FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2002 IS 300.

Applicable models: JCE10 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.
● 2002 LEXUS IS 300 Repair Manual Volume 1 Volume 2	 RM869U1 RM869U2
● 2002 LEXUS IS 300 New Car Features	NCF207U

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

TOYOTA MOTOR CORPORATION

NOTICE

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.

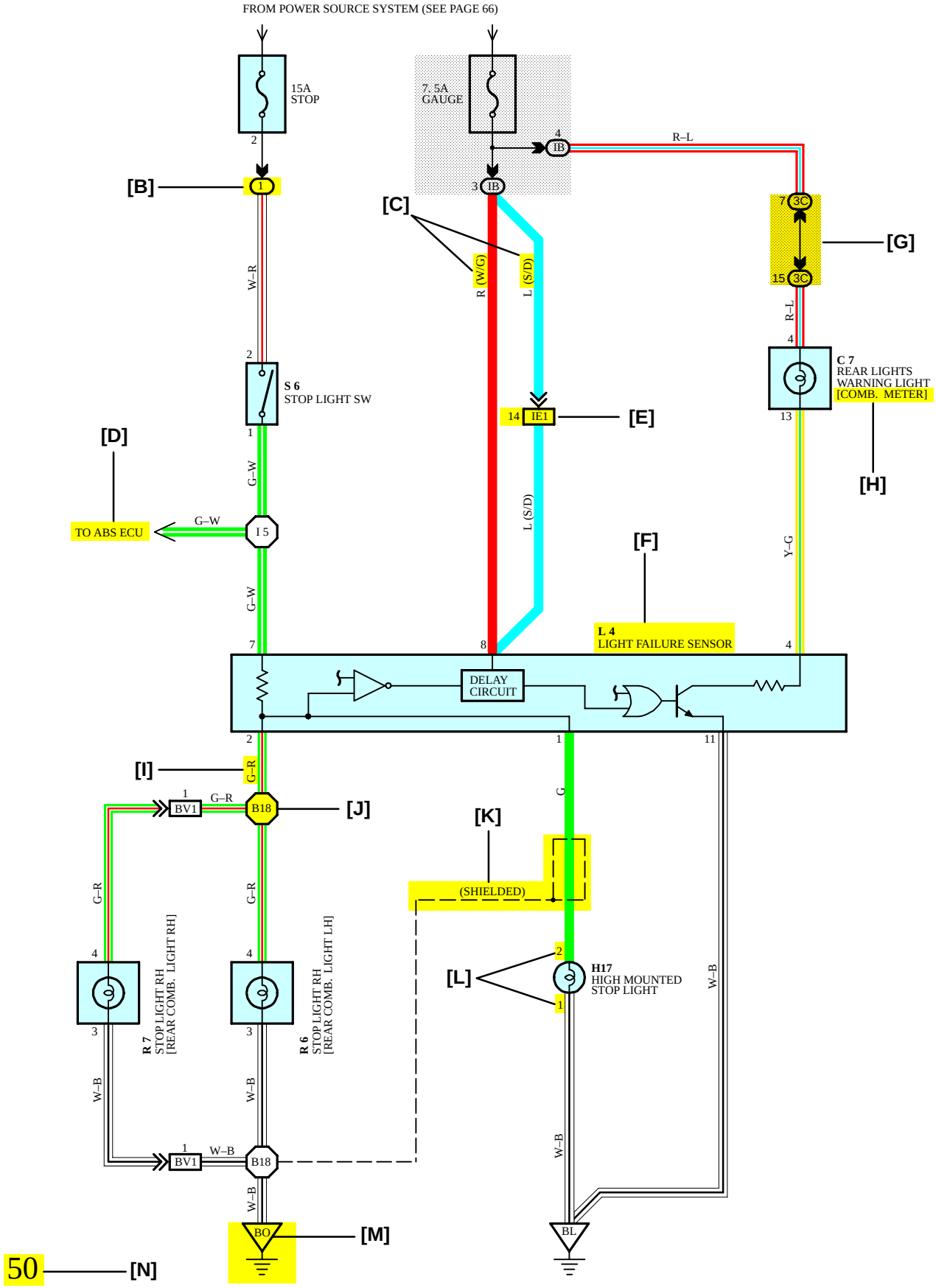
When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground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

B HOW TO USE 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

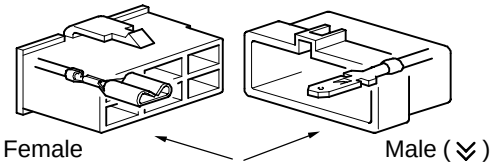
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

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.



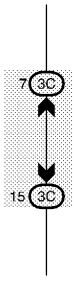
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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] : When 2 parts both use one connector in common, the parts connector name used in the wire routing section is shown in square brackets [ ].

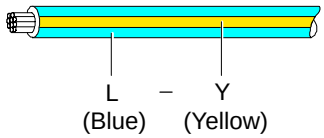
[I] : Indicates the wiring color.

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

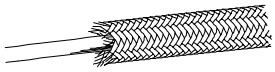


[J] : Indicates a wiring Splice Point (Codes are "E" for the Engine Room, "I" for the Instrument Panel, and "B" for the Body).



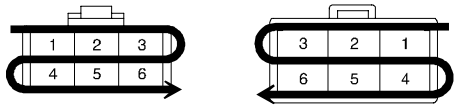
The Location of splice Point I 5 is indicated by the shaded section.

[K] : Indicates a shielded cable.



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

Example:



[M] : 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.

[N] : Page No.

B HOW TO USE THIS MANUAL

[O] SYSTEM OUTLINE

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

STOP LIGHT DISCONNECTION WARNING

When the ignition SW is turned on and the brake pedal is pressed (Stop light SW on), if the stop light circuit is open, the current flowing from TERMINAL 7 of the light failure sensor to TERMINALS 1, 2 changes, so the light failure sensor detects the disconnection and the warning circuit of the light failure sensor is activated.
As a result, the current flows from TERMINAL 4 of the light failure sensor to TERMINAL 11 to GROUND and turns the rear lights warning light on. By pressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and holds the warning light on until the ignition SW is turned off.

[P] 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

[Q] : PARTS LOCATION

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

[R] : RELAY BLOCKS

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

[S] : 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 Left Side)

[T] : 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 Compartment Left)

[U] : GROUND POINTS

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

[V] : SPLICE POINTS

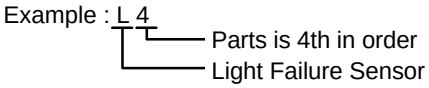
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

[O] : Explains the system outline.

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

[Q] : 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.



[R] : 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.

[S] : 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.

[T] : 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.

[U] : 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.

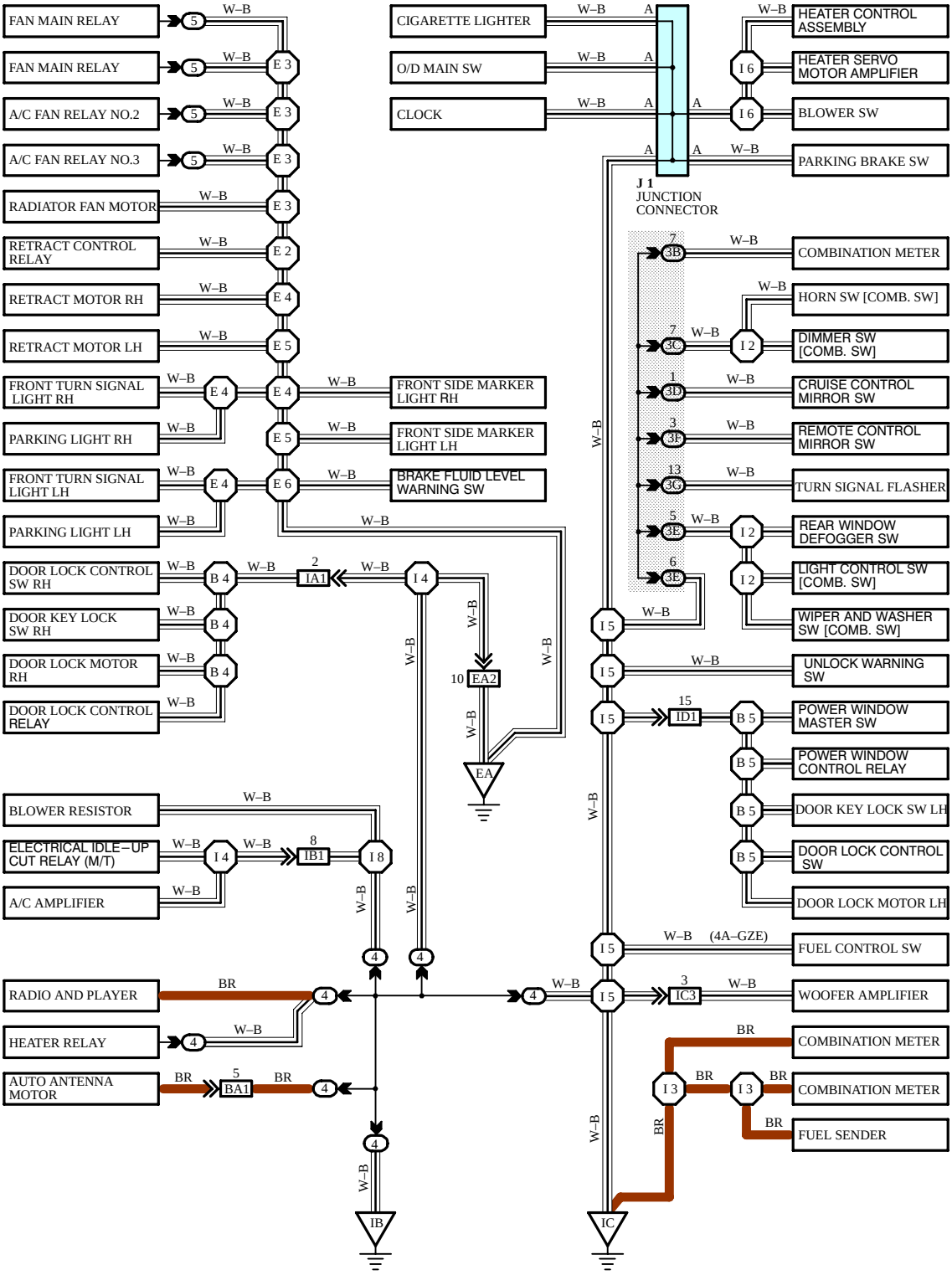
[V] : Indicates the reference page showing the position of the splice points on the vehicle.

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

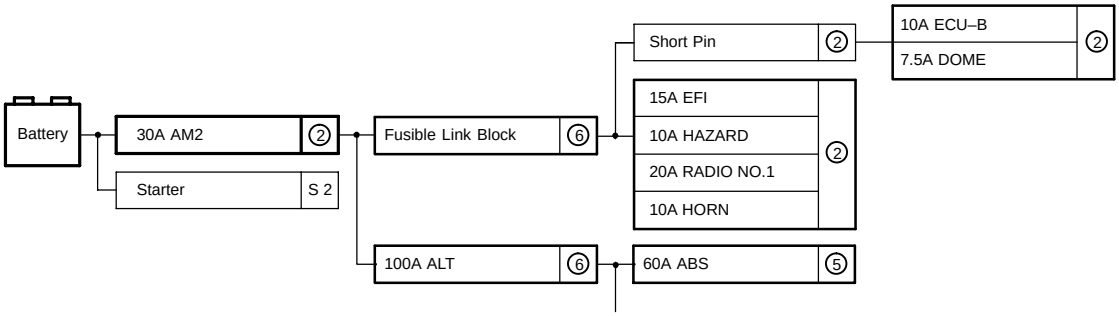


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

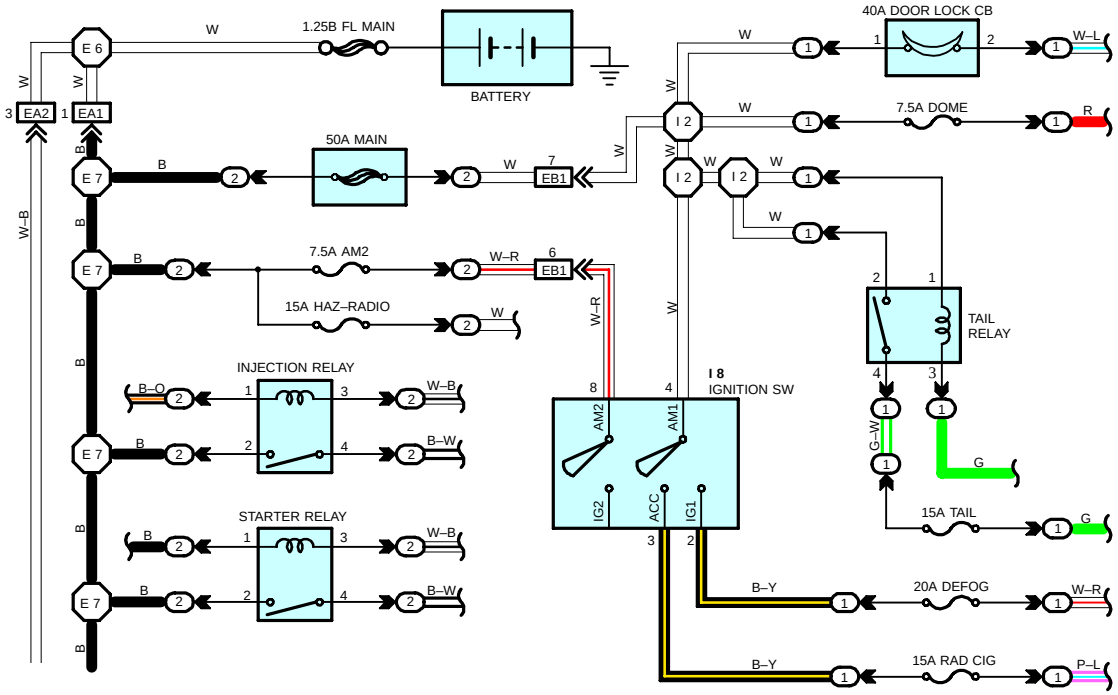
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

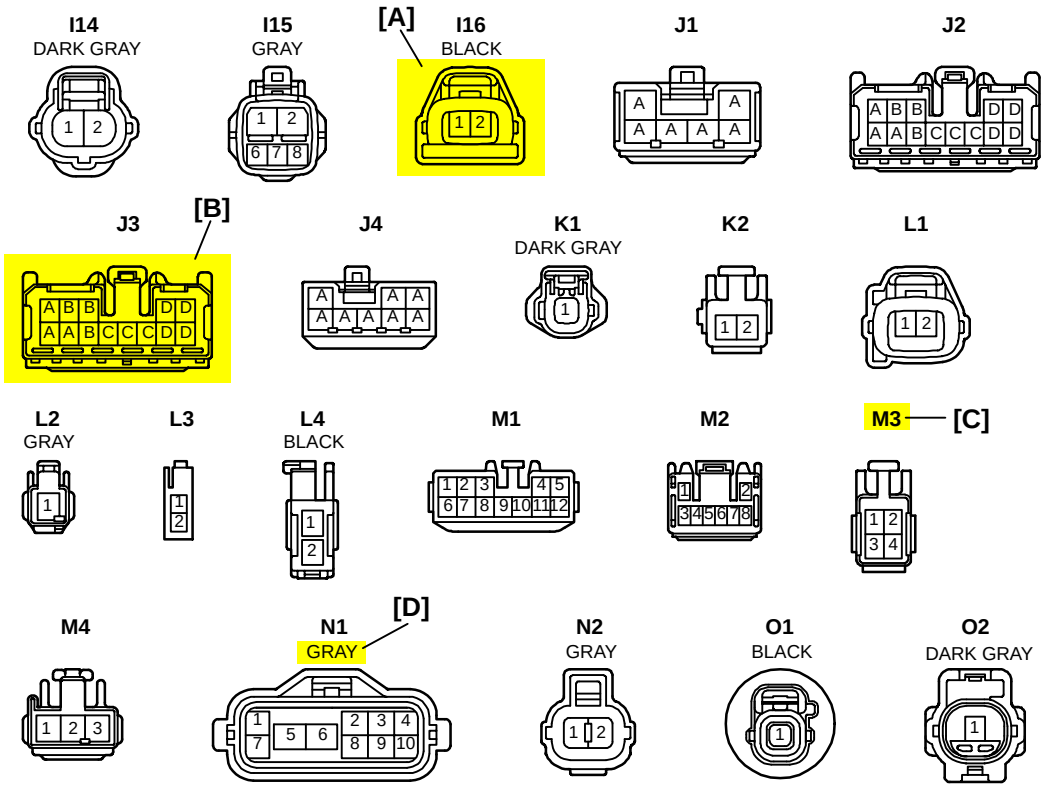
Fuse		System	Page
20A	STOP	ABS ABS and Traction Control Cruise Control Electronically Controlled Transmission and A/T Indicator Multiplex Communication System	194 187 180 166 210
10A	DOME	Cigarette Lighter and Clock Combination Meter Headlight Interior Light Key Reminder and Seat Belt Warning Light Auto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

POWER SOURCE



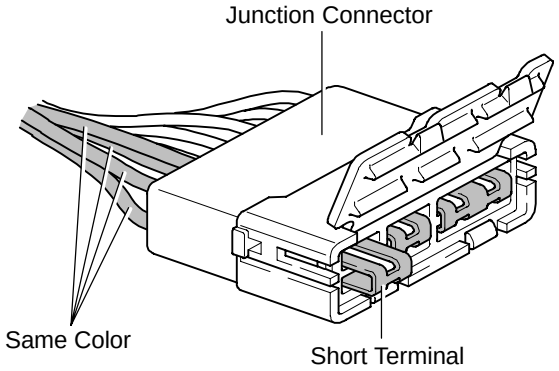
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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 Triple Pressure SW (A/C Dual and Single Pressure SW)	90980–10943
[A]	A/T Oil Temp. Sensor [B]	90[illegible] 413 [C]
A 6	ABS Actuator	90980–11151
A 7	ABS Actuator	90980–11009
A 8	ABS Speed Sensor Front LH	90980–10941
A 9	ABS Speed Sensor Front RH	90980–11002
A10	Airbag Sensor Front LH	90980–11856
A11	Airbag Sensor Front RH	
A12	[illegible]	90980–11194
		90980–[illegible]

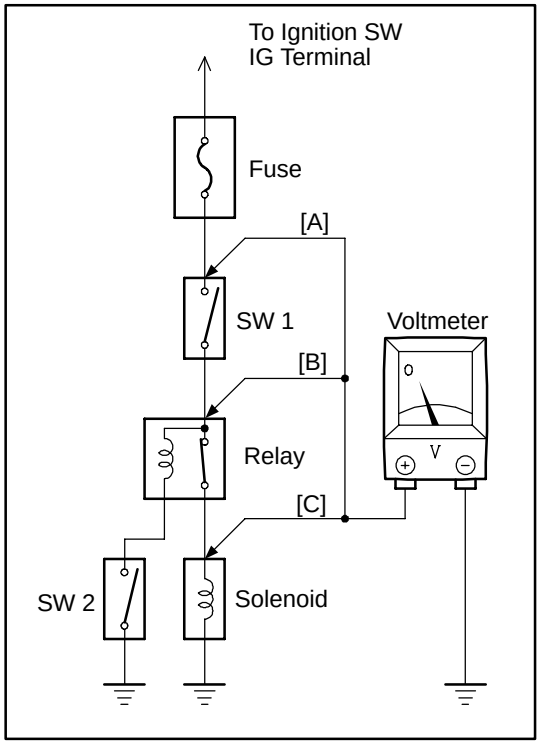
Code	Part Name	Part Number
D 4	Diode (Door Courtesy Light)	90980–11608
D 5	Diode (Key Off Operation)	90980–10962
D 6	Diode (Luggage Compartment Light)	90980–11608
D 7	Door Lock Control Relay	90980–10848
D 8	Door Courtesy Light LH	90980–11148
D 9	Door Courtesy Light RH	
D10	Door Courtesy SW LH	90980–11097
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	[illegible] 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. In case of ordering a connector or terminal with wire, please confirm in advance if there is supply for it using “Parts Catalog News” (published by Parts Engineering Administration Dept.).

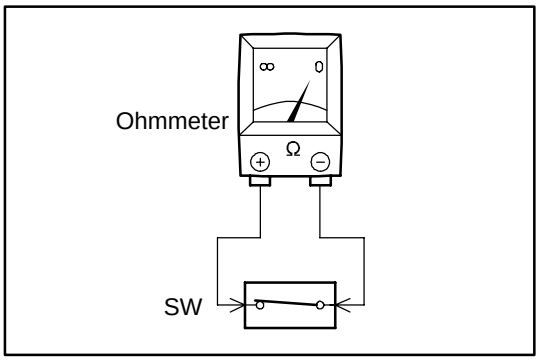


VOLTAGE CHECK

(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)

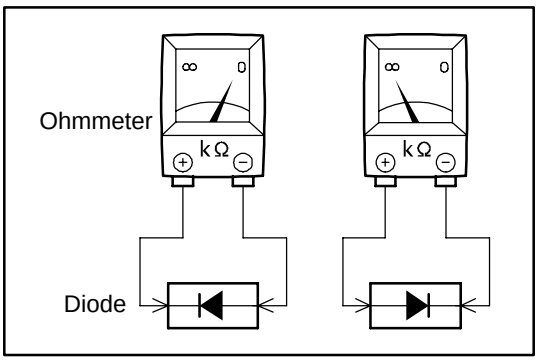
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

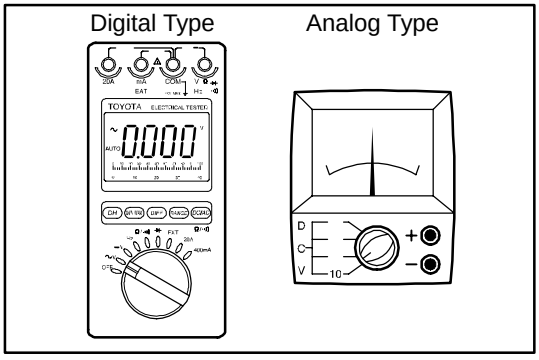
(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

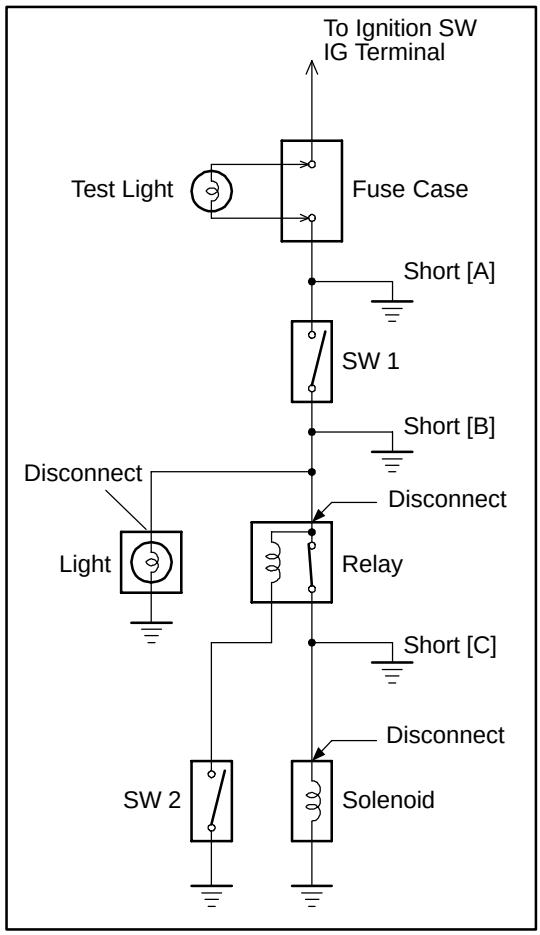
(b) Contact the two leads of an ohmmeter to each of the check points.



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:

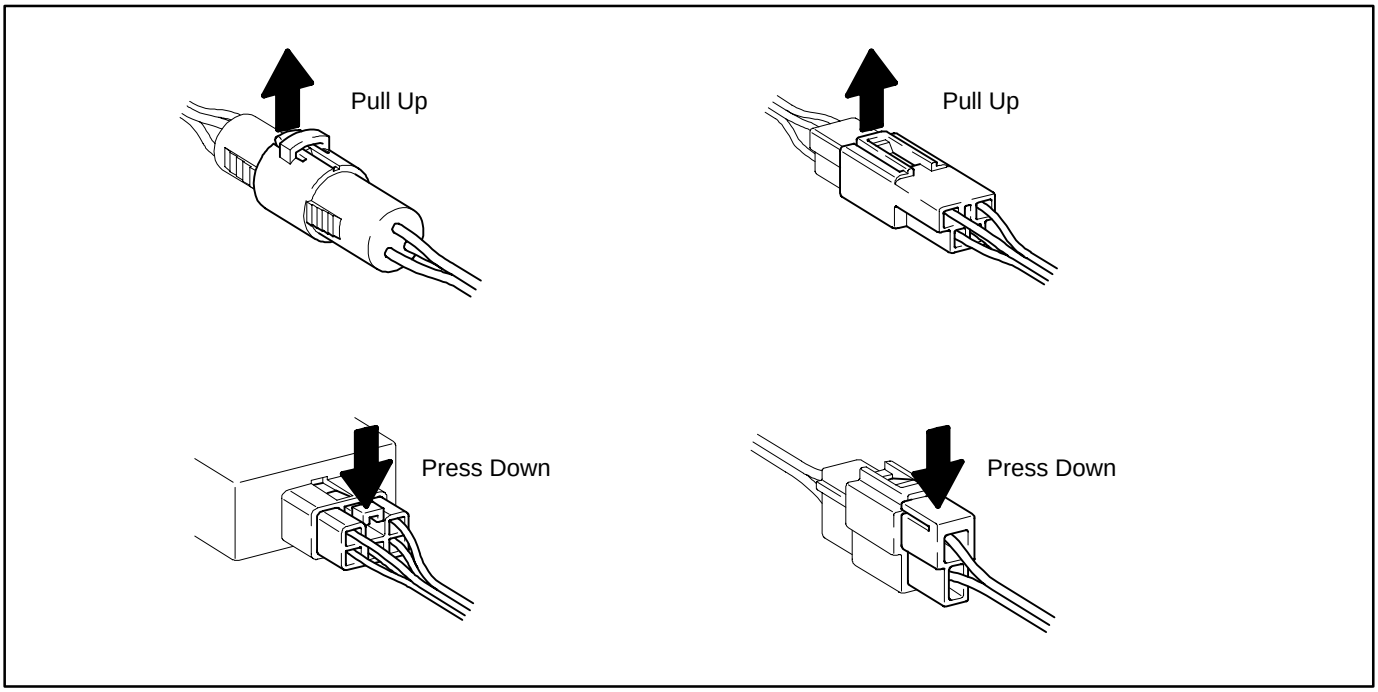
(a) Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

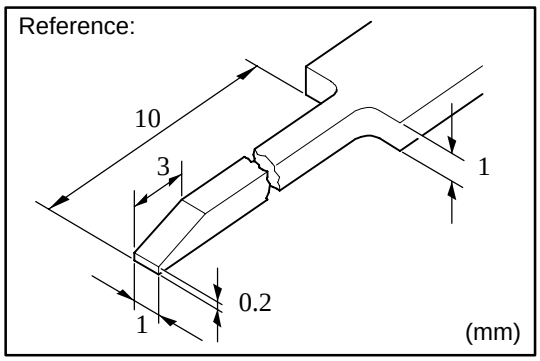
(b) When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).

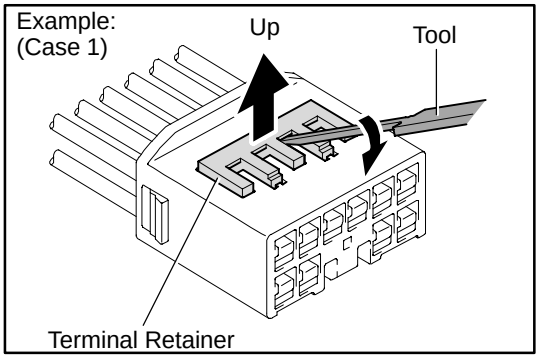
DISCONNECTION OF MALE AND FEMALE CONNECTORS

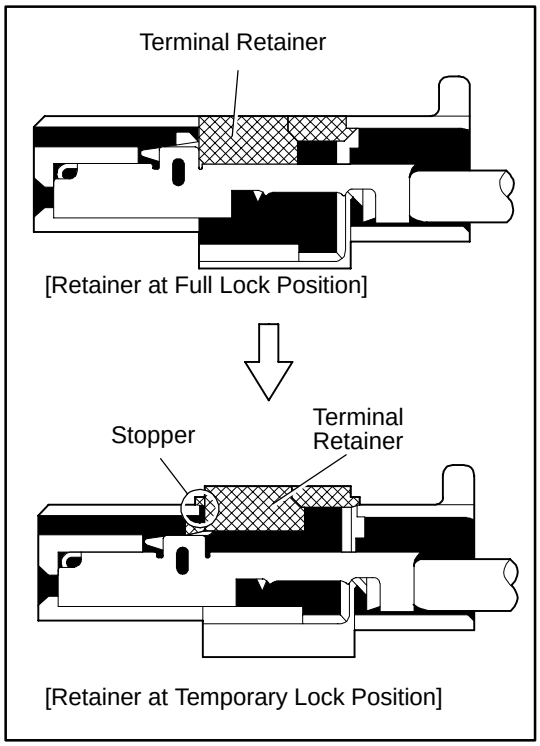
To pull apart the connectors, pull on the connector itself, not the wire harness.

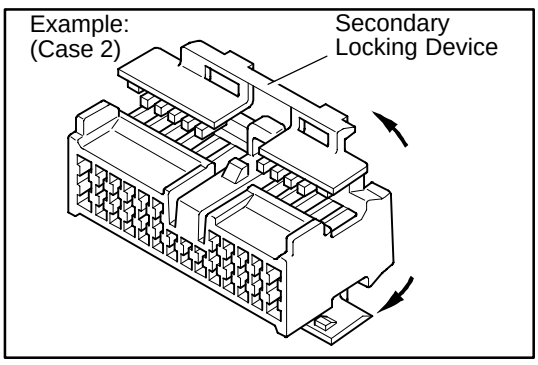
HINT : Check to see what kind of connector you are disconnecting before pulling apart.











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

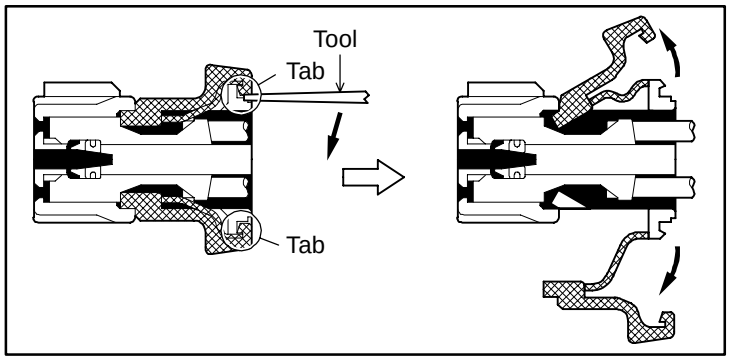
   HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

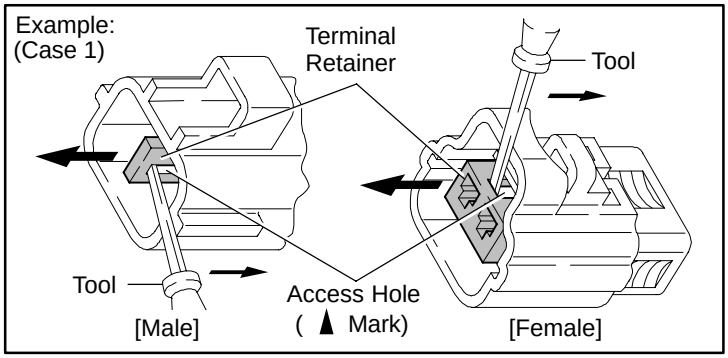
   "Case 1"

   Raise the terminal retainer up to the temporary lock position.

   "Case 2"

   Open the secondary locking device.



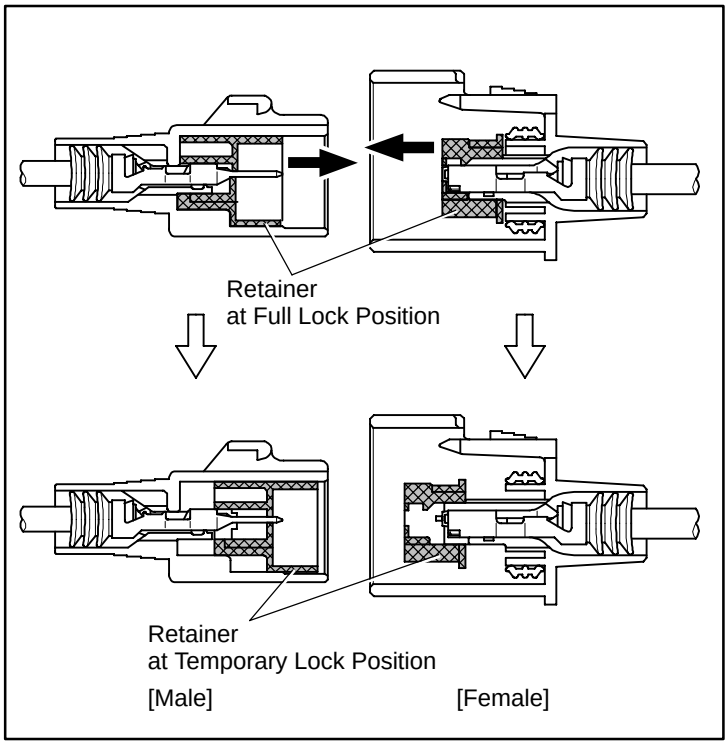


[B] For Waterproof Type Connector

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

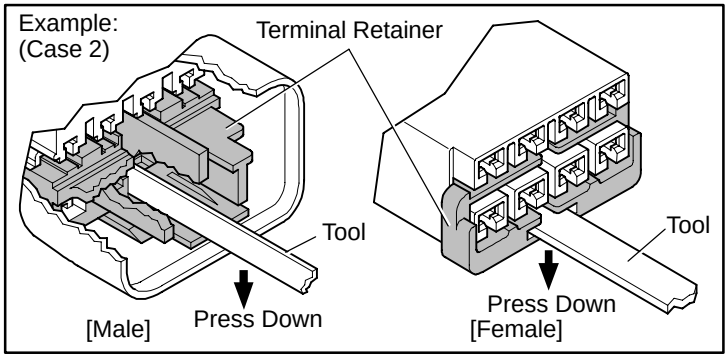


”Case 1”

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

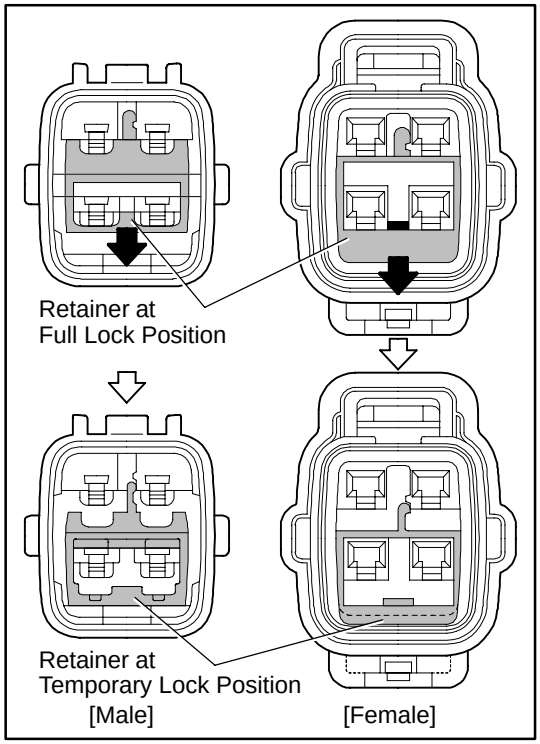
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

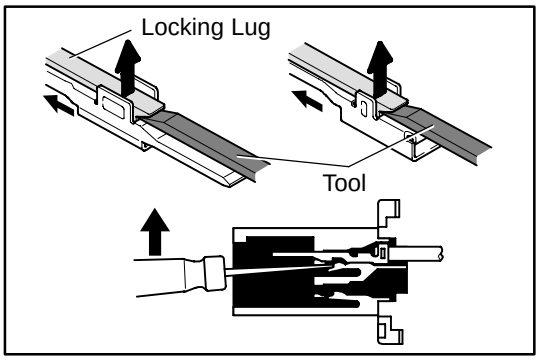


”Case 2”

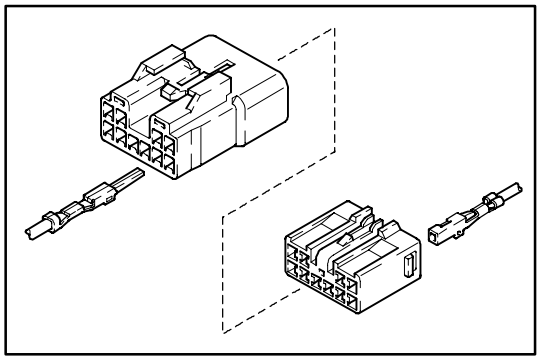
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



Push the terminal retainer down to the temporary lock position.



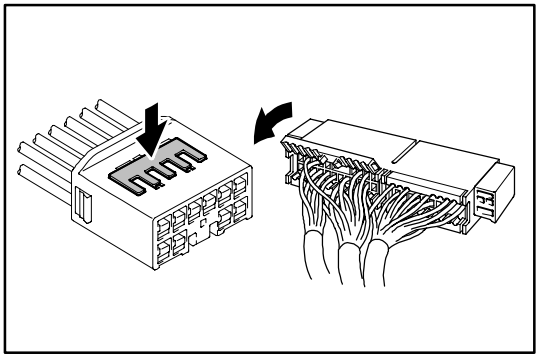
(c) Release the locking lug from terminal and pull the terminal out from rear.



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

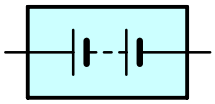
ABBREVIATIONS

The following abbreviations are used in this manual.

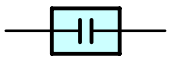
A/C	=	Air Conditioning
A/T	=	Automatic Transmission
ABS	=	Anti–Lock Brake System
ACIS	=	Acoustic Control Induction System
BA	=	Brake Assist
COMB.	=	Combination
ECU	=	Electronic Control Unit
ESA	=	Electronic Spark Advance
ETCS–i	=	Electronic Throttle Control System–intelligent
EVAP	=	Evaporative Emission
FFC	=	Flexible Flat Circuit
IC	=	Integrated Circuit
J/B	=	Junction Block
LCD	=	Liquid Crystal Display
LED	=	Light Emitting Diode
LH	=	Left–Hand
MPX	=	Multiplex
O/D	=	Overdrive
R/B	=	Relay Block
RH	=	Right–Hand
S/D	=	Sedan Type
SFI	=	Sequential Multiport Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRAC	=	Traction Control
VSC	=	Vehicle Skid Control
VSV	=	Vacuum Switching Valve
W/G	=	Wagon Type
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.

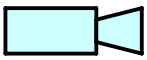
E GLOSSARY OF TERMS AND SYMBOLS



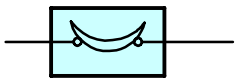
BATTERY
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.



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



CIGARETTE LIGHTER
An electric resistance heating element.



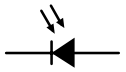
CIRCUIT BREAKER
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.



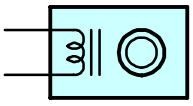
DIODE
A semiconductor which allows current flow in only one direction.



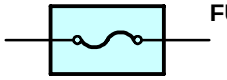
DIODE, ZENER
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



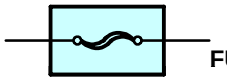
PHOTODIODE
The photodiode is a semiconductor which controls the current flow according to the amount of light.



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

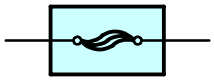


FUSE
A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.



(for Medium Current Fuse)

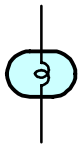
FUSIBLE LINK
A heavy–gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. The numbers indicate the crosssection surface area of the wires.



(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.

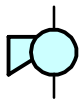


1. SINGLE FILAMENT

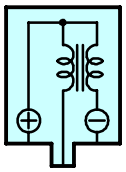


2. DOUBLE FILAMENT

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.



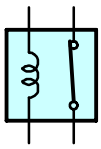
METER, DIGITAL
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.



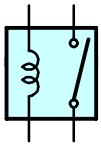
MOTOR
A power unit which converts electrical energy into mechanical energy, especially rotary motion.

RELAY

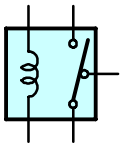
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.



1. NORMALLY CLOSED

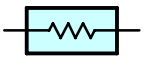


2. NORMALLY OPEN



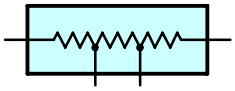
RELAY, DOUBLE THROW

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.



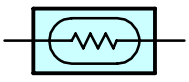
RESISTOR, TAPPED

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



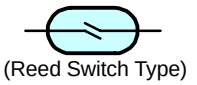
RESISTOR, VARIABLE or RHEOSTAT

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



SENSOR (Thermistor)

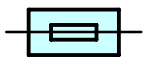
A resistor which varies its resistance with temperature.



(Reed Switch Type)

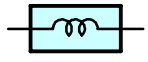
SENSOR, SPEED

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



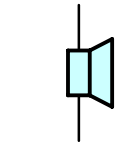
SHORT PIN

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.

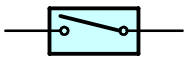


SPEAKER

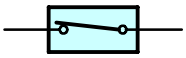
An electromechanical device which creates sound waves from current flow.

SWITCH, MANUAL

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



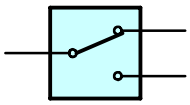
1. NORMALLY OPEN



2. NORMALLY CLOSED

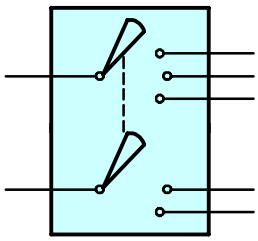
SWITCH, DOUBLE THROW

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



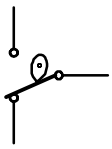
SWITCH, IGNITION

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



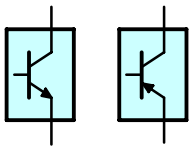
SWITCH, WIPER PARK

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



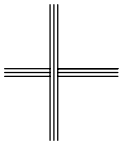
TRANSISTOR

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

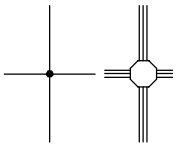


WIRES

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.



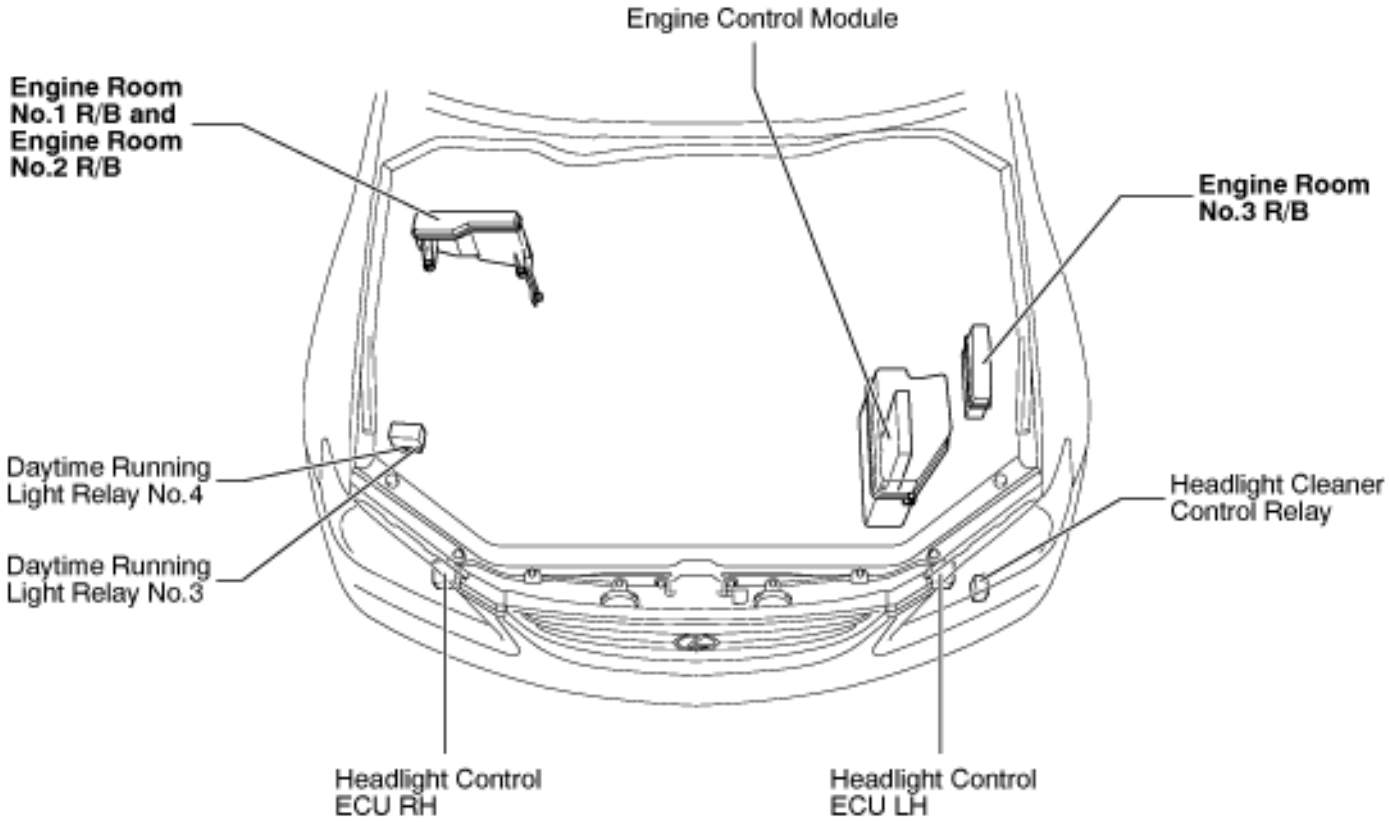
(1) NOT CONNECTED



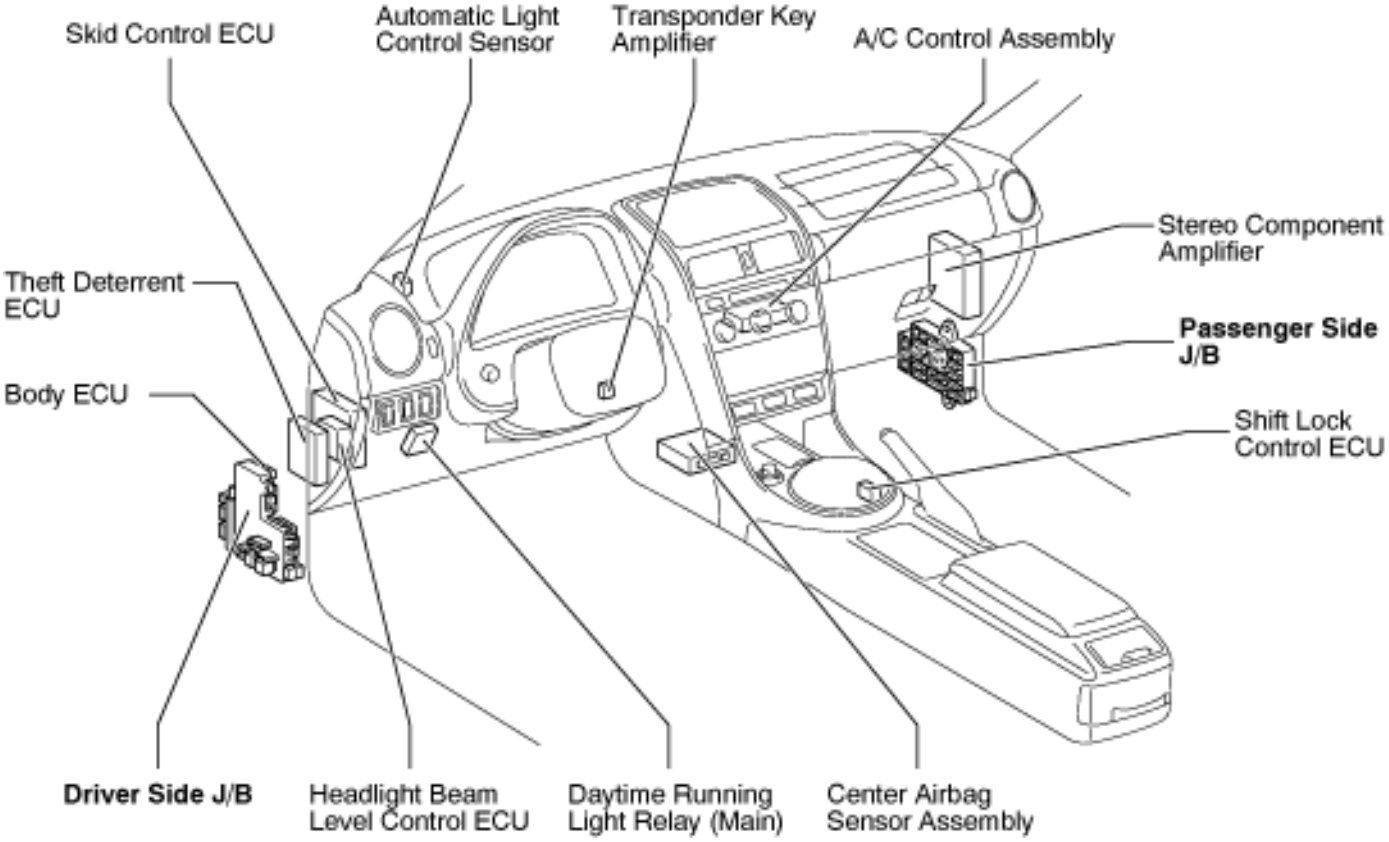
(2) SPLICED

F RELAY LOCATIONS

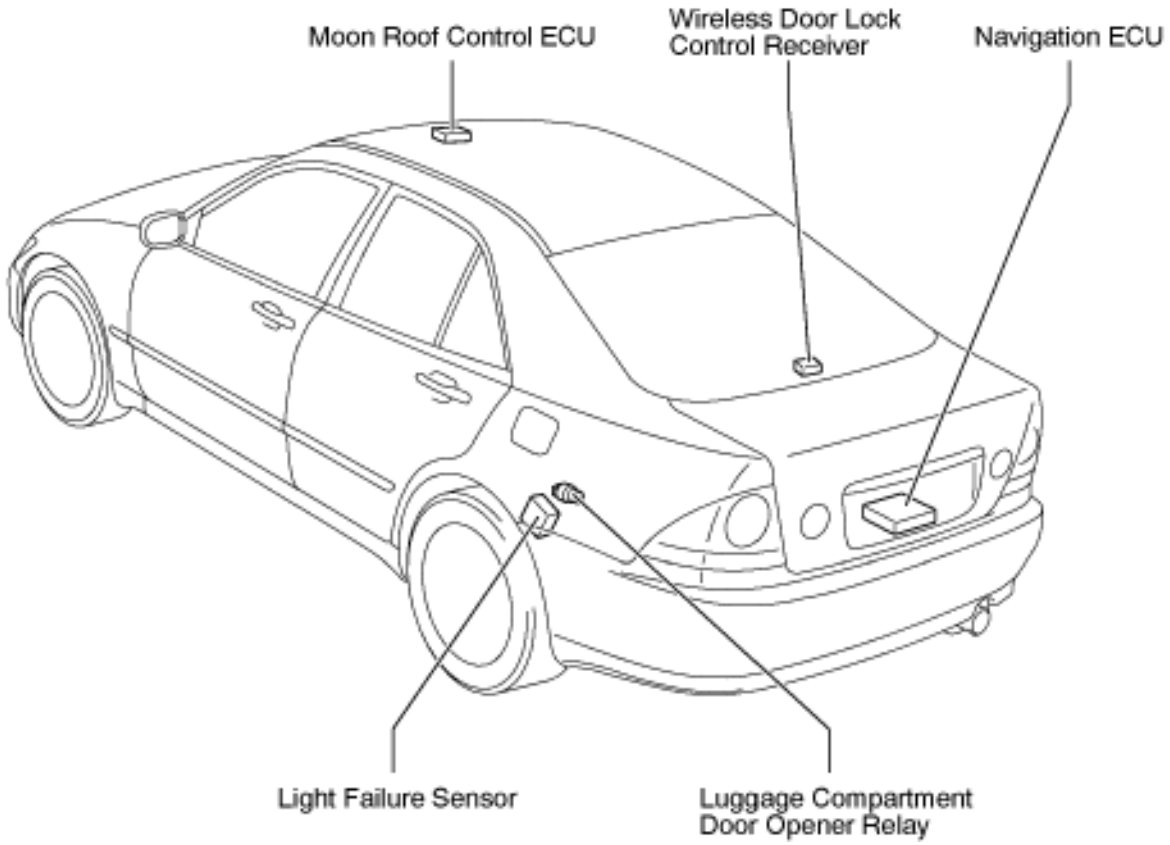
[Engine Compartment]



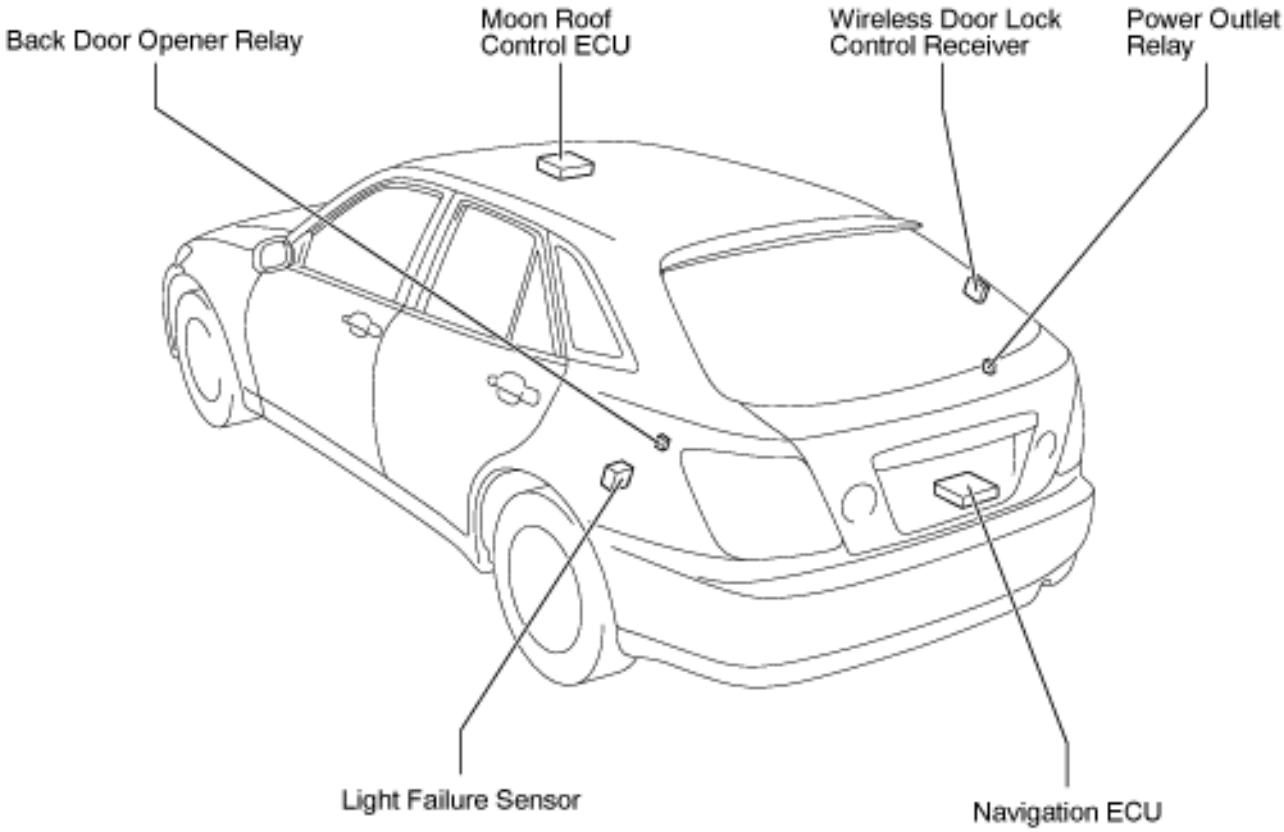
[Instrument Panel]



[Body]
(S/D)

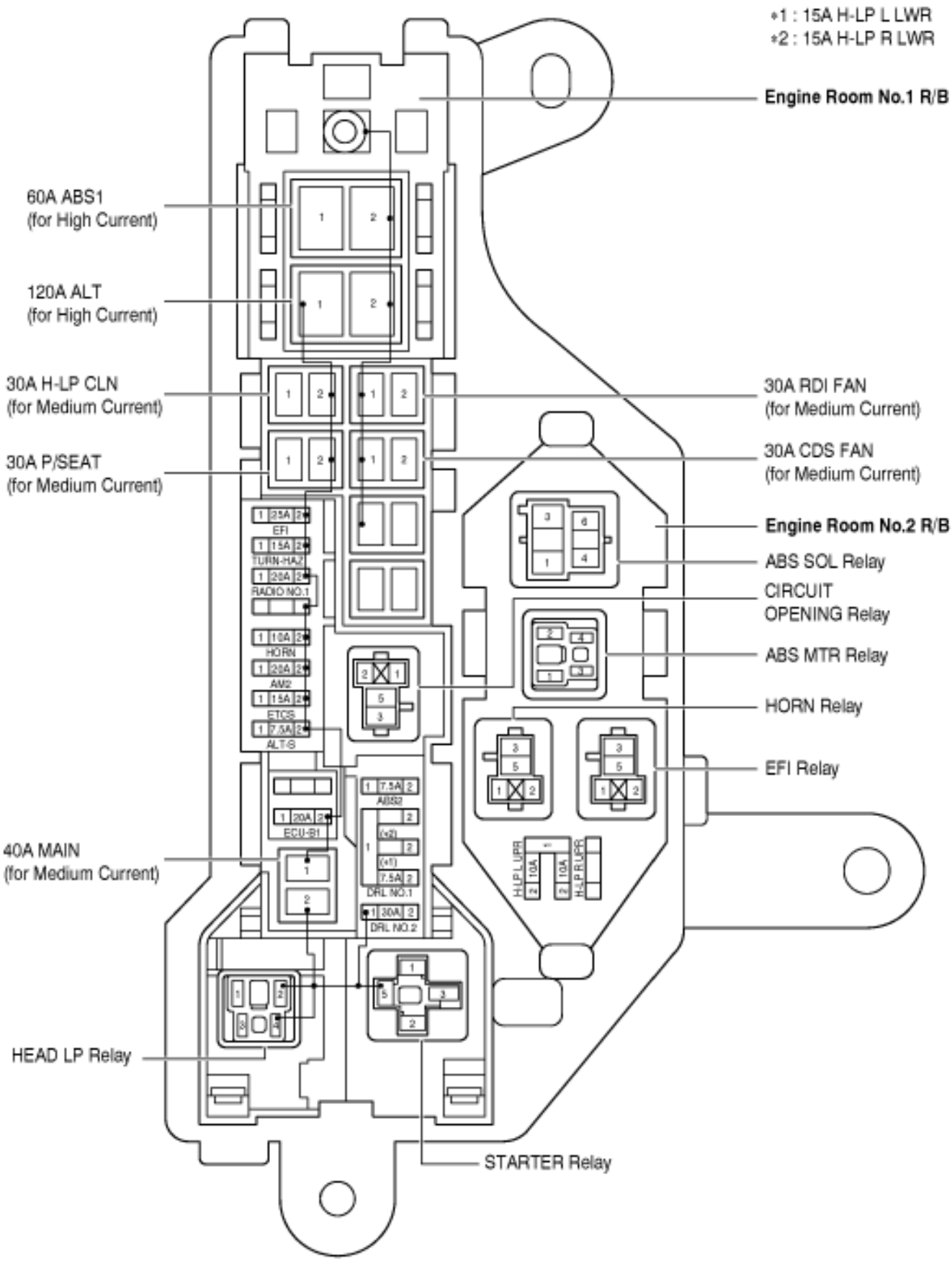

Moon Roof Control ECU
Wireless Door Lock Control Receiver
Navigation ECU
Light Failure Sensor
Luggage Compartment Door Opener Relay

(W/G)

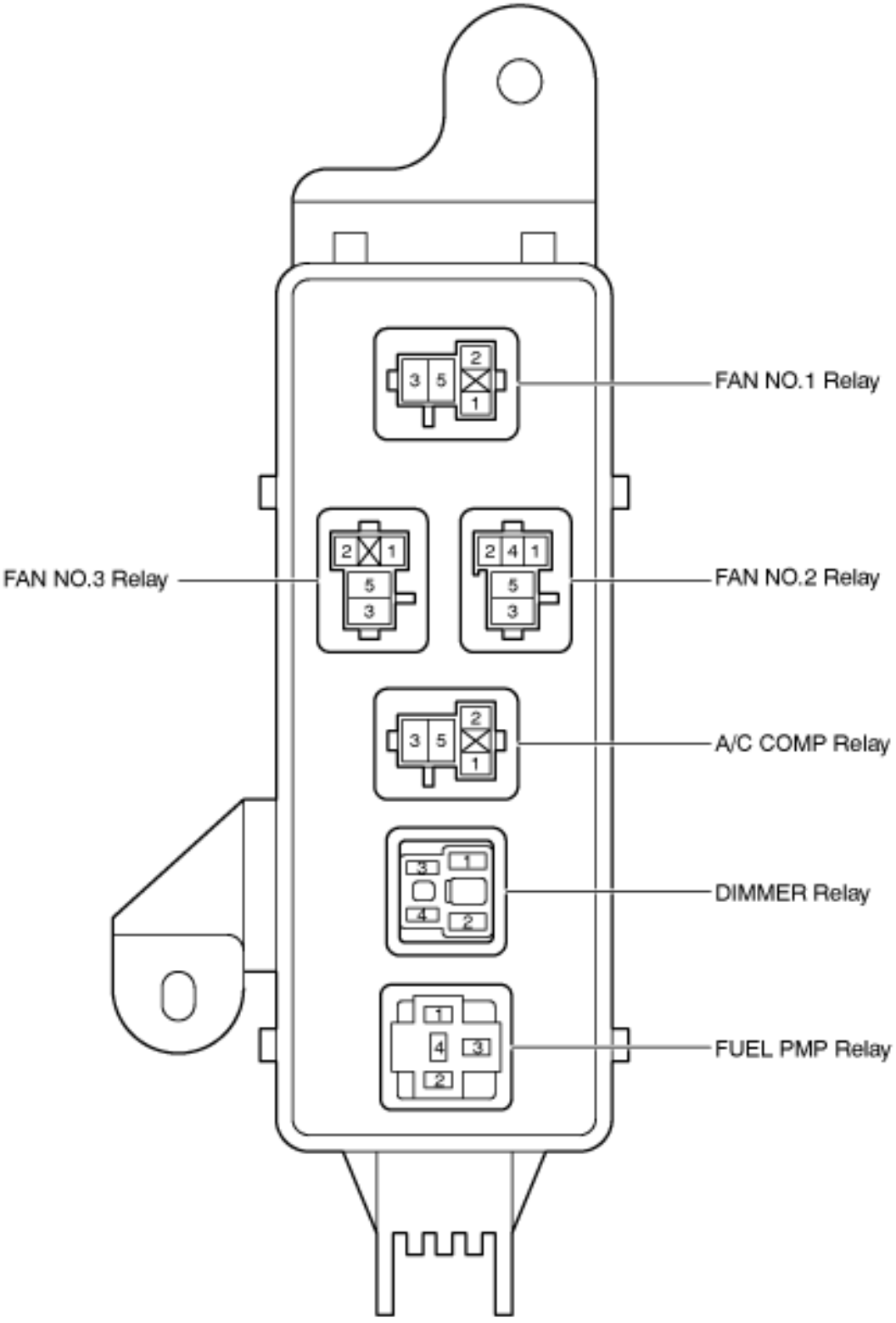

Back Door Opener Relay
Moon Roof Control ECU
Wireless Door Lock Control Receiver
Power Outlet Relay
Light Failure Sensor
Navigation ECU

F RELAY LOCATIONS

① : Engine Room No.1 R/B ② : Engine Room No.2 R/B	Engine Compartment Right (See Page 20)

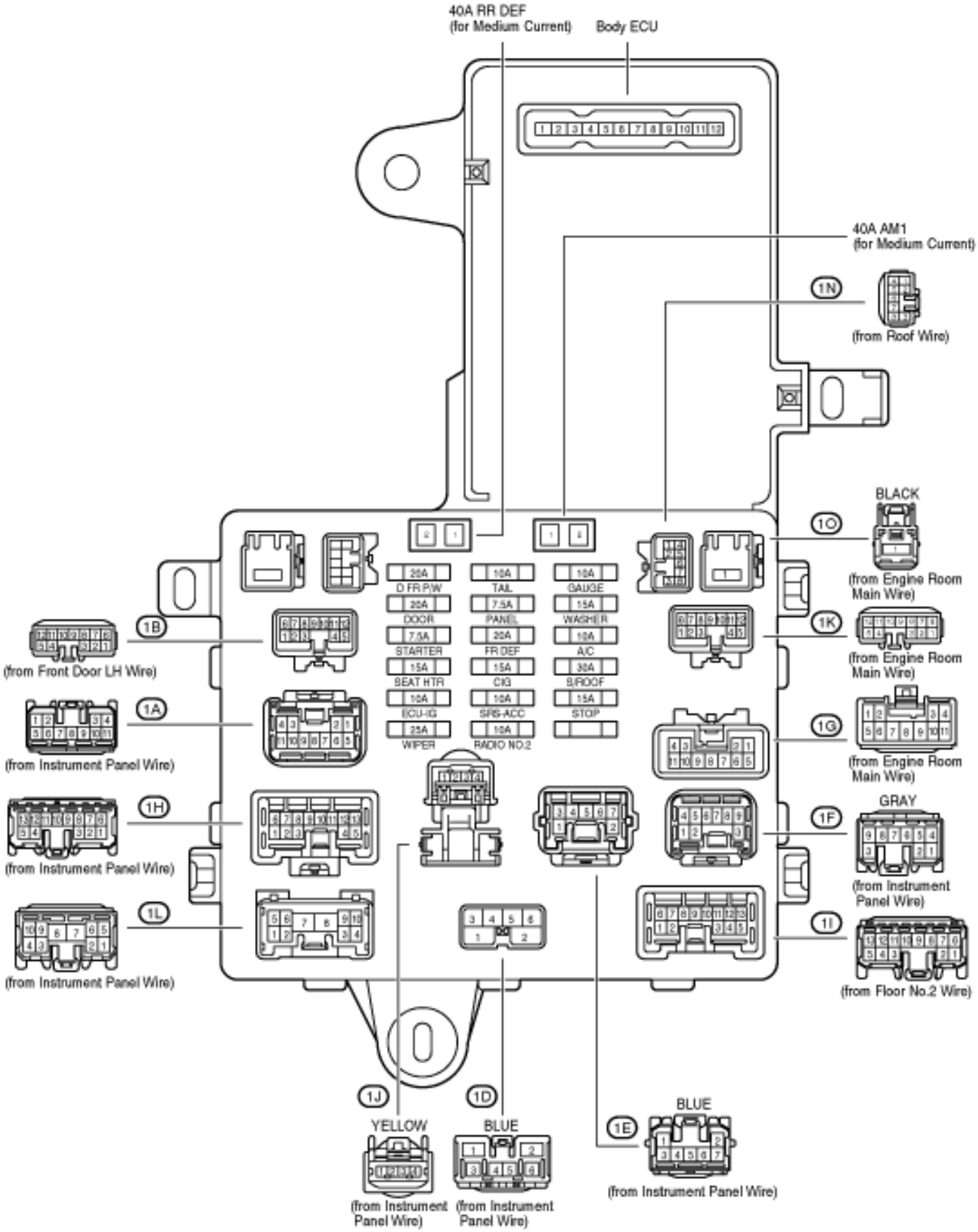


③ : Engine Room No.3 R/B	Engine Compartment Left (See Page 20)

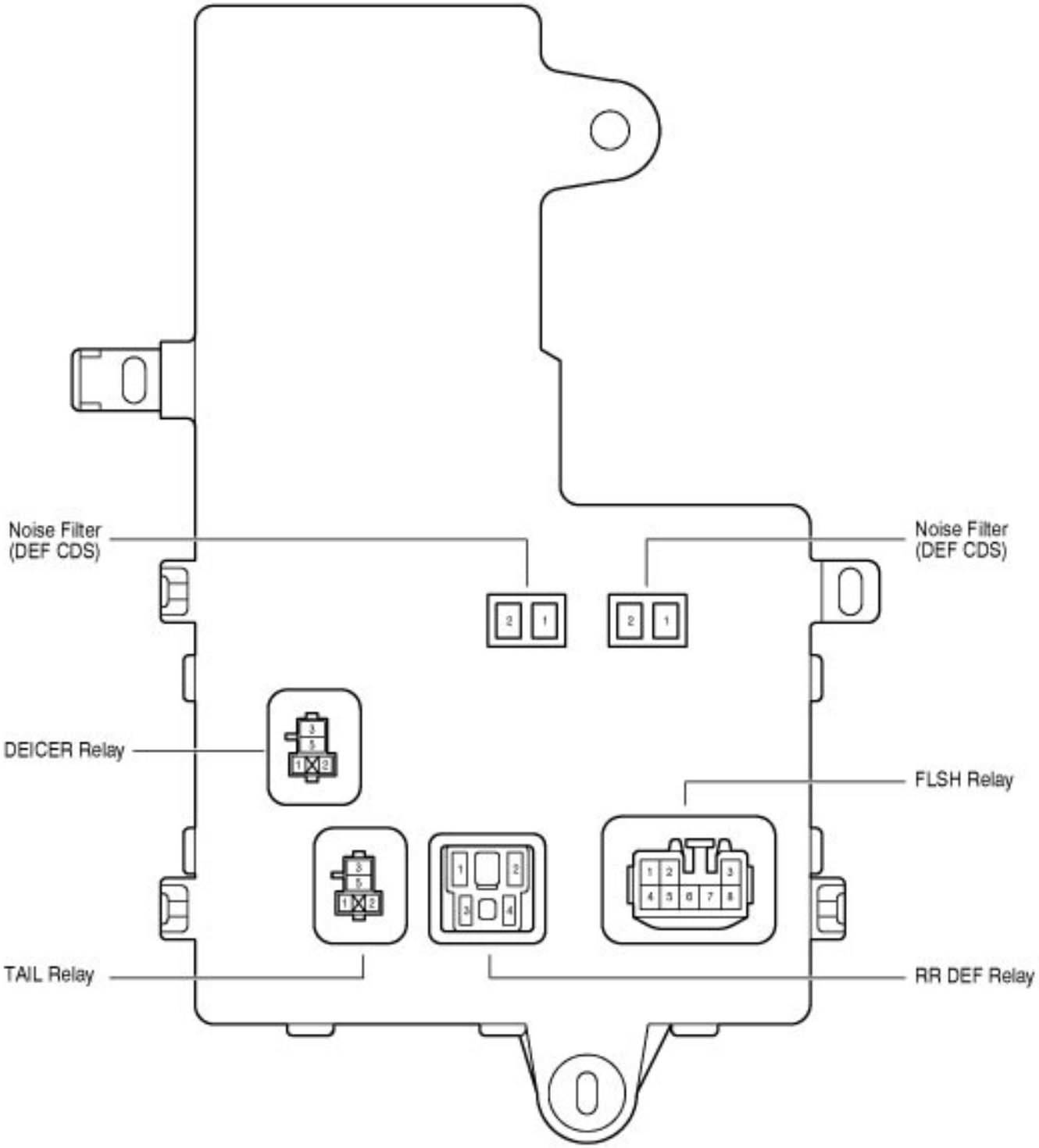


F RELAY LOCATIONS

: Driver Side J/B	Left Kick Panel (See Page 20)

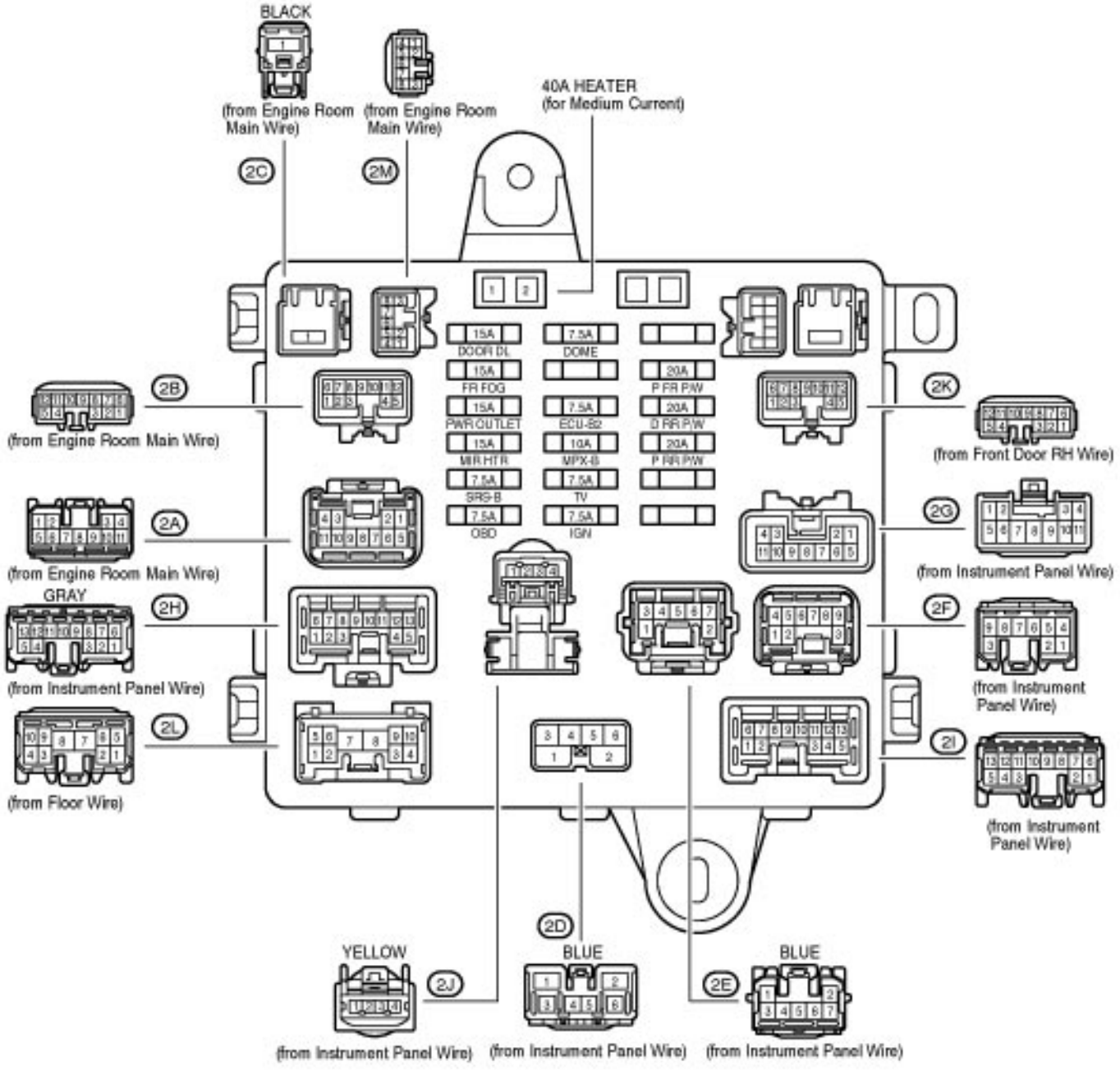


(Inner Circuit : See Page 28)

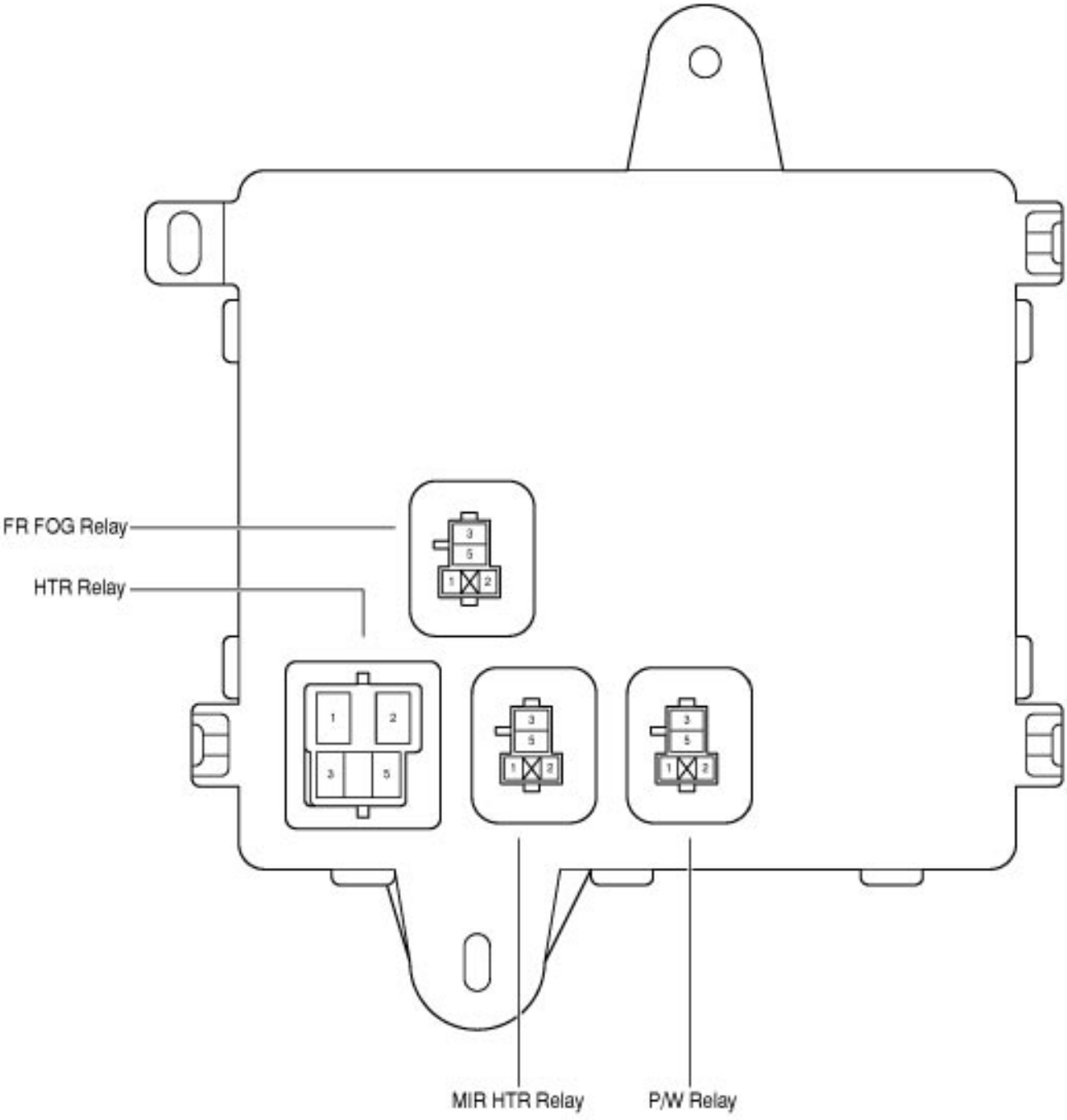


F RELAY LOCATIONS

: Passenger Side J/B	Right Kick Panel (See Page 20)

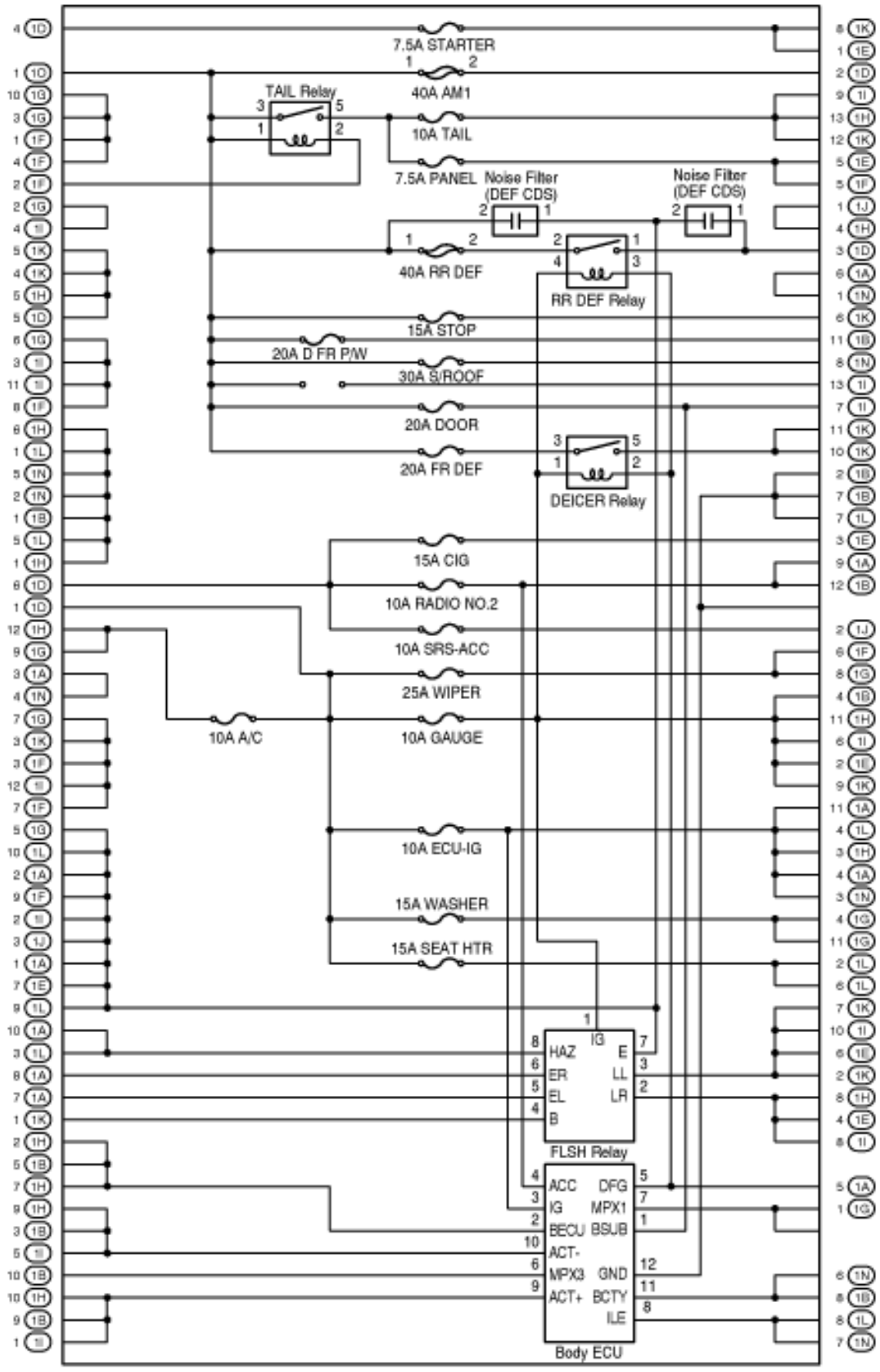


(Inner Circuit : See Page 29)

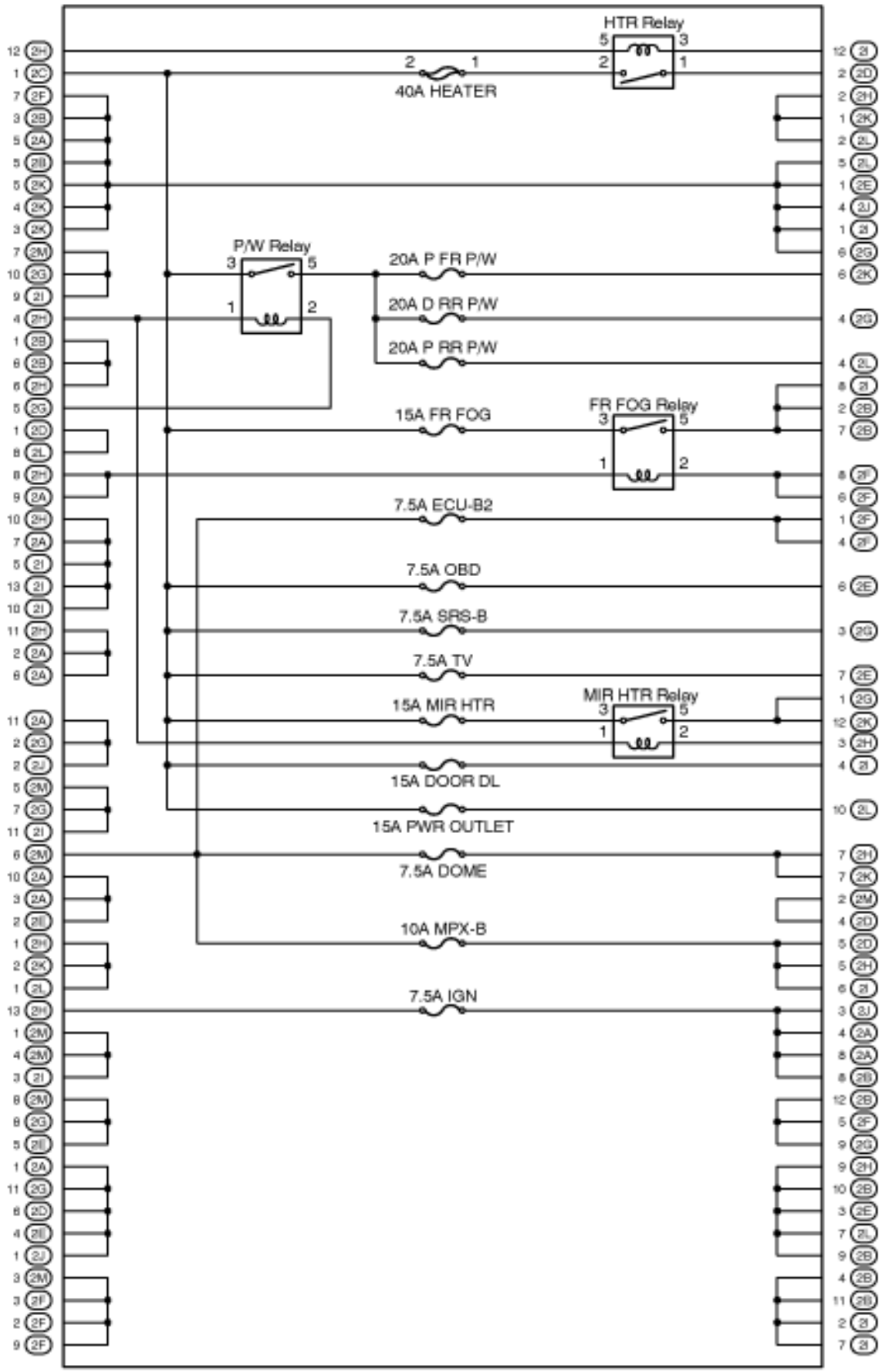


F RELAY LOCATIONS

[Driver Side J/B Inner Circuit]

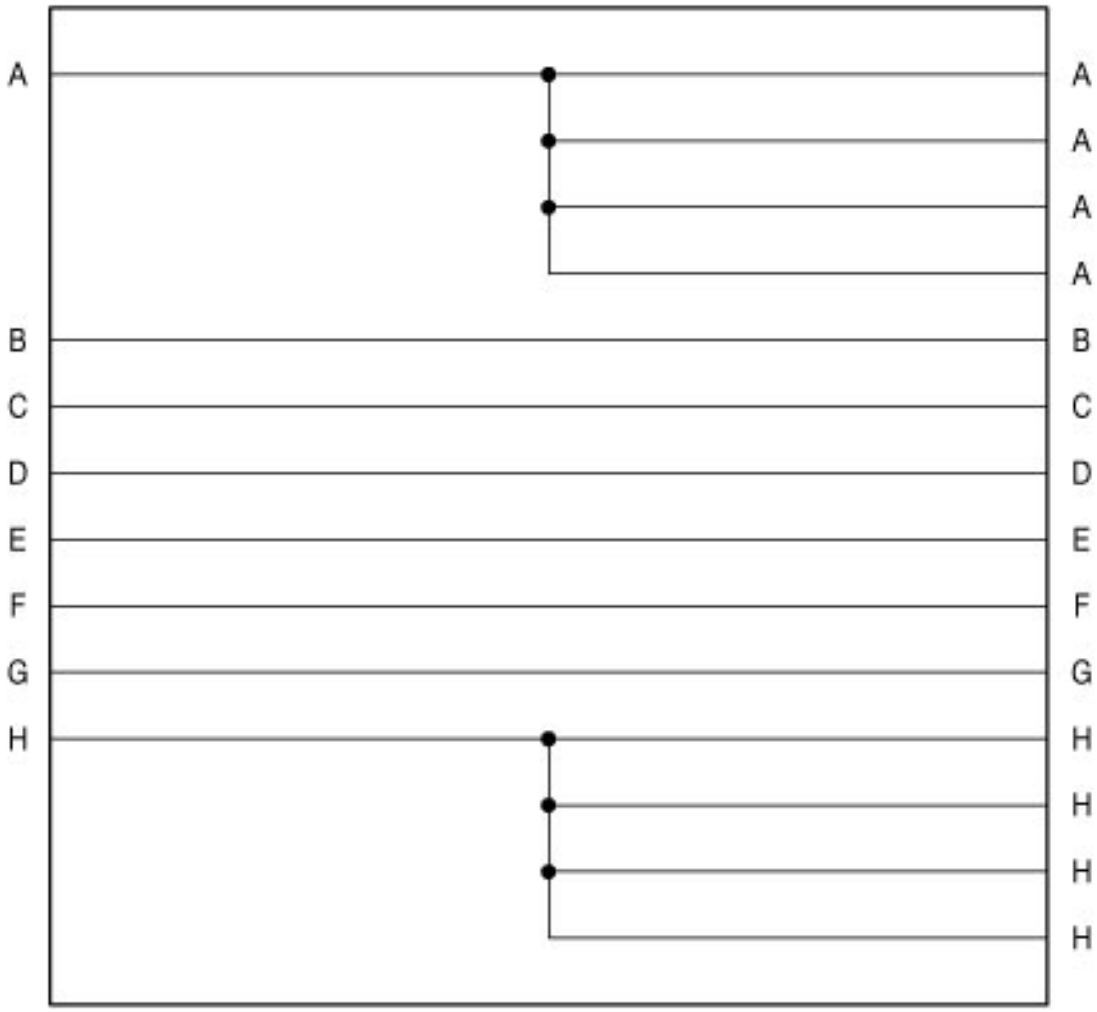


[Passenger Side J/B Inner Circuit]


HTR Relay
40A HEATER
P/W Relay
20A P FR P/W
20A D RR P/W
20A P RR P/W
FR FOG Relay
15A FR FOG
7.5A ECU-B2
7.5A OBD
7.5A SRS-B
7.5A TV
MIR HTR Relay
15A MIR HTR
15A DOOR DL
15A PWR OUTLET
7.5A DOME
10A MPX-B
7.5A IGN

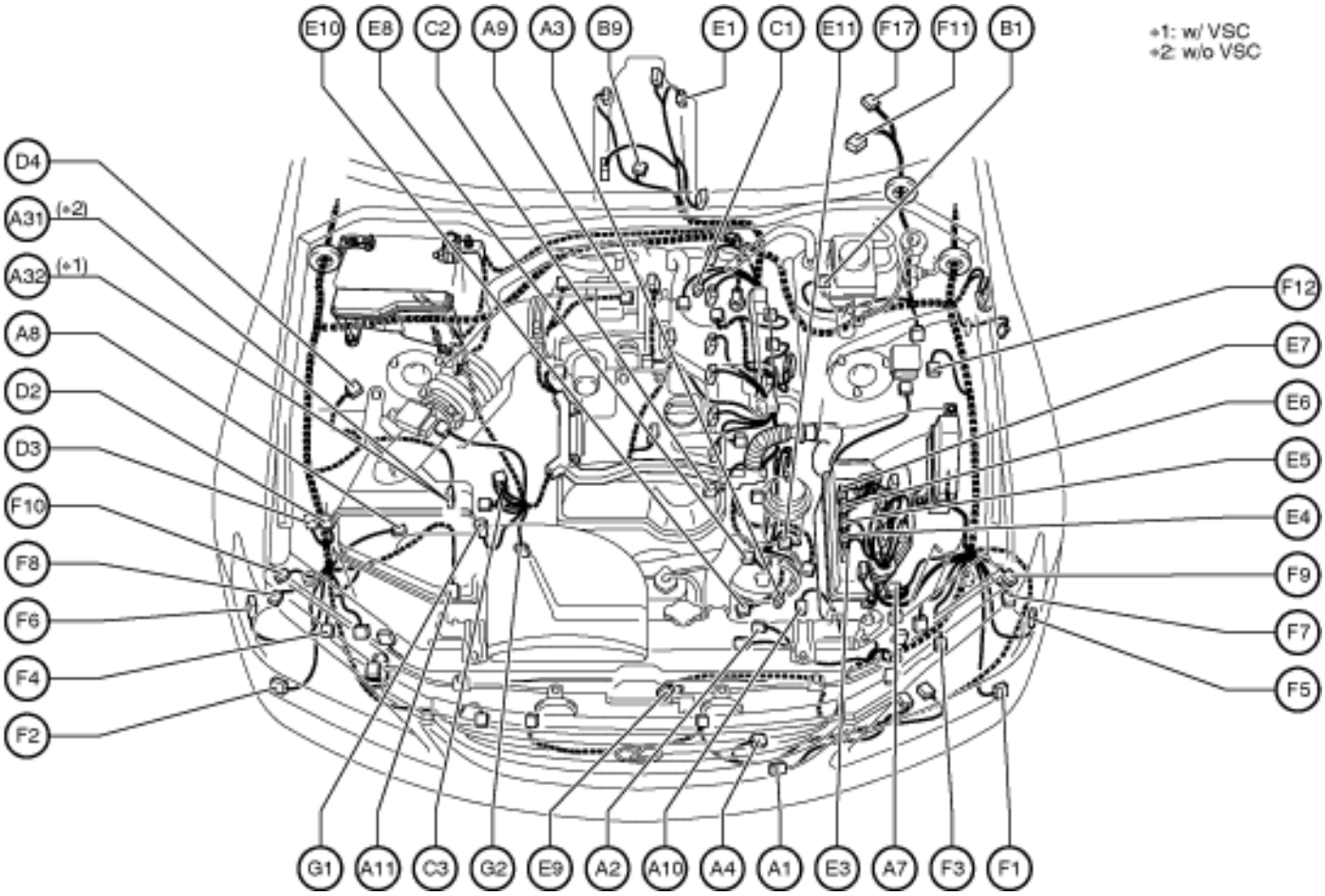
F RELAY LOCATIONS

[W4 : Wire to FFC Holder Inner Circuit]



G ELECTRICAL WIRING ROUTING

Position of Parts in Engine Compartment



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Magnetic Clutch and Lock Sensor
A 4 A/C Triple Pressure SW
(A/C Dual and Single Pressure SW)
A 7 ABS Speed Sensor Front LH
A 8 ABS Speed Sensor Front RH
A 9 Accel Position Sensor
A 10 Airbag Sensor Front LH
A 11 Airbag Sensor Front RH
A 31 ABS & BA & TRAC Actuator
A 32 ABS & BA & TRAC & VSC Actuator

B 1 Brake Fluid Level Warning SW
B 9 Back–Up Light SW

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

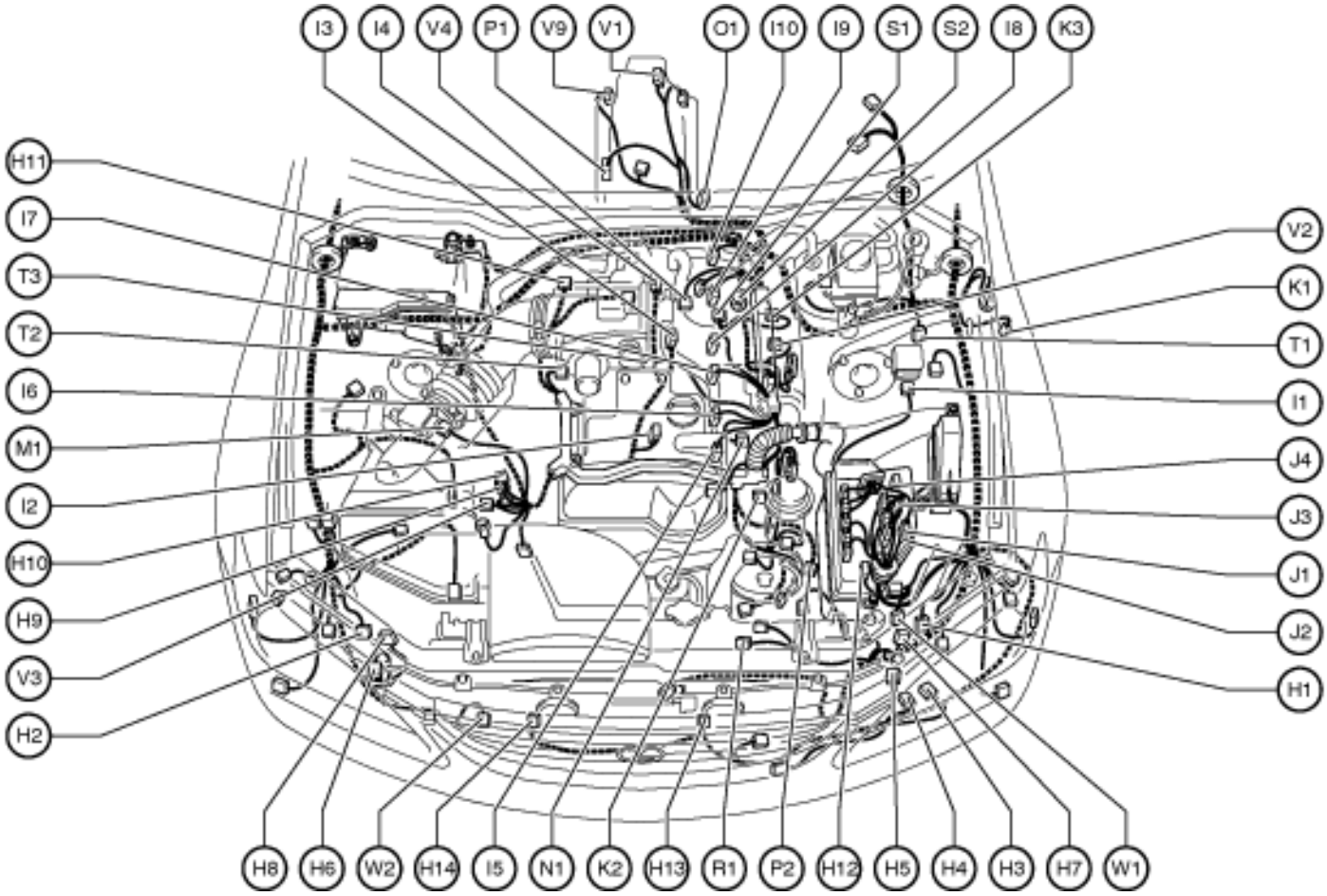
D 2 Daytime Running Light Relay No.3
D 3 Daytime Running Light Relay No.4
D 4 Daytime Running Light Resistor

E 1 Electronically Controlled Transmission Solenoid
E 3 Engine Control Module
E 4 Engine Control Module
E 5 Engine Control Module
E 6 Engine Control Module
E 7 Engine Control Module
E 8 Engine Coolant Temp. Sensor
E 9 Engine Hood Courtesy SW
E 10 Engine Oil Level Sensor
E 11 Engine Oil Pressure SW

F 1 Front Fog Light LH
F 2 Front Fog Light RH
F 3 Front Parking Light LH
F 4 Front Parking Light RH
F 5 Front Side Marker Light LH
F 6 Front Side Marker Light RH
F 7 Front Side Turn Signal Light LH
F 8 Front Side Turn Signal Light RH
F 9 Front Turn Signal Light LH
F 10 Front Turn Signal Light RH
F 11 Front Wiper Motor
F 12 Fuel Pump Resistor
F 17 Front Window Deicer

G 1 Generator
G 2 Generator

Position of Parts in Engine Compartment



H 1 Headlight Beam Level Control Actuator LH
H 2 Headlight Beam Level Control Actuator RH
H 3 Headlight Cleaner Control Relay
H 4 Headlight Cleaner Motor
H 5 Headlight Control ECU LH
H 6 Headlight Control ECU RH
H 7 Headlight LH (High)
H 8 Headlight RH (High)
H 9 Heated Oxygen Sensor (Bank 1 Sensor 1)
H10 Heated Oxygen Sensor (Bank 1 Sensor 2)
H11 Heated Oxygen Sensor (Bank 2 Sensor 1)
H12 Height Control Sensor Front LH
H13 Horn LH
H14 Horn RH

I 1 Igniter
I 2 Ignition Coil No.1
I 3 Ignition Coil No.2
I 4 Ignition Coil No.3
I 5 Injector No.1
I 6 Injector No.2
I 7 Injector No.3
I 8 Injector No.4
I 9 Injector No.5
I 10 Injector No.6

J 1 Junction Connector
J 2 Junction Connector
J 3 Junction Connector
J 4 Junction Connector

K 1 Keyless Buzzer
K 2 Knock Sensor 1
K 3 Knock Sensor 2

M 1 Mass Air Flow Meter

N 1 Noise Filter (Ignition)

O 1 O/D Direct Clutch Speed Sensor

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

R 1 Radiator Fan Motor

S 1 Starter
S 2 Starter

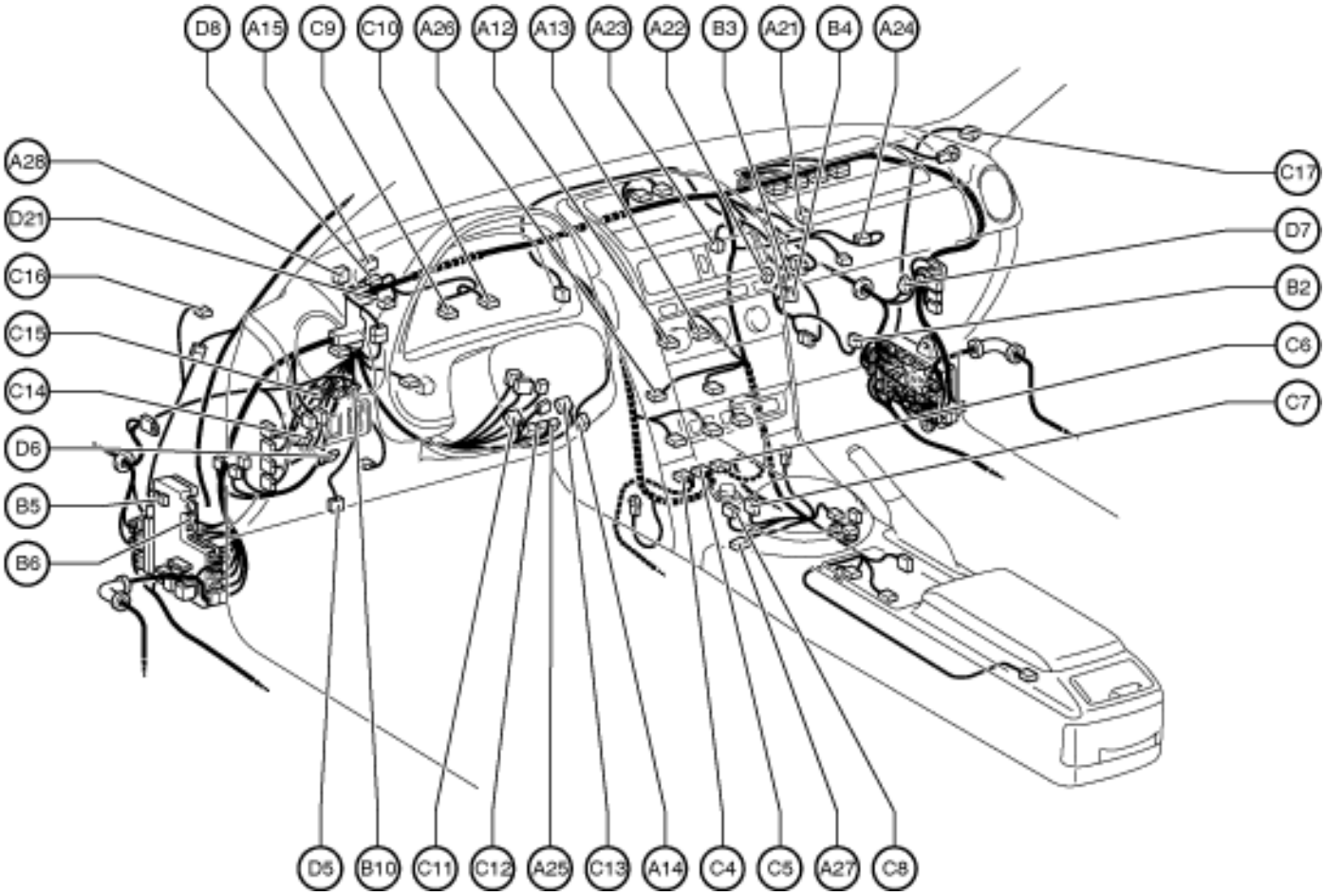
T 1 Theft Deterrent Horn
T 2 Throttle Control Motor
T 3 Throttle Position Sensor

V 1 Vehicle Speed Sensor (Electronically Controlled Transmission)
V 2 VSV (ACIS)
V 3 VSV (Canister Closed Valve)
V 4 VSV (EVAP)
V 9 Vehicle Speed Sensor (Combination Meter)

W 1 Washer Motor
W 2 Water Temp. SW

G ELECTRICAL WIRING ROUTING

Position of Parts in Instrument Panel



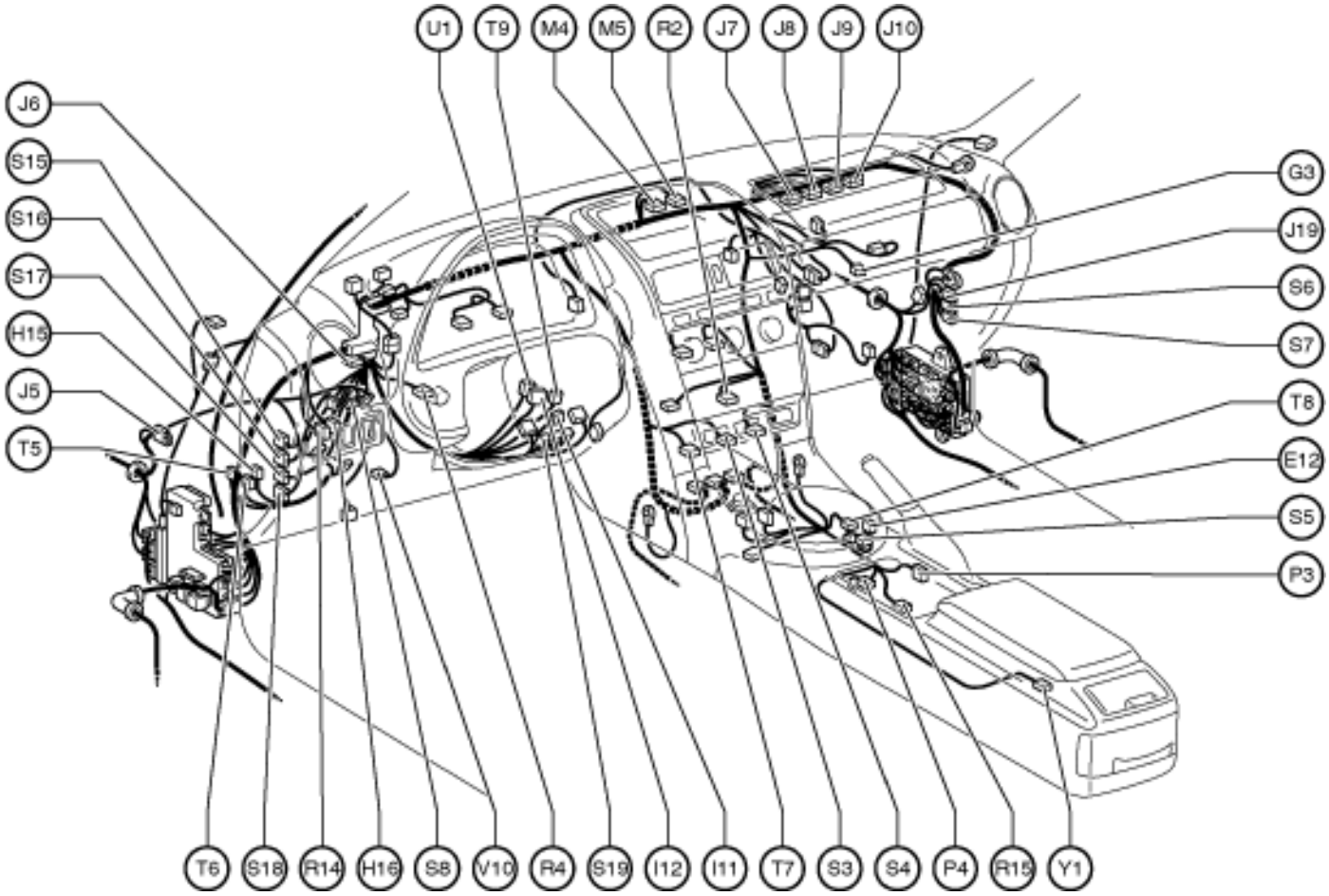
A12 A/C Control Assembly
A13 A/C Control Assembly
A14 A/C Room Temp. Sensor
A15 A/C Solar Sensor
A21 Air Inlet Control Servo Motor
A22 Air Mix Control Servo Motor
A23 Air Vent Mode Control Servo Motor
A24 Airbag Squib (Front Passenger Airbag Assembly)
A25 Airbag Squib (Steering Wheel Pad)
A26 Antenna Amplifier
A27 Ashtray Illumination
A28 Automatic Light Control Sensor

B 2 Blower Motor
B 3 Blower Motor Controller
B 4 Blower Motor Controller
B 5 Body ECU
B 6 Body ECU
B10 Brake Pedal Load Sensing SW

C 4 Center Airbag Sensor Assembly
C 5 Center Airbag Sensor Assembly
C 6 Center Airbag Sensor Assembly
C 7 Cigarette Lighter
C 8 Cigarette Lighter Illumination
C 9 Combination Meter
C10 Combination Meter
C11 Combination SW
C12 Combination SW
C13 Combination SW
C14 Clutch Start SW
C15 Cruise Control Clutch SW
C16 Curtain Shield Airbag Squib LH
C17 Curtain Shield Airbag Squib RH

D 5 Data Link Connector 3
D 6 Daytime Running Light Relay (Main)
D 7 Diode (A/C)
D 8 Diode (Headlight Cleaner)
D21 Diode (Fog Light)

Position of Parts in Instrument Panel



E12 Electronically Controlled Transmission Pattern Select SW

G 3 Glove Box Light

H15 Headlight Beam Level Control ECU
H16 Headlight Cleaner SW

I 11 Ignition Key Cylinder Light
I 12 Ignition SW

J 5 Junction Connector
J 6 Junction Connector
J 7 Junction Connector
J 8 Junction Connector
J 9 Junction Connector
J 10 Junction Connector
J 19 Junction Connector

M 4 Multi–Display
M 5 Multi–Display

P 3 Parking Brake SW
P 4 Power Outlet

R 2 Radio and Player
R 4 Rheostat
R14 Rear Fog Light SW
R15 Remote Controller (Navigation)

S 3 Seat Heater SW (Driver's Seat)
S 4 Seat Heater SW (Front Passenger's Seat)
S 5 Shift Lock Control ECU
S 6 Stereo Component Amplifier
S 7 Stereo Component Amplifier
S 8 Stop Light SW
S15 Skid Control ECU
S16 Skid Control ECU
S17 Skid Control ECU
S18 Skid Control ECU
S19 Steering Sensor

T 5 Theft Deterrent ECU
T 6 Theft Deterrent ECU
T 7 TRAC Off SW
T 8 Transmission Control SW (L–2)
T 9 Transponder Key Amplifier

U 1 Unlock Warning SW

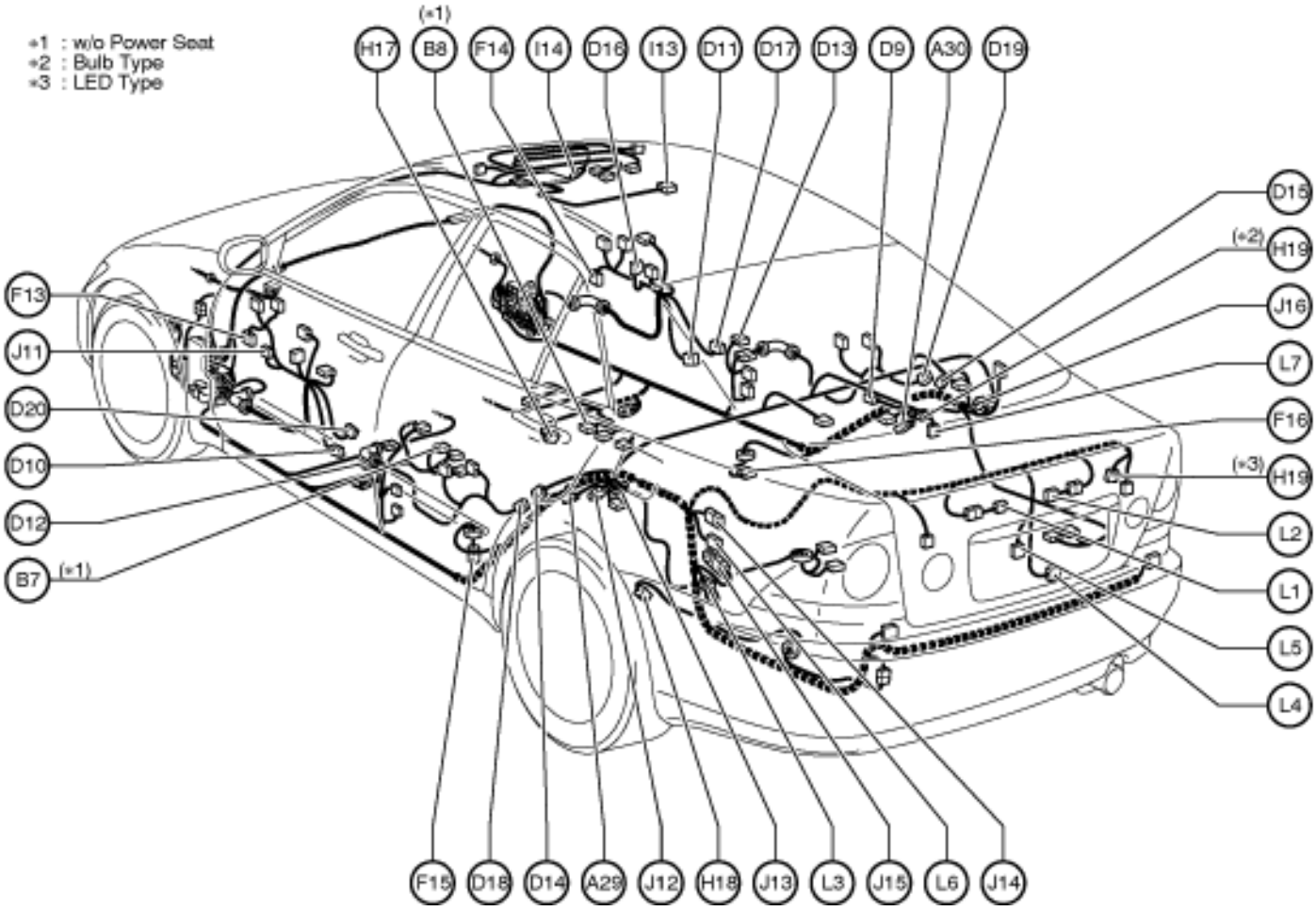
V10 VSC Warning Buzzer

Y 1 Yaw Rate Sensor

G ELECTRICAL WIRING ROUTING

Position of Parts in Body

[S/D]



A29 ABS Speed Sensor Rear LH
A30 ABS Speed Sensor Rear RH

B 7 Buckle SW LH
B 8 Buckle SW RH and
Seat Belt Warning Occupant Detection Sensor

D 9 Diode (Luggage Compartment Light)
D10 Door Courtesy Light Front LH
D11 Door Courtesy Light Front 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 Lock Control SW RH
D17 Door Lock Motor and Door Lock Detection SW Front RH
D18 Door Lock Motor and Door Lock Detection SW Rear LH
D19 Door Lock Motor and Door Lock Detection SW Rear RH
D20 Door Lock Motor,Door Key Lock and Unlock SW and
Door Lock Detection SW Front LH

F 13 Front Door Speaker LH
F 14 Front Door Speaker RH
F 15 Fuel Pump and Sender
F 16 Fuel Sender (Sub)

H17 Heated Oxygen Sensor (Bank 2 Sensor 2)
H18 Height Control Sensor Rear LH
H19 High Mounted Stop Light

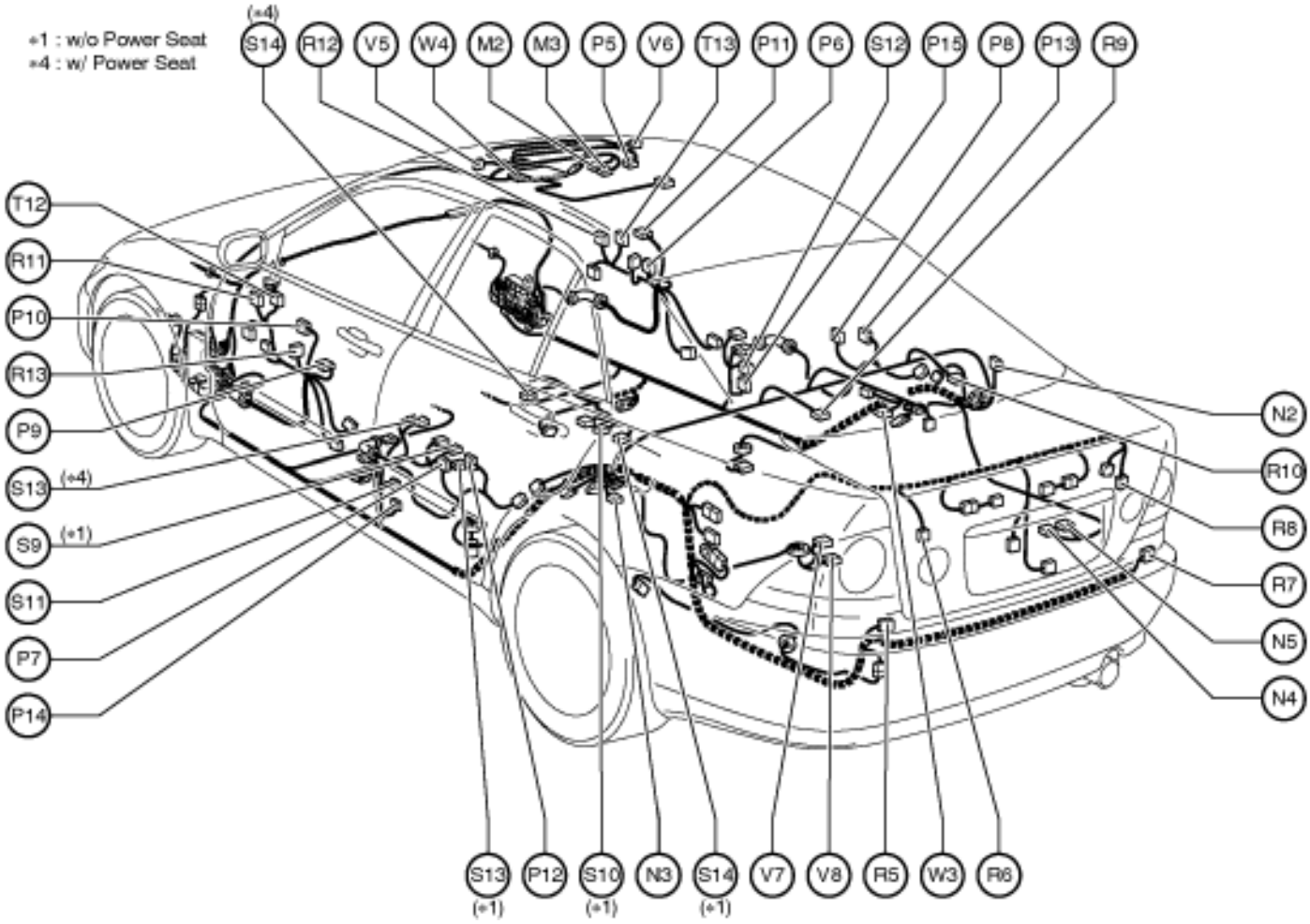
I 13 Interior Light
I 14 Inner Mirror

J 11 Junction Connector
J 12 Junction Connector
J 13 Junction Connector
J 14 Junction Connector
J 15 Junction Connector
J 16 Junction Connector

L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Light Failure Sensor
L 4 Luggage Compartment Door Courtesy SW and
Opener Motor
L 5 Luggage Compartment Door Key Unlock SW
L 6 Luggage Compartment Door Opener Relay
L 7 Luggage Compartment Light

Position of Parts in Body

[S/D]



M 2 Moon Roof Control ECU
M 3 Moon Roof Control SW

N 2 Noise Filter (Rear Window Defogger)
N 3 Noise Filter (Stop Light)
N 4 Navigation ECU
N 5 Navigation ECU

P 5 Personal Light
P 6 Power Window Control SW Front RH
P 7 Power Window Control SW Rear LH
P 8 Power Window Control SW Rear RH
P 9 Power Window Master SW
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

R 5 Rear Combination Light LH
R 6 Rear Combination Light LH
R 7 Rear Combination Light RH
R 8 Rear Combination Light RH
R 9 Rear Speaker and Woofer LH
R10 Rear Speaker and Woofer RH
R11 Remote Control Mirror LH
R12 Remote Control Mirror RH
R13 Remote Control Mirror SW

S 9 Seat Heater (Driver's Seat)
S10 Seat Heater (Front Passenger's Seat)
S11 Side Airbag Sensor LH
S12 Side Airbag Sensor RH
S13 Side Airbag Squib LH
S14 Side Airbag Squib RH

T12 Tweeter LH
T13 Tweeter RH

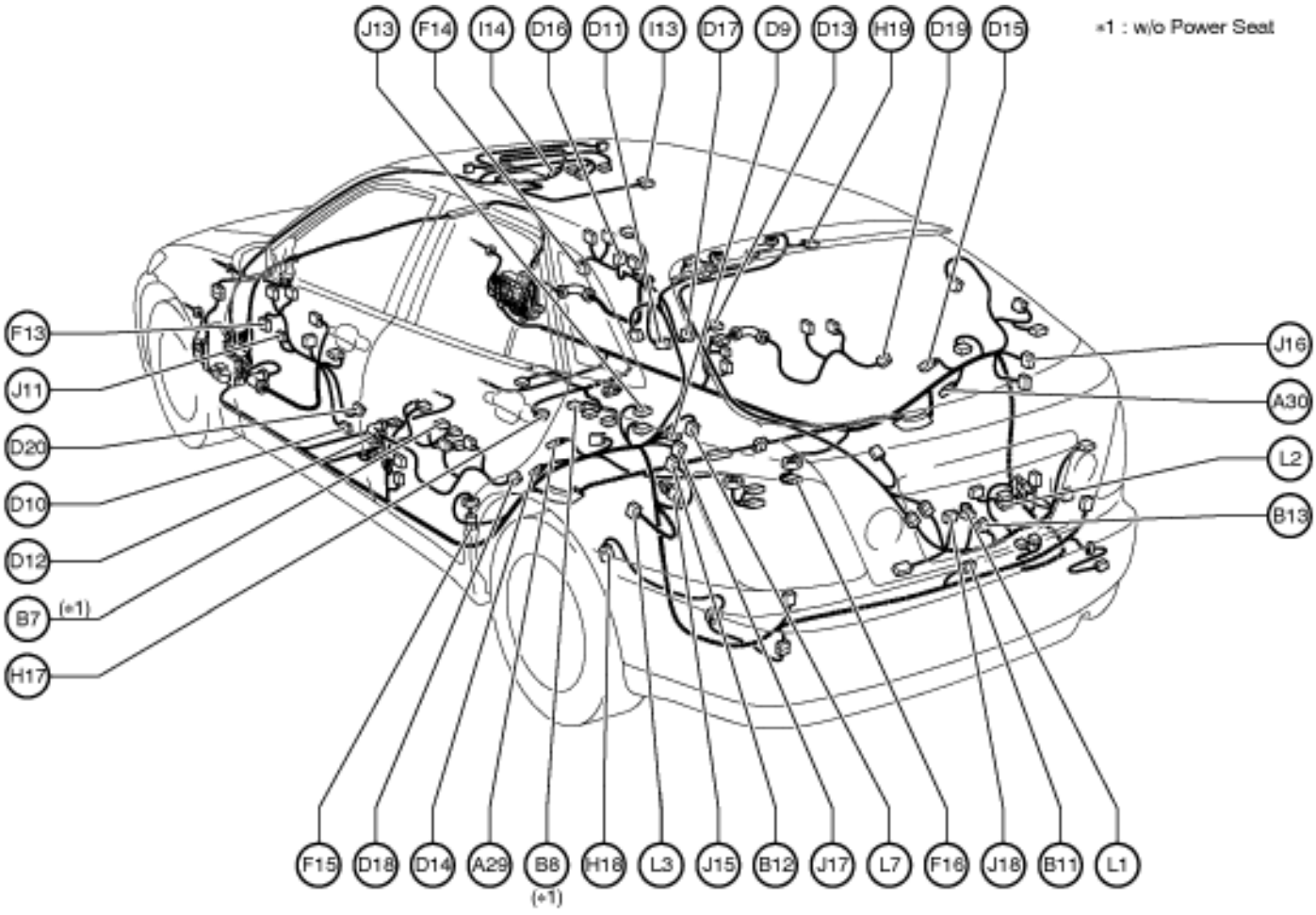
V 5 Vanity Light LH
V 6 Vanity Light RH
V 7 Vapor Pressure Sensor
V 8 VSV (Pressure Switching Valve)

