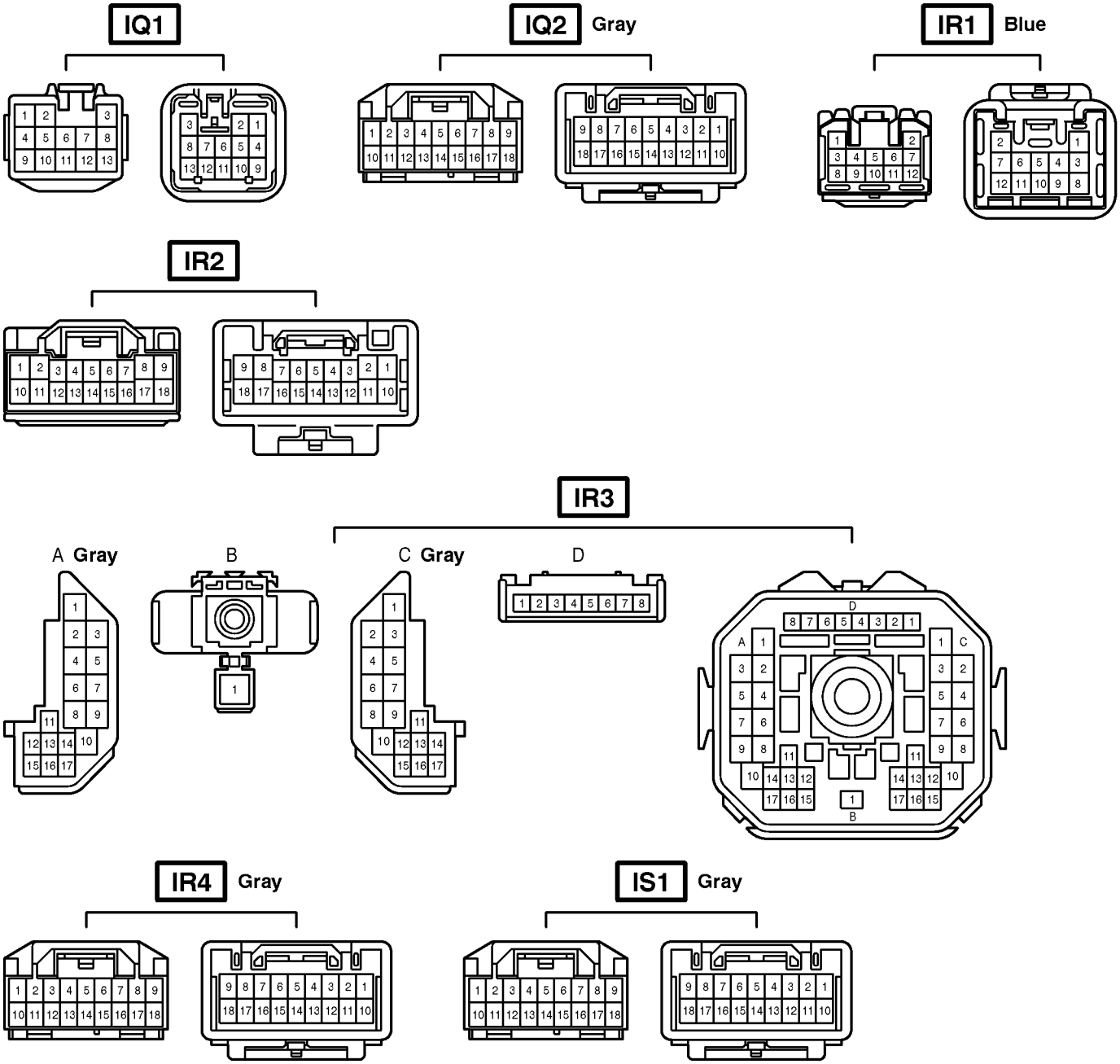


Code	Joining Wire Harness and Wire Harness (Connector Location)
IM1	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IN1	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2	
IO1	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2	
IO3	
IP1	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP2	
IP3	
IP4	
IP5	

▭ : Location of Connector Joining Wire Harness and Wire Harness

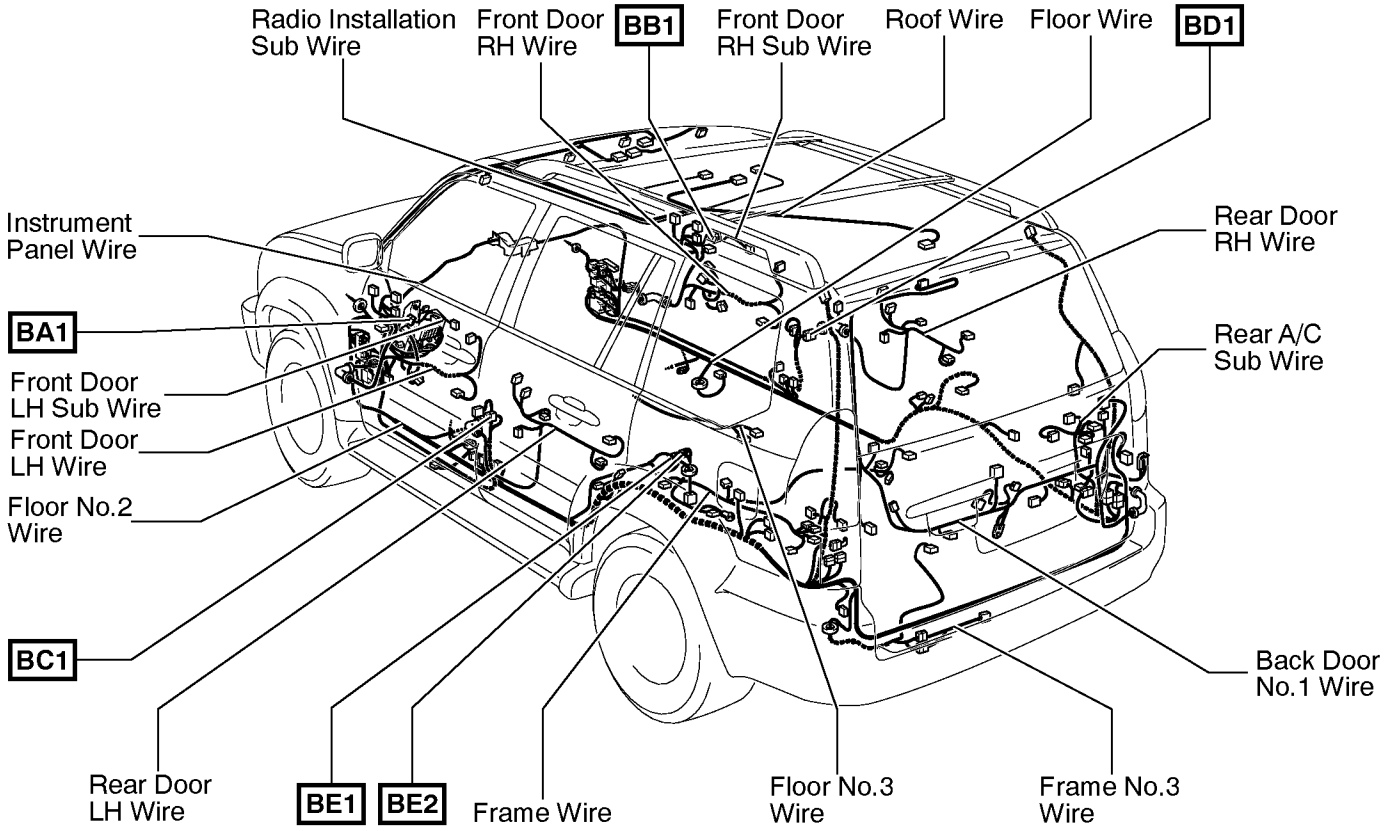


Connector Joining Wire Harness and Wire Harness

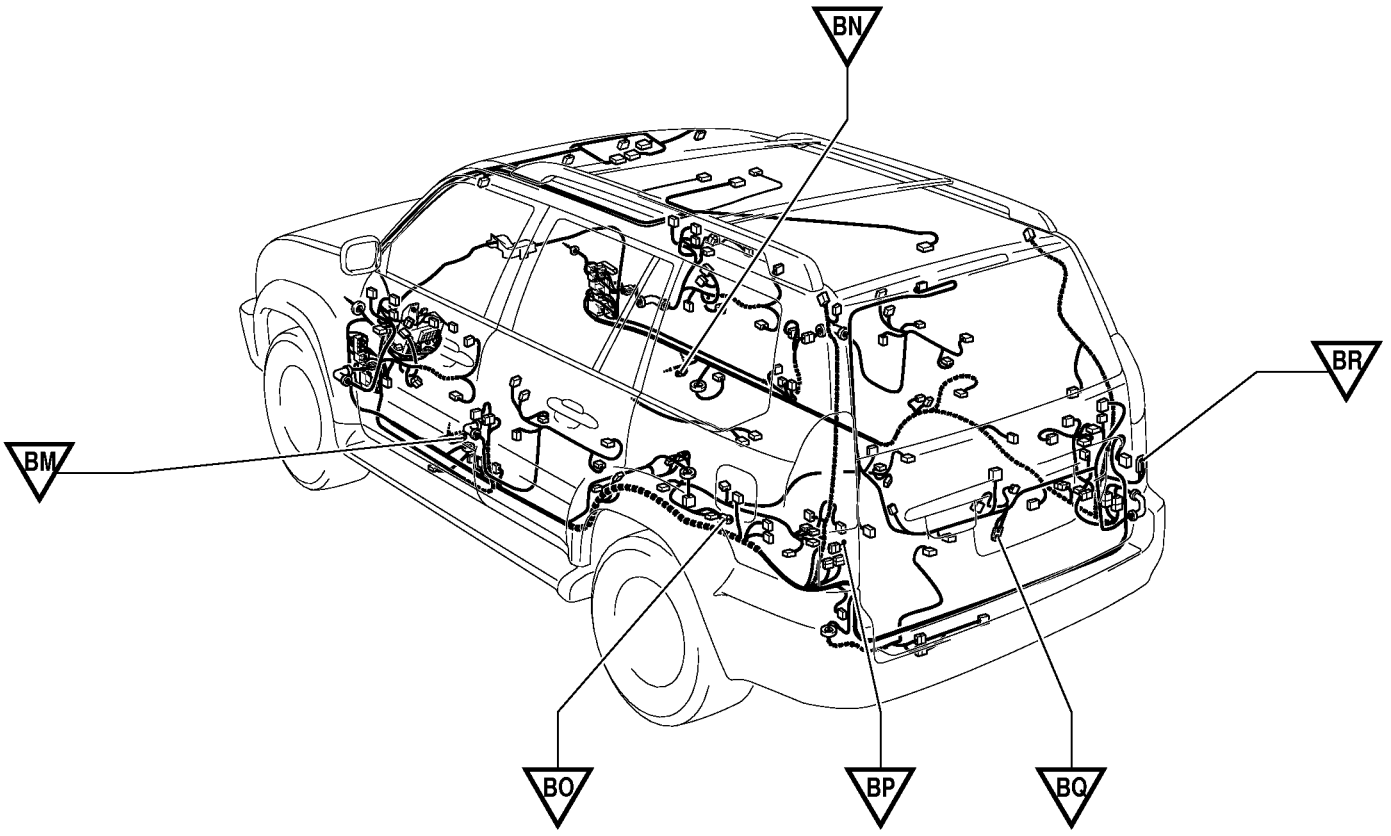


Code	Joining Wire Harness and Wire Harness (Connector Location)
IQ1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2	
IR1	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IR2	
IR3	
IR4	
IS1	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)

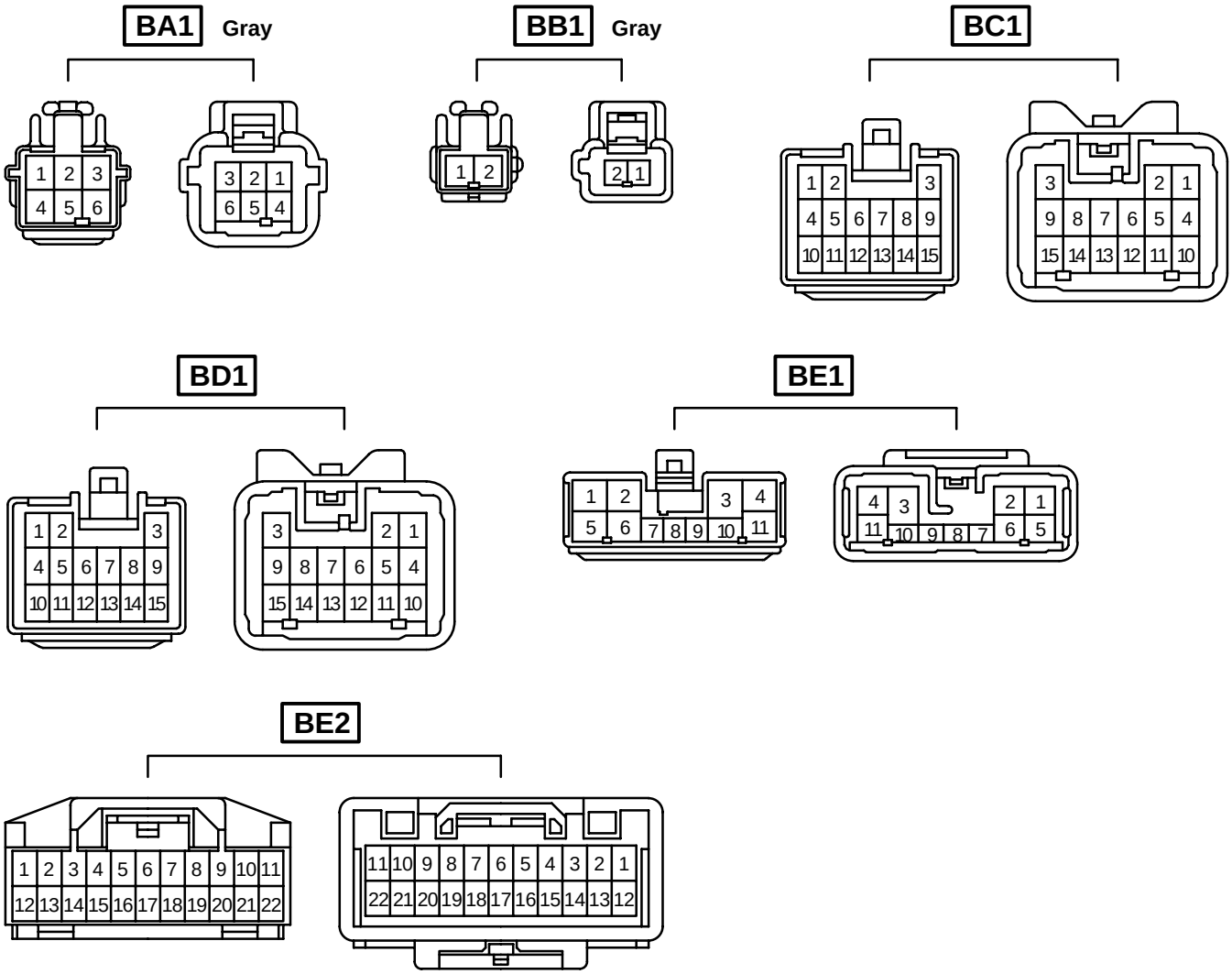
: Location of Connector Joining Wire Harness and Wire Harness



: Location of Ground Points

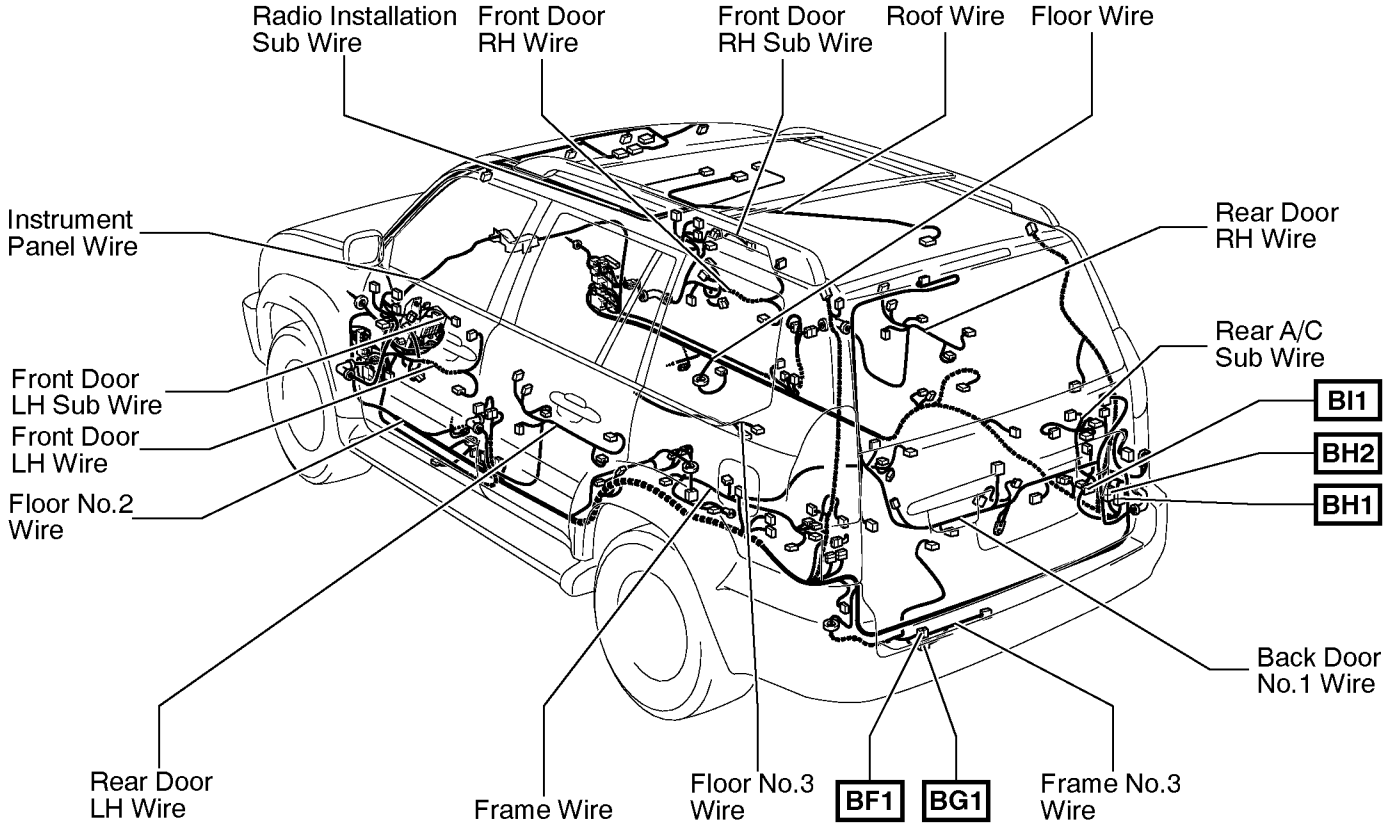


Connector Joining Wire Harness and Wire Harness

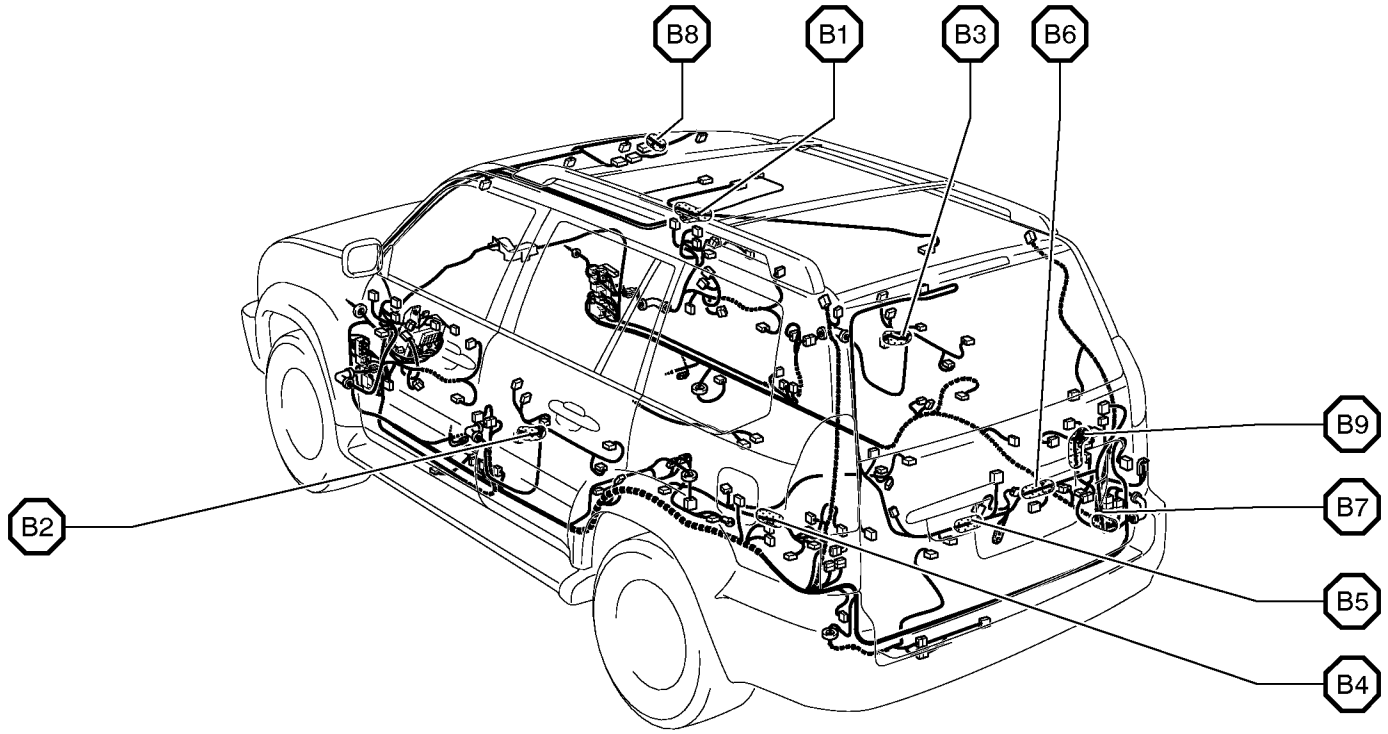


Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Front Door LH Wire and Front Door LH Sub Wire (Inside of Front Door LH)
BB1	Front Door RH Wire and Front Door RH Sub Wire (Inside of Front Door RH)
BC1	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BD1	Rear Door RH Wire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

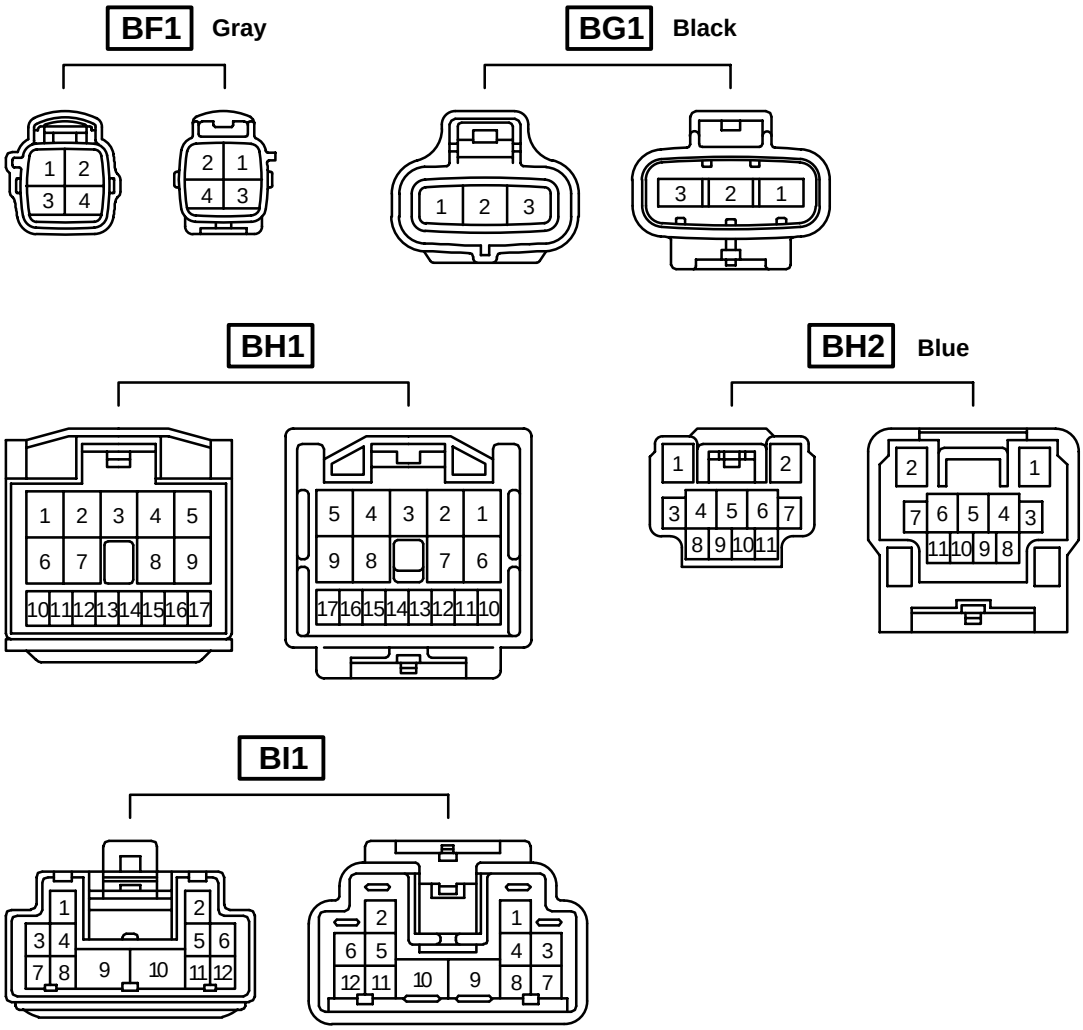
▭ : Location of Connector Joining Wire Harness and Wire Harness



⬡ : Location of Splice Points

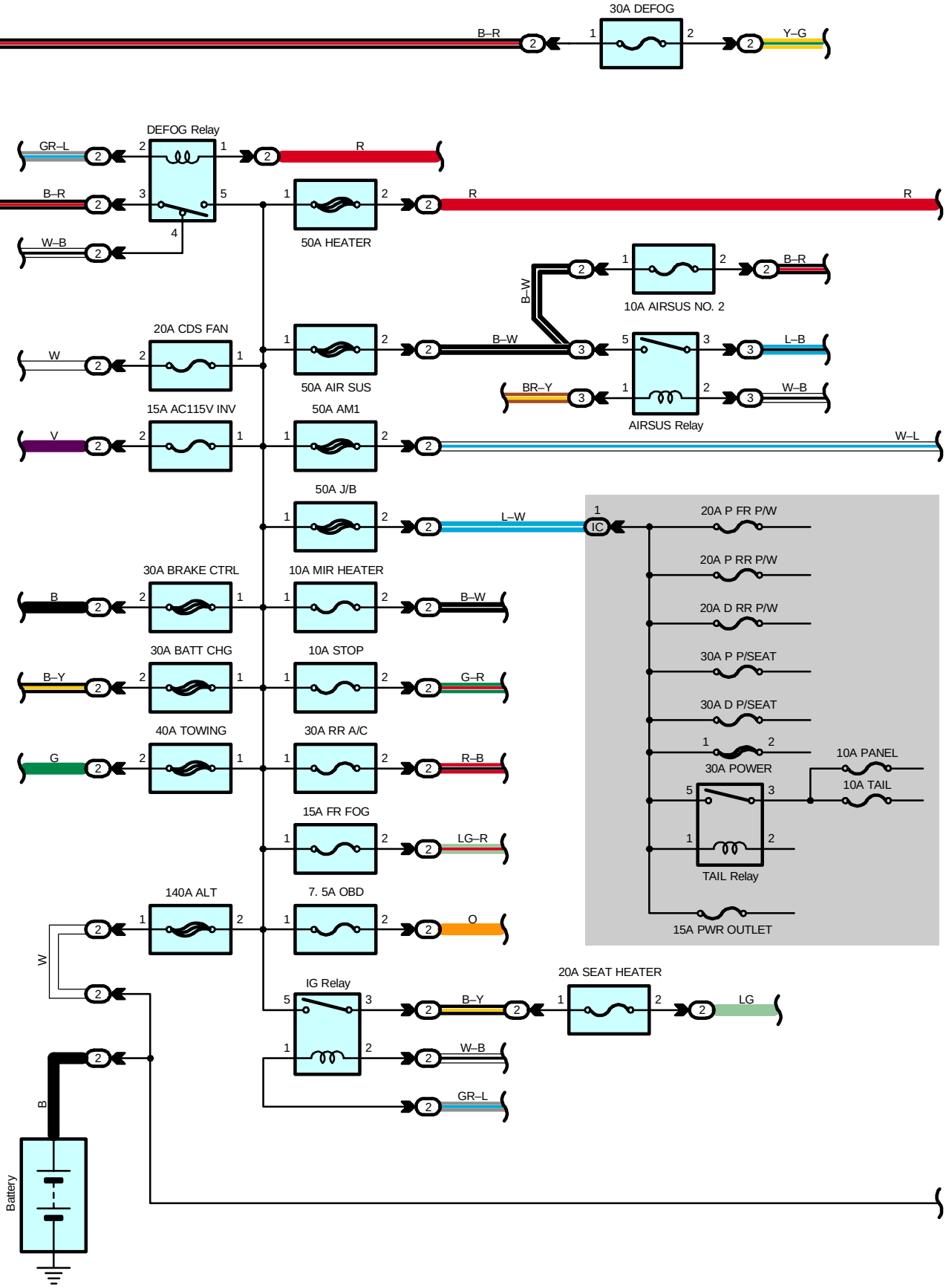


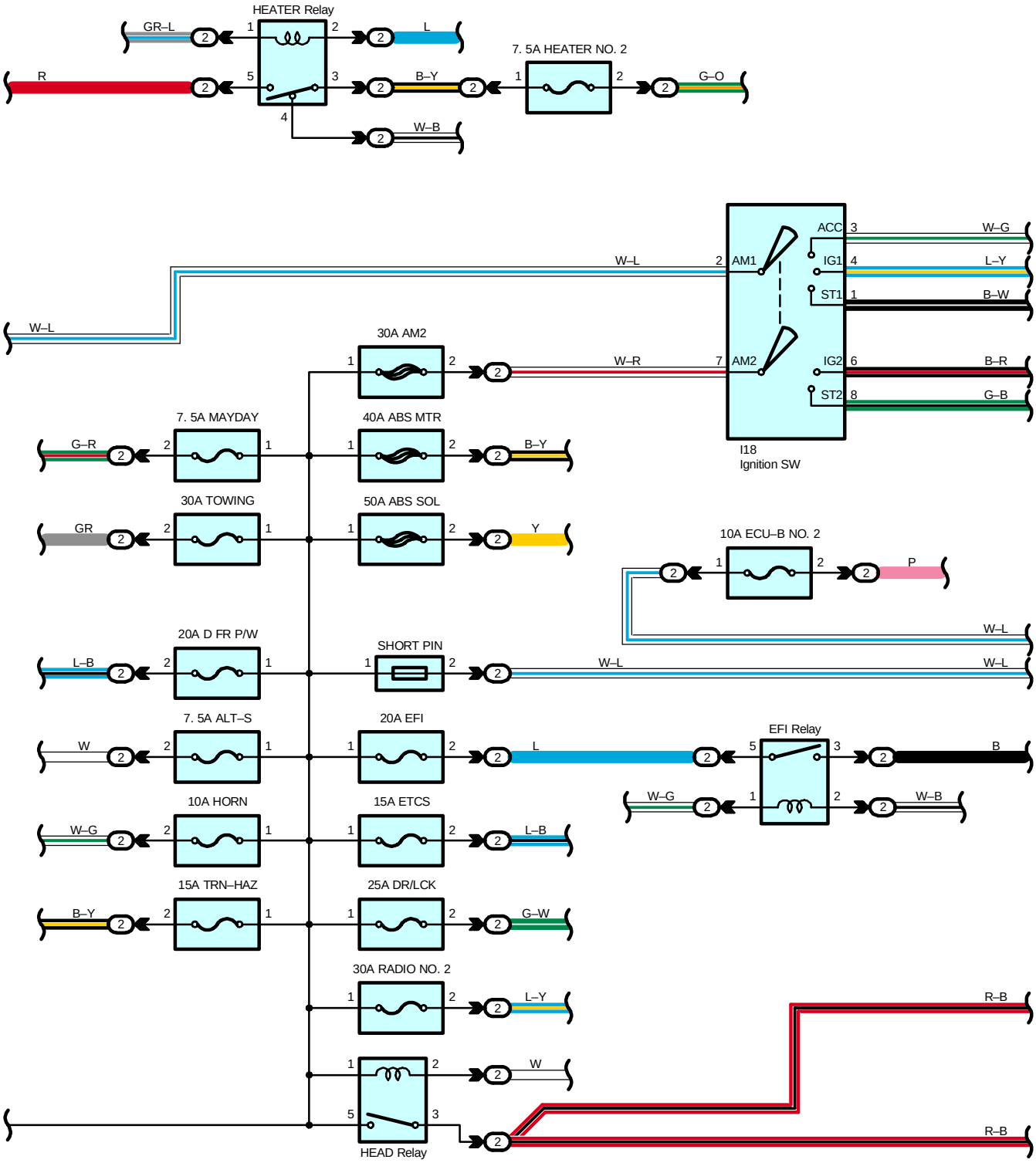
Connector Joining Wire Harness and Wire Harness

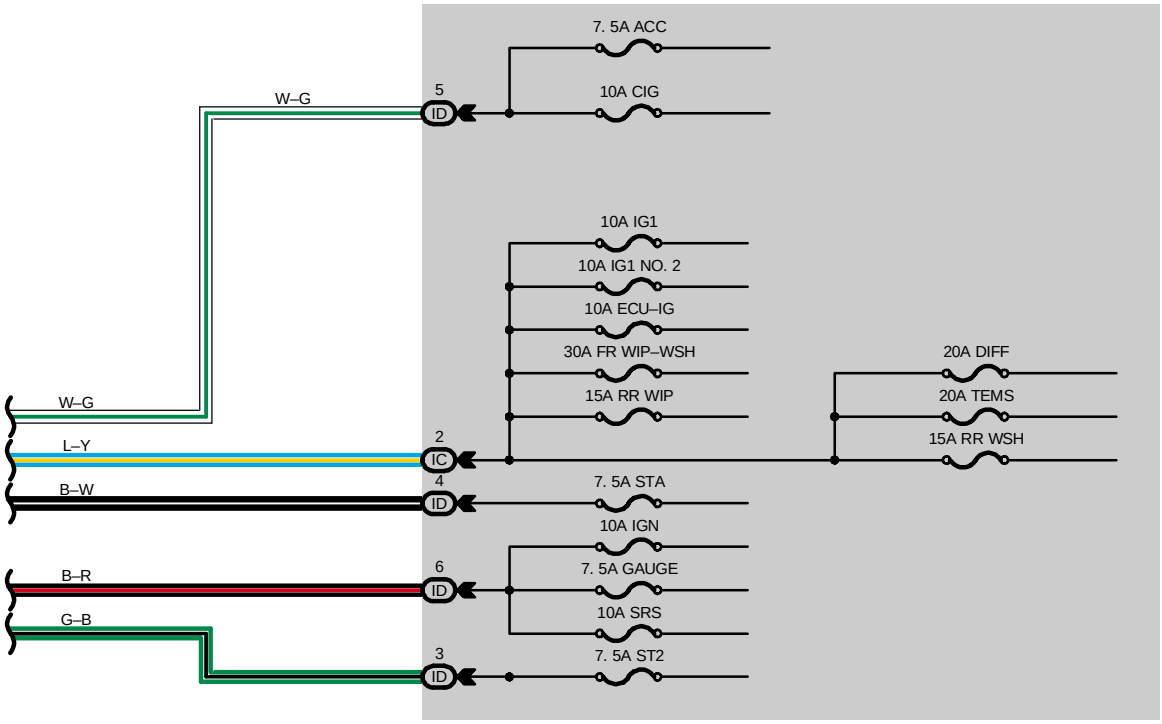


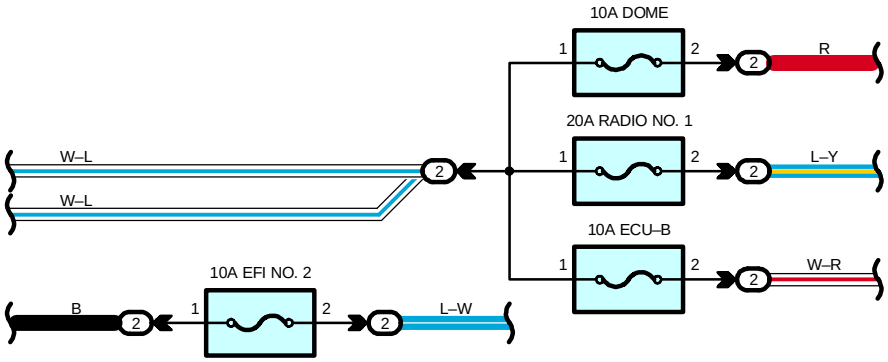
Code	Joining Wire Harness and Wire Harness (Connector Location)
BF1	Floor No.2 Wire and Frame No.3 Wire (Left Side of Rear Floor Crossmember)
BG1	Frame No.3 Wire and Floor No.2 Wire (Left Side of Rear Floor Crossmember)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BH2	
BI1	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)

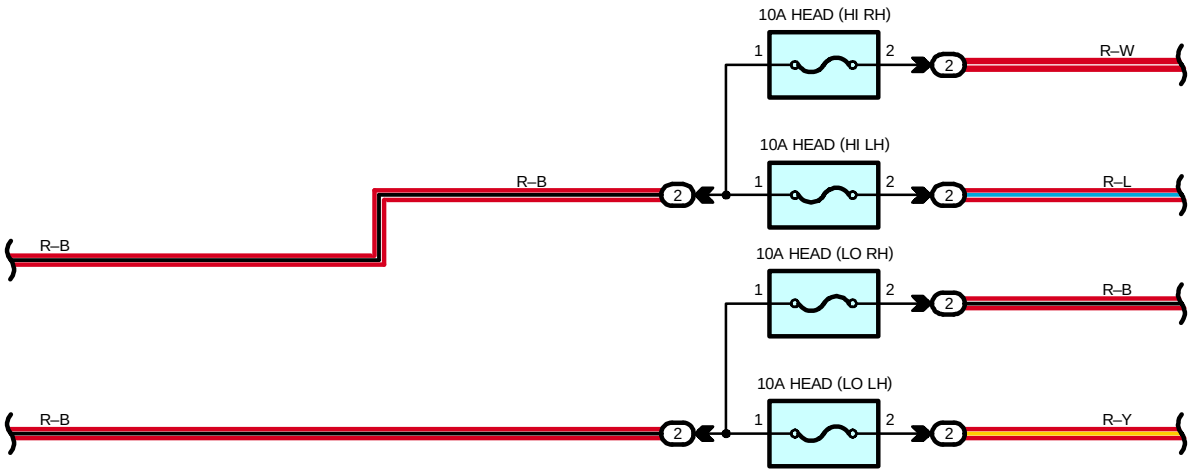
Power Source




HEATER Relay
GR–L
L
R
B–Y
W–B
7. 5A HEATER NO. 2
G–O
W–L
ACC
IG1
ST1
IG2
ST2
AM1
AM2
W–G
L–Y
B–W
B–R
G–B
I18
Ignition SW
30A AM2
W–R
7. 5A MAYDAY
G–R
40A ABS MTR
B–Y
30A TOWING
GR
50A ABS SOL
Y
10A ECU–B NO. 2
P
20A D FR P/W
L–B
SHORT PIN
7. 5A ALT–S
W
20A EFI
L
EFI Relay
B
10A HORN
W–G
15A ETCS
L–B
15A TRN–HAZ
B–Y
25A DR/LCK
G–W
30A RADIO NO. 2
L–Y
R–B
HEAD Relay


7. 5A ACC
10A CIG
W–G
5
ID
10A IG1
10A IG1 NO. 2
10A ECU–IG
30A FR WIP–WSH
15A RR WIP
20A DIFF
20A TEMS
15A RR WSH
W–G
L–Y
2
IC
B–W
4
ID
7. 5A STA
10A IGN
B–R
6
ID
7. 5A GAUGE
10A SRS
G–B
3
ID
7. 5A ST2


10A DOME
1
2
2
R
20A RADIO NO. 1
W–L
2
L–Y
W–L
10A ECU–B
W–R
10A EFI NO. 2
B
2
1
2
2
L–W


10A HEAD (HI RH)
R–W
10A HEAD (HI LH)
R–B
R–L
R–B
10A HEAD (LO RH)
R–B
10A HEAD (LO LH)
R–B
R–Y

Service Hints

HEAD Relay

5–3 : Closed with 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 ignition key at ACC or ON position
2–4 : Closed with ignition key at ON or ST position
2–1 : Closed with ignition key at ST position
7–6 : Closed with ignition key at ON or ST position
7–8 : Closed with ignition key at ST position

TAIL Relay

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

: Parts Location

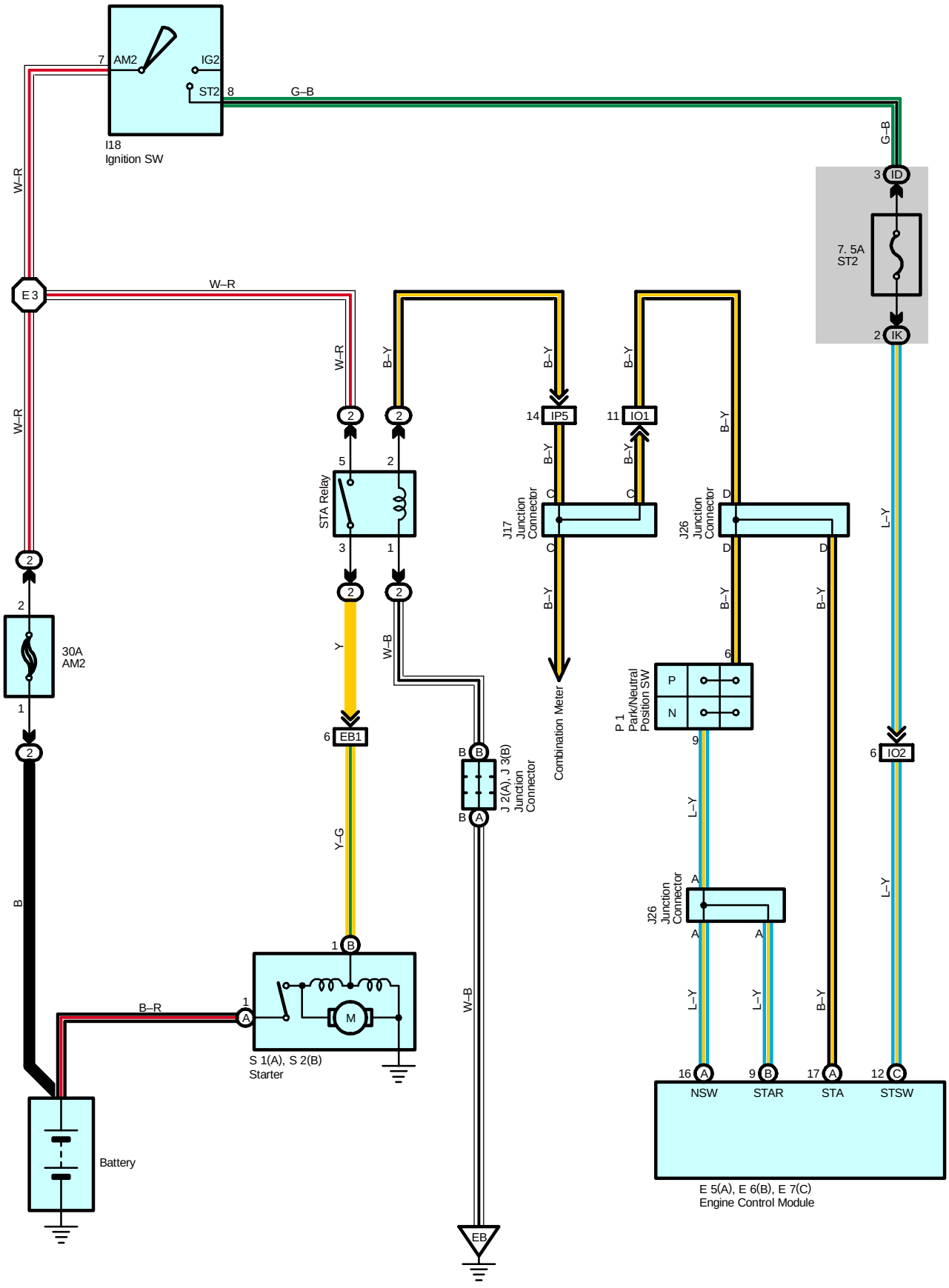
Code	See Page	Code	See Page	Code	See Page
I18	39				

: 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		


I18
Ignition SW
AM2
IG2
ST2
7
8
G–B
W–R
E 3
3
ID
7. 5A
ST2
2
IK
30A
AM2
STA Relay
5
2
3
1
B–Y
14
IP5
11
IO1
J17
Junction
Connector
C
J26
Junction
Connector
D
Y
W–B
6
EB1
Y–G
B
J 2(A), J 3(B)
Junction
Connector
Combination Meter
P 1
Park/Neutral
Position SW
P
N
9
L–Y
6
IO2
J26
Junction
Connector
A
B–R
1
B
M
S 1(A), S 2(B)
Starter
Battery
EB
16
NSW
9
STAR
17
STA
12
STSW
E 5(A), E 6(B), E 7(C)
Engine Control Module

Service Hints

I18 Ignition SW

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

P1 Park/Neutral Position SW

9–6 : 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
E5	A	39	J2	A	37	P1		37
E6	B	39	J3	B	37	S1	A	37
E7	C	39	J17		40	S2	B	37
I18		39	J26		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)
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

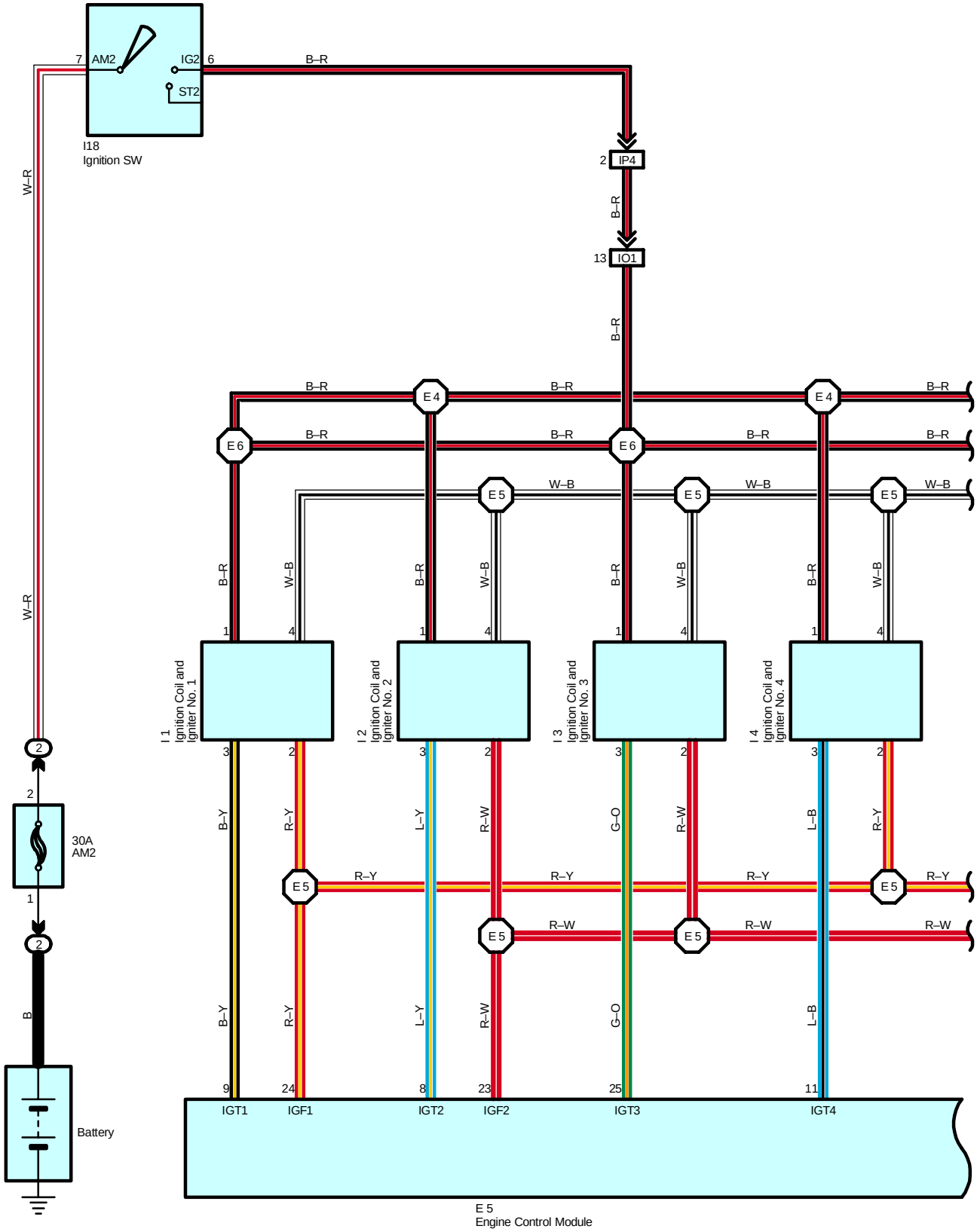
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IP5	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

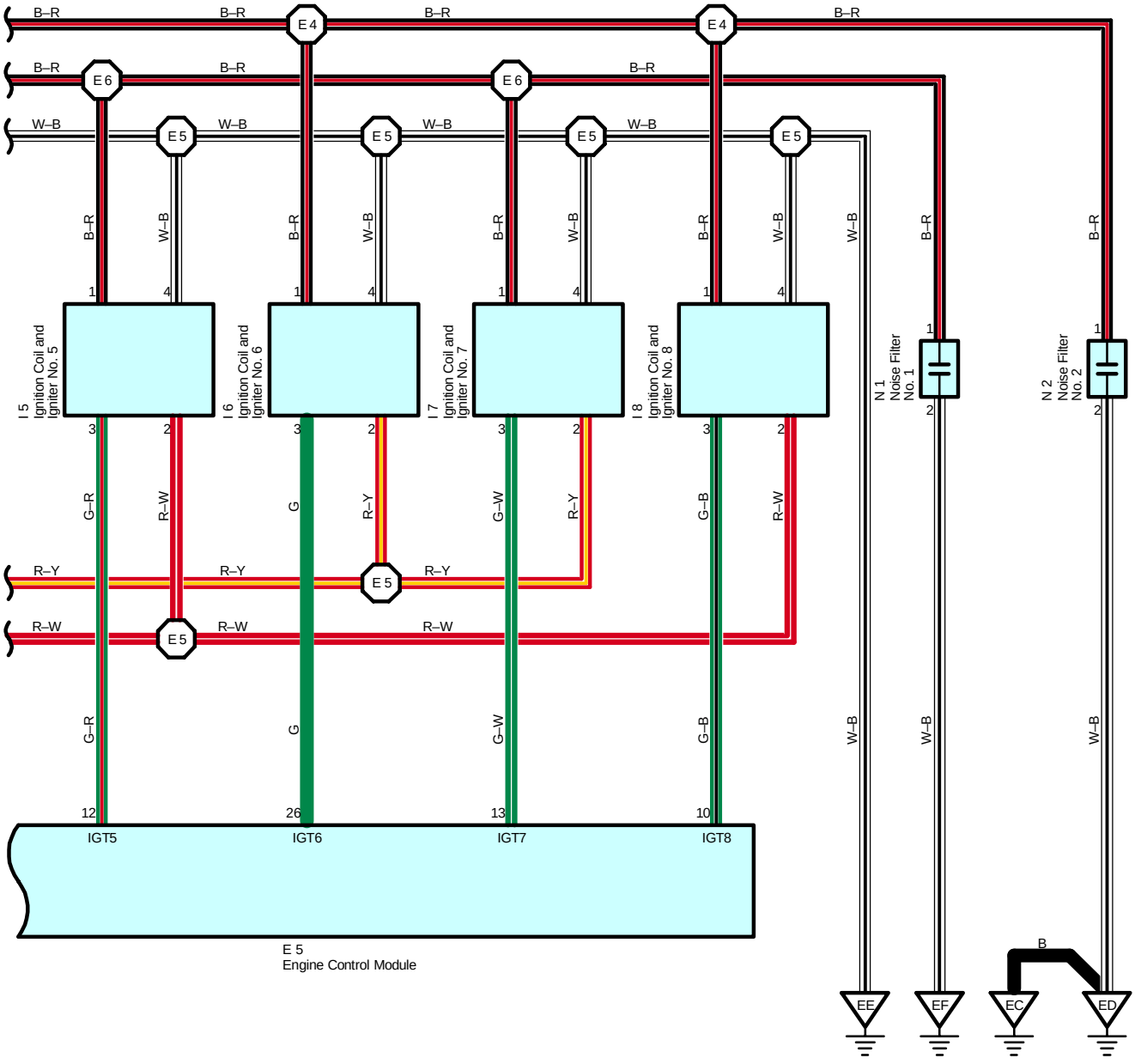
: Ground Points

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			


I18
Ignition SW
7 AM2
IG2 6
ST2
B–R
W–R
2 IP4
13 IO1
E 4
E 6
E 5
W–B
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
B–Y
R–Y
L–Y
R–W
G–O
L–B
30A
AM2
B
Battery
IGT1
IGF1
IGT2
IGF2
IGT3
IGT4
E 5
Engine Control Module


B–R
E 4
E 6
W–B
E 5
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
N 1
Noise Filter No. 1
N 2
Noise Filter No. 2
G–R
R–W
G
R–Y
G–W
G–B
R–Y
R–W
IGT5
IGT6
IGT7
IGT8
E 5
Engine Control Module
B
EE
EF
EC
ED

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	I4	37	I8	37
I1	37	I5	37	I18	39
I2	37	I6	37	N1	37
I3	37	I7	37	N2	37

: 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

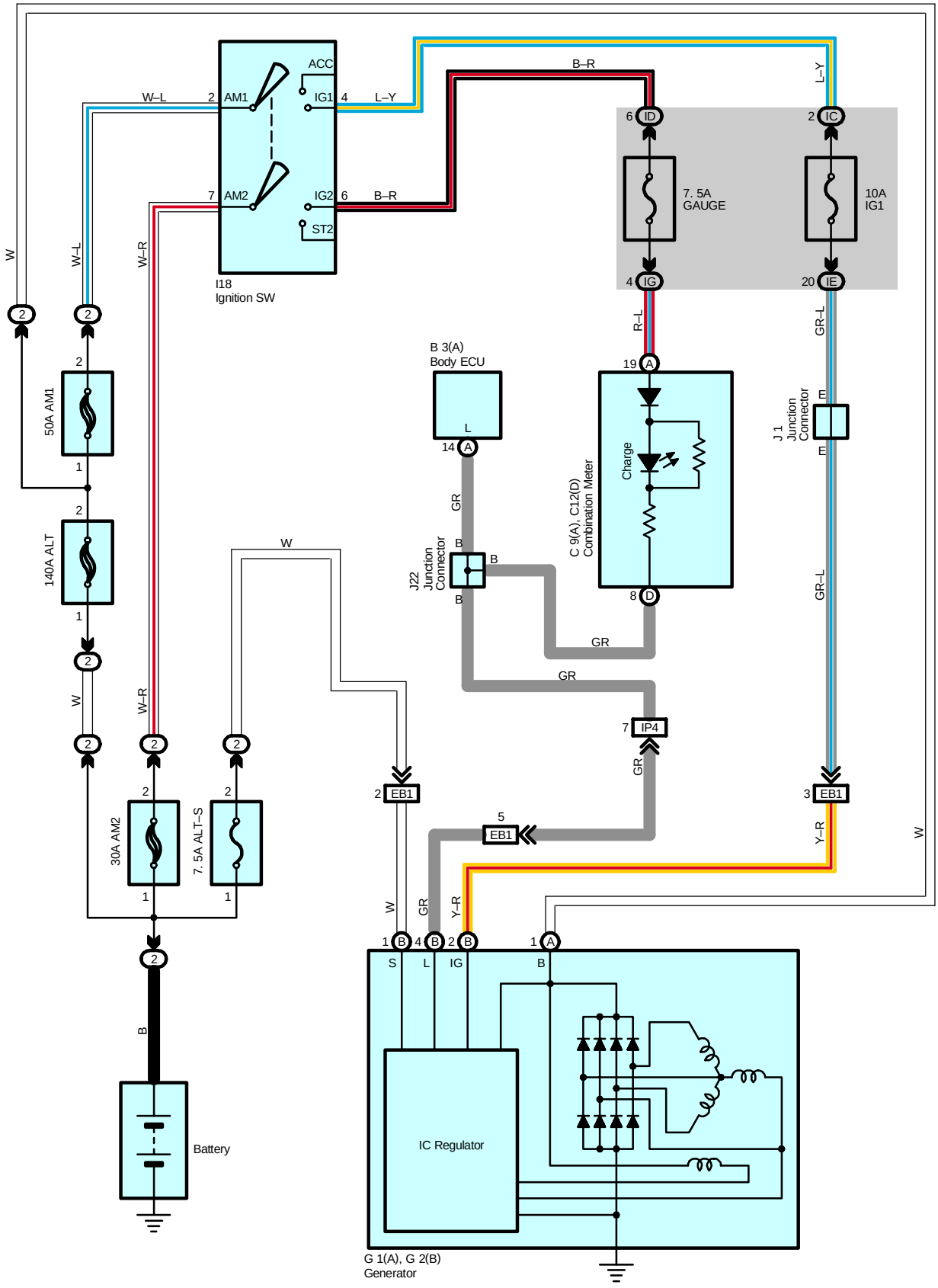
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

: Ground Points

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

: 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					


ACC
AM1
IG1
AM2
IG2
ST2
I18
Ignition SW
W–L
L–Y
B–R
W–R
W
7. 5A
GAUGE
10A
IG1
ID
IC
IG
IE
B 3(A)
Body ECU
L
R–L
GR–L
J 1
Junction
Connector
C 9(A), C12(D)
Combination Meter
Charge
J22
Junction
Connector
GR
IP4
50A AM1
140A ALT
30A AM2
7. 5A ALT–S
EB1
Y–R
Battery
IC Regulator
S
L
IG
B
G 1(A), G 2(B)
Generator

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	J22	40
C12	D	38	I18		39		

: Relay Blocks

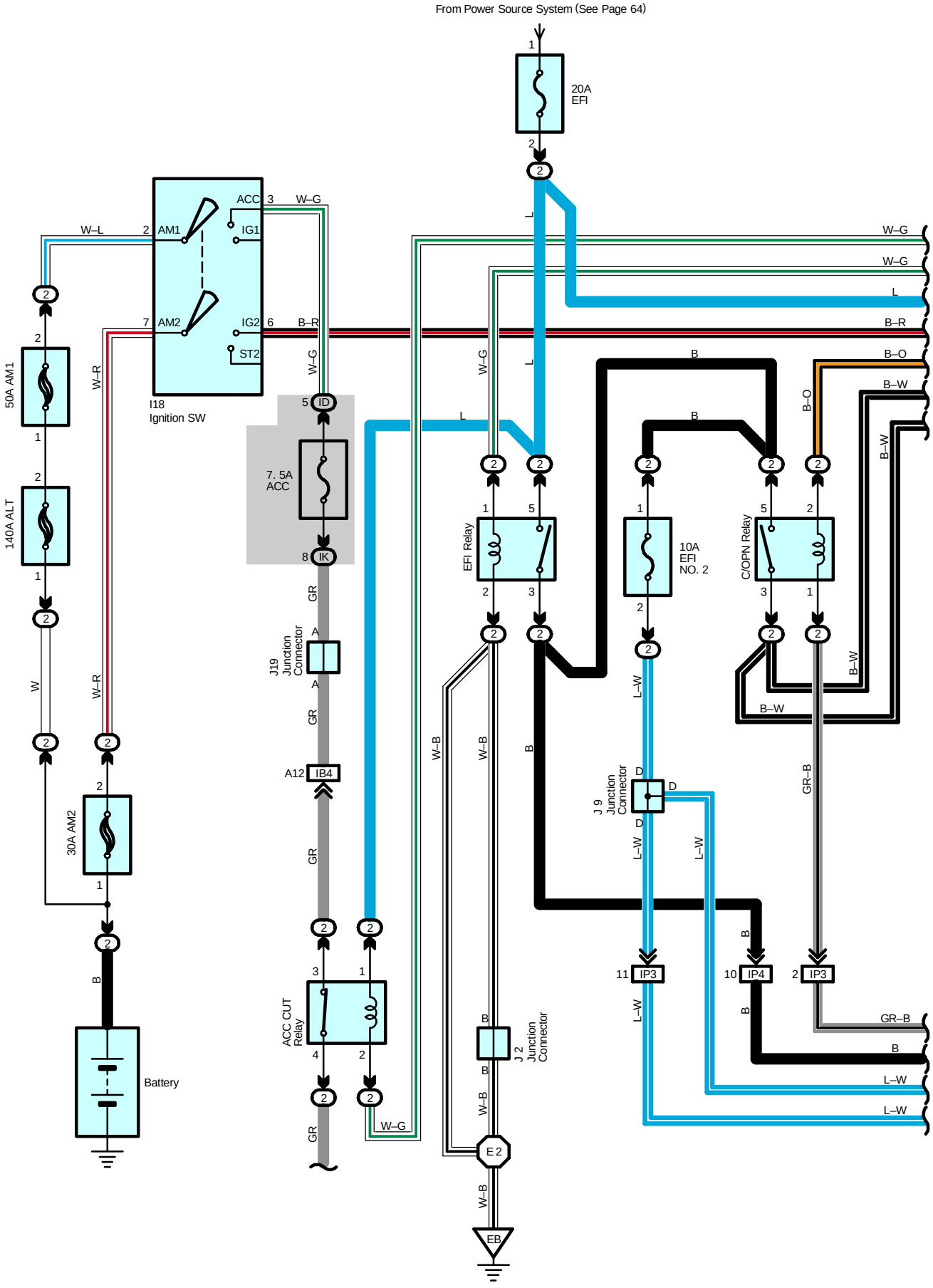
Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

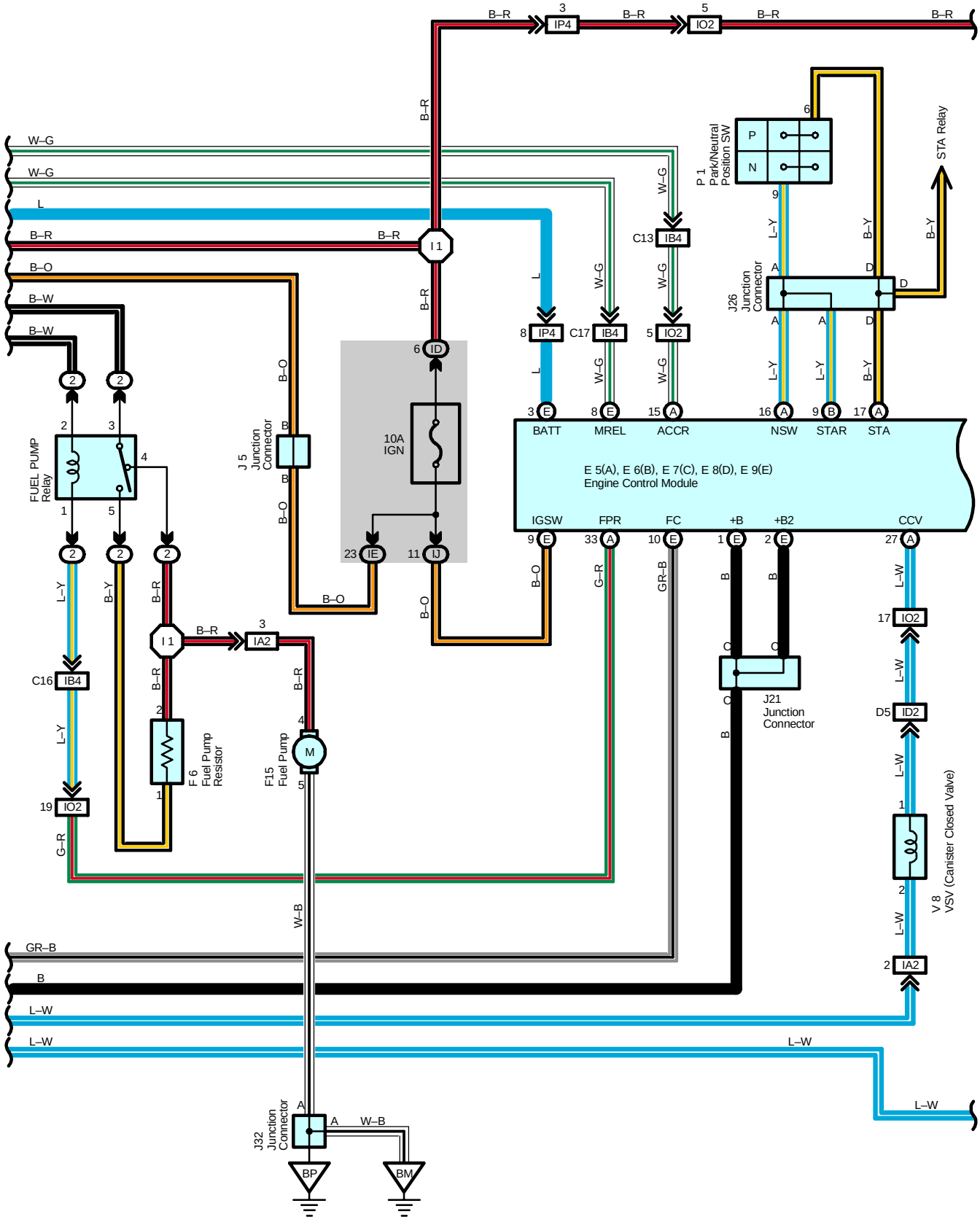
: Junction Block and Wire Harness Connector

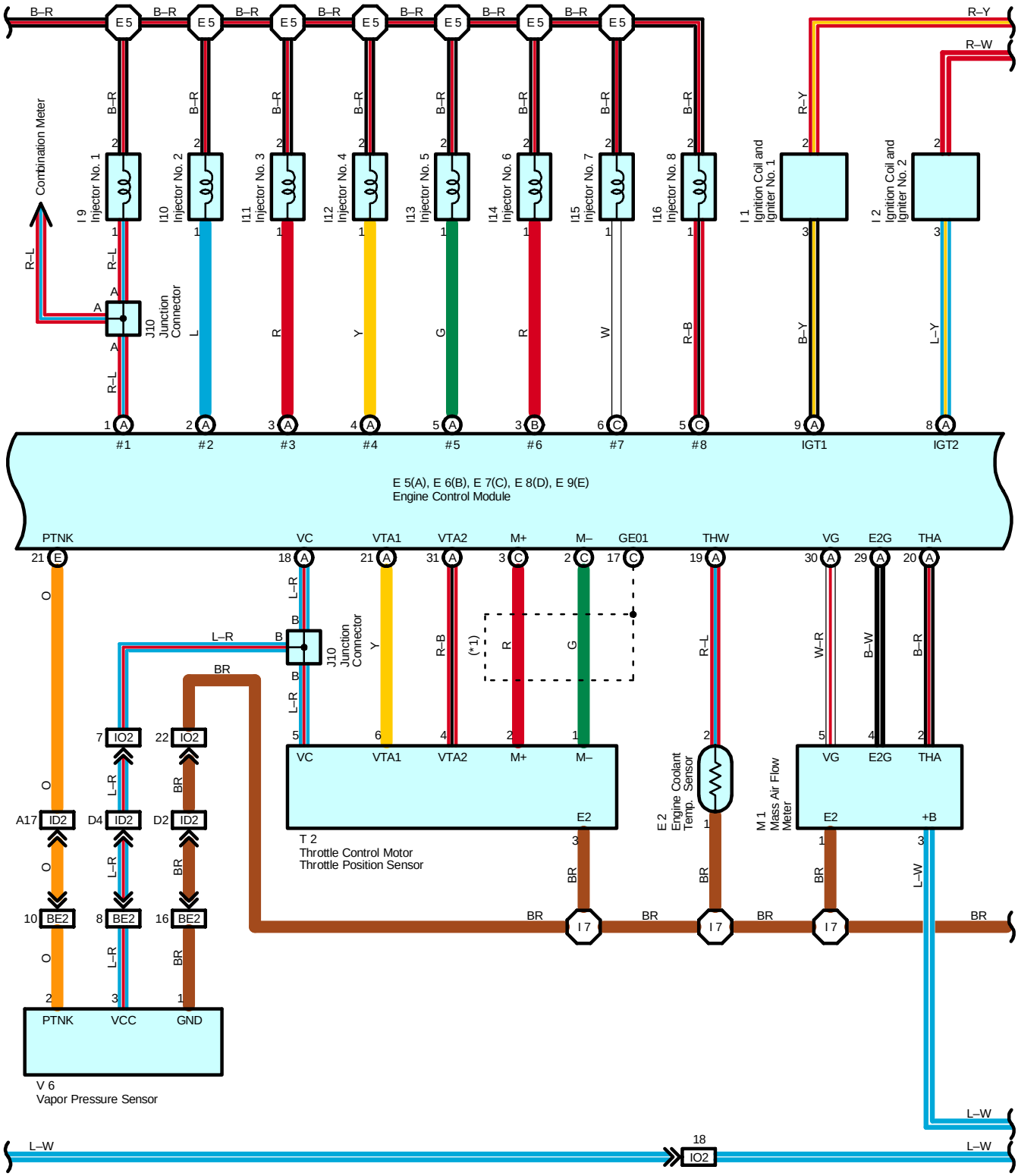
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
ID		
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

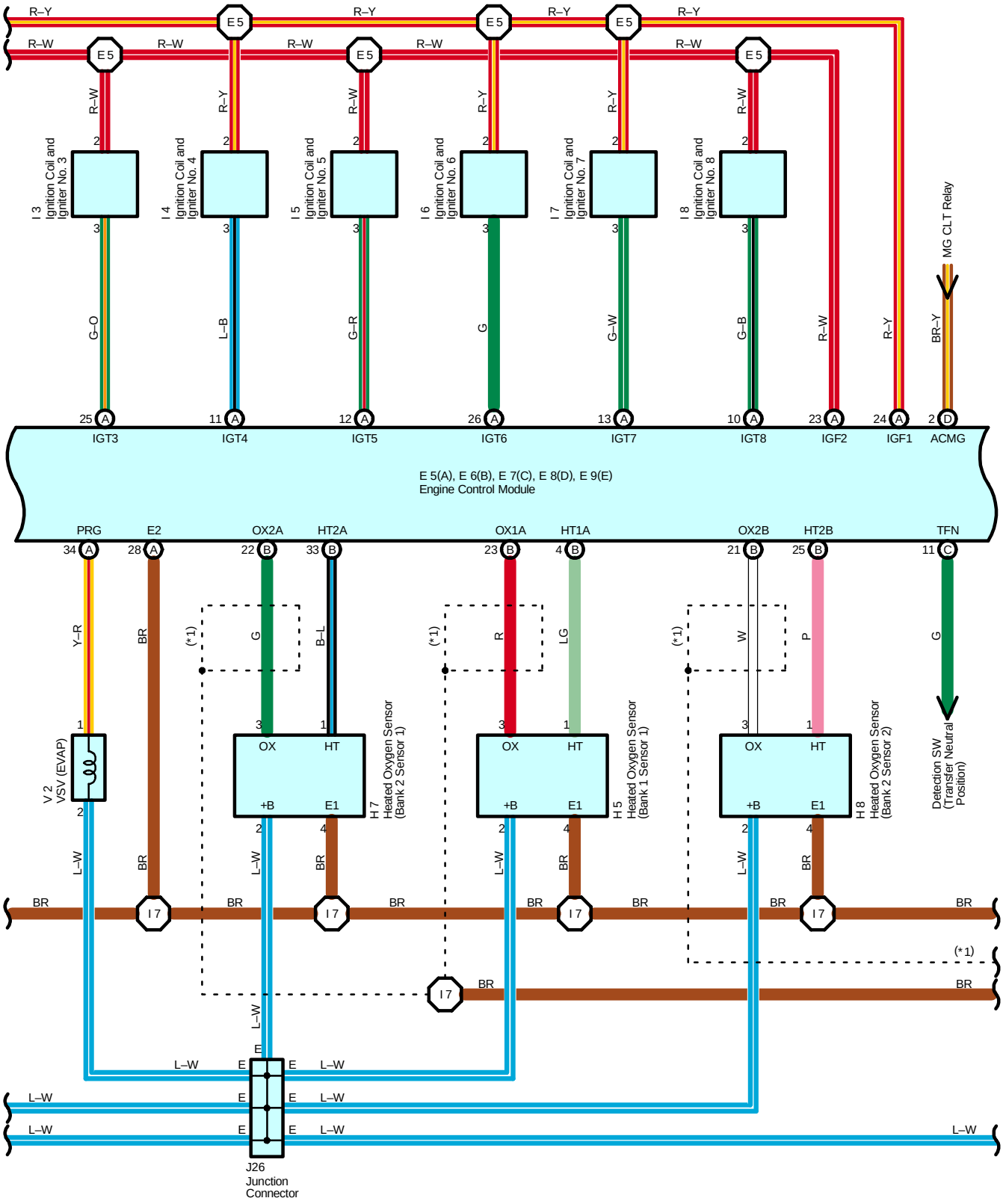
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

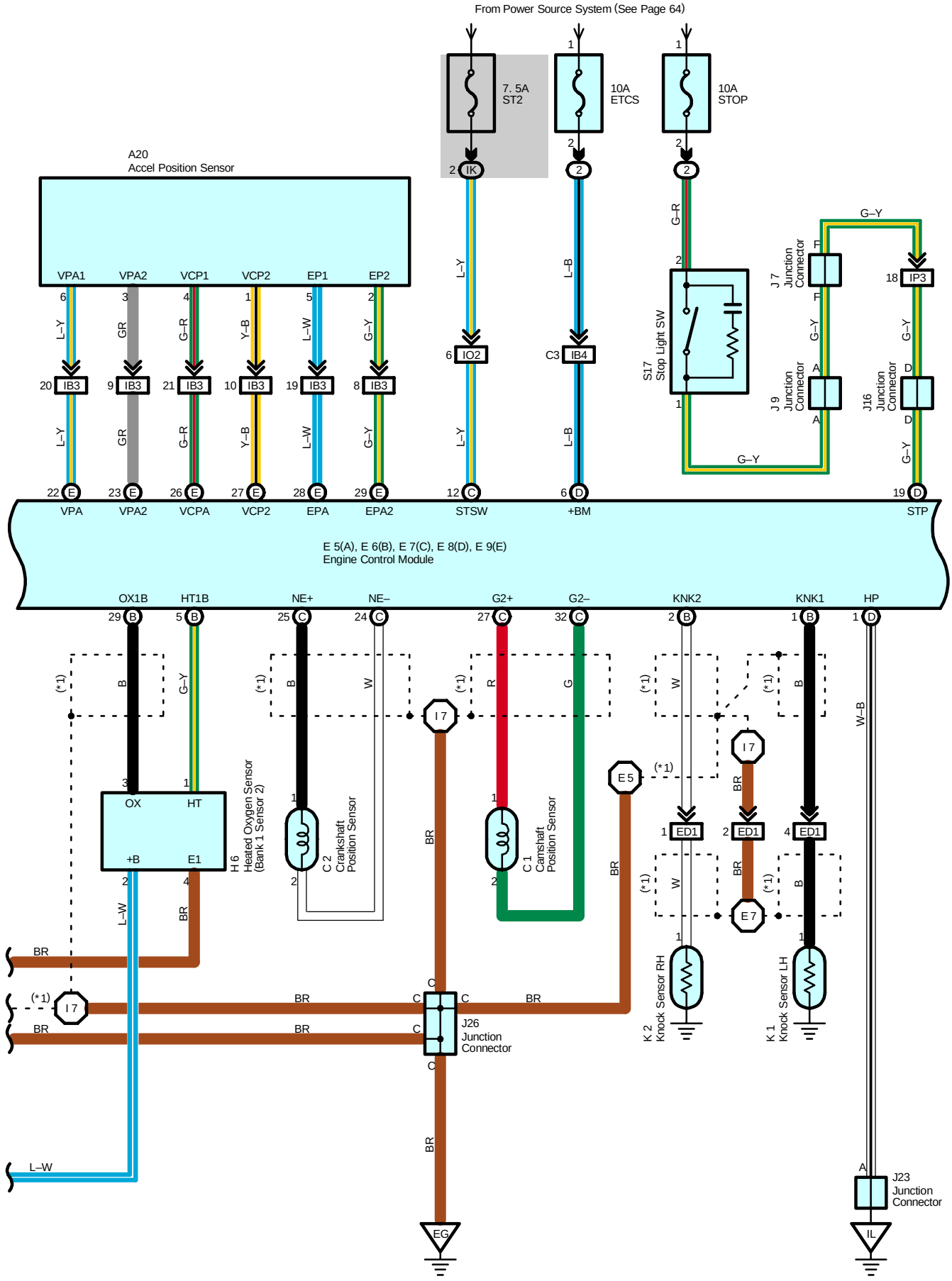

From Power Source System (See Page 64)
20A EFI
ACC
IG1
IG2
ST2
AM1
AM2
W–L
W–G
B–R
I18 Ignition SW
50A AM1
140A ALT
30A AM2
W–R
W
B
Battery
7. 5A ACC
ID
IK
GR
J19 Junction Connector
A12
IB4
ACC CUT Relay
W–G
EFI Relay
10A EFI NO. 2
C/OPN Relay
L
B
B–O
B–W
L–W
GR–B
J 9 Junction Connector
IP3
IP4
J 2 Junction Connector
W–B
E 2
EB


B–R
3
IP4
B–R
5
IO2
B–R
B–R
W–G
W–G
L
B–R
B–R
B–O
B–W
B–W
I 1
B–R
6
ID
10A
IGN
23
IE
11
IJ
B–O
B–O
B–O
B–O
J 5
Junction
Connector
B
B
FUEL PUMP
Relay
2
3
4
1
5
2
2
2
2
2
L–Y
B–Y
B–R
C16
IB4
L–Y
19
IO2
G–R
I 1
B–R
3
IA2
B–R
B–R
2
1
F 6
Fuel Pump
Resistor
F15
Fuel Pump
4
M
5
W–B
L
W–G
8
IP4
C17
IB4
W–G
5
IO2
W–G
C13
IB4
W–G
3
E
BATT
8
E
MREL
15
A
ACCR
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
IGSW
FPR
FC
+B
+B2
CCV
9
E
33
A
10
E
1
E
2
E
27
A
B–O
G–R
GR–B
B
B
C
C
C
B
J21
Junction
Connector
P 1
Park/Neutral
Position SW
6
P
N
9
L–Y
B–Y
STA Relay
B–Y
J26
Junction
Connector
A
D
D
A
A
D
L–Y
L–Y
B–Y
16
A
NSW
9
B
STAR
17
A
STA
L–W
17
IO2
L–W
D5
ID2
L–W
1
2
L–W
2
IA2
V 8
VSV (Canister Closed Valve)
GR–B
B
L–W
L–W
L–W
L–W
J32
Junction
Connector
A
A
W–B
BP
BM

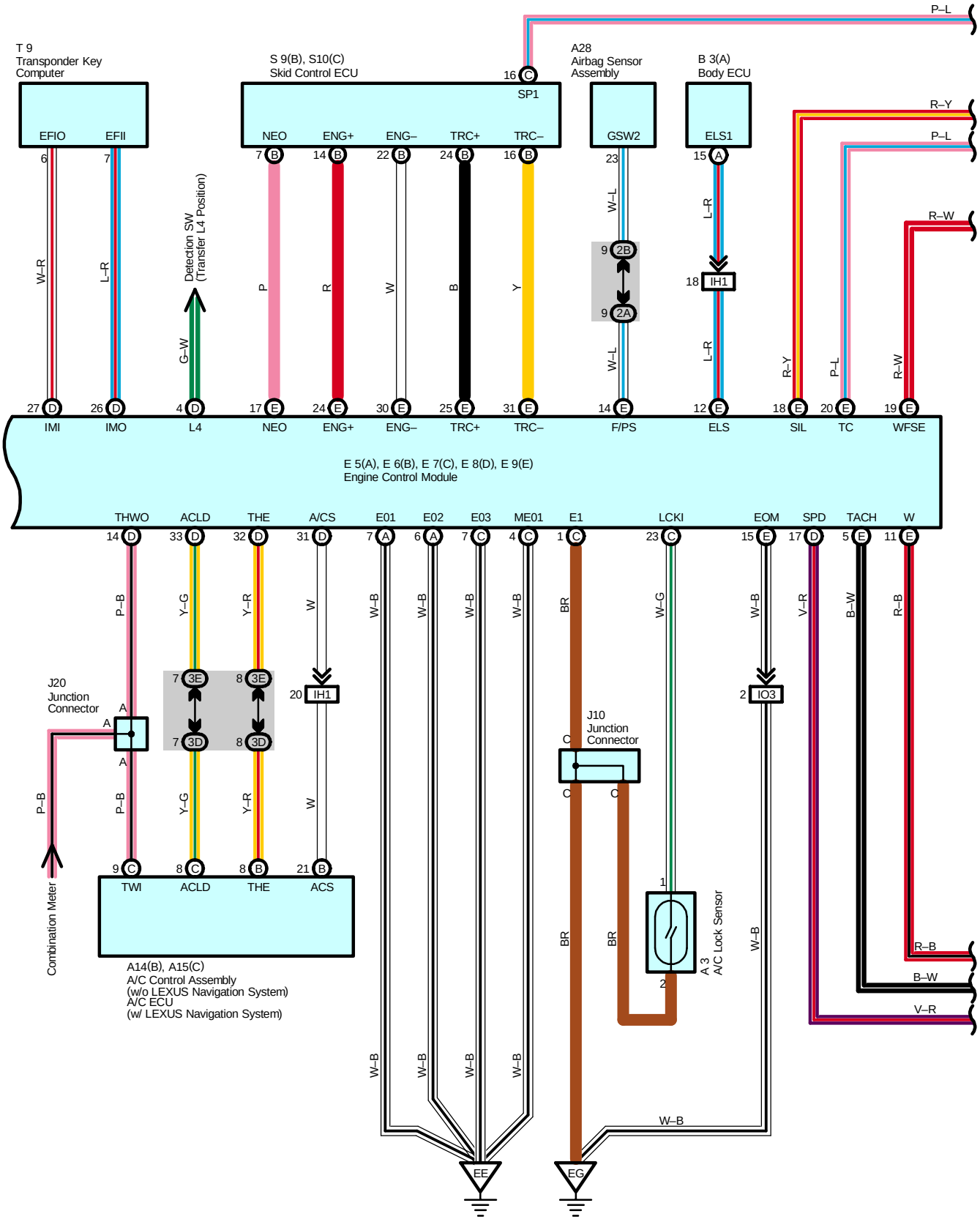

Combination Meter
I 9 Injector No. 1
I10 Injector No. 2
I11 Injector No. 3
I12 Injector No. 4
I13 Injector No. 5
I14 Injector No. 6
I15 Injector No. 7
I16 Injector No. 8
I 1 Ignition Coil and Igniter No. 1
I 2 Ignition Coil and Igniter No. 2
J10 Junction Connector
#1
#2
#3
#4
#5
#6
#7
#8
IGT1
IGT2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
PTNK
VC
VTA1
VTA2
M+
M–
GE01
THW
VG
E2G
THA
T 2
Throttle Control Motor
Throttle Position Sensor
E 2 Engine Coolant Temp. Sensor
M 1 Mass Air Flow Meter
V 6
Vapor Pressure Sensor
PTNK
VCC
GND
E2
+B
I 7
IO2
ID2
BE2
(*1)

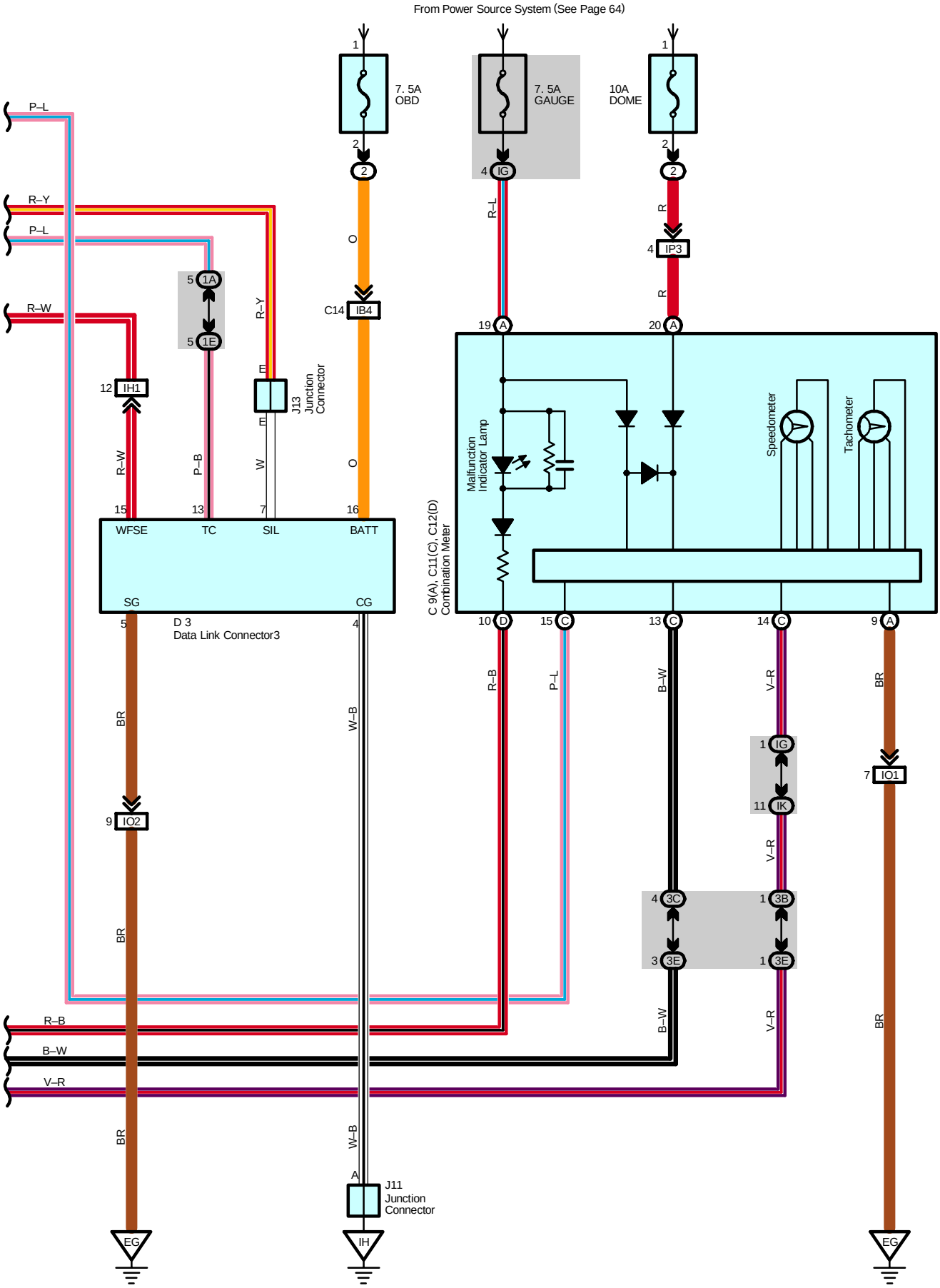
* 1 : Shielded


R–Y
R–W
E5
I3 Ignition Coil and Igniter No. 3
I4 Ignition Coil and Igniter No. 4
I5 Ignition Coil and Igniter No. 5
I6 Ignition Coil and Igniter No. 6
I7 Ignition Coil and Igniter No. 7
I8 Ignition Coil and Igniter No. 8
G–O
L–B
G–R
G
G–W
G–B
R–W
R–Y
BR–Y
MG CLT Relay
IGT3
IGT4
IGT5
IGT6
IGT7
IGT8
IGF2
IGF1
ACMG
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
PRG
E2
OX2A
HT2A
OX1A
HT1A
OX2B
HT2B
TFN
Y–R
BR
G
B–L
R
LG
W
P
(*1)
V 2
VSV (EVAP)
OX
HT
+B
E1
H 7
Heated Oxygen Sensor (Bank 2 Sensor 1)
H 5
Heated Oxygen Sensor (Bank 1 Sensor 1)
H 8
Heated Oxygen Sensor (Bank 2 Sensor 2)
Detection SW (Transfer Neutral Position)
L–W
J26
Junction Connector


From Power Source System (See Page 64)
7. 5A
ST2
10A
ETCS
10A
STOP
A20
Accel Position Sensor
VPA1
VPA2
VCP1
VCP2
EP1
EP2
IB3
IK
IO2
IB4
IP3
S17
Stop Light SW
J 7
Junction
Connector
J 9
Junction
Connector
J16
Junction
Connector
VPA
VPA2
VCPA
VCP2
EPA
EPA2
STSW
+BM
STP
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
OX1B
HT1B
NE+
NE–
G2+
G2–
KNK2
KNK1
HP
H 6
Heated Oxygen Sensor
(Bank 1 Sensor 2)
OX
HT
+B
E1
C 2
Crankshaft
Position Sensor
C 1
Camshaft
Position Sensor
I 7
E 5
E 7
ED1
K 2
Knock Sensor RH
K 1
Knock Sensor LH
J26
Junction
Connector
J23
Junction
Connector
EG
IL

* 1 : Shielded


T 9
Transponder Key Computer
EFIO
EFII
S 9(B), S10(C)
Skid Control ECU
NEO
ENG+
ENG–
TRC+
TRC–
SP1
A28
Airbag Sensor Assembly
GSW2
B 3(A)
Body ECU
ELS1
Detection SW (Transfer L4 Position)
IMI
IMO
L4
F/PS
ELS
SIL
TC
WFSE
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
THWO
ACLD
THE
A/CS
E01
E02
E03
ME01
E1
LCKI
EOM
SPD
TACH
W
J20 Junction Connector
J10 Junction Connector
IH1
IO3
TWI
ACLD
THE
ACS
Combination Meter
A14(B), A15(C)
A/C Control Assembly
(w/o LEXUS Navigation System)
A/C ECU
(w/ LEXUS Navigation System)
A 3
A/C Lock Sensor
EE
EG
P–L
R–Y
R–W
R–B
B–W
V–R
W–B
BR
W–G
W–L
L–R
G–W
Y–G
Y–R
P–B
W–R


From Power Source System (See Page 64)
7. 5A
OBD
7. 5A
GAUGE
10A
DOME
P–L
R–Y
P–L
R–W
5 1A
5 1E
R–Y
C14 IB4
O
R–L
R
4 IP3
R
19 A
20 A
12 IH1
R–W
P–B
W
O
15 WFSE
13 TC
7 SIL
16 BATT
E
E
J13
Junction
Connector
SG
CG
5
4
D 3
Data Link Connector3
C 9(A), C11(C), C12(D)
Combination Meter
Malfunction
Indicator Lamp
Speedometer
Tachometer
10 D
15 C
13 C
14 C
9 A
R–B
P–L
B–W
V–R
BR
9 IO2
7 IO1
1 IG
11 IK
V–R
4 3C
3 3E
1 3B
1 3E
BR
W–B
R–B
B–W
V–R
BR
W–B
A
J11
Junction
Connector
EG
IH
EG

System Outline

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

1. Input Signals

(1) Engine coolant temp. signal circuit

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

(2) Intake air temp. signal circuit

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

(3) Oxygen sensor signal circuit

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

(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) A/C SW signal system

The operating voltage of the A/C magnetic clutch is detected and input in the form of a control signal to TERMINAL A/CS of the 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 HT1A, HT1B, HT2A or HT2B to control the heater.
* Fuel pump control system
  The engine control module supplies current to TERMINAL FPR, and controls the operation speed of the fuel pump 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 STAR 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.

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
A3	36	H8	36	J11	40
A14 B	38	I1	37	J13	40
A15 C	38	I2	37	J16	40
A20	38	I3	37	J19	40
A28	38	I4	37	J20	40
B3 A	38	I5	37	J21	40
C1	36	I6	37	J23	40
C2	36	I7	37	J26	40
C9 A	38	I8	37	J32	43
C11 C	38	I9	37	K1	37
C12 D	38	I10	37	K2	37
D3	39	I11	37	M1	37
E2	36	I12	37	P1	37
E5 A	39	I13	37	S9 B	41
E6 B	39	I14	37	S10 C	41
E7 C	39	I15	37	S17	41
E8 D	39	I16	37	T2	37
E9 E	39	I18	39	T9	41
F6	36	J2	37	V2	37
F15	43	J5	37	V6	45
H5	36	J7	40	V8	45
H6	36	J9	40		
H7	36	J10	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)
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)
1E		
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

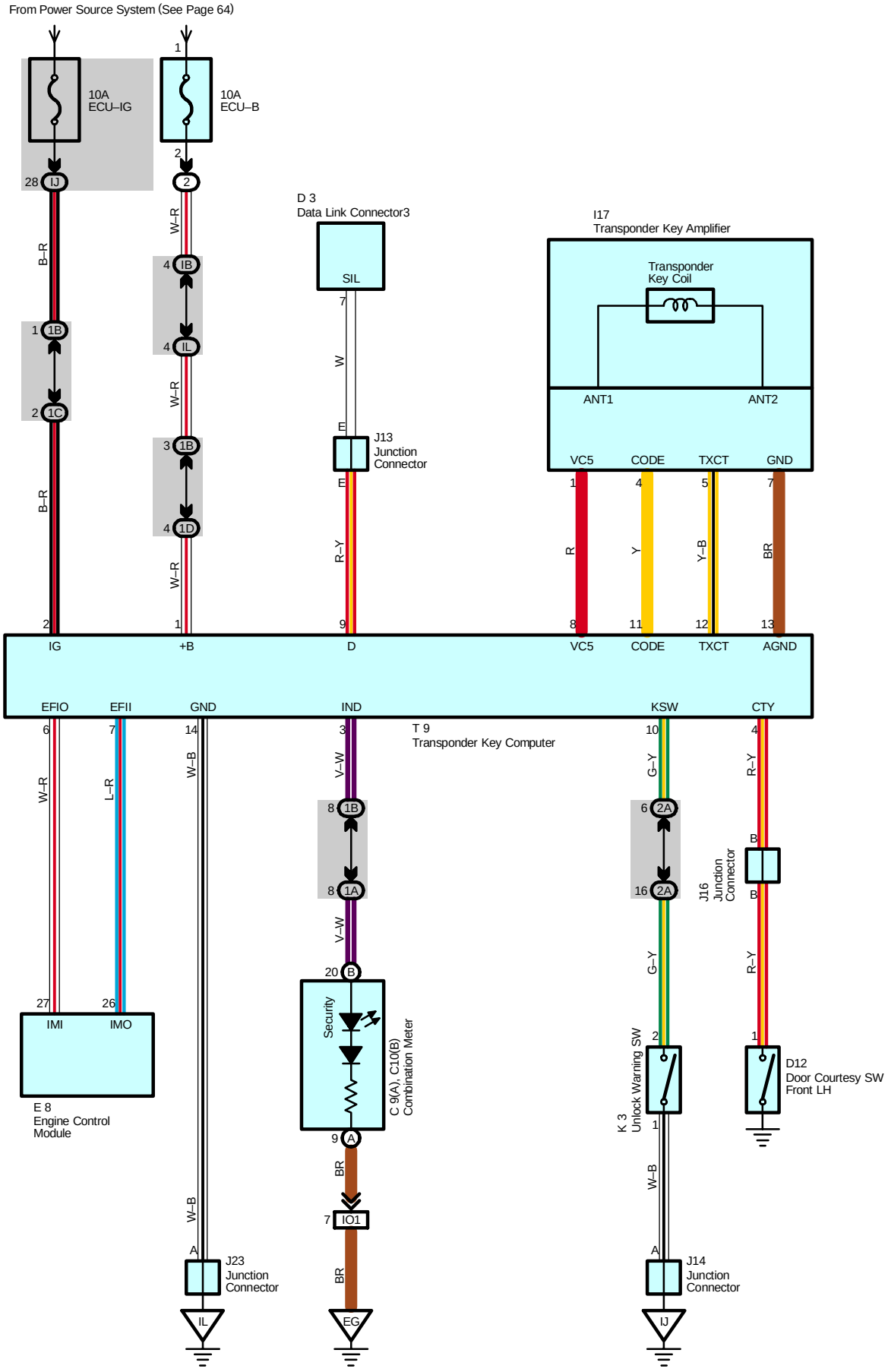
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ED1	48	Engine No.2 Wire and Engine Wire (Near the Starter)
IA2	50	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
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		
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
EB	48	Front Left Fender
EE	48	Rear Bank of Right Cylinder Head
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IL	50	Right 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
E2	48	Engine Room Main Wire	I1	52	Engine Room Main Wire
E5	48	Engine Wire	I7	52	Engine Wire
E7	48	Engine No.2 Wire			


From Power Source System (See Page 64)
10A
ECU–IG
10A
ECU–B
28 IJ
2
1
2
W–R
B–R
4 IB
4 IL
1 1B
2 1C
3 1B
4 1D
W–R
B–R
W–R
D 3
Data Link Connector3
SIL
7
W
E
J13
Junction
Connector
E
R–Y
9
I17
Transponder Key Amplifier
Transponder
Key Coil
ANT1
ANT2
VC5
CODE
TXCT
GND
1
4
5
7
R
Y
Y–B
BR
8
11
12
13
2
1
IG
+B
D
VC5
CODE
TXCT
AGND
EFIO
EFII
GND
IND
KSW
CTY
T 9
Transponder Key Computer
6
7
14
3
10
4
W–R
L–R
W–B
V–W
G–Y
R–Y
8 1B
8 1A
6 2A
16 2A
B
B
J16
Junction
Connector
V–W
G–Y
R–Y
20 B
27
26
IMI
IMO
Security
C 9(A), C10(B)
Combination Meter
2
1
D12
Door Courtesy SW
Front LH
K 3
Unlock Warning SW
9 A
1
E 8
Engine Control
Module
BR
W–B
7 IO1
W–B
BR
A
A
J23
Junction
Connector
J14
Junction
Connector
IL
EG
IJ

Service Hints

T9 Transponder Key Computer

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

: Parts Location

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

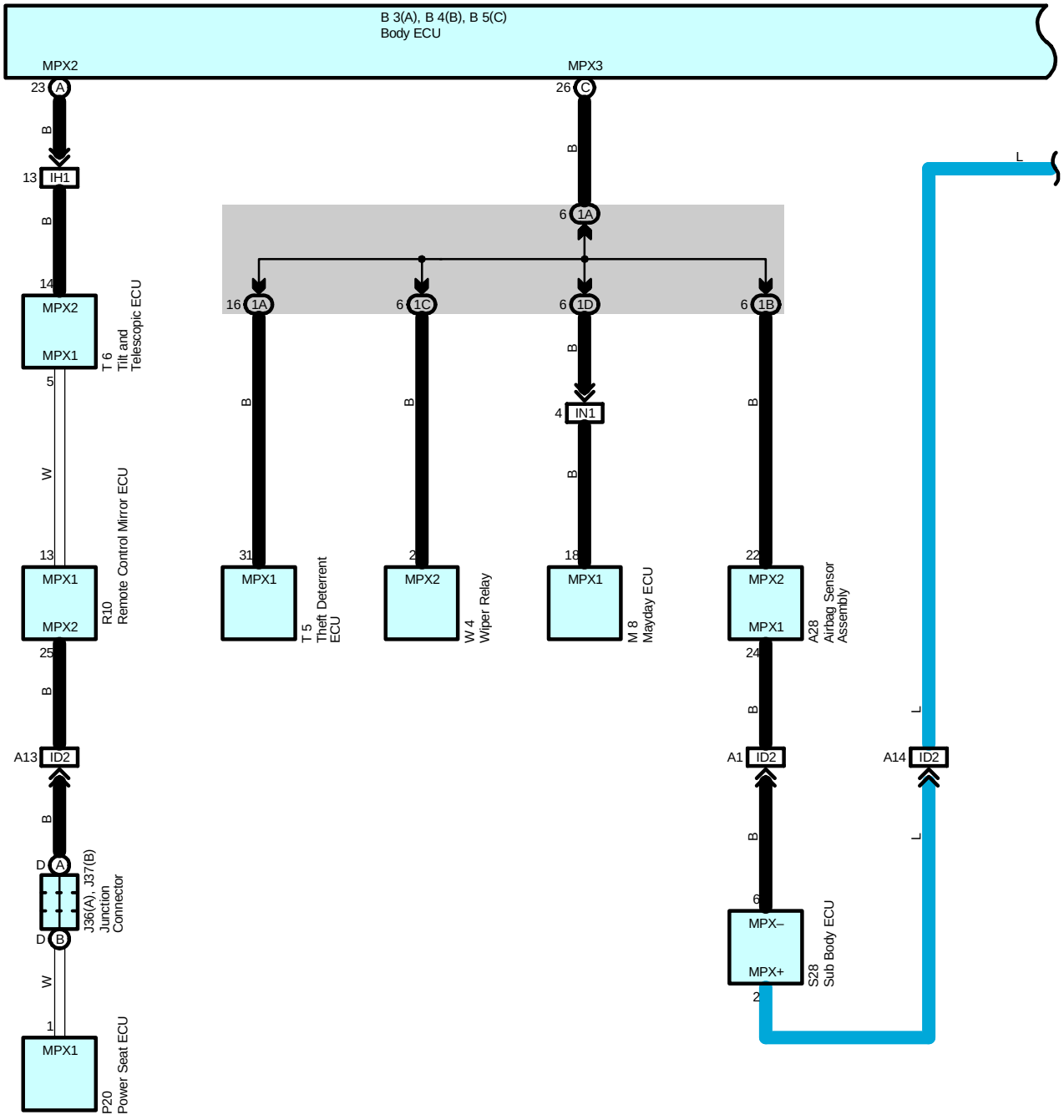
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D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

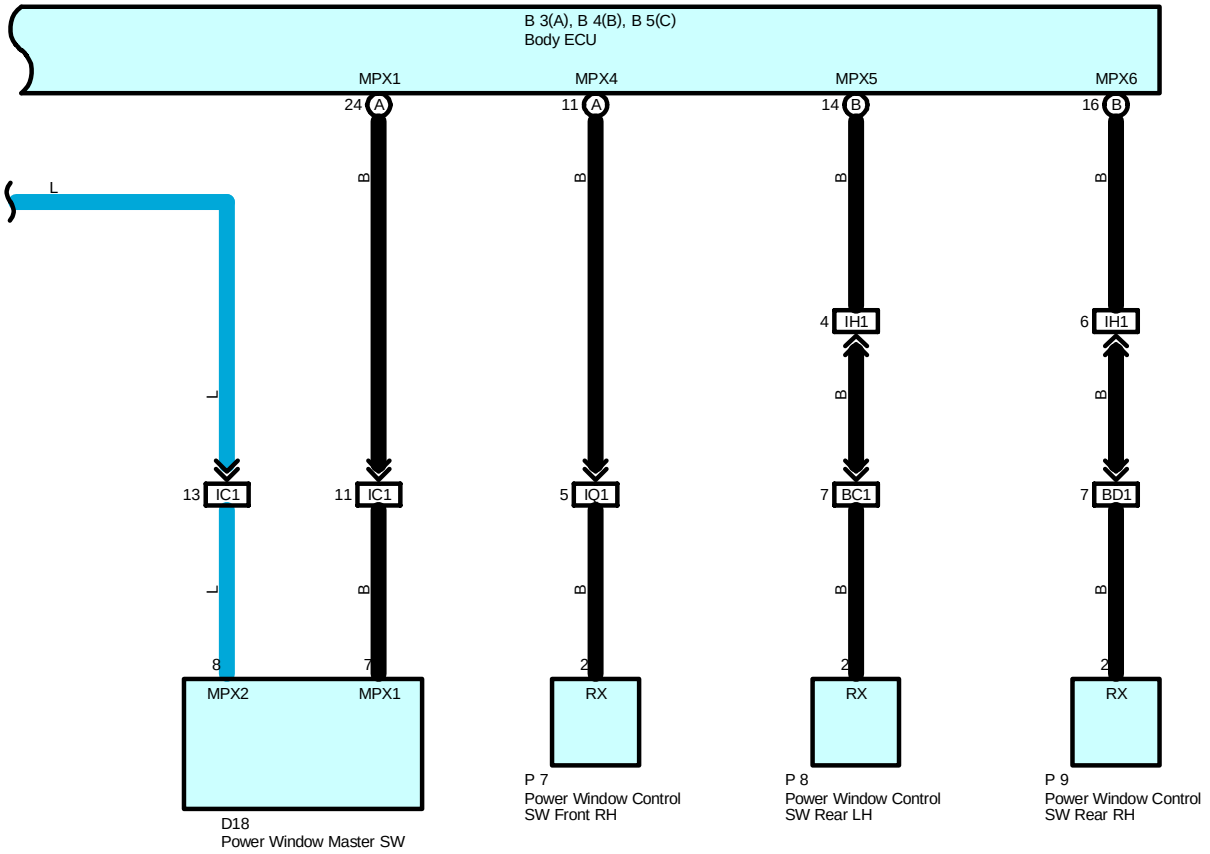
: Connector Joining Wire Harness and Wire Harness

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


B 3(A), B 4(B), B 5(C)
Body ECU
MPX2
MPX3
23 A
26 C
B
13 IH1
6 1A
14
MPX2
MPX1
T 6
Tilt and
Telescopic ECU
16 1A
6 1C
6 1D
6 1B
L
5
W
4 IN1
13
MPX1
MPX2
R10
Remote Control Mirror ECU
31
MPX1
T 5
Theft Deterrent
ECU
2
MPX2
W 4
Wiper Relay
18
MPX1
M 8
Mayday ECU
22
MPX2
MPX1
A28
Airbag Sensor
Assembly
25
24
A13 ID2
A1 ID2
A14 ID2
D A
D B
J36(A), J37(B)
Junction
Connector
6
MPX–
MPX+
2
S28
Sub Body ECU
1
MPX1
P20
Power Seat ECU


B 3(A), B 4(B), B 5(C)
Body ECU
MPX1
MPX4
MPX5
MPX6
24 A
11 A
14 B
16 B
L
B
4 IH1
6 IH1
13 IC1
11 IC1
5 IQ1
7 BC1
7 BD1
8
7
2
2
2
MPX2
MPX1
RX
RX
RX
D18
Power Window Master SW
P 7
Power Window Control
SW Front RH
P 8
Power Window Control
SW Rear LH
P 9
Power Window Control
SW Rear RH

Multiplex Communication System (Communication 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**
- **Power Window**
- **Rear Wiper and Washer**
- **Seat Belt Warning**
- **Theft Deterrent**
- **Wireless Door Lock Control**

○ : Parts Location

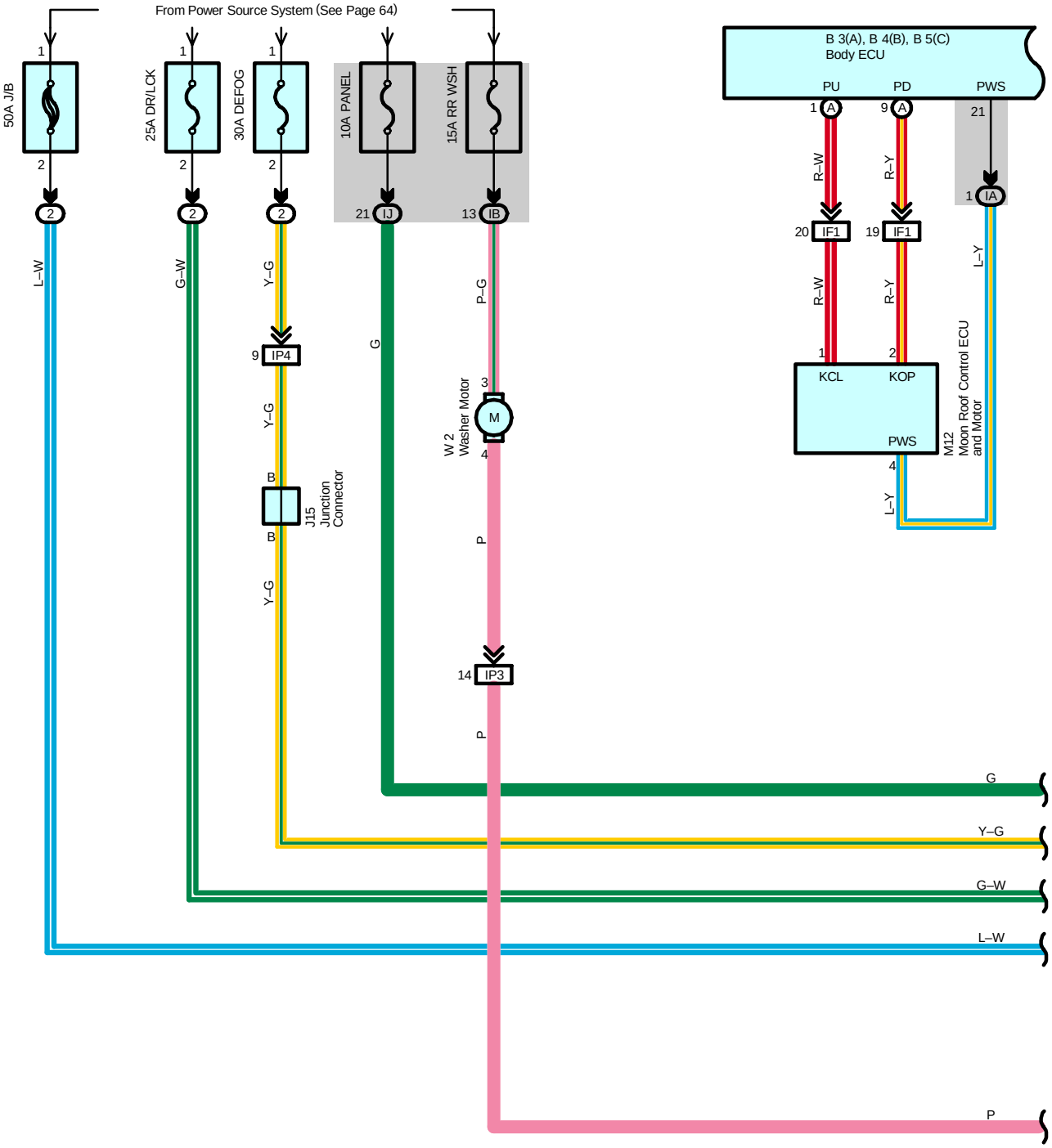
Code	See Page	Code	See Page	Code	See Page
A28	38	J37 B	46	R10	41
B3 A	38	M8	44	S28	45
B4 B	38	P7	44	T5	41
B5 C	38	P8	44	T6	41
D18	42	P9	44	W4	41
J36 A	46	P20	46		

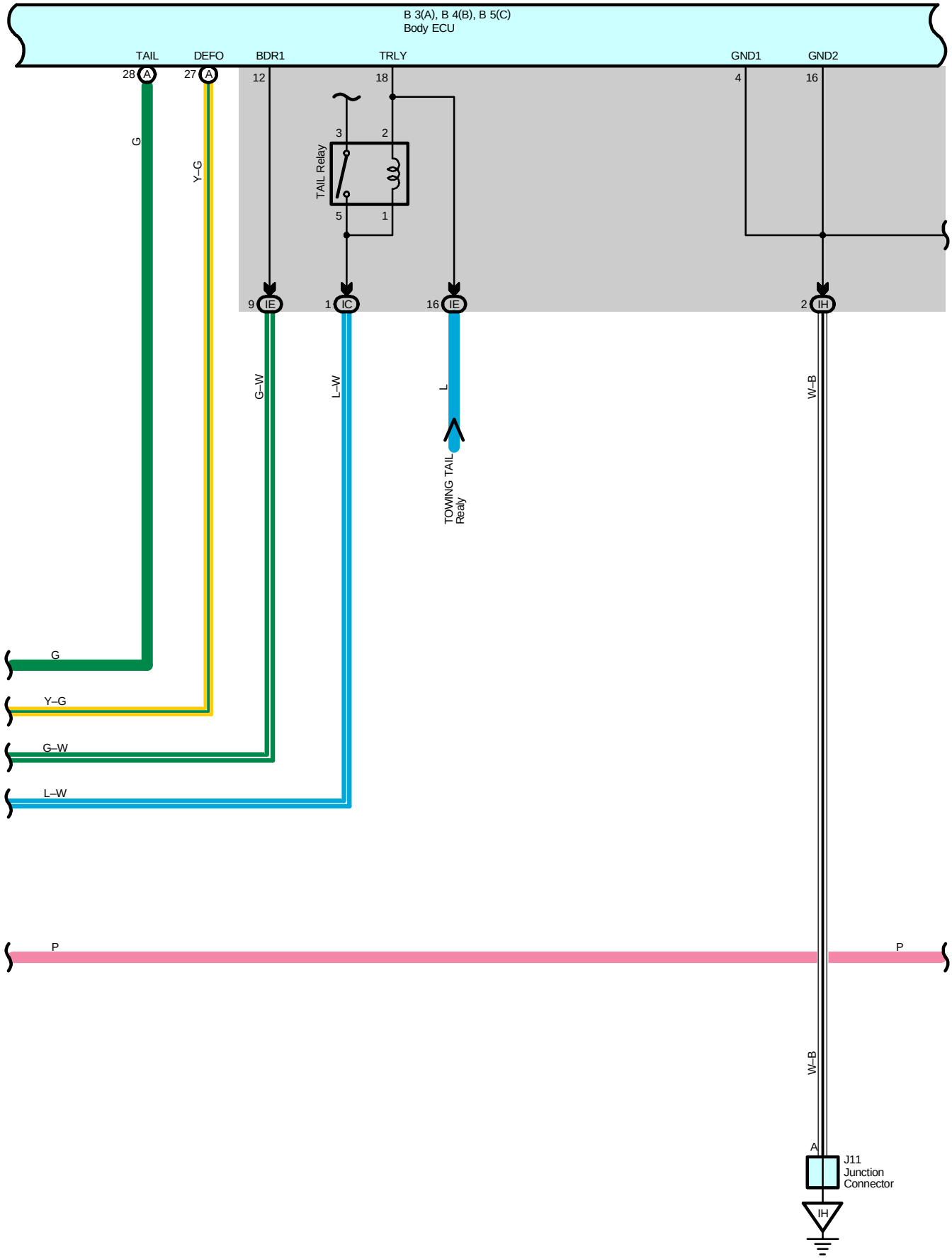
⬭ : Junction Block and Wire Harness Connector

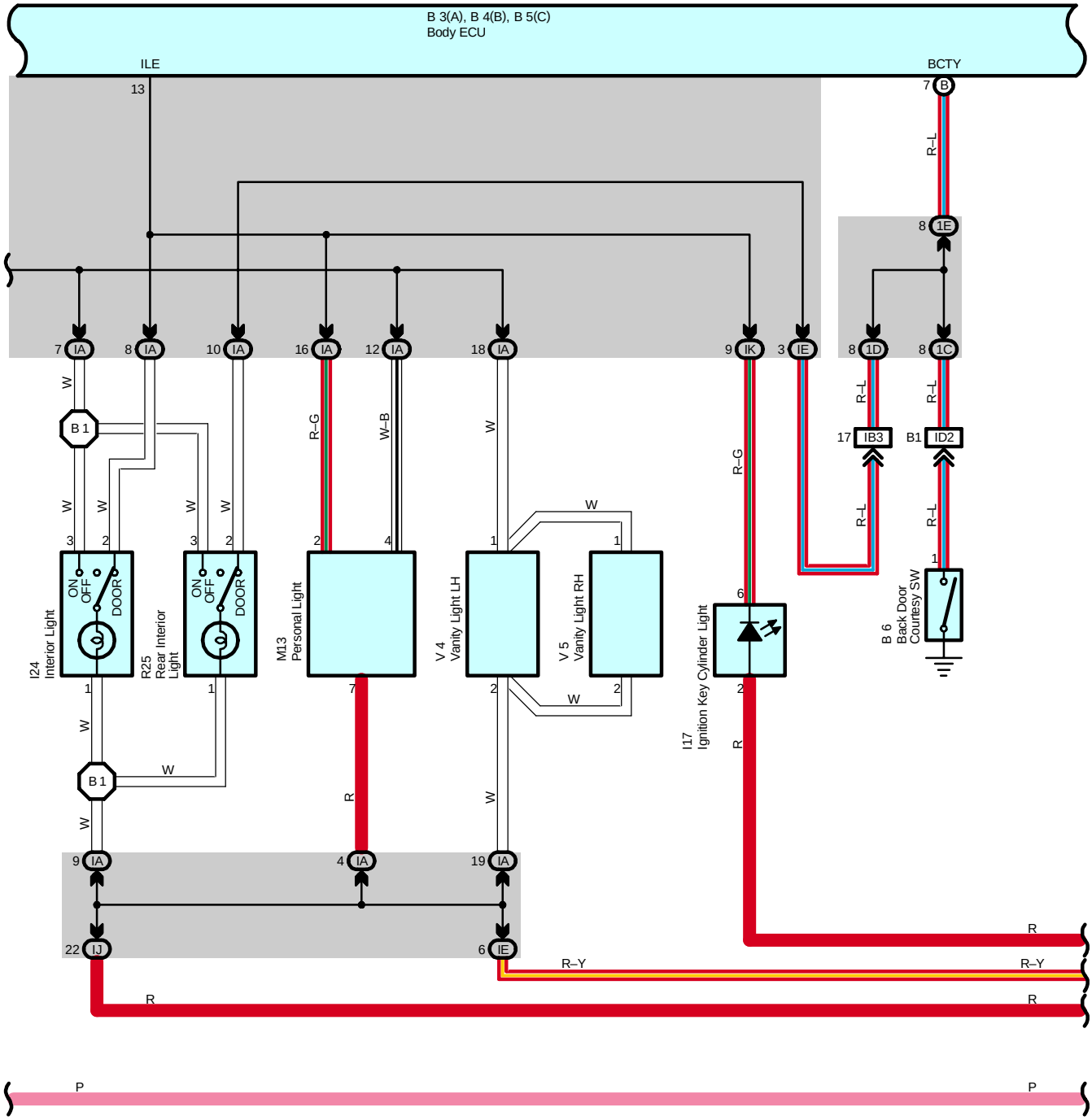
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		

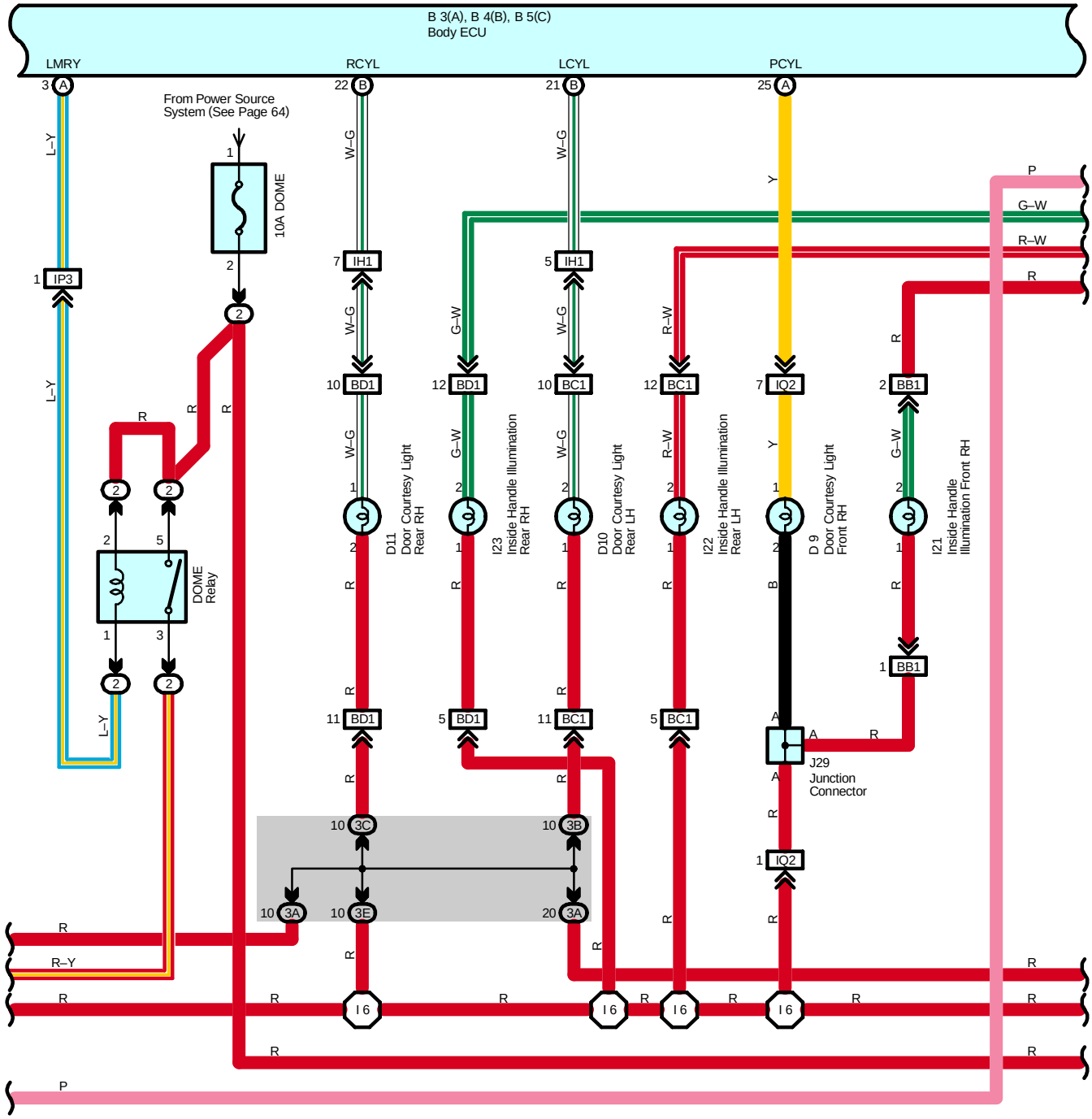
▭ : Connector Joining Wire Harness and Wire Harness

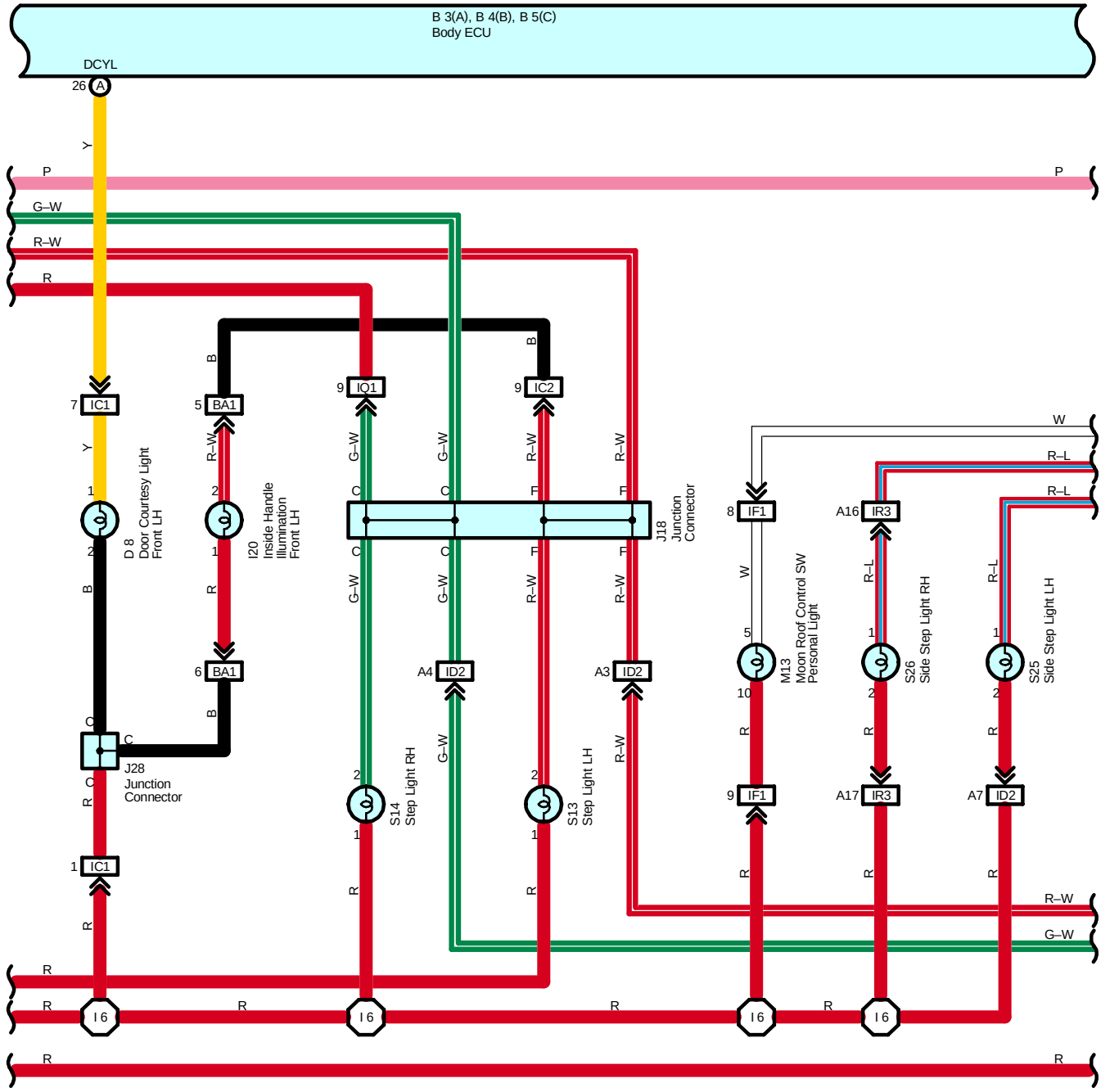
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
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)

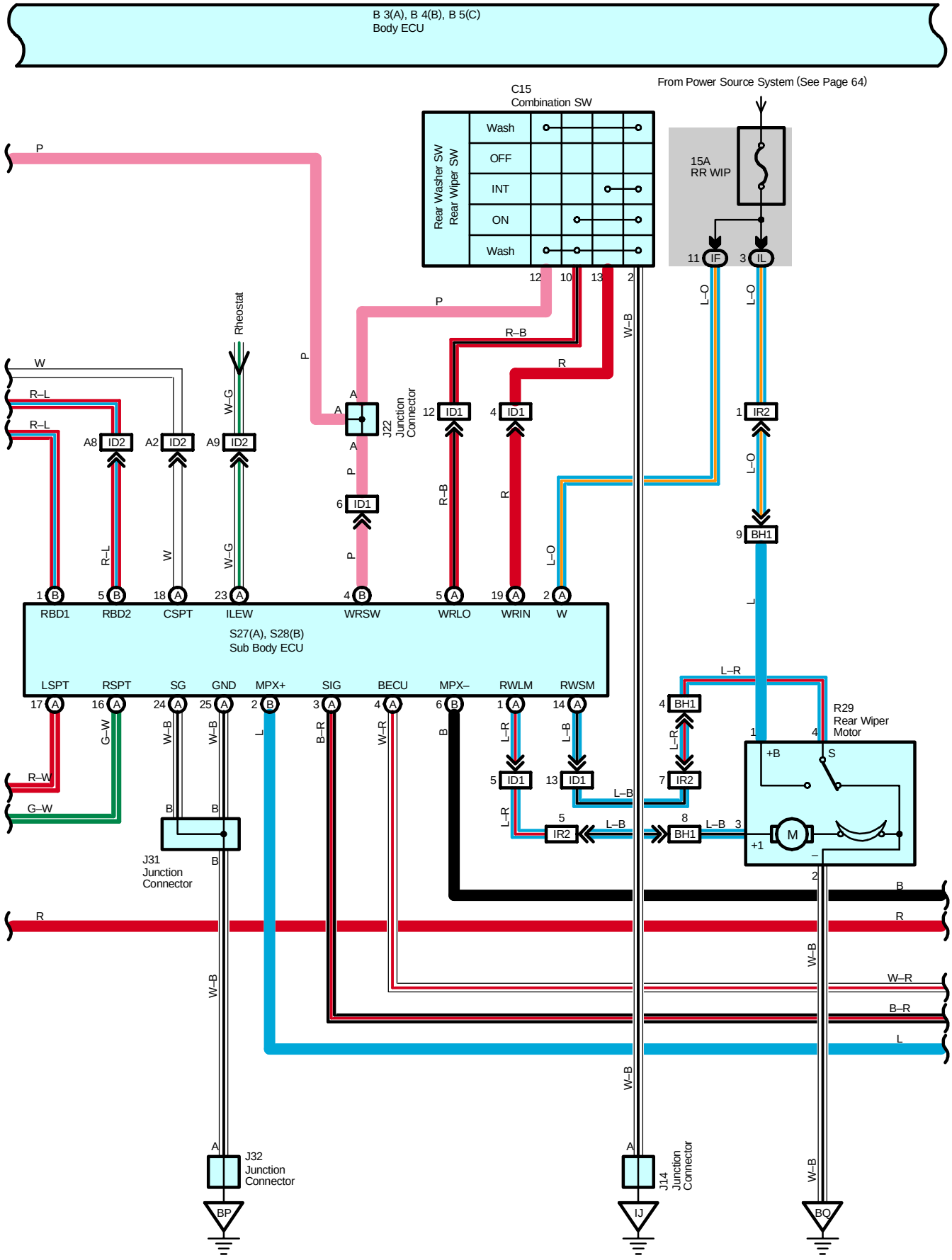

From Power Source System (See Page 64)
50A J/B
25A DR/LCK
30A DEFOG
10A PANEL
15A RR WSH
B 3(A), B 4(B), B 5(C)
Body ECU
PU
PD
PWS
R–W
R–Y
L–Y
IF1
KCL
KOP
M12
Moon Roof Control ECU
and Motor
IP4
IP3
J15
Junction
Connector
W 2
Washer Motor
M
L–W
G–W
Y–G
P–G
G
P

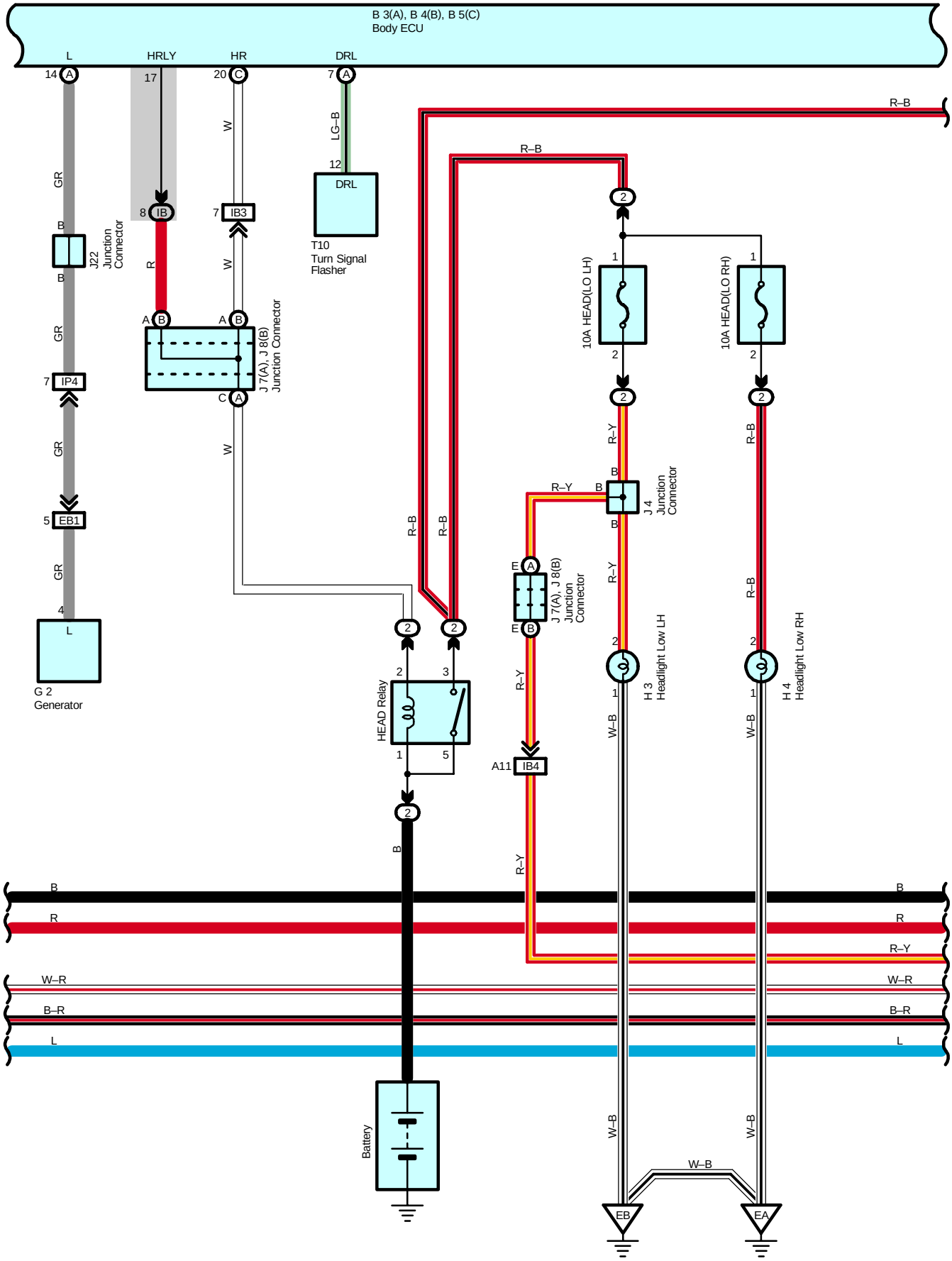

B 3(A), B 4(B), B 5(C)
Body ECU
TAIL
DEFO
BDR1
TRLY
GND1
GND2
28 A
27 A
12
18
4
16
3
2
5
1
TAIL Relay
9 IE
1 IC
16 IE
2 IH
G
Y–G
G–W
L–W
L
W–B
TOWING TAIL Realy
G
Y–G
G–W
L–W
P
P
W–B
A
J11
Junction
Connector
IH

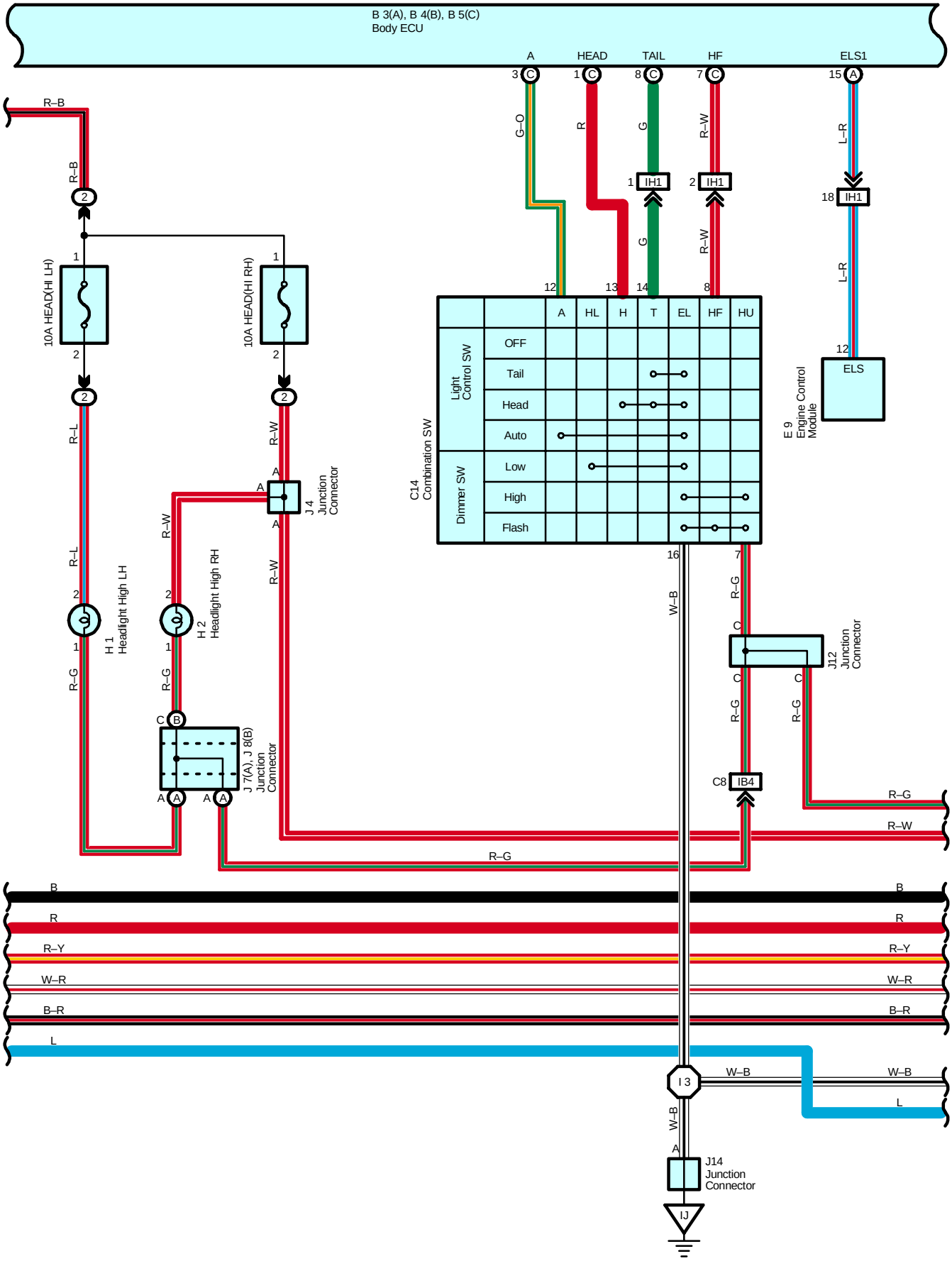

B 3(A), B 4(B), B 5(C)
Body ECU
ILE
BCTY
13
7 B
8 1E
7 IA
8 IA
10 IA
16 IA
12 IA
18 IA
9 IK
3 IE
8 1D
8 1C
17 IB3
B1 ID2
B 1
W
R–G
W–B
R–L
ON
OFF
DOOR
I24
Interior Light
R25
Rear Interior
Light
M13
Personal Light
V 4
Vanity Light LH
V 5
Vanity Light RH
I17
Ignition Key Cylinder Light
B 6
Back Door
Courtesy SW
9 IA
4 IA
19 IA
22 IJ
6 IE
R
R–Y
P

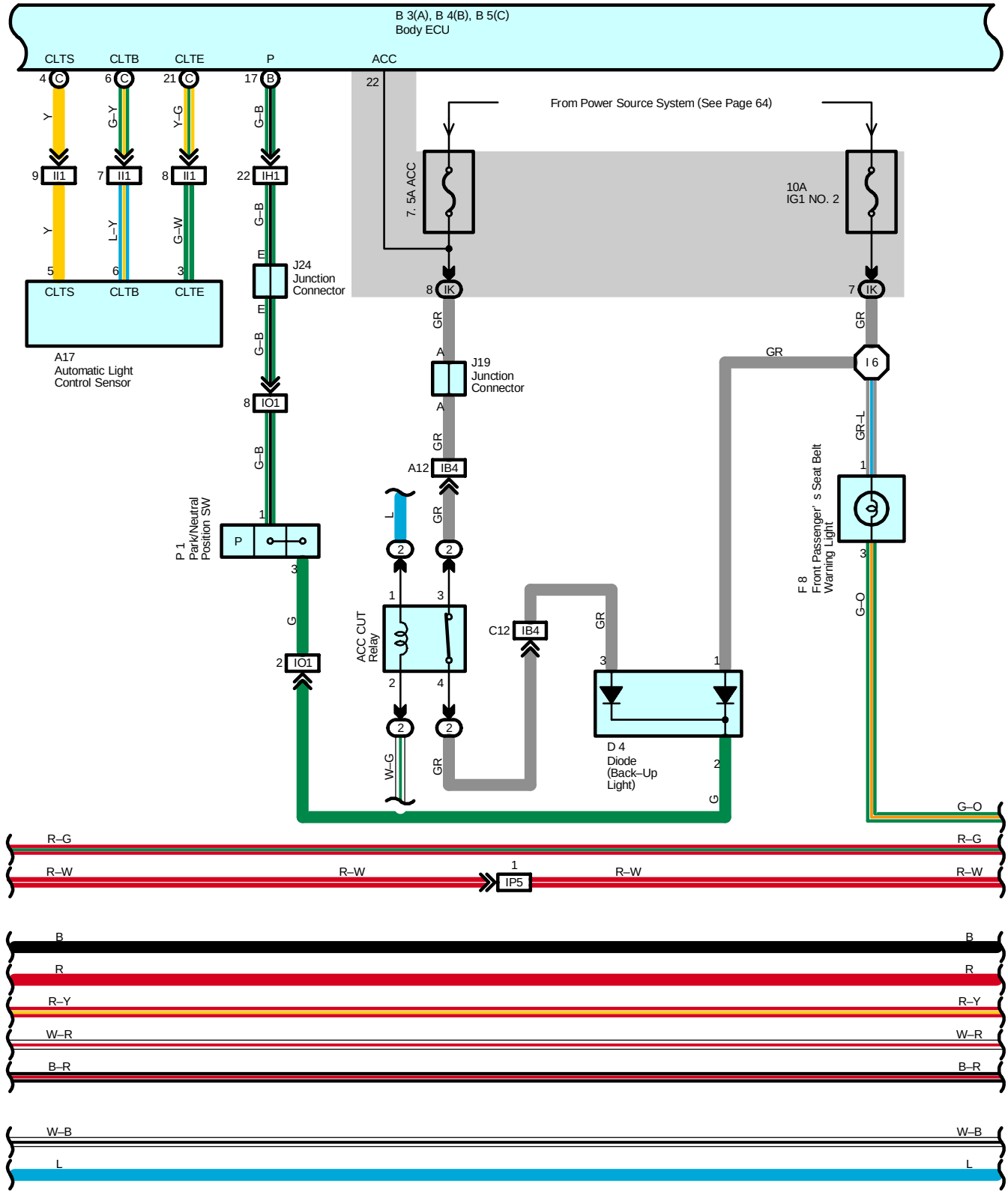

B 3(A), B 4(B), B 5(C)
Body ECU
LMRY
RCYL
LCYL
PCYL
From Power Source System (See Page 64)
10A DOME
DOME Relay
D11 Door Courtesy Light Rear RH
I23 Inside Handle Illumination Rear RH
D10 Door Courtesy Light Rear LH
I22 Inside Handle Illumination Rear LH
D 9 Door Courtesy Light Front RH
I21 Inside Handle Illumination Front RH
J29 Junction Connector
I 6

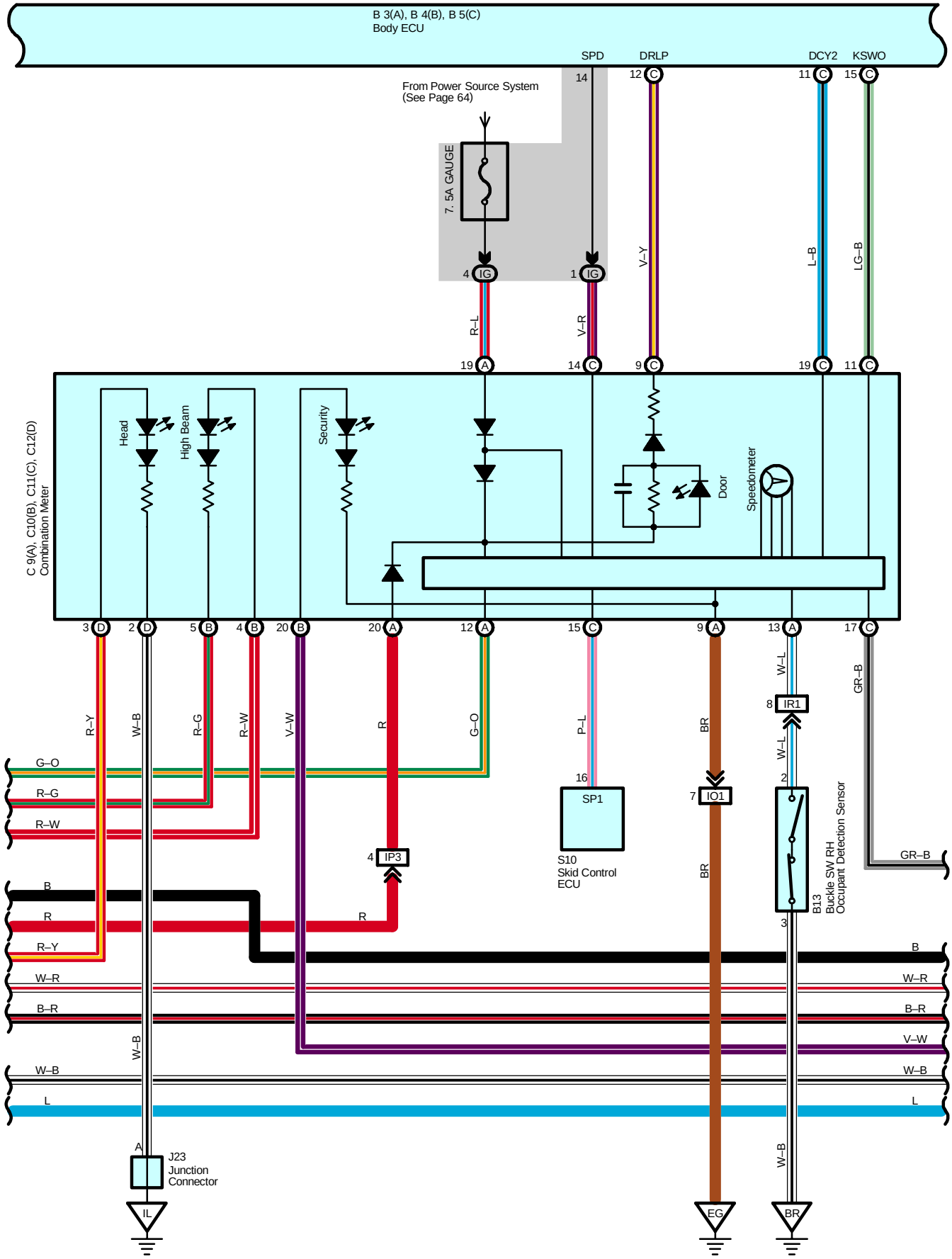

B 3(A), B 4(B), B 5(C)
Body ECU
DCYL
26 A
Y
P
G–W
R–W
R
7 IC1
5 BA1
9 IQ1
9 IC2
D 8
Door Courtesy Light
Front LH
I20
Inside Handle
Illumination
Front LH
J18
Junction
Connector
J28
Junction
Connector
6 BA1
A4 ID2
A3 ID2
S14
Step Light RH
S13
Step Light LH
8 IF1
M13
Moon Roof Control SW
Personal Light
A16 IR3
S26
Side Step Light RH
A17 IR3
A7 ID2
S25
Side Step Light LH
9 IF1
1 IC1
I 6
W
R–L

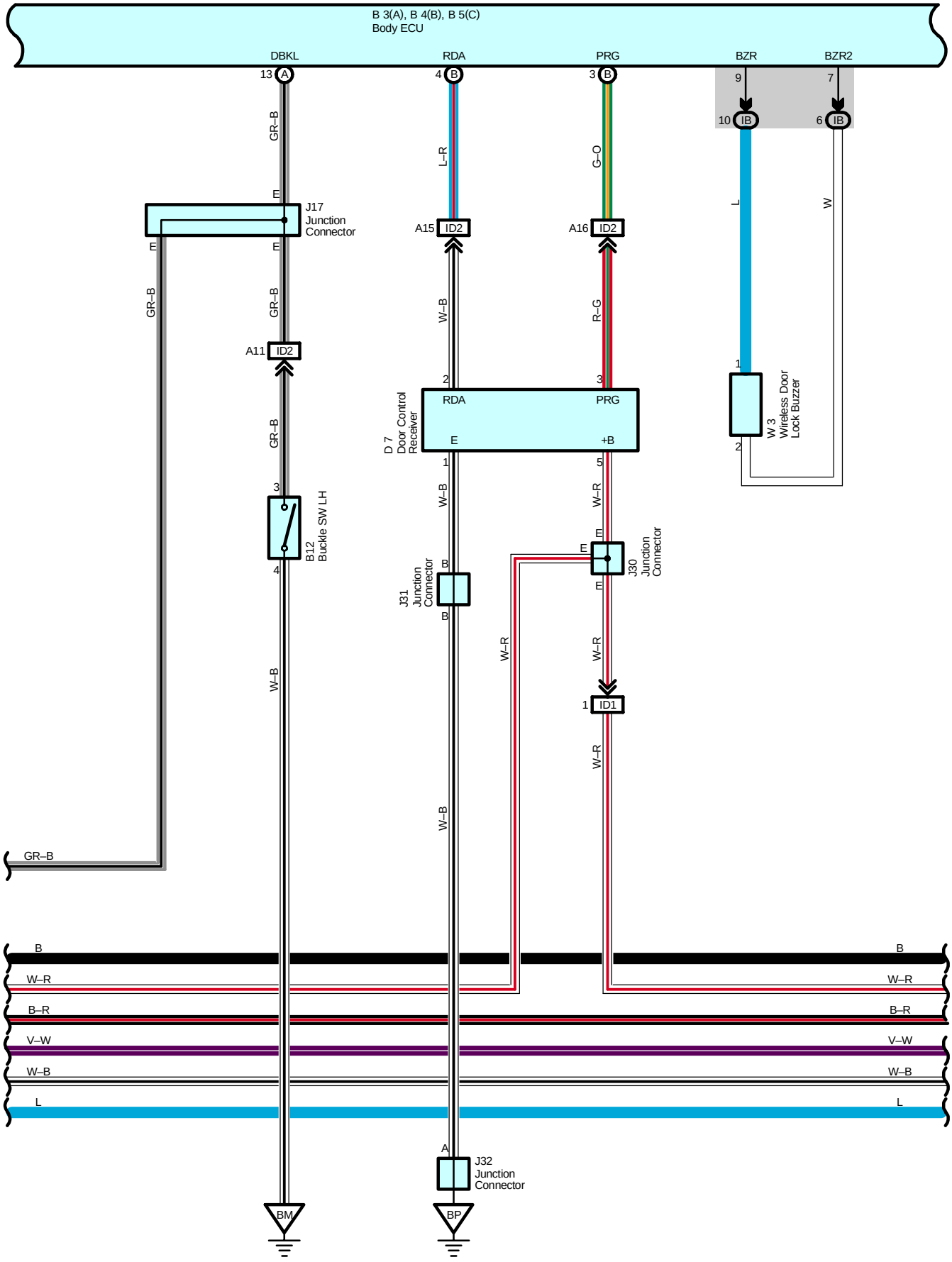

B 3(A), B 4(B), B 5(C)
Body ECU
From Power Source System (See Page 64)
C15
Combination SW
Rear Washer SW
Rear Wiper SW
Wash
OFF
INT
ON
Wash
15A
RR WIP
11 IF
3 IL
Rheostat
J22
Junction
Connector
ID1
ID2
IR2
BH1
S27(A), S28(B)
Sub Body ECU
RBD1
RBD2
CSPT
ILEW
WRSW
WRLO
WRIN
W
LSPT
RSPT
SG
GND
MPX+
SIG
BECU
MPX–
RWLM
RWSM
R29
Rear Wiper
Motor
+B
S
M
+1
–
J31
Junction
Connector
J32
Junction
Connector
J14
Junction
Connector
BP
IJ
BQ

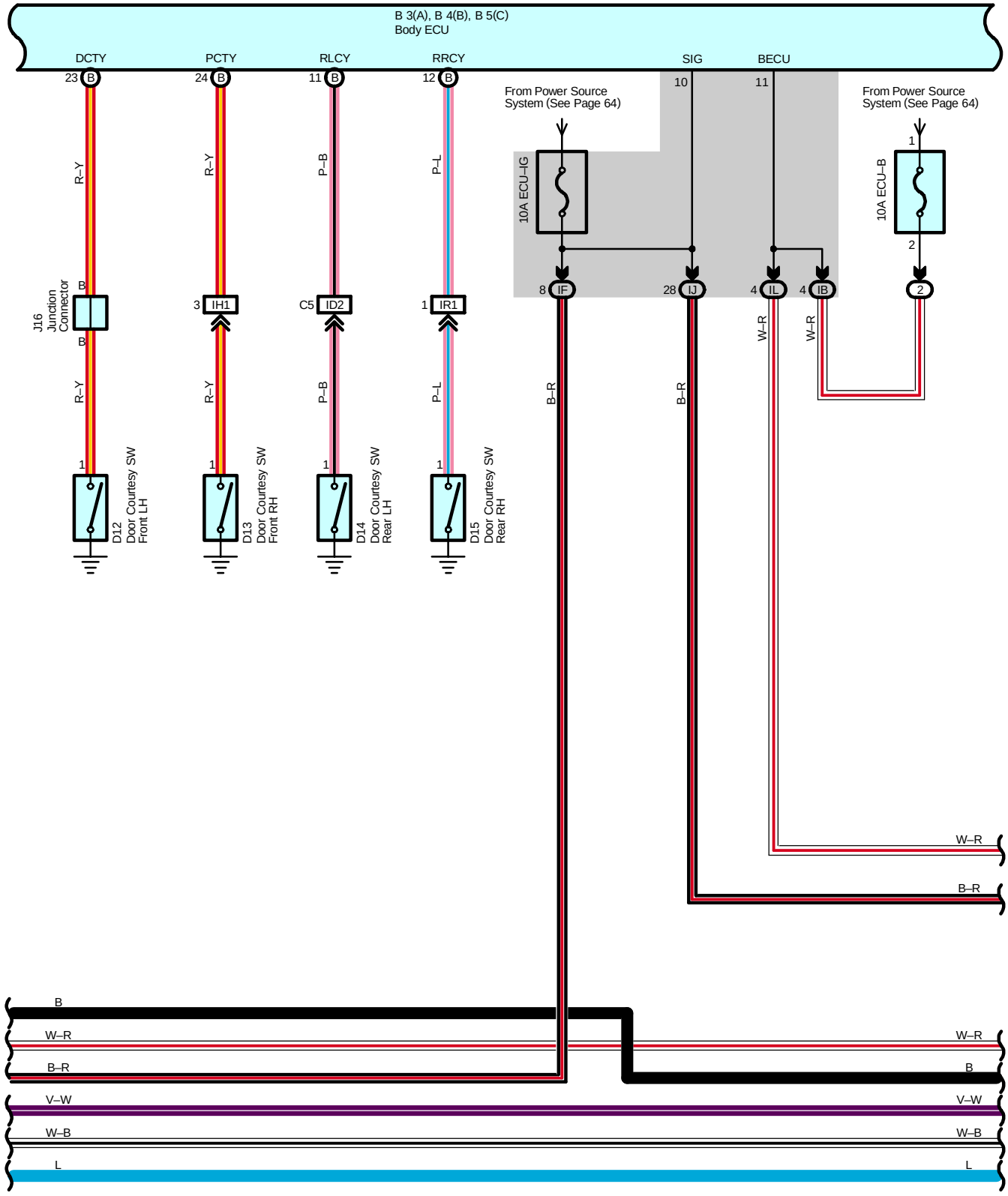

B 3(A), B 4(B), B 5(C)
Body ECU
L
HRLY
HR
DRL
14 A
17
20 C
7 A
GR
W
LG–B
12
DRL
T10
Turn Signal
Flasher
R–B
2
1
10A HEAD(LO LH)
10A HEAD(LO RH)
2
B
J22
Junction
Connector
B
R
8 IB
7 IB3
A B
A B
J 7(A), J 8(B)
Junction Connector
C A
7 IP4
5 EB1
4
L
G 2
Generator
R–Y
J 4
Junction
Connector
E A
E B
J 7(A), J 8(B)
Junction
Connector
HEAD Relay
2
3
1
5
A11 IB4
H 3
Headlight Low LH
H 4
Headlight Low RH
W–B
B
R
R–Y
W–R
B–R
L
Battery
EB
EA

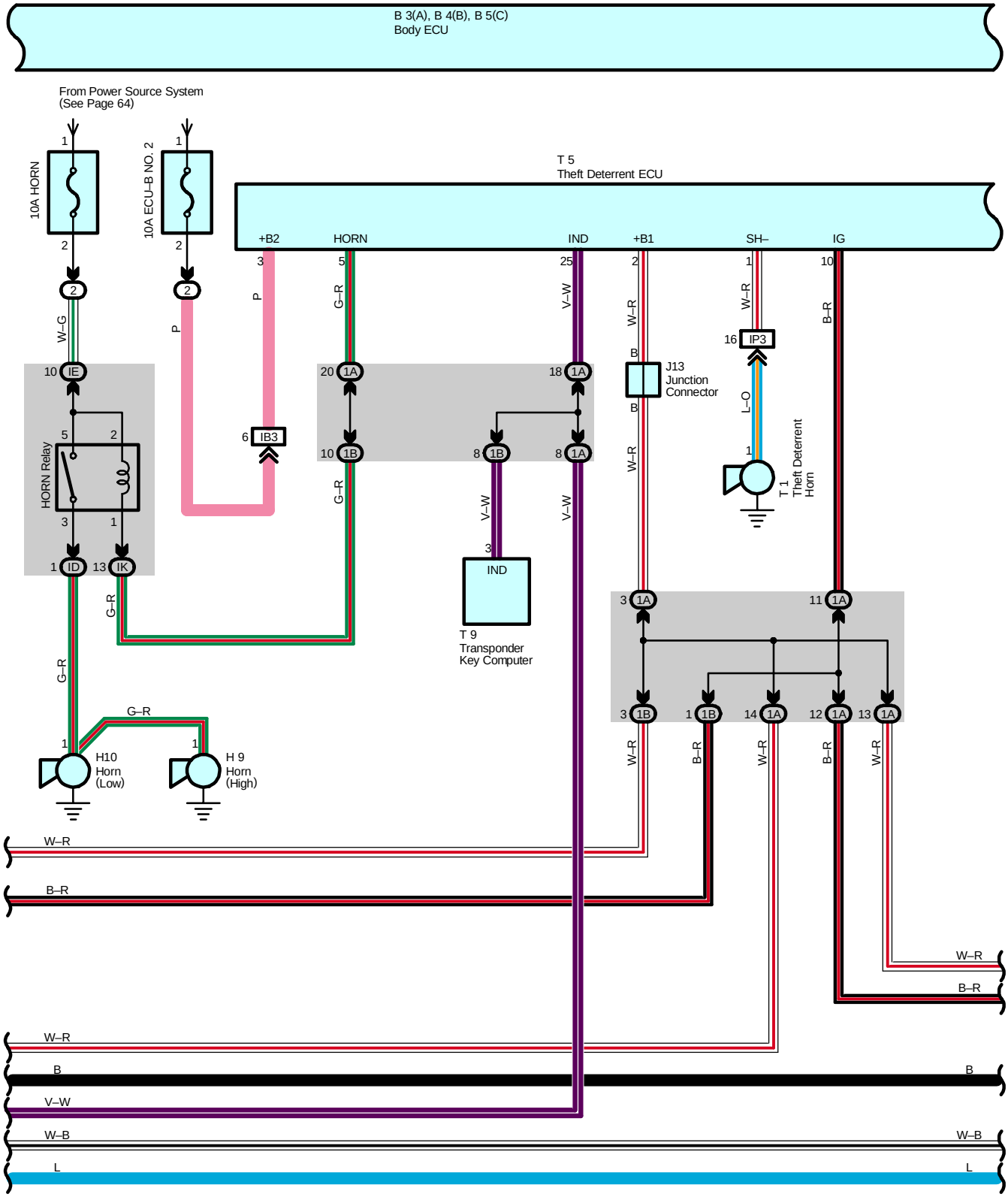

B 3(A), B 4(B), B 5(C)
Body ECU
A
HEAD
TAIL
HF
ELS1
3
1
8
7
15
G–O
R
G
R–W
L–R
IH1
18
12
ELS
E 9
Engine Control
Module
10A HEAD(HI LH)
10A HEAD(HI RH)
R–B
R–L
R–W
C14
Combination SW
Light
Control SW
Dimmer SW
OFF
Tail
Head
Auto
Low
High
Flash
A
HL
H
T
EL
HF
HU
16
7
W–B
R–G
J 4
Junction
Connector
H 1
Headlight High LH
H 2
Headlight High RH
J 7(A), J 8(B)
Junction
Connector
J12
Junction
Connector
C8
IB4
B
R
R–Y
W–R
B–R
L
I 3
J14
Junction
Connector
IJ

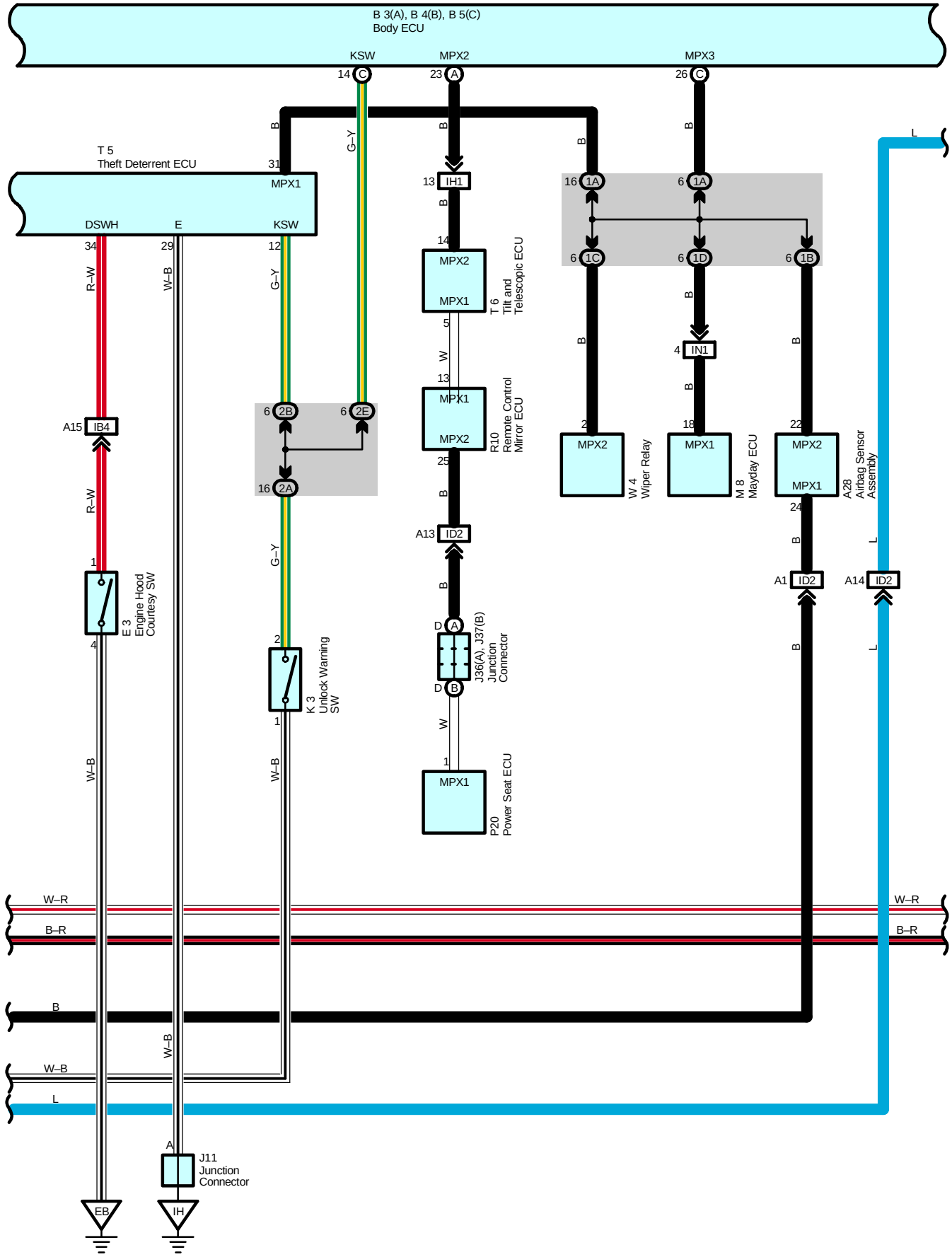

B 3(A), B 4(B), B 5(C)
Body ECU
CLTS
CLTB
CLTE
P
ACC
From Power Source System (See Page 64)
7. 5A ACC
10A
IG1 NO. 2
J24
Junction
Connector
J19
Junction
Connector
A17
Automatic Light
Control Sensor
P 1
Park/Neutral
Position SW
ACC CUT
Relay
C12
IB4
D 4
Diode
(Back–Up
Light)
F 8
Front Passenger' s Seat Belt
Warning Light
IP5
R–G
R–W
B
R
R–Y
W–R
B–R
W–B
L
G–O
GR
GR–L
G
W–G

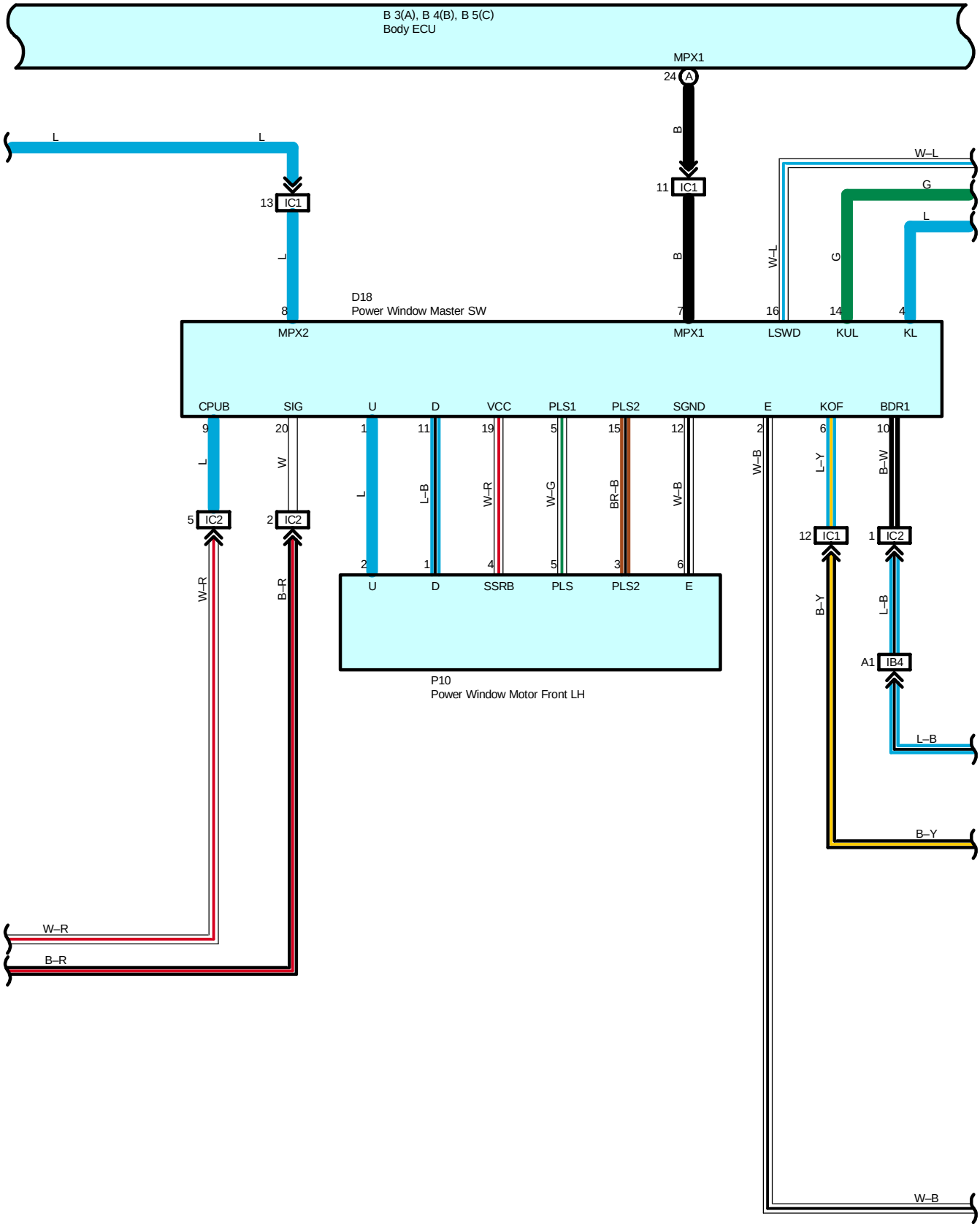

B 3(A), B 4(B), B 5(C)
Body ECU
SPD
DRLP
DCY2
KSWO
From Power Source System
(See Page 64)
7. 5A GAUGE
IG
R–L
V–R
V–Y
L–B
LG–B
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
Head
High Beam
Security
Door
Speedometer
R–Y
W–B
R–G
R–W
V–W
R
G–O
P–L
BR
W–L
GR–B
IR1
IP3
SP1
IO1
S10
Skid Control
ECU
B13
Buckle SW RH
Occupant Detection Sensor
B
W–R
B–R
L
J23
Junction
Connector
IL
EG
BR

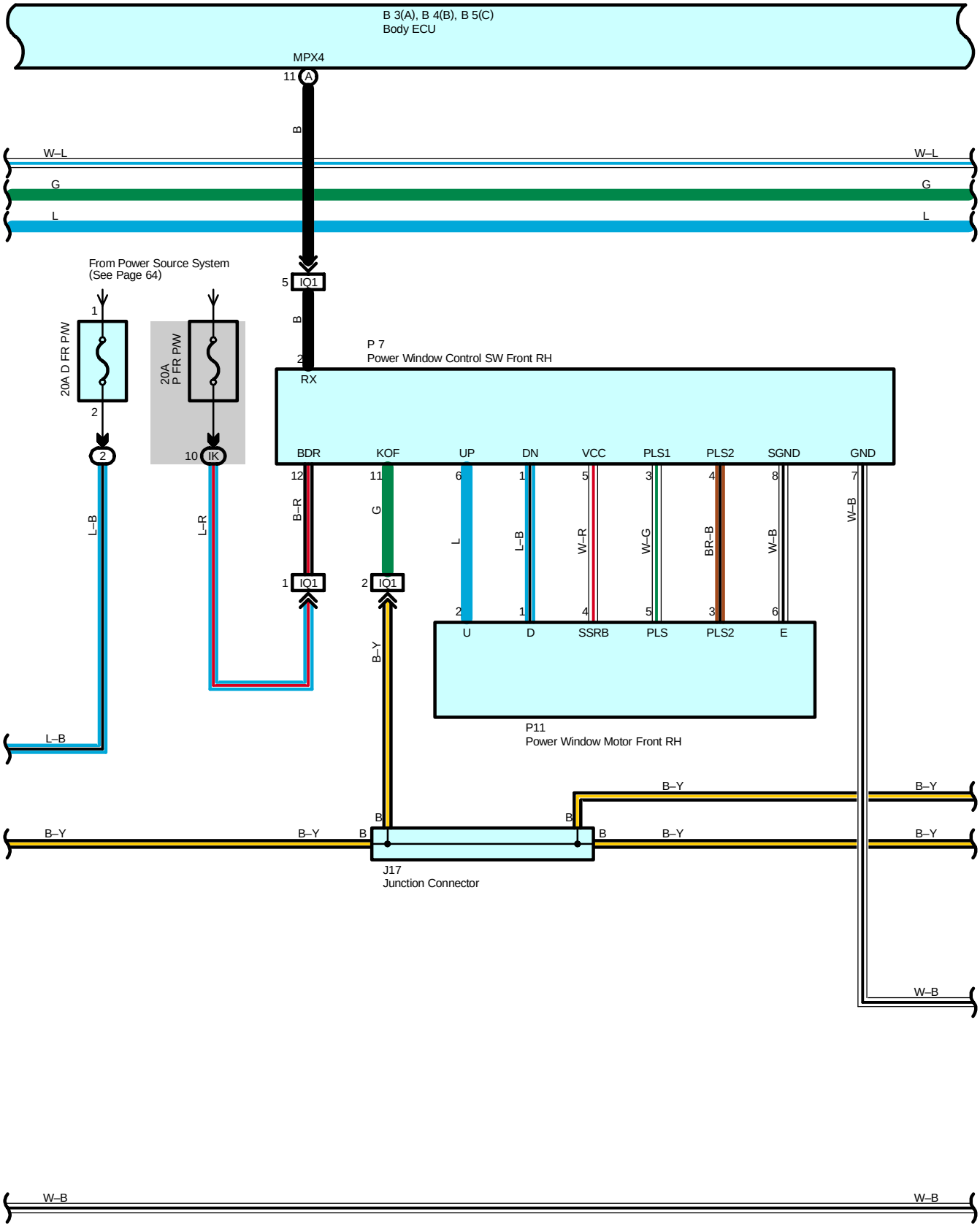

B 3(A), B 4(B), B 5(C)
Body ECU
DBKL
RDA
PRG
BZR
BZR2
13 A
4 B
3 B
9
7
10 IB
6 IB
GR–B
L–R
G–O
L
W
E
J17
Junction
Connector
E
E
GR–B
GR–B
A15 ID2
A16 ID2
W–B
R–G
A11 ID2
2
3
RDA
PRG
D 7
Door Control
Receiver
E
+B
1
5
1
W 3
Wireless Door
Lock Buzzer
2
GR–B
W–B
W–R
3
B12
Buckle SW LH
4
E
J30
Junction
Connector
E
J31
Junction
Connector
B
B
W–R
W–R
1 ID1
W–R
W–B
GR–B
B
W–R
B–R
V–W
W–B
L
B
W–R
B–R
V–W
W–B
L
A
J32
Junction
Connector
BM
BP

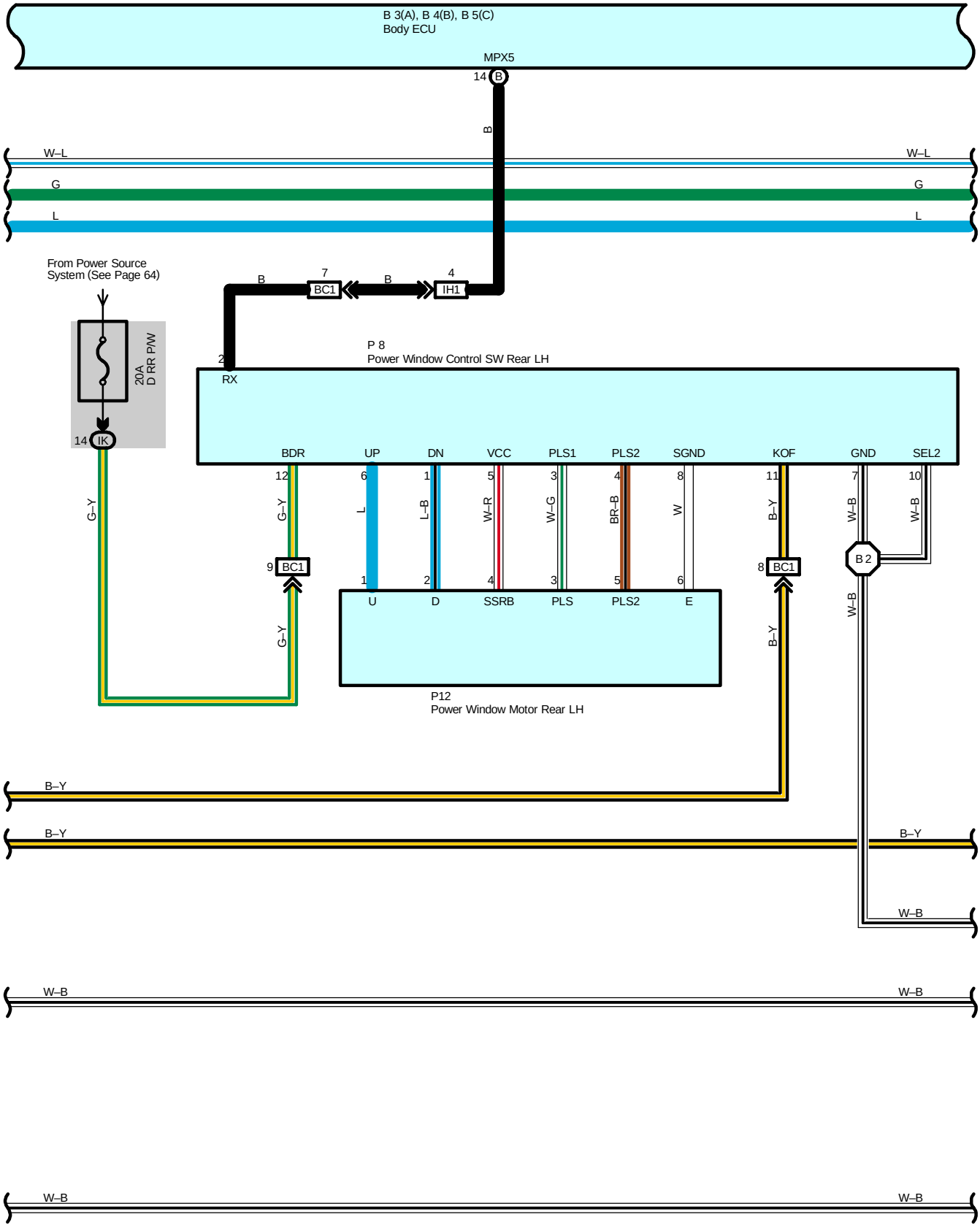

B 3(A), B 4(B), B 5(C)
Body ECU
DCTY
PCTY
RLCY
RRCY
SIG
BECU
23
24
11
12
10
11
From Power Source System (See Page 64)
From Power Source System (See Page 64)
10A ECU-IG
10A ECU-B
R–Y
R–Y
P–B
P–L
J16 Junction Connector
3 IH1
C5 ID2
1 IR1
8 IF
28 IJ
4 IL
4 IB
2
W–R
W–R
B–R
B–R
D12 Door Courtesy SW Front LH
D13 Door Courtesy SW Front RH
D14 Door Courtesy SW Rear LH
D15 Door Courtesy SW Rear RH
W–R
B–R
B
W–R
B–R
W–R
B
V–W
V–W
W–B
W–B
L
L

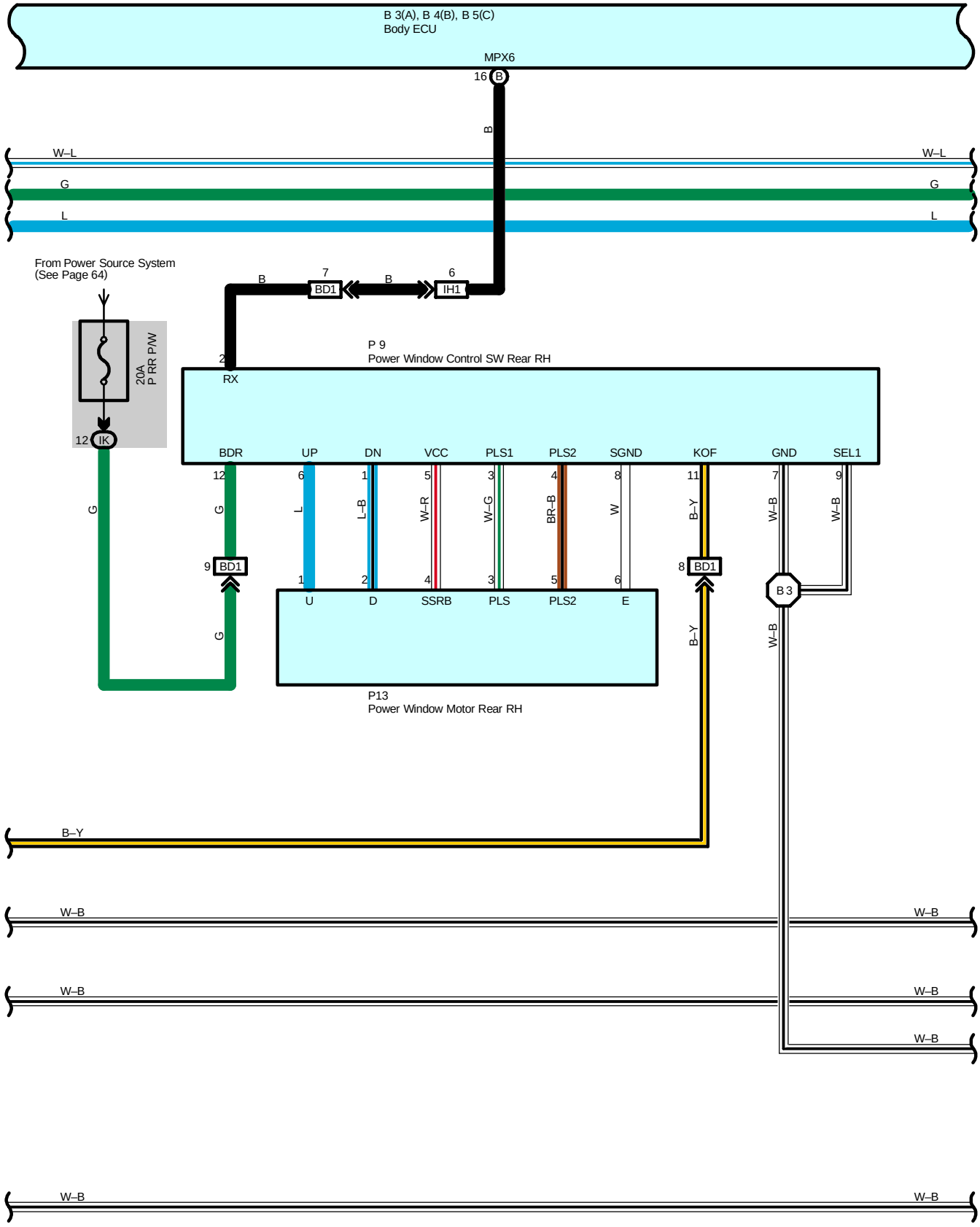

B 3(A), B 4(B), B 5(C)
Body ECU
From Power Source System
(See Page 64)
10A HORN
10A ECU–B NO. 2
T 5
Theft Deterrent ECU
+B2
HORN
IND
+B1
SH–
IG
J13
Junction
Connector
IP3
IB3
IE
IK
ID
1A
1B
HORN Relay
T 1
Theft Deterrent
Horn
T 9
Transponder
Key Computer
H10
Horn
(Low)
H 9
Horn
(High)
W–G
P
G–R
V–W
W–R
B
L–O
B–R
W–B
L

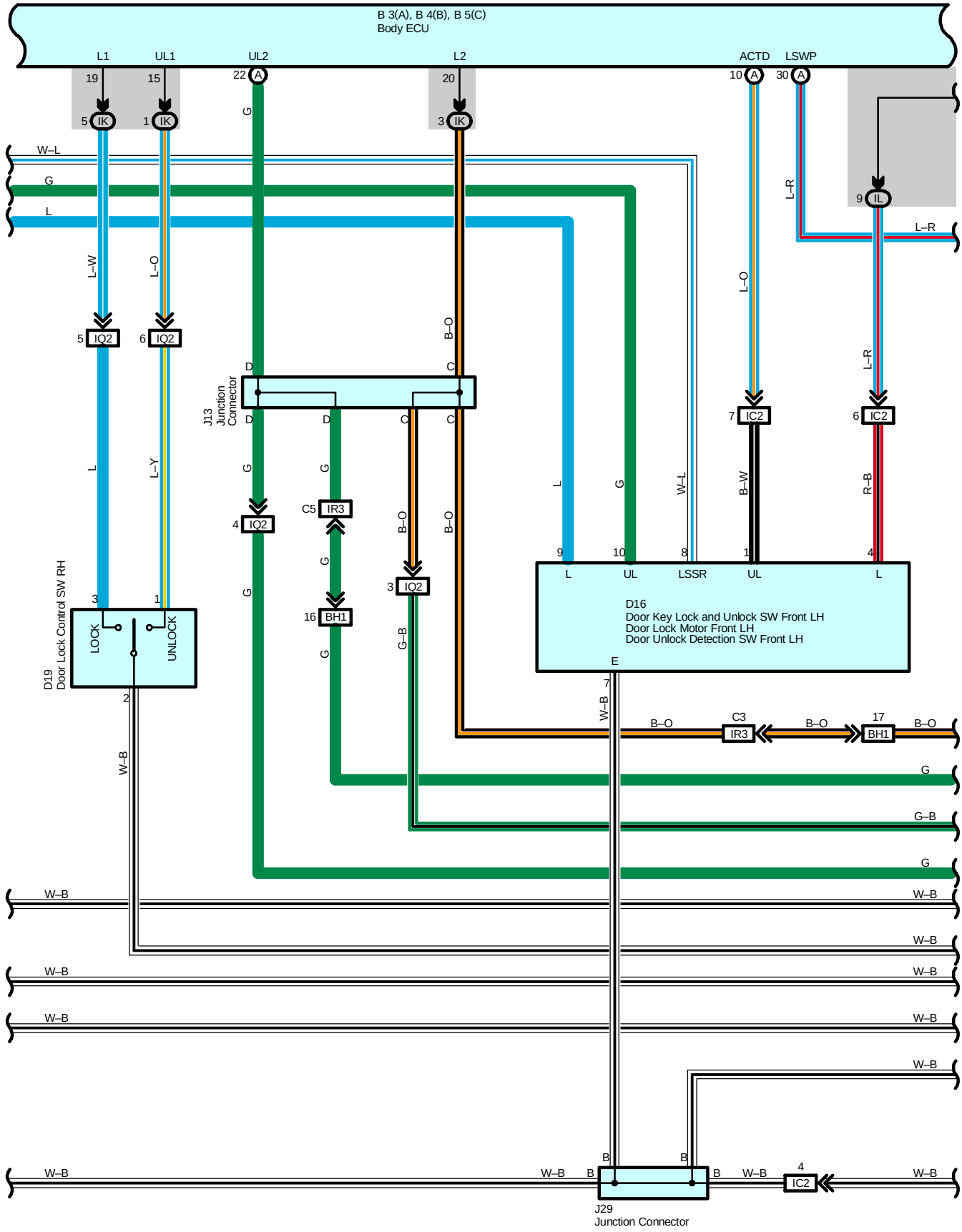

B 3(A), B 4(B), B 5(C)
Body ECU
KSW
MPX2
MPX3
14 C
23 A
26 C
T 5
Theft Deterrent ECU
31
MPX1
DSWH
E
KSW
34
29
12
R–W
W–B
G–Y
13 IH1
14
MPX2
MPX1
T 6
Tilt and
Telescopic ECU
5
W
13
MPX1
MPX2
R10
Remote Control
Mirror ECU
25
A13 ID2
D A
D B
J36(A), J37(B)
Junction
Connector
W
1
MPX1
P20
Power Seat ECU
16 1A
6 1A
6 1C
6 1D
6 1B
2
MPX2
W 4
Wiper Relay
4 IN1
18
MPX1
M 8
Mayday ECU
22
MPX2
MPX1
A28
Airbag Sensor
Assembly
24
A1 ID2
A14 ID2
L
B
A15 IB4
1
4
E 3
Engine Hood
Courtesy SW
6 2B
6 2E
16 2A
2
1
K 3
Unlock Warning
SW
W–R
B–R
A
J11
Junction
Connector
EB
IH

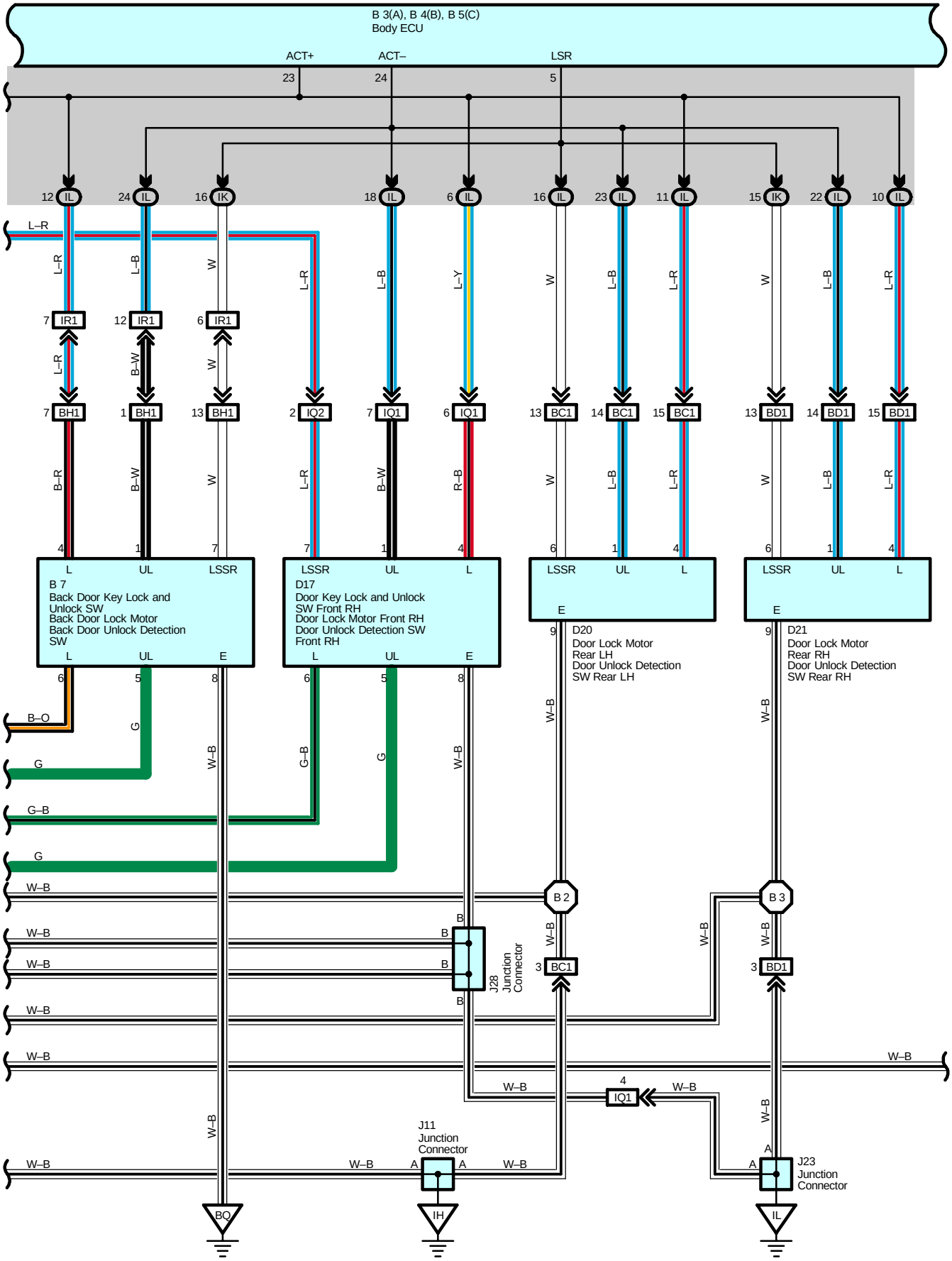

B 3(A), B 4(B), B 5(C)
Body ECU
MPX1
24 A
B
11 IC1
B
7
MPX1
L
L
13 IC1
L
8
MPX2
D18
Power Window Master SW
W–L
G
L
W–L
G
16
LSWD
14
KUL
4
KL
CPUB
SIG
U
D
VCC
PLS1
PLS2
SGND
E
KOF
BDR1
9
20
1
11
19
5
15
12
2
6
10
L
W
L
L–B
W–R
W–G
BR–B
W–B
W–B
L–Y
B–W
5 IC2
2 IC2
12 IC1
1 IC2
W–R
B–R
B–Y
L–B
A1 IB4
2
1
4
5
3
6
U
D
SSRB
PLS
PLS2
E
P10
Power Window Motor Front LH
L–B
B–Y
W–R
B–R
W–B

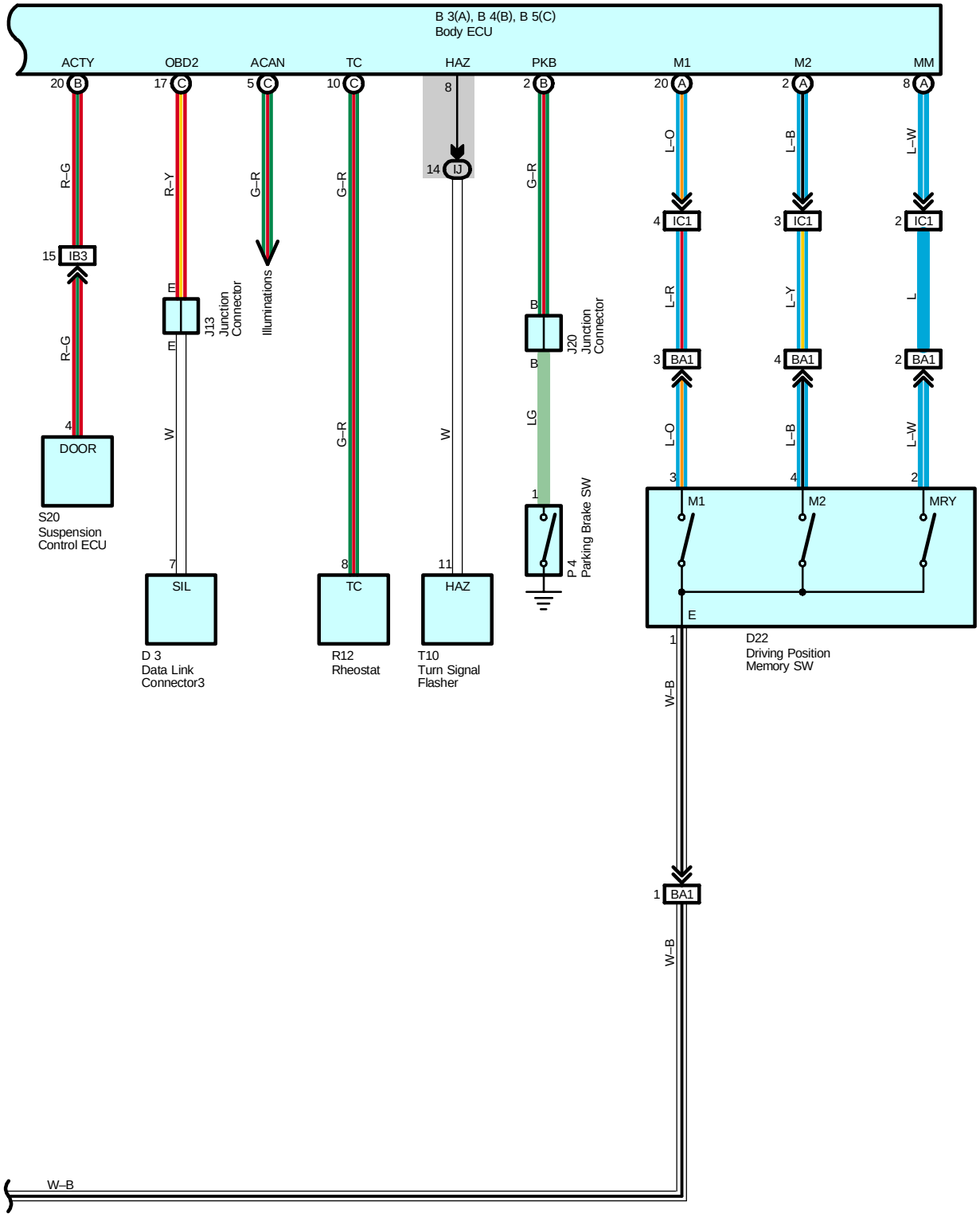

B 3(A), B 4(B), B 5(C)
Body ECU
MPX4
11 A
B
W–L
G
L
W–L
G
L
From Power Source System
(See Page 64)
5 IQ1
B
2
RX
P 7
Power Window Control SW Front RH
1
20A D FR P/W
2
2
L–B
20A
P FR P/W
10 IK
L–R
BDR
KOF
UP
DN
VCC
PLS1
PLS2
SGND
GND
12
B–R
1 IQ1
11
G
2 IQ1
B–Y
6
L
2
1
L–B
1
5
W–R
4
3
W–G
5
4
BR–B
3
8
W–B
6
7
W–B
U
D
SSRB
PLS
PLS2
E
P11
Power Window Motor Front RH
L–B
B–Y
B–Y
B
B
B
B–Y
B–Y
B–Y
B–Y
J17
Junction Connector
W–B
W–B
W–B


B 3(A), B 4(B), B 5(C)
Body ECU
MPX5
14 B
B
W–L
W–L
G
G
L
L
From Power Source System (See Page 64)
B
7
BC1
B
4
IH1
20A D RR P/W
2
RX
P 8
Power Window Control SW Rear LH
14 IK
BDR
UP
DN
VCC
PLS1
PLS2
SGND
KOF
GND
SEL2
12
6
1
5
3
4
8
11
7
10
G–Y
L
L–B
W–R
W–G
BR–B
W
B–Y
W–B
W–B
9 BC1
8 BC1
B 2
1
2
4
3
5
6
U
D
SSRB
PLS
PLS2
E
G–Y
B–Y
P12
Power Window Motor Rear LH
B–Y
B–Y
W–B
W–B
W–B
W–B


B 3(A), B 4(B), B 5(C)
Body ECU
MPX6
16 B
B
W–L
W–L
G
G
L
L
From Power Source System
(See Page 64)
B
7
BD1
B
6
IH1
20A
P RR P/W
2
RX
P 9
Power Window Control SW Rear RH
12 IK
BDR
UP
DN
VCC
PLS1
PLS2
SGND
KOF
GND
SEL1
12
6
1
5
3
4
8
11
7
9
G
G
L
L–B
W–R
W–G
BR–B
W
B–Y
W–B
W–B
9 BD1
8 BD1
B 3
1
2
4
3
5
6
U
D
SSRB
PLS
PLS2
E
G
B–Y
W–B
P13
Power Window Motor Rear RH
B–Y
W–B
W–B
W–B
W–B
W–B
W–B


B 3(A), B 4(B), B 5(C)
Body ECU
L1
UL1
UL2
L2
ACTD
LSWP
19
15
22
20
10
30
5 IK
1 IK
3 IK
W–L
G
L
L–W
L–O
B–O
L–R
9 IL
5 IQ2
6 IQ2
D
C
J13
Junction
Connector
7 IC2
6 IC2
4 IQ2
C5 IR3
16 BH1
3 IQ2
D19
Door Lock Control SW RH
LOCK
UNLOCK
D16
Door Key Lock and Unlock SW Front LH
Door Lock Motor Front LH
Door Unlock Detection SW Front LH
L
UL
LSSR
W–B
G–B
C3 IR3
17 BH1
J29
Junction Connector
4 IC2


B 3(A), B 4(B), B 5(C)
Body ECU
ACT+
ACT–
LSR
23
24
5
B 7
Back Door Key Lock and Unlock SW
Back Door Lock Motor
Back Door Unlock Detection SW
D17
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D20
Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
D21
Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH
J28 Junction Connector
J11 Junction Connector
J23 Junction Connector
B 2
B 3
BQ
IH
IL


B 3(A), B 4(B), B 5(C)
Body ECU
ACTY
OBD2
ACAN
TC
HAZ
PKB
M1
M2
MM
20 B
17 C
5 C
10 C
8
14 IJ
2 B
20 A
2 A
8 A
R–G
R–Y
G–R
G–R
G–R
L–O
L–B
L–W
4 IC1
3 IC1
2 IC1
15 IB3
E
B
B
L–R
L–Y
L
3 BA1
4 BA1
2 BA1
R–G
W
G–R
W
LG
L–O
L–B
L–W
4
7
8
11
1
3
4
2
DOOR
SIL
TC
HAZ
M1
M2
MRY
E
S20
Suspension
Control ECU
J13
Junction
Connector
Illuminations
J20
Junction
Connector
P 4
Parking Brake SW
D 3
Data Link
Connector3
R12
Rheostat
T10
Turn Signal
Flasher
D22
Driving Position
Memory SW
1
W–B
1 BA1
W–B
W–B

System Outline

Multiplex communication system is controlled by body ECU, theft deterrent ECU, wiper relay, airbag sensor assembly, mayday ECU, 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, 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 ignition SW at ACC or ON position
11, 12–Ground : Always approx. 12 volts
10–Ground : Approx. 12 volts with 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 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 ignition SW at ON position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A17	38	G2	36	K3	40
A28	38	H1	36	M8	44
B3 A	38	H2	36	M12	44
B4 B	38	H3	36	M13	44
B5 C	38	H4	36	P1	37
B6	42	H9	36	P4	40
B7	42	H10	36	P7	44
B12	46	I17	39	P8	44
B13	46	I20	43	P9	44
C9 A	38	I21	43	P10	44
C10 B	38	I22	43	P11	44
C11 C	38	I23	43	P12	44
C12 D	38	I24	43	P13	44
C14	38	J4	37	P20	46
C15	38	J7 A	40	R10	41
D3	39	J8 B	40	R12	41
D4	39	J11	40	R25	44
D7	42	J12	40	R29	44
D8	42	J13	40	S10	41
D9	42	J14	40	S13	41
D10	42	J15	40	S14	41
D11	42	J16	40	S20	41
D12	42	J17	40	S25	45
D13	42	J18	40	S26	45
D14	42	J19	40	S27 A	45
D15	42	J20	40	S28 B	45
D16	42	J22	40	T1	37
D17	42	J23	40	T5	41
D18	42	J24	40	T6	41
D19	42	J28	43	T9	41
D20	42	J29	43	T10	41
D21	42	J30	43	V4	45
D22	42	J31	43	V5	45
E3	36	J32	43	W2	37
E9	39	J36 A	46	W3	37
F8	39	J37 B	46	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)
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	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		
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
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		
3E		

: Connector Joining Wire Harness and Wire Harness

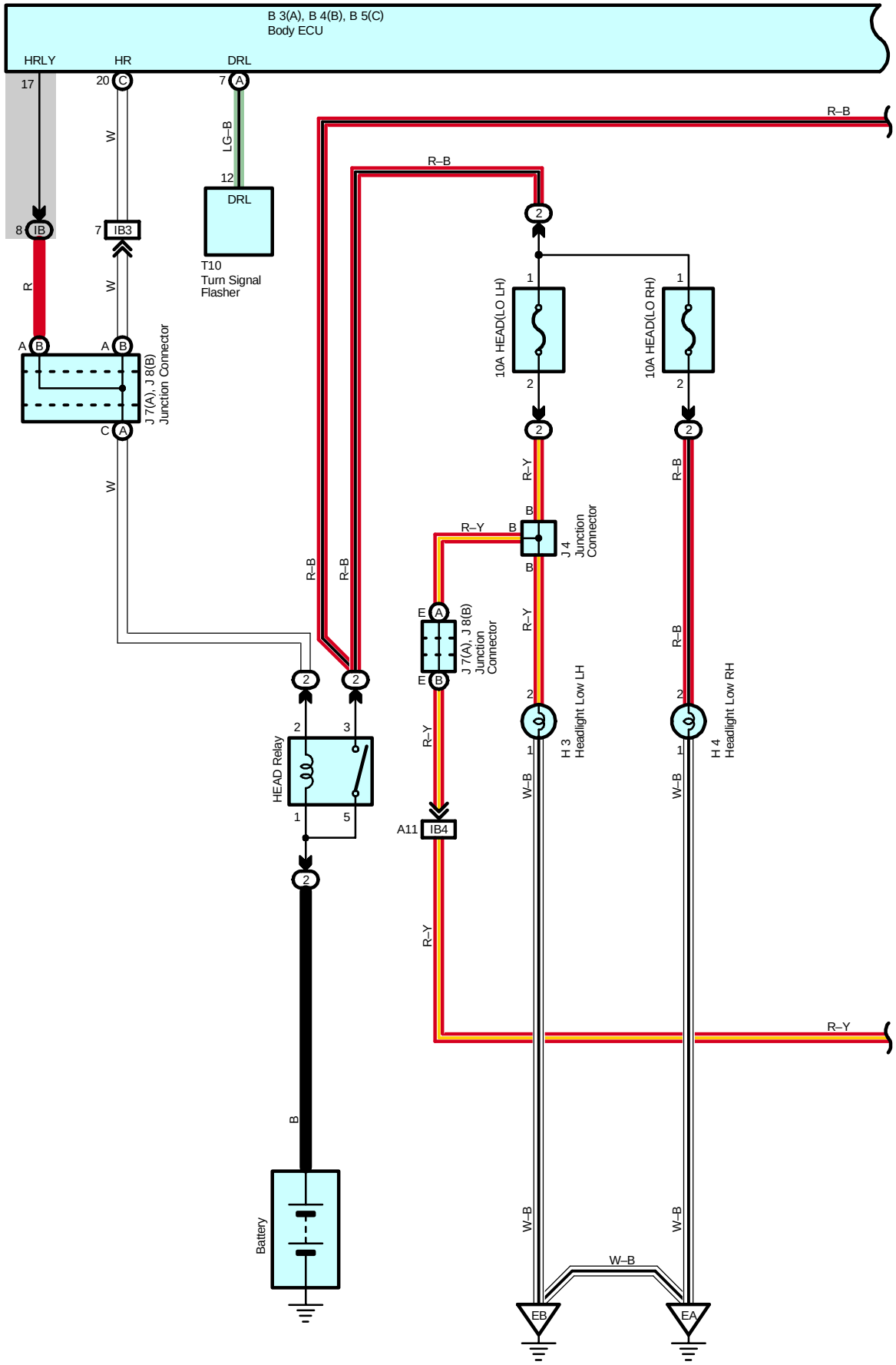
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	48	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
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)
IN1	54	Floor No.3 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)
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)

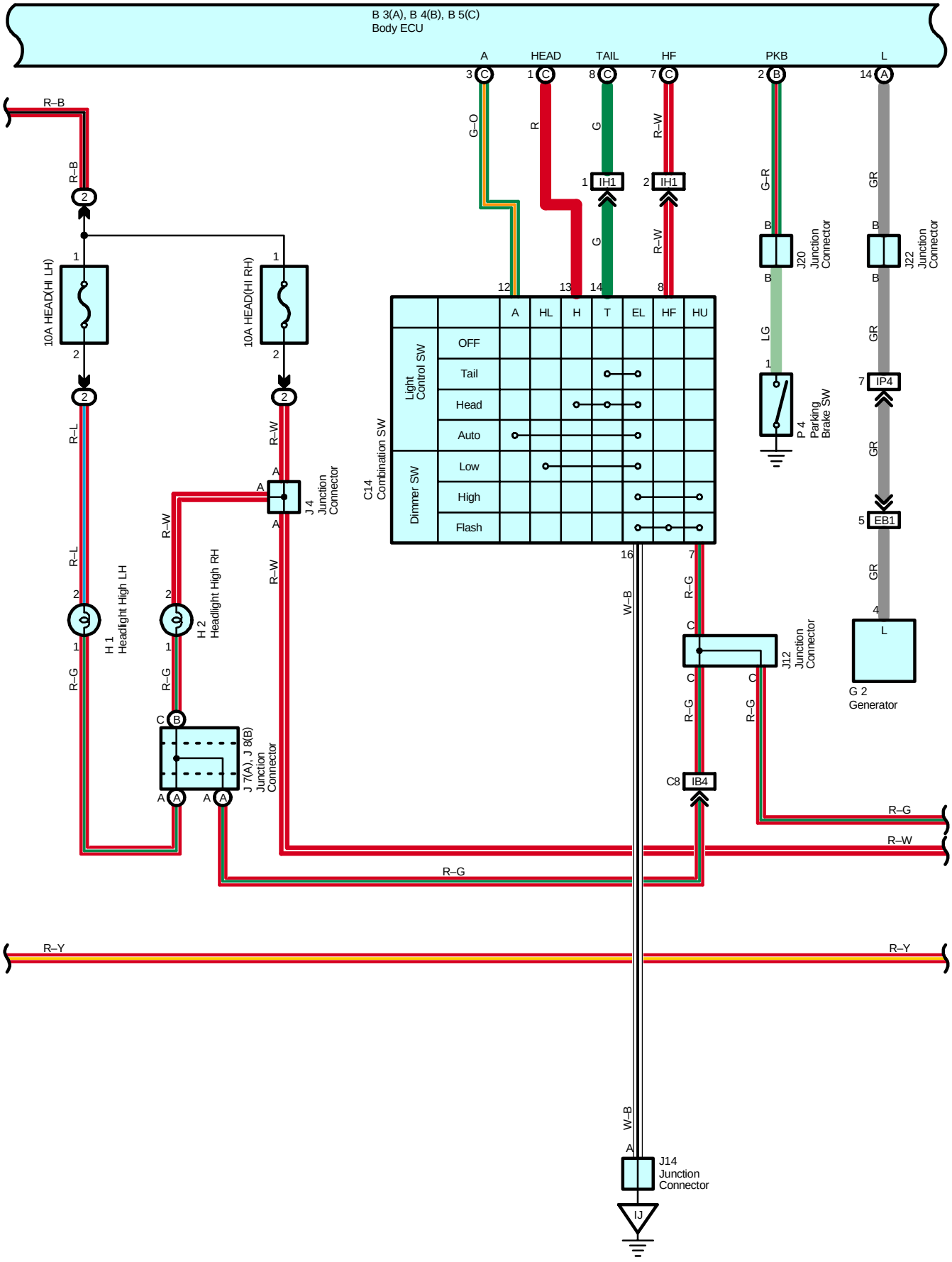
: **Ground Points**

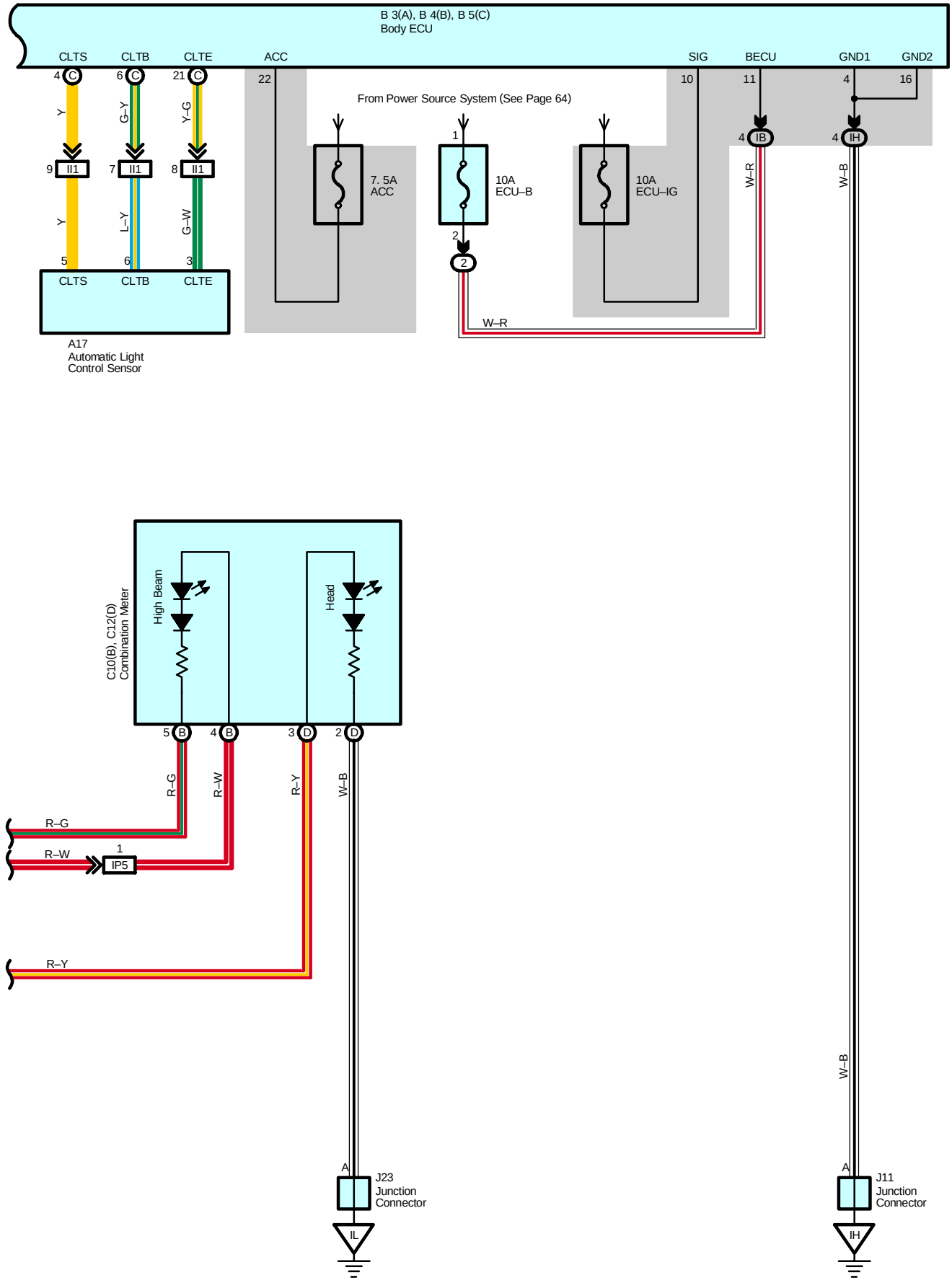
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BM	58	Under the Driver's Seat
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center
BR	58	Right 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	B2	60	Rear Door LH Wire
I6			B3	60	Rear Door RH Wire
B1	60	Roof Wire			


