CAMRY ELECTRICAL WIRING DIAGRAM

	Section Code	Page
INTRODUCTION	A	2
HOW TO USE THIS MANUAL	B	3
TROUBLESHOOTING	C	12
ABBREVIATIONS	D	17
GLOSSARY OF TERMS AND SYMBOLS	E	18
RELAY LOCATIONS	F	20
ELECTRICAL WIRING ROUTING	G	32
SYSTEM CIRCUITS	H	76
GROUND POINTS	I	288
POWER SOURCE (Current Flow Chart)	J	304
CONNECTOR LIST	K	312
PART NUMBER OF CONNECTORS	L	322
OVERALL ELECTRICAL WIRING DIAGRAM	M	326

A INTRODUCTION

This manual consists of the following 13 sections:

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

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

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

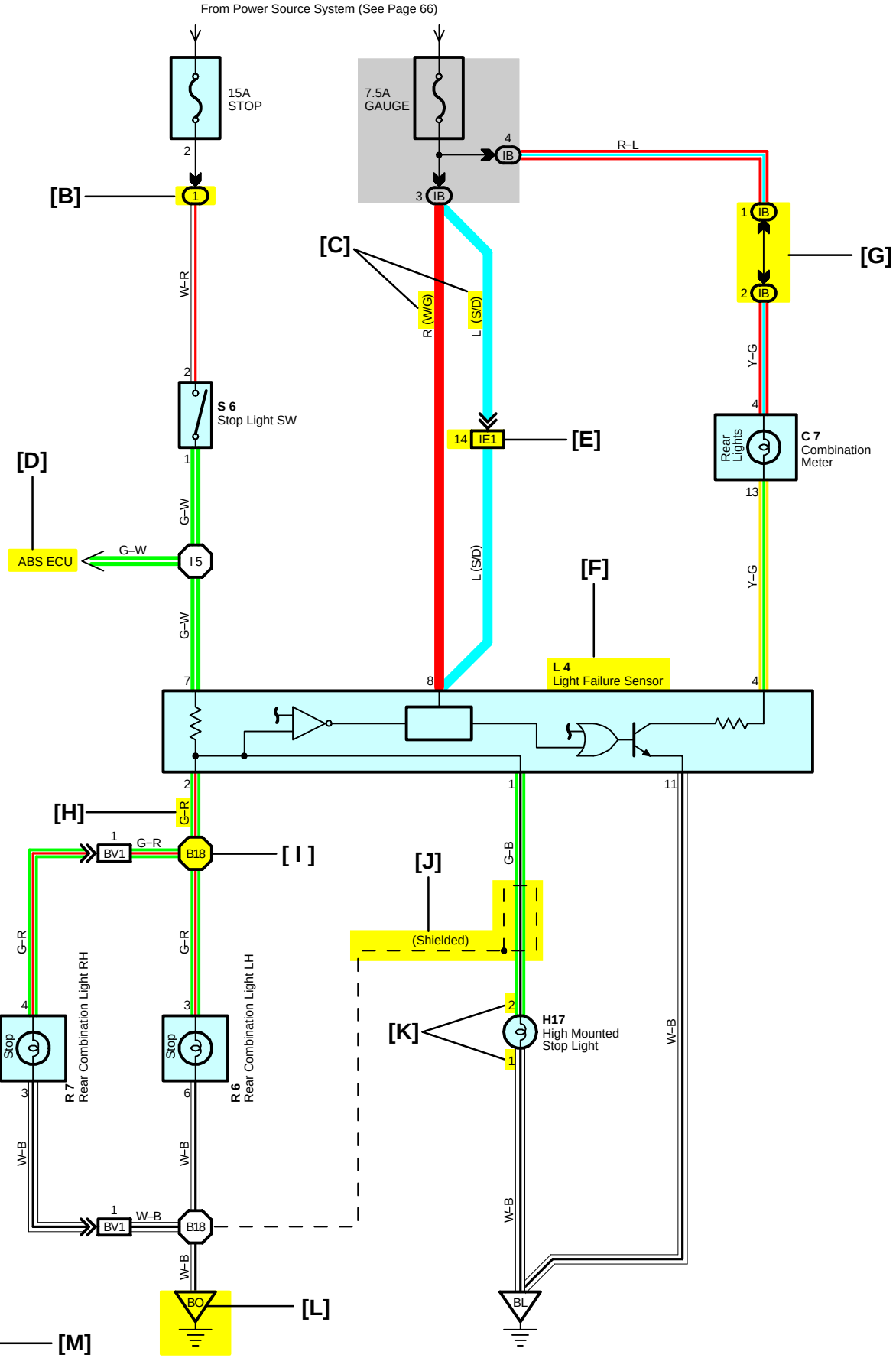
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Point section). See the System Outline to understand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

When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground points of each system circuit. Internal wiring for each junction block is also provided for better understanding of connection within a junction block.
Wiring related to each system is indicated in each system circuit by arrows (from__, to__). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

[A]

Stop Light

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



[A] : System Title

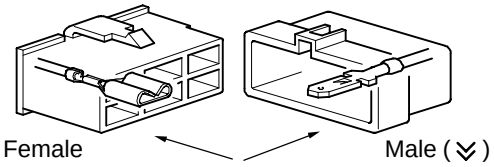
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

Example: (1) Indicates Relay Block No.1

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

[D] : Indicates related system.

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



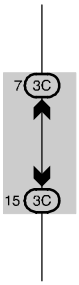
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

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

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

Example:



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

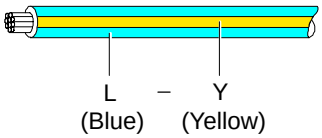
[H] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

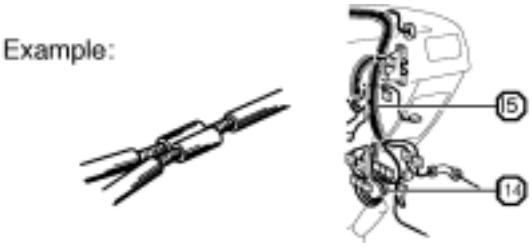
B	= Black	W	= White	BR	= Brown
L	= Blue	V	= Violet	SB	= Sky Blue
R	= Red	G	= Green	LG	= Light Green
P	= Pink	Y	= Yellow	GR	= Gray
O	= Orange				

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

Example: L – Y

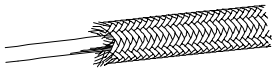


[I] : Indicates a wiring Splice Point (Codes are "E" for the Engine Room, "I" for the Instrument Panel, and "B" for the Body).



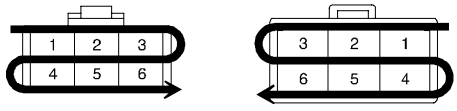
The Location of splice Point I 5 is indicated by the shaded section.

[J] : Indicates a shielded cable.



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

Example:



[L] : Indicates a ground point.

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

[M] : Page No.

[N] System Outline

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

Stop Light Disconnection Warning

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

[O] Service Hints

S6 Stop Light SW

2–1 : Closed with the brake pedal depressed

L4 Light Failure Sensor

1, 2, 7–Ground : Approx. 12 volts with the stop light SW on
4, 8–Ground : Approx. 12 volts with the ignition SW at ON position
11–Ground : Always continuity

[P] : Parts Location

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

[Q] : Relay Blocks

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

[R] : Junction Block and Wire Harness Connector

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

[S] : Connector Joining Wire Harness and Wire Harness

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

[T] : Ground Points

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

[U] : Splice Points

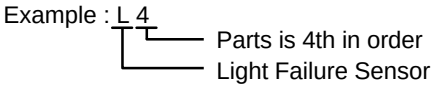
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

[N] : Explains the system outline.

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

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

Example : Part ”L4” (Light Failure Sensor) is on page 36 of the manual.
∗ The letter in the code is from the first letter of the part, and the number indicates its order in parts starting with that letter.



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

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

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

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

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

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

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

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

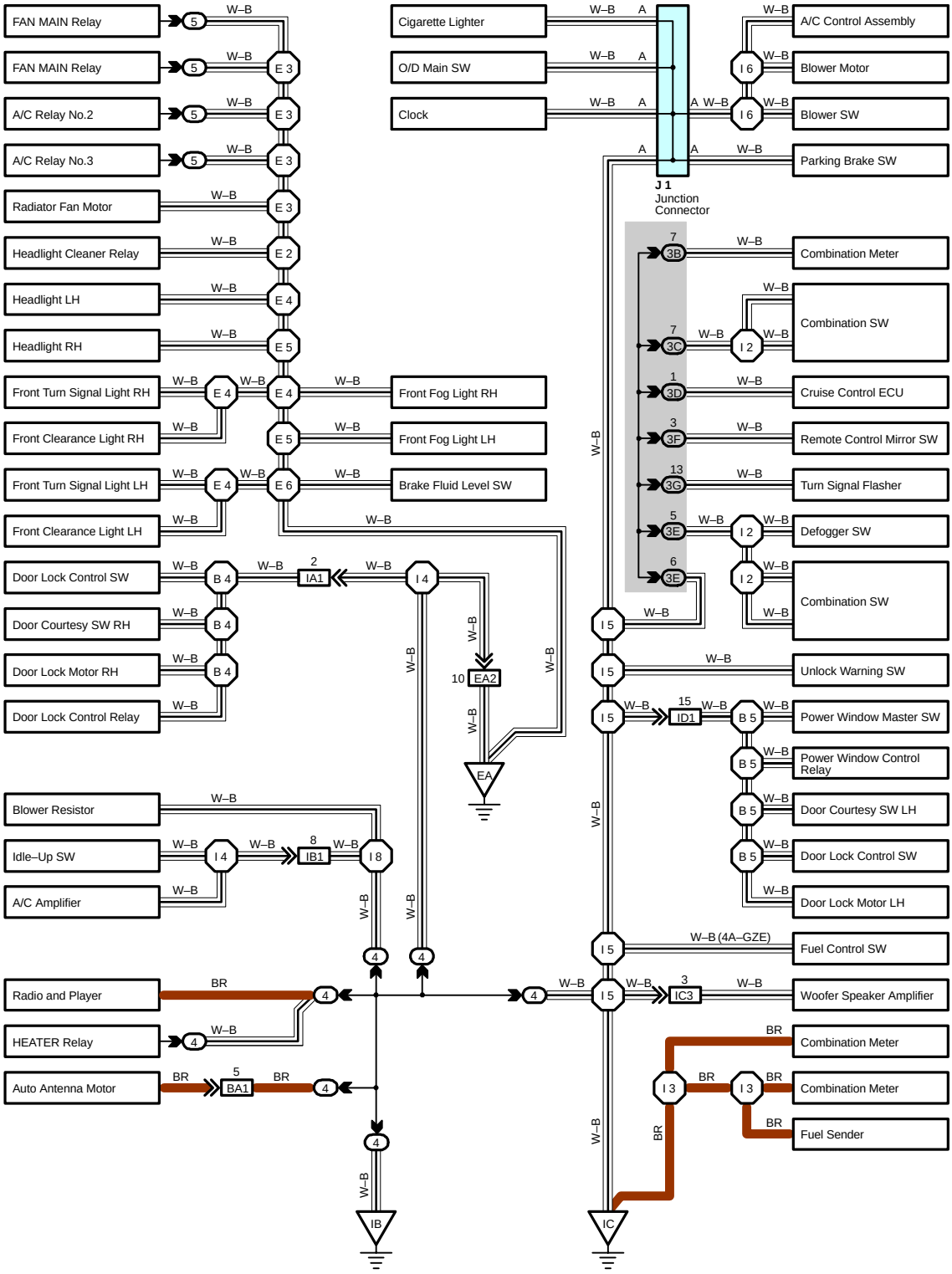
[U] : Indicates the reference page showing the position of the splice points on the vehicle.

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

B HOW TO USE THIS MANUAL

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

I GROUND POINT

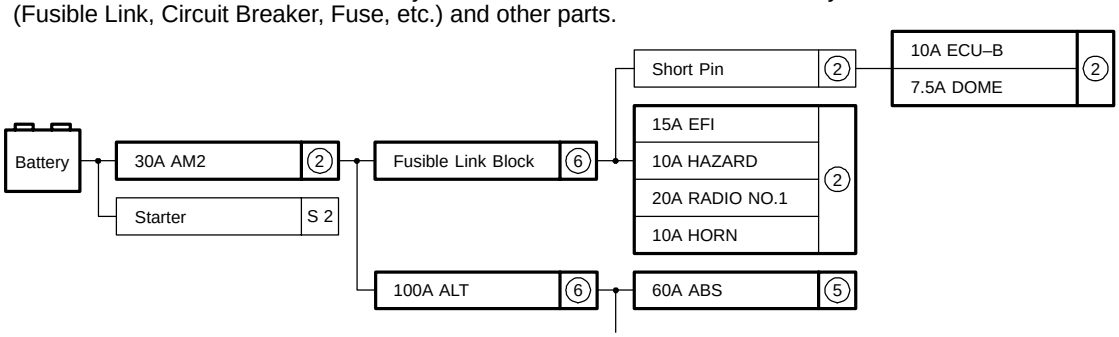


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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

J POWER SOURCE (Current Flow Chart)

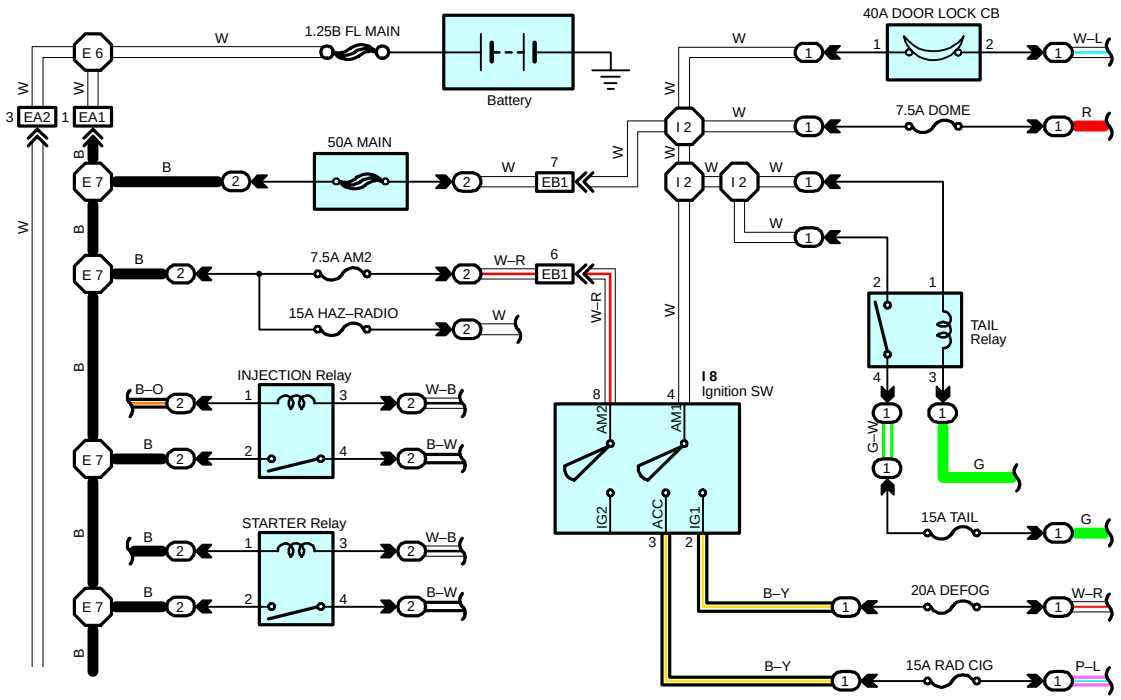
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

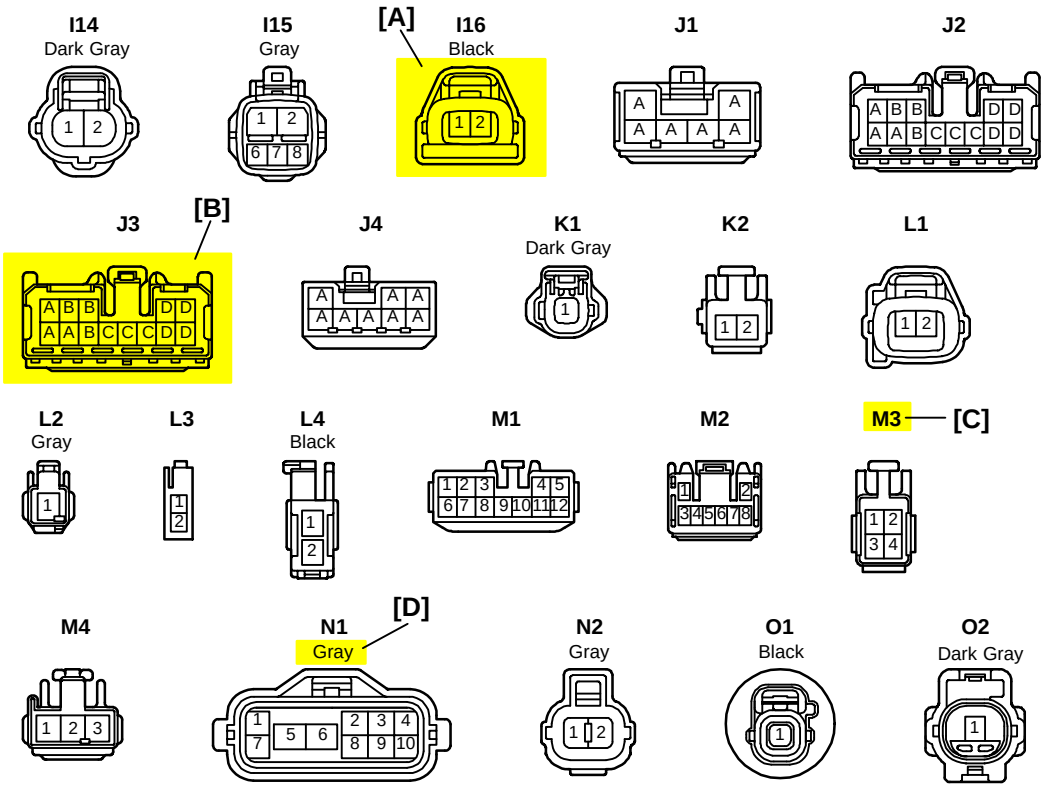
Fuse		System	Page
20A	STOP	ABS ABS and Traction Control Cruise Control Electronically Controlled Transmission Multiplex Communication System	194 187 180 166 210
10A	DOME	Cigarette Lighter Combination Meter Headlight Interior Light Key Reminder and Seat Belt Warning Light Auto Turn Off	214 230 112 122

Power Source



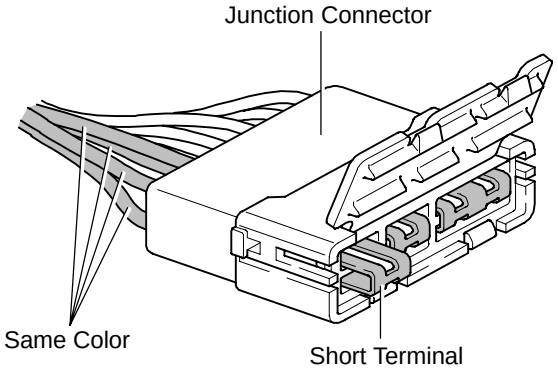
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

K CONNECTOR LIST



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

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



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

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

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

L PART NUMBER OF CONNECTORS

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

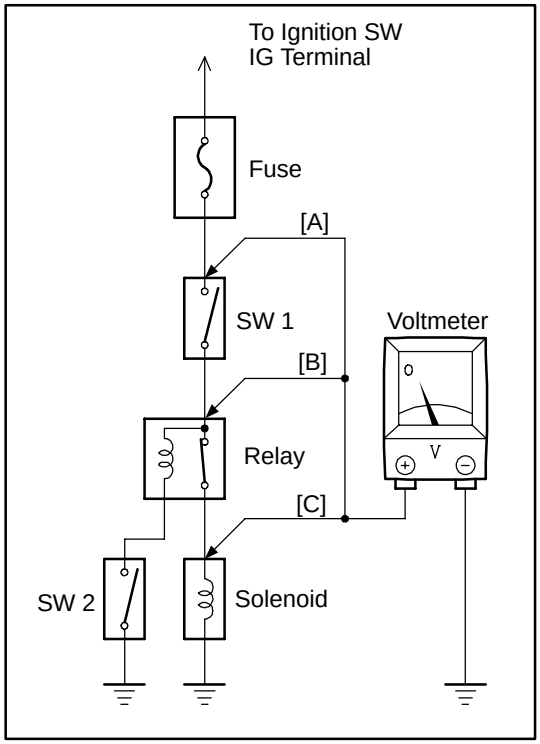
Code	Part Name	Part Number
D 4	Diode (Courtesy)	90980–11608
D 5	Diode (Interior Light)	90980–10962
D 6	Diode (Moon Roof)	90980–11608
D 7	Door Lock Control Relay	90980–10848
D 8	Door Lock Control SW LH	90980–11148
D 9	Door Lock Control SW RH	
D10	Door Courtesy SW LH	90980–11097
D11	Door Courtesy SW RH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

[A] : Part Code

[B] : Part Name

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

Not all of the above connector part numbers are established for supply. When ordering a connector or terminal with wire, confirm in advance if the part is available via the parts department.

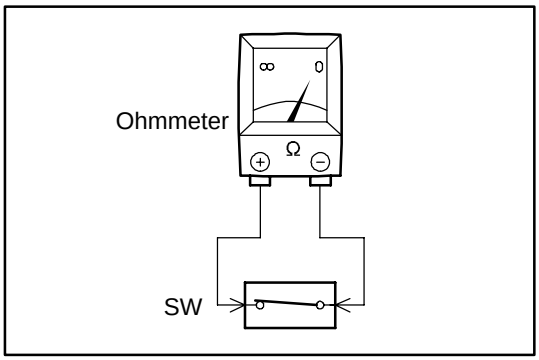


VOLTAGE CHECK

(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)

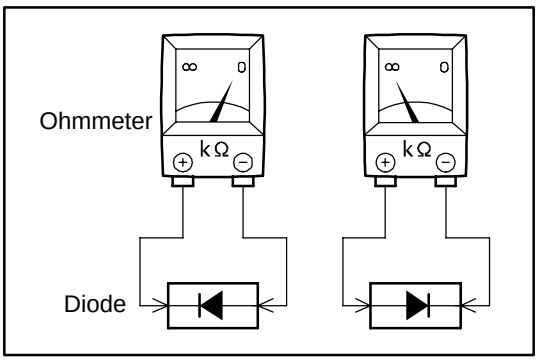
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

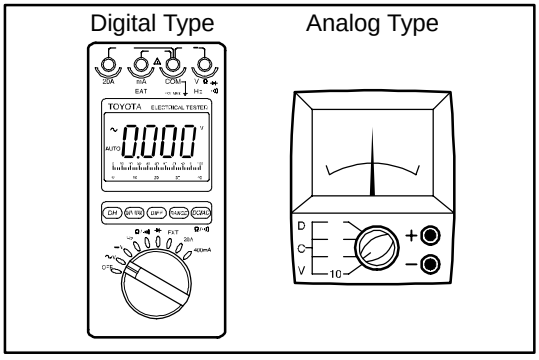
(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

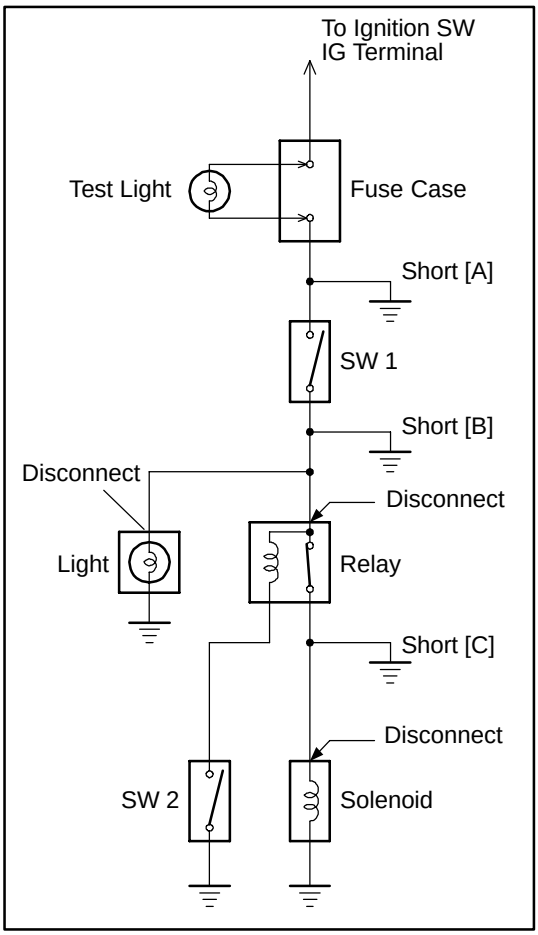
(b) Contact the two leads of an ohmmeter to each of the check points.



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:

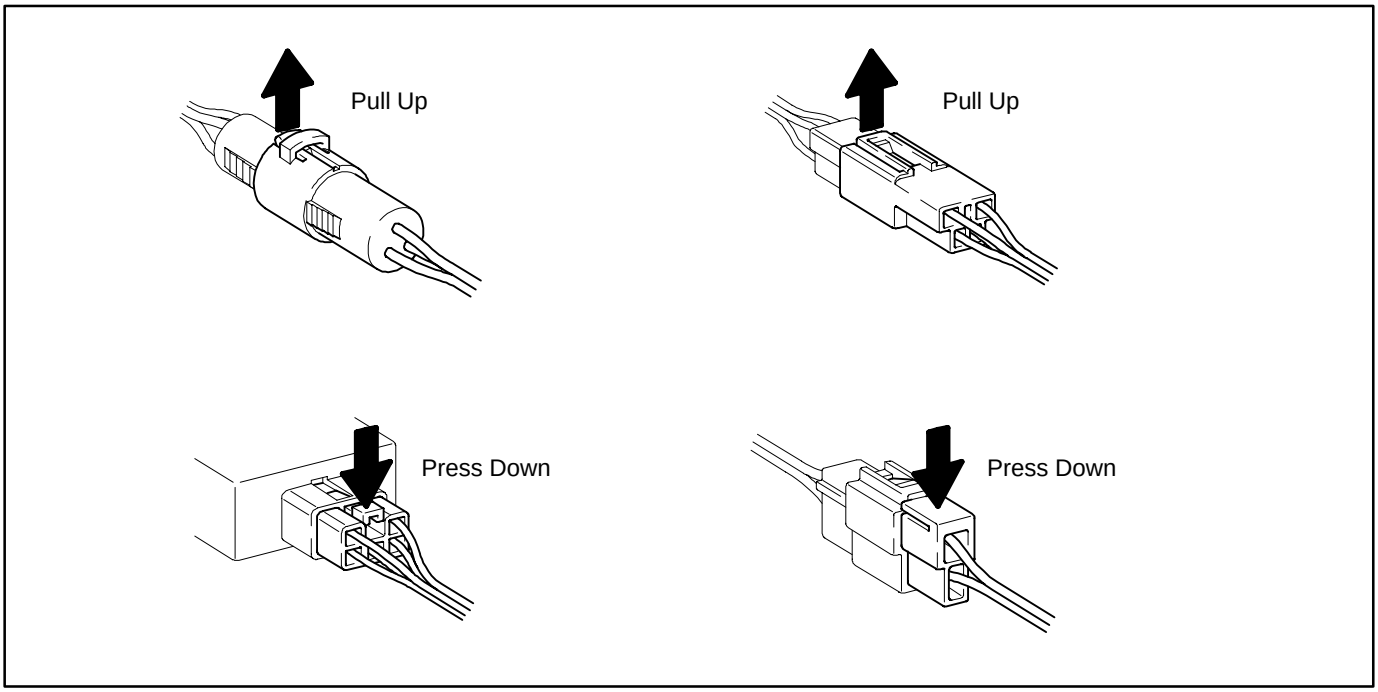
(a) Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

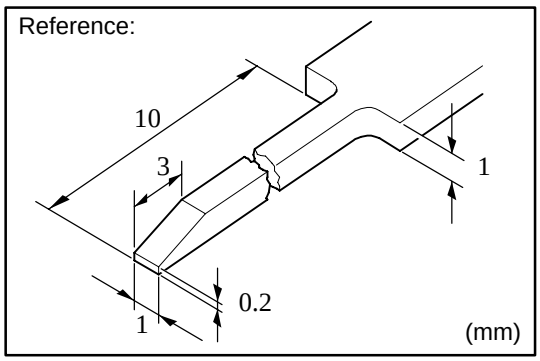
(b) When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).

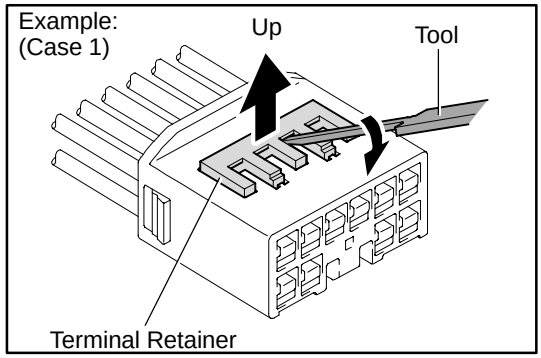
DISCONNECTION OF MALE AND FEMALE CONNECTORS

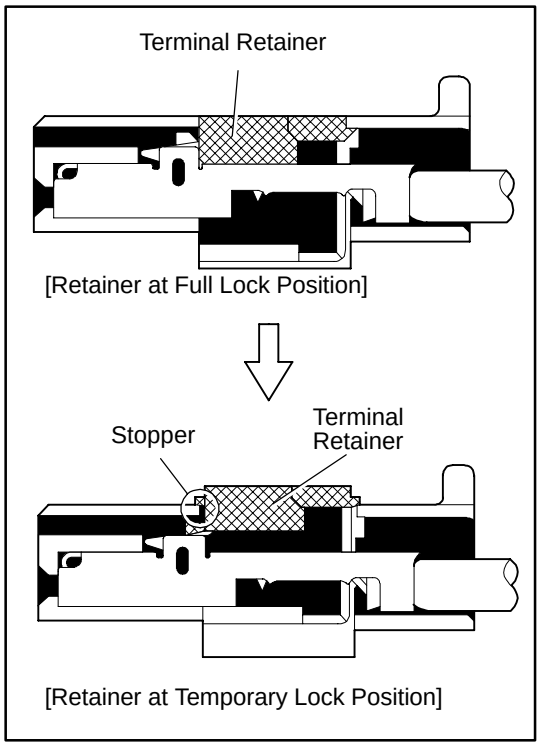
To pull apart the connectors, pull on the connector itself, not the wire harness.

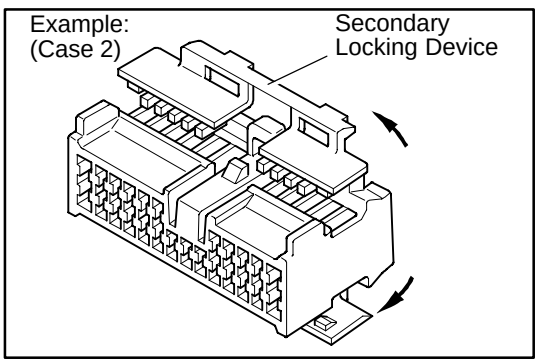
HINT : Check to see what kind of connector you are disconnecting before pulling apart.











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

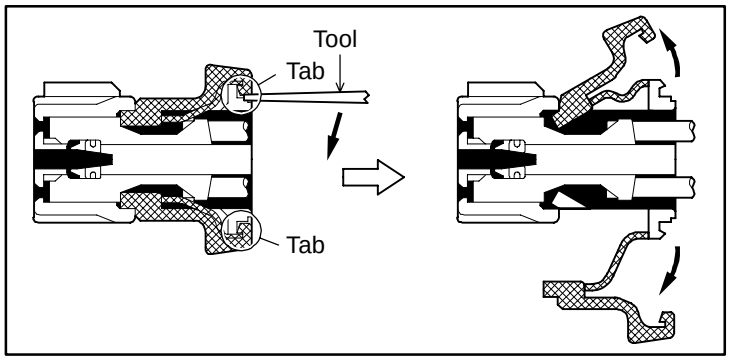
   HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

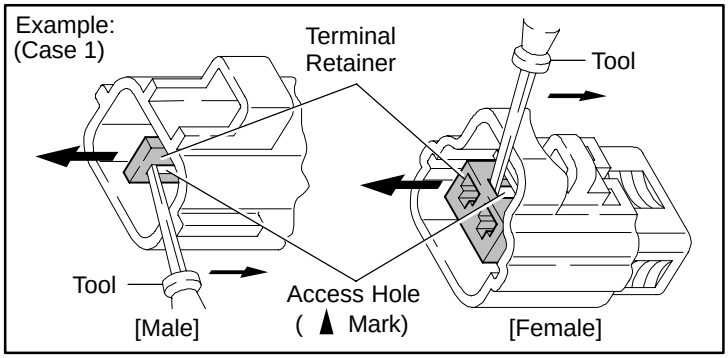
   "Case 1"

   Raise the terminal retainer up to the temporary lock position.

   "Case 2"

   Open the secondary locking device.



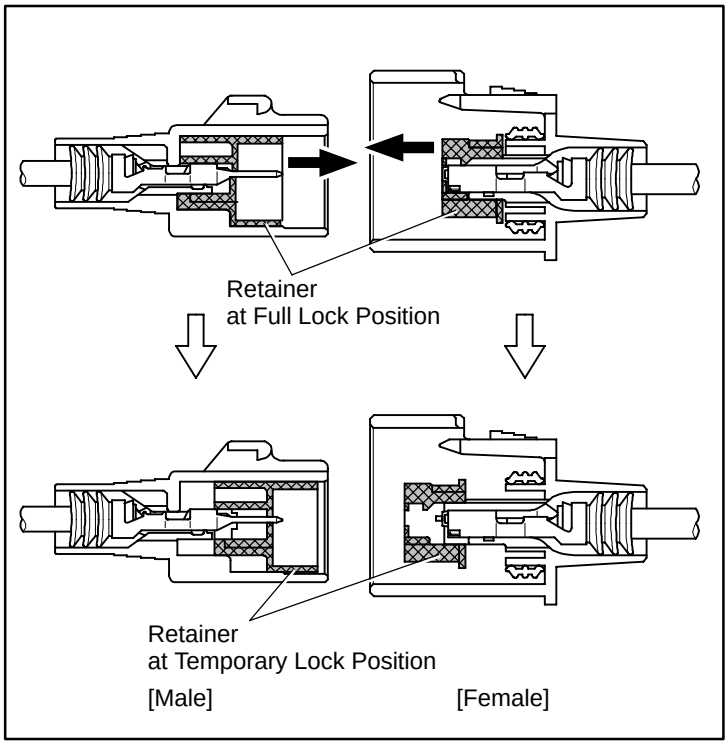


[B] For Waterproof Type Connector

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

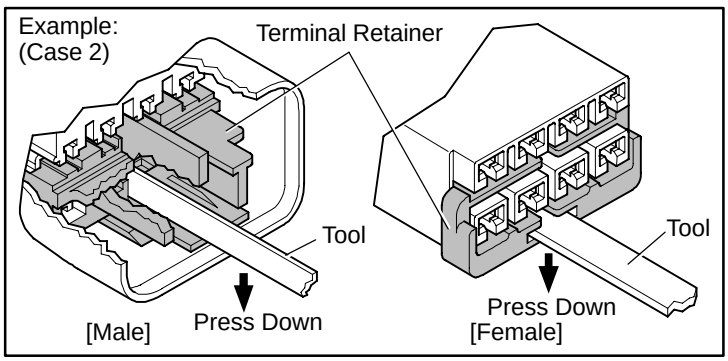


”Case 1”

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

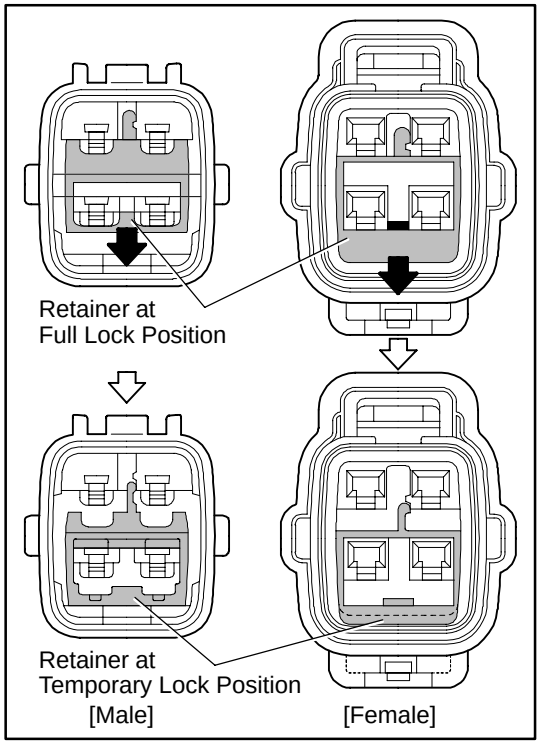
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

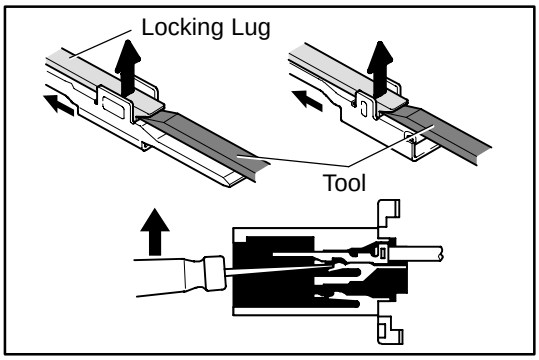


”Case 2”

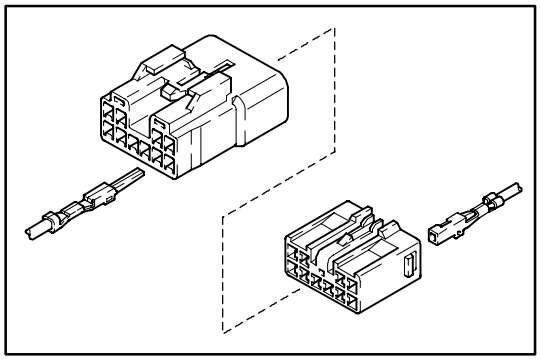
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



Push the terminal retainer down to the temporary lock position.



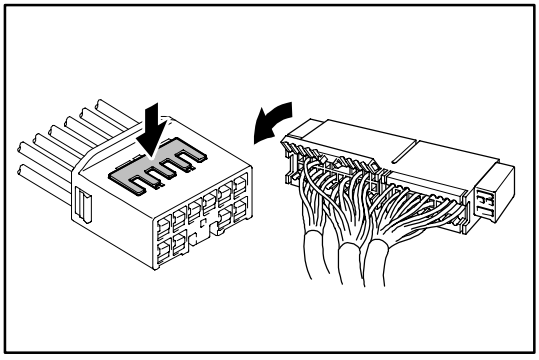
(c) Release the locking lug from terminal and pull the terminal out from rear.



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

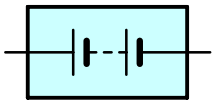
ABBREVIATIONS

The following abbreviations are used in this manual.

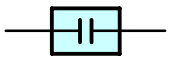
A/C	=	Air Conditioner
A/T	=	Automatic Transaxle
ABS	=	Anti–Lock Brake System
ACIS	=	Acoustic Control Induction System
AICV	=	Air Intake Control Valve
BA	=	Brake Assist
COMB.	=	Combination
DLC3	=	Data Link Connector 3
ECT	=	Electronic Control Transmission
ECU	=	Electronic Control Unit
EFI	=	Electronic Fuel Injection
EGR	=	Exhaust Gas Recirculation
ESA	=	Electronic Spark Advance
EVAP	=	Evaporative Emission
FL	=	Fusible Link
J/B	=	Junction Block
LH	=	Left–Hand
LHD	=	Left–Hand Drive
M/T	=	Manual Transaxle
MPX	=	Multiplex
O/D	=	Overdrive
R/B	=	Relay Block
RH	=	Right–Hand
RHD	=	Right–Hand Drive
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRC	=	Traction Control
VSC	=	Vehicle Stability Control
VSV	=	Vacuum Switching Valve
VVT	=	Variable Valve Timing
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.

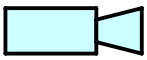
E GLOSSARY OF TERMS AND SYMBOLS



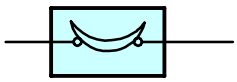
BATTERY
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.



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



CIGARETTE LIGHTER
An electric resistance heating element.

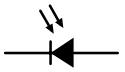


CIRCUIT BREAKER
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it. Some units automatically reset when cool, others must be manually reset.

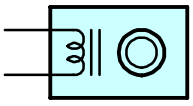
DIODE
A semiconductor which allows current flow in only one direction.



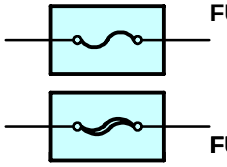
DIODE, ZENER
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



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.



(for Medium Current Fuse)

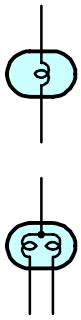
(for High Current Fuse or Fusible Link)

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.

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.



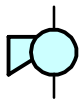
GROUND
The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.



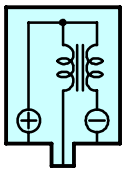
1. SINGLE FILAMENT

2. DOUBLE FILAMENT

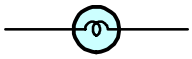
HEADLIGHTS
Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament



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.



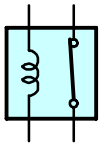
METER, DIGITAL
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.



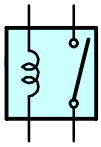
MOTOR
A power unit which converts electrical energy into mechanical energy, especially rotary motion.

RELAY

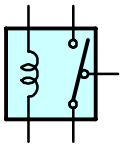
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.



1. NORMALLY CLOSED

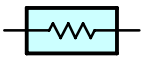


2. NORMALLY OPEN



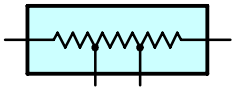
RELAY, DOUBLE THROW

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.



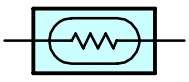
RESISTOR, TAPPED

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



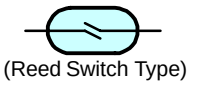
RESISTOR, VARIABLE or RHEOSTAT

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



SENSOR (Thermistor)

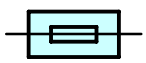
A resistor which varies its resistance with temperature.



(Reed Switch Type)

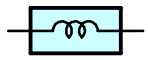
SENSOR, SPEED

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

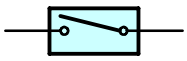
An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.



SPEAKER

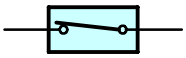
An electromechanical device which creates sound waves from current flow.

SWITCH, MANUAL

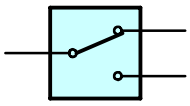


1. NORMALLY OPEN

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

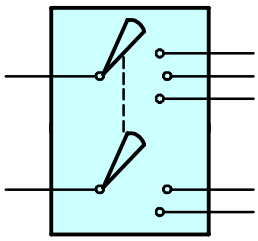


2. NORMALLY CLOSED



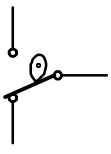
SWITCH, DOUBLE THROW

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



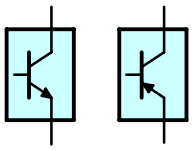
SWITCH, IGNITION

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



SWITCH, WIPER PARK

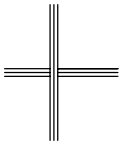
Automatically returns wipers to the stop position when the wiper switch is turned off.



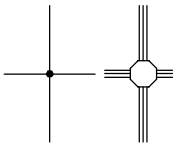
TRANSISTOR

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

WIRES



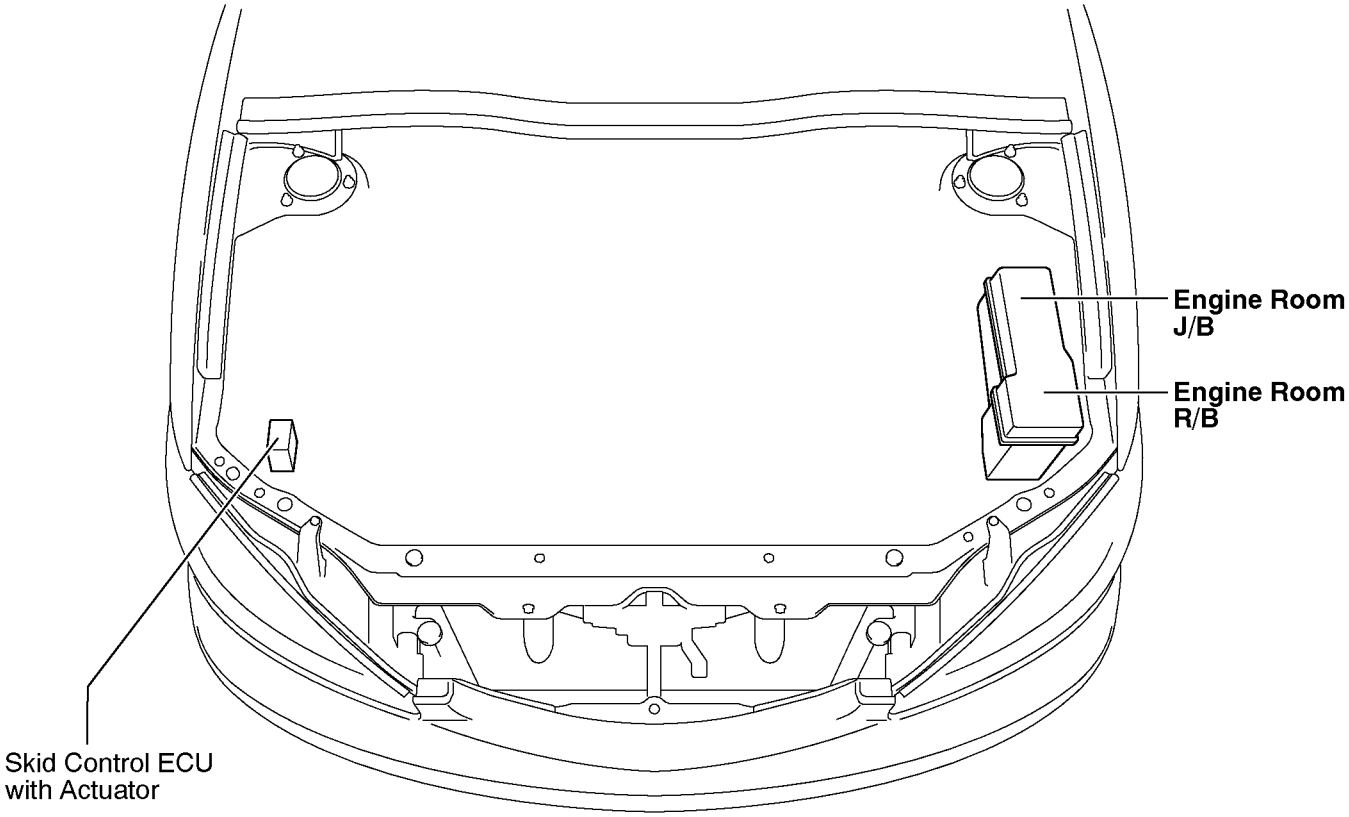
(1) NOT CONNECTED



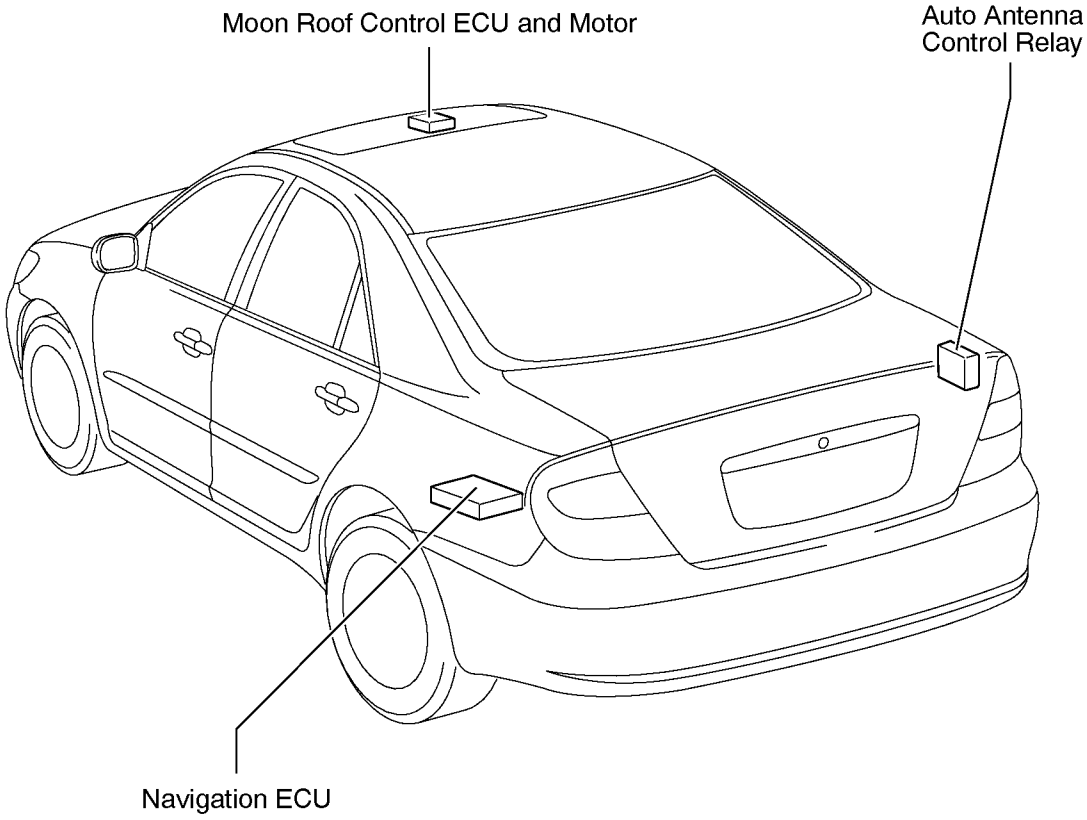
(2) SPLICED

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.

[Engine Compartment]

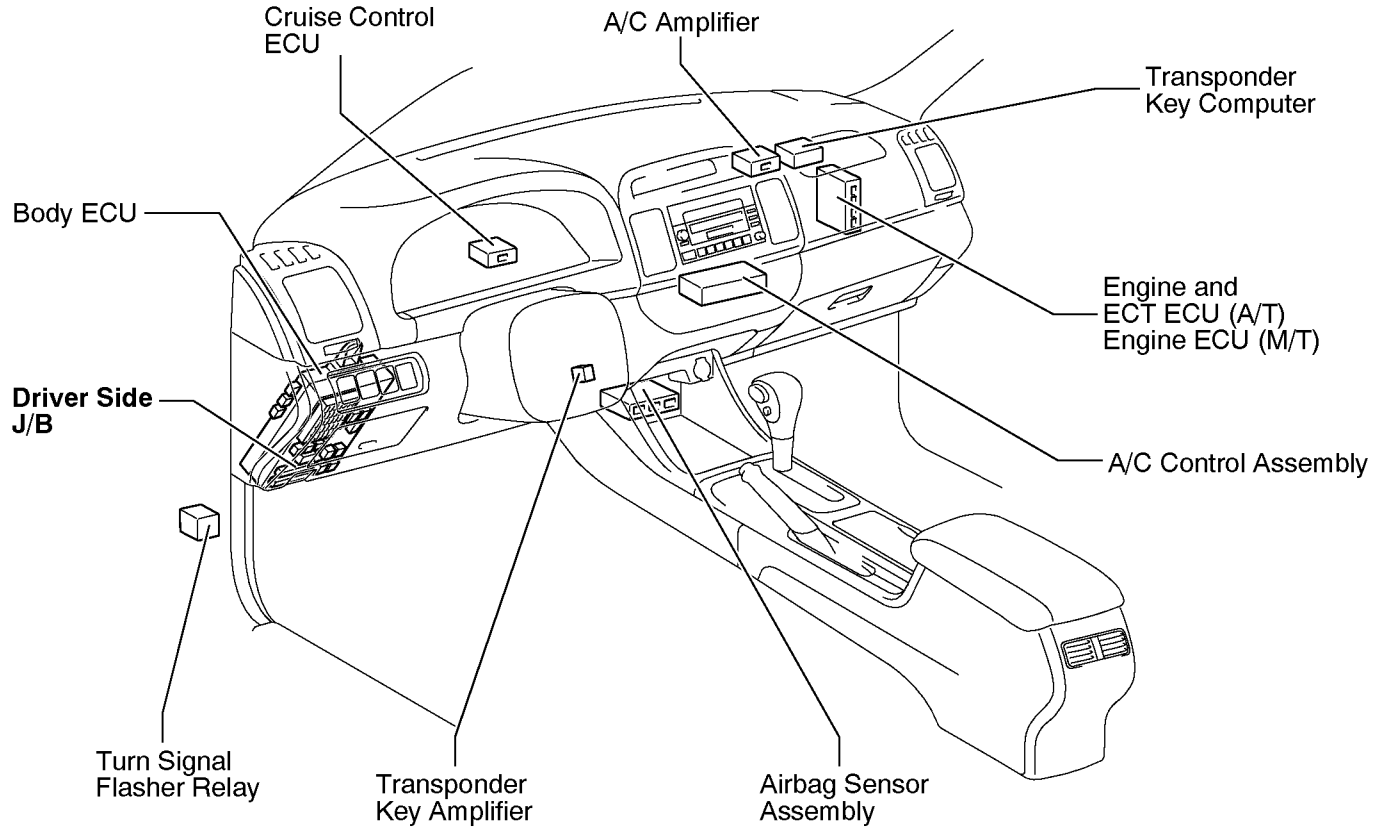


[Body]

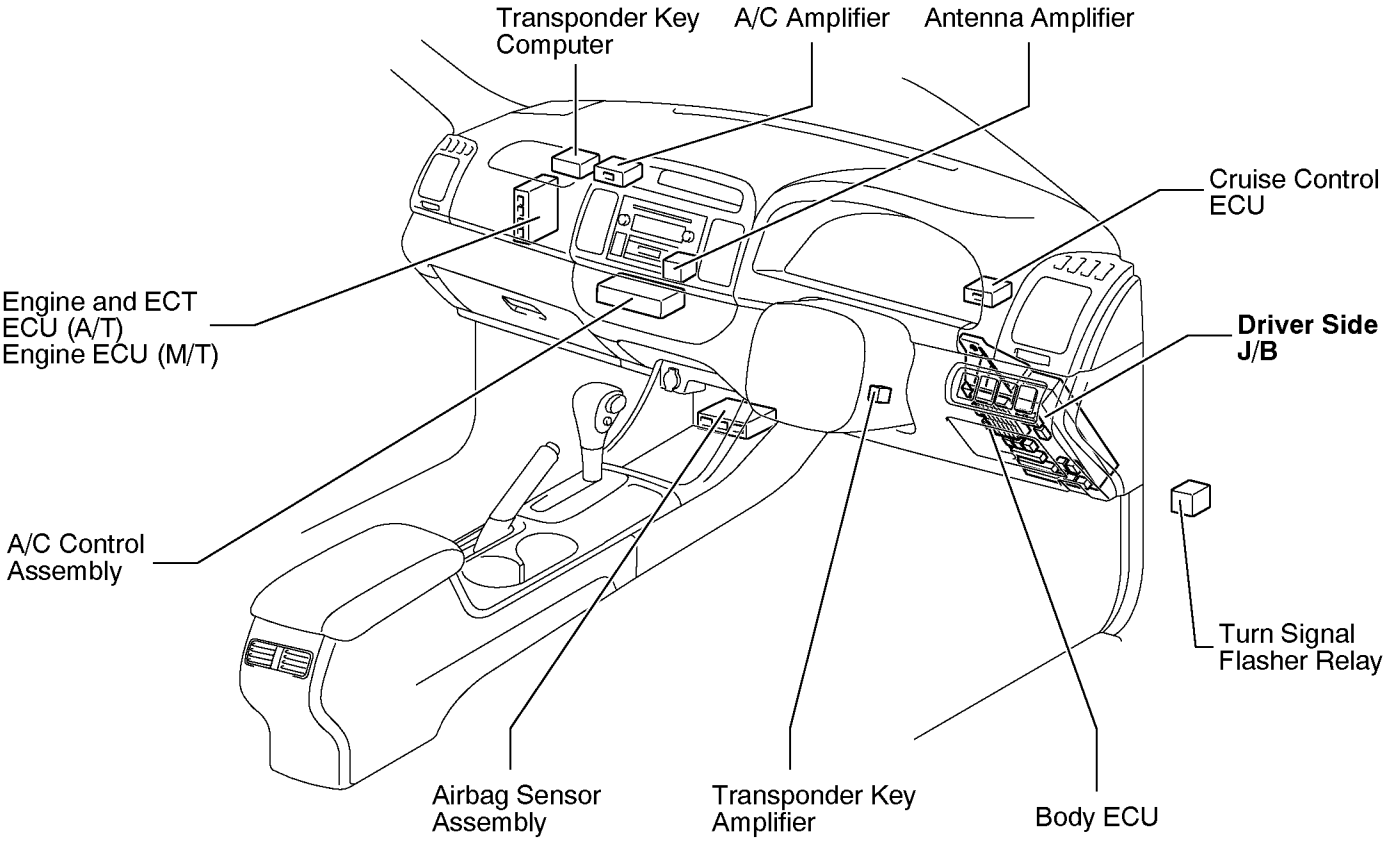


[Instrument Panel]

(LHD)

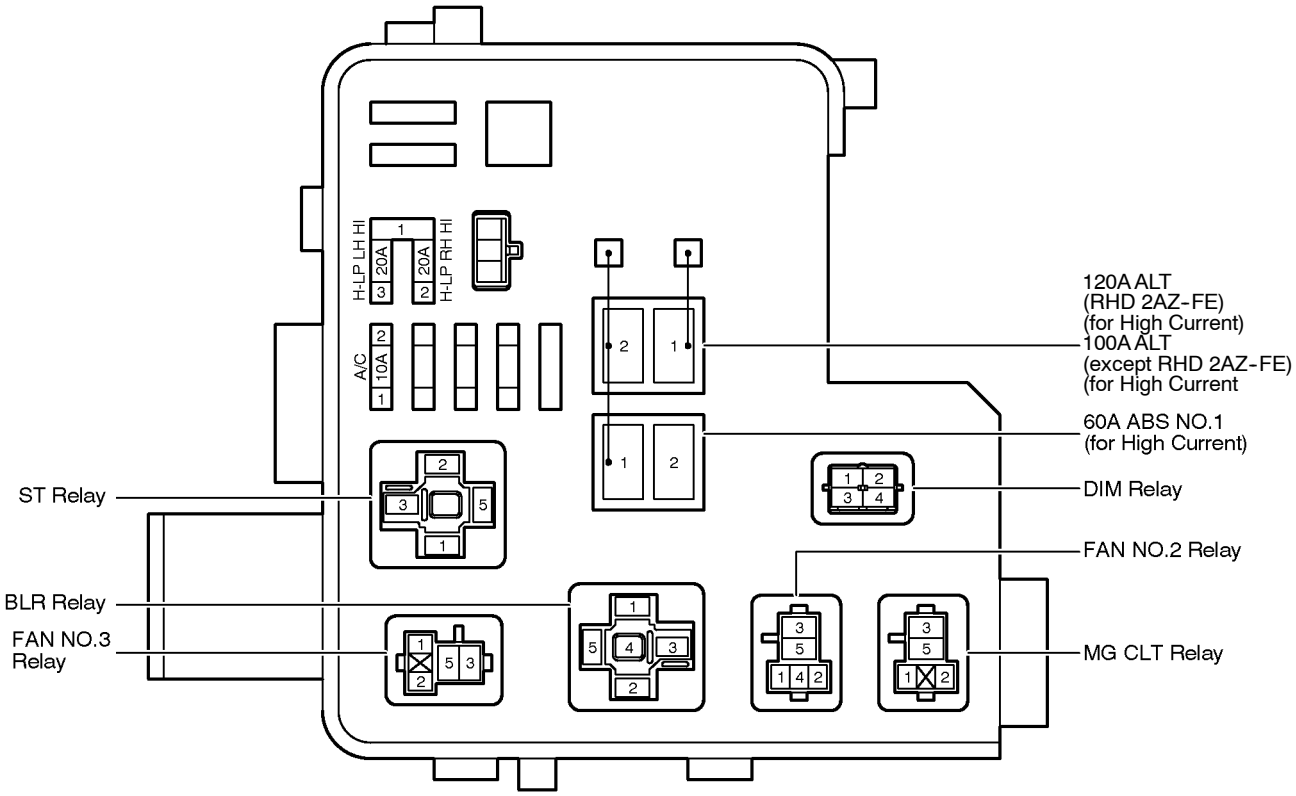


(RHD)

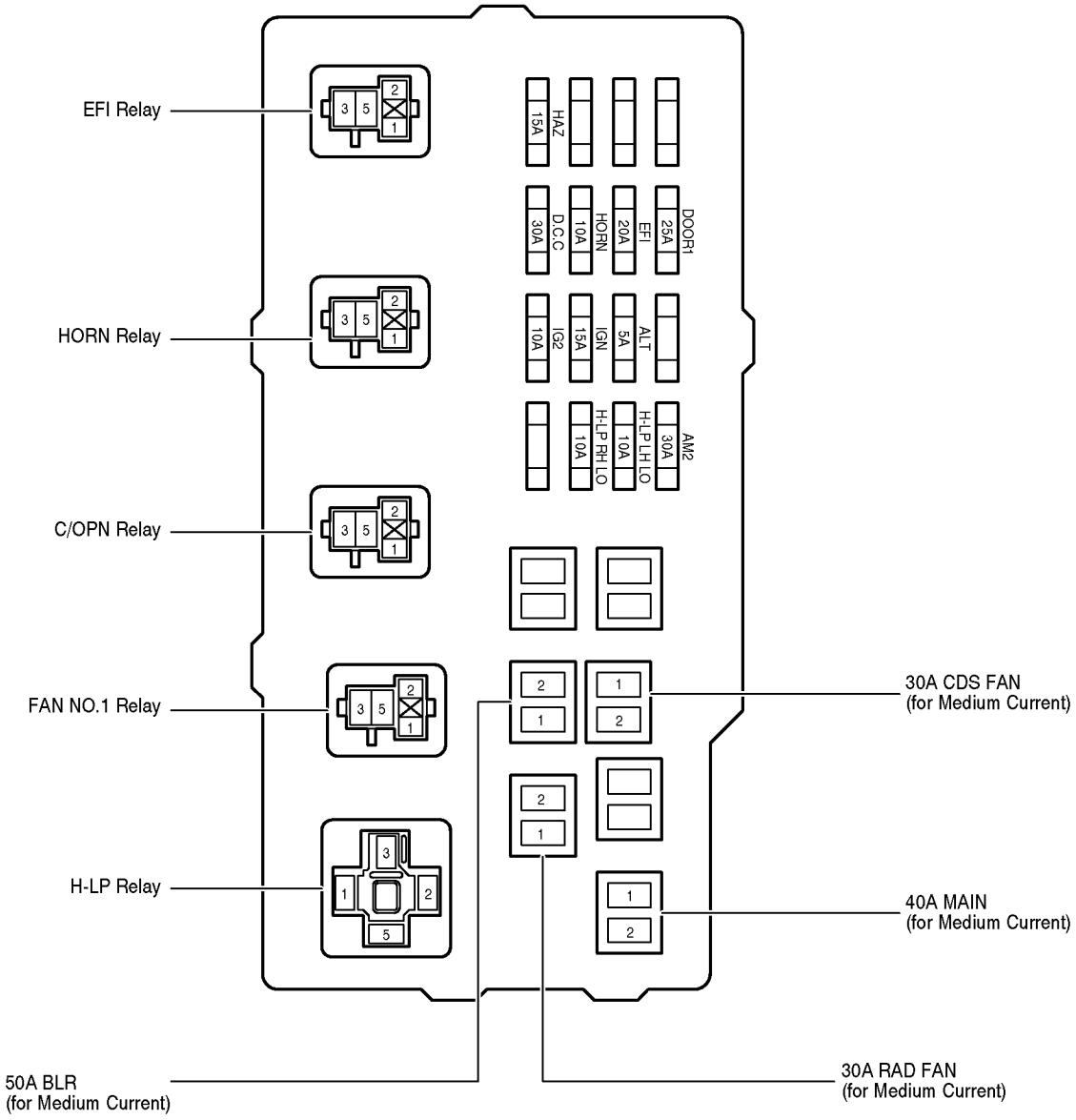


F RELAY LOCATIONS

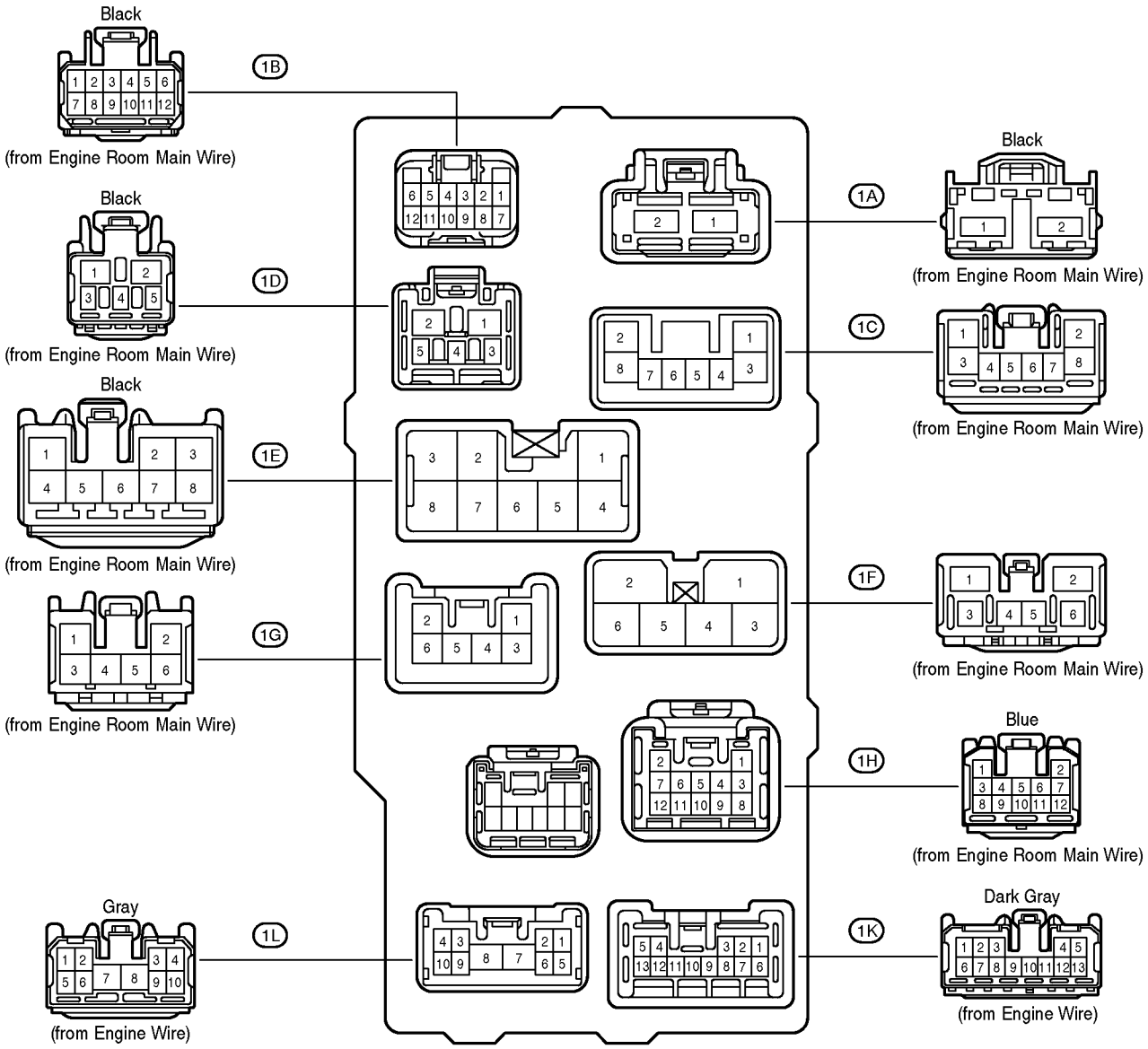
① : Engine Room R/B	Engine Compartment Left (See Page 20)



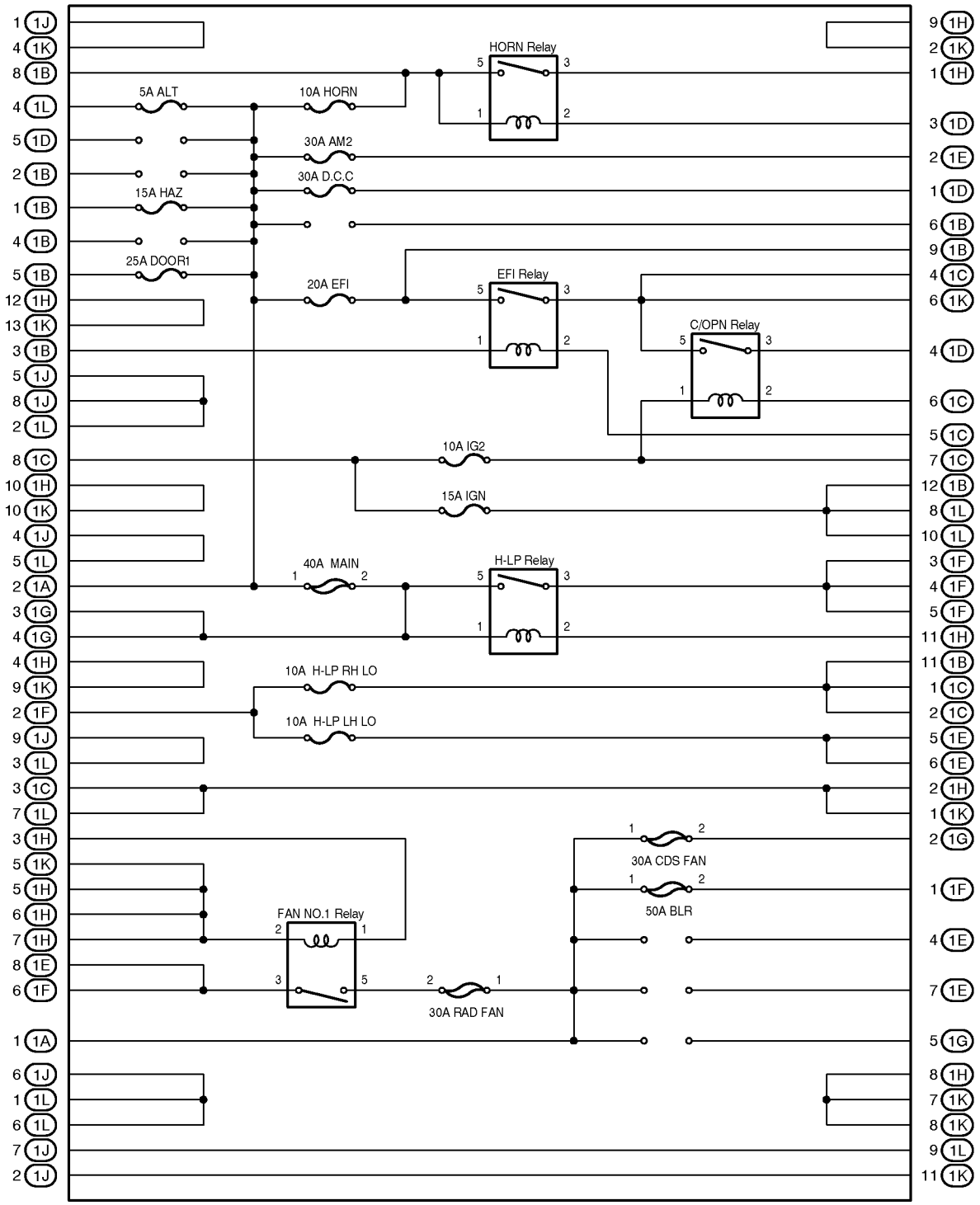
: Engine Room J/B	Engine Compartment Left (See Page 20)



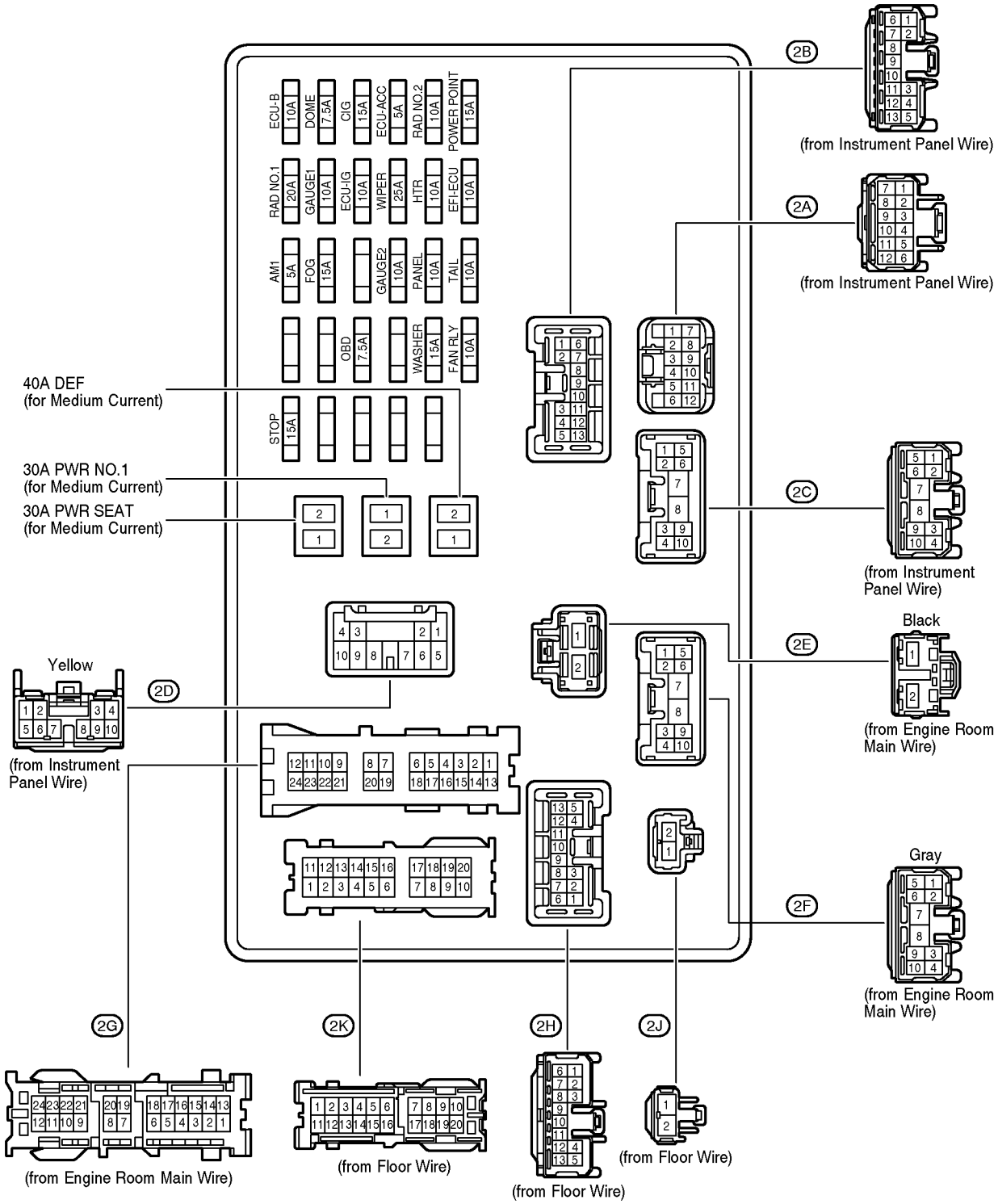
F RELAY LOCATIONS

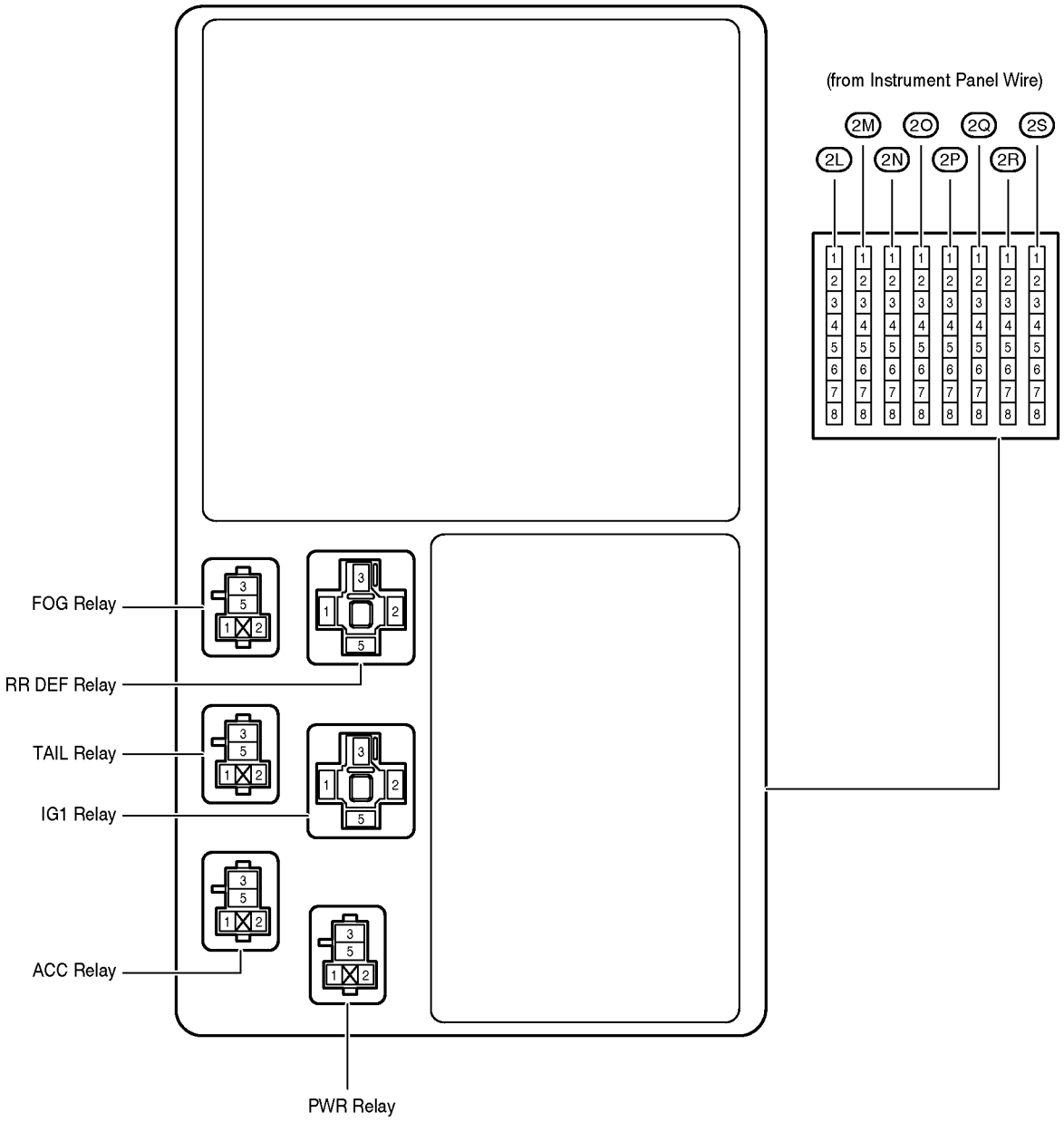


[Engine Room J/B Inner Circuit]

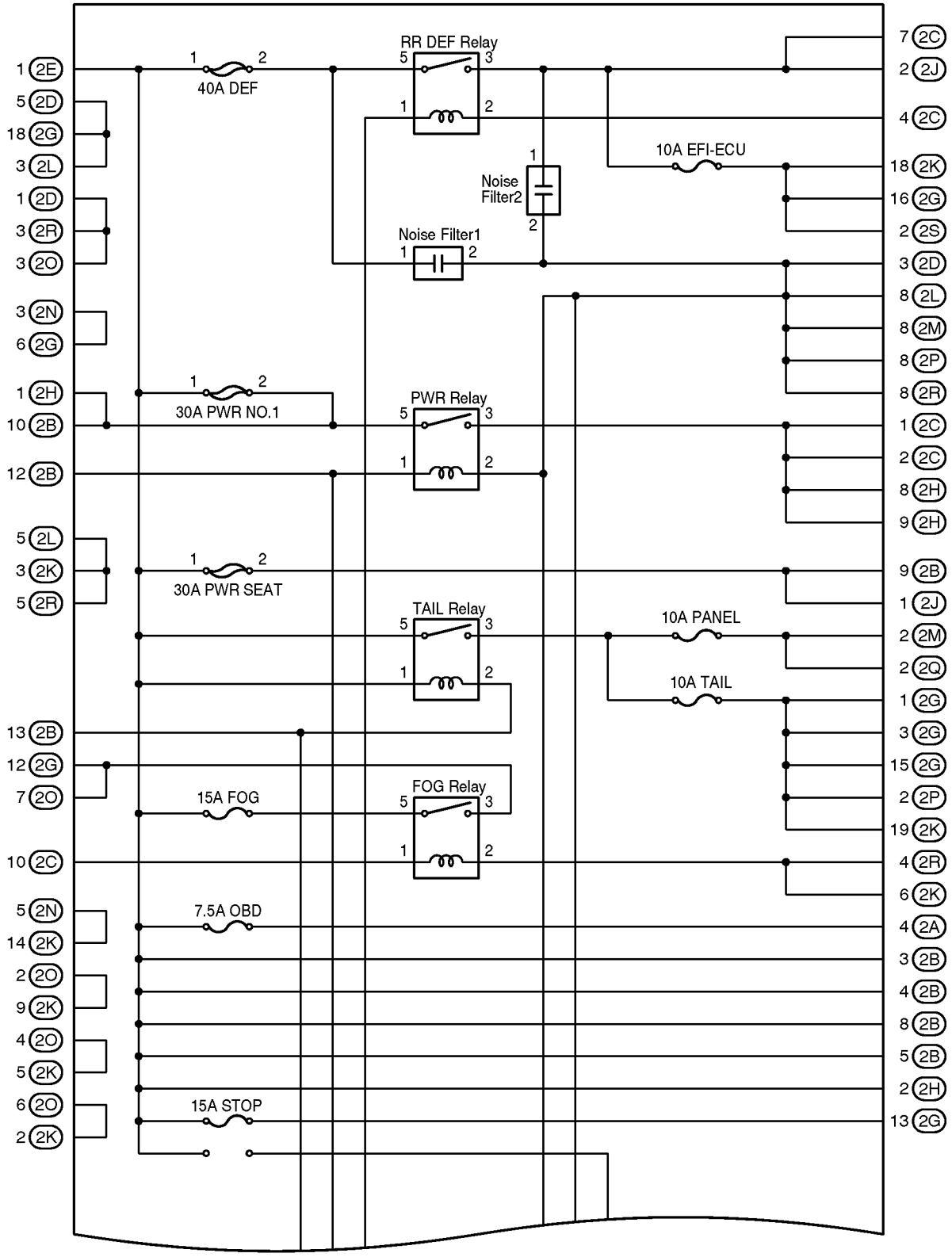


: Driver Side J/B	Lower Finish Panel (See Page 21)

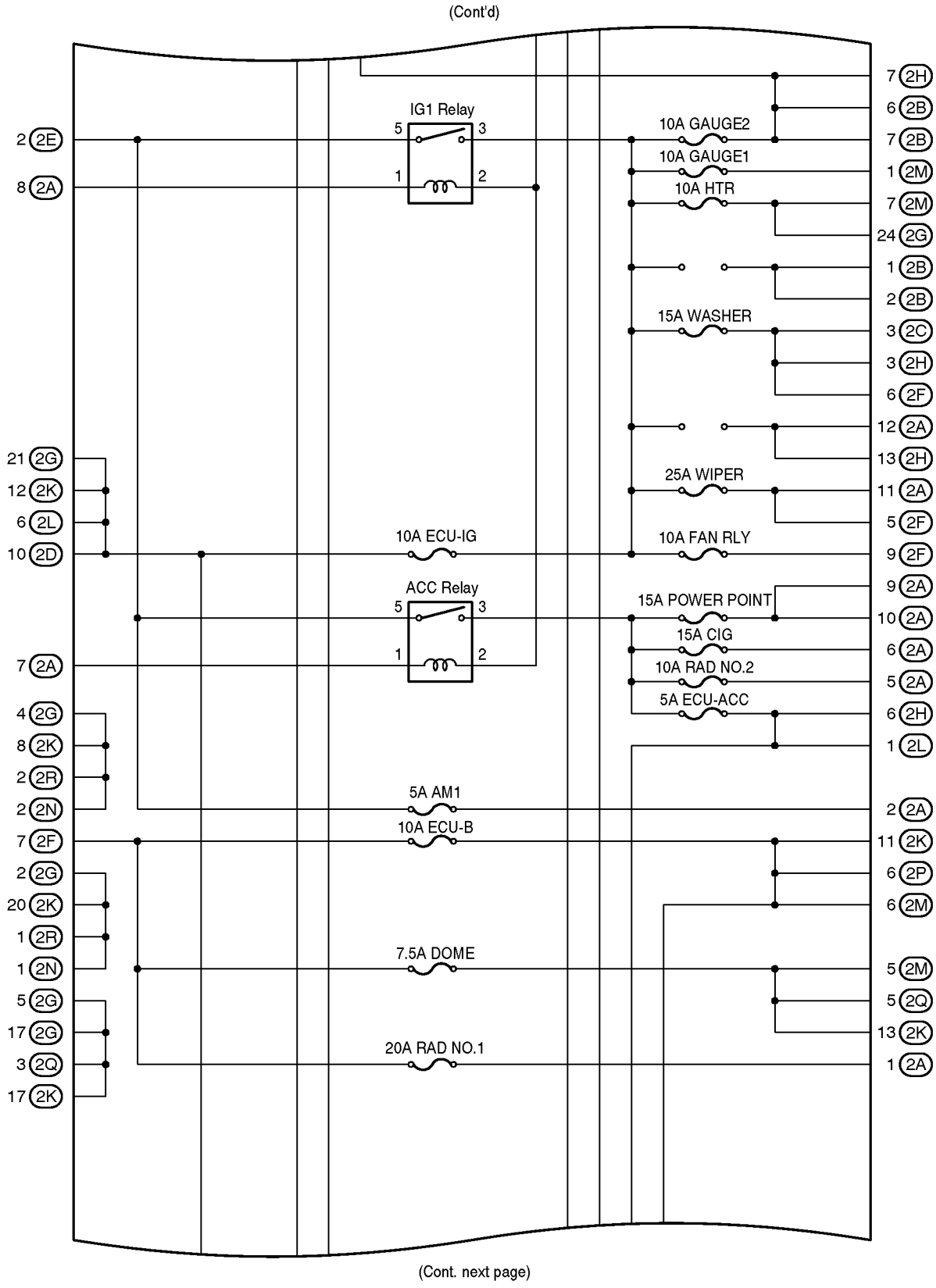


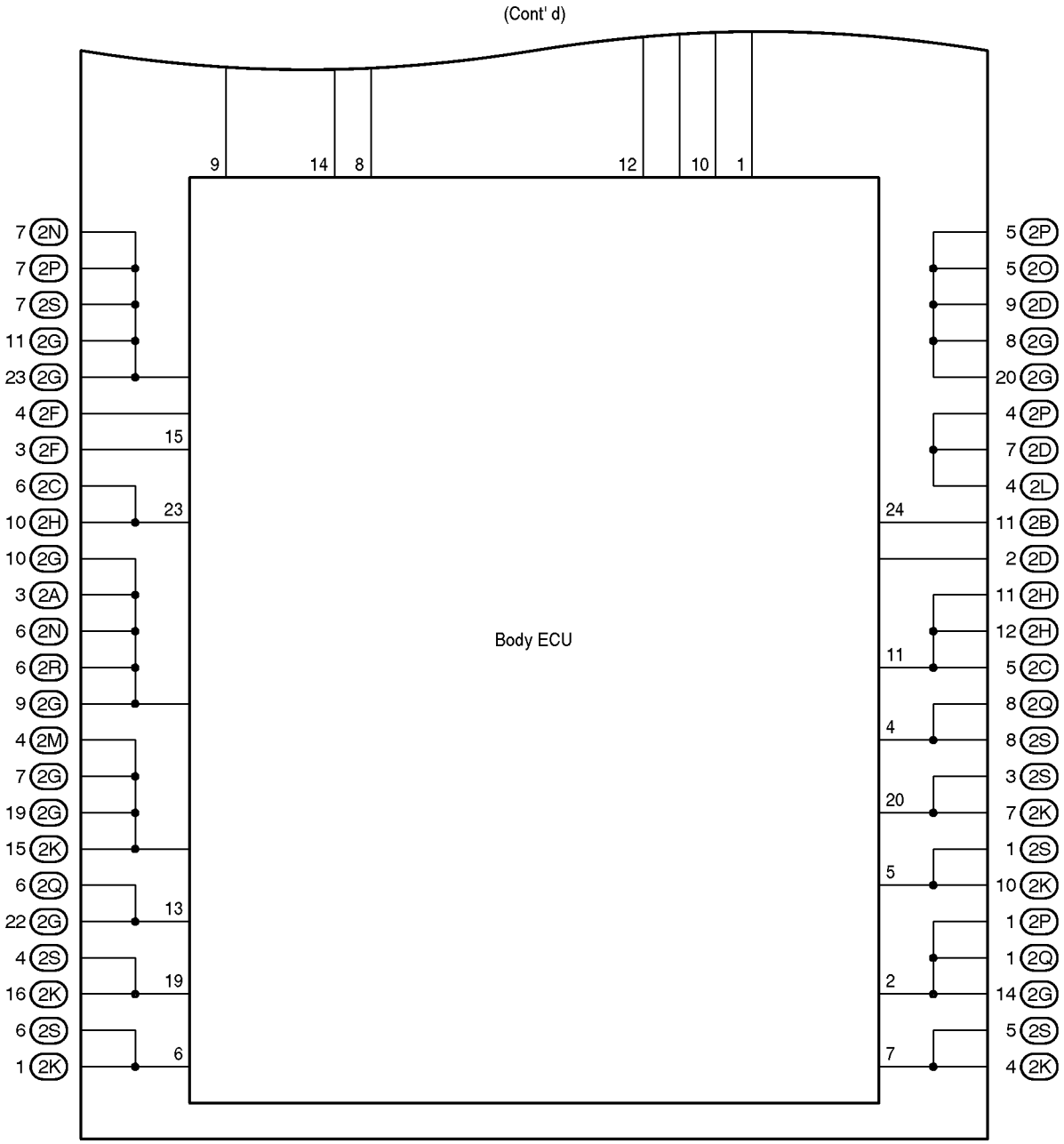

(from Instrument Panel Wire)
2M
2O
2Q
2S
2L
2N
2P
2R
FOG Relay
RR DEF Relay
TAIL Relay
IG1 Relay
ACC Relay
PWR Relay

[Driver Side J/B Inner Circuit]



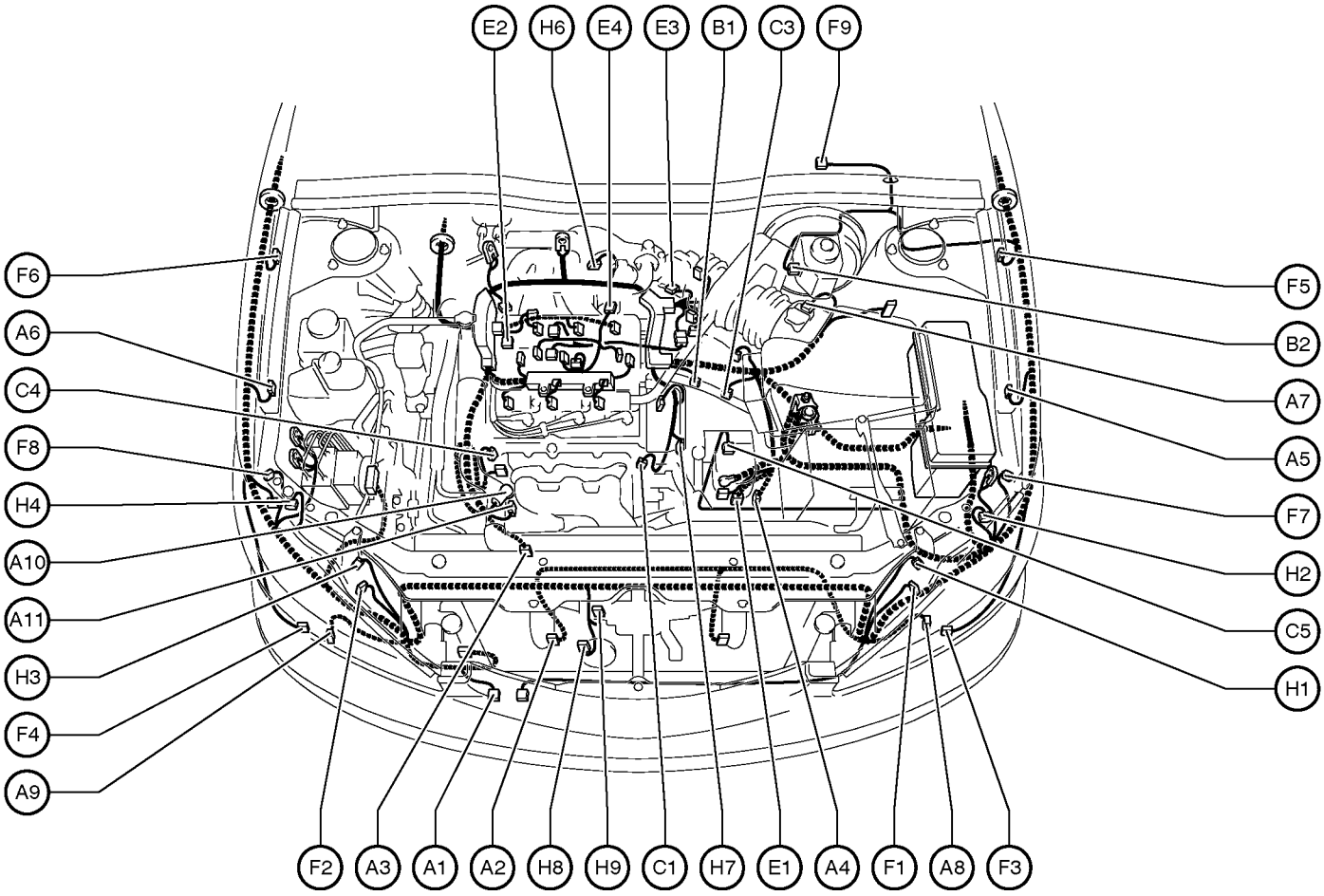
(Cont. next page)


(Cont'd)
IG1 Relay
ACC Relay
10A GAUGE2
10A GAUGE1
10A HTR
15A WASHER
25A WIPER
10A FAN RLY
15A POWER POINT
15A CIG
10A RAD NO.2
5A ECU-ACC
10A ECU-IG
5A AM1
10A ECU-B
7.5A DOME
20A RAD NO.1
2 2E
8 2A
21 2G
12 2K
6 2L
10 2D
7 2A
4 2G
8 2K
2 2R
2 2N
7 2F
2 2G
20 2K
1 2R
1 2N
5 2G
17 2G
3 2Q
17 2K
7 2H
6 2B
7 2B
1 2M
7 2M
24 2G
1 2B
2 2B
3 2C
3 2H
6 2F
12 2A
13 2H
11 2A
5 2F
9 2F
9 2A
10 2A
6 2A
5 2A
6 2H
1 2L
2 2A
11 2K
6 2P
6 2M
5 2M
5 2Q
13 2K
1 2A
(Cont. next page)


(Cont' d)
9
14
8
12
10
1
7 2N
7 2P
7 2S
11 2G
23 2G
4 2F
3 2F
6 2C
10 2H
10 2G
3 2A
6 2N
6 2R
9 2G
4 2M
7 2G
19 2G
15 2K
6 2Q
22 2G
4 2S
16 2K
6 2S
1 2K
15
23
13
19
6
Body ECU
24
11
4
20
5
2
7
5 2P
5 2O
9 2D
8 2G
20 2G
4 2P
7 2D
4 2L
11 2B
2 2D
11 2H
12 2H
5 2C
8 2Q
8 2S
3 2S
7 2K
1 2S
10 2K
1 2P
1 2Q
14 2G
5 2S
4 2K

Position of Parts in Engine Compartment

[LHD : 1MZ–FE]



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Lock Sensor
A/C Magnetic Clutch
A 4 A/T Indicator Light SW
Back–Up Light SW
Neutral Start SW
A 5 ABS Speed Sensor Front LH
A 6 ABS Speed Sensor Front RH
A 7 Air Flow Meter
A 8 Airbag Sensor Front LH
A 9 Airbag Sensor Front RH
A 10 Alternator
A 11 Alternator

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

C 1 Camshaft Position Sensor
C 3 Counter Gear Speed Sensor
C 4 Crankshaft Position Sensor
C 5 Cruise Control Actuator

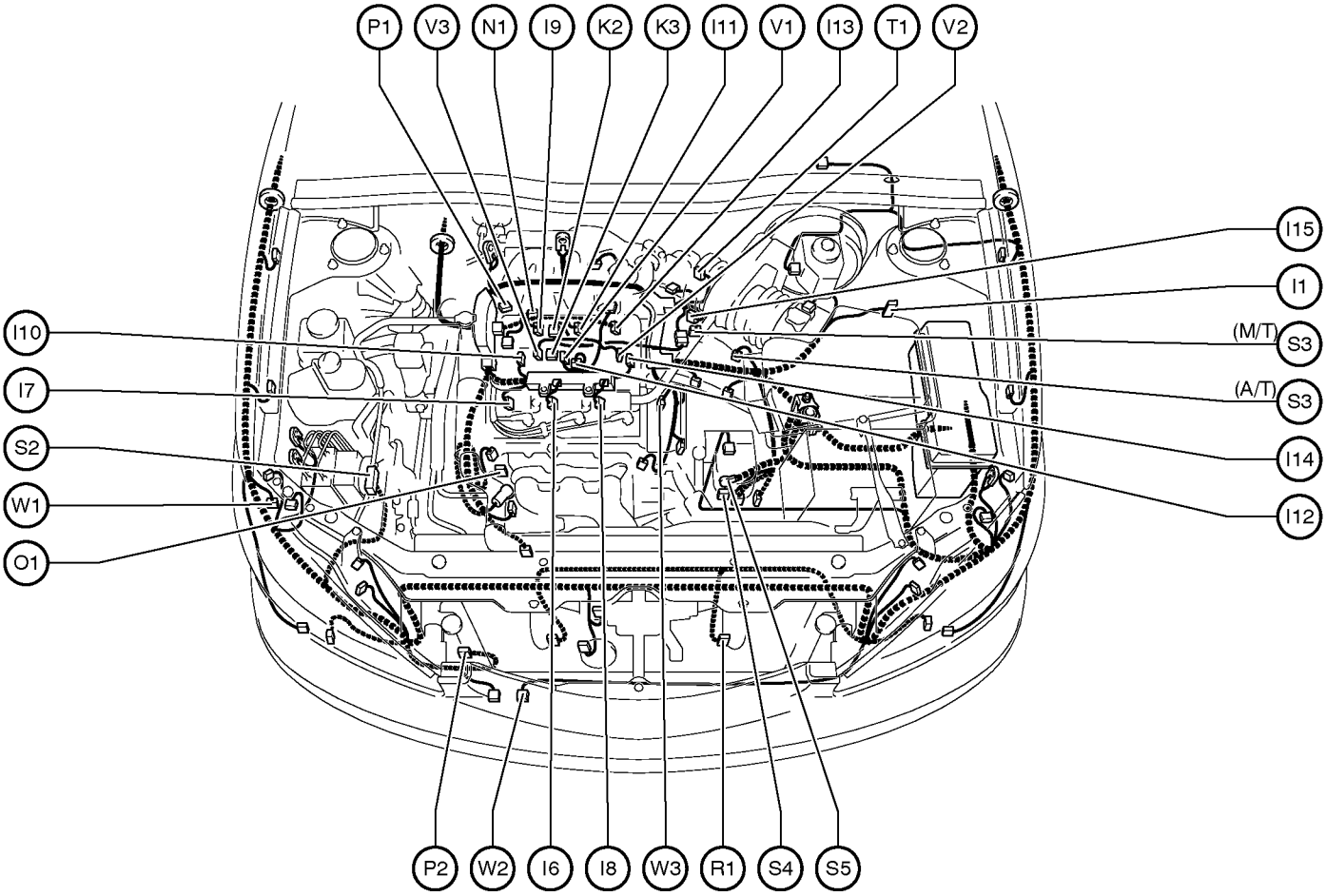
E 1 ECT Solenoid
E 2 EFI Water Temp. Sensor
E 3 EGR Gas Temp. Sensor
E 4 EGR Valve Position Sensor

F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
F 3 Front Fog Light LH
F 4 Front Fog Light RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
F 9 Front Wiper Motor

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

Position of Parts in Engine Compartment

[LHD : 1MZ–FE]



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

K 2 Knock Sensor No.1
K 3 Knock Sensor No.2

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Power Steering Oil Pressure SW
P 2 Pressure SW

R 1 Radiator Fan Motor

S 2 Skid Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

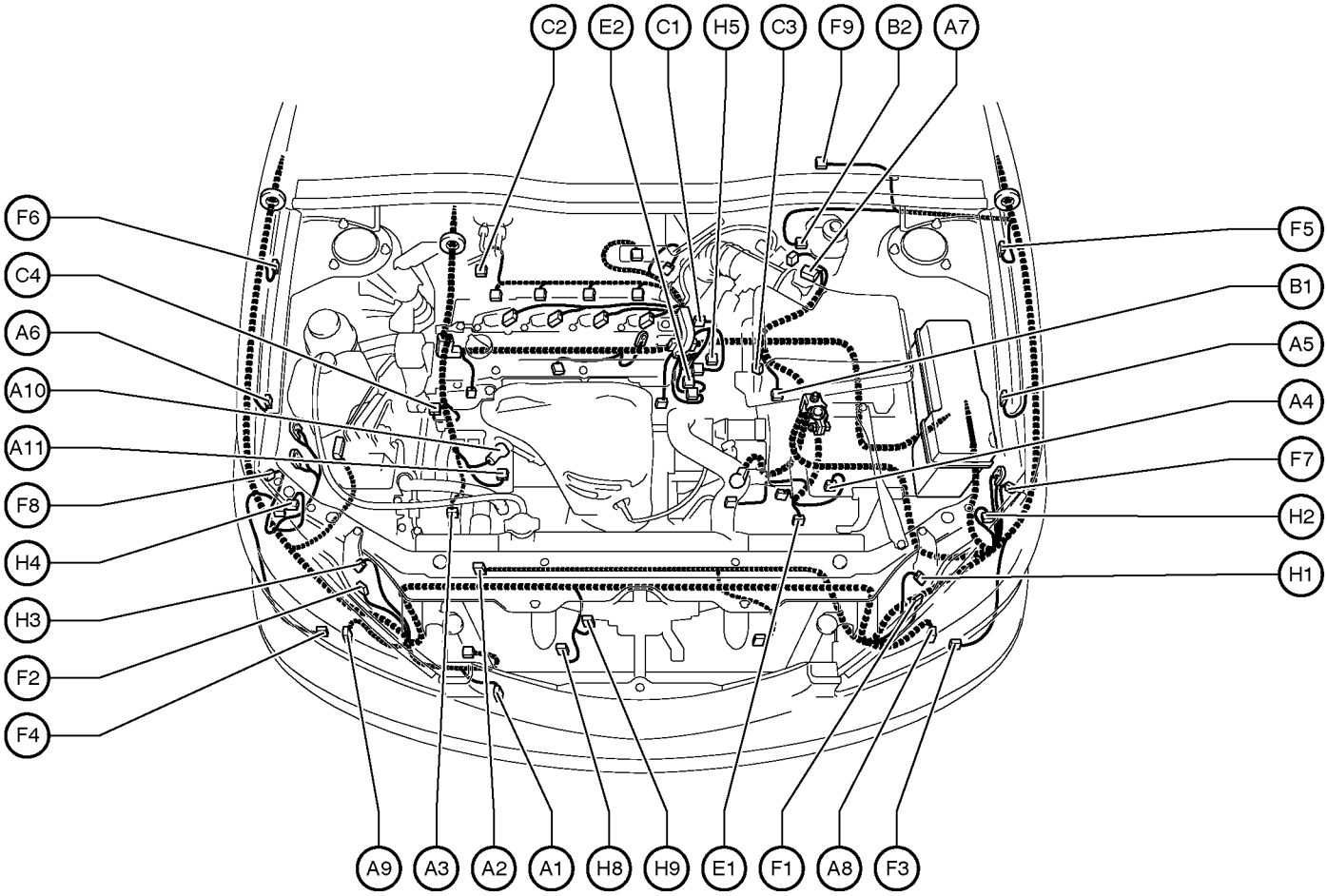
T 1 Throttle Position Sensor

V 1 VSV (ACIS)
V 2 VSV (EGR)
V 3 VSV (EVAP)

W 1 Washer Motor
W 2 Water Temp. SW No.1
W 3 Water Temp. SW No.2

Position of Parts in Engine Compartment

[LHD : 2AZ–FE]