W 3 Wireless Door Lock Control Receiver
W 4 Wire to FFC Holder

G ELECTRICAL WIRING ROUTING

Position of Parts in Body

[W/G]



A29 ABS Speed Sensor Rear LH
A30 ABS Speed Sensor Rear RH

B 7 Buckle SW LH
B 8 Buckle SW RH and
Seat Belt Warning Occupant Detection Sensor
B11 Back Door Courtesy SW and Opener Motor
B12 Back Door Opener Relay
B13 Back Door Opener SW

D 9 Diode (Luggage Compartment Light)
D10 Door Courtesy Light Front LH
D11 Door Courtesy Light Front 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 Lock Control SW RH
D17 Door Lock Motor and Door Lock Detection SW Front RH
D18 Door Lock Motor and Door Lock Detection SW Rear LH
D19 Door Lock Motor and Door Lock Detection SW Rear RH
D20 Door Lock Motor,Door Key Lock and Unlock SW and
Door Lock Detection SW Front LH

F13 Front Door Speaker LH
F14 Front Door Speaker RH
F15 Fuel Pump and Sender
F16 Fuel Sender (Sub)

H17 Heated Oxygen Sensor (Bank 2 Sensor 2)
H18 Height Control Sensor Rear LH
H19 High Mounted Stop Light

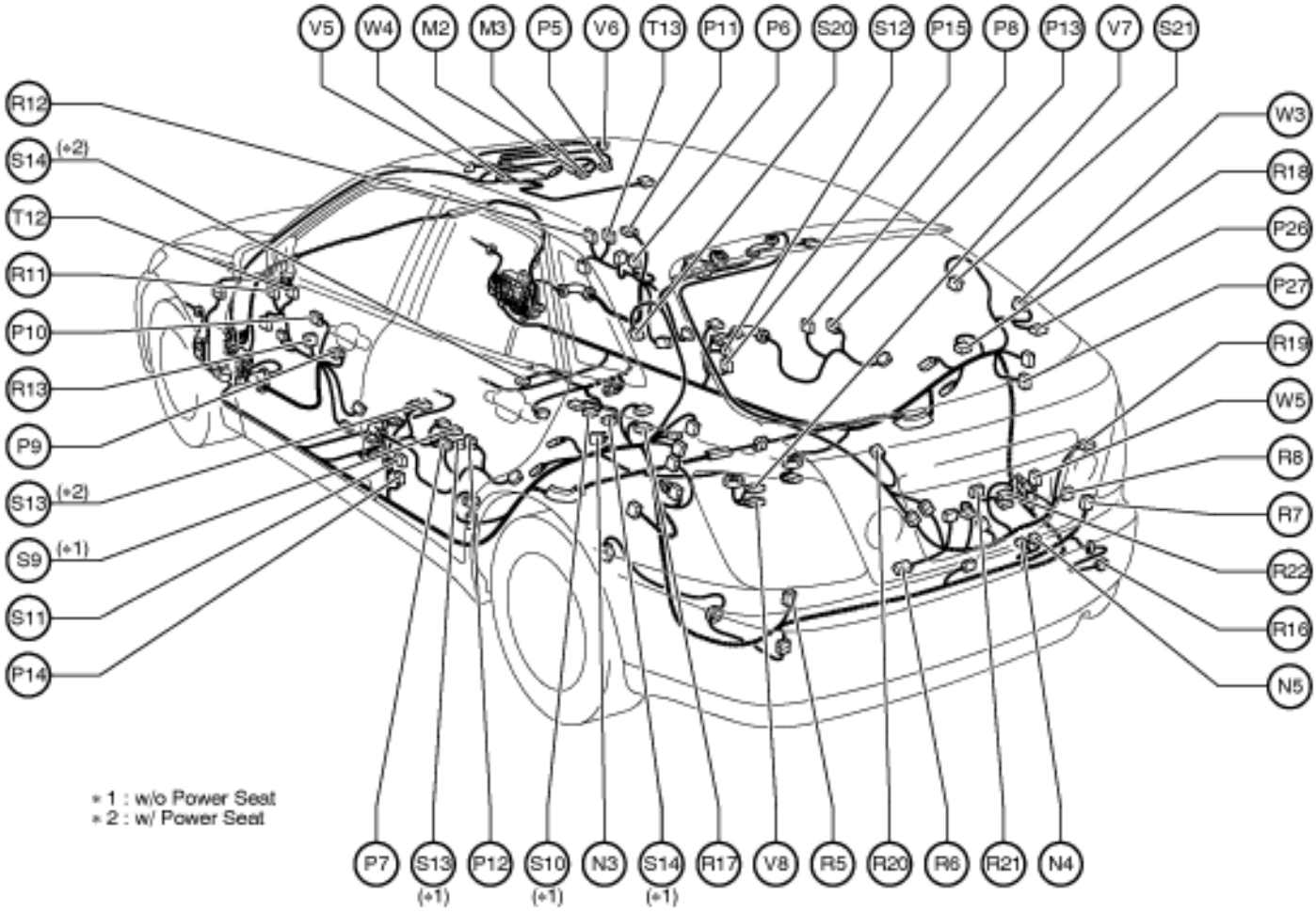
I 13 Interior Light
I 14 Inner Mirror

J 11 Junction Connector
J 13 Junction Connector
J 15 Junction Connector
J 16 Junction Connector
J 17 Junction Connector
J 18 Junction Connector

L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Light Failure Sensor
L 7 Luggage Compartment Light

Position of Parts in Body

[W/G]



M 2 Moon Roof Control ECU
M 3 Moon Roof Control SW

N 3 Noise Filter (Stop Light)
N 4 Navigation ECU
N 5 Navigation ECU

P 5 Personal Light
P 6 Power Window Control SW Front RH
P 7 Power Window Control SW Rear LH
P 8 Power Window Control SW Rear RH
P 9 Power Window Master SW
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
P26 Power Outlet (Luggage)
P27 Power Outlet Relay

R 5 Rear Combination Light LH
R 6 Rear Combination Light LH
R 7 Rear Combination Light RH
R 8 Rear Combination Light RH
R11 Remote Control Mirror LH
R12 Remote Control Mirror RH
R13 Remote Control Mirror SW
R16 Rear Side Marker Light
R17 Rear Speaker LH
R18 Rear Speaker RH
R19 Rear Window Defogger
R20 Rear Window Defogger
R21 Rear Wiper Motor
R22 Rear Wiper Motor

S 9 Seat Heater (Driver's Seat)
S10 Seat Heater (Front Passenger's Seat)
S11 Side Airbag Sensor LH
S12 Side Airbag Sensor RH
S13 Side Airbag Squib LH
S14 Side Airbag Squib RH
S20 Squawker LH
S21 Squawker RH

T12 Tweeter LH
T13 Tweeter RH

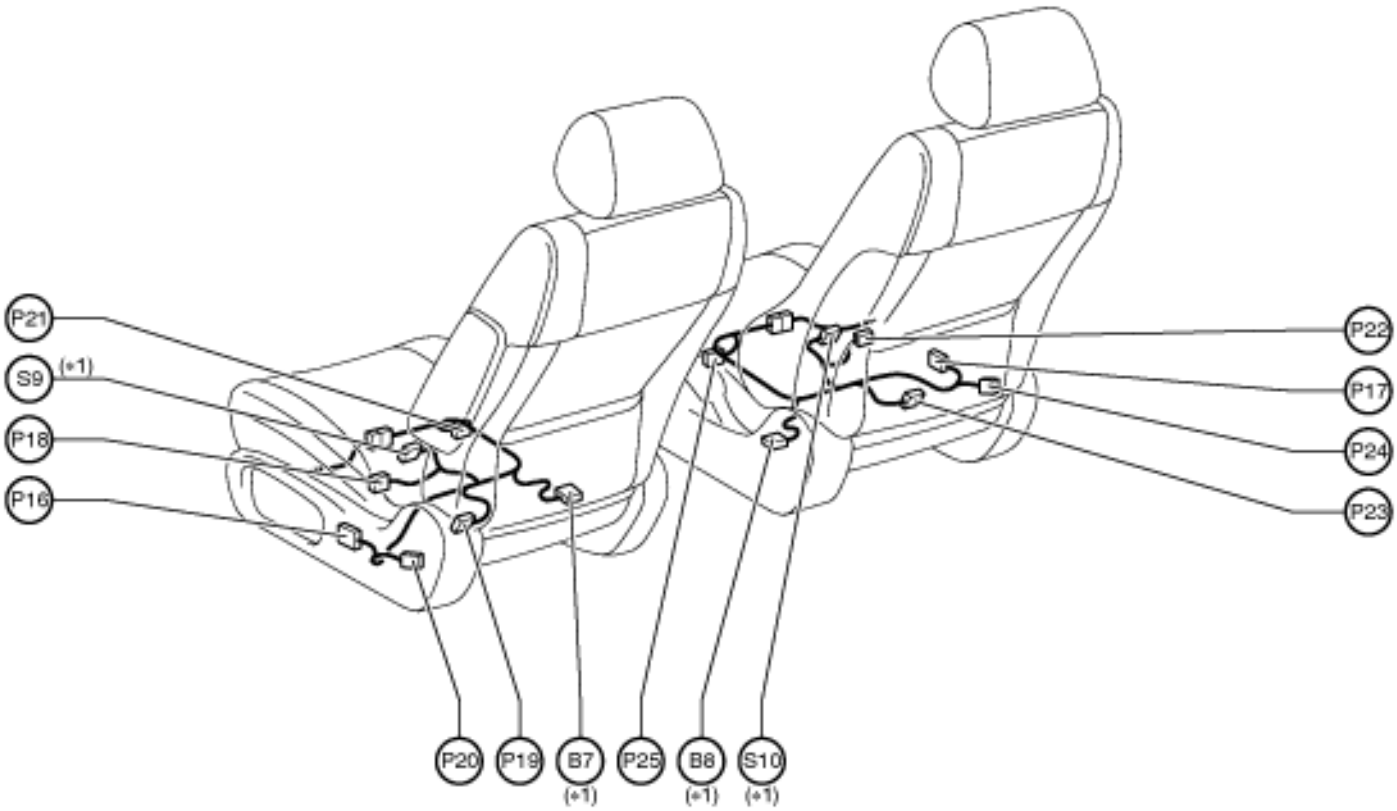
V 5 Vanity Light LH
V 6 Vanity Light RH
V 7 Vapor Pressure Sensor
V 8 VSV (Pressure Switching Valve)

W 3 Wireless Door Lock Control Receiver
W 4 Wire to FFC Holder
W 5 Woofer

G ELECTRICAL WIRING ROUTING

Position of Parts in Seat

*1 : w/ Power Seat



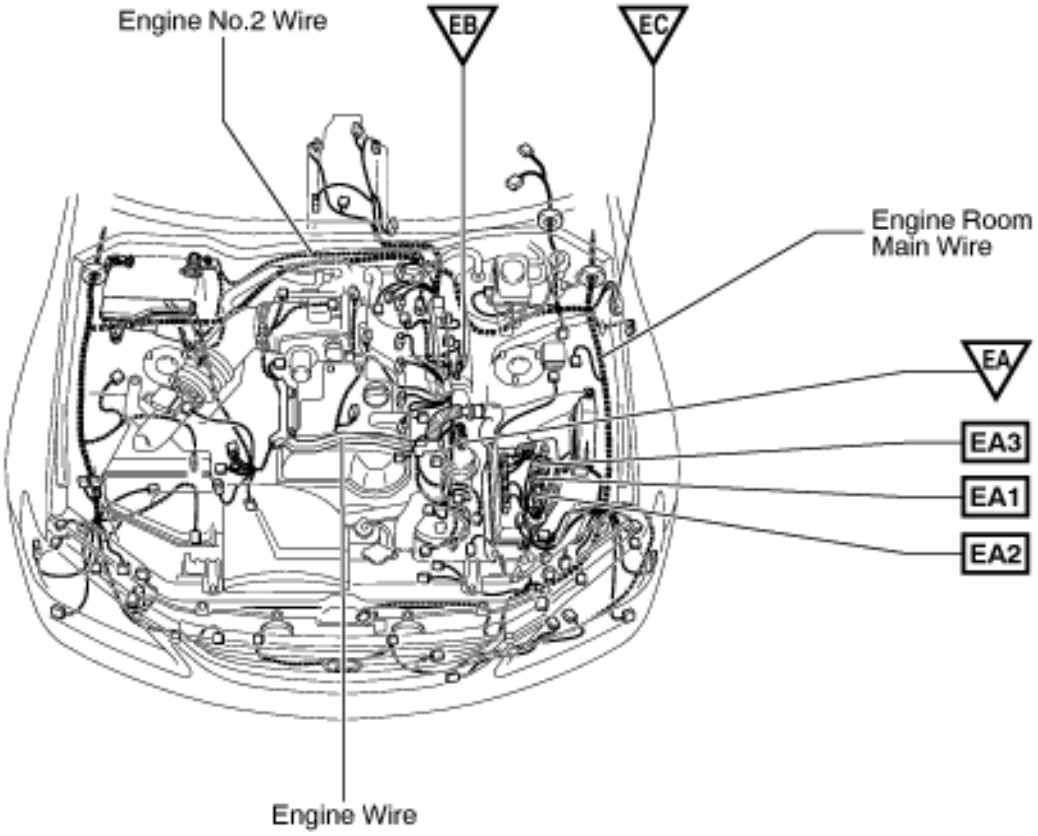
B 7 Buckle SW LH
B 8 Buckle SW RH and
Seat Belt Warning Occupant Detection Sensor

P16 Power Seat Control SW (Driver's Seat)
P17 Power Seat Control SW (Front Passenger's Seat)
P18 Power Seat Motor (Driver's Seat Front Vertical Control)
P19 Power Seat Motor (Driver's Seat Rear Vertical Control)
P20 Power Seat Motor (Driver's Seat Reclining Control)
P21 Power Seat Motor (Driver's Seat Slide Control)
P22 Power Seat Motor
(Front Passenger's Seat Front Vertical Control)
P23 Power Seat Motor
(Front Passenger's Seat Rear Vertical Control)
P24 Power Seat Motor
(Front Passenger's Seat Reclining Control)
P25 Power Seat Motor
(Front Passenger's Seat Slide Control)

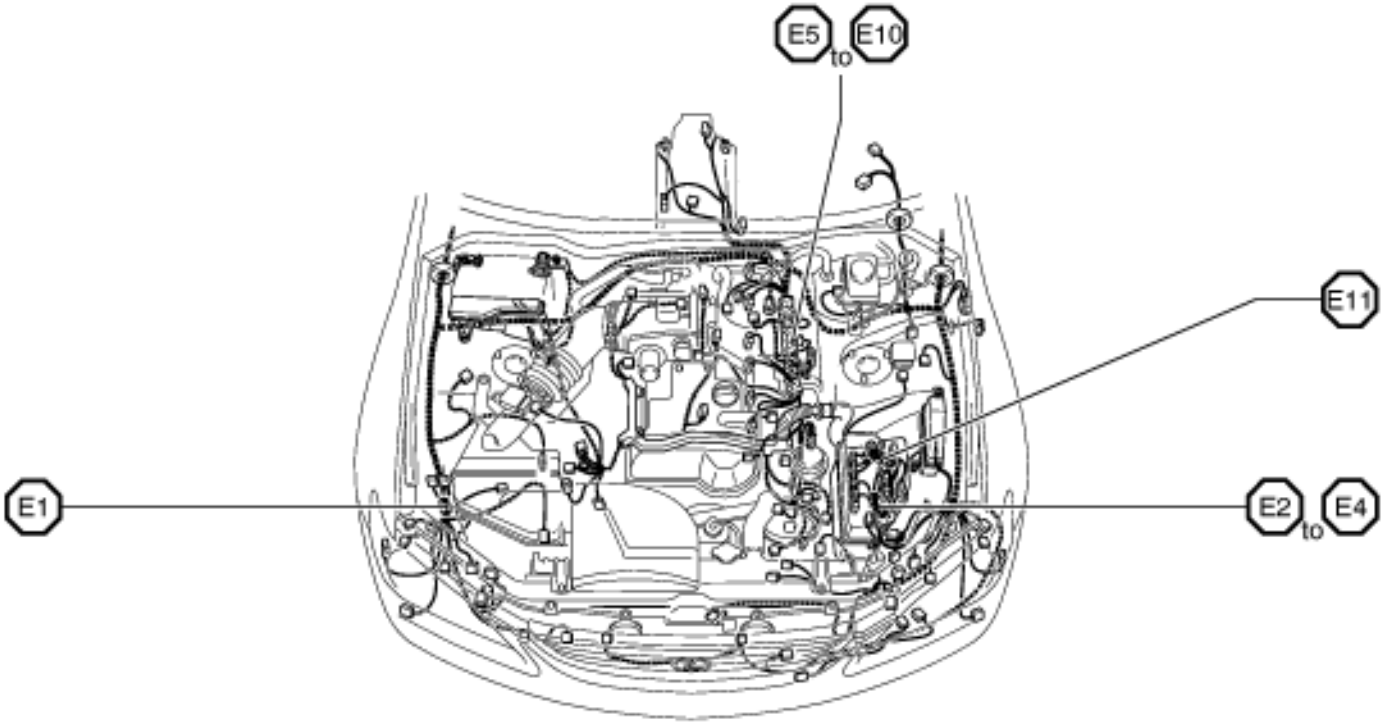
S 9 Seat Heater (Driver's Seat)
S10 Seat Heater (Front Passenger's Seat)

G ELECTRICAL WIRING ROUTING

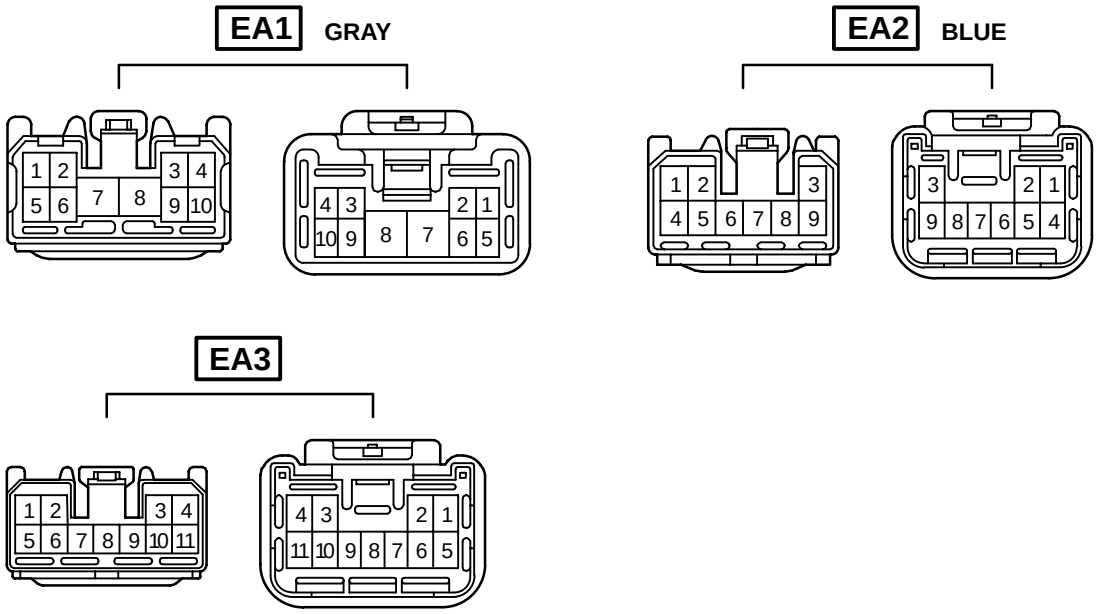
▭ : Location of Connector Joining Wire Harness and Wire Harness
▽ : Location of Ground Points



⬡ : Location of Splice Points



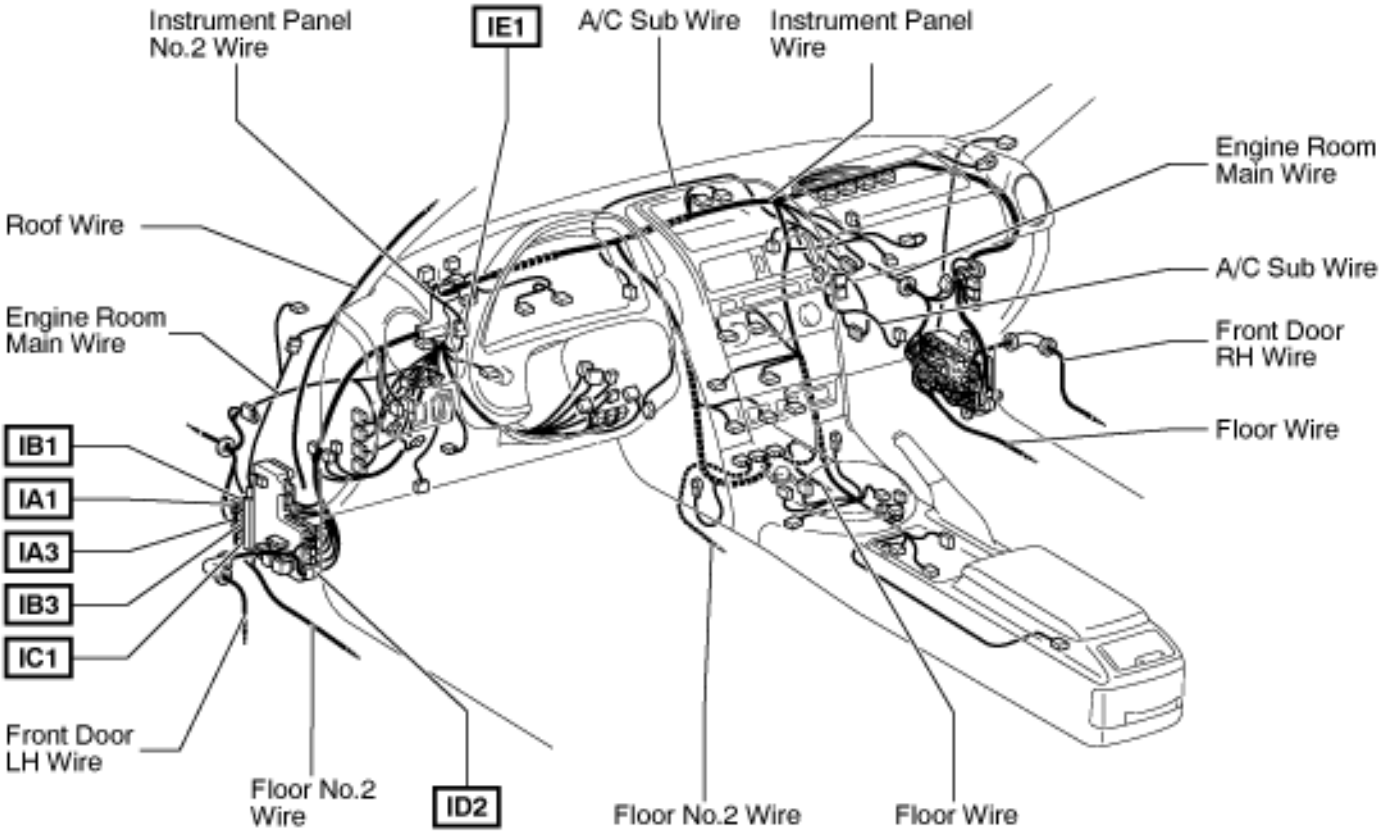
Connector Joining Wire Harness and Wire Harness



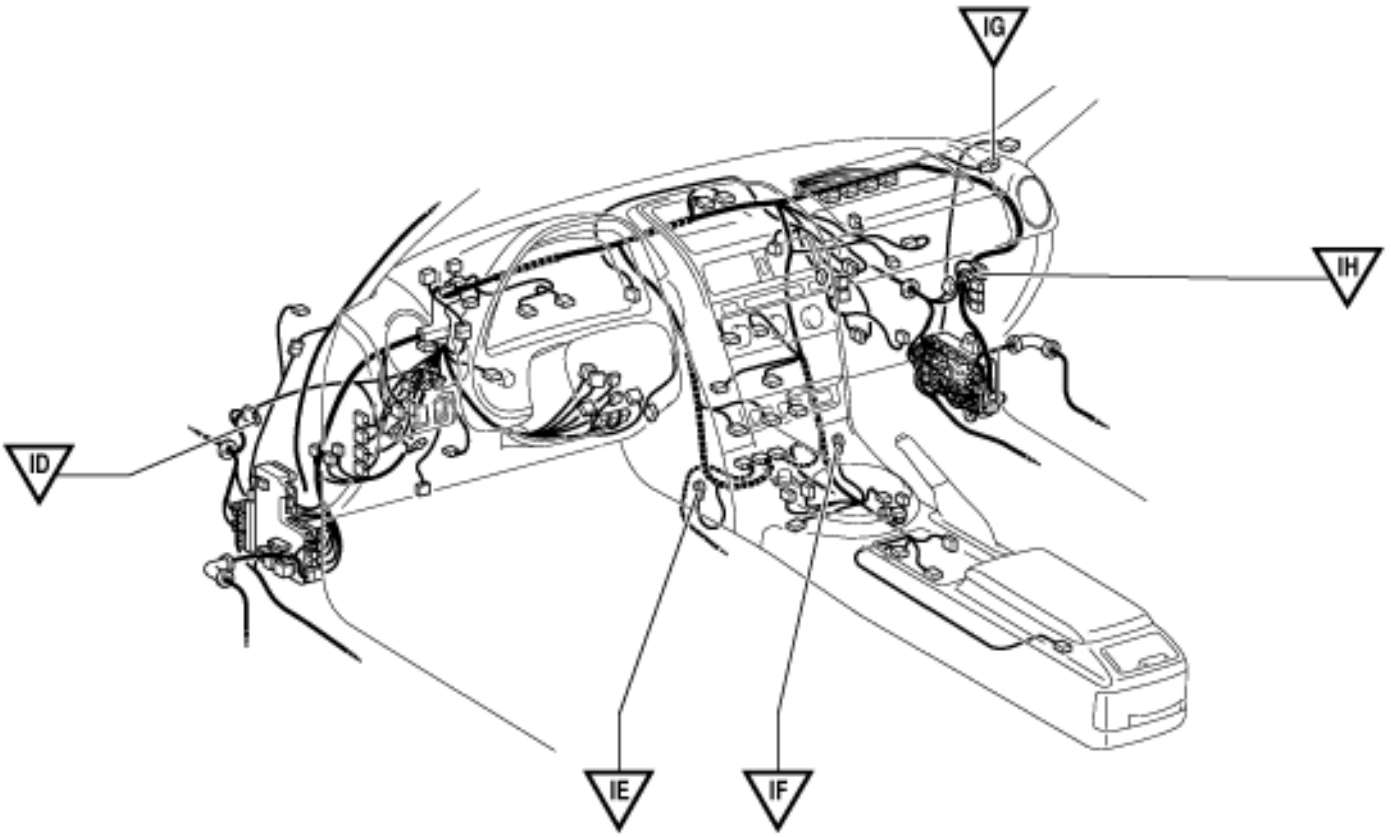
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2	
EA3	

G ELECTRICAL WIRING ROUTING

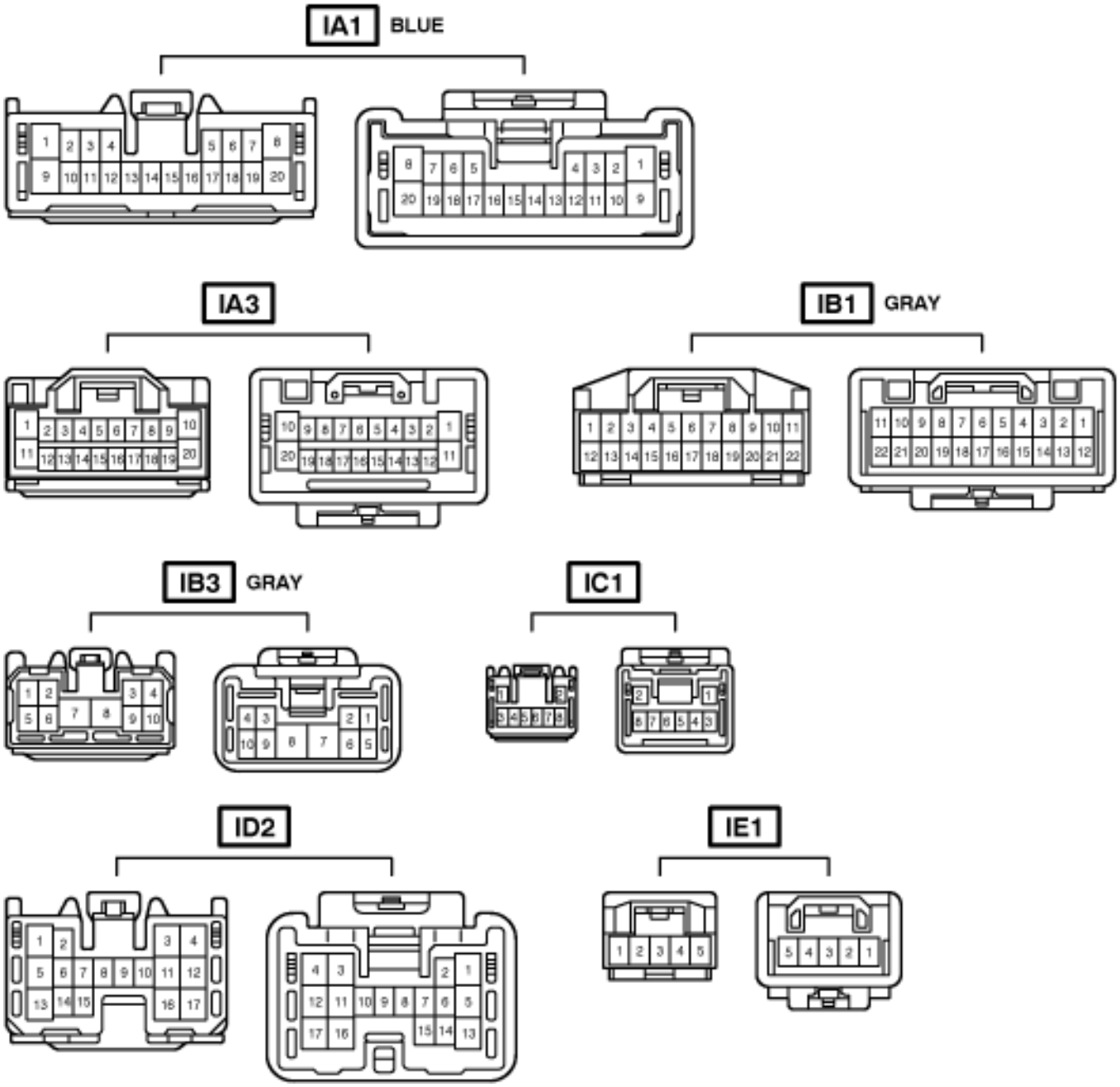
▭ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points



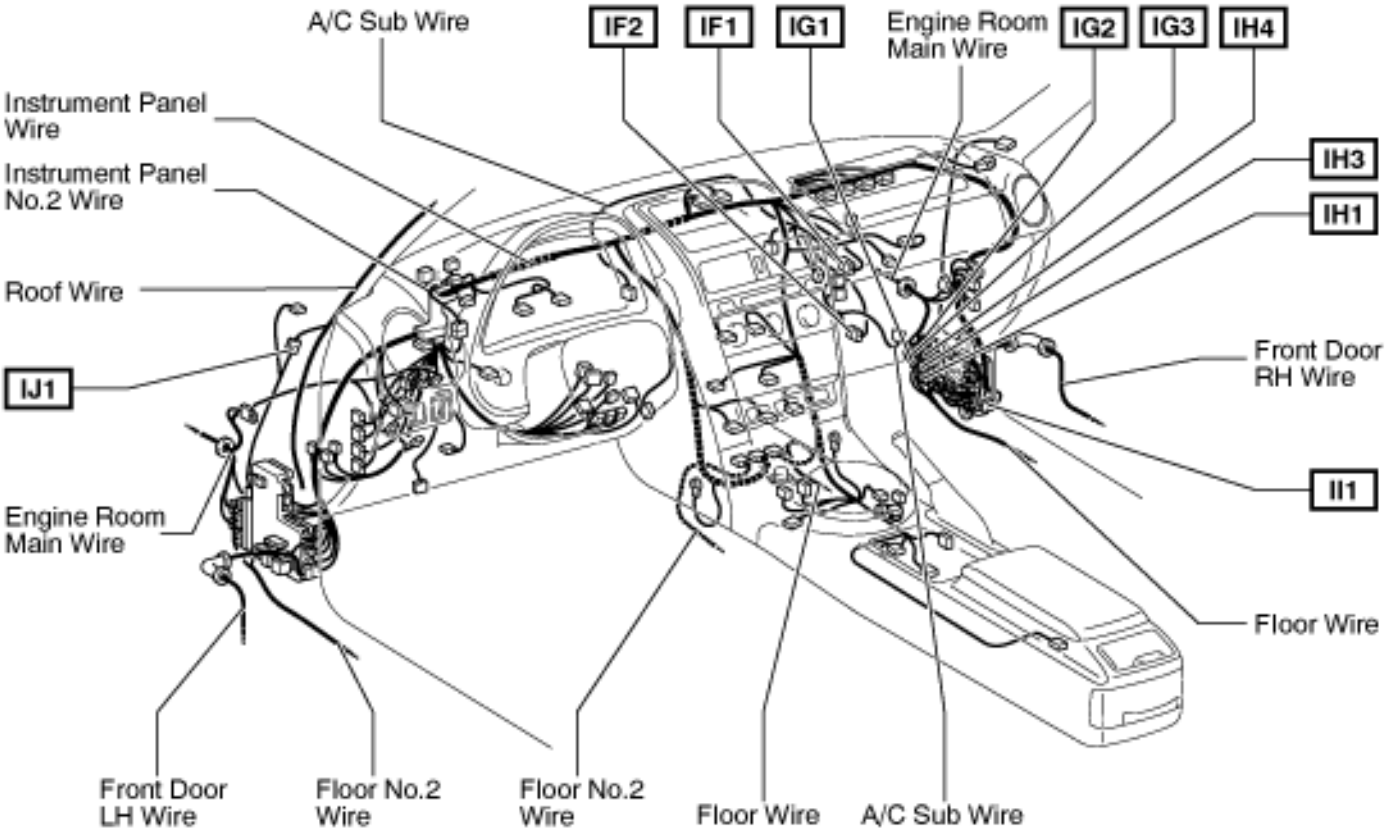
Connector Joining Wire Harness and Wire Harness



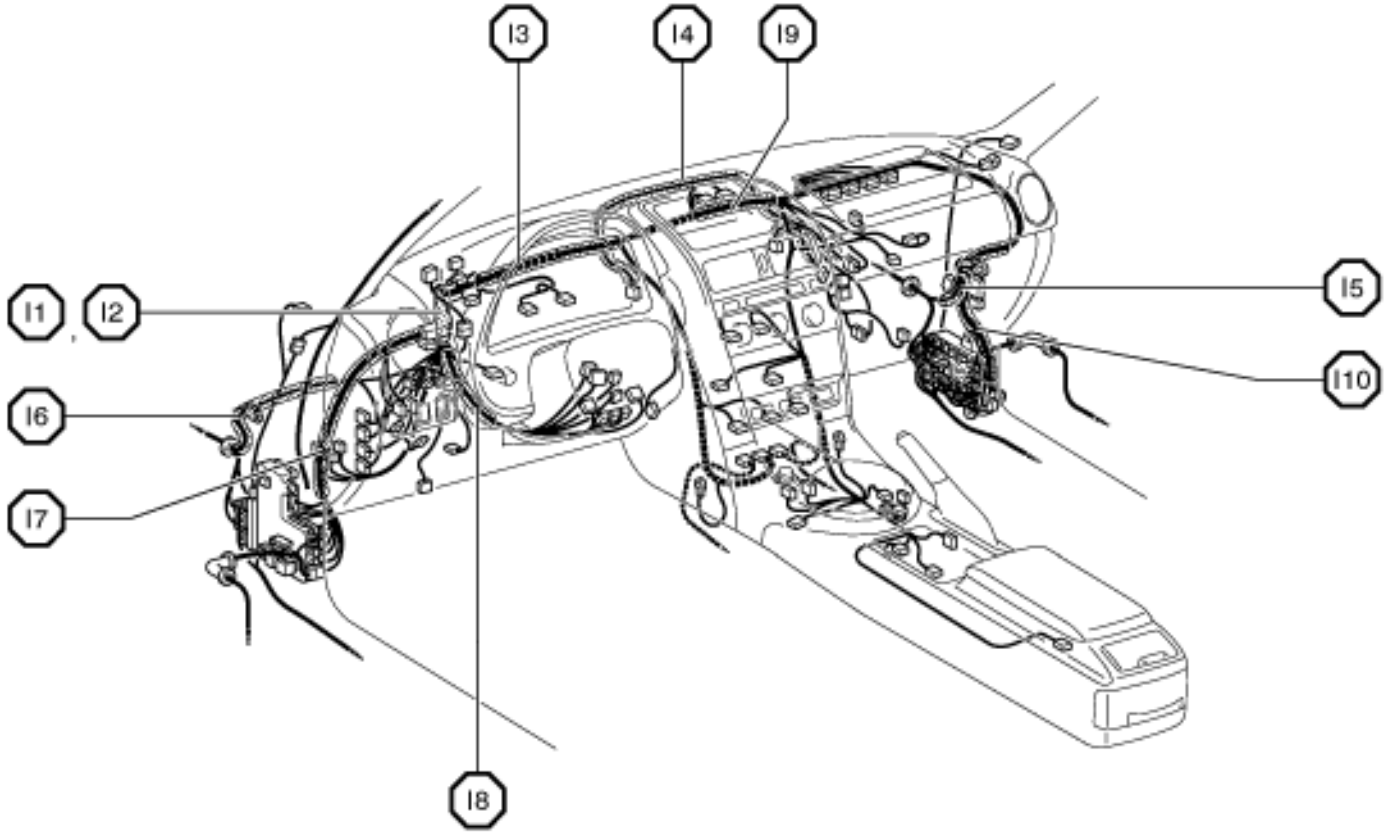
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3	
IB1	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB3	
IC1	Engine Room Main Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IE1	Instrument Panel No.2 Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

G ELECTRICAL WIRING ROUTING

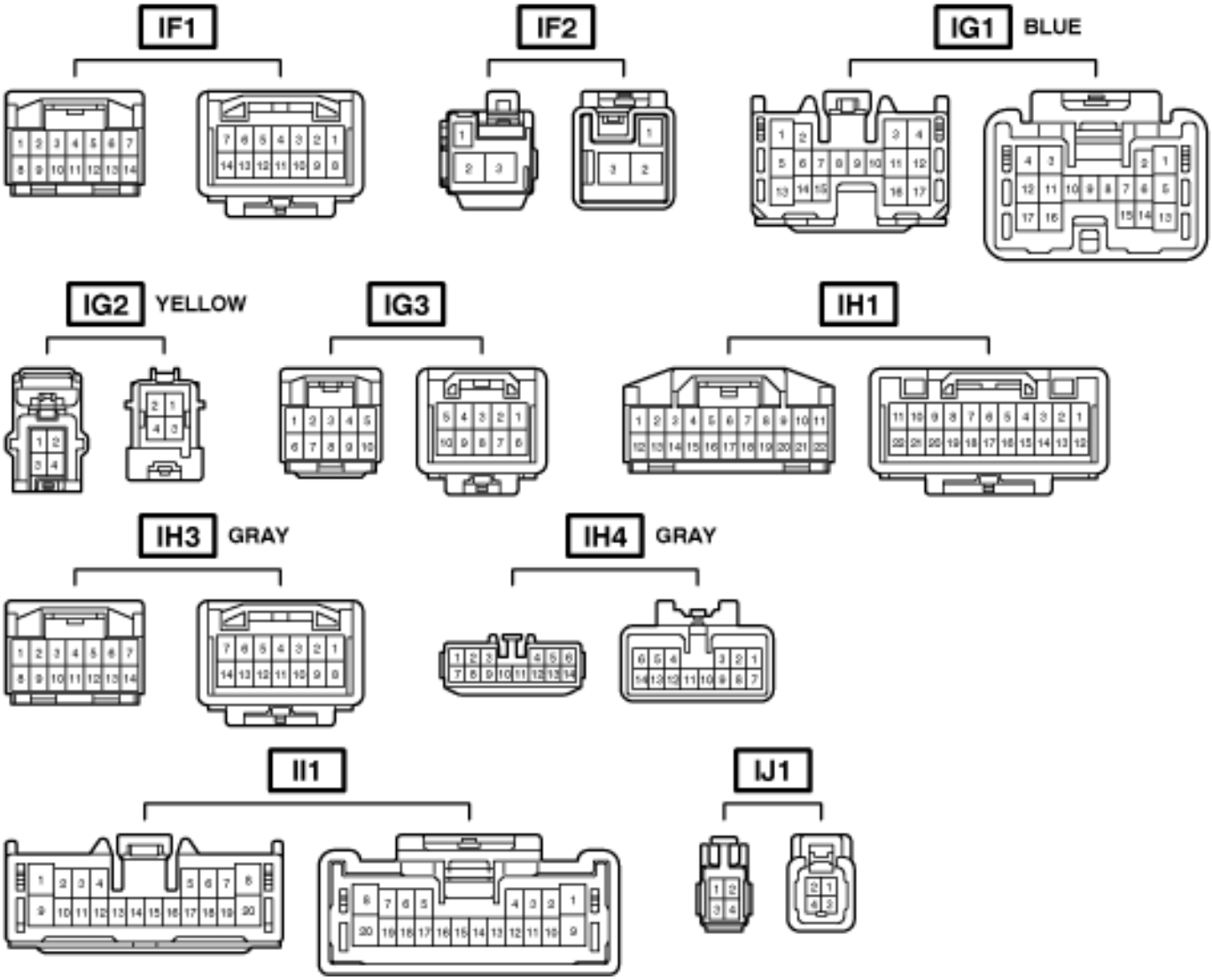
▭ : Location of Connector Joining Wire Harness and Wire Harness



◯ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

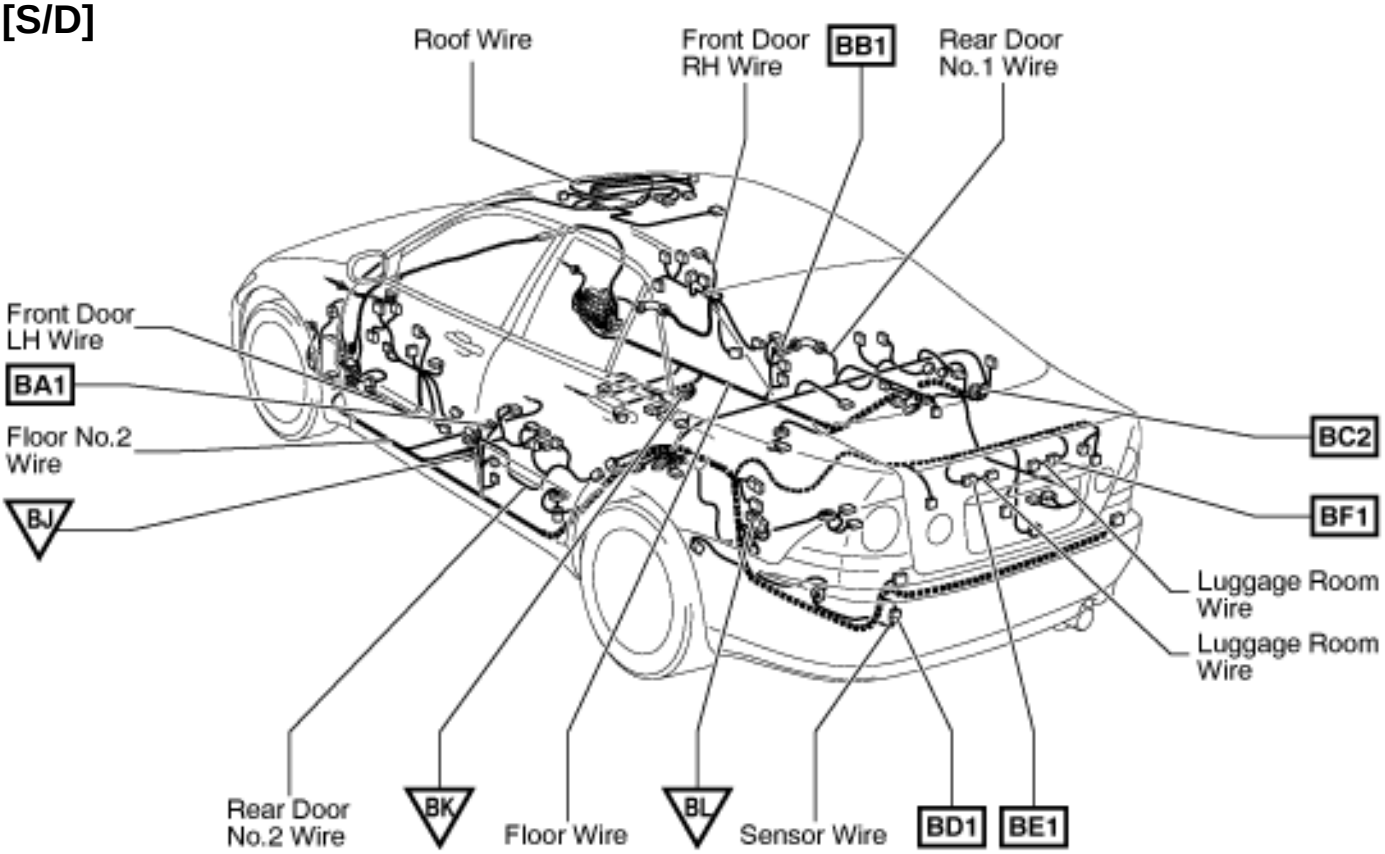


Code	Joining Wire Harness and Wire Harness (Connector Location)
IF1	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IF2	
IG1	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IG2	
IG3	
IH1	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH3	
IH4	
II1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)

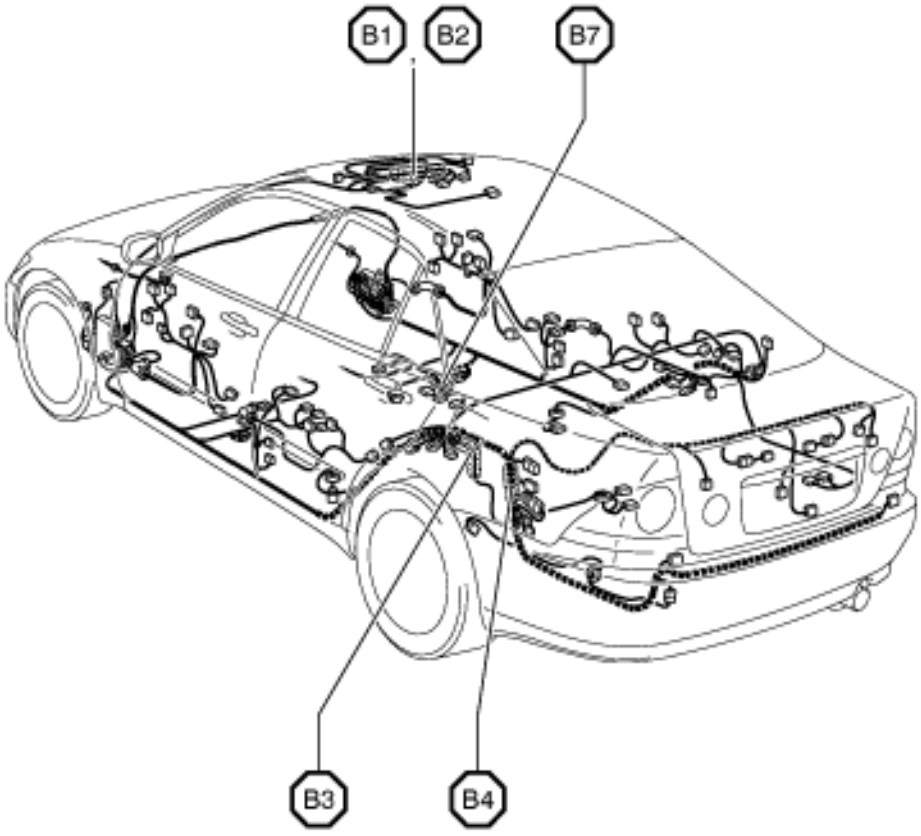
G ELECTRICAL WIRING ROUTING

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

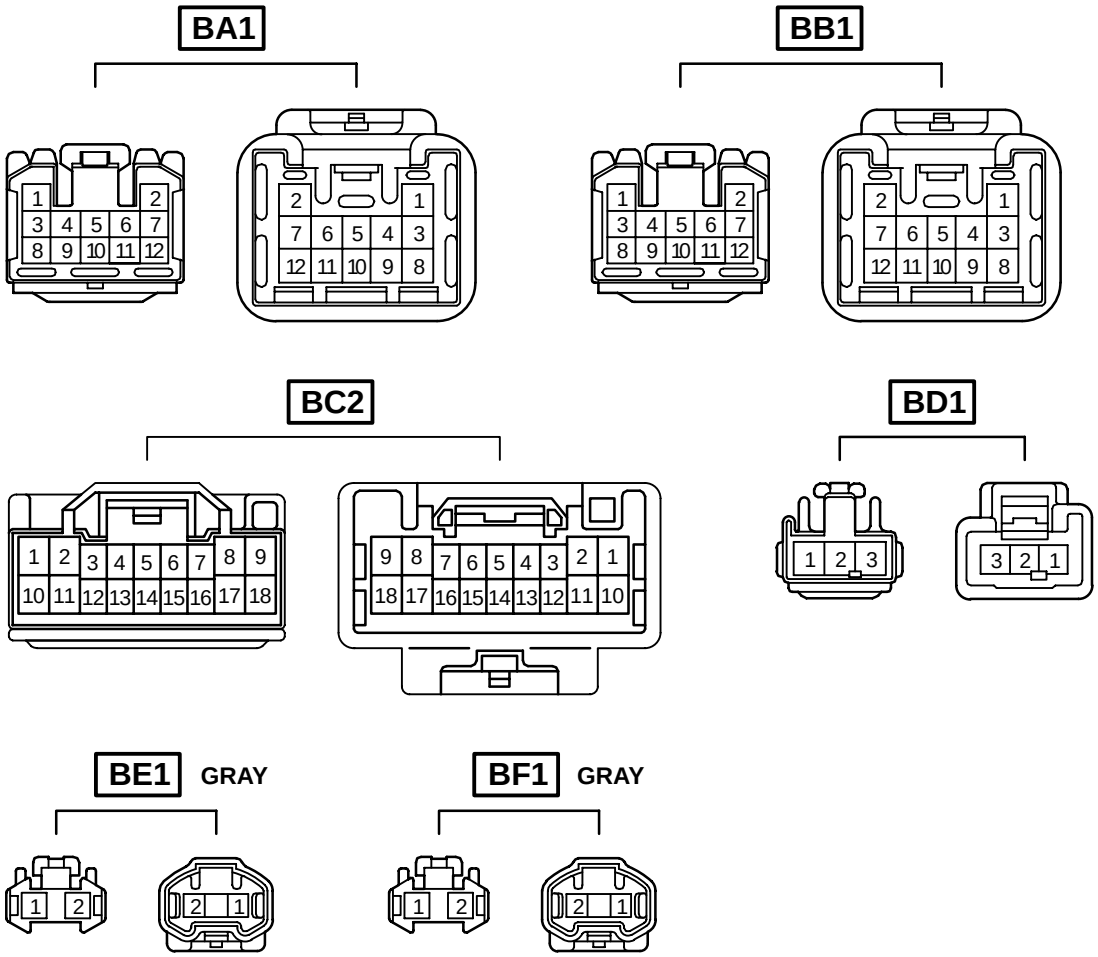
[S/D]



◯ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness



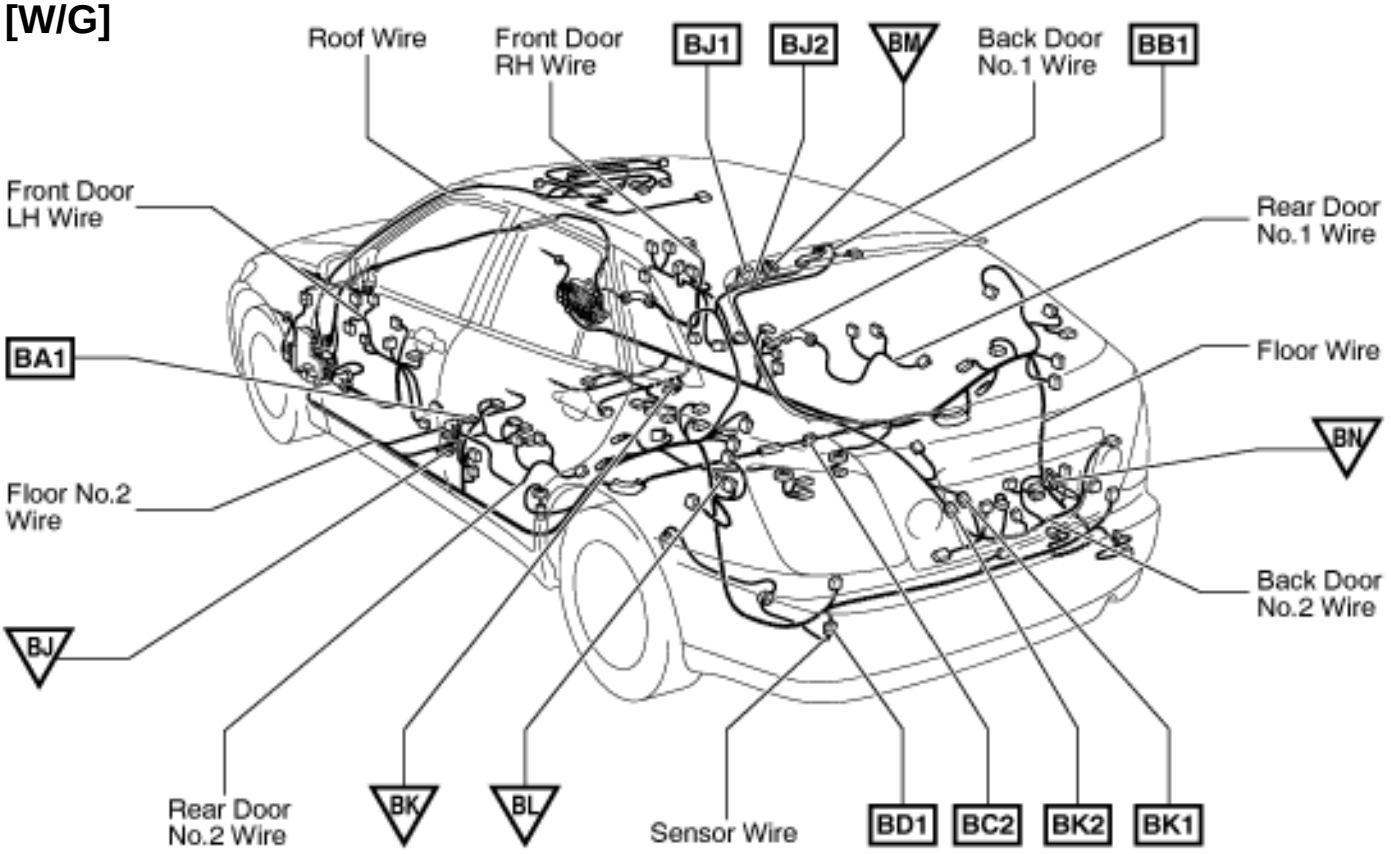
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC2	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
BD1	Sensor Wire and Floor No.2 Wire (Lower Back Panel LH)
BE1	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light LH)
BF1	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light RH)

G ELECTRICAL WIRING ROUTING

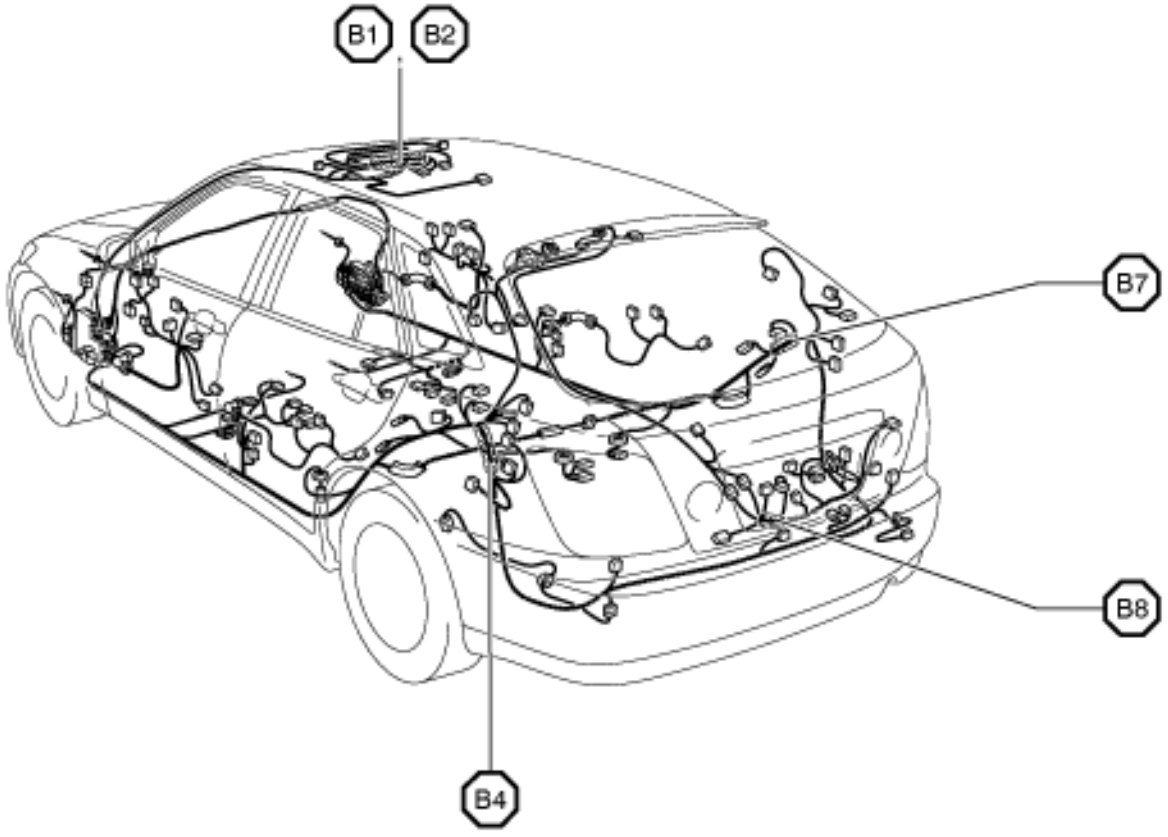
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

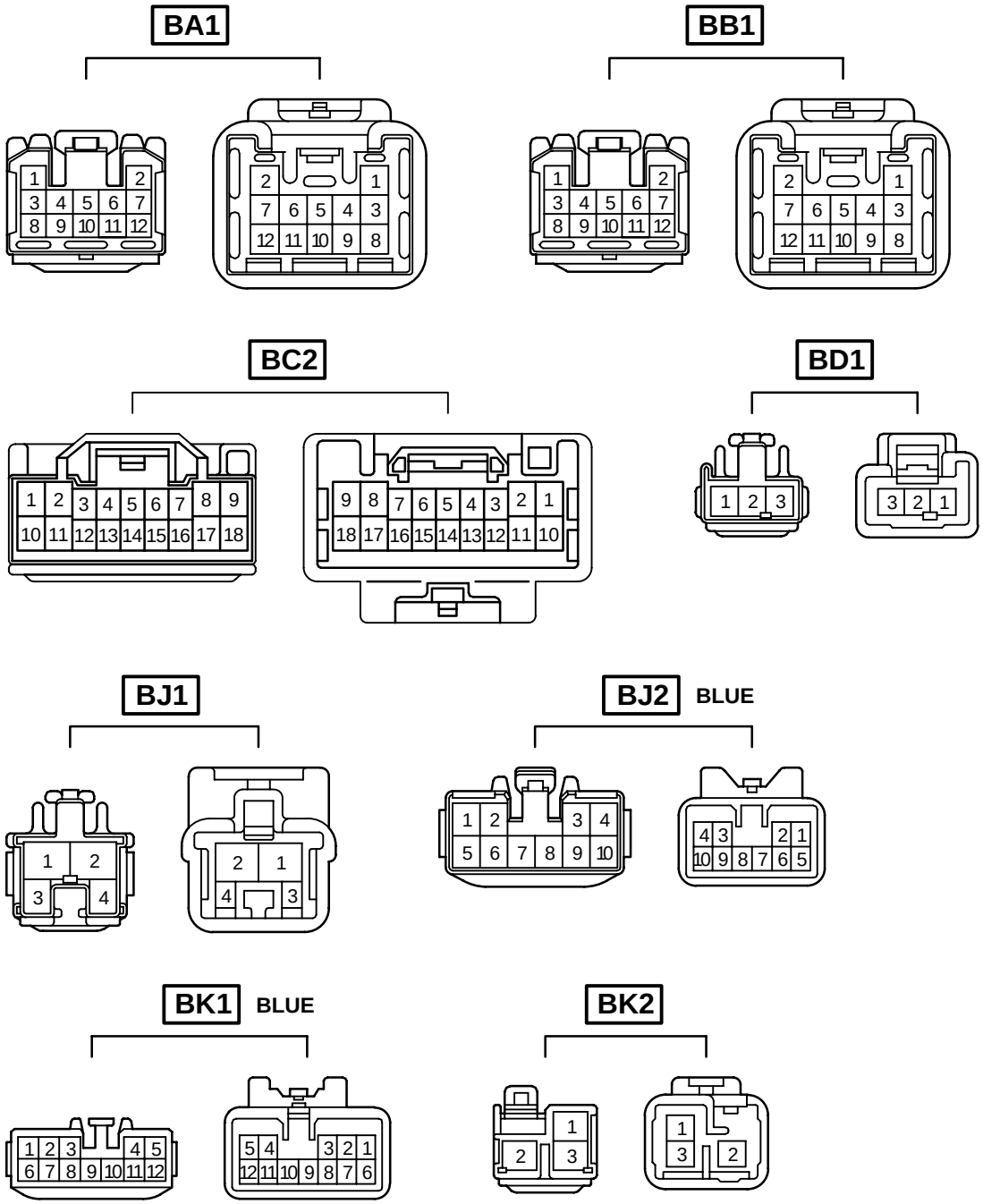
[W/G]



○ : Location of Splice Points



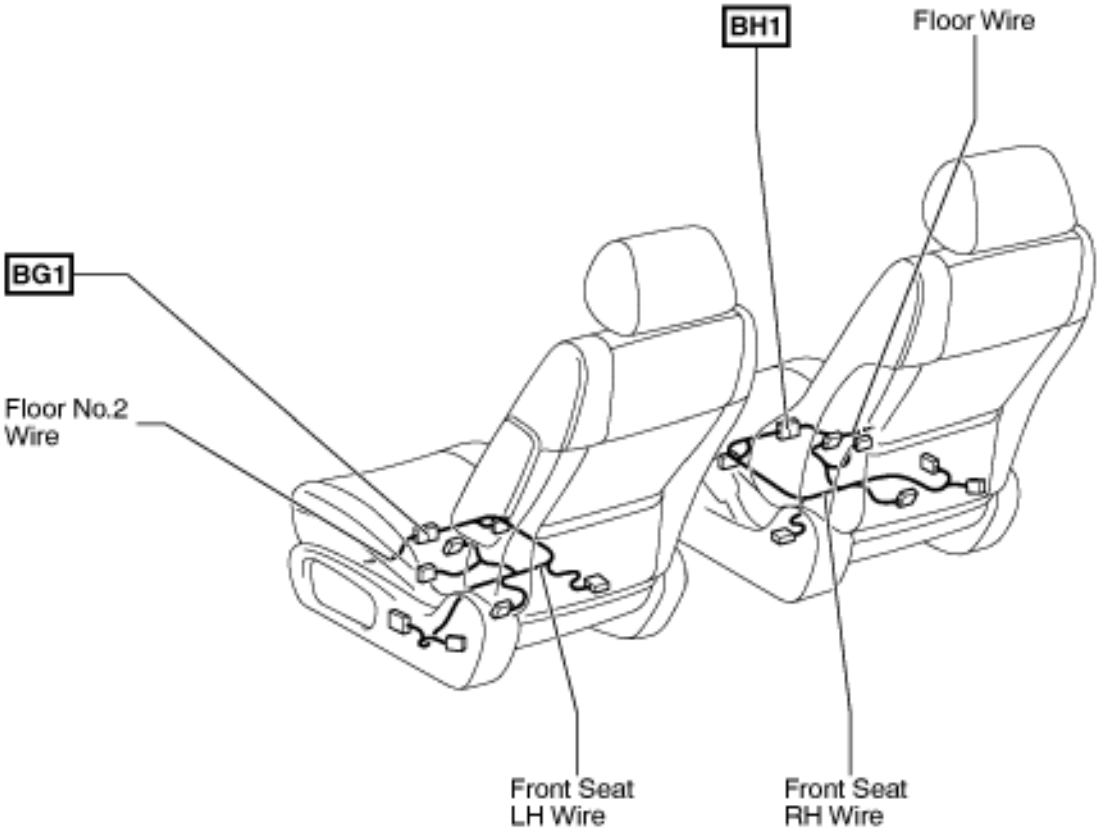
Connector Joining Wire Harness and Wire Harness



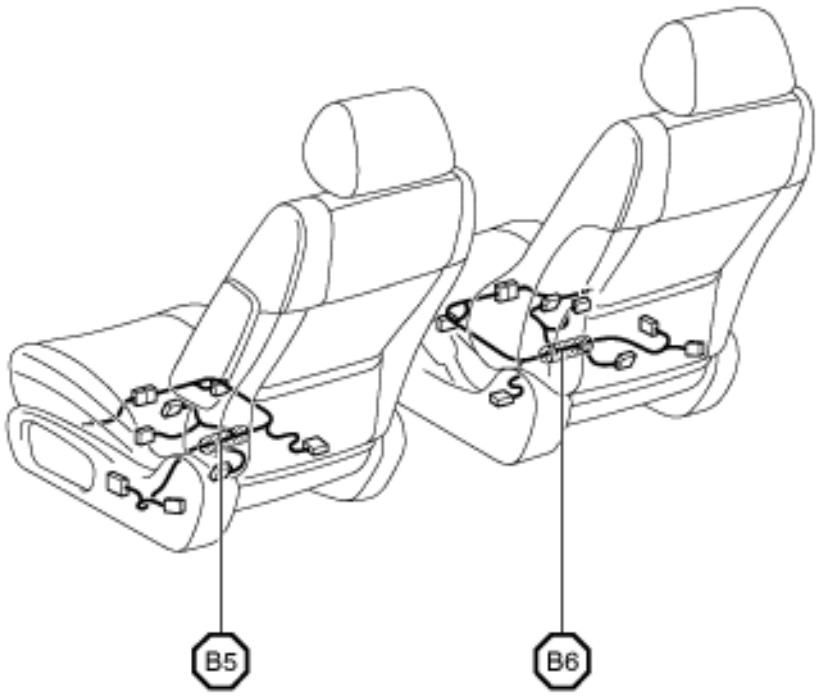
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
BB1	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
BC2	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)
BD1	Sensor Wire and Floor No.2 Wire (Lower Back Panel LH)
BJ1	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BJ2	
BK1	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)
BK2	

G ELECTRICAL WIRING ROUTING

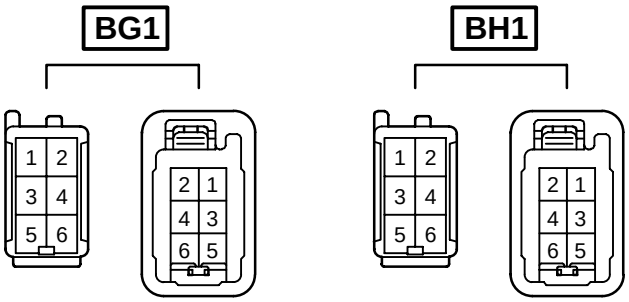
▭ : Location of Connector Joining Wire Harness and Wire Harness



⬡ : Location of Splice Points

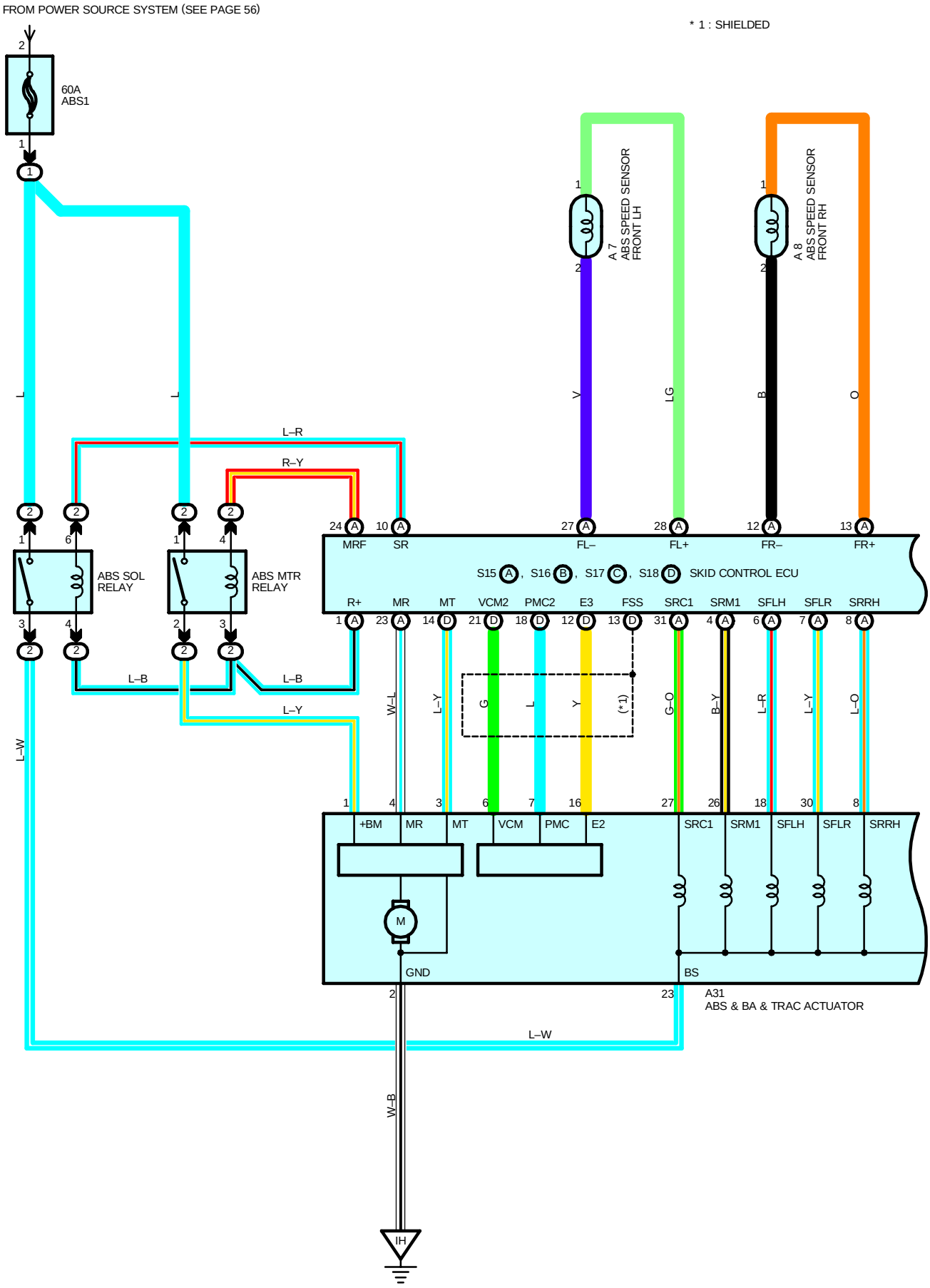


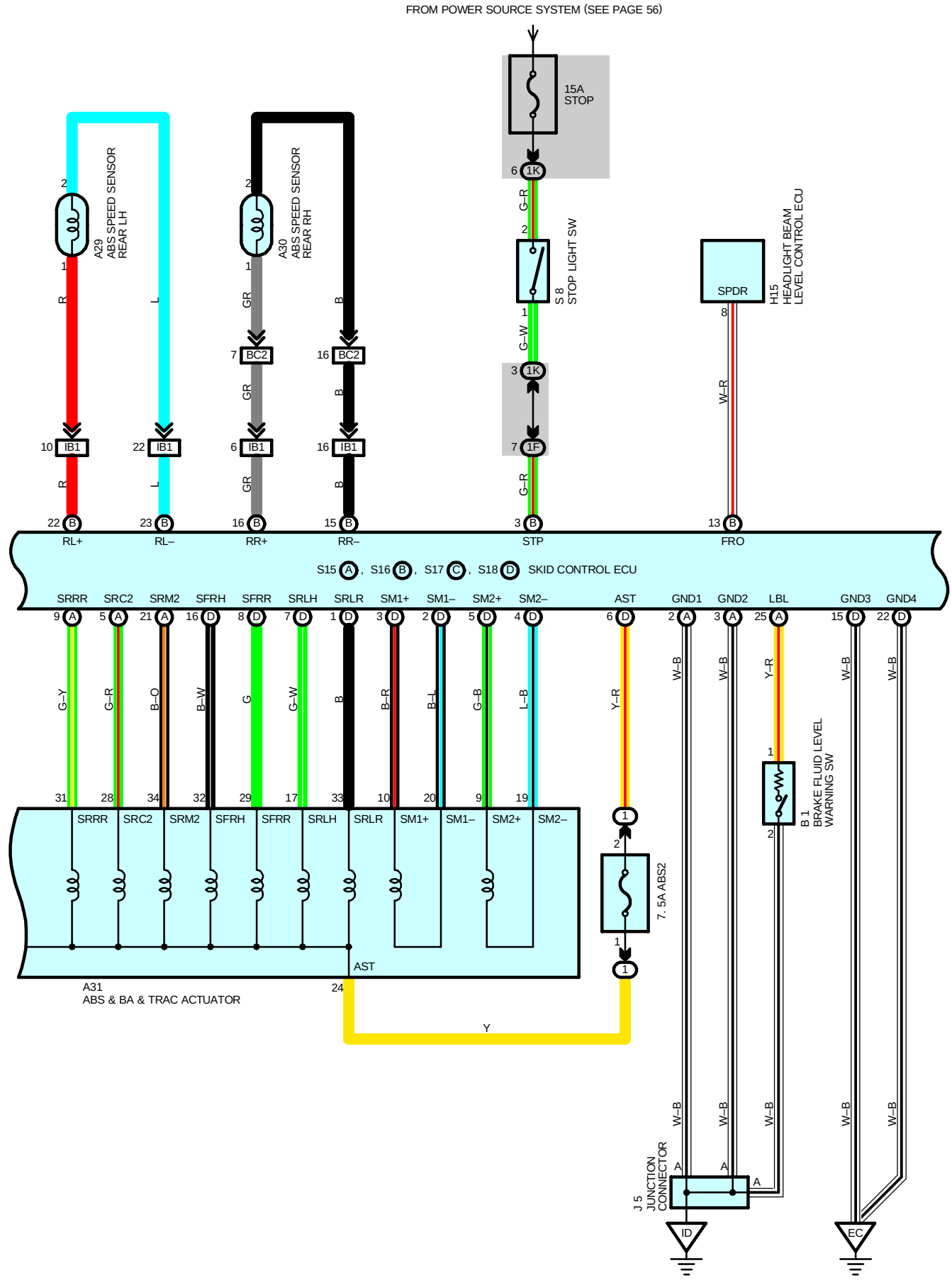
Connector Joining Wire Harness and Wire Harness



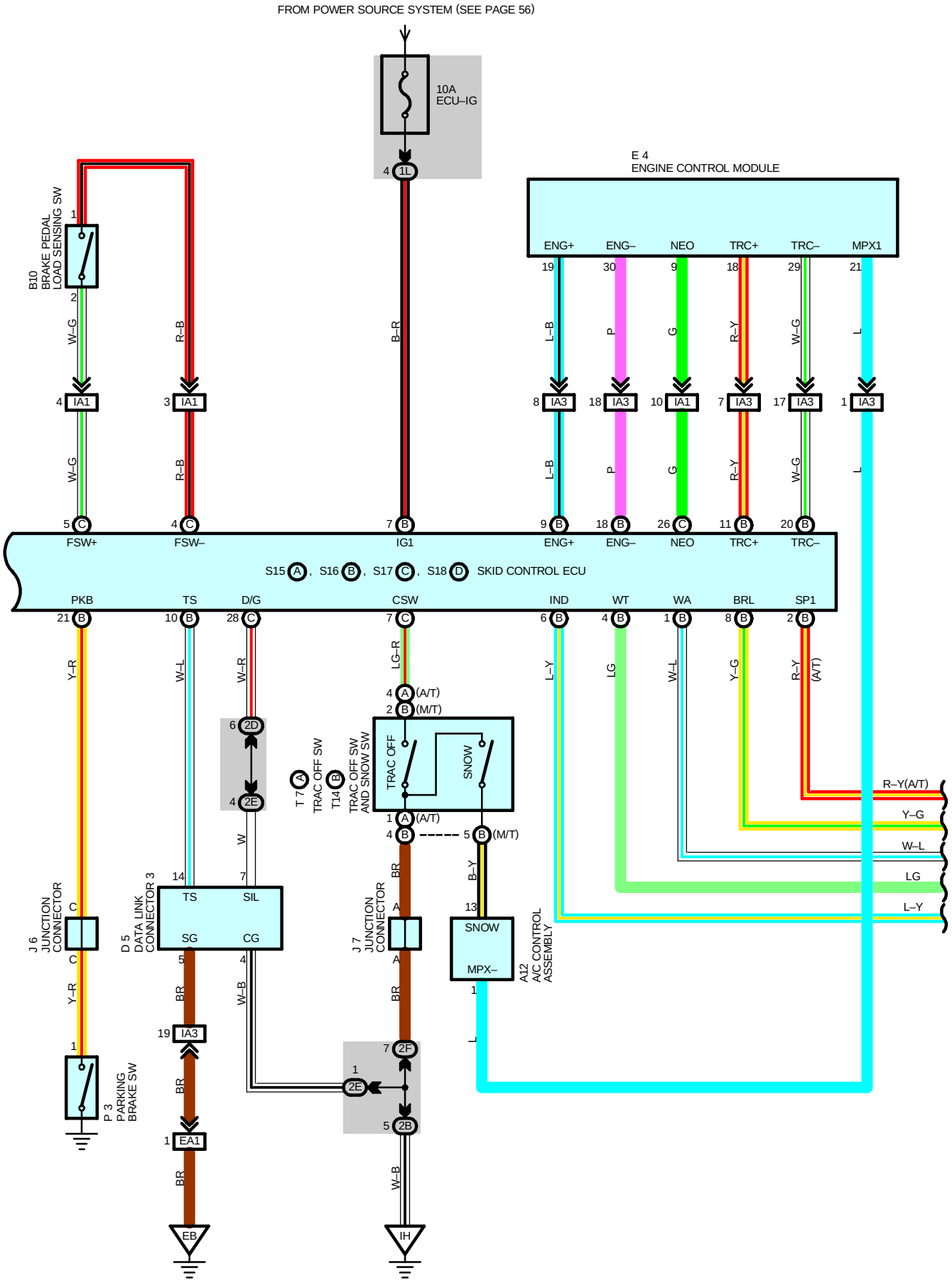
Code	Joining Wire Harness and Wire Harness (Connector Location)
BG1	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

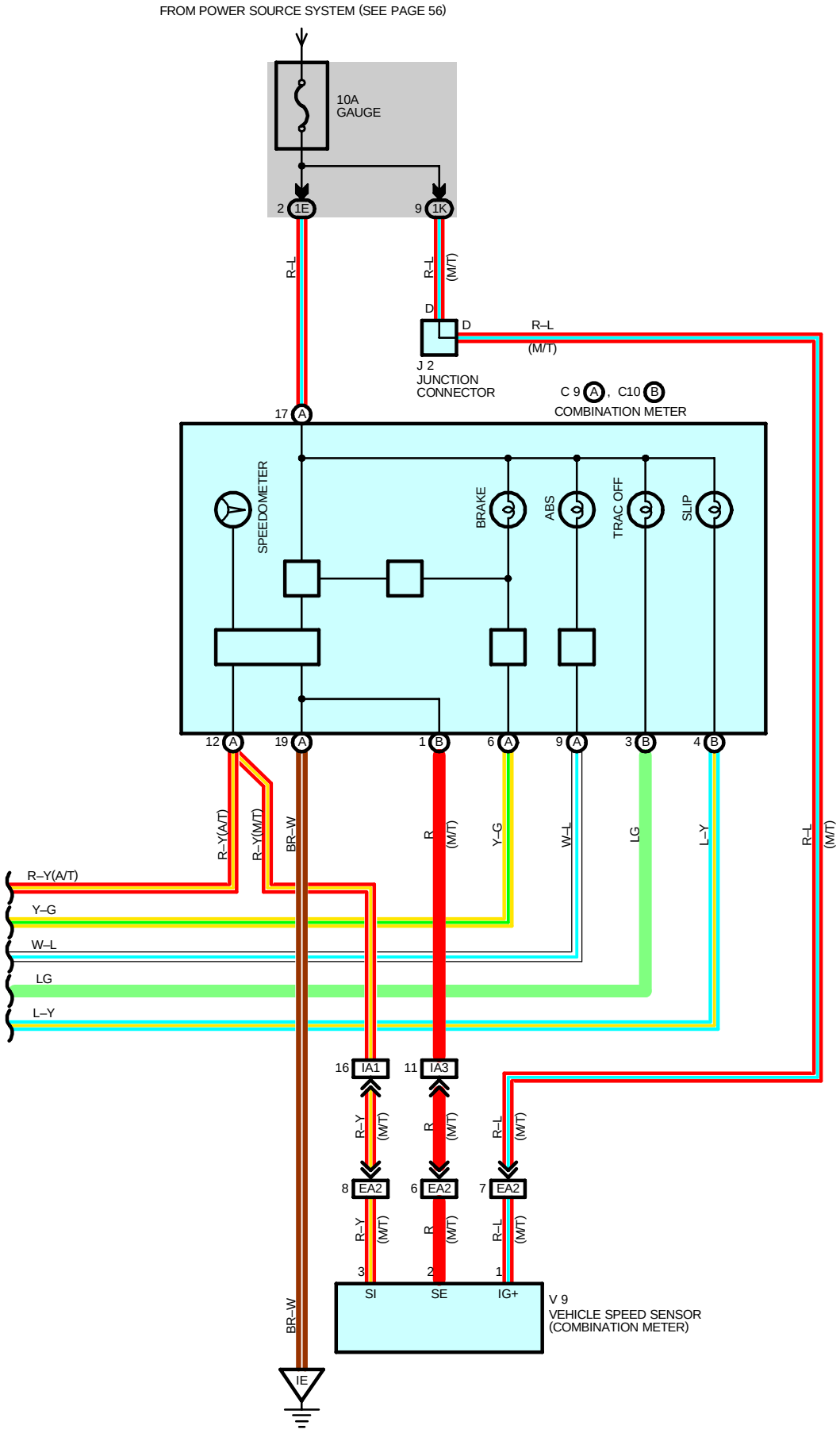
ABS AND TRACTION CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
15A
STOP
A29
ABS SPEED SENSOR
REAR LH
A30
ABS SPEED SENSOR
REAR RH
S 8
STOP LIGHT SW
H15
HEADLIGHT BEAM
LEVEL CONTROL ECU
SPDR
RL+
RL–
RR+
RR–
STP
FRO
S15 A , S16 B , S17 C , S18 D SKID CONTROL ECU
SRRR
SRC2
SRM2
SFRH
SFRR
SRLH
SRLR
SM1+
SM1–
SM2+
SM2–
AST
GND1
GND2
LBL
GND3
GND4
A31
ABS & BA & TRAC ACTUATOR
7. 5A ABS2
B 1
BRAKE FLUID LEVEL
WARNING SW
J 5
JUNCTION
CONNECTOR
ID
EC

ABS AND TRACTION CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
2 1E
9 1K
R–L
R–L
(M/T)
D
D
R–L
(M/T)
J 2
JUNCTION
CONNECTOR
C 9 A , C10 B
COMBINATION METER
17 A
SPEEDOMETER
BRAKE
ABS
TRAC OFF
SLIP
12 A
19 A
1 B
6 A
9 A
3 B
4 B
R–Y(A/T)
R–Y(M/T)
BR–W
R
(M/T)
Y–G
W–L
LG
L–Y
R–L
(M/T)
R–Y(A/T)
Y–G
W–L
LG
L–Y
16 IA1
11 IA3
R–Y
(M/T)
R
(M/T)
R–L
(M/T)
8 EA2
6 EA2
7 EA2
R–Y
(M/T)
R
(M/T)
R–L
(M/T)
3
2
1
SI
SE
IG+
V 9
VEHICLE SPEED SENSOR
(COMBINATION METER)
BR–W
IE

ABS AND TRACTION CONTROL

SYSTEM OUTLINE

1. ABS OPERATION

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

2. TRACTION CONTROL OPERATION

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

Traction control SW

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

SERVICE HINTS

S15 (A), S16 (B), S18 (D) SKID CONTROL ECU

IG1–GROUND : **10**–**14** volts with the ignition SW at **ON** position
STP–GROUND : **0**–**1.5** volts with the stop light SW off
: **8**–**14** volts with the stop light SW on
GND1, GND2, GND3, GND4–GROUND : Always continuity

S8 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

A7, A8 ABS SPEED SENSOR FRONT LH, RH

1–2 : Approx. **1.6** kΩ at **20**°C (**68**°F)

A29, A30 ABS SPEED SENSOR REAR LH, RH

1–2 : Approx. **1.0** kΩ at **25**°C (**77**°F)

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A7	32	C9 A	34	S8	35
A8	32	C10 B	34	S15 A	35
A12	34	D5	34	S16 B	35
A29	36 (S/D)	E4	32	S17 C	35
	38 (W/G)	H15	35	S18 D	35
A30	36 (S/D)	J2	33	T7 A	35
	38 (W/G)	J5	35	T14 B	35
A31	32	J6	35	V9	33
B1	32	J7	35		
B10	34	P3	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2E		
2F		



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2		
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)

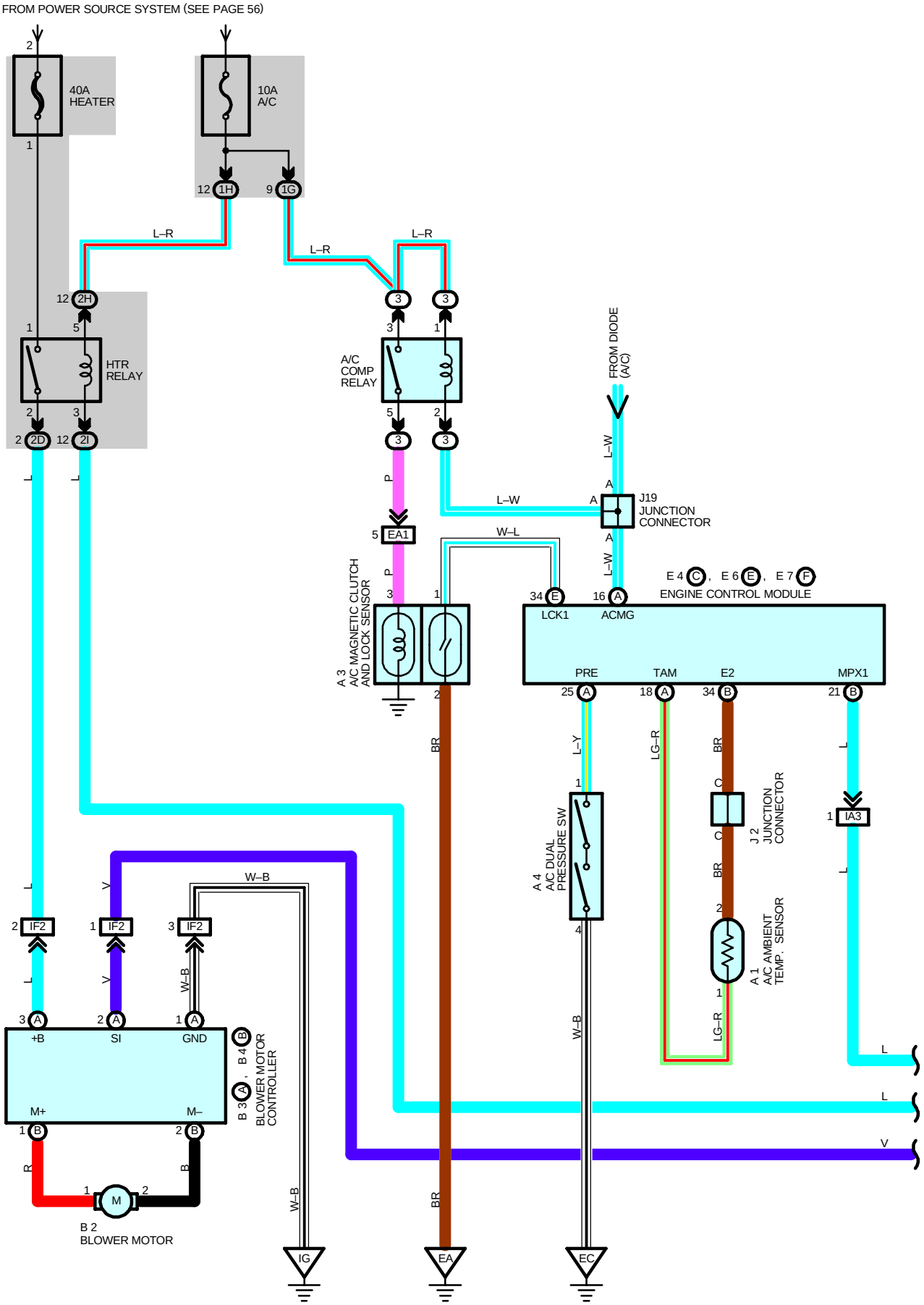


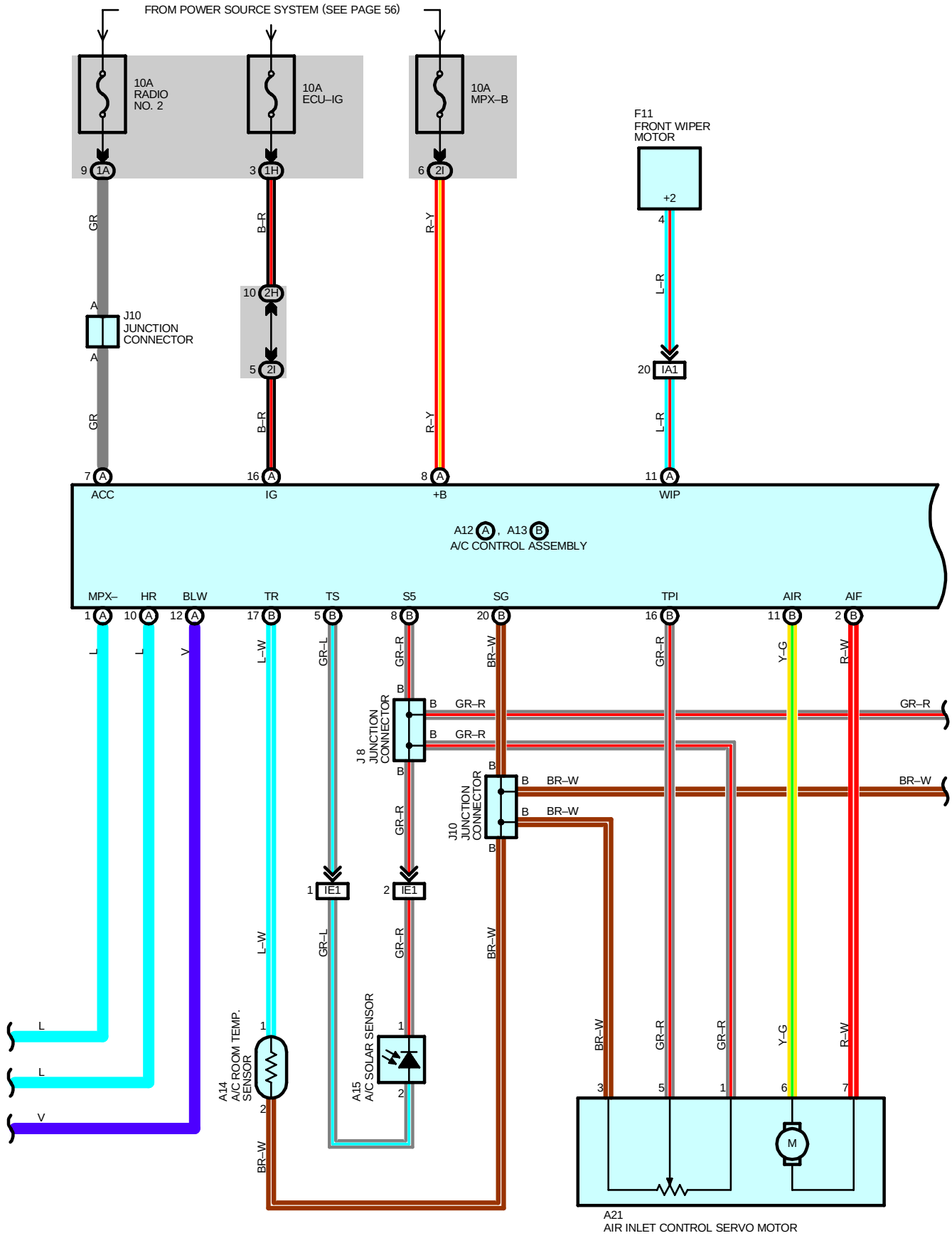
: GROUND POINTS

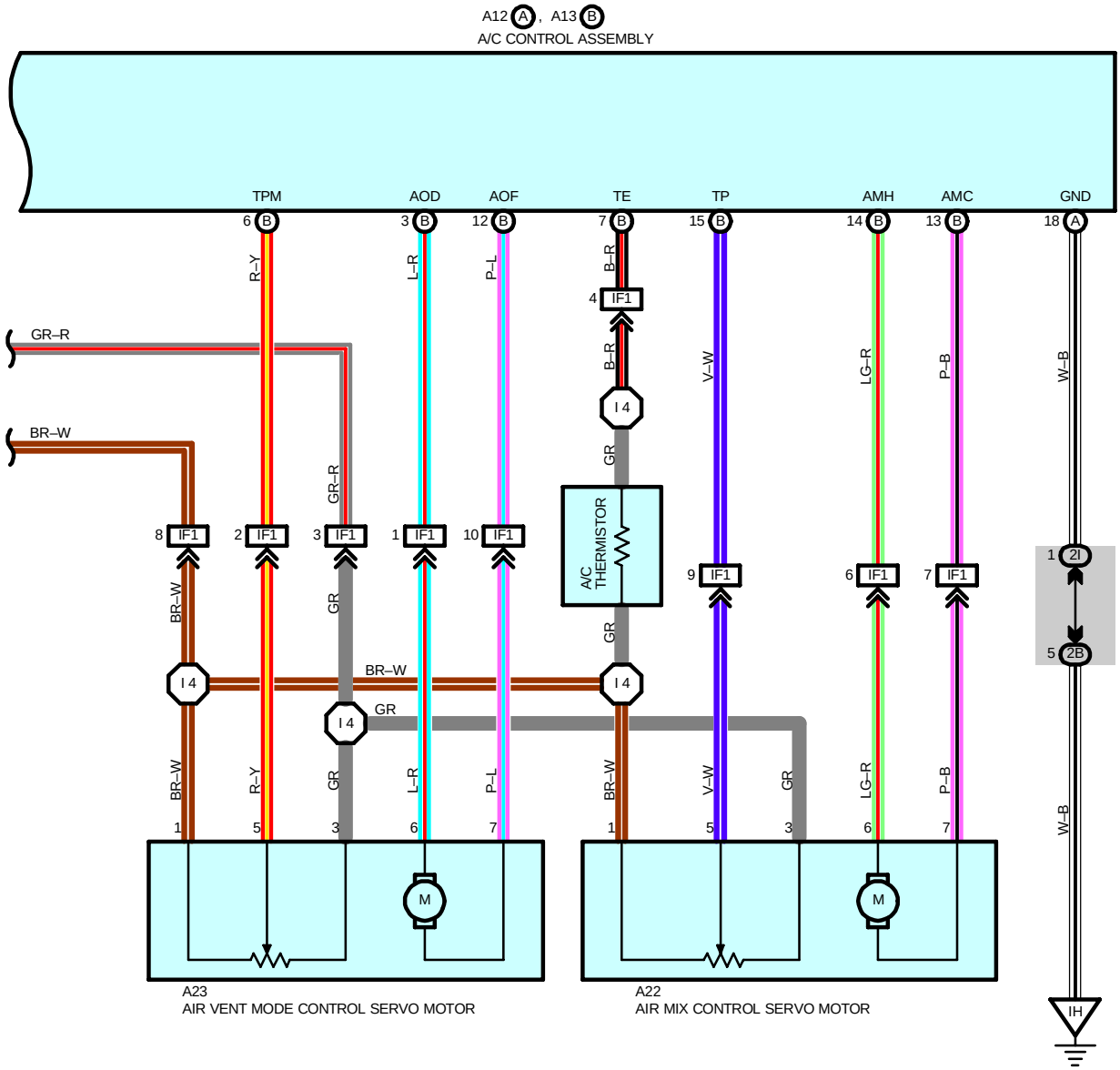
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH

MEMO

AUTOMATIC AIR CONDITIONING




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
RADIO
NO. 2
10A
ECU–IG
10A
MPX–B
F11
FRONT WIPER
MOTOR
9 1A
3 1H
6 2I
+2
4
GR
B–R
R–Y
L–R
A
J10
JUNCTION
CONNECTOR
A
10 2H
5 2I
20 IA1
GR
B–R
R–Y
L–R
7 A
ACC
16 A
IG
8 A
+B
11 A
WIP
A12 A , A13 B
A/C CONTROL ASSEMBLY
MPX–
HR
BLW
TR
TS
S5
SG
TPI
AIR
AIF
1 A
10 A
12 A
17 B
5 B
8 B
20 B
16 B
11 B
2 B
L
L
V
L–W
GR–L
GR–R
BR–W
GR–R
Y–G
R–W
B
B GR–R
B GR–R
GR–R
J8
JUNCTION
CONNECTOR
B
B BR–W
B BR–W
BR–W
J10
JUNCTION
CONNECTOR
1 IE1
2 IE1
GR–L
GR–R
BR–W
L
L
V
L–W
1
2
BR–W
A14
A/C ROOM TEMP.
SENSOR
1
2
A15
A/C SOLAR SENSOR
BR–W
GR–R
GR–R
Y–G
R–W
3
5
1
6
7
M
A21
AIR INLET CONTROL SERVO MOTOR


A12 A , A13 B
A/C CONTROL ASSEMBLY
TPM
AOD
AOF
TE
TP
AMH
AMC
GND
R–Y
L–R
P–L
B–R
V–W
LG–R
P–B
W–B
GR–R
BR–W
GR
A/C THERMISTOR
IF1
I 4
2I
2B
IH
M
A23
AIR VENT MODE CONTROL SERVO MOTOR
A22
AIR MIX CONTROL SERVO MOTOR

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 sends the signals to the blower control to control the blower motor speed.

Auto operation

When the auto SW is turned on, the A/C control assembly 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. 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. 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 ECU in the A/C control assembly 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 film damper.

4. AIR MIX CONTROL SERVO MOTOR CONTROL

When the temperature control SW is pressed, the ECU in the A/C control assembly sends a signal to the air mix control servo motor. This signal drives the motor to reach the temperature set by the temperature control SW, and moves the film damper.

5. AIR CONDITIONING OPERATION

The A/C control assembly receives various signals, I.E., the engine RPM from the crankshaft position sensor, outlet temperature signal from the A/C ambient temp. sensor, coolant temperature from the engine coolant temp. sensor, etc. When the engine is started and the A/C SW is on, a signal is input to the ECU (Built into the A/C control assembly) to engine control module, through communication control of the body ECU etc. As a result, the current flows from A/C fuse to TERMINAL 1 of the A/C COMP relay to TERMINAL 2 to TERMINAL ACMG of the engine control module, turning the relay on so that the A/C magnetic clutch is on and the A/C compressor operates. At the same time, the engine control module detects the magnetic clutch is on and the A/C compressor operates and rotates the motor to the open direction to avoid lowering the engine RPM during A/C operation. When any of the following signals are input to the A/C control assembly, the A/C control assembly operates to turn off the air conditioning.

* Coolant temp. signal is high.
* A signal that the temperature at the air outlet is low.
* A signal that there is a large difference between engine speed and compressor speed.
* A signal that the refrigerant pressure is abnormally high or low.

SERVICE HINTS

A4 A/C DUAL PRESSURE SW

1–4 : Open with the refrigerant pressure at less than approx. **216** kpa (**2.2** kgf/cm^2, **31** psi) or more than approx. **3138** kpa (**32** kgf/cm^2, **455** psi)

A12 (A) A/C CONTROL ASSEMBLY

+B–GROUND : Always approx. **12** volts
ACC–GROUND: Approx. **12** volts with the ignition SW at **ACC** or **ON** position
IG–GROUND : Approx. **12** volts with the ignition SW at **ON** position
GND–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A1	32	A21	34	E7 F	32
A3	32	A22	34	F11	32
A4	32	A23	34	J2	33
A12 A	34	B2	34	J8	35
A13 B	34	B3 A	34	J10	35
A14	34	B4 B	34	J19	35
A15	34	E4 C	32		
A16	34	E6 E	32		

: RELAY BLOCKS

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

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2I		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IE1	44	Instrument Panel No.2 Wire and Instrument Panel Wire (Left Side of the Instrument Panel)
IF1	46	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IF2		

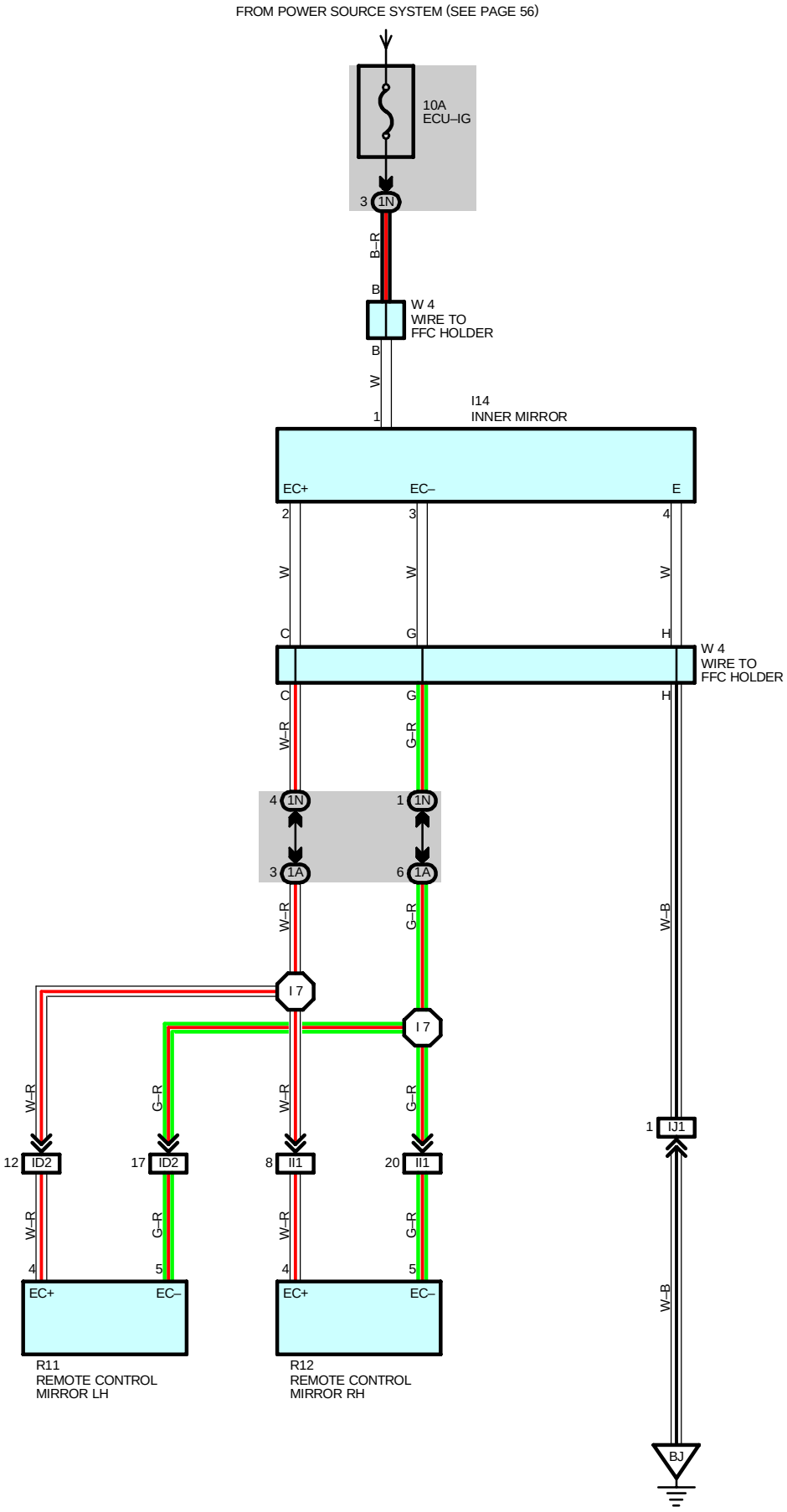
: GROUND POINTS

Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
EC	42	Left Fender Apron
IG	44	Instrument Panel Reinforcement RH
IH	44	Cowl Side Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I4	46	A/C Sub Wire			

AUTOMATIC GLARE–RESISTANT EC MIRROR



SERVICE HINTS

I14 INNER MIRROR

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
I14	36 (S/D)	R11	39 (W/G)	W4	37 (S/D)
	38 (W/G)	R12	37 (S/D)		39 (W/G)
R11	37 (S/D)		39 (W/G)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)

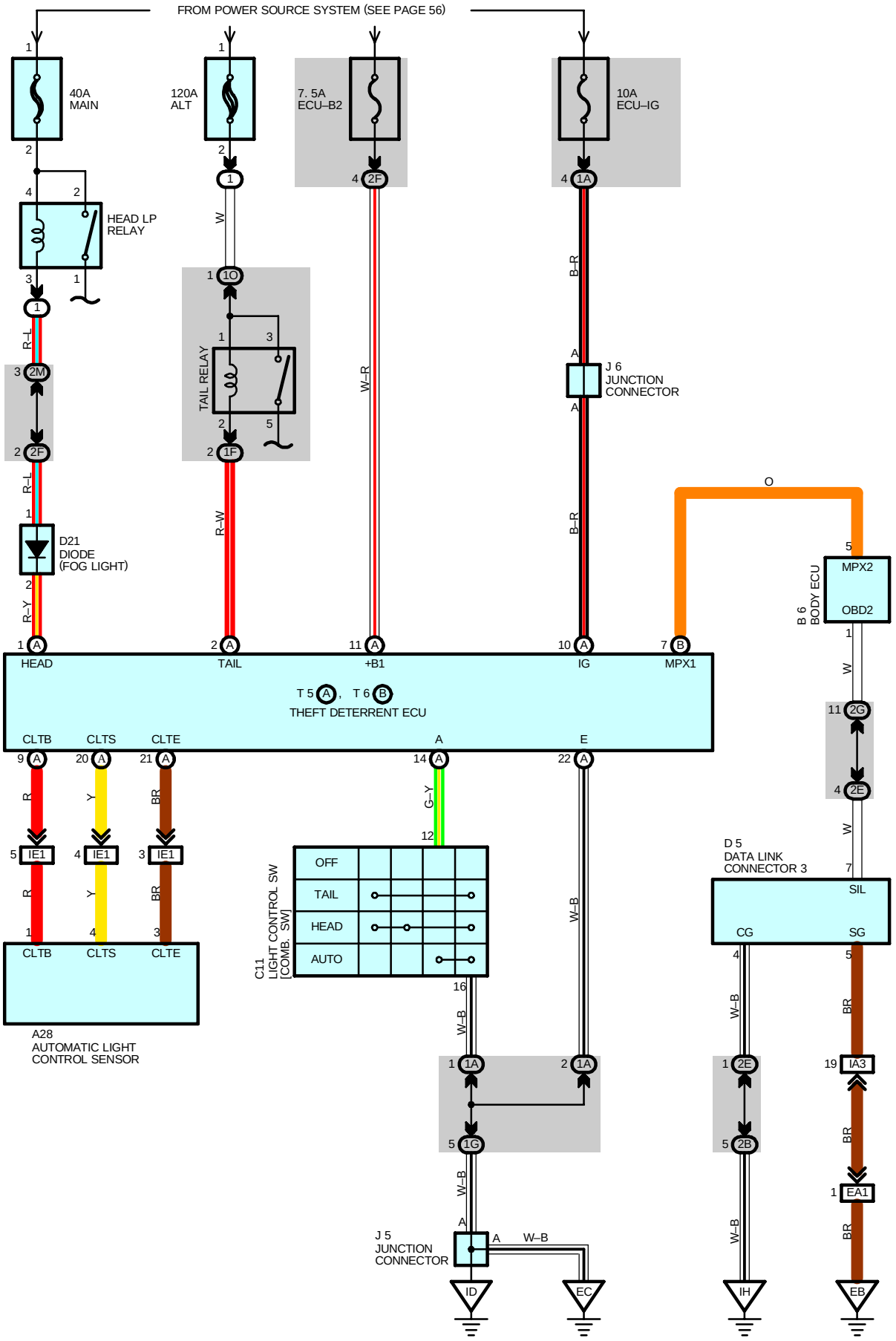
: GROUND POINTS

Code	See Page	Ground Points Location
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	46	Instrument Panel Wire			

AUTOMATIC LIGHT CONTROL



SYSTEM OUTLINE

When the light control SW is set at AUTO, the automatic light control system automatically turns on or off the taillights and headlights depending on the brightness around the vehicle.

AUTOMATIC LIGHT CONTROL OPERATION

The automatic light control sensor converts the intensity of the illumination into frequency and inputs it to the theft deterrent ECU. When the light control SW is set at AUTO, the signal is input to TERMINAL A of the theft deterrent ECU. Through communication control of the body ECU etc. , the taillights and headlights are automatically turned on or off.

* Turn on operation
  When the theft deterrent ECU receives the frequency signal from the automatic light control sensor and determines that the brightness around the vehicle has decreased below a specified level, TERMINAL TAIL and HEAD of the theft deterrent ECU are controlled through communication control of the body ECU etc. As a result, the taillights and/or headlights light up as the TAIL relay and/or HEAD LP relay are turned on.
* Turn off operation
  When the theft deterrent ECU receives the frequency signal from the automatic light control sensor and determines that the brightness around the vehicle has exceeded a specified level, TERMINAL TAIL and HEAD of the theft deterrent ECU are controlled through communication control of the body ECU etc. As a result, the taillights and/or headlights go off as the TAIL relay and/or HEAD LP relay are turned off.