B 3(A), B 4(B), B 5(C)
Body ECU
HRLY
HR
DRL
17
20 C
7 A
W
LG–B
12
DRL
T10
Turn Signal
Flasher
R–B
8 IB
7 IB3
R
W
A B
A B
C A
J 7(A), J 8(B)
Junction Connector
W
2
1
10A HEAD(LO LH)
10A HEAD(LO RH)
2
R–Y
R–B
B
J 4
Junction
Connector
E A
E B
J 7(A), J 8(B)
Junction
Connector
2 3
HEAD Relay
1 5
A11 IB4
H 3
Headlight Low LH
H 4
Headlight Low RH
W–B
B
Battery
EB
EA


B 3(A), B 4(B), B 5(C)
Body ECU
A
HEAD
TAIL
HF
PKB
L
3 C
1 C
8 C
7 C
2 B
14 A
G–O
R
G
R–W
G–R
GR
1 IH1
2 IH1
B
J20 Junction Connector
J22 Junction Connector
LG
GR
7 IP4
5 EB1
4
L
G 2 Generator
P 4 Parking Brake SW
1
12
13
14
8
A
HL
H
T
EL
HF
HU
Light Control SW
OFF
Tail
Head
Auto
Dimmer SW
Low
High
Flash
C14 Combination SW
16
7
W–B
R–G
C
C8 IB4
J12 Junction Connector
R–B
2
10A HEAD(HI LH)
10A HEAD(HI RH)
R–L
R–W
J 4 Junction Connector
H 1 Headlight High LH
H 2 Headlight High RH
J 7(A), J 8(B) Junction Connector
R–Y
J14 Junction Connector
IJ


B 3(A), B 4(B), B 5(C)
Body ECU
CLTS
CLTB
CLTE
ACC
SIG
BECU
GND1
GND2
From Power Source System (See Page 64)
7. 5A
ACC
10A
ECU–B
10A
ECU–IG
W–R
A17
Automatic Light
Control Sensor
C10(B), C12(D)
Combination Meter
High Beam
Head
R–G
R–W
R–Y
W–B
IP5
J23
Junction
Connector
J11
Junction
Connector
IL
IH

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	H1	36	J12	40
B3 A	38	H2	36	J14	40
B4 B	38	H3	36	J20	40
B5 C	38	H4	36	J22	40
C10 B	38	J4	37	J23	40
C12 D	38	J7 A	40	P4	40
C14	38	J8 B	40	T10	41
G2	36	J11	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)

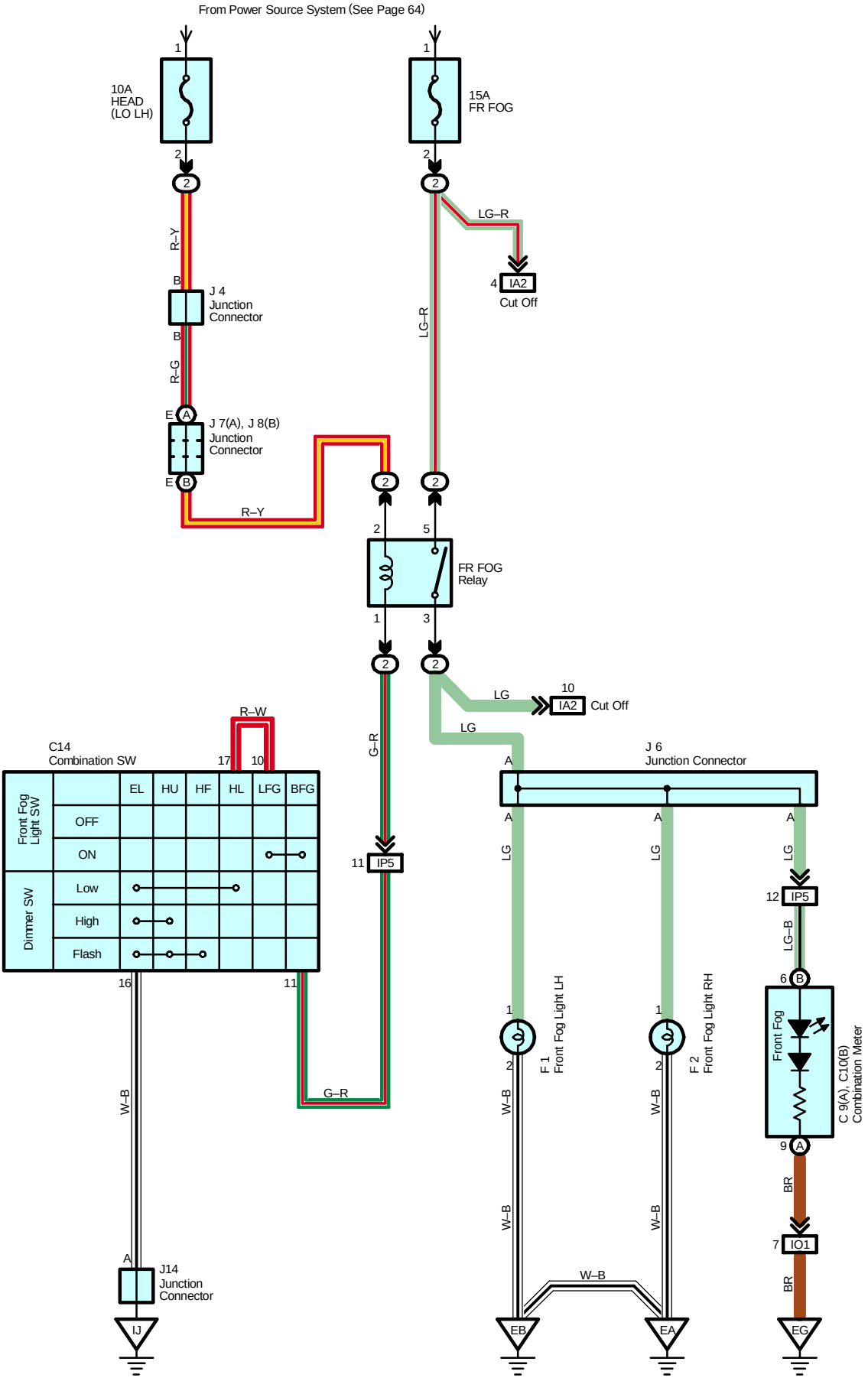
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	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)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP5		

▽ : **Ground Points**

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

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
C9 A	38	F2	36	J8 B	40
C10 B	38	J4	37	J14	40
C14	38	J6	37		
F1	36	J7 A	40		

: Relay Blocks

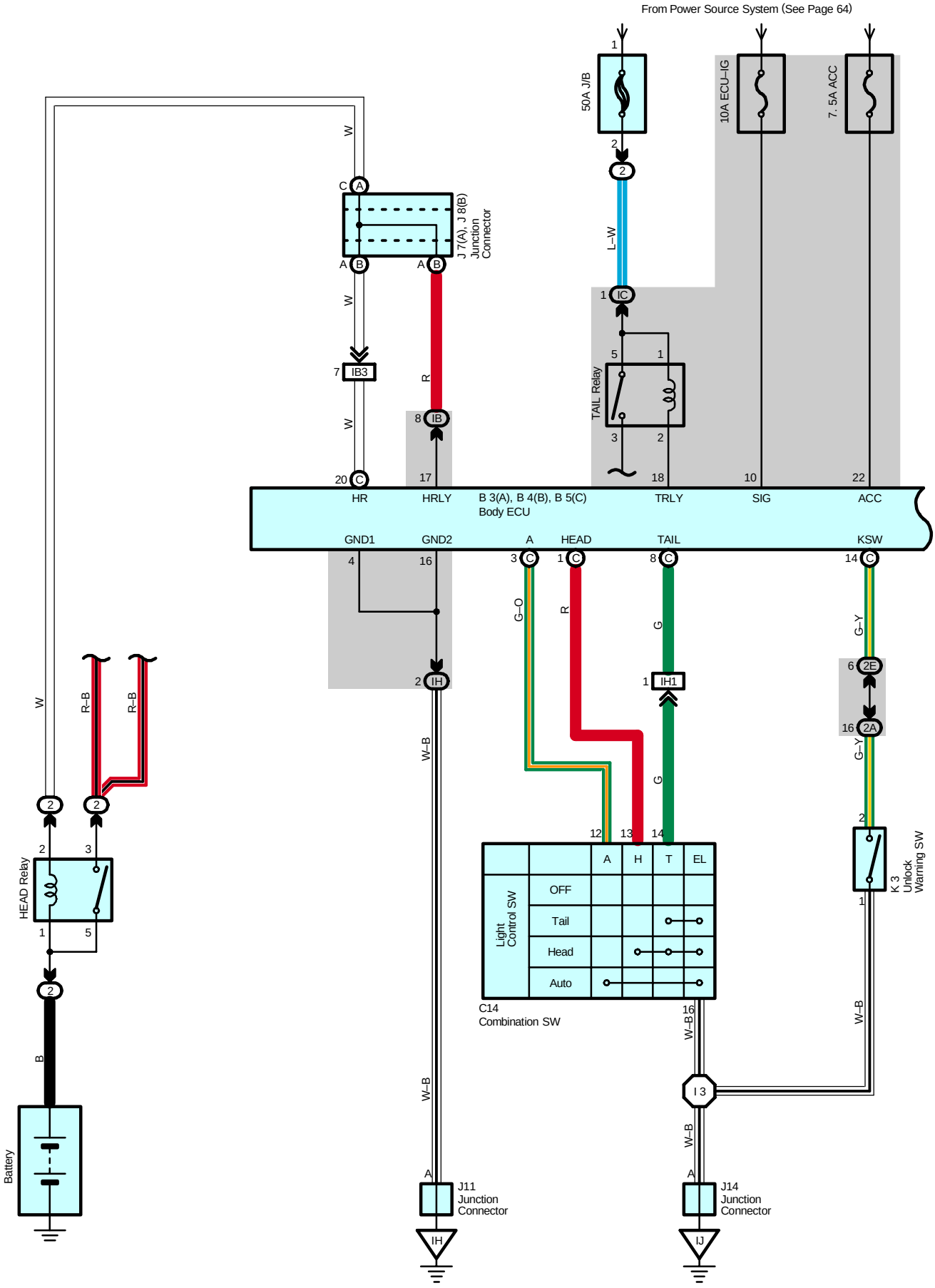
Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

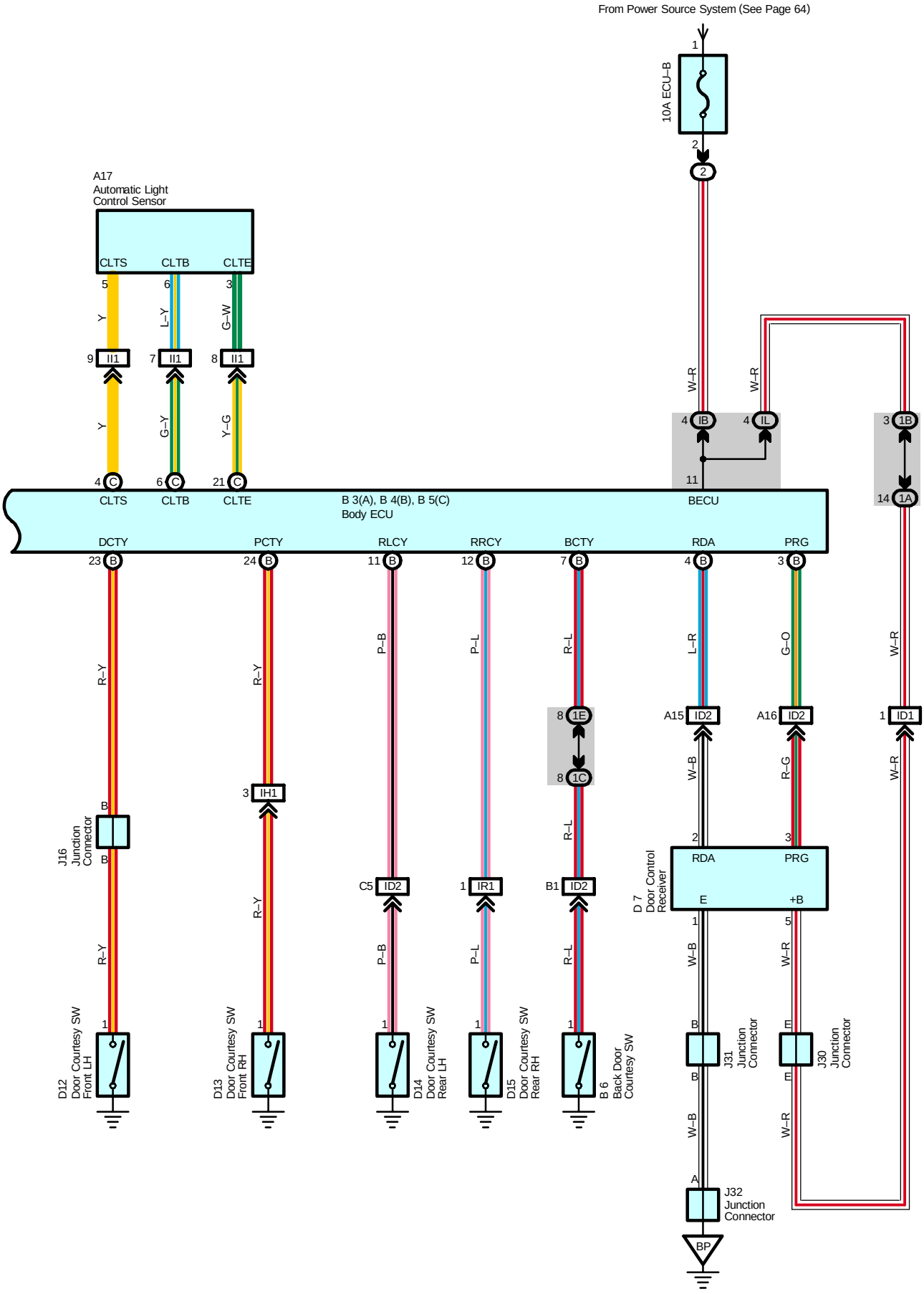
: Connector Joining Wire Harness and Wire Harness

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)
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)

: 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


From Power Source System (See Page 64)
50A J/B
10A ECU-IG
7. 5A ACC
L–W
TAIL Relay
J 7(A), J 8(B) Junction Connector
IB3
IC
IB
IH
IH1
2E
2A
HR
HRLY
B 3(A), B 4(B), B 5(C) Body ECU
TRLY
SIG
ACC
GND1
GND2
A
HEAD
TAIL
KSW
G–O
R
G
G–Y
W–B
R–B
W
B
HEAD Relay
Battery
Light Control SW
OFF
Tail
Head
Auto
C14
Combination SW
K 3
Unlock Warning SW
I 3
J11 Junction Connector
J14 Junction Connector


From Power Source System (See Page 64)
10A ECU–B
A17
Automatic Light Control Sensor
CLTS
CLTB
CLTE
B 3(A), B 4(B), B 5(C)
Body ECU
BECU
DCTY
PCTY
RLCY
RRCY
BCTY
RDA
PRG
J16 Junction Connector
D12 Door Courtesy SW Front LH
D13 Door Courtesy SW Front RH
D14 Door Courtesy SW Rear LH
D15 Door Courtesy SW Rear RH
B 6 Back Door Courtesy SW
D 7 Door Control Receiver
J31 Junction Connector
J30 Junction Connector
J32 Junction Connector
BP

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 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	J14	40
B3 A	38	D13	42	J16	40
B4 B	38	D14	42	J30	43
B5 C	38	D15	42	J31	43
B6	42	J7 A	40	J32	43
C14	38	J8 B	40	K3	40
D7	42	J11	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		
1C		
1E		
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)
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)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

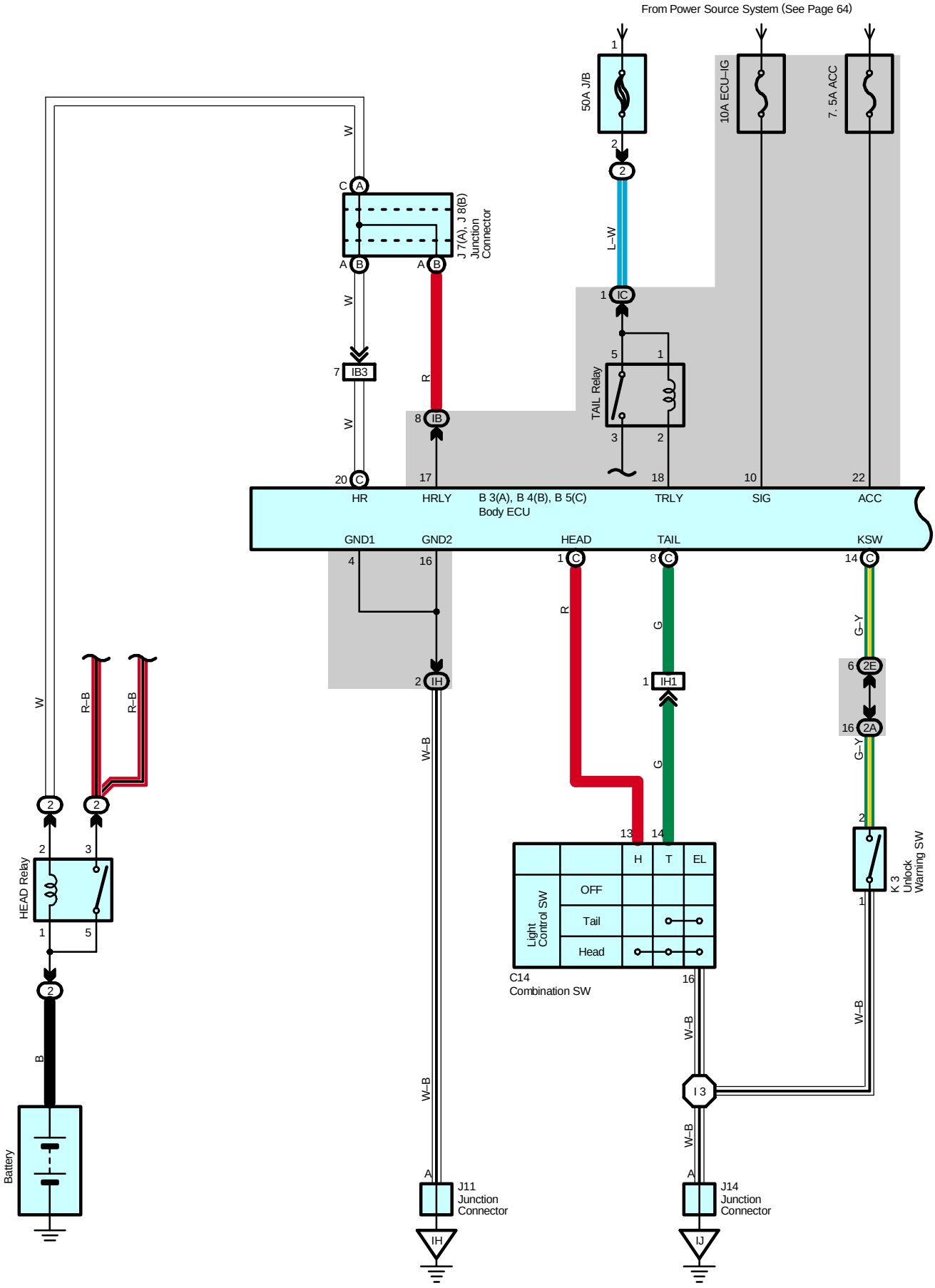
 **: Ground Points**

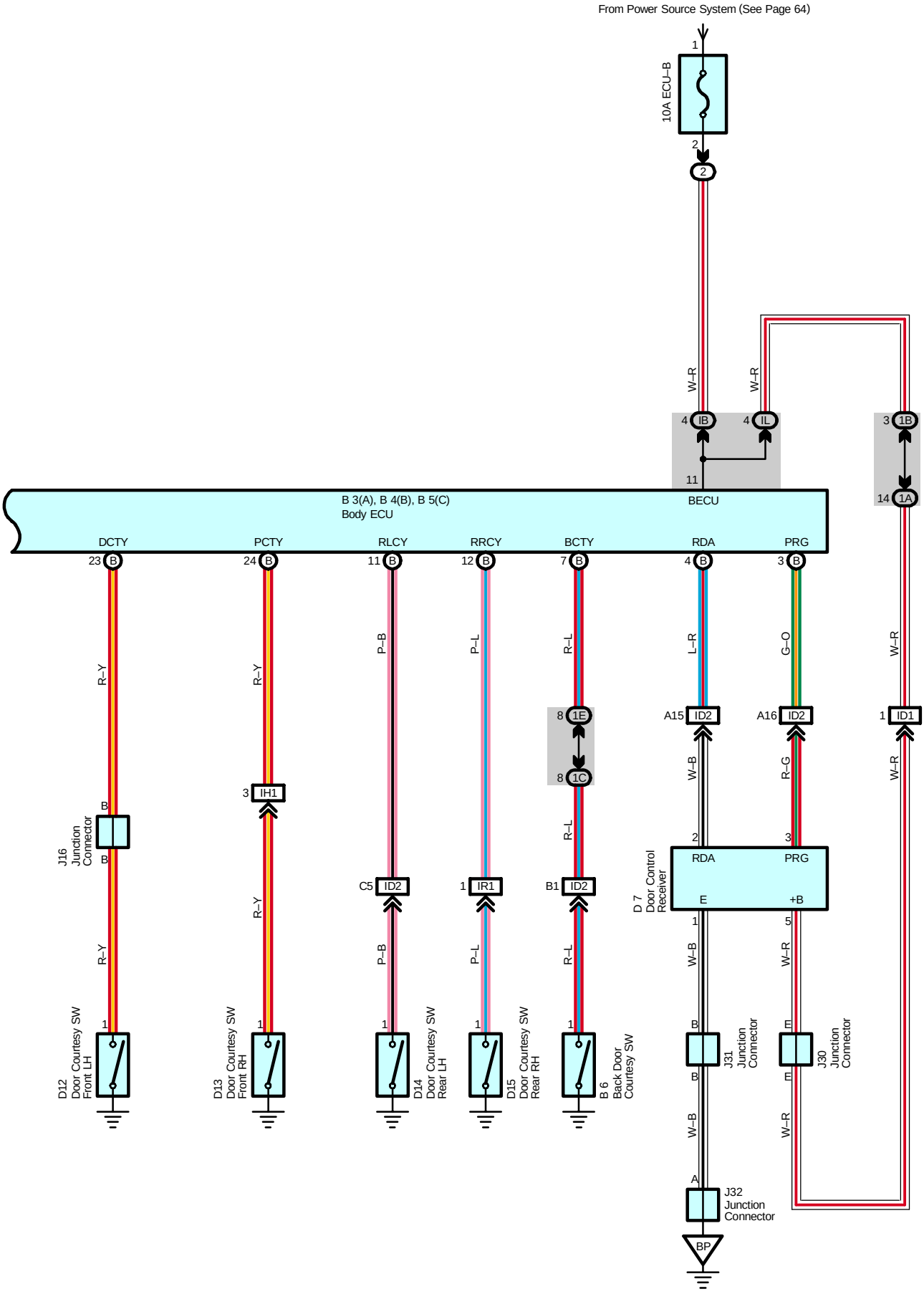
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner

 **: 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




From Power Source System (See Page 64)
10A ECU–B
W–R
W–R
B 3(A), B 4(B), B 5(C)
Body ECU
BECU
DCTY
PCTY
RLCY
RRCY
BCTY
RDA
PRG
R–Y
R–Y
P–B
P–L
R–L
L–R
G–O
W–R
W–B
R–G
J16
Junction
Connector
IH1
IR1
ID2
ID1
1E
1C
1A
1B
D 7
Door Control
Receiver
E
+B
J31
Junction
Connector
J30
Junction
Connector
J32
Junction
Connector
BP
D12
Door Courtesy SW
Front LH
D13
Door Courtesy SW
Front RH
D14
Door Courtesy SW
Rear LH
D15
Door Courtesy SW
Rear RH
B 6
Back Door
Courtesy SW

Light Auto Turn Off

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 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
B3 A	38	D13	42	J16	40
B4 B	38	D14	42	J30	43
B5 C	38	D15	42	J31	43
B6	42	J7 A	40	J32	43
C14	38	J8 B	40	K3	40
D7	42	J11	40		
D12	42	J14	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		
1C		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

: Connector Joining Wire Harness and Wire Harness

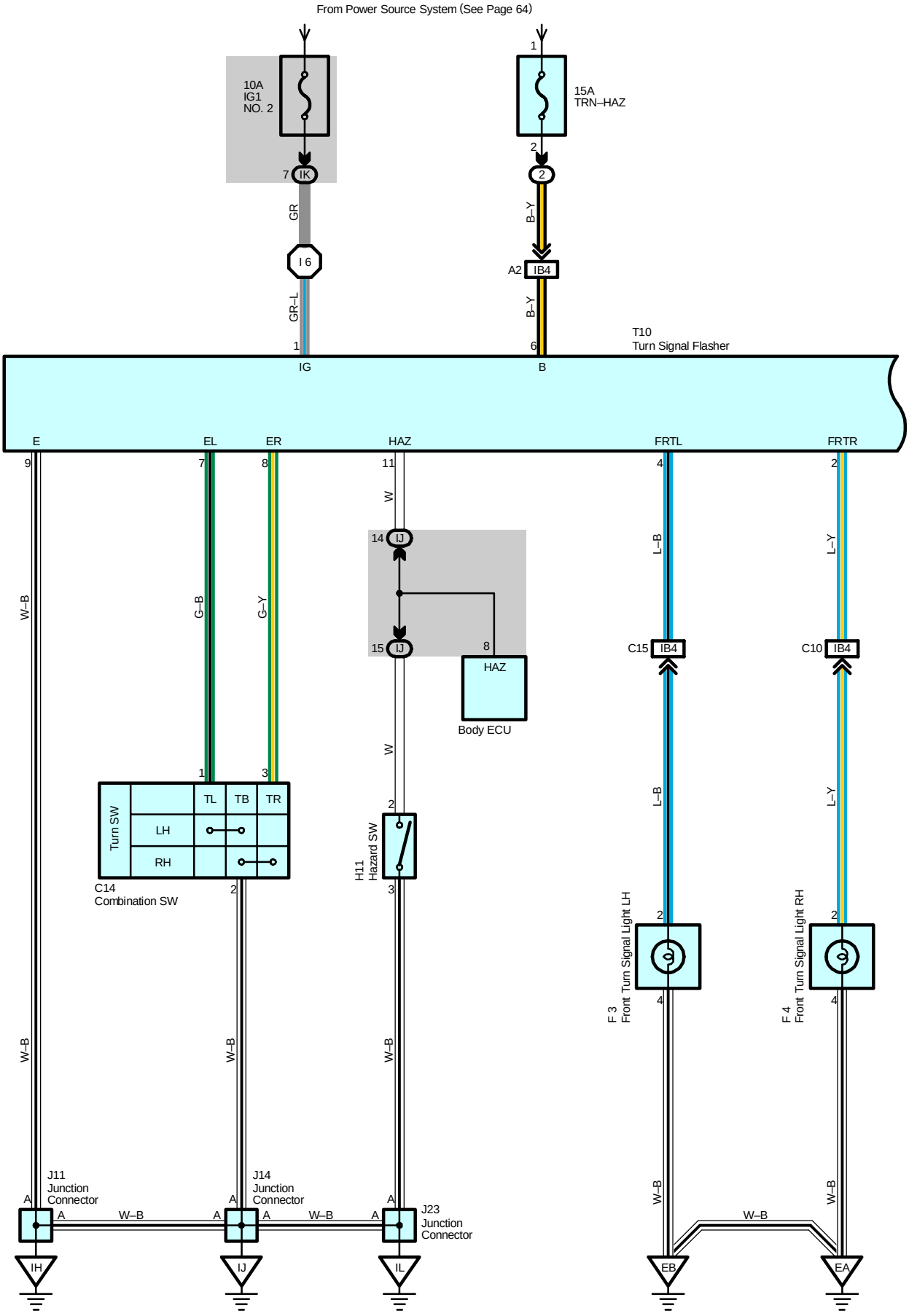
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

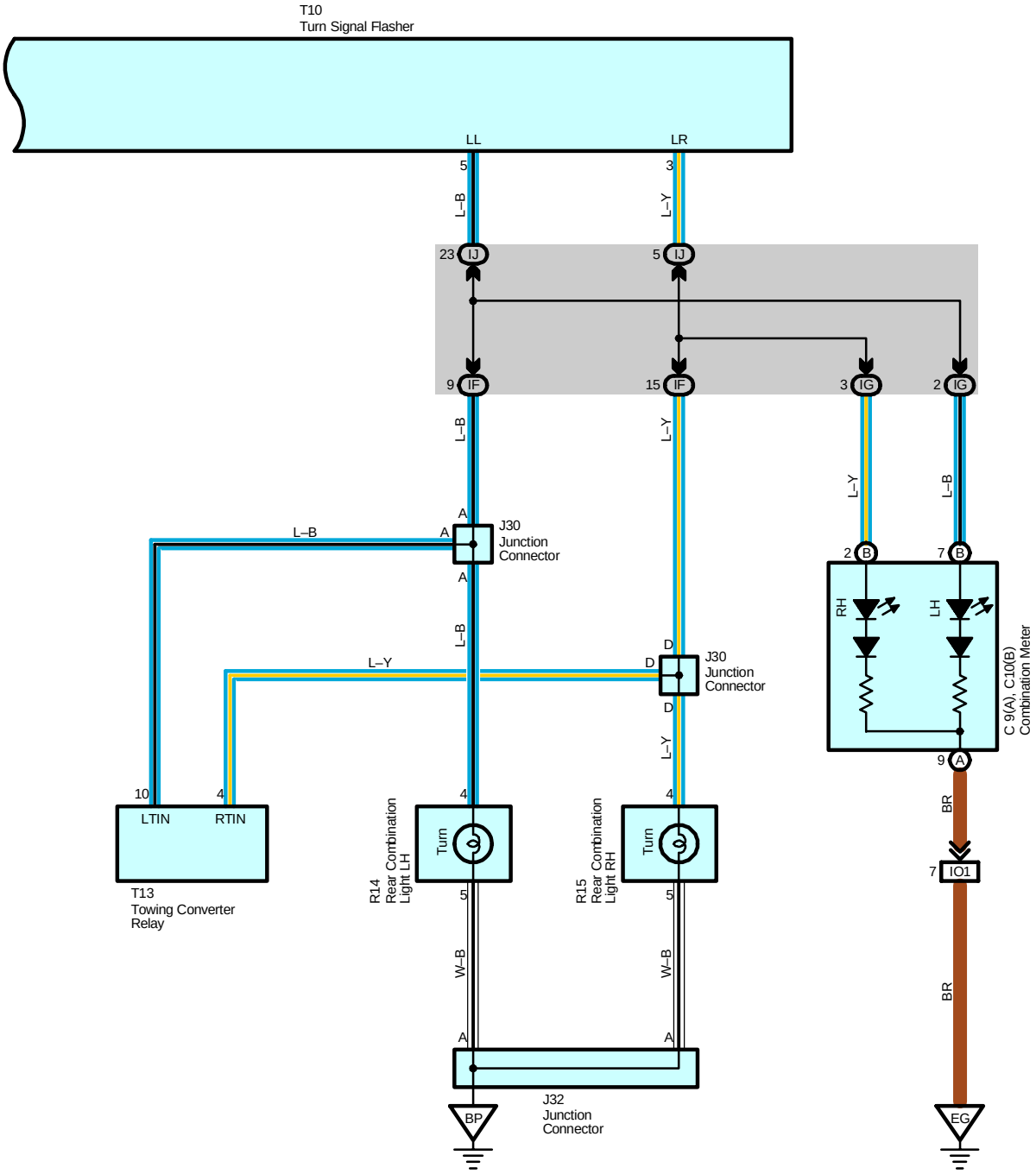
 **: Ground Points**

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			


From Power Source System (See Page 64)
10A
IG1
NO. 2
7
IK
GR
I 6
GR–L
1
IG
1
15A
TRN–HAZ
2
2
B–Y
A2
IB4
B–Y
6
B
T10
Turn Signal Flasher
E
EL
ER
HAZ
FRTL
FRTR
9
7
8
11
4
2
W–B
G–B
G–Y
W
L–B
L–Y
14
IJ
15
IJ
8
HAZ
Body ECU
C15
IB4
C10
IB4
1
3
TL
TB
TR
Turn SW
LH
RH
C14
Combination SW
2
H11
Hazard SW
2
3
F 3
Front Turn Signal Light LH
F 4
Front Turn Signal Light RH
J11
Junction
Connector
J14
Junction
Connector
J23
Junction
Connector
A
W–B
IH
IJ
IL
EB
EA


T10
Turn Signal Flasher
LL
LR
5
3
L–B
L–Y
23 IJ
5 IJ
9 IF
15 IF
3 IG
2 IG
L–B
L–Y
L–Y
L–B
A
A
J30
Junction
Connector
L–B
2 B
7 B
RH
LH
C 9(A), C10(B)
Combination Meter
D
D
J30
Junction
Connector
L–Y
D
L–B
L–Y
9 A
BR
10
4
4
4
LTIN
RTIN
Turn
Turn
7 IO1
T13
Towing Converter
Relay
R14
Rear Combination
Light LH
R15
Rear Combination
Light RH
5
5
W–B
W–B
BR
A
A
J32
Junction
Connector
BP
EG

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	J32	43
C10	B	38	J11	40	R14	44
C14		38	J14	40	R15	44
F3		36	J23	40	T10	41
F4		36	J30	43	T13	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)
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

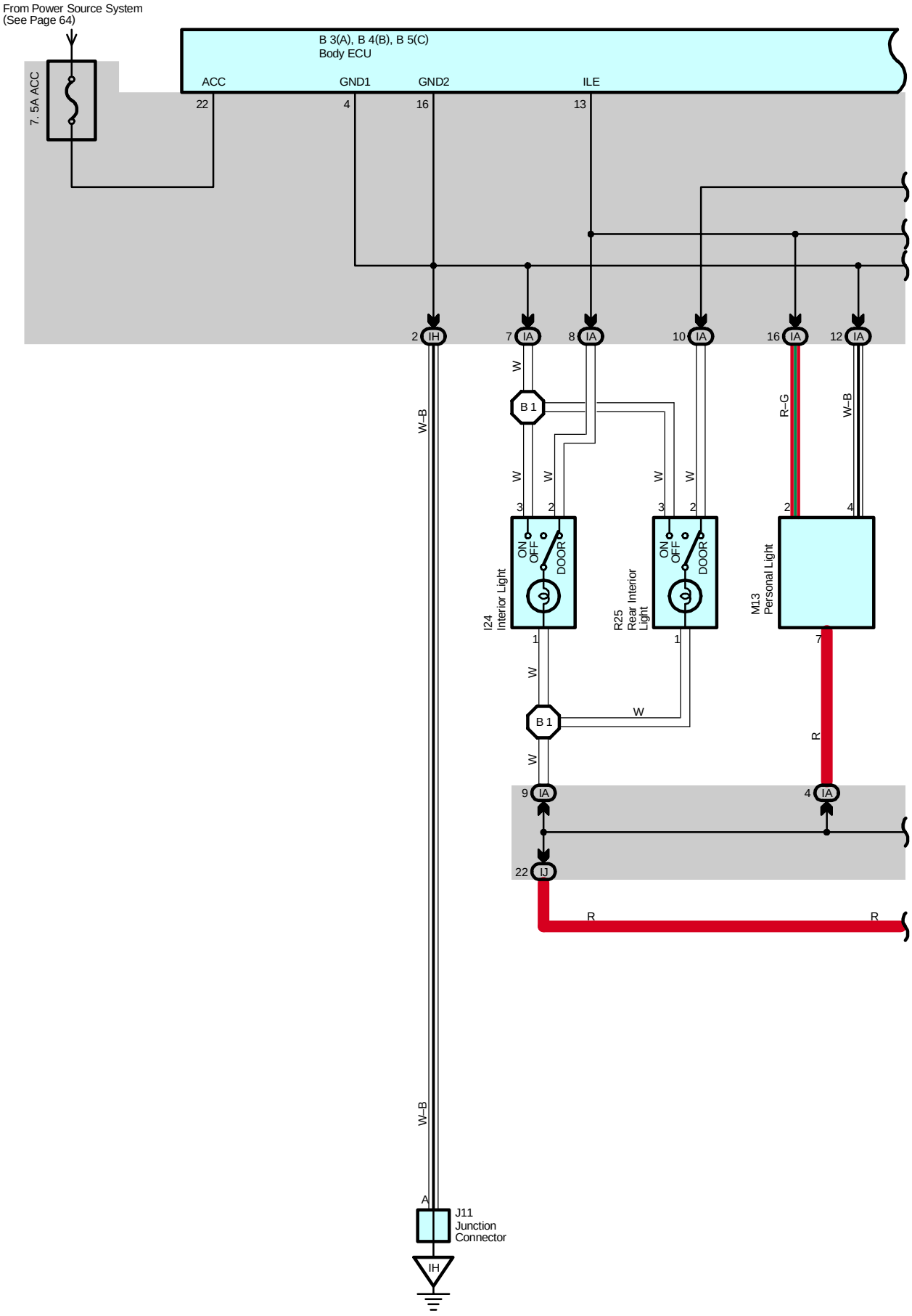
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)

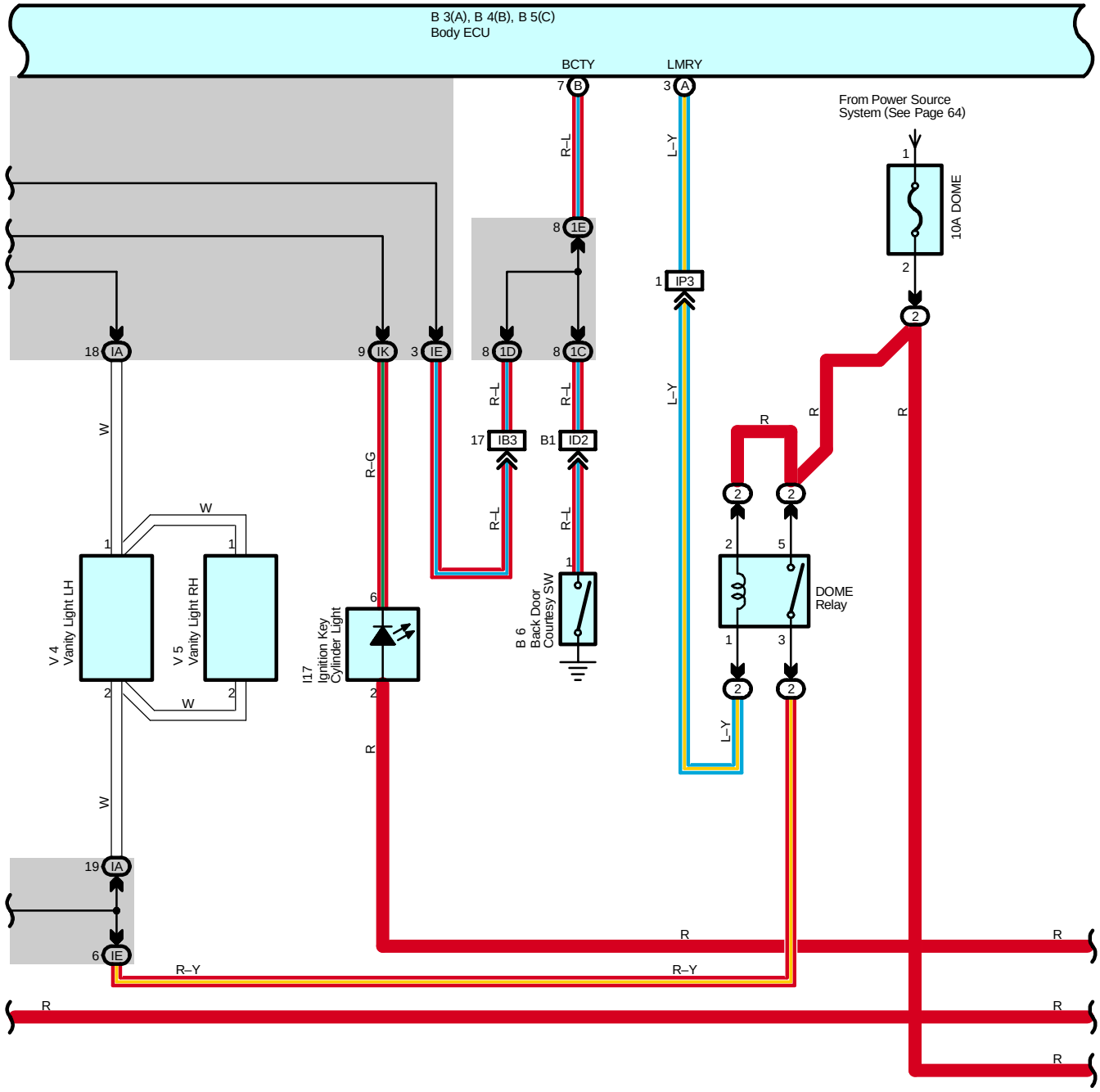
: Ground Points

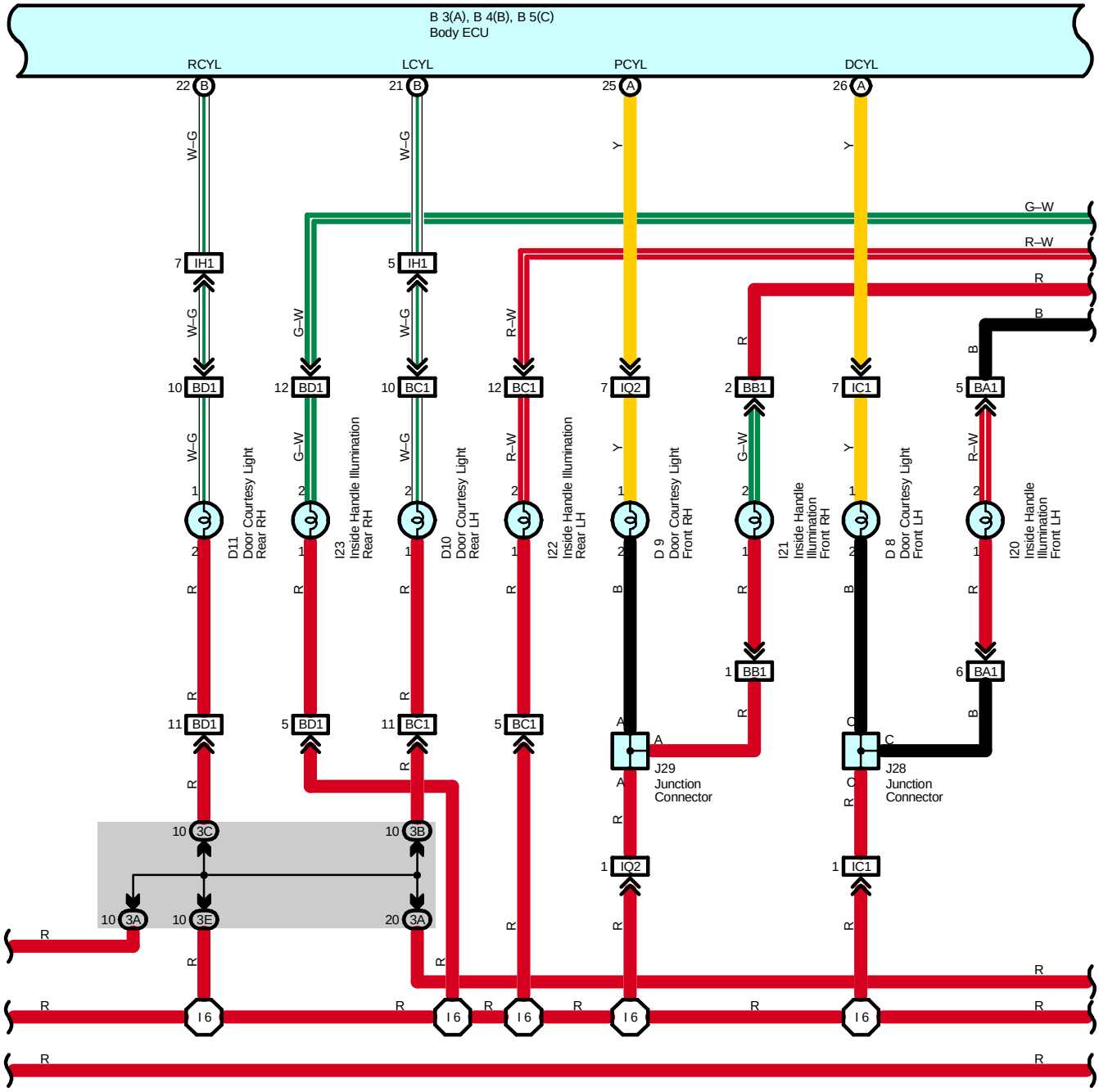
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner

: Splice Points

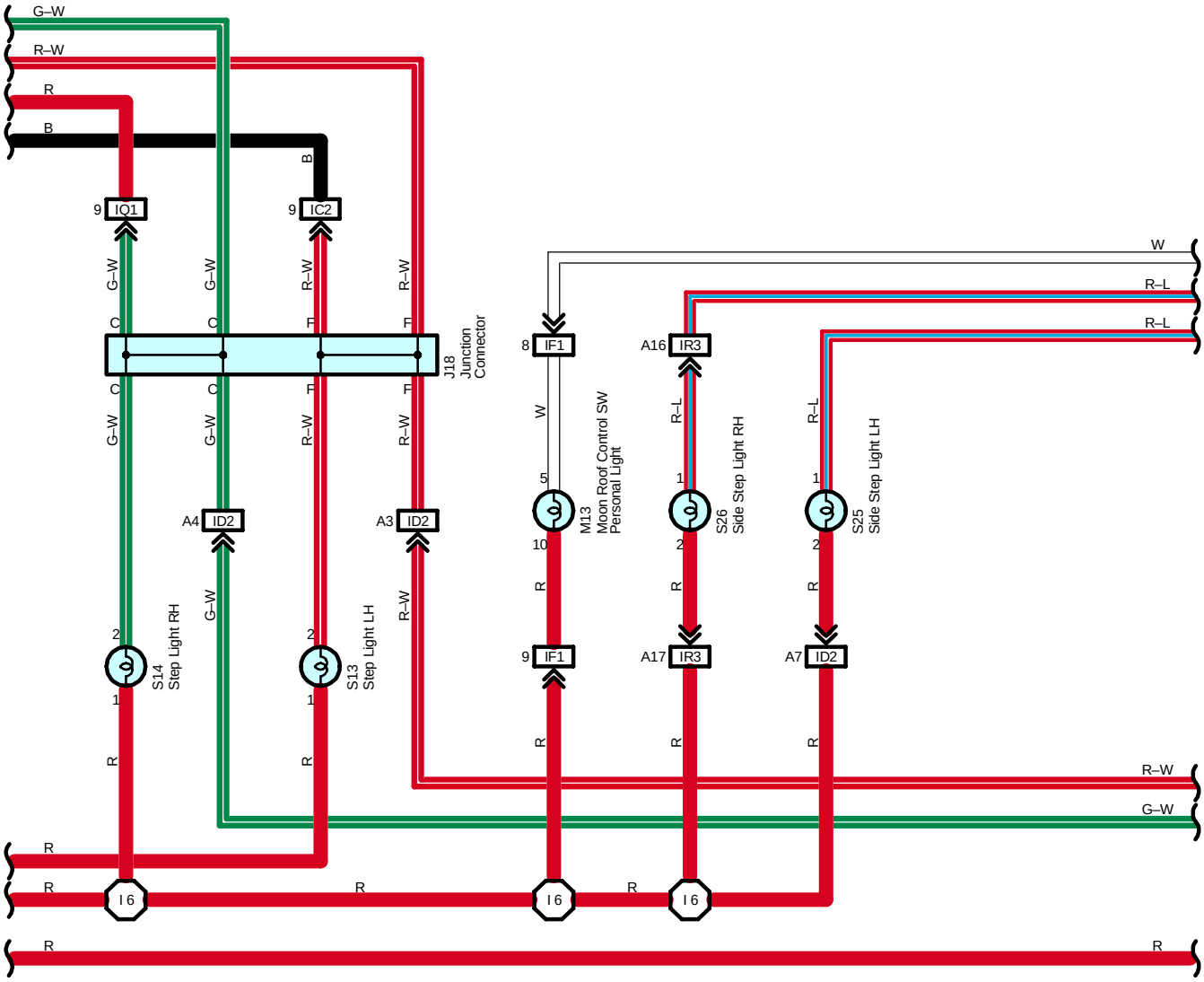
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire			

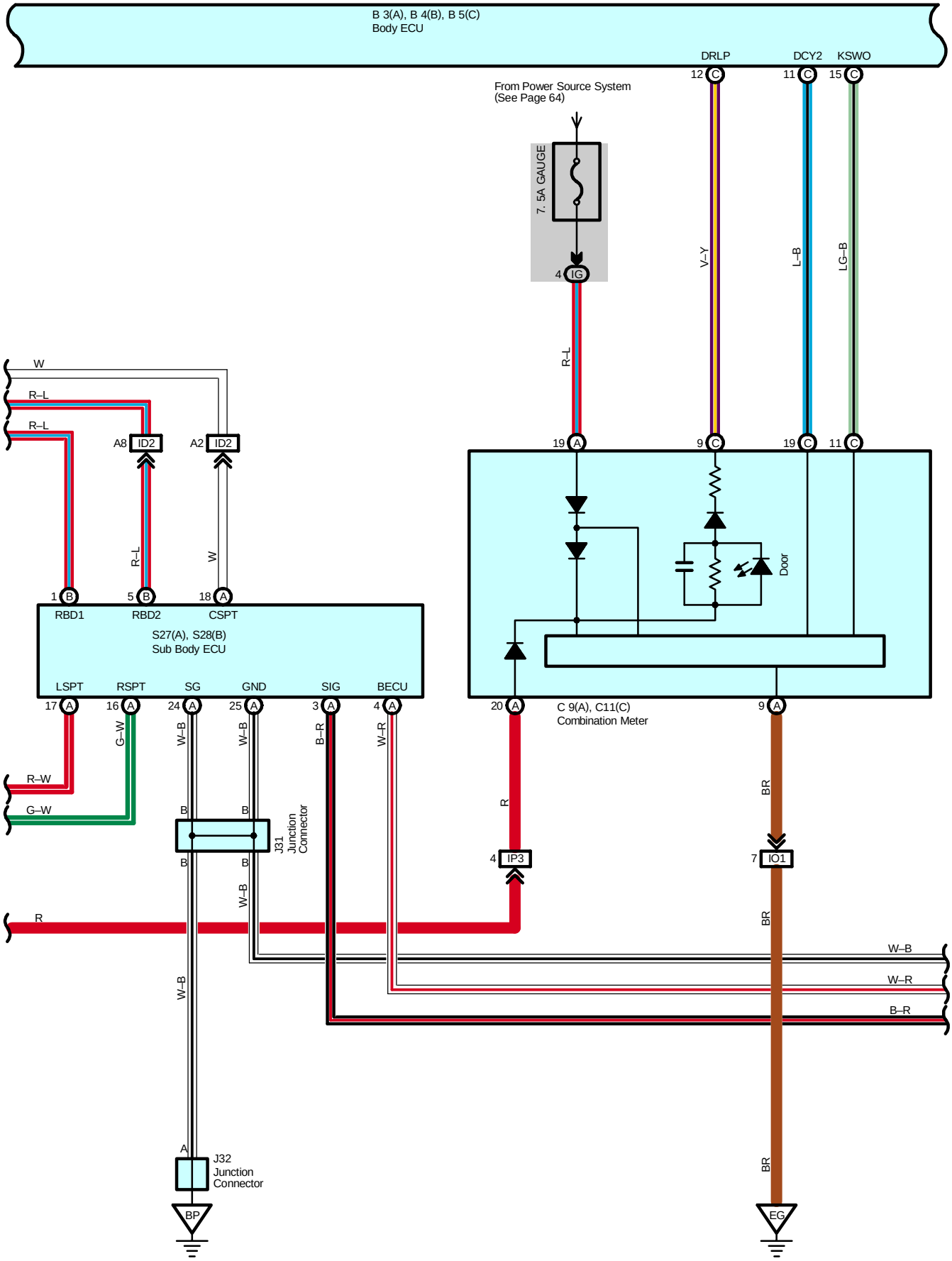

From Power Source System
(See Page 64)
7. 5A ACC
B 3(A), B 4(B), B 5(C)
Body ECU
ACC
GND1
GND2
ILE
22
4
16
13
2 IH
7 IA
8 IA
10 IA
16 IA
12 IA
W
B 1
W–B
R–G
W–B
W
W
W
W
3
2
3
2
2
4
ON
OFF
DOOR
I24
Interior Light
R25
Rear Interior
Light
M13
Personal Light
1
1
7
W
W
B 1
R
W
9 IA
4 IA
22 IJ
R
R
A
J11
Junction
Connector
IH
W–B

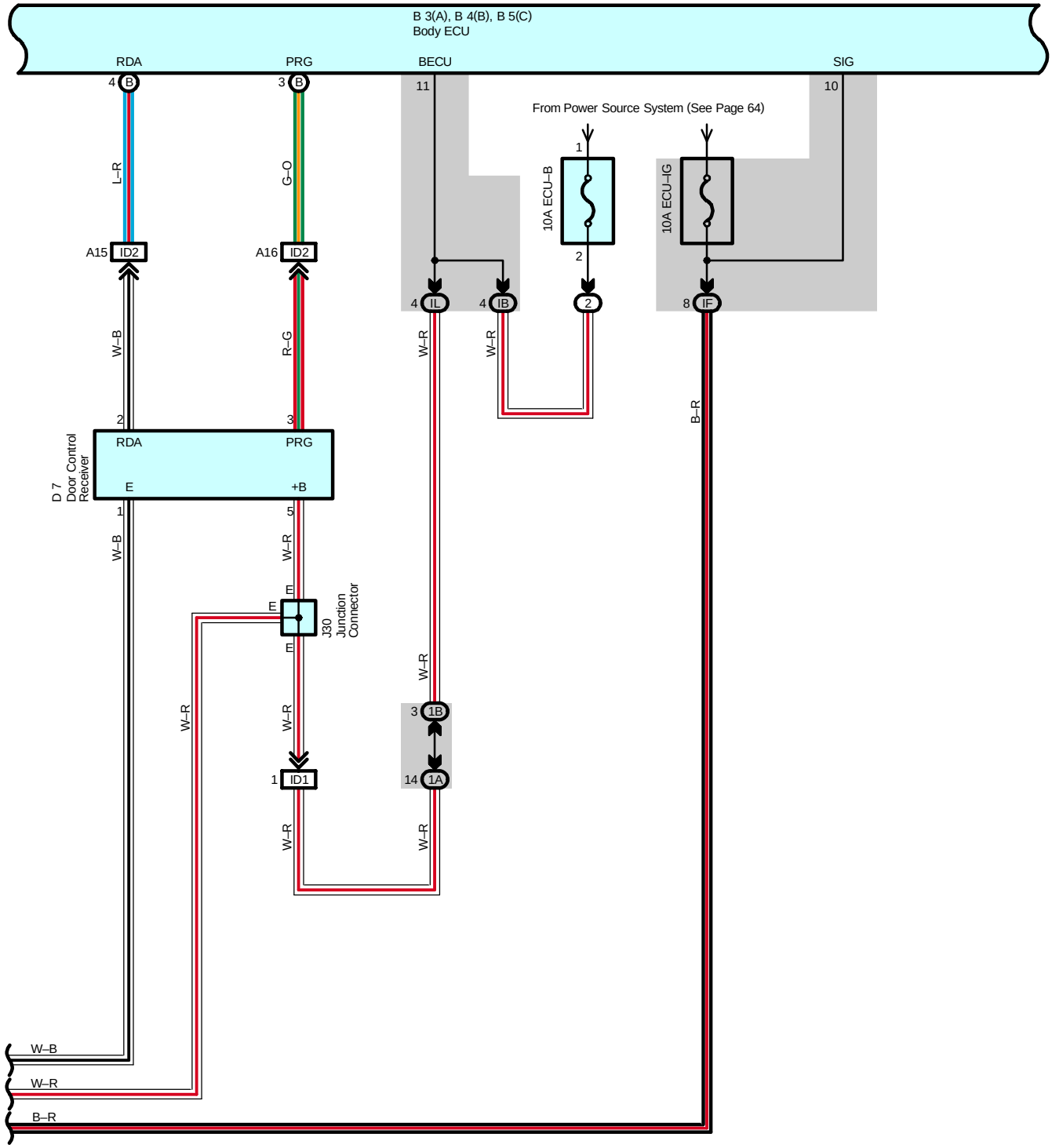

B 3(A), B 4(B), B 5(C)
Body ECU
BCTY
LMRY
From Power Source System (See Page 64)
10A DOME
DOME Relay
V 4 Vanity Light LH
V 5 Vanity Light RH
I17 Ignition Key Cylinder Light
B 6 Back Door Courtesy SW
IA
IK
IE
1E
1D
1C
IB3
ID2
IP3
W
R–L
R–G
L–Y
R
R–Y

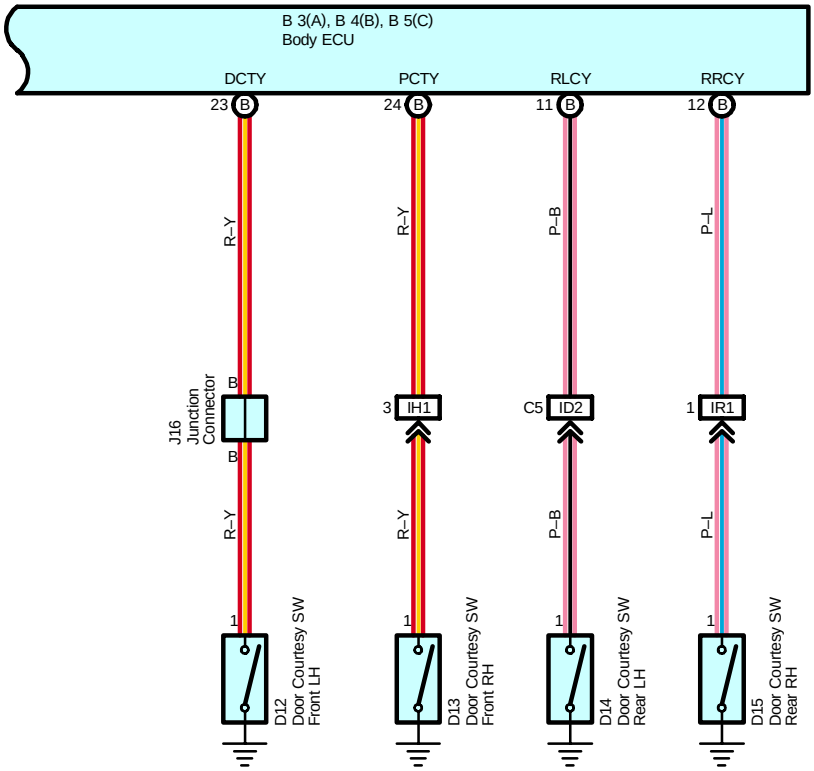

B 3(A), B 4(B), B 5(C)
Body ECU
RCYL
LCYL
PCYL
DCYL
22 B
21 B
25 A
26 A
W–G
Y
G–W
R–W
R
B
7 IH1
5 IH1
10 BD1
12 BD1
10 BC1
12 BC1
7 IQ2
2 BB1
7 IC1
5 BA1
1
2
D11 Door Courtesy Light Rear RH
I23 Inside Handle Illumination Rear RH
D10 Door Courtesy Light Rear LH
I22 Inside Handle Illumination Rear LH
D 9 Door Courtesy Light Front RH
I21 Inside Handle Illumination Front RH
D 8 Door Courtesy Light Front LH
I20 Inside Handle Illumination Front LH
11 BD1
5 BD1
11 BC1
5 BC1
1 BB1
6 BA1
A
C
J29 Junction Connector
J28 Junction Connector
1 IQ2
1 IC1
10 3C
10 3B
10 3A
10 3E
20 3A
I 6

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




B 3(A), B 4(B), B 5(C)
Body ECU
DRLP
DCY2
KSWO
12 C
11 C
15 C
From Power Source System
(See Page 64)
7. 5A GAUGE
4 IG
V–Y
L–B
LG–B
R–L
19 A
9 C
19 C
11 C
W
R–L
R–L
A8 ID2
A2 ID2
R–L
W
1 B
5 B
18 A
RBD1
RBD2
CSPT
S27(A), S28(B)
Sub Body ECU
Door
LSPT
RSPT
SG
GND
SIG
BECU
17 A
16 A
24 A
25 A
3 A
4 A
20 A
9 A
C 9(A), C11(C)
Combination Meter
W–B
G–W
W–B
W–B
B–R
W–R
R
BR
R–W
G–W
B
B
B
B
J31
Junction
Connector
4 IP3
7 IO1
W–B
R
BR
W–B
W–R
B–R
A
J32
Junction
Connector
BP
EG
BR


B 3(A), B 4(B), B 5(C)
Body ECU
RDA
PRG
BECU
SIG
From Power Source System (See Page 64)
10A ECU–B
10A ECU–IG
L–R
G–O
W–B
R–G
W–R
B–R
D 7
Door Control
Receiver
E
+B
J30
Junction
Connector
ID2
ID1
IL
IB
IF
1A
1B
W–B
W–R
B–R


B 3(A), B 4(B), B 5(C)
Body ECU
DCTY
PCTY
RLCY
RRCY
23
24
11
12
B
R–Y
P–B
P–L
J16
Junction
Connector
3
IH1
C5
ID2
1
IR1
D12
Door Courtesy SW
Front LH
D13
Door Courtesy SW
Front RH
D14
Door Courtesy SW
Rear LH
D15
Door Courtesy SW
Rear RH

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 ignition SW at ACC or ON position
10–Ground : Approx. 12 volts with 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	D14	42	J30		43
B4	B	38	D15	42	J31		43
B5	C	38	I17	39	J32		43
B6		42	I20	43	M13		44
C9	A	38	I21	43	R25		44
C11	C	38	I22	43	S13		41
D7		42	I23	43	S14		41
D8		42	I24	43	S25		45
D9		42	J11	40	S26		45
D10		42	J16	40	S27	A	45
D11		42	J18	40	S28	B	45
D12		42	J28	43	V4		45
D13		42	J29	43	V5		45

Interior Light

: 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	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		
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		
3E		

: Connector Joining Wire Harness and Wire Harness

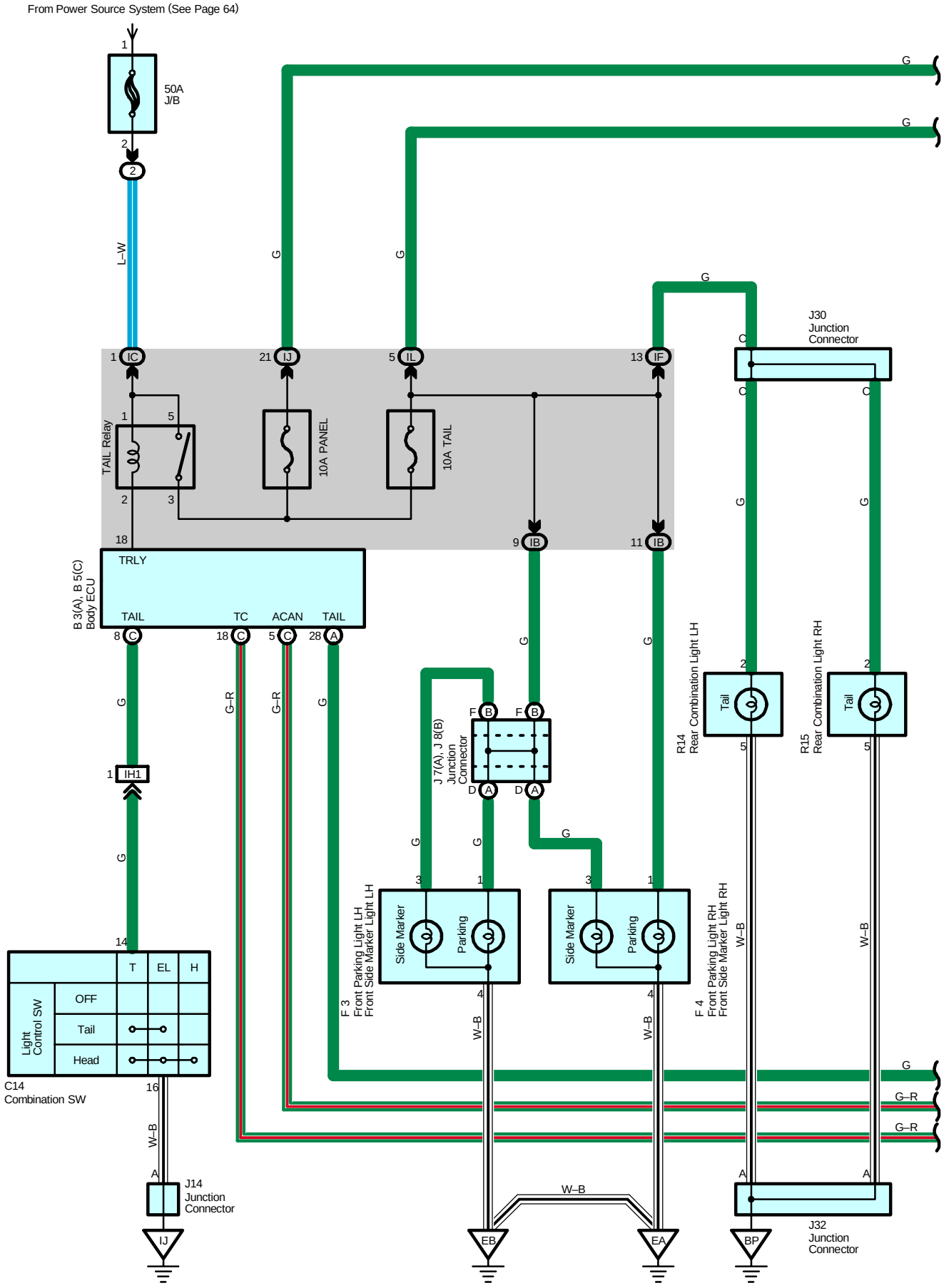
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IF1	52	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)

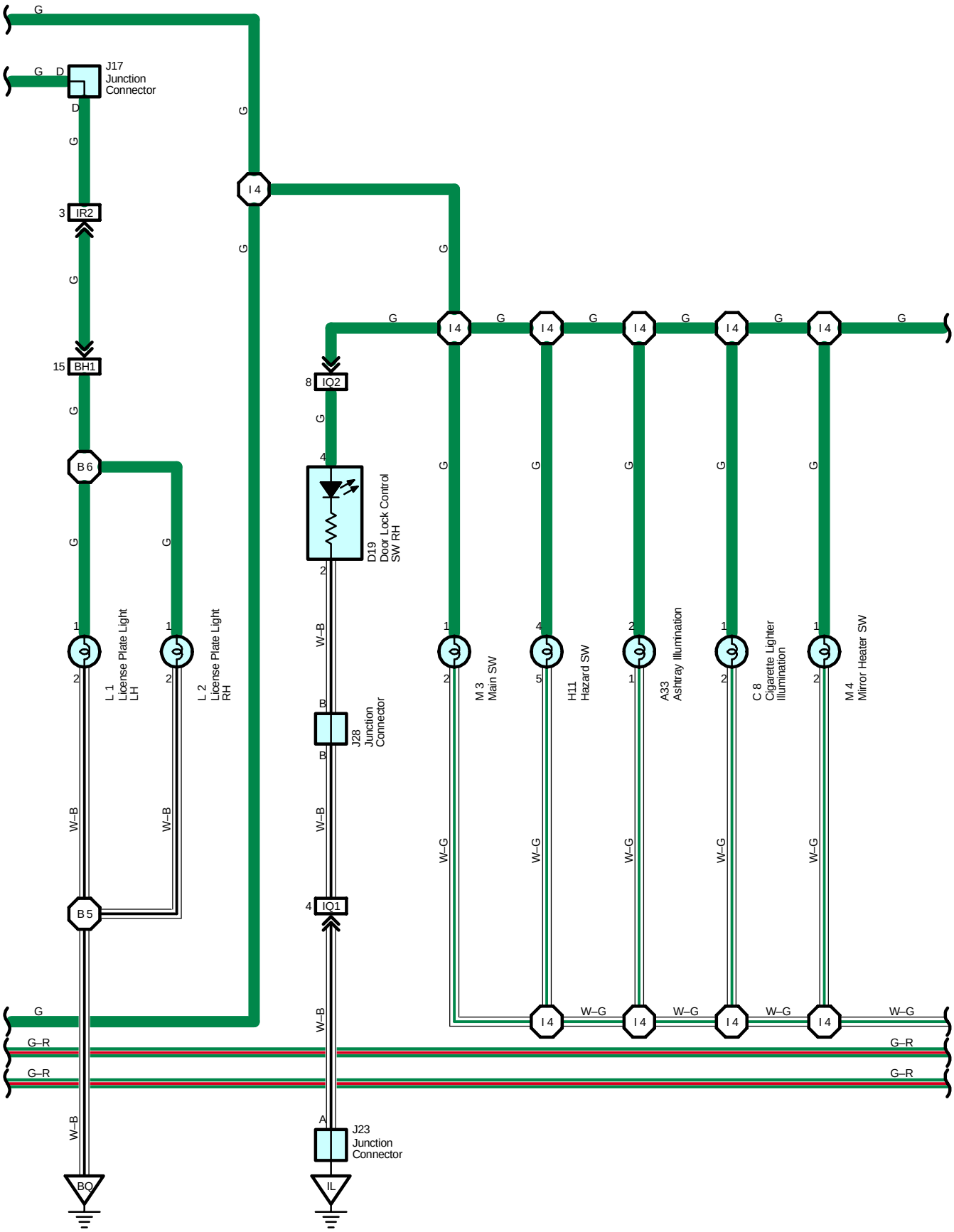
: Ground Points

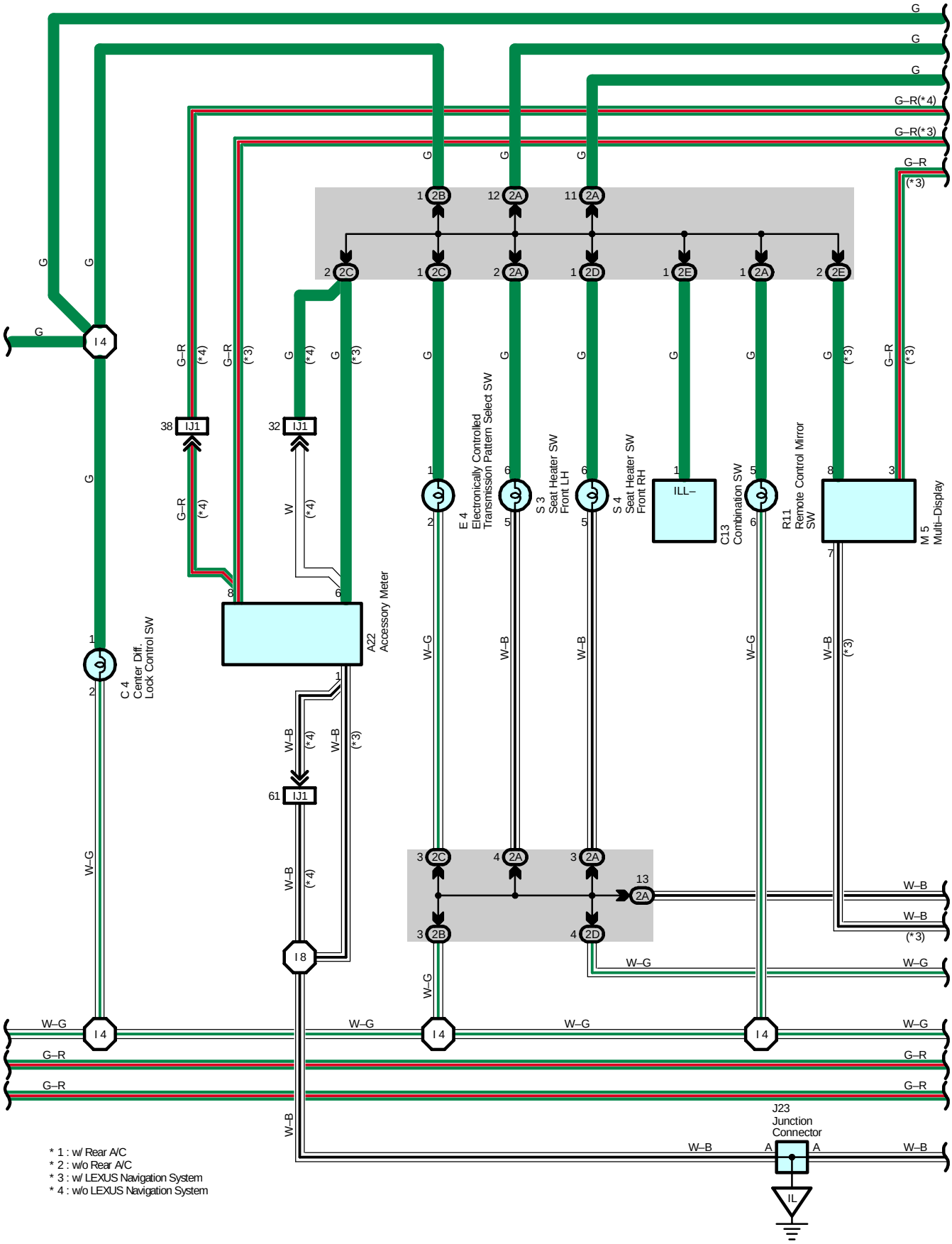
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
BP	58	Left Quarter Panel Inner

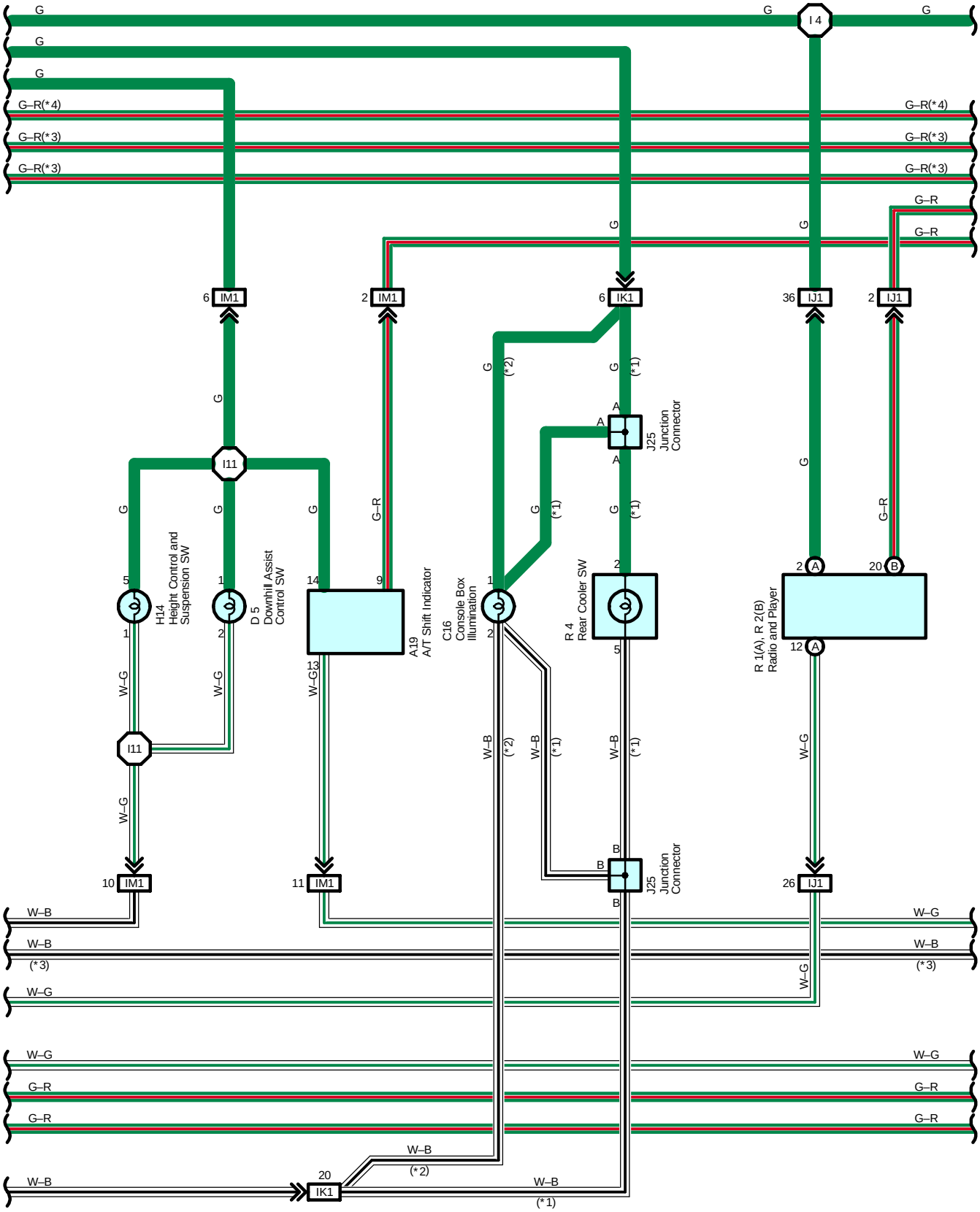
: Splice Points

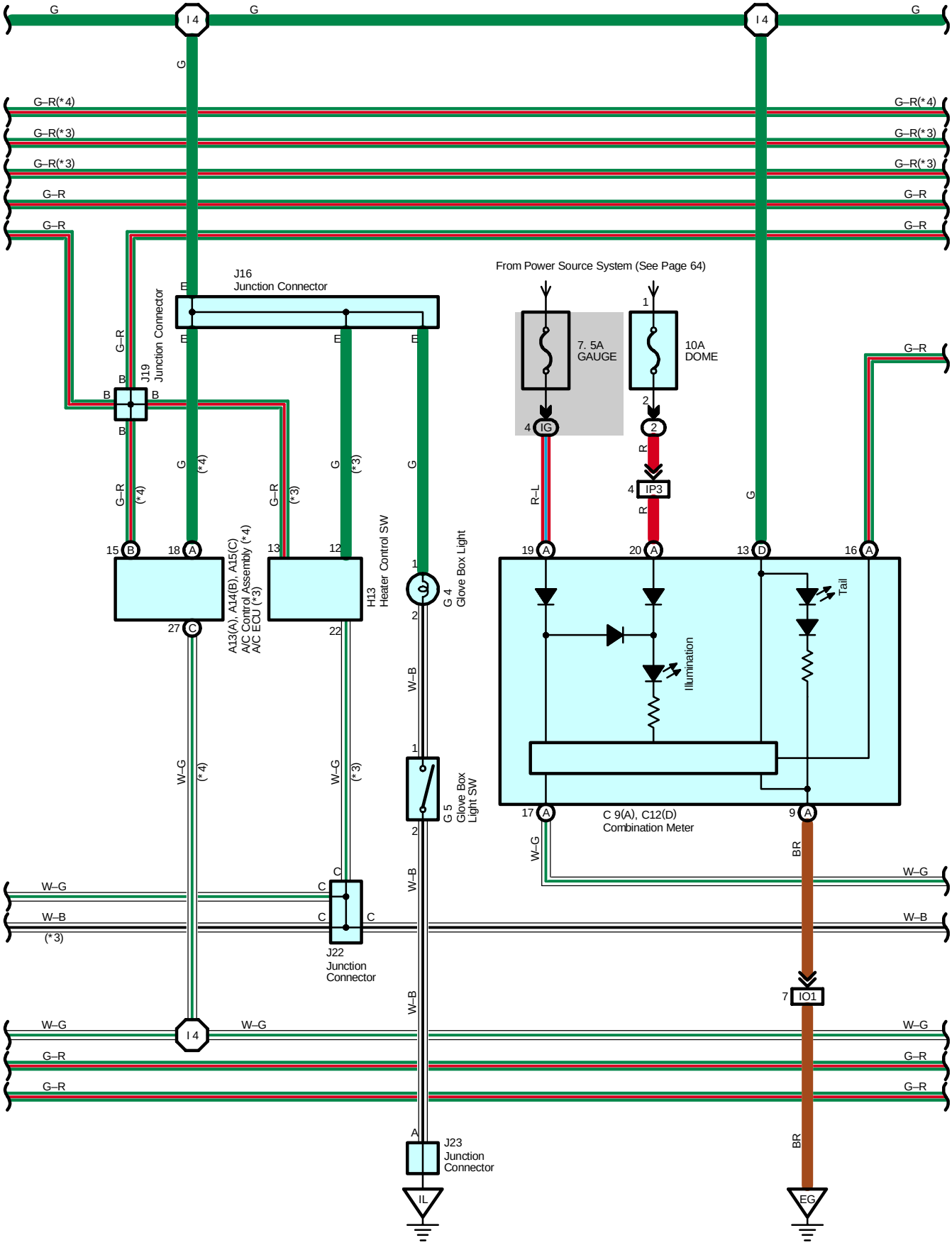
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B1	60	Roof Wire

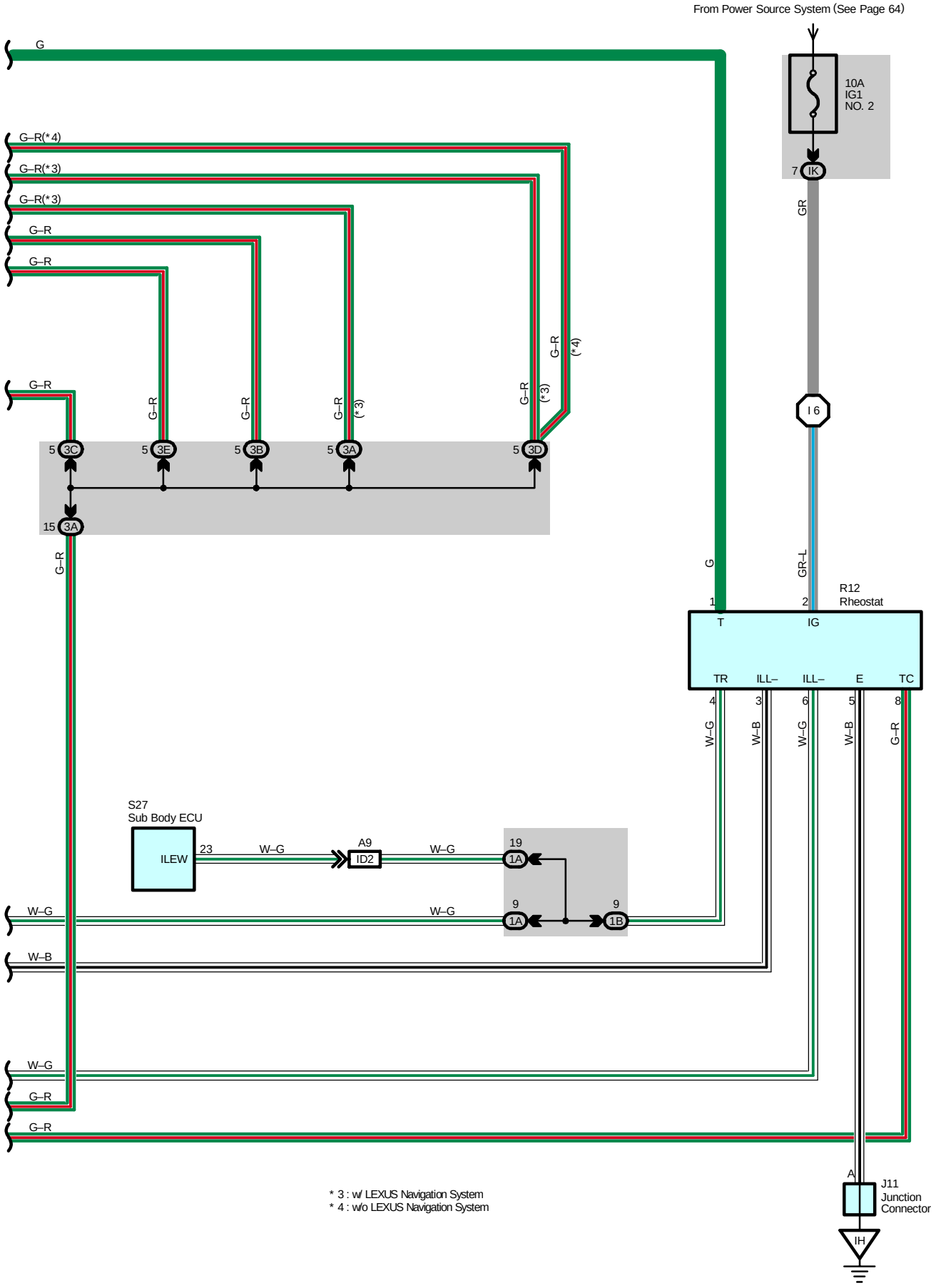

From Power Source System (See Page 64)
50A J/B
L–W
G
TAIL Relay
10A PANEL
10A TAIL
J30 Junction Connector
TRLY
B 3(A), B 5(C) Body ECU
TAIL
TC
ACAN
TAIL
IH1
G–R
W–B
J 7(A), J 8(B) Junction Connector
R14 Rear Combination Light LH
R15 Rear Combination Light RH
Tail
F 3 Front Parking Light LH Front Side Marker Light LH
F 4 Front Parking Light RH Front Side Marker Light RH
Side Marker
Parking
Light Control SW
OFF
Tail
Head
T
EL
H
C14 Combination SW
J14 Junction Connector
J32 Junction Connector
IJ
EB
EA
BP


J17
Junction
Connector
IR2
BH1
B 6
B 5
I 4
IQ2
IQ1
D19
Door Lock Control
SW RH
J28
Junction
Connector
J23
Junction
Connector
L 1
License Plate Light
LH
L 2
License Plate Light
RH
M 3
Main SW
H11
Hazard SW
A33
Ashtray Illumination
C 8
Cigarette Lighter
Illumination
M 4
Mirror Heater SW
BQ
IL
G
G–R
W–B
W–G


G
G–R(*4)
G–R(*3)
G–R
(*3)
I 4
IJ1
38
32
61
A22
Accessory Meter
C 4
Center Diff.
Lock Control SW
E 4
Electronically Controlled
Transmission Pattern Select SW
S 3
Seat Heater SW
Front LH
S 4
Seat Heater SW
Front RH
ILL–
C13
Combination SW
R11
Remote Control Mirror
SW
M 5
Multi–Display
2B
2A
2C
2D
2E
I 8
W–G
W–B
W
J23
Junction
Connector
A
IL
* 1 : w/ Rear A/C
* 2 : w/o Rear A/C
* 3 : w/ LEXUS Navigation System
* 4 : w/o LEXUS Navigation System


G
G–R(*4)
G–R(*3)
I4
IM1
IK1
IJ1
I11
H14
Height Control and Suspension SW
D 5
Downhill Assist Control SW
A19
A/T Shift Indicator
C16
Console Box Illumination
J25
Junction Connector
R 4
Rear Cooler SW
R 1(A), R 2(B)
Radio and Player
W–B
W–G
(*1)
(*2)
(*3)


From Power Source System (See Page 64)
J16
Junction Connector
J19
Junction Connector
7. 5A
GAUGE
10A
DOME
IG
IP3
A13(A), A14(B), A15(C)
A/C Control Assembly (*4)
A/C ECU (*3)
H13
Heater Control SW
G 4
Glove Box Light
G 5
Glove Box
Light SW
C 9(A), C12(D)
Combination Meter
Illumination
Tail
J22
Junction
Connector
J23
Junction
Connector
IO1
I 4
IL
EG
G
G–R(*4)
G–R(*3)
G–R
W–G
W–B
R–L
BR
(*3)
(*4)


From Power Source System (See Page 64)
G
10A
IG1
NO. 2
7
IK
G–R(*4)
G–R(*3)
G–R(*3)
G–R
G–R
GR
I 6
G–R
G–R
G–R
G–R
(*3)
G–R
(*3)
G–R
(*4)
5
3C
5
3E
5
3B
5
3A
5
3D
15
3A
G–R
G
GR–L
R12
Rheostat
1
T
2
IG
TR
ILL–
ILL–
E
TC
4
3
6
5
8
W–G
W–B
W–G
W–B
G–R
S27
Sub Body ECU
ILEW
23
W–G
A9
ID2
W–G
19
1A
W–G
9
1A
W–G
9
1B
W–B
W–G
G–R
G–R
A
J11
Junction
Connector
IH
* 3 : w/ LEXUS Navigation System
* 4 : w/o LEXUS Navigation System

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	J30	43
A14 B	38	F4	36	J32	43
A15 C	38	G4	39	L1	43
A19	38	G5	39	L2	43
A22	38	H11	39	M3	40
A33	38	H13	39	M4	40
B3 A	38	H14	39	M5	40
B5 C	38	J7 A	40	R1 A	41
C4	38	J8 B	40	R2 B	41
C8	38	J11	40	R4	41
C9 A	38	J14	40	R11	41
C12 D	38	J16	40	R12	41
C13	38	J17	40	R14	44
C14	38	J19	40	R15	44
C16	38	J22	40	S3	41
D5	39	J23	40	S4	41
D19	42	J25	40	S27	45
E4	39	J28	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)
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		
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

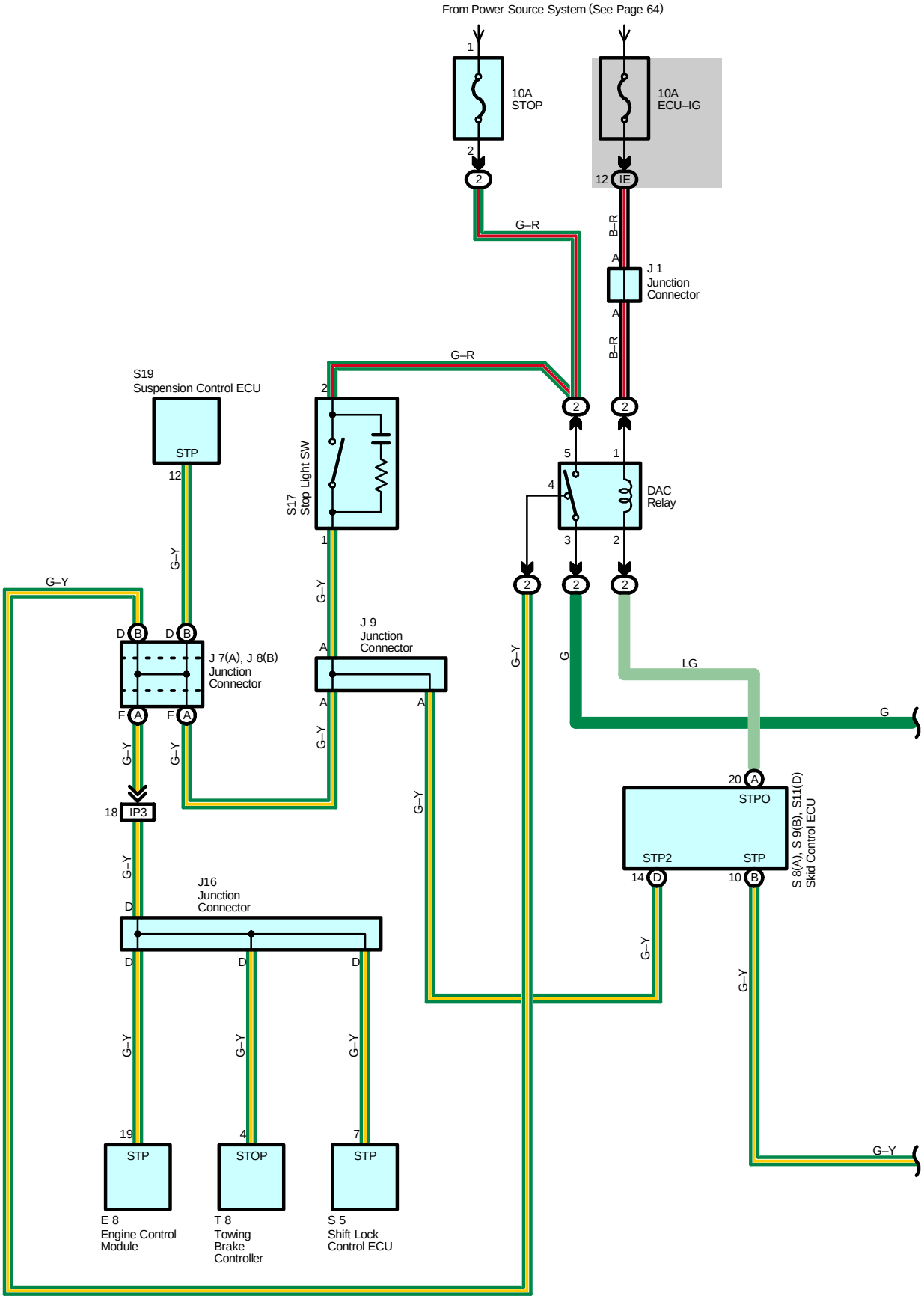
: **Ground Points**

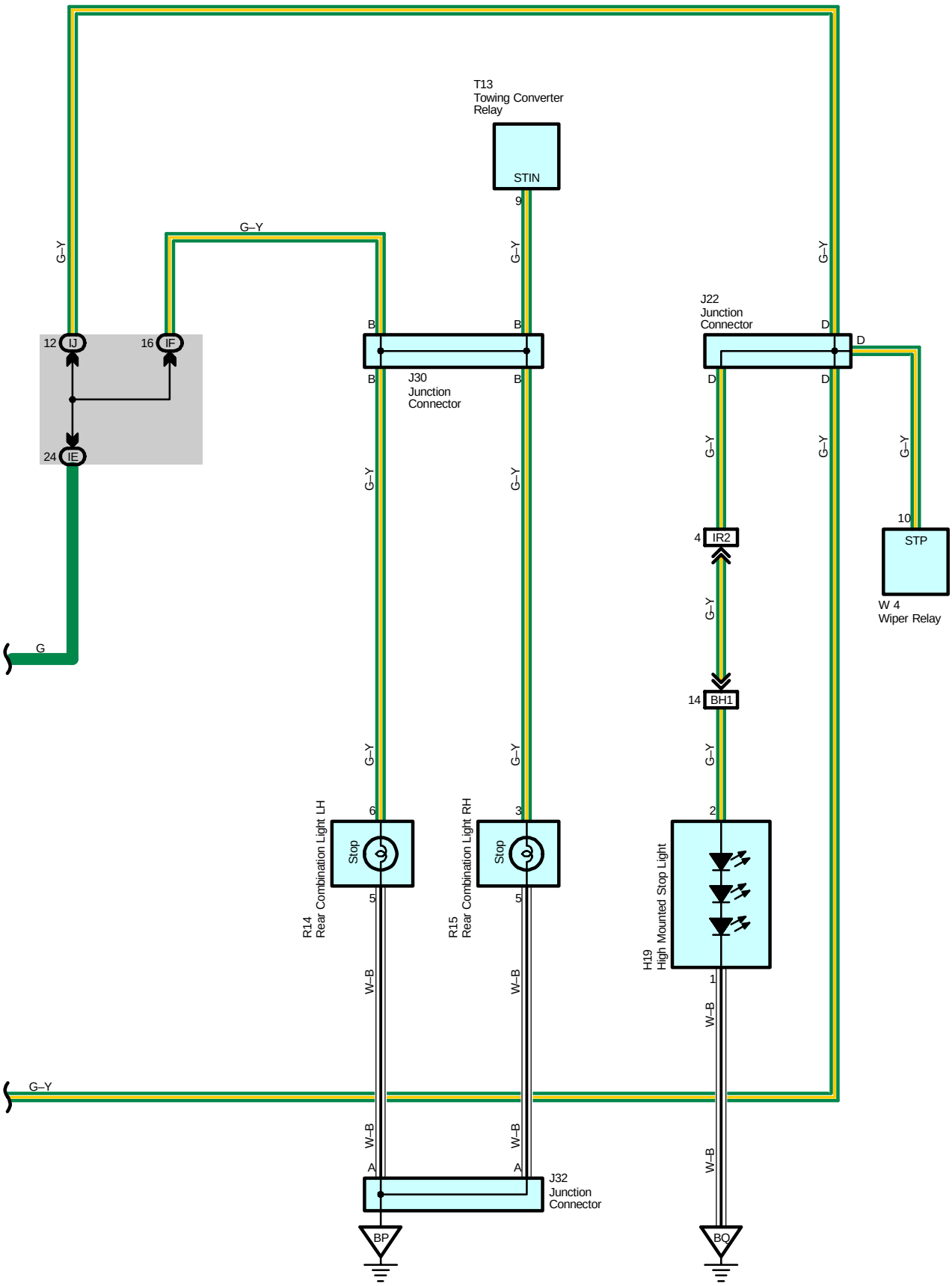
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	52	Instrument Panel Wire	I11	52	Switch Wire
I6			B5	60	Back Door No.1 Wire
I8			B6		

Stop Light


From Power Source System (See Page 64)
10A
STOP
10A
ECU–IG
G–R
B–R
J 1
Junction
Connector
S19
Suspension Control ECU
STP
S17
Stop Light SW
DAC
Relay
G–Y
LG
G
J 9
Junction
Connector
J 7(A), J 8(B)
Junction
Connector
IP3
J16
Junction
Connector
STPO
STP2
STP
S 8(A), S 9(B), S11(D)
Skid Control ECU
STOP
E 8
Engine Control
Module
T 8
Towing
Brake
Controller
S 5
Shift Lock
Control ECU


T13
Towing Converter
Relay
STIN
9
G–Y
G–Y
G–Y
12 IJ
16 IF
24 IE
B
B
B
B
J30
Junction
Connector
J22
Junction
Connector
D
D
D
D
G–Y
G–Y
G–Y
4 IR2
10
STP
W 4
Wiper Relay
G
G–Y
14 BH1
G–Y
G–Y
G–Y
6
3
2
Stop
Stop
R14
Rear Combination Light LH
R15
Rear Combination Light RH
H19
High Mounted Stop Light
5
5
1
W–B
W–B
W–B
G–Y
W–B
W–B
W–B
A
A
J32
Junction
Connector
BP
BQ

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
E8	39	J22	40	S9 B	41
H19	43	J30	43	S11 D	41
J1	37	J32	43	S17	41
J7 A	40	R14	44	S19	41
J8 B	40	R15	44	T8	41
J9	40	S5	41	T13	45
J16	40	S8 A	41	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

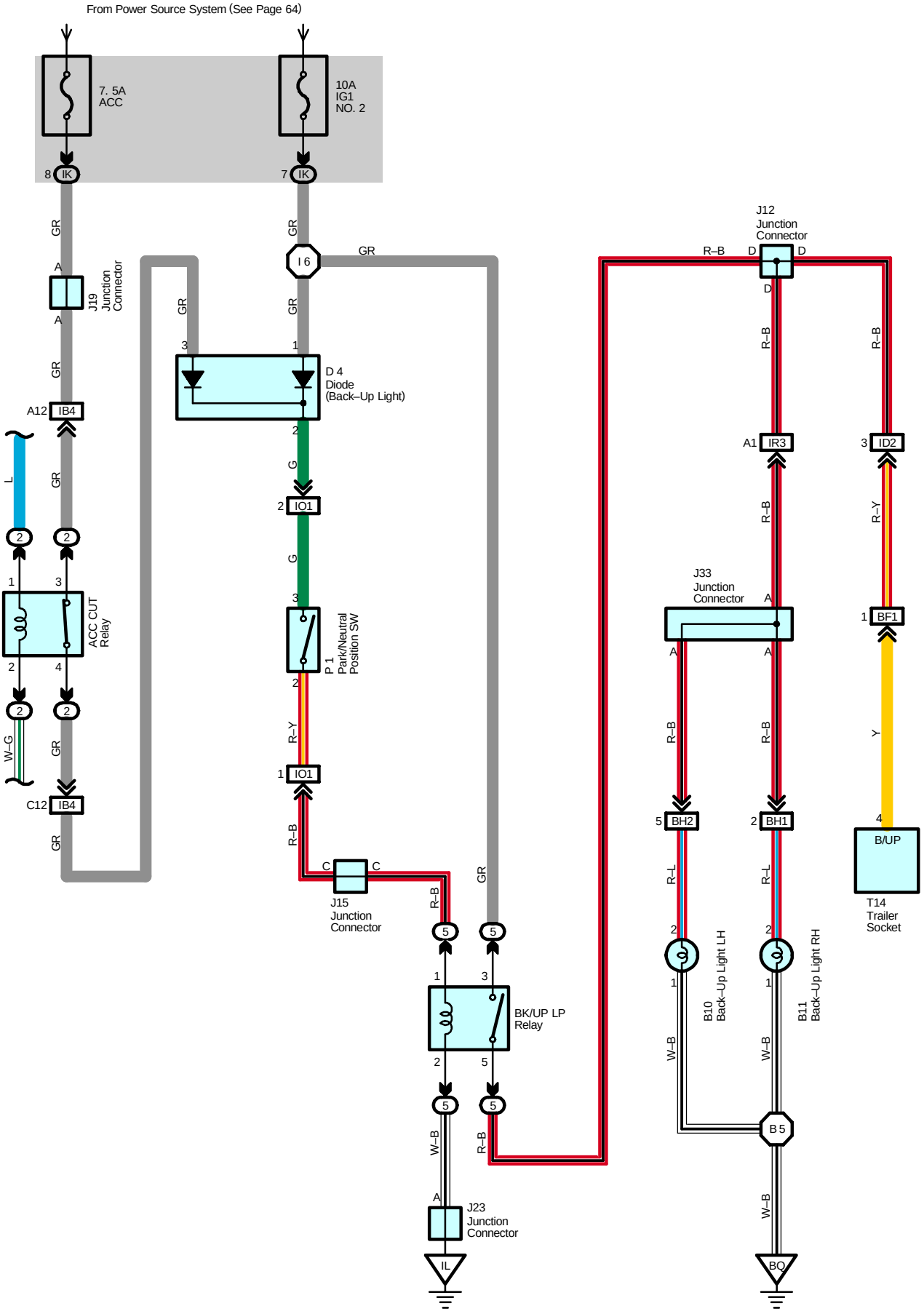
Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR2	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


From Power Source System (See Page 64)
7. 5A
ACC
10A
IG1
NO. 2
8 IK
7 IK
GR
A
J19
Junction
Connector
A12 IB4
L
2
1
3
ACC CUT
Relay
2
4
W–G
C12 IB4
I 6
D 4
Diode
(Back–Up Light)
IO1
G
P 1
Park/Neutral
Position SW
R–Y
R–B
C
J15
Junction
Connector
5
BK/UP LP
Relay
W–B
J23
Junction
Connector
IL
J12
Junction
Connector
D
A1 IR3
3 ID2
J33
Junction
Connector
5 BH2
2 BH1
1 BF1
Y
4
B/UP
T14
Trailer
Socket
R–L
B10
Back–Up Light LH
B11
Back–Up Light RH
B 5
BQ

Service Hints

P1 Park/Neutral Position SW

3–2 : Continuity with the shift lever in R position

: Parts Location

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

: 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 Crossmember)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BH2		

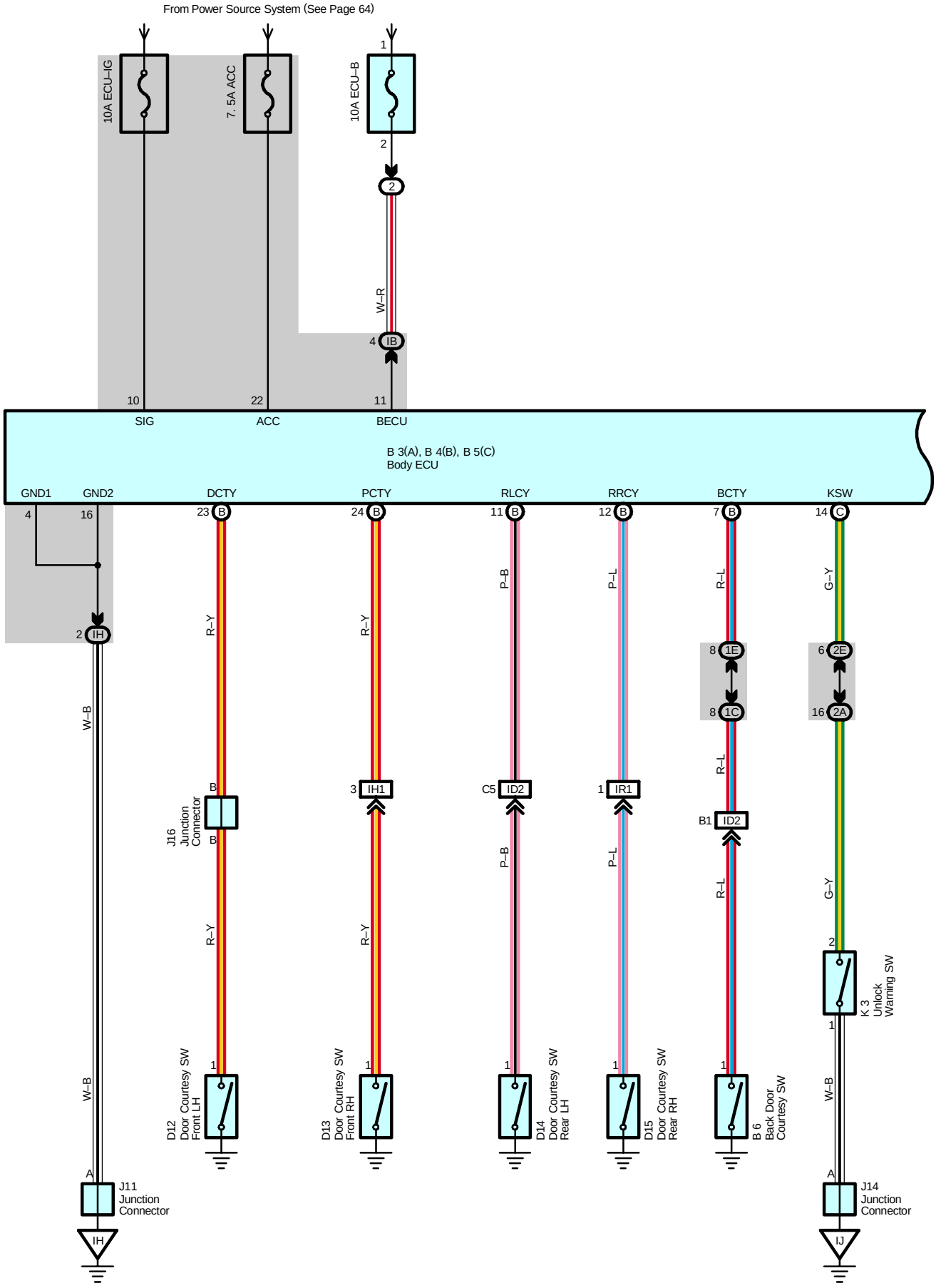
: Ground Points

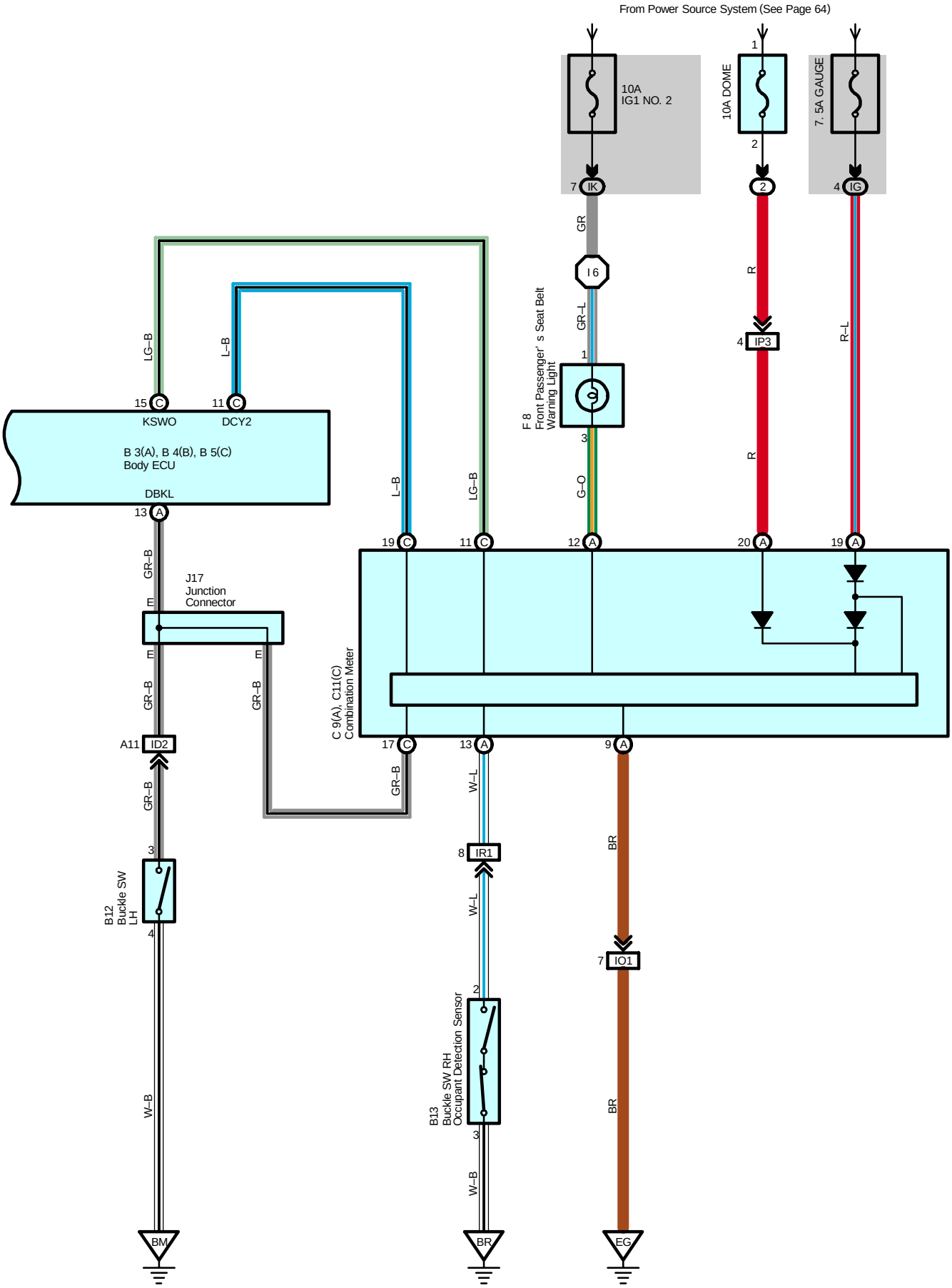
Code	See Page	Ground Points Location
IL	50	Right Kick Panel
BQ	58	Back Door Panel Center

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B5	60	Back Door No.1 Wire

Key Reminder and Seat Belt Warning




From Power Source System (See Page 64)
10A
IG1 NO. 2
10A DOME
7. 5A GAUGE
7 IK
1
2
4 IG
GR
I 6
GR–L
R
4 IP3
R–L
F 8
Front Passenger' s Seat Belt
Warning Light
3
G–O
LG–B
L–B
15 C
KSWO
11 C
DCY2
B 3(A), B 4(B), B 5(C)
Body ECU
DBKL
13 A
19 C
11 C
12 A
20 A
19 A
GR–B
J17
Junction
Connector
E
C 9(A), C11(C)
Combination Meter
A11 ID2
17 C
13 A
9 A
W–L
BR
8 IR1
7 IO1
B12
Buckle SW
LH
4
B13
Buckle SW RH
Occupant Detection Sensor
2
W–B
BM
BR
EG

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

B12 Buckle SW LH

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

B13 Buckle SW RH
Occupant Detection Sensor

2–3 : Continuity with front passenger sit on front passenger seat and front passenger's seat belt not use

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
B3	A	38	C9	A	38	F8	39
B4	B	38	C11	C	38	J11	40
B5	C	38	D12		42	J14	40
B6		42	D13		42	J16	40
B12		46	D14		42	J17	40
B13		46	D15		42	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)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IK		
1C	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

: Connector Joining Wire Harness and Wire Harness

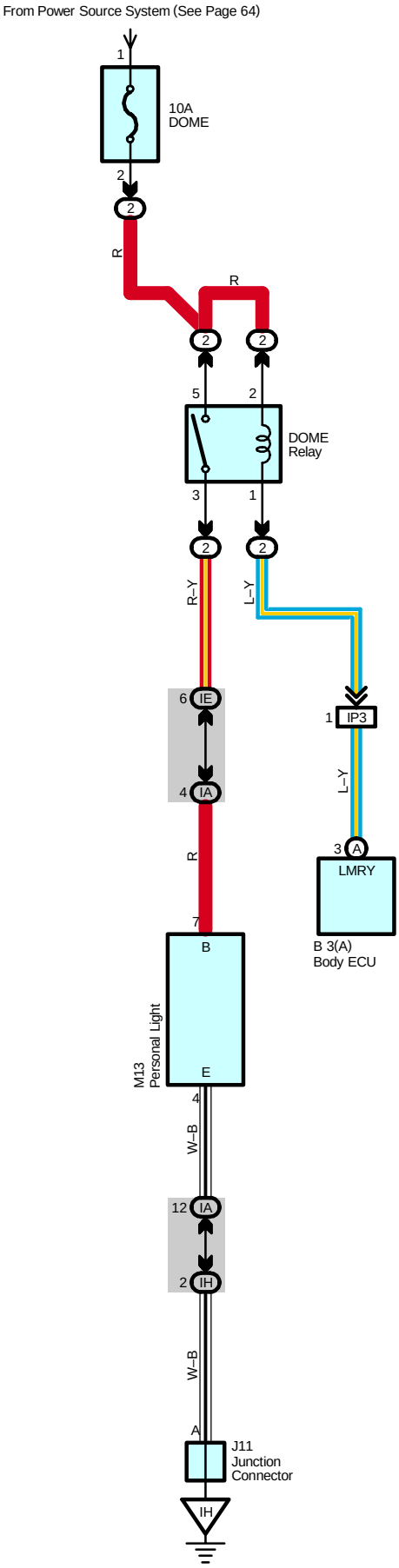
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: 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
BR	58	Right Quarter Panel Inner

: Splice Points

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


From Power Source System (See Page 64)
1
10A
DOME
2
2
R
R
2
2
5
2
DOME
Relay
3
1
2
2
R–Y
L–Y
6
IE
1
IP3
4
IA
L–Y
3
A
LMRY
R
7
B
B 3(A)
Body ECU
M13
Personal Light
E
4
W–B
12
IA
2
IH
W–B
A
J11
Junction
Connector
IH

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)

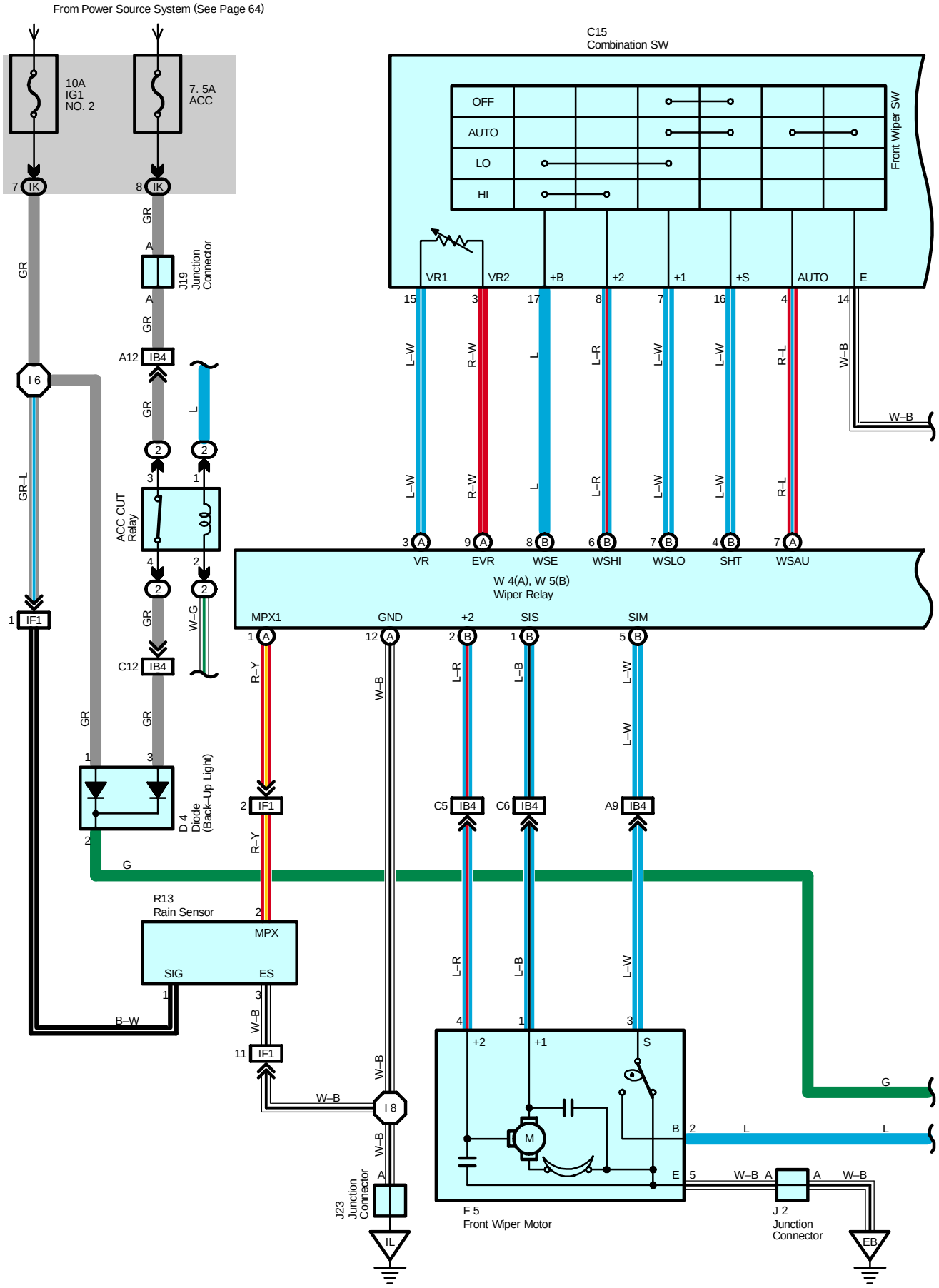
: Connector Joining Wire Harness and Wire Harness

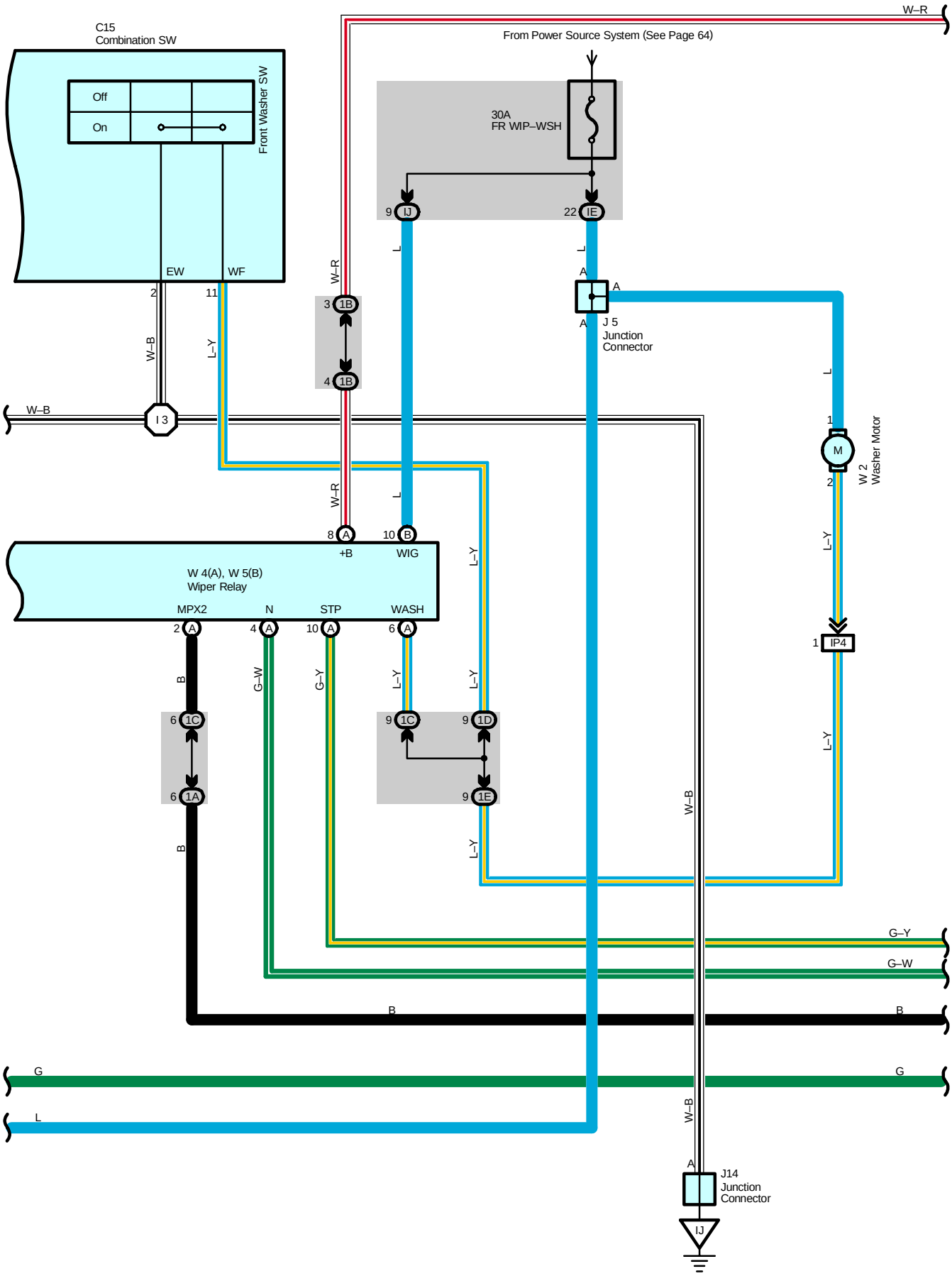
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

: Ground Points

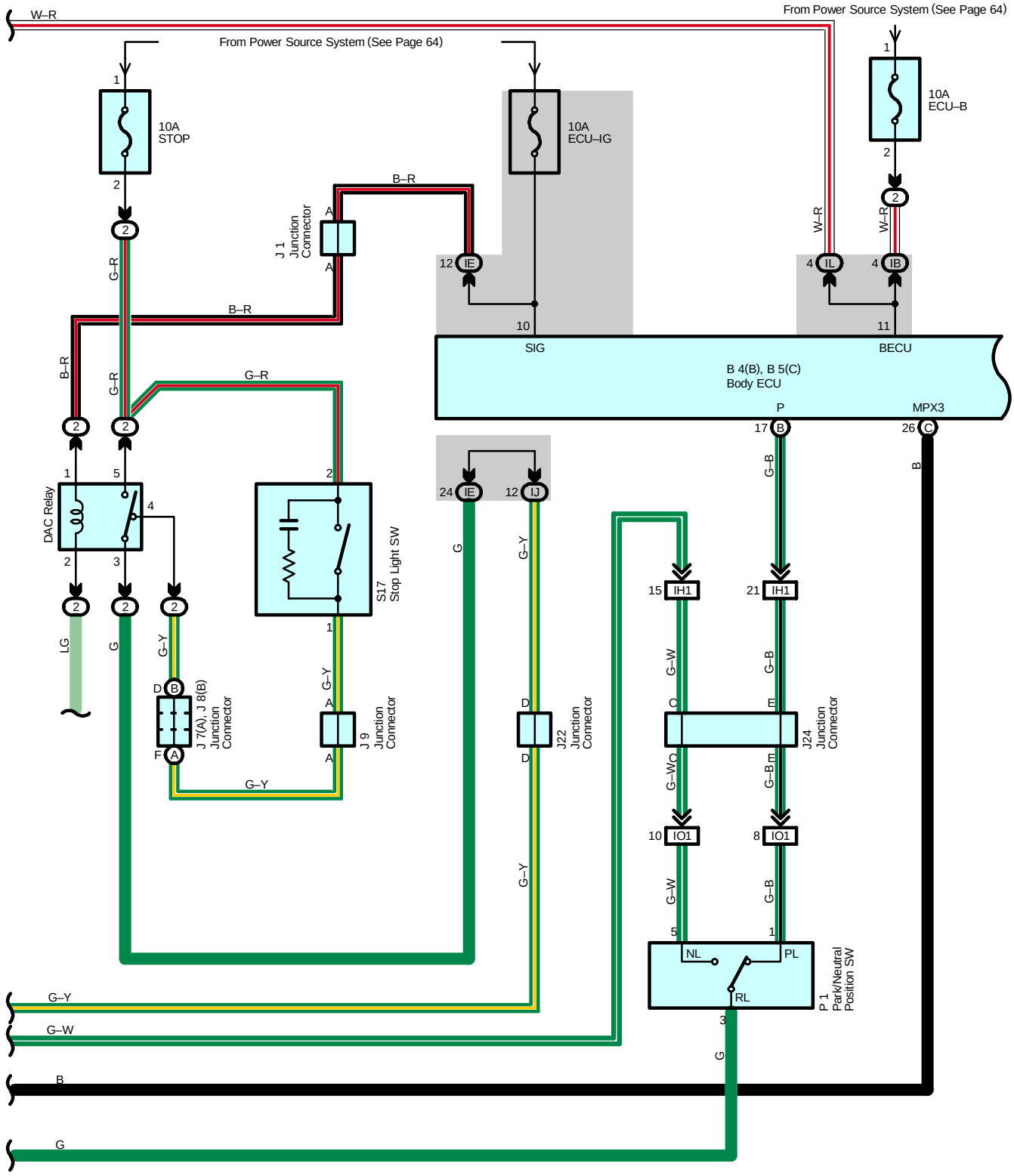
Code	See Page	Ground Points Location
IH	50	Left Kick Panel

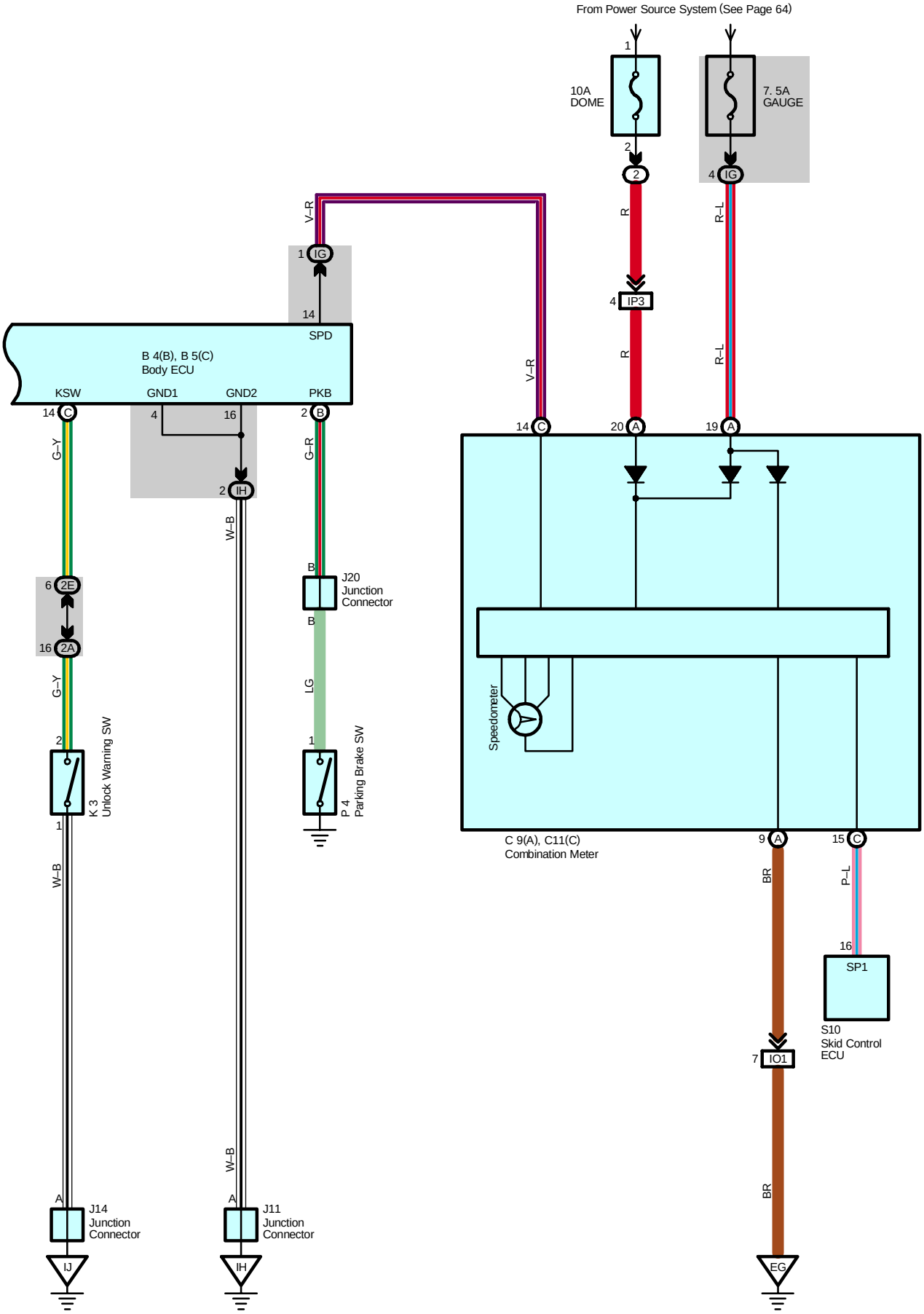
Front Wiper and Washer (w/ Rain Sensor)




C15
Combination SW
Off
On
Front Washer SW
EW
WF
2
11
W–B
L–Y
W–R
From Power Source System (See Page 64)
30A
FR WIP–WSH
9 IJ
22 IE
L
A
J 5
Junction
Connector
3 1B
4 1B
I 3
W–B
1
M
2
W 2
Washer Motor
L–Y
1 IP4
8 A
10 B
+B
WIG
W 4(A), W 5(B)
Wiper Relay
MPX2
N
STP
WASH
2 A
4 A
10 A
6 A
B
G–W
G–Y
6 1C
6 1A
9 1C
9 1D
9 1E
G–Y
G–W
B
G
L
J14
Junction
Connector
IJ

Front Wiper and Washer (w/ Rain Sensor)




From Power Source System (See Page 64)
10A
DOME
7. 5A
GAUGE
IG
IP3
V–R
R
R–L
SPD
B 4(B), B 5(C)
Body ECU
KSW
GND1
GND2
PKB
2E
2A
IH
G–Y
W–B
G–R
LG
J20
Junction
Connector
K 3
Unlock Warning SW
P 4
Parking Brake SW
Speedometer
C 9(A), C11(C)
Combination Meter
BR
P–L
SP1
S10
Skid Control
ECU
IO1
J14
Junction
Connector
J11
Junction
Connector
IJ
EG

Front Wiper and Washer (w/ Rain Sensor)

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 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 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	K3		40
B5	C	38	J8	B	40	P1		37
C9	A	38	J9		40	P4		40
C11	C	38	J11		40	R13		44
C15		38	J14		40	S10		41
D4		39	J19		40	S17		41
F5		36	J20		40	W2		37
J1		37	J22		40	W4	A	41
J2		37	J23		40	W5	B	41
J5		37	J24		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)
IH		
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
1E		
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)
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		

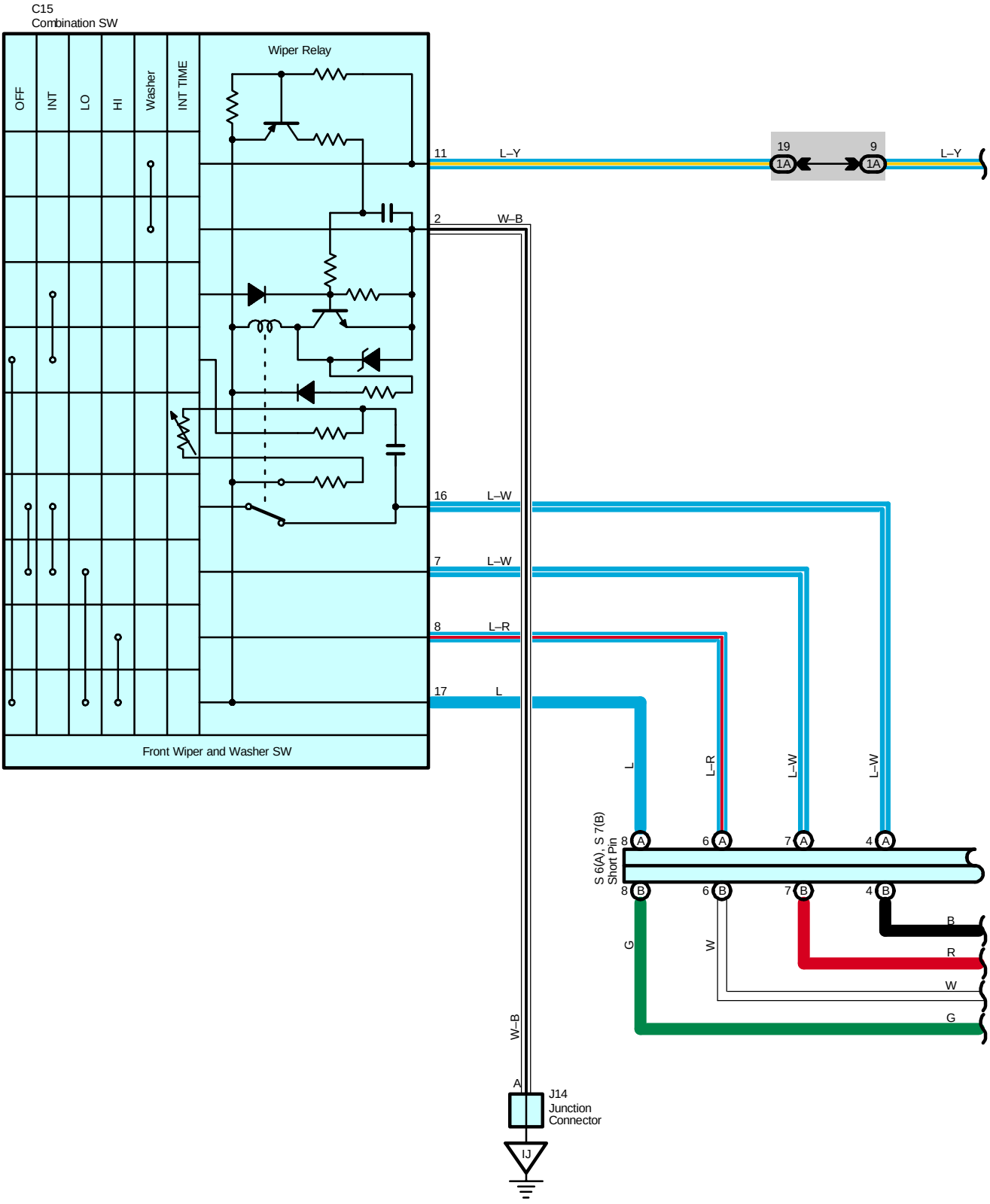
: **Ground Points**

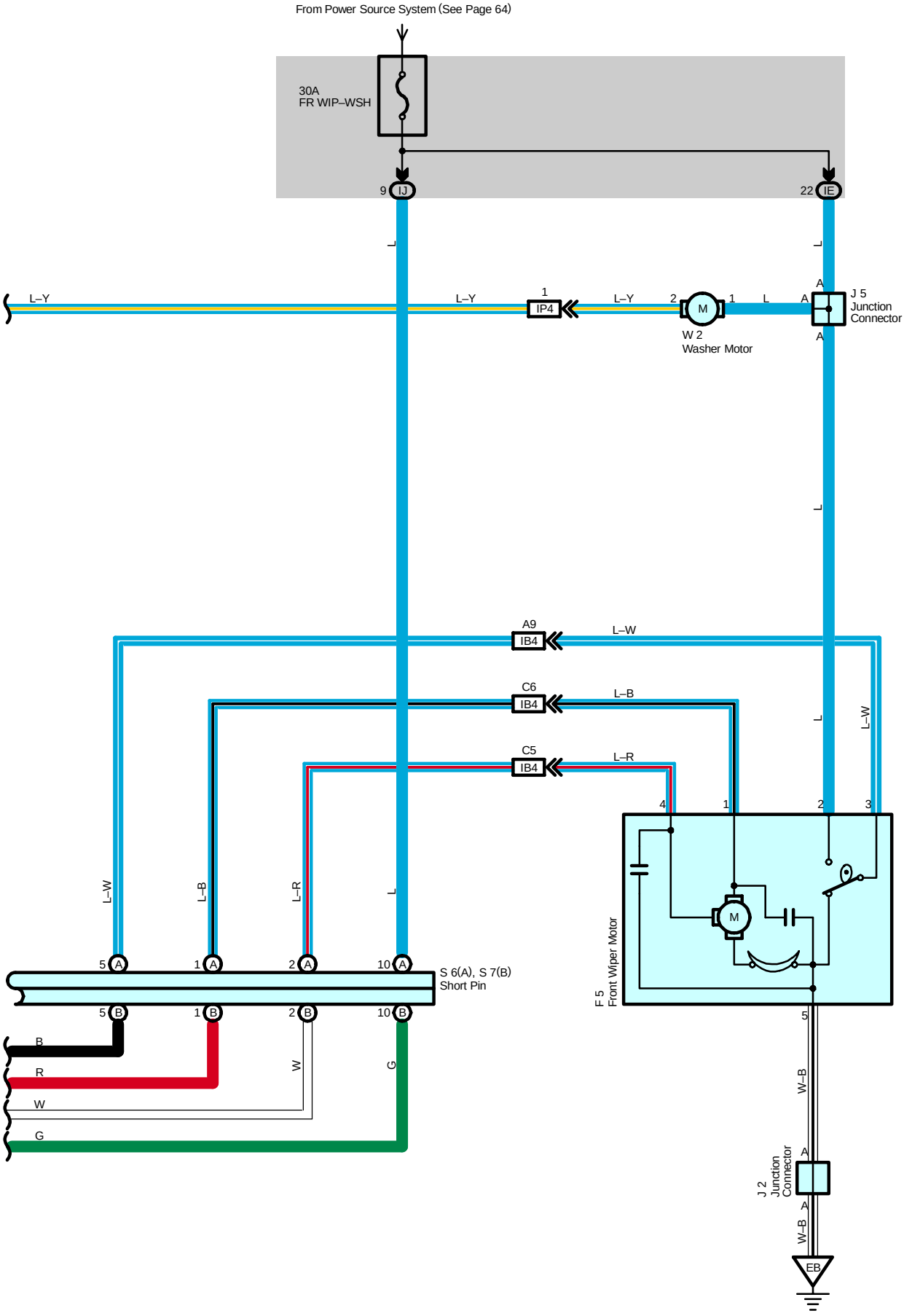
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	52	Instrument Panel Wire	I8	52	Instrument Panel Wire
I6					

Front Wiper and Washer (w/o Rain Sensor)




From Power Source System (See Page 64)
30A
FR WIP–WSH
9 IJ
22 IE
L
L–Y
1
IP4
L–Y
2
M
1
L
A
J 5
Junction
Connector
A
W 2
Washer Motor
A9
IB4
L–W
C6
IB4
L–B
C5
IB4
L–R
L–W
L–B
L–R
L
5 A
1 A
2 A
10 A
S 6(A), S 7(B)
Short Pin
5 B
1 B
2 B
10 B
B
R
W
G
W
G
4
1
2
3
M
F 5
Front Wiper Motor
5
W–B
J 2
Junction
Connector
A
A
W–B
EB

Front Wiper and Washer (w/o Rain Sensor)

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

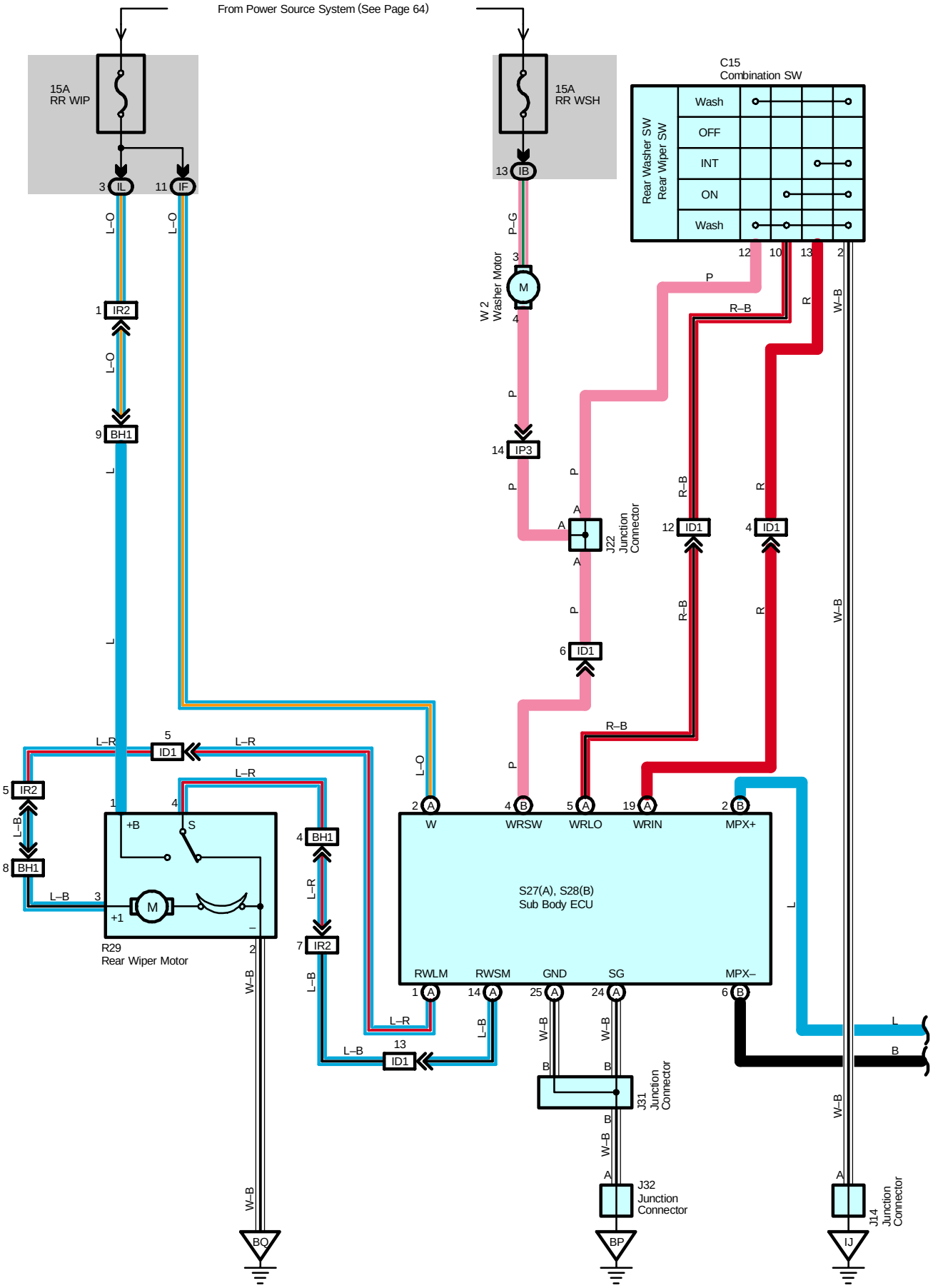
Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)

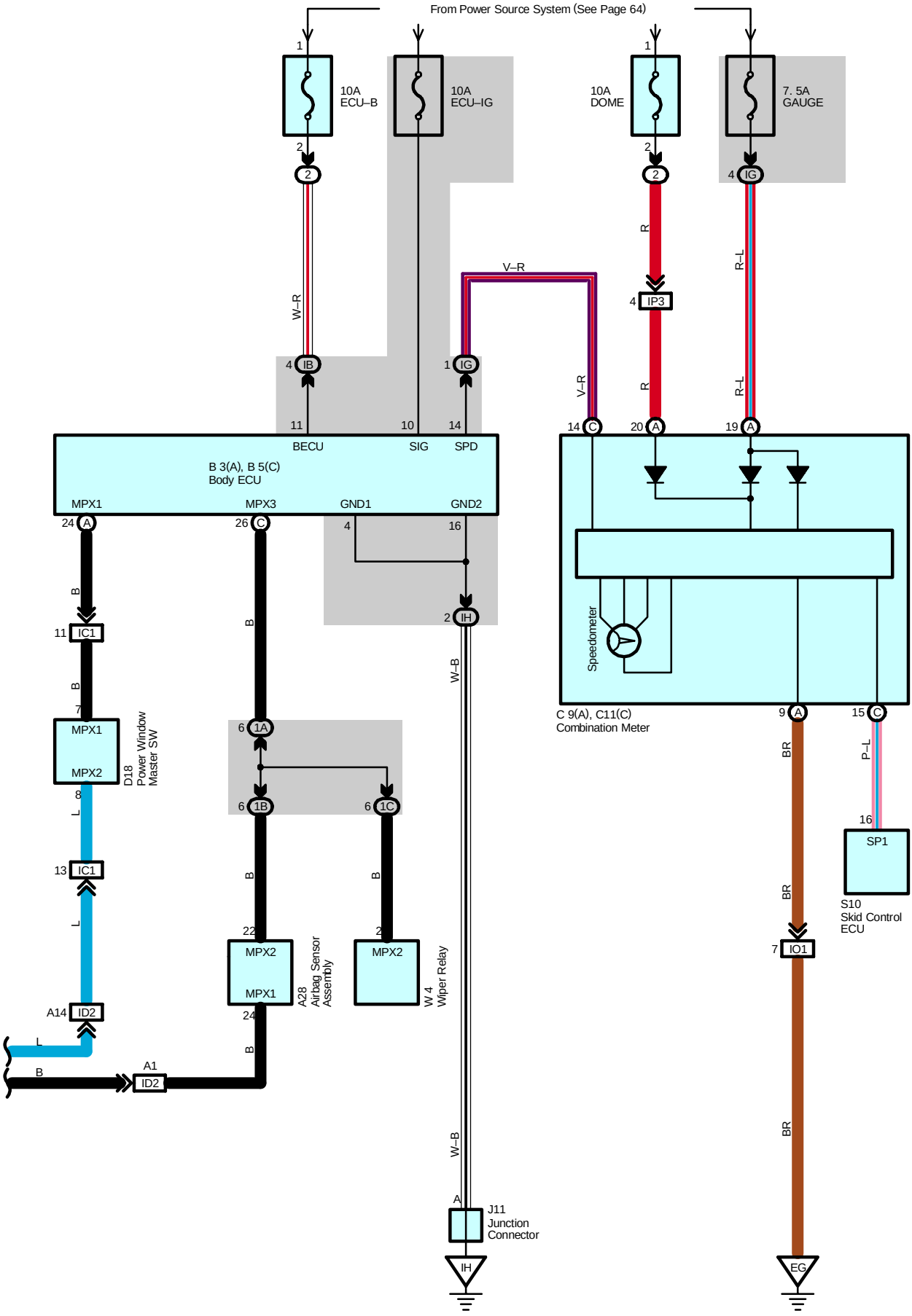
▭ : Connector Joining Wire Harness and Wire Harness

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


From Power Source System (See Page 64)
15A
RR WIP
15A
RR WSH
C15
Combination SW
Rear Washer SW
Rear Wiper SW
Wash
OFF
INT
ON
Wash
W 2
Washer Motor
J22
Junction
Connector
J31
Junction
Connector
J32
Junction
Connector
J14
Junction
Connector
R29
Rear Wiper Motor
S27(A), S28(B)
Sub Body ECU
W
WRSW
WRLO
WRIN
MPX+
RWLM
RWSM
GND
SG
MPX–
BQ
BP
IJ


From Power Source System (See Page 64)
10A
ECU–B
10A
ECU–IG
10A
DOME
7. 5A
GAUGE
W–R
V–R
R
R–L
BECU
SIG
SPD
B 3(A), B 5(C)
Body ECU
MPX1
MPX3
GND1
GND2
C 9(A), C11(C)
Combination Meter
Speedometer
D18
Power Window
Master SW
A28
Airbag Sensor
Assembly
W 4
Wiper Relay
J11
Junction
Connector
S10
Skid Control
ECU
SP1
W–B
B
L
BR
P–L

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. Wsher–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
A28		38	D18	42	R29		44
B3	A	38	J11	40	S10		41
B5	C	38	J14	40	S27	A	45
C9	A	38	J22	40	S28	B	45
C11	C	38	J31	43	W2		37
C15		38	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

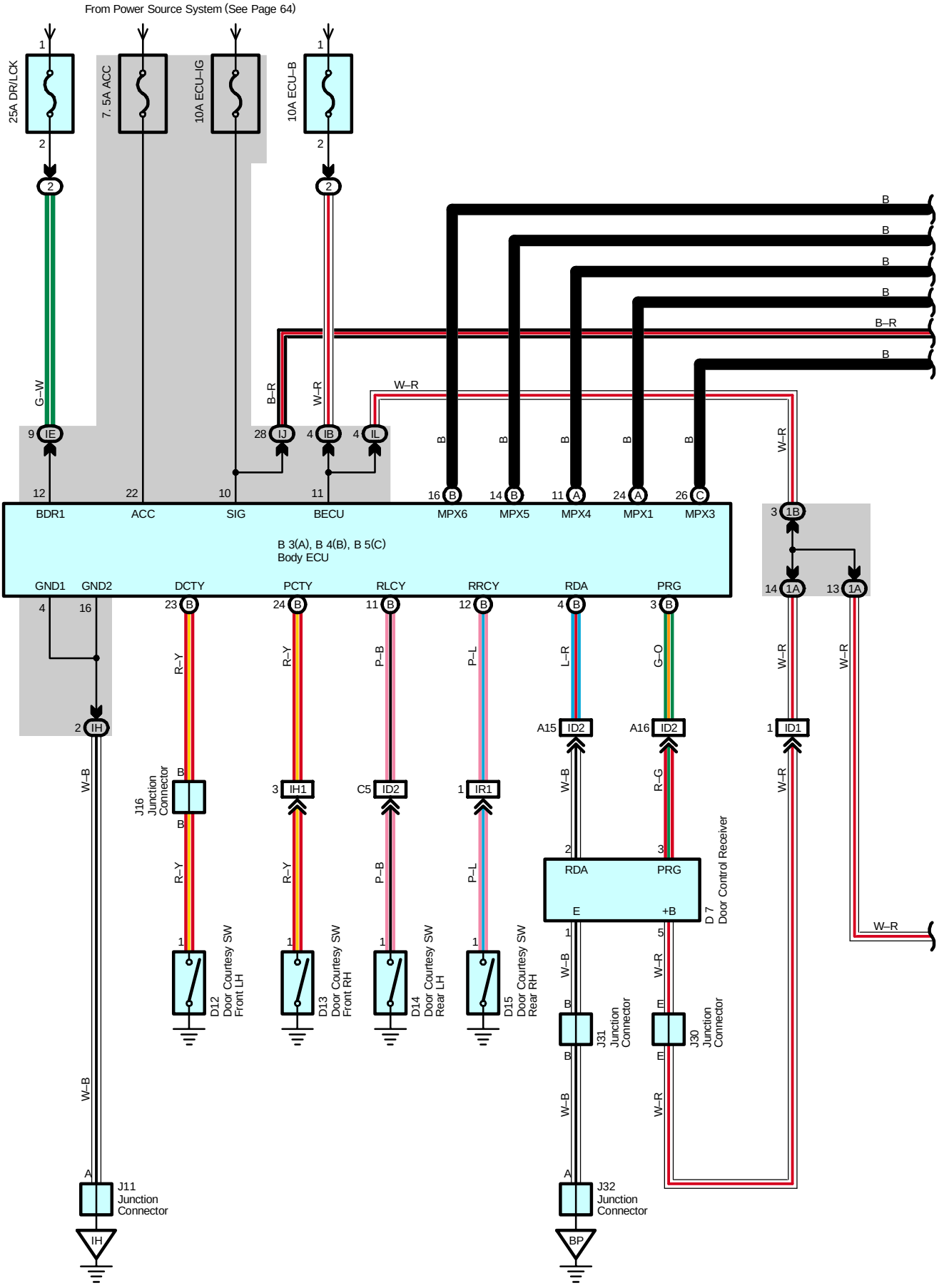
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IF	26	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IL		
1A	30	Instrument Panel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

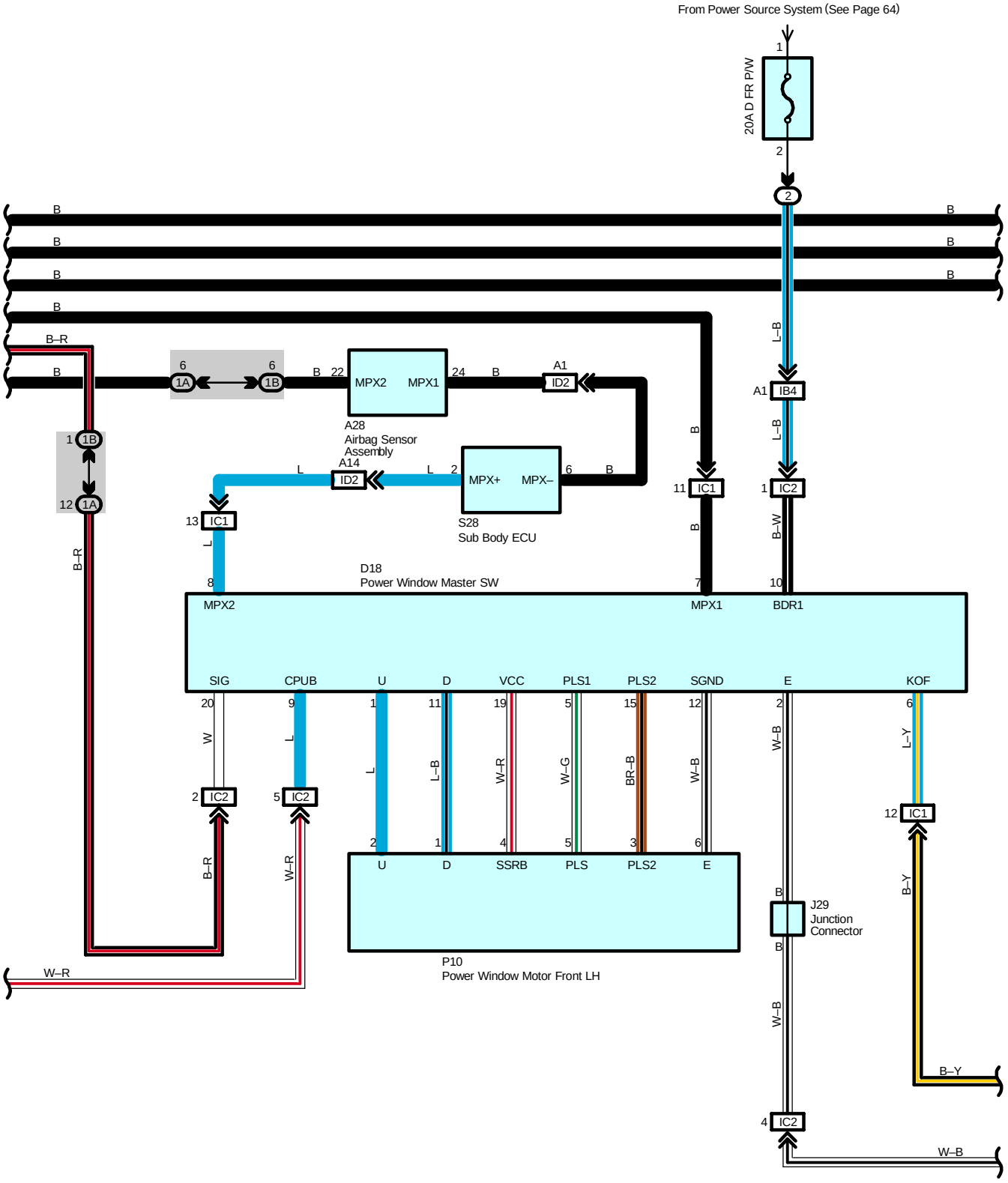
: Connector Joining Wire Harness and Wire Harness

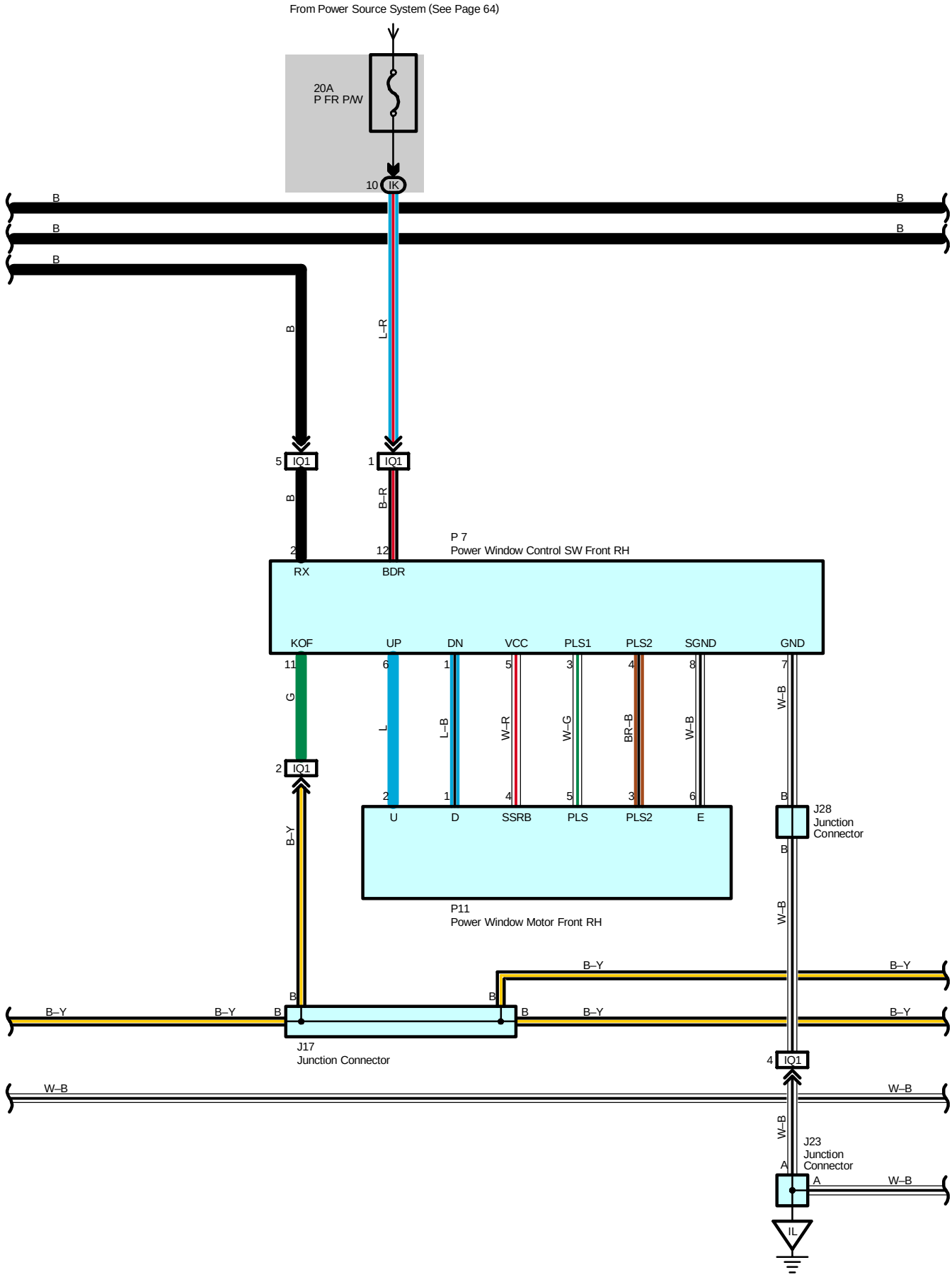
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

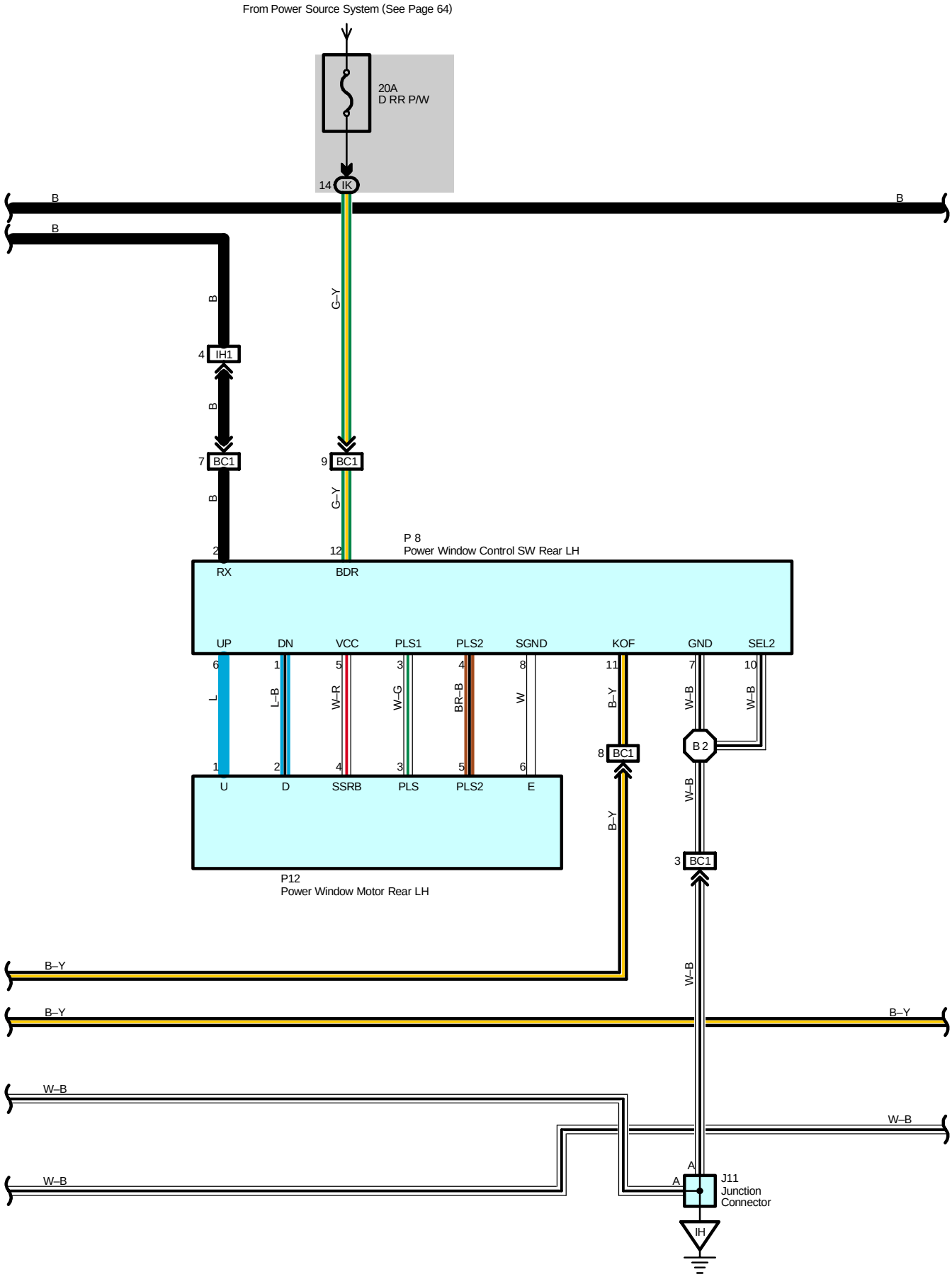
: Ground Points

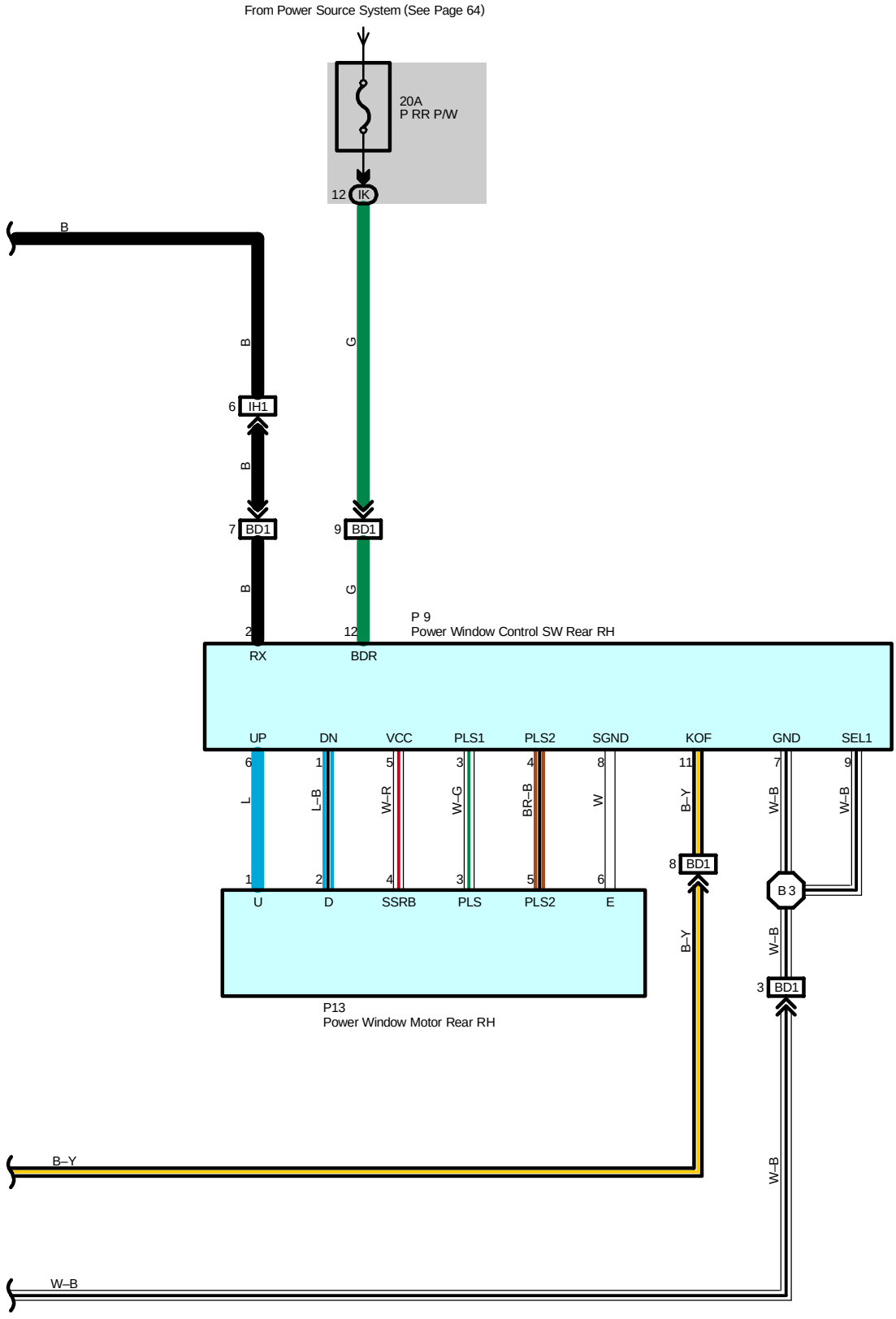
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
BP	58	Left Quarter Panel Inner
BQ	58	Back Door Panel Center


From Power Source System (See Page 64)
25A DR/LCK
7. 5A ACC
10A ECU–IG
10A ECU–B
G–W
B–R
W–R
B
BDR1
ACC
SIG
BECU
MPX6
MPX5
MPX4
MPX1
MPX3
B 3(A), B 4(B), B 5(C)
Body ECU
GND1
GND2
DCTY
PCTY
RLCY
RRCY
RDA
PRG
R–Y
P–B
P–L
L–R
G–O
W–B
R–G
J16 Junction Connector
D12 Door Courtesy SW Front LH
D13 Door Courtesy SW Front RH
D14 Door Courtesy SW Rear LH
D15 Door Courtesy SW Rear RH
D 7 Door Control Receiver
J31 Junction Connector
J30 Junction Connector
J11 Junction Connector
J32 Junction Connector
IH
BP


From Power Source System (See Page 64)
20A D FR P/W
1
2
2
B
B–R
L–B
A1
IB4
6
1A
6
1B
B
22
MPX2
MPX1
24
B
A1
ID2
A28
Airbag Sensor
Assembly
1
1B
12
1A
L
A14
ID2
L
2
MPX+
MPX–
6
B
S28
Sub Body ECU
11
IC1
1
IC2
13
IC1
L
B–W
B–R
D18
Power Window Master SW
8
7
10
MPX2
MPX1
BDR1
SIG
CPUB
U
D
VCC
PLS1
PLS2
SGND
E
KOF
20
9
1
11
19
5
15
12
2
6
W
L
L
L–B
W–R
W–G
BR–B
W–B
W–B
L–Y
2
IC2
5
IC2
2
1
4
5
3
6
12
IC1
B–R
W–R
U
D
SSRB
PLS
PLS2
E
B–Y
B
J29
Junction
Connector
B
W–B
W–R
4
IC2
B–Y
W–B


From Power Source System (See Page 64)
20A
P FR P/W
10 IK
B
L–R
5 IQ1
1 IQ1
B–R
P 7
Power Window Control SW Front RH
2
12
RX
BDR
KOF
UP
DN
VCC
PLS1
PLS2
SGND
GND
11
6
1
5
3
4
8
7
G
L
L–B
W–R
W–G
BR–B
W–B
W–B
2 IQ1
2
1
4
5
3
6
B
U
D
SSRB
PLS
PLS2
E
J28
Junction
Connector
P11
Power Window Motor Front RH
B–Y
J17
Junction Connector
4 IQ1
W–B
J23
Junction
Connector
A
IL


From Power Source System (See Page 64)
20A
D RR P/W
14 IK
B
B
B
G–Y
4 IH1
B
7 BC1
B
9 BC1
G–Y
2
12
P 8
Power Window Control SW Rear LH
RX
BDR
UP
DN
VCC
PLS1
PLS2
SGND
KOF
GND
SEL2
6
1
5
3
4
8
11
7
10
L
L–B
W–R
W–G
BR–B
W
B–Y
W–B
W–B
8 BC1
B 2
W–B
1
2
4
3
5
6
U
D
SSRB
PLS
PLS2
E
B–Y
3 BC1
P12
Power Window Motor Rear LH
B–Y
W–B
B–Y
W–B
W–B
W–B
A
A
J11
Junction
Connector
IH


From Power Source System (See Page 64)
20A
P RR P/W
12 IK
B
B
6 IH1
B
7 BD1
B
2
RX
G
9 BD1
G
12
BDR
P 9
Power Window Control SW Rear RH
UP
DN
VCC
PLS1
PLS2
SGND
KOF
GND
SEL1
6
1
5
3
4
8
11
7
9
L
L–B
W–R
W–G
BR–B
W
B–Y
W–B
W–B
1
2
4
3
5
6
8 BD1
B 3
U
D
SSRB
PLS
PLS2
E
B–Y
W–B
3 BD1
P13
Power Window Motor Rear RH
B–Y
W–B

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. Ker–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 ignition SW at ACC or ON position
11, 12–Ground : Always approx. 12 volts
10–Ground : Approx. 12 volts with 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 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
A28	38	D18	42	J32	43
B3 A	38	J11	40	P7	44
B4 B	38	J16	40	P8	44
B5 C	38	J17	40	P9	44
D7	42	J23	40	P10	44
D12	42	J28	43	P11	44
D13	42	J29	43	P12	44
D14	42	J30	43	P13	44
D15	42	J31	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

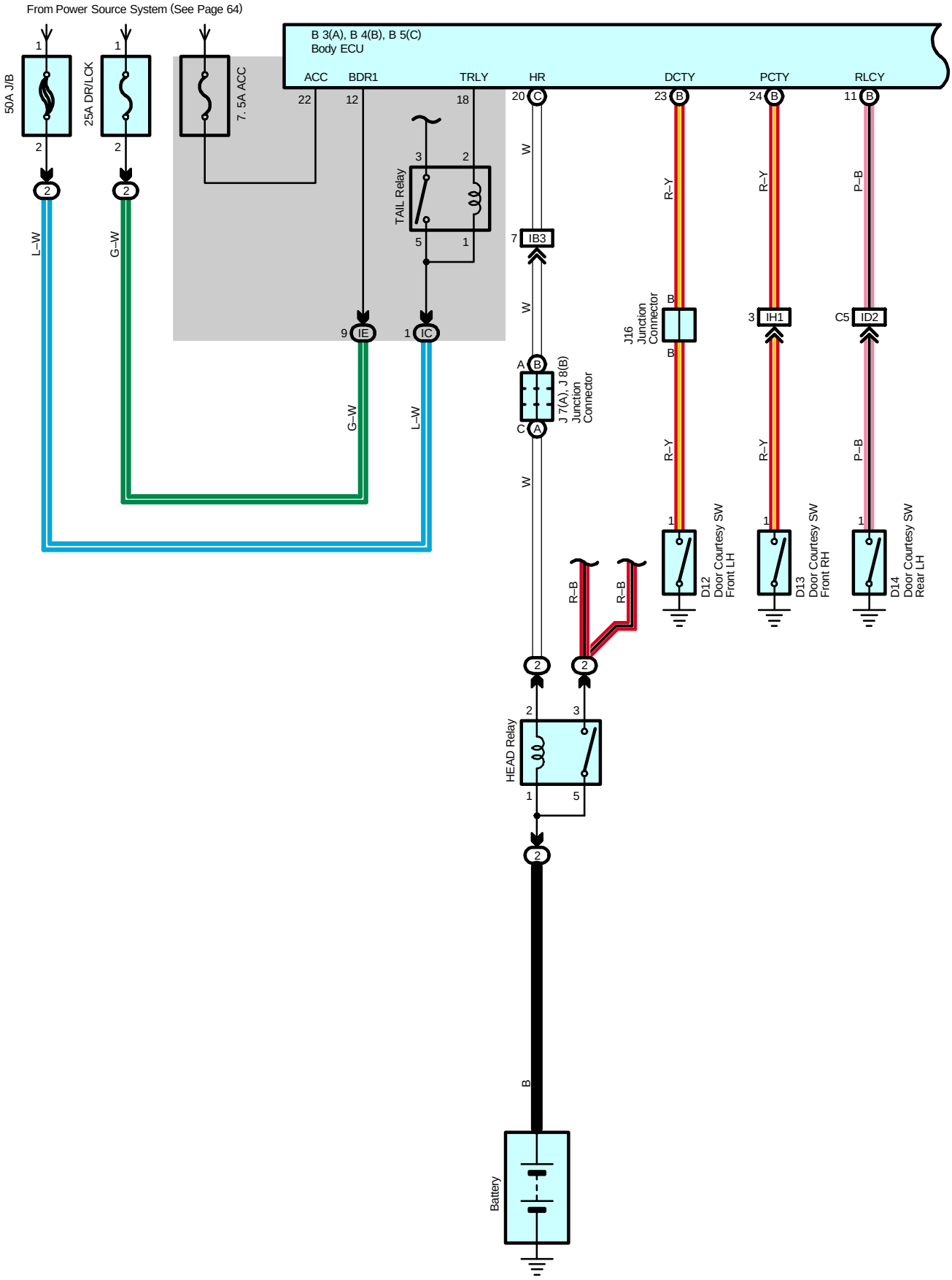
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IH1	52	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)
IR1	56	Instrument Panel Wire and Floor 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)

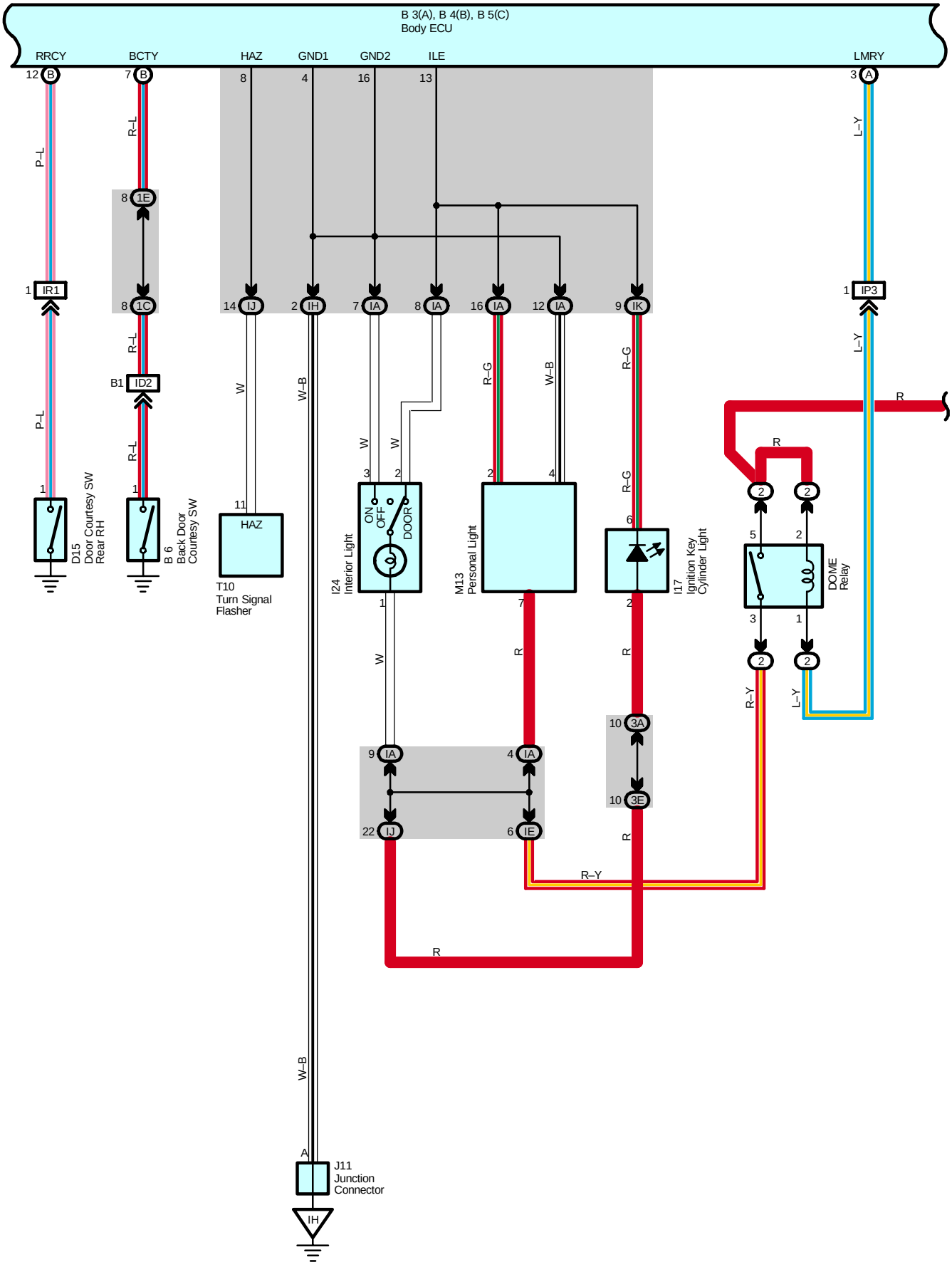
: Ground Points

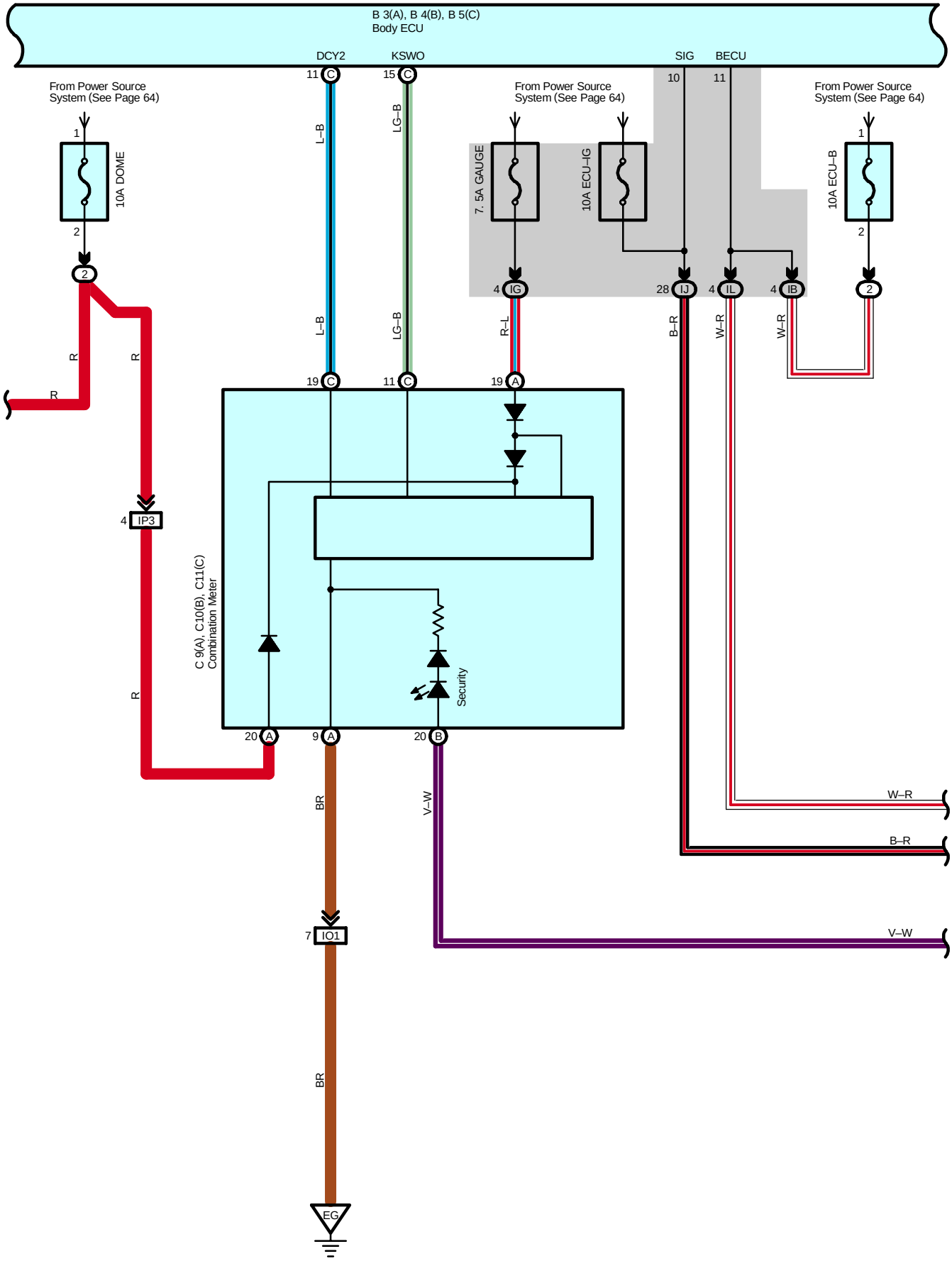
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IL	50	Right Kick Panel
BP	58	Left Quarter Panel Inner

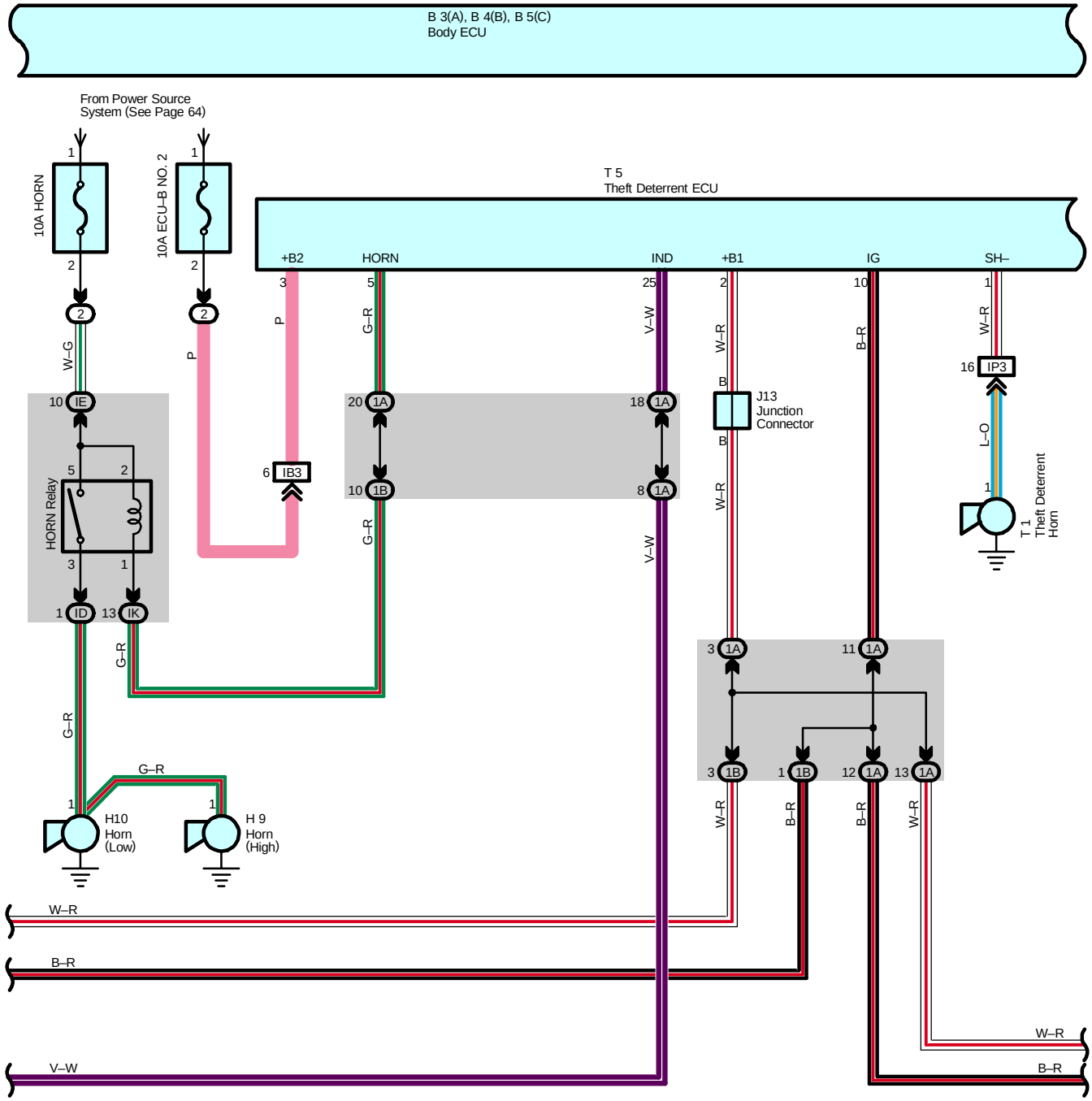
: Splice Points

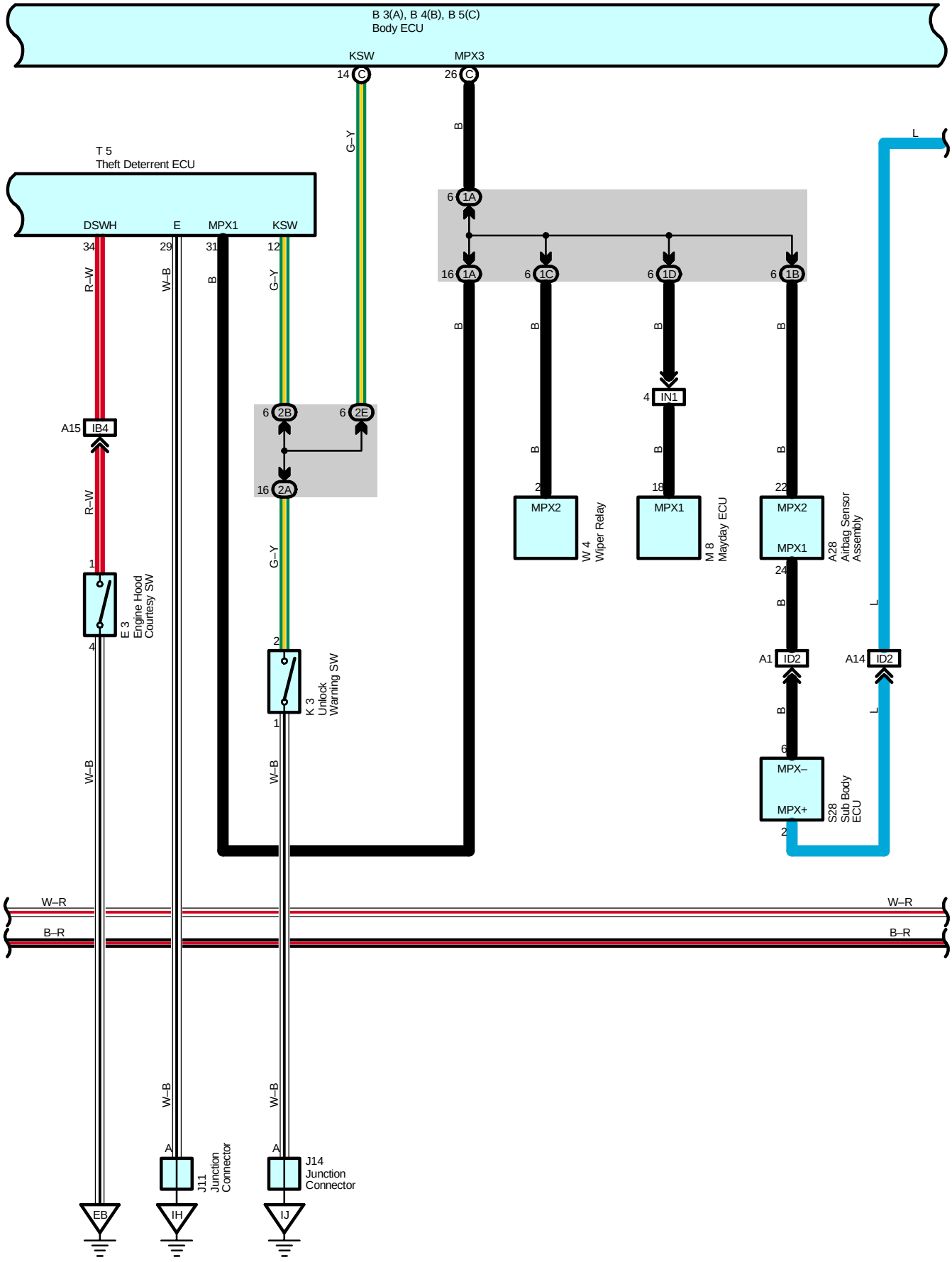
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	60	Rear Door LH Wire	B3	60	Rear Door RH Wire

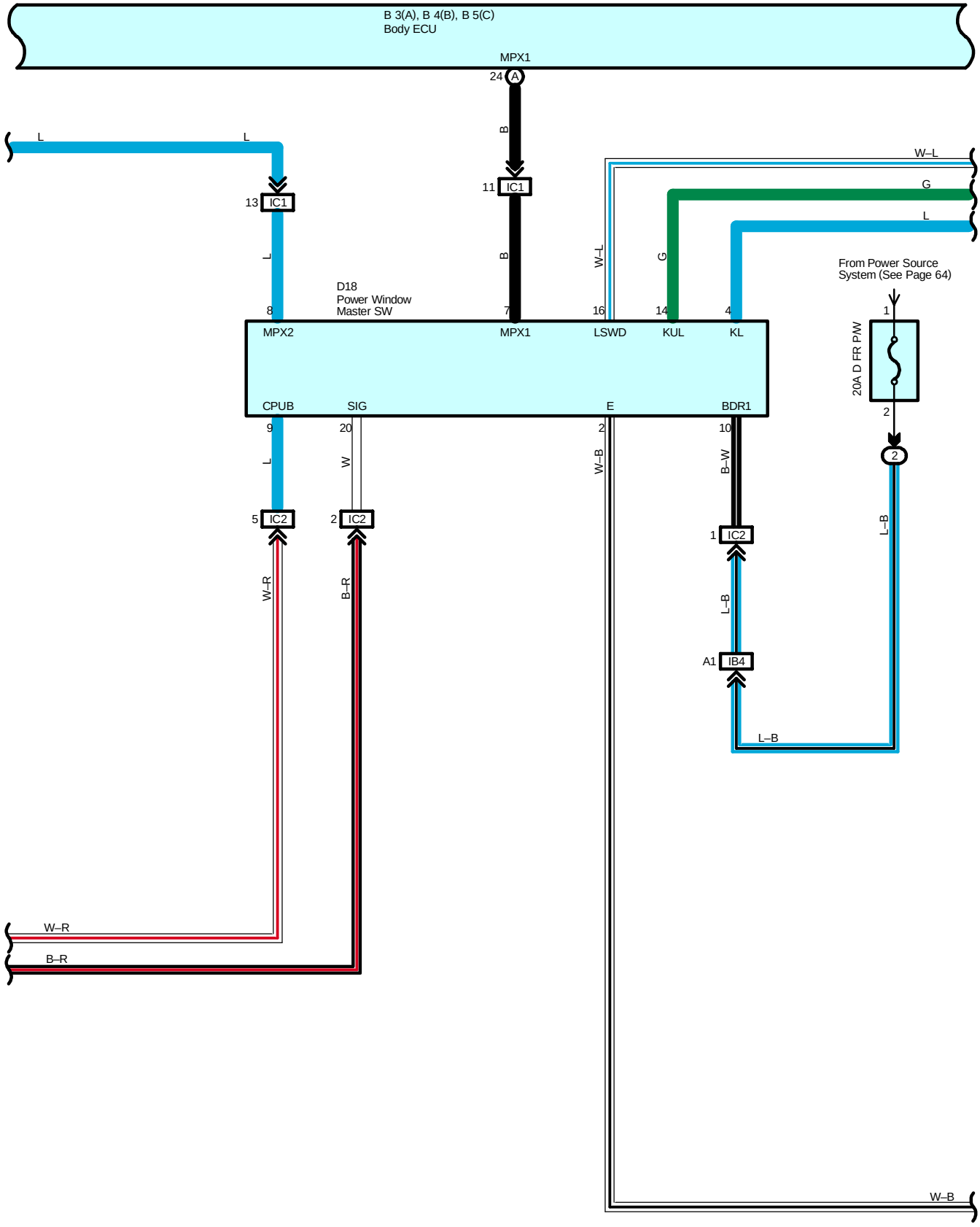

From Power Source System (See Page 64)
50A J/B
25A DR/LCK
7. 5A ACC
B 3(A), B 4(B), B 5(C)
Body ECU
ACC
BDR1
TRLY
HR
DCTY
PCTY
RLCY
TAIL Relay
IB3
IE
IC
J 7(A), J 8(B)
Junction
Connector
J16
Junction
Connector
IH1
ID2
C5
D12
Door Courtesy SW
Front LH
D13
Door Courtesy SW
Front RH
D14
Door Courtesy SW
Rear LH
HEAD Relay
Battery
L–W
G–W
W
R–Y
P–B
R–B
B


B 3(A), B 4(B), B 5(C)
Body ECU
RRCY
BCTY
HAZ
GND1
GND2
ILE
LMRY
12 B
7 B
8
4
16
13
3 A
P–L
R–L
L–Y
8 1E
1 IR1
8 1C
14 IJ
2 IH
7 IA
8 IA
16 IA
12 IA
9 IK
1 IP3
B1 ID2
W
W–B
W
W
R–G
W–B
R–G
R
R
R
D15
Door Courtesy SW
Rear RH
B 6
Back Door
Courtesy SW
11
HAZ
T10
Turn Signal
Flasher
I24
Interior Light
ON
OFF
DOOR
M13
Personal Light
I17
Ignition Key
Cylinder Light
DOME
Relay
R–Y
L–Y
9 IA
4 IA
22 IJ
6 IE
10 3A
10 3E
R–Y
A
J11
Junction
Connector
IH

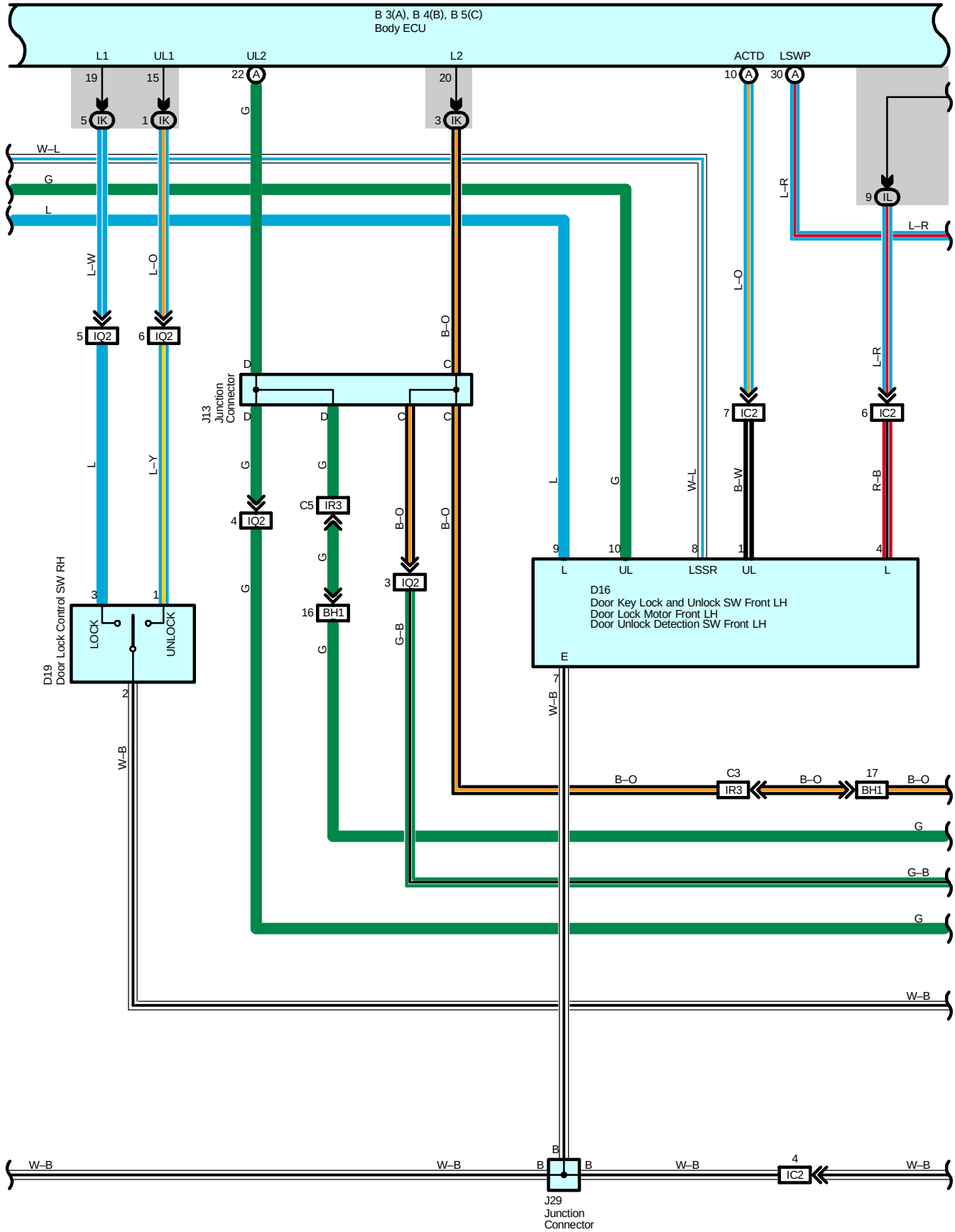

B 3(A), B 4(B), B 5(C)
Body ECU
DCY2
KSWO
SIG
BECU
From Power Source System (See Page 64)
From Power Source System (See Page 64)
From Power Source System (See Page 64)
10A DOME
7. 5A GAUGE
10A ECU–IG
10A ECU–B
L–B
LG–B
R–L
B–R
W–R
R
IP3
IG
IJ
IL
IB
IO1
C 9(A), C10(B), C11(C)
Combination Meter
Security
BR
V–W
EG

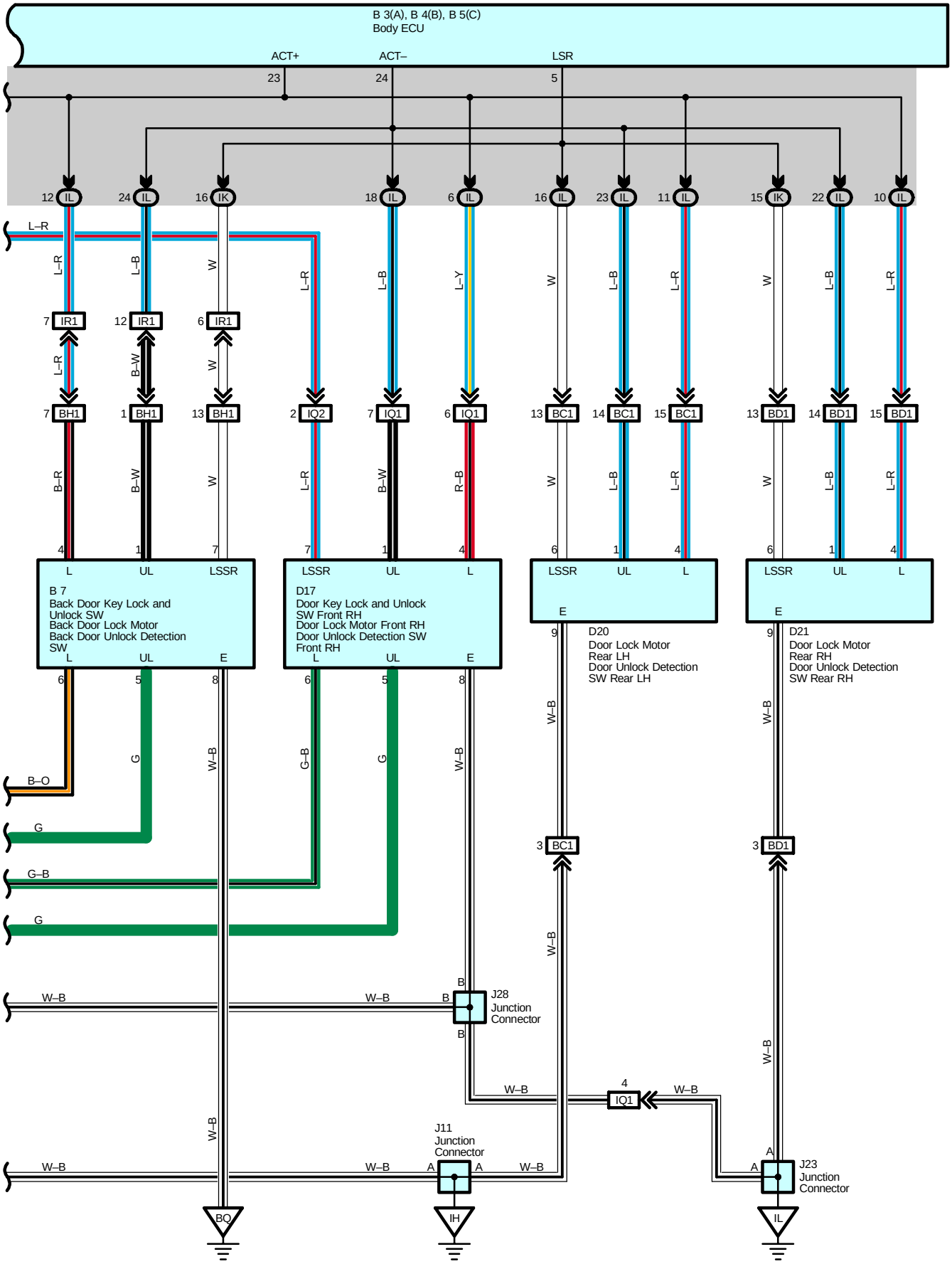

B 3(A), B 4(B), B 5(C)
Body ECU
From Power Source System (See Page 64)
10A HORN
10A ECU–B NO. 2
T 5
Theft Deterrent ECU
+B2
HORN
IND
+B1
IG
SH–
HORN Relay
J13 Junction Connector
T 1 Theft Deterrent Horn
H10 Horn (Low)
H 9 Horn (High)
W–G
P
G–R
V–W
W–R
B
B–R
L–O
W–R
B–R
V–W


B 3(A), B 4(B), B 5(C)
Body ECU
KSW
MPX3
14 C
26 C
G–Y
B
L
T 5
Theft Deterrent ECU
DSWH
E
MPX1
KSW
34
29
31
12
R–W
W–B
B
G–Y
6 1A
16 1A
6 1C
6 1D
6 1B
4 IN1
6 2B
6 2E
16 2A
A15 IB4
R–W
1
4
E 3
Engine Hood
Courtesy SW
G–Y
2
1
K 3
Unlock
Warning SW
W–B
2
MPX2
W 4
Wiper Relay
18
MPX1
M 8
Mayday ECU
22
MPX2
MPX1
A28
Airbag Sensor
Assembly
24
A1 ID2
A14 ID2
6
MPX–
MPX+
2
S28
Sub Body
ECU
W–R
B–R
A
J11
Junction
Connector
A
J14
Junction
Connector
EB
IH
IJ


B 3(A), B 4(B), B 5(C)
Body ECU
MPX1
24 A
B
11 IC1
B
L
L
13 IC1
L
8
MPX2
D18
Power Window
Master SW
7
MPX1
W–L
16
LSWD
G
14
KUL
L
4
KL
From Power Source
System (See Page 64)
1
20A D FR PW
2
2
L–B
CPUB
SIG
E
BDR1
9
L
5 IC2
W–R
20
W
2 IC2
B–R
2
W–B
10
B–W
1 IC2
L–B
A1 IB4
L–B
W–R
B–R
W–B

Door Lock Control and Theft Deterrent




B 3(A), B 4(B), B 5(C)
Body ECU
ACT+
ACT–
LSR
23
24
5
12 IL
24 IL
16 IK
18 IL
6 IL
16 IL
23 IL
11 IL
15 IK
22 IL
10 IL
L–R
L–B
W
L–Y
7 IR1
12 IR1
6 IR1
B–W
7 BH1
1 BH1
13 BH1
2 IQ2
7 IQ1
6 IQ1
13 BC1
14 BC1
15 BC1
13 BD1
14 BD1
15 BD1
B–R
R–B
4
1
7
6
L
UL
LSSR
B 7
Back Door Key Lock and Unlock SW
Back Door Lock Motor
Back Door Unlock Detection SW
D17
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
E
9
D20
Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
D21
Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH
3 BC1
3 BD1
6
5
8
B–O
G
G–B
W–B
B
J28
Junction Connector
4 IQ1
J11
Junction Connector
A
J23
Junction Connector
BQ
IH
IL

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A28	38	D17	42	J14	40
B3 A	38	D18	42	J16	40
B4 B	38	D19	42	J23	40
B5 C	38	D20	42	J28	43
B6	42	D21	42	J29	43
B7	42	E3	36	K3	40
C9 A	38	H9	36	M8	44
C10 B	38	H10	36	M13	44
C11 C	38	I17	39	S28	45
D12	42	I24	43	T1	37
D13	42	J7 A	40	T5	41
D14	42	J8 B	40	T10	41
D15	42	J11	40	W4	41
D16	42	J13	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		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
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)
3E		

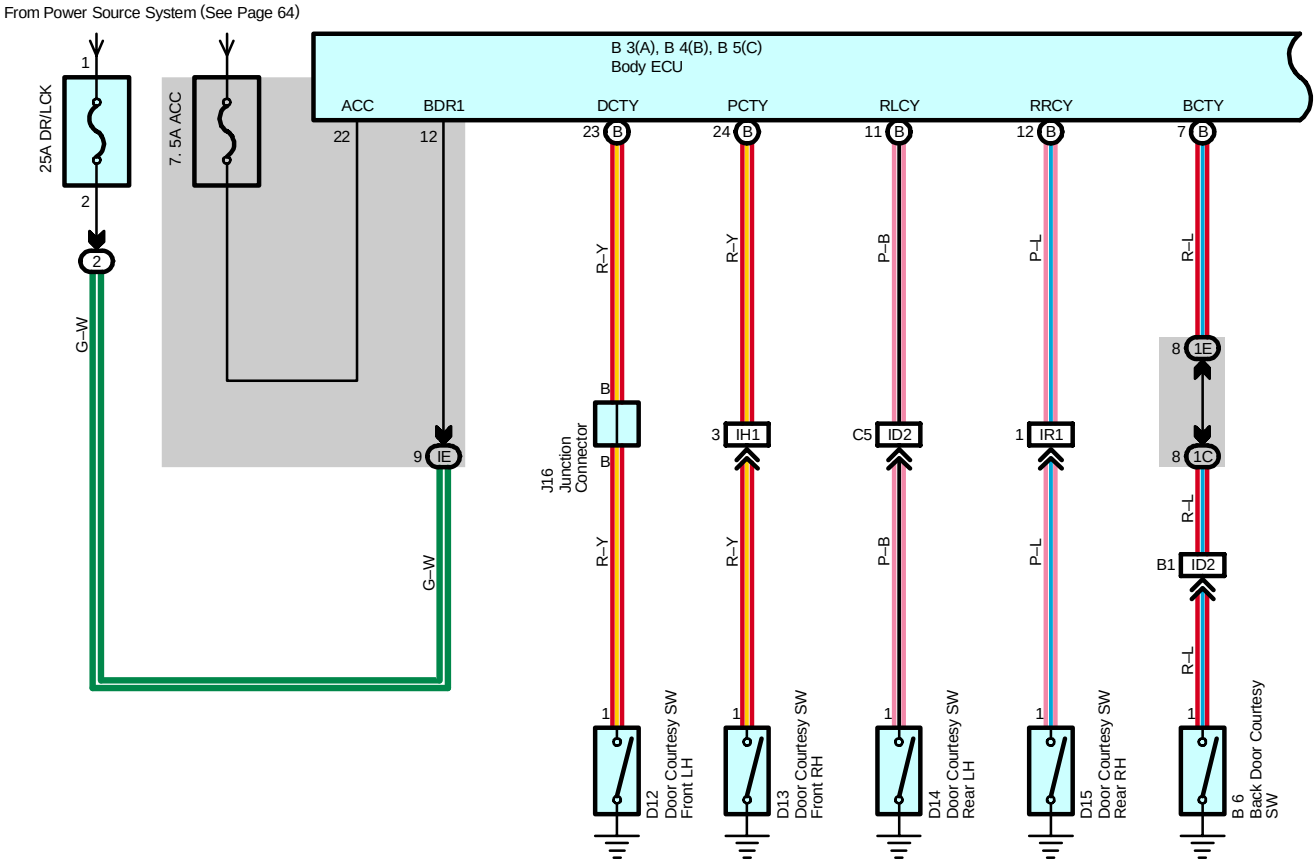
: Connector Joining Wire Harness and Wire Harness