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Lock Sensor
A/C Magnetic Clutch
A 4 A/T Indicator Light SW
Back–Up Light SW
Neutral Start SW
A 5 ABS Speed Sensor Front LH
A 6 ABS Speed Sensor Front RH
A 7 Air Flow Meter
A 8 Airbag Sensor Front LH
A 9 Airbag Sensor Front RH
A10 Alternator
A11 Alternator

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

C 1 Camshaft Position Sensor
C 2 Camshaft Timing Oil Control Valve
C 3 Counter Gear Speed Sensor
C 4 Crankshaft Position Sensor

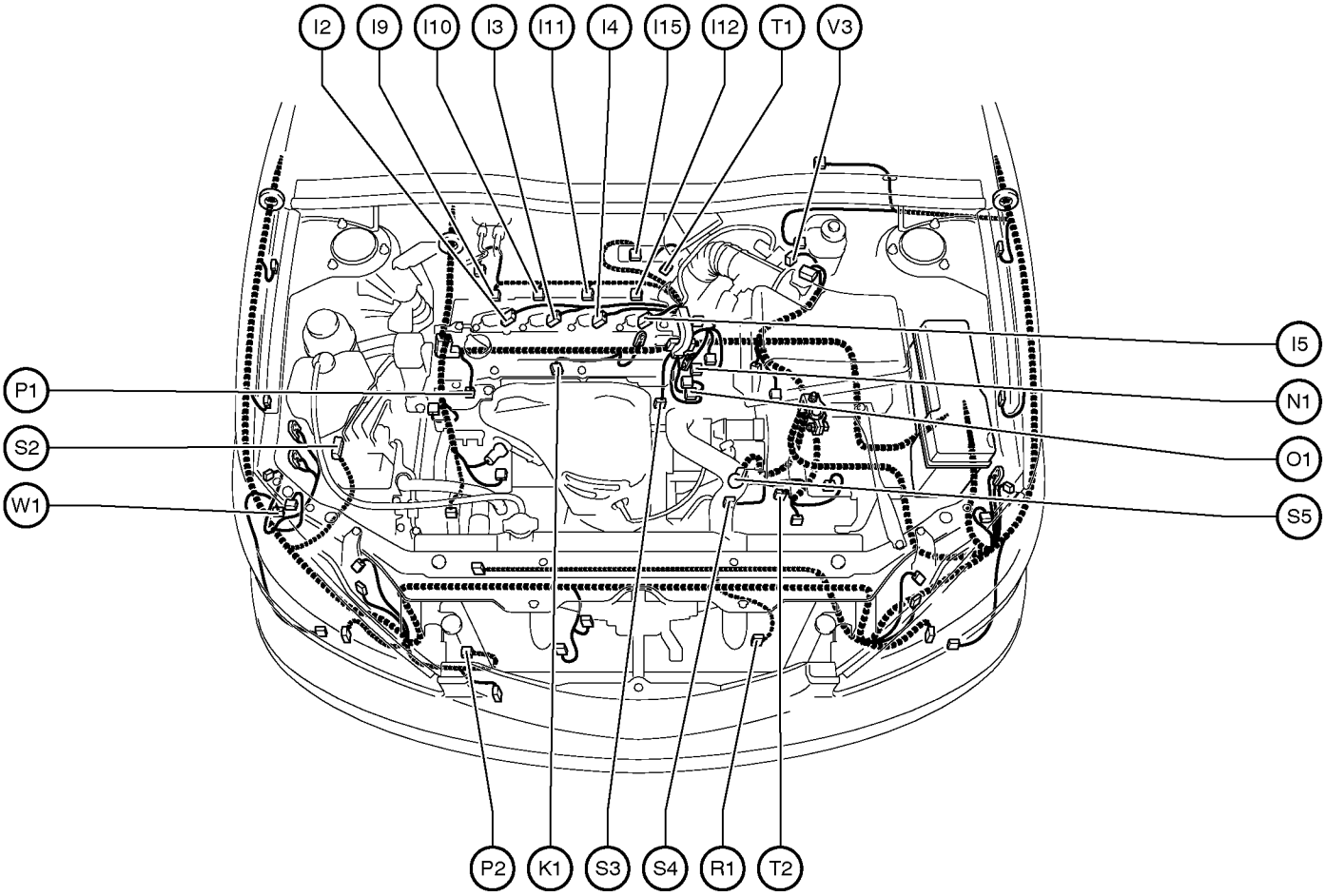
E 1 ECT Solenoid
E 2 EFI Water Temp. Sensor

F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
F 3 Front Fog Light LH
F 4 Front Fog Light RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
F 9 Front Wiper Motor

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

Position of Parts in Engine Compartment

[LHD : 2AZ–FE]



I 2 Ignition Coil and Igniter No.1
I 3 Ignition Coil and Igniter No.2
I 4 Ignition Coil and Igniter No.3
I 5 Ignition Coil and Igniter No.4
I 9 Injector No.1
I 10 Injector No.2
I 11 Injector No.3
I 12 Injector No.4
I 15 ISC Valve

K 1 Knock Sensor

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Power Steering Oil Pressure SW
P 2 Pressure SW

R 1 Radiator Fan Motor

S 2 Skid Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

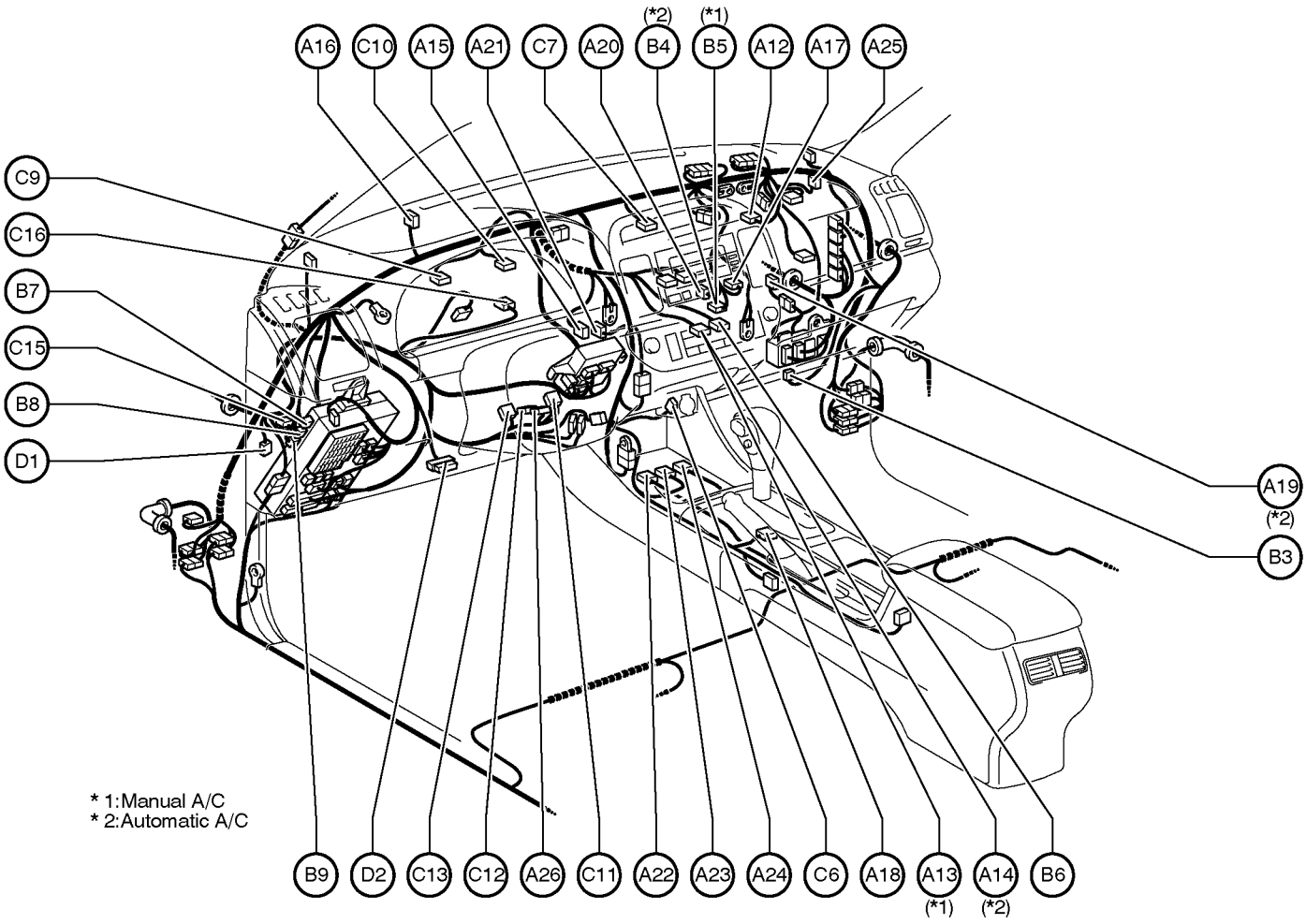
T 1 Throttle Position Sensor
T 2 Turbine Speed Sensor

V 3 VSV (EVAP)

W 1 Washer Motor

Position of Parts in Instrument Panel

[LHD]



A 12 A/C Amplifier
A 13 A/C Control Assembly
A 14 A/C Control Assembly
A 15 A/C Room Temp. Sensor
A 16 A/C Solar Sensor
A 17 A/C Thermistor
A 18 A/T Shift Lever Illumination
O/D Main SW
A 19 Air Inlet Control Servo Motor
A 20 Air Mix Control Servo Motor
A 21 Air Vent Mode Control Servo Motor
A 22 Airbag Sensor Assembly
A 23 Airbag Sensor Assembly
A 24 Airbag Sensor Assembly
A 25 Airbag Squib (Front Passenger Airbag Assembly)
A 26 Airbag Squib (Steering Wheel Pad)

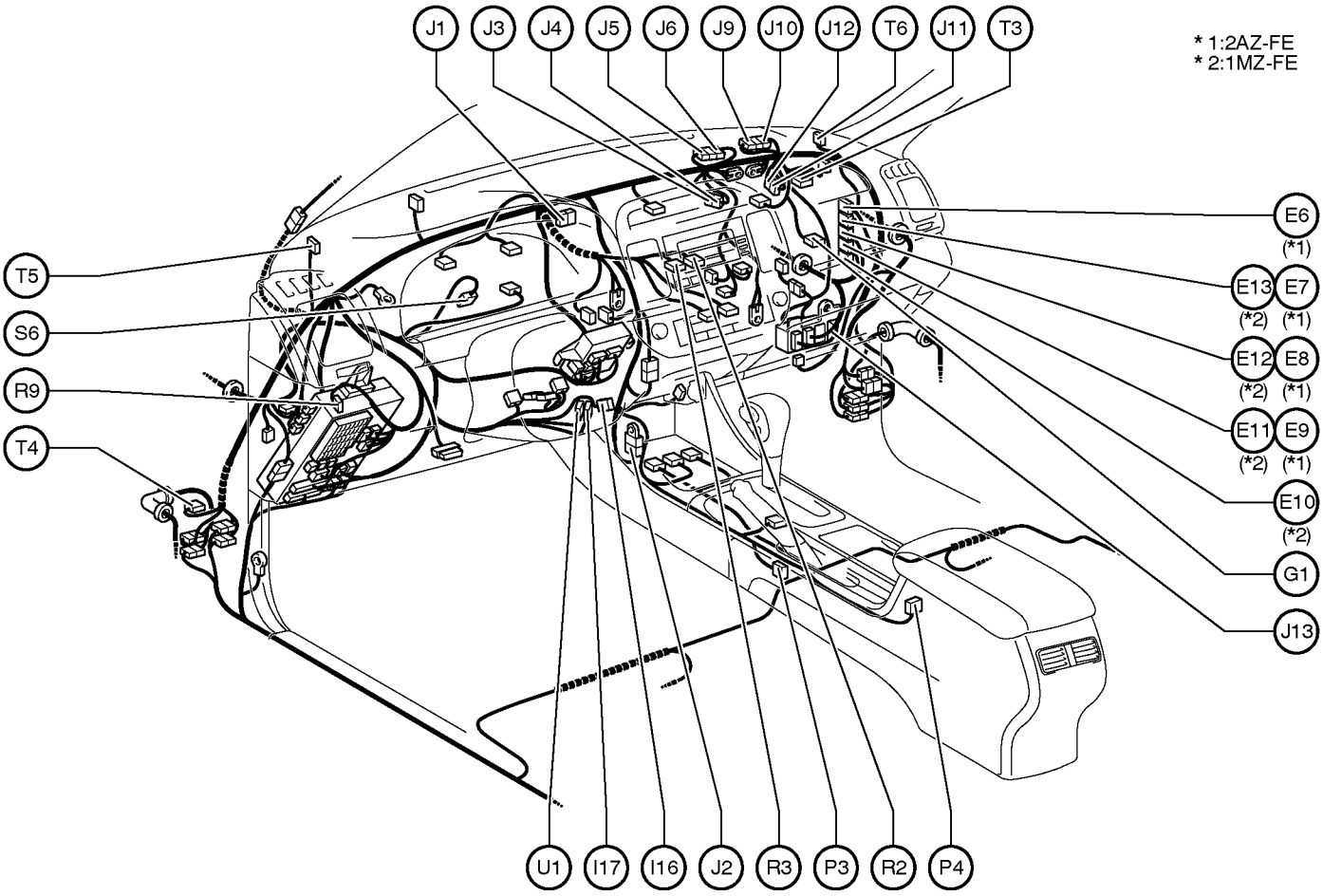
B 3 Blower Motor
B 4 Blower Motor Controller
B 5 Blower Resister
B 6 Blower SW
B 7 Body ECU
B 8 Body ECU
B 9 Body ECU

C 6 Cigarette Light Illumination
Cigarette Lighter
C 7 Clock
C 9 Combination Meter
C 10 Combination Meter
C 11 Combination SW
C 12 Combination SW
C 13 Combination SW
C 15 Cruise Control Clutch SW
C 16 Cruise Control ECU

D 1 Diode (A/C)
D 2 DLC3

Position of Parts in Instrument Panel

[LHD]



E 6 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 7 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 8 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 9 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 10 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 11 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 12 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 13 Engine and ECT ECU (A/T)
Engine ECU (M/T)

G 1 Glove Box Light and SW

I 16 Ignition Key Cylinder Light
Transponder Key Amplifier
I 17 Ignition SW

J 1 Junction Connector
J 2 Junction Connector
J 3 Junction Connector
J 4 Junction Connector
J 5 Junction Connector
J 6 Junction Connector
J 9 Junction Connector
J 10 Junction Connector
J 11 Junction Connector
J 12 Junction Connector
J 13 Junction Connector

P 3 Parking Brake SW
P 4 Power Outlet

R 2 Radio and Player
R 3 Radio and Player
R 9 Rheostat

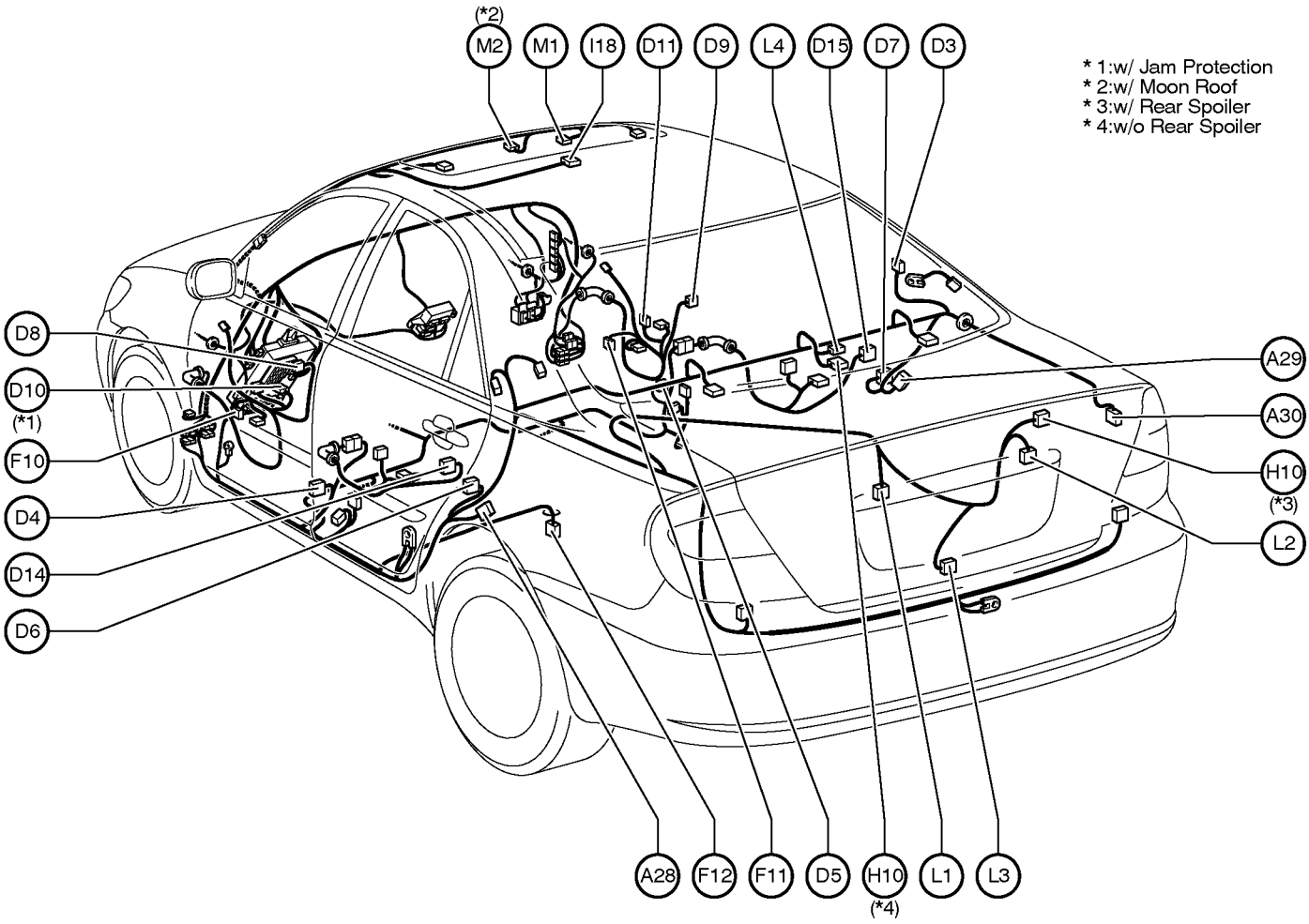
S 6 Stop Light SW

T 3 Transponder Key Computer
T 4 Turn Signal Flasher Relay
T 5 Tweeter LH
T 6 Tweeter RH

U 1 Unlock Warning SW

Position of Parts in Body

[LHD]



A 28 ABS Speed Sensor Rear LH
A 29 ABS Speed Sensor Rear RH
A 30 Auto Antenna Control Relay

D 3 Door Control Receiver
D 4 Door Courtesy SW Front LH
D 5 Door Courtesy SW Front RH
D 6 Door Courtesy SW Rear LH
D 7 Door Courtesy SW Rear RH
D 8 Door Key Lock and Unlock SW Front LH
Door Lock Motor Front LH
Door Unlock Detection SW Front LH
D 9 Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D10 Door Lock Control SW Front LH
Power Window Master SW
D 11 Door Lock Control SW Front RH
D14 Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
D15 Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH

F 10 Front Door Speaker LH
F 11 Front Door Speaker RH
F 12 Fuel Pump
Fuel Sender

H10 High Mounted Stop Light

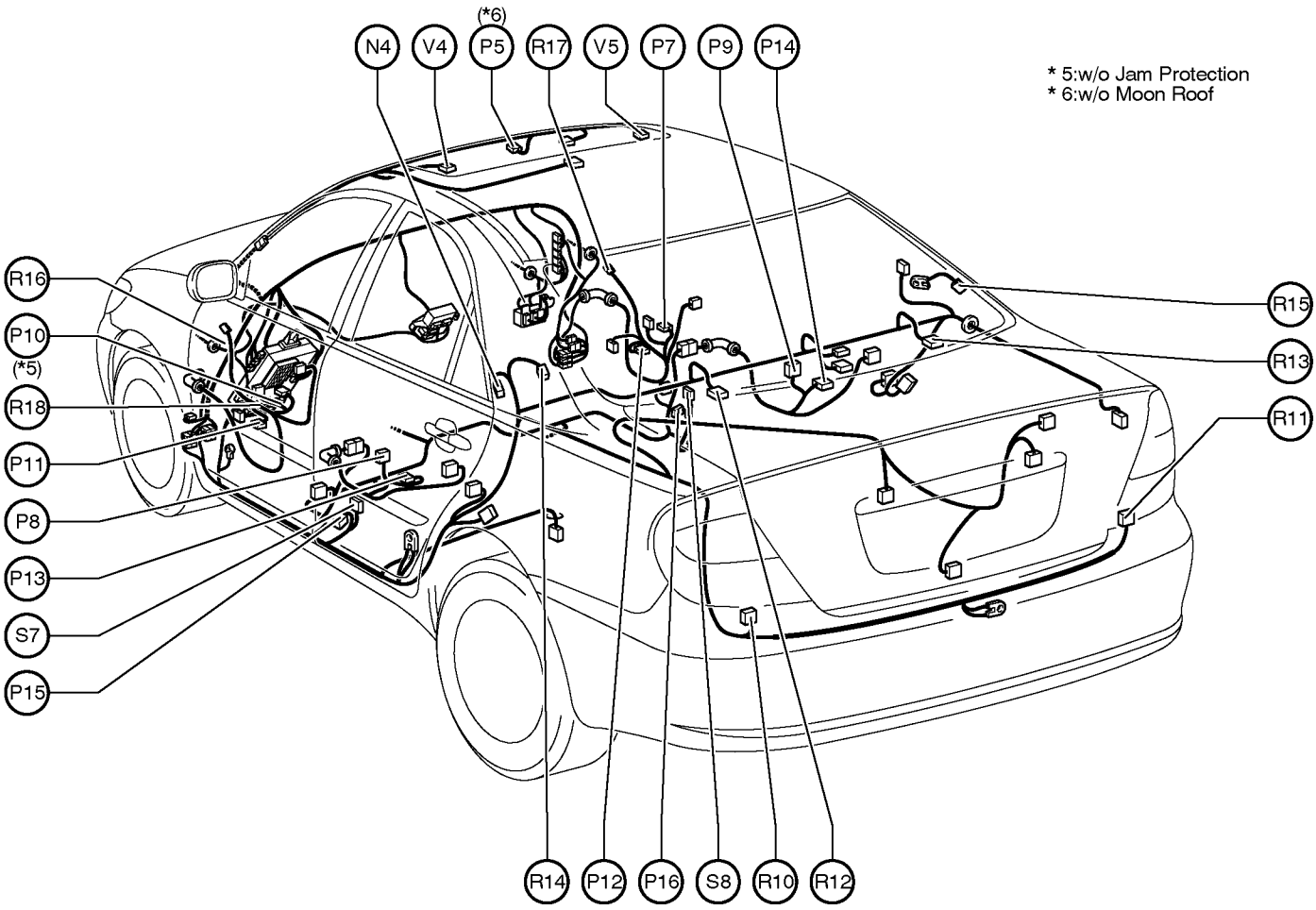
I 18 Interior Light

L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Luggage Compartment Door Opener Motor
Luggage Compartment Light SW
L 4 Luggage Compartment Light

M 1 Moon Roof Control ECU and Motor
M 2 Moon Roof Control SW
Personal Light

Position of Parts in Body

[LHD]



N 4 Noise Filter

P 5 Personal Light
P 7 Power Window Control SW Front RH
P 8 Power Window Control SW Rear LH
P 9 Power Window Control SW Rear RH
P 10 Power Window Master SW
P 11 Power Window Motor Front LH
P 12 Power Window Motor Front RH
P 13 Power Window Motor Rear LH
P 14 Power Window Motor Rear RH
P 15 Pretensioner LH
P 16 Pretensioner RH

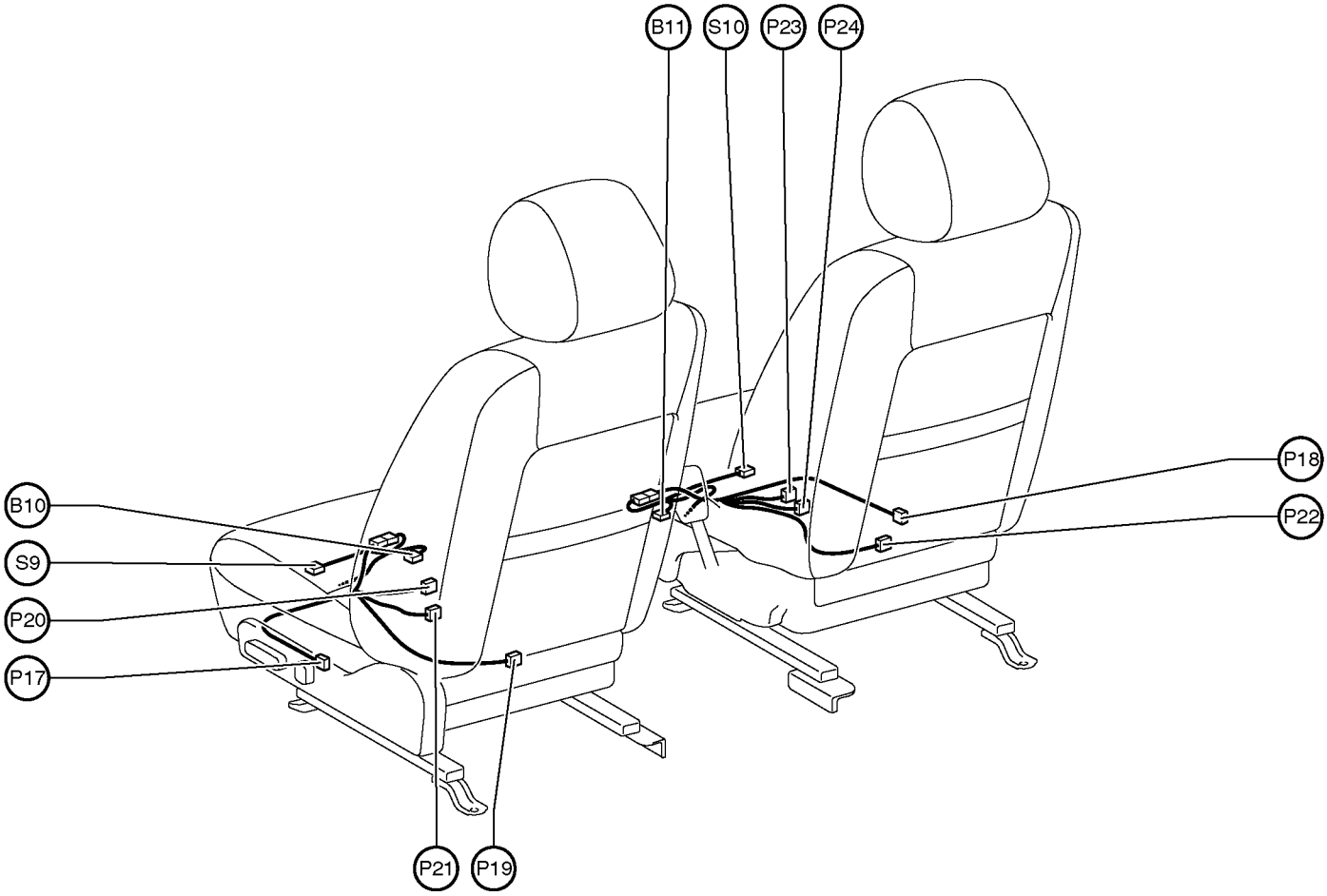
R 10 Rear Combination Light LH
R 11 Rear Combination Light RH
R 12 Rear Speaker LH
R 13 Rear Speaker RH
R 14 Rear Window Defogger
R 15 Rear Window Defogger
R 16 Remote Control Mirror LH
R 17 Remote Control Mirror RH
R 18 Remote Control Mirror SW

S 7 Side Airbag Sensor LH
S 8 Side Airbag Sensor RH

V 4 Vanity Light LH
V 5 Vanity Light RH

Position of Parts in Seat

[LHD]



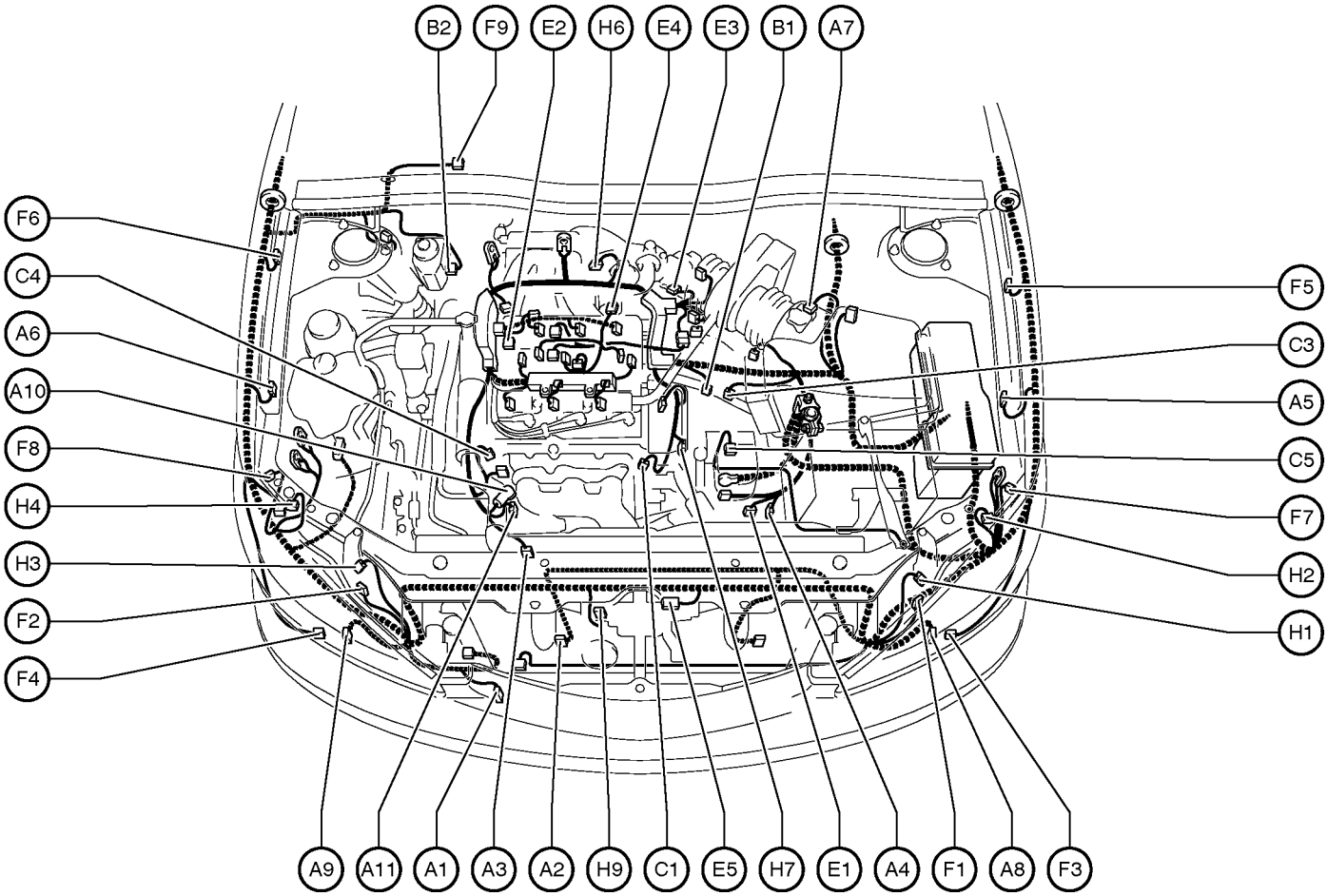
B 10 Buckle SW LH
B 11 Buckle SW RH
Occupant Detection Sensor

S 9 Side Airbag Squib LH
S 10 Side Airbag Squib RH

P 17 Power Seat Control SW (Driver's Seat)
P 18 Power Seat Control SW (Front Passenger's Seat)
P 19 Power Seat Motor (Driver's Seat Rear Vertical Control)
P 20 Power Seat Motor (Driver's Seat Reclining Control)
P 21 Power Seat Motor (Driver's Seat Slide Control)
P 22 Power Seat Motor
(Front Passenger's Seat Rear Vertical Control)
P 23 Power Seat Motor
(Front Passenger's Seat Reclining Control)
P 24 Power Seat Motor
(Front Passenger's Seat Slide Control)

Position of Parts in Engine Compartment

[RHD : 1MZ–FE]



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Lock Sensor
A/C Magnetic Clutch
A 4 A/T Indicator Light SW
Back–Up Light SW
Neutral Start SW
A 5 ABS Speed Sensor Front LH
A 6 ABS Speed Sensor Front RH
A 7 Air Flow Meter
A 8 Airbag Sensor Front LH
A 9 Airbag Sensor Front RH
A 10 Alternator
A 11 Alternator

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

C 1 Camshaft Position Sensor
C 3 Counter Gear Speed Sensor
C 4 Crankshaft Position Sensor
C 5 Cruise Control Actuator

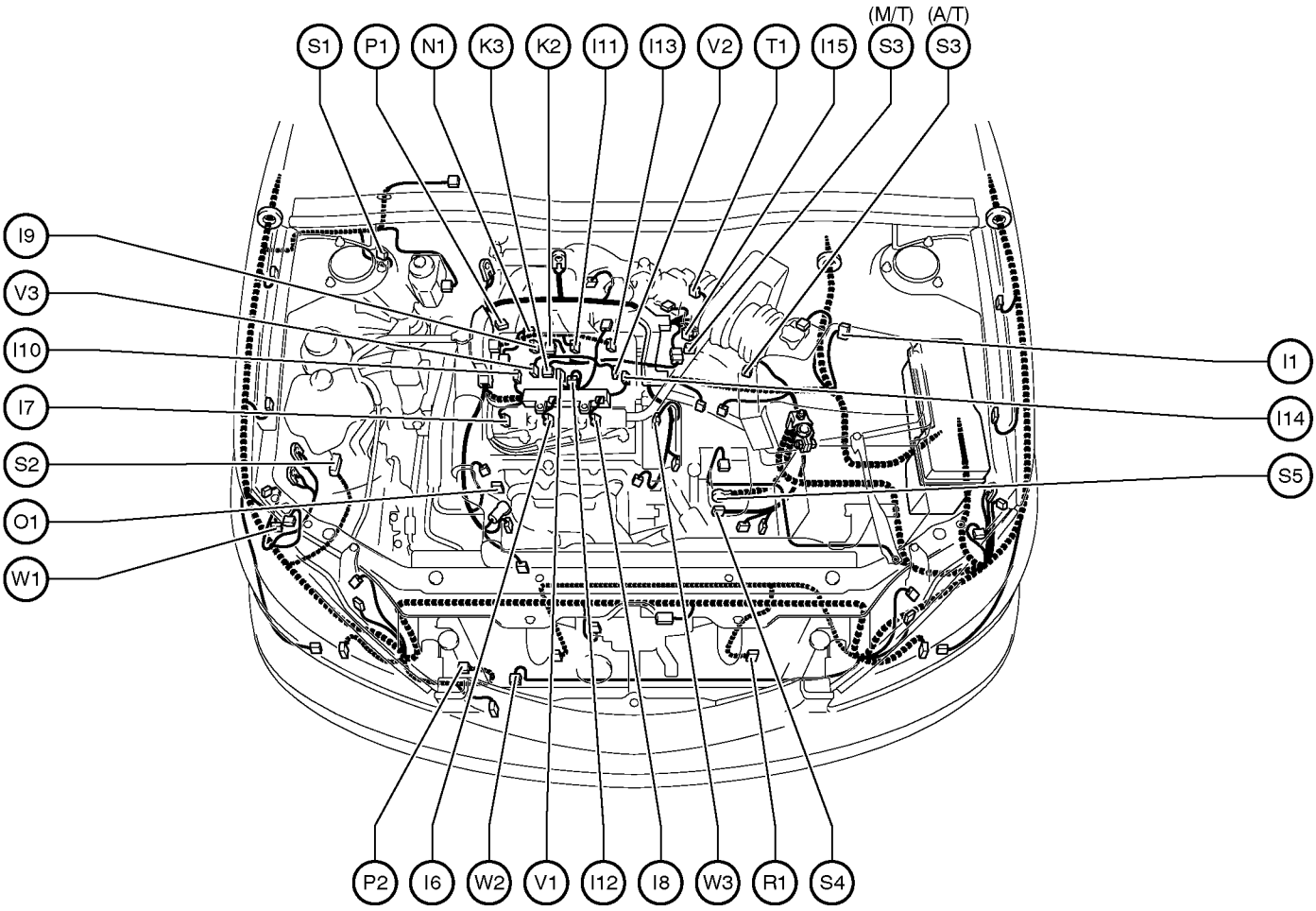
E 1 ECT Solenoid
E 2 EFI Water Temp. Sensor
E 3 EGR Gas Temp. Sensor
E 4 EGR Valve Position Sensor
E 5 Engine Hood Courtesy SW

F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
F 3 Front Fog Light LH
F 4 Front Fog Light RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
F 9 Front Wiper Motor

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

Position of Parts in Engine Compartment

[RHD : 1MZ–FE]



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

K 2 Knock Sensor No.1
K 3 Knock Sensor No.2

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Power Steering Oil Pressure SW
P 2 Pressure SW

R 1 Radiator Fan Motor

S 1 Security Horn
S 2 Skid Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

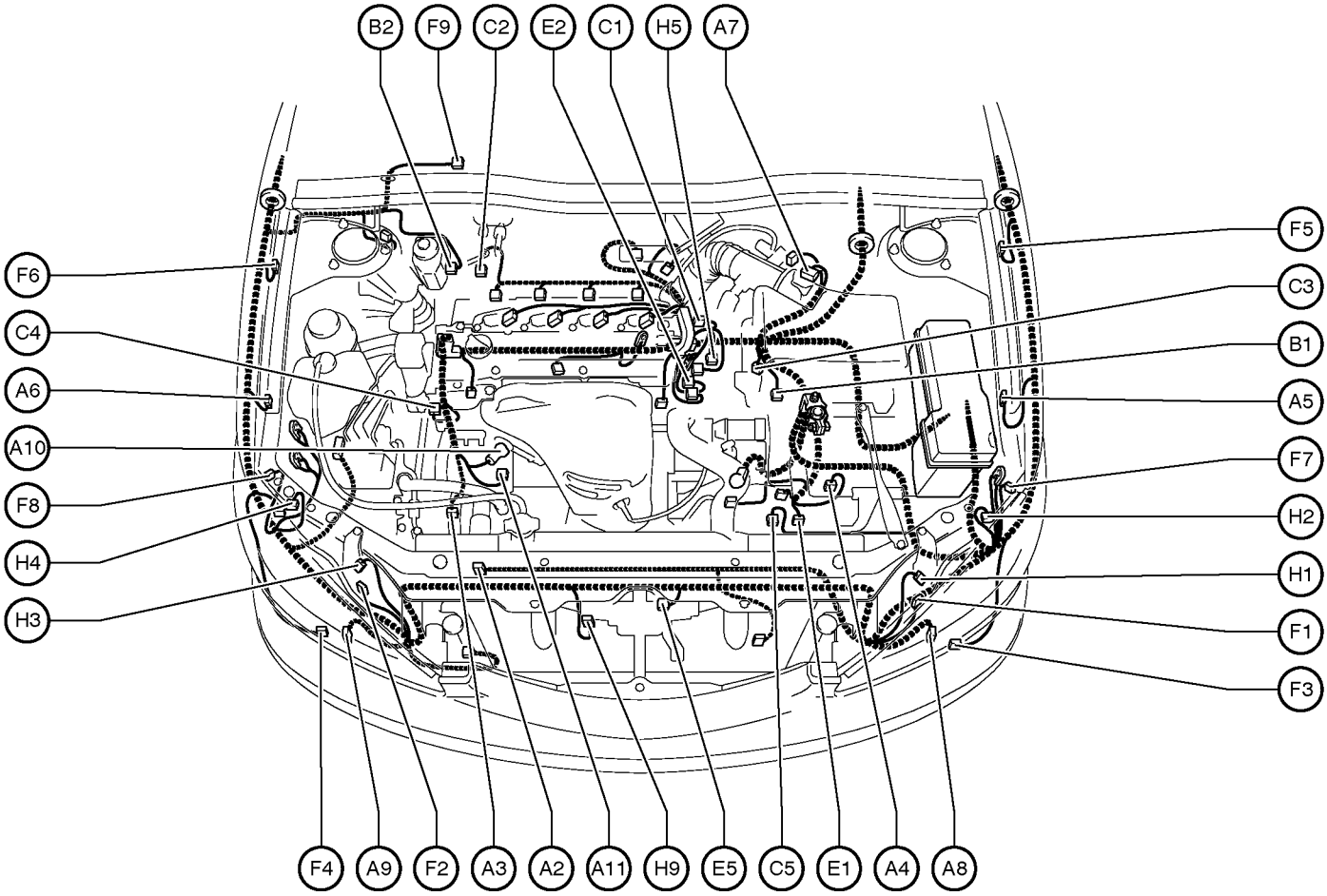
T 1 Throttle Position Sensor

V 1 VSV (ACIS)
V 2 VSV (EGR)
V 3 VSV (EVAP)

W 1 Washer Motor
W 2 Water Temp. SW No.1
W 3 Water Temp. SW No.2

Position of Parts in Engine Compartment

[RHD : 2AZ–FE]



A 1 A/C Ambient Temp. Sensor
A 2 A/C Condenser Fan Motor
A 3 A/C Lock Sensor
A/C Magnetic Clutch
A 4 A/T Indicator Light SW
Back–Up Light SW
Neutral Start SW
A 5 ABS Speed Sensor Front LH
A 6 ABS Speed Sensor Front RH
A 7 Air Flow Meter
A 8 Airbag Sensor Front LH
A 9 Airbag Sensor Front RH
A 10 Alternator
A 11 Alternator

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

C 1 Camshaft Position Sensor
C 2 Camshaft Timing Oil Control Valve
C 3 Counter Gear Speed Sensor
C 4 Crankshaft Position Sensor
C 5 Cruise Control Actuator

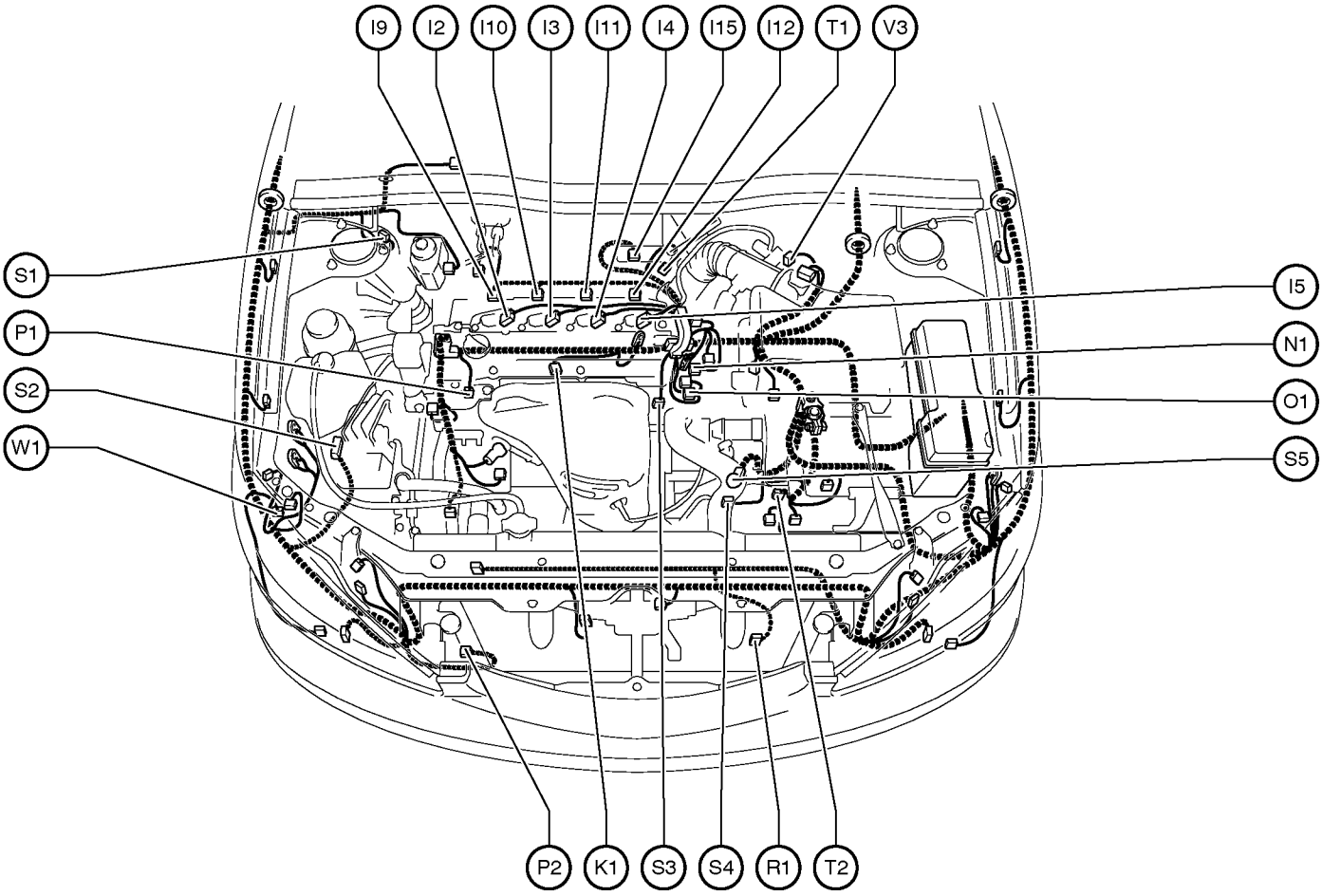
E 1 ECT Solenoid
E 2 EFI Water Temp. Sensor
E 5 Engine Hood Courtesy SW

F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
F 3 Front Fog Light LH
F 4 Front Fog Light RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
F 9 Front Wiper Motor

H 1 Headlight LH (High)
H 2 Headlight LH (Low)
H 3 Headlight RH (High)
H 4 Headlight RH (Low)
H 5 Heated Oxygen Sensor
H 9 Horn (Low)

Position of Parts in Engine Compartment

[RHD : 2AZ–FE]



I 2 Ignition Coil and Igniter No.1
I 3 Ignition Coil and Igniter No.2
I 4 Ignition Coil and Igniter No.3
I 5 Ignition Coil and Igniter No.4
I 9 Injector No.1
I 10 Injector No.2
I 11 Injector No.3
I 12 Injector No.4
I 15 ISC Valve

K 1 Knock Sensor

N 1 Noise Filter (Ignition)

O 1 Oil Pressure SW

P 1 Power Steering Oil Pressure SW
P 2 Pressure SW

R 1 Radiator Fan Motor

S 1 Security Horn
S 2 Skid Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

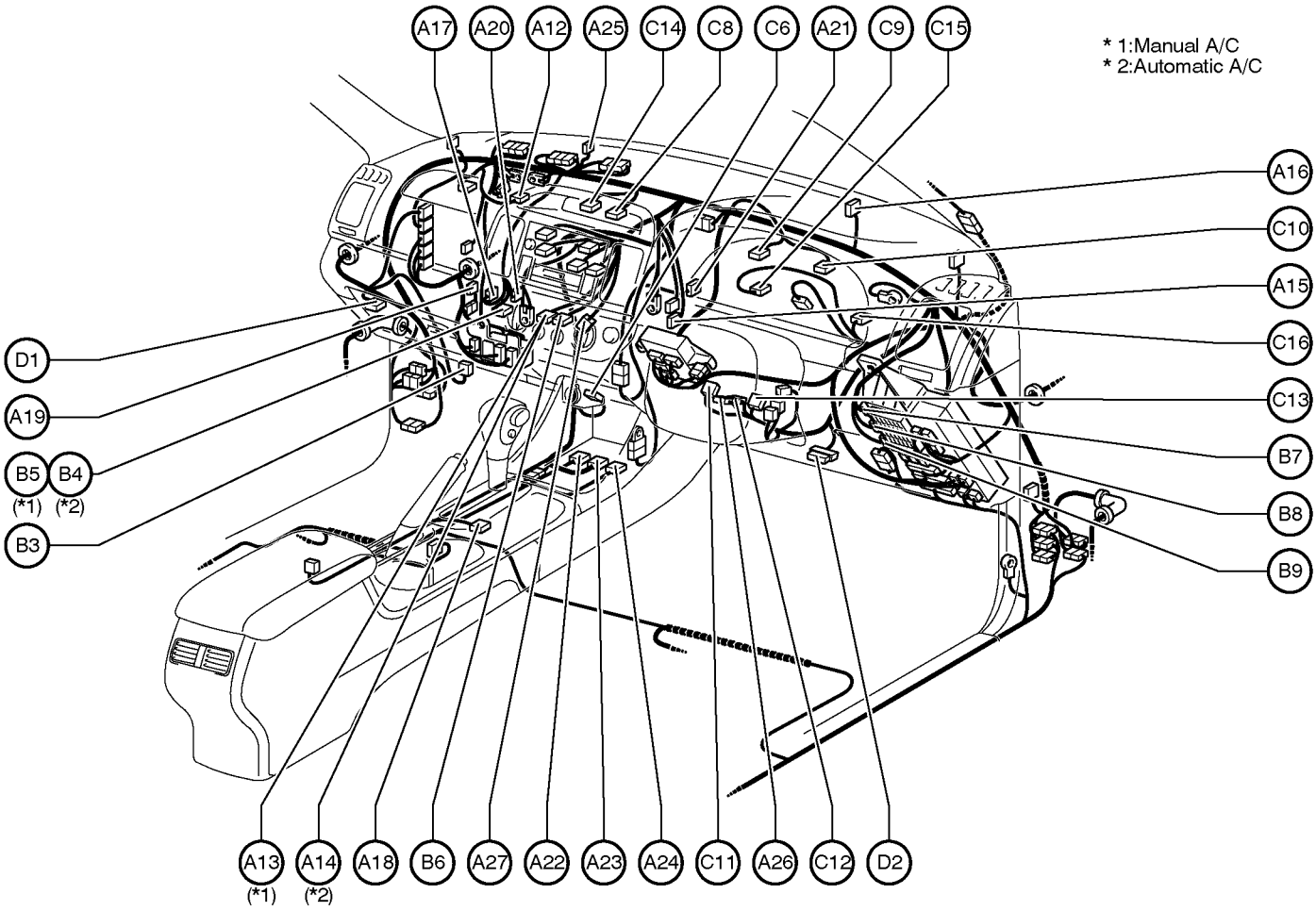
T 1 Throttle Position Sensor
T 2 Turbine Speed Sensor

V 3 VSV (EVAP)

W 1 Washer Motor

Position of Parts in Instrument Panel

[RHD]



A 12 A/C Amplifier
A 13 A/C Control Assembly
A 14 A/C Control Assembly
A 15 A/C Room Temp. Sensor
A 16 A/C Solar Sensor
A 17 A/C Thermistor
A 18 A/T Shift Lever Illumination
O/D Main SW
A 19 Air Inlet Control Servo Motor
A 20 Air Mix Control Servo Motor
A 21 Air Vent Mode Control Servo Motor
A 22 Airbag Sensor Assembly
A 23 Airbag Sensor Assembly
A 24 Airbag Sensor Assembly
A 25 Airbag Squib (Front Passenger Airbag Assembly)
A 26 Airbag Squib (Steering Wheel Pad)
A 27 Antenna Amplifier

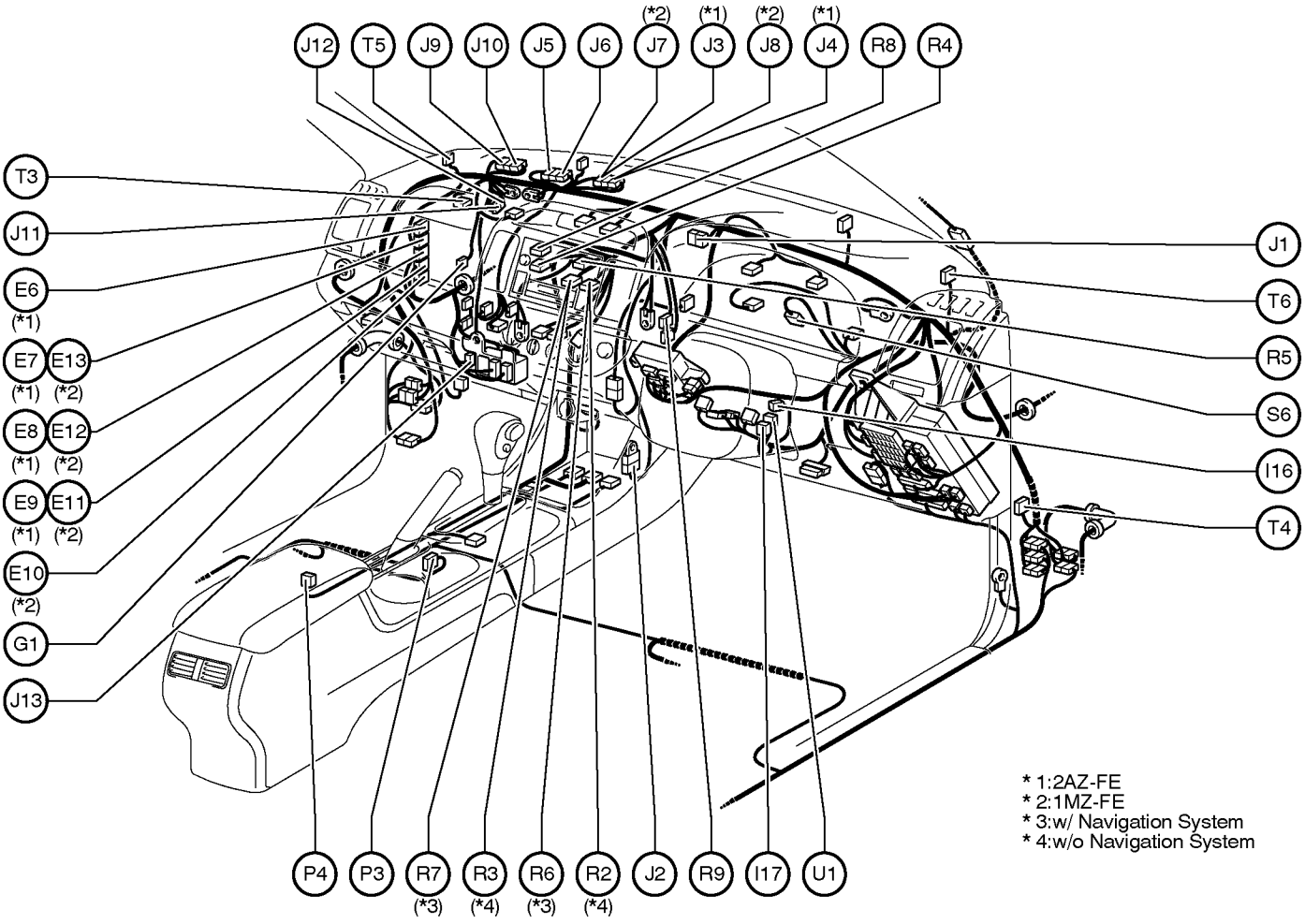
B 3 Blower Motor
B 4 Blower Motor Controller
B 5 Blower Resister
B 6 Blower SW
B 7 Body ECU
B 8 Body ECU
B 9 Body ECU

C 6 Cigarette Light Illumination
Cigarette Lighter
C 8 Clock
Door Control Receiver
C 9 Combination Meter
C 10 Combination Meter
C 11 Combination SW
C 12 Combination SW
C 13 Combination SW
C 14 Combination SW
C 15 Cruise Control Clutch SW
C 16 Cruise Control ECU

D 1 Diode (A/C)
D 2 DLC3

Position of Parts in Instrument Panel

[RHD]



E 6 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 7 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 8 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 9 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 10 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 11 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 12 Engine and ECT ECU (A/T)
Engine ECU (M/T)
E 13 Engine and ECT ECU (A/T)
Engine ECU (M/T)

G 1 Glove Box Light and SW

I 16 Ignition Key Cylinder Light
Transponder Key Amplifier
I 17 Ignition SW

J 1 Junction Connector
J 2 Junction Connector
J 3 Junction Connector
J 4 Junction Connector
J 5 Junction Connector
J 6 Junction Connector
J 7 Junction Connector
J 8 Junction Connector
J 9 Junction Connector
J 10 Junction Connector
J 11 Junction Connector
J 12 Junction Connector
J 13 Junction Connector

P 3 Parking Brake SW
P 4 Power Outlet

R 2 Radio and Player
R 3 Radio and Player
R 4 Radio and Player with Display
R 5 Radio and Player with Display
R 6 Radio and Player with Display
R 7 Radio and Player with Display
R 8 Radio and Player with Display
R 9 Rheostat

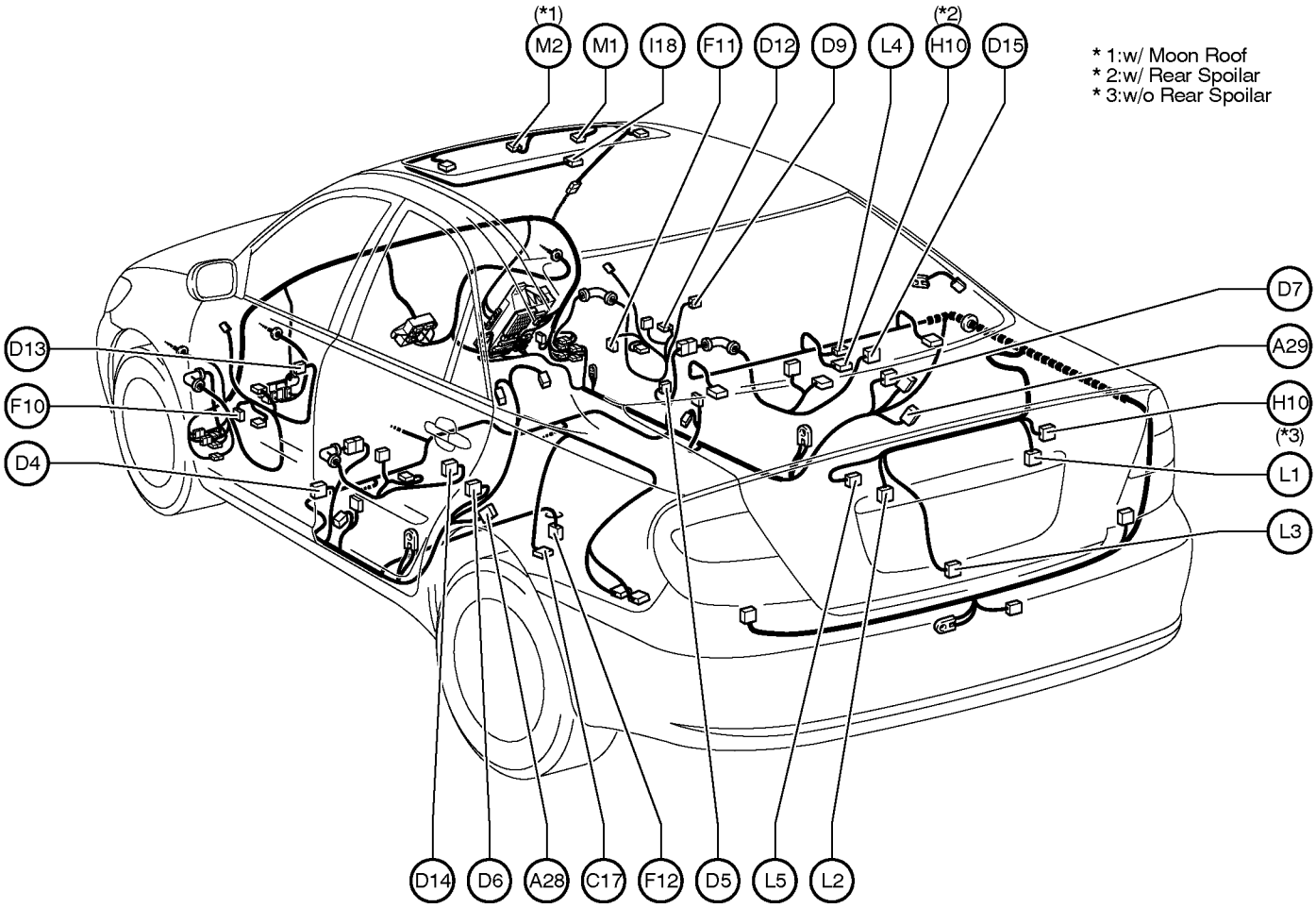
S 6 Stop Light SW

T 3 Transponder Key Computer
T 4 Turn Signal Flasher Relay
T 5 Tweeter LH
T 6 Tweeter RH

U 1 Unlock Warning SW

Position of Parts in Body

[RHD]



A 28 ABS Speed Sensor Rear LH
A 29 ABS Speed Sensor Rear RH

C 17 CD Changer

D 4 Door Courtesy SW Front LH
D 5 Door Courtesy SW Front RH
D 6 Door Courtesy SW Rear LH
D 7 Door Courtesy SW Rear RH
D 9 Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D12 Door Lock Control SW Front RH
Power Window Master SW
D13 Door Lock Motor Front LH
Door Unlock Detection SW Front LH
D14 Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
D15 Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH

F 10 Front Door Speaker LH
F 11 Front Door Speaker RH
F 12 Fuel Pump
Fuel Sender

H10 High Mounted Stop Light

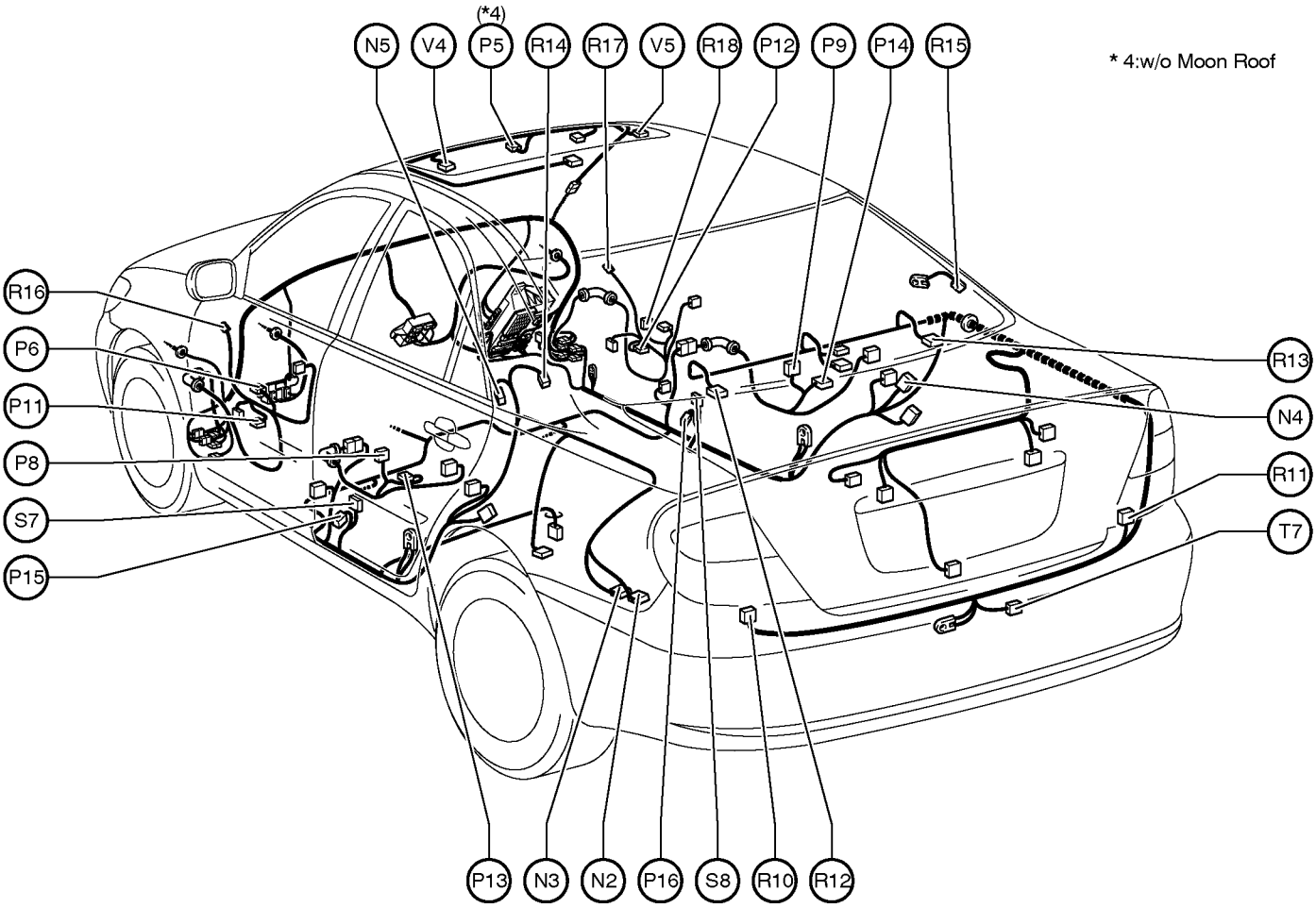
I 18 Interior Light

L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Luggage Compartment Door Opener Motor
Luggage Compartment Light SW
L 4 Luggage Compartment Light
L 5 Luggage Compartment Door Key Unlock SW

M 1 Moon Roof Control ECU and Motor
M 2 Moon Roof Control SW
Personal Light

Position of Parts in Body

[RHD]



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

P 5 Personal Light
P 6 Power Window Control SW Front LH
P 8 Power Window Control SW Rear LH
P 9 Power Window Control SW Rear RH
P 11 Power Window Motor Front LH
P 12 Power Window Motor Front RH
P 13 Power Window Motor Rear LH
P 14 Power Window Motor Rear RH
P 15 Pretensioner LH
P 16 Pretensioner RH

R 10 Rear Combination Light LH
R 11 Rear Combination Light RH
R 12 Rear Speaker LH
R 13 Rear Speaker RH
R 14 Rear Window Defogger
R 15 Rear Window Defogger
R 16 Remote Control Mirror LH
R 17 Remote Control Mirror RH
R 18 Remote Control Mirror SW

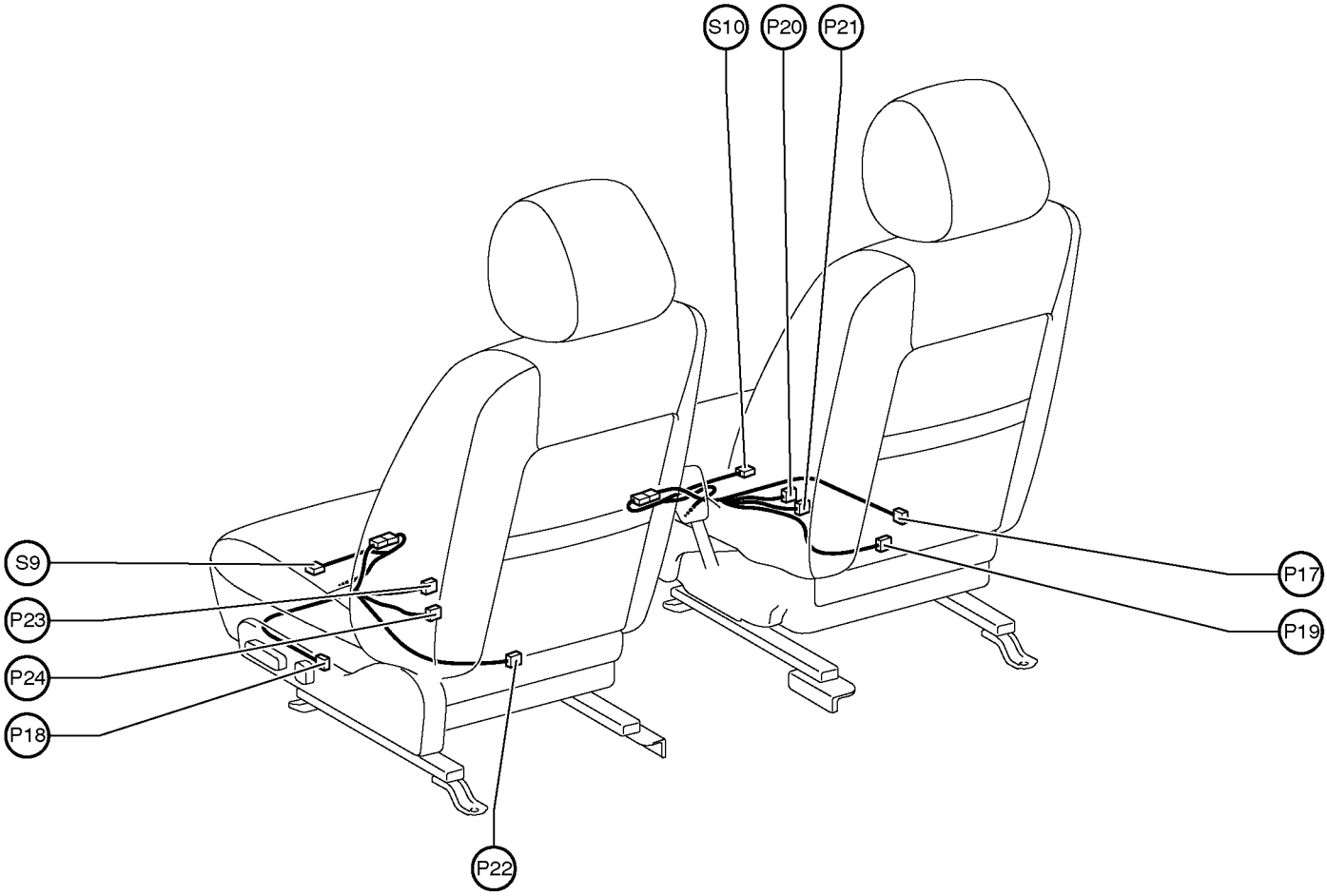
S 7 Side Airbag Sensor LH
S 8 Side Airbag Sensor RH

T 7 Trailer Socket

V 4 Vanity Light LH
V 5 Vanity Light RH

Position of Parts in Seat

[RHD]



P17 Power Seat Control SW (Driver's Seat)
P18 Power Seat Control SW (Front Passenger's Seat)
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 Rear Vertical Control)
P23 Power Seat Motor
(Front Passenger's Seat Reclining Control)
P24 Power Seat Motor
(Front Passenger's Seat Slide Control)

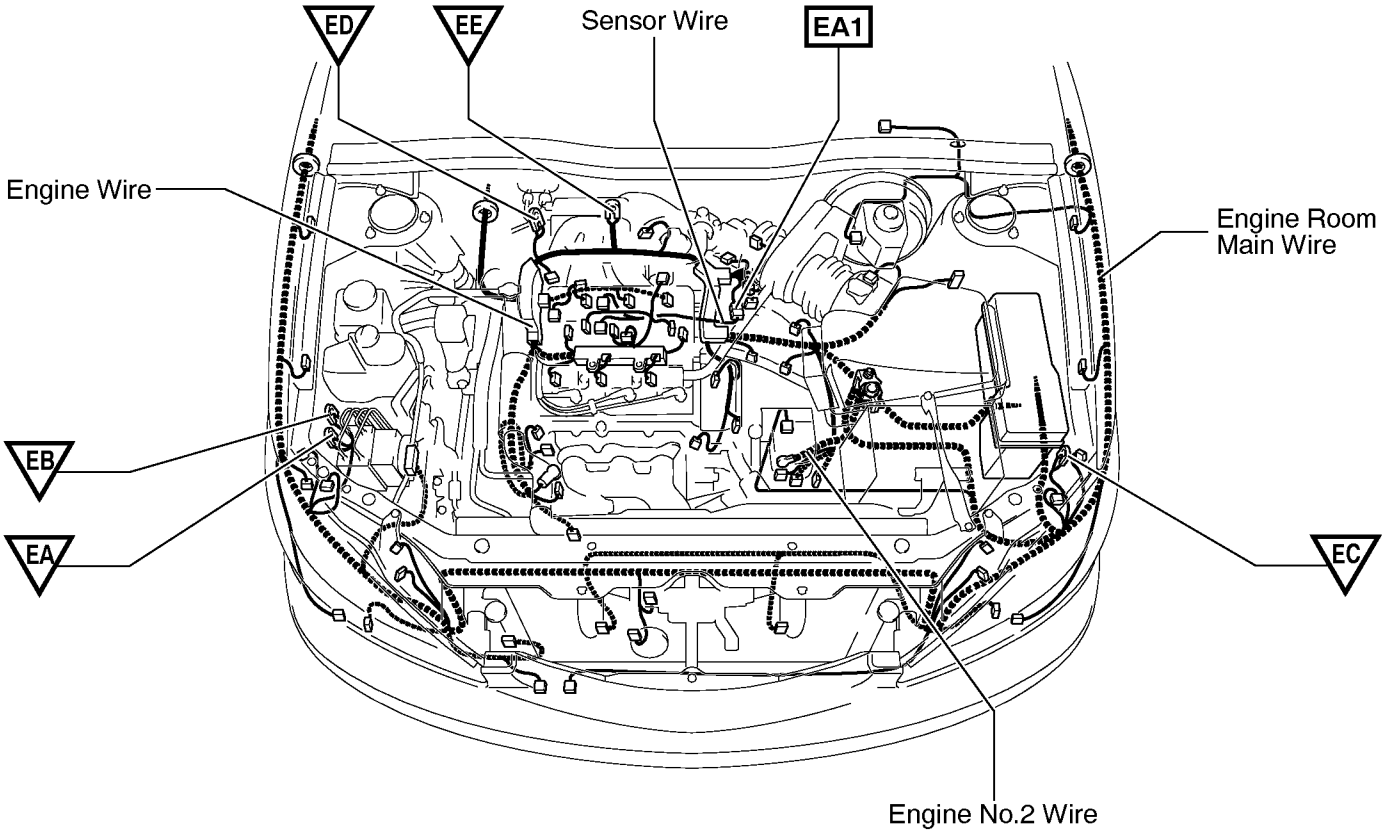
S 9 Side Airbag Squib LH
S10 Side Airbag Squib RH

Position of Parts in Engine Compartment

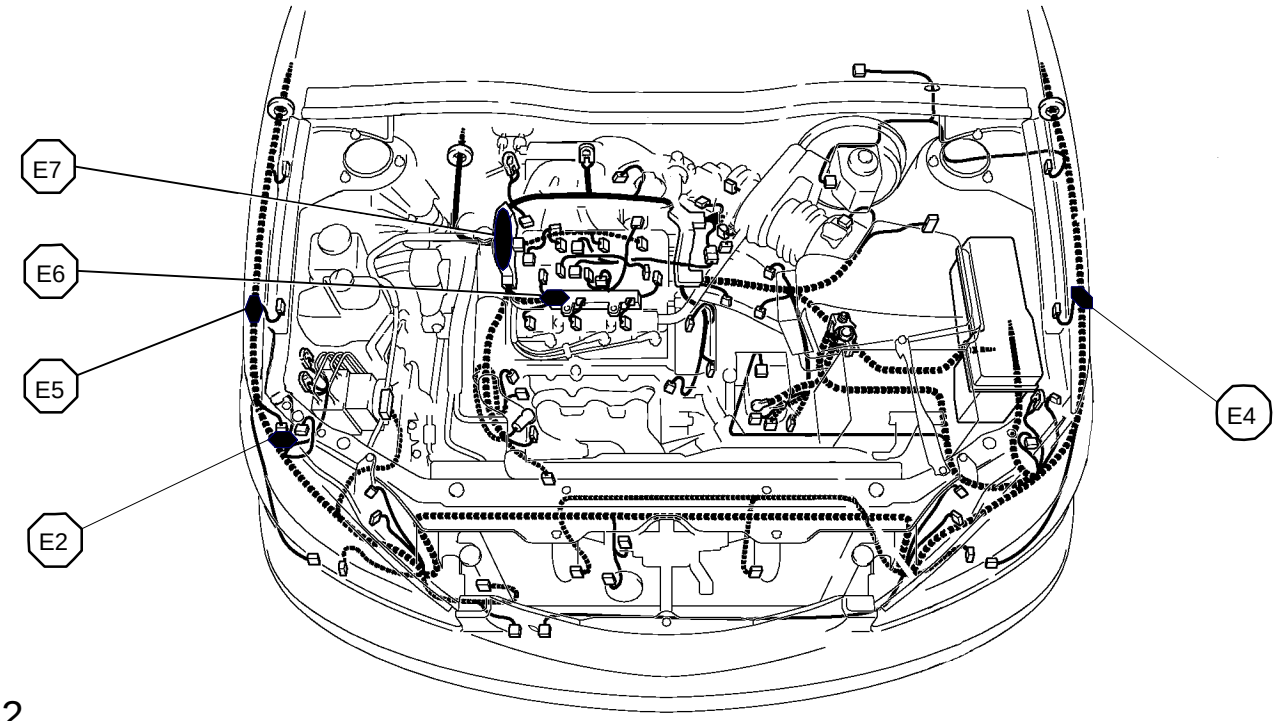
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

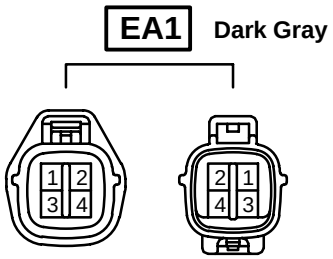
[LHD : 1MZ–FE]



⬡ : Location of Splice Points



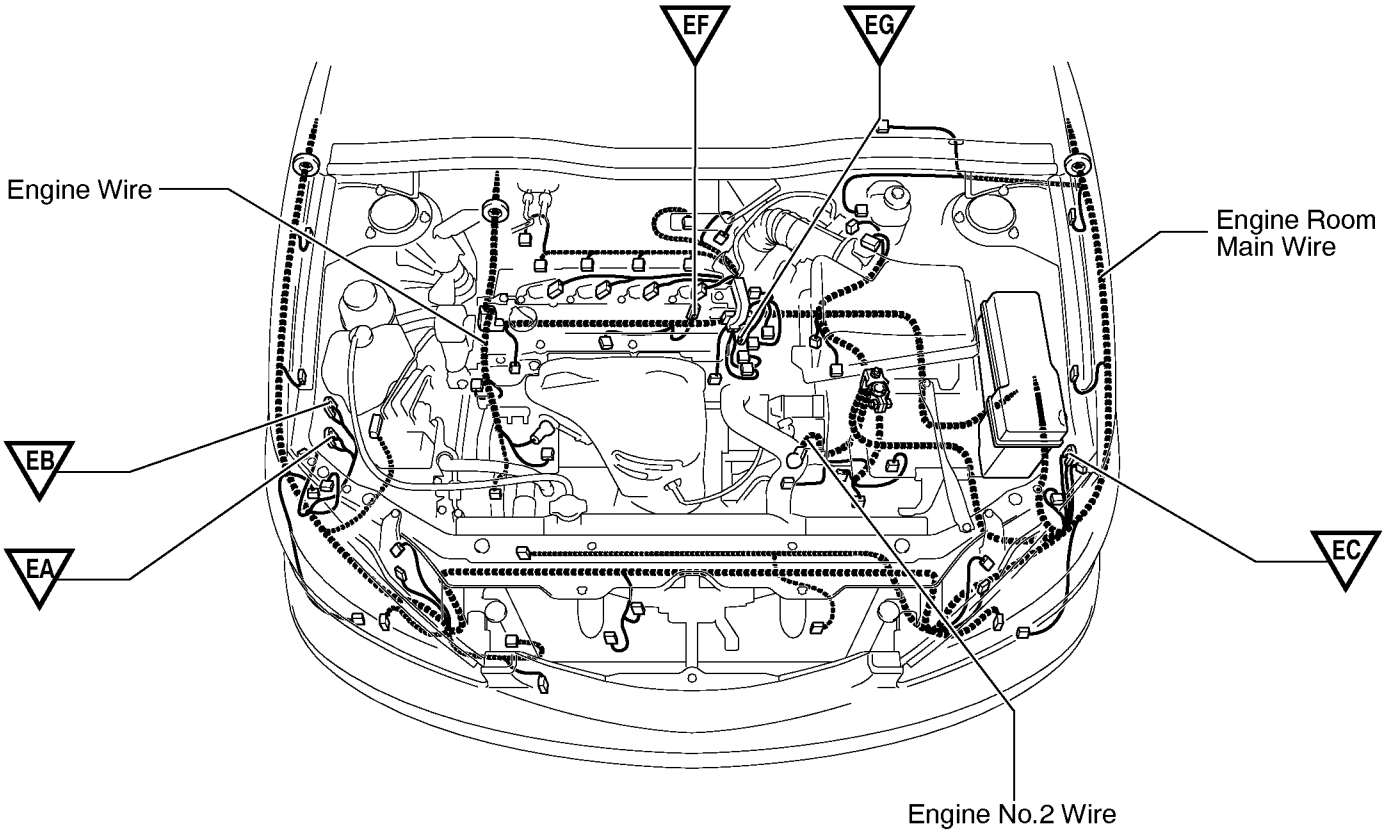
Connector Joining Wire Harness and Wire Harness



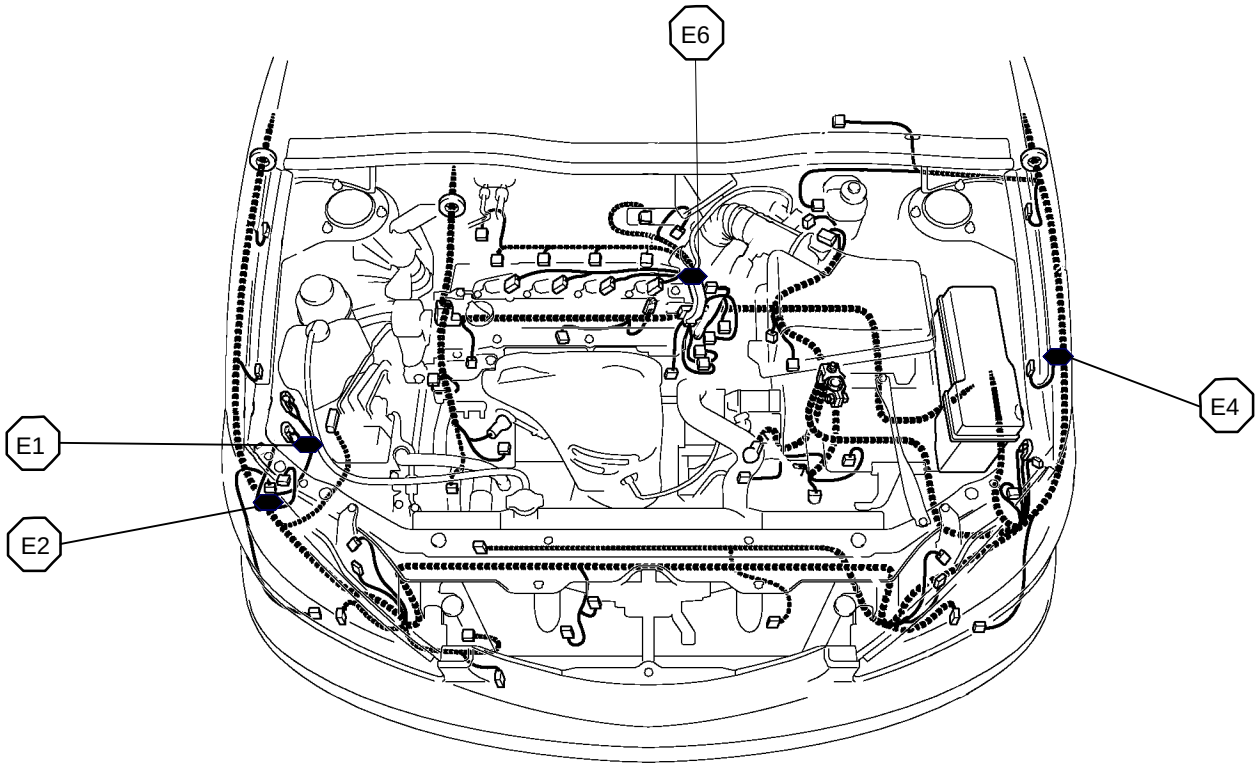
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Sensor Wire (Left Fender)

▽ : Location of Ground Points

[LHD : 2AZ–FE]

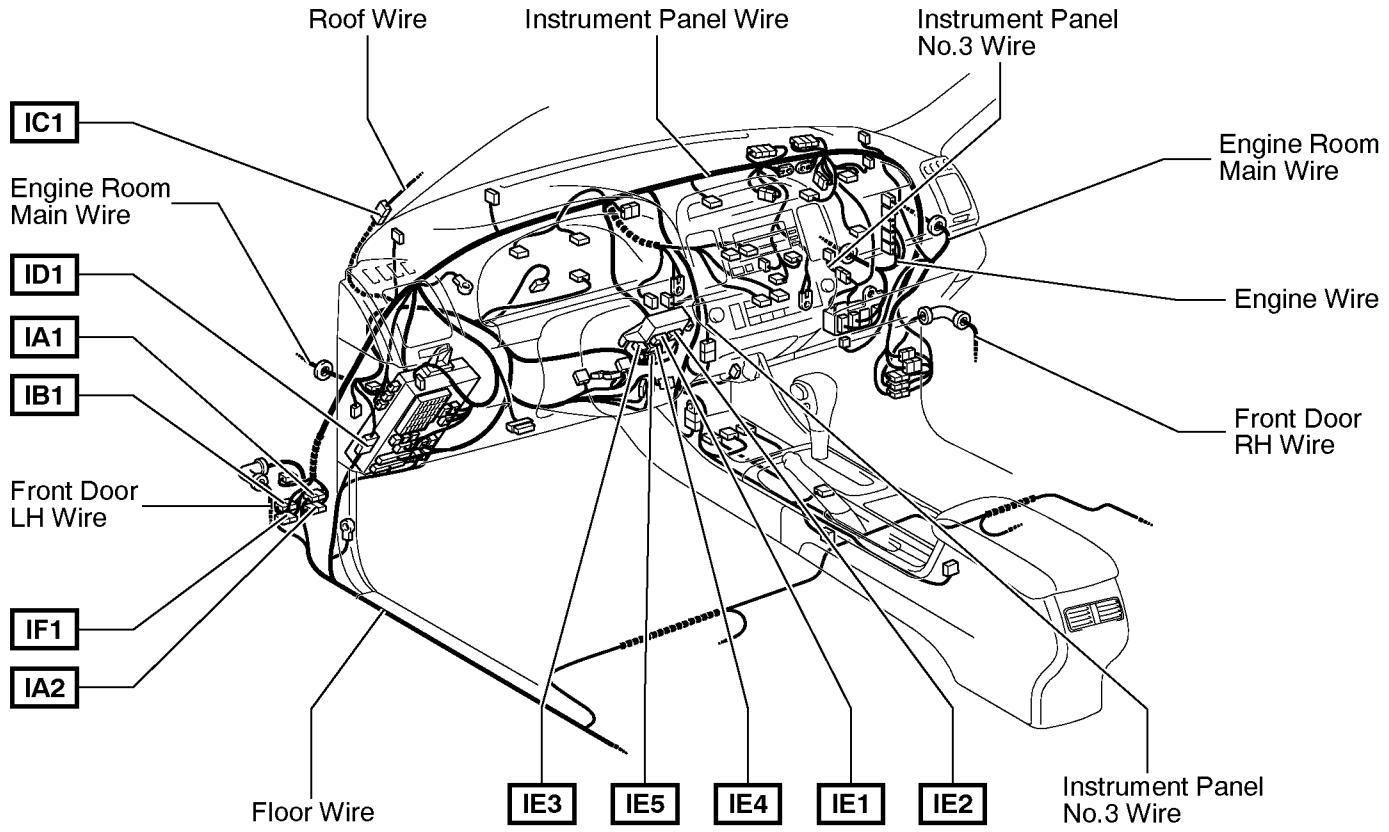


⬡ : Location of Splice Points

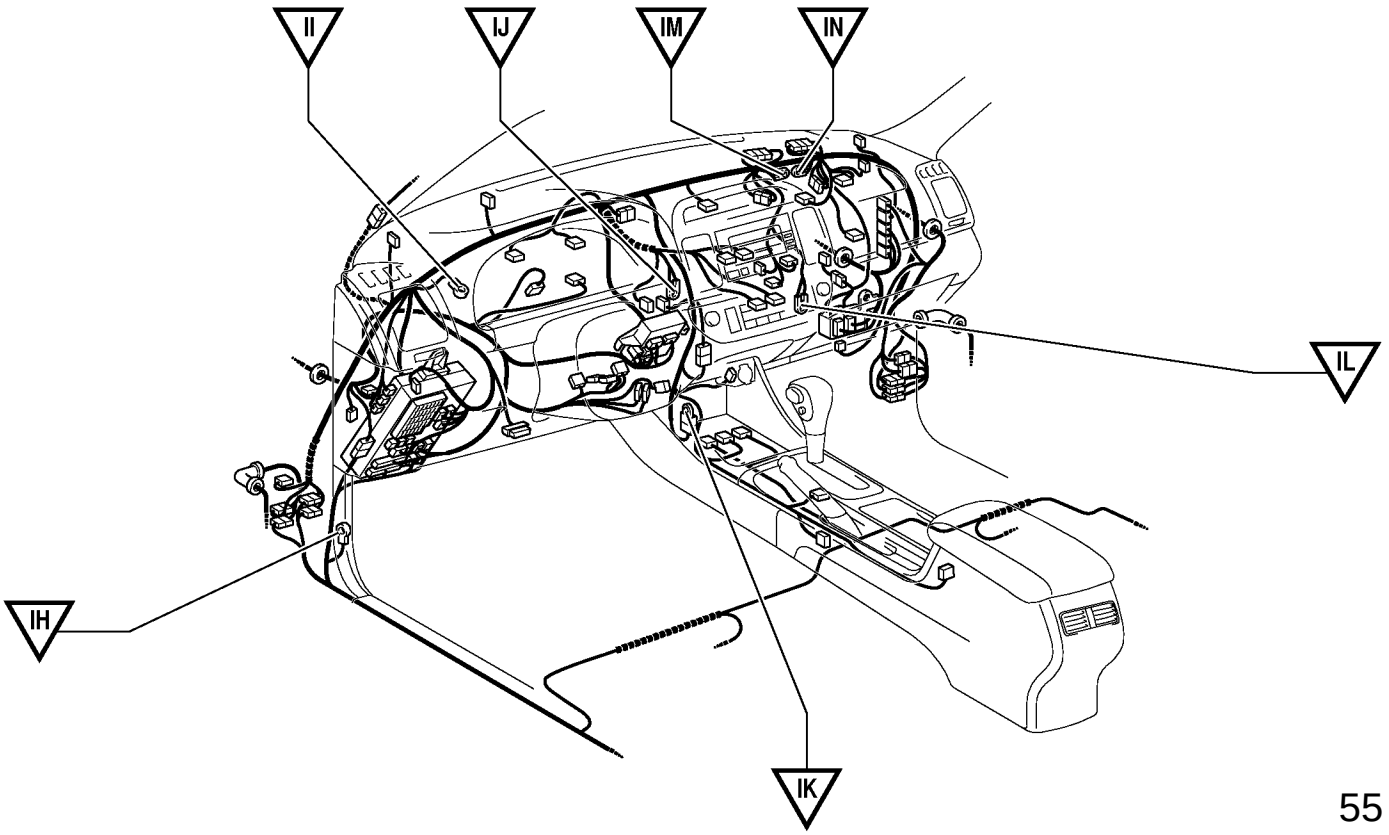


▭ : Location of Connector Joining Wire Harness and Wire Harness

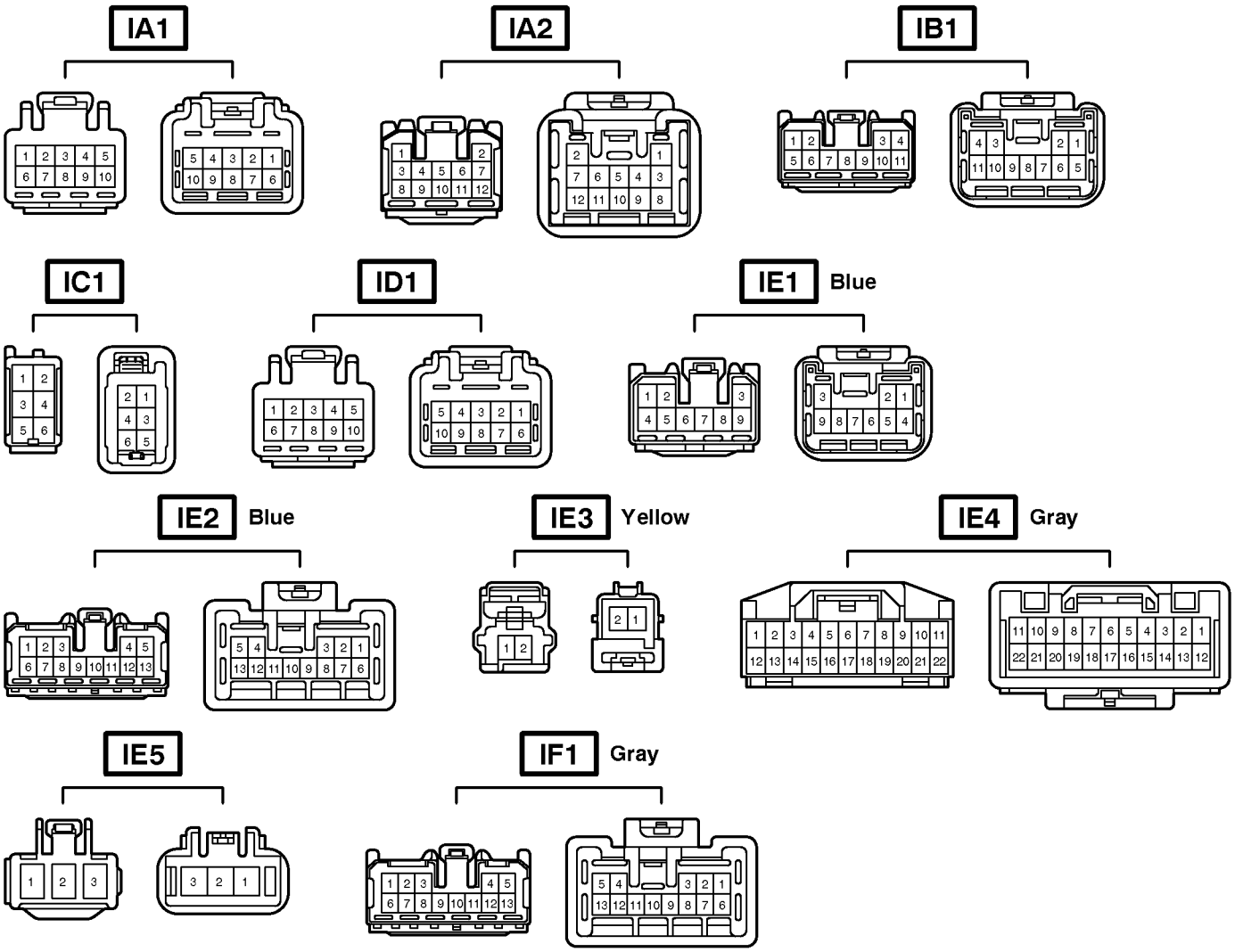
[LHD]



▽ : Location of Ground Points



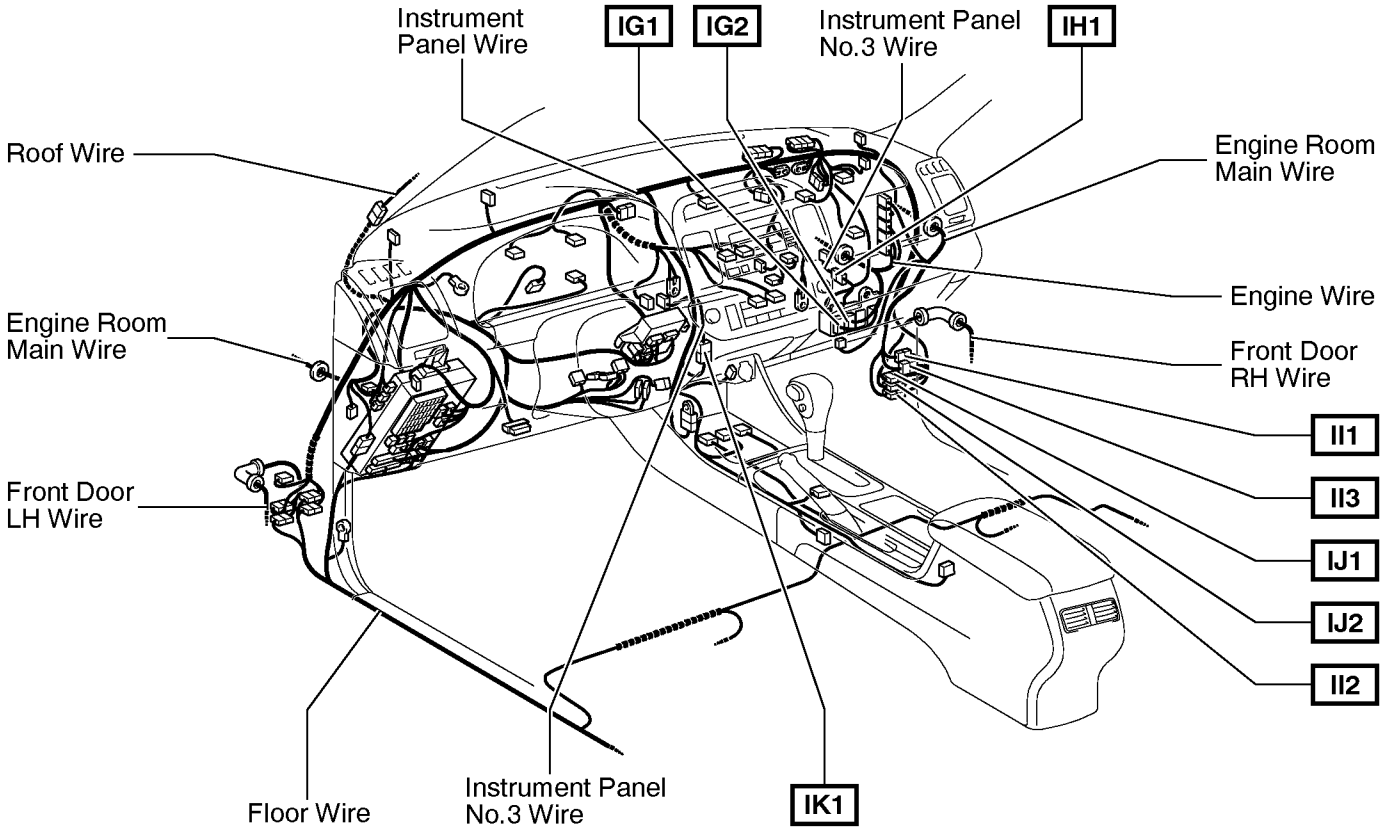
Connector Joining Wire Harness and Wire Harness



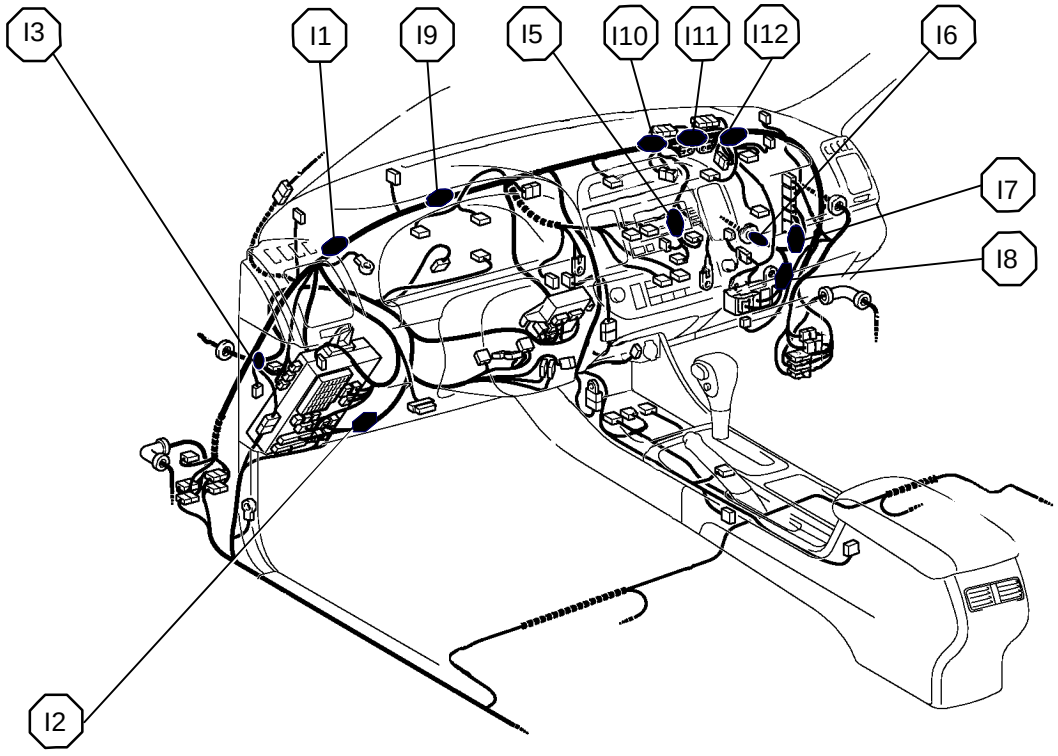
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IA2	
IB1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
ID1	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE1	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IE2	
IE3	
IE4	
IE5	
IF1	Front Door LH Wire and Floor Wire (Left Kick Panel)

: Location of Connector Joining Wire Harness and Wire Harness

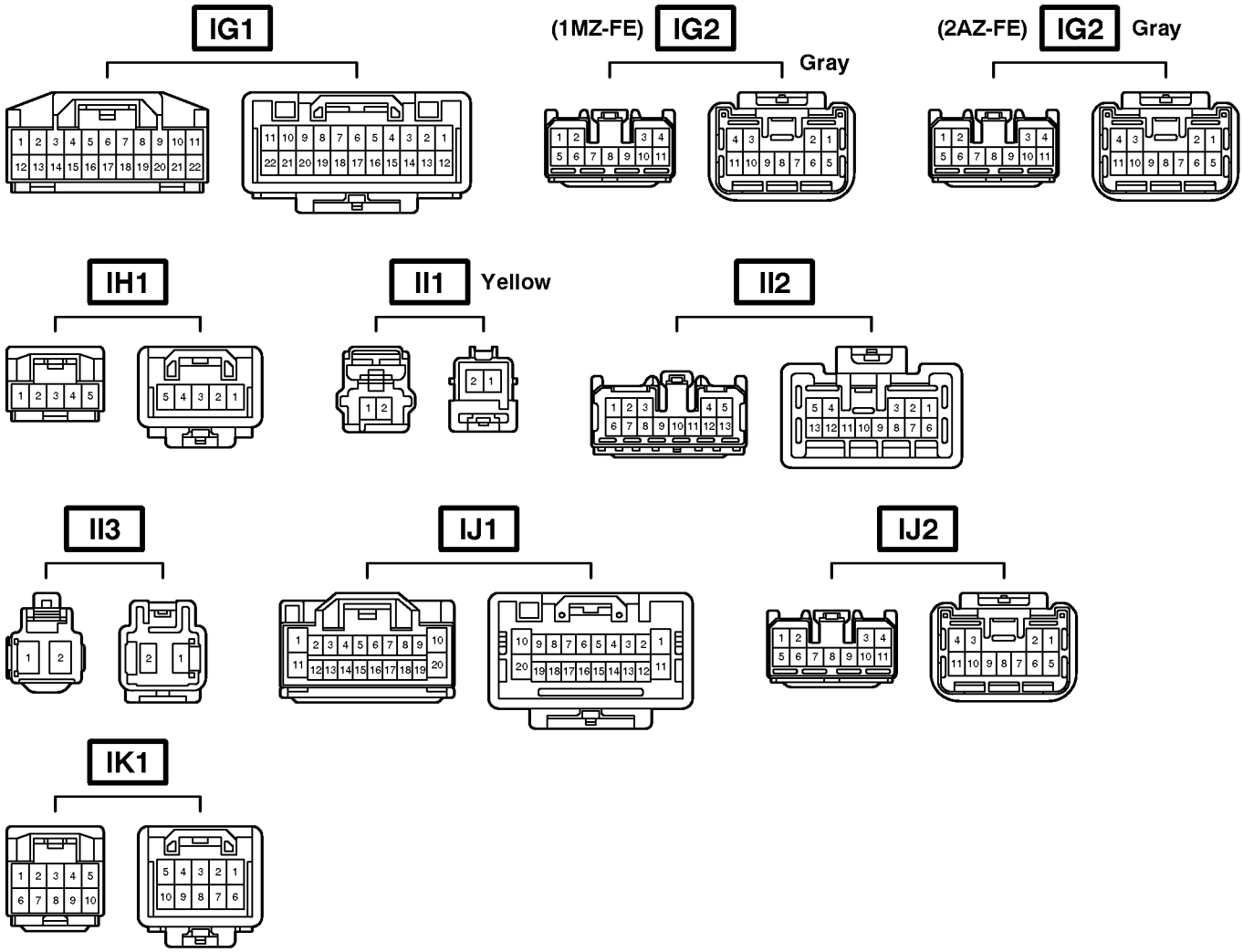
[LHD]