SERVICE HINTS

C11 LIGHT CONTROL SW [COMB. SW]

12–16 : Continuity with the light control SW at **AUTO** position

T5 (A), T6 (B) THEFT DETERRENT ECU

(A) 11, (B) 1–GROUND : Always approx. **12** volts
(A) 10–GROUND : Approx. **12** volts with the ignition SW at **ON** position
(A) 22–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code		See Page
A28	34	D5	34	J6		35
B6	34	D21	34	T5	A	35
C11	34	J5	35	T6	B	35

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

▭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

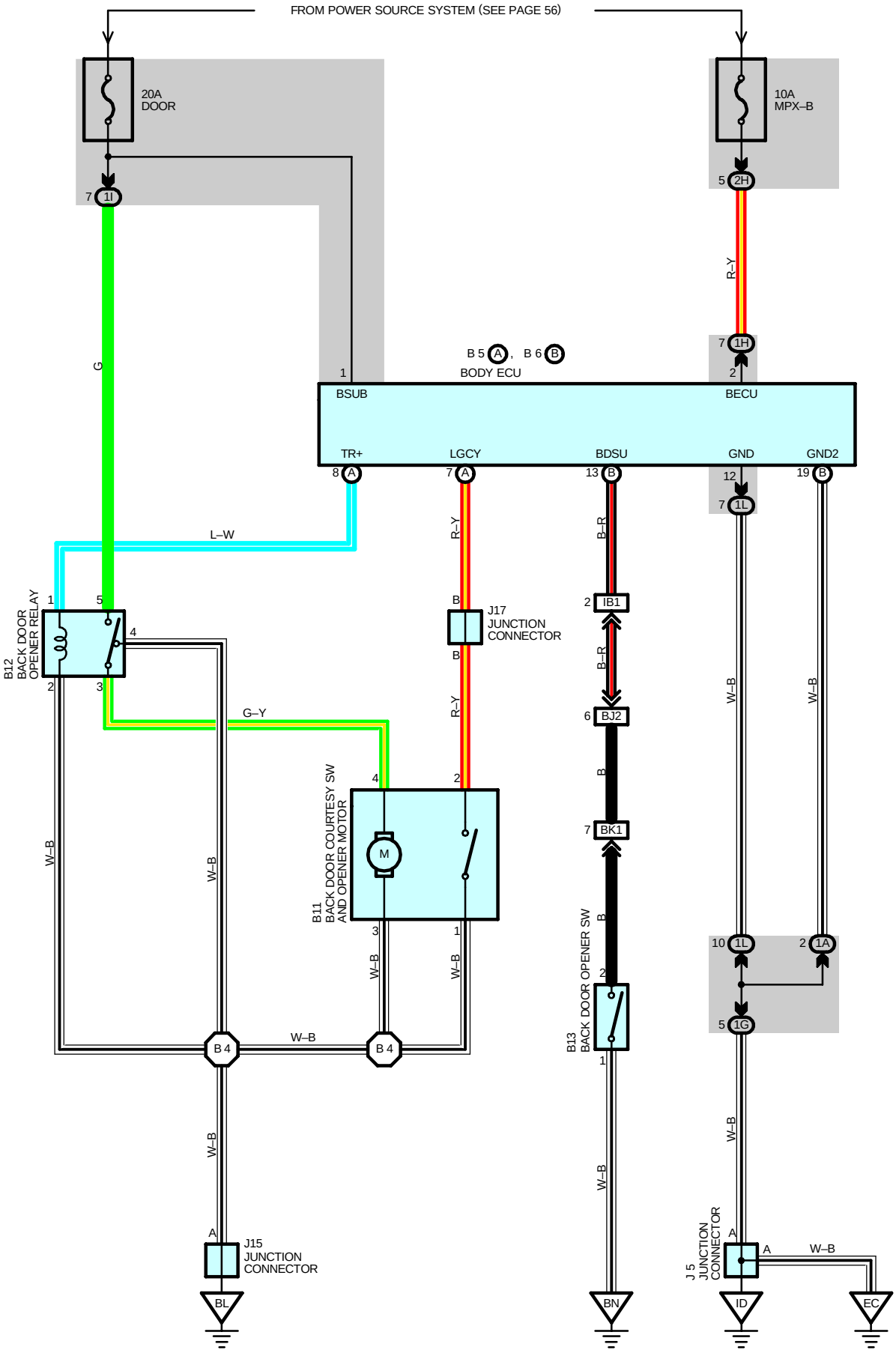
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IE1	44	Instrument Panel No.2 Wire and Instrument Panel Wire (Left Side of the Instrument Panel)

AUTOMATIC LIGHT CONTROL

▽ **: GROUND POINTS**

Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH

BACK DOOR OPENER



SERVICE HINTS

B11 BACK DOOR COURTESY SW AND OPENER MOTOR

4–GROUND : Approx. **12** volts with the back door open operate

1, 3–GROUND : Always continuity

B13 BACK DOOR OPENER SW

1–2 : Continuity with the back door opener SW is pushed

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
B5	A	34	B12	38 (W/G)	J15	38 (W/G)
B6	B	34	B13	38 (W/G)	J17	38 (W/G)
B11		38 (W/G)	J5	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BJ2	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

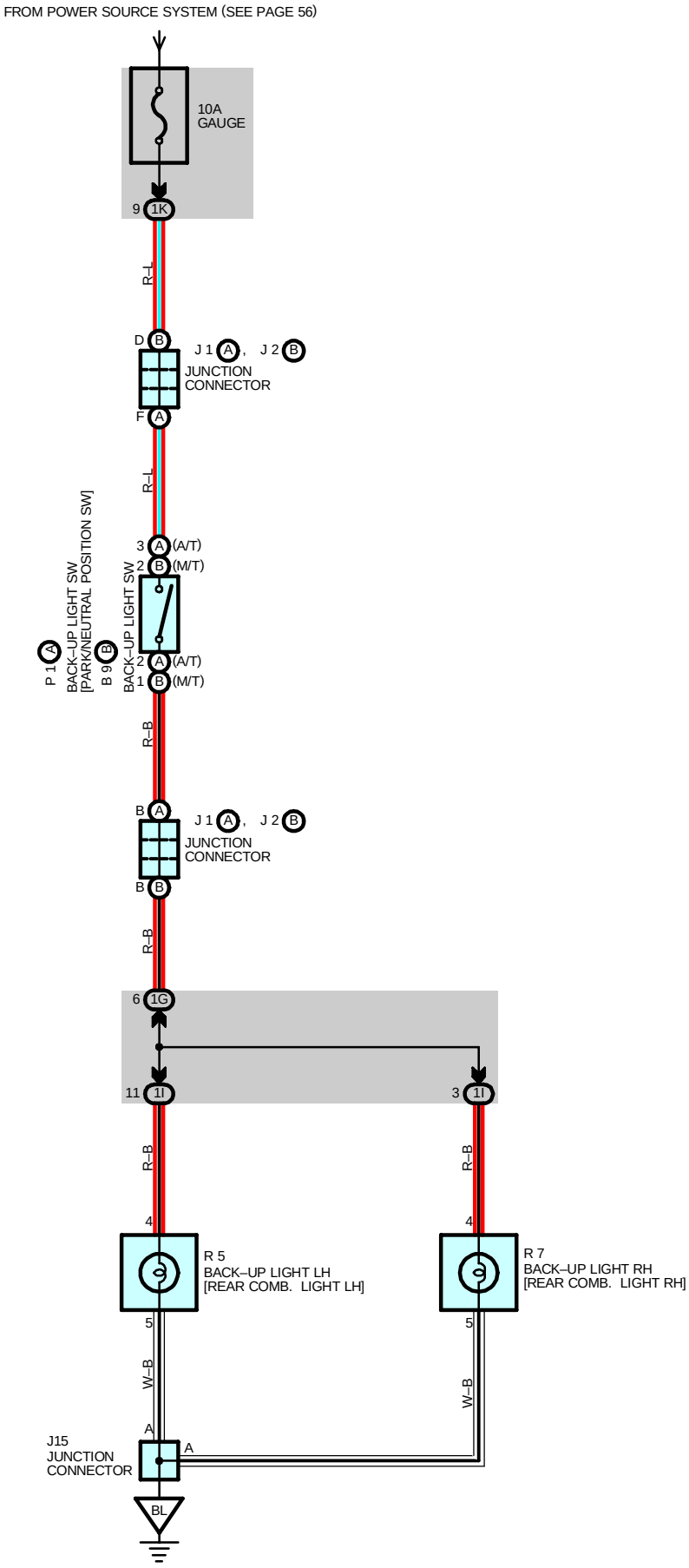
: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
BL	50 (W/G)	Left Quarter Panel LH
BN	50 (W/G)	Right Side of the Back Panel Lower

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	50 (W/G)	Floor No.2 Wire			

BACK–UP LIGHT



SERVICE HINTS

P1 (A) BACK–UP LIGHT SW [PARK/NEUTRAL POSITION SW] (A/T)

(A) 3–(A) 2 : Closed with the shift lever in **R** position

B9 (B) BACK–UP LIGHT SW (M/T)

(B) 2–(B) 1 : Closed with the shift lever in **R** position

○ : PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
B9	B	32	J15		38 (W/G)	R7	37 (S/D)
J1	A	33	P1	A	33		39 (W/G)
J2	B	33	R5		37 (S/D)		
J15		36 (S/D)			39 (W/G)		

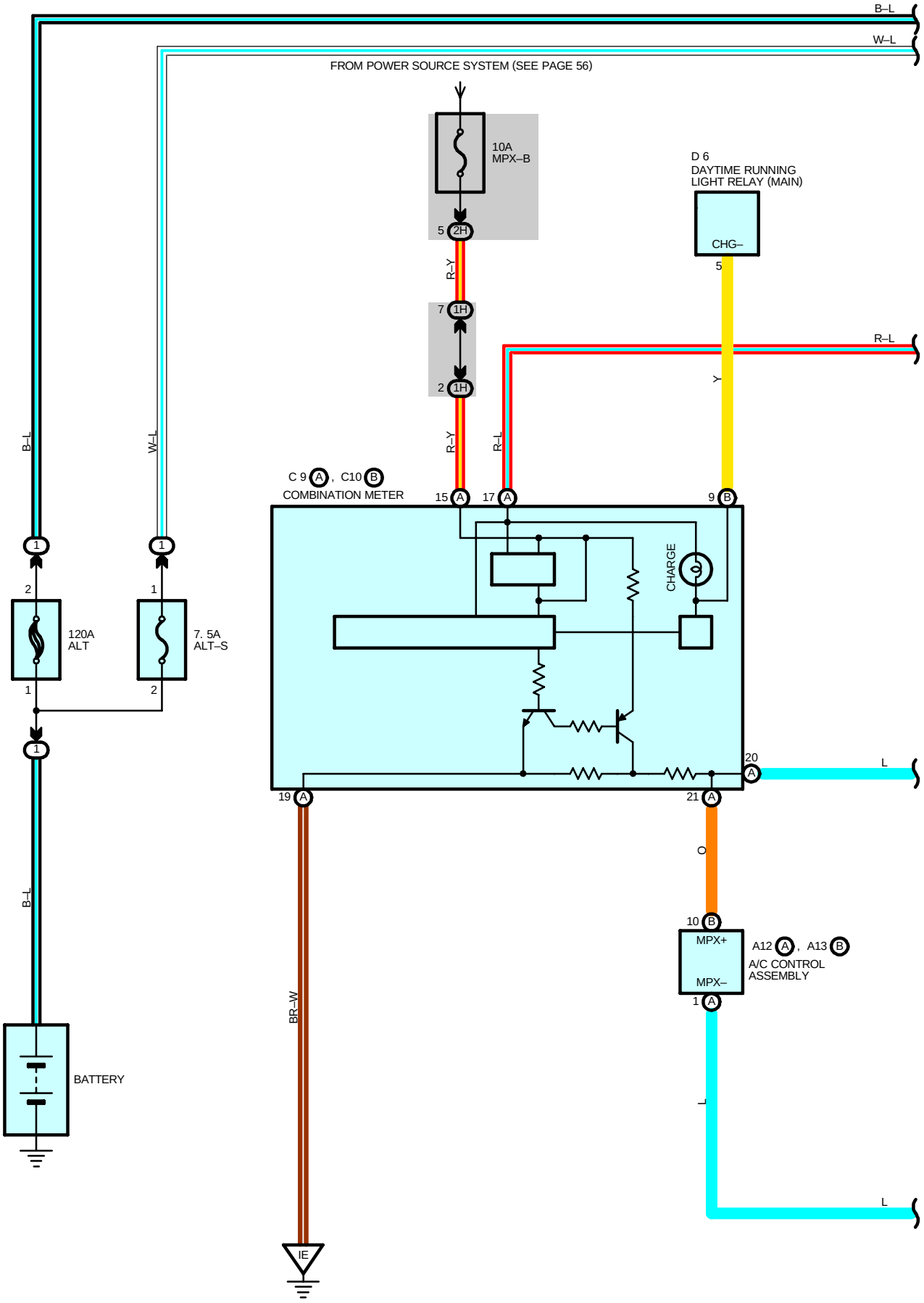
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

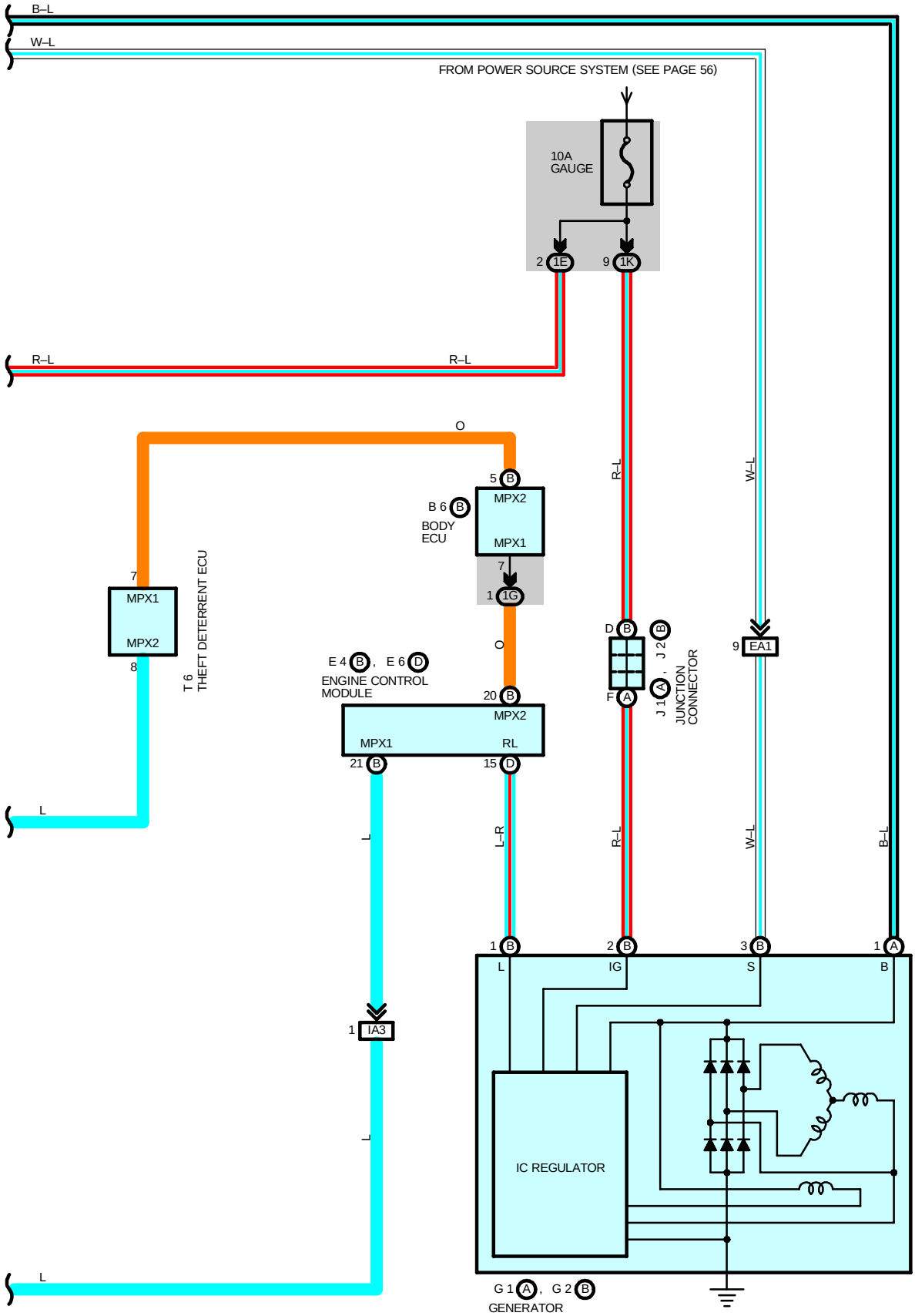
Code	See Page	Junction Block and Wire Harness (Connector Location)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

CHARGING


B–L
W–L
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
MPX–B
5
2H
R–Y
7
1H
2
1H
D 6
DAYTIME RUNNING
LIGHT RELAY (MAIN)
CHG–
5
R–L
Y
B–L
W–L
R–Y
R–L
C 9 A , C10 B
COMBINATION METER
15 A
17 A
9 B
CHARGE
1
2
120A
ALT
1
2
7. 5A
ALT–S
1
B–L
BATTERY
20 A
L
19 A
21 A
O
10 B
MPX+
MPX–
A12 A , A13 B
A/C CONTROL
ASSEMBLY
1 A
L
L
BR–W
IE


B–L
W–L
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
2 1E
9 1K
R–L
R–L
O
5 B
MPX2
B 6 B
BODY
ECU
MPX1
7
1 1G
7
MPX1
MPX2
8
T 6
THEFT DETERRENT ECU
O
E 4 B , E 6 D
ENGINE CONTROL
MODULE
20 B
MPX2
MPX1
RL
21 B
15 D
L
L–R
R–L
D B
F A
J 2 , J 1
JUNCTION
CONNECTOR
9 EA1
W–L
W–L
B–L
L
1 IA3
L
L
1 B
2 B
3 B
1 A
L
IG
S
B
IC REGULATOR
G 1 A , G 2 B
GENERATOR

CHARGING

SERVICE HINTS

G1 (A), G2 (B) GENERATOR

(A) 1–GROUND : **13.8**–**15.0** volts with the engine running at **5000** rpm and **25**˚C (**77**˚F)
13.2–**14.0** volts with the engine running at **5000** rpm and **115**˚C (**239**˚F)

(B) 1–GROUND : Below **1.5** volts with the ignition SW at **ON** position and engine not running

: PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A12	A	34	D6		34	J1	A	33
A13	B	34	E4	B	32	J2	B	33
B6	B	34	E6	D	32	T6		35
C9	A	34	G1	A	32			
C10	B	34	G2	B	32			

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

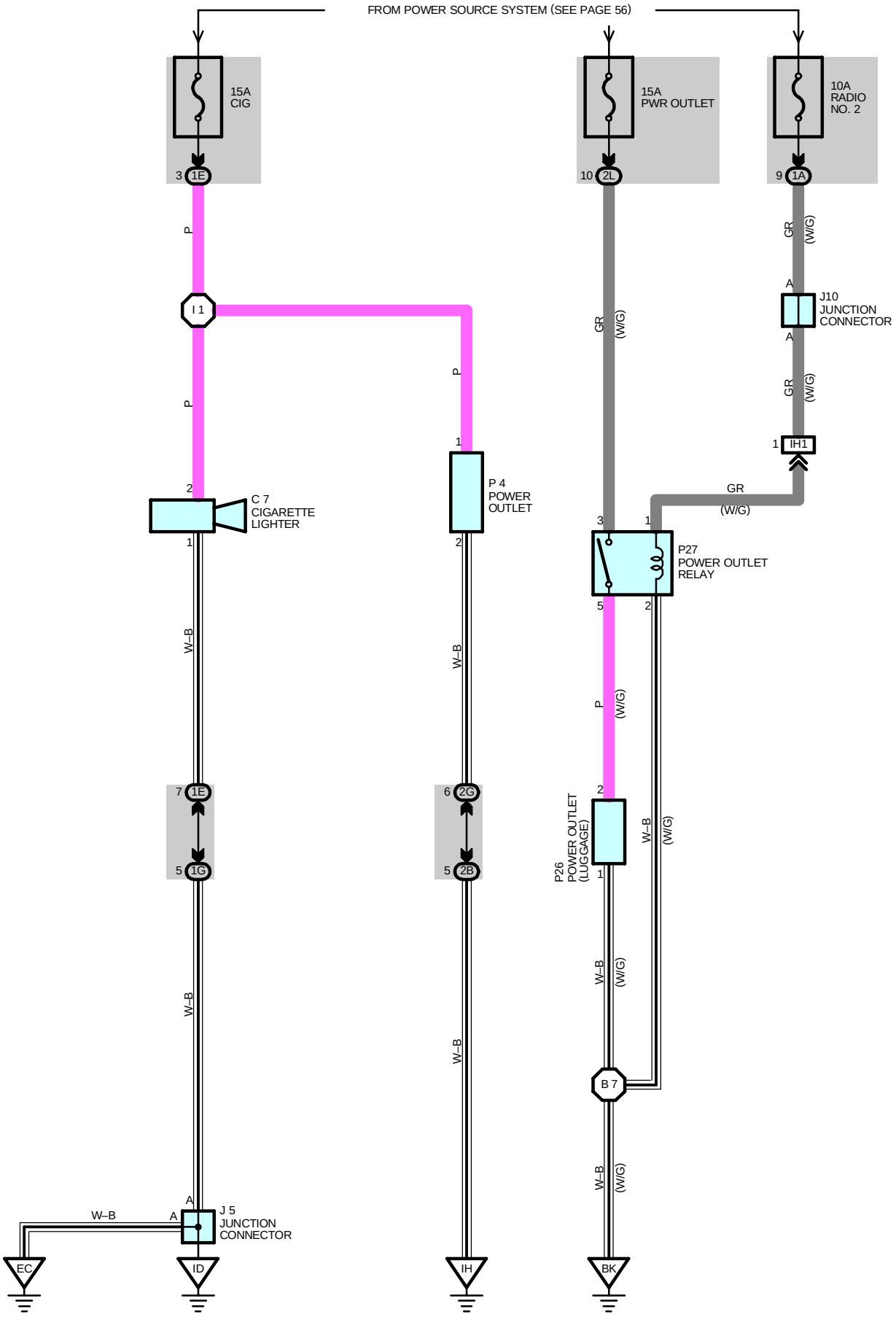
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

: GROUND POINTS

Code	See Page	Ground Points Location
IE	44	Front Floor Panel Center LH

CIGARETTE LIGHTER AND POWER OUTLET



SERVICE HINTS

C7 CIGARETTE LIGHTER

2–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
1–GROUND : Always continuity

P4 POWER OUTLET

1–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
2–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C7	34	J10	35	P26	39 (W/G)
J5	35	P4	35	P27	39 (W/G)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2G	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)

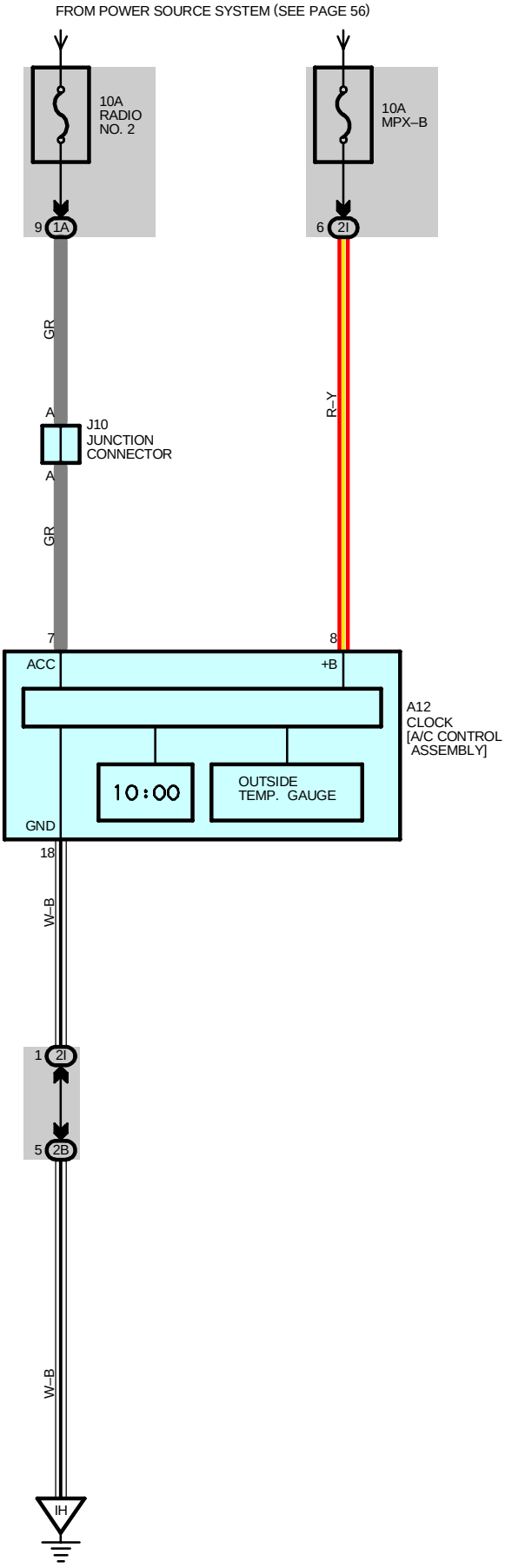
: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BK	50 (W/G)	Front Floor Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	46	Instrument Panel Wire	B7	50 (W/G)	Floor Wire

CLOCK


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
RADIO
NO. 2
10A
MPX–B
9
1A
6
2I
GR
R–Y
A
J10
JUNCTION
CONNECTOR
A
GR
7
8
ACC
+B
A12
CLOCK
[A/C CONTROL
ASSEMBLY]
10:00
OUTSIDE
TEMP. GAUGE
GND
18
W–B
1
2I
5
2B
W–B
IH

SERVICE HINTS

A12 CLOCK [A/C CONTROL ASSEMBLY]

8–GROUND : Always approx. **12** volts (Power for clock)
7–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position (Power for indication)
18–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A12	34	J10	35		

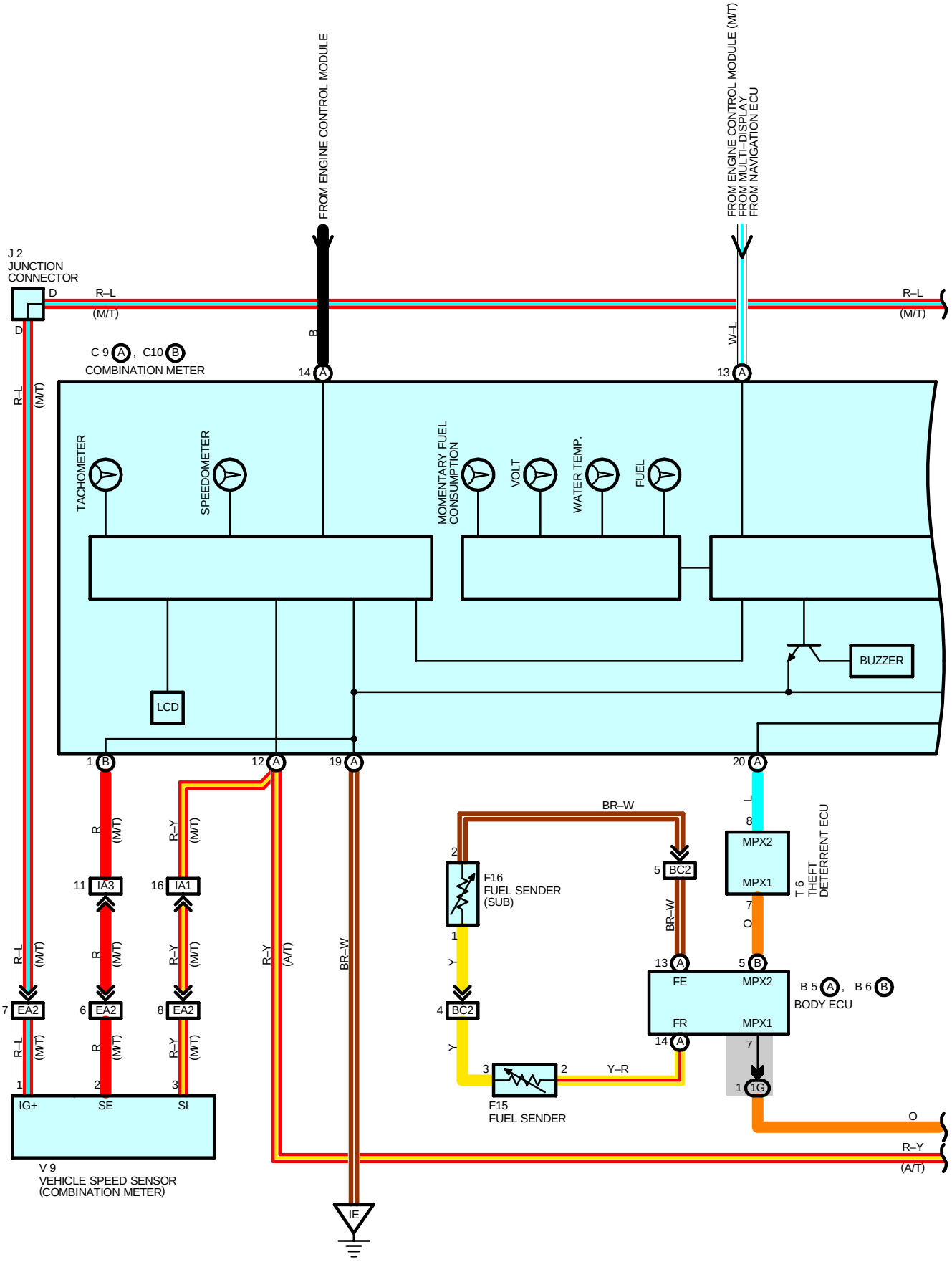
⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

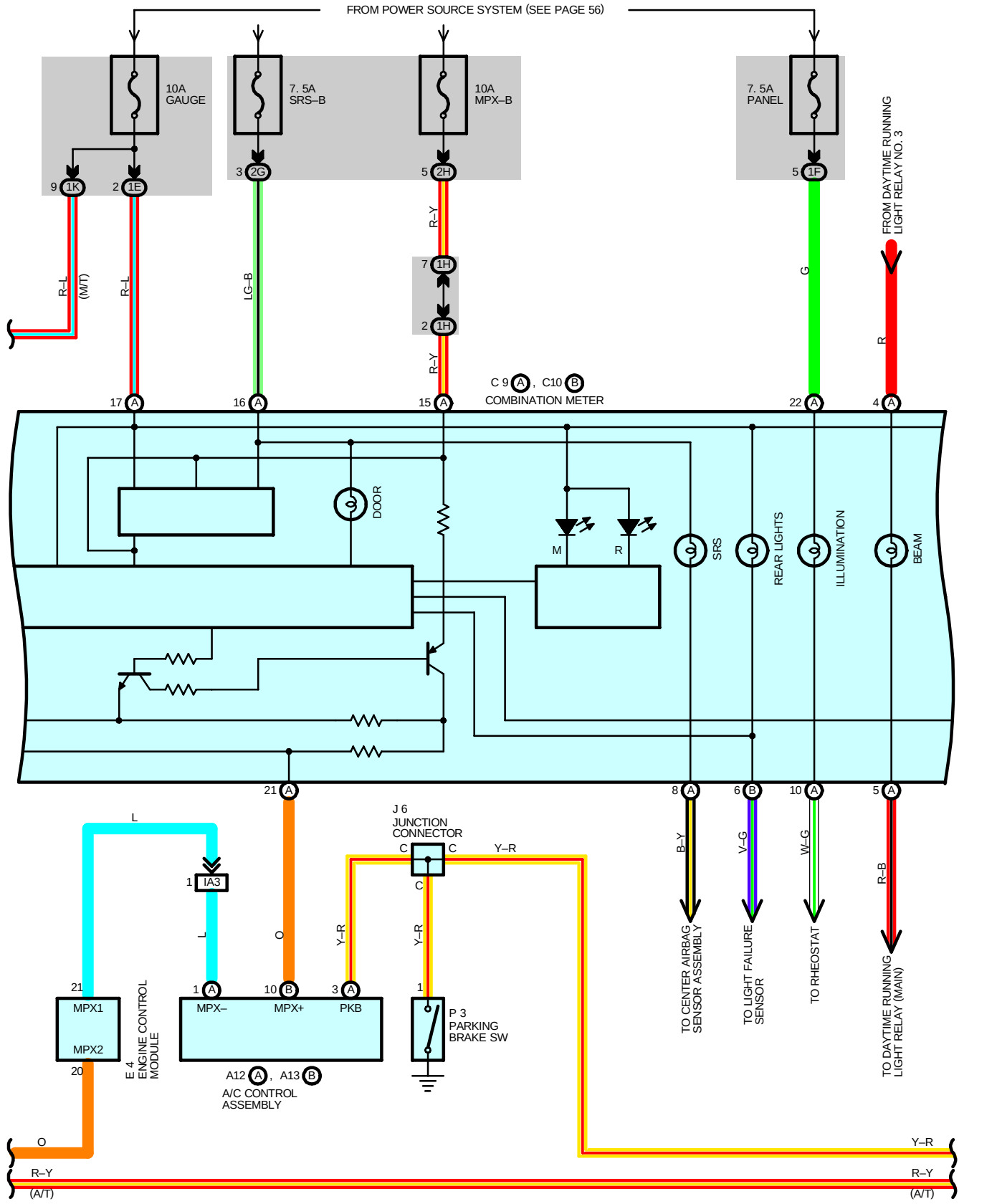
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2I	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

▽ : GROUND POINTS

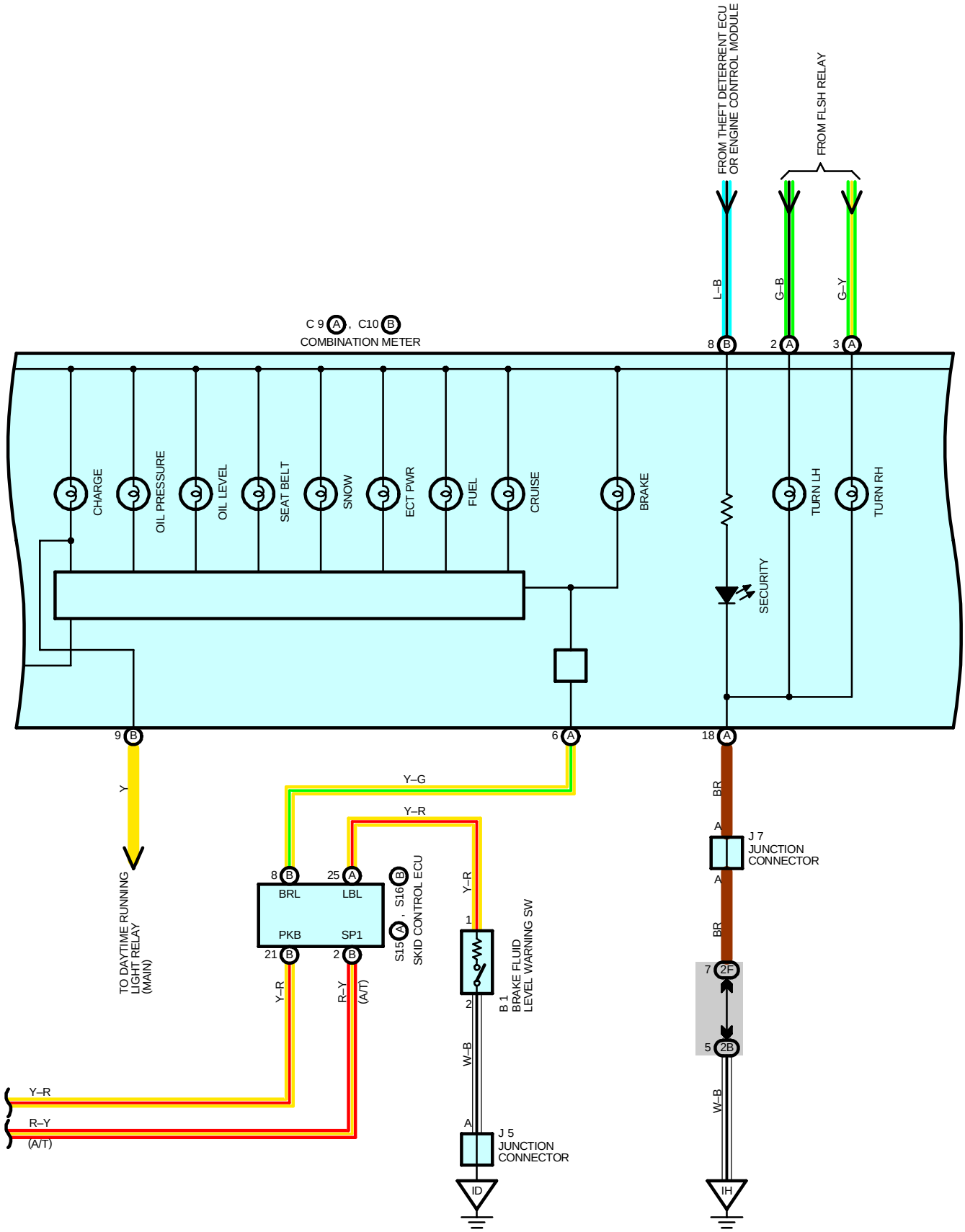
Code	See Page	Ground Points Location
IH	44	Cowl Side Panel RH

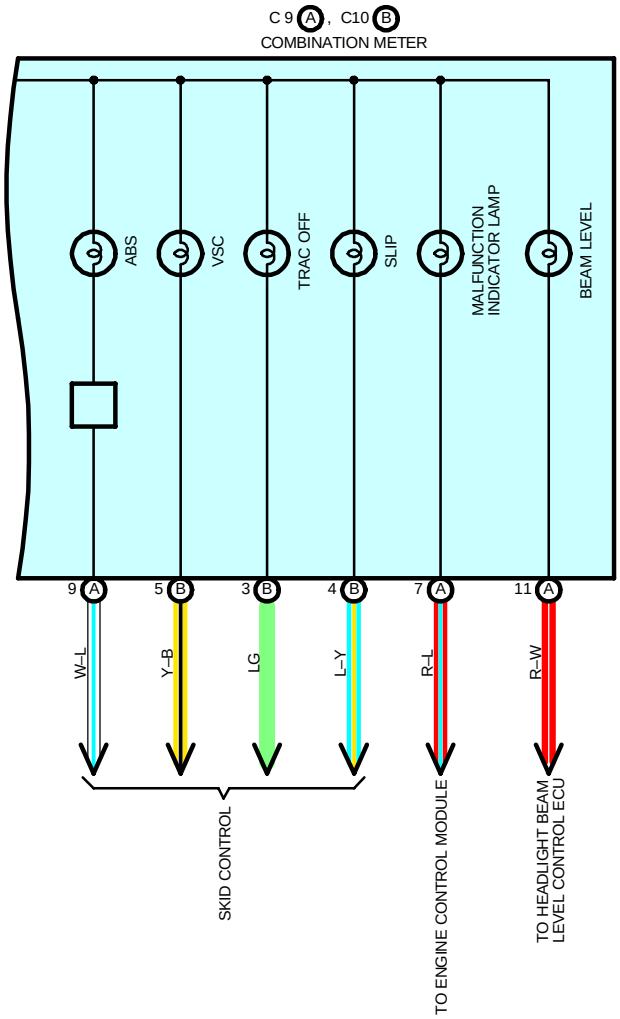
COMBINATION METER




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A GAUGE
7. 5A SRS–B
10A MPX–B
7. 5A PANEL
FROM DAYTIME RUNNING LIGHT RELAY NO. 3
9 1K
2 1E
3 2G
5 2H
5 1F
R–L (M/T)
R–L
LG–B
R–Y
G
R
7 1H
2 1H
R–Y
C 9 A , C10 B
COMBINATION METER
17 A
16 A
15 A
22 A
4 A
DOOR
M
R
SRS
REAR LIGHTS
ILLUMINATION
BEAM
21 A
8 A
6 B
10 A
5 A
L
1 IA3
L
O
Y–R
J 6
JUNCTION CONNECTOR
C
C
Y–R
C
Y–R
B–Y
V–G
W–G
R–B
TO CENTER AIRBAG SENSOR ASSEMBLY
TO LIGHT FAILURE SENSOR
TO RHEOSTAT
TO DAYTIME RUNNING LIGHT RELAY (MAIN)
21
MPX1
MPX2
20
E 4
ENGINE CONTROL MODULE
1 A
MPX–
10 B
MPX+
3 A
PKB
A12 A , A13 B
A/C CONTROL ASSEMBLY
1
P 3
PARKING BRAKE SW
O
R–Y
(A/T)
Y–R
R–Y
(A/T)

COMBINATION METER




C 9 A , C10 B
COMBINATION METER
ABS
VSC
TRAC OFF
SLIP
MALFUNCTION INDICATOR LAMP
BEAM LEVEL
9 A
5 B
3 B
4 B
7 A
11 A
W–L
Y–B
LG
L–Y
R–L
R–W
SKID CONTROL
TO ENGINE CONTROL MODULE
TO HEADLIGHT BEAM LEVEL CONTROL ECU

COMBINATION METER

SERVICE HINTS

P3 PARKING BRAKE SW

1–GROUND : Continuity with the parking brake lever pulled up

F15 FUEL SENDER

2–3 : Approx. **2.0** Ω at fuel full
Approx. **55.0** Ω at fuel empty

C9 (A) COMBINATION METER

(A)17–GROUND : Approx. **12** volts with the ignition SW at **ON** position
(A)18–GROUND : Always continuity
(A)19–GROUND : Always continuity
(A)15–GROUND : Always approx. **12** volts
(A)16–GROUND : Always approx. **12** volts

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
A12	A	34	E4	32	J6		35
A13	B	34	F15	36 (S/D)	J7		35
B1		32		38 (W/G)	P3		35
B5	A	34	F16	36 (S/D)	S15	A	35
B6	B	34		38 (W/G)	S16	B	35
C9	A	34	J2	33	T6		35
C10	B	34	J5	35	V9		33

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		

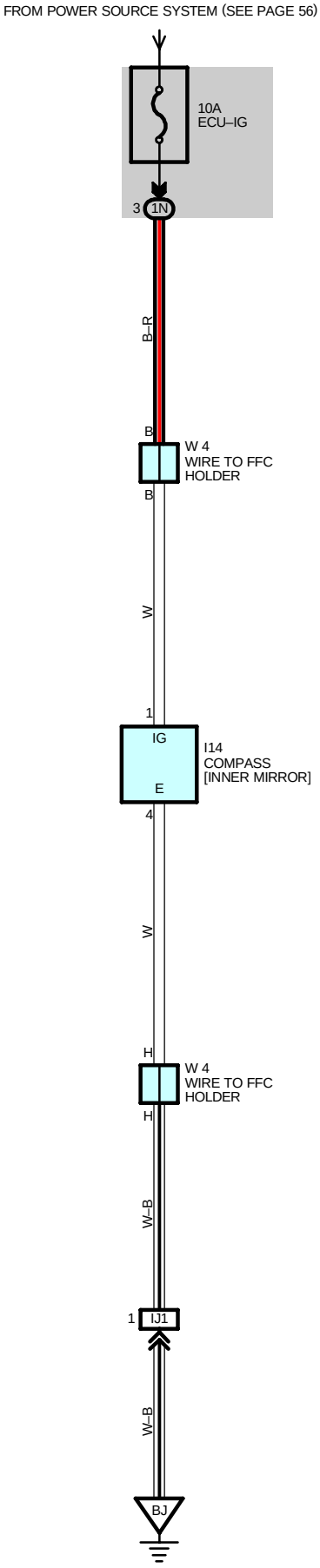
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH

COMPASS


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
ECU–IG
3
1N
B–R
B
W 4
WIRE TO FFC
HOLDER
B
W
1
IG
E
I14
COMPASS
[INNER MIRROR]
4
W
H
W 4
WIRE TO FFC
HOLDER
H
W–B
1
IJ1
W–B
BJ

SERVICE HINTS

I14 COMPASS [INNER MIRROR]

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
I14	36 (S/D)	W4	37 (S/D)		
	38 (W/G)		39 (W/G)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)

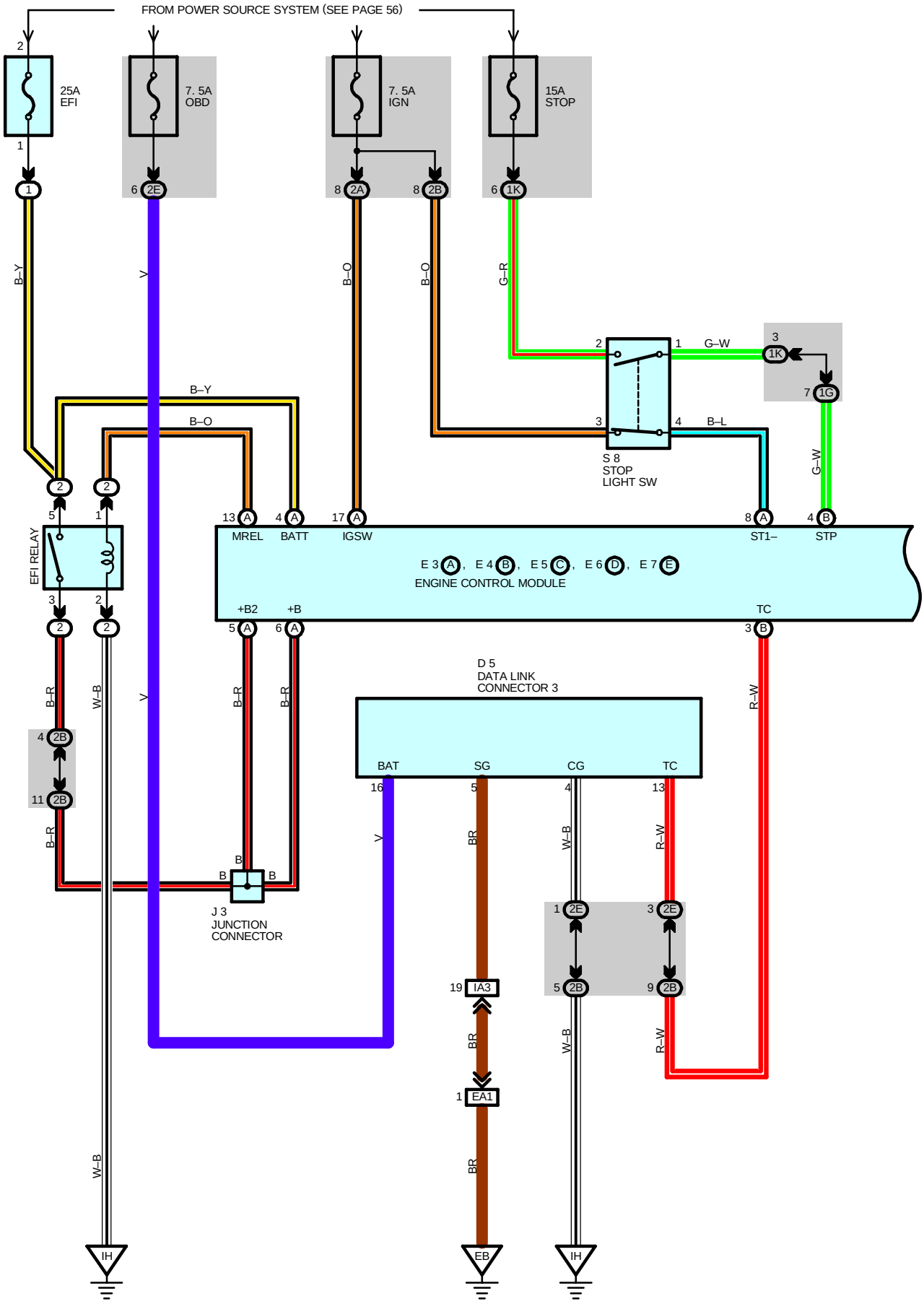
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

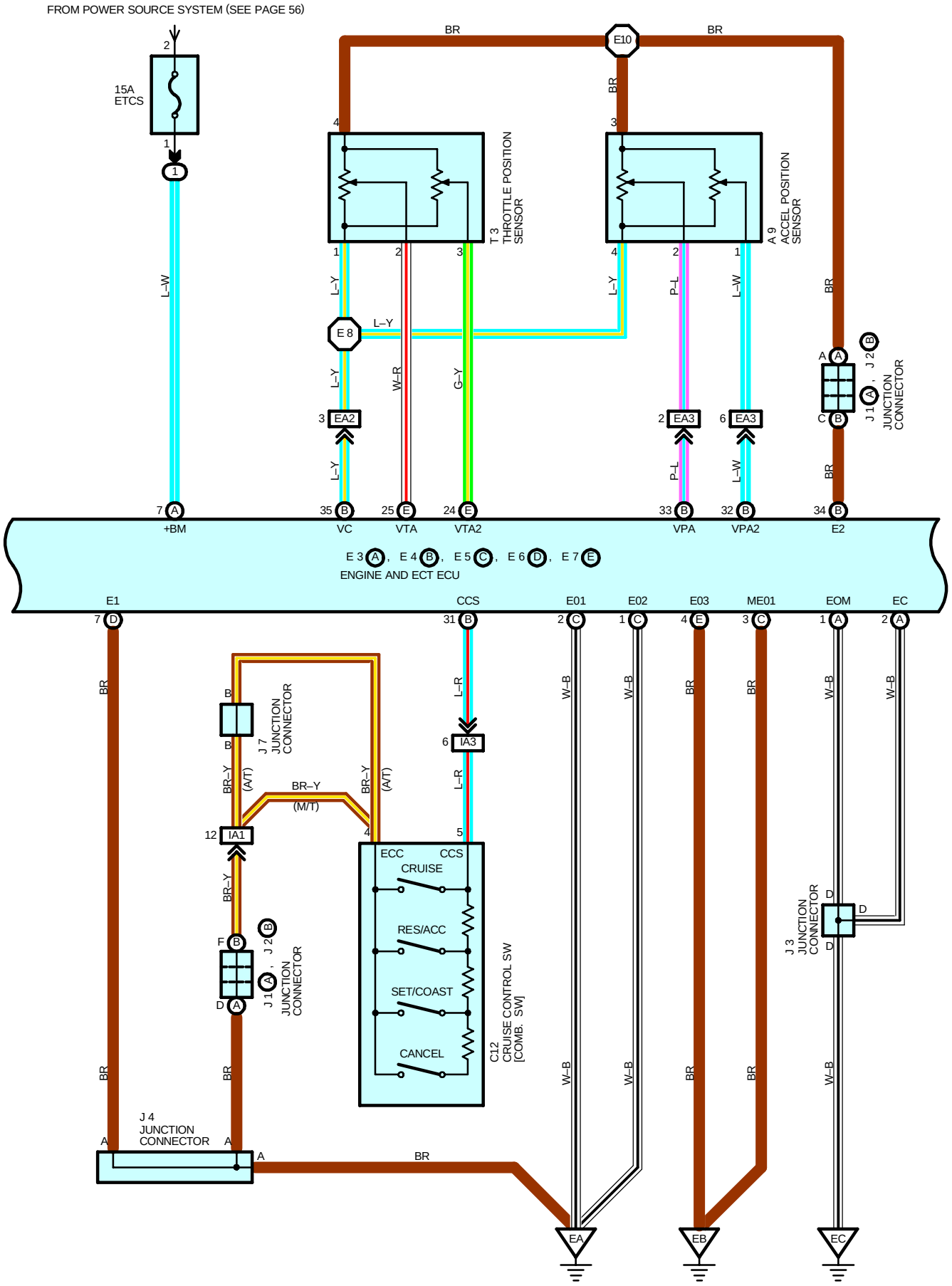
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)

: GROUND POINTS

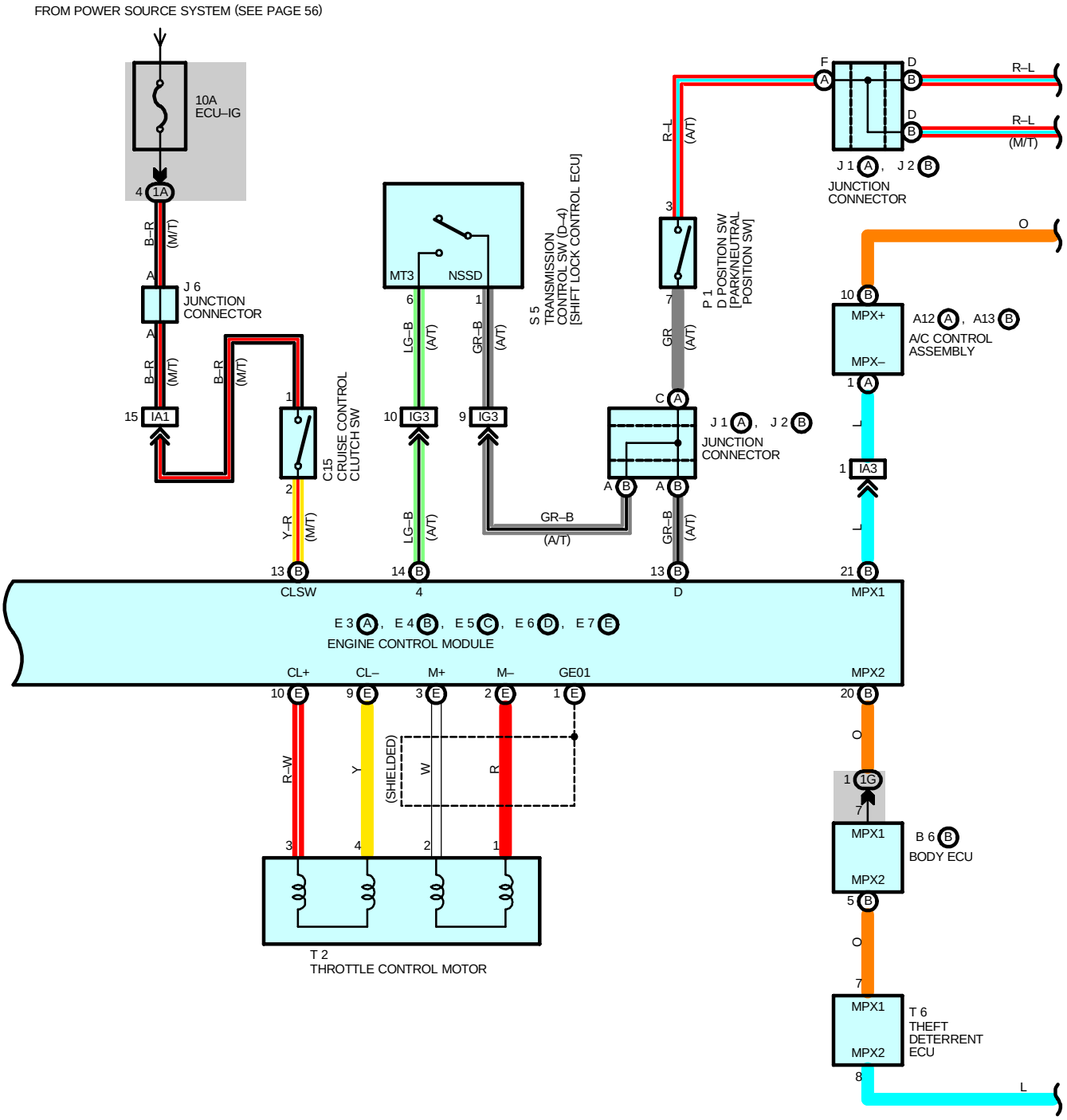
Code	See Page	Ground Points Location
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	

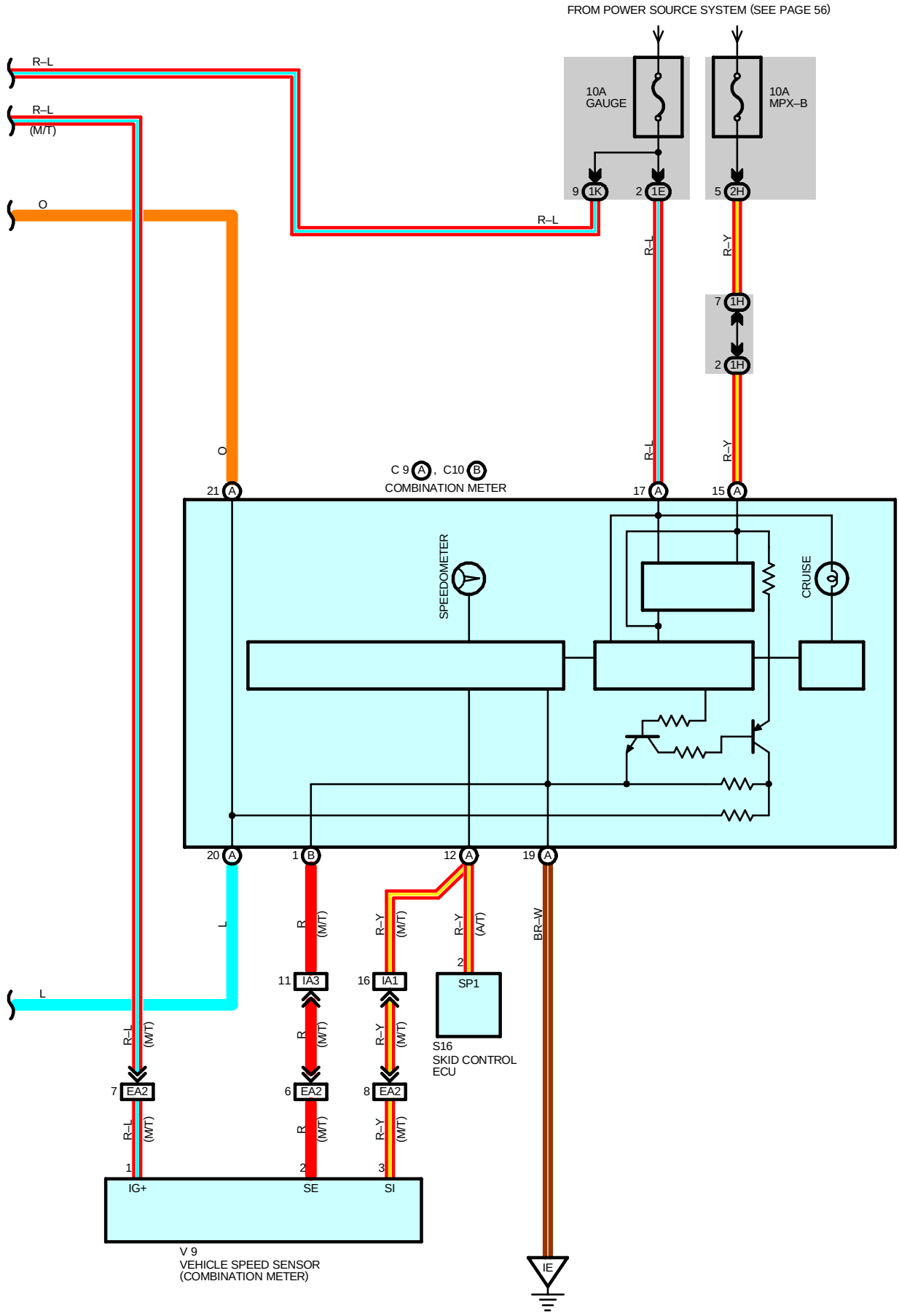
CRUISE CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
15A
ETCS
BR
E10
BR
THROTTLE POSITION SENSOR
T3
ACCEL POSITION SENSOR
A9
L–W
L–Y
E8
W–R
G–Y
P–L
EA2
EA3
JUNCTION CONNECTOR
J1, J2
+BM
VC
VTA
VTA2
VPA
VPA2
E2
E3, E4, E5, E6, E7
ENGINE AND ECT ECU
E1
CCS
E01
E02
E03
ME01
EOM
EC
J7 JUNCTION CONNECTOR
BR–Y
(A/T)
(M/T)
IA1
IA3
ECC
CCS
CRUISE
RES/ACC
SET/COAST
CANCEL
C12
CRUISE CONTROL SW [COMB. SW]
J4 JUNCTION CONNECTOR
J3 JUNCTION CONNECTOR
EA
EB
EC

CRUISE CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A GAUGE
10A MPX–B
R–L
R–L (M/T)
O
9 1K
2 1E
5 2H
7 1H
2 1H
C 9 A, C10 B
COMBINATION METER
21 A
17 A
15 A
SPEEDOMETER
CRUISE
20 A
1 B
12 A
19 A
L
R (M/T)
R–Y (M/T)
R–Y (A/T)
BR–W
11 IA3
16 IA1
2 SP1
S16
SKID CONTROL ECU
7 EA2
6 EA2
8 EA2
1 IG+
2 SE
3 SI
V 9
VEHICLE SPEED SENSOR (COMBINATION METER)
IE

CRUISE CONTROL

SYSTEM OUTLINE

The cruise control system allows the driver to control the vehicle speed at a constant speed, such as on a high way, without depressing the accelerator pedal. By operating the SW, the engine throttle valve is automatically adjusted to control the vehicle speed at a constant speed.

1. SET OPERATION

The actual vehicle speed is compared with the memorized vehicle speed, and when the actual vehicle speed is faster than the memorized speed, a signal is output to rotate the electronic throttle motor to close the throttle valve. When the actual vehicle speed is slower than the memorized speed, a signal is output to rotate the electronic throttle motor to open the throttle valve.

2. SET SPEED CONTROL

While traveling (Within the set speed limit) with the CRUISE SW on (Power indicator on), the speed when the SET/COAST SW is operated to off is memorized and the vehicle is controlled at that speed.

3. COAST CONTROL

When the SET/COAST SW is operated to on during cruise control driving, the cruise control opening angle requirement is controlled to 0 to decrease the vehicle speed (However the throttle valve itself is not fully closed due to ISC etc.), and the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed. Furthermore, every time the SET/COAST SW is operated to on momentarily (Approximately 0.5 seconds), the memorized vehicle speed is decreased by approximately 1.5km/h.In case of tap down operation where the difference between the memorized vehicle speed and the actual vehicle speed is more than 5km/h, the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed.

4. ACCEL CONTROL

When the RES/ACC SW is operated to on during cruise control driving, the electronic throttle motor is rotated so that the throttle valve opens to increase the vehicle speed, and the speed when the SW is operated to off is memorized, and the vehicle is controlled at that speed.
Furthermore, every time the RES/ACC SW is operated to on momentarily (Approximately 0.5 seconds), the memorized vehicle speed is increased by approximately 1.5km/h.
In case of tap up operation where the difference between the memorized vehicle speed and the actual vehicle speed is more than 5km/h, the memorized speed will not be changed.

5. MANUAL CANCEL MECHANISM

If any of the following signals are input during cruise control driving, the current to the motor flows in the direction to close the throttle valve, and the cruise control is canceled. (Vehicle speed memory will not be not erased)

- Stop light SW is on (Brake pedal is depressed)
- D position circuit in the Park/Neutral position SW is turned from on to off (Shift position is changed from D to N, 2, or 1) (A/T)
- The cruise control clutch SW is on (Clutch pedal depressed) (M/T)
- The CANCEL SW of the control SW is on
- The CRUISE SW is off (Vehicle speed memory will be erased)
- Shift lever in M position and shift range other than D or 3 position (A/T)

6. RESUME CONTROL

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

7. OVERDRIVE CONTROL FUNCTION

During cruise control driving, the overdrive may be cut on an uphill grade.
After the overdrive is cut, if the vehicle speed reaches the overdrive resume speed (Set speed minus 2km/h), and if the system determines that the uphill grade has finished, the overdrive will resume after overdrive resume timer operation. However, if the actual vehicle speed becomes slower than the overdrive resume speed before the timer operation has finished, the timer will be reset, and will start again when the vehicle speed reaches the overdrive resume speed.

8. AUTO CANCEL OPERATION

(1) If any of the following conditions are detected, the set speed is erased and the control is canceled.
At this time, the power indicator will blink, and control of the system will be prohibited until the CRUISE SW is turned on again.

* Disconnection and/or short in the stop light SW
* Failure in the vehicle speed signal
* Failure in the electronic throttle parts

(2) If any of the following conditions are detected, the set speed is erased and the control is canceled.
At this time, the power indicator will blink, and control of the system will be prohibited until the ignition SW is turned off.

* Failure in the stop light SW input circuit
* Failure in the cancel circuit

(3) If any of the following conditions are detected, the set speed is erased and the control is canceled. (Reset is possible)

* The actual speed becomes slower than the minimum speed limit.
* The actual speed becomes –16km/h slower than the set speed.

SERVICE HINTS

E3 (A), E4 (B), E5 (C), E6 (D), E7 (E) ENGINE CONTROL MODULE

IGSW–GROUND : Approx. **12** volts with the ignition SW at **ON** position
BATT, +BM–GROUND : Always approx. **12** volts
E01, E02, E03, ME01, EOM, EC, E1–GROUND : Always continuity
STP–GROUND : Approx. **12** volts with the stop light SW at on
CCS–GROUND : Continuity with the CRUISE SW at on
Approx. **1540** Ω with the CANCEL SW on in cruise control SW
Approx. **240** Ω with the RES/ACC SW on in cruise control SW
Approx. **630** Ω with the SET/COAST SW on in cruise control SW

C12 CRUISE CONTROL SW [COMB. SW]

5–4 : Approx. **1540** Ω with the CANCEL SW on
Approx. **240** Ω with the RES/ACC SW on
Approx. **630** Ω with the SET/COAST SW on

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A9		32	E4	B	32	P1	33
A12	A	34	E5	C	32	S5	35
A13	B	34	E6	D	32	S8	35
B6	B	34	E7	E	32	S16	35
C9	A	34	J1	A	33	T2	33
C10	B	34	J2	B	33	T3	33
C12		34	J3		33	T6	35
C15		34	J4		33	V9	33
D5		34	J6		35		
E3	A	32	J7		35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

CRUISE CONTROL



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2		
EA3		
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IG3	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)



: GROUND POINTS

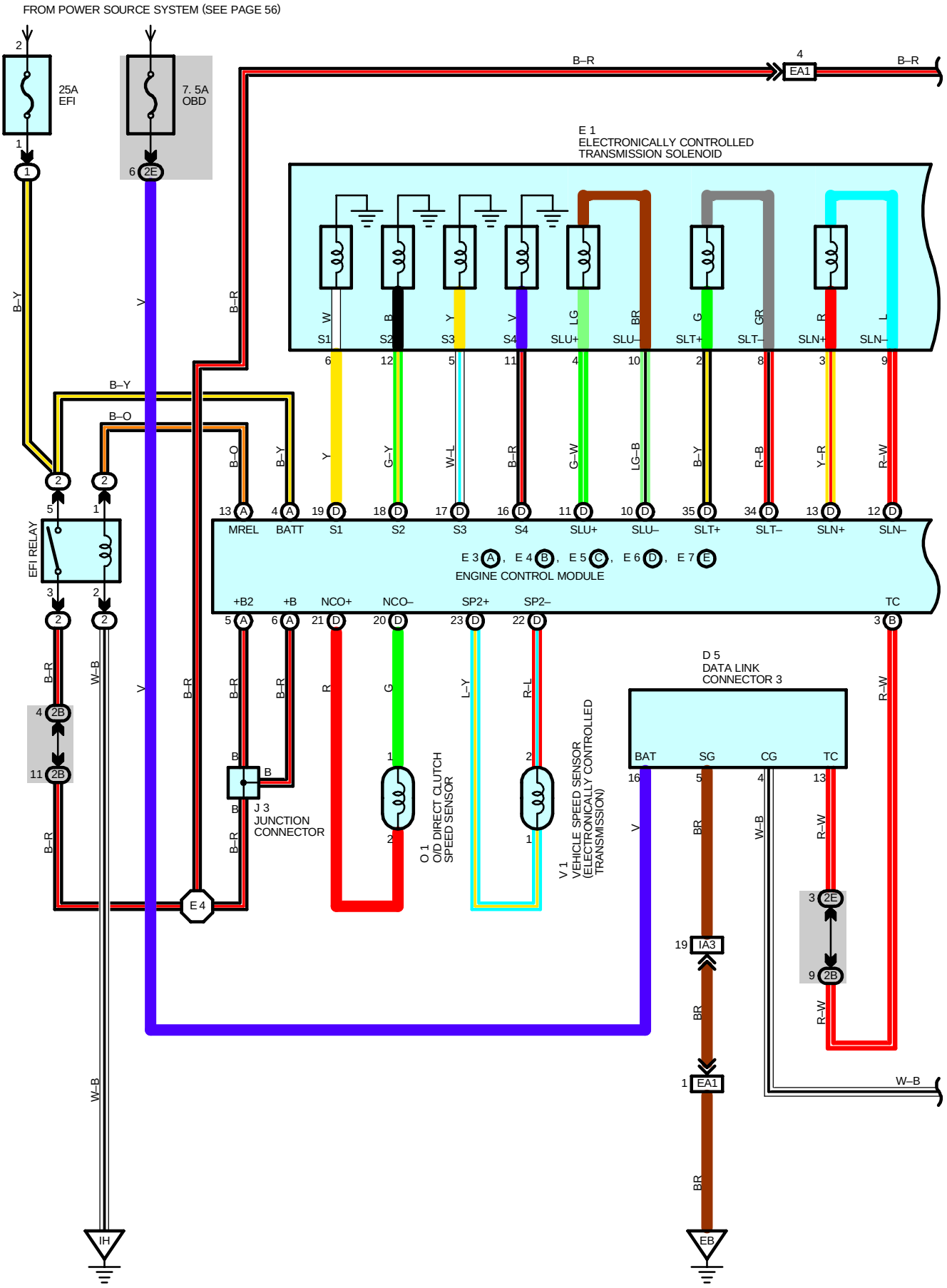
Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH

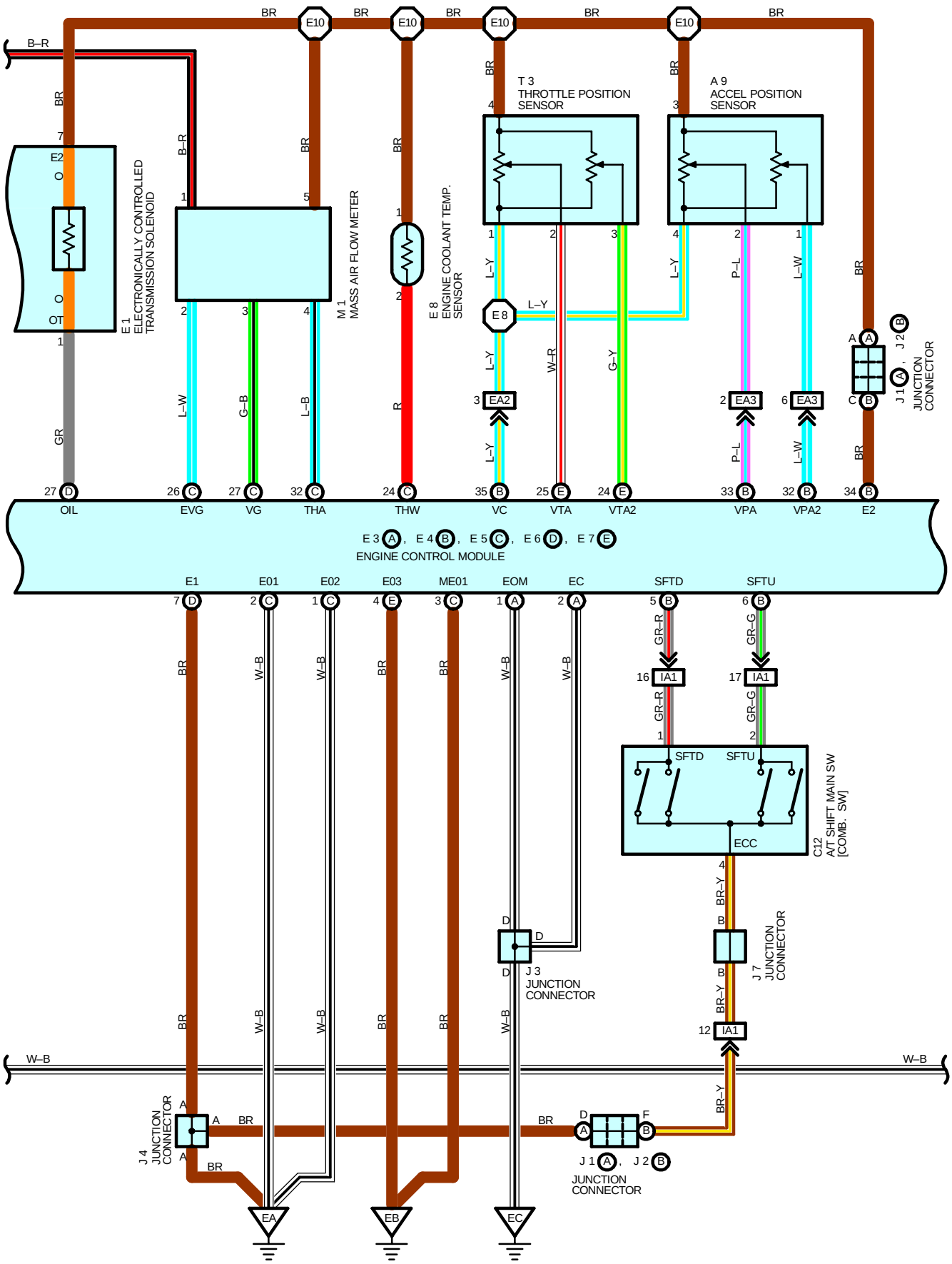


: SPLICE POINTS

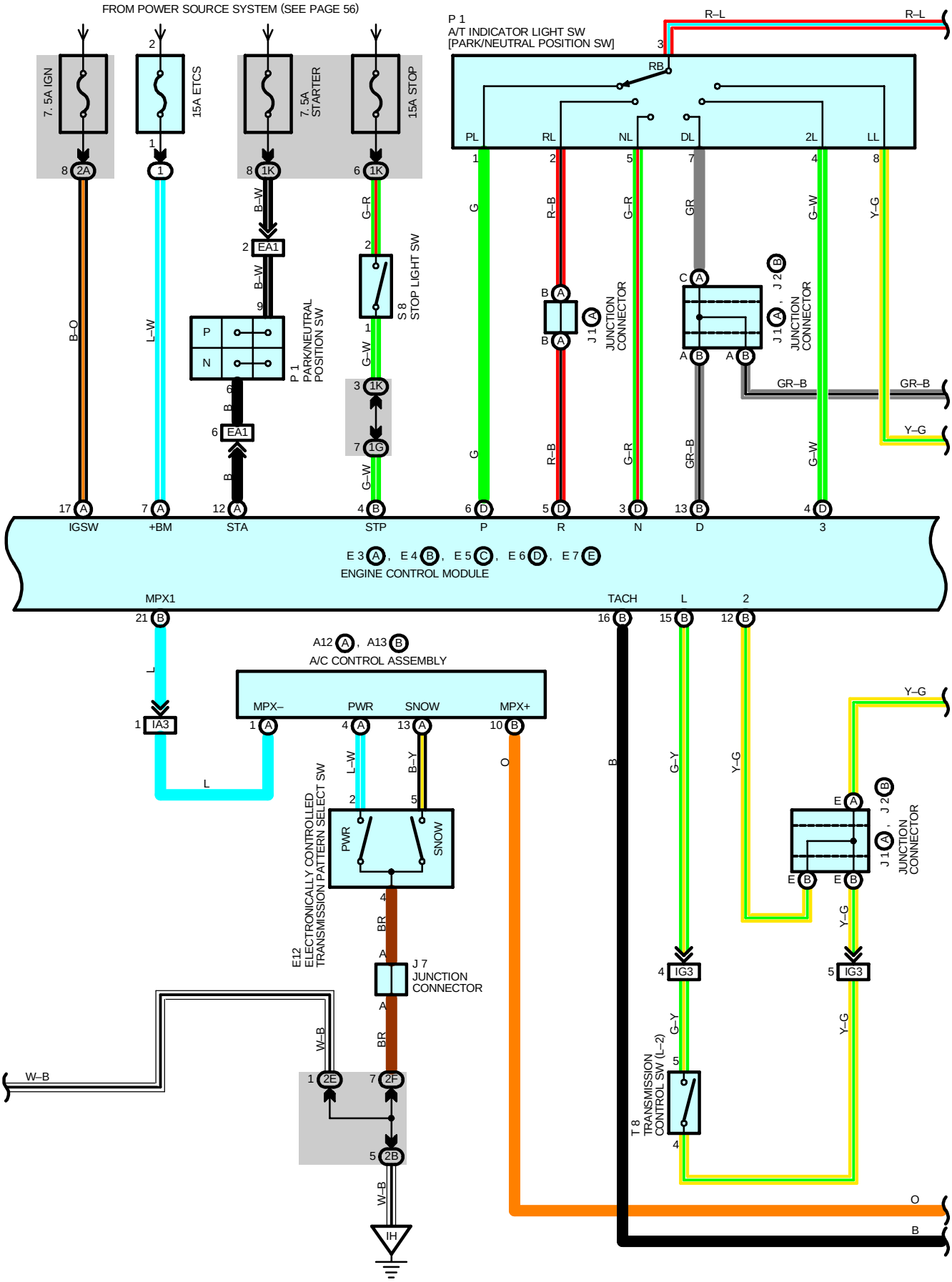
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E8	42	Engine Wire	E10	42	Engine Wire

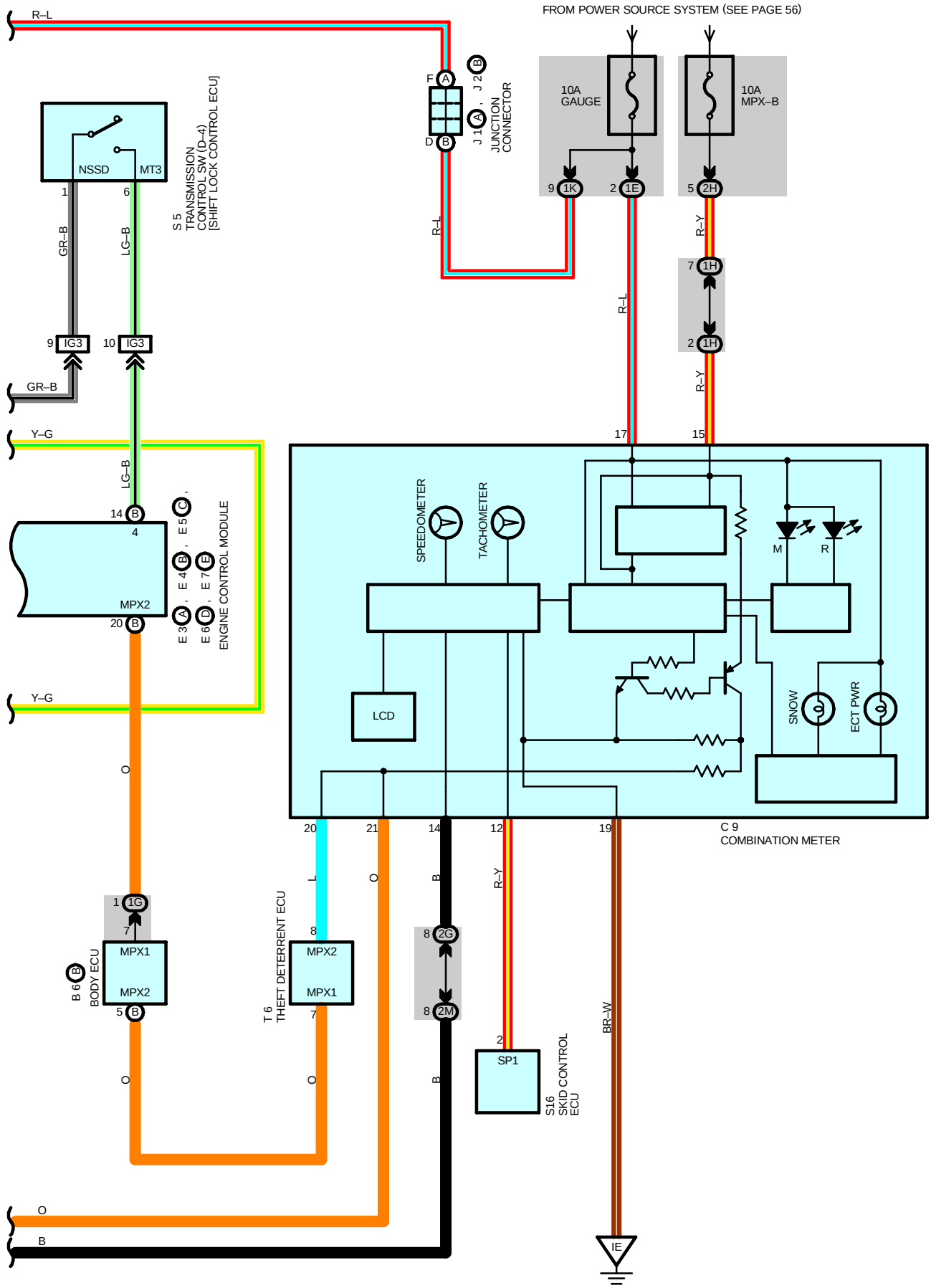
ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR




B–R
BR
E10
T 3
THROTTLE POSITION SENSOR
A 9
ACCEL POSITION SENSOR
E 1
ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID
M 1
MASS AIR FLOW METER
E 8
ENGINE COOLANT TEMP. SENSOR
E8
EA2
EA3
J 1 , J 2
JUNCTION CONNECTOR
OIL
EVG
VG
THA
THW
VC
VTA
VTA2
VPA
VPA2
E2
E 3 , E 4 , E 5 , E 6 , E 7
ENGINE CONTROL MODULE
E1
E01
E02
E03
ME01
EOM
EC
SFTD
SFTU
IA1
C12
A/T SHIFT MAIN SW [COMB. SW]
ECC
J 3
JUNCTION CONNECTOR
J 7
JUNCTION CONNECTOR
J 4
JUNCTION CONNECTOR
EA
EB
EC

ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
R–L
10A GAUGE
10A MPX–B
JUNCTION CONNECTOR
J 1, J 2
S 5 TRANSMISSION CONTROL SW (D–4) [SHIFT LOCK CONTROL ECU]
NSSD
MT3
GR–B
LG–B
IG3
Y–G
R–Y
ENGINE CONTROL MODULE
E 3, E 4, E 5, E 6, E 7
MPX2
SPEEDOMETER
TACHOMETER
LCD
SNOW
ECT PWR
C 9 COMBINATION METER
BODY ECU
B 6
MPX1
THEFT DETERRENT ECU
T 6
SP1
S16 SKID CONTROL ECU
BR–W
IE
O
B
L

ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR

SYSTEM OUTLINE

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

1. GEAR SHIFT OPERATION

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

When the engine control module decides based on each signal that the lock–up condition has been met, the current flows through TERMINAL SLU+ of the engine control module to TERMINAL 4 of the electronically controlled transmission solenoid to TERMINAL 10 to TERMINAL SLU– of the engine control module to GROUND.

3. STOP LIGHT SW CIRCUIT

If the brake pedal is depressed (Stop light SW on) when driving in lock–up 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.

4. ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW CIRCUIT

When the electronically controlled transmission pattern select SW is switched to PWR, a signal is input to TERMINAL PWR of the A/C control assembly, and control signals are distributed to the engine control module through communication control of the body ECU. This enables shift–up and shift–down at a higher speed range.

5. E–SHIFT SYSTEM

When the shift lever is set to the M position, the shift range can be switched with the UP or DOWN switch on the steering. (This limits to the maximum gear step and enables automatic shift–up and shift–down within the allowable range.)

SERVICE HINTS

E1 ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID

4–10 : **5.0**–**5.6** Ω
5, 6, 11, 12–GROUND : **11**–**15** Ω

E12 ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW

2–4 : Closed with the select SW at **PWR** position
5–4 : Only closed with the select SW at **SNOW** position

E3 (A), E4 (B), E5 (C), E6 (D), E7 (E) ENGINE CONTROL MODULE

BATT–GROUND : Always approx. **12** volts
+B, +B2–GROUND : Approx. **12** volts with the ignition SW at **ON** position
STA–GROUND : Approx. **12** volts with the ignition SW at **ST** position and shift lever in **P** or **N** position
STP–GROUND : Approx. **12** volts with the brake pedal depressed
E01, E02, E03, ME01, E1, EC, EOM–GROUND : Always continuity

P1 A/T INDICATOR LIGHT SW [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 **M** position
3–4 : Closed with the shift lever in **3** position
3–8 : Closed with the shift lever in **2** position or **L** position

: PARTS LOCATION

Code		See Page	Code		See Page	Code	See Page
A9		32	E5	C	32	M1	33
A12	A	34	E6	D	32	O1	33
A13	B	34	E7	E	32	P1	33
B6	B	34	E8		32	S5	35
C9		34	E12		35	S8	35
C12		34	J1	A	33	S16	35
D5		34	J2	B	33	T3	33
E1		32	J3		33	T6	35
E3	A	32	J4		33	T8	35
E4	B	32	J7		35	V1	33

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

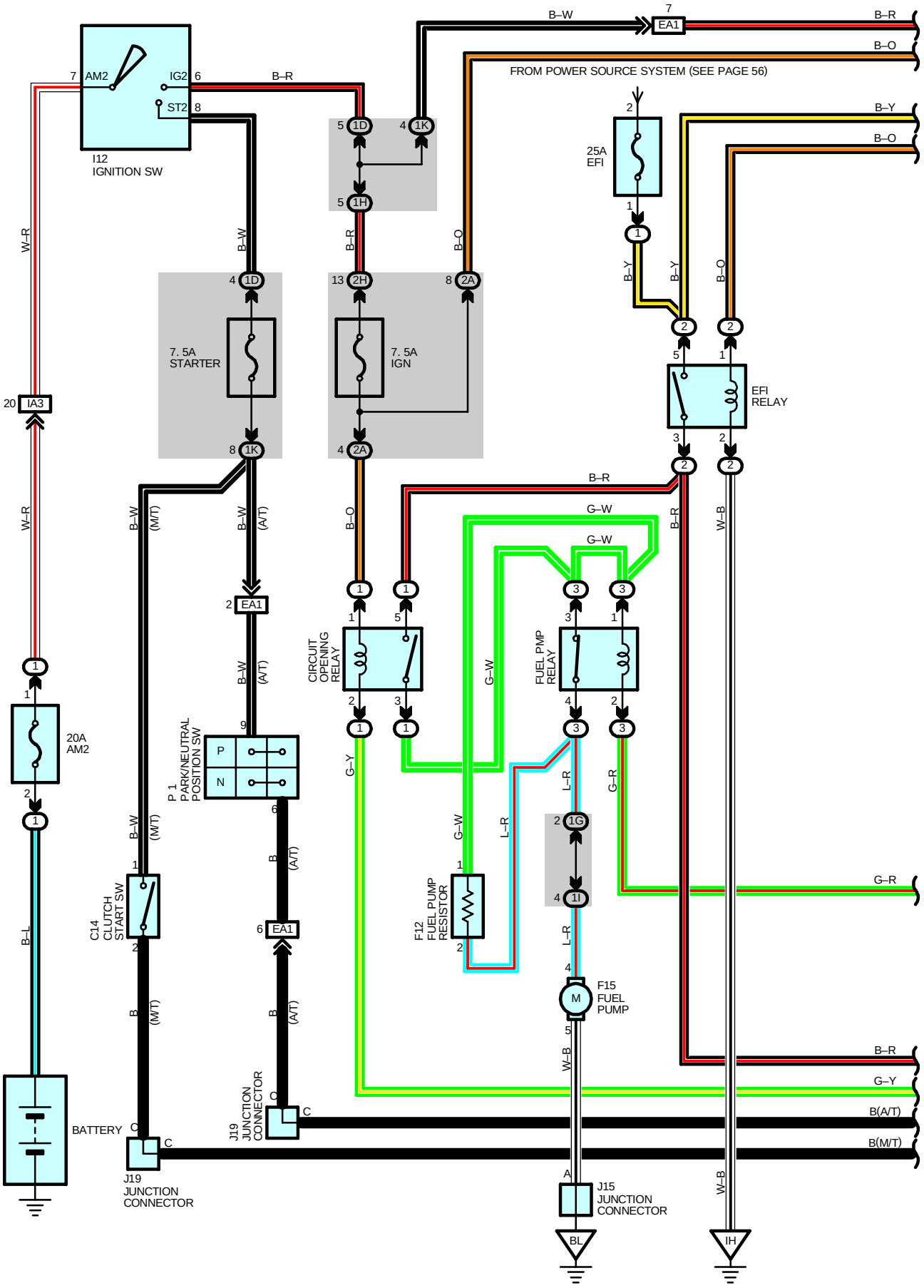
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2		
EA3		
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IG3	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

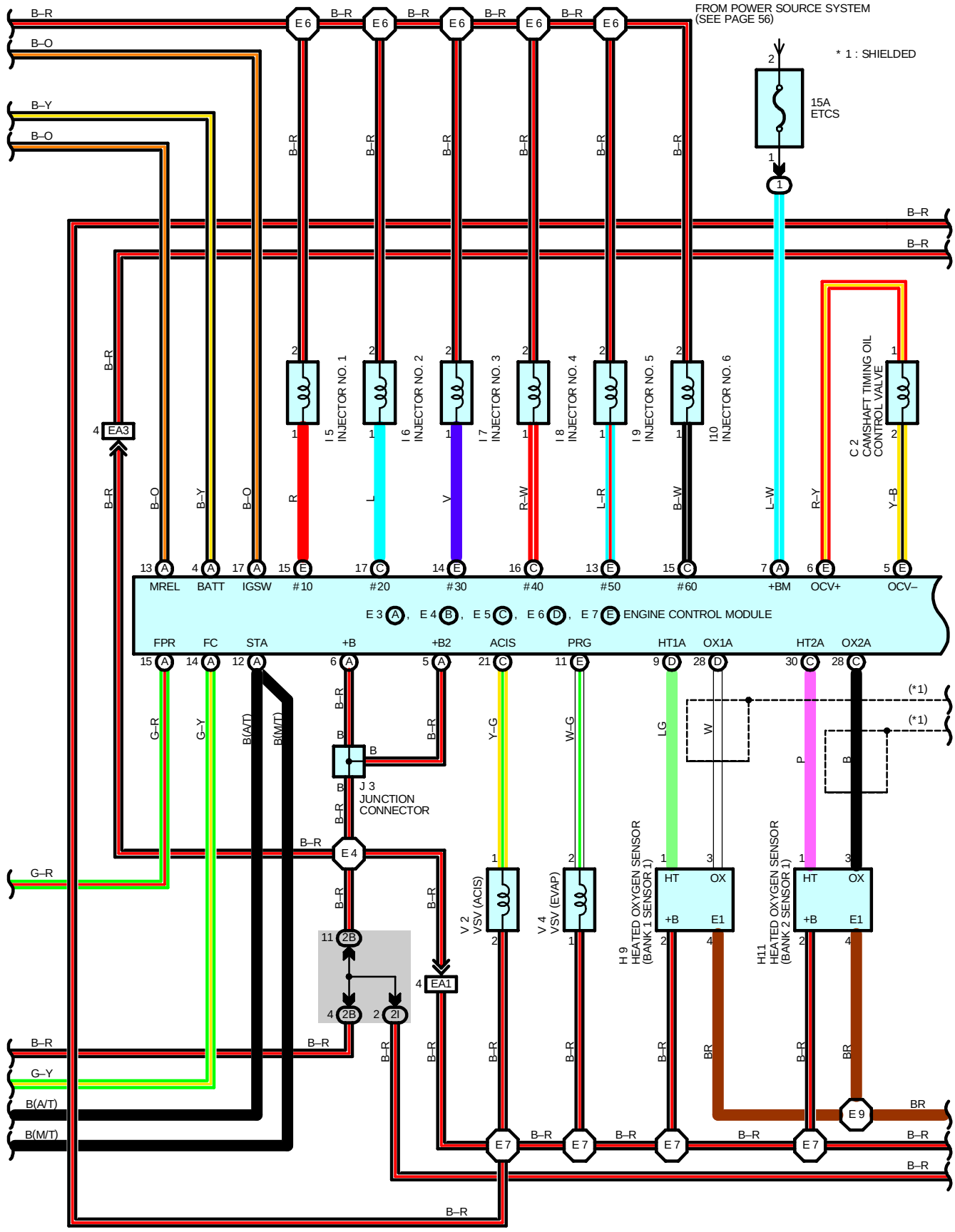
: GROUND POINTS

Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH

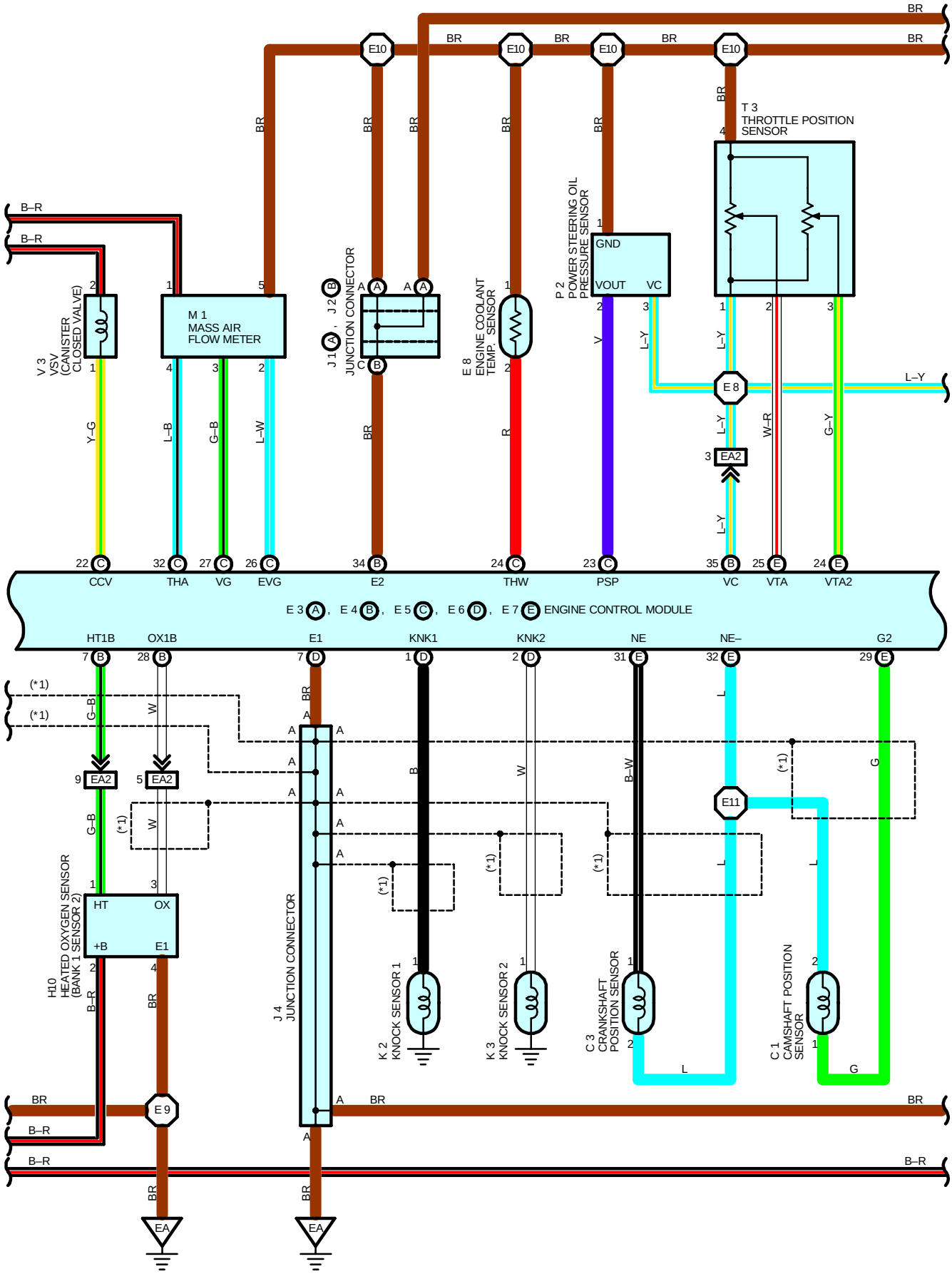
: SPLICE POINTS

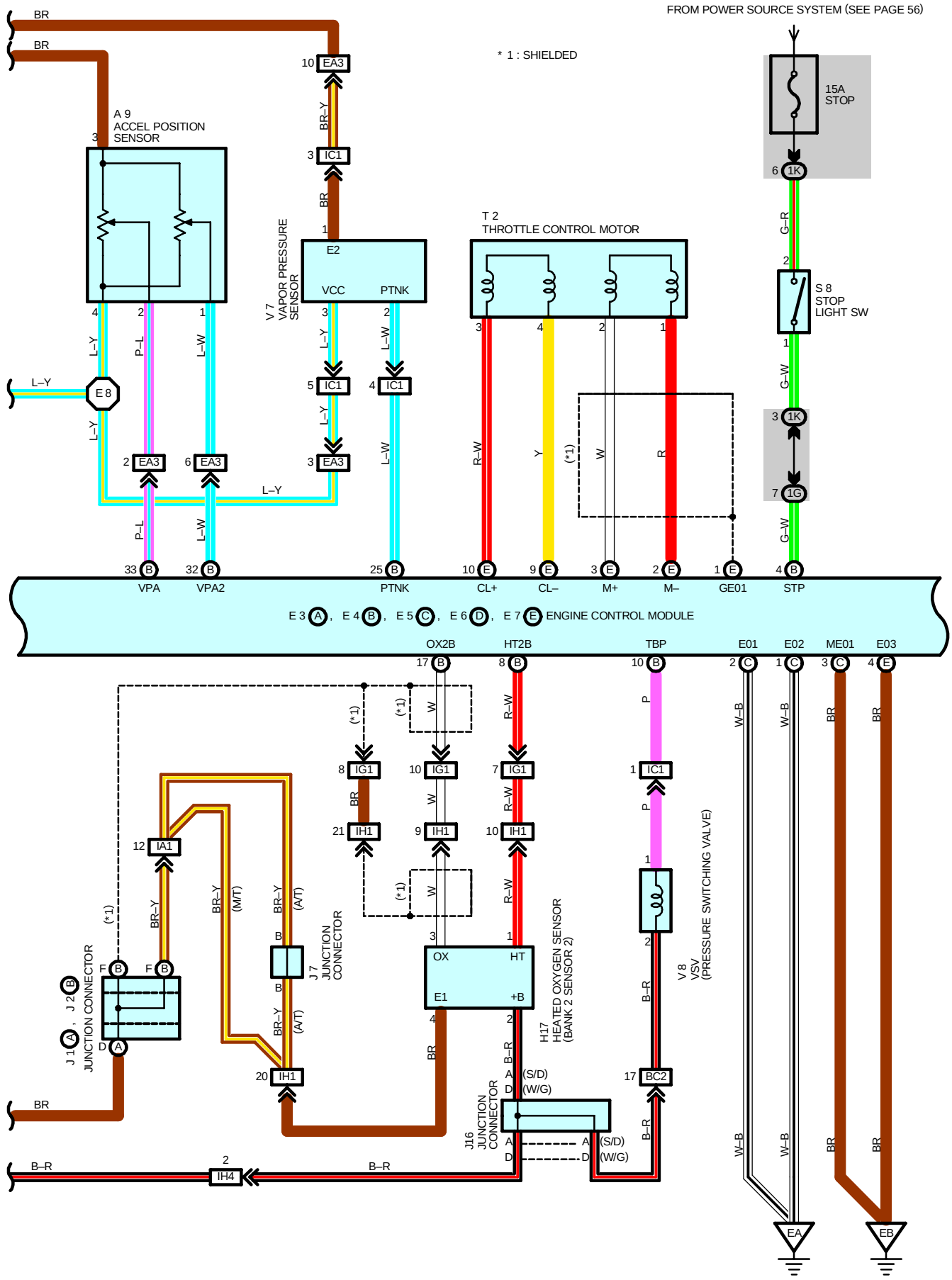
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	42	Engine Room Main Wire	E10	42	Engine Wire
E8	42	Engine Wire			


I12
IGNITION SW
AM2
IG2
ST2
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
25A
EFI
EFI
RELAY
7. 5A
STARTER
7. 5A
IGN
IA3
20A
AM2
CIRCUIT
OPENING
RELAY
FUEL PMP
RELAY
P 1
PARK/NEUTRAL
POSITION SW
C14
CLUTCH
START SW
F12
FUEL PUMP
RESISTOR
F15
FUEL
PUMP
J19
JUNCTION
CONNECTOR
J15
JUNCTION
CONNECTOR
BATTERY
BL
IH
B–W
B–R
B–O
B–Y
W–R
G–W
G–Y
G–R
L–R
W–B
B–L
B(A/T)
B(M/T)
(M/T)
(A/T)

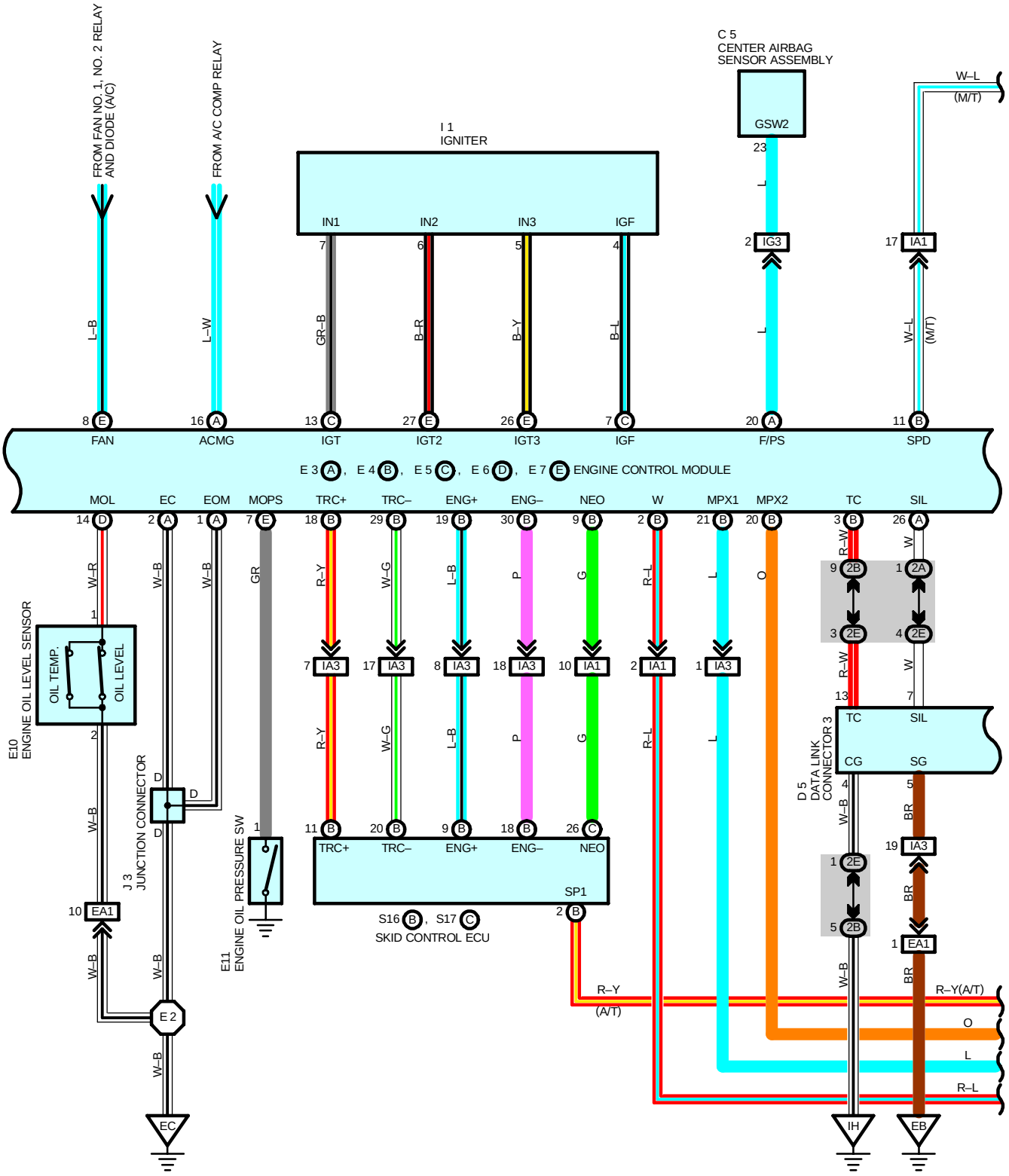

FROM POWER SOURCE SYSTEM
(SEE PAGE 56)
* 1 : SHIELDED
15A
ETCS
I5 INJECTOR NO. 1
I6 INJECTOR NO. 2
I7 INJECTOR NO. 3
I8 INJECTOR NO. 4
I9 INJECTOR NO. 5
I10 INJECTOR NO. 6
C2 CAMSHAFT TIMING OIL CONTROL VALVE
MREL
BATT
IGSW
#10
#20
#30
#40
#50
#60
+BM
OCV+
OCV–
E3 A, E4 B, E5 C, E6 D, E7 E ENGINE CONTROL MODULE
FPR
FC
STA
+B
+B2
ACIS
PRG
HT1A
OX1A
HT2A
OX2A
J3 JUNCTION CONNECTOR
V2 VSV (ACIS)
V4 VSV (EVAP)
H9 HEATED OXYGEN SENSOR (BANK 1 SENSOR 1)
H11 HEATED OXYGEN SENSOR (BANK 2 SENSOR 1)
HT
OX
+B
E1
(*1)
EA3
EA1
E4
E7
E9
2B
2I

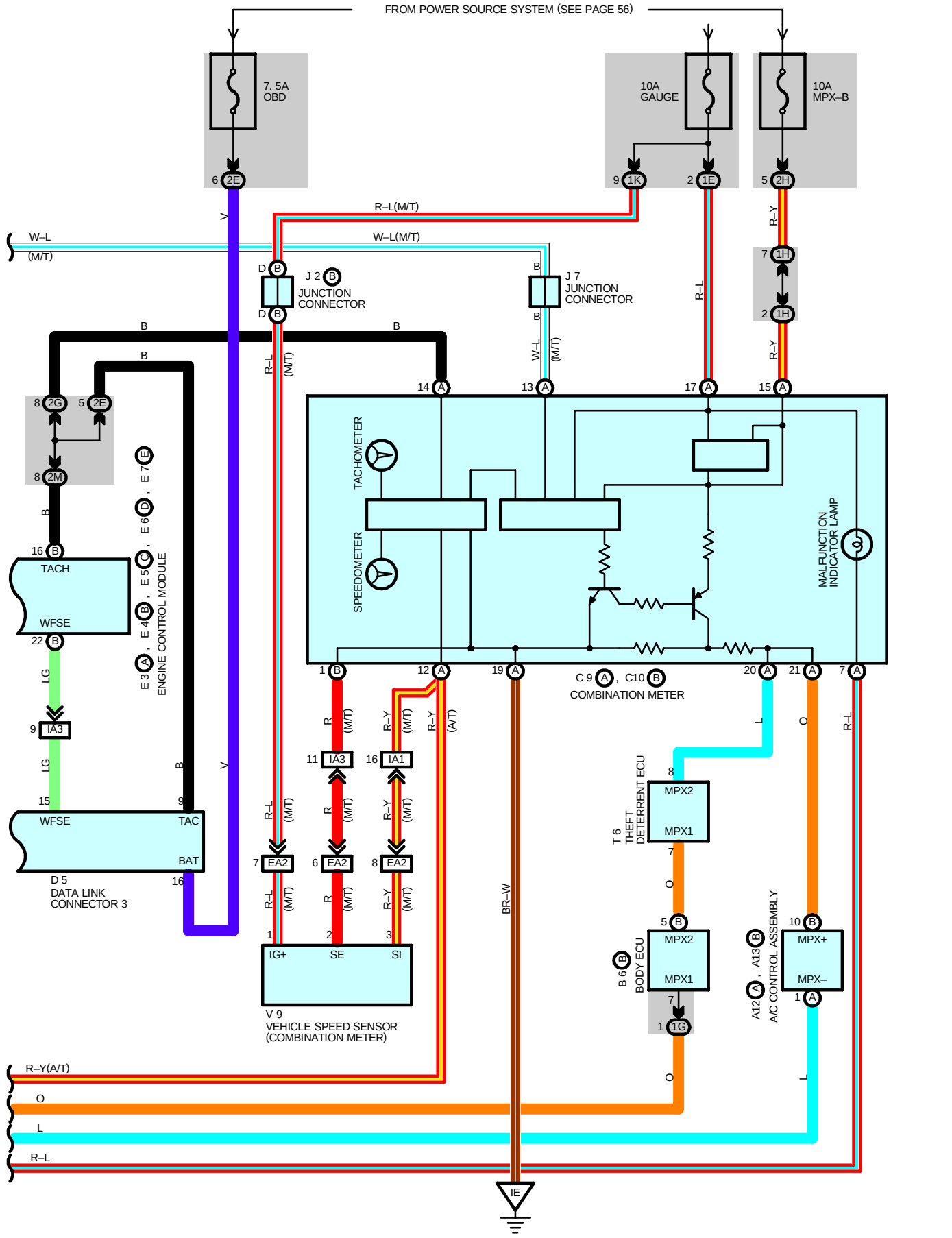
ENGINE CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
* 1 : SHIELDED
A 9
ACCEL POSITION SENSOR
V 7
VAPOR PRESSURE SENSOR
T 2
THROTTLE CONTROL MOTOR
15A
STOP
S 8
STOP
LIGHT SW
E 8
E2
VCC
PTNK
VPA
VPA2
PTNK
CL+
CL–
M+
M–
GE01
STP
E 3 (A), E 4 (B), E 5 (C), E 6 (D), E 7 (E) ENGINE CONTROL MODULE
OX2B
HT2B
TBP
E01
E02
ME01
E03
J 1
J 2
JUNCTION CONNECTOR
J 7
JUNCTION CONNECTOR
H17
HEATED OXYGEN SENSOR
(BANK 2 SENSOR 2)
V 8
VSV
(PRESSURE SWITCHING VALVE)
J16
JUNCTION CONNECTOR
OX
HT
E1
+B
(S/D)
(W/G)
EA
EB

ENGINE CONTROL




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
7. 5A
OBD
10A
GAUGE
10A
MPX–B
6 2E
9 1K
2 1E
5 2H
R–L(M/T)
W–L
(M/T)
W–L(M/T)
R–Y
7 1H
2 1H
D B
J 2 B
JUNCTION
CONNECTOR
D B
B
J 7
JUNCTION
CONNECTOR
B
R–L
W–L
(M/T)
B
B
B
R–L
(M/T)
14 A
13 A
17 A
15 A
8 2G
5 2E
8 2M
B
16 B
TACH
WFSE
22 B
LG
9 IA3
LG
15
WFSE
9
TAC
BAT
16
D 5
DATA LINK
CONNECTOR 3
E 3 A , E 4 B , E 5 C , E 6 D , E 7 E
ENGINE CONTROL MODULE
TACHOMETER
SPEEDOMETER
MALFUNCTION
INDICATOR LAMP
1 B
12 A
19 A
C 9 A , C10 B
COMBINATION METER
20 A
21 A
7 A
R
(M/T)
R–Y
(M/T)
R–Y
(A/T)
L
O
R–L
11 IA3
16 IA1
R–L
(M/T)
R
(M/T)
R–Y
(M/T)
7 EA2
6 EA2
8 EA2
R–L
(M/T)
R
(M/T)
R–Y
(M/T)
1
2
3
IG+
SE
SI
V 9
VEHICLE SPEED SENSOR
(COMBINATION METER)
BR–W
T 6
THEFT
DETERRENT ECU
8
MPX2
MPX1
7
O
5 B
MPX2
MPX1
B 6 B
BODY ECU
7
1 1G
O
A12 A , A13 B
A/C CONTROL ASSEMBLY
10 B
MPX+
MPX–
1 A
L
R–Y(A/T)
O
L
R–L
IE

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. which 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 density signal circuit

The oxygen density in the exhaust emission is detected by the heated oxygen sensors and input as a control signal to TERMINALS OX1A, OX2A, OX1B and OX2B of the engine control module.

(4) RPM signal circuit

Camshaft position is detected by the camshaft position sensor and its signal is input to TERMINAL G2 of the engine control module as a control signal.

Also,engine RPM is detected by the crankshaft position sensor and is input as a control signal to TERMINAL NE.

(5) Throttle position signal circuit

The throttle position sensor detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA and VTA2 of the engine control module.

(6) Vehicle speed circuit

(A/T)

Signals detected by ABS speed sensors are input into the combination meter through skid control ECU. Then it is delivered to the engine control module through MPX communication.

(M/T)

The vehicle speed sensor (Combination meter) detects the vehicle speed and inputs a control signal to TERMINAL SPD of the engine control module.

(7) Battery signal circuit

Voltage is constantly applied to TERMINALS BATT and +BM of the engine control module. If you turn on the ignition SW, the current goes from TERMINAL MREL of the engine control module to the EFI relay and put on the relay, and the voltage related to the engine control module operation is supplied to TERMINALS +B and +B2 of the engine control module through the EFI relay.

The current flowing through the IGN fuse flows to TERMINAL IGSW of the engine control module.

(8) Intake air volume signal circuit

Intake air volume is detected by the mass air flow meter and the signal is input to TERMINAL VG of the engine control module as a control signal.

(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 is applied to the starter motor during cranking is detected and the signal is input into TERMINAL STA of the engine control module as a control signal.

(11) Engine knock signal circuit

Engine knocking is detected by knock sensors and the signal is input into TERMINALS KNK1 and KNK2 of the engine control module as a control signal.

2. CONTROL SYSTEM

- SFI system
  The SFI system monitors the engine condition through the signals input from each sensor to the engine control module. And the control signal is output to TERMINALS #10, #20, #30, #40, #50 and #60 of the engine control module to operate the injector (Inject the fuel). The SFI system controls the fuel injection operation by the engine control module in response to the driving conditions.
- ESA system
  The ESA system monitors the engine condition through the signals input to the engine control module from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine control module and the control signal is output to TERMINALS IGT, IGT2 and IGT3. This signal controls the igniter to provide the best ignition timing for the driving conditions.
- 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 emissions is low), and warms up the oxygen sensors to improve detection performance of the sensors. The engine control module evaluates the signals from each sensor, and outputs current to TERMINALS HT1A, HT2A, HT1B and HT2B to control the heater.
- ACIS
  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.
  The engine control module judges the engine speed by the signals from each sensor and outputs signal to the TERMINAL ACIS of the engine control module and controls the VSV (ACIS).
- ETCS–i
  The ETCS–i controls the engine output at its optimal level corresponding to the opening of the accel. pedal under all driving conditions.
- Fuel pump control system
  The engine control module operation outputs to TERMINAL FPR and controls the FUEL PMP relay. Thus controls the fuel pump drive speed in response to conditions.
- MPX
  The MPX communicates with the combination meter, A/C control assembly, as well as body ECU of the multiplex communication system

3. DIAGNOSIS SYSTEM

With the 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 by the check engine warning light.

4. FAIL–SAFE SYSTEM

When a malfunction has occurred in any system, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail–safe system either controls the system by using data (Standard values) recorded in the engine control module memory or else stops the engine.

SERVICE HINTS

EFI RELAY

5–3 : Closed with the ignition SW at **ON** or **ST** position

E10 ENGINE OIL LEVEL SENSOR

1–2 : Closed with the float up and the engine oil temp. below **40**°C–**49**°C (**104.0**°F–**120.2**°F)
Open with the float down and the engine oil temp. above **50**°C–**60**°C (**122.0**°F–**140.0**°F)

E11 ENGINE OIL PRESSURE SW

1–GROUND : Closed with the oil pressure below approx. **0.2** kgf/cm^2 (**2.8** psi, **19.6** kpa)

E8 ENGINE COOLANT TEMP. SENSOR

1–2 : Approx. **15.04** kΩ at **–20**°C (**–4**°F)
Approx. **2.45** kΩ at **20**°C (**68**°F)
Approx. **0.32** kΩ at **80**°C (**176**°F)
Approx. **0.14** kΩ at **110**°C (**230**°F)

E3 (A), E4 (B), E5 (C), E6 (D), E7 (E) ENGINE CONTROL MODULE

BATT–GROUND : Always approx. **12** volts
+BM–GROUND : Always approx. **12** volts
IGSW–GROUND : Approx. **12** volts with the ignition SW at **ON** position
+B, +B2–GROUND : Approx. **12** volts with the ignition SW at **ON** position
VC–GROUND : **4.5**–**5.5** volts with the ignition SW on
VTA2–GROUND : **2.0**–**2.9** volts with the ignition SW on and the throttle valve fully closed
4.6–**5.0** volts with the ignition SW on and the throttle valve fully opened
VTA–GROUND : **0.4**–**1.0** volts with the ignition SW on and the throttle valve fully closed
3.2–**4.8** volts with the ignition SW on and the throttle valve fully opened
VPA–GROUND : **0.25**–**0.9** volts with the ignition SW at on and the accelerator fully closed
3.2–**4.8** volts with the ignition SW at on and the accelerator fully opened
VPA2–GROUND : **1.8**–**2.7** volts with the ignition SW at on and the accelerator fully closed
4.7–**5.0** volts with the ignition SW at on and the accelerator fully opened
THA–GROUND : **0.5**–**3.4** volts with the engine idling and the intake air temp. **20**°C (**68**°F)
THW–GROUND : **0.2**–**1.0** volts with the engine idling and the coolant temp. **80**°C (**176**°F)
STA–GROUND : **6.0** volts or more with the engine cranking
TC–GROUND : **9.0**–**14.0** volts with the ignition SW on
W–GROUND : **9.0**–**14.0** volts with the engine idling
0–**3.0** volts with the ignition SW on
ACMG–GROUND : **0**–**1.5** volts with the A/C SW on (at the engine idling)
7.5–**14.0** volts with the A/C SW off and the throttle valve fully open
#10, #20, #30, #40, #50, #60–GROUND : Pulse generation with the engine idling
E01, E02, E03, E1, EC, ME01, EOM–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A9	32	F15	38 (W/G)	J16	38 (W/G)
A12 A	34	H9	33	J19	35
A13 B	34	H10	33	K2	33
B6 B	34	H11	33	K3	33
C1	32	H17	36 (S/D)	M1	33
C2	32		38 (W/G)	P1	33
C3	32	I1	33	P2	33
C5	34	I5	33	S8	35
C9 A	34	I6	33	S16 B	35
C10 B	34	I7	33	S17 C	35
C14	34	I8	33	T2	33
D5	34	I9	33	T3	33
E3 A	32	I10	33	T6	35
E4 B	32	I12	35	V2	33
E5 C	32	J1 A	33	V3	33
E6 D	32	J2 B	33	V4	33
E7 E	32	J3	33	V7	37 (S/D)
E8	32	J4	33		39 (W/G)
E10	32	J7	35	V8	37 (S/D)
E11	32	J15	36 (S/D)		39 (W/G)
F12	32		38 (W/G)	V9	33
F15	36 (S/D)	J16	36 (S/D)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)
3	23	Engine Room No.3 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

ENGINE CONTROL

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
EA2		
EA3		
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IC1	44	Engine Room Main Wire and Floor No.2 Wire (Near the Driver Side J/B)
IG1	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IG3		
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH4		
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)

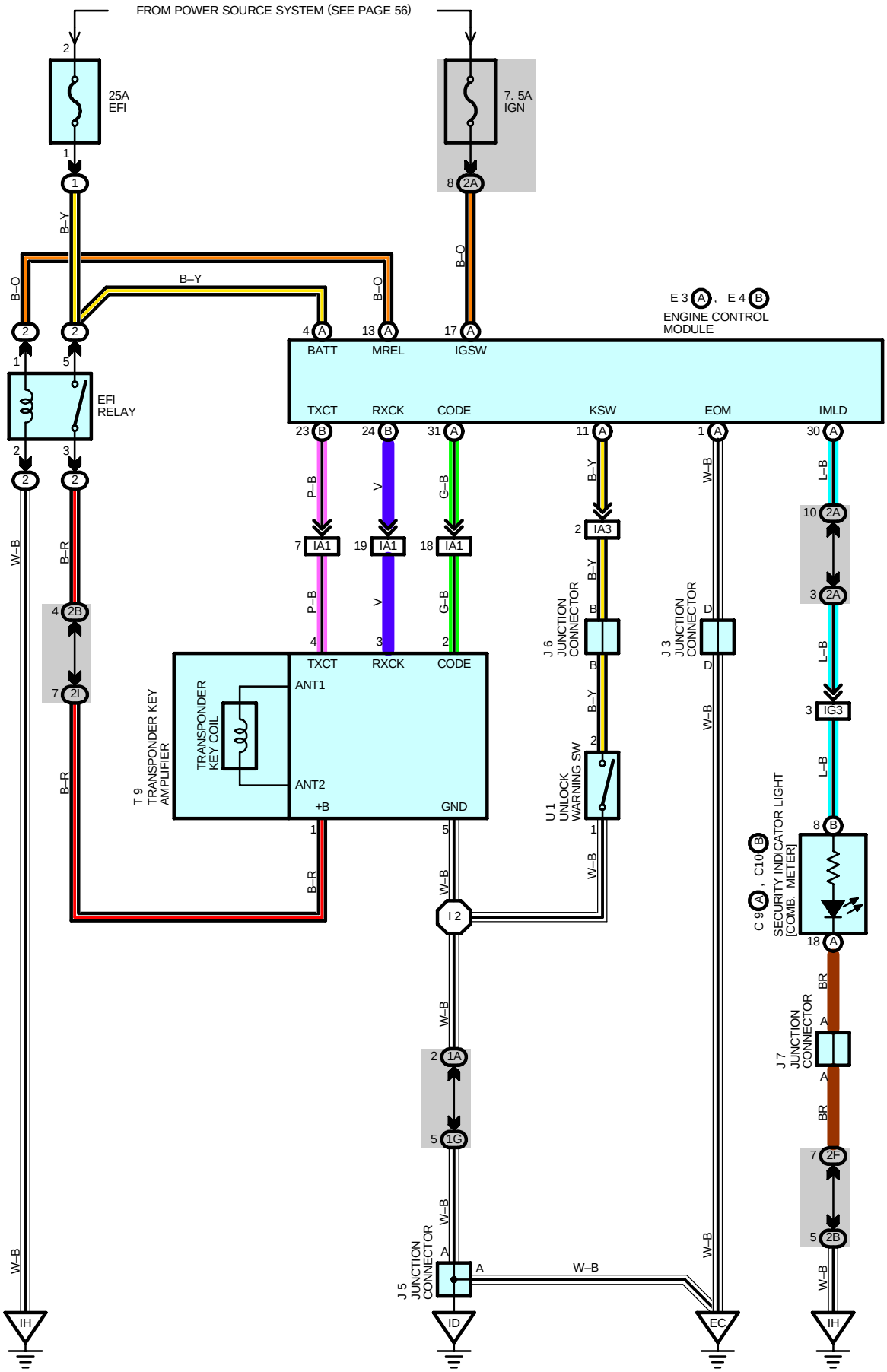
: GROUND POINTS

Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	42	Engine Room Main Wire	E8	42	Engine Wire
E4			E9		
E6	42	Engine Wire	E10		
E7			E11		

ENGINE IMMOBILISER SYSTEM



SERVICE HINTS

EFI RELAY

5–3 : Closed with the ignition SW at **ON** or **ST** position

U1 UNLOCK WARNING SW

1–2 : Closed with the ignition key in the ignition key cylinder

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C9	A	34	J3	33	T9	35
C10	B	34	J5	35	U1	35
E3	A	32	J6	35		
E4	B	32	J7	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2I		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IG3	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

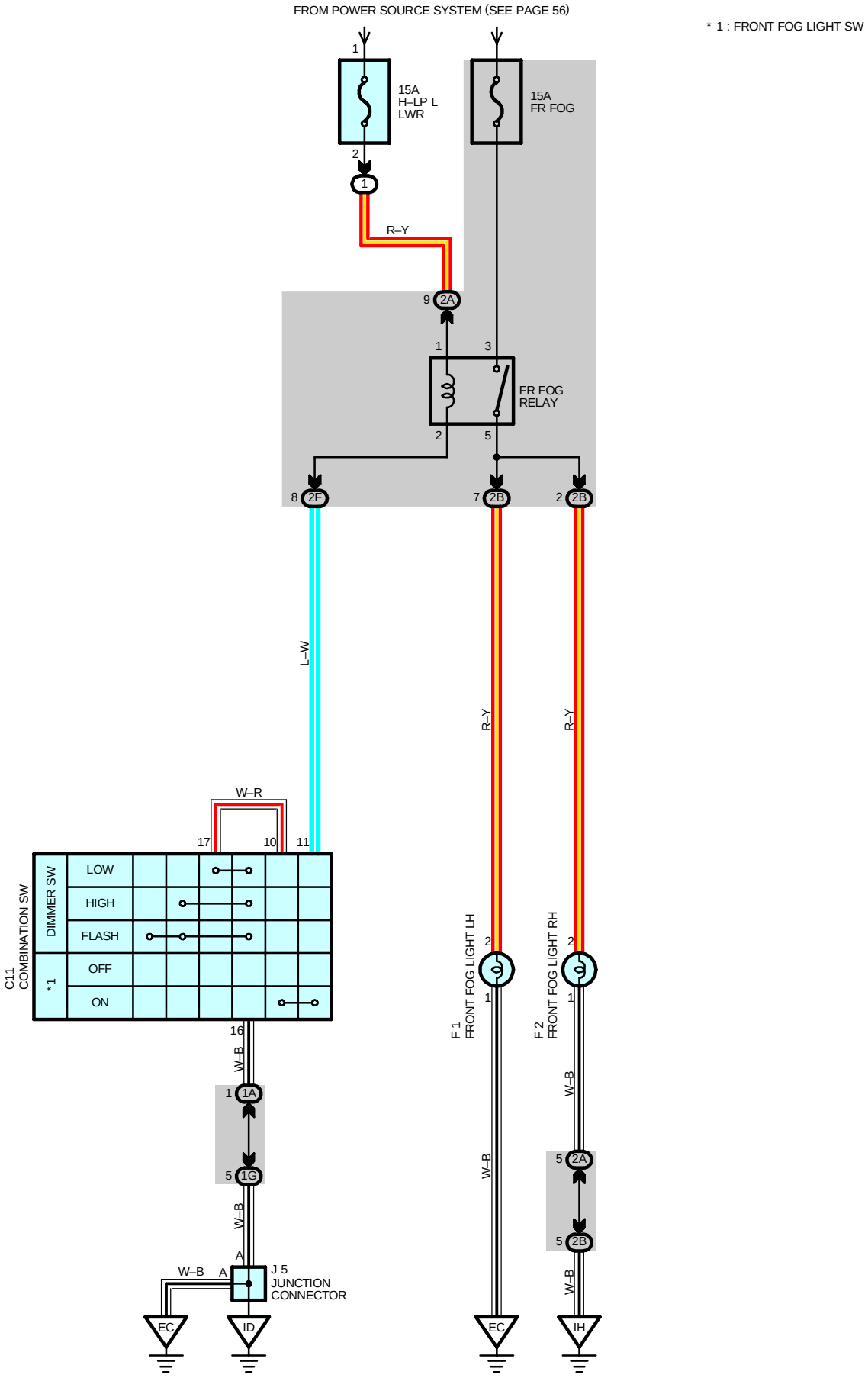
: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	46	Instrument Panel Wire			

FRONT FOG LIGHT



SERVICE HINTS

FR FOG RELAY

3–5 : Closed with the light control SW at **HEAD** position, the dimmer SW at **LOW** position and the front fog light SW at **ON** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C11	34	F2	32		
F1	32	J5	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

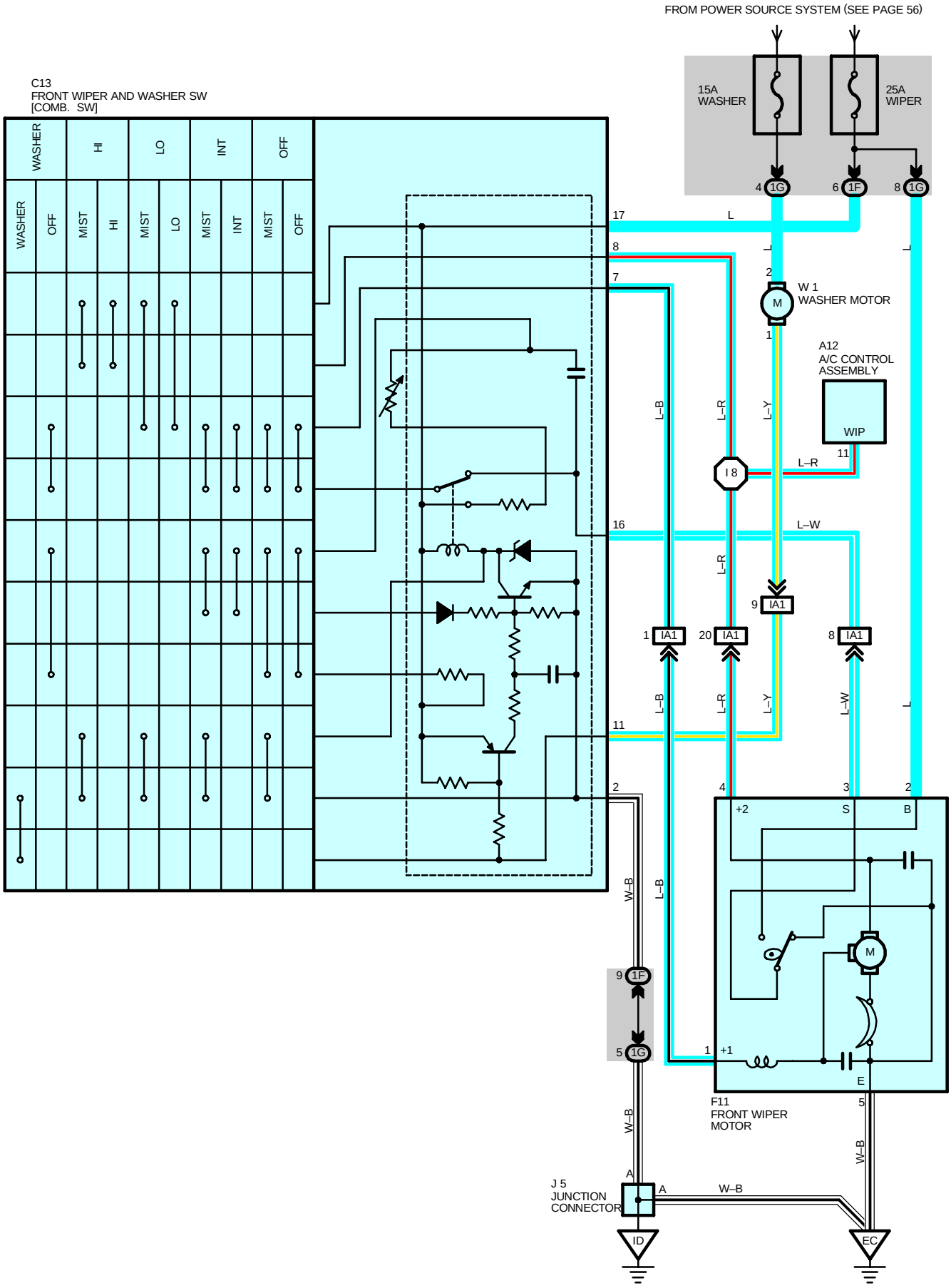
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH

FRONT WIPER AND WASHER



SYSTEM OUTLINE

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

1. LOW SPEED POSITION

With the wiper 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 wiper 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 wiper SW turned to INT position, the relay operates and the current which is connected by relay function flows from TERMINAL 17 of the front wiper and washer SW to TERMINAL 2 to GROUND. This flow of current operates 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 operates the wiper.
The intermittent operation is controlled by the charge/discharge function of the condenser installed in the relay, and the intermittent time is controlled by a time control SW to change the charging time of the condenser.

4. MIST POSITION

With the wiper SW pulled to MIST 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 wiper motor to run at low speed.

5. WASHER CONTINUOUS OPERATION

With the washer SW turned to on, the current flows from TERMINAL 2 of the washer motor to TERMINAL 1 to TERMINAL 11 of the front wiper and washer SW to TERMINAL 2 to GROUND and causes to the washer motor to run, and the window washer emits a water spray. This causes the current to flow to washer continuous operation circuit in 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 operates the wiper.