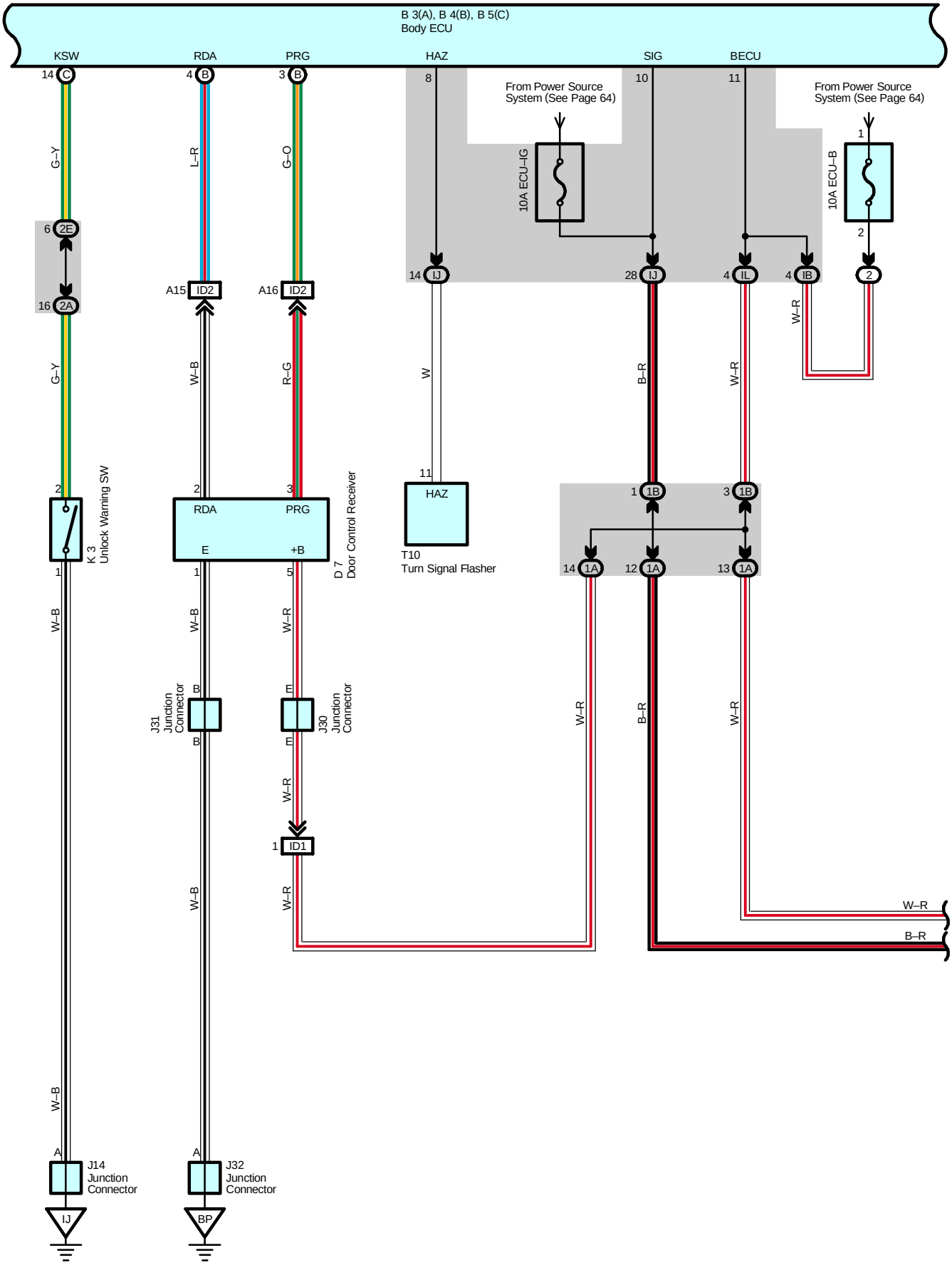
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN1	54	Floor No.3 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)
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)

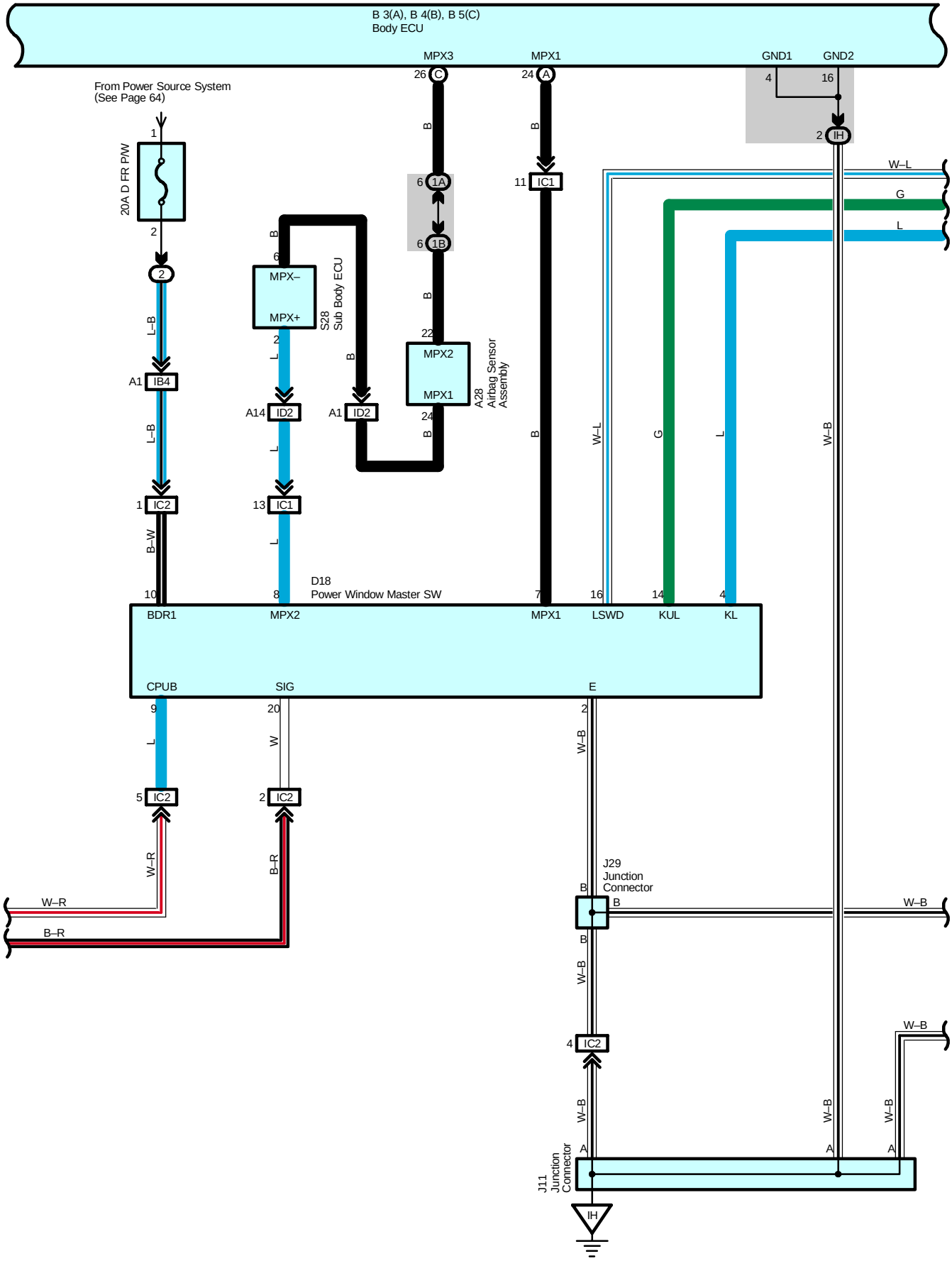
: Ground Points

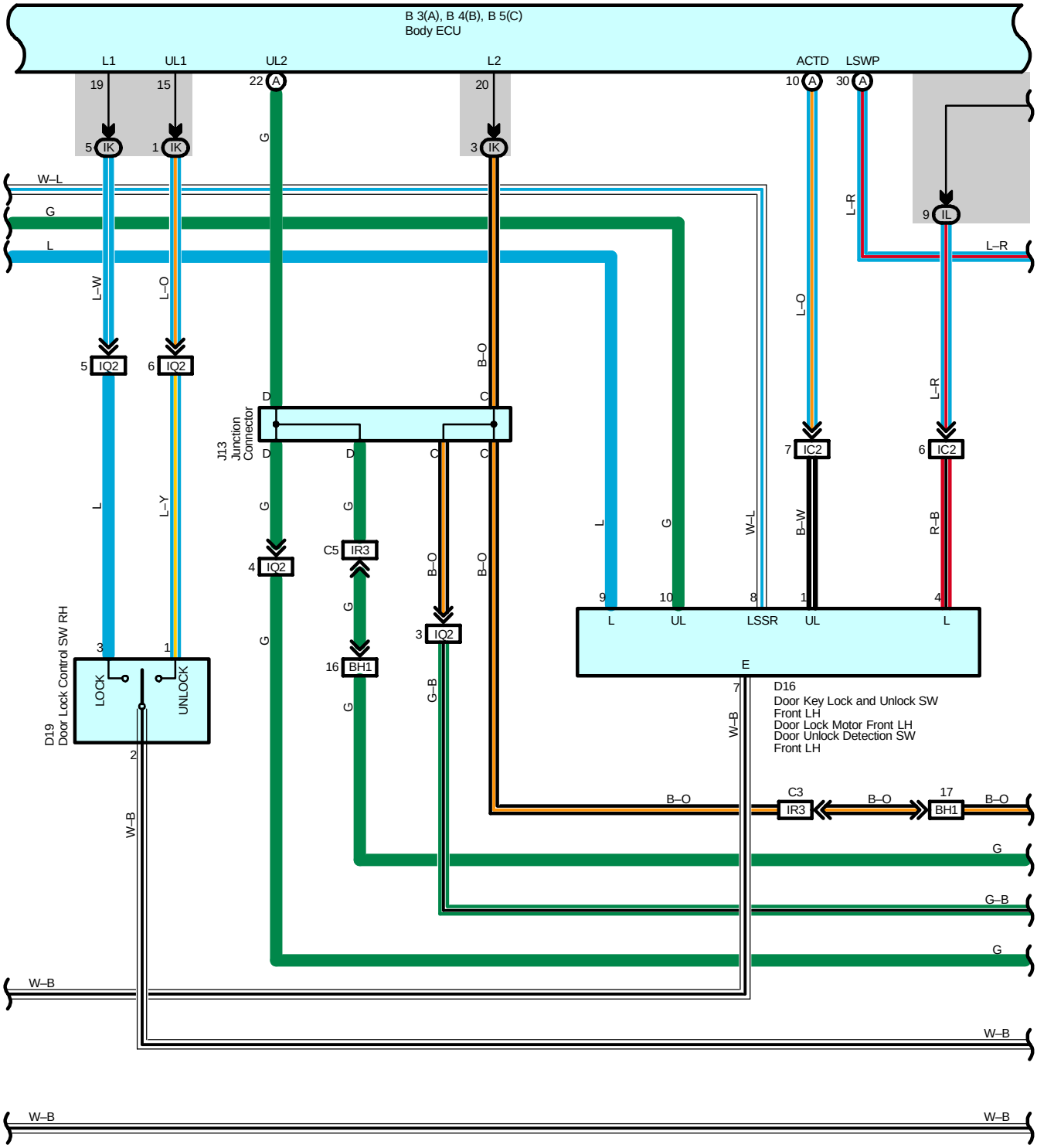
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel
BQ	58	Back Door Panel Center

Wireless Door Lock Control

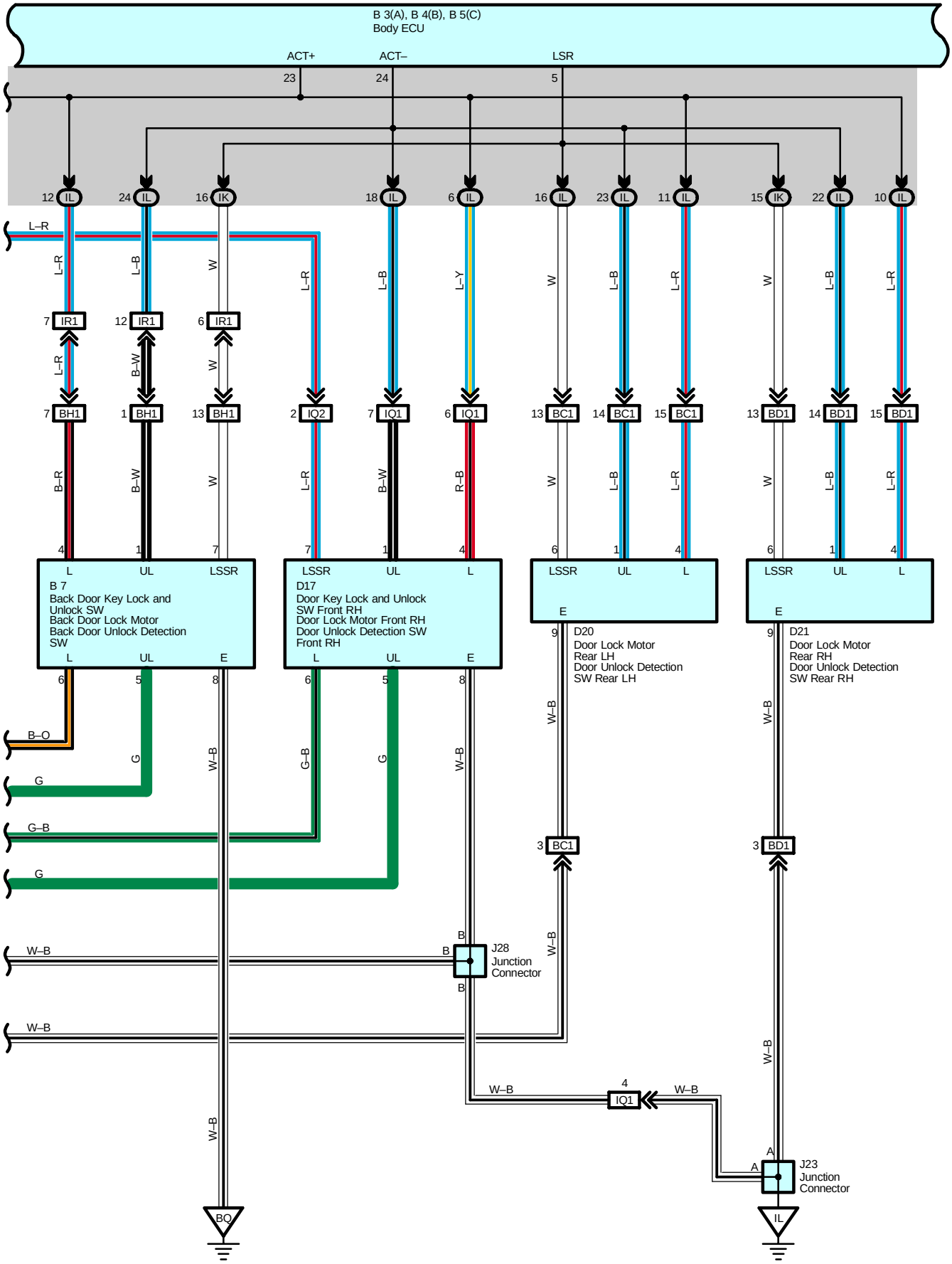


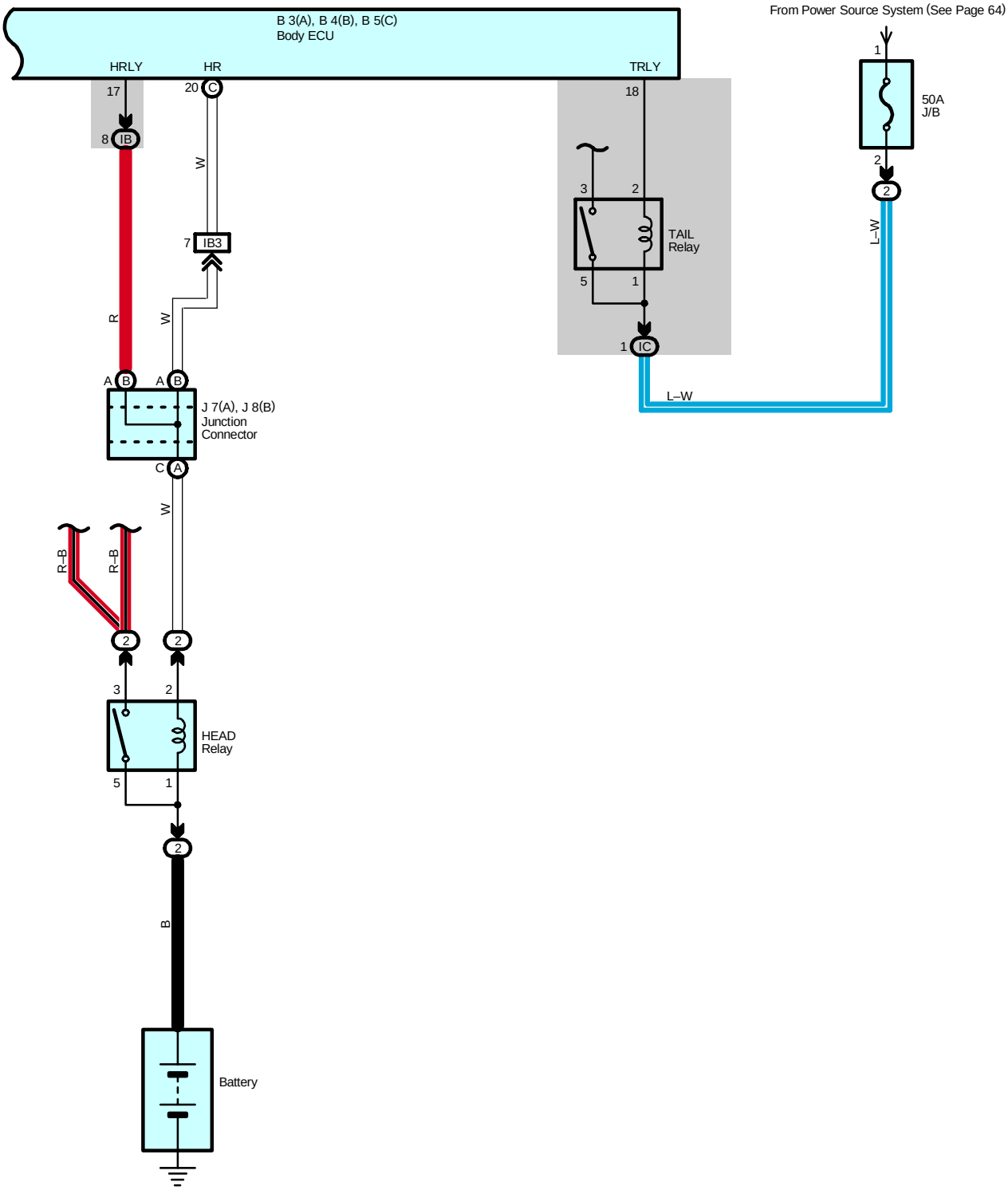

B 3(A), B 4(B), B 5(C)
Body ECU
KSW
RDA
PRG
HAZ
SIG
BECU
From Power Source System (See Page 64)
From Power Source System (See Page 64)
10A ECU-IG
10A ECU-B
K 3
Unlock Warning SW
D 7
Door Control Receiver
RDA
PRG
E
+B
T10
Turn Signal Flasher
HAZ
J31 Junction Connector
J30 Junction Connector
J14 Junction Connector
J32 Junction Connector
IJ
BP
G–Y
L–R
G–O
W–B
R–G
W
B–R
W–R


B 3(A), B 4(B), B 5(C)
Body ECU
MPX3
MPX1
GND1
GND2
From Power Source System
(See Page 64)
20A D FR P/W
S28
Sub Body ECU
MPX–
MPX+
A28
Airbag Sensor
Assembly
MPX2
MPX1
IB4
ID2
IC1
IC2
IH
1A
1B
D18
Power Window Master SW
BDR1
MPX2
MPX1
LSWD
KUL
KL
CPUB
SIG
E
J29
Junction
Connector
J11
Junction
Connector
W–L
G
L
W–B
B–W
W–R
B–R
L–B
B
W


B 3(A), B 4(B), B 5(C)
Body ECU
L1
UL1
UL2
L2
ACTD
LSWP
19
15
22
A
20
10
A
30
A
5
IK
1
IK
3
IK
9
IL
W–L
G
L
L–W
L–O
L–R
5
IQ2
6
IQ2
B–O
D
C
J13
Junction
Connector
7
IC2
6
IC2
L–O
L–R
B–W
R–B
C5
IR3
4
IQ2
3
IQ2
16
BH1
9
L
10
UL
8
LSSR
1
UL
4
L
E
D19
Door Lock Control SW RH
LOCK
UNLOCK
3
1
2
7
D16
Door Key Lock and Unlock SW
Front LH
Door Lock Motor Front LH
Door Unlock Detection SW
Front LH
W–B
G–B
C3
IR3
17
BH1
G
W–B
W–B
W–B
W–B

Wireless Door Lock Control




From Power Source System (See Page 64)
B 3(A), B 4(B), B 5(C)
Body ECU
HRLY
HR
TRLY
17
20
C
18
8
IB
W
3
2
50A
J/B
1
2
2
7
IB3
TAIL
Relay
L–W
5
1
1
IC
R
W
A
B
A
B
L–W
J 7(A), J 8(B)
Junction
Connector
C
A
W
R–B
R–B
2
2
3
2
HEAD
Relay
5
1
2
B
Battery

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 ignition SW at ON position
22–Ground : Approx. 12 volts with 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
A28	38	D16	42	J16	40
B3 A	38	D17	42	J23	40
B4 B	38	D18	42	J28	43
B5 C	38	D19	42	J29	43
B6	42	D20	42	J30	43
B7	42	D21	42	J31	43
D7	42	J7 A	40	J32	43
D12	42	J8 B	40	K3	40
D13	42	J11	40	S28	45
D14	42	J13	40	T10	41
D15	42	J14	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

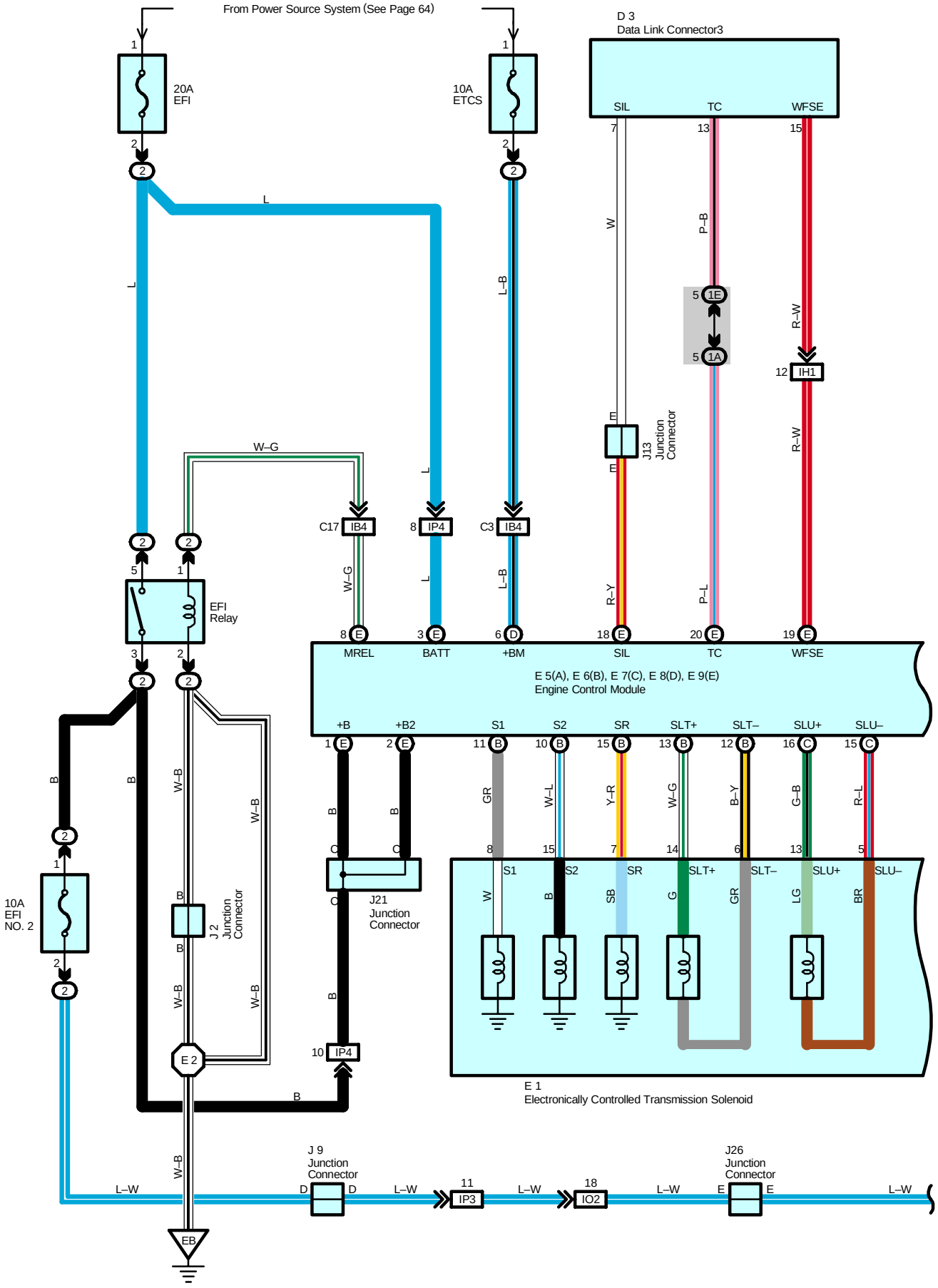
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement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

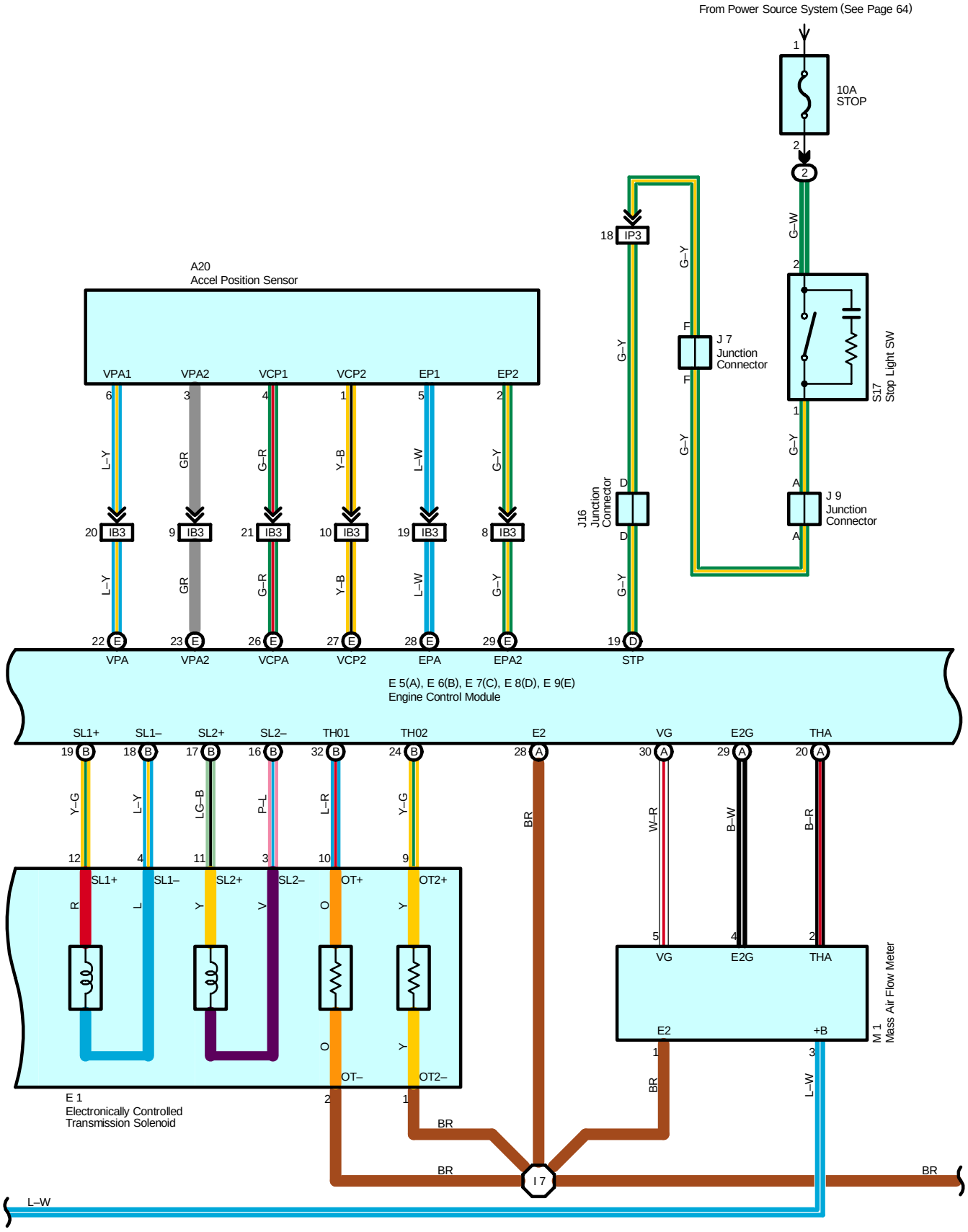
: Connector Joining Wire Harness and Wire Harness

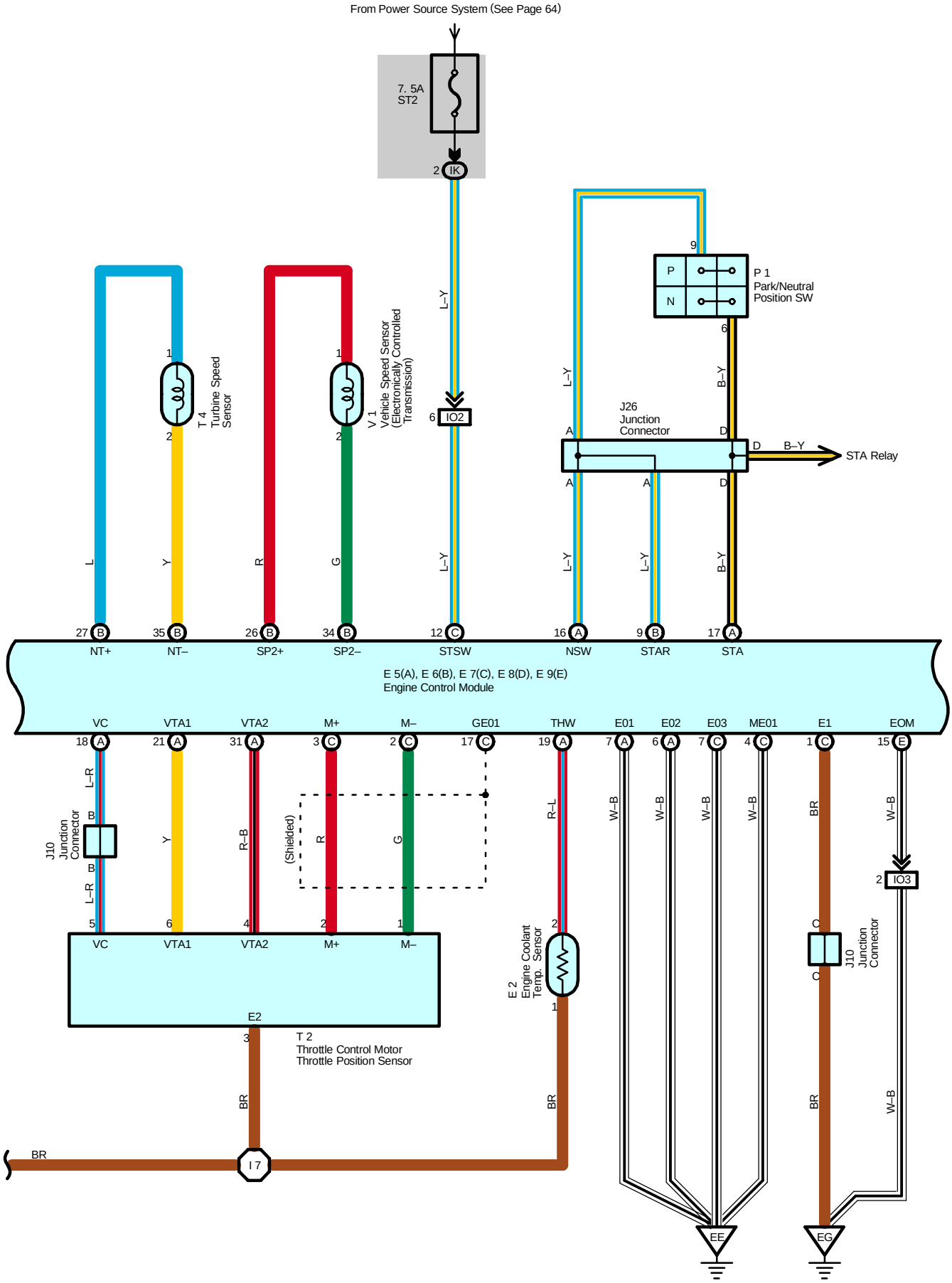
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
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)
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)

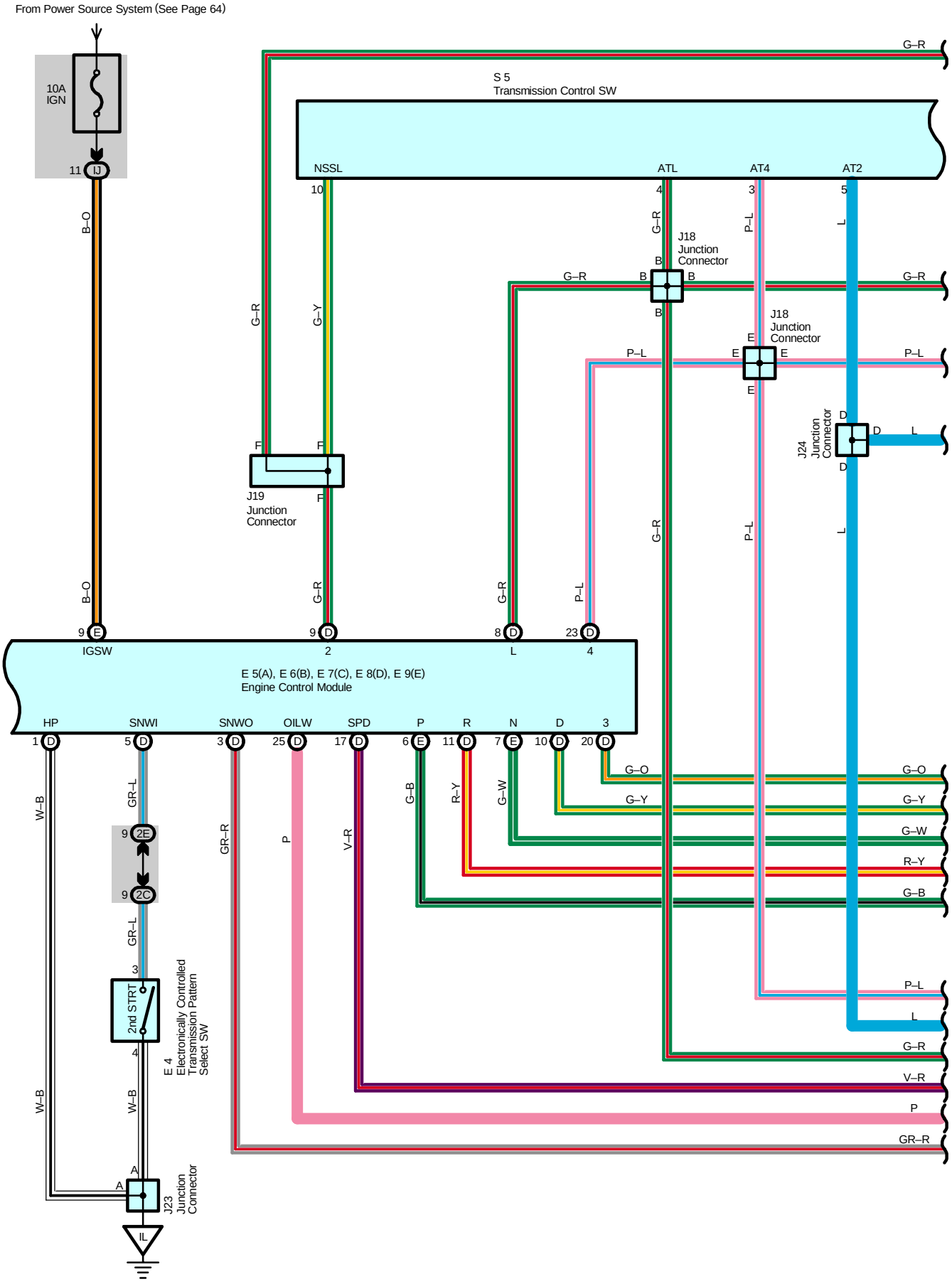
▽ : **Ground Points**

Code	See Page	Ground Points Location
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

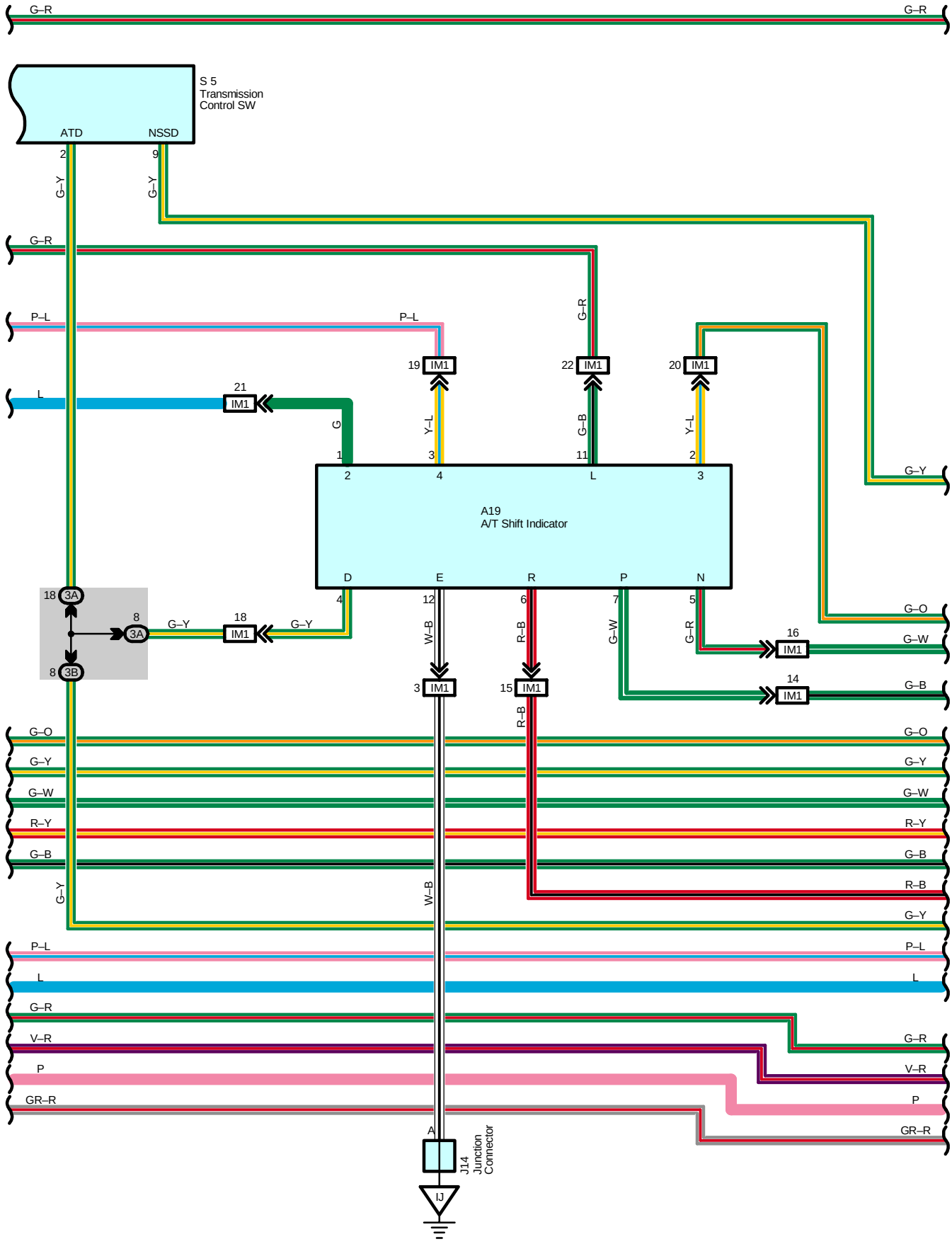

From Power Source System (See Page 64)
20A
EFI
10A
ETCS
D 3
Data Link Connector3
SIL
TC
WFSE
W
P–B
R–W
L
L–B
W–G
C17 IB4
8 IP4
C3 IB4
J13
Junction
Connector
1E
1A
IH1
EFI
Relay
R–Y
P–L
MREL
BATT
+BM
SIL
TC
WFSE
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
+B
+B2
S1
S2
SR
SLT+
SLT–
SLU+
SLU–
GR
W–L
Y–R
W–G
B–Y
G–B
R–L
W–B
B
J21
Junction
Connector
J 2
Junction
Connector
10A
EFI
NO. 2
E 2
10 IP4
E 1
Electronically Controlled Transmission Solenoid
W
B
SB
G
GR
LG
BR
J 9
Junction
Connector
J26
Junction
Connector
L–W
11
IP3
18
IO2
EB

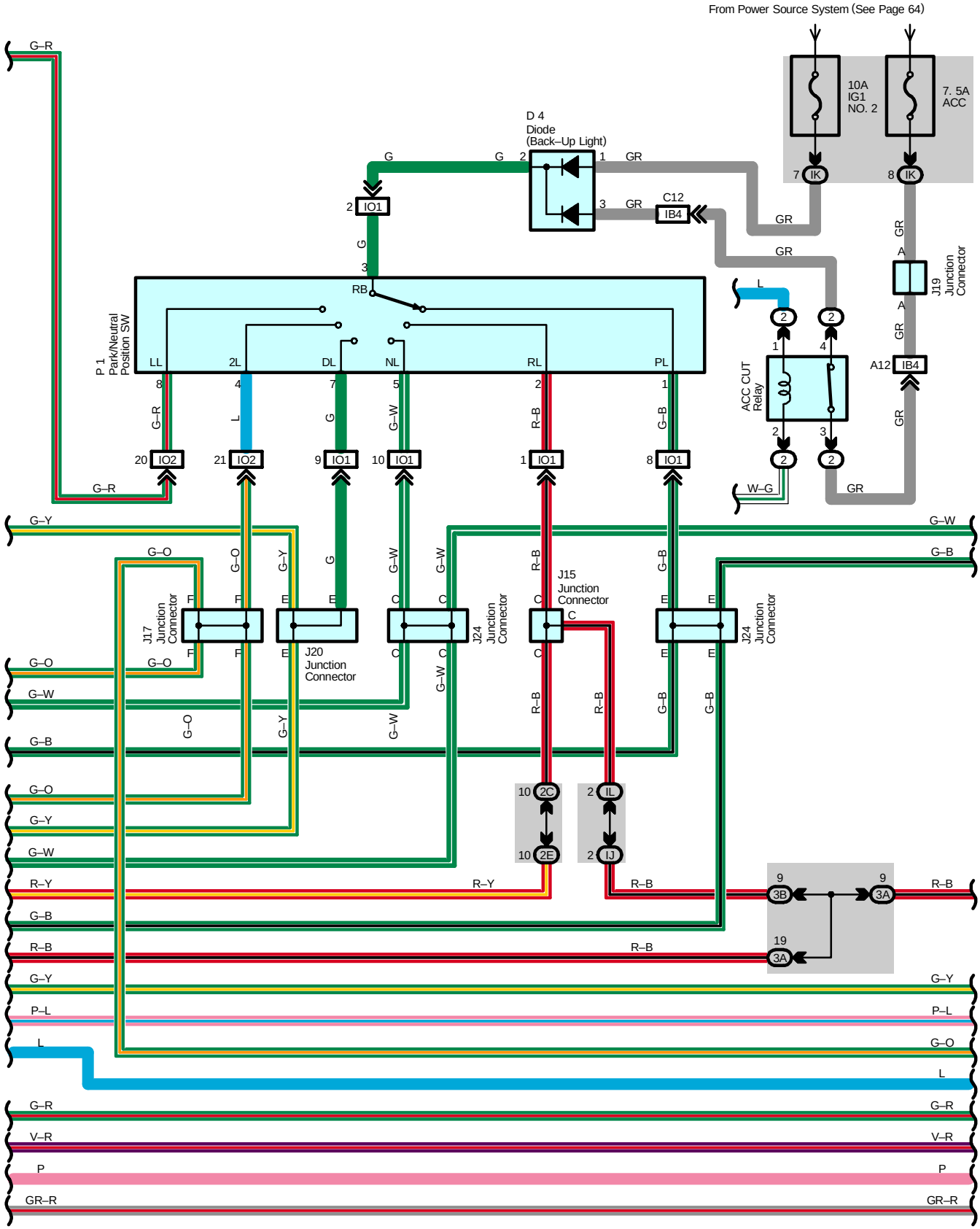

From Power Source System (See Page 64)
10A
STOP
A20
Accel Position Sensor
VPA1
VPA2
VCP1
VCP2
EP1
EP2
IB3
IP3
J 7
Junction
Connector
J16
Junction
Connector
J 9
Junction
Connector
S17
Stop Light SW
L–Y
GR
G–R
Y–B
L–W
G–Y
G–W
VPA
VPA2
VCPA
VCP2
EPA
EPA2
STP
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
SL1+
SL1–
SL2+
SL2–
TH01
TH02
E2
VG
E2G
THA
Y–G
L–Y
LG–B
P–L
L–R
Y–G
BR
W–R
B–W
B–R
R
L
Y
V
O
OT+
OT2+
OT–
OT2–
E 1
Electronically Controlled
Transmission Solenoid
M 1
Mass Air Flow Meter
E2
+B
I 7
L–W

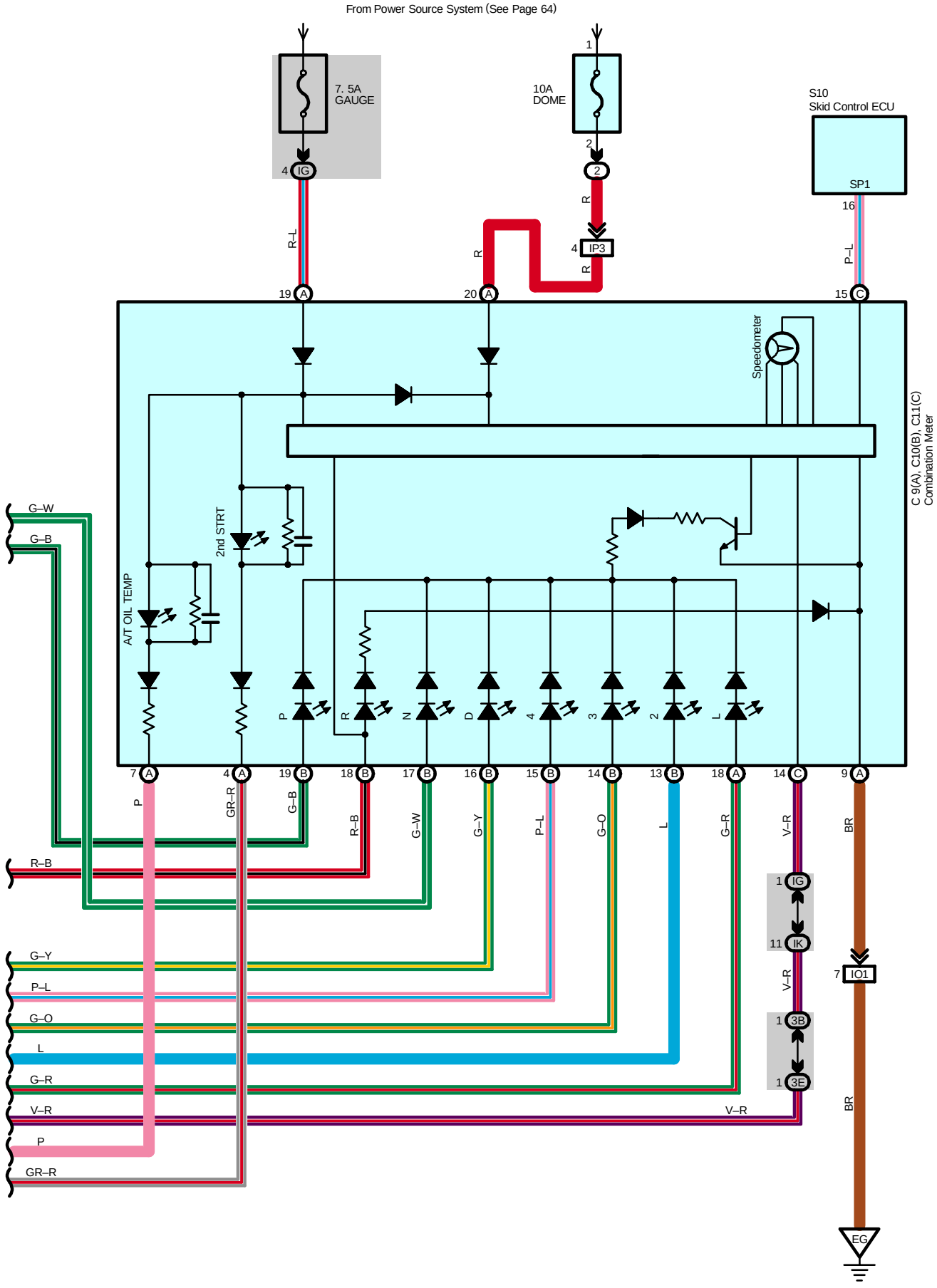

From Power Source System (See Page 64)
7. 5A
ST2
2 IK
6 IO2
L–Y
9
P
N
P 1
Park/Neutral
Position SW
6
B–Y
J26
Junction
Connector
A
D
D B–Y
STA Relay
T 4
Turbine Speed
Sensor
V 1
Vehicle Speed Sensor
(Electronically Controlled
Transmission)
L
Y
R
G
27 B NT+
35 B NT–
26 B SP2+
34 B SP2–
12 C STSW
16 A NSW
9 B STAR
17 A STA
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
VC
VTA1
VTA2
M+
M–
GE01
THW
E01
E02
E03
ME01
E1
EOM
18 A
21 A
31 A
3 C
2 C
17 C
19 A
7 A
6 A
7 C
4 C
1 C
15 E
L–R
B
Y
R–B
(Shielded)
R
G
R–L
W–B
BR
2 IO3
J10
Junction
Connector
5 VC
6 VTA1
4 VTA2
2 M+
1 M–
E2
3
T 2
Throttle Control Motor
Throttle Position Sensor
E 2
Engine Coolant
Temp. Sensor
2
1
I 7
BR
EE
EG


From Power Source System (See Page 64)
10A
IGN
11 IJ
B–O
S 5
Transmission Control SW
NSSL
ATL
AT4
AT2
10
4
3
5
G–R
G–Y
P–L
L
J18
Junction
Connector
B
G–R
J18
Junction
Connector
E
P–L
J24
Junction
Connector
D
L
F
J19
Junction
Connector
9 E
IGSW
9 D
2
8 D
L
23 D
4
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
HP
SNWI
SNWO
OILW
SPD
P
R
N
D
3
1 D
5 D
3 D
25 D
17 D
6 E
11 D
7 E
10 D
20 D
W–B
GR–L
GR–R
P
V–R
G–B
R–Y
G–W
G–O
G–Y
9 2E
9 2C
3
2nd STRT
4
E 4
Electronically Controlled
Transmission Pattern
Select SW
A
J23
Junction
Connector
IL

Electronically Controlled Transmission and A/T Indicator




From Power Source System (See Page 64)
10A
IG1
NO. 2
7. 5A
ACC
D 4
Diode
(Back–Up Light)
C12
IB4
P 1
Park/Neutral
Position SW
LL
2L
DL
NL
RL
PL
ACC CUT
Relay
J19
Junction
Connector
J17
Junction
Connector
J20
Junction
Connector
J24
Junction
Connector
J15
Junction
Connector
G–R
G–Y
G–W
G–B
G–O
R–Y
R–B
P–L
L
V–R
P
GR–R
W–G
GR


From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
S10
Skid Control ECU
SP1
IG
IP3
R–L
P–L
R
Speedometer
C 9(A), C10(B), C11(C)
Combination Meter
A/T OIL TEMP
2nd STRT
P
R
N
D
4
3
2
L
G–W
G–B
R–B
G–Y
P–L
G–O
L
G–R
V–R
P
GR–R
BR
IG
IK
3B
3E
IO1
EG

System Outline

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

1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine control module from the engine coolant temp. sensor and the vehicle speed signal from vehicle speed sensor is input to TERMINAL SP2+ of the engine control module. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINALS VTA1 and VTA2 of the engine control module as throttle angle signal.
Based on these signals, the engine control module selects the best shift position for the driving conditions and sends current to the electronically controlled transmission solenoid.

2. Line Hydraulic Pressure Control

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

3. High Response Gear Shifting Control

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

4. Clutch Hydraulic Pressure Control

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

5. Lock–Up and Flexible Lock–Up Control

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

6. Stop Light SW Circuit

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

7. AI–Shift Control

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

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
(D) 6, (E) 3–Ground : Always approx. 12 volts
(C)12–Ground : Approx. 12 volts with the ignition SW at ST position
(D)19–Ground : Approx. 12 volts with the brake pedal depressed
(A)6, (A) 7, (C) 1, (C) 4, (C) 7, (D) 1, (E) 15–Ground : Always continuity

P1 Park/Neutral Position SW

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

Electronically Controlled Transmission and A/T Indicator

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	38	E8 D	39	J20	40
A20	38	E9 E	39	J21	40
C9 A	38	J2	37	J23	40
C10 B	38	J7	40	J24	40
C11 C	38	J9	40	J26	40
D3	39	J10	40	M1	37
D4	39	J13	40	P1	37
E1	36	J14	40	S5	41
E2	36	J15	40	S10	41
E4	39	J16	40	S17	41
E5 A	39	J17	40	T2	37
E6 B	39	J18	40	T4	37
E7 C	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)
1E		
2C	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		
3E		

: Connector Joining Wire Harness and Wire Harness

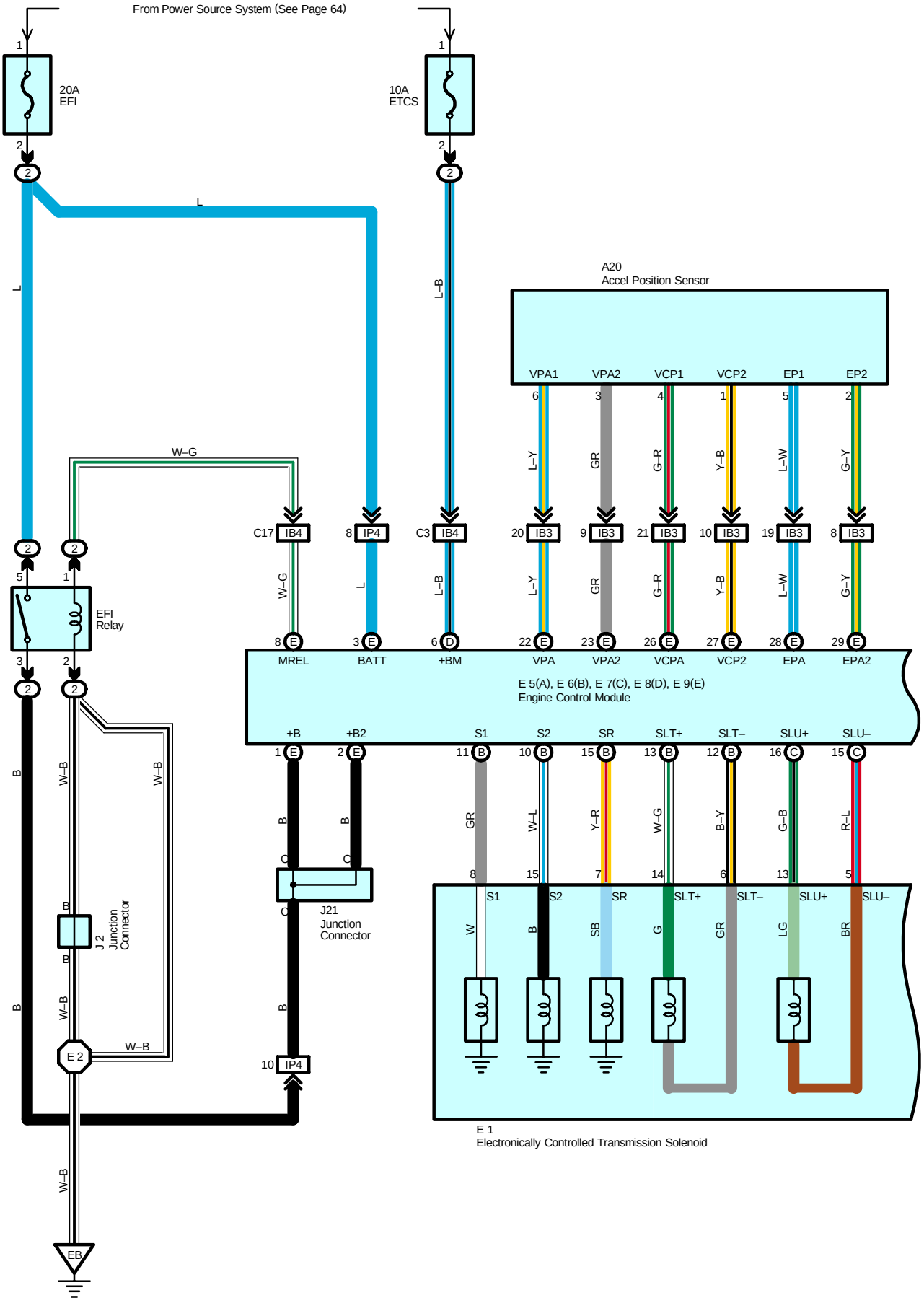
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IM1	54	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
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		

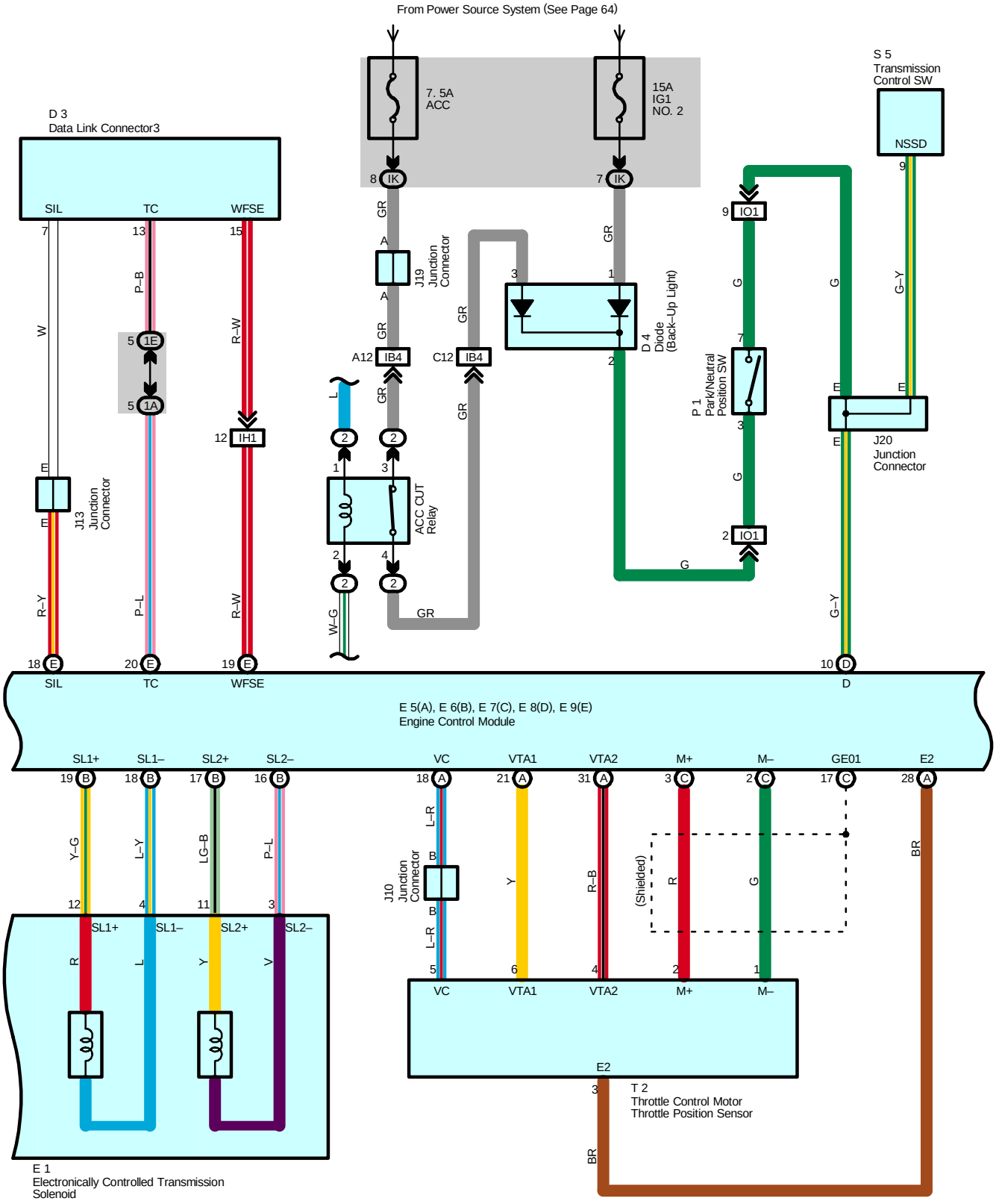
: Ground Points

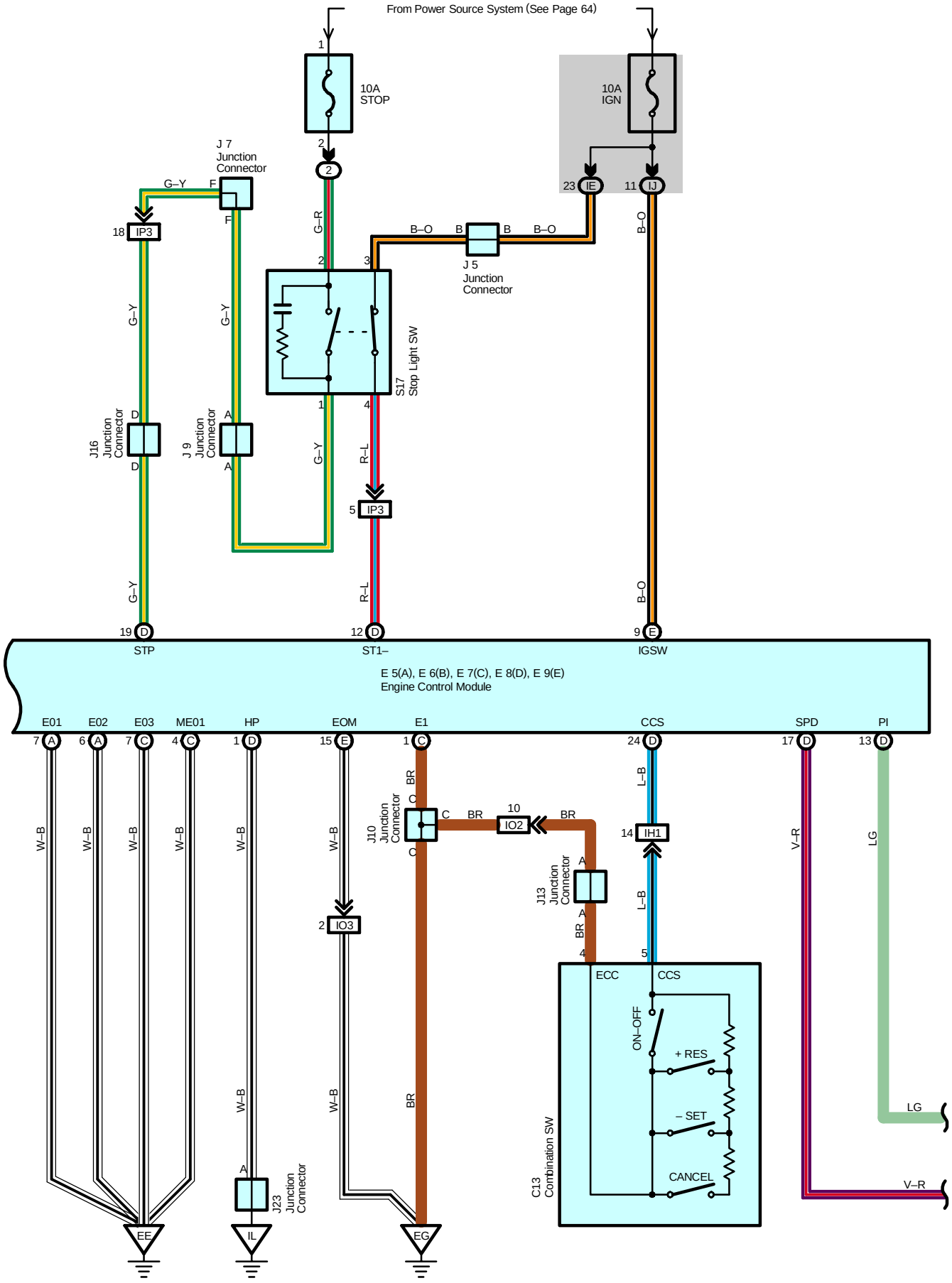
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EE	48	Rear Bank of Right Cylinder Head
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

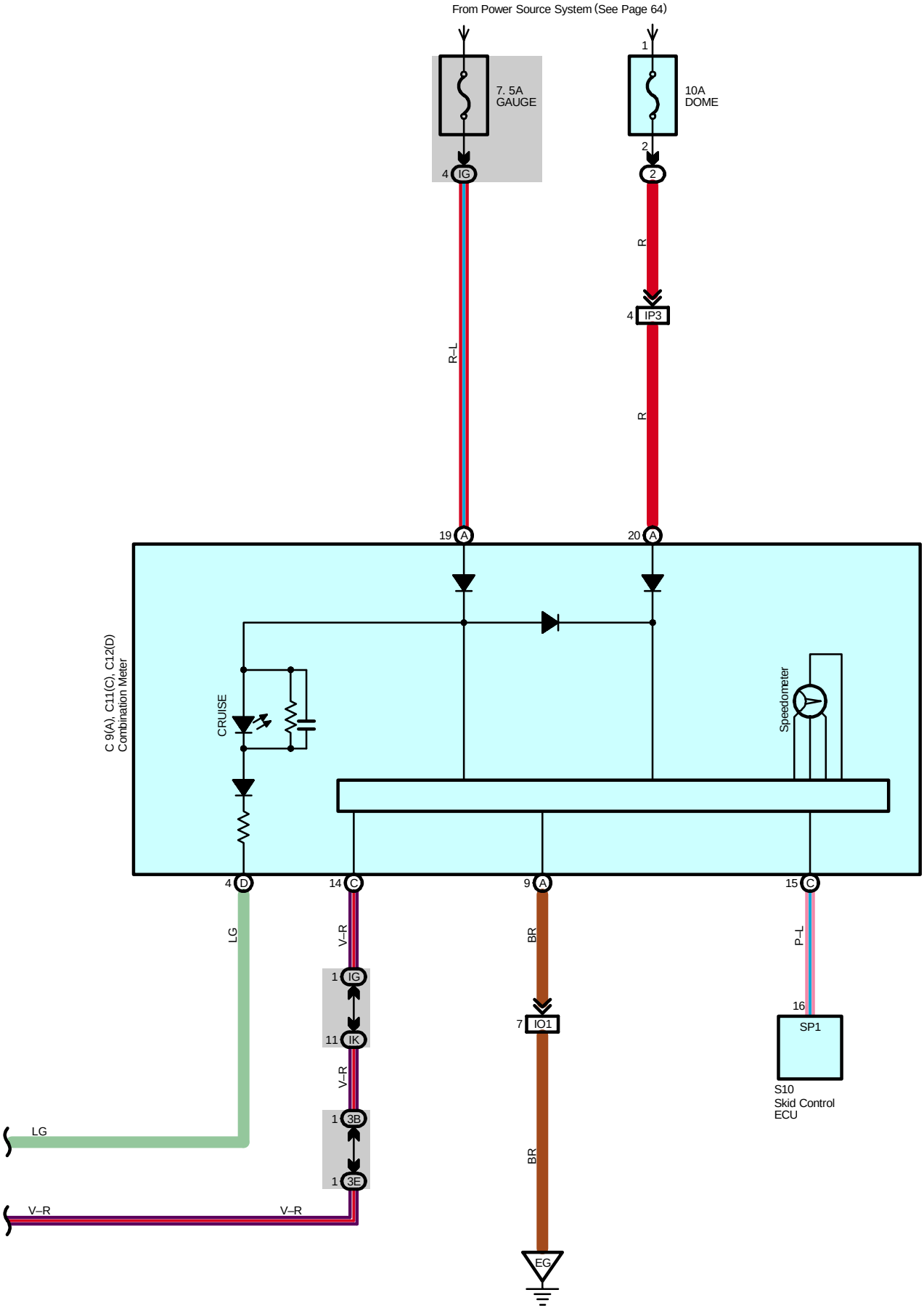
 **: Splice Points**

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


From Power Source System (See Page 64)
20A
EFI
10A
ETCS
L
L–B
A20
Accel Position Sensor
VPA1
VPA2
VCP1
VCP2
EP1
EP2
W–G
C17 IB4
8 IP4
C3 IB4
20 IB3
9 IB3
21 IB3
10 IB3
19 IB3
8 IB3
L–Y
GR
G–R
Y–B
L–W
G–Y
EFI
Relay
8 E MREL
3 E BATT
6 D +BM
22 E VPA
23 E VPA2
26 E VCPA
27 E VCP2
28 E EPA
29 E EPA2
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
+B
+B2
S1
S2
SR
SLT+
SLT–
SLU+
SLU–
1 E
2 E
11 B
10 B
15 B
13 B
12 B
16 C
15 C
W–B
B
J21
Junction
Connector
J 2
Junction
Connector
E 2
10 IP4
W
SB
G
LG
BR
R–L
B–Y
G–B
W–L
Y–R
W–G
E 1
Electronically Controlled Transmission Solenoid
EB


From Power Source System (See Page 64)
7. 5A
ACC
15A
IG1
NO. 2
S 5
Transmission
Control SW
NSSD
D 3
Data Link Connector3
SIL
TC
WFSE
J19
Junction
Connector
D 4
Diode
(Back–Up Light)
P 1
Park/Neutral
Position SW
J20
Junction
Connector
J13
Junction
Connector
ACC CUT
Relay
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
SL1+
SL1–
SL2+
SL2–
VC
VTA1
VTA2
M+
M–
GE01
E2
J10
Junction
Connector
(Shielded)
T 2
Throttle Control Motor
Throttle Position Sensor
E 1
Electronically Controlled Transmission
Solenoid


From Power Source System (See Page 64)
10A STOP
10A IGN
J 7 Junction Connector
J 5 Junction Connector
S17 Stop Light SW
J16 Junction Connector
J 9 Junction Connector
J10 Junction Connector
J13 Junction Connector
J23 Junction Connector
C13 Combination SW
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E) Engine Control Module
STP
ST1–
IGSW
E01
E02
E03
ME01
HP
EOM
E1
CCS
SPD
PI
ECC
CCS
ON–OFF
+ RES
– SET
CANCEL
EE
IL
EG
G–Y
G–R
B–O
R–L
L–B
W–B
BR
LG
V–R


From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
1
2
4 IG
2
R
4 IP3
R–L
R
19 A
20 A
C 9(A), C11(C), C12(D)
Combination Meter
CRUISE
Speedometer
4 D
14 C
9 A
15 C
LG
V–R
BR
P–L
1 IG
11 IK
7 IO1
16
SP1
S10
Skid Control
ECU
V–R
1 3B
1 3E
LG
V–R
V–R
BR
EG

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 within 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.

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 accelerator resuming control, control is reset to overdrive condition when accelerator resuming 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 ignition SW at ON position
(D) 6, (E) 3–Ground : Always approx. 12 volts
(A)6, (A) 7, (C) 1, (C) 4, (C) 7, (D) 1, (E) 15–Ground : Always continuity
(D)19–Ground : Approx. 12 volts with brake pedal depressed
(D)24–Ground : Continuity with cruise control ON–OFF SW at on
Approx. 1540 Ω with CANCEL SW on in cruise control SW
Approx. 240 Ω with + RES SW on in cruise control SW
Approx. 630 Ω with – SET SW on in cruise control SW

C14 Combination SW

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

: Parts Location

Code		See Page	Code		See Page	Code	See Page
A20		38	E7	C	39	J19	40
C9	A	38	E8	D	39	J20	40
C11	C	38	E9	E	39	J21	40
C12	D	38	J2		37	J23	40
C13		38	J5		37	P1	37
D3		39	J7		40	S5	41
D4		39	J9		40	S10	41
E1		36	J10		40	S17	41
E5	A	39	J13		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)
1E		
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

: Connector Joining Wire Harness and Wire Harness

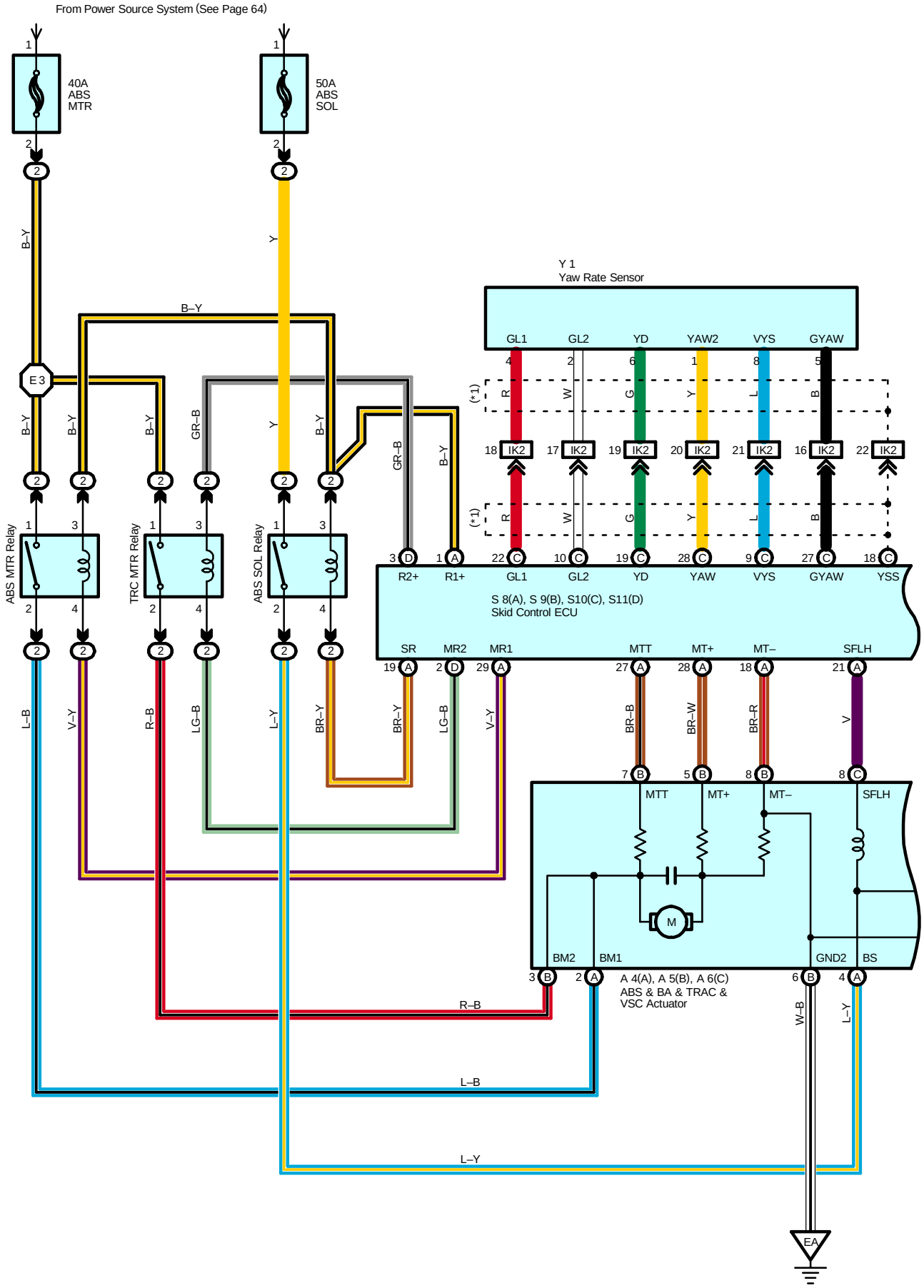
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)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

: Ground Points

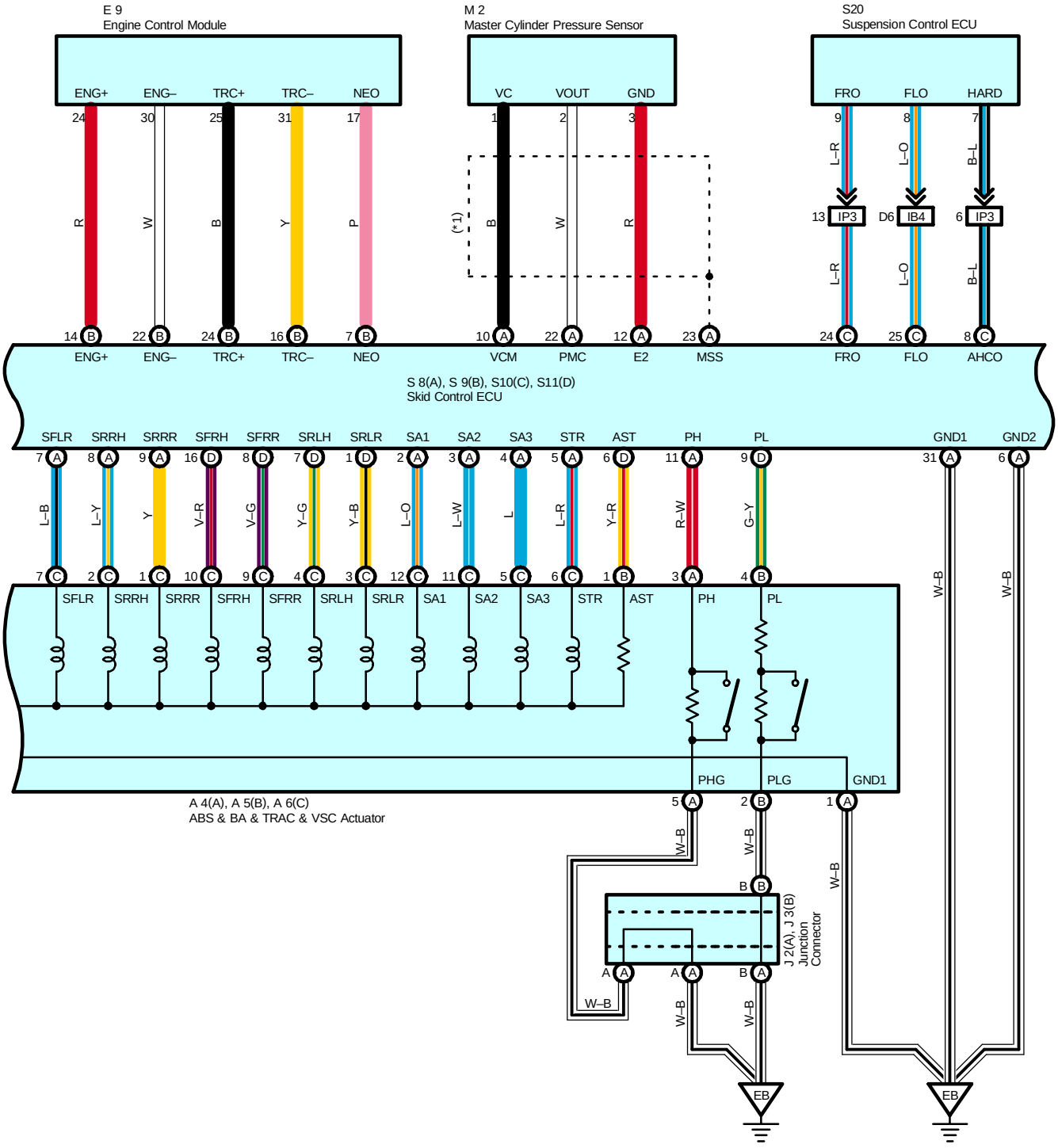
Code	See Page	Ground Points Location
EB	48	Front Left Fender
EE	48	Rear Bank of Right Cylinder Head
EG	48	Rear Bank of Left Cylinder Head
IL	50	Right Kick Panel

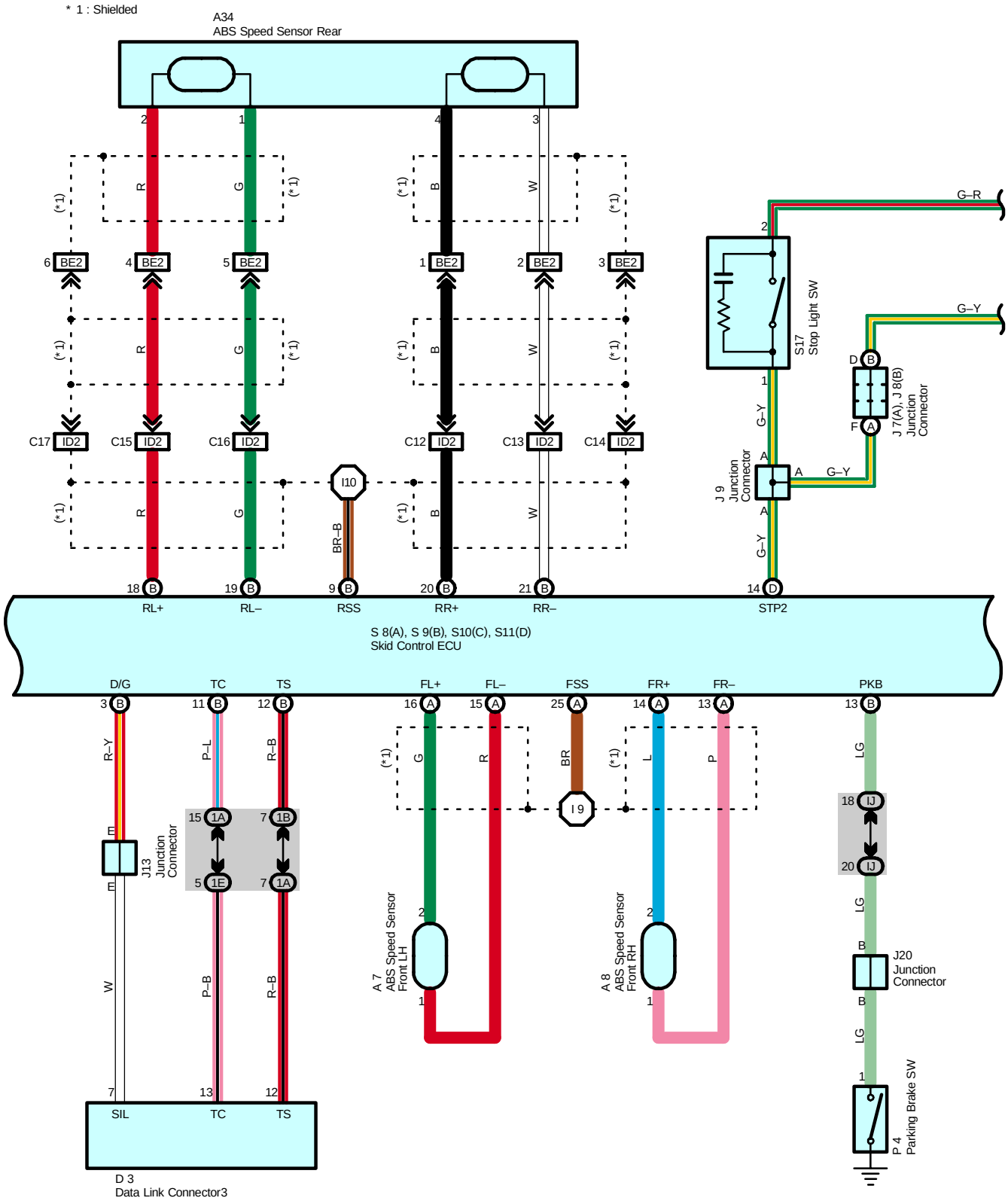
: Splice Points

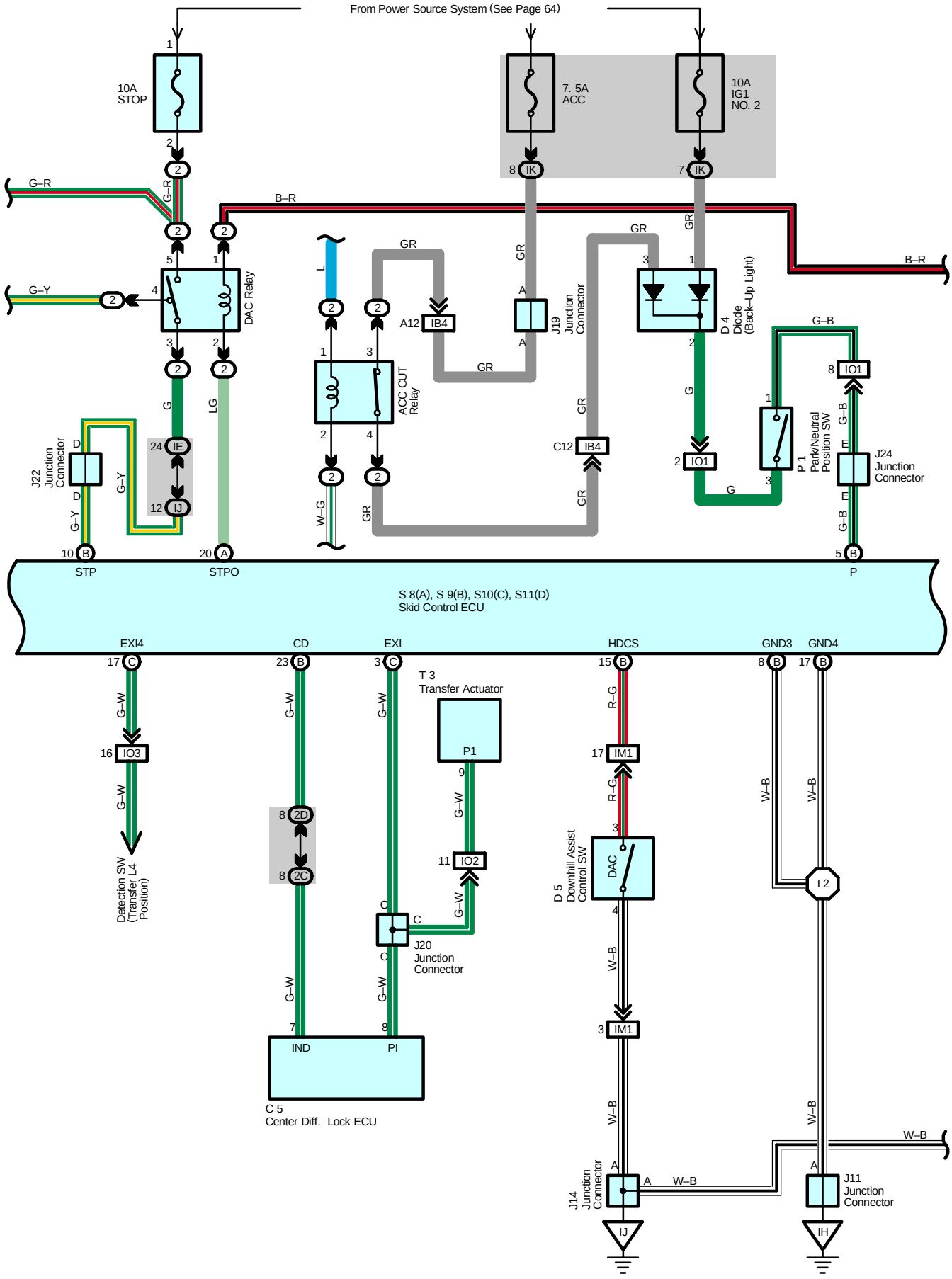
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	48	Engine Room Main Wire			

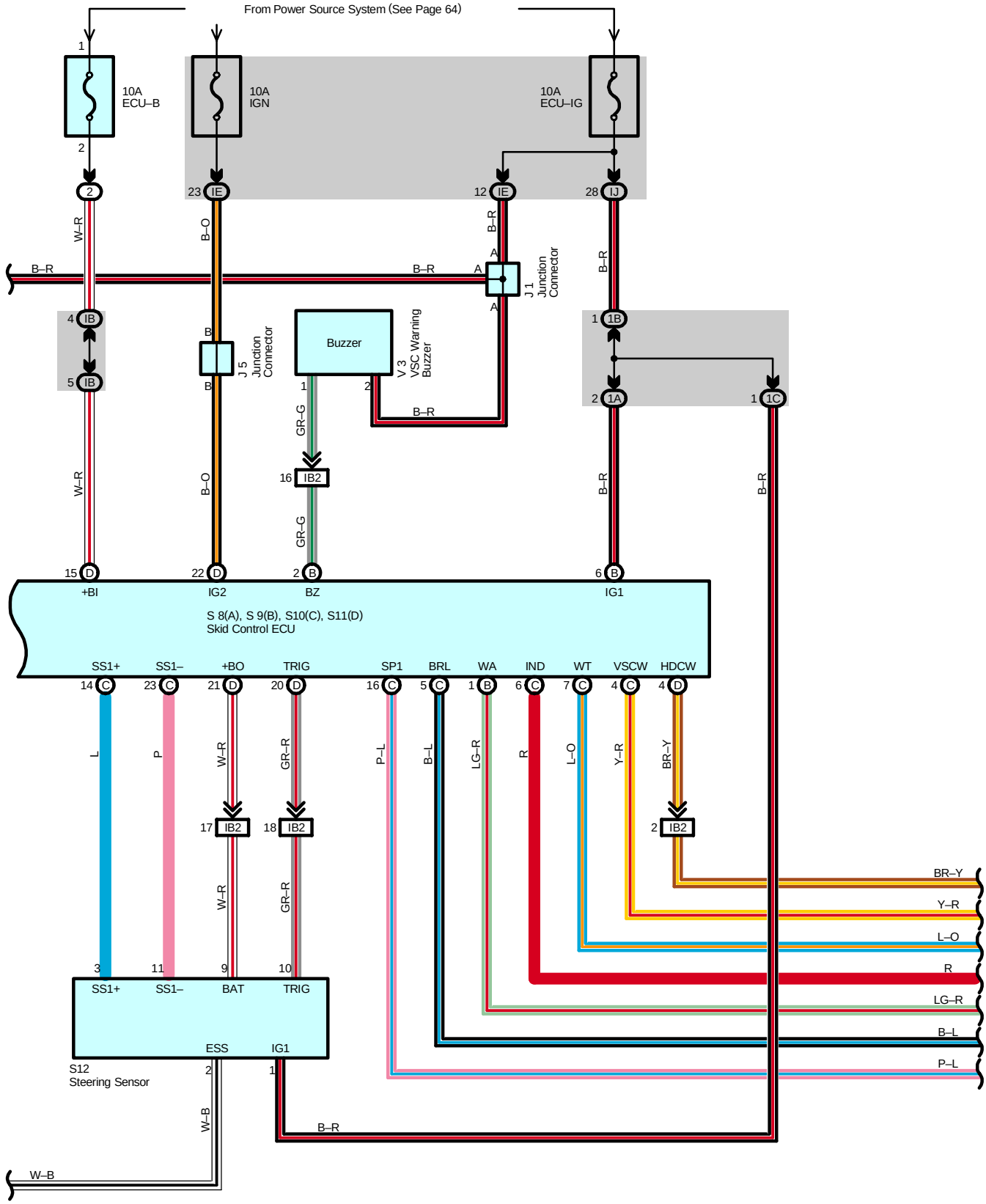

From Power Source System (See Page 64)
40A
ABS
MTR
50A
ABS
SOL
B–Y
Y
B–Y
E 3
GR–B
Y 1
Yaw Rate Sensor
GL1
GL2
YD
YAW2
VYS
GYAW
(*1)
IK2
ABS MTR Relay
TRC MTR Relay
ABS SOL Relay
R2+
R1+
GL1
GL2
YD
YAW
VYS
GYAW
YSS
S 8(A), S 9(B), S10(C), S11(D)
Skid Control ECU
SR
MR2
MR1
MTT
MT+
MT–
SFLH
BR–B
BR–W
BR–R
V
L–B
V–Y
R–B
LG–B
L–Y
BR–Y
BM2
BM1
GND2
BS
M
A 4(A), A 5(B), A 6(C)
ABS & BA & TRAC &
VSC Actuator
W–B
EA

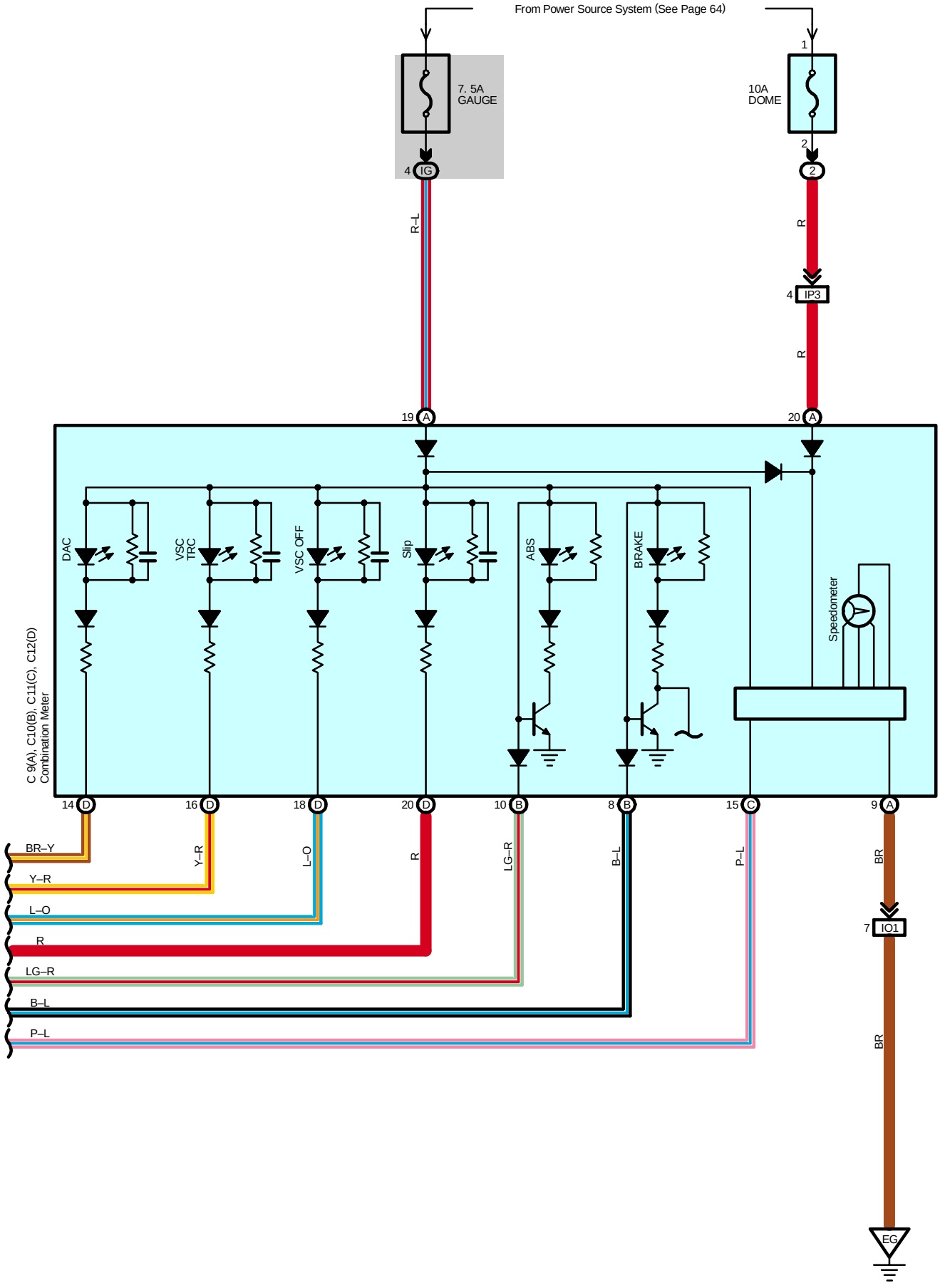
* 1 : Shielded


E 9
Engine Control Module
ENG+
ENG–
TRC+
TRC–
NEO
M 2
Master Cylinder Pressure Sensor
VC
VOUT
GND
S20
Suspension Control ECU
FRO
FLO
HARD
(*1)
IP3
IB4
IP3
S 8(A), S 9(B), S10(C), S11(D)
Skid Control ECU
VCM
PMC
E2
MSS
AHCO
SFLR
SRRH
SRRR
SFRH
SFRR
SRLH
SRLR
SA1
SA2
SA3
STR
AST
PH
PL
GND1
GND2
PHG
PLG
A 4(A), A 5(B), A 6(C)
ABS & BA & TRAC & VSC Actuator
J 2(A), J 3(B)
Junction
Connector
EB
EB


* 1 : Shielded
A34
ABS Speed Sensor Rear
RL+
RL–
RSS
RR+
RR–
S17
Stop Light SW
G–R
G–Y
J 9
Junction
Connector
J 7(A), J 8(B)
Junction
Connector
STP2
S 8(A), S 9(B), S10(C), S11(D)
Skid Control ECU
D/G
TC
TS
FL+
FL–
FSS
FR+
FR–
PKB
J13
Junction
Connector
A 7
ABS Speed Sensor
Front LH
A 8
ABS Speed Sensor
Front RH
J20
Junction
Connector
P 4
Parking Brake SW
SIL
TC
TS
D 3
Data Link Connector3


From Power Source System (See Page 64)
10A
STOP
7. 5A
ACC
10A
IG1
NO. 2
G–R
B–R
G–Y
DAC Relay
ACC CUT
Relay
J19
Junction
Connector
D 4
Diode
(Back–Up Light)
J22
Junction
Connector
J24
Junction
Connector
P 1
Park/Neutral
Position SW
STP
STPO
P
S 8(A), S 9(B), S10(C), S11(D)
Skid Control ECU
EXI4
CD
EXI
HDCS
GND3
GND4
T 3
Transfer Actuator
Detection SW
(Transfer L4
Position)
D 5
Downhill Assist
Control SW
J20
Junction
Connector
J14
Junction
Connector
J11
Junction
Connector
C 5
Center Diff. Lock ECU
IND
PI


From Power Source System (See Page 64)
10A ECU–B
10A IGN
10A ECU–IG
J1 Junction Connector
J5 Junction Connector
Buzzer
V3 VSC Warning Buzzer
+BI
IG2
BZ
IG1
S 8(A), S 9(B), S10(C), S11(D)
Skid Control ECU
SS1+
SS1–
+BO
TRIG
SP1
BRL
WA
IND
WT
VSCW
HDCW
SS1+
SS1–
BAT
TRIG
ESS
IG1
S12
Steering Sensor
BR–Y
Y–R
L–O
R
LG–R
B–L
P–L
W–B
B–R


From Power Source System (See Page 64)
7. 5A
GAUGE
4 IG
10A
DOME
1
2
2
R–L
R
4 IP3
R
19 A
20 A
DAC
VSC
TRC
VSC OFF
Slip
ABS
BRAKE
Speedometer
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
14 D
16 D
18 D
20 D
10 B
8 B
15 C
9 A
BR–Y
Y–R
L–O
R
LG–R
B–L
P–L
BR
7 IO1
BR
EG

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

S8 (A), S9 (B), S11 (D) Skid Control ECU

(A) 6, (A) 31, (B) 8, (B) 17–Ground : Always continuity
(B) 6, (D) 22–Ground : Approx. 12 volts with the ignition SW at ON position
(D) 15–Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A4 A	36	E9	39	J24	40
A5 B	36	J1	37	M2	37
A6 C	36	J2 A	37	P1	37
A7	36	J3 B	37	P4	40
A8	36	J5	37	S8 A	41
A34	42	J7 A	40	S9 B	41
C5	38	J8 B	40	S10 C	41
C9 A	38	J9	40	S11 D	41
C10 B	38	J11	40	S12	41
C11 C	38	J13	40	S17	41
C12 D	38	J14	40	S20	41
D3	39	J19	40	T3	37
D4	39	J20	40	V3	41
D5	39	J22	40	Y1	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)
IJ		
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1E		
2C	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		

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

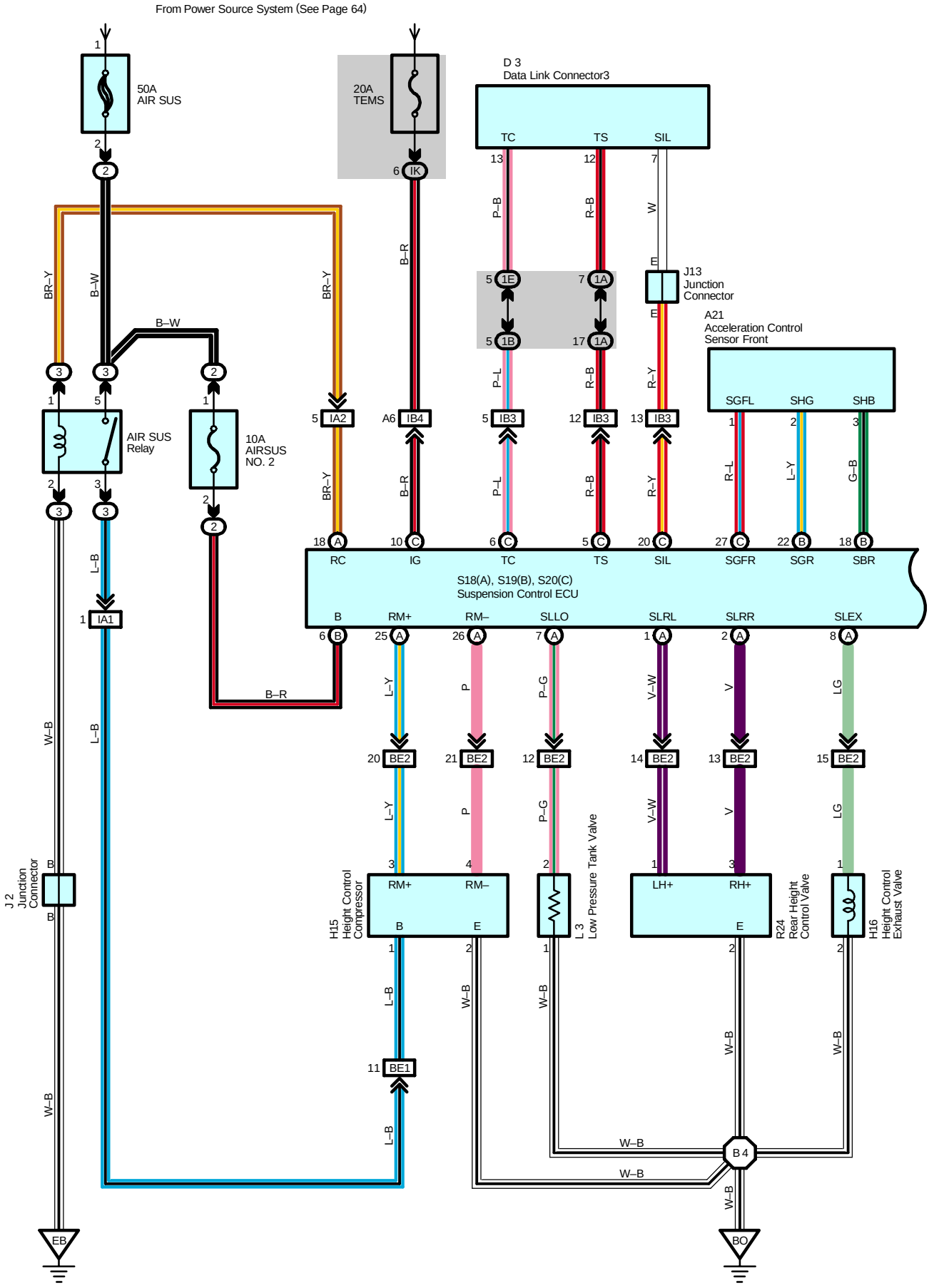
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IK2	52	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace 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		
IO3		
IP3	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
BE2	58	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)

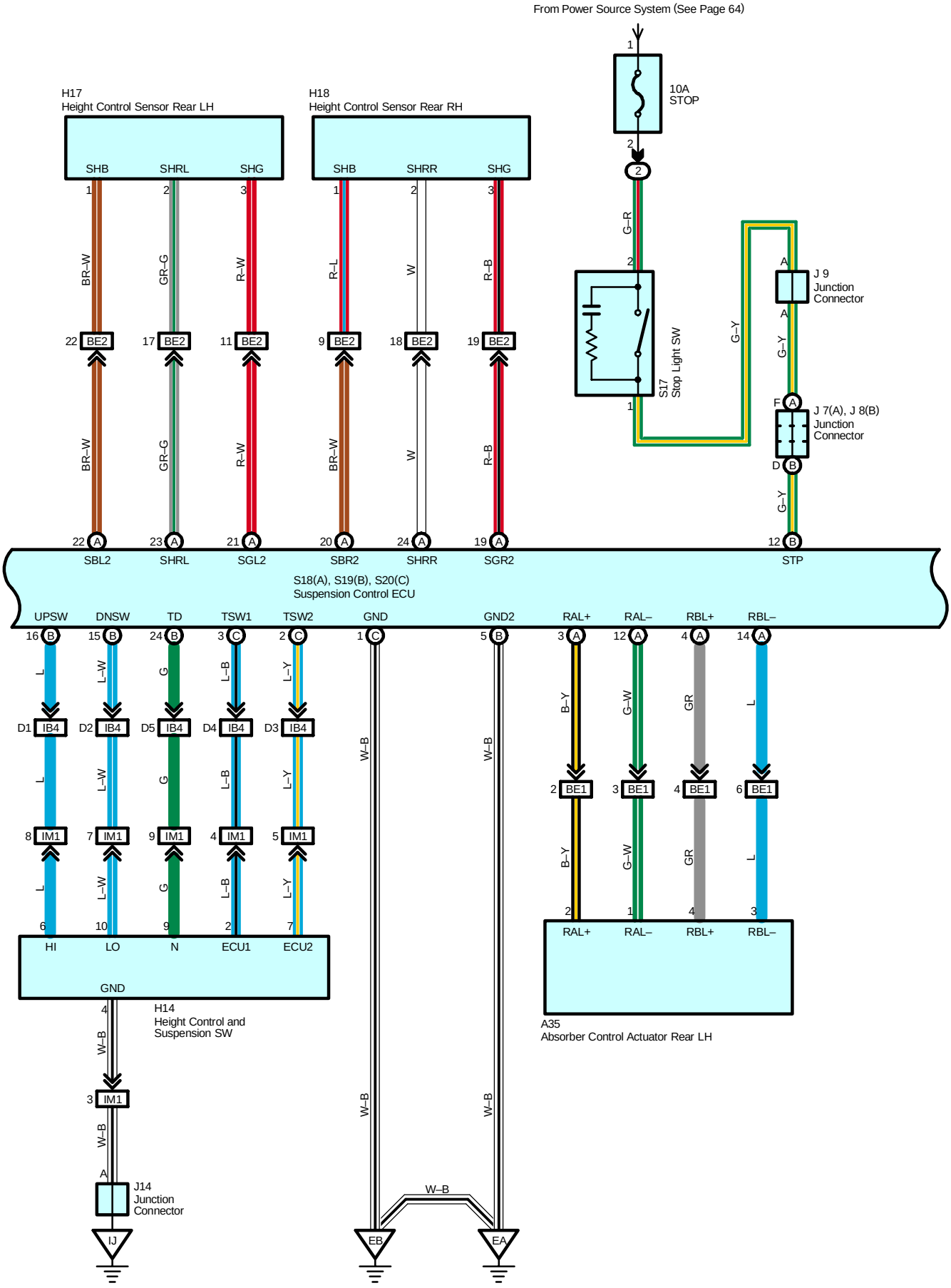
: **Ground Points**

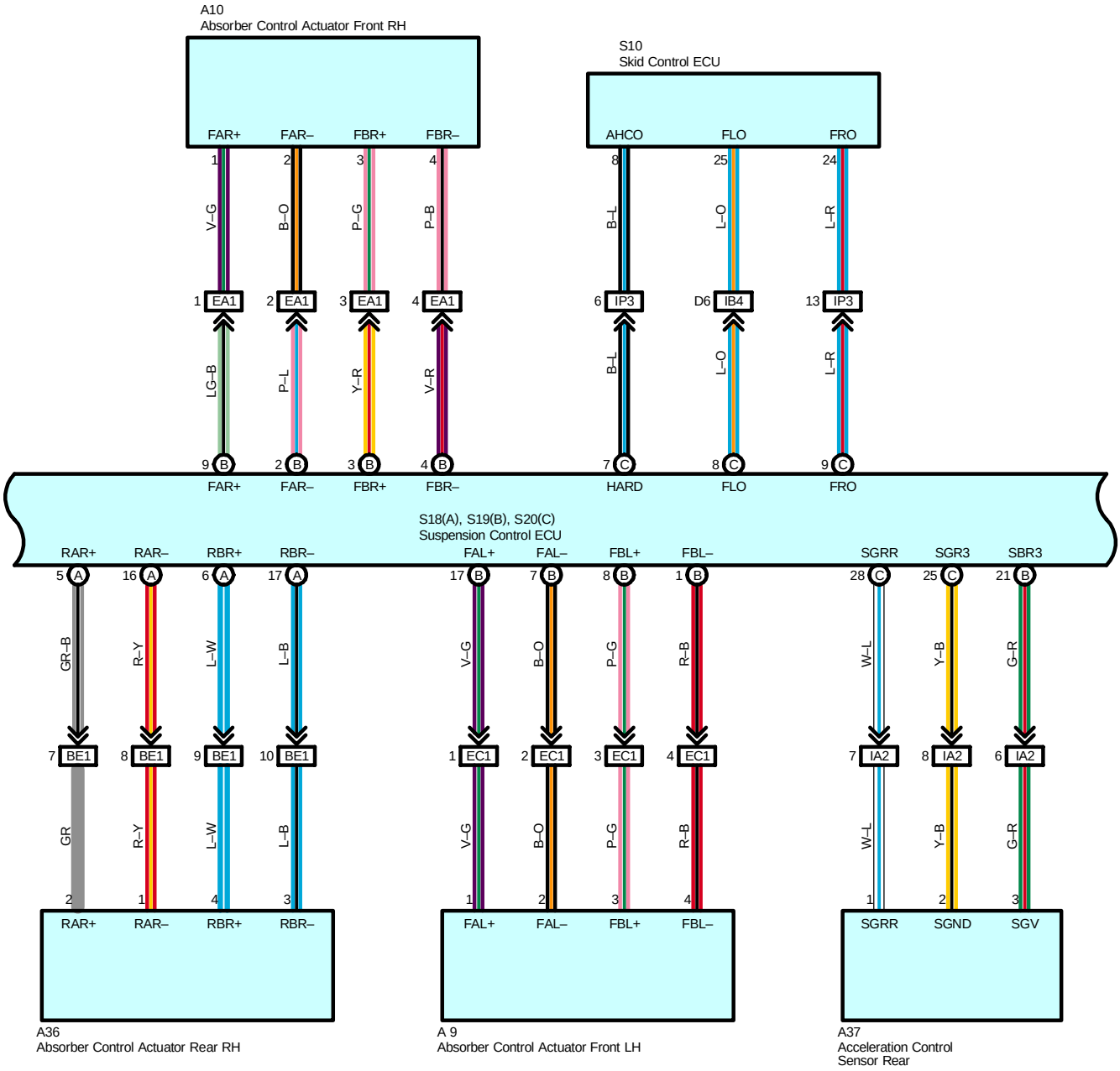
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

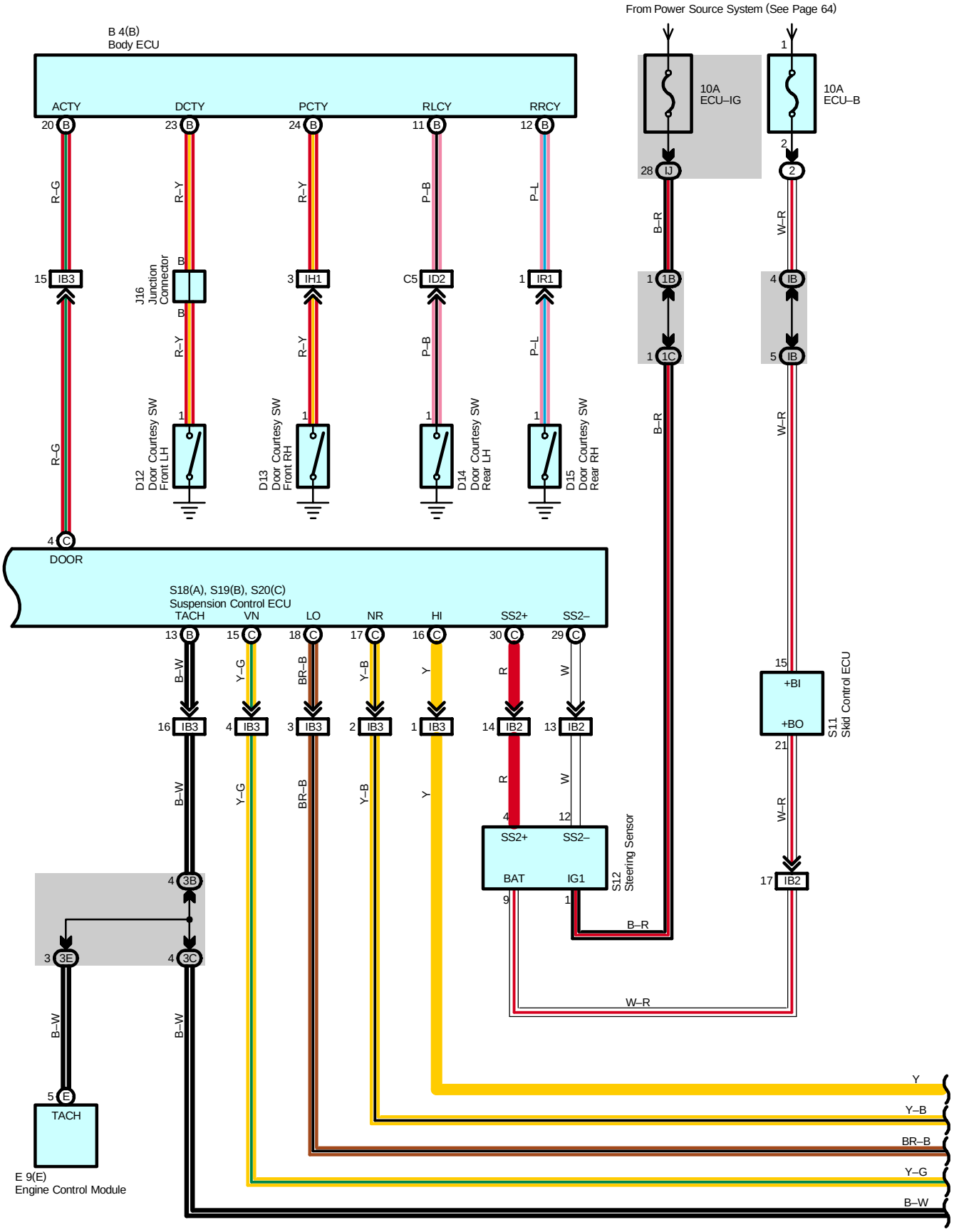
: **Splice Points**

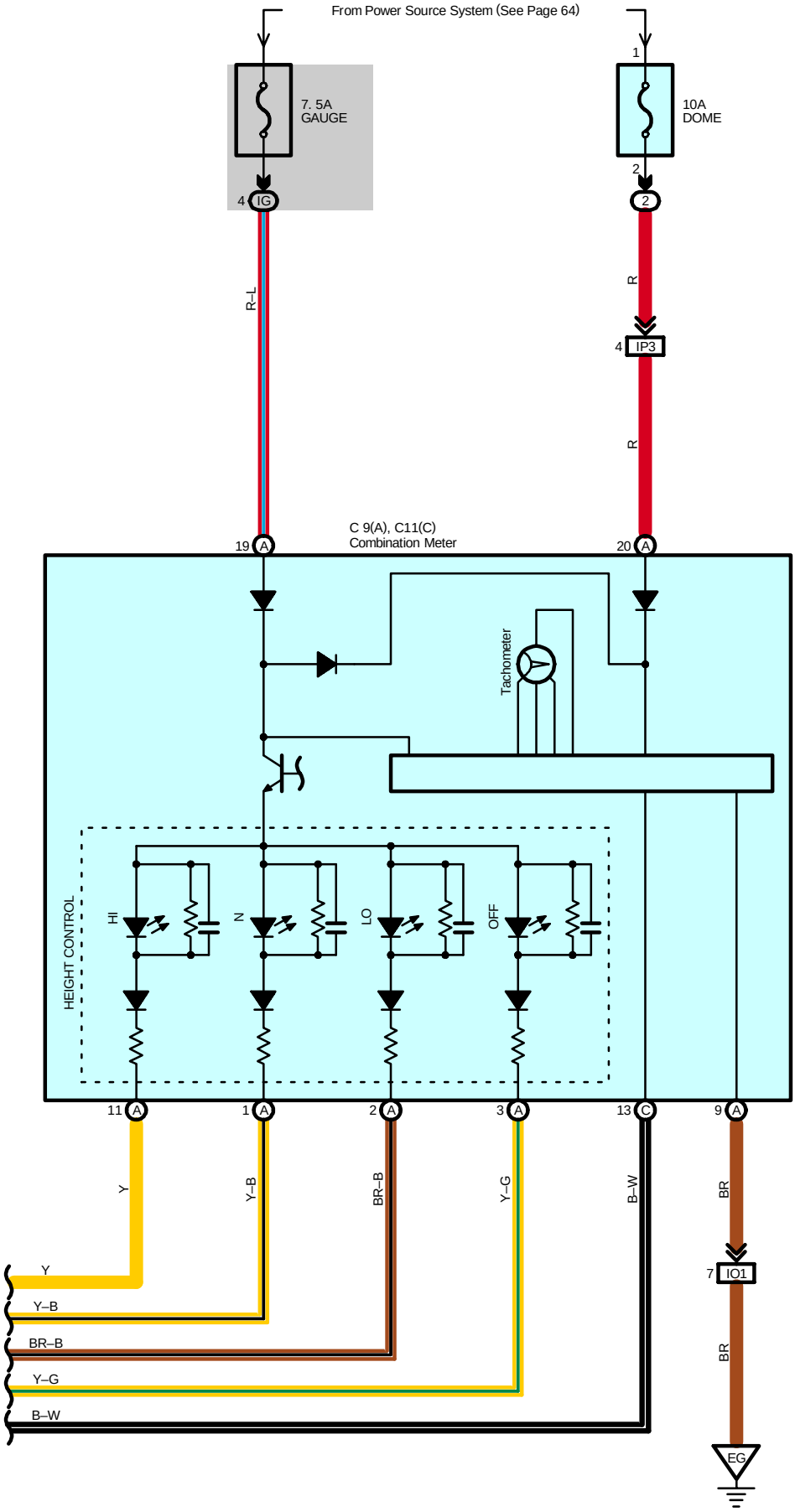
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	48	Engine Room Main Wire	I9	52	Engine Room Main Wire
I2	52	Instrument Panel Wire	I10	52	Instrument Panel Wire


From Power Source System (See Page 64)
50A
AIR SUS
20A
TEMS
D 3
Data Link Connector3
TC
TS
SIL
J13
Junction
Connector
A21
Acceleration Control
Sensor Front
SGFL
SHG
SHB
AIR SUS
Relay
10A
AIRSUS
NO. 2
S18(A), S19(B), S20(C)
Suspension Control ECU
RC
IG
TC
TS
SIL
SGFR
SGR
SBR
B
RM+
RM–
SLLO
SLRL
SLRR
SLEX
J 2
Junction
Connector
H15
Height Control
Compressor
L 3
Low Pressure Tank Valve
R24
Rear Height
Control Valve
H16
Height Control
Exhaust Valve
LH+
RH+
B 4
EB
BO


From Power Source System (See Page 64)
10A
STOP
H17
Height Control Sensor Rear LH
H18
Height Control Sensor Rear RH
SHB
SHRL
SHG
SHRR
BR–W
GR–G
R–W
R–L
W
R–B
G–R
G–Y
S17
Stop Light SW
J 9
Junction
Connector
J 7(A), J 8(B)
Junction
Connector
SBL2
SHRL
SGL2
SBR2
SHRR
SGR2
STP
S18(A), S19(B), S20(C)
Suspension Control ECU
UPSW
DNSW
TD
TSW1
TSW2
GND
GND2
RAL+
RAL–
RBL+
RBL–
L
L–W
G
L–B
L–Y
B–Y
G–W
GR
HI
LO
N
ECU1
ECU2
H14
Height Control and
Suspension SW
J14
Junction
Connector
A35
Absorber Control Actuator Rear LH


A10
Absorber Control Actuator Front RH
FAR+
FAR–
FBR+
FBR–
S10
Skid Control ECU
AHCO
FLO
FRO
V–G
B–O
P–G
P–B
B–L
L–O
L–R
LG–B
P–L
Y–R
V–R
EA1
IP3
IB4
FAR+
FAR–
FBR+
FBR–
HARD
FLO
FRO
S18(A), S19(B), S20(C)
Suspension Control ECU
RAR+
RAR–
RBR+
RBR–
FAL+
FAL–
FBL+
FBL–
SGRR
SGR3
SBR3
GR–B
R–Y
L–W
L–B
W–L
Y–B
G–R
GR
BE1
EC1
IA2
RAR+
RAR–
RBR+
RBR–
FAL+
FAL–
FBL+
FBL–
SGRR
SGND
SGV
A36
Absorber Control Actuator Rear RH
A 9
Absorber Control Actuator Front LH
A37
Acceleration Control
Sensor Rear


From Power Source System (See Page 64)
B 4(B)
Body ECU
ACTY
DCTY
PCTY
RLCY
RRCY
20 B
23 B
24 B
11 B
12 B
R–G
R–Y
P–B
P–L
15 IB3
J16
Junction
Connector
3 IH1
C5 ID2
1 IR1
D12
Door Courtesy SW
Front LH
D13
Door Courtesy SW
Front RH
D14
Door Courtesy SW
Rear LH
D15
Door Courtesy SW
Rear RH
4 C
DOOR
S18(A), S19(B), S20(C)
Suspension Control ECU
TACH
VN
LO
NR
HI
SS2+
SS2–
13 B
15 C
18 C
17 C
16 C
30 C
29 C
B–W
Y–G
BR–B
Y–B
Y
R
W
16 IB3
4 IB3
3 IB3
2 IB3
1 IB3
14 IB2
13 IB2
4 3B
3 3E
4 3C
5 E
TACH
E 9(E)
Engine Control Module
10A
ECU–IG
10A
ECU–B
28 IJ
2
1 1B
1 1C
4 IB
5 IB
B–R
W–R
15
+BI
+BO
21
S11
Skid Control ECU
17 IB2
SS2+
SS2–
BAT
IG1
9
1
S12
Steering Sensor
12
Y
Y–B
BR–B
Y–G
B–W


From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
1
2
4 IG
2
R
4 IP3
R
R–L
C 9(A), C11(C)
Combination Meter
19 A
20 A
Tachometer
HEIGHT CONTROL
HI
N
LO
OFF
11 A
1 A
2 A
3 A
13 C
9 A
Y
Y–B
BR–B
Y–G
B–W
BR
7 IO1
BR
EG
Y
Y–B
BR–B
Y–G
B–W

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
(C) 1, (B) 5–Ground : Always continuity

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A9	36	D14	42	J13	40
A10	36	D15	42	J14	40
A21	38	E9 E	39	J16	40
A35	42	H14	39	L3	43
A36	42	H15	43	R24	44
A37	42	H16	43	S10	41
B4 B	38	H17	43	S11	41
C9 A	38	H18	43	S12	41
C11 C	38	J2	37	S17	41
D3	39	J7 A	40	S18 A	41
D12	42	J8 B	40	S19 B	41
D13	42	J9	40	S20 C	41

▭ : 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)
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		
1C		
1E		
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	Engine Room No.2 Wire and Engine Room Main Wire (Near the Air Cleaner)
EC1	48	Engine Room No.2 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)
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		

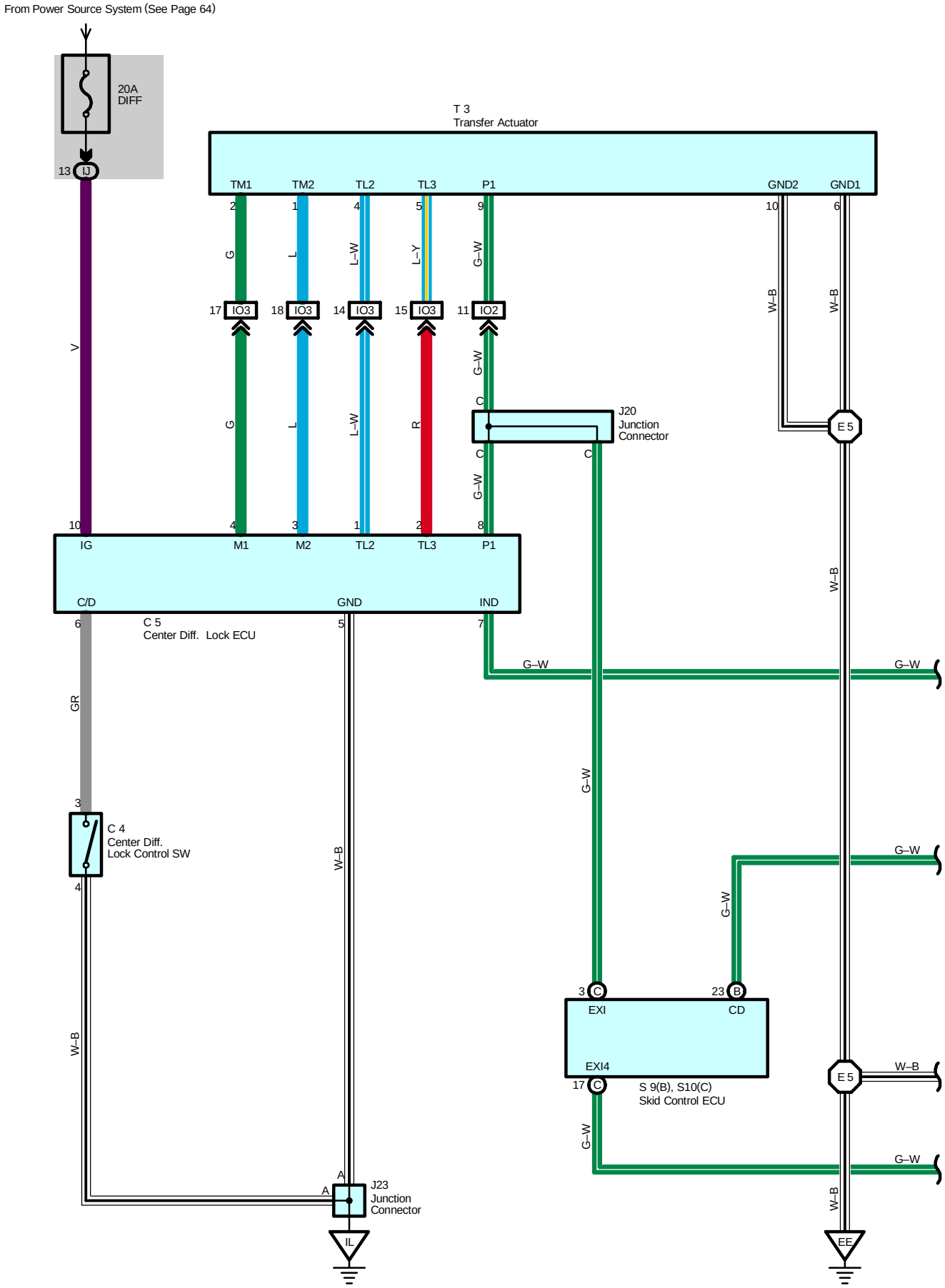
 : **Ground Points**

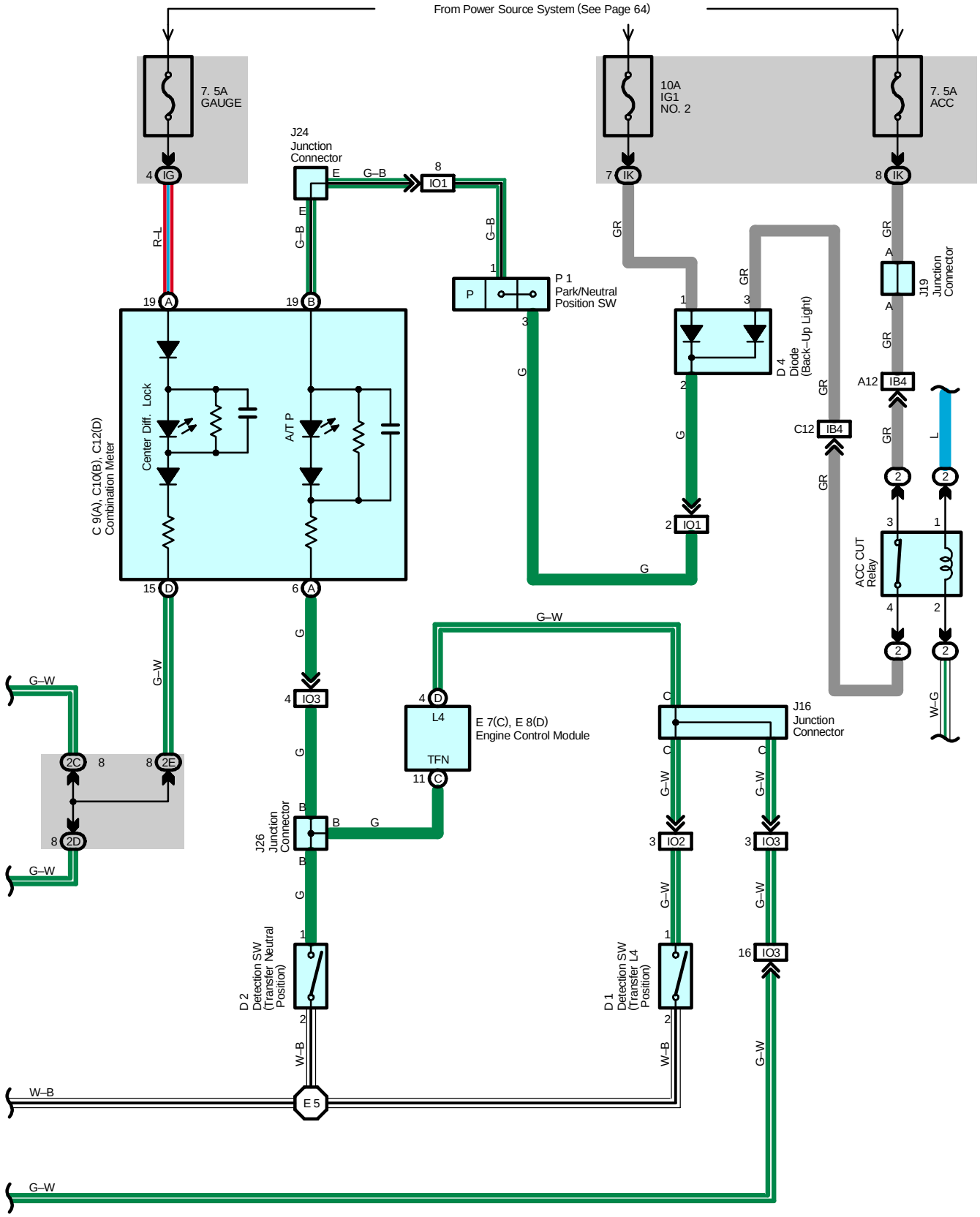
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
BO	58	Near the Left Side of No.5 Cross Member

 : **Splice Points**

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

Center Differential Lock




From Power Source System (See Page 64)
7. 5A
GAUGE
10A
IG1
NO. 2
7. 5A
ACC
J24
Junction
Connector
P 1
Park/Neutral
Position SW
D 4
Diode
(Back–Up Light)
J19
Junction
Connector
C 9(A), C10(B), C12(D)
Combination Meter
Center Diff. Lock
A/T P
ACC CUT
Relay
J16
Junction
Connector
E 7(C), E 8(D)
Engine Control Module
L4
TFN
J26
Junction
Connector
D 2
Detection SW
(Transfer Neutral
Position)
D 1
Detection SW
(Transfer L4
Position)
E 5
R–L
G–B
G
G–W
W–B
W–G
GR
L

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	J24	40
C5	38	E7 C	39	J26	40
C9 A	38	E8 D	39	P1	37
C10 B	38	J16	40	S9 B	41
C12 D	38	J19	40	S10 C	41
D1	36	J20	40	T3	37
D2	36	J23	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)
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)
IO2		
IO3		

: Ground Points

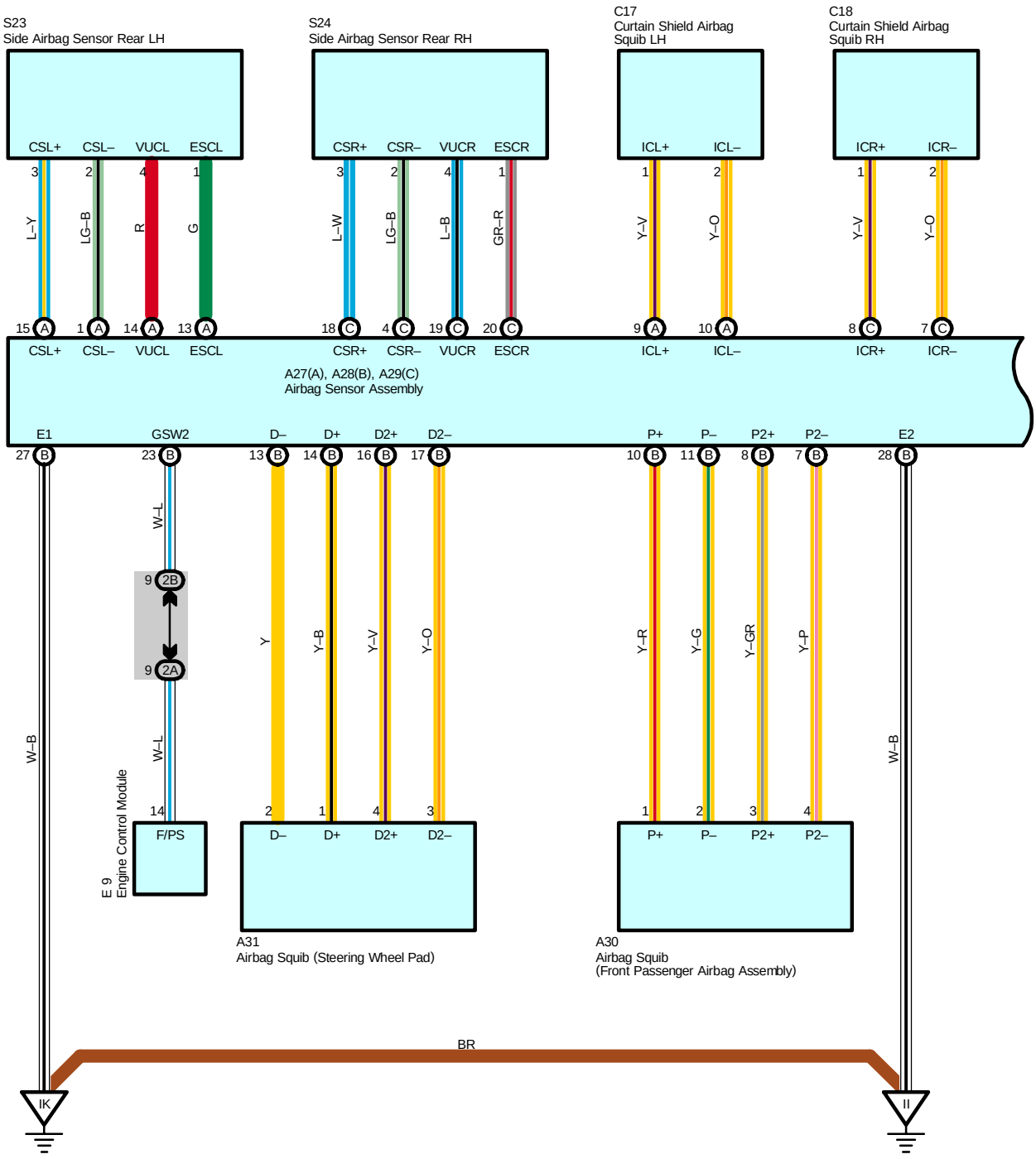
Code	See Page	Ground Points Location
EE	48	Rear Bank of Right Cylinder Head
IL	50	Right Kick Panel

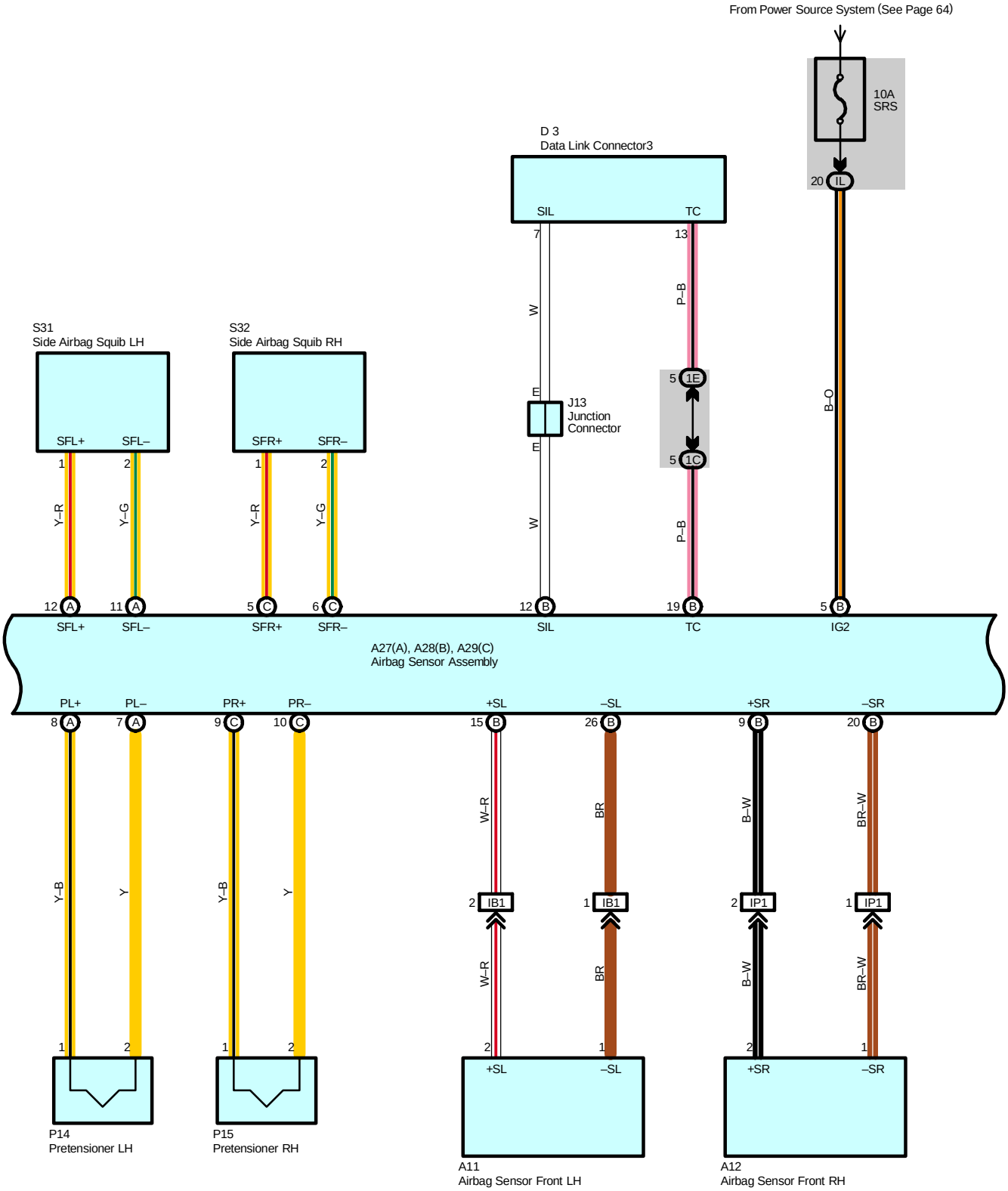
: Splice Points

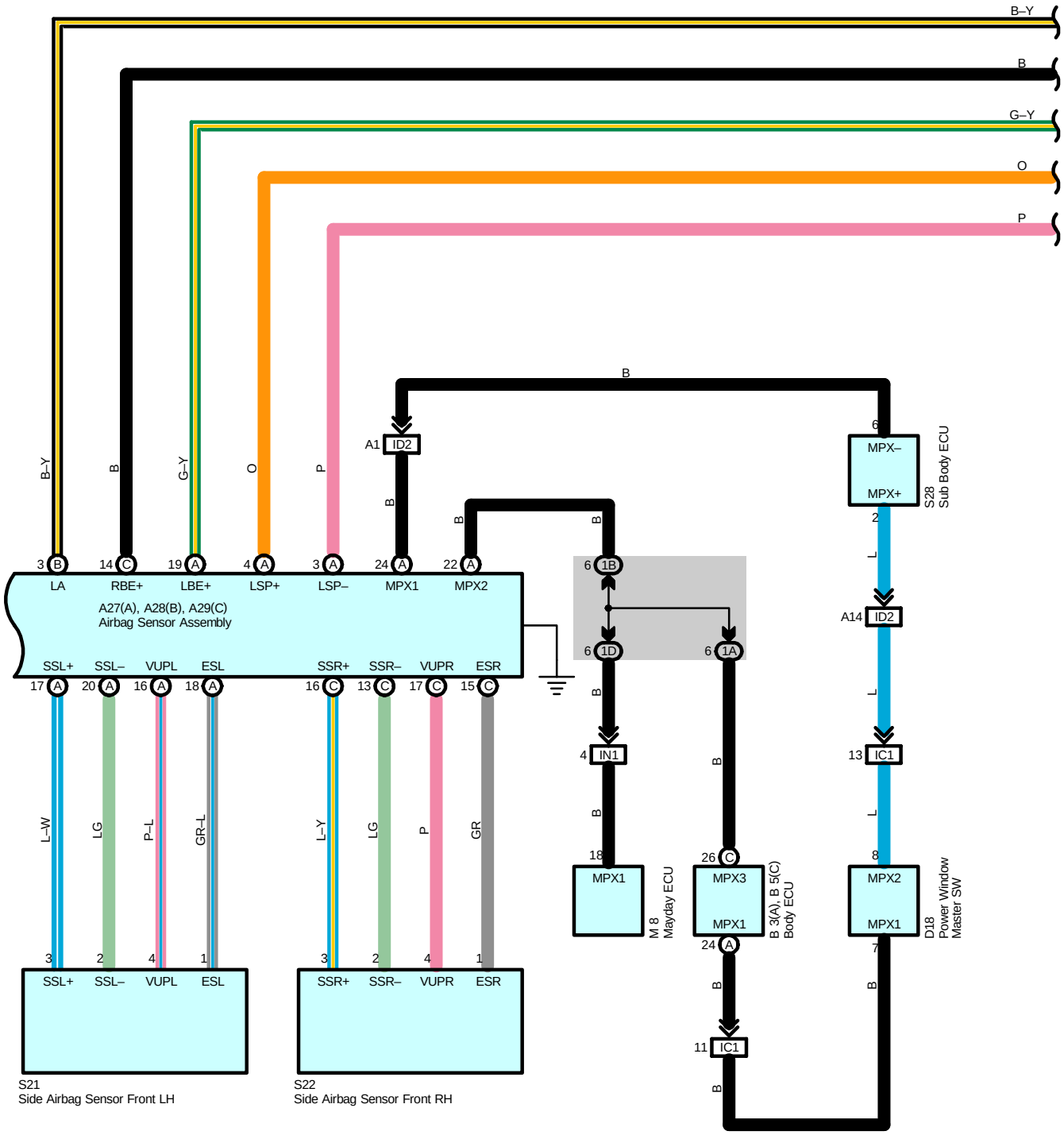
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	48	Engine Wire			

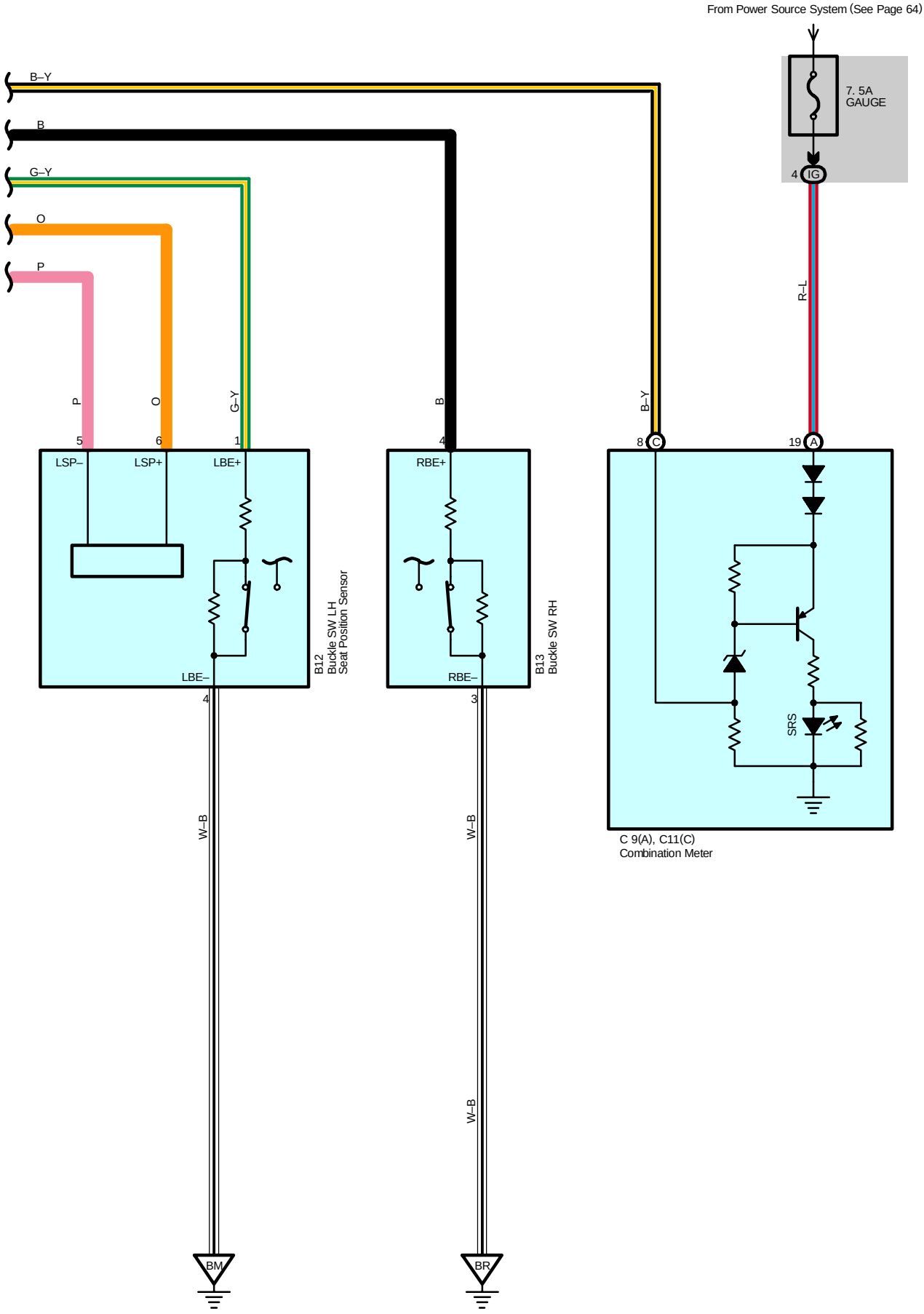
NOTICE: When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual for the applicable model year.

- 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 after 90 seconds from when the ignition switch 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 be deployed.)
- When the negative (–) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. This vehicle has power tilt and 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 the memory contents. So when the work is finished, it will be necessary to explain this fact tot the customer, and ask the customer to adjust the features and reset the memory. To avoid erasing the memory in each memory system, never use a back–up power supply from outside the vehicle.
- Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.
- Do not expose the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly directly to hot air or flames.
- Even in cases of a minor collision where the SRS does not deploy, the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly and side airbag sensor assembly should be inspected.
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly in order to reuse it.
- If the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly has been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace them with new ones.
- Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting the system's electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- After work on the SRS is completed, perform the SRS warning light check.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.


S23
Side Airbag Sensor Rear LH
CSL+
CSL–
VUCL
ESCL
3
2
4
1
L–Y
LG–B
R
G
15 A
1 A
14 A
13 A
S24
Side Airbag Sensor Rear RH
CSR+
CSR–
VUCR
ESCR
3
2
4
1
L–W
LG–B
L–B
GR–R
18 C
4 C
19 C
20 C
C17
Curtain Shield Airbag
Squib LH
ICL+
ICL–
1
2
Y–V
Y–O
9 A
10 A
C18
Curtain Shield Airbag
Squib RH
ICR+
ICR–
1
2
Y–V
Y–O
8 C
7 C
A27(A), A28(B), A29(C)
Airbag Sensor Assembly
E1
GSW2
D–
D+
D2+
D2–
P+
P–
P2+
P2–
E2
27 B
23 B
13 B
14 B
16 B
17 B
10 B
11 B
8 B
7 B
28 B
W–B
W–L
9 2B
9 2A
W–L
W–B
Y
Y–B
Y–V
Y–O
Y–R
Y–G
Y–GR
Y–P
E 9
Engine Control Module
14
F/PS
2
1
4
3
D–
D+
D2+
D2–
1
2
3
4
P+
P–
P2+
P2–
A31
Airbag Squib (Steering Wheel Pad)
A30
Airbag Squib
(Front Passenger Airbag Assembly)
BR
IK
II


From Power Source System (See Page 64)
10A
SRS
20 IL
D 3
Data Link Connector3
SIL
TC
7
13
W
P–B
S31
Side Airbag Squib LH
S32
Side Airbag Squib RH
SFL+
SFL–
SFR+
SFR–
1
2
Y–R
Y–G
E
J13
Junction
Connector
5 1E
5 1C
B–O
12 A
11 A
5 C
6 C
12 B
19 B
5 B
IG2
A27(A), A28(B), A29(C)
Airbag Sensor Assembly
PL+
PL–
PR+
PR–
+SL
–SL
+SR
–SR
8 A
7 A
9 C
10 C
15 B
26 B
9 B
20 B
Y–B
Y
W–R
BR
B–W
BR–W
2 IB1
1 IB1
2 IP1
1 IP1
P14
Pretensioner LH
P15
Pretensioner RH
A11
Airbag Sensor Front LH
A12
Airbag Sensor Front RH


B–Y
B
G–Y
O
P
A1 ID2
MPX–
MPX+
S28 Sub Body ECU
A14 ID2
IC1
A27(A), A28(B), A29(C)
Airbag Sensor Assembly
LA
RBE+
LBE+
LSP+
LSP–
MPX1
MPX2
SSL+
SSL–
VUPL
ESL
SSR+
SSR–
VUPR
ESR
1B
1D
1A
IN1
MPX1
M 8
Mayday ECU
MPX3
B 3(A), B 5(C)
Body ECU
MPX2
D18
Power Window
Master SW
L–W
LG
P–L
GR–L
L–Y
GR
S21
Side Airbag Sensor Front LH
S22
Side Airbag Sensor Front RH


From Power Source System (See Page 64)
B–Y
B
G–Y
O
P
7. 5A
GAUGE
4 IG
R–L
P
O
G–Y
B
B–Y
5
6
1
4
8 C
19 A
LSP–
LSP+
LBE+
RBE+
LBE–
RBE–
B12
Buckle SW LH
Seat Position Sensor
B13
Buckle SW RH
SRS
4
3
W–B
W–B
W–B
BM
BR
C 9(A), C11(C)
Combination Meter

System Outline

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A11	36	B13	46	P14	44
A12	36	C9 A	38	P15	44
A27 A	38	C11 C	38	S21	45
A28 B	38	C17	42	S22	45
A29 C	38	C18	42	S23	45
A30	38	D3	39	S24	45
A31	38	D18	42	S28	45
B3 A	38	E9	39	S31	46
B5 C	38	J13	40	S32	46
B12	46	M8	44		

: Junction Block and Wire Harness Connector

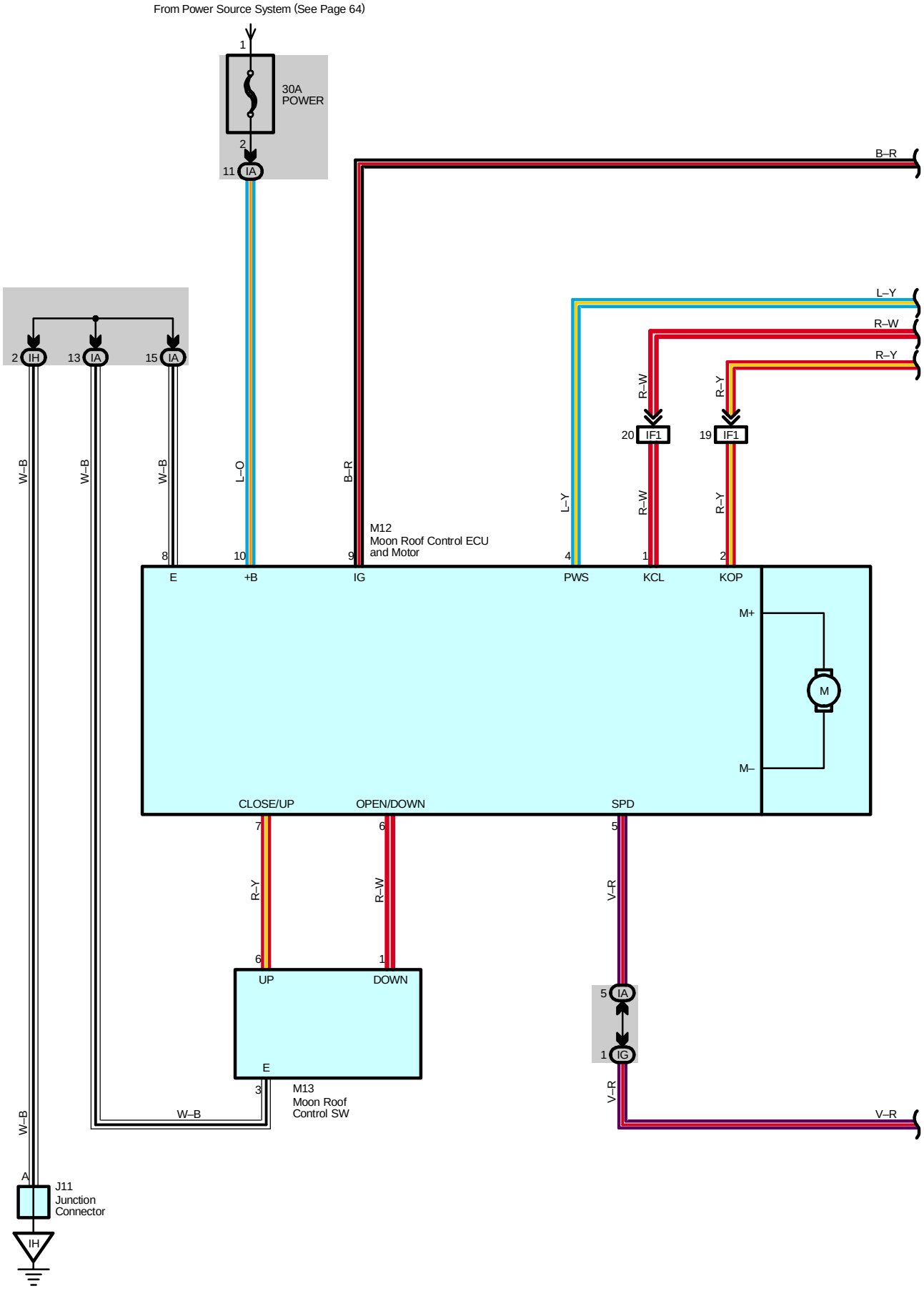
Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement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

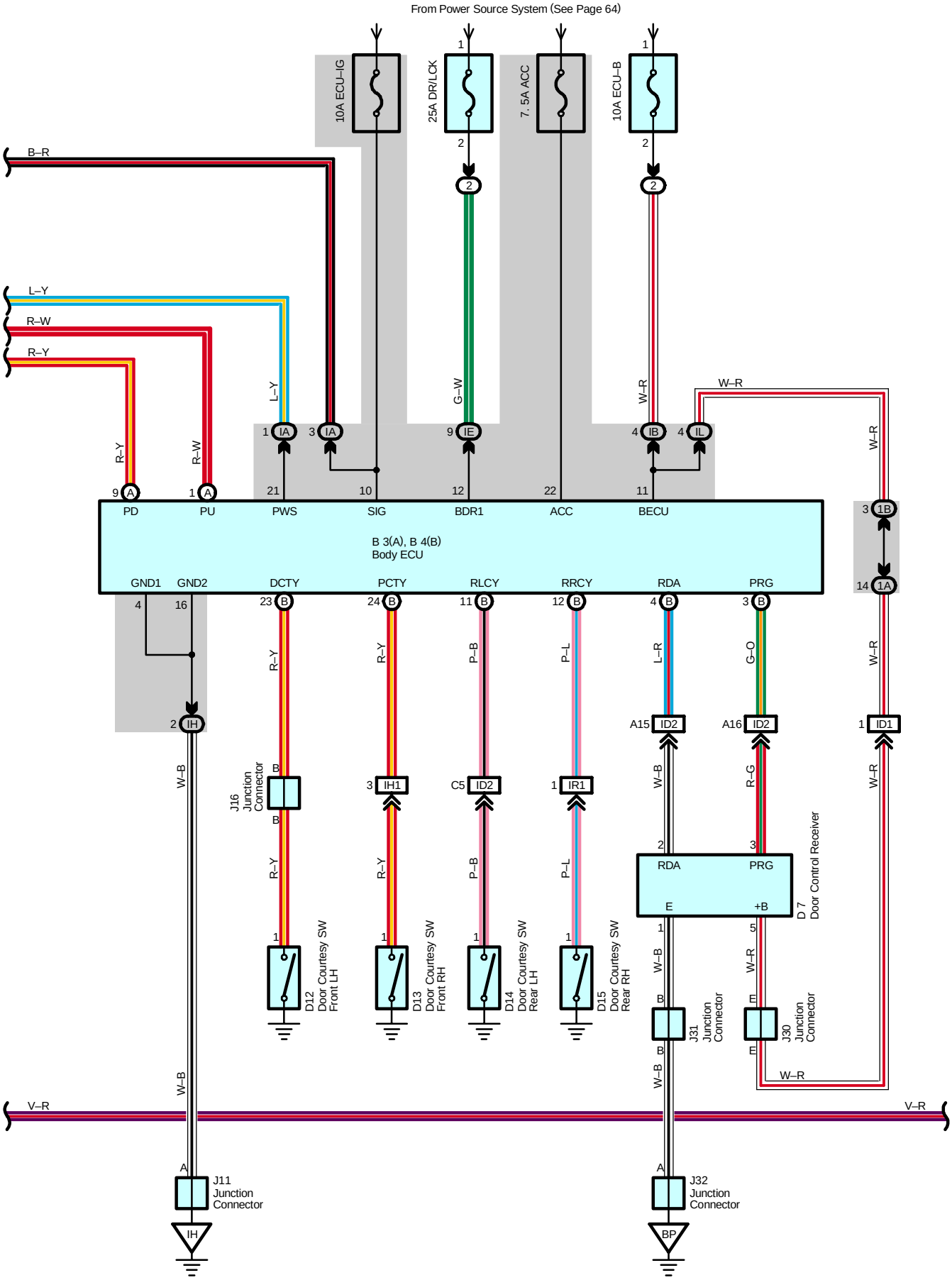
: Connector Joining Wire Harness and Wire Harness

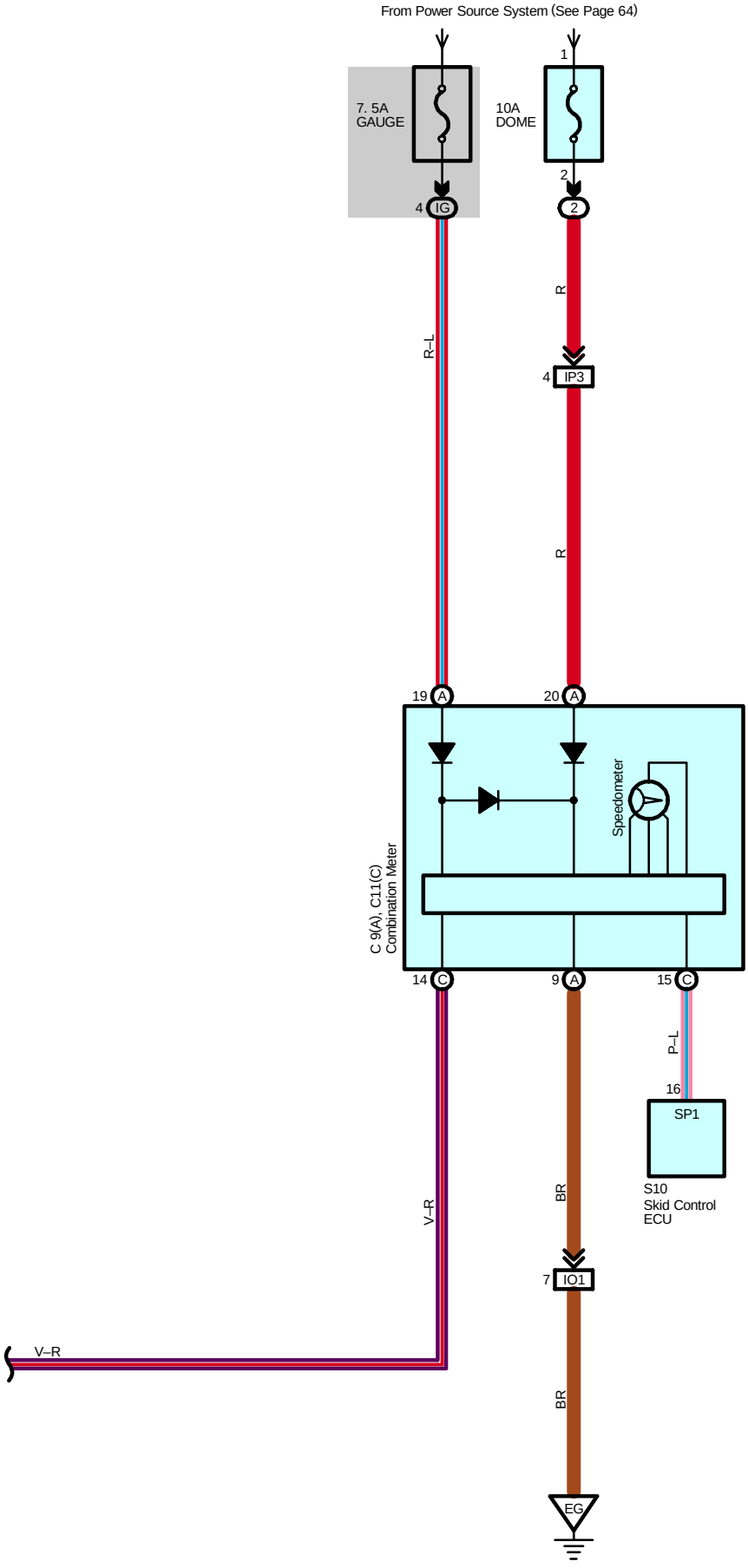
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IP1	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
II	50	Near the Left Side of Steering Column
IK	50	Instrument Panel Brace LH
BM	58	Under the Driver's Seat
BR	58	Right Quarter Panel Inner


From Power Source System (See Page 64)
1
30A
POWER
2
11 IA
B–R
L–Y
R–W
R–Y
2 IH
13 IA
15 IA
W–B
W–B
W–B
L–O
B–R
L–Y
R–W
R–Y
20 IF1
19 IF1
M12
Moon Roof Control ECU
and Motor
8
10
9
4
1
2
E
+B
IG
PWS
KCL
KOP
M+
M
M–
CLOSE/UP
OPEN/DOWN
SPD
7
6
5
R–Y
R–W
V–R
6
1
UP
DOWN
E
3
M13
Moon Roof
Control SW
W–B
5 IA
1 IG
V–R
V–R
W–B
A
J11
Junction
Connector
IH


From Power Source System (See Page 64)
10A ECU–IG
25A DR/LCK
7.5A ACC
10A ECU–B
B–R
L–Y
R–W
R–Y
G–W
W–R
PD
PU
PWS
SIG
BDR1
ACC
BECU
B 3(A), B 4(B)
Body ECU
GND1
GND2
DCTY
PCTY
RLCY
RRCY
RDA
PRG
W–B
J16 Junction Connector
D12 Door Courtesy SW Front LH
D13 Door Courtesy SW Front RH
D14 Door Courtesy SW Rear LH
D15 Door Courtesy SW Rear RH
D 7 Door Control Receiver
J31 Junction Connector
J30 Junction Connector
V–R
J11 Junction Connector
J32 Junction Connector
IH
BP


From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
1
2
4 IG
2
R
R–L
4 IP3
R
19 A
20 A
Speedometer
C 9(A), C11(C)
Combination Meter
14 C
9 A
15 C
P–L
16
SP1
S10
Skid Control
ECU
V–R
BR
7 IO1
V–R
BR
EG

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	J31	43
B4	B	38	D14	42	J32	43
C9	A	38	D15	42	M12	44
C11	C	38	J11	40	M13	44
D7		42	J16	40	S10	41
D12		42	J30	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**

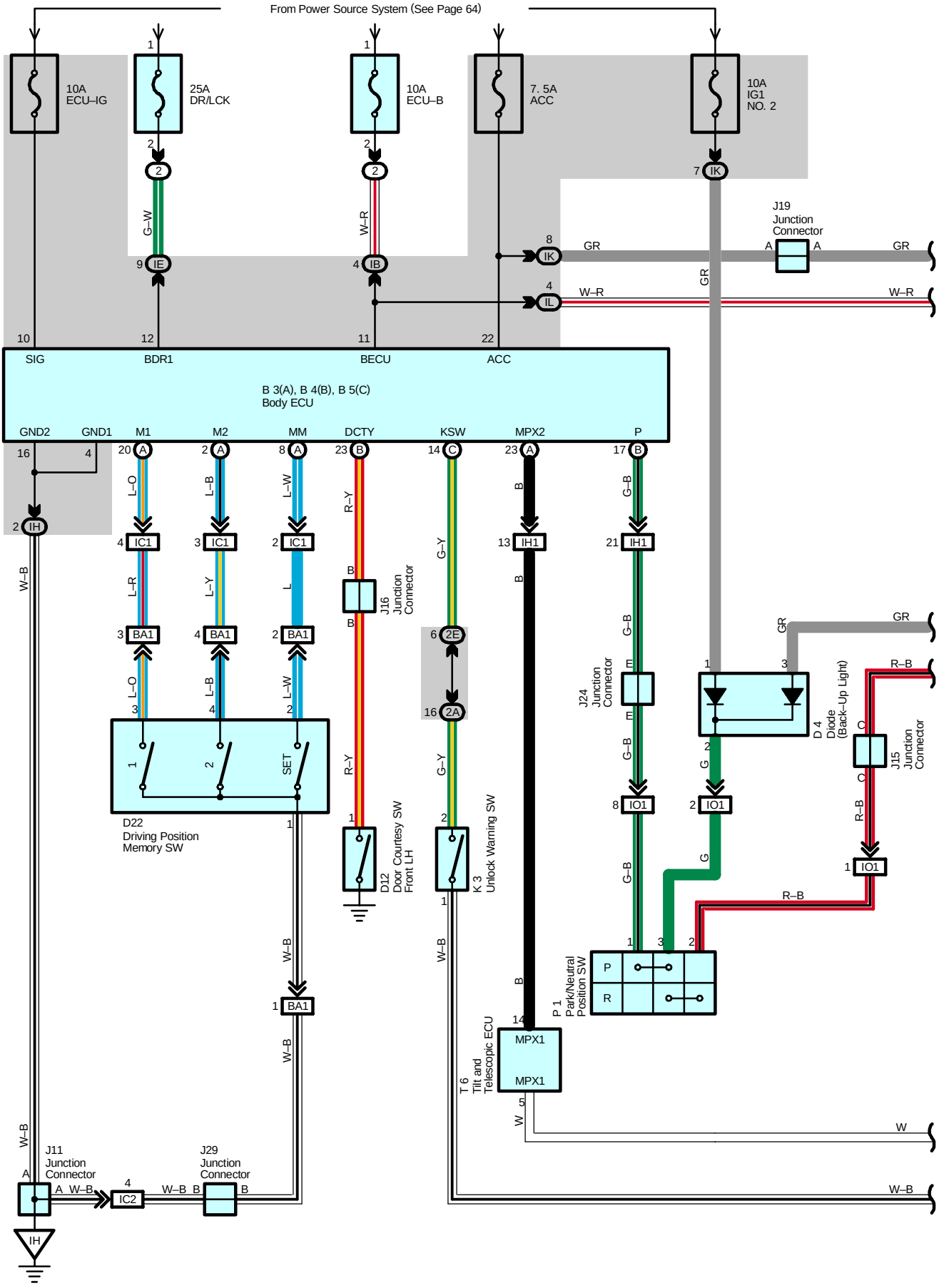
Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IH		
IL		
1A	30	Instrument Panel Wire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

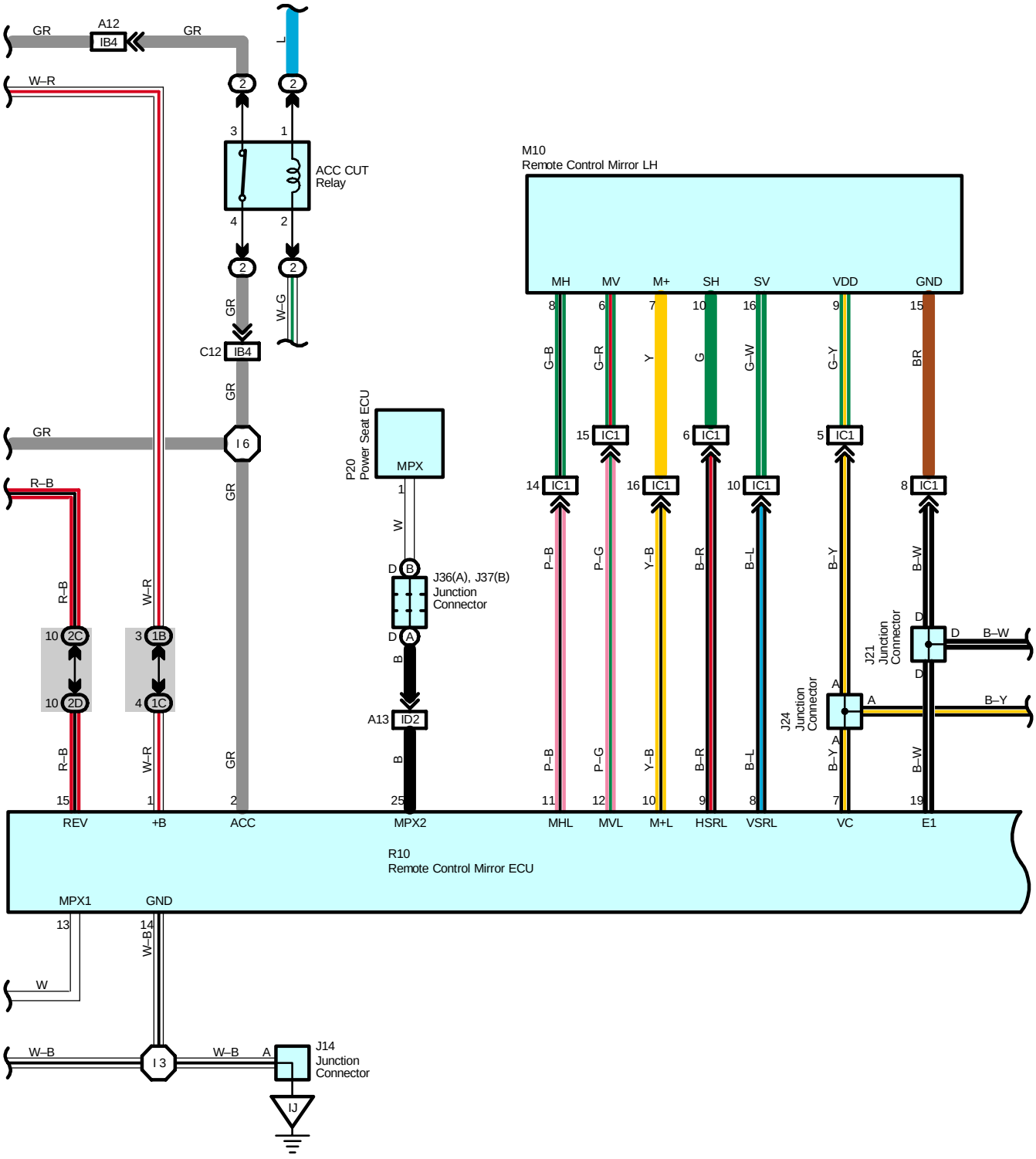
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
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)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

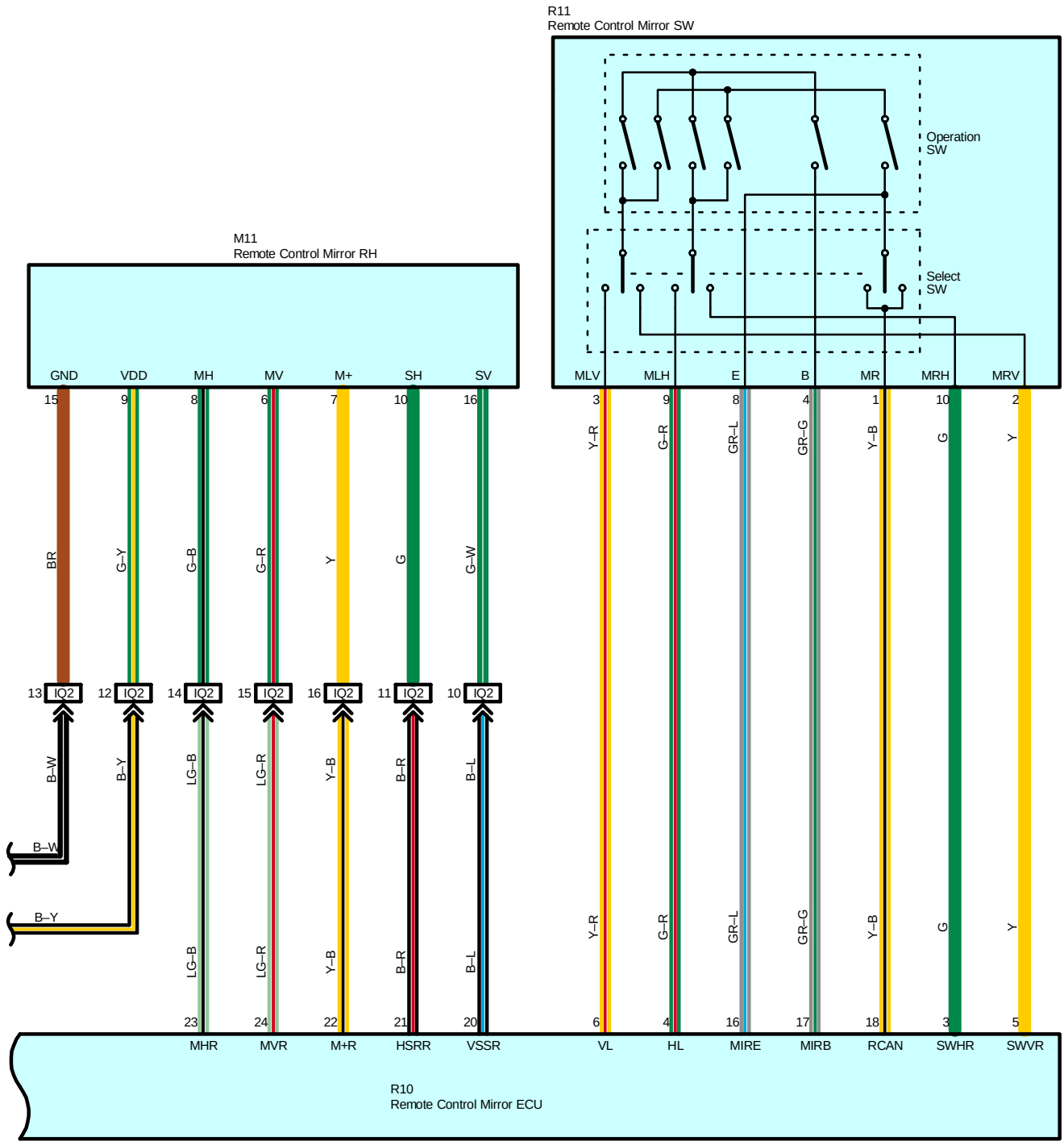
 : **Ground Points**

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


From Power Source System (See Page 64)
10A ECU–IG
25A DR/LCK
10A ECU–B
7. 5A ACC
10A IG1 NO. 2
J19 Junction Connector
SIG
BDR1
BECU
ACC
B 3(A), B 4(B), B 5(C) Body ECU
GND2
GND1
M1
M2
MM
DCTY
KSW
MPX2
P
D22 Driving Position Memory SW
J16 Junction Connector
D12 Door Courtesy SW Front LH
K 3 Unlock Warning SW
J24 Junction Connector
D 4 Diode (Back–Up Light)
J15 Junction Connector
P 1 Park/Neutral Position SW
T 6 Tilt and Telescopic ECU
J11 Junction Connector
J29 Junction Connector


GR
A12
IB4
GR
L
W–R
2
2
3
1
ACC CUT
Relay
4
2
2
2
GR
W–G
C12
IB4
GR
GR
I 6
GR
R–B
R–B
W–R
10
2C
3
1B
10
2D
4
1C
R–B
W–R
GR
15
1
2
REV
+B
ACC
P20
Power Seat ECU
MPX
1
W
D
B
J36(A), J37(B)
Junction
Connector
D
A
B
A13
ID2
B
25
MPX2
M10
Remote Control Mirror LH
MH
MV
M+
SH
SV
VDD
GND
8
6
7
10
16
9
15
G–B
G–R
Y
G
G–W
G–Y
BR
15
IC1
6
IC1
5
IC1
14
IC1
16
IC1
10
IC1
8
IC1
P–B
P–G
Y–B
B–R
B–L
B–Y
B–W
J21
Junction
Connector
D
D
B–W
D
A
A
B–Y
J24
Junction
Connector
A
B–Y
B–W
11
12
10
9
8
7
19
MHL
MVL
M+L
HSRL
VSRL
VC
E1
R10
Remote Control Mirror ECU
MPX1
GND
13
14
W–B
W
W–B
I 3
W–B
A
J14
Junction
Connector
IJ

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 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)
1C		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
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		
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)
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

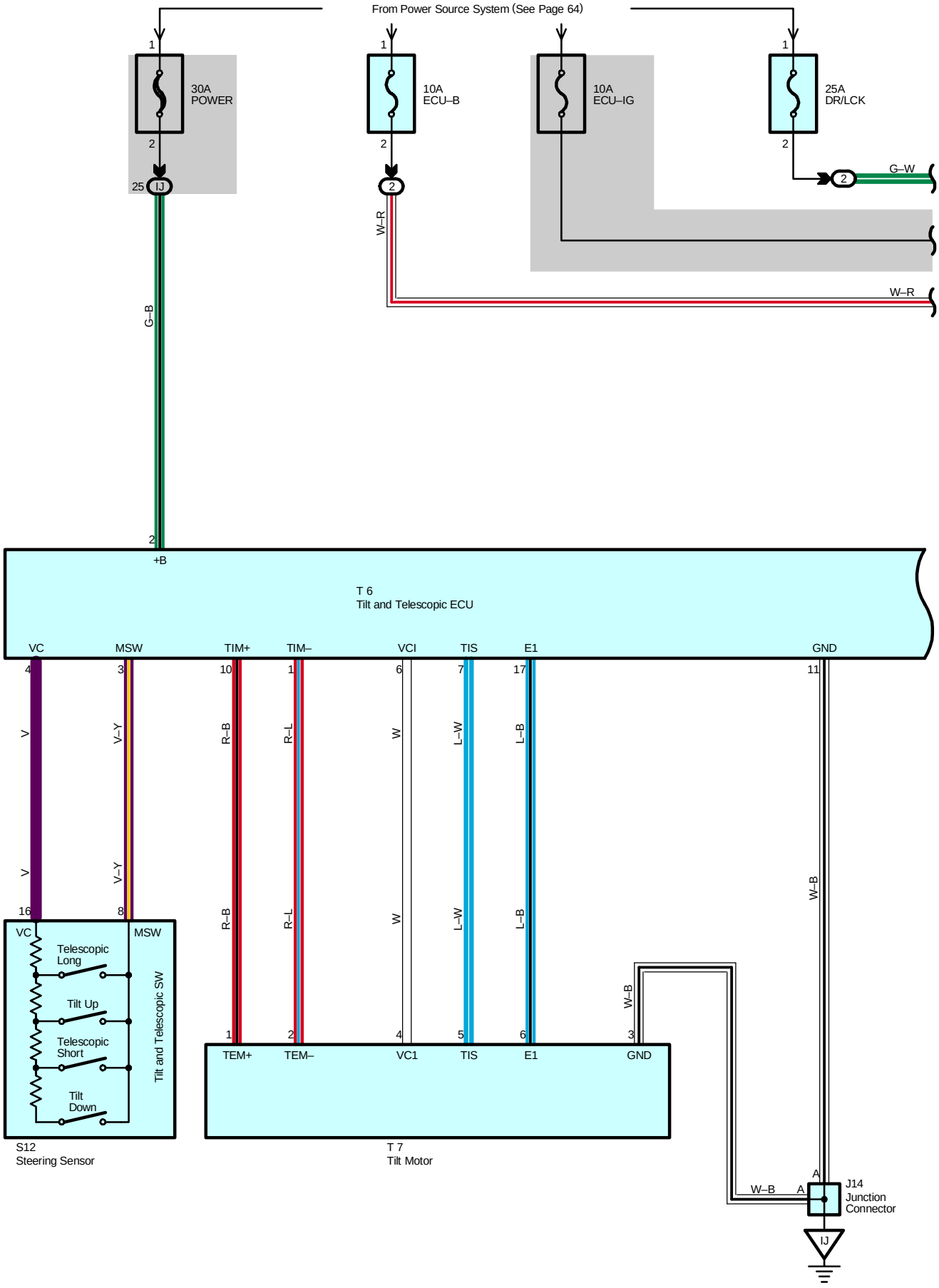
 **: Ground Points**

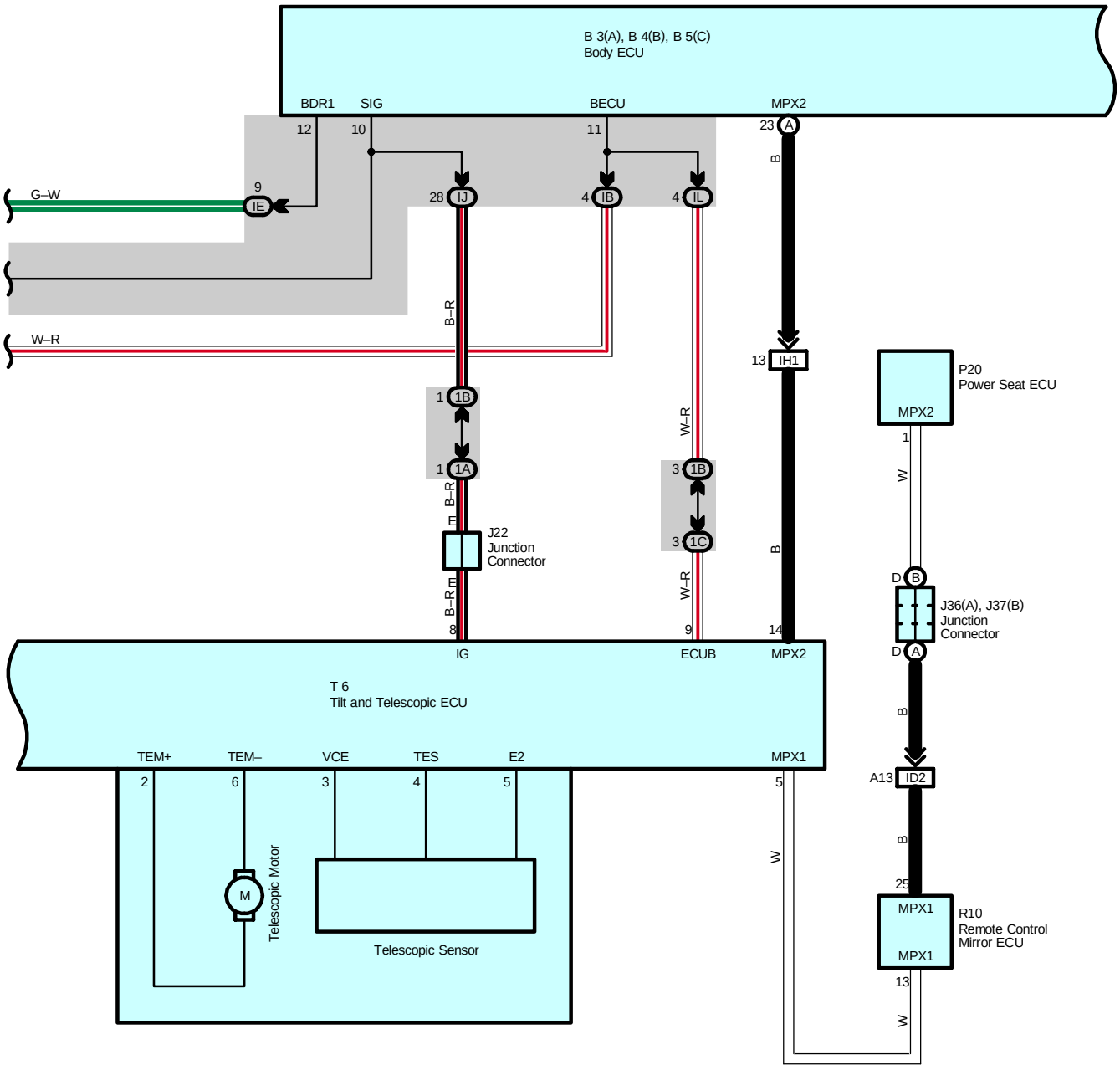
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

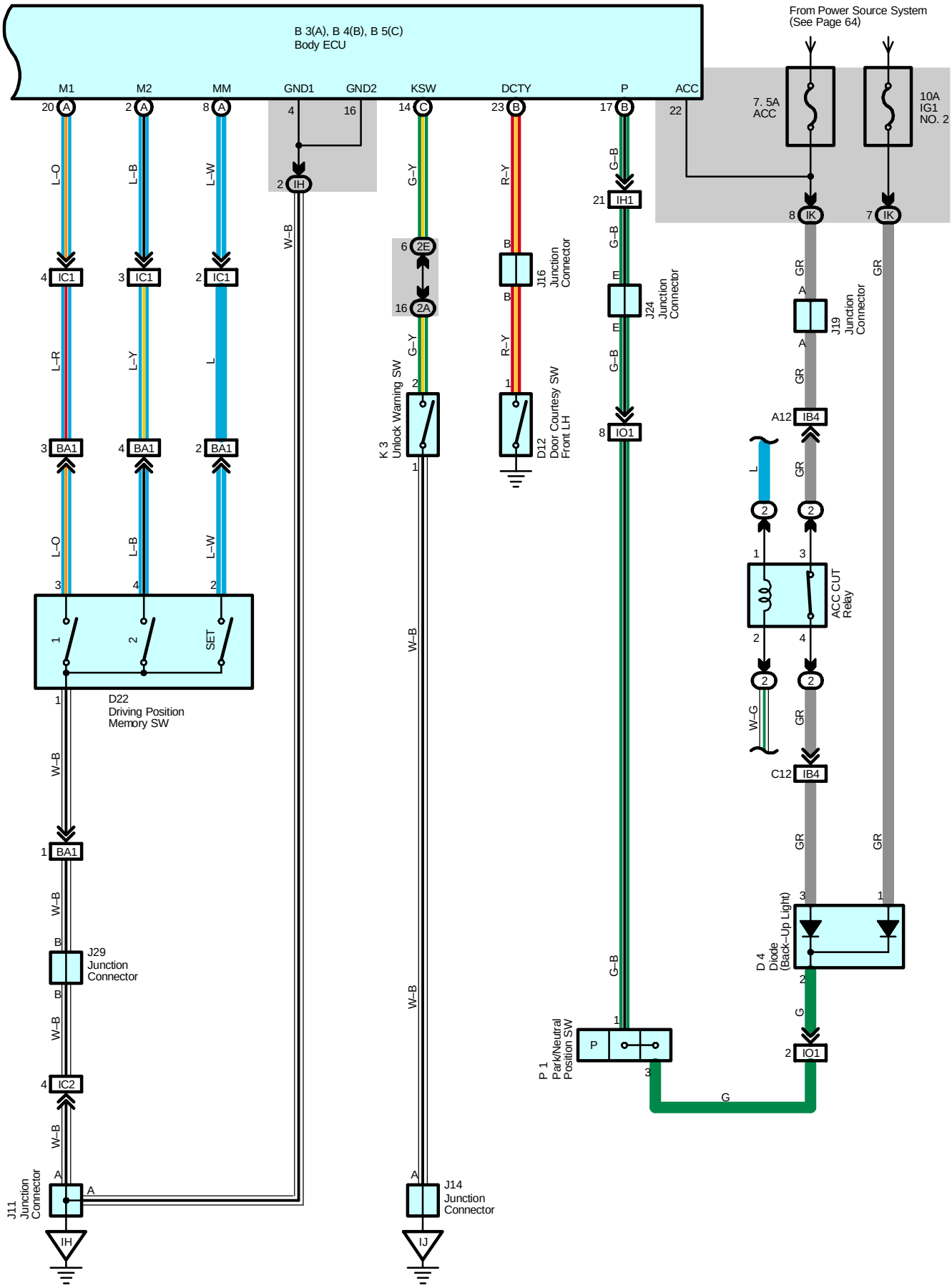
 **: Splice Points**

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

Power Tilt and Power Telescopic




B 3(A), B 4(B), B 5(C)
Body ECU
BDR1
SIG
BECU
MPX2
12
10
11
23
A
B
G–W
9
IE
28
IJ
4
IB
4
IL
B–R
W–R
13
IH1
P20
Power Seat ECU
MPX2
1
1B
1
1A
W–R
3
1B
3
1C
W
B
J22
Junction
Connector
B–R
B–R
W–R
D
B
J36(A), J37(B)
Junction
Connector
D
A
8
9
14
IG
ECUB
MPX2
T 6
Tilt and Telescopic ECU
TEM+
TEM–
VCE
TES
E2
MPX1
2
6
3
4
5
5
A13
ID2
B
W
B
25
M
Telescopic Motor
Telescopic Sensor
MPX1
R10
Remote Control
Mirror ECU
MPX1
13
W


B 3(A), B 4(B), B 5(C)
Body ECU
From Power Source System
(See Page 64)
M1
M2
MM
GND1
GND2
KSW
DCTY
P
ACC
7. 5A
ACC
10A
IG1
NO. 2
IC1
IC2
BA1
IH
IH1
2E
2A
IK
IO1
IB4
L–O
L–B
L–W
L–R
L–Y
L
W–B
G–Y
R–Y
G–B
GR
W–G
G
D22
Driving Position
Memory SW
SET
J29
Junction
Connector
J11
Junction
Connector
J14
Junction
Connector
J16
Junction
Connector
J24
Junction
Connector
J19
Junction
Connector
K 3
Unlock Warning SW
D12
Door Courtesy SW
Front LH
ACC CUT
Relay
D 4
Diode
(Back–Up Light)
P 1
Park/Neutral
Position SW
IJ

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–Ground : Always approx. 12 volts
8–Ground : Approx. 12 volts with ignition SW at ON or ST position
11–Ground : Always continuity

S21 Steering Sensor

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

: Parts Location

Code		See Page	Code		See Page	Code	See Page
B3	A	38	J16		40	P1	37
B4	B	38	J19		40	P20	46
B5	C	38	J22		40	R10	41
D4		39	J24		40	S12	41
D12		42	J29		43	T6	41
D22		42	J36	A	46	T7	41
J11		40	J37	B	46		
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

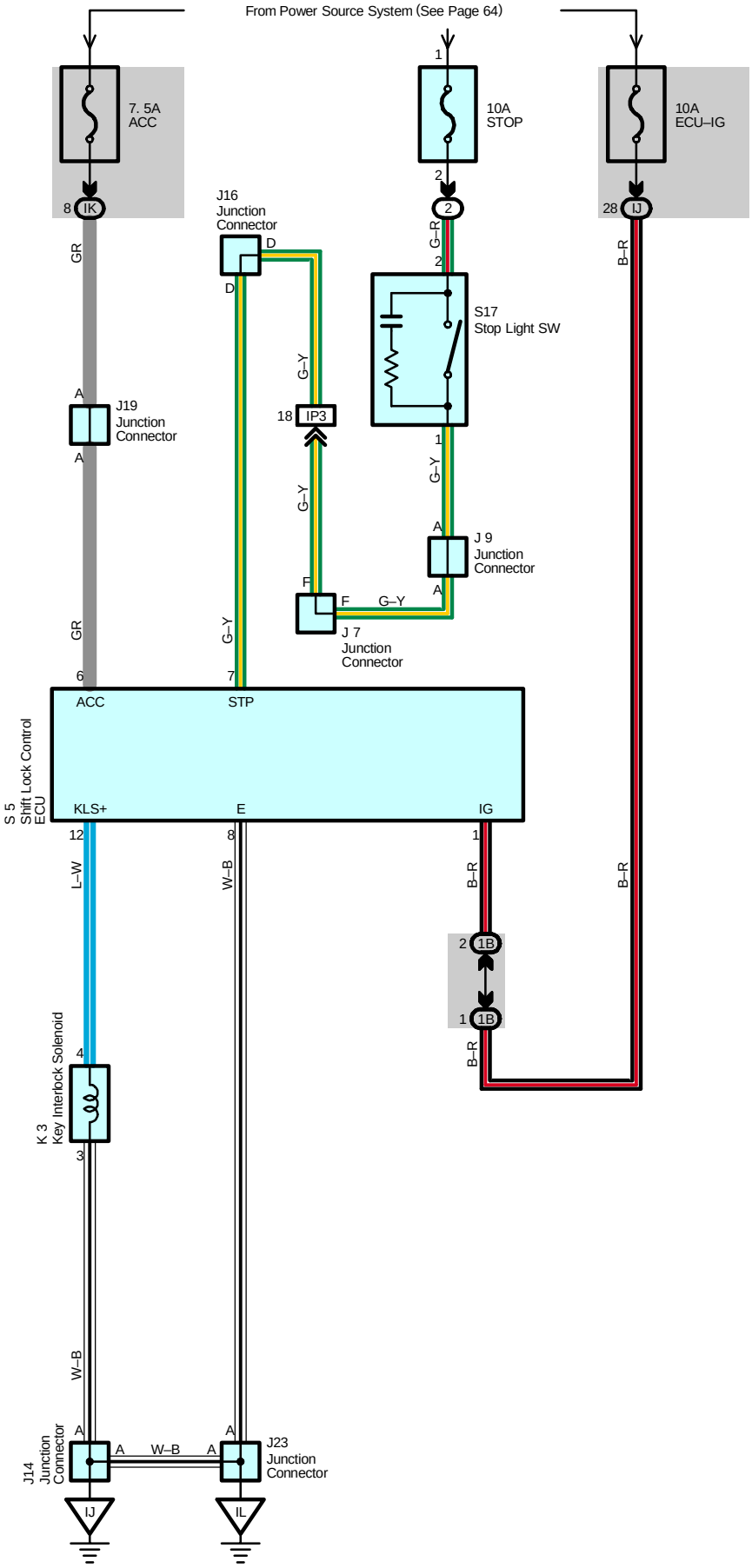
Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)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


From Power Source System (See Page 64)
7. 5A
ACC
10A
STOP
10A
ECU–IG
8 IK
2
28 IJ
J16
Junction
Connector
D
D
G–R
2
S17
Stop Light SW
1
GR
G–Y
18 IP3
A
J19
Junction
Connector
A
G–Y
A
J 9
Junction
Connector
A
F
F G–Y
J 7
Junction
Connector
GR
G–Y
6
7
ACC
STP
S 5
Shift Lock Control
ECU
KLS+
E
IG
12
8
1
L–W
W–B
B–R
B–R
2 1B
1 1B
B–R
4
K 3
Key Interlock Solenoid
3
W–B
A
A W–B A
J23
Junction
Connector
J14
Junction
Connector
IJ
IL

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
J7	40	J16	40	K3	40
J9	40	J19	40	S5	41
J14	40	J23	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)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)

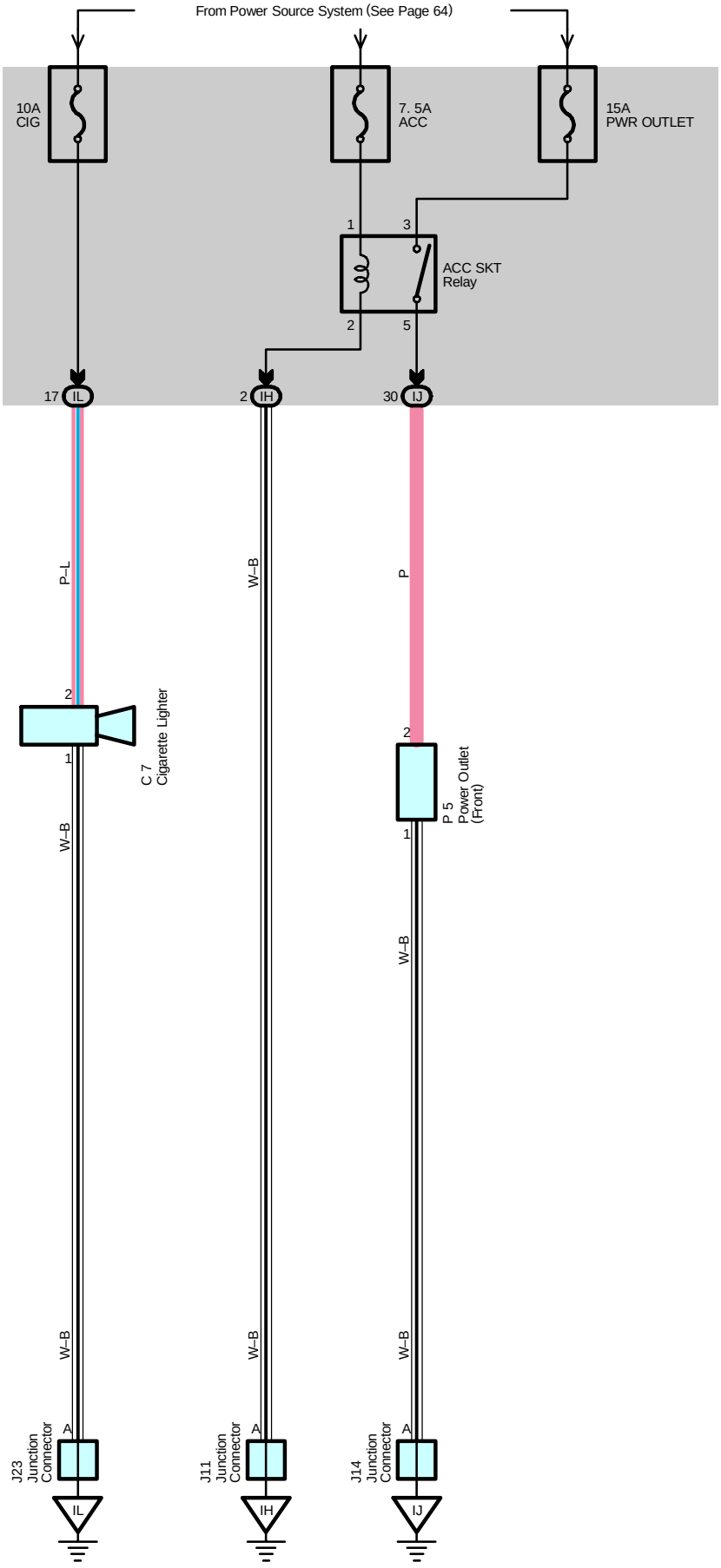
: Connector Joining Wire Harness and Wire Harness

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
IJ	50	Near the Right Side of Steering Column
IL	50	Right Kick Panel

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	P5	40
J11	40	J23	40		

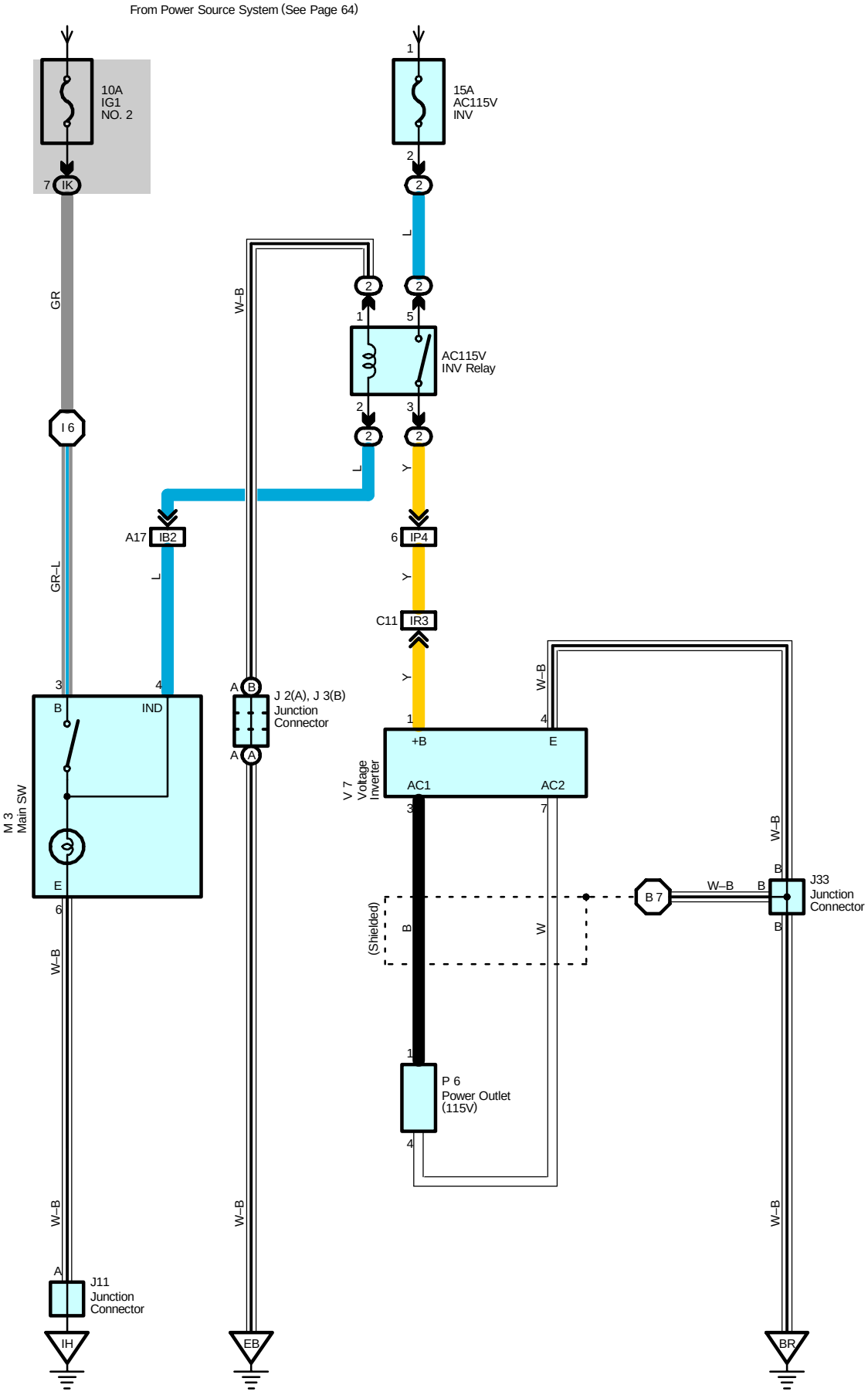
: Junction Block and Wire Harness Connector

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
IL	50	Right Kick Panel

Power Outlet (115V)



Service Hints

AC115V INV Relay

3–5 : Closed with 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

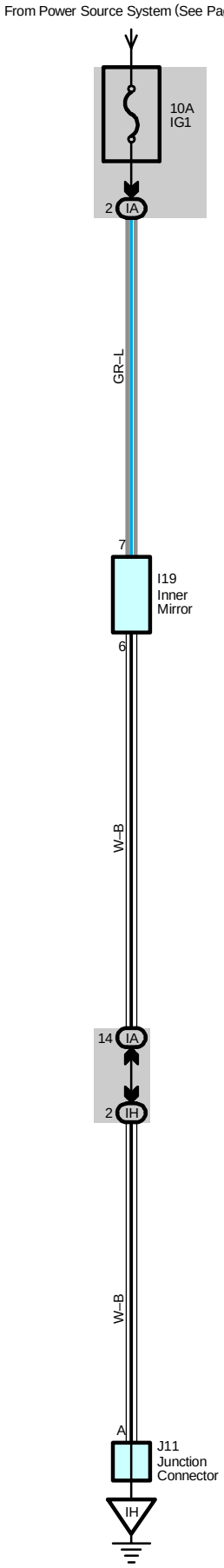
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IP4	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: Ground Points

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

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B7	60	Floor Wire


From Power Source System (See Page 64)
10A
IG1
2
IA
GR–L
7
I19
Inner
Mirror
6
W–B
14
IA
2
IH
W–B
A
J11
Junction
Connector
IH

Service Hints

I19 Inner Mirror

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

6–Ground : Always continuity

: Parts Location

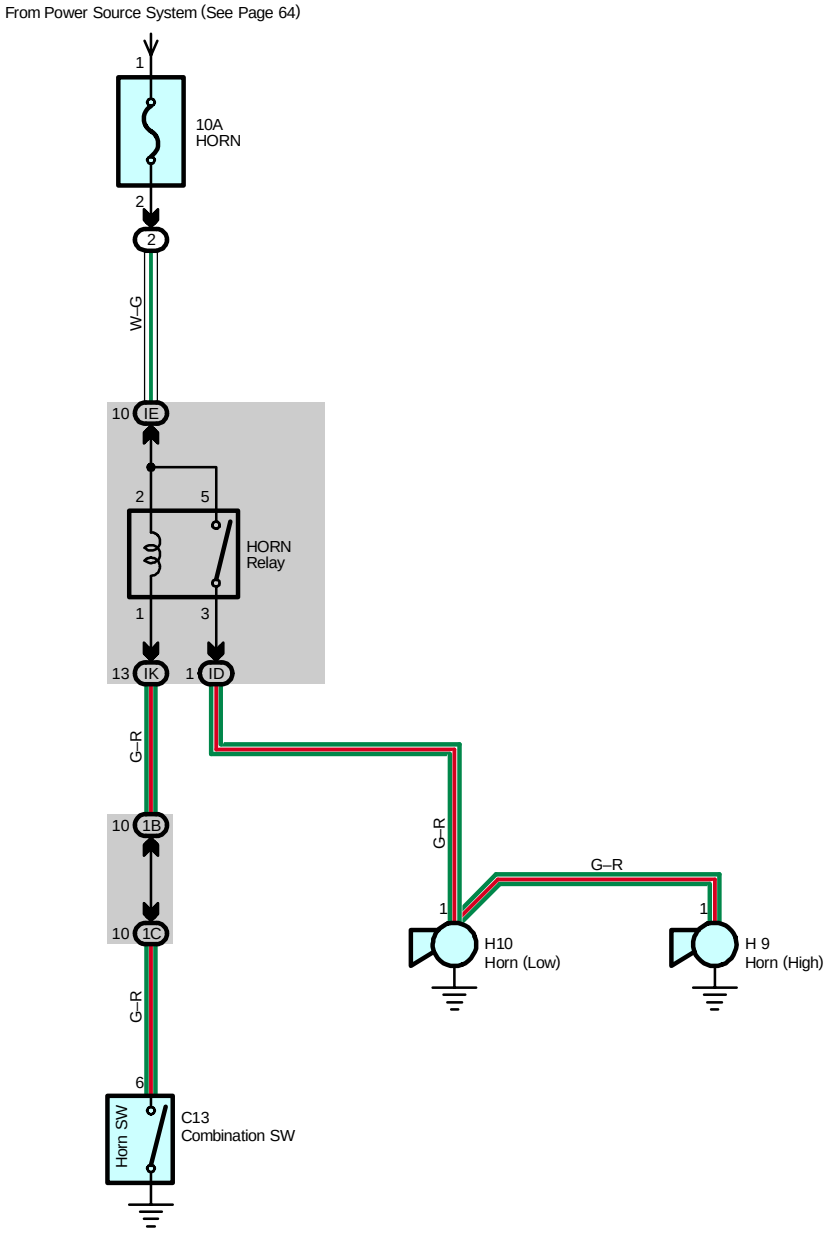
Code	See Page	Code	See Page	Code	See Page
I19	43	J11	40		

: 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 64)
1
10A
HORN
2
2
W–G
10
IE
2
5
HORN
Relay
1
3
13
IK
1
ID
G–R
10
1B
10
1C
G–R
6
Horn SW
C13
Combination SW
G–R
G–R
1
H10
Horn (Low)
1
H 9
Horn (High)

Service Hints

HORN Relay

5–3 : Closed with the horn SW on

: Parts Location

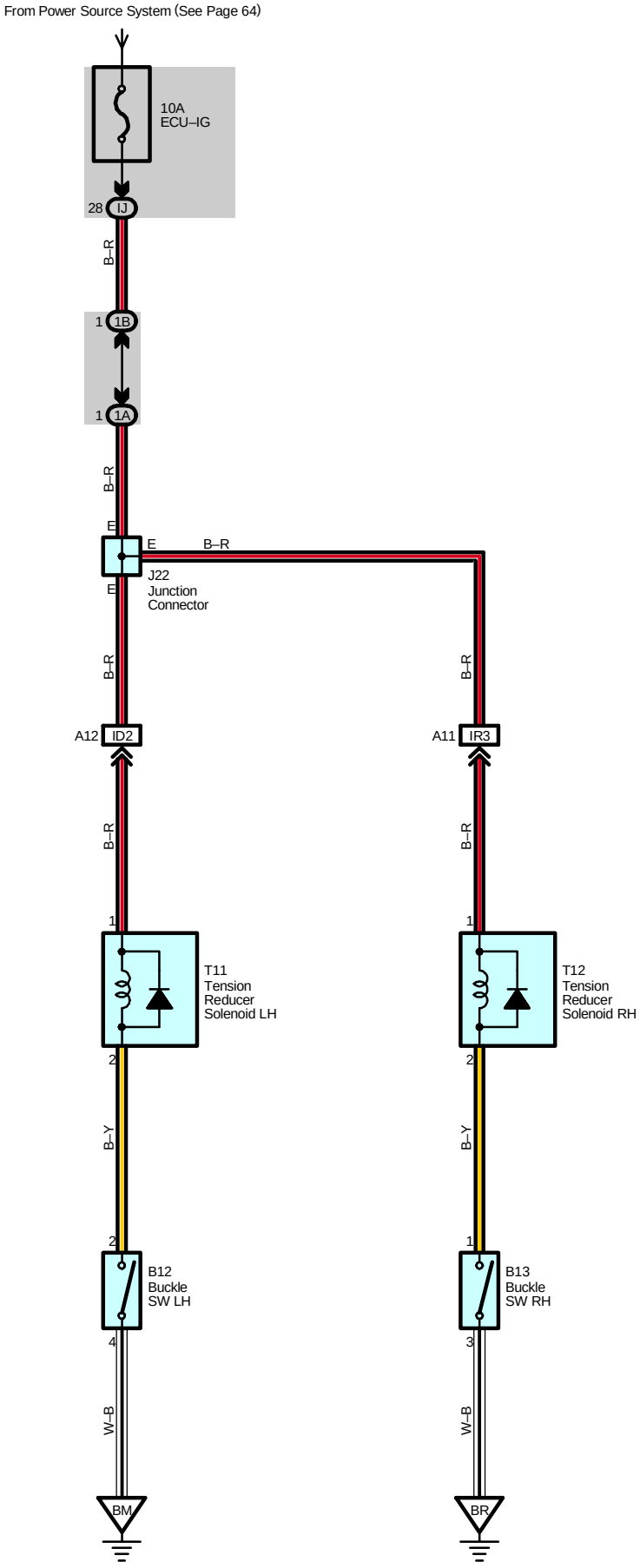
Code	See Page	Code	See Page	Code	See Page
C13	38	H9	36	H10	36

: 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)
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		