: Location of Splice Points



Connector Joining Wire Harness and Wire Harness

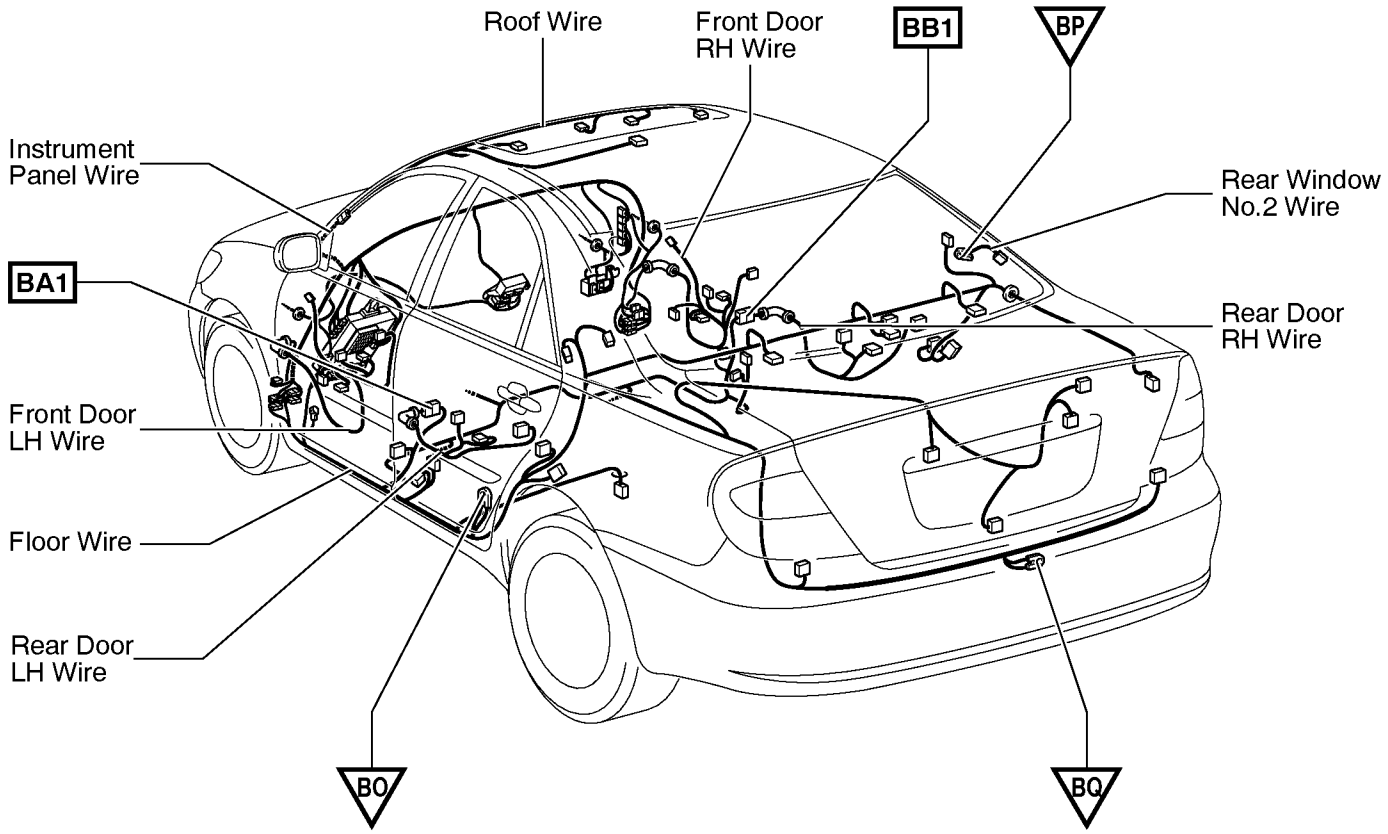


Code	Joining Wire Harness and Wire Harness (Connector Location)
IG1	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	
IH1	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II1	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
II2	
II3	
IJ1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2	
IK1	Instrument Panel Wire and Instrument Panel No.3 Wire (Instrument Panel Brace LH)

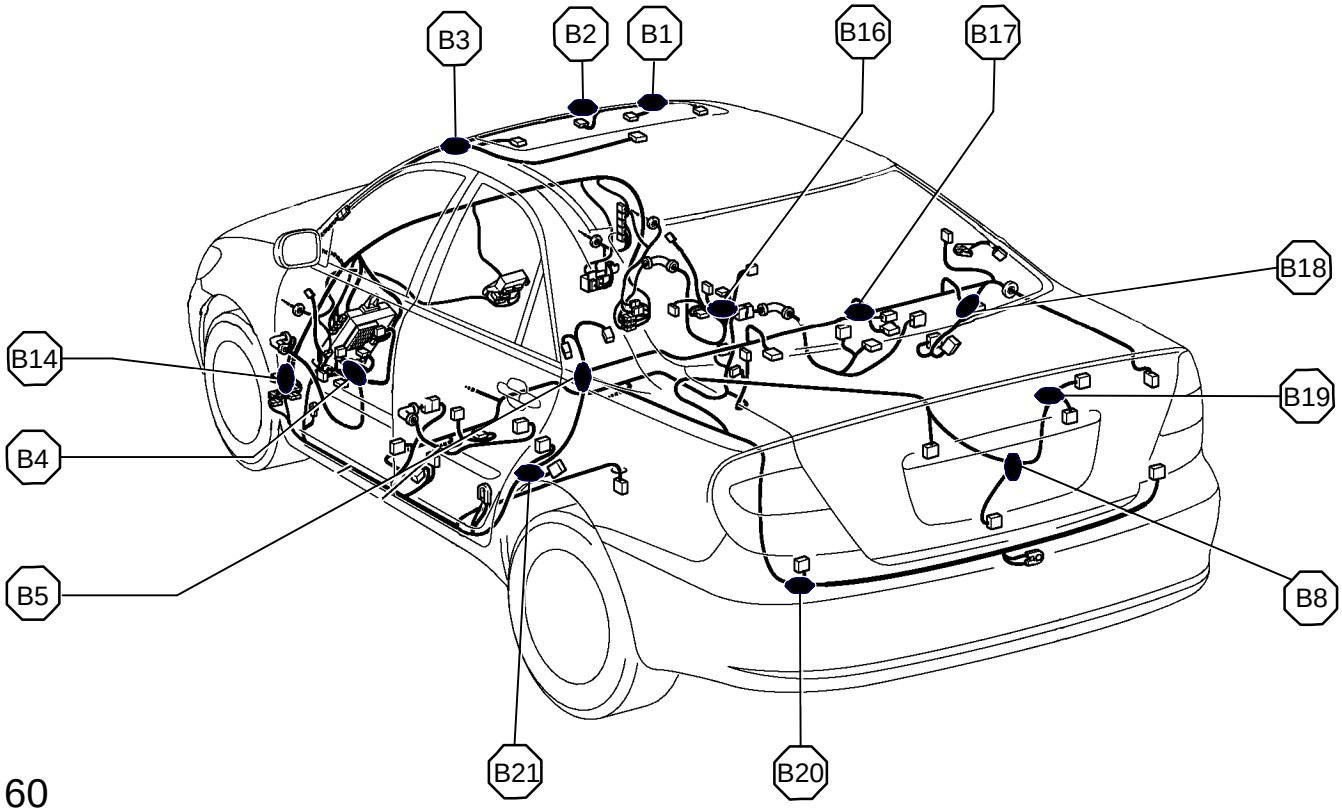
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

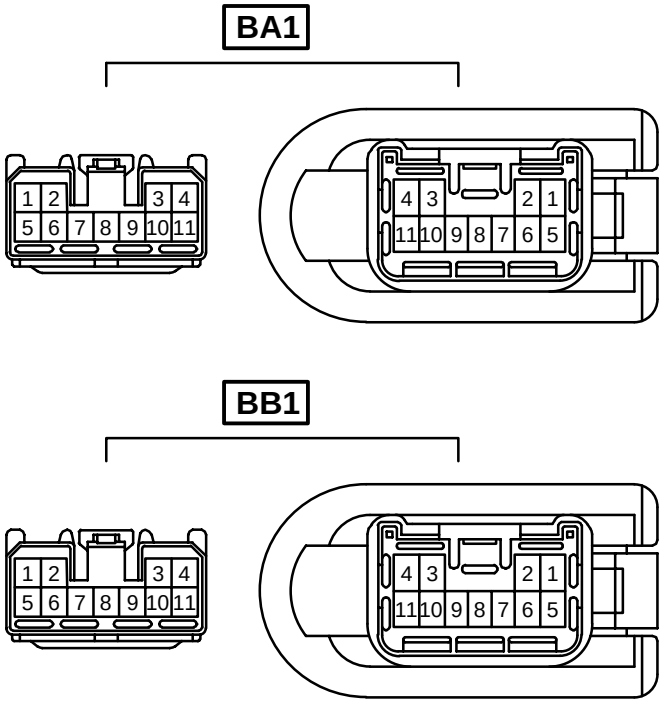
[LHD]



⬡ : Location of Splice Points



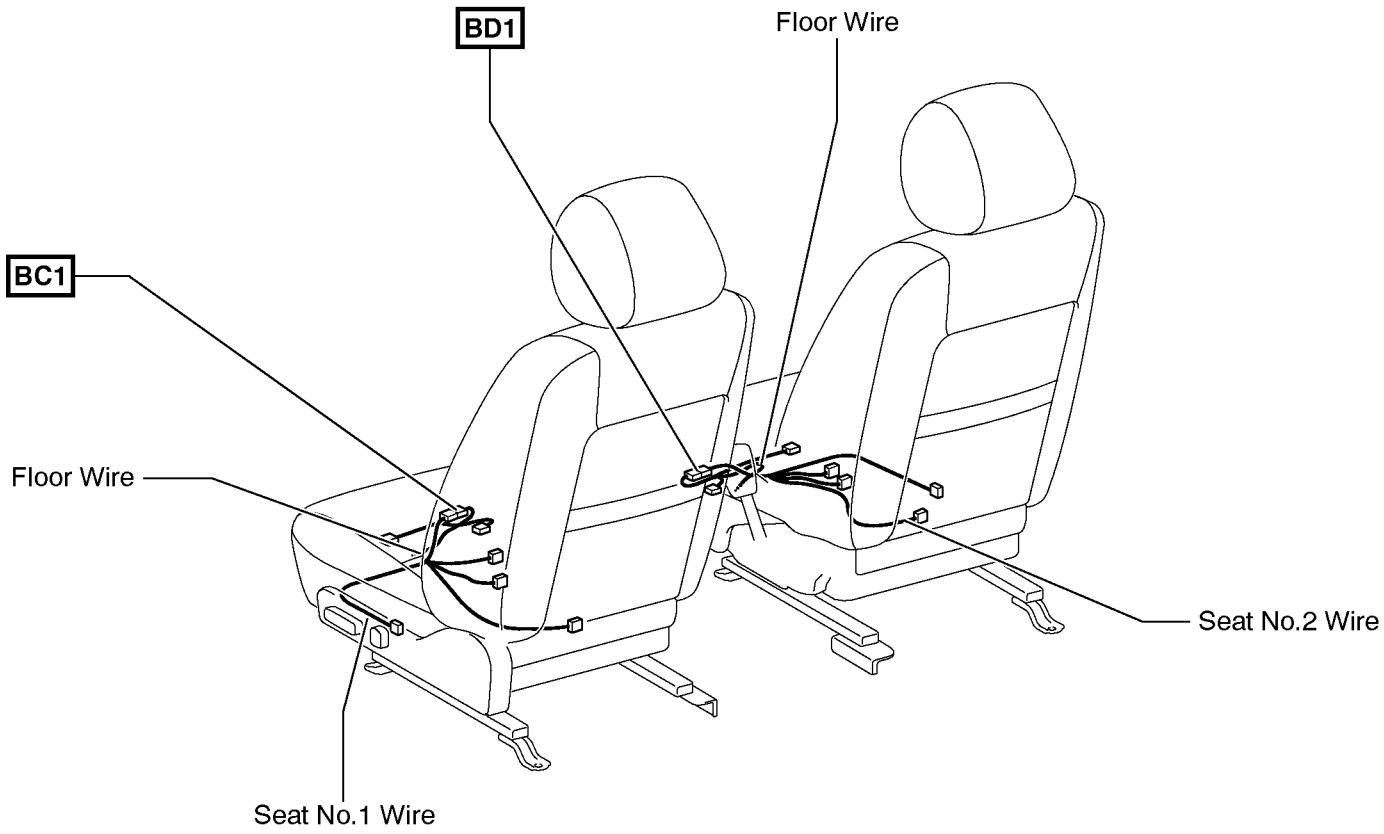
Connector Joining Wire Harness and Wire Harness



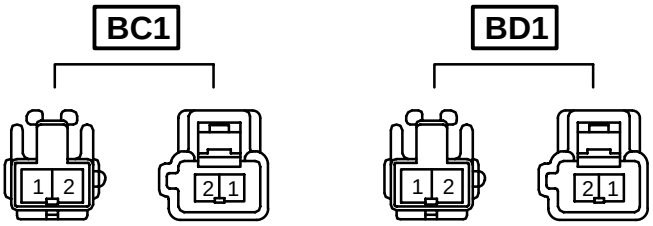
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	Rear Door RH Wire and Floor Wire (Right Center Pillar)

▭ : Location of Connector Joining Wire Harness and Wire Harness

[LHD]



Connector Joining Wire Harness and Wire Harness

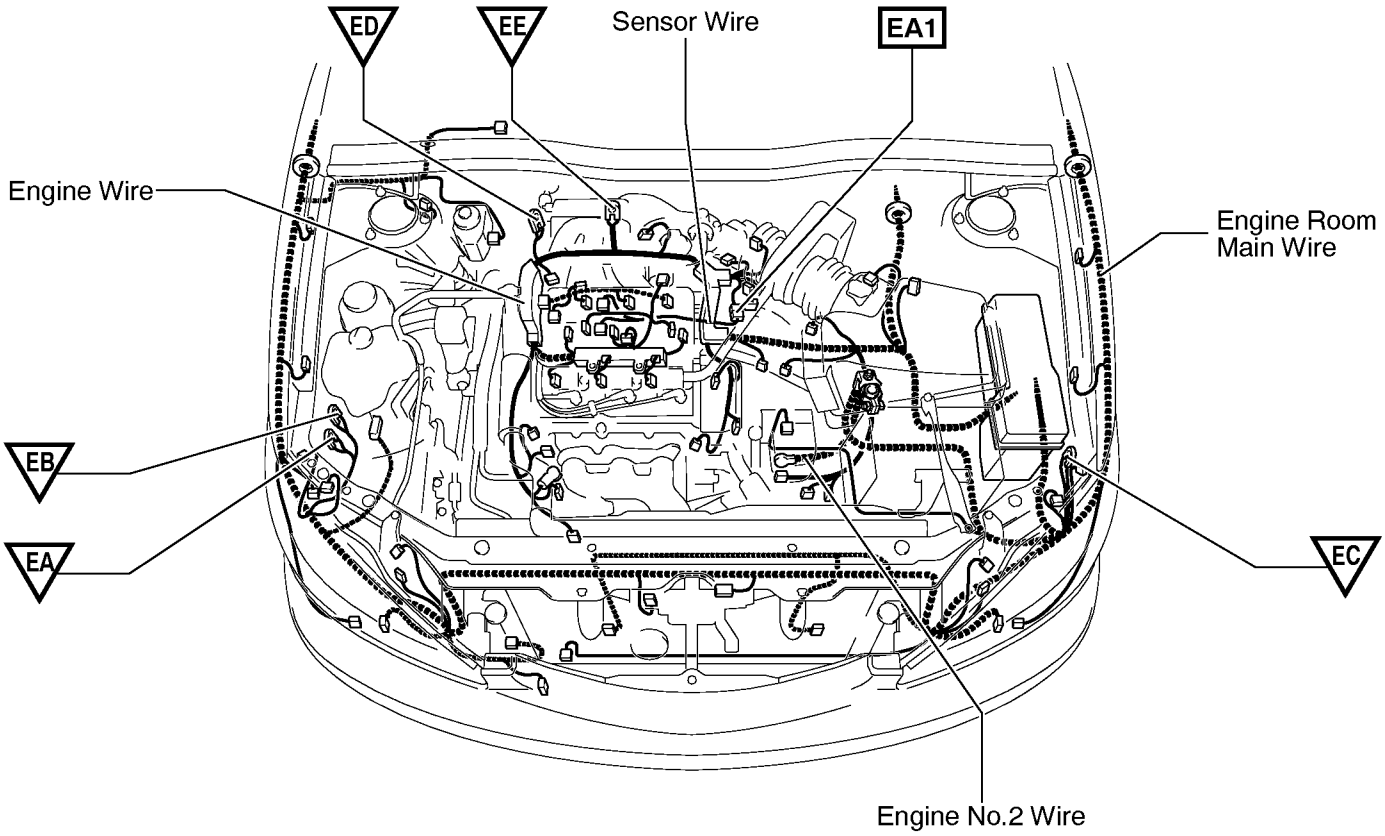


Code	Joining Wire Harness and Wire Harness (Connector Location)
BC1	Floor Wire and Seat No.1 Wire (Under the Driver's Seat)
BD1	Floor Wire and Seat No.2 Wire (Under the Front Passenger's Seat)

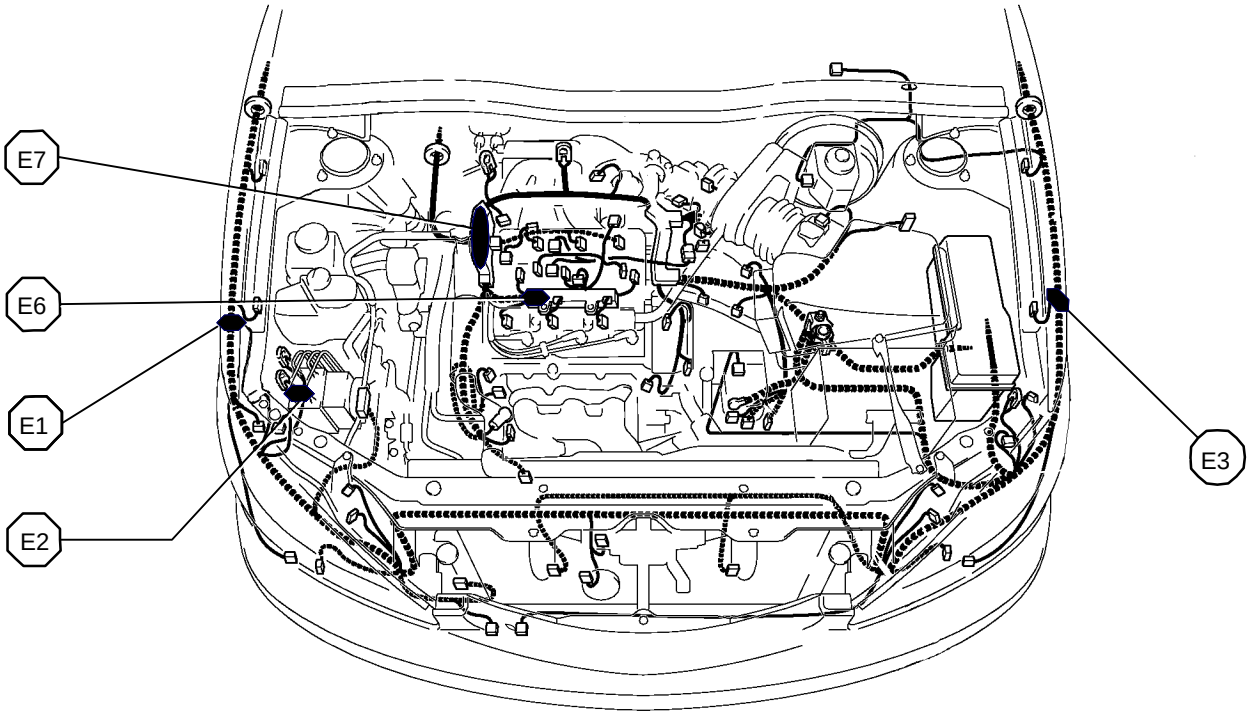
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

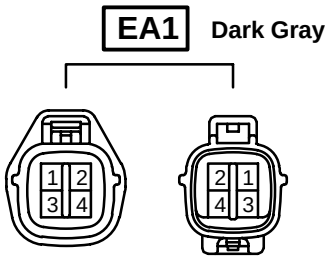
[RHD : 1MZ–FE]



⬡ : Location of Splice Points



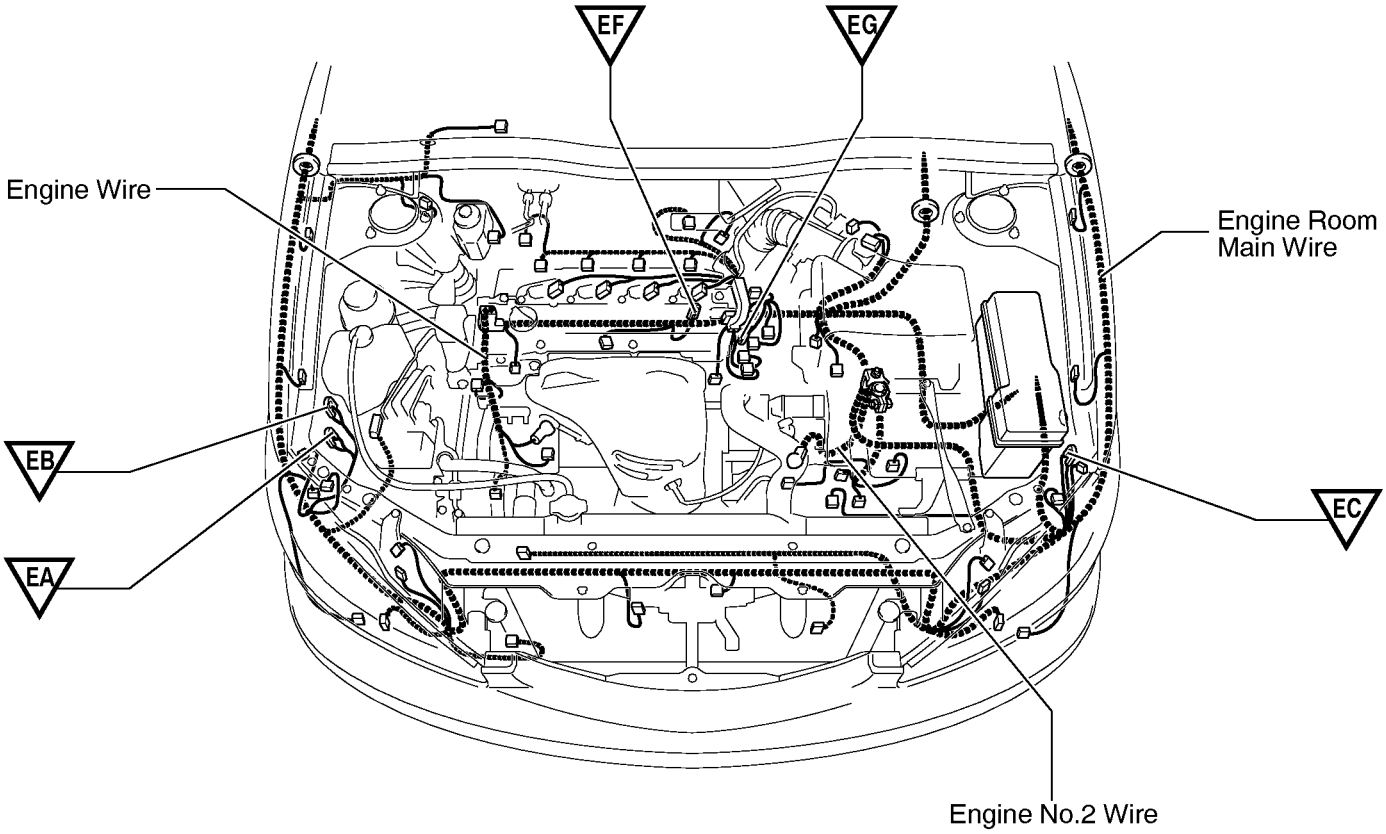
Connector Joining Wire Harness and Wire Harness



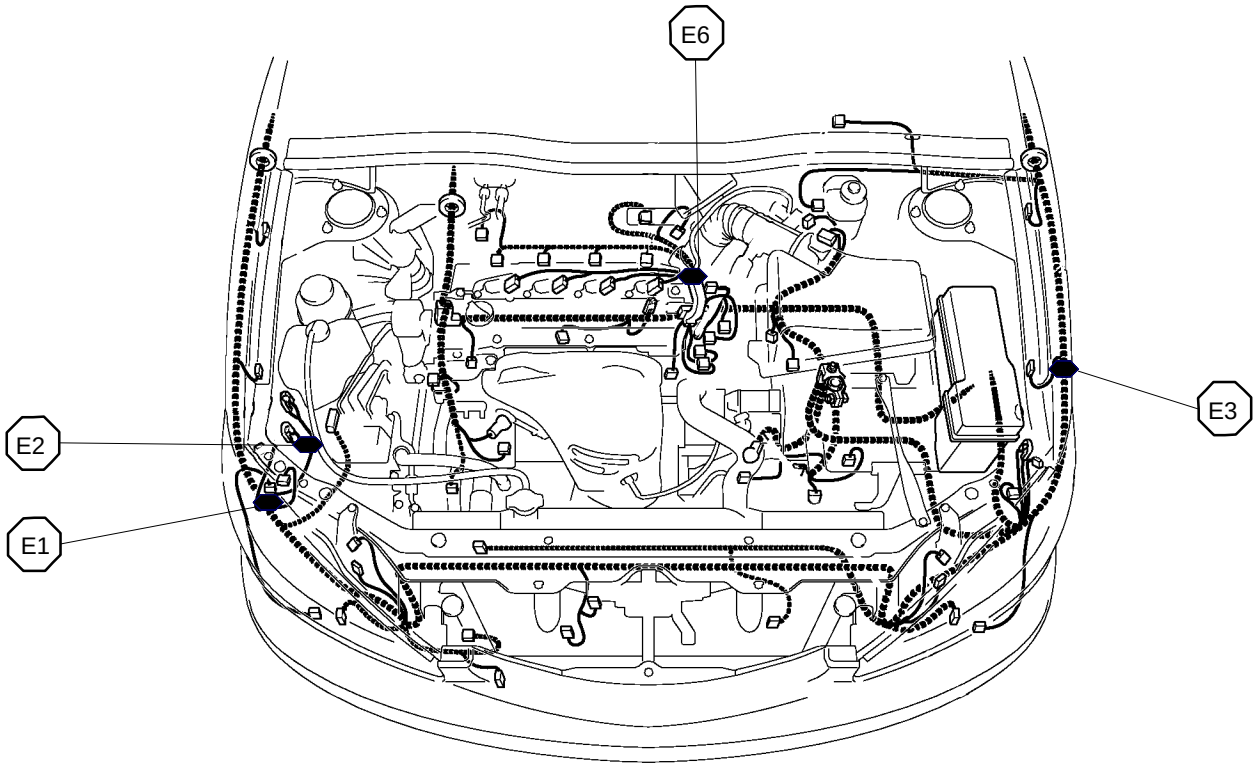
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Sensor Wire (Left Fender)

▽ : Location of Ground Points

[RHD : 2AZ–FE]

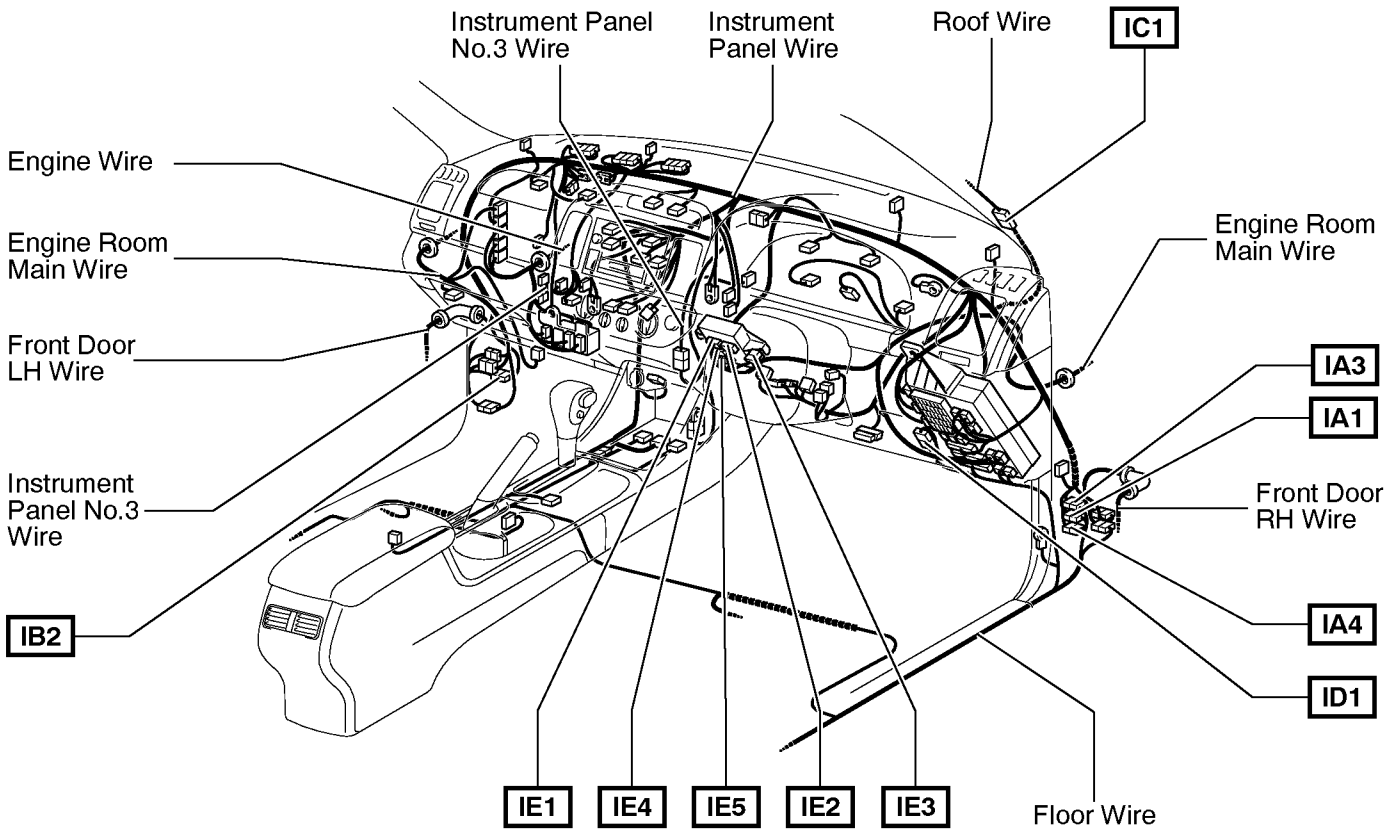


○ : Location of Splice Points

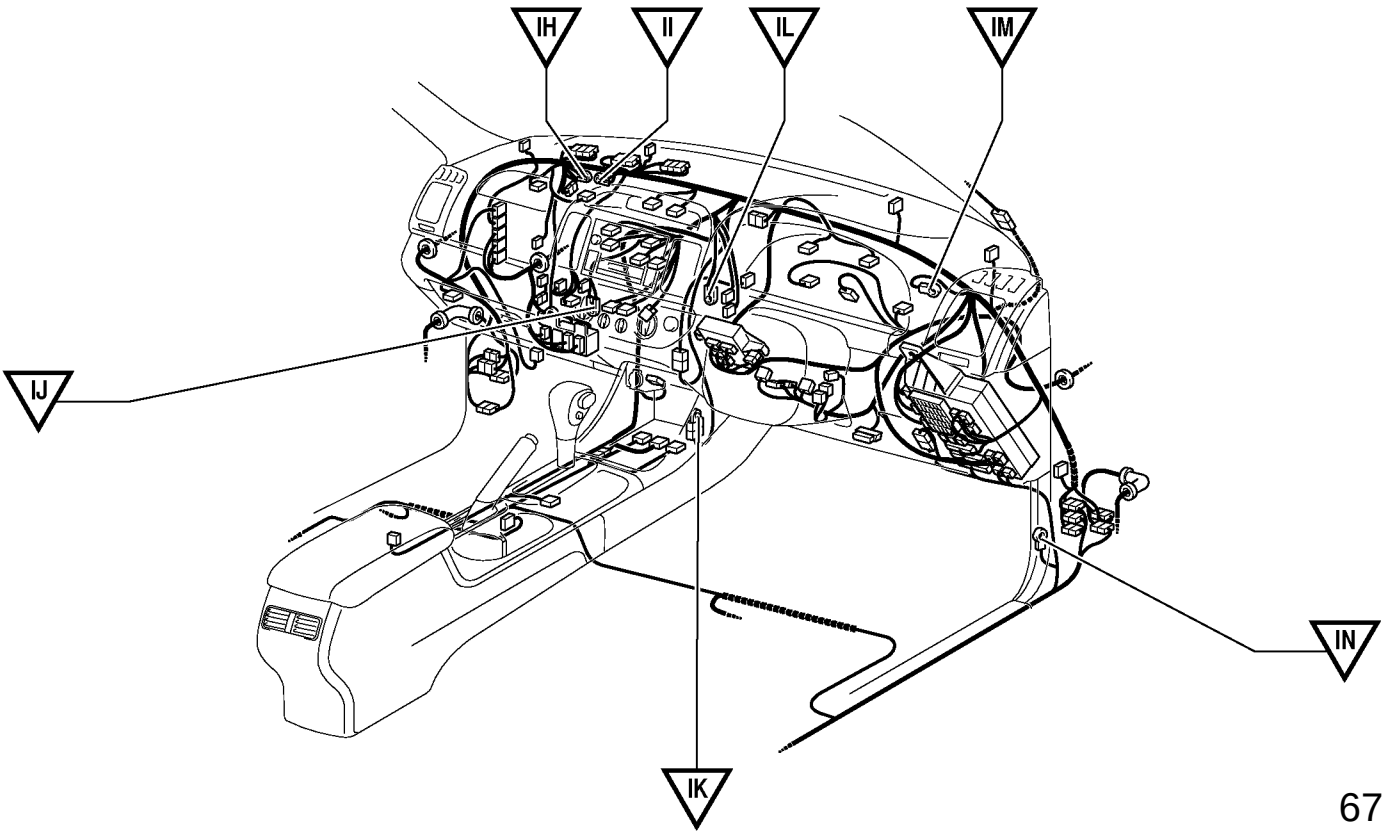


▭ : Location of Connector Joining Wire Harness and Wire Harness

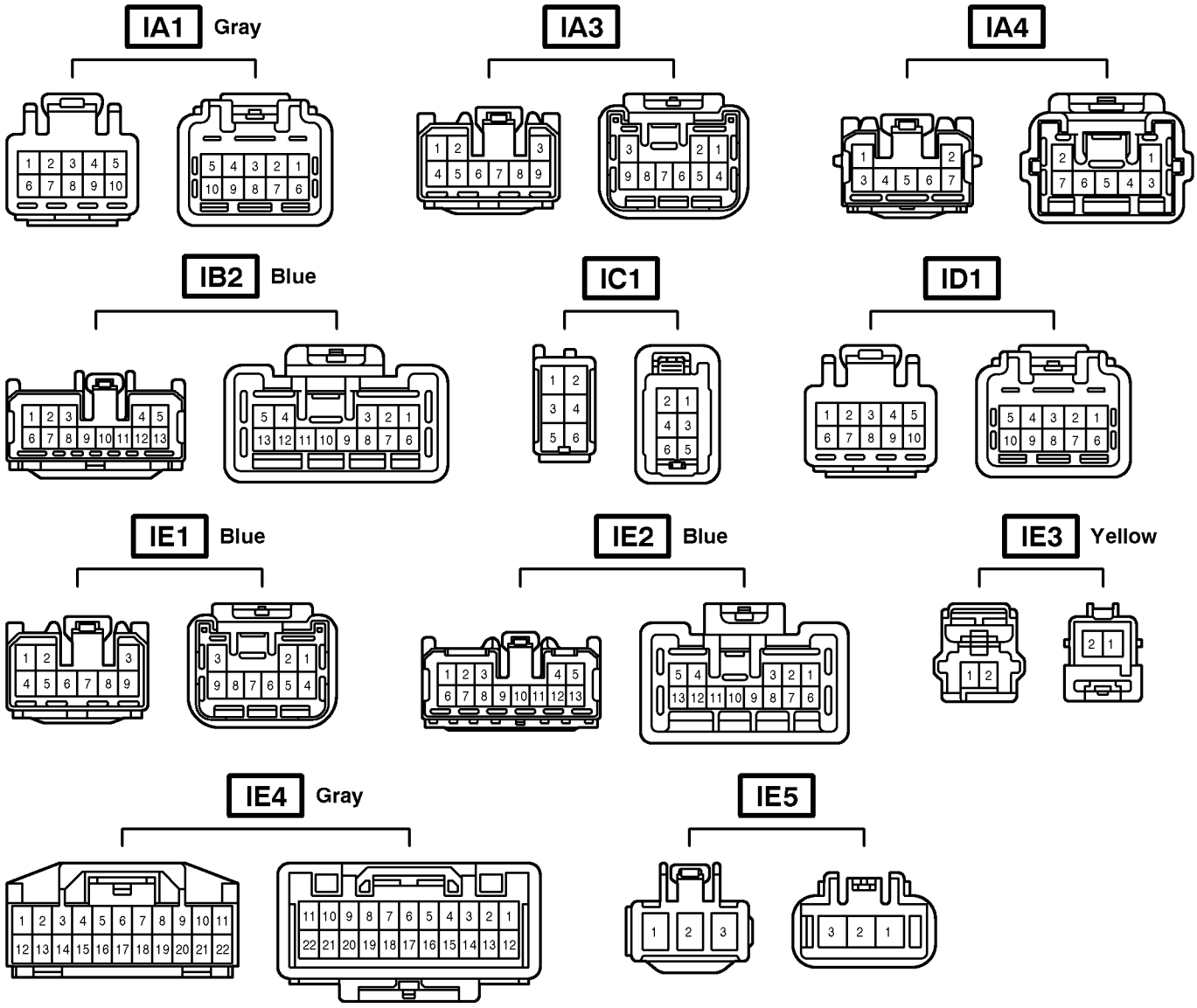
[RHD]



▽ : Location of Ground Points



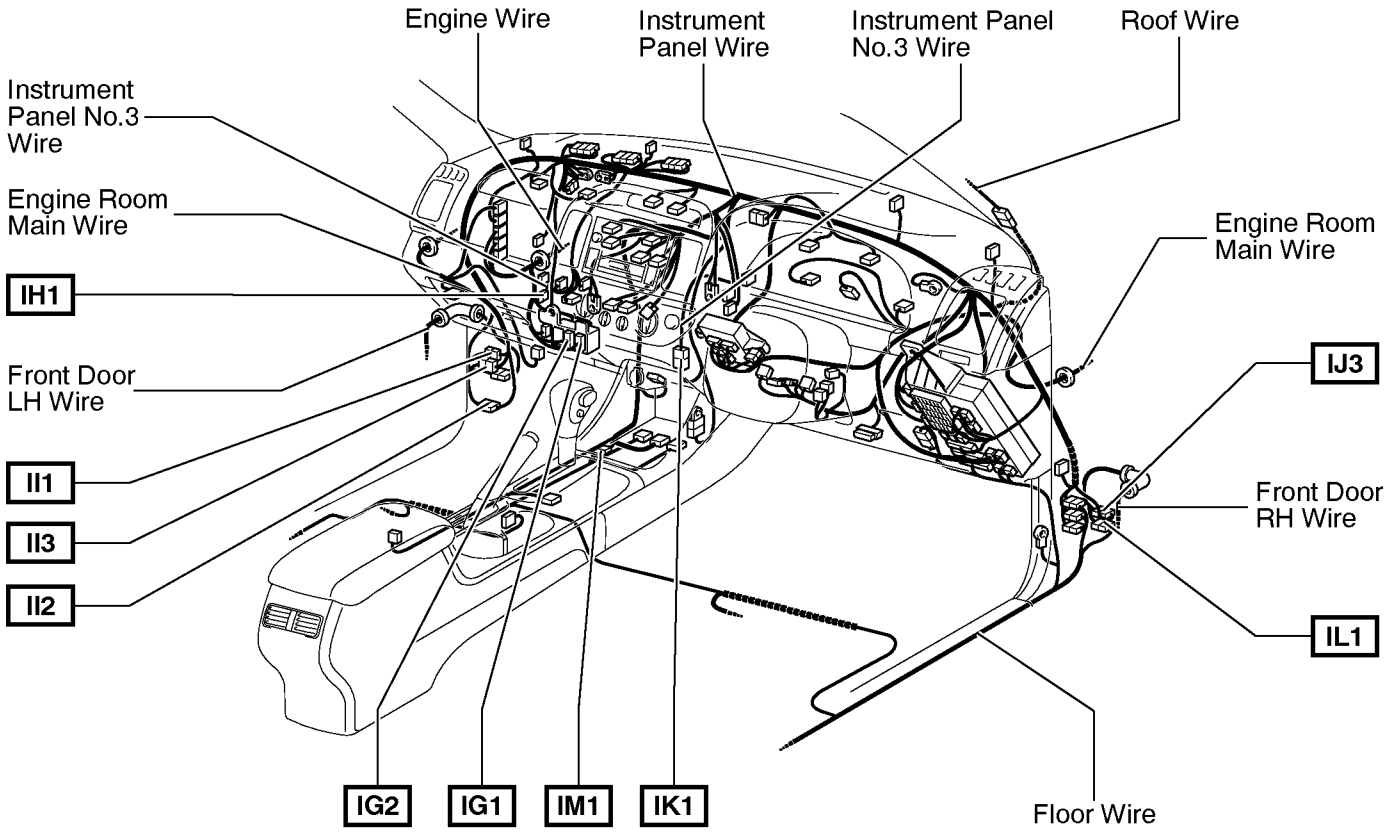
Connector Joining Wire Harness and Wire Harness



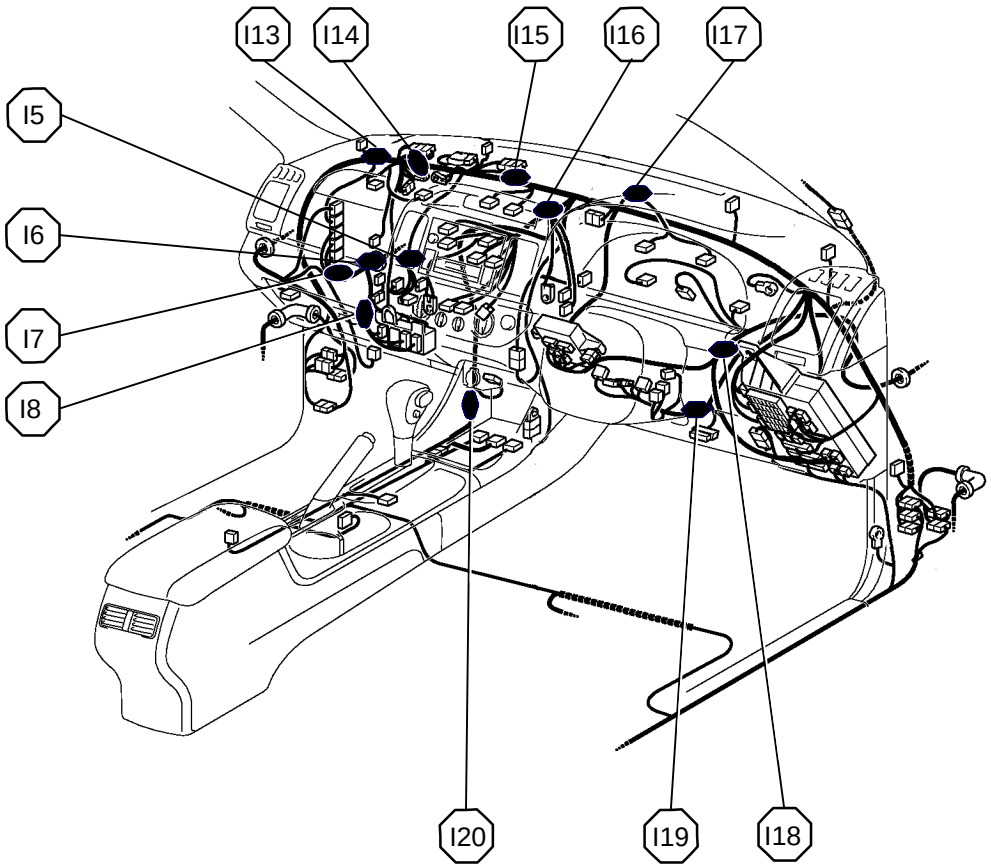
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA3	
IA4	
IB2	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
ID1	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE1	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE2	
IE3	
IE4	
IE5	

▭ : Location of Connector Joining Wire Harness and Wire Harness

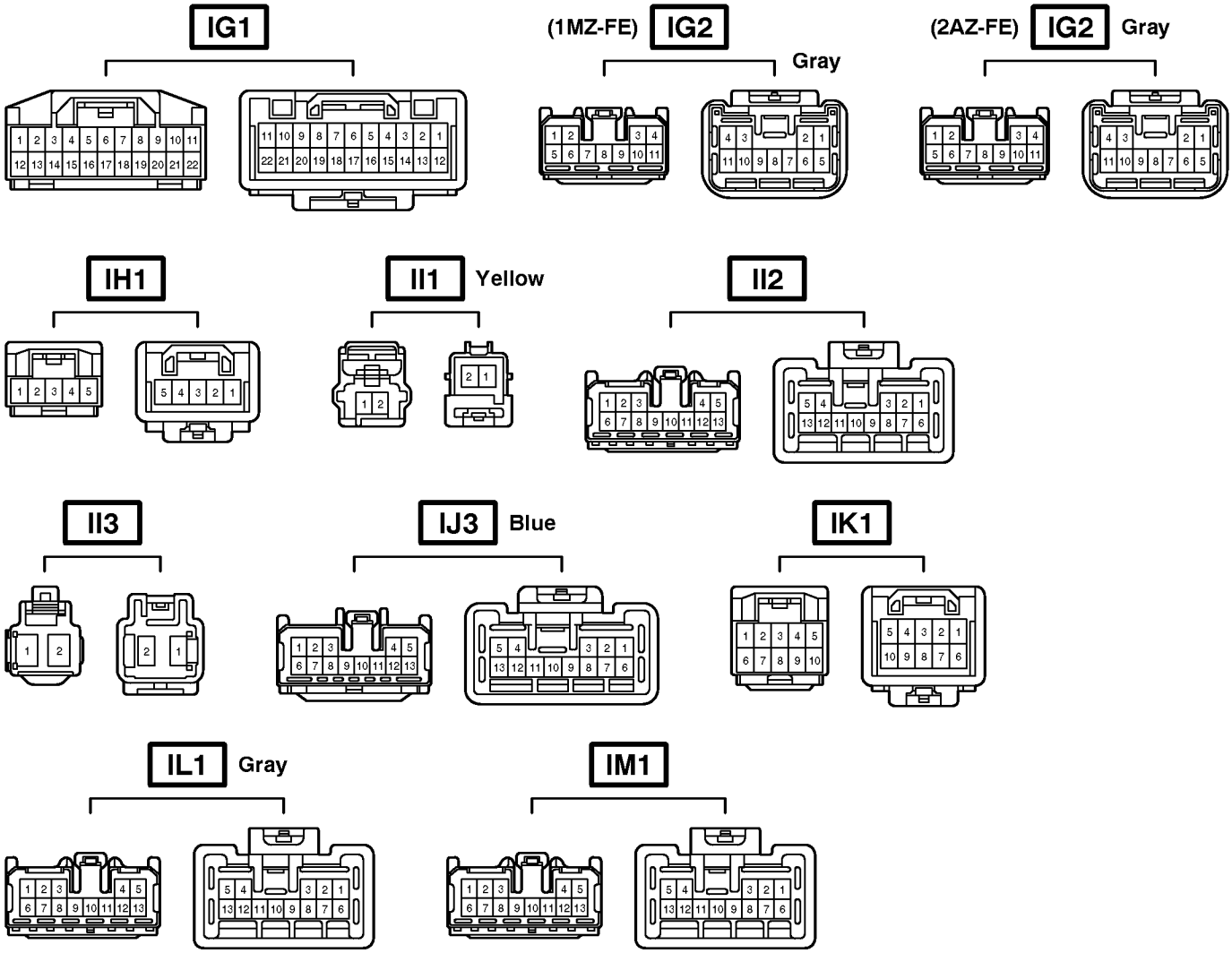
[RHD]



⬡ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

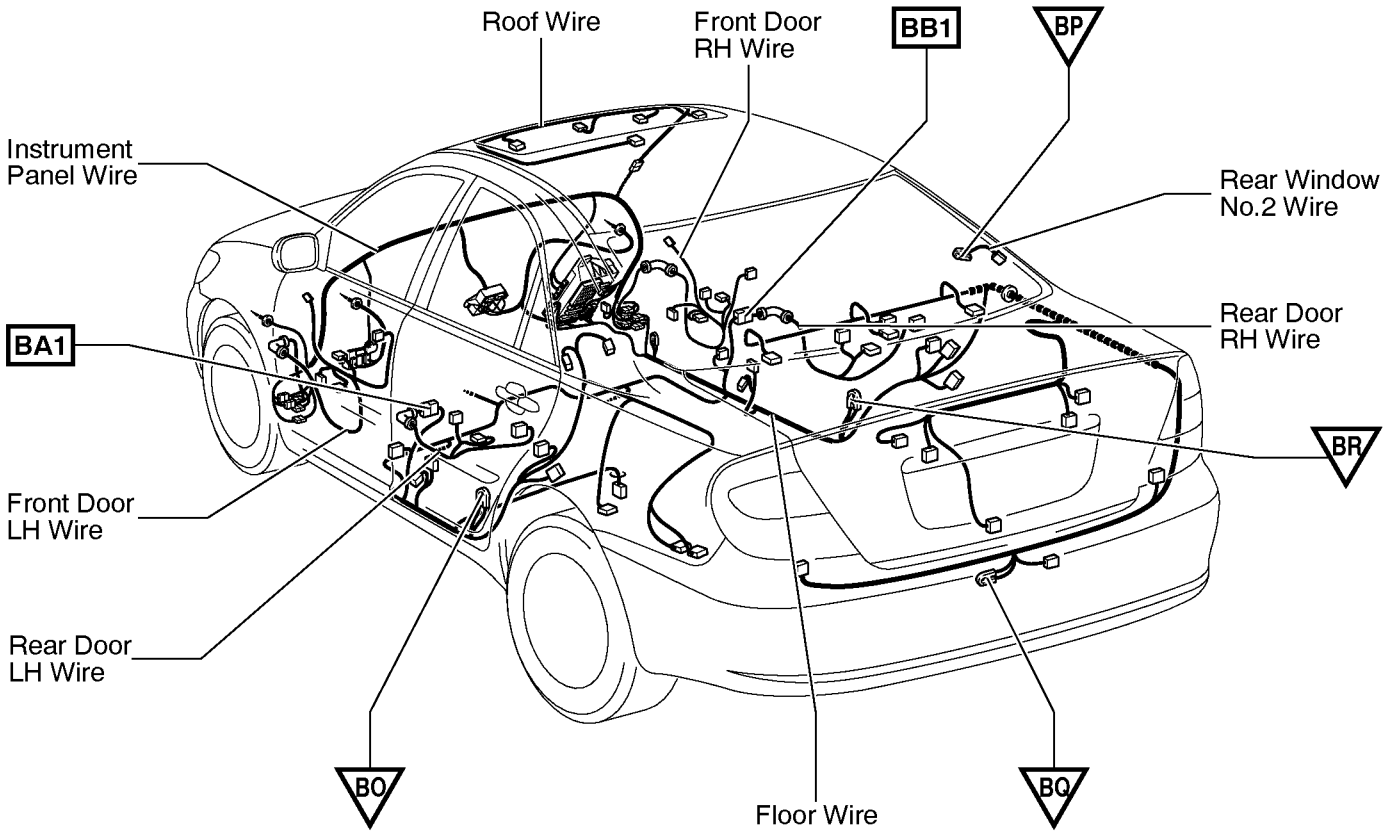


Code	Joining Wire Harness and Wire Harness (Connector Location)
IG1	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	
IH1	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II1	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II2	
II3	
IJ3	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IK1	Instrument Panel Wire and Instrument Panel No.3 Wire (Instrument Panel Brace RH)
IL1	Front Door RH Wire and Floor Wire (Right Kick Panel)
IM1	Instrument Panel Wire and Floor Wire (Instrument Panel Brace LH)

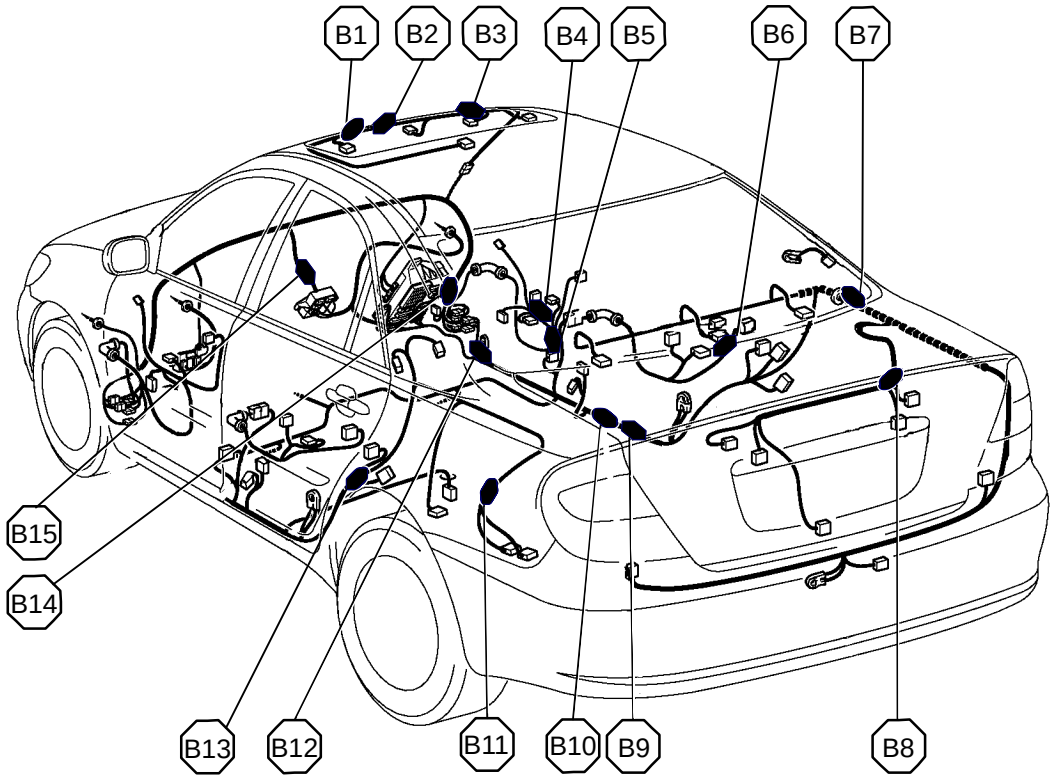
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

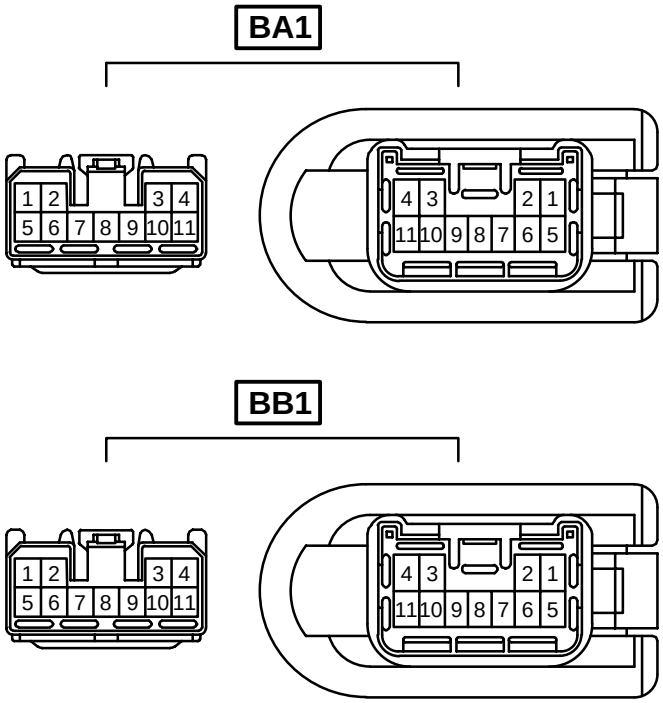
[RHD]



⬡ : Location of Splice Points



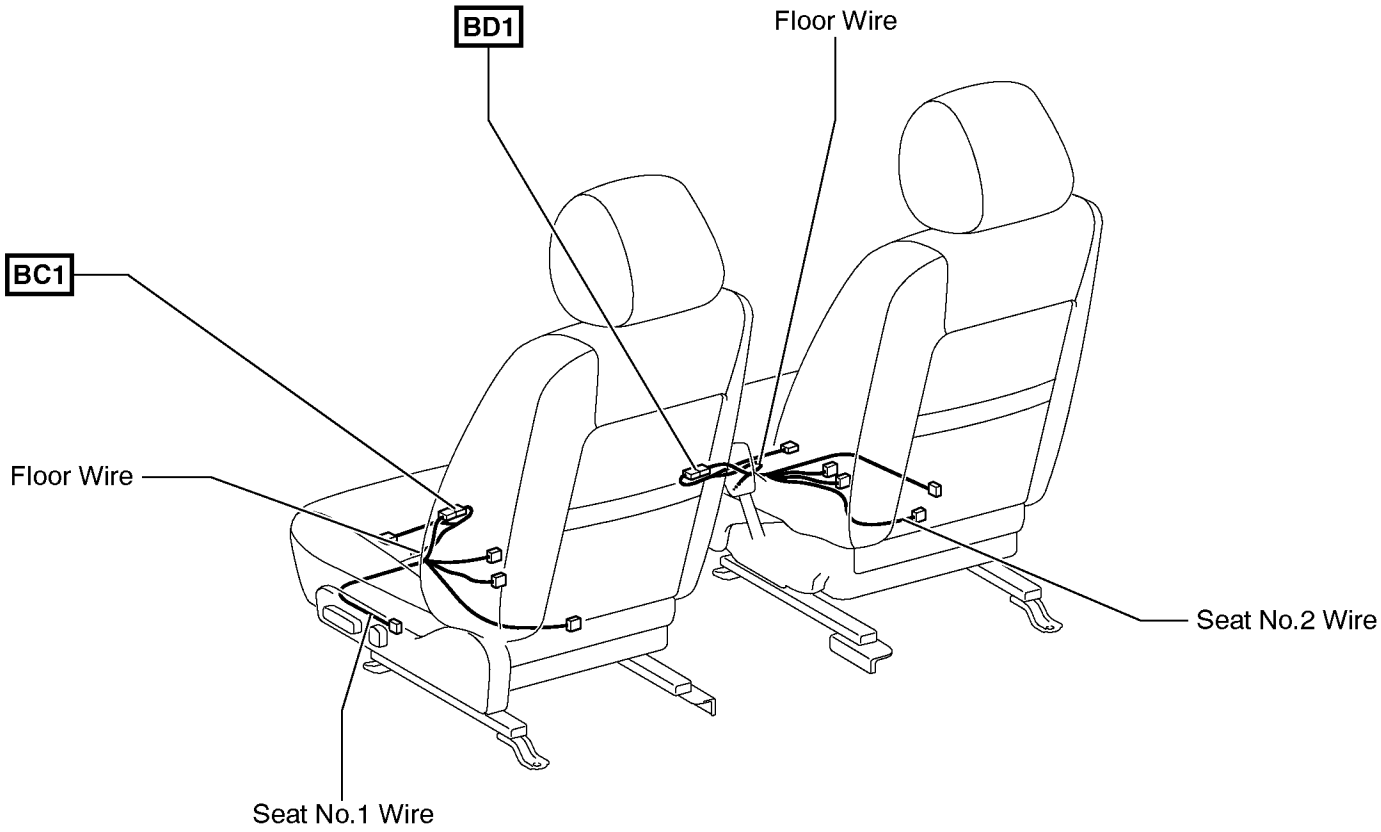
Connector Joining Wire Harness and Wire Harness



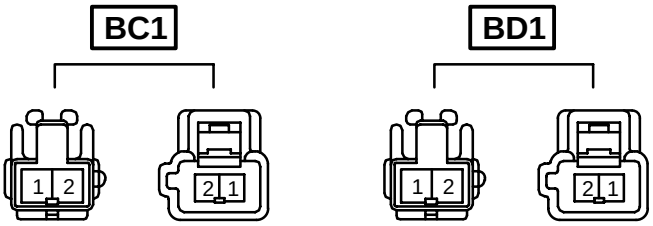
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	Rear Door RH Wire and Floor Wire (Right Center Pillar)

▭ : Location of Connector Joining Wire Harness and Wire Harness

[RHD]



Connector Joining Wire Harness and Wire Harness



Code	Joining Wire Harness and Wire Harness (Connector Location)
BC1	Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat)
BD1	Floor Wire and Seat No.2 Wire (Under the Driver's Seat)

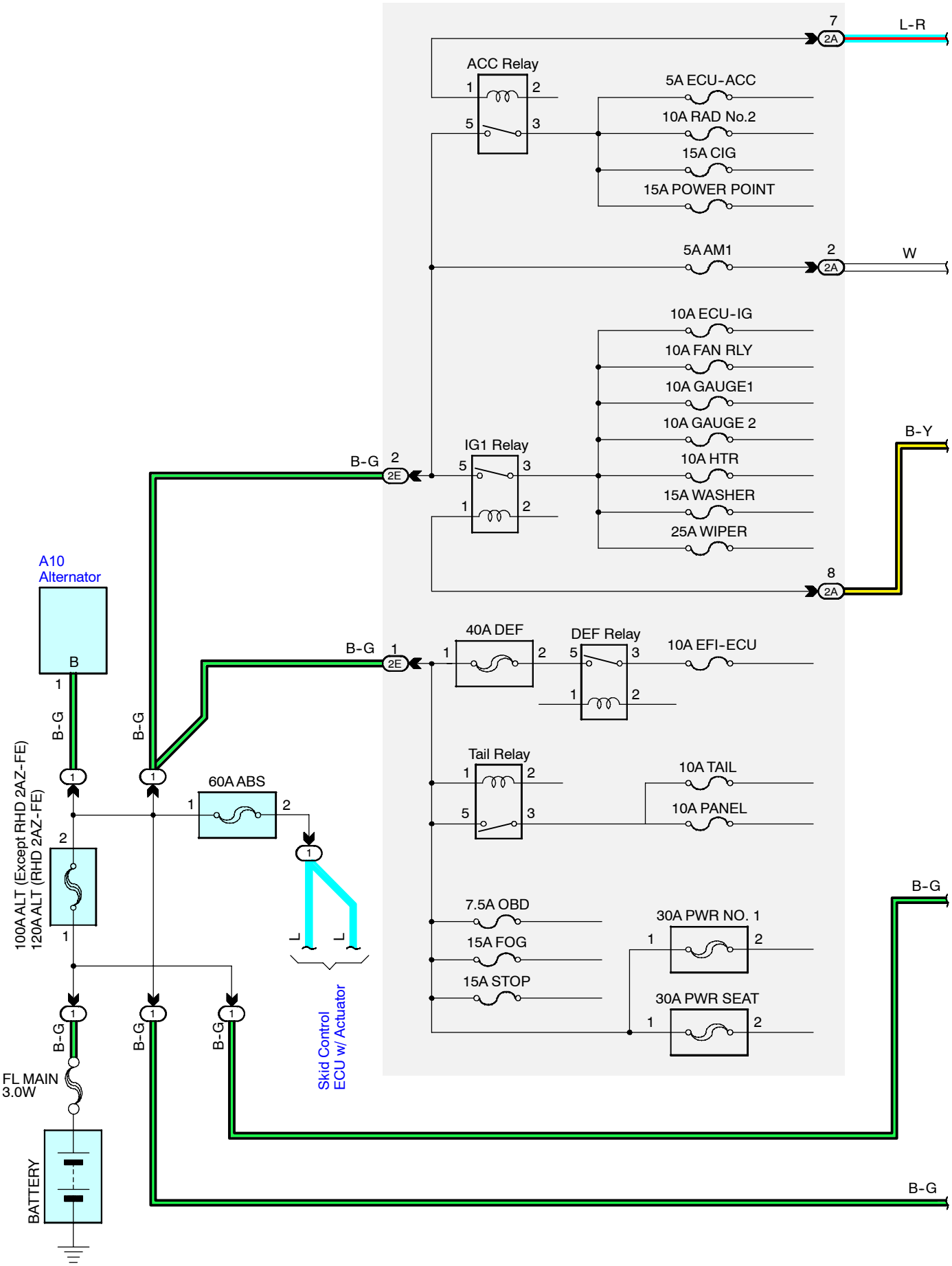
CAMRY
ELECTRICAL WIRING DIAGRAM

Page

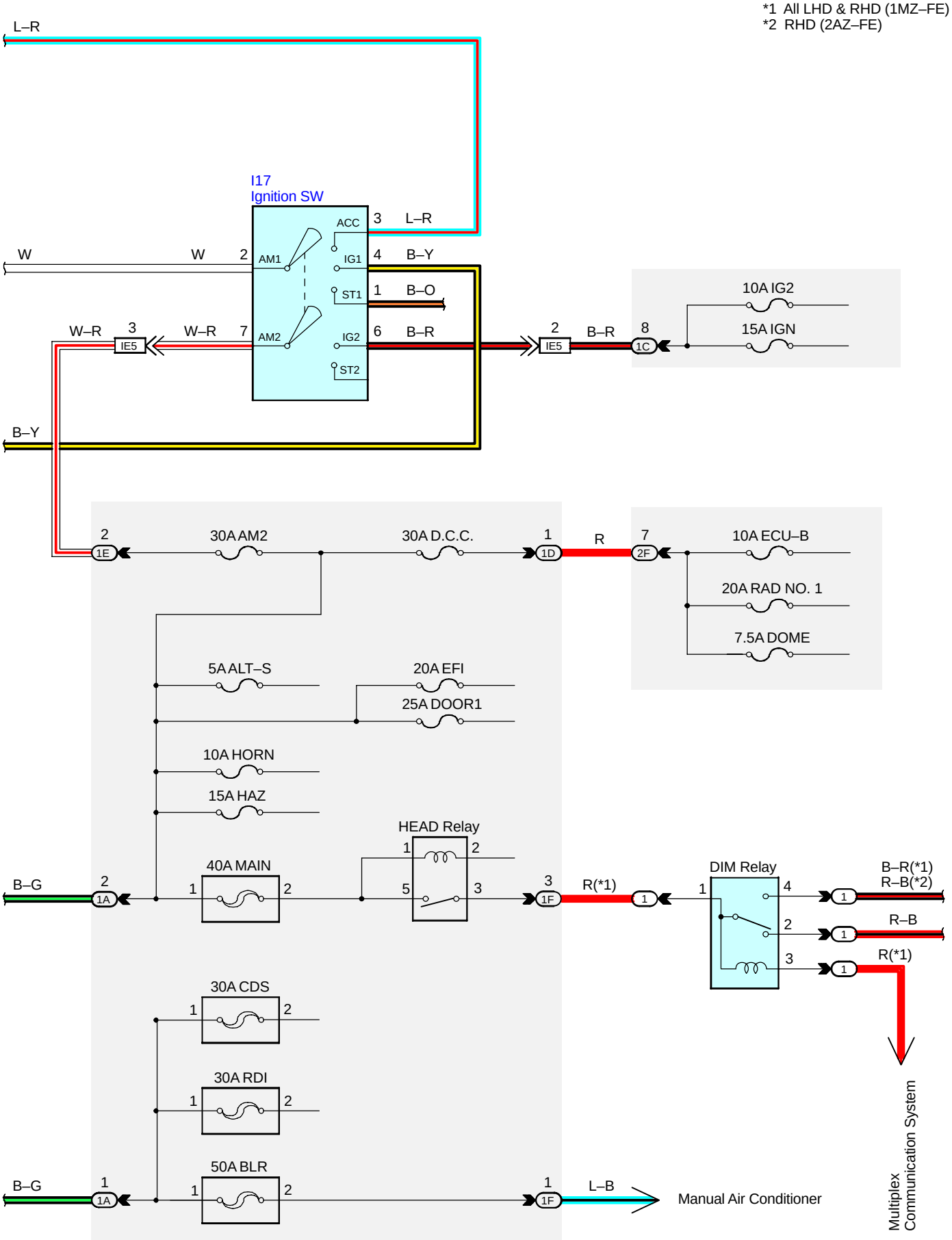
Power Source 78
Starting and Ignition (1MZ–FE) 82
Starting and Ignition (2AZ–FE) 86
Charging 90
Engine Control (1MZ–FE) 92
Engine Control (2AZ–FE) 104
Engine Immobiliser System (1MZ–FE) 116
Engine Immobiliser System (2AZ–FE) 118
Multiplex Communication System (LHD) 120
Multiplex Communication System (RHD) 130
Headlight (LHD) 140
Headlight (RHD) 144
Front Fog Light 148
Interior Light (LHD) 150
Interior Light (RHD) 154
Illumination 158
Turn Signal and Hazard Warning Light 162
Taillight 166
Stop Light 170
Back–Up Light 172
Door Lock Control (LHD) 174
Door Lock Control (RHD) 180
Moon Roof 186
Power Window with Jam Protection 188
Power Window without Jam Protection 194
ABS 198
SRS 203
Cruise Control 208
ECT and A/T Indicator (1MZ–FE) 212
ECT and A/T Indicator (2AZ–FE) 218
Power Seat 224
Seat Belt Warning (LHD) 228

Page

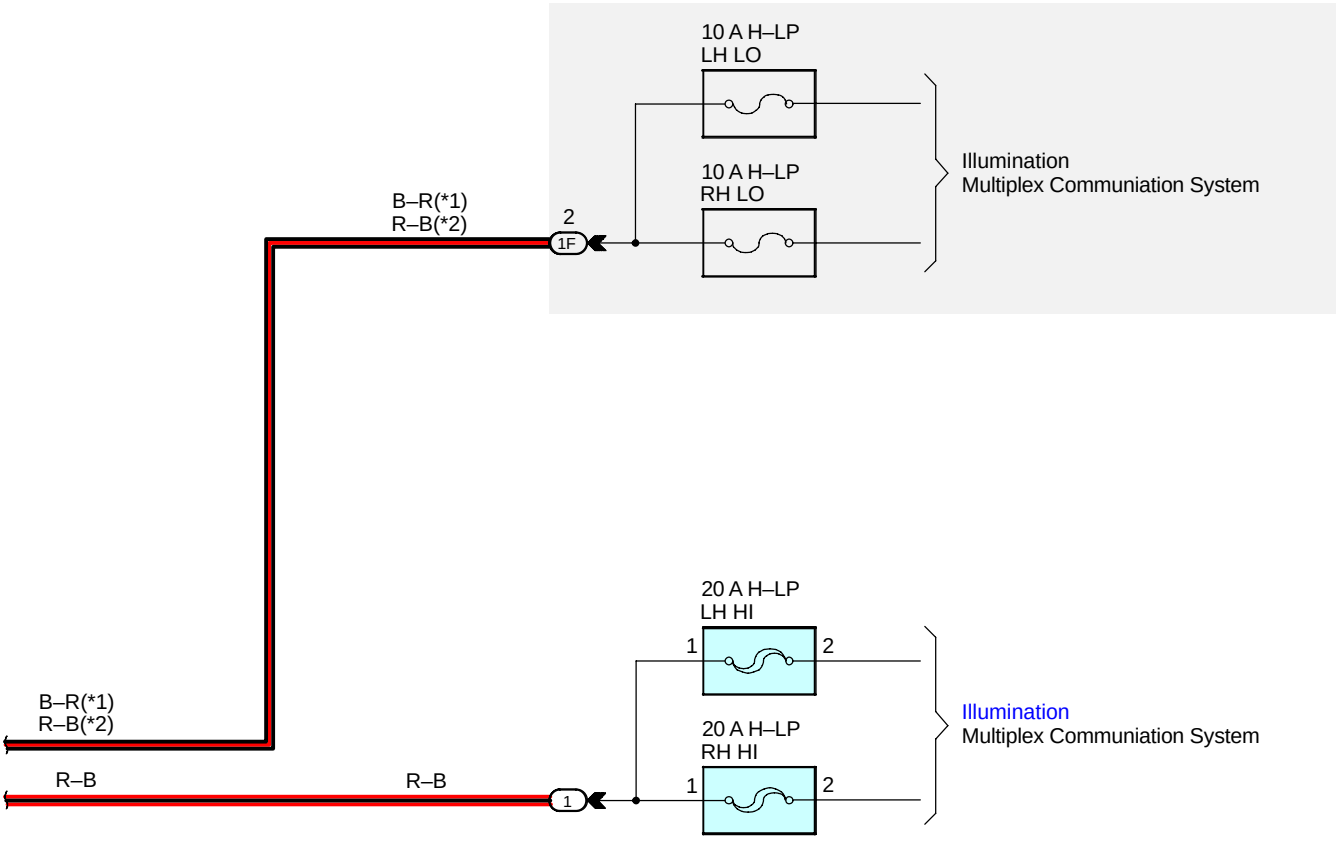
Remote Control Mirror 230
Power Outlet and Cigarette Lighter 232
Horn 234
Wiper and Washer 236
Rear Window Defogger 238
Clock 240
Radio and Player (with Navigation System) 244
Radio and Player (w/o Satellite Navigation System) 248
Auto Antenna (LHD) 250
Combination Meter 252
Radiator Fan and Condenser Fan 258
Trailer Socket 262
Automatic Air Conditioner 264
Manual Air Conditioner (2AZ-FE) 272
Manual Air Conditioner (1MZ-FE) 280


7
2A
L-R
ACC Relay
1
2
5
3
5A ECU-ACC
10A RAD No.2
15A CIG
15A POWER POINT
5A AM1
2
2A
W
10A ECU-IG
10A FAN RLY
10A GAUGE1
10A GAUGE 2
10A HTR
15A WASHER
25A WIPER
IG1 Relay
B-G
2
2E
B-Y
8
2A
A10
Alternator
B
1
B-G
B-G
40A DEF
DEF Relay
10A EFI-ECU
B-G
1
2E
Tail Relay
10A TAIL
10A PANEL
60A ABS
100A ALT (Except RHD 2AZ-FE)
120A ALT (RHD 2AZ-FE)
2
1
L
L
7.5A OBD
15A FOG
15A STOP
30A PWR NO. 1
30A PWR SEAT
B-G
Skid Control
ECU w/ Actuator
FL MAIN
3.0W
BATTERY
B-G
B-G
B-G
B-G

*1 All LHD & RHD (1MZ–FE)
*2 RHD (2AZ–FE)



*1 All LHD & RHD (1MZ–FE)
*2 RHD (2AZ–FE)



Service Hints

I17 Ignition SW

2–3 : Closed with the ignition SW at ACC or ON position
2–4 : Closed with the ignition SW at ON or ST position
2–1 : Closed with the ignition SW at ST position
7–6 : Closed with the ignition SW at ON or ST position

TAIL Relay

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

HEAD Relay

5–3 : Closed with the light control SW at HEAD position or dimmer SW at FLASH position
Closed with the engine running.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A10	36 (LHD)	I17	37 (LHD)		
	46 (RHD)		47 (RHD)		

: Relay Blocks

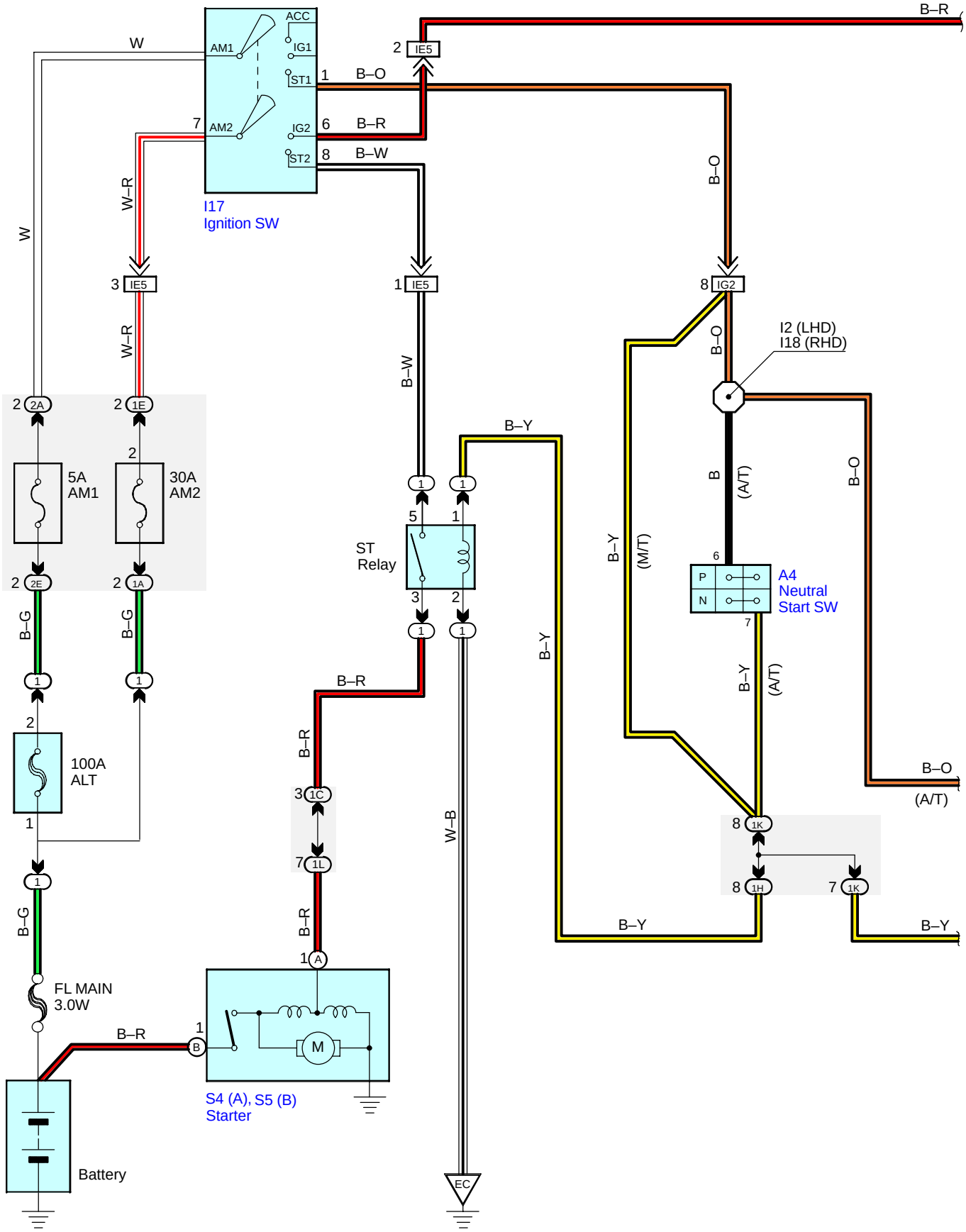
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

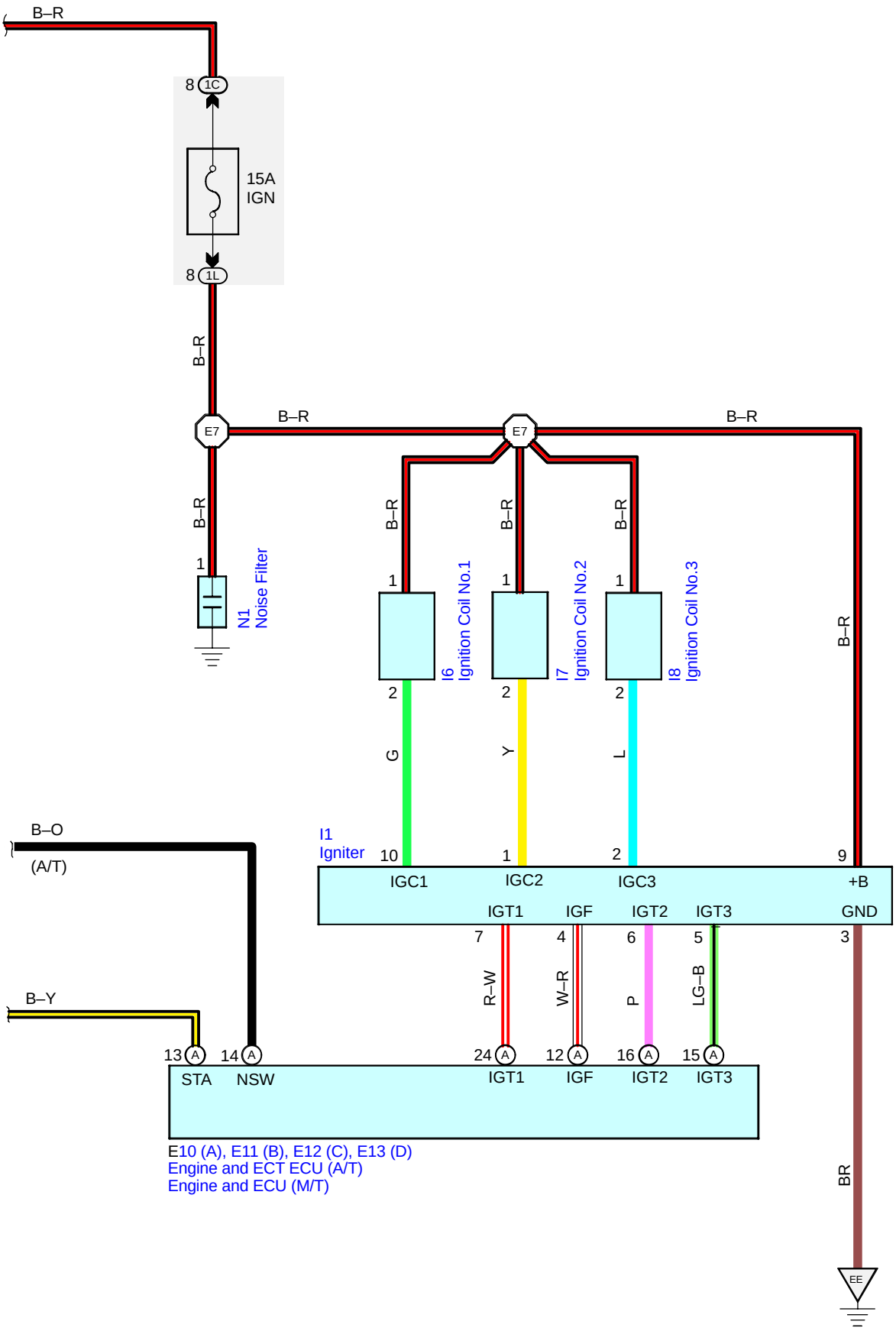
Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1C		
1D		
1E		
1F		
2A	26	Instrument Panel Wire and Driver Side J/B
2E	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2F	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)


ACC
AM1
IG1
ST1
AM2
IG2
ST2
I17
Ignition SW
W
W–R
B–O
B–R
B–W
B–Y
B–G
B
(A/T)
(M/T)
IE5
IG2
2A
1E
2E
1A
5A
AM1
30A
AM2
100A
ALT
FL MAIN
3.0W
ST
Relay
1C
1L
1K
1H
I2 (LHD)
I18 (RHD)
A4
Neutral
Start SW
P
N
S4 (A), S5 (B)
Starter
M
Battery
EC


B–R
8 1C
15A
IGN
8 1L
B–R
E7
B–R
E7
B–R
B–R
1
N1
Noise Filter
B–R
1
I6
Ignition Coil No.1
2
G
B–R
1
I7
Ignition Coil No.2
2
Y
B–R
1
I8
Ignition Coil No.3
2
L
B–R
B–O
(A/T)
B–Y
I1
Igniter
10
1
2
9
IGC1
IGC2
IGC3
+B
IGT1
IGF
IGT2
IGT3
GND
7
4
6
5
3
R–W
W–R
P
LG–B
13 A
14 A
24 A
12 A
16 A
15 A
STA
NSW
IGT1
IGF
IGT2
IGT3
BR
EE
E10 (A), E11 (B), E12 (C), E13 (D)
Engine and ECT ECU (A/T)
Engine and ECU (M/T)

Service Hints

I17 Ignition SW

2–1 : Closed with the ignition SW at ST position
7–6 : Closed with the ignition SW at ON or ST position
7–8 : Closed with the ignition SW at ST position

A4 Neutral Start SW

7–6 : Closed with the A/T shift lever in P or N position

S4 (A), S5 (B) Starter

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

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A4		32 (LHD 1MZ–FE)	I1	43 (RHD 1MZ–FE)	N1		33 (LHD)
		42 (RHD 1MZ–FE)	I6	33 (LHD 1MZ–FE)			43 (RHD)
E10	A	37 (LHD)		43 (RHD 1MZ–FE)	S4	A	33 (LHD 1MZ–FE)
		47 (RHD)	I7	33 (LHD 1MZ–FE)			43 (RHD 1MZ–FE)
E11	B	37 (LHD)		43 (RHD 1MZ–FE)	S5	B	33 (LHD 1MZ–FE)
		47 (RHD)	I8	33 (LHD 1MZ–FE)			43 (RHD 1MZ–FE)
E12	C	37 (LHD)		43 (RHD 1MZ–FE)			
		47 (RHD)	I17	37 (LHD 1MZ–FE)			
E13	D	37 (LHD)		47 (RHD 1MZ–FE)			
		47 (RHD)					

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	37	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1C		
1E		
1H		
1K	24	Engine Room Wire and Engine Room J/B (Engine Compartment)
1L		
2A	26	Instrument Panel Wire and Driver Side J/B
2E	26	Engine Room Main Wire and Driver Side J/B

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire
IG2	70 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)



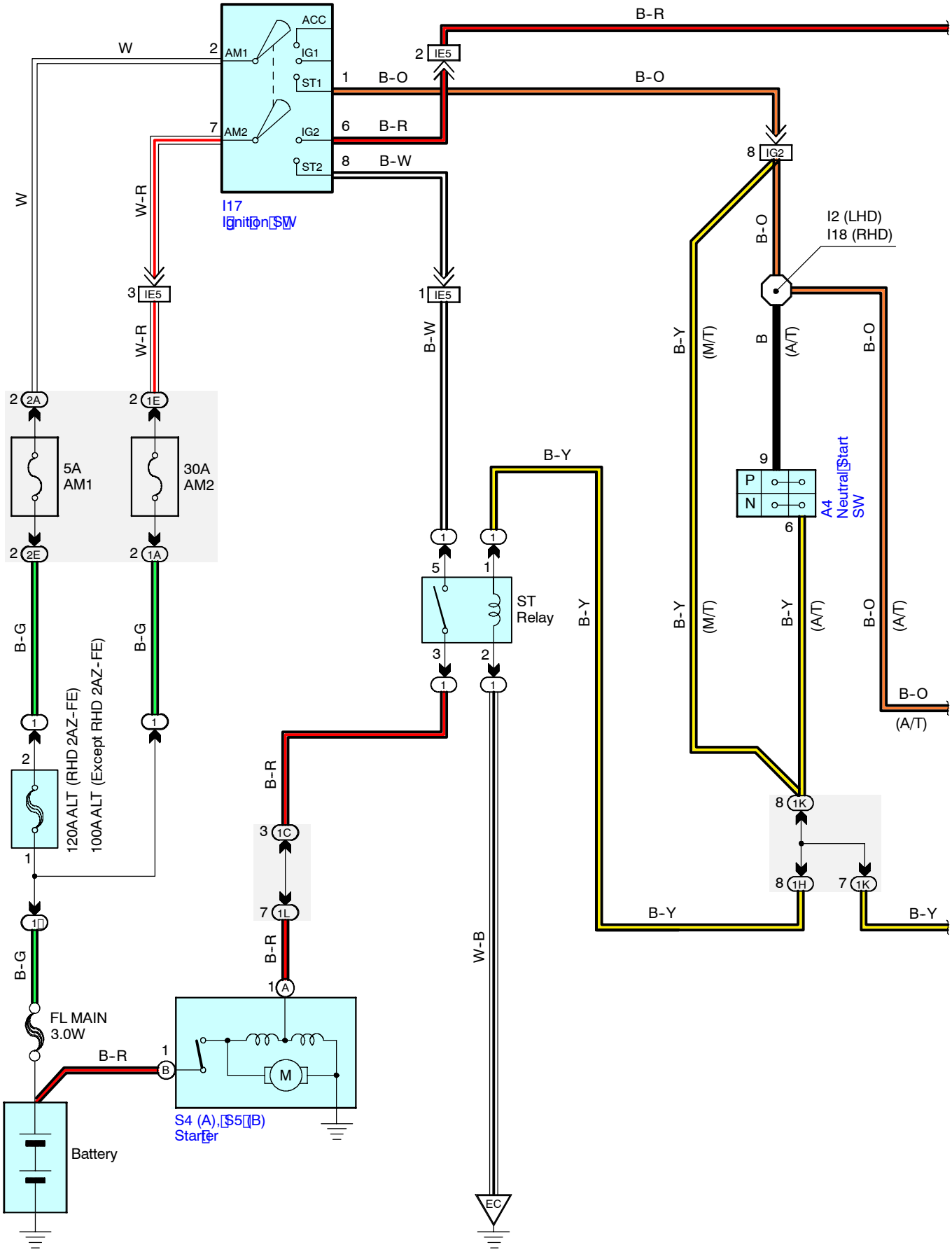
: Ground Points

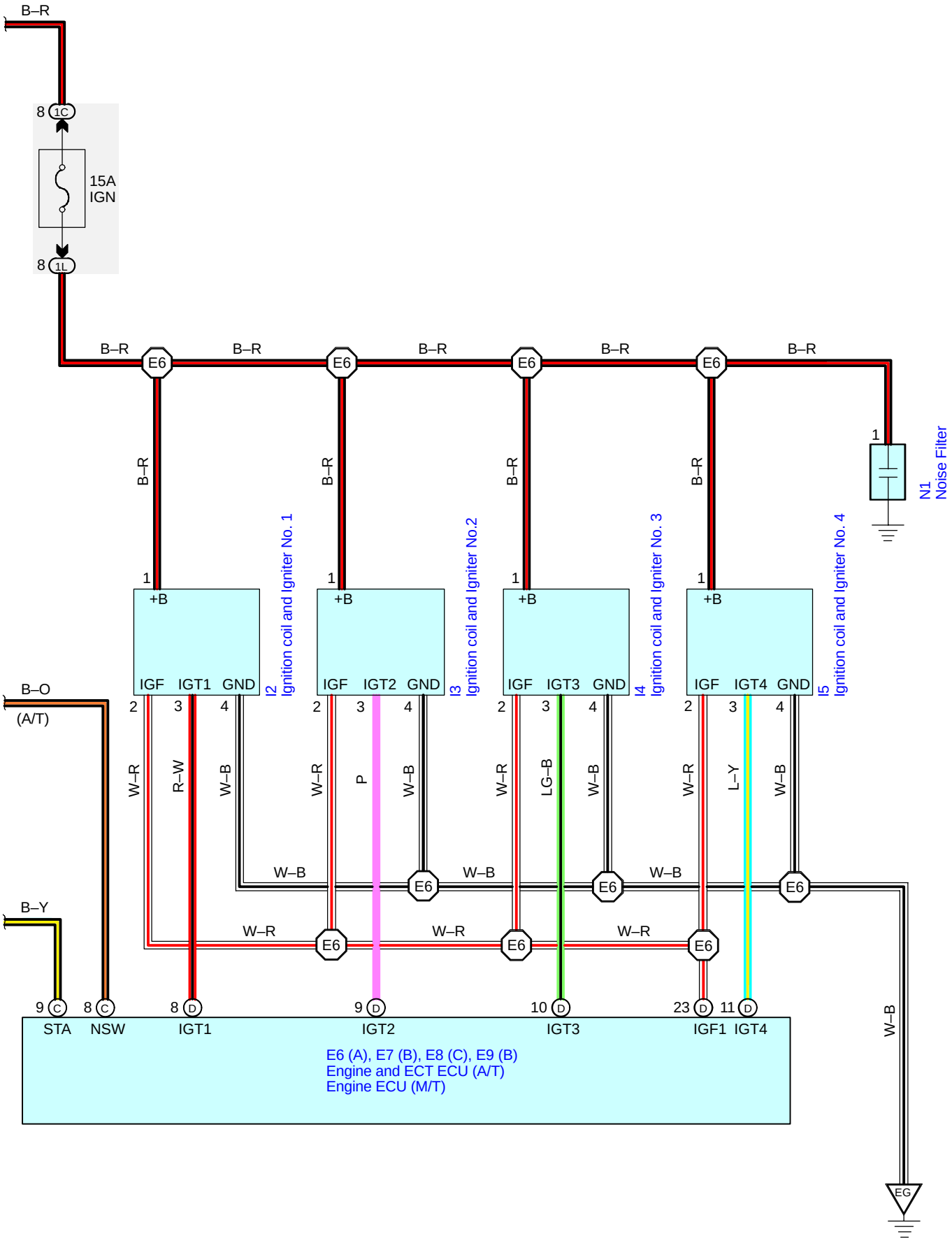
Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
EE	52 (LHD 1MZ–FE)	Rear Side of Surge Tank
	64 (RHD 1MZ–FE)	



: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	58 (LHD 1MZ–FE)	Engine Room Main Wire	I18	70 (RHD)	Engine Room Main Wire
E7	52 (LHD 1MZ–FE)	Engine Wire			
	64 (RHD 1MZ–FE)				


ACC
AM1
IG1
ST1
AM2
IG2
ST2
I17
Ignition SW
W
W-R
B-O
B-R
B-W
B-Y
B-G
W-B
IE5
2A
1E
2E
1A
1C
1L
1K
1H
5A
AM1
30A
AM2
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
FL MAIN
3.0W
Battery
S4 (A), S5 (B)
Starter
ST
Relay
I2 (LHD)
I18 (RHD)
A4
Neutral Start
SW
P
N
(M/T)
(A/T)
EC


B–R
8 1C
15A
IGN
8 1L
B–R
E6
B–R
E6
B–R
E6
B–R
E6
B–R
1
N1
Noise Filter
B–R
B–R
B–R
B–R
1
+B
IGF IGT1 GND
I2
Ignition coil and Igniter No. 1
1
+B
IGF IGT2 GND
I3
Ignition coil and Igniter No.2
1
+B
IGF IGT3 GND
I4
Ignition coil and Igniter No. 3
1
+B
IGF IGT4 GND
I5
Ignition coil and Igniter No. 4
B–O
(A/T)
2 3 4
W–R R–W W–B
2 3 4
W–R P W–B
2 3 4
W–R LG–B W–B
2 3 4
W–R L–Y W–B
B–Y
W–B
E6
W–B
E6
W–B
E6
W–B
E6
W–R
E6
W–R
E6
W–R
E6
9 C
STA
8 C
NSW
8 D
IGT1
9 D
IGT2
10 D
IGT3
23 D
IGF1
11 D
IGT4
E6 (A), E7 (B), E8 (C), E9 (B)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
W–B
EG

Service Hints

I17 Ignition SW

2–1 : Closed with the ignition SW at ST position
7–6 : Closed with the ignition SW at ON or ST position
7–8 : Closed with the ignition SW at ST position

A4 Neutral Start SW (A/T)

9–6 : Closed with the A/T shift lever in P or N position

S4 (A), S5 (B) Starter

Point closed with the neutral start SW at P or N position and the ignition SW at ST position (A/T)
Point closed with the clutch start SW on and the ignition SW at ST position (M/T)

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A4		34 (LHD) 44 (RHD)	I2	35 (LHD) 45 (RHD)	N1	A	35 (LHD) 45 (RHD)
E6	A	34 (LHD) 44 (RHD)	I3	35 (LHD) 45 (RHD)	S4	A	35 (LHD) 45 (RHD)
E7	B	34 (LHD) 44 (RHD)	I4	35 (LHD) 45 (RHD)	S5	B	35 (LHD) 45 (RHD)
E8	C	34 (LHD) 44 (RHD)	I5	35 (LHD) 45 (RHD)			
E9	B	34 (LHD) 44 (RHD)	I17	35 (LHD) 45 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

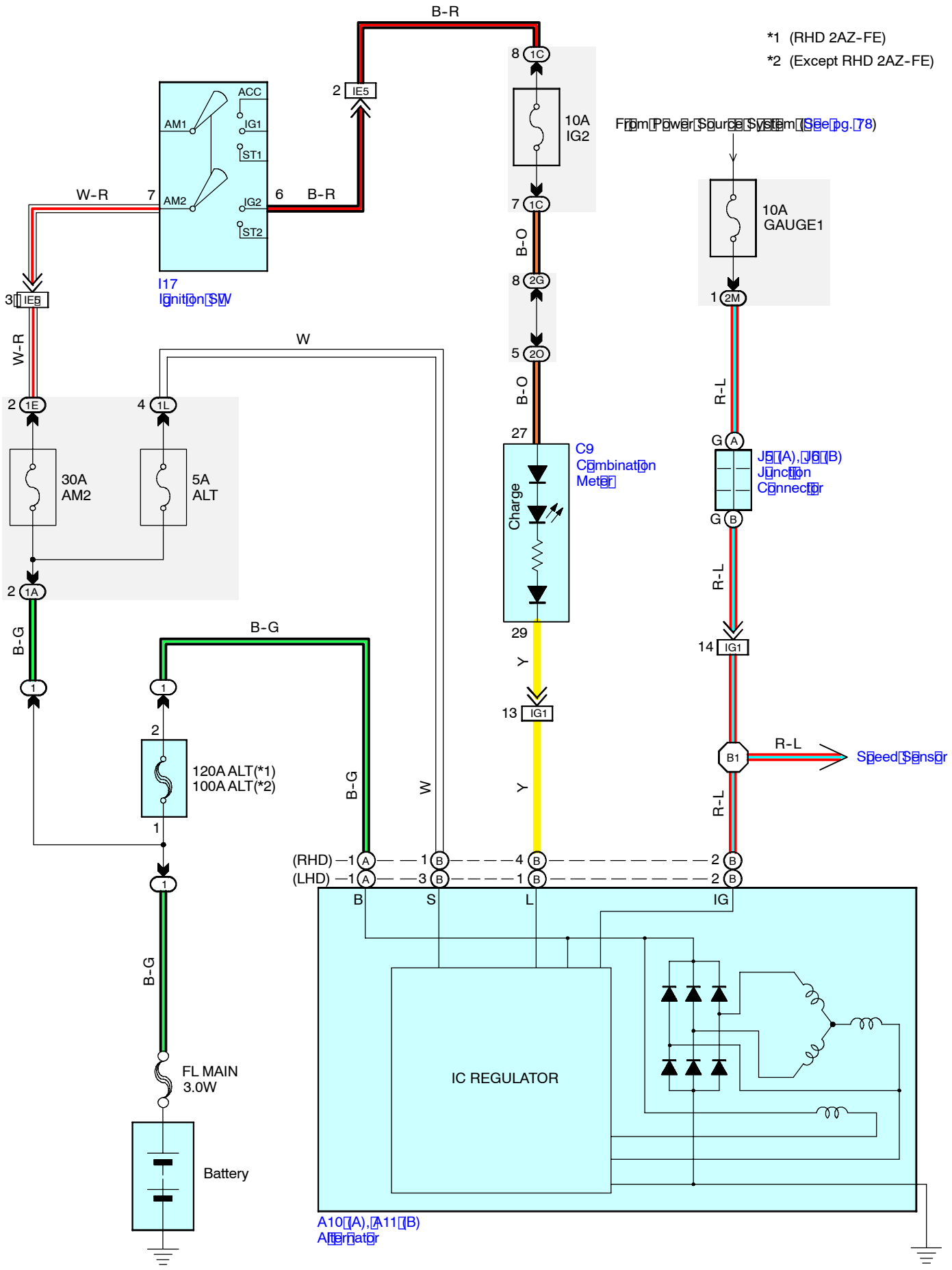
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG2	58 (LHD)	Engine Room Wire and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	Engine Room Wire and Instrument Panel Wire (Behind Glove Box)

 **: Ground Points**

Code	See Page	Ground Points Location
EC	54 (LHD 2AZ–FE)	Left Fender
	66 (RHD 2AZ–FE)	
EG	54 (LHD 2AZ–FE)	Left Side of Cylinder Head
	66 (RHD 2AZ–FE)	

 **: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	55 (LHD)	Engine Wire	E6	54 (LHD)	Engine Wire
I18	70 (RHD)			66 (RHD)	


*1 (RHD 2AZ-FE)
*2 (Except RHD 2AZ-FE)
B-R
W-R
W
B-G
B-O
R-L
Y
ACC
AM1
AM2
IG1
IG2
ST1
ST2
I17
Ignition SW
10A
IG2
10A
GAUGE1
30A
AM2
5A
ALT
120A ALT(*1)
100A ALT(*2)
FL MAIN
3.0W
Battery
C9
Combination
Meter
Charge
J5 (A), J6 (B)
Junction
Connector
Speed Sensor
IC REGULATOR
A10 (A), A11 (B)
Alternator
(RHD)
(LHD)
B
S
L
IG

Service Hints

A10 , A11 Alternator

(B) 1 –Ground : 13.9–15.1 volts with the engine running at 2000 rpm and 25° C (77° F)
13.5–14.3 volts with the engine running at 5000 rpm and 115° C (239° F)

(B)1 (LHD), 4 (RHD) –Ground : 0–4 volts with the ignition SW at ON position and the engine not running

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A10	A	32 (LHD 1MZ–FE)	A11	B	34 (LHD 2AZ–FE)	J5	A	37 (LHD)
		42 (RHD 1MZ–FE)			44 (RHD 2AZ–FE)			47 (RHD)
		34 (LHD 2AZ–FE)	C9		36 (LHD)	J6	B	37 (LHD)
		44 (RHD 2AZ–FE)			46 (RHD)			47 (RHD)
A11	B	32 (LHD 1MZ–FE)	I17		37 (LHD)			
		42 (RHD 1MZ–FE)			47 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

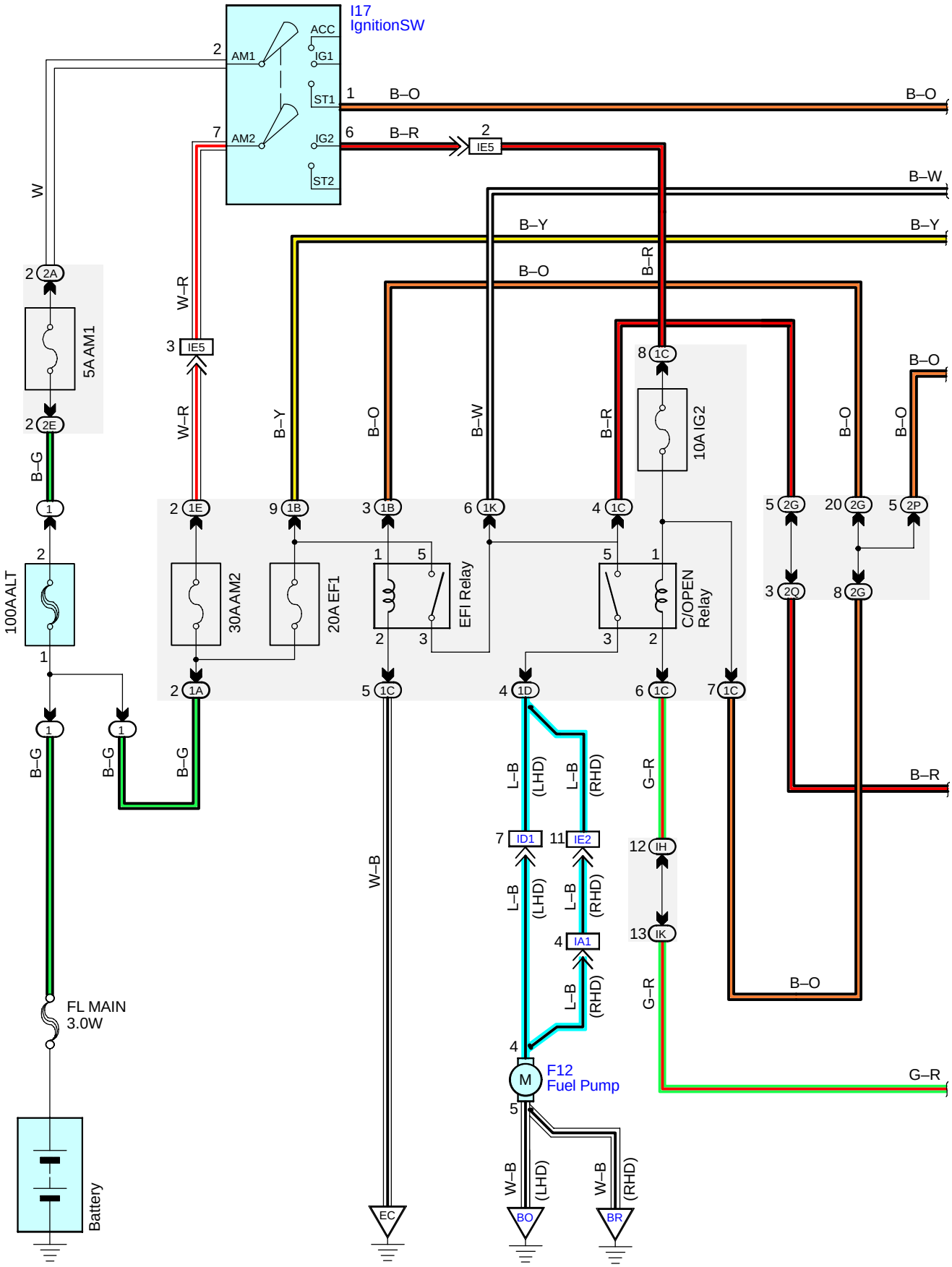
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1C		
1E		
1L	24	Engine Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B