SERVICE HINTS

C13 FRONT WIPER AND WASHER SW [COMB. SW]

2–GROUND : Always continuity
17–GROUND : Approx. **12** volts with the ignition SW at **ON** position
7–GROUND : Approx. **12** volts with the front wiper and washer SW at **LO** position
Approx. **12** volts approx. **1.6** to **10.7** seconds intermittently with the front wiper and washer SW at **INT** position
16–GROUND : Approx. **12** volts with the ignition SW on unless the front wiper motor at **STOP** position
8–GROUND : Approx. **12** volts with the front wiper and washer SW at **HI** position

F11 FRONT WIPER MOTOR

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

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A12	34	F11	32	W1	33
C13	34	J5	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

FRONT WIPER AND WASHER

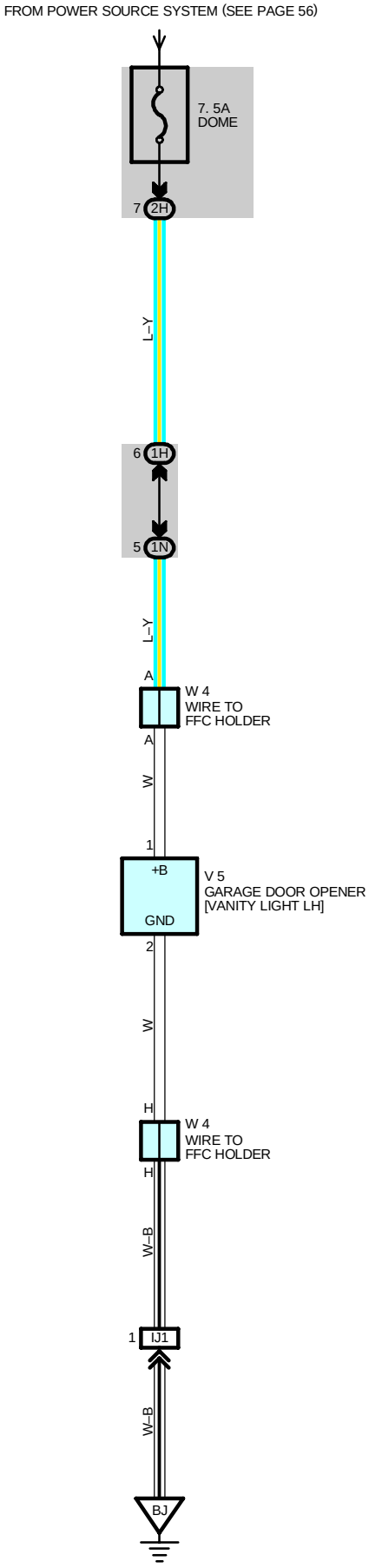
 **: GROUND POINTS**

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH

 **: SPLICE POINTS**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I8	46	Instrument Panel Wire			

GARAGE DOOR OPENER



SERVICE HINTS

V5 GARAGE DOOR OPENER [VANITY LIGHT LH]

1–GROUND : Always approx. **12** volts
2–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
V5	37 (S/D)	W4	37 (S/D)		
	39 (W/G)		39 (W/G)		

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

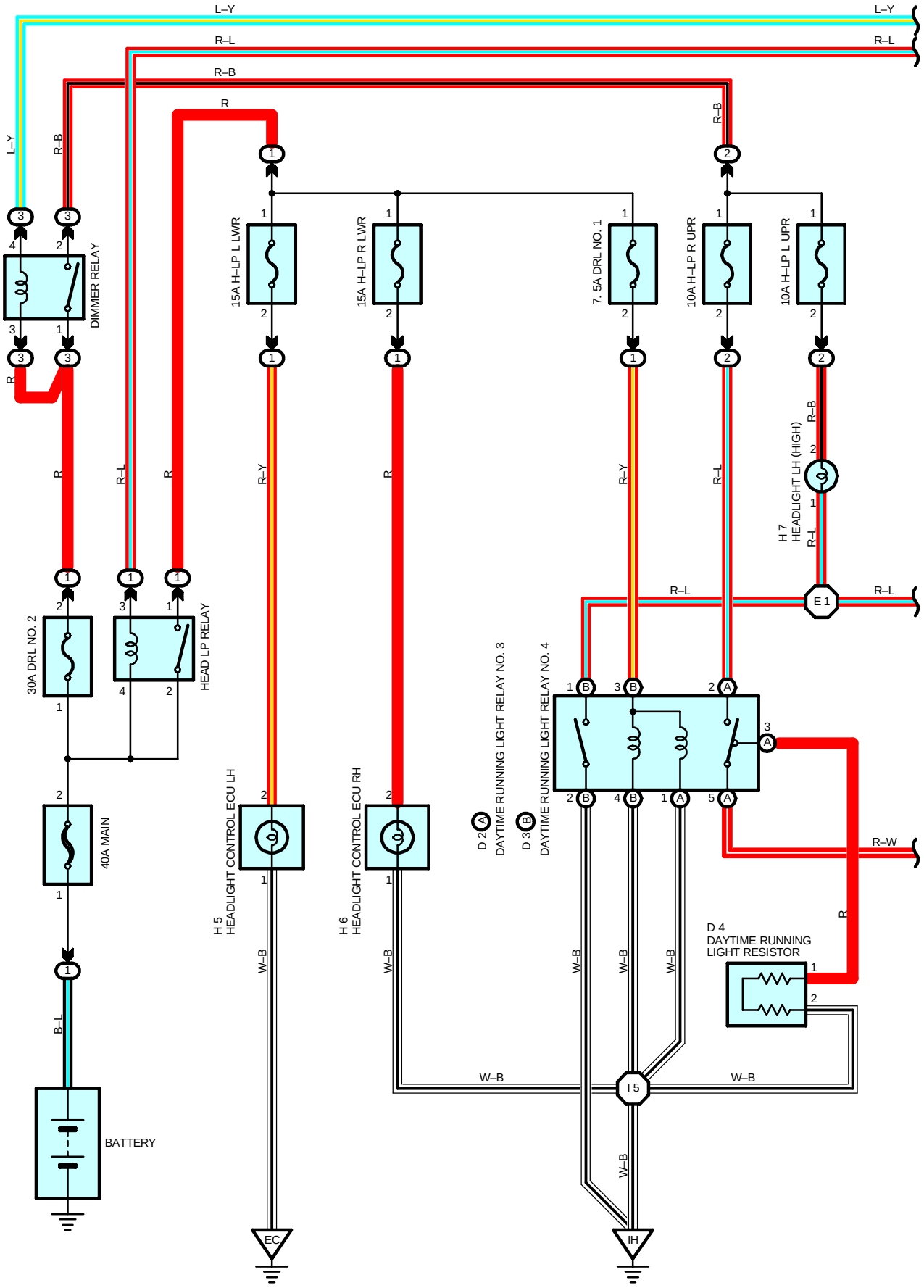
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

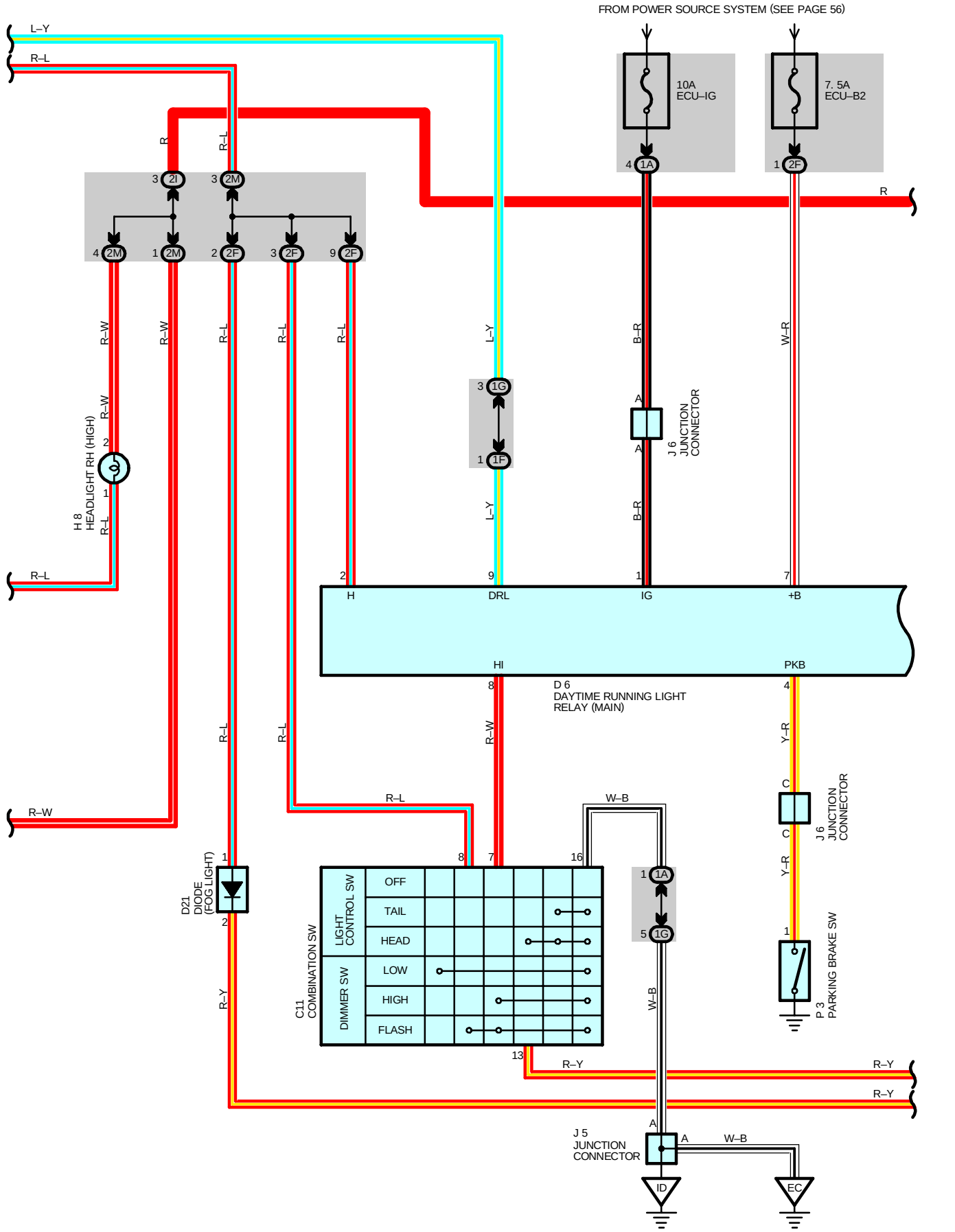
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)

▽ : GROUND POINTS

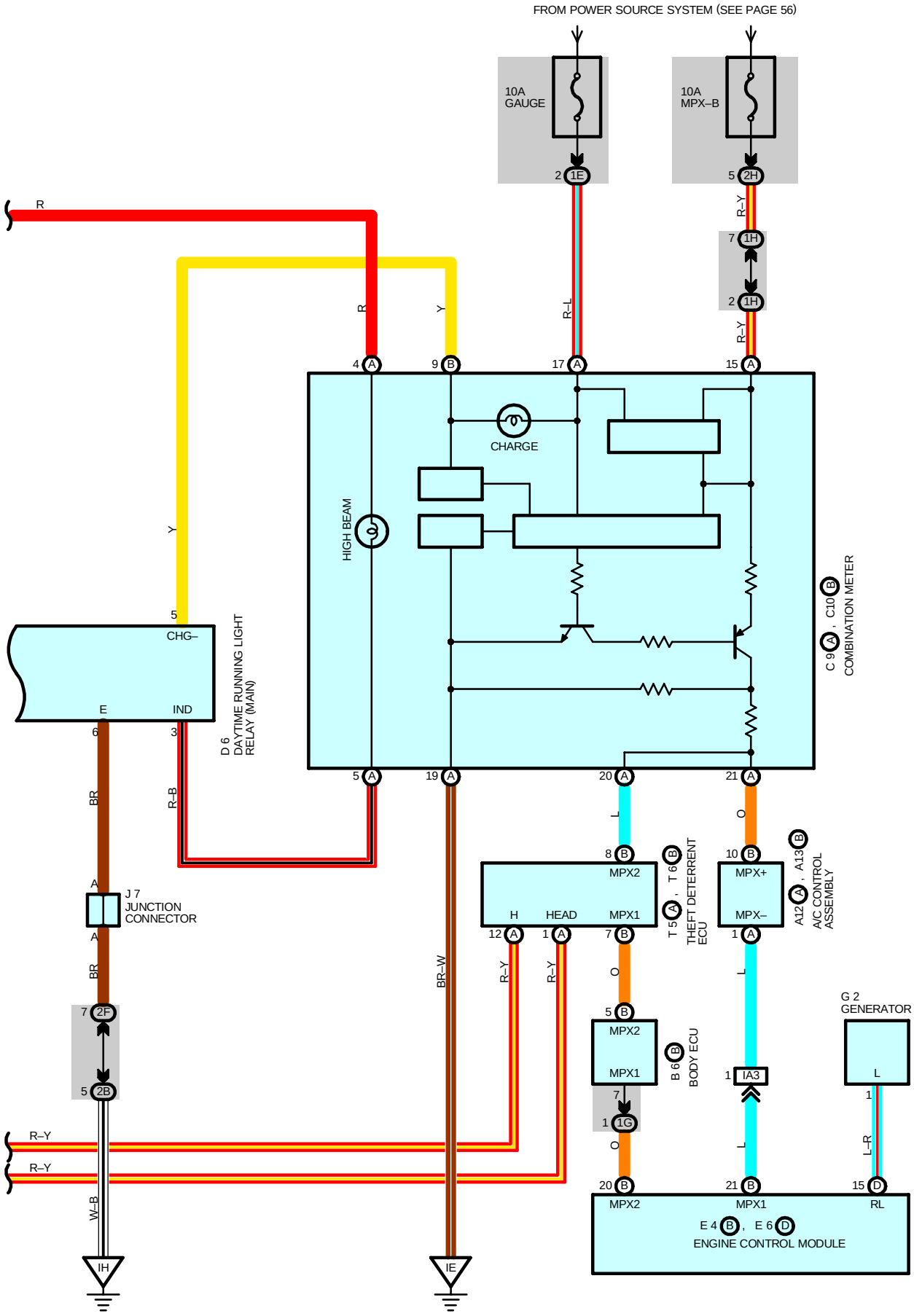
Code	See Page	Ground Points Location
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	

HEADLIGHT


L–Y
R–L
R–B
R
DIMMER RELAY
15A H–LP L LWR
15A H–LP R LWR
7. 5A DRL NO. 1
10A H–LP R UPR
10A H–LP L UPR
H 7
HEADLIGHT LH (HIGH)
E 1
30A DRL NO. 2
HEAD LP RELAY
40A MAIN
BATTERY
B–L
H 5
HEADLIGHT CONTROL ECU LH
H 6
HEADLIGHT CONTROL ECU RH
EC
W–B
R–Y
D 2
D 3
DAYTIME RUNNING LIGHT RELAY NO. 3
DAYTIME RUNNING LIGHT RELAY NO. 4
R–W
D 4
DAYTIME RUNNING
LIGHT RESISTOR
I 5
IH


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
L–Y
R–L
10A
ECU–IG
7. 5A
ECU–B2
R
R–L
3 2I
3 2M
4 2M
1 2M
2 2F
3 2F
9 2F
4 1A
1 2F
R–W
L–Y
B–R
W–R
3 1G
1 1F
A
J 6
JUNCTION
CONNECTOR
H 8
HEADLIGHT RH (HIGH)
2
1
H
DRL
IG
+B
HI
PKB
D 6
DAYTIME RUNNING LIGHT
RELAY (MAIN)
8
4
Y–R
C
J 6
JUNCTION
CONNECTOR
W–B
D21
DIODE
(FOG LIGHT)
C11
COMBINATION SW
LIGHT
CONTROL SW
DIMMER SW
OFF
TAIL
HEAD
LOW
HIGH
FLASH
16
5 1G
P 3
PARKING BRAKE SW
13
R–Y
J 5
JUNCTION
CONNECTOR
ID
EC

HEADLIGHT


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A GAUGE
10A MPX–B
2 1E
5 2H
R–Y
7 1H
2 1H
R–Y
R
R
Y
R–L
4 A
9 B
17 A
15 A
CHARGE
HIGH BEAM
Y
5
CHG–
E
IND
6
3
D 6 DAYTIME RUNNING LIGHT RELAY (MAIN)
C 9 A , C10 B
COMBINATION METER
BR
R–B
5 A
19 A
20 A
21 A
L
O
8 B
MPX2
10 B
MPX+
MPX–
H
HEAD
MPX1
T 5 A , T 6 B
THEFT DETERRENT ECU
A12 A , A13 B
A/C CONTROL ASSEMBLY
A
J 7 JUNCTION CONNECTOR
A
BR
12 A
1 A
7 B
1 A
R–Y
R–Y
O
L
BR–W
7 2F
5 2B
5 B
MPX2
MPX1
B 6 B
BODY ECU
7
1 1G
1 IA3
G 2 GENERATOR
L
1
L–R
R–Y
R–Y
O
L
W–B
20 B
MPX2
21 B
MPX1
15 D
RL
E 4 B , E 6 D
ENGINE CONTROL MODULE
IH
IE

SYSTEM OUTLINE

The current is always flowing from the ECU–B2 fuse to TERMINAL 7 of the daytime running light relay (Main).
When the ignition SW is turned on, the current flowing through the ECU–IG fuse flow to TERMINAL 1 of the daytime running light relay (Main).

1. DAYTIME RUNNING LIGHT OPERATION

When the engine is started, the generator signal is input from the combination meter to TERMINAL 5 of the daytime running light relay (Main). At this time, when the parking brake lever is pulled up (The parking brake SW is on), the relay is not activated and the daytime running light system does not function. When the parking brake lever is released (The parking brake SW is off), the signal is input to TERMINAL 4 of the daytime running light relay (Main). This activates the relay to turn on the DIMMER relay. The current flows from the battery into the MAIN fuse to DRL NO.2 fuse to DIMMER relay (Point side) to H–LP L UPR fuse to TERMINAL 2 of the headlight LH (High) to TERMINAL 1 to TERMINAL 1 of the headlight RH (High) to TERMINAL 2 to TERMINAL (A) 5 of the daytime running light relay No.3 to TERMINAL (A) 3 to TERMINAL 1 of the daytime running light resistor to TERMINAL 2 to GROUND. The headlights light up more dimly than usual as the engine is started.
Once the daytime running light system has been activated, the headlights are remained lit even though the parking brake lever is pulled up (The parking brake SW is on). Even if the engine is stopped and the generator signal is cut off with the ignition SW set at ON, the headlights are remained lit. When the ignition SW is turned from ON to OFF, the daytime running light system is stopped and the headlights go off. If the engine is started with the parking brake lever is released, the daytime running light system starts functioning and the headlights light up as the engine is started.

2. HEADLIGHT OPERATION

* Light control SW is set at HEAD.
  When the light control SW is set to HEAD position, the signal is input to TERMINAL 12 of the theft deterrent ECU. This activates the theft deterrent ECU and turns on the HEAD LP relay. When the signal is input to TERMINAL 2 of the daytime running light relay (Main), the daytime running light system is deactivated and headlights LH and RH (High) go off. At this time, the current flows from the battery into the MAIN fuse to HEAD LP relay (Point side) to H–LP L LWR and H–LP R LWR fuse to TERMINAL 2 of the headlight control ECU LH and RH to TERMINAL 1 to GROUND, to turn on the headlights (Low beam).
* Dimmer SW is set at HIGH.
  When the light control SW is set to HEAD position, the current flows from DRL No.1 fuse into the daytime running light relay No.3 and No.4 (Coil side) to turn on the relay as the headlights (Low beam) light up. At this time, when the dimmer SW is set to HIGH position, the signal is input to TERMINAL 8 of the daytime running light relay (Main). This activates the DIMMER relay to flow the current from the battery into the MAIN fuse to DRL NO.2 fuse to DIMMER relay (Point side) to H–LP L UPR fuse to headlight LH (High) to daytime running light relay No.4 (Point side) to GROUND and the current flows from H–LP R UPR to daytime running light relay No.3 (Point side) to headlight RH (High) to daytime running light relay No.4 (Point side) to GROUND, to turn on the headlights (High and low) and high beam indicator light at the same time.
* Dimmer SW is set at FLASH.
  When the dimmer SW is set to FLASH position, the current flows from the battery into the MAIN fuse, HEAD LP relay (Coil side) to TERMINAL 8 of the combination SW to TERMINAL 16 to GROUND in that order to turn on the HEAD LP relay.
  Additionally, the signal is input to TERMINAL 8 of the daytime running light relay (Main) to activate the relay and turn on the DIMMER relay. In the same manner as the dimmer SW set at HIGH position, the headlights (High and low) and high beam indicator light are turned on at the same time.

HEADLIGHT

SERVICE HINTS

HEAD LP RELAY

2–1 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position

DIMMER RELAY

1–2 : Closed with the daytime running light operation
Closed with the light control SW at **HEAD** position and the dimmer SW at **HIGH** position
Closed with the dimmer SW at **FLASH** position

D2 (A), D3 (B) DAYTIME RUNNING LIGHT RELAY NO.3, NO.4

(A) 2–(A) 5, (B) 1–(B) 2 : Closed with the light control SW at **HEAD** position and the dimmer SW at **HIGH** position or the dimmer SW at **FLASH** position

C11 COMBINATION SW

13–16 : Closed with the light control SW at **HEAD** position
8–16 : Closed with the dimmer SW at **FLASH** position
7–16 : Closed with the dimmer SW at **HIGH** or **FLASH** position

D6 DAYTIME RUNNING LIGHT RELAY (MAIN)

7–GROUND : Always approx. **12** volts
1–GROUND : Approx. **12** volts with the ignition SW at **ON** position
6–GROUND : Always continuity
4–GROUND : Continuity with the parking brake lever pulled up

: PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
A12	A	34	D4		32	H7		33
A13	B	34	D6		34	H8		33
B6	B	34	D21		34	J5		35
C9	A	34	E4	B	32	J6		35
C10	B	34	E6	D	32	J7		35
C11		34	G2		32	P3		35
D2	A	32	H5		33	T5	A	35
D3	B	32	H6		33	T6	B	35

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)
3	23	Engine Room No.3 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2I		
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)



: GROUND POINTS

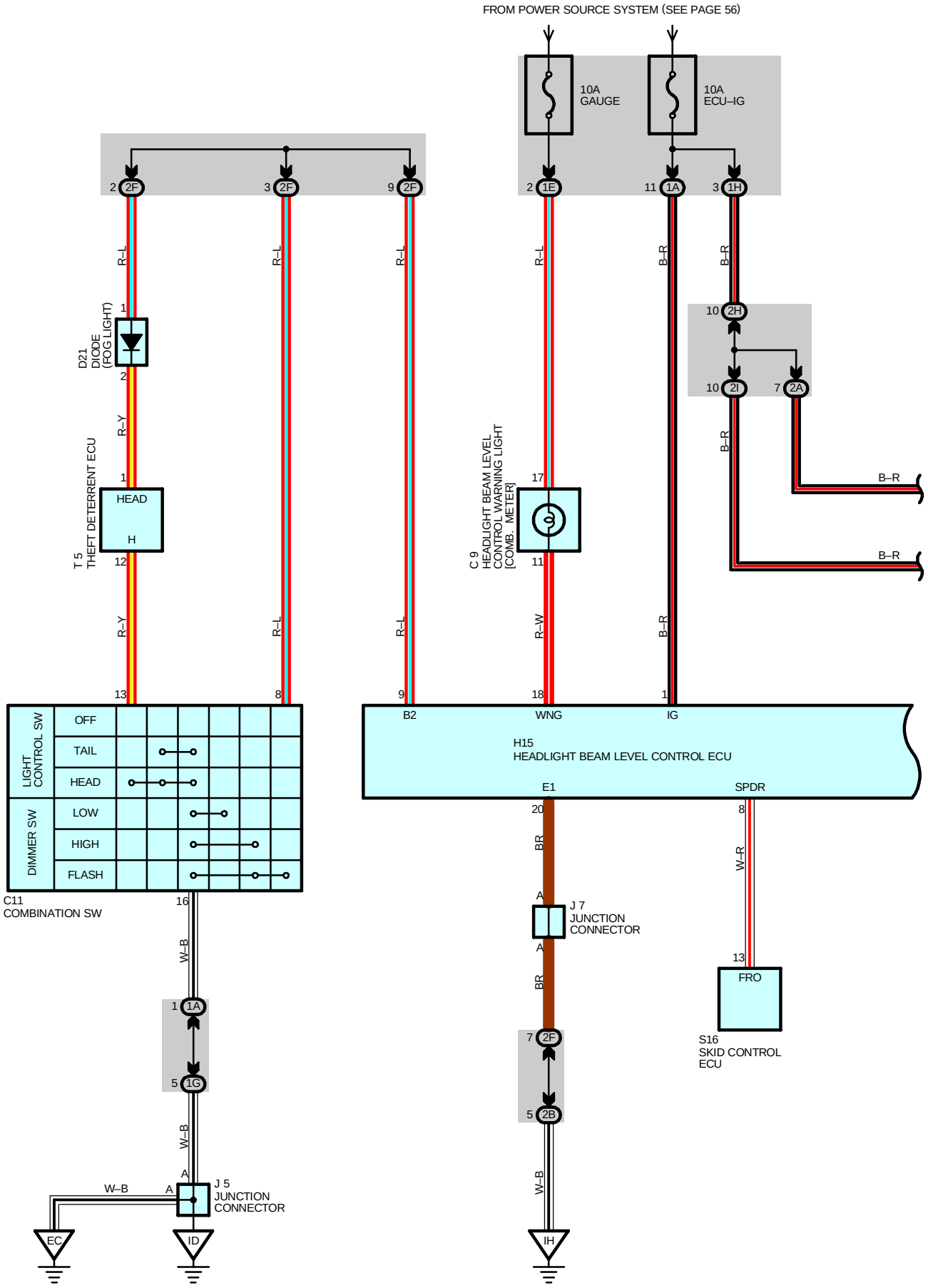
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH

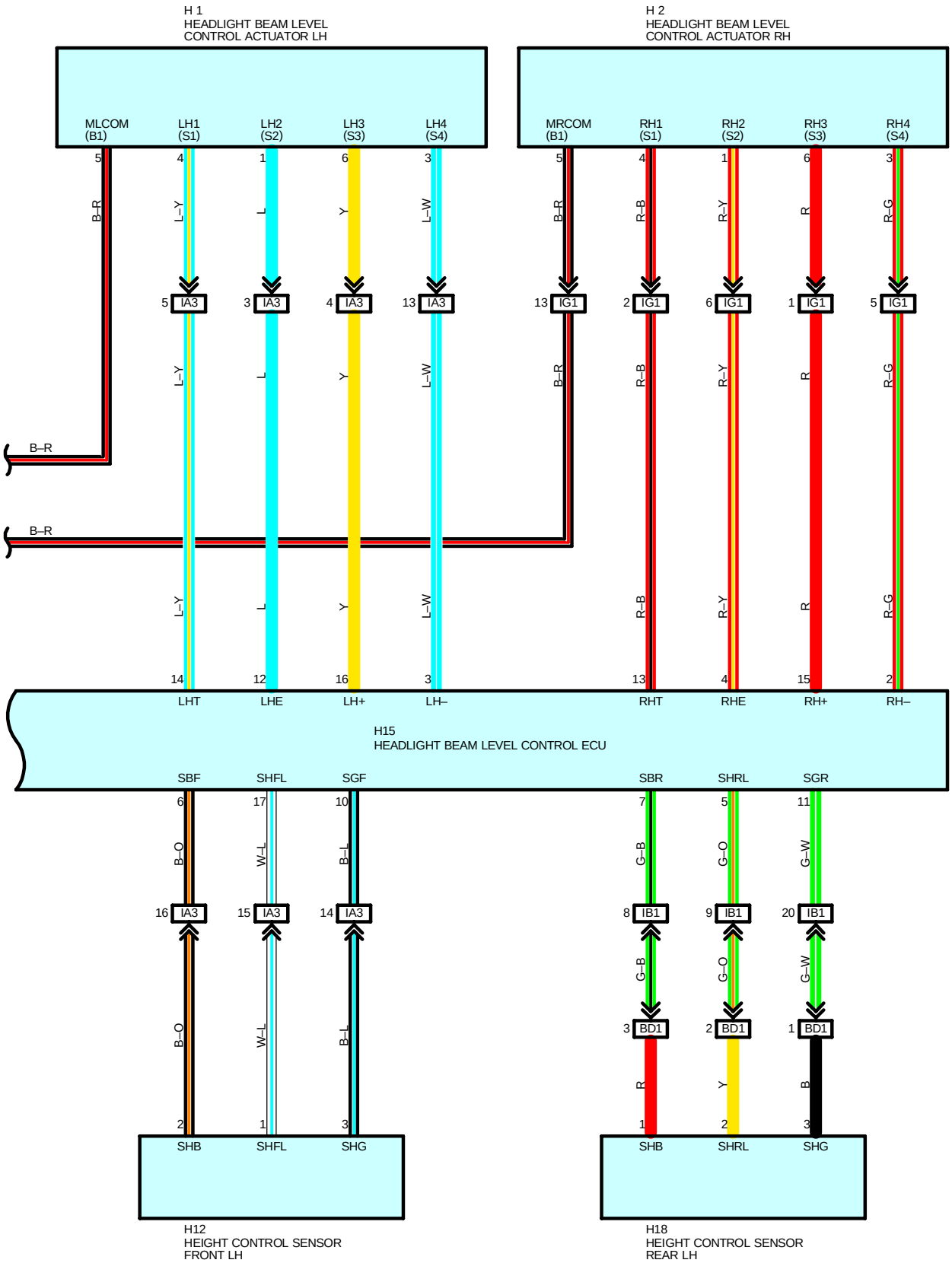


: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	42	Engine Room Main Wire	I5	46	Engine Room Main Wire

HEADLIGHT BEAM LEVEL CONTROL




H 1
HEADLIGHT BEAM LEVEL
CONTROL ACTUATOR LH
H 2
HEADLIGHT BEAM LEVEL
CONTROL ACTUATOR RH
MLCOM (B1)
LH1 (S1)
LH2 (S2)
LH3 (S3)
LH4 (S4)
MRCOM (B1)
RH1 (S1)
RH2 (S2)
RH3 (S3)
RH4 (S4)
B–R
L–Y
L
Y
L–W
R–B
R–Y
R
R–G
IA3
IG1
LHT
LHE
LH+
LH–
RHT
RHE
RH+
RH–
H15
HEADLIGHT BEAM LEVEL CONTROL ECU
SBF
SHFL
SGF
SBR
SHRL
SGR
B–O
W–L
B–L
G–B
G–O
G–W
IB1
BD1
SHB
SHFL
SHG
SHRL
H12
HEIGHT CONTROL SENSOR
FRONT LH
H18
HEIGHT CONTROL SENSOR
REAR LH

HEADLIGHT BEAM LEVEL CONTROL

SYSTEM OUTLINE

This system calculates changes in the illuminating angle from changes in the vehicle height and axle distance based on the information on the vehicle height detected by the height sensors installed at the front and rear of the vehicle and information on the vehicle speed and acceleration output from the ABS and traction system or VSC system to reversely operate the reflector by the obtained illuminating angle through actuators in order to always keep the beam axis constant.
If an error occurs in this system, the headlight beam level control warning light in the combination meter lights up to warn the driver.

SERVICE HINTS

H15 HEADLIGHT BEAM LEVEL CONTROL ECU

1–GROUND : Approx. **12** volts with the ignition SW at **ON** position
20–GROUND : Always continuity
9–GROUND :Continuity with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C9	34	H12	33	J7	35
C11	34	H15	35	S16	35
D21	34	H18	36 (S/D)	T5	35
H1	33		38 (W/G)		
H2	33	J5	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2I		

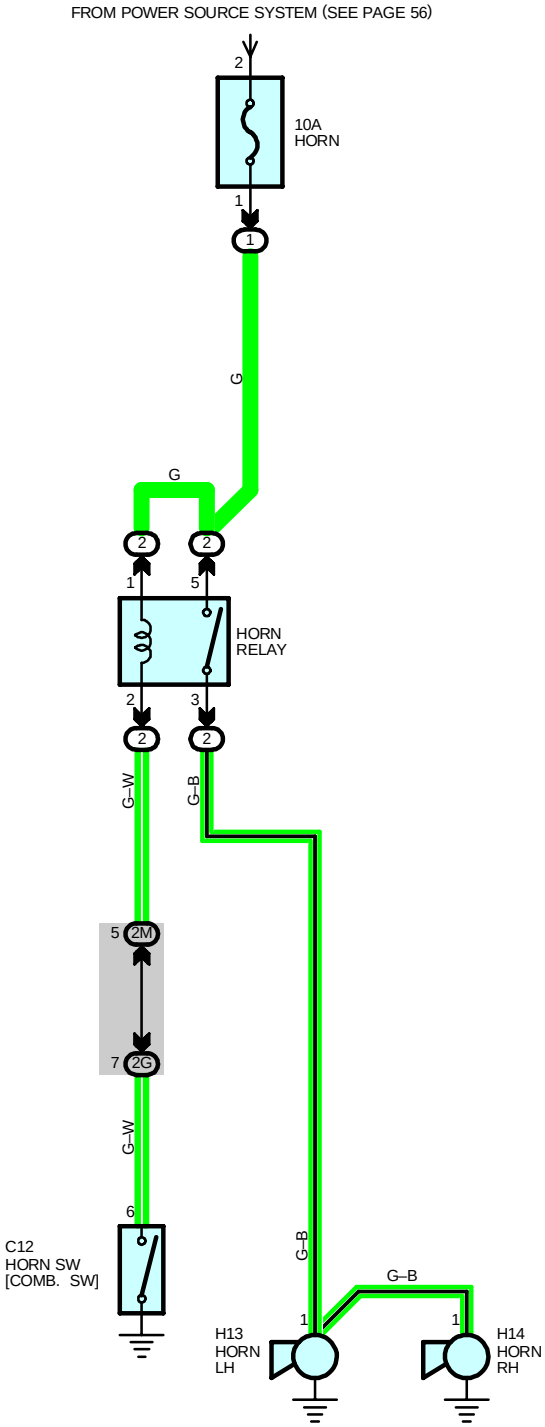
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IG1	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
BD1	48 (S/D)	Sensor Wire and Floor No.2 Wire (Lower Back Panel LH)
	50 (W/G)	

: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH

HORN


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
2
10A
HORN
1
1
G
G
2
2
1
5
HORN
RELAY
2
3
2
2
G–W
G–B
5
2M
7
2G
G–W
6
C12
HORN SW
[COMB. SW]
G–B
G–B
1
1
H13
HORN
LH
H14
HORN
RH

SERVICE HINTS

HORN RELAY

5–3 : Closed with the horn SW on

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C12	34	H13	33	H14	33

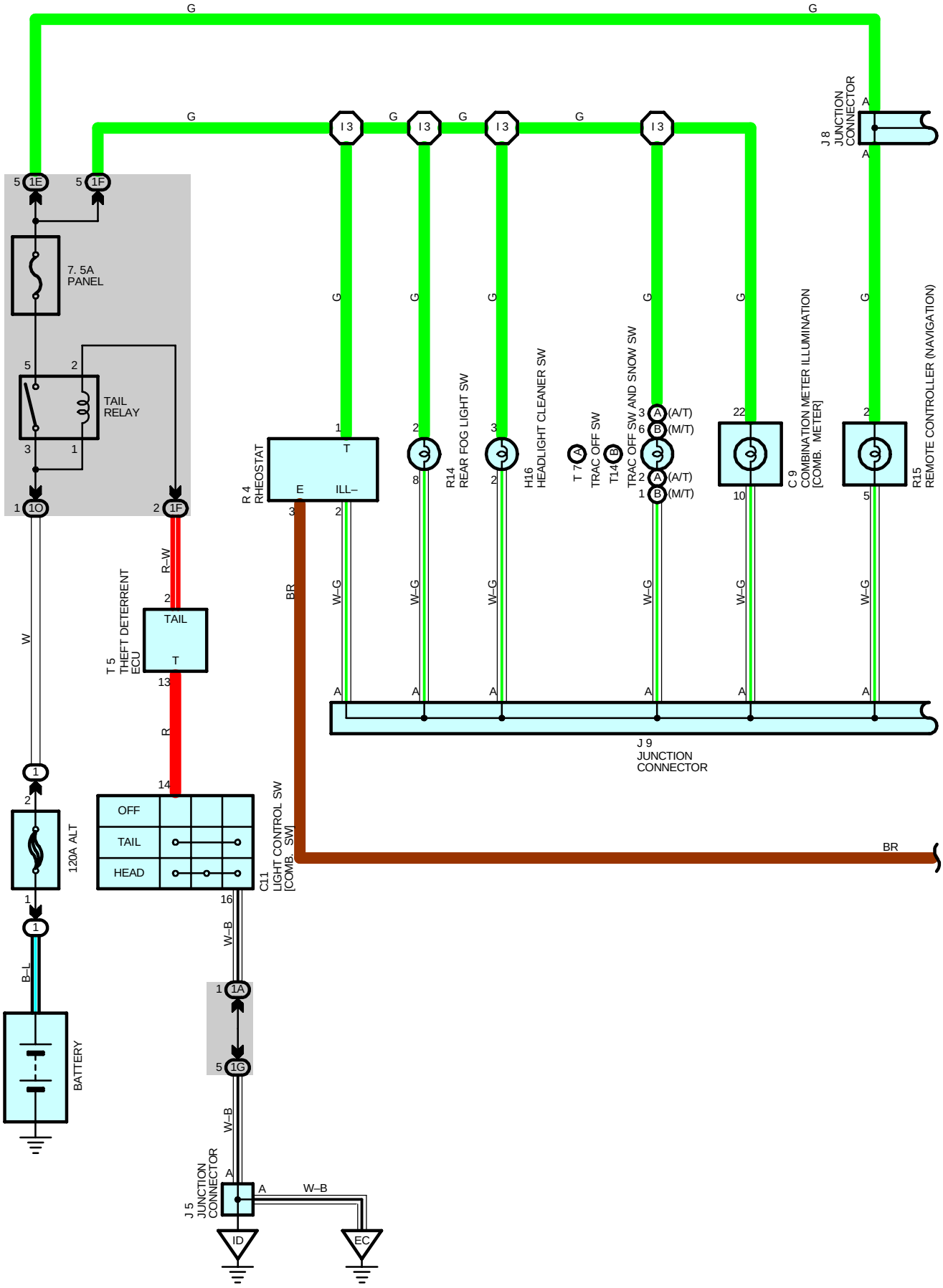
: RELAY BLOCKS

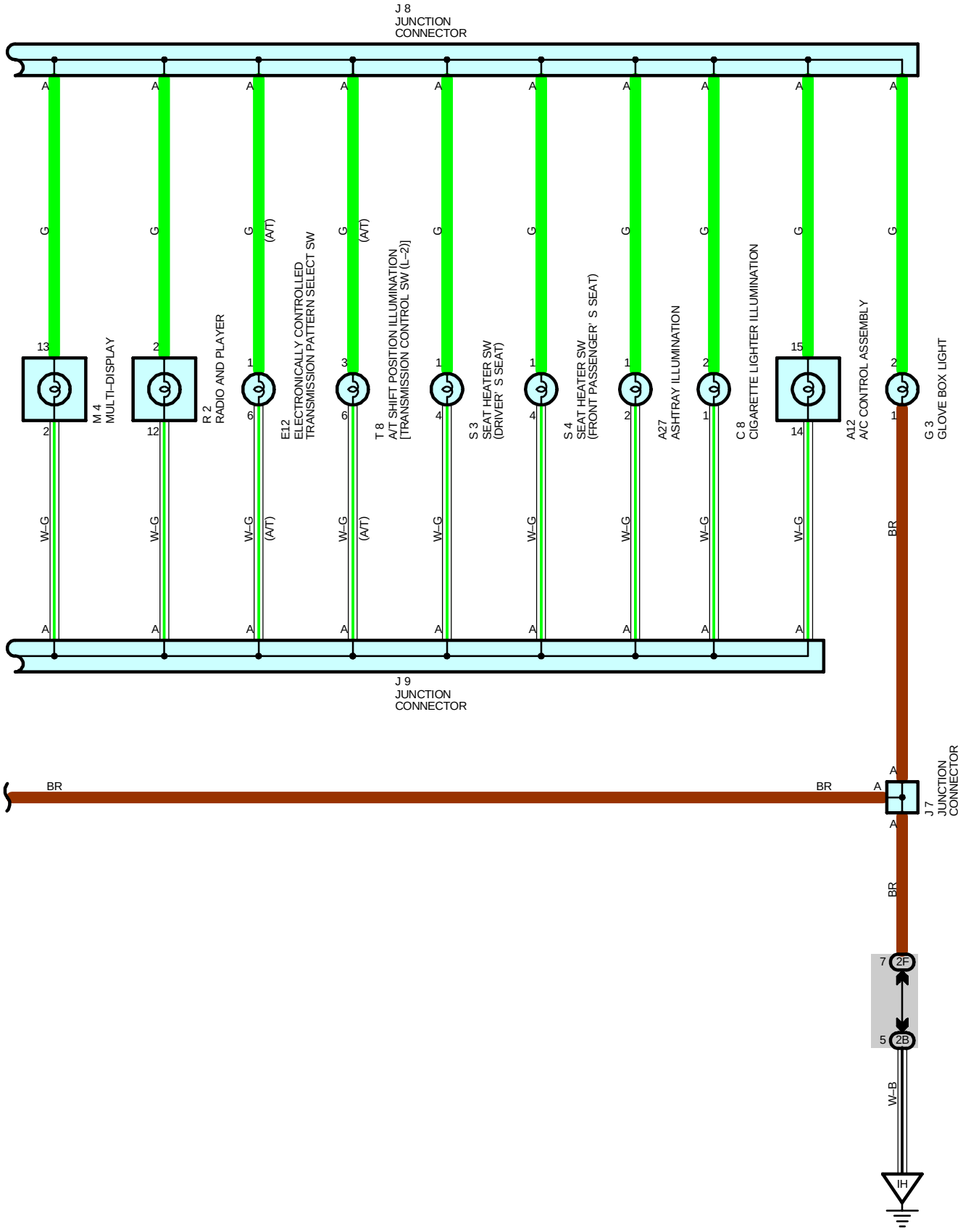
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

ILLUMINATION




J 8
JUNCTION
CONNECTOR
M 4
MULTI–DISPLAY
R 2
RADIO AND PLAYER
E12
ELECTRONICALLY CONTROLLED
TRANSMISSION PATTERN SELECT SW
T 8
A/T SHIFT POSITION ILLUMINATION
[TRANSMISSION CONTROL SW (L–2)]
S 3
SEAT HEATER SW
(DRIVER' S SEAT)
S 4
SEAT HEATER SW
(FRONT PASSENGER' S SEAT)
A27
ASHTRAY ILLUMINATION
C 8
CIGARETTE LIGHTER ILLUMINATION
A12
A/C CONTROL ASSEMBLY
G 3
GLOVE BOX LIGHT
J 9
JUNCTION
CONNECTOR
J 7
JUNCTION
CONNECTOR
IH
G
W–G
BR
(A/T)
2F
2B

ILLUMINATION

SERVICE HINTS

TAIL RELAY

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

C11 LIGHT CONTROL SW [COMB. SW]

14–16 : Continuity with the light control SW at **TAIL** or **HEAD** position

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A12	34	J5	35	R15	35
A27	34	J7	35	S3	35
C8	34	J8	35	S4	35
C9	34	J9	35	T5	35
C11	34	M4	35	T7 A	35
E12	35	R2	35	T8	35
G3	35	R4	35	T14 B	35
H16	35	R14	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

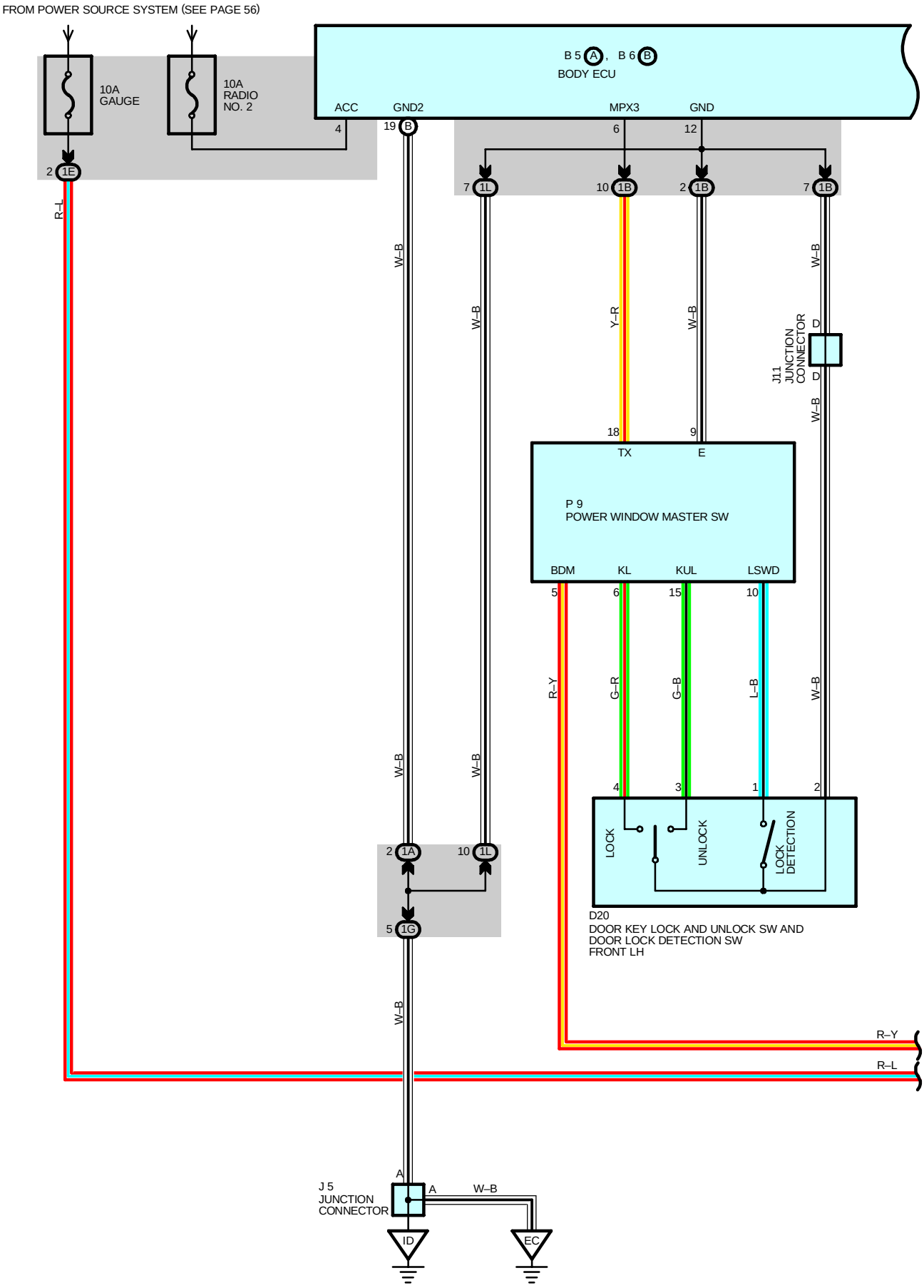
: GROUND POINTS

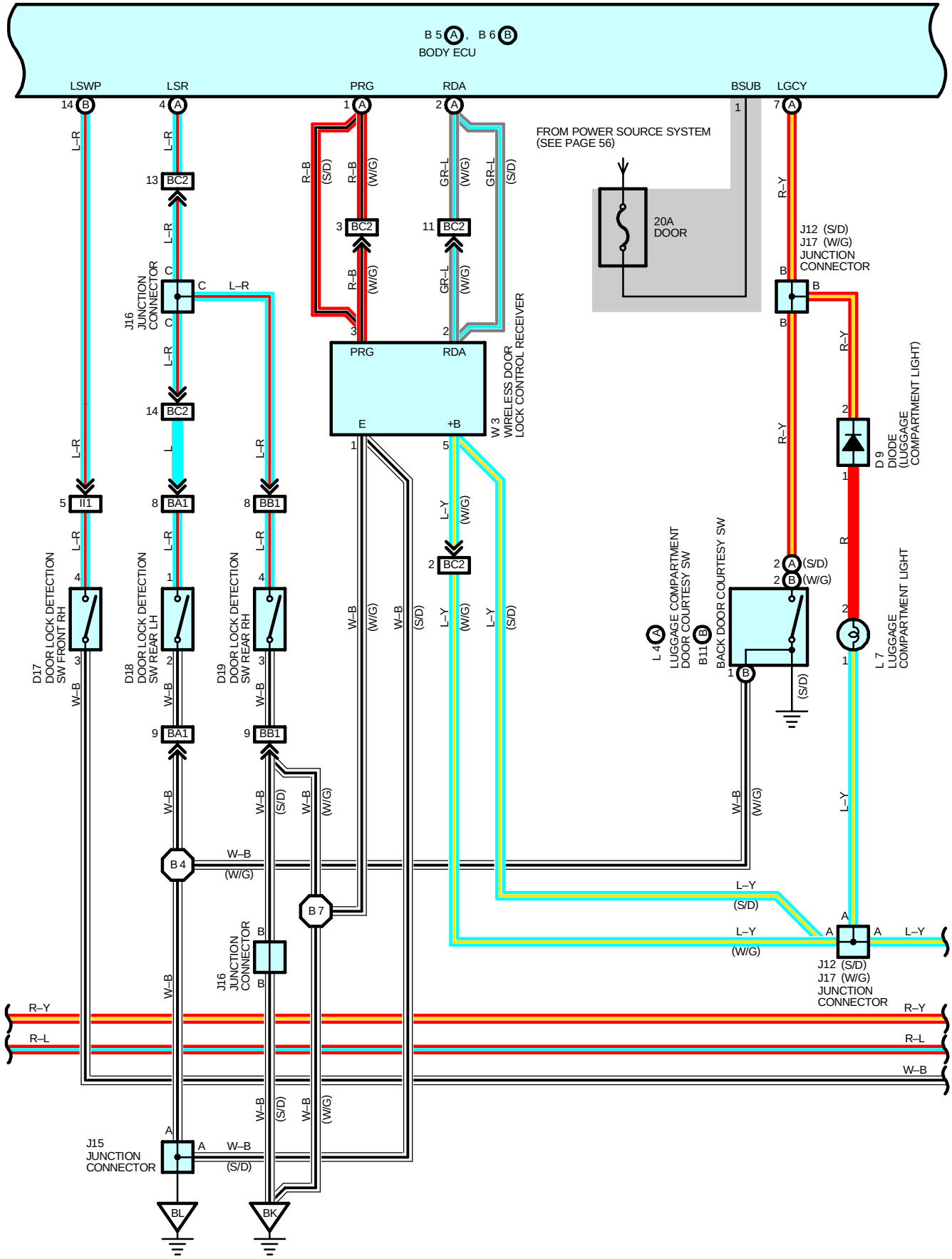
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH

: SPLICE POINTS

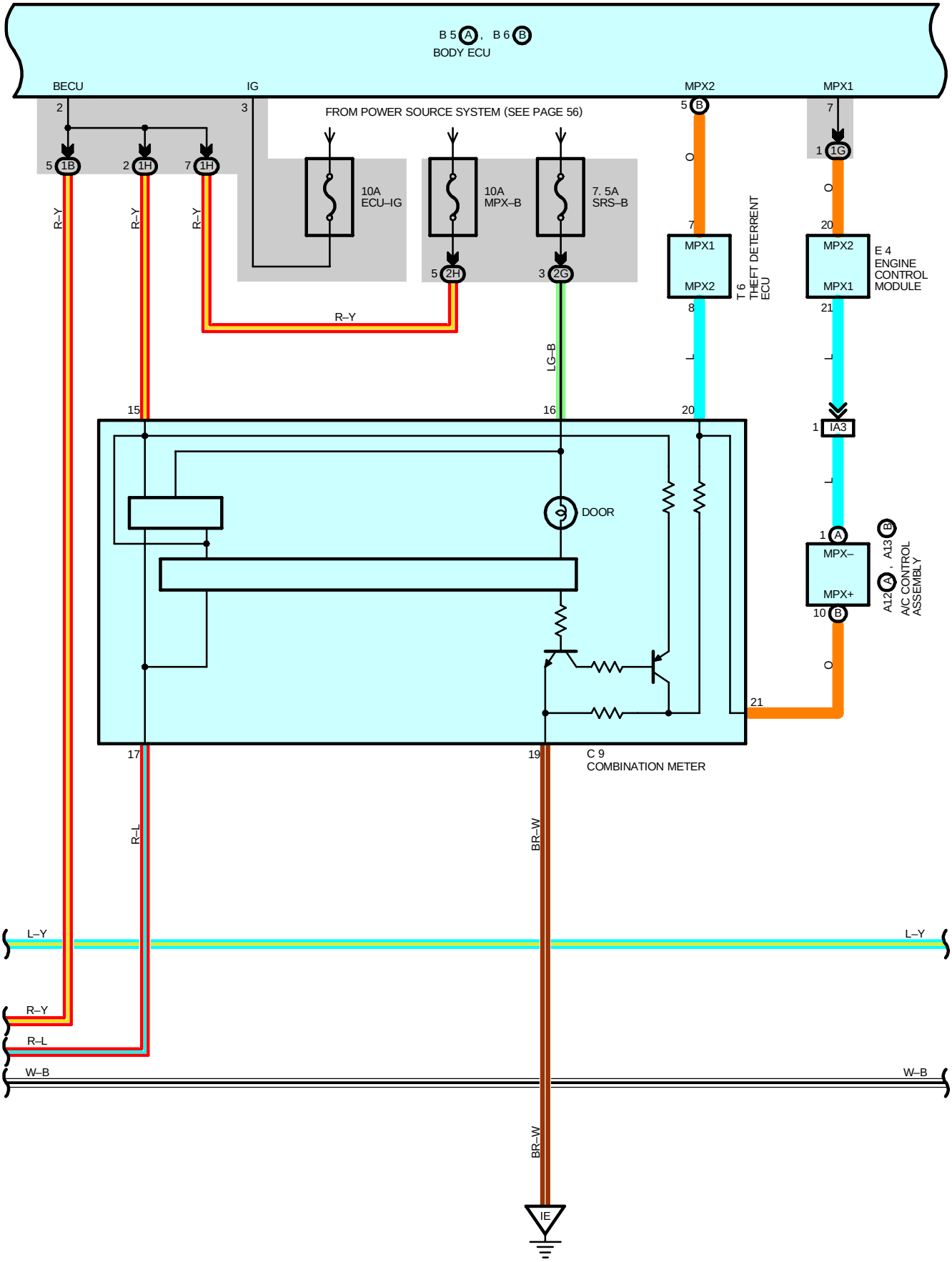
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	46	Instrument Panel Wire			

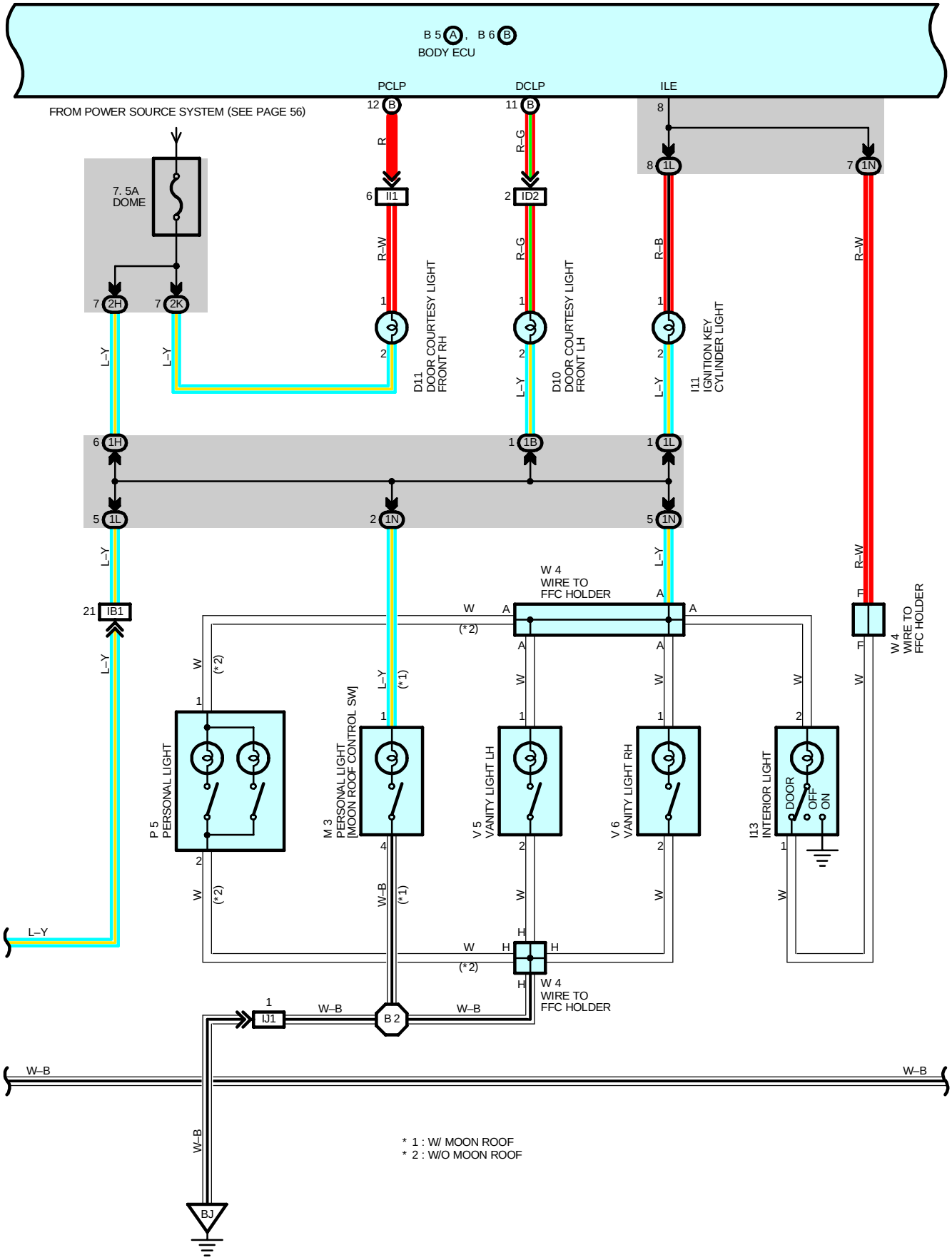
INTERIOR LIGHT



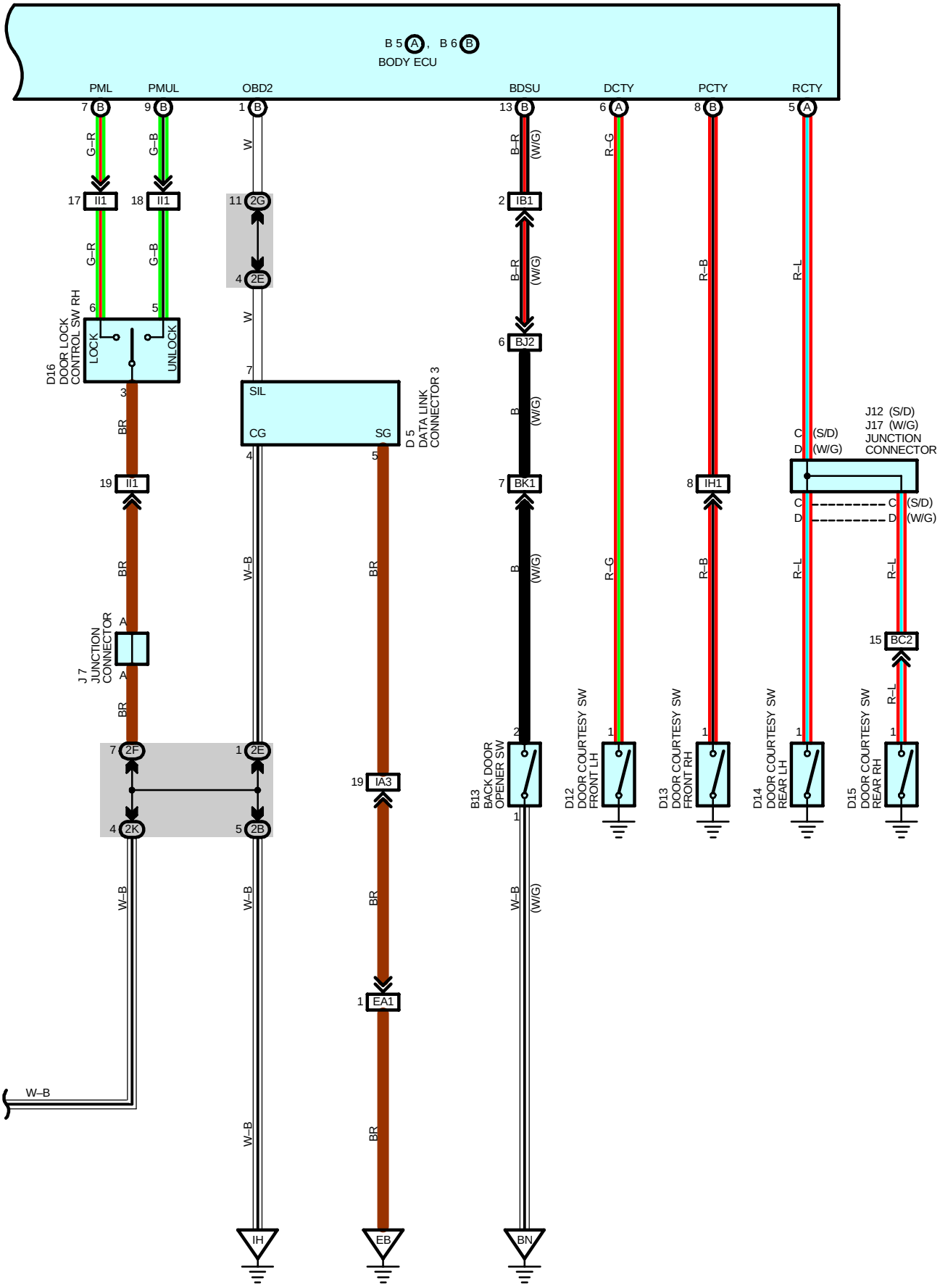

B 5 A , B 6 B
BODY ECU
LSWP
LSR
PRG
RDA
BSUB
LGCY
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
20A DOOR
J12 (S/D) J17 (W/G) JUNCTION CONNECTOR
J16 JUNCTION CONNECTOR
W 3 WIRELESS DOOR LOCK CONTROL RECEIVER
D 9 DIODE (LUGGAGE COMPARTMENT LIGHT)
L 7 LUGGAGE COMPARTMENT LIGHT
L 4 LUGGAGE COMPARTMENT DOOR COURTESY SW
B11
BACK DOOR COURTESY SW
D17 DOOR LOCK DETECTION SW FRONT RH
D18 DOOR LOCK DETECTION SW REAR LH
D19 DOOR LOCK DETECTION SW REAR RH
J15 JUNCTION CONNECTOR
B 4
B 7
BL
BK
R–Y
R–L
W–B
L–Y
L–R
GR–L
R–B
(S/D)
(W/G)

INTERIOR LIGHT




B 5 A , B 6 B
BODY ECU
PCLP
DCLP
ILE
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
7. 5A
DOME
12 B
11 B
8
8 1L
7 1N
R
R–G
6 II1
2 ID2
R–W
R–G
R–B
R–W
D11
DOOR COURTESY LIGHT
FRONT RH
D10
DOOR COURTESY LIGHT
FRONT LH
I11
IGNITION KEY
CYLINDER LIGHT
7 2H
7 2K
L–Y
L–Y
6 1H
1 1B
1 1L
5 1L
2 1N
5 1N
21 IB1
W 4
WIRE TO
FFC HOLDER
W
(*2)
A
F
W 4
WIRE TO
FFC HOLDER
P 5
PERSONAL LIGHT
M 3
PERSONAL LIGHT
[MOON ROOF CONTROL SW]
V 5
VANITY LIGHT LH
V 6
VANITY LIGHT RH
I13
INTERIOR LIGHT
DOOR
OFF
ON
(*1)
W–B
H
W 4
WIRE TO
FFC HOLDER
1 IJ1
B 2
W–B
W–B
W–B
W–B
BJ
* 1 : W/ MOON ROOF
* 2 : W/O MOON ROOF

INTERIOR LIGHT



SYSTEM OUTLINE

ILLUMINATED ENTRY SYSTEM

This system provides various functions listed below through communication control of the body ECU etc.

* Each relevant light lights up if any door is opened.
* If all the doors are closed with the ignition SW set at OFF after any door is opened, each light lights up for 15 sec., and then fades out when the time set on the timer has elapsed.
* If any door is unlocked from the driver or passenger side or if any door is unlocked with the unlock SW on the transmitter after all the doors are closed and locked, each light lights up for 15 sec., and then fades out when the time set on the timer has elapsed.
* If the ignition SW is turned to the ACC or ON position while each light is being lit by the timer, the timer lighting is cancelled and the light fades out.
* If all the doors are closed and locked from the driver or passenger side or with the lock SW on the transmitter while each light is being lit, the timer lighting is cancelled and the light fades out.
* If all the doors are closed with the ignition SW set at ACC or ON after any door is opened, the timer lighting is cancelled and the light fades out.
* Each light above is the interior light, ignition key cylinder light, and door courtesy lights.

SERVICE HINTS

D12, D13, D14, D15 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1–GROUND : Continuity with the door open

B6 (B) BODY ECU

BECU–GROUND : Always approx. **12** volts
BSUB–GROUND : Always approx. **12** volts
IG–GROUND : Approx. **12** volts with the ignition SW at **ON** position
ACC–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
GND–GROUND : Always continuity
GND2–GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page
A12	A	34
A13	B	34
B5	A	34
B6	B	34
B11	B	38 (W/G)
B13		38 (W/G)
C9		34
D5		34
D9		36 (S/D)
		38 (W/G)
D10		36 (S/D)
		38 (W/G)
D11		36 (S/D)
		38 (W/G)
D12		36 (S/D)
		38 (W/G)
D13		36 (S/D)
		38 (W/G)
D14		36 (S/D)
		38 (W/G)
D15		36 (S/D)
		38 (W/G)

Code	See Page
D16	36 (S/D)
	38 (W/G)
D17	36 (S/D)
	38 (W/G)
D18	36 (S/D)
	38 (W/G)
D19	36 (S/D)
	38 (W/G)
D20	36 (S/D)
	38 (W/G)
E4	32
I11	35
I13	36 (S/D)
	38 (W/G)
J5	35
J7	35
J11	36 (S/D)
	38 (W/G)
J12	36 (S/D)
J15	36 (S/D)
	38 (W/G)
J16	36 (S/D)

Code		See Page
J16		38 (W/G)
J17		38 (W/G)
L4	A	36 (S/D)
L7		36 (S/D)
		38 (W/G)
M3		37 (S/D)
		39 (W/G)
P5		37 (S/D)
		39 (W/G)
P9		37 (S/D)
		39 (W/G)
T6		35
V5		37 (S/D)
		39 (W/G)
V6		37 (S/D)
		39 (W/G)
W3		37 (S/D)
		39 (W/G)
W4		37 (S/D)
		39 (W/G)

INTERIOR LIGHT

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)
BJ2	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

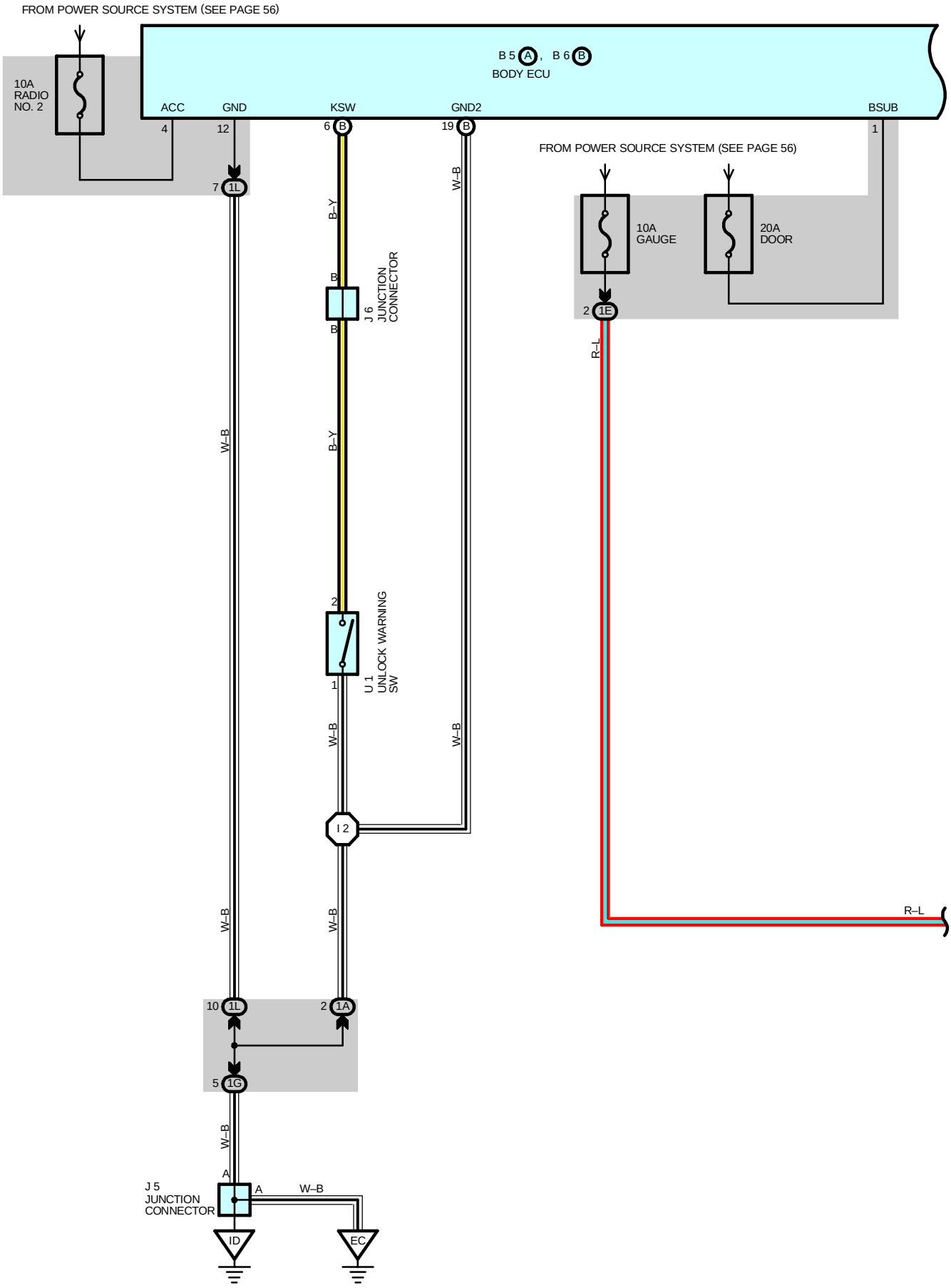
: GROUND POINTS

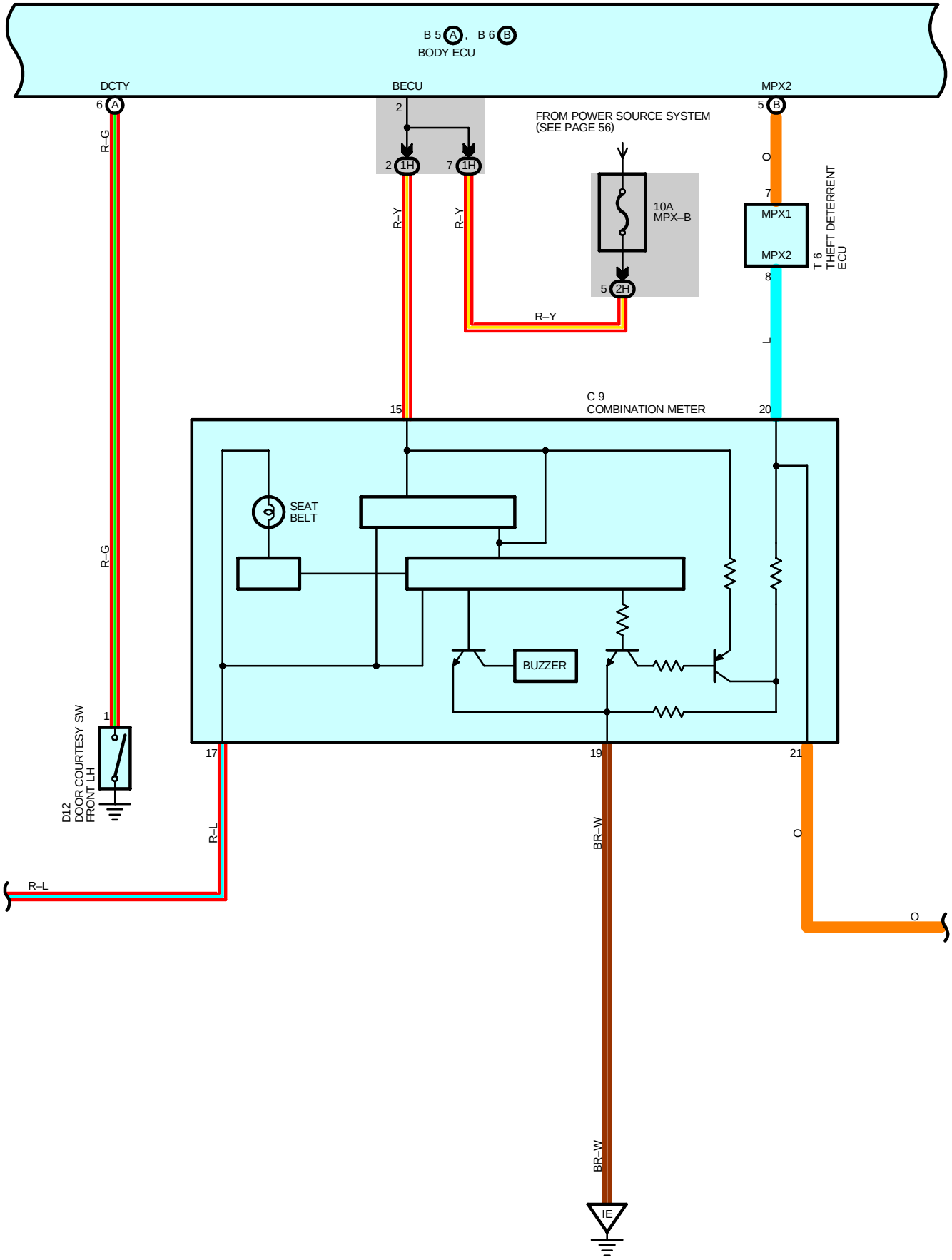
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	
BN	50 (W/G)	Right Side of the Back Panel Lower

: SPLICE POINTS

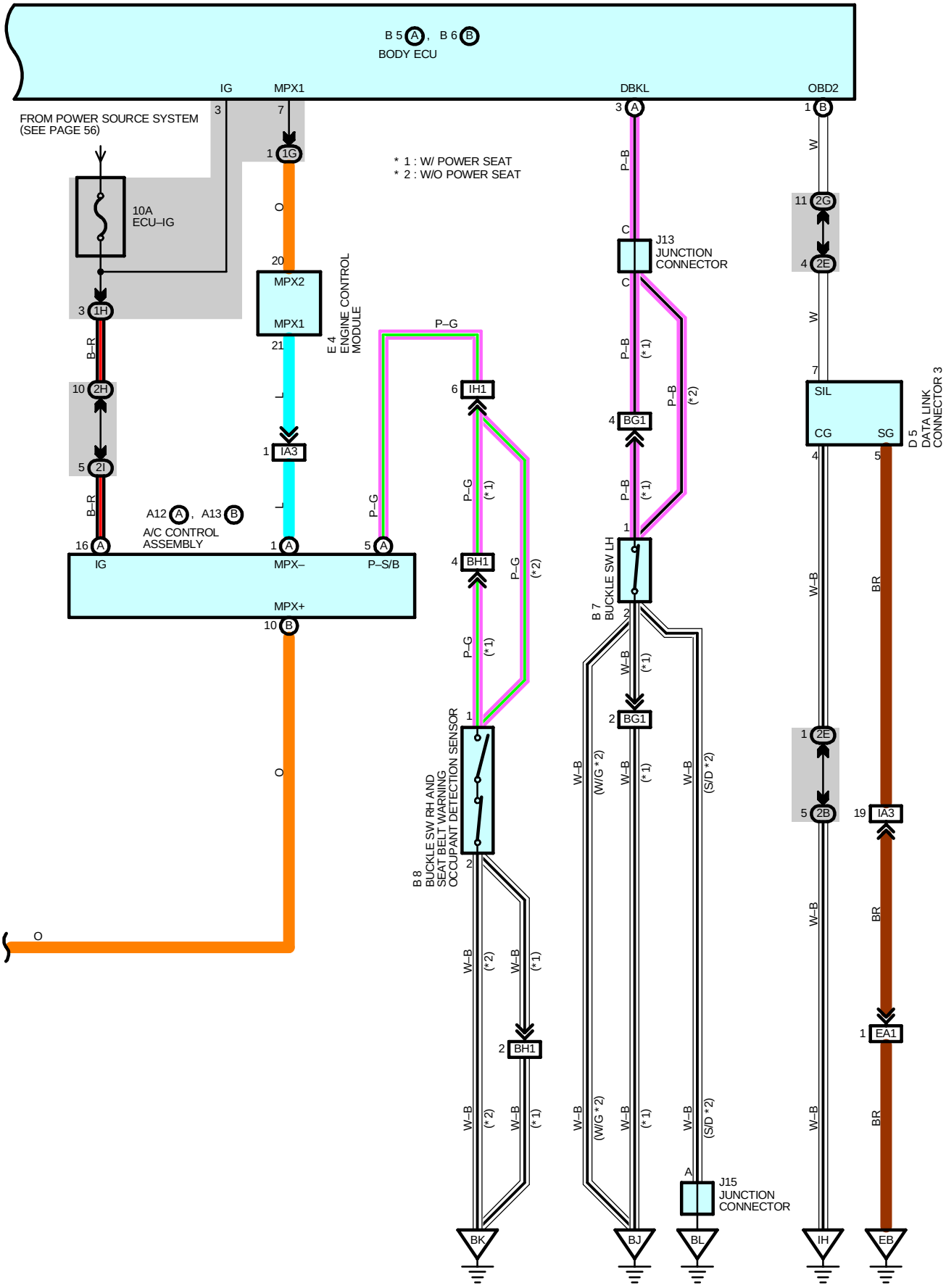
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	48 (S/D)	Roof Wire	B4	50 (W/G)	Floor No.2 Wire
	50 (W/G)		B7	50 (W/G)	Floor Wire

KEY REMINDER AND SEAT BELT WARNING




B 5 A , B 6 B
BODY ECU
DCTY
BECU
MPX2
6 A
2
5 B
FROM POWER SOURCE SYSTEM
(SEE PAGE 56)
2 1H
7 1H
10A
MPX–B
5 2H
R–G
R–Y
R–Y
R–Y
O
7
MPX1
MPX2
8
T 6
THEFT DETERRENT
ECU
L
C 9
COMBINATION METER
15
20
SEAT
BELT
BUZZER
R–G
1
D12
DOOR COURTESY SW
FRONT LH
17
19
21
R–L
R–L
BR–W
O
O
BR–W
IE

KEY REMINDER AND SEAT BELT WARNING



SYSTEM OUTLINE

1. SEAT BELT WARNING SYSTEM

When the ignition SW is turned to the ON position, the signal is input to the body ECU. At this time, to determine whether or not the driver fastens the seat belt, the signal from the buckle SW LH is input to TERMINAL DBKL of the body ECU. If the driver does not fasten the seat belt, the seat belt warning light in the combination meter flashes and the alarm buzzer goes on, in response to the communication control of the body ECU etc.
Additionally, the sensor (Seat belt warning occupant detection sensor) installed on the front passenger seat detects the passenger and determines whether or not the passenger fastens the seat belt.
If the passenger does not fasten the seat belt, the signals from the seat sensor and buckle SW RH are input to TERMINAL P–S/B of the A/C control assembly and through communication control of the body ECU etc. the passenger seat belt warning light is flashed.

2. KEY REMINDER SYSTEM

If the driver door is opened with the ignition SW set at the ACC or OFF position and the ignition key remained inserted into the key cylinder (The unlock warning SW is on), the signal from the unlock warning SW is input to TERMINAL KSW of the body ECU and the signal from the door courtesy SW front LH is input to TERMINAL DCTY of the body ECU. As a result, through communication control of the body ECU etc. the buzzer in the combination meter goes on to warn the driver that the ignition key is still inserted.

SERVICE HINTS

B7 BUCKLE SW LH

1–2 : Continuity with the driver's seat belt not use

B8 BUCKLE SW RH AND SEAT BELT WARNING OCCUPANT DETECTION SENSOR

1–2 : Continuity with the passenger sit on the front passenger seat and front passenger's seat belt not use

U1 UNLOCK WARNING SW

2–1 : Continuity with the ignition key in cylinder

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
A12	A	34	B8	38 (W/G w/o Power Seat)	J6	35
A13	B	34		40 (w/ Power Seat)	J13	36 (S/D)
B5	A	34	C9	34		38 (W/G)
B6	B	34	D5	34	J15	36 (S/D)
B7		36 (S/D w/o Power Seat)	D12	36 (S/D)	T6	35
		38 (W/G w/o Power Seat)		38 (W/G)	U1	35
		40 (w/ Power Seat)	E4	32		
B8		36 (S/D w/o Power Seat)	J5	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2I		

KEY REMINDER AND SEAT BELT WARNING

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

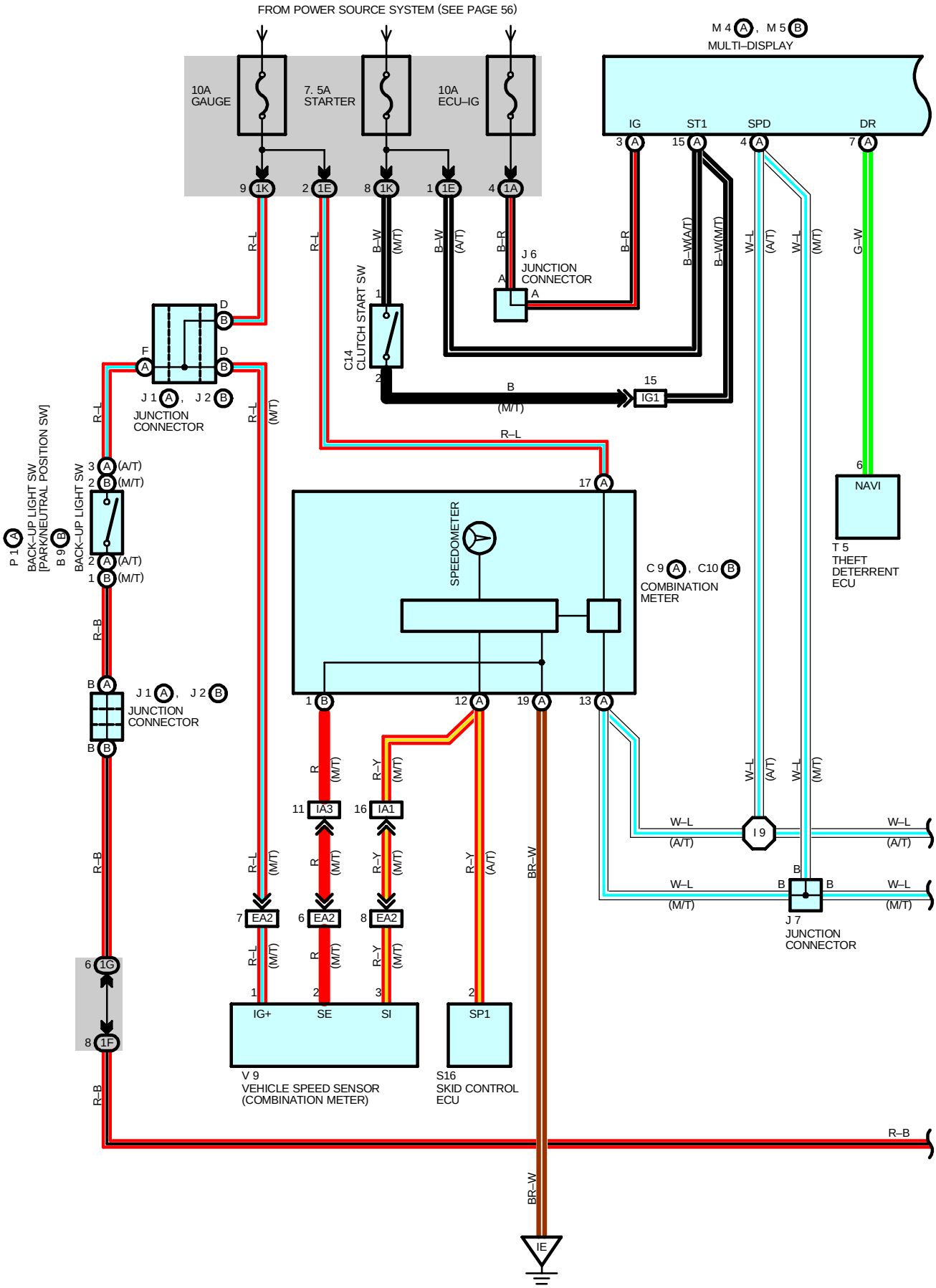
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

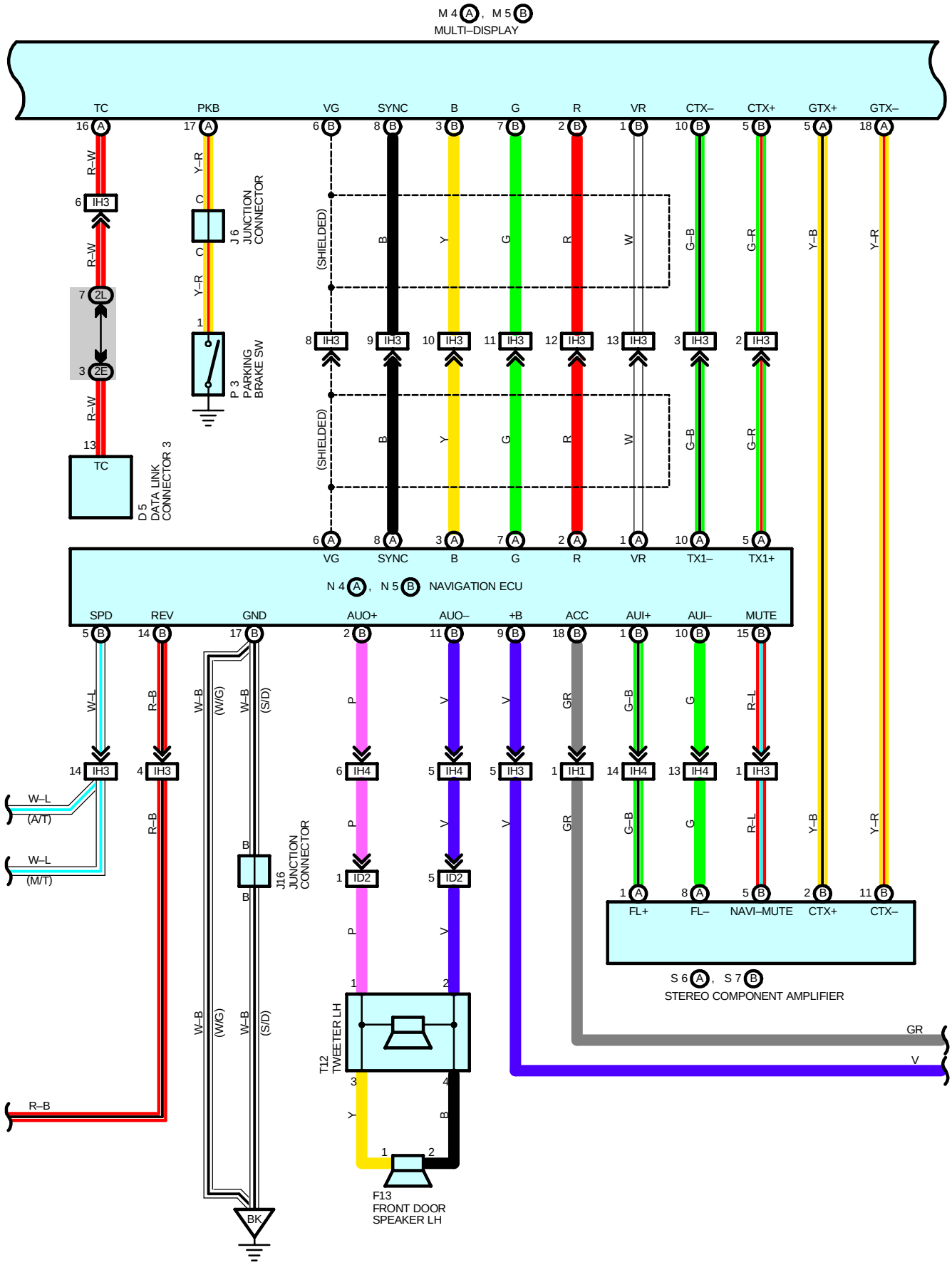
: GROUND POINTS

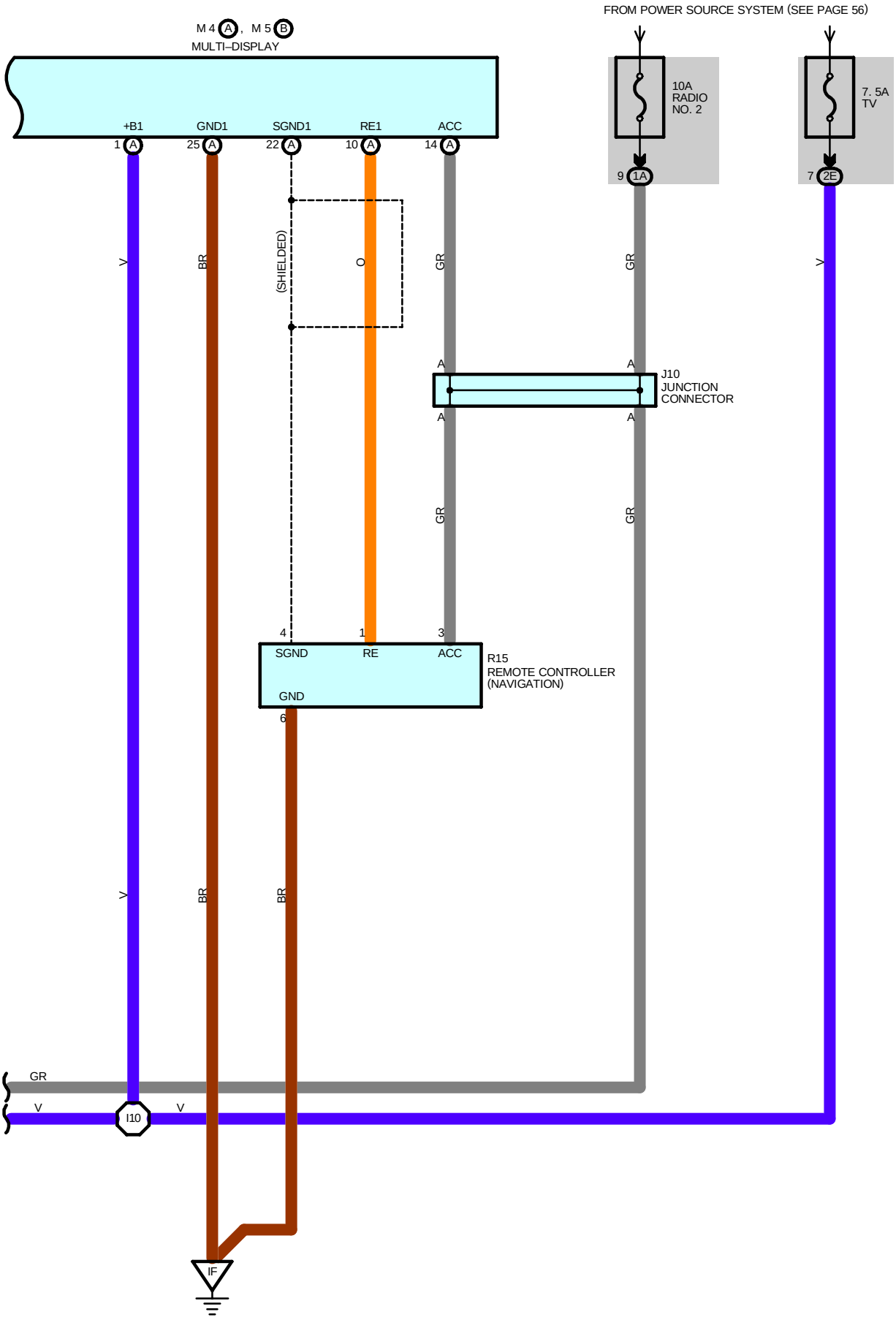
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH
BJ	48 (S/D) 50 (W/G)	Front Floor Panel LH
BK	48 (S/D) 50 (W/G)	Front Floor Panel RH
BL	48 (S/D)	Left Quarter Panel LH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	46	Instrument Panel Wire			


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A GAUGE
7. 5A STARTER
10A ECU–IG
M 4 A , M 5 B
MULTI–DISPLAY
IG
ST1
SPD
DR
J 6 JUNCTION CONNECTOR
C14 CLUTCH START SW
IG1
J 1 A , J 2 B JUNCTION CONNECTOR
BACK–UP LIGHT SW [PARK/NEUTRAL POSITION SW]
P 1
B 9
BACK–UP LIGHT SW
SPEEDOMETER
C 9 A , C10 B COMBINATION METER
NAVI
T 5 THEFT DETERRENT ECU
J 1 A , J 2 B JUNCTION CONNECTOR
IA3
IA1
EA2
I 9
J 7 JUNCTION CONNECTOR
IG+
SE
SI
SP1
V 9 VEHICLE SPEED SENSOR (COMBINATION METER)
S16 SKID CONTROL ECU
IE


M 4 A , M 5 B
MULTI–DISPLAY
TC
PKB
VG
SYNC
B
G
R
VR
CTX–
CTX+
GTX+
GTX–
J 6 JUNCTION CONNECTOR
P 3 PARKING BRAKE SW
D 5 DATA LINK CONNECTOR 3
(SHIELDED)
TX1–
TX1+
N 4 A , N 5 B NAVIGATION ECU
SPD
REV
GND
AUO+
AUO–
+B
ACC
AUI+
AUI–
MUTE
J16 JUNCTION CONNECTOR
T12 TWEETER LH
F13 FRONT DOOR SPEAKER LH
FL+
FL–
NAVI–MUTE
CTX+
CTX–
S 6 A , S 7 B
STEREO COMPONENT AMPLIFIER
W–L (A/T)
W–L (M/T)
R–B
W–B
(W/G)
(S/D)
BK
GR
V


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
M 4 A , M 5 B
MULTI–DISPLAY
+B1
GND1
SGND1
RE1
ACC
1 A
25 A
22 A
10 A
14 A
10A
RADIO
NO. 2
9 1A
7. 5A
TV
7 2E
V
BR
(SHIELDED)
O
GR
GR
V
A
A
J10
JUNCTION
CONNECTOR
A
A
GR
GR
4
1
3
SGND
RE
ACC
R15
REMOTE CONTROLLER
(NAVIGATION)
GND
6
V
BR
BR
GR
V
V
I10
IF

SYSTEM OUTLINE

The LEXUS navigation system displays the operating status and instructions for the radio and player, as well as trip information. 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

N5 (B) NAVIGATION ECU

(B) 9–GROUND : Always approx. **12** volts
(B)18–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
(B)17–GROUND : Always continuity

R15 REMOTE CONTROLLER (NAVIGATION)

3–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
6–GROUND : Always continuity

M4 (A) MULTI–DISPLAY

(A) 1–GROUND : Always approx. **12** volts
(A)14–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
(A) 3–GROUND : Approx. **12** volts with the ignition SW at **ON** position
(A)25–GROUND : Always continuity

: PARTS LOCATION

Code		See Page	Code		See Page	Code		See Page
B9	B	32	J7		35	P3		35
C9	A	34	J10		35	R15		35
C10	B	34	J16		36 (S/D)	S6	A	35
C14		34	M4	A	35	S7	B	35
D5		34	M5	B	35	S16		35
F13		36 (S/D)	N4	A	37 (S/D)	T5		35
		38 (W/G)			39 (W/G)	T12		37 (S/D)
J1	A	33	N5	B	37 (S/D)			39 (W/G)
J2	B	33			39 (W/G)	V9		33
J6		35	P1	A	33			

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1K		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA2	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IG1	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH3		
IH4		



: GROUND POINTS

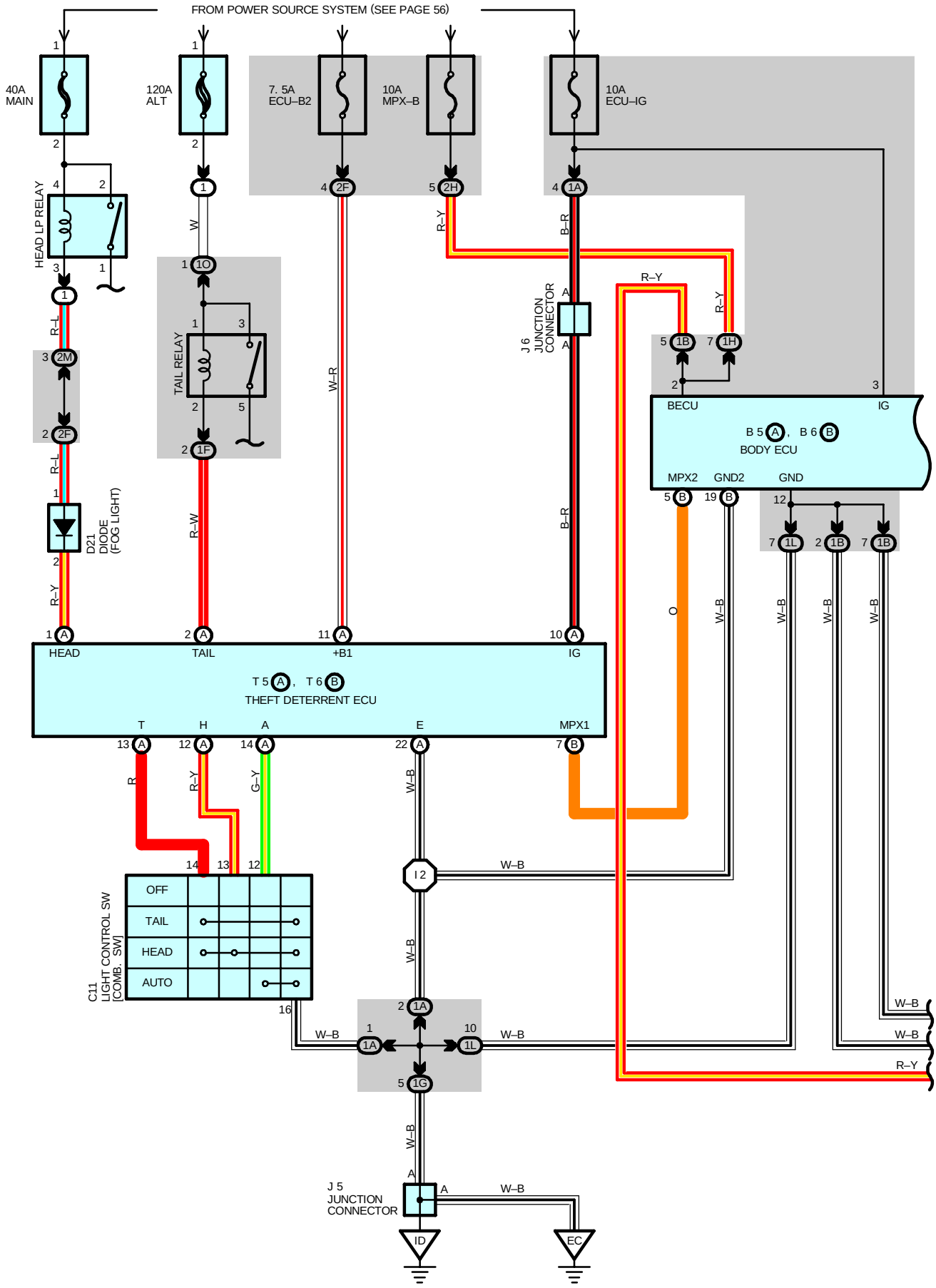
Code	See Page	Ground Points Location
IE	44	Front Floor Panel Center LH
IF	44	Front Floor Panel Center RH
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	

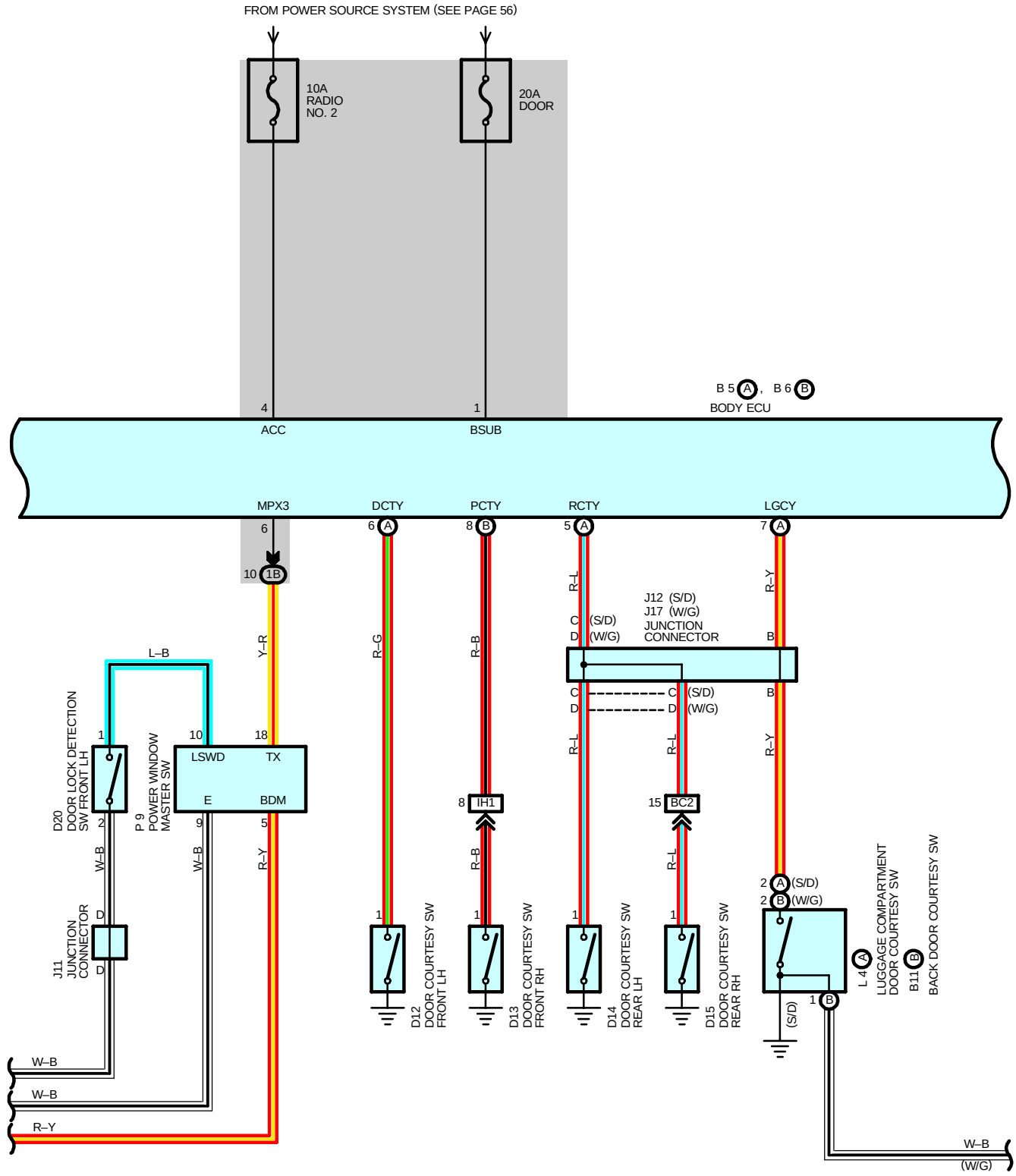


: SPLICE POINTS

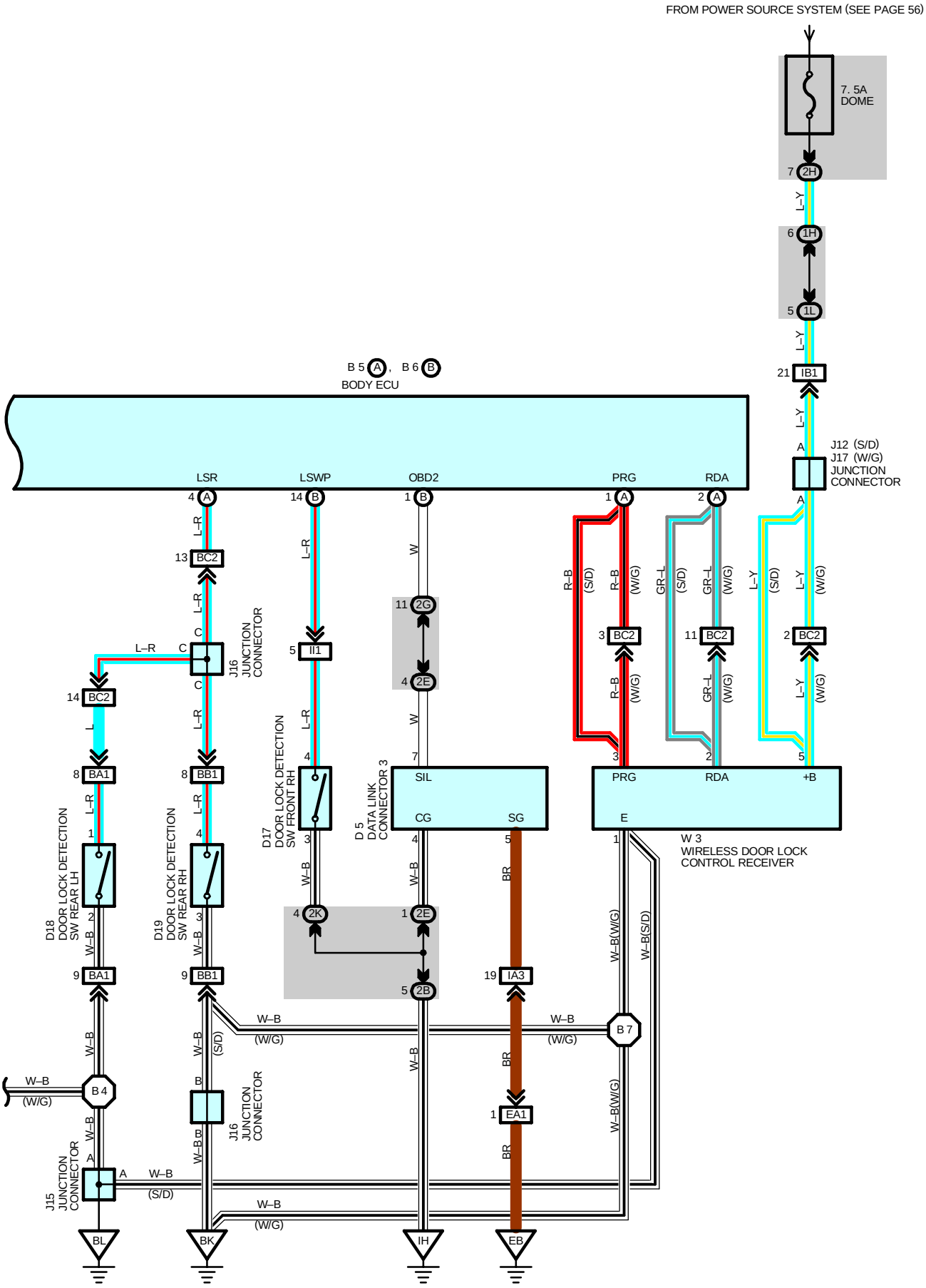
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I9	46	Instrument Panel Wire	I10	46	Instrument Panel Wire

LIGHT AUTO TURN OFF




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
RADIO
NO. 2
20A
DOOR
4
ACC
1
BSUB
B 5 A , B 6 B
BODY ECU
MPX3
DCTY
PCTY
RCTY
LGCY
6
10 1B
6 A
8 B
5 A
7 A
L–B
Y–R
R–G
R–B
R–L
R–Y
J12 (S/D)
J17 (W/G)
JUNCTION
CONNECTOR
C (S/D)
D (W/G)
B
D20
DOOR LOCK DETECTION
SW FRONT LH
P 9
POWER WINDOW
MASTER SW
LSWD
TX
E
BDM
1
10
18
2
9
5
W–B
W–B
R–Y
J11
JUNCTION
CONNECTOR
D
D
8 IH1
15 BC2
1
D12
DOOR COURTESY SW
FRONT LH
D13
DOOR COURTESY SW
FRONT RH
D14
DOOR COURTESY SW
REAR LH
D15
DOOR COURTESY SW
REAR RH
2 A (S/D)
2 B (W/G)
(S/D)
L 4
LUGGAGE COMPARTMENT
DOOR COURTESY SW
B11 B
BACK DOOR COURTESY SW
W–B
(W/G)

LIGHT AUTO TURN OFF



SYSTEM OUTLINE

This system automatically turns off the taillights and/or headlights when the driver door is opened and closed to prevent the lights from remaining lit.

LIGHT AUTO TURN OFF OPERATION

∗ Taillights ON

If the ignition SW is turned from ON to OFF with the taillights turned on (The light control SW is set at TAIL), the signal is input to TERMINAL IG of the theft deterrent ECU. At this time, if the driver door is opened, the signal is input from the door courtesy SW front LH to TERMINAL DCTY of the body ECU. After that, TERMINAL TAIL of the theft deterrent ECU is controlled through communication control of the body ECU etc. to turn off the TAIL relay. As a result, the current flowing into the taillights is cut off to turn off the taillights.

∗ Taillights and headlights ON

If the ignition SW is turned from ON to OFF with the taillights and headlights turned on (The light control SW is set at HEAD or AUTO), the signal is input to TERMINAL IG of the theft deterrent ECU. At this time, if any door is opened, the signal is input from the door courtesy SW to the body ECU. During this operation, the taillights and headlights are remained lit. When all doors and the luggage door (S/D) back door (W/G) are closed, the taillights and headlights are turned on for 30 sec. ,through communication control of the body ECU etc. After the set time has elapsed, a signal is input to TERMINAL TAIL and HEAD of the theft deterrent ECU, to turn off the TAIL relay and HEAD LP relay. As a result, the current flowing into the taillights and headlights is cut off to turn off the taillights and headlights.

If any door is opened during above operation, the taillights and headlights light up for 30 sec. again, and then go off after all the doors have been closed.

Additionally, if the vehicle is locked using the wireless door lock operation (Lock operation) while the taillights and headlights are being turned on for 30 sec., the taillights and headlights go off immediately.

SERVICE HINTS

C11 LIGHT CONTROL SW [COMB. SW]

14–16 : Continuity with the light control SW at **TAIL** or **HEAD** position

13–16 : Continuity with the light control SW at **HEAD** position

12–16 : Continuity with the light control SW at **AUTO** position

T5 (A), T6 (B) THEFT DETERRENT ECU

(A) 11, (B) 1–GROUND : Always approx. **12** volts

(A) 10–GROUND : Approx. **12** volts with the ignition SW at **ON** position

(A) 22–GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
B5	A	34	D17	36 (S/D)	J12		36 (S/D)
B6	B	34		38 (W/G)	J15		36 (S/D)
B11	B	38 (W/G)	D18	36 (S/D)			38 (W/G)
C11		34		38 (W/G)	J16		36 (S/D)
D5		34	D19	36 (S/D)			38 (W/G)
D12		36 (S/D)		38 (W/G)	J17		38 (W/G)
		38 (W/G)	D20	36 (S/D)	L4	A	36 (S/D)
D13		36 (S/D)		38 (W/G)	P9		37 (S/D)
		38 (W/G)	D21	34			39 (W/G)
D14		36 (S/D)	J5	35	T5	A	35
		38 (W/G)	J6	35	T6	B	35
D15		36 (S/D)	J11	36 (S/D)	W3		37 (S/D)
		38 (W/G)		38 (W/G)			39 (W/G)

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

LIGHT AUTO TURN OFF



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1F	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1O	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)



: GROUND POINTS

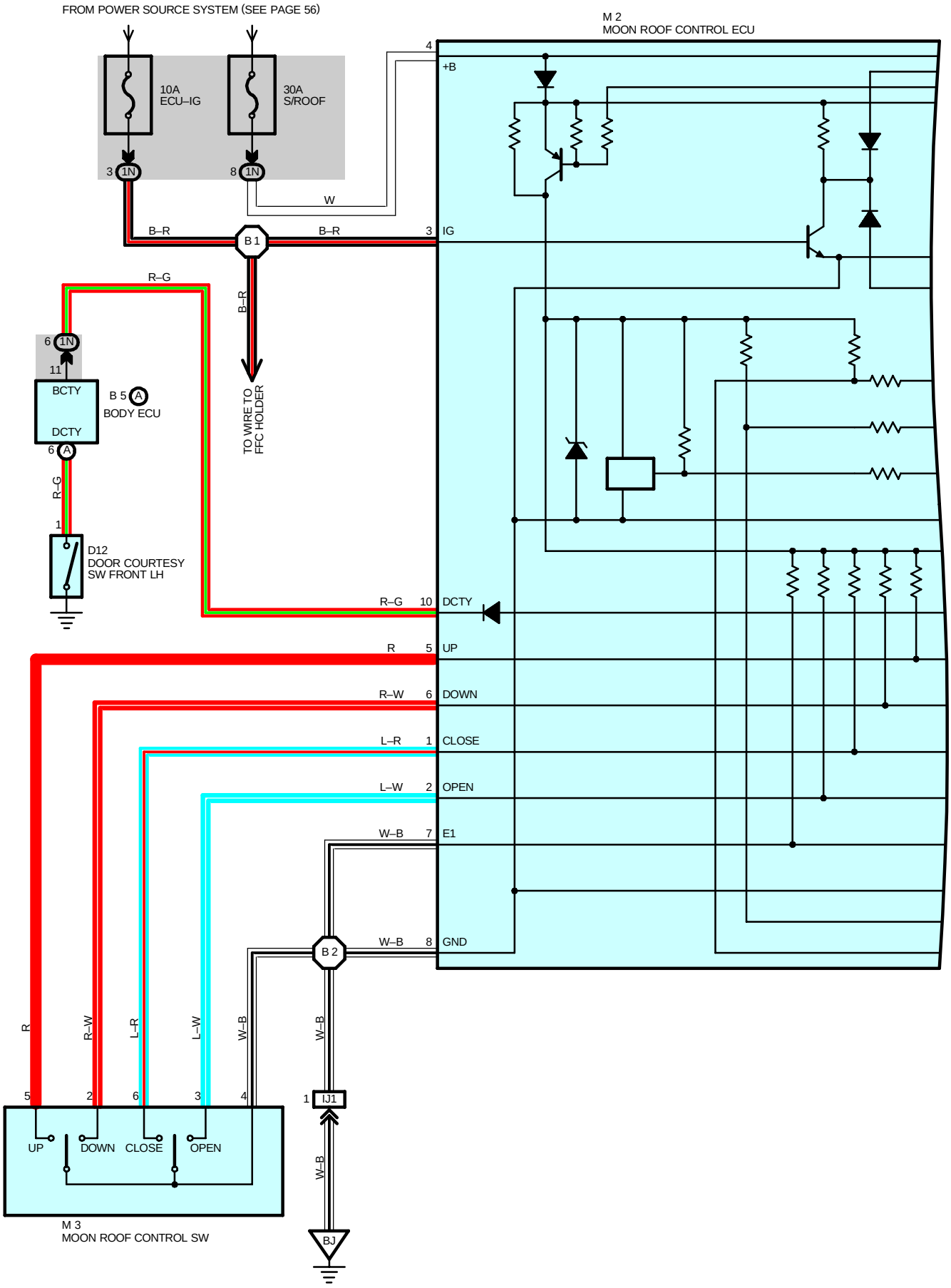
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

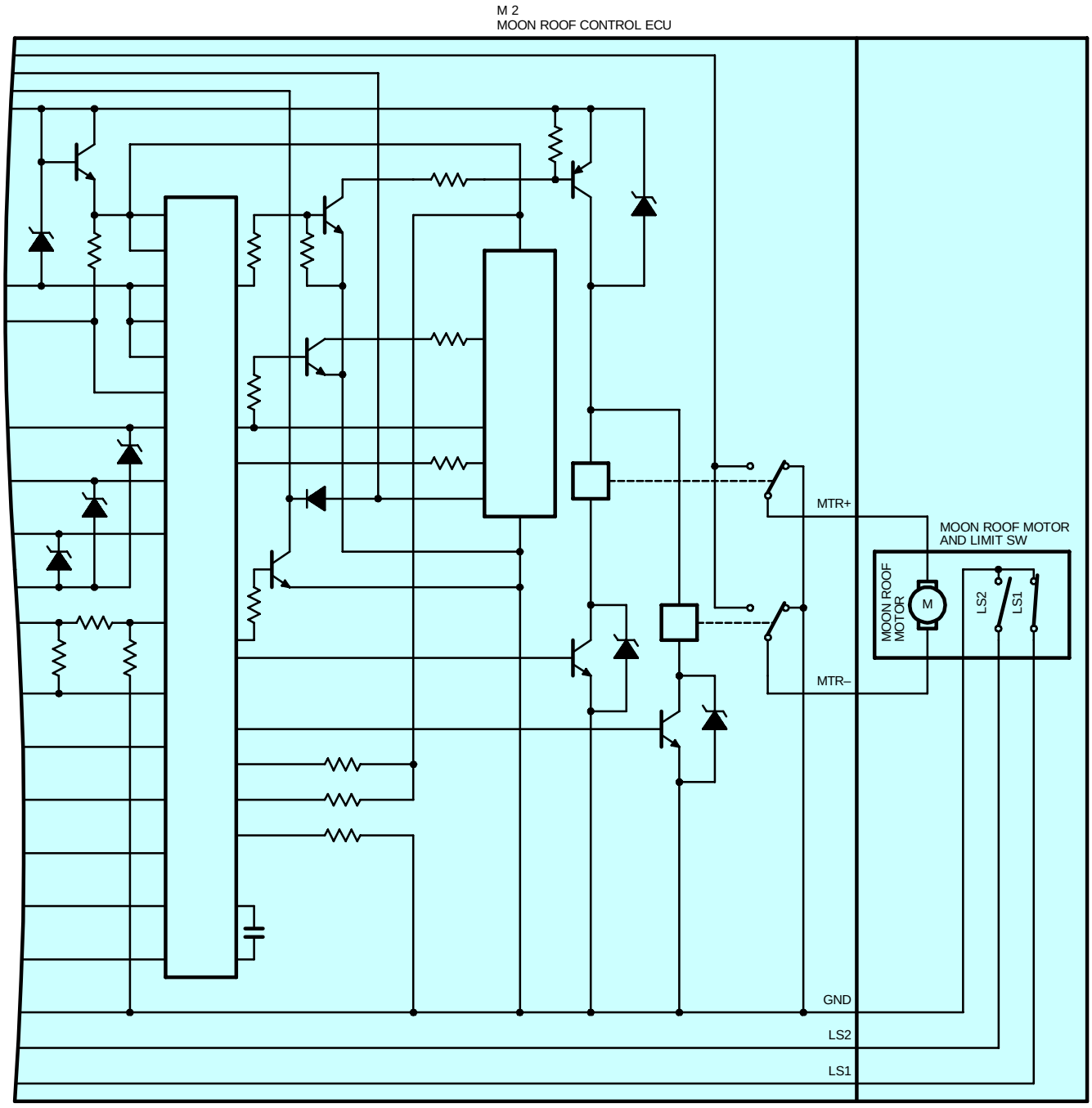


: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	46	Instrument Panel Wire	B7	50 (W/G)	Floor Wire
B4	50 (W/G)	Floor No.2 Wire			

MOON ROOF


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
M 2
MOON ROOF CONTROL ECU
10A
ECU–IG
30A
S/ROOF
3 1N
8 1N
W
B–R
B 1
B–R
4
+B
3
IG
R–G
B–R
6 1N
11
BCTY
DCTY
6 A
B 5 A
BODY ECU
TO WIRE TO
FFC HOLDER
R–G
1
D12
DOOR COURTESY
SW FRONT LH
R–G
10
DCTY
R
5
UP
R–W
6
DOWN
L–R
1
CLOSE
L–W
2
OPEN
W–B
7
E1
W–B
8
GND
B 2
R
R–W
L–R
L–W
W–B
W–B
5
2
6
3
4
1
IJ1
W–B
UP
DOWN
CLOSE
OPEN
M 3
MOON ROOF CONTROL SW
BJ


M 2
MOON ROOF CONTROL ECU
MTR+
MTR–
GND
LS2
LS1
MOON ROOF MOTOR
AND LIMIT SW
MOON ROOF MOTOR
M
LS2
LS1

MOON ROOF

SYSTEM OUTLINE

In this system, the HALL IC in the moon roof control ECU detects changes in the motor rotation to allow opening/closing and tilting up/down of the moon roof using one touch operation. Additionally, catching prevention mechanism during moon roof operation is also provided.

Voltage is always applied from the S/ROOF fuse to TERMINAL 4 of the moon roof control ECU. When the ignition SW is turned to ON, the voltage is applied from the ECU–IG fuse to TERMINAL 3 of the moon roof control ECU.

1. SLIDE OPEN OPERATION

When the moon roof control SW is pressed to OPEN position (The limit SW No.1 is off and limit SW No.2 is on), the signal is input from TERMINAL 3 of the moon roof control SW to TERMINAL 2 of the moon roof control ECU. This activates the relay and rotates the motor to open the moon roof. After that, when the limit SW No.1 is turned on, and then turned off again, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is opened (30 mm from the fully opened position), and stops the motor rotation. After that, when the moon roof control SW is pressed to OPEN position again, the moon roof is fully open. If other operation SW or open SW is operated while the moon roof is being opened, the relay is activated to stop the moon roof operation. Additionally, when the moon roof is tilted up, the slide open operation does not function.

2. SLIDE CLOSE OPERATION

When the moon roof control SW is pressed to CLOSE position (The limit SW No.1 is off and limit SW No.2 is off), the signal is input from TERMINAL 6 of the moon roof control SW to TERMINAL 1 of the moon roof control ECU. This activates the relay and rotates the motor to automatically close the moon roof. After that, when the limit SW No.2 is turned on, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is fully closed, and stops the motor rotation. If other operation SW or close SW is operated while the moon roof is being closed, the relay is activated to stop the moon roof operation.

3. TILT UP OPERATION

When the moon roof control SW is pressed to TILT UP position (The limit SW No.1 is off and limit SW No.2 is on), the signal is input from TERMINAL 5 of the moon roof control SW to TERMINAL 5 of the moon roof control ECU. This activates the relay and rotates the motor to automatically tilt up the moon roof. If the pulse signal sent from the HALL IC is not input when the moon roof is fully tilted up, the relay determines that the motor has stopped, and stops the current flowing into the motor.
If other operation SW or tilt up SW is operated while the moon roof is being tilted up, the relay is activated to stop the moon roof operation. Additionally, when the moon roof is open, the tilt up operation does not function.

4. TILT DOWN OPERATION

When the moon roof control SW is pressed to TILT DOWN position (The limit SW No.1 is on and limit SW No.2 is on), the signal is input from TERMINAL 2 of the moon roof control SW to TERMINAL 6 of the moon roof control ECU. This activates the relay and rotates the motor to automatically tilt down the moon roof. When the limit SW No.1 is turned off, the pulse signal sent from the HALL IC activates the relay, and it determines that the moon roof is fully closed, and stops the motor rotation.
If other operation SW or tilt down SW is operated while the moon roof is being tilted down, the relay is activated to stop the moon roof operation.

5. CATCHING PREVENTION FUNCTION

If the moon roof control ECU detects a catching load from changes in the motor rotation during slide close or tilt down operation, the operation is stopped, and then the motor is rotated in the reverse direction.
Slide close operation
The moon roof is moved approximately 200 mm in the reverse direction (Slide open) after a catching load has been detected. However, if the full open position is detected before moving approximately 200 mm completely, the reverse movement is stopped.
Tilt down operation
If a catching load is detected during tilt down operation, the moon roof is fully tilted up.

6. KEY OFF MOON ROOF OPERATION

The moon roof can be operated for approximately 45 seconds, when the ignition SW is turned from ON to OFF with all doors closed. However, when the driver side door is opened during this time, the operation is canceled.

7. FAIL SAFE FUNCTION

If the moon roof is operated continuously in the same operating direction, the current flowing into the motor is cut off when the time shown below has elapsed after the motor operation has been started.
Slide open/close operation with the moon roof control SW Approximately 20 sec.
Tilt up/down operation with the moon roof control SW Approximately 2 sec.
Slide open operation for reverse movement in case of activation of the catching prevention function Approximately 20 sec.
Tilt open operation for reverse movement in case of activation of the catching prevention function Approximately 2 sec.