From Power Source System (See Page 64)
10A
ECU–IG
28
IJ
B–R
1
1B
1
1A
B–R
E
E
B–R
J22
Junction
Connector
E
B–R
B–R
A12
ID2
A11
IR3
B–R
B–R
1
1
T11
Tension
Reducer
Solenoid LH
T12
Tension
Reducer
Solenoid RH
2
2
B–Y
B–Y
2
1
B12
Buckle
SW LH
B13
Buckle
SW RH
4
3
W–B
W–B
BM
BR

Service Hints

B12 Buckle SW LH

2–4 : Closed with the driver seat belt in use

B13 Buckle SW RH

1–3 : 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
B12	46	J22	40	T12	45
B13	46	T11	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		

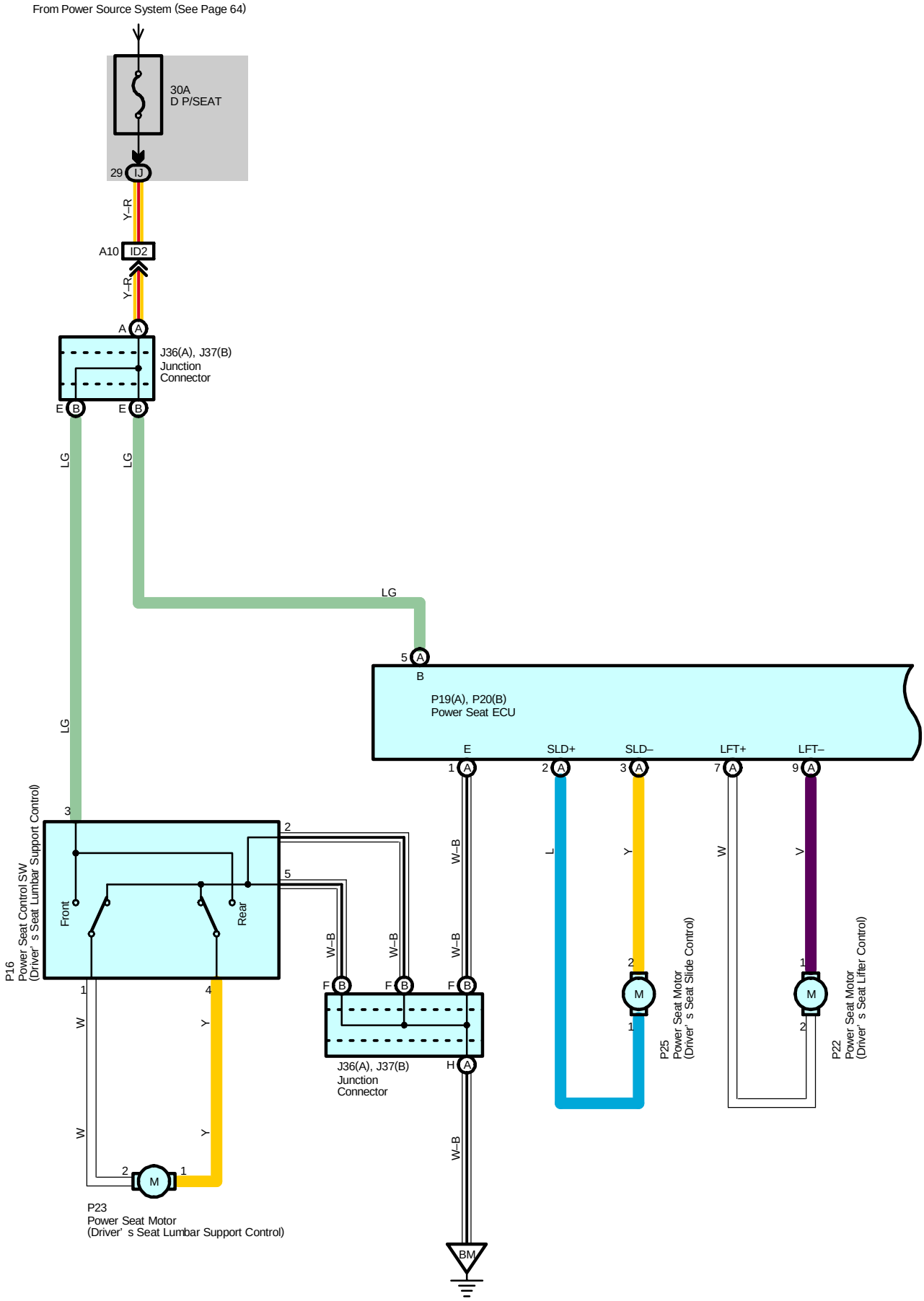
: Connector Joining Wire Harness and Wire Harness

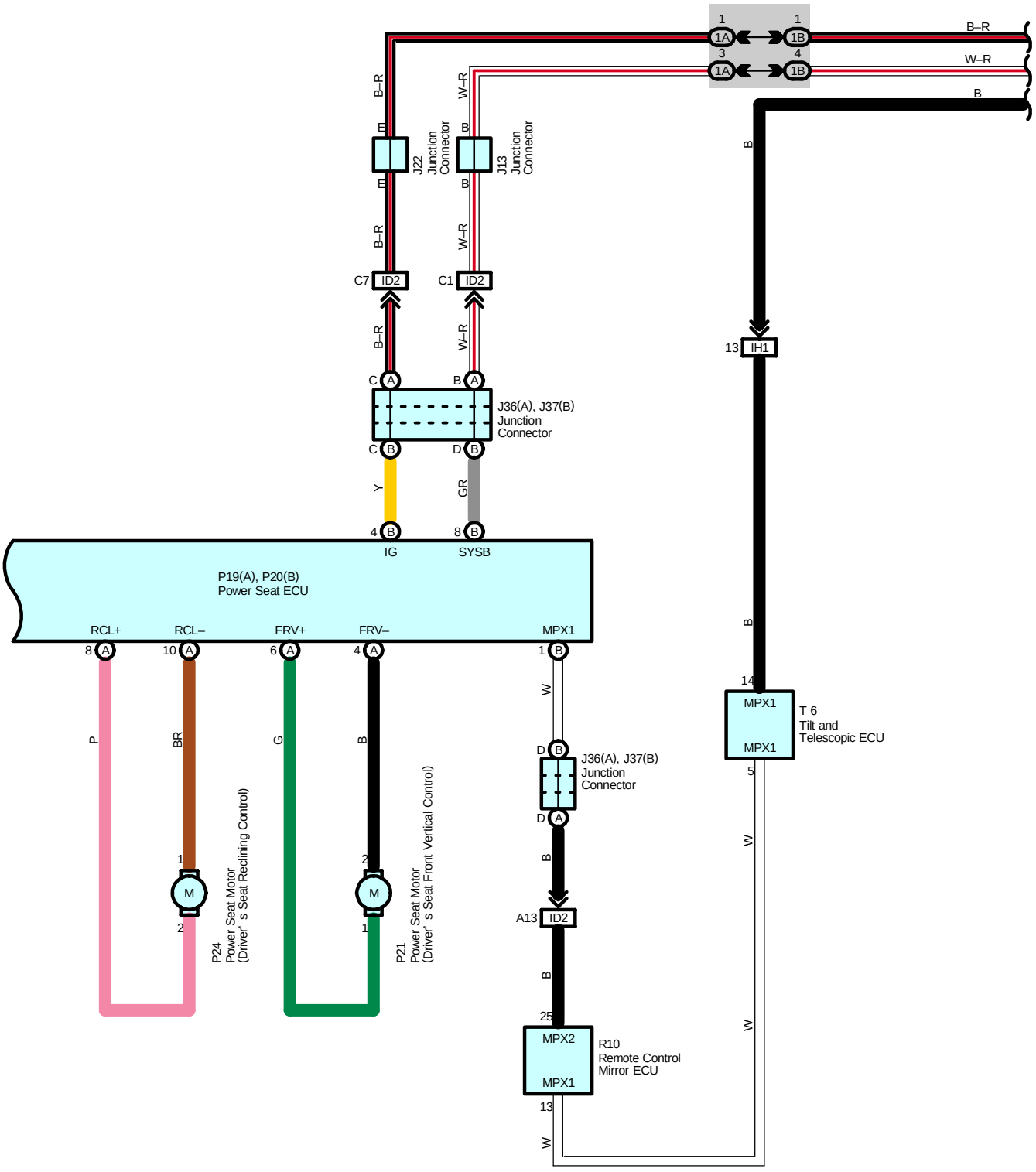
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IR3	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: Ground Points

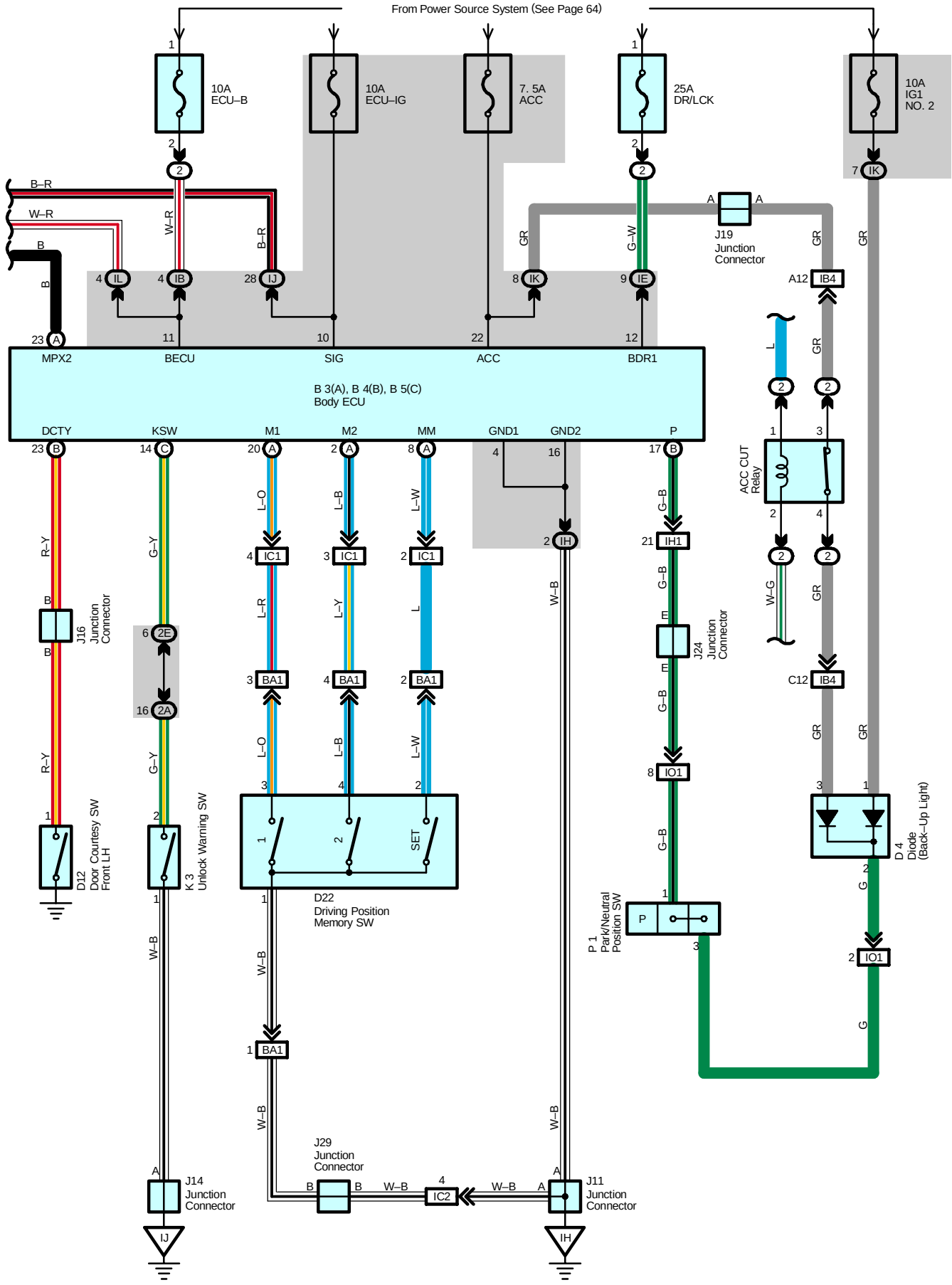
Code	See Page	Ground Points Location
BM	58	Under the Driver's Seat
BR	58	Right Quarter Panel Inner

Power Seat (Driver's Seat w/ Driving Position Memory)




1
1A
1B
3
4
B–R
W–R
B
J22
Junction
Connector
J13
Junction
Connector
E
B
C7
ID2
C1
ID2
13
IH1
C
A
B
J36(A), J37(B)
Junction
Connector
D
Y
GR
4
8
IG
SYSB
P19(A), P20(B)
Power Seat ECU
RCL+
RCL–
FRV+
FRV–
MPX1
8
10
6
4
1
P
BR
G
W
P24
Power Seat Motor
(Driver' s Seat Reclining Control)
P21
Power Seat Motor
(Driver' s Seat Front Vertical Control)
M
A13
ID2
25
MPX2
MPX1
R10
Remote Control
Mirror ECU
13
14
MPX1
MPX1
T 6
Tilt and
Telescopic ECU
5

Power Seat (Driver's Seat w/ Driving Position Memory)



System Outline

* In the power seat system, the power seat ECU 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

(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	J22	40	P21	46
B5 C	38	J24	40	P22	46
D4	39	J29	43	P23	46
D12	42	J36 A	46	P24	46
D22	42	J37 B	46	P25	46
J11	40	K3	40	R10	41
J13	40	P1	37	T6	41
J14	40	P16	46		
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		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		

Power Seat (Driver's Seat w/ Driving Position Memory)

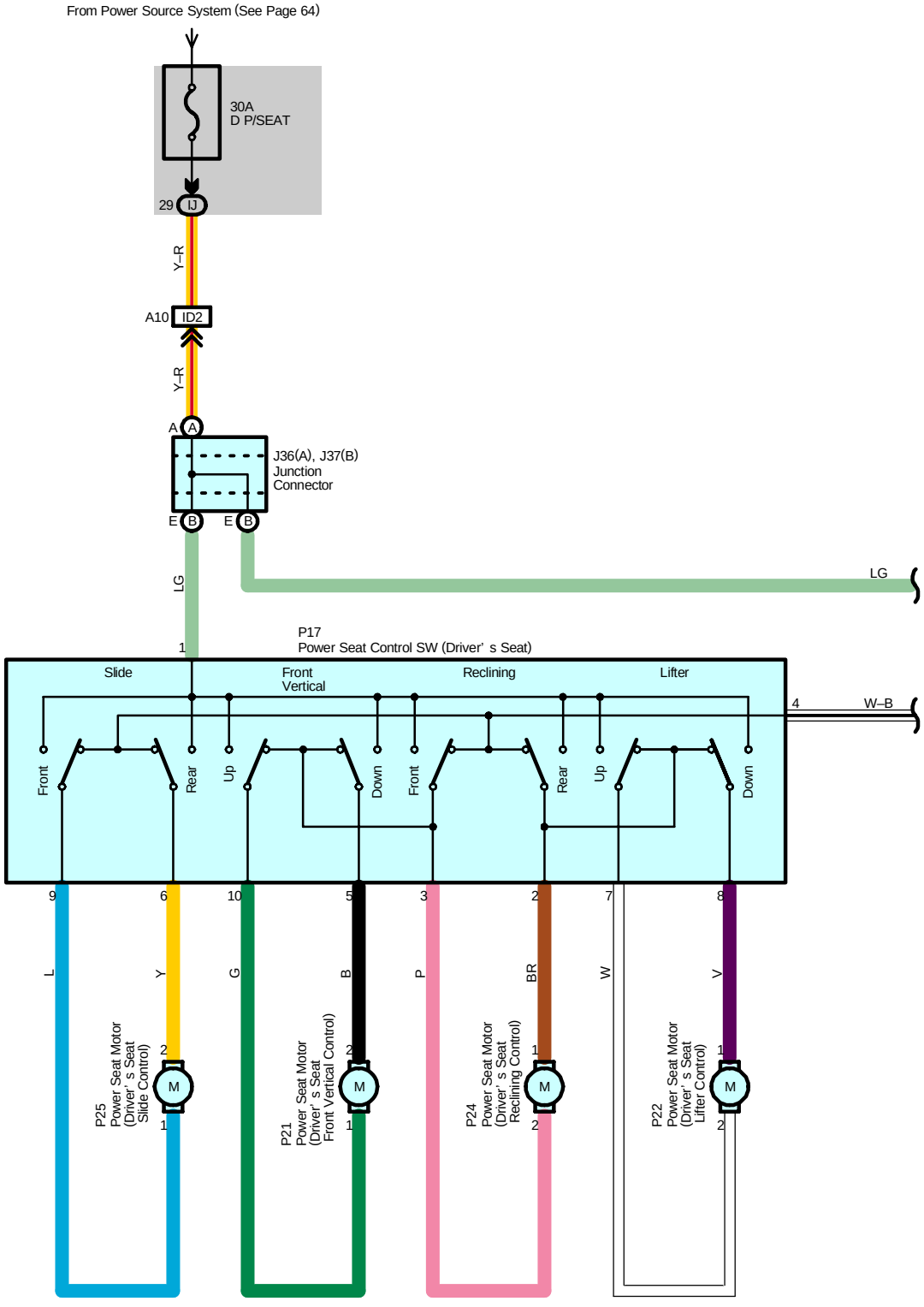
: Connector Joining Wire Harness and Wire Harness

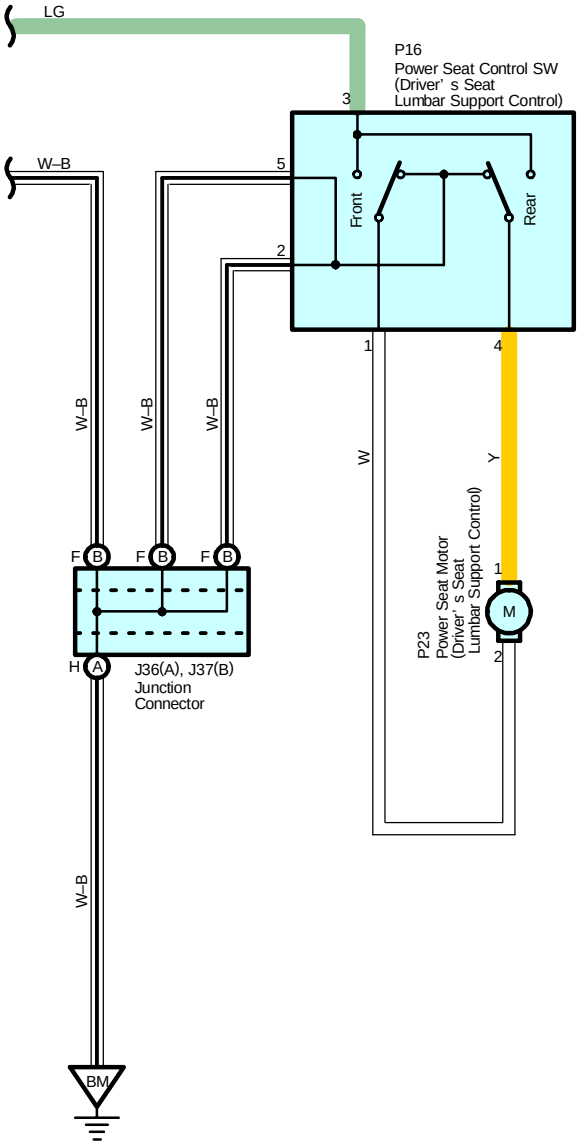
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	52	Instrument 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

Power Seat (Driver's Seat w/o Driving Position Memory)




LG
P16
Power Seat Control SW
(Driver' s Seat
Lumbar Support Control)
3
W–B
5
2
Front
Rear
1
4
W–B
W–B
W–B
W
Y
F B
F B
F B
H A
J36(A), J37(B)
Junction
Connector
P23
Power Seat Motor
(Driver' s Seat
Lumbar Support Control)
M
1
2
W–B
BM

Power Seat (Driver's Seat w/o Driving Position Memory)

Service Hints

P16 Power Seat Control SW (Driver's Seat Lumber Support Control)

3–1 : Closed with the driver's seat at lumbar support release operation
3–4 : Closed with the driver's seat at lumbar support hold operation
2, 5–Ground : Always continuity

P17 Power Seat Control SW (Driver's Seat)

1–9 : Closed with the driver's seat at front slide operation
1–6 : Closed with the driver's seat at rear slide operation
1–3 : Closed with the driver's seat at front reclining operation
1–2 : Closed with the driver's seat at rear reclining operation
1–10 : Closed with the driver's seat at front vertical up operation
1–5 : Closed with the driver's seat at front vertical down operation
1–7 : Closed with the driver's seat at lifter up operation
1–8 : Closed with the driver's seat at lifter down operation
4–Ground : Always continuity

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
J36	A	46	P17	46	P23	46
J37	B	46	P21	46	P24	46
P16		46	P22	46	P25	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)

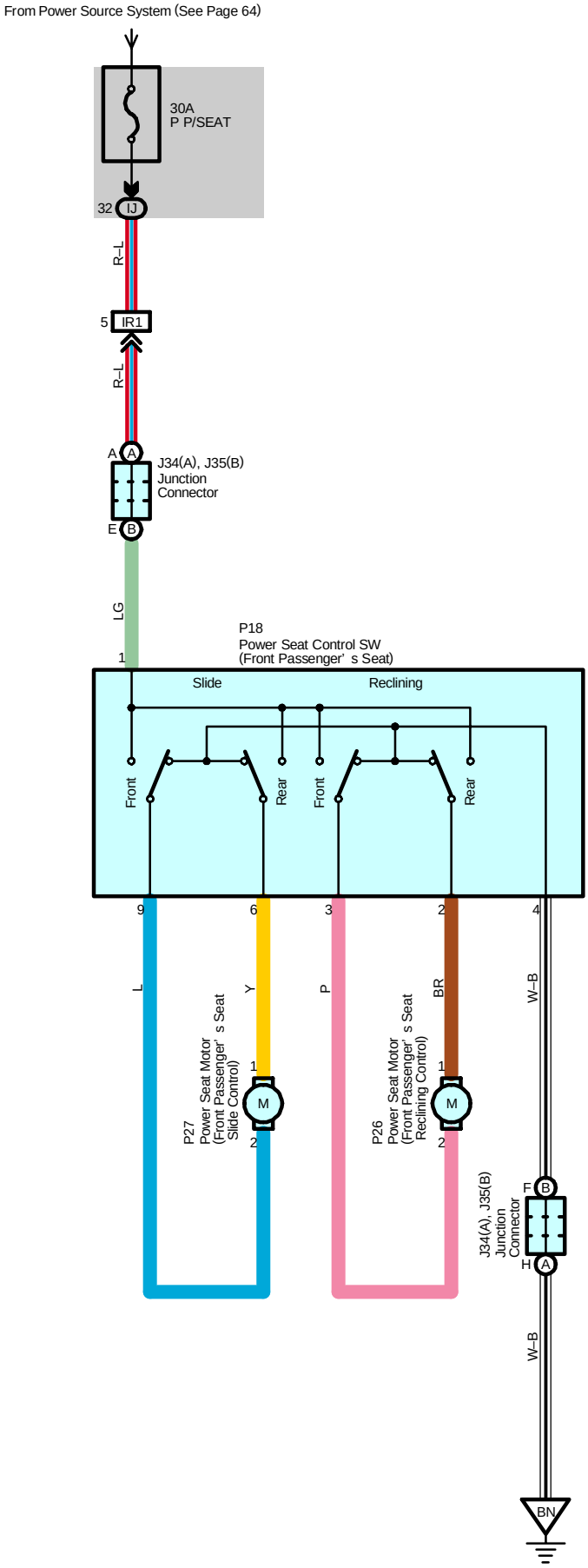
: Connector Joining Wire Harness and Wire Harness

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

: Ground Points

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

Power Seat (Front Passenger's Seat)



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	P18	46	P27	46
J35	B	46	P26	46		

: Junction Block and Wire Harness Connector

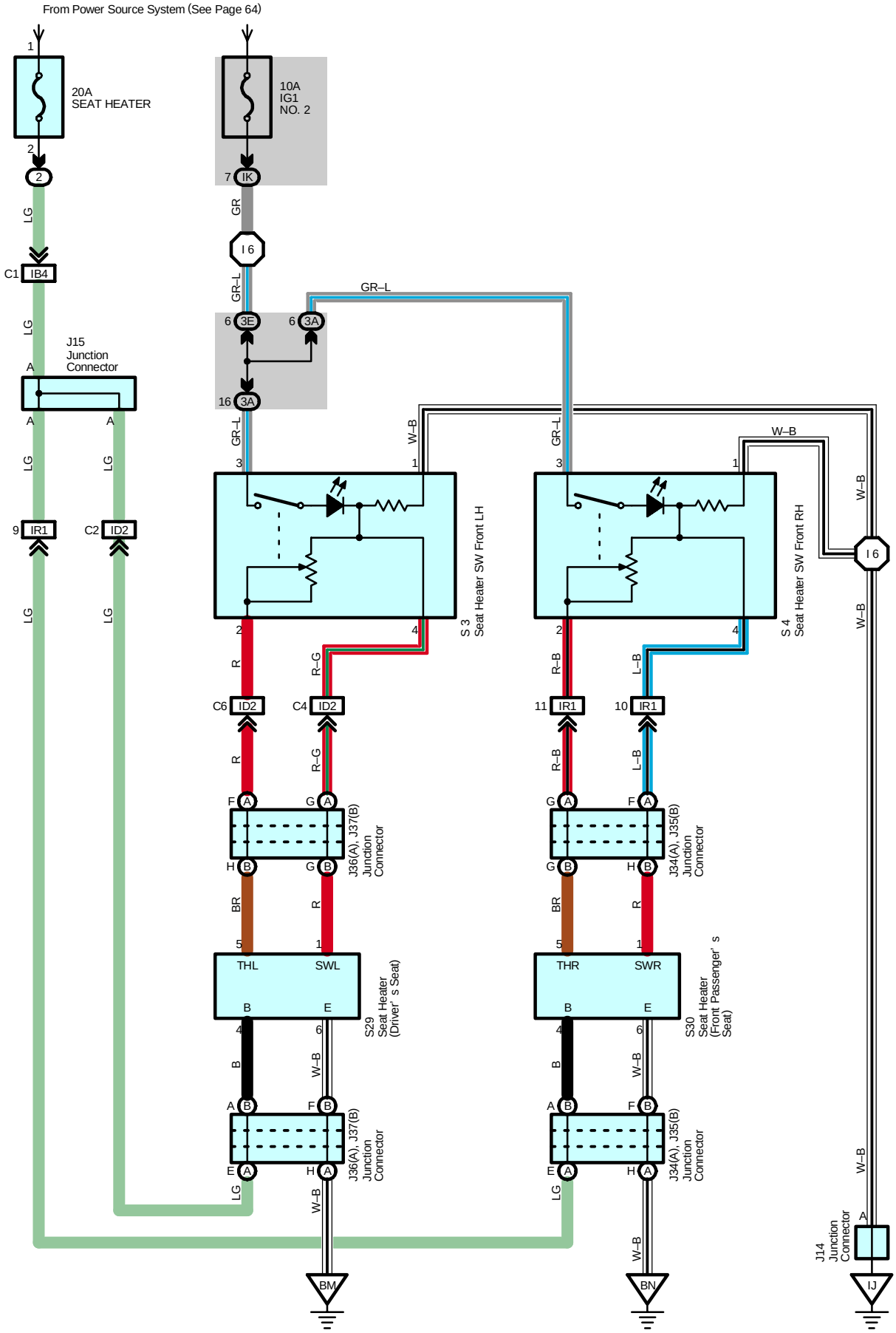
Code	See Page	Junction Block and Wire Harness (Connector Location)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IR1	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


From Power Source System (See Page 64)
20A
SEAT HEATER
10A
IG1
NO. 2
J15
Junction
Connector
GR–L
W–B
LG
R
R–G
R–B
L–B
BR
B
S 3
Seat Heater SW Front LH
S 4
Seat Heater SW Front RH
J36(A), J37(B)
Junction
Connector
J34(A), J35(B)
Junction
Connector
S29
Seat Heater
(Driver's Seat)
S30
Seat Heater
(Front Passenger's
Seat)
J14
Junction
Connector
BM
BN
IJ

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)
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

: Connector Joining Wire Harness and Wire Harness

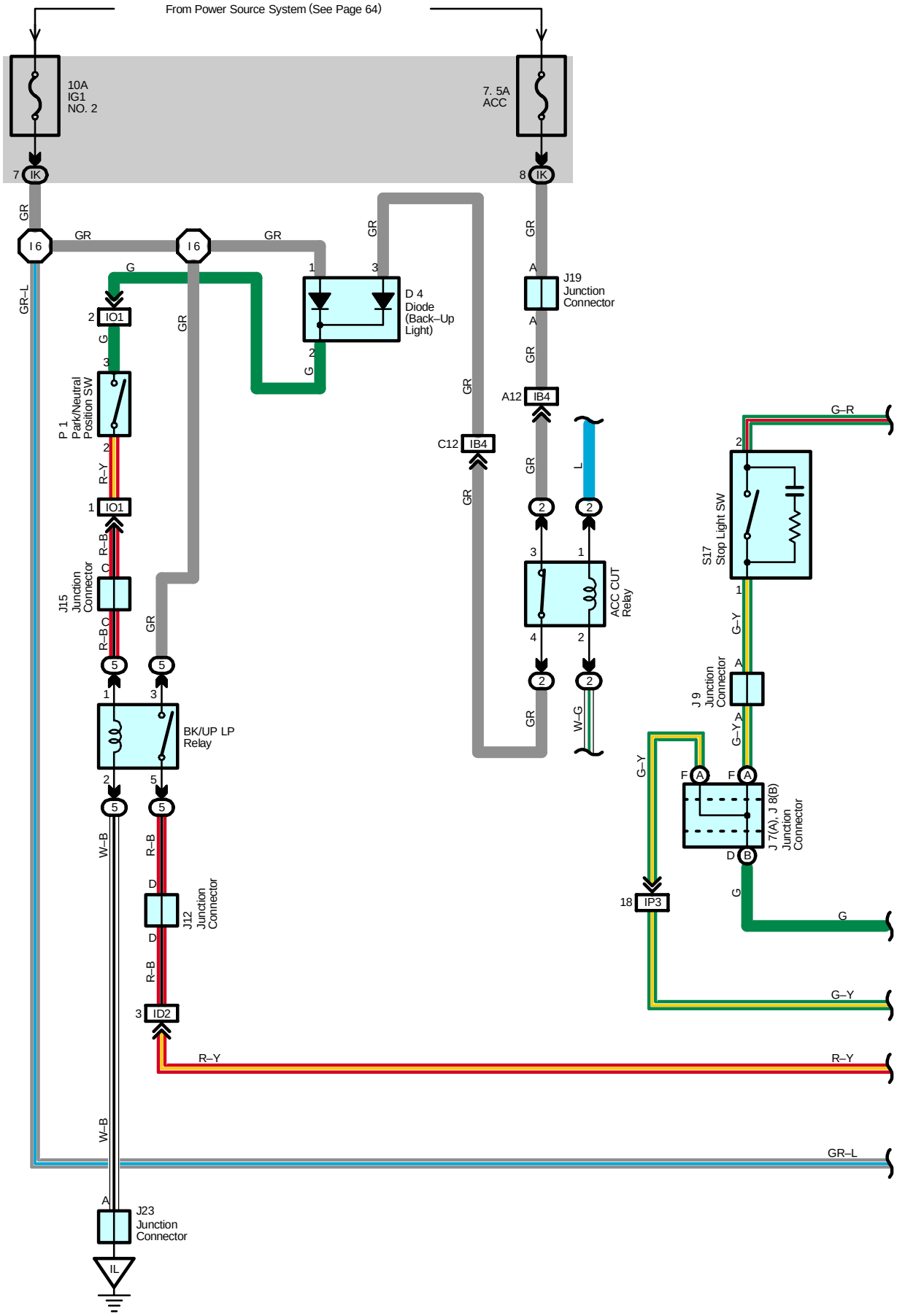
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	50	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IR1	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)

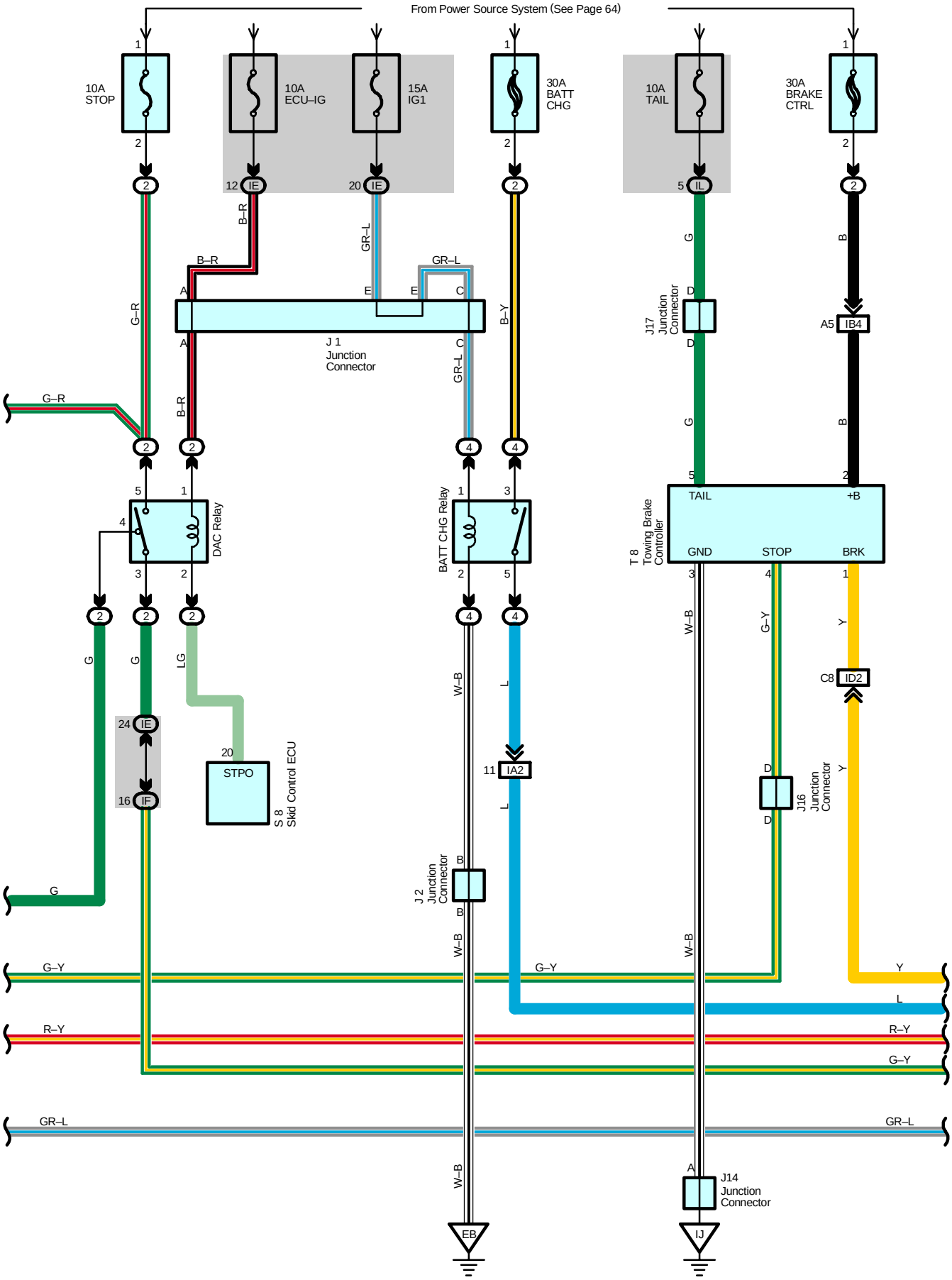
: Ground Points

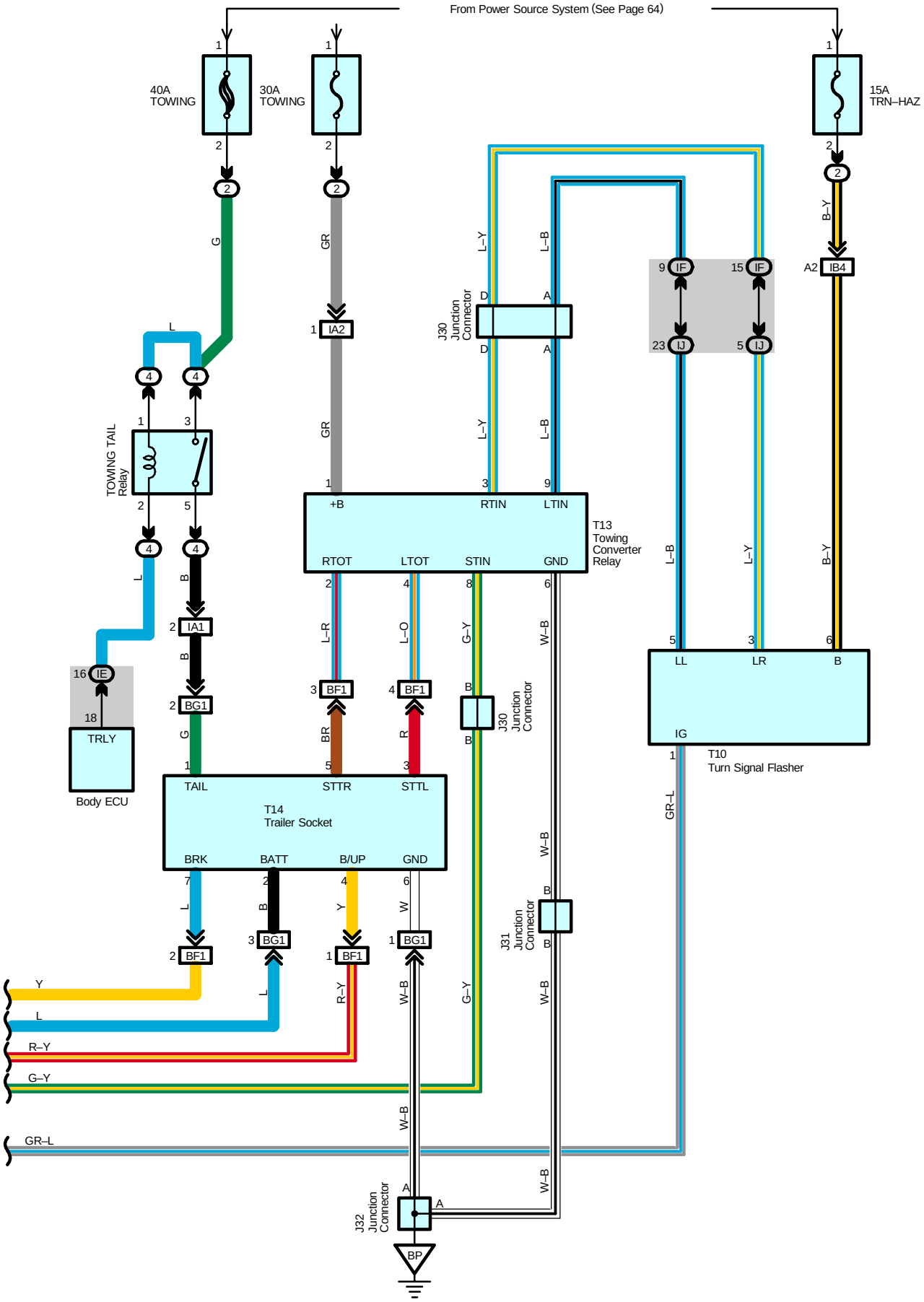
Code	See Page	Ground Points Location
IJ	50	Near the Right Side of Steering Column
BM	58	Under the Driver's Seat
BN	58	Under the Front Passenger's Seat

: Splice Points

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


From Power Source System (See Page 64)
10A
IG1
NO. 2
7. 5A
ACC
7 IK
8 IK
GR
GR–L
I 6
GR
I 6
GR
G
2 IO1
G
3
P 1
Park/Neutral
Position SW
2
R–Y
1 IO1
R–B
C
J15
Junction
Connector
C
R–B
5
1
3
5
BK/UP LP
Relay
2
5
5
W–B
R–B
D
J12
Junction
Connector
D
R–B
3 ID2
W–B
A
J23
Junction
Connector
IL
GR
1
3
D 4
Diode
(Back–Up
Light)
2
G
GR
A
J19
Junction
Connector
A
GR
A12 IB4
C12 IB4
GR
GR
2
2
3
1
4
2
2
2
ACC CUT
Relay
GR
L
W–G
G–R
2
S17
Stop Light SW
1
G–Y
A
J 9
Junction
Connector
A
G–Y
G–Y
F A
F A
D B
J 7(A), J 8(B)
Junction
Connector
G
18 IP3
G
G–Y
R–Y
R–Y
GR–L


From Power Source System (See Page 64)
10A STOP
10A ECU–IG
15A IG1
30A BATT CHG
10A TAIL
30A BRAKE CTRL
J 1 Junction Connector
J17 Junction Connector
DAC Relay
BATT CHG Relay
T 8 Towing Brake Controller
TAIL
+B
GND
STOP
BRK
S 8 Skid Control ECU
STPO
J 2 Junction Connector
J16 Junction Connector
J14 Junction Connector
IB4
ID2
IA2
IE
IF
IL
EB
IJ
G–R
B–R
GR–L
B–Y
G
B
LG
W–B
L
G–Y
R–Y
Y


From Power Source System (See Page 64)
40A TOWING
30A TOWING
15A TRN–HAZ
TOWING TAIL Relay
J30 Junction Connector
T13 Towing Converter Relay
+B
RTIN
LTIN
RTOT
LTOT
STIN
GND
T10 Turn Signal Flasher
LL
LR
B
IG
Body ECU
TRLY
T14 Trailer Socket
TAIL
STTR
STTL
BRK
BATT
B/UP
J31 Junction Connector
J32 Junction Connector
BP

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	P1	37
J1	37	J16	40	S8	41
J2	37	J17	40	S17	41
J7 A	40	J19	40	T8	41
J8 B	40	J23	40	T10	41
J9	40	J30	43	T13	45
J12	40	J31	43	T14	45
J14	40	J32	43		

⬭ : 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)
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)
IP3	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 Crossmember)
BG1	60	Frame No.3 Wire and Floor No.2 Wire (Left Side of Rear Floor Crossmember)

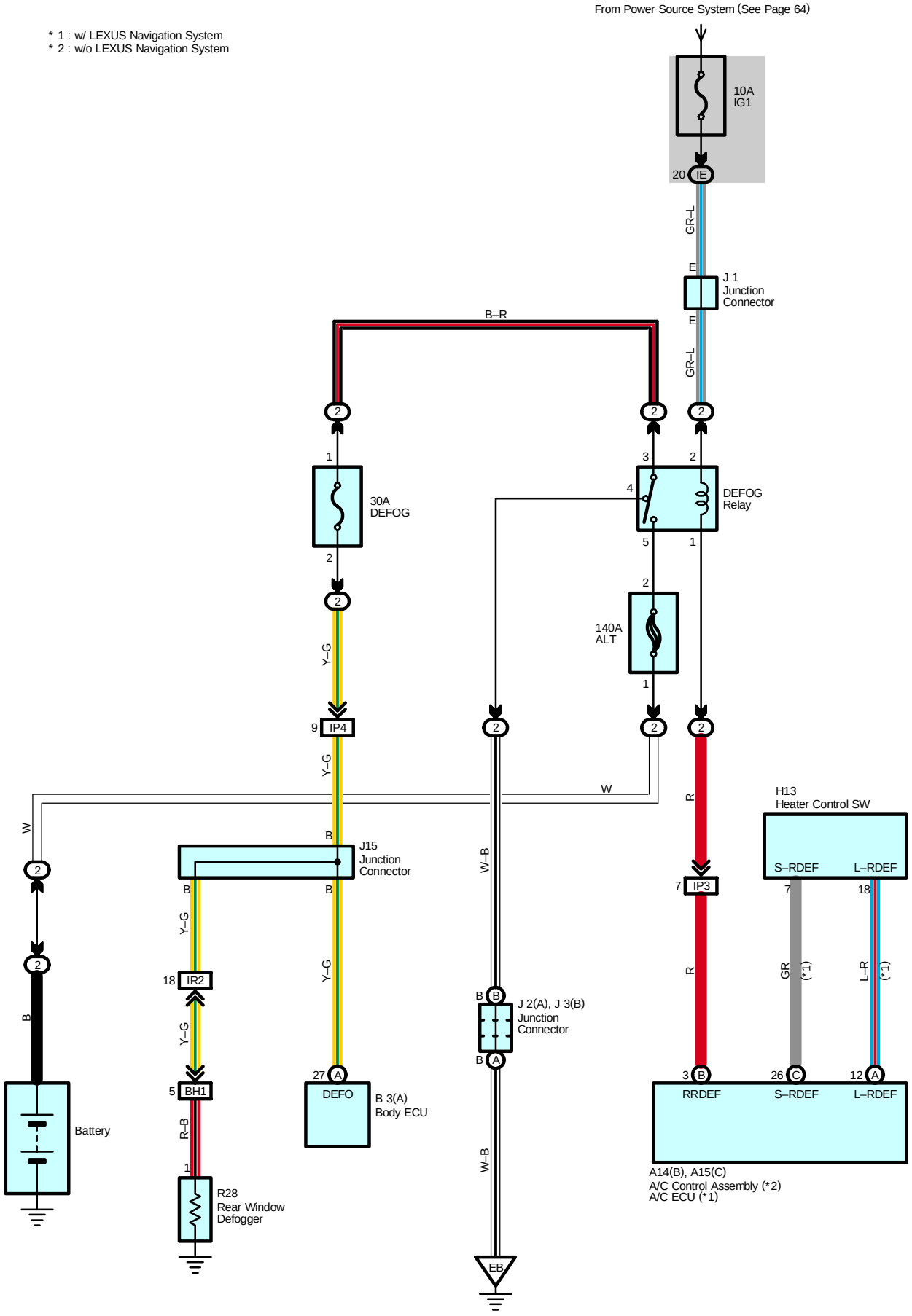
▽ : Ground Points

Code	See Page	Ground Points Location
EB	48	Front Left Fender
IJ	50	Near the Right Side of Steering Column
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
I6	52	Instrument Panel Wire			

Rear Window Defogger



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
B3	A	38	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

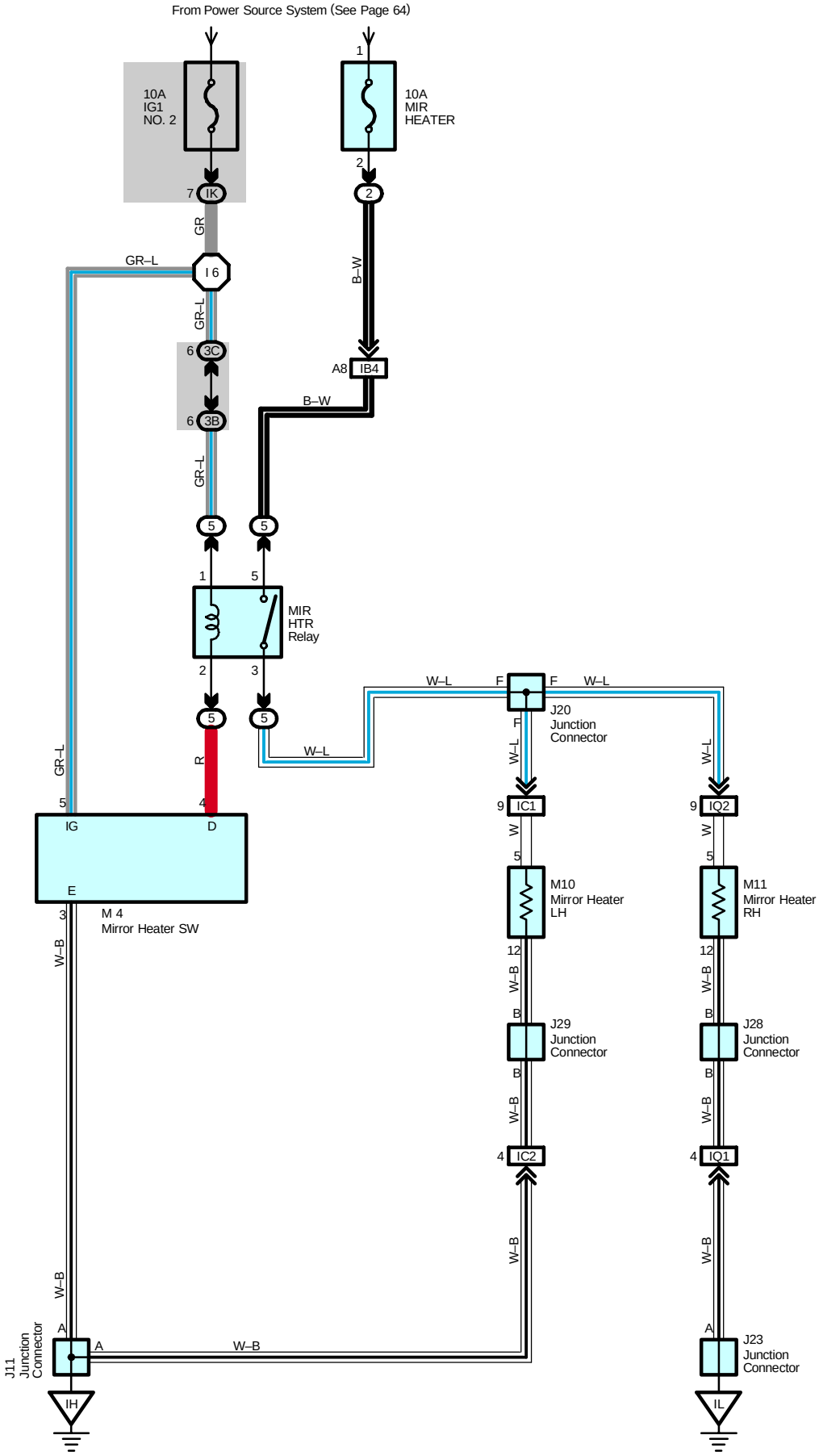
Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)

: 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		
IR2	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


From Power Source System (See Page 64)
10A
IG1
NO. 2
10A
MIR
HEATER
7 IK
2
GR
GR–L
I 6
B–W
GR–L
6 3C
A8 IB4
6 3B
B–W
GR–L
5
5
1
5
MIR
HTR
Relay
2
3
5
5
W–L
F
F
W–L
J20
Junction
Connector
R
W–L
W–L
GR–L
5
4
9 IC1
9 IQ2
IG
D
W
W
E
5
5
M10
Mirror Heater
LH
M11
Mirror Heater
RH
3
M 4
Mirror Heater SW
12
12
W–B
W–B
B
B
J29
Junction
Connector
J28
Junction
Connector
B
B
W–B
W–B
4 IC2
4 IQ1
W–B
W–B
A
A
W–B
J11
Junction
Connector
A
J23
Junction
Connector
IH
IL

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	J28	43	M10	44
J20	40	J29	43	M11	44
J23	40	M4	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)
3B	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3C		

: Connector Joining Wire Harness and Wire Harness

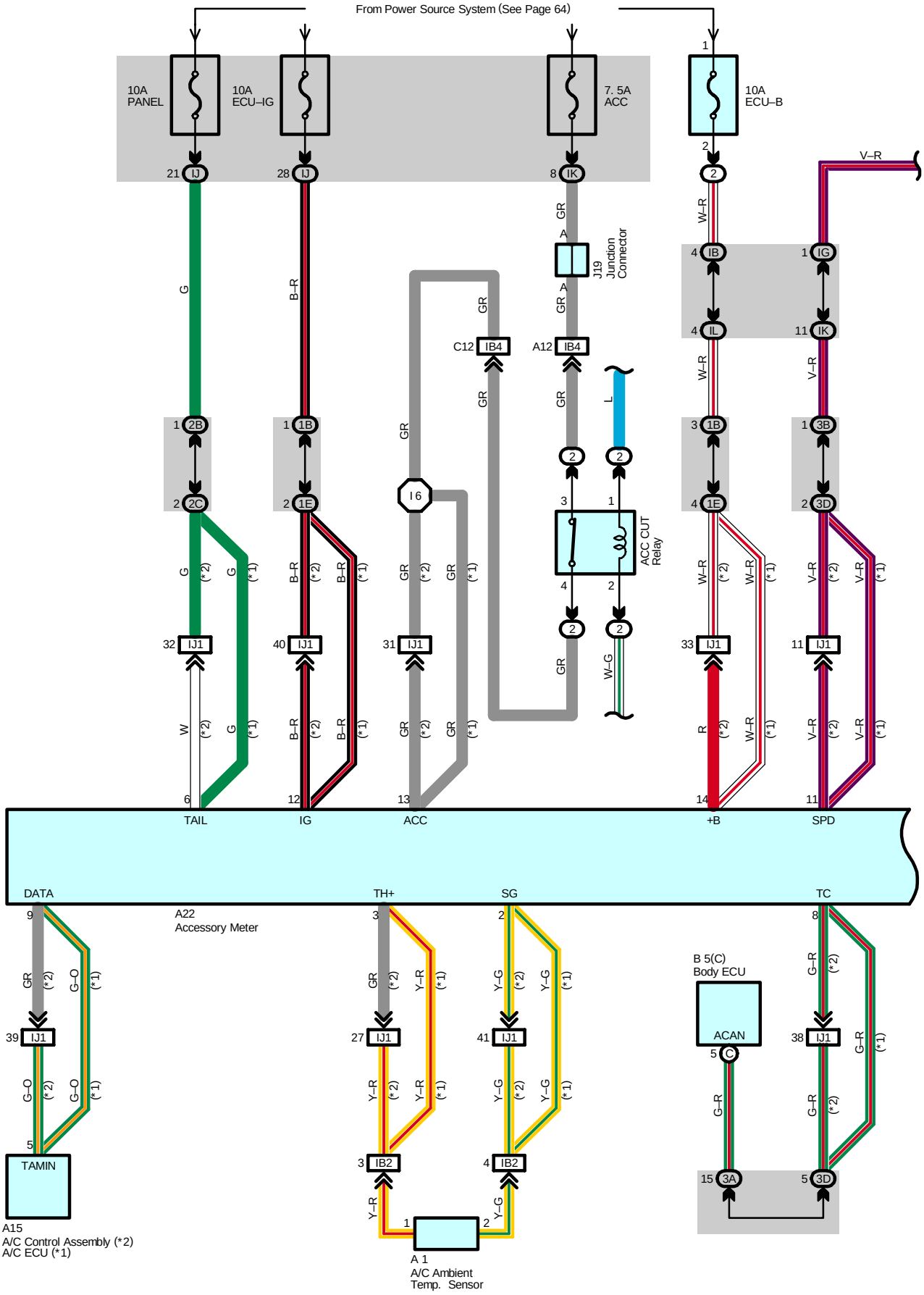
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC1	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
IQ1	56	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IQ2		

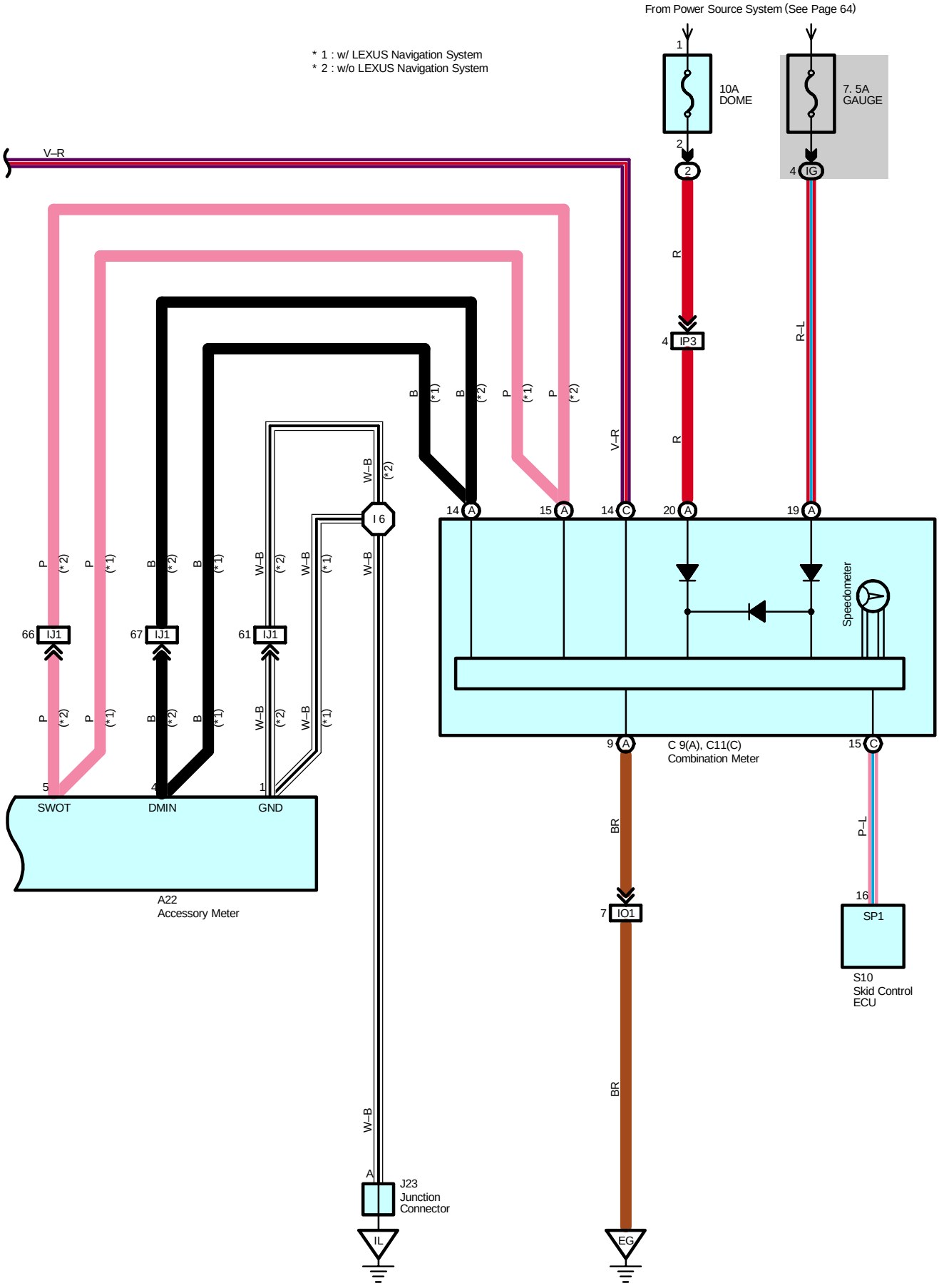
: Ground Points

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
I6	52	Instrument Panel Wire			


From Power Source System (See Page 64)
10A PANEL
10A ECU–IG
7. 5A ACC
10A ECU–B
J19 Junction Connector
ACC CUT Relay
TAIL
IG
ACC
+B
SPD
DATA
TH+
SG
TC
A22 Accessory Meter
TAMIN
A15 A/C Control Assembly (*2) A/C ECU (*1)
A 1 A/C Ambient Temp. Sensor
B 5(C) Body ECU
ACAN


From Power Source System (See Page 64)
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
1
10A
DOME
2
7. 5A
GAUGE
4 IG
V–R
2
R
4 IP3
R–L
V–R
R
B (*1)
B (*2)
P (*1)
P (*2)
W–B (*2)
I 6
14 A
15 A
14 C
20 A
19 A
P (*2)
P (*1)
B (*2)
B (*1)
W–B (*2)
W–B (*1)
W–B
66 IJ1
67 IJ1
61 IJ1
Speedometer
5
4
1
SWOT
DMIN
GND
A22
Accessory Meter
9 A
C 9(A), C11(C)
Combination Meter
15 C
BR
P–L
7 IO1
16
SP1
S10
Skid Control
ECU
BR
W–B
A
J23
Junction
Connector
IL
EG

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	S10	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		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1E		
2B	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3D		

: Connector Joining Wire Harness and Wire Harness

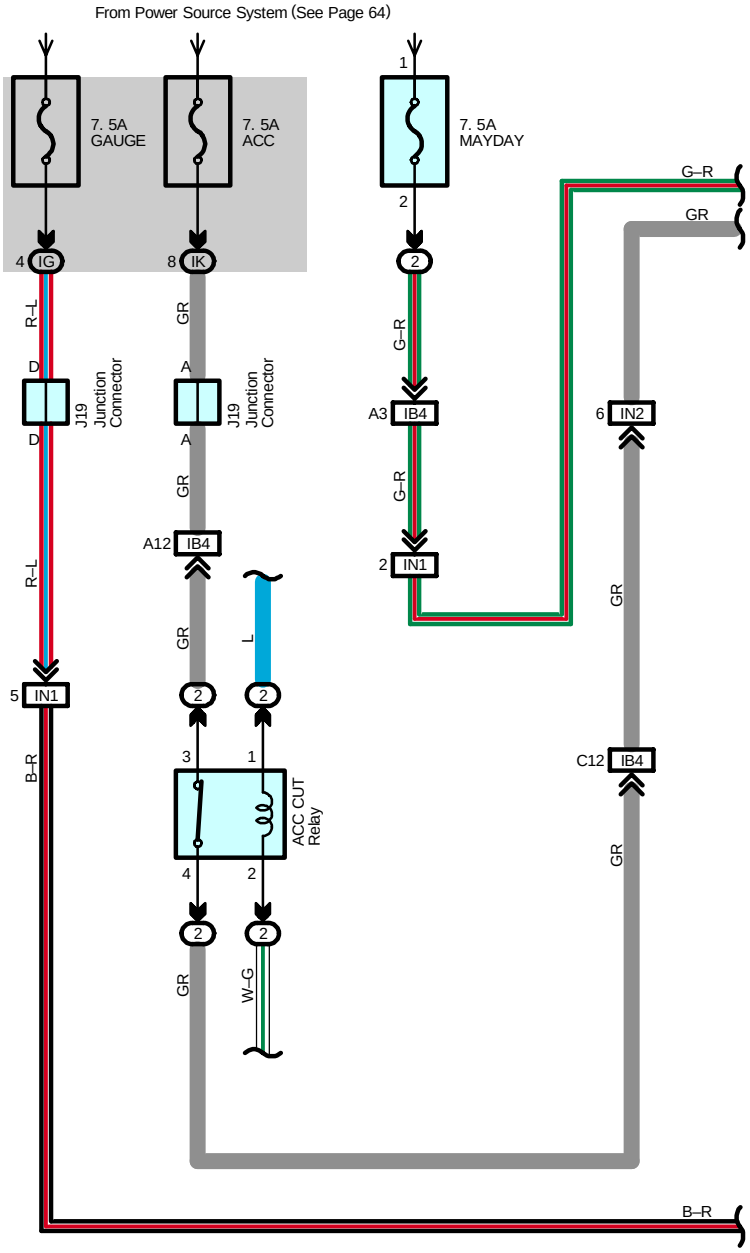
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB4		
IJ1	52	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the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

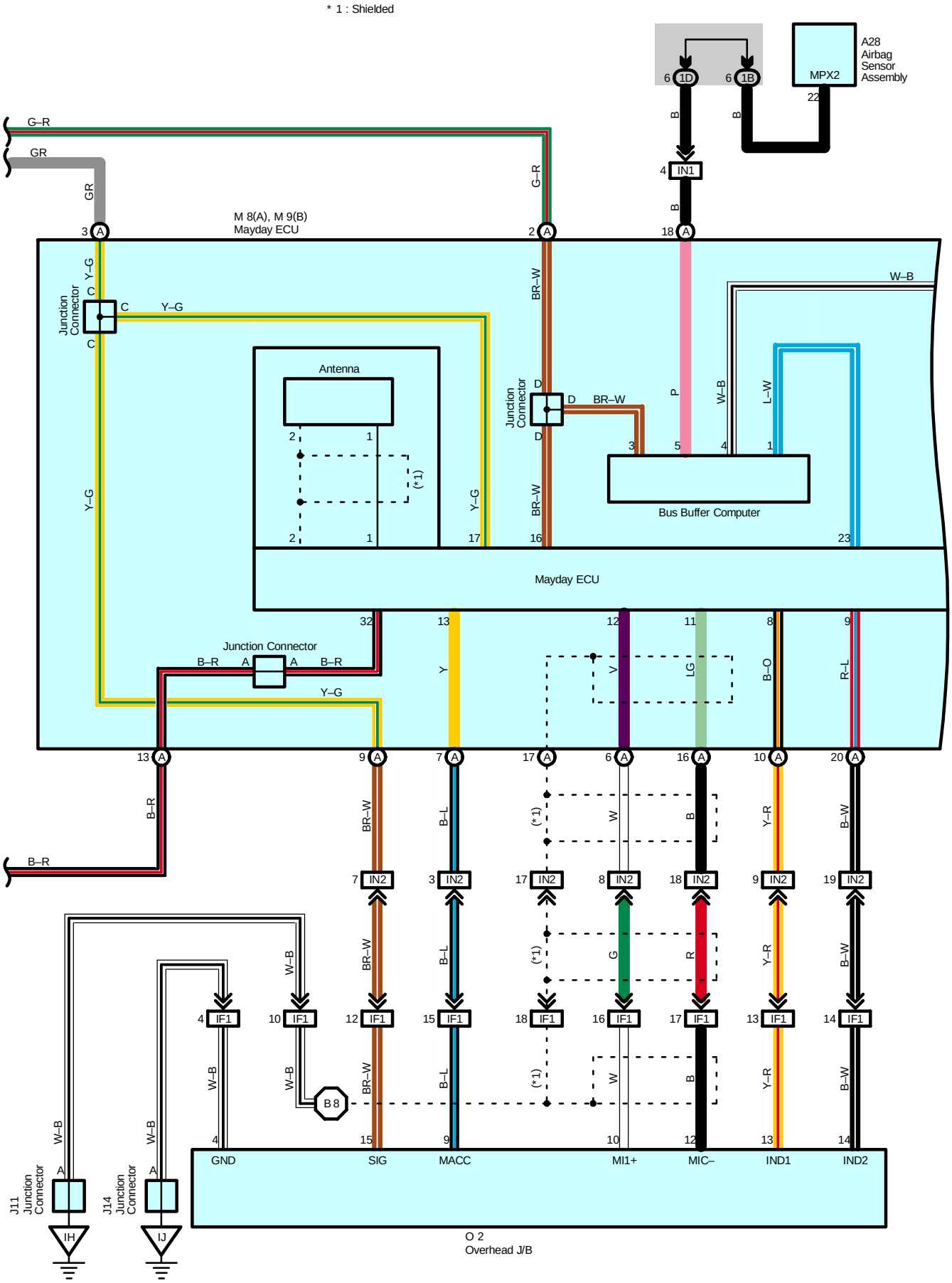
: Ground Points

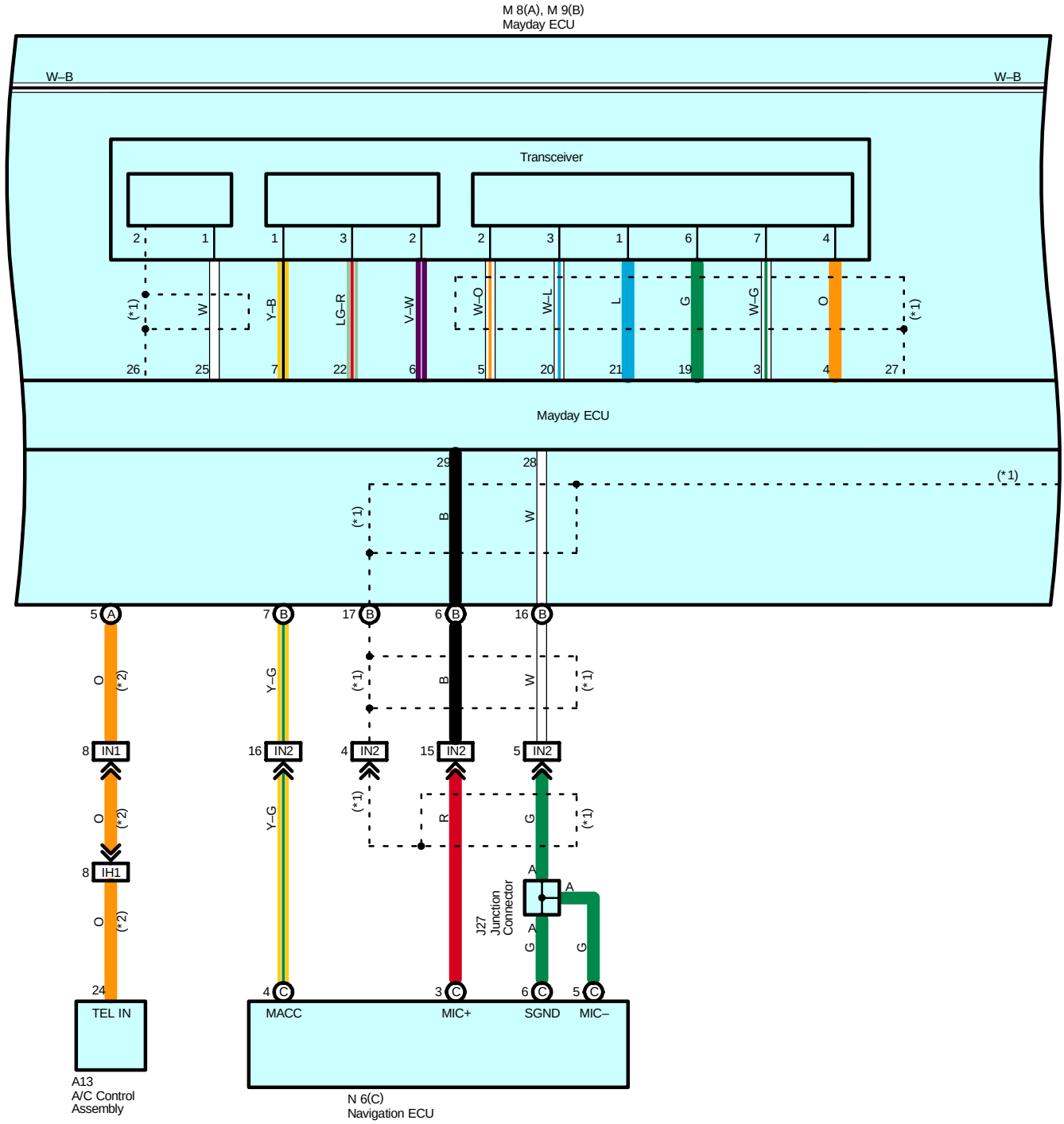
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IL	50	Right Kick Panel

: Splice Points

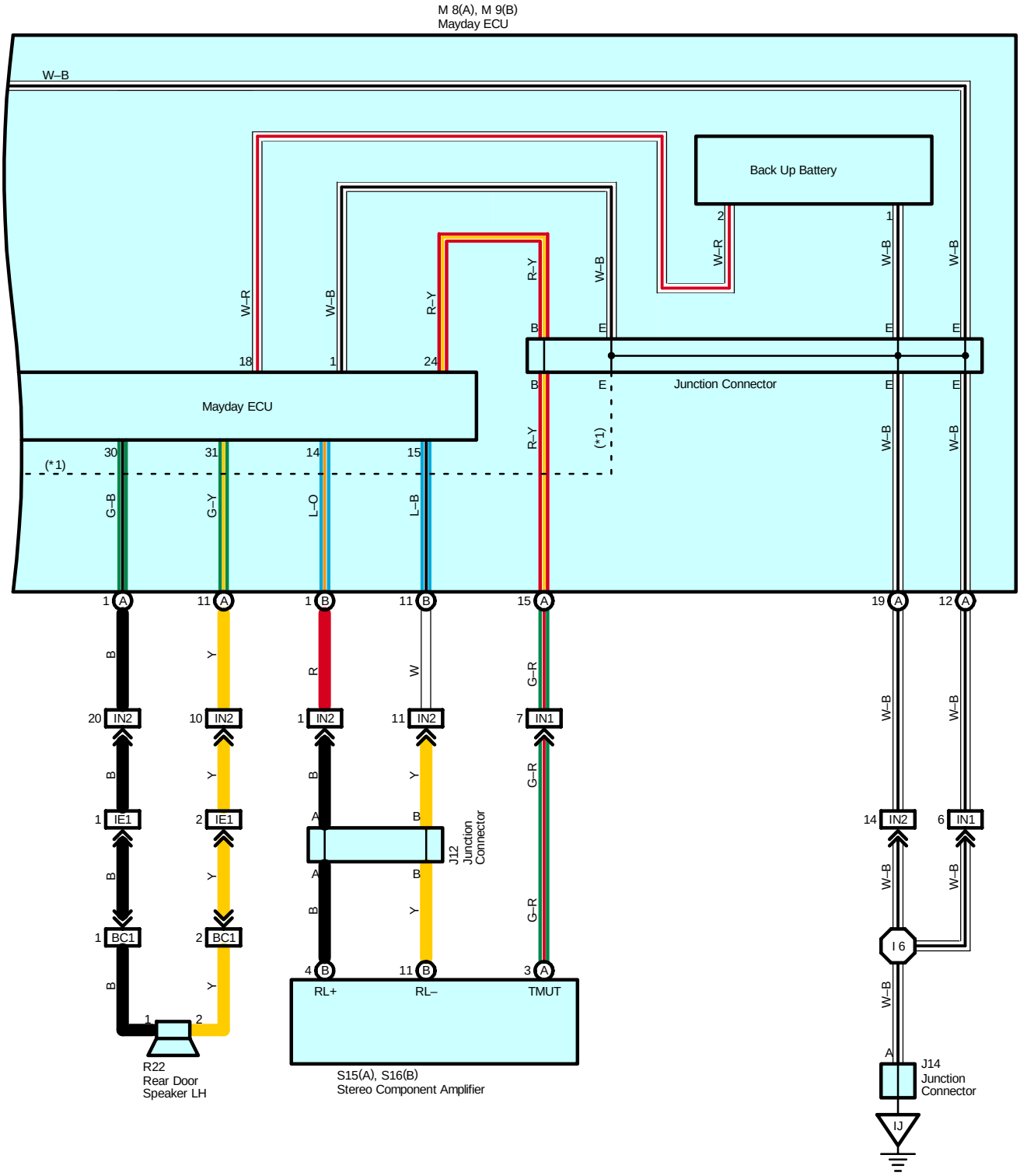
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire			


From Power Source System (See Page 64)
7. 5A
GAUGE
7. 5A
ACC
7. 5A
MAYDAY
4 IG
8 IK
1
2
R–L
GR
G–R
D
J19
Junction
Connector
A
A3 IB4
6 IN2
A12 IB4
2 IN1
5 IN1
L
3
1
ACC CUT
Relay
4
2
C12 IB4
W–G
B–R


* 1 : Shielded
A28
Airbag
Sensor
Assembly
MPX2
6 1D
6 1B
22
B
4 IN1
B
18 A
G–R
GR
GR
3 A
M 8(A), M 9(B)
Mayday ECU
2 A
G–R
BR–W
W–B
Junction
Connector
Y–G
C
C
C
Y–G
Antenna
2
1
(*1)
2
1
Y–G
17
Junction
Connector
D
D
BR–W
D
BR–W
P
W–B
L–W
3
5
4
1
Bus Buffer Computer
16
23
Mayday ECU
32
13
12
11
8
9
Junction Connector
B–R
A
A
B–R
Y–G
Y
V
LG
B–O
R–L
13 A
9 A
7 A
17 A
6 A
16 A
10 A
20 A
B–R
B–R
BR–W
B–L
(*1)
W
B
Y–R
B–W
7 IN2
3 IN2
17 IN2
8 IN2
18 IN2
9 IN2
19 IN2
BR–W
B–L
(*1)
G
R
Y–R
B–W
W–B
W–B
4 IF1
10 IF1
12 IF1
15 IF1
18 IF1
16 IF1
17 IF1
13 IF1
14 IF1
W–B
W–B
B 8
BR–W
B–L
(*1)
W
B
Y–R
B–W
4
15
9
10
12
13
14
GND
SIG
MACC
MI1+
MIC–
IND1
IND2
W–B
A
J11
Junction
Connector
IH
W–B
A
J14
Junction
Connector
IJ
O 2
Overhead J/B


M 8(A), M 9(B)
Mayday ECU
W–B
W–B
Transceiver
Mayday ECU
TEL IN
MACC
MIC+
SGND
MIC–
IN1
IN2
IH1
J27
Junction
Connector
A13
A/C Control
Assembly
N 6(C)
Navigation ECU

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



LEXUS Link System (Mayday System) (Apr. 2003–)

System Outline

1. Automatic Emergency Call

If an airbag deploys, an emergency signal is sent automatically to the LEXUS link call center. If the advisor cannot get any response from the customer, the advisor will locate his vehicle through the GPS.

2. Manual Emergency Call

The driver can place an emergency call manually. Upon reception of his call, the advisor will locate his vehicle and contact him to access the situation.

3. Service Call

When the driver pushes the SERVICE button, the advisor provides him with the service. The services provided will depend on the level of service package selected.

4. Memorandum Record

During a service call, the driver can record a conversation with the LEXUS link call center advisor.

5. Door Lock/Unlock

The LEXUS link system will allow the vehicle to be locked and unlocked remotely.

6. Theft Detection

If the theft deterrent system on the vehicle is activated, the LEXUS link system on the vehicle will automatically call the LEXUS link call center. The advisor will attempt to contact the customer to determine whether the alarm is valid. If the customer reports to the LEXUS link call center that his vehicle has been stolen, the advisor will locate, track and provide location information to the appropriate law enforcement authority.

Cases where the system will not make a call:

- The system components or wire harnesses are damaged due to the accident.
- The vehicle is in a weak or non–analog cellular coverage area.
- The LEXUS link call center is not operational.
- The vehicle has turned over and the antenna is shut off.
- The GPS signal can not be received, and the correct position can not be located.
- The LEXUS link subscription has expired.

Service Hints

M8 (A), M9 (B) Mayday ECU

(A) 3–Ground : Approx. 12 volts with ignition SW at ON or ACC position
(A) 2–Ground : Always approx. 12 volts
(A)13–Ground : Approx. 12 volts with ignition SW at ON position
(A)12, (A) 19–Ground: Always continuity

○ : Parts Location

Code	See Page	Code		See Page	Code		See Page
A13	38	J19		40	O2		44
A28	38	J27		40	R22		44
J11	40	M8	A	44	S15	A	41
J12	40	M9	B	44	S16	B	41
J14	40	N6	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)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		

: Connector Joining Wire Harness and Wire Harness

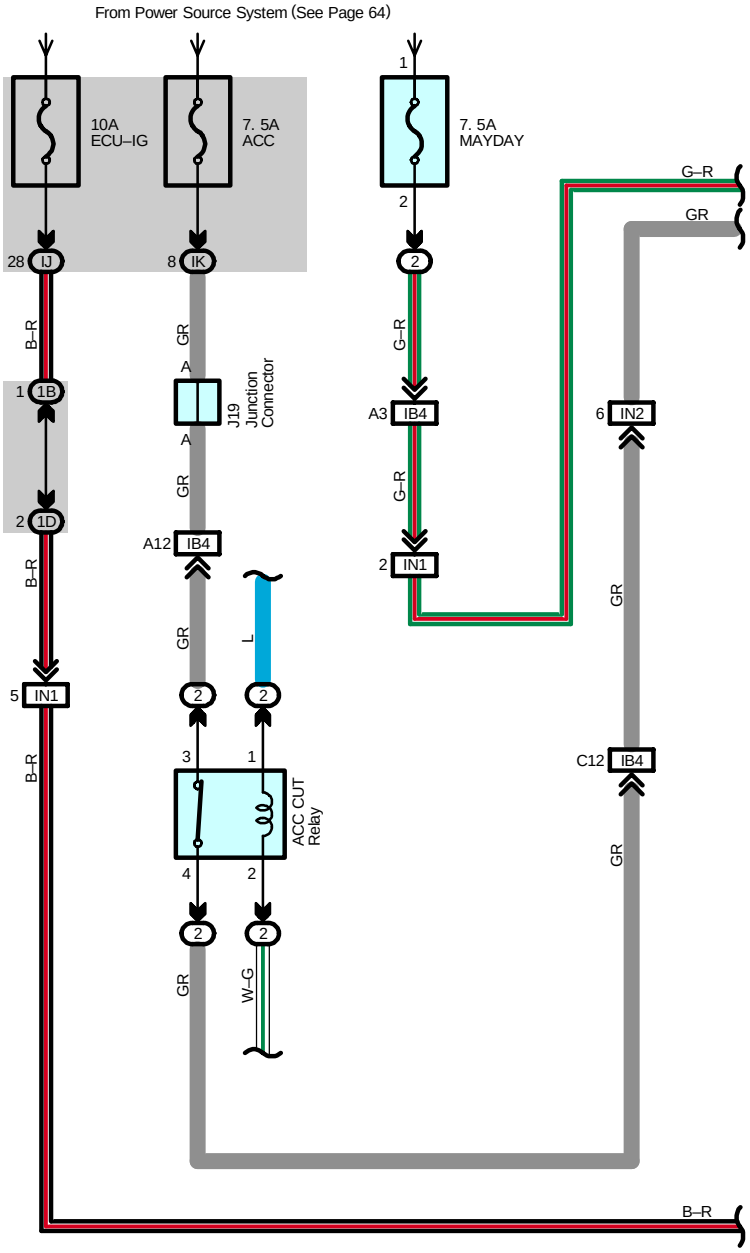
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IE1	52	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2		
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)

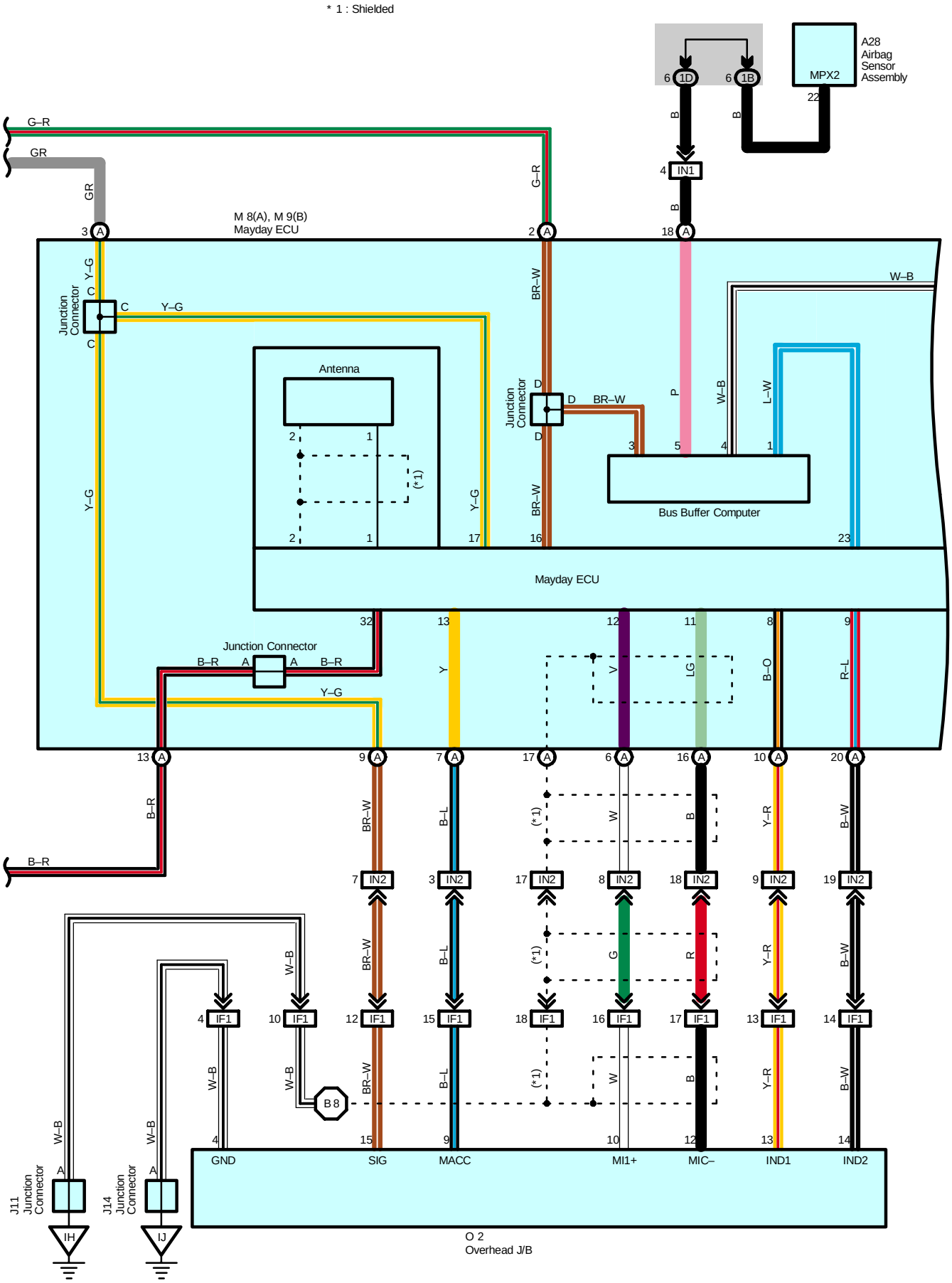
: Ground Points

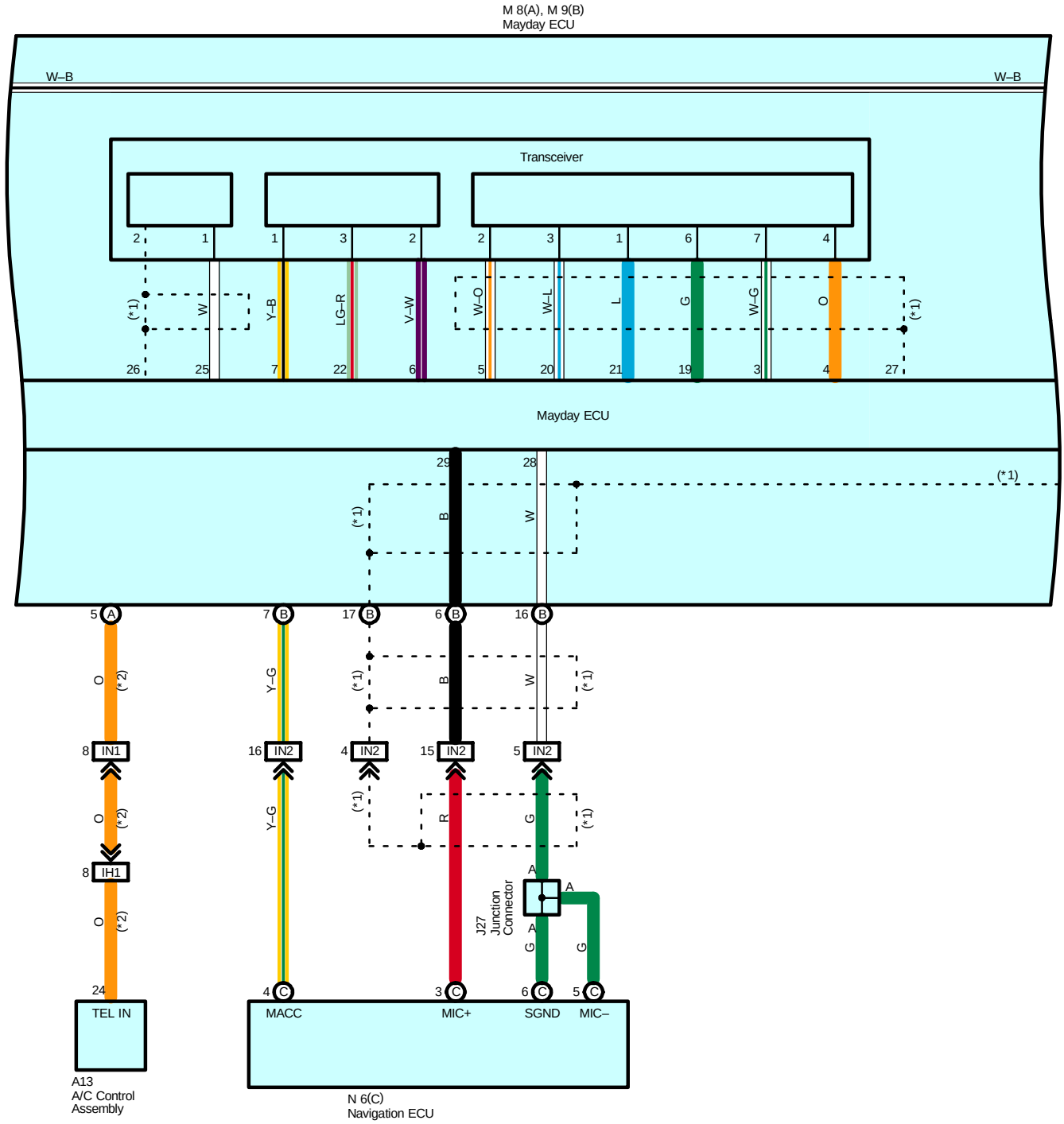
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

: Splice Points

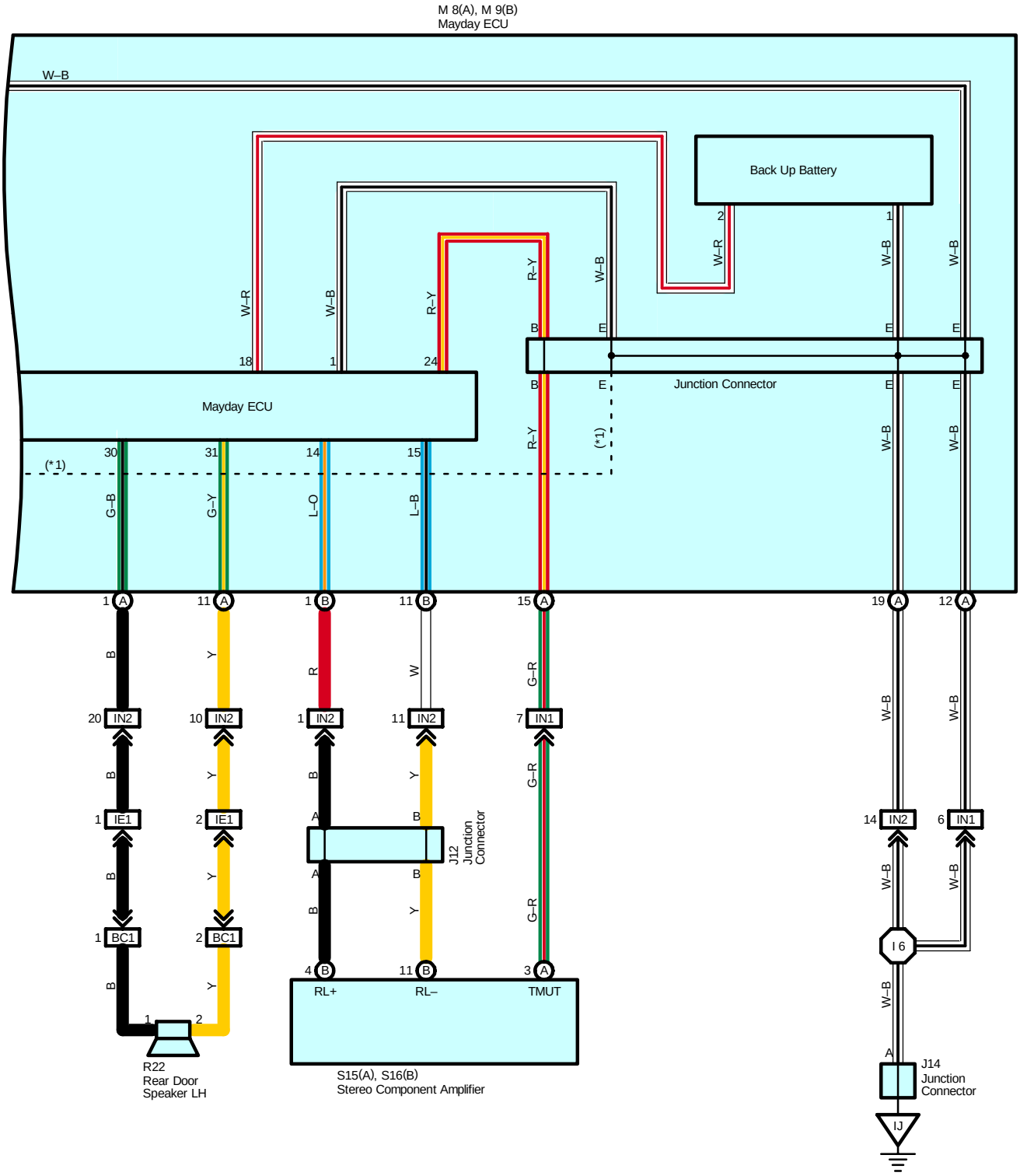
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B8	60	Roof Wire


From Power Source System (See Page 64)
10A
ECU–IG
7. 5A
ACC
7. 5A
MAYDAY
28 IJ
8 IK
1
2
B–R
GR
G–R
1 1B
A
J19
Junction
Connector
A
2 1D
A3 IB4
6 IN2
A12 IB4
2 IN1
5 IN1
L
3
1
ACC CUT
Relay
4
2
C12 IB4
W–G
B–R


* 1 : Shielded
A28
Airbag
Sensor
Assembly
MPX2
6 1D
6 1B
22
B
4 IN1
B
18 A
G–R
GR
GR
3 A
M 8(A), M 9(B)
Mayday ECU
2 A
G–R
BR–W
W–B
Junction
Connector
Y–G
C
C
C
Y–G
Antenna
2
1
(*1)
2
1
Y–G
17
Junction
Connector
D
D
D
BR–W
BR–W
16
P
W–B
L–W
3
5
4
1
Bus Buffer Computer
23
Mayday ECU
32
13
12
11
8
9
Junction Connector
B–R
A
A
B–R
Y–G
Y
V
LG
B–O
R–L
13 A
9 A
7 A
17 A
6 A
16 A
10 A
20 A
B–R
B–R
BR–W
B–L
(*1)
W
B
Y–R
B–W
7 IN2
3 IN2
17 IN2
8 IN2
18 IN2
9 IN2
19 IN2
BR–W
B–L
(*1)
G
R
Y–R
B–W
W–B
W–B
4 IF1
10 IF1
12 IF1
15 IF1
18 IF1
16 IF1
17 IF1
13 IF1
14 IF1
W–B
W–B
B 8
BR–W
B–L
(*1)
W
B
Y–R
B–W
4
15
9
10
12
13
14
W–B
W–B
A
A
J11
Junction
Connector
J14
Junction
Connector
IH
IJ
GND
SIG
MACC
MI1+
MIC–
IND1
IND2
O 2
Overhead J/B


M 8(A), M 9(B)
Mayday ECU
W–B
W–B
Transceiver
Mayday ECU
(*1)
(*2)
TEL IN
MACC
MIC+
SGND
MIC–
J27
Junction
Connector
A13
A/C Control
Assembly
N 6(C)
Navigation ECU

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



LEXUS Link System (Mayday System) (Aug. 2002–Apr. 2003)

System Outline

1. Automatic Emergency Call

If an airbag deploys, an emergency signal is sent automatically to the LEXUS link call center. If the advisor cannot get any response from the customer, the advisor will locate his vehicle through the GPS.

2. Manual Emergency Call

The driver can place an emergency call manually. Upon reception of his call, the advisor will locate his vehicle and contact him to access the situation.

3. Service Call

When the driver pushes the SERVICE button, the advisor provides him with the service. The services provided will depend on the level of service package selected.

4. Memorandum Record

During a service call, the driver can record a conversation with the LEXUS link call center advisor.

5. Door Lock/Unlock

The LEXUS link system will allow the vehicle to be locked and unlocked remotely.

6. Theft Detection

If the theft deterrent system on the vehicle is activated, the LEXUS link system on the vehicle will automatically call the LEXUS link call center. The advisor will attempt to contact the customer to determine whether the alarm is valid. If the customer reports to the LEXUS link call center that his vehicle has been stolen, the advisor will locate, track and provide location information to the appropriate law enforcement authority.

Cases where the system will not make a call:

- The system components or wire harnesses are damaged due to the accident.
- The vehicle is in a weak or non–analog cellular coverage area.
- The LEXUS link call center is not operational.
- The vehicle has turned over and the antenna is shut off.
- The GPS signal can not be received, and the correct position can not be located.
- The LEXUS link subscription has expired.

Service Hints

M8 (A), M9 (B) Mayday ECU

(A) 3–Ground : Approx. 12 volts with ignition SW at ON or ACC position
(A) 2–Ground : Always approx. 12 volts
(A)13–Ground : Approx. 12 volts with ignition SW at ON position
(A)12, (A) 19–Ground: Always continuity

○ : Parts Location

Code	See Page	Code		See Page	Code		See Page
A13	38	J19		40	O2		44
A28	38	J27		40	R22		44
J11	40	M8	A	44	S15	A	41
J12	40	M9	B	44	S16	B	41
J14	40	N6	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)
IJ	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		

: Connector Joining Wire Harness and Wire Harness

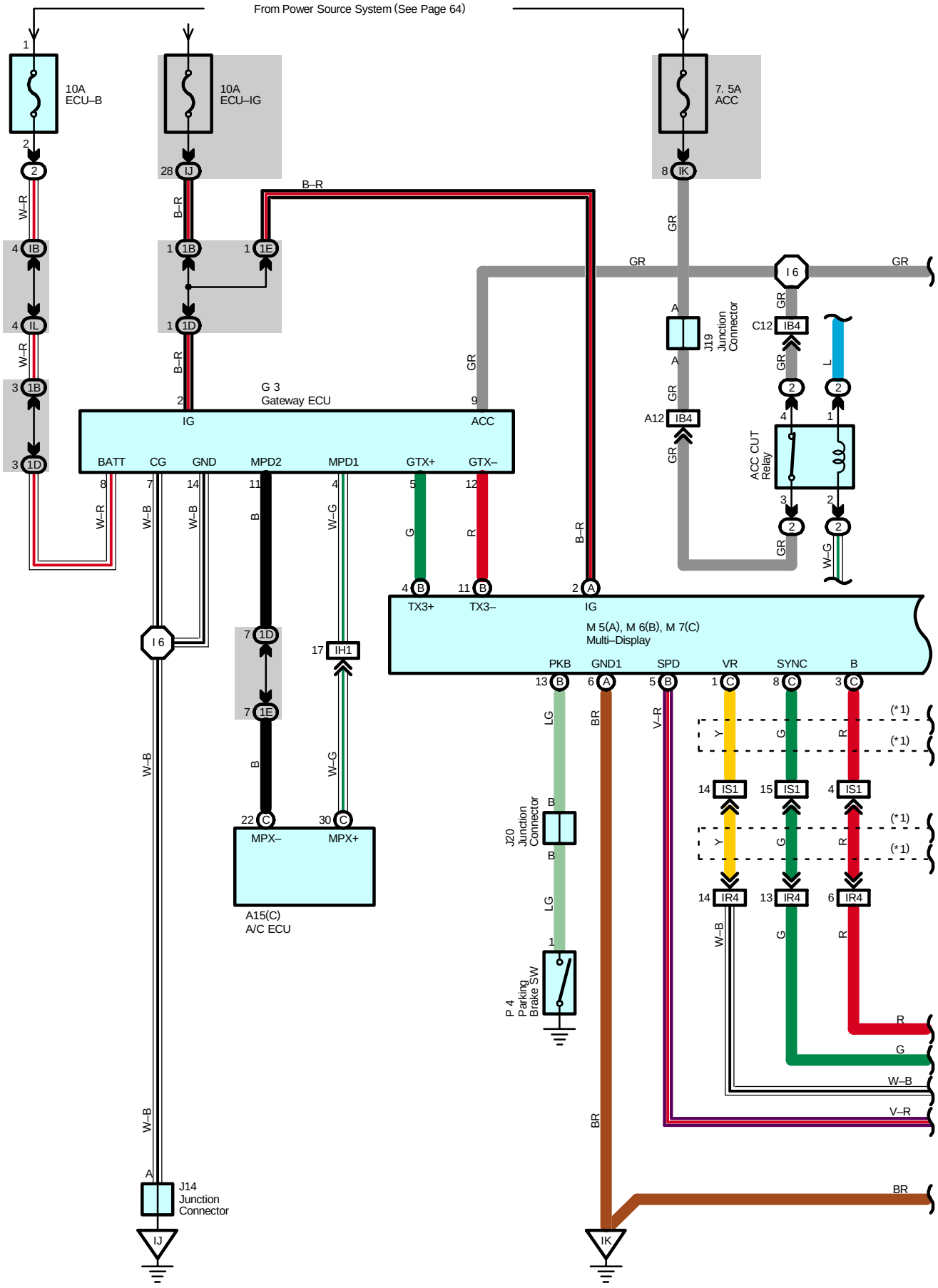
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IE1	52	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2		
BC1	58	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)

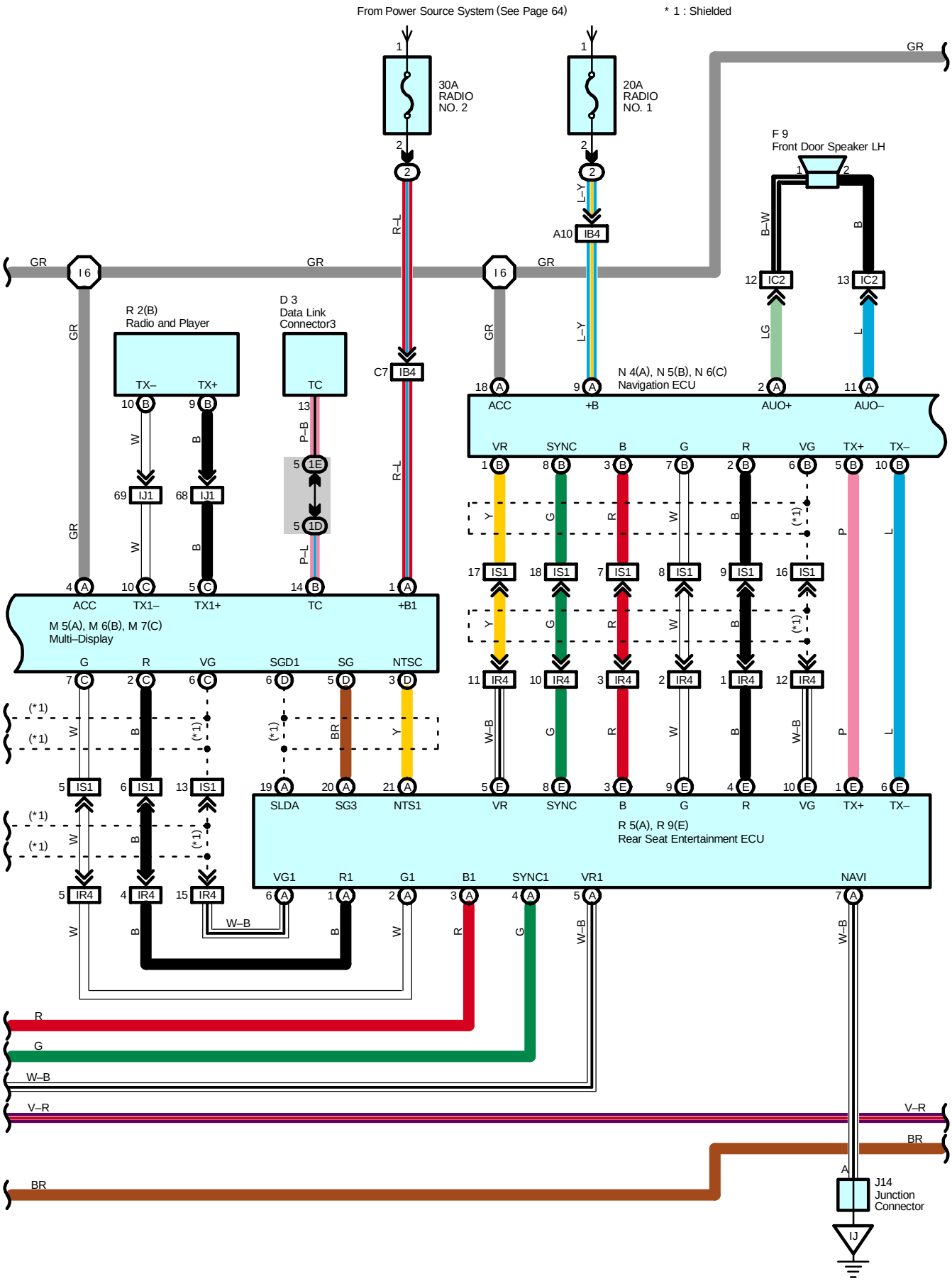
: Ground Points

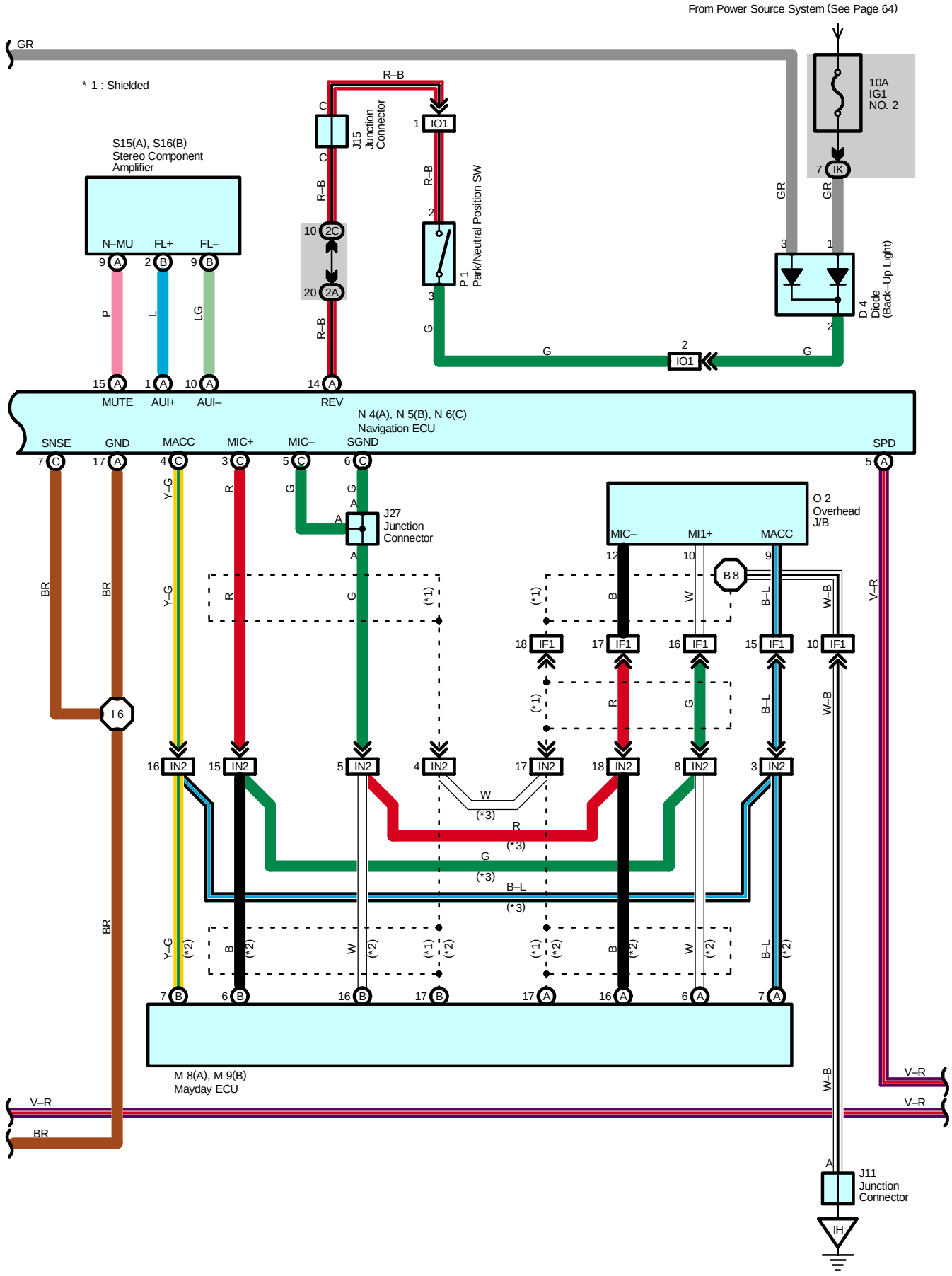
Code	See Page	Ground Points Location
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column

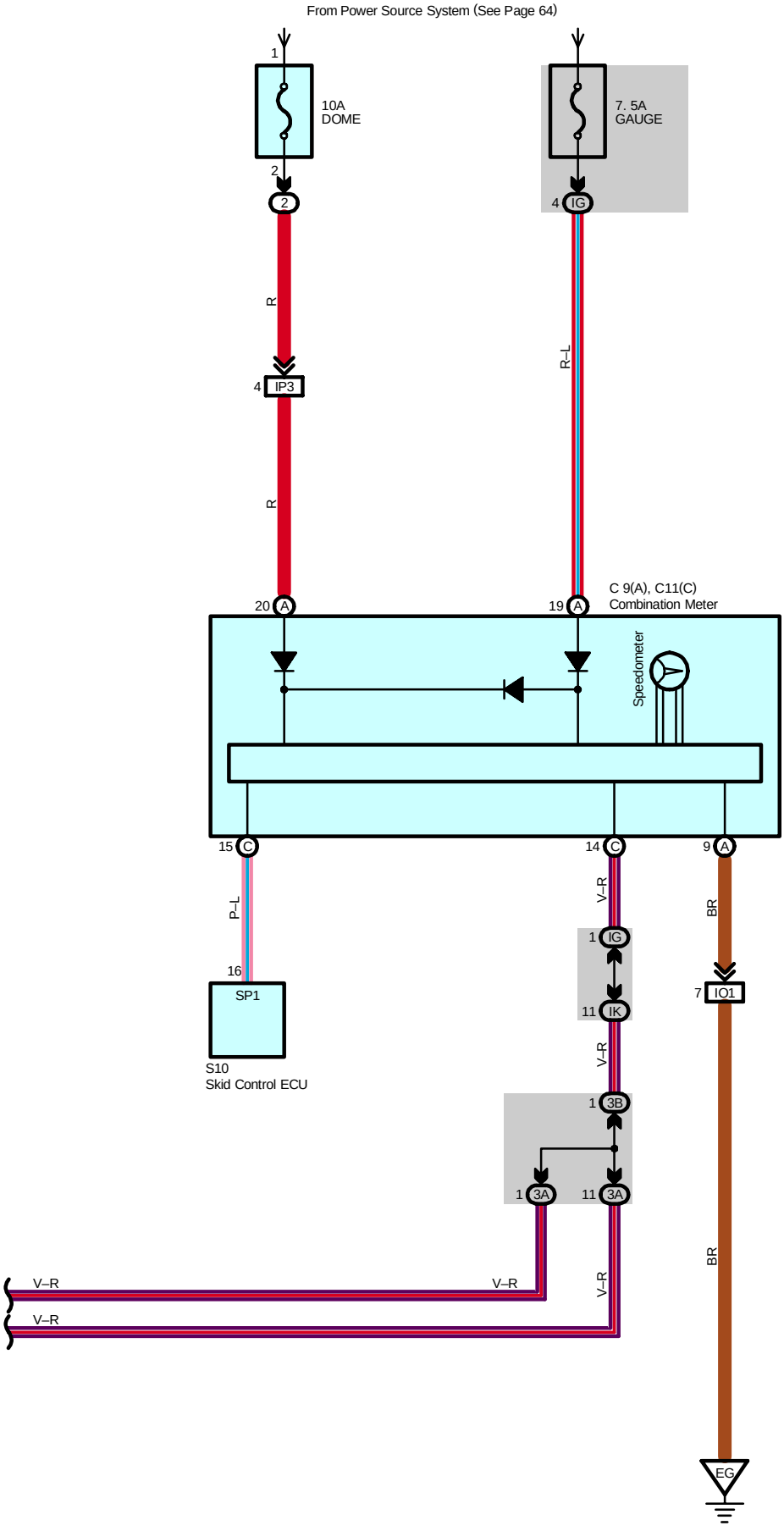
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B8	60	Roof Wire


From Power Source System (See Page 64)
10A ECU–B
10A ECU–IG
7. 5A ACC
G 3 Gateway ECU
IG
ACC
BATT
CG
GND
MPD2
MPD1
GTX+
GTX–
J19 Junction Connector
ACC CUT Relay
I 6
J14 Junction Connector
M 5(A), M 6(B), M 7(C) Multi–Display
PKB
GND1
SPD
VR
SYNC
B
TX3+
TX3–
IG
J20 Junction Connector
P 4 Parking Brake SW
A15(C) A/C ECU
MPX–
MPX+
(*1)


From Power Source System (See Page 64)
* 1 : Shielded
30A RADIO NO. 2
20A RADIO NO. 1
F 9 Front Door Speaker LH
R 2(B) Radio and Player
D 3 Data Link Connector3
N 4(A), N 5(B), N 6(C) Navigation ECU
M 5(A), M 6(B), M 7(C) Multi–Display
R 5(A), R 9(E) Rear Seat Entertainment ECU
J14 Junction Connector
ACC
+B
AUO+
AUO–
TX–
TX+
TC
TX1–
TX1+
+B1
VR
SYNC
B
G
R
VG
SGD1
SG
NTSC
SLDA
SG3
NTS1
VG1
R1
G1
B1
SYNC1
VR1
NAVI
GR
W
B
Y
G
R
W–B
P
L
BR
V–R
P–B
P–L
L–Y
B–W
LG


From Power Source System (See Page 64)
GR
* 1 : Shielded
10A
IG1
NO. 2
7 IK
S15(A), S16(B)
Stereo Component
Amplifier
N–MU
FL+
FL–
9 A
2 B
9 B
P
L
LG
15 A
1 A
10 A
MUTE
AUI+
AUI–
R–B
C
J15
Junction
Connector
1 IO1
10 2C
20 2A
14 A
REV
P 1
Park/Neutral Position SW
3
2
IO1
G
GR
3
1
2
D 4
Diode
(Back–Up Light)
N 4(A), N 5(B), N 6(C)
Navigation ECU
SNSE
GND
MACC
MIC+
MIC–
SGND
SPD
7 C
17 A
4 C
3 C
5 C
6 C
5 A
Y–G
R
G
BR
J27
Junction
Connector
O 2
Overhead
J/B
MIC–
MI1+
MACC
12
10
9
B 8
B
W
B–L
W–B
V–R
(*1)
18 IF1
17 IF1
16 IF1
15 IF1
10 IF1
I 6
16 IN2
15 IN2
5 IN2
4 IN2
17 IN2
18 IN2
8 IN2
3 IN2
W
(*3)
R
(*3)
G
(*3)
B–L
(*3)
(*2)
7 B
6 B
16 B
17 B
17 A
16 A
6 A
7 A
M 8(A), M 9(B)
Mayday ECU
V–R
BR
A
J11
Junction
Connector
IH


From Power Source System (See Page 64)
1
10A
DOME
2
2
R
4
IP3
R
20
A
7. 5A
GAUGE
4
IG
R–L
19
A
C 9(A), C11(C)
Combination Meter
Speedometer
15
C
P–L
16
SP1
S10
Skid Control ECU
14
C
V–R
1
IG
11
IK
V–R
1
3B
1
3A
11
3A
V–R
V–R
V–R
9
A
BR
7
IO1
BR
EG

LEXUS Navigation System (w/ Rear Seat Entertainment System)

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A15 C	38	J19	40	N6 C	40
C9 A	38	J20	40	O2	44
C11 C	38	J27	40	P1	37
D3	39	M5 A	40	P4	40
D4	39	M6 B	40	R2 B	41
F9	43	M7 C	40	R5 A	41
G3	39	M8 A	44	R9 E	41
J11	40	M9 B	44	S10	41
J14	40	N4 A	40	S15 A	41
J15	40	N5 B	40	S16 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)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

: Connector Joining Wire Harness and Wire Harness

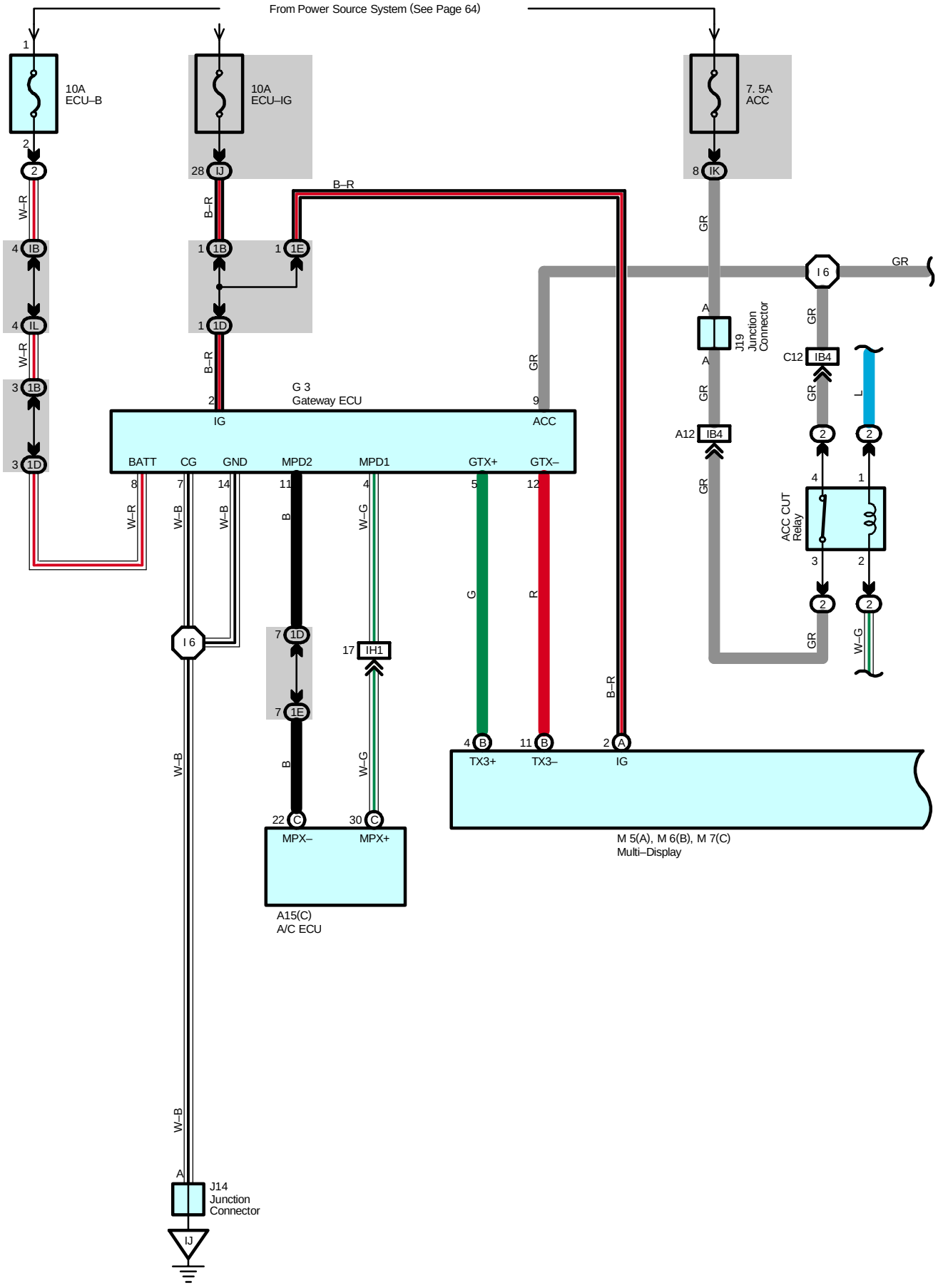
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	52	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	52	Instrument 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	Floor No.3 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)
IR4	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IS1	56	Instrument Panel Wire and Floor Wire (Under the Front Passenger's Seat)

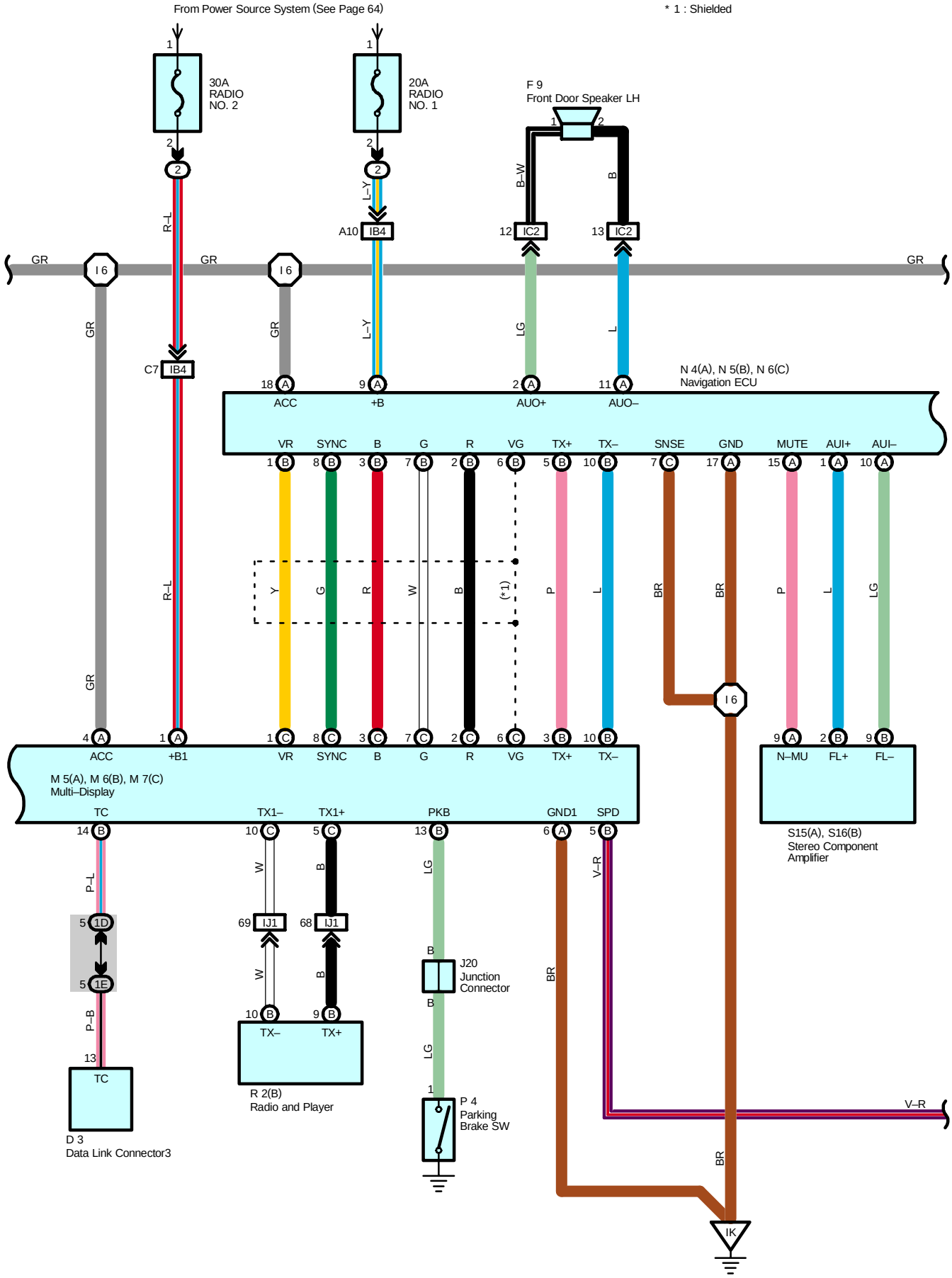
: Ground Points

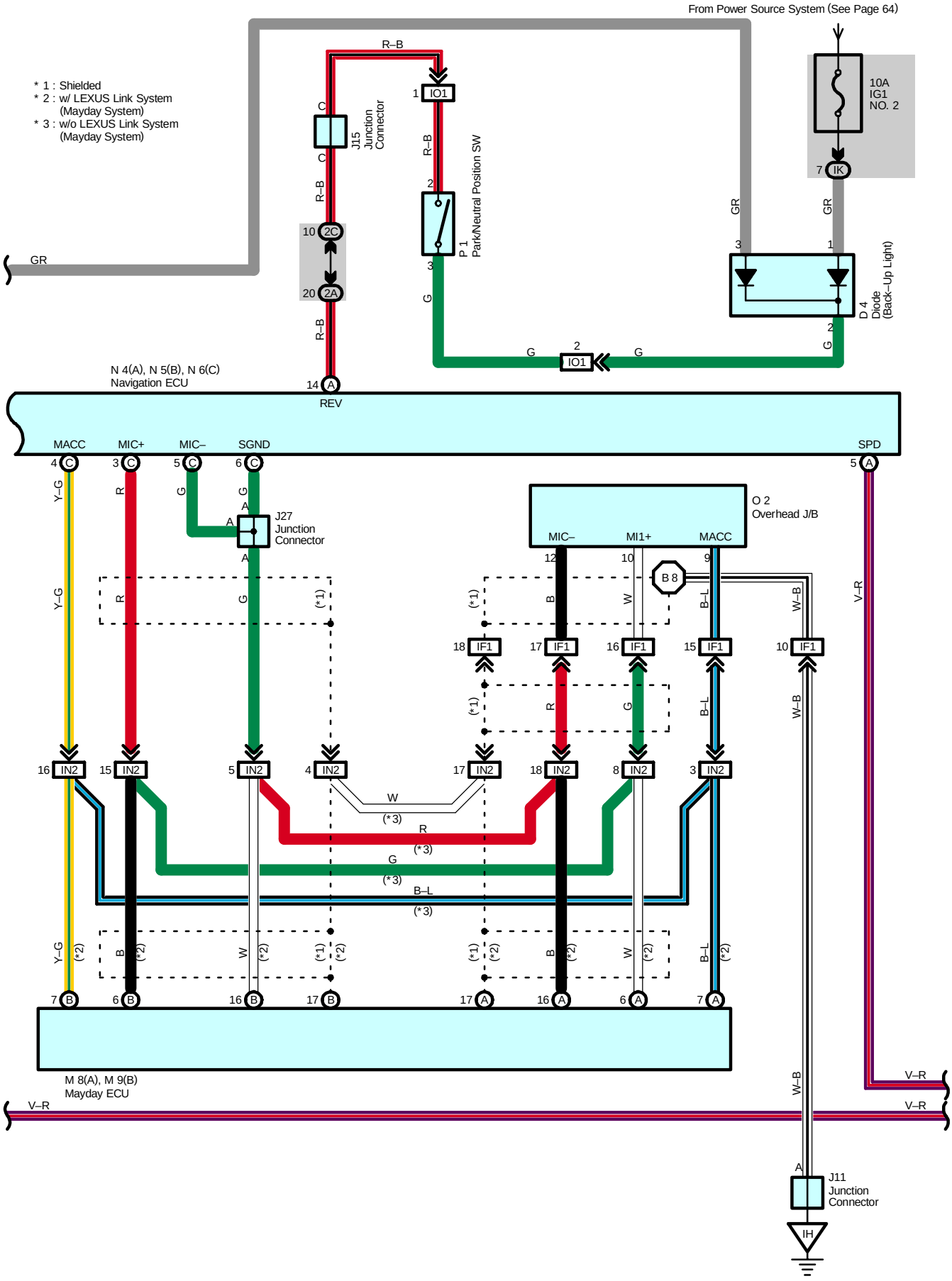
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH

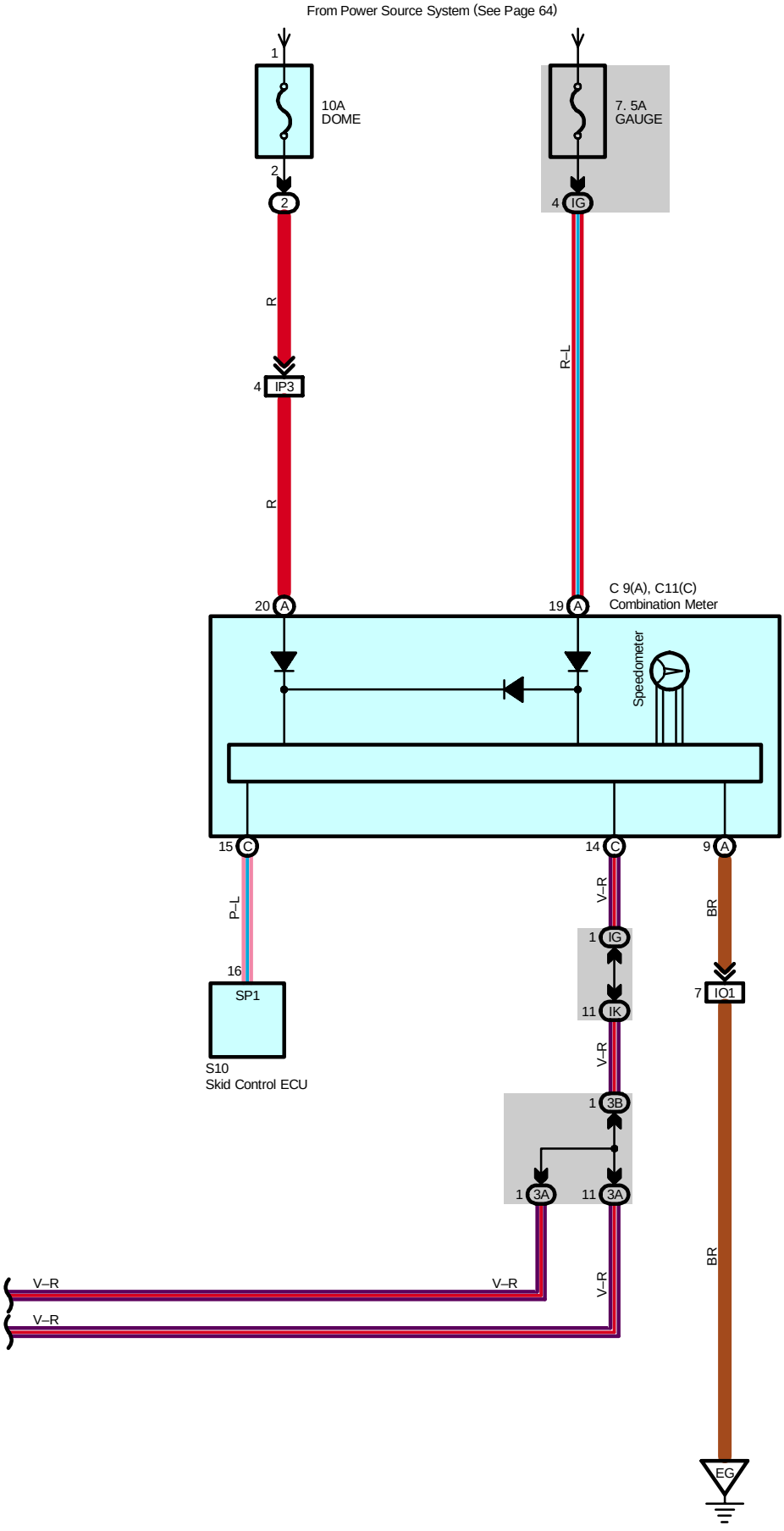
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B8	60	Roof Wire


From Power Source System (See Page 64)
10A
ECU–B
10A
ECU–IG
7. 5A
ACC
G 3
Gateway ECU
IG
ACC
BATT
CG
GND
MPD2
MPD1
GTX+
GTX–
J19
Junction
Connector
ACC CUT
Relay
J14
Junction
Connector
A15(C)
A/C ECU
MPX–
MPX+
TX3+
TX3–
IG
M 5(A), M 6(B), M 7(C)
Multi–Display
W–R
B–R
GR
W–B
W–G
B
G
R
L


From Power Source System (See Page 64)
* 1 : Shielded
30A
RADIO
NO. 2
20A
RADIO
NO. 1
F 9
Front Door Speaker LH
R–L
L–Y
B–W
B
GR
LG
L
C7 IB4
A10 IB4
12 IC2
13 IC2
I 6
N 4(A), N 5(B), N 6(C)
Navigation ECU
ACC
+B
AUO+
AUO–
VR
SYNC
B
G
R
VG
TX+
TX–
SNSE
GND
MUTE
AUI+
AUI–
Y
G
R
W
B
(*1)
P
L
BR
LG
M 5(A), M 6(B), M 7(C)
Multi–Display
+B1
TC
TX1–
TX1+
PKB
GND1
SPD
P–L
P–B
V–R
1D
1E
IJ1
J20
Junction
Connector
P 4
Parking
Brake SW
IK
S15(A), S16(B)
Stereo Component
Amplifier
N–MU
FL+
FL–
D 3
Data Link Connector3
R 2(B)
Radio and Player


From Power Source System (See Page 64)
* 1 : Shielded
* 2 : w/ LEXUS Link System (Mayday System)
* 3 : w/o LEXUS Link System (Mayday System)
R–B
J15 Junction Connector
P 1 Park/Neutral Position SW
10A IG1 NO. 2
GR
D 4 Diode (Back–Up Light)
N 4(A), N 5(B), N 6(C) Navigation ECU
REV
MACC
MIC+
MIC–
SGND
SPD
J27 Junction Connector
O 2 Overhead J/B
MI1+
M 8(A), M 9(B) Mayday ECU
J11 Junction Connector
Y–G
R
G
B
W
B–L
V–R
W–B


From Power Source System (See Page 64)
1
10A
DOME
2
2
R
4
IP3
R
20
A
7. 5A
GAUGE
4
IG
R–L
19
A
C 9(A), C11(C)
Combination Meter
Speedometer
15
C
P–L
16
SP1
S10
Skid Control ECU
14
C
V–R
1
IG
11
IK
V–R
1
3B
1
3A
11
3A
V–R
V–R
V–R
9
A
BR
7
IO1
BR
EG

LEXUS Navigation System (w/o Rear Seat Entertainment System)

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A15 C	38	J19	40	N6 C	40
C9 A	38	J20	40	O2	44
C11 C	38	J27	40	P1	37
D3	39	M5 A	40	P4	40
D4	39	M6 B	40	R2 B	41
F9	43	M7 C	40	S10	41
G3	39	M8 A	44	S15 A	41
J11	40	M9 B	44	S16 B	41
J14	40	N4 A	40		
J15	40	N5 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)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2C		
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)
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	Floor No.3 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)

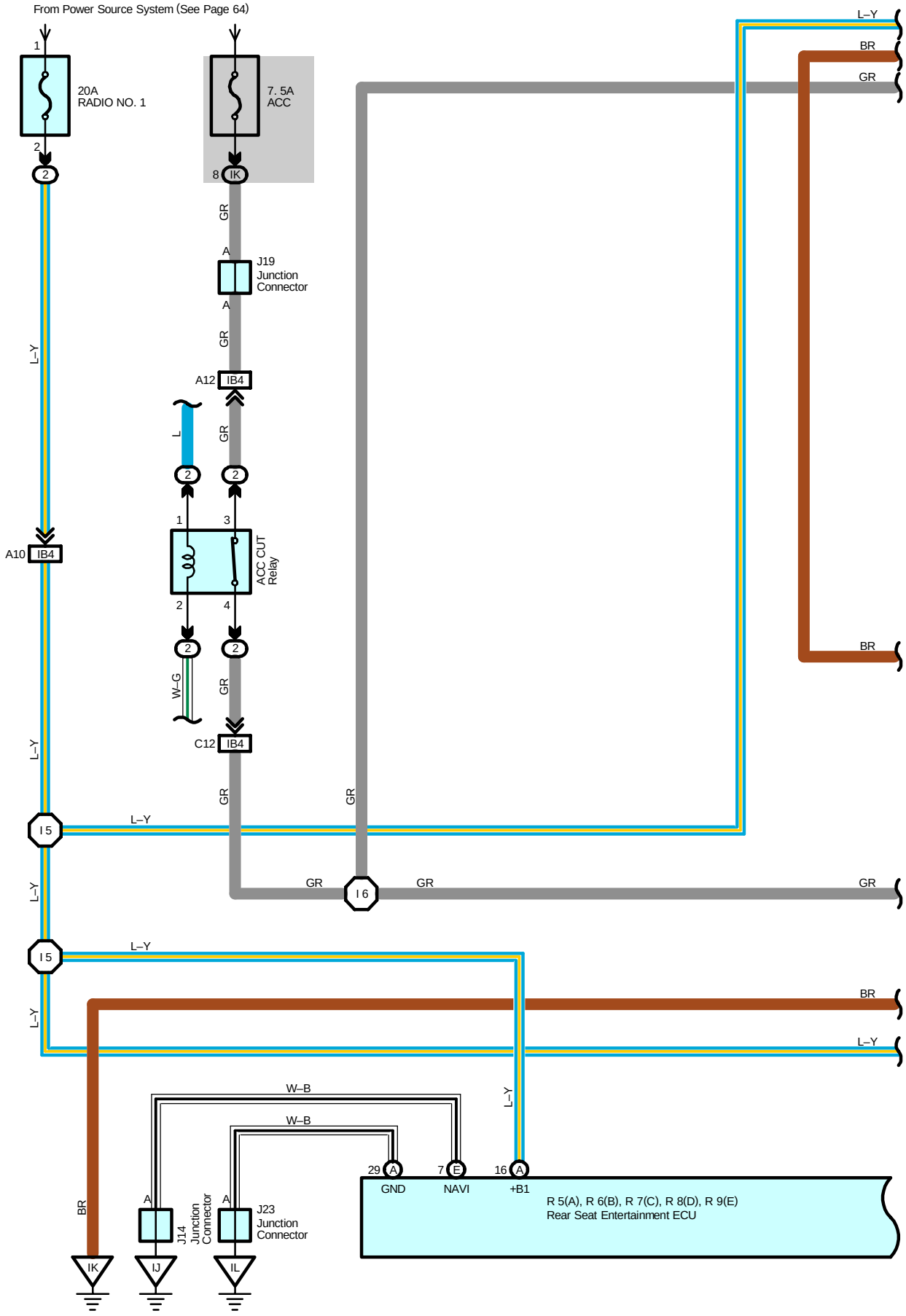
 **: Ground Points**

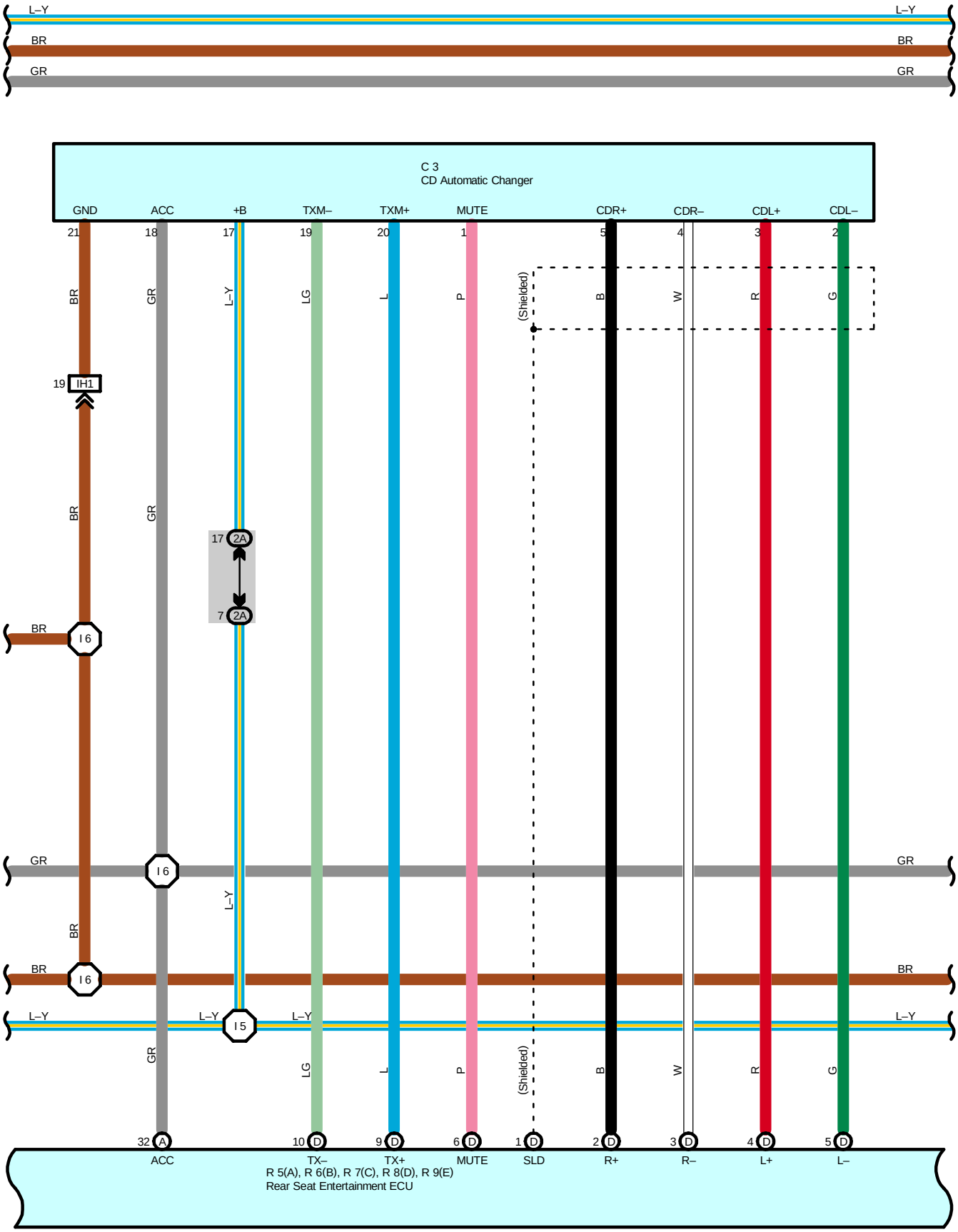
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IH	50	Left Kick Panel
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH

 **: Splice Points**

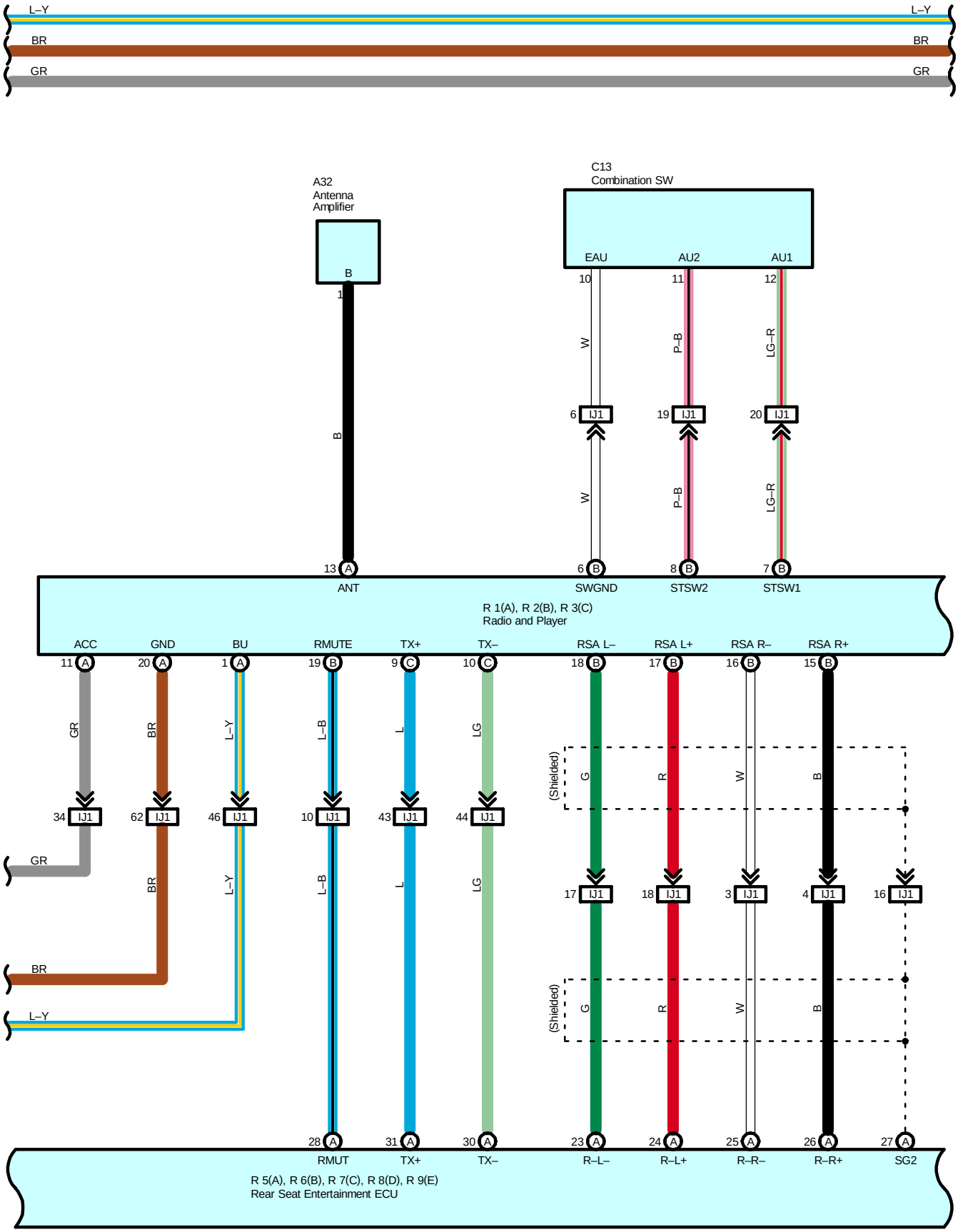
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B8	60	Roof Wire

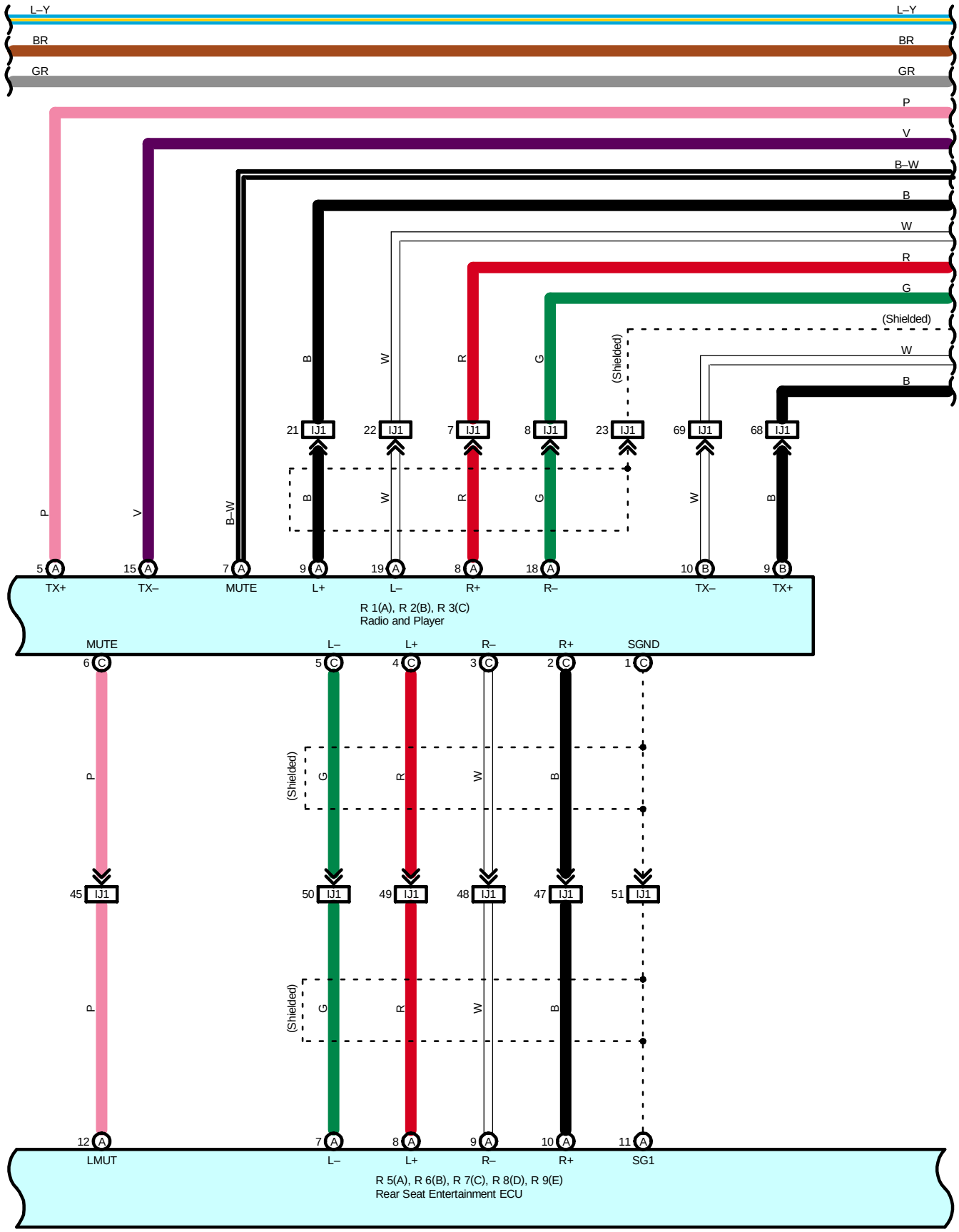
Radio and Player (w/ Rear Seat Entertainment System)



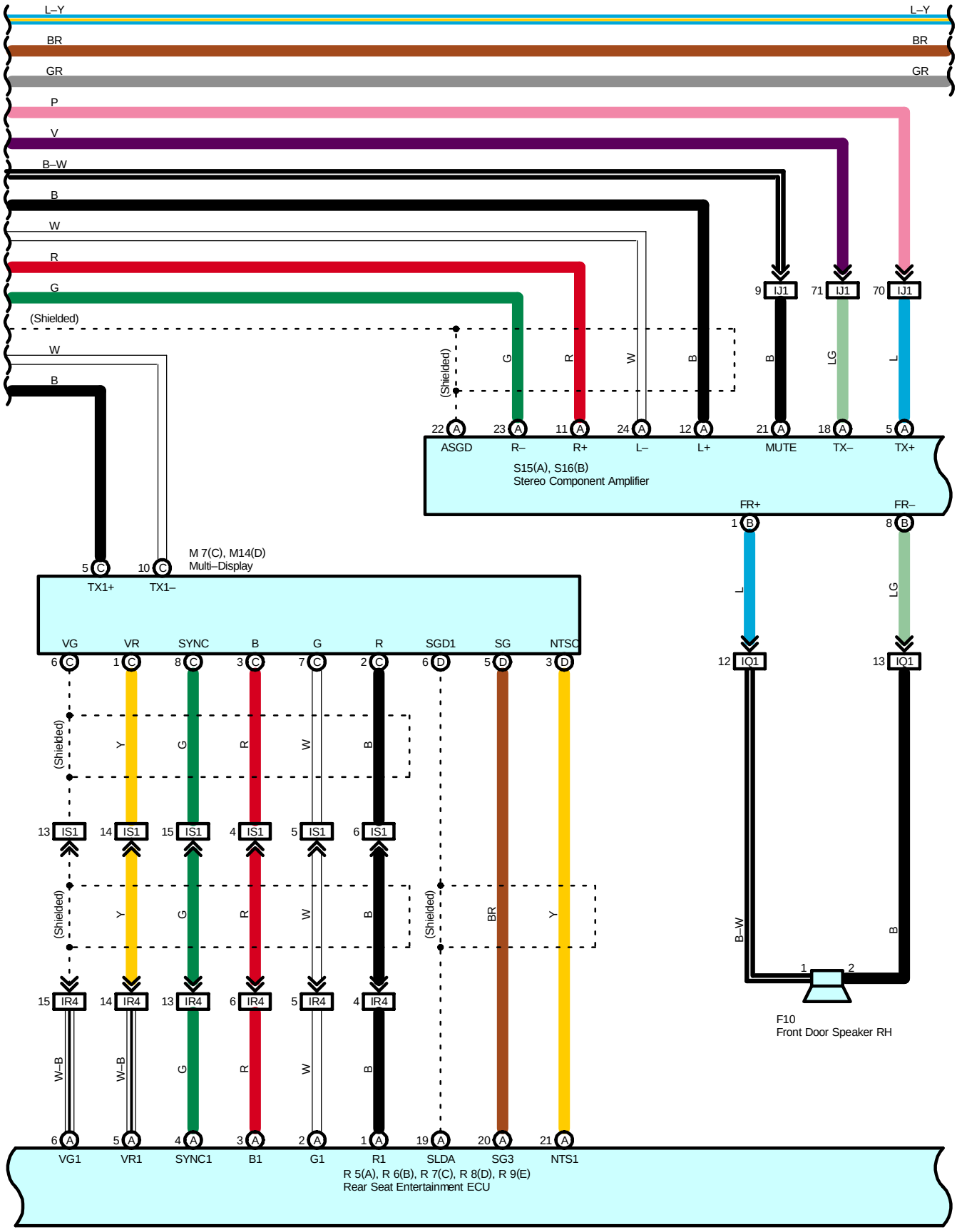

L–Y
BR
GR
L–Y
BR
GR
C 3
CD Automatic Changer
GND
ACC
+B
TXM–
TXM+
MUTE
CDR+
CDR–
CDL+
CDL–
21
18
17
19
20
1
5
4
3
2
BR
GR
L–Y
LG
L
P
B
W
R
G
(Shielded)
19
IH1
17
2A
7
2A
I 6
I 6
I 6
I 5
L–Y
32
A
10
D
9
D
6
D
1
D
2
D
3
D
4
D
5
D
ACC
TX–
TX+
MUTE
SLD
R+
R–
L+
L–
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU

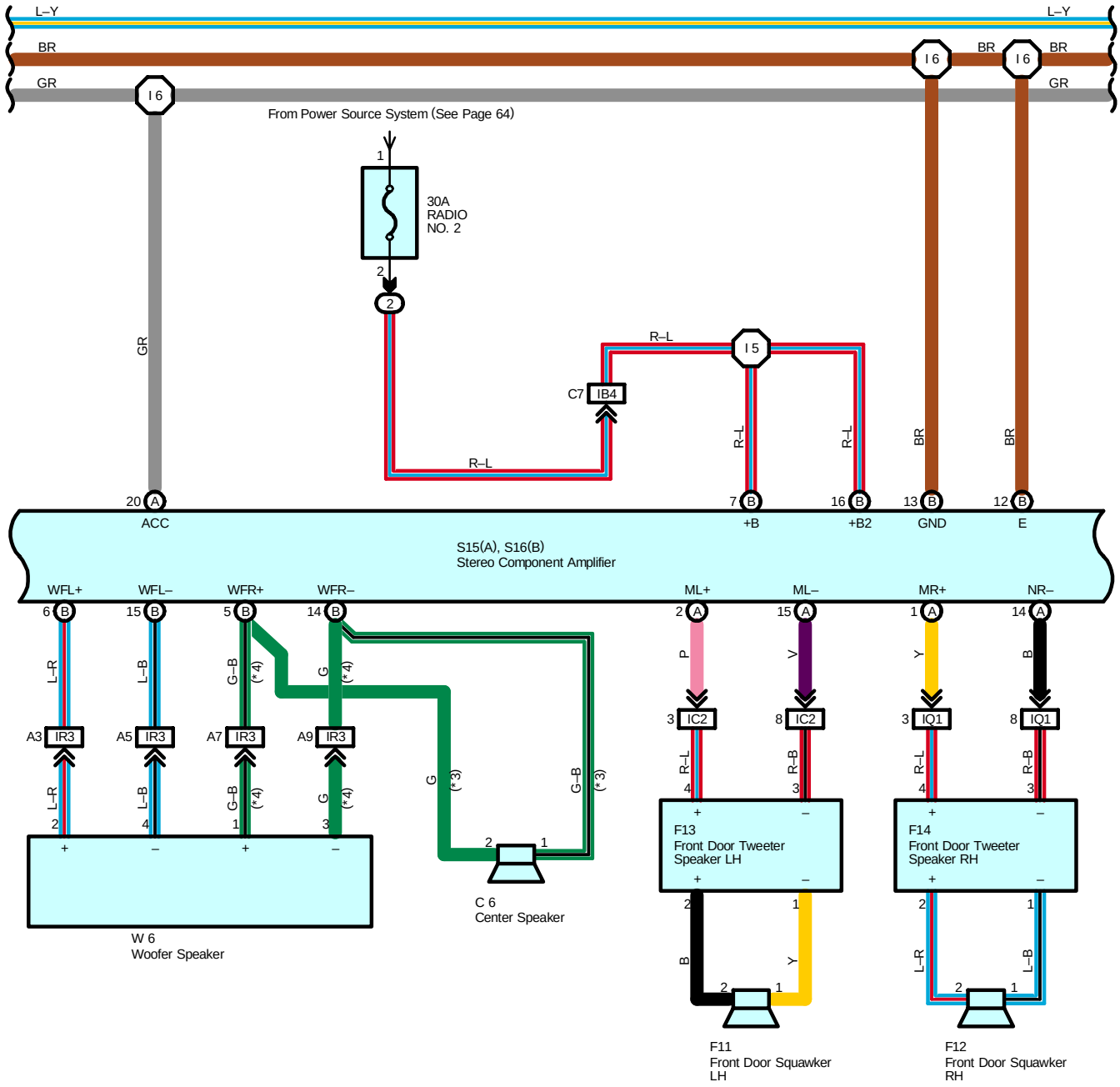
Radio and Player (w/ Rear Seat Entertainment System)




L–Y
BR
GR
P
V
B–W
B
W
R
G
(Shielded)
W
B
21 IJ1
22 IJ1
7 IJ1
8 IJ1
23 IJ1
69 IJ1
68 IJ1
5 A TX+
15 A TX–
7 A MUTE
9 A L+
19 A L–
8 A R+
18 A R–
10 B TX–
9 B TX+
R 1(A), R 2(B), R 3(C)
Radio and Player
MUTE
L–
L+
R–
R+
SGND
6 C
5 C
4 C
3 C
2 C
1 C
(Shielded)
45 IJ1
50 IJ1
49 IJ1
48 IJ1
47 IJ1
51 IJ1
12 A LMUT
7 A L–
8 A L+
9 A R–
10 A R+
11 A SG1
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU

Radio and Player (w/ Rear Seat Entertainment System)

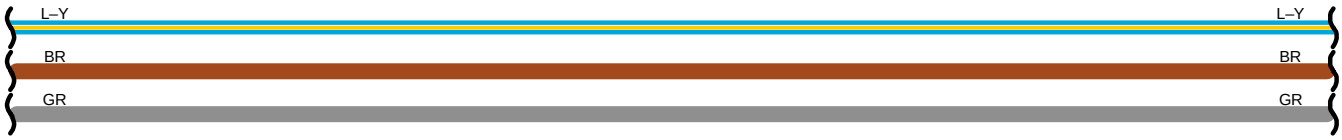




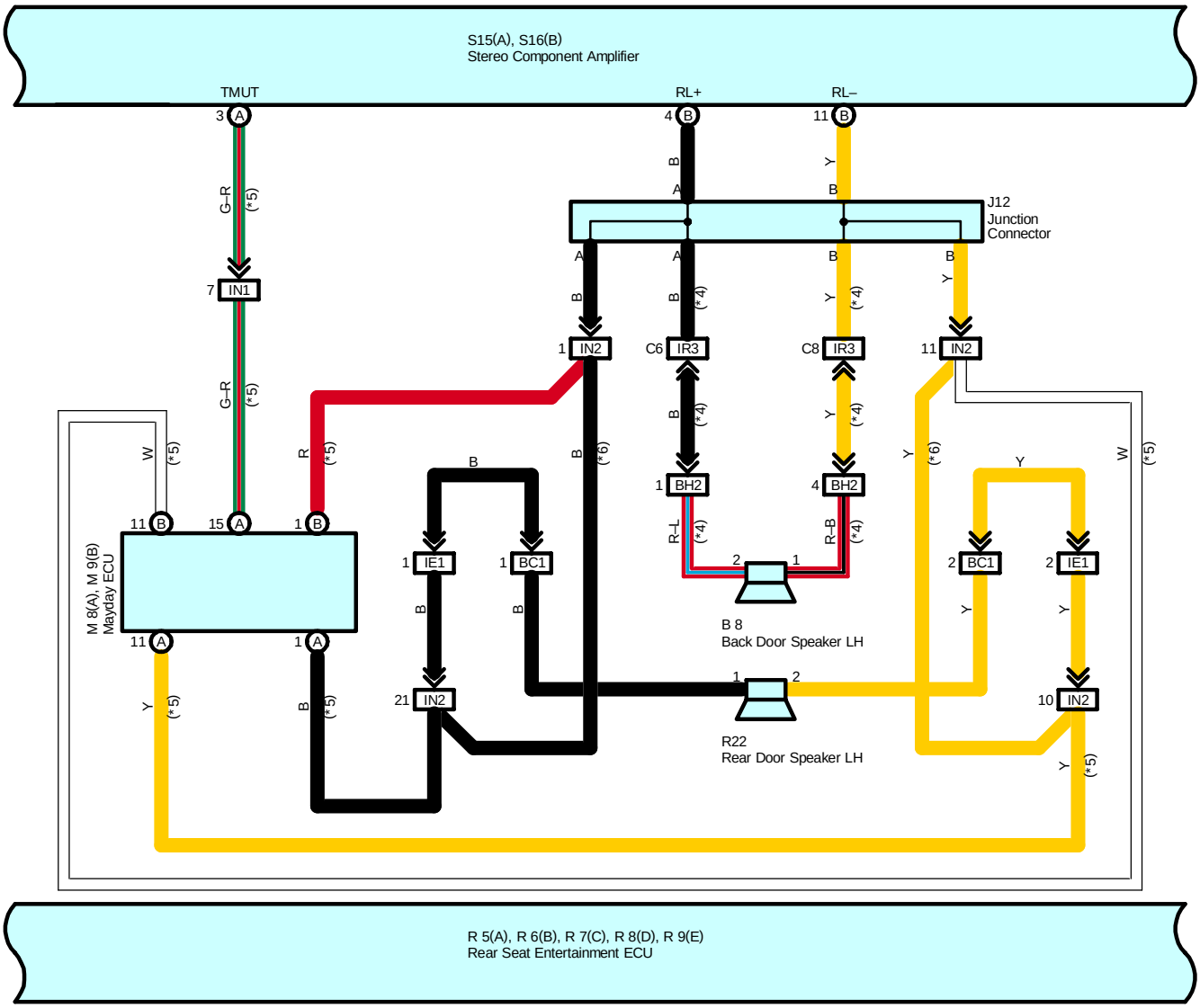
* 3 : 12 Speaker
* 4 : 9 Speaker

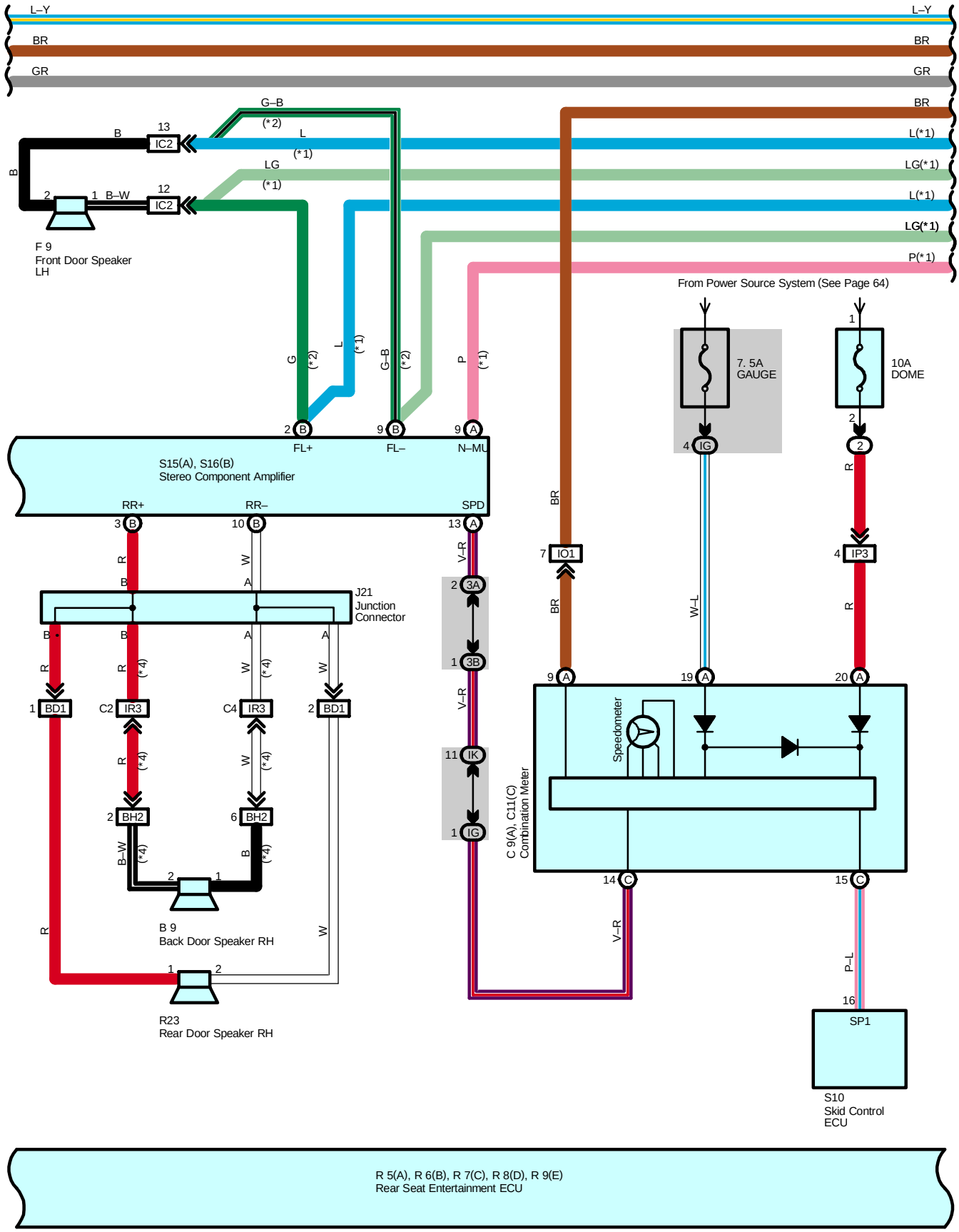
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU

Radio and Player (w/ Rear Seat Entertainment System)

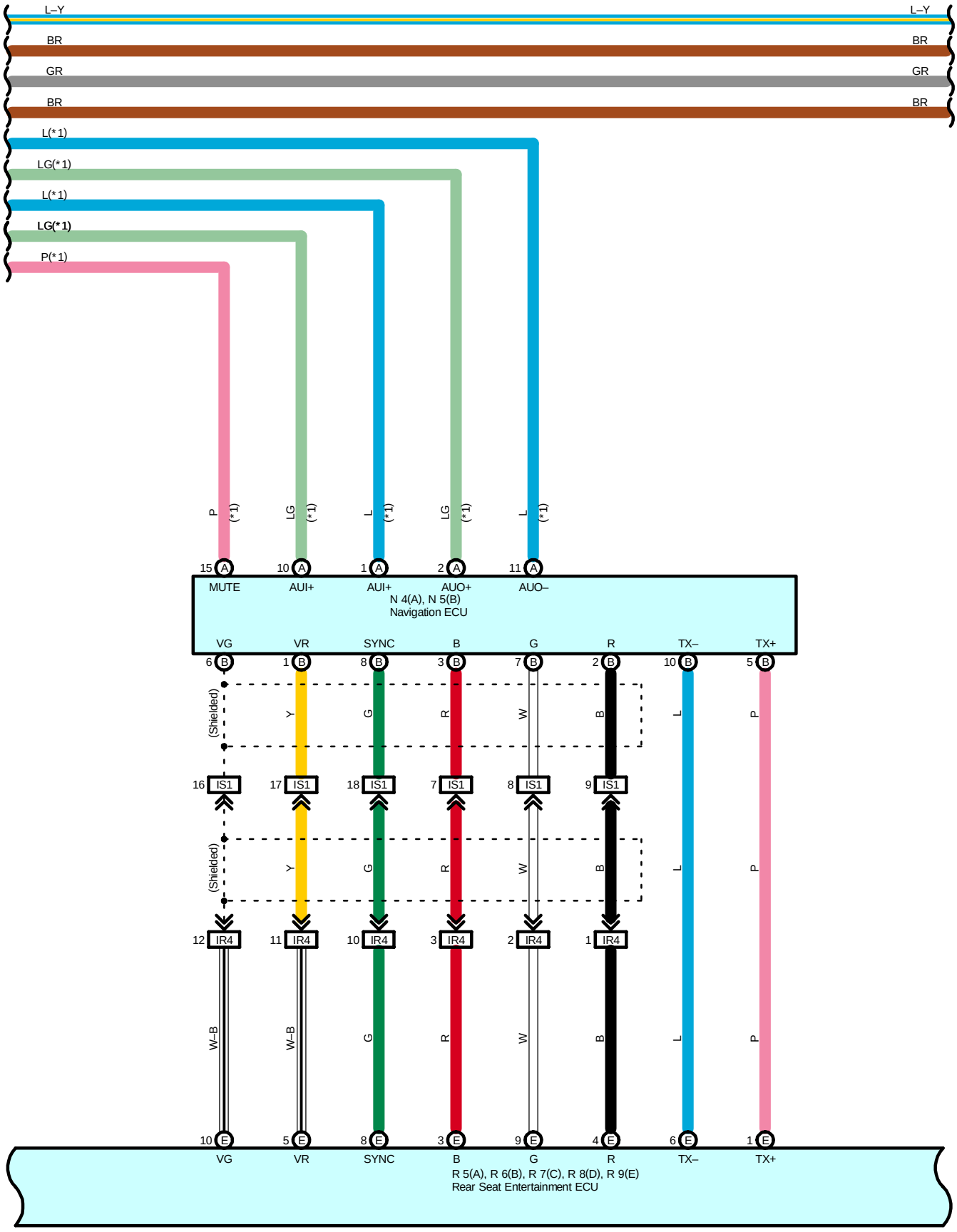


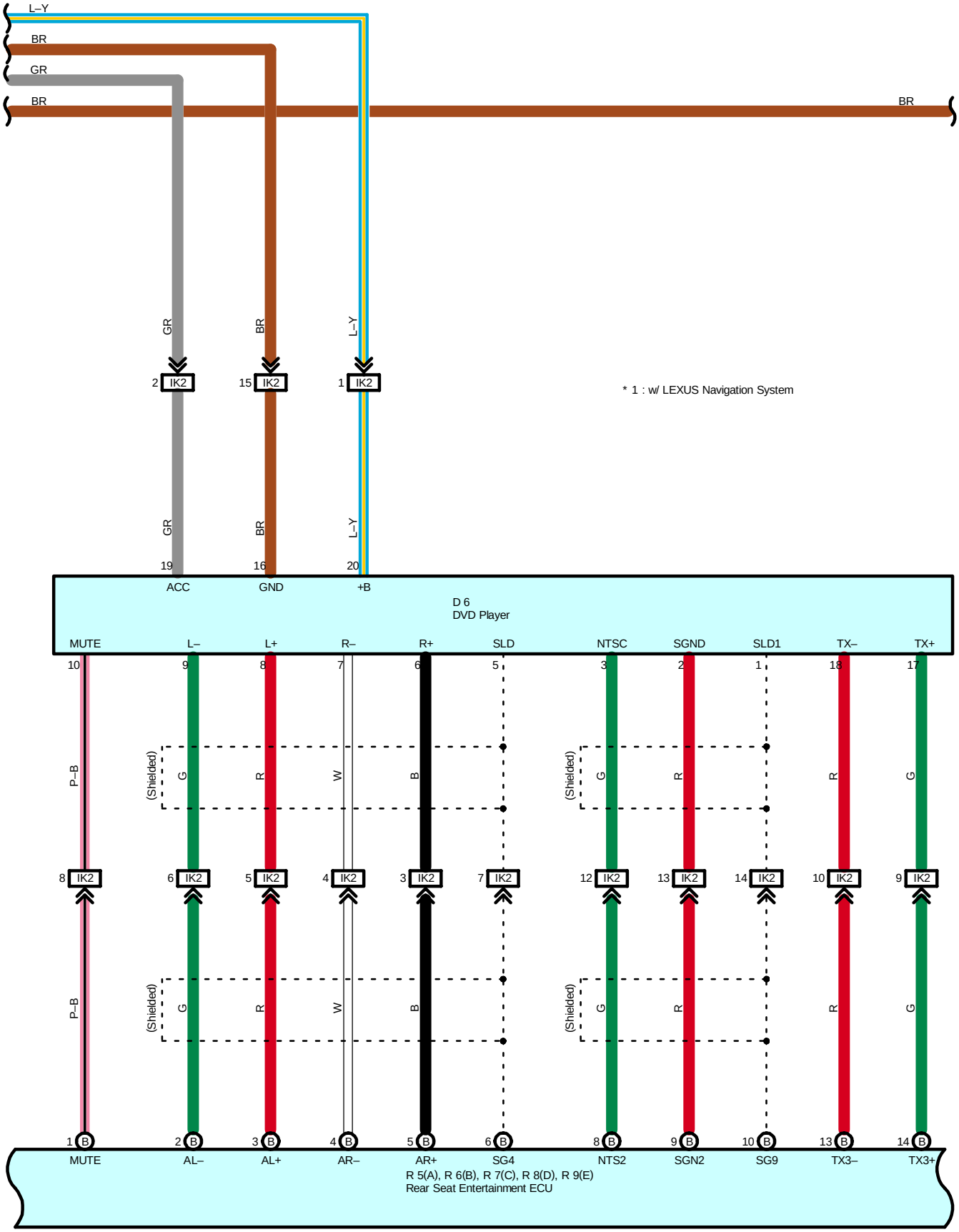
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
* 4 : 12 Speaker
* 5 : w/ LEXUS Link System (Mayday System)
* 6 : w/o LEXUS Link System (Mayday System)



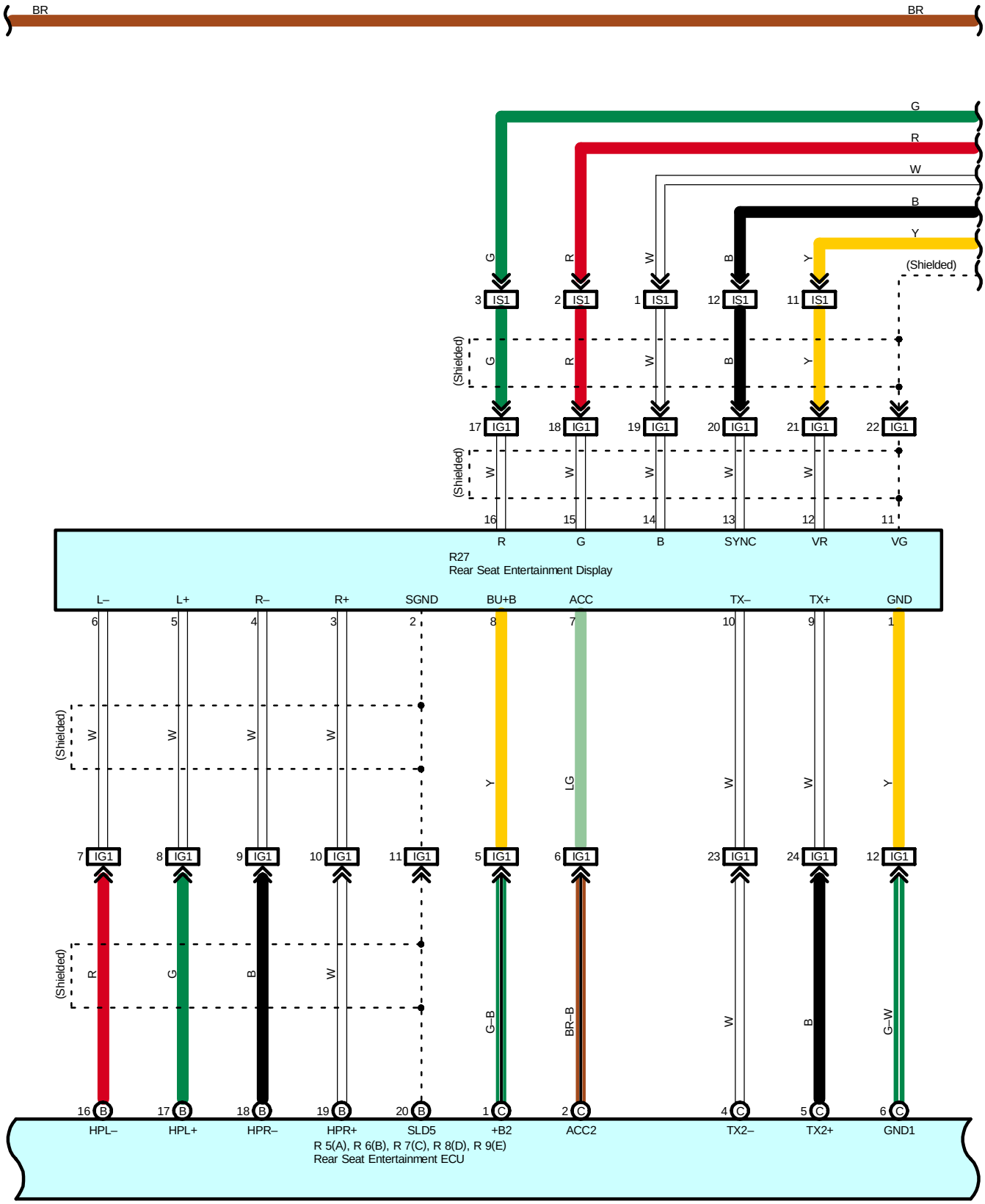

L–Y
BR
GR
G–B
(*2)
L
(*1)
LG
(*1)
B
13
IC2
12
IC2
2
1
B–W
F 9
Front Door Speaker
LH
From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
S15(A), S16(B)
Stereo Component Amplifier
RR+
RR–
SPD
FL+
FL–
N–MU
J21
Junction
Connector
BD1
IR3
BH2
IO1
IP3
3A
3B
IK
IG
Speedometer
C 9(A), C11(C)
Combination Meter
B 9
Back Door Speaker RH
R23
Rear Door Speaker RH
SP1
S10
Skid Control
ECU
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU

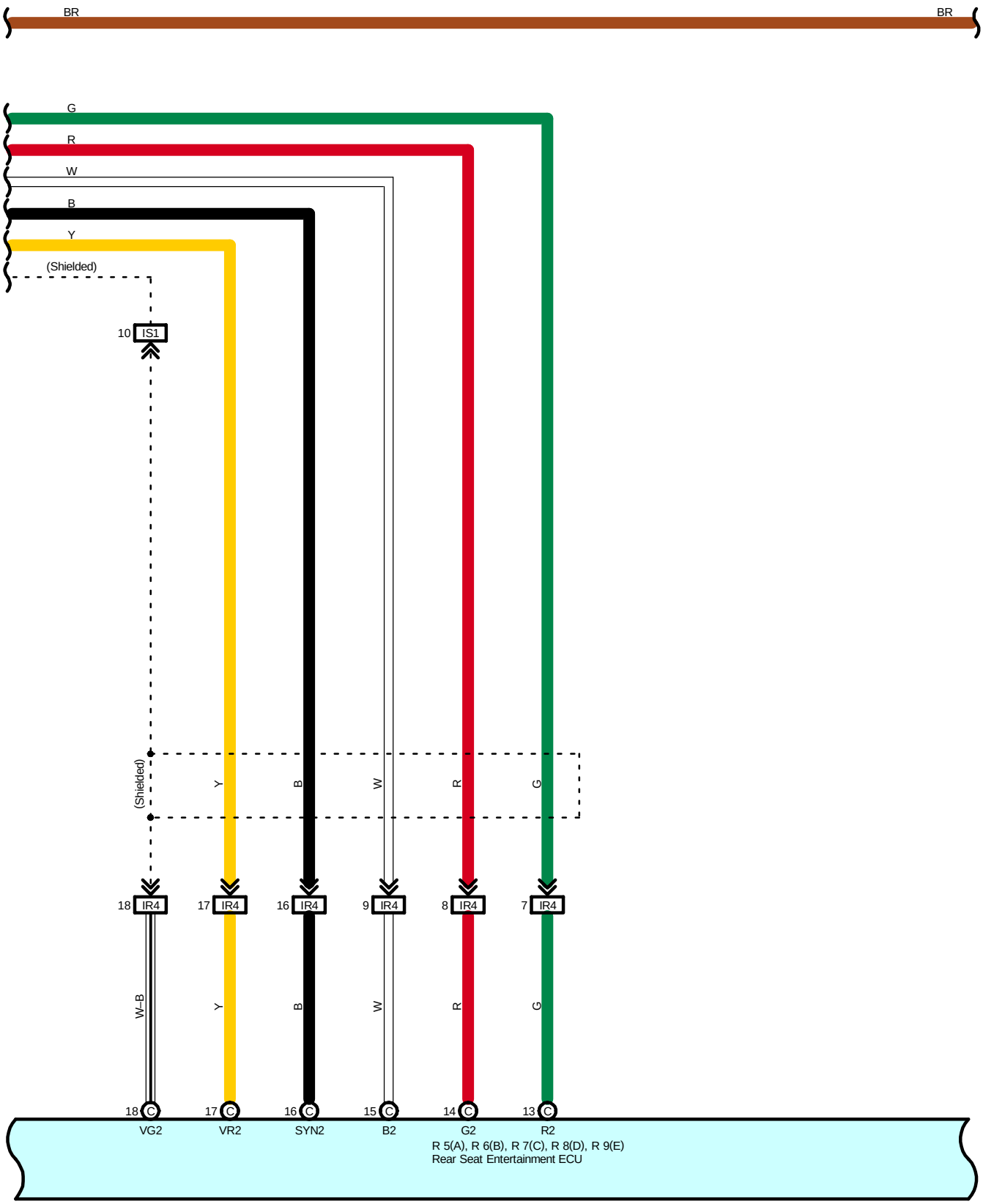
Radio and Player (w/ Rear Seat Entertainment System)

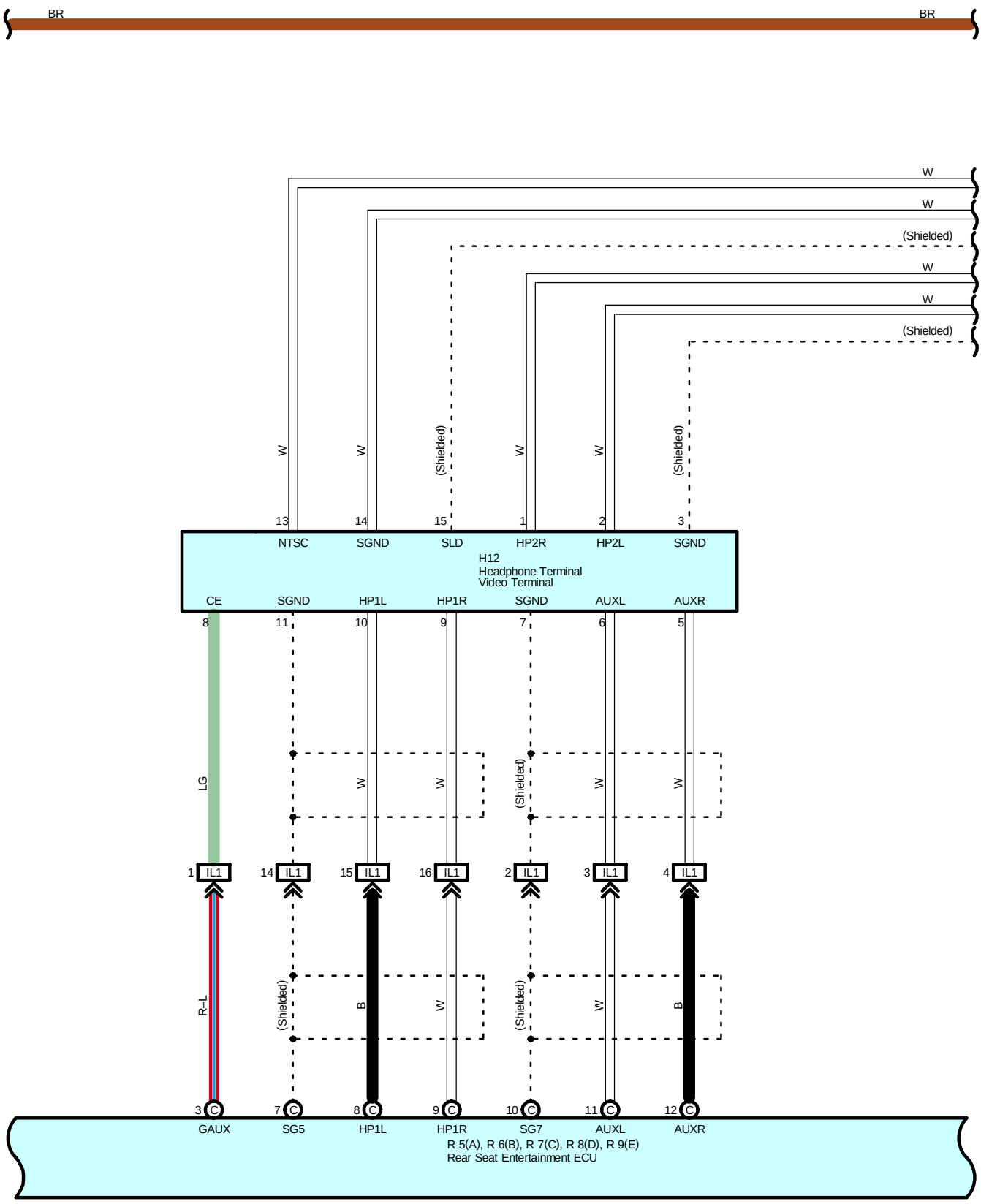


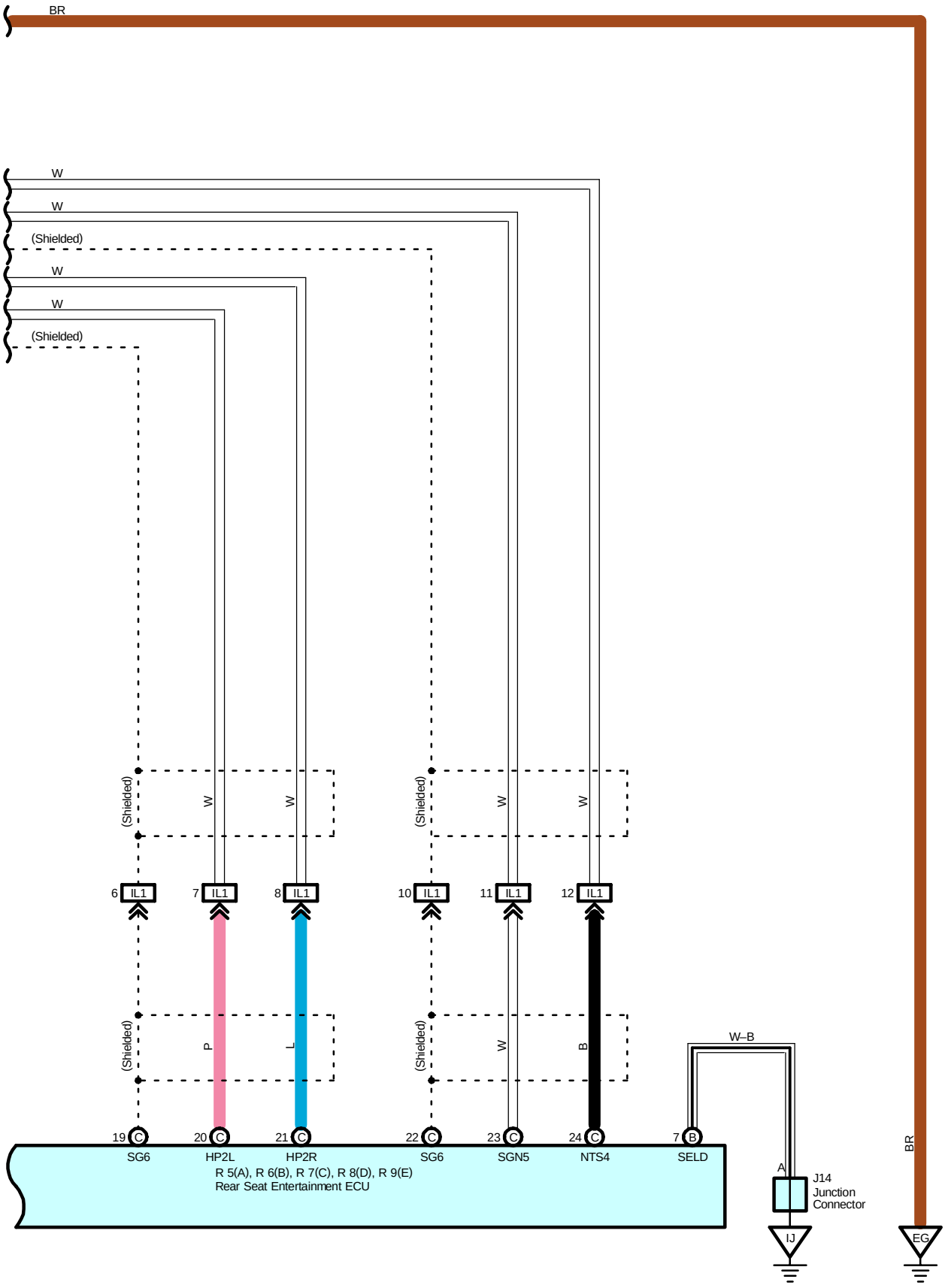

L–Y
BR
GR
BR
BR
GR
BR
L–Y
2 IK2
15 IK2
1 IK2
* 1 : w/ LEXUS Navigation System
GR
BR
L–Y
19
16
20
ACC
GND
+B
D 6
DVD Player
MUTE
L–
L+
R–
R+
SLD
NTSC
SGND
SLD1
TX–
TX+
10
9
8
7
6
5
3
2
1
18
17
P–B
(Shielded)
G
R
W
B
G
R
R
G
8 IK2
6 IK2
5 IK2
4 IK2
3 IK2
7 IK2
12 IK2
13 IK2
14 IK2
10 IK2
9 IK2
1 B
2 B
3 B
4 B
5 B
6 B
8 B
9 B
10 B
13 B
14 B
MUTE
AL–
AL+
AR–
AR+
SG4
NTS2
SGN2
SG9
TX3–
TX3+
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU

Radio and Player (w/ Rear Seat Entertainment System)




BR
BR
G
R
W
B
Y
(Shielded)
10 IS1
(Shielded)
Y
B
W
R
G
18 IR4
17 IR4
16 IR4
9 IR4
8 IR4
7 IR4
W–B
Y
B
W
R
G
18 C
17 C
16 C
15 C
14 C
13 C
VG2
VR2
SYN2
B2
G2
R2
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU


BR
BR
W
W
(Shielded)
W
W
(Shielded)
W
W
(Shielded)
(Shielded)
13 NTSC
14 SGND
15 SLD
1 HP2R
2 HP2L
3 SGND
H12
Headphone Terminal
Video Terminal
CE
SGND
HP1L
HP1R
SGND
AUXL
AUXR
8
11
10
9
7
6
5
LG
W
W
(Shielded)
W
W
1 IL1
14 IL1
15 IL1
16 IL1
2 IL1
3 IL1
4 IL1
R–L
(Shielded)
B
W
(Shielded)
W
B
3 C
7 C
8 C
9 C
10 C
11 C
12 C
GAUX
SG5
HP1L
HP1R
SG7
AUXL
AUXR
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU


BR
W
W
(Shielded)
W
W
(Shielded)
(Shielded)
W
W
(Shielded)
W
W
6 IL1
7 IL1
8 IL1
10 IL1
11 IL1
12 IL1
(Shielded)
P
L
(Shielded)
W
B
19 C
20 C
21 C
22 C
23 C
24 C
7 B
SG6
HP2L
HP2R
SG6
SGN5
NTS4
SELD
R 5(A), R 6(B), R 7(C), R 8(D), R 9(E)
Rear Seat Entertainment ECU
W–B
A
J14
Junction
Connector
IJ
BR
EG

Radio and Player (w/ Rear Seat Entertainment System)

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	R2 B	41
B8	42	H12	39	R3 C	41
B9	42	J12	40	R5 A	41
C3	38	J14	40	R6 B	41
C6	38	J19	40	R7 C	41
C9 A	38	J21	40	R8 D	41
C11 C	38	J23	40	R9 E	41
C13	38	M7 C	40	R22	44
D6	39	M8 A	44	R23	44
F9	43	M9 B	44	R27	44
F10	43	M14 D	40	S10	41
F11	43	N4 A	40	S15 A	41
F12	43	N5 B	40	S16 B	41
F13	43	R1 A	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)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2		
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)
IR3	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)
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)

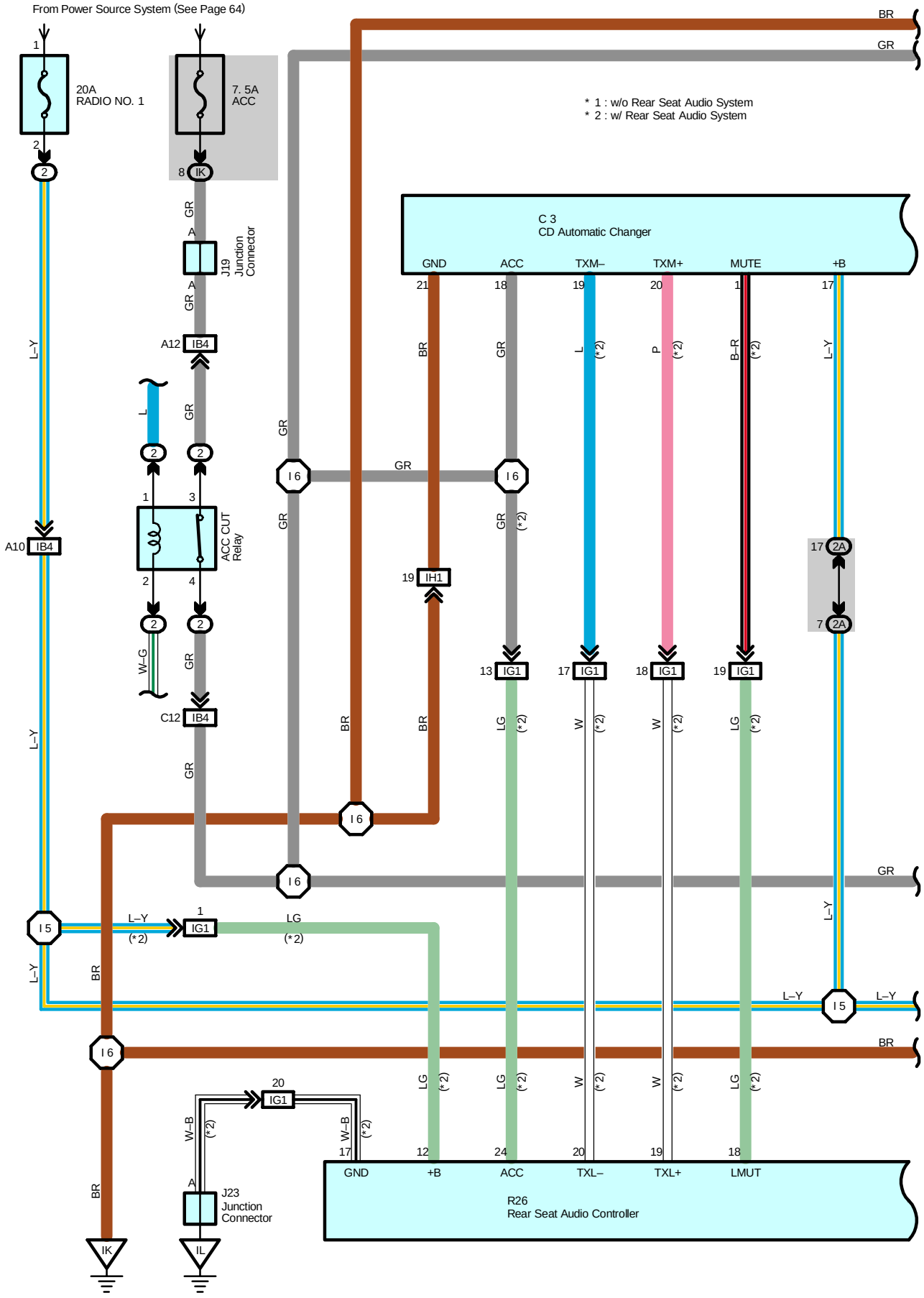
: Ground Points

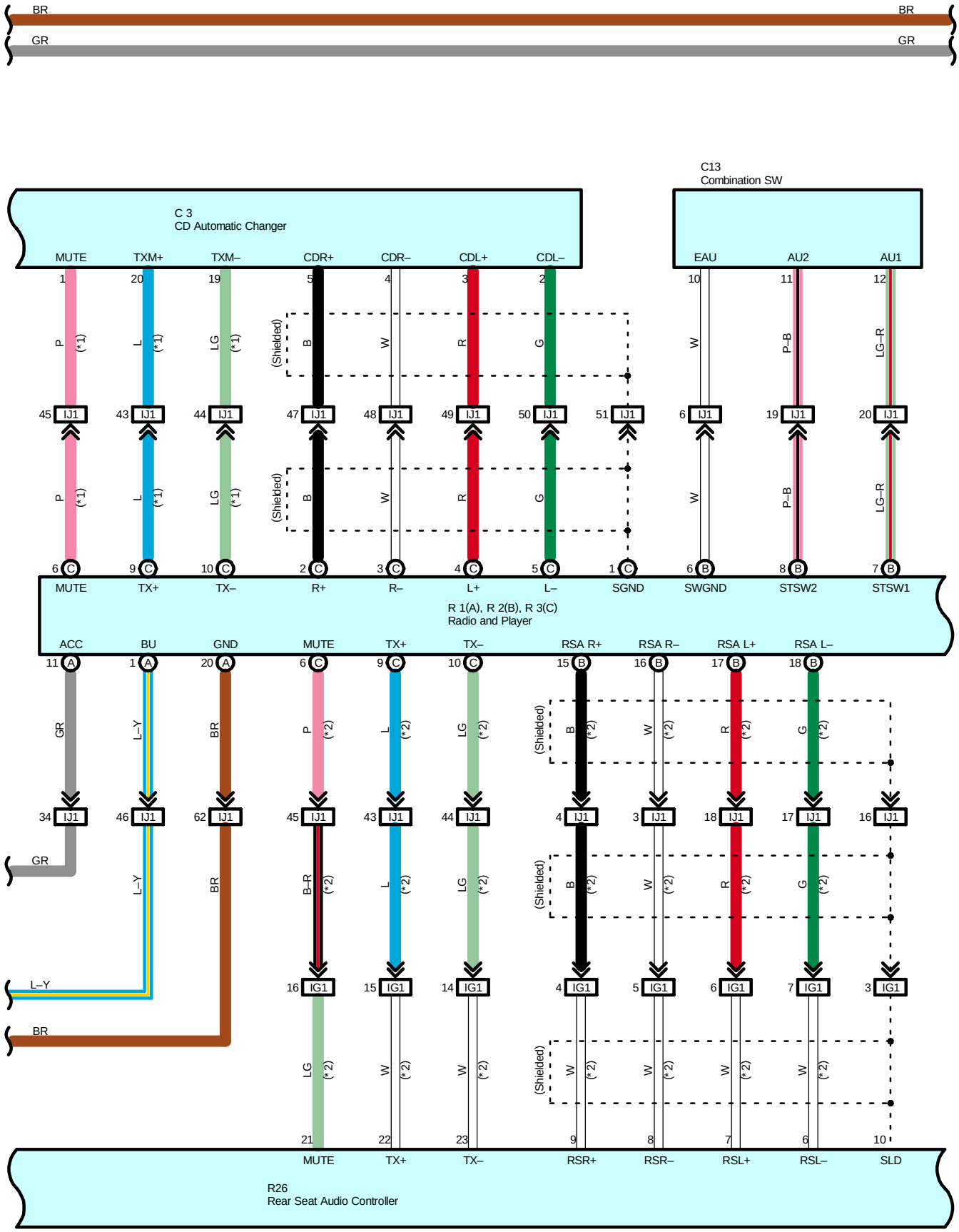
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IJ	50	Near the Right Side of Steering Column
IK	50	Instrument Panel Brace LH
IL	50	Right Kick Panel

: Splice Points

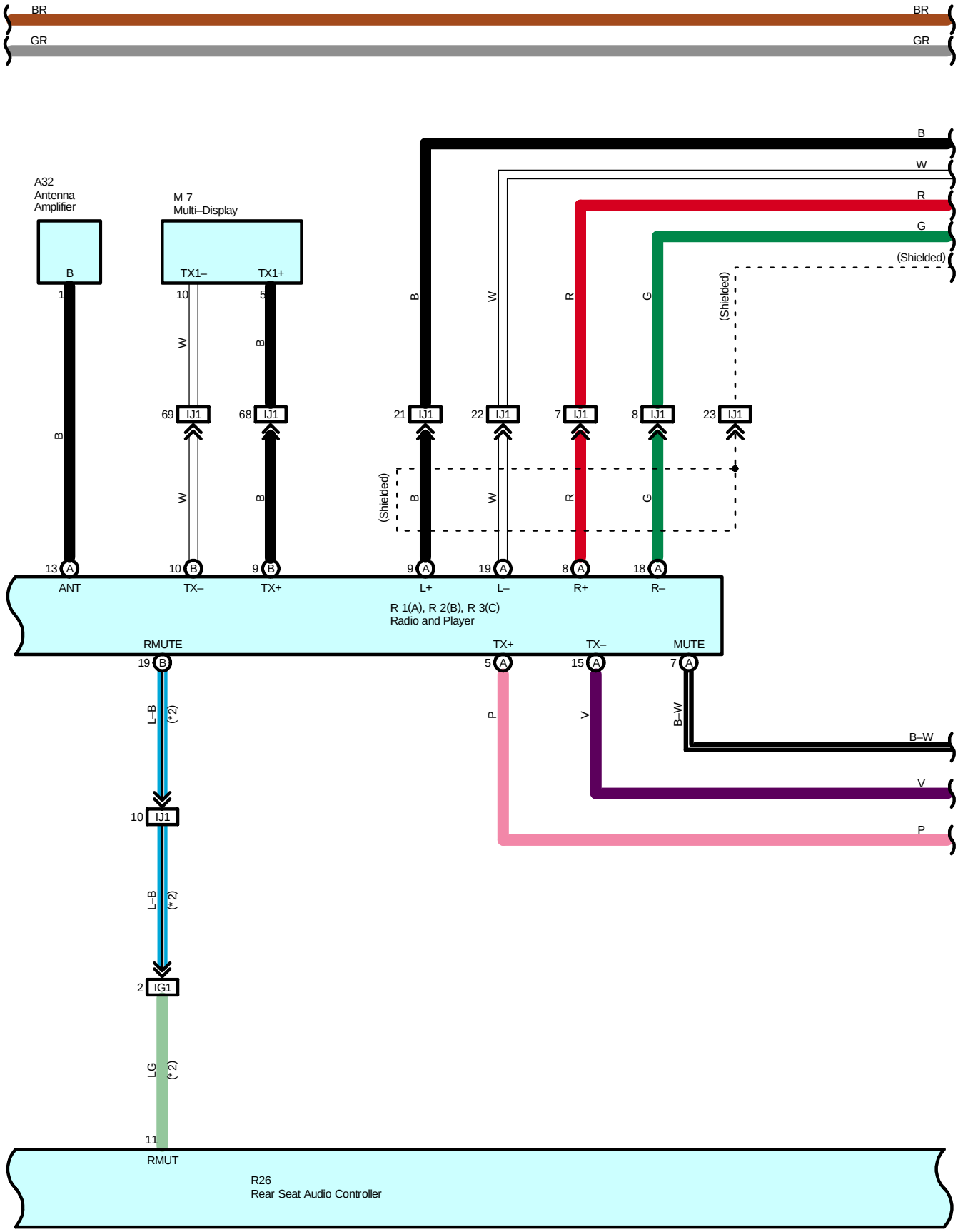
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I6	52	Instrument Panel Wire

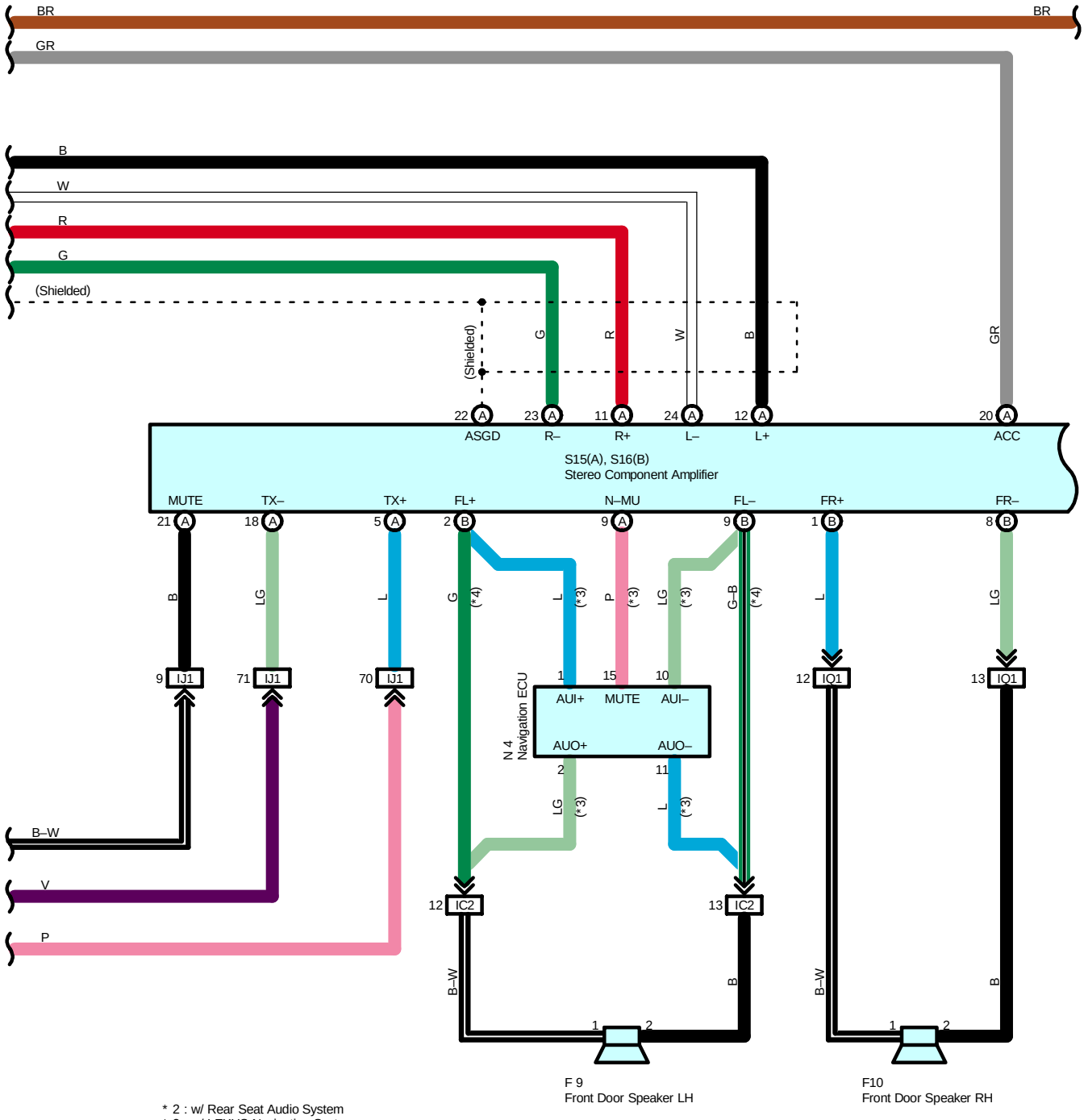
Radio and Player (w/o Rear Seat Entertainment System)



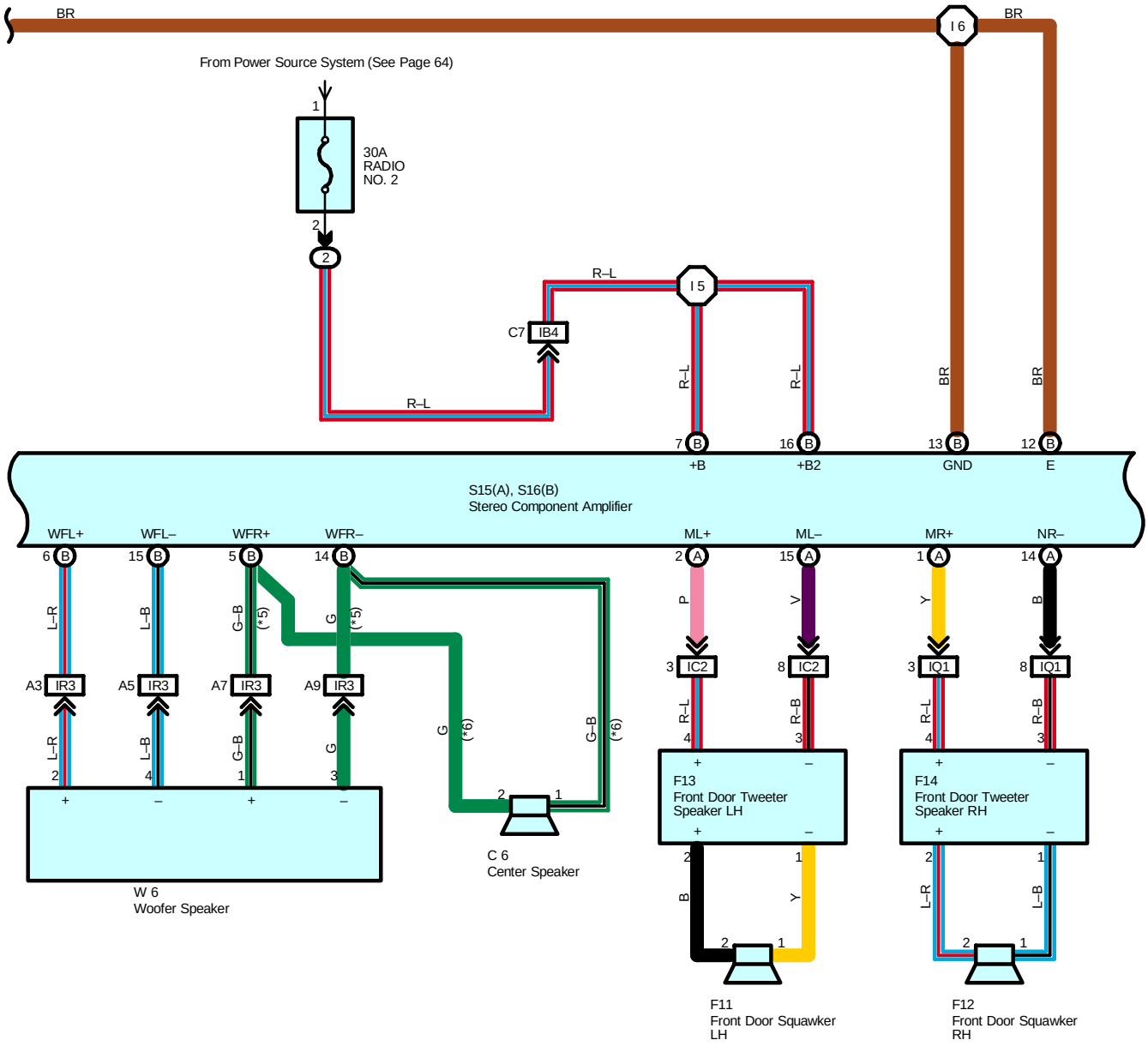

BR
GR
BR
GR
C13
Combination SW
C 3
CD Automatic Changer
MUTE
TXM+
TXM–
CDR+
CDR–
CDL+
CDL–
EAU
AU2
AU1
(Shielded)
(*1)
(*2)
IJ1
IG1
MUTE
TX+
TX–
R+
R–
L+
L–
SGND
SWGND
STSW2
STSW1
R 1(A), R 2(B), R 3(C)
Radio and Player
ACC
BU
GND
RSA R+
RSA R–
RSA L+
RSA L–
GR
L–Y
BR
B–R
W
R
G
LG
P
L
P–B
LG–R
RSR+
RSR–
RSL+
RSL–
SLD
R26
Rear Seat Audio Controller

Radio and Player (w/o Rear Seat Entertainment System)