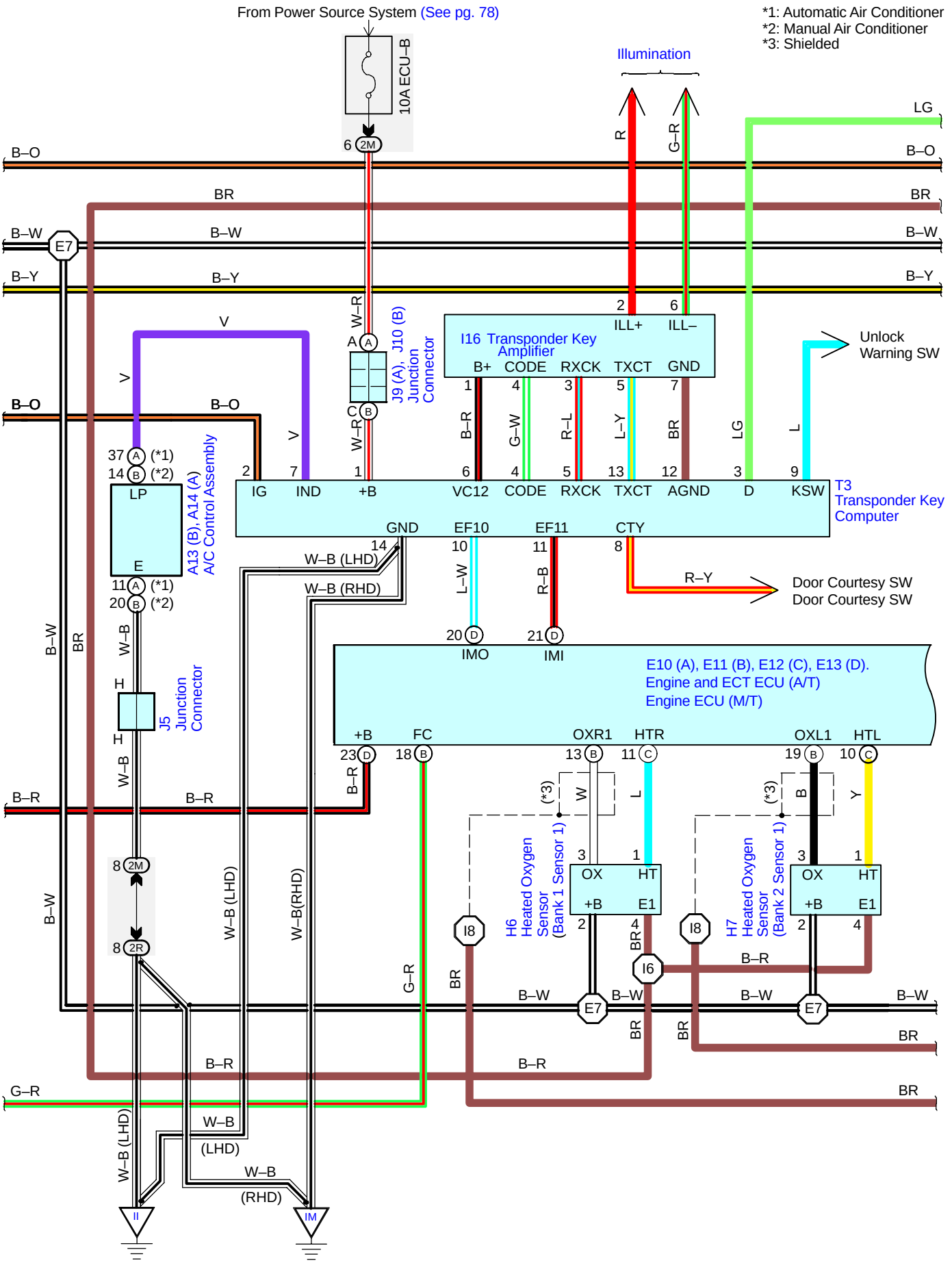
: Connector Joining Wire Harness and Wire Harness

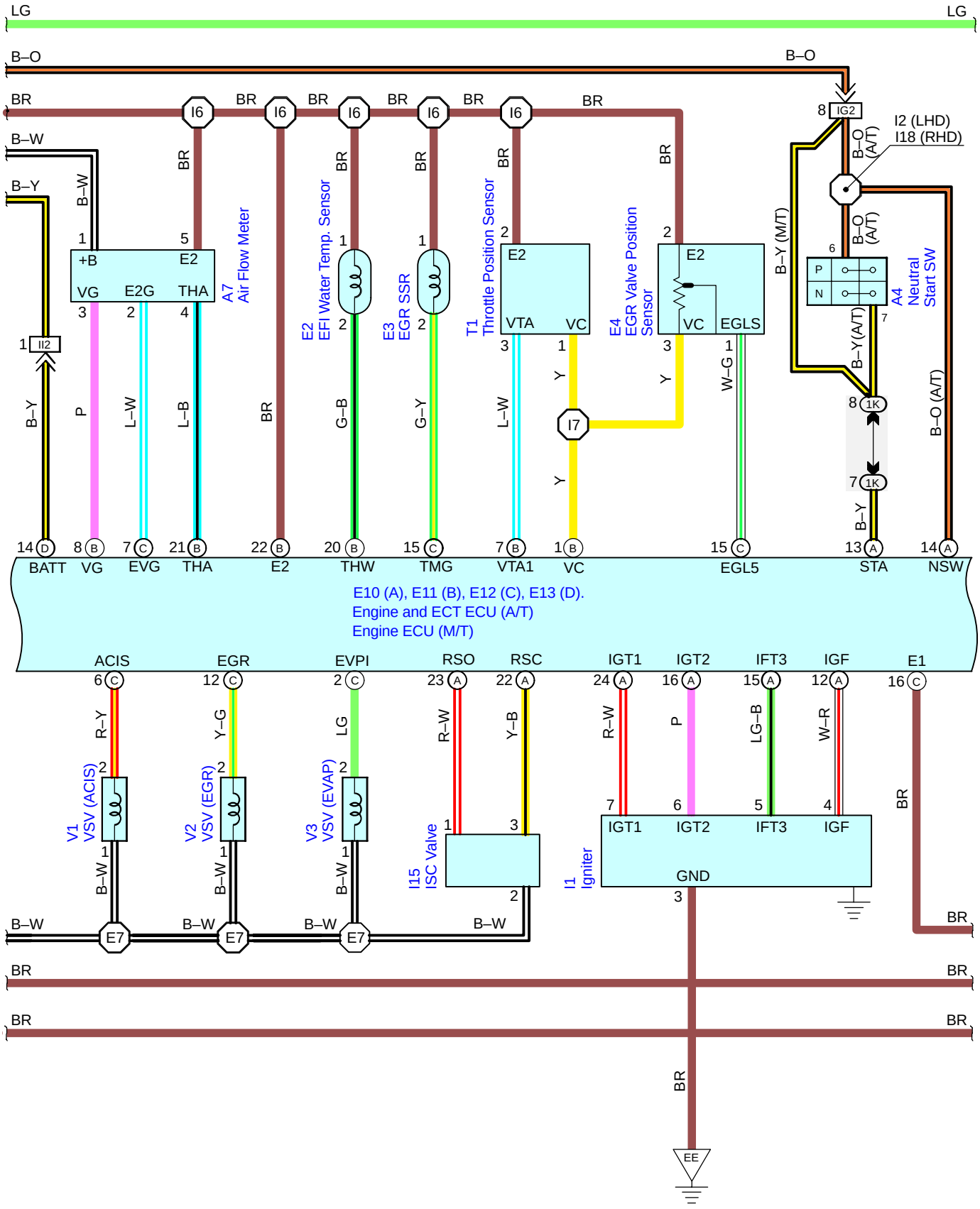
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Behind Glove Box)

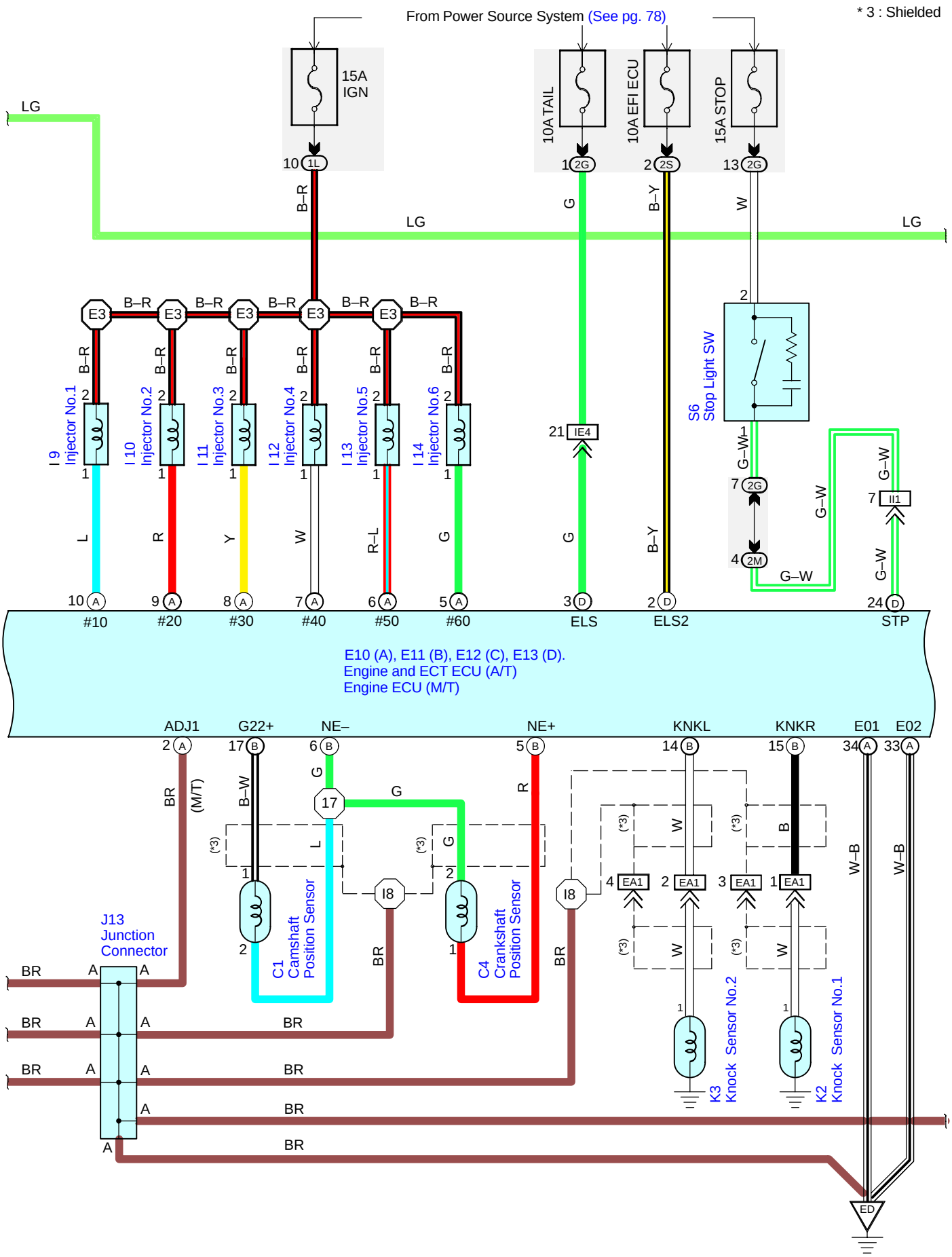
: Splice Points

Code	See Page	Wire Harness with Splice Points
E1	52 (LHD 1MZ–FE)	Engine Wire
	64 (RHD1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	

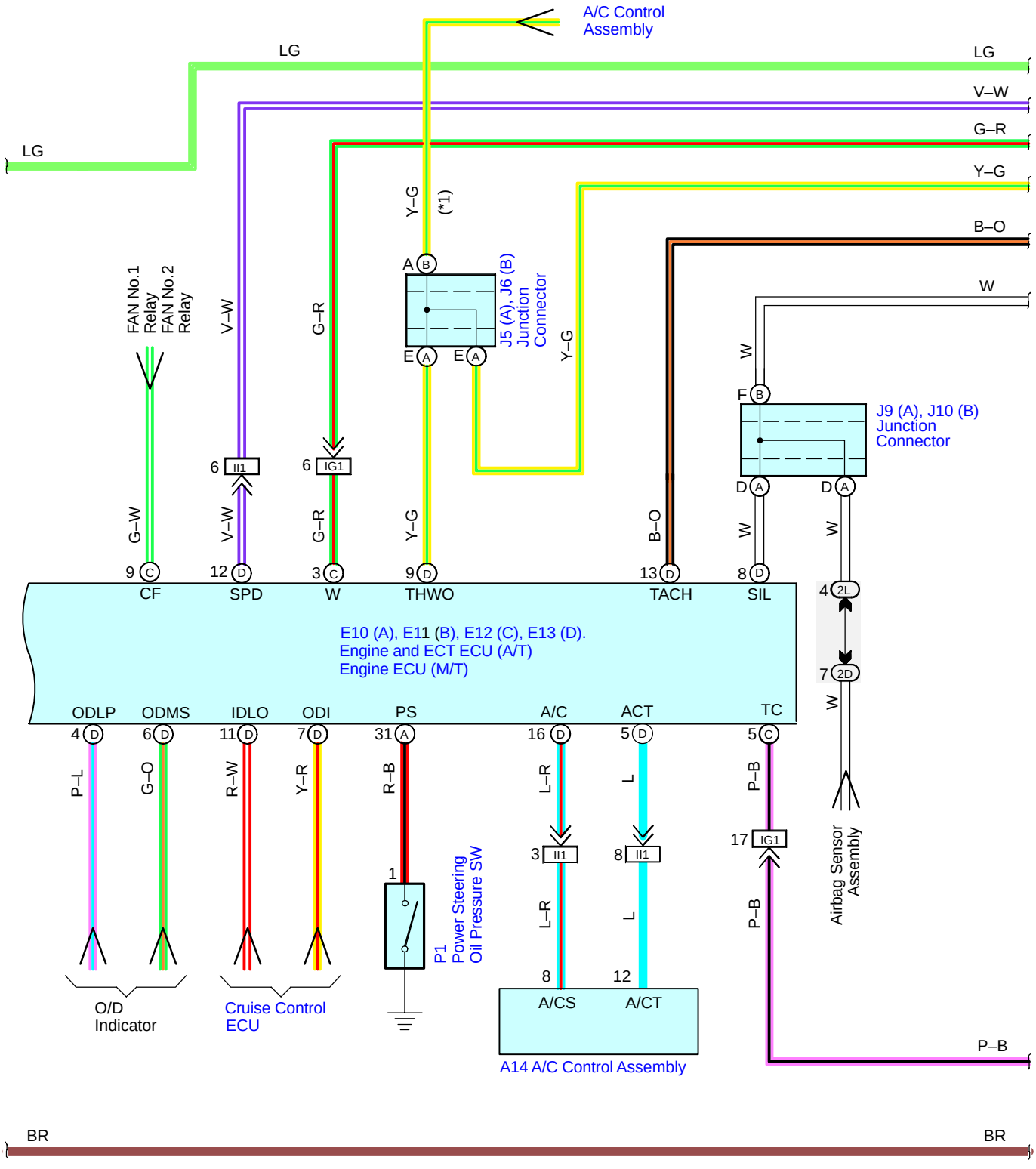

I17
IgnitionSW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
B–O
B–R
B–W
B–Y
W
W–R
B–G
W–B
G–R
L–B
(LHD)
(RHD)
5A AM1
100A ALT
30A AM2
20A EF1
EFI Relay
C/OPEN Relay
10A IG2
FL MAIN
3.0W
Battery
F12
Fuel Pump
EC
BO
BR
IE5
IE2
ID1
IA1
IH
IK
1A
1B
1C
1D
1E
1K
2A
2E
2G
2P
2Q

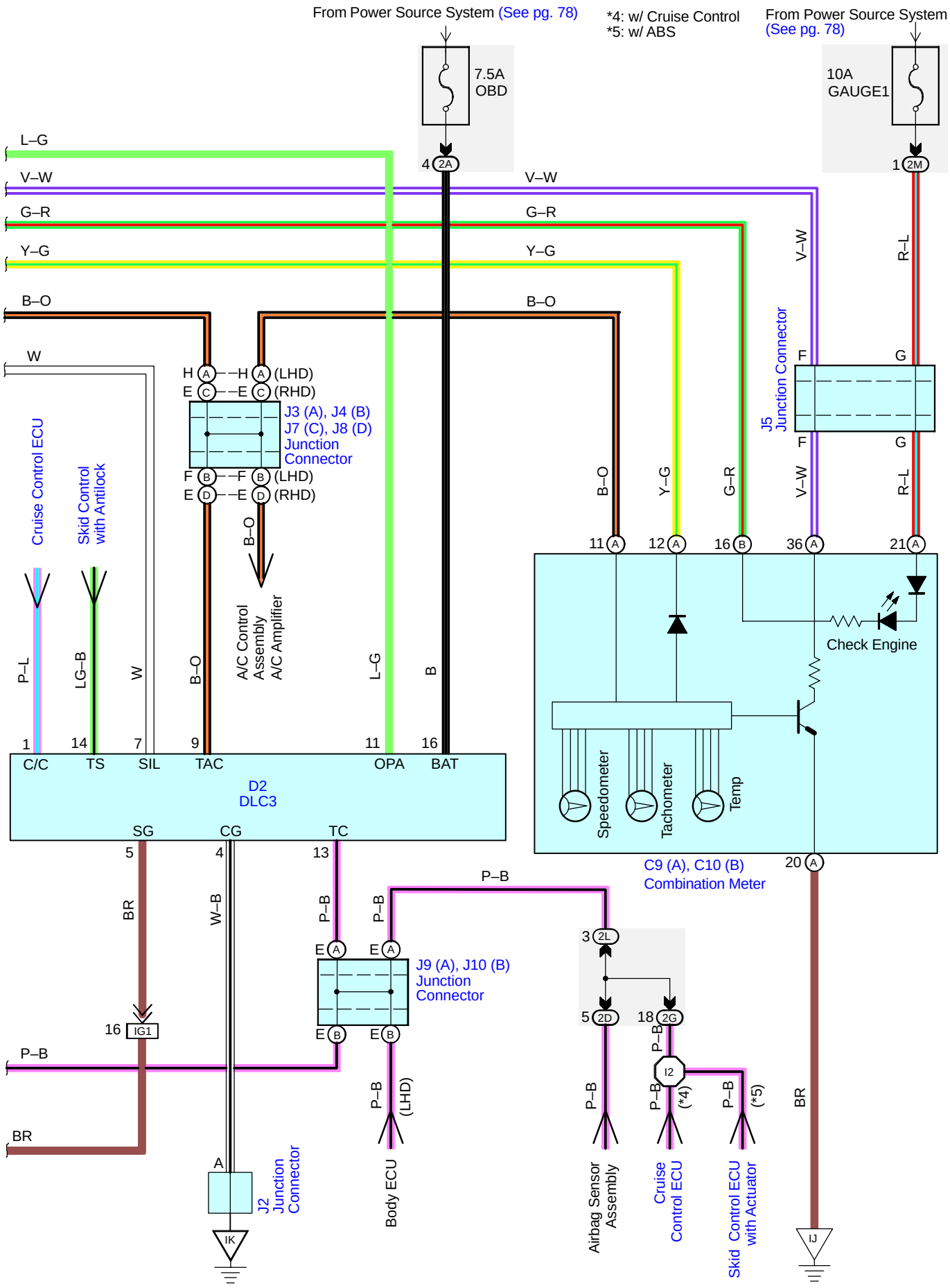

From Power Source System (See pg. 78)
*1: Automatic Air Conditioner
*2: Manual Air Conditioner
*3: Shielded
10A ECU–B
Illumination
I16 Transponder Key Amplifier
B+ CODE RXCK TXCT GND
ILL+ ILL–
Unlock Warning SW
J9 (A), J10 (B) Junction Connector
A13 (B), A14 (A) A/C Control Assembly
LP
IG IND +B VC12 CODE RXCK TXCT AGND D KSW
T3 Transponder Key Computer
GND EF10 EF11 CTY
W–B (LHD)
W–B (RHD)
R–Y
Door Courtesy SW
Door Courtesy SW
IMO IMI
J5 Junction Connector
E10 (A), E11 (B), E12 (C), E13 (D).
Engine and ECT ECU (A/T)
Engine ECU (M/T)
+B FC OXR1 HTR OXL1 HTL
H6 Heated Oxygen Sensor (Bank 1 Sensor 1)
H7 Heated Oxygen Sensor (Bank 2 Sensor 1)
OX +B HT E1
W–B (LHD)
W–B(RHD)
W–B (LHD)
W–B (RHD)
B–O
BR
B–W
B–Y
B–R
G–R
LG
V
W–R
R
G–R
L
B–R
G–W
R–L
L–Y
BR
LG
L
L–W
R–B
W–B
H
W
L
B
Y
(*3)
I8
I6
E7
2M
2R
II
IM


LG
B–O
BR
B–W
B–Y
I6
A7 Air Flow Meter
E2 EFI Water Temp. Sensor
E3 EGR SSR
T1 Throttle Position Sensor
E4 EGR Valve Position Sensor
I2 (LHD) I18 (RHD)
A4 Neutral Start SW
I2
I7
+B
E2
VG
E2G
THA
VTA
VC
EGLS
IG2
P
N
1K
BATT
VG
EVG
THA
E2
THW
TMG
VTA1
VC
EGL5
STA
NSW
E10 (A), E11 (B), E12 (C), E13 (D).
Engine and ECT ECU (A/T)
Engine ECU (M/T)
ACIS
EGR
EVPI
RSO
RSC
IGT1
IGT2
IFT3
IGF
E1
V1 VSV (ACIS)
V2 VSV (EGR)
V3 VSV (EVAP)
I15 ISC Valve
I1 Igniter
GND
E7
EE


* 3 : Shielded
From Power Source System (See pg. 78)
15A IGN
10A TAIL
10A EFI ECU
15A STOP
LG
B–R
G
B–Y
W
I 9 Injector No.1
I 10 Injector No.2
I 11 Injector No.3
I 12 Injector No.4
I 13 Injector No.5
I 14 Injector No.6
S6 Stop Light SW
G–W
R–L
#10
#20
#30
#40
#50
#60
ELS
ELS2
STP
E10 (A), E11 (B), E12 (C), E13 (D).
Engine and ECT ECU (A/T)
Engine ECU (M/T)
ADJ1
G22+
NE–
NE+
KNKL
KNKR
E01
E02
(M/T)
J13 Junction Connector
C1 Camshaft Position Sensor
C4 Crankshaft Position Sensor
K3 Knock Sensor No.2
K2 Knock Sensor No.1
W–B

* 1 : Automatic Air Conditioner




From Power Source System (See pg. 78)
*4: w/ Cruise Control
*5: w/ ABS
From Power Source System (See pg. 78)
7.5A OBD
10A GAUGE1
4 2A
1 2M
L–G
V–W
G–R
Y–G
B–O
W
H A H A (LHD)
E C E C (RHD)
J3 (A), J4 (B)
J7 (C), J8 (D)
Junction Connector
F B F B (LHD)
E D E D (RHD)
J5 Junction Connector
Cruise Control ECU
Skid Control with Antilock
A/C Control Assembly
A/C Amplifier
P–L
LG–B
W
B–O
L–G
B
1
14
7
9
11
16
C/C
TS
SIL
TAC
OPA
BAT
D2
DLC3
11 A
12 A
16 B
36 A
21 A
Check Engine
Speedometer
Tachometer
Temp
C9 (A), C10 (B)
Combination Meter
20 A
SG
CG
TC
5
4
13
BR
W–B
P–B
E A
E A
J9 (A), J10 (B)
Junction Connector
E B
E B
16 IG1
3 2L
5 2D
18 2G
I2
(*4)
(*5)
(LHD)
A
J2 Junction Connector
IK
Body ECU
Airbag Sensor Assembly
Cruise Control ECU
Skid Control ECU with Actuator
IJ

System Outline

This system utilizes an engine and ECT ECU and maintains overall control of components such as the engine and transmission. An outline of the engine control is explained here.

1. Input Signals

(1) Engine coolant temp. signal circuit

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

(2) Intake air temp. signal circuit

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

(3) Oxygen sensor signal circuit

The oxygen density in the exhaust gases is detected and input as a control signal into TERMINALS OX1B and OX2B of the engine and ECT ECU. To maintain stable detection performance by the heated oxygen sensor, a heater is used for warming the sensor. The heater is also controlled by the engine and ECT ECU (HT1B and HT2B).

(4) RPM signal circuit

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. The camshaft position is input as a control signal to TERMINAL G22+ of the engine and ECT ECU, and the engine RPM is input into TERMINAL NE+.

(5) Throttle signal circuit

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

(6) Vehicle speed signal circuit

The vehicle speed sensor, detects the vehicle speed and input to ABS speed sensor of the skid control ECU, from skid control ECU to TERMINAL SPD of the engine and ECT ECU, Via combination meter.

(7) Neutral start SW signal circuit

The neutral start SW detects whether the shift position is in neutral, parking or not, and inputs a control signal into TERMINAL NSW of the engine and ECT ECU.

(8) A/C SW signal circuit

The A/C control assembly inputs the A/C operations into TERMINAL A/CS of the engine and ECT ECU as a control signal.

(9) Battery signal circuit

Voltage is always supplies to TERMINAL BATT of the engine and ECT ECU.
If you turn on the ignition SW, the current goes from TERMINAL MREL of the engine and ECT ECU to the EFI relay and put on the relay, and the voltage related to the engine and ECT ECU operation is supplied to TERMINAL +B of the engine and ECT ECU through the EFI relay.

(10) Intake air volume signal circuit

Intake air volume is detected by the air flow meter and a signal is input into TERMINAL VG of the engine and ECT ECU as a control signal.

(11) Starter signal circuit

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

(12) Engine knock signal circuit

Engine knocking is detected by the knock sensor 1 and 2, then the signals are input into TERMINALS KNKR and KNKL of the engine and ECT ECU as a control signal.

(13) Air fuel ratio signal circuit

The air fuel ratio is detected and input as a control signal into TERMINALS AFL+, AFR+ of the engine and ECT ECU.

2. Control System

* EFI system
  The EFI system monitors the engine condition through the signals which are input from each sensor to engine and ECT ECU. The best fuel injection volume is decided based on this data and the program memorized by the engine and ECT ECU, and the control signal is output to TERMINALS #10, #20, #30, #40, #50 and #60 of the engine and ECT ECU to operate the injector (Inject the fuel). The EFI system produces control of fuel injection operation by the engine and ECT ECU in response to the driving conditions.
* ESA system
  The ESA system monitors the engine condition through the signals which are input to the engine and ECT ECU from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine and ECT ECU, and the control signal is output to TERMINALS IGT1, 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 heated oxygen sensor to improve detection performance of the sensor.
  The engine and ECT ECU evaluates the signals from each sensor, current is output to TERMINALS HT1B and HT2B, controlling the heater.
* EGR control system
  The EGR control system detects the signals from each sensor, and outputs current to TERMINAL EGR to control the VSV (EGR).
  The EGR valve position sensor is mounted on the EGR valve. this sensor converts the EGR valve opening height into a voltage and sends it to the engine and ECT ECU as the EGR valve position signal.
* 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 and ECT ECU judges the engine speed by the signals from each sensor and outputs current to the TERMINAL ACIS to control the VSV (ACIS).

3. Diagnosis System

With the diagnosis system, when there is a malfunction in the engine and ECT ECU signal system, the malfunctioning system is recorded in the memory.

4. Fail–Safe System

When a malfunction occurs in any systems, 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 and ECT ECU memory or else stops the engine.

Service Hints

E2 EFI Water Temp. Sensor

1–2 : Approx. 15.04 kΩ (–20°C, –4°F)
Approx. 5.74 kΩ (0°C, 32°F)
Approx. 2.45 kΩ (20°C, 68°F)
Approx. 1.15 kΩ (40°C, 104°F)
Approx. 0.584 kΩ (60°C, 140°F)
Approx. 0.318 kΩ (80°C, 176°F)

E10 (A), E11 (B), E12 (C), E13 (D) Engine and ECT ECU

Voltage at engine and ECT ECU wiring connector
BATT–E1 : Always 9.0–14.0 volts
+B–E1 : 9.0–14.0 volts (Ignition SW at ON position)
VC–E2 : Always 4.5–5.5 volts (Ignition SW at ON position)
VTA1–E2 : 0.3–0.8 volts (Ignition SW on and throttle valve fully closed)
: 3.2–4.9 volts (Ignition SW on and throttle valve fully open)
VG–E2G : 1.1–1.5 volts (Engine idling and A/C SW OFF position)
THA–E2 : 0.5–3.4 volts (Engine idling and intake air temp. 20° C, 68° F)
THW–E2 : 0.2–1.0 volts (Engine idling and engine coolant temp. 80° C, 176° F)
IGF–E1 : 4.5–5.5 volts (Ignition SW at ON position)
Pulse generation (Engine idling)
G22+–NE– : Pulse generation (Engine idling)
NE+–NE– : Pulse generation (Engine idling)
NSW–E1 : 9.0–14.0 volts (Ignition SW on and other shift position in P or N position)
Below 3.0 volts (Ignition SW on and shift position in P or N position)
SPD–E1 : Pulse generation (Ignition SW on and rotate driving wheel slowly)
W–E1 : Below 3.0 volts
A/CI–E1 : Below 2.0 volts (Engine idling and A/C SW on)
9.0–14.0 volts (A/C SW off)
A/CS–E1 : 9.0–14.0 volts (Engine idling and A/C SW on)
Below 2.0 volts (A/C SW off)
ACIS–E01 : 9.0–14.0 volts (Ignition SW at ON position)
STA–E1 : 6.0 volts or more (Engine cranking)
ELS–E1 : 7.5–14.0 volts (Taillight SW at ON position)
0–1.5 volts (Taillight SW at OFF position)
ELS2–E1 : 7.5–14.0 volts (Defogger SW at ON position)
0–1.5 volts (Defogger SW at OFF position)
FC–E1 : 9.0–14.0 volts (Ignition SW at ON position)
0–3.0 volts (Engine idling)
EVP1–E01 : 9.0–14.0 volts (Ignition SW at ON position)
CF–E1 : 9.0–14.0 volts (Electric cooling fan is operating on high speed)
0–2.0 volts (Electric cooling fan is operating on low speed or off)
TACH–E1 : Pulse generation (Engine idling)
TBP–E1 : 9.0–14.0 volts (Ignition SW on and disconnect the vacuum hose from the vapor pressure sensor)
PTNK–E1 : 3.0–3.6 volts (Ignition SW at ON position)
1.3–2.1 volts (Ignition SW on and apply vacuum 2.0 kpa (15.0 mmHg, 0.6 in.Hg)
STP–E1 : 7.5–14.0 volts (Ignition SW on and brake pedal depressed)
Below 1.5 volts (Ignition SW on and brake pedal released)
SIL–E1 : Pulse generation (During transmission)
KNK1, KNK2–E1 : Pulse generation (Engine idling)
HTL, HTR–E03 : 9.0–14.0 volts (Ignition SW at ON position)
0–3.0 volts (Engine idling)
OXR1, OXL1–E1 : Pulse generation (Maintain engine speed at 2500 rpm for two minutes after warning up)
IGT1, IGT2, IGT3–E1 : Pulse generation (Engine idling)
#10, #20, #30, #40, #50, #60–E01 : 9.0–14.0 volts (Ignition SW at ON position)
Pulse generation (Engine idling)

I9, I10, I11, I12, I13, I14 Injector

2–1 : Approx. 13.8 Ω

C/OPN Relay

3–5 : Closed with starter running

EFI Relay

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

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A4	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	H6	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	J6 B	37 (LHD) 47 (RHD)
A7	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	H7	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	J7 C	37 (LHD) 47 (RHD)
A13	36 (LHD) 46 (RHD)	I1	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	J8 D	37 (LHD) 47 (RHD)
A14	36 (LHD) 46 (RHD)	I9	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	J9 A	37 (LHD) 47 (RHD)
C1	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	I10	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	J10 B	37 (LHD) 47 (RHD)
C4	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	I11	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	J13	37 (LHD) 47 (RHD)
C9 A	36 (LHD) 46 (RHD)	I12	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	K2	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
C10 B	36 (LHD) 46 (RHD)	I13	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	K3	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
D2	36 (LHD) 46 (RHD)	I14	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	P1	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
E2	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	I15	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)	S6	37 (LHD) 47 (RHD)
E3	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	I16	37 (LHD) 47 (RHD)	T1	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
E4	32 (LHD 1MZ–FE) 42 (RHD 1MZ–FE)	I17	37 (LHD) 47 (RHD)	T3	37 (LHD) 47 (RHD)
E10 A	37 (LHD) 47 (RHD)	J2	37 (LHD) 47 (RHD)	V1	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
E11 B	37 (LHD) 47 (RHD)	J3 A	37 (LHD) 47 (RHD)	V2	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
E12 C	37 (LHD) 47 (RHD)	J4 B	37 (LHD) 47 (RHD)	V3	33 (LHD 1MZ–FE) 43 (RHD 1MZ–FE)
E13 D	37 (LHD) 47 (RHD)	J5	37 (LHD) 47 (RHD)		
F12	38 (LHD) 48 (RHD)	J5 A	37 (LHD) 47 (RHD)		

⬭ : Relay Blocks

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

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1B		
1C		
1D		
1E		
1H		
1K	24	Engine Wire and Engine Room J/B
1L		
2A	26	Instrument Panel Wire and Engine Room J/B
2D		
2E	26	Engine Room Main Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2L	26	Instrument Panel Wire and Driver Side J/B
2M		
2P		
2Q		
2R		
2S		

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

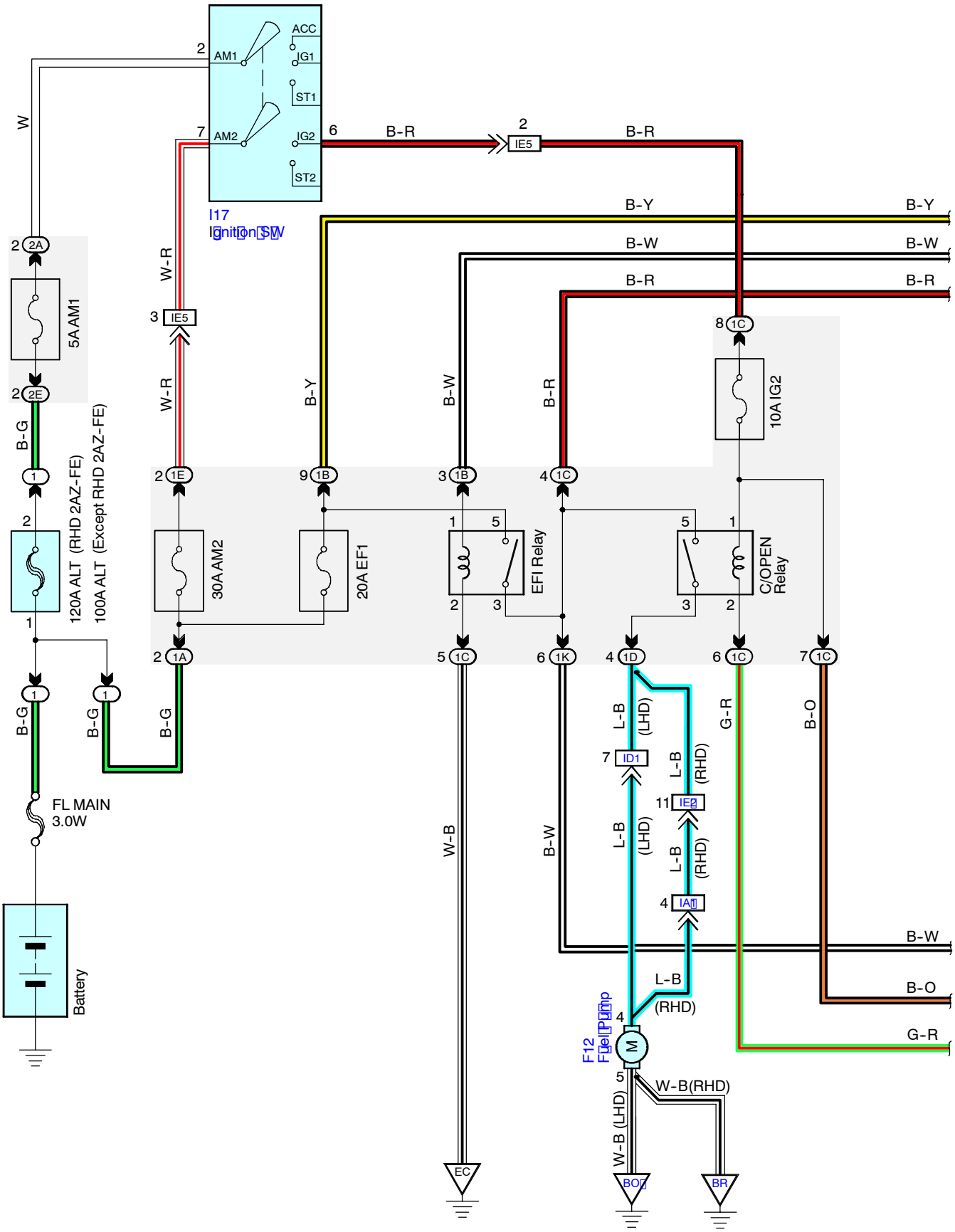
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	52 (LHD 1MZ–FE)	Engine Wire and Sensor Wire (Left Fender)
	64 (RHD 1MZ–FE)	
IA1	55 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IE2	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
IE4	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
ID1	55 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IG1	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II1	58 (LHD)	Engine Room Main Wire and Instrument Panel (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel (Left Kick Panel)
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel (Left Kick Panel)

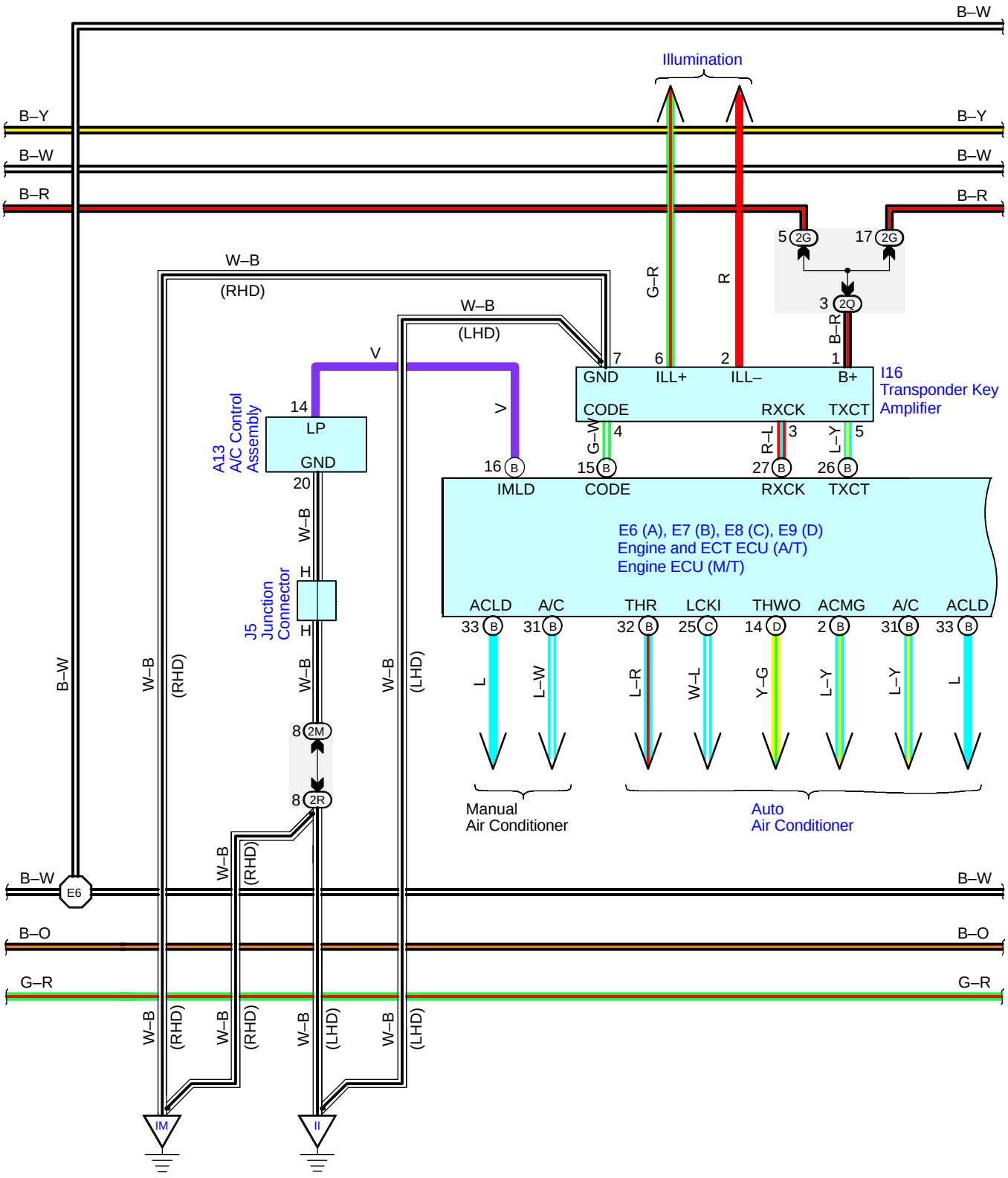
: Ground Points

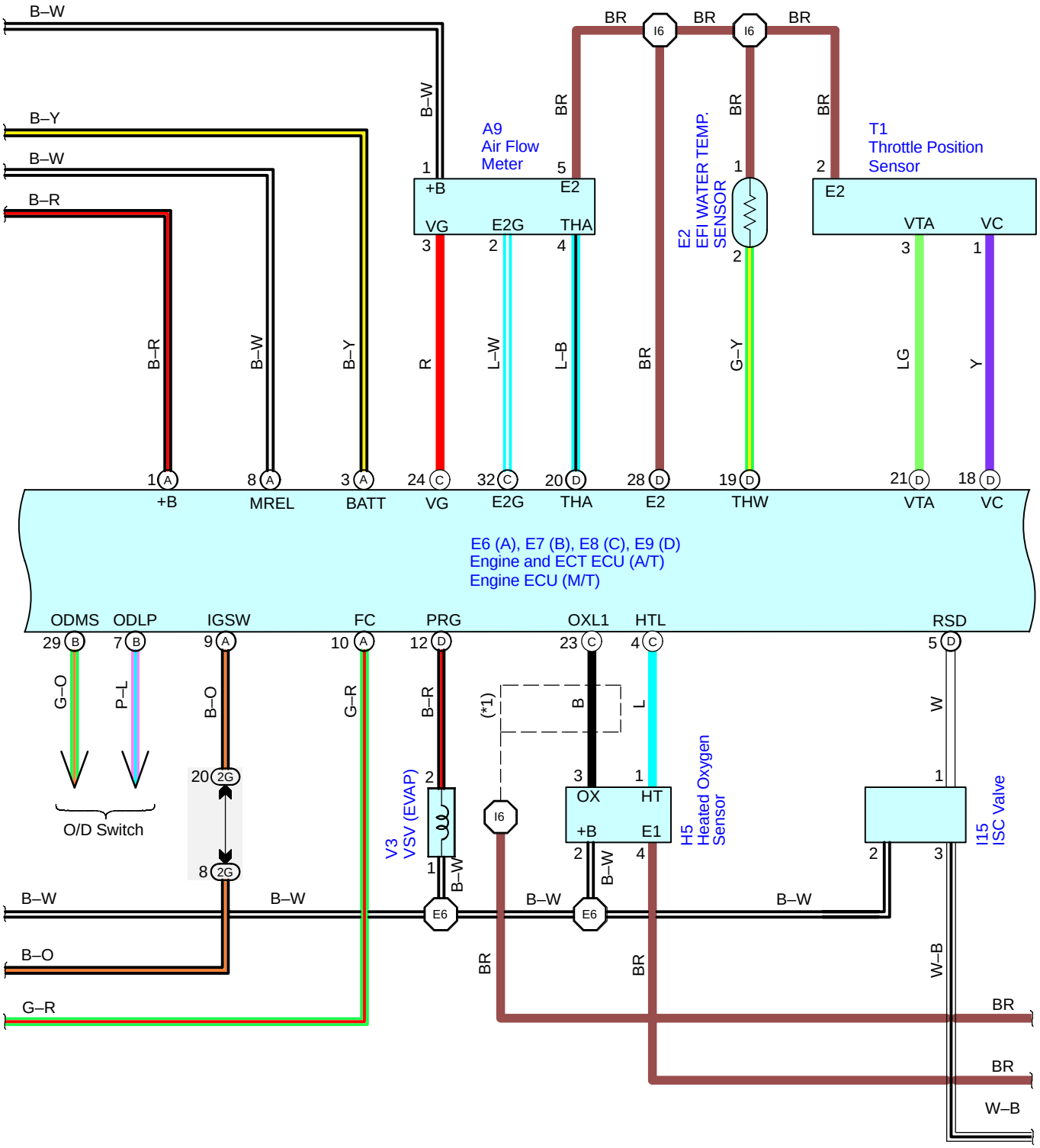
Code	See Page	Ground Points Location
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
EE	52 (LHD 1MZ–FE)	Rear Side of Surge Tank
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
ED	52 (LHD 1MZ–FE)	Surge Tank RH
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	
IJ	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	

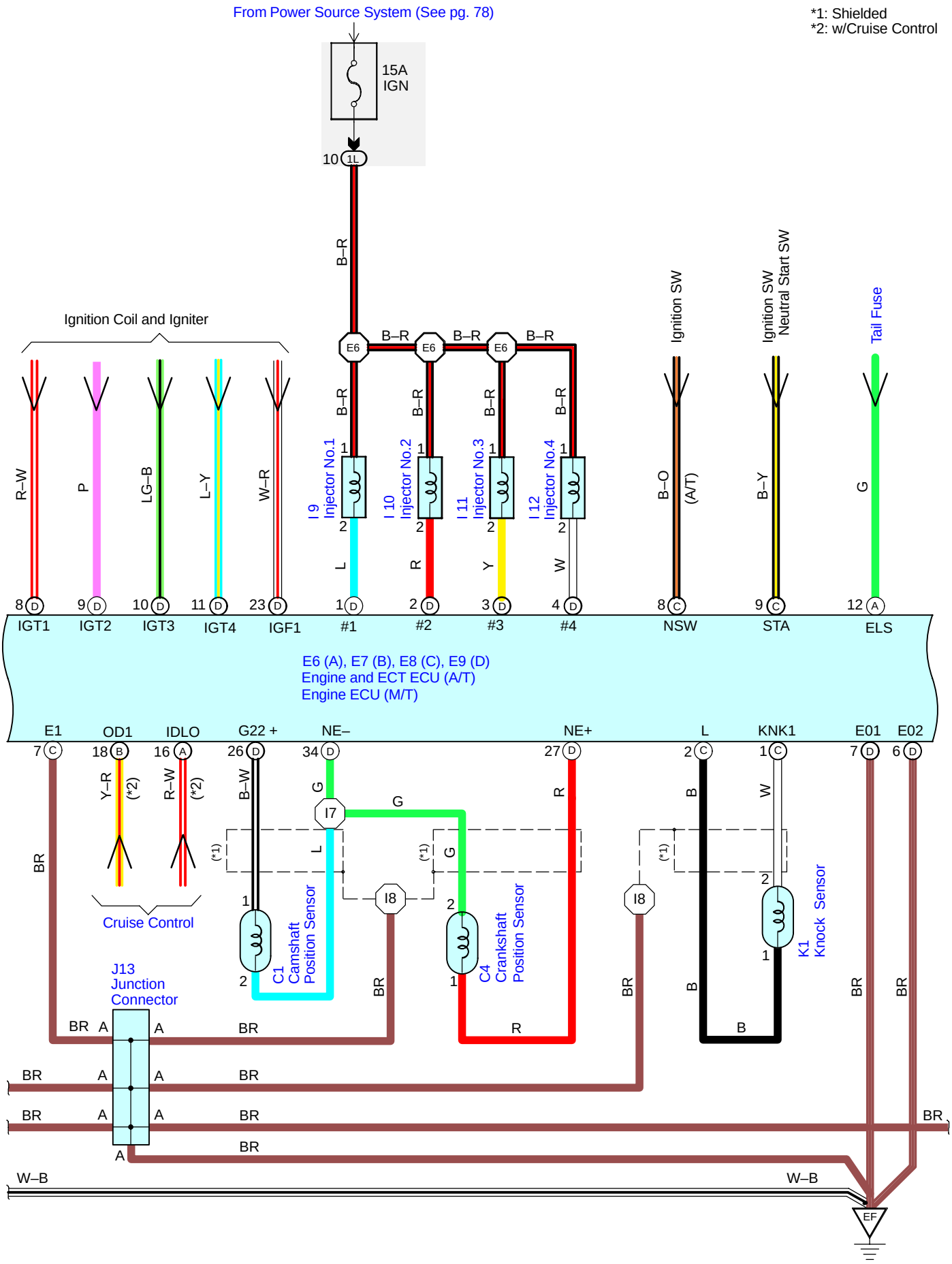
: Splice Points

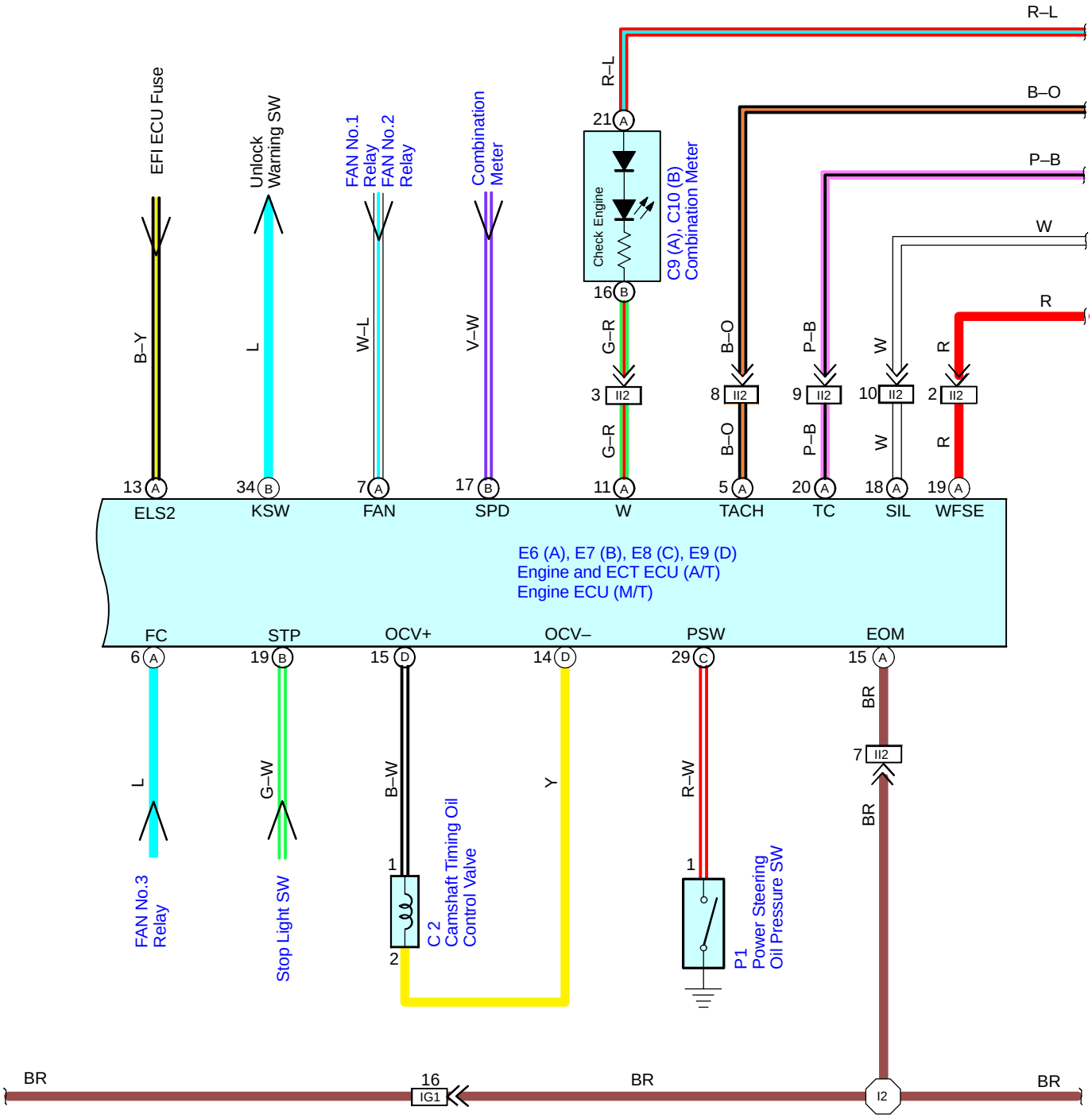
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	54 (LHD)	Engine Wire	I2	58 (LHD)	Instrument Panel
	66 (RHD)			70 (RHD)	
E7	54 (LHD)		I18	58 (LHD)	
	66 (RHD)			70 (RHD)	
I7	58 (LHD)	Instrument Panel			
	70 (RHD)				
I8	58 (LHD)				
	70 (RHD)				

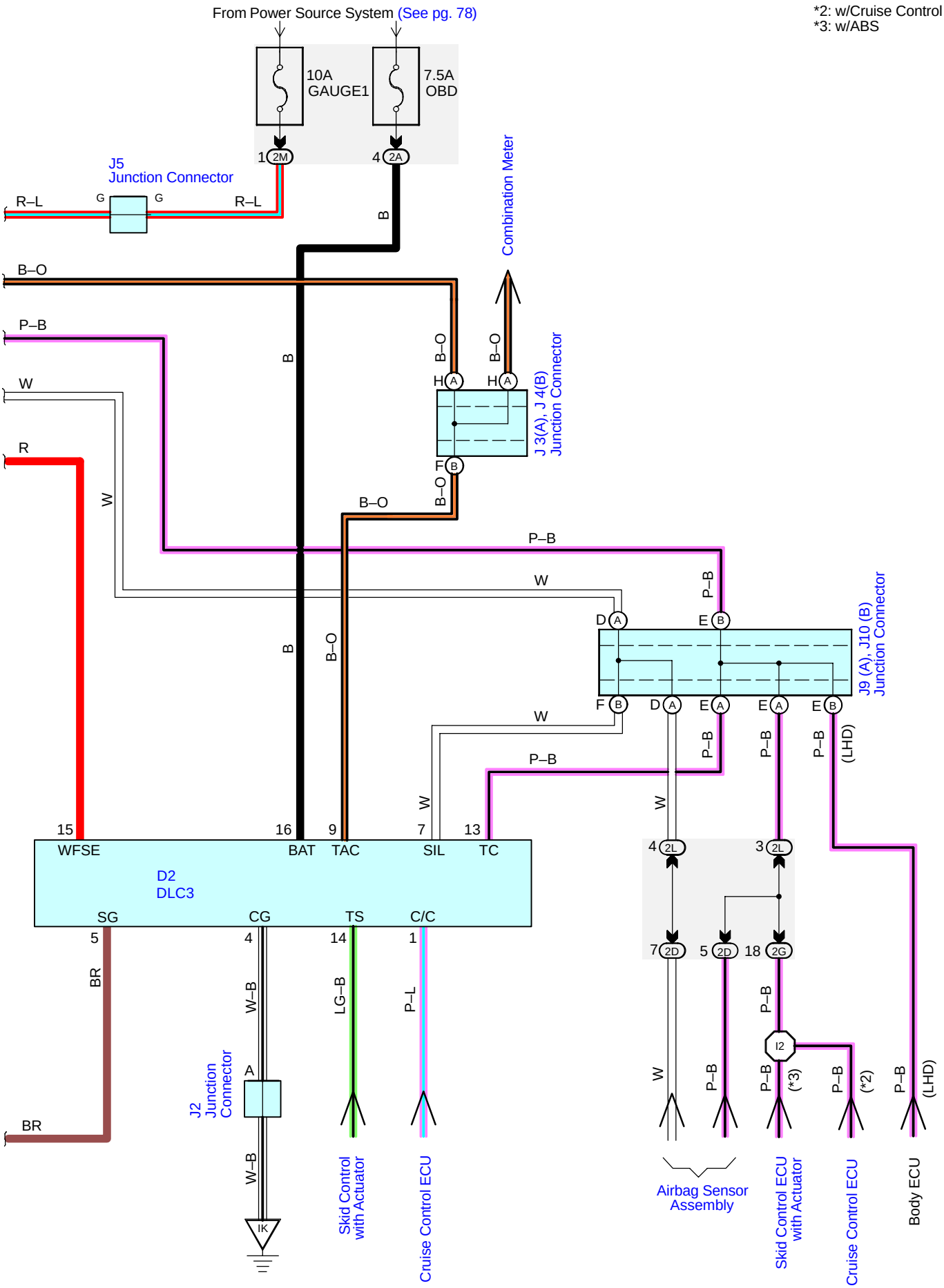

I17
Ignition SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
W
W-R
B-R
B-Y
B-W
B-G
L-B
G-R
B-O
W-B
5A AM1
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
30A AM2
20A EF1
EFI Relay
C/OPEN Relay
10A IG2
FL MAIN
3.0W
Battery
(LHD)
(RHD)
W-B(RHD)
W-B (LHD)
F12
Fuel Pump
M
EC
BOD
BR


B–W
B–Y
B–W
B–R
Illumination
G–R
R
5 2G
17 2G
3 2Q
B–R
W–B
(RHD)
W–B
(LHD)
V
V
7
6
2
1
GND
ILL+
ILL–
B+
I16
Transponder Key
Amplifier
CODE
RXCK
TXCT
G–W
4
R–L
3
L–Y
5
A13
A/C Control
Assembly
14
LP
GND
20
16 B
15 B
27 B
26 B
IMLD
CODE
RXCK
TXCT
E6 (A), E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
W–B
H
J5
Junction
Connector
H
W–B
ACLD
A/C
THR
LCKI
THWO
ACMG
A/C
ACLD
33 B
31 B
32 B
25 C
14 D
2 B
31 B
33 B
L
L–W
L–R
W–L
Y–G
L–Y
L–Y
L
8 2M
8 2R
Manual
Air Conditioner
Auto
Air Conditioner
B–W
W–B
(RHD)
B–W
E6
B–O
G–R
W–B
(RHD)
W–B
(RHD)
W–B
(LHD)
W–B
(LHD)
IM
II


B–W
B–Y
B–W
B–R
B–W
A9
Air Flow
Meter
+B
VG
E2G
THA
E2
BR
BR
BR
BR
BR
E2
EFI WATER TEMP. SENSOR
T1
Throttle Position
Sensor
E2
VTA
VC
B–R
B–W
B–Y
R
L–W
L–B
BR
G–Y
LG
Y
1 +B
8 MREL
3 BATT
24 VG
32 E2G
20 THA
28 E2
19 THW
21 VTA
18 VC
E6 (A), E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
ODMS
ODLP
IGSW
FC
PRG
OXL1
HTL
RSD
29
7
9
10
12
23
4
5
G–O
P–L
B–O
G–R
B–R
B
L
W
O/D Switch
20 2G
8 2G
(*1)
V3
VSV (EVAP)
OX
HT
+B
E1
H5
Heated Oxygen
Sensor
I15
ISC Valve
B–W
B–O
G–R
B–W
B–W
B–W
B–W
E6
E6
BR
BR
W–B
BR
BR
W–B


From Power Source System (See pg. 78)
*1: Shielded
*2: w/Cruise Control
15A IGN
10 1L
B–R
Ignition Coil and Igniter
E6
B–R
I 9 Injector No.1
I 10 Injector No.2
I 11 Injector No.3
I 12 Injector No.4
Ignition SW
Ignition SW Neutral Start SW
Tail Fuse
R–W
P
LG–B
L–Y
W–R
L
R
Y
W
B–O (A/T)
B–Y
G
8 D IGT1
9 D IGT2
10 D IGT3
11 D IGT4
23 D IGF1
1 D #1
2 D #2
3 D #3
4 D #4
8 C NSW
9 C STA
12 A ELS
E6 (A), E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
E1
OD1
IDLO
G22 +
NE–
NE+
L
KNK1
E01
E02
7 C
18 B
16 A
26 D
34 D
27 D
2 C
1 C
7 D
6 D
Y–R (*2)
R–W (*2)
B–W
G
R
B
W
BR
(*1)
I7
I8
Cruise Control
C1 Camshaft Position Sensor
C4 Crankshaft Position Sensor
K1 Knock Sensor
J13 Junction Connector
W–B
EF


R–L
B–O
P–B
W
R
EFI ECU Fuse
Unlock Warning SW
FAN No.1 Relay
FAN No.2 Relay
Combination Meter
Check Engine
C9 (A), C10 (B) Combination Meter
B–Y
L
W–L
V–W
G–R
B–O
P–B
W
R
13 A ELS2
34 B KSW
7 A FAN
17 B SPD
11 A W
5 A TACH
20 A TC
18 A SIL
19 A WFSE
21 A
16 B
3 II2
8 II2
9 II2
10 II2
2 II2
E6 (A), E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
FC
STP
OCV+
OCV–
PSW
EOM
6 A
19 B
15 D
14 D
29 C
15 A
L
G–W
B–W
Y
R–W
BR
7 II2
FAN No.3 Relay
Stop Light SW
C 2 Camshaft Timing Oil Control Valve
P1 Power Steering Oil Pressure SW
1
2
BR
16 IG1
BR
I2
BR


From Power Source System (See pg. 78)
*2: w/Cruise Control
*3: w/ABS
10A GAUGE1
7.5A OBD
1 2M
4 2A
J5 Junction Connector
R–L
G
G
R–L
B
Combination Meter
B–O
P–B
W
R
B
B–O
H A
H A
J 3(A), J 4(B) Junction Connector
F B
B–O
B–O
P–B
W
B
B–O
D A
E B
P–B
J9 (A), J10 (B) Junction Connector
F B
D A
E A
E A
E B
W
P–B
P–B
P–B
P–B
(LHD)
W
P–B
15
16
9
7
13
WFSE
BAT
TAC
SIL
TC
D2
DLC3
SG
CG
TS
C/C
5
4
14
1
BR
W–B
LG–B
P–L
4 2L
3 2L
7 2D
5 2D
18 2G
P–B
I2
J2 Junction Connector
A
W–B
IK
BR
W
P–B
P–B
(*3)
P–B
(*2)
P–B
(LHD)
Skid Control with Actuator
Cruise Control ECU
Airbag Sensor Assembly
Skid Control ECU with Actuator
Cruise Control ECU
Body ECU

System Outline

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

1. Input Signals

(1) Engine coolant temp. signal circuit

The EFI water 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 and ECT ECU (A/T), engine ECU (M/T) as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the air flow meter and detects the intake air temp. which is input as a control signal to TERMINAL THA of the engine and ECT ECU (A/T), engine ECU (M/T).

(3) Oxygen density signal circuit

The oxygen density in the exhaust emission is detected by the heated oxygen sensor and input as a control signal to TERMINAL OX1B of the engine and ECT ECU (A/T), engine ECU (M/T).

(4) RPM signal circuit

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. Camshaft position is input as a control signal to TERMINAL G22+ of the engine and ECT ECU (A/T), engine ECU (M/T), and engine RPM is input into 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 TERMINAL VTA of the engine and ECT ECU (A/T), engine ECU (M/T).

(6) Vehicle speed circuit

The vehicle speed sensor, detects the vehicle speed and input to ABS speed sensor of the skid control ECU, from skid control ECU to TERMINAL SPD of the engine and ECT ECU (A/T), engine ECU (M/T), Via combination meter.

(7) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine and ECT ECU (A/T), engine ECU (M/T). With the ignition SW turned on, the voltage for engine and ECT ECU (A/T), engine ECU (M/T) start–up power supply is applied to TERMINAL +B of the engine and ECT ECU (A/T), engine ECU (M/T) via the EFI main relay.

(8) A/C SW signal circuit

The A/C control assembly inputs the A/C operations into TERMINAL A/CS of the engine and ECT ECU (A/T), engine ECU (M/T).

(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 and ECT ECU (A/T), engine ECU (M/T) 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 and ECT ECU (A/T), engine ECU (M/T) as a control signal.

(11) Engine knock signal circuit

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

(12) Air fuel ratio signal system

The air fuel ratio is detected and input as a control signal into TERMINAL AF1A+ of the engine and ECT ECU (A/T), engine ECU (M/T).

2. Control System

* EFI system
  The EFI system monitors the engine condition through the signals input from each sensor to the engine and ECT ECU (A/T), engine ECU (M/T). And the control signal is output to TERMINALS #10, #20, #30, #40 of the engine and ECT ECU (A/T), engine ECU (M/T) to operate the injector (Inject the fuel). The EFI system controls the fuel injection operation by the engine and ECT ECU (A/T), engine ECU (M/T) in response to the driving conditions.
* ESA system
  The ESA system monitors the engine condition through the signals input to the engine and ECT ECU (A/T), engine ECU (M/T) from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine and ECT ECU (A/T), engine ECU (M/T) and the control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4. 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 heated oxygen sensor to improve detection performance of the sensor. The engine and ECT ECU (A/T), engine ECU (M/T) evaluates the signals from each sensor, and outputs current to TERMINAL HT1B to control the heater.

3. Diagnosis System

With the diagnosis system, when there is a malfunction in the engine and ECT ECU (A/T), engine ECU (M/T) signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed by the malfunction indicator lamp.

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 and ECT ECU (A/T), engine ECU (M/T) memory or else stops the engine.

Service Hints

E6 (A), E7 (B), E8 (C), E9 (D) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT–E1 : Always 9.0–14.0 volts
VC–E2 : 4.5–5.5 volts (Ignition SW at ON position)
VTA–E2 : 0.3–1.0 volts (Ignition SW on and throttle valve fully closed)
3.2–4.9 volts (Ignition SW on and throttle valve fully open)
VG–E2G : 1.1–1.5 volts (Engine idling and A/C SW off)
THA–E2 : 0.5–3.4 volts (Engine idling and intake air temp. 20° C, 68° F)
THW–E2 : 0.2–1.0 volts (Engine idling and coolant temp. 80° C, 176° F)
IGF1–E1 : 4.5–5.5 volts (Ignition SW at ON position)
Pulse generation (Engine idling)
SIL–E1 : Pulse generation (During transmission)
TACH–E1 : Pulse generation (Engine idling)
STA–E1 : 6.0 volts or more (Engine cranking)
FC–E01 : 9.0–14.0 volts (Ignition SW at ON position)
SPD–E1 : Pulse generation (Ignition SW on and rotate driving wheel slowly)
W–E01 : Below 3.0 volts (Ignition SW at ON position)
NSW–E1 : 9.0–14.0 volts (Ignition SW on and other shift position in P or N position)
0–3.0 volts (Ignition SW on and shift position in P or N position)
EVP1–E01 : 9.0–14.0 volts (Ignition SW at ON position)
STP–E1 : 7.5–14.0 volts (Ignition SW on and brake pedal depressed)
Below 1.5 volts (Ignition SW on and brake pedal released)
KNK1–E1 : Pulse generation (Engine idling)
PSW–E1 : 9.0–14.0 volts (Ignition SW at ON position)
IGSW–E1 : 9.0–14.0 volts (Ignition SW at ON position)
MREL–E1 : 9.0–14.0 volts (Ignition SW at ON position)
G22+, NE+ –NE– : Pulse generation (Engine idling)
OCV+ –OCV– : Pulse generation (Ignition SW at ON position)
HTL–E1 : 9.0–14.0 volts (Engine idling)
Below 3.0 volts (Ignition SW at ON position)
OXL1–E1 : Pulse generation (Maintain engine speed at 2500 rpm for 90 sec. after warming up)
IGT1, IGT2, IGT3, IGT4–E1 : Pulse generation (Engine idling)
#10, #20, #30, #40–E01 : 9.0–14.0 volts (Ignition SW at ON position)
Pulse generation (Engine idling)

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A9	34 (LHD) 44 (RHD)	E8 C	37 (LHD) 47 (RHD)	J2	37 (LHD) 47 (RHD)
A13	36 (LHD) 46 (RHD)	E9 D	37 (LHD) 47 (RHD)	J3 A	37 (LHD) 47 (RHD)
C1	34 (LHD) 44 (RHD)	F12	38 (LHD) 48 (RHD)	J4 B	37 (LHD) 47 (RHD)
C2	34 (LHD) 44 (RHD)	H5	34 (LHD) 44 (RHD)	J5	37 (LHD) 47 (RHD)
C4	34 (LHD) 44 (RHD)	I9	35 (LHD) 45 (RHD)	J9 A	37 (LHD) 47 (RHD)
C9 A	36 (LHD) 46 (RHD)	I10	35 (LHD) 45 (RHD)	J10 B	37 (LHD) 47 (RHD)
C10 B	36 (LHD) 46 (RHD)	I11	35 (LHD) 45 (RHD)	J13	37 (LHD) 47 (RHD)
D2	36 (LHD) 46 (RHD)	I12	35 (LHD) 45 (RHD)	K1	35 (LHD) 45 (RHD)
E2	34 (LHD) 44 (RHD)	I15	35 (LHD) 45 (RHD)	P1	35 (LHD) 45 (RHD)
E6 A	37 (LHD) 47 (RHD)	I16	37 (LHD) 47 (RHD)	T1	35 (LHD) 45 (RHD)
E7 B	37 (LHD) 47 (RHD)	I17	35 (LHD) 45 (RHD)	V3	35 (LHD) 45 (RHD)

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A 1B 1C 1D 1E	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1K 1L	24	Engine Wire and Engine Room J/B (Engine Compartment Left)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2D 2E 2G	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2L 2M 2O 2Q 2R	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
ID1	55 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE2	67 (RHD)	Engine Room Main Wire and Instrument Panel (Left Side of Steering Column Tube)
IE5	55 (LHD)	Engine Room Main Wire and Instrument Panel (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel (Left Side of Steering Column Tube)
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

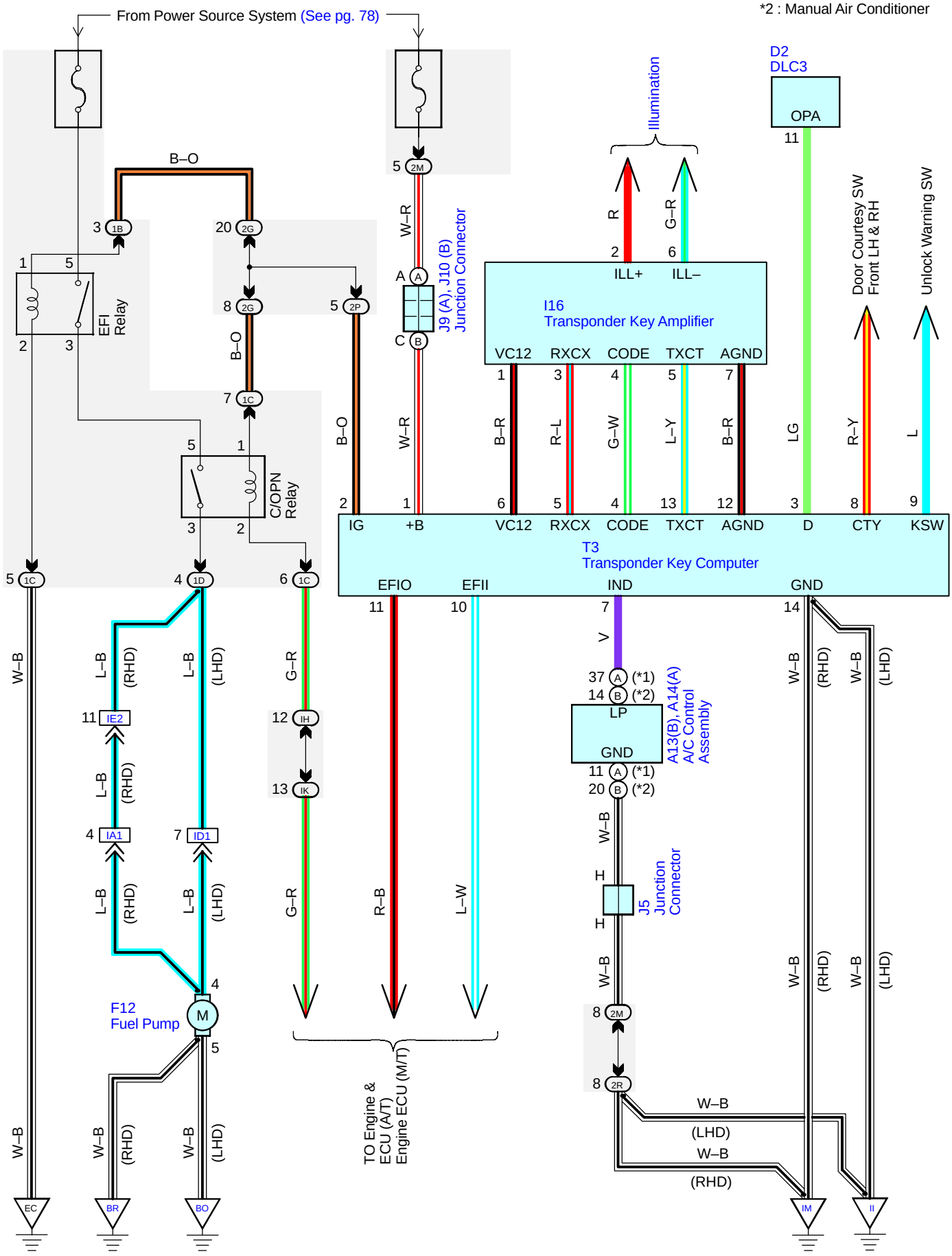
: Ground Points

Code	See Page	Ground Points Location
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
EC	54 (LHD 2AZ–FE)	Left Fender
	66 (RHD 2AZ–FE)	
EF	54 (LHD 2AZ–FE)	Intake Side of Cylinder Block
	66 (RHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	67 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E6	54 (LHD)	Engine Wire	I6	70 (RHD)	Engine Wire
	66 (RHD)		I7	58 (LHD)	
I2	58 (LHD)	Instrument Panel Wire		70 (RHD)	
	70 (RHD)		I8	58 (LHD)	
I6	58 (LHD)	Engine Wire		70 (RHD)	

*1 : Automatic Air Conditioner
*2 : Manual Air Conditioner



Service Hints

T3 Transponder Key Computer

+B–Ground : Always approx. 12 volts
IG–Ground : Approx. 12 volts with ignition SW at ON or ST position
KSW–Ground : Continuity with the key in cylinder

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A13	A	36 (LHD) 46 (RHD)	F12	38 (LHD) 48 (RHD)	J9	A	37 (LHD) 47 (RHD)
A14	B	36 (LHD) 46 (RHD)	I16	37 (LHD) 47 (RHD)	J10	B	37 (LHD) 47 (RHD)
D2		36 (LHD) 46 (RHD)	J5	37 (LHD) 47 (RHD)	T3		37 (LHD) 47 (RHD)

: Junction Block and Wire Harness Connector

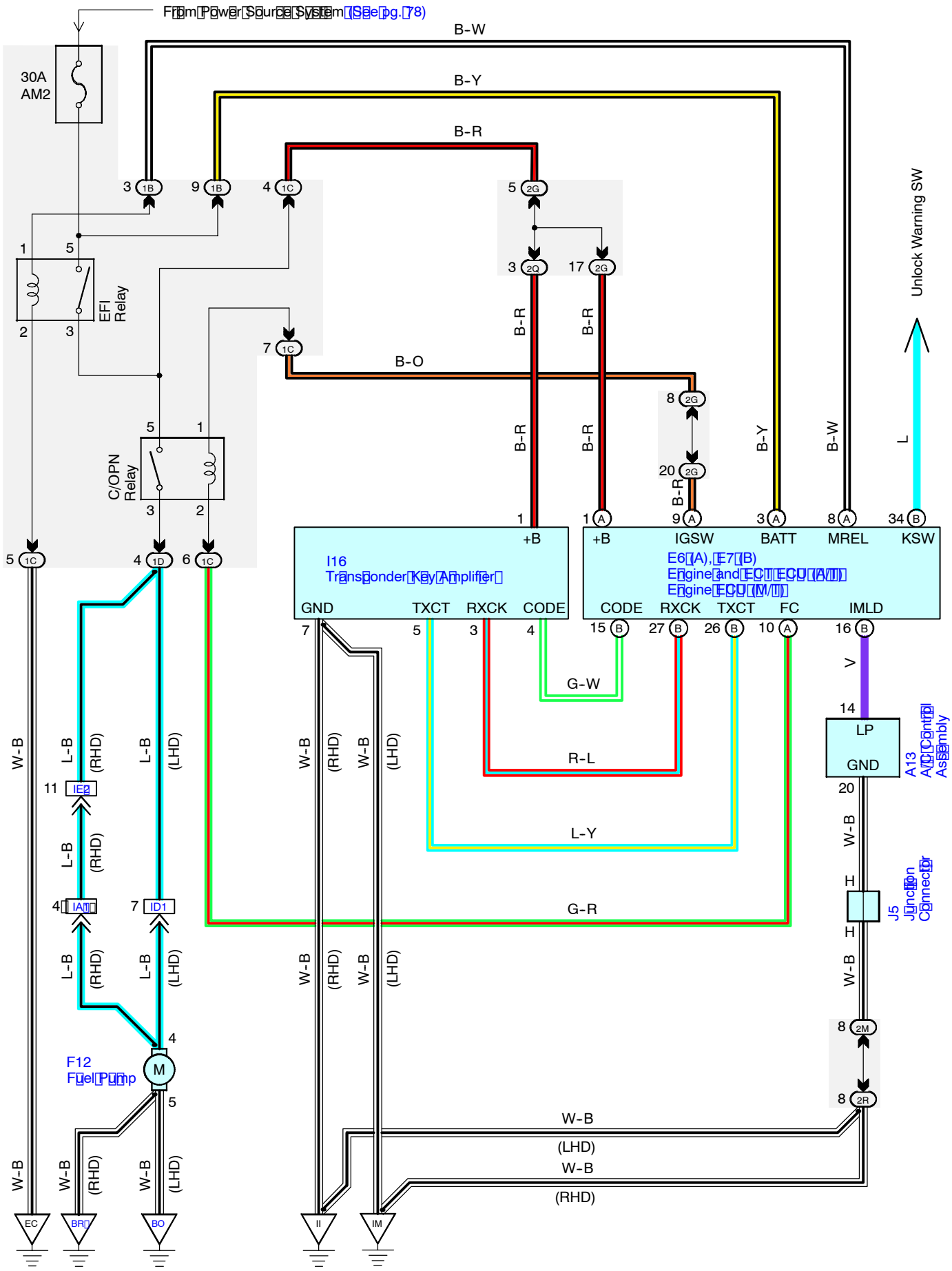
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
1C		
1D		
1H		
1K		
2G	26	Instrument Panel Wire and Driver Side J/B
2M		
2P		
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
ID1	55 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE2	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)

: Ground Points

Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
II	55 (LHD)	Instrument Panel Reinforcement LH
IM	67 (RHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 78)
B-W
B-Y
B-R
B-O
30A
AM2
EFI
Relay
C/OPN
Relay
Unlock Warning SW
L
I16
Transponder Key Amplifier
GND
TXCT
RXCK
CODE
+B
E6 (A), E7 (B)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
+B
IGSW
BATT
MREL
KSW
CODE
RXCK
TXCT
FC
IMLD
G-W
R-L
L-Y
G-R
V
LP
GND
A13
W-B
L-B
(RHD)
(LHD)
IE2
IA1
ID1
F12
Fuel Pump
M
J5
H
EC
BR
BO
II
IM
W-B
(LHD)
W-B
(RHD)

Service Hints

E6 (A), E7 (B) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT–Ground : Always approx. 12 volts
IGSW–Ground : Approx. 12 volts with ignition SW at ON or ST position
KSW–Ground : Continuity with the key in cylinder

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A13		36 (LHD) 46 (RHD)	E7	B	37 (LHD) 47 (RHD)	I16	37 (LHD) 47 (RHD)
E6	A	37 (LHD) 47 (RHD)	F12		37 (LHD) 47 (RHD)	J5	37 (LHD) 47 (RHD)

: Junction Block and Wire Harness Connector

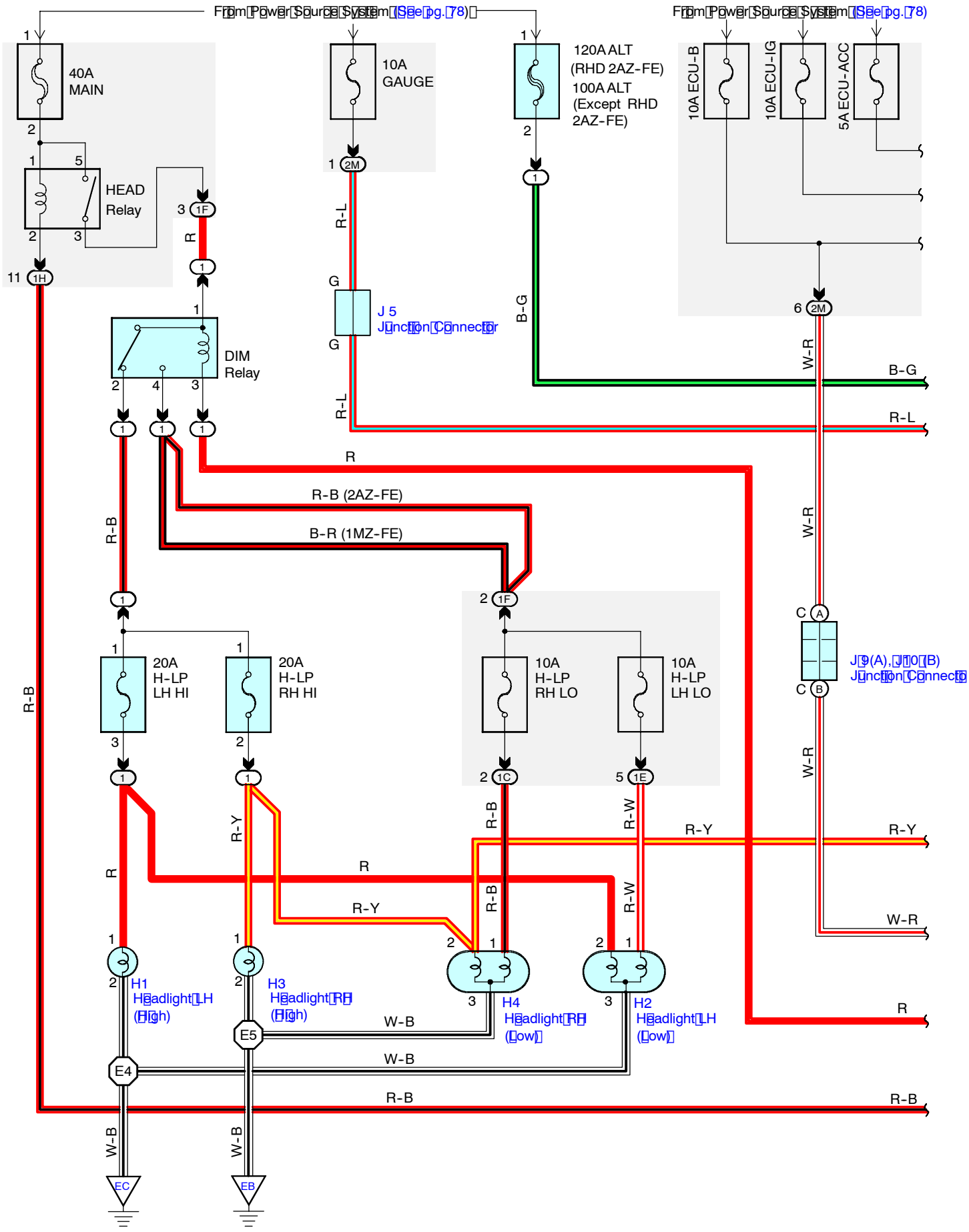
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B 1C	24	Engine Room Main Wire and Engine Room J/B
1D	24	Engine Room Main Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2Q	26	Instrument Panel Wire and Driver Side J/B

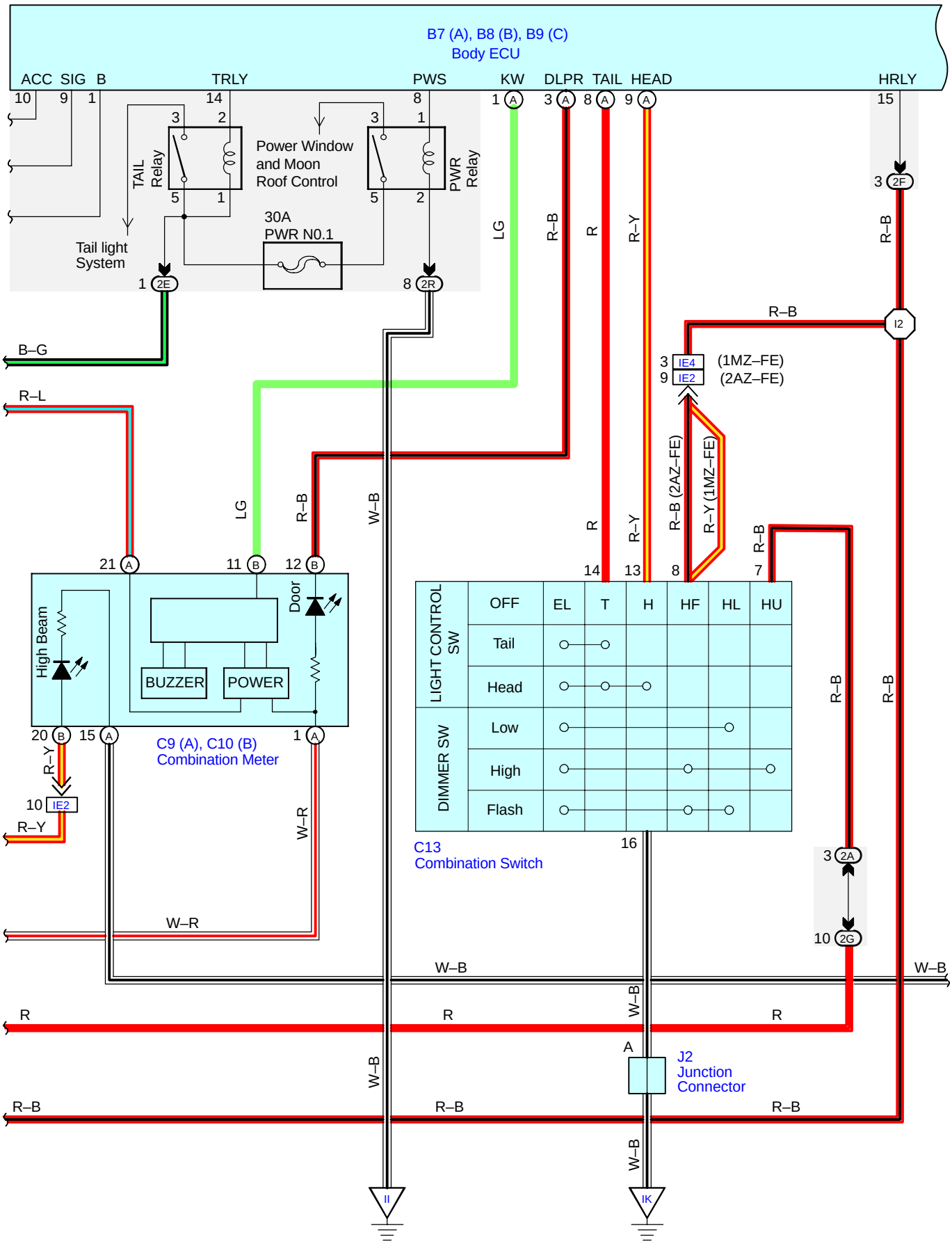
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	55 (LHD) 67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IE2	55 (LHD) 67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
ID1	55 (LHD) 67 (RHD)	Engine Room Main Wire and Floor Wire (Right Kick Panel)

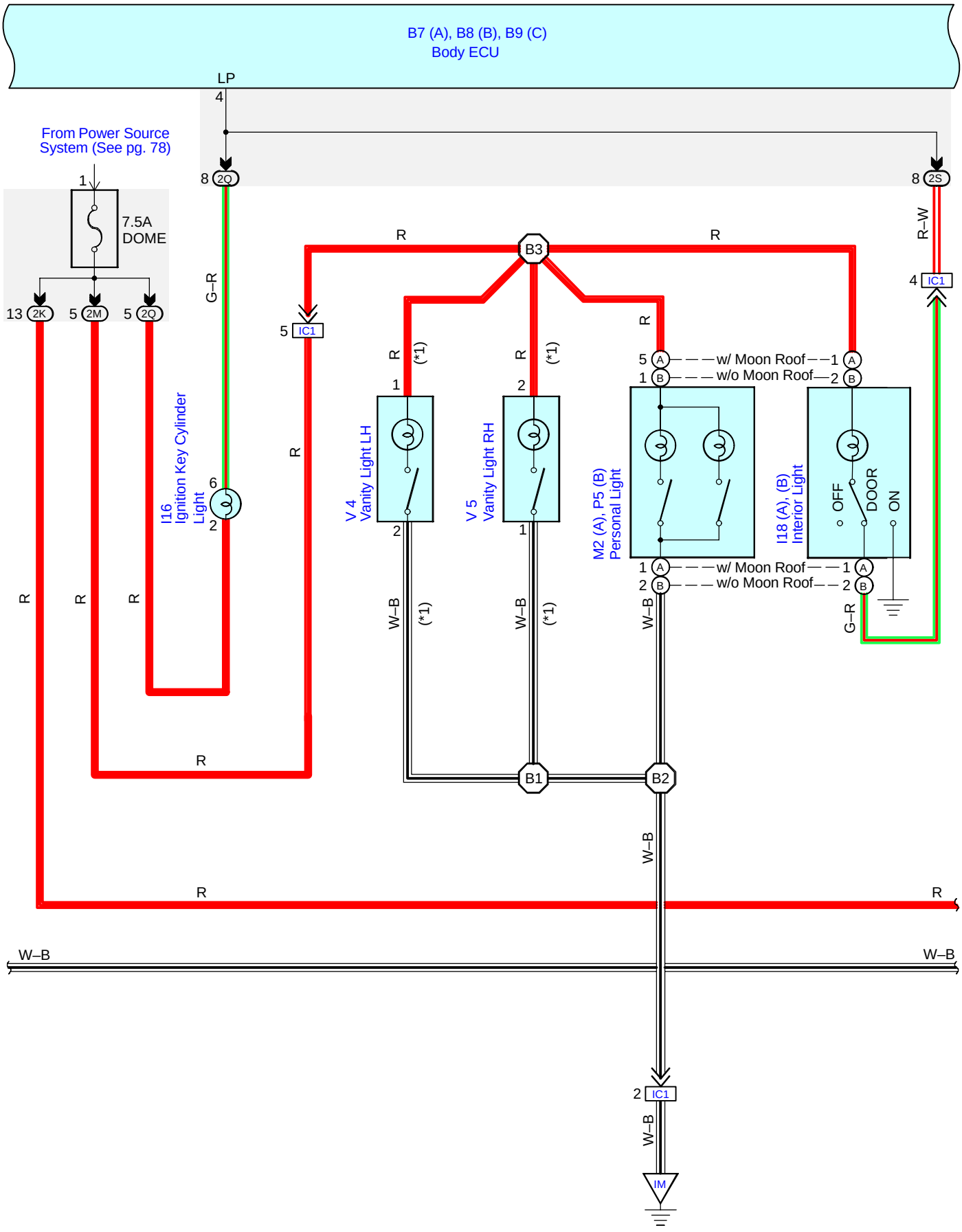
▽ : Ground Points

Code	See Page	Ground Points Location
EC	54 (LHD) 66 (RHD)	Left Fender
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
II	55 (LHD) 67 (RHD)	Instrument Panel Reinforcement LH
IM	55 (LHD) 67 (RHD)	Instrument Panel Reinforcement RH

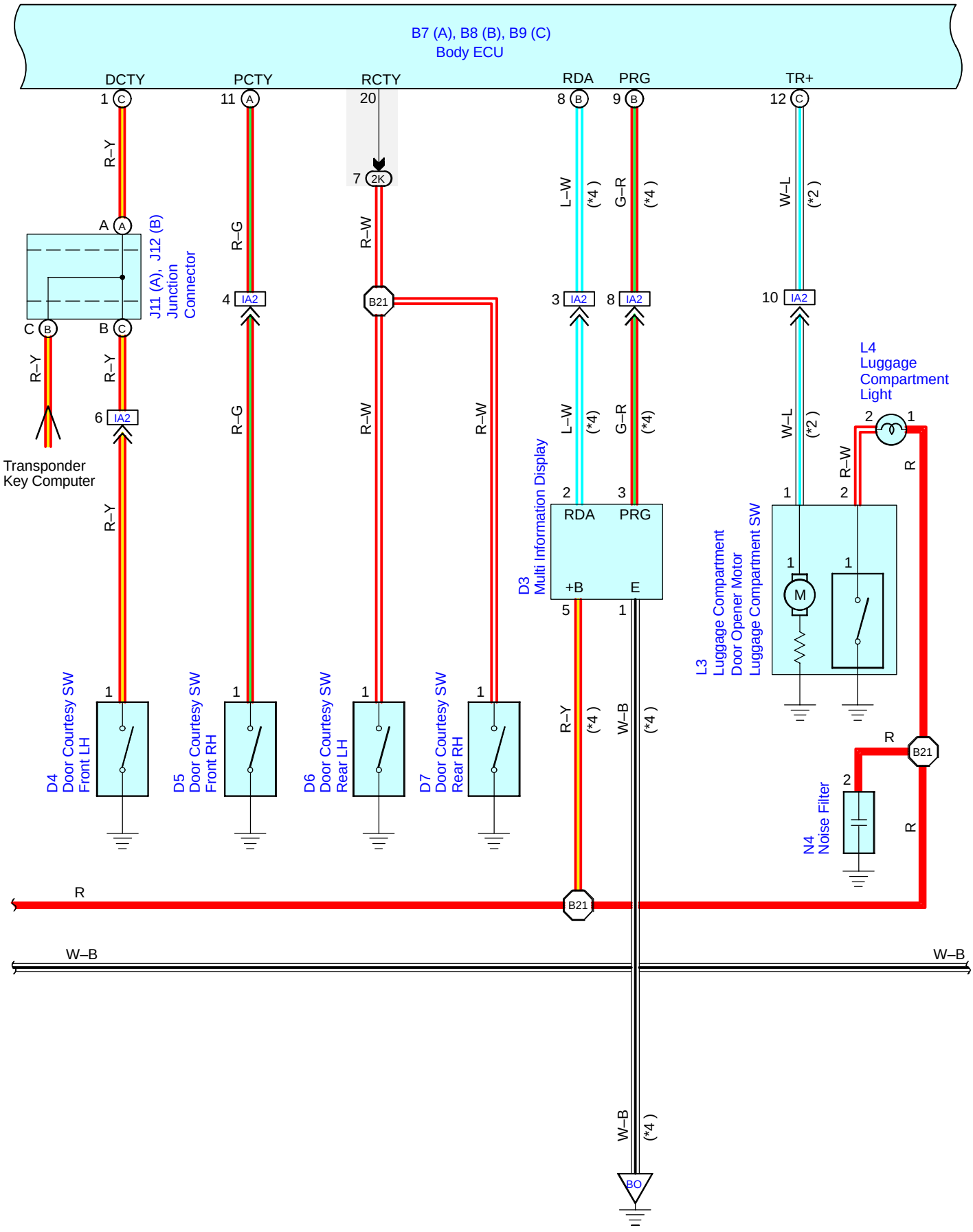

From Power Source System (See pg. 78)
From Power Source System (See pg. 78)
40A MAIN
HEAD Relay
DIM Relay
10A GAUGE
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
10A ECU-B
10A ECU-IG
5A ECU-ACC
J 5 Junction Connector
20A H-LP LH HI
20A H-LP RH HI
10A H-LP RH LO
10A H-LP LH LO
J 9 (A), J 10 (B) Junction Connector
H1 Headlight LH (High)
H3 Headlight RH (High)
H4 Headlight RH (Low)
H2 Headlight LH (Low)
E5
E4
EC
EB
R-B
R-L
B-G
W-R
R-Y
R-W
W-B
R
R-B (2AZ-FE)
B-R (1MZ-FE)


B7 (A), B8 (B), B9 (C)
Body ECU
ACC SIG B TRLY PWS KW DLPR TAIL HEAD HRLY
TAIL Relay
PWR Relay
Power Window and Moon Roof Control
30A PWR N0.1
Tail light System
1 2E
8 2R
3 2F
B–G
R–L
LG
R–B
R
R–Y
W–B
R–B (2AZ–FE)
R–Y (1MZ–FE)
I2
3 IE4 (1MZ–FE)
9 IE2 (2AZ–FE)
21 A
11 B
12 B
High Beam
Door
BUZZER
POWER
20 B
15 A
1 A
C9 (A), C10 (B)
Combination Meter
10 IE2
W–R
14 13 8 7
LIGHT CONTROL SW
DIMMER SW
OFF EL T H HF HL HU
Tail
Head
Low
High
Flash
16
C13
Combination Switch
3 2A
10 2G
A
J2
Junction Connector
II
IK

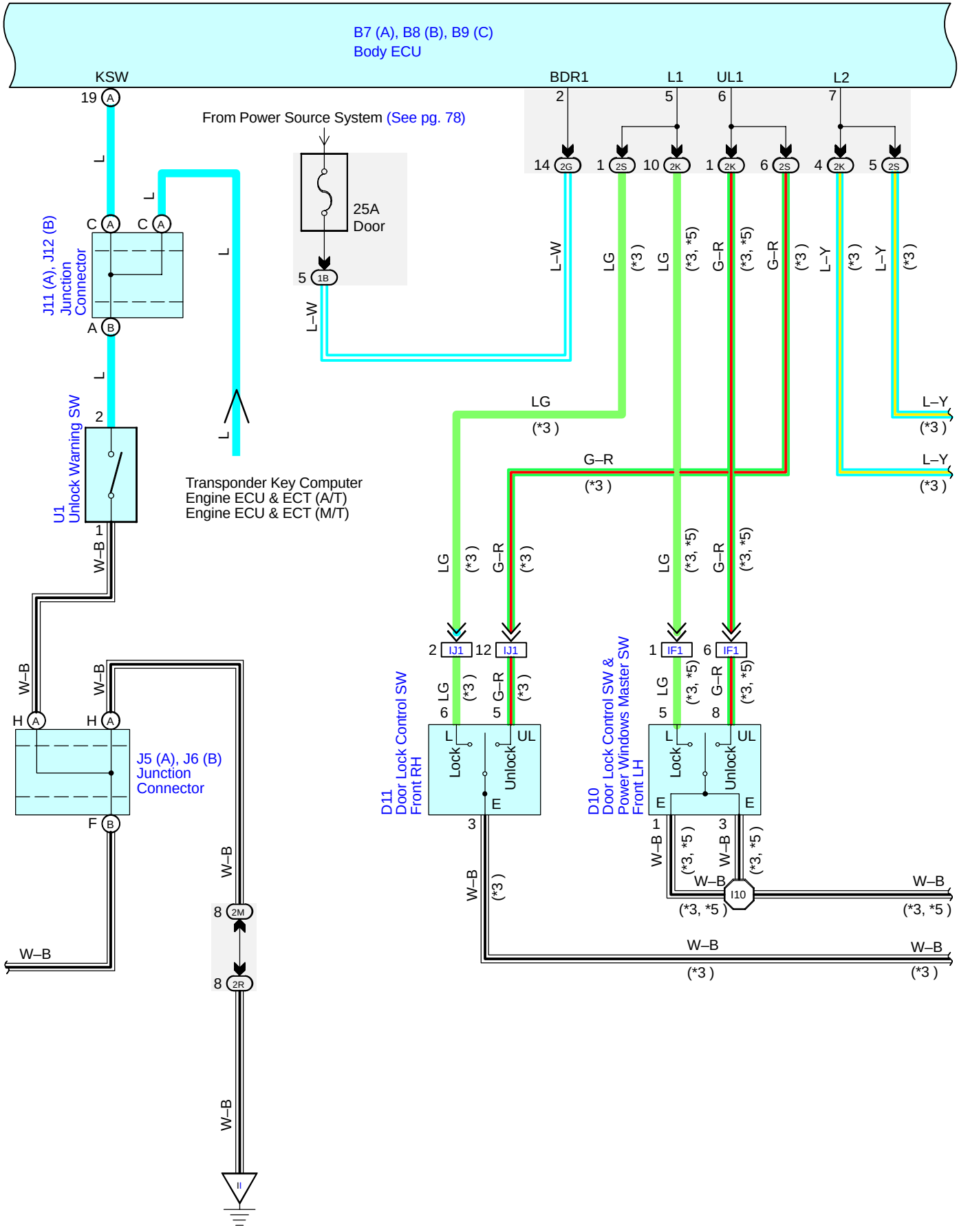
*1 : w/ Vanity Light


B7 (A), B8 (B), B9 (C)
Body ECU
LP
4
From Power Source System (See pg. 78)
1
7.5A DOME
13 2K
5 2M
5 2Q
8 2Q
8 2S
R–W
4 IC1
G–R
5 IC1
R
B3
R
R
R

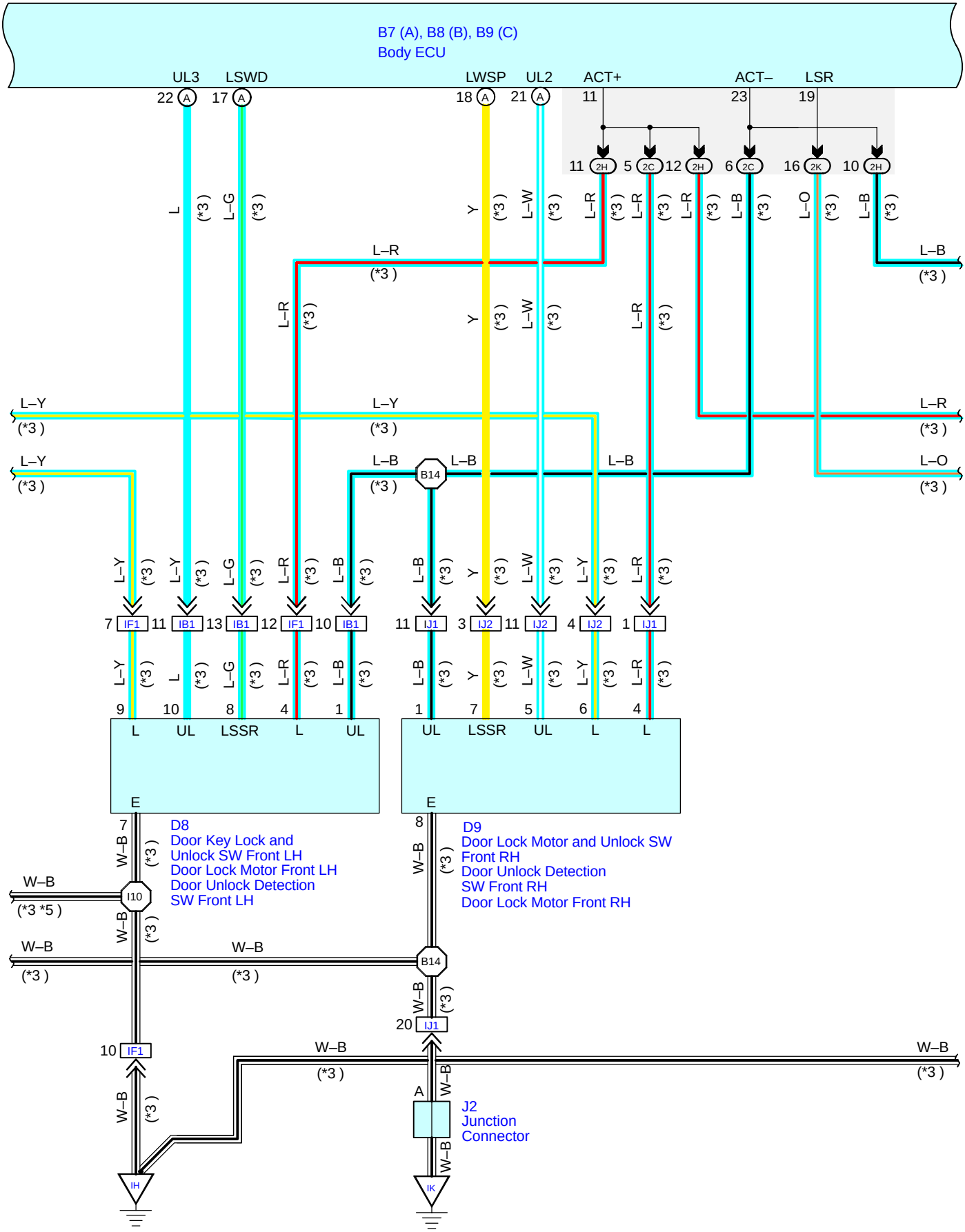
*2 : w/ Luggage Compartment Door Opener
*4 : w/ Wireless Door Lock Control



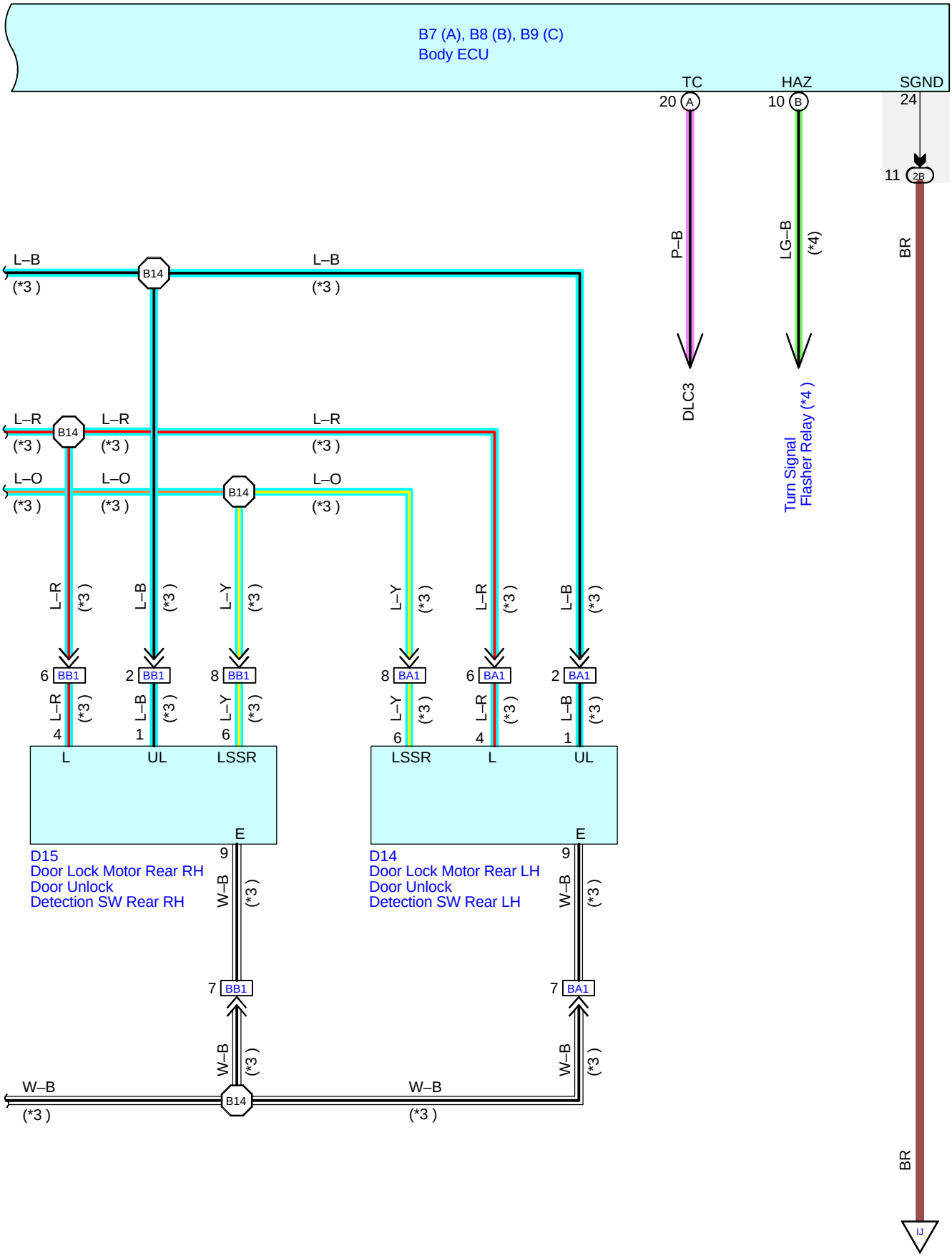
*3 : Door Lock Control
*5 : Jam Protection



*3 : Door Lock Control
*5 : Jam Protection



*3 : Door Lock Control
*4 : w/ Wireless Door Lock Control



System Outline

The multiplex communication system communicates among the body ECU and controls the following systems according to the signals from respective sensors or switches.