SERVICE HINTS

M2 MOON ROOF CONTROL ECU

4–GROUND : Always approx. **12** volts
3–GROUND : Approx. **12** volts with the ignition SW at **ON** position
7–GROUND : Always continuity

M3 MOON ROOF CONTROL SW

5–4 : Closed with the moon roof control SW at **TILT UP** position
2–4 : Closed with the moon roof control SW at **TILT DOWN** position
3–4 : Closed with the moon roof control SW at **OPEN** position
6–4 : Closed with the moon roof control SW at **CLOSE** position
4–GROUND : Always continuity



: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
B5	A	34	M2	37 (S/D)	M3	39 (W/G)
D12		36 (S/D)		39 (W/G)		
		38 (W/G)	M3	37 (S/D)		



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)



: GROUND POINTS

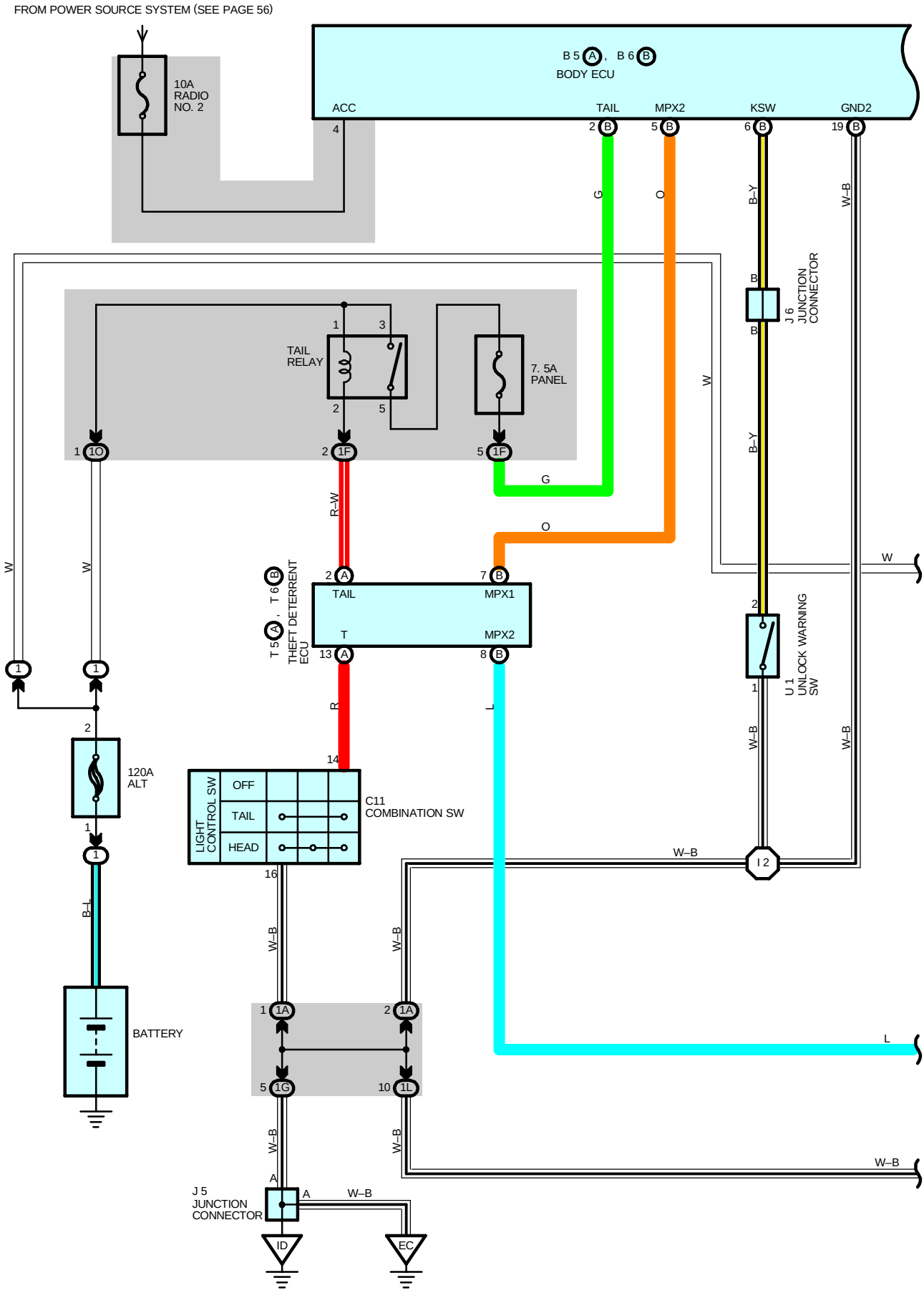
Code	See Page	Ground Points Location
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	

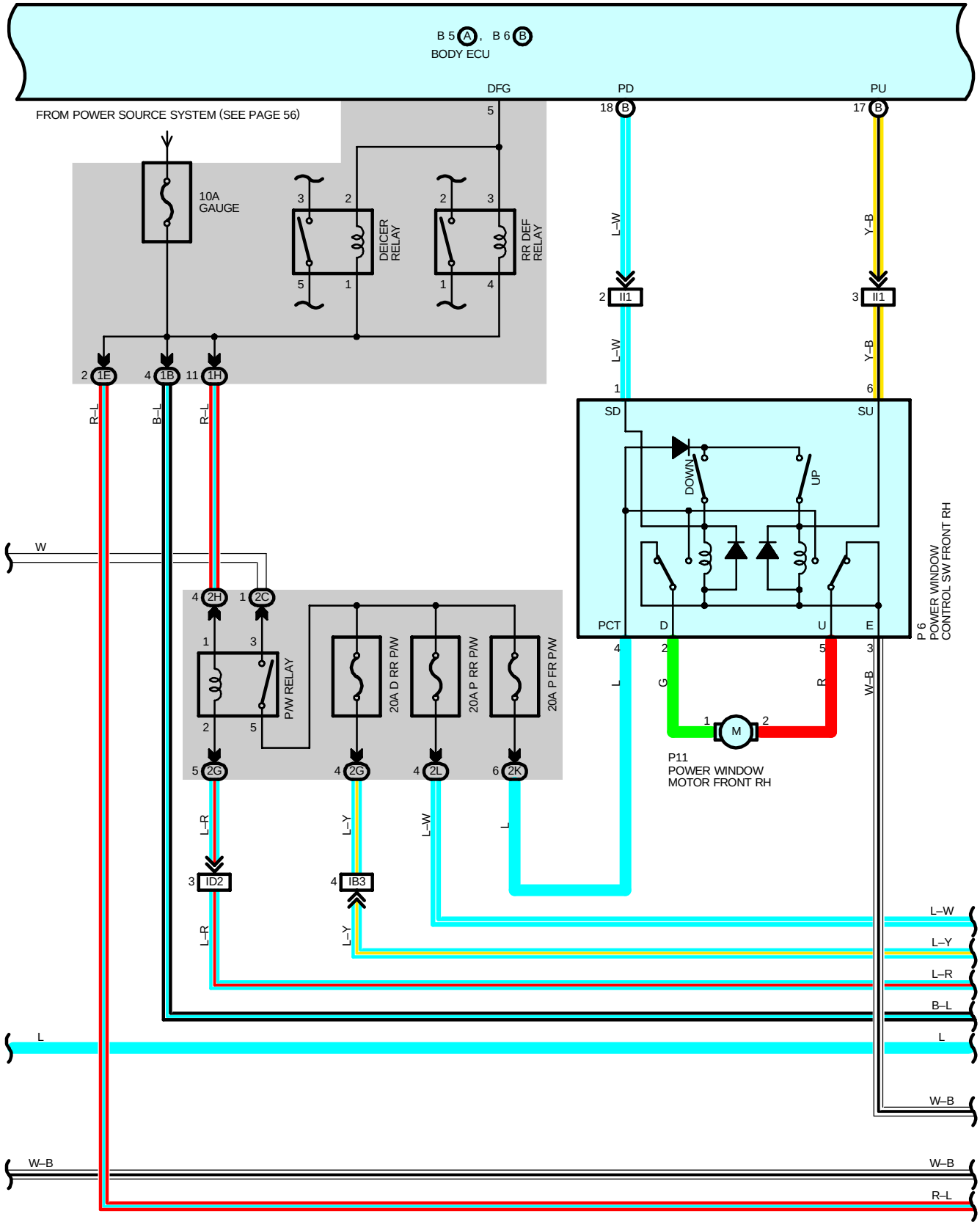


: SPLICE POINTS

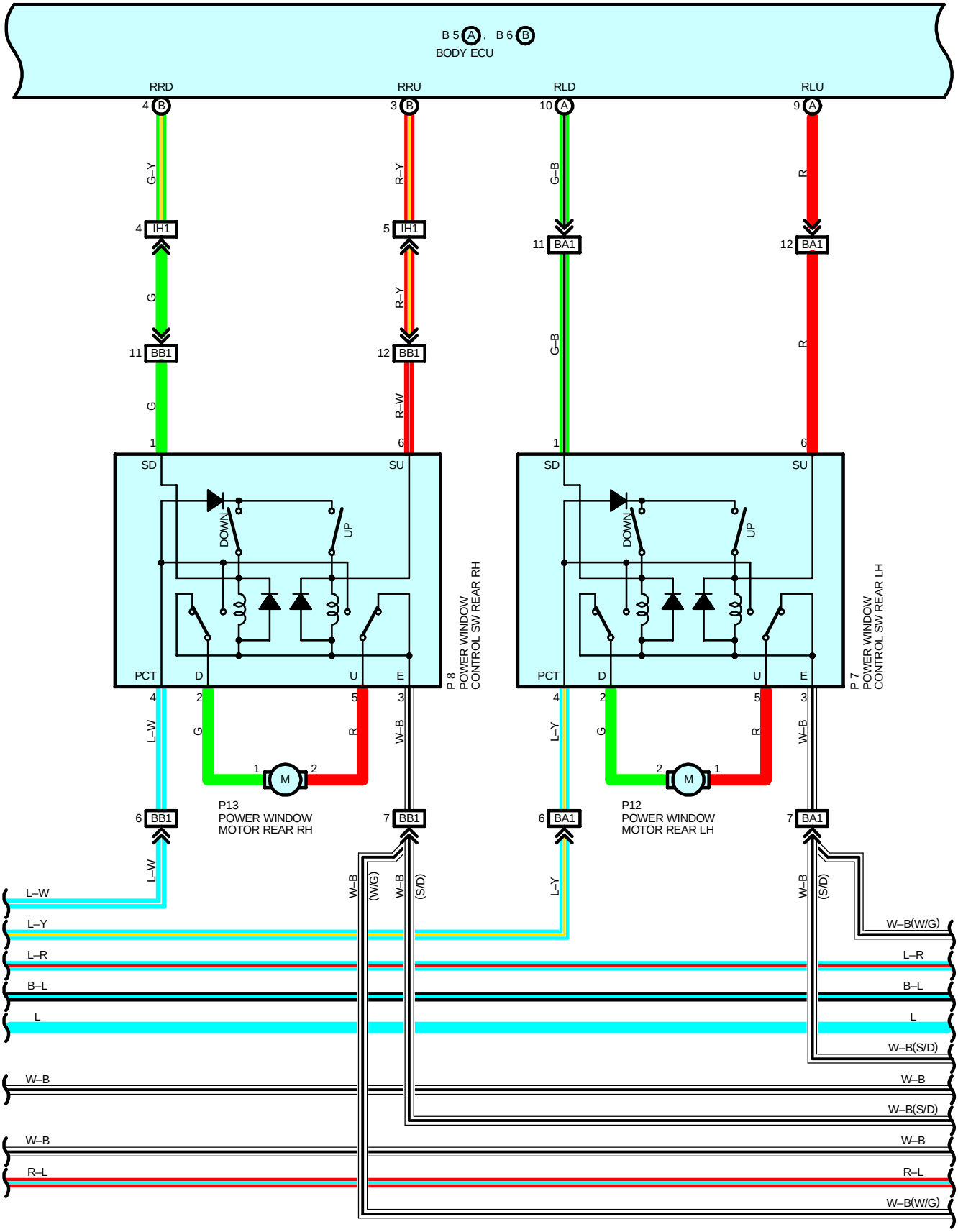
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	48 (S/D)	Roof Wire	B2	48 (S/D)	Roof Wire
	50 (W/G)			50 (W/G)	

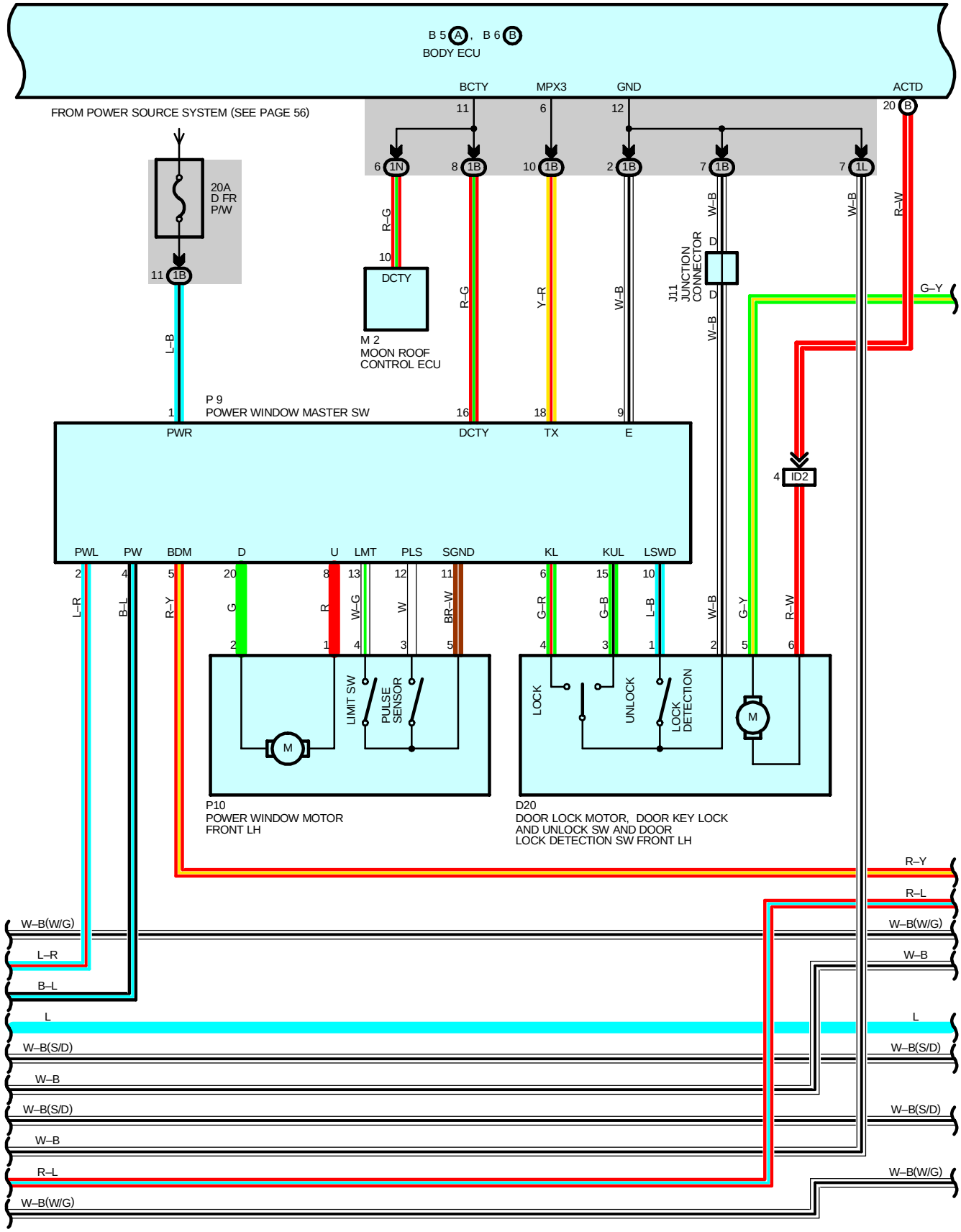
MULTIPLEX COMMUNICATION SYSTEM



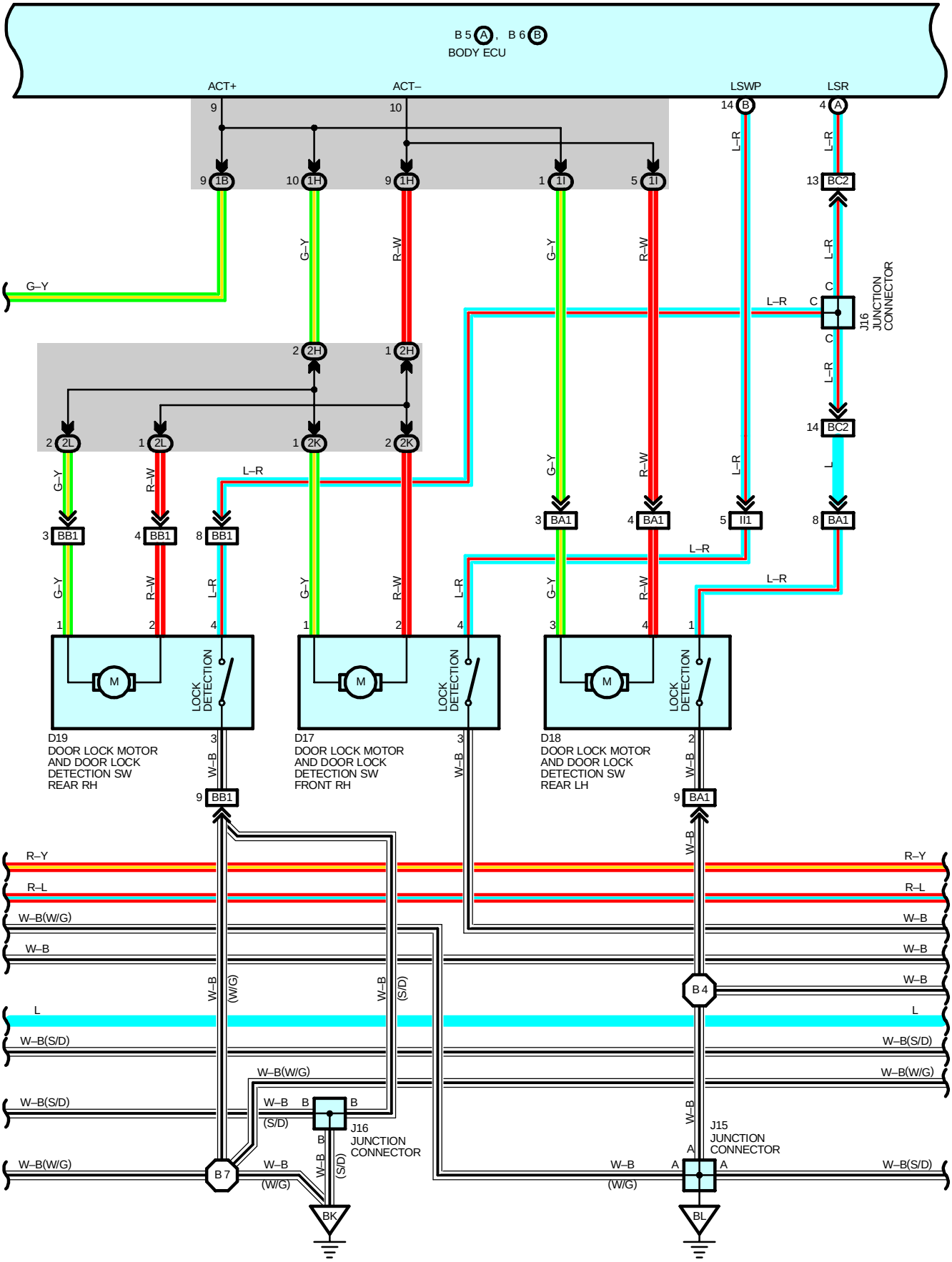

B 5 A , B 6 B
BODY ECU
DFG
PD
PU
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
DEICER
RELAY
RR DEF
RELAY
L–W
Y–B
II1
SD
SU
DOWN
UP
PCT
D
U
E
P 6
POWER WINDOW
CONTROL SW FRONT RH
P11
POWER WINDOW
MOTOR FRONT RH
M
W
P/W RELAY
20A D RR P/W
20A P RR P/W
20A P FR P/W
ID2
IB3
R–L
B–L
L–R
L–Y
L
W–B

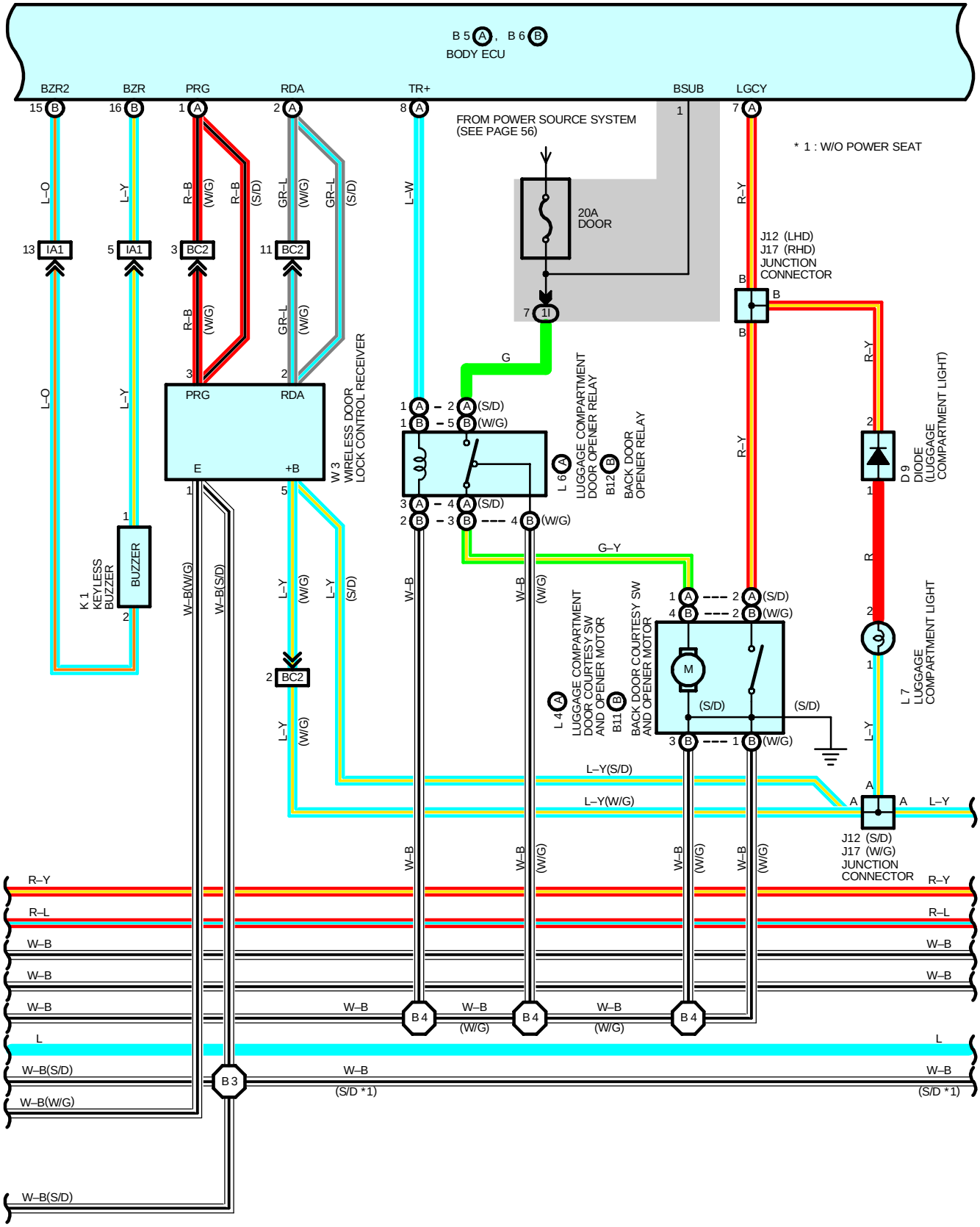
MULTIPLEX COMMUNICATION SYSTEM



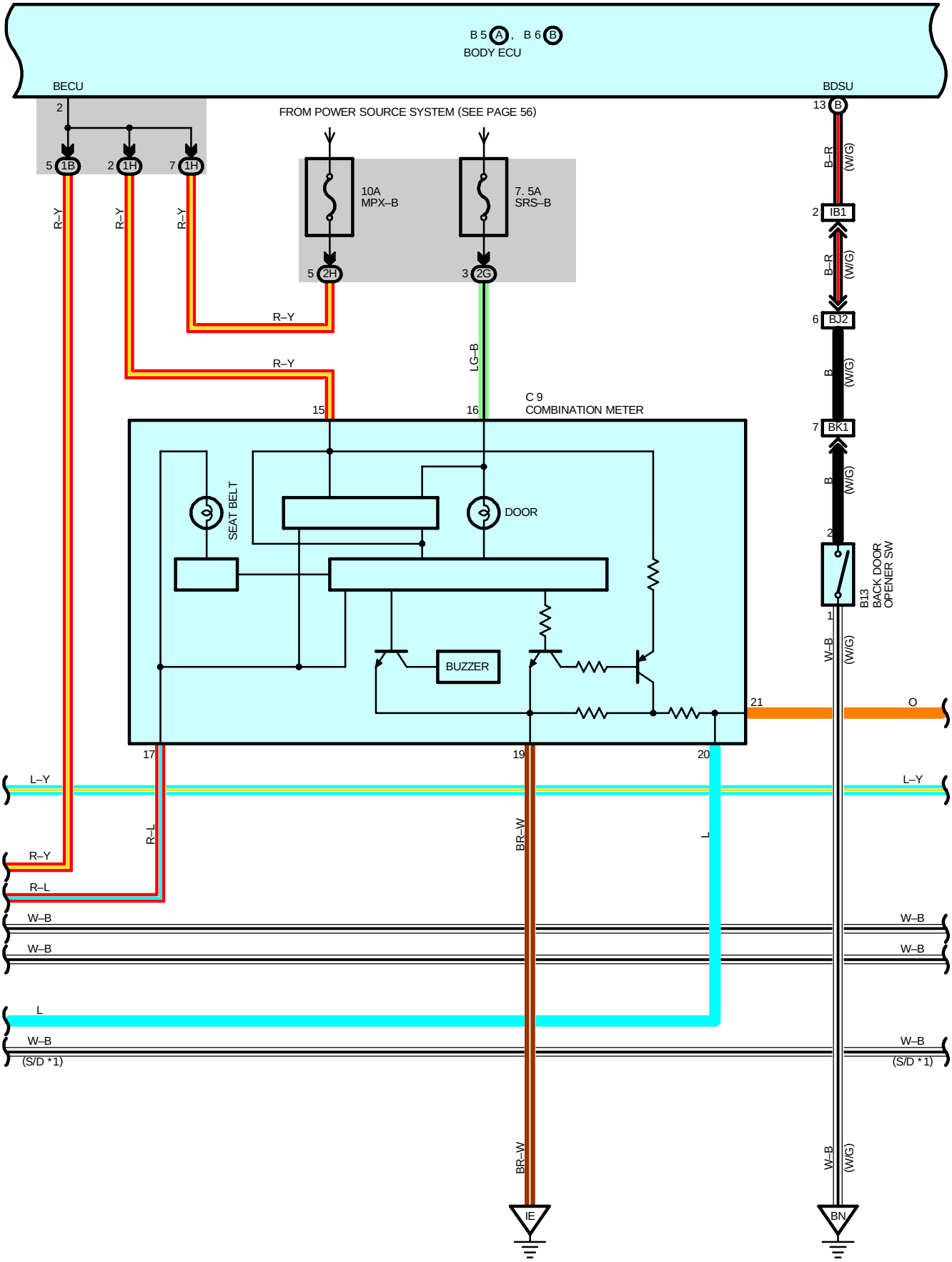

B 5 A , B 6 B
BODY ECU
BCTY
MPX3
GND
ACTD
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
20A
D FR
P/W
DCTY
M 2
MOON ROOF
CONTROL ECU
J11
JUNCTION
CONNECTOR
P 9
POWER WINDOW MASTER SW
PWR
DCTY
TX
E
ID2
PWL
PW
BDM
D
U
LMT
PLS
SGND
KL
KUL
LSWD
LIMT SW
PULSE
SENSOR
LOCK
UNLOCK
LOCK
DETECTION
P10
POWER WINDOW MOTOR
FRONT LH
D20
DOOR LOCK MOTOR, DOOR KEY LOCK
AND UNLOCK SW AND DOOR
LOCK DETECTION SW FRONT LH
R–G
L–B
R–G
Y–R
W–B
W–B
W–B
R–W
G–Y
L–R
B–L
R–Y
G
R
W–G
W
BR–W
G–R
G–B
L–B
W–B
G–Y
R–W
R–Y
R–L
W–B(W/G)
L–R
B–L
L
W–B(S/D)
W–B
W–B(S/D)
W–B
R–L
W–B(W/G)
W–B(W/G)

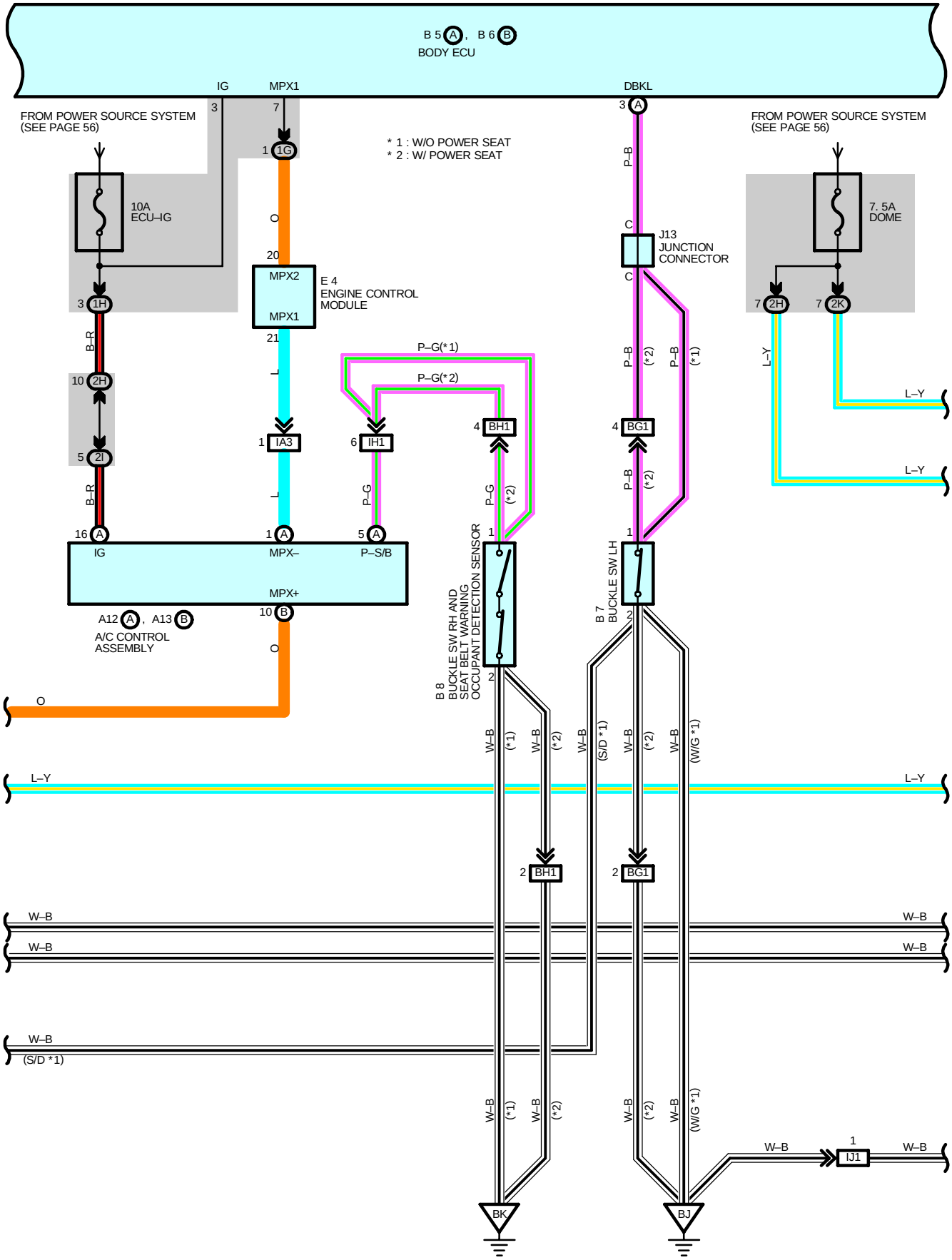
MULTIPLEX COMMUNICATION SYSTEM



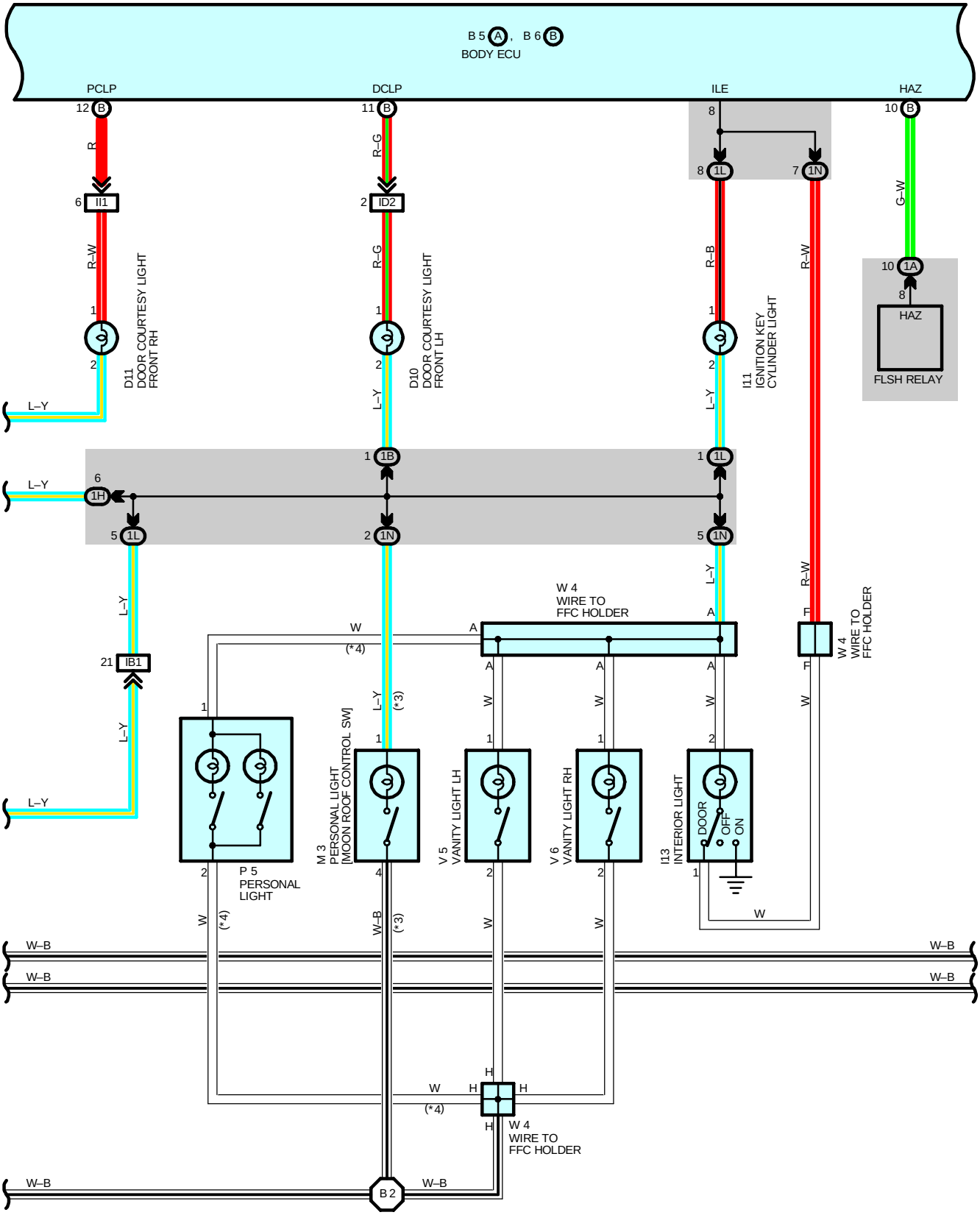

B 5 A , B 6 B
BODY ECU
BZR2
BZR
PRG
RDA
TR+
BSUB
LGCY
FROM POWER SOURCE SYSTEM
(SEE PAGE 56)
* 1 : W/O POWER SEAT
20A
DOOR
J12 (LHD)
J17 (RHD)
JUNCTION
CONNECTOR
IA1
BC2
PRG
RDA
E
+B
W 3
WIRELESS DOOR
LOCK CONTROL RECEIVER
K 1
KEYLESS
BUZZER
BUZZER
LUGGAGE COMPARTMENT
DOOR OPENER RELAY
BACK DOOR
OPENER RELAY
B12
L 6
D 9
DIODE
(LUGGAGE
COMPARTMENT LIGHT)
L 7
LUGGAGE
COMPARTMENT LIGHT
LUGGAGE COMPARTMENT
DOOR COURTESY SW
AND OPENER MOTOR
L 4
B11
BACK DOOR COURTESY SW
AND OPENER MOTOR
L–Y(S/D)
L–Y(W/G)
W–B(S/D)
W–B(W/G)
B 4
B 3
(S/D *1)

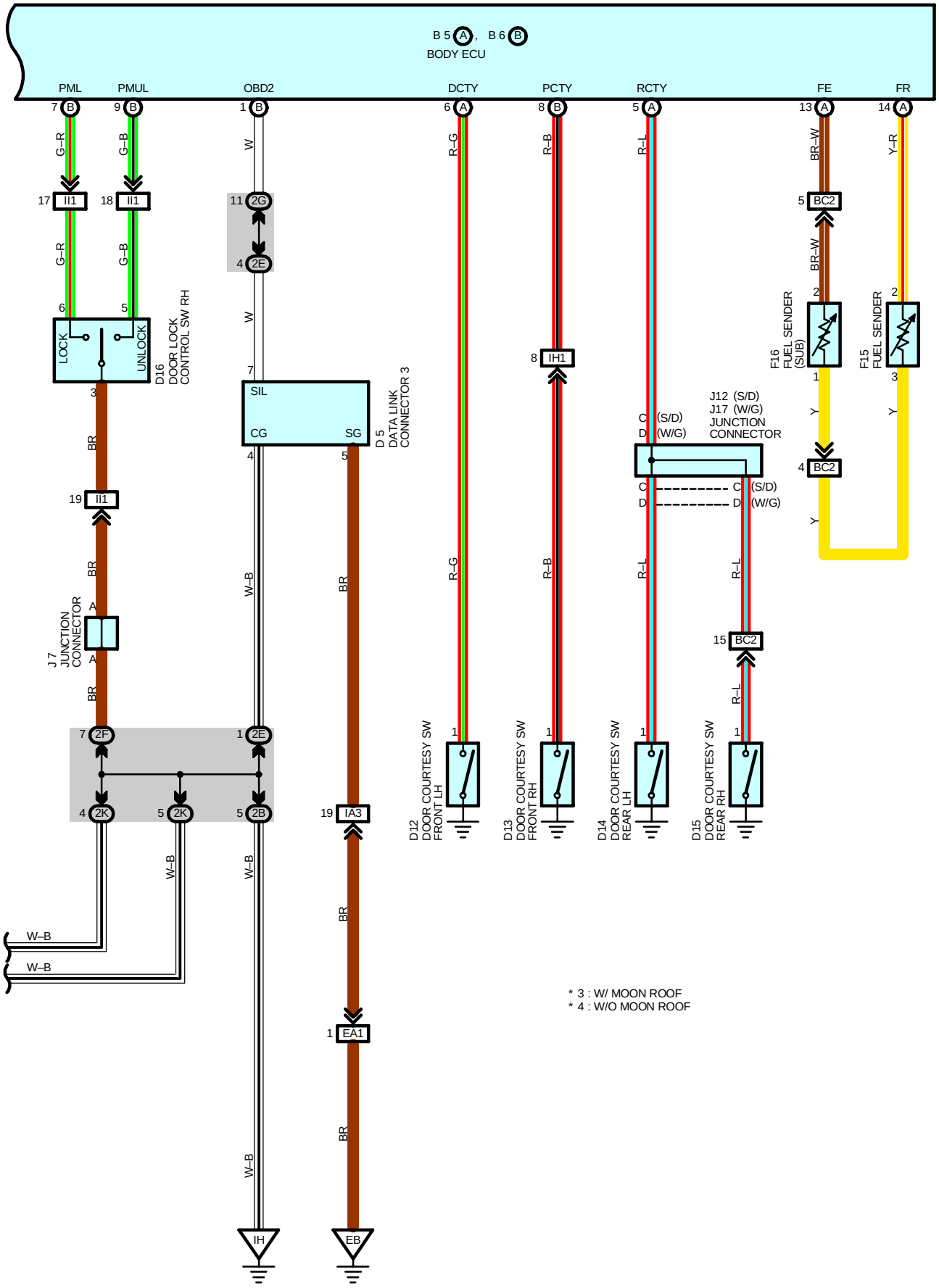
MULTIPLEX COMMUNICATION SYSTEM




B 5 A , B 6 B
BODY ECU
IG
MPX1
DBKL
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
* 1 : W/O POWER SEAT
* 2 : W/ POWER SEAT
10A ECU–IG
E 4 ENGINE CONTROL MODULE
MPX2
MPX1
J13 JUNCTION CONNECTOR
7. 5A DOME
P–G(*1)
P–G(*2)
IA3
IH1
BH1
BG1
IG
MPX–
P–S/B
MPX+
A12 A , A13 B
A/C CONTROL ASSEMBLY
B 8 BUCKLE SW RH AND SEAT BELT WARNING OCCUPANT DETECTION SENSOR
B 7 BUCKLE SW LH
(S/D *1)
(W/G *1)
IJ1
BK
BJ
B–R
P–B
P–G
L
O
L–Y
W–B

MULTIPLEX COMMUNICATION SYSTEM




B 5 A , B 6 B
BODY ECU
PML
PMUL
OBD2
DCTY
PCTY
RCTY
FE
FR
LOCK
UNLOCK
D16
DOOR LOCK
CONTROL SW RH
SIL
CG
SG
D 5
DATA LINK
CONNECTOR 3
J 7
JUNCTION
CONNECTOR
J12 (S/D)
J17 (W/G)
JUNCTION
CONNECTOR
F16
FUEL SENDER
(SUB)
F15
FUEL SENDER
D12
DOOR COURTESY SW
FRONT LH
D13
DOOR COURTESY SW
FRONT RH
D14
DOOR COURTESY SW
REAR LH
D15
DOOR COURTESY SW
REAR RH
IH
EB
* 3 : W/ MOON ROOF
* 4 : W/O MOON ROOF

MULTIPLEX COMMUNICATION SYSTEM

SYSTEM OUTLINE

MULTIPLEX COMMUNICATION SYSTEM

The system is comprised of the communication modes of the body ECU, engine control module, theft deterrent ECU, power window master SW, combination meter and A/C control assembly. The body electrical systems are controlled by a serial communication in which each ECU is linked to another via a single communication line. This system is also equipped with a self–diagnosis function.

The table below shows the systems under the control of the MPX communication system and related ECUs (Communication nodes).

	Body ECU	Engine Control Module	Combination Meter	A/C Control Assembly	Theft Deterrent ECU
Door Lock Control	1	–	–	–	–
Wireless Door Lock Control	1	–	–	–	2
Light Auto Turn Off	–	–	–	–	1
Automatic Light Control	–	–	–	–	1
Theft Deterrent	2	–	–	–	1
Illuminated Entry	1	–	–	–	–
Key Reminder Buzzer	1	–	2	–	–
Luggage Compartment Door or Back Door Opener	1	–	–	–	–
C–BEST System	1	–	2	2	2
Diagnosis System	1	–	2	2	2
Seat Belt Warning	1	–	2	–	–
Electronically Controlled Transmission Signal	–	1	2	2	–
A/C Control	–	2	–	1	–
Multi Information Display	2	2	1	2	–

1 : Master control 2 : Sub control

1. COMMUNICATION OUTLINE

Communication is implemented among the combination meter, A/C control assembly, body ECU, engine control module and theft deterrent ECU, and among the body ECU and power window master SW.

Upon receiving signals from applicable switches such as the door lock control switch or door courtesy light switch, each ECU determines the conditions of the switches as well as of the doors, and after converting this information into digital signals, outputs them to other ECUs via serial data communication. The ECU that receives these digital signals determines the conditions of the switches and doors so that it can implement various controls such as to activate a door lock motor.

However, if there are no changes in the input signals because no doors were opened and no switches were used within 30 seconds, the body ECU interrupts the communication to save electricity. Following this interruption, any changes in the input signals will cause the communication to resume.

For details please refer to the new car features and repair manuals.

SERVICE HINTS

B5 (A), B6 (B) BODY ECU

3–GROUND : Approx. **12** volts with the ignition SW at **ON** position
1–GROUND : Always approx. **12** volts
2–GROUND : Always approx. **12** volts
12–GROUND : Always continuity
4–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
(B)19–GROUND : Always continuity

MULTIPLEX COMMUNICATION SYSTEM

: PARTS LOCATION

Code		See Page
A12	A	34
A13	B	34
B5	A	34
B6	B	34
B7		36 (S/D w/o Power Seat)
		38 (W/G w/o Power Seat)
		40 (w/ Power Seat)
B8		36 (S/D w/o Power Seat)
		38 (W/G w/o Power Seat)
		40 (w/ Power Seat)
B11	B	38 (W/G)
B12	B	38 (W/G)
B13		38 (W/G)
C9		34
C11		34
D5		34
D9		36 (S/D)
		38 (W/G)
D10		36 (S/D)
		38 (W/G)
D11		36 (S/D)
		38 (W/G)
D12		36 (S/D)
		38 (W/G)
D13		36 (S/D)
		38 (W/G)
D14		36 (S/D)
		38 (W/G)
D15		36 (S/D)
		38 (W/G)
D16		36 (S/D)
		38 (W/G)
D17		36 (S/D)

Code		See Page
D17		38 (W/G)
D18		36 (S/D)
		38 (W/G)
D19		36 (S/D)
		38 (W/G)
D20		36 (S/D)
		38 (W/G)
E4		32
F15		36 (S/D)
		38 (W/G)
F16		36 (S/D)
		38 (W/G)
I11		35
I13		36 (S/D)
		38 (W/G)
J5		35
J6		35
J7		35
J11		36 (S/D)
		38 (W/G)
J12		36 (S/D)
J13		36 (S/D)
		38 (W/G)
J15		36 (S/D)
		38 (W/G)
J16		36 (S/D)
		38 (W/G)
J17		38 (W/G)
K1		33
L4	A	36 (S/D)
L6	A	36 (S/D)
L7		36 (S/D)
		38 (W/G)

Code		See Page
M2		37 (S/D)
		39 (W/G)
M3		37 (S/D)
		39 (W/G)
P5		37 (S/D)
		39 (W/G)
P6		37 (S/D)
		39 (W/G)
P7		37 (S/D)
		39 (W/G)
P8		37 (S/D)
		39 (W/G)
P9		37 (S/D)
		39 (W/G)
P10		37 (S/D)
		39 (W/G)
P11		37 (S/D)
		39 (W/G)
P12		37 (S/D)
		39 (W/G)
P13		37 (S/D)
		39 (W/G)
T5	A	35
T6	B	35
U1		35
V5		37 (S/D)
		39 (W/G)
V6		37 (S/D)
		39 (W/G)
W3		37 (S/D)
		39 (W/G)
W4		37 (S/D)
		39 (W/G)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1N	24	Roof Wire and Driver Side J/B (Left Kick Panel)
1O	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2C		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2I		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IB3		
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)
BJ2	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

MULTIPLEX COMMUNICATION SYSTEM



: GROUND POINTS

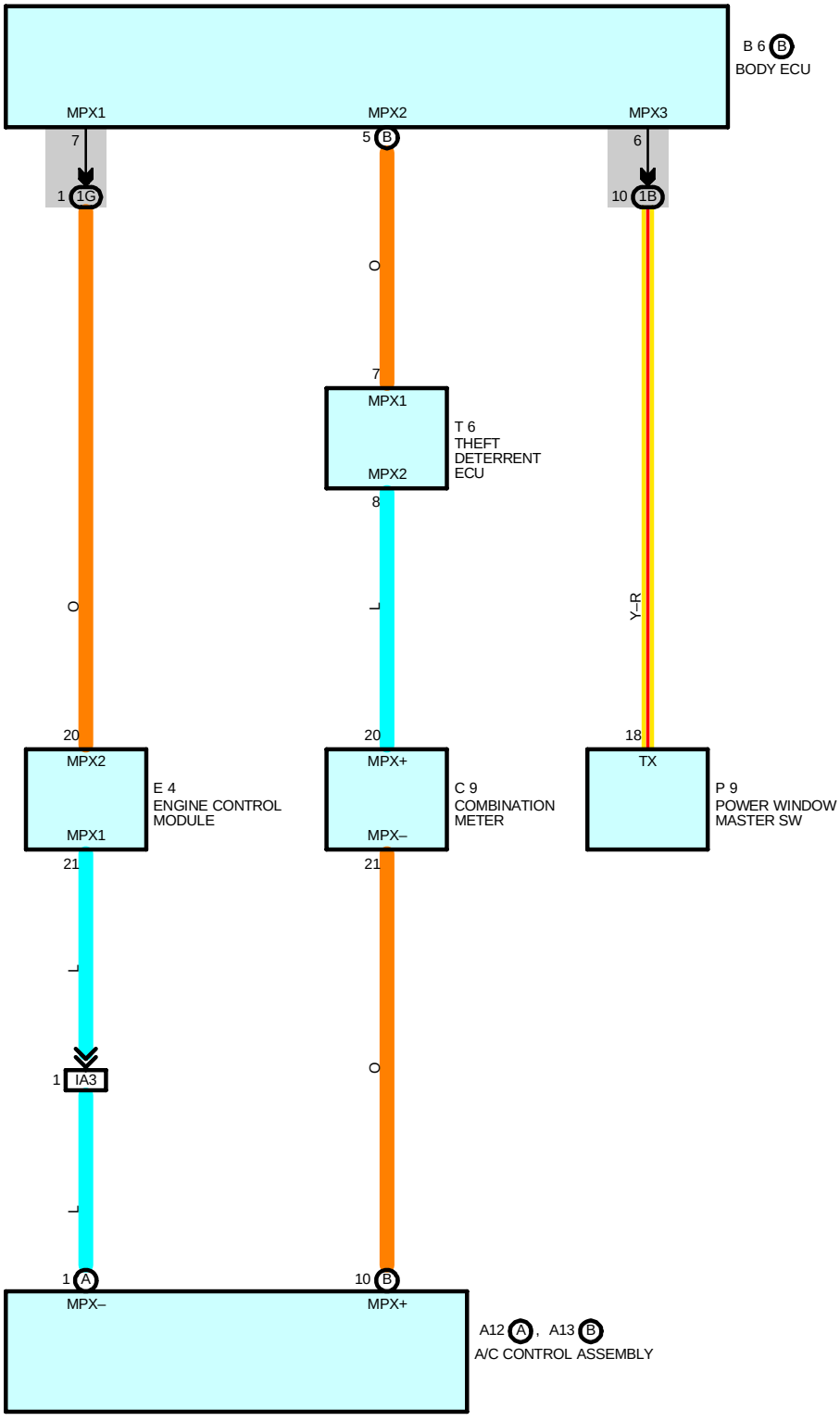
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	
BN	50 (W/G)	Right Side of the Back Panel Lower



: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	46	Instrument Panel Wire	B4	48 (S/D)	Floor No.2 Wire
B2	48 (S/D)	Roof Wire		50 (W/G)	
	50 (W/G)		B7	50 (W/G)	Floor Wire
B3	48 (S/D)	Floor No.2 Wire			

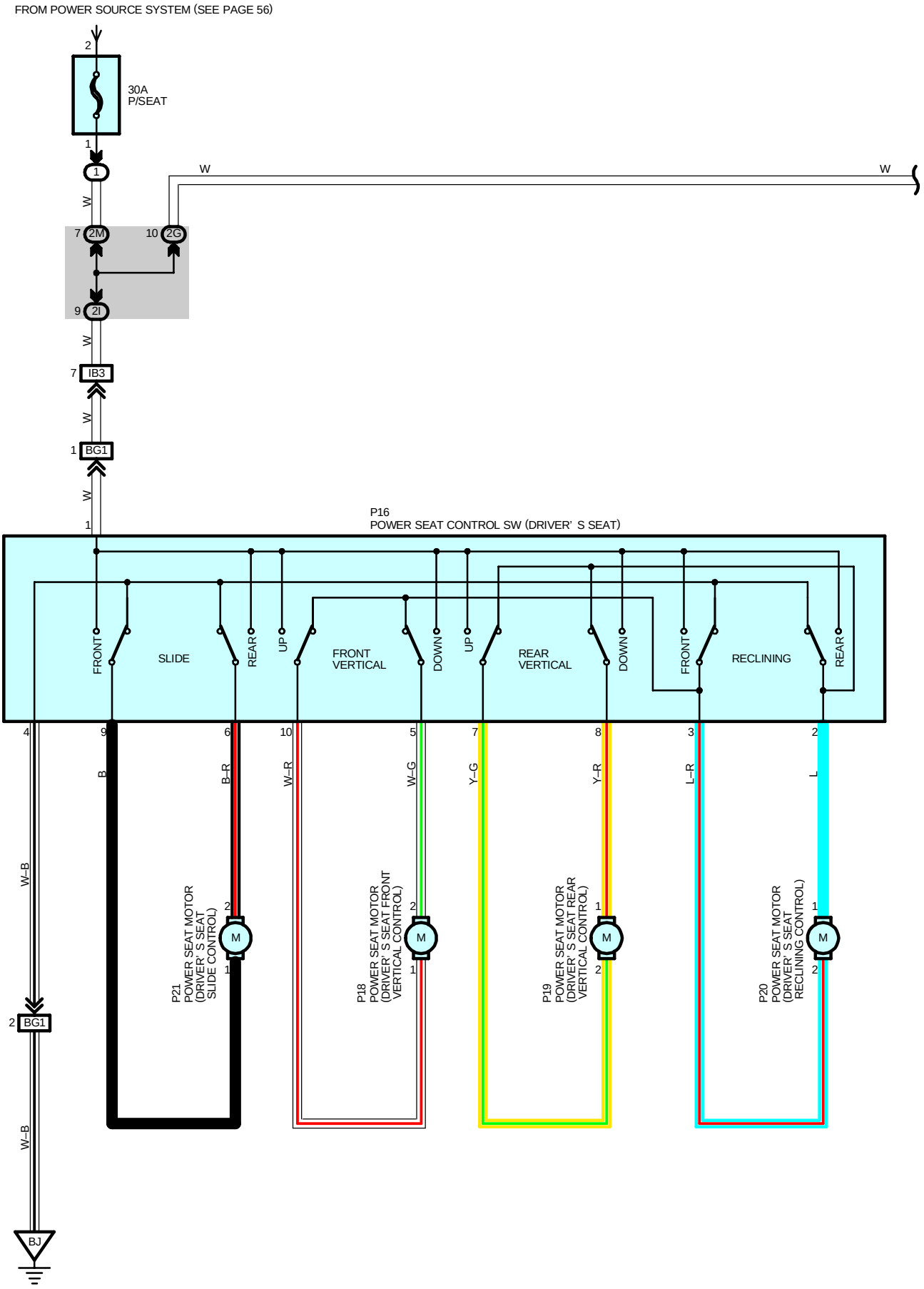
MULTIPLEX COMMUNICATION SYSTEM (COMMUNICATION BUS)

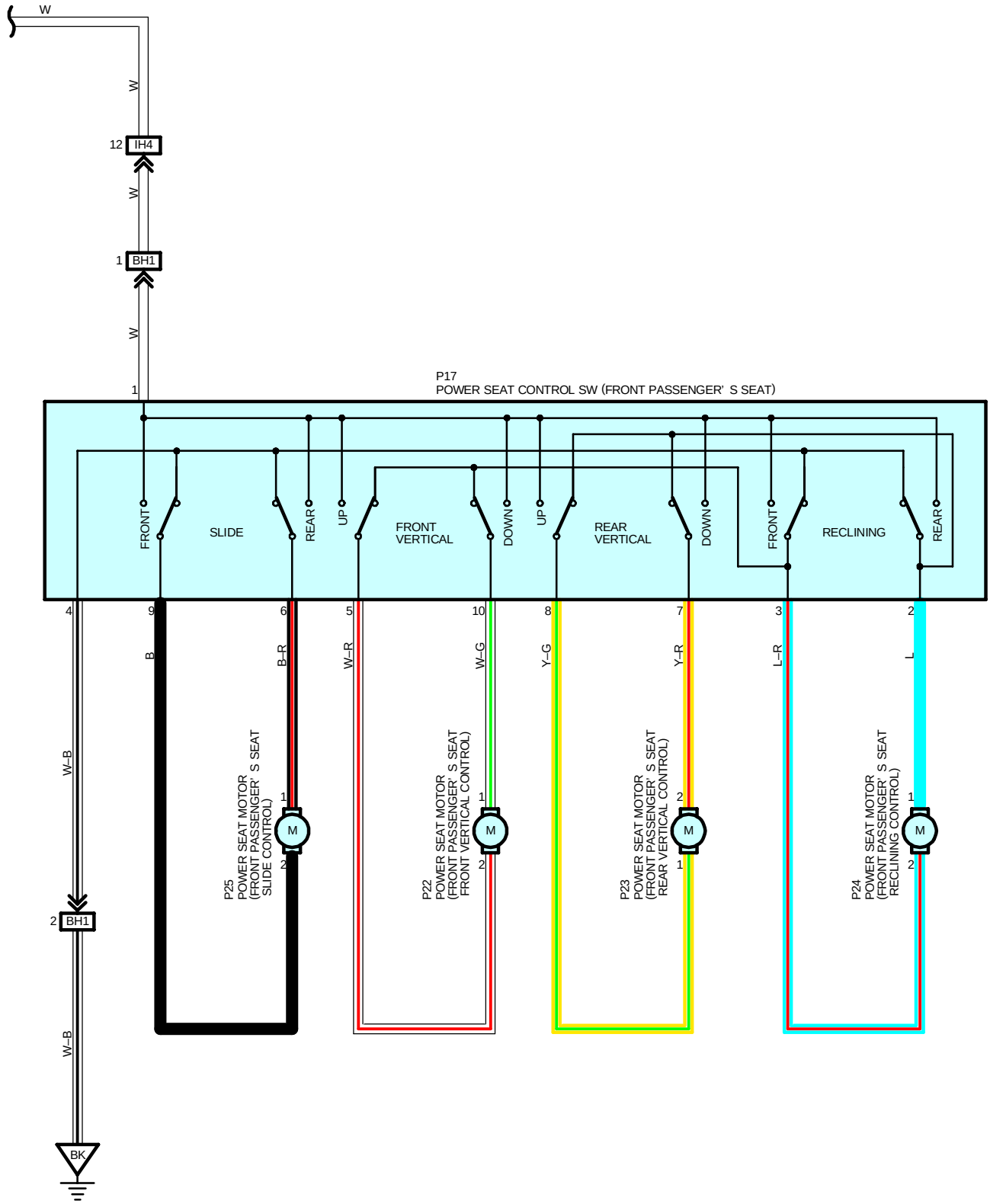


MULTIPLEX COMMUNICATION SYSTEM INCLUDES FOLLOWING SYSTEMS

- **AUTOMATIC AIR CONDITIONING**
- **AUTOMATIC LIGHT CONTROL**
- **BACK DOOR OPENER**
- **CHARGING**
- **COMBINATION METER**
- **CRUISE CONTROL**
- **DOOR LOCK CONTROL AND WIRELESS DOOR LOCK CONTROL**
- **ELECTRONICALLY CONTROLLED TRANSMISSION AND A/T INDICATOR**
- **ENGINE CONTROL**
- **FRONT WINDOW DEICER**
- **HEADLIGHT**
- **INTERIOR LIGHT**
- **KEY REMINDER AND SEAT BELT WARNING**
- **LIGHT AUTO TURN OFF**
- **POWER WINDOW**
- **REAR WINDOW DEFOGGER AND MIRROR HEATER**
- **THEFT DETERRENT**

POWER SEAT


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
30A
P/SEAT
W
W
2M
2G
2I
IB3
BG1
P16
POWER SEAT CONTROL SW (DRIVER' S SEAT)
FRONT
SLIDE
REAR
UP
FRONT
VERTICAL
DOWN
UP
REAR
VERTICAL
DOWN
FRONT
RECLINING
REAR
W–B
B
B–R
W–R
W–G
Y–G
Y–R
L–R
L
W–B
BJ
P21
POWER SEAT MOTOR
(DRIVER' S SEAT
SLIDE CONTROL)
P18
POWER SEAT MOTOR
(DRIVER' S SEAT FRONT
VERTICAL CONTROL)
P19
POWER SEAT MOTOR
(DRIVER' S SEAT REAR
VERTICAL CONTROL)
P20
POWER SEAT MOTOR
(DRIVER' S SEAT
RECLINING CONTROL)
M


W
W
12
IH4
W
1
BH1
W
1
P17
POWER SEAT CONTROL SW (FRONT PASSENGER' S SEAT)
FRONT
SLIDE
REAR
UP
FRONT VERTICAL
DOWN
UP
REAR VERTICAL
DOWN
FRONT
RECLINING
REAR
4
9
6
5
10
8
7
3
2
W–B
B
B–R
W–R
W–G
Y–G
Y–R
L–R
L
P25
POWER SEAT MOTOR
(FRONT PASSENGER' S SEAT
SLIDE CONTROL)
P22
POWER SEAT MOTOR
(FRONT PASSENGER' S SEAT
FRONT VERTICAL CONTROL)
P23
POWER SEAT MOTOR
(FRONT PASSENGER' S SEAT
REAR VERTICAL CONTROL)
P24
POWER SEAT MOTOR
(FRONT PASSENGER' S SEAT
RECLINING CONTROL)
M
1
2
2
BH1
W–B
BK

POWER SEAT

SERVICE HINTS

P16 POWER SEAT CONTROL SW (DRIVER'S SEAT)

1–GROUND : Always approx. **12** volts
4–GROUND : Always continuity

P17 POWER SEAT CONTROL SW (FRONT PASSENGER'S SEAT)

1–GROUND : Always approx. **12** volts
4–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
P16	40	P20	40	P24	40
P17	40	P21	40	P25	40
P18	40	P22	40		
P19	40	P23	40		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2I		
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

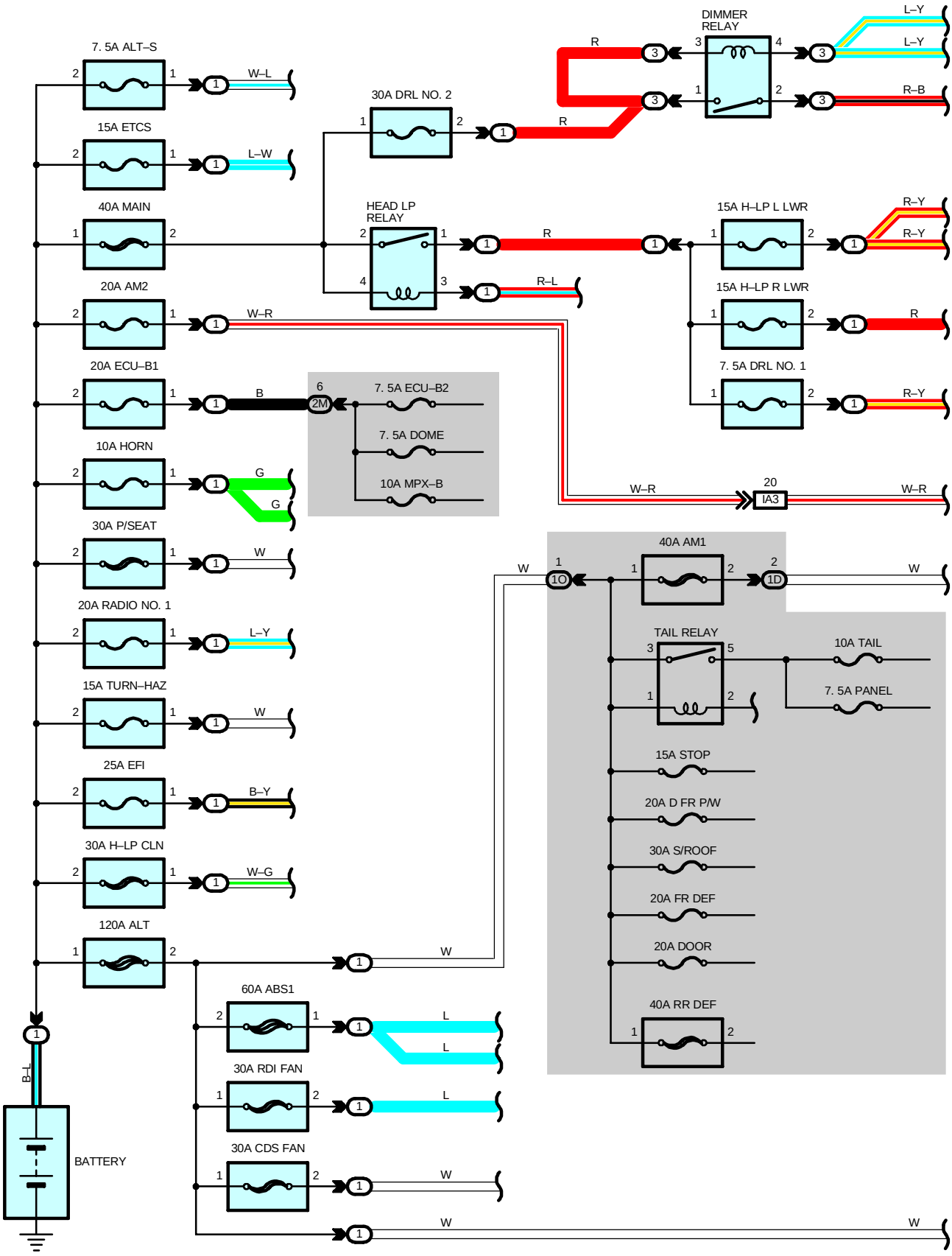
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

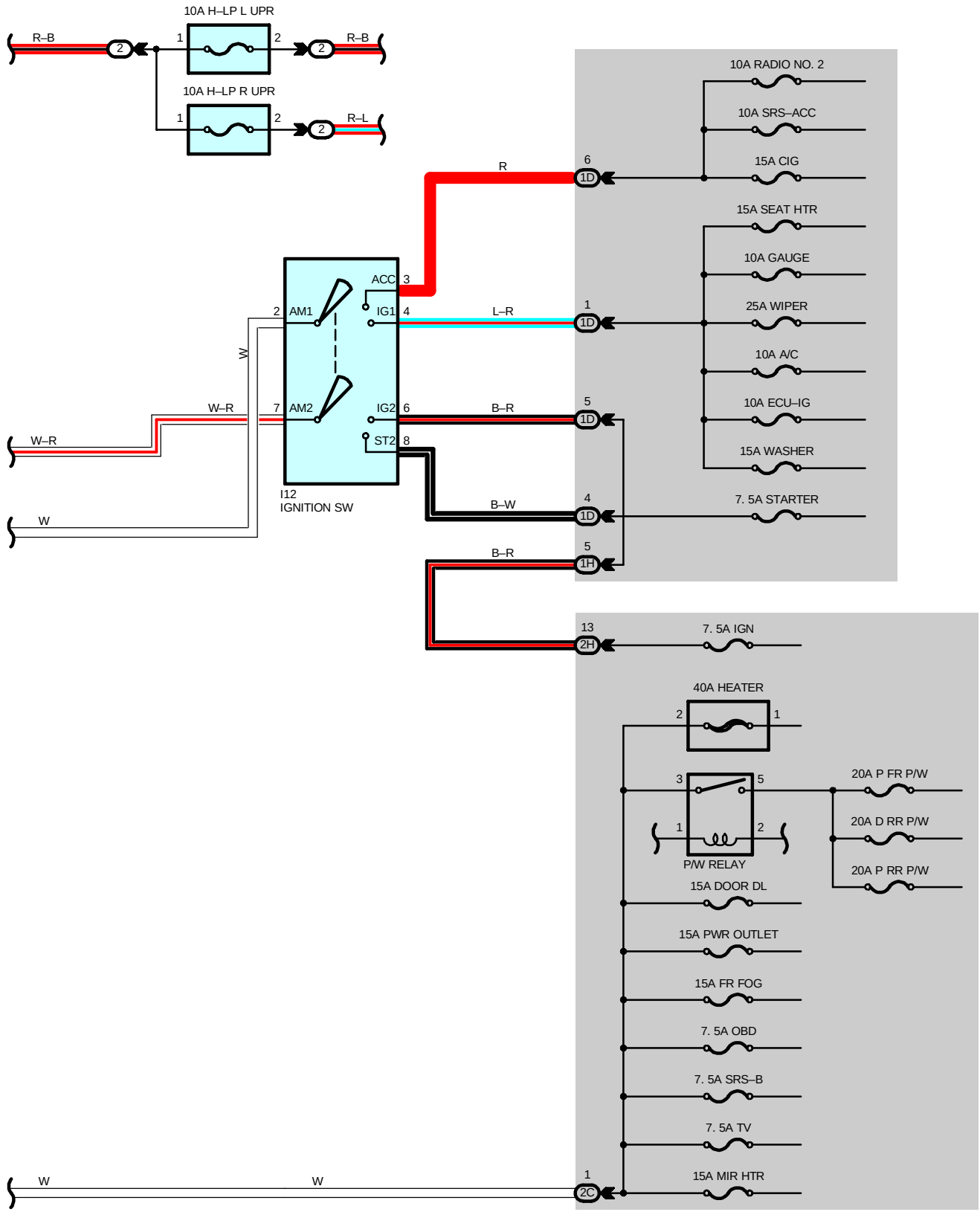
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IH4	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

: GROUND POINTS

Code	See Page	Ground Points Location
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	

POWER SOURCE




10A H–LP L UPR
R–B
1
2
2
R–B
10A H–LP R UPR
1
2
2
R–L
R
6
1D
10A RADIO NO. 2
10A SRS–ACC
15A CIG
15A SEAT HTR
10A GAUGE
25A WIPER
10A A/C
10A ECU–IG
15A WASHER
7. 5A STARTER
ACC 3
2 AM1
IG1 4
L–R
1
1D
W
W–R
7 AM2
IG2 6
B–R
5
1D
W–R
ST2 8
B–W
4
1D
W
I12
IGNITION SW
B–R
5
1H
13
2H
7. 5A IGN
40A HEATER
2
1
3
5
1
2
P/W RELAY
20A P FR P/W
20A D RR P/W
20A P RR P/W
15A DOOR DL
15A PWR OUTLET
15A FR FOG
7. 5A OBD
7. 5A SRS–B
7. 5A TV
W
W
1
2C
15A MIR HTR

POWER SOURCE

SERVICE HINTS

HEAD LP RELAY

2–1 : Closed with the light control SW at **HEAD** position or the dimmer SW at **FLASH** position

DIMMER RELAY

1–2 : Closed with the light control SW at **HEAD** position and the dimmer SW at **HIGH** position
Closed with the dimmer SW at **FLASH** position
Closed with the daytime running light operation

TAIL RELAY

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

I12 IGNITION SW

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

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
I12	35				

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)
3	23	Engine Room No.3 R/B (Engine Compartment Left)

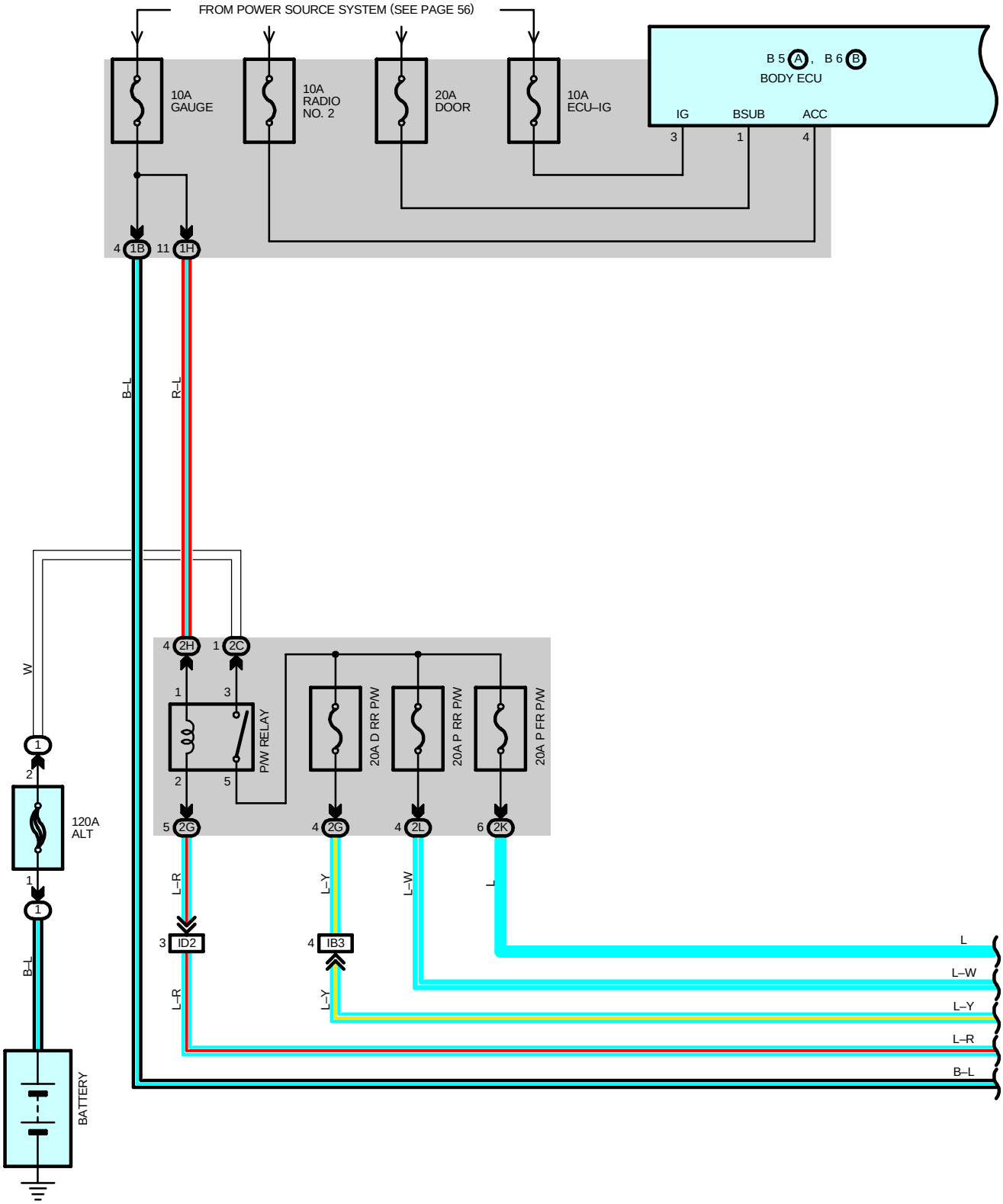
: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

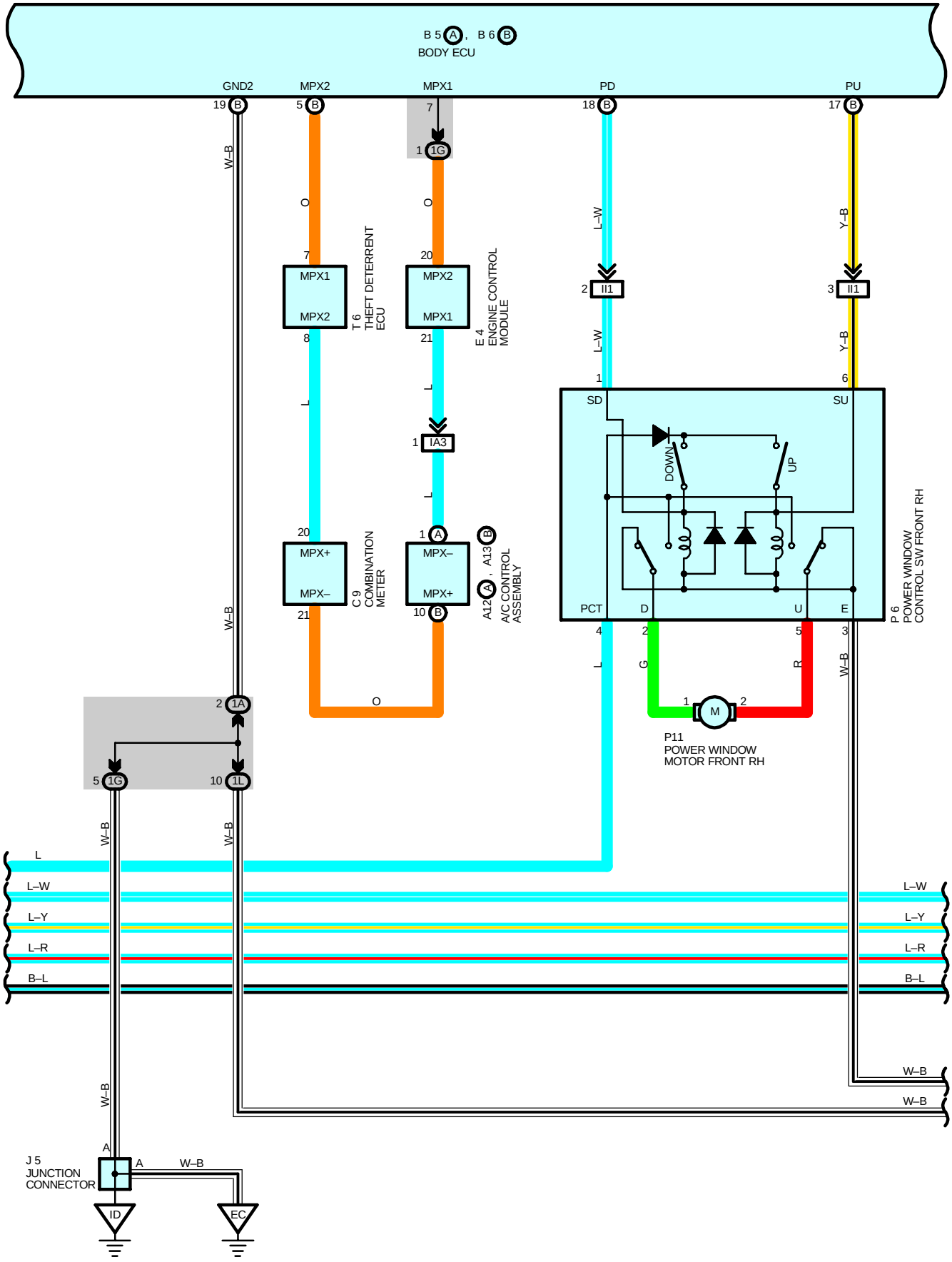
Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1H		
1O	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2C	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

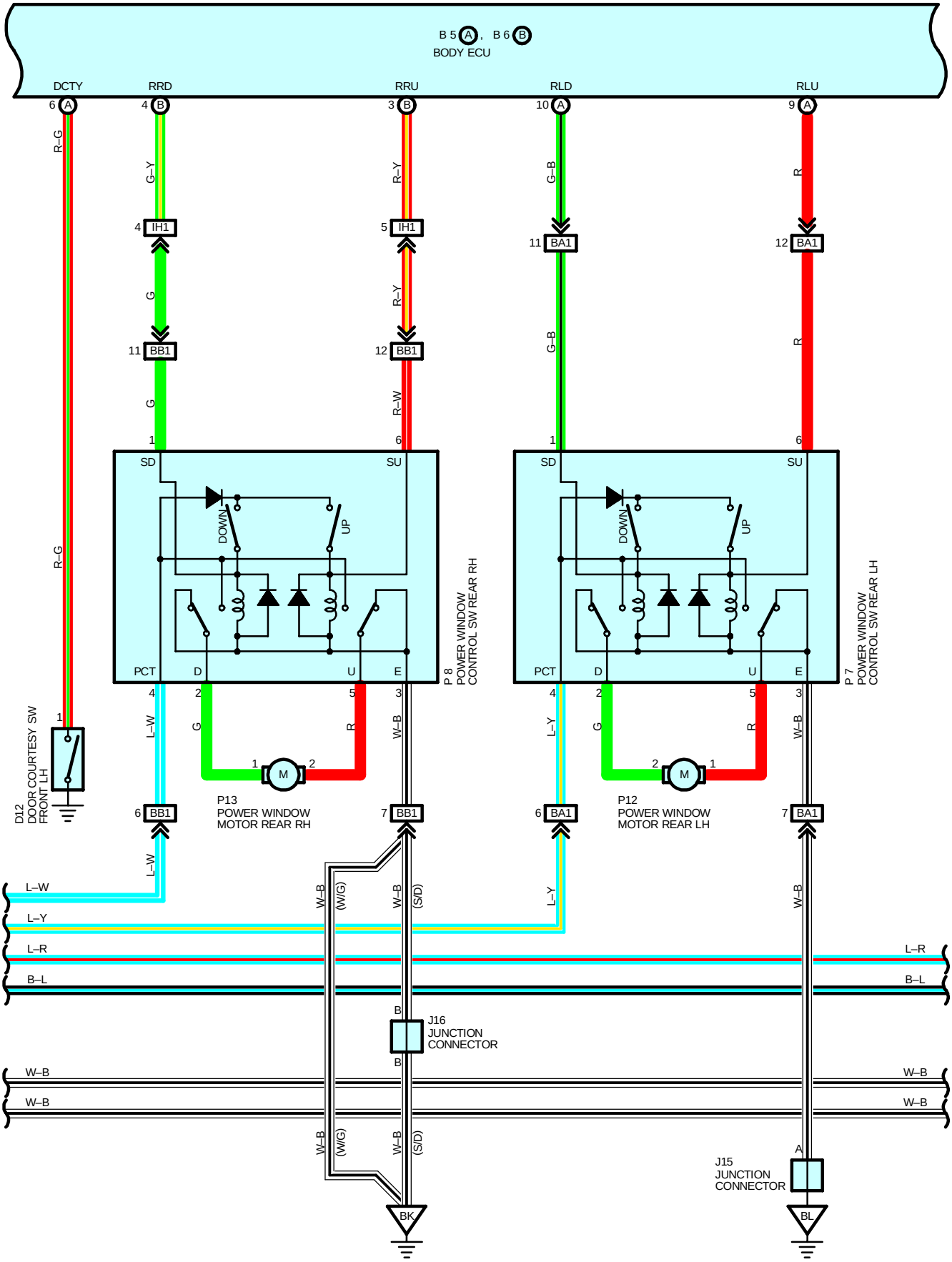
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

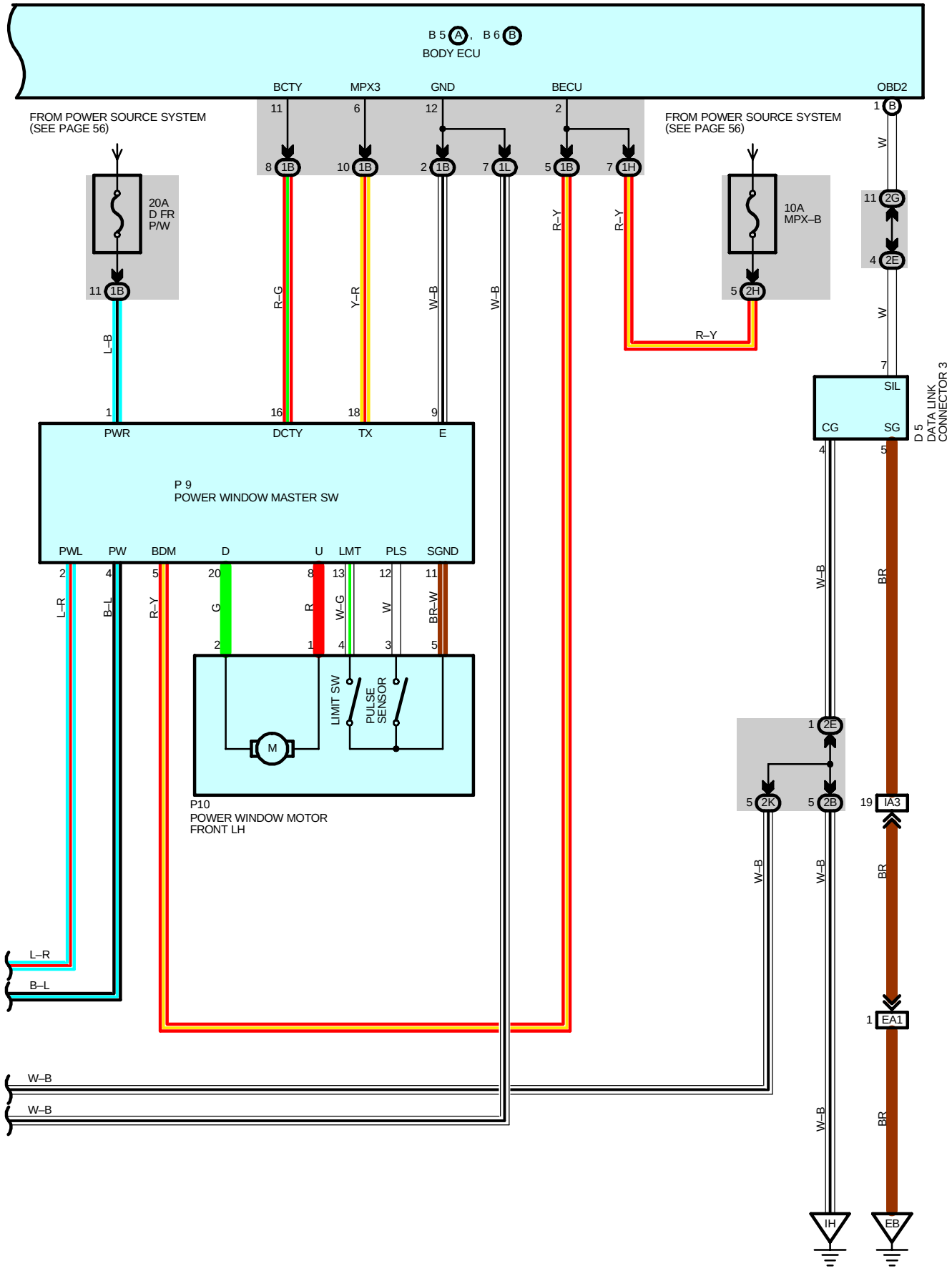
POWER WINDOW




B 5 A , B 6 B
BODY ECU
GND2
MPX2
MPX1
PD
PU
19 B
5 B
7
18 B
17 B
1 1G
W–B
O
L–W
Y–B
7
MPX1
MPX2
T 6
THEFT DETERRENT ECU
20
MPX2
MPX1
E 4
ENGINE CONTROL MODULE
2 I1
3 I1
8
21
L
1 IA3
1
6
SD
SU
DOWN
UP
20
MPX+
MPX–
C 9
COMBINATION METER
1 A
B
A13
A12 , A
A/C CONTROL ASSEMBLY
21
10 B
PCT
D
U
E
P 6
POWER WINDOW CONTROL SW FRONT RH
4
2
5
3
G
R
2 1A
1
M
2
P11
POWER WINDOW MOTOR FRONT RH
5 1G
10 1L
L
L–W
L–Y
L–R
B–L
A
J 5
JUNCTION CONNECTOR
A
W–B
ID
EC

POWER WINDOW




B 5 A , B 6 B
BODY ECU
BCTY
MPX3
GND
BECU
OBD2
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
FROM POWER SOURCE SYSTEM (SEE PAGE 56)
20A D FR P/W
10A MPX–B
L–B
R–G
Y–R
W–B
W–B
R–Y
R–Y
R–Y
W
W
BR
BR
BR
W–B
W–B
W–B
W–B
W–B
L–R
B–L
PWR
DCTY
TX
E
P 9
POWER WINDOW MASTER SW
PWL
PW
BDM
D
U
LMT
PLS
SGND
L–R
B–L
R–Y
G
R
W–G
W
BR–W
LIMIT SW
PULSE SENSOR
M
P10
POWER WINDOW MOTOR FRONT LH
SIL
CG
SG
D 5
DATA LINK CONNECTOR 3
IA3
EA1
IH
EB

POWER WINDOW

SYSTEM OUTLINE

1. AUTO OPERATION (DRIVER'S WINDOW)

When the power window master SW is operated to AUTO UP position with the ignition SW on, the current flows from the D FR P/W fuse to power window master SW TERMINAL 1 to TERMINAL 8 to power window motor front LH TERMINAL 1 to TERMINAL 2 to power window master SW TERMINAL 20 to TERMINAL 9 to GROUND, and the motor rotates to close the window. The motor continues to rotate until the window is fully closed or the DOWN position of the power window master SW is operated.

When the power window master SW is operated to AUTO DOWN position with the ignition SW on, the current flows from the D FR P/W fuse to power window master SW TERMINAL 1 to TERMINAL 20 to power window motor front LH TERMINAL 2 to TERMINAL 1 to power window master SW TERMINAL 8 to TERMINAL 9 to GROUND, and the motor rotates to open the window. The motor continues to rotate until the window is fully opened or the UP position of the power window master SW is operated.

2. MANUAL OPERATION (DRIVER'S WINDOW)

When the power window master SW is operated to UP position with the ignition SW on, the current flows from the D FR P/W fuse to power window master SW TERMINAL 1 to TERMINAL 8 to power window motor front LH TERMINAL 1 to TERMINAL 2 to power window master SW TERMINAL 20 to TERMINAL 9 to GROUND, and the motor rotates to close the window.

When the power window master SW is operated to DOWN position with the ignition SW on, the current flows from the D FR P/W fuse to power window master SW TERMINAL 1 to TERMINAL 20 to power window motor front LH TERMINAL 2 to TERMINAL 1 to power window master SW TERMINAL 8 to TERMINAL 9 to GROUND, and the motor rotates to open the window.

3. MANUAL OPERATION (EXCEPT DRIVER'S WINDOW)

When the power window control SW front RH, rear LH, RH is operated to UP position, the current flows to the power window control SW TERMINAL PCT to TERMINAL U to power window motor to power window control SW TERMINAL D to TERMINAL E to GROUND, and the motor rotates to close the window.

When the power window control SW front RH, rear LH, RH is operated to DOWN position, the current flows to the power window control SW TERMINAL PCT to TERMINAL D to power window motor to power window control SW TERMINAL U to TERMINAL E to GROUND, and the motor rotates to open the window.

When controlling the respective windows with the power window master SW, a communication signal is input from the power window master TERMINAL TX to body ECU TERMINAL MPX3, and the current flows from the body ECU to respective power window control SW TERMINAL SU (UP operation), SD (DOWN operation), and the motor rotates in the controlled direction.

4. KEY OFF POWER WINDOW OPERATION

After the ignition SW is turned off, the driver's side power window can be operated for approximately 45 seconds, unless the driver's side door is opened. However, if the key off operation time finishes during AUTO operation, the AUTO operation is stopped immediately.

5. CATCHING PREVENTION FUNCTION

If any foreign matter is caught in the window while it is rising, the pulse sensor installed in the power window motor detects changes in the number of motor rotations, forcibly lowers the door window 50 mm or if the door window opening amount is 200 mm or less, the window is lowered so that the opening amount is 200 mm.

SERVICE HINTS

P6, P7, P8 POWER WINDOW CONTROL SW FRONT RH, REAR LH, RH

3–GROUND : Always continuity
4–GROUND : Approx. **12** volts with the ignition SW at **ON** position

P9 POWER WINDOW MASTER SW

9–GROUND : Always continuity
4–GROUND : Approx. **12** volts with the ignition SW at **ON** position
1–GROUND : Always approx. **12** volts

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
A12	A	34	J15	36 (S/D)	P9	39 (W/G)
A13	B	34		38 (W/G)	P10	37 (S/D)
B5	A	34	J16	36 (S/D)		39 (W/G)
B6	B	34	P6	37 (S/D)	P11	37 (S/D)
C9		34		39 (W/G)		39 (W/G)
D5		34	P7	37 (S/D)	P12	37 (S/D)
D12		36 (S/D)		39 (W/G)		39 (W/G)
		38 (W/G)	P8	37 (S/D)	P13	37 (S/D)
E4		32		39 (W/G)		39 (W/G)
J5		35	P9	37 (S/D)	T6	35

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2C		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

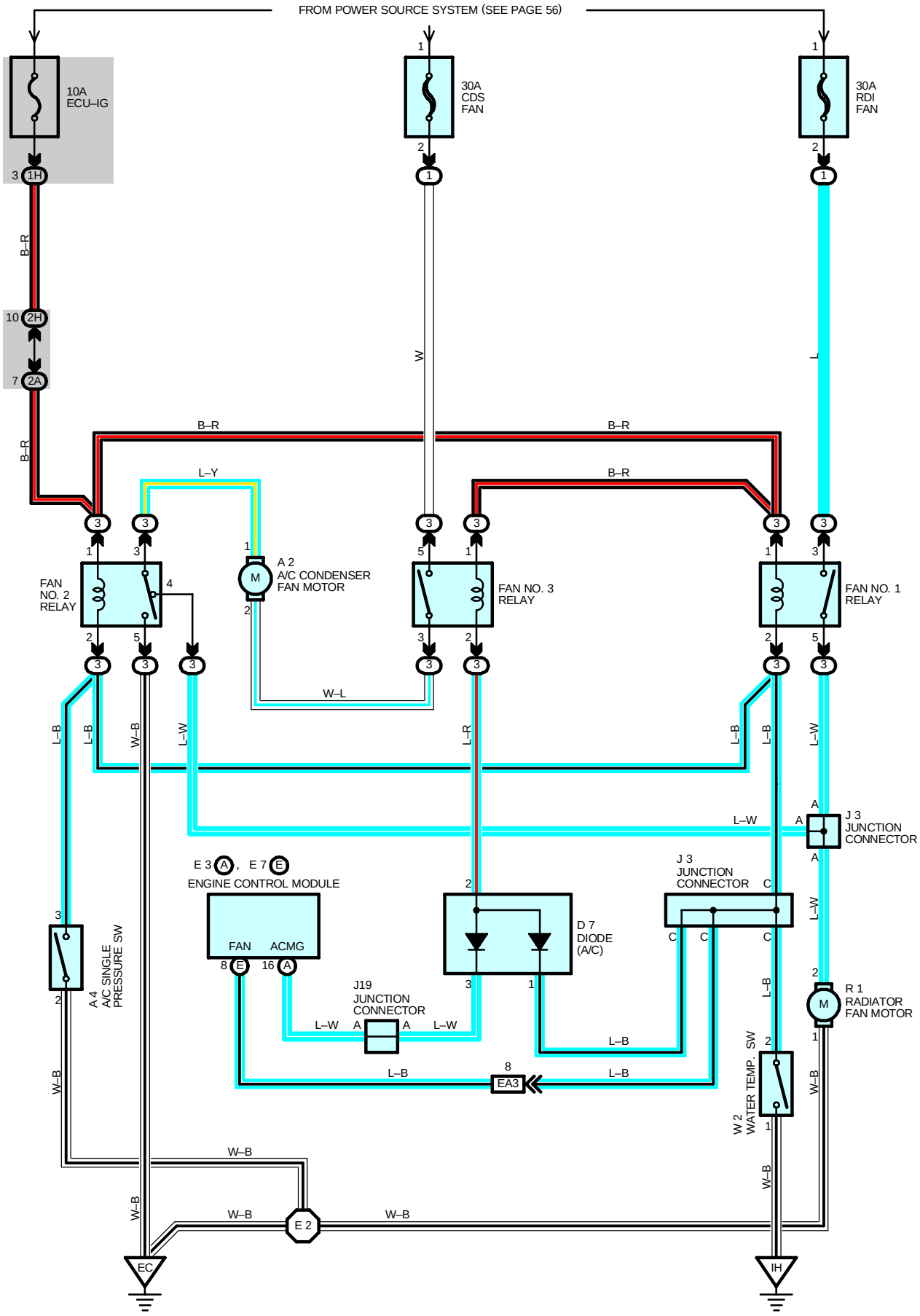
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	

POWER WINDOW

▽ **: GROUND POINTS**

Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

RADIATOR FAN AND CONDENSER FAN



SYSTEM OUTLINE

With the ignition SW turned on, the current through the ECU–IG fuse flows to the FAN NO.1 relay (Coil side), FAN NO.2 relay (Coil side) and FAN NO.3 relay (Coil side).

1. LOW SPEED OPERATION

Only when the A/C system is activated, the A/C condenser fan motor and the radiator fan motor rotates at low speed.
When the A/C system is activated, the current from ECU–IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (A/C) to TERMINAL 3 to TERMINAL (A) 16 of the engine control module, causing the FAN NO.3 relay to turn on. As a result, the current through the CDS FAN fuse flows to FAN NO.3 relay (Point side) to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 4 to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. As this flowing in series for the motors, the motors rotate at low speed.

2. HIGH SPEED OPERATION

With the A/C single pressure SW is turned on and/or the water temp. SW is turned on, the A/C condenser fan motor and the radiator fan motor rotate at high speed.
When the A/C single pressure SW is turned on, the current through the ECU–IG fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 3 of the A/C single pressure SW to TERMINAL 2 to GROUND, and the current through the ECU–IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (A/C) to TERMINAL 1 to TERMINAL 3 of the A/C single pressure SW to TERMINAL 2 to GROUND. As a result, FAN NO.1, NO.2. and NO.3 relay is turned on. At the same time, the current from the RDI FAN fuse flows to FAN NO.1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND, and the current from the CDS FAN fuse flows to FAN NO.3 relay (Point side) to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND.
As the current flowing in parallel for motors as above, the motors rotate at high speed.
When the water temp. SW is turned on, the current through the ECU–IG fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 2 of the water temp. SW to TERMINAL 1 to GROUND, and the current through the ECU–IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (A/C) to TERMINAL 1 to TERMINAL 2 of the water temp. SW to TERMINAL 1 to GROUND. As a result, FAN NO.1, NO.2 and NO.3 relay is turned on. At the same time, the current from the RDI FAN fuse flows to FAN NO.1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND, and the current from the CDS FAN fuse flows to FAN NO.3 relay (Point side) to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND.
As the current flowing in parallel for motors as above, the motors rotate at high speed.

SERVICE HINTS

A4 A/C SINGLE PRESSURE SW

3–2 : Close above approx. **15.5** kgf/cm^2 (**220** psi, **1520** kpa)
Open below approx. **12.5** kgf/cm^2 (**178** psi, **1226** kpa)

W2 WATER TEMP. SW

1–2 : Close above approx. **95**˚C (**203**˚F)

: PARTS LOCATION

Code	See Page	Code		See Page	Code	See Page
A2	32	E3	A	32	J19	35
A4	32	E7	E	32	R1	33
D7	34	J3		33	W2	33

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
3	23	Engine Room No.3 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

RADIATOR FAN AND CONDENSER FAN

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA3	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)

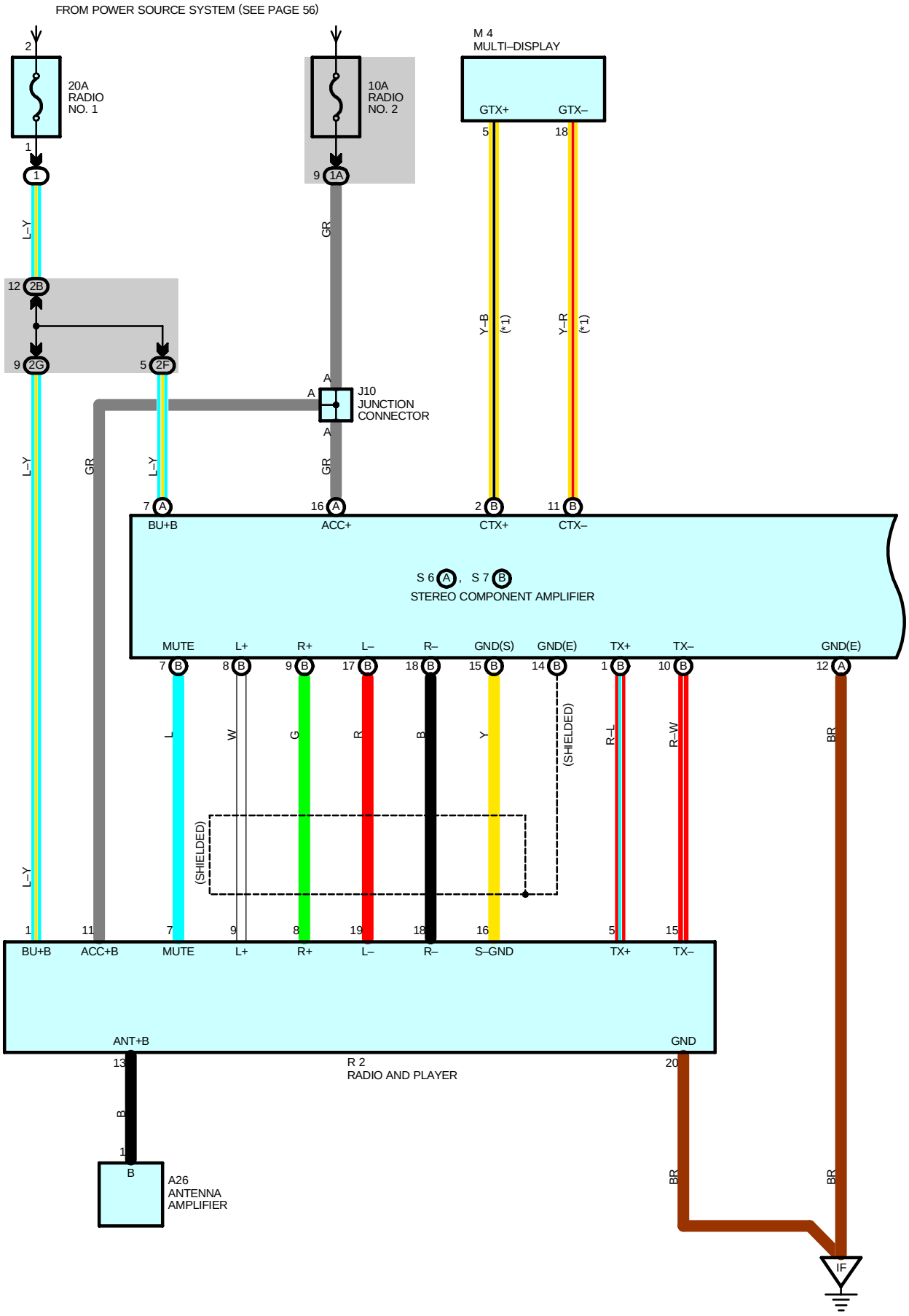
: GROUND POINTS

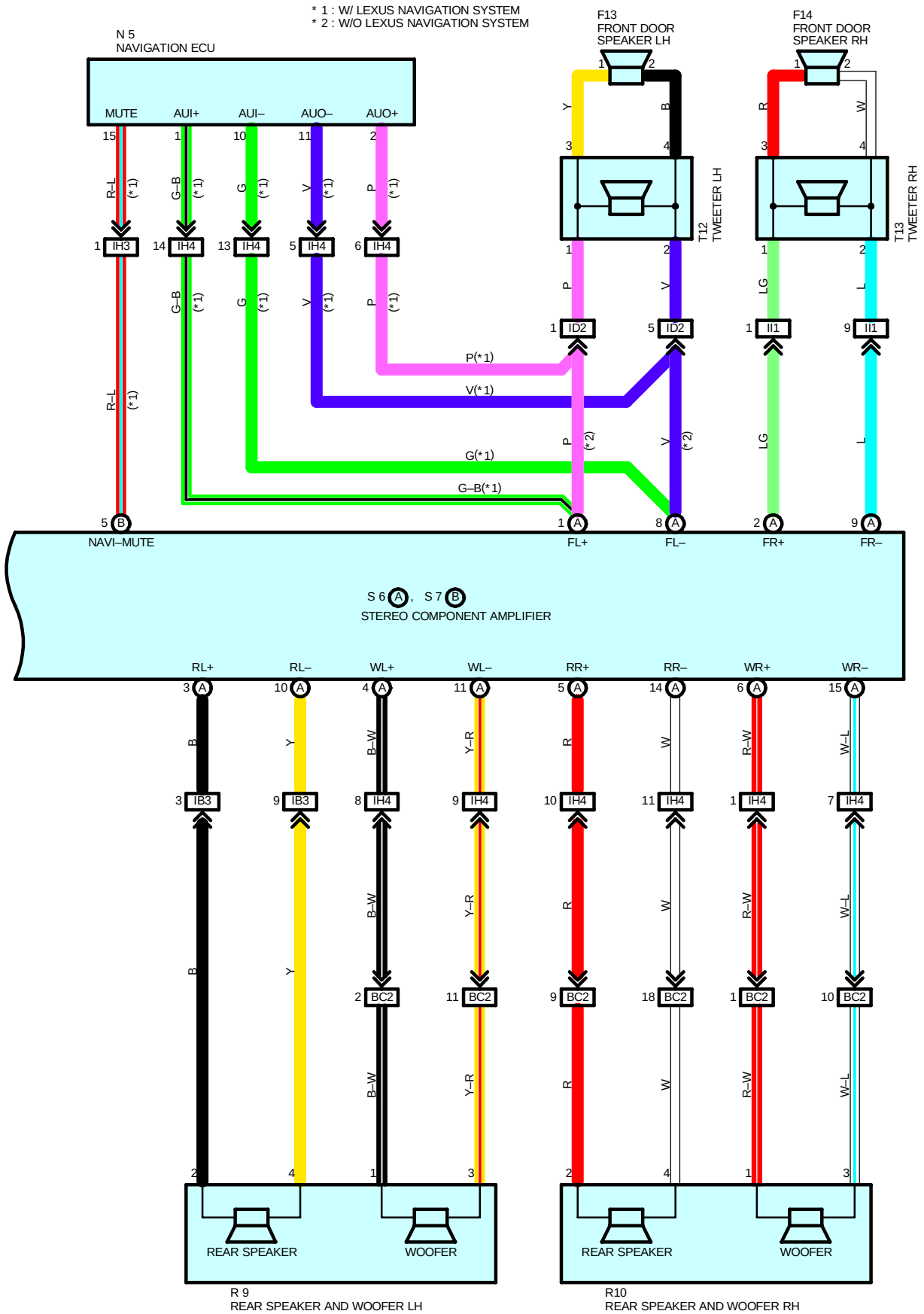
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
IH	44	Cowl Side Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	42	Engine Room Main Wire			

RADIO AND PLAYER (S/D)




* 1 : W/ LEXUS NAVIGATION SYSTEM
* 2 : W/O LEXUS NAVIGATION SYSTEM
N 5
NAVIGATION ECU
MUTE
AUI+
AUI–
AUO–
AUO+
F13
FRONT DOOR
SPEAKER LH
F14
FRONT DOOR
SPEAKER RH
T12
TWEETER LH
T13
TWEETER RH
IH3
IH4
ID2
II1
P(*1)
V(*1)
G(*1)
G–B(*1)
NAVI–MUTE
FL+
FL–
FR+
FR–
S 6 A , S 7 B
STEREO COMPONENT AMPLIFIER
RL+
RL–
WL+
WL–
RR+
RR–
WR+
WR–
IB3
BC2
REAR SPEAKER
WOOFER
R 9
REAR SPEAKER AND WOOFER LH
R10
REAR SPEAKER AND WOOFER RH

RADIO AND PLAYER (S/D)

SERVICE HINTS

S6 (A) STEREO COMPONENT AMPLIFIER

(A)16–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
(A) 7–GROUND : Always approx. **12** volts
(A)12–GROUND : Always continuity

R2 RADIO AND PLAYER

11–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
1–GROUND : Always approx. **12** volts
20–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A26	34	N5	37 (S/D)	S7 B	35
F13	36 (S/D)	R2	35	T12	37 (S/D)
F14	36 (S/D)	R9	37 (S/D)	T13	37 (S/D)
J10	35	R10	37 (S/D)		
M4	35	S6 A	35		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		

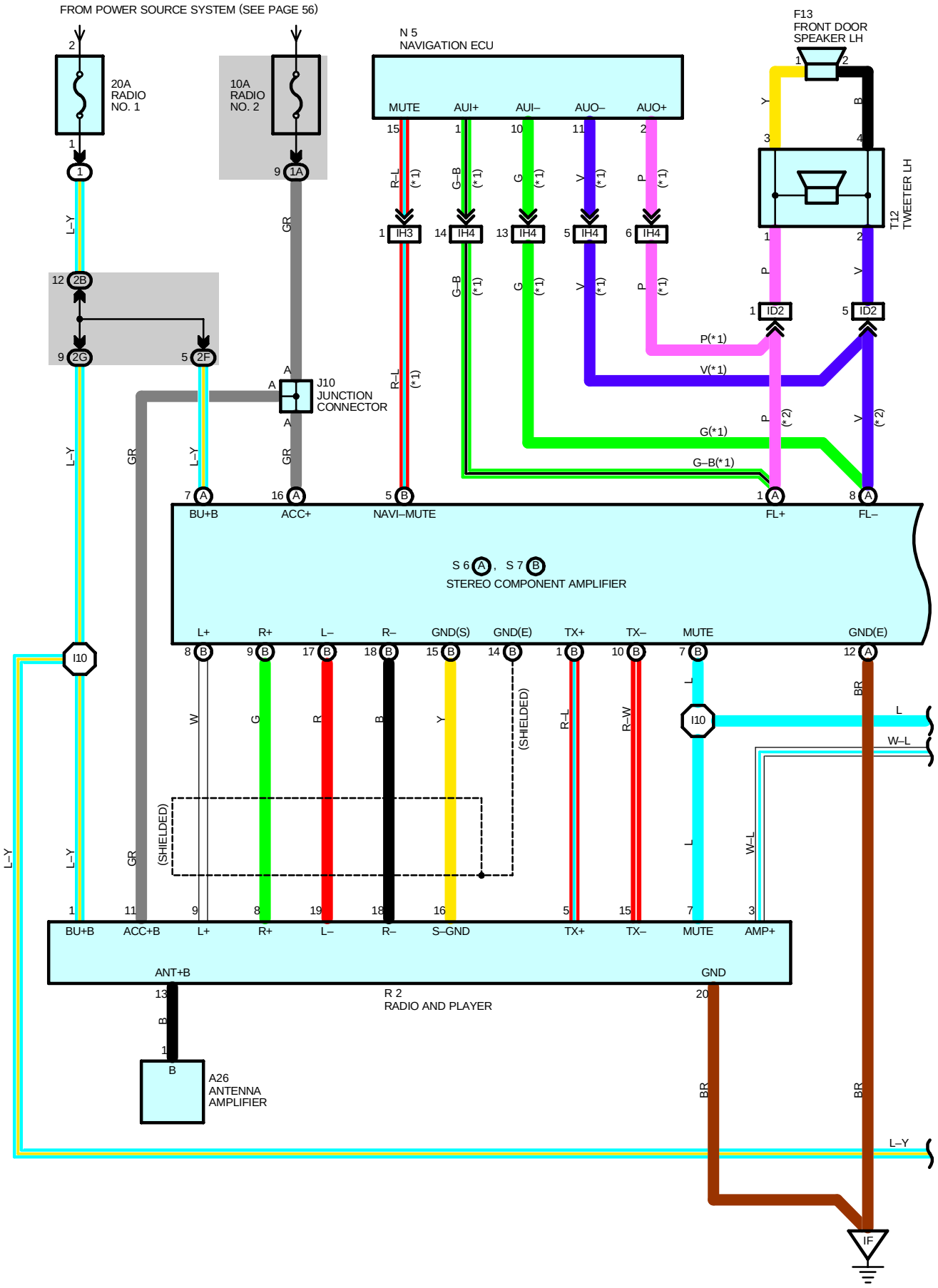
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

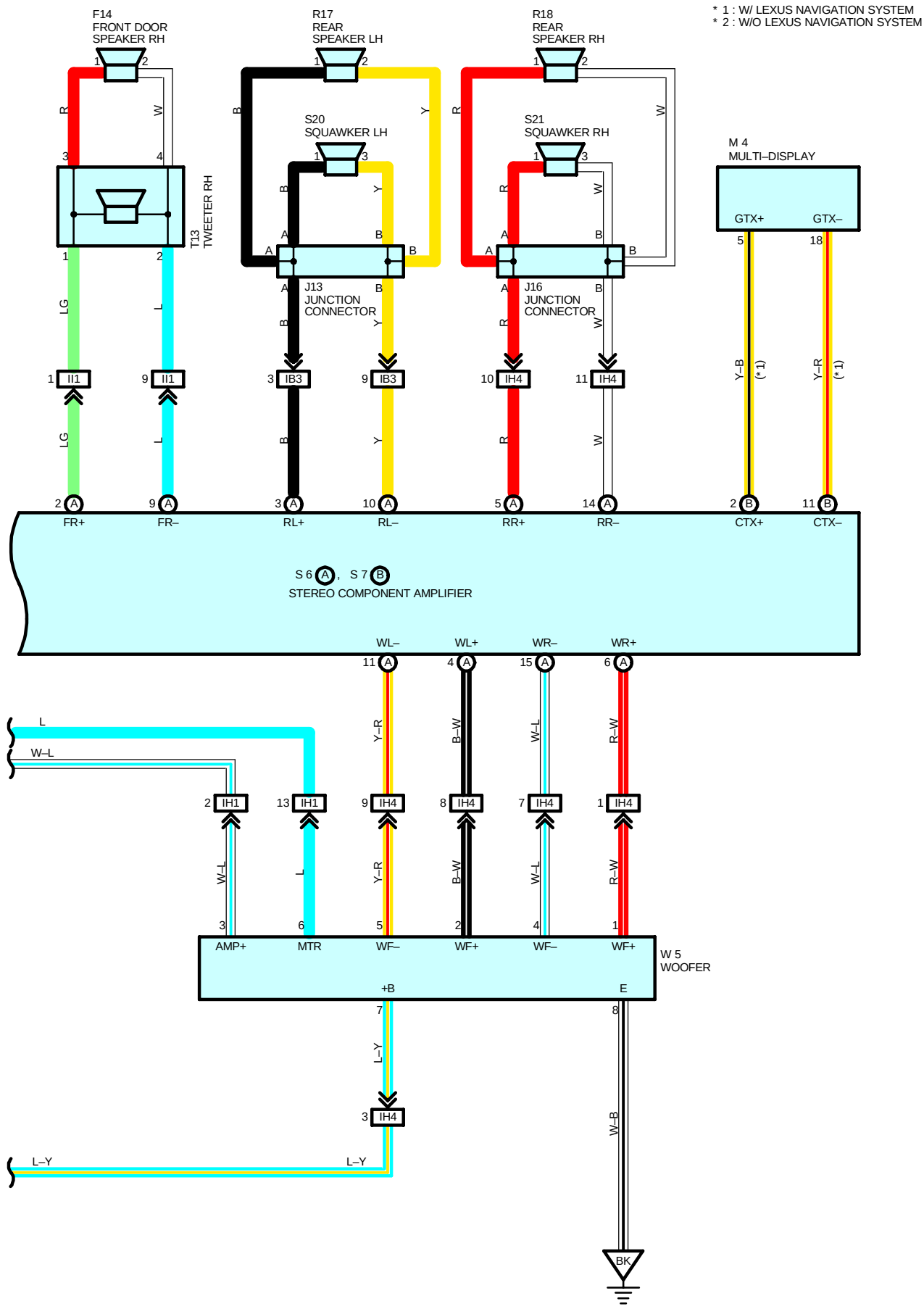
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH3	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH4		
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)

: GROUND POINTS

Code	See Page	Ground Points Location
IF	44	Front Floor Panel Center RH

RADIO AND PLAYER (W/G)




* 1 : W/ LEXUS NAVIGATION SYSTEM
* 2 : W/O LEXUS NAVIGATION SYSTEM
F14
FRONT DOOR
SPEAKER RH
R17
REAR
SPEAKER LH
R18
REAR
SPEAKER RH
S20
SQUAWKER LH
S21
SQUAWKER RH
M 4
MULTI–DISPLAY
GTX+
GTX–
T13
TWEETER RH
J13
JUNCTION
CONNECTOR
J16
JUNCTION
CONNECTOR
II1
IB3
IH4
FR+
FR–
RL+
RL–
RR+
RR–
CTX+
CTX–
(*1)
S 6 A , S 7 B
STEREO COMPONENT AMPLIFIER
WL–
WL+
WR–
WR+
IH1
AMP+
MTR
WF–
WF+
W 5
WOOFER
+B
E
BK

RADIO AND PLAYER (W/G)

SERVICE HINTS

S6 (A) STEREO COMPONENT AMPLIFIER

(A)16–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
(A) 7–GROUND : Always approx. **12** volts
(A)12–GROUND : Always continuity

R2 RADIO AND PLAYER

11–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
1–GROUND : Always approx. **12** volts
20–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A26	34	M4	35	S7 B	35
F13	38 (W/G)	N5	39 (W/G)	S20	39 (W/G)
F14	38 (W/G)	R2	35	S21	39 (W/G)
J10	35	R17	39 (W/G)	T12	39 (W/G)
J13	38 (W/G)	R18	39 (W/G)	T13	39 (W/G)
J16	38 (W/G)	S6 A	35	W5	39 (W/G)

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
IH3		
IH4		
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

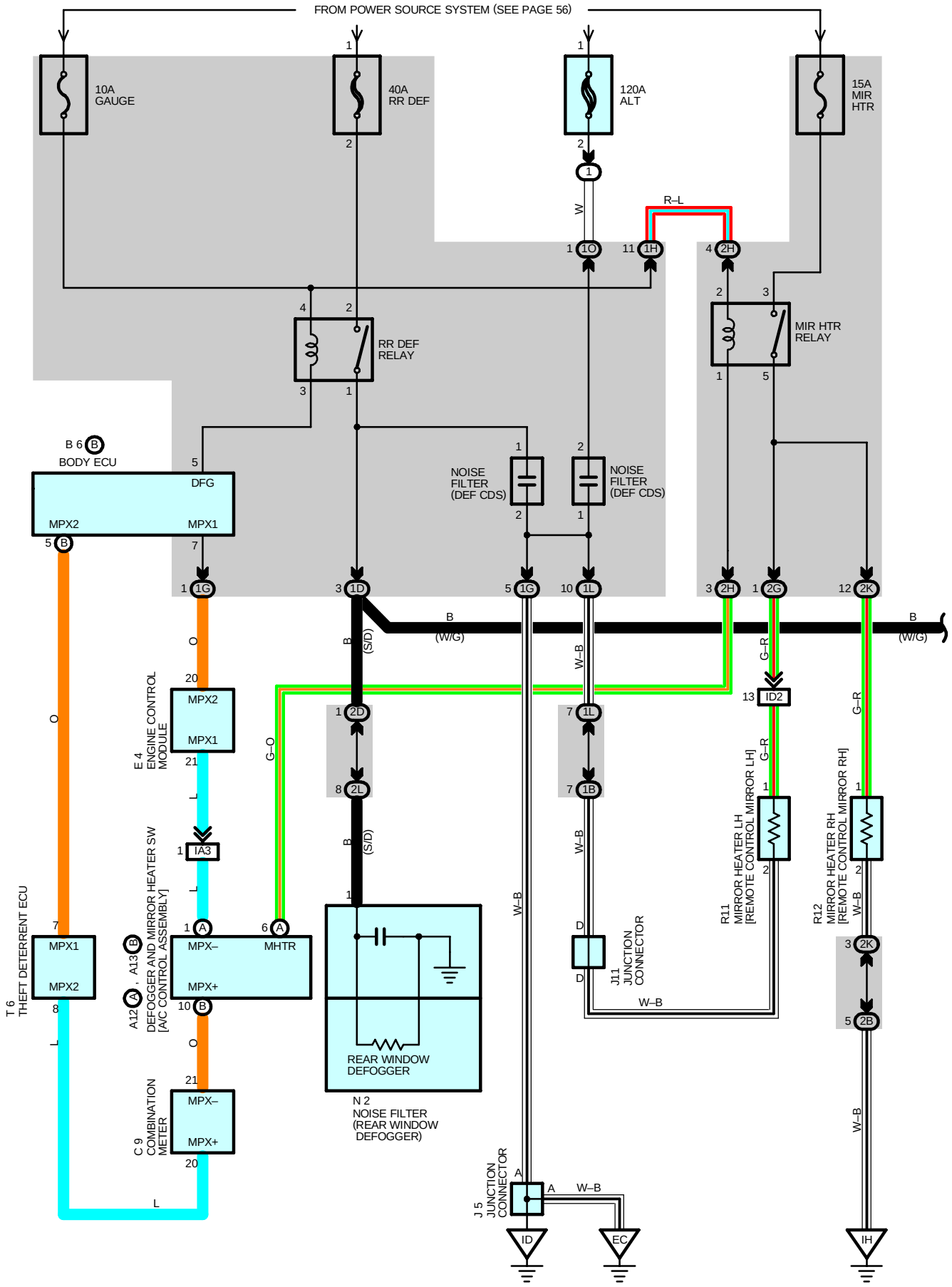
: GROUND POINTS

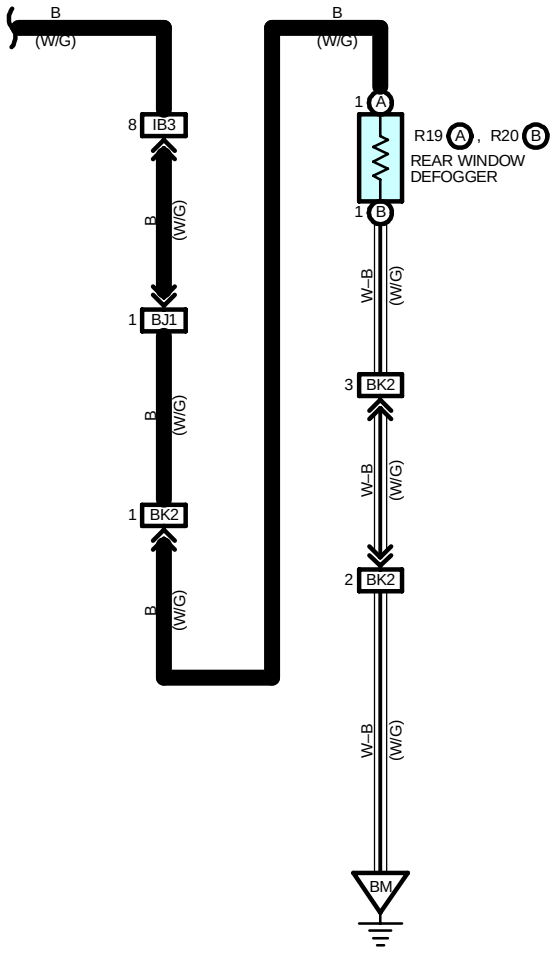
Code	See Page	Ground Points Location
IF	44	Front Floor Panel Center RH
BK	50 (W/G)	Front Floor Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I10	46	Instrument Panel Wire			

REAR WINDOW DEFOGGER AND MIRROR HEATER




B
(W/G)
B
(W/G)
8
IB3
B
(W/G)
1
BJ1
B
(W/G)
1
BK2
B
(W/G)
1
A
R19 A , R20 B
REAR WINDOW
DEFOGGER
1
B
W–B
(W/G)
3
BK2
W–B
(W/G)
2
BK2
W–B
(W/G)
BM

REAR WINDOW DEFOGGER AND MIRROR HEATER

SERVICE HINTS

RR DEF RELAY

2–1 : Closed with the ignition SW at **ON** position and the defogger and mirror heater SW [A/C control assembly] on

: PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
A12	A	34	J11	36 (S/D)	R12		39 (W/G)
A13	B	34		38 (W/G)	R19	A	39 (W/G)
B6	B	34	N2	37 (S/D)	R20	B	39 (W/G)
C9		34	R11	37 (S/D)	T6		35
E4		32		39 (W/G)			
J5		35	R12	37 (S/D)			

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1D	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1O	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

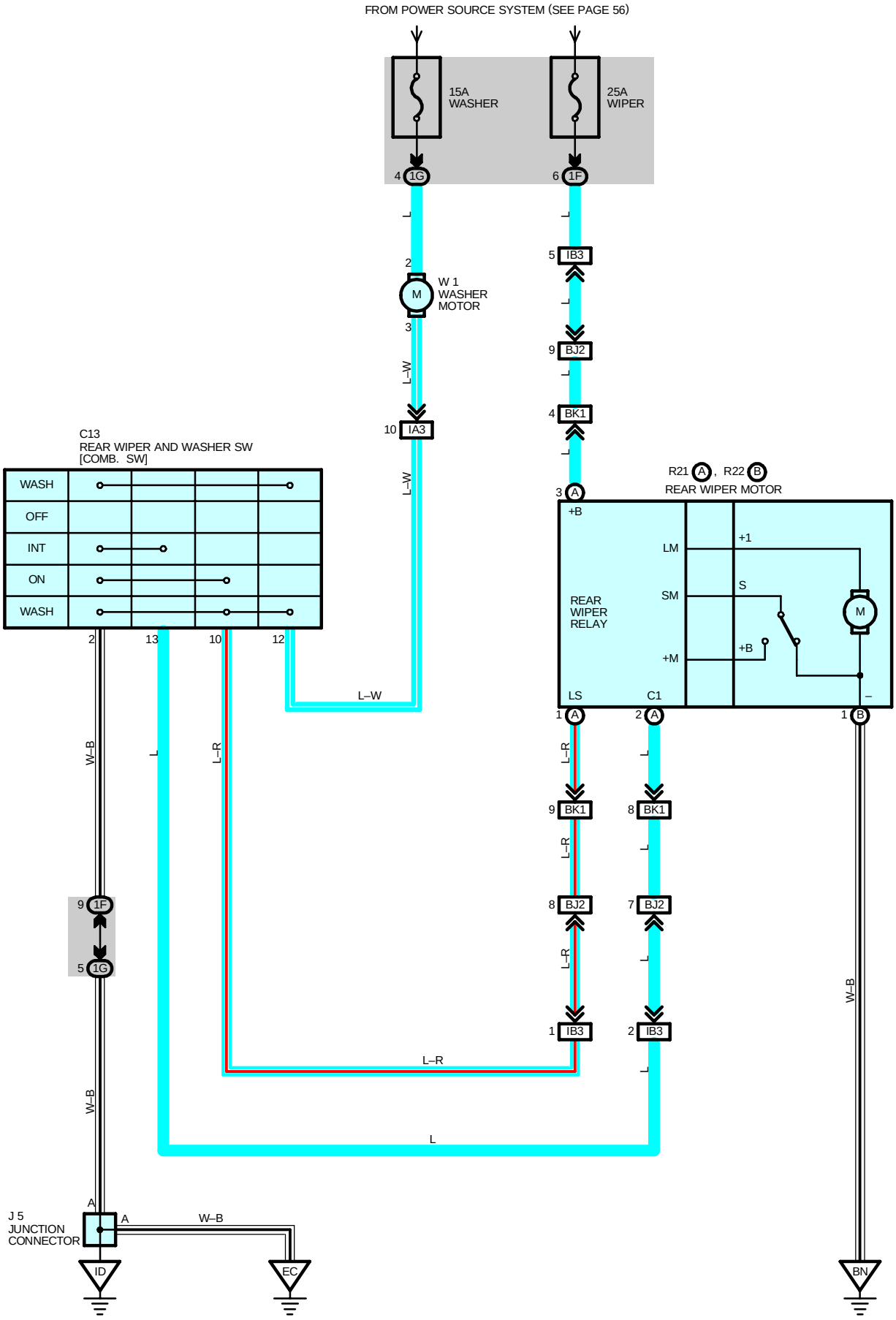
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
BJ1	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK2	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

: GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BM	50 (W/G)	Left Side of the Back Panel Upper

REAR WIPER AND WASHER



SERVICE HINTS

W1 WASHER MOTOR

2–GROUND : Approx. **12** volts with the ignition SW at **ON** position
3–GROUND : Continuity with the rear wiper and washer SW at **WASH** position

R21 (A), R22 (B) REAR WIPER MOTOR

(A) 3–GROUND : Approx. **12** volts with the ignition SW at **ON** position
(B) 1–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code		See Page	Code	See Page
C13	34	R21	A	39 (W/G)	W1	33
J5	35	R22	B	39 (W/G)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

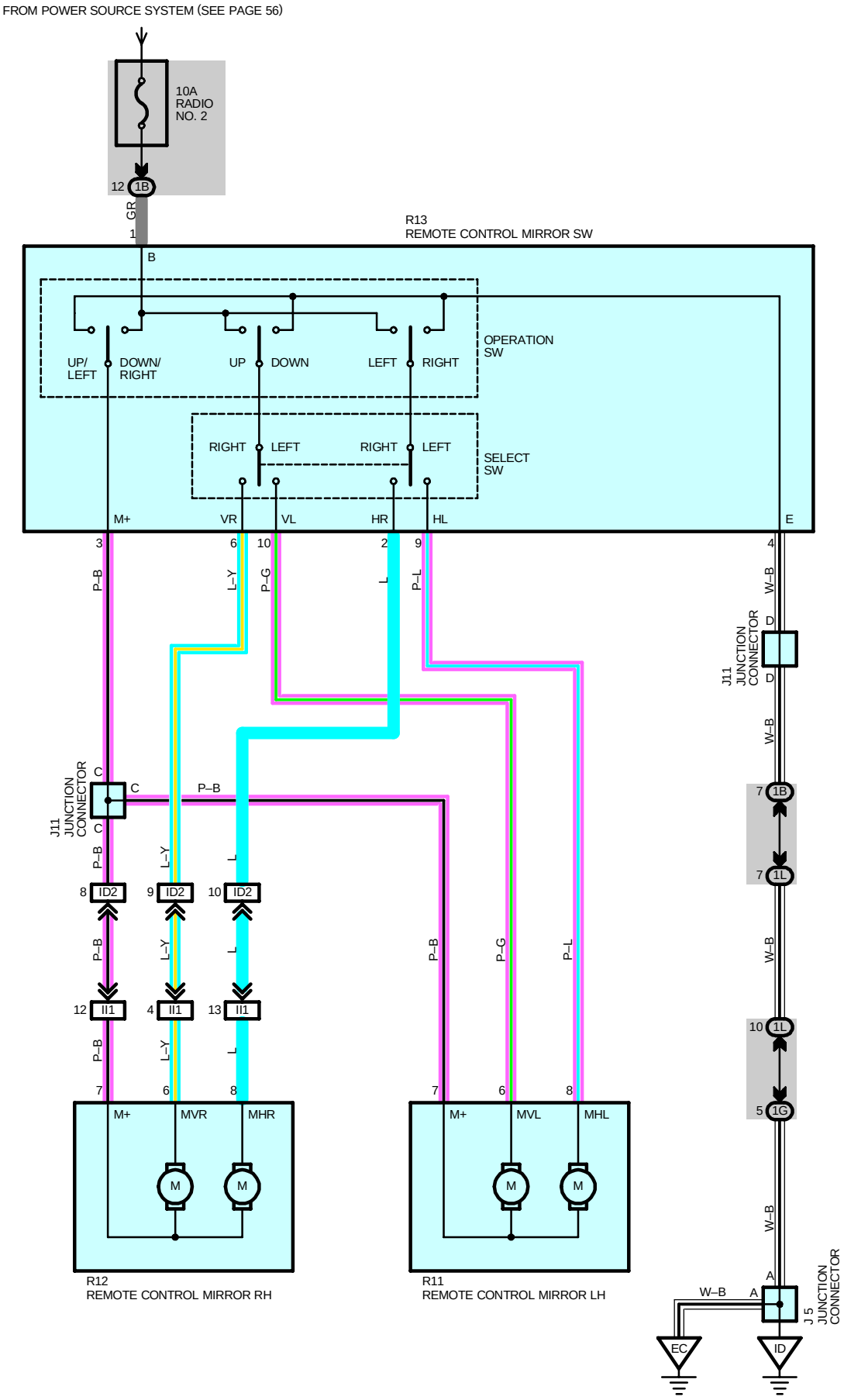
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BJ2	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
BN	50 (W/G)	Right Side of the Back Panel Lower

REMOTE CONTROL MIRROR



SERVICE HINTS

R13 REMOTE CONTROL MIRROR SW

1–3 : Continuity with the operation SW at **DOWN** or **RIGHT** position
3–4 : Continuity with the operation SW at **UP** or **LEFT** position
1–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
4–GROUND : Always continuity

○ : PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J5	35	R11	37 (S/D)	R12	39 (W/G)
J11	36 (S/D)		39 (W/G)	R13	37 (S/D)
	38 (W/G)	R12	37 (S/D)		39 (W/G)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)

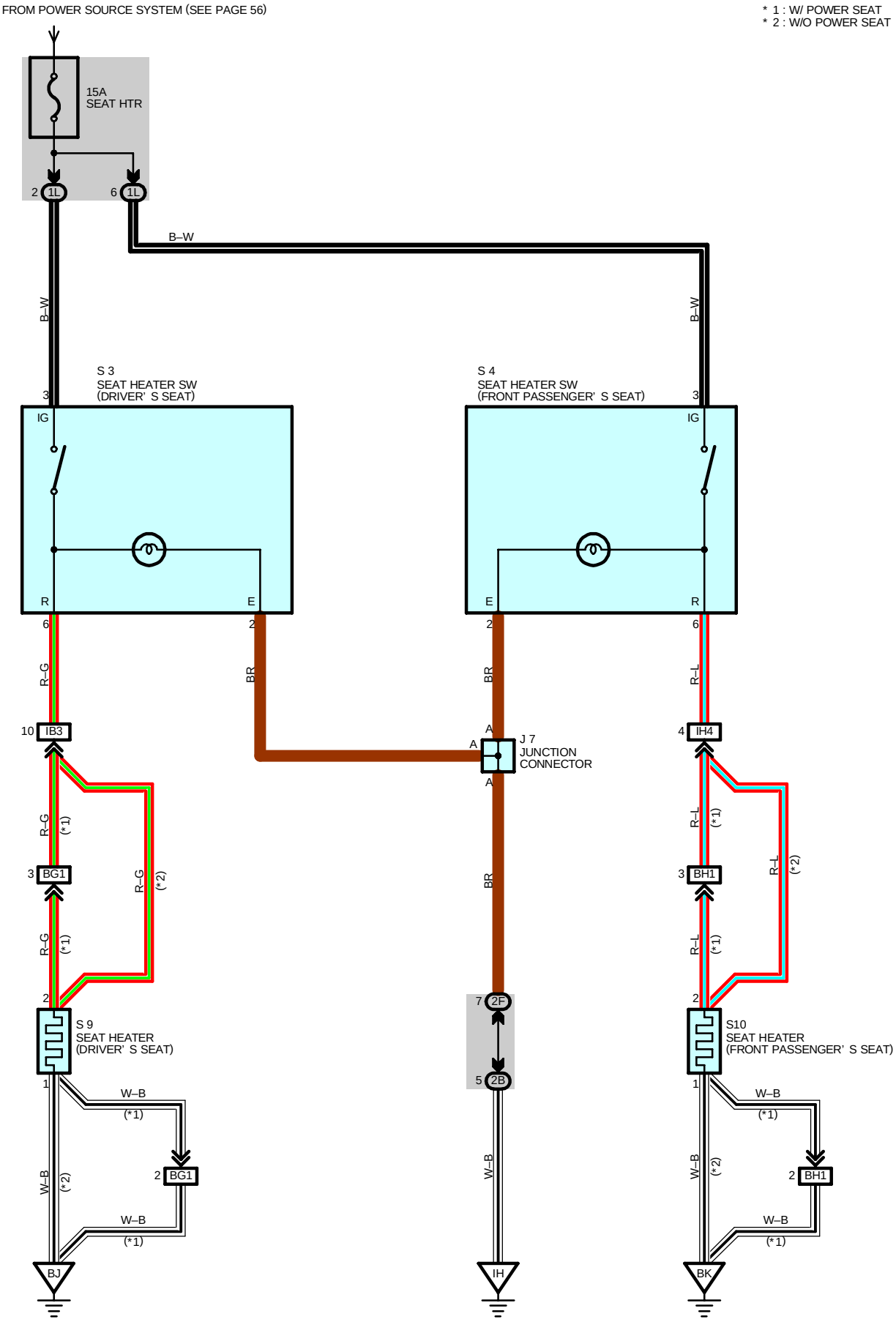
▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	44	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

▽ : GROUND POINTS

Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH

SEAT HEATER


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
* 1 : W/ POWER SEAT
* 2 : W/O POWER SEAT
15A
SEAT HTR
2 1L
6 1L
B–W
B–W
B–W
S 3
SEAT HEATER SW
(DRIVER' S SEAT)
S 4
SEAT HEATER SW
(FRONT PASSENGER' S SEAT)
3
IG
R
E
E
R
6
2
BR
R–G
10 IB3
A
A
J 7
JUNCTION
CONNECTOR
A
R–L
4 IH4
R–G
(*1)
3 BG1
R–G
(*2)
R–L
(*1)
3 BH1
R–L
(*2)
BR
R–G
(*1)
R–L
(*1)
2
7 2F
5 2B
S 9
SEAT HEATER
(DRIVER' S SEAT)
S10
SEAT HEATER
(FRONT PASSENGER' S SEAT)
1
W–B
(*1)
W–B
(*2)
2 BG1
W–B
(*1)
W–B
(*1)
W–B
(*2)
2 BH1
W–B
(*1)
BJ
IH
BK

SERVICE HINTS

S3, S4 SEAT HEATER SW (DRIVER'S SEAT, FRONT PASSENGER'S SEAT)

3–GROUND : Approx. **12** volts with the ignition SW at **ON** position

2–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
J7	35	S9	37 (S/D w/o Power Seat)	S10	37 (S/D w/o Power Seat)
S3	35		39 (W/G w/o Power Seat)		39 (W/G w/o Power Seat)
S4	35		40 (w/ Power Seat)		40 (w/ Power Seat)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

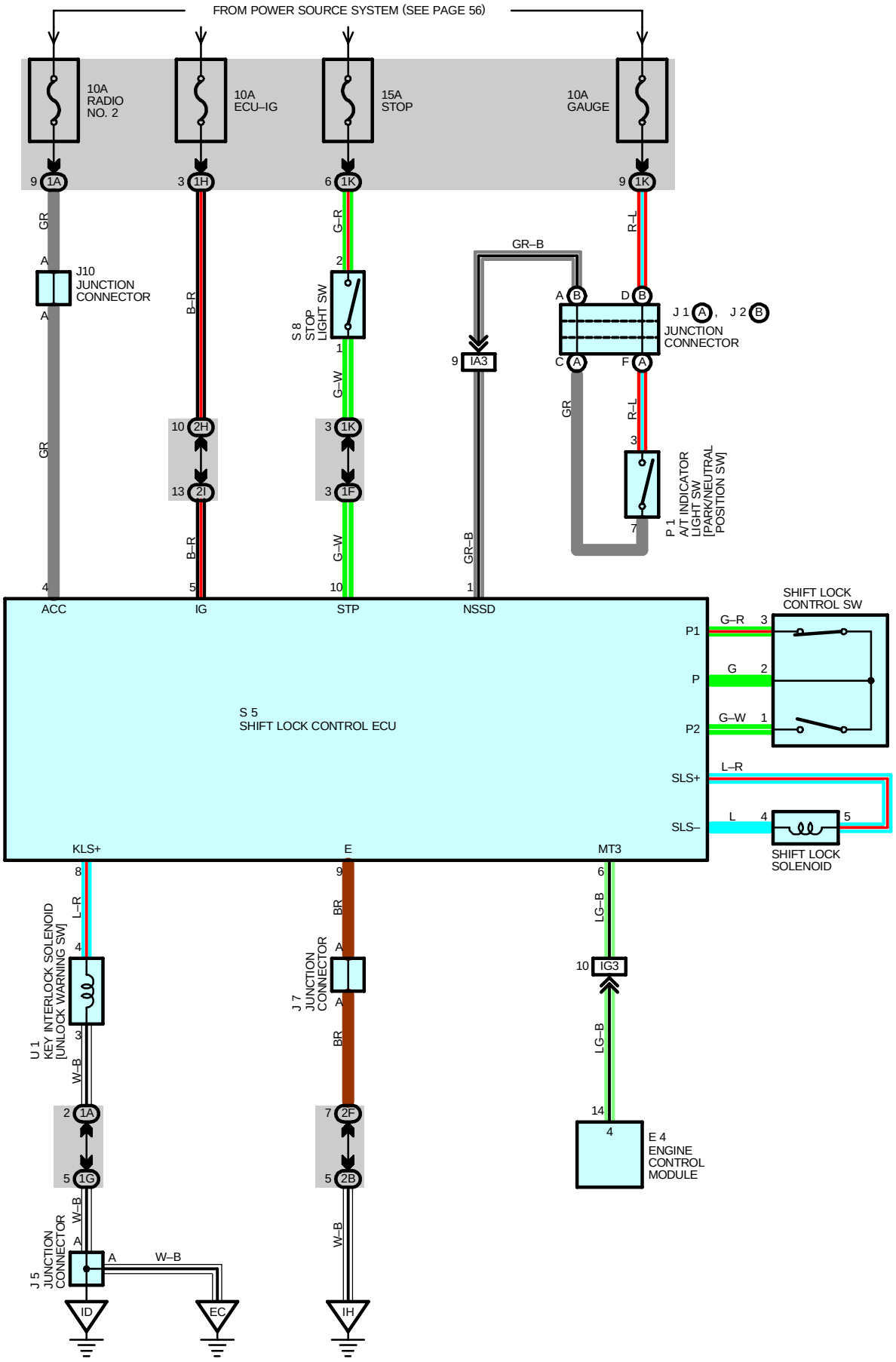
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB3	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IH4	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

: GROUND POINTS

Code	See Page	Ground Points Location
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	

SHIFT LOCK


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A RADIO NO. 2
10A ECU–IG
15A STOP
10A GAUGE
9 1A
3 1H
6 1K
9 1K
GR
A
J10 JUNCTION CONNECTOR
A
GR
4
ACC
B–R
10 2H
13 2I
B–R
5
IG
G–R
2
S 8 STOP LIGHT SW
1
G–W
3 1K
3 1F
G–W
10
STP
GR–B
9 IA3
GR–B
1
NSSD
R–L
A B
D B
J 1 A , J 2 B
JUNCTION CONNECTOR
C A
F A
GR
R–L
3
7
P 1 A/T INDICATOR LIGHT SW [PARK/NEUTRAL POSITION SW]
S 5 SHIFT LOCK CONTROL ECU
SHIFT LOCK CONTROL SW
P1
G–R 3
P
G 2
P2
G–W 1
SLS+
L–R
SLS–
L 4
5
SHIFT LOCK SOLENOID
KLS+
E
MT3
8
L–R
4
U 1 KEY INTERLOCK SOLENOID [UNLOCK WARNING SW]
3
W–B
2 1A
5 1G
W–B
A
J 5 JUNCTION CONNECTOR
A
W–B
ID
EC
9
BR
A
J 7 JUNCTION CONNECTOR
A
BR
7 2F
5 2B
W–B
IH
6
LG–B
10 IG3
LG–B
14
4
E 4 ENGINE CONTROL MODULE

SYSTEM OUTLINE

When the ignition SW is turned to ACC position, the current from the RADIO NO.2 fuse flows to TERMINAL 4 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 5 of the ECU.