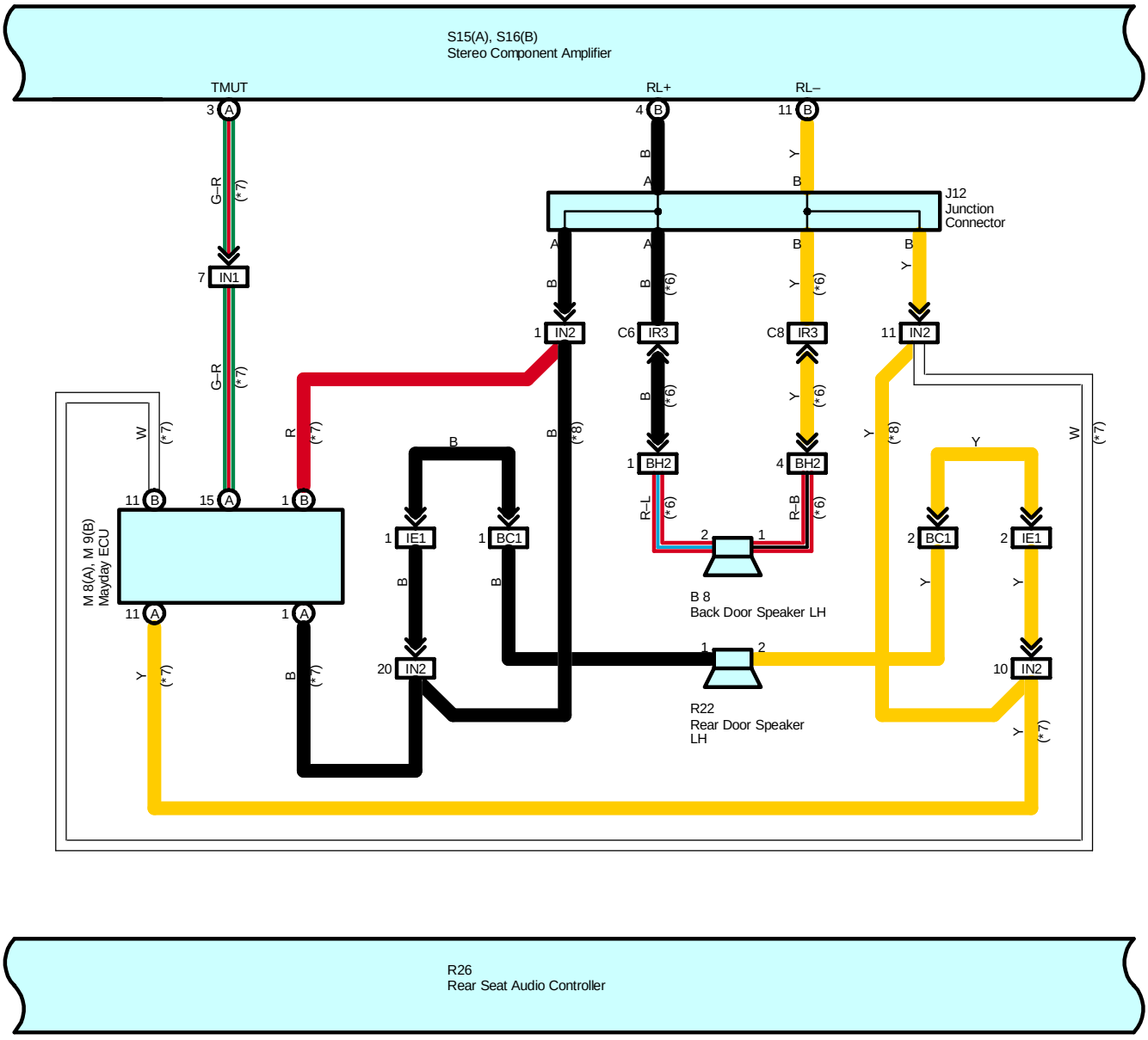



BR
BR
GR
B
W
R
G
(Shielded)
(Shielded)
G
R
W
B
GR
22 A ASGD
23 A R–
11 A R+
24 A L–
12 A L+
20 A ACC
S15(A), S16(B)
Stereo Component Amplifier
MUTE
TX–
TX+
FL+
N–MU
FL–
FR+
FR–
21 A
18 A
5 A
2 B
9 A
9 B
1 B
8 B
B
LG
L
G (*4)
L (*3)
P (*3)
LG (*3)
G–B (*4)
L
LG
9 IJ1
71 IJ1
70 IJ1
12 IQ1
13 IQ1
N 4
Navigation ECU
1 AUI+
15 MUTE
10 AUI–
2 AUO+
11 AUO–
LG (*3)
L (*3)
B–W
V
P
12 IC2
13 IC2
B–W
B
1
2
F 9
Front Door Speaker LH
F10
Front Door Speaker RH
* 2 : w/ Rear Seat Audio System
* 3 : w/ LEXUS Navigation System
* 4 : w/o LEXUS Navigation System
R26
Rear Seat Audio Controller

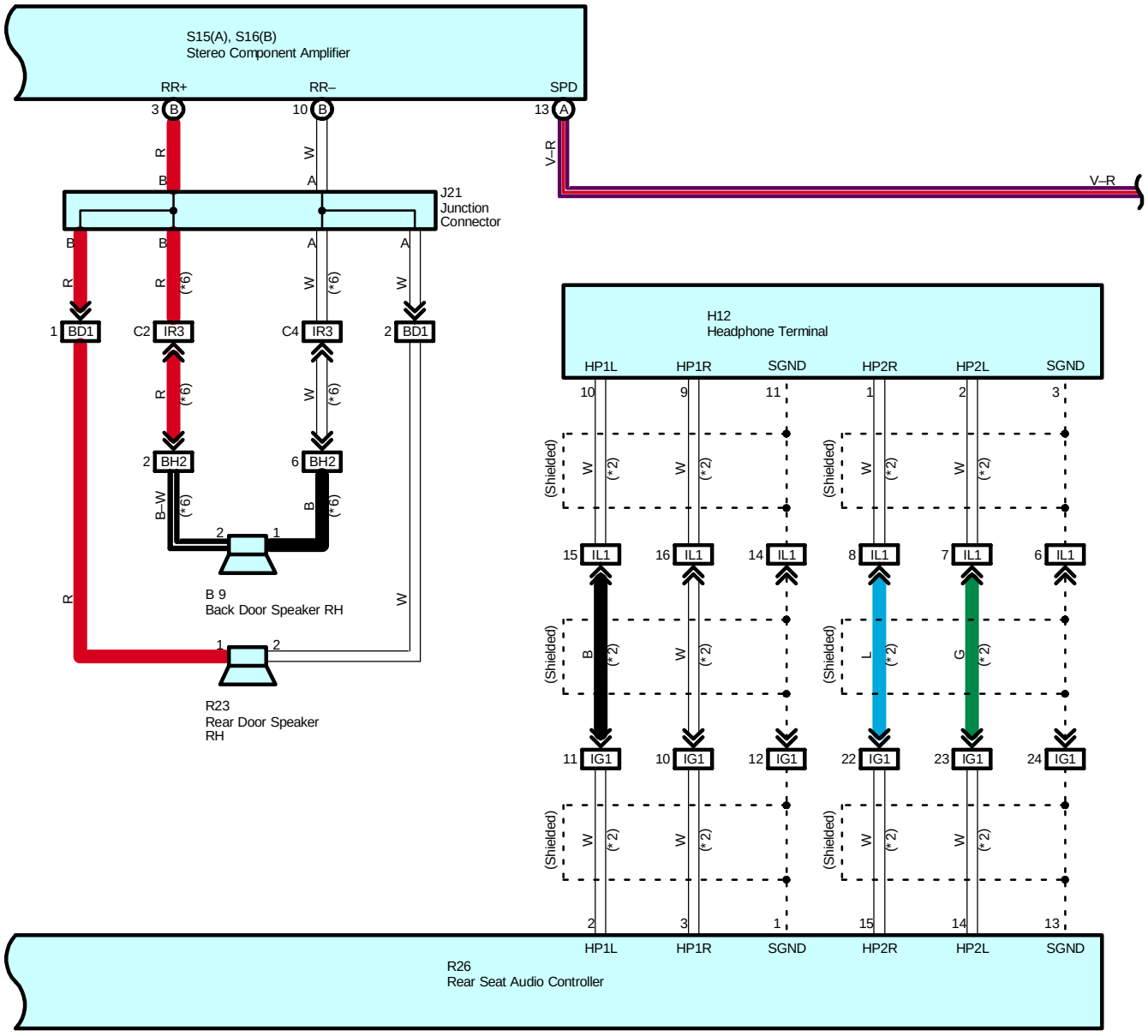
Radio and Player (w/o Rear Seat Entertainment System)

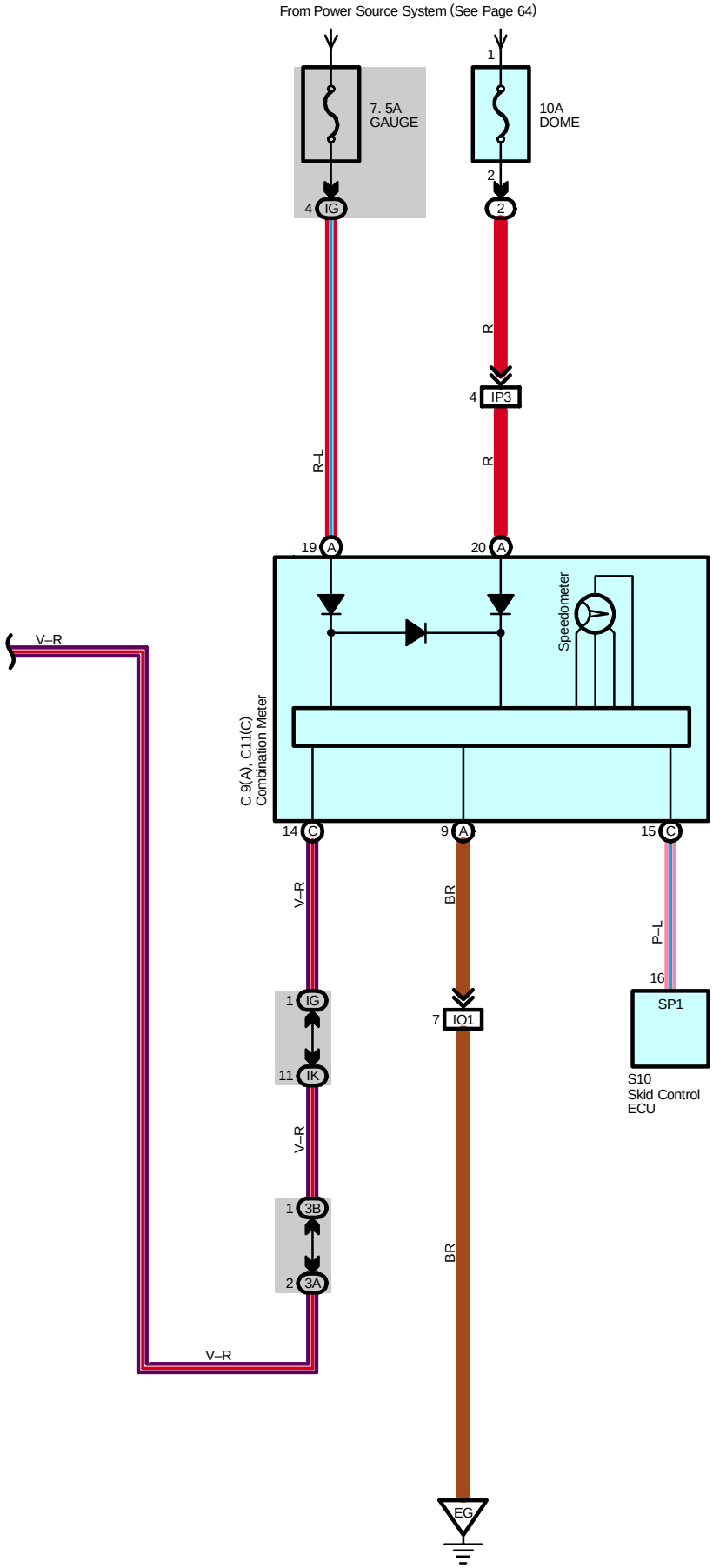


* 5 : 9 Speaker
* 6 : 12 Speaker
* 7 : w/ LEXUS Link System (Mayday System)
* 8 : w/o LEXUS Link System (Mayday System)



* 2 : w/ Rear Seat Audio System
* 6 : 12 Speaker




From Power Source System (See Page 64)
7. 5A
GAUGE
10A
DOME
1
2
4 IG
2
R
4 IP3
R
R–L
19 A
20 A
Speedometer
V–R
C 9(A), C11(C)
Combination Meter
14 C
9 A
15 C
V–R
BR
P–L
16
SP1
1 IG
11 IK
7 IO1
S10
Skid Control
ECU
V–R
1 3B
2 3A
BR
V–R
EG

Radio and Player (w/o Rear Seat Entertainment System)

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	N4	40
B8	42	F13	43	R1 A	41
B9	42	F14	43	R2 B	41
C3	38	H12	39	R3 C	41
C6	38	J12	40	R22	44
C9 A	38	J19	40	R23	44
C11 C	38	J21	40	R26	44
C13	38	J23	40	S10	41
F9	43	M7	40	S15 A	41
F10	43	M8 A	44	S16 B	41
F11	43	M9 B	44	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**

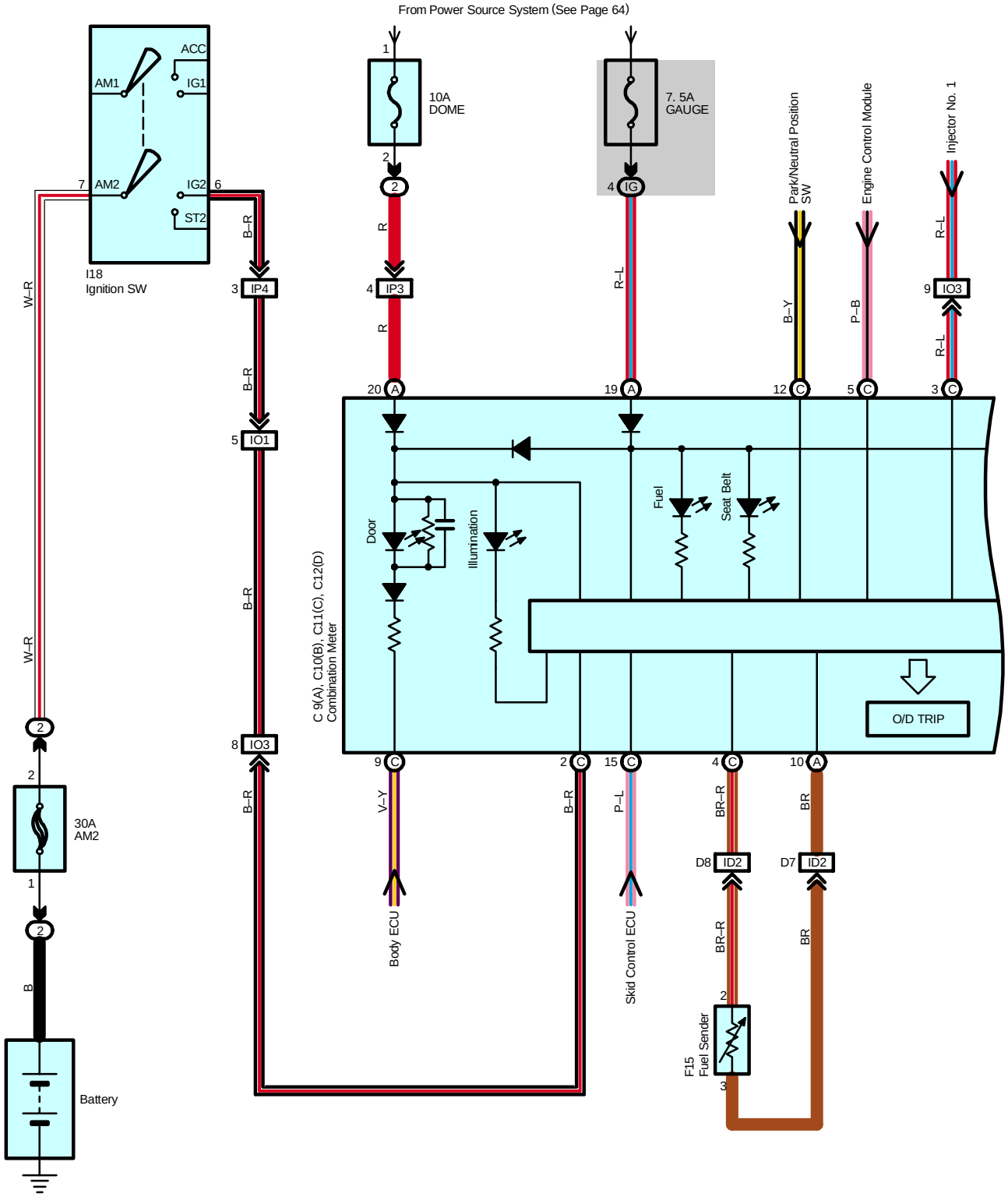
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB4	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC2	50	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IE1	52	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IG1	52	Radio 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)
IL1	52	Radio Installation Sub Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2		
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)
IR3	56	Instrument Panel Wire and Floor 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)
BH2	60	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

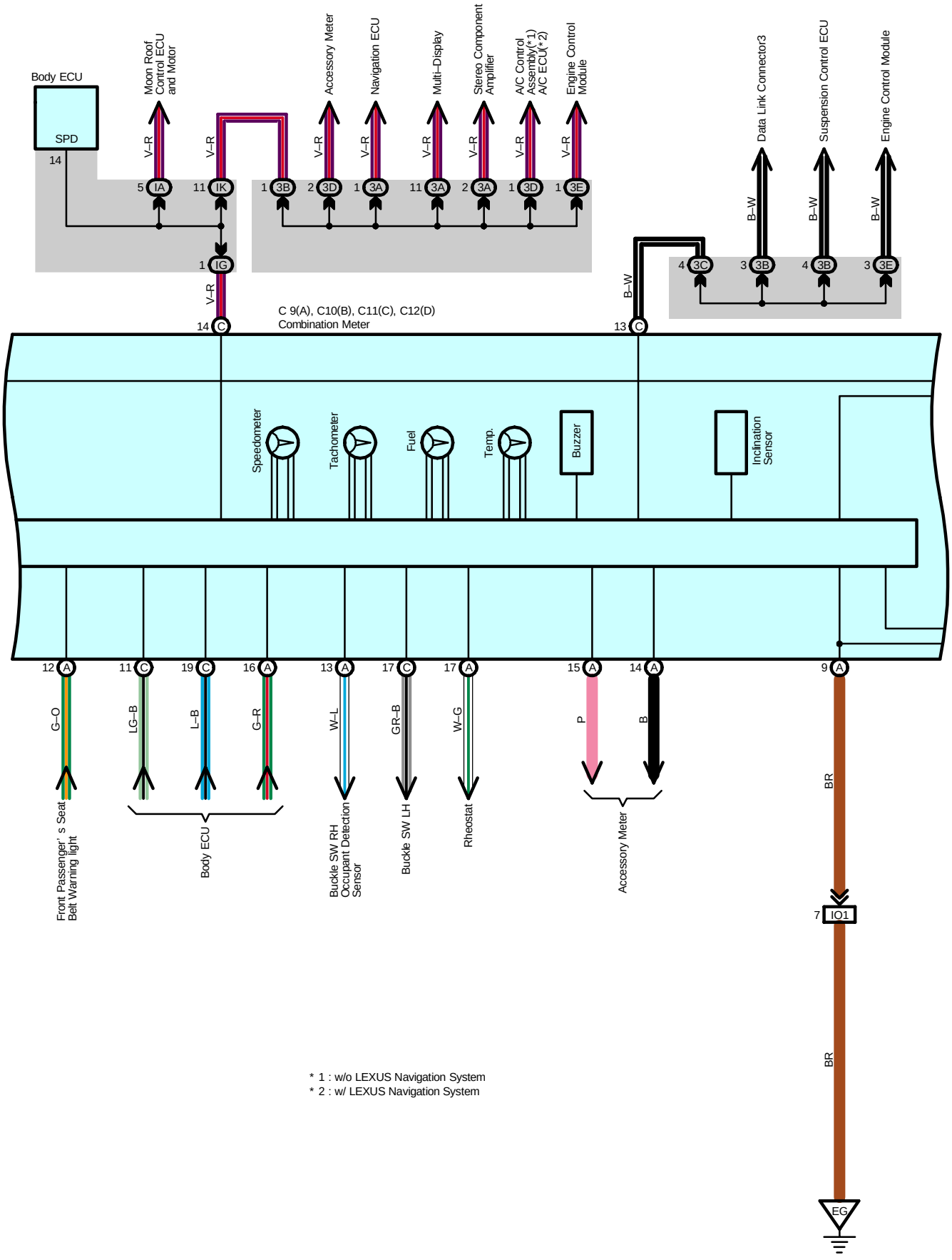
: **Ground Points**

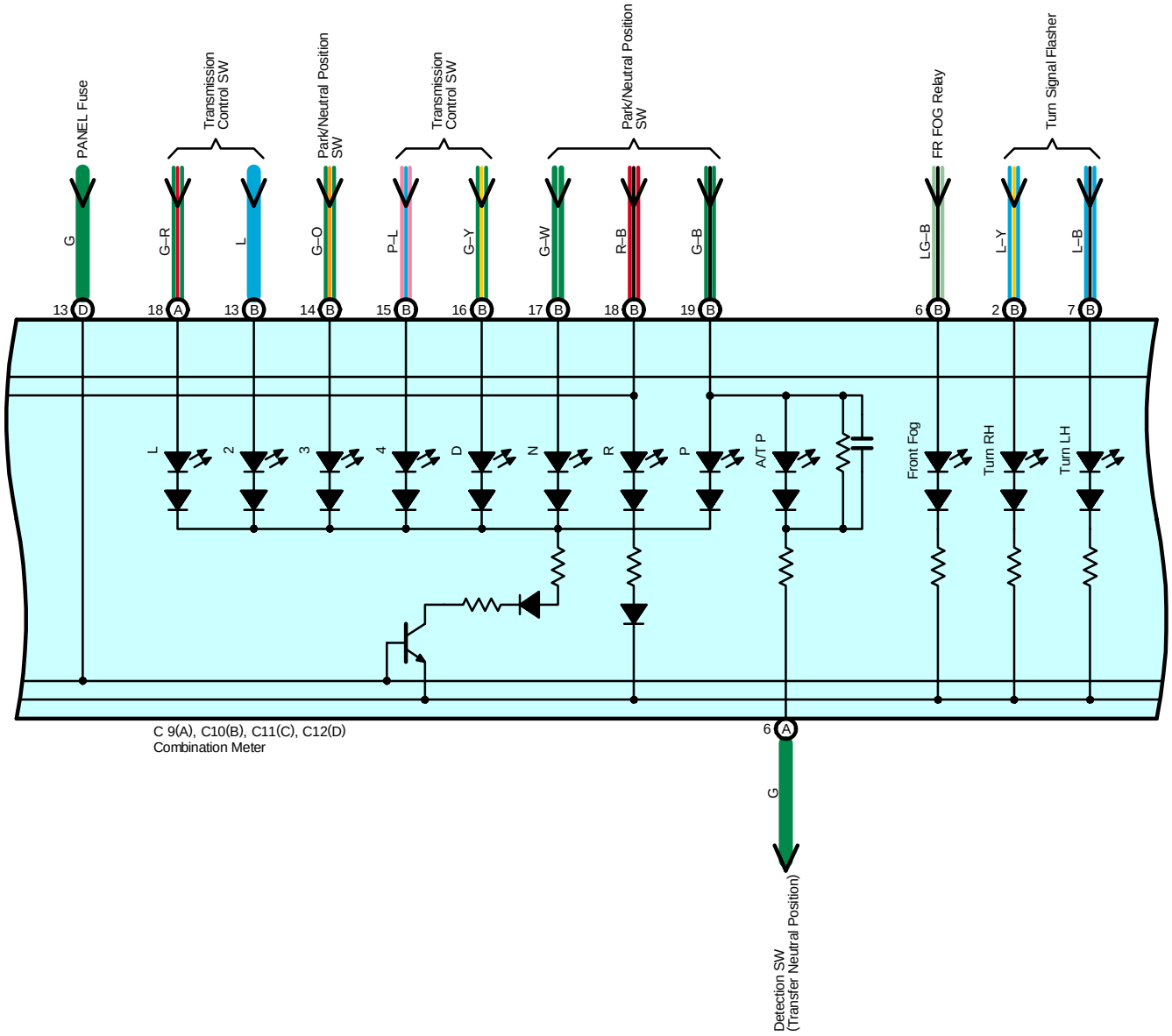
Code	See Page	Ground Points Location
EG	48	Rear Bank of Left Cylinder Head
IK	50	Instrument Panel Brace LH
IL	50	Right Kick Panel

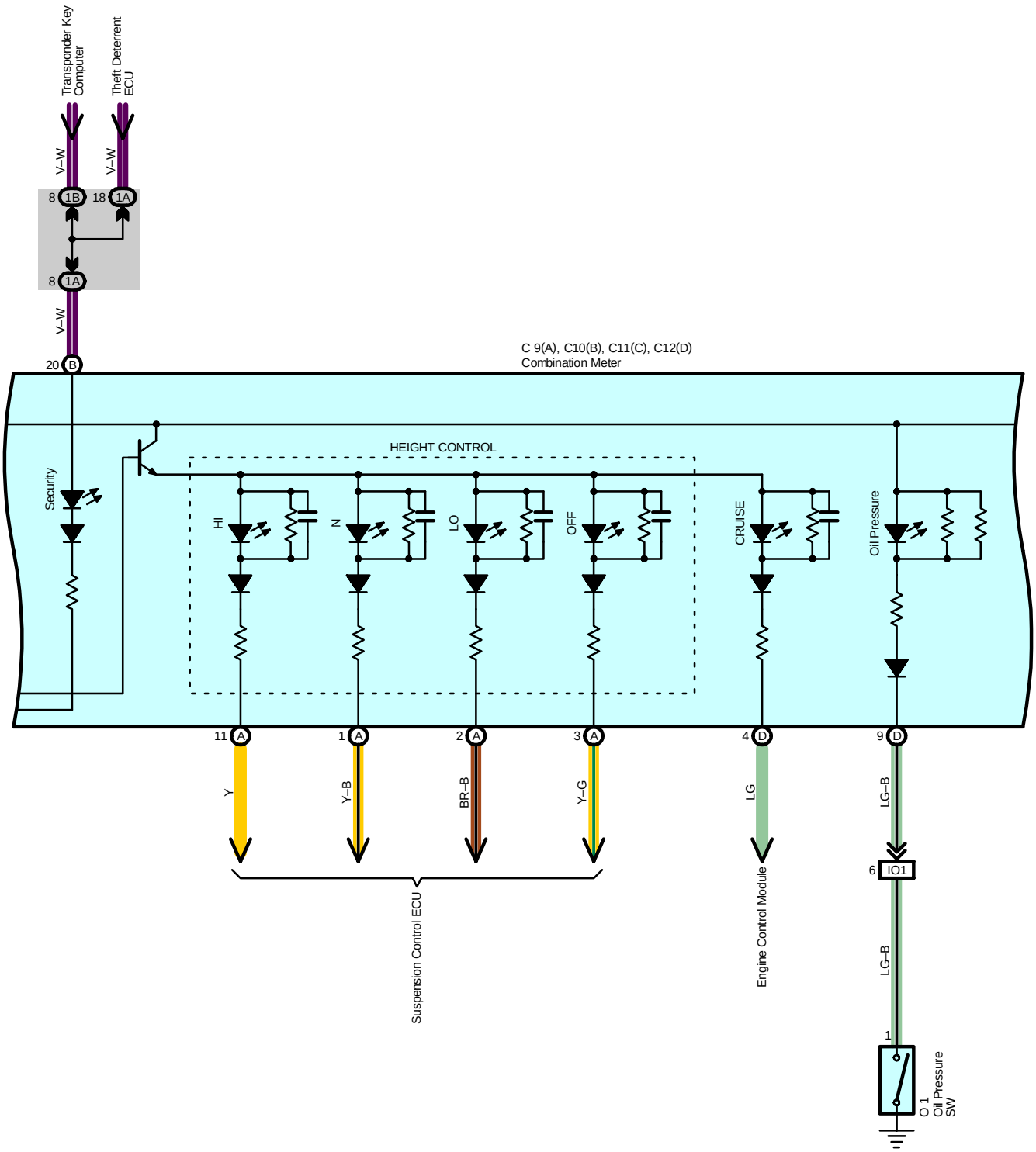
: **Splice Points**

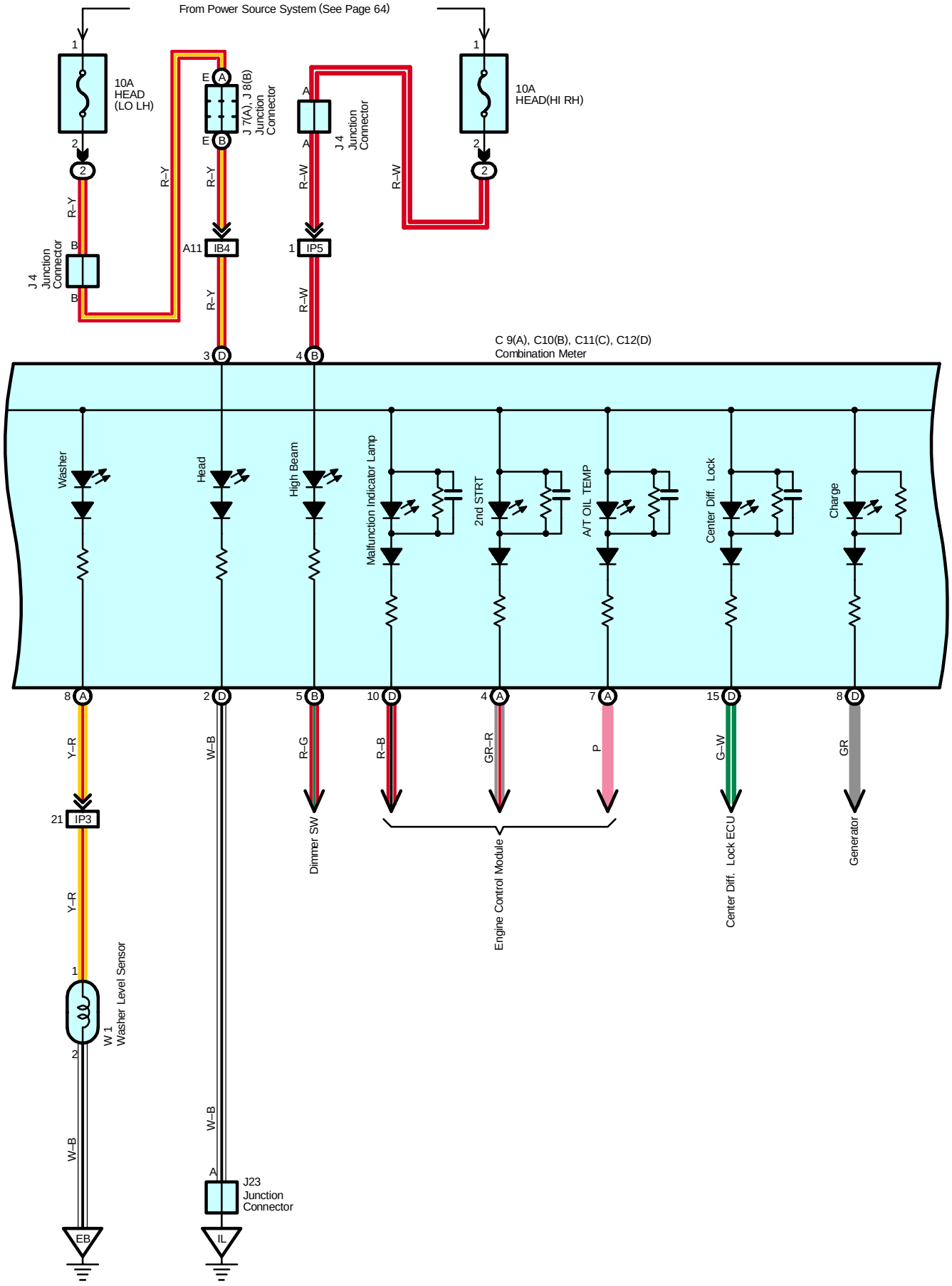
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	52	Instrument Panel Wire	I6	52	Instrument Panel Wire

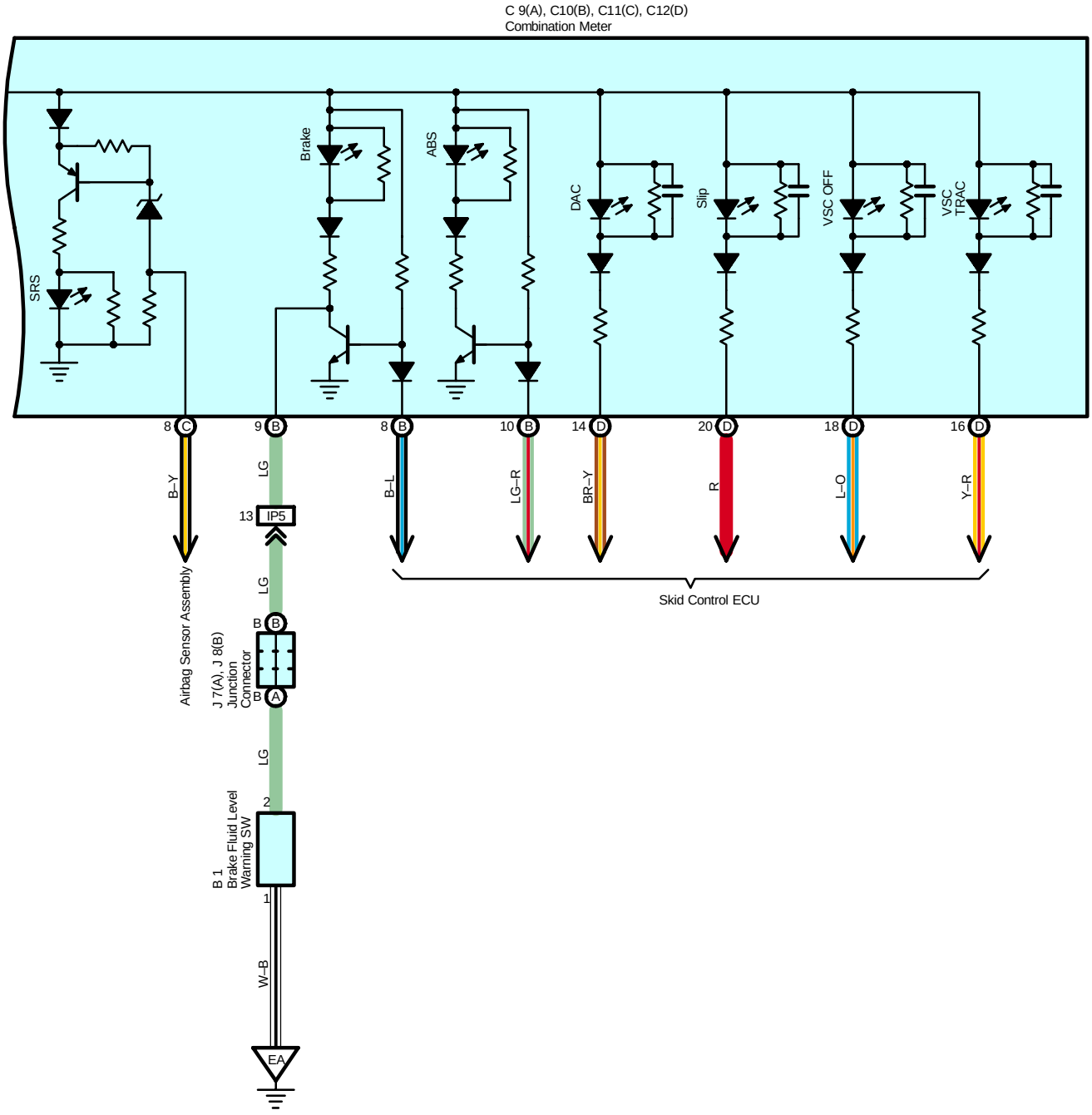

From Power Source System (See Page 64)
ACC
AM1
IG1
AM2
IG2
ST2
I18
Ignition SW
W–R
B–R
10A
DOME
7. 5A
GAUGE
IG
R
R–L
B–Y
P–B
Park/Neutral Position SW
Engine Control Module
Injector No. 1
IP4
IP3
IO1
IO3
IO3
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
Door
Illumination
Fuel
Seat Belt
O/D TRIP
V–Y
B–R
P–L
BR–R
BR
ID2
ID2
Body ECU
Skid Control ECU
F15
Fuel Sender
30A
AM2
B
Battery


Body ECU
SPD
14
Moon Roof Control ECU and Motor
Accessory Meter
Navigation ECU
Multi–Display
Stereo Component Amplifier
A/C Control Assembly(*1) A/C ECU(*2)
Engine Control Module
Data Link Connector3
Suspension Control ECU
Engine Control Module
V–R
B–W
5 IA
11 IK
1 3B
2 3D
1 3A
11 3A
2 3A
1 3D
1 3E
4 3C
3 3B
4 3B
3 3E
1 IG
14 C
13 C
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
Speedometer
Tachometer
Fuel
Temp.
Buzzer
Inclination Sensor
12 A
11 C
19 C
16 A
13 A
17 C
17 A
15 A
14 A
9 A
G–O
LG–B
L–B
G–R
W–L
GR–B
W–G
P
B
BR
Front Passenger' s Seat Belt Warning light
Body ECU
Buckle SW RH Occupant Detection Sensor
Buckle SW LH
Rheostat
Accessory Meter
7 IO1
EG
* 1 : w/o LEXUS Navigation System
* 2 : w/ LEXUS Navigation System


PANEL Fuse
Transmission Control SW
Park/Neutral Position SW
Transmission Control SW
Park/Neutral Position SW
FR FOG Relay
Turn Signal Flasher
G
G–R
L
G–O
P–L
G–Y
G–W
R–B
G–B
LG–B
L–Y
L–B
13 D
18 A
13 B
14 B
15 B
16 B
17 B
18 B
19 B
6 B
2 B
7 B
L
2
3
4
D
N
R
P
A/T P
Front Fog
Turn RH
Turn LH
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
6 A
G
Detection SW
(Transfer Neutral Position)


Transponder Key Computer
Theft Deterrent ECU
V–W
V–W
8 1B 18 1A
8 1A
V–W
20 B
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
HEIGHT CONTROL
Security
HI
N
LO
OFF
CRUISE
Oil Pressure
11 A
1 A
2 A
3 A
4 D
9 D
Y
Y–B
BR–B
Y–G
LG
LG–B
6 IO1
LG–B
1
O 1
Oil Pressure SW
Suspension Control ECU
Engine Control Module


From Power Source System (See Page 64)
10A HEAD (LO LH)
J 7(A), J 8(B) Junction Connector
J 4 Junction Connector
10A HEAD(HI RH)
J 4 Junction Connector
R–Y
R–W
A11 IB4
1 IP5
C 9(A), C10(B), C11(C), C12(D) Combination Meter
Washer
Head
High Beam
Malfunction Indicator Lamp
2nd STRT
A/T OIL TEMP
Center Diff. Lock
Charge
Y–R
W–B
R–G
R–B
GR–R
P
G–W
GR
21 IP3
W 1 Washer Level Sensor
Dimmer SW
Engine Control Module
Center Diff. Lock ECU
Generator
J23 Junction Connector
EB
IL


C 9(A), C10(B), C11(C), C12(D)
Combination Meter
SRS
Brake
ABS
DAC
Slip
VSC OFF
VSC TRAC
8 C
9 B
8 B
10 B
14 D
20 D
18 D
16 D
B–Y
LG
B–L
LG–R
BR–Y
R
L–O
Y–R
13 IP5
Skid Control ECU
Airbag Sensor Assembly
J 7(A), J 8(B) Junction Connector
B B
B A
LG
2
B 1 Brake Fluid Level Warning SW
1
W–B
EA

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, (D) 2–Ground : Always continuity
(A)20–Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code		See Page	Code	See Page
B1		36	F15		43	J23	40
C9	A	38	I18		39	O1	37
C10	B	38	J4		37	W1	37
C11	C	38	J7	A	40		
C12	D	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

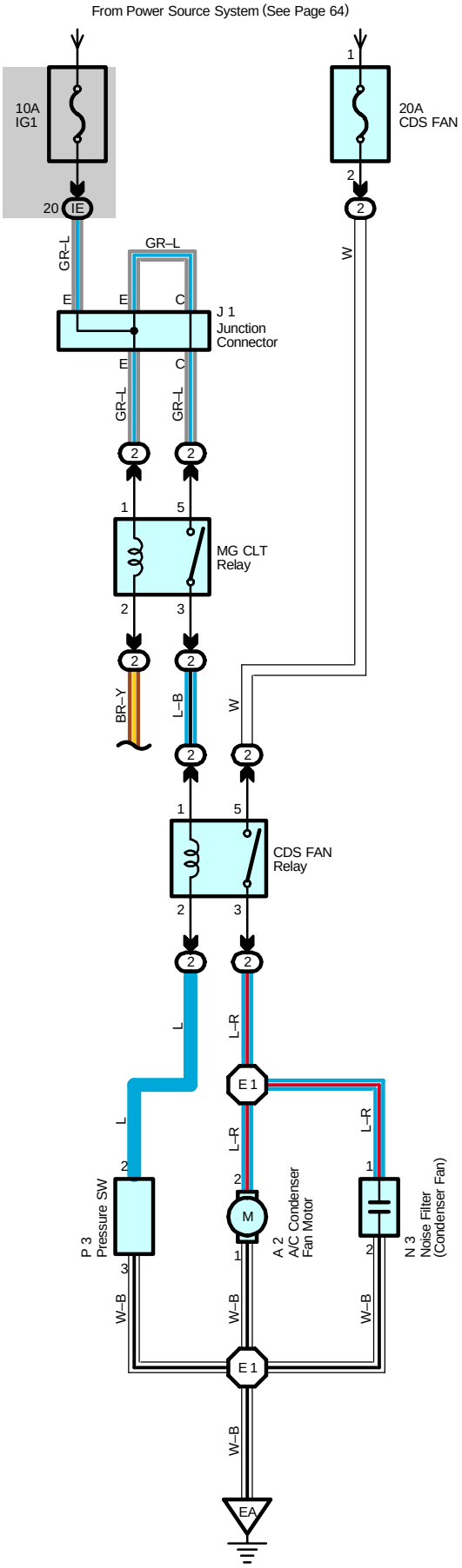
Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26	Roof Wire and Driver Side J/B (Lower Finish Panel)
IG	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
1A	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
3A	34	Instrument Panel 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
EA	48	Front Right Fender
EB	48	Front Left Fender
EG	48	Rear Bank of Left Cylinder Head
IL	50	Right Kick Panel


From Power Source System (See Page 64)
10A
IG1
20
IE
20A
CDS FAN
1
2
GR–L
W
J 1
Junction
Connector
MG CLT
Relay
CDS FAN
Relay
BR–Y
L–B
L
L–R
E 1
P 3
Pressure SW
A 2
A/C Condenser
Fan Motor
N 3
Noise Filter
(Condenser Fan)
W–B
EA

Service Hints

P3 Pressure SW

3–2 : Close above approx. 15.5 kgf/cm^2 (224 psi, 1520 kpa)
Open below approx. 12.5 kgf/cm^2 (181 psi, 1225 kpa)

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	36	N3	37		
J1	37	P3	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

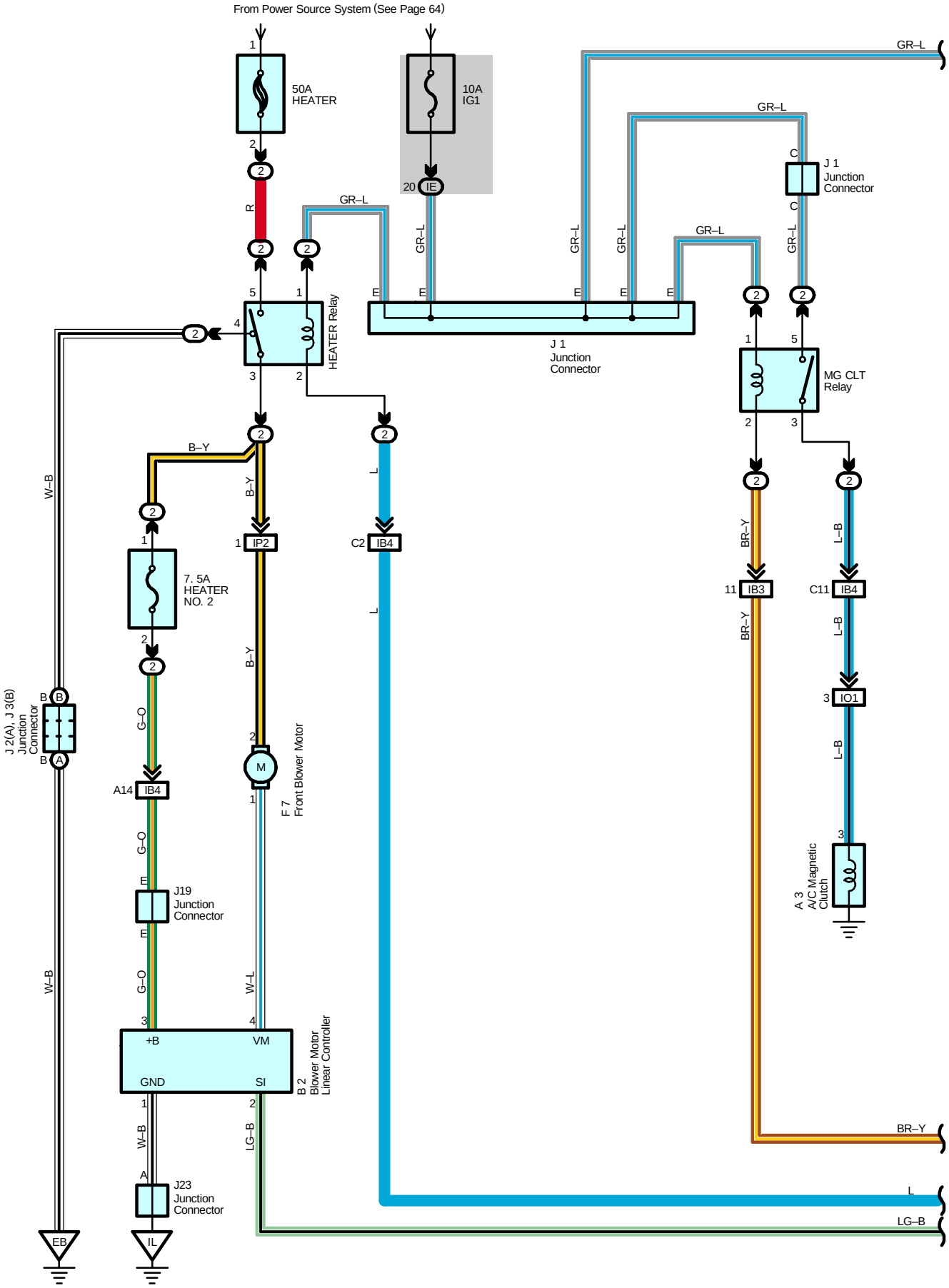
Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)

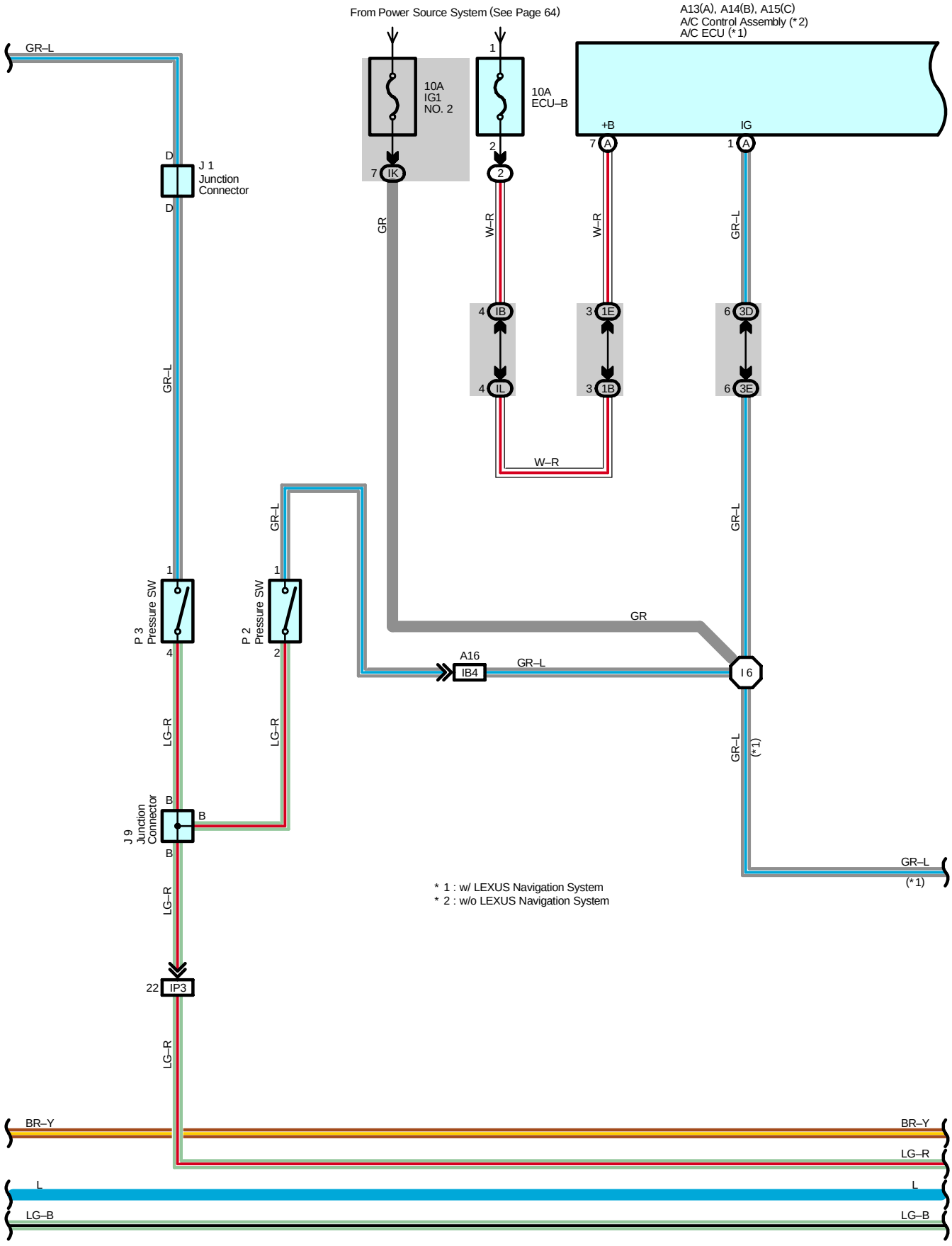
: Ground Points

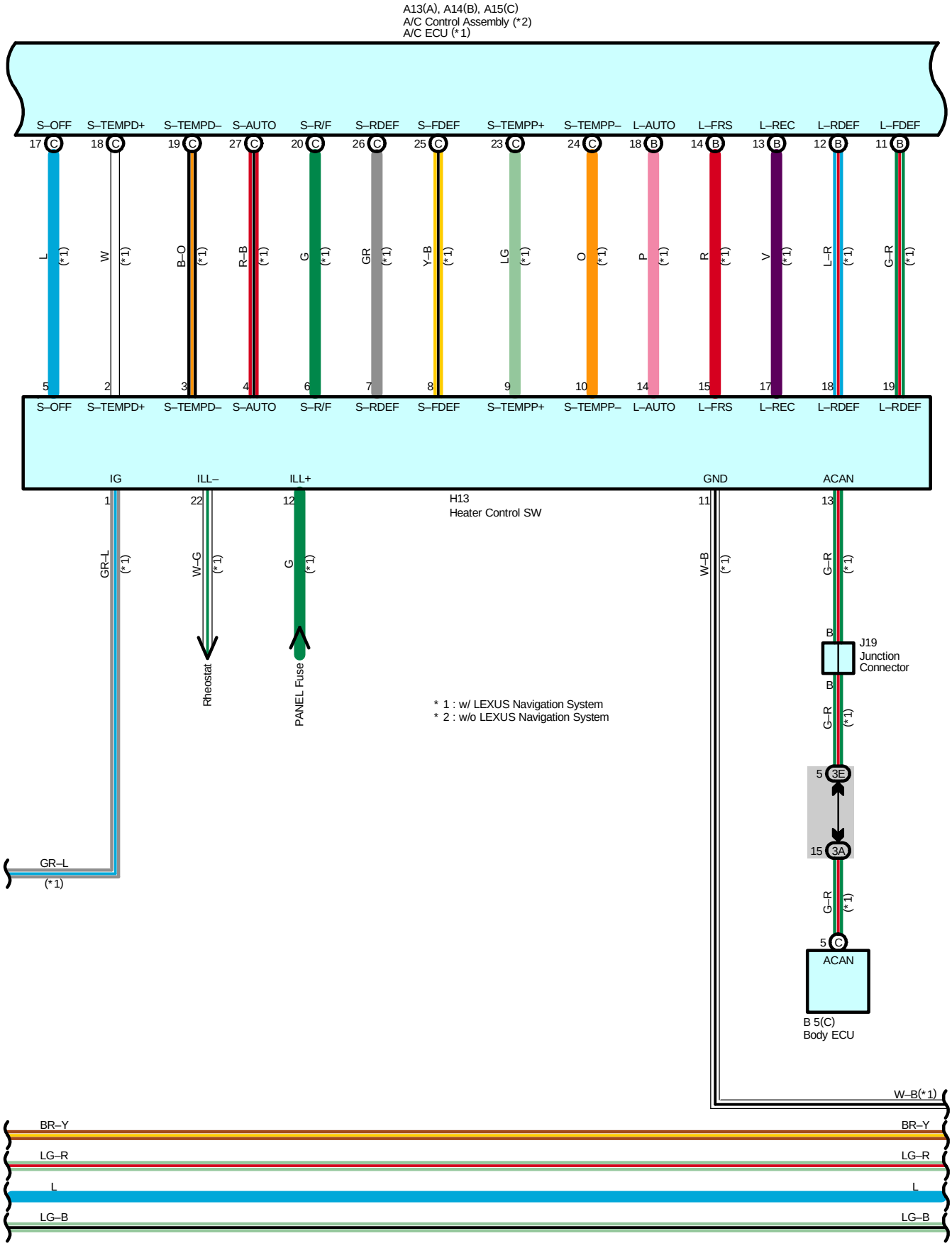
Code	See Page	Ground Points Location
EA	48	Front Right Fender

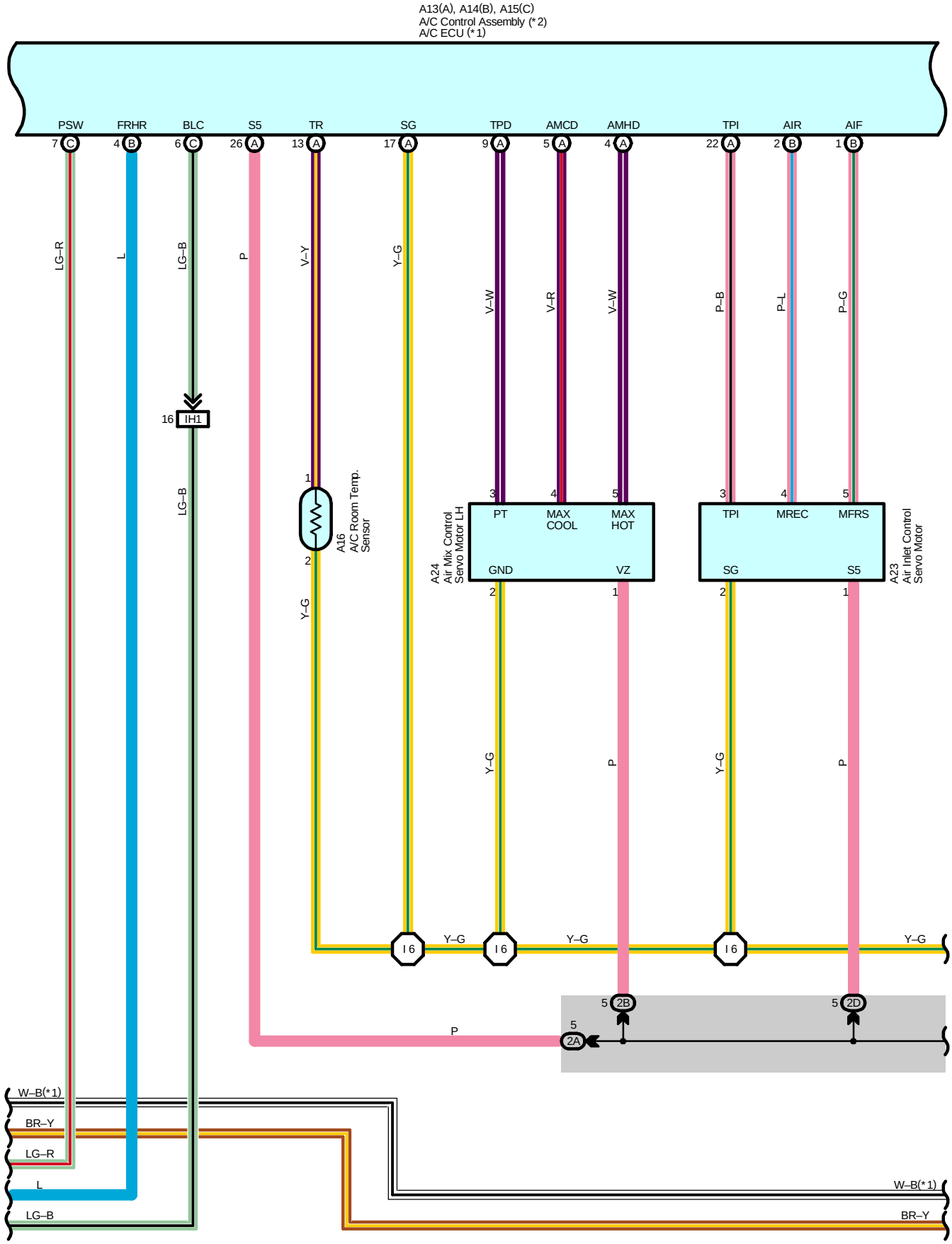
: Splice Points

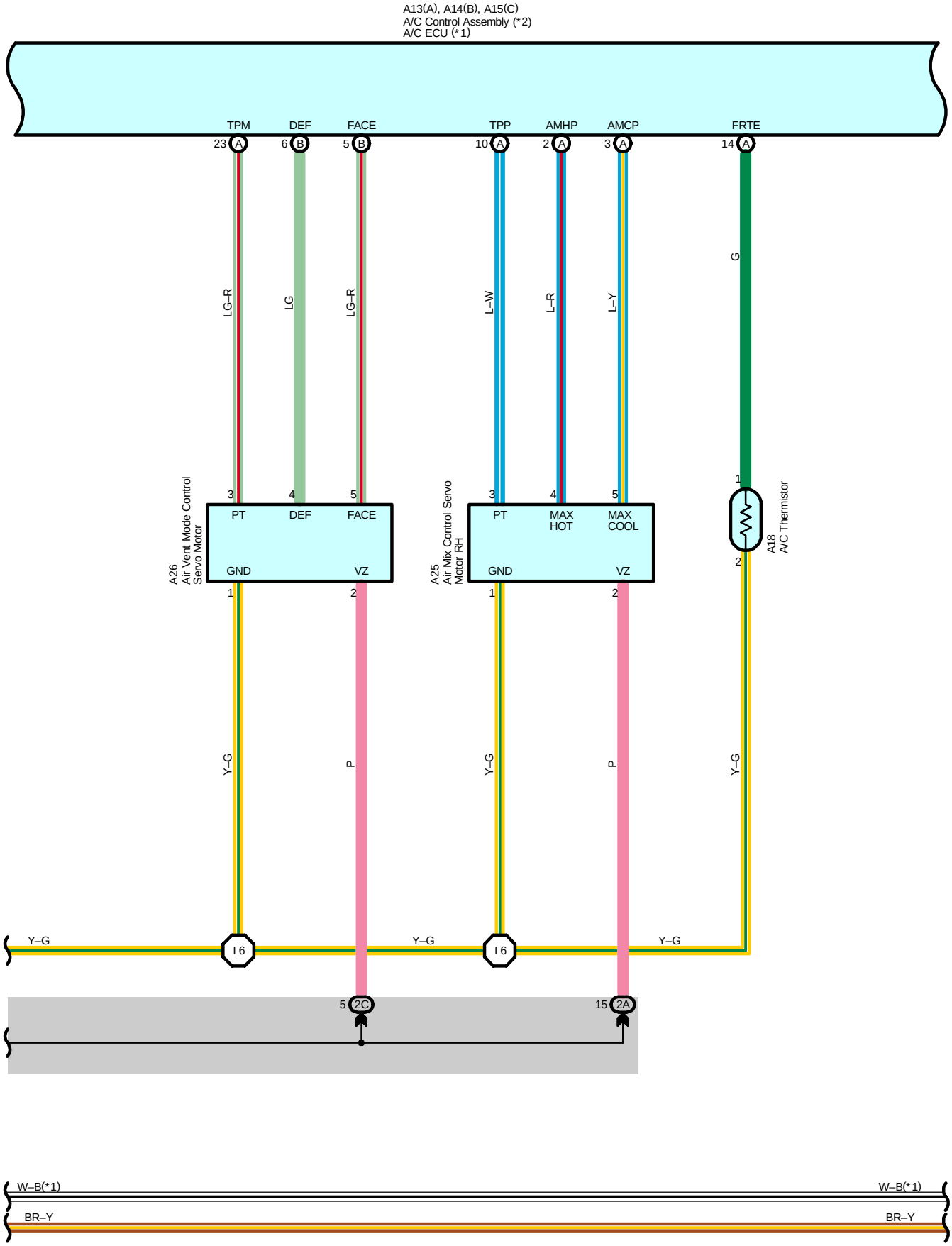
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	48	Engine Room Main Wire			

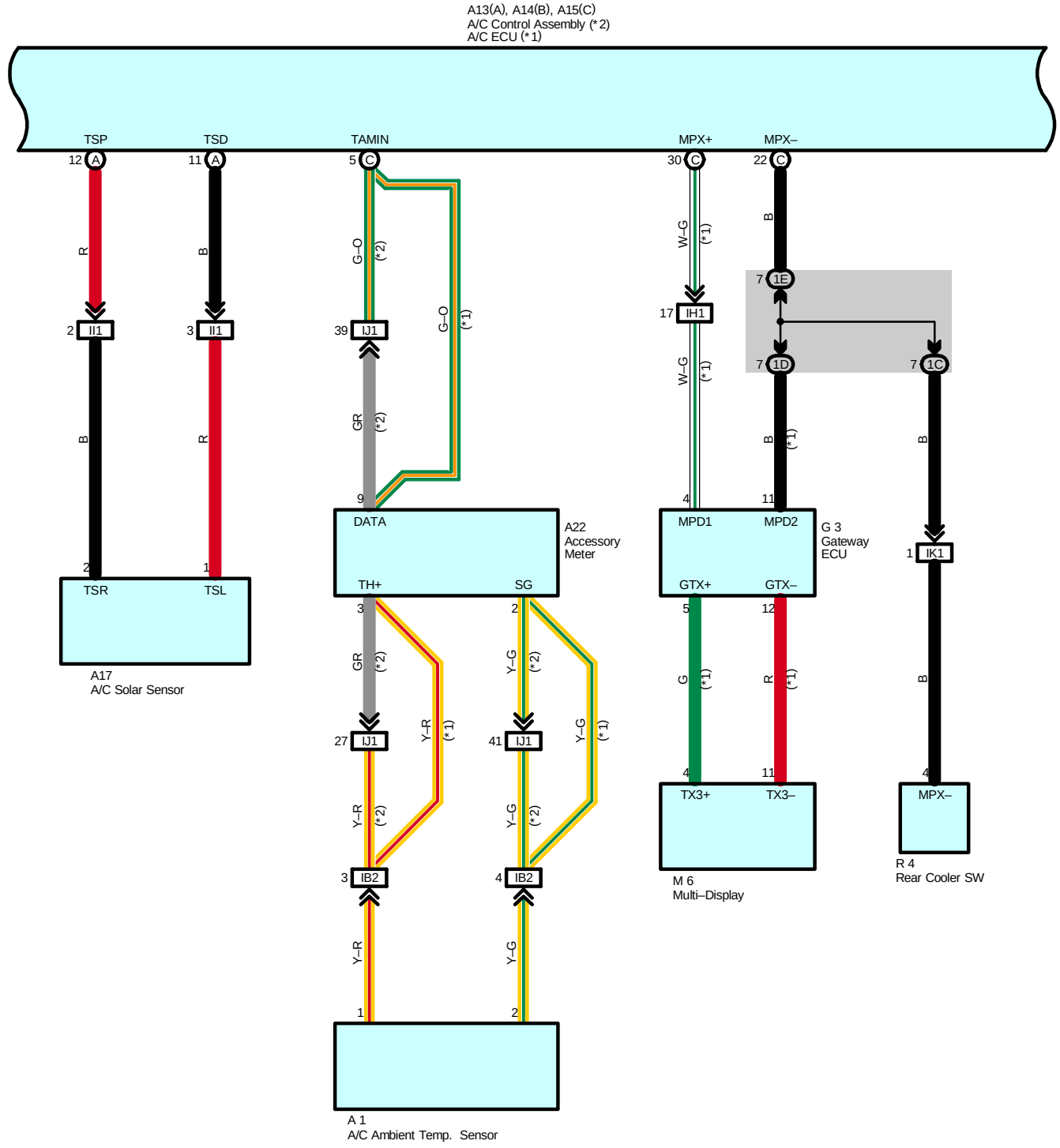

From Power Source System (See Page 64)
50A HEATER
10A IG1
20 IE
GR–L
R
HEATER Relay
J 1 Junction Connector
MG CLT Relay
B–Y
L
BR–Y
L–B
7. 5A HEATER NO. 2
IP2
C2 IB4
IB3
C11 IB4
IO1
J 2(A), J 3(B) Junction Connector
G–O
A14 IB4
M
F 7 Front Blower Motor
J19 Junction Connector
W–B
W–L
+B
VM
GND
SI
B 2 Blower Motor Linear Controller
LG–B
J23 Junction Connector
A 3 A/C Magnetic Clutch
EB
IL

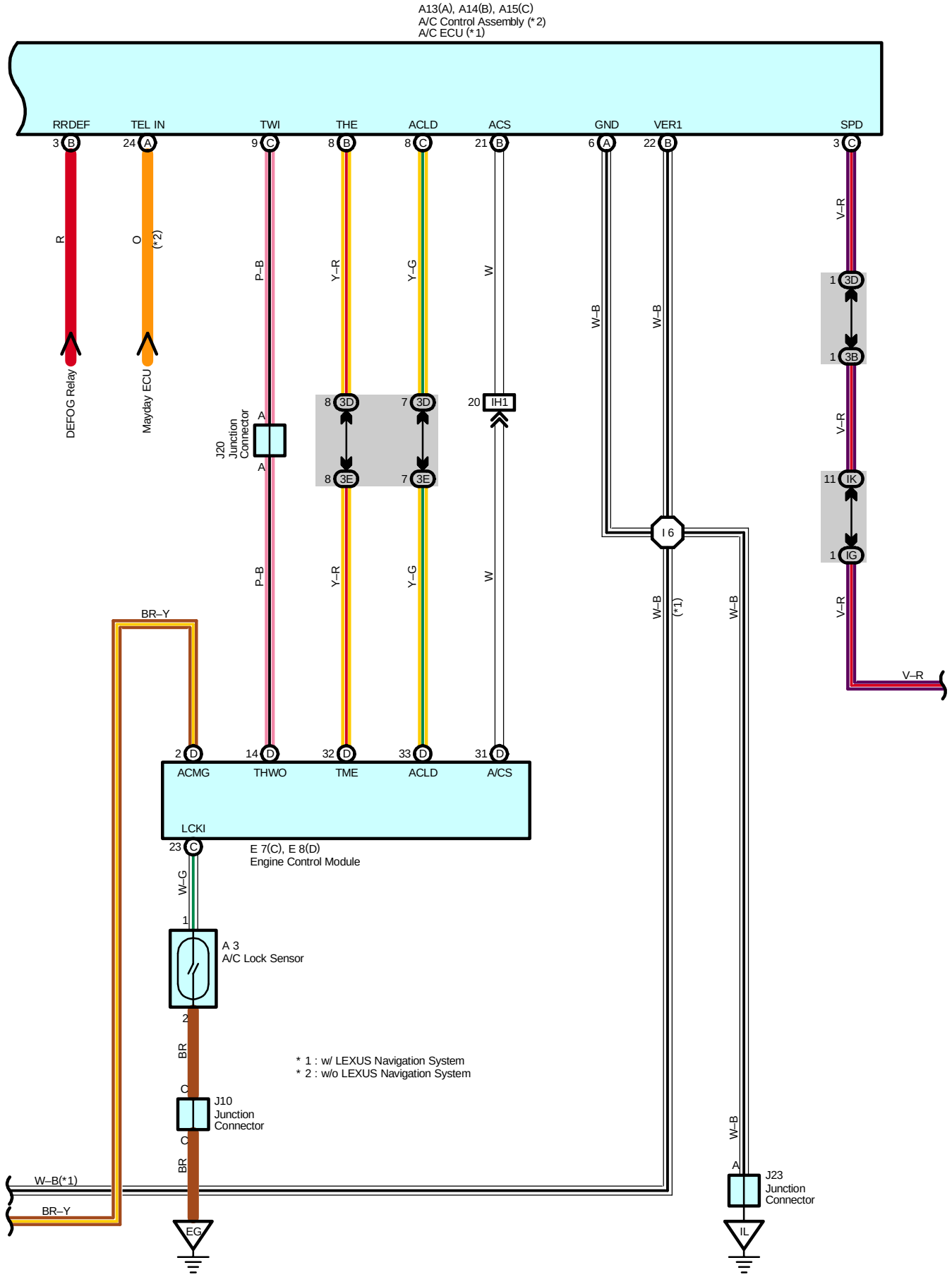

From Power Source System (See Page 64)
A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
10A
IG1
NO. 2
10A
ECU–B
+B
IG
GR–L
J 1
Junction
Connector
GR
W–R
GR–L
P 3
Pressure SW
P 2
Pressure SW
A16
IB4
I 6
LG–R
J 9
Junction
Connector
(*1)
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
IP3
BR–Y
L
LG–B

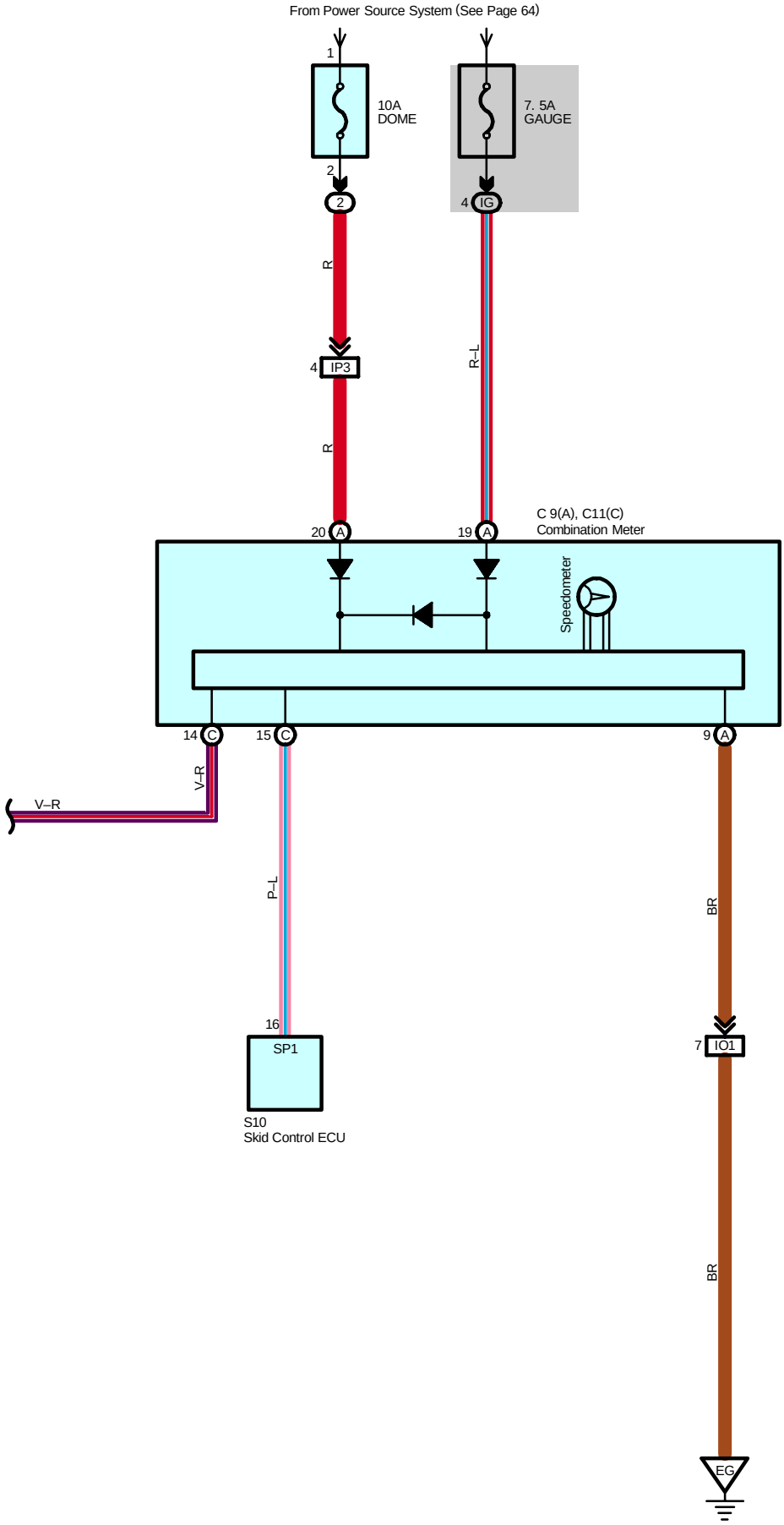

A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
S–OFF
S–TEMPD+
S–TEMPD–
S–AUTO
S–R/F
S–RDEF
S–FDEF
S–TEMPP+
S–TEMPP–
L–AUTO
L–FRS
L–REC
L–RDEF
L–FDEF
17 C
18 C
19 C
27 C
20 C
26 C
25 C
23 C
24 C
18 B
14 B
13 B
12 B
11 B
L (*1)
W (*1)
B–O (*1)
R–B (*1)
G (*1)
GR (*1)
Y–B (*1)
LG (*1)
O (*1)
P (*1)
R (*1)
V (*1)
L–R (*1)
G–R (*1)
5
2
3
4
6
7
8
9
10
14
15
17
18
19
IG
ILL–
ILL+
GND
ACAN
1
22
12
11
13
GR–L (*1)
W–G (*1)
G (*1)
W–B (*1)
G–R (*1)
H13
Heater Control SW
Rheostat
PANEL Fuse
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
B
J19
Junction
Connector
B
5 3E
15 3A
5 C
ACAN
B 5(C)
Body ECU
GR–L
(*1)
W–B(*1)
BR–Y
LG–R
L
LG–B


A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
PSW
FRHR
BLC
S5
TR
SG
TPD
AMCD
AMHD
TPI
AIR
AIF
7 C
4 B
6 C
26 A
13 A
17 A
9 A
5 A
4 A
22 A
2 B
1 B
LG–R
L
LG–B
P
V–Y
Y–G
V–W
V–R
V–W
P–B
P–L
P–G
16 IH1
LG–B
1
2
A16
A/C Room Temp. Sensor
Y–G
3
4
5
PT
MAX COOL
MAX HOT
GND
VZ
A24
Air Mix Control Servo Motor LH
2
1
TPI
MREC
MFRS
SG
S5
A23
Air Inlet Control Servo Motor
I 6
Y–G
I 6
Y–G
I 6
Y–G
Y–G
P
Y–G
P
5 2B
5 2D
5 2A
P
W–B(*1)
BR–Y
LG–R
L
LG–B
W–B(*1)
BR–Y


A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
TPM
DEF
FACE
TPP
AMHP
AMCP
FRTE
23 A
6 B
5 B
10 A
2 A
3 A
14 A
LG–R
LG
LG–R
L–W
L–R
L–Y
G
A26
Air Vent Mode Control
Servo Motor
PT
DEF
FACE
GND
VZ
A25
Air Mix Control Servo
Motor RH
PT
MAX
HOT
MAX
COOL
GND
VZ
A18
A/C Thermistor
Y–G
P
Y–G
P
Y–G
Y–G
Y–G
I 6
I 6
5 2C
15 2A
W–B(*1)
W–B(*1)
BR–Y
BR–Y


A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
TSP
TSD
TAMIN
MPX+
MPX–
12 A
11 A
5 C
30 C
22 C
R
B
G–O (*2)
G–O (*1)
W–G (*1)
B
2 II1
3 II1
39 IJ1
17 IH1
7 1E
7 1D
7 1C
B
R
GR (*2)
W–G (*1)
B (*1)
B
9
4
11
DATA
MPD1
MPD2
A22
Accessory
Meter
G 3
Gateway
ECU
2
1
TSR
TSL
TH+
SG
GTX+
GTX–
1 IK1
3
2
5
12
GR (*2)
Y–G (*2)
G (*1)
R (*1)
B
27 IJ1
41 IJ1
4
11
4
Y–R (*1)
Y–G (*1)
TX3+
TX3–
MPX–
Y–R (*2)
Y–G (*2)
3 IB2
4 IB2
A17
A/C Solar Sensor
M 6
Multi–Display
R 4
Rear Cooler SW
Y–R
Y–G
1
2
A 1
A/C Ambient Temp. Sensor
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
W–B(*1)
W–B(*1)
BR–Y
BR–Y


A13(A), A14(B), A15(C)
A/C Control Assembly (*2)
A/C ECU (*1)
RRDEF
TEL IN
TWI
THE
ACLD
ACS
GND
VER1
SPD
DEFOG Relay
Mayday ECU
J20 Junction Connector
I 6
IH1
ACMG
THWO
TME
ACLD
A/CS
LCKI
E 7(C), E 8(D)
Engine Control Module
A 3
A/C Lock Sensor
J10 Junction Connector
J23 Junction Connector
EG
IL
BR–Y
W–B(*1)
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System


From Power Source System (See Page 64)
1
10A
DOME
2
2
R
4
IP3
R
20
A
7. 5A
GAUGE
4
IG
R–L
19
A
C 9(A), C11(C)
Combination Meter
Speedometer
14
C
15
C
9
A
V–R
V–R
P–L
16
SP1
S10
Skid Control ECU
BR
7
IO1
BR
EG

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, out side 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 engine control module 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/cm^2, 32 psi) or more than approx. 3138 kpa (32 kgf/cm^2, 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 ignition SW at ON or ST position

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	36	A26	38	J3 B	37
A3	36	B2	38	J9	40
A13 A	38	B5 C	38	J10	40
A14 B	38	C9 A	38	J19	40
A15 C	38	C11 C	38	J20	40
A16	38	E7 C	39	J23	40
A17	38	E8 D	39	M6	40
A18	38	F7	39	P2	37
A22	38	G3	39	P3	37
A23	38	H13	39	R4	41
A24	38	J1	37	S10	41
A25	38	J2 A	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)
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		
1D		
1E		
2A	32	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
3A	34	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		
3D		
3E		

: Connector Joining Wire Harness and Wire Harness

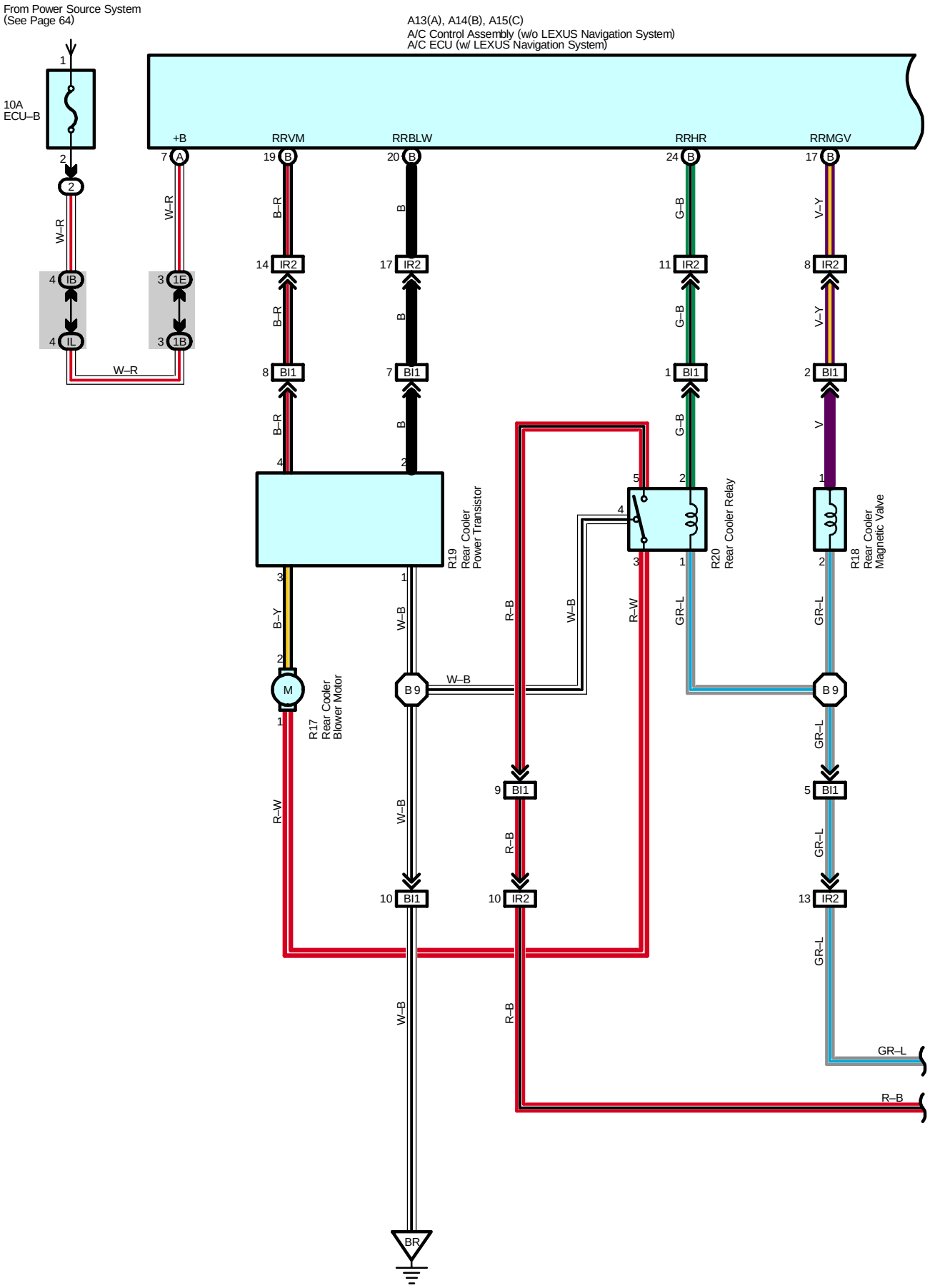
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	50	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IB3		
IB4		
IH1	52	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
II1	52	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the 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)
IP2	54	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IP3		

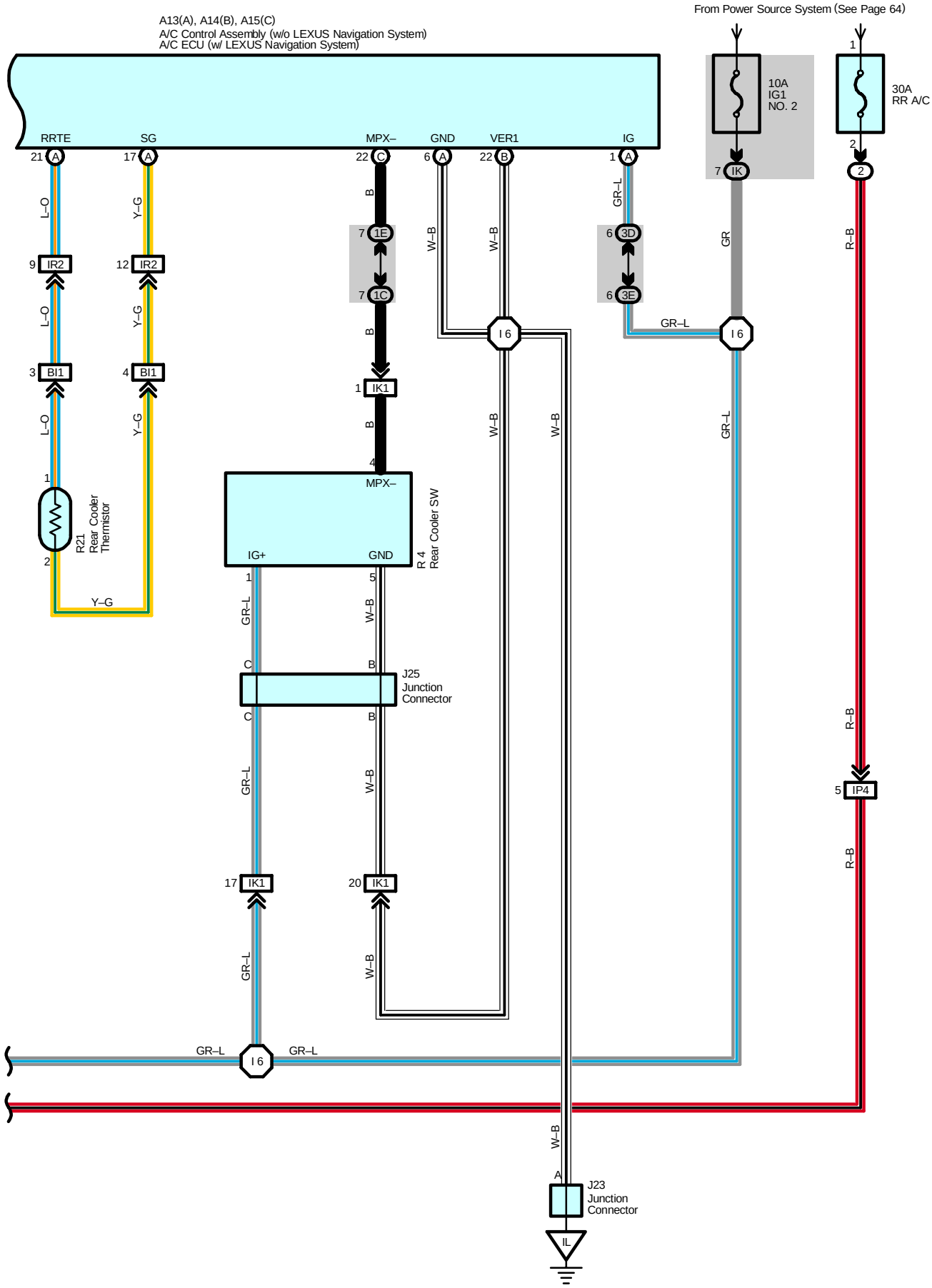
 : **Ground Points**

Code	See Page	Ground Points Location
EB	48	Front Left Fender
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			


From Power Source System
(See Page 64)
A13(A), A14(B), A15(C)
A/C Control Assembly (w/o LEXUS Navigation System)
A/C ECU (w/ LEXUS Navigation System)
10A
ECU–B
+B
RRVM
RRBLW
RRHR
RRMGV
W–R
B–R
B
G–B
V–Y
V
B–Y
R–W
W–B
R–B
GR–L
R19
Rear Cooler
Power Transistor
R20
Rear Cooler Relay
R18
Rear Cooler
Magnetic Valve
R17
Rear Cooler
Blower Motor
BR


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 64)
10A
IG1
NO. 2
30A
RR A/C
RRTE
SG
MPX–
GND
VER1
IG
21 A
17 A
22 C
6 A
22 B
1 A
7 IK
1
2
L–O
Y–G
W–B
GR–L
GR
R–B
9 IR2
12 IR2
7 1E
7 1C
6 3D
6 3E
I 6
3 BI1
4 BI1
1 IK1
4
MPX–
1
2
R21
Rear Cooler
Thermistor
IG+
GND
R 4
Rear Cooler SW
1
5
C
B
J25
Junction
Connector
17 IK1
20 IK1
5 IP4
A
J23
Junction
Connector
IL

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), A5 (C) 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	J25	40	R19	44
A14	B	38	R4	41	R20	44
A15	C	38	R17	44	R21	44
J23		40	R18	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		
1B	30	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
1E		
3D	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)
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)
IR2	56	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BI1	60	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)

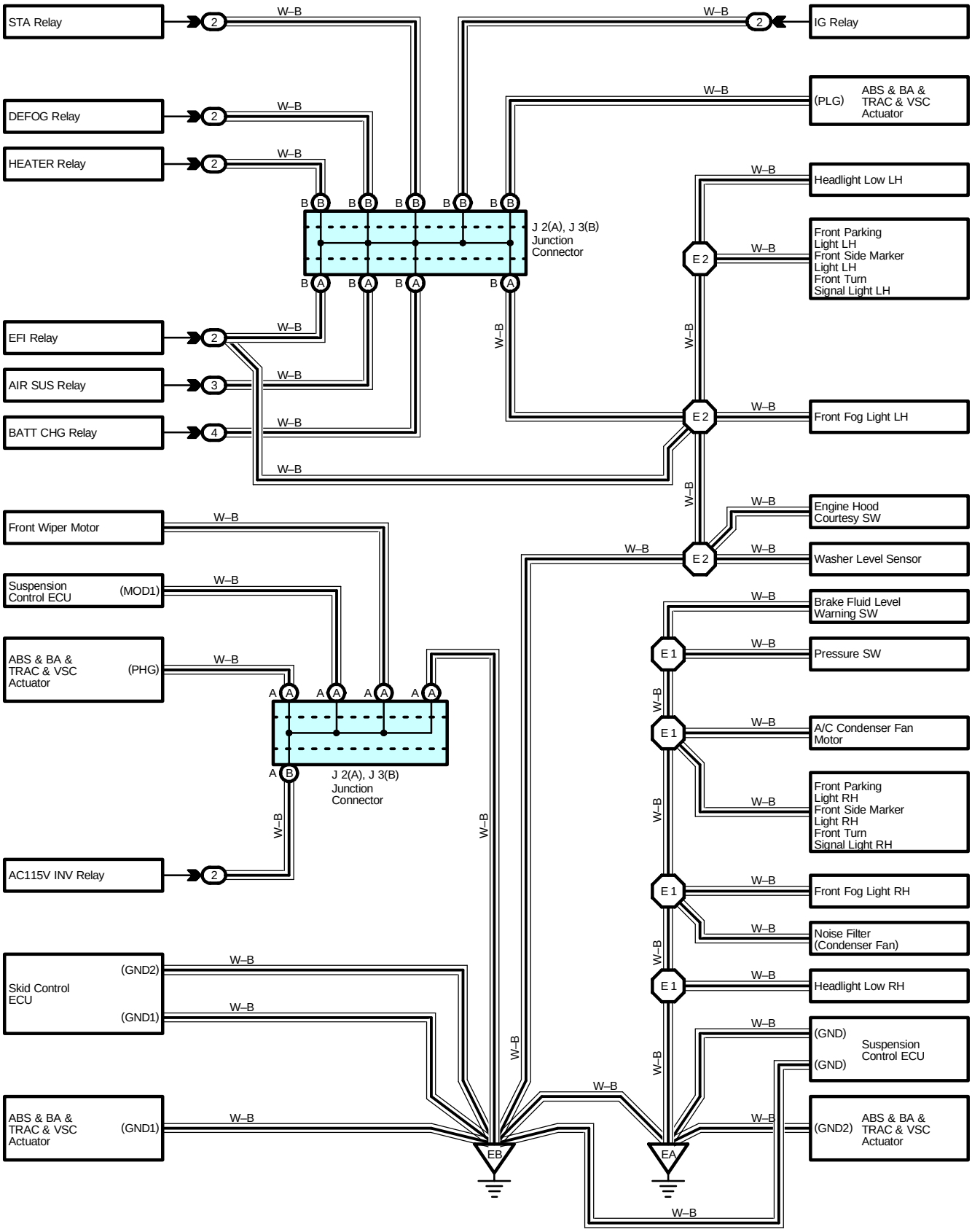
 **: Ground Points**

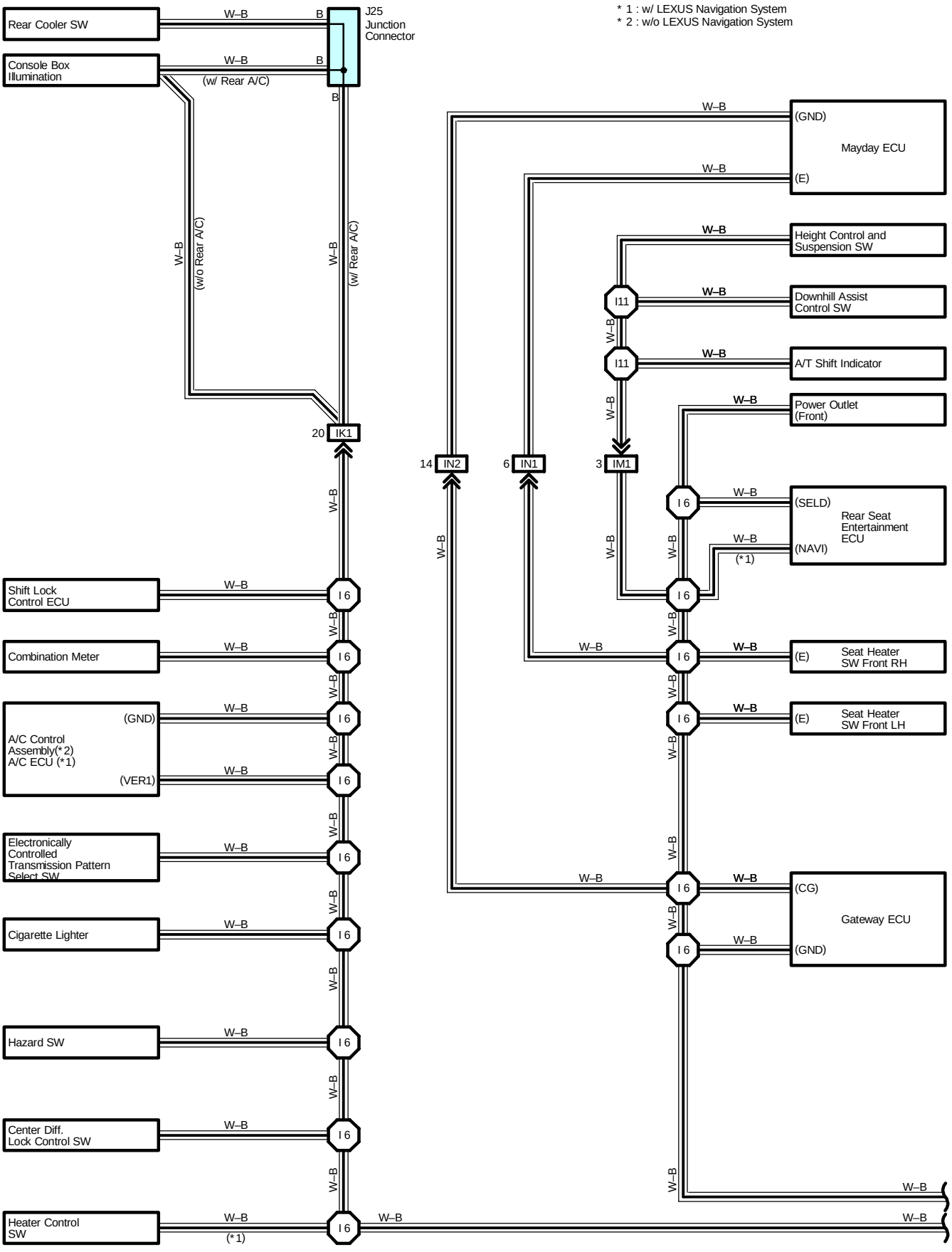
Code	See Page	Ground Points Location
IL	50	Right Kick Panel
BR	58	Right Quarter Panel Inner

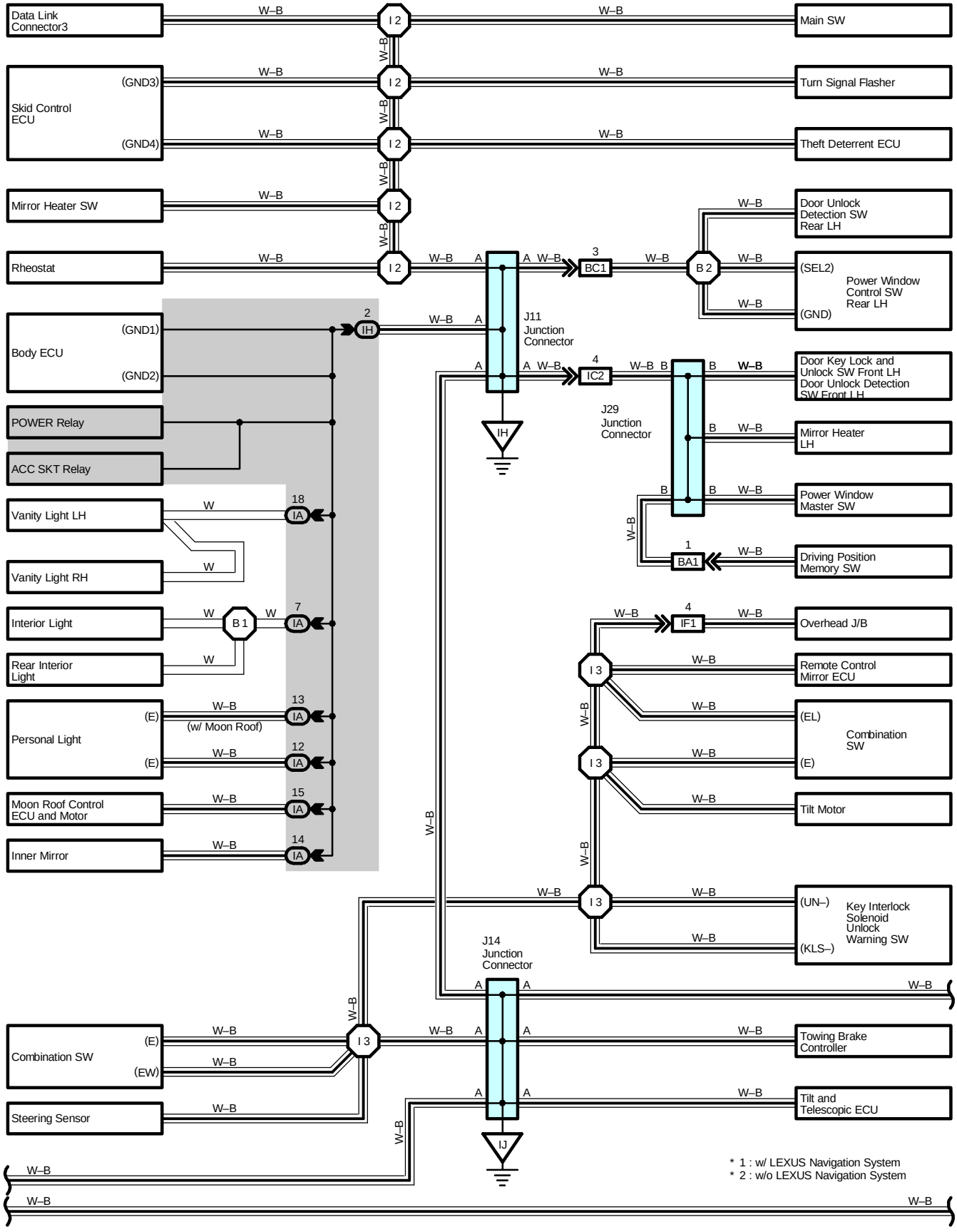
 **: Splice Points**

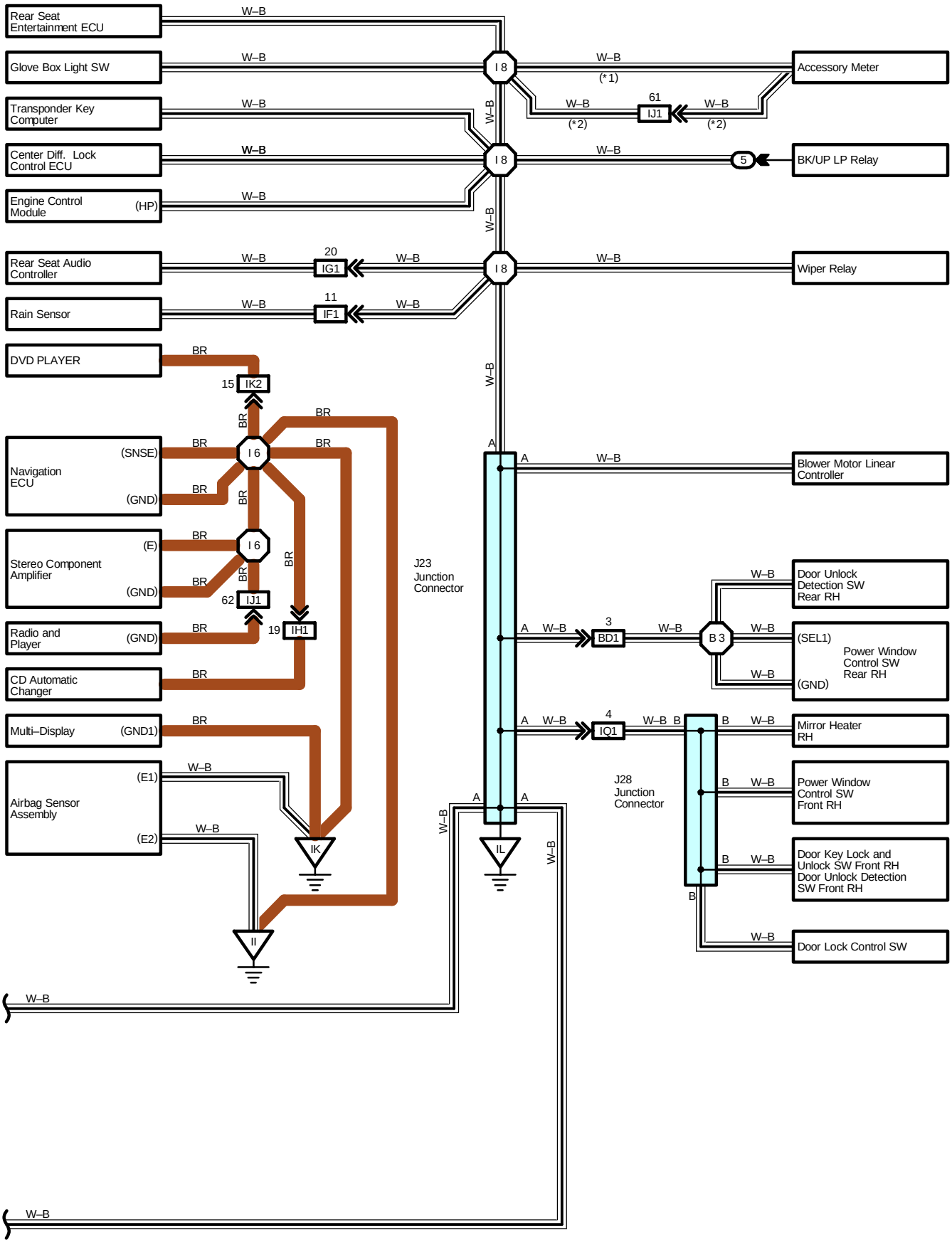
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	52	Instrument Panel Wire	B9	60	Rear A/C Sub Wire

I GROUND POINT

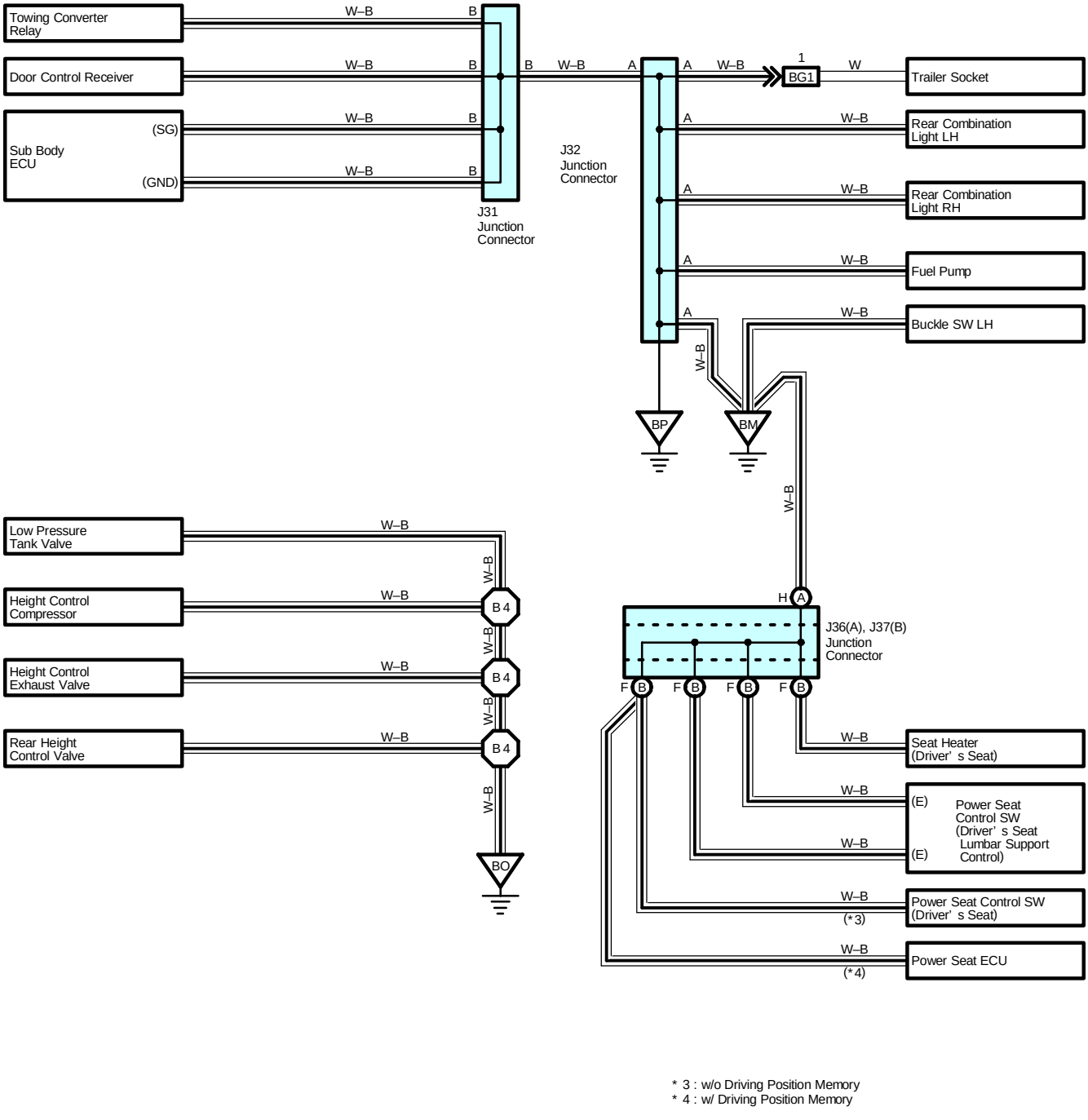



* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
Rear Cooler SW
Console Box Illumination
(w/ Rear A/C)
J25 Junction Connector
W–B
B
(w/o Rear A/C)
(w/ Rear A/C)
20 IK1
14 IN2
6 IN1
3 IM1
Shift Lock Control ECU
Combination Meter
A/C Control Assembly(*2) A/C ECU (*1)
(GND)
(VER1)
Electronically Controlled Transmission Pattern Select SW
Cigarette Lighter
Hazard SW
Center Diff. Lock Control SW
Heater Control SW
(*1)
I 6
I11
Mayday ECU
(E)
Height Control and Suspension SW
Downhill Assist Control SW
A/T Shift Indicator
Power Outlet (Front)
(SELD)
(NAVI)
Rear Seat Entertainment ECU
Seat Heater SW Front RH
Seat Heater SW Front LH
(CG)
Gateway ECU

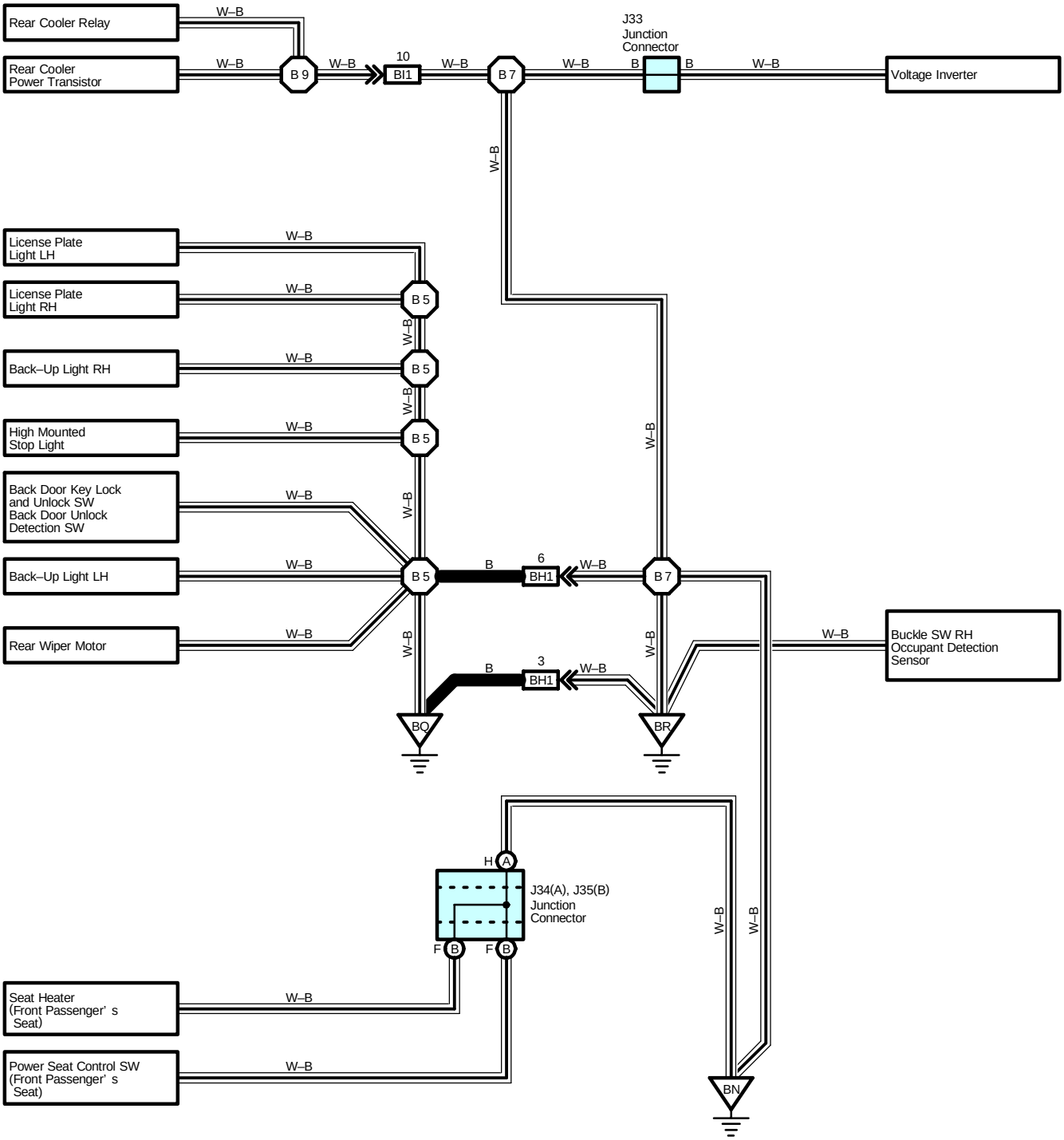

Data Link Connector3
Skid Control ECU
(GND3)
(GND4)
Mirror Heater SW
Rheostat
Body ECU
(GND1)
(GND2)
POWER Relay
ACC SKT Relay
Vanity Light LH
Vanity Light RH
Interior Light
Rear Interior Light
Personal Light
(E)
(E)
(w/ Moon Roof)
Moon Roof Control ECU and Motor
Inner Mirror
Combination SW
(E)
(EW)
Steering Sensor
W–B
I 2
I 3
IH
IA
B 1
B 2
BC1
IC2
IF1
BA1
IJ
J11 Junction Connector
J29 Junction Connector
J14 Junction Connector
Main SW
Turn Signal Flasher
Theft Deterrent ECU
Door Unlock Detection SW Rear LH
(SEL2)
Power Window Control SW Rear LH
(GND)
Door Key Lock and Unlock SW Front LH
Door Unlock Detection SW Front LH
Mirror Heater LH
Power Window Master SW
Driving Position Memory SW
Overhead J/B
Remote Control Mirror ECU
(EL)
Combination SW
(E)
Tilt Motor
(UN–)
Key Interlock Solenoid Unlock Warning SW
(KLS–)
Towing Brake Controller
Tilt and Telescopic ECU
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System


Rear Seat Entertainment ECU
Glove Box Light SW
Transponder Key Computer
Center Diff. Lock Control ECU
Engine Control Module (HP)
Rear Seat Audio Controller
Rain Sensor
DVD PLAYER
Navigation ECU (SNSE) (GND)
Stereo Component Amplifier (E) (GND)
Radio and Player (GND)
CD Automatic Changer
Multi–Display (GND1)
Airbag Sensor Assembly (E1) (E2)
W–B
BR
I 8
I 6
IG1
IF1
IK2
IJ1
IH1
IK
IL
II
20
11
15
62
19
61
(*1)
(*2)
Accessory Meter
BK/UP LP Relay
Wiper Relay
Blower Motor Linear Controller
J23 Junction Connector
J28 Junction Connector
BD1
IQ1
B 3
Door Unlock Detection SW Rear RH
(SEL1)
Power Window Control SW Rear RH
(GND)
Mirror Heater RH
Power Window Control SW Front RH
Door Key Lock and Unlock SW Front RH
Door Unlock Detection SW Front RH
Door Lock Control SW

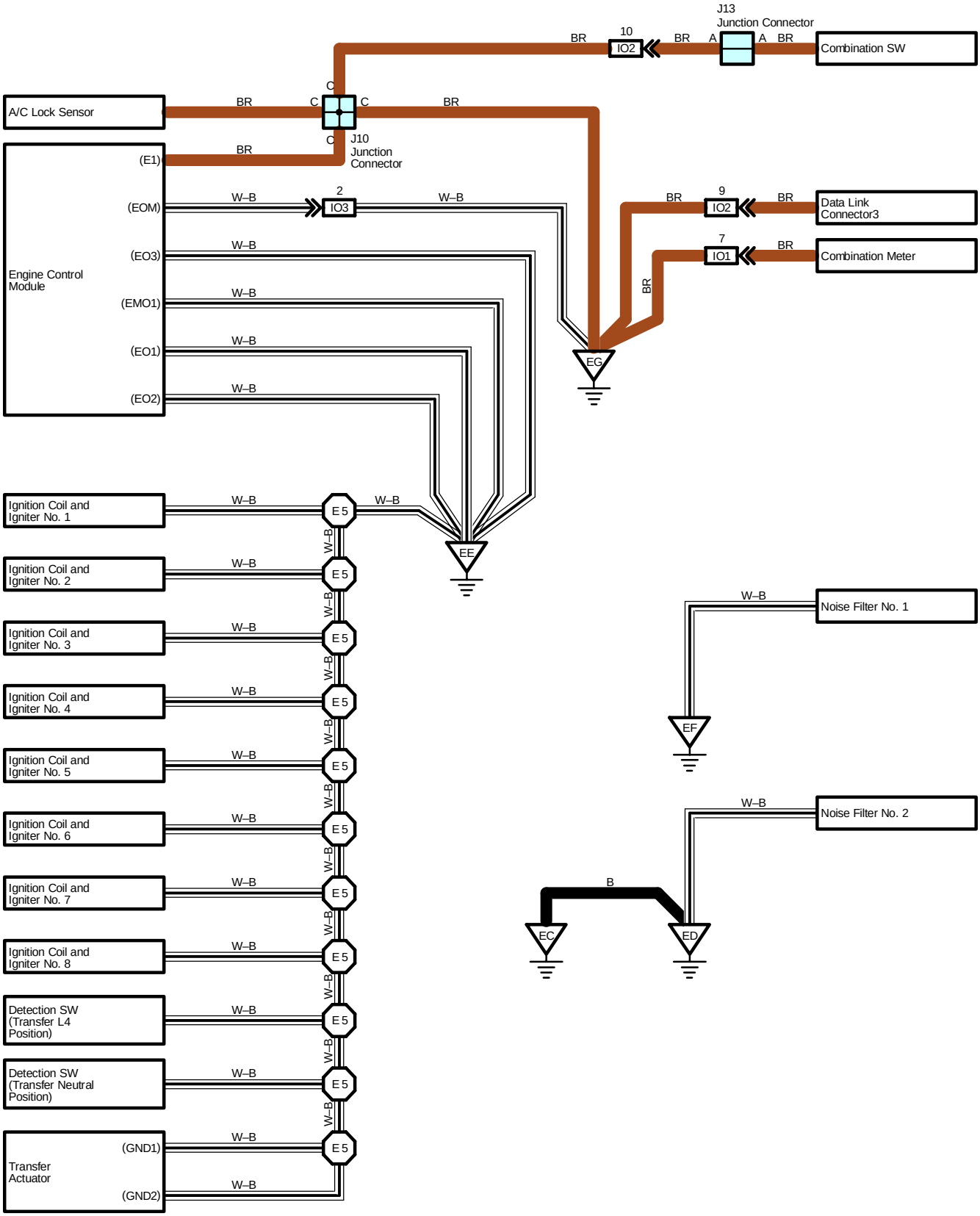
I GROUND POINT



* 3 : w/o Driving Position Memory
* 4 : w/ Driving Position Memory


Rear Cooler Relay
Rear Cooler Power Transistor
W–B
B 9
10
BI1
B 7
J33 Junction Connector
B
Voltage Inverter
License Plate Light LH
License Plate Light RH
Back–Up Light RH
High Mounted Stop Light
Back Door Key Lock and Unlock SW
Back Door Unlock Detection SW
Back–Up Light LH
Rear Wiper Motor
B 5
6
BH1
3
BQ
BR
Buckle SW RH Occupant Detection Sensor
J34(A), J35(B) Junction Connector
H
A
F
Seat Heater (Front Passenger' s Seat)
Power Seat Control SW (Front Passenger' s Seat)
BN

I GROUND POINT



: Parts Location

Code		See Page	Code	See Page	Code		See Page
J2	A	37	J23	40	J33		43
J3	B	37	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
J14		40	J32	43			

: 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)
IC2	50	Front Door LH Wire and Instrument Panel 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)
IN1	54	Floor No.3 Wire and Instrument Panel Wire (Under the Instrument Panel Brace RH)
IN2		
IO1	54	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IO2		
IO3		
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 Crossmember)
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)

I GROUND POINT

▽ : **Ground Points**

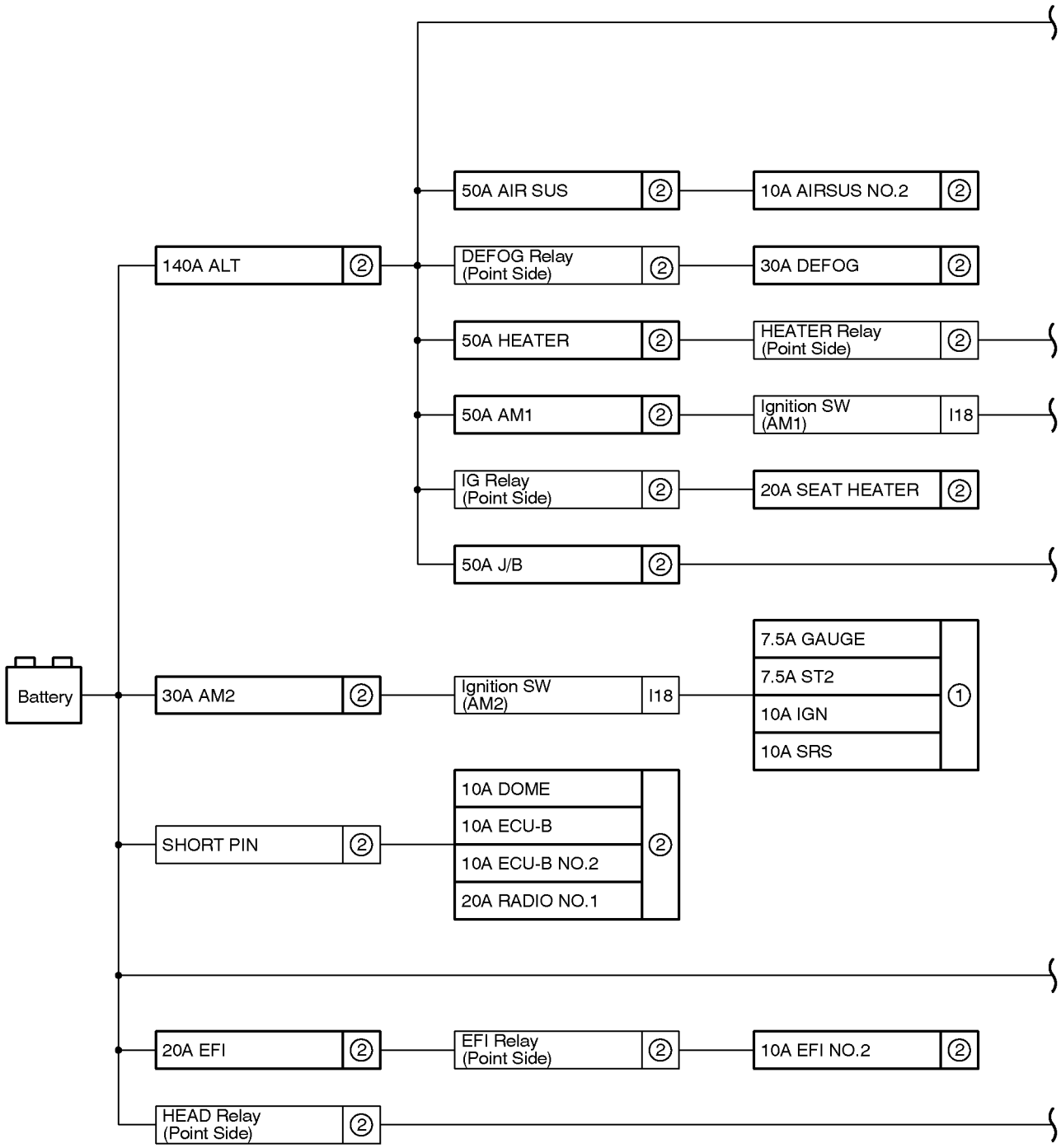
Code	See Page	Ground Points Location
EA	48	Front Right Fender
EB	48	Front Left Fender
EC	48	Front Right Fender
ED	48	Rear Bank of Right Cylinder Head
EE		
EF	48	Rear Bank of Left Cylinder Head
EG		
IH	50	Left Kick Panel
II	50	Near the Left Side of Steering Column
IJ	50	Near the Right Side of Steering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

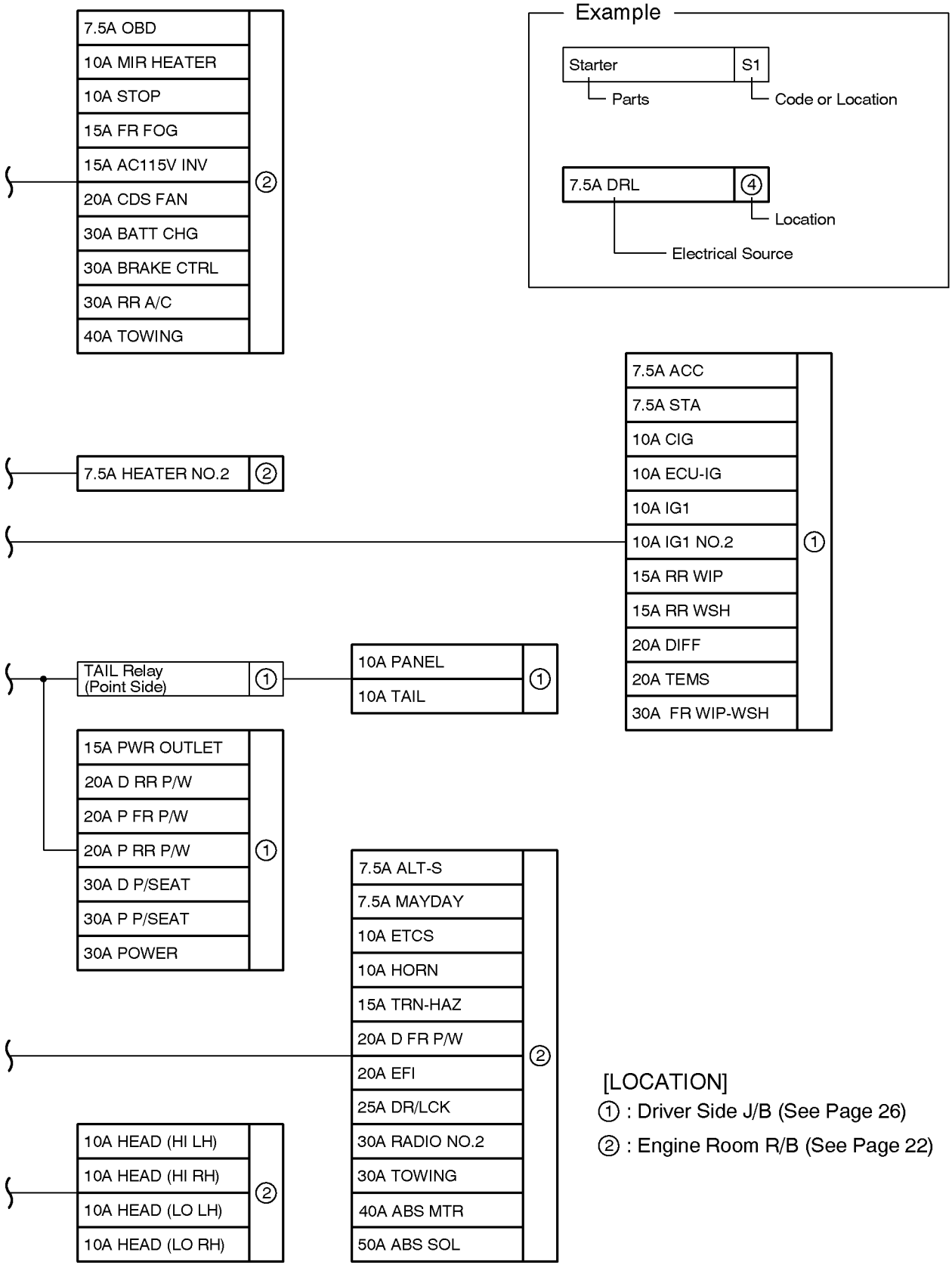
○ : **Splice Points**

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

J POWER SOURCE (Current Flow Chart)

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





[LOCATION]

① : Driver Side J/B (See Page 26)

② : Engine Room R/B (See Page 22)

Driver Side J/B (See Page 26)

Fuse		System	Page
7.5A	ACC	Accesory Meter	308
		Automatic Light Control	128
		Back–Up Light	162
		Center Differential Lock	244
		Cigarette Lighter and Power Outlet (12V)	274
		Cruise Control	222
		Door Lock Control and Theft Deterent	192
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
		Front Wiper and Washer (w/ Rain Sensor)	170
		Headlight	120
		Interior Light	140
		Key Reminder and Seat Belt Warning	164
		LEXUS Link System (Mayday System)	312
		LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Light Auto Turn Off	132
		Moon Roof	254
		Multiplex Communication System	94
		Power Seat (Driver’s Seat w/ Driving Position Memory)	284
		Power Tilt and Power Telescopic	266
		Power Window	184
		Radio and Player (w/ Rear Seat Entertainment System)	330
		Radio and Player (w/o Rear Seat Entertainment System)	346
		Remote Control Mirror	260
		Shift Lock	272
		Trailer Towing	298
		VSC	228
		Wireless Door Lock Control	202
7.5A	GAUGE	Accesory Meter	308
		Active Height Control Suspension and Electric Modulated Air Suspension	
		Air Conditioning	366
		Center Differential Lock	244
		Charging	74
		Combination Meter	356
		Cruise Control	222
		Door Lock Control and Theft Deterent	192
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
		Front Wiper and Washer (w/ Rain Sensor)	170
		Interior Light	140
		Key Reminder and Seat Belt Warning	164

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

Fuse		System	Page
7.5A	GAUGE	LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Moon Roof	254
		Multiplex Communication System	94
		Radio and Player (w/ Rear Seat Entertainment System)	330
		Radio and Player (w/o Rear Seat Entertainment System)	346
		Rear Wiper and Washer	180
		SRS	247
		Taillight and Illumination	150
		VSC	228
7.5A	ST2	Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
		Starting	68
10A	CIG	Cigarette Lighter and Power Outlet (12V)	274
10A	ECU–IG	Accesory Meter	308
		Active Height Control Suspension and Electric Modulated Air Suspension	
		Automatic Light Control	128
		Door Lock Control and Theft Deterent	192
		Electric Tension Reducer	282
		Engine Immobiliser	88
		Front Wiper and Washer (w/ Rain Sensor)	170
		Headlight	120
		Interior Light	140
		Key Reminder and Seat Belt Warning	164
		LEXUS Link System (Mayday System)	312
		LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Light Auto Turn Off	132
		Moon Roof	254
		Multiplex Communication System	94
		Power Seat (Driver’s Seat w/ Driving Position Memory)	284
		Power Tilt and Power Telescopic	266
		Power Window	184
		Rear Wiper and Washer	180
		Remote Control Mirror	260
		Shift Lock	272
		Stop Light	158
		Trailer Towing	298
		VSC	228
		Wireless Door Lock Control	202
10A	IGN	Cruise Control	222
		Electronically Controlled Transmission and A/T Indicator	212

* 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	IGN	Engine Control	76
		VSC	228
10A	IG1	Air Conditioning	366
		Automatic Glare–Resistant EC Mirror and Compass	278
		Charging	74
		Condenser Fan	364
		Rear Window Defogger	304
		Trailer Towing	298
10A	IG1 NO.2	Air Conditioning	366
		Back–Up Light	162
		Center Differential Lock	244
		Cruise Control	222
		Electronically Controlled Transmission and A/T Indicator	212
		Front Wiper and Washer (w/ Rain Sensor)	170
		Key Reminder and Seat Belt Warning	164
		LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Mirror Heater	306
		Multiplex Communication System	94
		Power Outlet (115V)	276
		Power Seat (Driver’s Seat w/ Driving Position Memory)	284
		Power Tilt and Power Telescopic	266
		Rear Air Conditioning	378
		Remote Control Mirror	260
		Seat Heater	296
		Taillight and Illumination	150
		Trailer Towing	298
		Turn Signal and Hazard Warning Light	136
		VSC	228
10A	PANEL	Accesory Meter	308
		Multiplex Communication System	94
		Taillight and Illumination	150
10A	SRS	SRS	247
10A	TAIL	Taillight and Illumination	150
		Trailer Towing	298
15A	PWR OUTLET	Cigarette Lighter and Power Outlet (12V)	274
15A	RR WIP	Multiplex Communication System	94
		Rear Wiper and Washer	180
15A	RR WSH	Multiplex Communication System	94
		Rear Wiper and Washer	180
20A	D RR P/W	Multiplex Communication System	94
		Power Window	184
20A	DIFF	Center Differential Lock	244

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

Fuse		System	Page
20A	P FR P/W	Multiplex Communication System Power Window	94 184
20A	P RR P/W	Multiplex Communication System Power Window	94 184
20A	TEMS	Active Height Control Suspension and Electric Modulated Air Suspension	236
30A	D P/SEAT	Power Seat (Driver's Seat w/ Driving Position Memory) Power Seat (Driver's Seat w/o Driving Position Memory)	284 290
30A	FR WIP–WSH	Front Wiper and Washer (w/ Rain Sensor) Front Wiper and Washer (w/o Rain Sensor)	170 176
30A	P P/SEAT	Power Seat (Front Passenger's Seat)	294
30A	POWER	Moon Roof Power Tilt and Power Telescopic	254 266

Engine Room R/B (See Page 22)

Fuse		System	Page
7.5A	ALT–S	Charging	74
7.5A	HEATER NO.2	Air Conditioning	366
7.5A	MAYDAY	LEXUS Link System (Mayday System)	312
7.5A	OBD	Engine Control	76
10A	AIRSUS NO.2	Active Height Control Suspension and Electric Modulated Air Suspension	236
10A	DOME	Accesory Meter	308
		Active Height Control Suspension and Electric Modulated Air Suspension	236
		Air Conditioning	366
		Combination Meter	356
		Cruise Control	222
		Door Lock Control and Theft Deterent	192
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
		Front Wiper and Washer (w/ Rain Sensor)	170
		Garage Door Opener	168
		Interior Light	140
		Key Reminder and Seat Belt Warning	164
		LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Moon Roof	254
		Multiplex Communication System	94
		Radio and Player (w/ Rear Seat Entertainment System)	330
		Radio and Player (w/o Rear Seat Entertainment System)	346
		Rear Wiper and Washer	180
		Taillight and Illumination	150
		VSC	228

* 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–B	Accesory Meter	308
		Active Height Control Suspension and Electric Modulated Air Suspension	
		Air Conditioning	366
		Automatic Light Control	128
		Door Lock Control and Theft Deterent	192
		Engine Immobiliser	88
		Front Wiper and Washer (w/ Rain Sensor)	170
		Headlight	120
		Interior Light	140
		Key Reminder and Seat Belt Warning	164
		LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Light Auto Turn Off	132
		Moon Roof	254
		Multiplex Communication System	94
		Power Seat (Driver's Seat w/ Driving Position Memory)	284
		Power Tilt and Power Telescopic	266
		Power Window	184
		Rear Air Conditioning	378
		Rear Wiper and Washer	180
		Remote Control Mirror	260
		VSC	228
		Wireless Door Lock Control	202
10A	ECU–B NO.2	Door Lock Control and Theft Deterent	192
		Multiplex Communication System	94
10A	EFI NO.2	Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
10A	ETCS	Cruise Control	222
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
10A	HEAD(HI LH)	Headlight	120
		Multiplex Communication System	94
10A	HEAD(HI RH)	Combination Meter	356
		Headlight	120
		Multiplex Communication System	94
10A	HEAD(LO LH)	Combination Meter	356
		Front Fog Light	126
		Headlight	120
		Multiplex Communication System	94
10A	HEAD(LO RH)	Headlight	120
		Multiplex Communication System	94

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

Fuse		System	Page
10A	HORN	Door Lock Control and Theft Deterent	192
		Horn	280
		Multiplex Communication System	94
10A	MIR HEATER	Mirror Heater	306
10A	STOP	Active Height Control Suspension and Electric Modulated Air Suspension	236
		Cruise Control	222
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
		Front Wiper and Washer (w/ Rain Sensor)	170
		Shift Lock	272
		Stop Light	158
		Trailer Towing	298
		VSC	228
15A	AC115V INV	Power Outlet (115V)	276
15A	FR FOG	Front Fog Light	126
15A	TRN–HAZ	Trailer Towing	298
		Turn Signal and Hazard Warning Light	136
20A	CDS FAN	Condenser Fan	364
20A	D FR P/W	Door Lock Control and Theft Deterent	192
		Multiplex Communication System	94
		Power Window	184
		Wireless Door Lock Control	202
20A	EFI	Cruise Control	222
		Electronically Controlled Transmission and A/T Indicator	212
		Engine Control	76
20A	RADIO NO.1	LEXUS Navigation System (w/ Rear Seat Entertainment System)	318
		LEXUS Navigation System (w/o Rear Seat Entertainment System)	324
		Radio and Player (w/ Rear Seat Entertainment System)	330
		Radio and Player (w/o Rear Seat Entertainment System)	346
20A	SEAT HEATER	Seat Heater	296
25A	DR/LCK	Door Lock Control and Theft Deterent	192
		Moon Roof	254
		Multiplex Communication System	94
		Power Seat (Driver's Seat w/ Driving Position Memory)	284
		Power Tilt and Power Telescopic	266
		Power Window	184
		Remote Control Mirror	260
		Wireless Door Lock Control	202
30A	AM2	Charging	74
		Combination Meter	356
		Engine Control	76
		Ignition	70
		Starting	68

* 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
30A	BATT CHG	Trailer Towing	298
30A	BRAKE CTRL	Trailer Towing	298
30A	DEFOG	Multiplex Communication System Rear Window Defogger	94 304
30A	RADIO NO.2	LEXUS Navigation System (w/ Rear Seat Entertainment System) LEXUS Navigation System (w/o Rear Seat Entertainment System) Radio and Player (w/ Rear Seat Entertainment System) Radio and Player (w/o Rear Seat Entertainment System)	318 324 330 346
30A	RR A/C	Rear Air Conditioning	378
30A	TOWING	Trailer Towing	298
40A	ABS MTR	VSC	228
40A	TOWING	Trailer Towing	298
50A	ABS SOL	VSC	228
50A	AIR SUS	Active Height Control Suspension and Electric Modulated Air Suspension	236
50A	AM1	Charging Engine Control	74 76
50A	HEATER	Air Conditioning	366
50A	J/B	Automatic Light Control Door Lock Control and Theft Deterent Light Auto Turn Off Multiplex Communication System Taillight and Illumination Wireless Door Lock Control	128 192 132 94 150 202
140A	ALT	Engine Control Rear Window Defogger Charging	76 304 74

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

K CONNECTOR LIST

A 1
Black



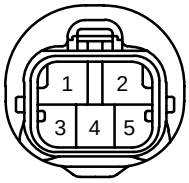
A 2
Black



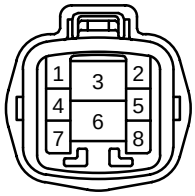
A 3
Gray



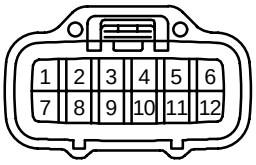
A 4



A 5
Gray



A 6
Black



A 7
Gray



A 8
Gray



A 9
Gray



A10
Gray



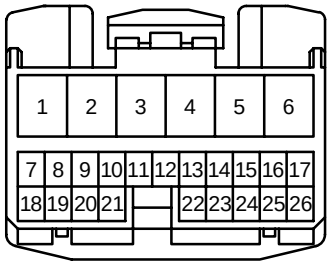
A11
Yellow



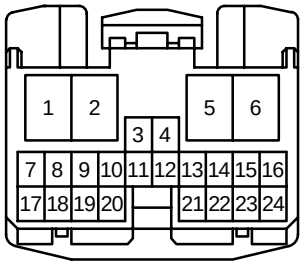
A12
Yellow



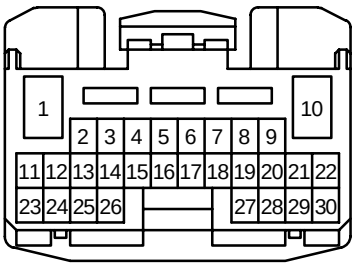
A13



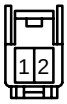
A14



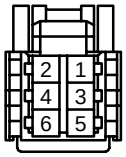
A15



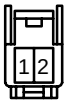
A16
Black



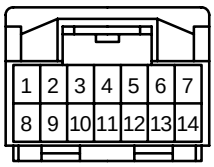
A17
Black



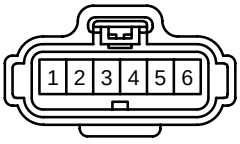
A18



A19



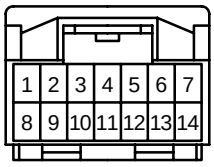
A20
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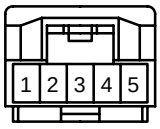
A21
Black



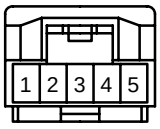
A22
Gray



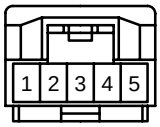
A23
Black



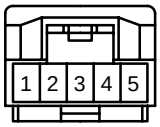
A24
Black



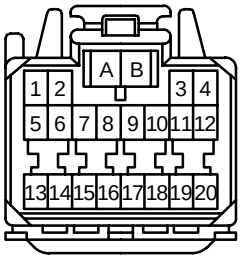
A25
Black



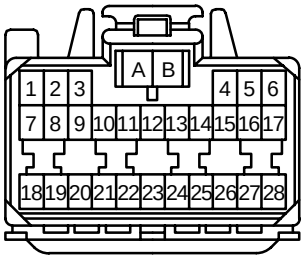
A26
Black



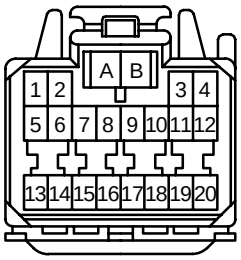
A27
Yellow



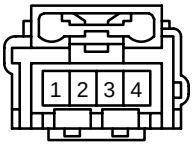
A28
Yellow



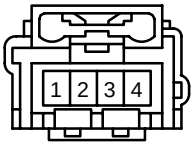
A29
Yellow



A30
Yellow



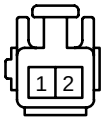
A31
Yellow



A32



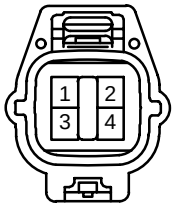
A33



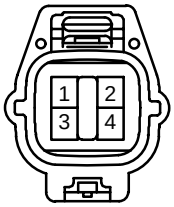
A34



A35
Black



A36
Black



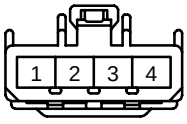
A37
Black



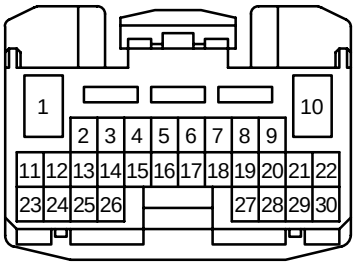
B 1
Gray



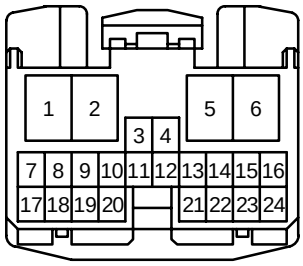
B 2
Black



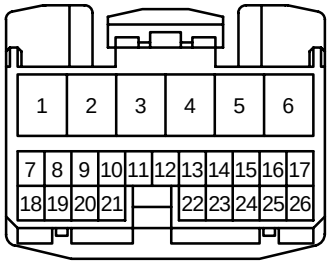
B 3



B 4



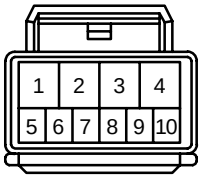
B 5



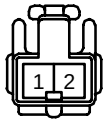
B 6



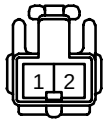
B 7



B 8

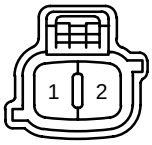


B 9

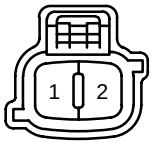


K CONNECTOR LIST

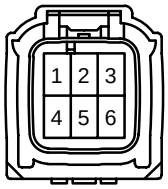
B10
Gray



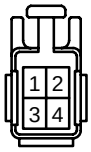
B11
Gray



B12



B13



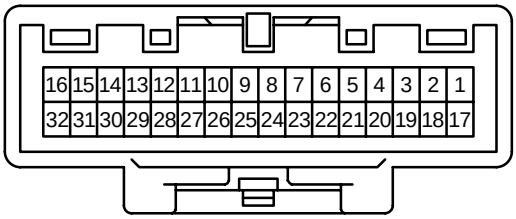
C 1
Dark Gray



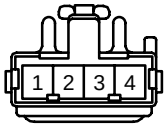
C 2
Dark Gray



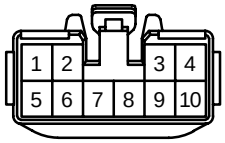
C 3



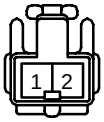
C 4
Gray



C 5



C 6



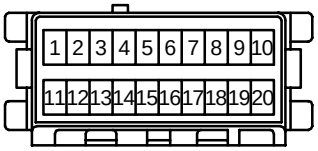
C 7



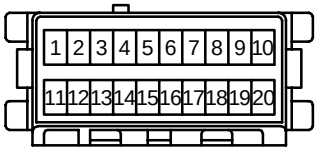
C 8
Gray



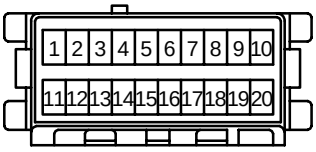
C 9



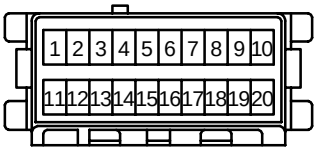
C10



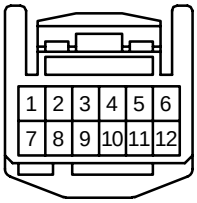
C11



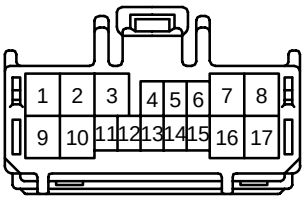
C12



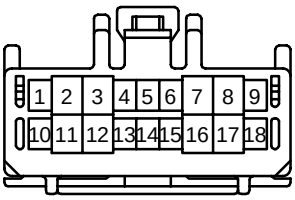
C13
Black



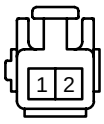
C14



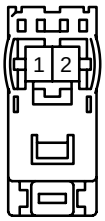
C15
Black



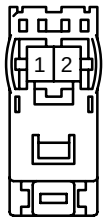
C16
Blue



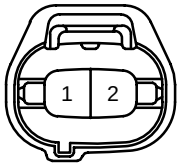
C17
Black



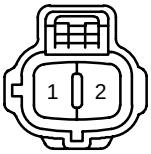
C18
Black



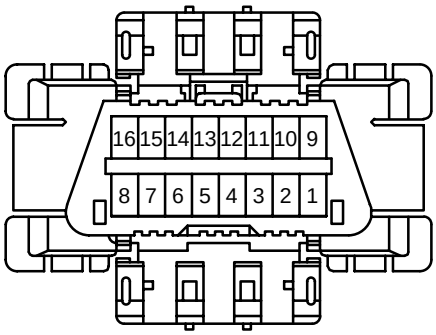
D 1
Blue



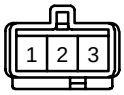
D 2
Gray



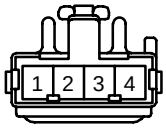
D 3



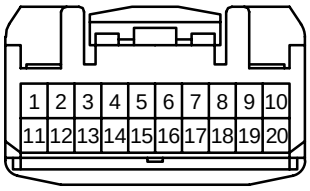
D 4
Gray



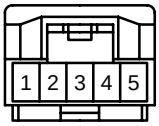
D 5
Blue



D 6



D 7



D 8
Gray



D 9
Gray



D10
Gray



D11
Gray



D12
Black



D13
Black



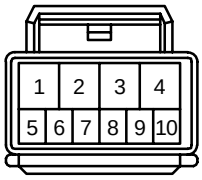
D14



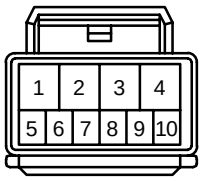
D15



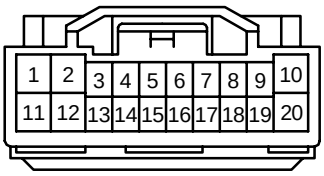
D16



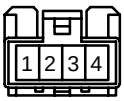
D17



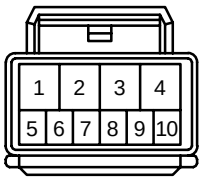
D18



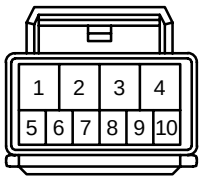
D19



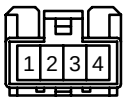
D20



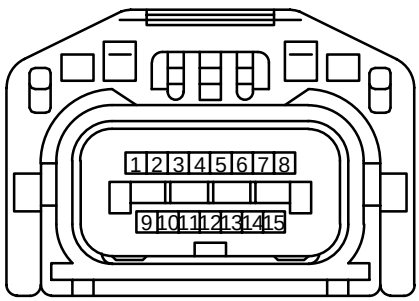
D21



D22
Blue



E 1
Gray



E 2
Black

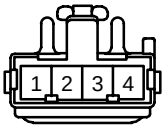


K CONNECTOR LIST

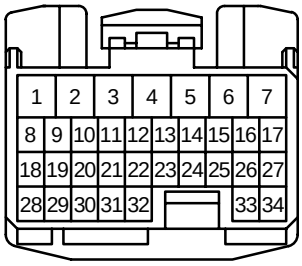
E 3
Black



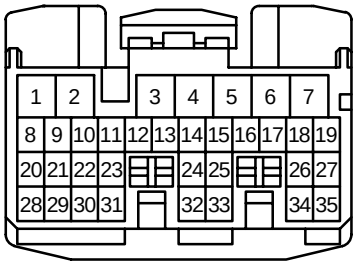
E 4
Gray



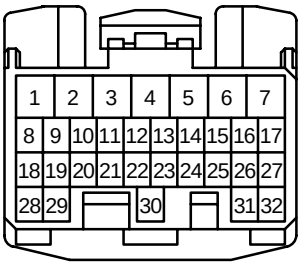
E 5



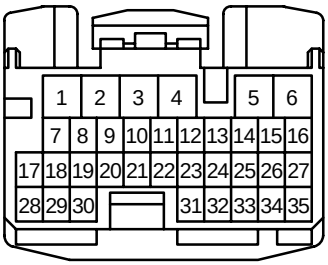
E 6



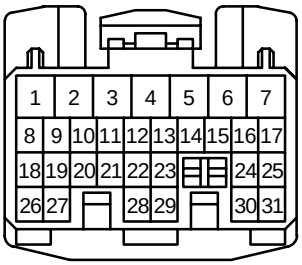
E 7



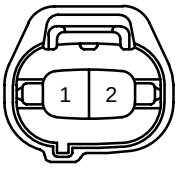
E 8



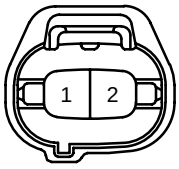
E 9



F 1
Gray



F 2
Gray



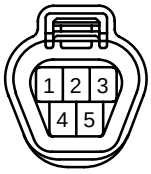
F 3
Gray



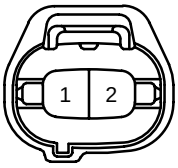
F 4
Gray



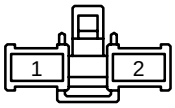
F 5
Black



F 6
Dark Gray



F 7
Black



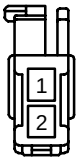
F 8
Black



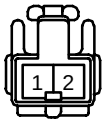
F 9



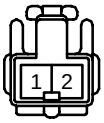
F10



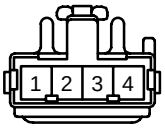
F11
Black



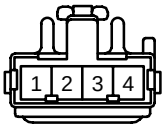
F12
Black



F13



F14



F15



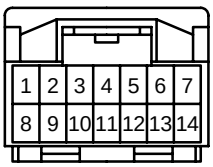
G 1



G 2
Green



G 3
Gray



G 4
Black



G 5
Black



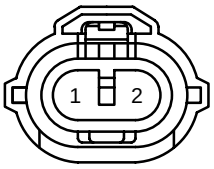
H 1
Black



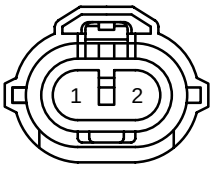
H 2
Black



H 3
Black



H 4
Black



H 5
Dark Gray



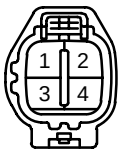
H 6
Dark Gray



H 7
Dark Gray



H 8
Dark Gray



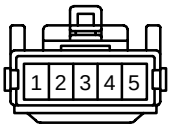
H 9
Black



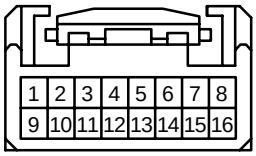
H10
Black



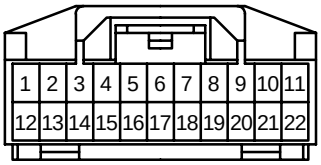
H11
Black



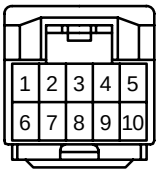
H12



H13
Gray



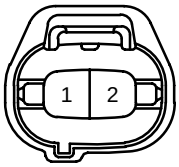
H14



H15
Gray



H16
Black



H17
Black



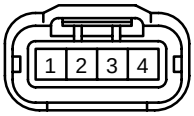
H18
Black



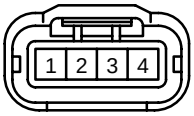
H19



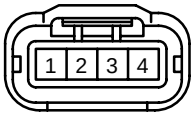
I 1
Black



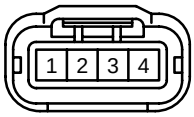
I 2
Black



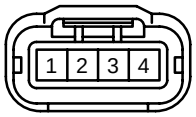
I 3
Black



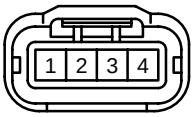
I 4
Black



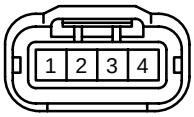
I 5
Black



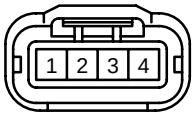
I 6
Black



I 7
Black



I 8
Black



I 9
Blue



I10
Blue



I11
Blue



I12
Blue



I13
Blue



I14
Blue



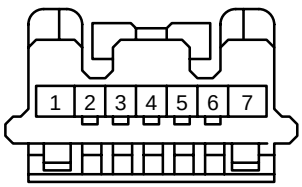
I15
Blue



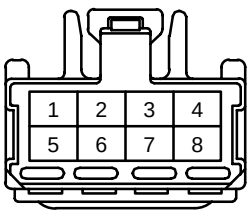
I16
Blue



I17
Black

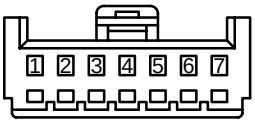


I18

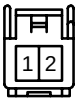


K CONNECTOR LIST

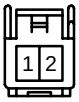
I19
Black



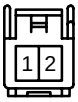
I20



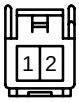
I21



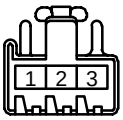
I22



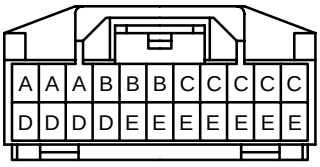
I23



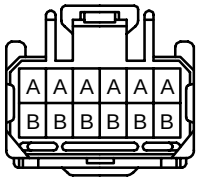
I24



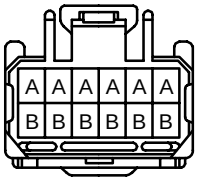
J 1



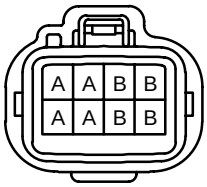
J 2



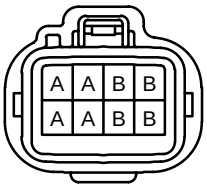
J 3



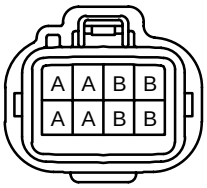
J 4
Dark Gray



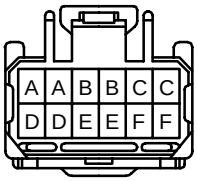
J 5
Dark Gray



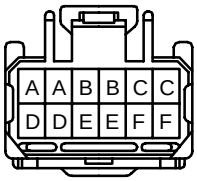
J 6
Dark Gray



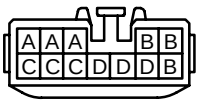
J 7



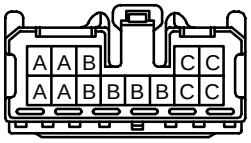
J 8



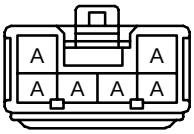
J 9
Black



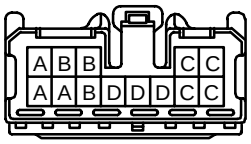
J10



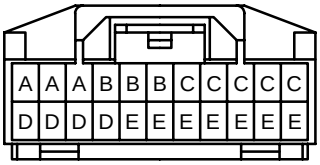
J11



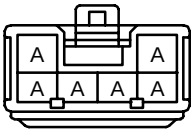
J12
Blue



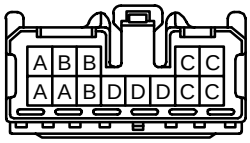
J13



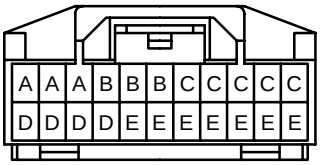
J14



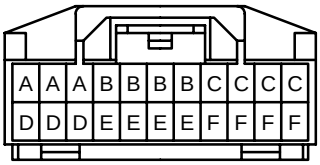
J15
Blue



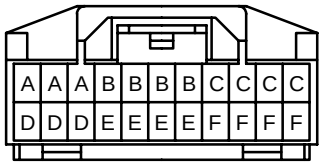
J16



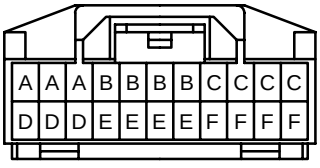
J17
Gray



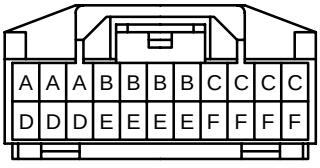
J18
Gray



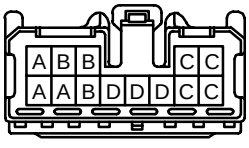
J19
Gray



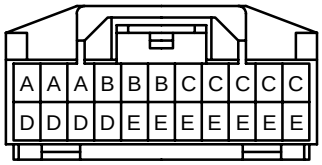
J20
Gray



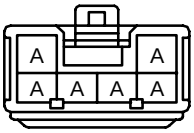
J21
Blue



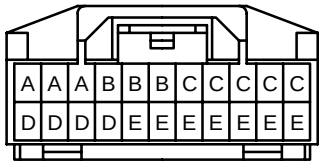
J22



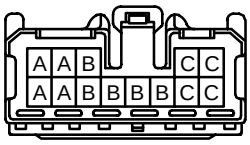
J23



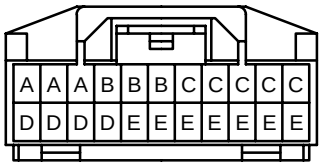
J24



J25



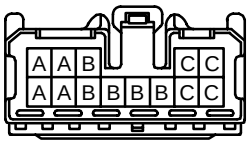
J26



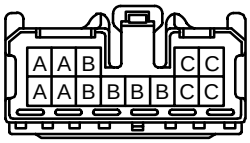
J27
Black



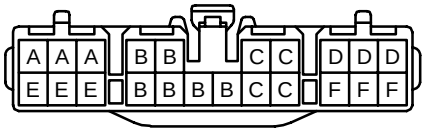
J28



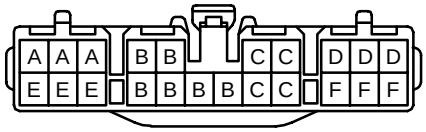
J29



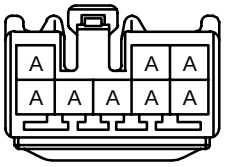
J30



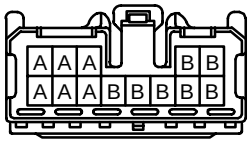
J31



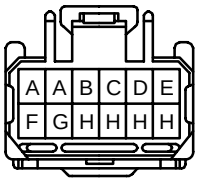
J32



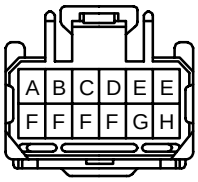
J33



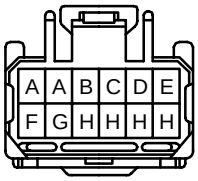
J34
Black



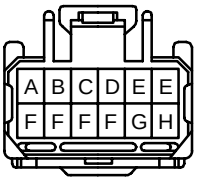
J35



J36
Black



J37



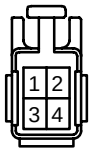
K 1
Dark Gray



K 2
Dark Gray



K 3



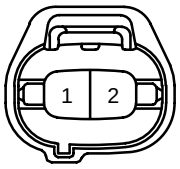
L 1



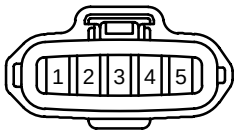
L 2



L 3
Black



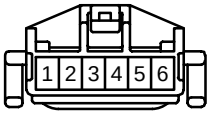
M 1
Black



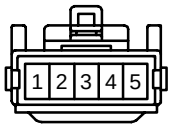
M 2
Gray



M 3
Black



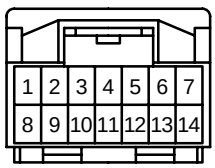
M 4
Black



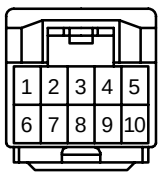
M 5



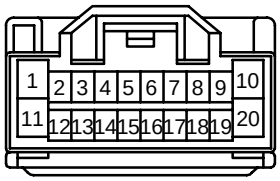
M 6



M 7

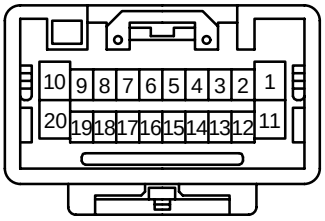


M 8

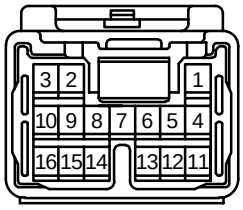


K CONNECTOR LIST

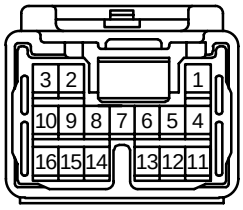
M 9



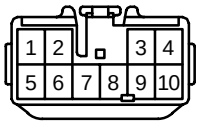
M10



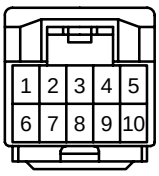
M11



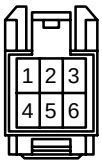
M12



M13



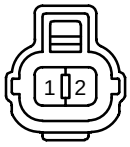
M14



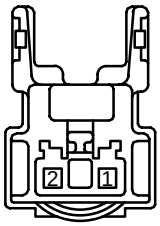
N 1
Gray



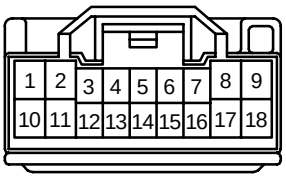
N 2
Gray



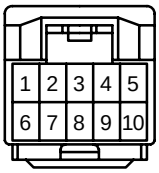
N 3
Gray



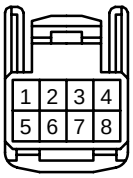
N 4



N 5



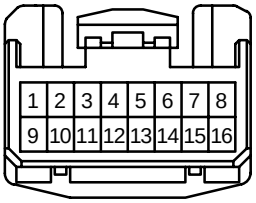
N 6



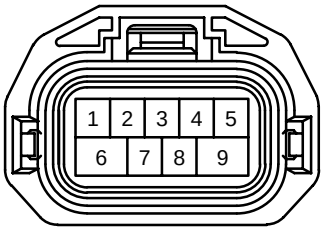
O 1
Gray



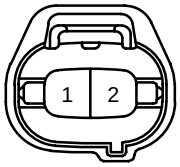
O 2



P 1
Gray



P 2
Gray



P 3
Dark Gray



P 4
Black



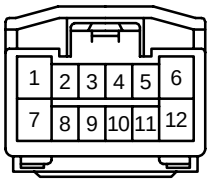
P 5



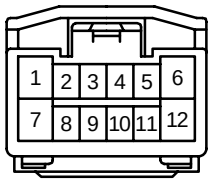
P 6
Black



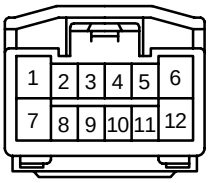
P 7



P 8



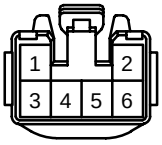
P 9



P10
Black



P11
Black



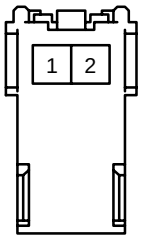
P12
Black



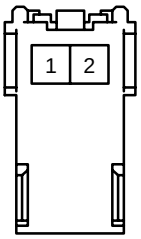
P13
Black



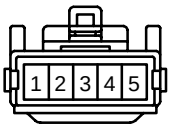
P14
Yellow



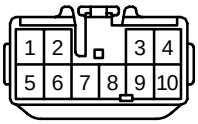
P15
Yellow



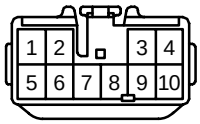
P16



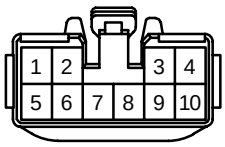
P17
Black



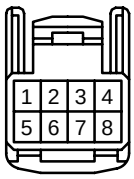
P18
Black



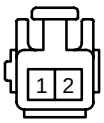
P19



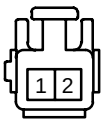
P20



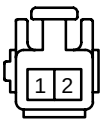
P21
Black



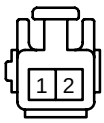
P22
Black



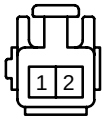
P23
Black



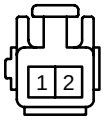
P24
Black



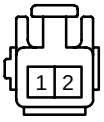
P25
Black



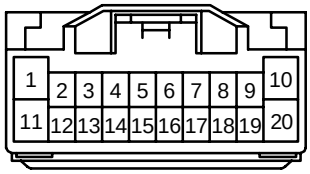
P26
Black



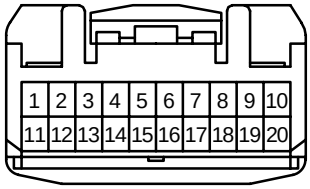
P27
Black



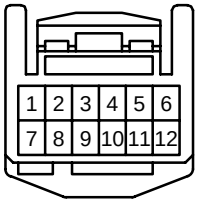
R 1



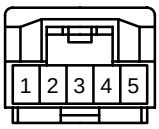
R 2



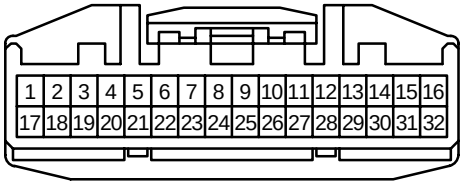
R 3



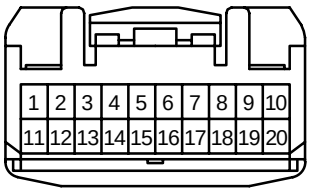
R 4



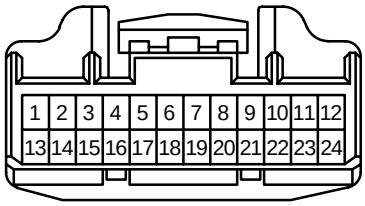
R 5



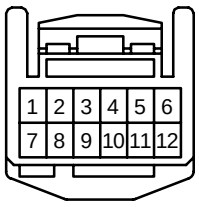
R 6



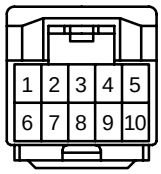
R 7



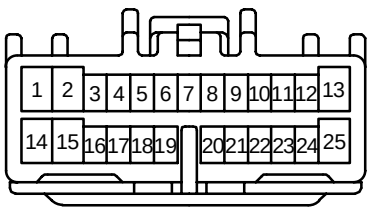
R 8



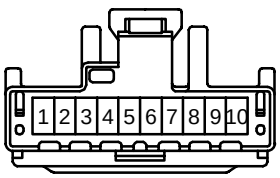
R 9



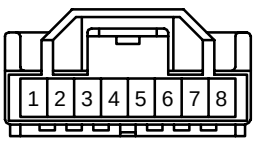
R10



R11



R12

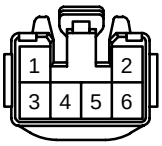


R13
Black

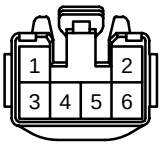


K CONNECTOR LIST

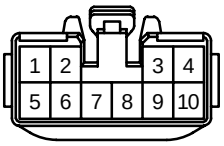
R14
Gray



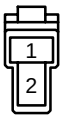
R15
Gray



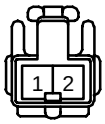
R16
Black



R17
Black



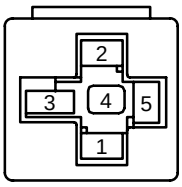
R18
Black



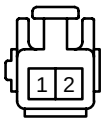
R19
Black



R20



R21



R22



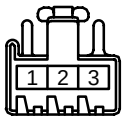
R23



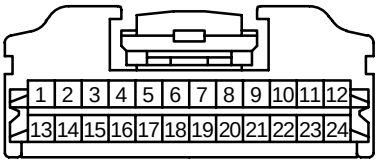
R24
Black



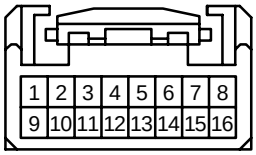
R25



R26



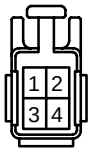
R27



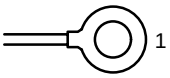
R28
Black



R29



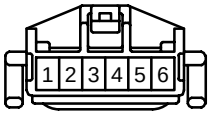
S 1



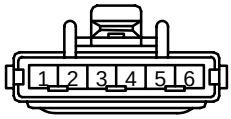
S 2
Black



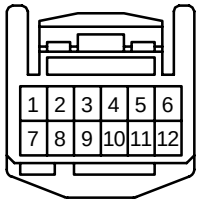
S 3
Black



S 4



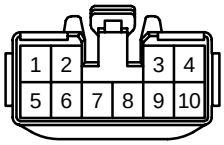
S 5



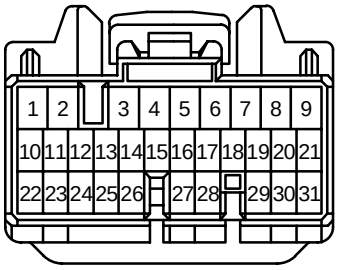
S 6



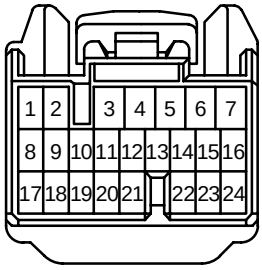
S 7
Blue



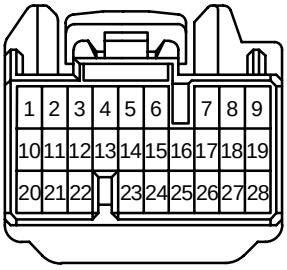
S 8



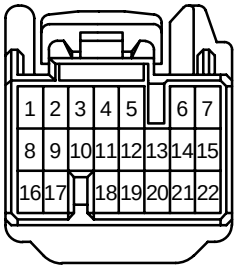
S 9
Black



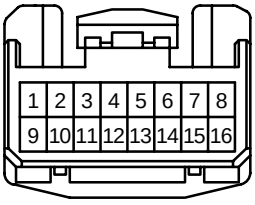
S10



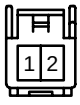
S11



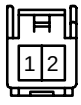
S12



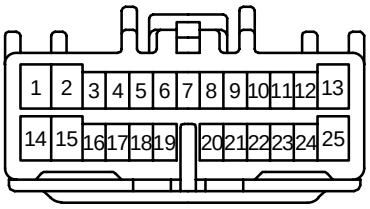
S13



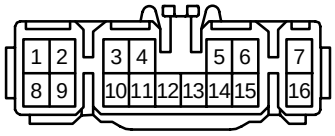
S14



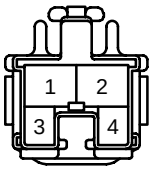
S15



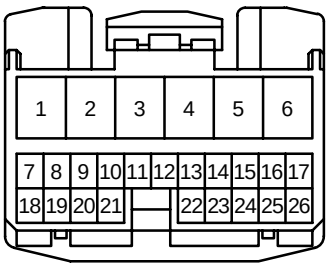
S16



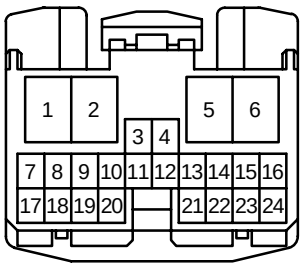
S17
Blue



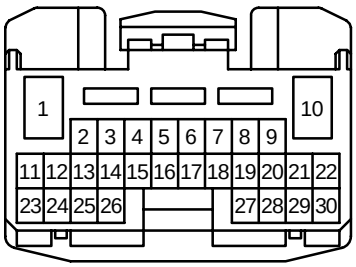
S18



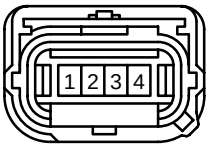
S19



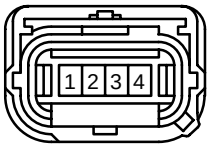
S20



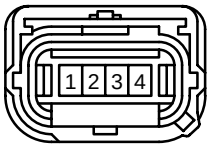
S21
Yellow



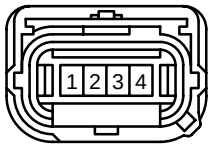
S22
Yellow



S23
Yellow



S24
Yellow



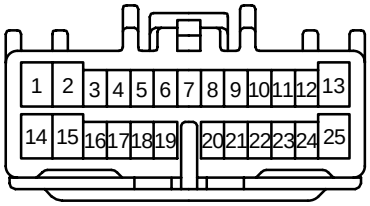
S25



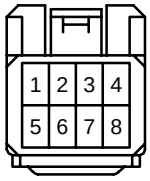
S26



S27



S28



S29



S30



S31
Yellow



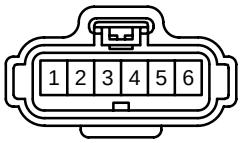
S32
Yellow



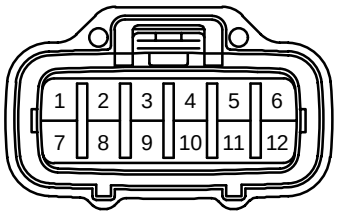
T 1
Black



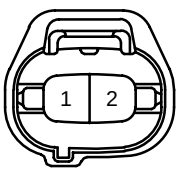
T 2
Black



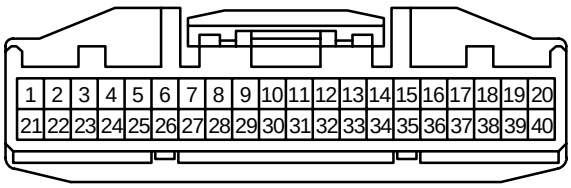
T 3
Black



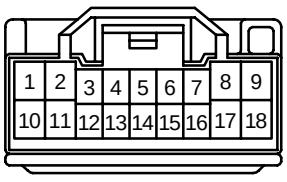
T 4
Black



T 5

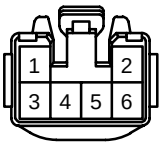


T 6

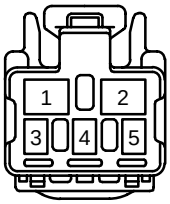


K CONNECTOR LIST

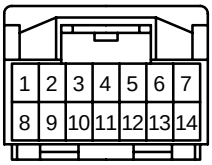
T 7



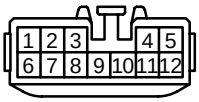
T 8



T 9



T10



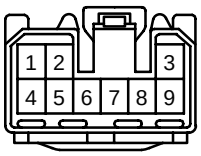
T11
Black



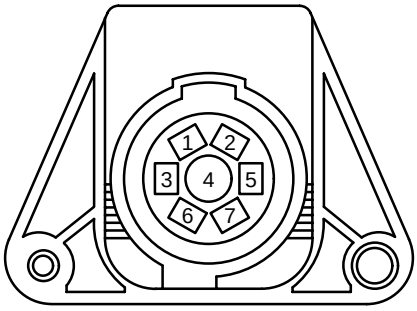
T12
Black



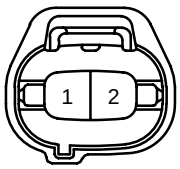
T13



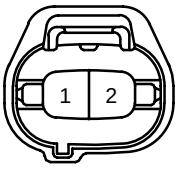
T14
Black



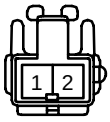
V 1
Black



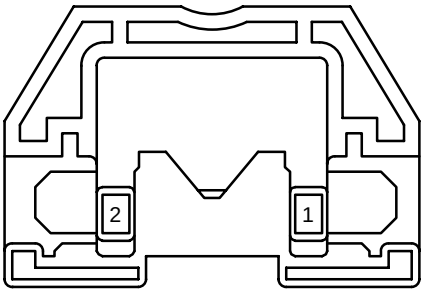
V 2
Black



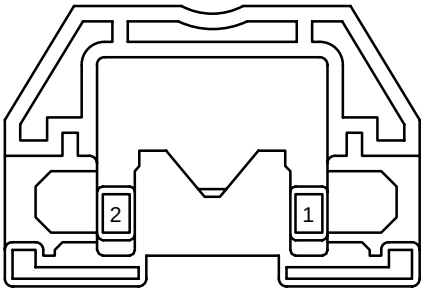
V 3
Black



V 4



V 5



V 6
Black



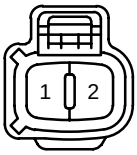
V 7



V 8
Blue



W 1
Black



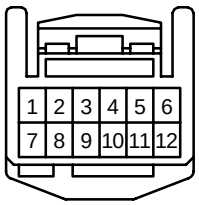
W 2
Dark Gray



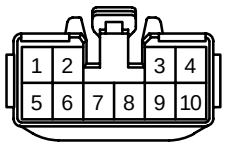
W 3
Gray



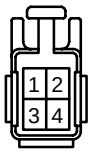
W 4



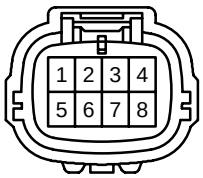
W 5
Blue



W 6



Y 1
Black



L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980–11070
A 2	A/C Condenser Fan Motor	90980–11237
A 3	A/C Lock Sensor	90980–11016
	A/C Magnetic Clutch	
A 4	ABS & BA & TRAC & VSC Actuator	90980–11413
A 5	ABS & BA & TRAC & VSC Actuator	90980–10895
A 6	ABS & BA & TRAC & VSC Actuator	90980–11151
A 7	ABS Speed Sensor Front LH	90980–11003
A 8	ABS Speed Sensor Front RH	
A 9	Absorber Control Actuator Front LH	90980–11929
A10	Absorber Control Actuator Front RH	
A11	Airbag Sensor Front LH	90980–11856
A12	Airbag Sensor Front RH	
A13	A/C Control Assembly (w/o LEXUS Navigation System)	90980–12150
	A/C ECU (w/ LEXUS Navigation System)	
A14	A/C Control Assembly (w/o LEXUS Navigation System)	90980–12149
	A/C ECU (w/ LEXUS Navigation System)	
A15	A/C Control Assembly (w/o LEXUS Navigation System)	90980–12151
	A/C ECU (w/ LEXUS Navigation System)	
A16	A/C Room Temp. Sensor	90980–11918
A17	A/C Solar Sensor	90980–12056
	Automatic Light Control Sensor	
A18	A/C Thermistor	90980–11918
A19	A/T Shift Indicator	90980–11911
A20	Accel Position Sensor	90980–11858
A21	Acceleration Control Sensor Front	90980–10845
A22	Accessory Meter	90980–11911
A23	Air Inlet Control Servo Motor	90980–11909
A24	Air Mix Control Servo Motor LH	
A25	Air Mix Control Servo Motor RH	
A26	Air Vent Mode Control Servo Motor	
A27	Airbag Sensor Assembly	82824–50160
A28	Airbag Sensor Assembly	90980–11872
A29	Airbag Sensor Assembly	82824–50150
A30	Airbag Squib (Front Passenger Airbag Assembly)	90980–12160
A31	Airbag Squib (Steering Wheel Pad)	
A32	Antenna Amplifier	90980–11146
A33	Ashtray Illumination	90980–10825
A34	ABS Speed Sensor Rear	90980–10942
A35	Absorber Control Actuator Rear LH	90980–11930
A36	Absorber Control Actuator Rear RH	
A37	Acceleration Control Sensor Rear	90980–10845
B 1	Brake Fluid Level Warning SW	90980–11009

Code	Part Name	Part Number
B 2	Blower Motor Linear Controller	90980–11676
B 3	Body ECU	90980–12151
B 4	Body ECU	90980–12149
B 5	Body ECU	90980–12150
B 6	Back Door Courtesy SW	90980–10871
B 7	Back Door Key Lock and Unlock SW	90980–12226
	Back Door Lock Motor	
	Back Door Unlock Detection SW	
B 8	Back Door Speaker LH	90980–10860
B 9	Back Door Speaker RH	
B10	Back–Up Light LH	90980–11019
B11	Back–Up Light RH	
B12	Buckle SW LH	90980–12257
	Seat Position Sensor	
B13	Buckle SW RH	90980–10795
	Occupant Detection Sensor	
C 1	Camshaft Position Sensor	90980–10947
C 2	Crankshaft Position Sensor	90980–11162
C 3	CD Automatic Changer	90980–12262
C 4	Center Diff. Lock Control SW	90980–11013
C 5	Center Diff. Lock ECU	90980–10801
C 6	Center Speaker	90980–10860
C 7	Cigarette Lighter	90980–10760
C 8	Cigarette Lighter Illumination	90980–11148
C 9	Combination Meter	82824–35040
C10	Combination Meter	82824–35030
C11	Combination Meter	82824–35040
C12	Combination Meter	82824–35030
C13	Combination SW	90980–12183
C14	Combination SW	90980–11672
C15	Combination SW	90980–11594
C16	Console Box Illumination	90980–10825
C17	Curtain Shield Airbag Squib LH	90980–12219
C18	Curtain Shield Airbag Squib RH	
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
D 4	Diode (Back–Up Light)	90980–11071
D 5	Downhill Assist Control SW	90980–11013
D 6	DVD Player	90980–12259
D 7	Door Control Receiver	90980–11909
D 8	Door Courtesy Light Front LH	90980–11148
D 9	Door Courtesy Light Front RH	
D10	Door Courtesy Light Rear LH	
D11	Door Courtesy Light Rear RH	

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

Code	Part Name	Part Number
D12	Door Courtesy SW Front LH	90980–10871
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
	Door Lock Motor Front LH	
	Door Unlock Detection SW Front LH	
D17	Door Key Lock and Unlock SW Front RH	
	Door Lock Motor Front RH	
	Door Unlock Detection SW Front RH	
D18	Door Lock Control SW LH	90980–12166
	Power Window Master SW	
D19	Door Lock Control SW RH	90980–11950
D20	Door Lock Motor Rear LH	90980–12226
	Door Unlock Detection SW Rear LH	
D21	Door Lock Motor Rear RH	
	Door Unlock Detection SW Rear RH	
D22	Driving Position Memory SW	90980–11950
E 1	Electronically Controlled Transmission Solenoid	90980–12293
E 2	Engine Coolant Temp. Sensor	90980–10736
E 3	Engine Hood Courtesy SW	90980–10942
E 4	Electronically Controlled Transmission Pattern Select SW	90980–11013
E 5	Engine Control Module	90980–12144
E 6	Engine Control Module	90980–12145
E 7	Engine Control Module	90980–12143
E 8	Engine Control Module	90980–12146
E 9	Engine Control Module	90980–12142
F 1	Front Fog Light LH	90980–11156
F 2	Front Fog Light RH	
F 3	Front Parking Light LH	90980–10942
	Front Side Marker Light LH	
	Front Turn Signal Light LH	
F 4	Front Parking Light RH	
	Front Side Marker Light RH	
	Front Turn Signal Light RH	
F 5	Front Wiper Motor	90980–11599
F 6	Fuel Pump Resistor	90980–11156
F 7	Front Blower Motor	90980–10385
F 8	Front Passenger's Seat Belt Warning Light	90980–11296
F 9	Front Door Speaker LH	90980–10935
F10	Front Door Speaker RH	
F11	Front Door Squawker LH	90980–10860
F12	Front Door Squawker RH	
F13	Front Door Tweeter Speaker LH	90980–11013
F14	Front Door Tweeter Speaker RH	

Code	Part Name	Part Number
F15	Fuel Pump	90980–11077
	Fuel Sender	
G 1	Generator	90980–09365
G 2	Generator	90980–11964
G 3	Gateway ECU	90980–11911
G 4	Glove Box Light	90980–11148
G 5	Glove Box Light SW	90980–11098
H 1	Headlight High LH	90980–11095
H 2	Headlight High RH	
H 3	Headlight Low LH	82824–60460
H 4	Headlight Low RH	
H 5	Heated Oxygen Sensor (Bank 1 Sensor 1)	90980–10869
H 6	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980–11028
H 7	Heated Oxygen Sensor (Bank 2 Sensor 1)	90980–10869
H 8	Heated Oxygen Sensor (Bank 2 Sensor 2)	90980–11028
H 9	Horn (High)	90980–10619
H10	Horn (Low)	
H11	Hazard SW	90980–10789
H12	Headphone Terminal	90980–12156
	Video Terminal	
H13	Heater Control SW	90980–11915
H14	Height Control and Suspension SW	90980–11923
H15	Height Control Compressor	90980–10990
H16	Height Control Exhaust Valve	90980–11156
H17	Height Control Sensor Rear LH	90980–11016
H18	Height Control Sensor Rear RH	
H19	High Mounted Stop Light	90980–11003
I 1	Ignition Coil and Igniter No.1	90980–11885
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	90980–11153
I10	Injector No.2	
I11	Injector No.3	
I12	Injector No.4	
I13	Injector No.5	
I14	Injector No.6	
I15	Injector No.7	
I16	Injector No.8	
I17	Ignition Key Cylinder Light	90980–12092
	Transponder Key Amplifier	
I18	Ignition SW	90980–11615

L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
I19	Inner Mirror	90980–11794
I20	Inside Handle Illumination Front LH	90980–12063
I21	Inside Handle Illumination Front RH	
I22	Inside Handle Illumination Rear LH	
I23	Inside Handle Illumination Rear RH	
I24	Interior Light	90980–12321
J 1	Junction Connector	90980–11915
J 2	Junction Connector	90980–11661
J 3	Junction Connector	
J 4	Junction Connector	90980–10891
J 5	Junction Connector	
J 6	Junction Connector	
J 7	Junction Connector	90980–11661
J 8	Junction Connector	
J 9	Junction Connector	90980–10803
J10	Junction Connector	90980–11542
J11	Junction Connector	90980–10976
J12	Junction Connector	90980–11542
J13	Junction Connector	90980–11915
J14	Junction Connector	90980–10976
J15	Junction Connector	90980–11542
J16	Junction Connector	90980–11915
J17	Junction Connector	
J18	Junction Connector	
J19	Junction Connector	
J20	Junction Connector	
J21	Junction Connector	90980–11542
J22	Junction Connector	90980–11915
J23	Junction Connector	90980–10976
J24	Junction Connector	90980–11915
J25	Junction Connector	90980–11542
J26	Junction Connector	90980–11915
J27	Junction Connector	90980–11398
J28	Junction Connector	90980–11542
J29	Junction Connector	
J30	Junction Connector	90980–11238
J31	Junction Connector	
J32	Junction Connector	90980–11686
J33	Junction Connector	90980–11542
J34	Junction Connector	90980–11661
J35	Junction Connector	
J36	Junction Connector	
J37	Junction Connector	
K 1	Knock Sensor LH	90980–11166
K 2	Knock Sensor RH	

Code	Part Name	Part Number
K 3	Key Interlock Solenoid	90980–10795
	Unlock Warning SW	
L 1	License Plate Light LH	90980–11148
L 2	License Plate Light RH	
L 3	Low Pressure Tank Valve	90980–11156
M 1	Mass Air Flow Meter	90980–11317
M 2	Master Cylinder Pressure Sensor	90980–11451
M 3	Main SW	90980–10964
M 4	Mirror Heater SW	90980–10789
M 5	Multi–Display	90980–10799
M 6	Multi–Display	90980–11911
M 7	Multi–Display	90980–11923
M 8	Mayday ECU	90980–11971
M 9	Mayday ECU	90980–12025
M10	Mirror Heater LH	90980–11573
	Remote Control Mirror LH	
M11	Mirror Heater RH	
	Remote Control Mirror RH	
M12	Moon Roof Control ECU and Motor	90980–10997
M13	Coin Box Illumination	90980–11923
	Moon Roof Control SW	
	Personal Light	
M14	Multi–Display	90980–12012
N 1	Noise Filter No.1	90980–10843
N 2	Noise Filter No.2	
N 3	Noise Filter (Condenser Fan)	90980–10849
N 4	Navigation ECU	90980–11973
N 5	Navigation ECU	90980–11923
N 6	Navigation ECU	90980–12221
O 1	Oil Pressure SW	90980–11363
O 2	Overhead J/B	90980–12155
P 1	Park/Neutral Position SW	90980–11784
P 2	Pressure SW	90980–11149
P 3	Pressure SW	90980–10943
P 4	Parking Brake SW	90980–10871
P 5	Power Outlet (Front)	90980–10760
P 6	Power Outlet (115V)	90980–10601
P 7	Power Window Control SW Front RH	90980–11947
P 8	Power Window Control SW Rear LH	
P 9	Power Window Control SW Rear RH	
P10	Power Window Motor Front LH	90980–10797
P11	Power Window Motor Front RH	
P12	Power Window Motor Rear LH	
P13	Power Window Motor Rear RH	

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

Code	Part Name	Part Number
P14	Pretensioner LH	90980–12253
P15	Pretensioner RH	
P16	Power Seat Control SW (Driver's Seat Lumbar Support Control)	90980–10789
P17	Power Seat Control SW (Driver's Seat)	90980–10997
P18	Power Seat Control SW (Front Passenger's Seat)	
P19	Power Seat ECU	90980–10801
P20	Power Seat ECU	90980–12221
P21	Power Seat Motor (Driver's Seat Front Vertical Control)	90980–10825
P22	Power Seat Motor (Driver's Seat Lifter Control)	
P23	Power Seat Motor (Driver's Seat Lumbar Support Control)	
P24	Power Seat Motor (Driver's Seat Reclining Control)	
P25	Power Seat Motor (Driver's Seat Slide Control)	
P26	Power Seat Motor (Front Passenger's Seat Reclining Control)	
P27	Power Seat Motor (Front Passenger's Seat Slide Control)	
R 1	Radio and Player	90980–12038
R 2	Radio and Player	90980–12259
R 3	Radio and Player	90980–12183
R 4	Rear Cooler SW	90980–11909
R 5	Rear Seat Entertainment ECU	90980–12153
R 6	Rear Seat Entertainment ECU	90980–12259
R 7	Rear Seat Entertainment ECU	90980–12200
R 8	Rear Seat Entertainment ECU	90980–12183
R 9	Rear Seat Entertainment ECU	90980–11923
R10	Remote Control Mirror ECU	90980–11877
R11	Remote Control Mirror SW	90980–11657
R12	Rheostat	90980–11989
R13	Rain Sensor	90980–11987
R14	Rear Combination Light LH	90980–10797
R15	Rear Combination Light RH	
R16	Rear Cooler Amplifier	90980–10801
R17	Rear Cooler Blower Motor	90980–10214
R18	Rear Cooler Magnetic Valve	90980–10860
R19	Rear Cooler Power Transistor	90980–10171
R20	Rear Cooler Relay	–
R21	Rear Cooler Thermistor	90980–10825
R22	Rear Door Speaker LH	90980–10935
R23	Rear Door Speaker RH	
R24	Rear Height Control Valve	90980–11143
R25	Rear Interior Light	90980–12321
R26	Rear Seat Audio Controller	90980–12267

Code	Part Name	Part Number
R27	Rear Seat Entertainment Display	90980–12156
R28	Rear Window Defogger	90980–10870
R29	Rear Wiper Motor	90980–10795
S 1	Starter	90980–09585
S 2	Starter	90980–11400
S 3	Seat Heater SW Front LH	90980–10964
S 4	Seat Heater SW Front RH	90980–10933
S 5	Shift Lock Control ECU	90980–12183
	Transmission Control SW	
S 6	Short Pin	90980–10800
S 7	Short Pin	90980–10801
S 8	Skid Control ECU	90980–11935
S 9	Skid Control ECU	90980–11476
S10	Skid Control ECU	90980–11637
S11	Skid Control ECU	90980–11638
S12	Steering Sensor	90980–12155
S13	Step Light LH	90980–12063
S14	Step Light RH	
S15	Stereo Component Amplifier	90980–11877
S16	Stereo Component Amplifier	90980–10848
S17	Stop Light SW	90980–11118
S18	Suspension Control ECU	90980–12150
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	
S25	Side Step Light LH	90980–11075
S26	Side Step Light RH	
S27	Sub Body ECU	90980–11877
S28	Sub Body ECU	90980–12113
S29	Seat Heater (Driver's Seat)	90980–10797
S30	Seat Heater (Front Passenger's Seat)	
S31	Side Airbag Squib LH	90980–11864
S32	Side Airbag Squib RH	
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

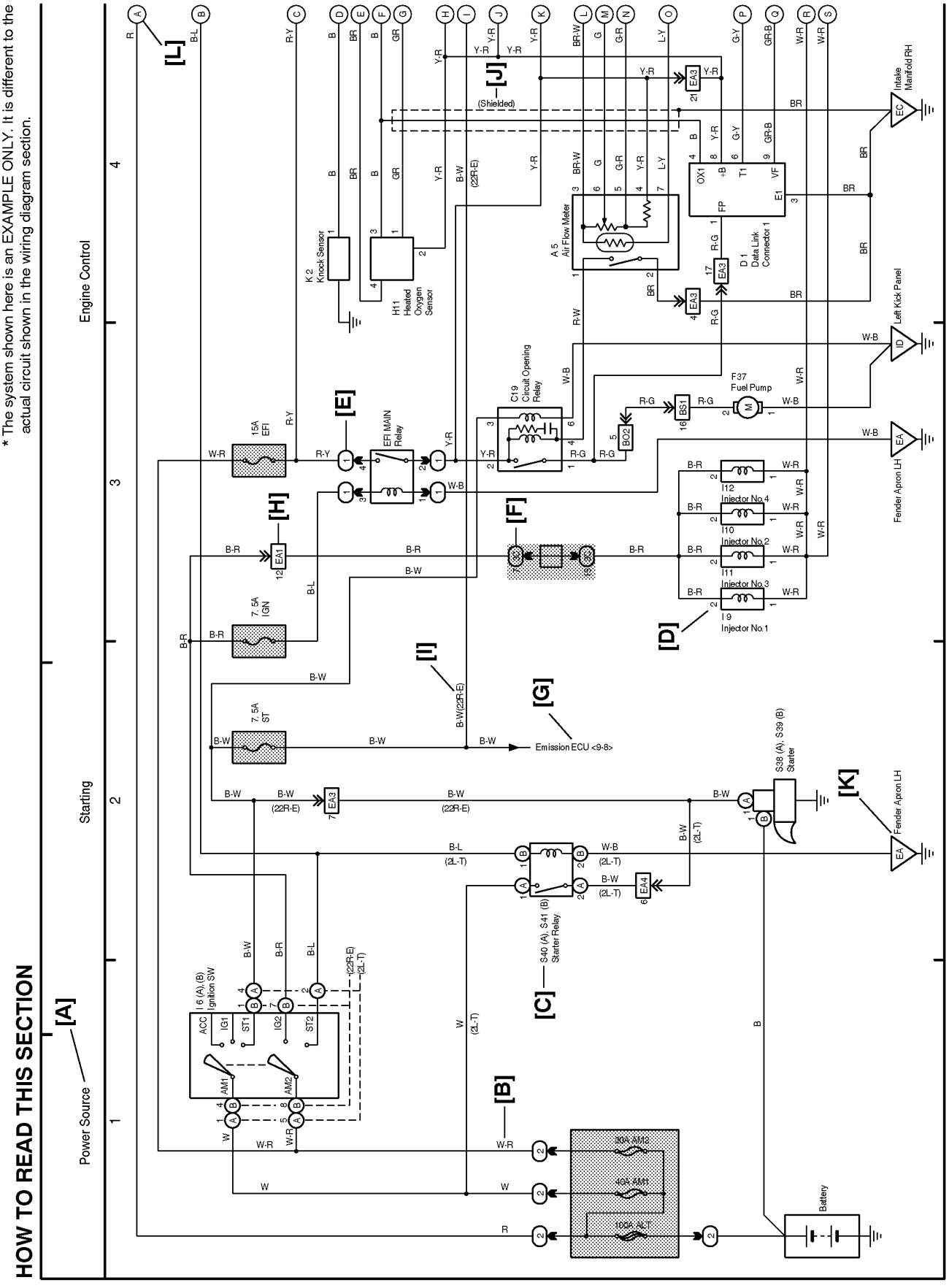
L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
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
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 6	Vapor Pressure Sensor	90980–11143
V 7	Voltage Inverter	90980–10799
V 8	VSV (Canister Closed Valve)	90980–11859
W 1	Washer Level Sensor	90980–11068
W 2	Washer Motor	90980–11028
W 3	Wireless Door Lock Buzzer	90980–11142
W 4	Wiper Relay	90980–12183
W 5	Wiper Relay	90980–10801
W 6	Woofer Speaker	90980–10795
Y 1	Yaw Rate Sensor	90980–12080

Code	Part Name	Part Number

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


* 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
Power Source
Starting
Engine Control
[A]
[B]
[C]
[D]
[E]
[F]
[G]
[H]
[I]
[J]
[K]
[L]
Battery
Emission ECU <9-8>
Intake Manifold RH
Left Kick Panel
Fender Apron LH
Fender Apron LH
Data Link Connector 1
Air Flow Meter
Knock Sensor
Heated Oxygen Sensor
Circuit Opening Relay
Fuel Pump
EFI MAIN Relay
Injector No.4
Injector No.2
Injector No.3
Injector No.1
Starter
Starter Relay
Ignition SW
(Shielded)
(22R-E)
(2L-T)

[A] : System Title

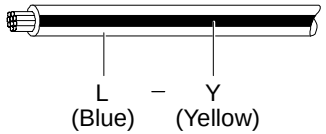
[B] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

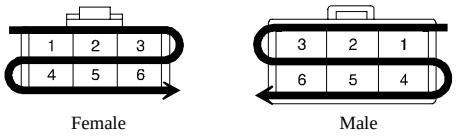
Example: L – Y



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

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

Example : Numbered in order from upper left to lower right / Numbered in order from upper right to lower left



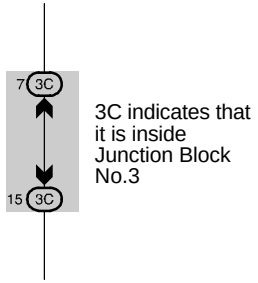
The numbering system for the overall wiring diagram is the same as above

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

Example : (1) Indicates Relay Block No.1

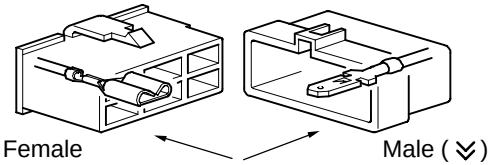
[F] : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

Example:



[G] : Indicates related system.

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



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

[J] : Indicates a shielded cable.



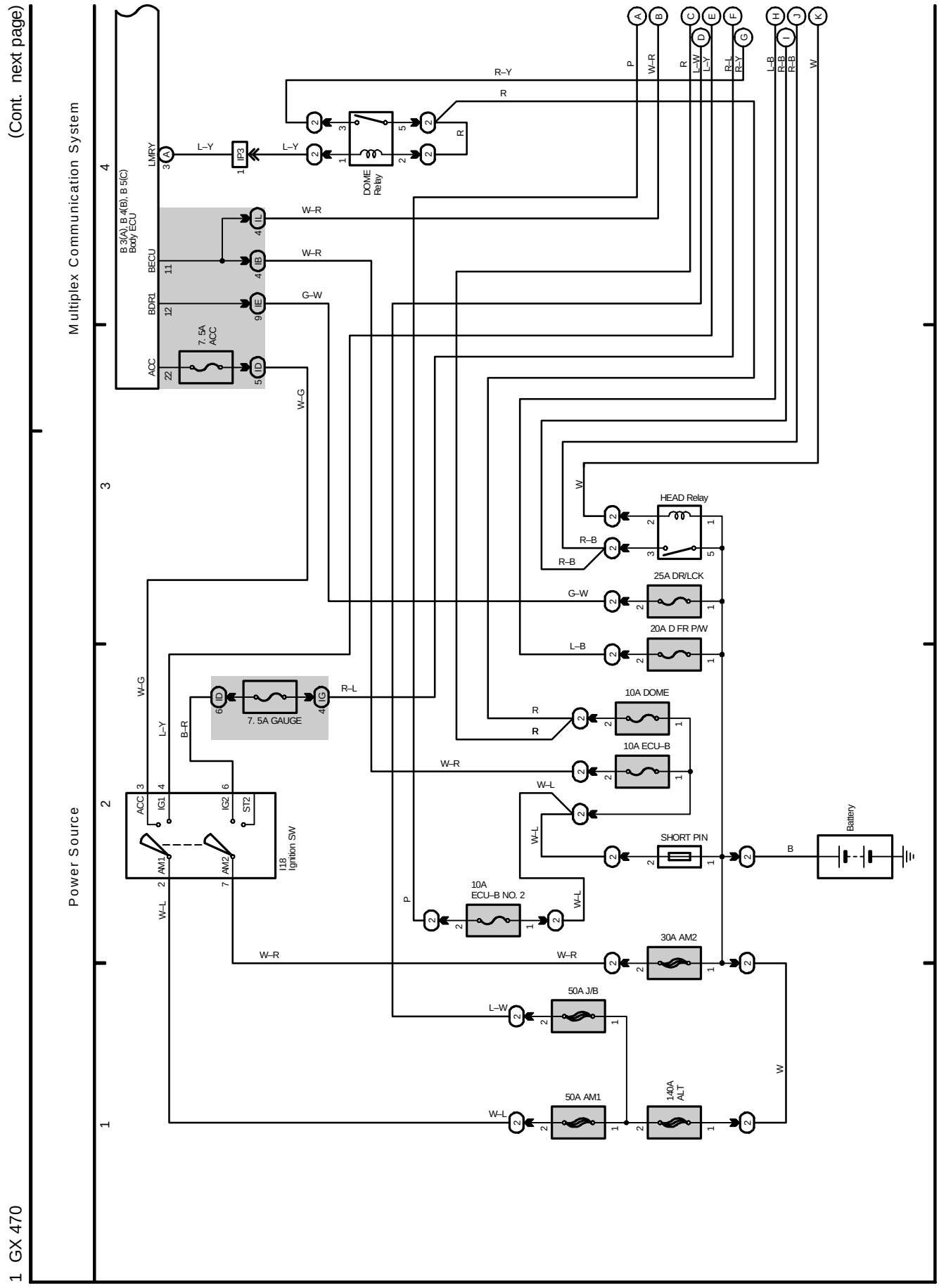
[K] : Indicates and located on ground point.