Multiplex Communication System Includes Following Systems

- **Automatic Light Control**
- **Door Lock Control**
- **Headlight**
- **Interior Light**
- **Key Reminder**
- **Light Auto Turn Off**
- **Wireless Door Lock Control**

Service Hints

Body ECU

SIG9–Ground : Approx. 12 volts with ignition SW at ON or ST position
SGND24–Ground : Always continuity
B1–Ground : Always approx. 12 volts

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	36 (LHD)	D10		38 (LHD)	J9	A	37 (LHD)
B8	B		D11			J10	B	
B9	C		D14			J11	A	
B10	D	40 (LHD)	D15			J12	B	
C9	A	36 (LHD)	H1		32 (LHD (1MZ–FE) 34 (LHD 2AZ–FE)	L3		38 (LHD)
C10	B		H2			L4		
C13			H3			M2	A	38 (LHD)
D3		38 (LHD)	H4			N4		39 (LHD)
D4			I16		37 (LHD)	P5	B	39 (LHD)
D5			I18	A	38 (LHD)	U1		37 (LHD)
D6			I18	B		V4		39 (LHD)
D7			J2		37 (LHD)	V5		39 (LHD)
D8			J5	A				
D9			J6	B				

⬭ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22 (LHD)	Engine Room R/B

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
1C		
1E		
1F		
1H		
2A	26	Instrument Panel Wire and Driver Side J/B
2B		
2C		
2E	26	Engine Room Main Wire and Driver Side J/B
2F	26	Engine Room Main Wire
2G	26	Engine Room Main Wire and Driver Side J/B
2H		
2K	26	Floor Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2Q		
2R		
2S		

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

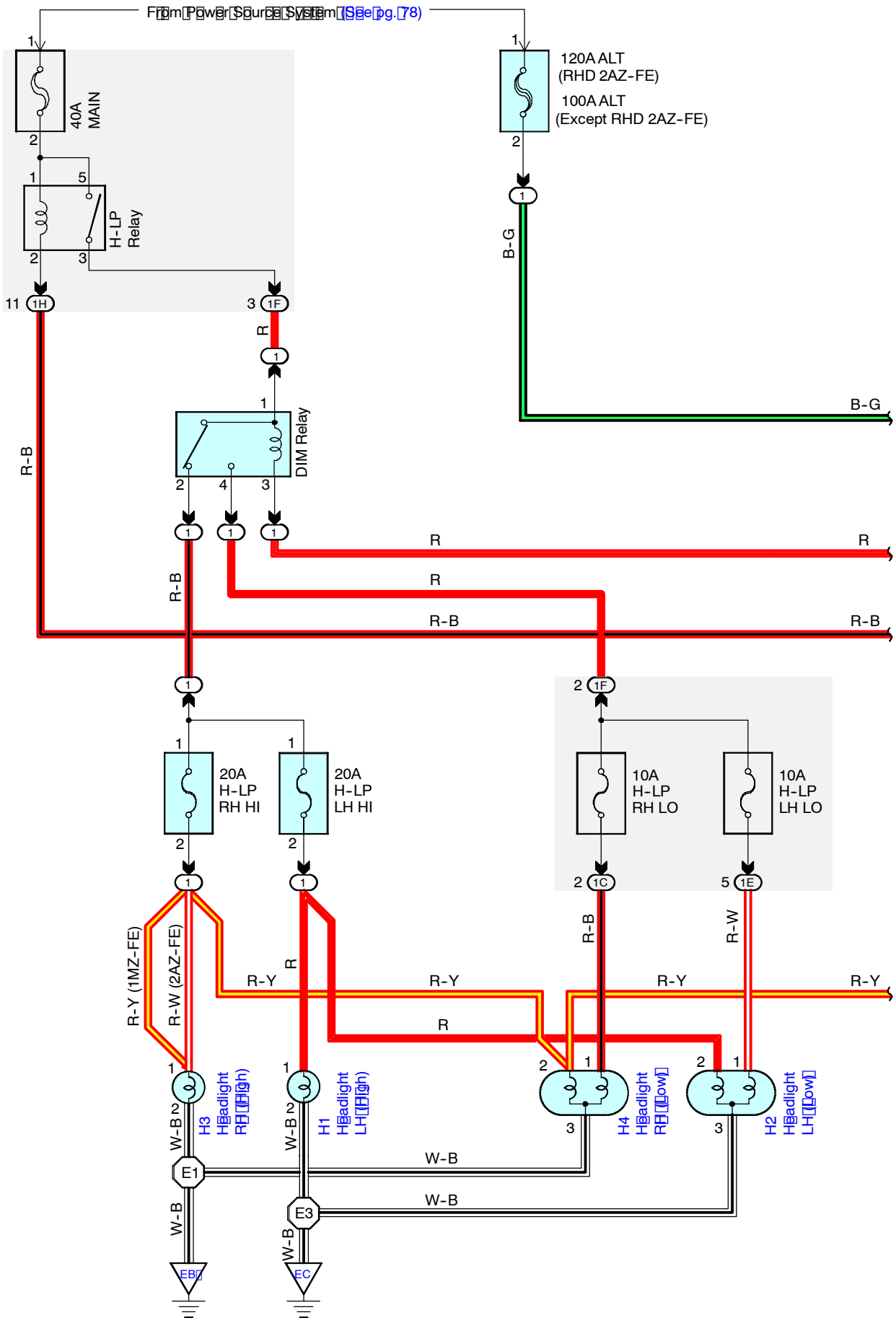
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	60 (LHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	60 (LHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
IA2	55 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	55 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
IE2	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IE4	55 (LHD)	
IF1	55 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ1	58 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2	58 (LHD)	

: **Ground Points**

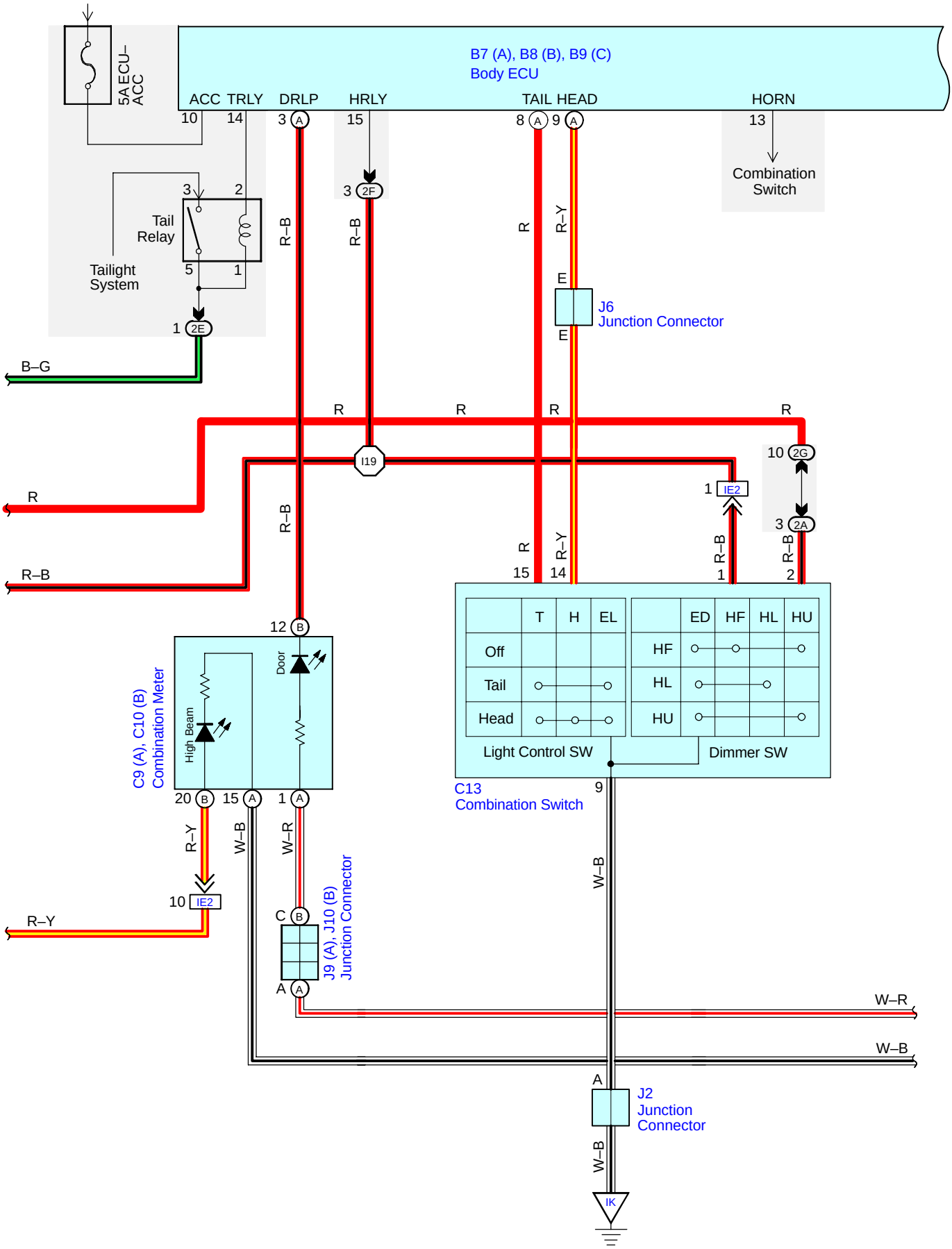
Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	54 (LHD 2AZ–FE)	
EB	52 (LHD 1MZ–FE)	Right Fender
	54 (LHD 2AZ–FE)	
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
IH	55 (LHD)	Left Kick Panel
II	55 (LHD)	Instrument Panel Reinforcement LH
IJ	55 (LHD)	Instrument Panel Brace LH
IK		
IM	55 (LHD)	Instrument Panel Reinforcement RH

: **Splice Points**

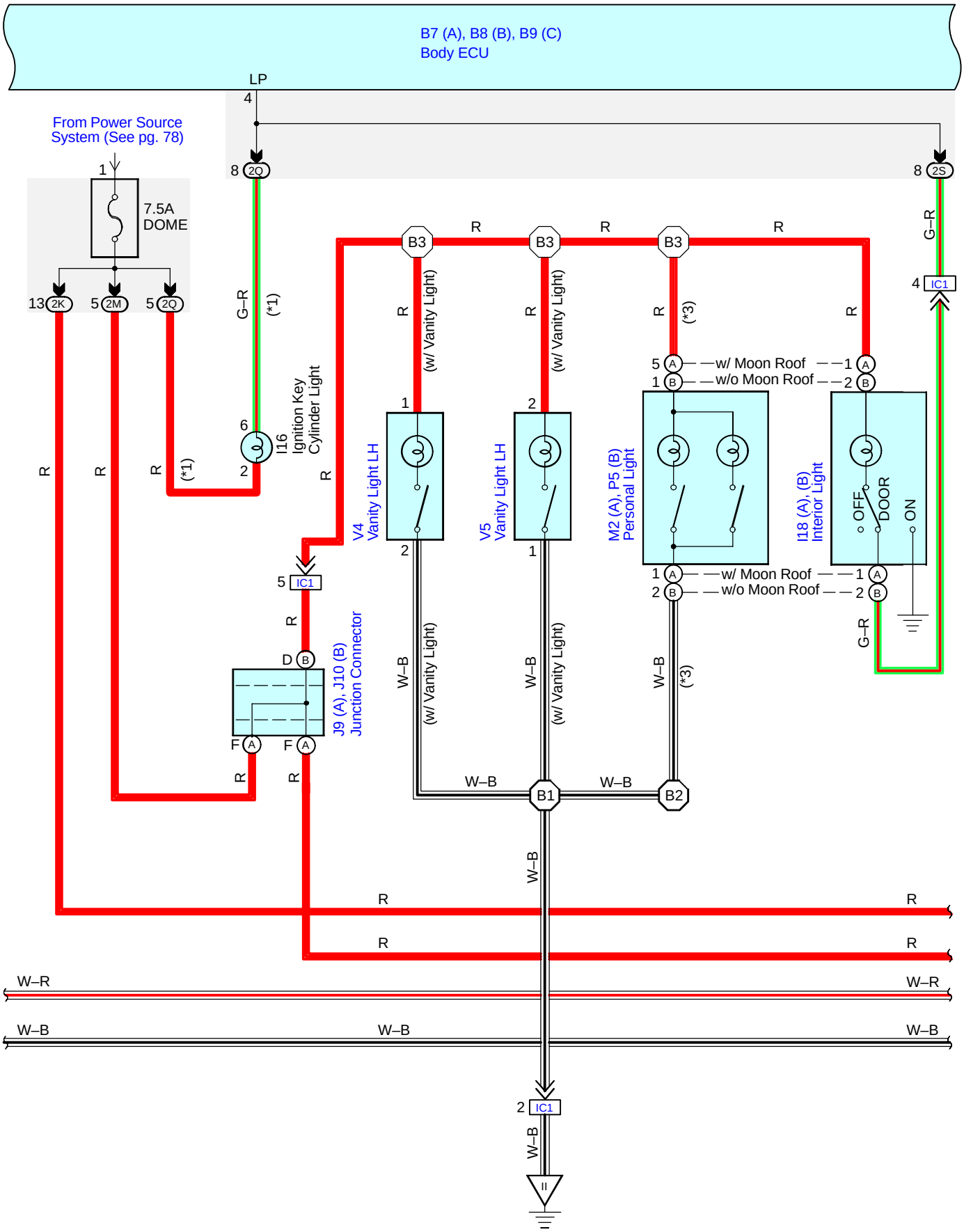
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	60 (LHD)	Roof Wire	E5	52 (LHD 1MZ–FE)	Engine Room Main Wire
B2				54 (LHD 2AZ–FE)	
B3			I2	58 (LHD)	Instrument Panel Wire
B14	60 (LHD)	Floor Wire	I10	58 (LHD)	
B21					
E4	52 (LHD 1MZ–FE)	Engine Room Main Wire			
	54 (LHD 2AZ–FE)				


From Power Source System (See pg. 78)
40A MAIN
H-LP Relay
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
B-G
DIM Relay
R-B
R
20A H-LP RH HI
20A H-LP LH HI
10A H-LP RH LO
10A H-LP LH LO
R-Y (1MZ-FE)
R-W (2AZ-FE)
R-Y
R-W
W-B
H3 Headlight RH (High)
H1 Headlight LH (High)
H4 Headlight RH (Low)
H2 Headlight LH (Low)
E1
E3
EB
EC

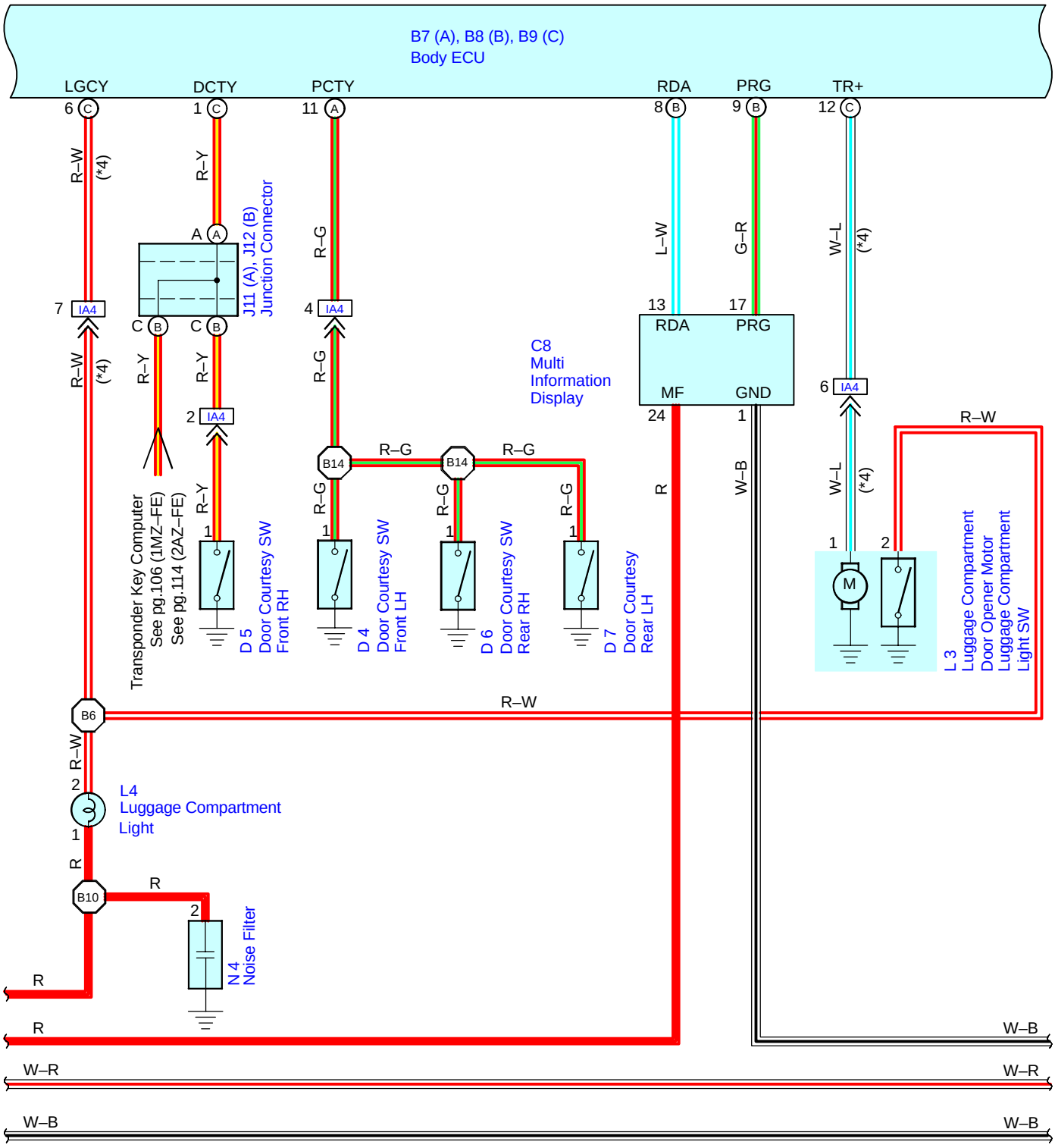
From Power Source System (See pg. 78)



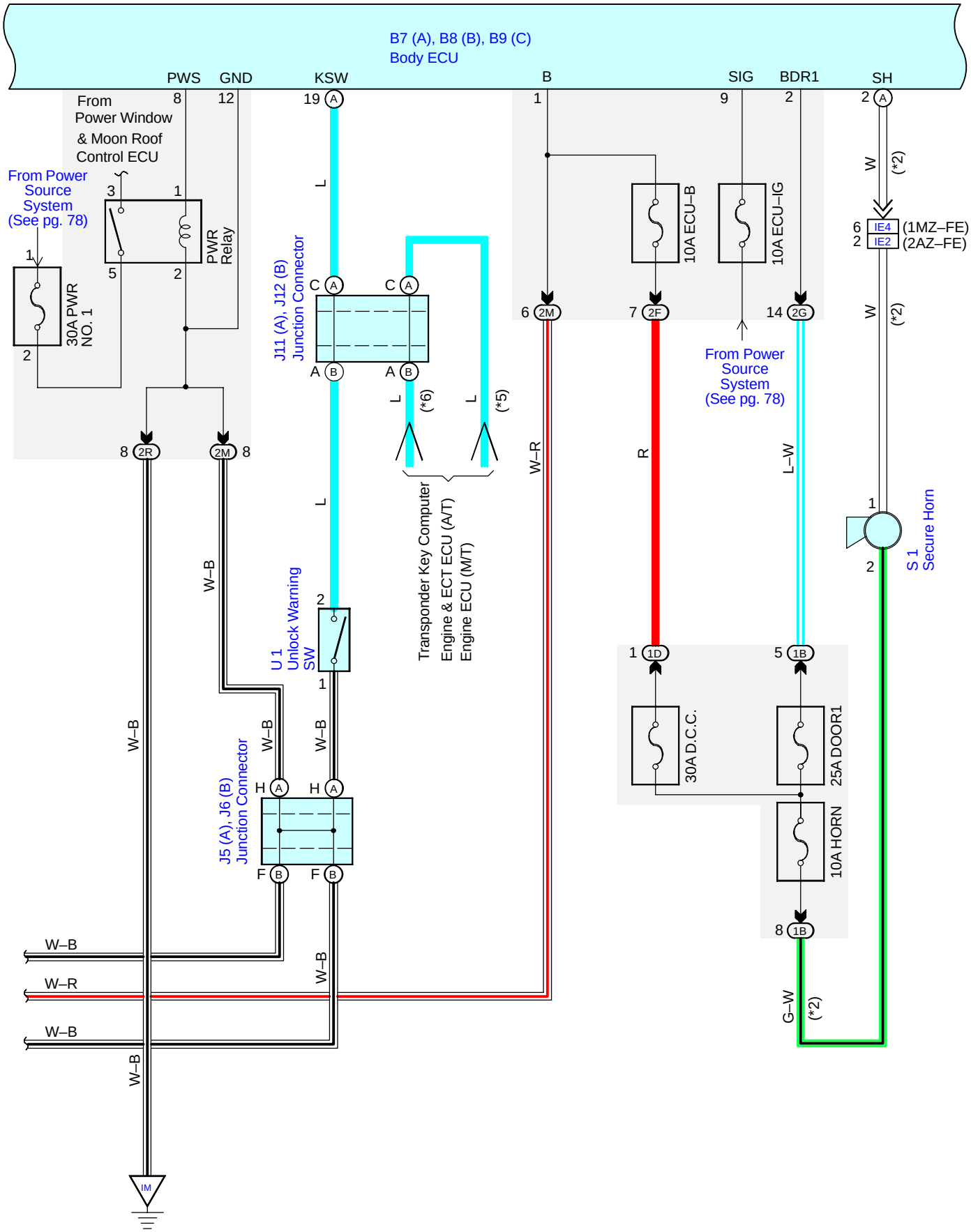
*1 : w/ Ignition Key Cylinder Light
*3 : w/ Personal Light



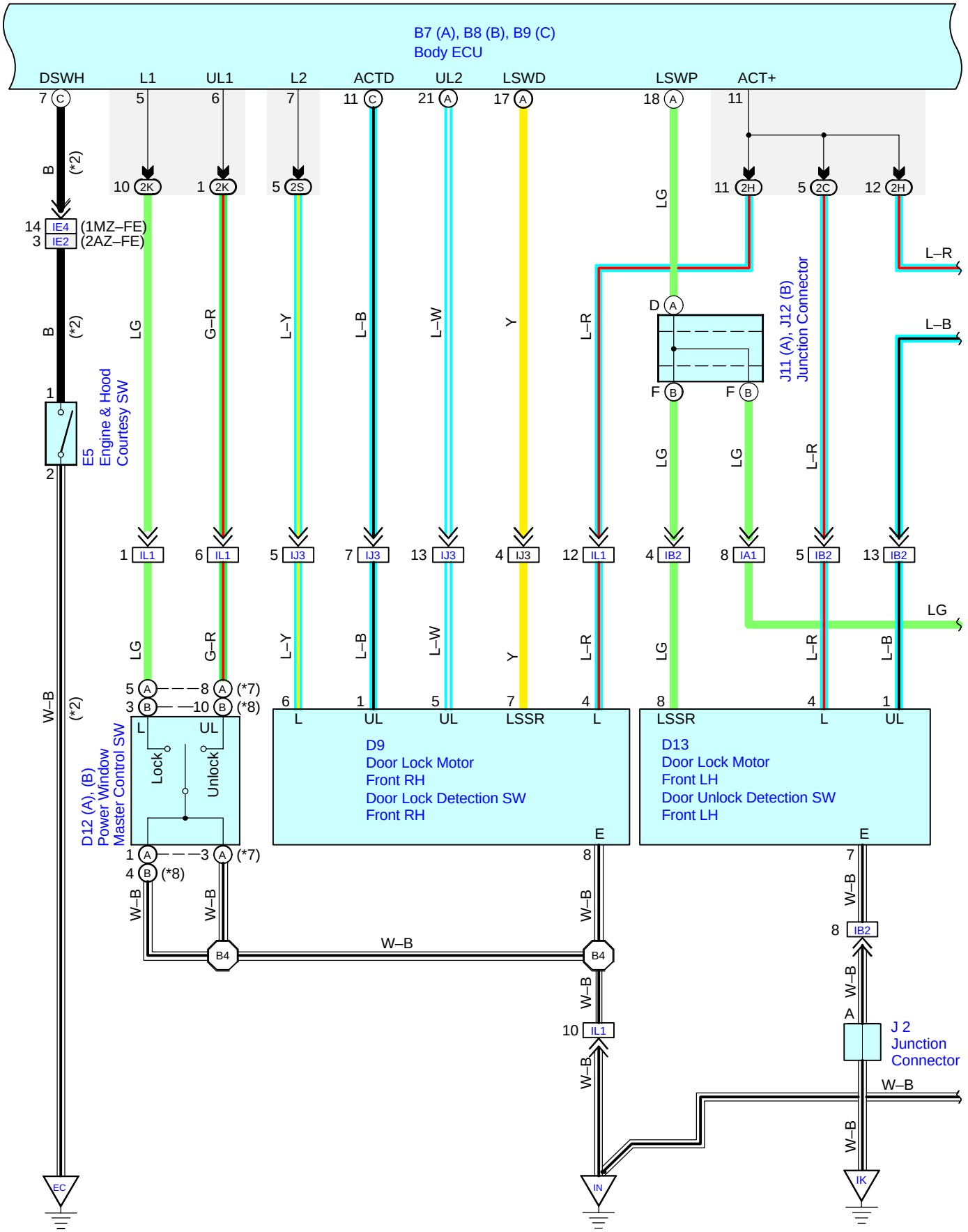
*4 : w/ Luggage Compartment Door Opener



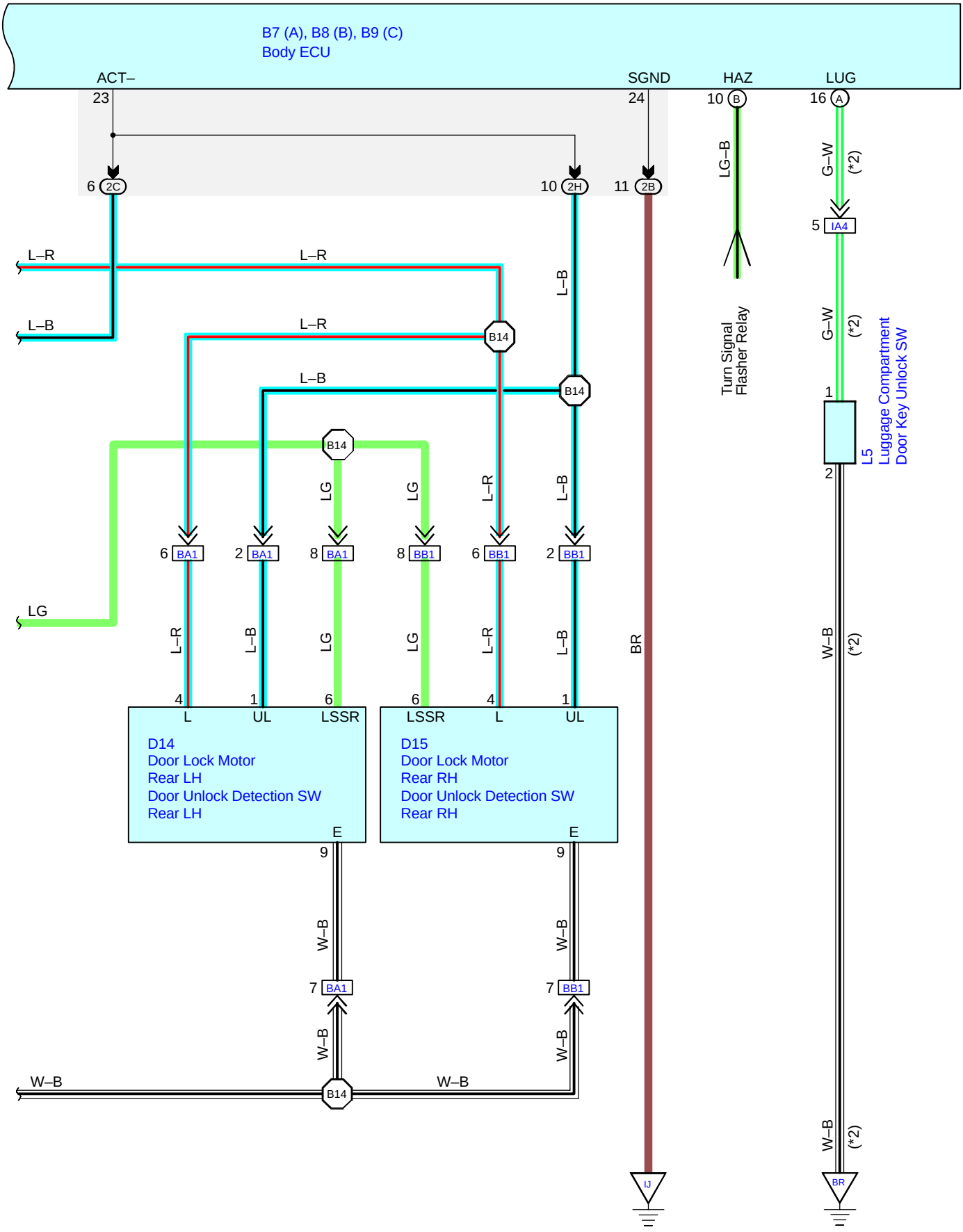
*2 : w/ Theft Deterrent
*5 : RHD 1MZ–FE
*6 : Except RHD 1MZ–FE



*2 : w/ Theft Deterrent
*7 : w/ Jam Protection
*8 : w/o Jam Protection



*2 : w/ Theft Deterrent



System Outline

The multiplex communication system communicates among the body ECU, double door lock ECU and controls the following systems according to the signals from respective sensors or switches.

Multiplex Communication System Includes Following Systems

- **Door Lock Control**
- **Headlight**
- **Interior Light**
- **Key Reminder**
- **Light Auto Turn Off**
- **Wireless Door Lock Control**

Service Hints

Body ECU

SIG9–Ground : Approx. 12 volts with ignition SW at ON or ST position
SGND & GND
12, 24–Ground : Always continuity
B1–Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	46 (RHD)	D15		48 (RHD)	J12	B	47 (RHD)
B8	B		E5		42 (RHD 1MZ–FE) 44 (RHD 2AZ–FE)	L3		48 (RHD)
B9	C					L4		
C8			H1		42 (RHD 1MZ–FE) 44 (RHD 2AZ–FE)	L5		
C9	A		H2			M2	A	
C10	B		H3			N4		49 (RHD)
C13			H4			P5	B	
D4		48 (RHD)	I16		47 (RHD)	S1		45 (RHD)
D5			I18		48 (RHD)	U1		43 (RHD)
D6			J2		47 (RHD)	V4		49 (RHD)
D7			J5		47 (RHD)	V5		
D9			J6		47 (RHD)			
D12	A		J6	B	47 (RHD)			
D12	B		J9	A				
D13		48 (RHD)	J10	B				
D14		48 (RHD)	J11	A	47 (RHD)			

: Relay Blocks

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

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
1C		
1D		
1E		
1F		
1H		
2A	26	Instrument Panel Wire and Driver Side J/B
2B		
2C		
2E	26	Engine Room Main Wire and Driver Side J/B
2F	26	Engine Room Main Wire and Driver Side J/B
2G		
2H	26	Floor Wire and Drive Side J/B
2K	26	Floor Wire and Driver Side J/B (Lower Finish Panel)
2M	26	Instrument Panel Wire and Driver Side J/B
2Q		
2R		
2S		

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

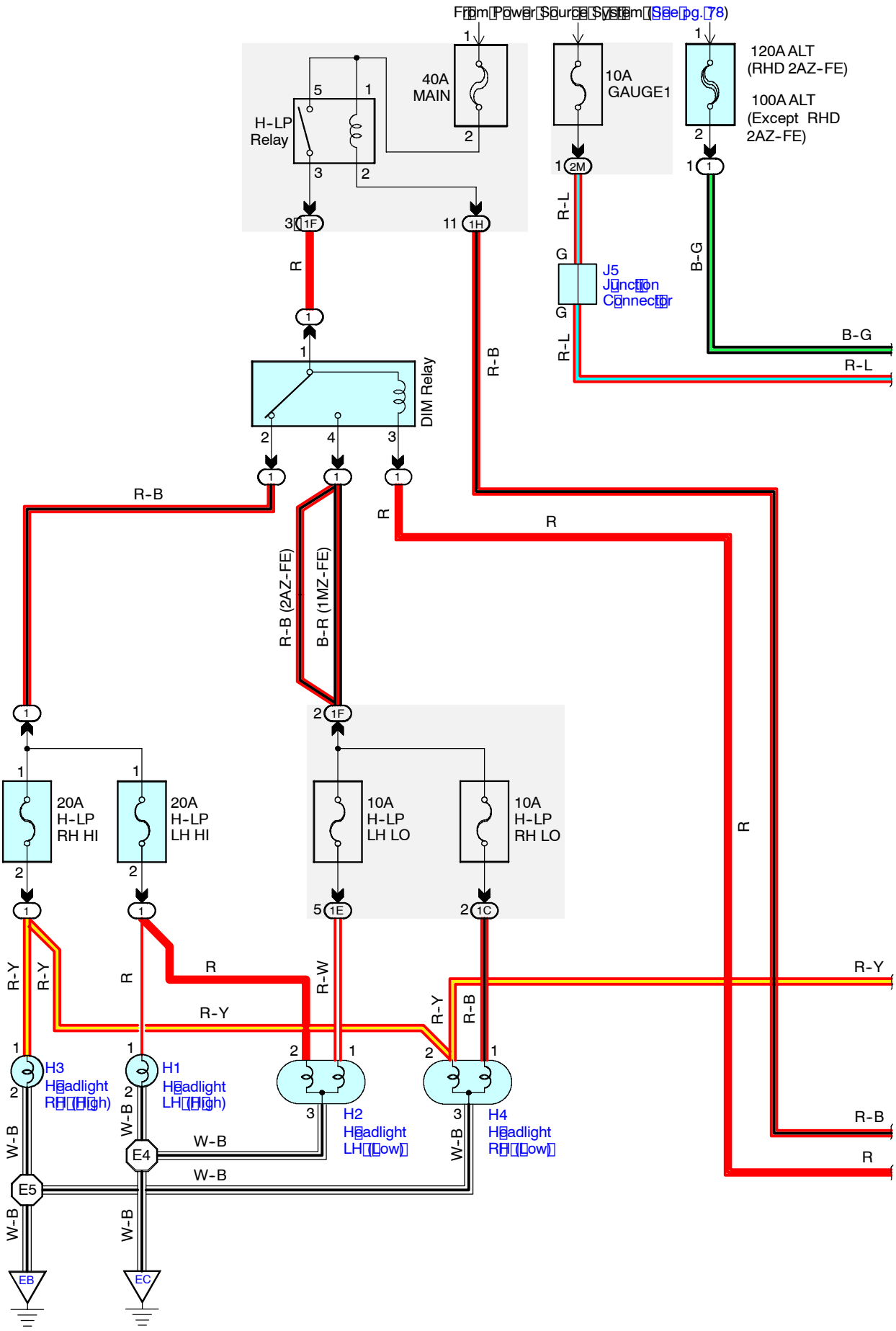
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	72 (RHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	72 (RHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
IA4	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IB2	67 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	67 (RHD)	Instrument Panel Wire and Roof Wire (Inside of Front Right Panel)
IE2	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE4	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IJ3	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IL1	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

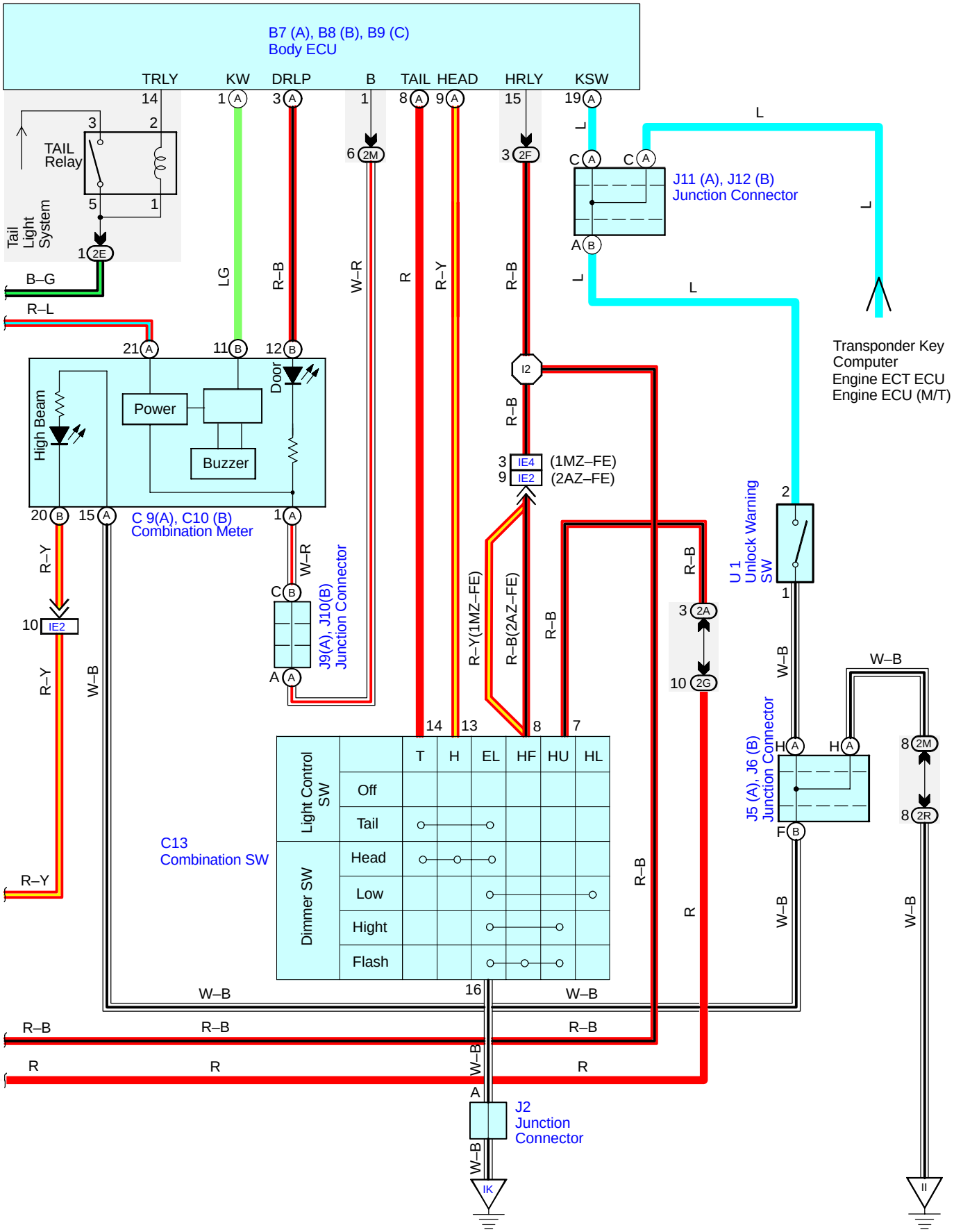
 **: Ground Points**

Code	See Page	Ground Points Location
EB	64 (RHD 1MZ–FE)	Right Fender
	66 RHD 2AZ–FE)	
EC	64 (RHD 1MZ–FE)	Left Fender
	66 (RHD 2AZ–FE)	
BR	72 (RHD)	Front Side of Rear Wheel House RH
II	67 (RHD)	Instrument Panel Reinforcement LH
IJ	67 (RHD)	Instrument Panel Brace RH
IK	67 (RHD)	Instrument Panel Brace RH
IM	67 (RHD)	Instrument Panel Reinforcement RH
IN	67 (RHD)	Right Kick Panel

 **: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	72 (RHD)	Roof Wire	B6	72 (RHD)	Floor Wire
B2	72 (RHD)		B10		
B3	72 (RHD)		B14		
B4	72 (RHD)	Floor Wire	I19	70 (RHD)	Instrument Panel Wire


From Power Source System (See pg. 78)
40A MAIN
H-LP Relay
10A GAUGE1
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
J5 Junction Connector
DIM Relay
20A H-LP RH HI
20A H-LP LH HI
10A H-LP LH LO
10A H-LP RH LO
H3 Headlight RH (High)
H1 Headlight LH (High)
H2 Headlight LH (Low)
H4 Headlight RH (Low)
E4
E5
EB
EC
R-B
R-L
B-G
R
R-Y
R-W
W-B
R-B (2AZ-FE)
B-R (1MZ-FE)


B7 (A), B8 (B), B9 (C)
Body ECU
TRLY
KW
DRLP
B
TAIL
HEAD
HRLY
KSW
TAIL Relay
Tail Light System
B–G
R–L
LG
R–B
W–R
R
R–Y
L
J11 (A), J12 (B)
Junction Connector
Transponder Key Computer
Engine ECT ECU
Engine ECU (M/T)
High Beam
Power
Buzzer
Door
C 9(A), C10 (B)
Combination Meter
J9(A), J10(B)
Junction Connector
I2
IE4
IE2
(1MZ–FE)
(2AZ–FE)
R–Y(1MZ–FE)
R–B(2AZ–FE)
U 1
Unlock Warning SW
W–B
J5 (A), J6 (B)
Junction Connector
C13
Combination SW
Light Control SW
Dimmer SW
T
H
EL
HF
HU
HL
Off
Tail
Head
Low
Hight
Flash
J2
Junction
Connector
IK
II

Headlight (LHD)

Service Hints

Body ECU

9–Ground : Approx. 12 volts with ignition SW at ON or ST position
12, 24–Ground : Always continuity
2M-6–Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code	See Page	Code		See Page
B7	A	36 (LHD)	H2	32 (LHD 1MZ–FE)	J5	A	37 (LHD)
B8	B	36 (LHD)		34 (LHD 2AZ–FE)	J6	B	37 (LHD)
B9	C	36 (LHD)	H3	32 (LHD 1MZ–FE)	J9	A	37 (LHD)
C9	A	36 (LHD)		34 (LHD 2AZ–FE)	J10	B	37 (LHD)
C10	B	36 (LHD)	H4	32 (LHD 1MZ–FE)	J11	A	37 (LHD)
C13		36 (LHD)		34 (LHD 2AZ–FE)	J12	B	37 (LHD)
H1		32 (LHD 1MZ–FE)	J2	37 (LHD)	U1		37 (LHD)
		34 (LHD 2AZ–FE)	J5	37 (LHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	55	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
IE4		



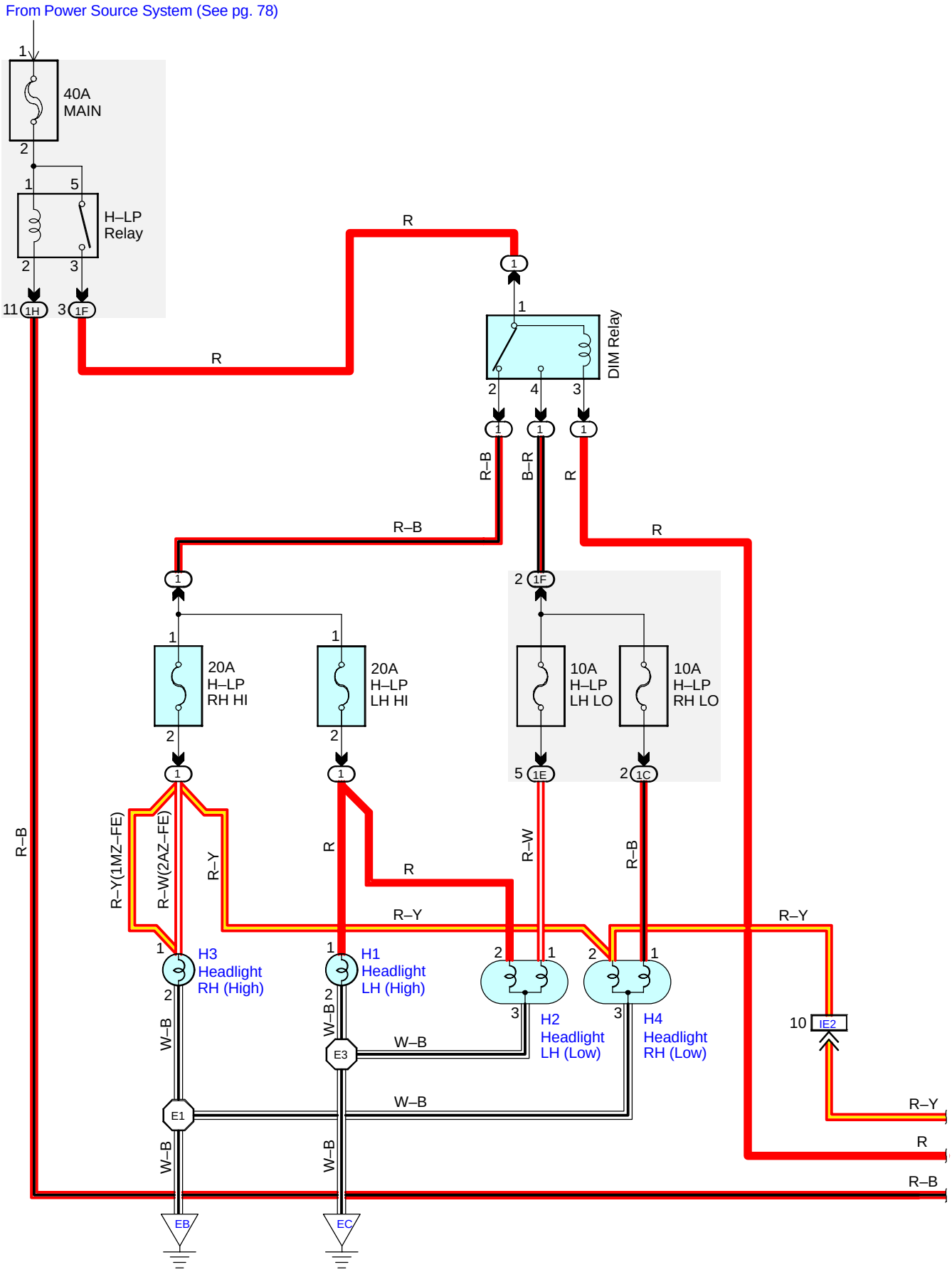
: Ground Points

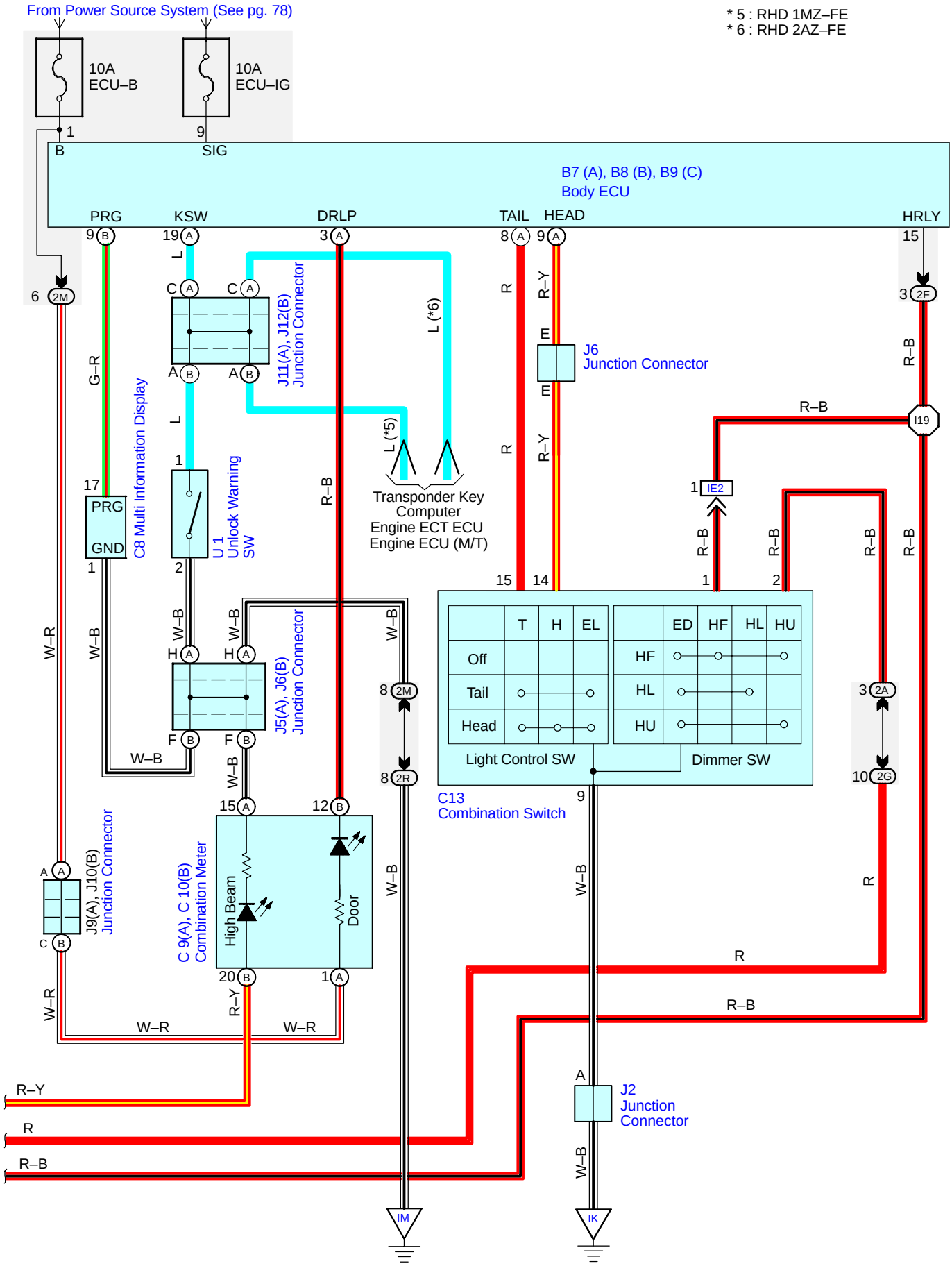
Code	See Page	Ground Points Location
EB	52 (LHD 1MZ–FE)	Right Fender
	54 (LHD 2AZ–FE)	
EC	52 (LHD 1MZ–FE)	Left Fender
	54 (LHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH



: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	52 (LHD 1MZ–FE)	Engine Room Main Wire	I2	58	Instrument Panel
	54 (LHD 2AZ–FE)				
E5	52 (LHD 1MZ–FE)	Engine Room Main Wire			
	54 (LHD 2AZ–FE)				


From Power Source System (See pg. 78)
40A MAIN
H–LP Relay
DIM Relay
20A H–LP RH HI
20A H–LP LH HI
10A H–LP LH LO
10A H–LP RH LO
H3 Headlight RH (High)
H1 Headlight LH (High)
H2 Headlight LH (Low)
H4 Headlight RH (Low)
R
R–B
B–R
R–Y
R–W
W–B
R–Y(1MZ–FE)
R–W(2AZ–FE)
11 1H
3 1F
2 1F
5 1E
2 1C
10 IE2
E1
E3
EB
EC


From Power Source System (See pg. 78)
* 5 : RHD 1MZ–FE
* 6 : RHD 2AZ–FE
10A ECU–B
10A ECU–IG
B
SIG
B7 (A), B8 (B), B9 (C) Body ECU
PRG
KSW
DRLP
TAIL
HEAD
HRLY
C8 Multi Information Display
U 1 Unlock Warning SW
J11(A), J12(B) Junction Connector
J5(A), J6(B) Junction Connector
J6 Junction Connector
J9(A), J10(B) Junction Connector
C 9(A), C 10(B) Combination Meter
High Beam
Door
Transponder Key Computer
Engine ECT ECU
Engine ECU (M/T)
C13 Combination Switch
Light Control SW
Dimmer SW
J2 Junction Connector
IM
IK
I19
IE2
L (*5)
L (*6)
G–R
L
R
R–Y
R–B
W–B
W–R
R–Y
R
R–B

Headlight (RHD)

Service Hints

Body ECU

9–Ground : Approx. 12 volts with ignition SW at ON or ST position
12, 24–Ground : Always continuity
2M-6–Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	46 (RHD	H2		42 (RHD 1MZ–FE)	J6	B	47 (RHD)
B8	B	46 (RHD)			44 (RHD 2AZ–FE)	J9	A	47 (RHD)
B9	C	46 (RHD)	H3		42 (RHD 1MZ–FE)	J10	B	47 (RHD)
C8		46 (RHD)			44 (RHD 2AZ–FE)	J11	A	47 (RHD)
C9	A	46 (RHD)	H4		42 (RHD 1MZ–FE)	J12	B	47 (RHD)
C10	B	46 (RHD)			44 (RHD 2AZ–FE)	U1		47 (RHD)
C13		46 (RHD)	J2		47 (RHD)			
H1		42 (RHD 1MZ–FE)	J5		47 (RHD)			
		44 (RHD 2AZ–FE)	J5	A	47 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	67	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)



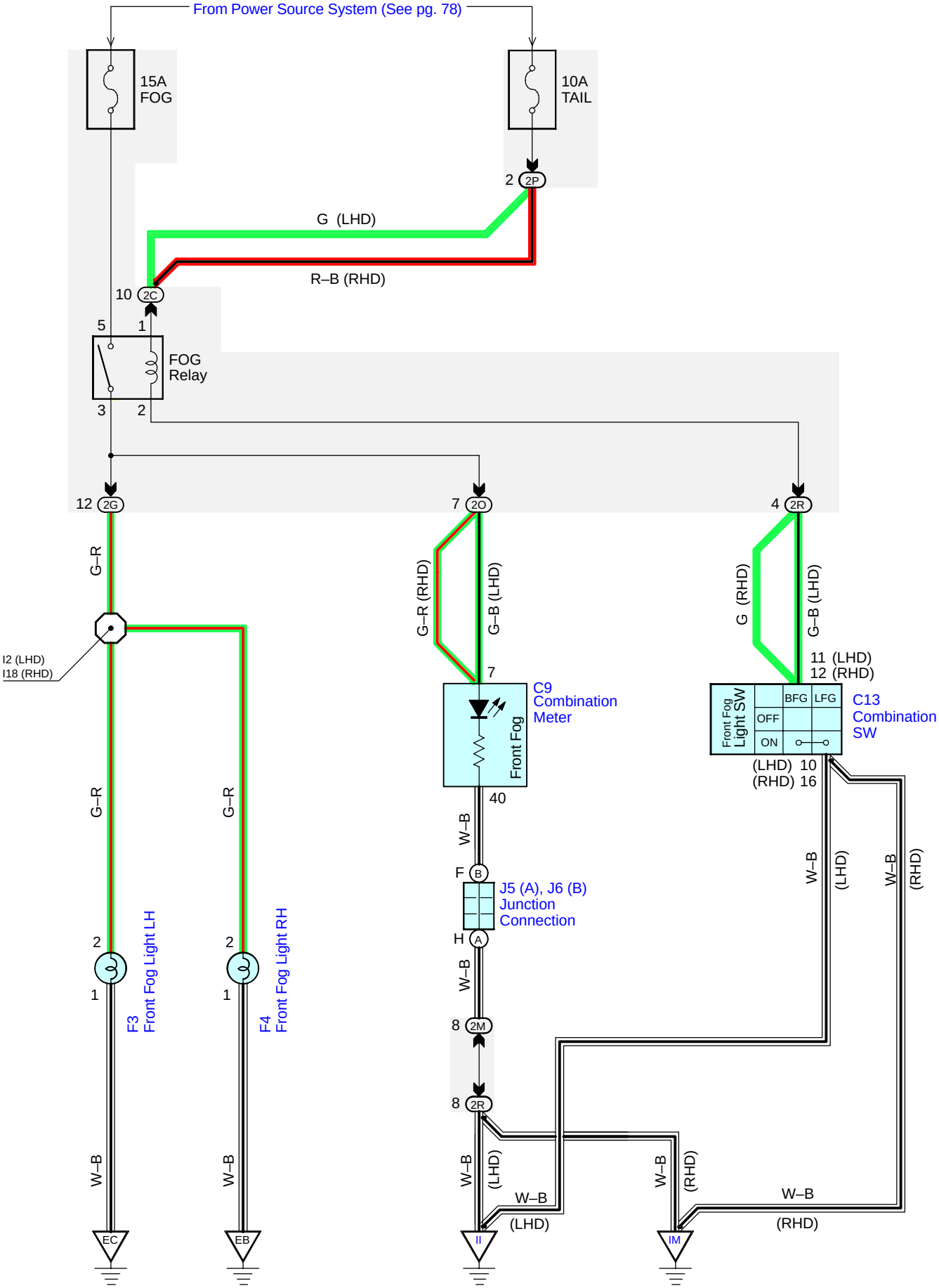
: Ground Points

Code	See Page	Ground Points Location
EB	64 (RHD 1MZ–FE)	Right Fender
	66 (RHD 2AZ–FE)	
EC	64 (RHD 1MZ–FE)	Left Fender
	66 (RHD 2AZ–FE)	
IK	67 (RHD)	Instrument Panel Brace LH
IM	67 (RHD)	Instrument Panel Brace RH



: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
EB	64 (RHD 1MZ–FE)	Engine Room Main Wire	I19	70 (RHD)	Instrument Panel Wire
	66 (RHD 2AZ–FE)				
EC	64 (RHD 1MZ–FE)	Engine Room Main Wire			
	66 (RHD 2AZ–FE)				


From Power Source System (See pg. 78)
15A
FOG
10A
TAIL
2
2P
G (LHD)
R–B (RHD)
10
2C
5
1
FOG
Relay
3
2
12
2G
7
2O
4
2R
G–R
G–R (RHD)
G–B (LHD)
G (RHD)
G–B (LHD)
I2 (LHD)
I18 (RHD)
7
11 (LHD)
12 (RHD)
C9
Combination
Meter
Front Fog
C13
Combination
SW
Front Fog
Light SW
BFG
LFG
OFF
ON
(LHD) 10
(RHD) 16
40
W–B
F
B
J5 (A), J6 (B)
Junction
Connection
H
A
W–B
8
2M
8
2R
W–B
(LHD)
W–B
(RHD)
2
1
F3
Front Fog Light LH
2
1
F4
Front Fog Light RH
W–B
W–B
EC
EB
W–B
(LHD)
W–B
(LHD)
W–B
(RHD)
W–B
(RHD)
II
IM

Service Hints

FOG Relay

5–3 : Closed with the light control SW at TAIL or HEAD position and front fog light SW on

: Parts Location

Code	See Page	Code	See Page	Code		See Page
C9	36 (LHD)	F3	34 (LHD 2AZ–FE)	J5	A	37 (LHD)
	46 (RHD)		44 (RHD 2AZ–FE)			47 (RHD)
C13	36 (LHD)	F4	32 (LHD 1MZ–FE)	J6	B	37 (LHD)
	46 (RHD)		42 (RHD 1MZ–FE)			47 (RHD)
F3	32 (LHD 1MZ–FE)		34 (LHD 2AZ–FE)			
	42 (RHD 1MZ–FE)		44 (RHD 2AZ–FE)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2O		
2P		
2R		

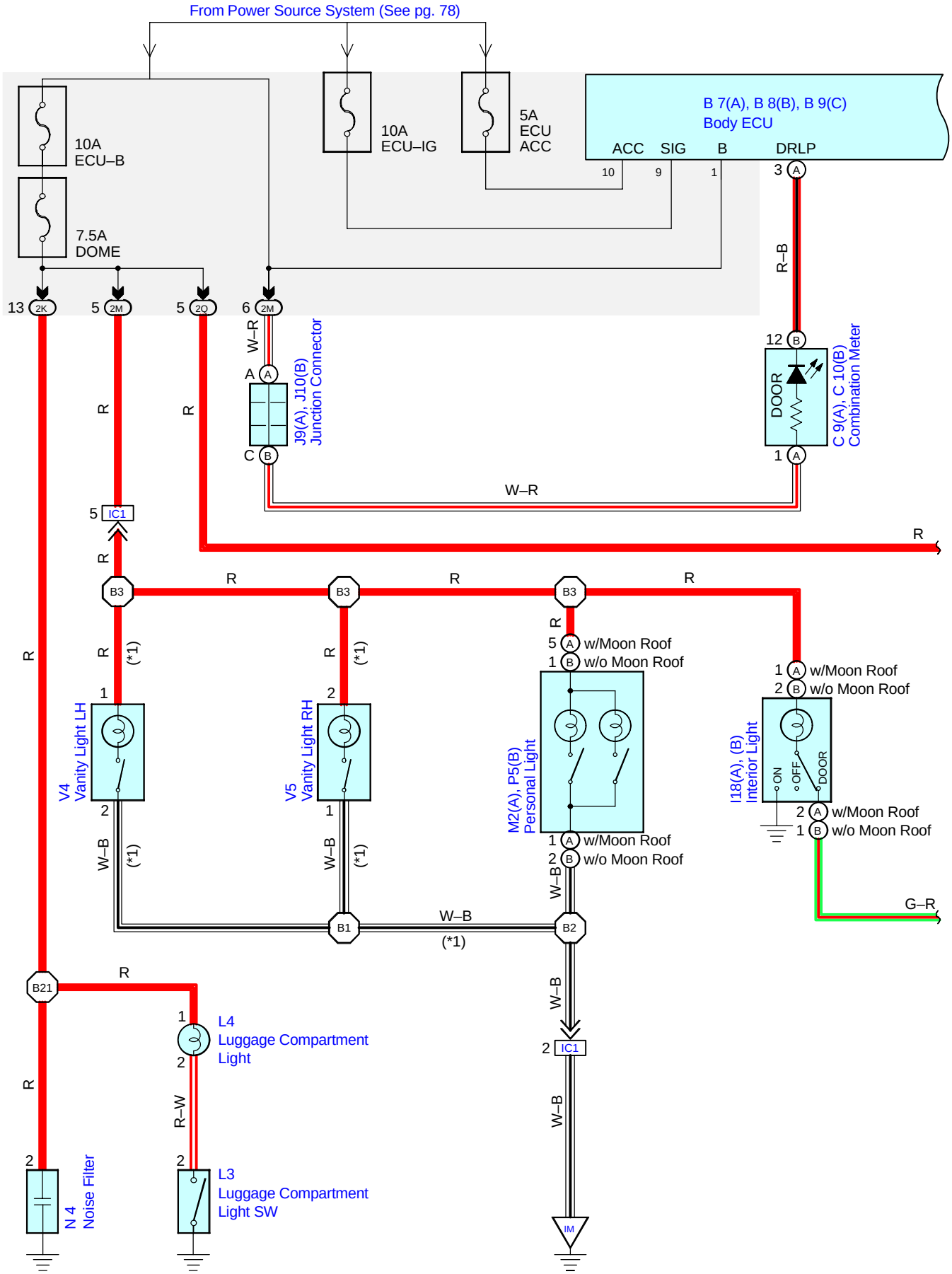
: Ground Points

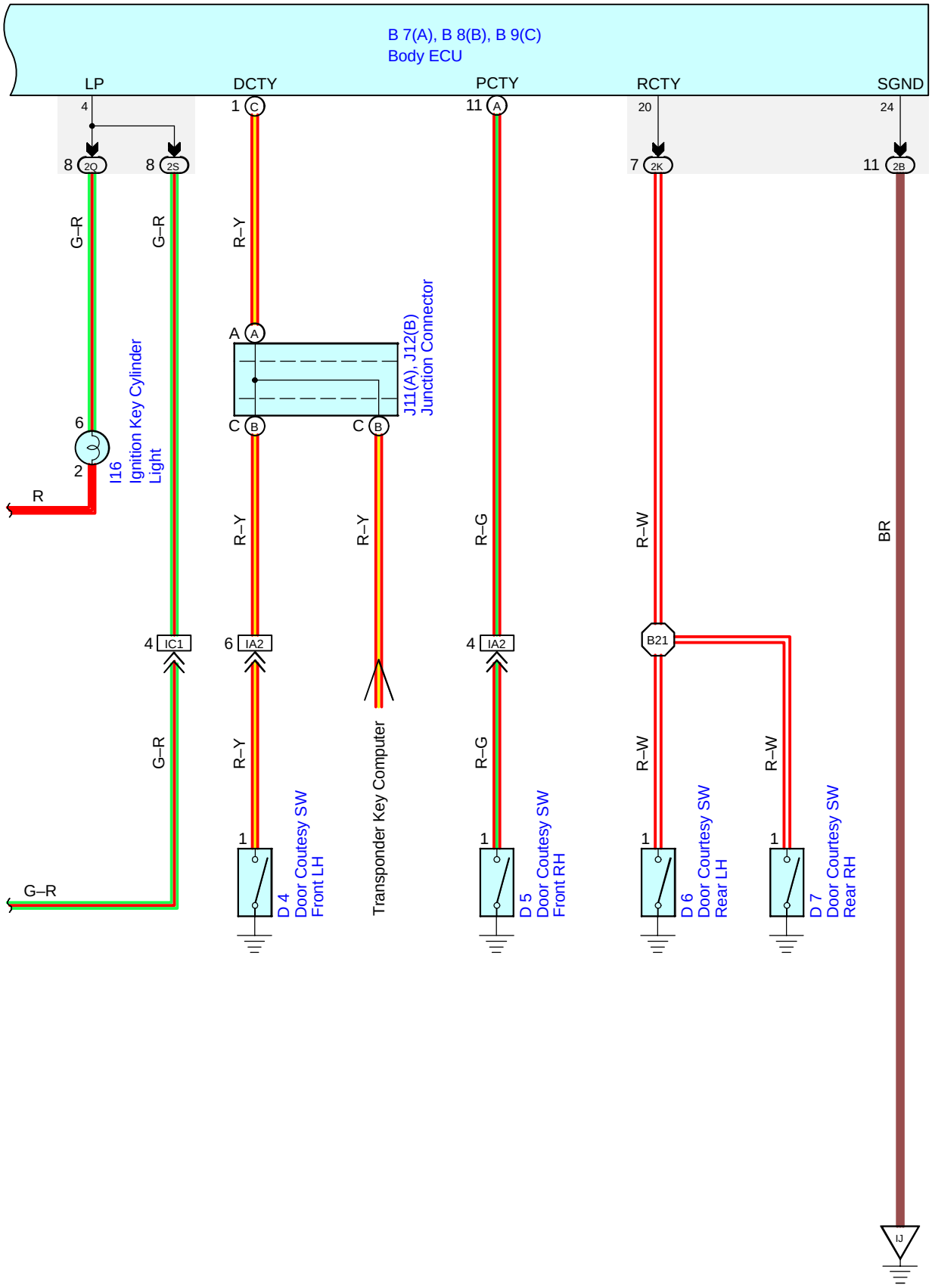
Code	See Page	Ground Points Location
EB	52 (LHD 1MZ–FE)	Right Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	58 (LHD)	Engine Room Main Wire	I18	70 (RHD)	Engine Room Main Wire

*1 : w/Ignition Key Cylinder Light




B 7(A), B 8(B), B 9(C)
Body ECU
LP
DCTY
PCTY
RCTY
SGND
4
8 2Q
8 2S
1 C
11 A
20
7 2K
24
11 2B
G–R
G–R
R–Y
A A
J11(A), J12(B)
Junction Connector
C B
C B
6
2
I16
Ignition Key Cylinder
Light
R
R–Y
R–Y
R–G
R–W
BR
4 IC1
6 IA2
4 IA2
B21
G–R
R–Y
R–G
R–W
R–W
1
1
1
1
1
G–R
D 4
Door Coutesy SW
Front LH
Transponder Key Computer
D 5
Door Coutesy SW
Front RH
D 6
Door Courtesy SW
Rear LH
D 7
Door Courtesy SW
Rear RH
IJ

Interior Light (LHD)

Service Hints

Body ECU

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

12, 24–Ground : Always continuity

1–Ground : Always approx. 12 volts

D6, D7, D8, D9 Door Courtesy SW Front LH, RH, Rear LH, RH

1–Ground : Closed with each of the doors

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	36 (LHD)	D7		38 (LHD)	L4		38 (LHD)
B8	B	36 (LHD)	I16		37 (LHD)	M2	A	38 (LHD)
B9	C	36 (LHD)	I18		38 (LHD)	N4		39 (LHD)
C9	A	36 (LHD)	J9	A	37 (LHD)	P5	B	39 (LHD)
C10	B	36 (LHD)	J10	B	37 (LHD)	V4		39 (LHD)
D4		38 (LHD)	J11	A	37 (LHD)	V5		39 (LHD)
D5		38 (LHD)	J12	B	37 (LHD)			
D6		38 (LHD)	L3		38 (LHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	26	Instrument Panel Wire and Driver Side J/B
2K	26	Floor Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2Q		
2S		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	55 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IC1	55 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)

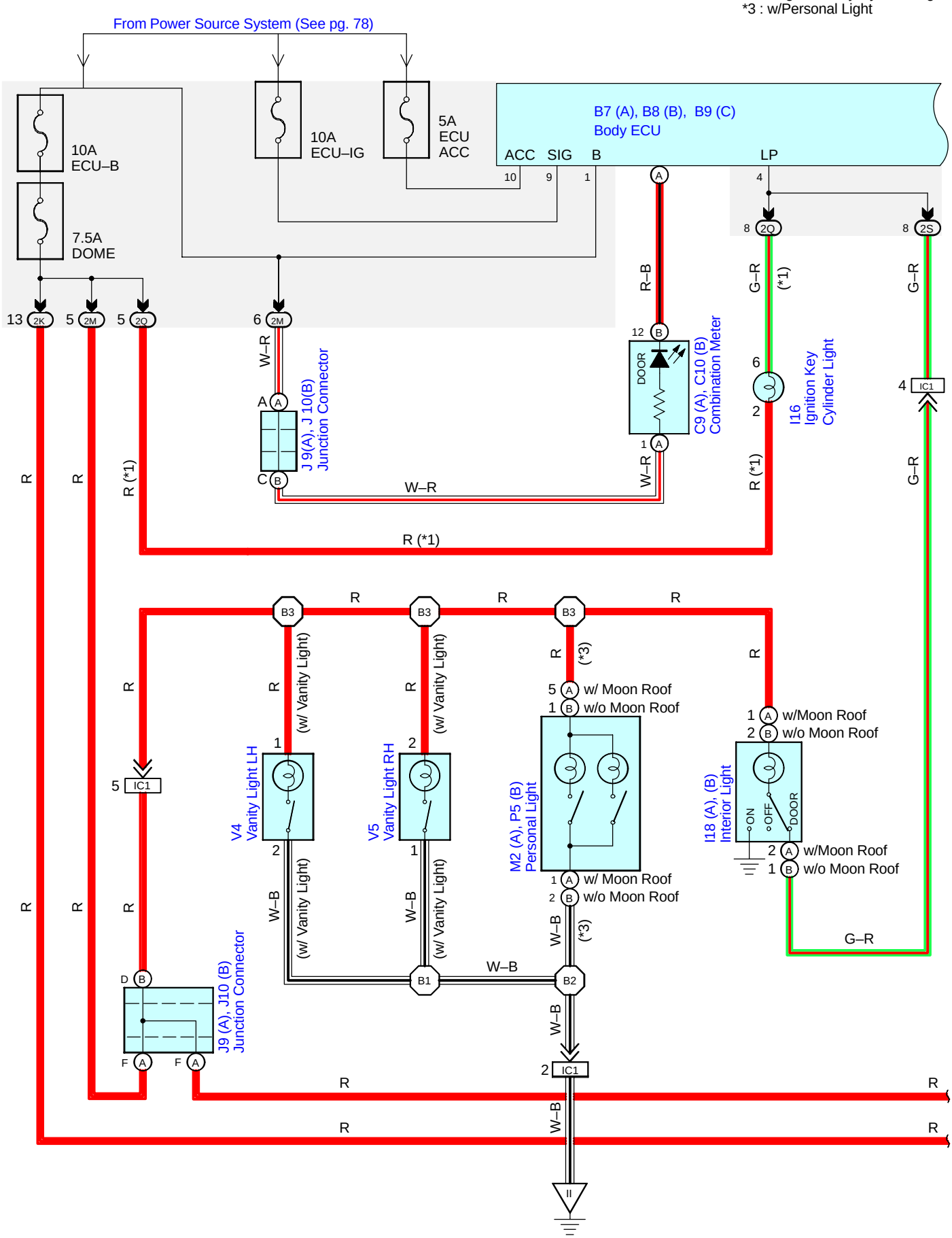
: Ground Points

Code	See Page	Ground Points Location
IJ	55 (LHD)	Instrument Panel Brace LH
IM	55 (LHD)	Instrument Panel Reinforcement RH

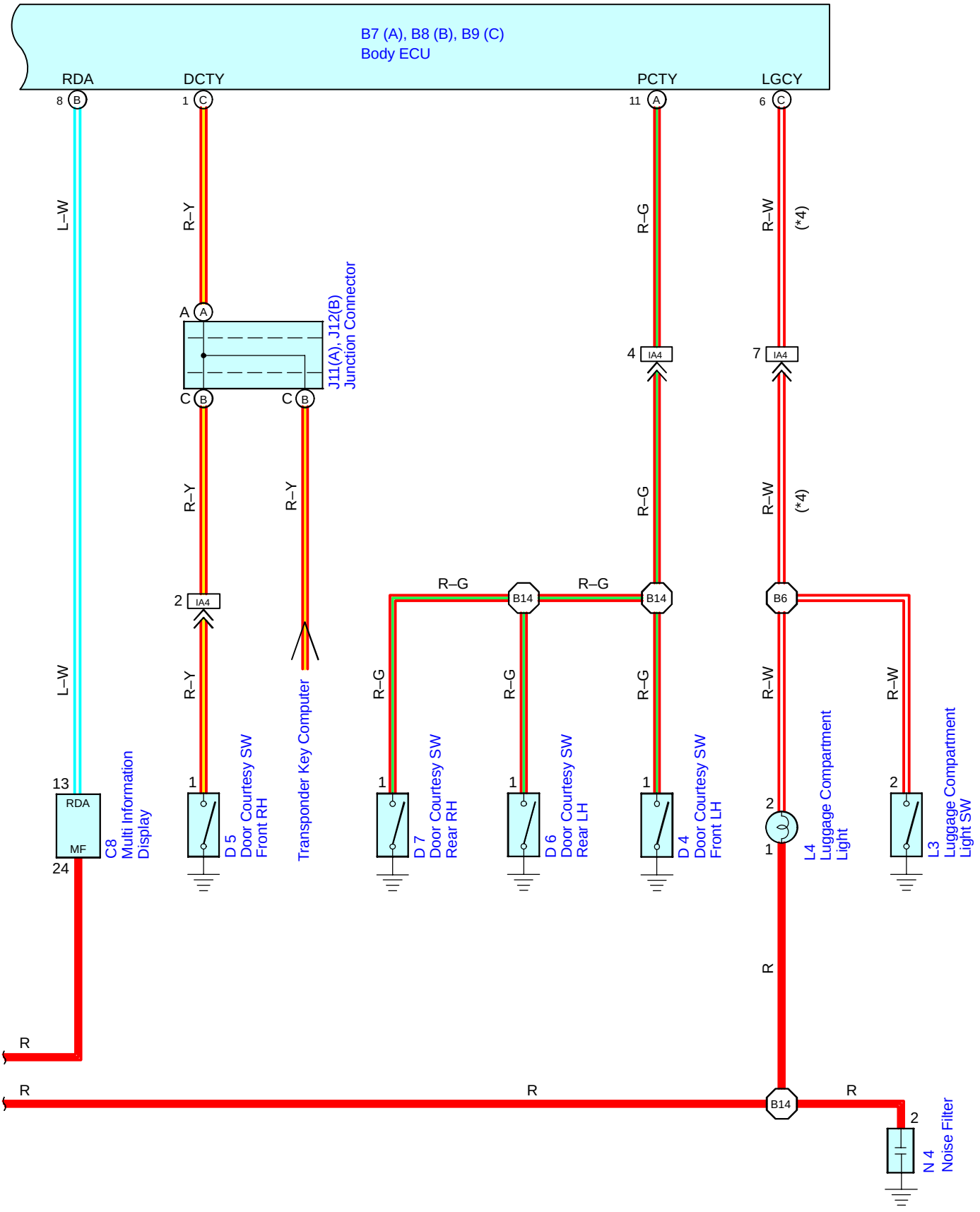
 **: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	60 (LHD)	Roof Wire	B3	60 (LHD)	Roof Wire
B2	60 (LHD)	Roof Wire	B21	60 (LHD)	Floor Wire

*1 : w/Ignition Key Cylinder Light
*3 : w/Personal Light



*4 : w/Luggage Compartment Door Opener



Interior Light (RHD)

Service Hints

Body ECU

9–Ground : Approx. 12 volts with ignition SW at ON or ST position
12, 24–Ground : Always continuity
1–Ground : Always approx. 12 volts

D6, D7, D8, D9 Door Courtesy SW Front LH, RH, Rear LH, RH

1–Ground : Closed with each of the door

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	46 (RHD)	D6		48 (RHD)	J12	B	47 (RHD)
B8	B	46 (RHD)	D7		48 (RHD)	L3		48 (RHD)
B9	C	46 (RHD)	I16		48 (RHD)	L4		48 (RHD)
C8		46 (RHD)	I18	A	48 (RHD)	M2	A	48 (RHD)
C9	A	46 (RHD)		B		N4		49 (RHD)
C10	B	46 (RHD)	J9	A	47 (RHD)	P5	B	49 (RHD)
D4		48 (RHD)	J10	B	47 (RHD)	V4		49 (RHD)
D5		48 (RHD)	J11	A	47 (RHD)	V5		49 (RHD)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2K	26	Floor Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2Q		
2S		

: Connector Joining Wire Harness and Wire Harness

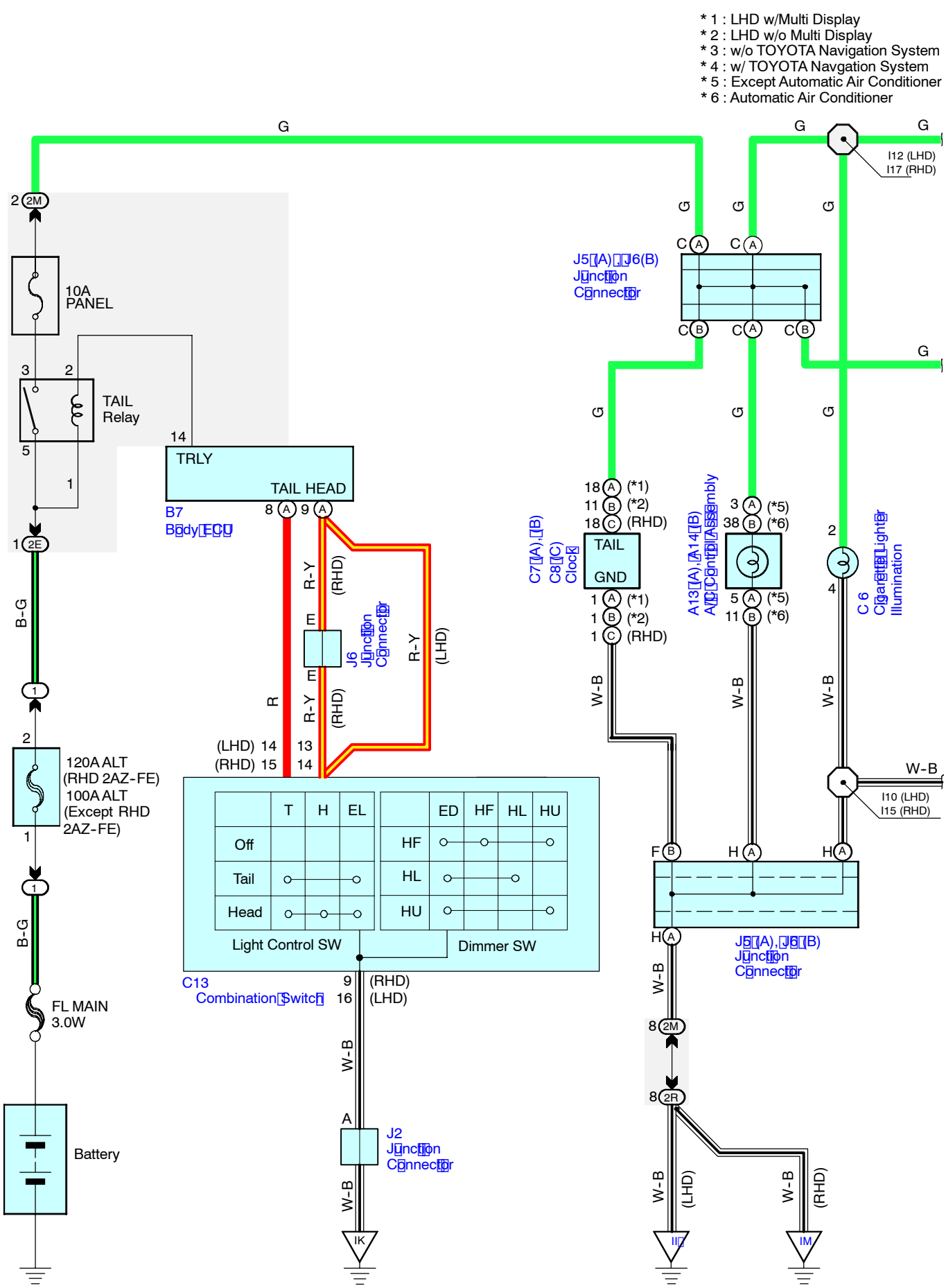
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IC1	67 (RHD)	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)

: Ground Points

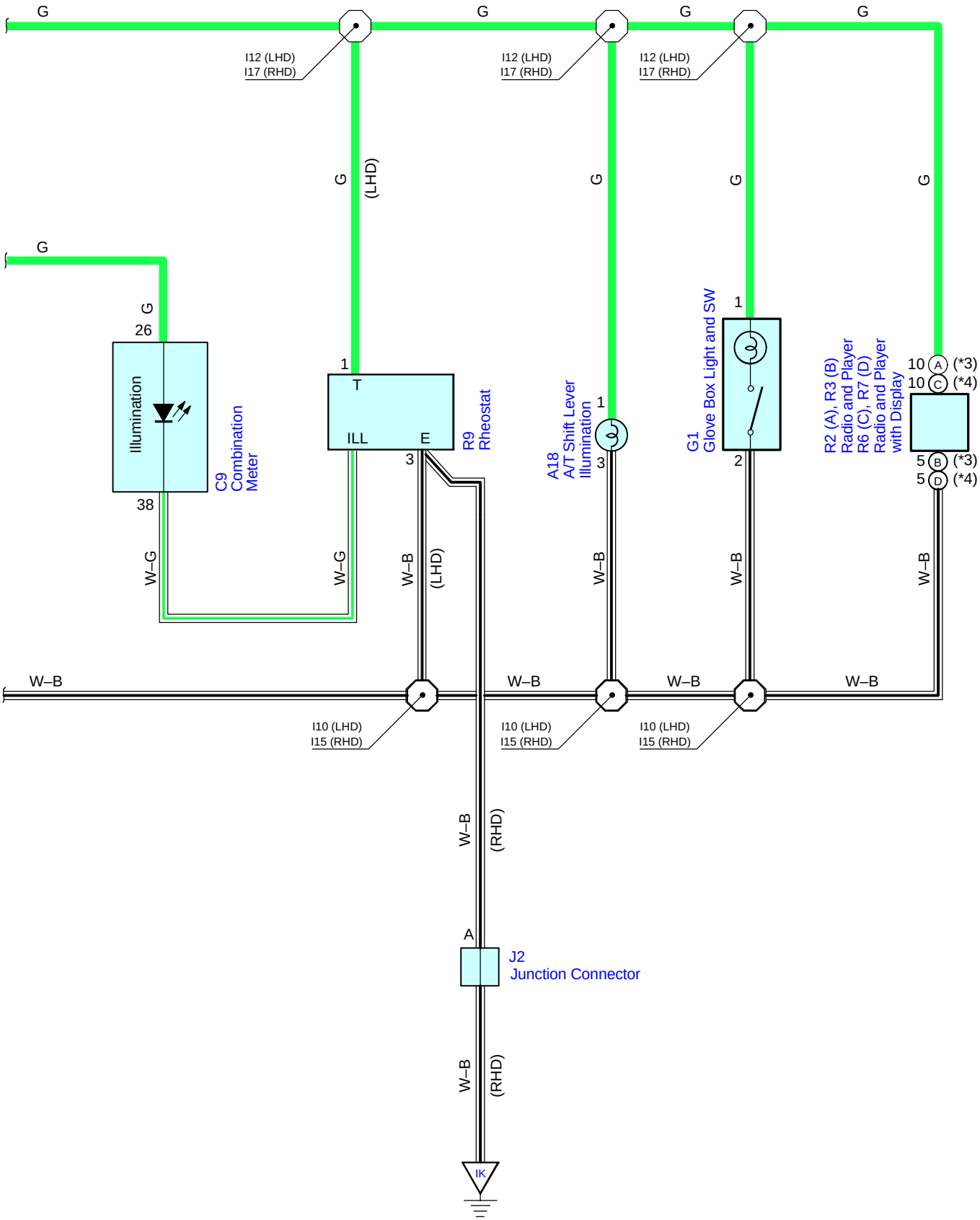
Code	See Page	Ground Points Location
II	67 (RHD)	Instrument Panel Reinforcement LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	72 (RHD)	Roof Wire	B6	72 (RHD)	Floor Wire
B2	72 (RHD)	Roof Wire	B14	72 (RHD)	Floor Wire
B3	72 (RHD)	Roof Wire			


* 1 : LHD w/Multi Display
* 2 : LHD w/o Multi Display
* 3 : w/o TOYOTA Navigation System
* 4 : w/ TOYOTA Navgation System
* 5 : Except Automatic Air Conditioner
* 6 : Automatic Air Conditioner
10A PANEL
TAIL Relay
TRLY
TAIL HEAD
B7 Body ECU
J6 Junction Connector
C13 Combination Switch
Light Control SW
Dimmer SW
Off
Tail
Head
T
H
EL
ED
HF
HL
HU
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
FL MAIN 3.0W
Battery
J2 Junction Connector
J5 (A), J6 (B) Junction Connector
TAIL GND
C7 (A), C8 (C) Clock
A13 (A), A14 (B) A/T Control Assembly
C 6 Cigarette Lighter Illumination
I12 (LHD) I17 (RHD)
I10 (LHD) I15 (RHD)
W-B
B-G
R-Y
R
G
(RHD)
(LHD)

* 3 : w/o TOYOTA Navigation System
* 4 : w/ TOYOTA Navgation System



Service Hints

TAIL Relay

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

C13 Combination SW

14–16 (LHD) and 15–9 (RHD) : Closed with the light control SW at TAIL or HEAD position

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A13	A	36 (LHD) 46 (RHD)	C9		36 (LHD) 46 (RHD)	R2	A	37 (LHD) 47 (RHD)
A14	B	36 (LHD) 46 (RHD)	C13		36 (LHD) 46 (RHD)	R3	B	37 (LHD) 47 (RHD)
A18		36 (LHD) 46 (RHD)	G1		37 (LHD) 47 (RHD)	R6	C	47 (RHD)
						R7	D	47 (RHD)
B7		36 (LHD) 46 (RHD)	J2		37 (LHD) 47 (RHD)	R9		37 (LHD) 47 (RHD)
C6		36 (LHD) 46 (RHD)	J5	A	37 (LHD) 47 (RHD)			
C7	A	36 (LHD)	J6	B	37 (LHD) 47 (RHD)			
	B	36 (LHD)						
C8	C	46 (RHD)						

: Relay Blocks

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

: Junction Block and Wire Harness Connector

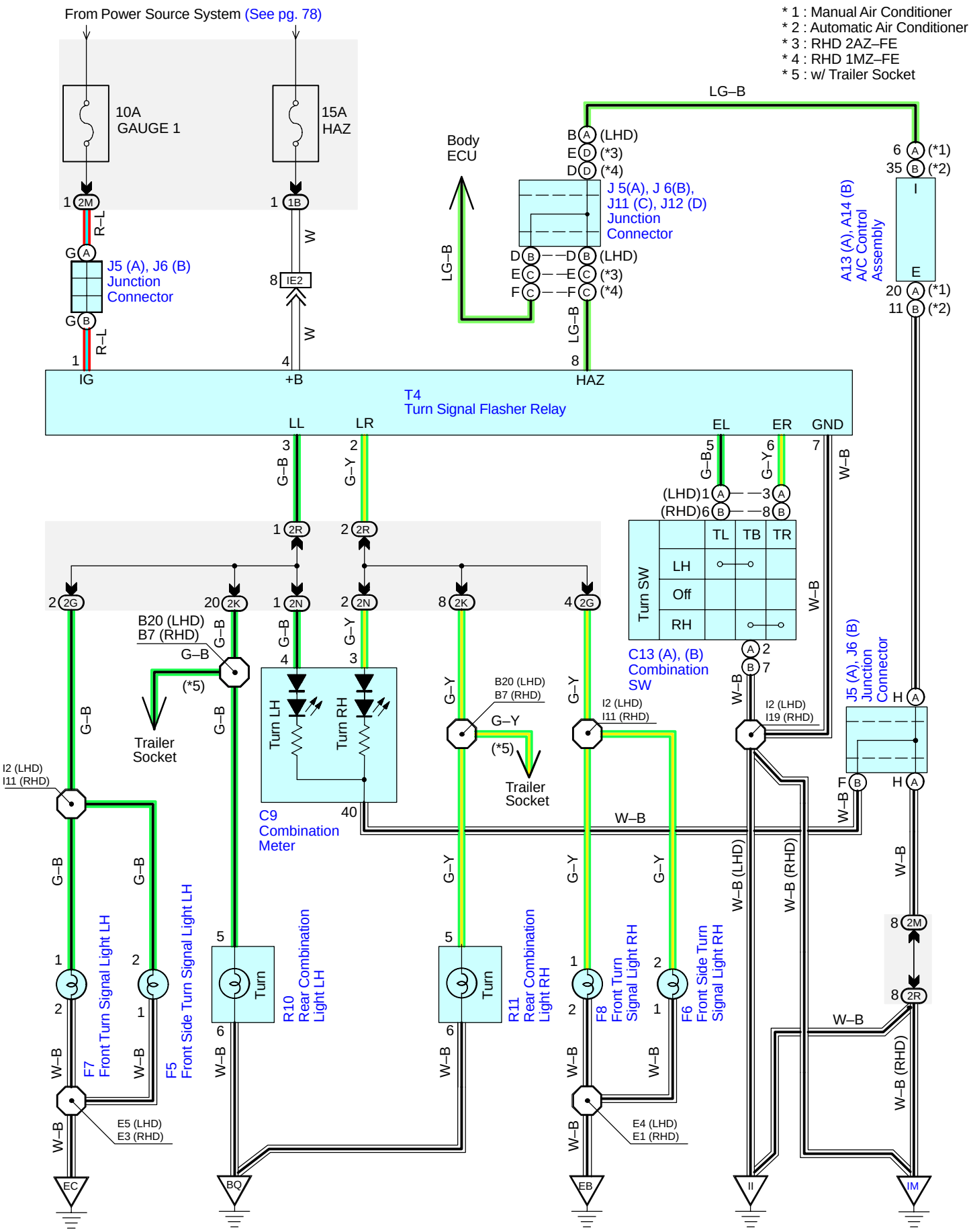
Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	26	Engine Room Main Wire and Driver Side J/B
2M 2R	26	Instrument Panel Wire and Driver Side J/B

: Ground Points

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD) 67 (RHD)	Instrument Panel Brace LH
IM	67 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I10	58 (LHD)	Instrument Panel Wire	I15	70 (RHD)	Instrument Panel Wire
I12	58 (LHD)		I17	70 (RHD)	


From Power Source System (See pg. 78)
* 1 : Manual Air Conditioner
* 2 : Automatic Air Conditioner
* 3 : RHD 2AZ–FE
* 4 : RHD 1MZ–FE
* 5 : w/ Trailer Socket
10A GAUGE 1
15A HAZ
Body ECU
LG–B
J 5(A), J 6(B), J11 (C), J12 (D) Junction Connector
A13 (A), A14 (B) A/C Control Assembly
J5 (A), J6 (B) Junction Connector
IG
+B
HAZ
T4 Turn Signal Flasher Relay
LL
LR
EL
ER
GND
Turn SW
TL
TB
TR
LH
Off
RH
C13 (A), (B) Combination SW
B20 (LHD) B7 (RHD)
Trailer Socket
Turn LH
Turn RH
C9 Combination Meter
I2 (LHD) I11 (RHD)
I2 (LHD) I19 (RHD)
F7 Front Turn Signal Light LH
F5 Front Side Turn Signal Light LH
R10 Rear Combination Light LH
R11 Rear Combination Light RH
F8 Front Turn Signal Light RH
F6 Front Side Turn Signal Light RH
E5 (LHD) E3 (RHD)
E4 (LHD) E1 (RHD)
W–B (LHD)
W–B (RHD)
EC
BQ
EB
II
IM

Service Hints

T4 Turn Signal Flasher Relay

1–Ground : Approx. 12 volts with ignition SW at ON or ST position
4–Ground : Always approx. 12 volts
7–Ground : Always continuity

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A13	A	36 (LHD)	F5	32 (LHD 1MZ–FE)	J11	C	37 (LHD)
		46 (RHD)	F6	34 (LHD 2AZ–FE)			47 (RHD)
A14	B	36 (LHD)	F7	42 (RHD 1MZ–FE)	J12	D	37 (LHD)
		46 (RHD)	F8	44 (RHD 2AZ–FE)			47 (RHD)
C9		36 (LHD)	J5	A	37 (LHD)	R10	39 (LHD)
		46 (RHD)			47 (RHD)		49 (RHD)
C13	A	36 (LHD)	J6	B	37 (LHD)	R11	39 (LHD)
		46 (RHD)			47 (RHD)		49 (RHD)
C13	B	36 (LHD)				T4	37 (LHD)
		46 (RHD)					47 (RHD)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2K	26	Floor Wire and Driver Side J/B (Lower Finish Panel)
2M	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2N		
2R		

: Connector Joining Wire Harness and Wire Harness

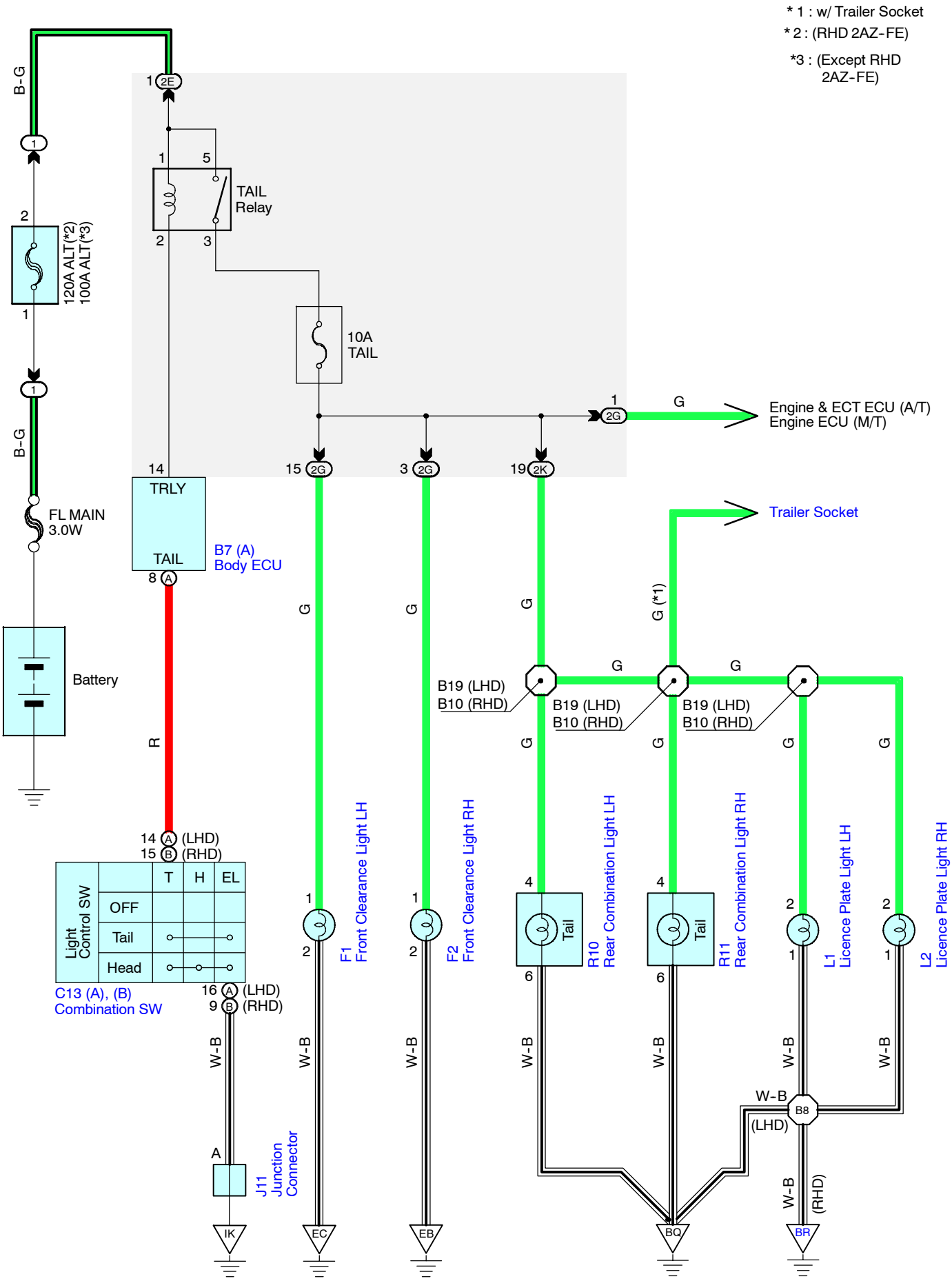
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)

: Ground Points

Code	See Page	Ground Points Location
EB	52 (LHD 1MZ–FE)	Right Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
BQ	60 (LHD)	Lower Back Panel Center
	72 (RHD)	
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	72 (RHD)	Floor Wire	E4	52 (LHD 1MZ–FE)	Engine Room Main Wire
B20	60 (LHD)			54 (LHD 2AZ–FE)	
E1	64 (RHD 1MZ–FE)	Engine Room Main Wire	E5	52 (LHD 1MZ–FE)	Engine Room Main Wire
	66 (RHD 2AZ–FE)			54 (LHD 2AZ–FE)	
E3	64 (RHD 1MZ–FE)	Engine Room Main Wire	I2	58 (LHD)	Instrument Panel Wire
	66 (RHD 2AZ–FE)		I11	58 (LHD)	Instrument Panel Wire
			I19	70 (RHD)	Instrument Panel Wire


* 1 : w/ Trailer Socket
* 2 : (RHD 2AZ-FE)
*3 : (Except RHD 2AZ-FE)
B-G
1 2E
1 5
TAIL Relay
2 3
2
120A ALT(*2)
100A ALT(*3)
1
10A TAIL
1 2G
G
Engine & ECT ECU (A/T)
Engine ECU (M/T)
B-G
FL MAIN 3.0W
14
TRLY
TAIL
8 A
B7 (A) Body ECU
15 2G
3 2G
19 2K
Trailer Socket
G (*1)
Battery
R
G
B19 (LHD)
B10 (RHD)
14 A (LHD)
15 B (RHD)
Light Control SW
T H EL
OFF
Tail
Head
C13 (A), (B) Combination SW
16 A (LHD)
9 B (RHD)
W-B
F1 Front Clearance Light LH
F2 Front Clearance Light RH
R10 Rear Combination Light LH
R11 Rear Combination Light RH
L1 Licence Plate Light LH
L2 Licence Plate Light RH
Tail
A
J11 Junction Connector
B8
(LHD)
(RHD)
IK
EC
EB
BQ
BR

System Outline

When the light control SW is turned to the TAIL or HEAD position, the signal is input to TERMINAL TAIL of the body ECU. This activates the body ECU to flow the current from the battery into the ALT fuse, TAIL relay (Coil side), TERMINAL TRLY of the body ECU to GROUND in that order to turn on the TAIL relay. The current flows from the TAIL fuse into the front clearance lights, license plate lights, TERMINAL 3 of the light failure sensor to TERMINALS 5, 9 to taillights in that order to turn on each light.