1. SHIFT LOCK MECHANISM

With the ignition SW on, when a signal that the brake pedal is depressed (Stop light SW on) and a signal that the shift lever is put in P position (Continuity between P1 and P of the shift lock control SW) is input to the ECU, the ECU activates and the current flows from TERMINAL 5 of the ECU to TERMINAL SLS+ of the shift lock solenoid to solenoid to TERMINAL SLS– to TERMINAL 9 of the ECU to GROUND. This causes the shift lock solenoid to turn on (Lock plate disengages) and the shift lever can be shifted into other position than the P position

2. KEY INTER LOCK MECHANISM

With the ignition SW at ON or ACC position, when the shift lever is put in P position (No continuity between P2 and P of shift lock control SW), the current flowing from TERMINAL 8 of the ECU to the key interlock solenoid is cut off. This causes the key interlock solenoid to turn off (Lock plate disengages from LOCK position) and the ignition key can be turned from ACC to LOCK position.

SERVICE HINTS

S5 SHIFT LOCK CONTROL ECU

4–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
5–GROUND : Approx. **12** volts with the ignition SW at **ON** position
9–GROUND : Always continuity
10–GROUND : Approx. **12** volts with the brake pedal depressed

S8 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
E4	32	J7	35	S8	35
J1 A	33	J10	35	U1	35
J2 B	33	P1	33		
J5	35	S5	35		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2I		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG3	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)

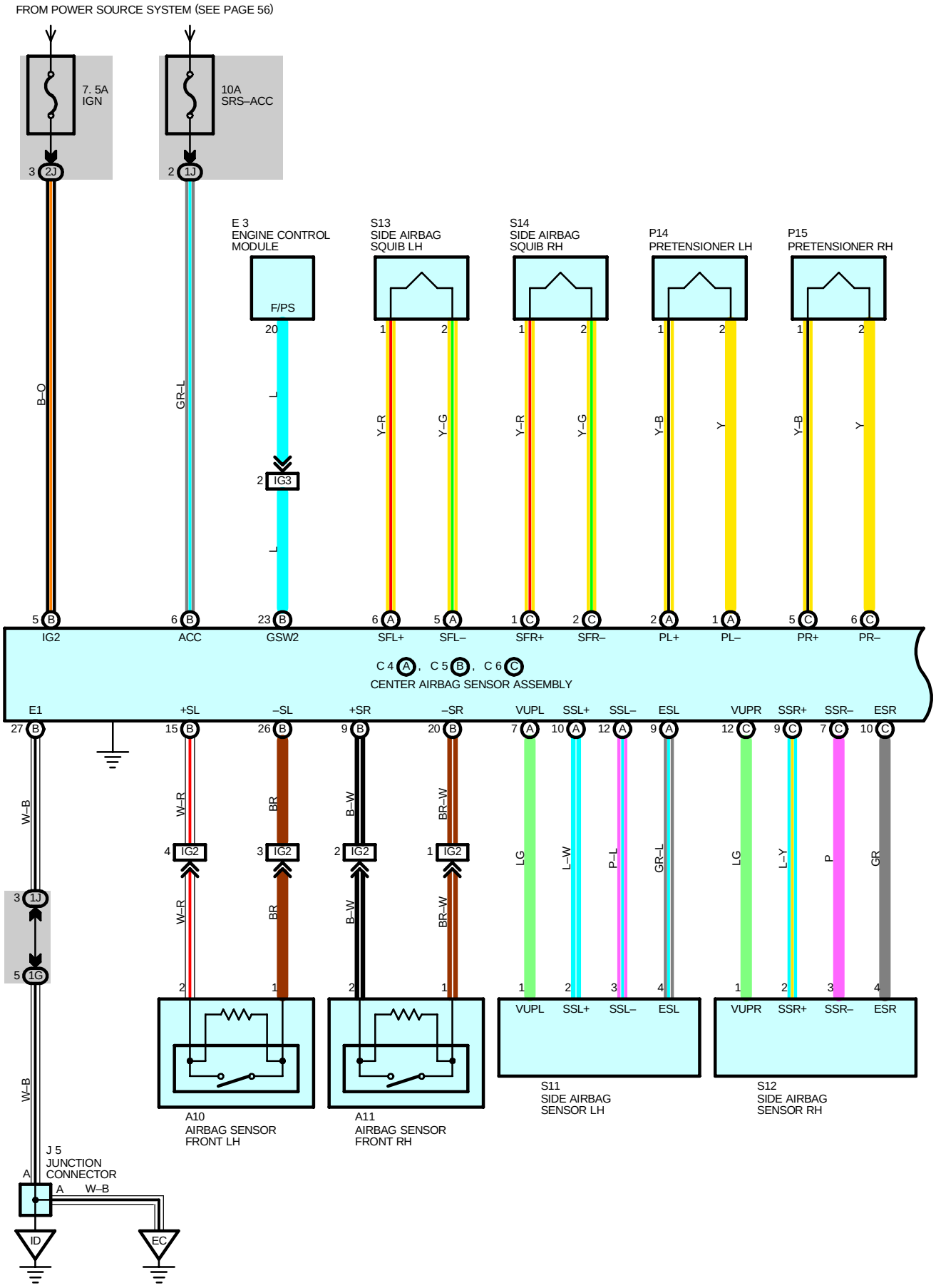
: GROUND POINTS

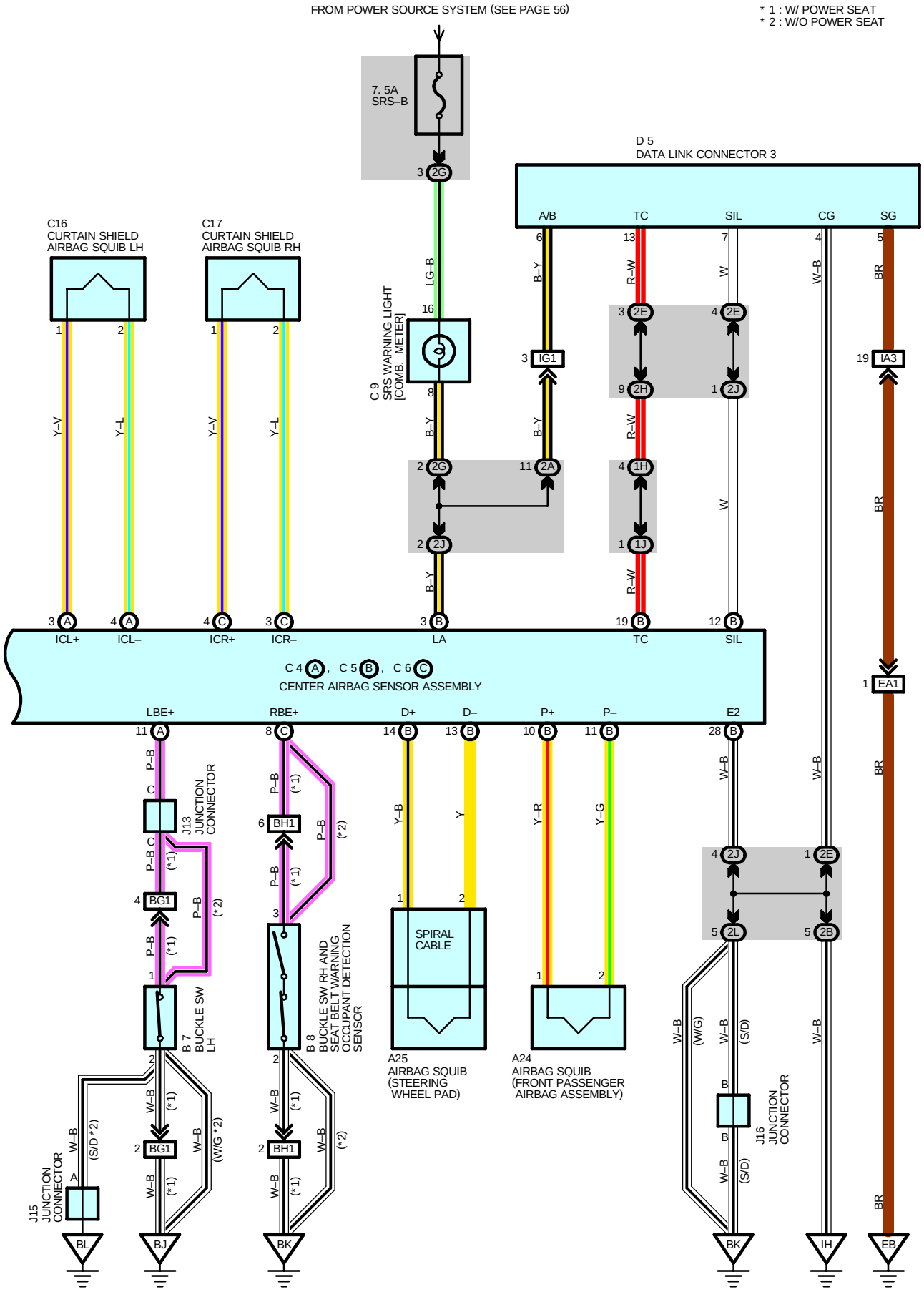
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH

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. 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, airbag sensor assembly, front 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, airbag sensor assembly, front 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, airbag sensor assembly, front 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, airbag sensor assembly, front 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.

SRS


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
7. 5A
IGN
10A
SRS–ACC
3 2J
2 1J
B–O
GR–L
E 3
ENGINE CONTROL
MODULE
F/PS
20
L
2 IG3
L
S13
SIDE AIRBAG
SQUIB LH
S14
SIDE AIRBAG
SQUIB RH
P14
PRETENSIONER LH
P15
PRETENSIONER RH
Y–R
Y–G
Y–B
Y
5 B IG2
6 B ACC
23 B GSW2
6 A SFL+
5 A SFL–
1 C SFR+
2 C SFR–
2 A PL+
1 A PL–
5 C PR+
6 C PR–
C 4 A , C 5 B , C 6 C
CENTER AIRBAG SENSOR ASSEMBLY
E1
+SL
–SL
+SR
–SR
VUPL
SSL+
SSL–
ESL
VUPR
SSR+
SSR–
ESR
27 B
15 B
26 B
9 B
20 B
7 A
10 A
12 A
9 A
12 C
9 C
7 C
10 C
W–B
W–R
BR
B–W
BR–W
LG
L–W
P–L
GR–L
L–Y
P
GR
4 IG2
3 IG2
2 IG2
1 IG2
3 1J
5 1G
A10
AIRBAG SENSOR
FRONT LH
A11
AIRBAG SENSOR
FRONT RH
S11
SIDE AIRBAG
SENSOR LH
S12
SIDE AIRBAG
SENSOR RH
J 5
JUNCTION
CONNECTOR
A
A W–B
ID
EC


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
* 1 : W/ POWER SEAT
* 2 : W/O POWER SEAT
7. 5A
SRS–B
D 5
DATA LINK CONNECTOR 3
A/B
TC
SIL
CG
SG
C16
CURTAIN SHIELD
AIRBAG SQUIB LH
C17
CURTAIN SHIELD
AIRBAG SQUIB RH
C 9
SRS WARNING LIGHT
[COMB. METER]
LG–B
B–Y
R–W
W
W–B
BR
Y–V
Y–L
IG1
IA3
2G
2E
2H
2J
2A
1H
1J
2L
2B
EA1
ICL+
ICL–
ICR+
ICR–
LA
TC
SIL
C 4 (A), C 5 (B), C 6 (C)
CENTER AIRBAG SENSOR ASSEMBLY
LBE+
RBE+
D+
D–
P+
P–
E2
J13
JUNCTION
CONNECTOR
P–B
BG1
BH1
(*1)
(*2)
B 7
BUCKLE SW
LH
B 8
BUCKLE SW RH AND
SEAT BELT WARNING
OCCUPANT DETECTION
SENSOR
SPIRAL
CABLE
A25
AIRBAG SQUIB
(STEERING
WHEEL PAD)
A24
AIRBAG SQUIB
(FRONT PASSENGER
AIRBAG ASSEMBLY)
J15
JUNCTION
CONNECTOR
J16
JUNCTION
CONNECTOR
W–B
(S/D *2)
(W/G *2)
(W/G)
(S/D)
BL
BJ
BK
IH
EB

SRS

SYSTEM OUTLINE

The SRS is a driver and front passenger protection device which has a supplemental role to the seat belts.
When the ignition SW is turned to ACC or ON, the current from the SRS–ACC fuse flows to TERMINAL (B) 6 of the center airbag sensor assembly. Only when the ignition SW is on does the current flow from the IGN fuse to TERMINAL (B) 5 of the center airbag sensor assembly.
If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the SRS–ACC or IGN fuse flows to TERMINALS (B) 14, (B) 10, (A) 2 and (C) 5 of the center airbag sensor assembly to TERMINAL 1 of the airbag squibs and the pretensioners to TERMINAL 2 to TERMINALS (B) 13, (B) 11, (A) 1 and (C) 6 of the center airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them to operate.
When the side impact also exceeds a set level, the current from the SRS–ACC or IGN fuse flows to TERMINALS (A) 6, (C) 1, (A) 3, (C) 4, (A) 2 and (C) 5 of the center airbag sensor assembly to TERMINAL 1 of the side airbag squibs, the curtain shield airbag squibs and the pretensioners to TERMINAL 2 to TERMINALS (A) 5, (C) 2, (A) 4, (C) 3, (A) 1 and (C) 6 of the center airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, causing the side airbag squibs, the curtain shield airbag squibs and the pretensioners to operate.
The airbag stored inside the steering wheel pad is instantaneously expanded to soften the shock to the driver.
The airbag stored inside the front passenger's instrument panel is instantaneously expanded to soften the shock to the front passenger.
Side airbags are instantaneously expanded to soften the shock of side to the driver and front passenger.
The curtain shield airbag can ease an impact on the head of the front and rear passengers and reduce risks of injury.
The pretensioners make sure of the seat belt restrainability.

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A10	32	C6 C	34	P14	39 (W/G)
A11	32	C9	34	P15	37 (S/D)
A24	34	C16	34		39 (W/G)
A25	34	C17	34	S11	37 (S/D)
B7	36 (S/D w/o Power Seat)	D5	34		39 (W/G)
	38 (W/G w/o Power Seat)	E3	32	S12	37 (S/D)
	40 (w/ Power Seat)	J5	35		39 (W/G)
B8	36 (S/D w/o Power Seat)	J13	36 (S/D)	S13	37 (S/D)
	38 (W/G w/o Power Seat)		38 (W/G)		39 (W/G)
	40 (w/ Power Seat)	J15	36 (S/D)	S14	37 (S/D)
C4 A	34	J16	36 (S/D)		39 (W/G)
C5 B	34	P14	37 (S/D)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

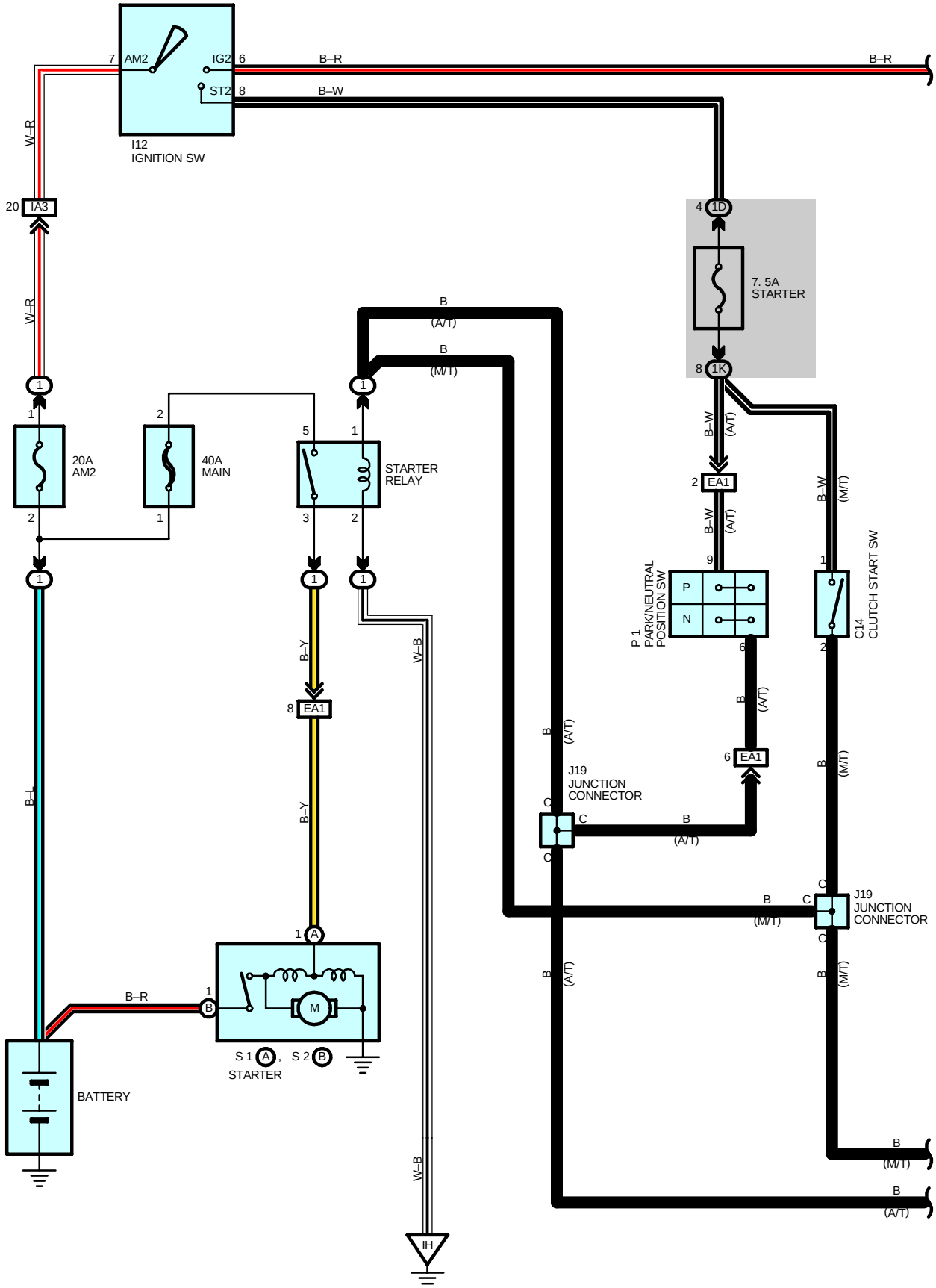
Code	See Page	Junction Block and Wire Harness (Connector Location)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1J		
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2G		
2H		
2J		
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

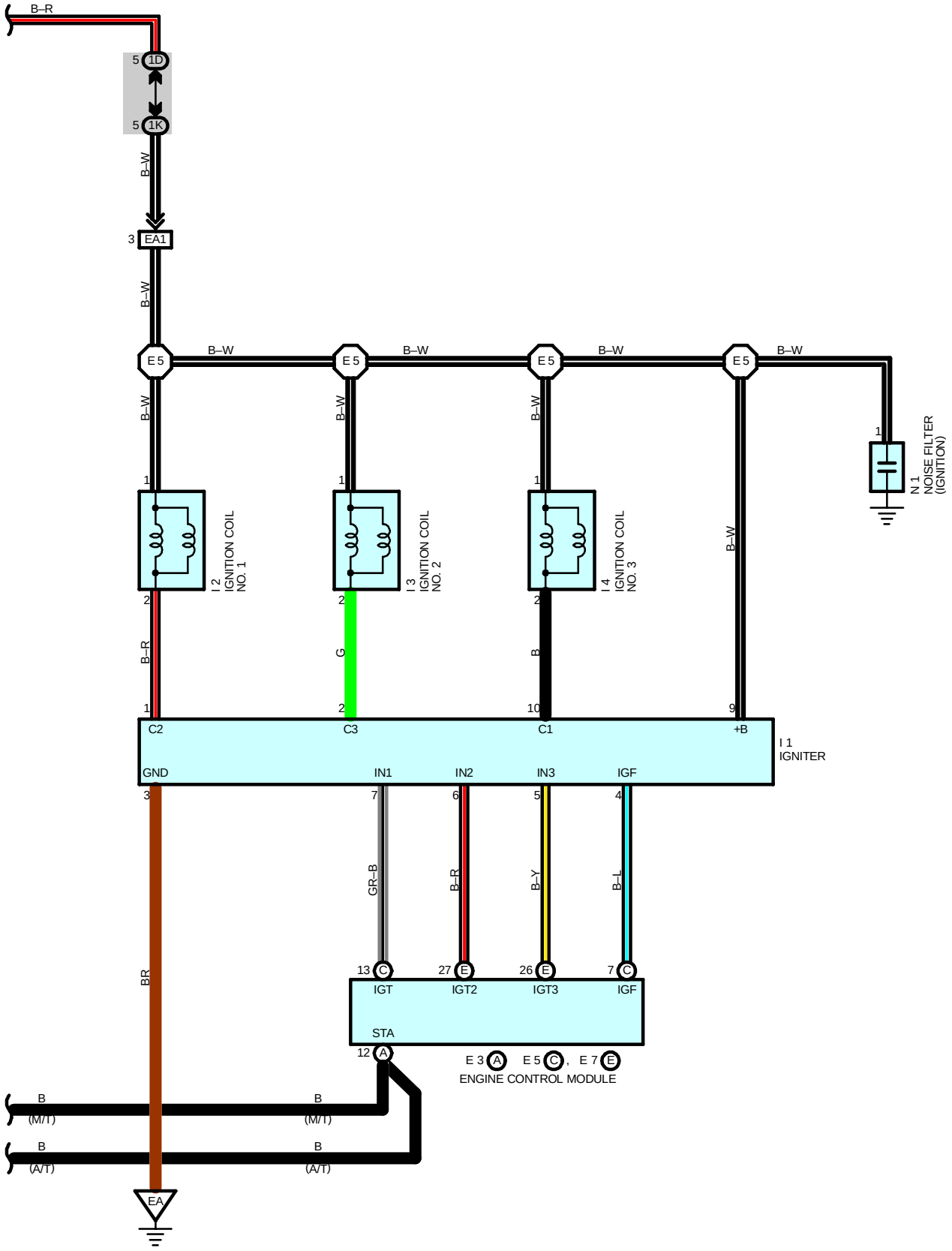
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IG1	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IG2		
IG3		
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)

: GROUND POINTS

Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH


7 AM2
IG2 6
B–R
B–R
ST2 8
B–W
I12
IGNITION SW
W–R
20 IA3
W–R
4 1D
7. 5A
STARTER
8 1K
B
(A/T)
B
(M/T)
1
1
20A
AM2
2
40A
MAIN
5
1
STARTER
RELAY
3
2
B–W
(A/T)
2 EA1
B–W
(A/T)
B–W
(M/T)
9
P
N
P 1
PARK/NEUTRAL
POSITION SW
1
C14
CLUTCH START SW
2
B–Y
8 EA1
W–B
B–Y
B–L
B
(A/T)
6 EA1
B
(A/T)
J19
JUNCTION
CONNECTOR
C
C
C
B
(A/T)
B
(M/T)
J19
JUNCTION
CONNECTOR
B
(M/T)
B
(M/T)
B
(A/T)
1 A
B–R
1
B
M
S 1 A , S 2 B
STARTER
BATTERY
W–B
IH


B–R
5 1D
5 1K
B–W
3 EA1
B–W
E 5
B–W
E 5
B–W
E 5
B–W
E 5
B–W
B–W
B–W
B–W
1
1
1
1
I 2
IGNITION COIL
NO. 1
I 3
IGNITION COIL
NO. 2
I 4
IGNITION COIL
NO. 3
1
N 1
NOISE FILTER
(IGNITION)
2
2
2
B–R
G
B
1
2
10
9
C2
C3
C1
+B
I 1
IGNITER
GND
IN1
IN2
IN3
IGF
3
7
6
5
4
GR–B
B–R
B–Y
B–L
BR
13 C
27 E
26 E
7 C
IGT
IGT2
IGT3
IGF
STA
12 A
E 3 A
E 5 C
, E 7 E
ENGINE CONTROL MODULE
B
(M/T)
B
(M/T)
B
(A/T)
B
(A/T)
EA

STARTING AND IGNITION

SERVICE HINTS

S1 (A), S2 (B) STARTER

Points closed with the Park/Neutral position SW at **P** or **N** position and the ignition SW at **ST** position

I12 IGNITION SW

7–6 : Closed with the ignition SW at **ON** or **ST** position
7–8 : Closed with the ignition SW at **ST** position

: PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
C14		34	I2	33	N1		33
E3	A	32	I3	33	P1		33
E5	C	32	I4	33	S1	A	33
E7	E	32	I12	35	S2	B	33
I1		33	J19	35			

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA3	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)

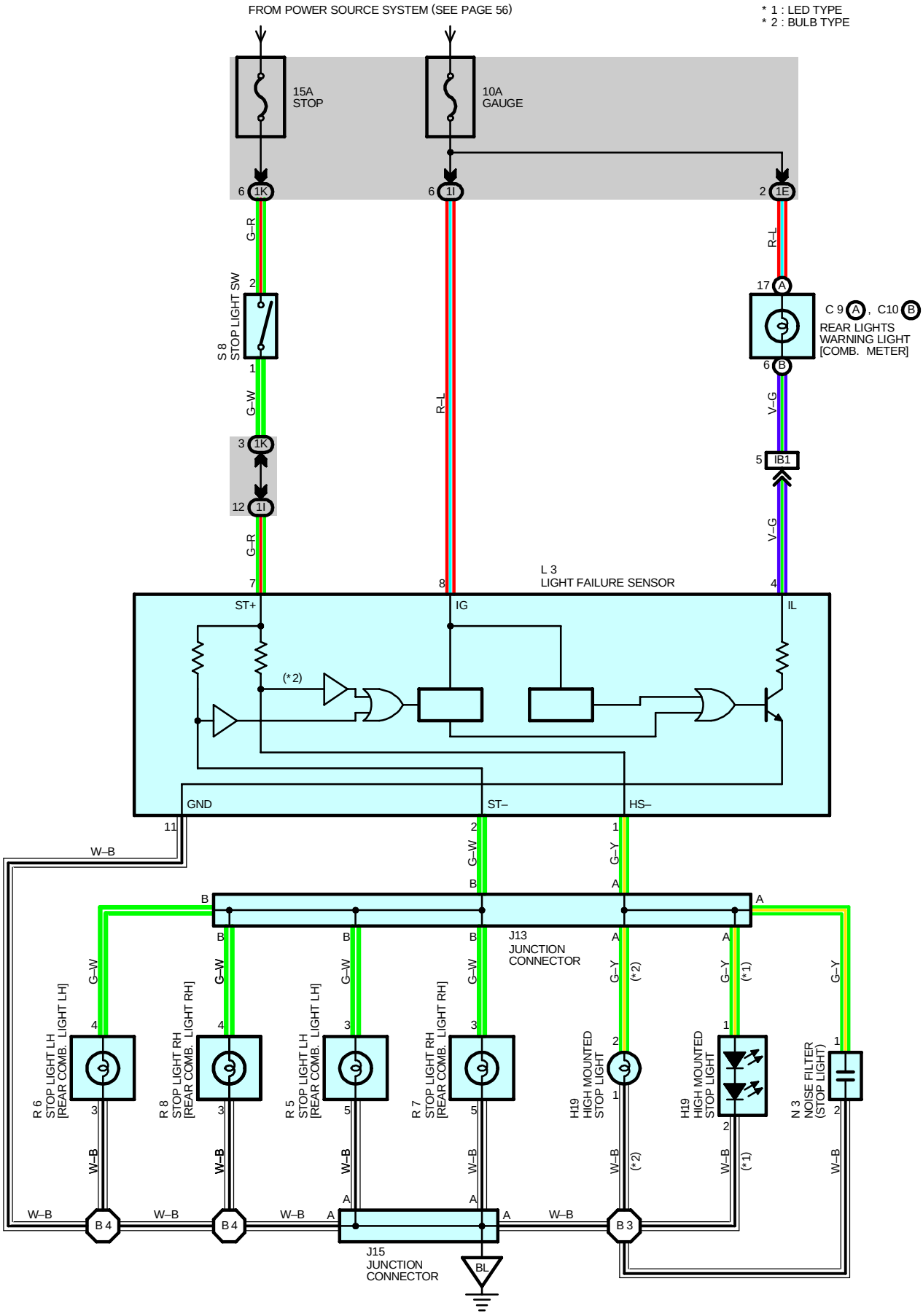
: GROUND POINTS

Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
IH	44	Cowl Side Panel RH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	42	Engine Wire			

STOP LIGHT (S/D)



SYSTEM OUTLINE

Current is applied at all times through a 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 depressed (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 (Bulb type), 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 depressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and the warning light on until the ignition SW is turned off.

SERVICE HINTS

S8 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

L3 LIGHT FAILURE SENSOR

1, 2, 7–GROUND : Approx. **12** volts with the brake pedal depressed
4, 8–GROUND : Approx. **12** volts with the ignition SW at **ON** position
11–GROUND : Always continuity

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C9	A	34	J15	36 (S/D)	R6	37 (S/D)
C10	B	34	L3	36 (S/D)	R7	37 (S/D)
H19		36 (S/D)	N3	37 (S/D)	R8	37 (S/D)
J13		36 (S/D)	R5	37 (S/D)	S8	35

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)

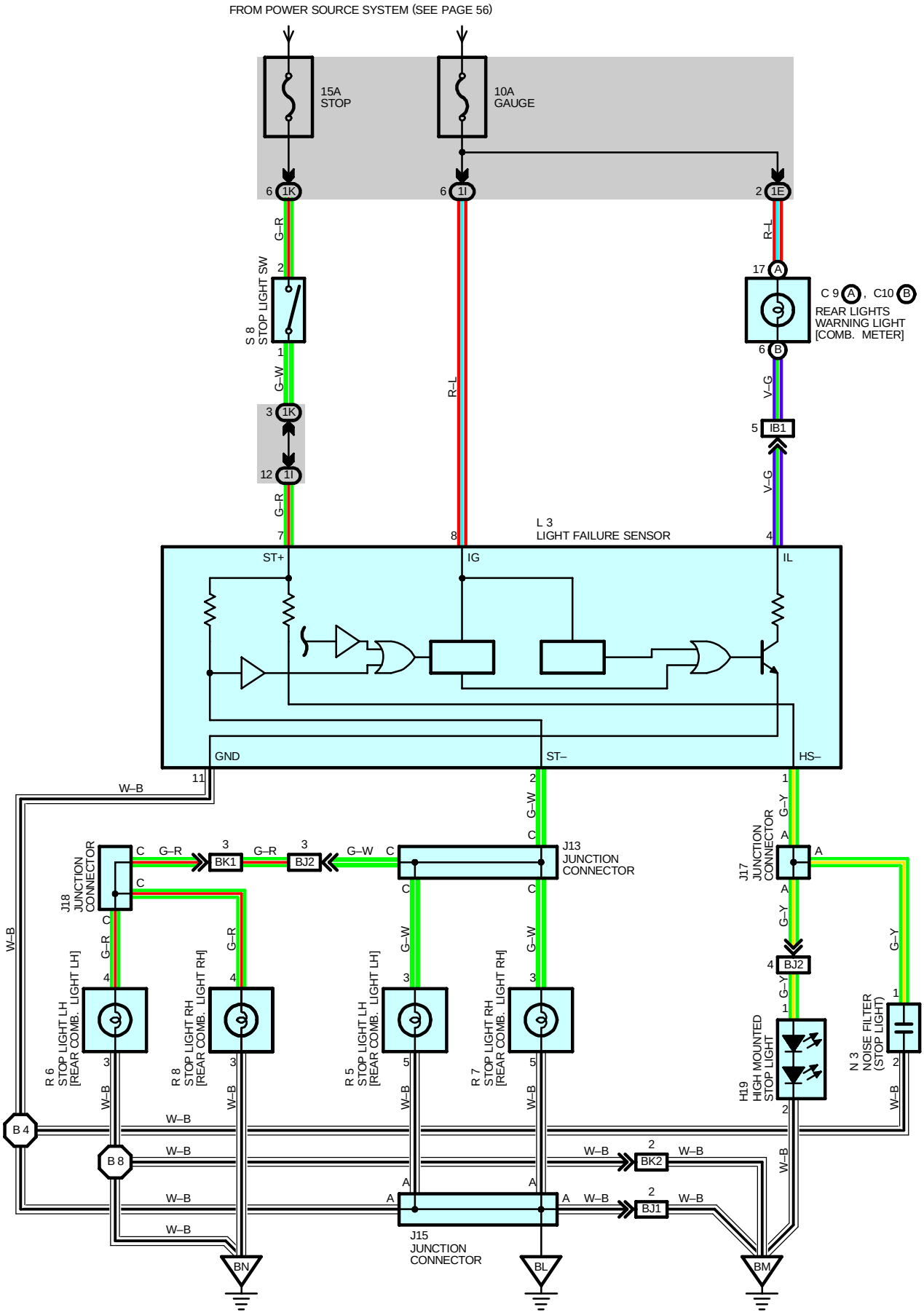
: GROUND POINTS

Code	See Page	Ground Points Location
BL	48 (S/D)	Left Quarter Panel LH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B3	48 (S/D)	Floor No.2 Wire	B4	48 (S/D)	Floor No.2 Wire

STOP LIGHT (W/G)



SYSTEM OUTLINE

Current is applied at all times through a 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 depressed (Stop light SW on), if the stop light circuit is open, the current flowing from TERMINAL 7 of the light failure sensor to TERMINAL 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 depressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and the warning light on until the ignition SW is turned off.

SERVICE HINTS

S8 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

L3 LIGHT FAILURE SENSOR

1, 2, 7–GROUND : Approx. **12** volts with the brake pedal depressed
4, 8–GROUND : Approx. **12** volts with the ignition SW at **ON** position
11–GROUND : Always continuity

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
C9	A	34	J17	38 (W/G)	R6	39 (W/G)
C10	B	34	J18	38 (W/G)	R7	39 (W/G)
H19		38 (W/G)	L3	38 (W/G)	R8	39 (W/G)
J13		38 (W/G)	N3	39 (W/G)	S8	35
J15		38 (W/G)	R5	39 (W/G)		

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BJ1	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BJ2		
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)
BK2		

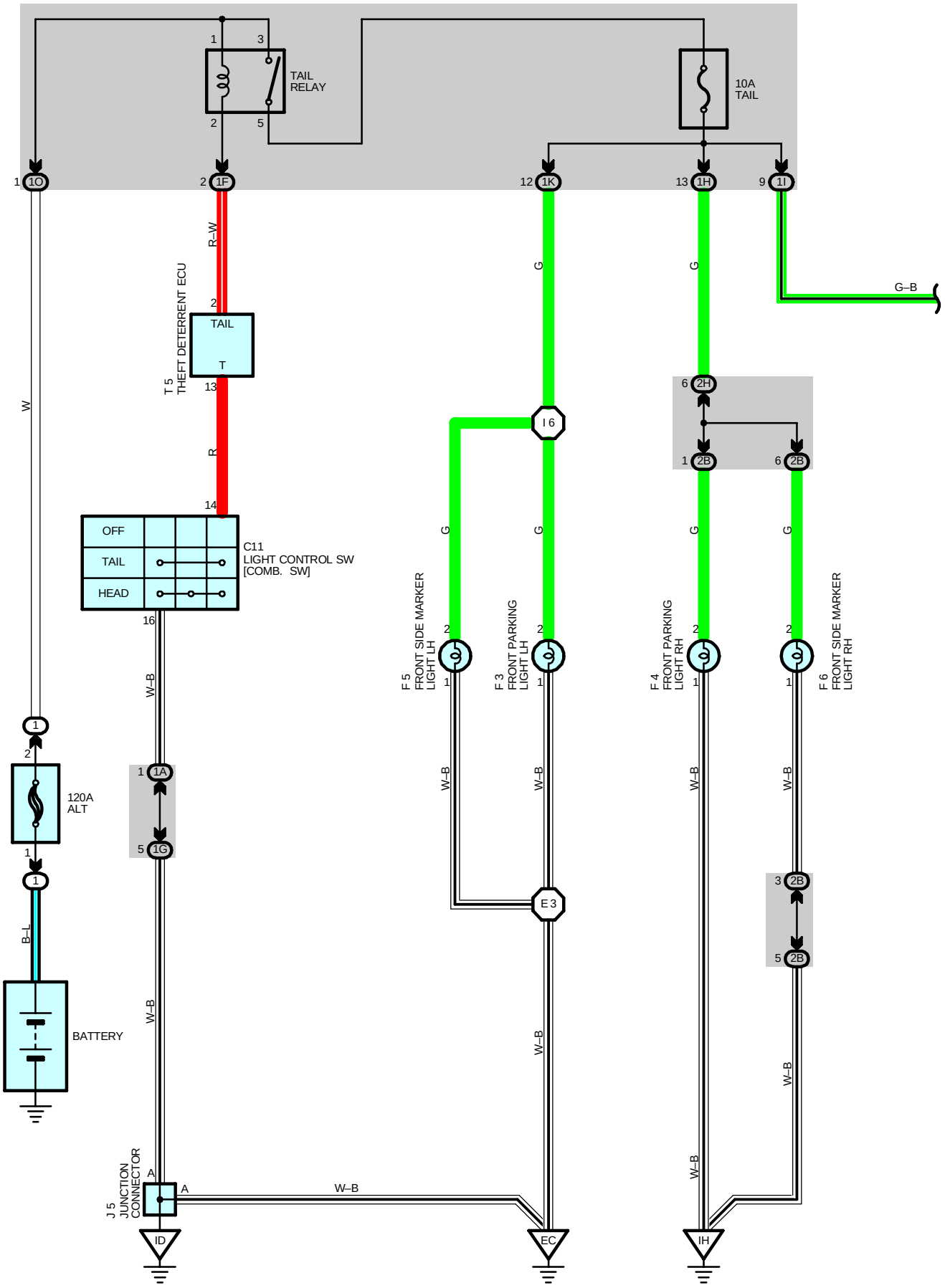
: GROUND POINTS

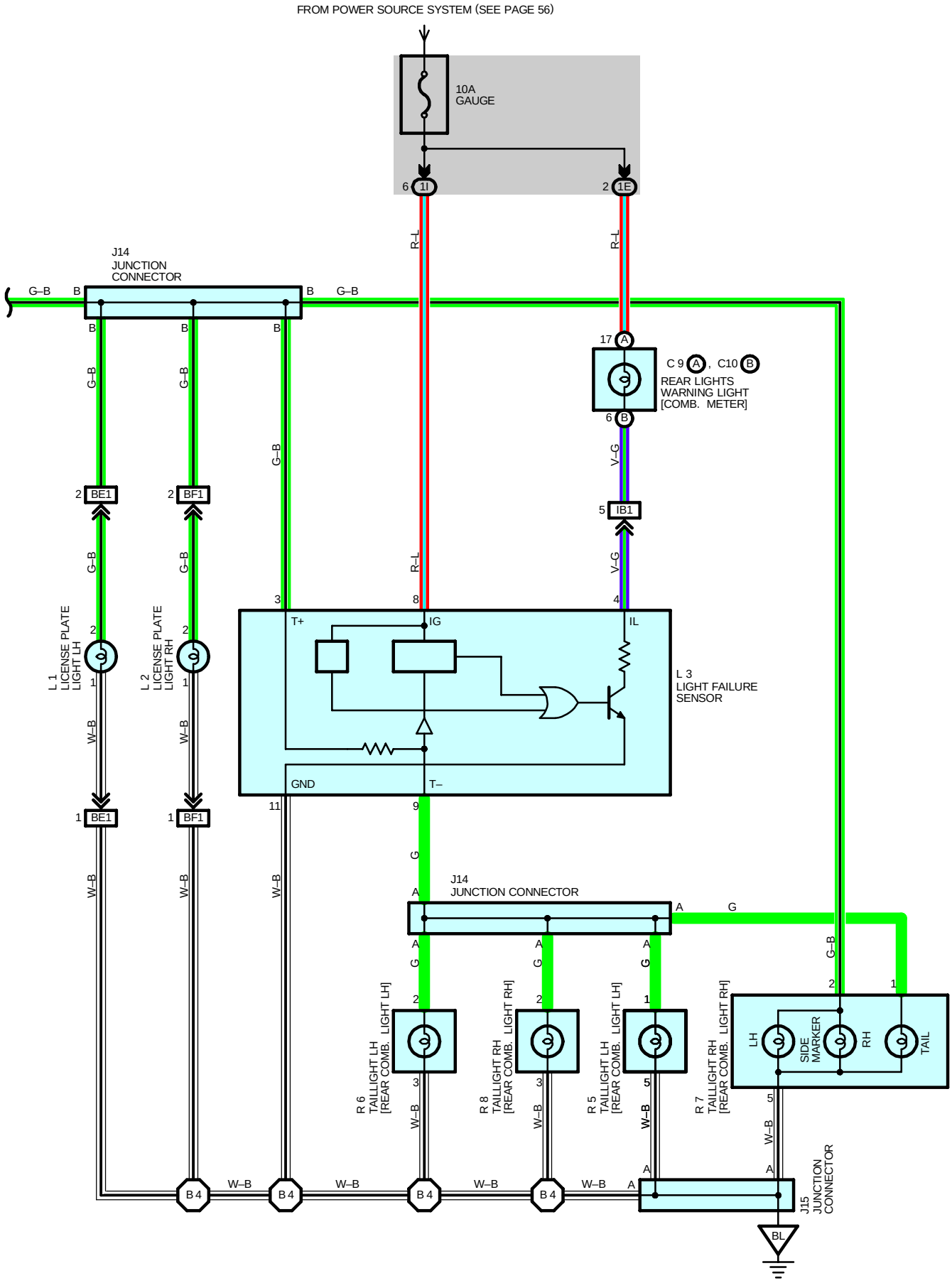
Code	See Page	Ground Points Location
BL	50 (W/G)	Left Quarter Panel LH
BM	50 (W/G)	Left Side of the Back Panel Upper
BN	50 (W/G)	Right Side of the Back Panel Lower

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	50 (W/G)	Floor No.2 Wire	B8	50 (W/G)	Back Door No.2 Wire

TAILLIGHT (S/D)




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
6 1I
2 1E
R–L
R–L
J14
JUNCTION
CONNECTOR
G–B
B
17 A
C 9 A , C10 B
REAR LIGHTS
WARNING LIGHT
[COMB. METER]
6 B
V–G
5 IB1
2 BE1
2 BF1
1 BE1
1 BF1
L 1
LICENSE PLATE
LIGHT LH
L 2
LICENSE PLATE
LIGHT RH
3
8
4
T+
IG
IL
GND
T–
L 3
LIGHT FAILURE
SENSOR
11
9
W–B
G
J14
JUNCTION CONNECTOR
A
R 6
TAILLIGHT LH
[REAR COMB. LIGHT LH]
R 8
TAILLIGHT RH
[REAR COMB. LIGHT RH]
R 5
TAILLIGHT LH
[REAR COMB. LIGHT LH]
R 7
TAILLIGHT RH
[REAR COMB. LIGHT RH]
LH
SIDE
MARKER
RH
TAIL
B 4
J15
JUNCTION
CONNECTOR
BL

TAILLIGHT (S/D)

SYSTEM OUTLINE

When the light control SW is turned to TAIL or HEAD position, the current flows to TERMINAL 3 of the light failure sensor through the TAIL fuse.
When the ignition SW is turned on, the 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.

TAILLIGHT DISCONNECTION WARNING

With the ignition SW on and the light control SW turned to TAIL or HEAD position, if the taillight circuit is open, the light failure sensor detects the failure by the change in current flowing from TERMINAL 3 of the light failure sensor to TERMINAL 9 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, which remains on until the light control SW is turned off.

SERVICE HINTS

TAIL RELAY

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

L3 LIGHT FAILURE SENSOR

4, 8–GROUND : Approx. **12** volts with the ignition SW at **ON** position
3, 9–GROUND : Approx. **12** volts with the light control SW at **TAIL** or **HEAD** position
11–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C9 A	34	F6	32	L3	36 (S/D)
C10 B	34	J5	35	R5	37 (S/D)
C11	34	J14	36 (S/D)	R6	37 (S/D)
F3	32	J15	36 (S/D)	R7	37 (S/D)
F4	32	L1	36 (S/D)	R8	37 (S/D)
F5	32	L2	36 (S/D)	T5	35

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BE1	48 (S/D)	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light LH)
BF1	48 (S/D)	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light RH)



: GROUND POINTS

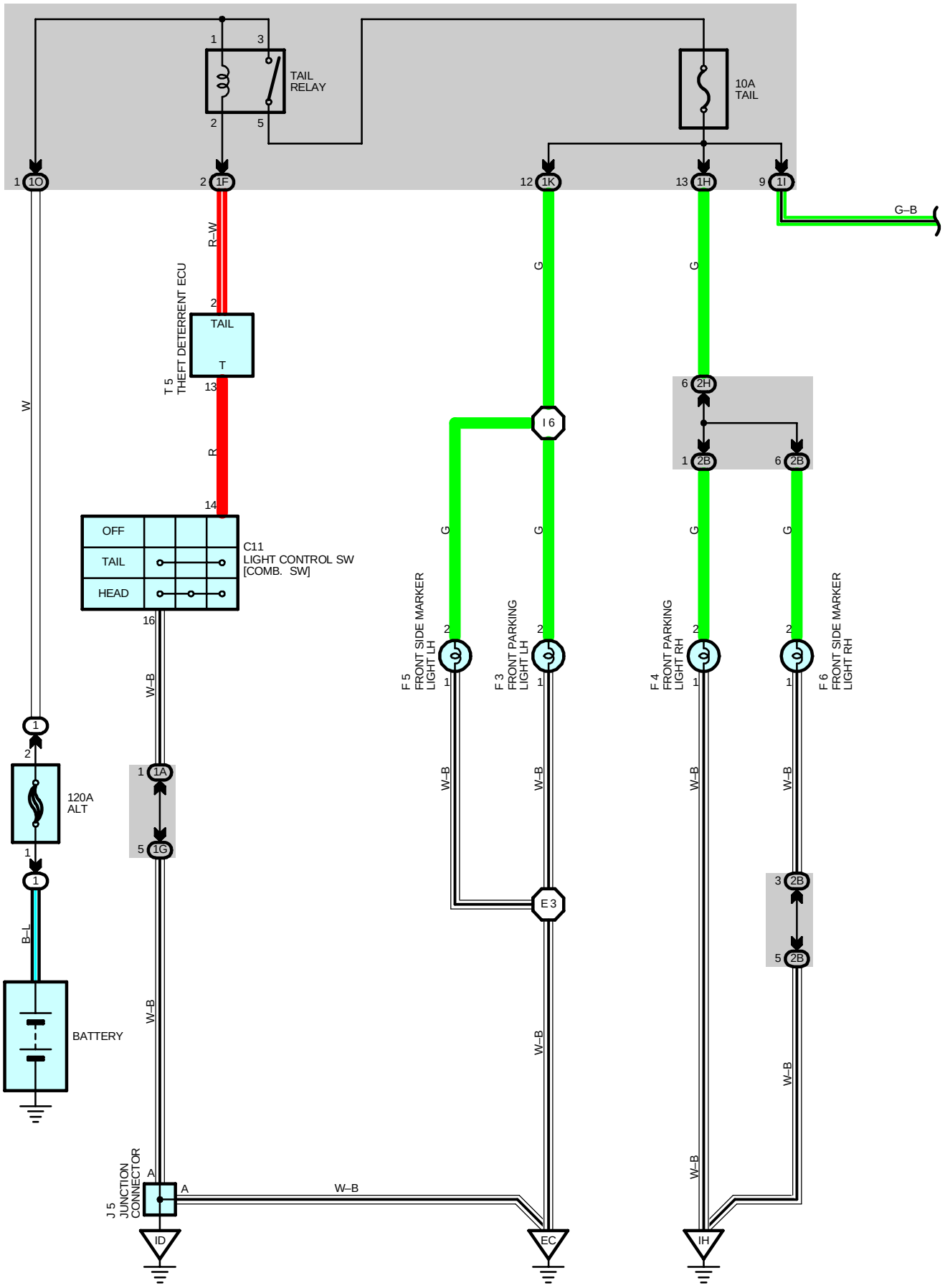
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BL	48 (S/D)	Left Quarter Panel LH

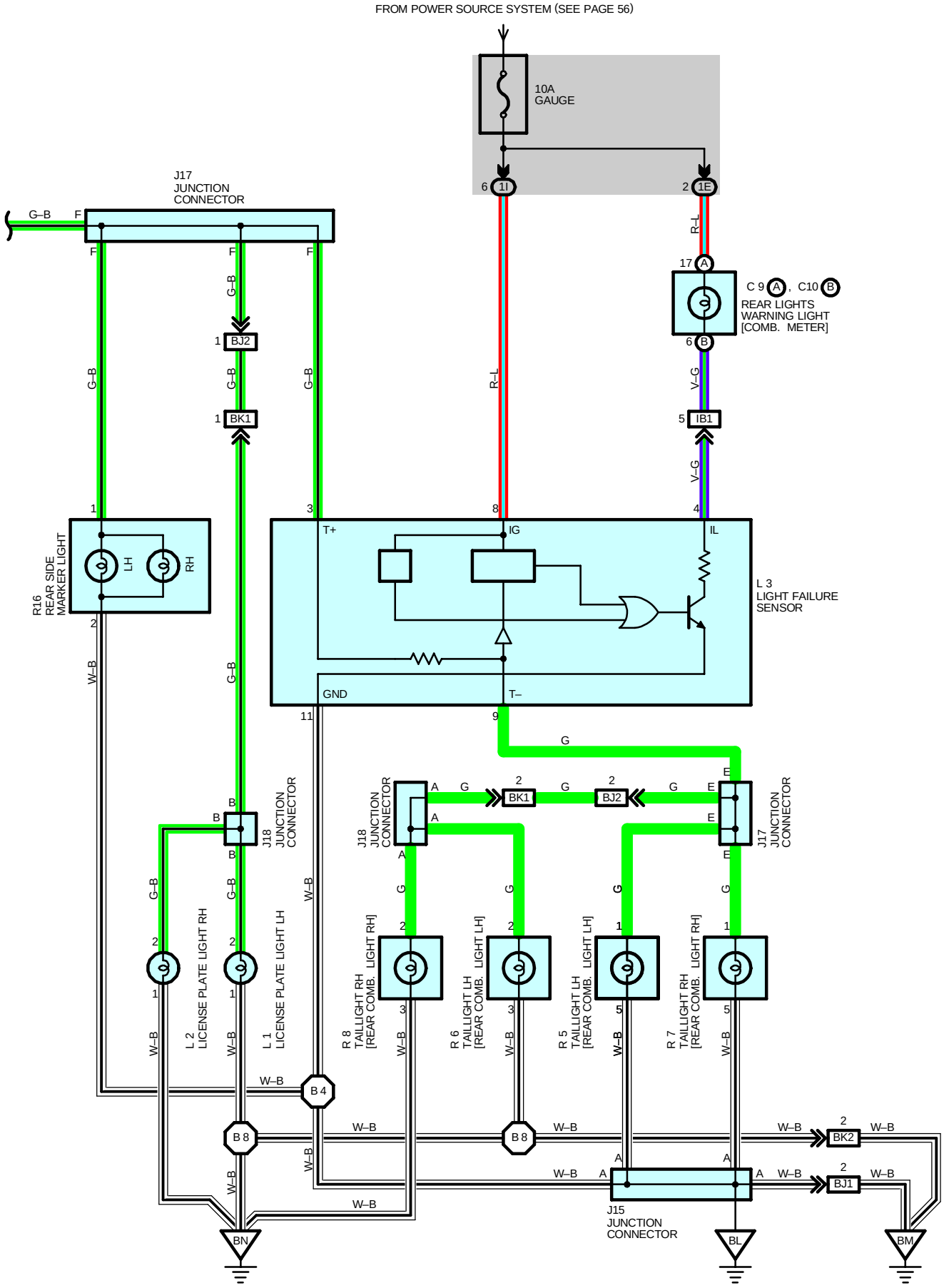


: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	42	Engine Room Main Wire	B4	48 (S/D)	Floor No.2 Wire
I6	46				

TAILLIGHT (W/G)




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
6 1I
2 1E
J17
JUNCTION
CONNECTOR
G–B
F
R–L
17 A
C 9 A , C10 B
REAR LIGHTS
WARNING LIGHT
[COMB. METER]
6 B
V–G
5 IB1
1 BJ2
1 BK1
R16
REAR SIDE
MARKER LIGHT
LH
RH
T+
IG
IL
L 3
LIGHT FAILURE
SENSOR
GND
T–
J18
JUNCTION
CONNECTOR
J17
JUNCTION
CONNECTOR
L 2
LICENSE PLATE LIGHT RH
L 1
LICENSE PLATE LIGHT LH
R 8
TAILLIGHT RH
[REAR COMB. LIGHT RH]
R 6
TAILLIGHT LH
[REAR COMB. LIGHT LH]
R 5
TAILLIGHT LH
[REAR COMB. LIGHT LH]
R 7
TAILLIGHT RH
[REAR COMB. LIGHT RH]
W–B
B 4
B 8
BK2
BJ1
J15
JUNCTION
CONNECTOR
BN
BL
BM

TAILLIGHT (W/G)

SYSTEM OUTLINE

When the light control SW is turned to TAIL or HEAD position, the current flows to TERMINAL 3 of the light failure sensor through the TAIL fuse.
When the ignition SW is turned on, the 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.

TAILLIGHT DISCONNECTION WARNING

With the ignition SW on and the light control SW turned to TAIL or HEAD position, if the taillight circuit is open, the light failure sensor detects the failure by the change in current flowing from TERMINAL 3 of the light failure sensor to TERMINAL 9 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, which remains on until the light control SW is turned off.

SERVICE HINTS

TAIL RELAY

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

L3 LIGHT FAILURE SENSOR

4, 8–GROUND : Approx. **12** volts with the ignition SW at **ON** position
3, 9–GROUND : Approx. **12** volts with the light control SW at **TAIL** or **HEAD** position
11–GROUND : Always continuity

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
C9 A	34	J5	35	R5	39 (W/G)
C10 B	34	J15	38 (W/G)	R6	39 (W/G)
C11	34	J17	38 (W/G)	R7	39 (W/G)
F3	32	J18	38 (W/G)	R8	39 (W/G)
F4	32	L1	38 (W/G)	R16	39 (W/G)
F5	32	L2	38 (W/G)	T5	35
F6	32	L3	38 (W/G)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1O		
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2H	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BJ1	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BJ2		
BK1	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)
BK2		

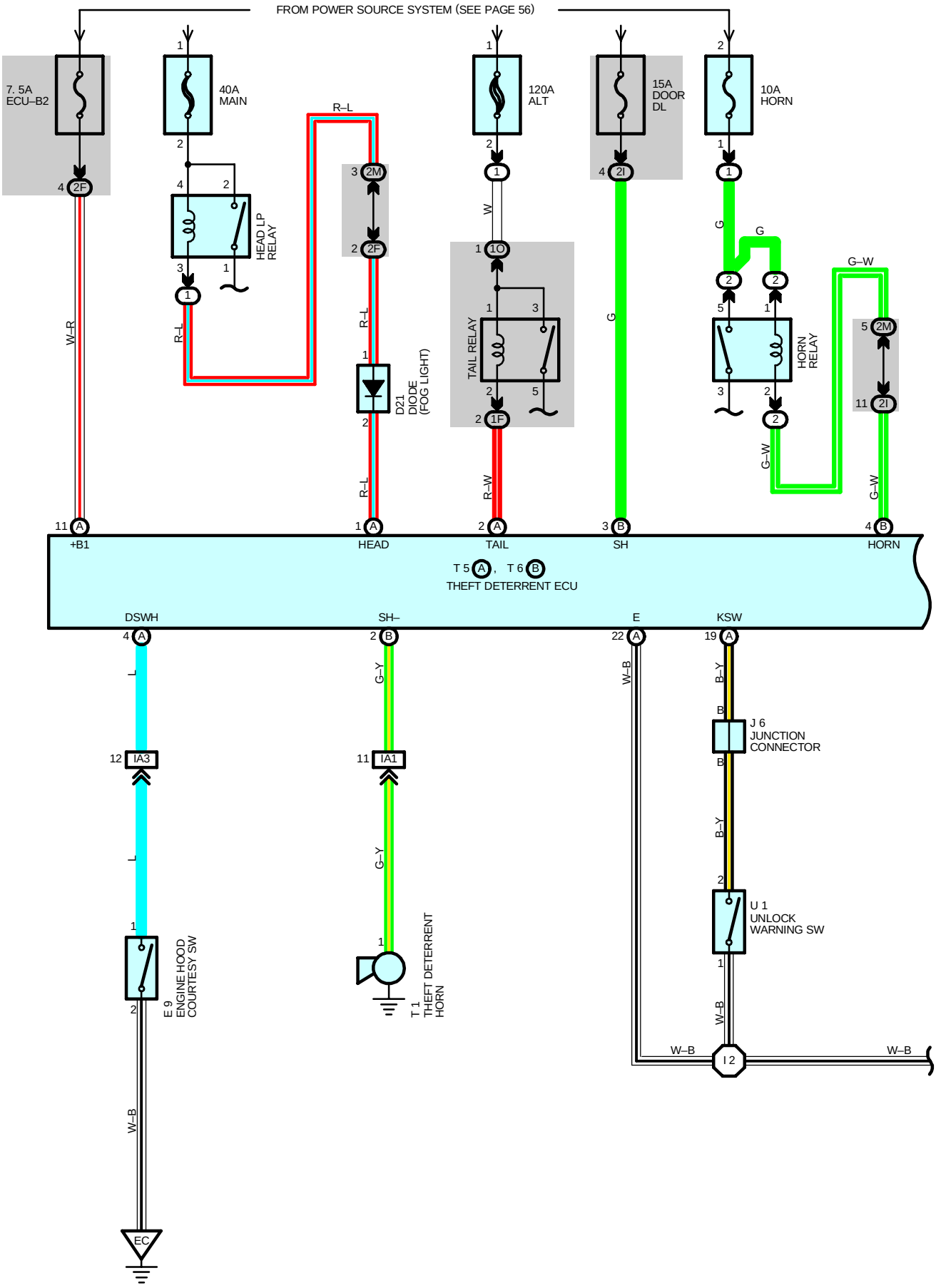
: GROUND POINTS

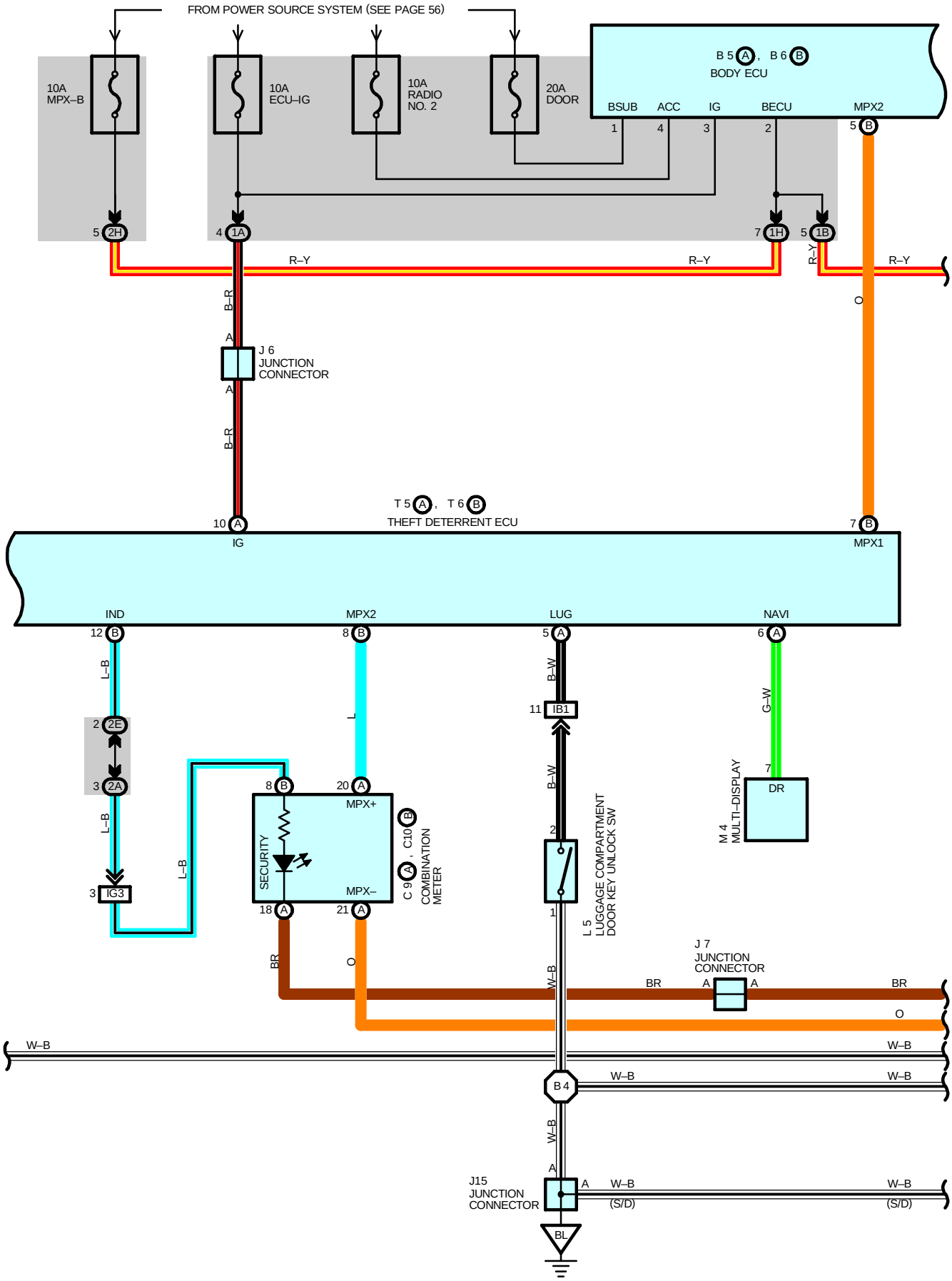
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BL	50 (W/G)	Left Quarter Panel LH
BM	50 (W/G)	Left Side of the Back Panel Upper
BN	50 (W/G)	Right Side of the Back Panel Lower

: SPLICE POINTS

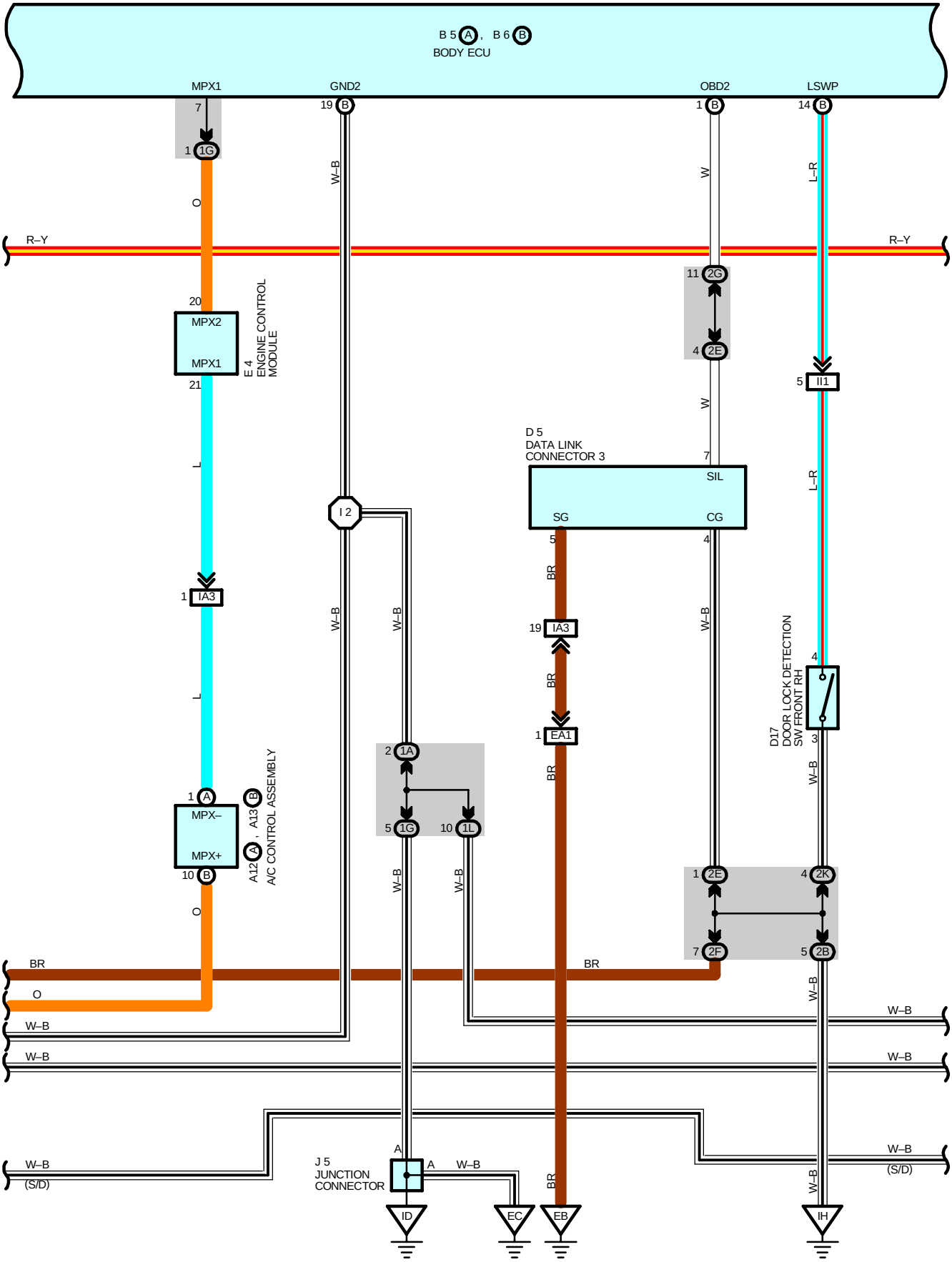
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	42	Engine Room Main Wire	B4	50 (W/G)	Floor No.2 Wire
I6	46		B8	50 (W/G)	Back Door No.2 Wire

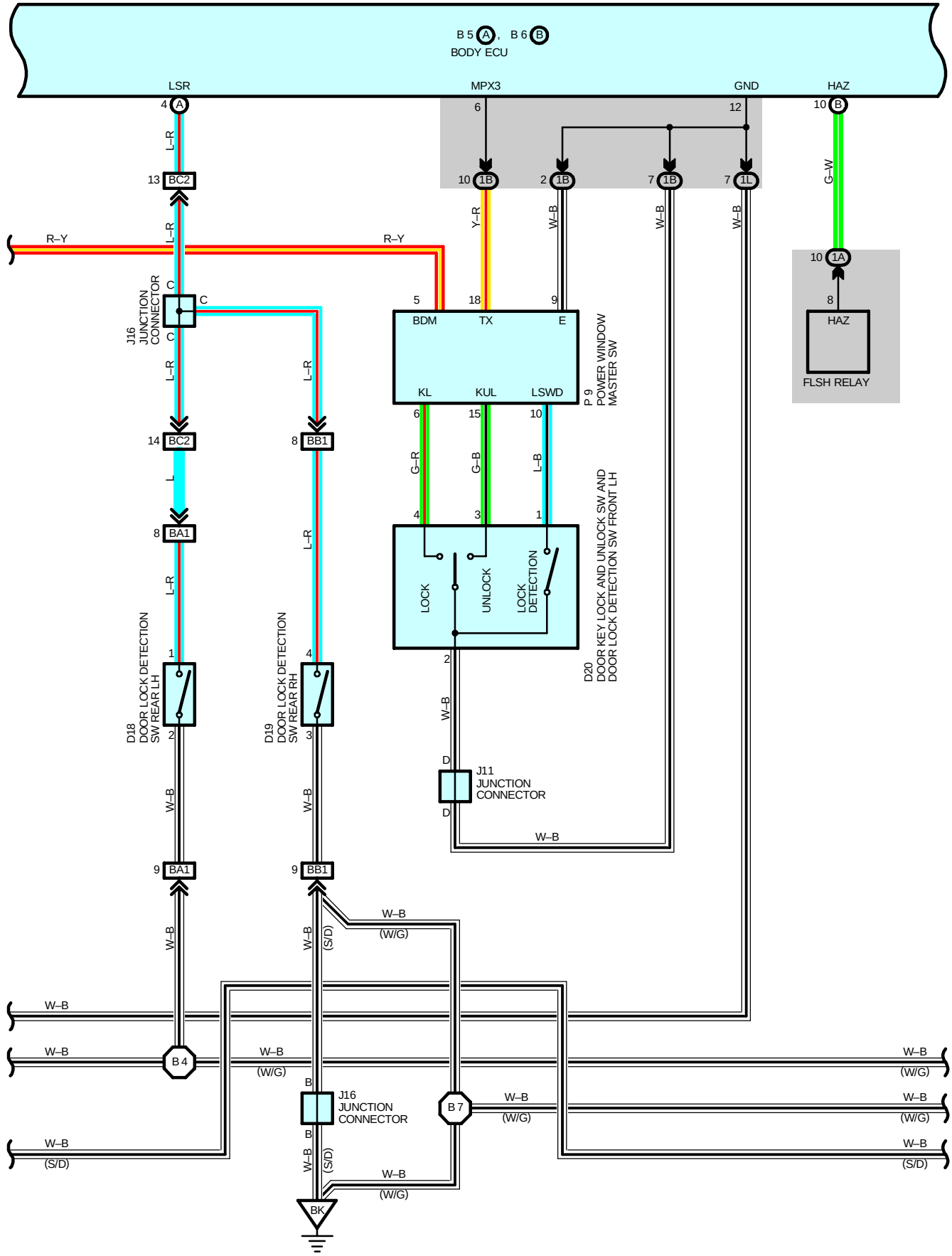
THEFT DETERRENT



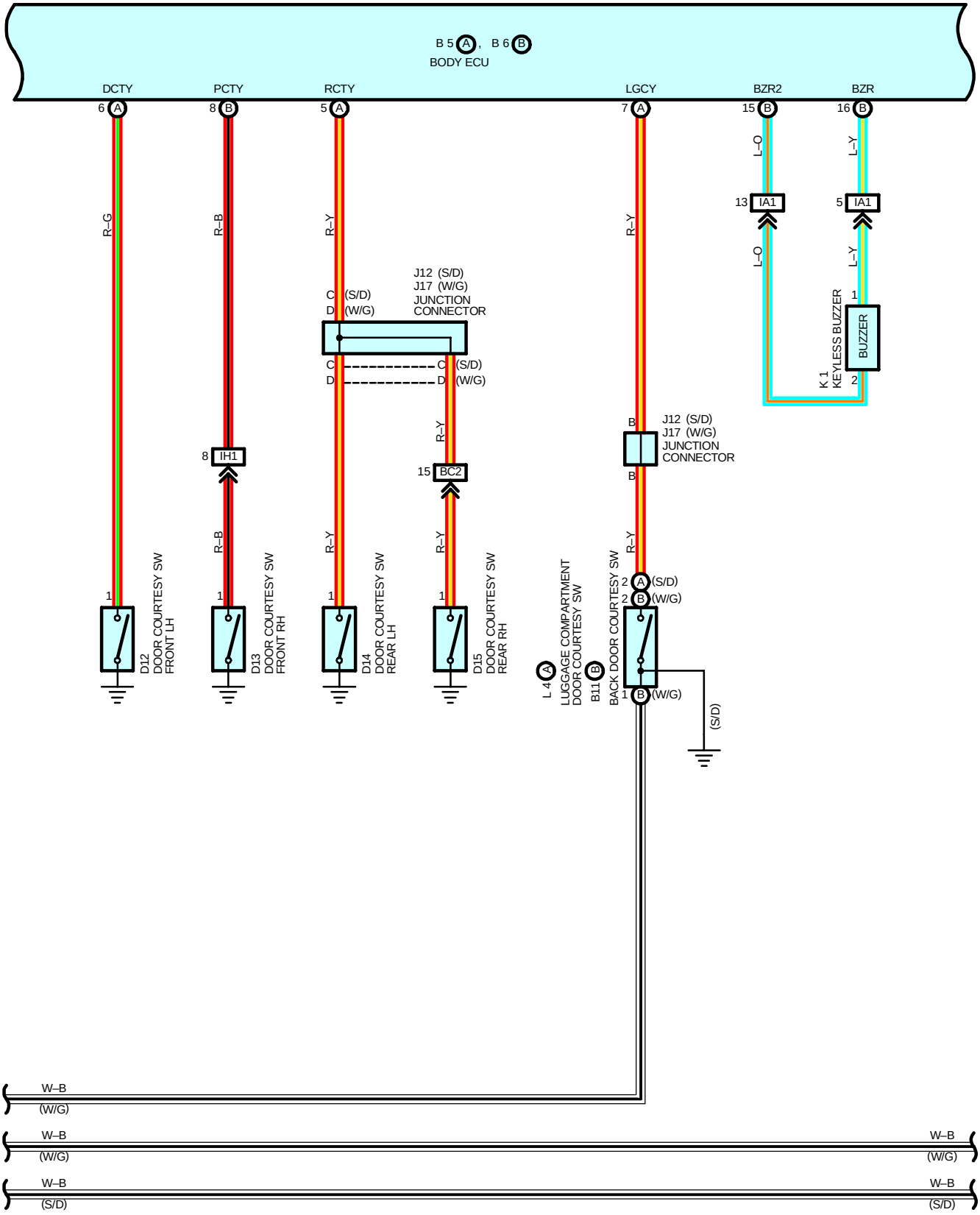

FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A MPX–B
10A ECU–IG
10A RADIO NO. 2
20A DOOR
B 5 A , B 6 B
BODY ECU
BSUB
ACC
IG
BECU
MPX2
1
4
3
2
5 B
5 2H
4 1A
7 1H
5 1B
R–Y
R–Y
R–Y
R–Y
B–R
O
A
J 6
JUNCTION CONNECTOR
A
B–R
T 5 A , T 6 B
THEFT DETERRENT ECU
10 A
IG
7 B
MPX1
IND
MPX2
LUG
NAVI
12 B
8 B
5 A
6 A
L–B
L
B–W
G–W
11 IB1
2 2E
3 2A
8 B
20 A
MPX+
MPX–
18 A
21 A
SECURITY
C 10 B , C 9 A
COMBINATION METER
B–W
2
1
L 5
LUGGAGE COMPARTMENT DOOR KEY UNLOCK SW
7
DR
M 4
MULTI–DISPLAY
3 IG3
L–B
L–B
BR
O
W–B
J 7
JUNCTION CONNECTOR
BR
A
A
BR
O
W–B
W–B
W–B
W–B
B 4
W–B
A
J15
JUNCTION CONNECTOR
A
W–B
(S/D)
W–B
(S/D)
BL

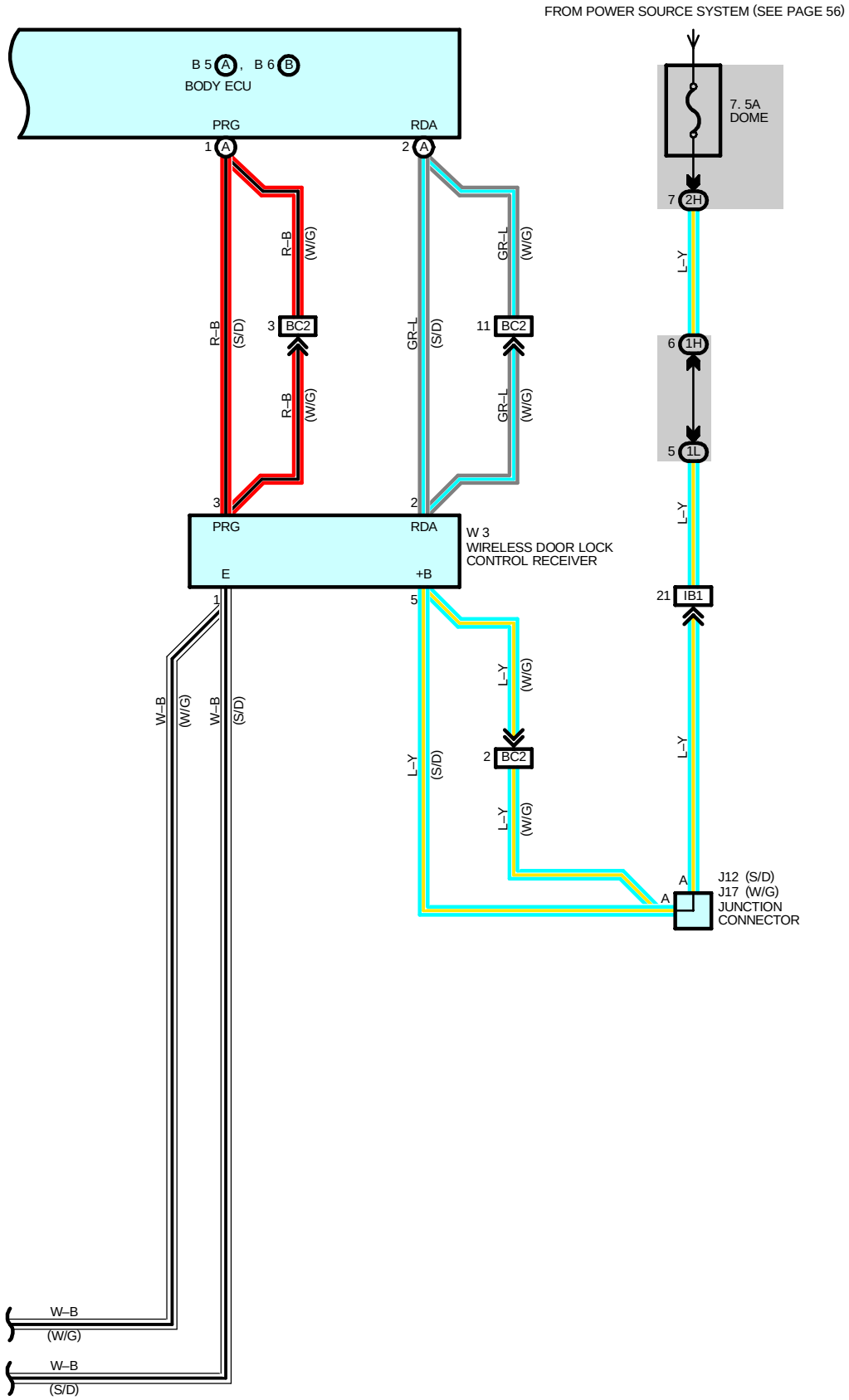
THEFT DETERRENT




B 5 A , B 6 B
BODY ECU
LSR
MPX3
GND
HAZ
4 A
6
12
10 B
L–R
13 BC2
10 1B
2 1B
7 1B
7 1L
G–W
Y–R
W–B
W–B
W–B
R–Y
R–Y
10 1A
8
HAZ
FLSH RELAY
J16 JUNCTION CONNECTOR
C
C
C
5
18
9
BDM
TX
E
P 9 POWER WINDOW MASTER SW
KL
KUL
LSWD
6
15
10
G–R
G–B
L–B
14 BC2
8 BB1
L
8 BA1
4
3
1
LOCK
UNLOCK
LOCK DETECTION
D20 DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH
1
4
2
3
D18 DOOR LOCK DETECTION SW REAR LH
D19 DOOR LOCK DETECTION SW REAR RH
W–B
D
J11 JUNCTION CONNECTOR
D
9 BA1
9 BB1
W–B
(W/G)
(S/D)
B 4
B 7
B
J16 JUNCTION CONNECTOR
B
BK

THEFT DETERRENT




FROM POWER SOURCE SYSTEM (SEE PAGE 56)
B 5 A , B 6 B
BODY ECU
PRG
RDA
1 A
2 A
7. 5A
DOME
7 2H
L–Y
6 1H
5 1L
L–Y
21 IB1
L–Y
R–B (W/G)
R–B (S/D)
3 BC2
R–B (W/G)
GR–L (W/G)
GR–L (S/D)
11 BC2
GR–L (W/G)
3
2
PRG
RDA
W 3
WIRELESS DOOR LOCK
CONTROL RECEIVER
E
+B
1
5
W–B (W/G)
W–B (S/D)
L–Y (W/G)
L–Y (S/D)
2 BC2
L–Y (W/G)
A
A
J12 (S/D)
J17 (W/G)
JUNCTION
CONNECTOR
W–B
(W/G)
W–B
(S/D)

THEFT DETERRENT

SERVICE HINTS

L5 LUGGAGE COMPARTMENT DOOR KEY UNLOCK SW

2–1 : Continuity with the door lock cylinder unlocked with the key

E9 ENGINE HOOD COURTESY SW

1–2 : Continuity with the engine hood open

D12, D13, D14, D15 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1–GROUND : Continuity with the door open

D20 DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH

4–2 : Continuity with the door lock cylinder locked with the key
3–2 : Continuity with the door lock cylinder unlocked with the key

B6 (B) BODY ECU

BECU–GROUND : Always approx. **12** volts
BSUB–GROUND : Always approx. **12** volts
ACC–GROUND : Approx. **12** volts with the ignition SW at **ACC** or **ON** position
IG–GROUND : Approx. **12** volts with the ignition SW at **ON** position
GND–GROUND : Always continuity
GND2–GROUND : Always continuity

○ : PARTS LOCATION

Code		See Page	Code	See Page	Code		See Page
A12	A	34	D17	38 (W/G)	J15		38 (W/G)
A13	B	34	D18	36 (S/D)	J16		36 (S/D)
B5	A	34		38 (W/G)			38 (W/G)
B6	B	34	D19	36 (S/D)	J17		38 (W/G)
B11	B	38 (W/G)		38 (W/G)	K1		33
C9	A	34	D20	36 (S/D)	L4	A	36 (S/D)
C10	B	34		38 (W/G)	L5		36 (S/D)
D5		34	D21	34	M4		35
D12		36 (S/D)	E4	32	P9		37 (S/D)
		38 (W/G)	E9	32			39 (W/G)
D13		36 (S/D)	J5	35	T1		33
		38 (W/G)	J6	35	T5	A	35
D14		36 (S/D)	J7	35	T6	B	35
		38 (W/G)	J11	36 (S/D)	U1		35
D15		36 (S/D)		38 (W/G)	W3		37 (S/D)
		38 (W/G)	J12	36 (S/D)			39 (W/G)
D17		36 (S/D)	J15	36 (S/D)			

▭ : RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1F	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
1O	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2H		
2I		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2M	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
IG3	46	Instrument Panel Wire and Engine Room Main Wire (Near the Passenger Side J/B)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)

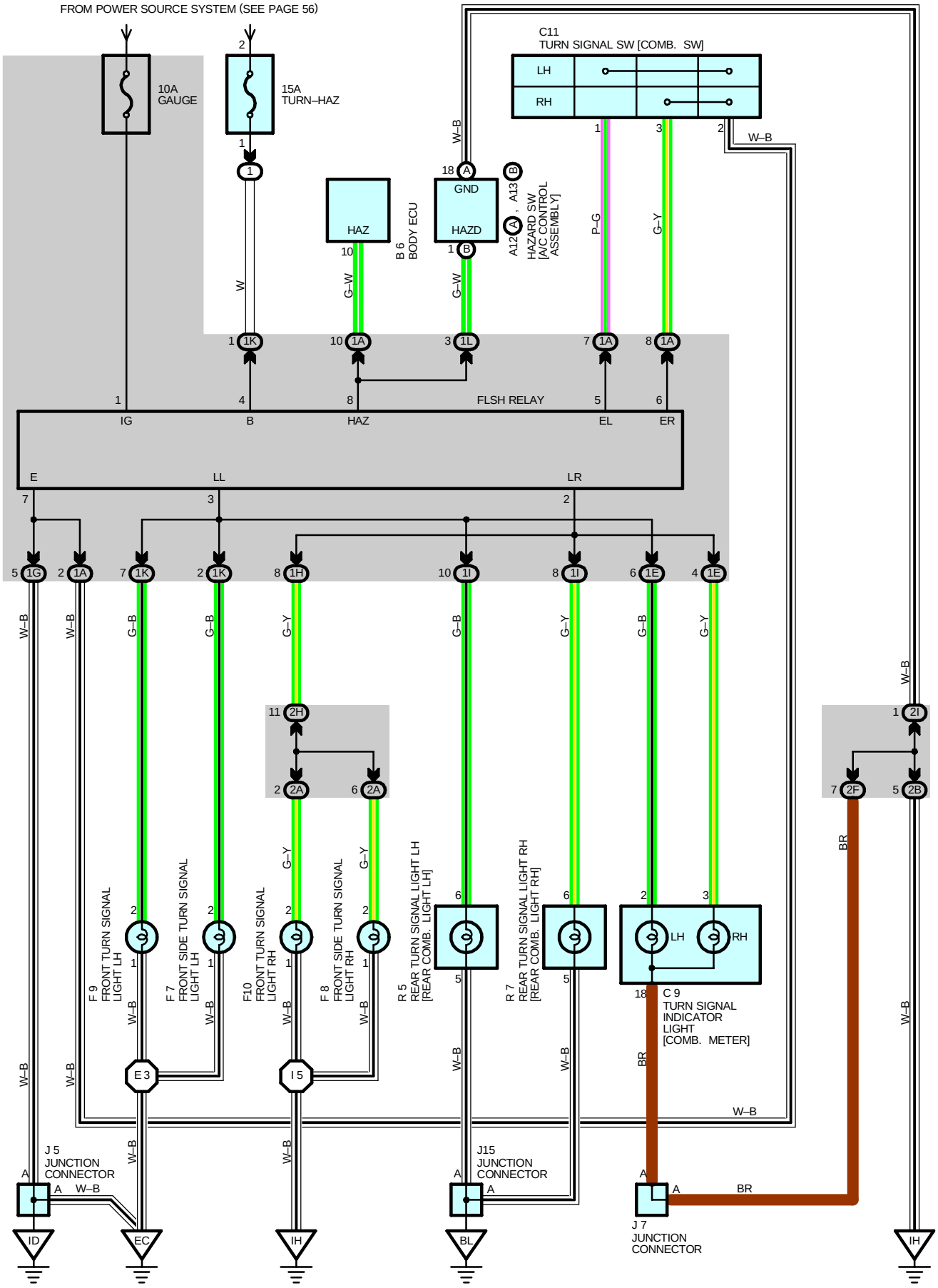
: GROUND POINTS

Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	46	Instrument Panel Wire	B4	50 (W/G)	Floor No.2 Wire
B4	48 (S/D)	Floor No.2 Wire	B7	50 (W/G)	Floor Wire

TURN SIGNAL AND HAZARD WARNING LIGHT



SERVICE HINTS

FLSH RELAY

4–GROUND : Always approx. **12** volts
1–GROUND : Approx. **12** volts with the ignition SW at **ON** position
7–GROUND : Always continuity

: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
A12	A	34	F8	32	J15	38 (W/G)
A13	B	34	F9	32	R5	37 (S/D)
B6		34	F10	32		39 (W/G)
C9		34	J5	35	R7	37 (S/D)
C11		34	J7	35		39 (W/G)
F7		32	J15	36 (S/D)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1H	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2F	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2H		
2I		

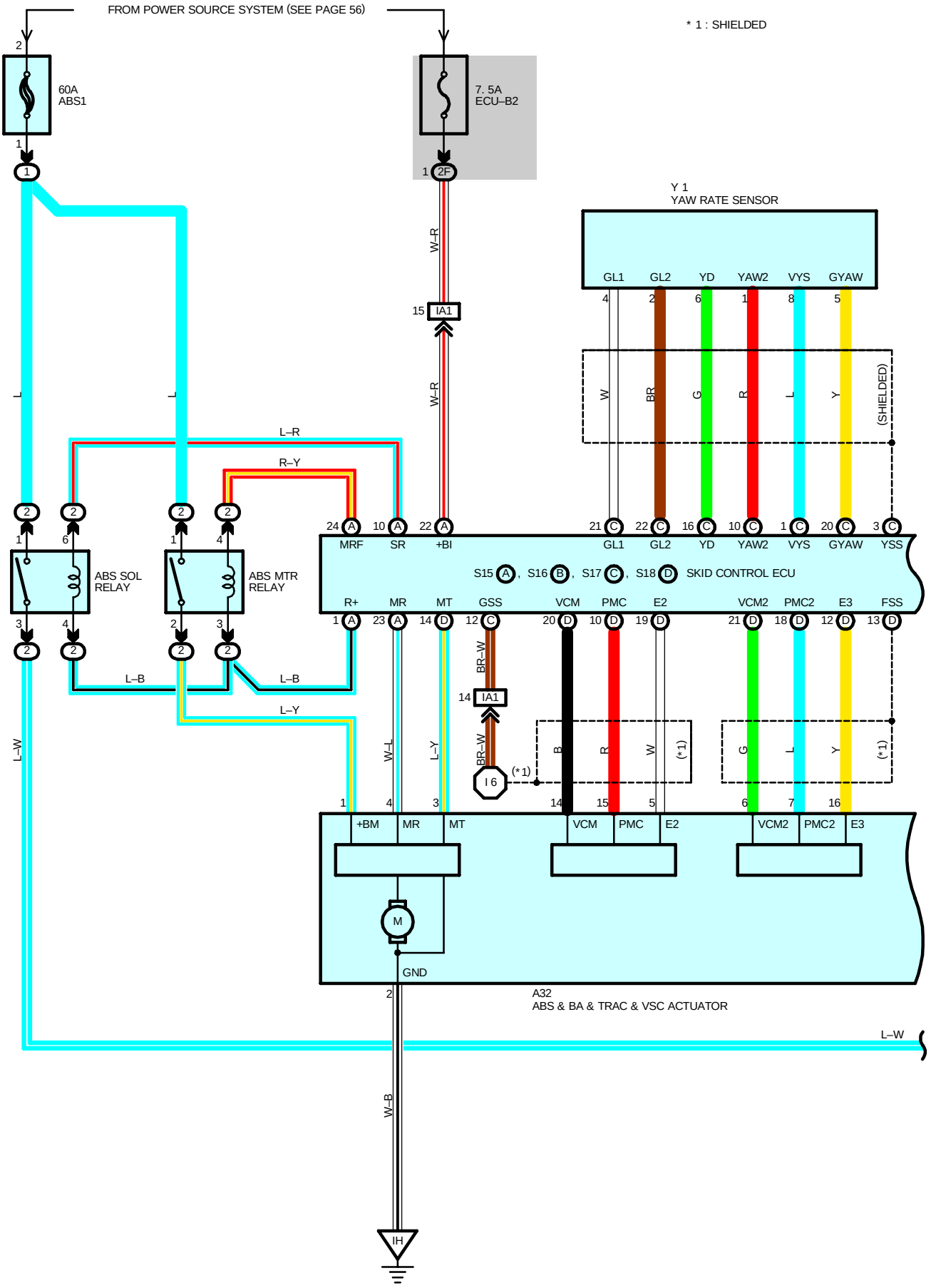
: GROUND POINTS

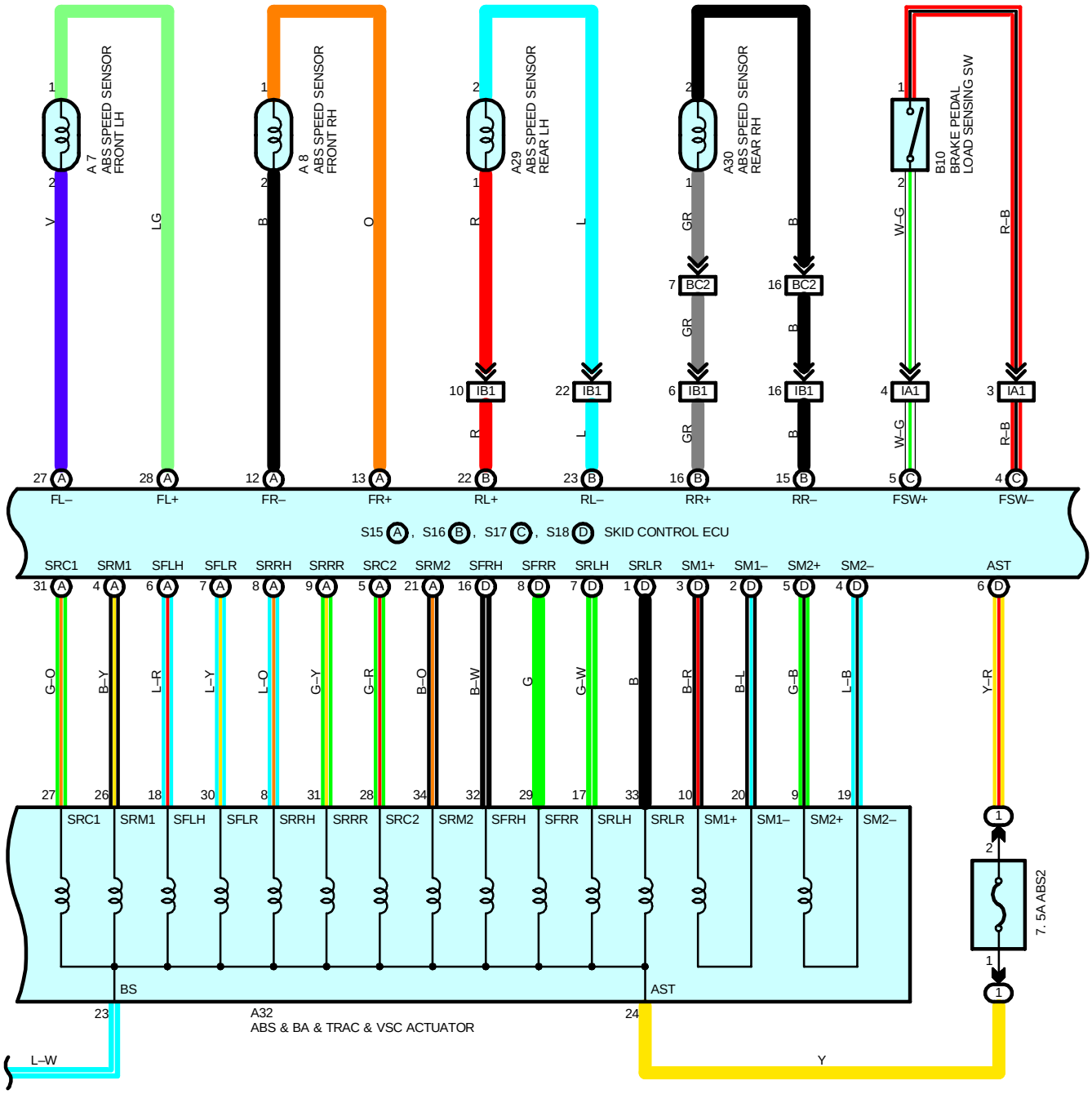
Code	See Page	Ground Points Location
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IH	44	Cowl Side Panel RH
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	

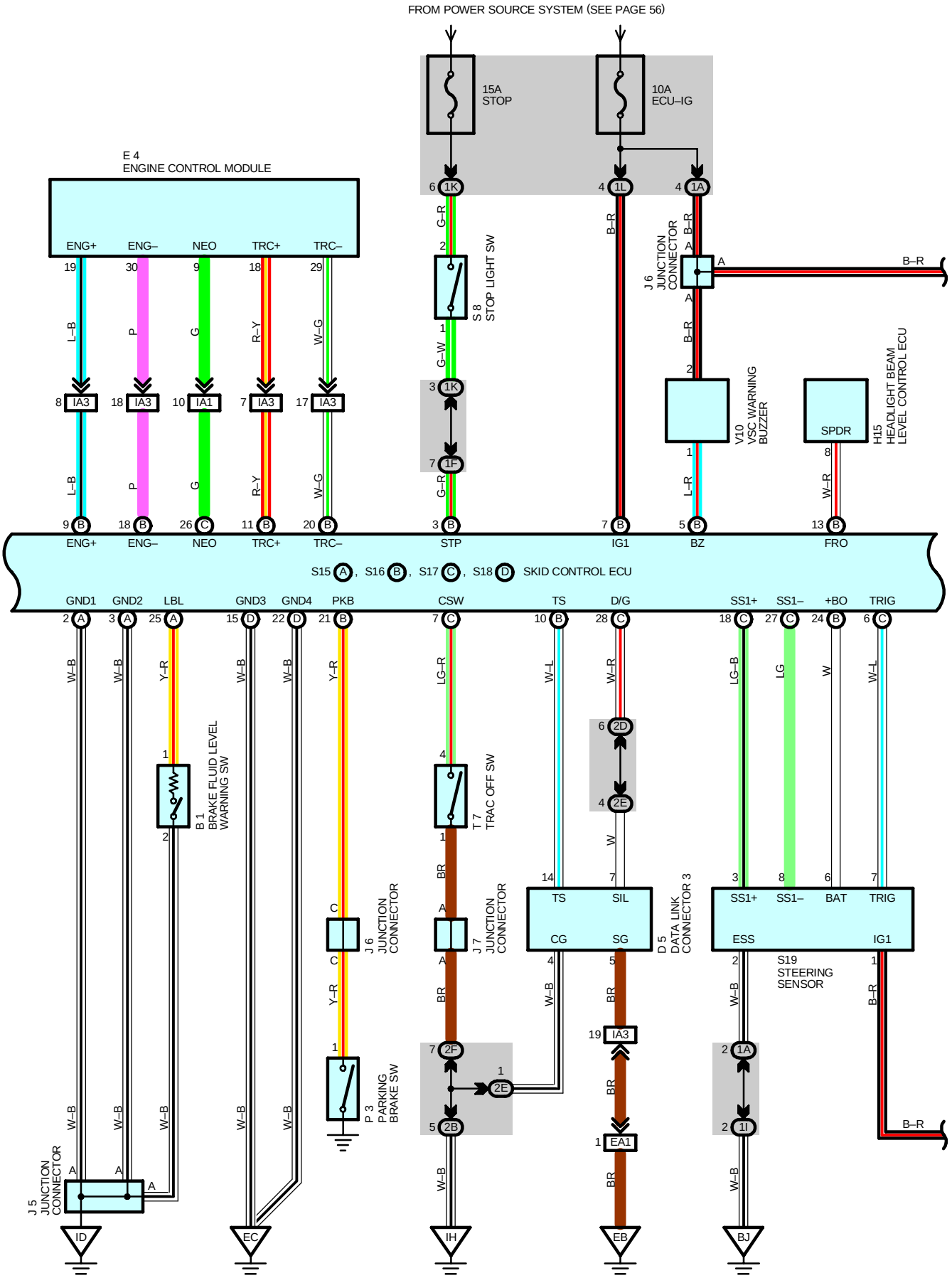
: SPLICE POINTS

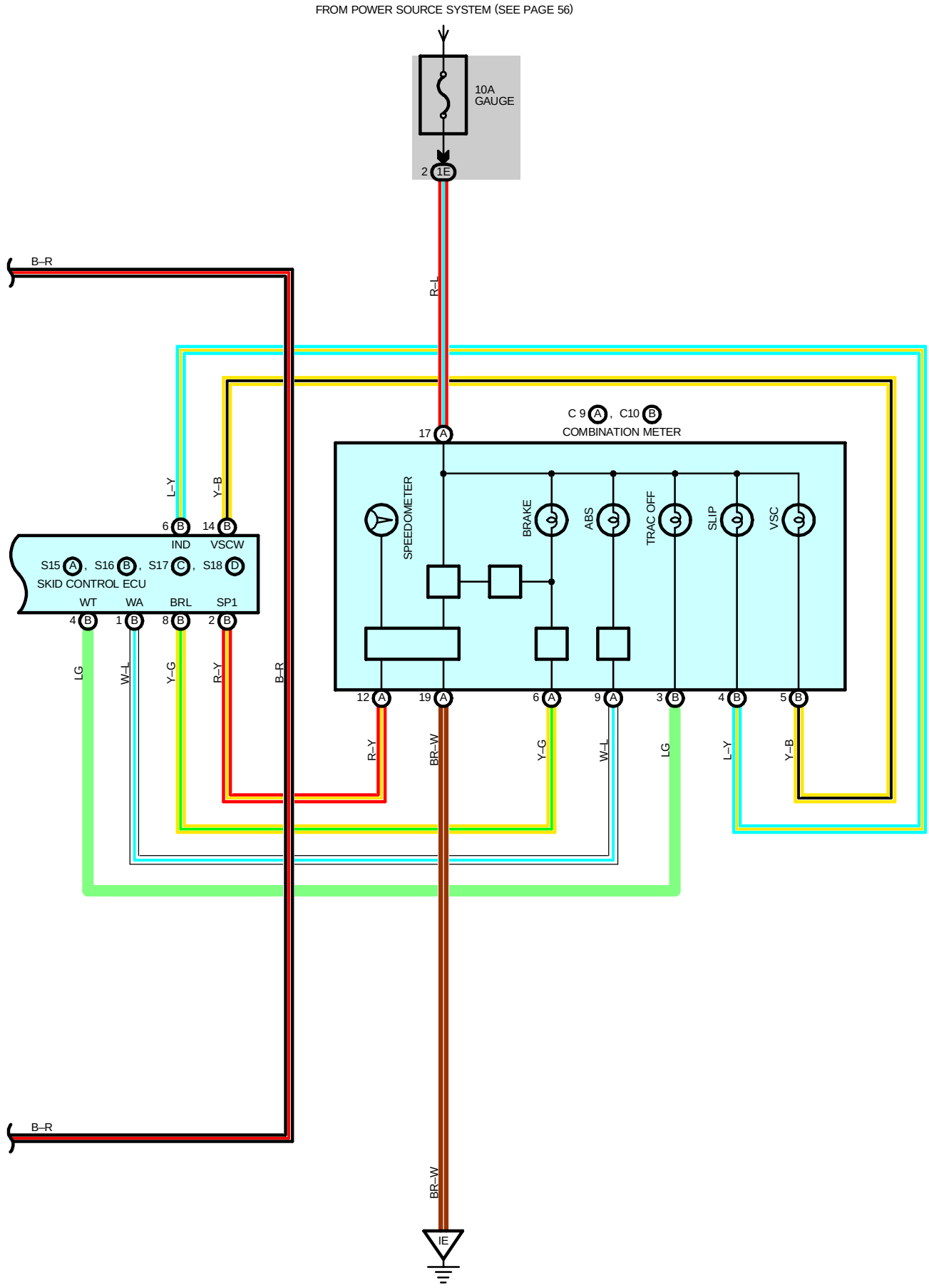
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	42	Engine Room Main Wire	I5	46	Engine Room Main Wire

VSC


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
* 1 : SHIELDED
60A
ABS1
7. 5A
ECU–B2
Y 1
YAW RATE SENSOR
GL1
GL2
YD
YAW2
VYS
GYAW
(SHIELDED)
W–R
L–R
R–Y
L–B
L–Y
L–W
W–L
BR–W
W–B
ABS SOL
RELAY
ABS MTR
RELAY
MRF
SR
+BI
S15 A , S16 B , S17 C , S18 D SKID CONTROL ECU
R+
MR
MT
GSS
VCM
PMC
E2
VCM2
PMC2
E3
FSS
IA1
I 6
(*1)
+BM
M
GND
A32
ABS & BA & TRAC & VSC ACTUATOR
IH


A 7
ABS SPEED SENSOR
FRONT LH
A 8
ABS SPEED SENSOR
FRONT RH
A29
ABS SPEED SENSOR
REAR LH
A30
ABS SPEED SENSOR
REAR RH
B10
BRAKE PEDAL
LOAD SENSING SW
BC2
IB1
IA1
FL–
FL+
FR–
FR+
RL+
RL–
RR+
RR–
FSW+
FSW–
S15 A, S16 B, S17 C, S18 D SKID CONTROL ECU
SRC1
SRM1
SFLH
SFLR
SRRH
SRRR
SRC2
SRM2
SFRH
SFRR
SRLH
SRLR
SM1+
SM1–
SM2+
SM2–
AST
BS
A32
ABS & BA & TRAC & VSC ACTUATOR
7. 5A ABS2
L–W
Y


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
15A STOP
10A ECU–IG
E 4 ENGINE CONTROL MODULE
ENG+
ENG–
NEO
TRC+
TRC–
S 8 STOP LIGHT SW
J 6 JUNCTION CONNECTOR
V10 VSC WARNING BUZZER
SPDR
H15 HEADLIGHT BEAM LEVEL CONTROL ECU
STP
IG1
BZ
FRO
S15 A, S16 B, S17 C, S18 D SKID CONTROL ECU
GND1
GND2
LBL
GND3
GND4
PKB
CSW
TS
D/G
SS1+
SS1–
+BO
TRIG
B 1 BRAKE FLUID LEVEL WARNING SW
T 7 TRAC OFF SW
J 7 JUNCTION CONNECTOR
J 6 JUNCTION CONNECTOR
P 3 PARKING BRAKE SW
D 5 DATA LINK CONNECTOR 3
TS
SIL
CG
SG
ESS
BAT
S19 STEERING SENSOR
J 5 JUNCTION CONNECTOR
ID
EC
IH
EB
BJ


FROM POWER SOURCE SYSTEM (SEE PAGE 56)
10A
GAUGE
2 1E
B–R
R–L
C 9 A , C10 B
COMBINATION METER
17 A
SPEEDOMETER
BRAKE
ABS
TRAC OFF
SLIP
VSC
L–Y
Y–B
6 B
14 B
IND
VSCW
S15 A , S16 B , S17 C , S18 D
SKID CONTROL ECU
WT
WA
BRL
SP1
4 B
1 B
8 B
2 B
LG
W–L
Y–G
R–Y
B–R
12 A
19 A
6 A
9 A
3 B
4 B
5 B
R–Y
BR–W
Y–G
W–L
LG
L–Y
Y–B
B–R
BR–W
IE

VSC

SYSTEM OUTLINE

1. ABS OPERATION

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

2. TRACTION CONTROL OPERATION

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

Traction control SW

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

3. VSC OPERATION

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

To reduce large rear wheel skid :

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

To reduce large front wheel skid :

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

4. MUTUAL SYSTEM CONTROL

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

Engine throttle control

The engine power does not interfere with the VSC brake control by controlling the opening of the throttle and reducing the engine output.

Engine control and electronically controlled transmission control

The strong braking force does not interfere with the braking force control of the VSC system by turning off the accel. and reducing changes in the driving torque at shift–down.

VSC system operation indication

The SLIP indicator light flashes and the buzzer sounds intermittently to warn the driver that the current road is slippery, while the VSC system is being operated.