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

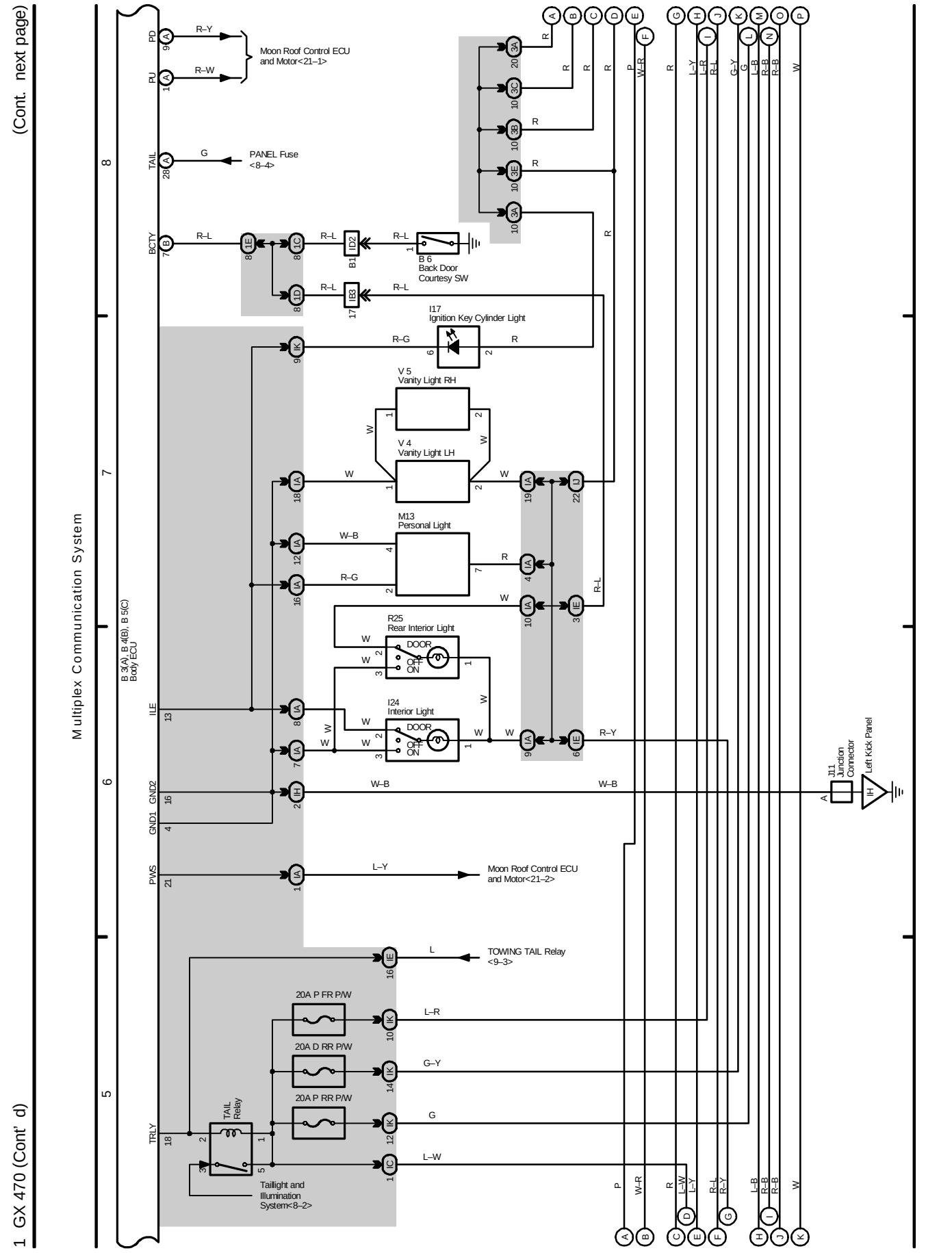
SYSTEM INDEX

SYSTEMS	LOCATION
Accessory Meter	31–3
Active Height Control Suspension	16–2
Air Conditioning	38–3
Automatic Glare–Resistant EC Mirror and Compass	27–1
Back–Up Light	13–3
Center Differential Lock	18–3
Charging	4–3
Cigarette Lighter	25–3
Combination Meter	37–3
Condenser Fan	38–1
Cruise Control	7–3
Electric Modulated Air Suspension	16–2
Electric Tension Reducer	27–3
Electronically Controlled Transmission and A/T Indicator	6–2
Engine Control	5–3
Engine Immobiliser System	5–19
Front Fog Light	12–3
Front Wiper and Washer (w/ Rain Sensor)	19–3
Front Wiper and Washer (w/o Rain Sensor)	20–2
Horn	25–2
Ignition	3–3
Illumination	8–3
LEXUS Link System (Mayday System)	32–3
LEXUS Navigation System (w/ Rear Seat Entertainment System)	33–2
LEXUS Navigation System (w/o Rear Seat Entertainment System)	34–2
Mirror Heater	23–3
Moon Roof	21–3
Multiplex Communication System	1–4
∗ Automatic Light Control	
∗ Door Lock Control	
∗ Garage Door Opener	
∗ Headlight	
∗ Interior Light	
∗ Key Reminder	
∗ Light Auto Turn Off	
∗ Power Window	
∗ Rear Wiper and Washer	
∗ Seat Belt Warning	
∗ Theft Deterrent	
∗ Wireless Door Lock Control	
Power Outlet (115V)	26–3
Power Outlet (12V)	25–4
Power Seat (Driver’s Seat w/ Driving Position Memory)	28–2
Power Seat (Driver’s Seat w/o Driving Position Memory)	29–2
Power Seat (Front Passenger’s Seat)	29–4
Power Source	1~38–1
Power Tilt and Power Telescopic	17–2
Radio and Player (w/ Rear Seat Entertainment System)	35–2
Radio and Player (w/o Rear Seat Entertainment System)	36–2
Rear Air Conditioning	38–14
Rear Window Defogger	24–2
Remote Control Mirror	22–2
Seat Heater	30–3
Shift Lock	24–4
SRS	14–3
Starting	2–3
Stop Light	11–3
Taillight	8–3
Trailer Towing	9–3
Turn Signal and Hazard Warning Light	10–2
VSC	15–3

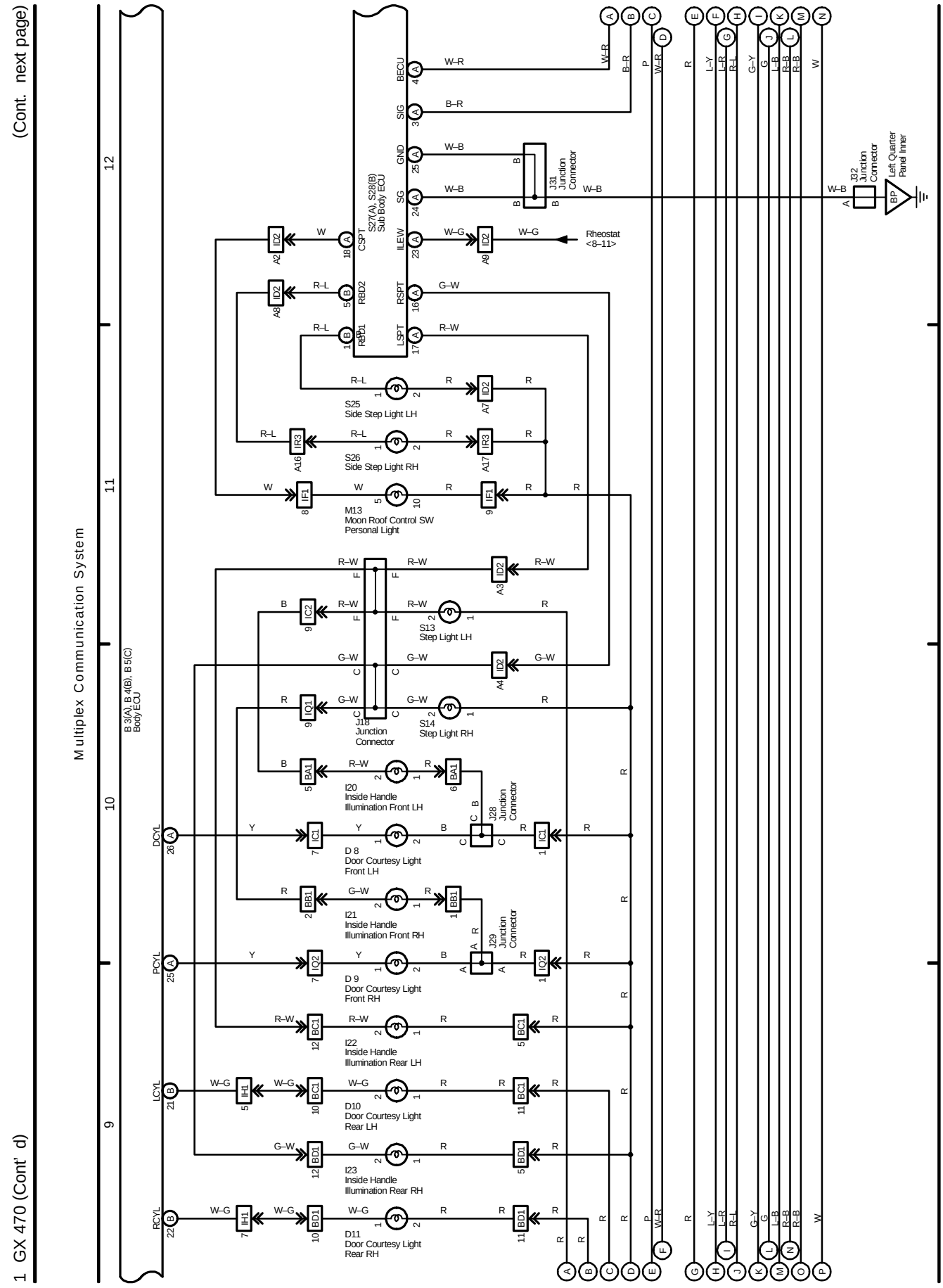
OVERALL ELECTRICAL WIRING DIAGRAM (August 2002–April 2003)

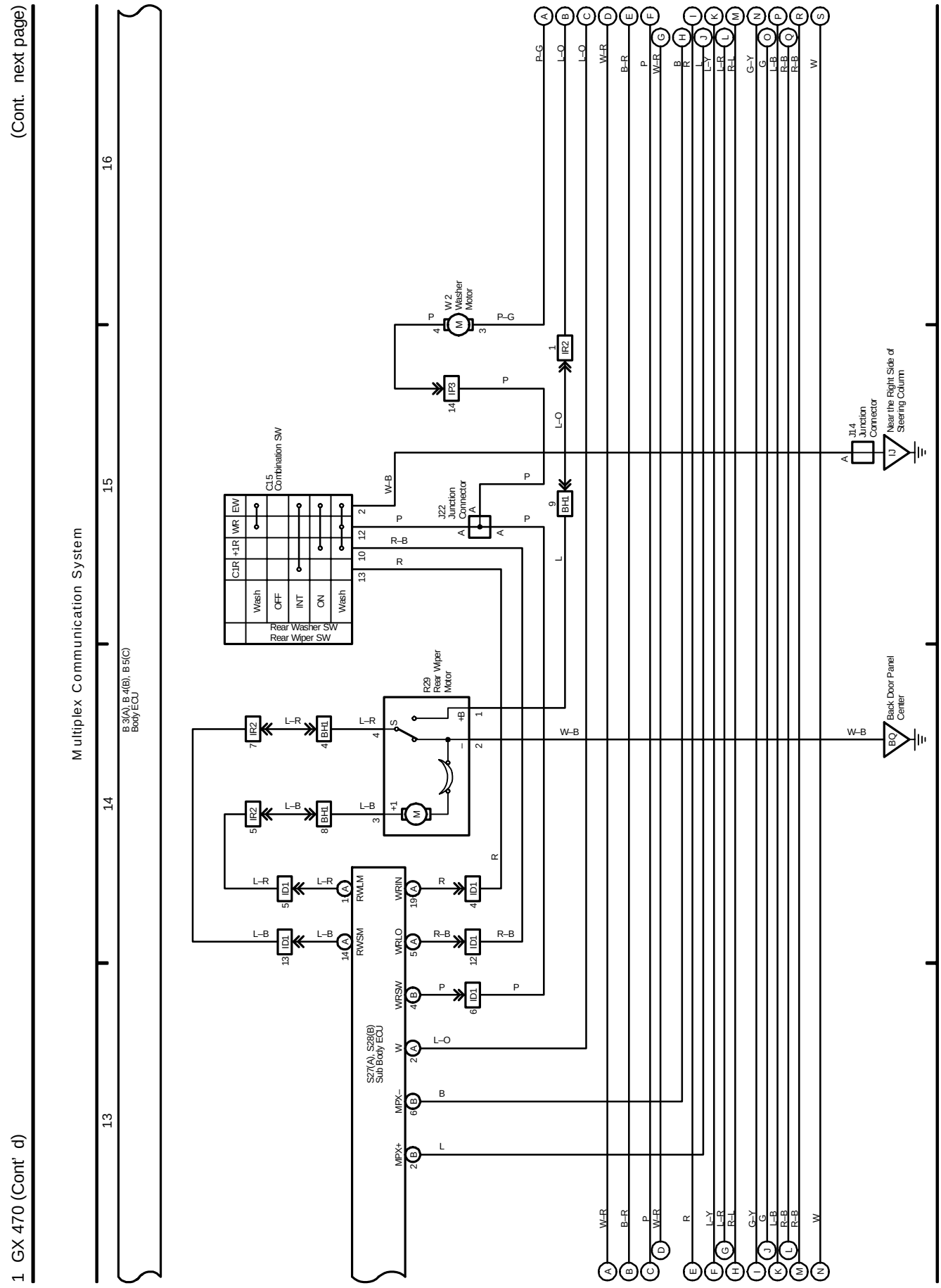


OVERALL ELECTRICAL WIRING DIAGRAM (August 2002–April 2003)



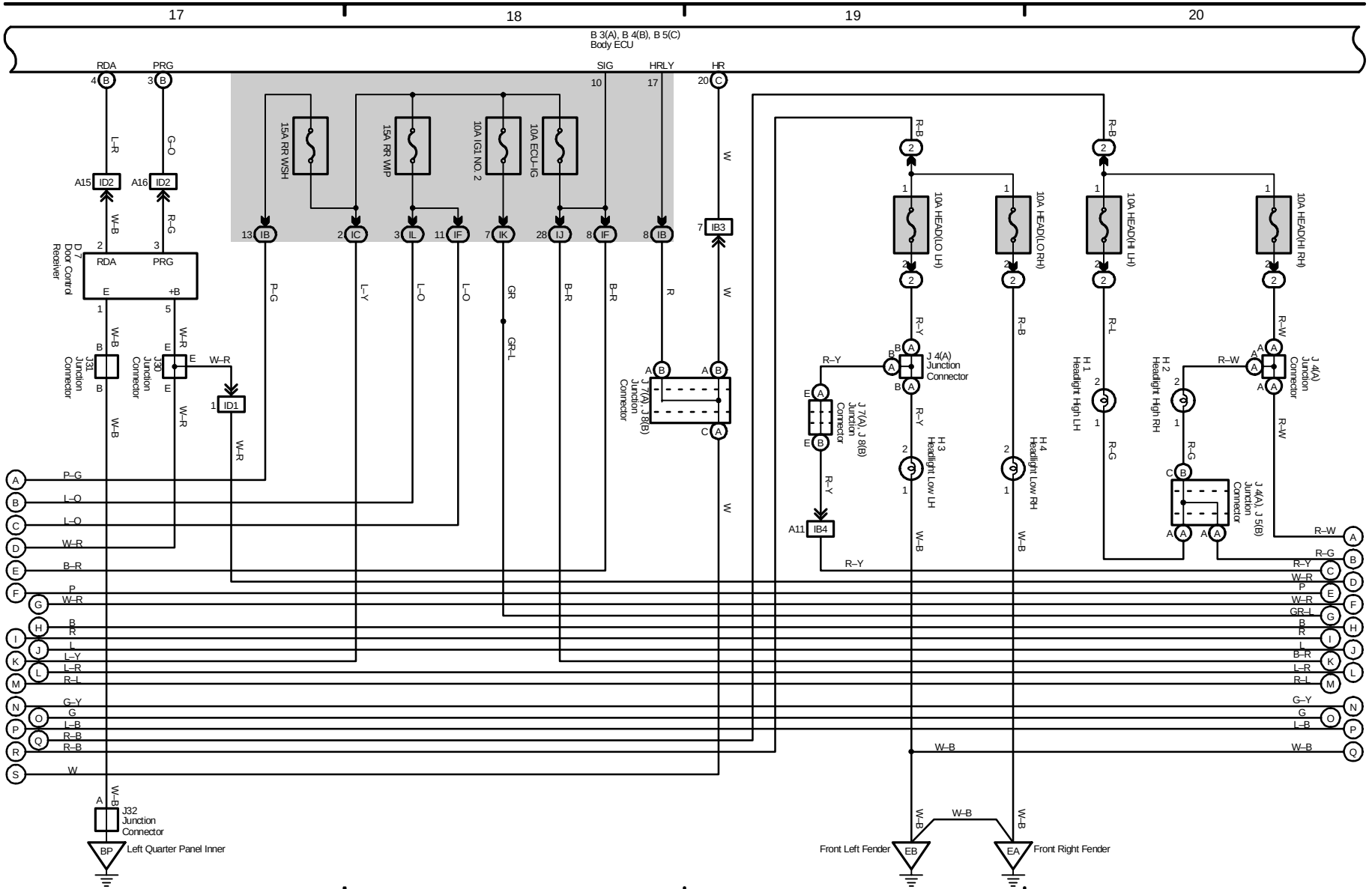
OVERALL ELECTRICAL WIRING DIAGRAM (August 2002–April 2003)



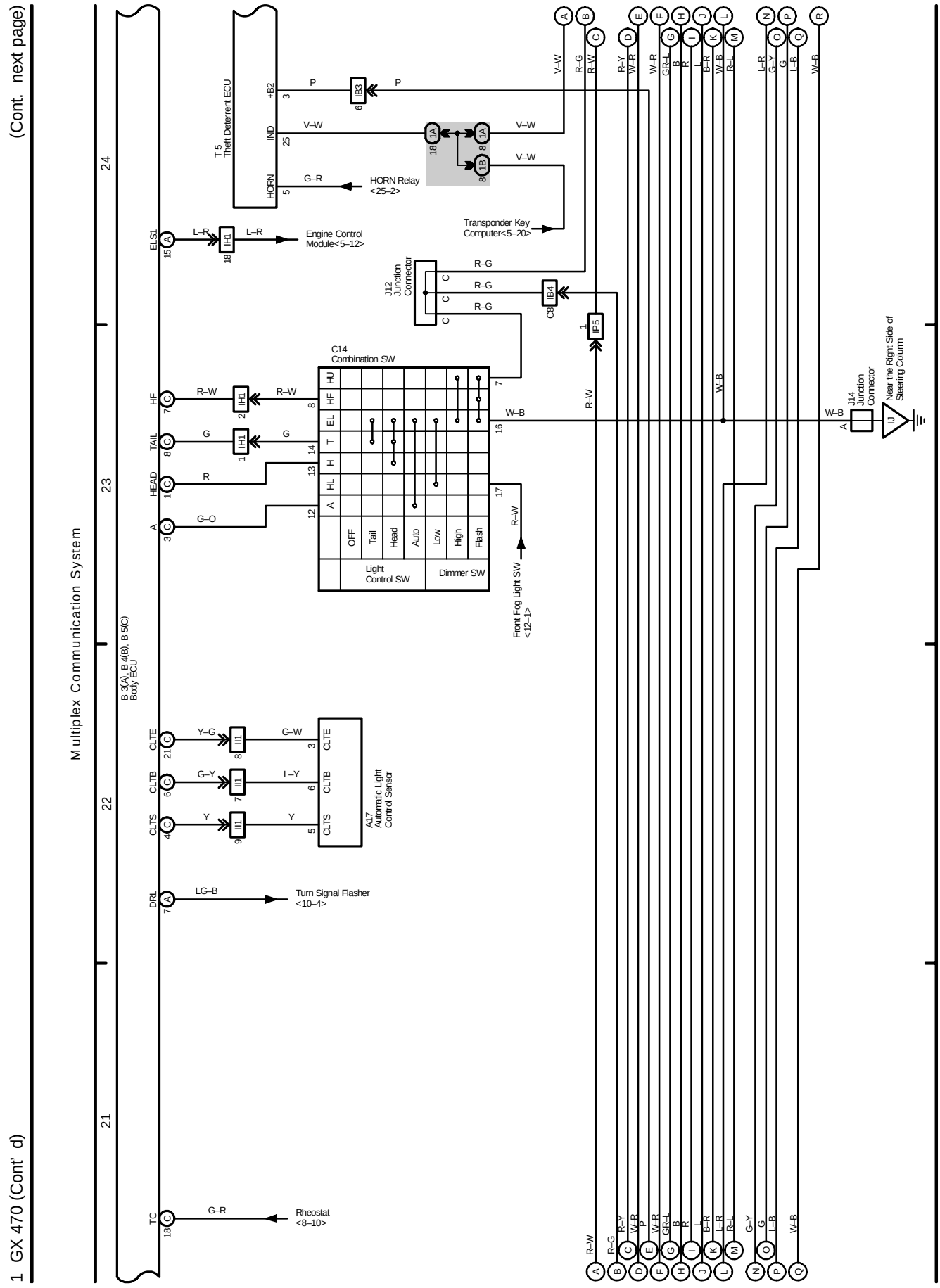

1 GX 470 (Cont' d)
(Cont. next page)
13
14
15
16
Multiplex Communication System
B 3(A), B 4(B), B 5(C)
Body ECU
C15
Combination SW
Rear Washer SW
Rear Wiper SW
Wash
OFF
INT
ON
Wash
EW
WR
+1R
C1R
J22
Junction
Connector
W 2
Washer
Motor
IP3
IR2
BH1
R29
Rear Wiper
Motor
+B
+1
ID1
RWLM
RWSM
WRIN
WRLO
WRSW
S27(A), S28(B)
Sub Body ECU
MPX–
MPX+
J14
Junction
Connector
Near the Right Side of
Steering Column
IJ
Back Door Panel
Center
BQ
P–G
L–O
W–R
B–R
P
R
L–Y
L–R
R–L
G–Y
G
L–B
R–B
W
W–B
L–R
L–B
R–B
B
L

(Cont. next page)

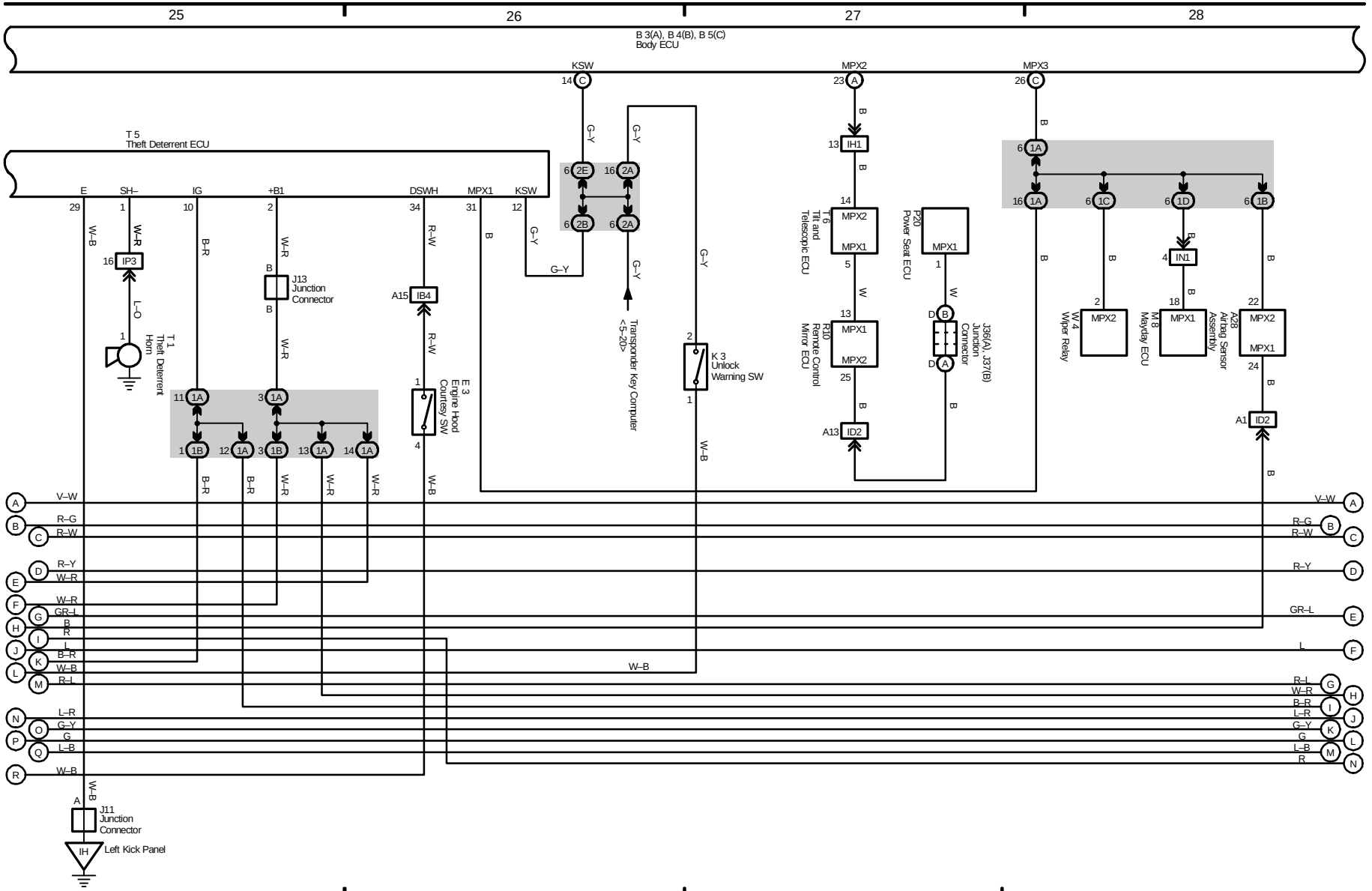
Multiplex Communication System

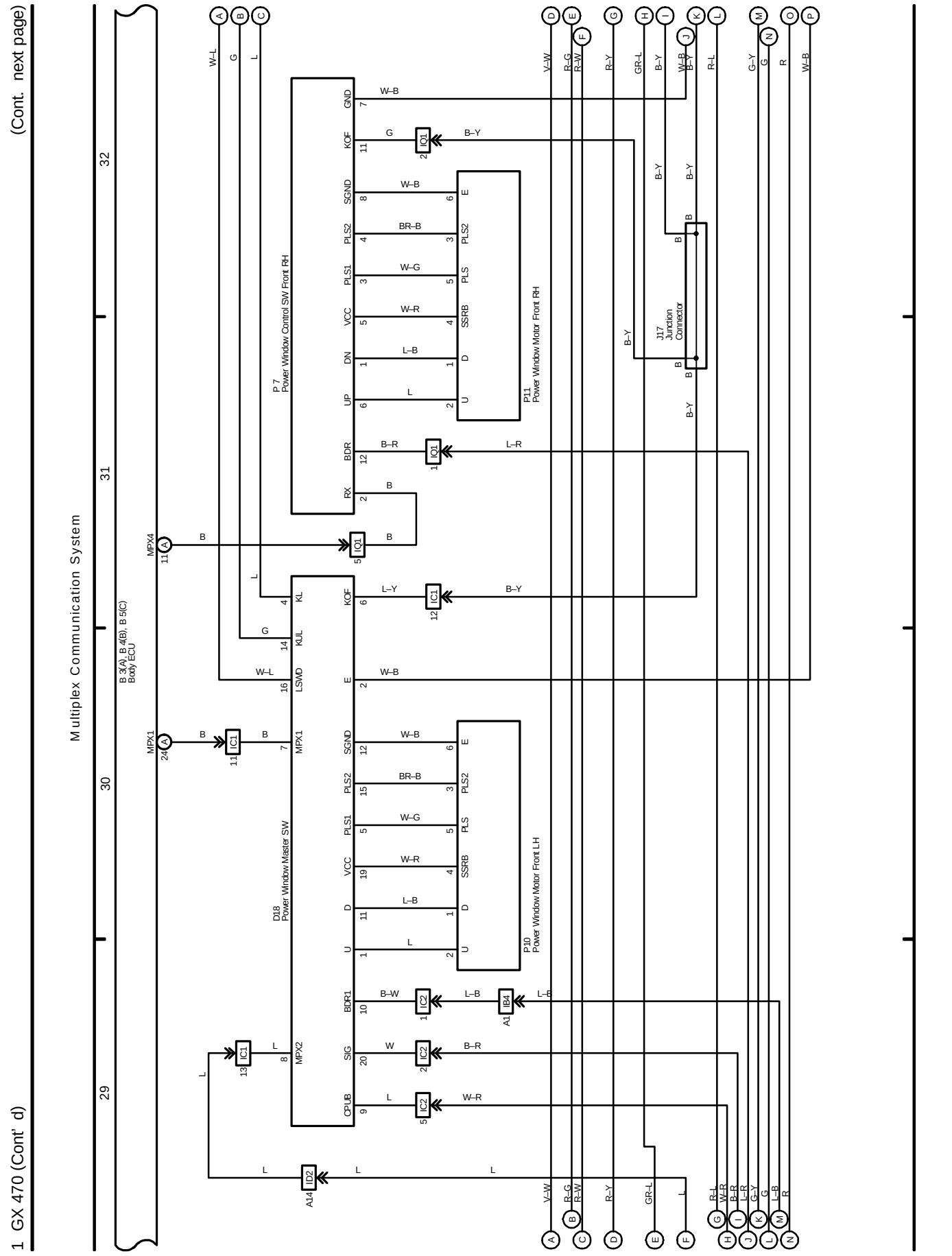


M OVERALL ELECTRICAL WIRING DIAGRAM



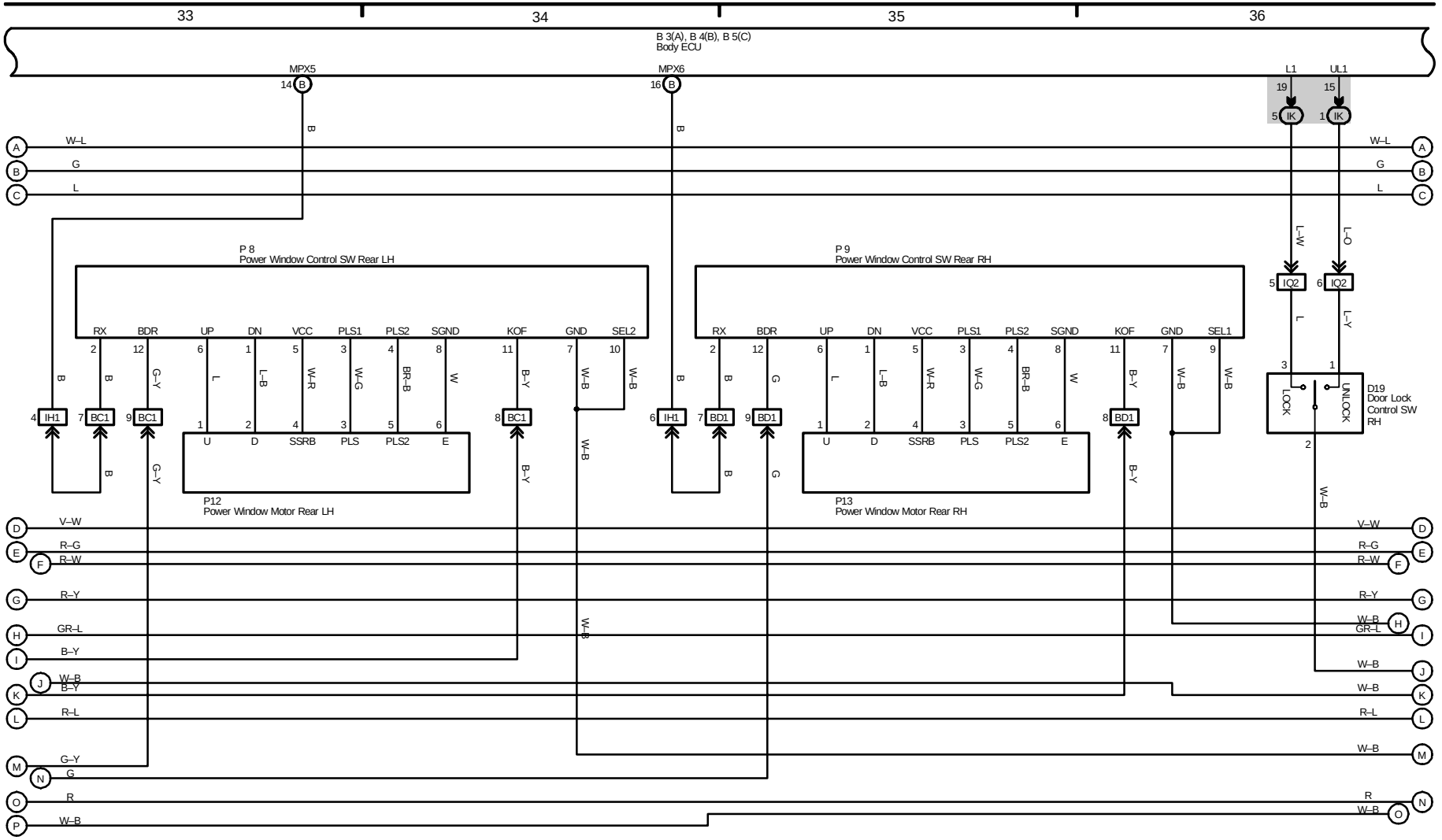
Multiplex Communication System



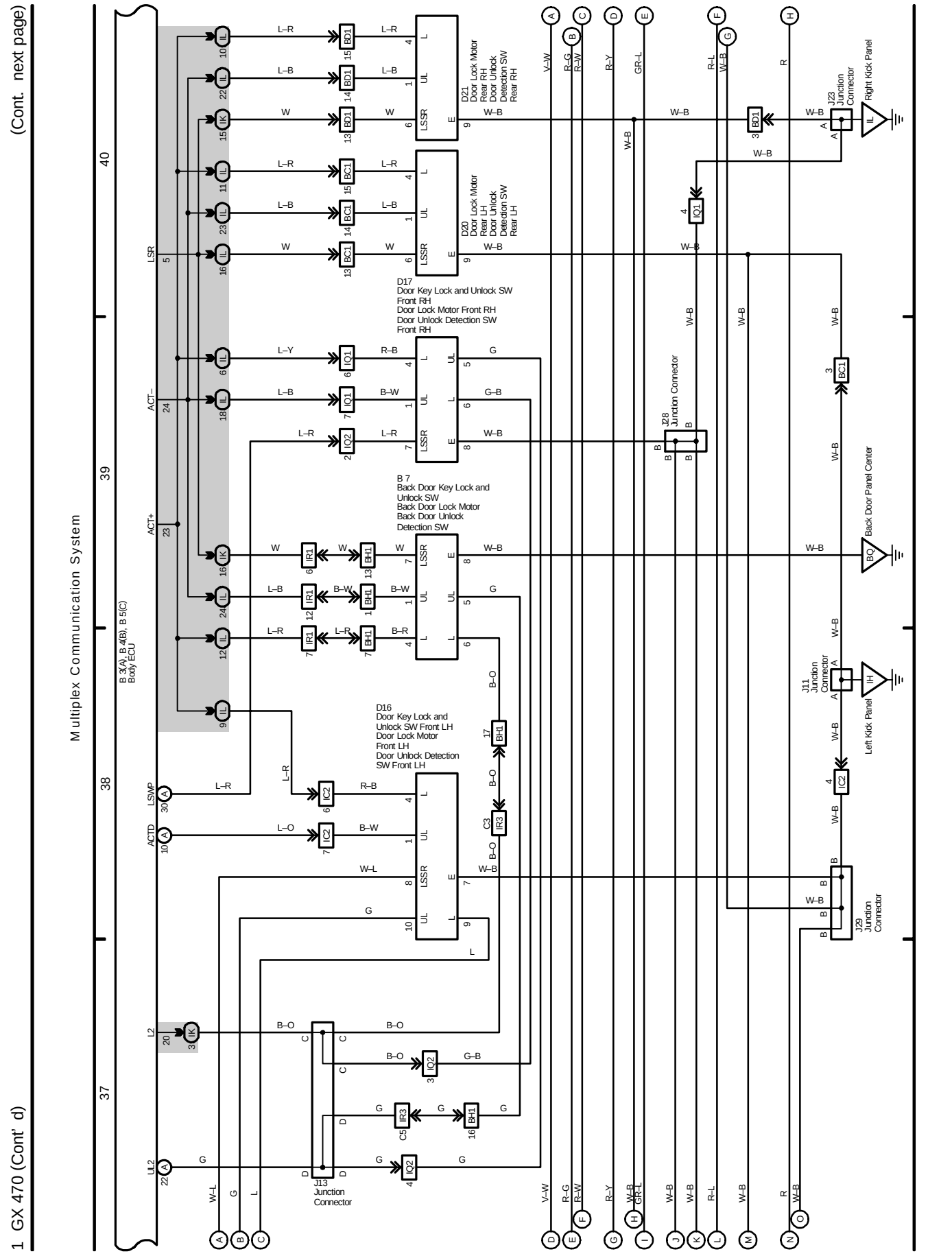

1 GX 470 (Cont' d)
(Cont. next page)
Multiplex Communication System
B 3(A), B 4(B), B 5(C)
Body ECU
MPX4
MPX1
MPX2
D18
Power Window Master SW
P 7
Power Window Control SW Front RH
P10
Power Window Motor Front LH
P11
Power Window Motor Front RH
J17
Junction
Connector
GND
KOF
SGND
PLS2
PLS1
VCC
DN
UP
BDR
RX
KL
KJL
LSWD
SGND
PLS2
PLS1
VCC
D
U
BDR1
SIG
CPUB
SSRB
PLS
IC1
IC2
IQ1
ID2
IB4

(Cont. next page)

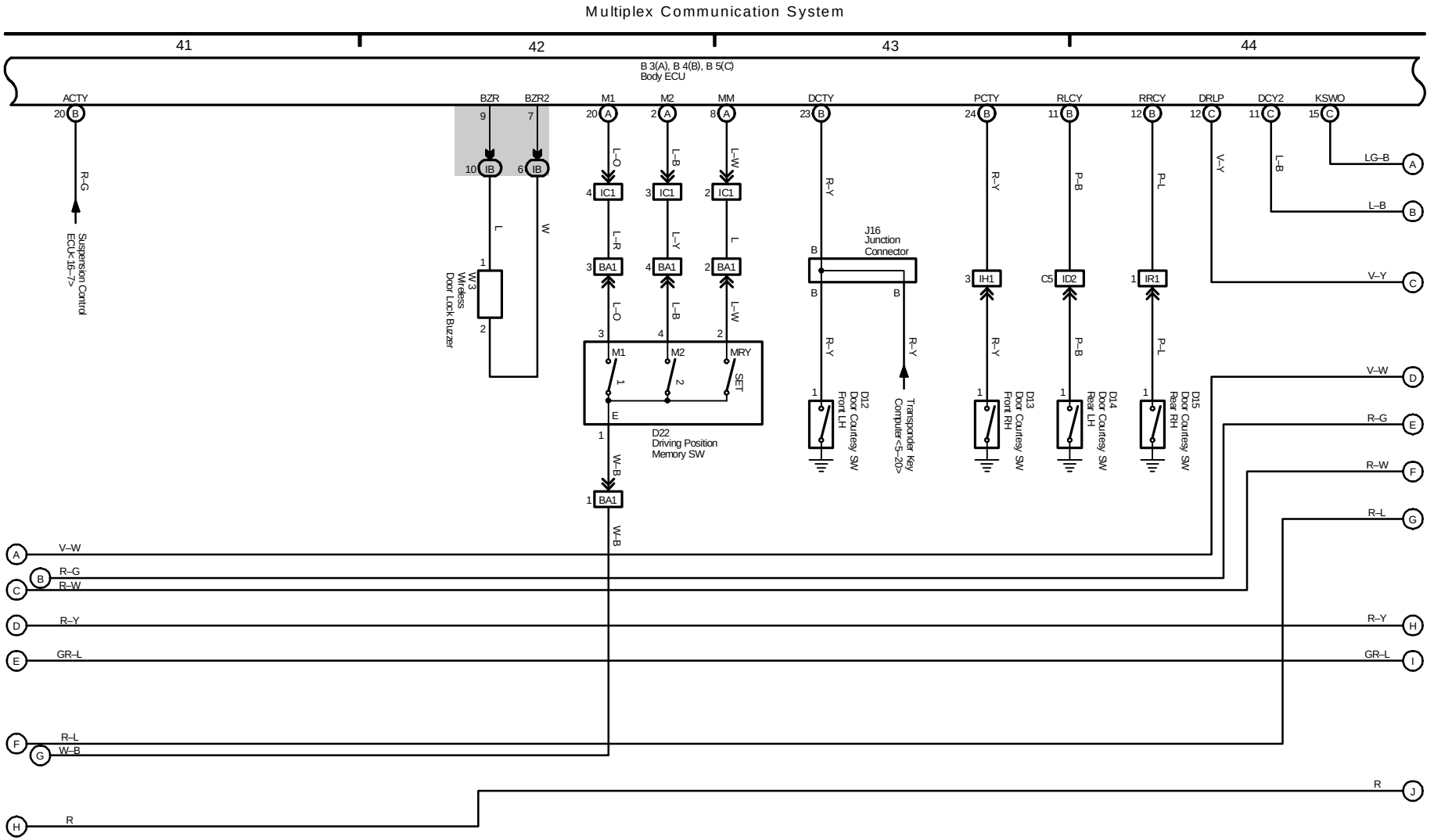
Multiplex Communication System



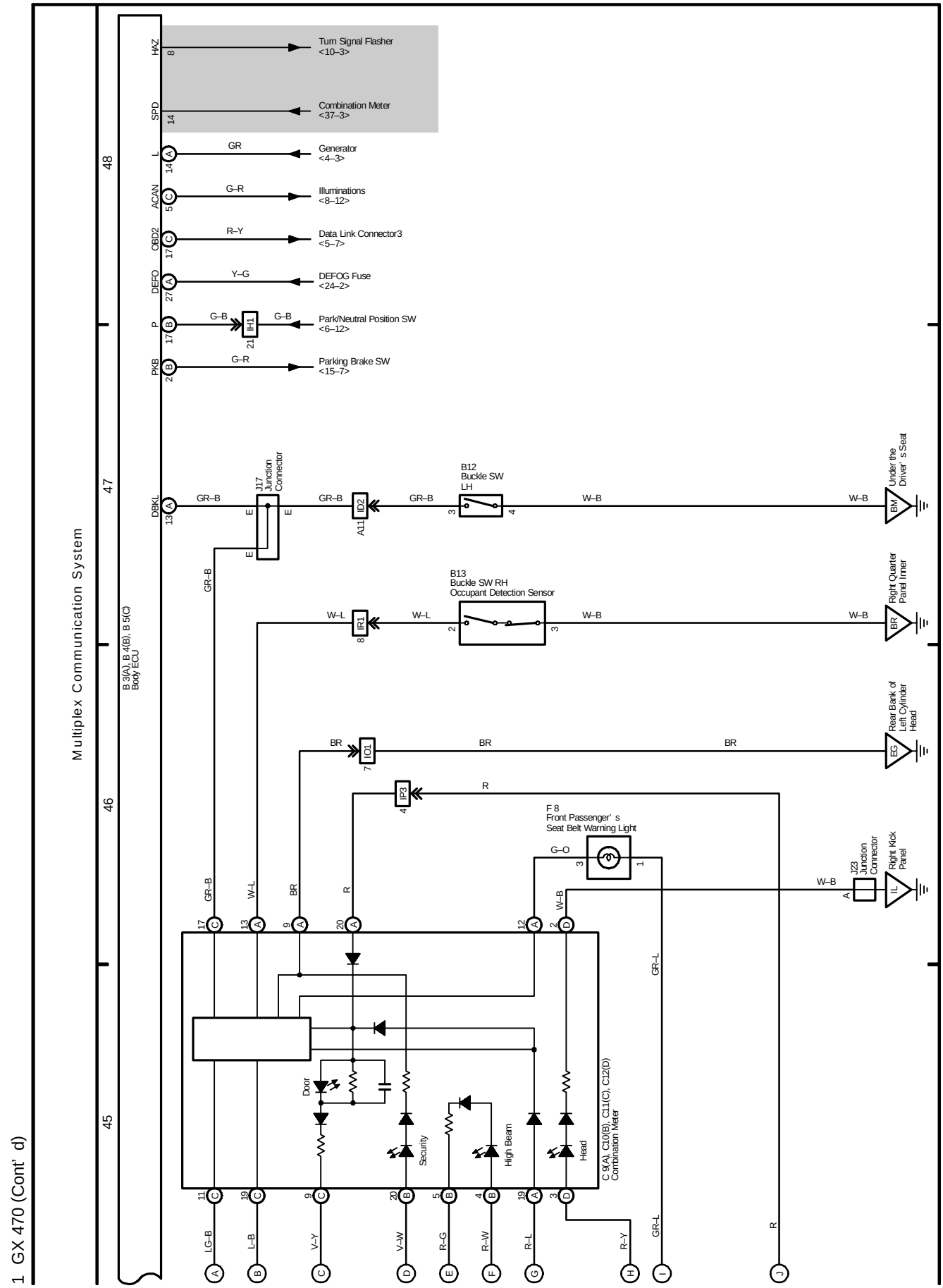
M OVERALL ELECTRICAL WIRING DIAGRAM

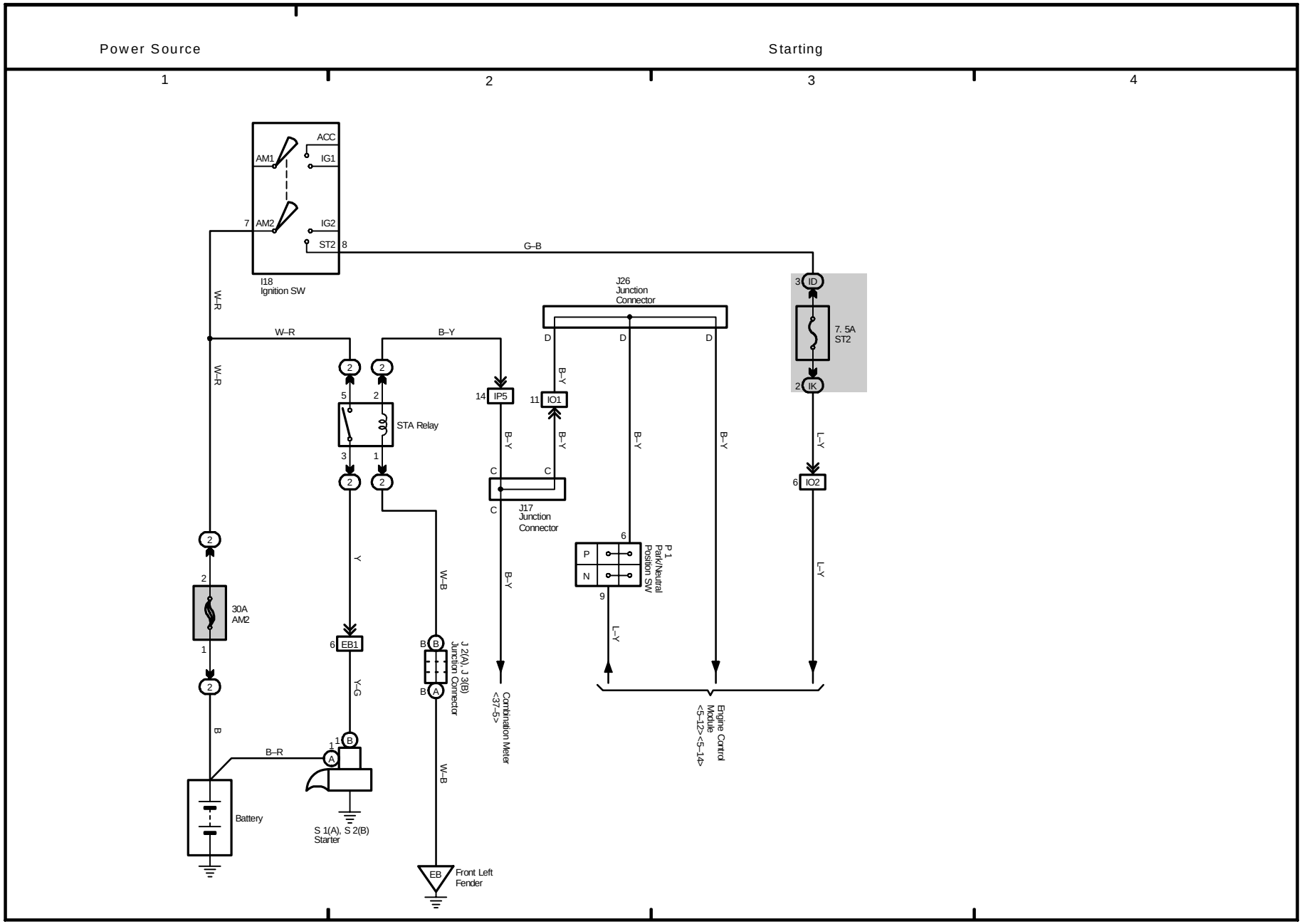


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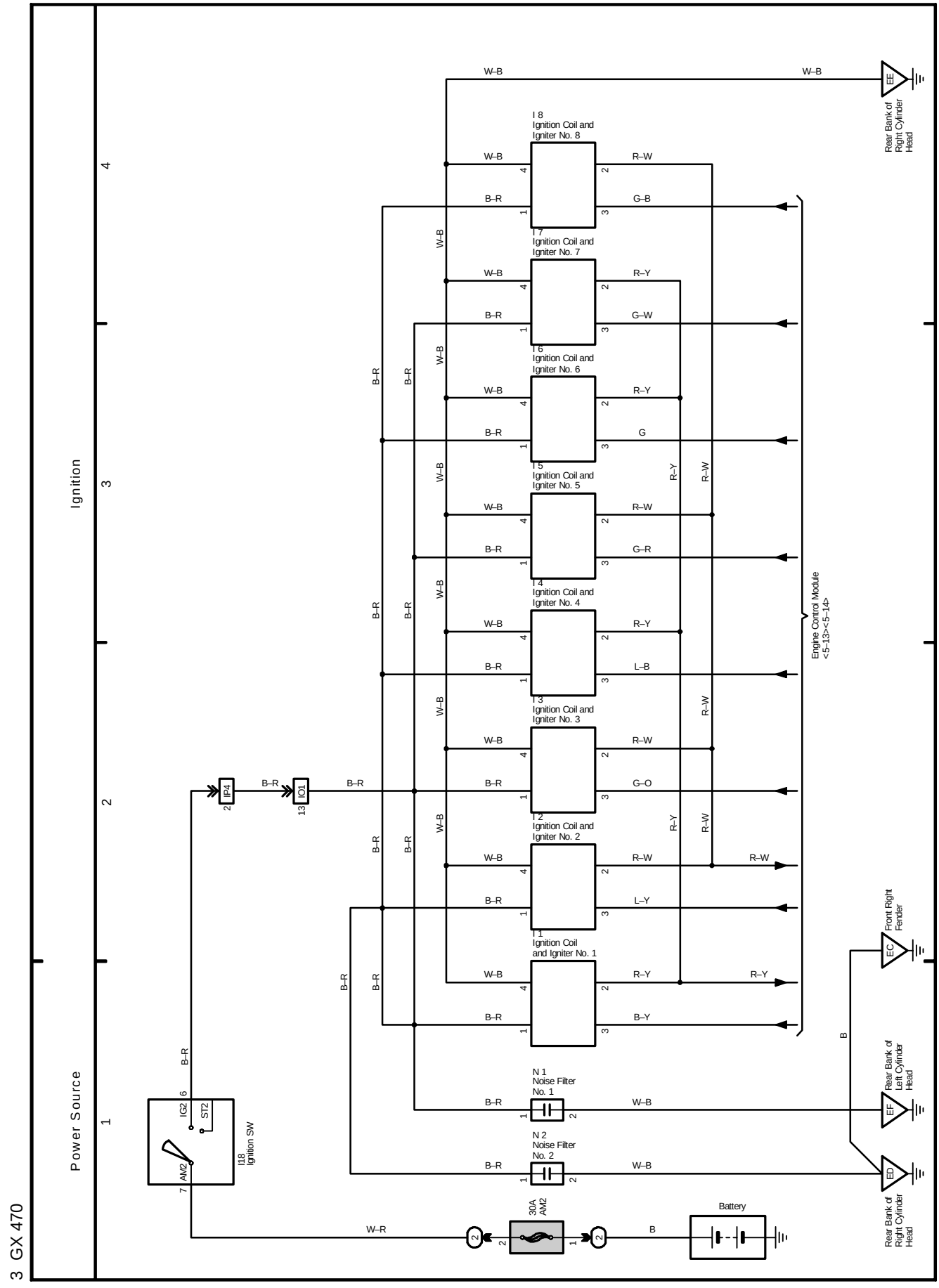


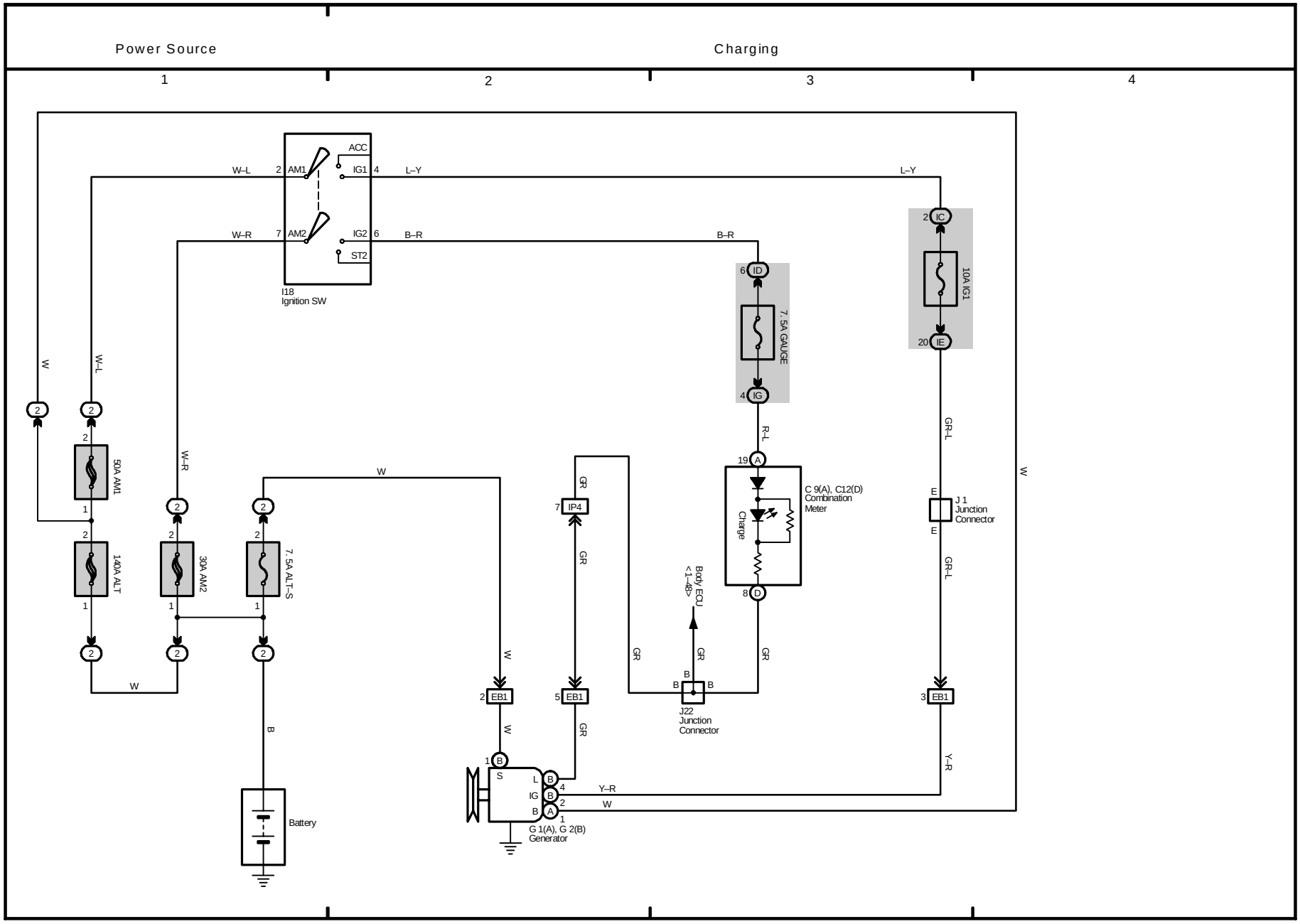
M OVERALL ELECTRICAL WIRING DIAGRAM



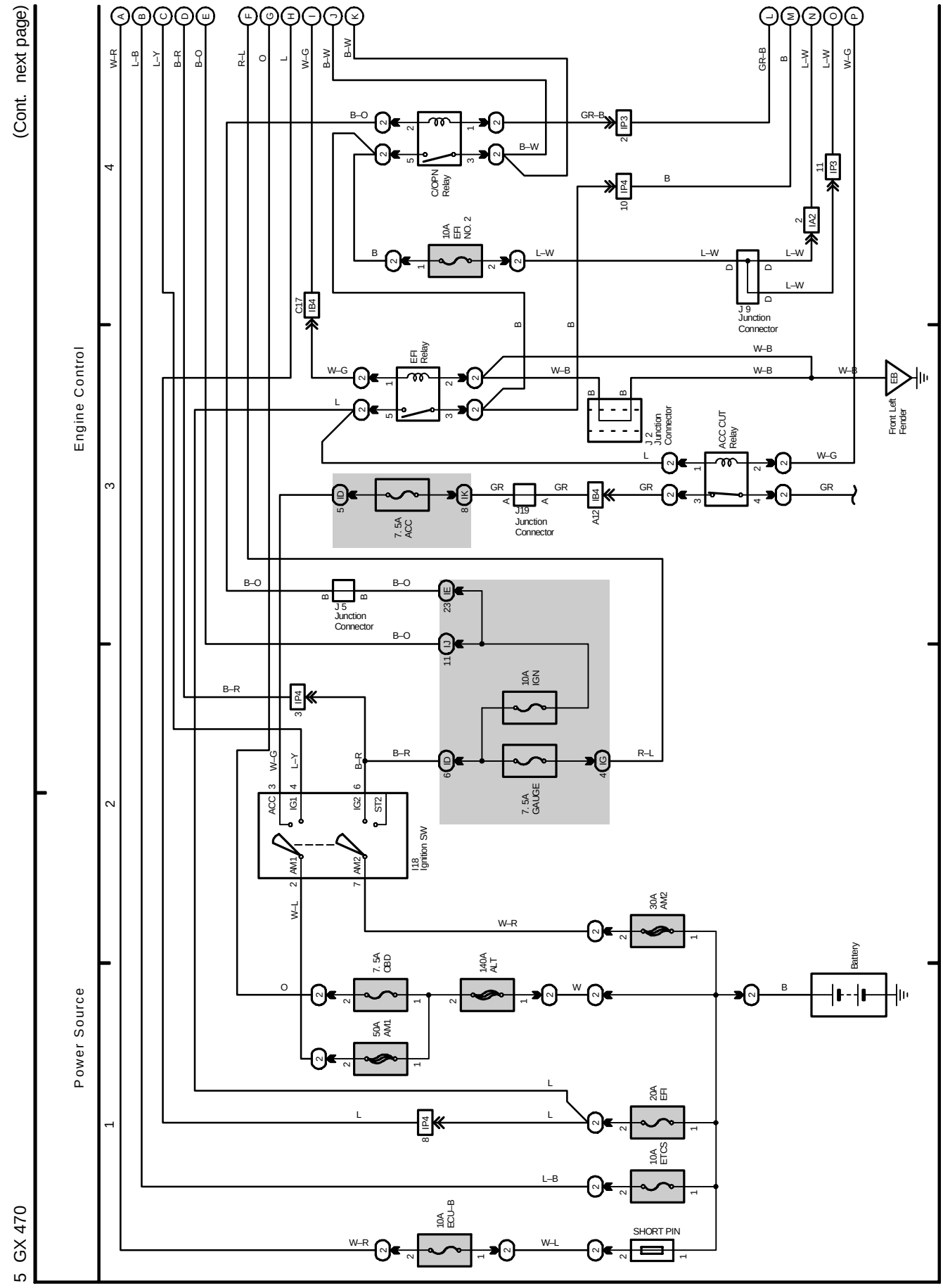

Power Source
Starting
1
2
3
4
ACC
AM1
IG1
7
AM2
IG2
ST2
8
G–B
I18
Ignition SW
W–R
W–R
B–Y
J26
Junction
Connector
D
D
D
3
ID
7. 5A
ST2
2
IK
2
2
5
2
STA Relay
3
1
2
2
14
IP5
11
IO1
B–Y
B–Y
B–Y
B–Y
L–Y
6
IO2
C
C
C
J17
Junction
Connector
6
P
N
9
P 1
Park/Neutral
Position SW
L–Y
L–Y
2
2
30A
AM2
1
2
Y
W–B
B–Y
6
EB1
B
B
J 2(A), J 3(B)
Junction Connector
B
A
Combination Meter
<37-45>
Y–G
B
B–R
1
B
1
A
Engine Control
Module
<5–12><5–14>
Battery
S 1(A), S 2(B)
Starter
W–B
EB
Front Left
Fender

M OVERALL ELECTRICAL WIRING DIAGRAM

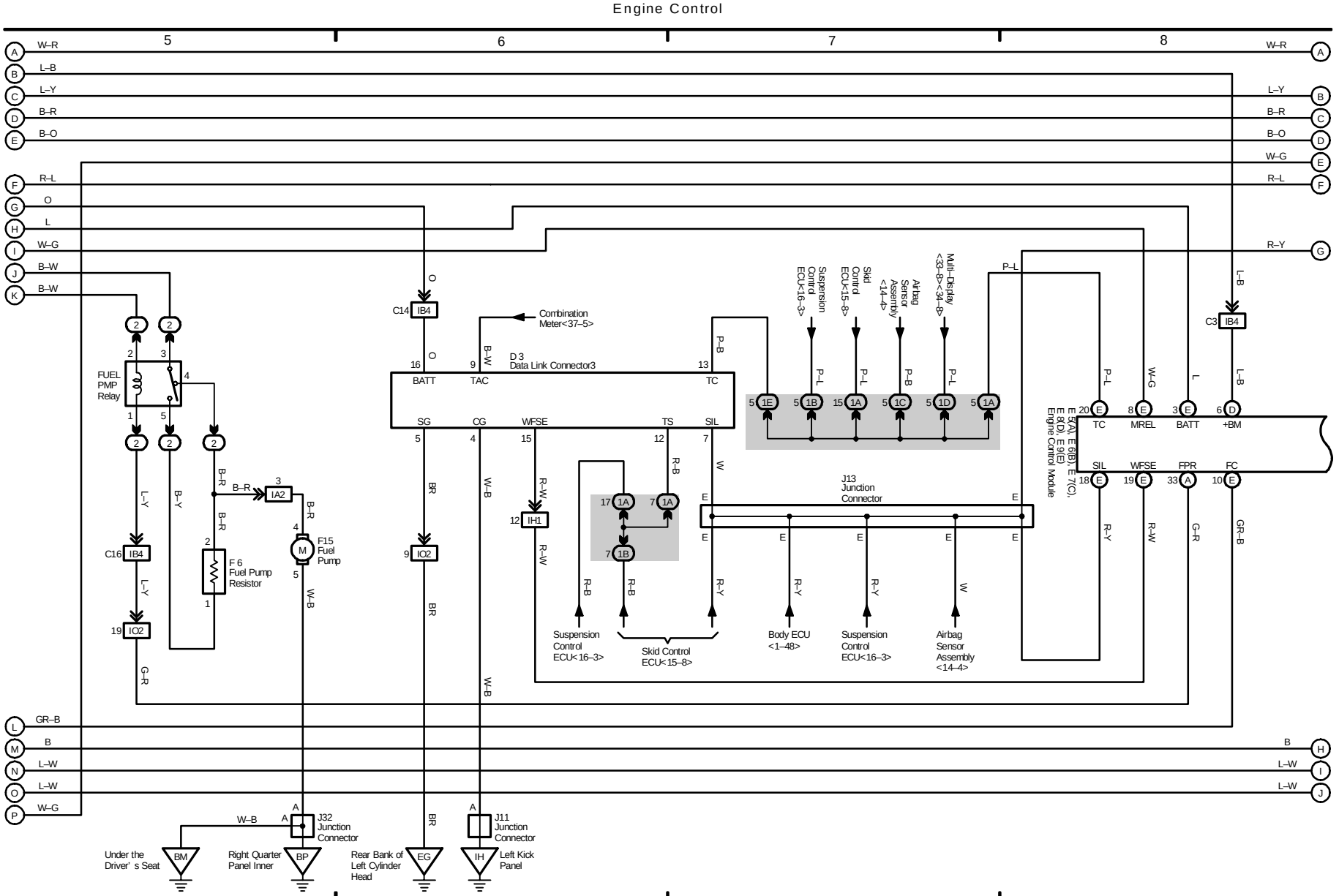



Power Source
Charging
1
2
3
4
ACC
IG1
AM1
IG2
AM2
ST2
I18
Ignition SW
W–L
L–Y
W–R
B–R
2 IC
10A IG1
20 IE
6 ID
7.5A GAUGE
4 IG
R–L
GR–L
19 A
C 9(A), C12(D)
Combination
Meter
Charge
8 D
J 1
Junction
Connector
50A AM1
140A ALT
30A AM2
7.5A ALT–S
W
B
7 IP4
GR
Body ECU
<1–48>
J22
Junction
Connector
2 EB1
5 EB1
3 EB1
Y–R
1 B
S
L
IG
B
4
2
1
G 1(A), G 2(B)
Generator
Battery

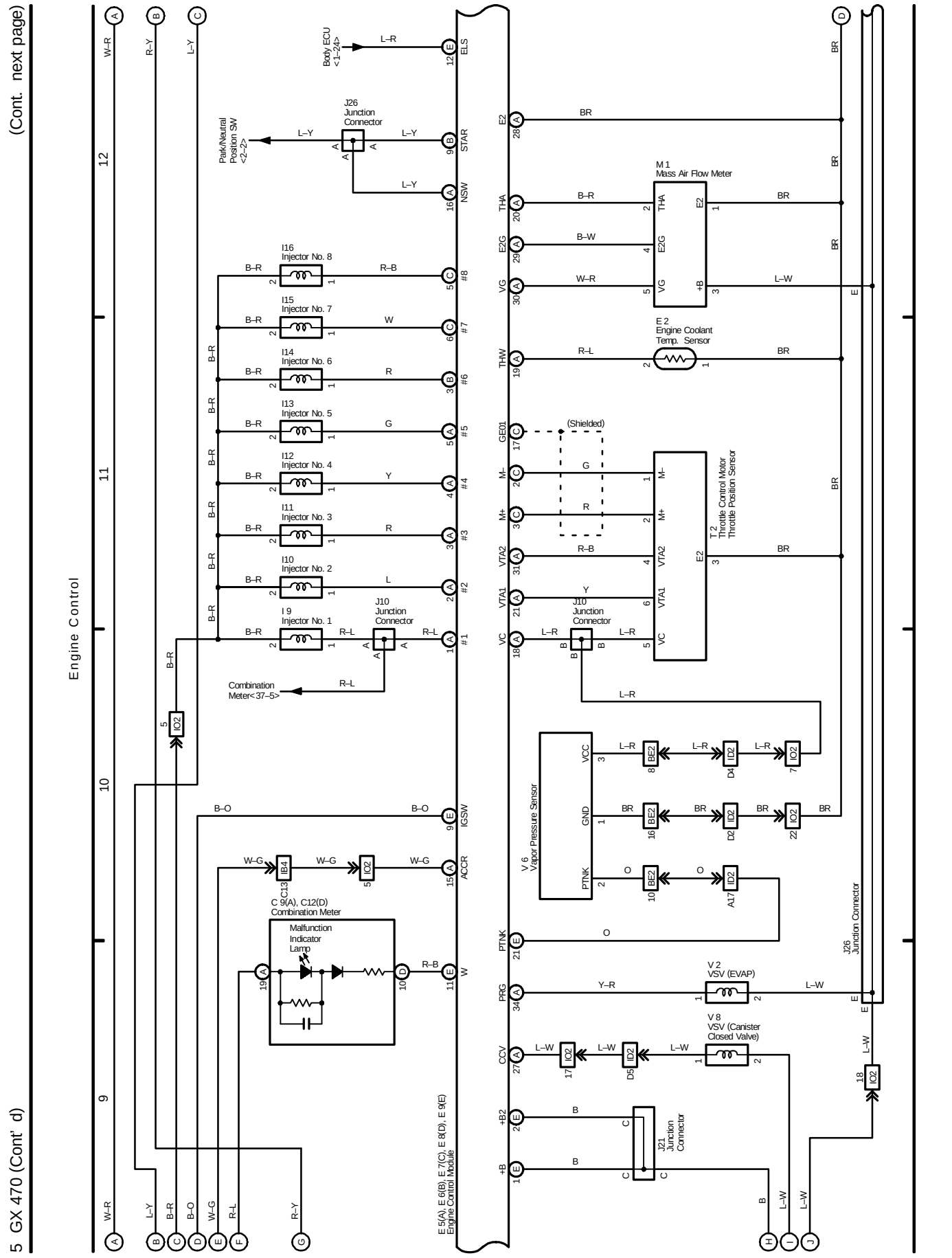
M OVERALL ELECTRICAL WIRING DIAGRAM



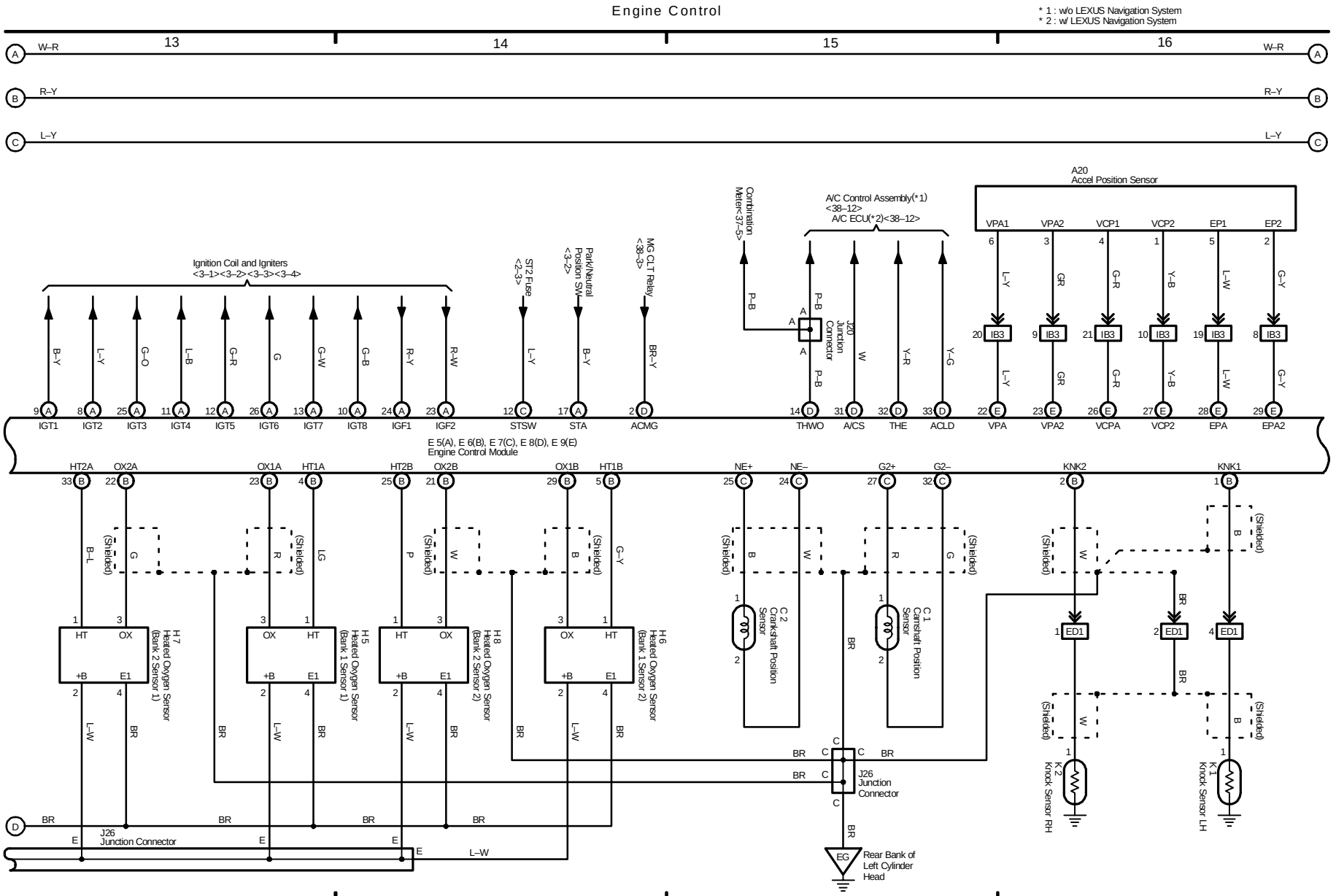
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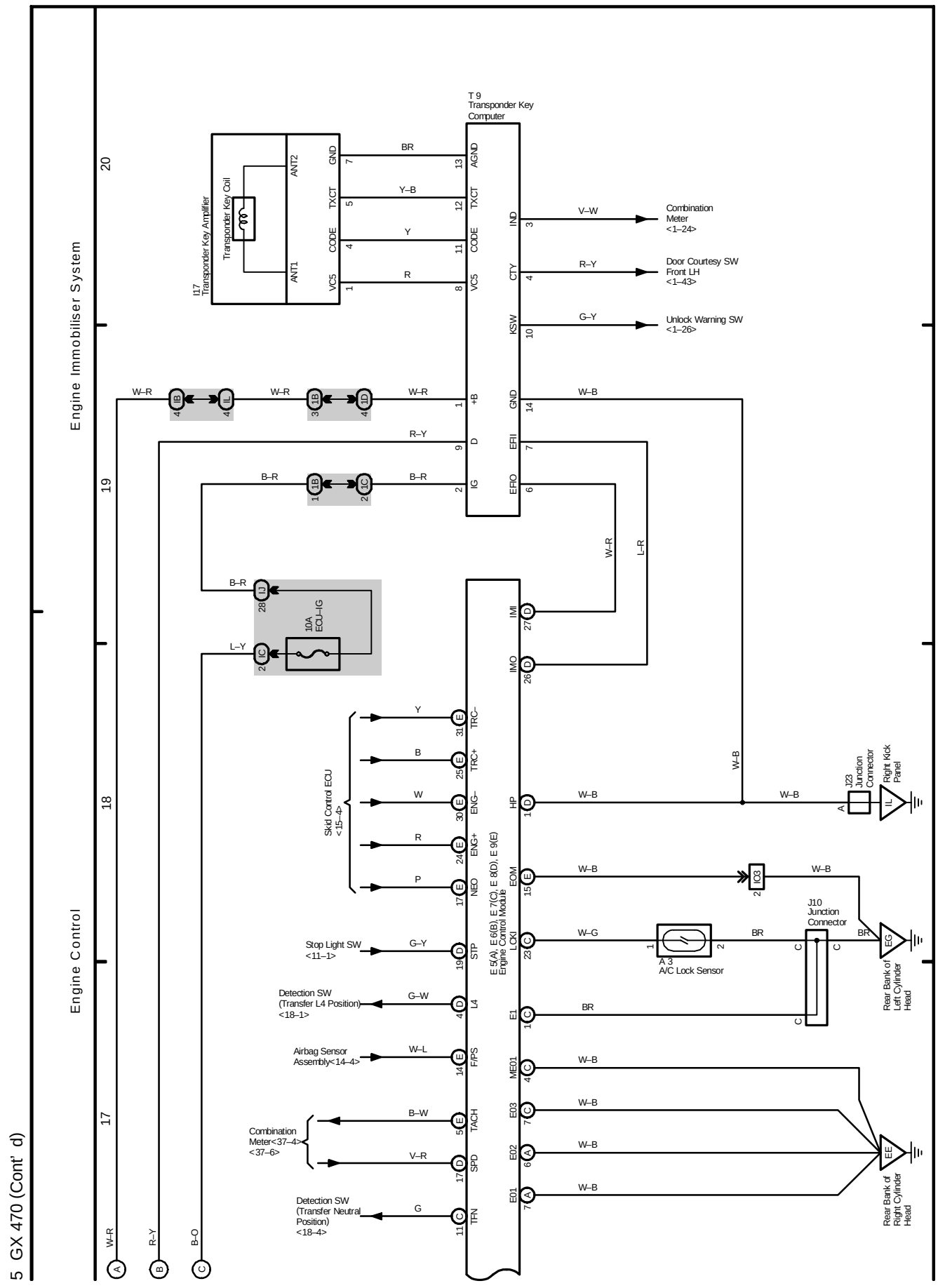
M OVERALL ELECTRICAL WIRING DIAGRAM



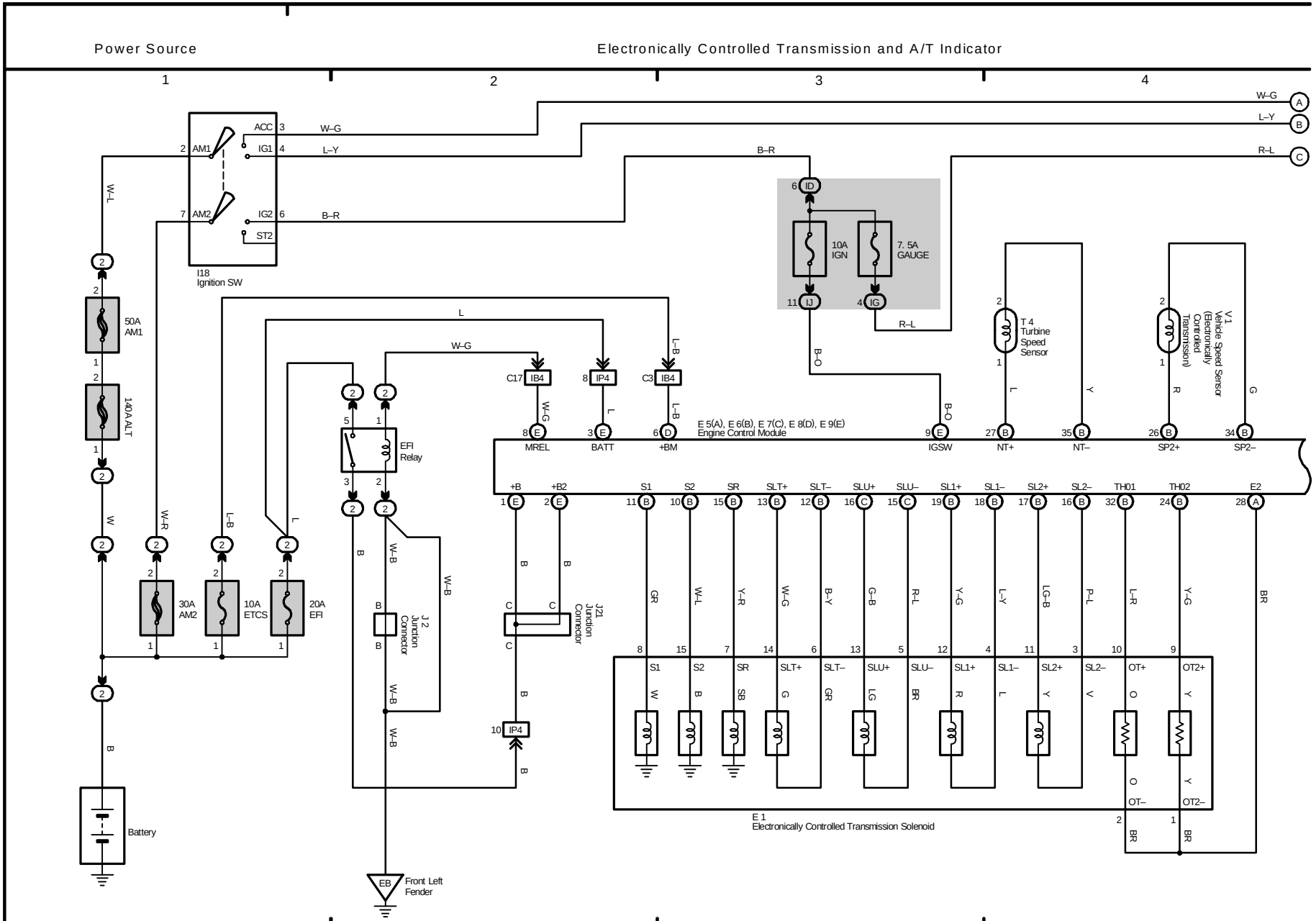
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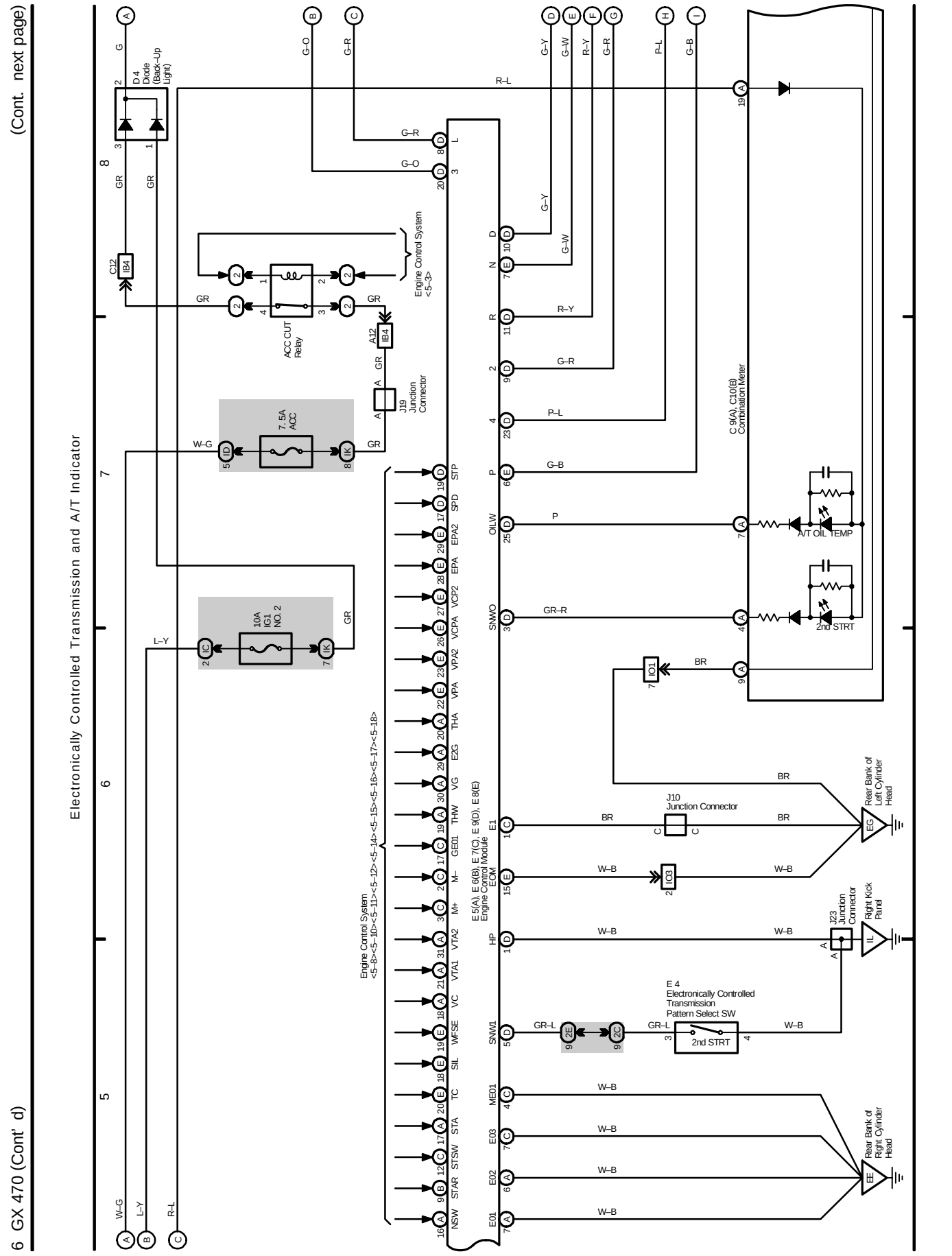
M OVERALL ELECTRICAL WIRING DIAGRAM

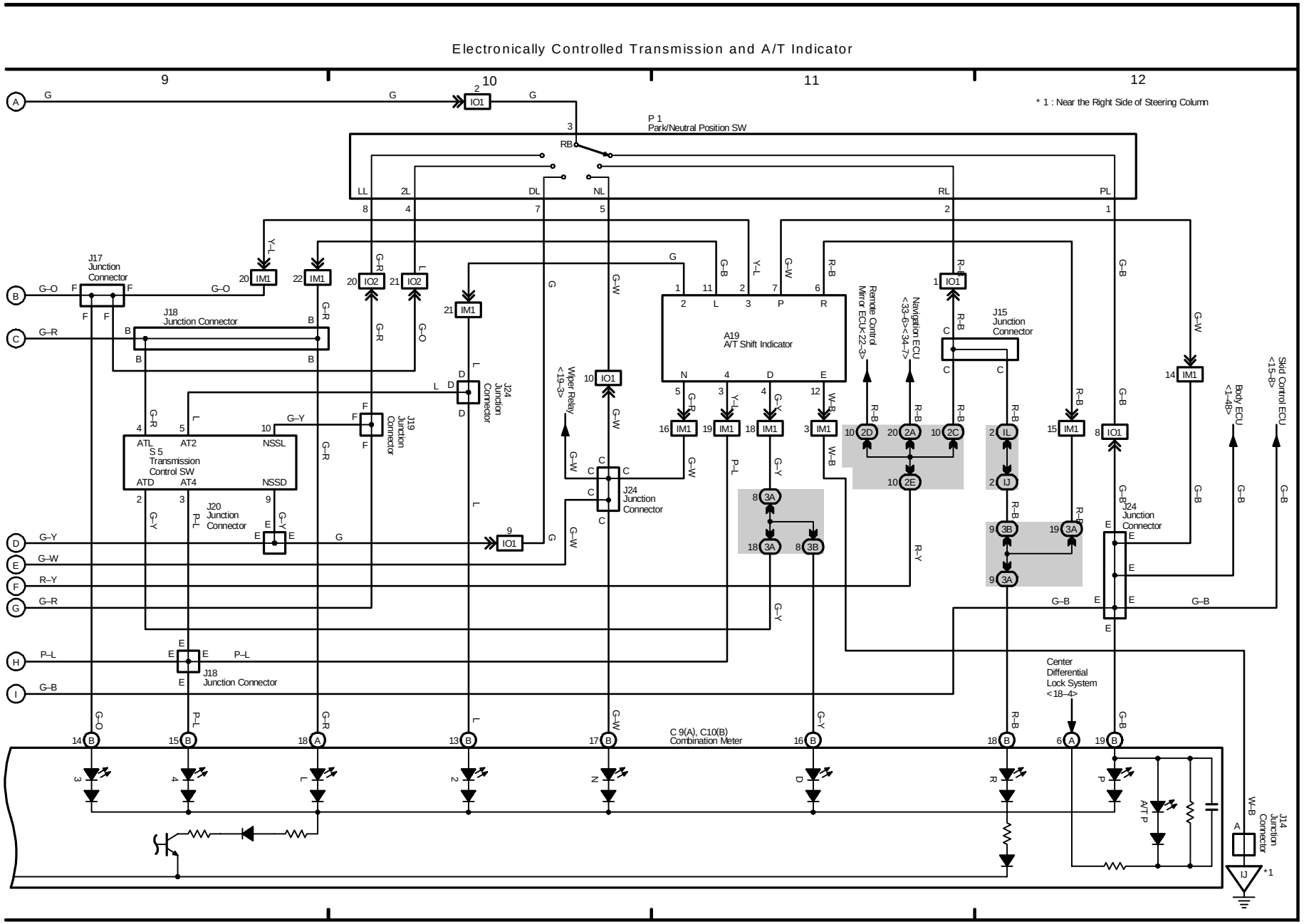


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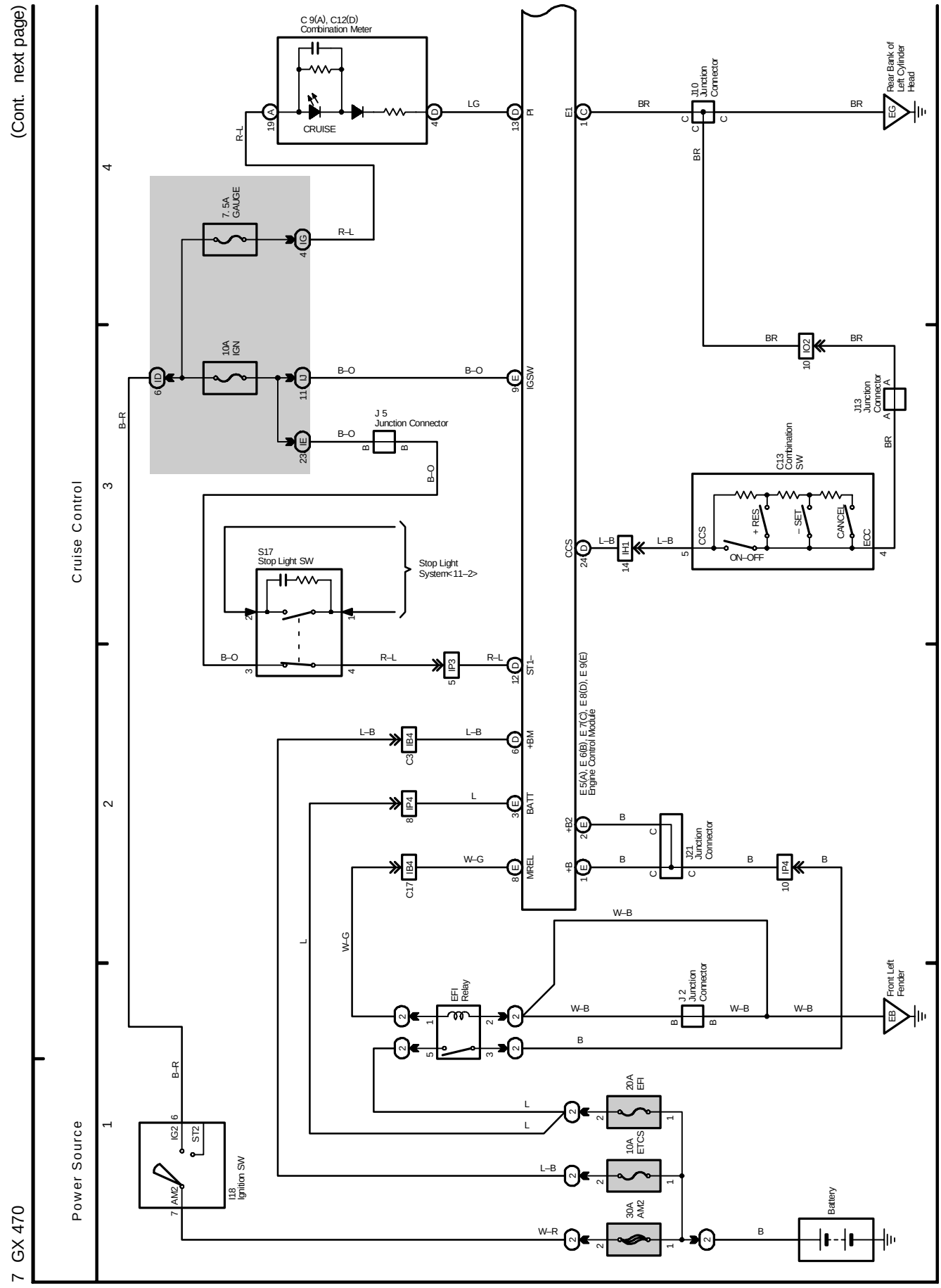


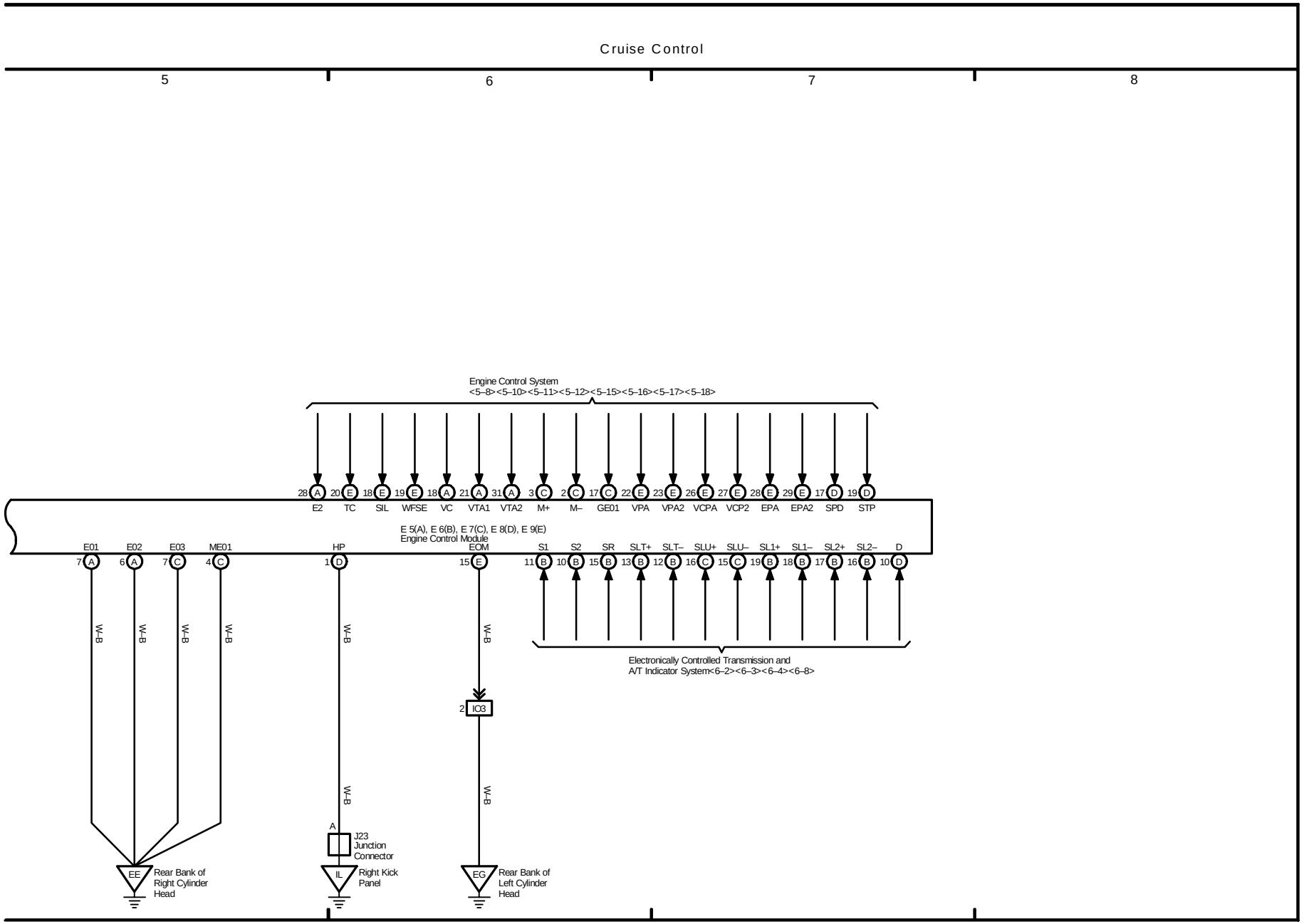
M OVERALL ELECTRICAL WIRING DIAGRAM



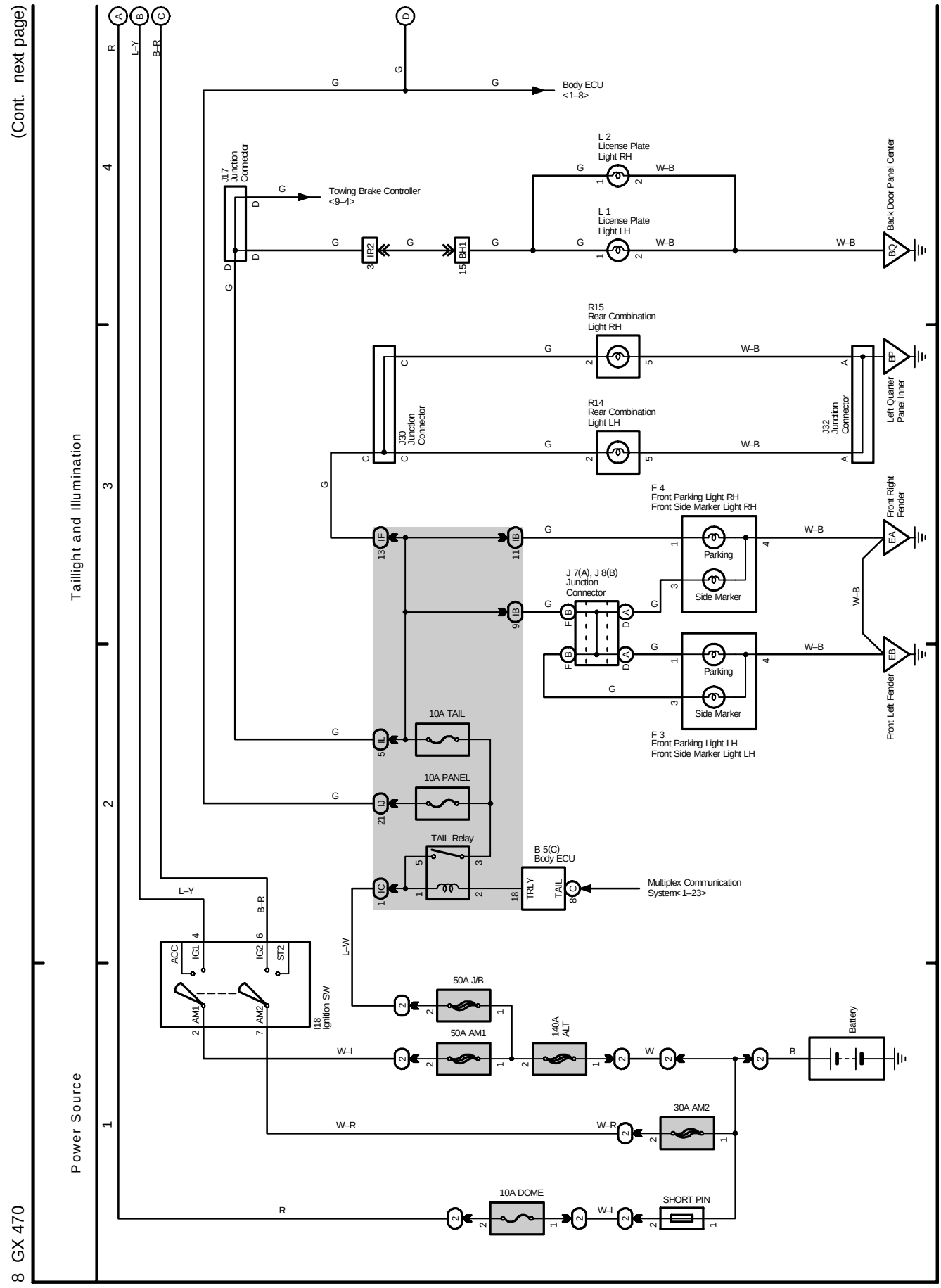

Electronically Controlled Transmission and A/T Indicator
9
10
11
12
* 1 : Near the Right Side of Steering Column
P 1
Park/Neutral Position SW
A19
A/T Shift Indicator
J17
Junction
Connector
J18
Junction Connector
J24
Junction
Connector
J19
Junction
Connector
J20
Junction
Connector
S 5
Transmission
Control SW
Wiper Relay
<19-3>
Remote Control
Mirror ECU<22-3>
Navigation ECU
<33-6><34-7>
J15
Junction
Connector
Body ECU
<1-48>
Skid Control ECU
<15-8>
Center
Differential
Lock System
<18-4>
C 9(A), C10(B)
Combination Meter
J14
Junction
Connector
A/T P

M OVERALL ELECTRICAL WIRING DIAGRAM




Cruise Control
5
6
7
8
Engine Control System
<5–8><5–10><5–11><5–12><5–15><5–16><5–17><5–18>
28 A E2
20 E TC
18 E SIL
19 E WFSE
18 A VC
21 A VTA1
31 A VTA2
3 C M+
2 C M–
17 C GE01
22 E VPA
23 E VPA2
26 E VCPA
27 E VCP2
28 E EPA
29 E EPA2
17 D SPD
19 D STP
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
E01 7 A
E02 6 A
E03 7 C
ME01 4 C
HP 1 D
EOM 15 E
S1 11 B
S2 10 B
SR 15 B
SLT+ 13 B
SLT– 12 B
SLU+ 16 C
SLU– 15 C
SL1+ 19 B
SL1– 18 B
SL2+ 17 B
SL2– 16 B
D 10 D
W-B
2 IO3
A
J23
Junction
Connector
Electronically Controlled Transmission and
A/T Indicator System<6–2><6–3><6–4><6–8>
EE Rear Bank of Right Cylinder Head
IL Right Kick Panel
EG Rear Bank of Left Cylinder Head

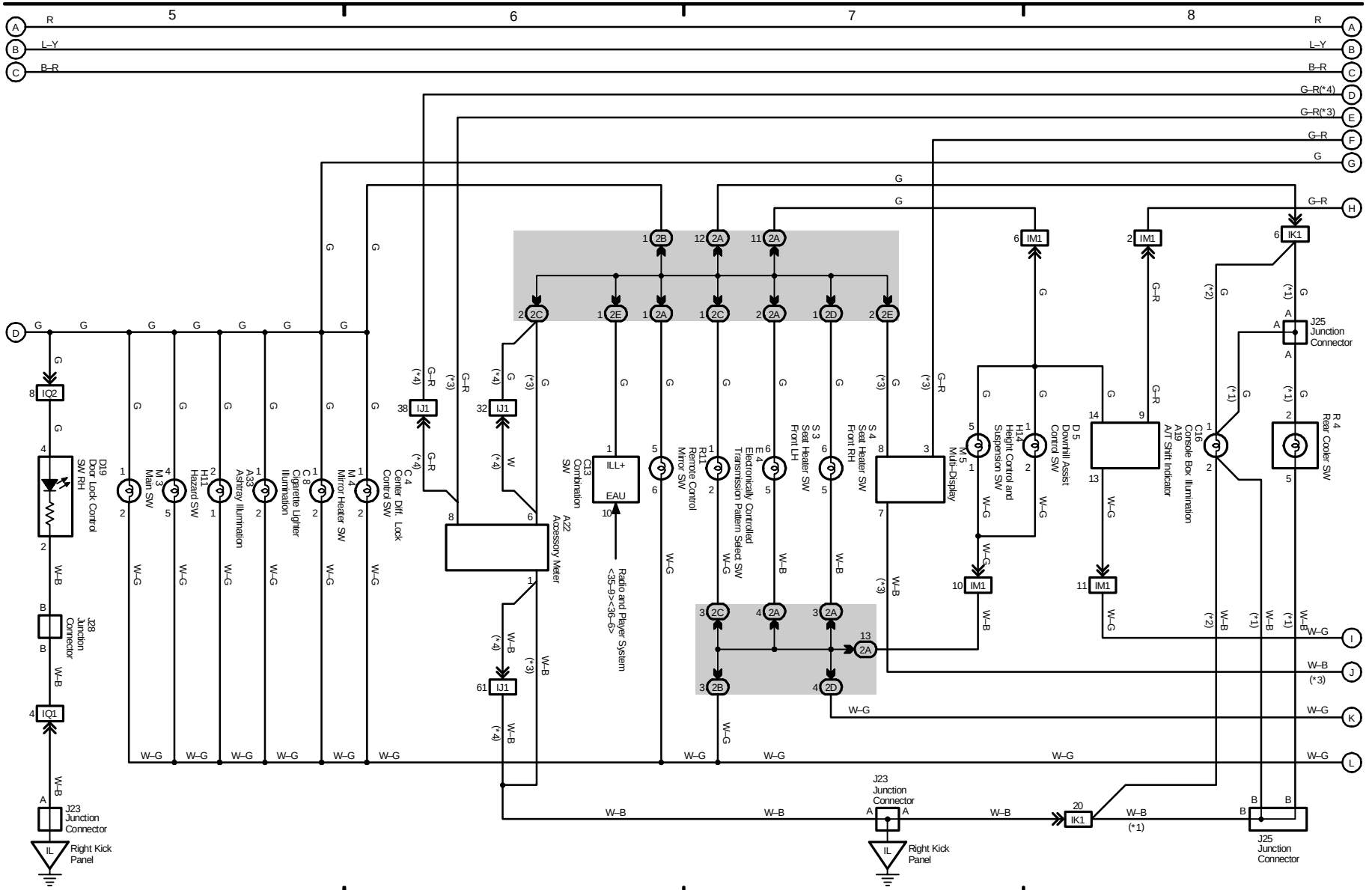
M OVERALL ELECTRICAL WIRING DIAGRAM



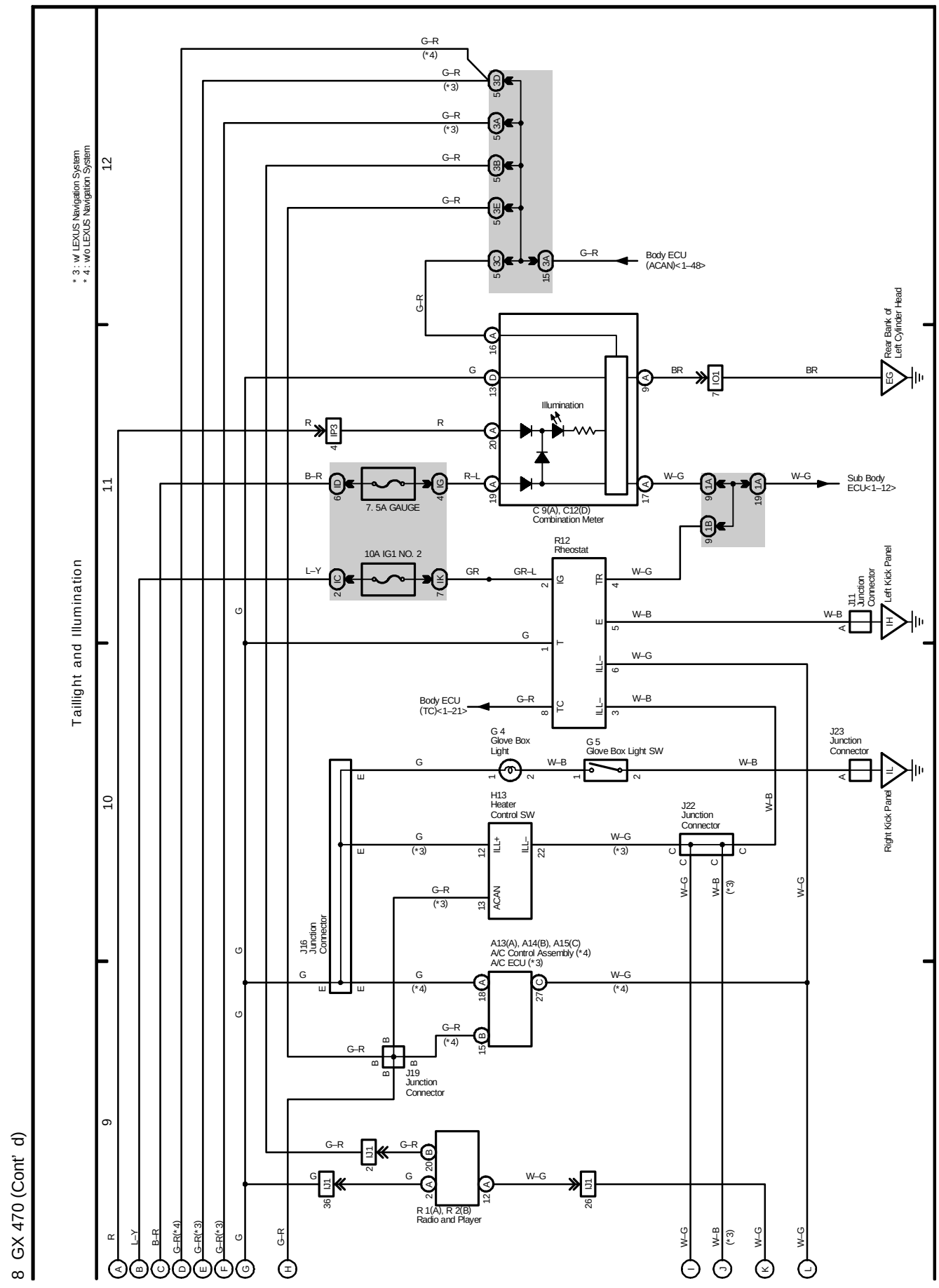
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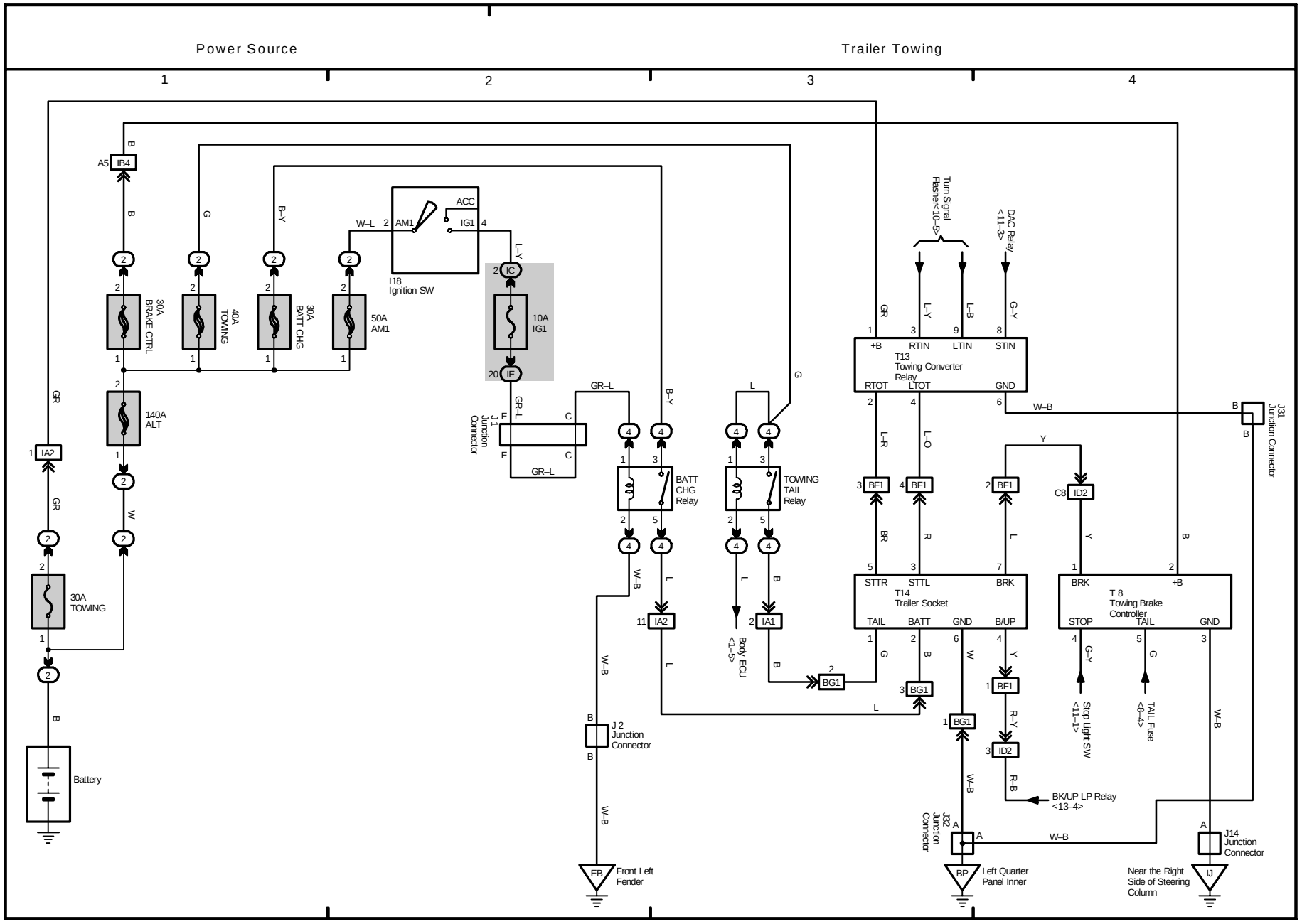
Taillight and Illumination

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

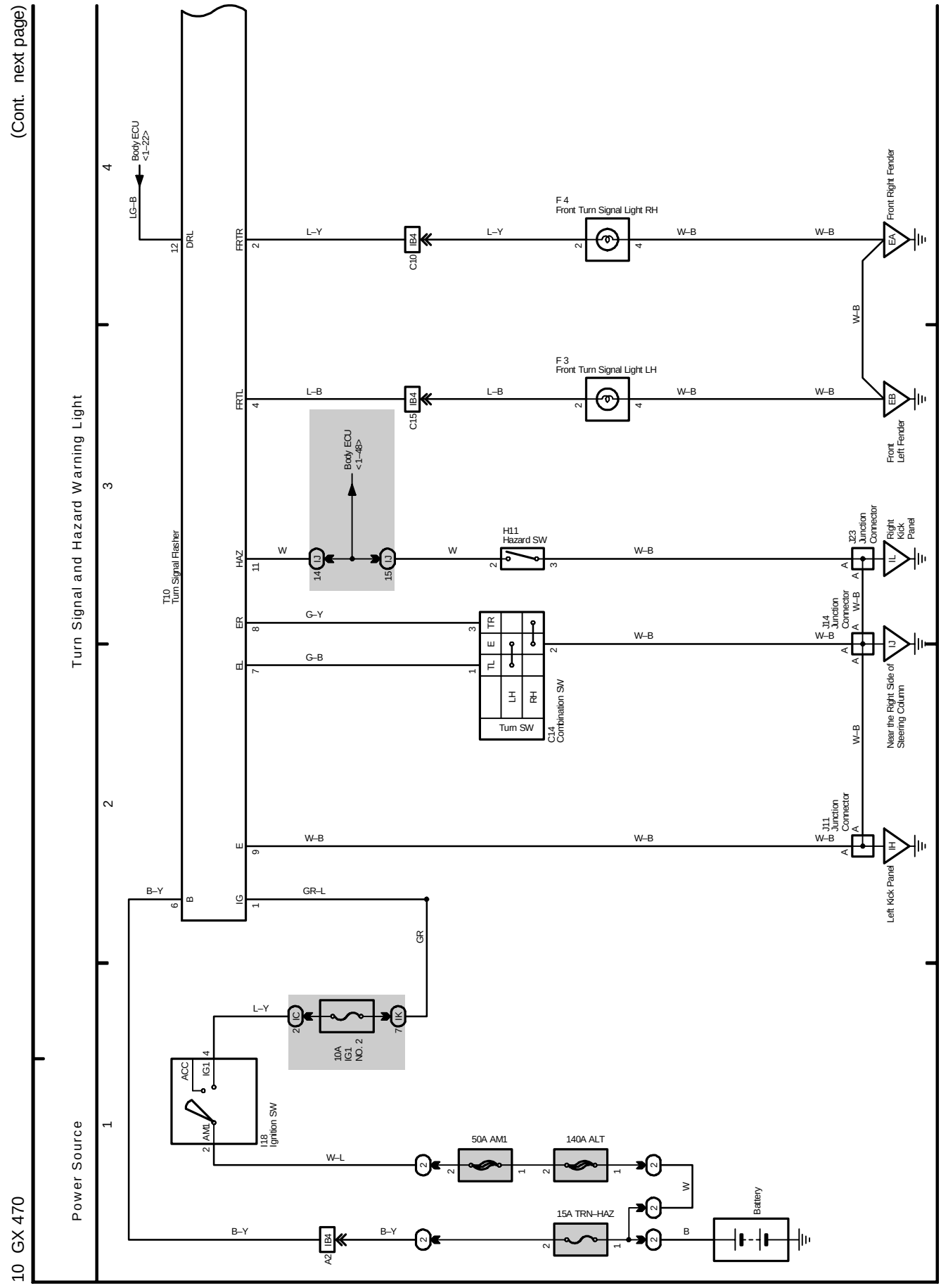


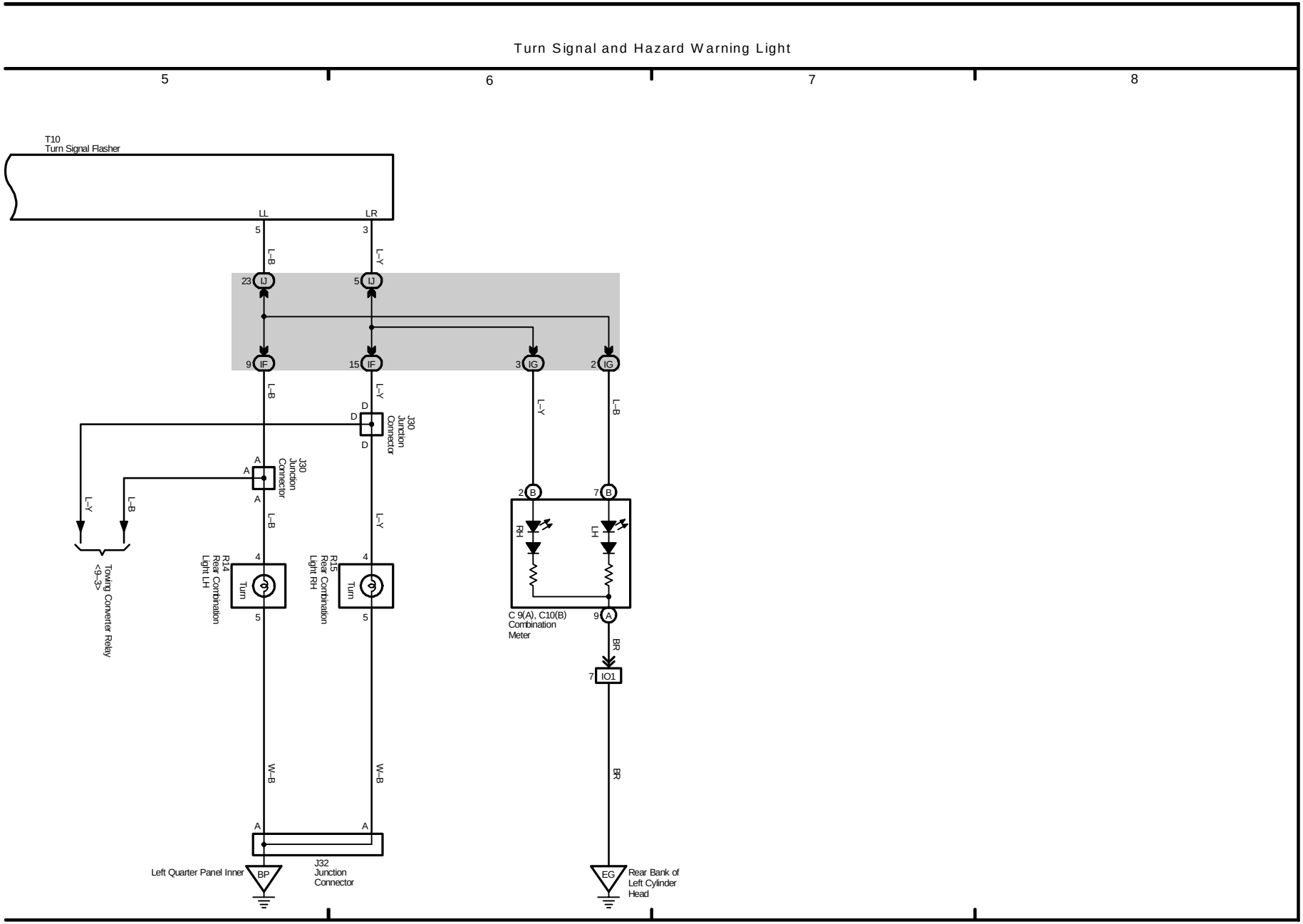
M OVERALL ELECTRICAL WIRING DIAGRAM



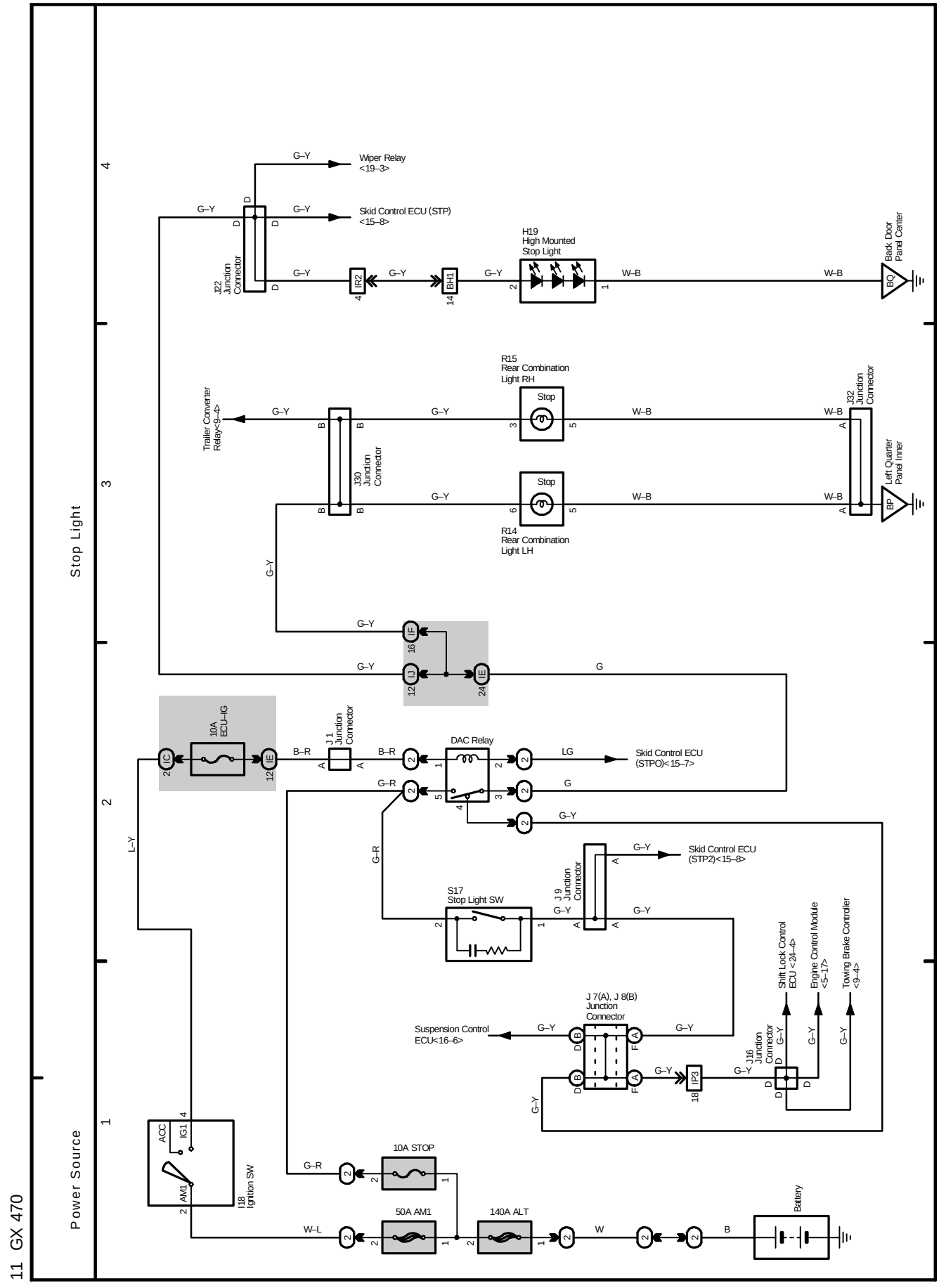

Power Source
Trailer Towing
1
2
3
4
A5 IB4
B
GR
IA2
30A TOWING
Battery
30A BRAKE CTRL
40A TOWING
30A BATT CHG
50A AM1
140A ALT
W
I18 Ignition SW
ACC
IG1
AM1
W–L
B–Y
G
L–Y
10A IG1
IC
IE
20
J1 Junction Connector
GR–L
BATT CHG Relay
TOWING TAIL Relay
L
Body ECU <1–5>
IA1
BG1
J 2 Junction Connector
W–B
EB Front Left Fender
Turn Signal Flasher<10–5>
DAC Relay <11–3>
T13 Towing Converter Relay
+B
RTIN
LTIN
STIN
RTOT
LTOT
GND
L–R
L–O
L–B
G–Y
BF1
BR
R
L
Y
C8 ID2
T14 Trailer Socket
STTR
STTL
BRK
TAIL
BATT
B/UP
T 8 Towing Brake Controller
STOP
TAIL
Stop Light SW <11–1>
TAIL Fuse <8–4>
R–Y
ID2
R–B
BK/UP LP Relay <13–4>
J32 Junction Connector
BP Left Quarter Panel Inner
J31 Junction Connector
J14 Junction Connector
IJ Near the Right Side of Steering Column

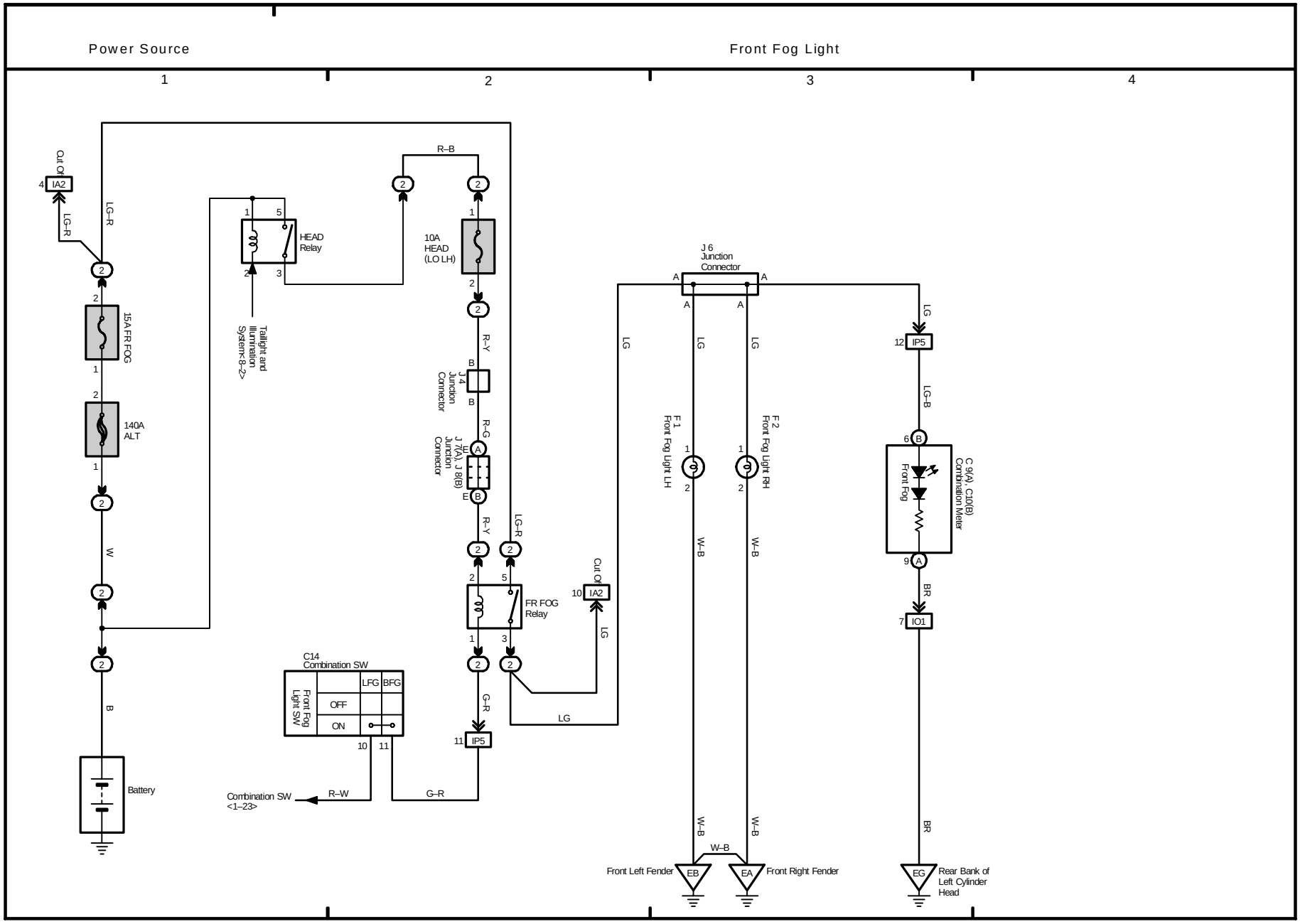
M OVERALL ELECTRICAL WIRING DIAGRAM



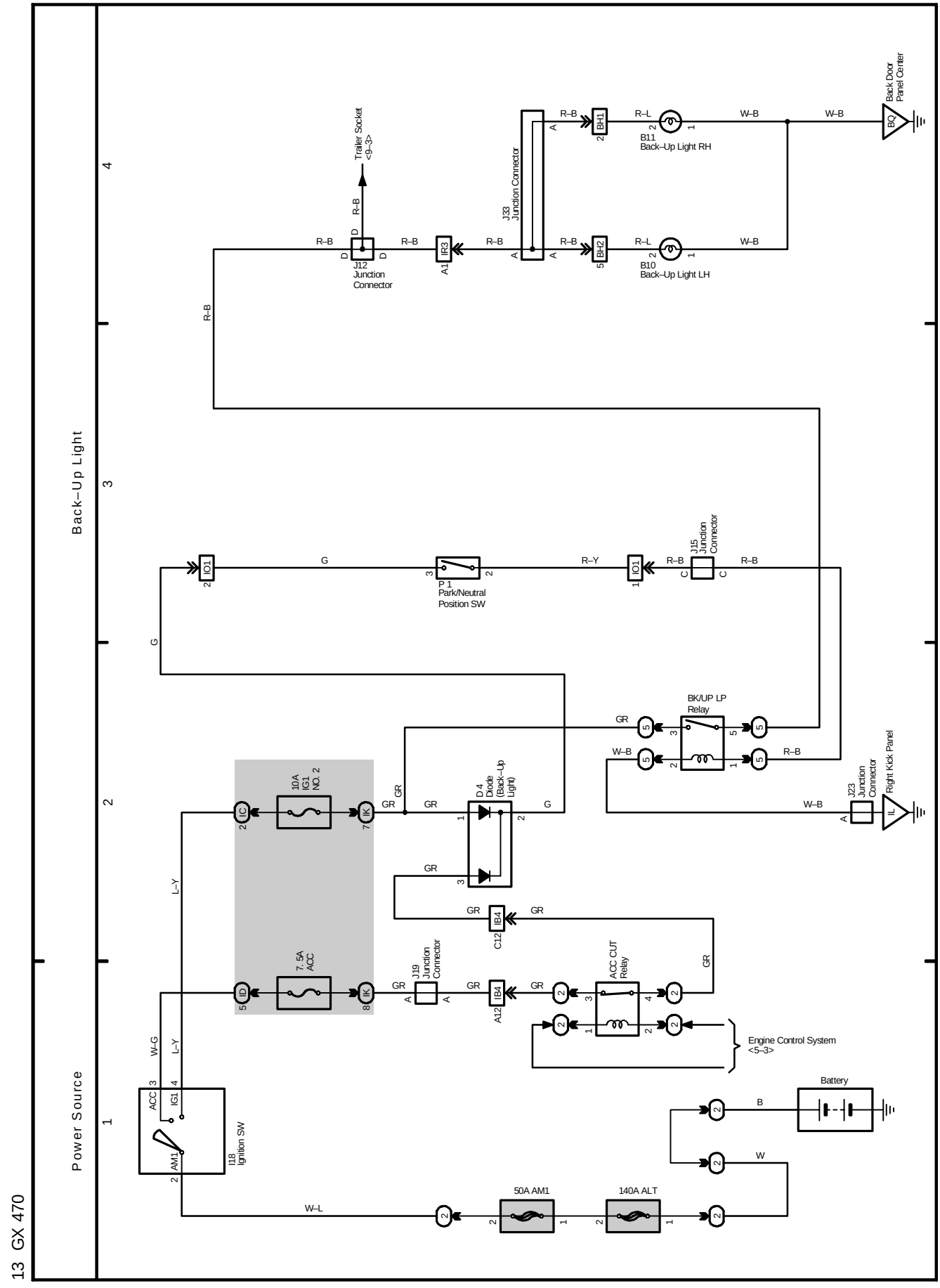

Turn Signal and Hazard Warning Light
5
6
7
8
T10
Turn Signal Flasher
LL
LR
5
3
L–B
L–Y
23 IJ
5 IJ
9 IF
15 IF
3 IG
2 IG
L–B
L–Y
L–Y
L–B
D
D
D
J30
Junction
Connector
A
A
A
J30
Junction
Connector
L–Y
L–B
L–B
L–Y
2 B
7 B
RH
LH
4
4
R14
Rear Combination
Light LH
Turn
R15
Rear Combination
Light RH
Turn
5
5
Towing Converter Relay
<9–3>
C 9(A), C10(B)
Combination
Meter
9 A
BR
7 IO1
W–B
W–B
BR
A
A
Left Quarter Panel Inner
BP
J32
Junction
Connector
EG
Rear Bank of
Left Cylinder
Head

M OVERALL ELECTRICAL WIRING DIAGRAM

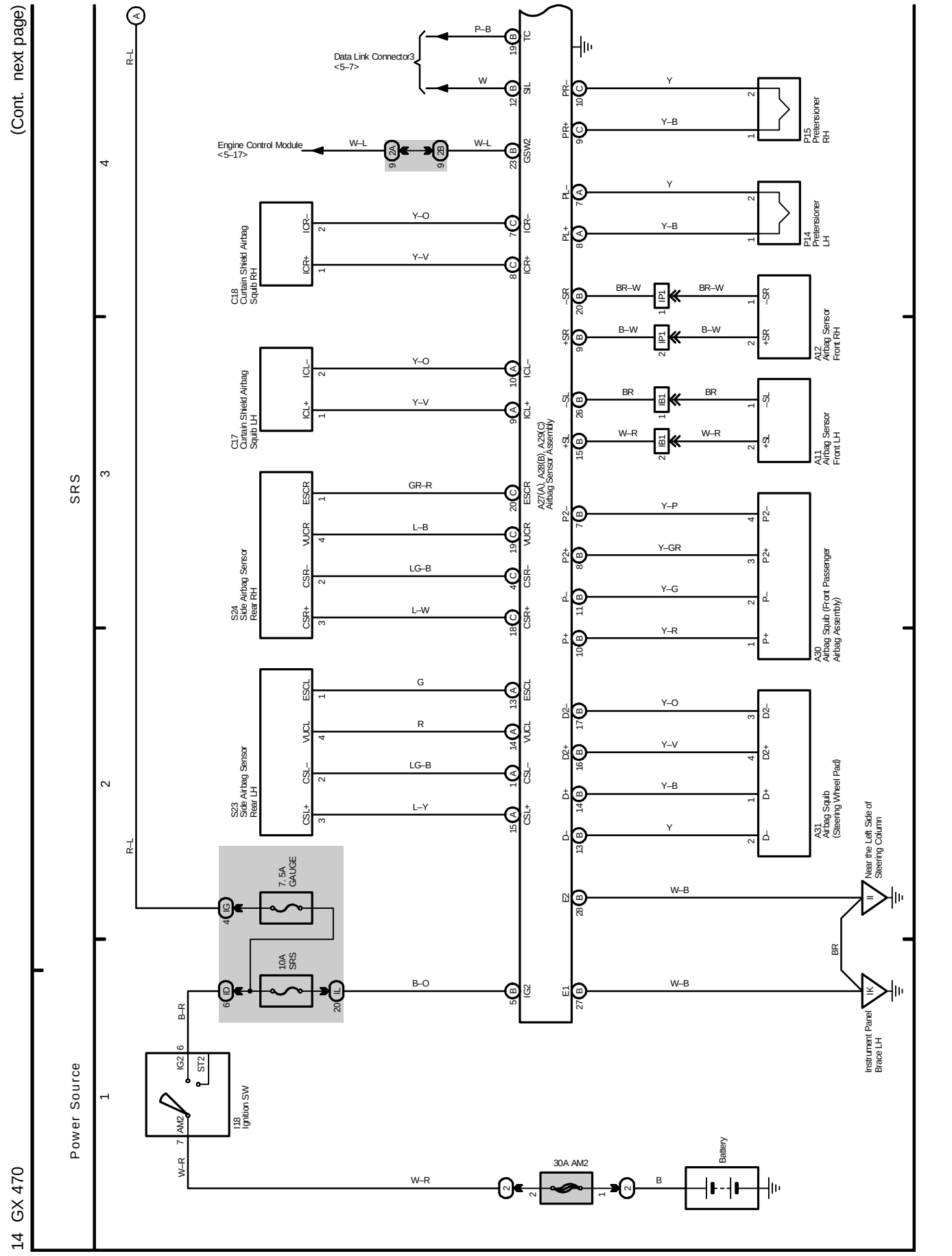


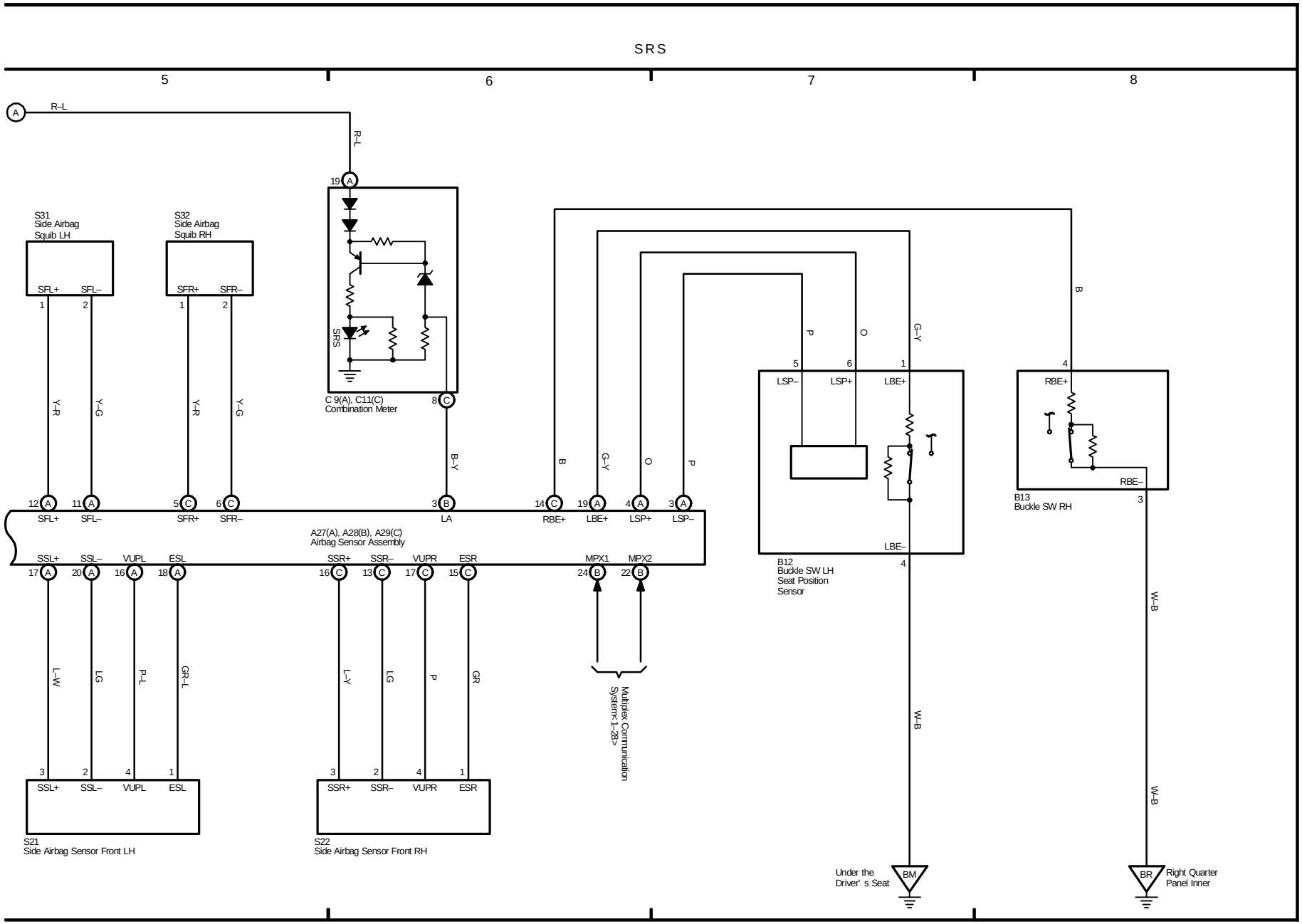

Power Source
Front Fog Light
1
2
3
4
Cur Off
IA2
LG–R
15A FR FOG
140A ALT
W
B
Battery
HEAD Relay
Taillight and Illumination System<8–2>
R–B
10A HEAD (LO LH)
R–Y
J 4 Junction Connector
R–G
J 7(A), J 8(B) Junction Connector
FR FOG Relay
LG
G–R
IP5
C14 Combination SW
LFG
BFG
Front Fog Light SW
OFF
ON
Combination SW <1–23>
R–W
J 6 Junction Connector
F 1 Front Fog Light LH
F 2 Front Fog Light RH
W–B
LG–B
BR
IO1
C 9(A), C10(B) Combination Meter
Front Fog
Front Left Fender
EB
EA
Front Right Fender
EG
Rear Bank of Left Cylinder Head

M OVERALL ELECTRICAL WIRING DIAGRAM

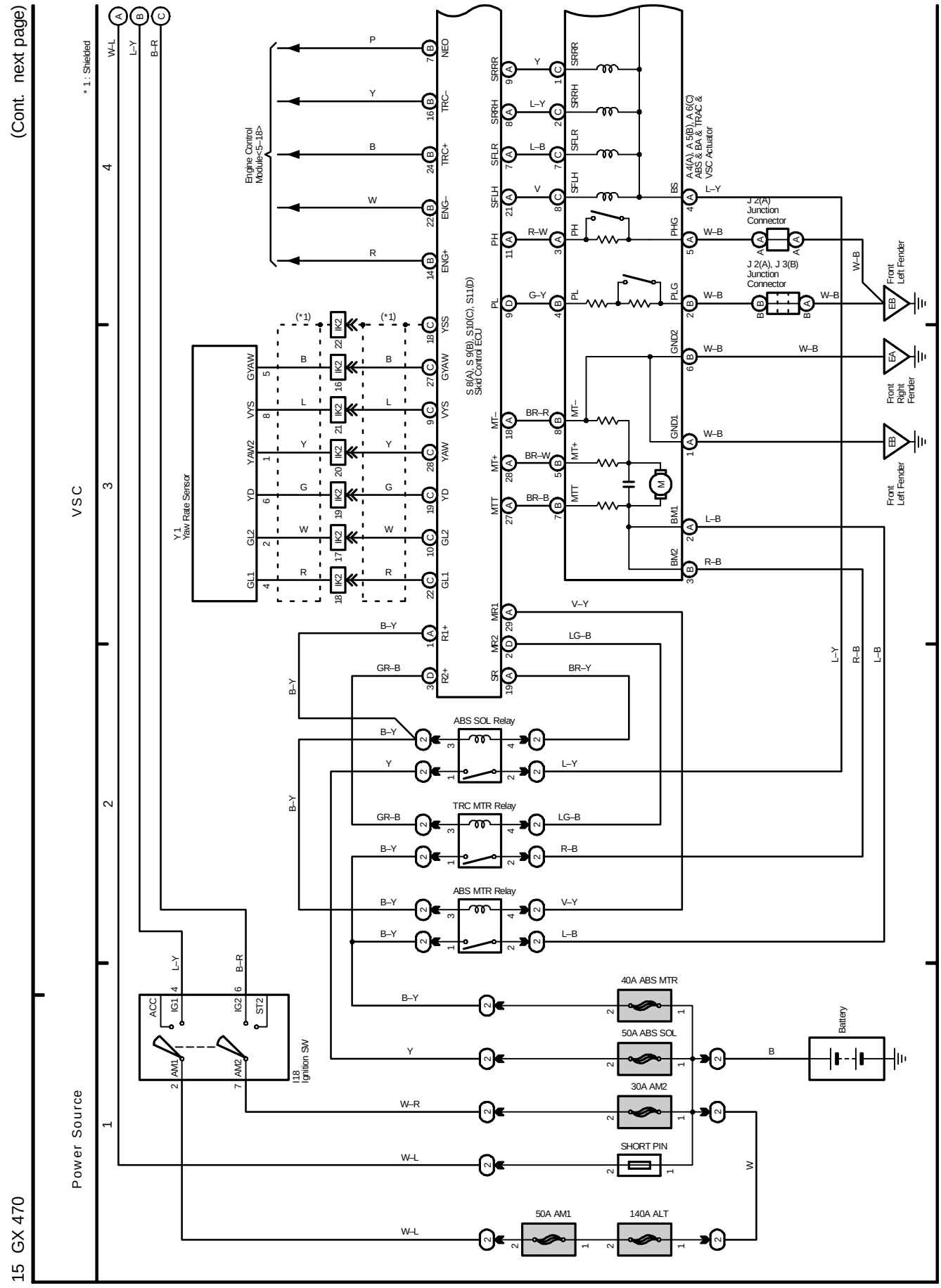


M OVERALL ELECTRICAL WIRING DIAGRAM

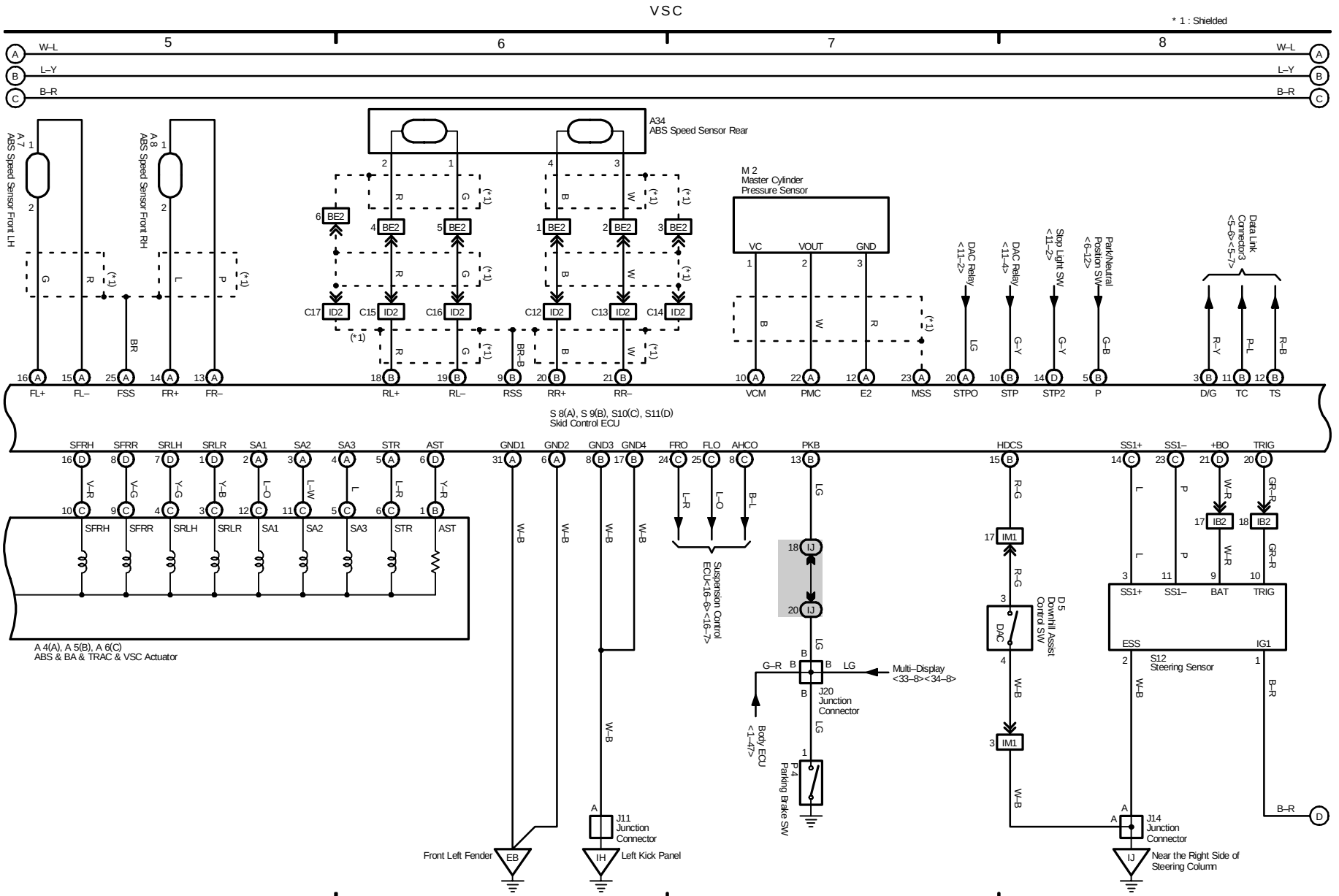



SRS
5
6
7
8
R–L
19 A
C 9(A), C11(C)
Combination Meter
8 C
B–Y
S31
Side Airbag
Squib LH
SFL+
SFL–
1
2
Y–R
Y–G
12 A
11 A
SFL+
SFL–
S32
Side Airbag
Squib RH
SFR+
SFR–
1
2
Y–R
Y–G
5 C
6 C
SFR+
SFR–
A27(A), A28(B), A29(C)
Airbag Sensor Assembly
3 B
LA
B
G–Y
O
P
14 C
19 A
4 A
3 A
RBE+
LBE+
LSP+
LSP–
P
O
G–Y
5
6
1
LSP–
LSP+
LBE+
LBE–
4
B12
Buckle SW LH
Seat Position
Sensor
B
4
RBE+
RBE–
3
B13
Buckle SW RH
SSL+
SSL–
VUPL
ESL
17 A
20 A
16 A
18 A
L–W
LG
P–L
GR–L
3
2
4
1
SSL+
SSL–
VUPL
ESL
S21
Side Airbag Sensor Front LH
SSR+
SSR–
VUPR
ESR
16 C
13 C
17 C
15 C
L–Y
LG
P
GR
3
2
4
1
SSR+
SSR–
VUPR
ESR
S22
Side Airbag Sensor Front RH
MPX1
MPX2
24 B
22 B
Multiplex Communication
System<1–28>
W–B
W–B
W–B
Under the
Driver' s Seat
BM
BR
Right Quarter
Panel Inner

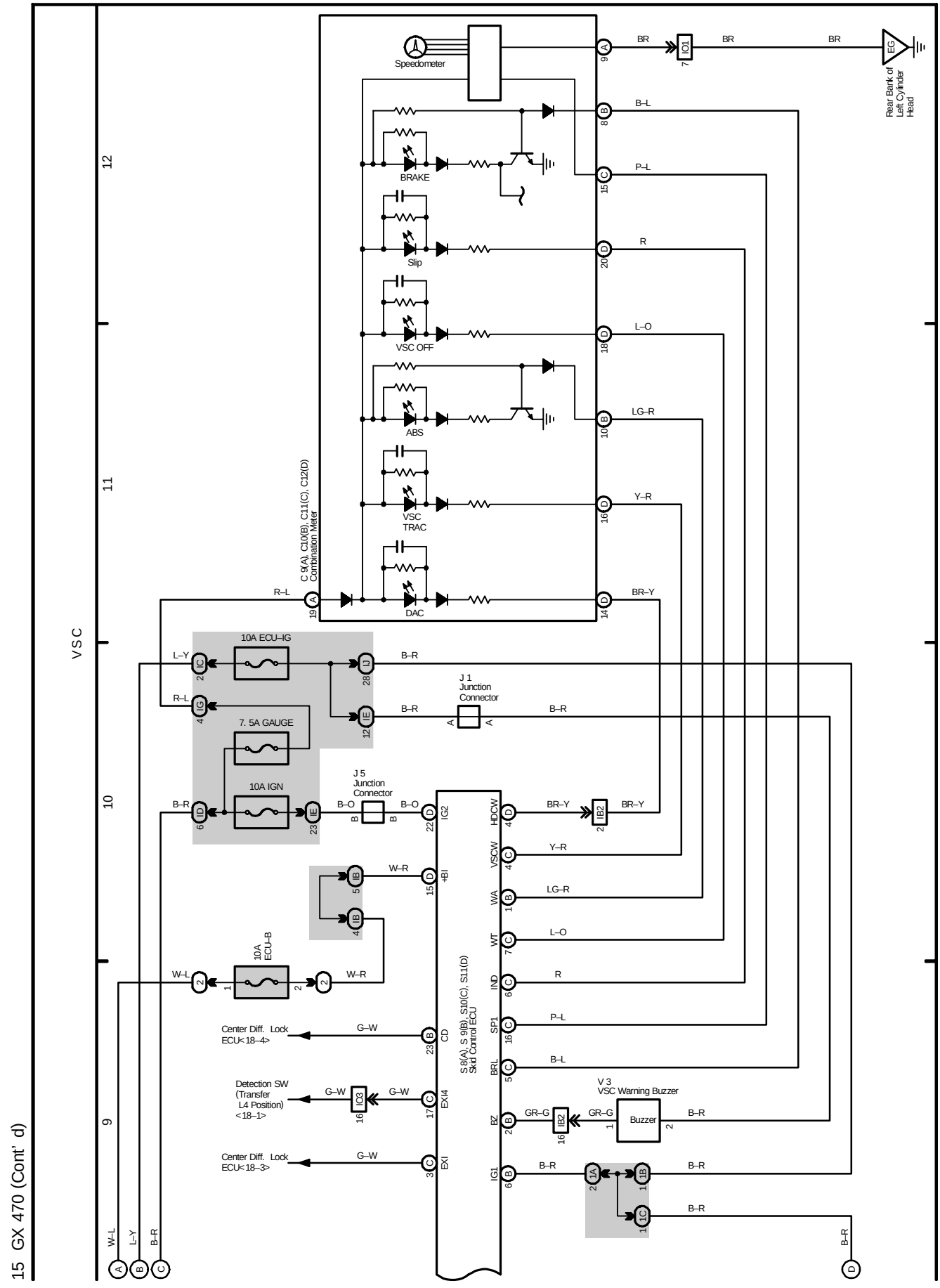
M OVERALL ELECTRICAL WIRING DIAGRAM



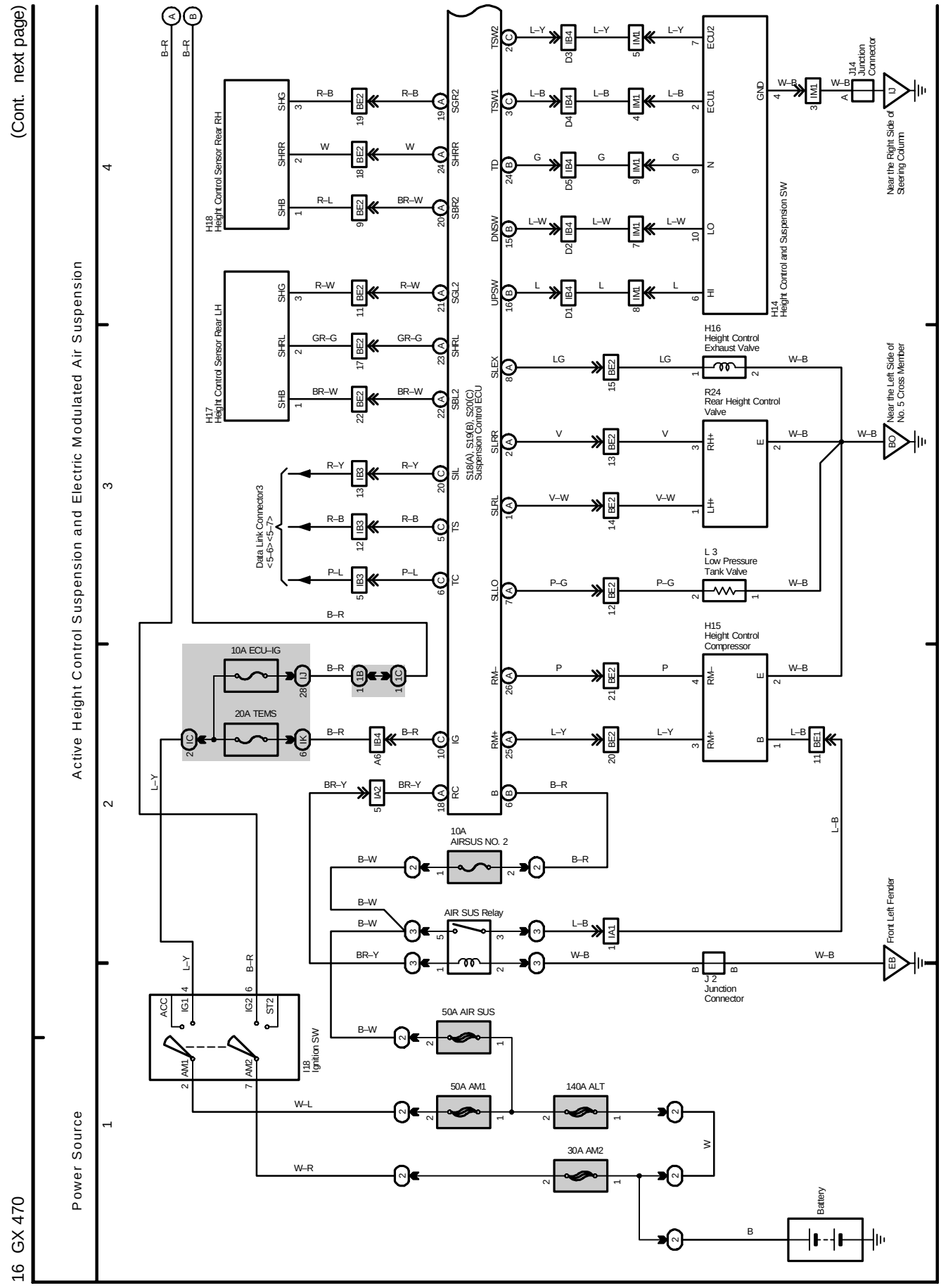
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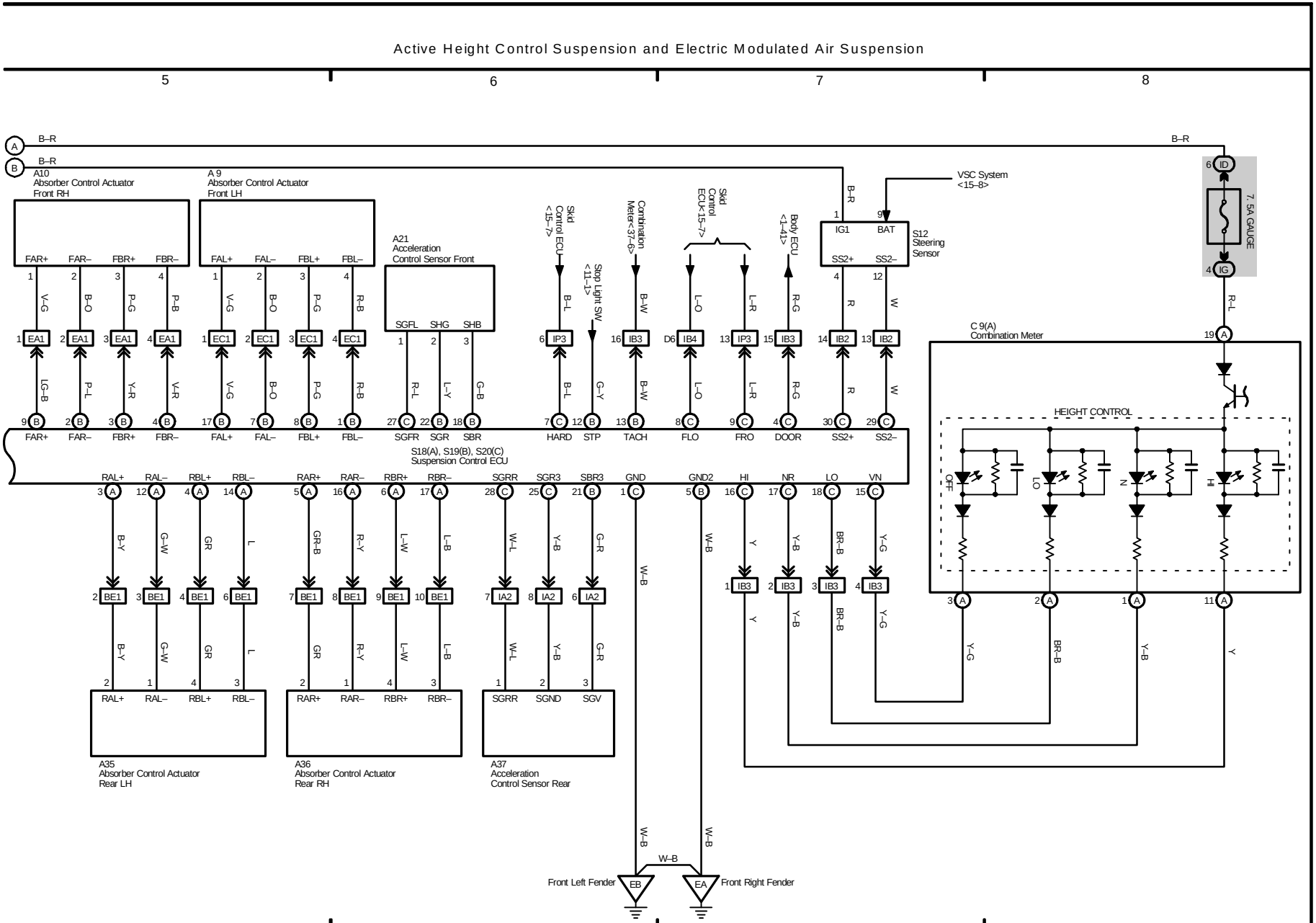
M OVERALL ELECTRICAL WIRING DIAGRAM



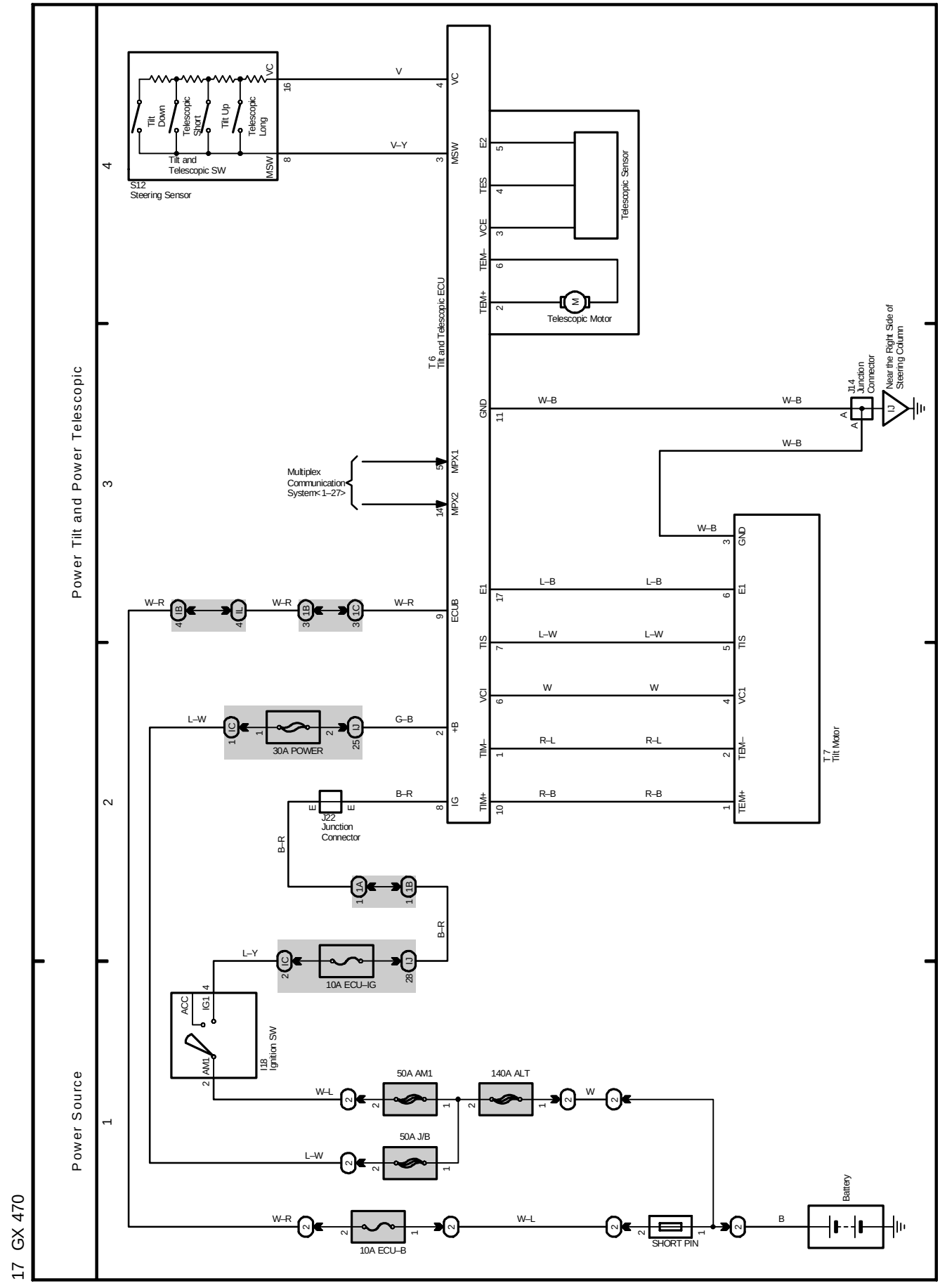
M OVERALL ELECTRICAL WIRING DIAGRAM

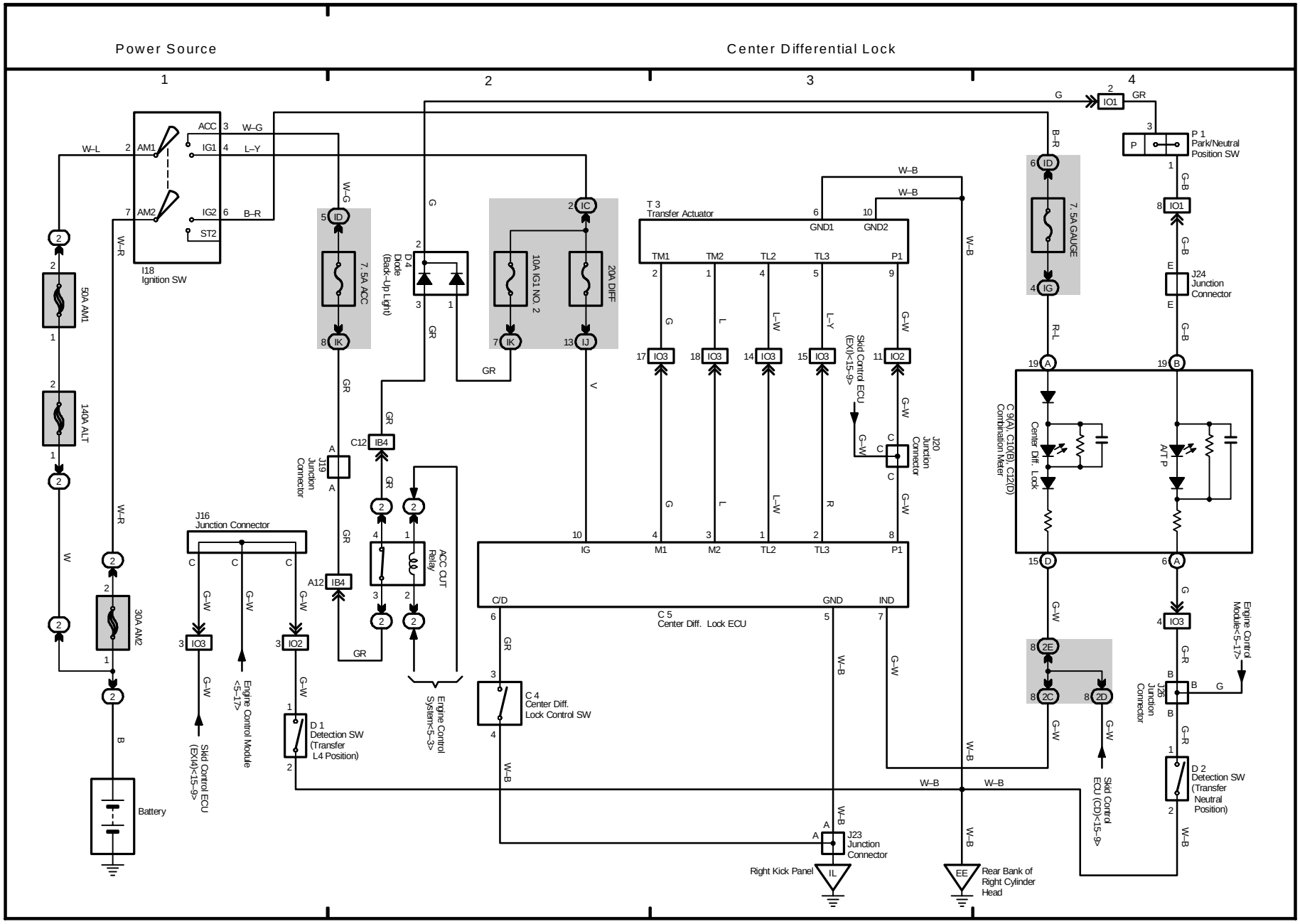


Active Height Control Suspension and Electric Modulated Air Suspension

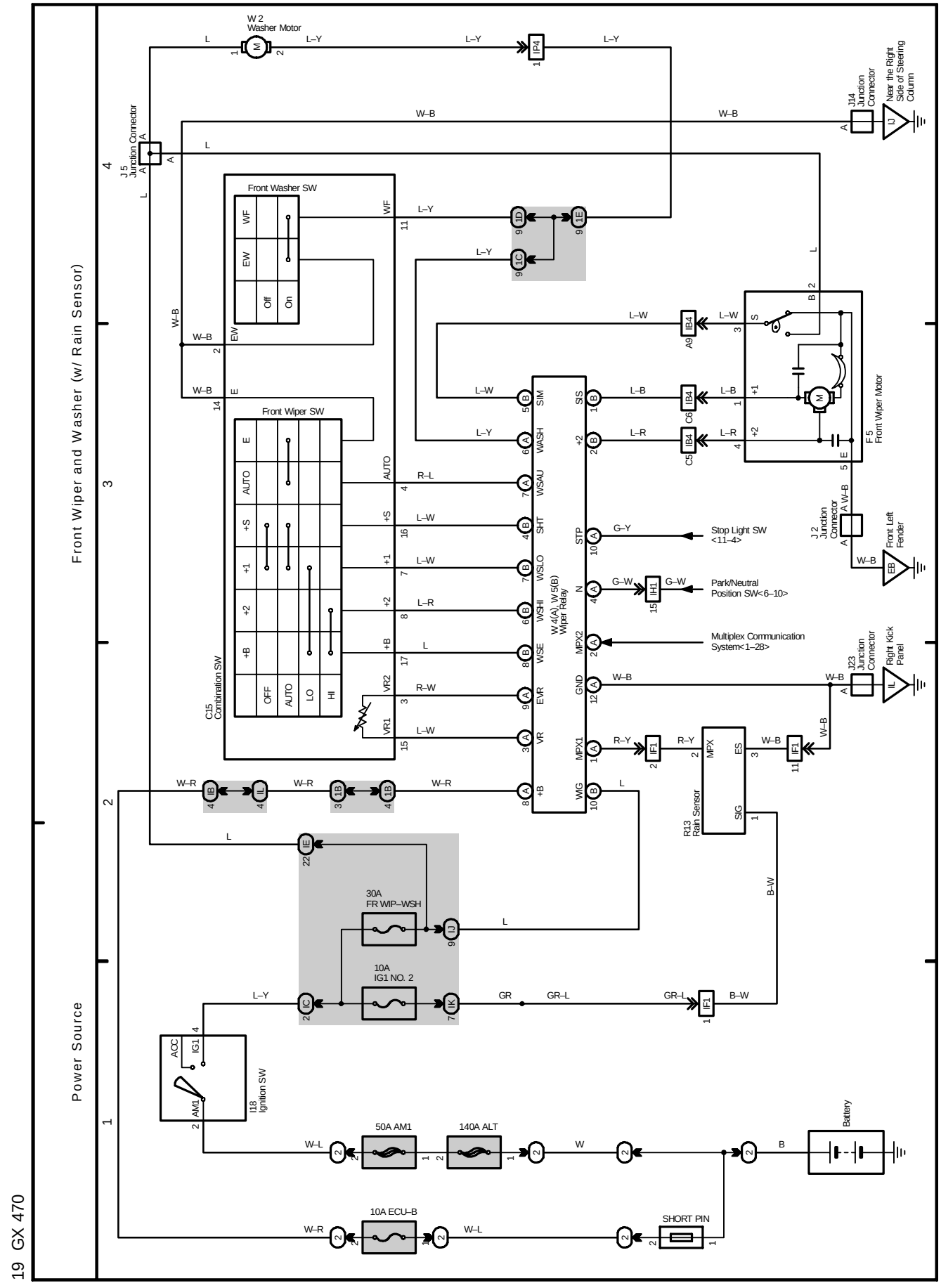


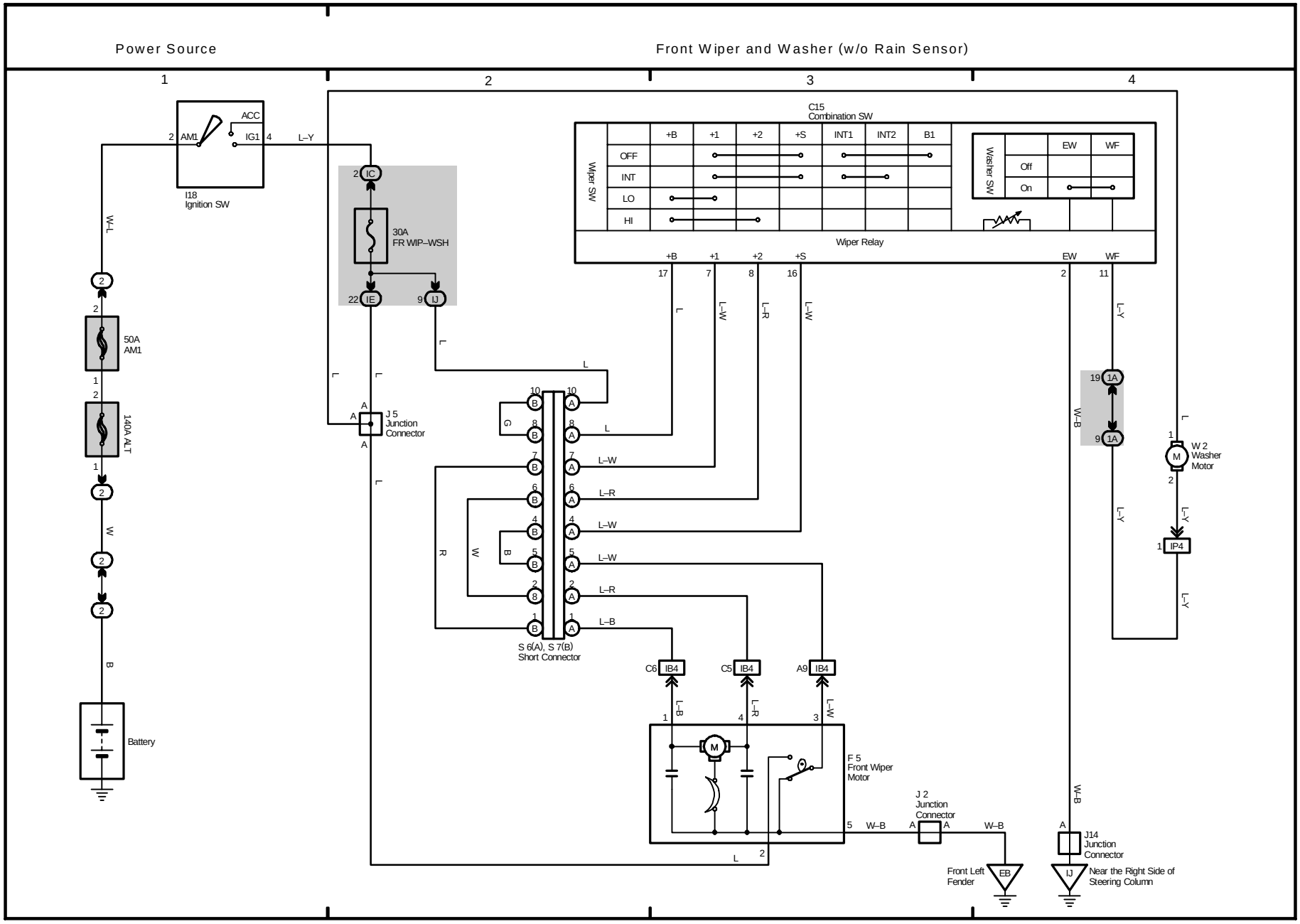
M OVERALL ELECTRICAL WIRING DIAGRAM



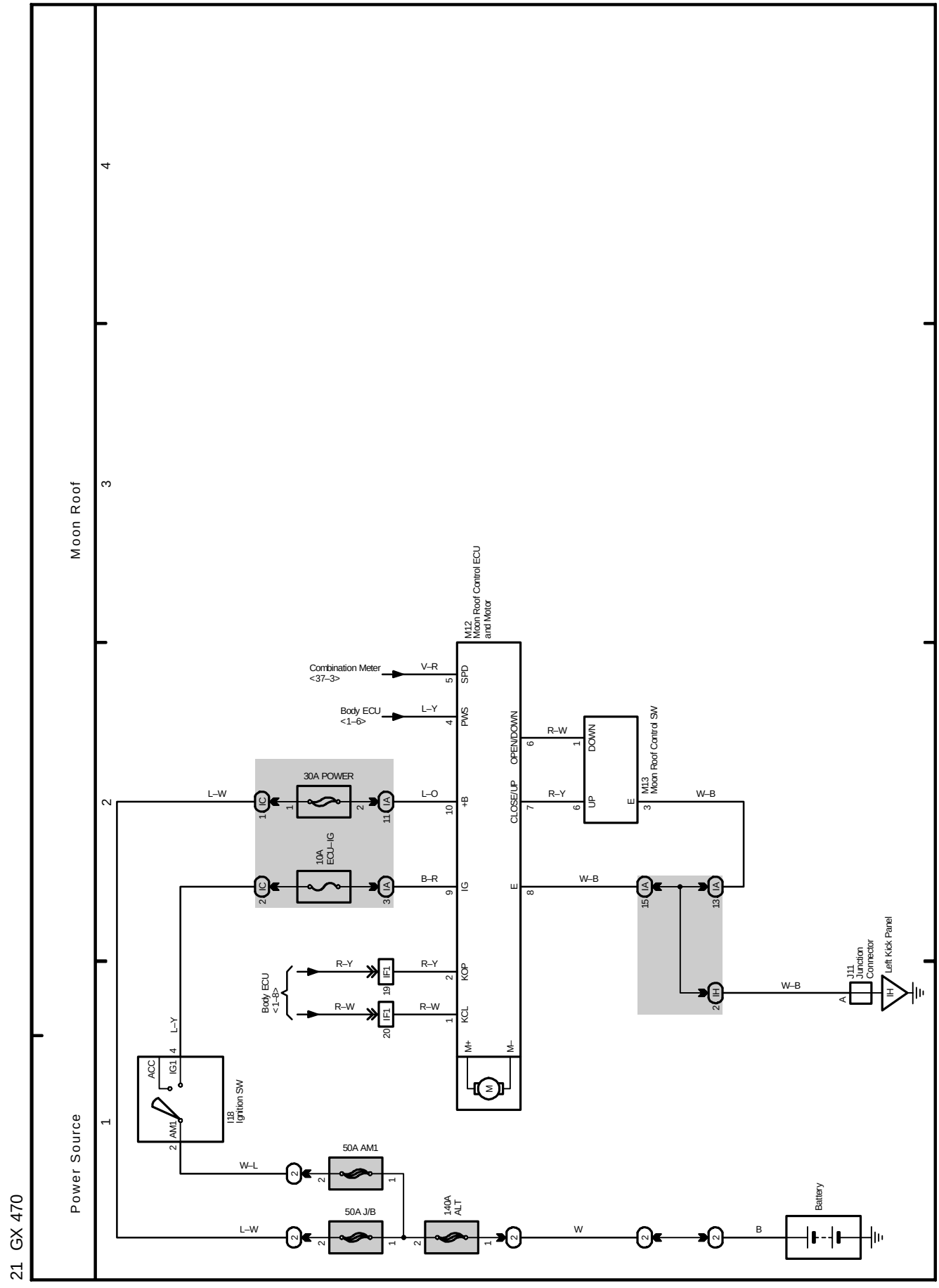

Power Source
Center Differential Lock
1
2
3
4
I18 Ignition SW
ACC
IG1
IG2
ST2
AM1
AM2
50A AM1
140A ALT
30A AM2
Battery
7.5A ACC
D4 Diode (Back-Up Light)
10A IG1 NO. 2
20A DIFF
T3 Transfer Actuator
GND1
GND2
TM1
TM2
TL2
TL3
P1
J19 Junction Connector
J16 Junction Connector
ACC CUT Relay
Engine Control System<5-3>
Engine Control Module <5-17>
Skid Control ECU (EXI)<15-9>
D1 Detection SW (Transfer L4 Position)
C4 Center Diff. Lock Control SW
C5 Center Diff. Lock ECU
C/D
GND
IND
J23 Junction Connector
Right Kick Panel
P1 Park/Neutral Position SW
7.5A GAUGE
J24 Junction Connector
C9(A), C10(B), C12(D) Combination Meter
Center Diff. Lock
A/T P
J20 Junction Connector
J28 Junction Connector
D2 Detection SW (Transfer Neutral Position)
Skid Control ECU (CD)<15-9>
Rear Bank of Right Cylinder Head

M OVERALL ELECTRICAL WIRING DIAGRAM

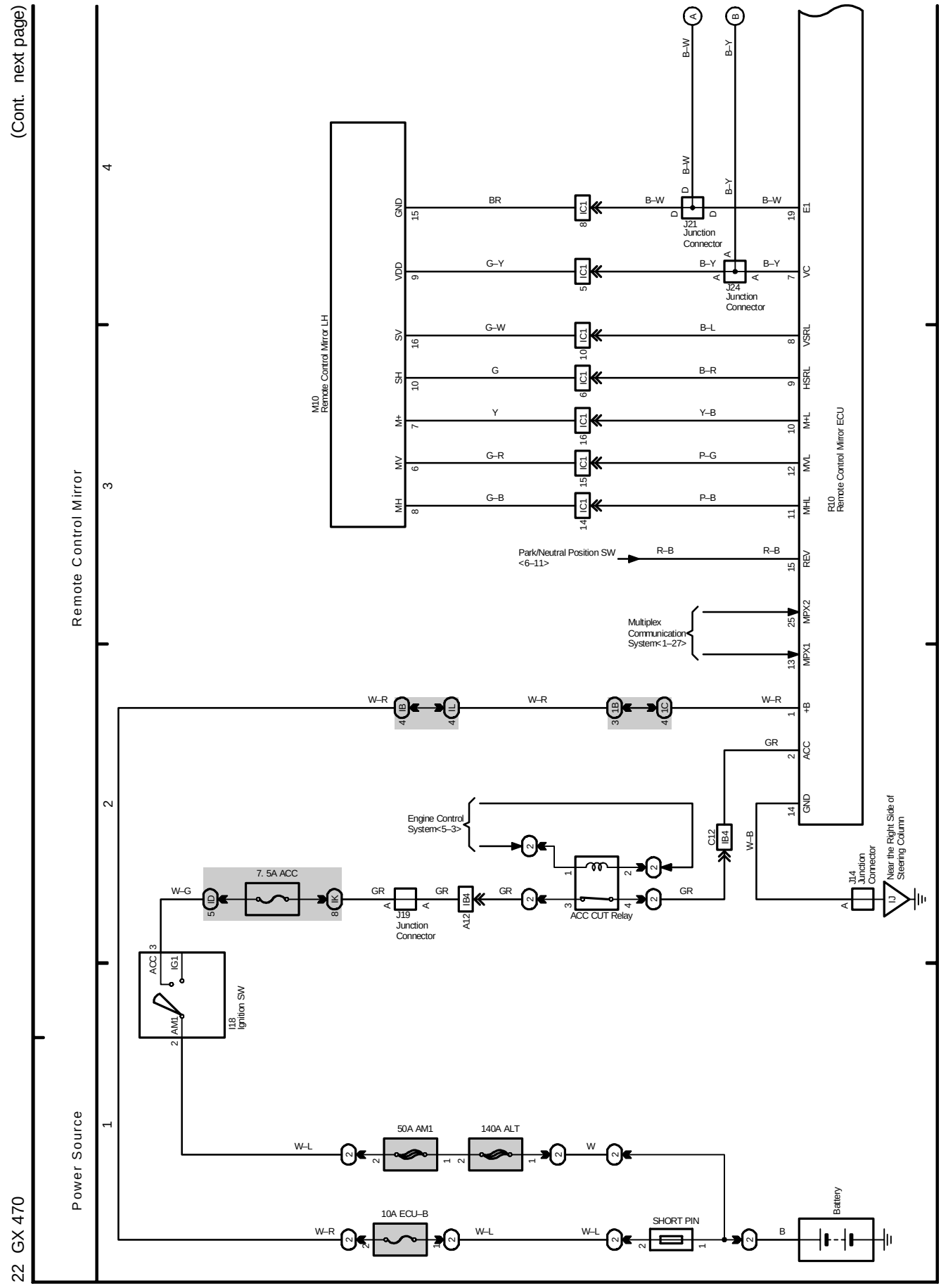


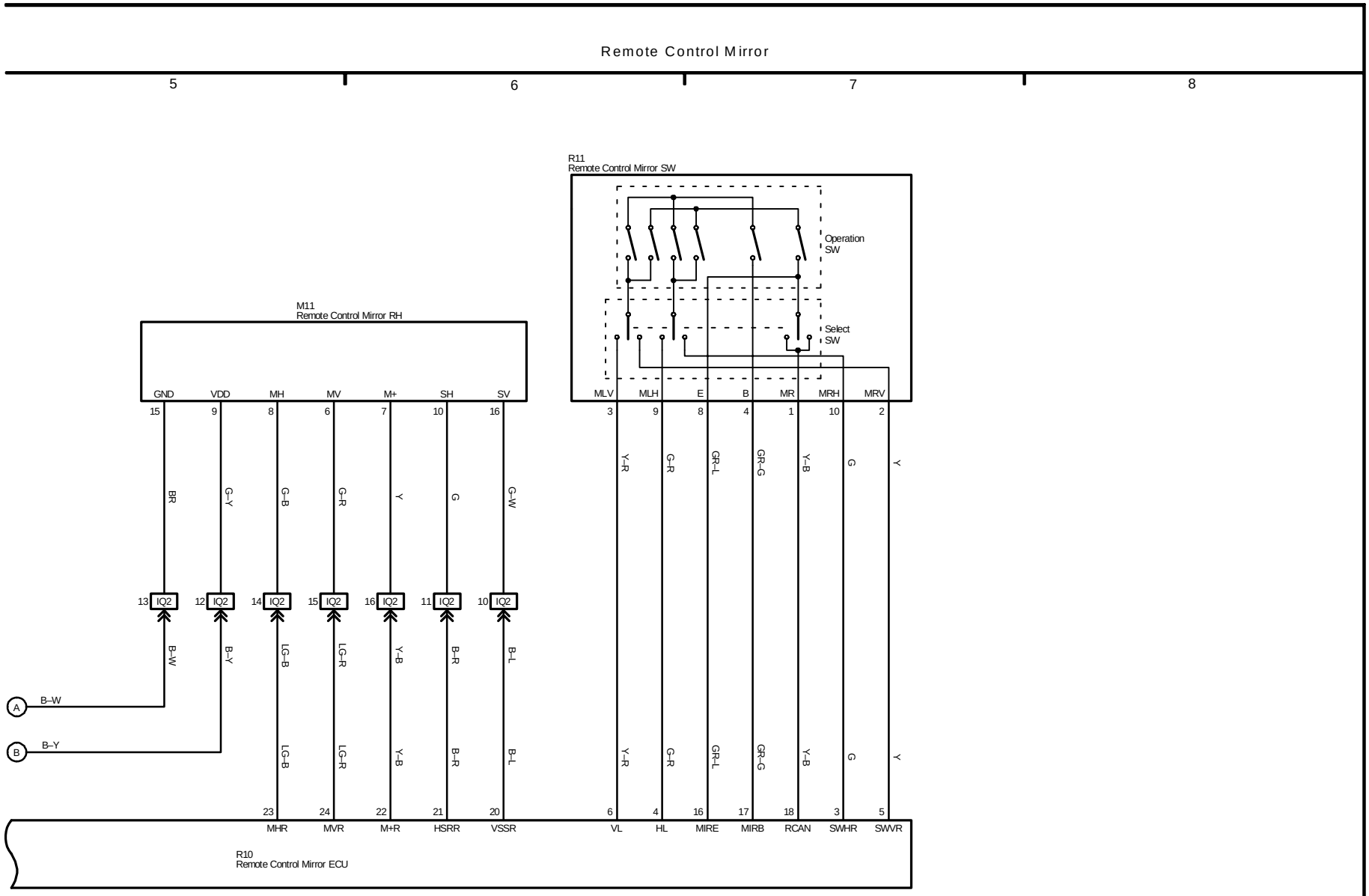

Power Source
Front Wiper and Washer (w/o Rain Sensor)
1
2
3
4
C15
Combination SW
Wiper SW
OFF
INT
LO
HI
+B
+1
+2
+S
INT1
INT2
B1
Washer SW
Off
On
EW
WF
Wiper Relay
ACC
AM1
IG1
I18
Ignition SW
30A
FR WIP–WSH
IC
IE
IJ
50A
AM1
140A ALT
Battery
J 5
Junction
Connector
S 6(A), S 7(B)
Short Connector
C6 IB4
C5 IB4
A9 IB4
F 5
Front Wiper
Motor
J 2
Junction
Connector
J14
Junction
Connector
Front Left
Fender
EB
Near the Right Side of
Steering Column
W 2
Washer
Motor
IP4
1A
L–Y
W–B
L–W
L–R
L–B
W–L
L
R
W
B
G

M OVERALL ELECTRICAL WIRING DIAGRAM

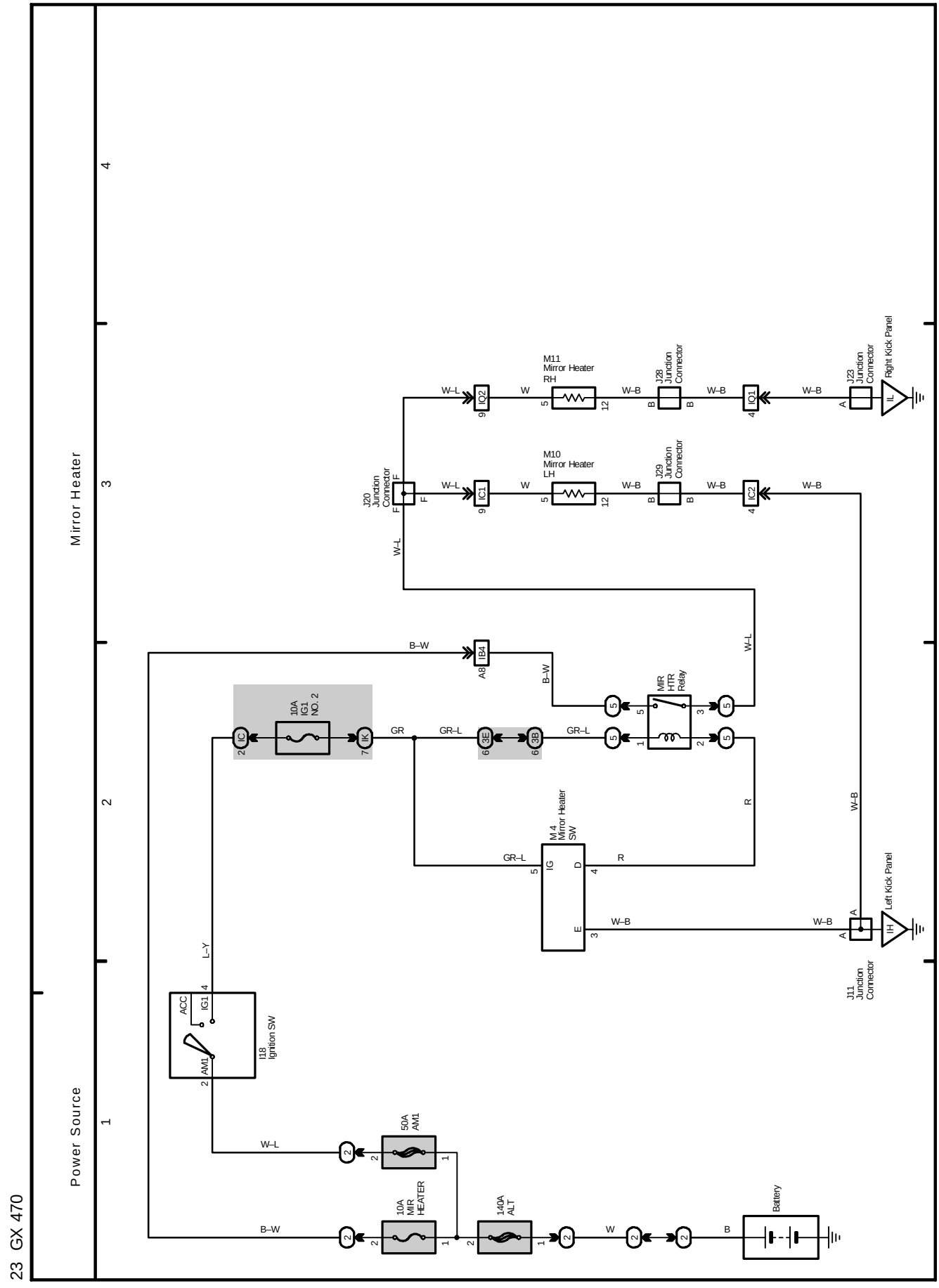


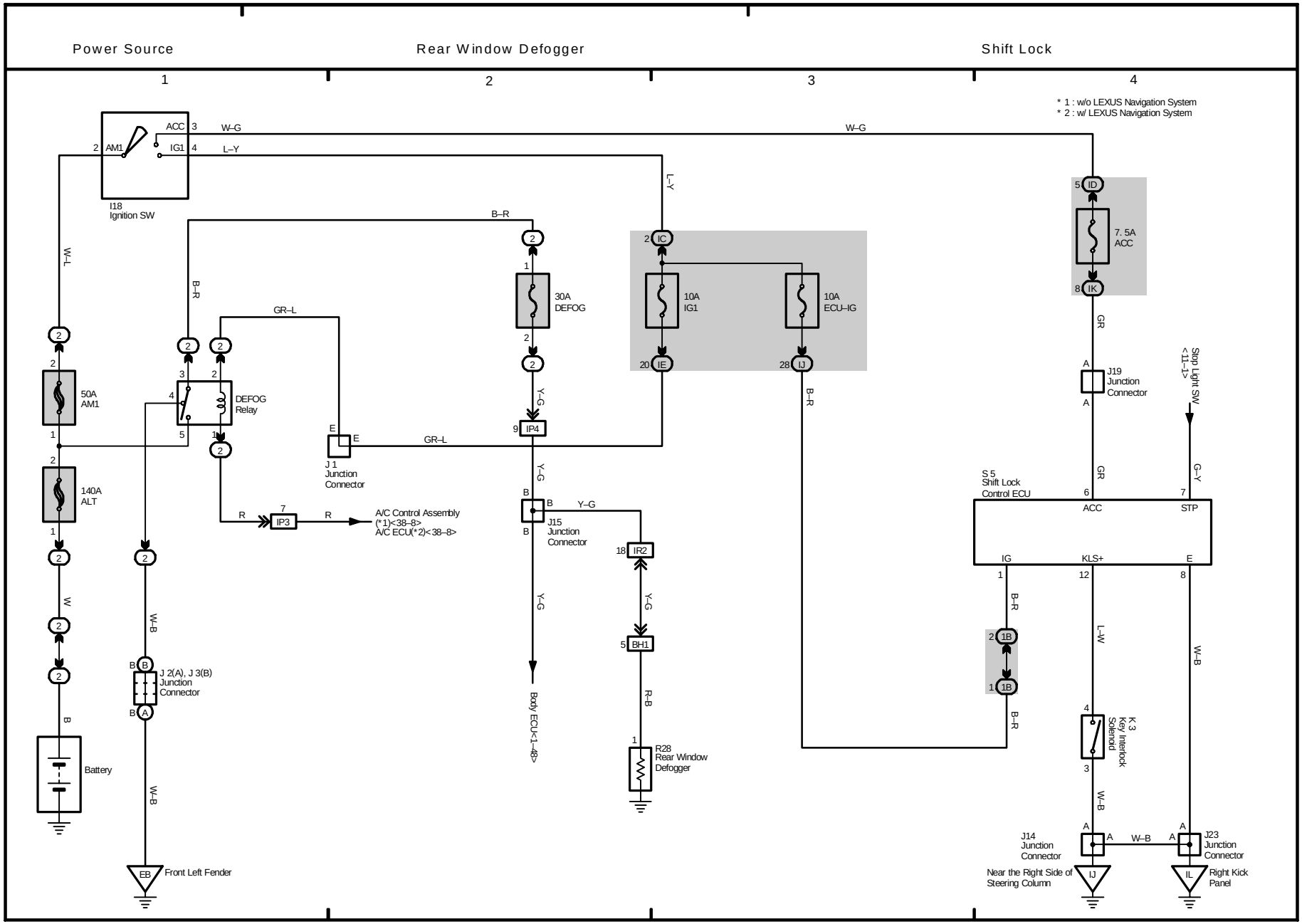
M OVERALL ELECTRICAL WIRING DIAGRAM



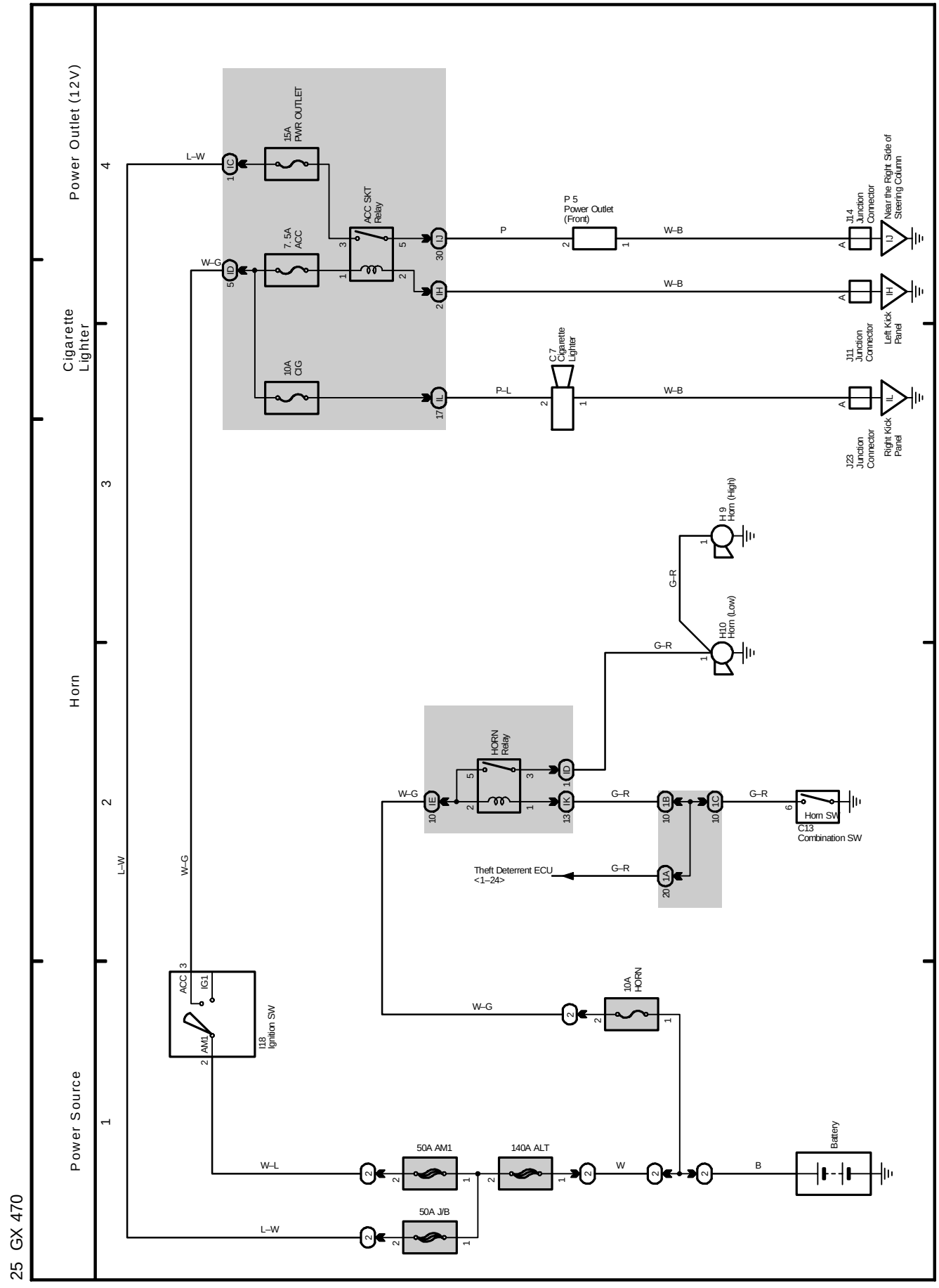

Remote Control Mirror
5
6
7
8
R11
Remote Control Mirror SW
Operation SW
Select SW
MLV
MLH
E
B
MR
MRH
MRV
M11
Remote Control Mirror RH
GND
VDD
MH
MV
M+
SH
SV
BR
G–Y
G–B
G–R
Y
G
G–W
Y–R
G–R
GR–L
GR–G
Y–B
G
Y
IQ2
B–W
B–Y
LG–B
LG–R
Y–B
B–R
B–L
A
B
MHR
MVR
M+R
HSRR
VSSR
VL
HL
MIRE
MIRB
RCAN
SWHR
SWVR
R10
Remote Control Mirror ECU

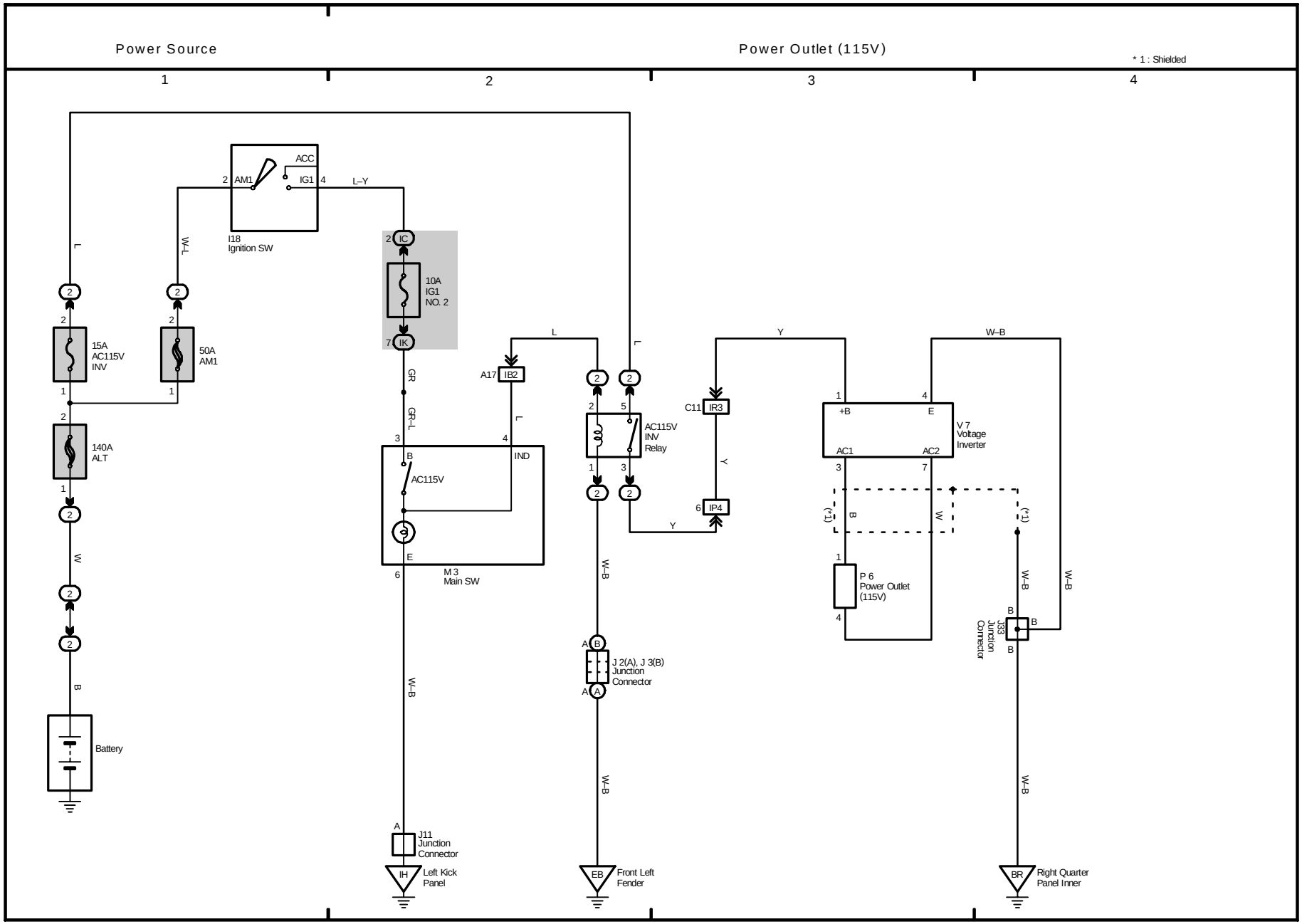
M OVERALL ELECTRICAL WIRING DIAGRAM



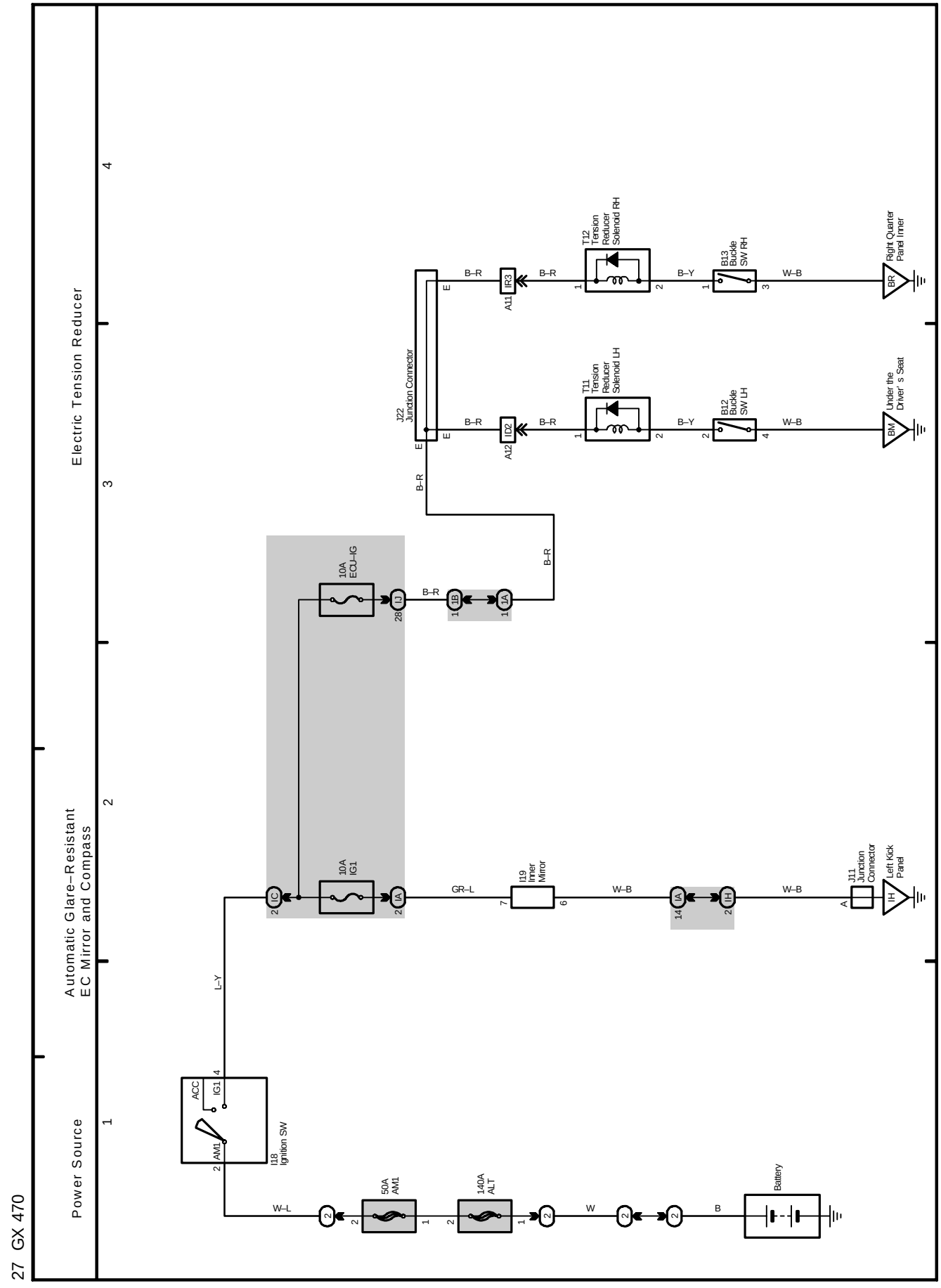

Power Source
Rear Window Defogger
Shift Lock
1
2
3
4
* 1 : w/o LEXUS Navigation System
* 2 : w/ LEXUS Navigation System
I18
Ignition SW
ACC
AM1
IG1
W–G
L–Y
W–L
B–R
GR–L
50A
AM1
140A
ALT
Battery
DEFOG
Relay
30A
DEFOG
10A
IG1
10A
ECU–IG
7. 5A
ACC
J 1
Junction
Connector
J15
Junction
Connector
Y–G
IP3
IP4
IR2
BH1
R28
Rear Window
Defogger
R–B
A/C Control Assembly
(*1)<38–8>
A/C ECU(*2)<38–8>
Body ECU<1–48>
J 2(A), J 3(B)
Junction
Connector
W–B
EB
Front Left Fender
J19
Junction
Connector
GR
S 5
Shift Lock
Control ECU
ACC
STP
IG
KLS+
E
G–Y
Stop Light SW
<11–1>
B–R
L–W
1B
K 3
Key Interlock
Solenoid
J14
Junction
Connector
Near the Right Side of
Steering Column
IJ
J23
Junction
Connector
IL
Right Kick
Panel

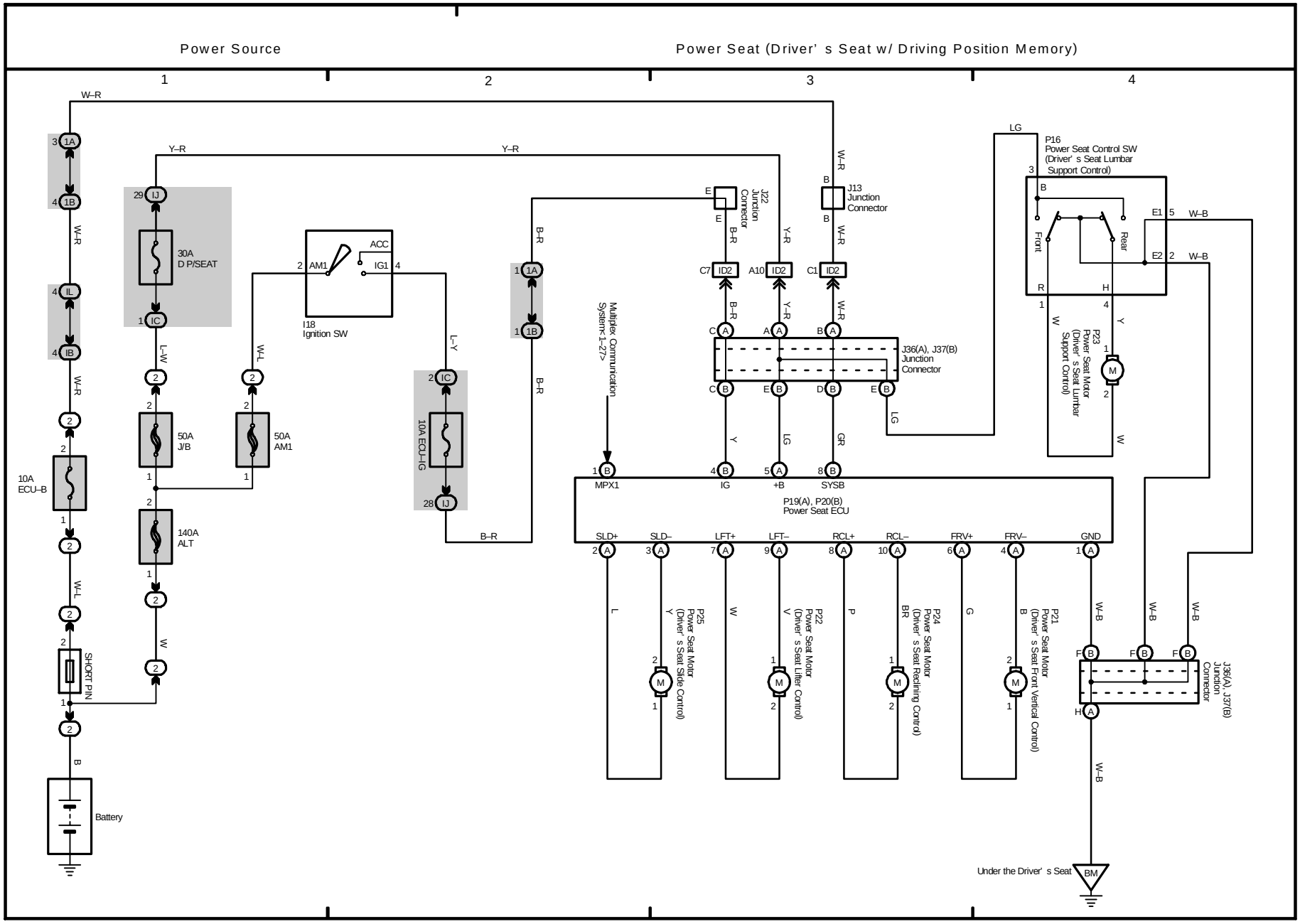
M OVERALL ELECTRICAL WIRING DIAGRAM



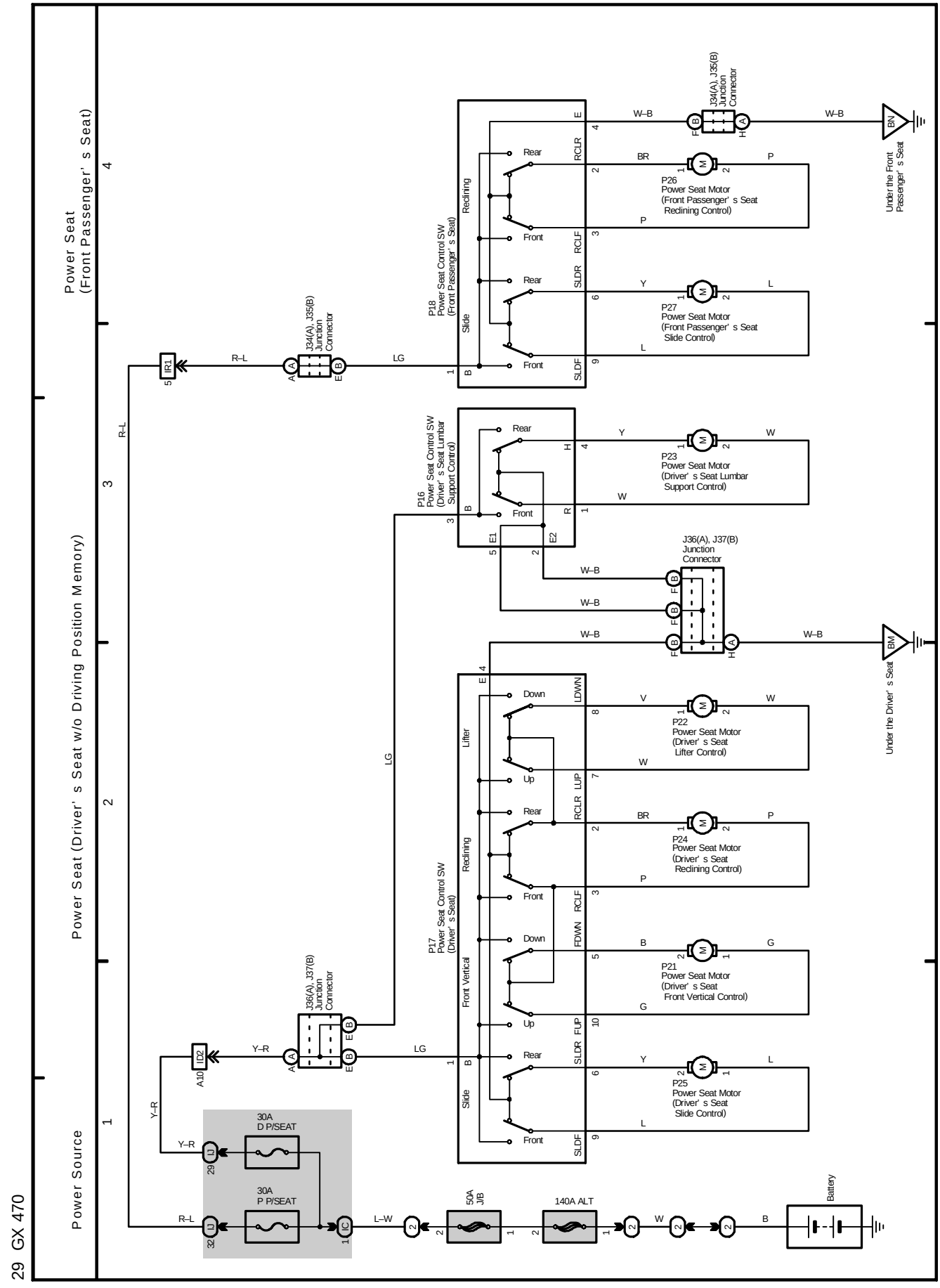

Power Source
Power Outlet (115V)
* 1 : Shielded
1
2
3
4
ACC
AM1
IG1
L–Y
I18
Ignition SW
IC
10A
IG1
NO. 2
IK
15A
AC115V
INV
50A
AM1
140A
ALT
Battery
GR
GR–L
M 3
Main SW
AC115V
IND
IB2
AC115V
INV
Relay
C11
IR3
IP4
V 7
Voltage
Inverter
+B
E
AC1
AC2
P 6
Power Outlet
(115V)
J 2(A), J 3(B)
Junction
Connector
J11
Junction
Connector
Left Kick
Panel
Front Left
Fender
J33
Junction
Connector
Right Quarter
Panel Inner