Taillight Disconnection Warning

If any taillight wiring is faulty when the ignition SW is turned to the ON position with the light control SW set at TAIL or HEAD, the light failure sensor detects a voltage difference and is activated to turn on the rear lights warning light in the combination meter to warn the driver. The warning light is remained lit until the ignition SW is turned to the OFF position

Service Hints

L3 Light Failure Sensor

8–Ground : Approx. 12 volts with the ignition SW at ON position
3–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
B7	A	36 (LHD)	F2	42 (RHD 1MZ–FE)	L2	38 (LHD)
		46 (RHD)		44 (RHD 2AZ–FE)		48 (RHD)
C13	A	36 (LHD)		32 (LHD 1MZ–FE)	R10	49 (RHD)
C13	B	46 (RHD)		34 (LHD 2AZ–FE)		39 (LHD)
F1		34 (LHD 2AZ–FE)	J11	37 (LHD)	R11	49 (RHD)
		32 (LHD 1MZ–FE)		47 (RHD)		39 (LHD)
		44 (RHD 2AZ–FE)	L1	38 (LHD)		
		42 (RHD 1MZ–FE)		48 (RHD)		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	26	Engine Room Main Wire and Driver Side J/B
2G		
2K		Floor Wire and Driver Side J/B

Taillight

 : **Ground Points**

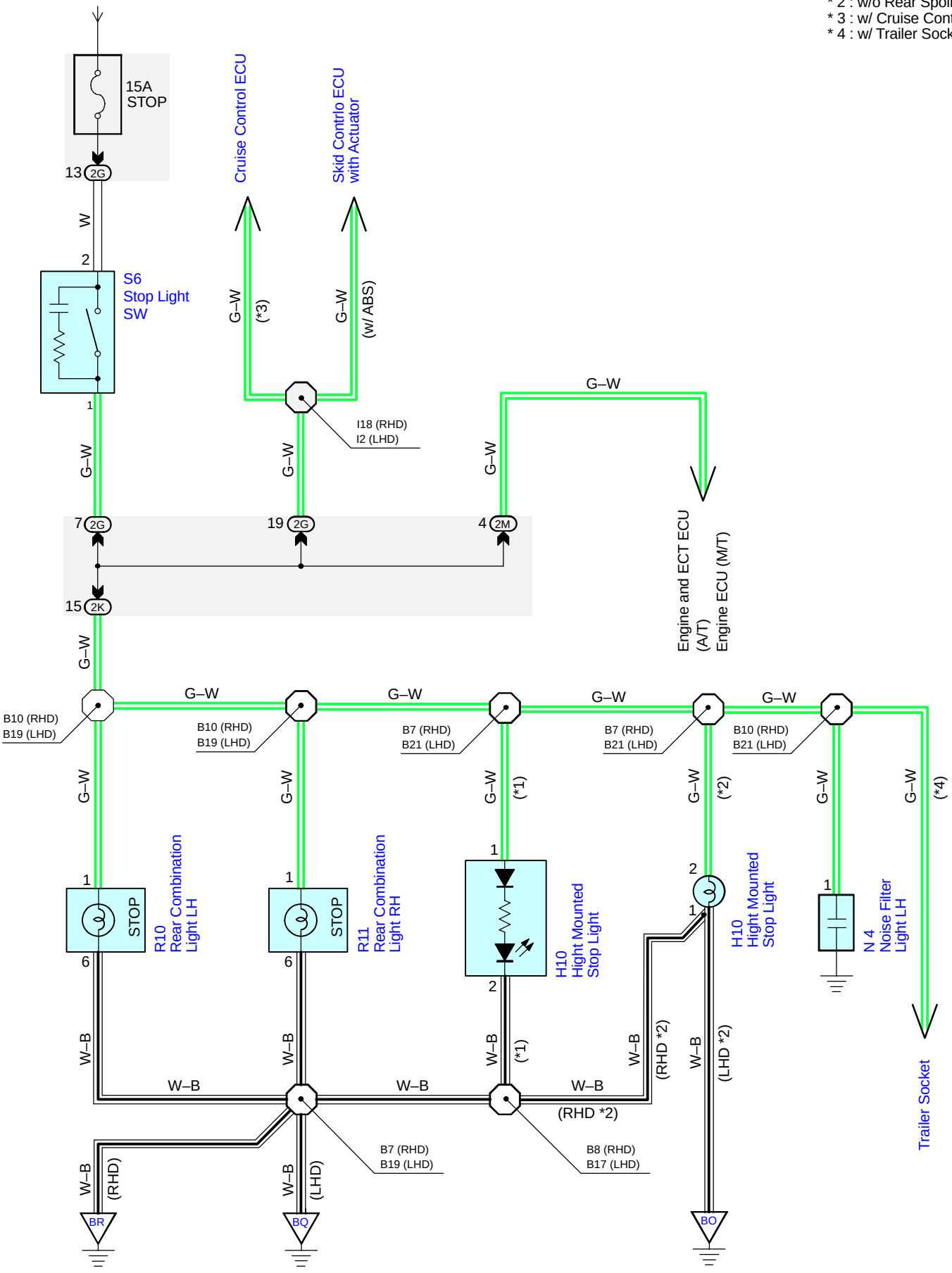
Code	See Page	Ground Points Location
EB	52 (LHD 1MZ–FE)	Right Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
BQ	60 (LHD)	Lower Back Panel Center
	72 (RHD)	
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	72 (RHD)	Floor No. 2 Wire	B19	60 (LHD)	Floor No. 2 Wire
	60 (LHD)				
B10	72 (RHD)				

From Power Source System (See pg. 78)

* 1 : w/ Rear Spoiler
* 2 : w/o Rear Spoiler
* 3 : w/ Cruise Control
* 4 : w/ Trailer Socket



Service Hints

S14 Stop Light SW

2–1 : Closed with the brake pedal depressed

: Parts Location

Code	See Page	Code	See Page	Code	See Page
H10	38 (LHD)	R10	39 (LHD)	S6	37 (LHD)
	48 (RHD)		49 (RHD)		47 (RHD)
N4	39 (LHD)	R11	39 (LHD)		
	49 (RHD)		49 (RHD)		

: Junction Block and Wire Harness Connector

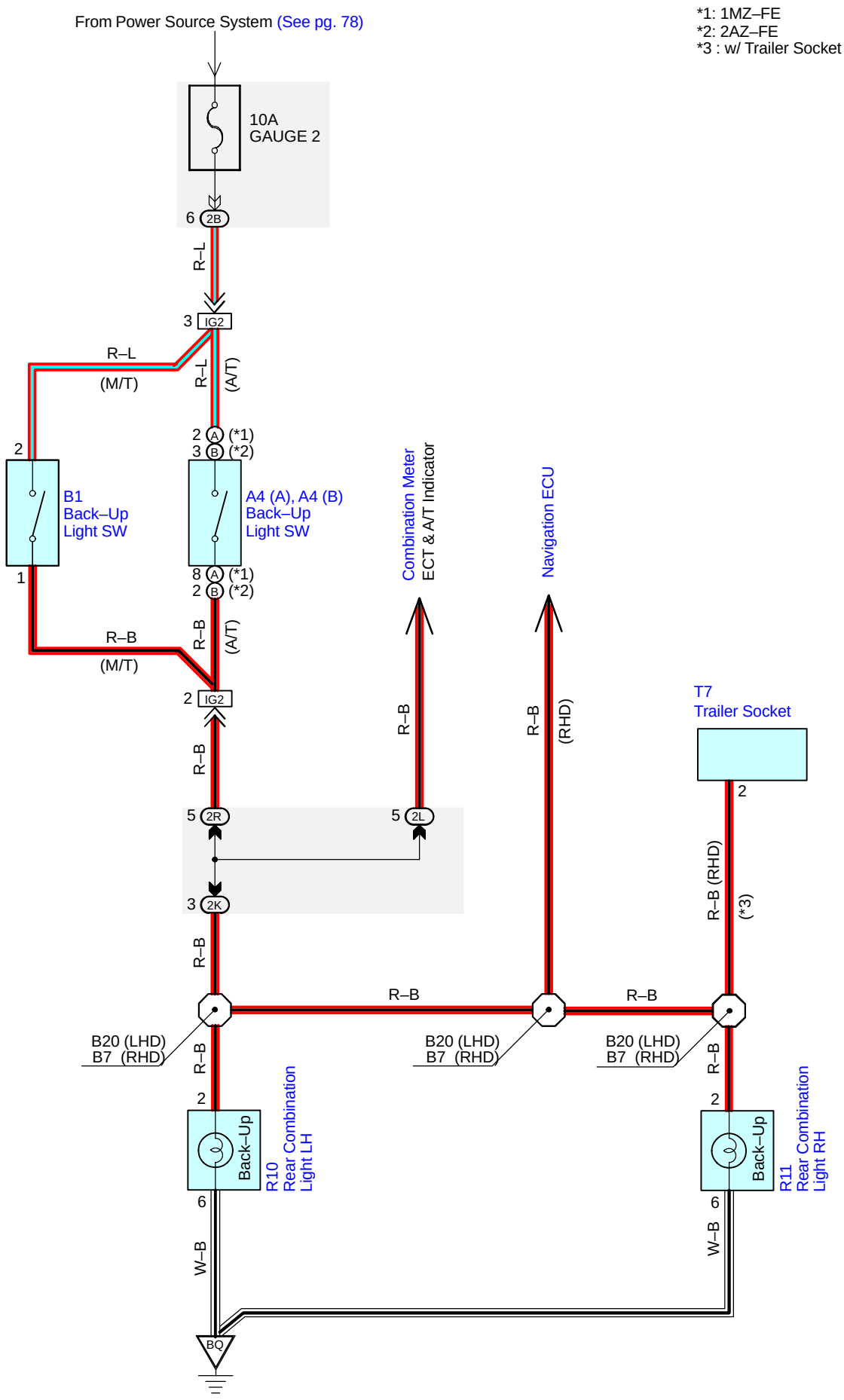
Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	26	Engine Room Main Wire and Driver Side J/B
2K		Floor Wire and Driver Side J/B
2M		Instrument Panel Wire and Driver Side J/B

: Ground Points

Code	See Page	Ground Points Location
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
BQ	60 (LHD)	Lower Back Panel Centre
	72 (RHD)	
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	72 (RHD)	Floor Wire	B19	60 (LHD)	Floor Wire
B8	60 (LHD)		B21	60 (LHD)	
	72 (RHD)		I2	58 (LHD)	Instrument Panel
B10	72 (RHD)		I18	70 (RHD)	
B17	60 (LHD)				


From Power Source System (See pg. 78)
*1: 1MZ–FE
*2: 2AZ–FE
*3 : w/ Trailer Socket
10A
GAUGE 2
6
2B
R–L
3
IG2
R–L
(M/T)
R–L
(A/T)
2
A
(*1)
3
B
(*2)
2
B1
Back–Up
Light SW
1
A4 (A), A4 (B)
Back–Up
Light SW
8
A
(*1)
2
B
(*2)
Combination Meter
ECT & A/T Indicator
Navigation ECU
R–B
(M/T)
R–B
(A/T)
R–B
(RHD)
T7
Trailer Socket
2
IG2
R–B
R–B
5
2R
5
2L
R–B (RHD)
(*3)
3
2K
R–B
R–B
R–B
B20 (LHD)
B7 (RHD)
B20 (LHD)
B7 (RHD)
B20 (LHD)
B7 (RHD)
R–B
R–B
2
2
Back–Up
R10
Rear Combination
Light LH
Back–Up
R11
Rear Combination
Light RH
6
6
W–B
W–B
BQ

Service Hints

B1 Back–Up Light SW (M/T)

1–2 : Closed with the shift lever at R position

A4 Back–Up Light SW (A/T)

3–2 : Closed with the shift lever at R position (2AZ–FE)

2–8 : Closed with the shift lever at R position (1MZ–FE)

: Parts Location

Code		See Page	Code	See Page	Code	See Page
A4	A	32 (LHD)	B1	32 (LHD 1MZ–FE)	R10	39 (LHD)
		42 (RHD)		42 (RHD 1MZ–FE)		49 (RHD)
A4	B	34 (LHD)		34 (LHD 2AZ–FE)	R11	39 (LHD)
		44 (RHD)		44 (RHD 2AZ–FE)		49 (RHD)
					T7	49 (RHD)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	26	Instrument Panel Wire and Driver Side J/B
2K		Floor Wire and Driver Side J/B
2L		Instrument Panel Wire and Driver Side J/B
2R		

: Connector Joining Wire Harness and Wire Harness

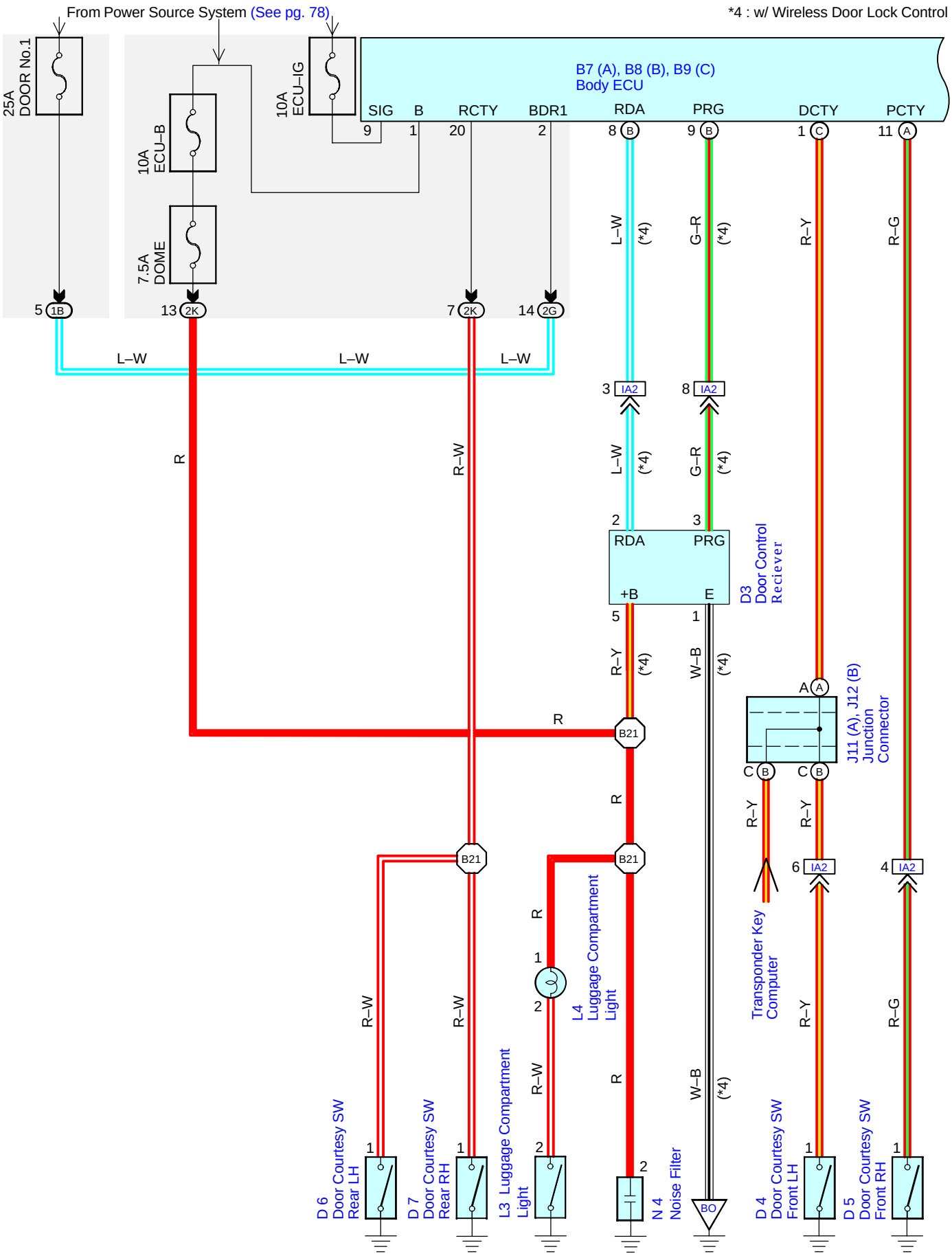
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG2	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	70 (RHD)	

: Ground Points

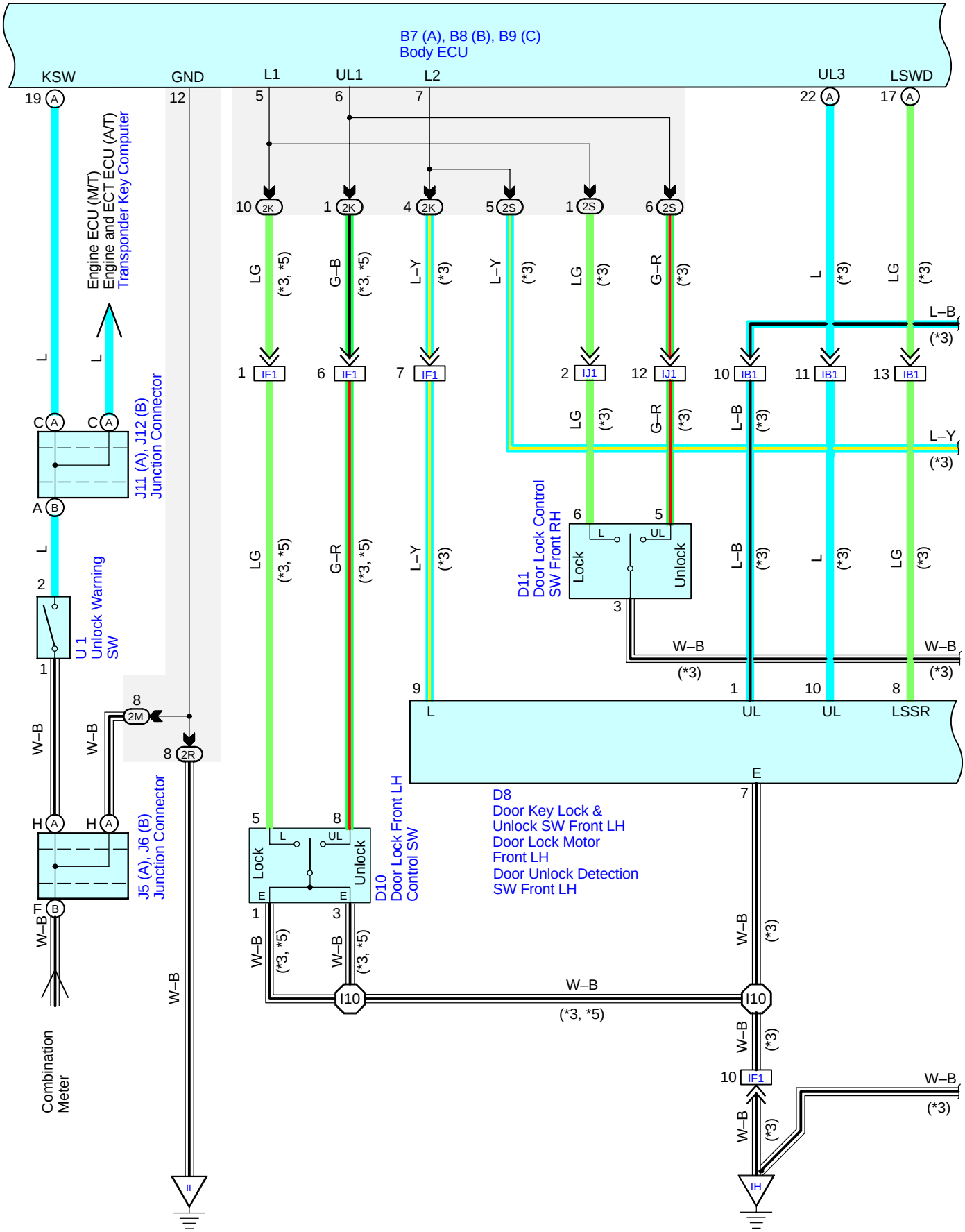
Code	See Page	Ground Points Location
BQ	60 (LHD)	Lower Back Panel Center
	72 (RHD)	

: Splice Points

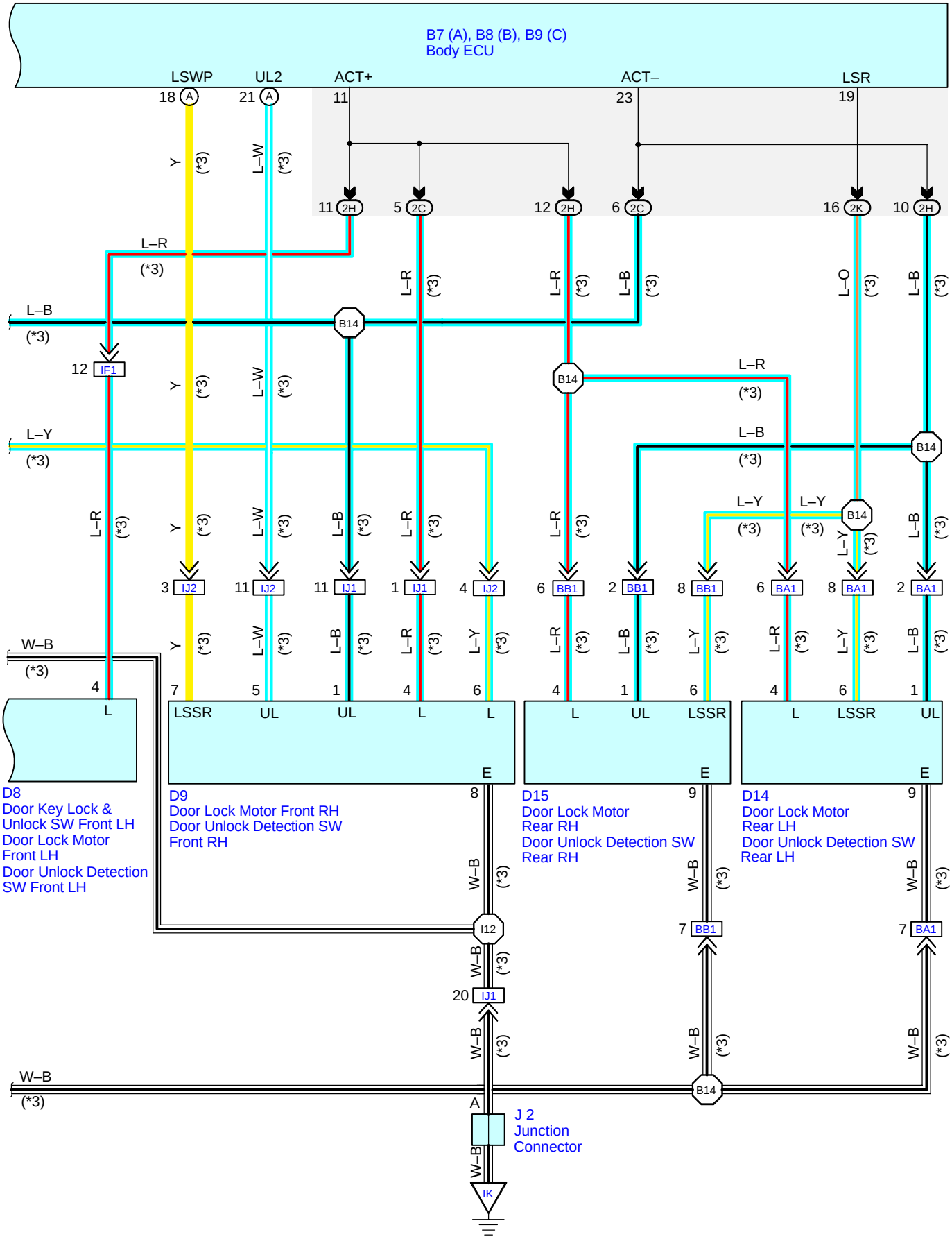
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	72 (RHD)	Floor Wire	B20	60 (LHD)	Floor Wire


From Power Source System (See pg. 78)
*4 : w/ Wireless Door Lock Control
25A DOOR No.1
10A ECU-B
10A ECU-IG
7.5A DOME
B7 (A), B8 (B), B9 (C)
Body ECU
SIG
B
RCTY
BDR1
RDA
PRG
DCTY
PCTY
L–W
G–R
R–Y
R–G
R
R–W
W–B
RDA
PRG
+B
E
D3 Door Control Reciever
J11 (A), J12 (B) Junction Connector
Transponder Key Computer
B21
IA2
BO
D 6 Door Courtesy SW Rear LH
D 7 Door Courtesy SW Rear RH
L3 Luggage Compartment Light
L4 Luggage Compartment Light
N 4 Noise Filter
D 4 Door Courtesy SW Front LH
D 5 Door Courtesy SW Front RH

* 3 : Door Lock Control
* 5 : Jam Protection



* 3 : Door Lock Control



System Outline

1. Manual Unlock Operation

When the door lock control SW of the driver's side door is pushed to UNLOCK, the door lock will unlock.

2. Manual Lock Operation

When the door lock control SW of the driver's side door is pushed to LOCK, the door lock will lock.

3. Door Key Unlock Operation

∗ Unlock operation from driver's side door

When the driver's side door is unlocked once using the ignition key, all the other doors are unlocked.

∗ Unlock operation from front passenger's side door

When the front passenger's side door is unlocked using the ignition key, all the other doors are unlocked.

Service Hints

Body ECU

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

12, 24–Ground : Always continuity

1, 2–Ground : Always approx. 12 volts

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	36 (LHD)	D8		38 (LHD)	J11	A	37 (LHD)
B8	B	36 (LHD)	D9		38 (LHD)	J12	B	37 (LHD)
B9	C	36 (LHD)	D10		38 (LHD)	L3		38 (LHD)
D3		38 (LHD)	D11		38 (LHD)	L4		38 (LHD)
D4		38 (LHD)	D14		38 (LHD)	N4		38 (LHD)
D5		38 (LHD)	D15		38 (LHD)	U1		37 (LHD)
D6		38 (LHD)	J5	A	37 (LHD)			
D7		38 (LHD)	J6	B	37 (LHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
2C	26	Instrument Panel Wire and Driver Side J/B
2G		Engine Room Main Wire and Driver Side J/B
2H		Floor Wire and Driver Side J/B
2K		
2M		Instrument Panel Wire and Driver Side J/B
2R		
2S		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	60 (LHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	60 (LHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
IA2	55 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	55 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ1	58 (LHD)	Rear Door RH Wire and Floor Wire (Left Center Pillar)
IJ2	58 (LHD)	Rear Door RH Wire and Floor Wire (Left Center Pillar)

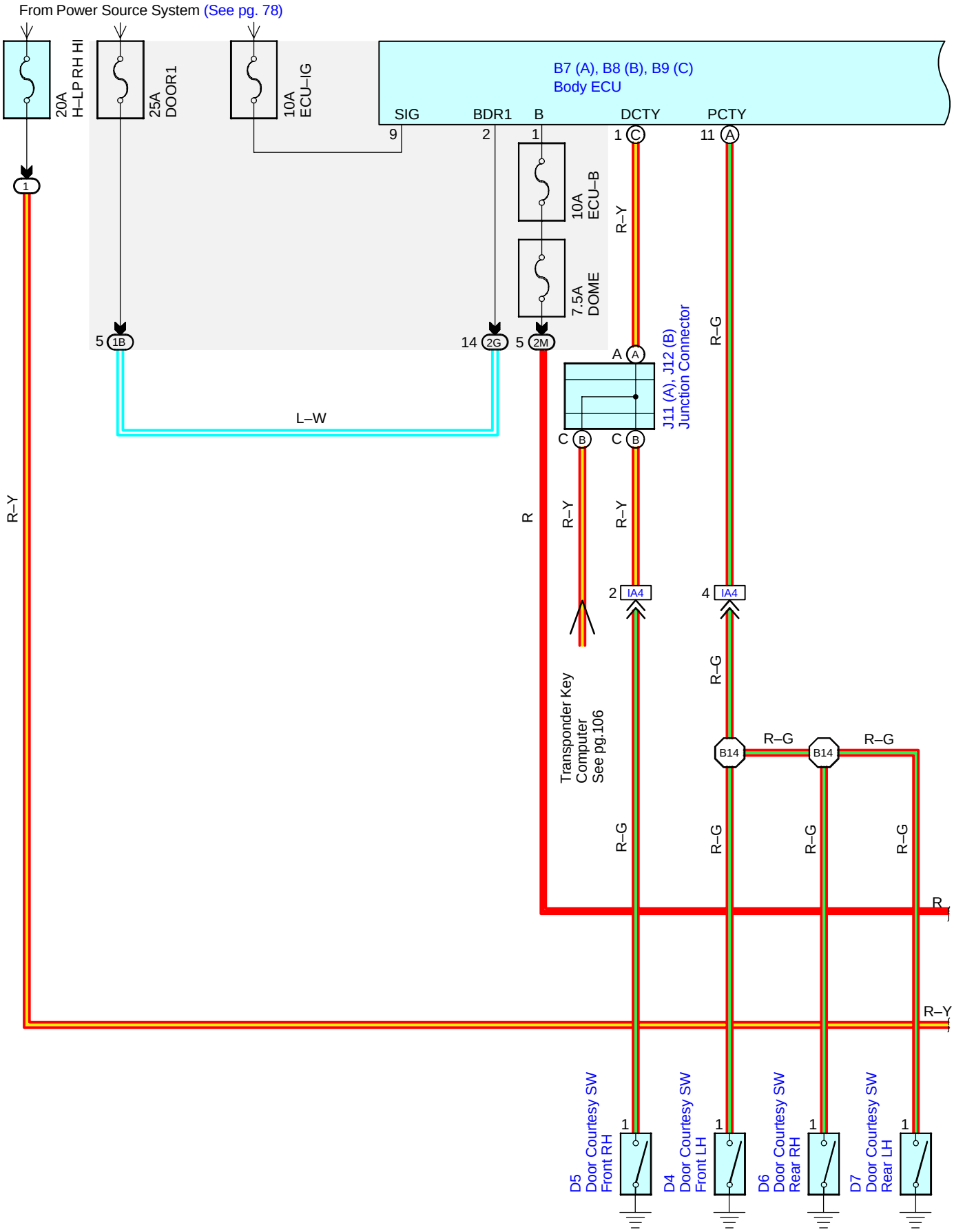
Door Lock Control (LHD)

 : **Ground Points**

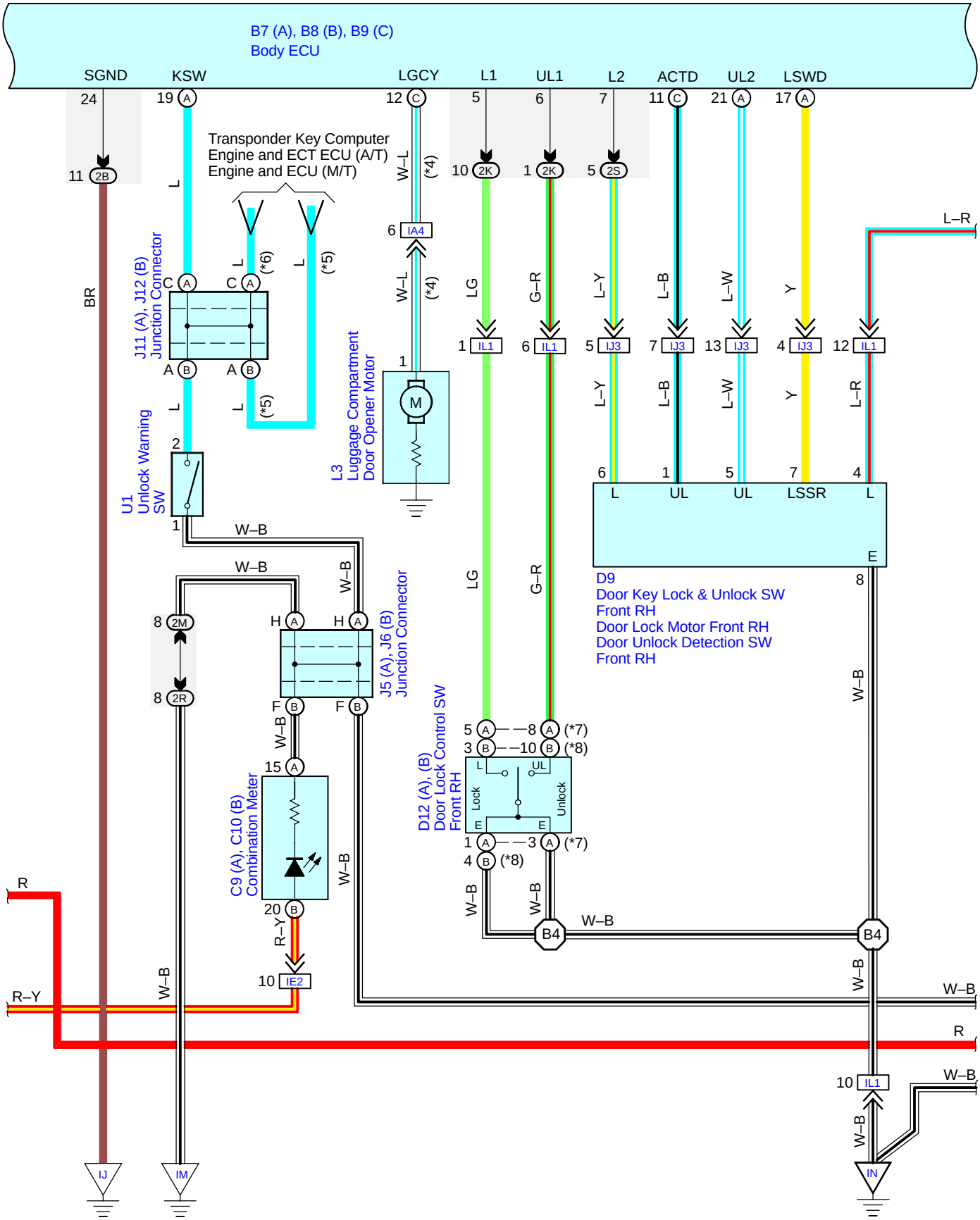
Code	See Page	Ground Points Location
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH
IH	55 (LHD)	Left Kick Panel
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace RH

 : **Splice Points**

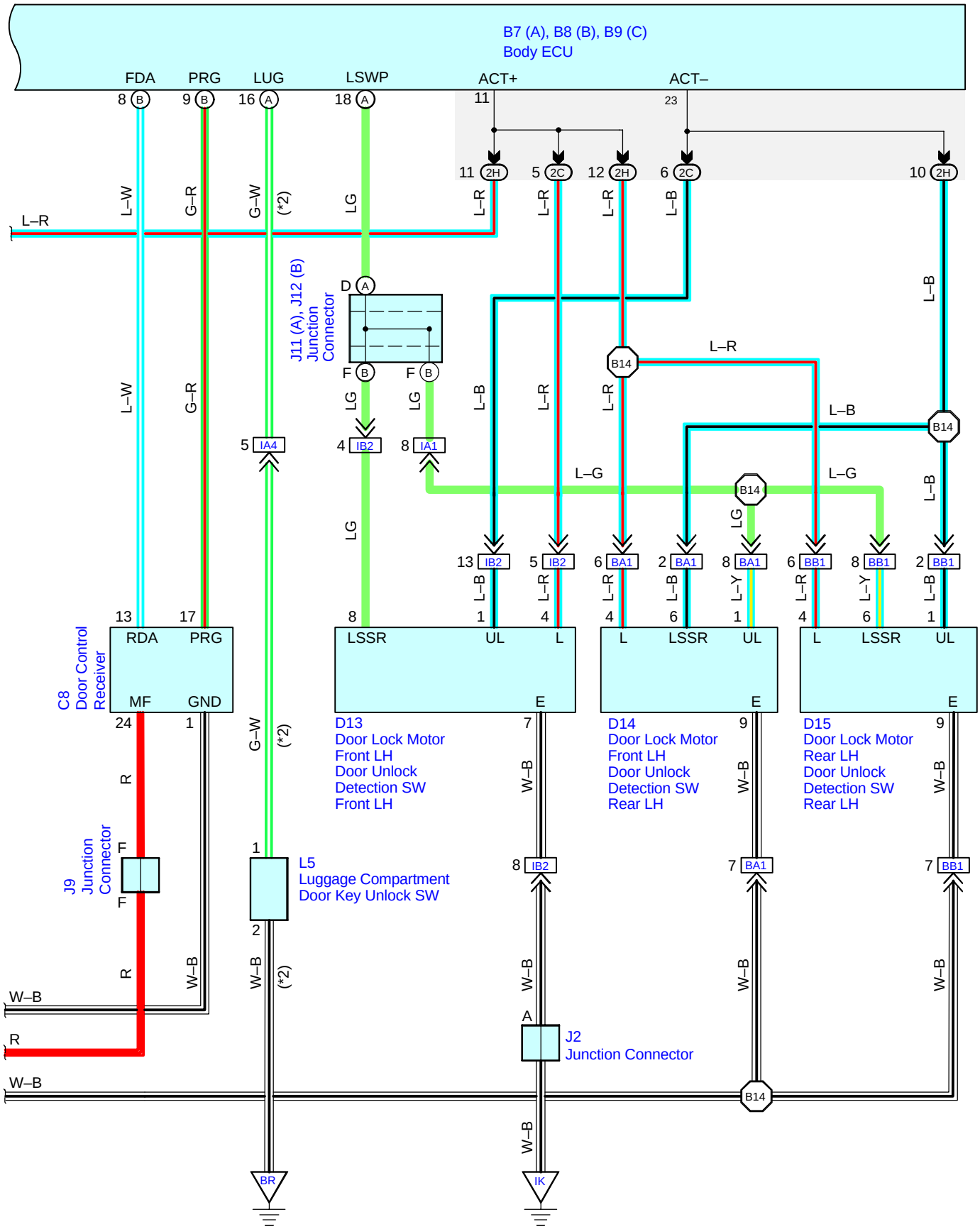
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	60 (LHD)	Floor Wire	I12	58 (LHD)	Instrument Panel Wire
B21	60 (LHD)		I10	58 (LHD)	Instrument Panel Brace


From Power Source System (See pg. 78)
20A H–LP RH HI
25A DOOR1
10A ECU–IG
B7 (A), B8 (B), B9 (C)
Body ECU
SIG
BDR1
B
DCTY
PCTY
9
2
1
1
11
10A ECU–B
7.5A DOME
5 1B
14 2G
5 2M
L–W
R–Y
R–Y
R
R–Y
R–Y
R–G
A
C
B
C
B
J11 (A), J12 (B)
Junction Connector
2 IA4
4 IA4
R–G
B14
R–G
B14
R–G
R–G
R–G
R–G
R
R–Y
Transponder Key
Computer
See pg.106
D5
Door Courtesy SW
Front RH
D4
Door Courtesy SW
Front LH
D6
Door Courtesy SW
Rear RH
D7
Door Courtesy SW
Rear LH

* 4 : w/ Luggage Compartment Door Opener
* 5 : RHD 1MZ–FE
* 6 : 2AZ–FE
* 7 : w/ Jam Protection
* 8 : w/o Jam Protection



* 2 : w/ Theft Deterrent System



System Outline

1. Manual Unlock Operation

When the door lock control SW of the driver's side door is pushed to UNLOCK, the door lock will unlock.

2. Manual Lock Operation

When the door lock control SW of the driver's side door is pushed to LOCK, the door lock will lock.

3. Door Key Unlock Operation

* Unlock operation from driver's side door

When the driver's side door is unlocked once using the ignition key, all the other doors are unlocked.

* Unlock operation from front passenger's side door

When the front passenger's side door is unlocked using the ignition key, all the other doors are unlocked.

Service Hints

Body ECU

9–Ground : Approx. 12 volts with ignition SW at ON or ST position
12, 24–Ground : Always continuity
1, 2–Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	46 (RHD)	D7		48 (RHD)	J9		47 (RHD)
B8	B	46 (RHD)	D8		48 (RHD)	J11	A	47 (RHD)
B9	C	46 (RHD)	D9		48 (RHD)	J12	B	47 (RHD)
C8		46 (RHD)	D12		48 (RHD)	L3		48 (RHD)
C9	A	46 (RHD)	D13		48 (RHD)	L5		48 (RHD)
C10	B	46 (RHD)	D14		48 (RHD)	U1		47 (RHD)
D3		48 (RHD)	D15		48 (RHD)			
D4		48 (RHD)	J2		47 (RHD)			
D5		48 (RHD)	J5	A	47 (RHD)			
D6		48 (RHD)	J6	B	47 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B	26	Instrument Panel Wire and Driver Side J/B
2C	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2H	26	Floor Wire and Driver Side J/B
2K		
2R	26	Instrument Panel Wire and Driver Side J/B
2S		
2M	26	Instrument Panel Wire and Driver Side J/B

Door Lock Control (RHD)

: Connector Joining Wire Harness and Wire Harness

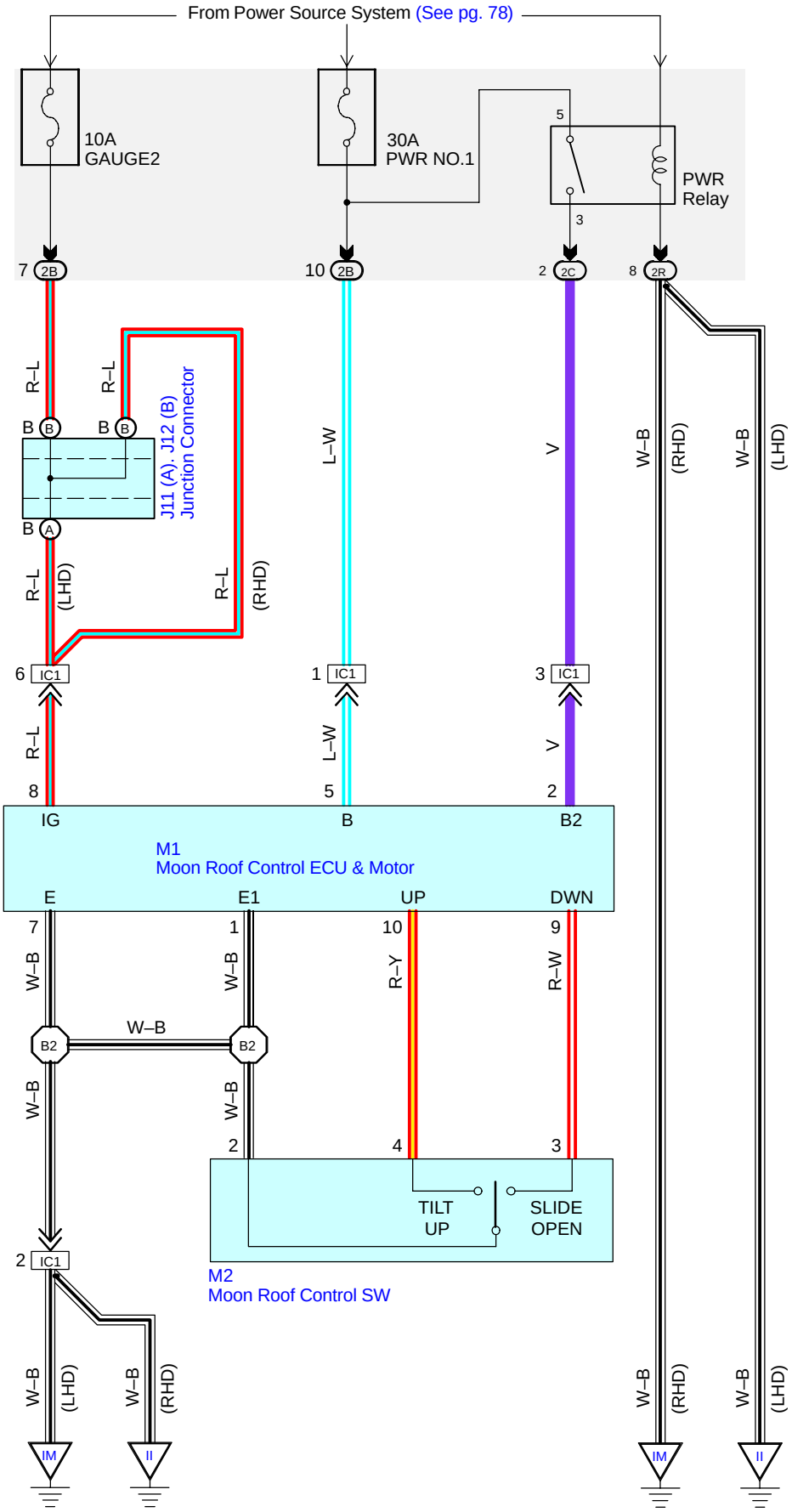
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	72 (RHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	72 (RHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
IA4	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IB2	67 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IE2	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire RH
IJ3	70 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IL1	70 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH
IJ	67 (RHD)	Instrument Panel Brace RH
IK	67 (RHD)	Instrument Panel Brace RH
IM	67 (RHD)	Instrument Panel Reinforcement RH
IN	67 (RHD)	Right Kick Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	72	Floor Wire	B14	72	Floor Wire


From Power Source System (See pg. 78)
10A
GAUGE2
30A
PWR NO.1
PWR
Relay
5
3
7 2B
10 2B
2 2C
8 2R
R–L
R–L
B B
B B
J11 (A), J12 (B)
Junction Connector
B A
R–L (LHD)
R–L (RHD)
L–W
V
W–B (RHD)
W–B (LHD)
6 IC1
1 IC1
3 IC1
R–L
L–W
V
8
5
2
IG
B
B2
M1
Moon Roof Control ECU & Motor
E
E1
UP
DWN
7
1
10
9
W–B
W–B
R–Y
R–W
W–B
B2
B2
W–B
W–B
2
4
3
TILT
UP
SLIDE
OPEN
2 IC1
M2
Moon Roof Control SW
W–B (LHD)
W–B (RHD)
W–B (RHD)
W–B (LHD)
IM
II
IM
II

Service Hints

M1 Moon Roof Control ECU and Motor

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

: Parts Location

Code		See Page	Code	See Page	Code	See Page
J11	A	37 (LHD)	M1	38 (LHD)	M2	38 (LHD)
		47 (RHD)		48 (RHD)		48 (RHD)
J12	B	37 (LHD)				
		47 (RHD)				

: Junction Block and Wire Harness Connector

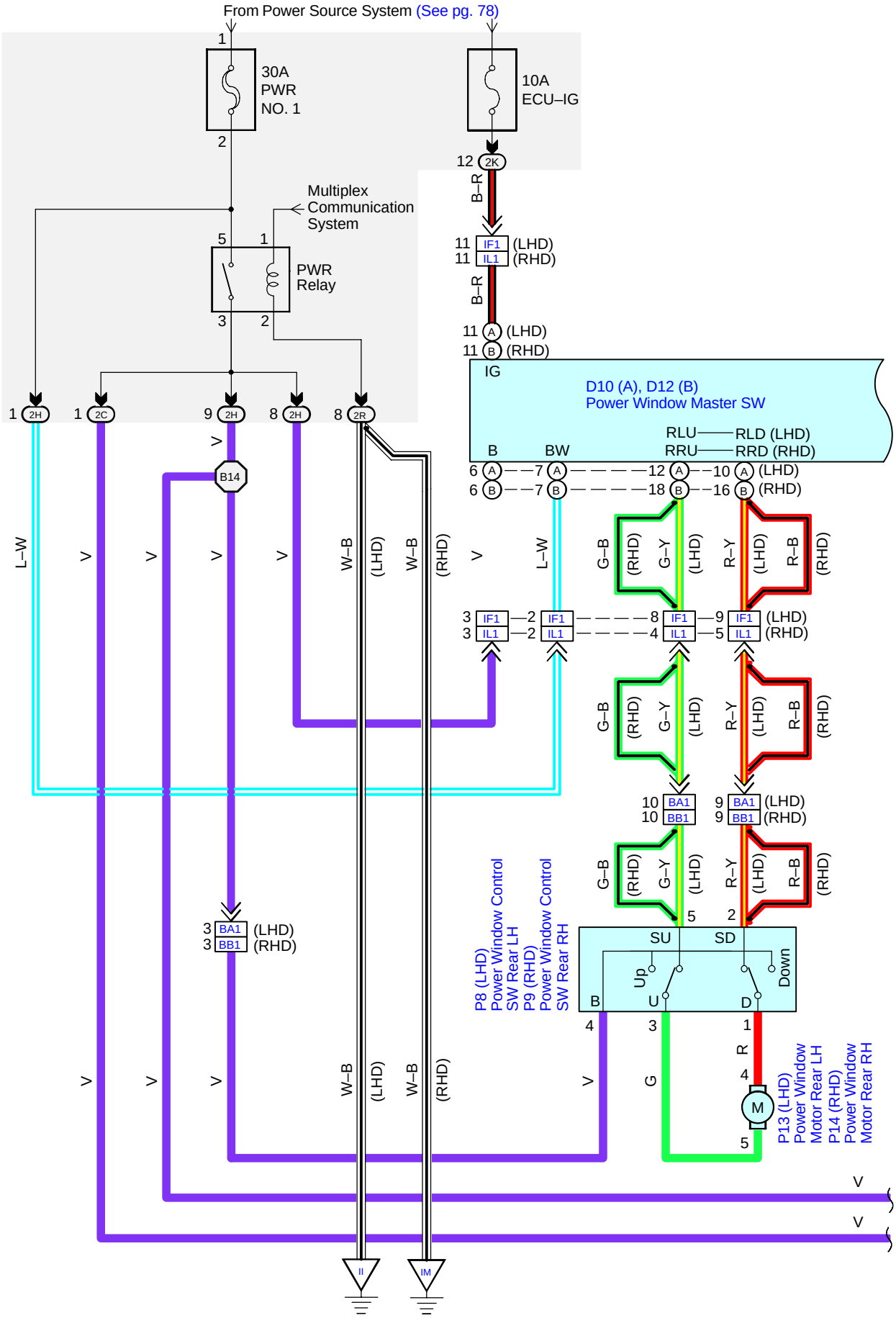
Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	26	Instrument Panel Wire and Driver Side J/B
2C		
2R		

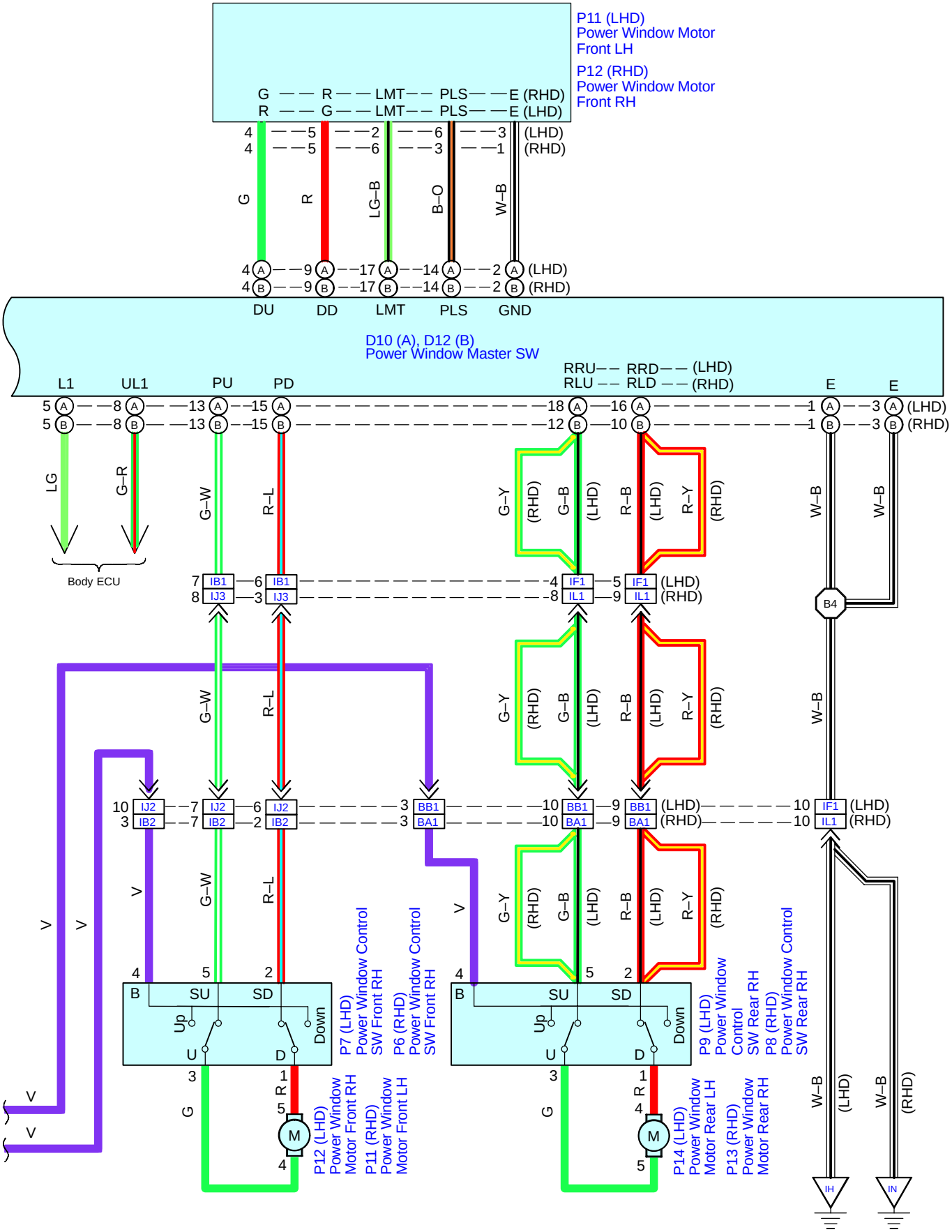
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	55 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
	67 (RHD)	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)

: Ground Points

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	


From Power Source System (See pg. 78)
30A PWR NO. 1
10A ECU–IG
Multiplex Communication System
PWR Relay
IG
D10 (A), D12 (B)
Power Window Master SW
RLU
RLD (LHD)
RRU
RRD (RHD)
B14
P8 (LHD) Power Window Control SW Rear LH
P9 (RHD) Power Window Control SW Rear RH
P13 (LHD) Power Window Motor Rear LH
P14 (RHD) Power Window Motor Rear RH
SU
SD
Up
Down


P11 (LHD)
Power Window Motor
Front LH
P12 (RHD)
Power Window Motor
Front RH
G R LMT PLS E (RHD)
R G LMT PLS E (LHD)
DU DD LMT PLS GND
D10 (A), D12 (B)
Power Window Master SW
RRU RRD (LHD)
RLU RLD (RHD)
L1 UL1 PU PD E E
Body ECU
B4
P7 (LHD) Power Window Control SW Front RH
P6 (RHD) Power Window Control SW Front RH
P9 (LHD) Power Window Control SW Rear RH
P8 (RHD) Power Window Control SW Rear RH
P12 (LHD) Power Window Motor Front RH
P11 (RHD) Power Window Motor Front LH
P14 (LHD) Power Window Motor Rear LH
P13 (RHD) Power Window Motor Rear RH
IH
IN

System Outline

1. Manual Operation (Driver's Window)

With the ignition SW turned on and with the power window master SW in UP position, the current flowing from TERMINAL B or BW of the power window master SW flows to TERMINAL DU of the master SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL DD of the master SW to TERMINAL E to GROUND and causes the power window motor to rotate in the up direction. The window ascends only while the SW is being pushed.

In down operation, the flow of current from TERMINAL B or BW of the power window master SW to TERMINAL DD of the master SW causes the flow of current from TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL DU of the master SW to TERMINAL E to GROUND, flowing in the opposite detection to manual up operation and causing the motor to rotate in reverse, lowering the window.

2. Auto Down Operation (Driver's Window)

When the driver's window SW is pushed strongly to the down side, the current flowing to TERMINAL B or BW of the power window master SW flows to the down contact point and auto down contact point of the driver's SW.

This activates the relay (Down side) inside the power window master SW and the hold circuit also turns on at the same time, so the relay (Down side) remains activated even when the SW is released.

Current flows at this time from TERMINAL B or BW of the power window master SW to TERMINAL DD to TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL DU of the power window master SW to TERMINAL E to GROUND, so the motor continues to operate until the driver's window is fully down.

When the driver's window finishes down operation and the hold circuit goes off, so the relay (Down side) also turns off. This stops the current flowing from TERMINAL B or BW of the power window master SW to TERMINAL DD is cut off, so the power window motor stops and auto down operation stops.

When the driver's SW is pulled to the up side during auto down operation, the hold circuit is turned off so the current flowing from TERMINAL B or BW of the power window master SW to TERMINAL DD is cut off and the power window motor stops. If the SW remains pulled up the relay (Up side) is activated, so current flows from TERMINAL B or BW of the power window master SW to TERMINAL DU to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL DD to TERMINAL E to GROUND, the power window motor rotates in the up direction and manual up operation occurs while the SW is pulled up.

3. Manual Operation (Front RH Window)

With the power window control SW front RH pulled to the up side, the current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 of the power window control SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL PD of the master SW to TERMINAL E to GROUND and causes the power window motor front RH to rotate in the up direction. The up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 5 to TERMINAL 4, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the front RH window becomes open.

As a result, even if Open/Close operation of the front RH window is tried, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the front RH window can not be operated and window lock occurs.

4. Manual Operation (Rear LH, RH Window)

With the power window control SW rear LH, RH pulled to the up side, the current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 of the power control SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL RLD or RRD of the master SW to TERMINAL E to GROUND and causes the power window motor rear LH, RH to rotate in the up direction. The up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 5 to TERMINAL 4, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the rear LH, RH window becomes open.

As a result, even if Open/Close operation of the rear LH, RH window is tried, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the rear LH, RH window can not be operated and window lock occurs.

5. Key Off Power Window Operation

With the ignition SW turned from on to off, the body ECU operates and current flows from the ECU–B fuse to TERMINAL 1 of the body ECU to TERMINAL 8 to TERMINAL 2 of the power relay to TERMINAL 1 to GROUND for about 43 seconds. The same as normal operation, the current flows from the PWR NO.1 fuse to TERMINAL 3 of the power relay to TERMINAL 5 to TERMINAL B or BW of the power window master SW and TERMINAL 4 (Front RH, Rear LH, RH) of the power window control SW. As a result, for about 43 seconds after the ignition SW is turned off, the functioning of this ECU makes it possible to raise and lower the power window. Also, by opening the front doors (Door courtesy SW on) within about 43 seconds after turning the ignition SW to off, a signal is input to TERMINAL (C) 1 of the body ECU. As a result, the POWER relay turned off, and up and down movement of the power window stops.

Service Hints

D10 (A), D12 (B) Power Window Master SW

B, BW–Ground : Approx. 12 volts with the ignition SW at ON position or key off power window operation
E–Ground : Always continuity
DU–Ground : Approx. 12 volts with the ignition SW on and the master SW (Driver's window) at UP position
DD–Ground : Approx. 12 volts with the ignition SW on and the master SW (Driver's window) at DOWN or AUTO DOWN position

Window Lock SW

Open with the window lock SW at LOCK position

: Parts Location

Code		See Page	Code	See Page	Code	See Page
D10	A	38 (LHD)	P8	39 (LHD)	P13	39 (LHD)
		48 (RHD)		49 (RHD)		49 (RHD)
D12	B	38 (LHD)	P9	39 (LHD)	P14	39 (LHD)
		48 (RHD)		49 (RHD)		49 (RHD)
P6		39 (LHD)	P11	39 (LHD)		
		49 (RHD)		49 (RHD)		
P7		39 (LHD)	P12	39 (LHD)		
		49 (RHD)		49 (RHD)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	26	Instrument Panel Wire and Driver Side J/B
2H		Floor Wire and Driver Side J/B
2K		
2R		Instrument Panel Wire and Driver Side J/B

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	60 (LHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
	72 (RHD)	Rear Door LH Wire and Floor No.2 Wire (Left Center Pillar)
BB1	60 (LHD)	Rear Door RH Wire and Floor No.2 Wire (Right Center Pillar)
	72 (RHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	67 (RHD)	
IF1	55 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	58 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	
IJ3	58 (LHD)	Front Door Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	
IL1	70 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

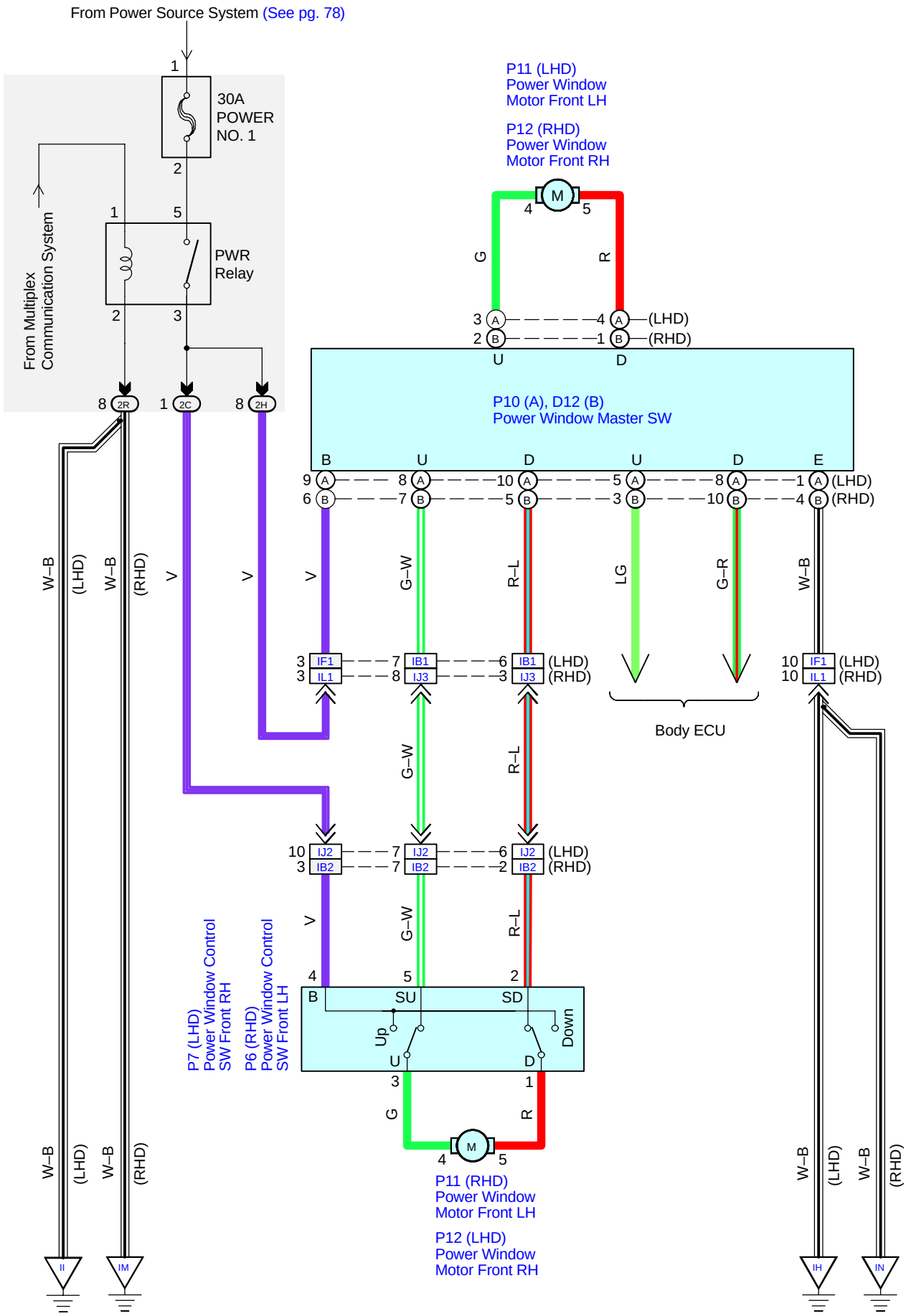
Power Window with Jam Protection

 : **Ground Points**

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
IM	67 (RHD)	Instrument Panel Reinforcement RH
IH	55 (LHD)	Right Kick Panel
IN	67 (RHD)	Left Kick Panel

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	60 (LHD) 72 (RHD)	Floor Wire	B14	60 (LHD) 72 (RHD)	Floor Wire


From Power Source System (See pg. 78)
30A POWER NO. 1
PWR Relay
From Multiplex Communication System
P11 (LHD) Power Window Motor Front LH
P12 (RHD) Power Window Motor Front RH
P10 (A), D12 (B) Power Window Master SW
Body ECU
P7 (LHD) Power Window Control SW Front RH
P6 (RHD) Power Window Control SW Front LH
P11 (RHD) Power Window Motor Front LH
P12 (LHD) Power Window Motor Front RH
W–B
V
G–W
R–L
LG
G–R
G
R
(LHD)
(RHD)

System Outline

1. Manual Operation (Driver's Window)

With the ignition SW turned on and with the power window master SW in UP position, the current flowing from TERMINAL B or BW of the power window master SW flows to TERMINAL DU of the master SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL DD of the master SW to TERMINAL E to GROUND and causes the power window motor to rotate in the up direction. The window ascends only while the SW is being pushed.

In down operation, the flow of current from TERMINAL B or BW of the power window master SW to TERMINAL DD of the master SW causes the flow of current from TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL DU of the master SW to TERMINAL E to GROUND, flowing in the opposite detection to manual up operation and causing the motor to rotate in reverse, lowering the window.

2. Auto Down Operation (Driver's Window)

When the driver's window SW is pushed strongly to the down side, the current flowing to TERMINAL B or BW of the power window master SW flows to the down contact point and auto down contact point of the driver's SW.

This activates the relay (Down side) inside the power window master SW and the hold circuit also turns on at the same time, so the relay (Down side) remains activated even when the SW is released.

Current flows at this time from TERMINAL B or BW of the power window master SW to TERMINAL DD to TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL DU of the power window master SW to TERMINAL E to GROUND, so the motor continues to operate until the driver's window is fully down.

When the driver's window finishes down operation and the hold circuit goes off, so the relay (Down side) also turns off. This stops the current flowing from TERMINAL B or BW of the power window master SW to TERMINAL DD is cut off, so the power window motor stops and auto down operation stops.

When the driver's SW is pulled to the up side during auto down operation, the hold circuit is turned off so the current flowing from TERMINAL B or BW of the power window master SW to TERMINAL DD is cut off and the power window motor stops. If the SW remains pulled up the relay (Up side) is activated, so current flows from TERMINAL B or BW of the power window master SW to TERMINAL DU to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL DD to TERMINAL E to GROUND, the power window motor rotates in the up direction and manual up operation occurs while the SW is pulled up.

3. Manual Operation (Front RH Window)

With the power window control SW front RH pulled to the up side, the current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 of the power window control SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL PD of the master SW to TERMINAL E to GROUND and causes the power window motor front RH to rotate in the up direction. The up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 5 to TERMINAL 4, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the front RH window becomes open.

As a result, even if Open/Close operation of the front RH window is tried, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the front RH window can not be operated and window lock occurs.

4. Manual Operation (Rear LH, RH Window)

With the power window control SW rear LH, RH pulled to the up side, the current flowing from TERMINAL 4 of the power window control SW flows to TERMINAL 3 of the power control SW to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL 1 of the power window control SW to TERMINAL 2 to TERMINAL RLD or RRD of the master SW to TERMINAL E to GROUND and causes the power window motor rear LH, RH to rotate in the up direction. The up operation continues only while the power window control SW is pulled to the up side. When the window descends, the current flowing to the motor flows in the opposite direction, from TERMINAL 5 to TERMINAL 4, and the motor rotates in reverse. When the window lock SW is pushed to the lock side, the ground circuit to the rear LH, RH window becomes open.

As a result, even if Open/Close operation of the rear LH, RH window is tried, the current from TERMINAL E of the power window master SW is not grounded and the motor does not rotate, so the rear LH, RH window can not be operated and window lock occurs.

5. Key Off Power Window Operation

With the ignition SW turned from on to off, the body ECU operates and current flows from the ECU–B fuse to TERMINAL 1 of the body ECU to TERMINAL 8 to TERMINAL 2 of the power relay to TERMINAL 1 to GROUND for about 43 seconds. The same as normal operation, the current flows from the PWR NO.1 fuse to TERMINAL 3 of the power relay to TERMINAL 5 to TERMINAL B or BW of the power window master SW and TERMINAL 4 (Front RH, Rear LH, RH) of the power window control SW. As a result, for about 43 seconds after the ignition SW is turned off, the functioning of this ECU makes it possible to raise and lower the power window. Also, by opening the front doors (Door courtesy SW on) within about 43 seconds after turning the ignition SW to off, a signal is input to TERMINAL (C) 1 of the body ECU. As a result, the POWER relay turned off, and up and down movement of the power window stops.

Power Window without Jam Protection

Service Hints

P10 (A), D12 (B) Power Window Master SW

B, BW–Ground : Approx. 12 volts with the ignition SW at ON position or key off power window operation
E–Ground : Always continuity
DU–Ground : Approx. 12 volts with the ignition SW on and the master SW (Driver's window) at UP position
DD–Ground : Approx. 12 volts with the ignition SW on and the master SW (Driver's window) at DOWN or AUTO DOWN position

Window Lock SW

Open with the window lock SW at LOCK position

: Parts Location

Code		See Page	Code		See Page	Code	See Page
D12	B	48 (RHD)	P7		39 (LHD)	P11	49 (RHD)
P6		49 (RHD)	P10	A	39 (LHD)	P12	39 (LHD)

: Junction Block and Wire Harness Connector

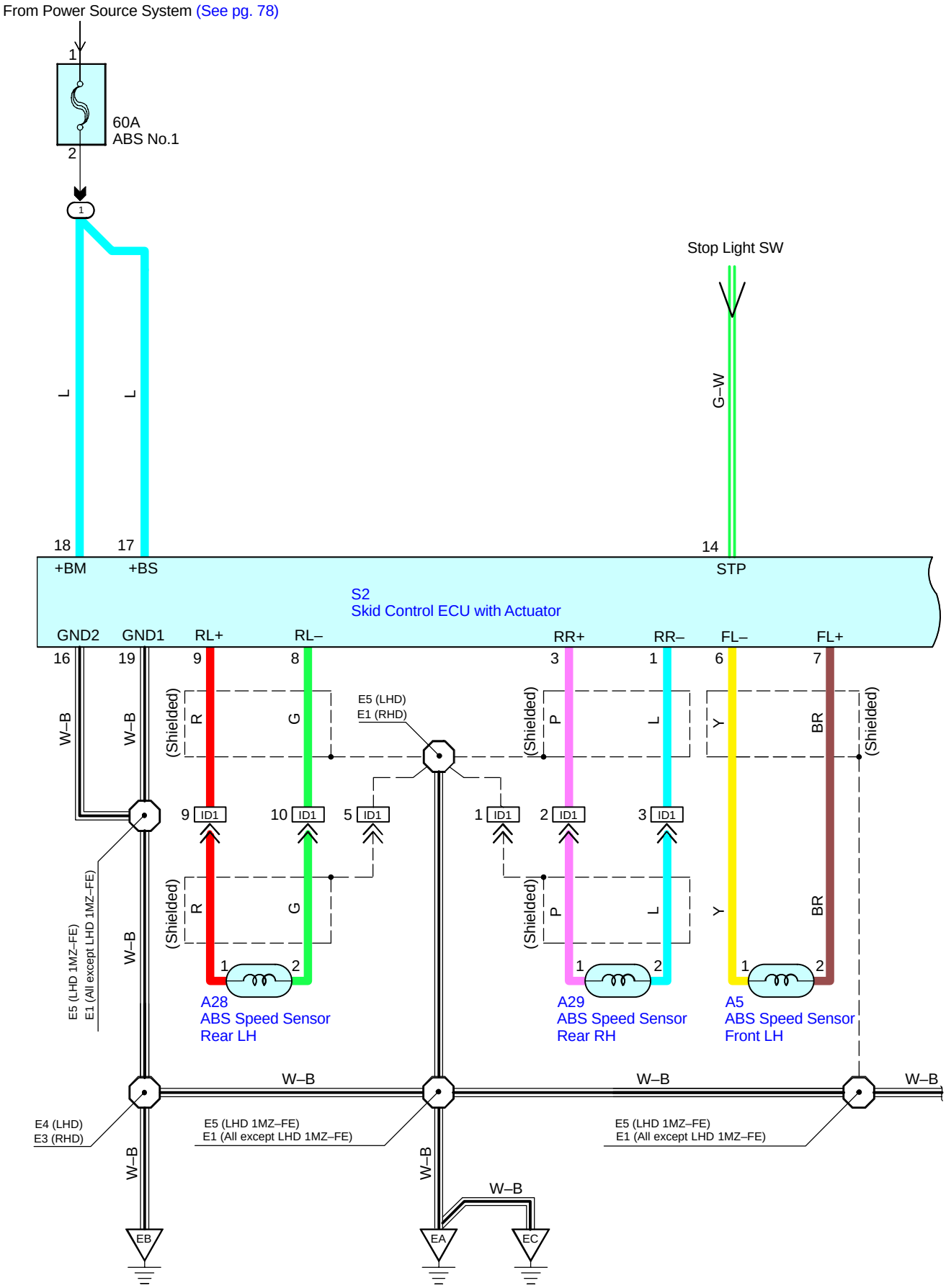
Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	26	Instrument Panel Wire and Driver Side J/B
2H		Floor Wire and Driver Side J/B (Lower Finish Panel)
2R		Instrument Panel Wire and Driver Side J/B

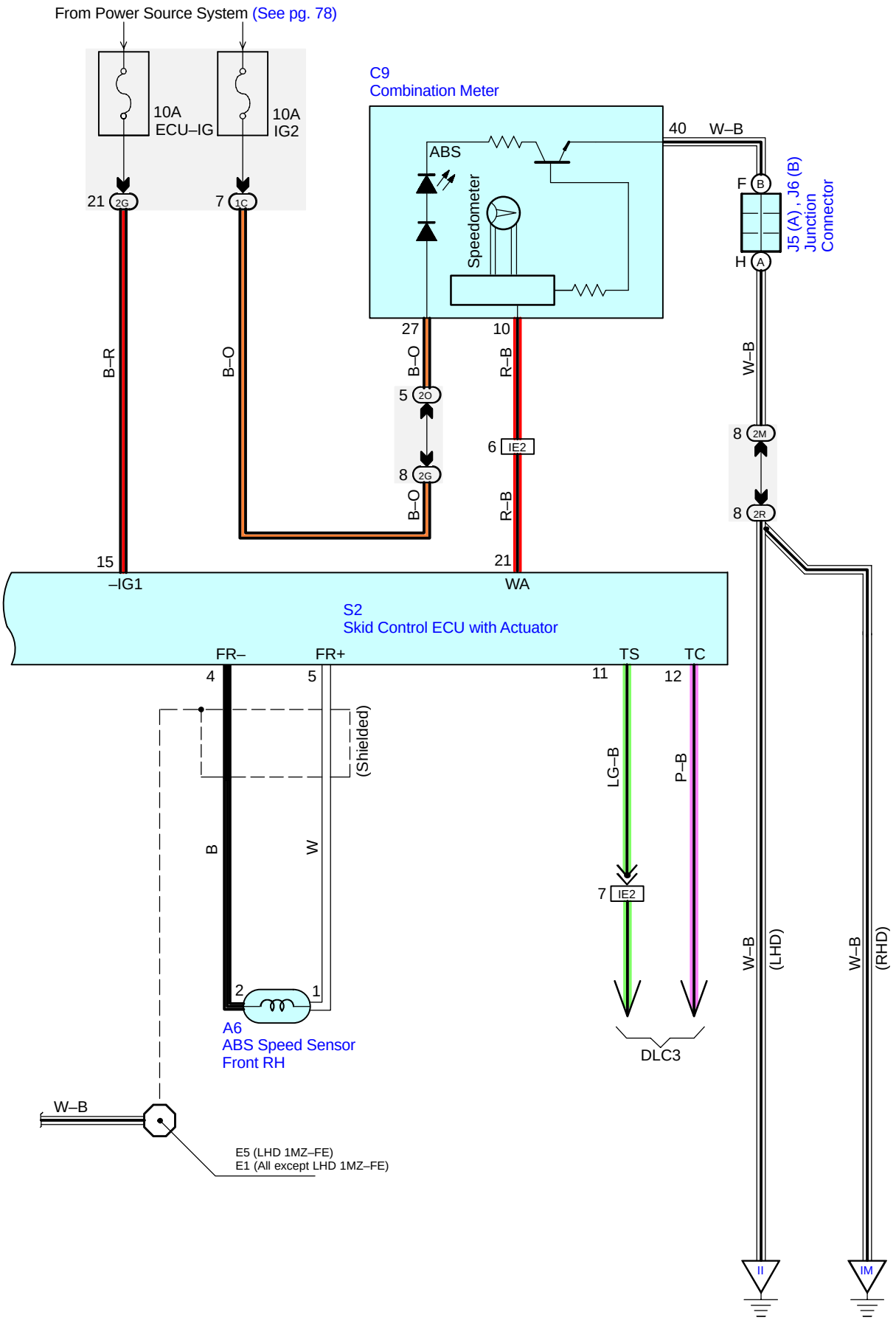
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	67 (RHD)	
IF1	55 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	58 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	70 (RHD)	
IL1	70 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IH	55 (LHD)	Left Kick Panel
II	55 (LHD)	Instrument Panel Reinforcement LH
IM	67 (RHD)	Instrument Panel Reinforcement RH
IN	67 (RHD)	Right Kick Panel


From Power Source System (See pg. 78)
1
60A
ABS No.1
2
1
L
L
Stop Light SW
G–W
18
+BM
17
+BS
14
STP
S2
Skid Control ECU with Actuator
GND2
GND1
RL+
RL–
RR+
RR–
FL–
FL+
16
19
9
8
3
1
6
7
W–B
W–B
(Shielded)
R
G
E5 (LHD)
E1 (RHD)
P
L
Y
BR
ID1
9
10
5
1
2
3
E5 (LHD 1MZ–FE)
E1 (All except LHD 1MZ–FE)
A28
ABS Speed Sensor
Rear LH
A29
ABS Speed Sensor
Rear RH
A5
ABS Speed Sensor
Front LH
E4 (LHD)
E3 (RHD)
E5 (LHD 1MZ–FE)
E1 (All except LHD 1MZ–FE)
EB
EA
EC


From Power Source System (See pg. 78)
10A
ECU–IG
10A
IG2
21 2G
7 1C
C9
Combination Meter
ABS
Speedometer
40 W–B
F B
H A
J5 (A) , J6 (B)
Junction
Connector
27
10
B–O
R–B
5 2O
8 2G
6 IE2
8 2M
8 2R
W–B
B–R
B–O
15
–IG1
21
WA
S2
Skid Control ECU with Actuator
FR–
FR+
TS
TC
4
5
11
12
(Shielded)
B
W
LG–B
P–B
7 IE2
2
1
A6
ABS Speed Sensor
Front RH
DLC3
W–B
(LHD)
W–B
(RHD)
W–B
E5 (LHD 1MZ–FE)
E1 (All except LHD 1MZ–FE)
II
IM

System Outline

This system controls the respective brake fluid pressures acting on the disc brake cylinders of the right front wheel, left front wheel and rear wheels when the brakes are applied in a panic stop so that the wheels do not lock. This results in improved directional stability and steerability during panic braking.

1. Input Signals

(1) Speed sensor signal

The speed of the wheels is detected and input to TERMINALS (B) 5, (B) 3, (C) 3 and (C) 1 of the skid control ECU.

(2) Stop light SW signal

A signal is input to TERMINAL (C) 11 of the skid control ECU when the brake pedal is depressed.

2. System Operation

During sudden braking the skid control ECU has signals input from each sensor, which controls the current to the solenoid inside the actuator and lets the hydraulic pressure acting on each wheel cylinder escape to the reservoir. The pump inside the actuator is also operating at this time and it returns the brake fluid from the reservoir to the master cylinder, thus preventing locking of the vehicle wheels.

If the skid control ECU judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current on the solenoid is controlled and the hydraulic pressure is increased. Holding of the hydraulic pressure is also controlled by the skid control ECU, by the same method as above. Pressure reduction, holding and increase are repeated to maintain vehicle stability and to improve steerability during sudden braking.

Service Hints

A5, A6 ABS Speed Sensor Front LH, RH

2–1 : Approx. 1.6 kΩ

A28, A29 ABS Speed Sensor Rear LH, RH

2–1 : Approx. 1.6 kΩ

S2 Skid Control ECU

–IG1–15–Ground : Approx. 12 volts with the ignition SW at ON position
STP–14–Ground : Approx. 12 volts with the brake pedal depressed
GND1–19 AND GND2–16–Ground : Always continuity
+BM–18 AND +BS–17–Ground : Approx. 12 Volts at ALL times.

○ : Parts Location

Code	See Page	Code	See Page	Code		See Page
A5	32 (LHD 1MZ–FE)	A28	38 (LHD)	J5	A	37 (LHD)
	42 (RHD 1MZ–FE)		48 (RHD)			47 (RHD)
	34 (LHD 2AZ–FE)	A29	38 (LHD)	J6	B	37 (LHD)
	44 (RHD 2AZ–FE)		48 (RHD)			47 (RHD)
A6	32 (LHD 1MZ–FE)	C9	36 (LHD)	S2		33 (LHD 1MZ–FE)
	42 (RHD 1MZ–FE)		46 (RHD)			43 (RHD 1MZ–FE)
	34 (LHD 2AZ–FE)					35 (LHD 2AZ–FE)
	44 (RHD 2AZ–FE)					45 (RHD 2AZ–FE)

▭ : Relay Blocks

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

▭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2O		
2R		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	55 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
	67 (RHD)	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE2	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)

: **Ground Points**

Code	See Page	Ground Points Location	Code	See Page	Ground Points Location
EA	52 (LHD 1MZ–FE)	Right Fender	EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)			64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)			54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)			66 (RHD 2AZ–FE)	
EB	52 (LHD 1MZ–FE)	Right Fender	II	55 (LHD)	Instrument Panel Reinforcement LH
	64 (RHD 1MZ–FE)		IM	67 (RHD)	Instrument Panel Reinforcement RH
	54 (LHD 2AZ–FE)				
	66 (RHD 2AZ–FE)				

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	64 (RHD 1MZ–FE)	Engine Room Main Wire	E4	52 (LHD 1MZ–FE)	Engine Room Main Wire
	66 (RHD 2AZ–FE)			54 (LHD 2AZ–FE)	
E3	64 (RHD 1MZ–FE)		E5	52 (LHD 1MZ–FE)	
	66 (RHD 2AZ–FE)			54 (LHD 2AZ–FE)	

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 not be started until after 90 seconds from when the ignition switch is turned to the "LOCK" position and the negative (–) terminal cable is disconnected from the battery.
(The SRS is equipped with a back–up power source so that if work is started within 90 seconds from disconnecting the negative (–) terminal cable of the battery, the SRS may be deployed.)

When the negative (–) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. This vehicle has power tilt and power telescopic steering, power seat and power outside rear view mirror which are all equipped with memory function. However, it is not possible to make a record of the memory contents. So when the work is finished, it will be necessary to explain this fact tot the customer, and ask the customer to adjust the features and reset the memory. To avoid erasing the memory in each memory system, never use a back–up power supply from outside the vehicle.

Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.

Do not expose the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, 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 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 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 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.

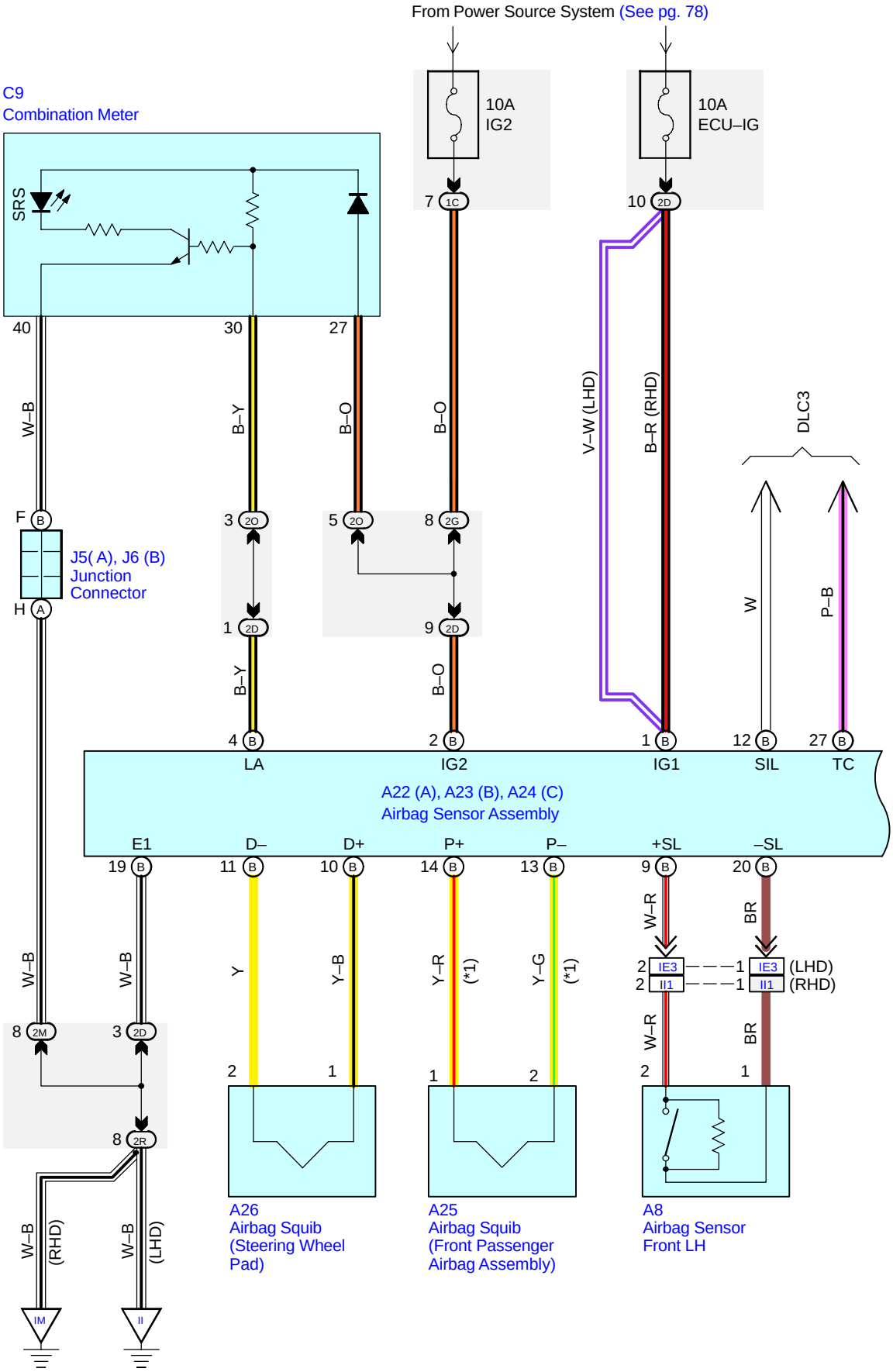
Use a volt/ohmmeter with high impedance (10 kΩ/V minimum) for troubleshooting the system's electrical circuits.

Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.

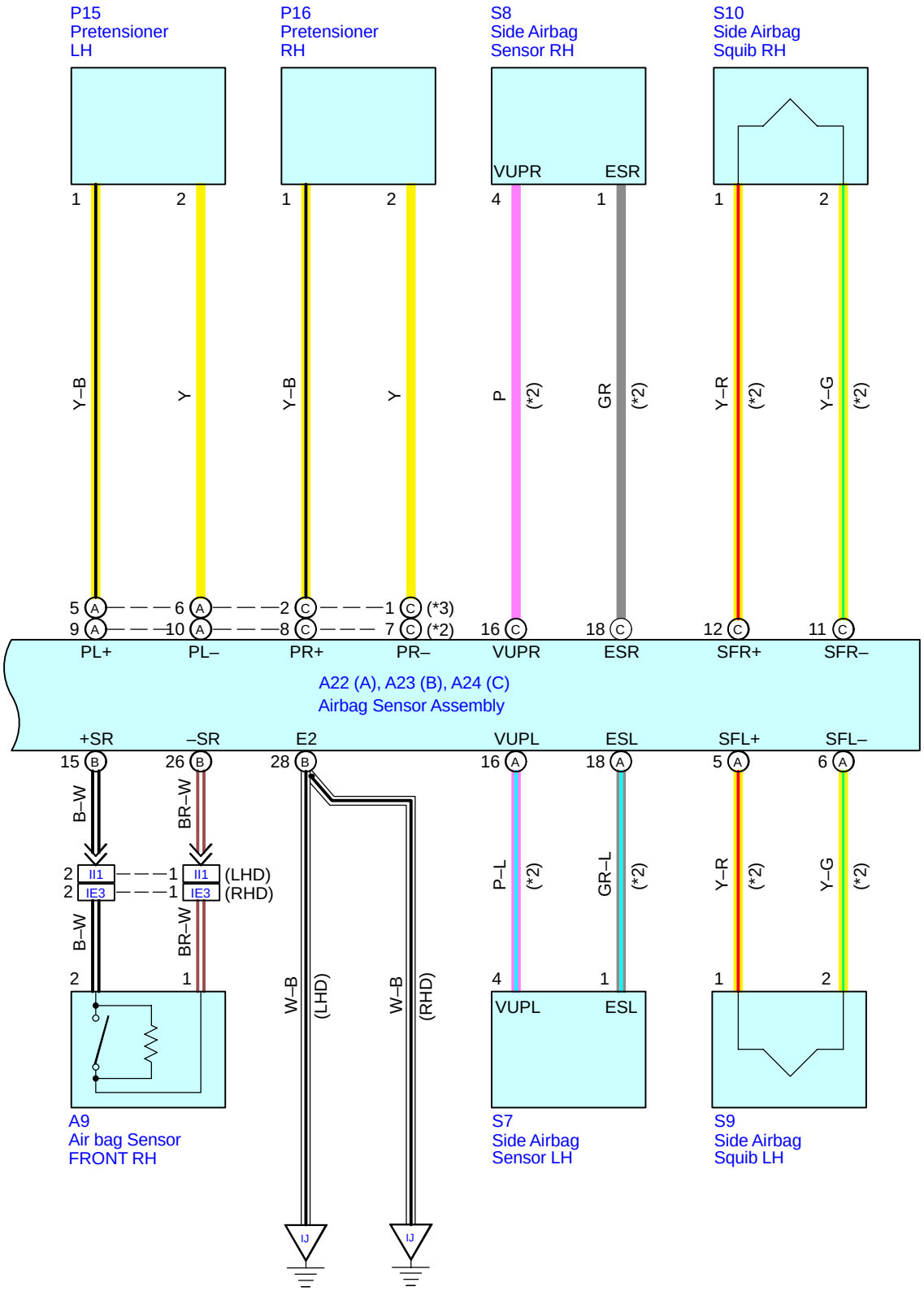
After work on the SRS is completed, perform the SRS warning light check.

If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.

* 1 : w/ Front Passenger Airbag



* 2 : w/ Side Airbag
* 3 : w/o Side Airbag



System Outline

The SRS is a driver and front passenger protection device which has a supplemental role to the seat belts.
When the ignition SW is turned to ON, the current from the ECU–IG fuse flows to TERMINAL (B) 1 of the airbag sensor assembly, and from the IG2 fuse to TERMINAL (B) 2 of the airbag sensor assembly.
If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the ECU–IG or IG2 fuse flows to TERMINALS (B) 10, (B) 14, (B) 9, (B) 15, (A) 5, (C) 12, (C) 16 and (A) 16 of the airbag sensor assembly to the airbag squibs and the pretensioners to TERMINALS (A) 5, (C) 2 without side airbags and (A) 9, (C) 9 with side airbags.of the airbag sensor assembly to TERMINAL (B) 19, (B) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them to operate.
Moreover, the airbag sensor assembly detects whether the front passenger is seated or not and when not seated, the passenger's airbag will not be deployed.
When the side impact also exceeds a set level, the current from the ECU–IG or IG2 fuse flows to TERMINALS (B) 15, (B) 9, (A) 16 and (C) 16 of the airbag sensor assembly to the side airbag squibs and the curtain shield airbag squibs TERMINALS (A) 5, (C) 12, (B) 14 and (B) 10 of the airbag sensor assembly to TERMINAL (B) 19, (B) 28 or BODY GROUND to GROUND, causing side airbag squibs and curtain shield airbag squibs to operate.
The airbag stored inside the steering wheel pad is instantaneously expanded to soften the shock to the driver.
The airbag stored inside the passenger's instrument panel is instantaneously expanded to soften the shock to the front passenger.
Side airbags are instantaneously expanded to soften the shock of side to the driver and front passenger.
The curtain shield airbag can ease an impact on the head of the front and rear passengers and reduce risks of injury.
The pretensioners make sure of the seat belt restrainability.

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page
A8		32 (LHD 1MZ–FE)	A24	C	36 (LHD)	P15	39 (LHD)
		42 (RHD 1MZ–FE)			46 (RHD)		49 (RHD)
		34 (LHD 2AZ–FE)	A25		36 (LHD)	P16	39 (LHD)
		44 (RHD 2AZ–FE)			46 (RHD)		49 (RHD)
A9		32 (LHD 1MZ–FE)	A26		36 (LHD)	S7	39 (LHD)
		42 (RHD 1MZ–FE)			46 (RHD)		49 (RHD)
		34 (LHD 2AZ–FE)	C9		36 (LHD)	S8	39 (LHD)
		44 (RHD 2AZ–FE)			46 (RHD)		49 (RHD)
A22	A	36 (LHD)	J5	A	37 (LHD)	S9	39 (LHD)
		46 (RHD)			47 (RHD)		49 (RHD)
A23	B	36 (LHD)	J6	B	37 (LHD)	S10	40 (LHD)
		46 (RHD)			47 (RHD)		50 (RHD)

⬭ : Junction Block and Wire Harness Connector

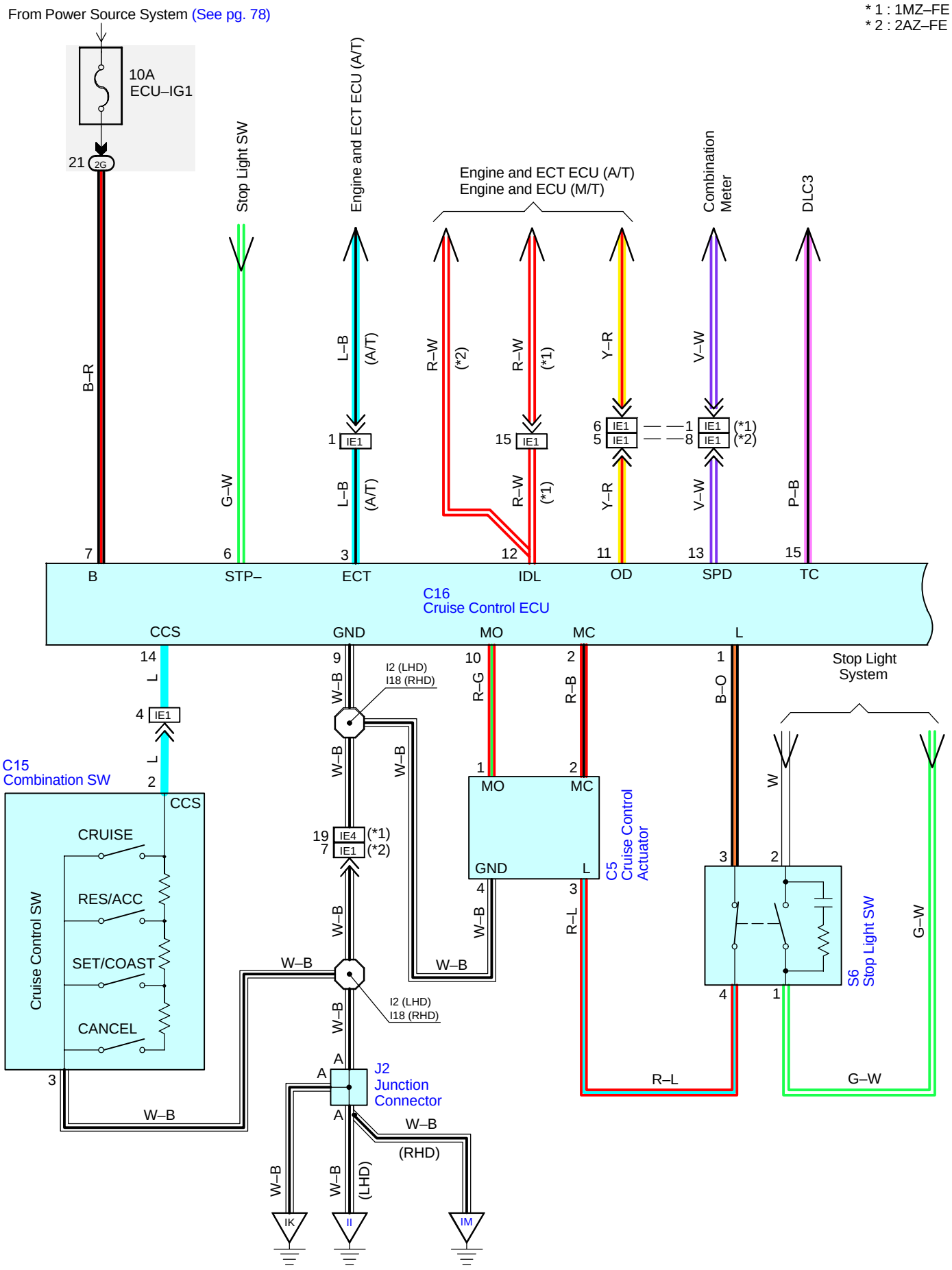
Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Engine Room J/B
2D	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2O		
2R		

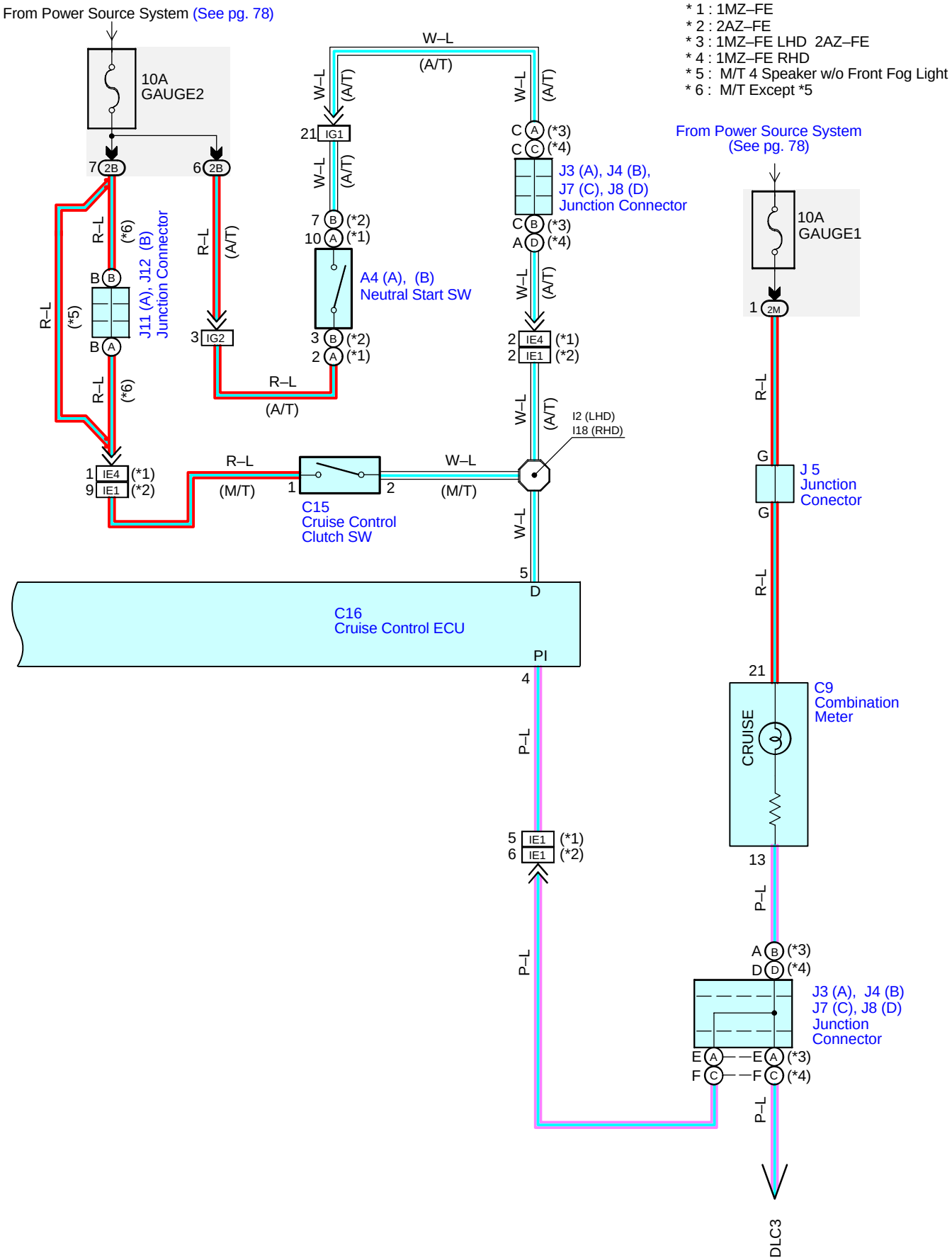
: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE3	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
II1	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

: **Ground Points**

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
IJ	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	67 (RHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 78)
* 1 : 1MZ–FE
* 2 : 2AZ–FE
10A
ECU–IG1
21
2G
Stop Light SW
Engine and ECT ECU (A/T)
Engine and ECT ECU (A/T)
Engine and ECU (M/T)
Combination Meter
DLC3
B–R
G–W
L–B (A/T)
R–W (*2)
R–W (*1)
Y–R
V–W
P–B
IE1
7 B
6 STP–
3 ECT
12 IDL
11 OD
13 SPD
15 TC
C16
Cruise Control ECU
CCS
GND
MO
MC
L
14
L
4
2
C15
Combination SW
CCS
CRUISE
RES/ACC
SET/COAST
CANCEL
Cruise Control SW
3
W–B
9
W–B
I2 (LHD)
I18 (RHD)
19
7
IE4
(*1)
(*2)
10
R–G
2
R–B
1
2
MO
MC
GND
L
C5
Cruise Control Actuator
4
3
R–L
1
B–O
Stop Light System
W
3
2
4
1
S6
Stop Light SW
G–W
R–L
G–W
A
J2
Junction Connector
W–B
(RHD)
(LHD)
IK
II
IM


From Power Source System (See pg. 78)
* 1 : 1MZ–FE
* 2 : 2AZ–FE
* 3 : 1MZ–FE LHD 2AZ–FE
* 4 : 1MZ–FE RHD
* 5 : M/T 4 Speaker w/o Front Fog Light
* 6 : M/T Except *5
10A GAUGE2
W–L (A/T)
21 IG1
7 2B
6 2B
C A (*3)
C C (*4)
J3 (A), J4 (B), J7 (C), J8 (D) Junction Connector
C B (*3)
A D (*4)
7 B (*2)
10 A (*1)
A4 (A), (B) Neutral Start SW
3 B (*2)
2 A (*1)
3 IG2
2 IE4 (*1)
2 IE1 (*2)
R–L (A/T)
R–L (*6)
B B
B A
J11 (A), J12 (B) Junction Connector
R–L (*5)
I2 (LHD) I18 (RHD)
1 IE4 (*1)
9 IE1 (*2)
R–L (M/T)
1
2
W–L (M/T)
C15 Cruise Control Clutch SW
5
D
C16 Cruise Control ECU
PI
4
P–L
5 IE1 (*1)
6 IE1 (*2)
From Power Source System (See pg. 78)
10A GAUGE1
1 2M
R–L
G
G
J 5 Junction Conector
21
C9 Combination Meter
CRUISE
13
A B (*3)
D D (*4)
J3 (A), J4 (B) J7 (C), J8 (D) Junction Connector
E A — E A (*3)
F C — F C (*4)
DLC3

System Outline

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

1. Set Operation

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

2. Set Speed Control

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

3. Coast Control

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

4. Accel Control

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

5. Resume Control

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

6. Manual Cancel Mechanism

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

* The stop light SW is turned on.
* The CANCEL SW is turned on.
* The cruise control main SW is turned off.

7. Auto Cancel Function

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

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

8. Overdrive Control Function

The overdrive control may be cancelled if the vehicle travels on the slope during cruise control travelling. After the overdrive control has been cancelled, if the vehicle speed exceeds the overdrive return speed (The set speed is 2 km/h, 1.2 mph) and it is decided that the slope is finished, the vehicle returns to the overdrive control mode again.