5. FAIL SAFE FUNCTION

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

SERVICE HINTS

S15 (A), S16 (B), S18 (D) SKID CONTROL ECU

IG1–GROUND : **10**–**14** volts with the ignition SW at **ON** position
STP–GROUND : **0**–**1.5** volts with the stop light SW off
: **8**–**14** volts with the stop light SW on
GND1, GND2, GND3, GND4–GROUND : Always continuity

S8 STOP LIGHT SW

2–1 : Closed with the brake pedal depressed

A7, A8 ABS SPEED SENSOR FRONT LH, RH

1–2 : Approx. **1.6** kΩ at **20**˚C (**68**˚F)

A29, A30 ABS SPEED SENSOR REAR LH, RH

1–2 : Approx. **1.0** kΩ at **25**˚C (**77**˚F)

: PARTS LOCATION

Code	See Page	Code	See Page	Code	See Page
A7	32	C9 A	34	S8	35
A8	32	C10 B	34	S15 A	35
A29	36 (S/D)	D5	34	S16 B	35
	38 (W/G)	E4	32	S17 C	35
A30	36 (S/D)	H15	35	S18 D	35
	38 (W/G)	J5	35	S19	35
A32	32	J6	35	T7	35
B1	32	J7	35	V10	35
B10	34	P3	35	Y1	35

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1E		
1F		
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1K	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1L	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
2B	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2D	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2E		
2F		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IB1	44	Instrument Panel Wire and Floor No.2 Wire (Near the Driver Side J/B)
BC2	48 (S/D)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel RH)
	50 (W/G)	Floor No.2 Wire and Floor Wire (Rear Floor Partition Panel Center)

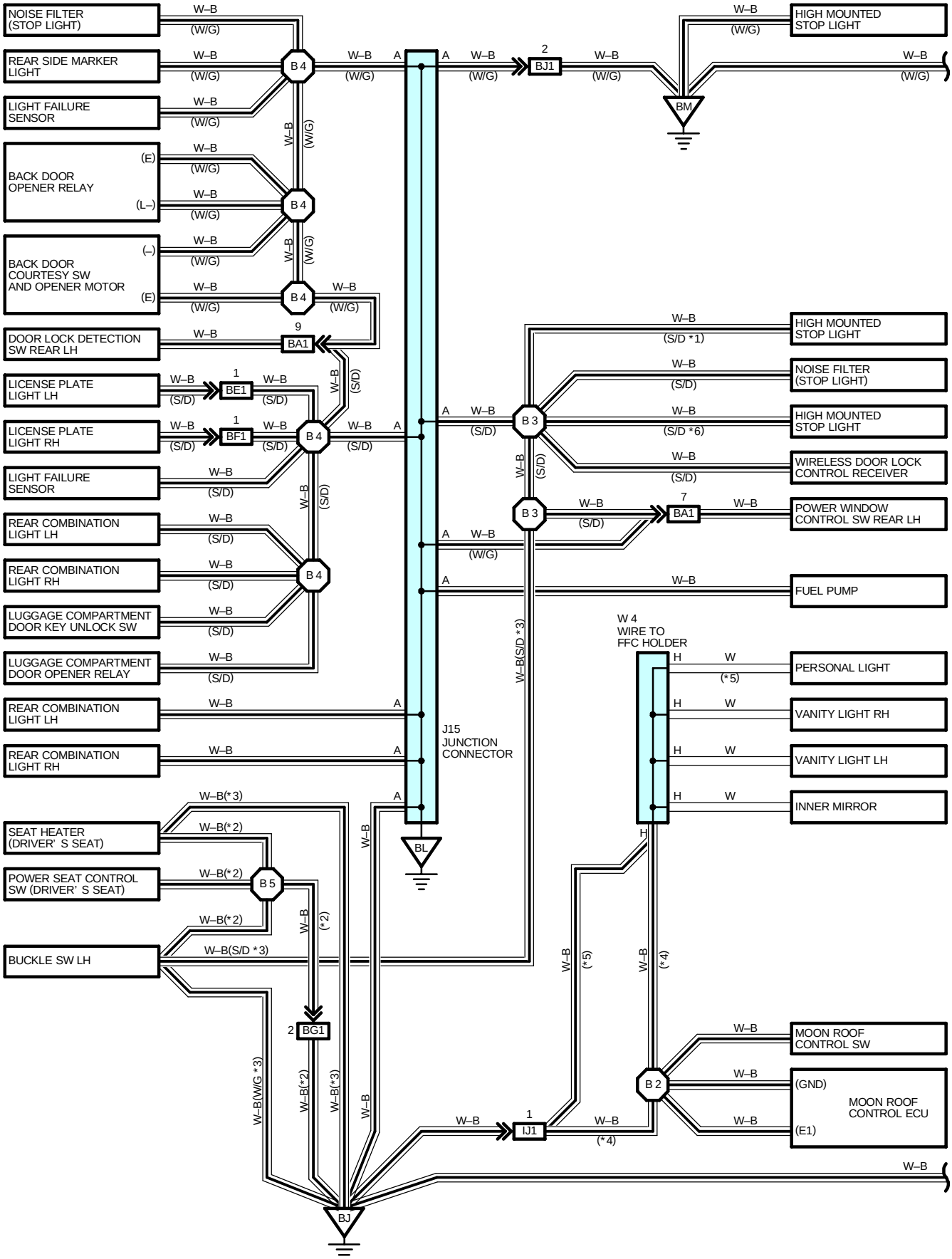
: GROUND POINTS

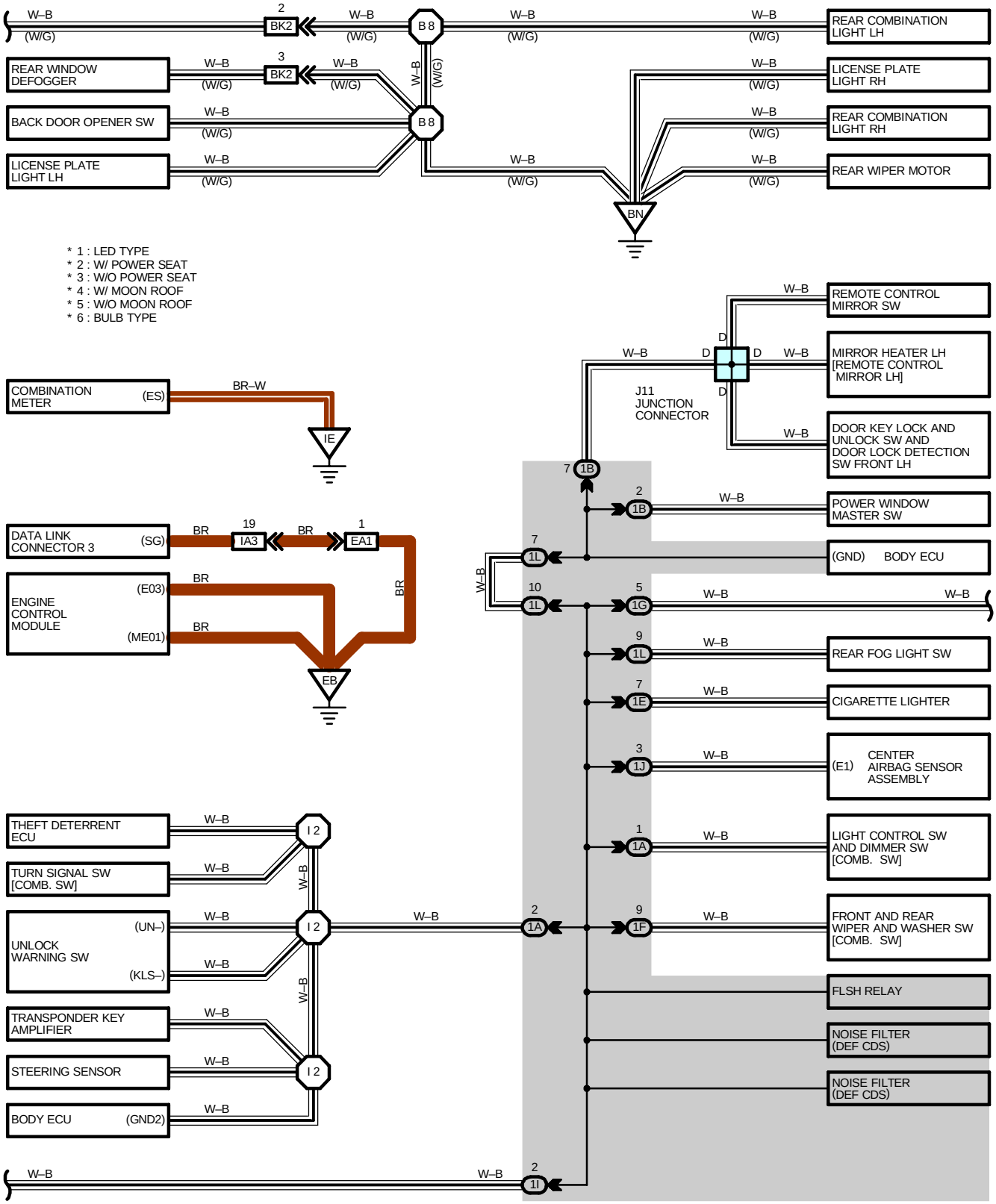
Code	See Page	Ground Points Location
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	

: SPLICE POINTS

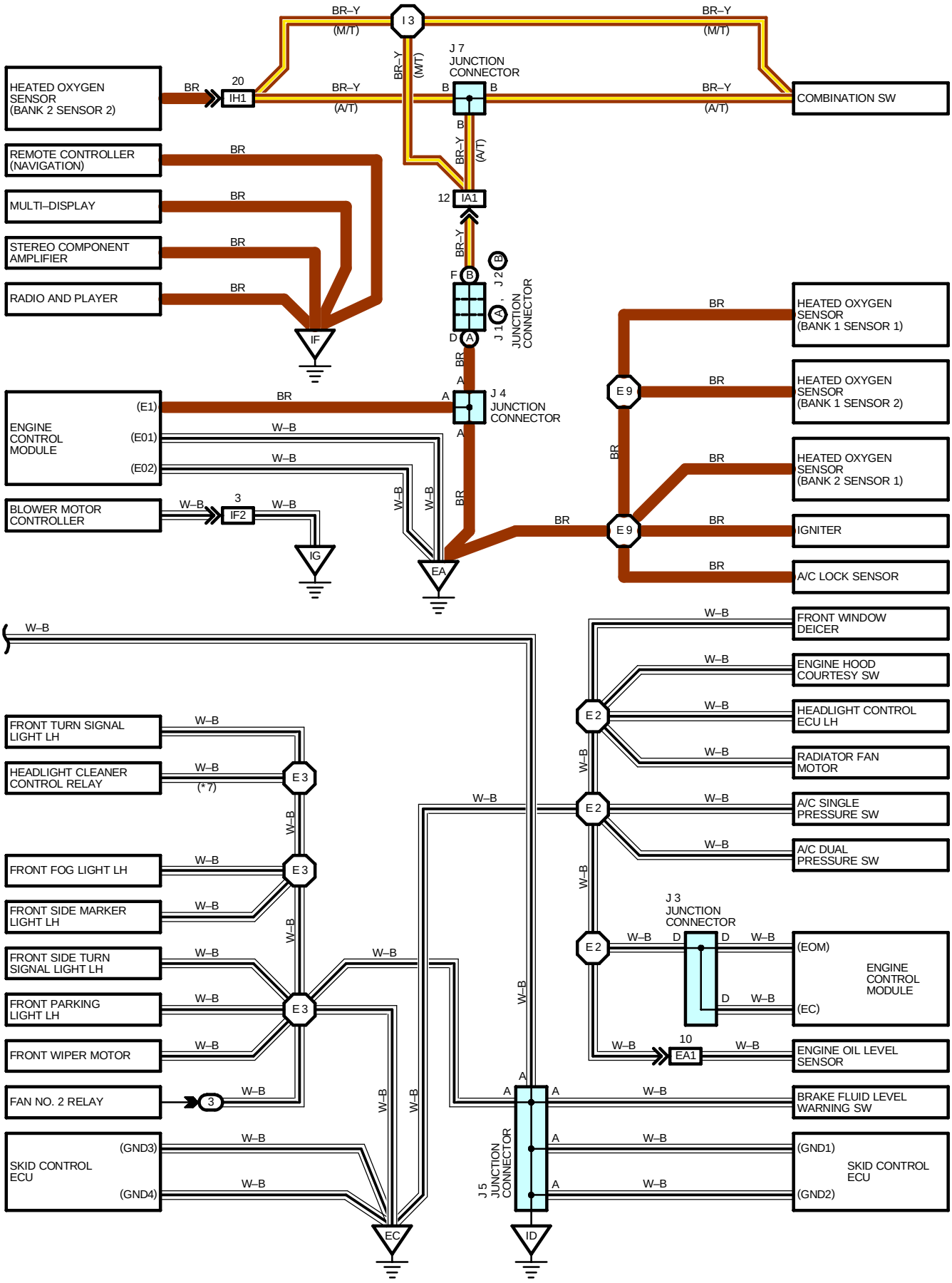
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	46	Engine Room Main Wire			

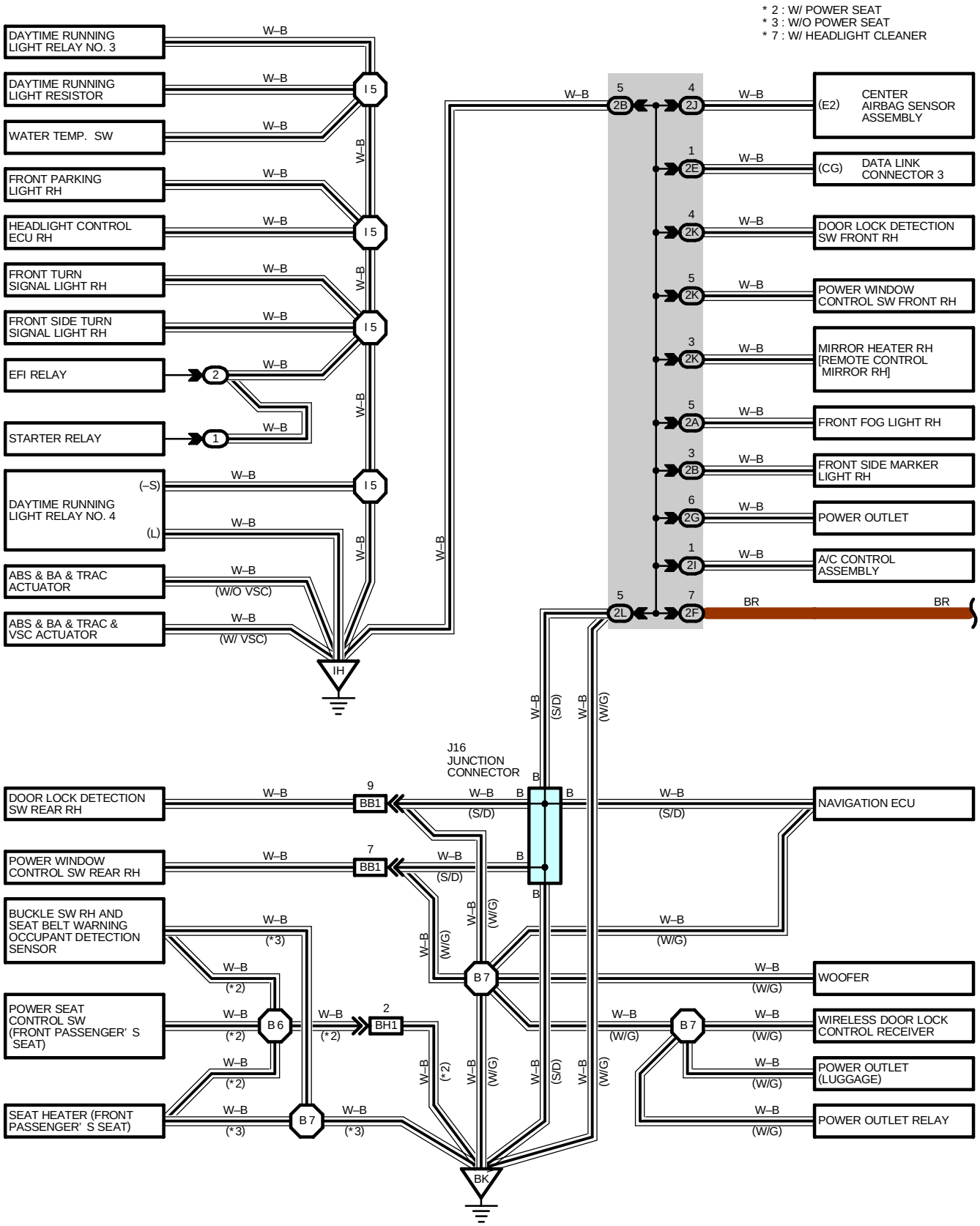
I GROUND POINT



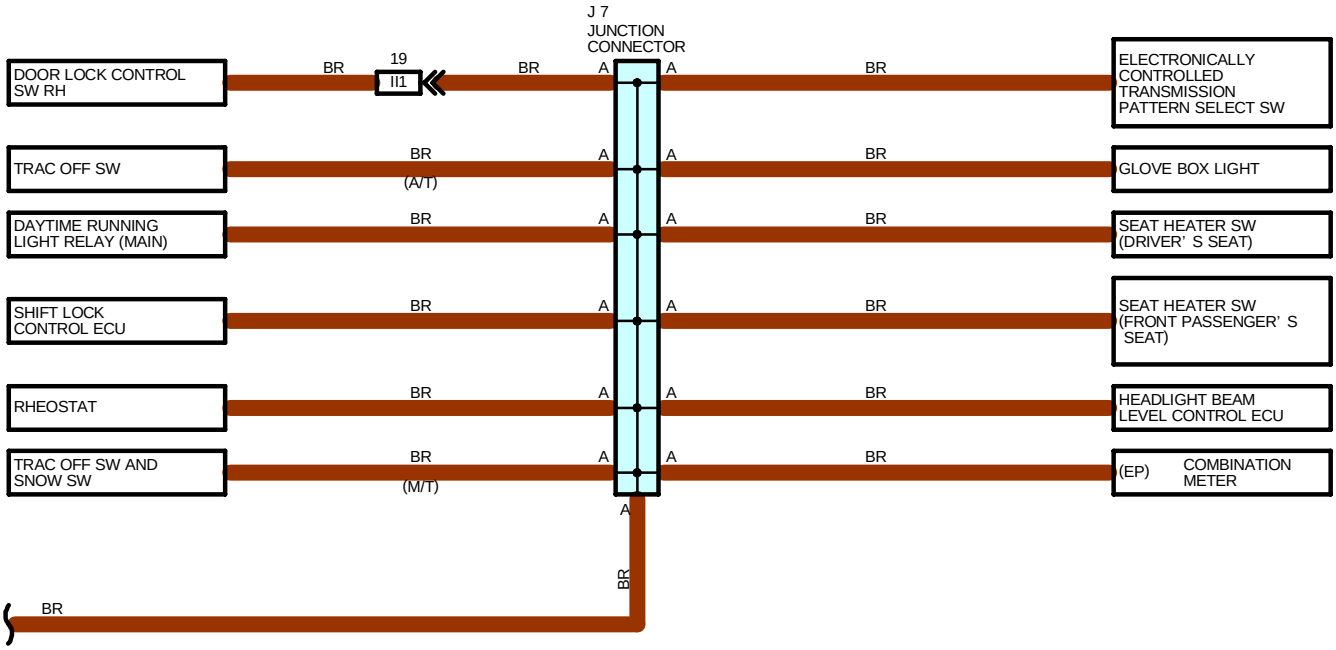

REAR COMBINATION LIGHT LH
REAR WINDOW DEFOGGER
BACK DOOR OPENER SW
LICENSE PLATE LIGHT LH
LICENSE PLATE LIGHT RH
REAR COMBINATION LIGHT RH
REAR WIPER MOTOR
BK2
B8
BN
* 1 : LED TYPE
* 2 : W/ POWER SEAT
* 3 : W/O POWER SEAT
* 4 : W/ MOON ROOF
* 5 : W/O MOON ROOF
* 6 : BULB TYPE
REMOTE CONTROL MIRROR SW
MIRROR HEATER LH [REMOTE CONTROL MIRROR LH]
J11 JUNCTION CONNECTOR
DOOR KEY LOCK AND UNLOCK SW AND DOOR LOCK DETECTION SW FRONT LH
COMBINATION METER
(ES)
IE
POWER WINDOW MASTER SW
DATA LINK CONNECTOR 3
(SG)
IA3
EA1
(GND) BODY ECU
ENGINE CONTROL MODULE
(E03)
(ME01)
EB
REAR FOG LIGHT SW
CIGARETTE LIGHTER
CENTER AIRBAG SENSOR ASSEMBLY
(E1)
THEFT DETERRENT ECU
TURN SIGNAL SW [COMB. SW]
UNLOCK WARNING SW
(UN–)
(KLS–)
I2
LIGHT CONTROL SW AND DIMMER SW [COMB. SW]
FRONT AND REAR WIPER AND WASHER SW [COMB. SW]
TRANSPONDER KEY AMPLIFIER
STEERING SENSOR
BODY ECU
(GND2)
FLSH RELAY
NOISE FILTER (DEF CDS)
NOISE FILTER (DEF CDS)
1B
1L
1G
1A
1F
1E
1J
1I
W–B
BR
BR–W

I GROUND POINT




* 2 : W/ POWER SEAT
* 3 : W/O POWER SEAT
* 7 : W/ HEADLIGHT CLEANER
DAYTIME RUNNING LIGHT RELAY NO. 3
DAYTIME RUNNING LIGHT RESISTOR
WATER TEMP. SW
FRONT PARKING LIGHT RH
HEADLIGHT CONTROL ECU RH
FRONT TURN SIGNAL LIGHT RH
FRONT SIDE TURN SIGNAL LIGHT RH
EFI RELAY
STARTER RELAY
DAYTIME RUNNING LIGHT RELAY NO. 4
(–S)
(L)
ABS & BA & TRAC ACTUATOR
(W/O VSC)
ABS & BA & TRAC & VSC ACTUATOR
(W/ VSC)
I5
IH
W–B
2B
2J
2E
2K
2A
2G
2I
2L
2F
(E2)
CENTER AIRBAG SENSOR ASSEMBLY
(CG)
DATA LINK CONNECTOR 3
DOOR LOCK DETECTION SW FRONT RH
POWER WINDOW CONTROL SW FRONT RH
MIRROR HEATER RH [REMOTE CONTROL MIRROR RH]
FRONT FOG LIGHT RH
FRONT SIDE MARKER LIGHT RH
POWER OUTLET
A/C CONTROL ASSEMBLY
BR
J16
JUNCTION
CONNECTOR
DOOR LOCK DETECTION SW REAR RH
POWER WINDOW CONTROL SW REAR RH
BUCKLE SW RH AND SEAT BELT WARNING OCCUPANT DETECTION SENSOR
POWER SEAT CONTROL SW (FRONT PASSENGER' S SEAT)
SEAT HEATER (FRONT PASSENGER' S SEAT)
BB1
BH1
B6
B7
(S/D)
(W/G)
(*2)
(*3)
NAVIGATION ECU
WOOFER
WIRELESS DOOR LOCK CONTROL RECEIVER
POWER OUTLET (LUGGAGE)
POWER OUTLET RELAY
BK

I GROUND POINT



: PARTS LOCATION

Code		See Page	Code	See Page	Code	See Page
J1	A	33	J7	35	J16	36 (S/D)
J2	B	33	J11	36 (S/D)	W4	37 (S/D)
J3		33		38 (W/G)		39 (W/G)
J4		33	J15	36 (S/D)		
J5		35		38 (W/G)		

: RELAY BLOCKS

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room No.1 R/B (Engine Compartment Right)
2	22	Engine Room No.2 R/B (Engine Compartment Right)
3	23	Engine Room No.3 R/B (Engine Compartment Left)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1B	24	Front Door LH Wire and Driver Side J/B (Left Kick Panel)
1E	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1F		
1G	24	Engine Room Main Wire and Driver Side J/B (Left Kick Panel)
1I	24	Floor No.2 Wire and Driver Side J/B (Left Kick Panel)
1J	24	Instrument Panel Wire and Driver Side J/B (Left Kick Panel)
1L		
2A	26	Engine Room Main Wire and Passenger Side J/B (Right Kick Panel)
2B		
2E	26	Instrument Panel Wire and Passenger Side J/B (Right Kick Panel)
2F		
2G		
2I		
2J		
2K	26	Front Door RH Wire and Passenger Side J/B (Right Kick Panel)
2L	26	Floor Wire and Passenger Side J/B (Right Kick Panel)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	42	Engine Wire and Engine Room Main Wire (Inside of the ECU Box)
IA1	44	Instrument Panel Wire and Engine Room Main Wire (Near the Driver Side J/B)
IA3		
IF2	46	Instrument Panel Wire and A/C Sub Wire (Left Side of the Blower Unit)
IH1	46	Instrument Panel Wire and Floor Wire (Near the Passenger Side J/B)
II1	46	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	46	Roof Wire and Floor No.2 Wire (Left Side of the Instrument Panel)
BA1	48 (S/D)	Rear Door No.2 Wire and Floor No.2 Wire (Left Center Pillar)
	50 (W/G)	
BB1	48 (S/D)	Rear Door No.1 Wire and Floor Wire (Right Center Pillar)
	50 (W/G)	
BE1	48 (S/D)	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light LH)
BF1	48 (S/D)	Floor No.2 Wire and Luggage Room Wire (Near the License Plate Light RH)
BG1	52	Floor No.2 Wire and Front Seat LH Wire (Under the Driver's Seat)
BH1	52	Floor Wire and Front Seat RH Wire (Under the Front Passenger's Seat)
BJ1	50 (W/G)	Back Door No.1 Wire and Floor No.2 Wire (Left Side of the Back Panel Upper)
BK2	50 (W/G)	Back Door No.1 Wire and Back Door No.2 Wire (Left Side of the Back Panel Lower)

I GROUND POINT

: GROUND POINTS

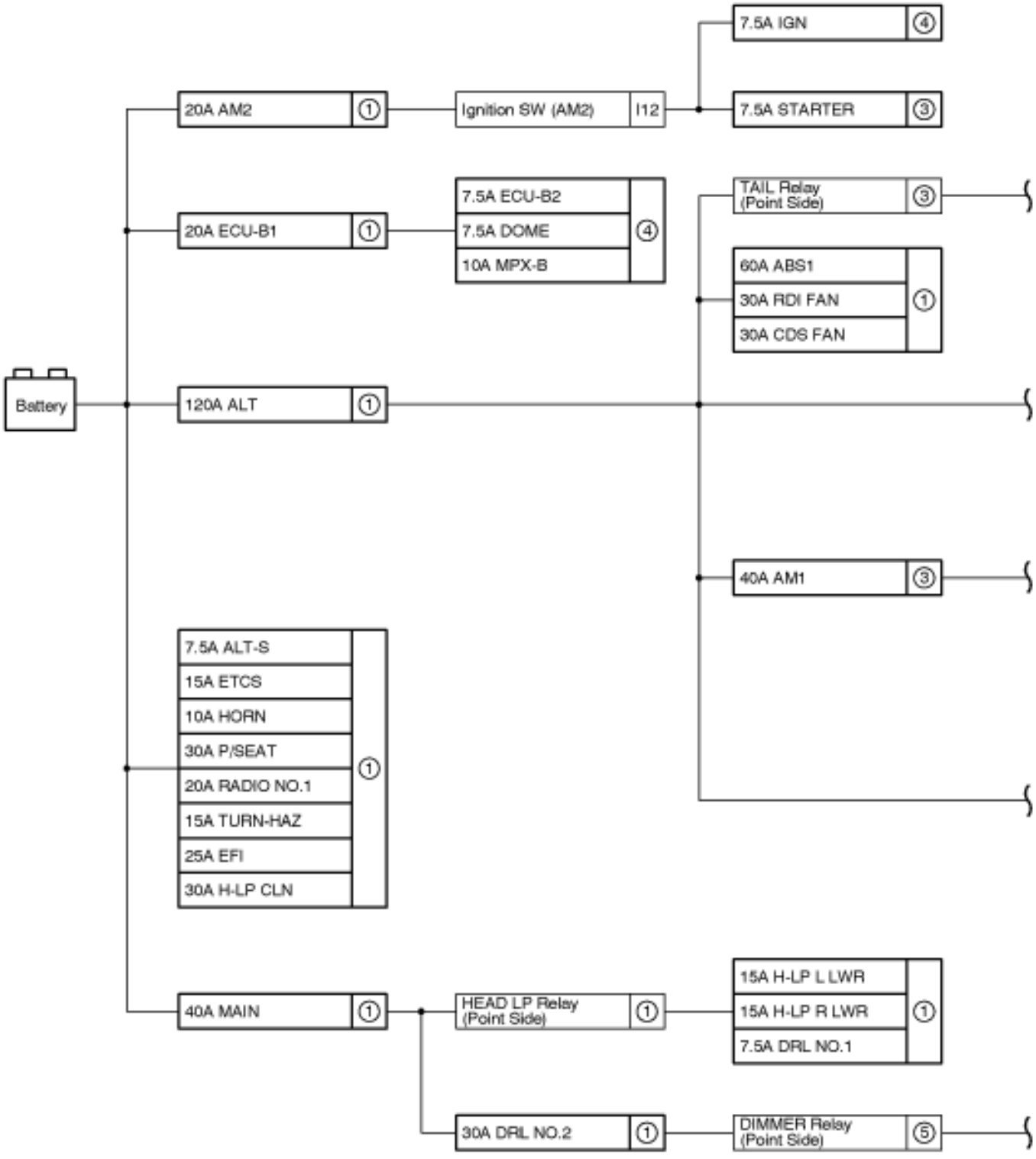
Code	See Page	Ground Points Location
EA	42	Front Side of the Intake Manifold
EB	42	Center Side of the Intake Manifold
EC	42	Left Fender Apron
ID	44	Cowl Side Panel LH
IE	44	Front Floor Panel Center LH
IF	44	Front Floor Panel Center RH
IG	44	Instrument Panel Reinforcement RH
IH	44	Cowl Side Panel RH
BJ	48 (S/D)	Front Floor Panel LH
	50 (W/G)	
BK	48 (S/D)	Front Floor Panel RH
	50 (W/G)	
BL	48 (S/D)	Left Quarter Panel LH
	50 (W/G)	
BM	50 (W/G)	Left Side of the Back Panel Upper
BN	50 (W/G)	Right Side of the Back Panel Lower

: SPLICE POINTS

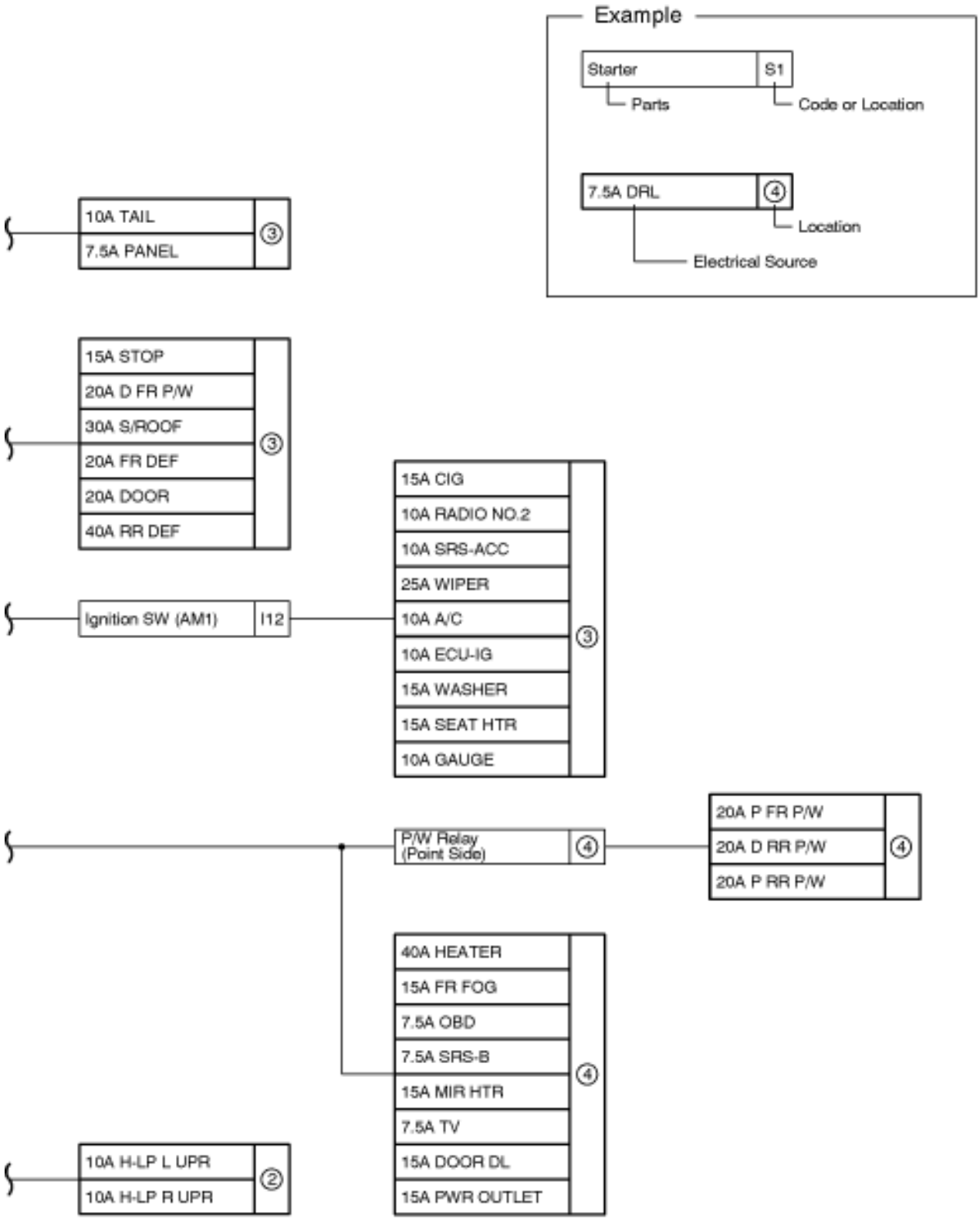
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	42	Engine Room Main Wire	B3	48 (S/D)	Floor No.2 Wire
E3			B4	48 (S/D)	
E9	42	Engine Wire		50 (W/G)	
I2	46	Instrument Panel Wire	B5	52	Front Seat LH Wire
I3			B6	52	Front Seat RH Wire
I5	46	Engine Room Main Wire	B7	48 (S/D)	Floor Wire
B2	48 (S/D)	Roof Wire		50 (W/G)	
	50 (W/G)		B8	50 (W/G)	Back Door No.2 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 : Engine Room No.1 R/B (See Page 22) ② : Engine Room No.2 R/B (See Page 22)
⑤ : Engine Room No.3 R/B (See Page 23)



③ : Driver Side J/B (See Page 24)

④ : Passenger Side J/B (See Page 26)

J POWER SOURCE (Current Flow Chart)

Engine Room No.1 R/B (See Page 22)

Fuse		System	Page
7.5A	ABS2	ABS and Traction Control VSC	216 210
7.5A	ALT–S	Charging	64
7.5A	DRL NO.1	Headlight	82
10A	HORN	Horn Theft Deterrent	240 186
15A	ETCS	Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control	202 196 68
15A	H–LP L LWR	Front Fog Light Headlight	88 82
15A	H–LP R LWR	Headlight	82
15A	TURN–HAZ	Turn Signal and Hazard Warning Light	92
20A	AM2	Engine Control Starting and Ignition	68 60
20A	RADIO NO.1	Radio and Player (S/D) Radio and Player (W/G)	260 264
25A	EFI	Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control Engine Immobiliser System	202 196 68 80
30A	CDS FAN	Radiator Fan and Condenser Fan	280
30A	DRL NO.2	Headlight	82
30A	H–LP CLN	Headlight Cleaner	122
30A	P/SEAT	Power Seat	248
30A	RDI FAN	Radiator Fan and Condenser Fan	280
40A	MAIN	Automatic Light Control Headlight Headlight Cleaner Light Auto Turn Off Starting and Ignition Theft Deterrent	112 82 122 116 60 186
60A	ABS1	ABS and Traction Control VSC	216 210
120A	ALT	Automatic Light Control Charging Illumination Light Auto Turn Off Multiplex Communication System Power Window Rear Window Defogger and Mirror Heater	112 64 94 116 138 168 270

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

Fuse		System	Page
120A	ALT	Taillight (S/D) Taillight (W/G) Theft Deterrent	98 102 186

Engine Room No.2 R/B (See Page 22)

Fuse		System	Page
10A	H–LP L UPR	Headlight	82
10A	H–LP R UPR	Headlight	82

Driver Side J/B (See Page 24)

Fuse		System	Page
7.5A	PANEL	Combination Meter Illumination Multiplex Communication System Rear Fog Light	274 94 138 90
7.5A	STARTER	Electronically Controlled Transmission and A/T Indicator Engine Control LEXUS Navigation System Starting and Ignition	196 68 254 60
10A	A/C	Automatic Air Conditioning	284
10A	ECU–IG	ABS and Traction Control Automatic Air Conditioning Automatic Glare–Resistant EC Mirror Automatic Light Control Compass Cruise Control Door Lock Control and Wireless Door Lock Control Headlight Headlight Beam Level Control Interior Light Key Reminder and Seat Belt Warning LEXUS Navigation System Light Auto Turn Off Moon Roof Multiplex Communication System Power Window Radiator Fan and Condenser Fan Shift Lock Theft Deterrent VSC	216 284 236 112 238 202 176 82 126 154 162 254 116 228 138 168 280 232 186 210
10A	GAUGE	ABS and Traction Control Back–Up Light Charging Combination Meter	216 110 64 274

∗ 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	GAUGE	Cruise Control	202
		Electronically Controlled Transmission and A/T Indicator	196
		Engine Control	68
		Front Window Deicer	268
		Headlight	82
		Headlight Beam Level Control	126
		Interior Light	154
		Key Reminder and Seat Belt Warning	162
		LEXUS Navigation System	254
		Multiplex Communication System	138
		Power Window	168
		Rear Window Defogger and Mirror Heater	270
		Shift Lock	232
		Stop Light (S/D)	106
		Stop Light (W/G)	108
		Taillight (S/D)	98
		Taillight (W/G)	102
		Turn Signal and Hazard Warning Light	92
		VSC	210
10A	RADIO NO.2	Automatic Air Conditioning	284
		Cigarette Lighter and Power Outlet	242
		Clock	244
		Door Lock Control and Wireless Door Lock Control	176
		Interior Light	154
		Key Reminder and Seat Belt Warning	162
		LEXUS Navigation System	254
		Light Auto Turn Off	116
		Multiplex Communication System	138
		Power Window	168
		Radio and Player (S/D)	260
		Radio and Player (W/G)	264
		Remote Control Mirror	246
		Shift Lock	232
		Theft Deterrent	186
10A	SRS–ACC	SRS	223
10A	TAIL	Taillight (S/D)	98
		Taillight (W/G)	102
15A	CIG	Cigarette Lighter and Power Outlet	242
15A	SEAT HTR	Seat Heater	252
15A	STOP	ABS and Traction Control	216
		Cruise Control	202
		Electronically Controlled Transmission and A/T Indicator	196
		Engine Control	68
		Shift Lock	232

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

Fuse		System	Page
15A	STOP	Stop Light (S/D) Stop Light (W/G) VSC	106 108 210
15A	WASHER	Front Wiper and Washer Headlight Cleaner Rear Wiper and Washer	130 122 134
20A	D FR P/W	Multiplex Communication System Power Window	138 168
20A	DOOR	Back Door Opener Door Lock Control and Wireless Door Lock Control Interior Light Key Reminder and Seat Belt Warning Light Auto Turn Off Multiplex Communication System Power Window Theft Deterrent	194 176 154 162 116 138 168 186
20A	FR DEF	Front Window Deicer	268
25A	WIPER	Front Wiper and Washer Rear Wiper and Washer	130 134
30A	S/ROOF	Moon Roof	228
40A	RR DEF	Rear Window Defogger and Mirror Heater	270

Passenger Side J/B (See Page 26)

Fuse		System	Page
7.5A	DOME	Door Lock Control and Wireless Door Lock Control Garage Door Opener Interior Light Light Auto Turn Off Multiplex Communication System Theft Deterrent	176 234 154 116 138 186
7.5A	ECU–B2	Automatic Light Control Headlight Light Auto Turn Off Rear Fog Light Theft Deterrent VSC	112 82 116 90 186 210
7.5A	IGN	Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control Engine Immobiliser System SRS	202 196 68 80 223
7.5A	OBD	Cruise Control Electronically Controlled Transmission and A/T Indicator Engine Control	202 196 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
7.5A	SRS–B	Combination Meter	274
		Interior Light	154
		Multiplex Communication System	138
		SRS	223
7.5A	TV	LEXUS Navigation System	254
10A	MPX–B	Automatic Air Conditioning	284
		Back Door Opener	194
		Charging	64
		Clock	244
		Combination Meter	274
		Cruise Control	202
		Door Lock Control and Wireless Door Lock Control	176
		Electronically Controlled Transmission and A/T Indicator	196
		Engine Control	68
		Headlight	82
		Interior Light	154
		Key Reminder and Seat Belt Warning	162
		Light Auto Turn Off	116
		Multiplex Communication System	138
		Power Window	168
		Theft Deterrent	186
15A	DOOR DL	Theft Deterrent	186
15A	FR FOG	Front Fog Light	88
15A	MIR HTR	Rear Window Defogger and Mirror Heater	270
15A	PWR OUTLET	Cigarette Lighter and Power Outlet	242
20A	D RR P/W	Multiplex Communication System	138
		Power Window	168
20A	P FR P/W	Multiplex Communication System	138
		Power Window	168
20A	P RR P/W	Multiplex Communication System	138
		Power Window	168
40A	HEATER	Automatic Air Conditioning	284

* 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
Black



A 7
Gray



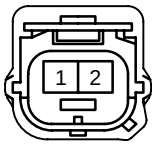
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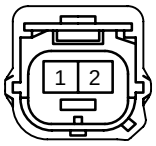
A 9
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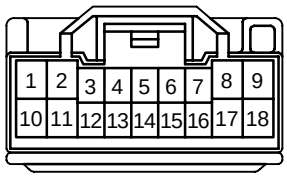
A10
Yellow



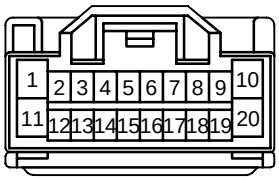
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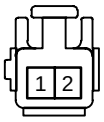
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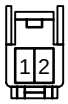
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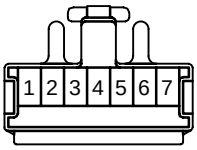
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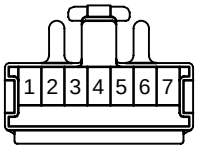
A15
Black



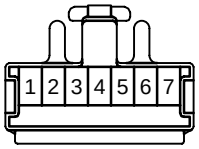
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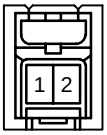
A22
Black



A23



A24
Yellow



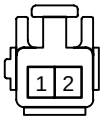
A25
Yellow



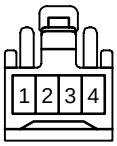
A26



A27



A28



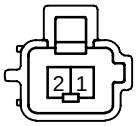
A29
(S/D) Gray



A29
(W/G) Gray



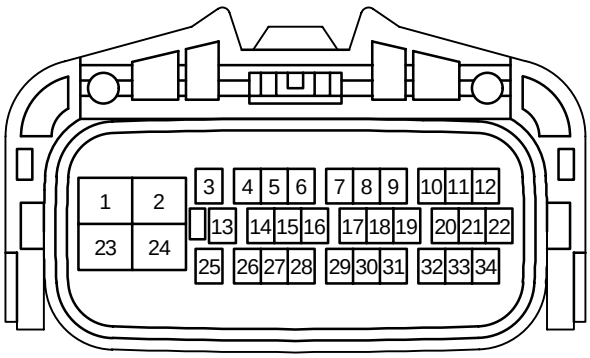
A30
(S/D)



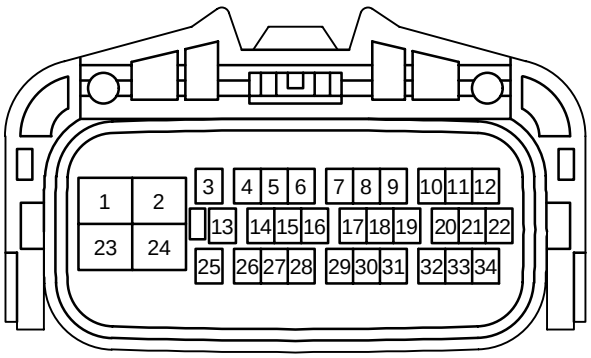
A30
(W/G)



A31
Black



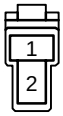
A32
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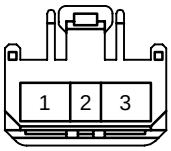
B 1
Gray



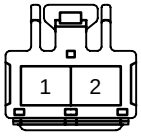
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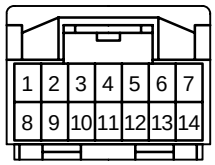
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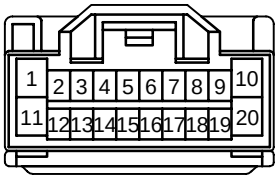
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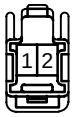
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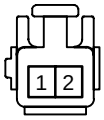
B 6



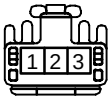
B 7
(w/ Power Seat)



B 7
(w/o Power Seat)



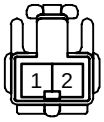
B 8



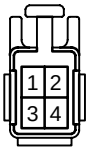
B 9
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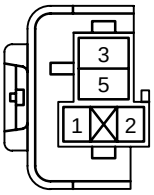
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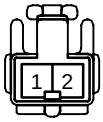
B11



B12
Gray



B13



C 1
Black



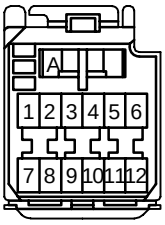
C 2
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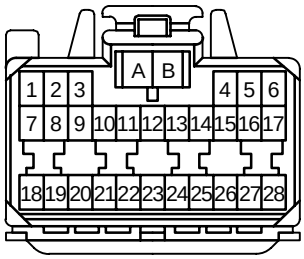
C 3
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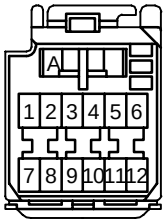
C 4
Yellow



C 5
Yellow



C 6
Yellow



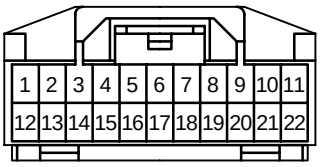
C 7



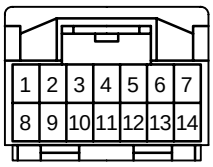
C 8
Gray



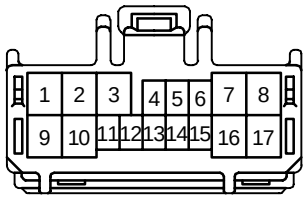
C 9



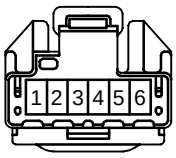
C10



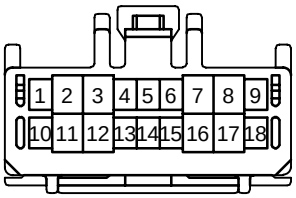
C11
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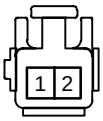
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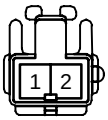
C13
Black



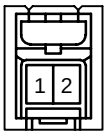
C14



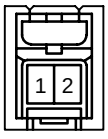
C15



C16
Yellow

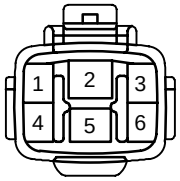


C17
Yellow



K CONNECTOR LIST

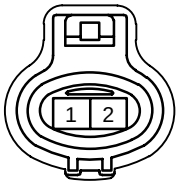
D 2
Black



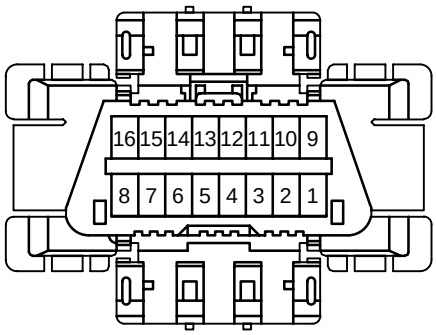
D 3
Black



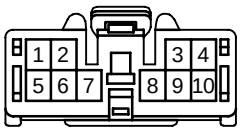
D 4
Black



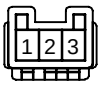
D 5



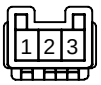
D 6
Gray



D 7



D 8



D 9
Black



D10



D11



D12



D13



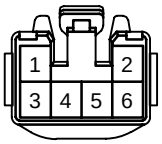
D14



D15



D16
Black



D17
Black



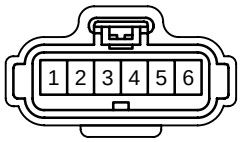
D18
Black



D19
Black



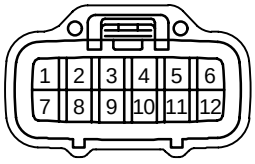
D20
Black



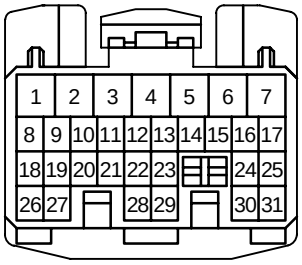
D21
Black



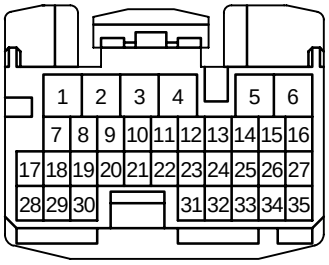
E 1
Gray



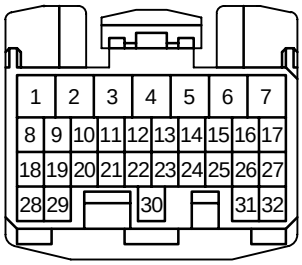
E 3



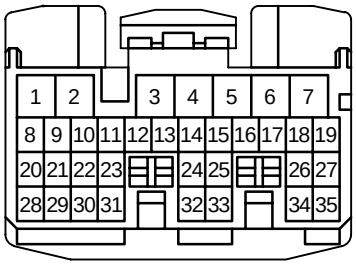
E 4



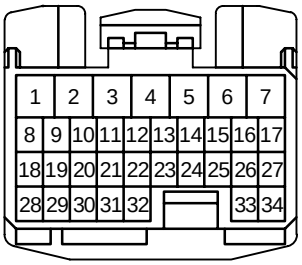
E 5



E 6



E 7



E 8
Black



E 9
Black



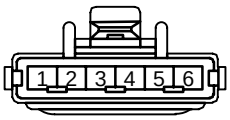
E10
Gray



E11
Gray



E12
Black



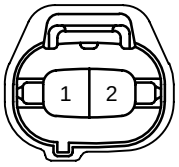
F 1
Brown



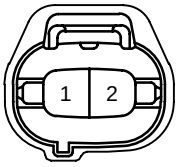
F 2
Brown



F 3
Black



F 4
Black



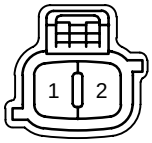
F 5
Gray



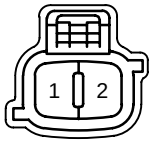
F 6
Gray



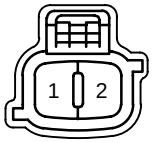
F 7
Gray



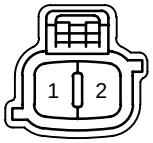
F 8
Gray



F 9
Gray



F10
Gray



F11
Black



F12
Dark Gray



F13



F14



F15
Dark Gray



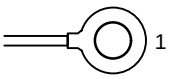
F16



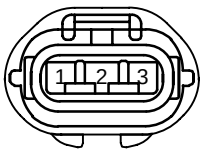
F17
Gray



G 1



G 2
Black



G 3



H 1
Gray

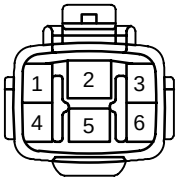


H 2
Gray



K CONNECTOR LIST

H 3
Gray



H 4
Black



H 5
Gray



H 6
Gray



H 7
Black



H 8
Black



H 9
Dark Gray



H10
Dark Gray



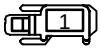
H11
Dark Gray



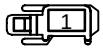
H12
Gray



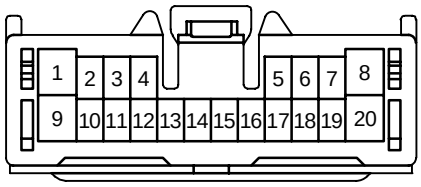
H13
Black



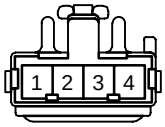
H14
Black



H15



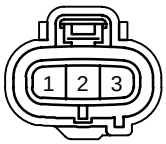
H16
Black



H17
Dark Gray



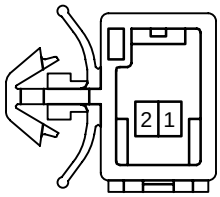
H18
Black



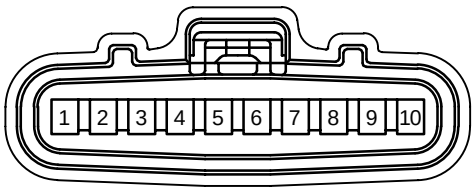
H19
(Bulb Type)



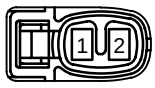
H19
(LED Type)



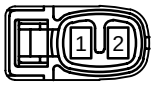
I 1
Black



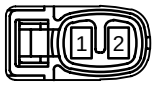
I 2
Black



I 3
Black



I 4
Black



I 5
Dark Gray



I 6
Brown



I 7
Dark Gray



I 8
Brown



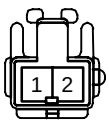
I 9
Dark Gray



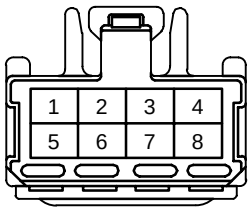
I10
Brown



I11



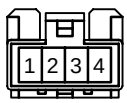
I12



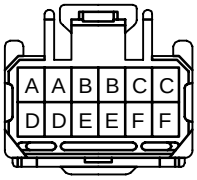
I13



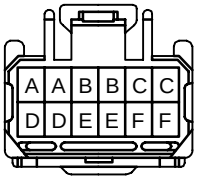
I14



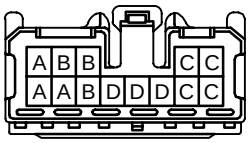
J 1



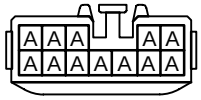
J 2



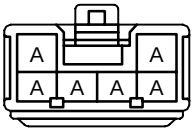
J 3



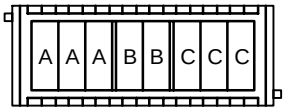
J 4



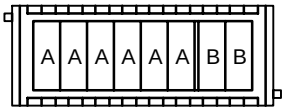
J 5



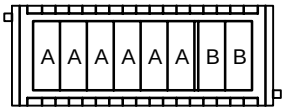
J 6
Black



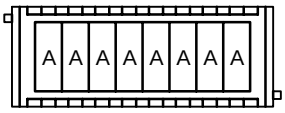
J 7
Gray



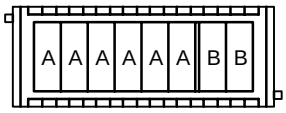
J 8
Gray



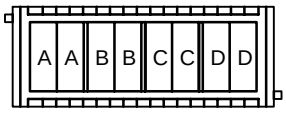
J 9
Blue



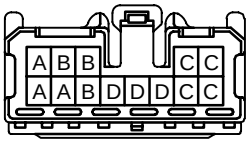
J10
Gray



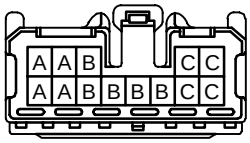
J11



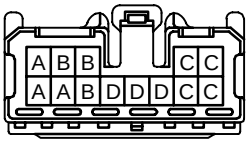
J12



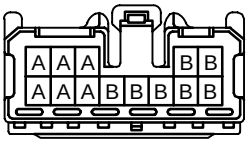
J13
(S/D)



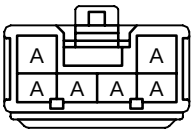
J13
(W/G)



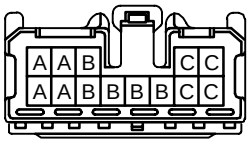
J14



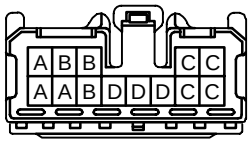
J15



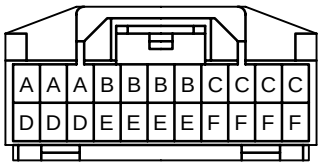
J16
(S/D)



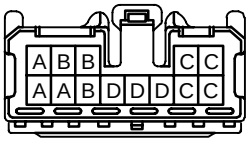
J16
(W/G)



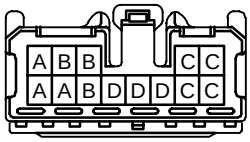
J17



J18



J19



K 1
Black



K 2
Dark Gray



K 3
Dark Gray



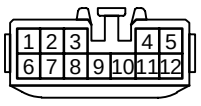
L 1
Gray



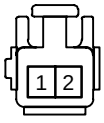
L 2
Gray



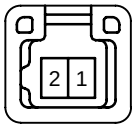
L 3



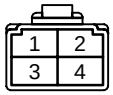
L 4
Black



L 5

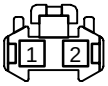


L 6



K CONNECTOR LIST

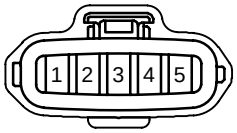
L 7
(S/D) Gray



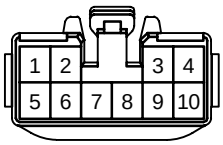
L 7
(W/G)



M 1
Black



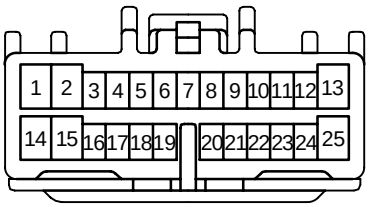
M 2



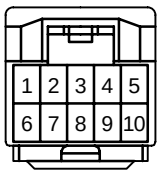
M 3



M 4



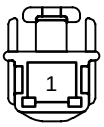
M 5



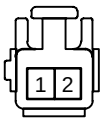
N 1
Gray



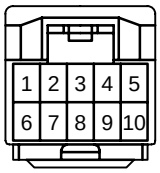
N 2



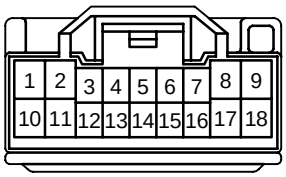
N 3



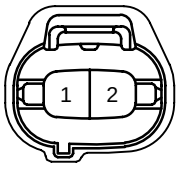
N 4



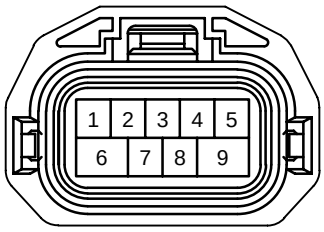
N 5



O 1
Black



P 1
Gray



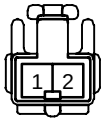
P 2
Black



P 3
Black



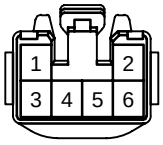
P 4



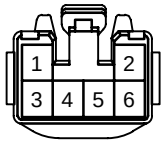
P 5



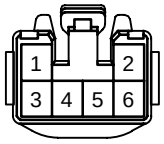
P 6



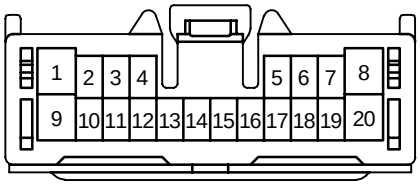
P 7



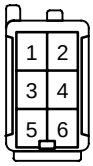
P 8



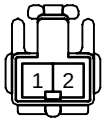
P 9



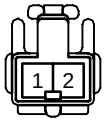
P10



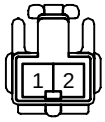
P11



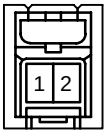
P12



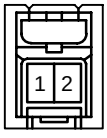
P13



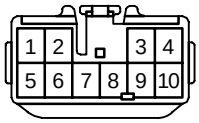
P14
Yellow



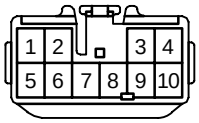
P15
Yellow



P16



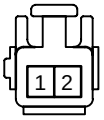
P17



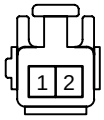
P18
Black



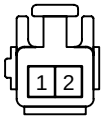
P19



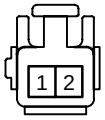
P20



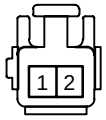
P21



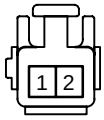
P22
Black



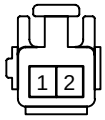
P23



P24



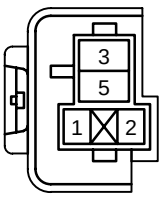
P25



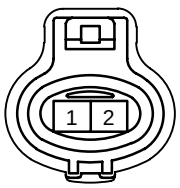
P26



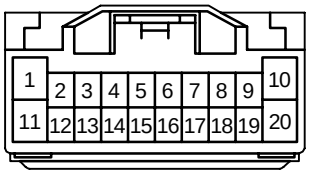
P27



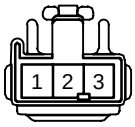
R 1
Black



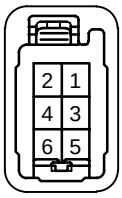
R 2



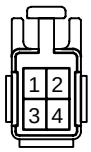
R 4
Black



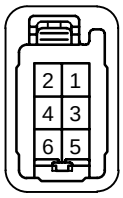
R 5



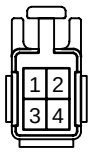
R 6



R 7



R 8



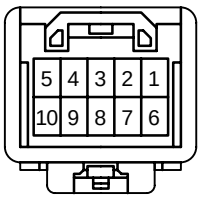
R 9



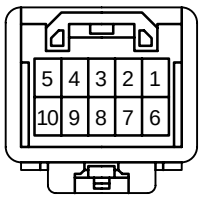
R10



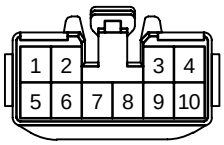
R11



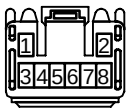
R12



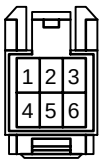
R13



R14
Black



R15



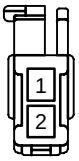
R16



R17



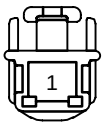
R18



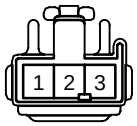
R19



R20



R21
Black



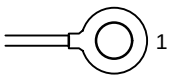
R22



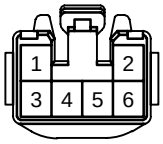
S 1
Black



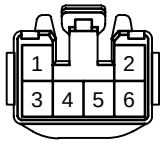
S 2



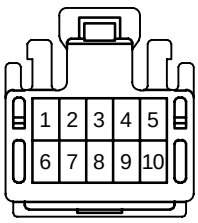
S 3
Blue



S 4

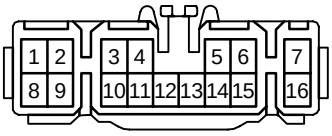


S 5

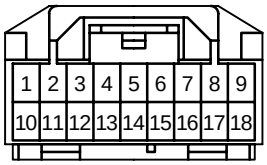


K CONNECTOR LIST

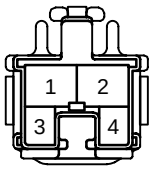
S 6



S 7



S 8



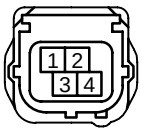
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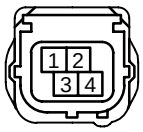
S10



S11
Yellow



S12
Yellow



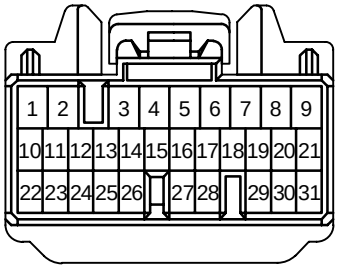
S13
Yellow



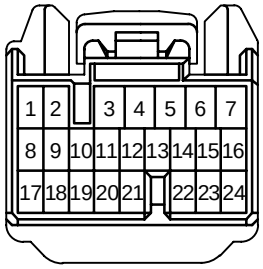
S14
Yellow



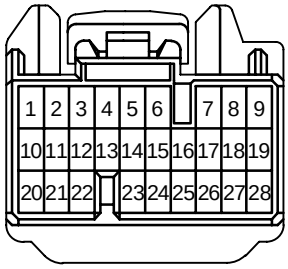
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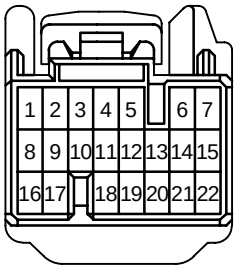
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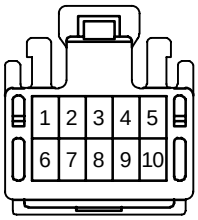
S17



S18



S19



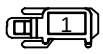
S20



S21



T 1
Black



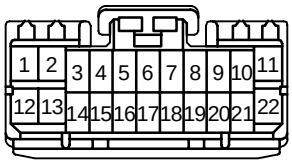
T 2
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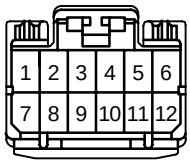
T 3
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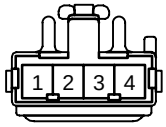
T 5



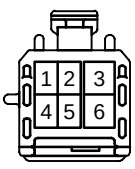
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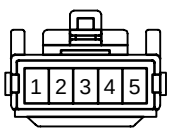
T 7
Black



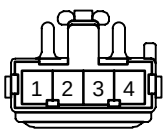
T 8



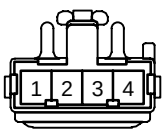
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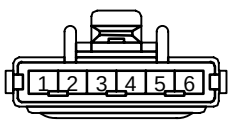
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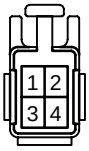
T13



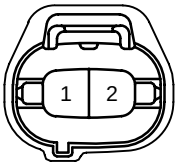
T14
Black



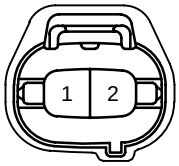
U 1



V 1
Black



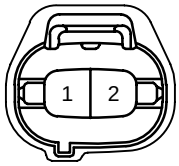
V 2
Brown



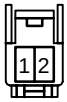
V 3
Gray



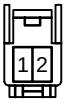
V 4
Blue



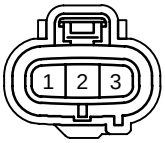
V 5



V 6



V 7
Black



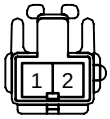
V 8
Blue



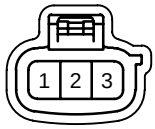
V 9
Black



V10
Black



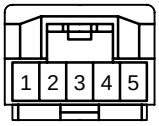
W 1
Black



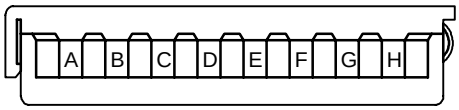
W 2
Dark Gray



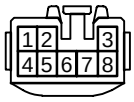
W 3



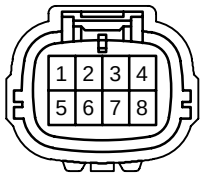
W 4



W 5



Y 1
Black



Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980–11070
A 2	A/C Condenser Fan Motor	90980–11410
A 3	A/C Magnetic Clutch and Lock Sensor	90980–11016
A 4	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	90980–10943
A 7	ABS Speed Sensor Front LH	90980–11002
A 8	ABS Speed Sensor Front RH	
A 9	Accel Position Sensor	90980–11150
A10	Airbag Sensor Front LH	90980–11856
A11	Airbag Sensor Front RH	
A12	A/C Control Assembly	90980–11973
A13	A/C Control Assembly	90980–11971
A14	A/C Room Temp. Sensor	90980–10825
A15	A/C Solar Sensor	90980–11918
A21	Air Inlet Control Servo Motor	90980–11165
A22	Air Mix Control Servo Motor	
A23	Air Vent Mode Control Servo Motor	
A24	Airbag Squib (Front Passenger Airbag Assembly)	90980–11886
A25	Airbag Squib (Steering Wheel Pad)	90980–10850
A26	Antenna Amplifier	90980–10871
A27	Ashtray Illumination	90980–10825
A28	Automatic Light Control Sensor	90980–11107
A29	ABS Speed Sensor Rear LH (S/D)	90980–11060
	ABS Speed Sensor Rear LH (W/G)	90980–10859
A30	ABS Speed Sensor Rear RH (S/D)	90980–11299
	ABS Speed Sensor Rear RH (W/G)	90980–10824
A31	ABS & BA & TRAC Actuator	90980–12020
A32	ABS & BA & TRAC & VSC Actuator	
B 1	Brake Fluid Level Warning SW	90980–11207
B 2	Blower Motor	90980–10214
B 3	Blower Motor Controller	90980–11667
B 4	Blower Motor Controller	90980–11579
B 5	Body ECU	90980–11911
B 6	Body ECU	90980–11971
B 7	Buckle SW LH (w/ Power Seat)	90980–11212
	Buckle SW LH (w/o Power Seat)	90980–10825
B 8	Buckle SW RH and Seat Belt Warning Occupant Detection Sensor	90980–11471
B 9	Back–Up Light SW	90980–11142
B10	Brake Pedal Load Sensing SW	90980–10860
B11	Back Door Courtesy SW and Opener Motor	90980–10795
B12	Back Door Opener Relay	82660–53010
B13	Back Door Opener SW	90980–10860
C 1	Camshaft Position Sensor	90980–10947
C 2	Camshaft Timing Oil Control Valve	90980–11162
C 3	Crankshaft Position Sensor	90980–10947

Code	Part Name	Part Number
C 4	Center Airbag Sensor Assembly	90980–11873
C 5	Center Airbag Sensor Assembly	90980–11872
C 6	Center Airbag Sensor Assembly	90980–11871
C 7	Cigarette Lighter	90980–10760
C 8	Cigarette Lighter Illumination	90980–11148
C 9	Combination Meter	90980–11915
C10	Combination Meter	90980–11911
C11	Combination SW	90980–11672
C12	Combination SW	90980–11616
C13	Combination SW	90980–11594
C14	Clutch Start SW	90980–10825
C15	Cruise Control Clutch SW	90980–10906
C16	Curtain Shield Airbag Squib LH	90980–11886
C17	Curtain Shield Airbag Squib RH	
D 2	Daytime Running Light Relay No.3	90980–10939
D 3	Daytime Running Light Relay No.4	90980–10940
D 4	Daytime Running Light Resistor	90980–10928
D 5	Data Link Connector 3	90980–11665
D 6	Daytime Running Light Relay (Main)	90980–11450
D 7	Diode (A/C)	90980–11251
D 8	Diode (Headlight Cleaner)	
D 9	Diode (Luggage Compartment Light)	90980–10962
D10	Door Courtesy Light Front LH	90980–11148
D11	Door Courtesy Light Front RH	
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 Lock Control SW RH	90980–10797
D17	Door Lock Motor and Door Lock Detection SW Front RH	90980–11150
D18	Door Lock Motor and Door Lock Detection SW Rear LH	
D19	Door Lock Motor and Door Lock Detection SW Rear RH	
D20	Door Lock Motor,Door Key Lock and Unlock SW and Door Lock Detection SW Front LH	90980–11858
D21	Diode (Fog Light)	90980–10962
E 1	Electronically Controlled Transmission Solenoid	90980–11151
E 3	Engine Control Module	90980–12142
E 4	Engine Control Module	90980–12146
E 5	Engine Control Module	90980–12143
E 6	Engine Control Module	90980–12145
E 7	Engine Control Module	90980–12144
E 8	Engine Coolant Temp. Sensor	90980–10736
E 9	Engine Hood Courtesy SW	90980–11189

L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
E10	Engine Oil Level Sensor	90980–11235
E11	Engine Oil Pressure SW	90980–11363
E12	Electronically Controlled Transmission Pattern Select SW	90980–10933
F 1	Front Fog Light LH	90980–11096
F 2	Front Fog Light RH	
F 3	Front Parking Light LH	90980–11156
F 4	Front Parking Light RH	
F 5	Front Side Marker Light LH	90980–11162
F 6	Front Side Marker Light RH	
F 7	Front Side Turn Signal Light LH	90980–11019
F 8	Front Side Turn Signal Light RH	
F 9	Front Turn Signal Light LH	
F10	Front Turn Signal Light RH	
F11	Front Wiper Motor	90980–11599
F12	Fuel Pump Resistor	90980–10901
F13	Front Door Speaker LH	90980–10935
F14	Front Door Speaker RH	
F15	Fuel Pump and Sender	90980–11077
F16	Fuel Sender (Sub)	90980–11140
F17	Front Window Deicer	90980–11295
G 1	Generator	90980–09363
G 2	Generator	90980–11349
G 3	Glove Box Light	90980–11098
H 1	Headlight Beam Level Control Actuator LH	90980–11144
H 2	Headlight Beam Level Control Actuator RH	
H 3	Headlight Cleaner Control Relay	90980–10939
H 4	Headlight Cleaner Motor	90980–11410
H 5	Headlight Control ECU LH	90980–11255
H 6	Headlight Control ECU RH	
H 7	Headlight LH (High)	90980–11095
H 8	Headlight RH (High)	
H 9	Heated Oxygen Sensor (Bank 1 Sensor 1)	90980–11028
H10	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980–10869
H11	Heated Oxygen Sensor (Bank 2 Sensor 1)	
H12	Height Control Sensor Front LH	90980–11016
H13	Horn LH	90980–10619
H14	Horn RH	
H15	Headlight Beam Level Control ECU	90980–11469
H16	Headlight Cleaner SW	90980–11013
H17	Heated Oxygen Sensor (Bank 2 Sensor 2)	90980–11028
H18	Height Control Sensor Rear LH	90980–11860
H19	High Mounted Stop Light (Bulb Type)	90980–11148
	High Mounted Stop Light (LED Type)	90980–11967
I 1	Igniter	90980–11653
I 2	Ignition Coil No.1	90980–11246
I 3	Ignition Coil No.2	
I 4	Ignition Coil No.3	
I 5	Injector No.1	90980–11153
I 6	Injector No.2	
I 7	Injector No.3	
I 8	Injector No.4	
I 9	Injector No.5	
I10	Injector No.6	
I11	Ignition Key Cylinder Light	90980–10906
I12	Ignition SW	90980–11615
I13	Interior Light	90980–10935
I14	Inner Mirror	90980–11950
J 1	Junction Connector	90980–11661
J 2	Junction Connector	
J 3	Junction Connector	90980–11542
J 4	Junction Connector	90980–10803
J 5	Junction Connector	90980–10976
J 6	Junction Connector	82824–10020
J 7	Junction Connector	82824–16060
J 8	Junction Connector	
J 9	Junction Connector	82824–10030
J10	Junction Connector	82824–16060
J11	Junction Connector	82824–10010
J12	Junction Connector	90980–11542
J13	Junction Connector	
J14	Junction Connector	
J15	Junction Connector	90980–10976
J16	Junction Connector	90980–11542
J17	Junction Connector	90980–11915
J18	Junction Connector	90980–11542
J19	Junction Connector	
K 1	Keyless Buzzer	90980–11142
K 2	Knock Sensor 1	90980–11166
K 3	Knock Sensor 2	
L 1	License Plate Light LH	90980–11148
L 2	License Plate Light RH	
L 3	Light Failure Sensor	90980–10803
L 4	Luggage Compartment Door Courtesy SW and Opener Motor	90980–10825
L 5	Luggage Compartment Door Key Unlock SW	90980–11368
L 6	Luggage Compartment Door Opener Relay	90980–10171
L 7	Luggage Compartment Light (S/D)	90980–11148
	Luggage Compartment Light (W/G)	90980–10121

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

Code	Part Name	Part Number
M 1	Mass Air Flow Meter	90980–11317
M 2	Moon Roof Control ECU	90980–10801
M 3	Moon Roof Control SW	90980–10367
M 4	Multi–Display	90980–11877
M 5	Multi–Display	90980–11923
N 1	Noise Filter (Ignition)	90980–10843
N 2	Noise Filter (Rear Window Defogger)	90980–11259
N 3	Noise Filter (Stop Light)	90980–10825
N 4	Navigation ECU	90980–11923
N 5	Navigation ECU	90980–11973
O 1	O/D Direct Clutch Speed Sensor	90980–11156
P 1	Park/Neutral Position SW	90980–11784
P 2	Power Steering Oil Pressure Sensor	90980–10845
P 3	Parking Brake SW	90980–10871
P 4	Power Outlet	90980–10860
P 5	Personal Light	90980–10935
P 6	Power Window Control SW Front RH	90980–10797
P 7	Power Window Control SW Rear LH	
P 8	Power Window Control SW Rear RH	
P 9	Power Window Master SW	90980–11469
P10	Power Window Motor Front LH	90980–11011
P11	Power Window Motor Front RH	90980–10860
P12	Power Window Motor Rear LH	
P13	Power Window Motor Rear RH	
P14	Pretensioner LH	90980–11886
P15	Pretensioner RH	
P16	Power Seat Control SW (Driver's Seat)	90980–10997
P17	Power Seat Control SW (Front Passenger's Seat)	
P18	Power Seat Motor (Driver's Seat Front Vertical Control)	90980–10825
P19	Power Seat Motor (Driver's Seat Rear Vertical Control)	
P20	Power Seat Motor (Driver's Seat Reclining Control)	
P21	Power Seat Motor (Driver's Seat Slide Control)	
P22	Power Seat Motor (Front Passenger's Seat Front Vertical Control)	
P23	Power Seat Motor (Front Passenger's Seat Rear Vertical Control)	
P24	Power Seat Motor (Front Passenger's Seat Reclining Control)	
P25	Power Seat Motor (Front Passenger's Seat Slide Control)	
P26	Power Outlet (Luggage)	90980–11300
P27	Power Outlet Relay	82660–20340
R 1	Radiator Fan Motor	90980–10928
R 2	Radio and Player	90980–12038

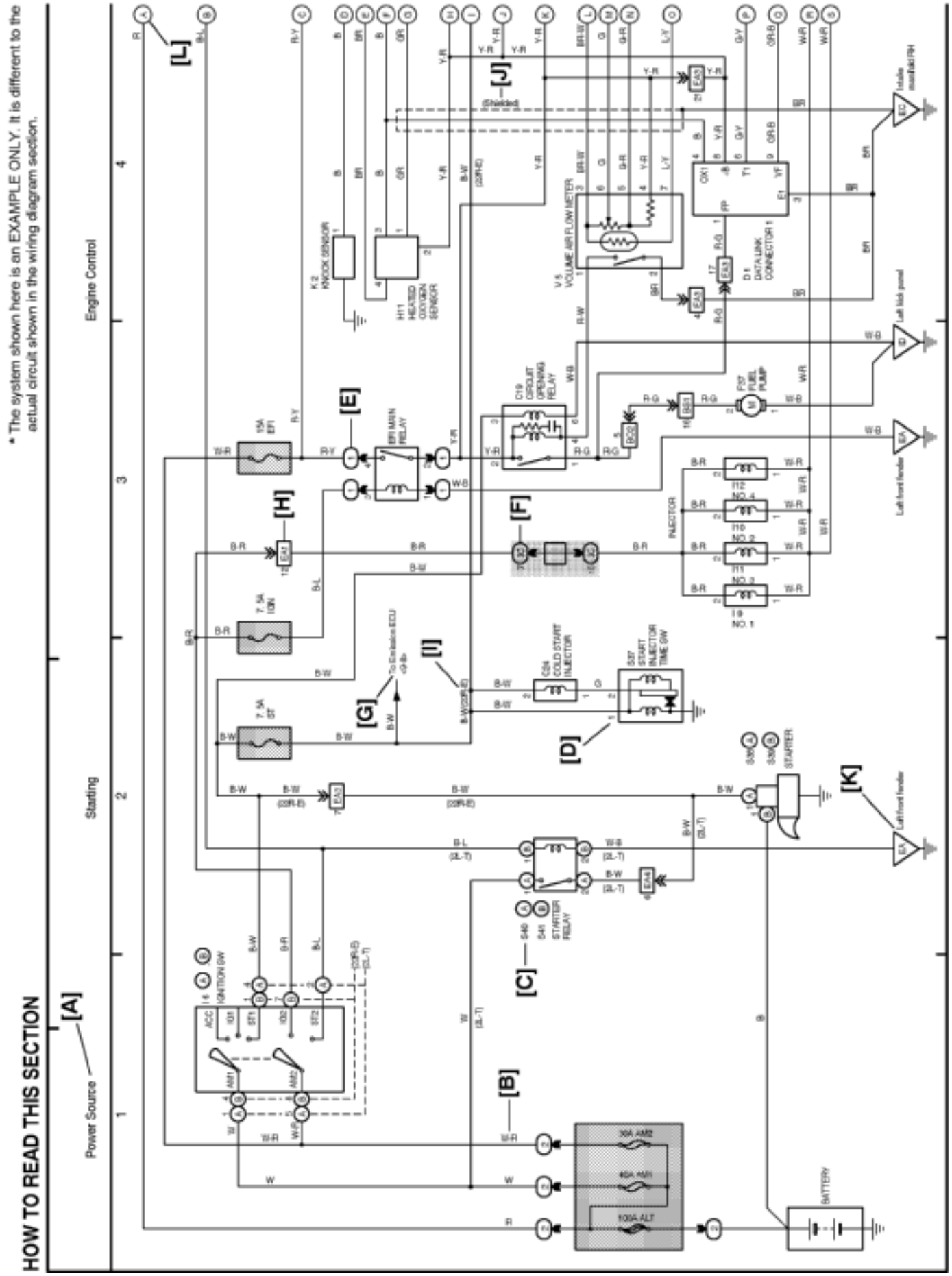
Code	Part Name	Part Number
R 4	Rheostat	90980–10908
R 5	Rear Combination Light LH	90980–11587
R 6	Rear Combination Light LH	90980–10795
R 7	Rear Combination Light RH	90980–11587
R 8	Rear Combination Light RH	90980–10795
R 9	Rear Speaker and Woofer LH	90980–11399
R10	Rear Speaker and Woofer RH	
R11	Remote Control Mirror LH	90980–11922
R12	Remote Control Mirror RH	
R13	Remote Control Mirror SW	90980–10801
R14	Rear Fog Light SW	90980–11533
R15	Remote Controller (Navigation)	90980–12012
R16	Rear Side Marker Light	90980–11247
R17	Rear Speaker LH	90980–10935
R18	Rear Speaker RH	
R19	Rear Window Defogger	90980–11259
R20	Rear Window Defogger	
R21	Rear Wiper Motor	90980–11296
R22	Rear Wiper Motor	90980–10871
S 1	Starter	90980–11400
S 2	Starter	90980–09531
S 3	Seat Heater SW (Driver's Seat)	90980–10797
S 4	Seat Heater SW (Front Passenger's Seat)	
S 5	Shift Lock Control ECU	90980–11581
S 6	Stereo Component Amplifier	90980–10848
S 7	Stereo Component Amplifier	90980–11913
S 8	Stop Light SW	90980–11118
S 9	Seat Heater (Driver's Seat)	90980–10905
S10	Seat Heater (Front Passenger's Seat)	
S11	Side Airbag Sensor LH	90980–11857
S12	Side Airbag Sensor RH	
S13	Side Airbag Squib LH	90980–11864
S14	Side Airbag Squib RH	
S15	Skid Control ECU	90980–11421
S16	Skid Control ECU	90980–11476
S17	Skid Control ECU	90980–11637
S18	Skid Control ECU	90980–11638
S19	Steering Sensor	90980–11581
S20	Squawker LH	90980–11399
S21	Squawker RH	
T 1	Theft Deterrent Horn	90980–10619
T 2	Throttle Control Motor	90980–10942
T 3	Throttle Position Sensor	90980–10711
T 5	Theft Deterrent ECU	90980–11392
T 6	Theft Deterrent ECU	90980–11424

L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
T 7	TRAC Off SW	90980–11013
T 8	Transmission Control SW (L–2)	90980–11493
T 9	Transponder Key Amplifier	90980–10789
T12	Tweeter LH	90980–11013
T13	Tweeter RH	
T14	TRAC Off SW and SNOW SW	90980–10933
U 1	Unlock Warning SW	90980–10795
V 1	Vehicle Speed Sensor (Electronically Controlled Transmission)	90980–11156
V 2	VSV (ACIS)	90980–11149
V 3	VSV (Canister Closed Valve)	90980–11162
V 4	VSV (EVAP)	90980–11156

Code	Part Name	Part Number
V 5	Vanity Light LH	90980–11918
V 6	Vanity Light RH	
V 7	Vapor Pressure Sensor	90980–11860
V 8	VSV (Pressure Switching Valve)	90980–11859
V 9	Vehicle Speed Sensor (Combination Meter)	90980–11143
V10	VSC Warning Buzzer	90980–10906
W 1	Washer Motor	90980–10981
W 2	Water Temp. SW	90980–11235
W 3	Wireless Door Lock Control Receiver	90980–11909
W 4	Wire to FFC Holder	82824–53010
W 5	Woofer	90980–10799
Y 1	Yaw Rate Sensor	90980–12080

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


HOW TO READ THIS SECTION
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the wiring diagram section.
Power Source
Starting
Engine Control
[A]
[B]
[C]
[D]
[E]
[F]
[G]
[H]
[I]
[J]
[K]
[L]
BATTERY
STARTER
IGNITION SW
EFI MAIN RELAY
STARTER RELAY
COLD START INJECTOR
START INJECTOR TIME SW
CIRCUIT OPENING RELAY
FUEL PUMP
INJECTOR
KNOCK SENSOR
HEATED OXYGEN SENSOR
VOLUME AIR FLOW METER
DATA LINK CONNECTOR 1
To Emission ECU
Left kick panel
Left front fender
Intake manifold RH
30A AM2
40A AM1
100A ALT

[A] : System Title

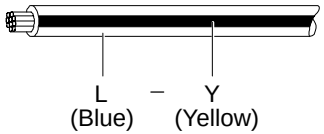
[B] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

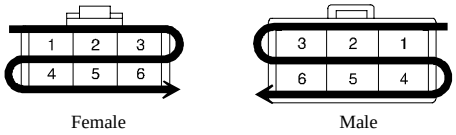
Example: L – Y



[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



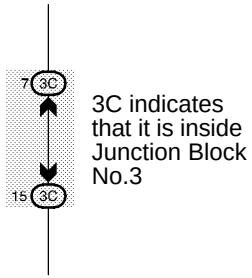
The numbering system for the overall wiring diagram is the same as above

[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

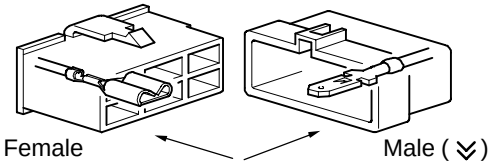
[F] : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

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.

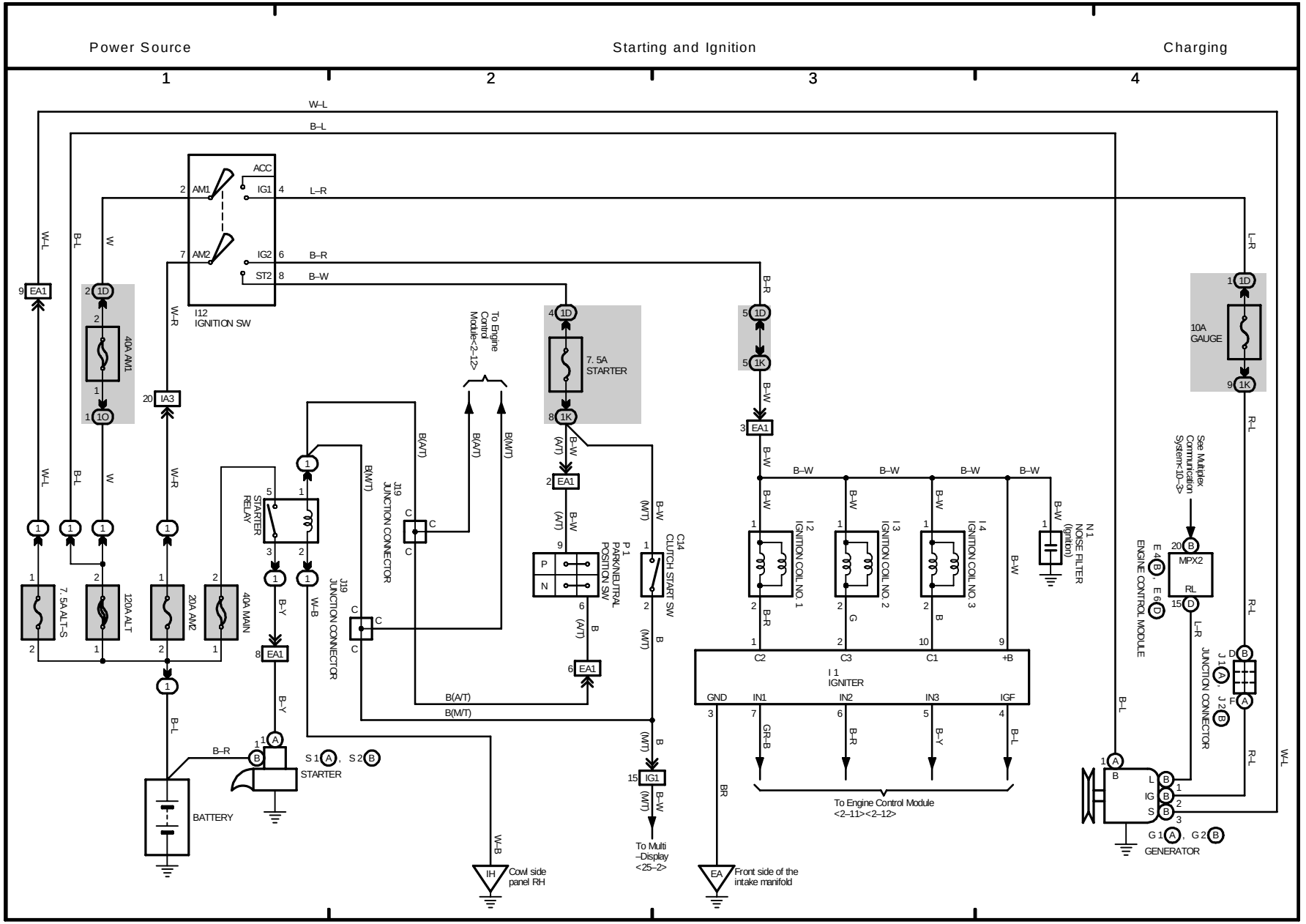
[L] : The same code occuring on the next page indicates that the wire harness is continuous.

SYSTEM INDEX

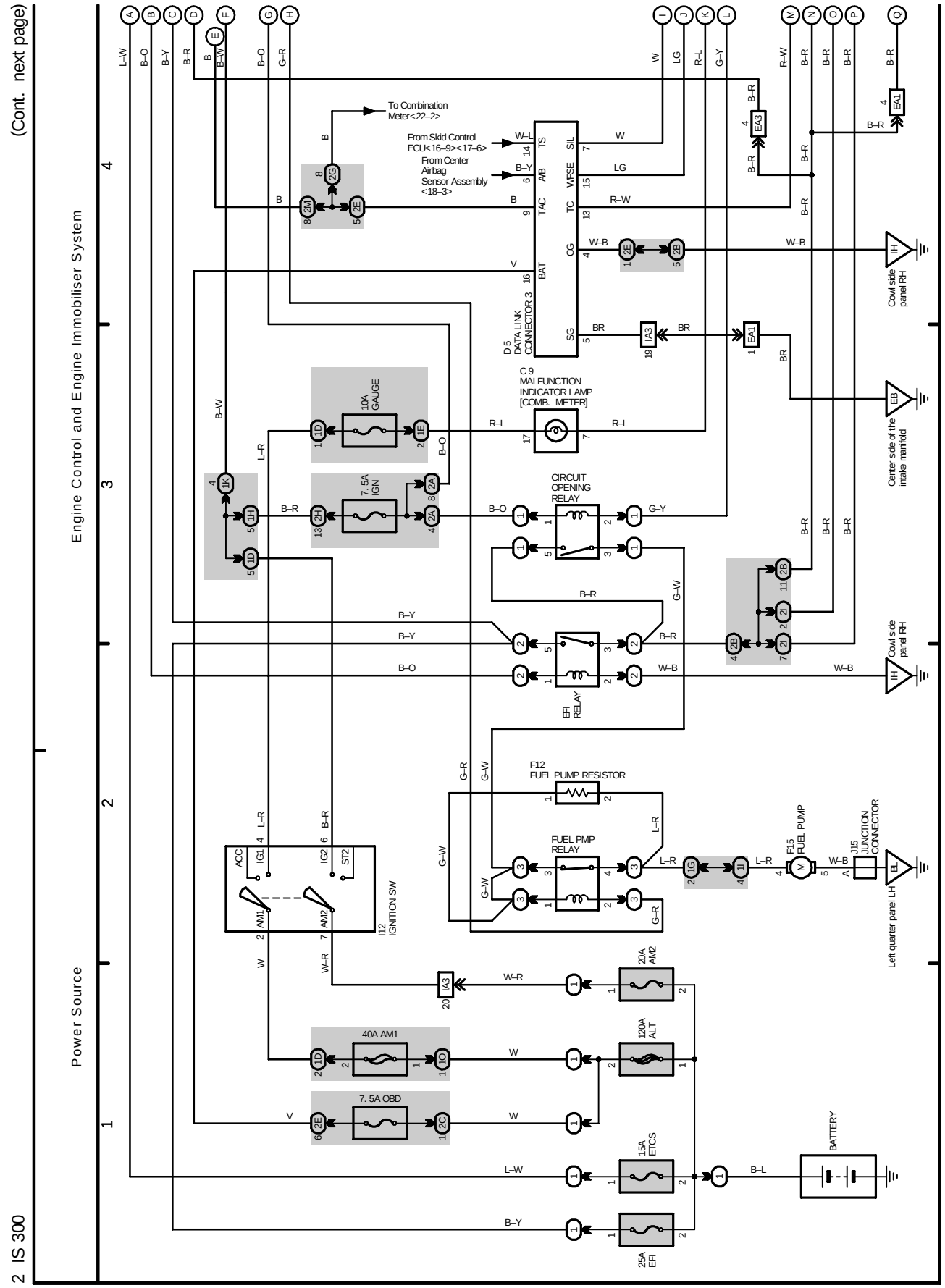
SYSTEMS	LOCATION
ABS and Traction Control	17–2
Automatic Air Conditioning	24–2
Automatic Glare–Resistant EC Mirror	12–2
Automatic Light Control	11–2
Back–Up Light	6–4
Charging	1–4
Cigarette Lighter	19–2
Clock	19–3
Combination Meter	22–2
Compass	23–2
Cruise Control	15–2
Electronically Controlled Transmission and A/T Indicator	14–2
Engine Control	2–2
Engine Immobiliser System	2–2
Front Fog Light	7–3
Front Window Deicer	21–1
Front Wiper and Washer	9–2
Garage Door Opener	19–4
Headlight	3–2
Headlight Beam Level Control	8–2
Headlight Cleaner	7–2
Horn	9–4
Ignition	1–2
Illumination	5–2
LEXUS Navigation System	25–2
Light Auto Turn Off	11–2
Mirror Heater	21–2
Moon Roof	12–1

SYSTEMS	LOCATION
Multiplex Communication System	10–3
∗ Back Door Opener	
∗ Door Lock Control	
∗ Interior Light	
∗ Key Reminder	
∗ Power Window	
∗ Seat Belt Warning	
∗ Wireless Door Lock Control	
Power Outlet	19–2
Power Seat	13–2
Power Source	1~28–1
Radiator Fan and Condenser Fan	23–3
Radio and Player (S/D)	20–2
Radio and Player (W/G)	28–2
Rear Fog Light	7–4
Rear Window Defogger	21–2
Rear Wiper and Washer	27–2
Remote Control Mirror	12–3
Seat Heater	13–4
Shift Lock	21–4
SRS	18–2
Starting	1–2
Stop Light (S/D)	6–2
Stop Light (W/G)	26–2
Taillight (S/D)	6–2
Taillight (W/G)	26–2
Theft Deterrent	11–3
Turn Signal and Hazard Warning Light	4–2
VSC	16–2

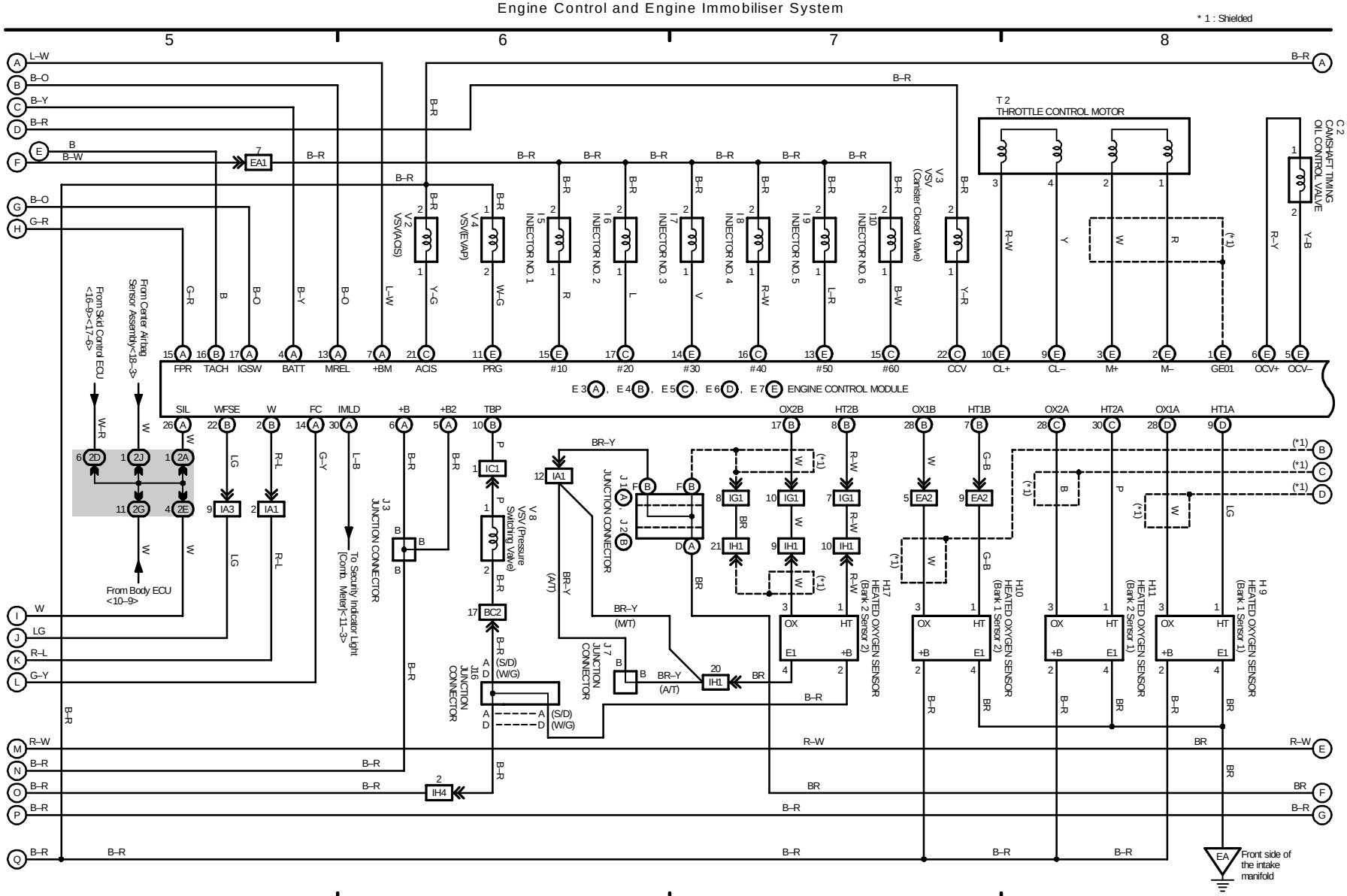
1 IS 300 ELECTRICAL WIRING DIAGRAM



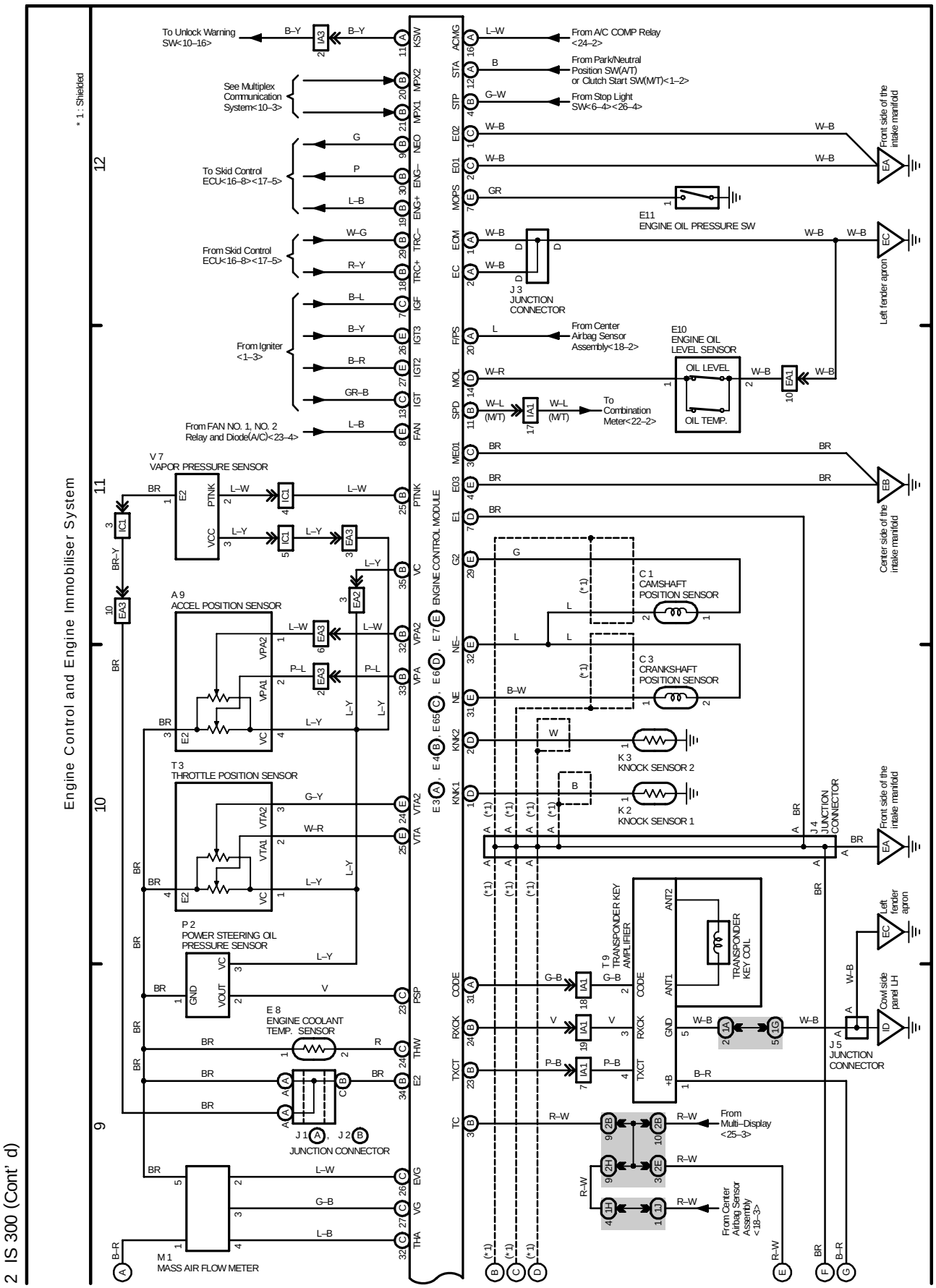
M OVERALL ELECTRICAL WIRING DIAGRAM

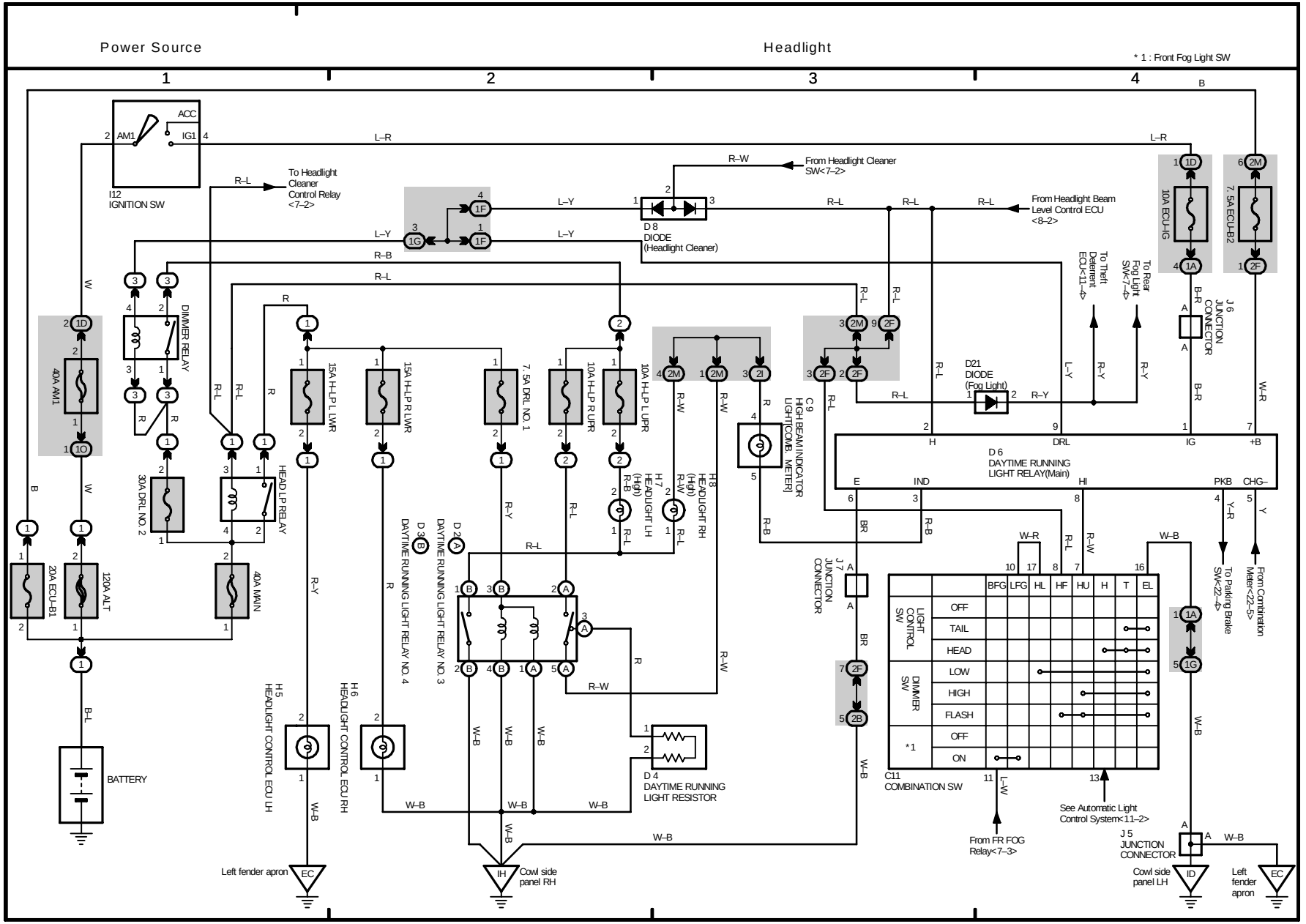


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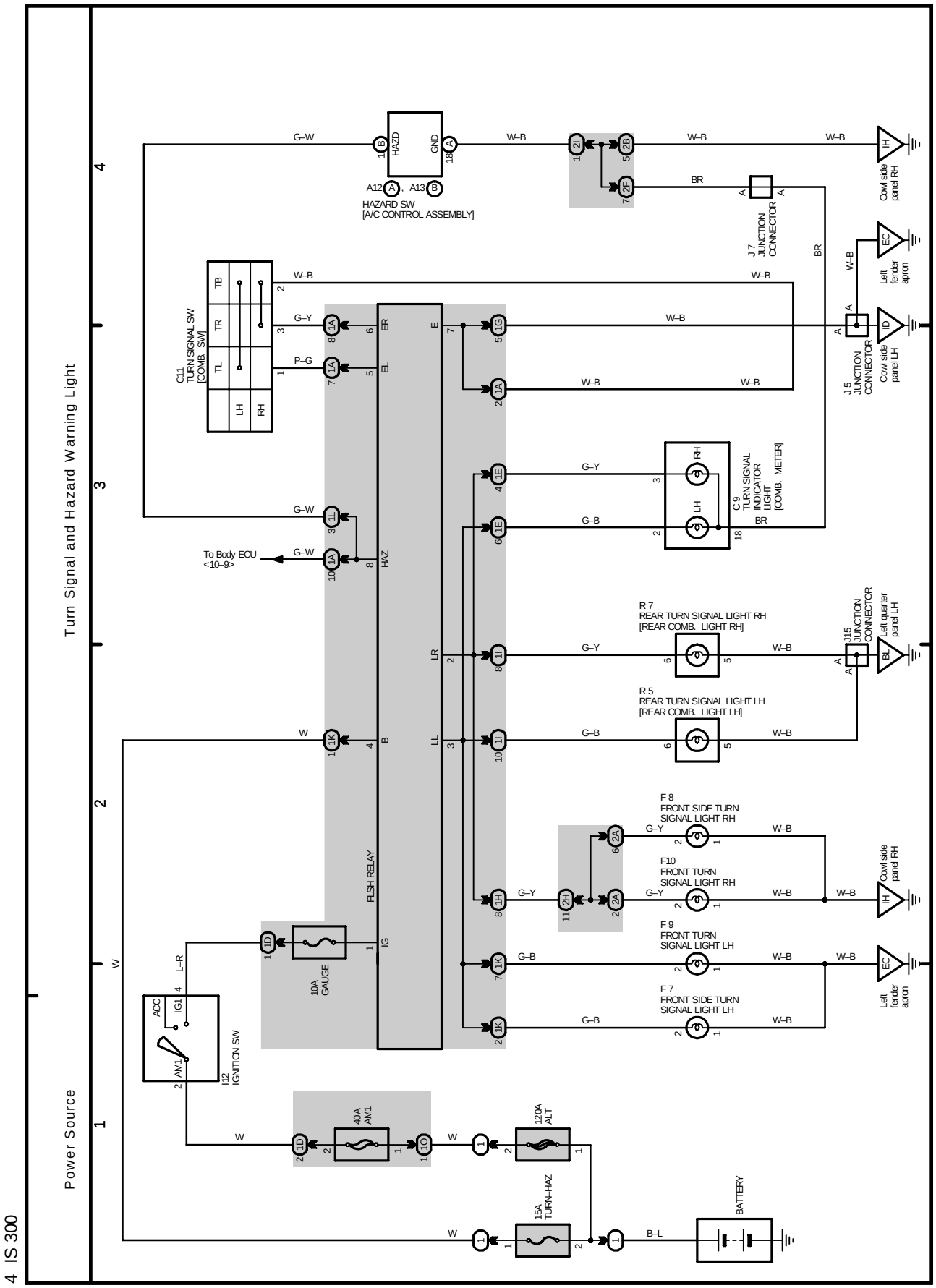


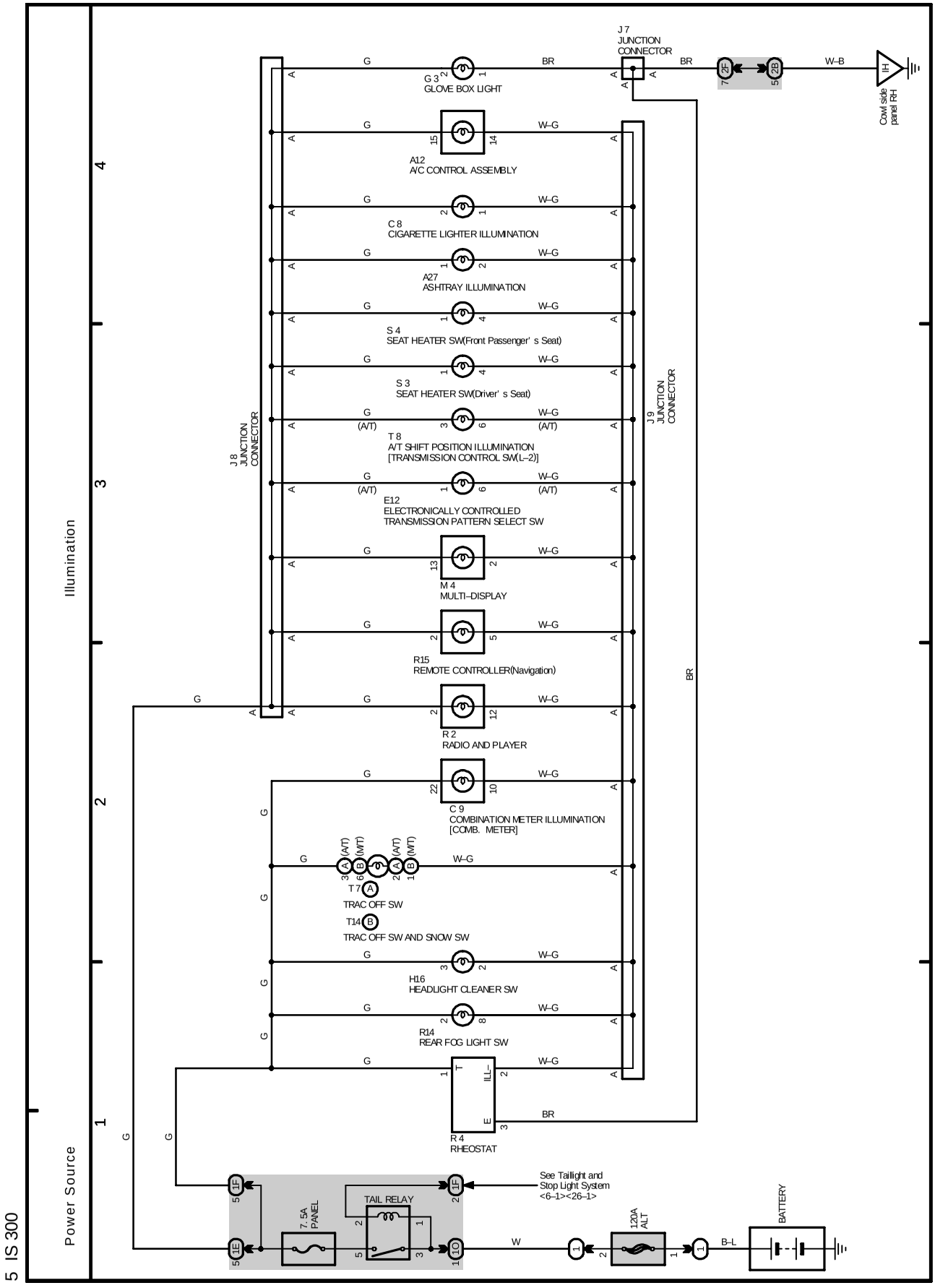
M OVERALL ELECTRICAL WIRING DIAGRAM



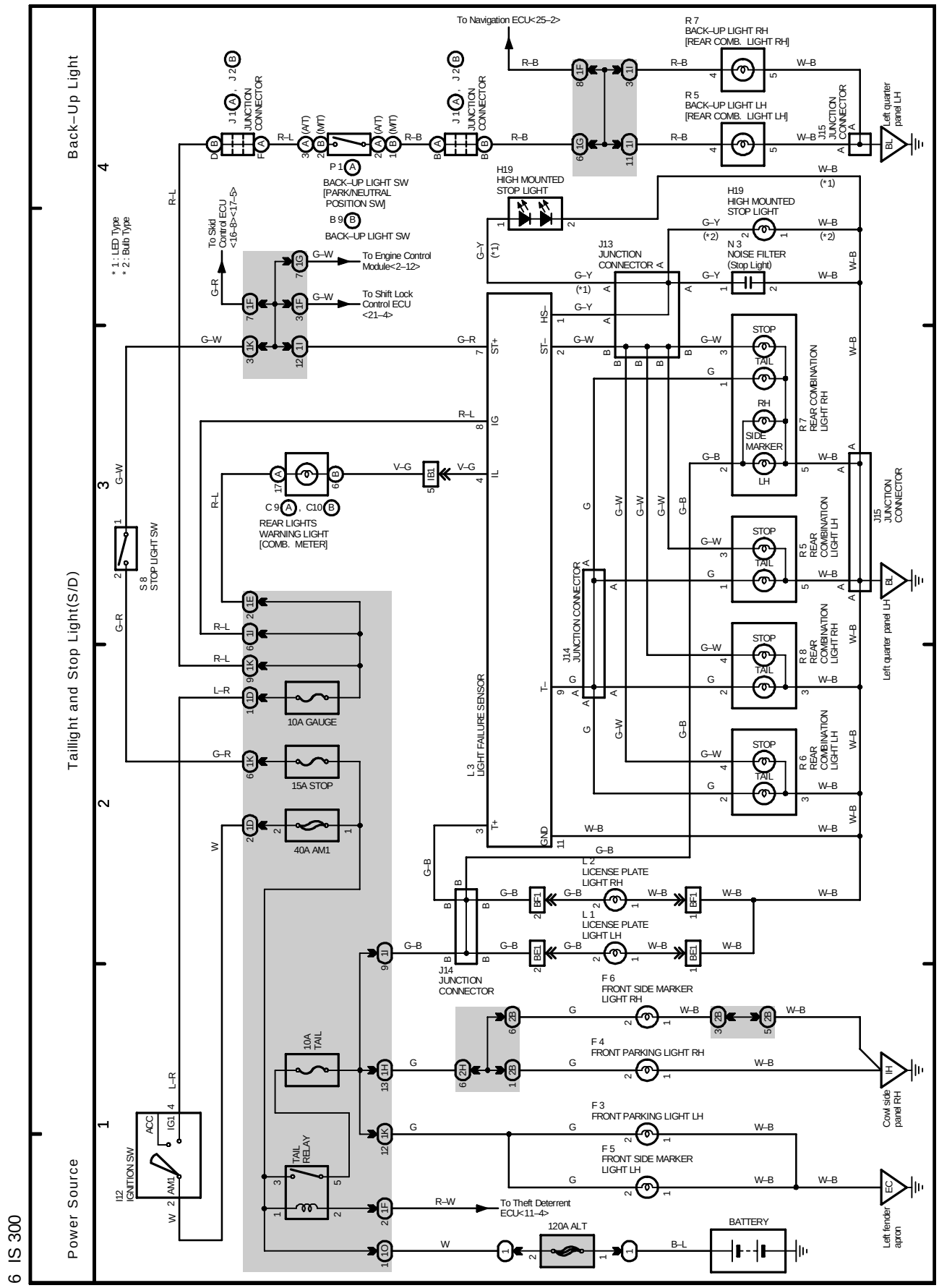

Power Source
Headlight
* 1 : Front Fog Light SW
1
2
3
4
ACC
AM1
IG1
I12
IGNITION SW
To Headlight Cleaner Control Relay <7–2>
From Headlight Cleaner SW<7–2>
From Headlight Beam Level Control ECU <8–2>
D 8
DIODE
(Headlight Cleaner)
10A ECU–IG
7.5A ECU–B2
J 6
JUNCTION CONNECTOR
To Theft Deterrent ECU<11–4>
To Rear Fog Light SW<7–4>
D21
DIODE
(Fog Light)
D 6
DAYTIME RUNNING LIGHT RELAY(Main)
H
DRL
IG
+B
E
IND
HI
PKB
CHG–
DIMMER RELAY
40A AM1
30A DRL NO. 2
HEAD LP RELAY
15A H–LP L LWR
15A H–LP R LWR
7.5A DRL NO. 1
10A H–LP R UPR
10A H–LP L UPR
H 7
HEADLIGHT LH (High)
H 8
HEADLIGHT RH (High)
C 9
HIGH BEAM INDICATOR LIGHT(COMB. METER)
20A ECU–B1
120A ALT
40A MAIN
BATTERY
H 5
HEADLIGHT CONTROL ECU LH
H 6
HEADLIGHT CONTROL ECU RH
D 3
DAYTIME RUNNING LIGHT RELAY NO. 4
D 2
DAYTIME RUNNING LIGHT RELAY NO. 3
D 4
DAYTIME RUNNING LIGHT RESISTOR
J 7
JUNCTION CONNECTOR
C11
COMBINATION SW
BFG
LFG
HL
HF
HU
H
T
EL
LIGHT CONTROL SW
OFF
TAIL
HEAD
DIMMER SW
LOW
HIGH
FLASH
*1
OFF
ON
To Parking Brake SW<22–4>
From Combination Meter<22–5>
From FR FOG Relay<7–3>
See Automatic Light Control System<11–2>
J 5
JUNCTION CONNECTOR
Left fender apron
EC
Cowl side panel RH
IH
Cowl side panel LH
ID

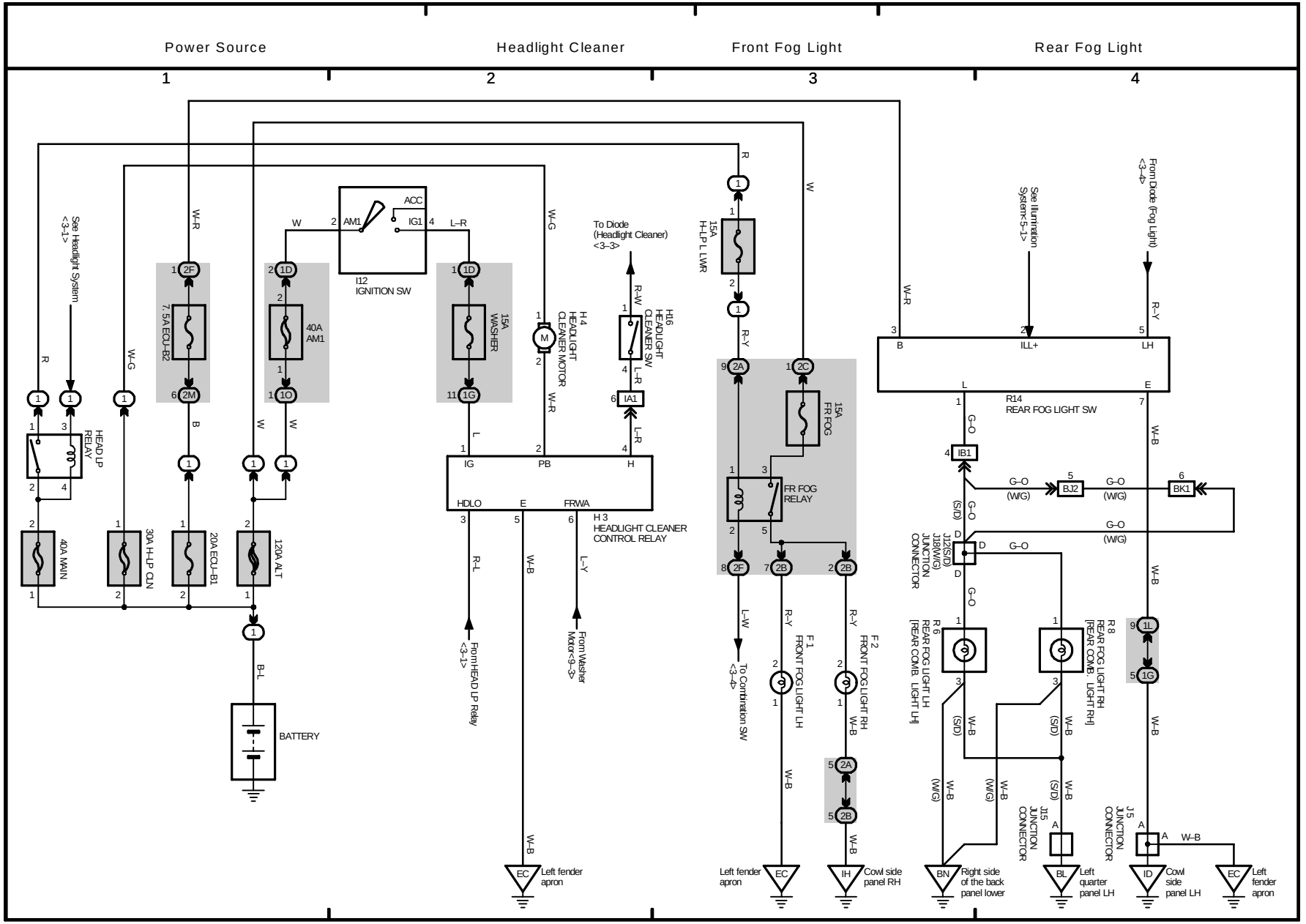
M OVERALL ELECTRICAL WIRING DIAGRAM



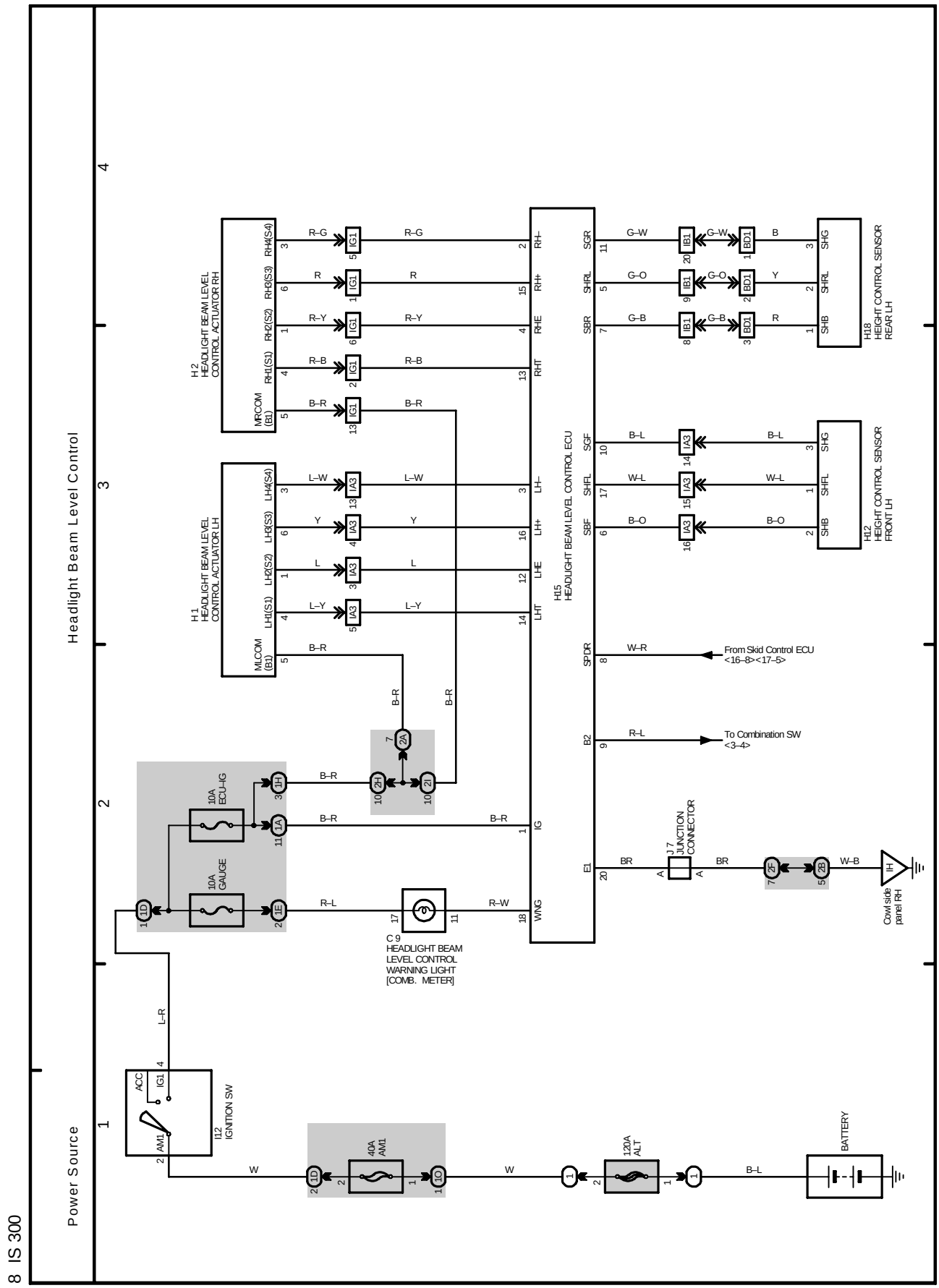

5 IS 300
Power Source
Illumination
J 7
JUNCTION
CONNECTOR
G 3
GLOVE BOX LIGHT
Cowl side
panel RH
A12
A/C CONTROL ASSEMBLY
C 8
CIGARETTE LIGHTER ILLUMINATION
A27
ASHTRAY ILLUMINATION
S 4
SEAT HEATER SW(Front Passenger' s Seat)
S 3
SEAT HEATER SW(Driver' s Seat)
J 8
JUNCTION
CONNECTOR
J 9
JUNCTION
CONNECTOR
T 8
A/T SHIFT POSITION ILLUMINATION
[TRANSMISSION CONTROL SW(L–2)]
E12
ELECTRONICALLY CONTROLLED
TRANSMISSION PATTERN SELECT SW
M 4
MULTI–DISPLAY
R15
REMOTE CONTROLLER(Navigation)
R 2
RADIO AND PLAYER
C 9
COMBINATION METER ILLUMINATION
[COMB. METER]
T 7
TRAC OFF SW
T14
TRAC OFF SW AND SNOW SW
H16
HEADLIGHT CLEANER SW
R14
REAR FOG LIGHT SW
R 4
RHEOSTAT
See Taillight and
Stop Light System
<6–1><26–1>
TAIL RELAY
7. 5A
PANEL
120A
ALT
BATTERY
W–B
BR
W–G
B–L
W