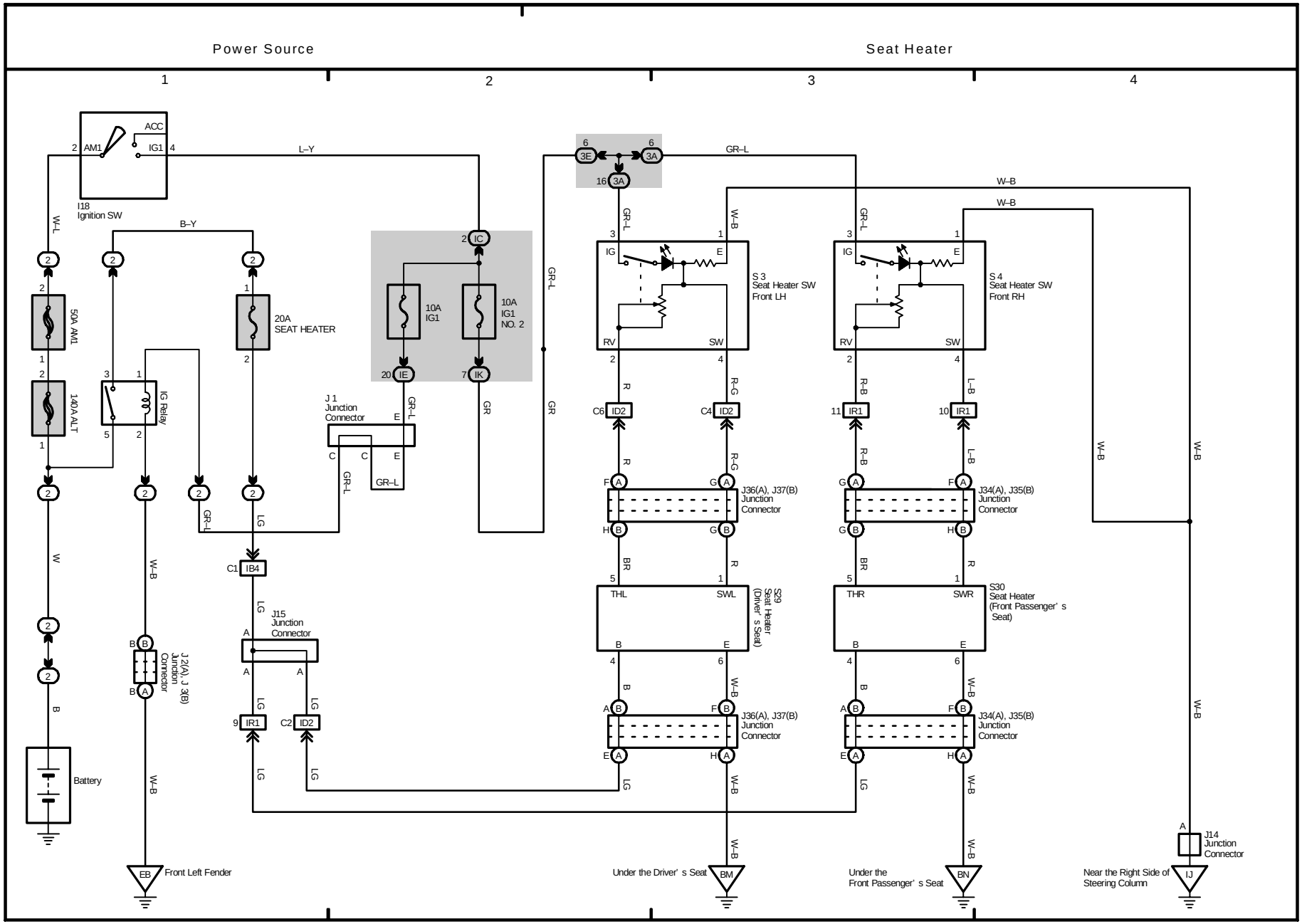
M OVERALL ELECTRICAL WIRING DIAGRAM



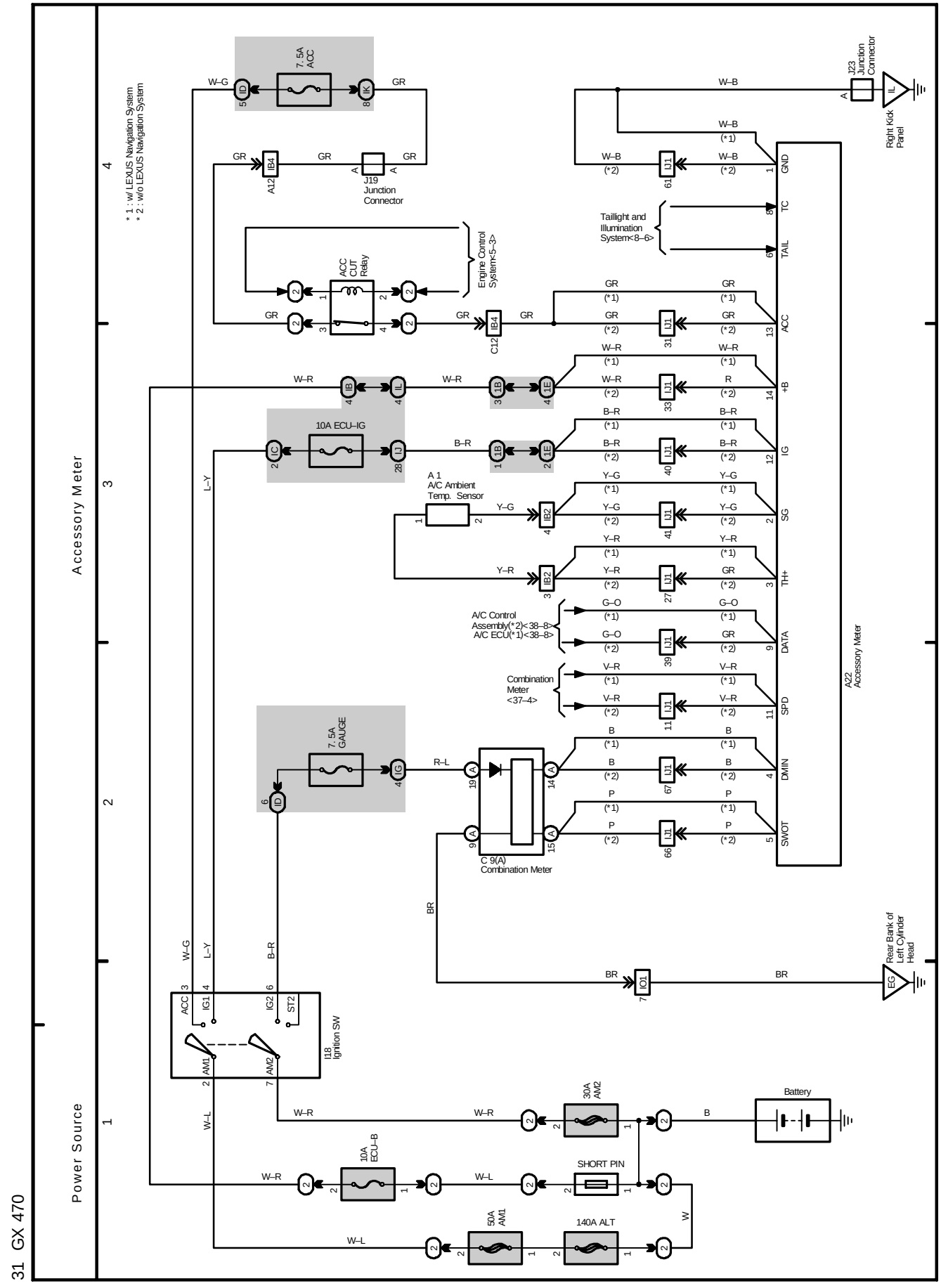

Power Source
Power Seat (Driver' s Seat w/ Driving Position Memory)
1
2
3
4
W–R
Y–R
B–R
L–W
L–Y
W–L
B
LG
Y
GR
L
W
P
BR
G
V
30A
D P/SEAT
50A
J/B
50A
AM1
140A
ALT
10A
ECU–B
10A ECU–IG
SHORT PIN
Battery
ACC
IG1
AM1
I18
Ignition SW
122
Junction
Connector
J13
Junction
Connector
J36(A), J37(B)
Junction
Connector
Multiplex Communication
System<1–27>
MPX1
IG
+B
SYSB
P19(A), P20(B)
Power Seat ECU
SLD+
SLD–
LFT+
LFT–
RCL+
RCL–
FRV+
FRV–
GND
P16
Power Seat Control SW
(Driver' s Seat Lumbar
Support Control)
Front
Rear
P23
Power Seat Motor
(Driver' s Seat Lumbar
Support Control)
P25
Power Seat Motor
(Driver' s Seat Slide Control)
P22
Power Seat Motor
(Driver' s Seat Lifter Control)
P24
Power Seat Motor
(Driver' s Seat Reclining Control)
P21
Power Seat Motor
(Driver' s Seat Front Vertical Control)
J36(A), J37(B)
Junction
Connector
Under the Driver' s Seat
BM

M OVERALL ELECTRICAL WIRING DIAGRAM

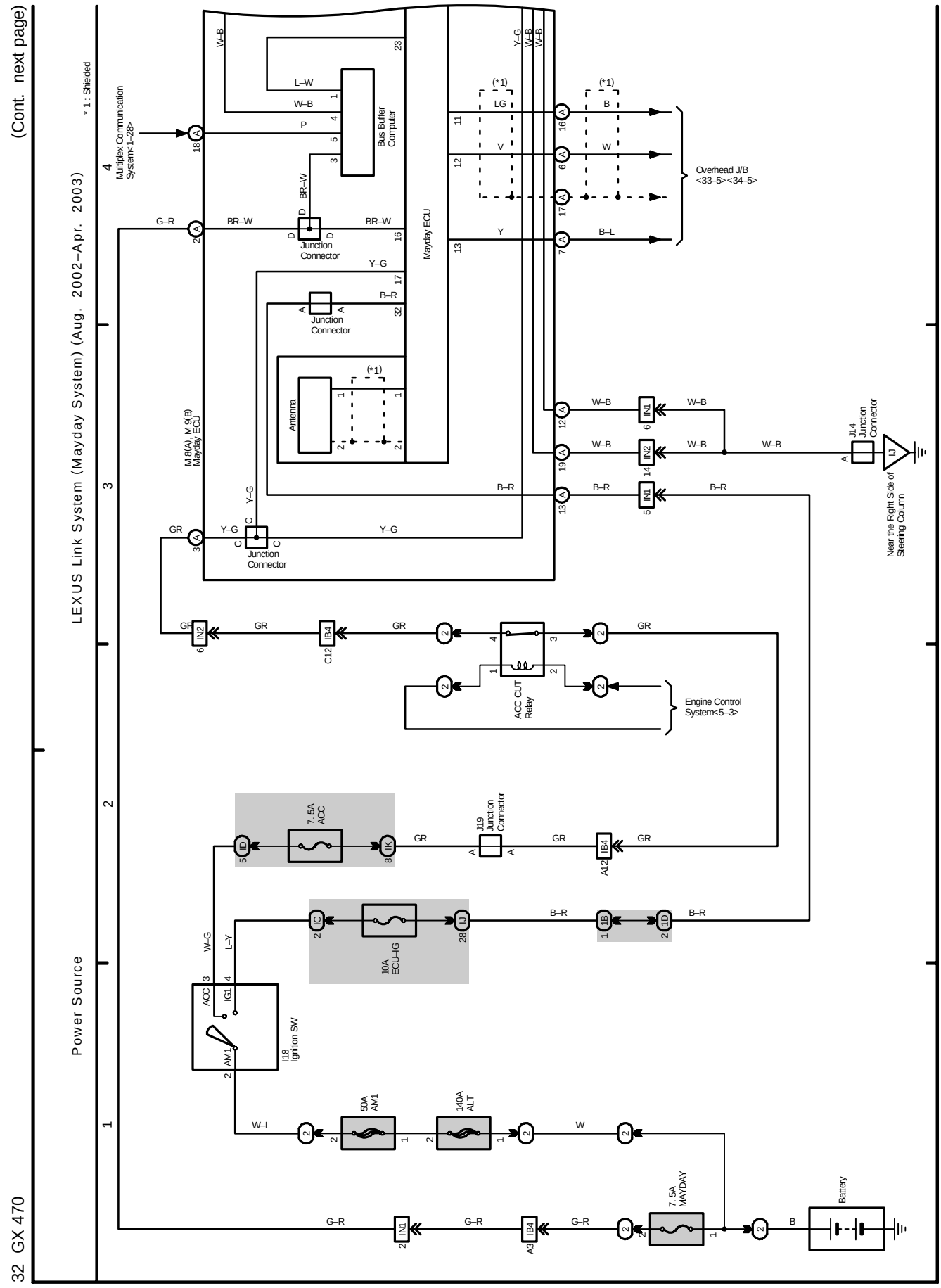



Power Source
Seat Heater
1
2
3
4
ACC
AM1
IG1
I18
Ignition SW
L–Y
W–L
B–Y
50A AM1
140A ALT
IG Relay
20A
SEAT HEATER
10A
IG1
10A
IG1
NO. 2
J 1
Junction
Connector
GR–L
GR
GR–L
LG
W
W–B
B
Battery
J15
Junction
Connector
J2(A), J 3(B)
Junction
Connector
W–B
Front Left Fender
3E
3A
16 3A
GR–L
W–B
S 3
Seat Heater SW
Front LH
S 4
Seat Heater SW
Front RH
RV
SW
R
R–G
R–B
L–B
J36(A), J37(B)
Junction
Connector
J34(A), J35(B)
Junction
Connector
BR
R
S29
Seat Heater
(Driver's Seat)
S30
Seat Heater
(Front Passenger's
Seat)
THL
SWL
THR
SWR
Under the Driver's Seat
Under the
Front Passenger's Seat
J14
Junction
Connector
Near the Right Side of
Steering Column

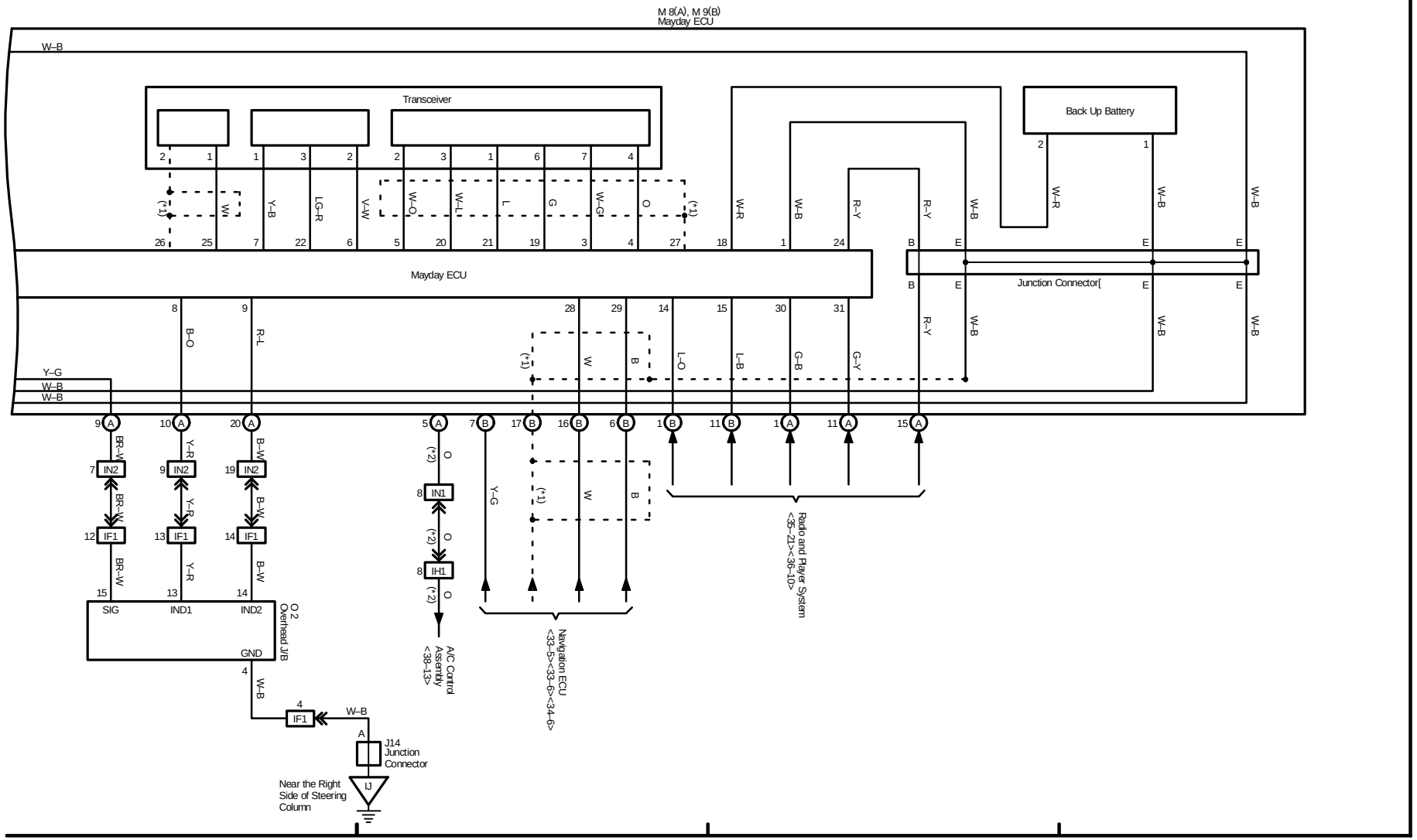
M OVERALL ELECTRICAL WIRING DIAGRAM



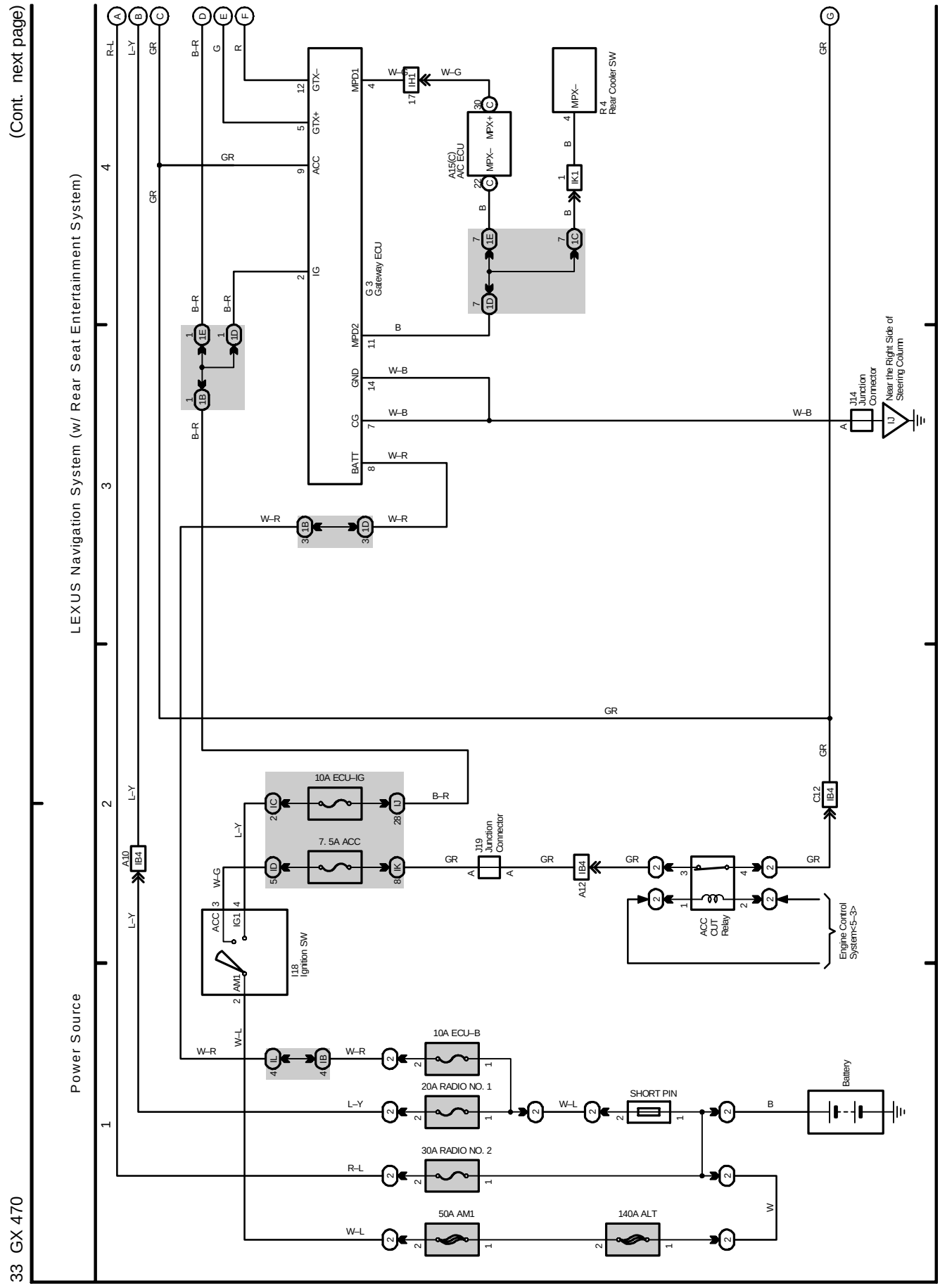
M OVERALL ELECTRICAL WIRING DIAGRAM

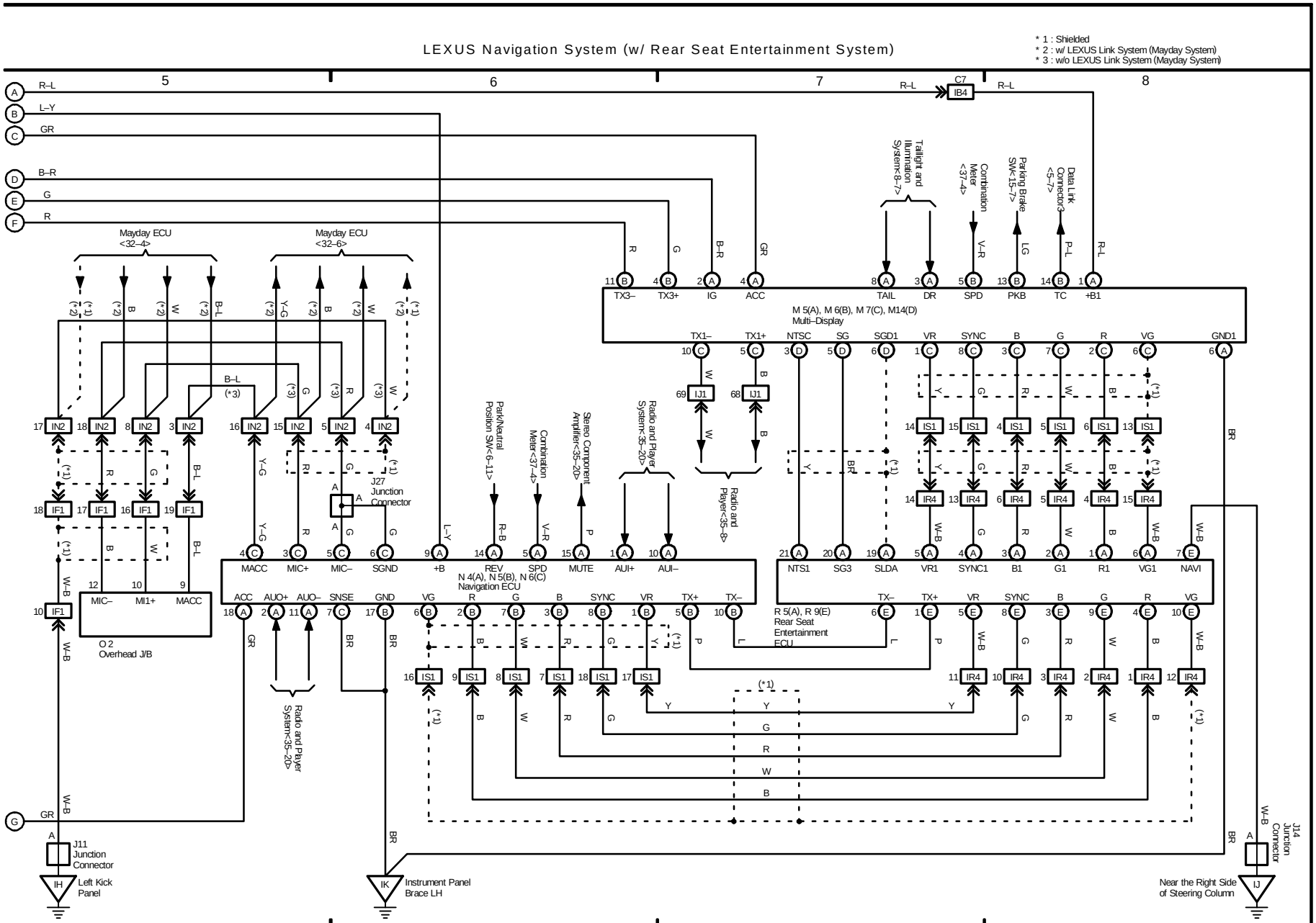


LEXUS Link System (Mayday System) (Aug. 2002–Apr. 2003)

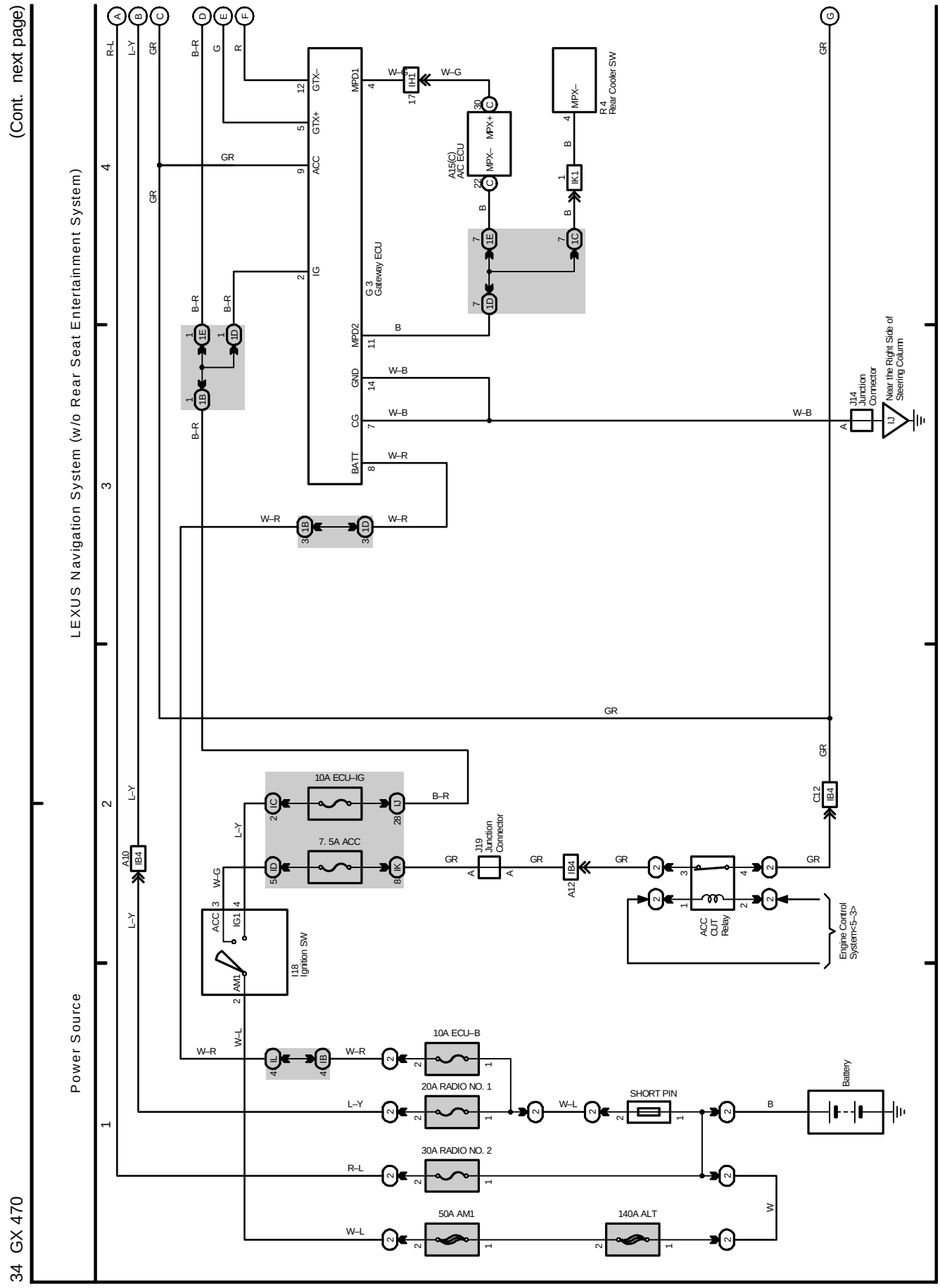


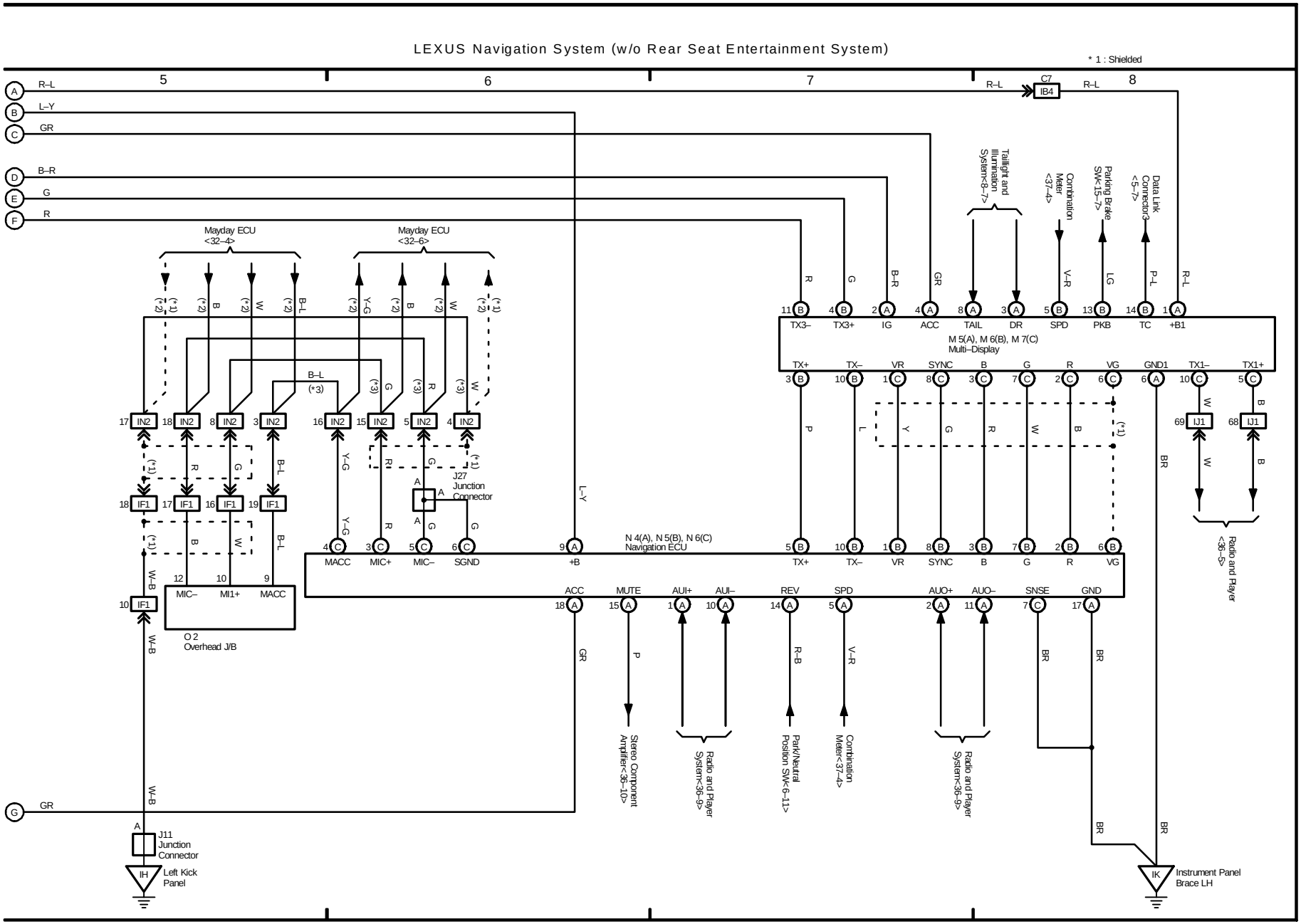
M OVERALL ELECTRICAL WIRING DIAGRAM



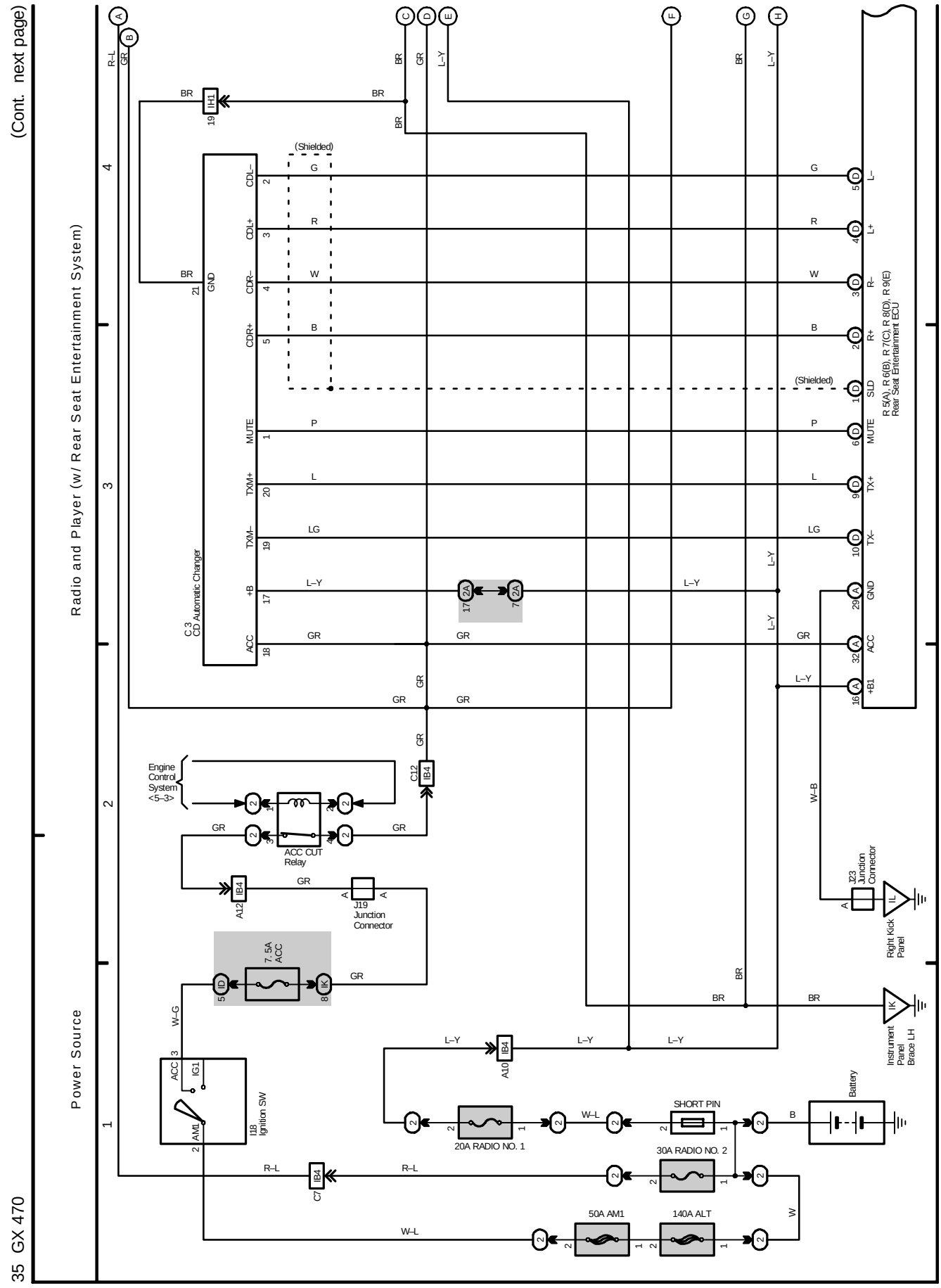

LEXUS Navigation System (w/ Rear Seat Entertainment System)
* 1 : Shielded
* 2 : w/ LEXUS Link System (Mayday System)
* 3 : w/o LEXUS Link System (Mayday System)
Mayday ECU <32–4>
Mayday ECU <32–6>
Taillight and Illumination System<8–7>
Combination Meter <37–4>
Parking Brake SW<15–7>
Data Link Connector3 <5–7>
M 5(A), M 6(B), M 7(C), M14(D) Multi–Display
J27 Junction Connector
Park/Neutral Position SW<6–11>
Combination Meter<37–4>
Stereo Component Amplifier<35–20>
Radio and Player System<35–20>
Radio and Player<35–8>
N 4(A), N 5(B), N 6(C) Navigation ECU
R 5(A), R 9(E) Rear Seat Entertainment ECU
O 2 Overhead J/B
J11 Junction Connector
J14 Junction Connector
Left Kick Panel
Instrument Panel Brace LH
Near the Right Side of Steering Column

M OVERALL ELECTRICAL WIRING DIAGRAM



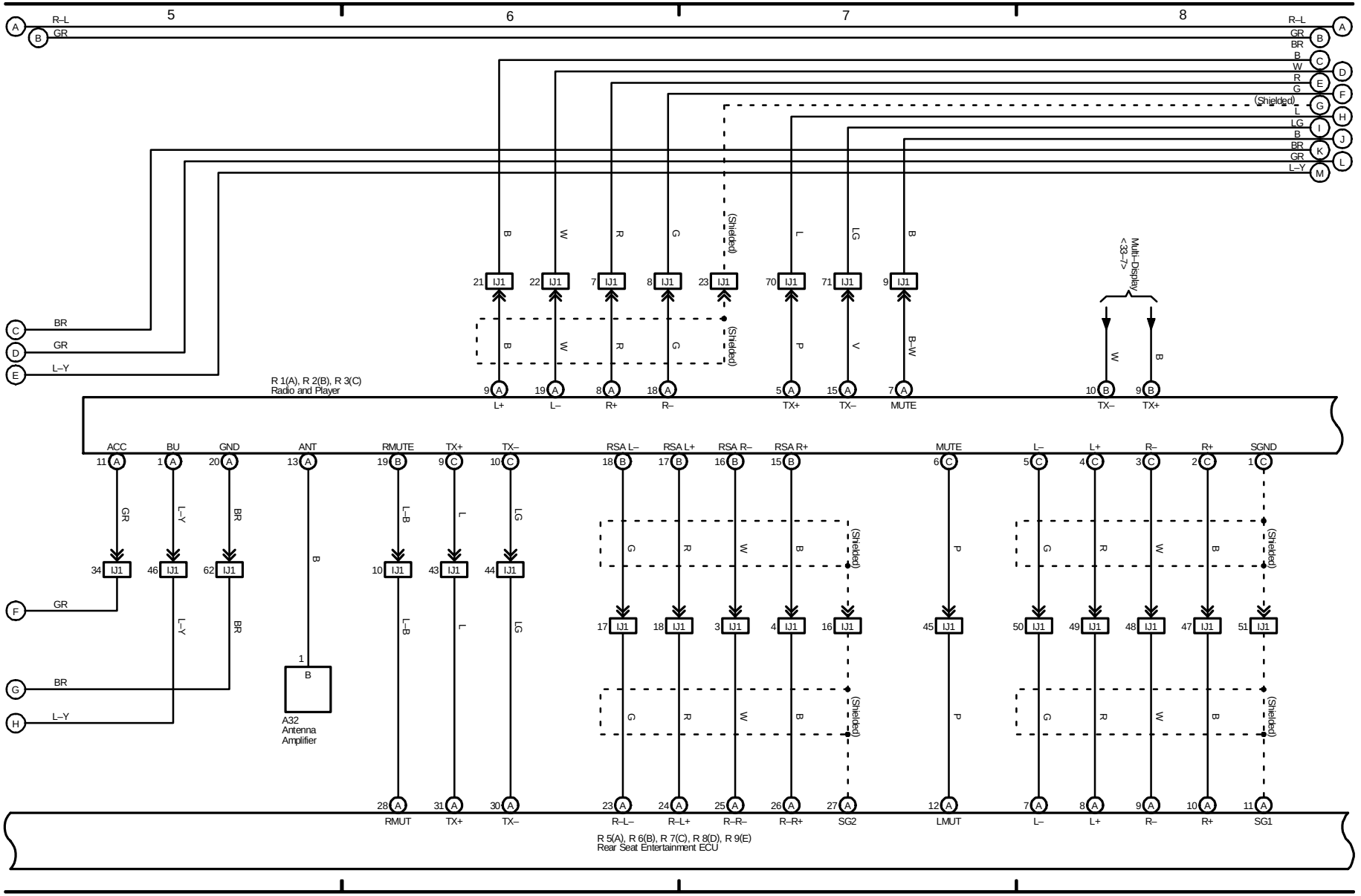

LEXUS Navigation System (w/o Rear Seat Entertainment System)
* 1 : Shielded
Mayday ECU <32–4>
Mayday ECU <32–6>
J27 Junction Connector
O 2 Overhead J/B
J11 Junction Connector
Left Kick Panel
M 5(A), M 6(B), M 7(C) Multi–Display
N 4(A), N 5(B), N 6(C) Navigation ECU
Taillight and Illumination System<8–7>
Combination Meter <37–4>
Parking Brake SW<15–7>
Data Link Connector3 <5–7>
Radio and Player <36–5>
Stereo Component Amplifier<36–10>
Radio and Player System<36–9>
Park/Neutral Position SW<6–11>
Combination Meter<37–4>
Radio and Player System<36–9>
Instrument Panel Brace LH
TX3–
TX3+
IG
ACC
TAIL
DR
SPD
PKB
TC
+B1
TX+
TX–
VR
SYNC
B
G
R
VG
GND1
TX1–
TX1+
MACC
MIC+
MIC–
SGND
+B
ACC
MUTE
AUI+
AUI–
REV
SPD
AUO+
AUO–
SNSE
GND
MIC–
MI1+
MACC

M OVERALL ELECTRICAL WIRING DIAGRAM



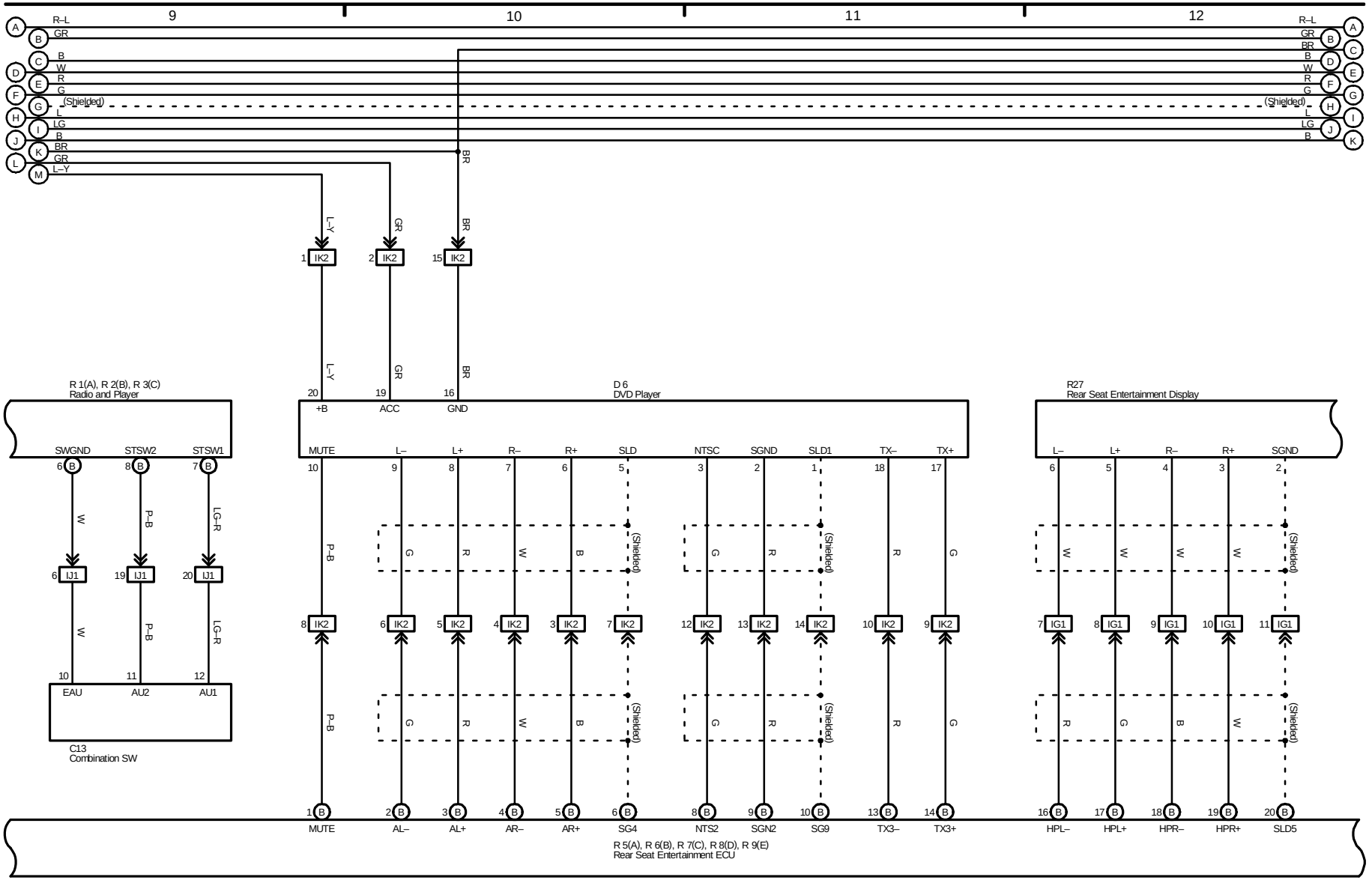
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Radio and Player (w/ Rear Seat Entertainment System)



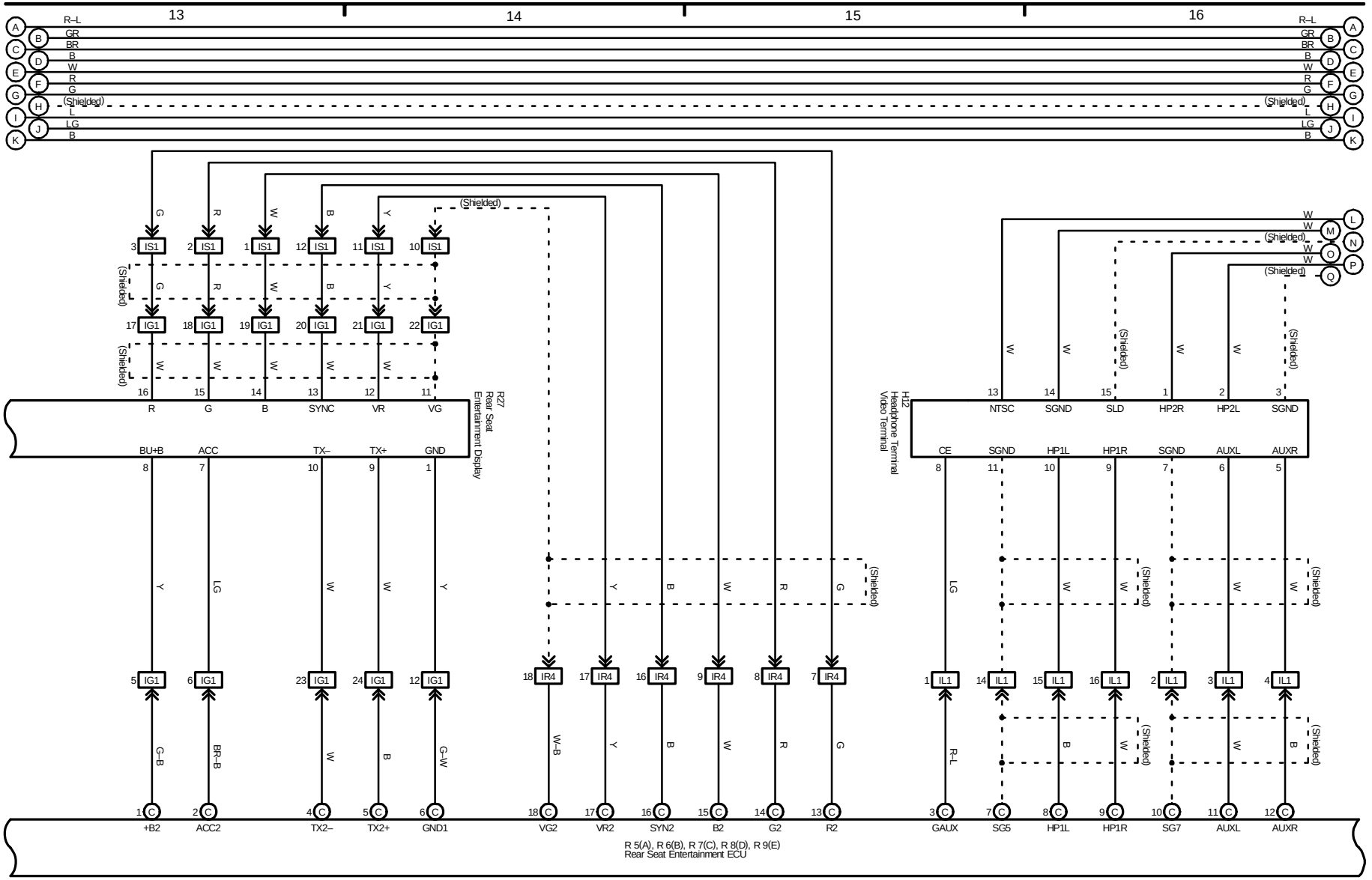
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Radio and Player (w/ Rear Seat Entertainment System)



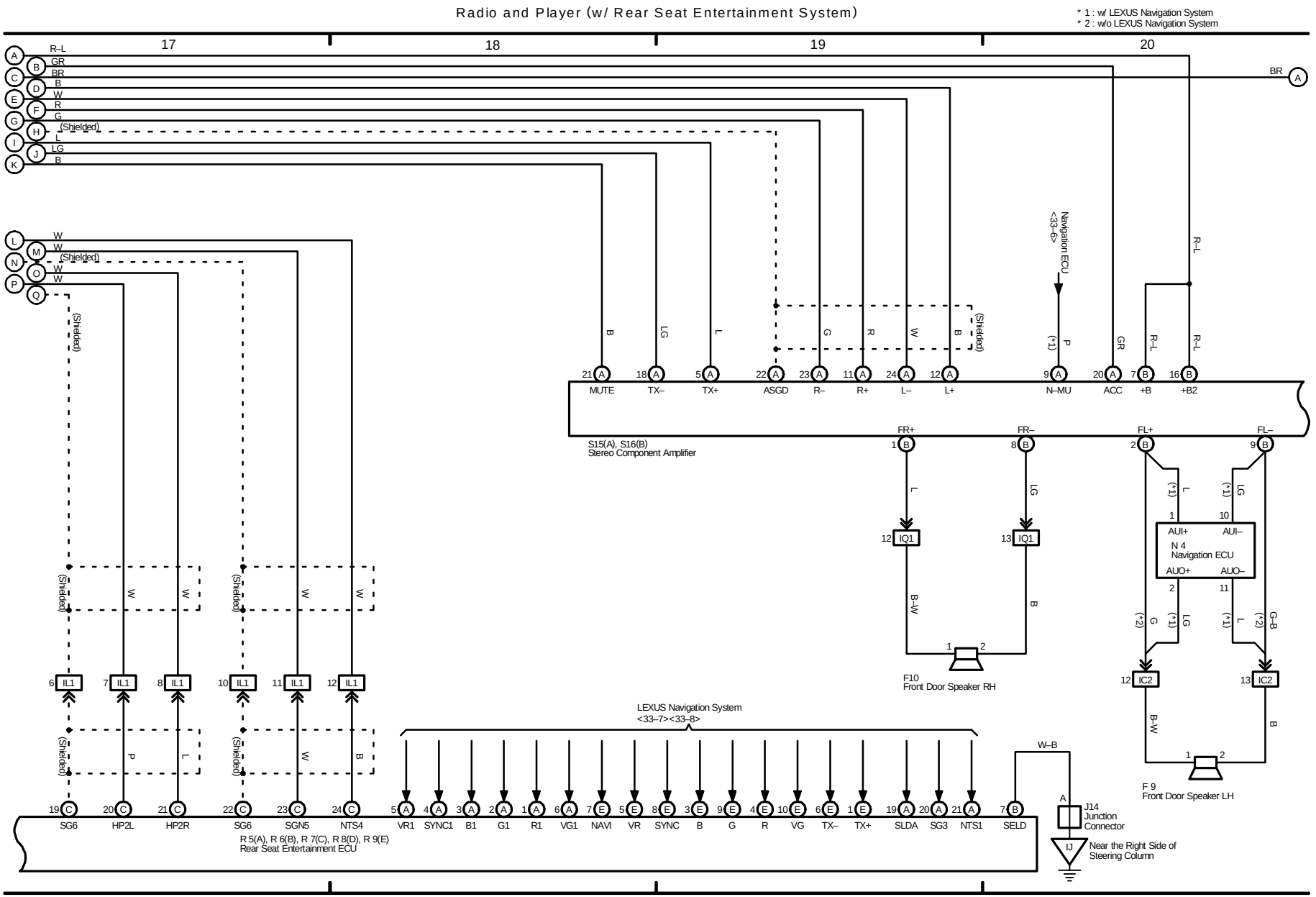
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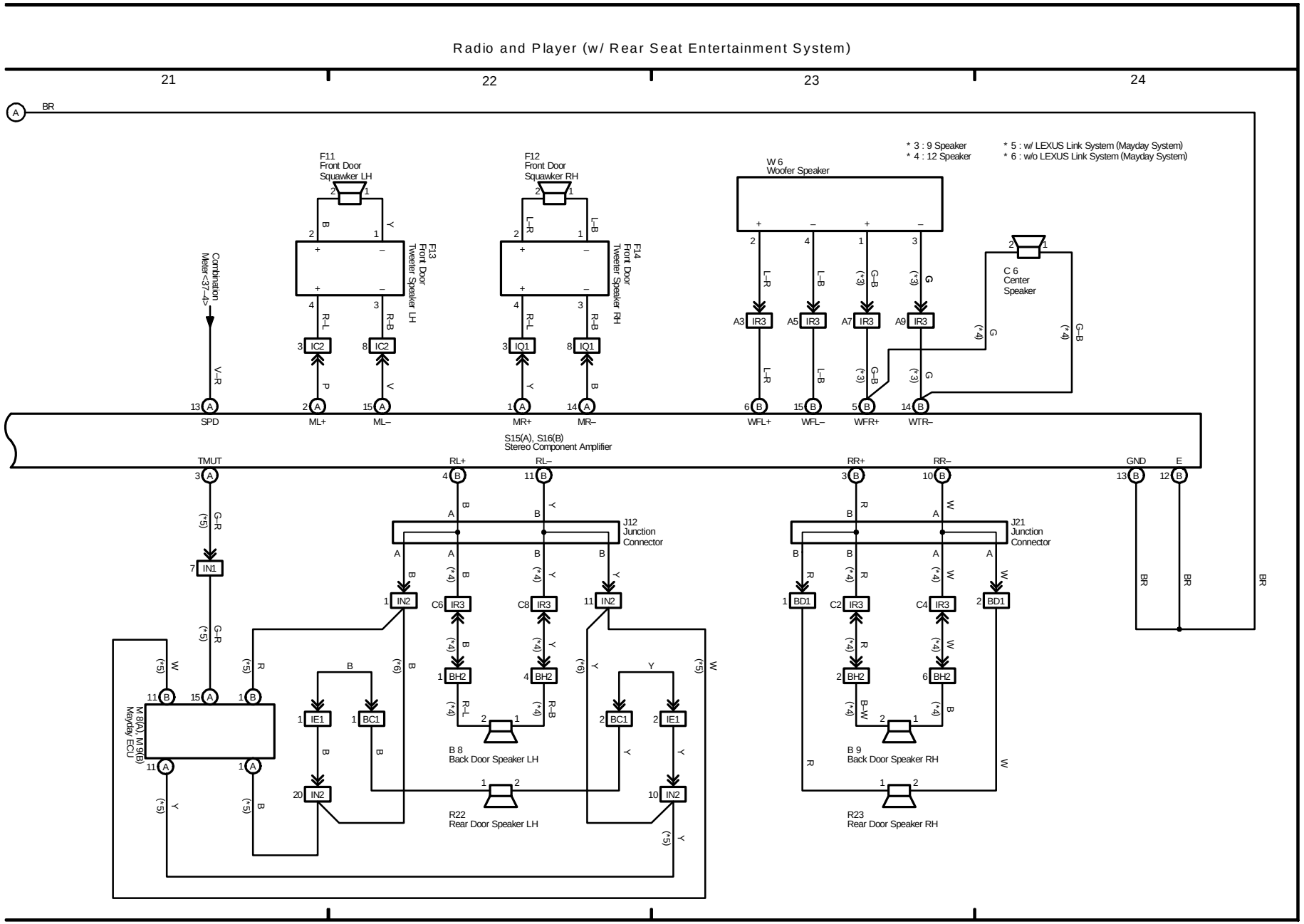
Radio and Player (w/ Rear Seat Entertainment System)



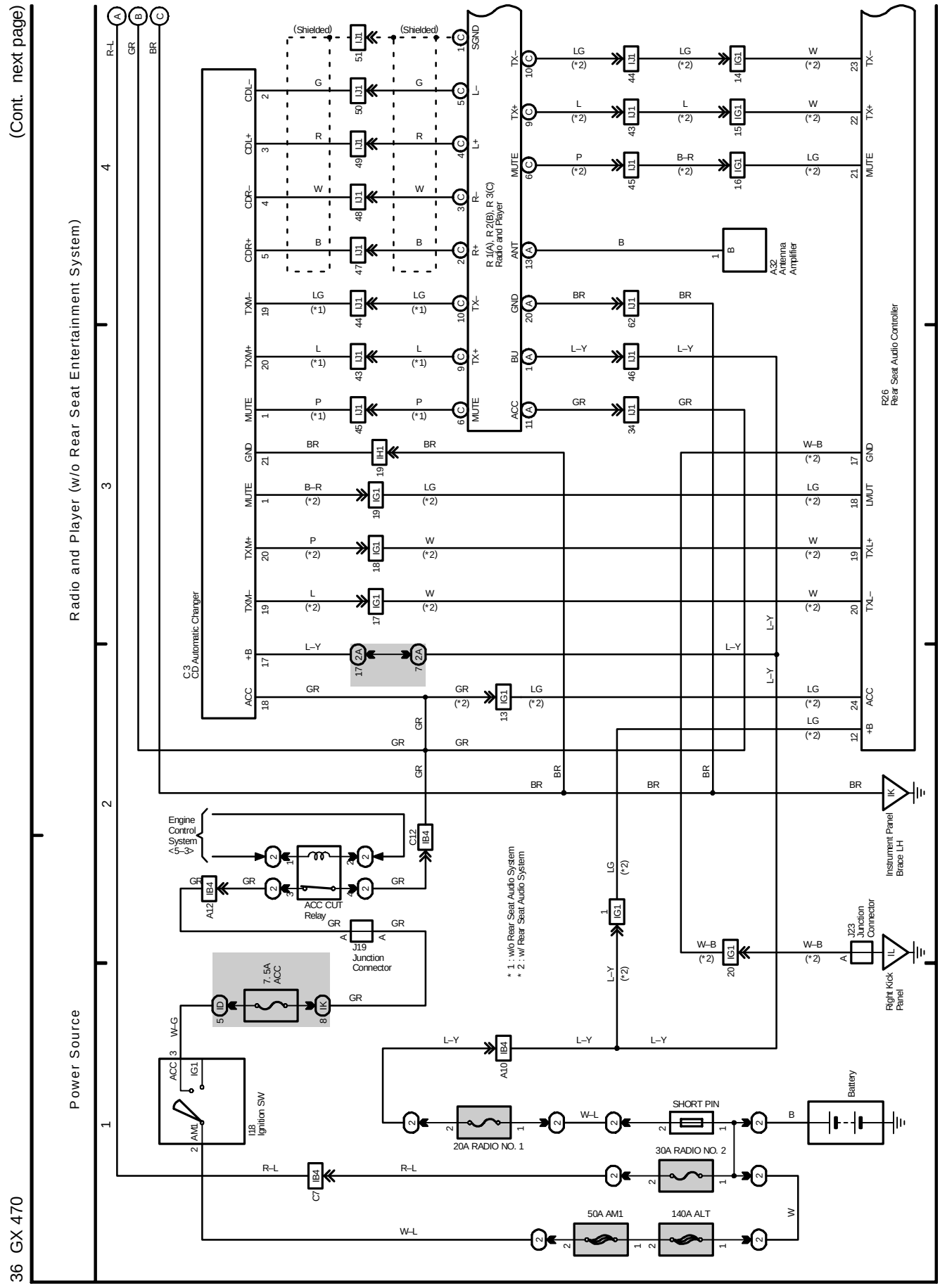
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Radio and Player (w/ Rear Seat Entertainment System)



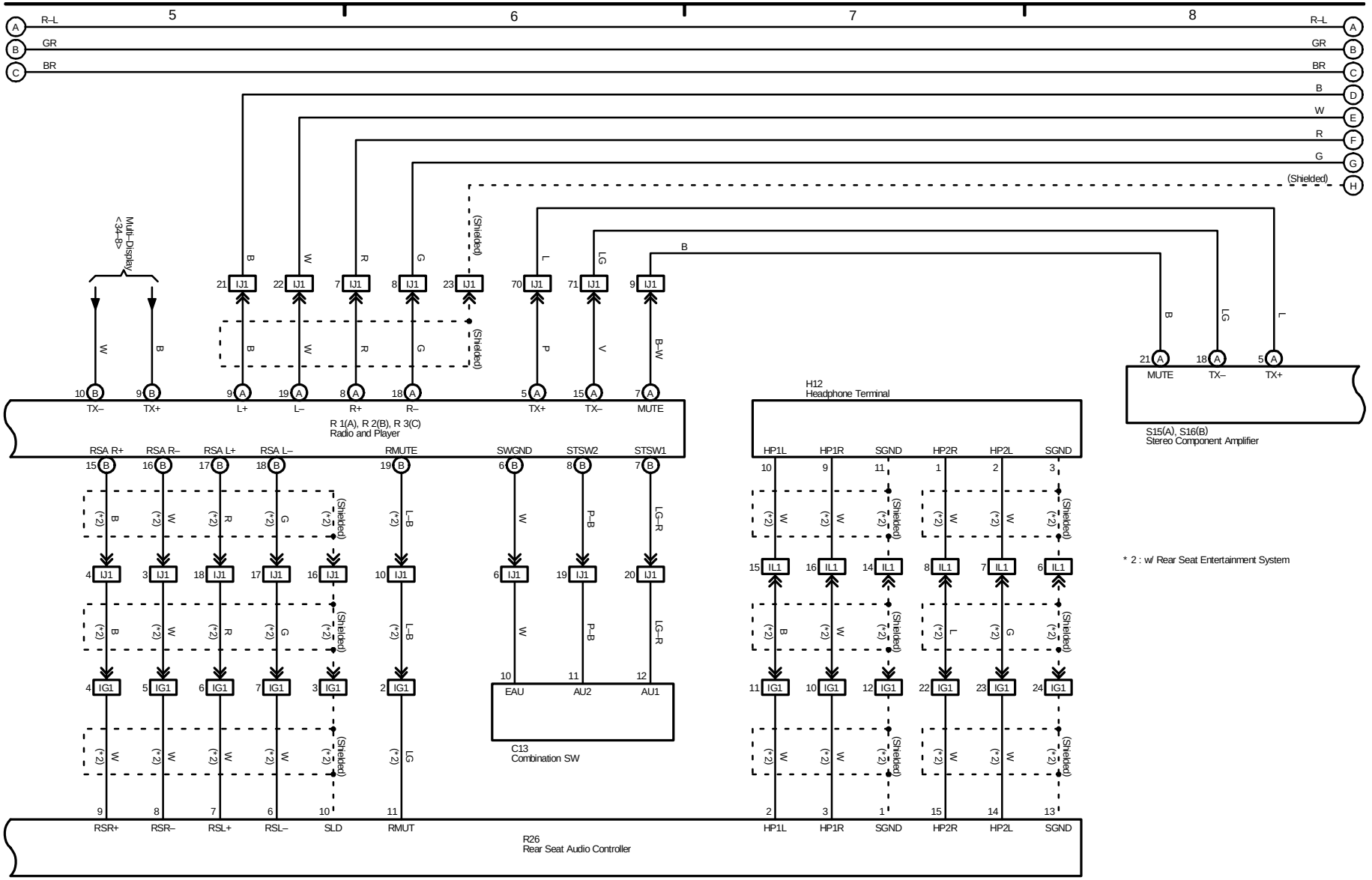

Radio and Player (w/ Rear Seat Entertainment System)
21
22
23
24
BR
* 3 : 9 Speaker
* 4 : 12 Speaker
* 5 : w/ LEXUS Link System (Mayday System)
* 6 : w/o LEXUS Link System (Mayday System)
F11
Front Door
Squawker LH
F12
Front Door
Squawker RH
F13
Front Door
Tweeter Speaker LH
F14
Front Door
Tweeter Speaker RH
W 6
Woofer Speaker
C 6
Center
Speaker
Combination
Meter<37–4>
SPD
ML+
ML–
MR+
MR–
WFL+
WFL–
WFR+
WTR–
S15(A), S16(B)
Stereo Component Amplifier
TMUT
RL+
RL–
RR+
RR–
GND
E
J12
Junction
Connector
J21
Junction
Connector
M 8(A), M 9(B)
Mayday ECU
B 8
Back Door Speaker LH
B 9
Back Door Speaker RH
R22
Rear Door Speaker LH
R23
Rear Door Speaker RH

M OVERALL ELECTRICAL WIRING DIAGRAM

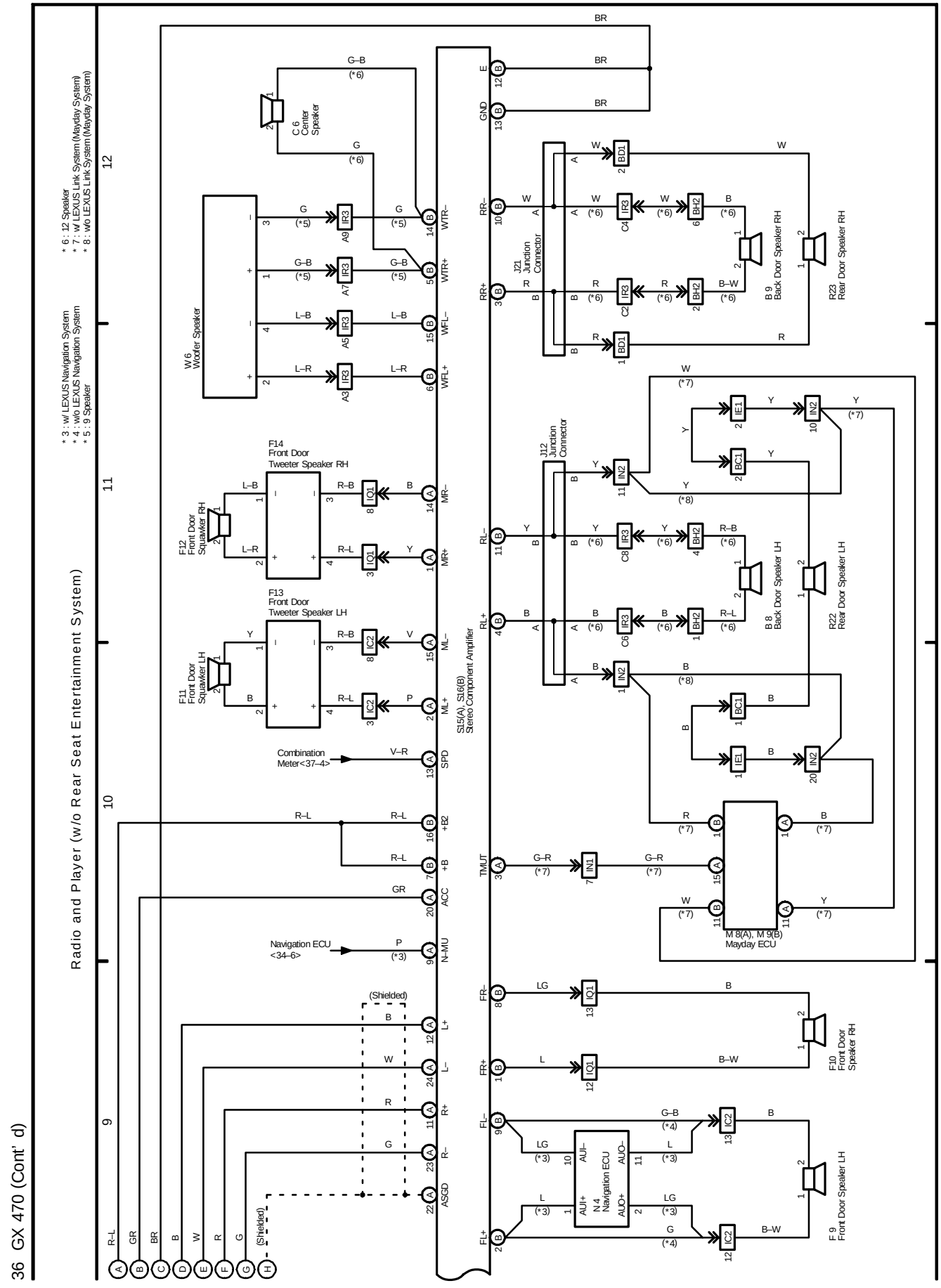


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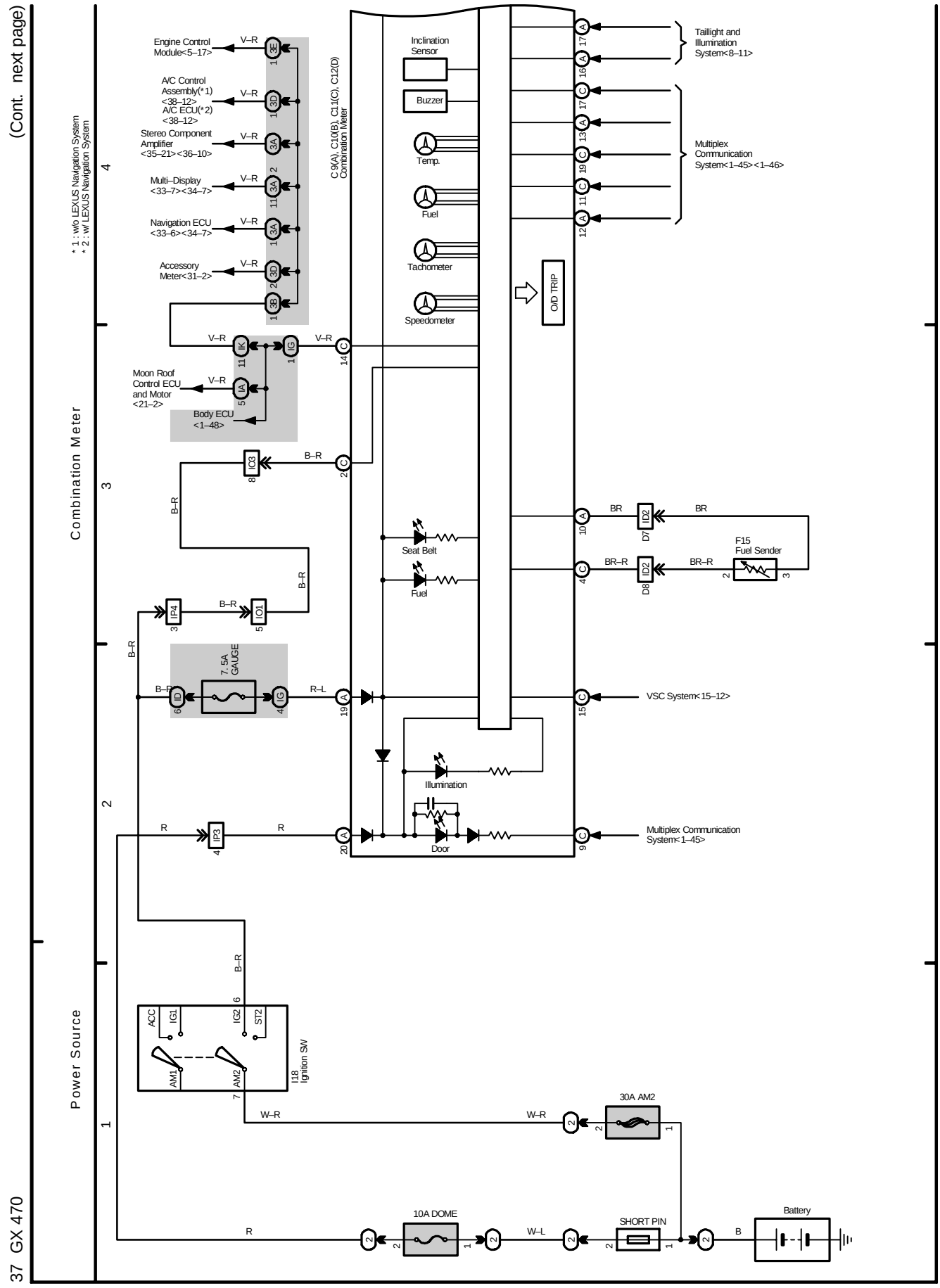
Radio and Player (w/o Rear Seat Entertainment System)



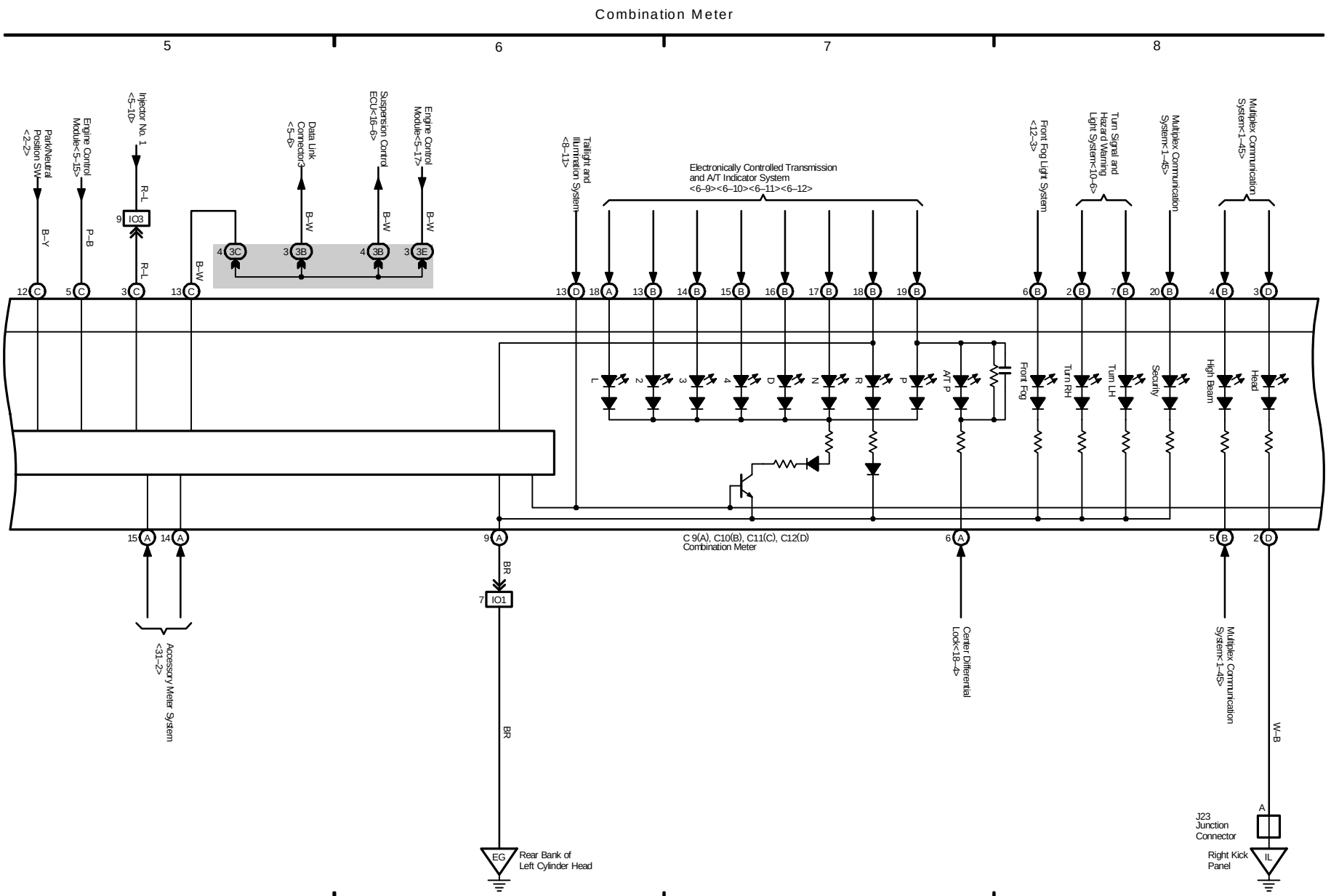
M OVERALL ELECTRICAL WIRING DIAGRAM

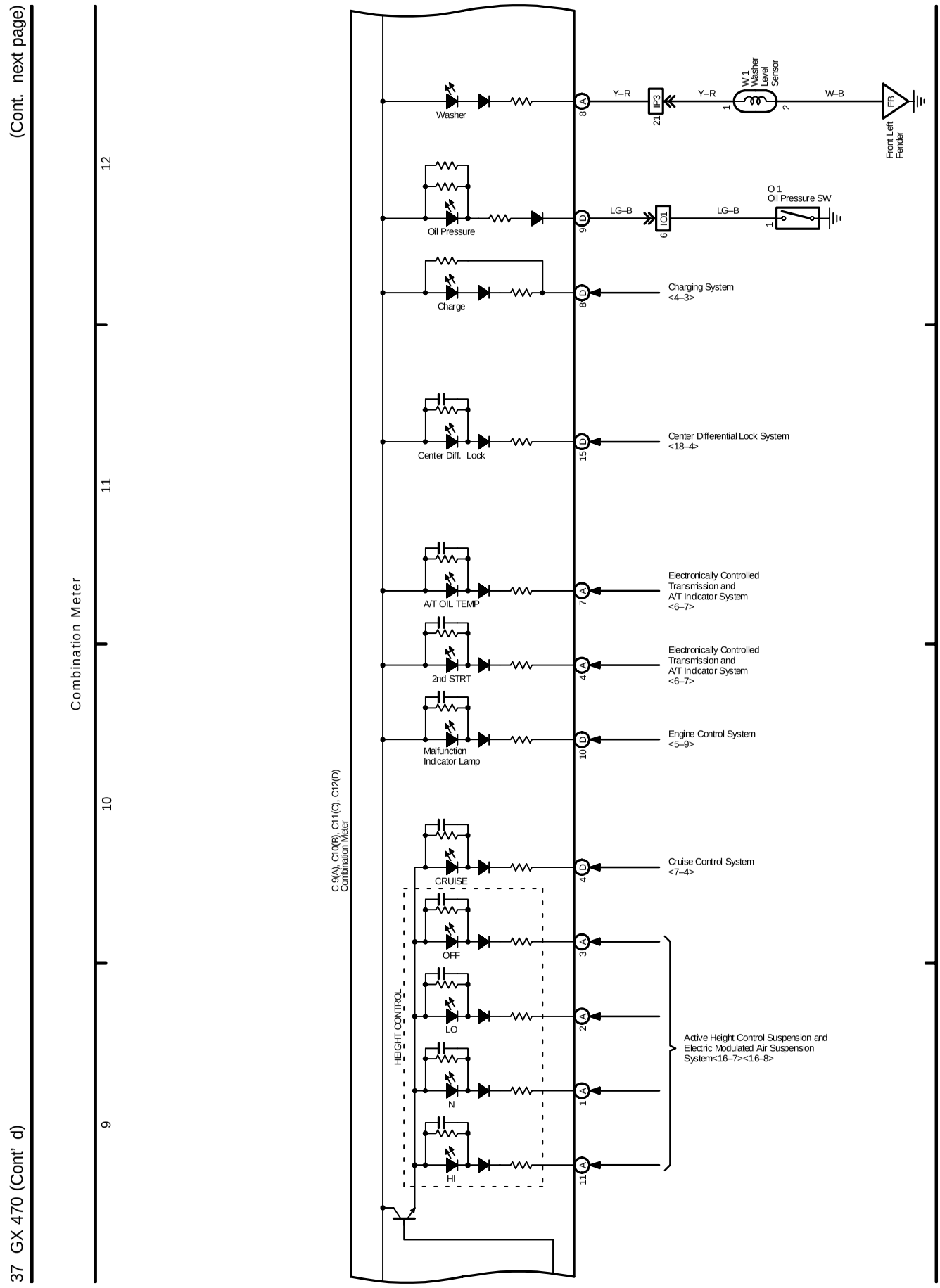


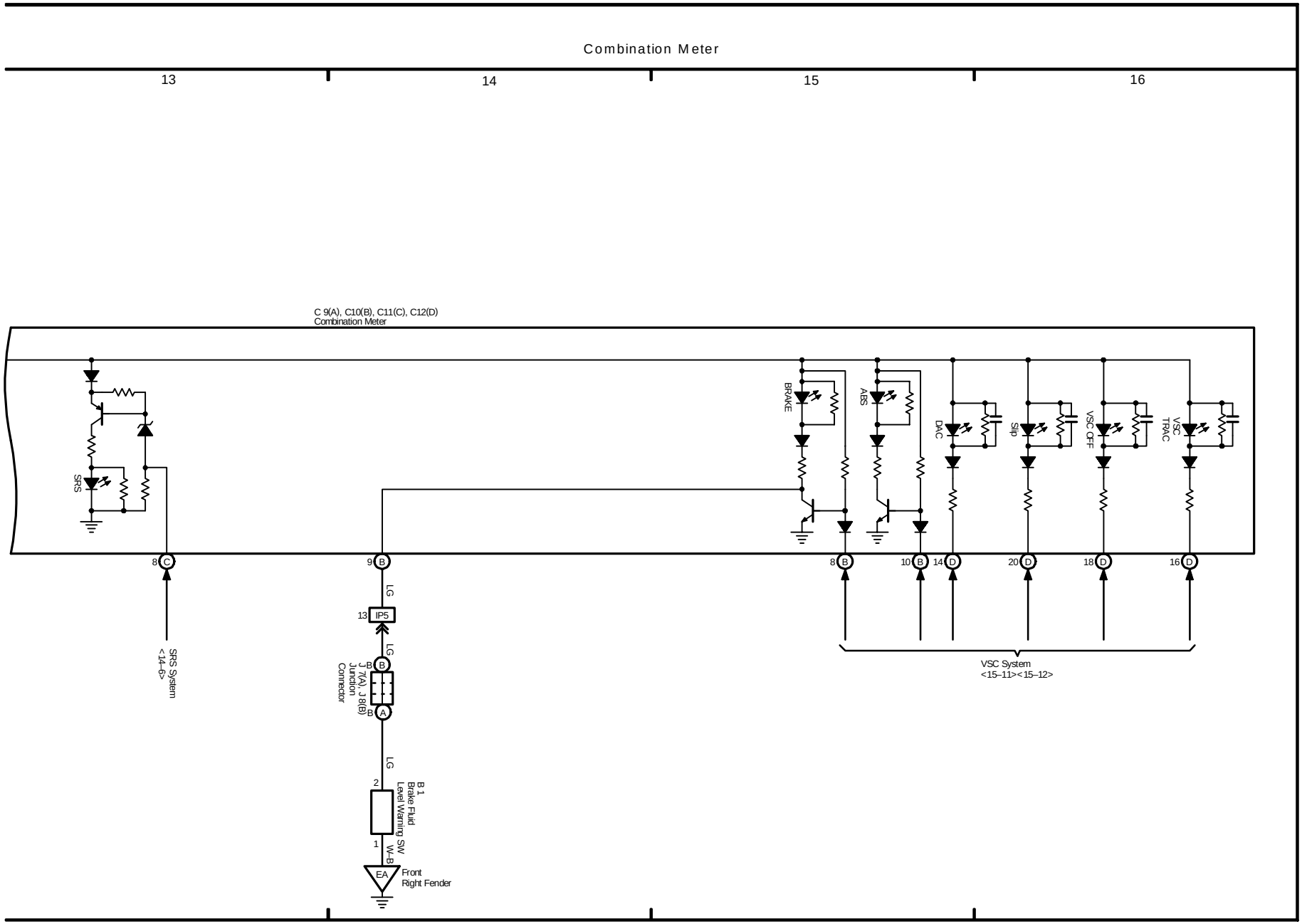
M OVERALL ELECTRICAL WIRING DIAGRAM



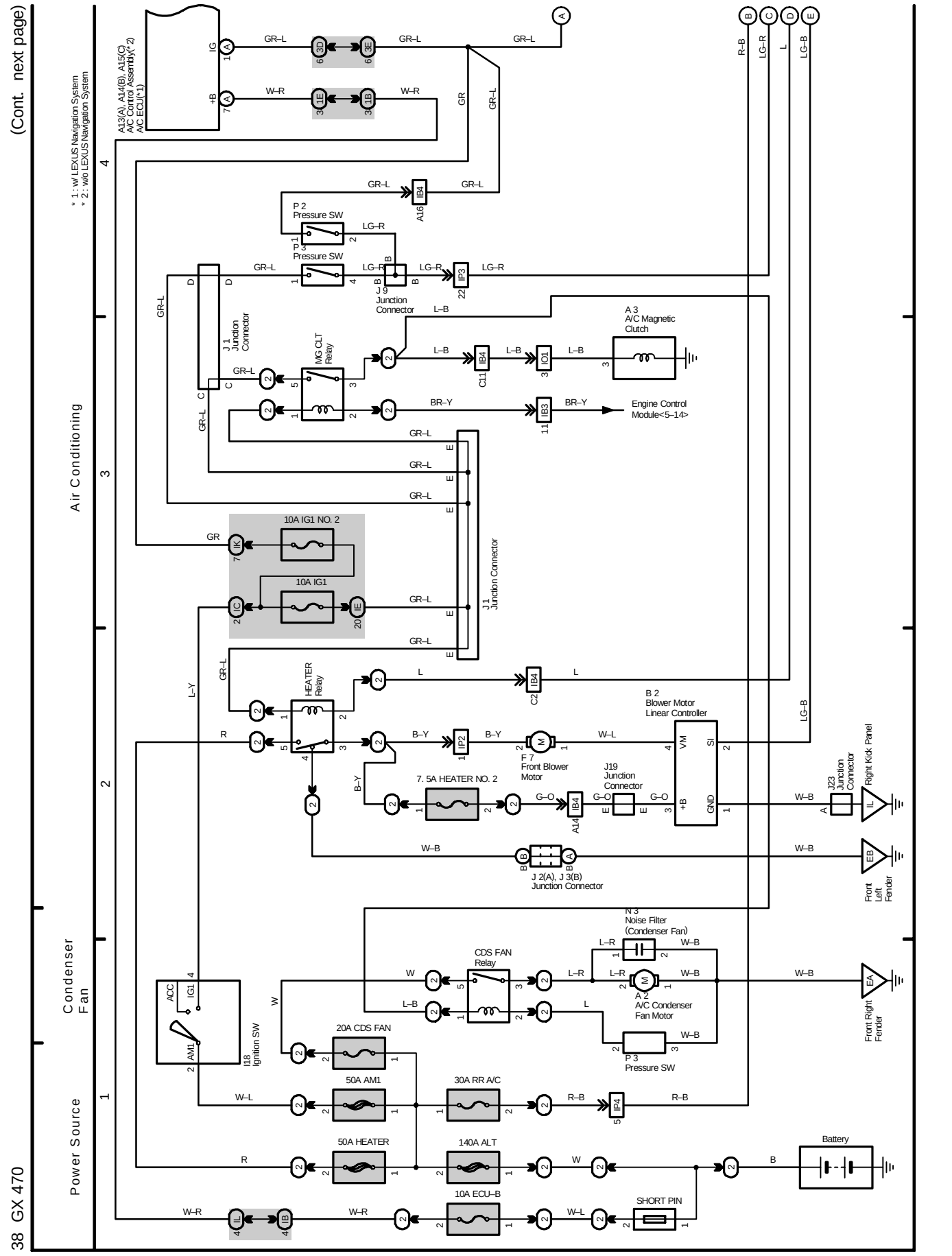
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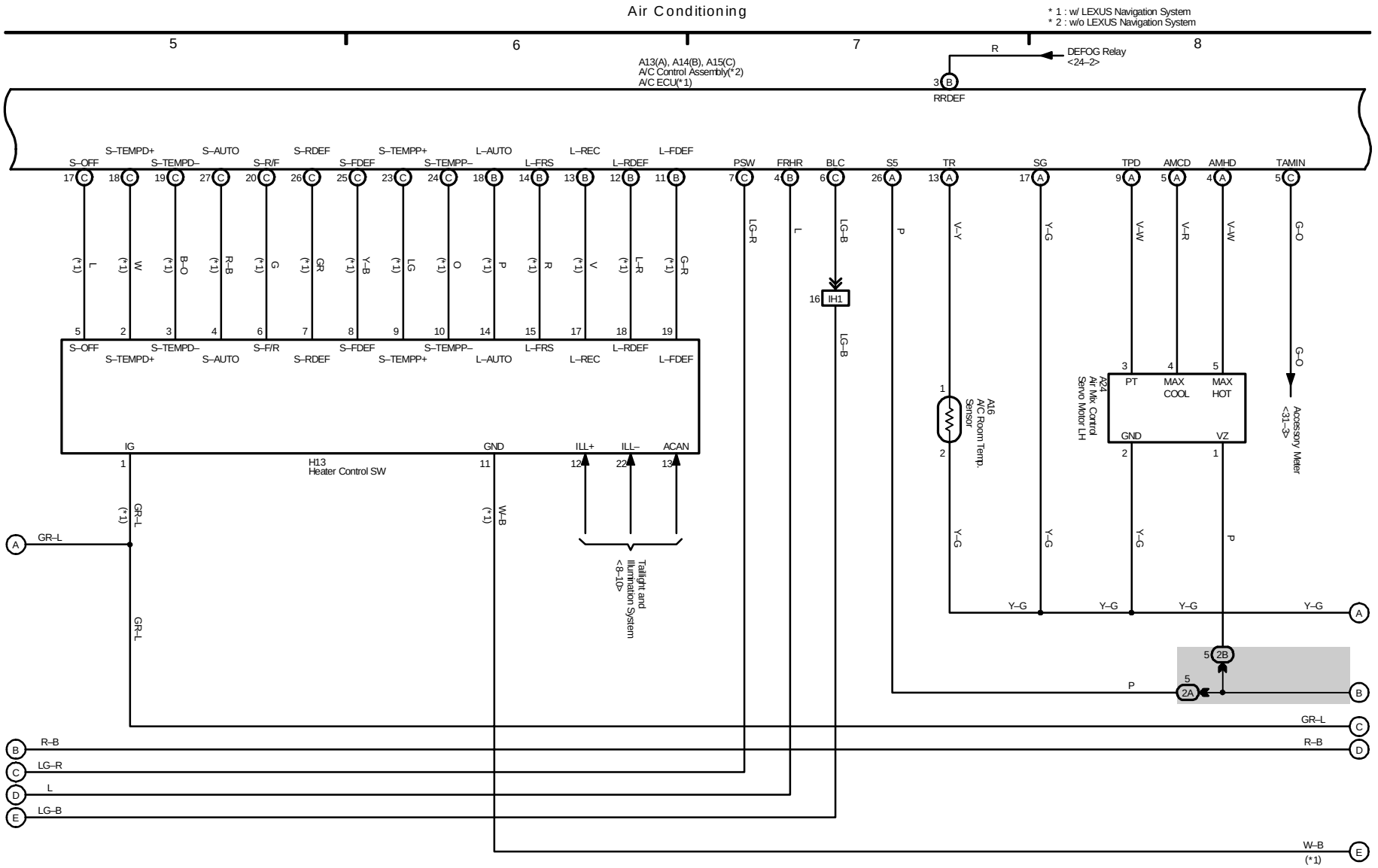

(Cont. next page)
37 GX 470 (Cont' d)
Combination Meter
12
11
10
9
Washer
Y–R
IP3
21
Y–R
W 1
Washer
Level
Sensor
1
2
W–B
EB
Front Left
Fender
8 A
Oil Pressure
LG–B
IO1
6
LG–B
O 1
Oil Pressure SW
1
9 D
Charge
8 D
Charging System
<4–3>
Center Diff. Lock
15 D
Center Differential Lock System
<18–4>
A/T OIL TEMP
7 A
Electronically Controlled
Transmission and
A/T Indicator System
<6–7>
2nd STRT
4 A
Electronically Controlled
Transmission and
A/T Indicator System
<6–7>
Malfunction
Indicator Lamp
10 D
Engine Control System
<5–9>
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
CRUISE
4 D
Cruise Control System
<7–4>
HEIGHT CONTROL
OFF
3 A
LO
2 A
N
1 A
HI
11 A
Active Height Control Suspension and
Electric Modulated Air Suspension
System<16–7><16–8>

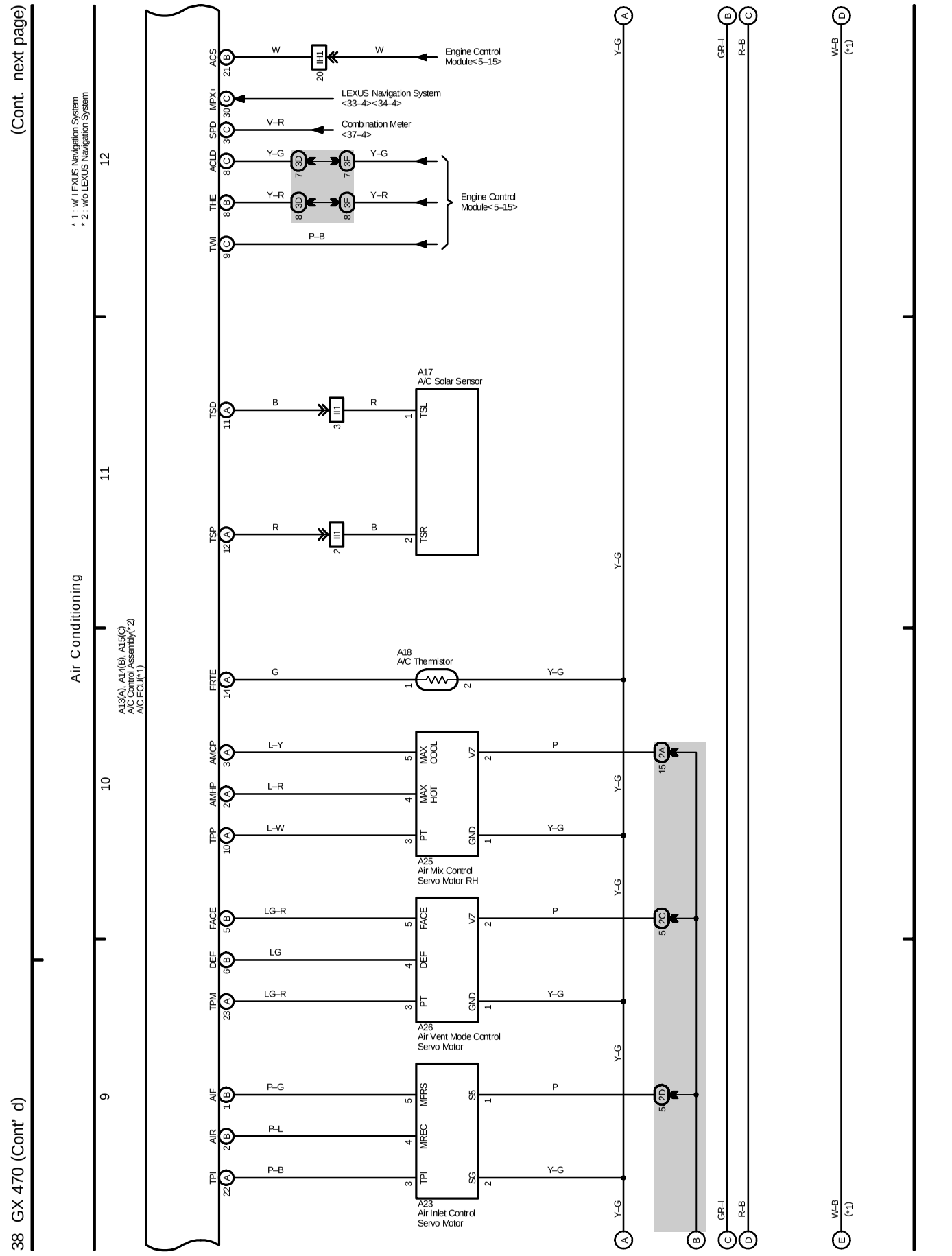

Combination Meter
13
14
15
16
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
SRS
BRAKE
ABS
DAC
Slip
VSC OFF
VSC TRAC
8 C
9 B
8 B
10 B
14 D
20 D
18 D
16 D
LG
13 IP5
LG
J-B B Junction Connector J-B A 7(A), J-8(B)
LG
2
B-1 Brake Fluid Level Warning SW
1
W-B
EA
Front Right Fender
SRS System <14-6>
VSC System <15-11><15-12>

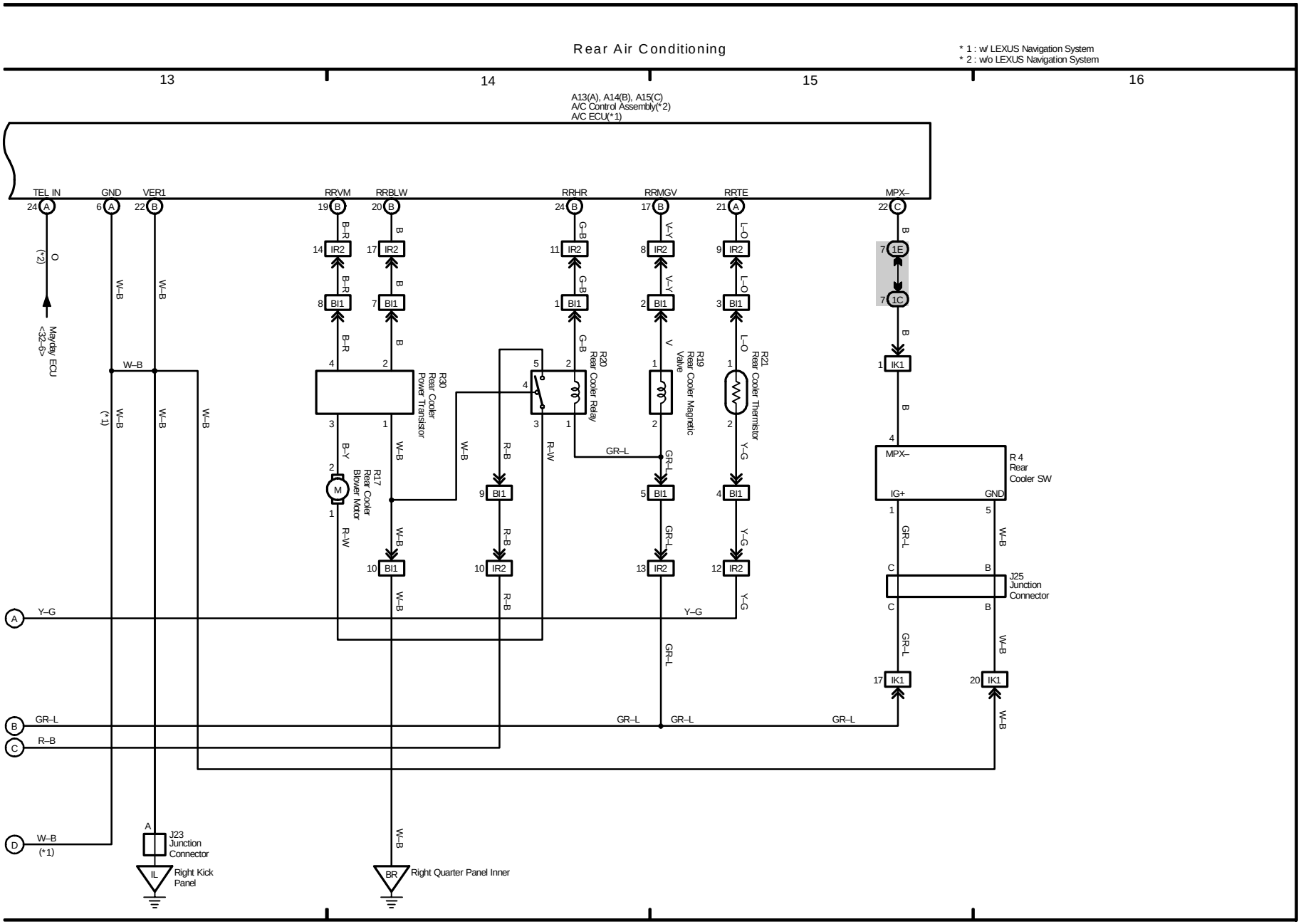
M OVERALL ELECTRICAL WIRING DIAGRAM



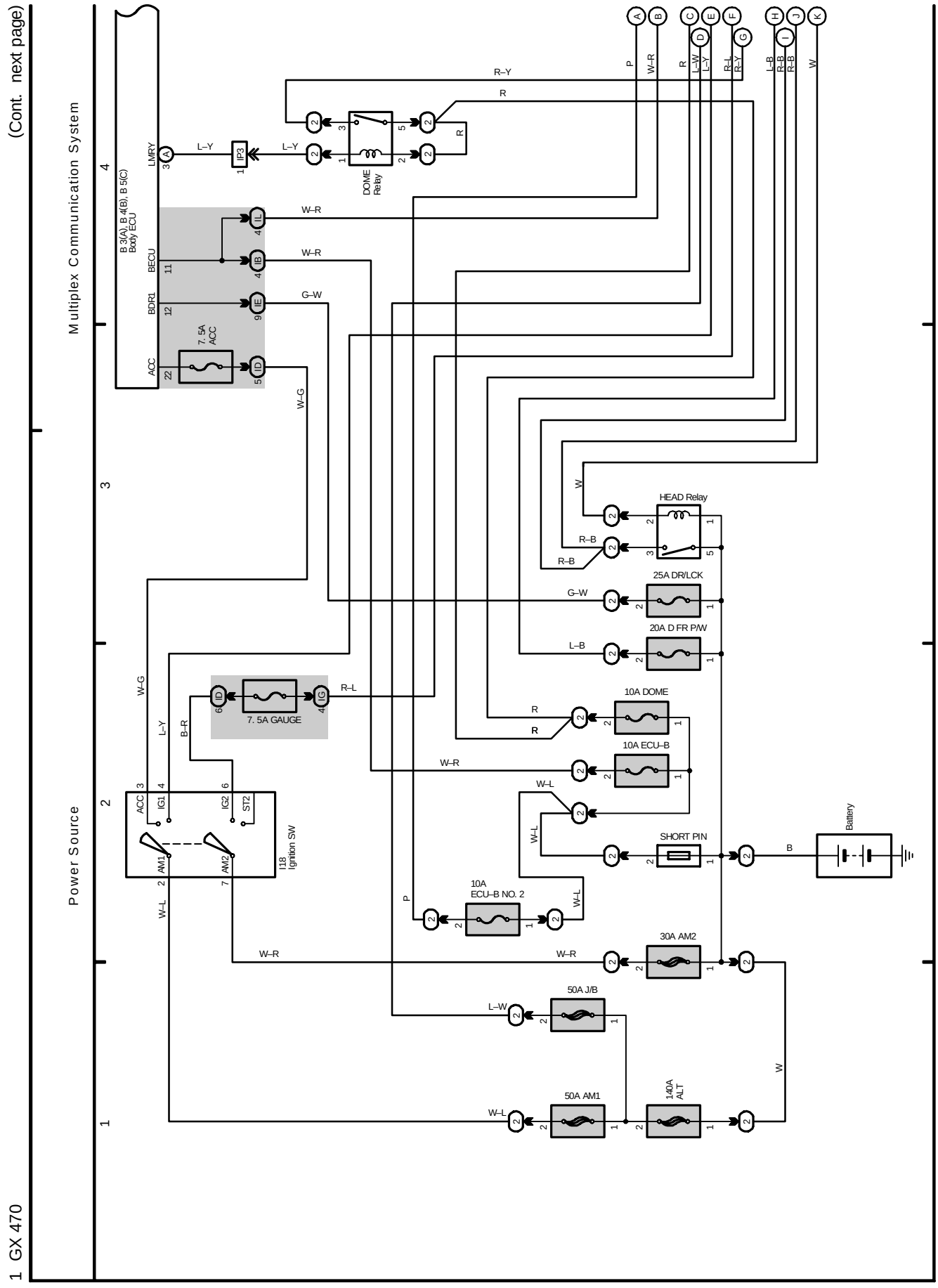
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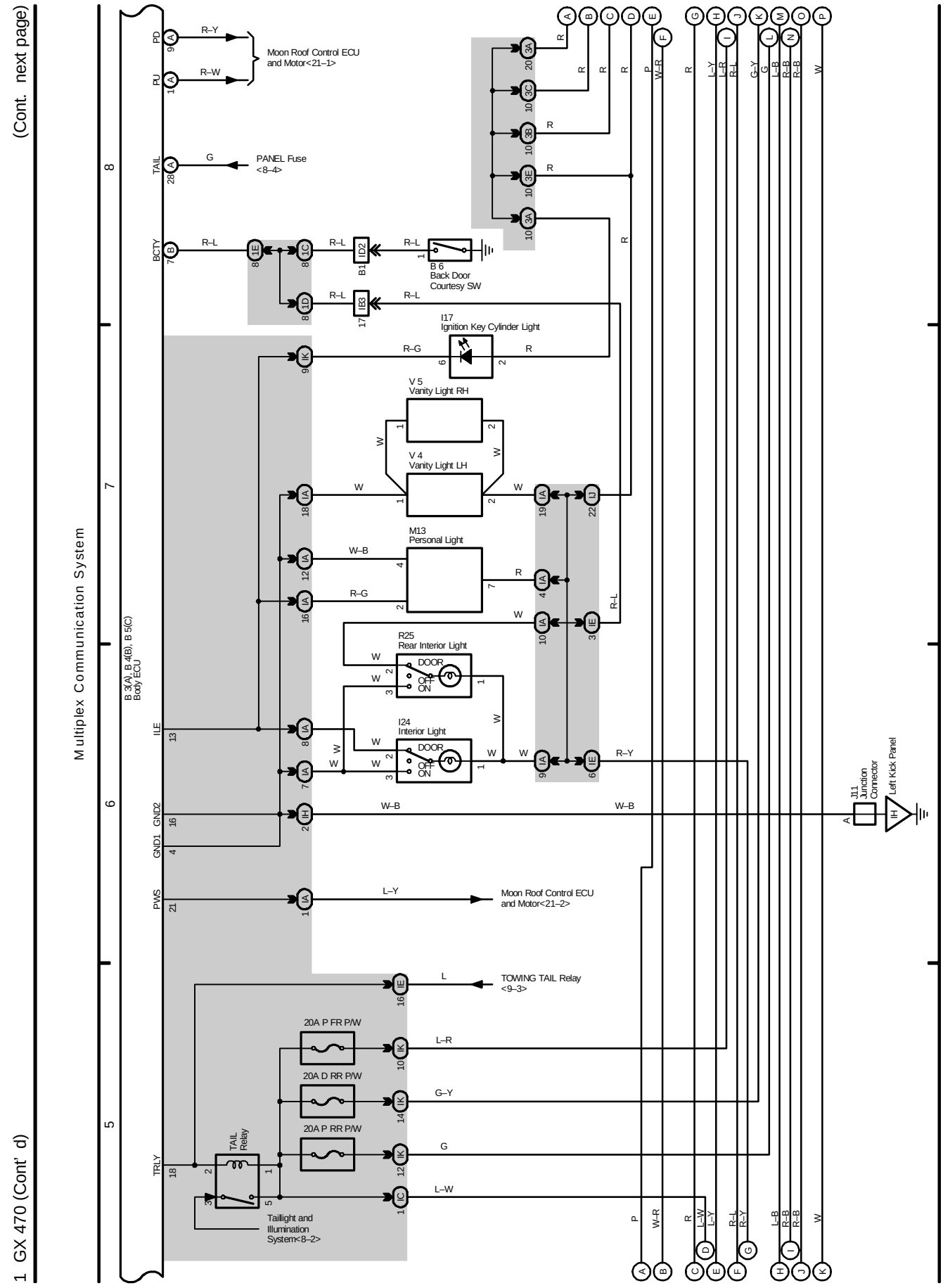

(Cont. next page)
38 GX 470 (Cont' d)
Air Conditioning
A13(A), A14(B), A15(C)
A/C Control Assembly(*2)
A/C ECU(*1)
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
9
10
11
12
ACS
MPX+
SPD
ACLD
THE
TWI
TSD
TSP
FRTE
AMCP
AMHP
TPP
FACE
DEF
TPM
AIF
AIR
TPI
W
Engine Control Module<5–15>
LEXUS Navigation System <33–4><34–4>
V–R
Combination Meter <37–4>
Y–G
Y–R
P–B
A17
A/C Solar Sensor
TSL
TSR
B
R
G
A18
A/C Thermistor
L–Y
L–R
L–W
A25
Air Mix Control Servo Motor RH
MAX COOL
MAX HOT
PT
VZ
GND
LG–R
LG
A26
Air Vent Mode Control Servo Motor
FACE
DEF
P–G
P–L
A23
Air Inlet Control Servo Motor
MRRS
MREC
SS
SG
P
GR–L
R–B
W–B
(*1)


Rear Air Conditioning
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
13
14
15
16
A13(A), A14(B), A15(C)
A/C Control Assembly(*2)
A/C ECU(*1)
TEL IN
GND
VER1
RRVM
RRBLW
RRHR
RRMGV
RRTE
MPX–
R30 Rear Cooler Power Transistor
R17 Rear Cooler Blower Motor
R20 Rear Cooler Relay
R19 Rear Cooler Magnetic Valve
R21 Rear Cooler Thermistor
R 4 Rear Cooler SW
J25 Junction Connector
J23 Junction Connector
Right Kick Panel
Right Quarter Panel Inner
Mayday ECU <32–6>
(*1)
(*2)

OVERALL ELECTRICAL WIRING DIAGRAM (From April 2003)

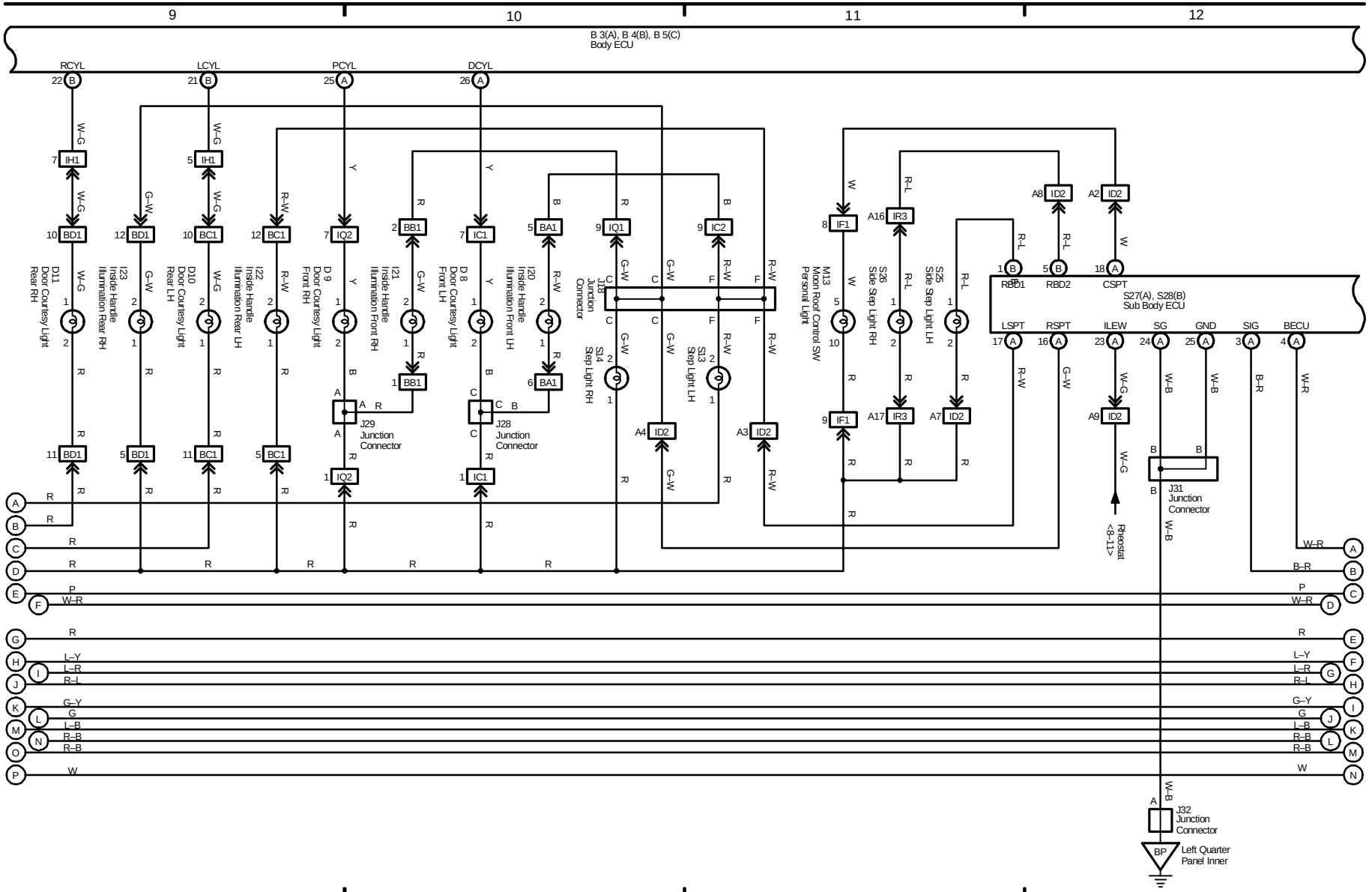


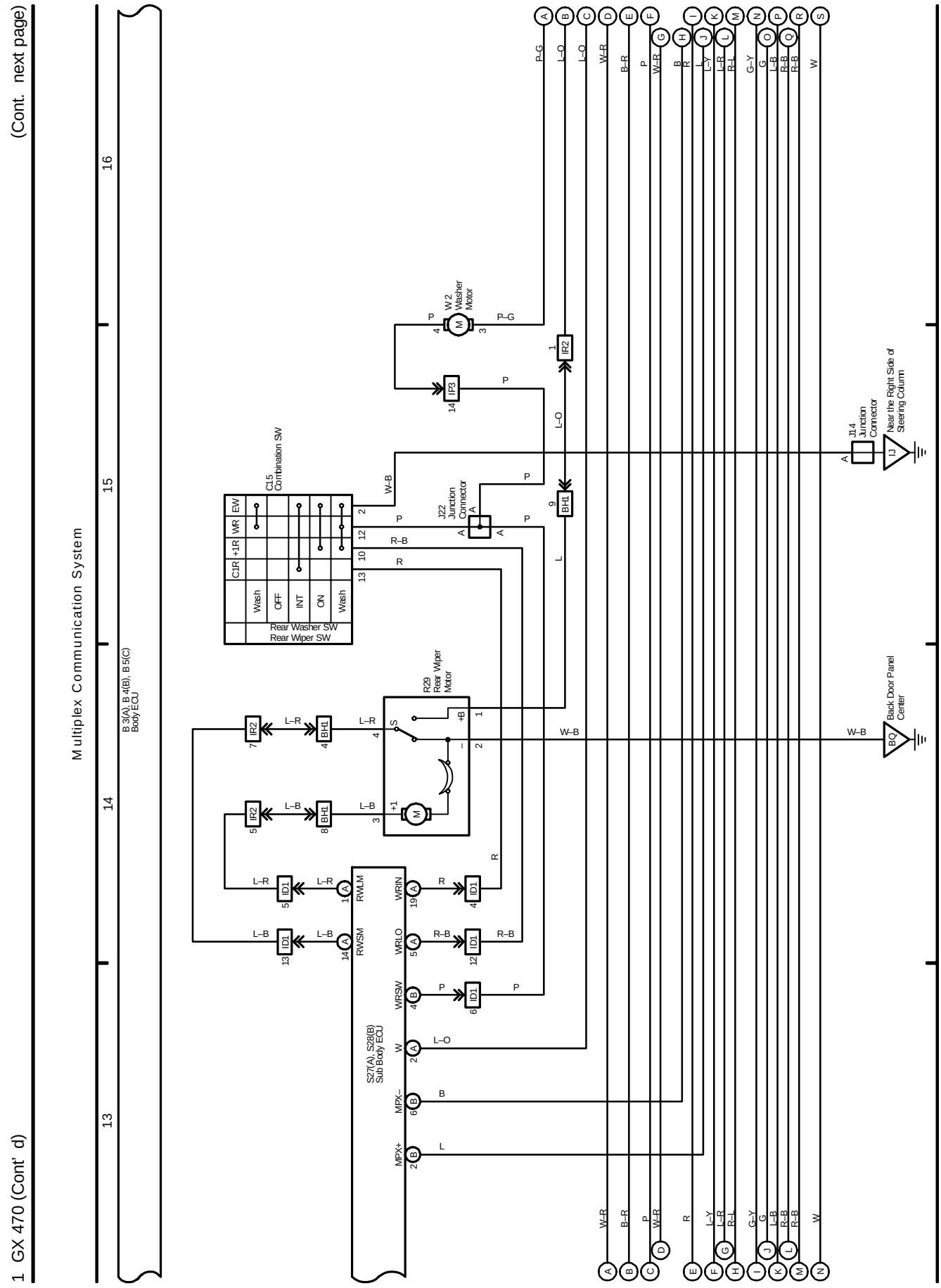
OVERALL ELECTRICAL WIRING DIAGRAM (From April 2003)



(Cont. next page)

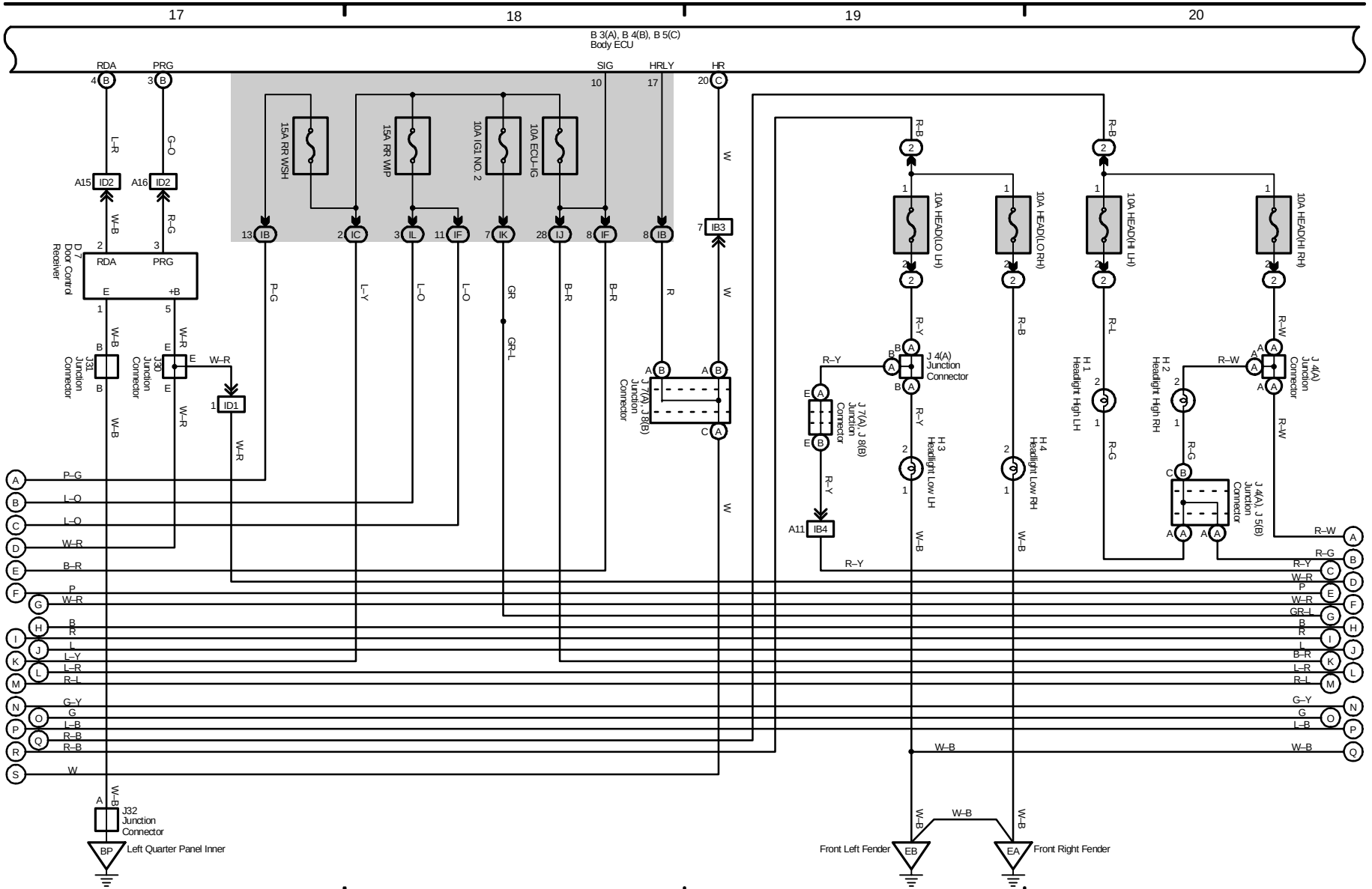
Multiplex Communication System



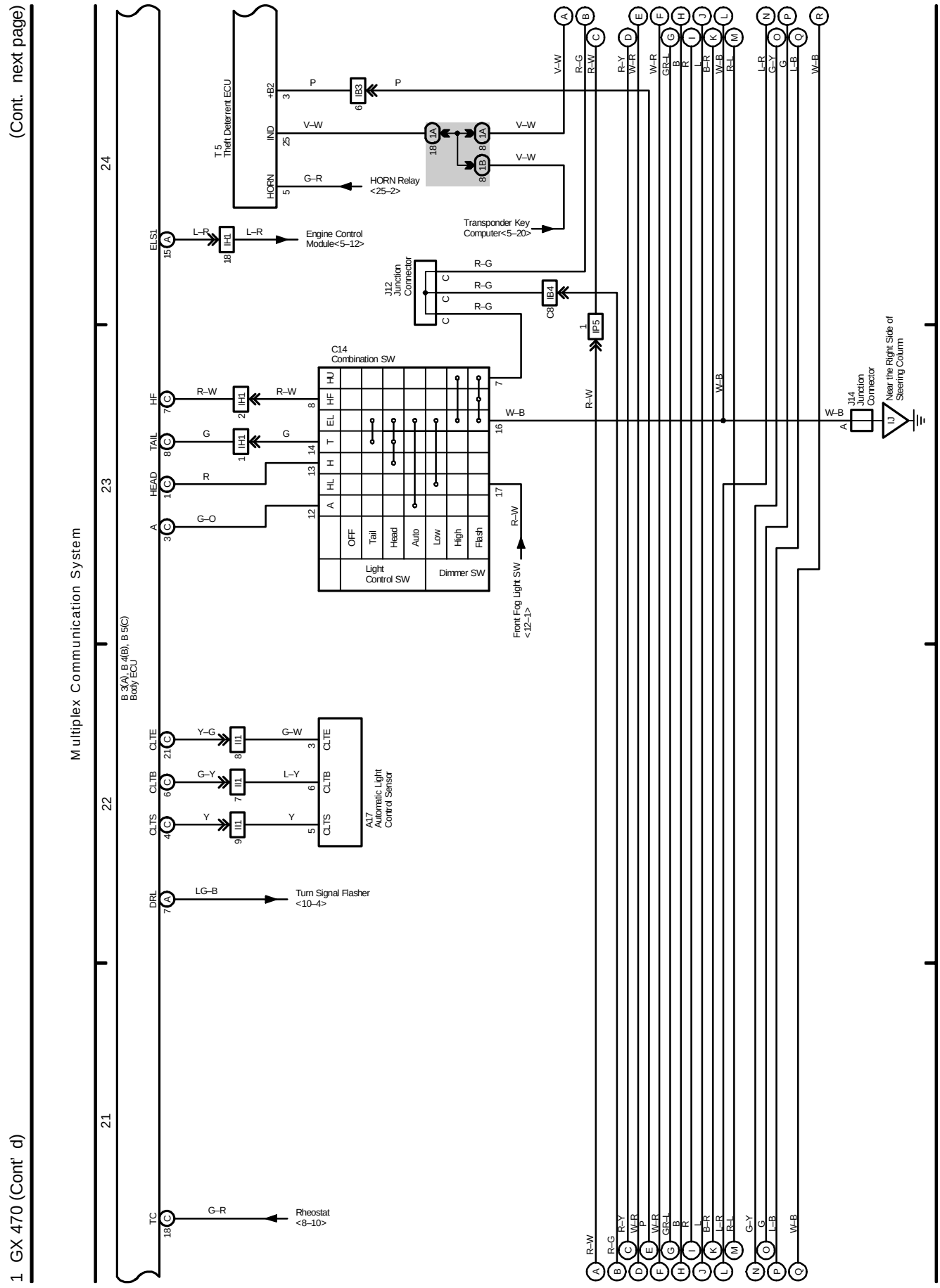

1 GX 470 (Cont' d)
(Cont. next page)
13
14
15
16
Multiplex Communication System
B 3(A), B 4(B), B 5(C)
Body ECU
C15
Combination SW
Rear Washer SW
Rear Wiper SW
Wash
OFF
INT
ON
Wash
EW
WR
+1R
C1R
J22
Junction
Connector
W 2
Washer
Motor
IP3
IR2
BH1
R29
Rear Wiper
Motor
+B
+1
ID1
RWLM
RWSM
WRIN
WRLO
WRSW
S27(A), S28(B)
Sub Body ECU
MPX–
MPX+
J14
Junction
Connector
Near the Right Side of
Steering Column
IJ
Back Door Panel
Center
BQ
P–G
L–O
W–R
B–R
P
R
L–Y
L–R
R–L
G–Y
G
L–B
R–B
W
W–B
L–R
L–B
R–B
B
L

(Cont. next page)

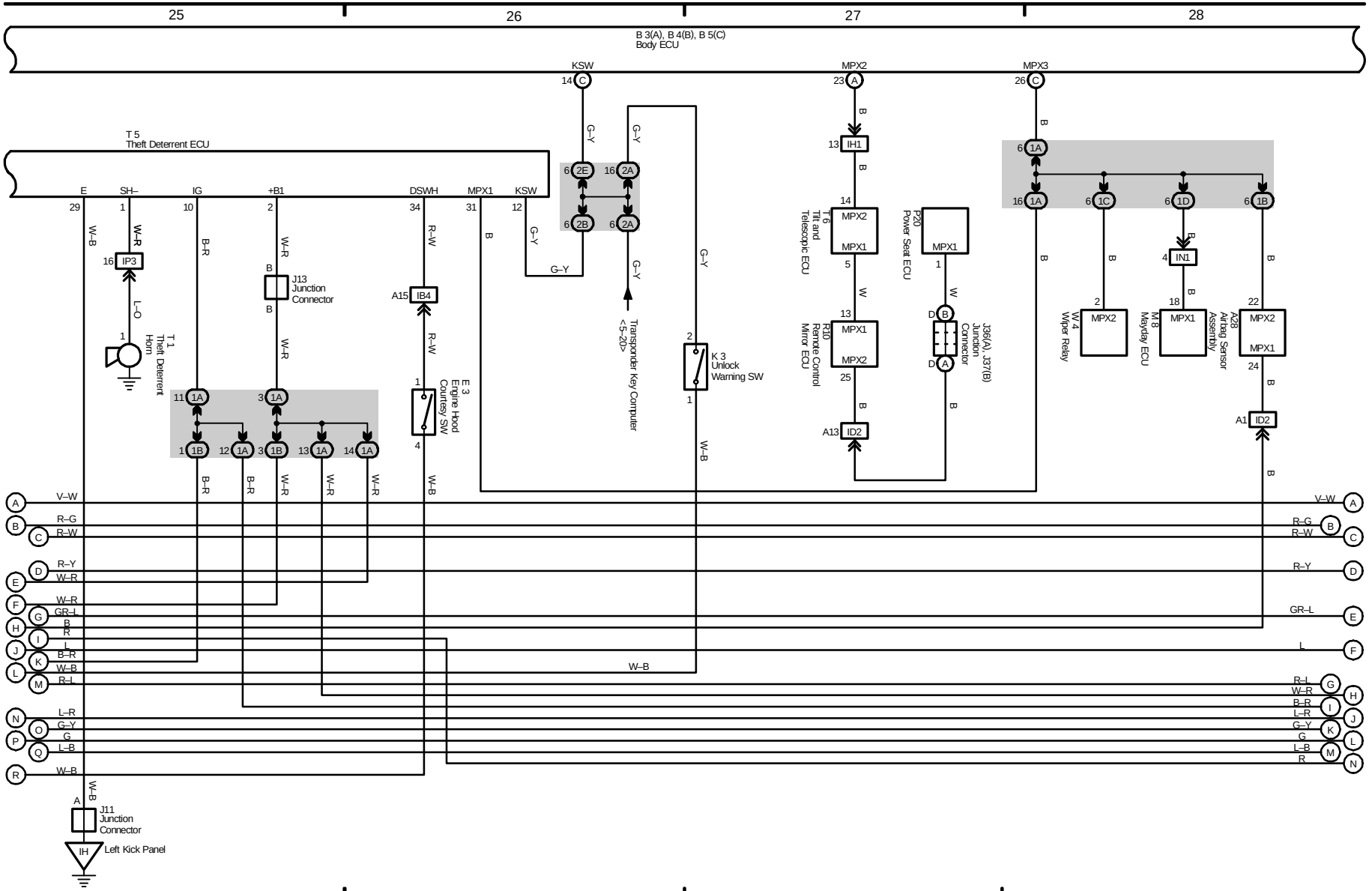
Multiplex Communication System

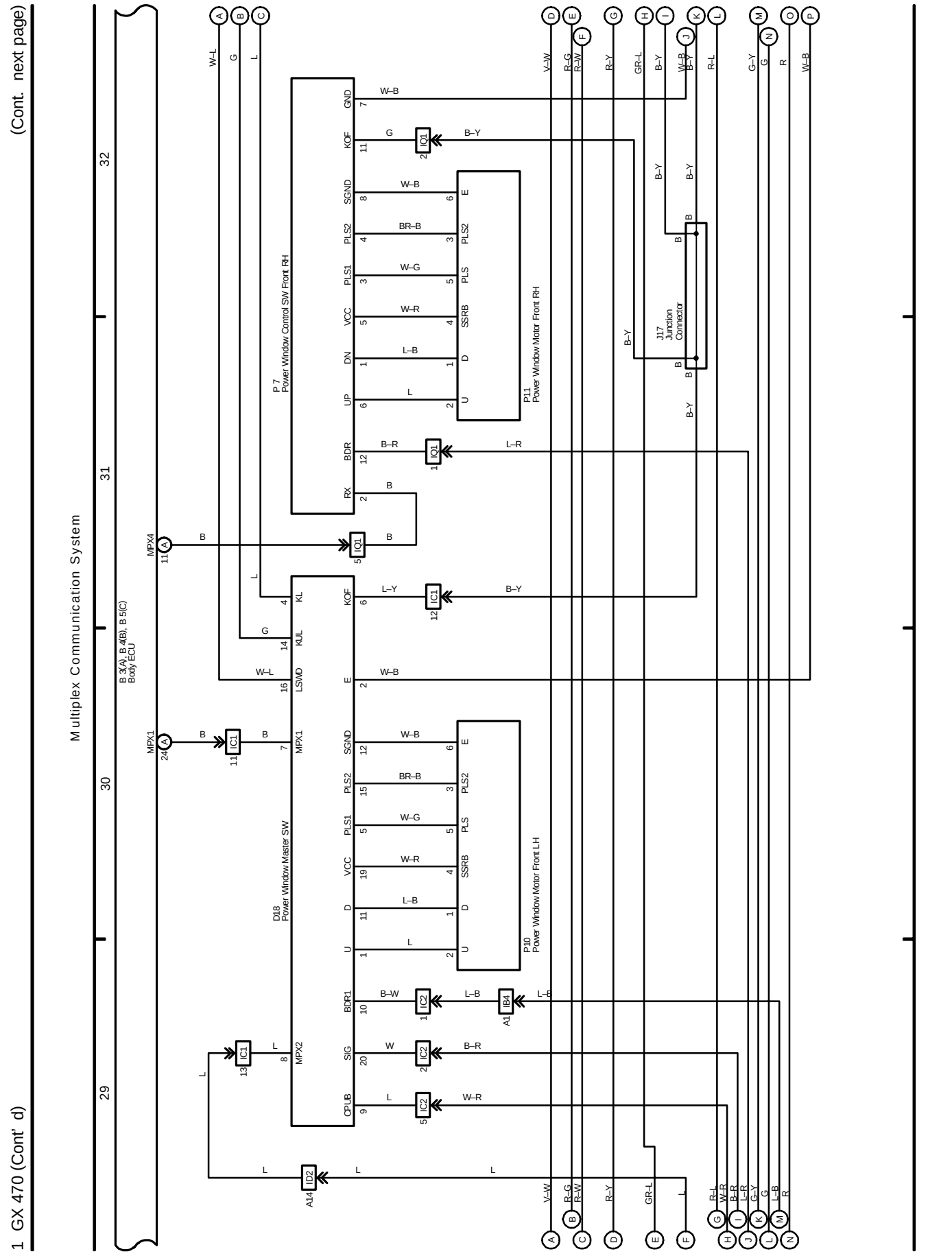


M OVERALL ELECTRICAL WIRING DIAGRAM



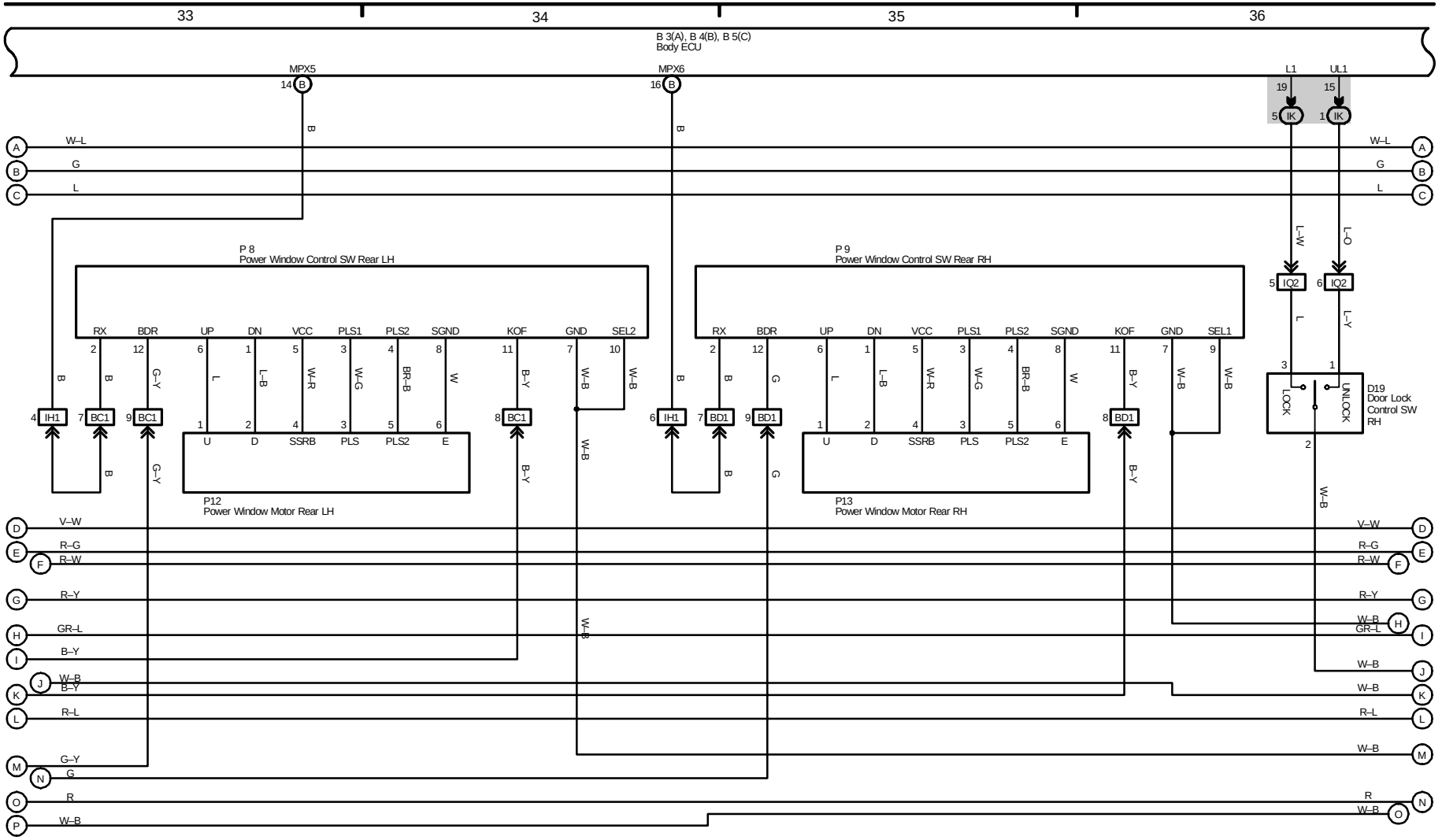
Multiplex Communication System



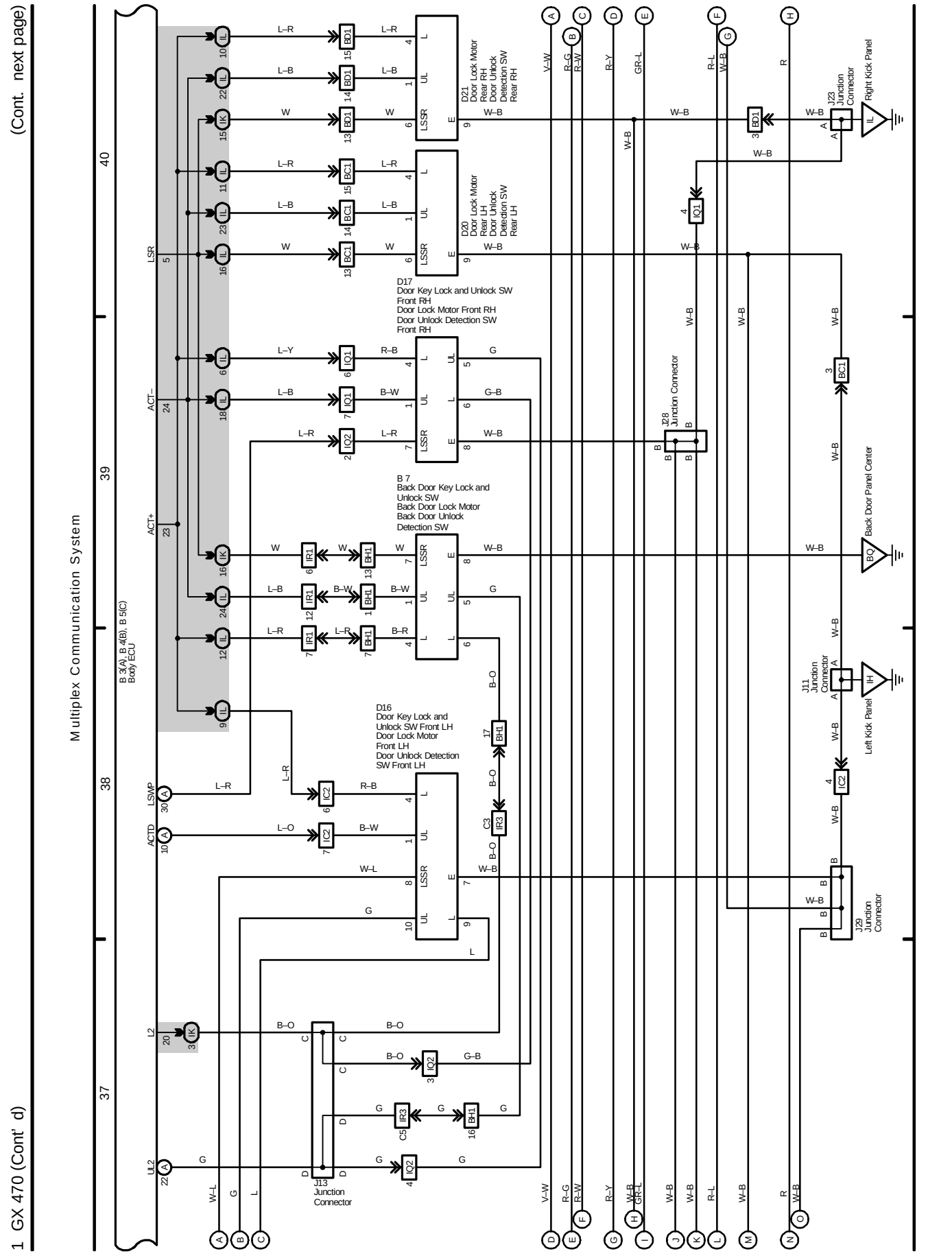

1 GX 470 (Cont' d)
(Cont. next page)
Multiplex Communication System
B 3(A), B 4(B), B 5(C)
Body ECU
MPX4
MPX1
MPX2
D18
Power Window Master SW
P 7
Power Window Control SW Front RH
P10
Power Window Motor Front LH
P11
Power Window Motor Front RH
J17
Junction
Connector
GND
KOF
SGND
PLS2
PLS1
VCC
DN
UP
BDR
RX
KL
KJL
LSWD
SGND
PLS2
PLS1
VCC
D
U
BDR1
SIG
CPUB
SSRB
PLS
IC1
IC2
IQ1
ID2
IB4

(Cont. next page)

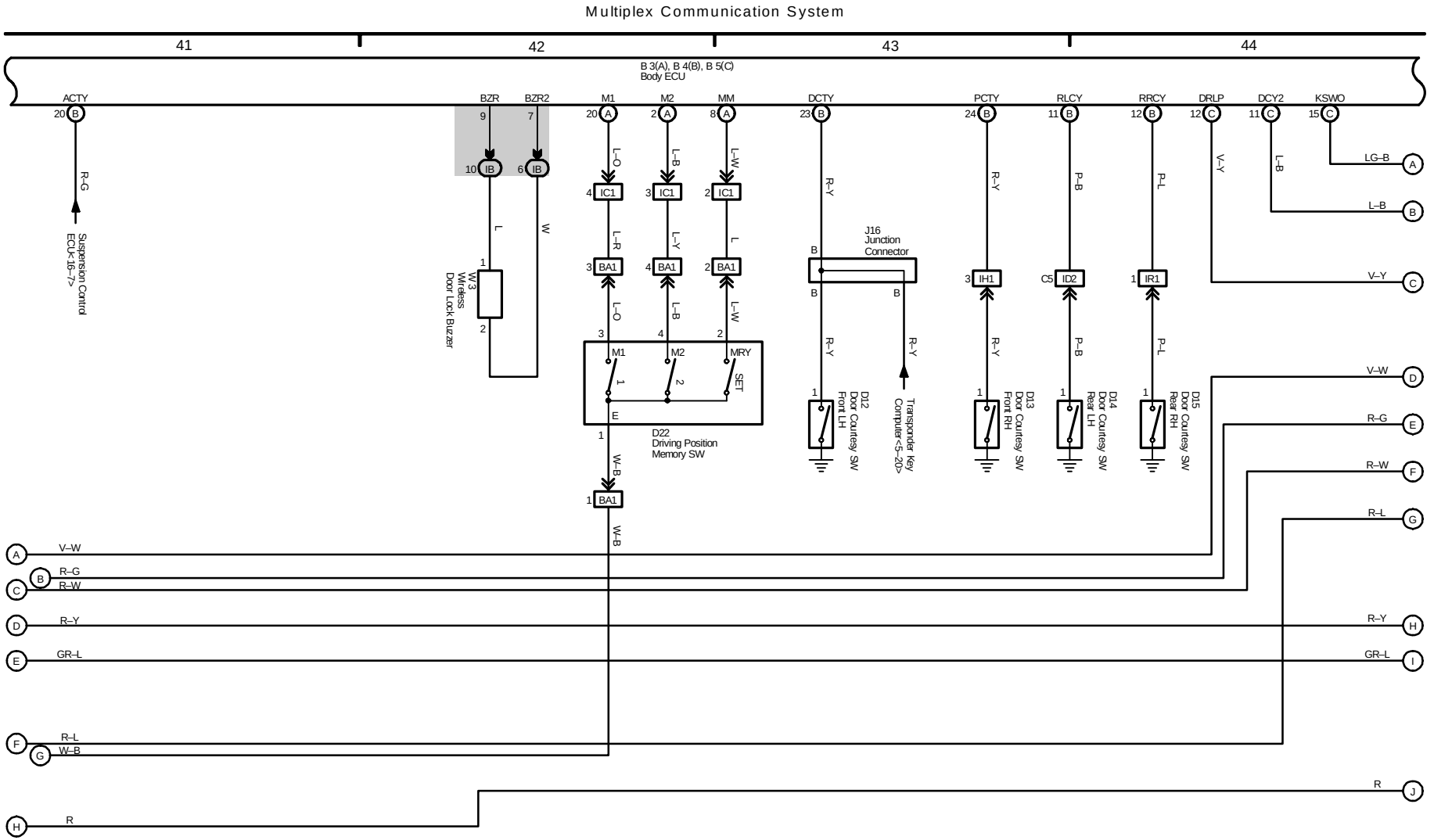
Multiplex Communication System



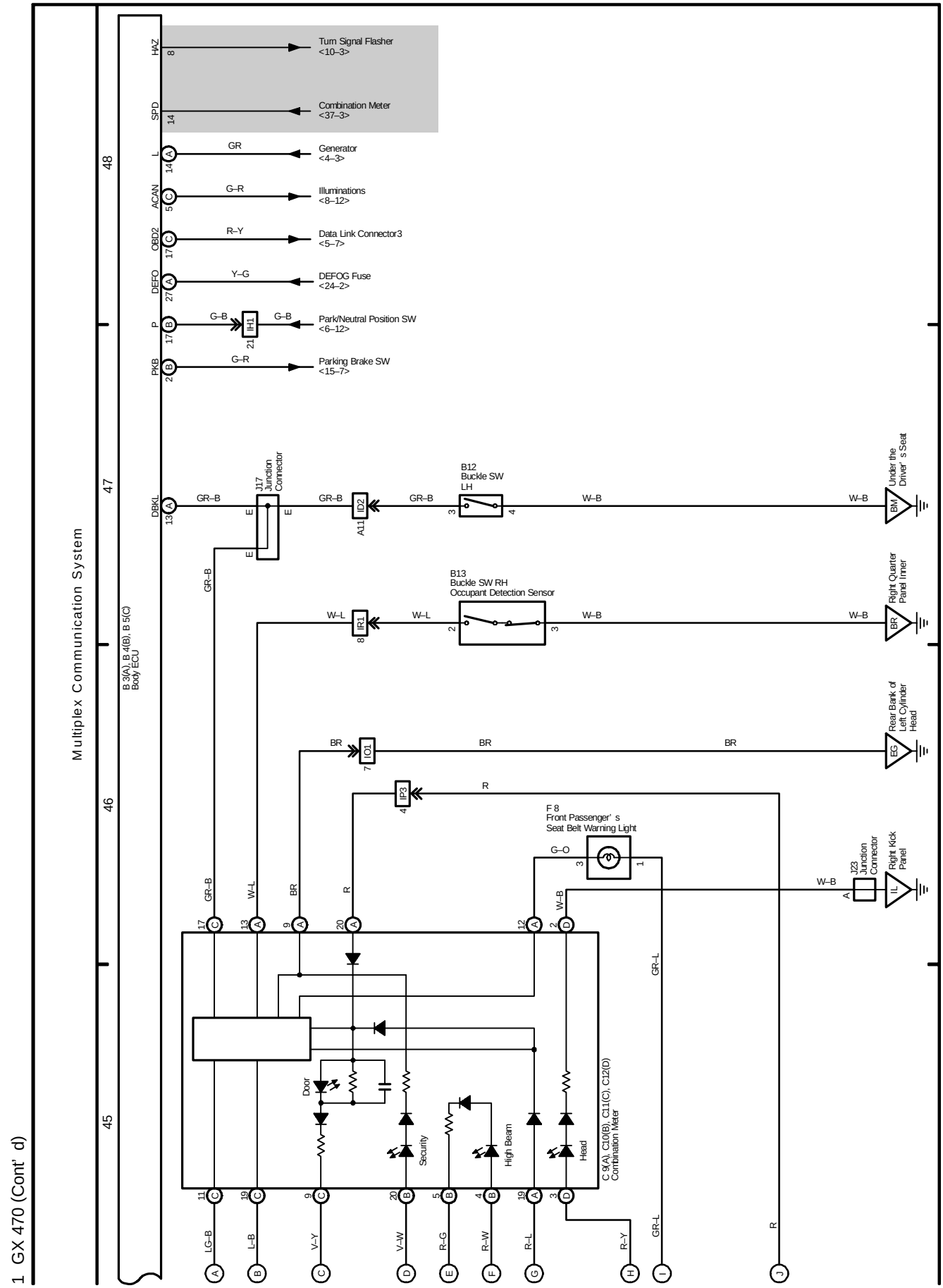
M OVERALL ELECTRICAL WIRING DIAGRAM

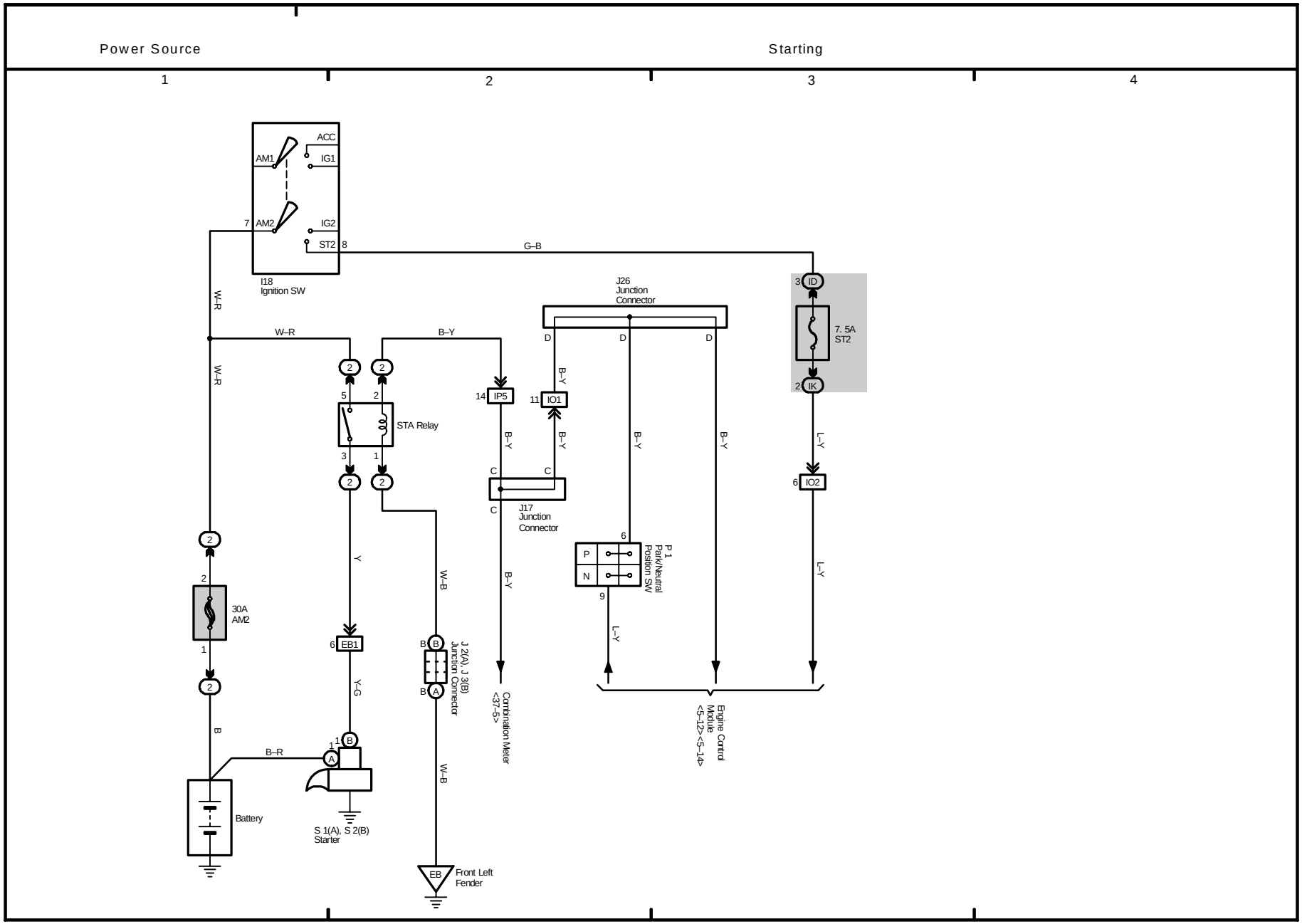


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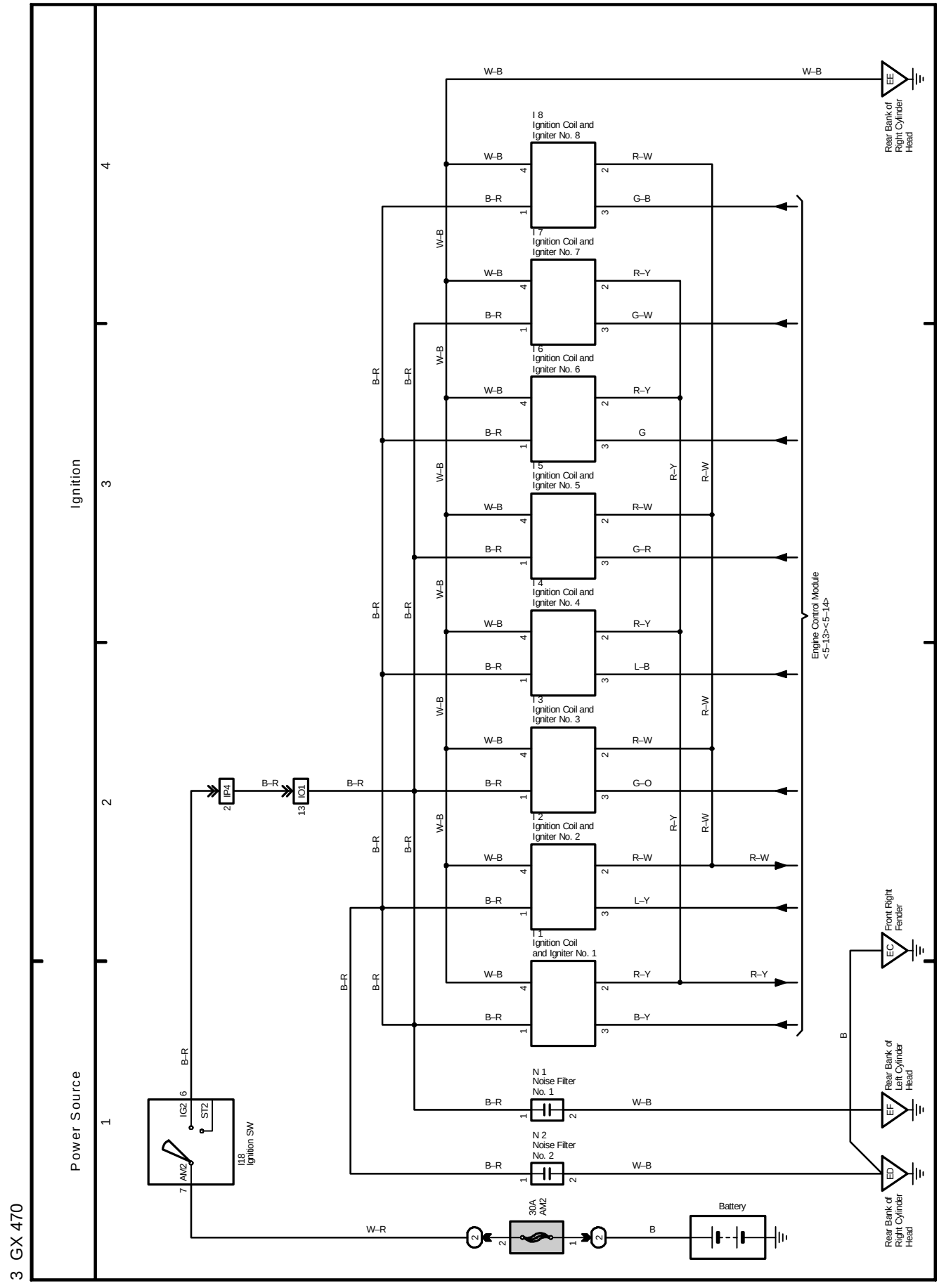


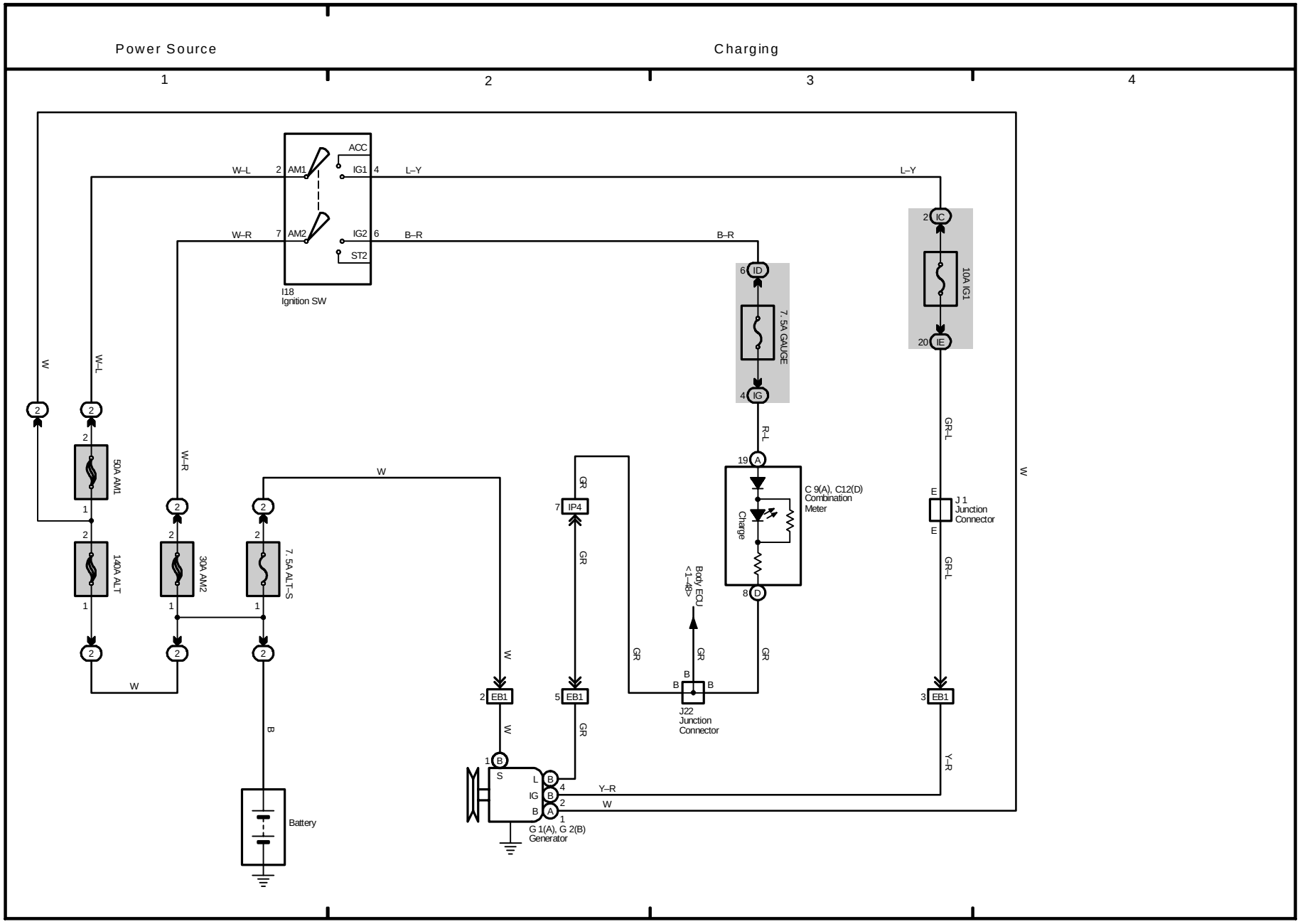
M OVERALL ELECTRICAL WIRING DIAGRAM



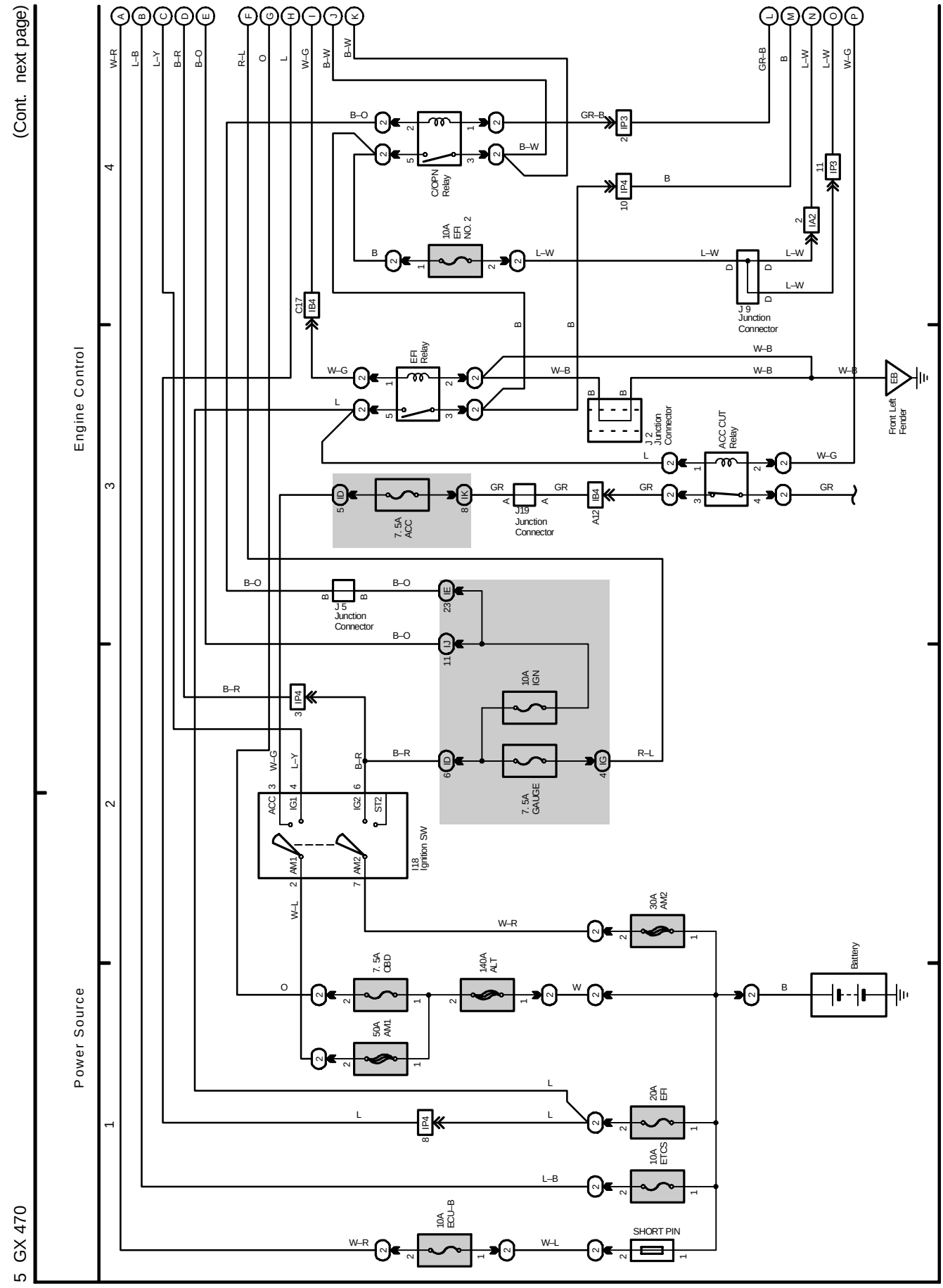

Power Source
Starting
1
2
3
4
ACC
AM1
IG1
7
AM2
IG2
ST2
8
G–B
I18
Ignition SW
W–R
W–R
B–Y
J26
Junction
Connector
D
D
D
3
ID
7. 5A
ST2
2
IK
2
2
5
2
STA Relay
3
1
2
2
14
IP5
11
IO1
B–Y
B–Y
B–Y
B–Y
L–Y
6
IO2
C
C
C
J17
Junction
Connector
6
P
N
9
P 1
Park/Neutral
Position SW
L–Y
L–Y
2
2
30A
AM2
1
2
Y
W–B
B–Y
6
EB1
B
B
J 2(A), J 3(B)
Junction Connector
B
A
Combination Meter
<37-45>
Y–G
B
B–R
1
B
1
A
Engine Control
Module
<5–12><5–14>
Battery
S 1(A), S 2(B)
Starter
W–B
EB
Front Left
Fender

M OVERALL ELECTRICAL WIRING DIAGRAM

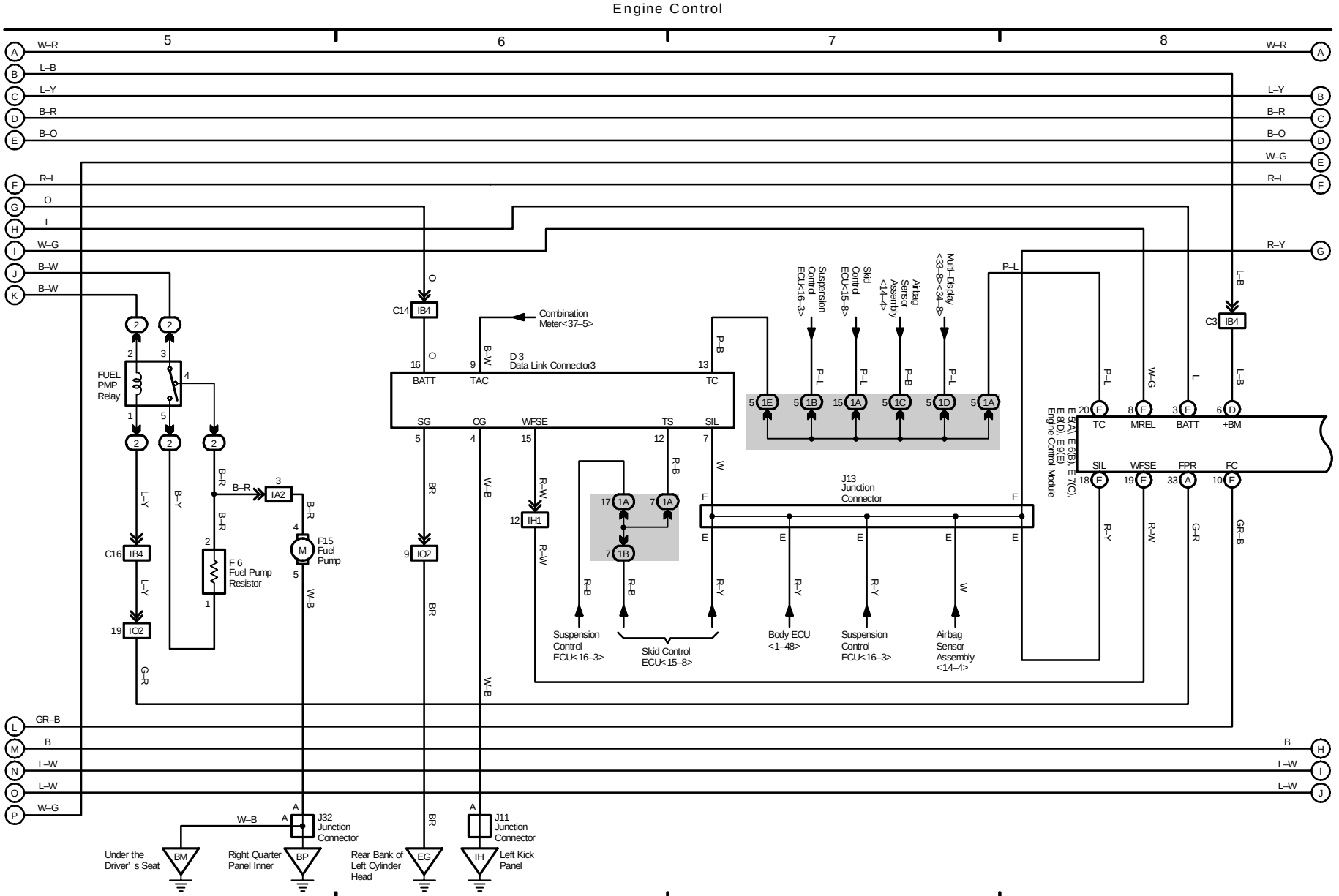



Power Source
Charging
1
2
3
4
ACC
IG1
AM1
IG2
AM2
ST2
I18
Ignition SW
W–L
L–Y
W–R
B–R
2 IC
10A IG1
20 IE
6 ID
7.5A GAUGE
4 IG
R–L
GR–L
19 A
C 9(A), C12(D)
Combination
Meter
Charge
8 D
J 1
Junction
Connector
50A AM1
140A ALT
30A AM2
7.5A ALT–S
W
B
7 IP4
GR
Body ECU
<1–48>
J22
Junction
Connector
2 EB1
5 EB1
3 EB1
Y–R
1 B
S
L
IG
B
4
2
1
G 1(A), G 2(B)
Generator
Battery

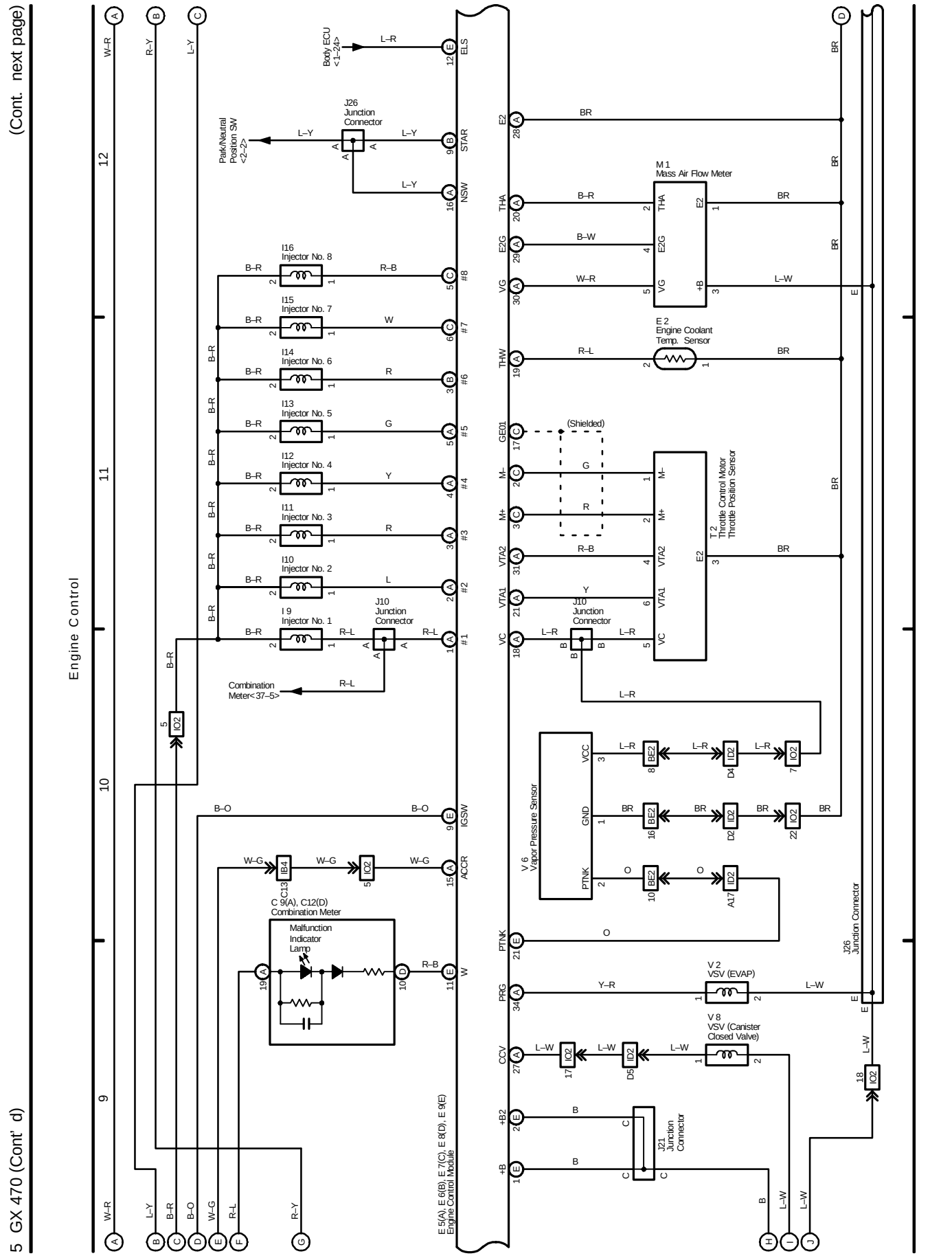
M OVERALL ELECTRICAL WIRING DIAGRAM



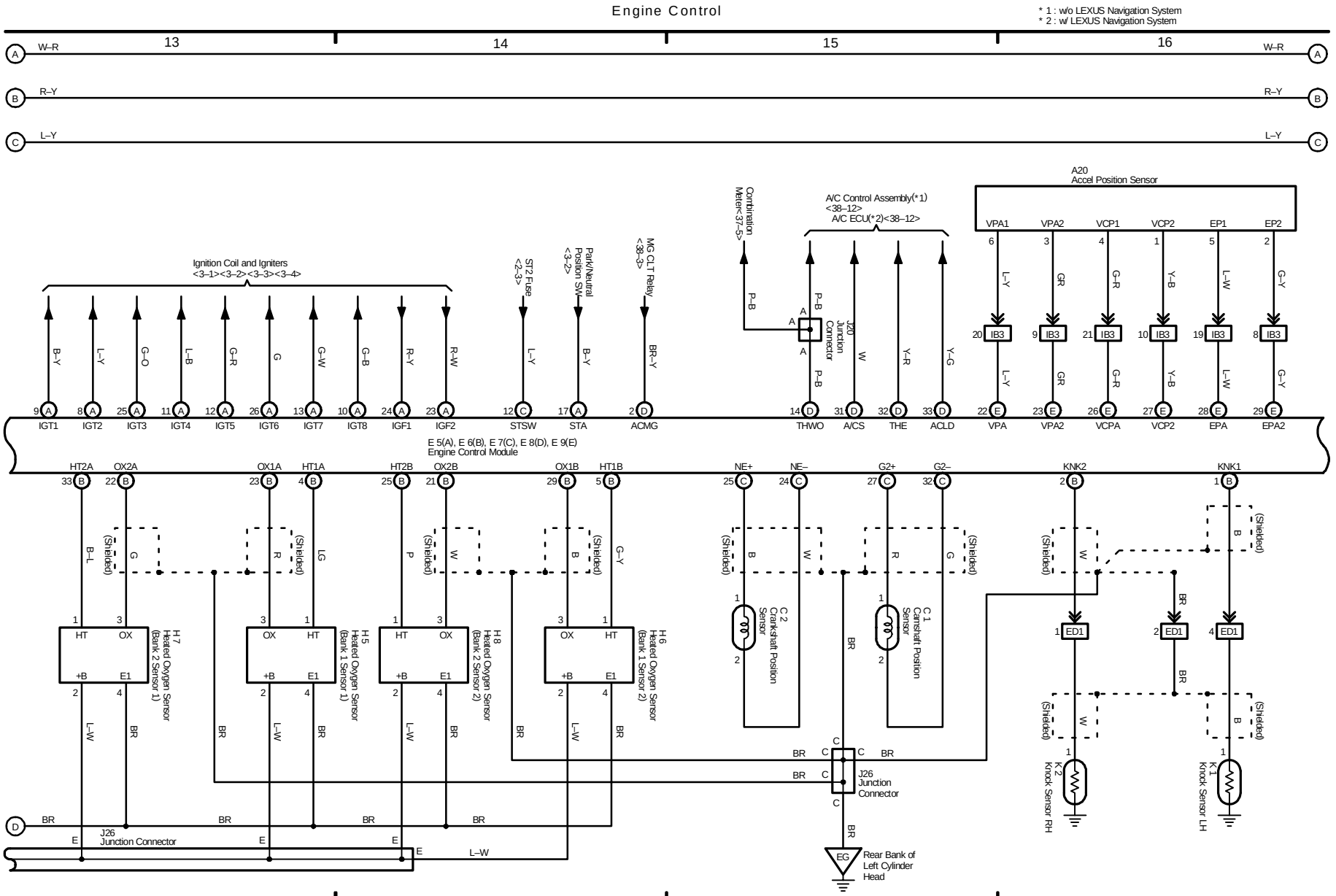
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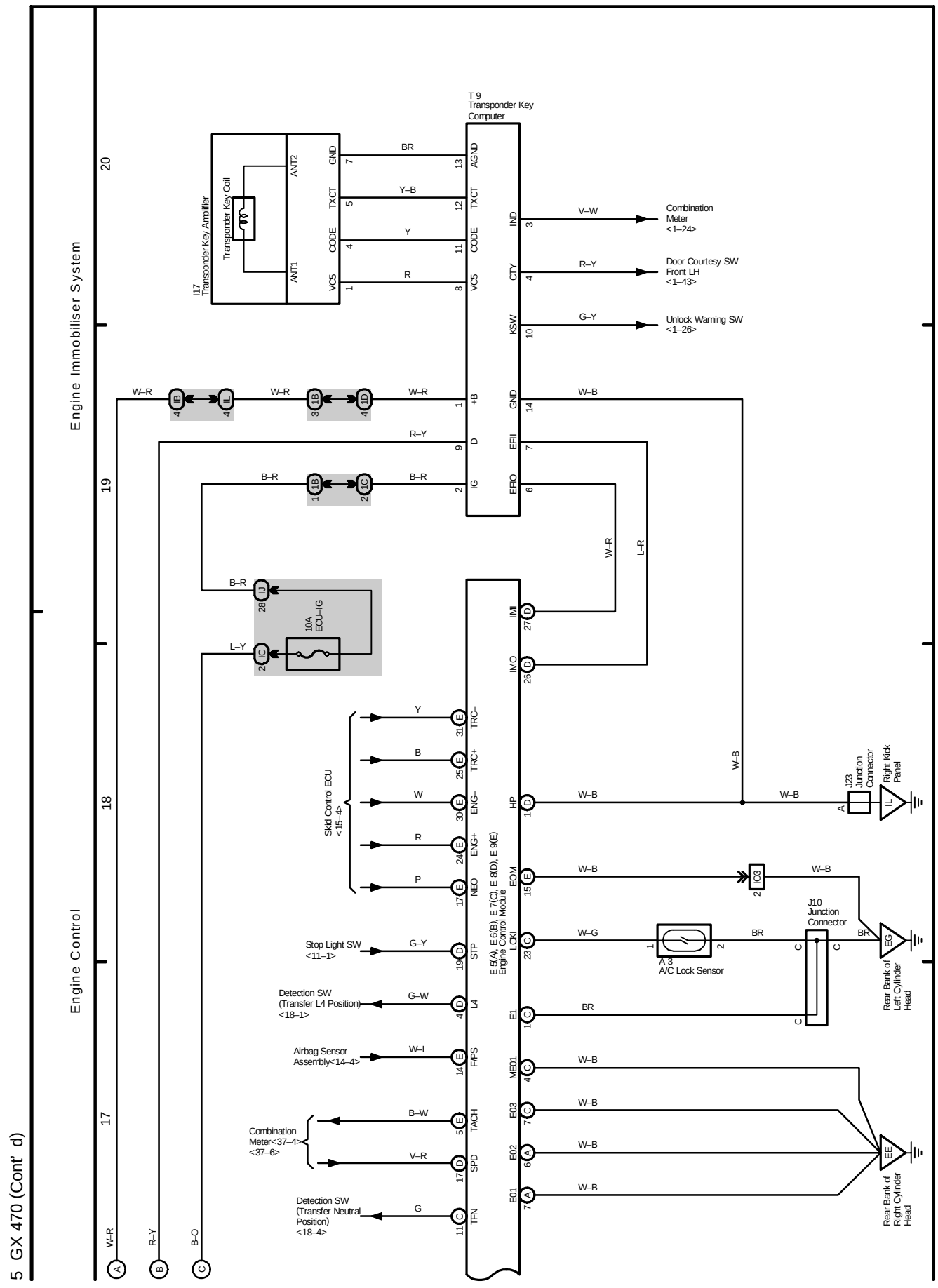
M OVERALL ELECTRICAL WIRING DIAGRAM



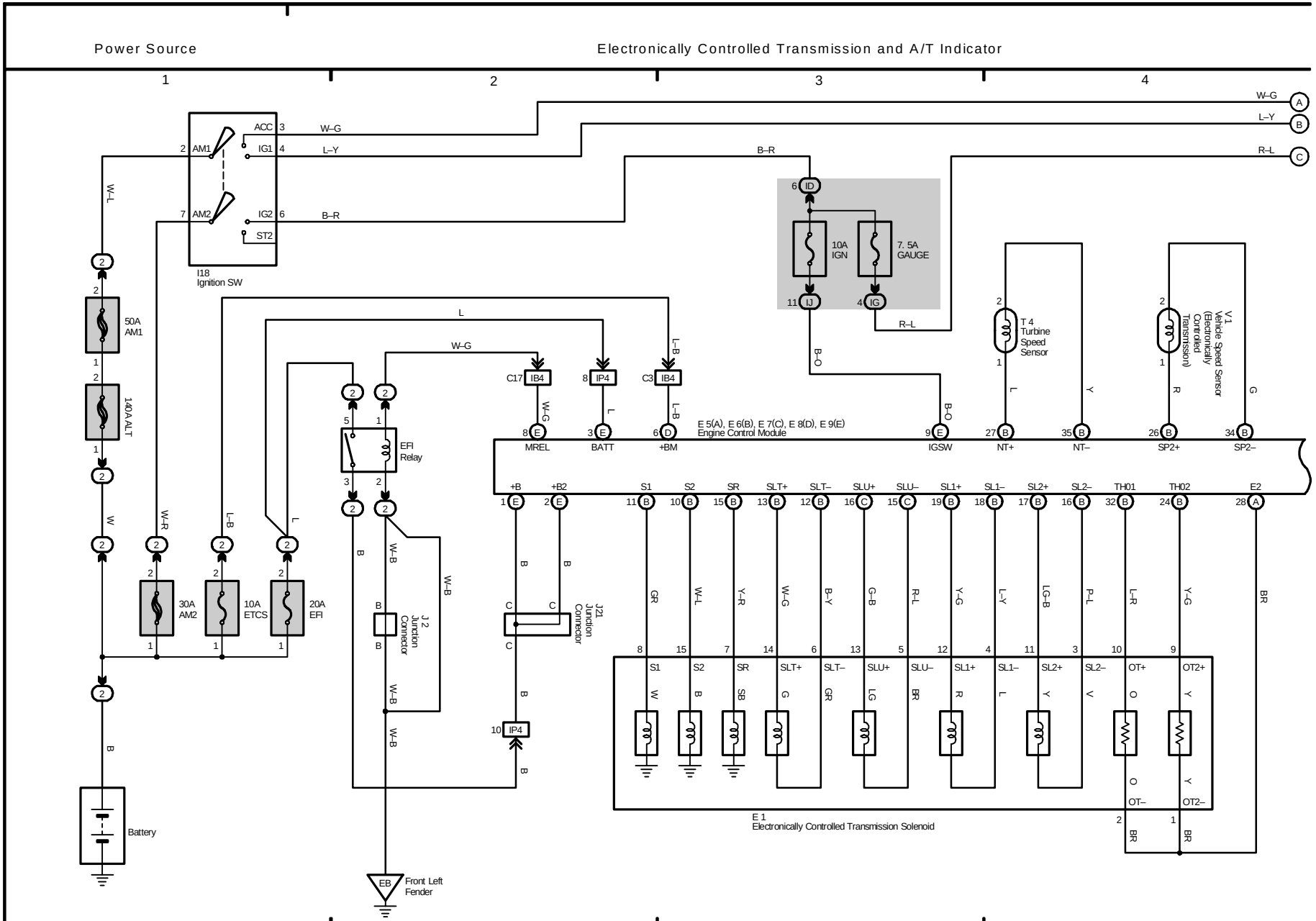
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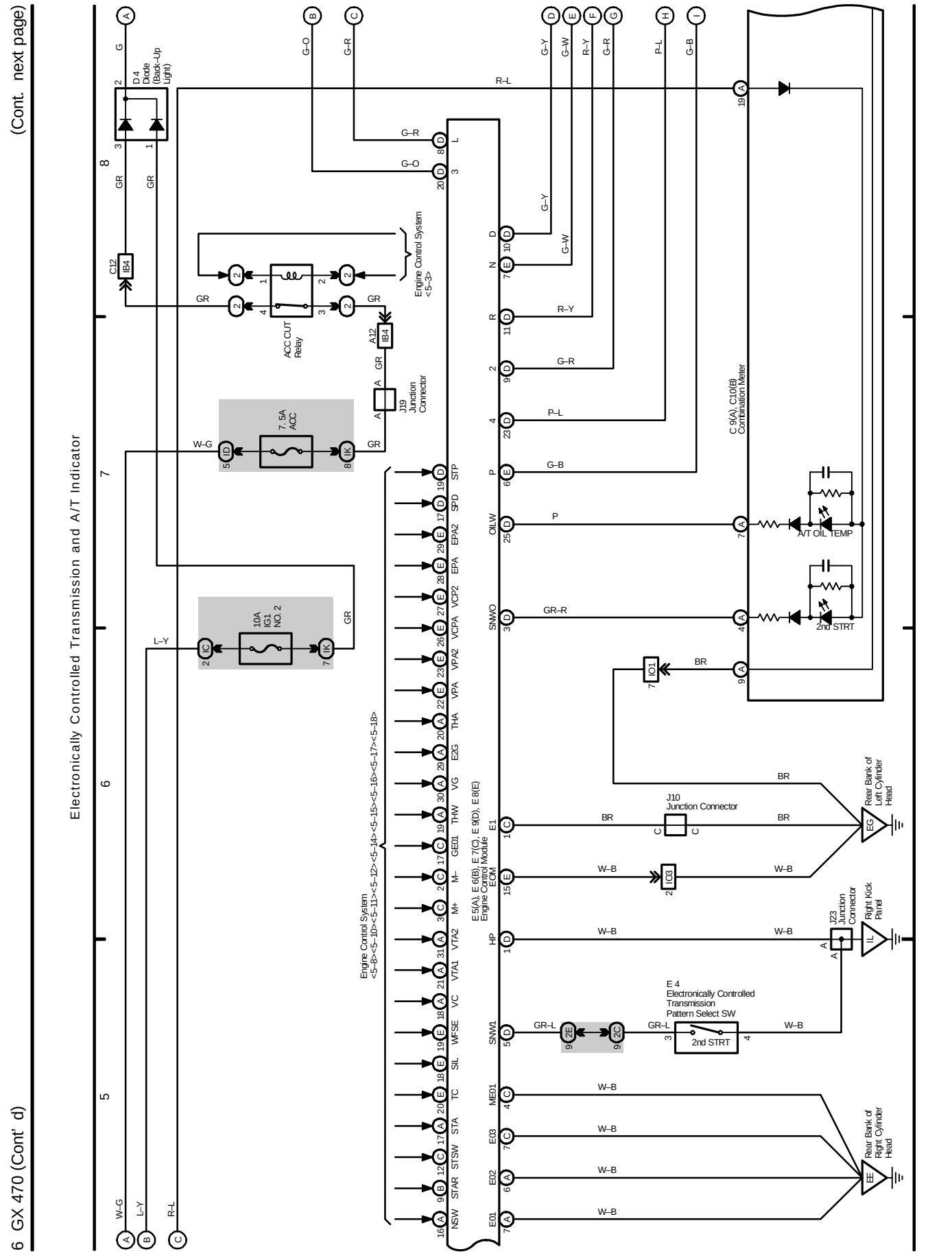
M OVERALL ELECTRICAL WIRING DIAGRAM

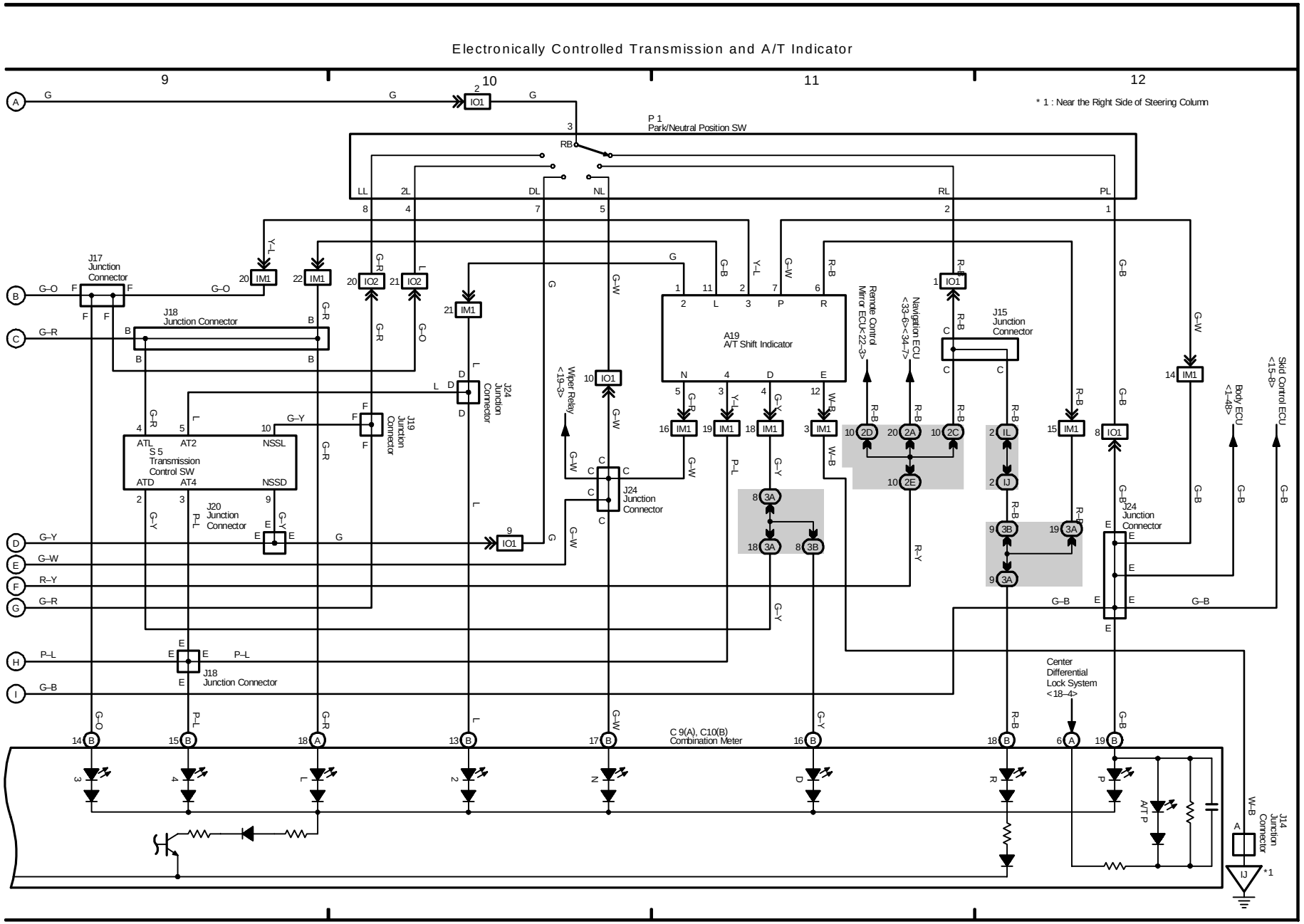


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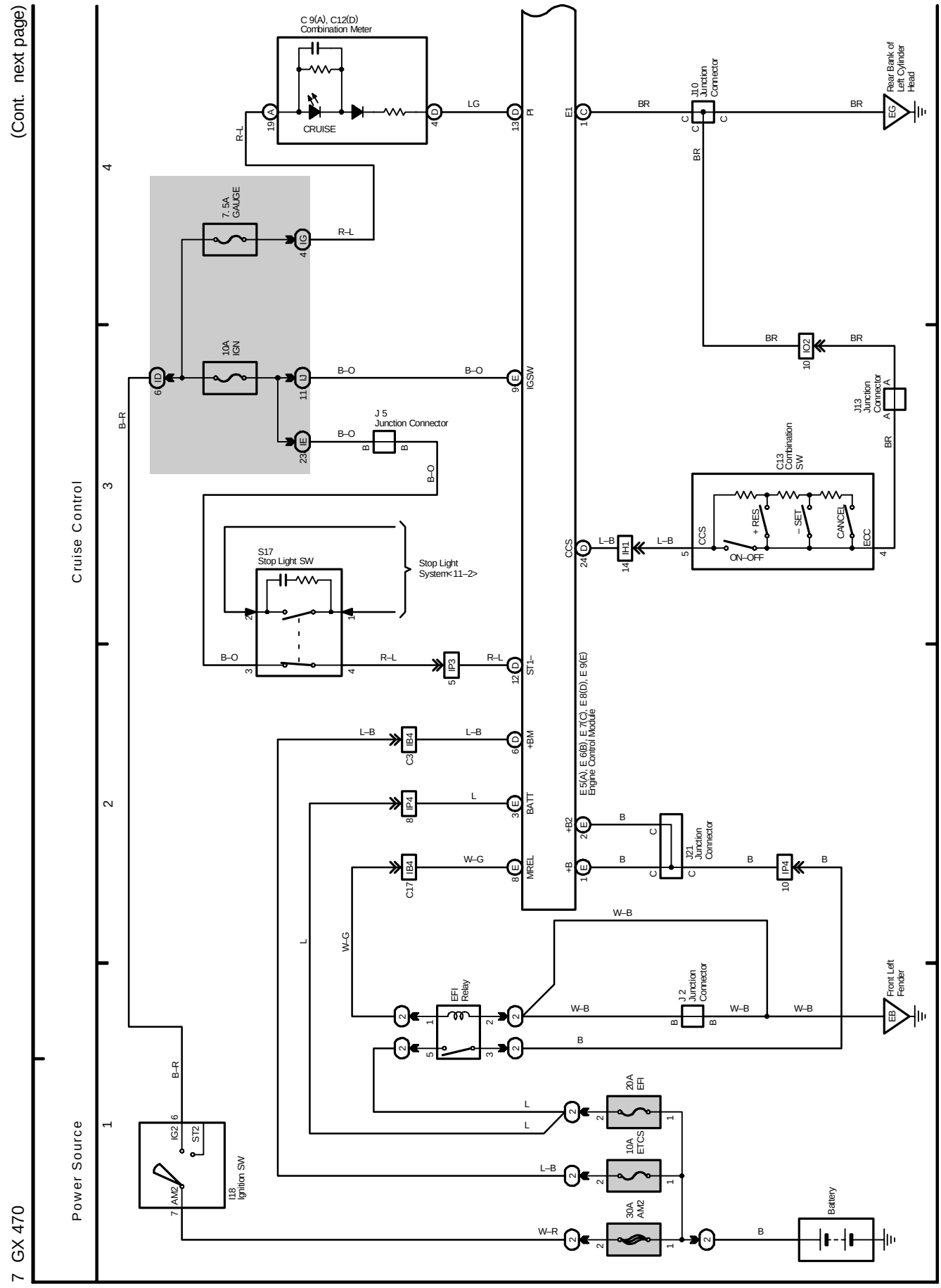


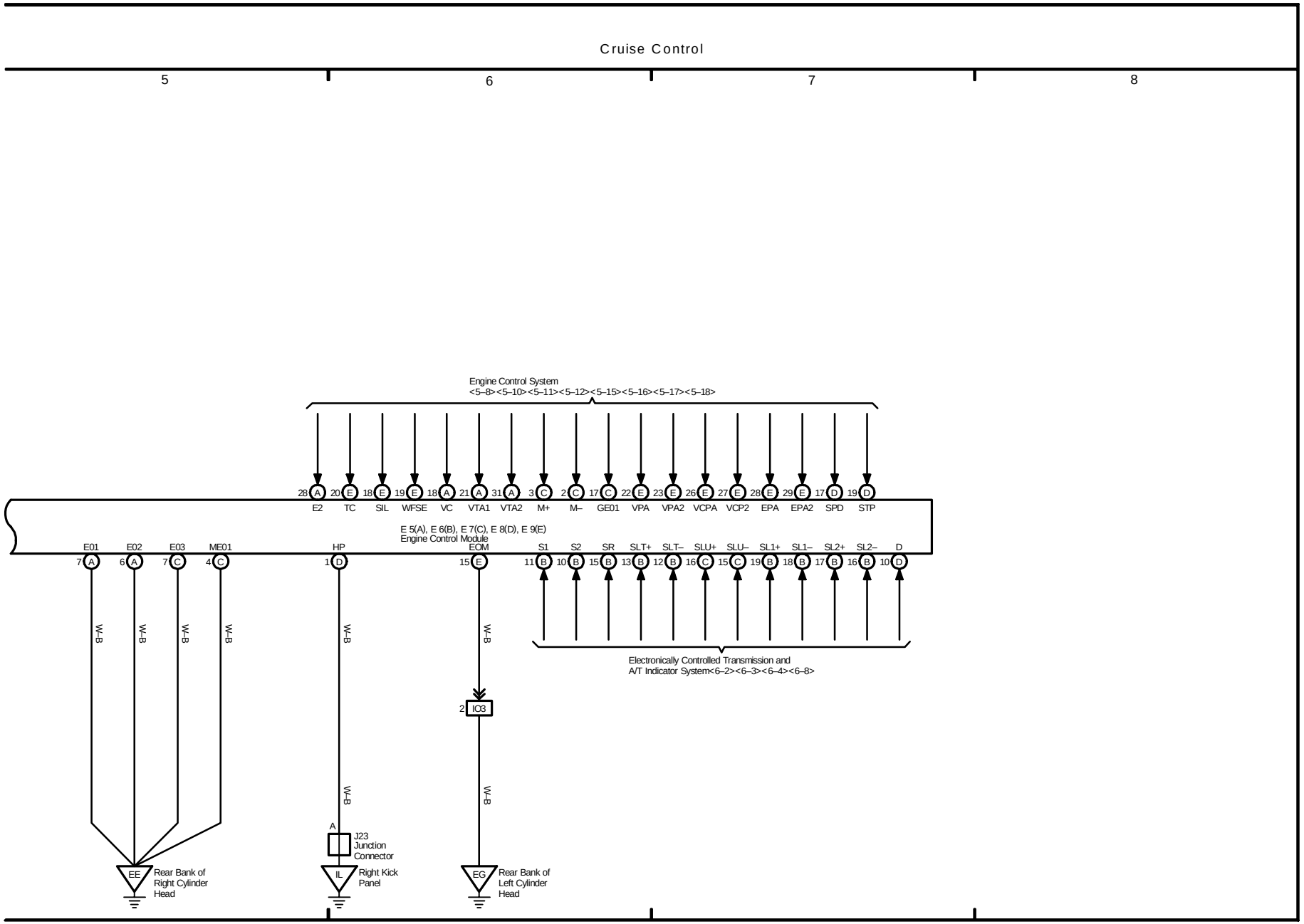
M OVERALL ELECTRICAL WIRING DIAGRAM



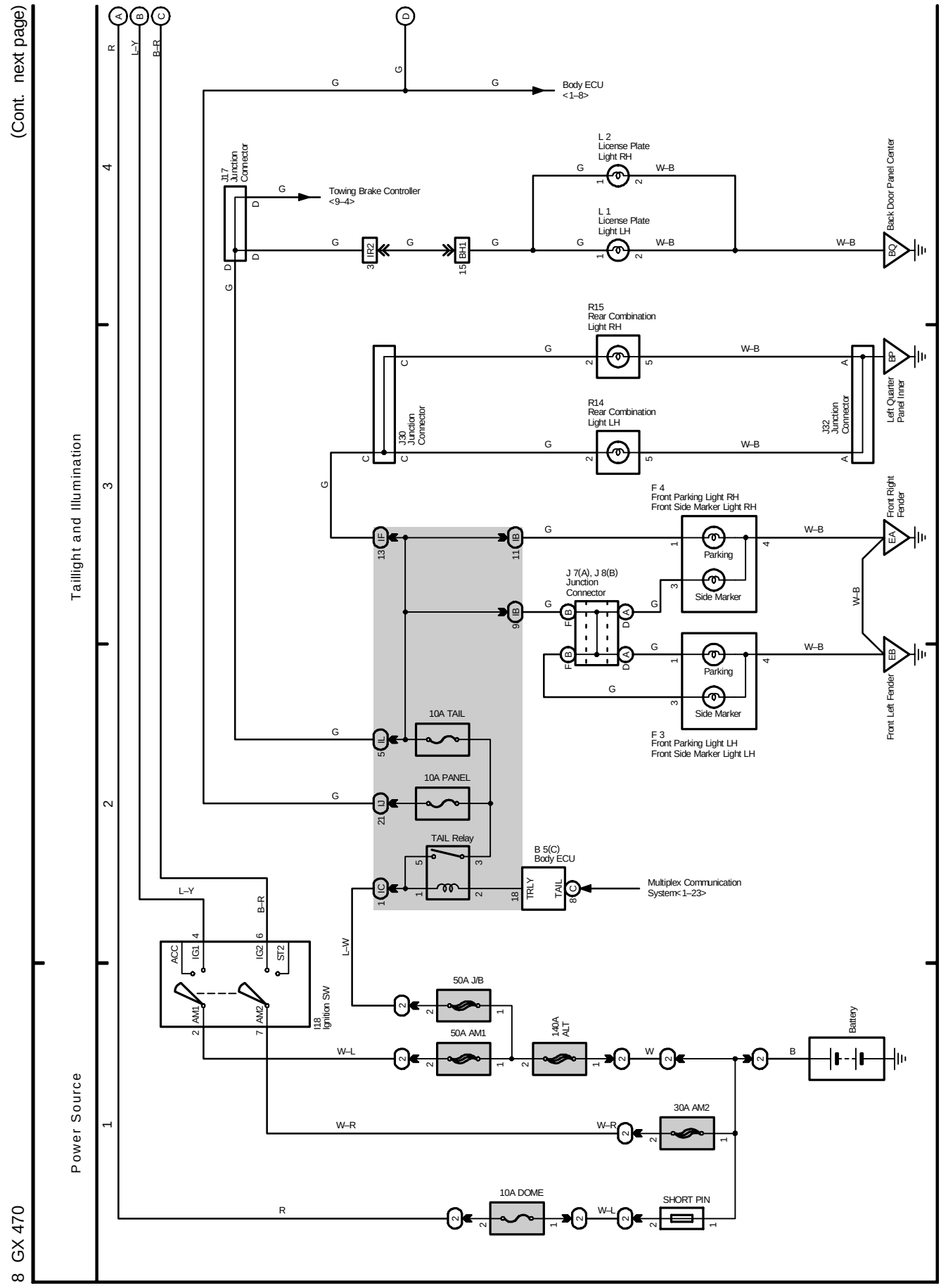

Electronically Controlled Transmission and A/T Indicator
9
10
11
12
* 1 : Near the Right Side of Steering Column
P 1
Park/Neutral Position SW
A19
A/T Shift Indicator
J17
Junction
Connector
J18
Junction Connector
J24
Junction
Connector
J19
Junction
Connector
J20
Junction
Connector
S 5
Transmission
Control SW
Wiper Relay
<19-3>
Remote Control
Mirror ECU<22-3>
Navigation ECU
<33-6><34-7>
J15
Junction
Connector
Body ECU
<1-48>
Skid Control ECU
<15-8>
Center
Differential
Lock System
<18-4>
C 9(A), C10(B)
Combination Meter
J14
Junction
Connector
A/T P

M OVERALL ELECTRICAL WIRING DIAGRAM




Cruise Control
5
6
7
8
Engine Control System
<5–8><5–10><5–11><5–12><5–15><5–16><5–17><5–18>
28 A E2
20 E TC
18 E SIL
19 E WFSE
18 A VC
21 A VTA1
31 A VTA2
3 C M+
2 C M–
17 C GE01
22 E VPA
23 E VPA2
26 E VCPA
27 E VCP2
28 E EPA
29 E EPA2
17 D SPD
19 D STP
E 5(A), E 6(B), E 7(C), E 8(D), E 9(E)
Engine Control Module
E01 7 A
E02 6 A
E03 7 C
ME01 4 C
HP 1 D
EOM 15 E
S1 11 B
S2 10 B
SR 15 B
SLT+ 13 B
SLT– 12 B
SLU+ 16 C
SLU– 15 C
SL1+ 19 B
SL1– 18 B
SL2+ 17 B
SL2– 16 B
D 10 D
W-B
2 IO3
A
J23
Junction
Connector
Electronically Controlled Transmission and
A/T Indicator System<6–2><6–3><6–4><6–8>
EE Rear Bank of Right Cylinder Head
IL Right Kick Panel
EG Rear Bank of Left Cylinder Head

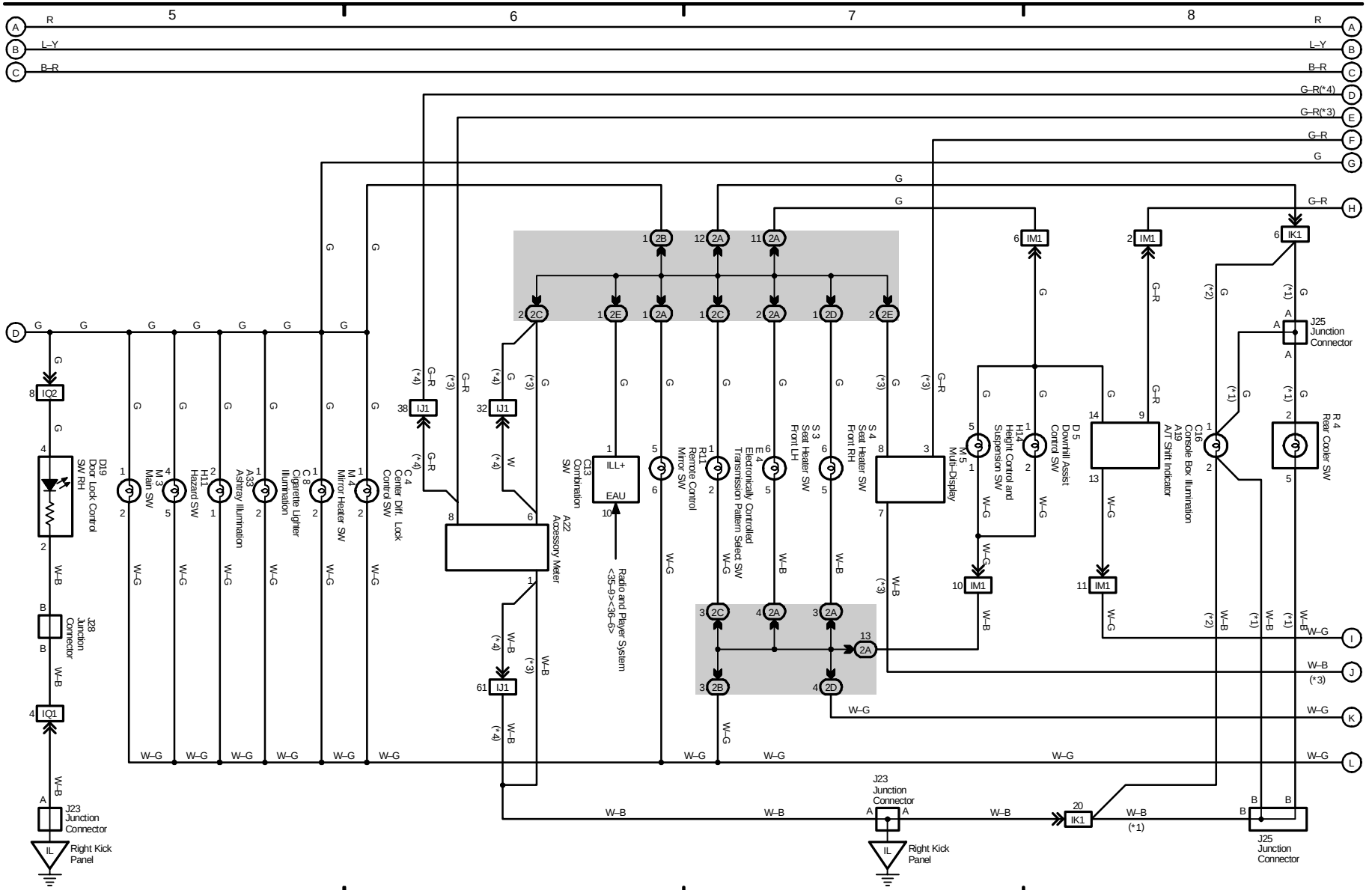
M OVERALL ELECTRICAL WIRING DIAGRAM



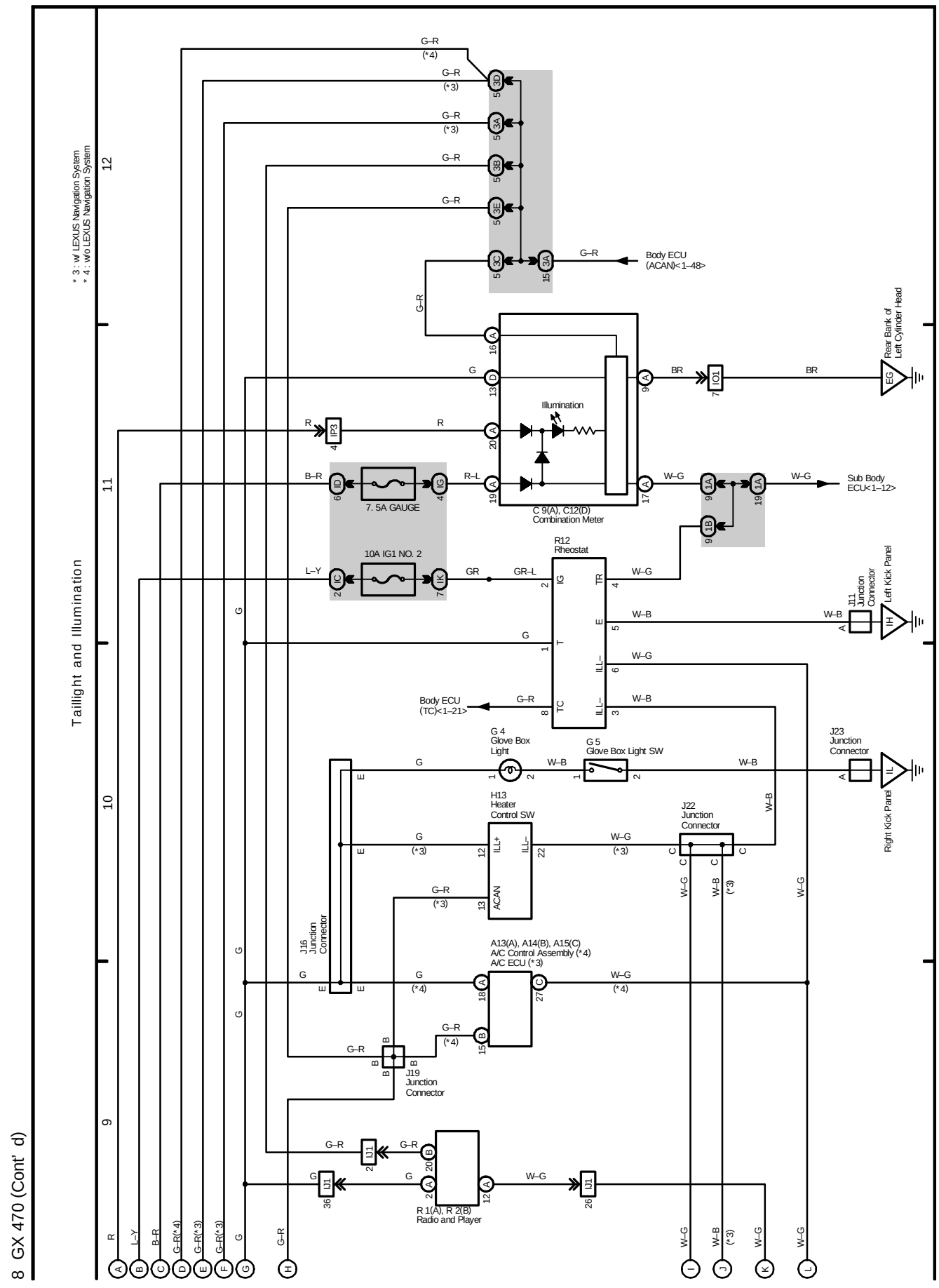
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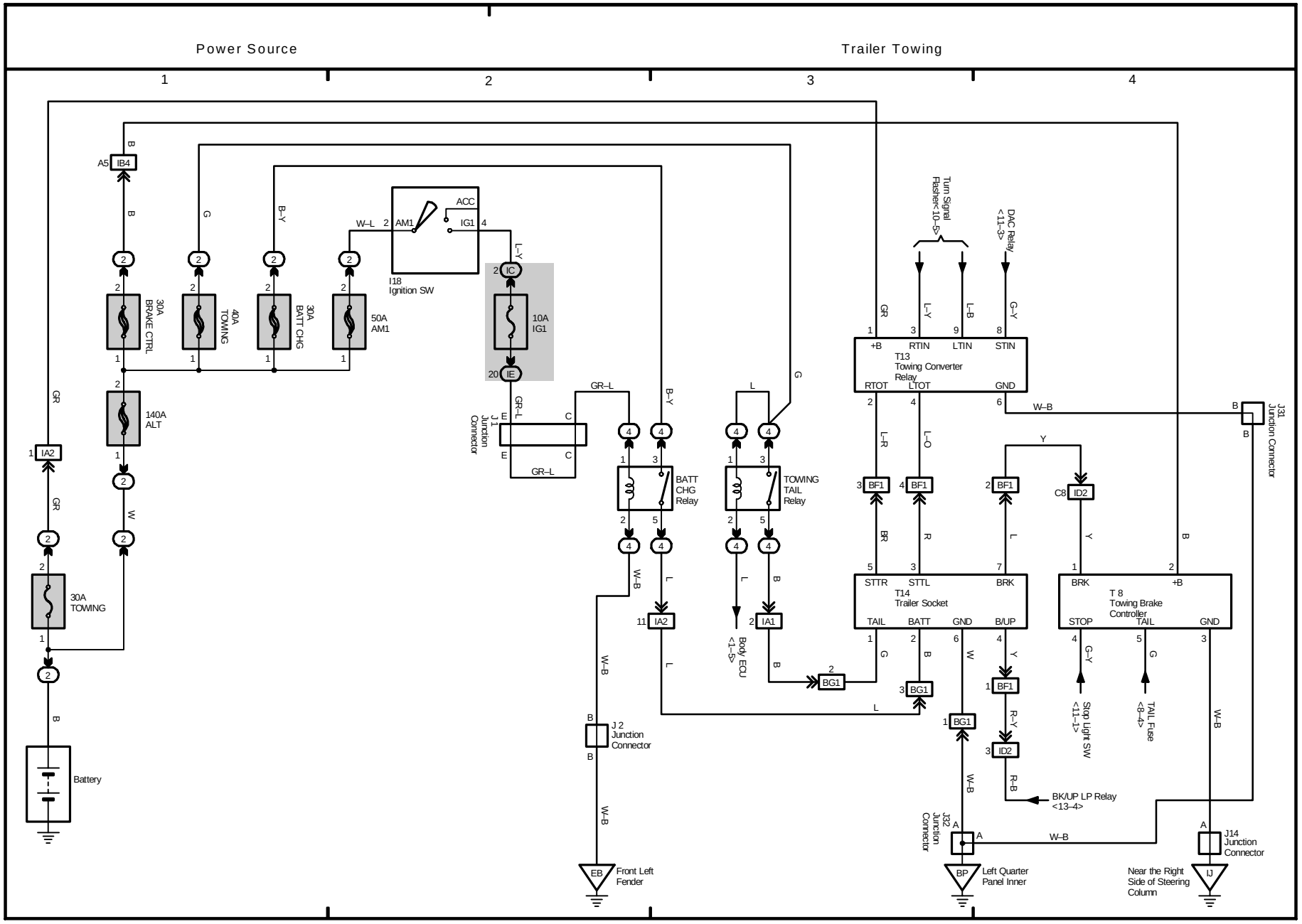
Taillight and Illumination