Service Hints

C16 Engine and ECT ECU

(D) 9–Ground : Approx. 12 volts with ignition SW at ON or ST position
(E) 2–Ground : Always approx. 12 volts
(A)1, (A) 4, (A) 7, (B) 6, (B) 7, (C) 6, (C) 7–Ground : Always continuity
(E)19–Ground : Approx. 12 volts with stop light SW at on
(E)24–Ground : Continuity with cruise control main SW at on
Approx. 1540 Ω with CANSEL SW on in cruise control SW
Approx. 240 Ω with RES/ACC SW on in cruise control SW
Approx. 630 Ω with SET/COAST SW on in cruise control SW

C15 Combination SW

2–3 : Approx. 1540 Ω with CANSEL SW on
Approx. 240 Ω with RES/ACC SW on
Approx. 630 Ω with SET/COAST SW on

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A4	A	32 (LHD 1MZ–FE)	C15	36 (LHD)	J7	C	37 (LHD)
		42 (RHD 1MZ–FE)		46 (RHD)			47 (RHD)
A4	B	34 (LHD 2AZ–FE)	C16	36 (LHD)	J8	9	37 (LHD)
		44 (RHD 2AZ–FE)		46 (RHD)			47 (RHD)
C5		32 (LHD 1MZ–FE)	J2	37 (LHD)	J11	A	37 (LHD)
		42 (RHD 1MZ–FE)		47 (RHD)			47 (RHD)
		34 (LHD 2AZ–FE)	J3	A 37 (LHD)	J12	B	37 (LHD 1MZ–FE)
		44 (RHD 2AZ–FE)		47 (RHD)			47 (RHD 1MZ–FE)
C9		36 (LHD)	J4	B 37 (LHD)	S6		37 (LHD 1MZ–FE)
		46 (RHD)		47 (RHD)			47 (RHD 1MZ–FE)
			J5	37 (LHD)			
				47 (RHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	27	Instrument Panel Wire and Driver Side J/B

: Connector Joining Wire Harness and Wire Harness

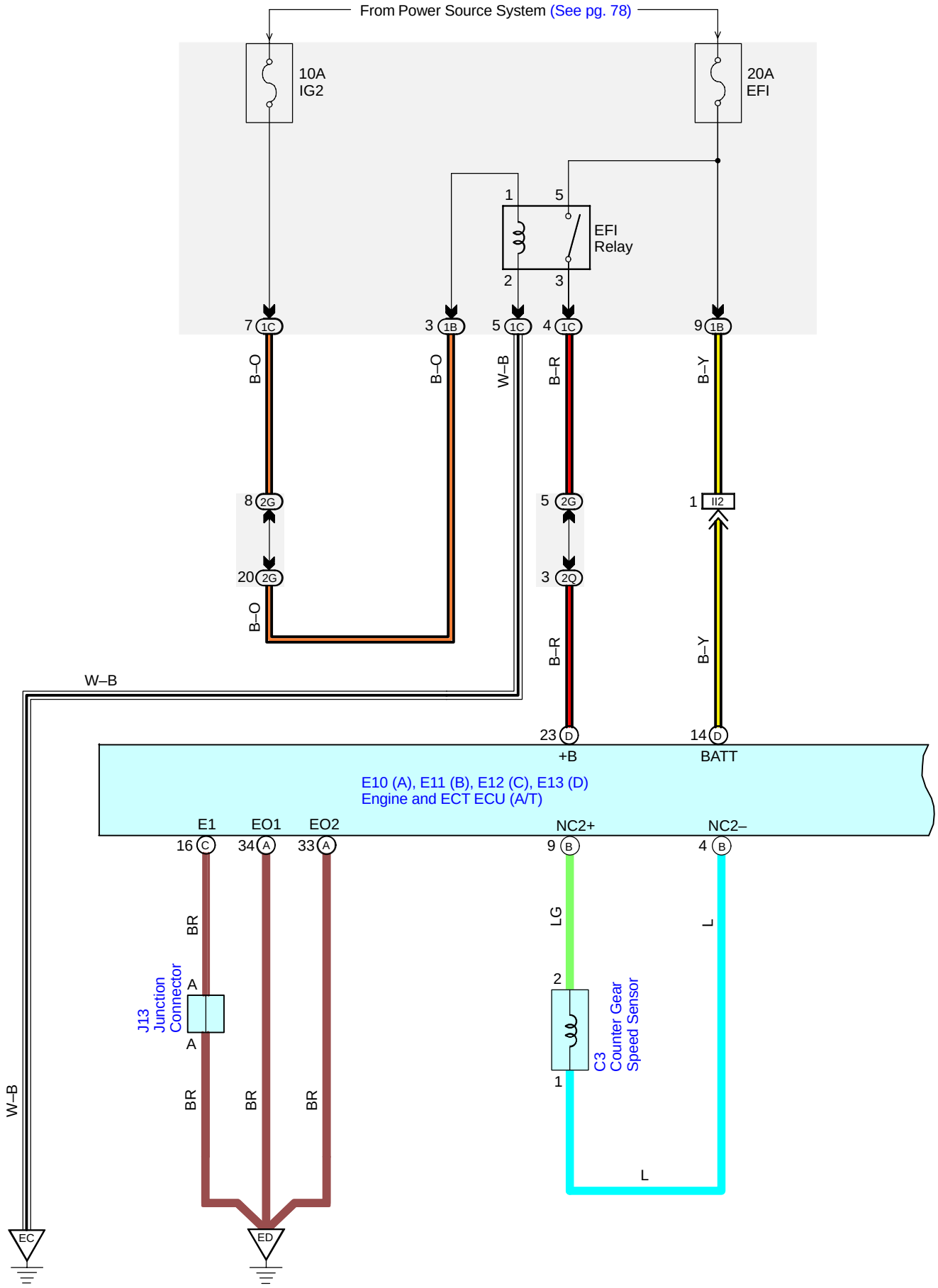
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE4	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE1	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG2	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	70 (RHD)	

: Ground Points

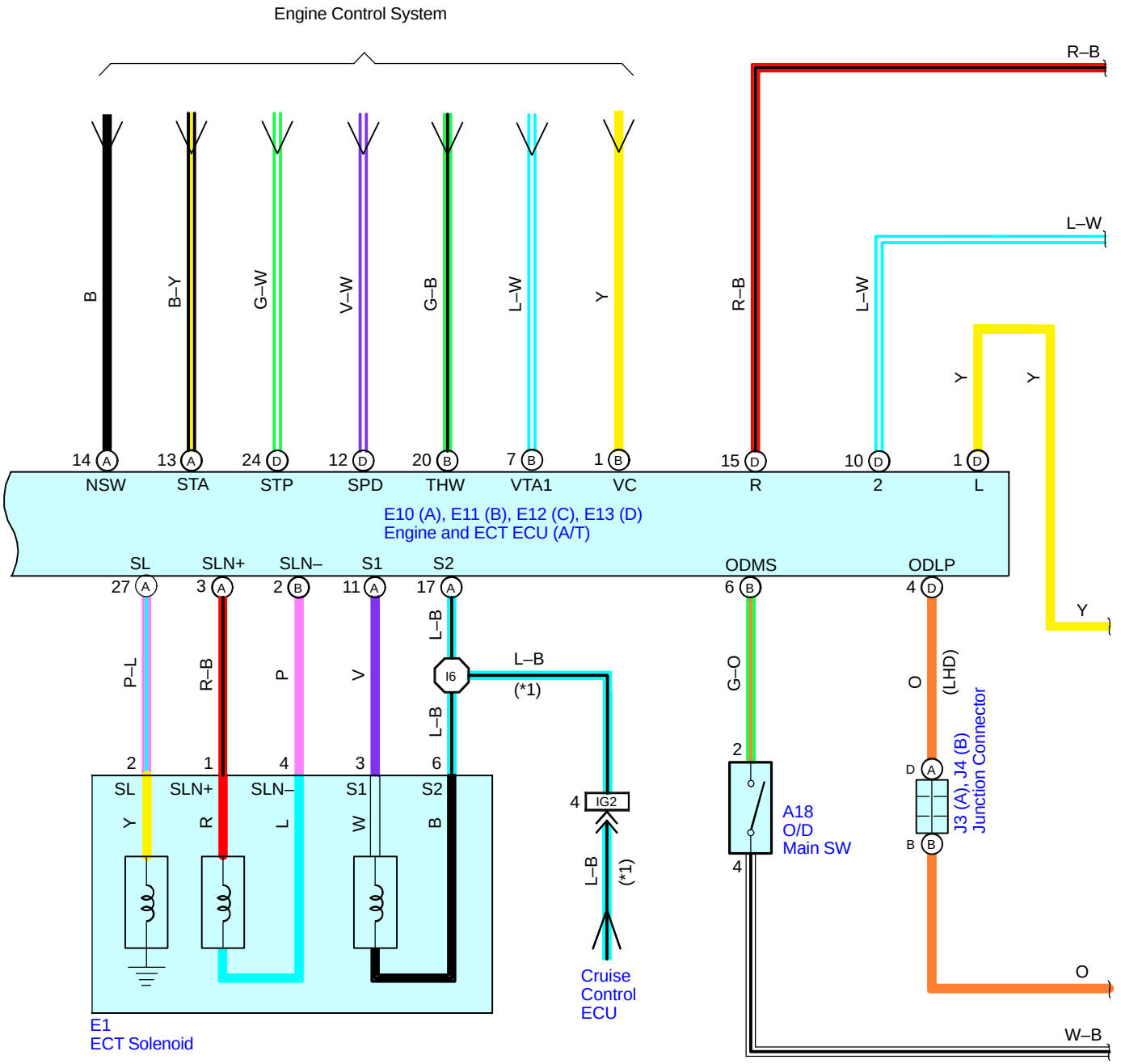
Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace (LHD)
	67 (RHD)	Instrument Panel Brace (RHD)
IM	67 (RHD)	Instrument Panel Reinforcement RH

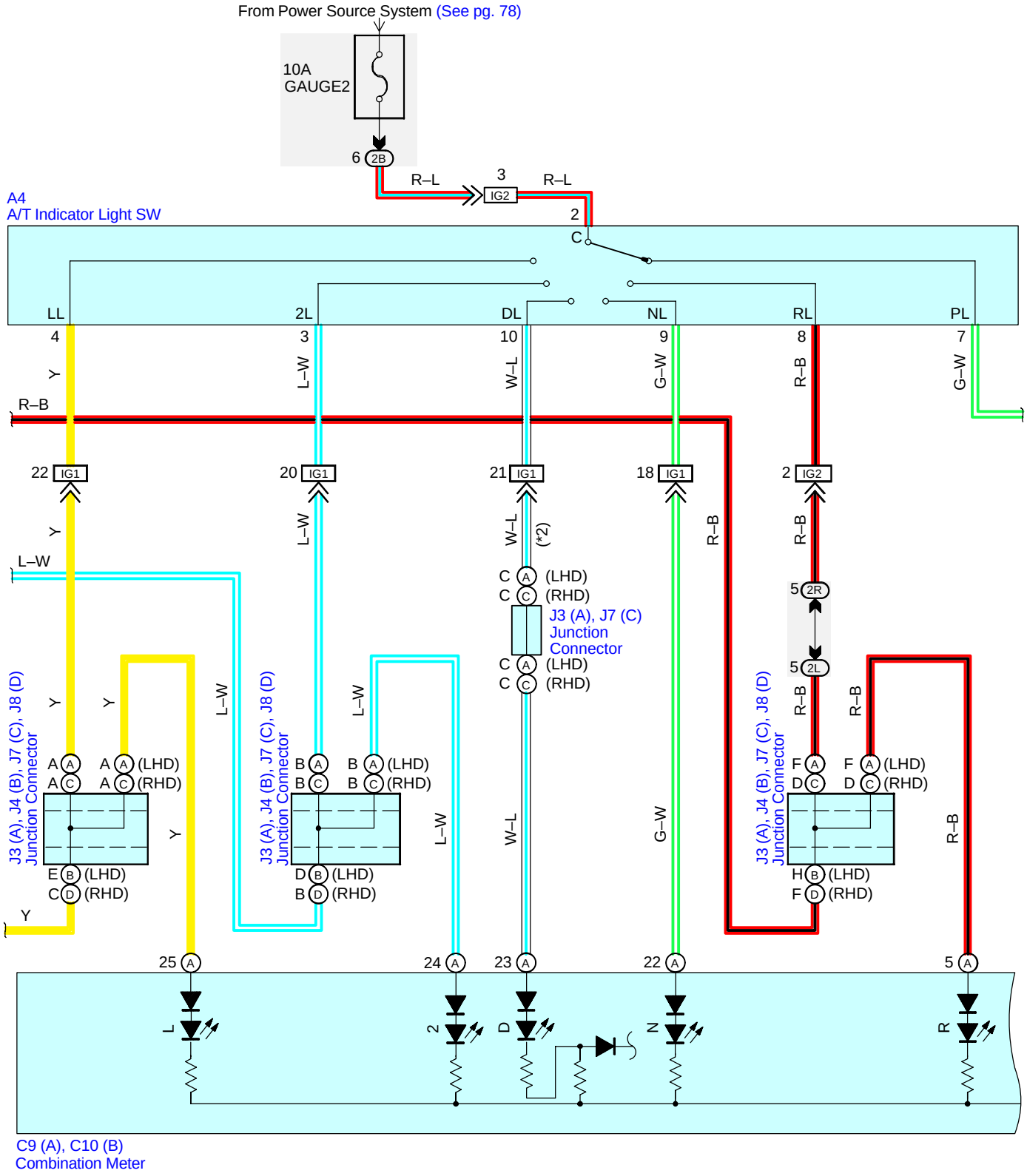
: Splice Points

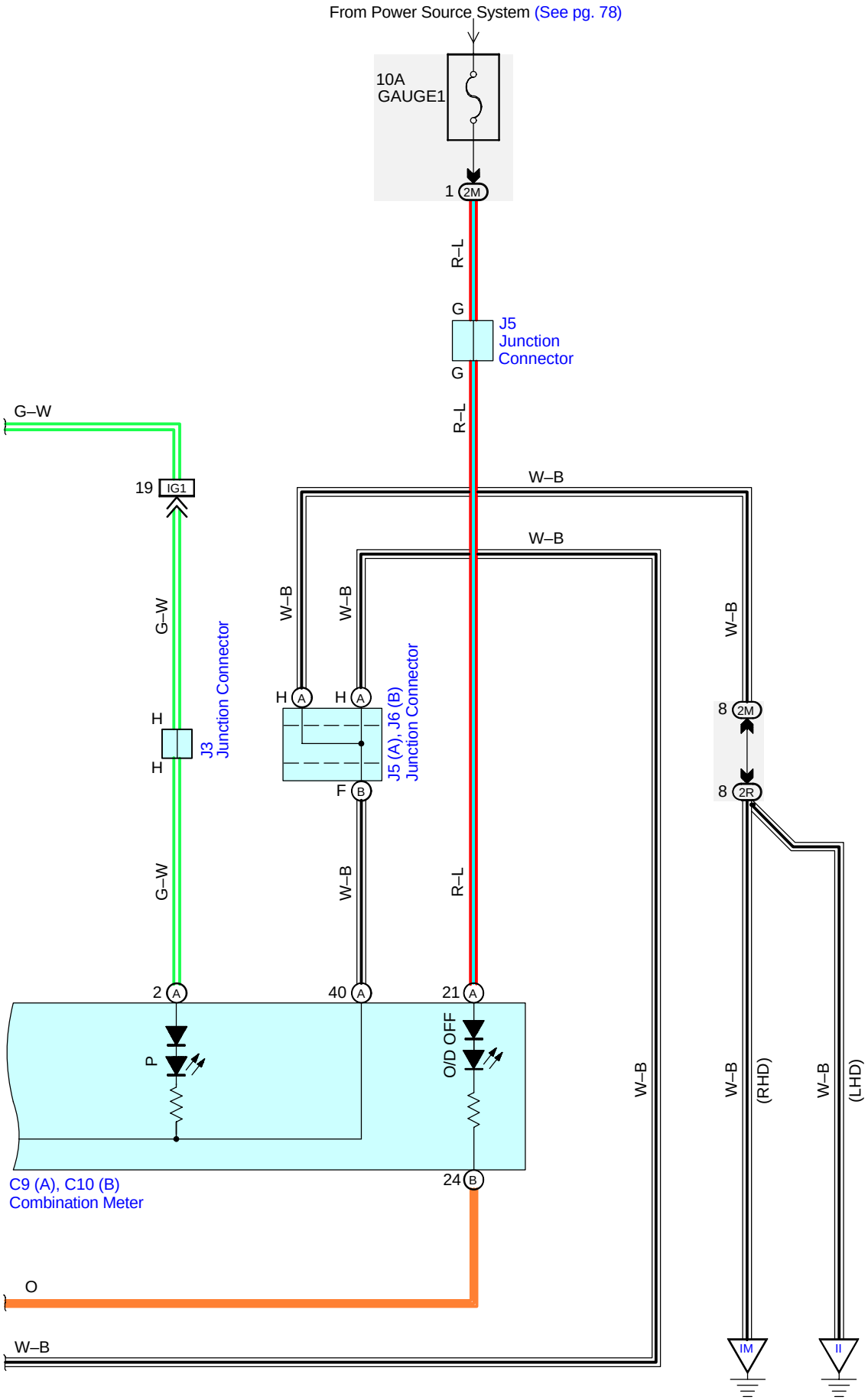
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	58 (LHD)	Instrument Panel	I8	70 (RHD)	Instrument Panel


From Power Source System (See pg. 78)
10A
IG2
20A
EFI
EFI
Relay
1
5
2
3
7 1C
3 1B
5 1C
4 1C
9 1B
B–O
B–O
W–B
B–R
B–Y
8 2G
20 2G
5 2G
3 2Q
1 II2
B–O
B–R
B–Y
W–B
23 D
14 D
+B
BATT
E10 (A), E11 (B), E12 (C), E13 (D)
Engine and ECT ECU (A/T)
E1
EO1
EO2
NC2+
NC2–
16 C
34 A
33 A
9 B
4 B
BR
LG
L
J13
Junction
Connector
A
A
2
1
C3
Counter Gear
Speed Sensor
BR
BR
BR
L
W–B
EC
ED

* 1: w/ Cruise Control




From Power Source System (See pg. 78)
10A
GAUGE2
6 2B
R–L
3
IG2
R–L
A4
A/T Indicator Light SW
2
C
LL
2L
DL
NL
RL
PL
4
3
10
9
8
7
Y
L–W
W–L
G–W
R–B
R–B
22 IG1
20 IG1
21 IG1
18 IG1
2 IG2
(*2)
C A (LHD)
C C (RHD)
J3 (A), J7 (C)
Junction
Connector
C A (LHD)
C C (RHD)
5 2R
5 2L
J3 (A), J4 (B), J7 (C), J8 (D)
Junction Connector
A A (LHD)
A C (RHD)
E B (LHD)
C D (RHD)
B A (LHD)
B C (RHD)
D B (LHD)
B D (RHD)
F A (LHD)
D C (RHD)
H B (LHD)
F D (RHD)
25 A
24 A
23 A
22 A
5 A
L
2
D
N
R
C9 (A), C10 (B)
Combination Meter
O
O
W–B
W–B


From Power Source System (See pg. 78)
10A
GAUGE1
1 2M
R–L
G
J5
Junction
Connector
G
R–L
G–W
19 IG1
W–B
W–B
G–W
J3
Junction Connector
H
H
W–B
W–B
H A
H A
J5 (A), J6 (B)
Junction Connector
F B
W–B
R–L
W–B
8 2M
8 2R
2 A
40 A
21 A
P
O/D OFF
W–B
W–B
(RHD)
W–B
(LHD)
C9 (A), C10 (B)
Combination Meter
24 B
O
W–B
IM
II

System Outline

Previous automatic transaxle have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock–up hydraulic pressure. The ECT, however, electrically controls the line pressure, throttle pressure, lock–up pressure and accumulator pressure etc. through the solenoid valve. The ECT 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 and ECT ECU from the EFI water temp. sensor and the vehicle speed signal is input to TERMINAL SPD of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINAL VTA of the engine and ECT ECU as throttle angle signal.
Based on these signals, the engine and ECT ECU selects the best shift position for the driving conditions and sends current to the ECT solenoid.

2. Lock–Up Operation

When each signal makes engine and ECT ECU recognize that LOCK–UP condition is satisfied, the current flows from engine and ECT ECU TERMINAL DSL to ECT solenoid TERMINAL DSL. At the same time, the current flows engine and ECT ECU TERMINAL SL1+ to ECT solenoid TERMINAL SL1+ and from TERMINAL SL1– to engine and ECT ECU TERMINAL SL1–. This works LOCK–UP solenoid to perform LOCK–UP operation.

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 and ECT ECU. The engine and ECT ECU operates and cuts the current to the solenoid to release lock–up.

4. Overdrive Circuit

* O/D main SW on
  When the O/D main SW is turned on, a signal is input to TERMINAL ODMS of the engine and ECT ECU and engine and ECT ECU operation causes gear shift when the conditions for overdrive are met.
* O/D main SW off
  When the O/D main SW is turned off, a signal is input into TERMINAL ODMS of the engine and ECT ECU, and turns on the O/D off indicator light. This activates the ECU, and the transmission system is controlled not to shift to overdrive.

Service Hints

E10 (A), E11(B), E12 (C), E13 (D) Engine and ECT ECU

L–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at L position)
2–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at 2 position)
R–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at R position)
D–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at D position)
ODMS–E1 : 10.0–14.0 volts (O/D main SW on)
Below 1.0 volts (O/D main SW off)
THO–E2 : Below 1.0 volts (Ignition SW on and AFT temperature 110 °C (230 °F)
SLT+ –SLT– :
10.0–14.0 volts (Ignition SW on)

A4 A/T Indicator Light SW

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

A18 O/D Main SW

2–4 : Closed with the O/D main SW off, open with the O/D main SW on

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A4		32 (LHD 1MZ–FE)	E10	A	37 (LHD)	J6	B	37 (LHD)
		42 (RHD 1MZ–FE)			47 (RHD)			47 (RHD)
A18		36 (LHD)	E11	B	37 (LHD)	J7	C	37 (LHD)
		46 (RHD)			47 (RHD)			47 (RHD)
C3		32 (LHD 1MZ–FE)	E12	C	37 (LHD)	J8	D	37 (LHD)
		42 (RHD 1MZ–FE)			47 (RHD)			47 (RHD)
C9	A	36 (LHD)	E13	D	37 (LHD)	J13		37 (LHD)
		46 (RHD)			47 (RHD)			47 (RHD)
C10	B	36 (LHD)	J3	A	37 (LHD)			
		46 (RHD)			47 (RHD)			
E1		32 (LHD 1MZ–FE)	J4	B	47 (RHD)			
		42 (RHD 1MZ–FE)	J5	A	37 (LHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
1C		
2G	26	Instrument Panel Wire and Driver Side J/B
2B		
2L		
2M		
2Q		
2R		

: Connector Joining Wire Harness and Wire Harness

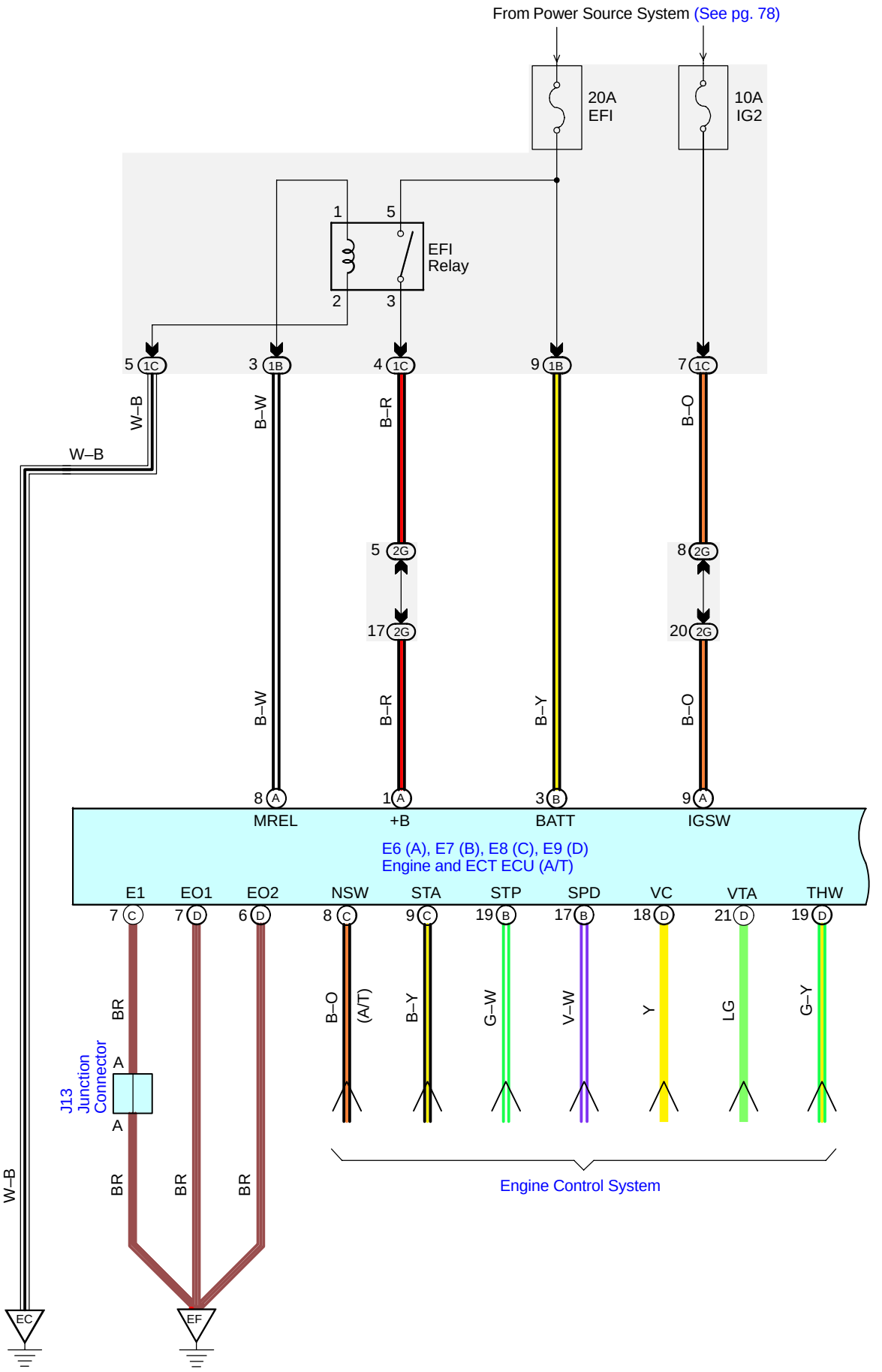
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	58 (LHD)	
	70 (RHD)	
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	

: Ground Points

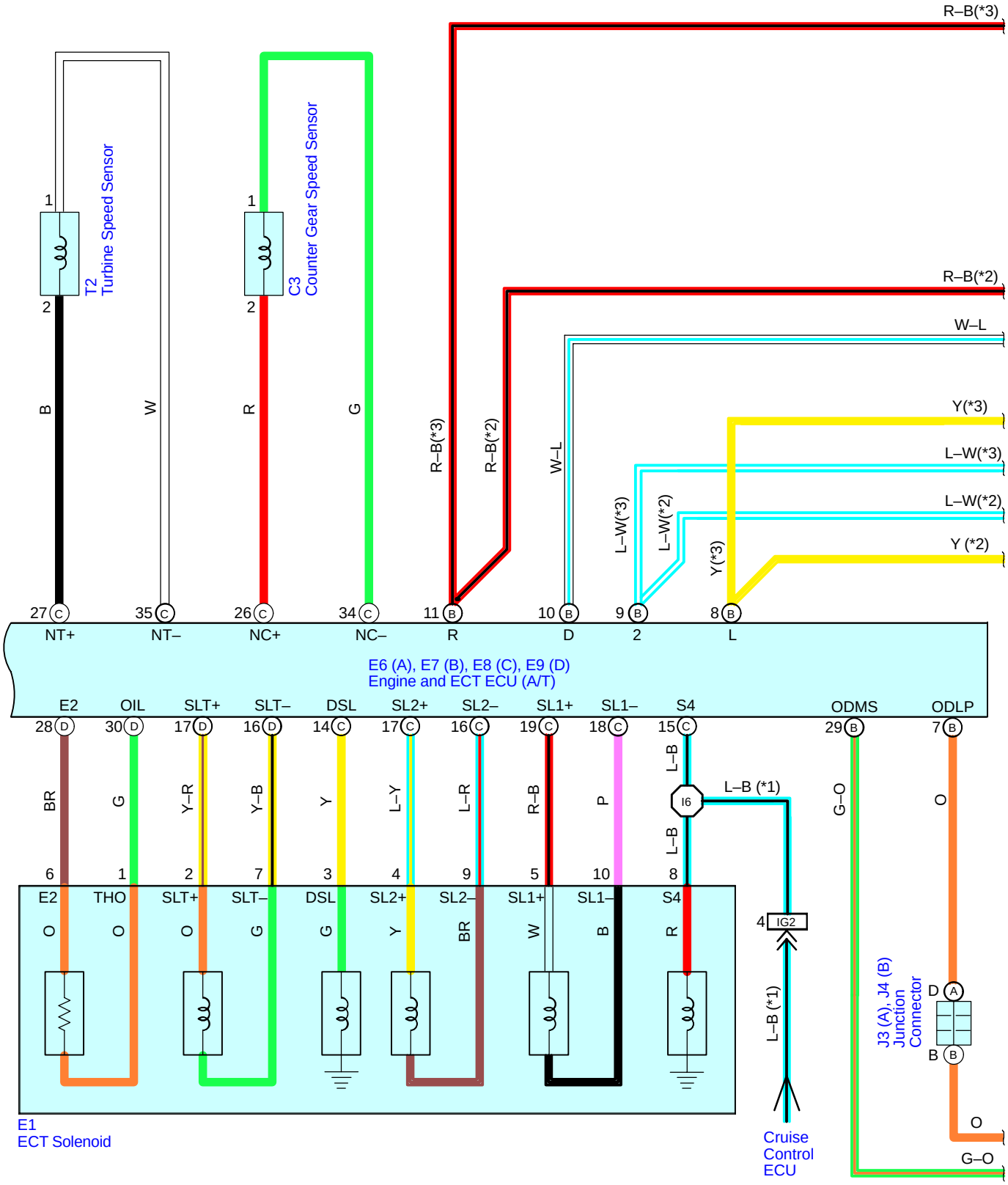
Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
ED	52 (LHD 1MZ–FE)	Surge Tank RH
	64 (RHD 1MZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
IM	67 (RHD)	Instrument Panel Reinforcement RH

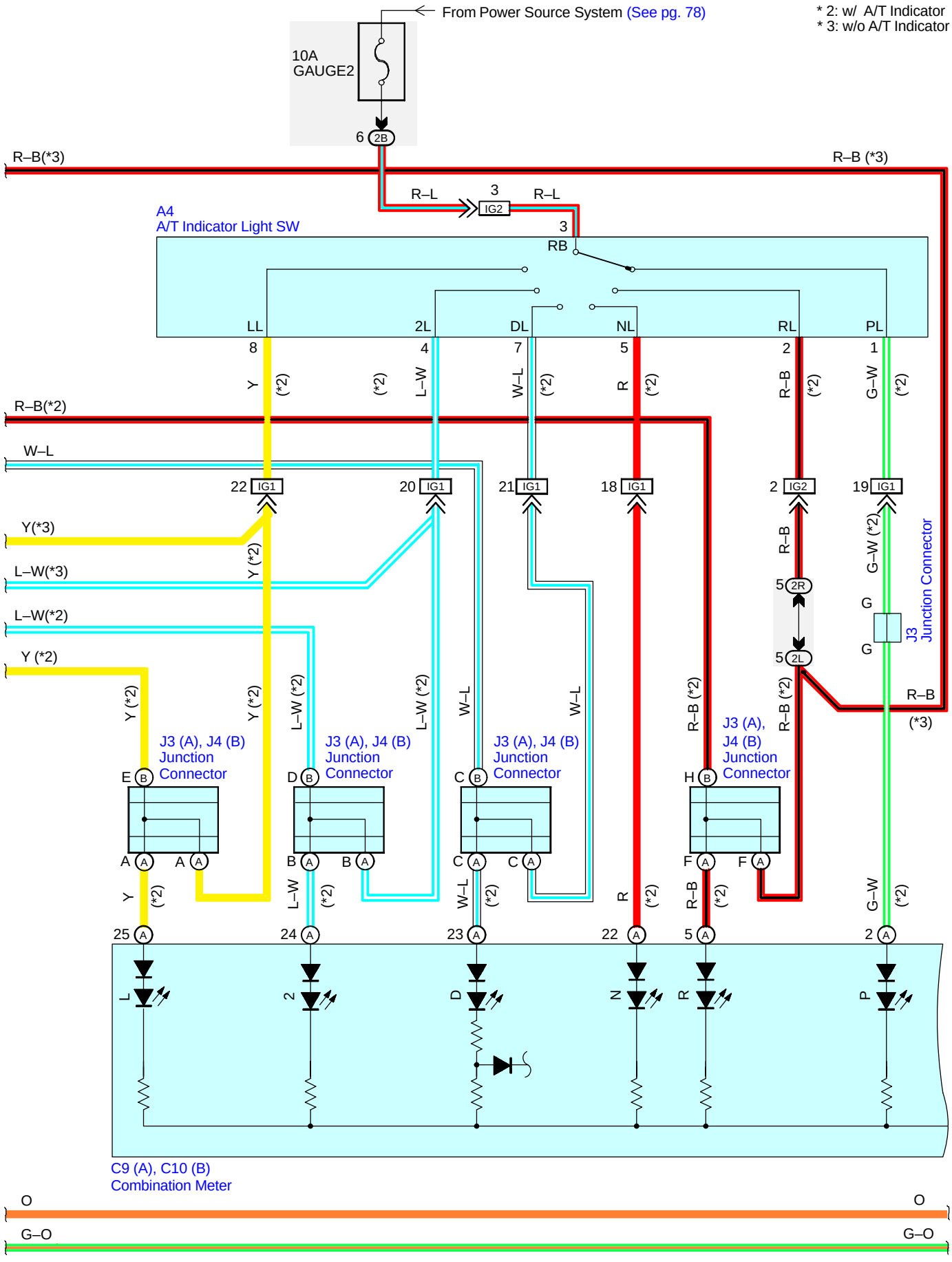
: Splice Points

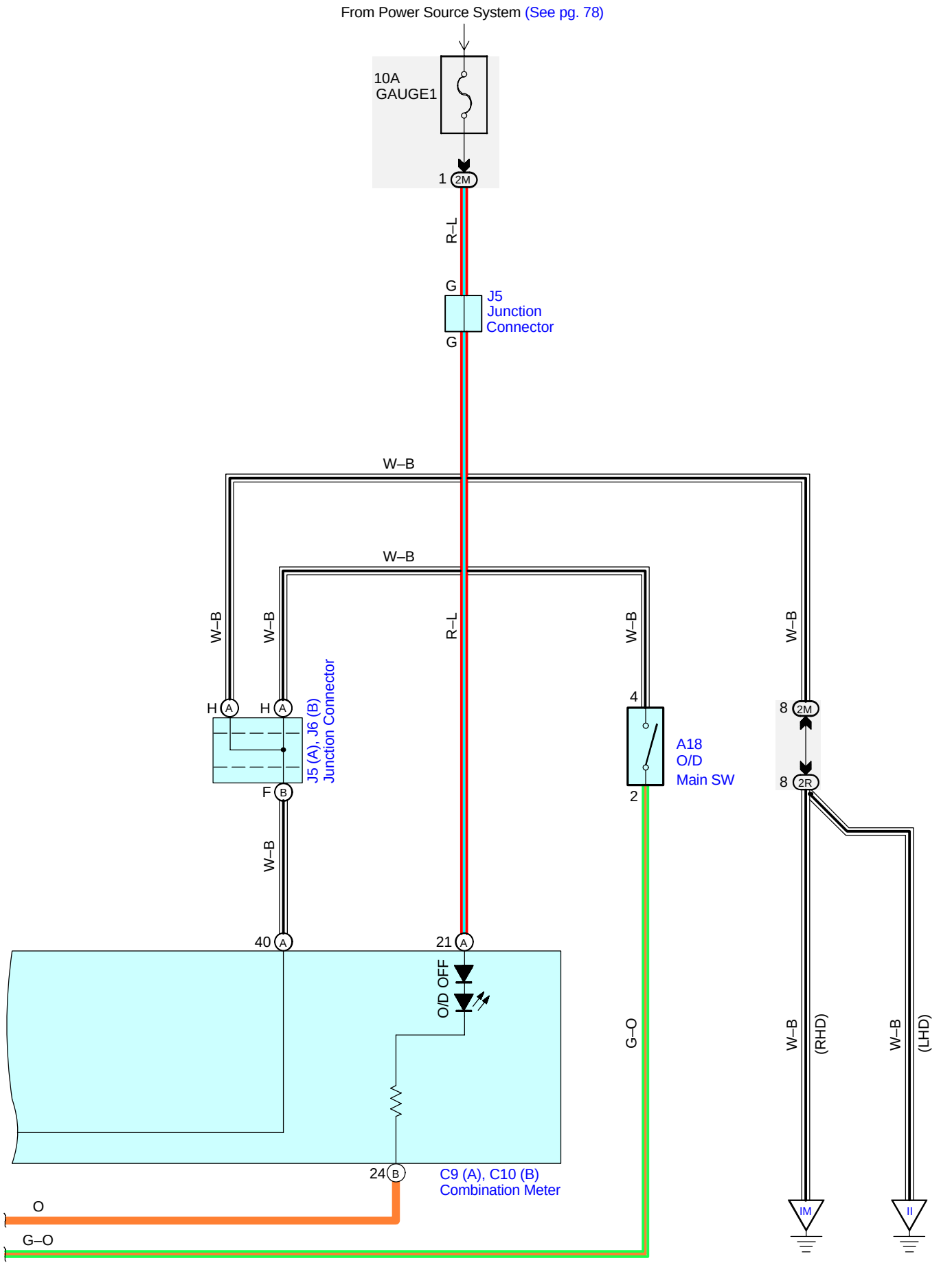
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	58 (LHD)	Instrument Panel	I6	70 (RHD)	Instrument Panel


From Power Source System (See pg. 78)
20A EFI
10A IG2
EFI Relay
1
5
2
3
5 1C
3 1B
4 1C
9 1B
7 1C
W–B
B–W
B–R
B–Y
B–O
5 2G
17 2G
8 2G
20 2G
8 A
1 A
3 B
9 A
MREL
+B
BATT
IGSW
E6 (A), E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
E1
EO1
EO2
NSW
STA
STP
SPD
VC
VTA
THW
7 C
7 D
6 D
8 C
9 C
19 B
17 B
18 D
21 D
19 D
BR
J13 Junction Connector
A
A
B–O (A/T)
B–Y
G–W
V–W
Y
LG
G–Y
Engine Control System
EC
EF

* 1: w/ Cruise Control
* 2: w/ A/T Indicator
* 3: w/o A/T Indicator




From Power Source System (See pg. 78)
* 2: w/ A/T Indicator
* 3: w/o A/T Indicator
10A
GAUGE2
6 2B
R–B(*3)
R–B (*3)
R–L
3
IG2
R–L
A4
A/T Indicator Light SW
3
RB
LL
2L
DL
NL
RL
PL
8
4
7
5
2
1
Y
(*2)
L–W
W–L
R
R–B
G–W
R–B(*2)
W–L
22 IG1
20 IG1
21 IG1
18 IG1
2 IG2
19 IG1
Y(*3)
L–W(*3)
L–W(*2)
Y (*2)
G–W (*2)
5 2R
G
5 2L
G
J3
Junction Connector
R–B
(*3)
J3 (A), J4 (B)
Junction
Connector
E B
D B
C B
H B
A A
A A
B A
B A
C A
C A
F A
F A
25 A
24 A
23 A
22 A
5 A
2 A
L
2
D
N
R
P
C9 (A), C10 (B)
Combination Meter
O
O
G–O
G–O


From Power Source System (See pg. 78)
10A
GAUGE1
1 2M
R–L
G
J5
Junction
Connector
G
W–B
W–B
W–B
W–B
R–L
W–B
W–B
H A
H A
J5 (A), J6 (B)
Junction Connector
F B
4
A18
O/D
Main SW
2
8 2M
8 2R
W–B
40 A
21 A
O/D OFF
G–O
W–B
(RHD)
W–B
(LHD)
24 B
C9 (A), C10 (B)
Combination Meter
O
G–O
IM
II

System Outline

Previous automatic transaxle have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock–up hydraulic pressure. The ECT, however, electrically controls the line pressure, throttle pressure, lock–up pressure and accumulator pressure etc. through the solenoid valve. The ECT 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 and ECT ECU from the EFI water temp. sensor and the vehicle speed signal is input to TERMINAL SPD of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINAL VTA of the engine and ECT ECU as throttle angle signal.
Based on these signals, the engine and ECT ECU selects the best shift position for the driving conditions and sends current to the ECT solenoid.

2. Lock–Up Operation

When each signal makes engine and ECT ECU recognize that LOCK–UP condition is satisfied, the current flows from engine and ECT ECU TERMINAL DSL to ECT solenoid TERMINAL DSL. At the same time, the current flows engine and ECT ECU TERMINAL SL1+ to ECT solenoid TERMINAL SL1+ and from TERMINAL SL1– to engine and ECT ECU TERMINAL SL1–. This works LOCK–UP solenoid to perform LOCK–UP operation.

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 and ECT ECU. The engine and ECT ECU operates and cuts the current to the solenoid to release lock–up.

4. Overdrive Circuit

* O/D main SW on
  When the O/D main SW is turned on, a signal is input to TERMINAL ODMS of the engine and ECT ECU and engine and ECT ECU operation causes gear shift when the conditions for overdrive are met.
* O/D main SW off
  When the O/D main SW is turned off, a signal is input into TERMINAL ODMS of the engine and ECT ECU, and turns on the O/D off indicator light. This activates the ECU, and the transmission system is controlled not to shift to overdrive.

Service Hints

E6 (A), E7 (B), E8 (C), E9 (D), E10 (E) Engine and ECT ECU

L–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at L position)
2–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at 2 position)
R–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at R position)
D–E1 : 10.0–14.0 volts (Ignition SW on and shift lever at D position)
ODMS–E1 : 10.0–14.0 volts (O/D main SW on)
Below 1.0 volts (O/D main SW off)
THO–E2 : Below 1.0 volts (Ignition SW on and AFT temperature 110 °C (230 °F)
SLT+ –SLT– :
10.0–14.0 volts (Ignition SW on)

A4 A/T Indicator Light SW

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

A21 O/D Main SW

2–4 : Closed with the O/D main SW off, open with the O/D main SW on

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A4		34 (LHD 2AZ–FE) 44 (RHD 2AZ–FE)	E6	A	37 (LHD) 47 (RHD)	J5		37 (LHD) 47 (RHD)
A18		36 (LHD) 46 (RHD)	E7	B	37 (LHD) 47 (RHD)	J5	A	37 (LHD) 47 (RHD)
C3		34 (LHD 2AZ–FE) 44 (RHD 2AZ–FE)	E8	C	37 (LHD) 47 (RHD)	J6	B	37 (LHD) 47 (RHD)
C9	A	36 (LHD) 46 (RHD)	E9	D	37 (LHD) 47 (RHD)	T2		35 (LHD) 45 (RHD)
C10	B	36 (LHD) 46 (RHD)	J3	A	37 (LHD) 47 (RHD)	J13		37 (LHD) 47 (RHD)
E1		34 (LHZ 2AZ–FE) 44 (RHD 2AZ–FE)	J4	B	37 (LHD) 47 (RHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Engine Room J/B
1C		
2B	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2L	26	Instrument Panel Wire and Driver Side J/B
2M		
2R		

: Connector Joining Wire Harness and Wire Harness

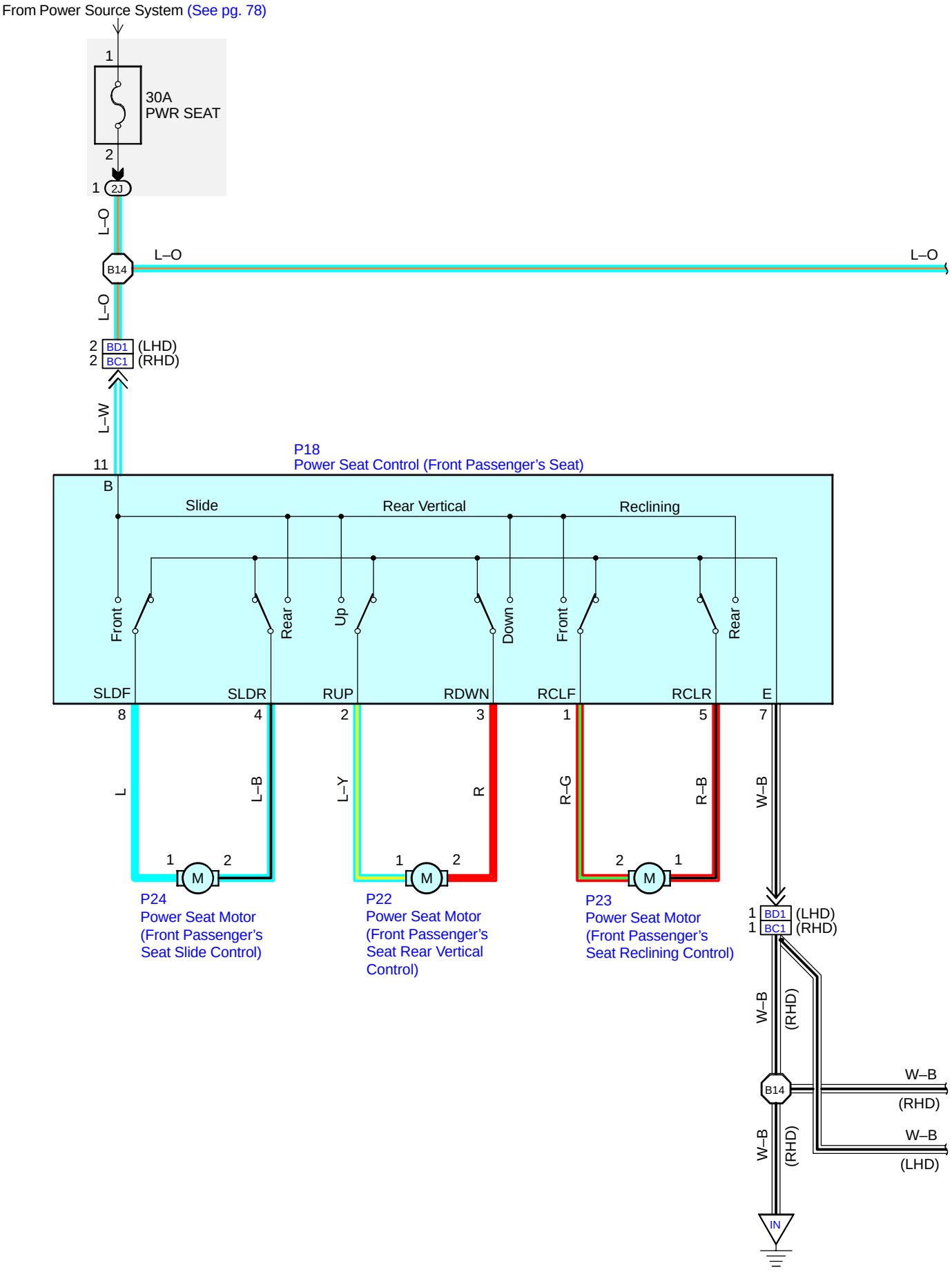
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
IG2	70 (RHD)	

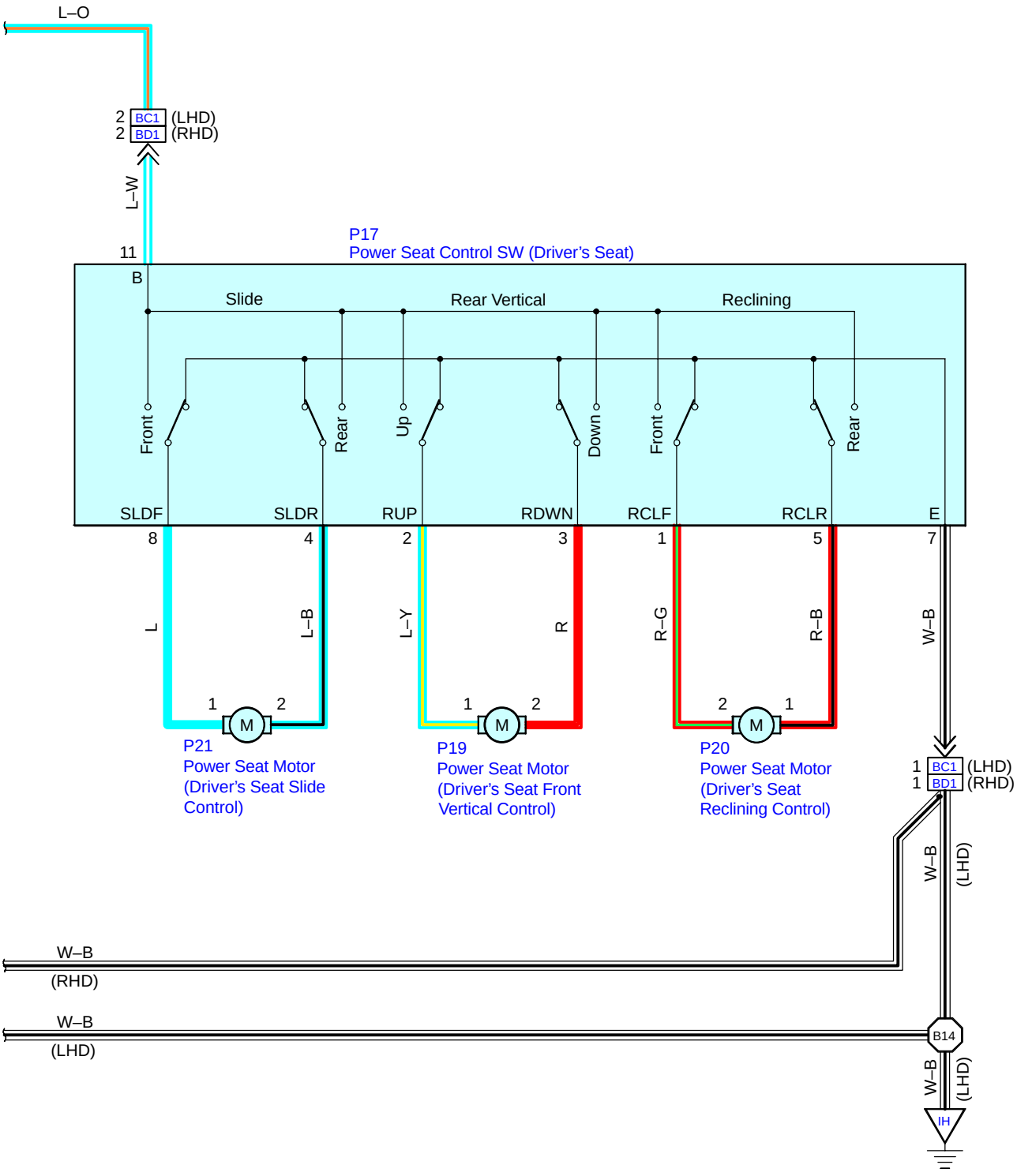
: Ground Points

Code	See Page	Ground Points Location
EC	54 (LHD 2AZ–FE) 66 (RHD 2AZ–FE)	Left Fender
EF	54 (LHD 2AZ–FE) 66 (RHD 2AZ–FE)	Intake Side of Cylinder Block
II	55 (LHD)	Instrument Panel Reinforcement LH
IM	67 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	58 (LHD)	Instrument Panel	I6	70 (RHD)	Instrument Panel


From Power Source System (See pg. 78)
1
30A
PWR SEAT
2
1 2J
L–O
B14
L–O
L–O
L–O
2 BD1 (LHD)
2 BC1 (RHD)
L–W
11
P18
Power Seat Control (Front Passenger's Seat)
B
Slide
Rear Vertical
Reclining
Front
Rear
Up
Down
Front
Rear
SLDF
SLDR
RUP
RDWN
RCLF
RCLR
E
8
4
2
3
1
5
7
L
L–B
L–Y
R
R–G
R–B
W–B
1
2
M
P24
Power Seat Motor
(Front Passenger's
Seat Slide Control)
P22
Power Seat Motor
(Front Passenger's
Seat Rear Vertical
Control)
P23
Power Seat Motor
(Front Passenger's
Seat Reclining Control)
1 BD1 (LHD)
1 BC1 (RHD)
W–B
(RHD)
B14
W–B
(RHD)
W–B
(RHD)
W–B
(LHD)
IN


L–O
2 BC1 (LHD)
2 BD1 (RHD)
L–W
11
P17
Power Seat Control SW (Driver's Seat)
B
Slide
Rear Vertical
Reclining
Front
Rear
Up
Down
Front
Rear
SLDF
SLDR
RUP
RDWN
RCLF
RCLR
E
8
4
2
3
1
5
7
L
L–B
L–Y
R
R–G
R–B
W–B
1
2
M
P21
Power Seat Motor
(Driver's Seat Slide
Control)
P19
Power Seat Motor
(Driver's Seat Front
Vertical Control)
P20
Power Seat Motor
(Driver's Seat
Reclining Control)
1 BC1 (LHD)
1 BD1 (RHD)
W–B
(LHD)
W–B
(RHD)
W–B
(LHD)
B14
W–B
(LHD)
IH

Power Seat

Service Hints

P17 Power Seat Control SW (Driver's Seat)

11–Ground : Always approx. 12 volts

7–Ground : Always continuity

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

11–Ground : Always approx. 12 volts

7–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
P17	40 (LHD)	P20	40 (LHD)	P23	40 (LHD)
	50 (RHD)		50 (RHD)		50 (RHD)
P18	40 (LHD)	P21	40 (LHD)	P24	40 (LHD)
	50 (RHD)		50 (RHD)		50 (RHD)
P19	40 (LHD)	P22	40 (LHD)		
	50 (RHD)		50 (RHD)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2J	26	Floor Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

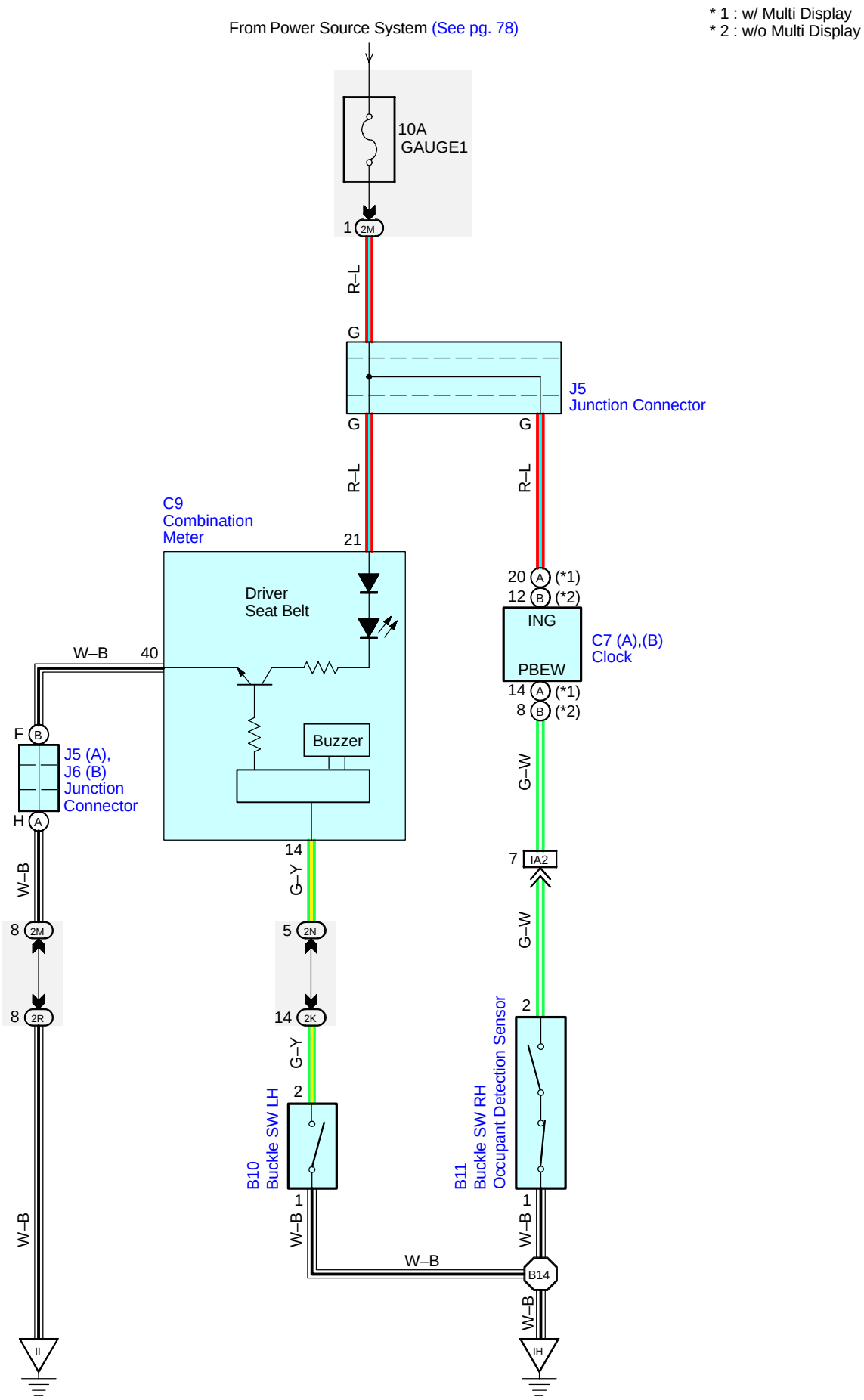
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BD1	62 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
	74 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
BC1	62 (LHD)	Floor Wire and Front Seat LH Wire (Under the Driver's Seat)
	74 (RHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Front Passenger's Seat)

: Ground Points

Code	See Page	Ground Points Location
IH	55 (LHD)	Left Kick Panel
IN	67 (RHD)	Right Kick Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	60 (LHD)	Floor wire			
	72 (RHD)				


* 1 : w/ Multi Display
* 2 : w/o Multi Display
From Power Source System (See pg. 78)
10A
GAUGE1
1 2M
R–L
G
J5
Junction Connector
G
G
R–L
R–L
C9
Combination
Meter
21
Driver
Seat Belt
Buzzer
W–B
40
F B
J5 (A),
J6 (B)
Junction
Connector
H A
W–B
8 2M
8 2R
W–B
14
G–Y
5 2N
14 2K
G–Y
2
B10
Buckle SW LH
1
W–B
W–B
B14
W–B
IH
20 A (*1)
12 B (*2)
ING
PBEW
C7 (A),(B)
Clock
14 A (*1)
8 B (*2)
G–W
7 IA2
G–W
2
B11
Buckle SW RH
Occupant Detection Sensor
1
W–B
II

Service Hints

B10 Buckle SW LH

2–1 : Closed with seat belt in use

B11 Buckle SW RH

2–1 : Closed with seat belt in use

: Parts Location

Code	See Page	Code		See Page	Code		See Page
B10	40 (LHD)	C9		36 (LHD)			
B11	40 (LHD)	J5	A	37 (LHD)			
C7	36 (LHD)	J6	B	37 (LHD)			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2K	26	Floor Wire and Driver Side J/B (Lower Finish Panel)
2M	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2N	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2R	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

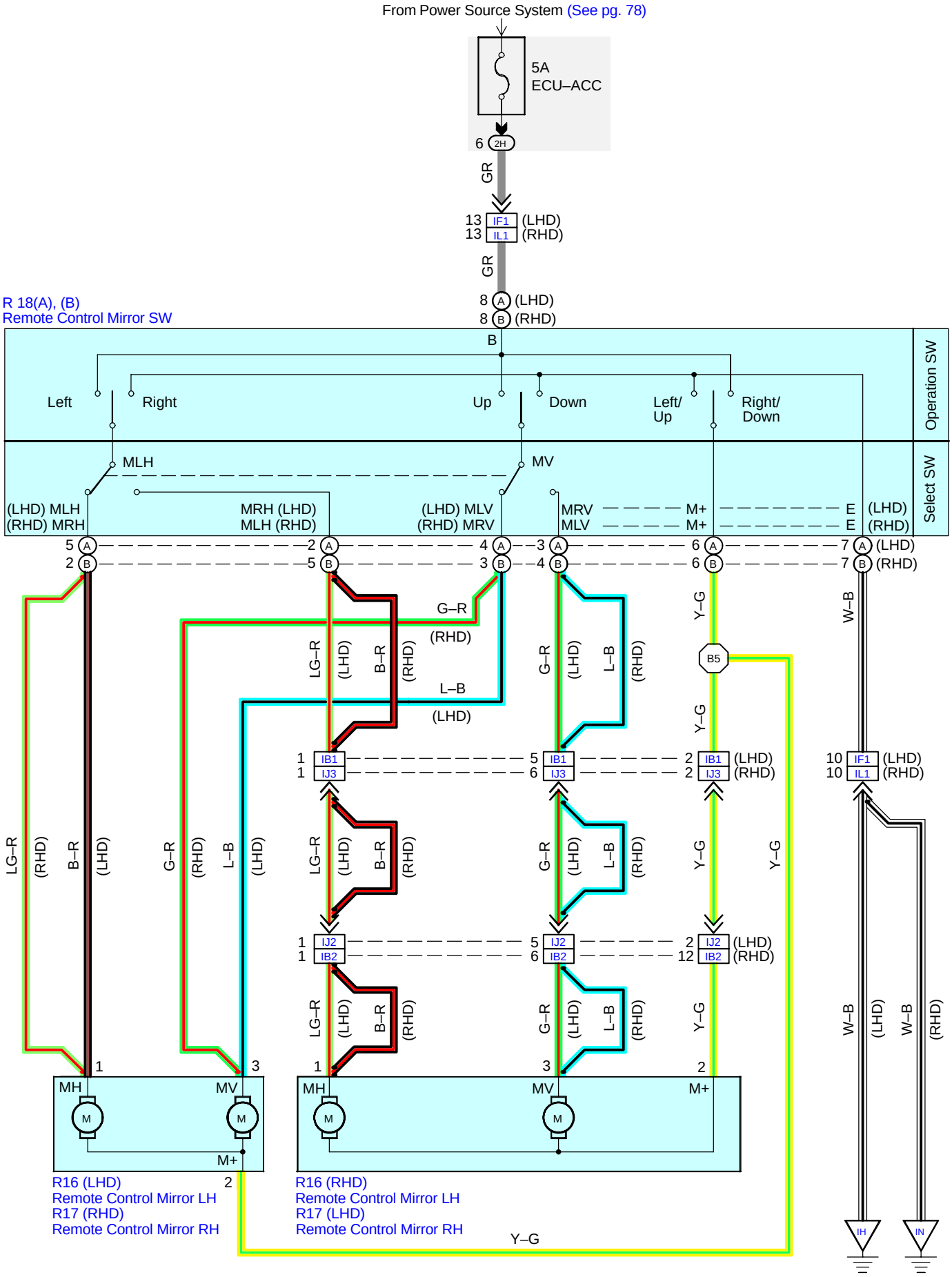
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	55 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IH	55 (LHD)	Left Kick Panel
II	55 (LHD)	Instrument Panel Reinforcement LH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	60	Flooor wire			


From Power Source System (See pg. 78)
5A
ECU–ACC
6 2H
GR
13 IF1 (LHD)
13 IL1 (RHD)
GR
8 A (LHD)
8 B (RHD)
R 18(A), (B)
Remote Control Mirror SW
B
Left
Right
Up
Down
Left/
Up
Right/
Down
Operation SW
MLH
MV
Select SW
(LHD) MLH
(RHD) MRH
MRH (LHD)
MLH (RHD)
(LHD) MLV
(RHD) MRV
MRV
MLV
M+
E
(LHD)
(RHD)
5 A
2 B
2 A
5 B
4 A
3 B
3 A
4 B
6 A
6 B
7 A (LHD)
7 B (RHD)
G–R
(RHD)
L–B
(LHD)
LG–R
(LHD)
B–R
(RHD)
G–R
(LHD)
L–B
(RHD)
Y–G
B5
W–B
1 IB1
1 IJ3
5 IB1
6 IJ3
2 IB1 (LHD)
2 IJ3 (RHD)
10 IF1 (LHD)
10 IL1 (RHD)
LG–R (RHD)
B–R (LHD)
G–R (RHD)
L–B (LHD)
LG–R (LHD)
B–R (RHD)
G–R (LHD)
L–B (RHD)
Y–G
Y–G
1 IJ2
1 IB2
5 IJ2
6 IB2
2 IJ2 (LHD)
12 IB2 (RHD)
LG–R (LHD)
B–R (RHD)
G–R (LHD)
L–B (RHD)
Y–G
W–B (LHD)
W–B (RHD)
1
3
1
3
2
MH
MV
M
M
M+
MH
MV
M
M
M+
IH
IN
R16 (LHD)
Remote Control Mirror LH
R17 (RHD)
Remote Control Mirror RH
2
R16 (RHD)
Remote Control Mirror LH
R17 (LHD)
Remote Control Mirror RH
Y–G

Service Hints

R18 Remote Control Mirror SW

8–Ground : Approx. 12 volts with ignition SW at ACC or ON position
7–Ground : Always continuity
8–6 : Continuity with the operation SW at DOWN or RIGHT position
6–7 : Continuity with the operation SW at UP or LEFT position

: Parts Location

Code	See Page	Code		See Page	Code	See Page
R16	39 (LHD)	R18	A	39 (LHD)		
	49 (RHD)			49 (RHD)		
R17	39 (LHD)		B	39 (LHD)		
	49 (RHD)			49 (RHD)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2H	26	Floor Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

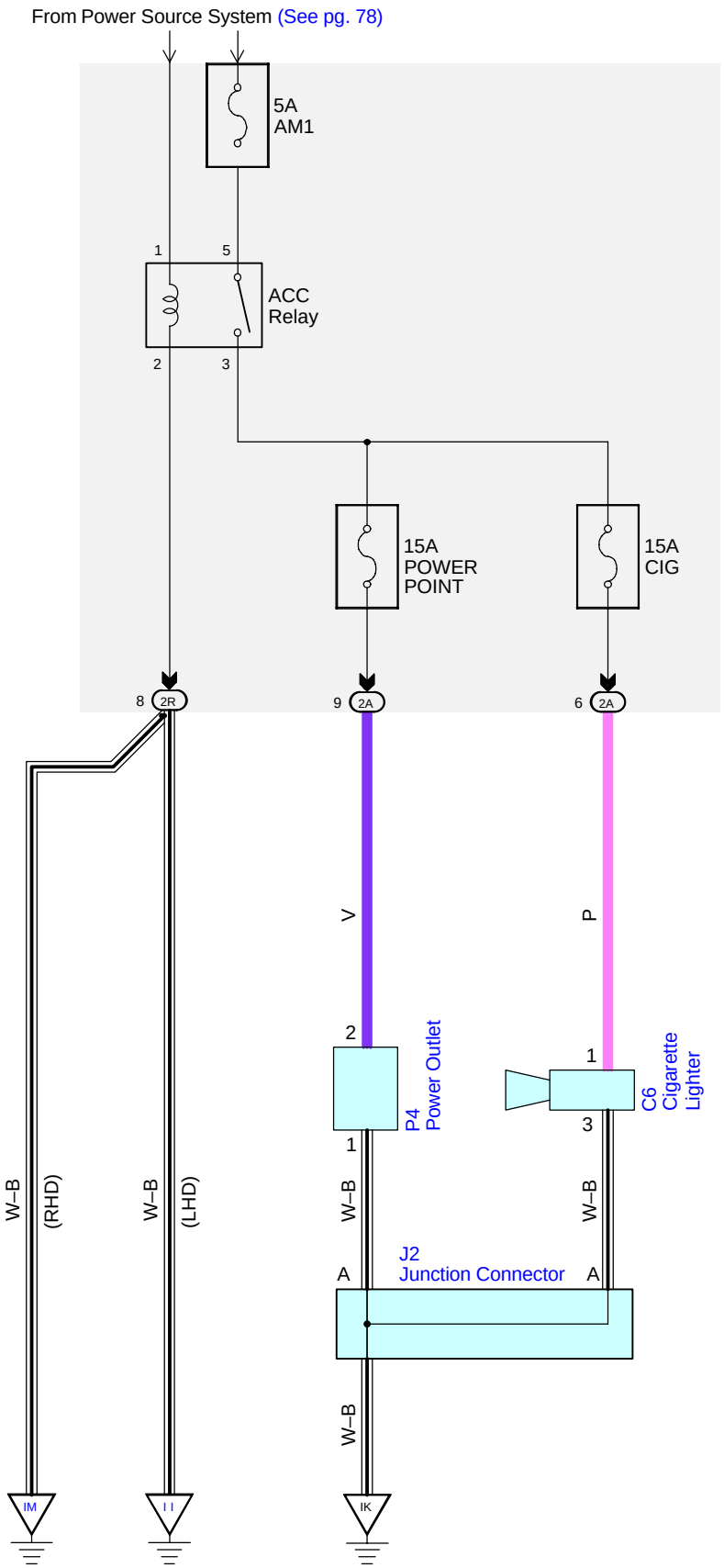
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	67 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	58 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	70 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IL1	70 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IH	55 (LHD)	Left Kick Panel
IN	67 (RHD)	Right Kick Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B5	60 (LHD)	Front Door LH Wire			
	72 (RHD)	Front Door RH Wire			


From Power Source System (See pg. 78)
5A
AM1
1
5
ACC
Relay
2
3
15A
POWER
POINT
15A
CIG
8
2R
9
2A
6
2A
V
P
2
1
P4
Power Outlet
C6
Cigarette
Lighter
3
1
W–B
(RHD)
W–B
(LHD)
W–B
W–B
J2
Junction Connector
A
A
W–B
IM
IK

Service Hints

C6 Cigarette Lighter

1–Ground : Approx. 12 volts with ignition SW at ACC or ON position
3–Ground : Always continuity

P4 Power Outlet (Front)

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

○ : Parts Location

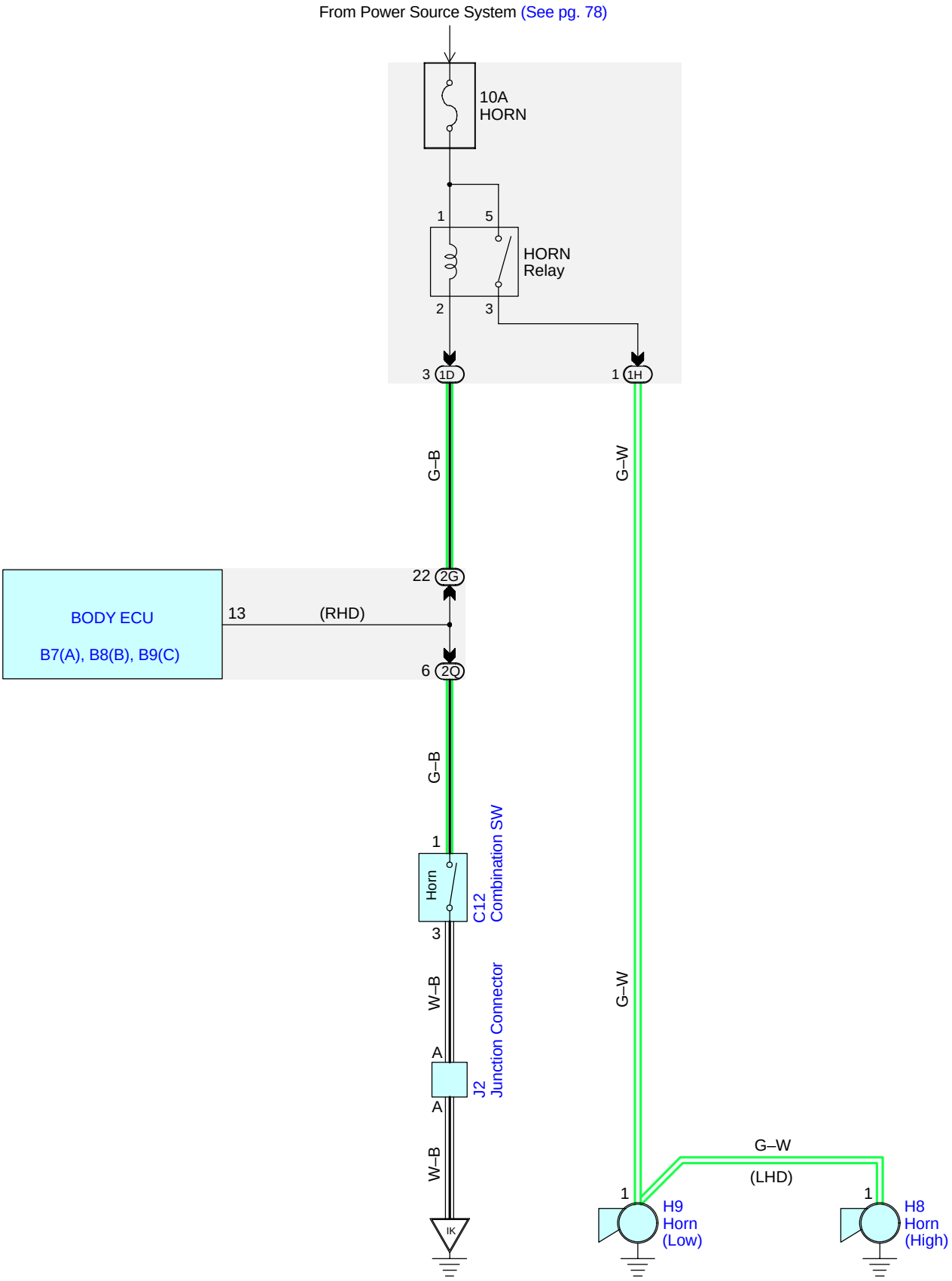
Code	See Page	Code	See Page	Code	See Page
C6	36 (LHD)	J2	37 (LHD)	P4	37 (LHD)
	46 (RHD)		47 (RHD)		47 (RHD)

⬭ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2R	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	
IM	67 (RHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 78)
10A
HORN
1
5
HORN
Relay
2
3
3
1D
1
1H
G–B
G–W
22
2G
BODY ECU
B7(A), B8(B), B9(C)
13
(RHD)
6
2Q
G–B
1
Horn
C12
Combination SW
3
W–B
A
J2
Junction Connector
A
W–B
IK
G–W
G–W
(LHD)
1
H9
Horn
(Low)
1
H8
Horn
(High)

Service Hints

HORN Relay

5–3 : Closed with the horn SW on

: Parts Location

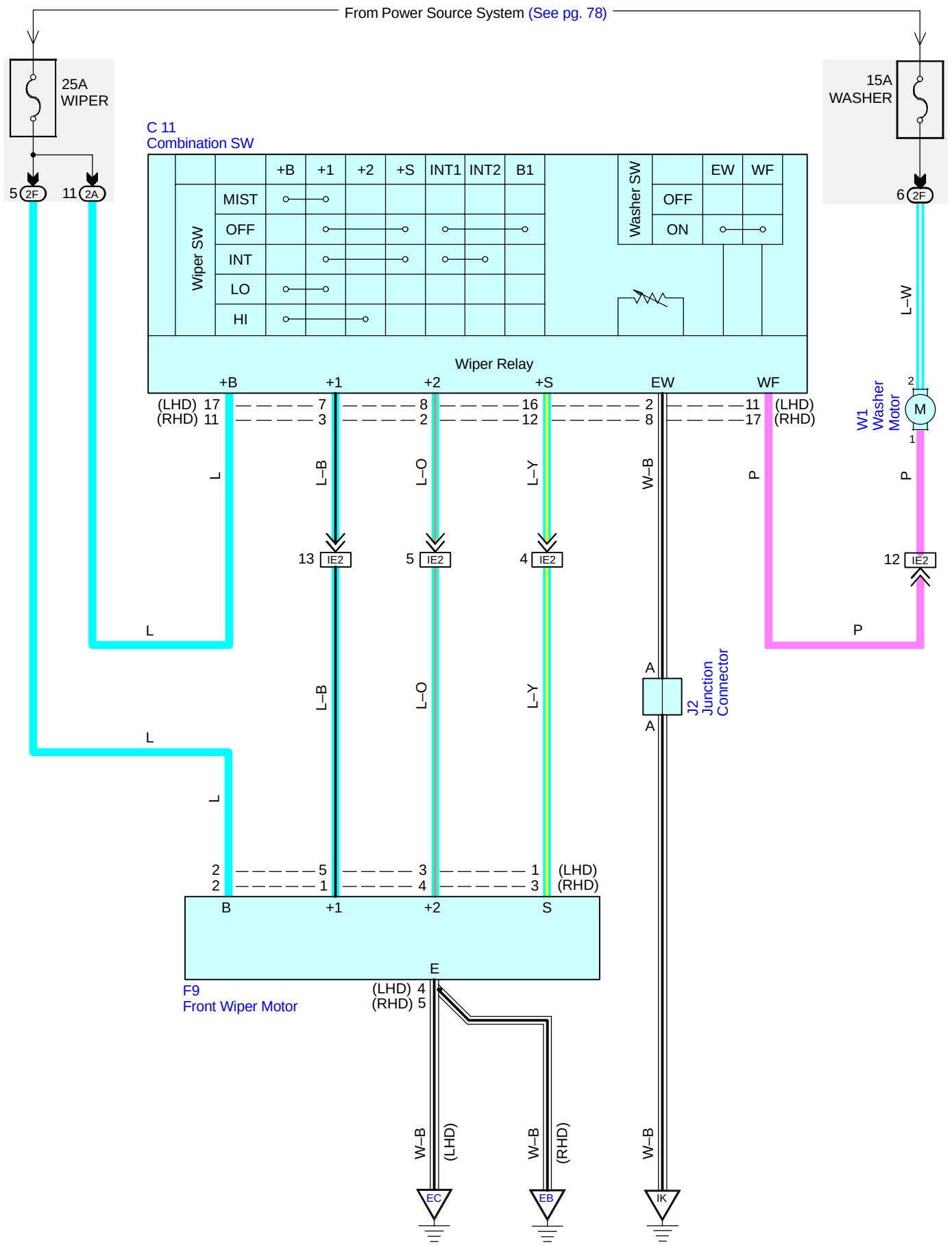
Code	See Page	Code	See Page	Code	See Page
C12	36 (LHD)	H9	32 (LHD 1MZ–FE)	J2	37 (LHD)
	46 (RHD)		42 (RHD 1MZ–FE)		47 (RHD)
H8	32 (LHD 1MZ–FE)		34 (LHD 2AZ–FE)		
	34 (LHD 2AZ–FE)		44 (RHD 2AZ–FE)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1H	24	Engine Room Main Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2Q	27	Instrument Panel Wire and Driver Side J/B

: GROUND POINTS

Code	See Page	Ground Points Location
IK	55 (LHD)	Instrument Panel Brace
	67 (RHD)	


From Power Source System (See pg. 78)
25A
WIPER
15A
WASHER
5 2F
11 2A
6 2F
C 11
Combination SW
Wiper SW
MIST
OFF
INT
LO
HI
+B
+1
+2
+S
INT1
INT2
B1
Washer SW
OFF
ON
EW
WF
Wiper Relay
+B
+1
+2
+S
EW
WF
(LHD) 17
(RHD) 11
7
3
8
2
16
12
2
8
11
17
(LHD)
(RHD)
L
L–B
L–O
L–Y
W–B
P
W1
Washer
Motor
M
L–W
13 IE2
5 IE2
4 IE2
12 IE2
L
P
A
A
J2
Junction
Connector
L
L
2
2
5
1
3
4
1
3
(LHD)
(RHD)
B
+1
+2
S
E
F9
Front Wiper Motor
(LHD) 4
(RHD) 5
W–B
(LHD)
W–B
(RHD)
W–B
EC
EB
IK

Service Hints

C11 Combination SW

2 (LHD), 8 (RHD)–Ground : Always continuity
17 (LHD), 11 (RHD)–Ground : Approx. 12 volts with the ignition SW at ON position
7 (LHD), 3 (RHD)–Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at LO position
Approx. 12 volts every approx. 1 to 10 seconds intermittently with the ignition SW on and the wiper and washer SW at INT position
16 (LHD), 12 (RHD)–Ground : Approx. 12 volts with the ignition SW on and unless the front wiper motor at STOP position
8 (LHD), 2 (RHD)–Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at HI position

F9 Front Wiper Motor

2–3 (LHD), 2–5 (RHD) : Closed unless the front wiper motor at STOP position

: Parts Location

Code	See Page	Code	See Page	Code	See Page
C11	36 (LHD)	F9	34 (LHD 2AZ–FE)	W1	33 (LHD 1MZ–FE)
	46 (RHD)		44 (RHD 2AZ–FE)		43 (RHD 1MZ–FE)
F9	32 (LHD 1MZ–FE)	J2	37 (LHD)		35 (LHD 2AZ–FE)
	42 (RHD 1MZ–FE)		47 (RHD)		45 (RHD 2AZ–FE)

: Junction Block and Wire Harness Connector

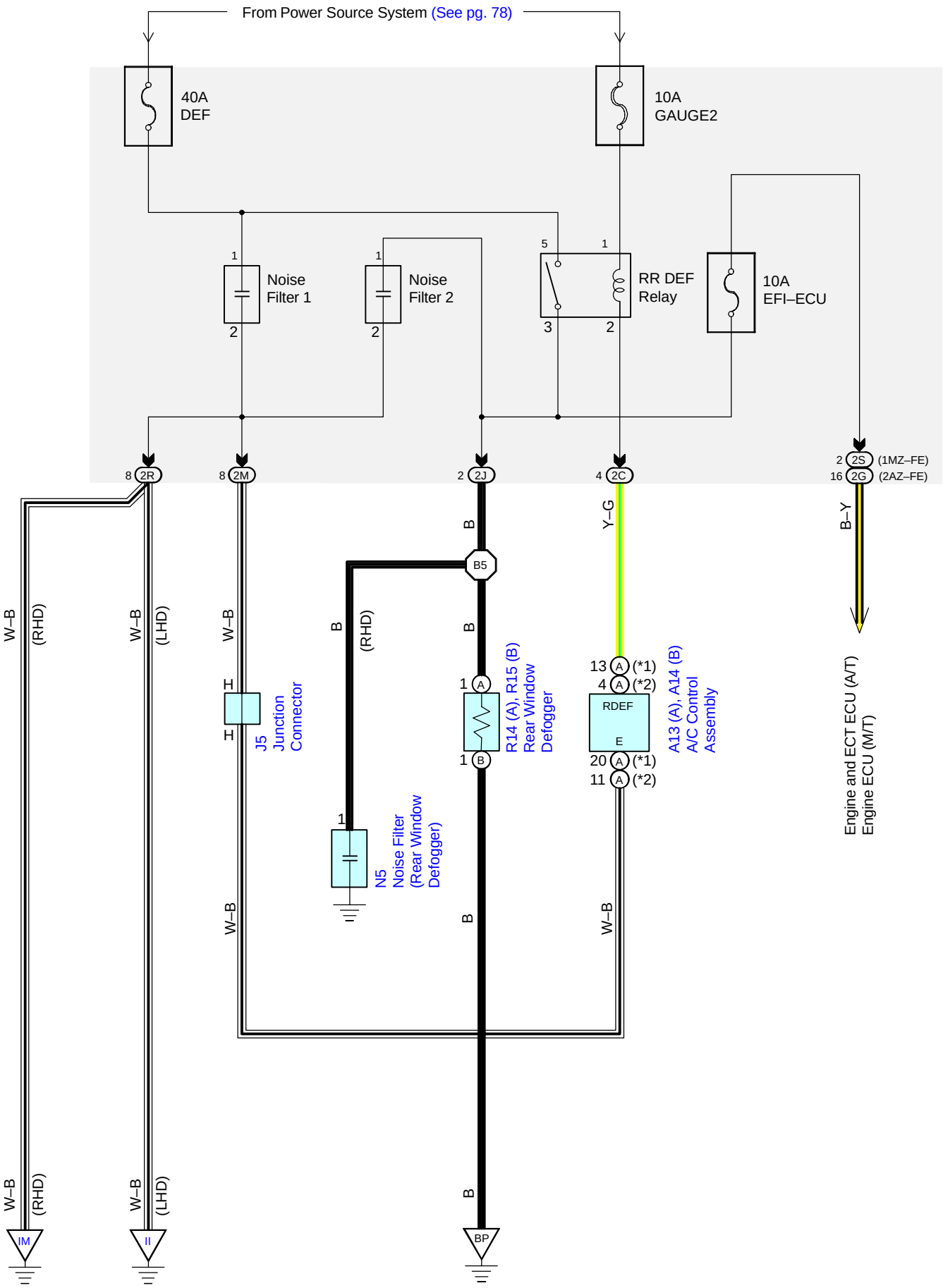
Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2F	26	

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)

: Ground Points

Code	See Page	Ground Points Location
EB	64 (RHD 1MZ–FE)	Right Fender
	66 (RHD 2AZ–FE)	
EC	52 (LHD 1MZ–FE)	Left Fender
	54 (LHD 2AZ–FE)	
IK	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	


From Power Source System (See pg. 78)
40A
DEF
10A
GAUGE2
Noise
Filter 1
Noise
Filter 2
RR DEF
Relay
10A
EFI–ECU
8 2R
8 2M
2 2J
4 2C
2 2S (1MZ–FE)
16 2G (2AZ–FE)
W–B (RHD)
W–B (LHD)
B
Y–G
B–Y
B5
J5
Junction
Connector
N5
Noise Filter
(Rear Window
Defogger)
R14 (A), R15 (B)
Rear Window
Defogger
RDEF
A13 (A), A14 (B)
A/C Control
Assembly
13 A (*1)
4 A (*2)
20 A (*1)
11 A (*2)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
IM
II
BP

Service Hints

DEF Relay

5–3 : Closed with the ignition SW at on and rear window defogger SW (A/C control assembly) on

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A13	36 (LHD)	J5	37 (LHD)	R14 A	49 (RHD)
	46 (RHD)		47 (RHD)	R15 B	39 (LHD)
A14	36 (LHD)	N5	49 (RHD)		49 (RHD)
	46 (RHD)	R14 A	39 (LHD)		

: Junction Block and Wire Harness Connector

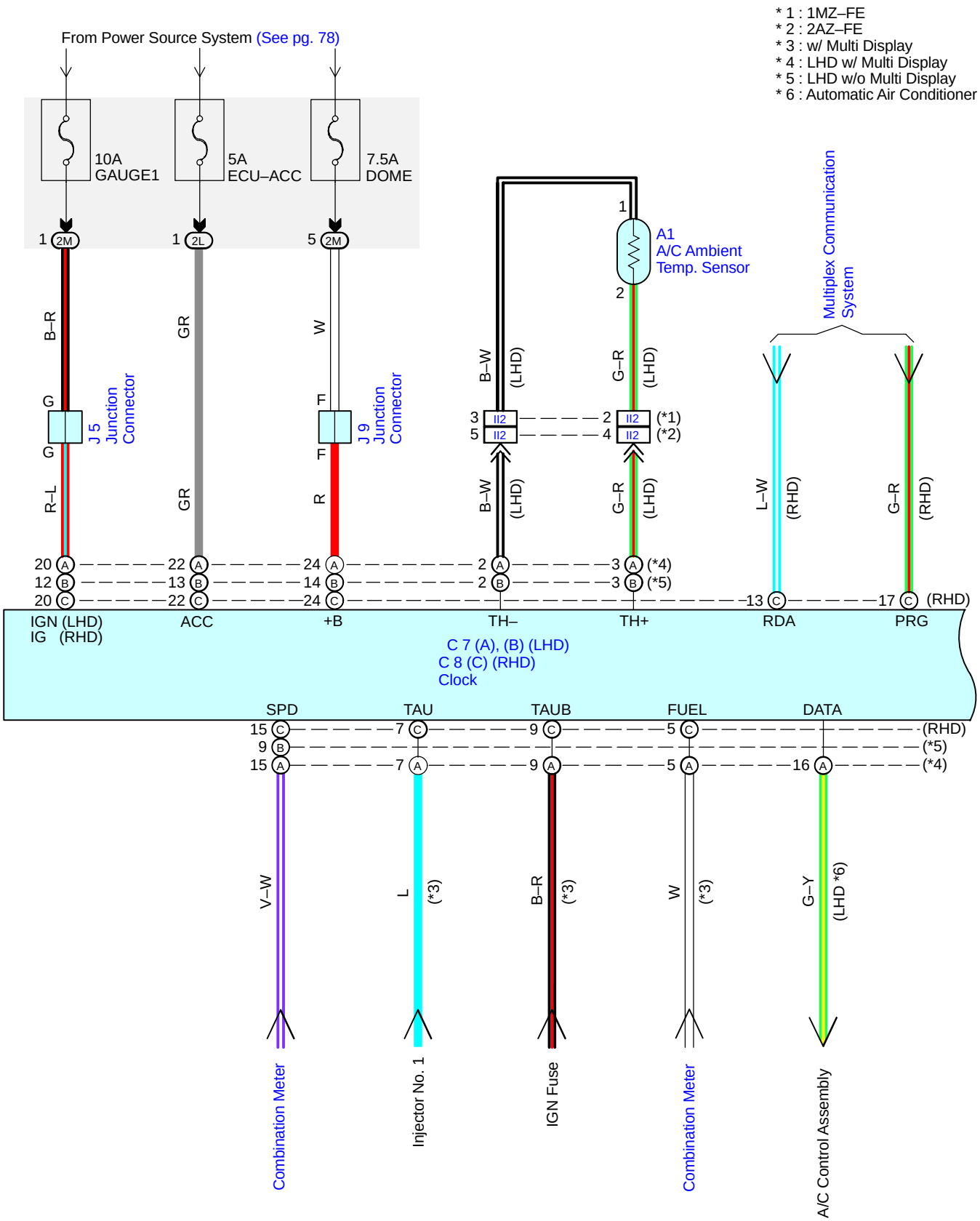
Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2G	26	Instrument Panel Wire and Engine Room Main
2J	26	Floor Wire and Driver Side J/B (Lower Finish Panel)
2M	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2R		
2S		

: Ground Points

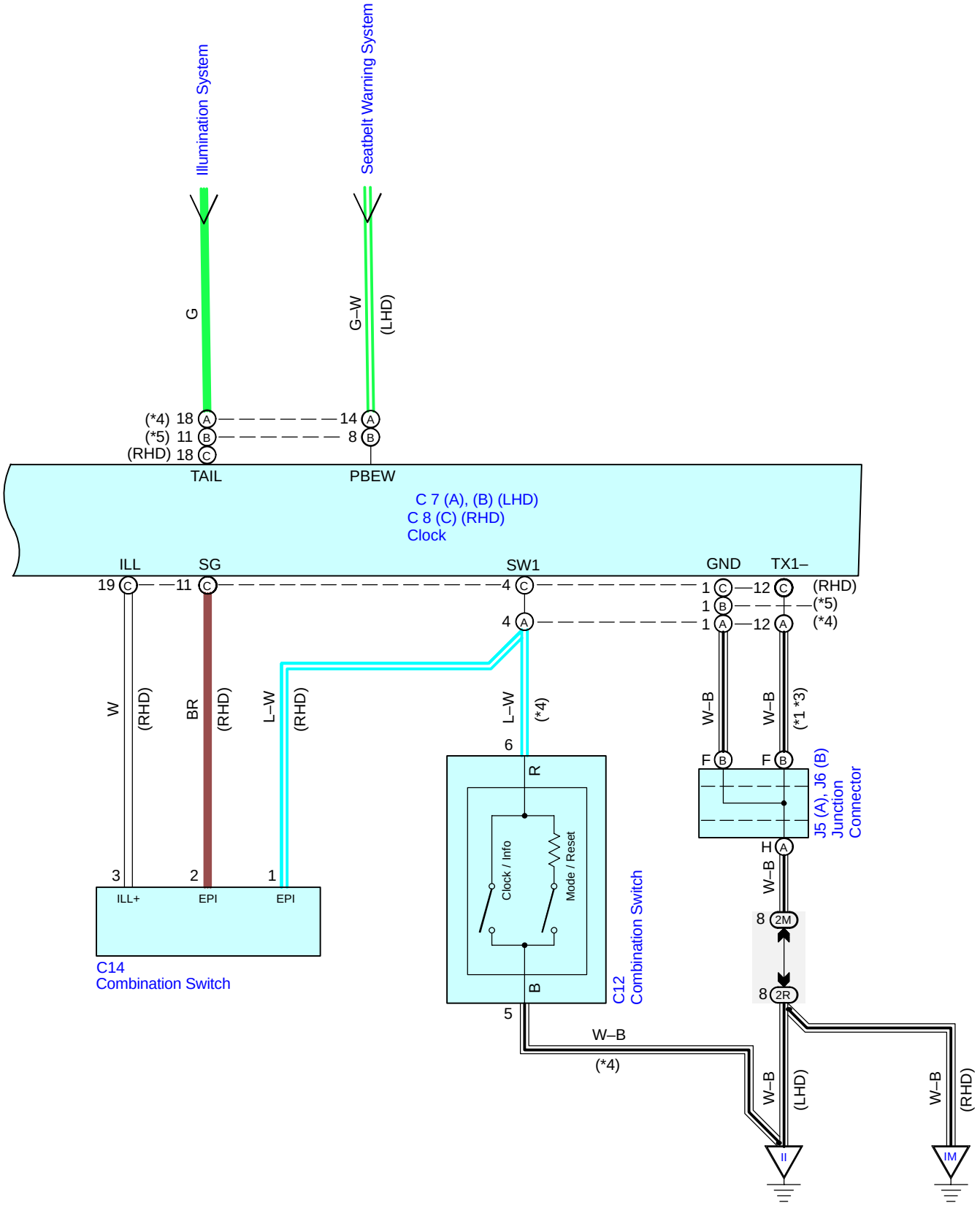
Code	See Page	Ground Points Location
II	55 (LHD)	Cowl Side Panel LH
IM	67 (RHD)	Instrument Panel Reinforcement RH
BP	60 (LHD)	“C” Pillar
	72 (RHD)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B5	60 (LHD	Floor wire			
	72 (RHD)				


* 1 : 1MZ–FE
* 2 : 2AZ–FE
* 3 : w/ Multi Display
* 4 : LHD w/ Multi Display
* 5 : LHD w/o Multi Display
* 6 : Automatic Air Conditioner
From Power Source System (See pg. 78)
10A GAUGE1
5A ECU–ACC
7.5A DOME
A1 A/C Ambient Temp. Sensor
Multiplex Communication System
J 5 Junction Connector
J 9 Junction Connector
IGN (LHD) IG (RHD)
ACC
+B
TH–
TH+
RDA
PRG
C 7 (A), (B) (LHD)
C 8 (C) (RHD)
Clock
SPD
TAU
TAUB
FUEL
DATA
Combination Meter
Injector No. 1
IGN Fuse
Combination Meter
A/C Control Assembly

* 1 : 1MZ–FE
* 3 : w/ Multi Display
* 4 : LHD w/ Multi Display
* 5 : LHD w/o Multi Display



Clock

Service Hints

C7(A), C7(B), C8(C) Clock

20(A), (C), 12(B)–Ground: Approx. 12 volts with ignition SW at ON or ST position
22(A), (C), 13(B)–Ground: Approx. 12 volts with ignition SW at ACC or ON position
24(A), (C), 14(B)–Ground: Always approx. 12 volts
1–Ground : Always continuity

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A1		32 (LHD 1MZ–FE)	C8	C	46 (RHD)	J6	B	37 (LHD)
		42 (RHD 1MZ–FE)	C12		36 (LHD)			47 (RHD)
		34 (LHD 2AZ–FE)			46 (RHD)	J9		37 (LHD)
		44 (RHD 2AZ–FE)	C14		46 (RHD)			47 (RHD)
C7	A	36 (LHD)	J5	A	37 (LHD)			
C7	B	36 (LHD)			47 (RHD)			

: Junction Block and Wire Harness Connector

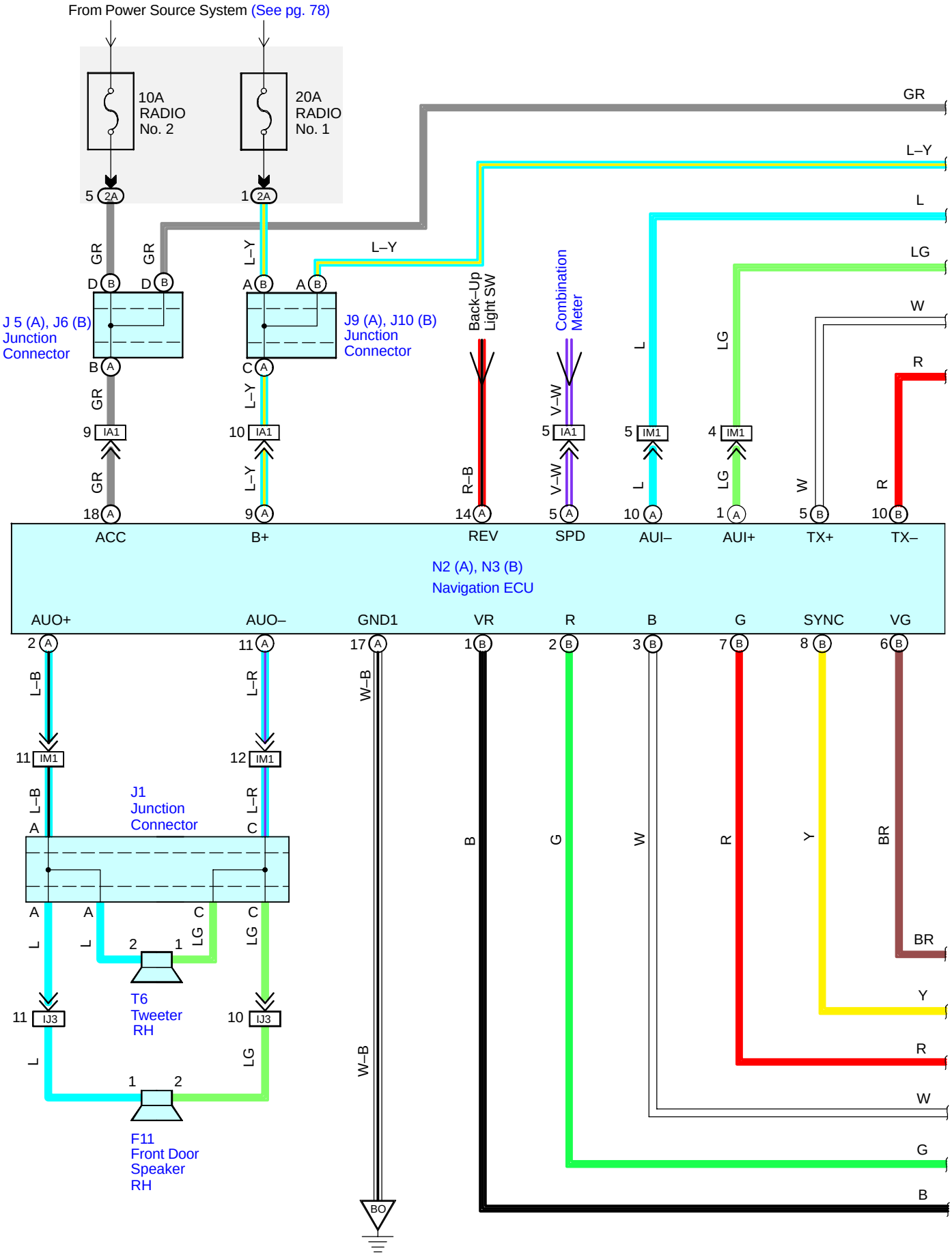
Code	See Page	Junction Block and Wire Harness (Connector Location)
2L	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2M		
2R		

: Connector Joining Wire Harness and Wire Harness

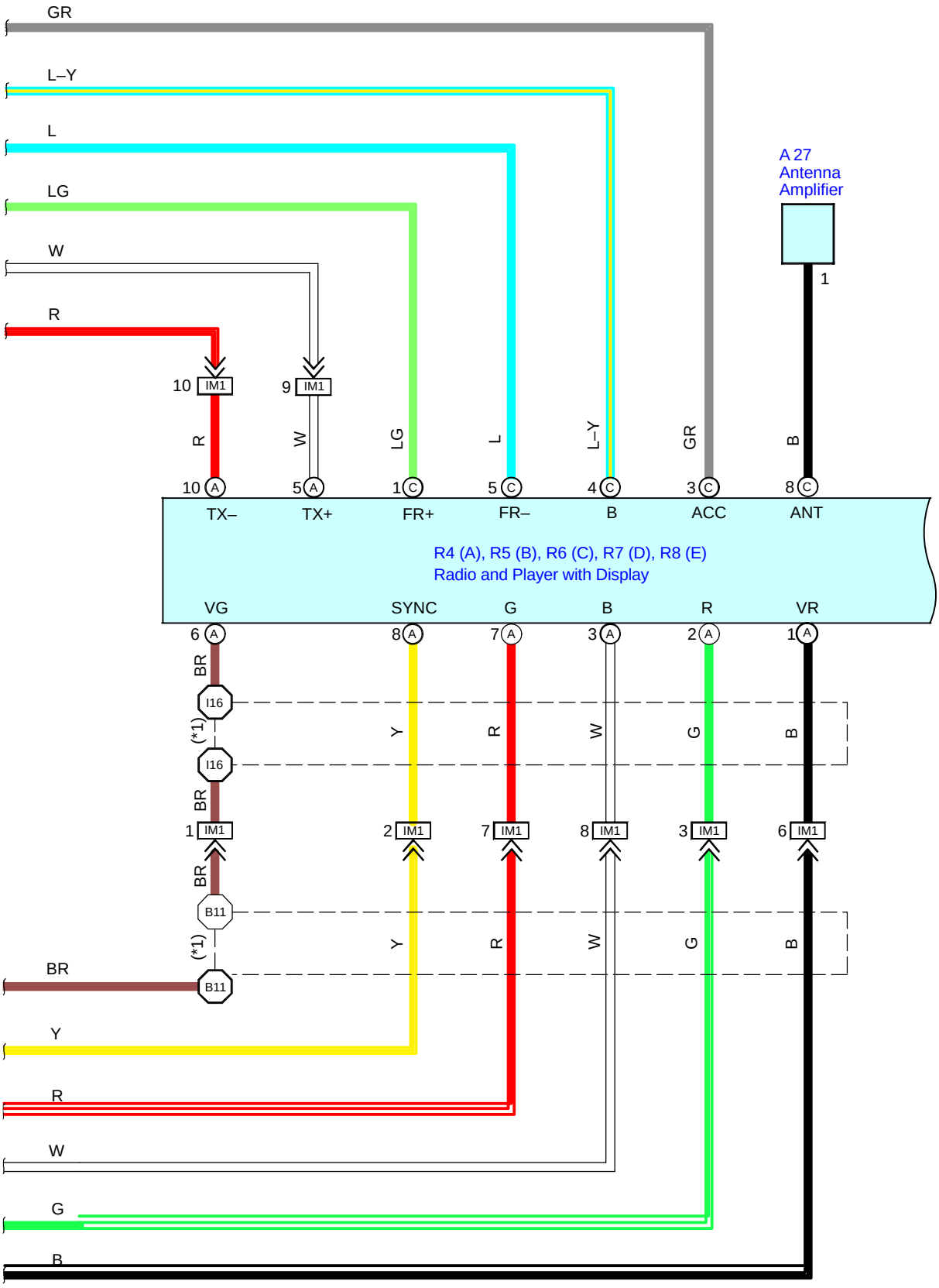
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

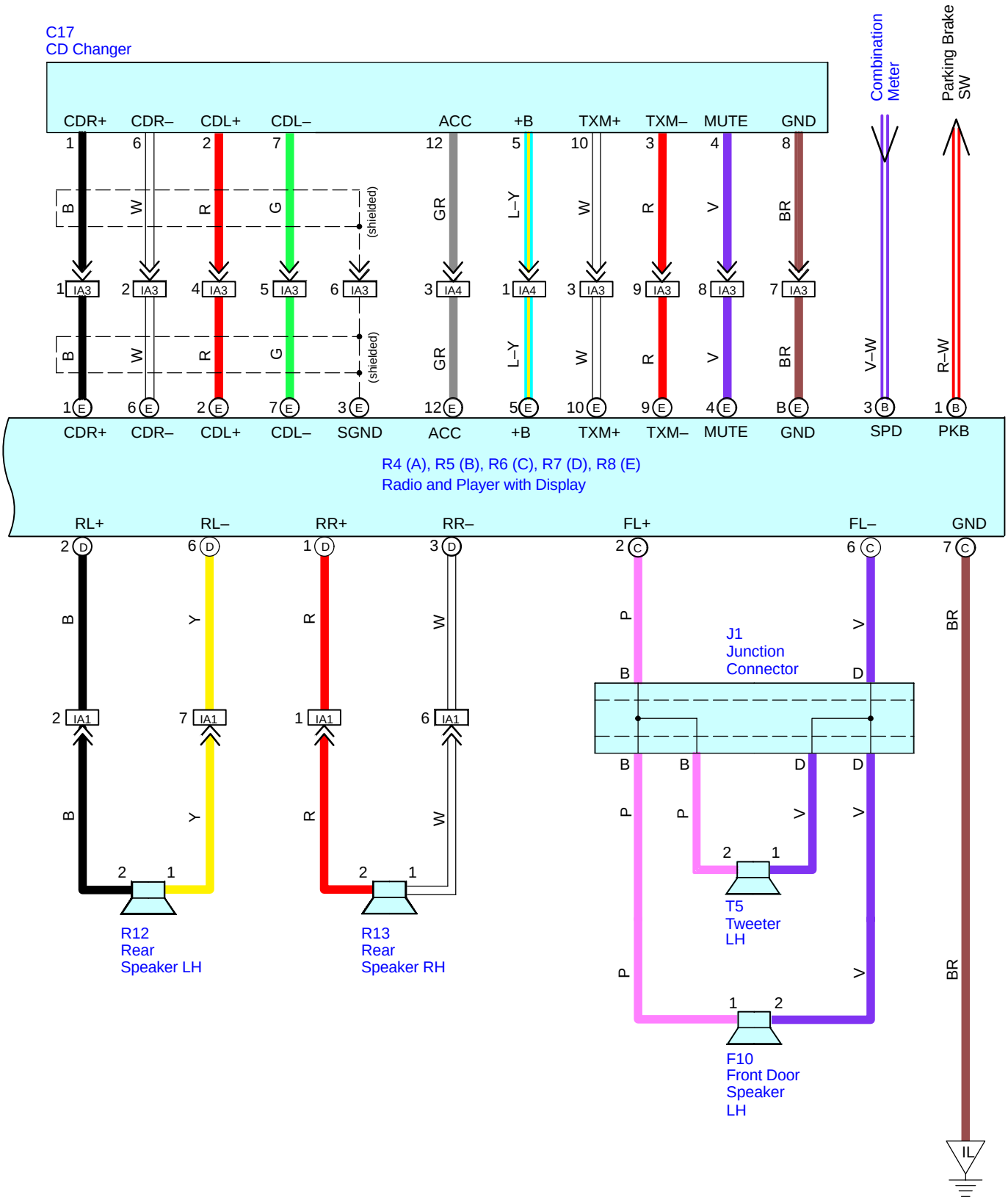
: Ground Points

Code	See Page	Ground Points Location
II	55 (LHD)	Instrument Panel Brace LH
IM	67 (RHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 78)
10A RADIO No. 2
20A RADIO No. 1
5 2A
1 2A
GR
L–Y
L
LG
W
R
J 5 (A), J6 (B) Junction Connector
J9 (A), J10 (B) Junction Connector
Back–Up Light SW
Combination Meter
9 IA1
10 IA1
5 IA1
5 IM1
4 IM1
18 A
9 A
14 A
5 A
10 A
1 A
5 B
10 B
ACC
B+
REV
SPD
AUI–
AUI+
TX+
TX–
N2 (A), N3 (B) Navigation ECU
AUO+
AUO–
GND1
VR
R
B
G
SYNC
VG
2 A
11 A
17 A
1 B
2 B
3 B
7 B
8 B
6 B
L–B
L–R
W–B
B
G
W
R
Y
BR
11 IM1
12 IM1
J1 Junction Connector
11 IJ3
10 IJ3
T6 Tweeter RH
F11 Front Door Speaker RH
BO