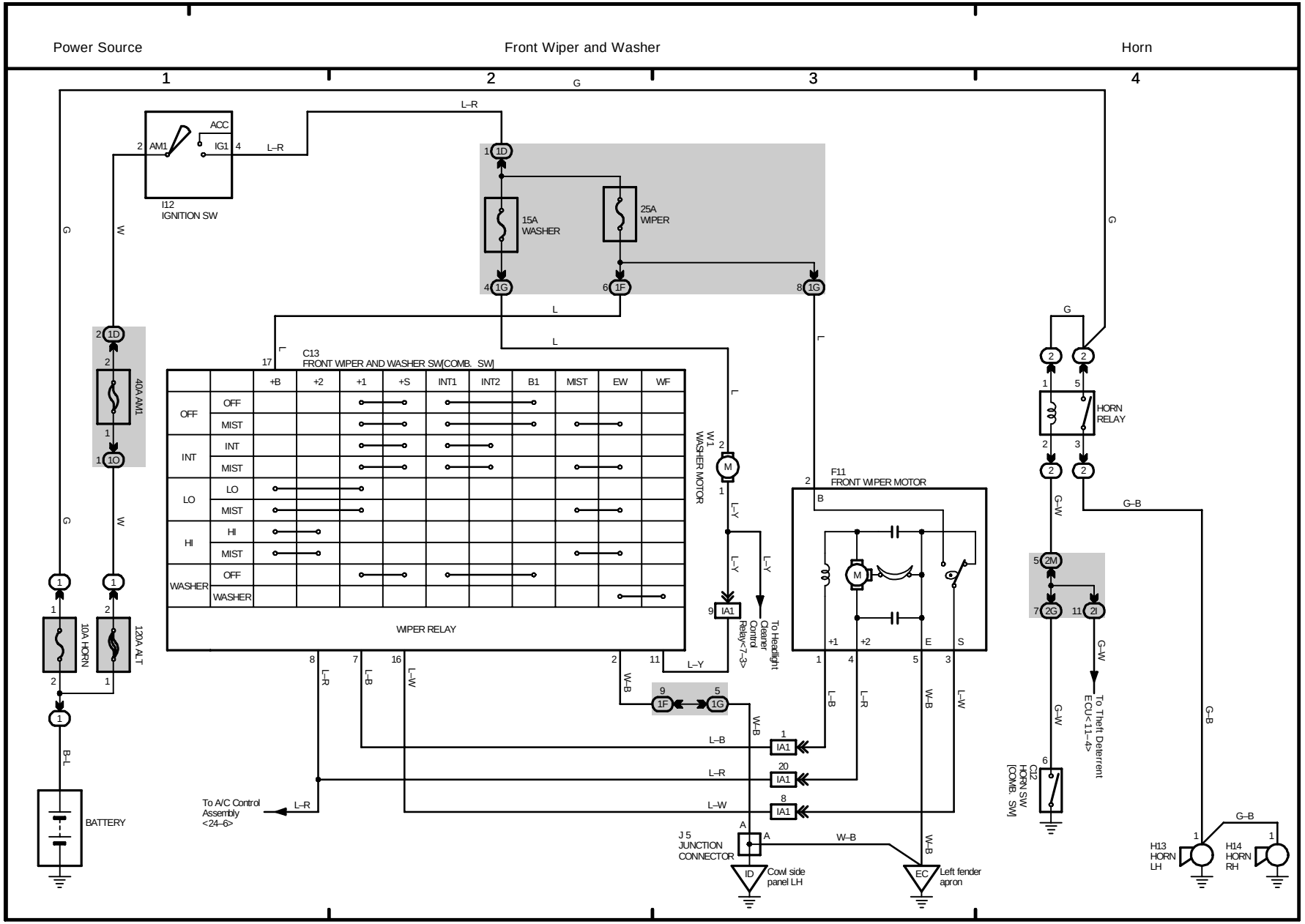
M OVERALL ELECTRICAL WIRING DIAGRAM



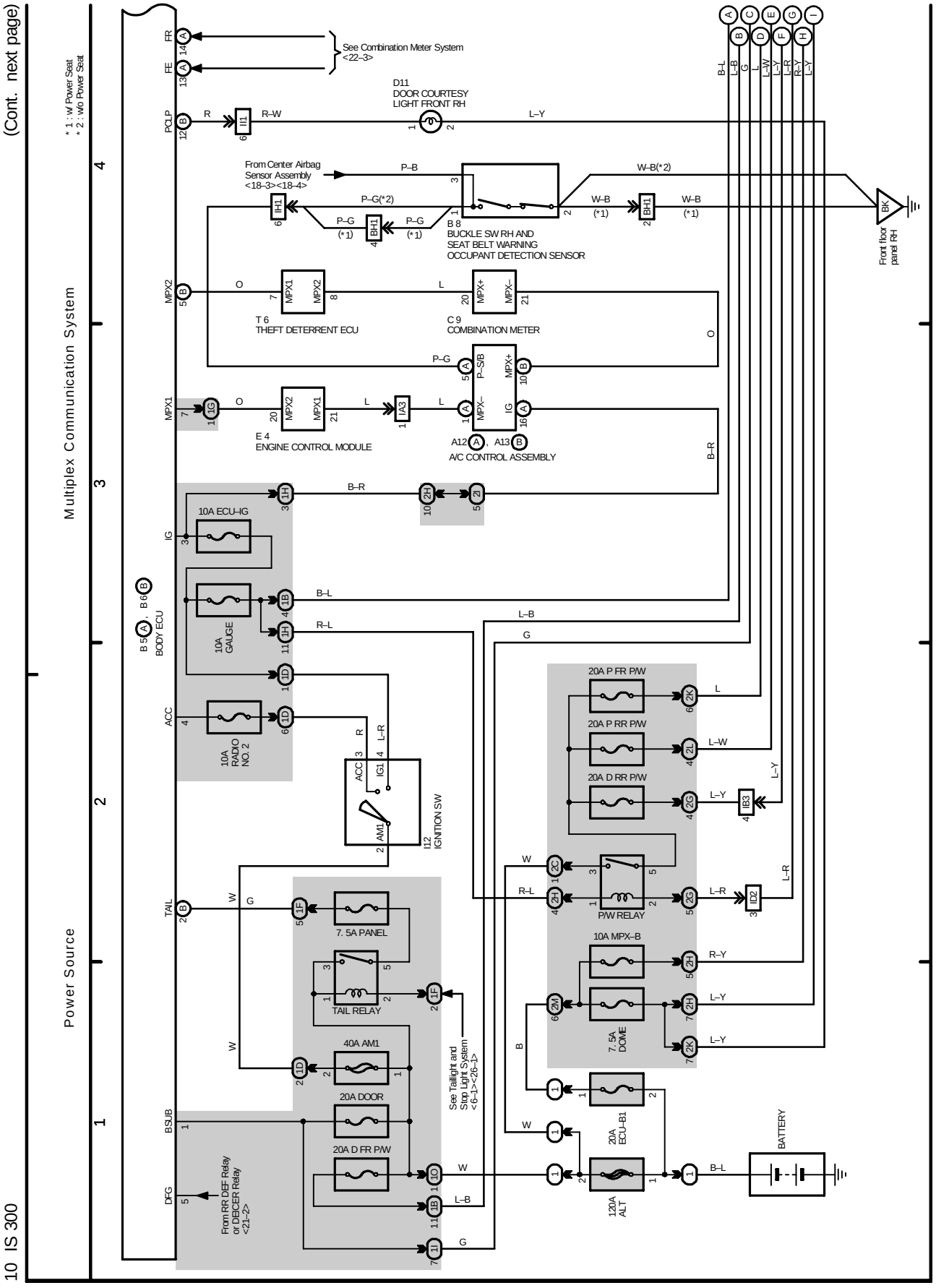

Power Source
Headlight Cleaner
Front Fog Light
Rear Fog Light
1
2
3
4
See Headlight System <3-1>
HEAD LP RELAY
40A MAIN
7.5A ECU-B2
30A H-LP CLN
20A ECU-B1
120A ALT
40A AM1
BATTERY
ACC
IG1
AM1
I12 IGNITION SW
15A WASHER
H4 HEADLIGHT CLEANER MOTOR
H16 HEADLIGHT CLEANER SW
To Diode (Headlight Cleaner) <3-3>
IG
PB
H
HDLO
E
FRWA
H3 HEADLIGHT CLEANER CONTROL RELAY
From HEAD LP Relay <3-1>
From Washer Motor <9-3>
15A H-LP L LWR
15A FR FOG
FR FOG RELAY
F1 FRONT FOG LIGHT LH
F2 FRONT FOG LIGHT RH
To Combination SW <3-4>
Left fender apron
Cowl side panel RH
From Diode (Fog Light) <3-4>
See Illumination System <5-1>
ILL+
R14 REAR FOG LIGHT SW
J12(S/D) J18(W/G) JUNCTION CONNECTOR
R6 REAR FOG LIGHT LH [REAR COMB. LIGHT LH]
R8 REAR FOG LIGHT RH [REAR COMB. LIGHT RH]
J15 JUNCTION CONNECTOR
J5 JUNCTION CONNECTOR
IB1
BJ2
BK1
Right side of the back panel lower
Left quarter panel LH
Cowl side panel LH
Left fender apron

M OVERALL ELECTRICAL WIRING DIAGRAM

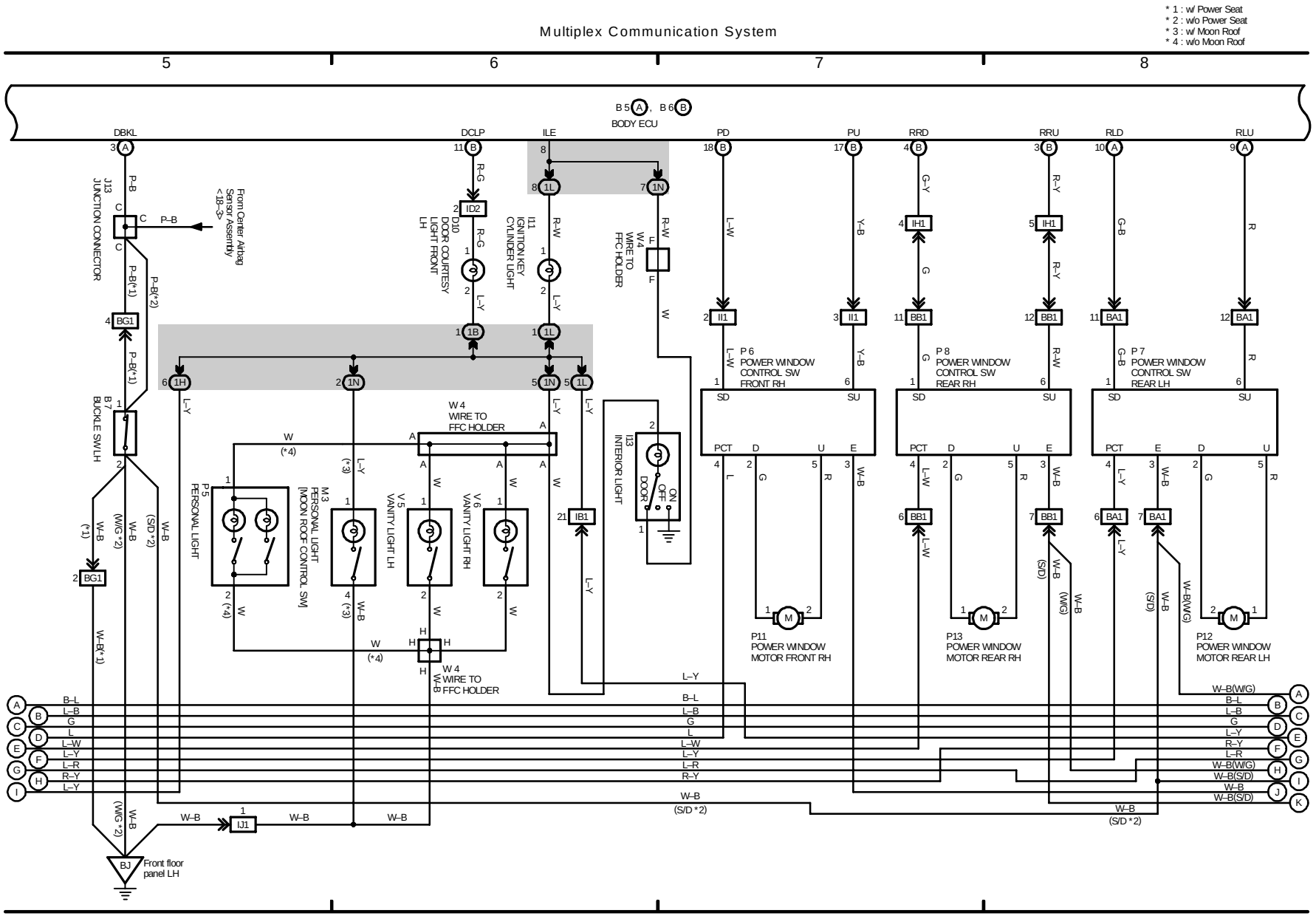



Power Source
Front Wiper and Washer
Horn
1
2
3
4
G
L–R
ACC
AM1
IG1
I12
IGNITION SW
15A
WASHER
25A
WIPER
1D
1G
1F
L
W
40A AM1
1O
10A HORN
120A ALT
B–L
BATTERY
C13
FRONT WIPER AND WASHER SW[COMB. SW]
+B
+2
+1
+S
INT1
INT2
B1
MIST
EW
WF
OFF
INT
LO
HI
WASHER
WIPER RELAY
W1
WASHER MOTOR
L–Y
IA1
To Headlight Cleaner Control Relay<7–3>
F11
FRONT WIPER MOTOR
+1
+2
E
S
W–B
L–B
L–W
L–R
To A/C Control Assembly <24–6>
J 5
JUNCTION CONNECTOR
ID
Cowl side panel LH
EC
Left fender apron
HORN RELAY
G–W
G–B
2M
2G
2I
To Theft Deterrent ECU<11–4>
C12
HORN SW [COMB. SW]
H13
HORN LH
H14
HORN RH

M OVERALL ELECTRICAL WIRING DIAGRAM

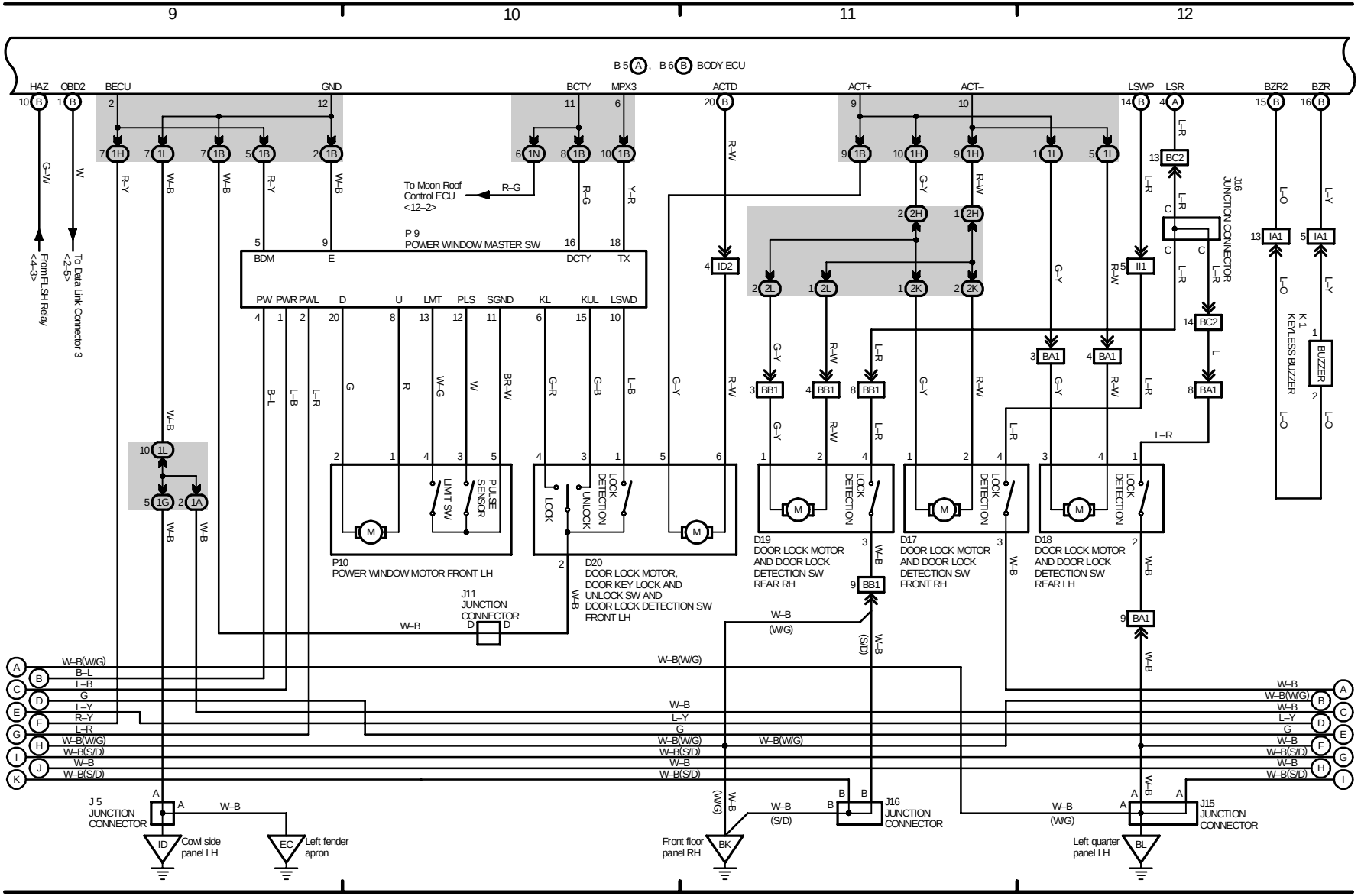


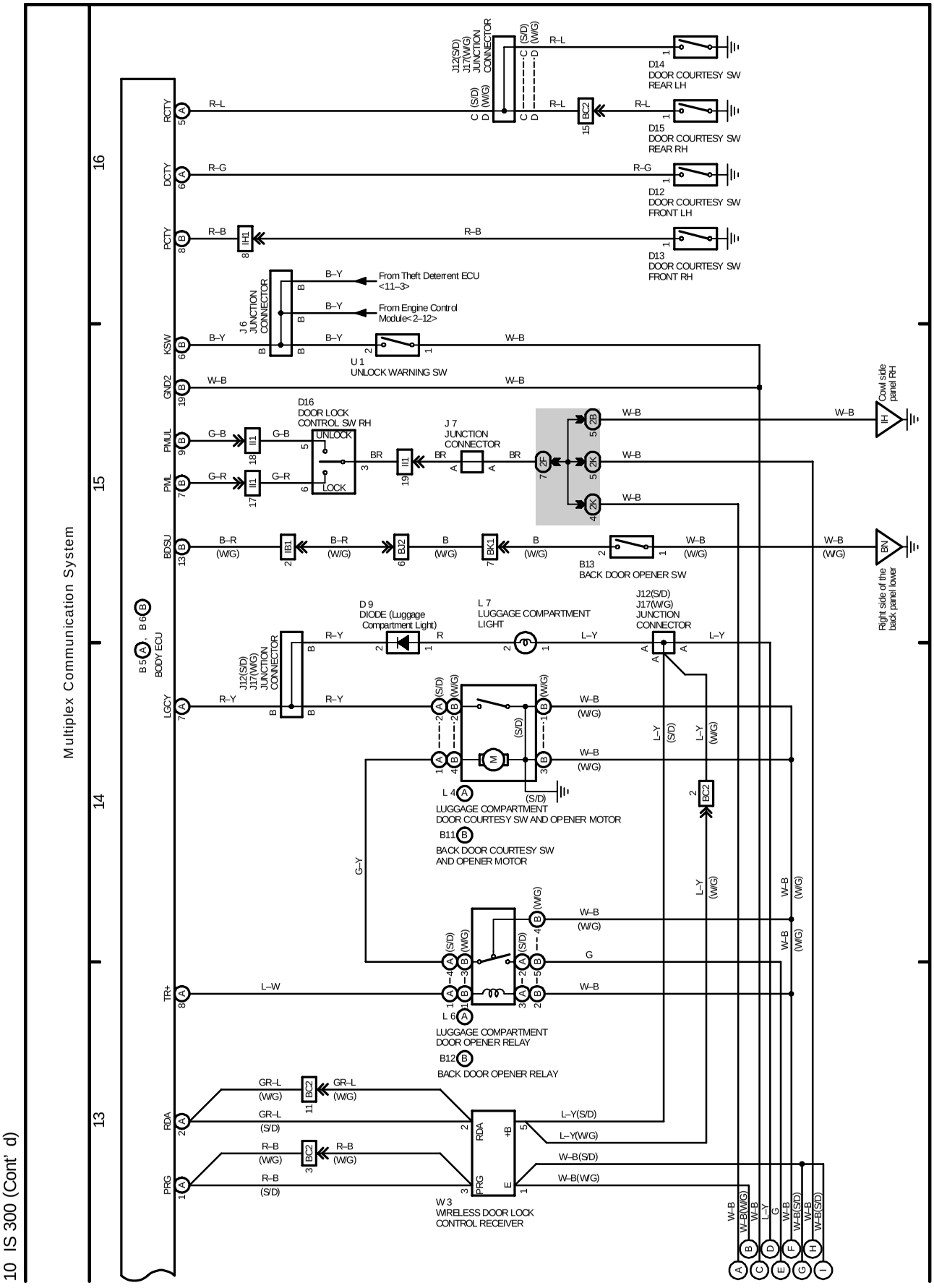
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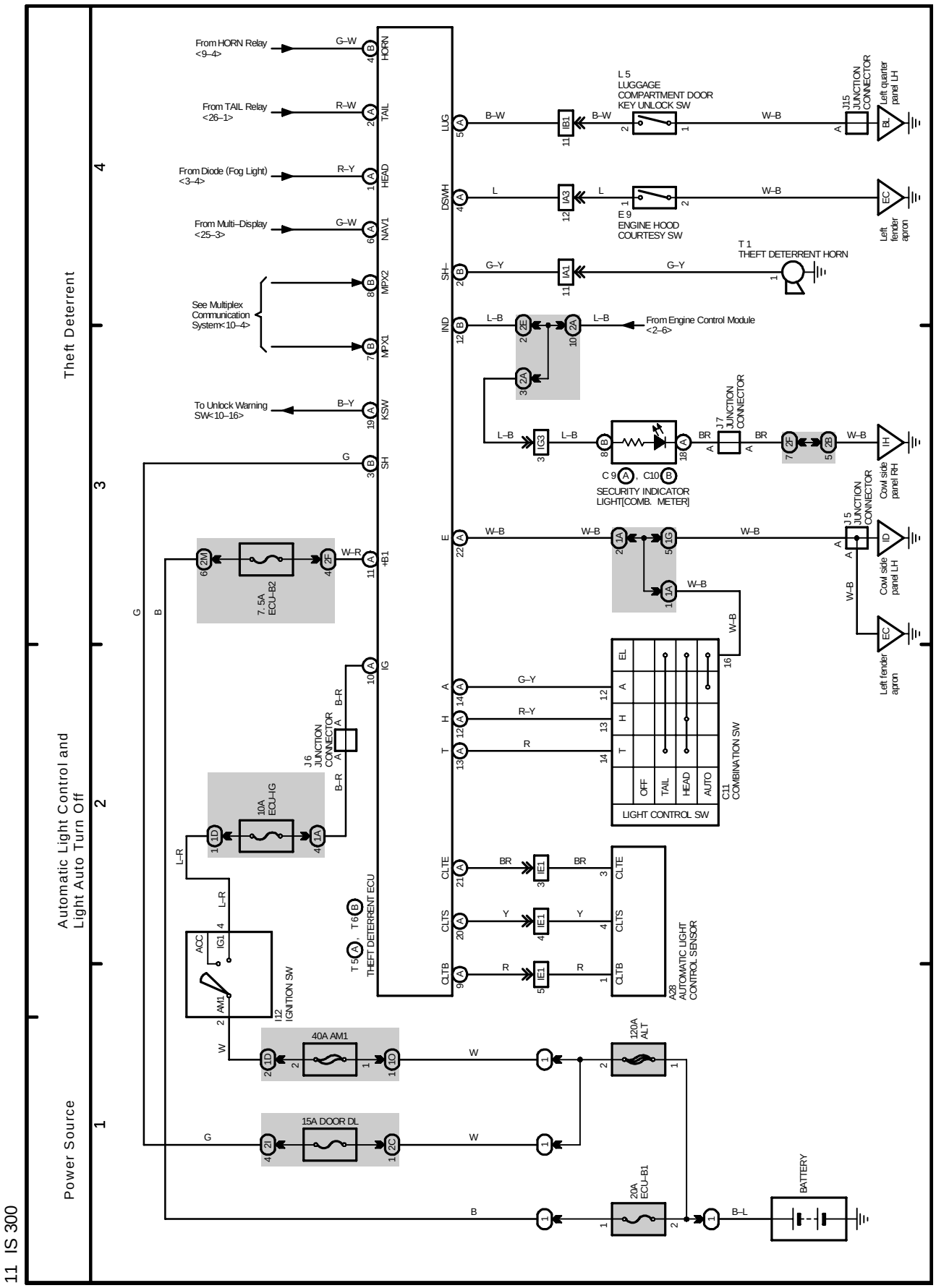
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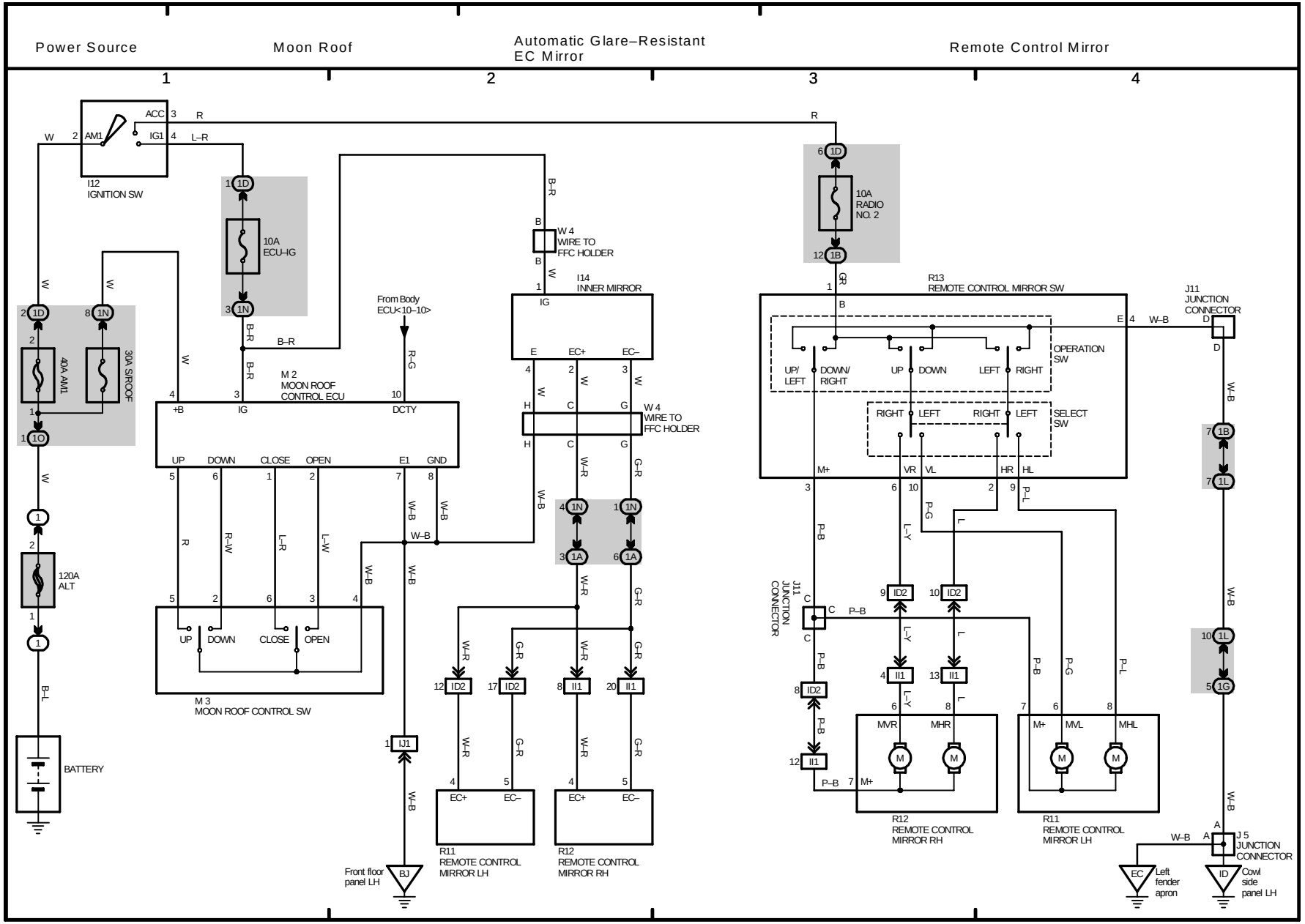
Multiplex Communication System



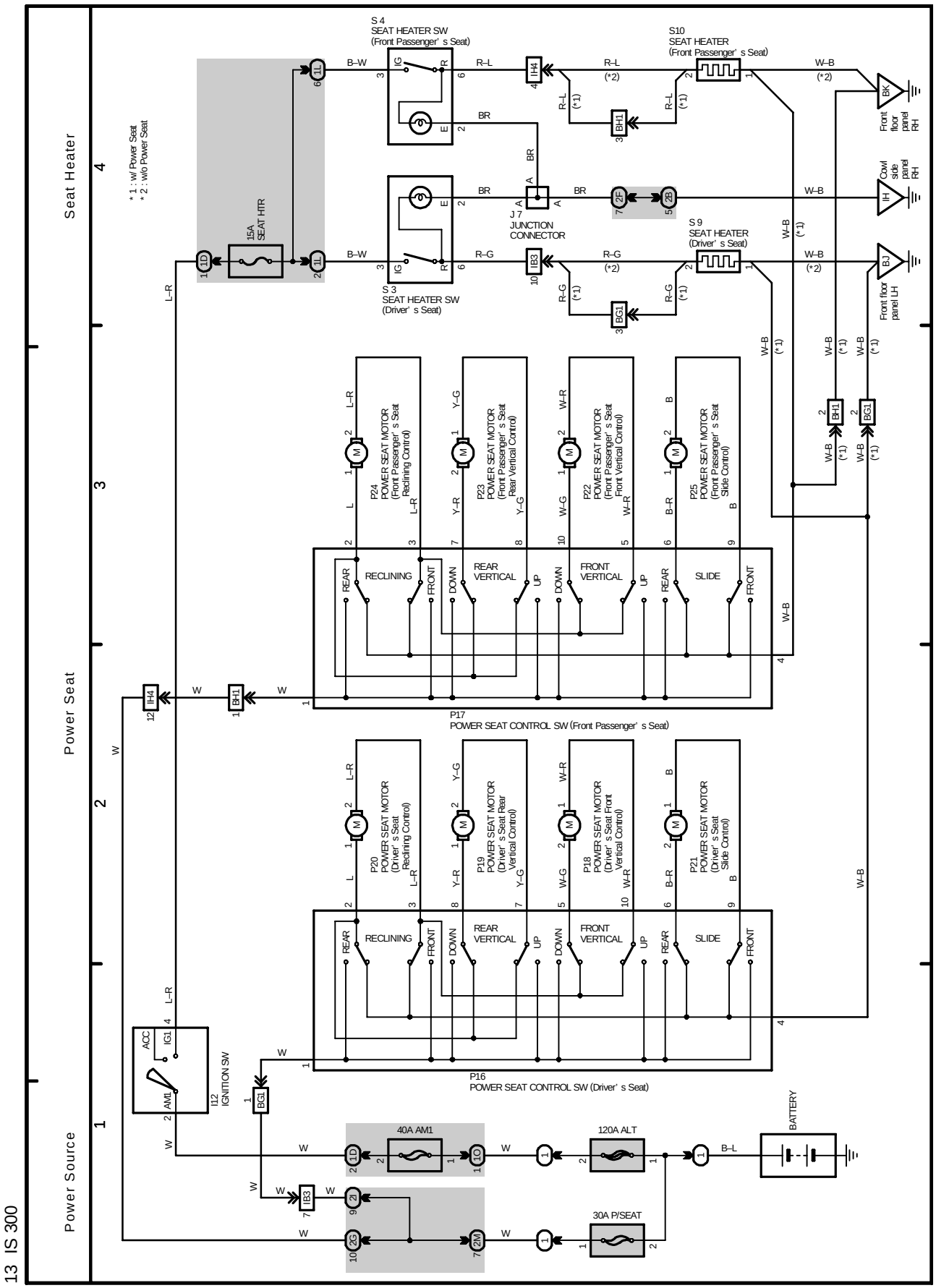

Multiplex Communication System
10 IS 300 (Cont' d)
13
14
15
16
BODY ECU
RCTY
DCTY
PCTY
KSW
GND2
PMJL
PML
BDSU
LGCY
TR+
RDA
PRG
D14 DOOR COURTESY SW REAR LH
D15 DOOR COURTESY SW REAR RH
D12 DOOR COURTESY SW FRONT LH
D13 DOOR COURTESY SW FRONT RH
From Theft Deterrent ECU <11–3>
From Engine Control Module< 2–12>
J6 JUNCTION CONNECTOR
U 1 UNLOCK WARNING SW
D16 DOOR LOCK CONTROL SW RH
UNLOCK
LOCK
J 7 JUNCTION CONNECTOR
Cowl side panel RH
B13 BACK DOOR OPENER SW
Right side of the back panel lower
D 9 DIODE (Luggage Compartment Light)
L 7 LUGGAGE COMPARTMENT LIGHT
J12(S/D) J17(W/G) JUNCTION CONNECTOR
L 4 LUGGAGE COMPARTMENT DOOR COURTESY SW AND OPENER MOTOR
B11 BACK DOOR COURTESY SW AND OPENER MOTOR
L 6 LUGGAGE COMPARTMENT DOOR OPENER RELAY
B12 BACK DOOR OPENER RELAY
W 3 WIRELESS DOOR LOCK CONTROL RECEIVER

M OVERALL ELECTRICAL WIRING DIAGRAM

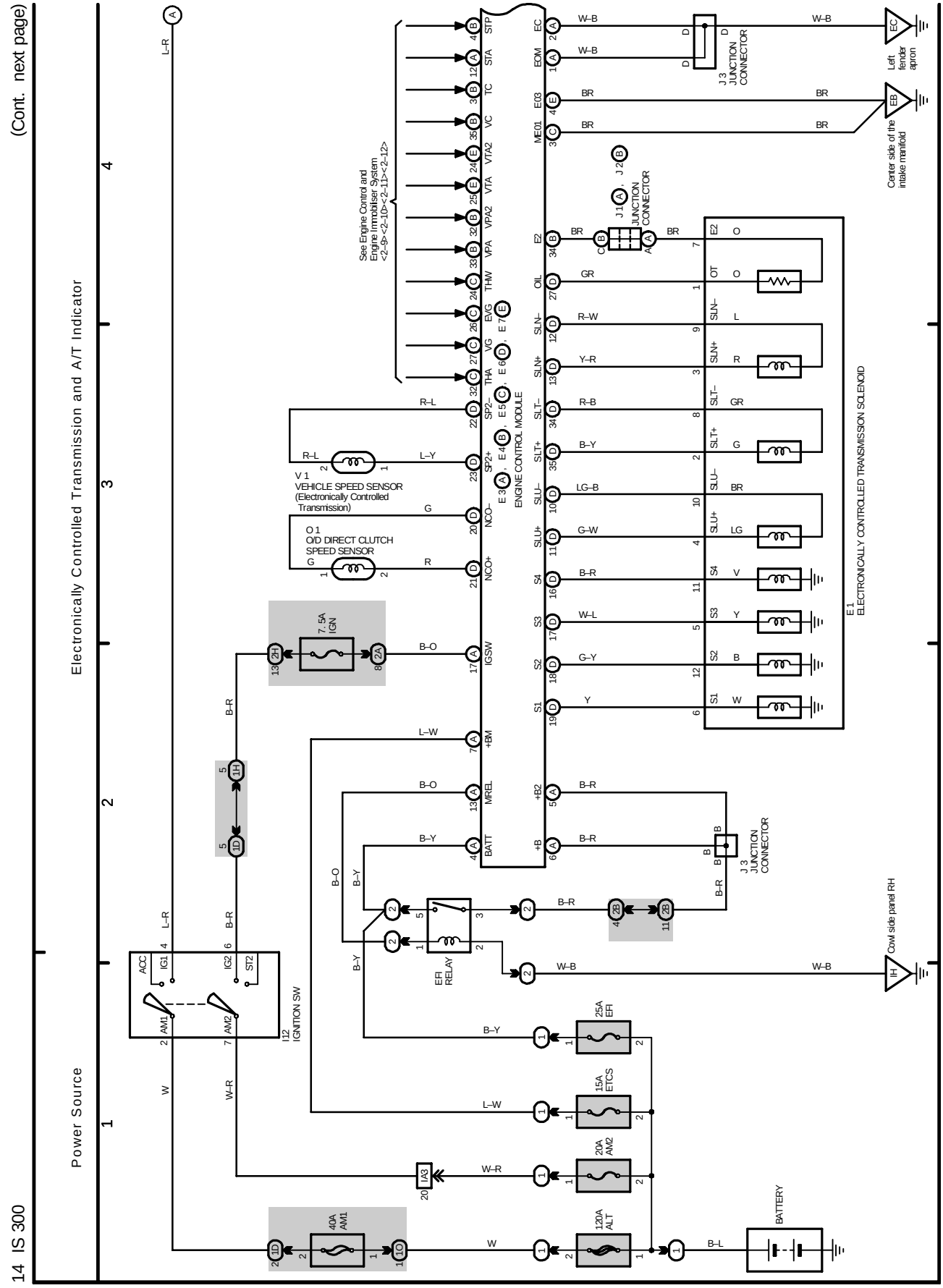


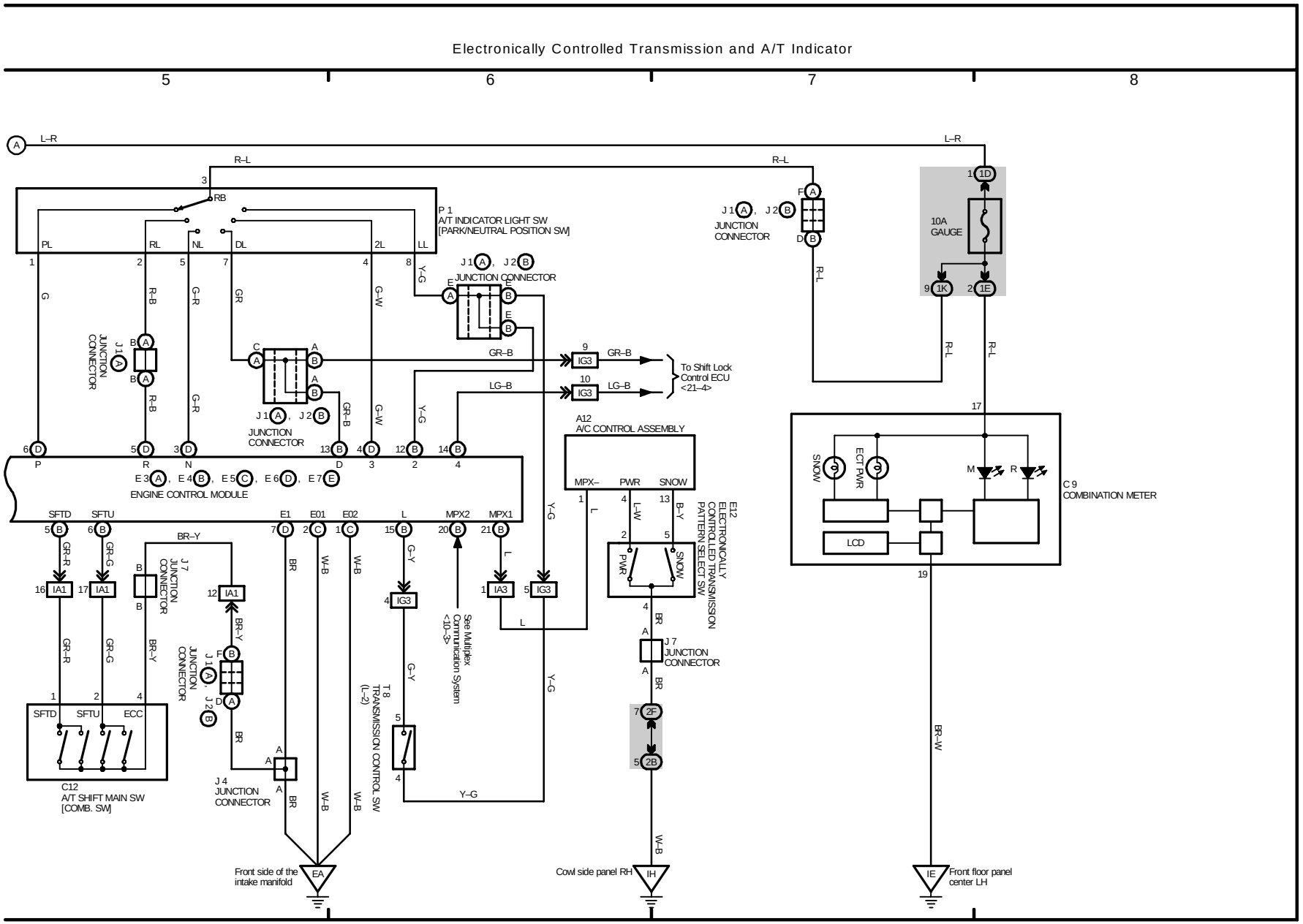

Power Source
Moon Roof
Automatic Glare–Resistant EC Mirror
Remote Control Mirror
1
2
3
4
I12 IGNITION SW
ACC
IG1
AM1
10A ECU–IG
W 4 WIRE TO FFC HOLDER
I14 INNER MIRROR
10A RADIO NO. 2
R13 REMOTE CONTROL MIRROR SW
J11 JUNCTION CONNECTOR
OPERATION SW
SELECT SW
UP/ LEFT
DOWN/ RIGHT
UP
DOWN
LEFT
RIGHT
40A AM1
30A S/ROOF
120A ALT
BATTERY
From Body ECU<10–10>
M 2 MOON ROOF CONTROL ECU
+B
IG
DCTY
UP
DOWN
CLOSE
OPEN
E1
GND
M 3 MOON ROOF CONTROL SW
IJ1
Front floor panel LH
BJ
R11 REMOTE CONTROL MIRROR LH
R12 REMOTE CONTROL MIRROR RH
EC+
EC–
M+
VR
VL
HR
HL
MVR
MHR
MVL
MHL
J 5 JUNCTION CONNECTOR
EC
Left fender apron
ID
Cowl side panel LH

M OVERALL ELECTRICAL WIRING DIAGRAM

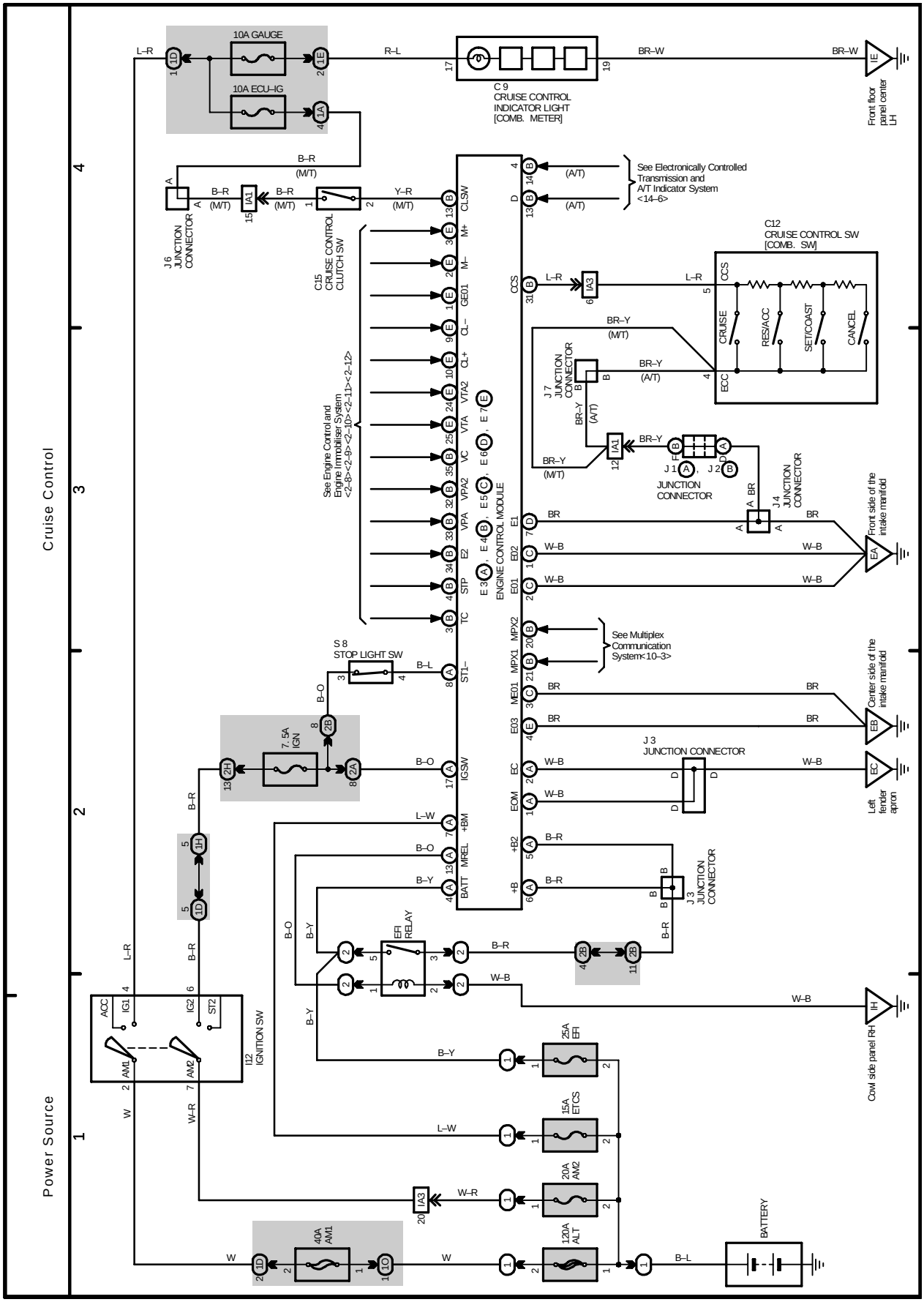


M OVERALL ELECTRICAL WIRING DIAGRAM

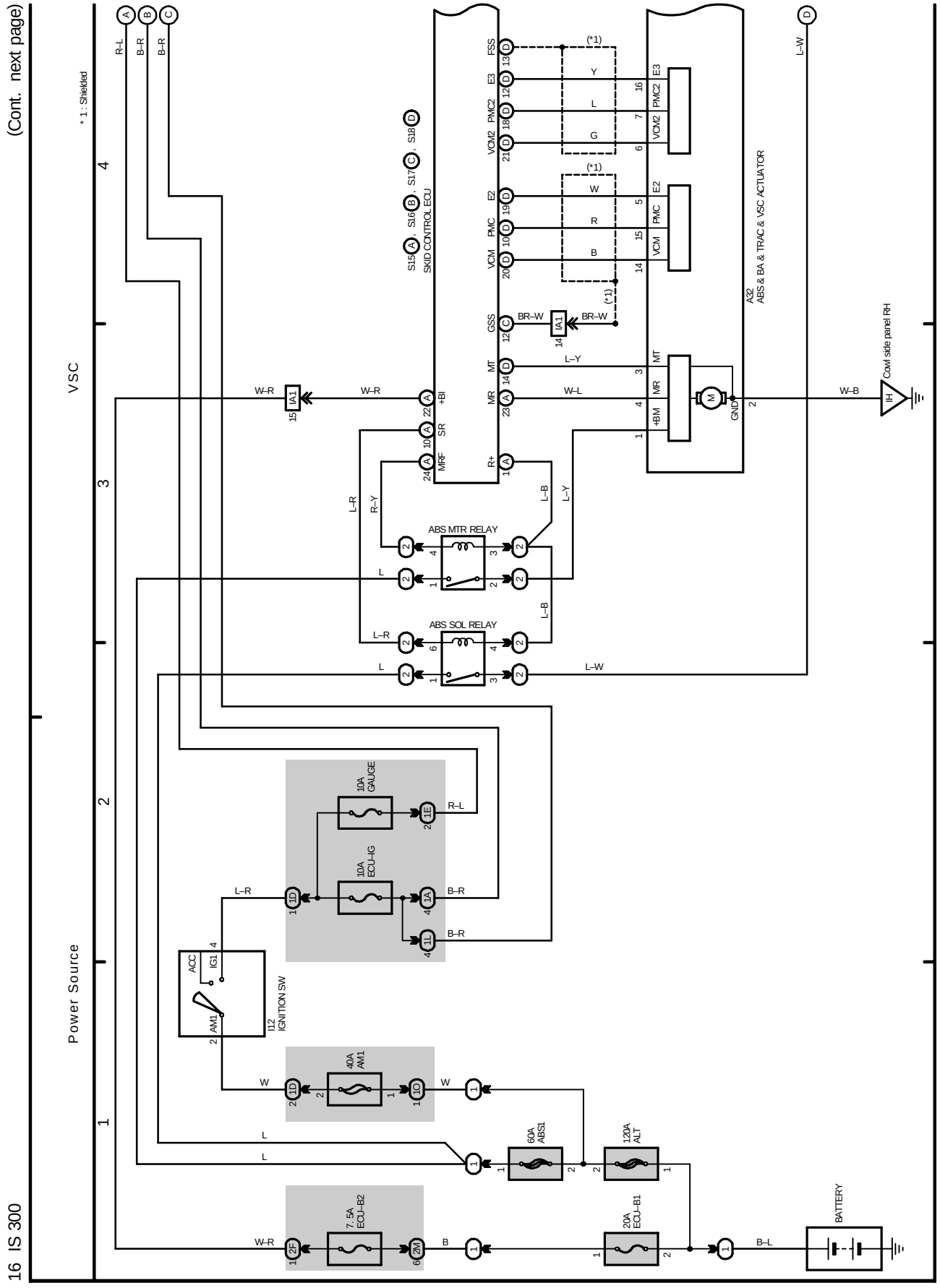



Electronically Controlled Transmission and A/T Indicator
5
6
7
8
P 1
A/T INDICATOR LIGHT SW
[PARK/NEUTRAL POSITION SW]
PL
RL
NL
DL
2L
LL
JUNCTION CONNECTOR
10A GAUGE
To Shift Lock Control ECU <21–4>
A12
A/C CONTROL ASSEMBLY
MPX–
PWR
SNOW
E12
ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW
C 9
COMBINATION METER
ECT PWR
LCD
ENGINE CONTROL MODULE
SFTD
SFTU
E1
E01
E02
L
MPX2
MPX1
C12
A/T SHIFT MAIN SW
[COMB. SW]
ECC
T 8
TRANSMISSION CONTROL SW (L–2)
See Multiplex Communication System <10–3>
J 4
JUNCTION CONNECTOR
Front side of the intake manifold
EA
Cowl side panel RH
IH
Front floor panel center LH
IE

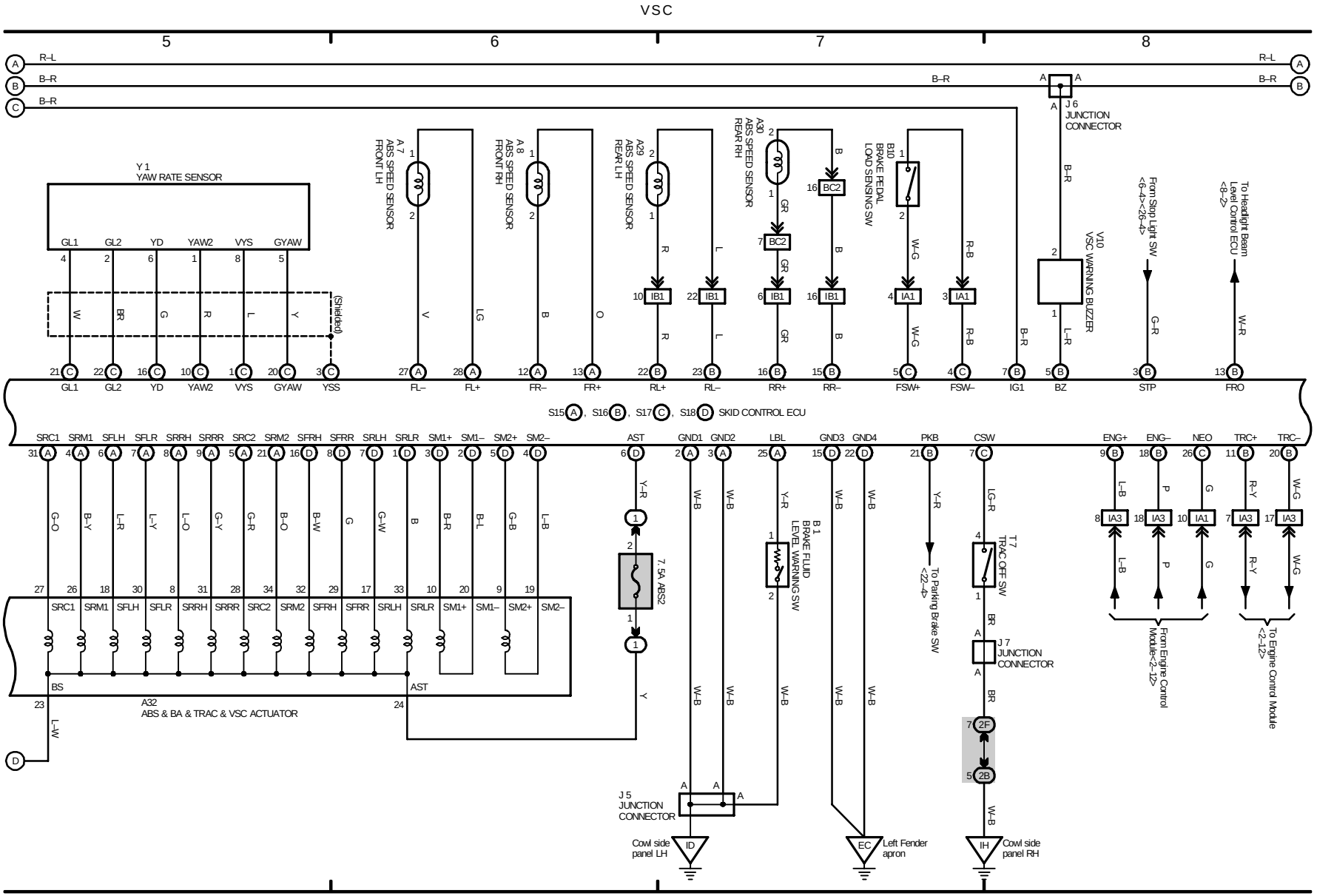
M OVERALL ELECTRICAL WIRING DIAGRAM



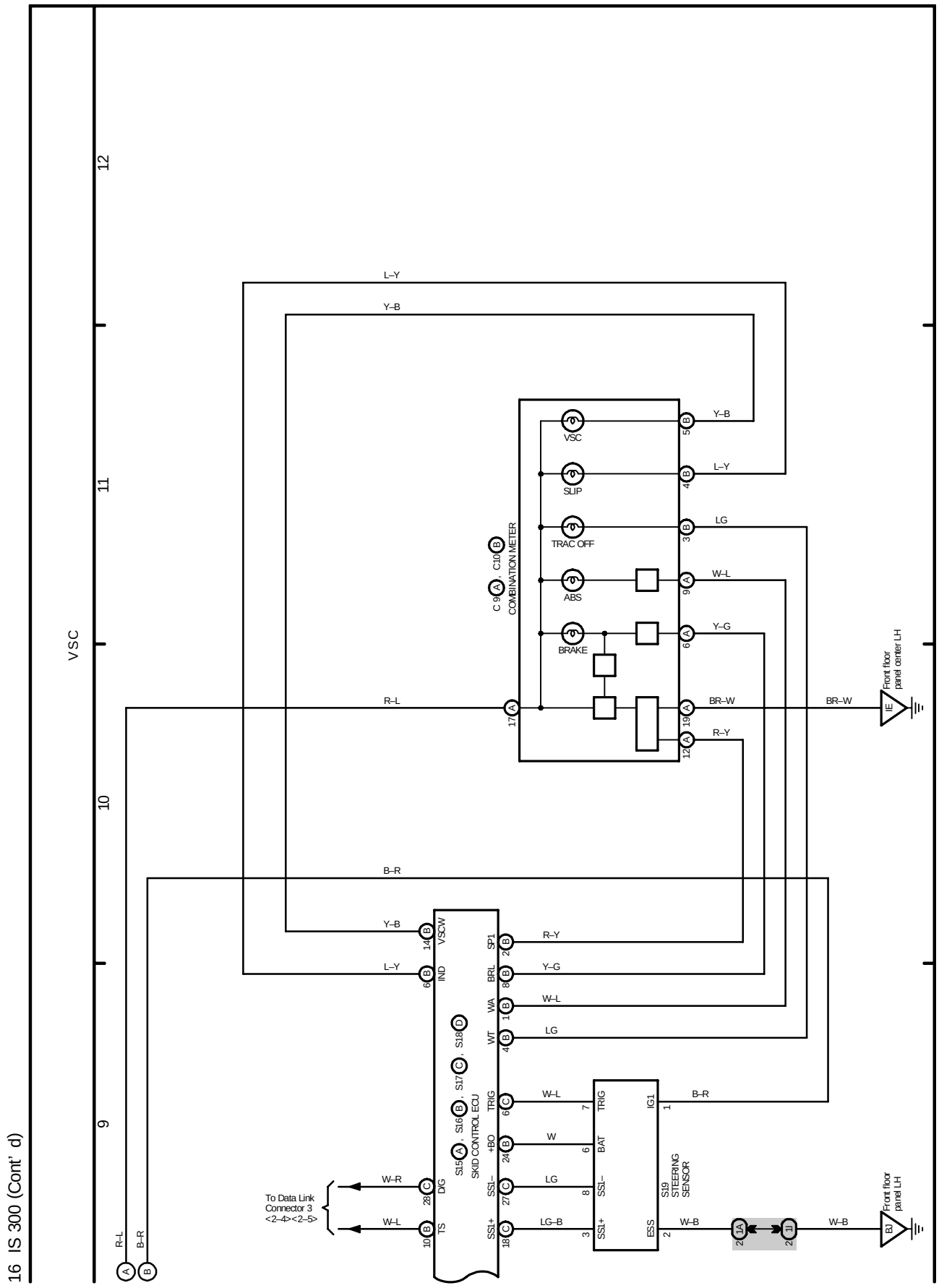
M OVERALL ELECTRICAL WIRING DIAGRAM



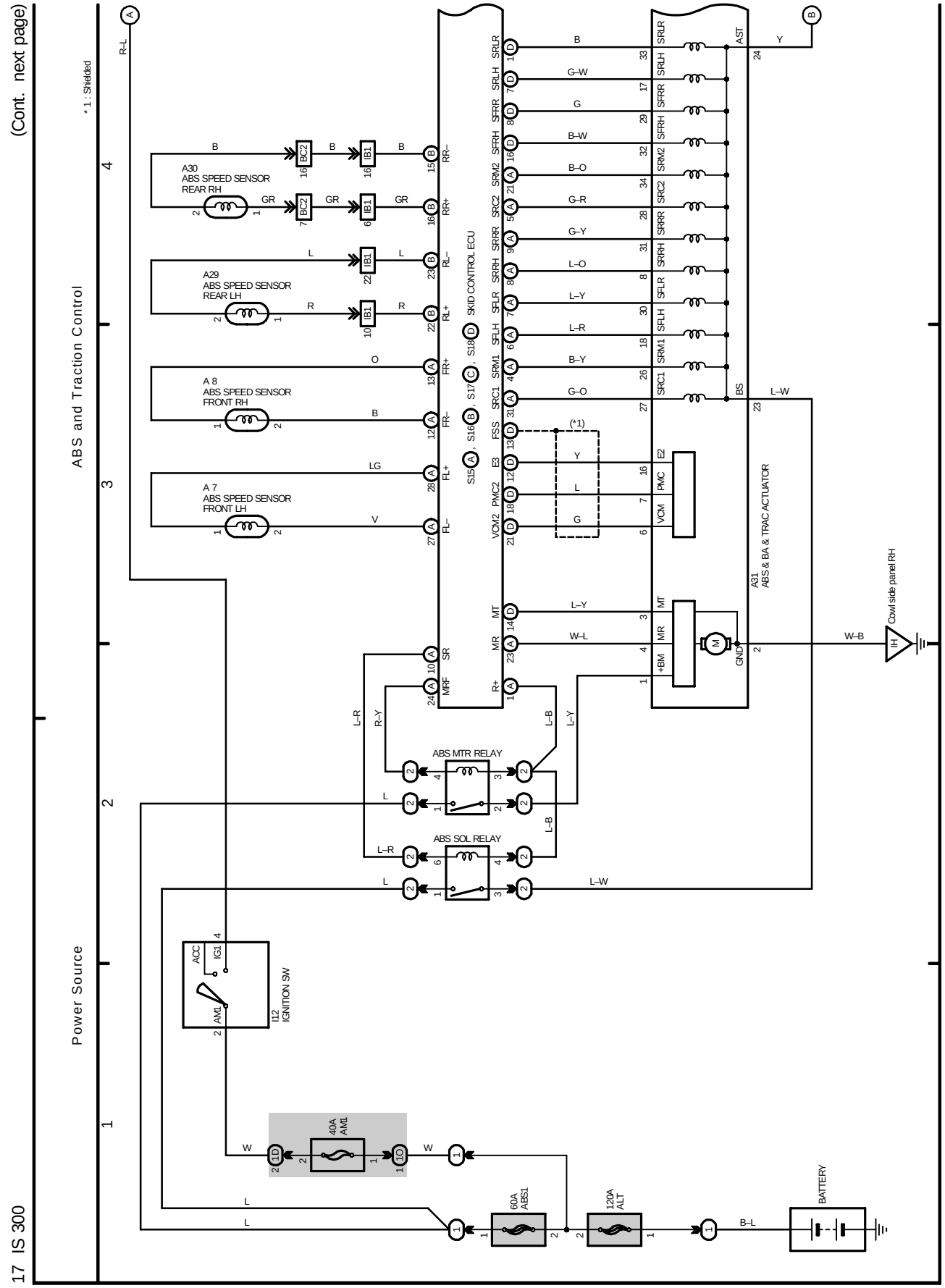
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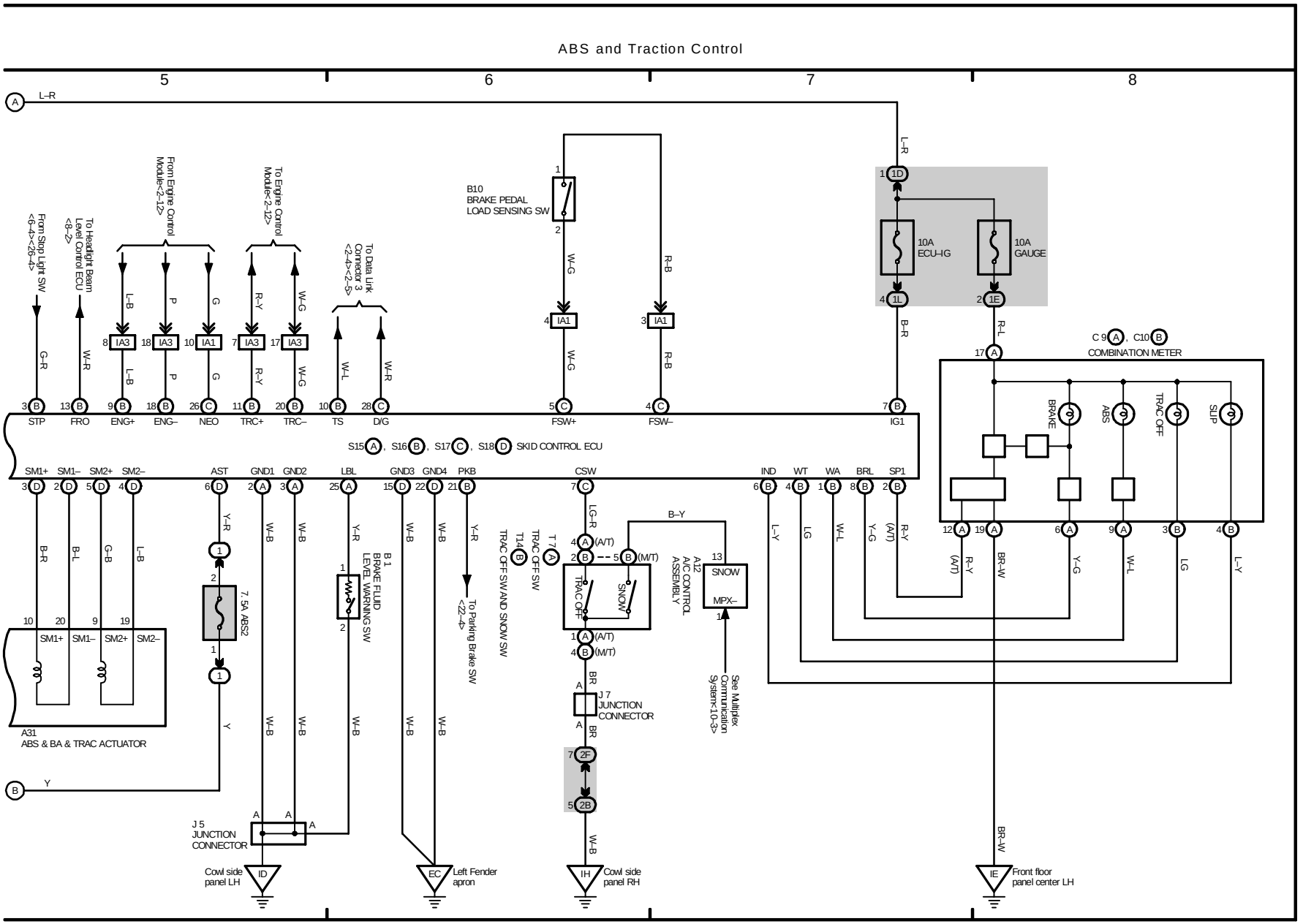


M OVERALL ELECTRICAL WIRING DIAGRAM

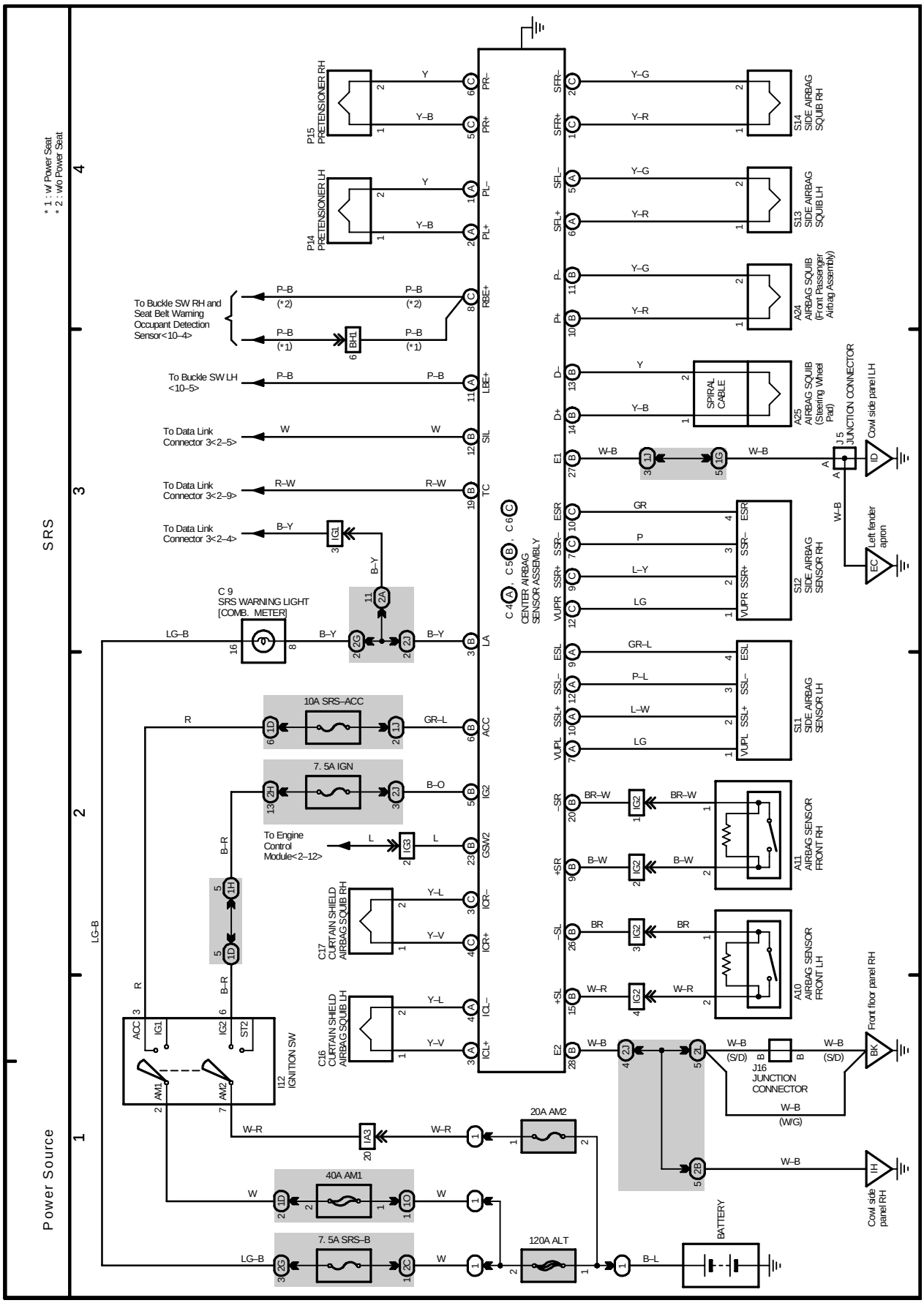


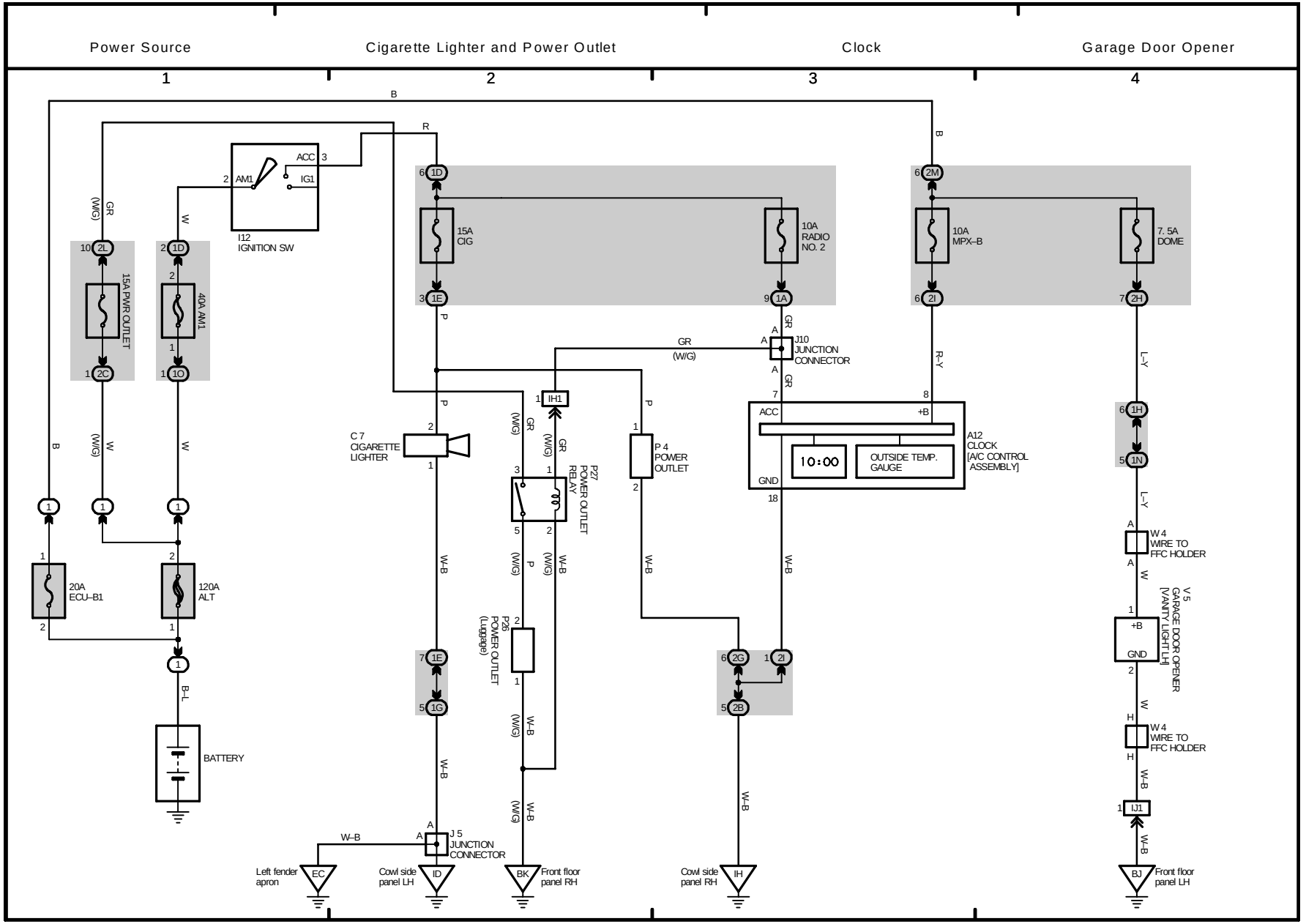
M OVERALL ELECTRICAL WIRING DIAGRAM

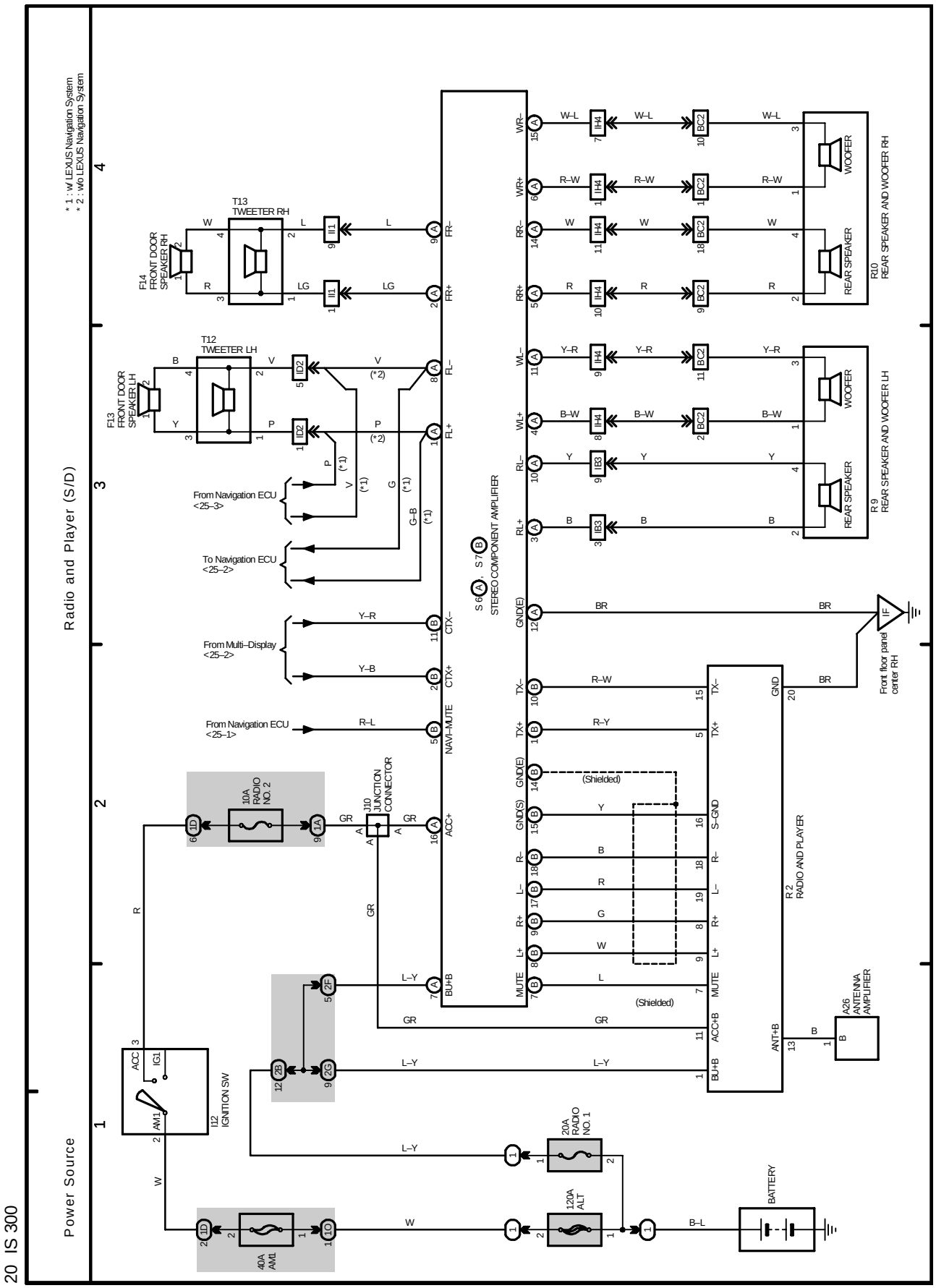


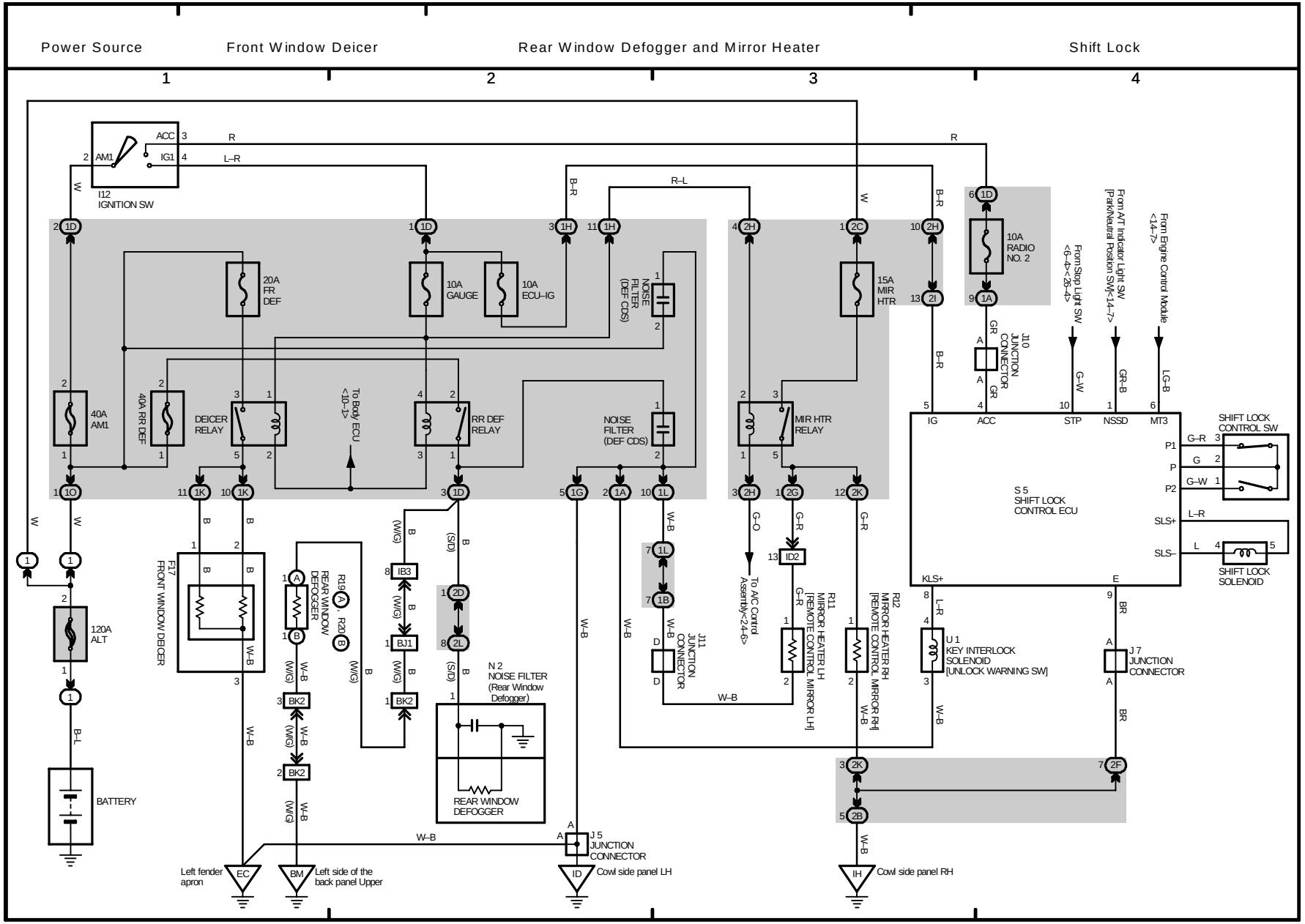

ABS and Traction Control
5
6
7
8
L–R
B10
BRAKE PEDAL
LOAD SENSING SW
10A
ECU–IG
10A
GAUGE
C 9 A , C10 B
COMBINATION METER
BRAKE
ABS
TRAC OFF
SLIP
From Stop Light SW <6–4><26–4>
To Headlight Beam Level Control ECU <8–2>
From Engine Control Module<2–12>
To Engine Control Module<2–12>
To Data Link Connector 3 <2–4><2–5>
STP
FRO
ENG+
ENG–
NEO
TRC+
TRC–
TS
D/G
FSW+
FSW–
IG1
S15 A , S16 B , S17 C , S18 D SKID CONTROL ECU
SM1+
SM1–
SM2+
SM2–
AST
GND1
GND2
LBL
GND3
GND4
PKB
CSW
IND
WT
WA
BRL
SP1
A31
ABS & BA & TRAC ACTUATOR
7. 5A ABS2
B 1
BRAKE FLUID LEVEL WARNING SW
To Parking Brake SW <22–4>
TRAC OFF SW AND SNOW SW
TRAC OFF SW
A12
A/C CONTROL ASSEMBLY
TRAC OFF
SNOW
MPX–
See Multiplex Communication System<10–3>
J 7
JUNCTION CONNECTOR
J 5
JUNCTION CONNECTOR
Cowl side panel LH
Left Fender apron
Cowl side panel RH
Front floor panel center LH

M OVERALL ELECTRICAL WIRING DIAGRAM

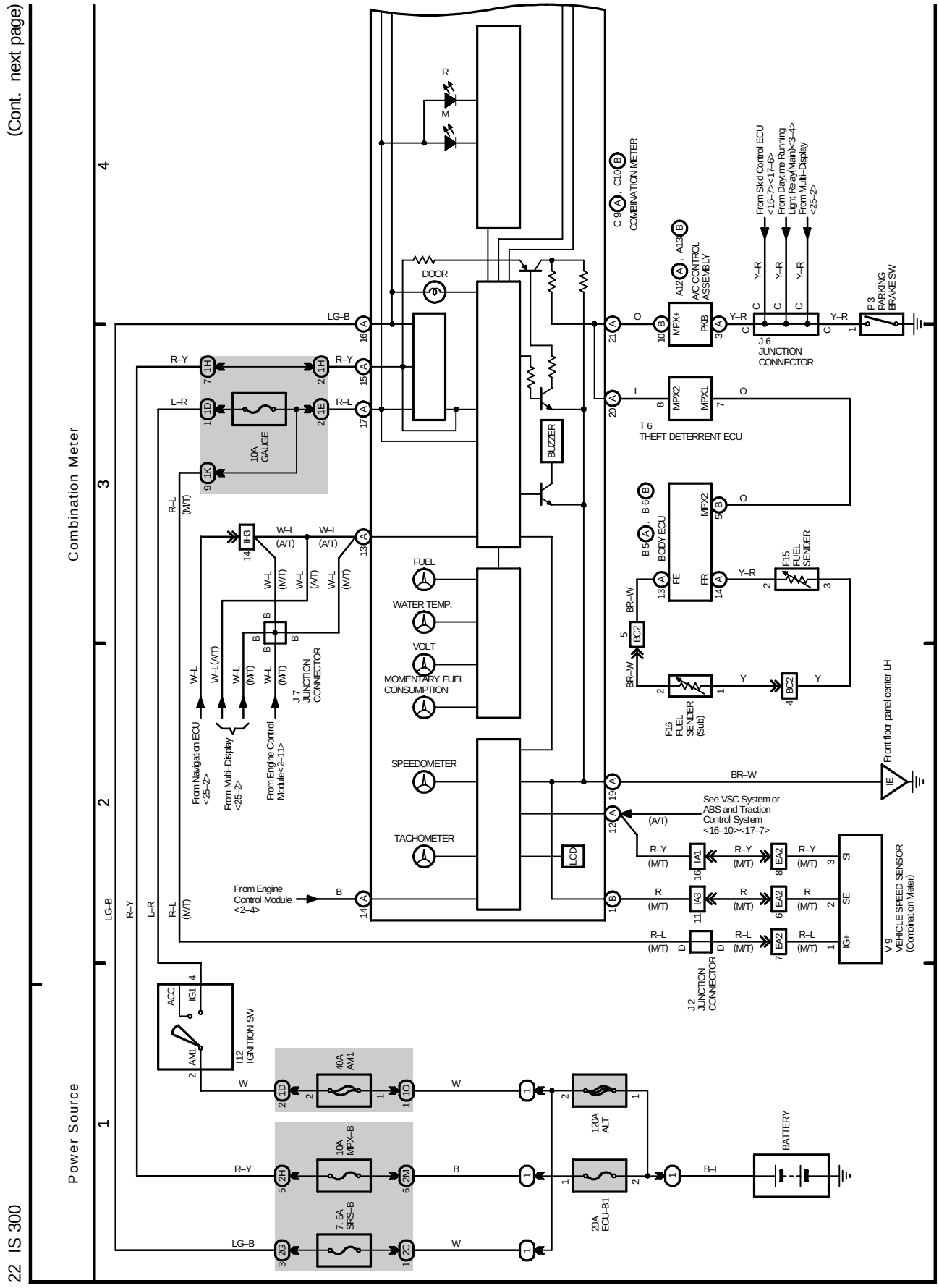


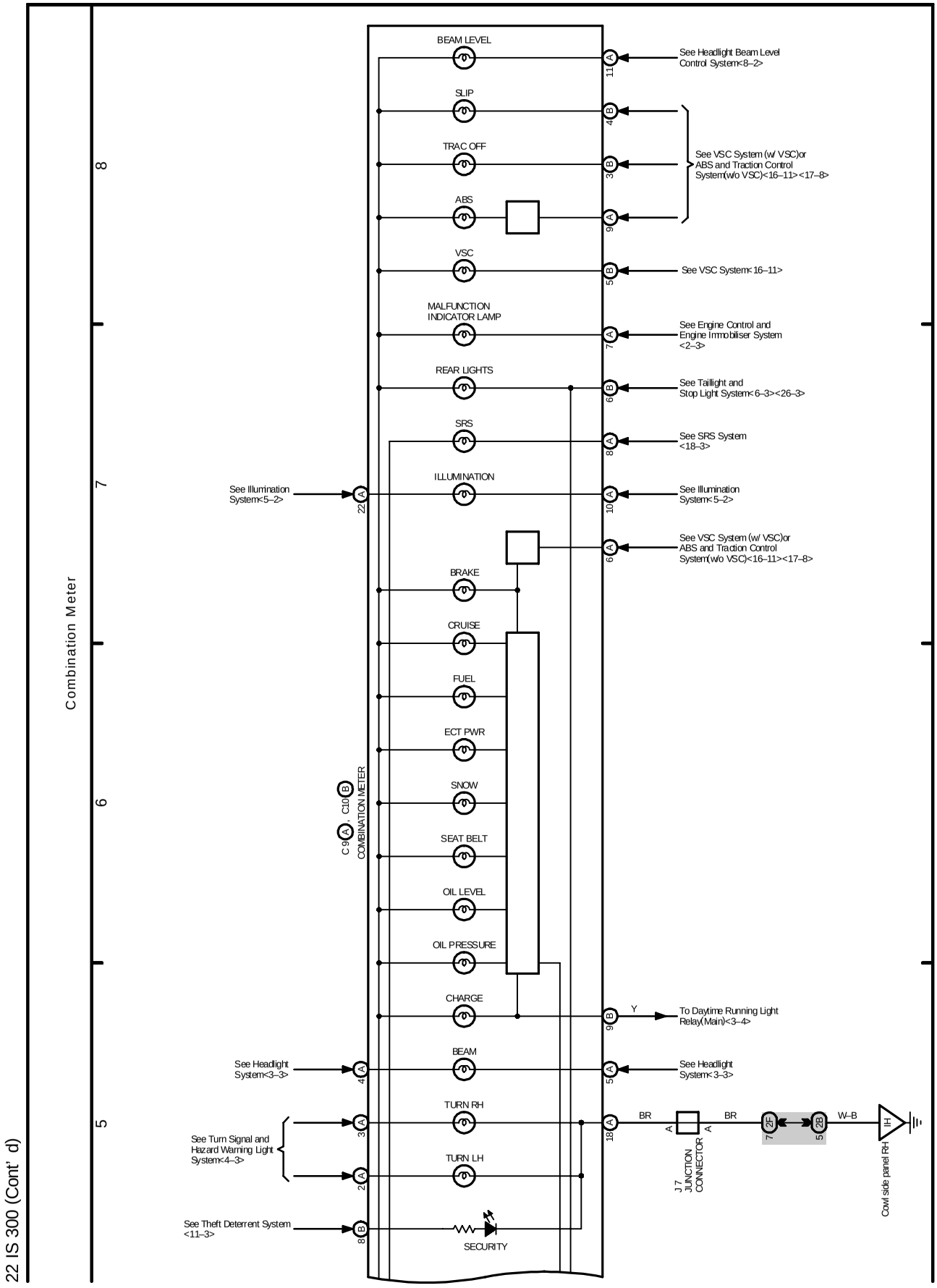

Power Source
Cigarette Lighter and Power Outlet
Clock
Garage Door Opener
1
2
3
4
B
R
GR (W/G)
W
W (W/G)
B
B–L
ACC
AM1
IG1
I12
IGNITION SW
15A PWR OUTLET
40A AM1
20A ECU–B1
120A ALT
BATTERY
15A CIG
10A RADIO NO. 2
10A MPX–B
7. 5A DOME
J10 JUNCTION CONNECTOR
C 7 CIGARETTE LIGHTER
P27 POWER OUTLET RELAY
P 4 POWER OUTLET
P26 POWER OUTLET (Luggage)
A12 CLOCK [A/C CONTROL ASSEMBLY]
10:00
OUTSIDE TEMP. GAUGE
ACC
+B
GND
R–Y
L–Y
W–B
W 4 WIRE TO FFC HOLDER
V 5 GARAGE DOOR OPENER [VANITY LIGHT LH]
J5 JUNCTION CONNECTOR
Left fender apron
Cowl side panel LH
Front floor panel RH
Cowl side panel RH
Front floor panel LH


* 1 : w LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
Radio and Player (S/D)
Power Source
20 IS 300
T13 TWEETER RH
F14 FRONT DOOR SPEAKER RH
T12 TWEETER LH
F13 FRONT DOOR SPEAKER LH
From Navigation ECU <25–3>
To Navigation ECU <25–2>
From Multi–Display <25–2>
From Navigation ECU <25–1>
S6, S7 STEREO COMPONENT AMPLIFIER
R10 REAR SPEAKER AND WOOFER RH
R9 REAR SPEAKER AND WOOFER LH
WOOFER
REAR SPEAKER
R2 RADIO AND PLAYER
J10 JUNCTION CONNECTOR
I12 IGNITION SW
10A RADIO NO. 2
20A RADIO NO. 1
40A AM1
120A ALT
BATTERY
A26 ANTENNA AMPLIFIER
Front floor panel center RH
(Shielded)

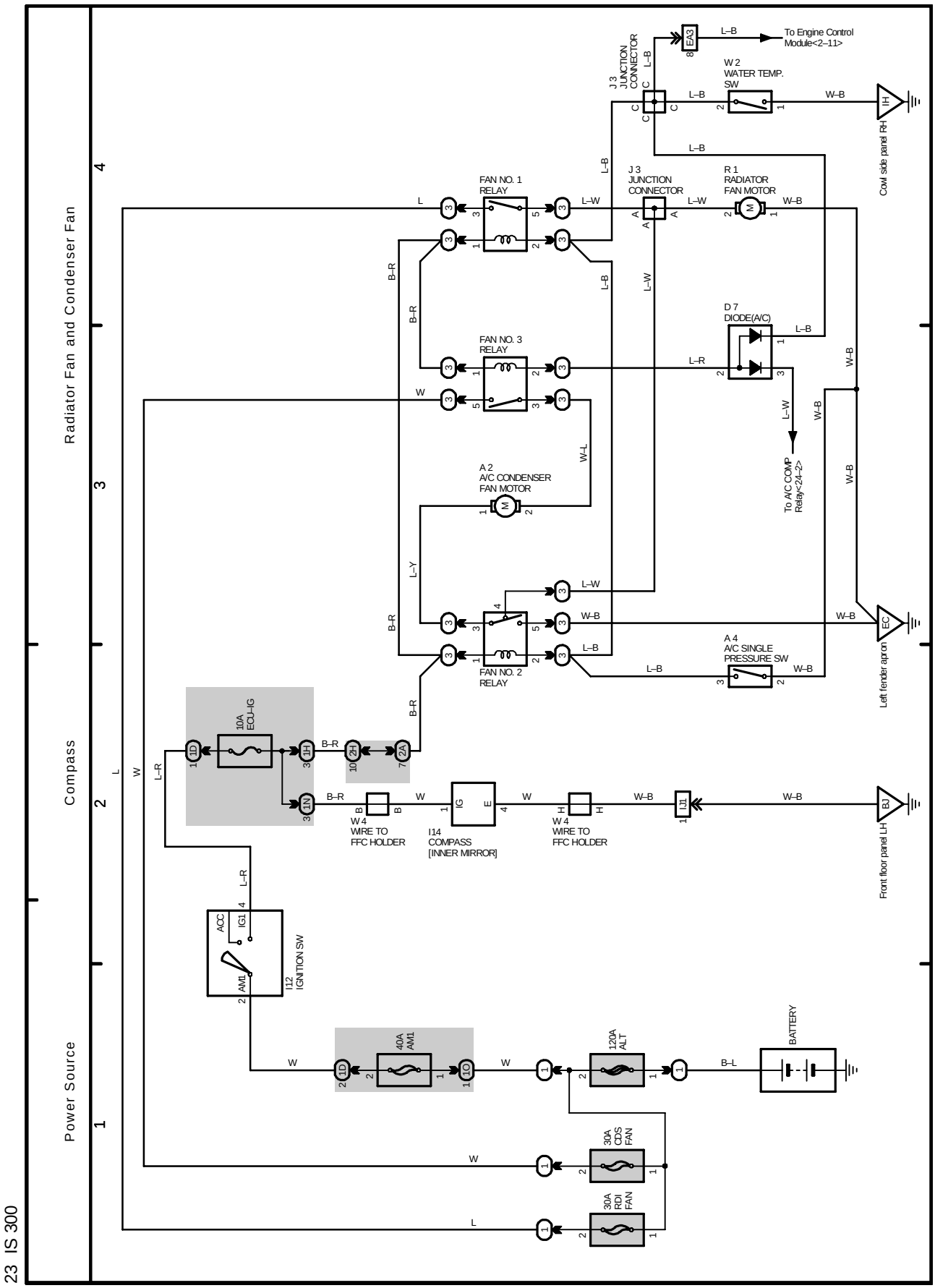

Power Source
Front Window Deicer
Rear Window Defogger and Mirror Heater
Shift Lock
1
2
3
4
I12
IGNITION SW
ACC
AM1
IG1
20A
FR
DEF
10A
GAUGE
10A
ECU–IG
NOISE
FILTER
(DEF CDS)
15A
MIR
HTR
10A
RADIO
NO. 2
40A
AM1
40A RR DEF
DEICER
RELAY
To Body ECU
<10–1>
RR DEF
RELAY
NOISE
FILTER
(DEF CDS)
MIR HTR
RELAY
J10
JUNCTION
CONNECTOR
From Stop Light SW
<6–4><26–4>
From A/T Indicator Light SW
[Park/Neutral Position SW]<14–7>
From Engine Control Module
<14–7>
IG
ACC
STP
NSSD
MT3
S 5
SHIFT LOCK
CONTROL ECU
SHIFT LOCK
CONTROL SW
SHIFT LOCK
SOLENOID
P1
P
P2
SLS+
SLS–
KLS+
E
120A
ALT
BATTERY
F17
FRONT WINDOW DEICER
R19
REAR WINDOW
DEFOGGER
R20
IB3
BJ1
BK2
N 2
NOISE FILTER
(Rear Window
Defogger)
REAR WINDOW
DEFOGGER
J11
JUNCTION
CONNECTOR
To A/C Control
Assembly<24–6>
ID2
R11
MIRROR HEATER LH
[REMOTE CONTROL MIRROR LH]
R12
MIRROR HEATER RH
[REMOTE CONTROL MIRROR RH]
U 1
KEY INTERLOCK
SOLENOID
[UNLOCK WARNING SW]
J 7
JUNCTION
CONNECTOR
J 5
JUNCTION
CONNECTOR
Left fender
apron
EC
Left side of the
back panel Upper
BM
ID
Cowl side panel LH
IH
Cowl side panel RH

M OVERALL ELECTRICAL WIRING DIAGRAM

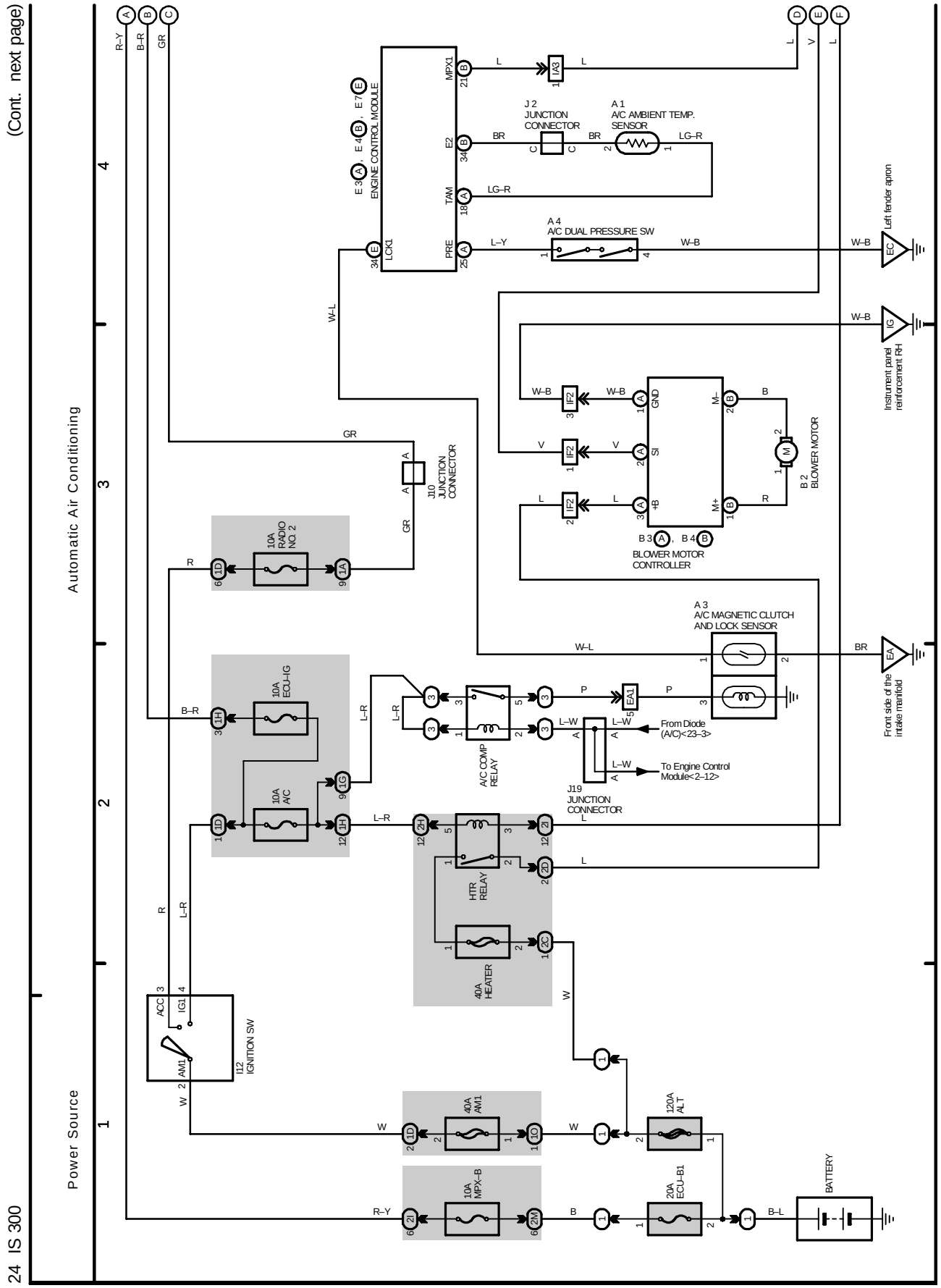


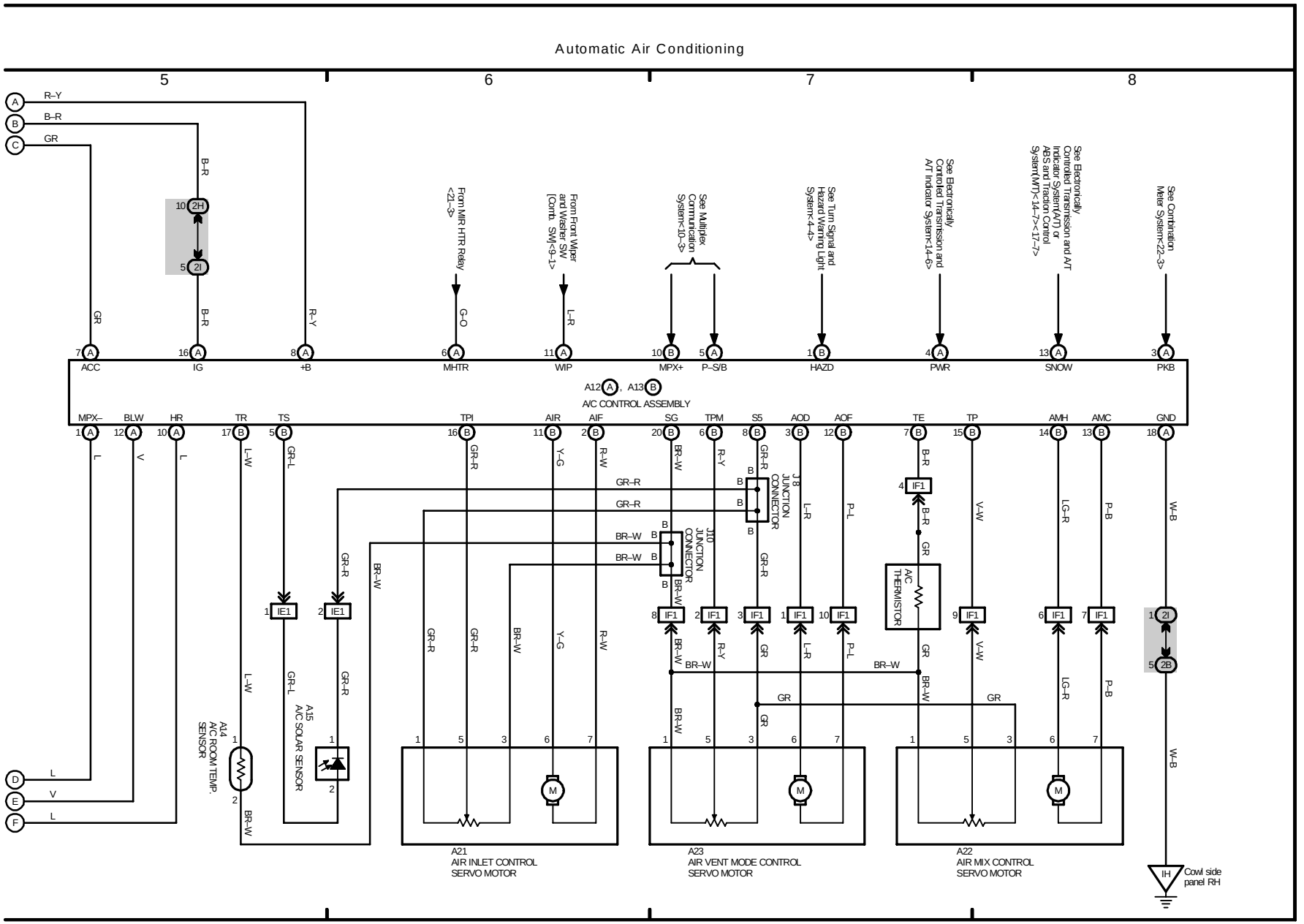

22 IS 300 (Cont' d)
Combination Meter
8
7
6
5
BEAM LEVEL
SLIP
TRAC OFF
ABS
VSC
MALFUNCTION INDICATOR LAMP
REAR LIGHTS
SRS
ILLUMINATION
BRAKE
CRUISE
FUEL
ECT PWR
SNOW
SEAT BELT
OIL LEVEL
OIL PRESSURE
CHARGE
BEAM
TURN RH
TURN LH
SECURITY
C9 (A), C10 (B) COMBINATION METER
See Headlight Beam Level Control System<8–2>
See VSC System (w/ VSC)or ABS and Traction Control System(w/o VSC)<16–11><17–8>
See VSC System<16–11>
See Engine Control and Engine Immobiliser System <2–3>
See Taillight and Stop Light System<6–3><26–3>
See SRS System <18–3>
See Illumination System<5–2>
See VSC System (w/ VSC)or ABS and Traction Control System(w/o VSC)<16–11><17–8>
To Daytime Running Light Relay(Main)<3–4>
See Headlight System<3–3>
See Turn Signal and Hazard Warning Light System<4–3>
See Theft Deterrent System <11–3>
BR
BR
W–B
J7 JUNCTION CONNECTOR
2F
2B
IH
Cowl side panel RH

M OVERALL ELECTRICAL WIRING DIAGRAM

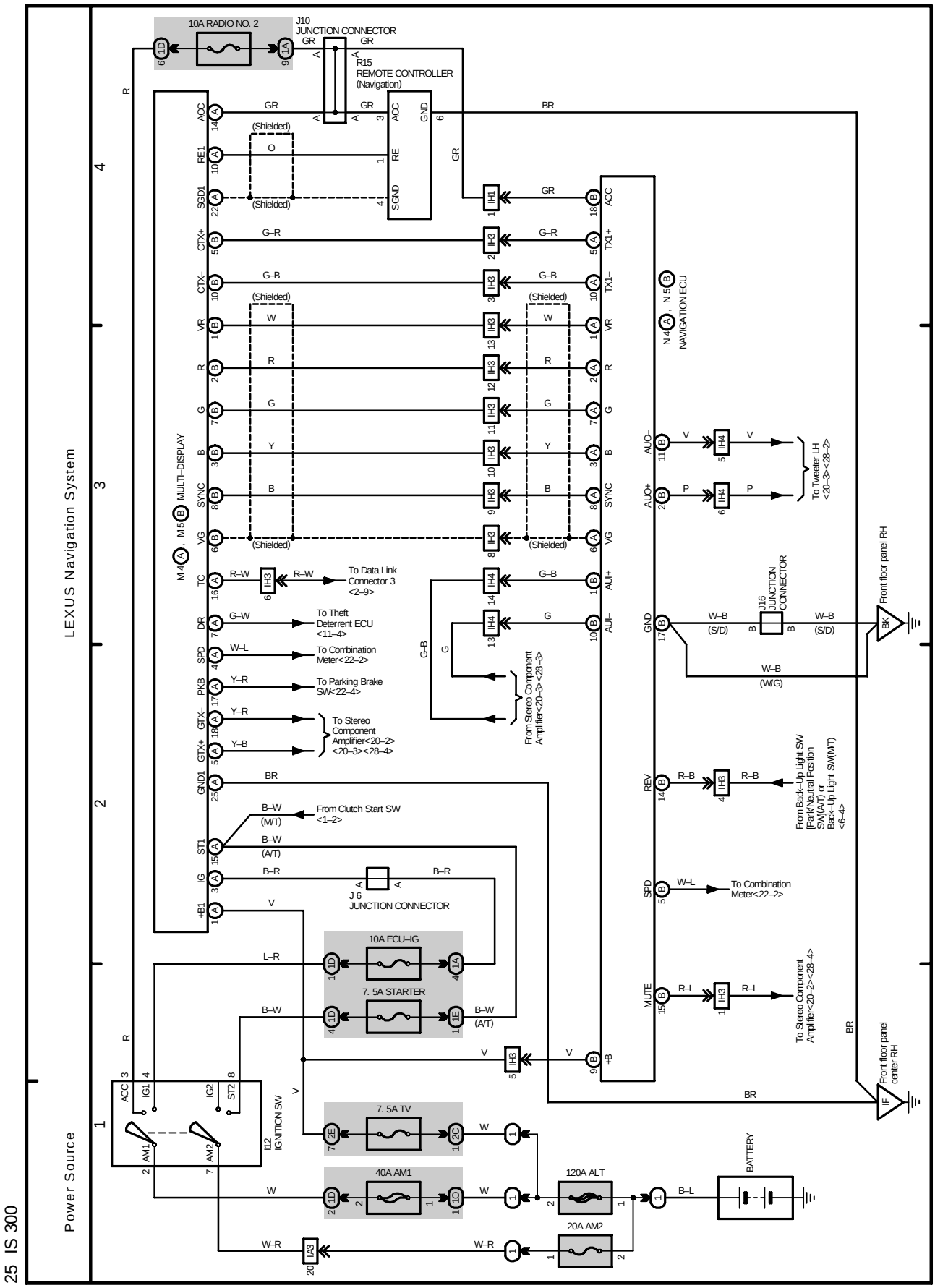


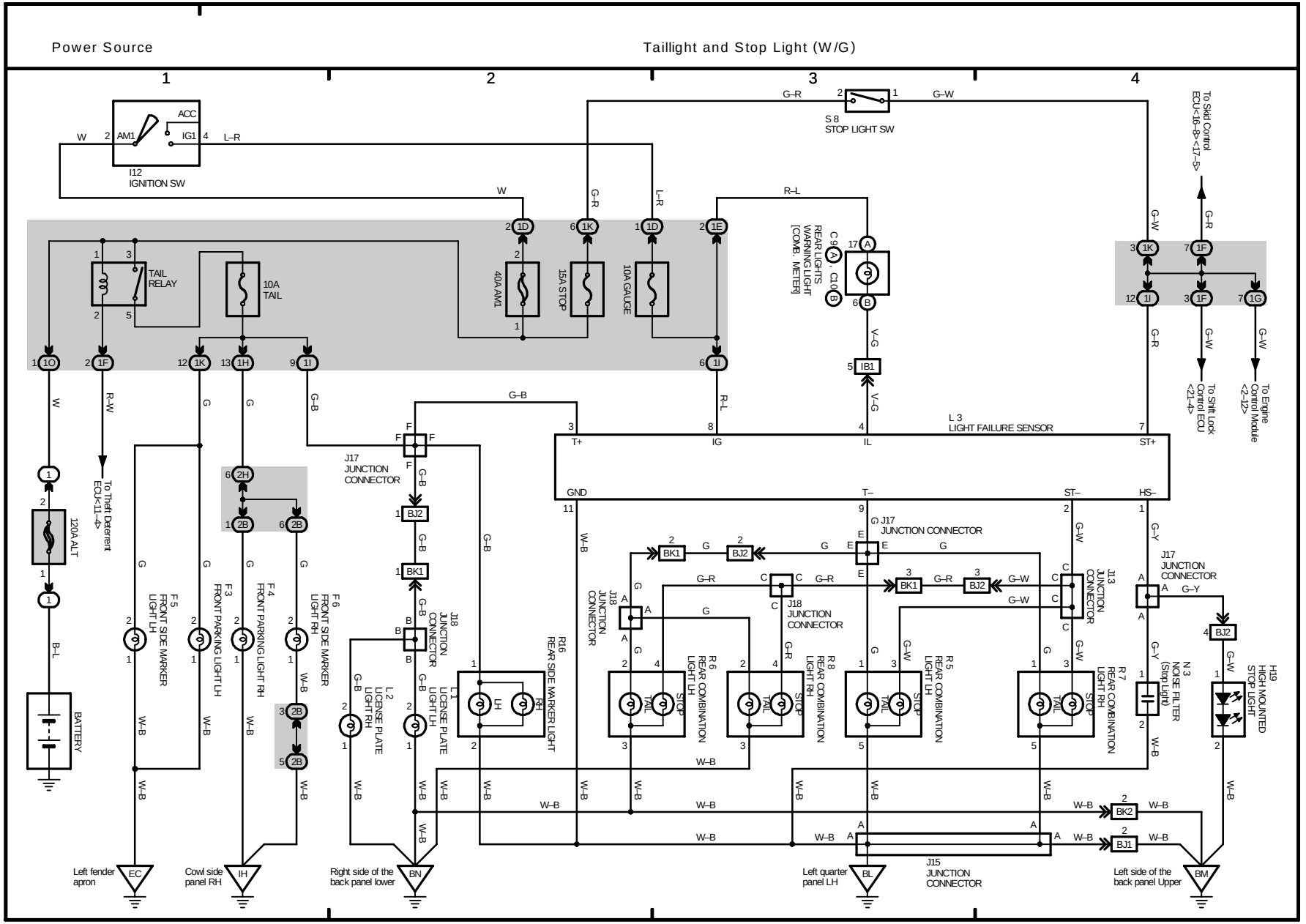
M OVERALL ELECTRICAL WIRING DIAGRAM



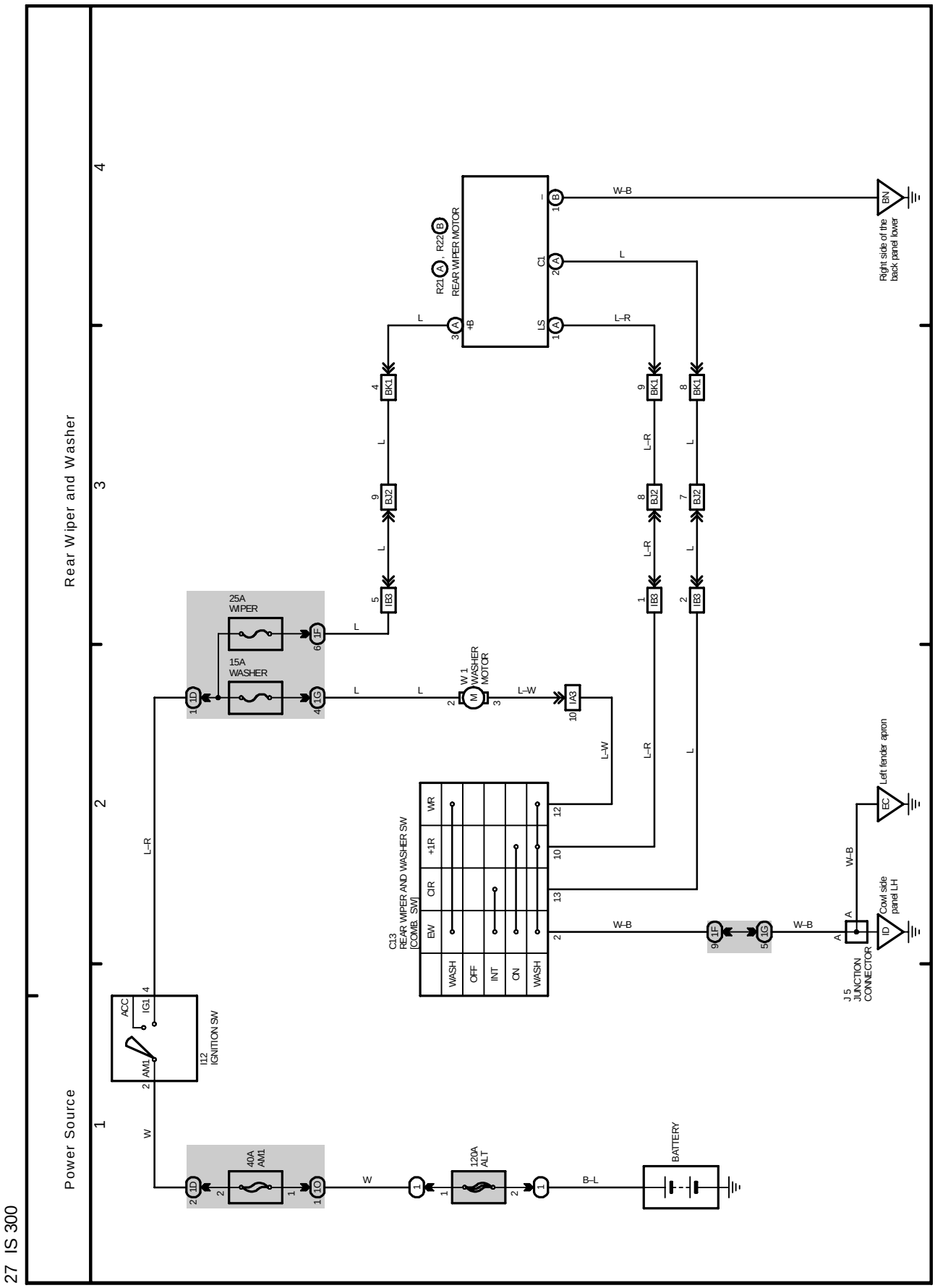

Automatic Air Conditioning
5
6
7
8
R–Y
B–R
GR
B–R
GR
R–Y
G–O
L–R
From MIR HTR Relay <21–3>
From Front Wiper and Washer SW [Comb. SW]<9–1>
See Multiplex Communication System<10–3>
See Turn Signal and Hazard Warning Light System<4–4>
See Electronically Controlled Transmission and A/T Indicator System<14–6>
See Electronically Controlled Transmission and A/T Indicator System(A/T) or ABS and Traction Control System(M/T)<14–7><17–7>
See Combination Meter System<22–3>
ACC
IG
+B
MHTR
WIP
MPX+
P–S/B
HAZD
PWR
SNOW
PKB
A12, A13
A/C CONTROL ASSEMBLY
MPX–
BLW
HR
TR
TS
TPI
AIR
AIF
SG
TPM
S5
AOD
AOF
TE
TP
AMH
AMC
GND
L
V
L
L–W
GR–L
GR–R
Y–G
R–W
BR–W
R–Y
GR
L–R
P–L
B–R
V–W
LG–R
P–B
W–B
GR–R
BR–W
J8 JUNCTION CONNECTOR
J10 JUNCTION CONNECTOR
A/C THERMISTOR
IE1
IF1
2H
2I
2B
A14 A/C ROOM TEMP. SENSOR
A15 A/C SOLAR SENSOR
A21 AIR INLET CONTROL SERVO MOTOR
A23 AIR VENT MODE CONTROL SERVO MOTOR
A22 AIR MIX CONTROL SERVO MOTOR
IH
Cowl side panel RH

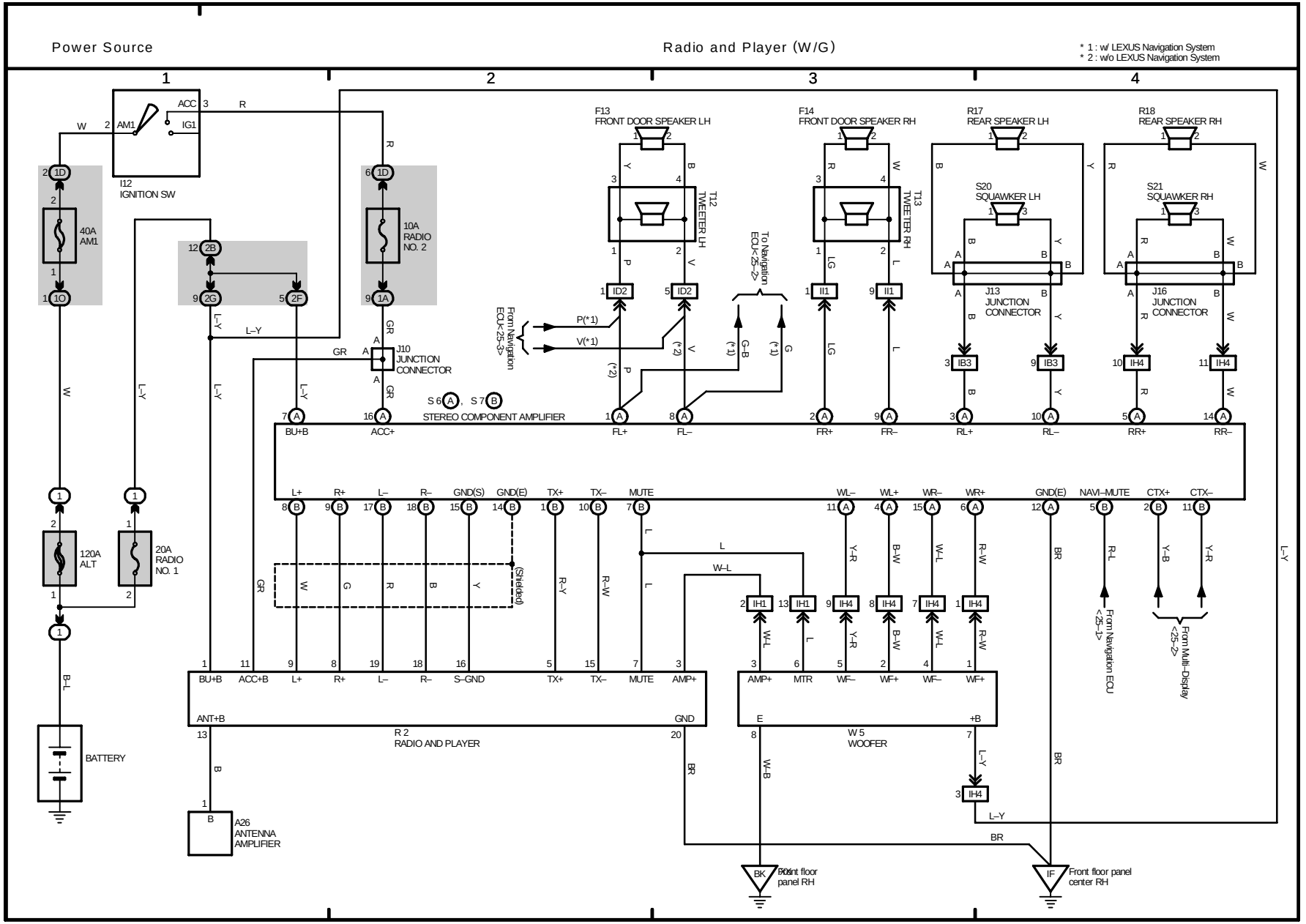
M OVERALL ELECTRICAL WIRING DIAGRAM




Power Source
Taillight and Stop Light (W/G)
1
2
3
4
I12
IGNITION SW
ACC
AM1
IG1
S 8
STOP LIGHT SW
TAIL RELAY
10A TAIL
40A AM1
15A STOP
10A GAUGE
REAR LIGHTS WARNING LIGHT [COMB. METER]
To Skid Control ECU<16-8><17-5>
To Shift Lock Control ECU <21-4>
To Engine Control Module <2-12>
L 3
LIGHT FAILURE SENSOR
T+
IG
IL
ST+
GND
T–
ST–
HS–
J17 JUNCTION CONNECTOR
J18 JUNCTION CONNECTOR
J13 JUNCTION CONNECTOR
J15 JUNCTION CONNECTOR
To Theft Deterrent ECU<11-4>
120A ALT
BATTERY
F5 FRONT SIDE MARKER LIGHT LH
F3 FRONT PARKING LIGHT LH
F4 FRONT PARKING LIGHT RH
F6 FRONT SIDE MARKER LIGHT RH
L2 LICENSE PLATE LIGHT RH
L1 LICENSE PLATE LIGHT LH
R16 REAR SIDE MARKER LIGHT
R6 REAR COMBINATION LIGHT LH
R8 REAR COMBINATION LIGHT RH
R5 REAR COMBINATION LIGHT LH
R7 REAR COMBINATION LIGHT RH
N 3 NOISE FILTER (Stop Light)
H19 HIGH MOUNTED STOP LIGHT
Left fender apron
Cowl side panel RH
Right side of the back panel lower
Left quarter panel LH
Left side of the back panel Upper
EC
IH
BN
BL
BM

M OVERALL ELECTRICAL WIRING DIAGRAM




Power Source
Radio and Player (W/G)
* 1 : w/ LEXUS Navigation System
* 2 : w/o LEXUS Navigation System
I12 IGNITION SW
40A AM1
10A RADIO NO. 2
120A ALT
20A RADIO NO. 1
BATTERY
J10 JUNCTION CONNECTOR
F13 FRONT DOOR SPEAKER LH
F14 FRONT DOOR SPEAKER RH
R17 REAR SPEAKER LH
R18 REAR SPEAKER RH
T12 TWEETER LH
T13 TWEETER RH
S20 SQUAWKER LH
S21 SQUAWKER RH
J13 JUNCTION CONNECTOR
J16 JUNCTION CONNECTOR
To Navigation ECU<25-2>
From Navigation ECU<25-3>
S6, S7
STEREO COMPONENT AMPLIFIER
BU+B
ACC+
FL+
FL–
FR+
FR–
RL+
RL–
RR+
RR–
L+
R+
L–
R–
GND(S)
GND(E)
TX+
TX–
MUTE
WL–
WL+
WR–
WR+
NAVI–MUTE
CTX+
CTX–
(Shielded)
BU+B
ACC+B
S–GND
AMP+
AMP+
MTR
WF–
WF+
WF–
WF+
ANT+B
GND
R 2
RADIO AND PLAYER
W 5
WOOFER
A26
ANTENNA AMPLIFIER
From Navigation ECU <25-1>
From Multi-Display <25-2>
Front floor panel RH
Front floor panel center RH