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

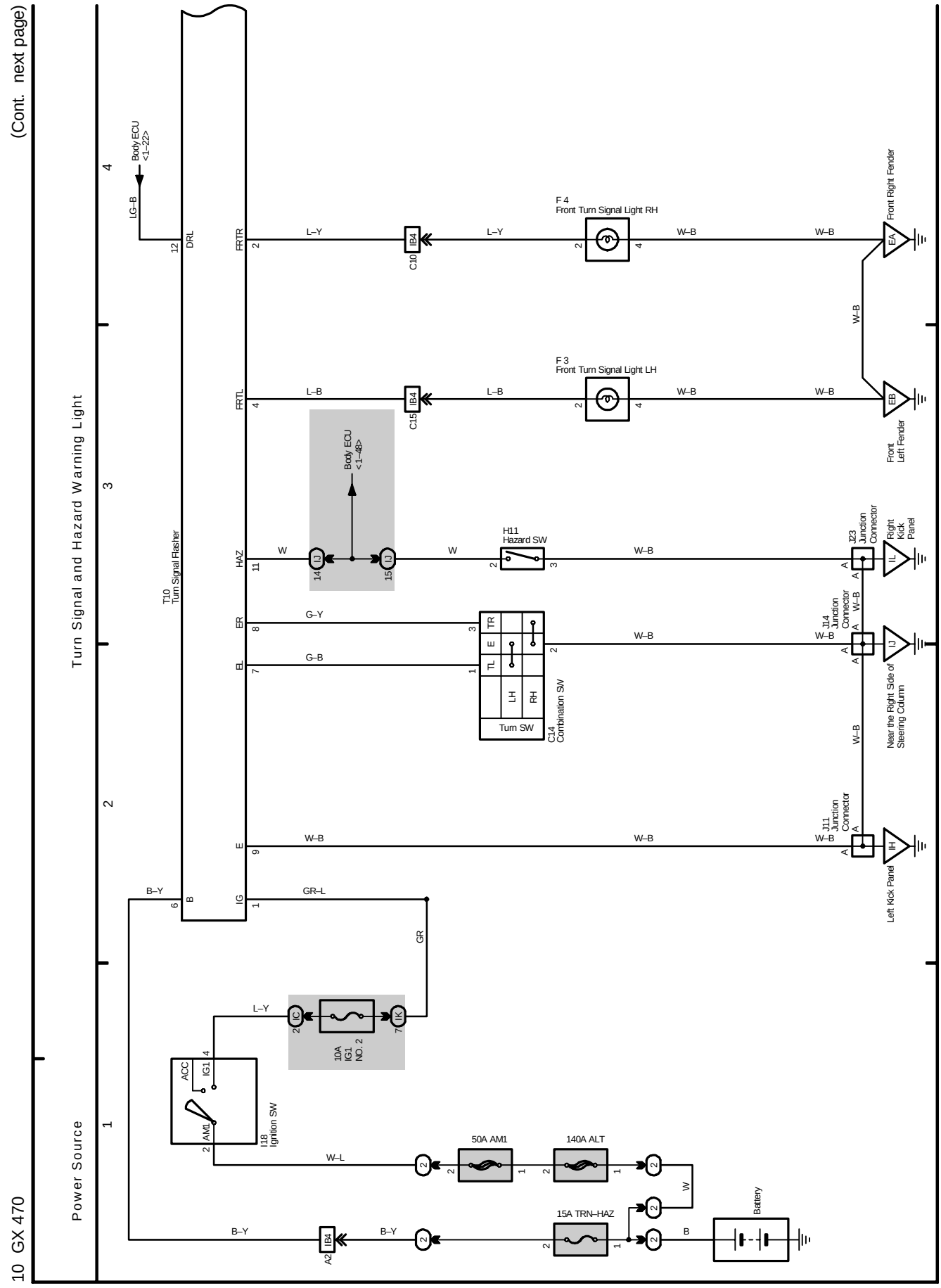


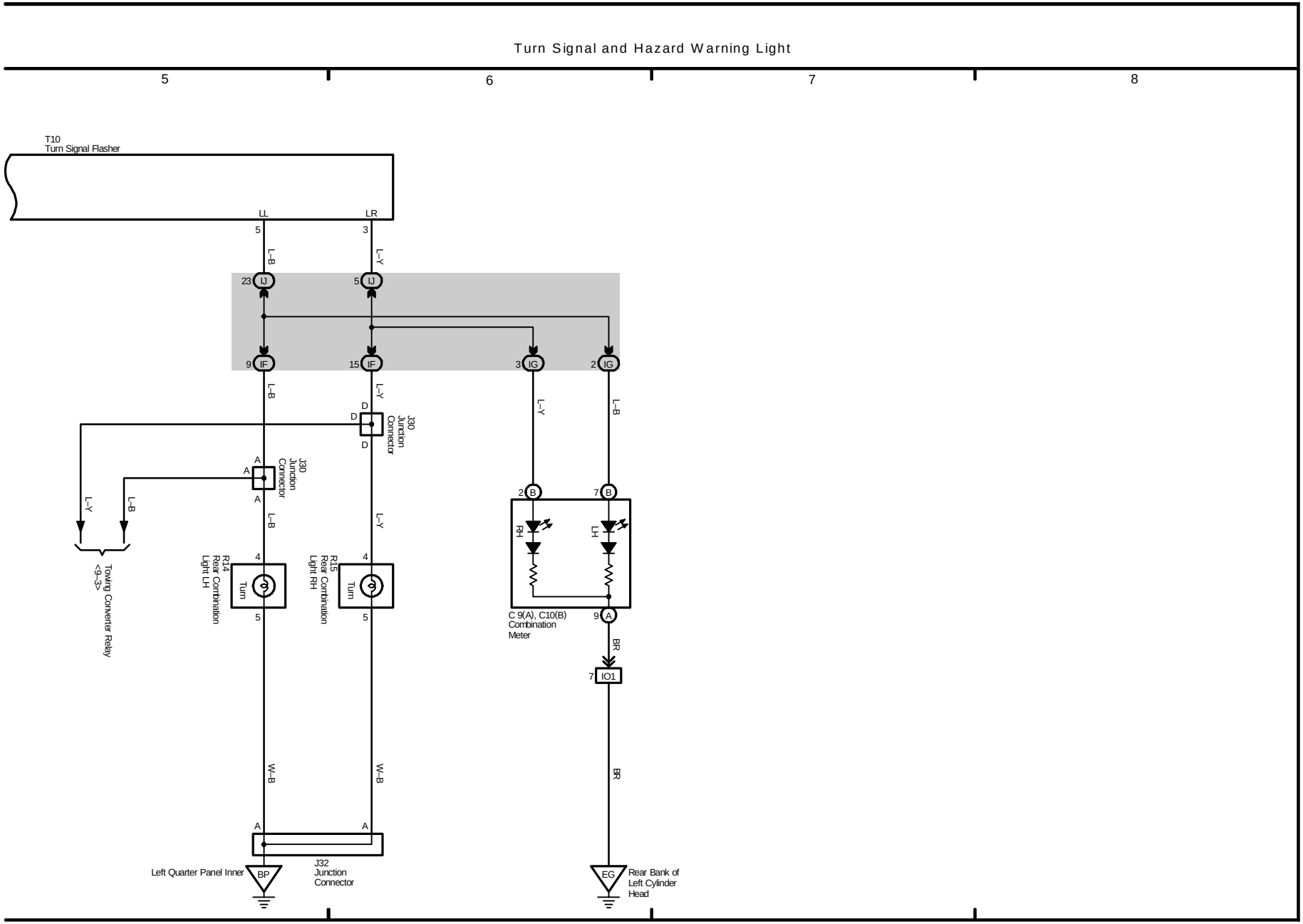
M OVERALL ELECTRICAL WIRING DIAGRAM



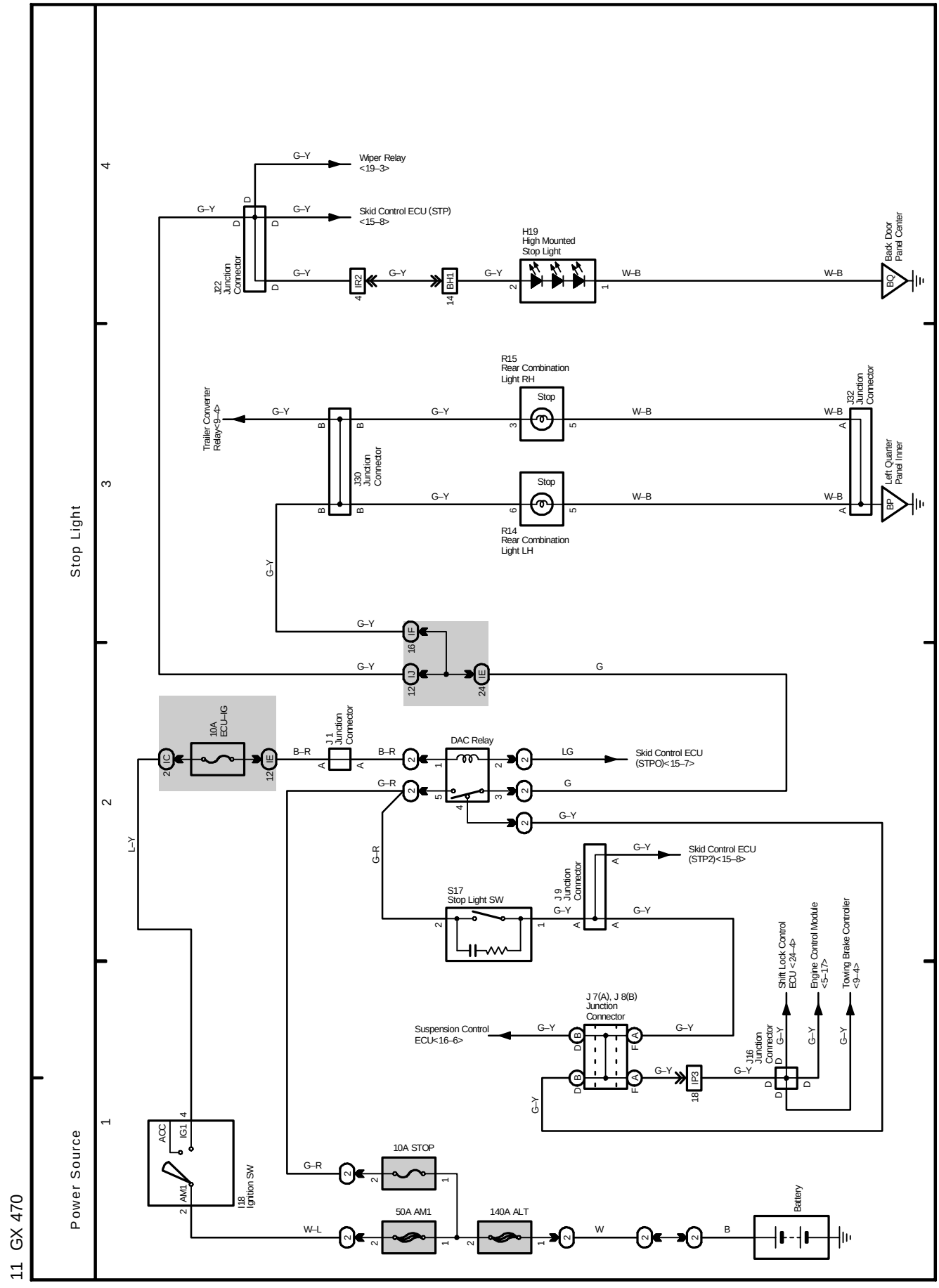

Power Source
Trailer Towing
1
2
3
4
A5 IB4
B
GR
IA2
30A TOWING
Battery
30A BRAKE CTRL
40A TOWING
30A BATT CHG
50A AM1
140A ALT
W
I18 Ignition SW
ACC
IG1
AM1
W–L
B–Y
G
L–Y
10A IG1
IC
IE
20
J1 Junction Connector
GR–L
BATT CHG Relay
TOWING TAIL Relay
L
Body ECU <1–5>
IA1
BG1
J 2 Junction Connector
W–B
EB Front Left Fender
Turn Signal Flasher<10–5>
DAC Relay <11–3>
T13 Towing Converter Relay
+B
RTIN
LTIN
STIN
RTOT
LTOT
GND
L–R
L–O
L–B
G–Y
BF1
BR
R
L
Y
C8 ID2
T14 Trailer Socket
STTR
STTL
BRK
TAIL
BATT
B/UP
T 8 Towing Brake Controller
STOP
TAIL
Stop Light SW <11–1>
TAIL Fuse <8–4>
R–Y
ID2
R–B
BK/UP LP Relay <13–4>
J32 Junction Connector
BP Left Quarter Panel Inner
J31 Junction Connector
J14 Junction Connector
IJ Near the Right Side of Steering Column

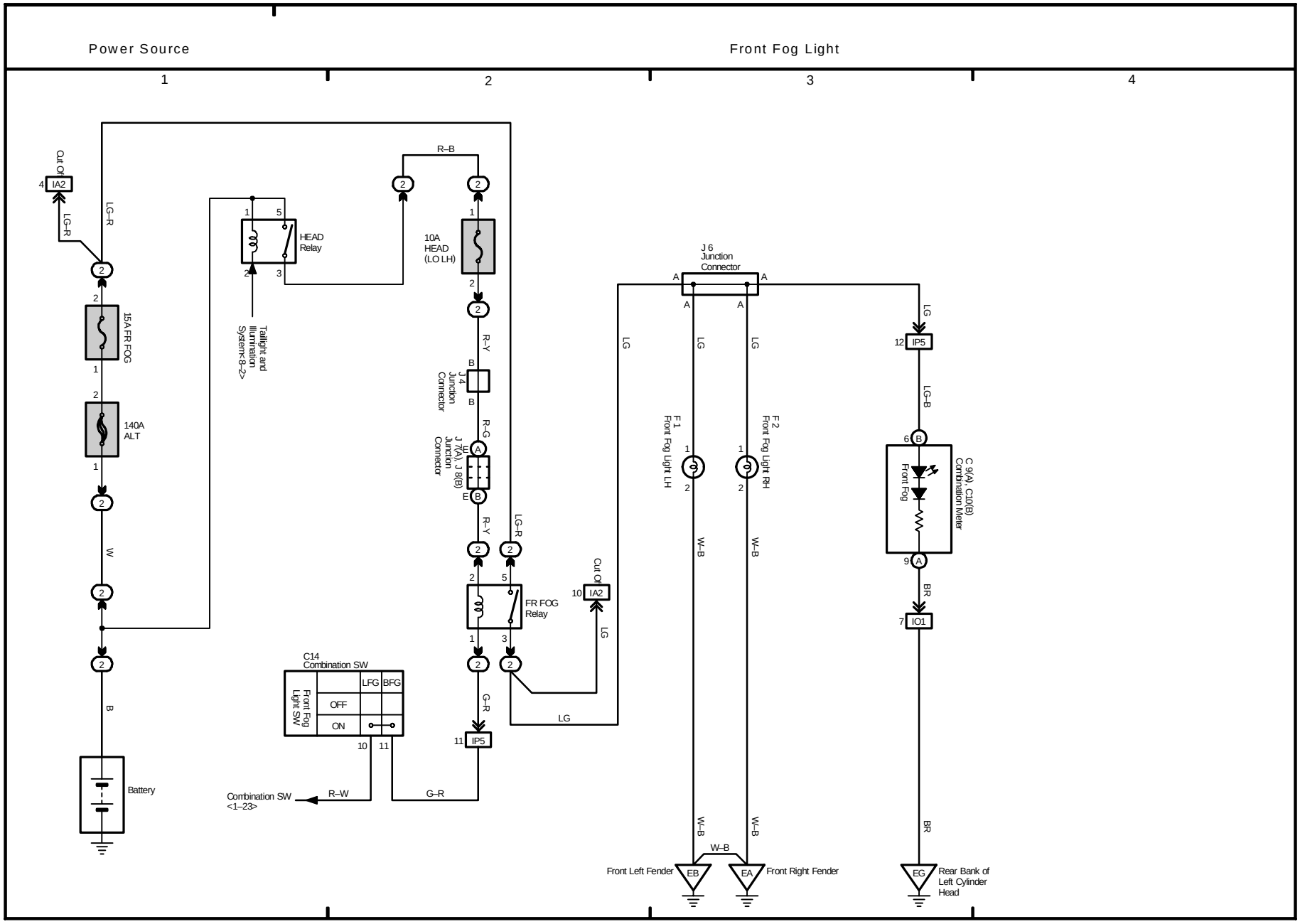
M OVERALL ELECTRICAL WIRING DIAGRAM



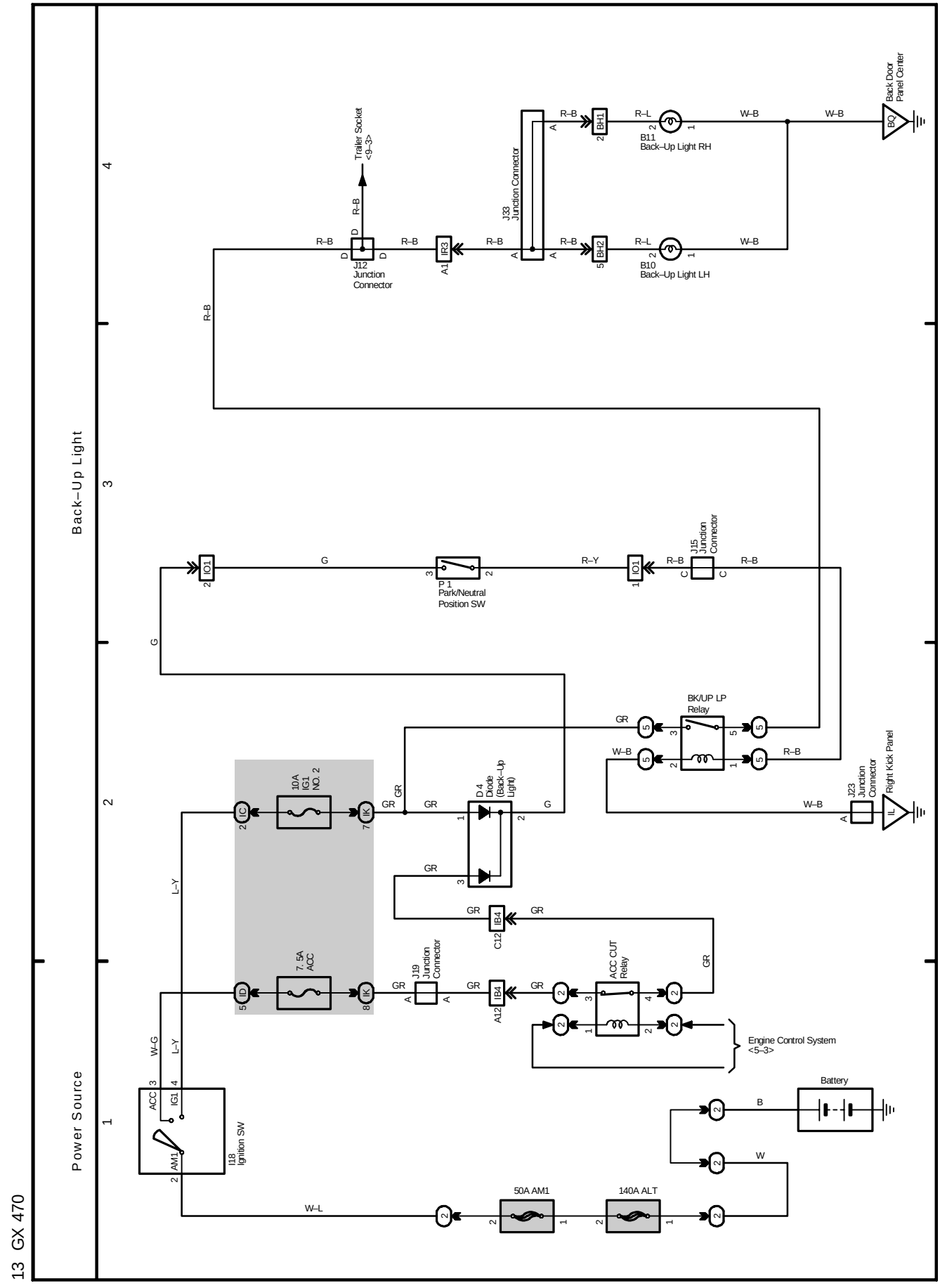

Turn Signal and Hazard Warning Light
5
6
7
8
T10
Turn Signal Flasher
LL
LR
5
3
L–B
L–Y
23 IJ
5 IJ
9 IF
15 IF
3 IG
2 IG
L–B
L–Y
L–Y
L–B
D
D
D
J30
Junction
Connector
A
A
A
J30
Junction
Connector
L–Y
L–B
L–B
L–Y
2 B
7 B
RH
LH
4
4
R14
Rear Combination
Light LH
Turn
R15
Rear Combination
Light RH
Turn
5
5
Towing Converter Relay
<9–3>
C 9(A), C10(B)
Combination
Meter
9 A
BR
7 IO1
W–B
W–B
BR
A
A
Left Quarter Panel Inner
BP
J32
Junction
Connector
EG
Rear Bank of
Left Cylinder
Head

M OVERALL ELECTRICAL WIRING DIAGRAM

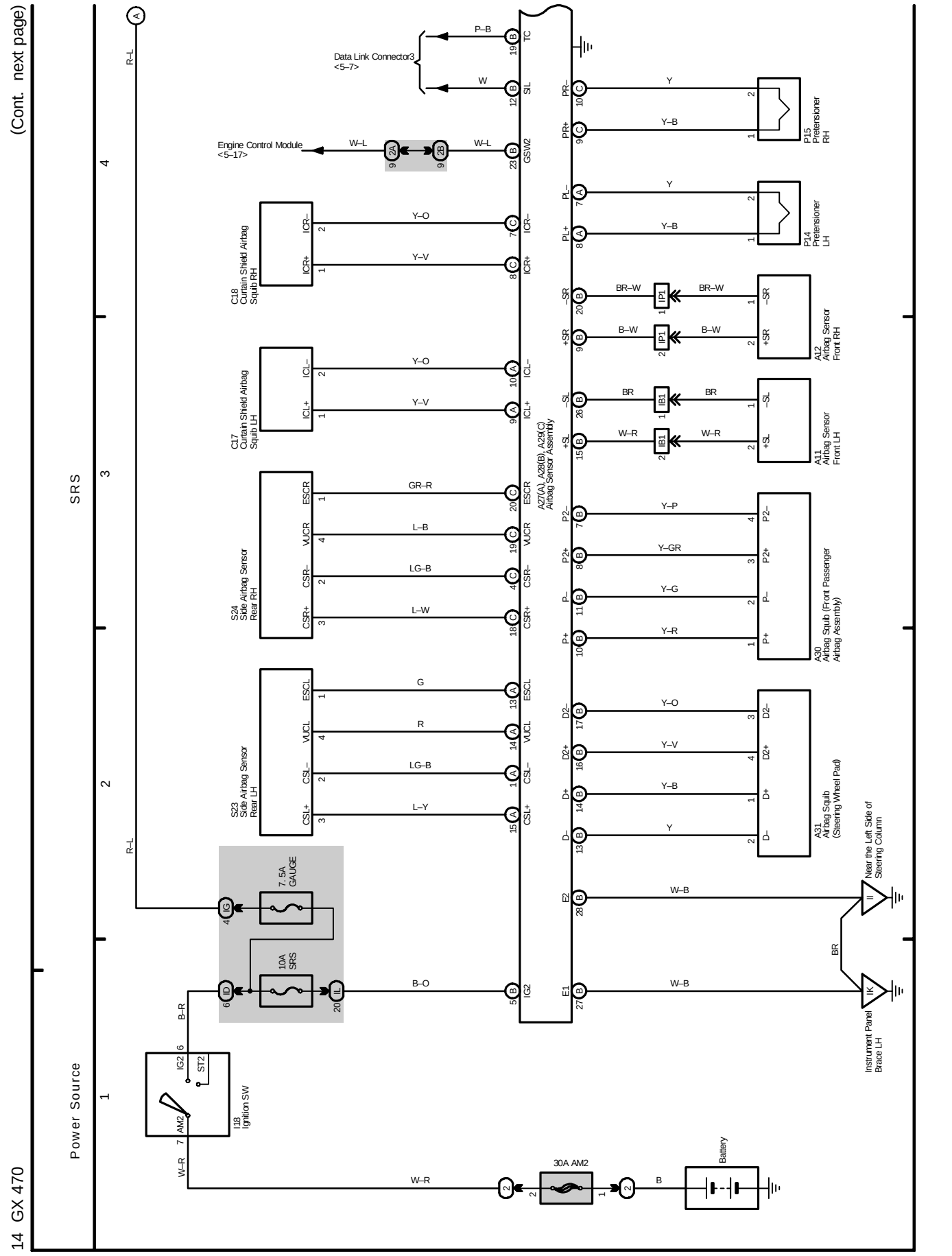


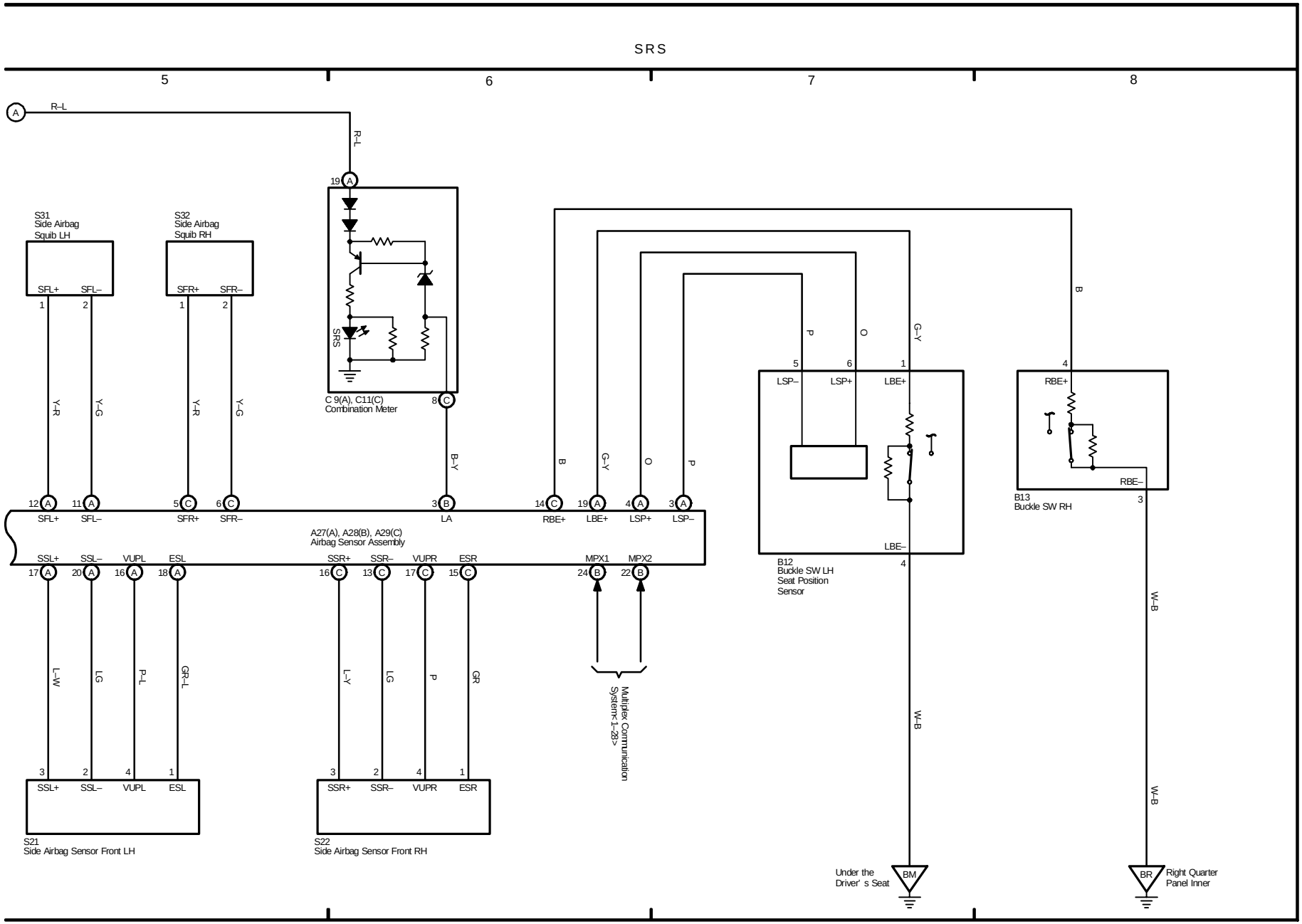

Power Source
Front Fog Light
1
2
3
4
Cur Off
IA2
LG–R
15A FR FOG
140A ALT
W
B
Battery
HEAD Relay
Taillight and Illumination System<8–2>
R–B
10A HEAD (LO LH)
R–Y
J 4 Junction Connector
R–G
J 7(A), J 8(B) Junction Connector
FR FOG Relay
LG
G–R
IP5
C14 Combination SW
LFG
BFG
Front Fog Light SW
OFF
ON
Combination SW <1–23>
R–W
J 6 Junction Connector
F 1 Front Fog Light LH
F 2 Front Fog Light RH
W–B
LG–B
BR
IO1
C 9(A), C10(B) Combination Meter
Front Fog
Front Left Fender
EB
EA
Front Right Fender
EG
Rear Bank of Left Cylinder Head

M OVERALL ELECTRICAL WIRING DIAGRAM

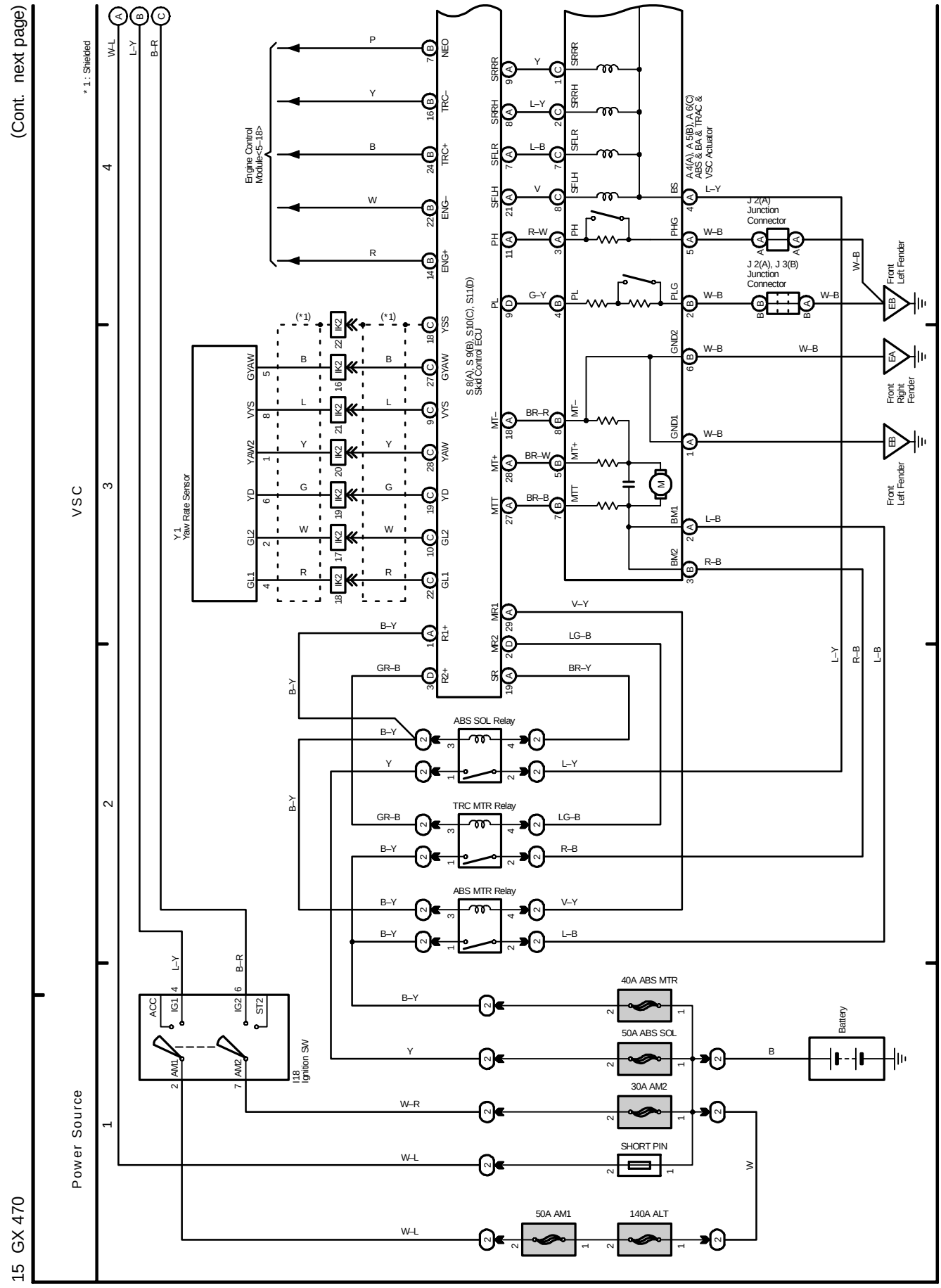


M OVERALL ELECTRICAL WIRING DIAGRAM

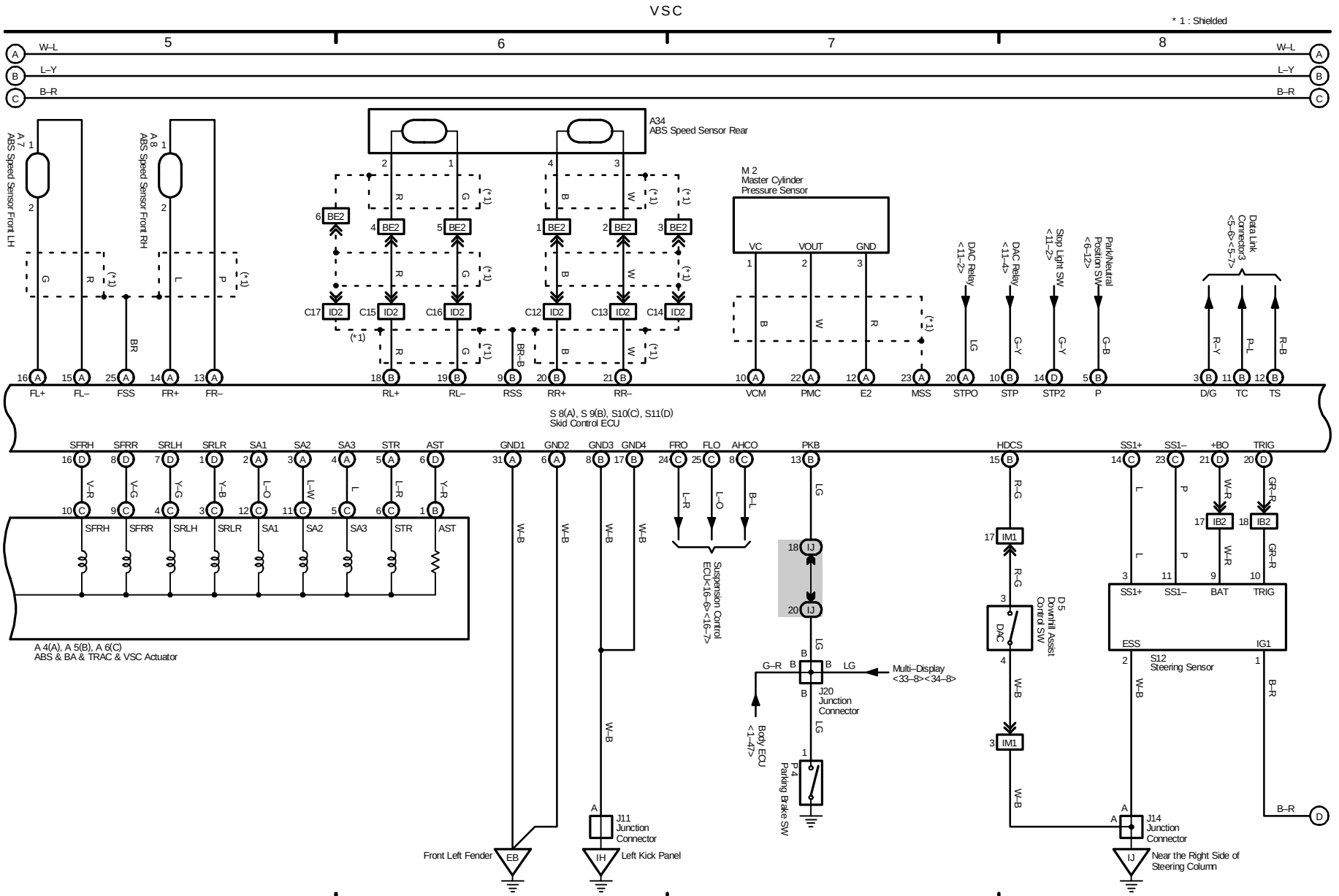



SRS
5
6
7
8
R–L
19 A
C 9(A), C11(C)
Combination Meter
8 C
B–Y
S31
Side Airbag
Squib LH
SFL+
SFL–
1
2
Y–R
Y–G
12 A
11 A
SFL+
SFL–
S32
Side Airbag
Squib RH
SFR+
SFR–
1
2
Y–R
Y–G
5 C
6 C
SFR+
SFR–
A27(A), A28(B), A29(C)
Airbag Sensor Assembly
3 B
LA
B
G–Y
O
P
14 C
19 A
4 A
3 A
RBE+
LBE+
LSP+
LSP–
P
O
G–Y
5
6
1
LSP–
LSP+
LBE+
LBE–
4
B12
Buckle SW LH
Seat Position
Sensor
B
4
RBE+
RBE–
3
B13
Buckle SW RH
SSL+
SSL–
VUPL
ESL
17 A
20 A
16 A
18 A
L–W
LG
P–L
GR–L
3
2
4
1
SSL+
SSL–
VUPL
ESL
S21
Side Airbag Sensor Front LH
SSR+
SSR–
VUPR
ESR
16 C
13 C
17 C
15 C
L–Y
LG
P
GR
3
2
4
1
SSR+
SSR–
VUPR
ESR
S22
Side Airbag Sensor Front RH
MPX1
MPX2
24 B
22 B
Multiplex Communication
System<1–28>
W–B
W–B
W–B
Under the
Driver' s Seat
BM
BR
Right Quarter
Panel Inner

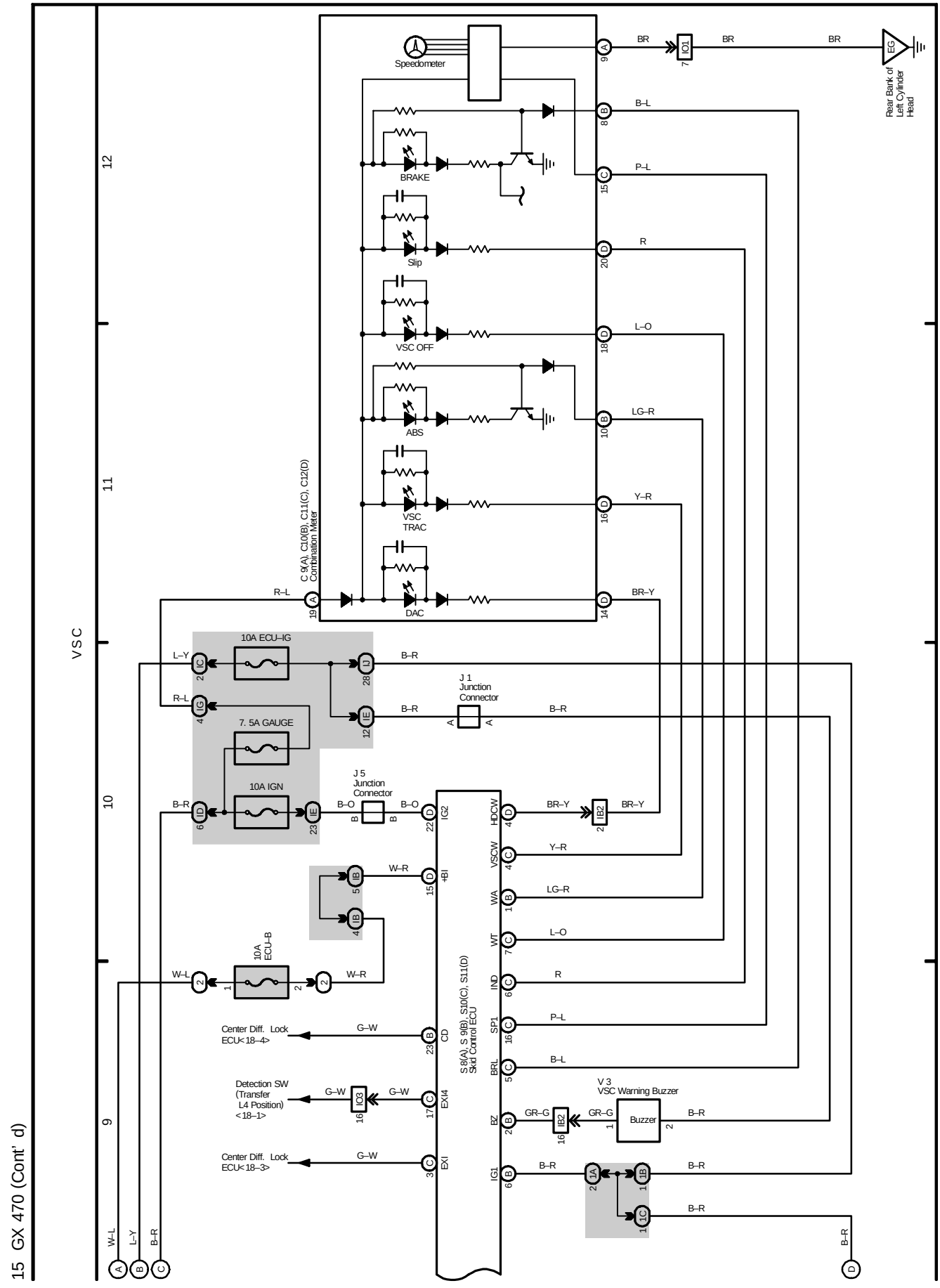
M OVERALL ELECTRICAL WIRING DIAGRAM



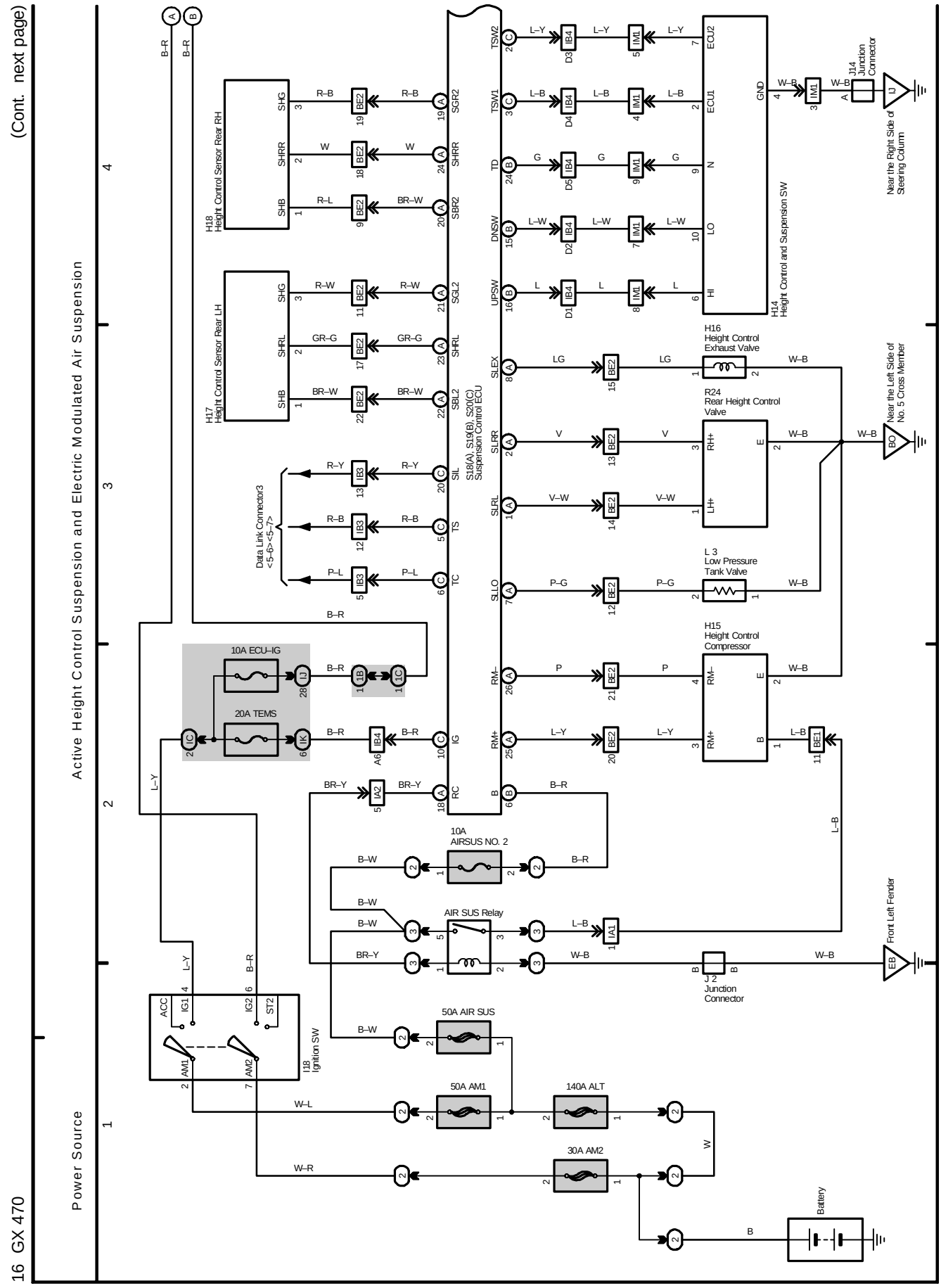
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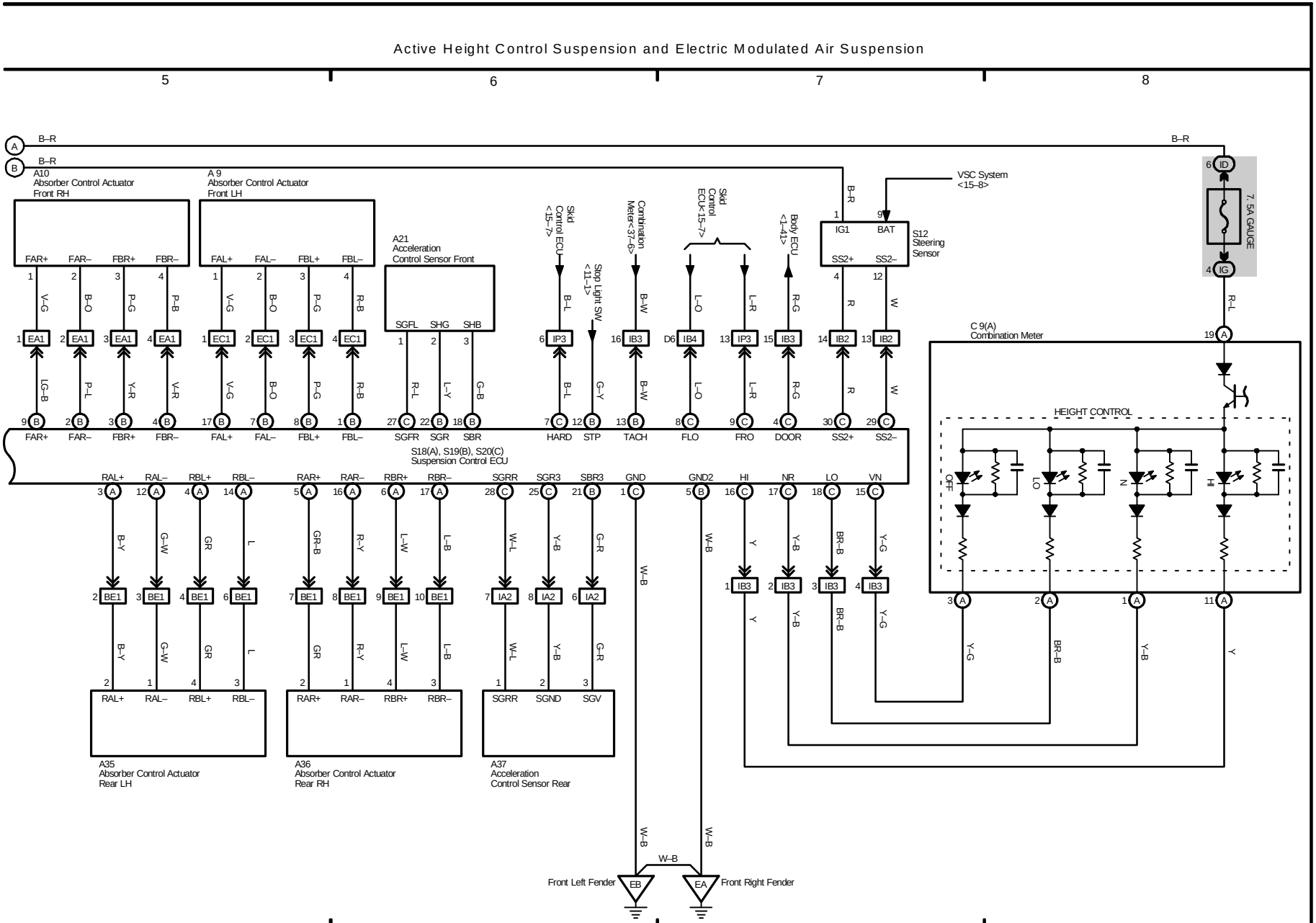
M OVERALL ELECTRICAL WIRING DIAGRAM



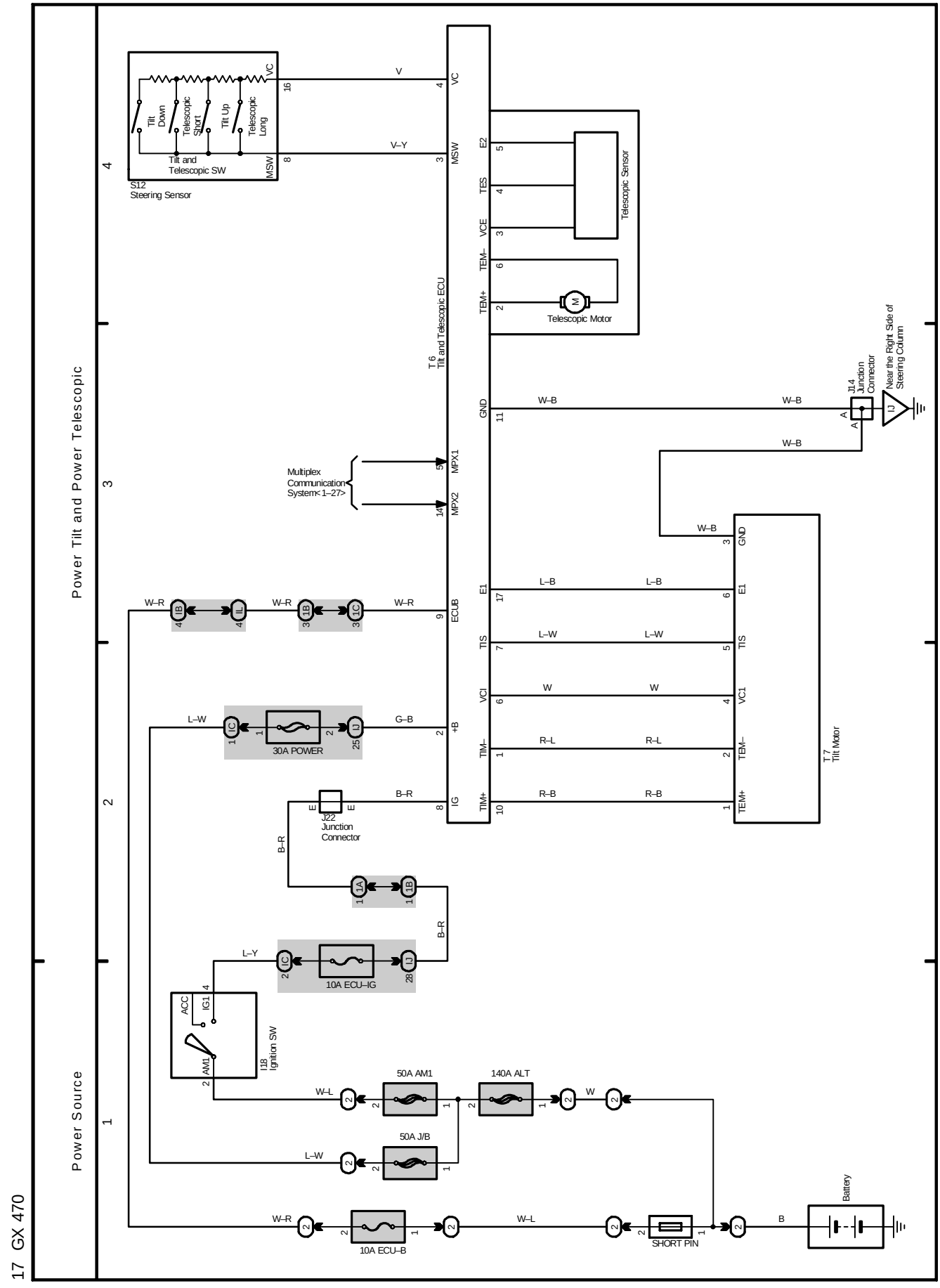
M OVERALL ELECTRICAL WIRING DIAGRAM

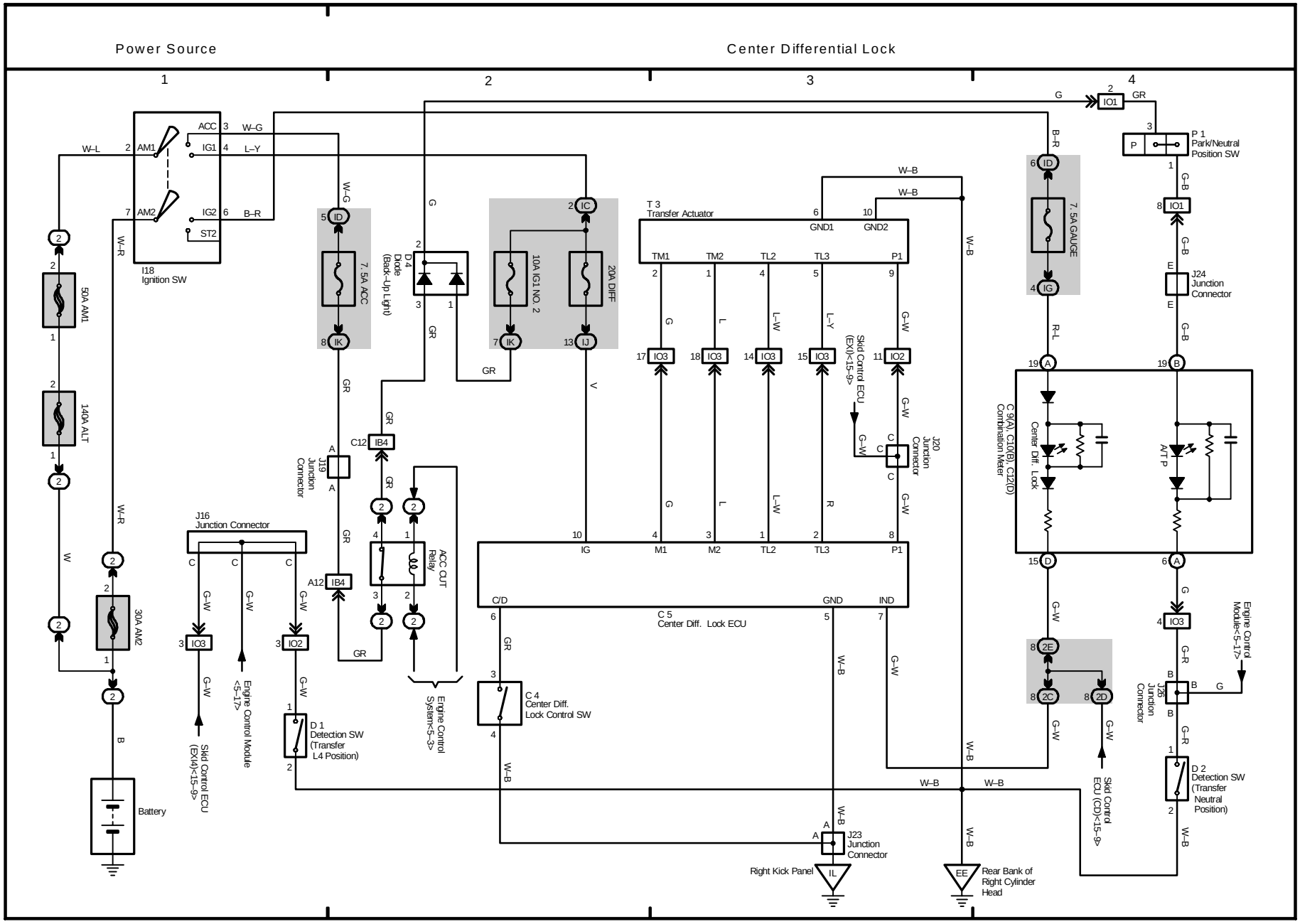


Active Height Control Suspension and Electric Modulated Air Suspension

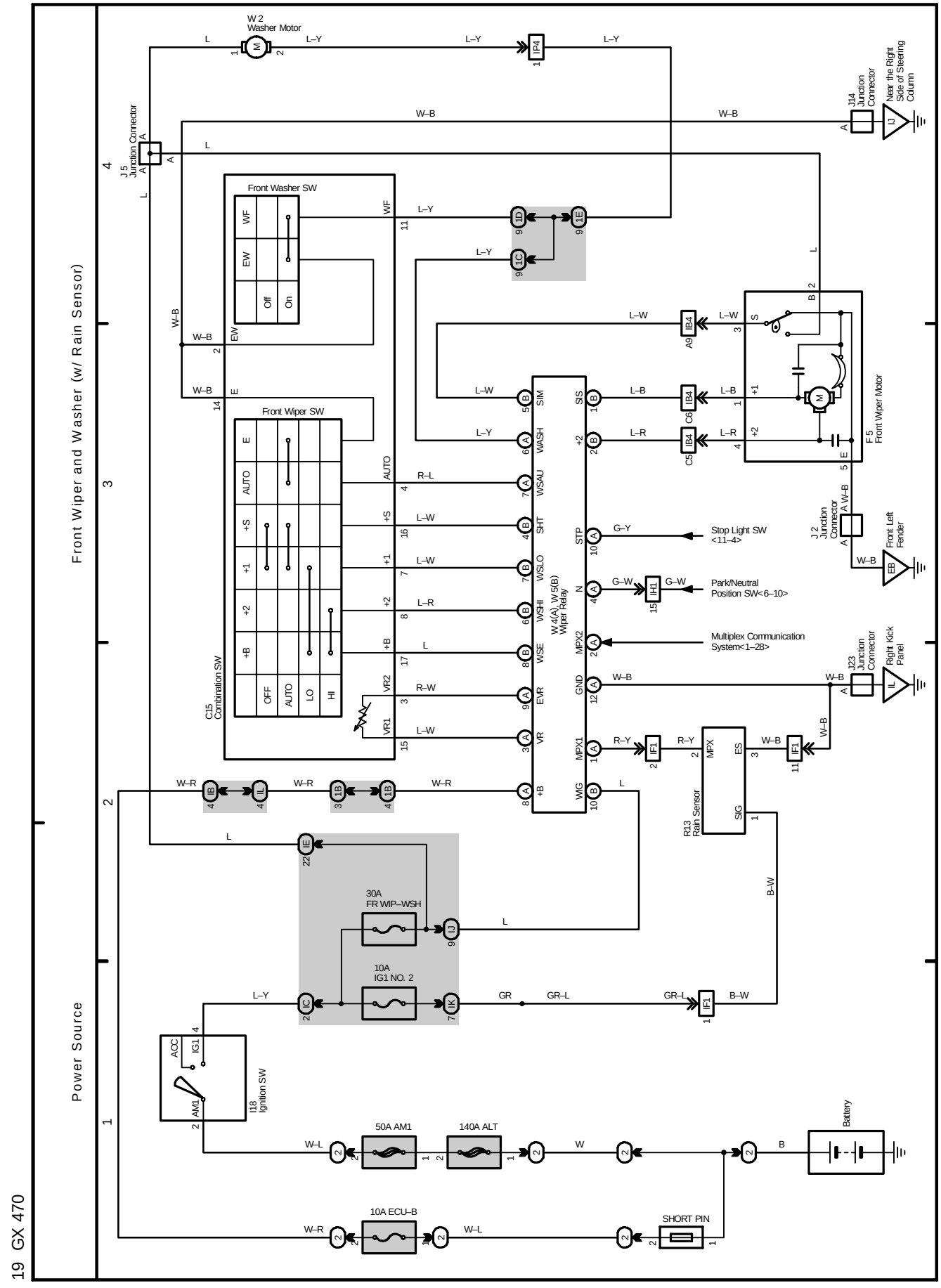


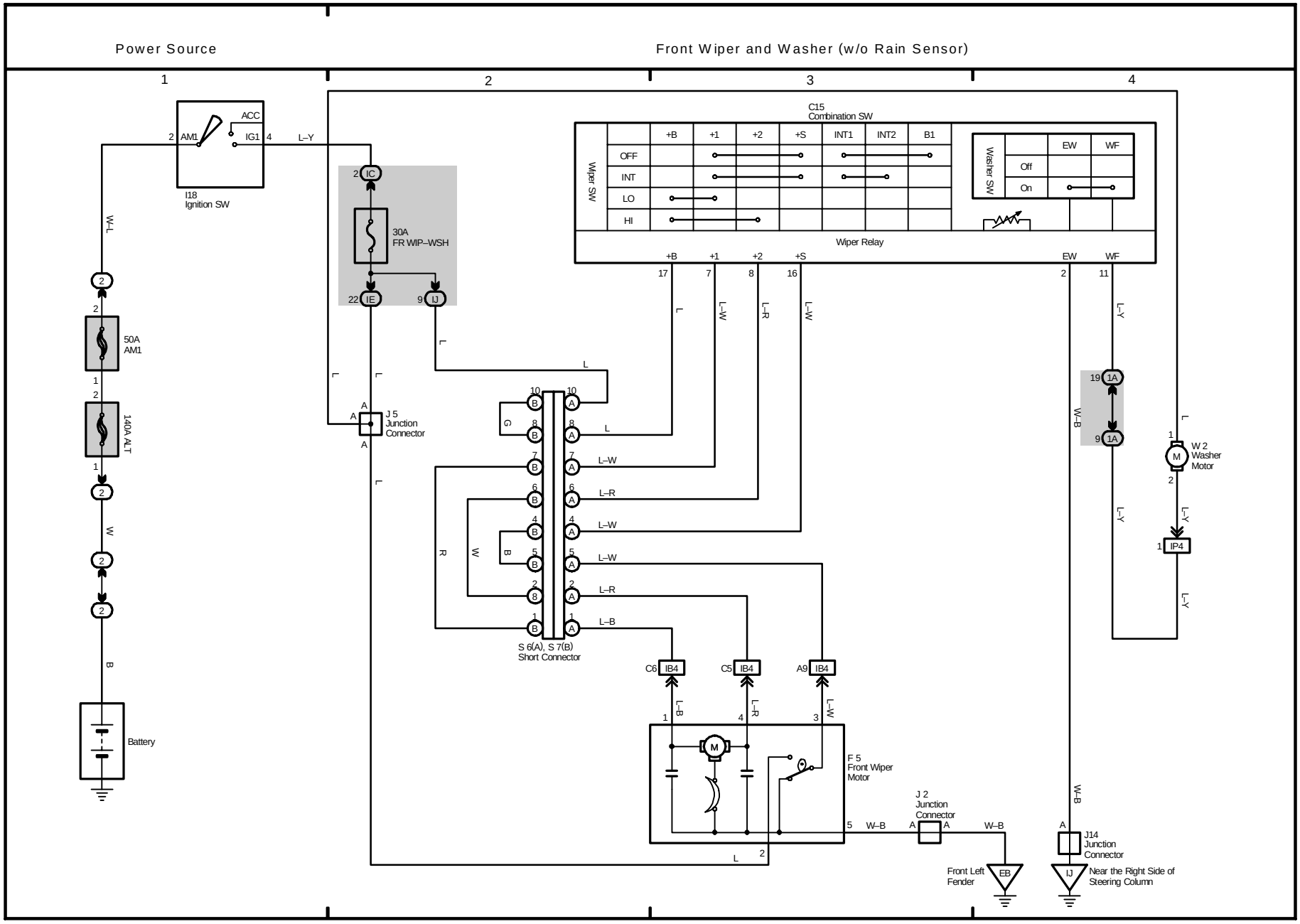
M OVERALL ELECTRICAL WIRING DIAGRAM



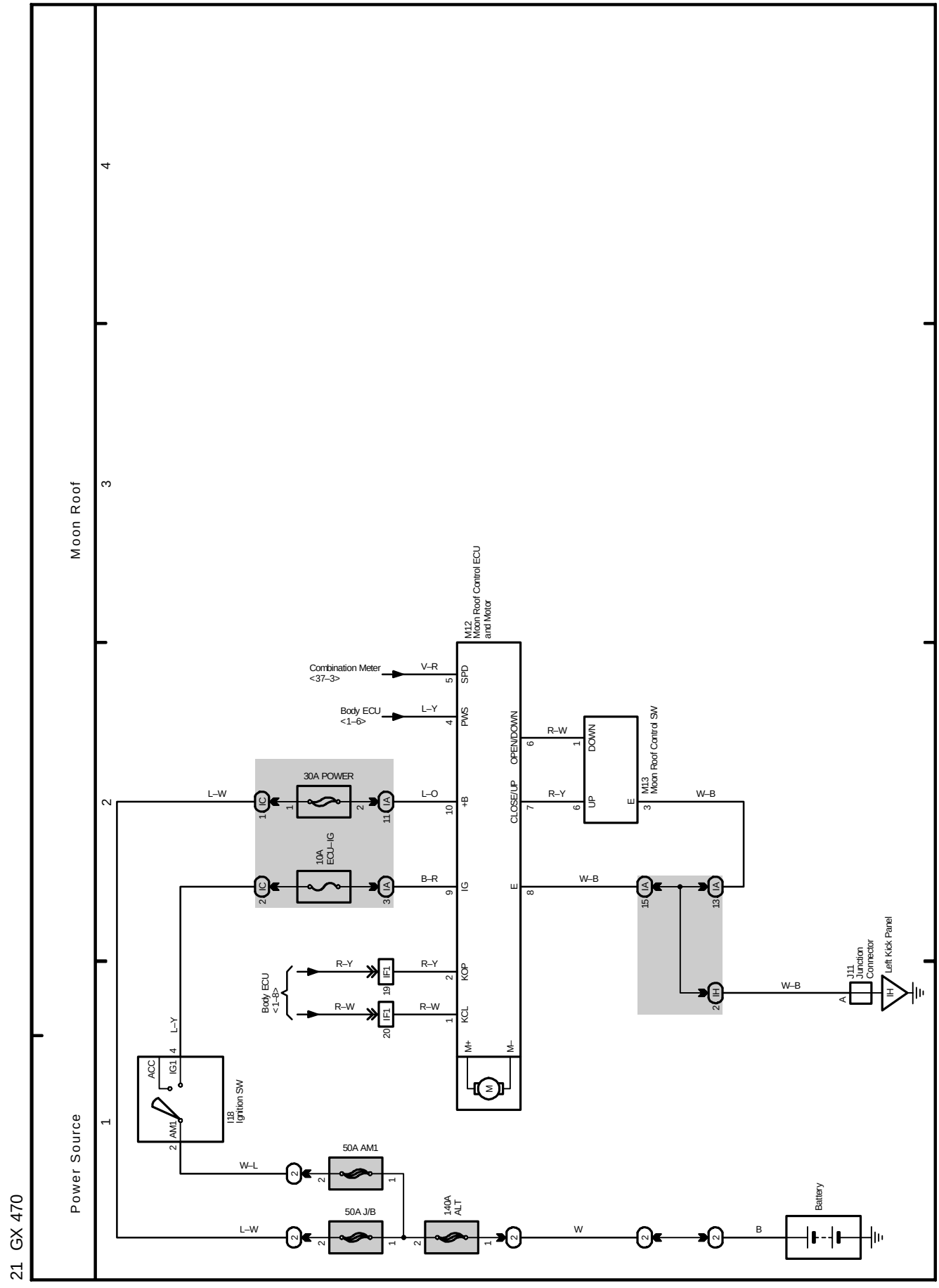

Power Source
Center Differential Lock
1
2
3
4
I18 Ignition SW
ACC
IG1
IG2
ST2
AM1
AM2
50A AM1
140A ALT
30A AM2
Battery
7.5A ACC
D4 Diode (Back-Up Light)
10A IG1 NO. 2
20A DIFF
T3 Transfer Actuator
GND1
GND2
TM1
TM2
TL2
TL3
P1
J19 Junction Connector
J16 Junction Connector
ACC CUT Relay
Engine Control System<5-3>
Engine Control Module <5-17>
Skid Control ECU (EXI)<15-9>
D1 Detection SW (Transfer L4 Position)
C4 Center Diff. Lock Control SW
C5 Center Diff. Lock ECU
C/D
GND
IND
J23 Junction Connector
Right Kick Panel
P1 Park/Neutral Position SW
7.5A GAUGE
J24 Junction Connector
C9(A), C10(B), C12(D) Combination Meter
Center Diff. Lock
A/T P
J20 Junction Connector
J28 Junction Connector
D2 Detection SW (Transfer Neutral Position)
Skid Control ECU (CD)<15-9>
Rear Bank of Right Cylinder Head

M OVERALL ELECTRICAL WIRING DIAGRAM

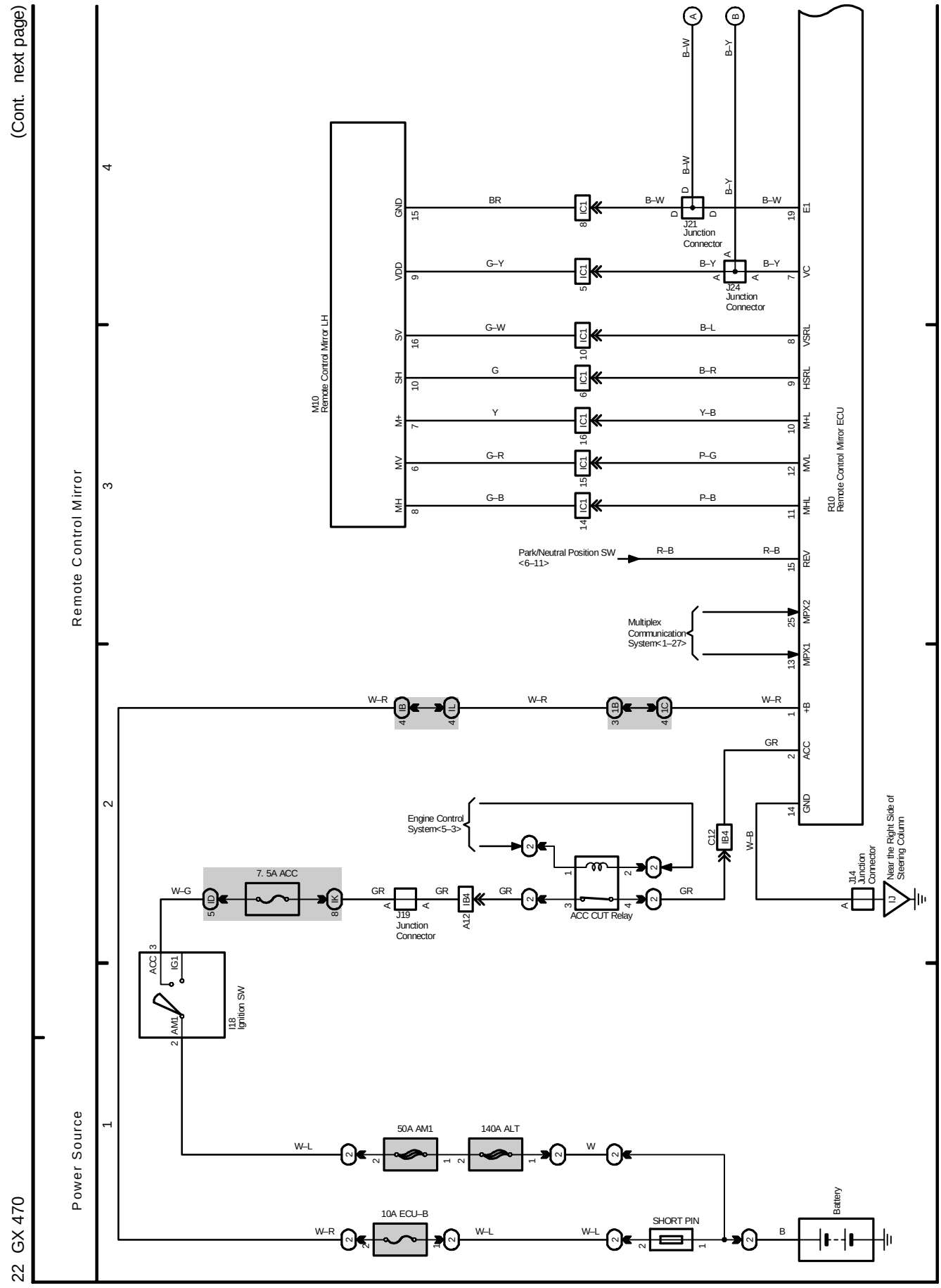


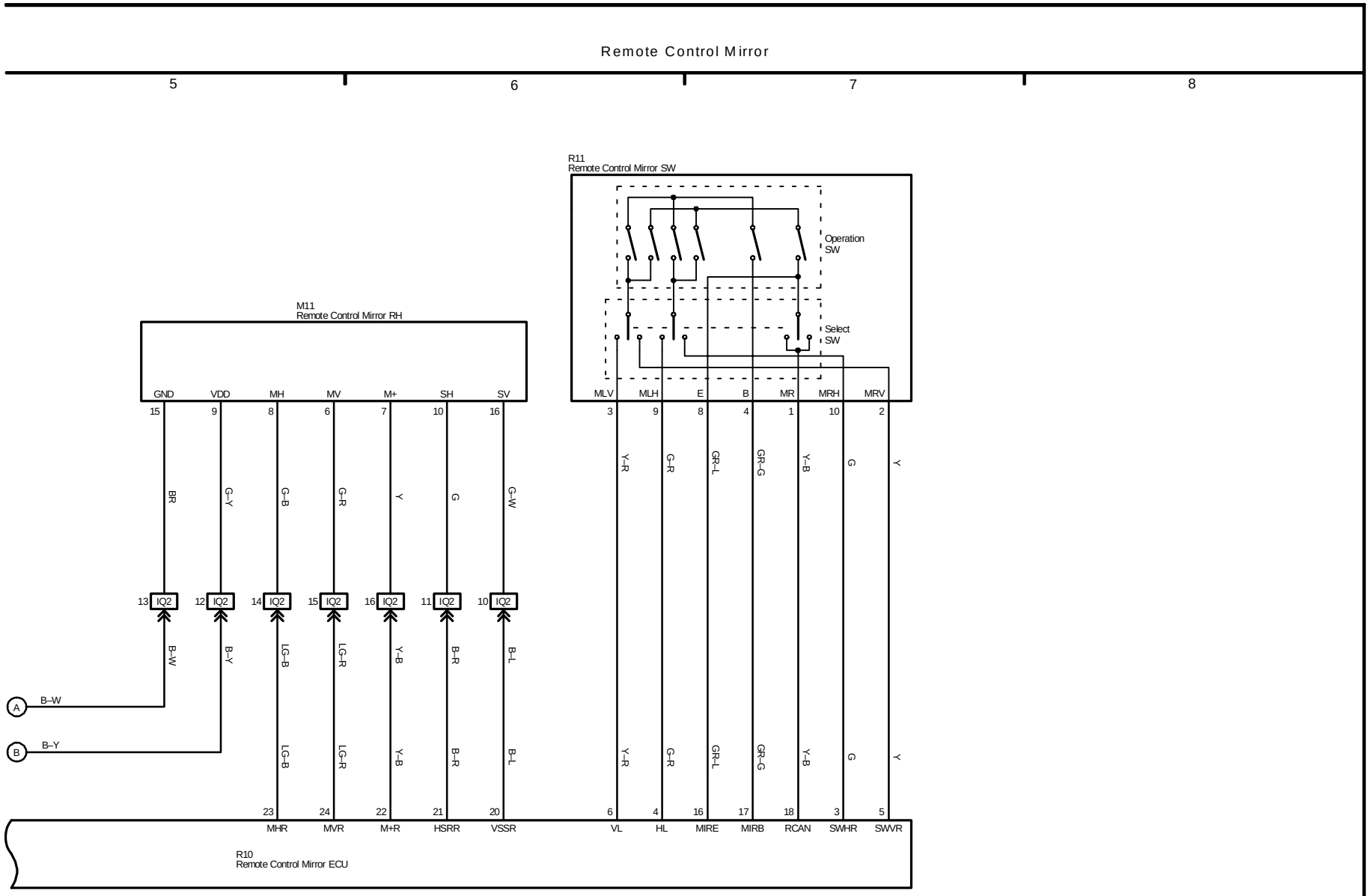

Power Source
Front Wiper and Washer (w/o Rain Sensor)
1
2
3
4
C15
Combination SW
Wiper SW
OFF
INT
LO
HI
+B
+1
+2
+S
INT1
INT2
B1
Washer SW
Off
On
EW
WF
Wiper Relay
ACC
AM1
IG1
I18
Ignition SW
30A
FR WIP–WSH
IC
IE
IJ
50A
AM1
140A ALT
Battery
J 5
Junction
Connector
S 6(A), S 7(B)
Short Connector
C6 IB4
C5 IB4
A9 IB4
F 5
Front Wiper
Motor
J 2
Junction
Connector
J14
Junction
Connector
Front Left
Fender
EB
Near the Right Side of
Steering Column
W 2
Washer
Motor
IP4
1A
L–Y
W–B
L–W
L–R
L–B
W–L
L
R
W
B
G

M OVERALL ELECTRICAL WIRING DIAGRAM

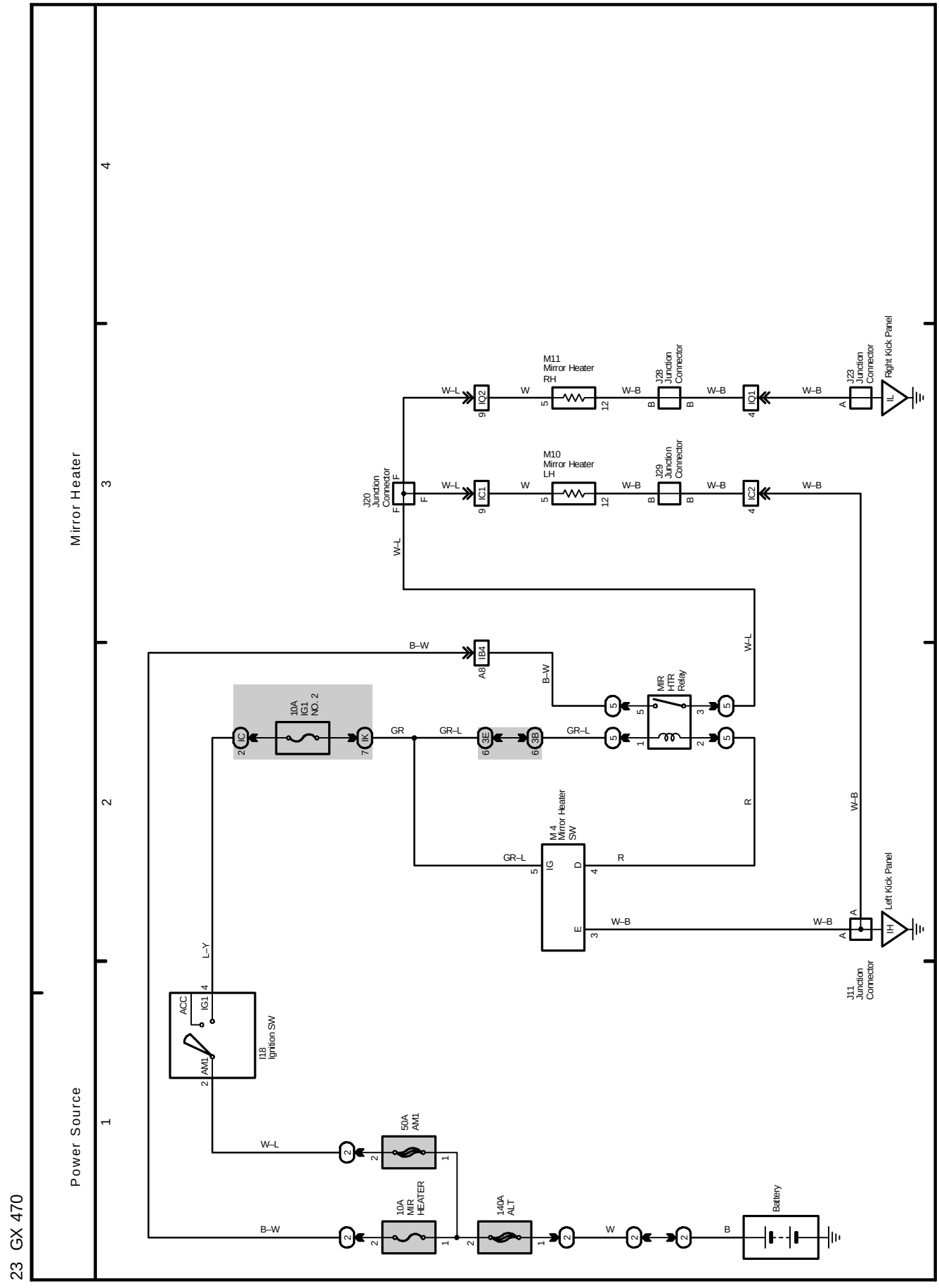


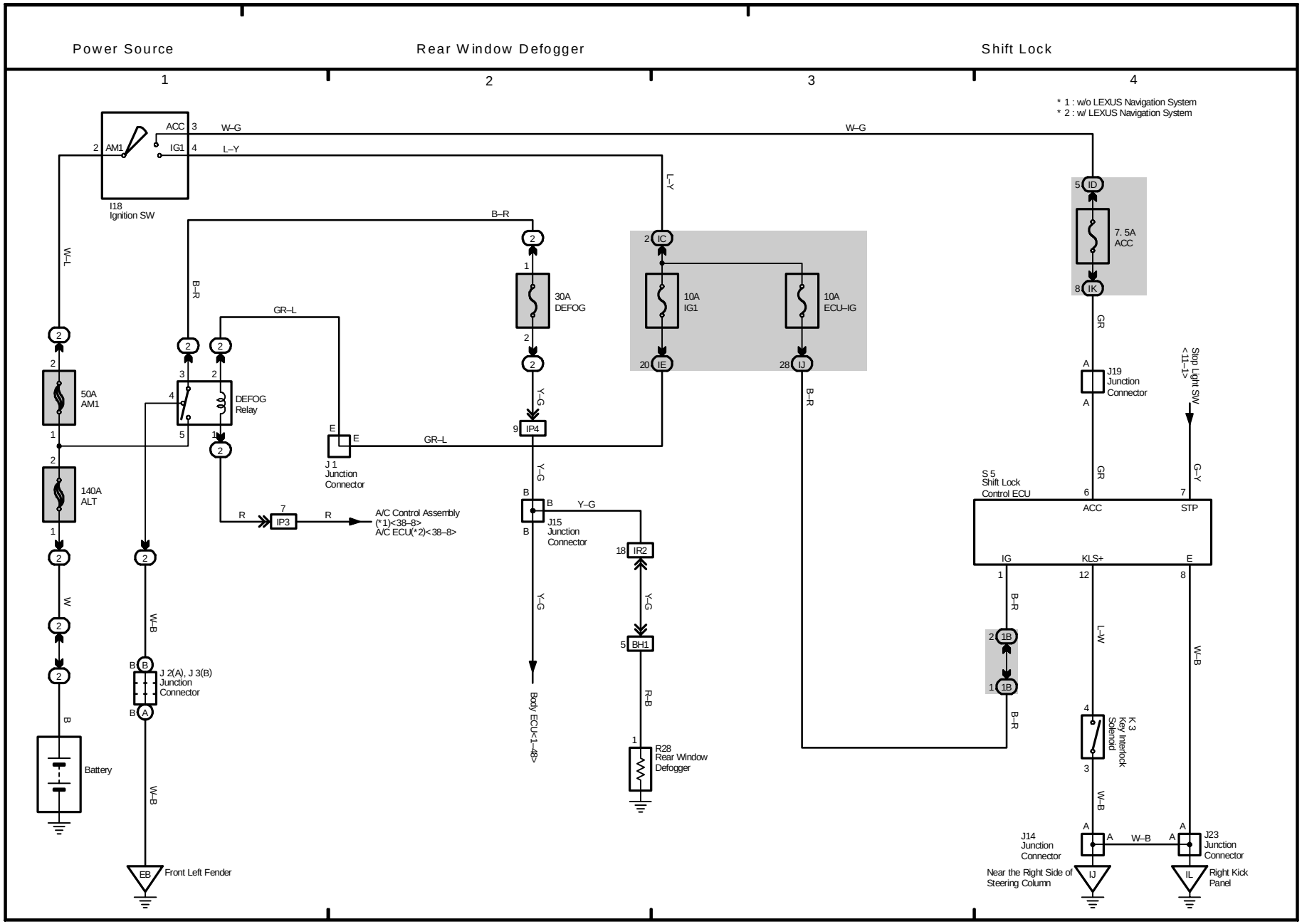
M OVERALL ELECTRICAL WIRING DIAGRAM



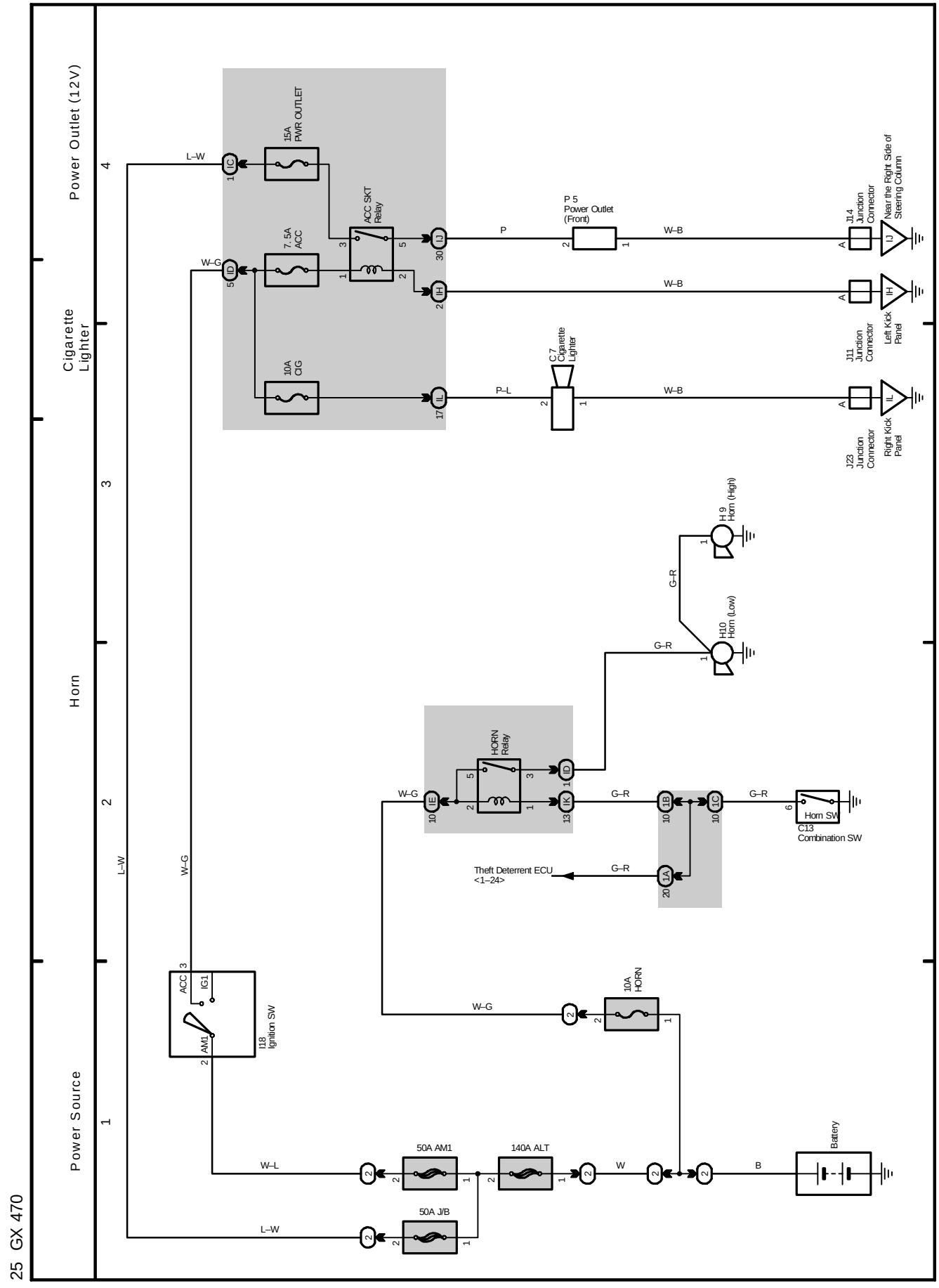

Remote Control Mirror
5
6
7
8
R11
Remote Control Mirror SW
Operation SW
Select SW
MLV
MLH
E
B
MR
MRH
MRV
M11
Remote Control Mirror RH
GND
VDD
MH
MV
M+
SH
SV
BR
G–Y
G–B
G–R
Y
G
G–W
Y–R
G–R
GR–L
GR–G
Y–B
G
Y
IQ2
B–W
B–Y
LG–B
LG–R
Y–B
B–R
B–L
A
B
MHR
MVR
M+R
HSRR
VSSR
VL
HL
MIRE
MIRB
RCAN
SWHR
SWVR
R10
Remote Control Mirror ECU

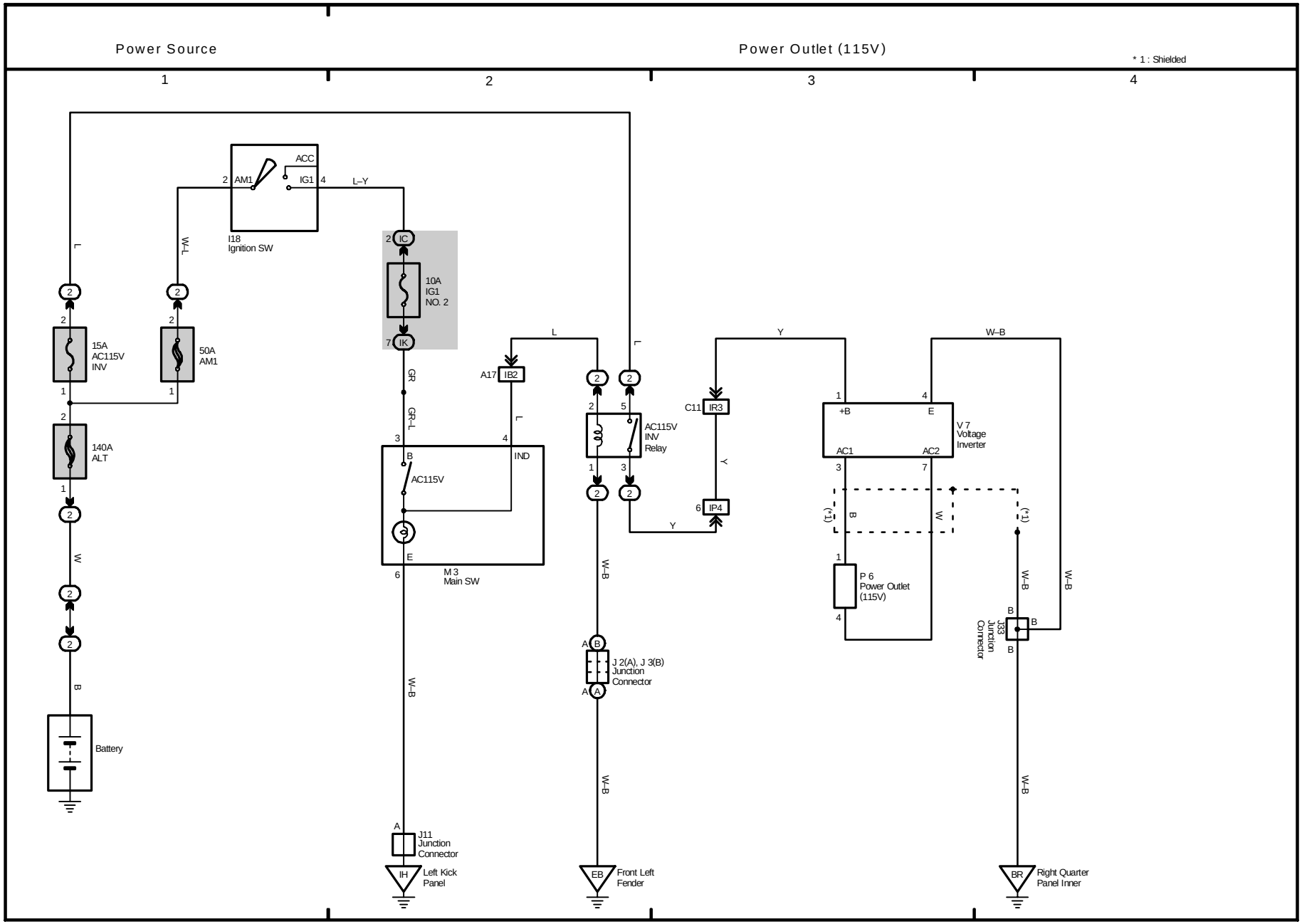
M OVERALL ELECTRICAL WIRING DIAGRAM



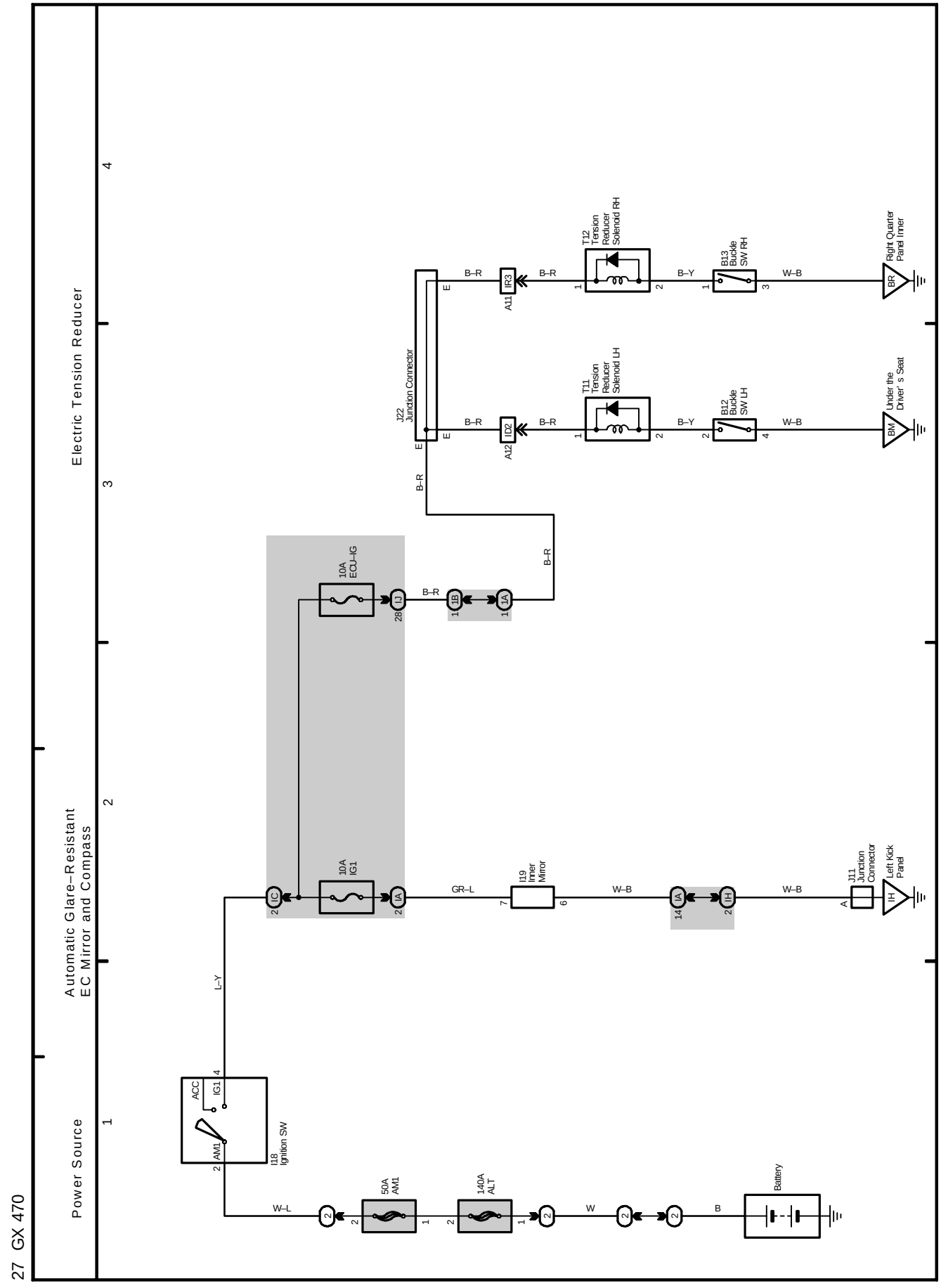

Power Source
Rear Window Defogger
Shift Lock
1
2
3
4
* 1 : w/o LEXUS Navigation System
* 2 : w/ LEXUS Navigation System
I18
Ignition SW
ACC
AM1
IG1
W–G
L–Y
W–L
B–R
GR–L
50A
AM1
140A
ALT
Battery
DEFOG
Relay
30A
DEFOG
10A
IG1
10A
ECU–IG
7. 5A
ACC
J 1
Junction
Connector
J15
Junction
Connector
Y–G
IP3
IP4
IR2
BH1
R28
Rear Window
Defogger
R–B
A/C Control Assembly
(*1)<38–8>
A/C ECU(*2)<38–8>
Body ECU<1–48>
J 2(A), J 3(B)
Junction
Connector
W–B
EB
Front Left Fender
J19
Junction
Connector
GR
S 5
Shift Lock
Control ECU
ACC
STP
IG
KLS+
E
G–Y
Stop Light SW
<11–1>
B–R
L–W
1B
K 3
Key Interlock
Solenoid
J14
Junction
Connector
Near the Right Side of
Steering Column
IJ
J23
Junction
Connector
IL
Right Kick
Panel

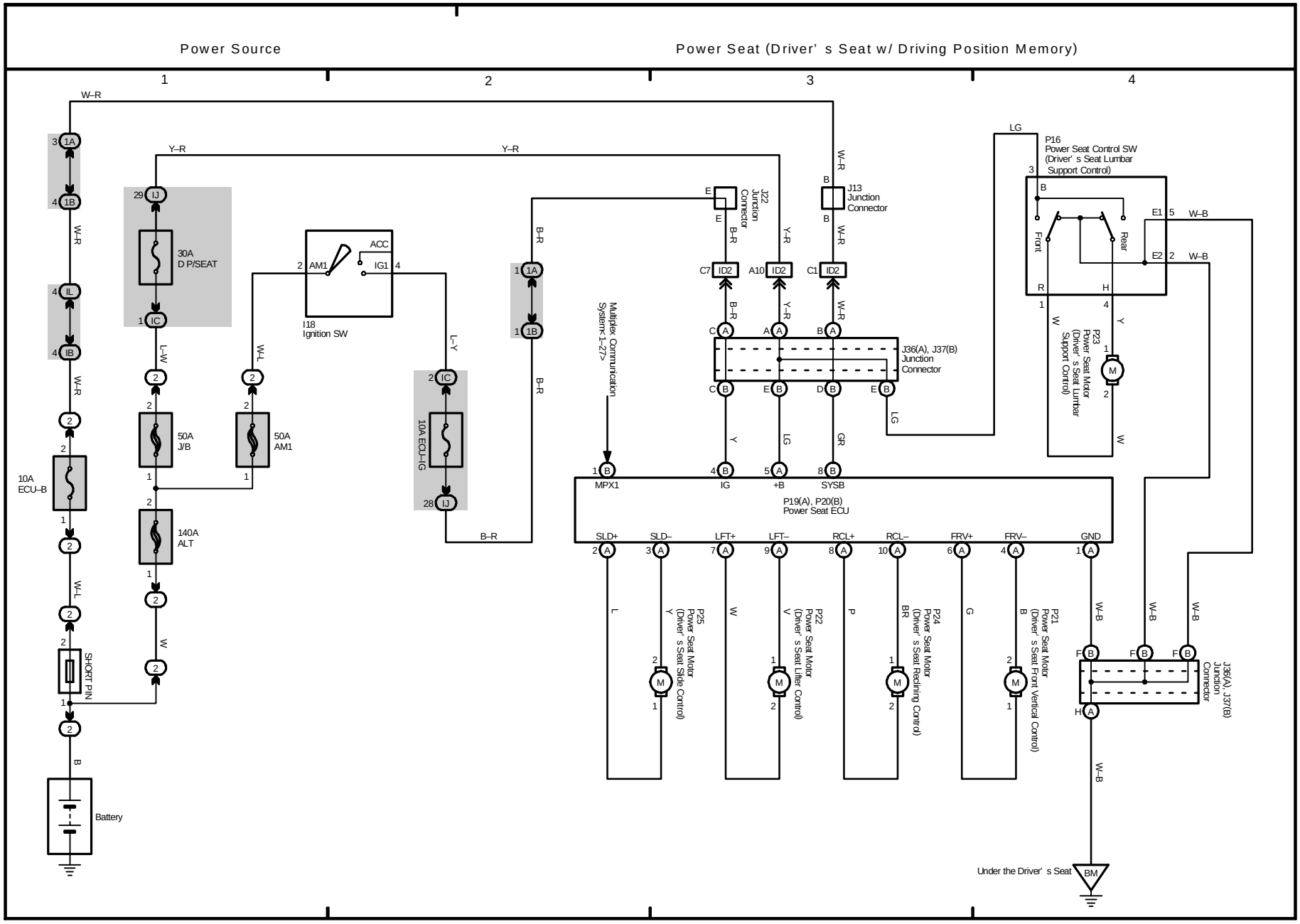
M OVERALL ELECTRICAL WIRING DIAGRAM



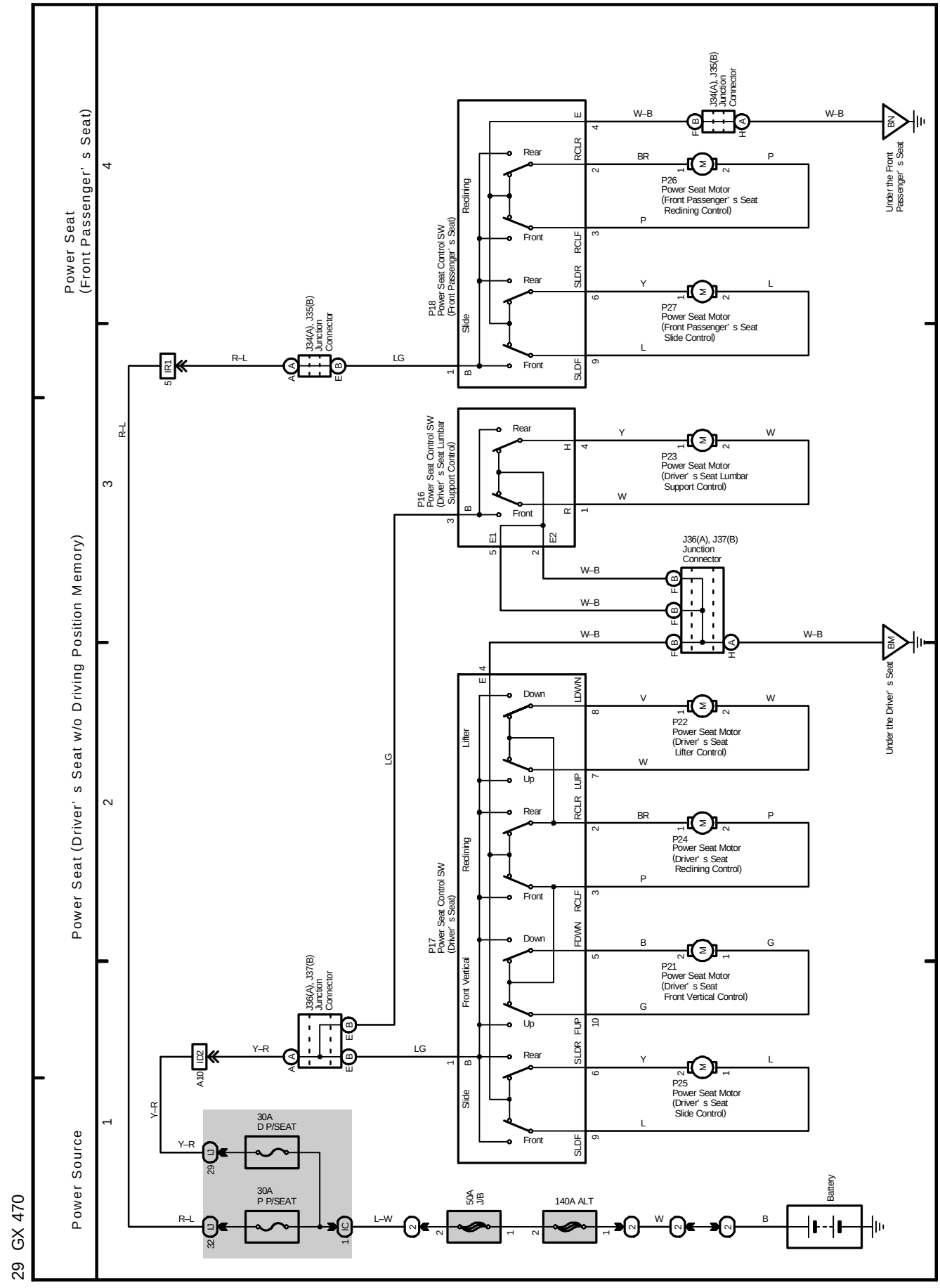

Power Source
Power Outlet (115V)
* 1 : Shielded
1
2
3
4
ACC
AM1
IG1
L–Y
I18
Ignition SW
IC
10A
IG1
NO. 2
IK
15A
AC115V
INV
50A
AM1
140A
ALT
Battery
GR
GR–L
M 3
Main SW
AC115V
IND
IB2
AC115V
INV
Relay
C11
IR3
IP4
V 7
Voltage
Inverter
+B
E
AC1
AC2
P 6
Power Outlet
(115V)
J 2(A), J 3(B)
Junction
Connector
J11
Junction
Connector
Left Kick
Panel
Front Left
Fender
J33
Junction
Connector
Right Quarter
Panel Inner

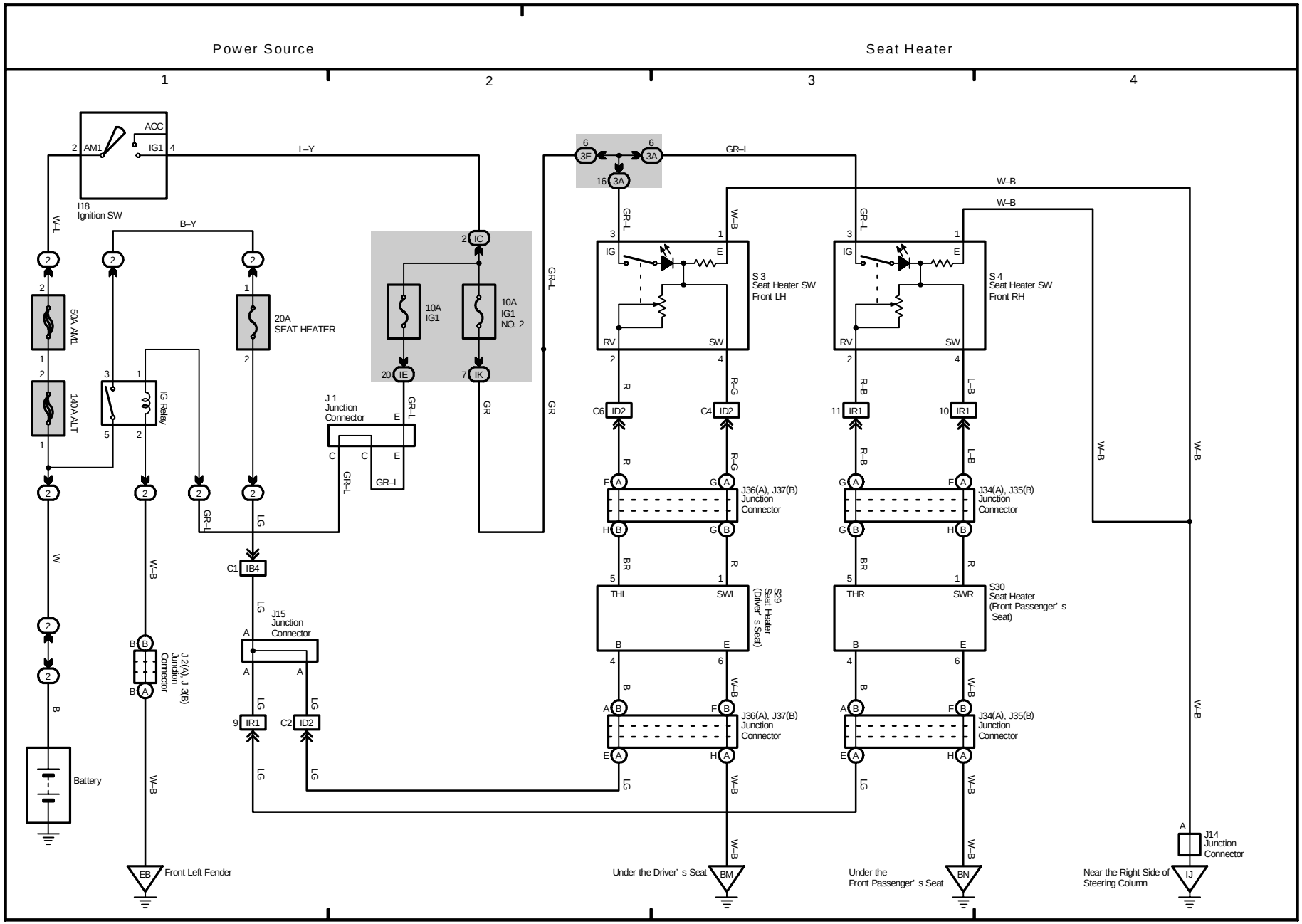
M OVERALL ELECTRICAL WIRING DIAGRAM



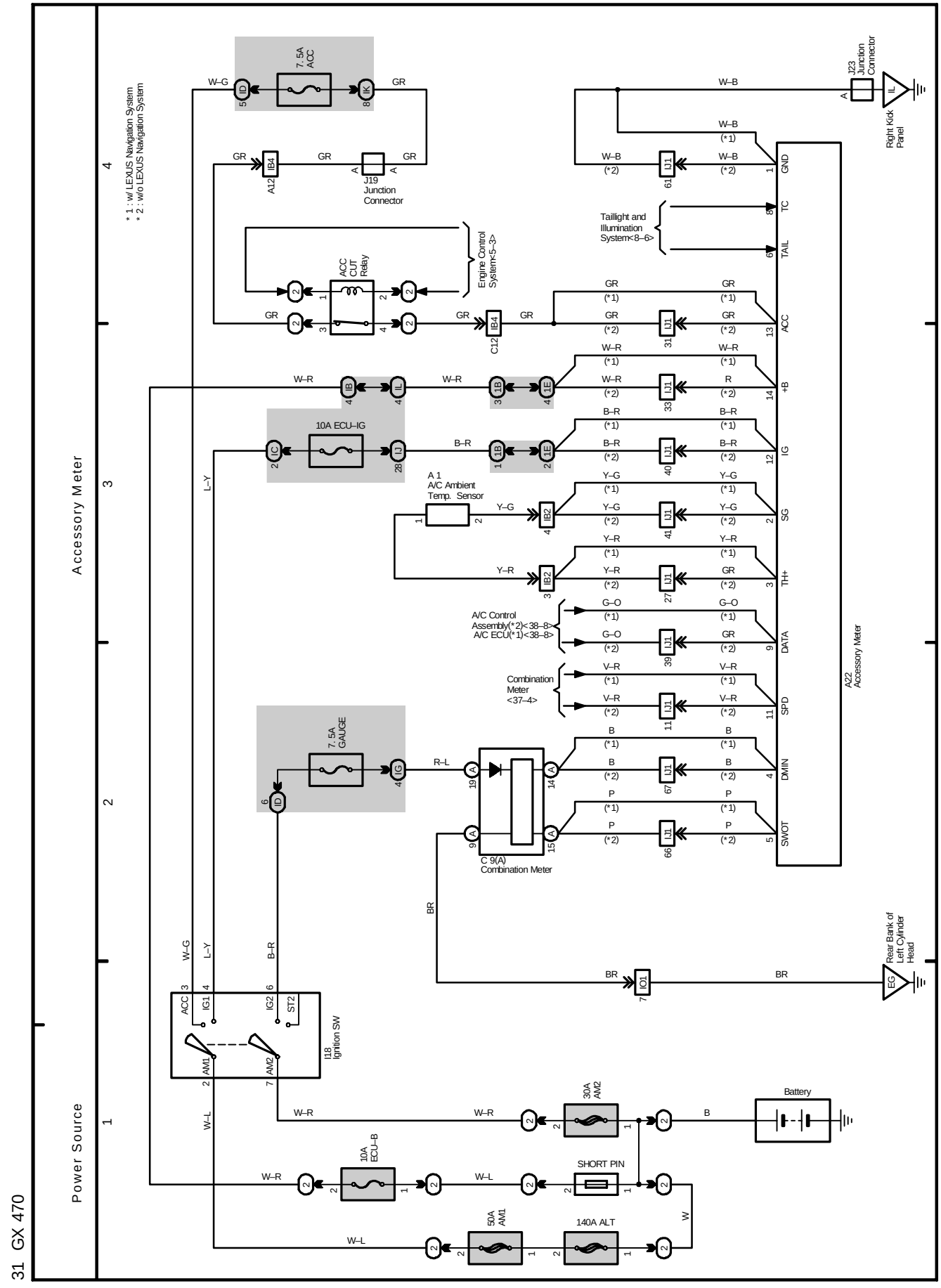

Power Source
Power Seat (Driver' s Seat w/ Driving Position Memory)
1
2
3
4
W–R
Y–R
B–R
L–W
L–Y
W–L
B
LG
Y
GR
L
W
P
BR
G
V
30A
D P/SEAT
50A
J/B
50A
AM1
140A
ALT
10A
ECU–B
10A ECU–IG
SHORT PIN
Battery
ACC
IG1
AM1
I18
Ignition SW
122
Junction
Connector
J13
Junction
Connector
J36(A), J37(B)
Junction
Connector
Multiplex Communication
System<1–27>
MPX1
IG
+B
SYSB
P19(A), P20(B)
Power Seat ECU
SLD+
SLD–
LFT+
LFT–
RCL+
RCL–
FRV+
FRV–
GND
P16
Power Seat Control SW
(Driver' s Seat Lumbar
Support Control)
Front
Rear
P23
Power Seat Motor
(Driver' s Seat Lumbar
Support Control)
P25
Power Seat Motor
(Driver' s Seat Slide Control)
P22
Power Seat Motor
(Driver' s Seat Lifter Control)
P24
Power Seat Motor
(Driver' s Seat Reclining Control)
P21
Power Seat Motor
(Driver' s Seat Front Vertical Control)
J36(A), J37(B)
Junction
Connector
Under the Driver' s Seat
BM

M OVERALL ELECTRICAL WIRING DIAGRAM

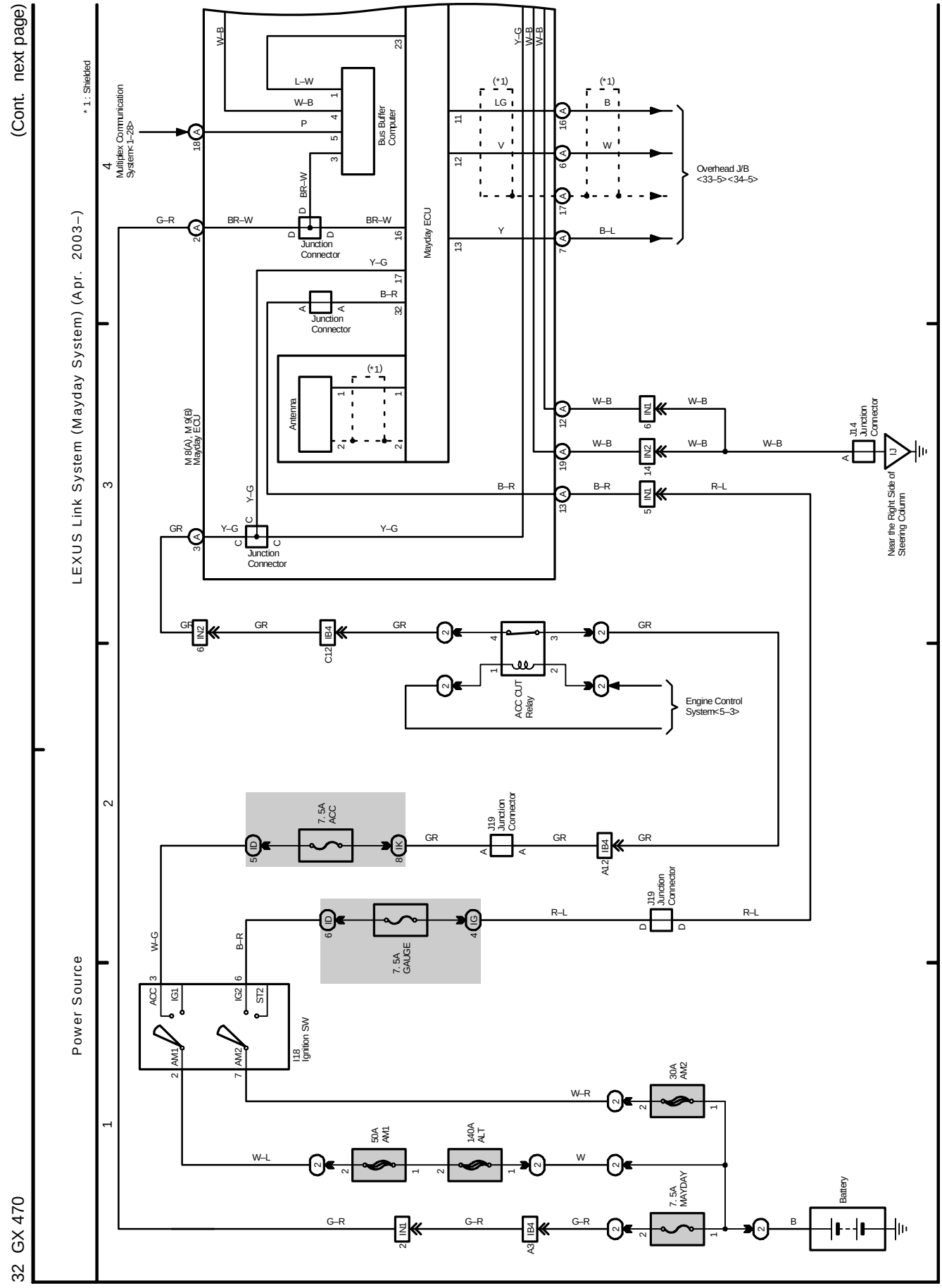



Power Source
Seat Heater
1
2
3
4
ACC
AM1
IG1
I18
Ignition SW
L–Y
W–L
B–Y
50A AM1
140A ALT
IG Relay
20A
SEAT HEATER
10A
IG1
10A
IG1
NO. 2
J 1
Junction
Connector
GR–L
GR
GR–L
LG
W
W–B
B
Battery
J15
Junction
Connector
J2(A), J 3(B)
Junction
Connector
W–B
Front Left Fender
3E
3A
16 3A
GR–L
W–B
S 3
Seat Heater SW
Front LH
S 4
Seat Heater SW
Front RH
RV
SW
R
R–G
R–B
L–B
J36(A), J37(B)
Junction
Connector
J34(A), J35(B)
Junction
Connector
BR
R
S29
Seat Heater
(Driver's Seat)
S30
Seat Heater
(Front Passenger's
Seat)
THL
SWL
THR
SWR
Under the Driver's Seat
Under the
Front Passenger's Seat
J14
Junction
Connector
Near the Right Side of
Steering Column

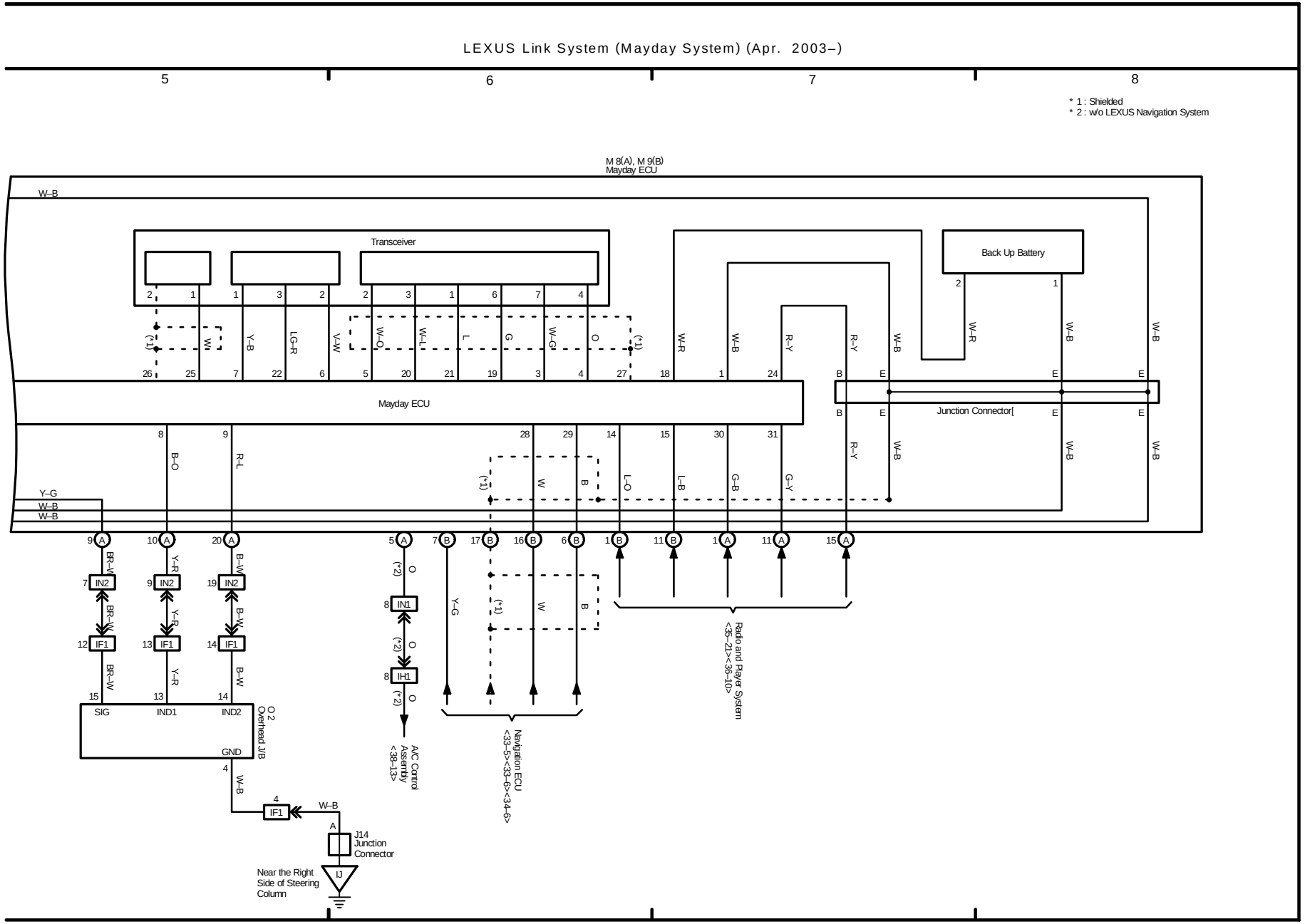
M OVERALL ELECTRICAL WIRING DIAGRAM



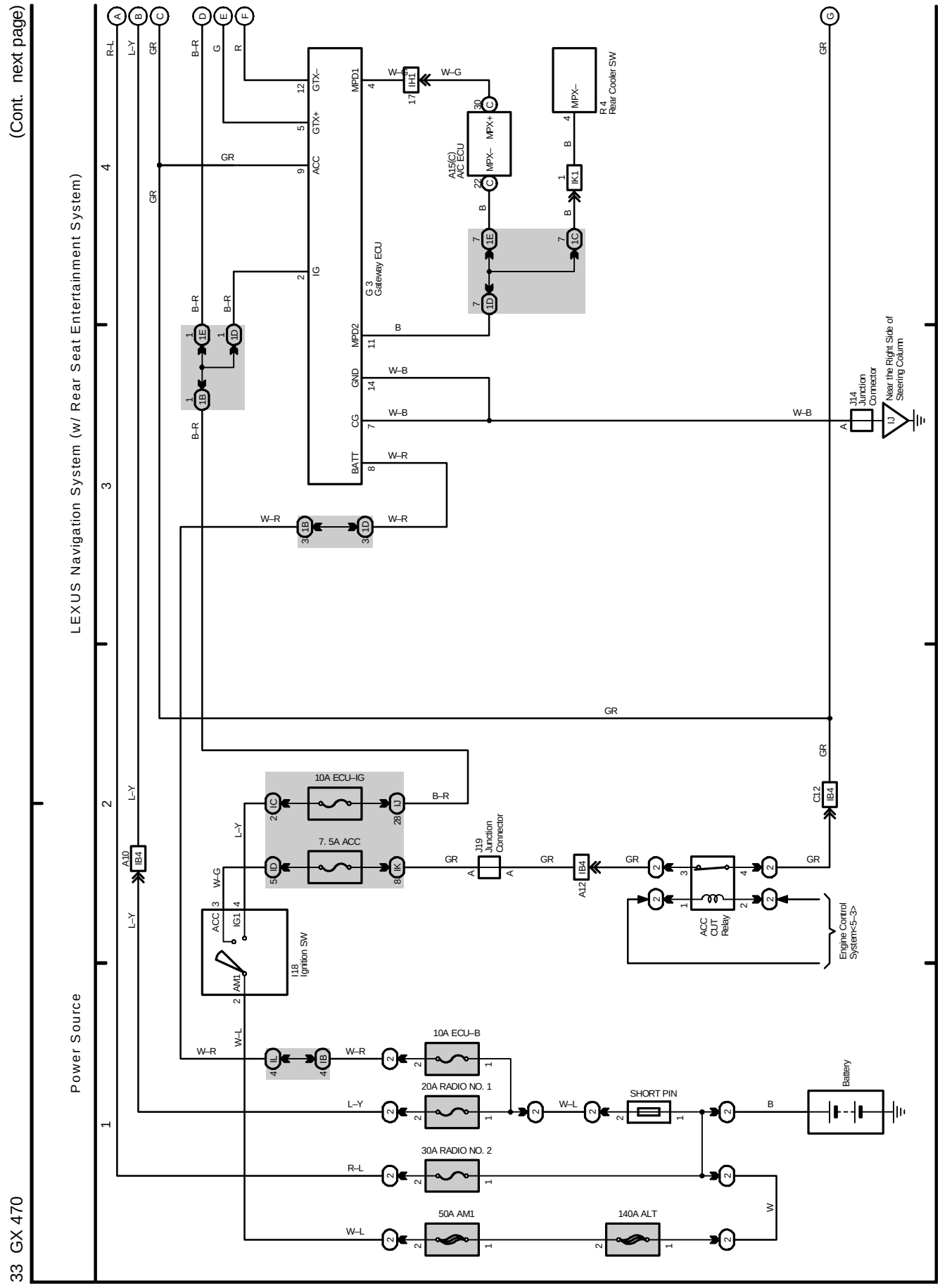
M OVERALL ELECTRICAL WIRING DIAGRAM

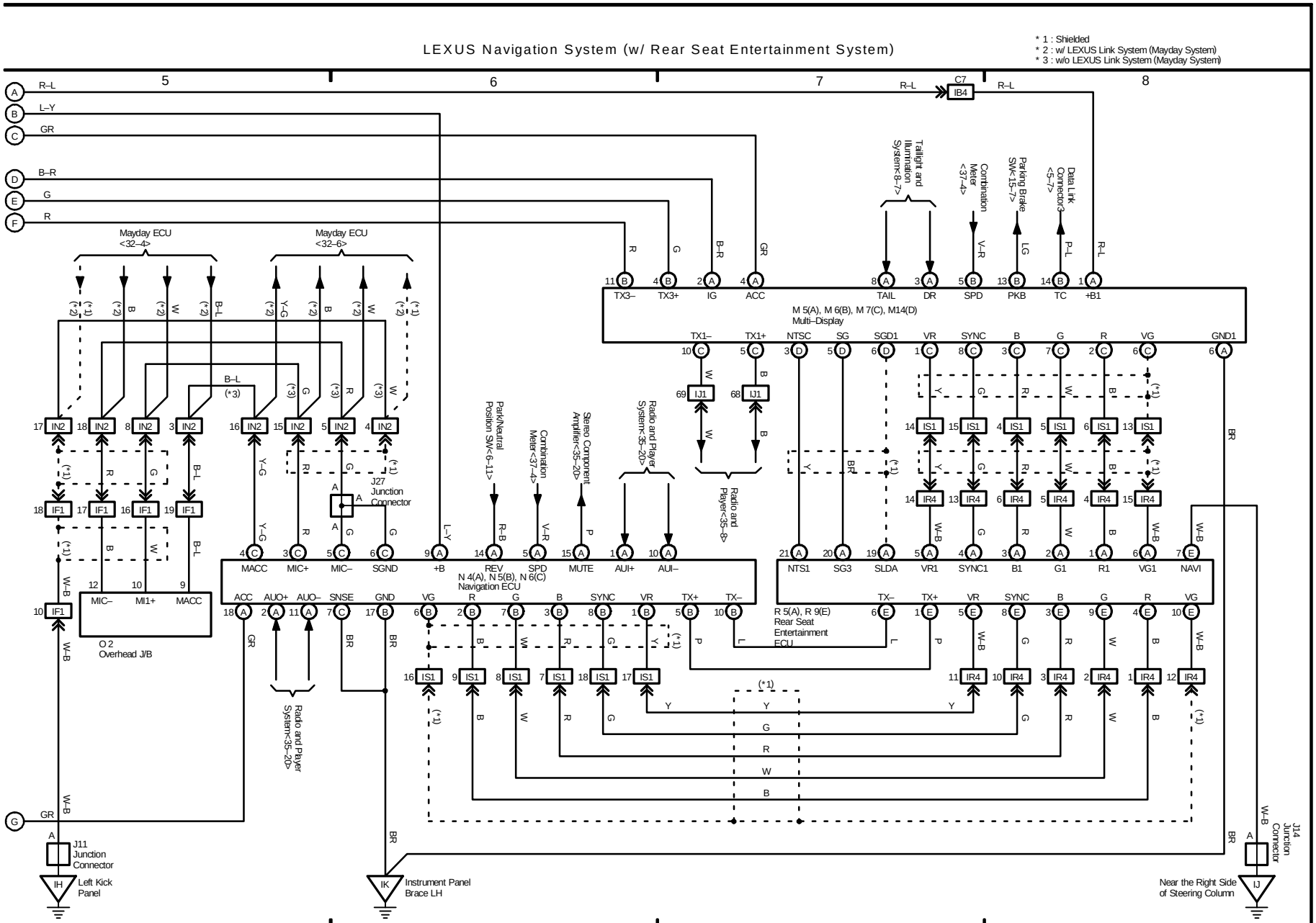


LEXUS Link System (Mayday System) (Apr. 2003–)

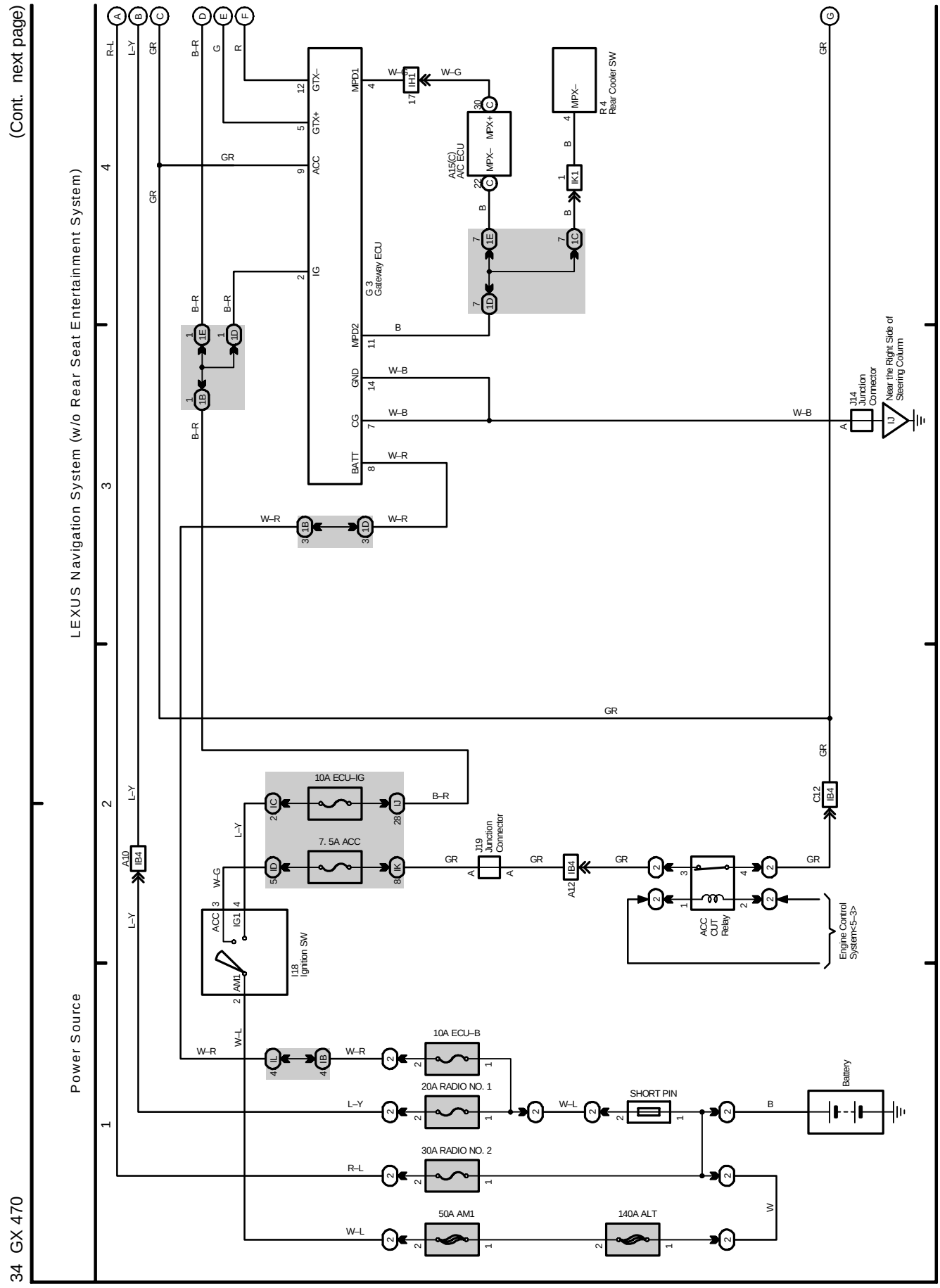


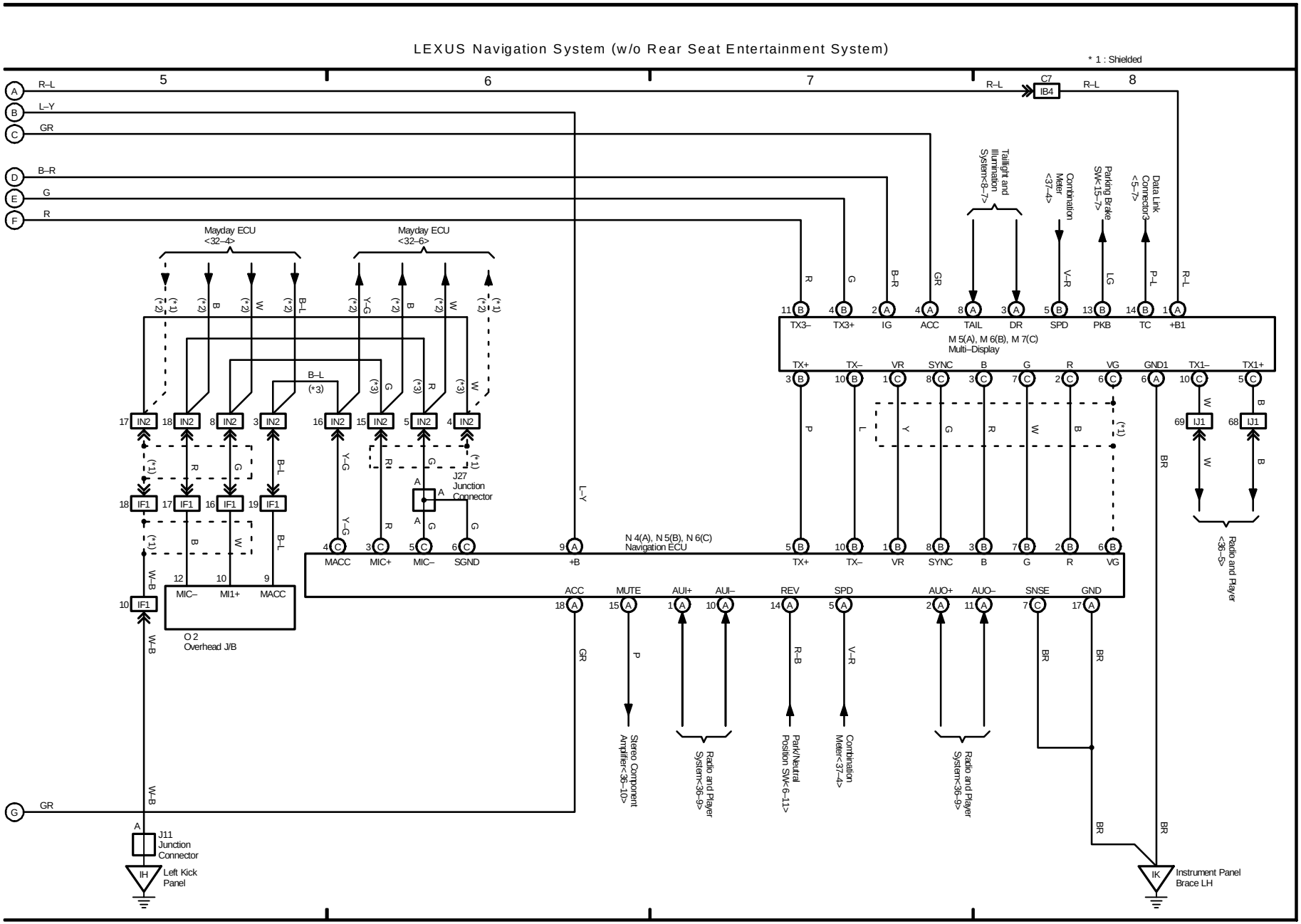
M OVERALL ELECTRICAL WIRING DIAGRAM



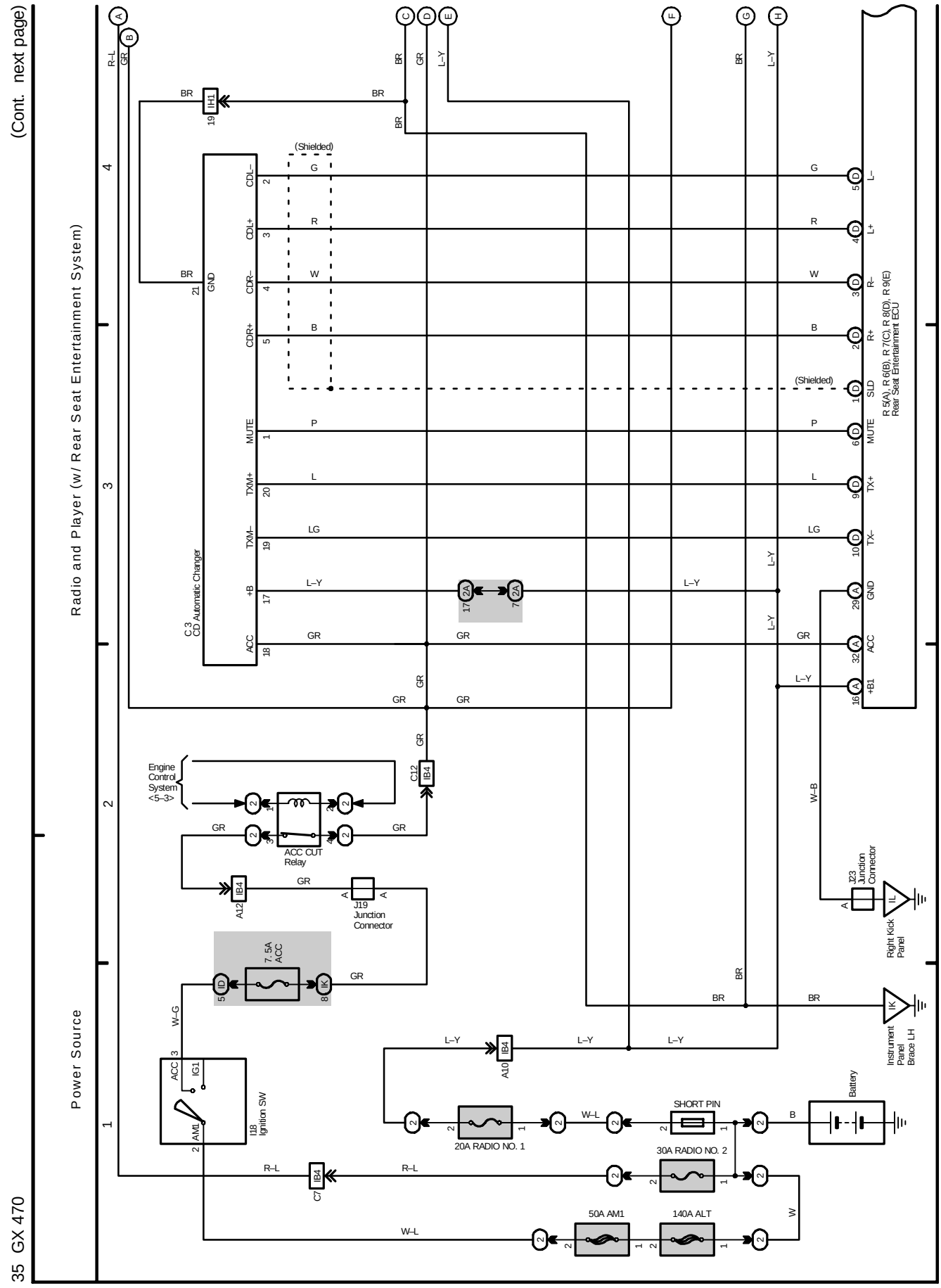

LEXUS Navigation System (w/ Rear Seat Entertainment System)
* 1 : Shielded
* 2 : w/ LEXUS Link System (Mayday System)
* 3 : w/o LEXUS Link System (Mayday System)
Mayday ECU <32–4>
Mayday ECU <32–6>
Taillight and Illumination System<8–7>
Combination Meter <37–4>
Parking Brake SW<15–7>
Data Link Connector3 <5–7>
M 5(A), M 6(B), M 7(C), M14(D) Multi–Display
J27 Junction Connector
Park/Neutral Position SW<6–11>
Combination Meter<37–4>
Stereo Component Amplifier<35–20>
Radio and Player System<35–20>
Radio and Player<35–8>
N 4(A), N 5(B), N 6(C) Navigation ECU
R 5(A), R 9(E) Rear Seat Entertainment ECU
O 2 Overhead J/B
J11 Junction Connector
J14 Junction Connector
Left Kick Panel
Instrument Panel Brace LH
Near the Right Side of Steering Column

M OVERALL ELECTRICAL WIRING DIAGRAM



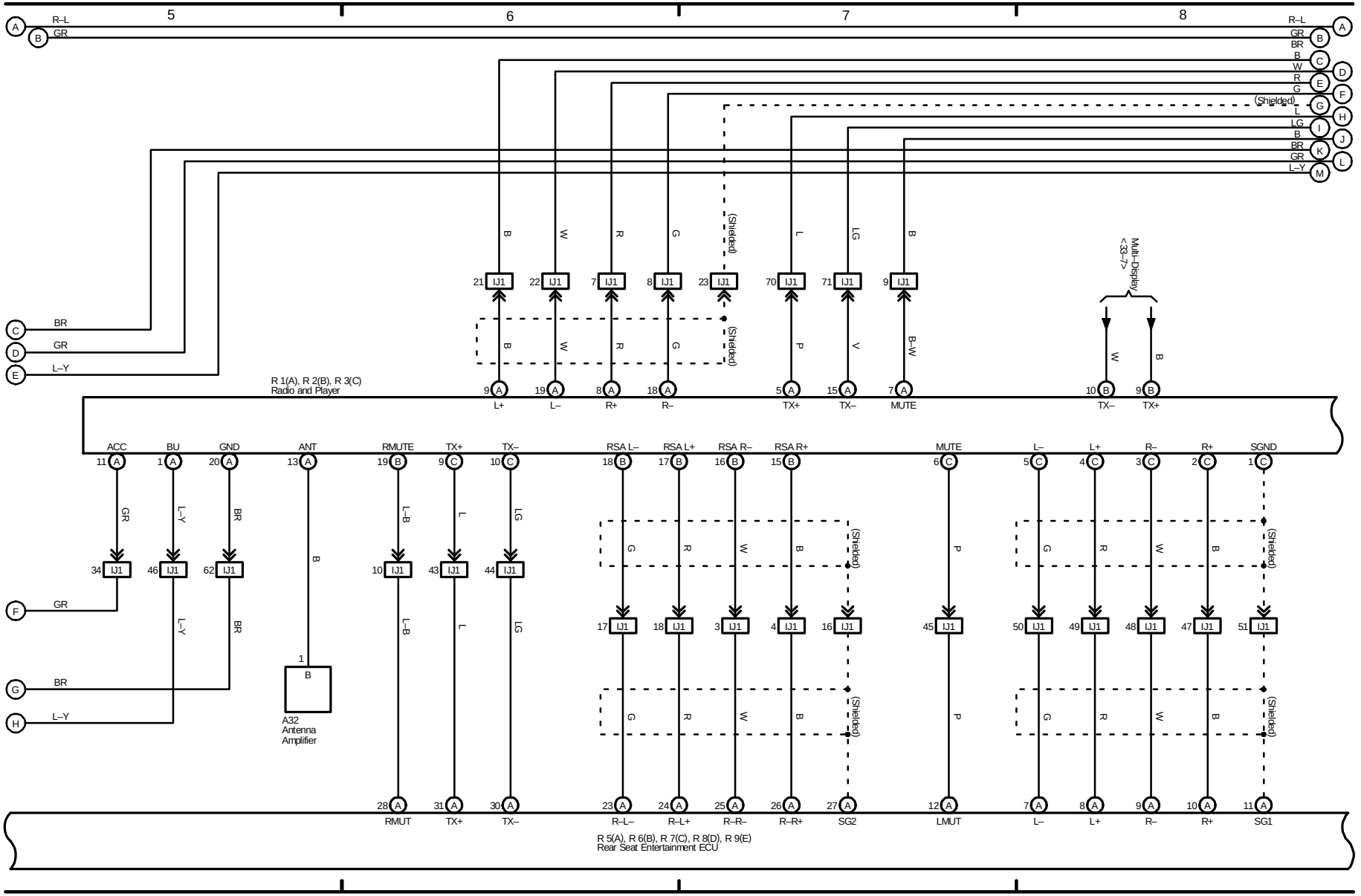

LEXUS Navigation System (w/o Rear Seat Entertainment System)
* 1 : Shielded
Mayday ECU <32–4>
Mayday ECU <32–6>
J27 Junction Connector
O 2 Overhead J/B
J11 Junction Connector
Left Kick Panel
M 5(A), M 6(B), M 7(C) Multi–Display
N 4(A), N 5(B), N 6(C) Navigation ECU
Taillight and Illumination System<8–7>
Combination Meter <37–4>
Parking Brake SW<15–7>
Data Link Connector3 <5–7>
Radio and Player <36–5>
Stereo Component Amplifier<36–10>
Radio and Player System<36–9>
Park/Neutral Position SW<6–11>
Combination Meter<37–4>
Radio and Player System<36–9>
Instrument Panel Brace LH
TX3–
TX3+
IG
ACC
TAIL
DR
SPD
PKB
TC
+B1
TX+
TX–
VR
SYNC
B
G
R
VG
GND1
TX1–
TX1+
MACC
MIC+
MIC–
SGND
+B
ACC
MUTE
AUI+
AUI–
REV
SPD
AUO+
AUO–
SNSE
GND
MIC–
MI1+
MACC

M OVERALL ELECTRICAL WIRING DIAGRAM



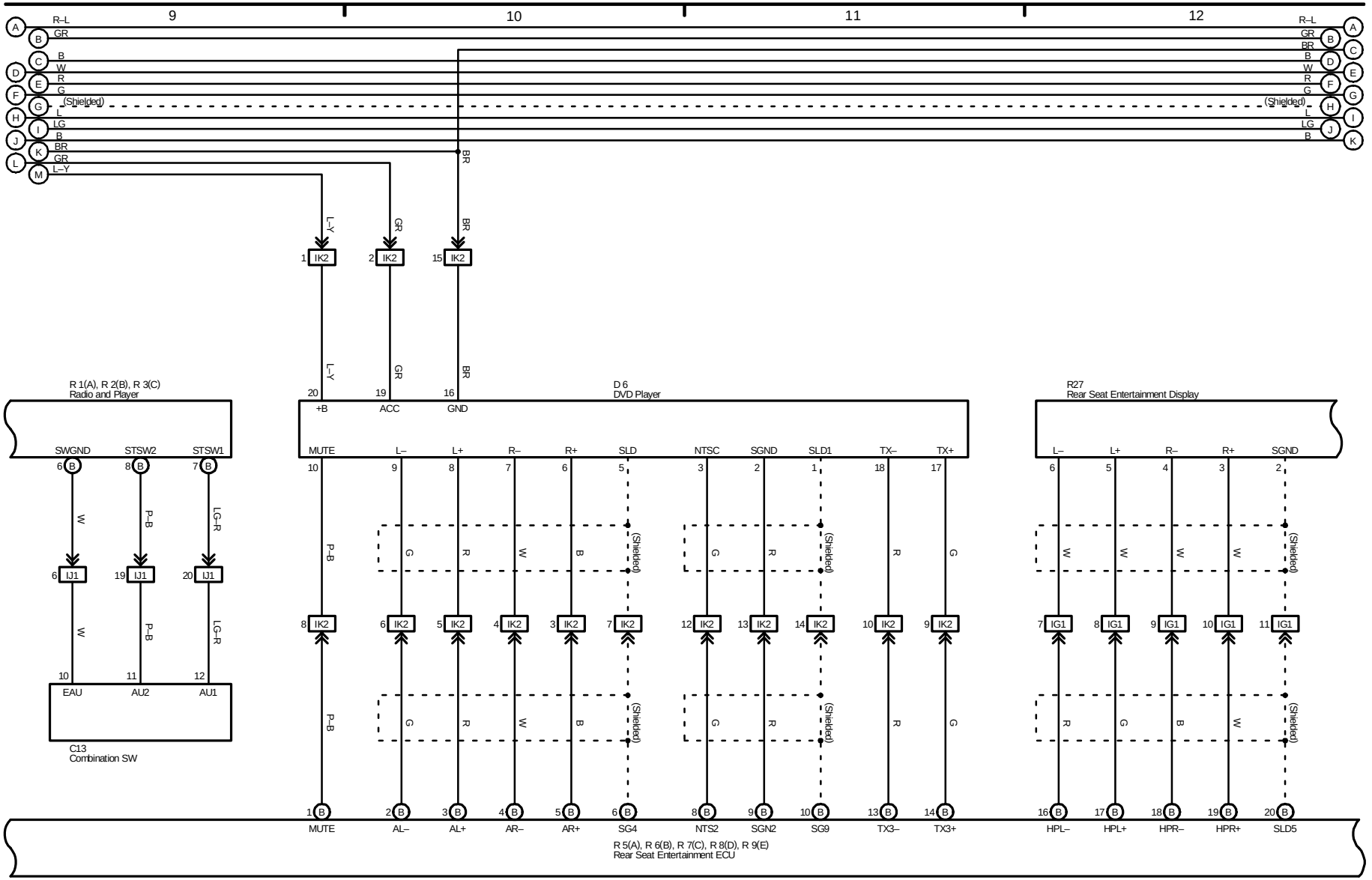
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Radio and Player (w/ Rear Seat Entertainment System)



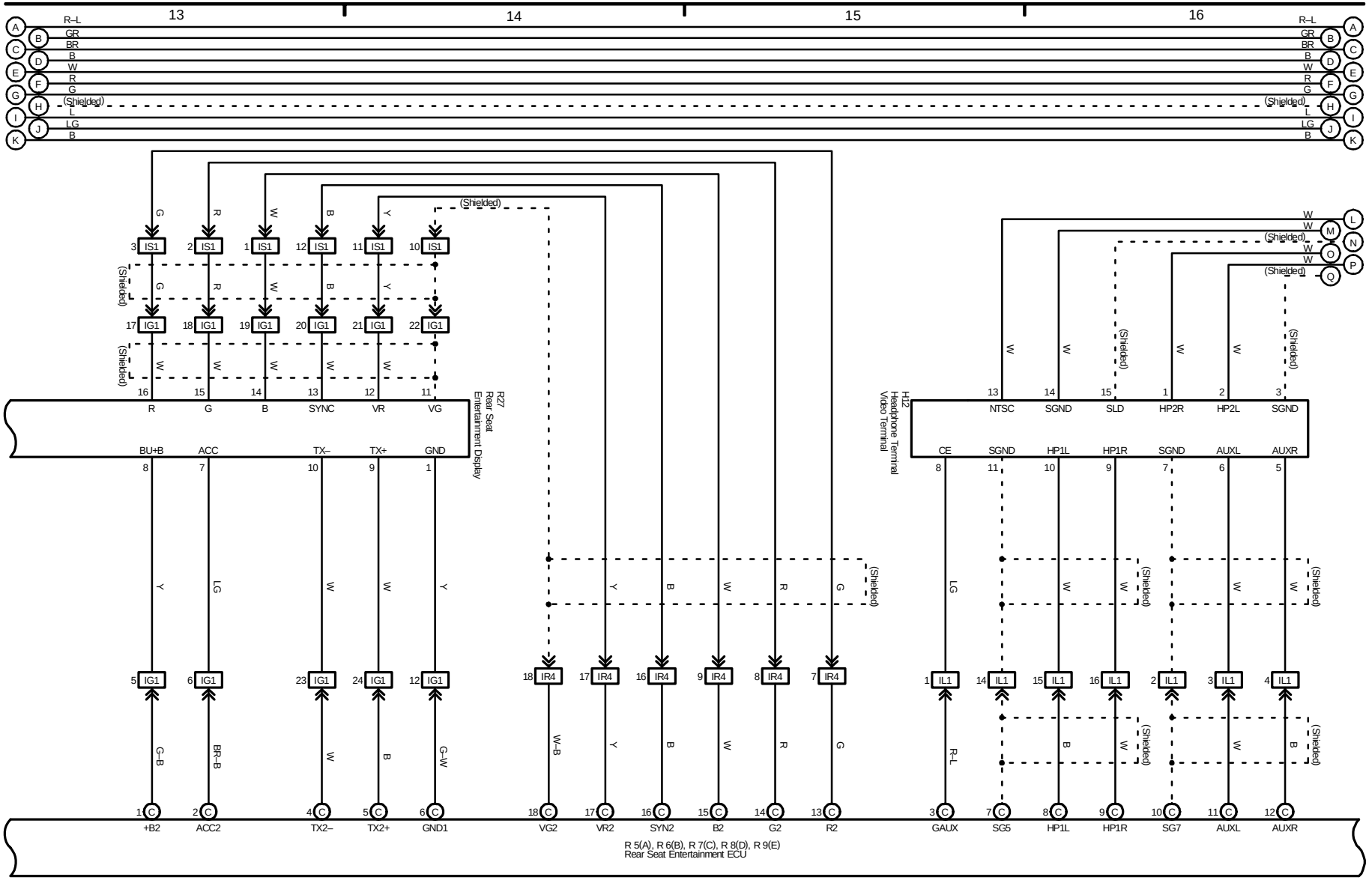
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Radio and Player (w/ Rear Seat Entertainment System)



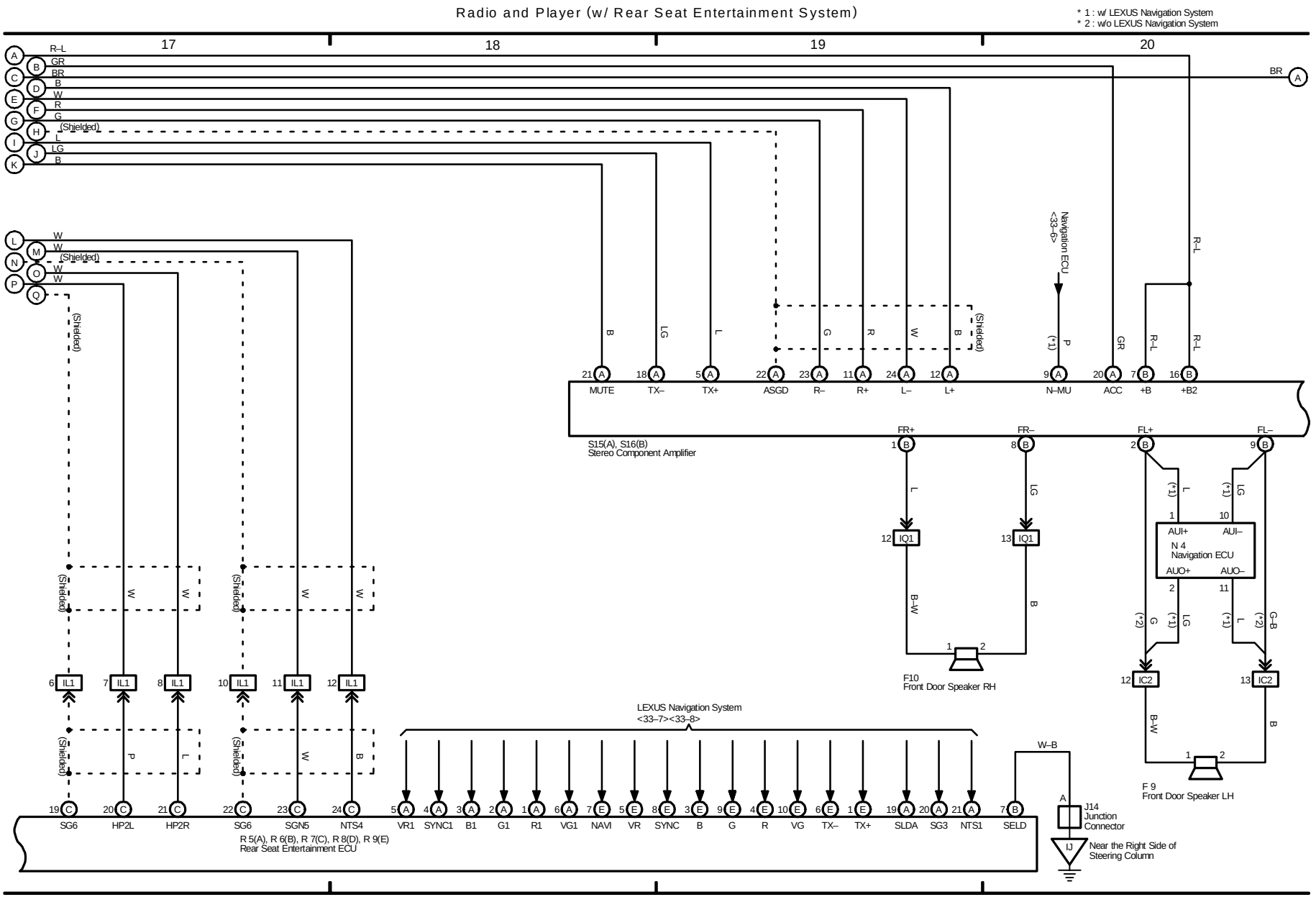
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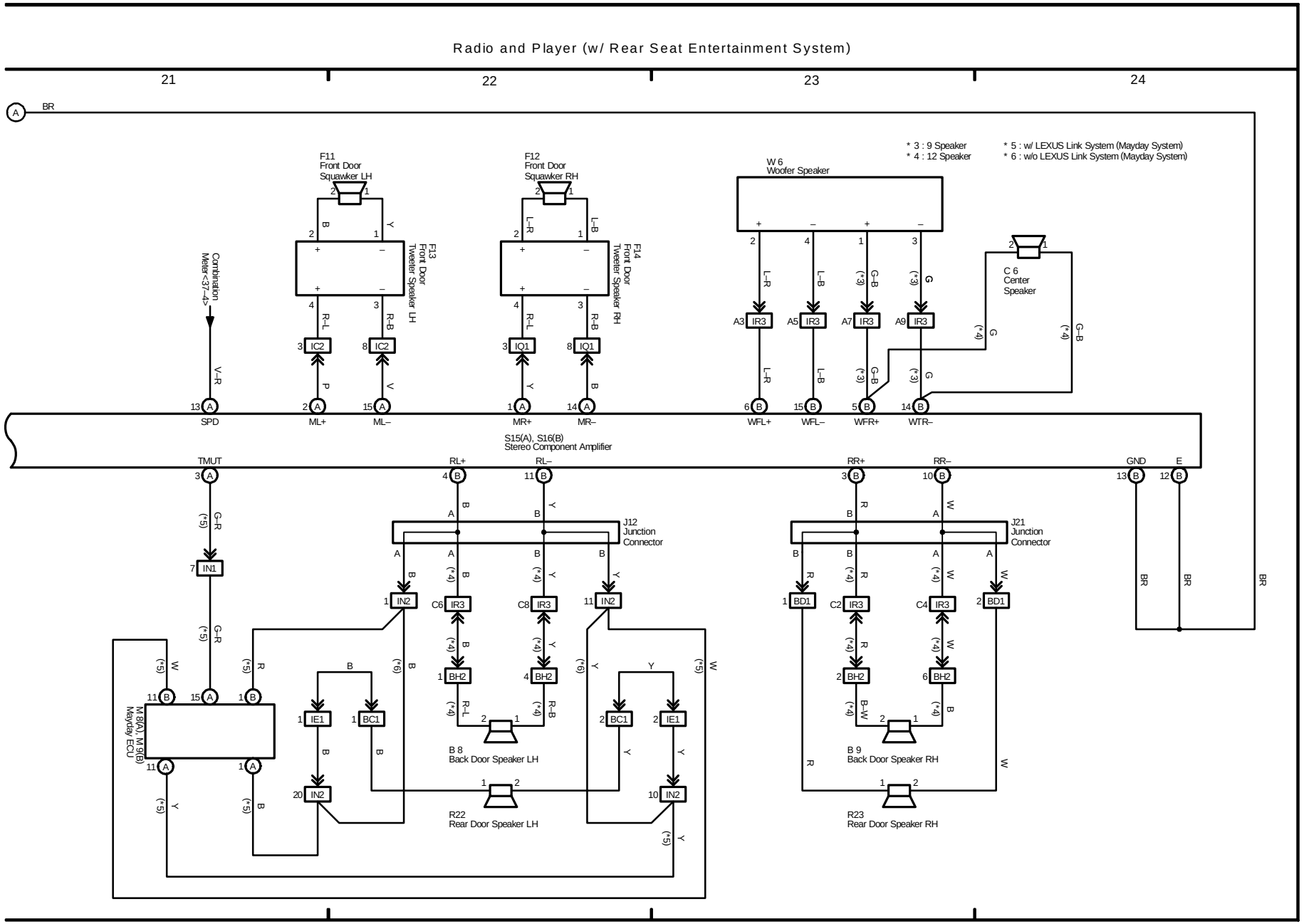
Radio and Player (w/ Rear Seat Entertainment System)



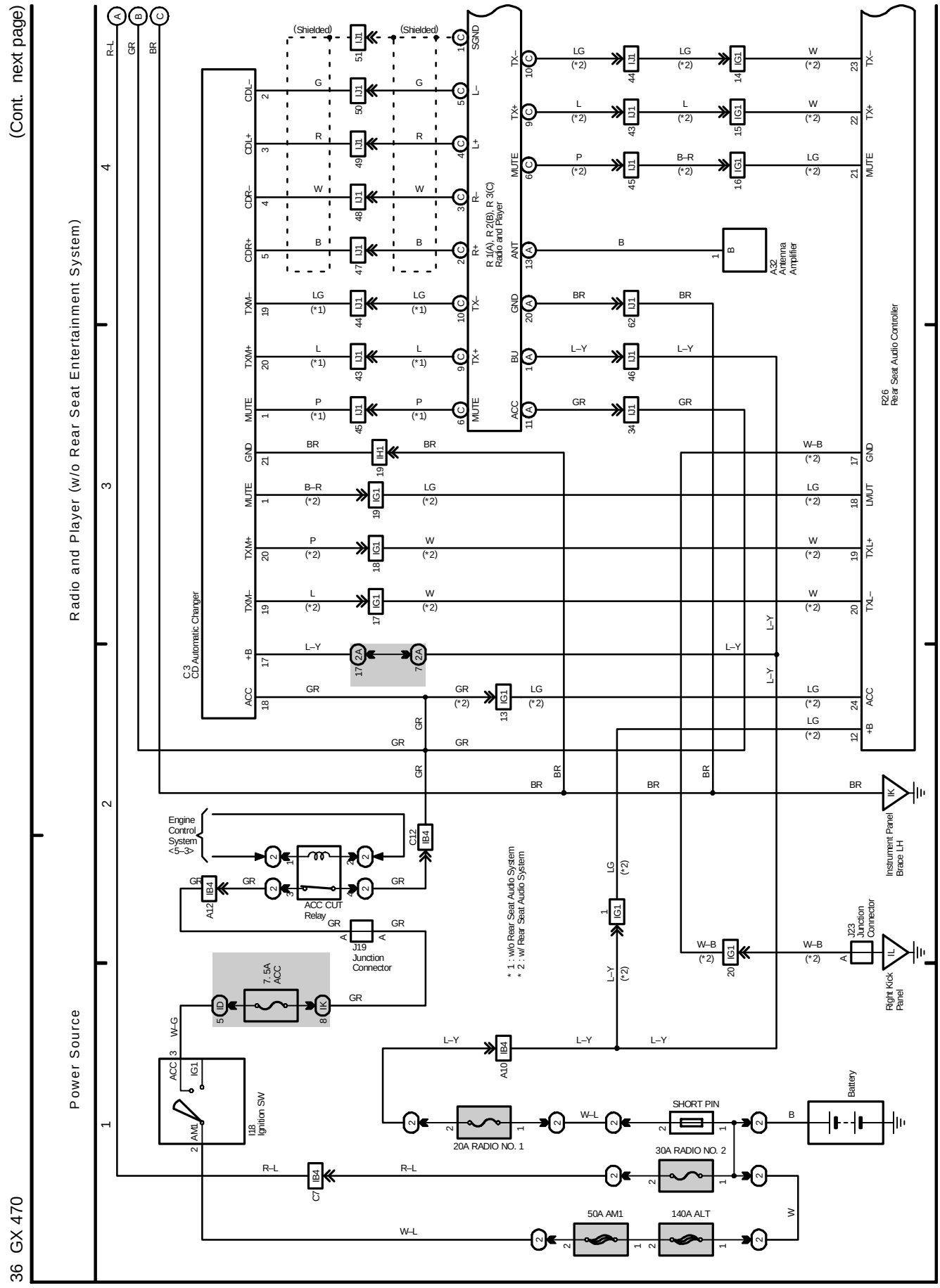
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Radio and Player (w/ Rear Seat Entertainment System)



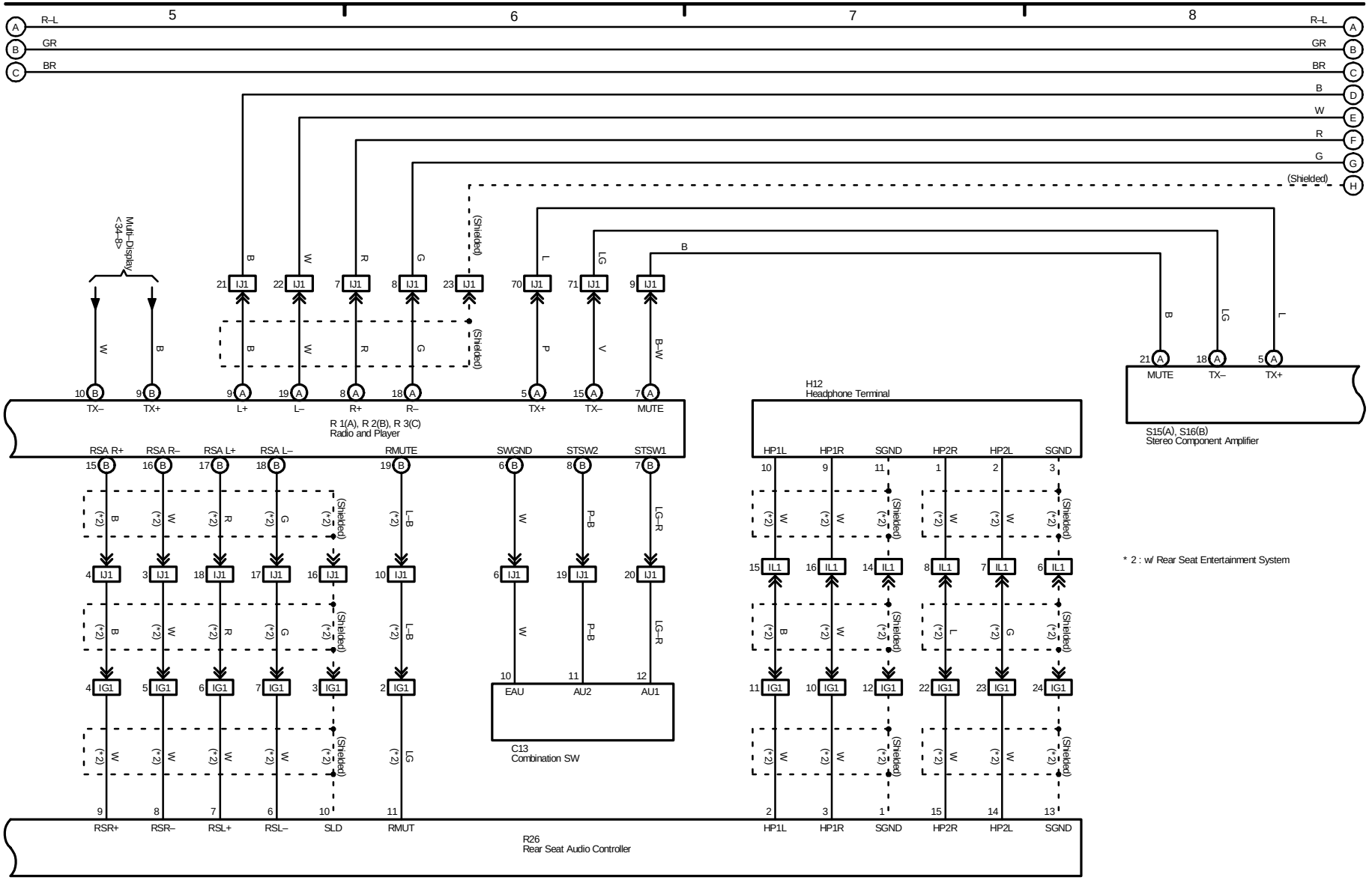

Radio and Player (w/ Rear Seat Entertainment System)
21
22
23
24
BR
* 3 : 9 Speaker
* 4 : 12 Speaker
* 5 : w/ LEXUS Link System (Mayday System)
* 6 : w/o LEXUS Link System (Mayday System)
F11
Front Door
Squawker LH
F12
Front Door
Squawker RH
F13
Front Door
Tweeter Speaker LH
F14
Front Door
Tweeter Speaker RH
W 6
Woofer Speaker
C 6
Center
Speaker
Combination
Meter<37–4>
SPD
ML+
ML–
MR+
MR–
WFL+
WFL–
WFR+
WTR–
S15(A), S16(B)
Stereo Component Amplifier
TMUT
RL+
RL–
RR+
RR–
GND
E
J12
Junction
Connector
J21
Junction
Connector
M 8(A), M 9(B)
Mayday ECU
B 8
Back Door Speaker LH
B 9
Back Door Speaker RH
R22
Rear Door Speaker LH
R23
Rear Door Speaker RH

M OVERALL ELECTRICAL WIRING DIAGRAM

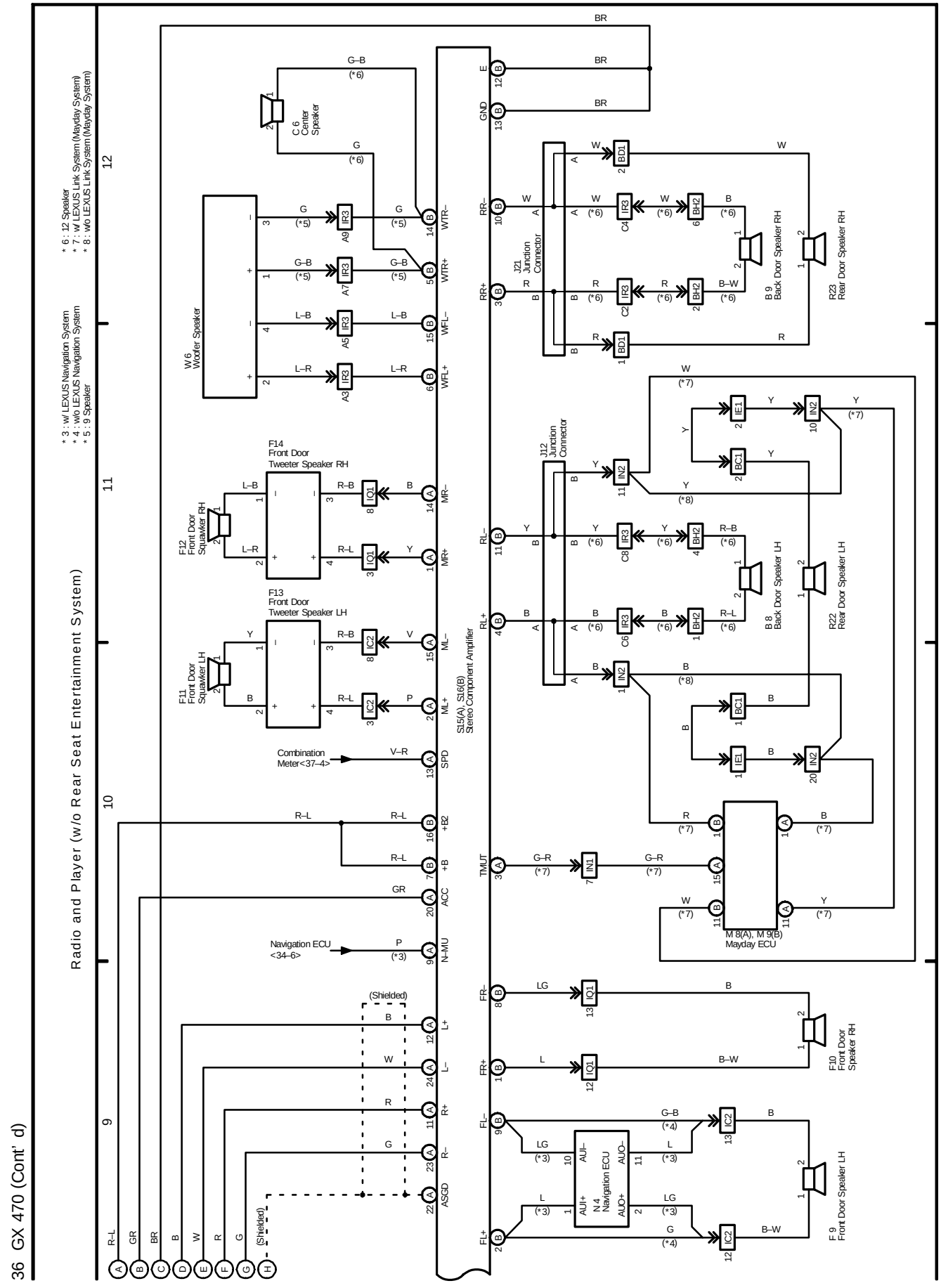


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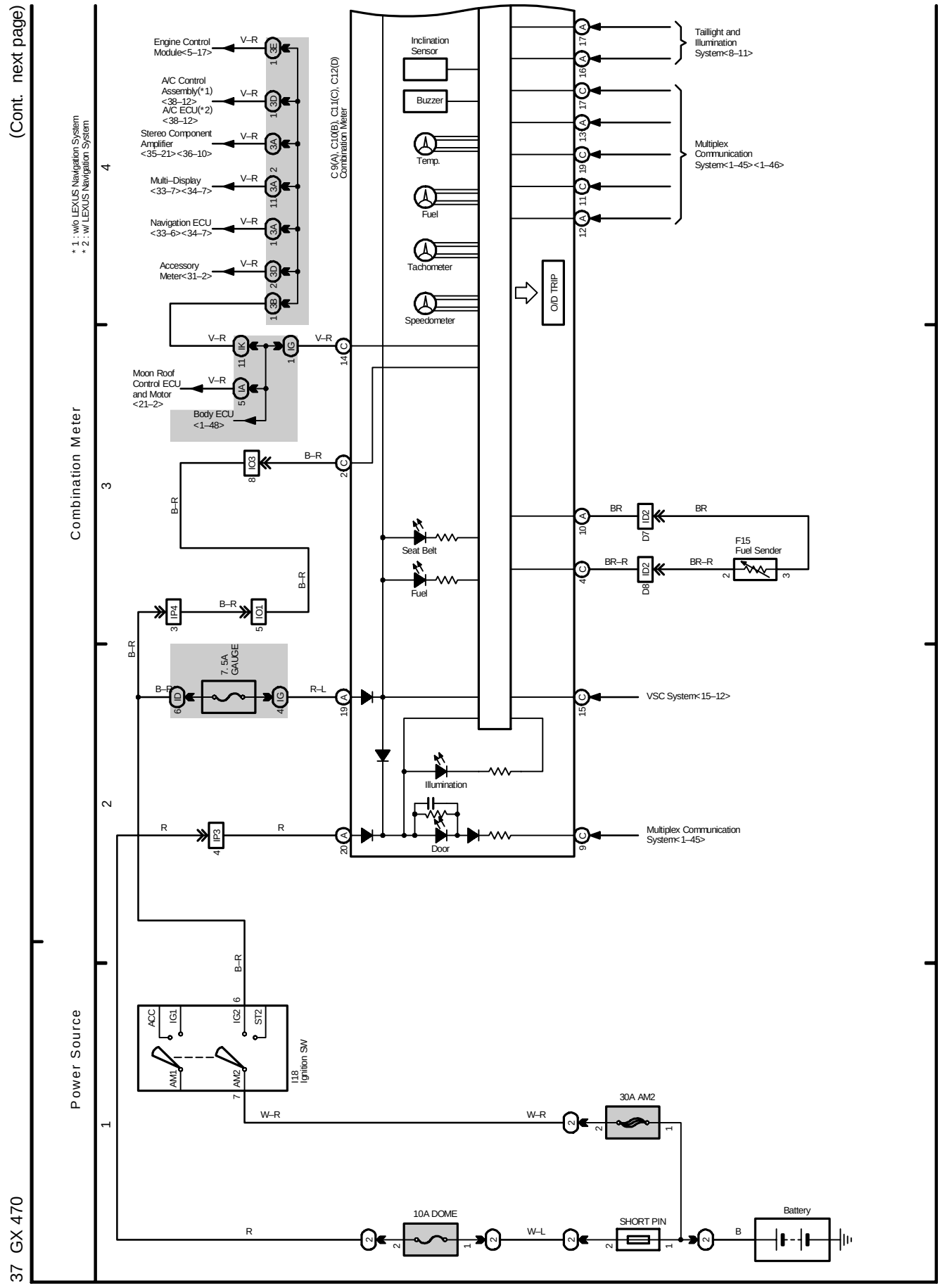
Radio and Player (w/o Rear Seat Entertainment System)



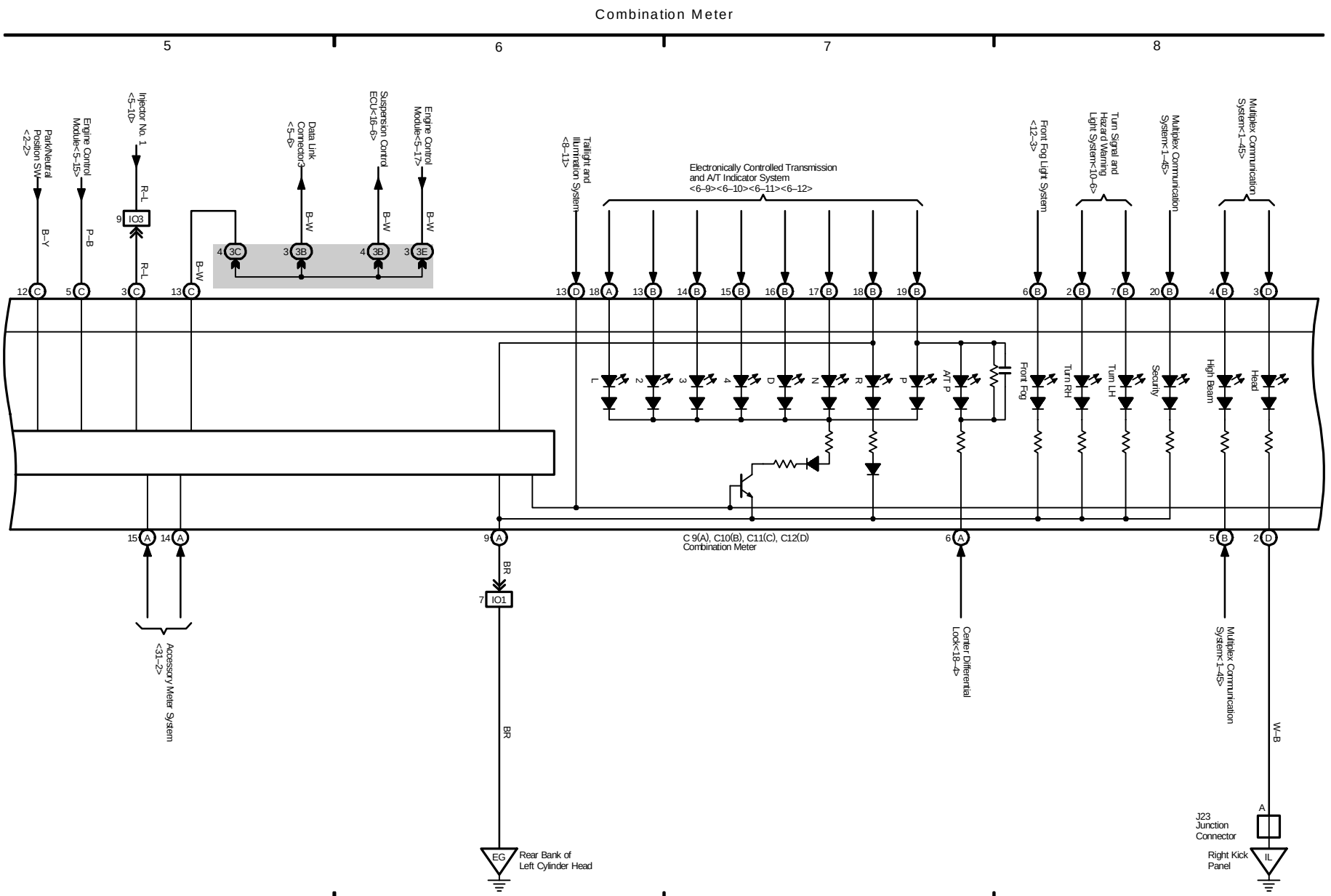
M OVERALL ELECTRICAL WIRING DIAGRAM

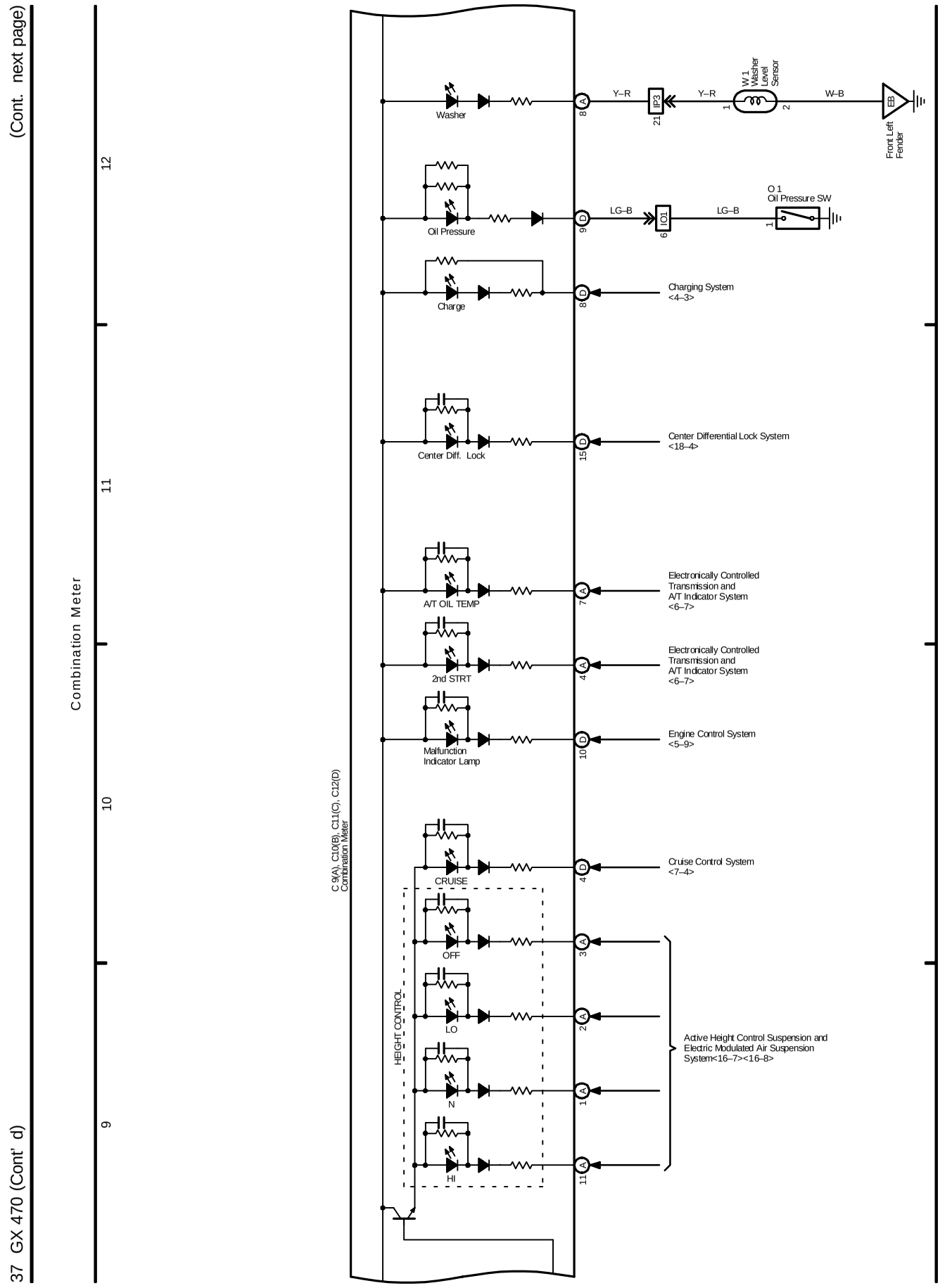


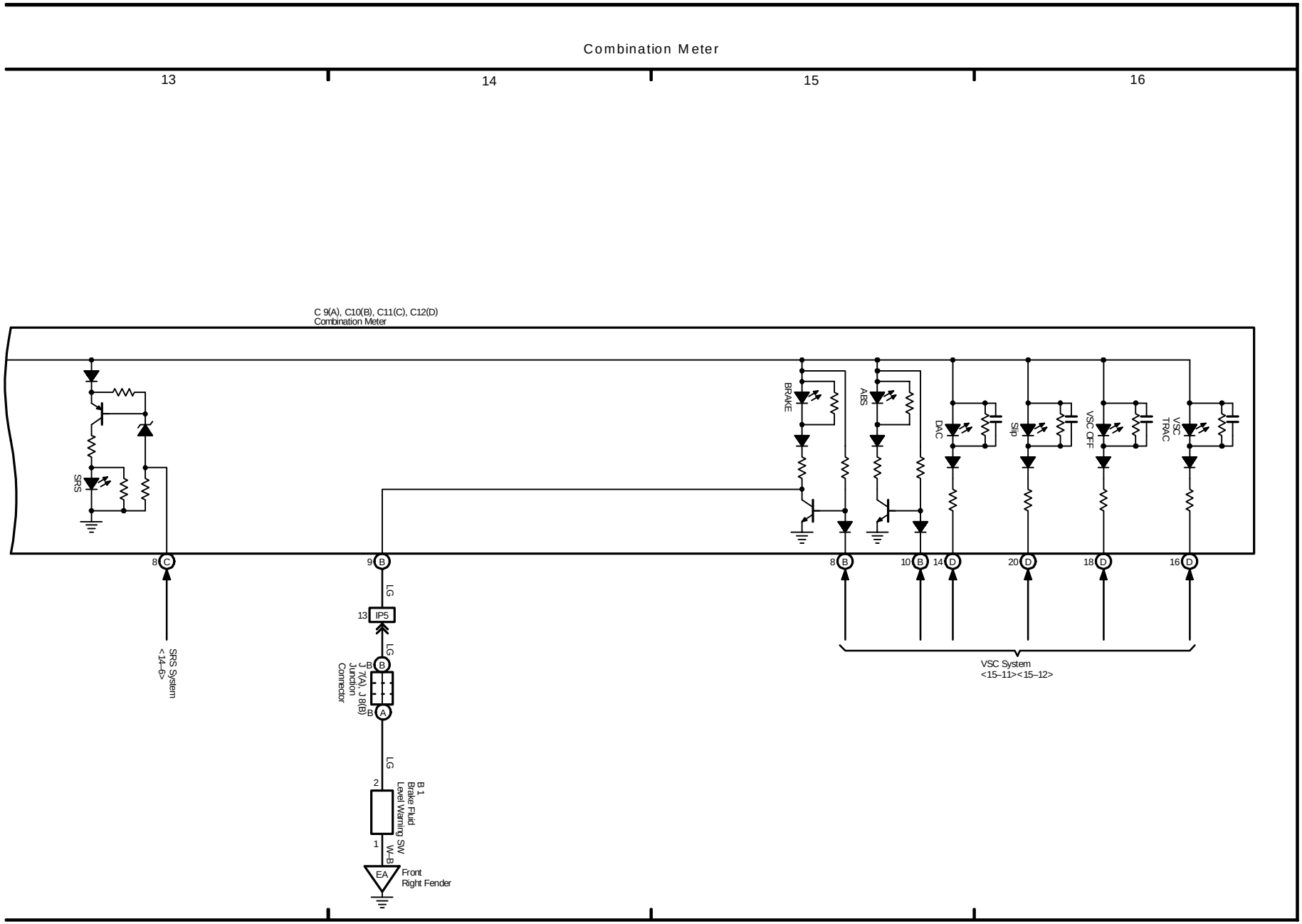
M OVERALL ELECTRICAL WIRING DIAGRAM



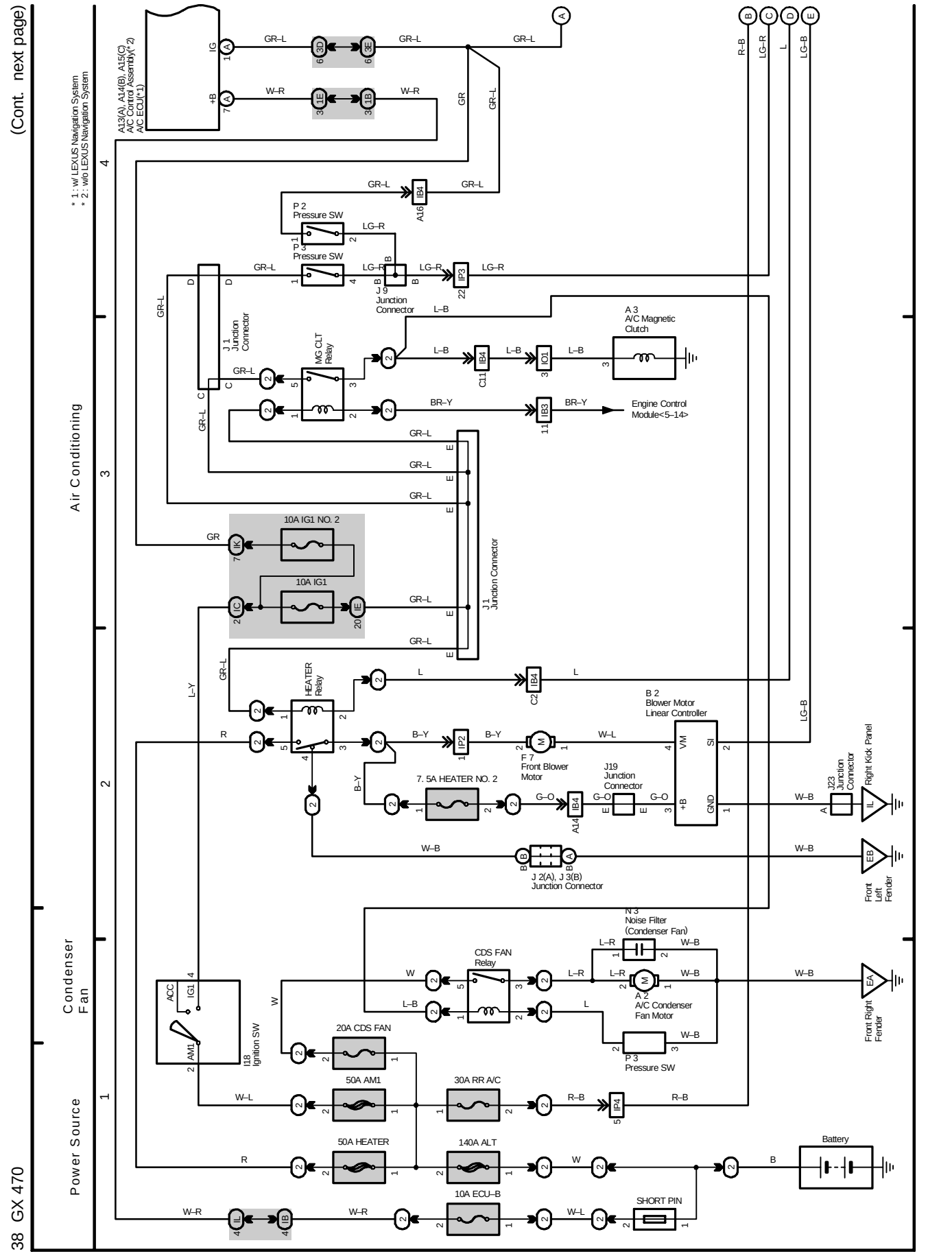
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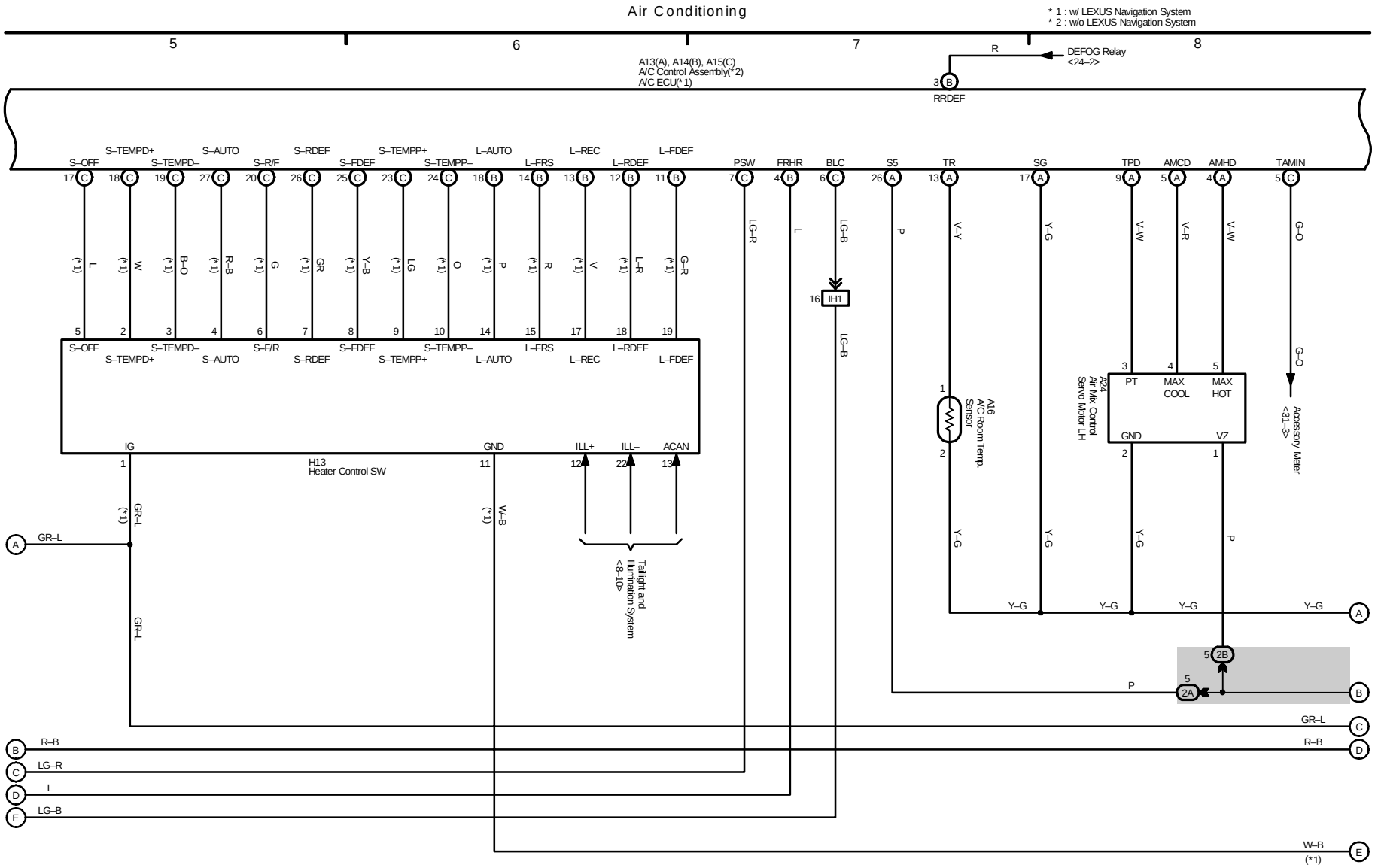

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37 GX 470 (Cont' d)
Combination Meter
12
11
10
9
Washer
Y–R
IP3
21
Y–R
W 1
Washer
Level
Sensor
1
2
W–B
EB
Front Left
Fender
8 A
Oil Pressure
LG–B
IO1
6
LG–B
O 1
Oil Pressure SW
1
9 D
Charge
8 D
Charging System
<4–3>
Center Diff. Lock
15 D
Center Differential Lock System
<18–4>
A/T OIL TEMP
7 A
Electronically Controlled
Transmission and
A/T Indicator System
<6–7>
2nd STRT
4 A
Electronically Controlled
Transmission and
A/T Indicator System
<6–7>
Malfunction
Indicator Lamp
10 D
Engine Control System
<5–9>
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
CRUISE
4 D
Cruise Control System
<7–4>
HEIGHT CONTROL
OFF
3 A
LO
2 A
N
1 A
HI
11 A
Active Height Control Suspension and
Electric Modulated Air Suspension
System<16–7><16–8>

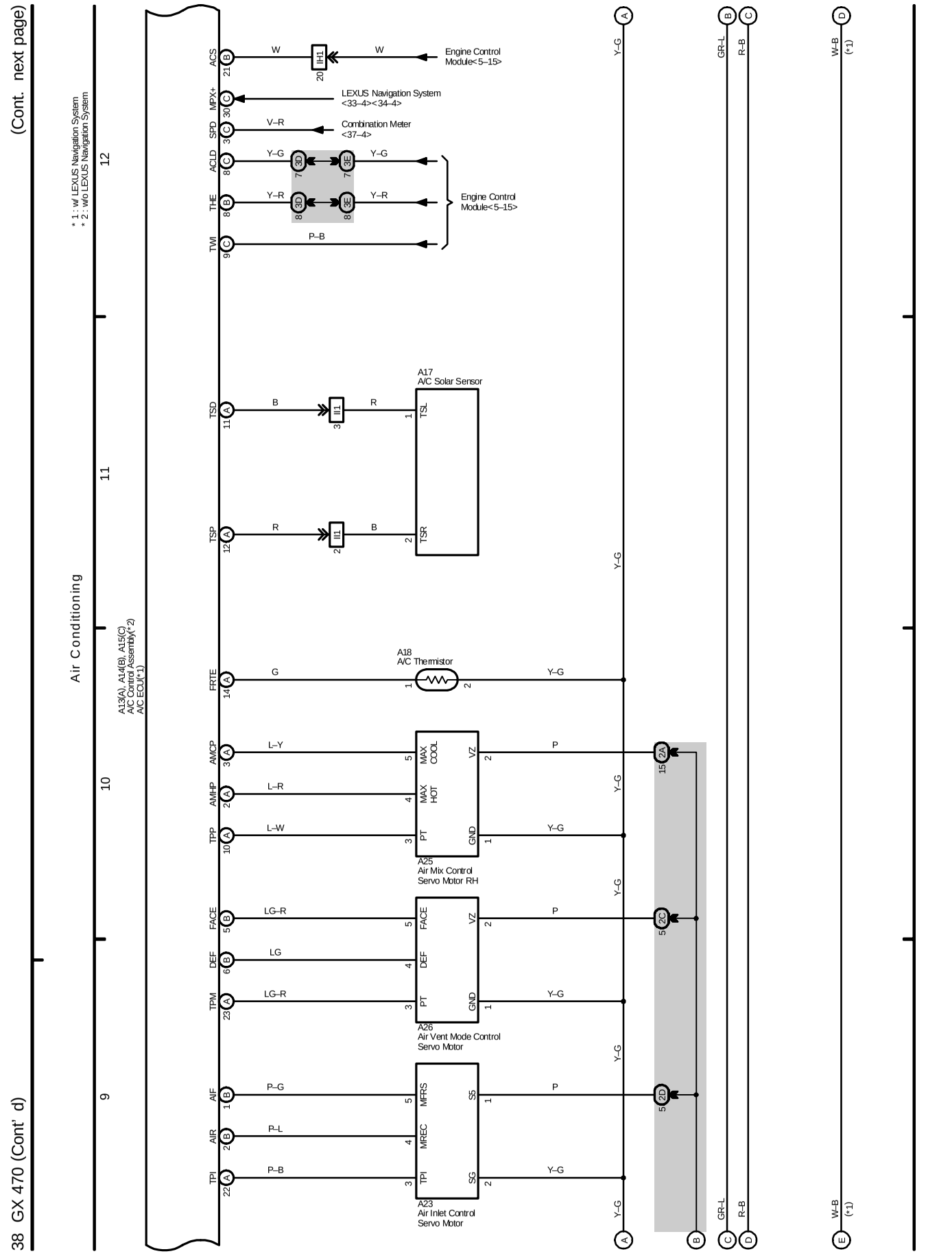

Combination Meter
13
14
15
16
C 9(A), C10(B), C11(C), C12(D)
Combination Meter
SRS
BRAKE
ABS
DAC
Slip
VSC OFF
VSC TRAC
8 C
9 B
8 B
10 B
14 D
20 D
18 D
16 D
LG
13 IP5
LG
J-B B Junction Connector J-B A 7(A), J-8(B)
LG
2
B-1 Brake Fluid Level Warning SW
1
W-B
EA
Front Right Fender
SRS System <14-6>
VSC System <15-11><15-12>

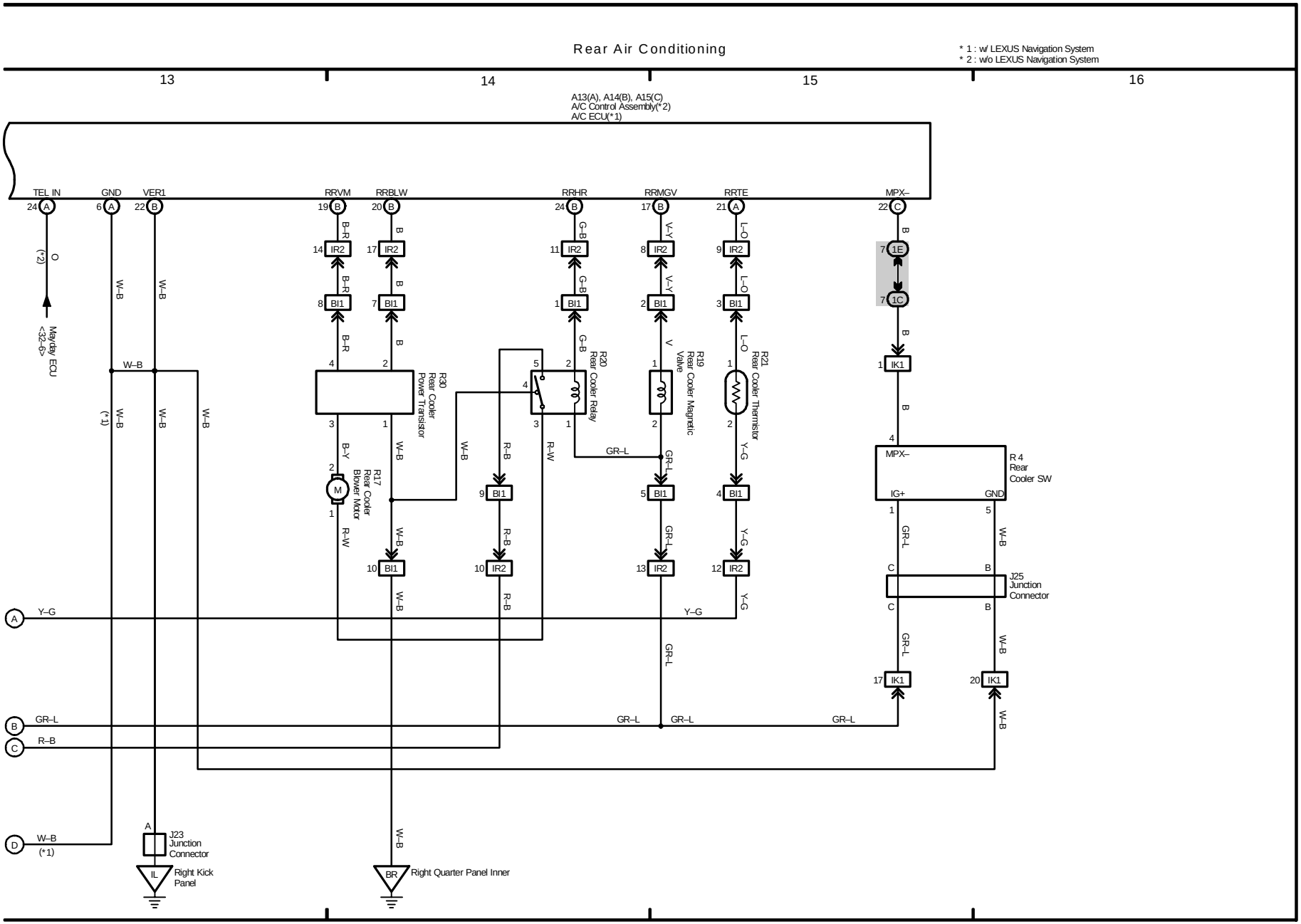
M OVERALL ELECTRICAL WIRING DIAGRAM



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38 GX 470 (Cont' d)
Air Conditioning
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
9
10
11
12
ACS
MPX+
SPD
ACLD
THE
TWI
TSD
TSP
FRTE
AMCP
AMHP
TPP
FACE
DEF
TPM
AIF
AIR
TPI
W
Engine Control Module<5–15>
LEXUS Navigation System <33–4><34–4>
V–R
Combination Meter <37–4>
Y–G
Y–R
P–B
A17
A/C Solar Sensor
TSL
TSR
B
R
G
A18
A/C Thermistor
L–Y
L–R
L–W
A25
Air Mix Control Servo Motor RH
MAX COOL
MAX HOT
PT
VZ
GND
LG–R
LG
A26
Air Vent Mode Control Servo Motor
FACE
DEF
P–G
P–L
A23
Air Inlet Control Servo Motor
MRRS
MREC
SS
SG
P
GR–L
R–B
W–B
(*1)


Rear Air Conditioning
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
13
14
15
16
A13(A), A14(B), A15(C)
A/C Control Assembly(*2)
A/C ECU(*1)
TEL IN
GND
VER1
RRVM
RRBLW
RRHR
RRMGV
RRTE
MPX–
R30 Rear Cooler Power Transistor
R17 Rear Cooler Blower Motor
R20 Rear Cooler Relay
R19 Rear Cooler Magnetic Valve
R21 Rear Cooler Thermistor
R 4 Rear Cooler SW
J25 Junction Connector
J23 Junction Connector
Right Kick Panel
Right Quarter Panel Inner
Mayday ECU <32–6>
(*1)
(*2)