*1 : Shielding


GR
L–Y
L
LG
W
R
A 27
Antenna
Amplifier
1
10 IM1
9 IM1
R
W
LG
L
L–Y
GR
B
10 A
5 A
1 C
5 C
4 C
3 C
8 C
TX–
TX+
FR+
FR–
B
ACC
ANT
R4 (A), R5 (B), R6 (C), R7 (D), R8 (E)
Radio and Player with Display
VG
SYNC
G
B
R
VR
6 A
8 A
7 A
3 A
2 A
1 A
BR
I16
(*1)
I16
BR
Y
R
W
G
B
1 IM1
2 IM1
7 IM1
8 IM1
3 IM1
6 IM1
BR
B11
(*1)
B11
Y
R
W
G
B
BR
Y
R
W
G
B


C17
CD Changer
CDR+
CDR–
CDL+
CDL–
ACC
+B
TXM+
TXM–
MUTE
GND
Combination Meter
Parking Brake SW
(shielded)
SGND
SPD
PKB
R4 (A), R5 (B), R6 (C), R7 (D), R8 (E)
Radio and Player with Display
RL+
RL–
RR+
RR–
FL+
FL–
J1
Junction
Connector
R12
Rear
Speaker LH
R13
Rear
Speaker RH
T5
Tweeter
LH
F10
Front Door
Speaker
LH
IL

System Outline

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

Service Hints

N2 (A) Navigation ECU

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A27	46 (RHD)	J9 A	47 (RHD)	R7 D	47 (RHD)
C17	48 (RHD)	J10 B	47 (RHD)	R8 E	47 (RHD)
F10	48 (RHD)	N2 A	49 (RHD)	R12	49 (RHD)
F11	48 (RHD)	N3 B	49 (RHD)	R13	49 (RHD)
J1	47 (RHD)	R4 A	47 (RHD)	T5	47 (RHD)
J5 A	47 (RHD)	R5 B	47 (RHD)	T6	47 (RHD)
J6 B	47 (RHD)	R6 C	47 (RHD)		

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

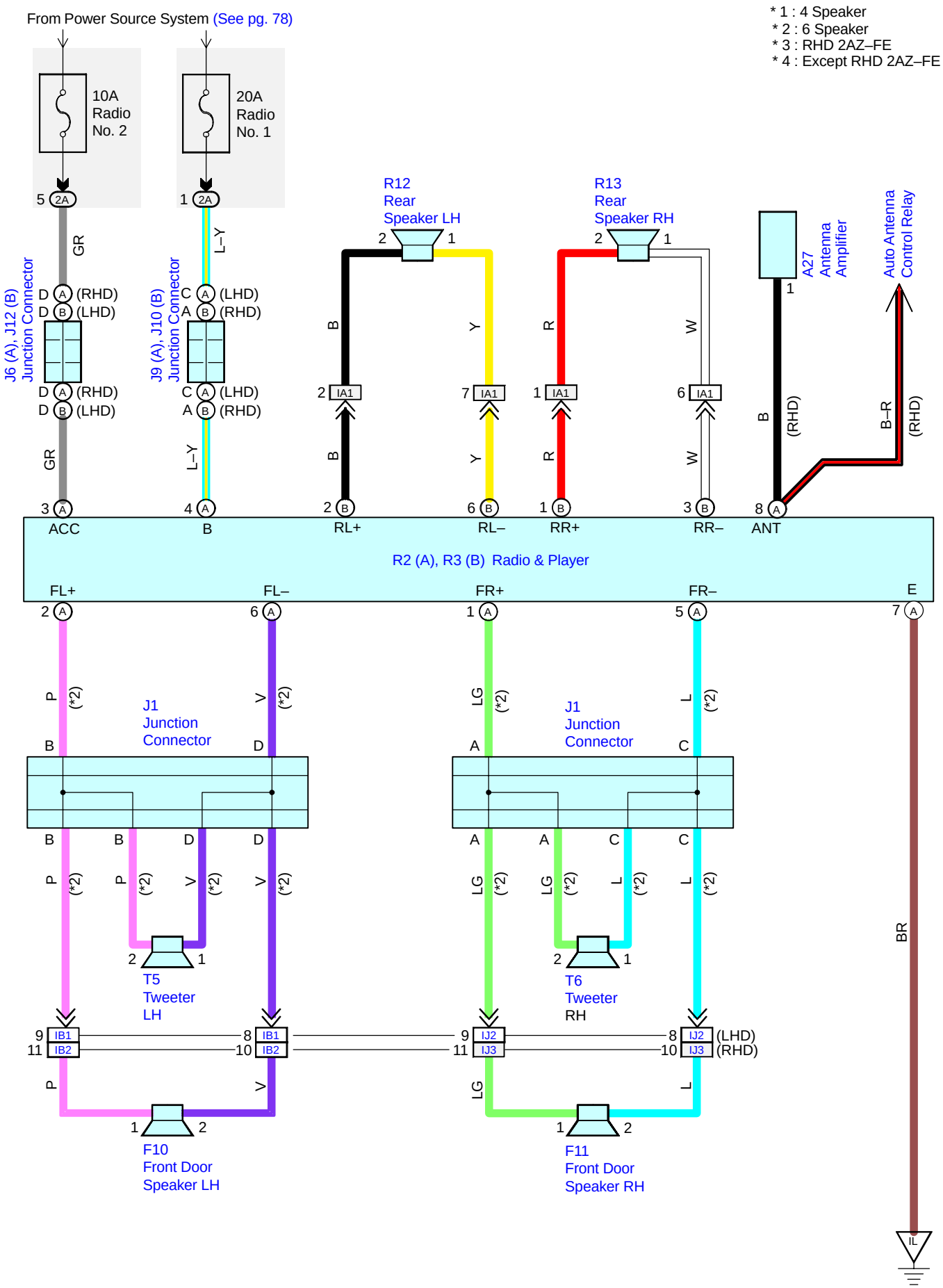
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA3	67 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA4	67 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	67 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IM1	67 (RHD)	Instrument Panel Wire and Floor Wire (Instrument Panel Brace LH)

: Ground Points

Code	See Page	Ground Points Location
IL	67 (RHD)	Instrument Panel Brace RH
BO	72 (RHD)	Front Side of Rear Quarter Wheel House LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	72 (RHD)	Floor No.4 Wire	I16	70 (RHD)	Instrument Panel Brace


* 1 : 4 Speaker
* 2 : 6 Speaker
* 3 : RHD 2AZ–FE
* 4 : Except RHD 2AZ–FE
From Power Source System (See pg. 78)
10A Radio No. 2
20A Radio No. 1
5 2A
1 2A
GR
L–Y
J6 (A), J12 (B) Junction Connector
J9 (A), J10 (B) Junction Connector
D A (RHD)
D B (LHD)
C A (LHD)
A B (RHD)
R12 Rear Speaker LH
R13 Rear Speaker RH
A27 Antenna Amplifier
Auto Antenna Control Relay
IA1
B
Y
R
W
B (RHD)
B–R (RHD)
ACC
B
RL+
RL–
RR+
RR–
ANT
R2 (A), R3 (B) Radio & Player
FL+
FL–
FR+
FR–
E
P
V
LG
L
(*2)
J1 Junction Connector
T5 Tweeter LH
T6 Tweeter RH
IB1
IB2
IJ2
IJ3
(LHD)
(RHD)
F10 Front Door Speaker LH
F11 Front Door Speaker RH
BR
IL

Service Hints

R2 Radio and Player

3–Ground : Approx. 12 volts with ignition SW at ACC or ON position
4–Ground : Always approx. 12 volts
7–Ground : Always continuity

: Parts Location

Code		See Page	Code		See Page	Code	See Page
A27		46 (RHD)	J9	A	37 (LHD)	R12	49 (RHD)
F10		38 (LHD)			47 (RHD)	R13	39 (LHD)
		48 (RHD)	J10	B	37 (LHD)		49 (RHD)
F11		38 (LHD)			47 (RHD)	T5	37 (LHD)
		48 (RHD)	J12	B	37 (LHD)		47 (RHD)
J1		37 (LHD)			47 (RHD)	T6	37 (LHD)
		47 (RHD)	R2		37 (LHD)		47 (RHD)
J6	A	37 (LHD)	R3		47 (RHD)		
		47 (RHD)	R12		39 (LHD)		

: Junction Block and Wire Harness Connector

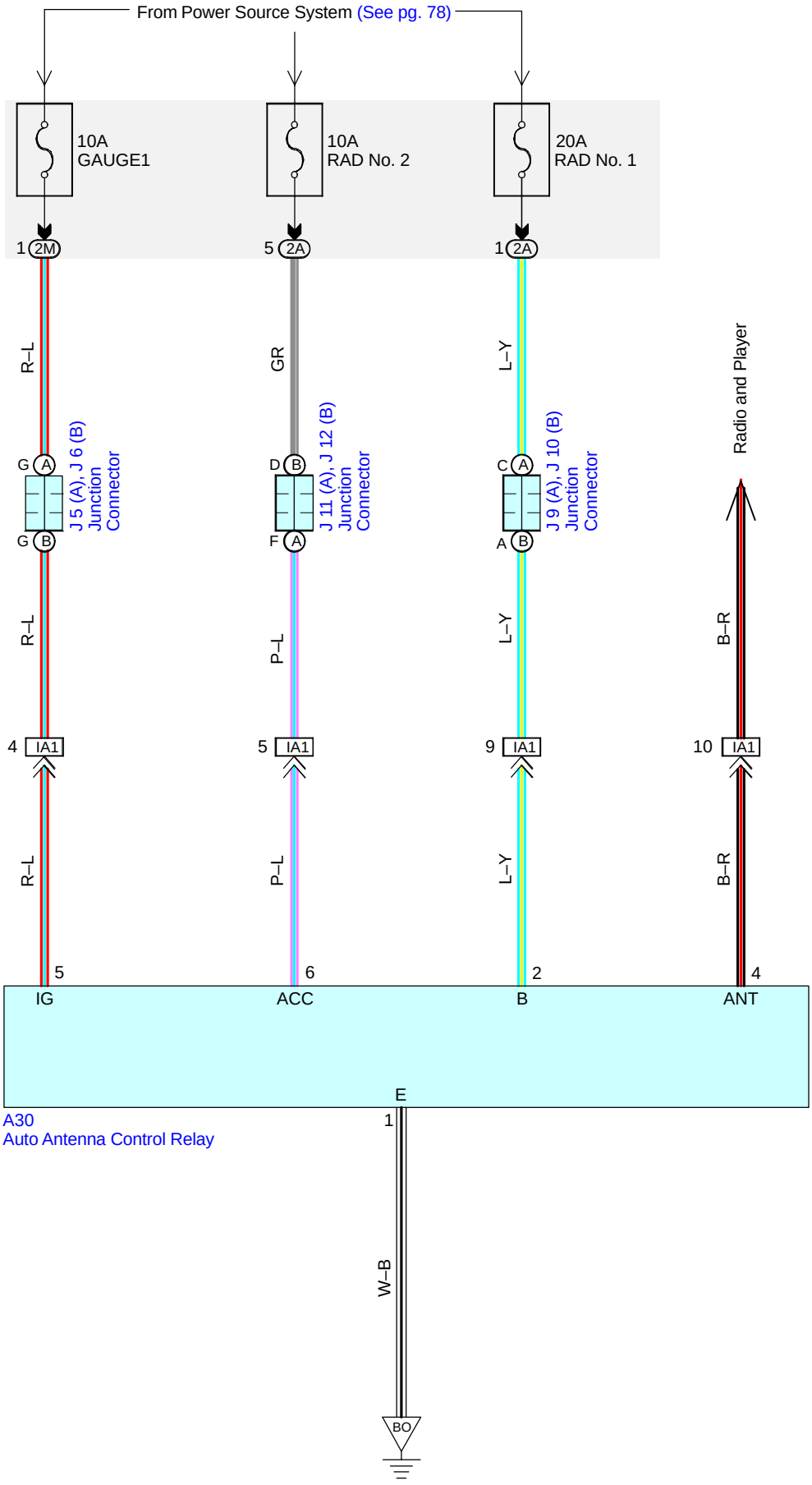
Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	55 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
	67 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IB1	55 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	67 (RHD)	Instrument Panel Wire
IJ2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	70 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IL	55 (LHD)	Instrument Panel Brace RH
	67 (RHD)	


From Power Source System (See pg. 78)
10A
GAUGE1
10A
RAD No. 2
20A
RAD No. 1
1 2M
5 2A
1 2A
R–L
GR
L–Y
G A
G B
J 5 (A), J 6 (B)
Junction
Connector
D B
F A
J 11 (A), J 12 (B)
Junction
Connector
C A
A B
J 9 (A), J 10 (B)
Junction
Connector
Radio and Player
B–R
R–L
P–L
L–Y
4 IA1
5 IA1
9 IA1
10 IA1
R–L
P–L
L–Y
B–R
5
6
2
4
IG
ACC
B
ANT
E
1
A30
Auto Antenna Control Relay
W–B
BO

Service Hints

A30 Auto Antenna Control Relay

5–Ground : Approx. 12 volts with the ignition SW at ON or ST position
6–Ground : Approx. 12 volts with the ignition SW at ACC or ON position
2–Ground : Always approx. 12 volts
1–Ground : Always continuity

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A30		38 (LHD)	J9	A	37 (LHD)	J12	B	37 (LHD)
J5	A	37 (LHD)	J10	B	37 (LHD)			
J6	B	37 (LHD)	J11	A	37 (LHD)			

: Junction Block and Wire Harness Connector

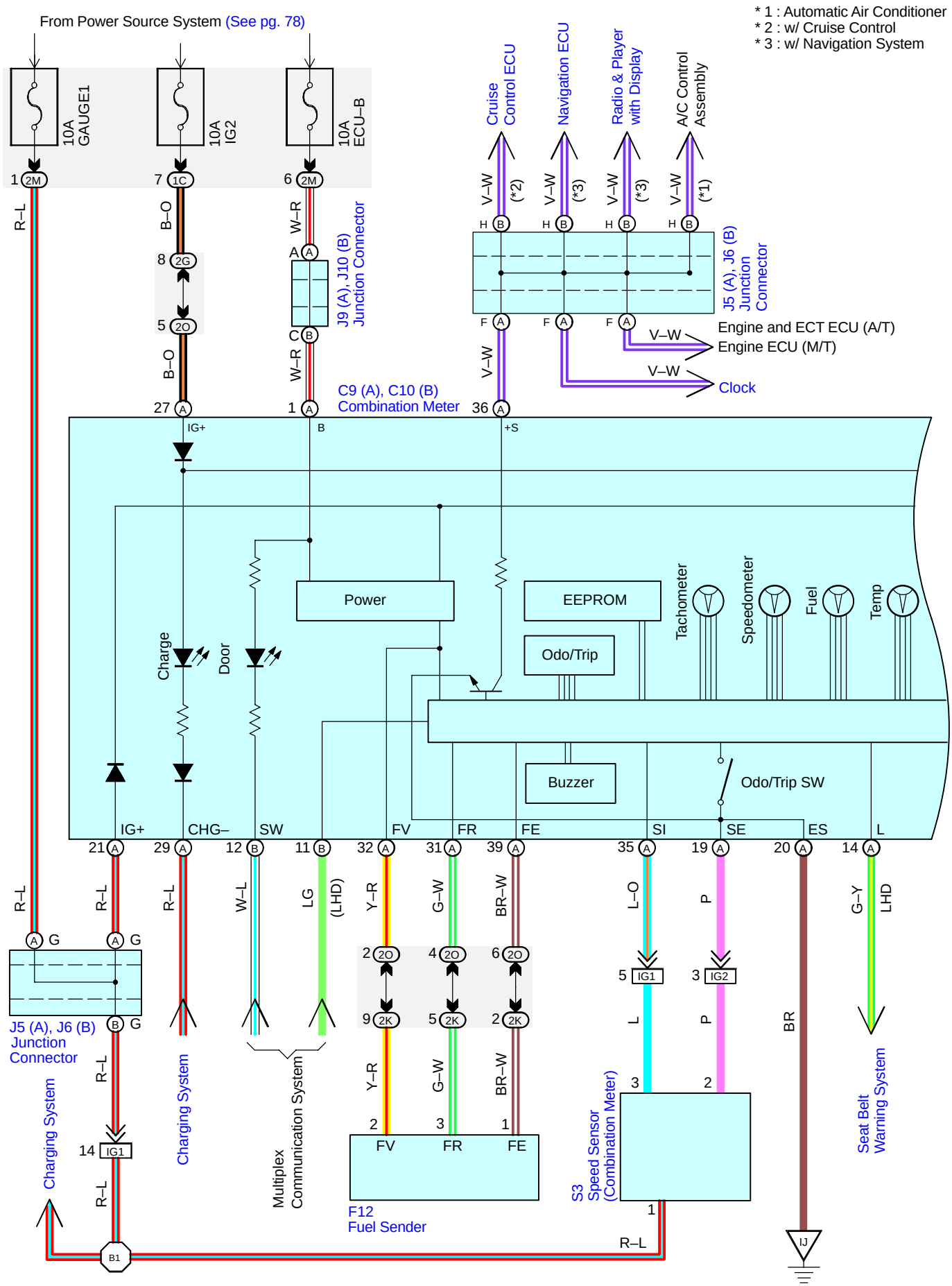
Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B
2M	27	

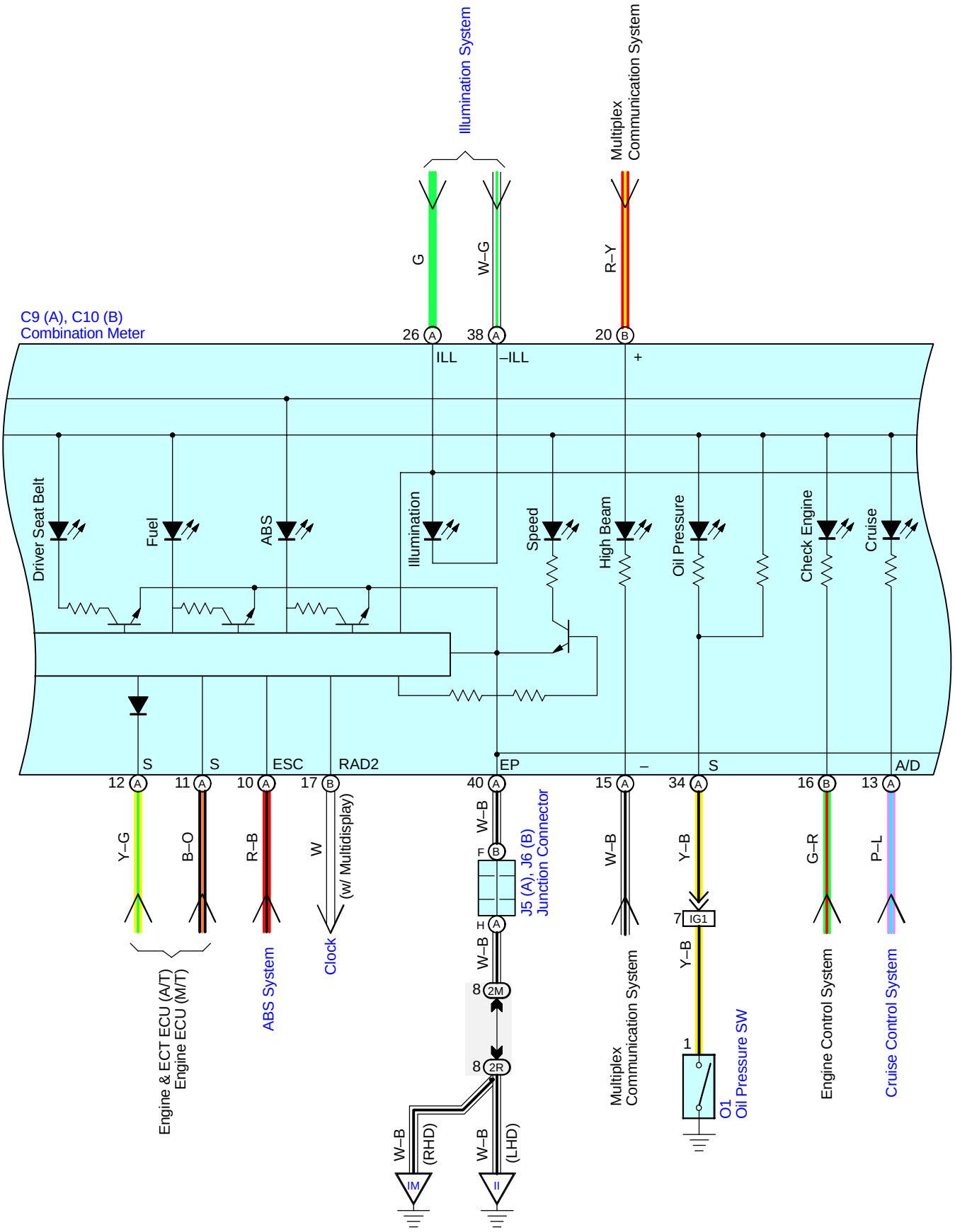
: Connector Joining Wire Harness and Wire Harness

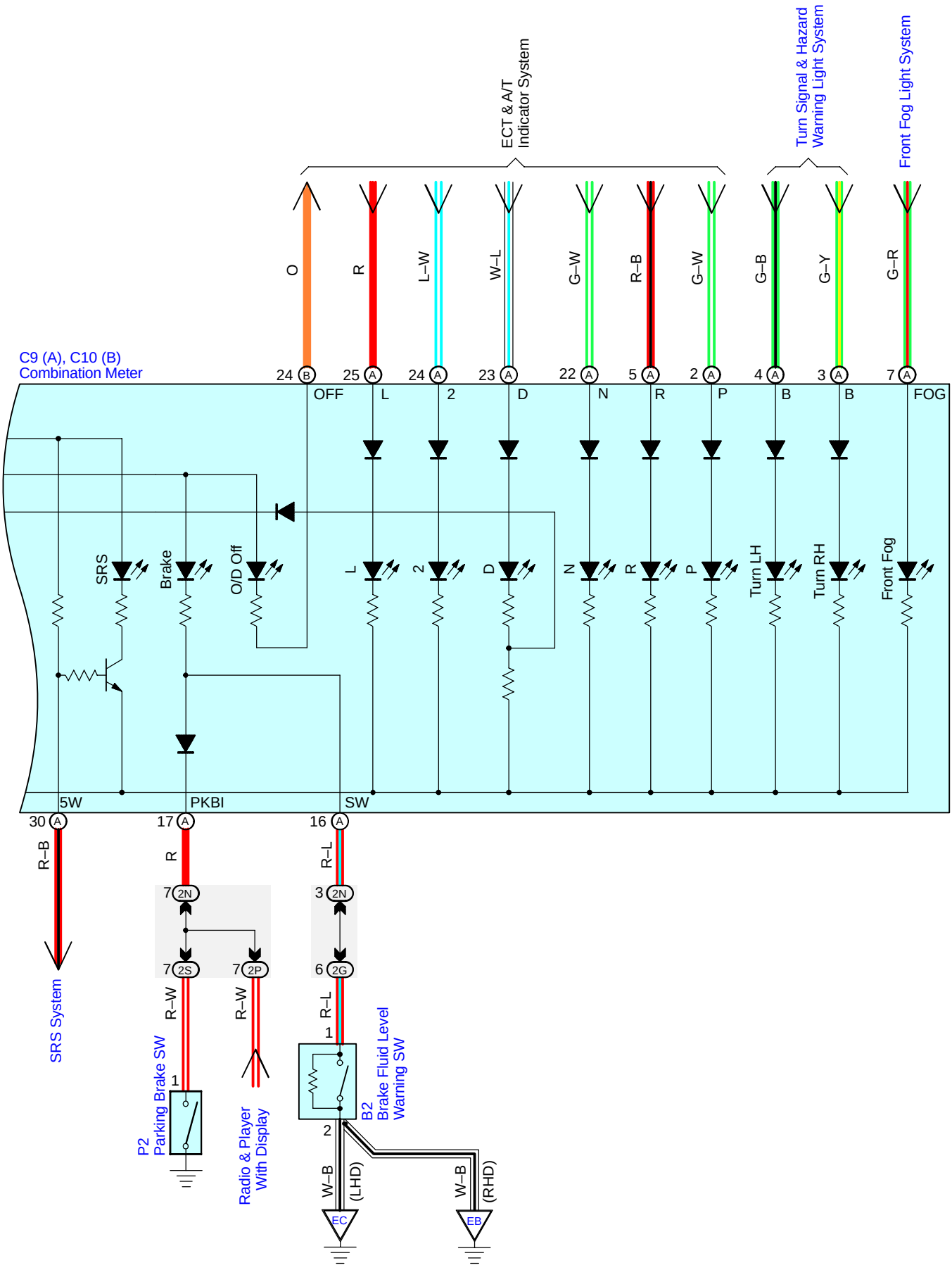
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	55 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
BO	60 (LHD)	Front Side of Rear Quarter Wheel House LH


* 1 : Automatic Air Conditioner
* 2 : w/ Cruise Control
* 3 : w/ Navigation System
From Power Source System (See pg. 78)
10A GAUGE1
10A IG2
10A ECU–B
Cruise Control ECU
Navigation ECU
Radio & Player with Display
A/C Control Assembly
J9 (A), J10 (B) Junction Connector
J5 (A), J6 (B) Junction Connector
C9 (A), C10 (B) Combination Meter
Engine and ECT ECU (A/T)
Engine ECU (M/T)
Clock
IG+
B
+S
Power
EEPROM
Odo/Trip
Tachometer
Speedometer
Fuel
Temp
Charge
Door
Buzzer
Odo/Trip SW
CHG–
SW
FV
FR
FE
SI
SE
ES
L
Charging System
Multiplex Communication System
F12 Fuel Sender
S3 Speed Sensor (Combination Meter)
Seat Belt Warning System
IG1
IG2
B1
IJ


Illumination System
Multiplex Communication System
G
W–G
R–Y
C9 (A), C10 (B)
Combination Meter
26 A
38 A
20 B
ILL
–ILL
+
Driver Seat Belt
Fuel
ABS
Illumination
Speed
High Beam
Oil Pressure
Check Engine
Cruise
S
S
ESC
RAD2
EP
–
S
A/D
12 A
11 A
10 A
17 B
40 A
15 A
34 A
16 B
13 A
Y–G
B–O
R–B
W
(w/ Multidisplay)
W–B
F B
H A
J5 (A), J6 (B)
Junction Connector
W–B
W–B
Y–B
7 IG1
Y–B
G–R
P–L
8 2M
8 2R
1
O1
Oil Pressure SW
Engine & ECT ECU (A/T)
Engine ECU (M/T)
ABS System
Clock
Multiplex Communication System
Engine Control System
Cruise Control System
W–B
(RHD)
W–B
(LHD)
IM
II


ECT & A/T Indicator System
Turn Signal & Hazard Warning Light System
Front Fog Light System
C9 (A), C10 (B)
Combination Meter
24 (B) O
25 (A) R
24 (A) L–W
23 (A) W–L
22 (A) G–W
5 (A) R–B
2 (A) G–W
4 (A) G–B
3 (A) G–Y
7 (A) G–R
OFF
L
2
D
N
R
P
B
B
FOG
SRS
Brake
O/D Off
Turn LH
Turn RH
Front Fog
5W
PKBI
SW
30 (A) R–B
17 (A) R
16 (A) R–L
7 (2N)
3 (2N)
7 (2S)
7 (2P)
6 (2G)
R–W
R–W
R–L
SRS System
P2 Parking Brake SW
Radio & Player With Display
B2 Brake Fluid Level Warning SW
W–B (LHD)
W–B (RHD)
EC
EB

Service Hints

B2 Brake Fluid Level Warning SW

1–2 : Closed with the float down

C9 (A) Combination Meter

(A) 21, (A) 27–Ground : Approx. 12 volts with ignition SW at ON or ST position

(A) 1–Ground : Always approx. 12 volts

(A) 15, (A) 40–Ground : Always continuity

O1 Oil Pressure SW

1–Ground : Continuity with the oil pressure above approx. 20 kpa (2.8 psi, 0.2 kgf/cm^2)

P2 Parking Brake SW

1–Ground : Continuity with the parking brake lever pulled up (Lever type)

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B2		32 (LHD 1MZ–FE)	J9	A	37 (LHD)	P2		33 (LHD 1MZ–FE)
		42 (RHD 1MZ–FE)			47 (RHD)			43 (RHD 1MZ–FE)
		34 (RHD 2AZ–FE)	J10	B	37 (LHD)			35 (LHD 2AZ–FE)
		44 (RHD 2AZ–FE)			47 (RHD)			45 (RHD 2AZ–FE)
C9	A	36 (LHD)	F12		38 (LHD)	S3		33 (LHD 1MZ–FE)
		46 (RHD)			48 (RHD)			43 (RHD 1MZ–FE)
C10	B	36 (LHD)	O1		33 (LHD 1MZ–FE)			35 (LHD 2AZ–FE)
		46 (RHD)			43 RHD 1MZ–FE)			45 (RHD 2AZ–FE)
J5	A	37 (LHD)			35 (LHD 2AZ–FE)			
		47 (RHD)			45 (RHD 2AZ–FE)			
J6	B	37 (LHD)						
		47 (RHD)						

⬭ : Junction Block and Wire Harness Connector

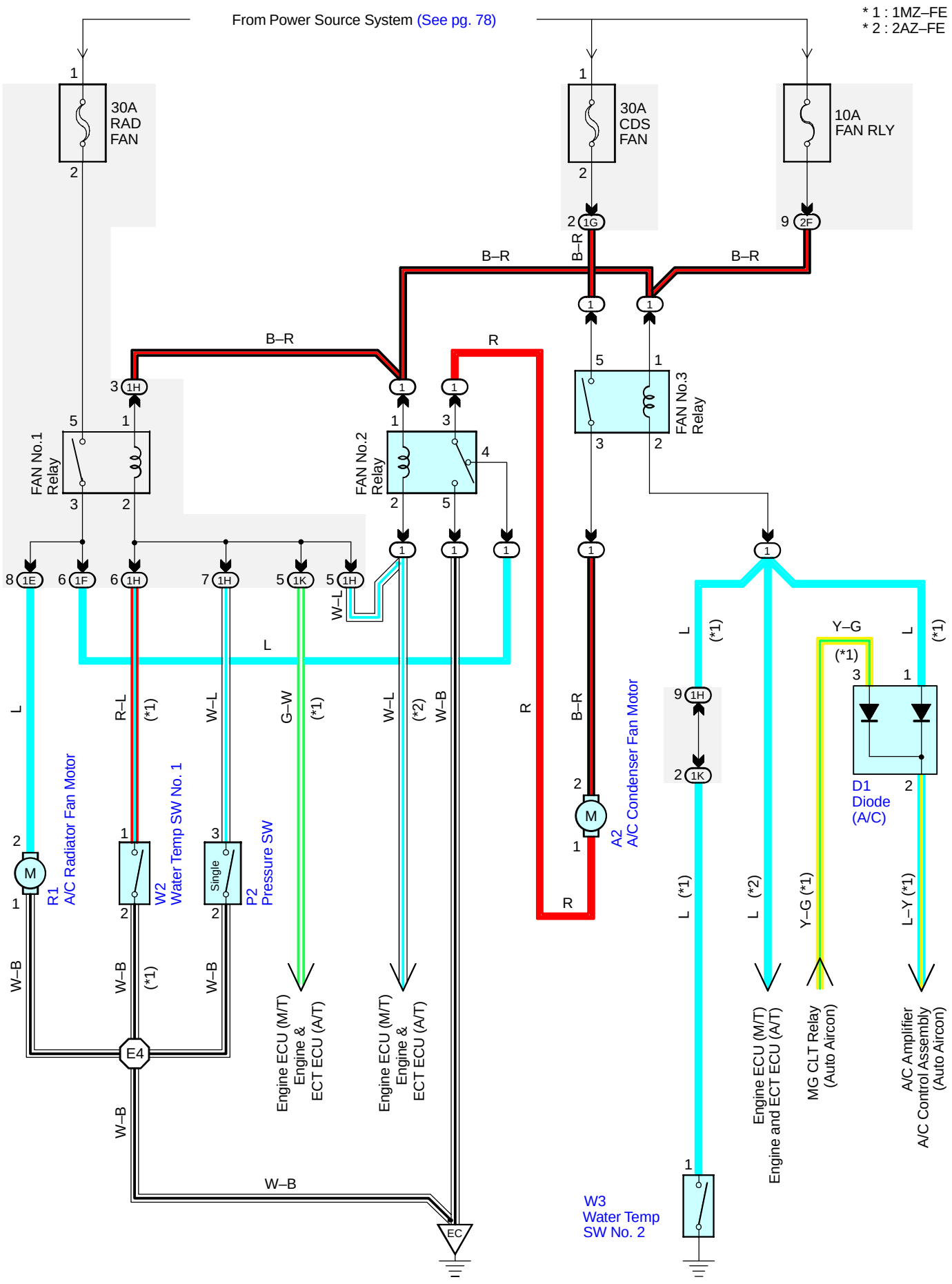
Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2K	26	Floor Wire and Driver Side J/B
2M	27	Instrument Panel Wire and Driver Side J/B
2N		
2O		
2R		
2P		
2S		

▭ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	70 (RHD)	
IG2	58 (LHD)	
	70 (RHD)	

▽ : **Ground Points**

Code	See Page	Ground Points Location
EB	64 (RHD–1MZ–FE) 66 (RHD–2AZ–FE)	Right Front Fender
EC	52 (LHD–1MZ–FE) 54 (LHD–2AZ–FE)	Left Front Fender
II	55 (LHD)	Instrument Panel Reinforcement LH
IJ	55 (LHD) 67 (RHD)	Instrument Panel Brace
IM	67 (RHD)	Instrument Panel Reinforcement RH


* 1 : 1MZ–FE
* 2 : 2AZ–FE
From Power Source System (See pg. 78)
30A RAD FAN
30A CDS FAN
10A FAN RLY
FAN No.1 Relay
FAN No.2 Relay
FAN No.3 Relay
B–R
R
L
R–L
W–L
G–W
Y–G
L–Y
W–B
(*1)
(*2)
R1 A/C Radiator Fan Motor
W2 Water Temp SW No. 1
P2 Pressure SW
A2 A/C Condenser Fan Motor
D1 Diode (A/C)
W3 Water Temp SW No. 2
Single
E4
EC
Engine ECU (M/T) Engine & ECT ECU (A/T)
Engine and ECT ECU (A/T)
MG CLT Relay (Auto Aircon)
A/C Amplifier A/C Control Assembly (Auto Aircon)

System Outline

Fan Motor Operation (1MZ–FE)

With the ignition SW turned on, the current through the FAN RLY 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 or the water temp. SW No.2 is turned on, 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 FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode to TERMINAL 2 to TERMINAL (E) 3 of the engine and ECT ECU causing the FAN NO.3 relay to turn on. As a result, the current through the CDS fuse flows to TERMINAL 5 of the FAN NO.3 relay to TERMINAL 3 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 the current flows in series through the motors, the motors rotate at low speed.

When the water temp. SW No.2 is turned on, the current from FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the water temp. SW No.2 to GROUND, causing the FAN NO.3 relay to turn on. As a result, the current through the CDS fuse flows the same route as above, rotating the motors at low speed.

2. High Speed Operation

With the pressure SW is turned on and/or the water temp. SW No.1 is turned on, the A/C condenser fan motor and the radiator fan motor rotate at high speed.

When the pressure SW is turned on, the current through the FAN RLY fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 3 of the pressure SW to TERMINAL 2 to GROUND, and the current through the FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode (A/C No.1) to TERMINAL 2 to TERMINAL ACMG of the engine and ECT ECU (A/T), engine ECU (M/T) 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 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 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 motors are in parallel the current is increased and the motors rotate at high speed.

When the water temp. SW No.1 is turned on, the current through the FAN RLY fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 2 of the water temp. SW No.1 to TERMINAL 1 to GROUND, and the current through the FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode (A/C No.1) to TERMINAL 2 to TERMINAL ACMG of the engine and ECT ECU (A/T), engine ECU (M/T) 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 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 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 motors are in parallel the current is increased and the motors rotate at high speed.

Fan Motor Operation (2AZ–FE)

With the ignition SW turned on, the current through the FAN RLY 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

When the ignition SW is turned on and 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 FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode (A/C No.1) to TERMINAL 2 to TERMINAL ACMG of the engine and ECT ECU (A/T), engine ECU (M/T) causing the FAN NO.3 relay to turn on. As a result, the current through the CDS fuse flows to TERMINAL 5 of the FAN NO.3 relay to TERMINAL 3 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 the motors are in parallel the current is increased and the motors rotate at high speed.

2. High Speed Operation

When the pressure SW is turned on, the current through the FAN RLY fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 3 of the pressure SW to TERMINAL 2 to GROUND, and the current through the FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode (A/C No.2) to TERMINAL 2 to TERMINAL 3 of the 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 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 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 motors are in parallel the current is increased and the motors rotate at high speed.
When the engine coolant is too high, the current through the FAN RLY fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL FAN of the engine and ECT ECU (A/T), engine ECU (M/T) to GROUND, and the current through the FAN RLY fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 1 of the diode (A/C No.1) to TERMINAL 2 to TERMINAL ACMG of the engine and ECT ECU (A/T), engine ECU (M/T) 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 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 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 motors are in parallel the current is increased and the motors rotate at high speed.

Service Hints

P2 Pressure SW

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

W2 Water Temp. SW No.1

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

W3 Water Temp. SW No.2

1–Ground : Close above approx. 90° C (194° F)

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A2	32 (LHD 1MZ–FE)	P2	35 (LHD 2AZ–FE)	W3	33 (LHD 1MZ–FE)
	42 (RHD 1MZ–FE)		45 (RHD 2AZ–FE)		43 (RHD 1MZ–FE)
	34 (LHD 2AZ–FE)	R1	33 (LHD 1MZ–FE)		
	44 (RHD 2AZ–FE)		43 (RHD 1MZ–FE)		
D1	36 (LHD)		35 (LHD 2AZ–FE)		
	46 (RHD)		45 (RHD 2AZ–FE)		
P2	33 (LHD 1MZ–FE)	W2	33 (LHD 1MZ–FE)		
	43 (RHD 1MZ–FE)		43 (RHD 1MZ–FE)		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

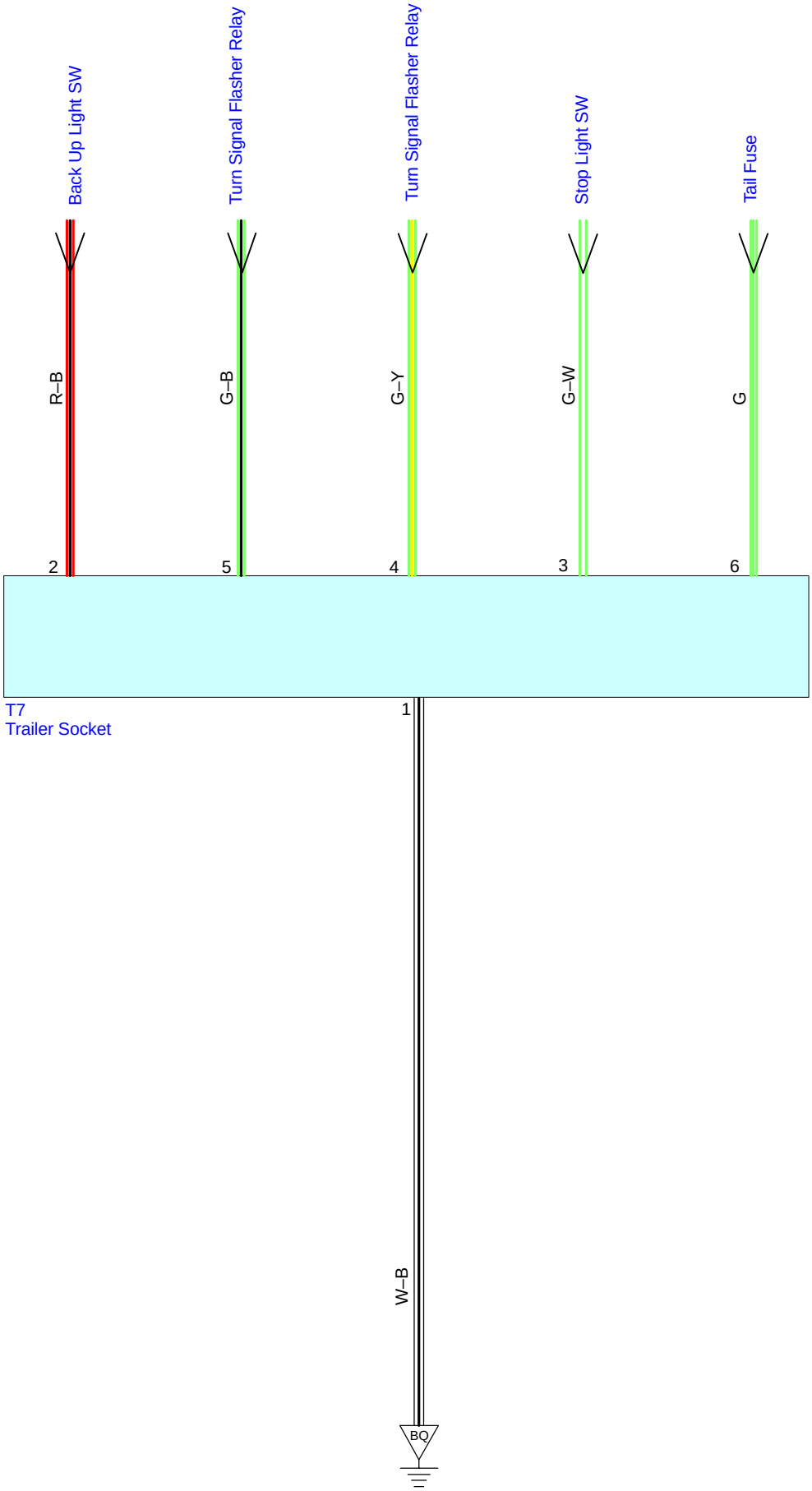
Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Engine Room Main Wire and Engine Room J/B
1F		
1G		
1H		
1K		
2F	26	Engine Room Main Wire and Instrument Panel Wire

 **: Ground Points**

Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	

 **: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	52 (LHD 1MZ–FE)	Engine Room Main Wire	E4	54 (LHD 2AZ–FE)	Engine Room Main Wire
	64 (RHD 1MZ–FE)			66 (RHD 2AZ–FE)	


Back Up Light SW
Turn Signal Flasher Relay
Turn Signal Flasher Relay
Stop Light SW
Tail Fuse
R–B
G–B
G–Y
G–W
G
2
5
4
3
6
T7
Trailer Socket
1
W–B
BQ

Service Hints

Trailer Connection

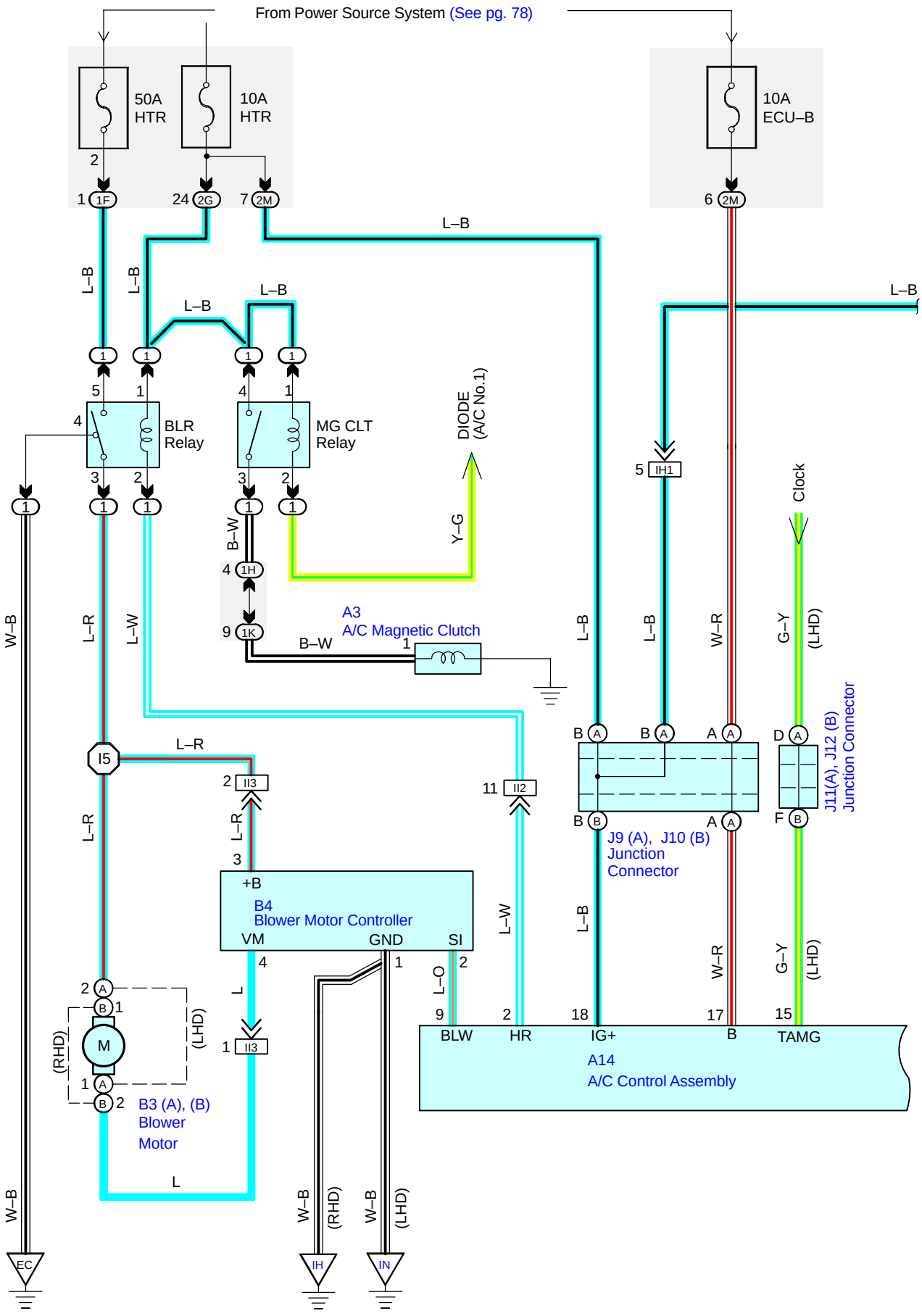
1– Ground : Always Continuity
2–1 : 12–14Volts with the ign switch ON and the transmission in reverse.
3–1 : 12–14Volts with the ign switch ON and the brake pedal depressed.
4–1 : 12–14Volts with the ign switch ON and the RH indicator operating.
5–1 : 12–14Volts with the ign switch ON and the LH indicator operating.
6–1 : 12–14Volts with the ign switch ON and the tails operating.

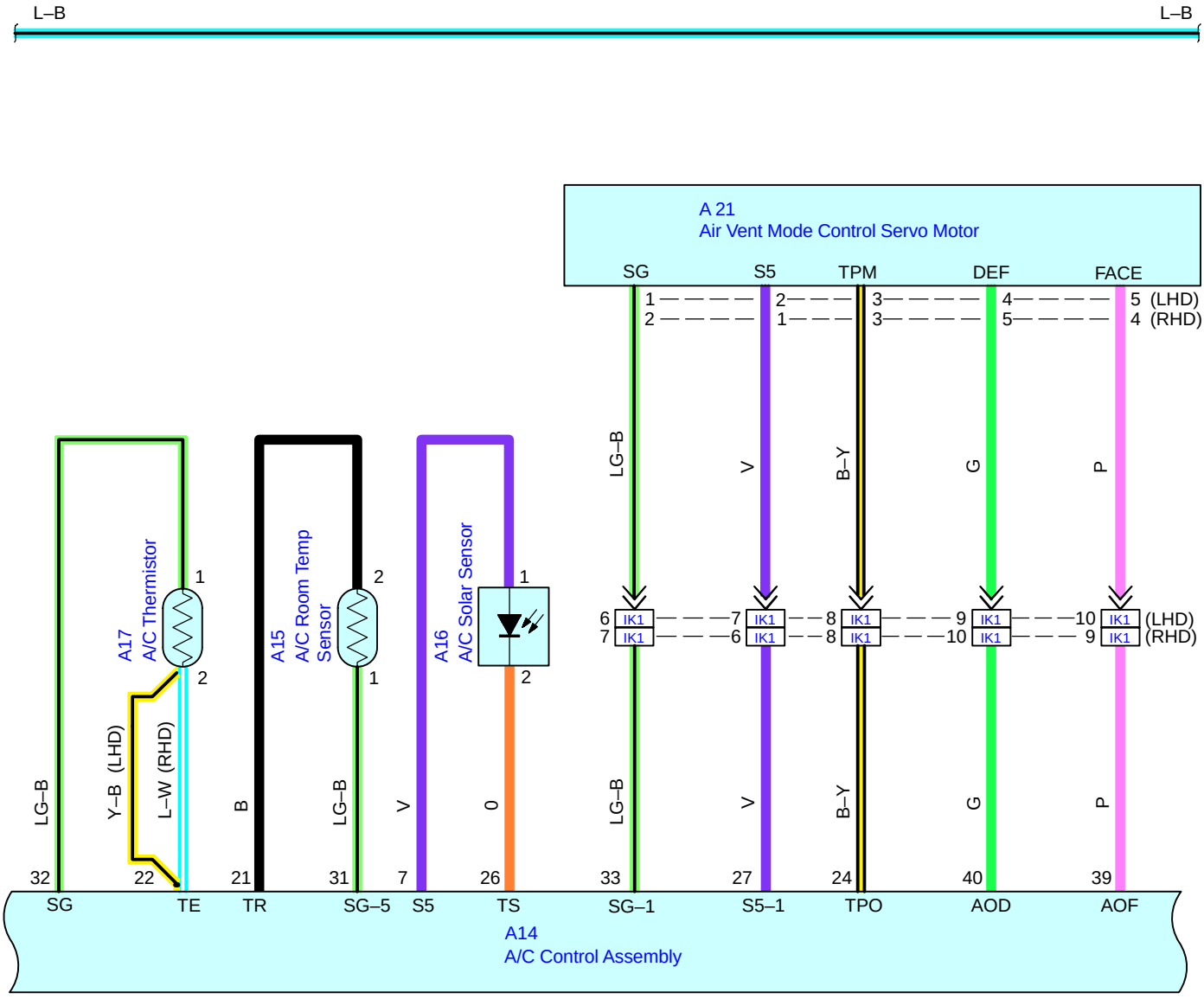
○ : Parts Location

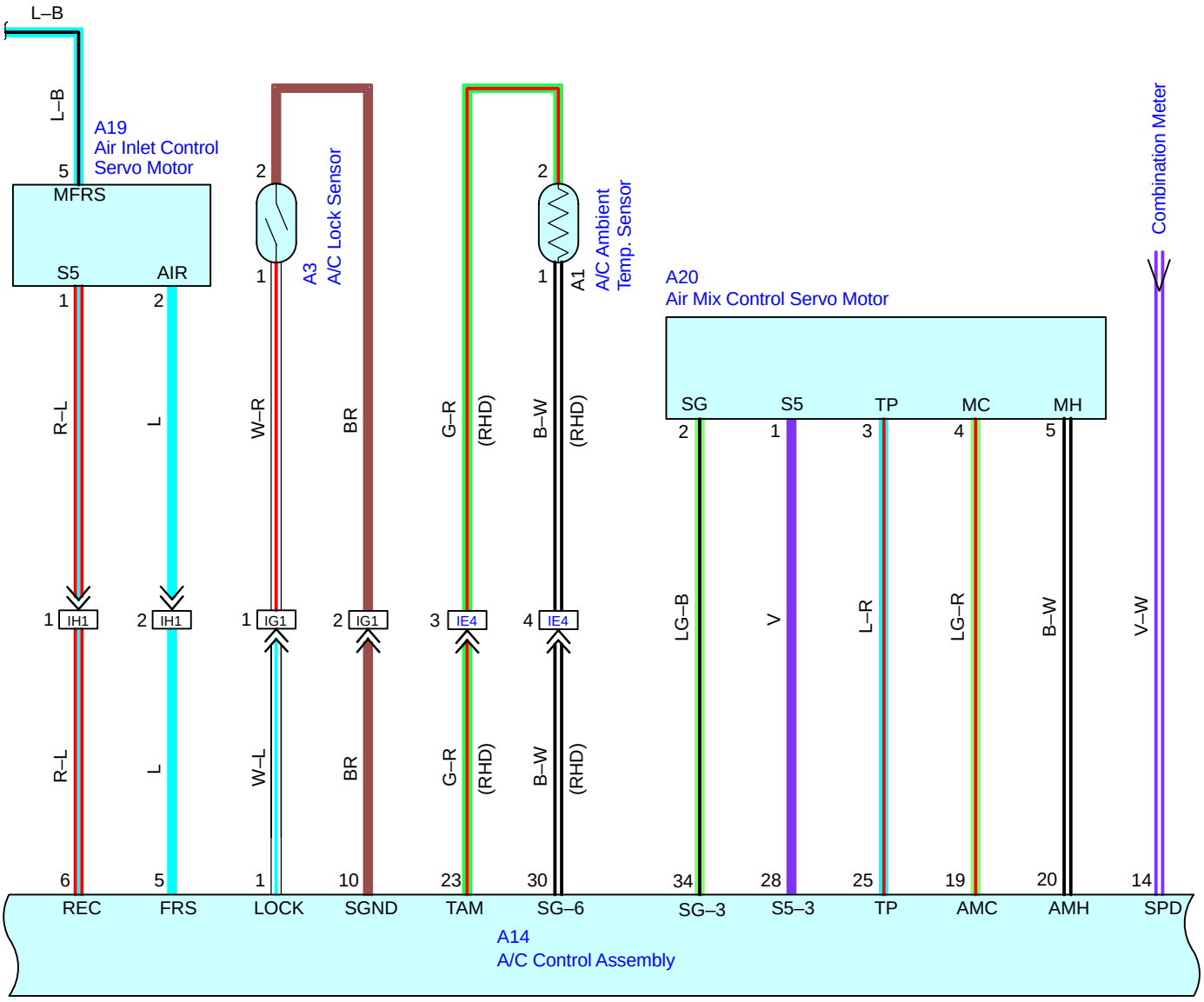
Code	See Page	Code	See Page	Code	See Page
T7	49 (RHD)				

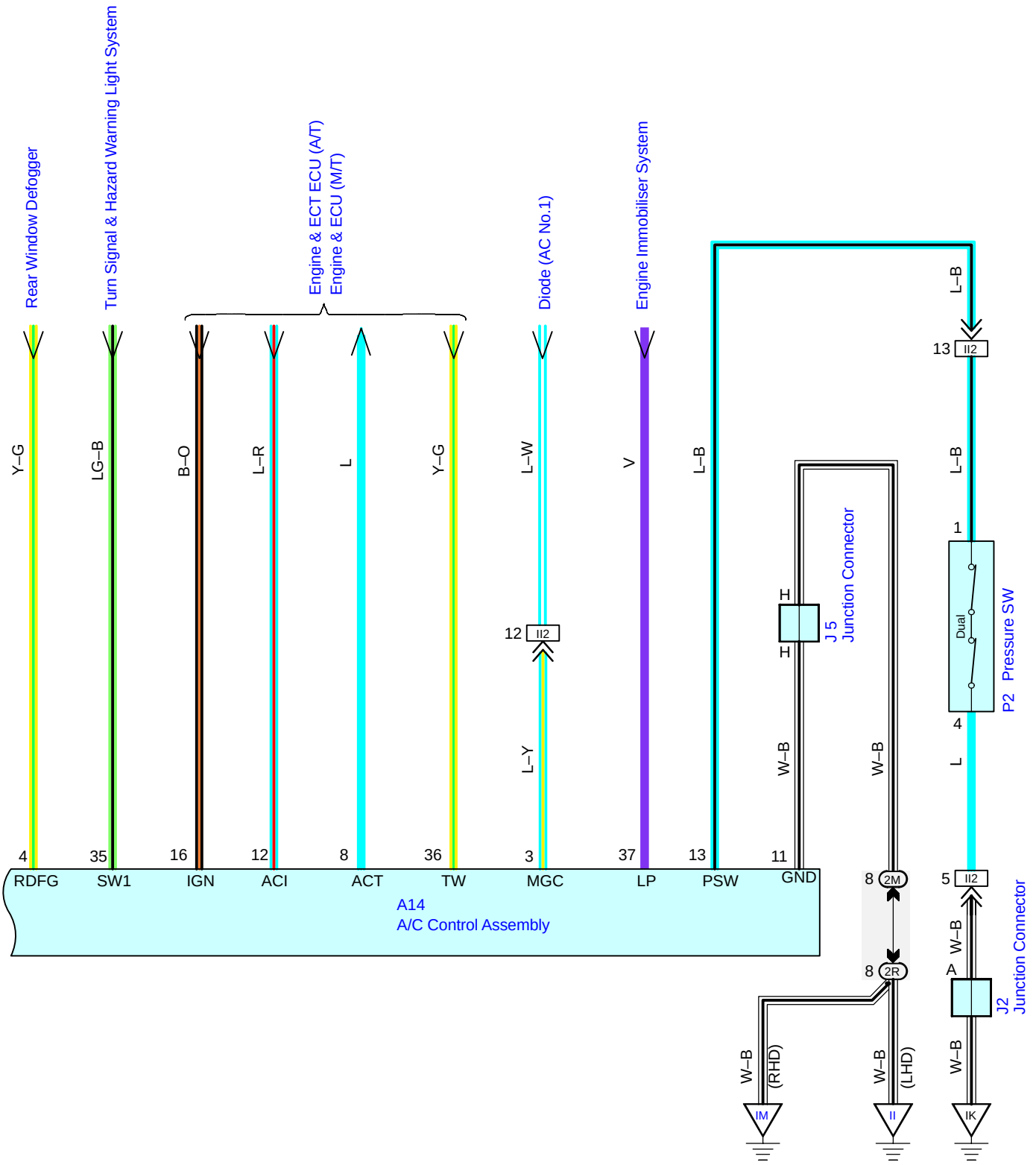
▽ : Ground Points

Code	See Page	Ground Points Location
BQ	72 (RHD)	Floor wire – Luggage compartment


From Power Source System (See pg. 78)
50A HTR
10A HTR
10A ECU–B
1F
2G
2M
L–B
BLR Relay
MG CLT Relay
DIODE (A/C No.1)
Y–G
B–W
1H
1K
A3
A/C Magnetic Clutch
IH1
Clock
W–B
L–R
L–W
W–R
G–Y
(LHD)
I5
II3
II2
+B
B4
Blower Motor Controller
VM
GND
SI
L–O
L
(RHD)
M
B3 (A), (B)
Blower
Motor
J9 (A), J10 (B)
Junction
Connector
J11(A), J12 (B)
Junction Connector
BLW
HR
IG+
B
TAMG
A14
A/C Control Assembly
EC
IH
IN


L–B
L–B
A 21
Air Vent Mode Control Servo Motor
SG
S5
TPM
DEF
FACE
1
2
2
1
3
3
4
5
5 (LHD)
4 (RHD)
LG–B
V
B–Y
G
P
6
7
IK1
7
6
8
8
9
10
10
9
(LHD)
(RHD)
A17
A/C Thermistor
A15
A/C Room Temp
Sensor
A16
A/C Solar Sensor
Y–B (LHD)
L–W (RHD)
B
LG–B
V
0
32
22
21
31
7
26
33
27
24
40
39
SG
TE
TR
SG–5
S5
TS
SG–1
S5–1
TPO
AOD
AOF
A14
A/C Control Assembly


L–B
L–B
A19
Air Inlet Control
Servo Motor
5
MFRS
S5
AIR
1
2
R–L
L
1
IH1
2
IH1
R–L
L
6
5
REC
FRS
2
1
A3
A/C Lock Sensor
W–R
BR
1
IG1
2
IG1
W–L
BR
1
10
LOCK
SGND
2
1
A1
A/C Ambient
Temp. Sensor
G–R
(RHD)
B–W
(RHD)
3
IE4
4
IE4
G–R
(RHD)
B–W
(RHD)
23
30
TAM
SG–6
A20
Air Mix Control Servo Motor
SG
S5
TP
MC
MH
2
1
3
4
5
LG–B
V
L–R
LG–R
B–W
34
28
25
19
20
SG–3
S5–3
TP
AMC
AMH
Combination Meter
V–W
14
SPD
A14
A/C Control Assembly


Rear Window Defogger
Turn Signal & Hazard Warning Light System
Engine & ECT ECU (A/T)
Engine & ECU (M/T)
Diode (AC No.1)
Engine Immobiliser System
Y–G
LG–B
B–O
L–R
L
Y–G
L–W
V
L–B
L–B
L–B
L–Y
W–B
W–B
W–B
W–B
W–B
W–B
L
4
35
16
12
8
36
3
37
13
11
8
8
5
A
12
13
1
4
RDFG
SW1
IGN
ACI
ACT
TW
MGC
LP
PSW
GND
A14
A/C Control Assembly
J 5
Junction Connector
P2 Pressure SW
Dual
J2
Junction Connector
2M
2R
II2
IM
II
IK
(RHD)
(LHD)

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. 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.

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 damper.

5. Air Conditioner Operation

The A/C control assembly receives various signals, I.E., the engine RPM from the engine and ECT ECU (A/T), engine ECU (M/T), out side air temperature signal from the A/C ambient temp. sensor, coolant temperature from the engine and ECT ECU (A/T), engine ECU (M/T) and the lock signal from the A/C compressor, etc.

When the engine is started and the A/C SW (A/C control assembly) is on, a signal is input to the A/C control assembly.

As a result, the ground circuit in A/C control assembly is closed and current flows from HTR (10A) fuse to TERMINAL 1 of the MG CLT relay to TERMINAL 3 of the diode to TERMINAL MGCL of the engine and ECT ECU (A/T), engine ECU (M/T) to TERMINAL PRE to GROUND, turning the MG CLT relay on, so that the magnetic clutch is on and the A/C compressor operates.

At the same time, the engine and ECT ECU (A/T), engine ECU (M/T). Detects the magnetic clutch is on and the A/C compressor operates.

If the A/C control assembly detects the following conditions, it stops the air conditioner:

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

Service Hints

P2 Pressure SW

1–4 : 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)

A14 (A) A/C Control Assembly

B–Ground : Always approx. 12 volts

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

GND–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code		See Page
A1	32 (LHD 1MZ–FE)	A19	36 (LHD)	J5		37 (LHD)
	42 (RHD 1MZ–FE)		46 (RHD)			47 (RHD)
A3	32 (LHD 1MZ–FE)	A20	36 (LHD)	J9	A	37 (LHD)
	42 (RHD 1MZ–FE)		46 (RHD)			47 (RHD)
A14	36 (LHD)	A21	36 (LHD)	J10	B	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A15	36 (LHD)	B3	36 (LHD)	J11	A	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A16	36 (LHD)	B4	36 (LHD)	J12	B	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A17	36 (LHD)	J2	37 (LHD)			
	46 (RHD)		47 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Engine Room Main Wire and Engine Room J/B
1H		
1K		
2G	26	Engine Room Main Wire and Driver Side J/B
2M	27	Instrument Panel Wire and Driver Side J/B
2R		

: Connector Joining Wire Harness and Wire Harness

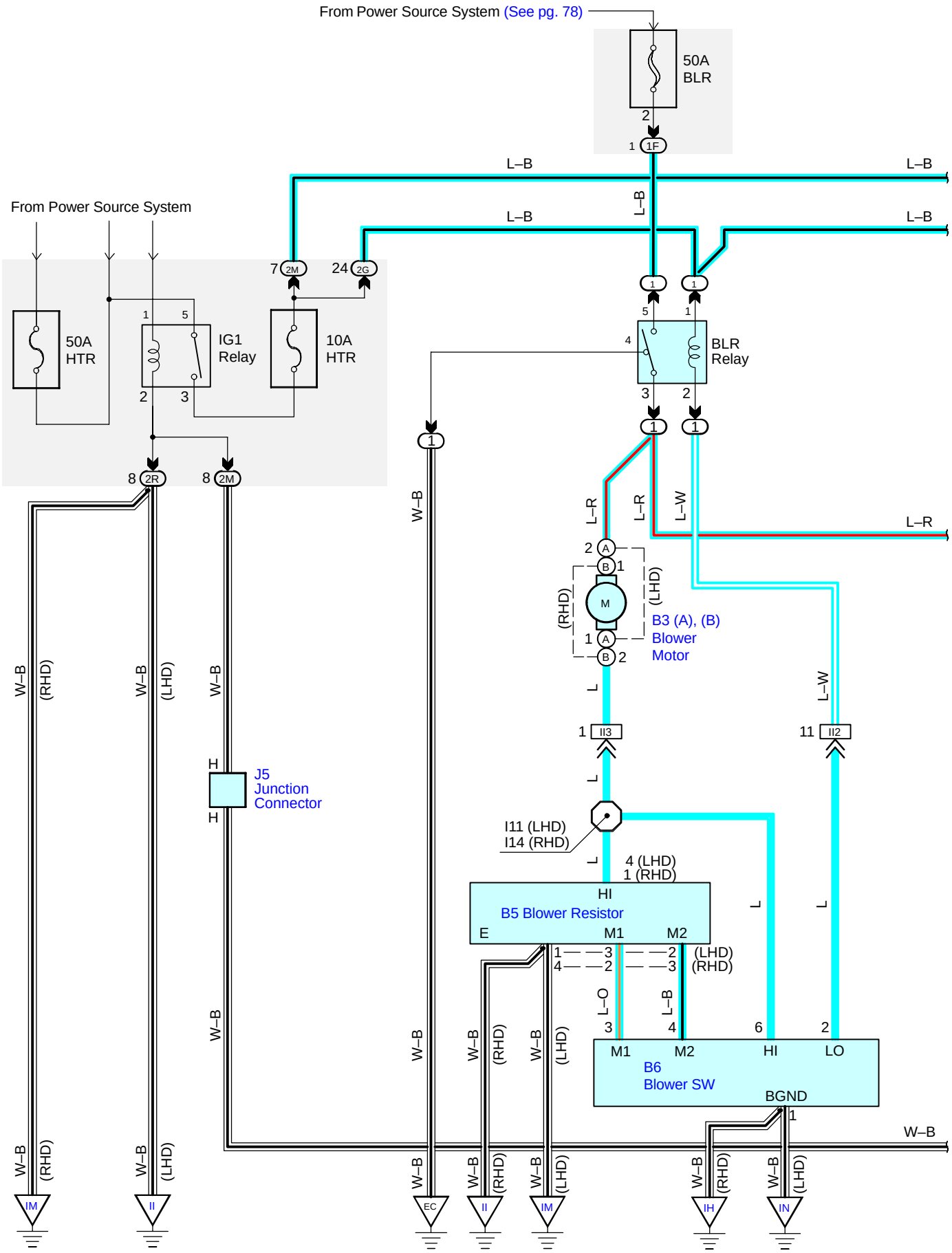
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE4	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	67 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	58 (LHD)	Engine Room and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	
IH1	58 (LHD)	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
	70 (RHD)	
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1	58 (LHD)	Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)
	70 (RHD)	

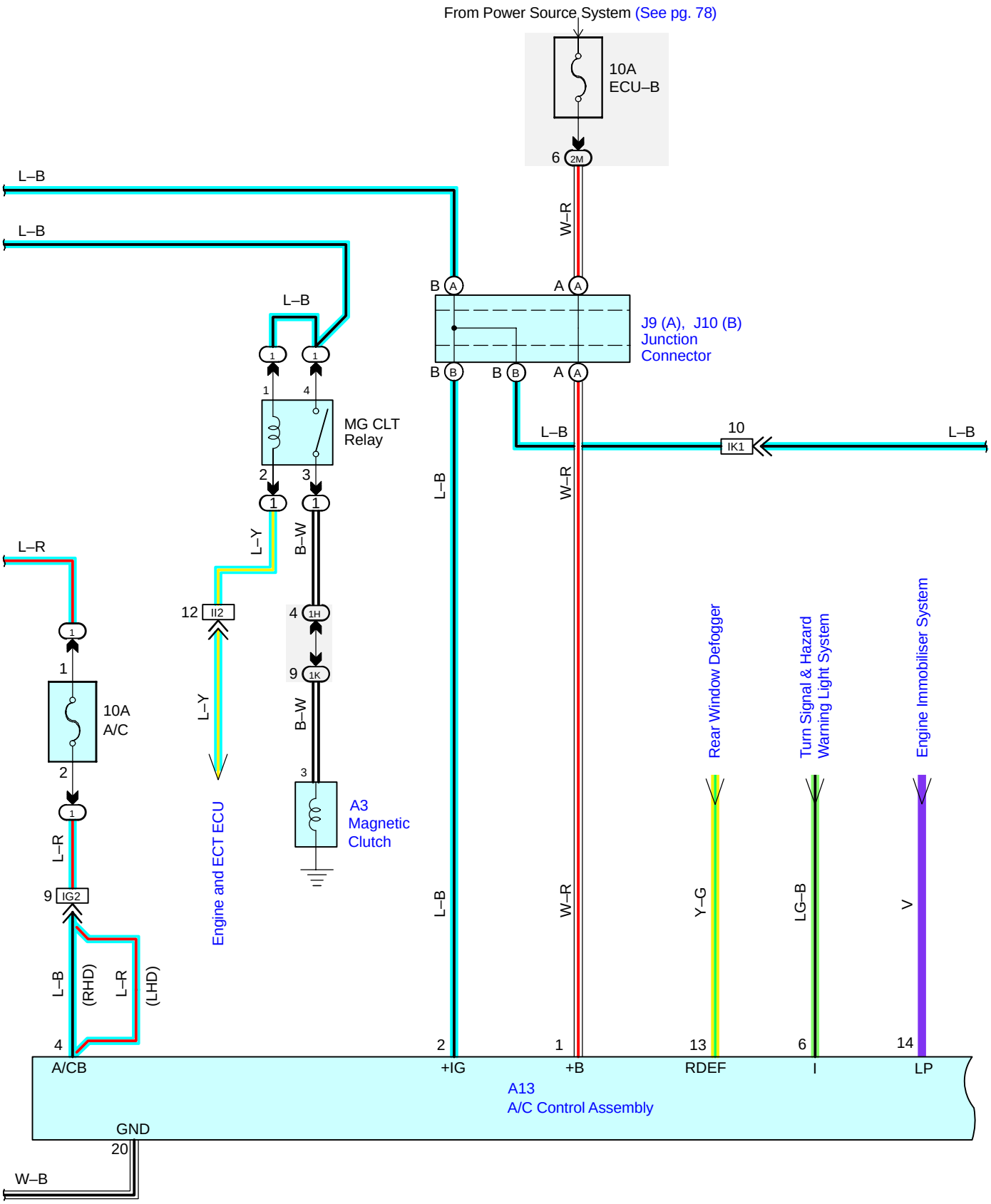
 : **Ground Points**

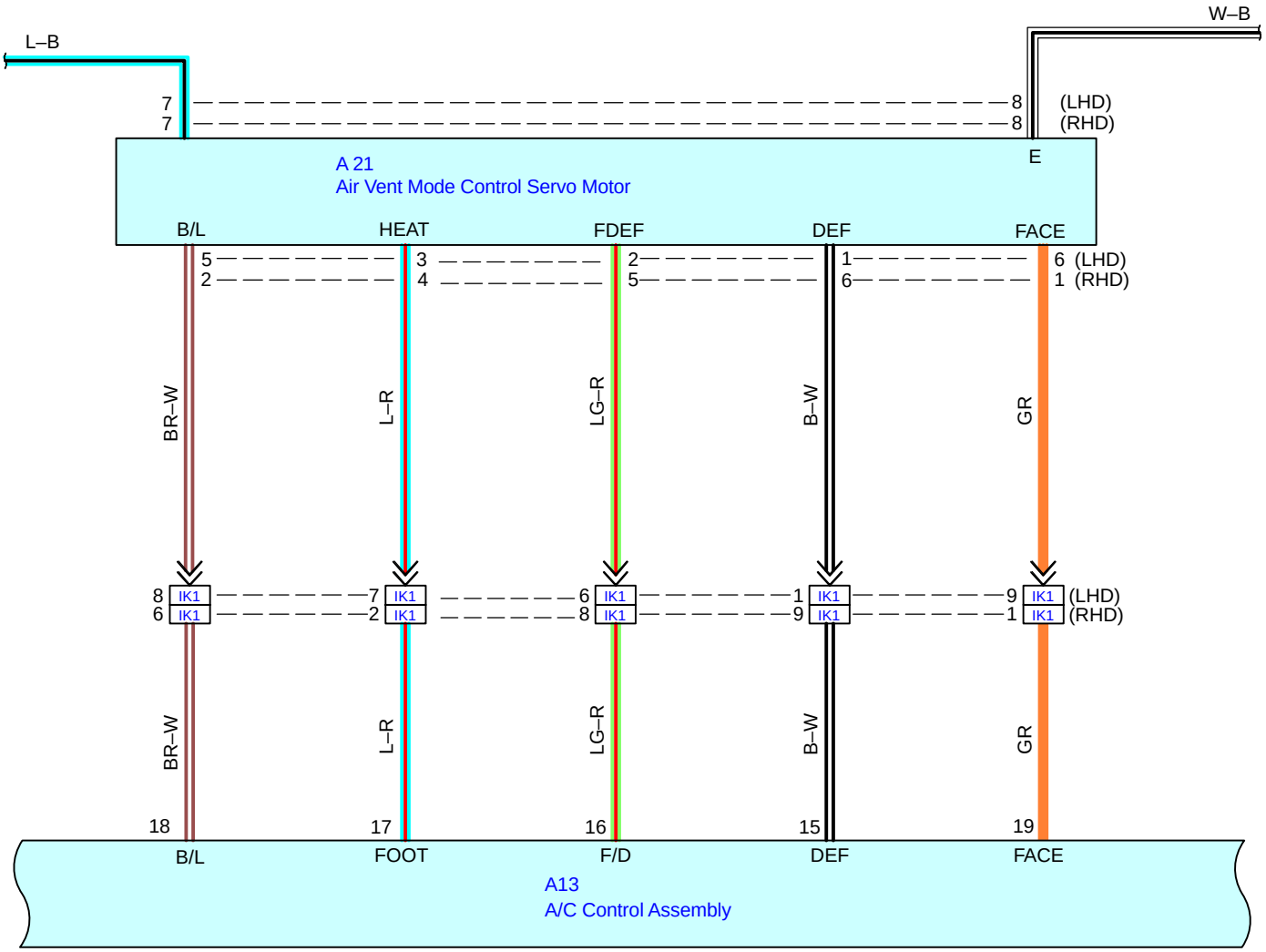
Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD MZ–FE)	
	54 (LHD 2AZ–FE)	
	66 (RHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
IH	67 (RHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	67 (RHD)	Instrument Panel Reinforcement RH
IN	55 (LHD)	Instrument Panel Reinforcement RH

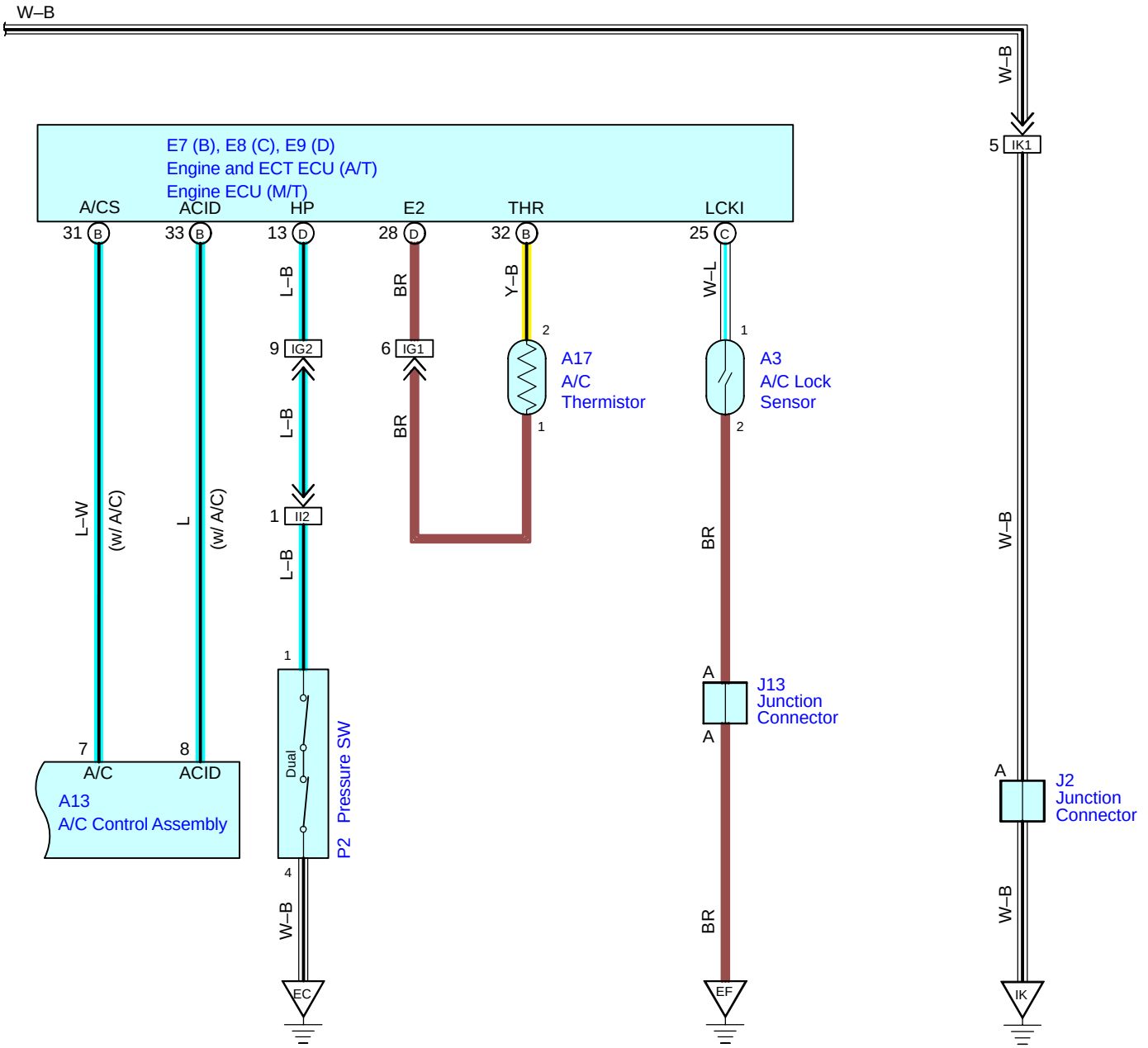
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	58 (LHD)	A/C Sub Wire			
	70 (RHD)				


From Power Source System (See pg. 78)
50A
BLR
2
1
1F
L–B
L–B
L–B
L–B
L–B
From Power Source System
7
2M
24
2G
1
5
50A
HTR
IG1
Relay
10A
HTR
2
3
1
1
5
1
4
BLR
Relay
3
2
1
1
8
2R
8
2M
W–B
L–R
L–R
L–W
L–R
2
A
B
1
M
(RHD)
(LHD)
1
A
B
2
B3 (A), (B)
Blower
Motor
L
1
II3
11
II2
L–W
H
H
J5
Junction
Connector
I11 (LHD)
I14 (RHD)
L
4 (LHD)
1 (RHD)
HI
B5 Blower Resistor
E
M1
M2
1
3
4
2
2
3
(LHD)
(RHD)
L
L
L–O
L–B
3
4
6
2
M1
M2
HI
LO
B6
Blower SW
BGND
1
W–B
W–B
(RHD)
W–B
(LHD)
W–B
W–B
(RHD)
W–B
(LHD)
W–B
(RHD)
W–B
(LHD)
IM
II
EC
II
IM
IH
IN


From Power Source System (See pg. 78)
10A
ECU–B
6 2M
W–R
L–B
L–B
B A
A A
J9 (A), J10 (B)
Junction
Connector
B B
B B
A A
L–B
10
IK1
L–B
L–B
W–R
L–B
MG CLT
Relay
1 4
2 3
1 1
L–Y
B–W
L–R
12 II2
4 1H
9 1K
10A
A/C
1
2
L–R
9 IG2
L–Y
B–W
3
A3
Magnetic
Clutch
Engine and ECT ECU
Rear Window Defogger
Turn Signal & Hazard
Warning Light System
Engine Immobiliser System
L–B
W–R
Y–G
LG–B
V
L–B (RHD)
L–R (LHD)
4
2
1
13
6
14
A/CB
+IG
+B
RDEF
I
LP
A13
A/C Control Assembly
GND
20
W–B


W–B
L–B
7
7
8
8
(LHD)
(RHD)
E
A 21
Air Vent Mode Control Servo Motor
B/L
HEAT
FDEF
DEF
FACE
5
2
3
4
2
5
1
6
6 (LHD)
1 (RHD)
BR–W
L–R
LG–R
B–W
GR
8 IK1
6 IK1
7 IK1
2 IK1
6 IK1
8 IK1
1 IK1
9 IK1
9 IK1
1 IK1
(LHD)
(RHD)
BR–W
L–R
LG–R
B–W
GR
18
17
16
15
19
B/L
FOOT
F/D
DEF
FACE
A13
A/C Control Assembly


W–B
W–B
5 IK1
E7 (B), E8 (C), E9 (D)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
A/CS
ACID
HP
E2
THR
LCKI
31 B
33 B
13 D
28 D
32 B
25 C
L–B
BR
Y–B
W–L
9 IG2
6 IG1
2
1
A17
A/C
Thermistor
A3
A/C Lock
Sensor
L–B
BR
L–W
(w/ A/C)
L
(w/ A/C)
1 II2
L–B
BR
1
A
J13
Junction
Connector
A
7
8
A/C
ACID
A13
A/C Control Assembly
Dual
P2 Pressure SW
4
W–B
BR
W–B
A
J2
Junction
Connector
W–B
EC
EF
IK

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. 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.

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 damper.

5. Air Conditioner Operation

The A/C control assembly receives various signals,such as the engine RPM from the engine and ECT ECU (A/T), engine ECU (M/T), out side air temperature signal from the A/C ambient temp. sensor, coolant temperature from the engine and ECT ECU (A/T), engine ECU (M/T) and the lock signal from the A/C compressor, etc.

When the engine is started and the A/C SW (A/C control assembly) is on, a signal is input to the A/C control assembly.

As a result, the ground circuit in A/C control assembly is closed and current flows from HTR (10A) fuse to TERMINAL 1 of the MG CLT relay to TERMINAL 3 of the diode to TERMINAL MGCL of the engine and ECT ECU (A/T), engine ECU (M/T) to TERMINAL PRE to GROUND, turning the MG CLT relay on, so that the magnetic clutch is on and the A/C compressor operates.

At the same time, the engine and ECT ECU (A/T), engine ECU (M/T). Detects the magnetic clutch is on and the A/C compressor operates.

If the A/C control assembly detects the following conditions, it stops the air conditioner:

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

Service Hints

P2 Pressure SW

1–4 : 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)

A13 (A) A/C Control Assembly

B–Ground : Always approx. 12 volts

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

GND–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	34 (LHD 2AZ–FE)	B5	46 (RHD)	J5	37 (LHD)
	42 (RHD 2AZ–FE)	B6	36 (LHD)		47 (RHD)
A13	36 (LHD)		46 (RHD)	J9 A	37 (LHD)
	46 (RHD)	E7 B	37 (LHD)		47 (RHD)
A17	36 (LHD)		47 (RHD)	J10 B	37 (LHD)
	46 (RHD)	E8 C	37 (LHD)		47 (RHD)
A21	36 (LHD)		47 (RHD)	J13	37 (LHD)
	46 (RHD)	E9 D	37 (LHD)		47 (RHD)
B3	36 (LHD)		47 (RHD)	P2	35 (LHD)
	46 (RHD)	J2	37 (LHD)		45 (RHD)
B5	36 (LHD)		47 (RHD)		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Engine Room Main Wire and Engine Room J/B
1H		
1K		
2G	26	Engine Room Main Wire and Driver Side J/B
2M	27	Instrument Panel Wire and Driver Side J/B
2R		

: Connector Joining Wire Harness and Wire Harness

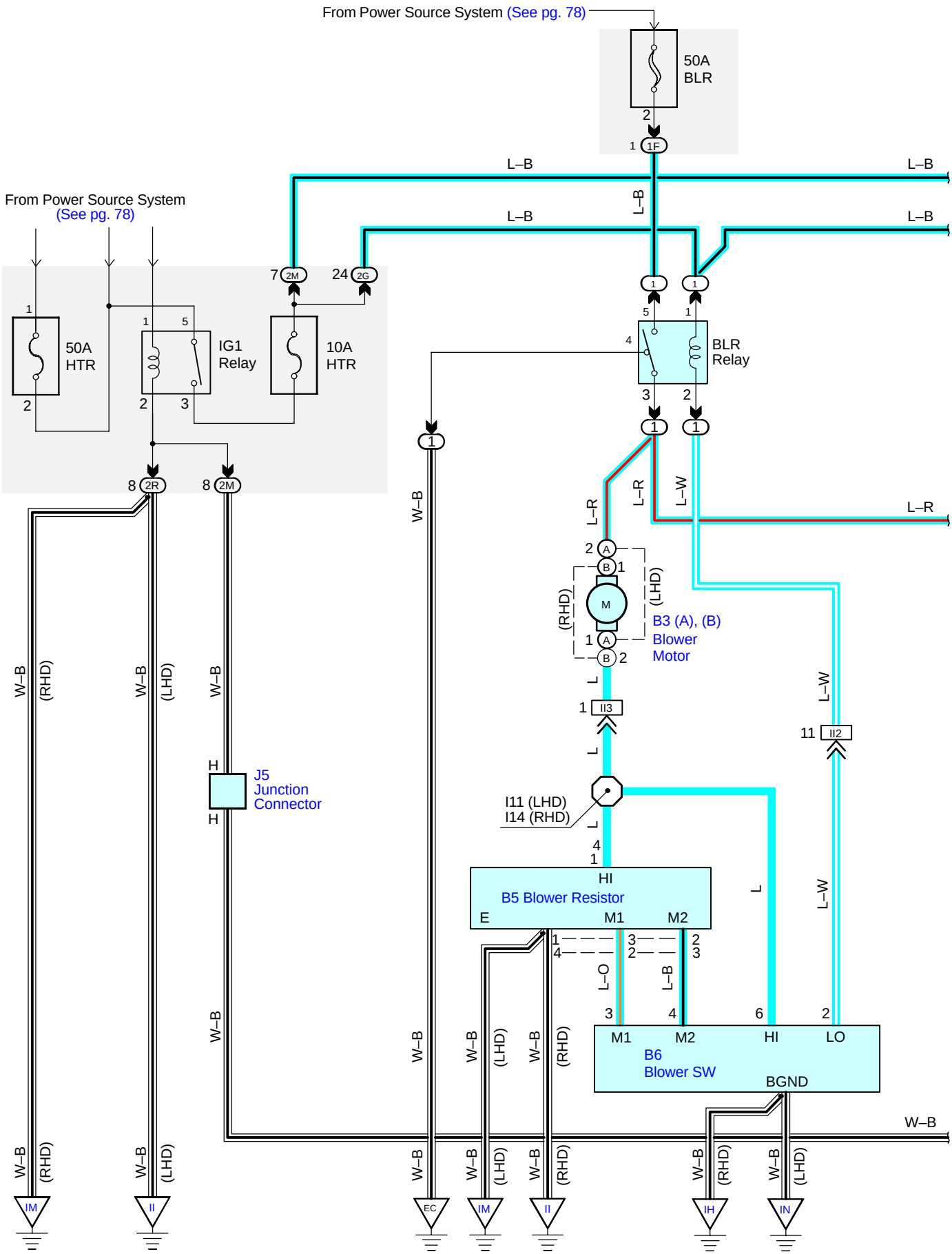
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	55 (LHD)	Engine Room and Instrument Panel Wire (Instrument Panel Brace)
	67 (RHD)	
IG2	58 (LHD)	Engine Room and Instrument Panel Wire (Left Side of Steering Column)
	70 (RHD)	
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3	58 (LHD)	Engine Room and Instrument Panel Wire (Right Side of Steering Column)
	70 (RHD)	
IK1	58 (LHD)	Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)
	70 (RHD)	

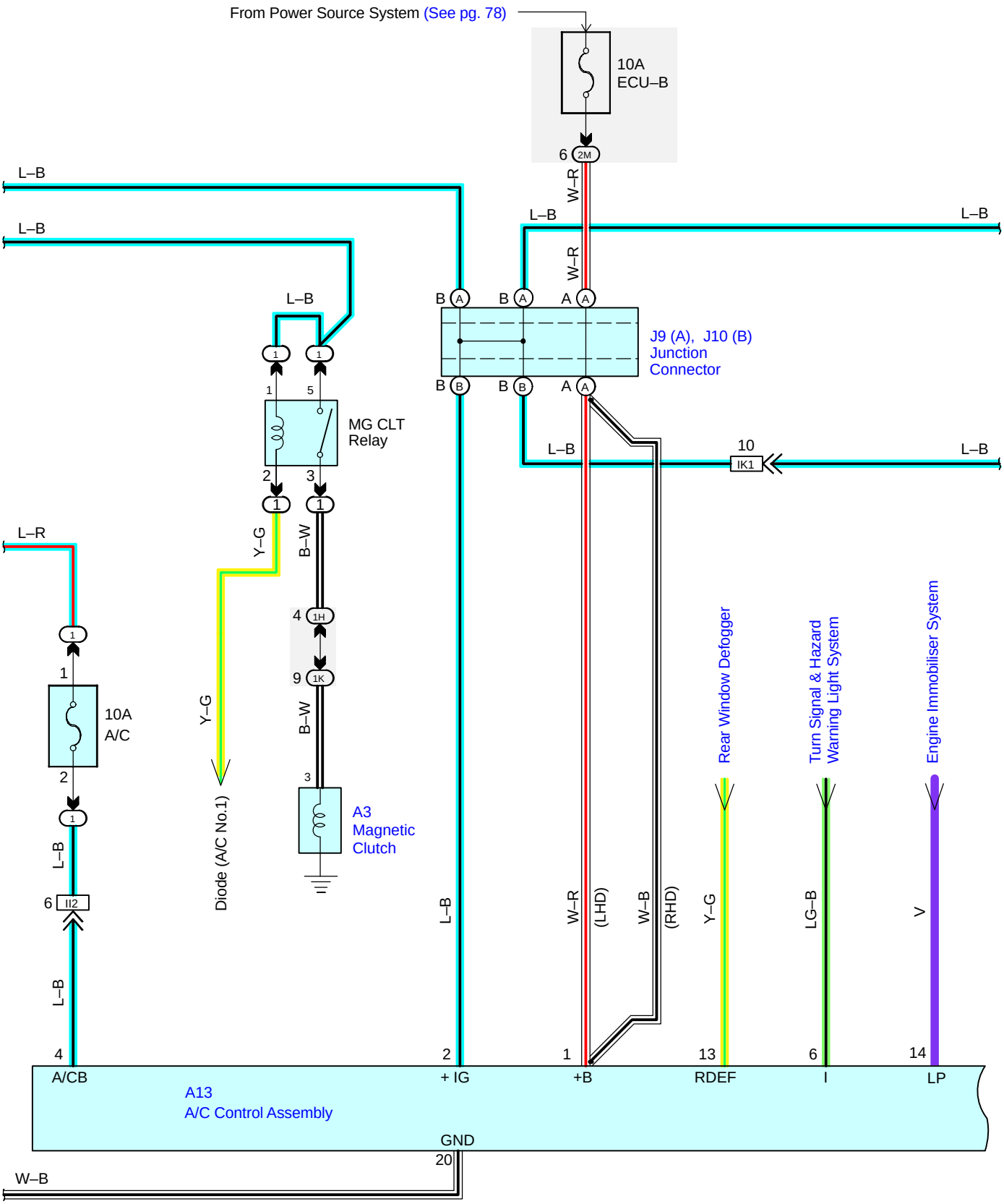
▽ : **Ground Points**

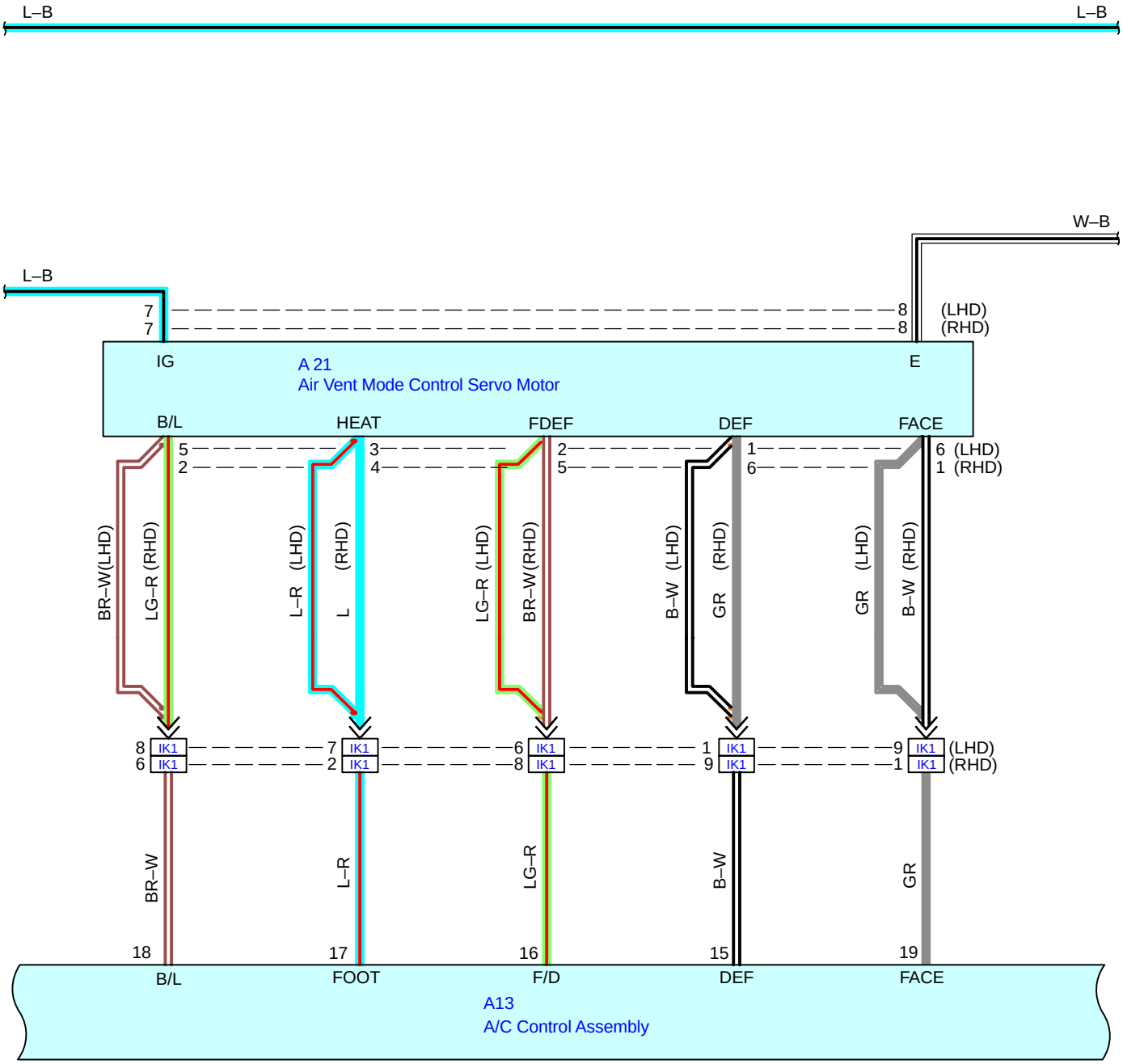
Code	See Page	Ground Points Location
EC	54 (LHD 2AZ–FE)	Left Fender
	66 (RHD 2AZ–FE)	
EF	54 (LHD 2AZ–FE)	Right Side of Surge Tank
	66 (RHD 2AZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	Instrument Panel Reinforcement LH
IH	67 (RHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	
IN	55 (LHD)	Instrument Panel Reinforcement RH

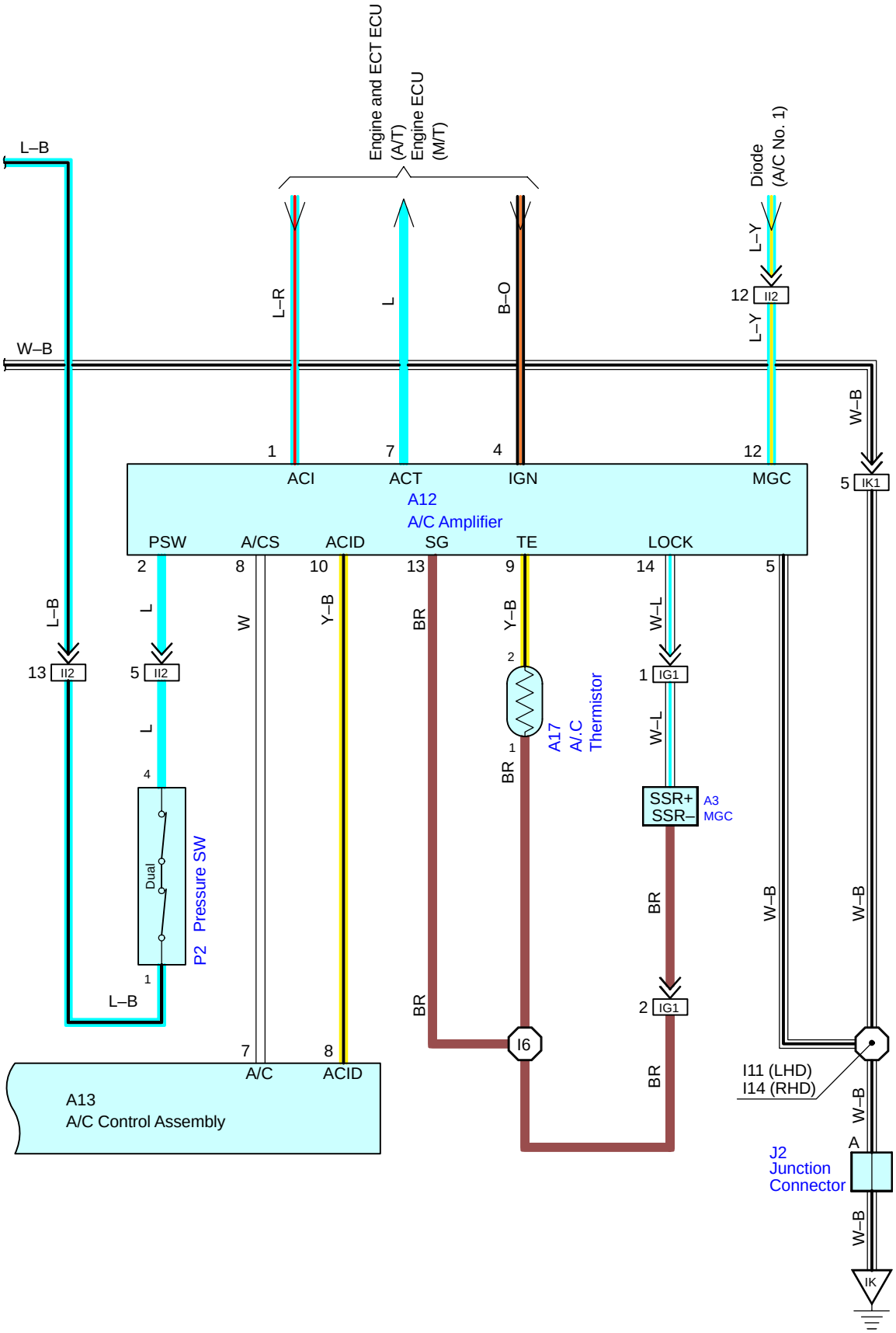
○ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I11	58 (LHD)	A/C Sub Wire	I14	70 (RHD)	A/C Sub Wire


From Power Source System (See pg. 78)
50A BLR
1F
L–B
From Power Source System (See pg. 78)
7 2M
24 2G
50A HTR
IG1 Relay
10A HTR
BLR Relay
8 2R
8 2M
W–B
(RHD)
(LHD)
L–R
L–W
B3 (A), (B) Blower Motor
J5 Junction Connector
II3
II2
I11 (LHD)
I14 (RHD)
B5 Blower Resistor
HI
E
M1
M2
L
L–O
B6 Blower SW
LO
BGND
IM
II
EC
IH
IN


From Power Source System (See pg. 78)
10A
ECU–B
6 2M
W–R
L–B
L–B
L–B
L–B
L–B
B A
B A
A A
J9 (A), J10 (B)
Junction
Connector
B B
B B
A A
MG CLT
Relay
1
5
2
3
10
IK1
L–R
Y–G
B–W
4 1H
9 1K
10A
A/C
Y–G
Diode (A/C No.1)
B–W
3
A3
Magnetic
Clutch
Rear Window Defogger
Turn Signal & Hazard
Warning Light System
Engine Immobiliser System
L–B
W–R
(LHD)
W–B
(RHD)
Y–G
LG–B
V
6 II2
L–B
L–B
4
2
1
13
6
14
A/CB
+ IG
+B
RDEF
I
LP
A13
A/C Control Assembly
GND
20
W–B


L–B
L–B
W–B
L–B
7
7
8
8
(LHD)
(RHD)
IG
A 21
Air Vent Mode Control Servo Motor
E
B/L
HEAT
FDEF
DEF
FACE
5
2
3
4
2
5
1
6
6 (LHD)
1 (RHD)
BR–W(LHD)
LG–R (RHD)
L–R (LHD)
L (RHD)
LG–R (LHD)
BR–W(RHD)
B–W (LHD)
GR (RHD)
GR (LHD)
B–W (RHD)
8
6
IK1
7
2
6
8
1
9
9
1
(LHD)
(RHD)
BR–W
L–R
LG–R
B–W
GR
18
17
16
15
19
B/L
FOOT
F/D
DEF
FACE
A13
A/C Control Assembly


Engine and ECT ECU (A/T)
Engine ECU (M/T)
Diode (A/C No. 1)
L–B
W–B
L–R
L
B–O
L–Y
L–Y
12 II2
1
7
4
12
ACI
ACT
IGN
MGC
A12
A/C Amplifier
W–B
5 IK1
PSW
A/CS
ACID
SG
TE
LOCK
2
8
10
13
9
14
5
L–B
13 II2
L
5 II2
W
Y–B
BR
Y–B
W–L
2
1 IG1
L
4
Dual
P2 Pressure SW
1
L–B
BR
1
A17
A/C
Thermistor
W–L
SSR+
SSR–
A3
MGC
BR
W–B
W–B
BR
2 IG1
I6
BR
I11 (LHD)
I14 (RHD)
W–B
A
J2
Junction
Connector
W–B
IK
7
8
A/C
ACID
A13
A/C Control Assembly

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. 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.

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 damper.

5. Air Conditioner Operation

The A/C control assembly receives various signals, such as the engine RPM from the engine and ECT ECU (A/T), engine ECU (M/T), out side air temperature signal from the A/C ambient temp. sensor, coolant temperature from the engine and ECT ECU (A/T), engine ECU (M/T) and the lock signal from the A/C compressor, etc.

When the engine is started and the A/C SW (A/C control assembly) is on, a signal is input to the A/C control assembly.

As a result, the ground circuit in A/C control assembly is closed and current flows from HTR (10A) fuse to TERMINAL 1 of the MG CLT relay to TERMINAL 3 of the diode to TERMINAL MGCL of the engine and ECT ECU (A/T), engine ECU (M/T) to TERMINAL PRE to GROUND, turning the MG CLT relay on, so that the magnetic clutch is on and the A/C compressor operates.

At the same time, the engine and ECT ECU (A/T), engine ECU (M/T). Detects the magnetic clutch is on and the A/C compressor operates.

If the A/C control assembly detects the following conditions, it stops the air conditioner:

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

Service Hints

P2 Pressure SW

1–4 : 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)

A13 (A) A/C Control Assembly

B–Ground : Always approx. 12 volts

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

GND–Ground : Always continuity

: Parts Location

Code	See Page	Code	See Page	Code		See Page
A3	32 (LHD 1MZ–FE)	A21	36 (LHD)	J9	A	37 (LHD)
	42 (RHD 1MZ–FE)		46 (RHD)			47 (RHD)
A12	36 (LHD)	A21	36 (LHD)	J10	B	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A13	36 (LHD)	B4	36 (LHD)	J11	A	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A16	36 (LHD)	B5	36 (LHD)	J12	B	37 (LHD)
	46 (RHD)		46 (RHD)			47 (RHD)
A17	36 (LHD)	B6	36 (LHD)	P2		33 (LHD)
	46 (RHD)		46 (RHD)			43 (RHD)
A19	36 (LHD)	J2	37 (LHD)			
	46 (RHD)		47 (RHD)			
A20	36 (LHD)	J5	37 (LHD)			
	46 (RHD)		47 (RHD)			

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Engine Room Main Wire and Engine Room J/B
1H		
1K		
2G	26	Engine Room Main Wire and Driver Side J/B
2M	27	Instrument Panel Wire and Driver Side J/B
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	58 (LHD)	Engine Room and Instrument Panel Wire (Behind Glove Box)
	70 (RHD)	
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	70 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1	58 (LHD)	Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)
	70 (RHD)	

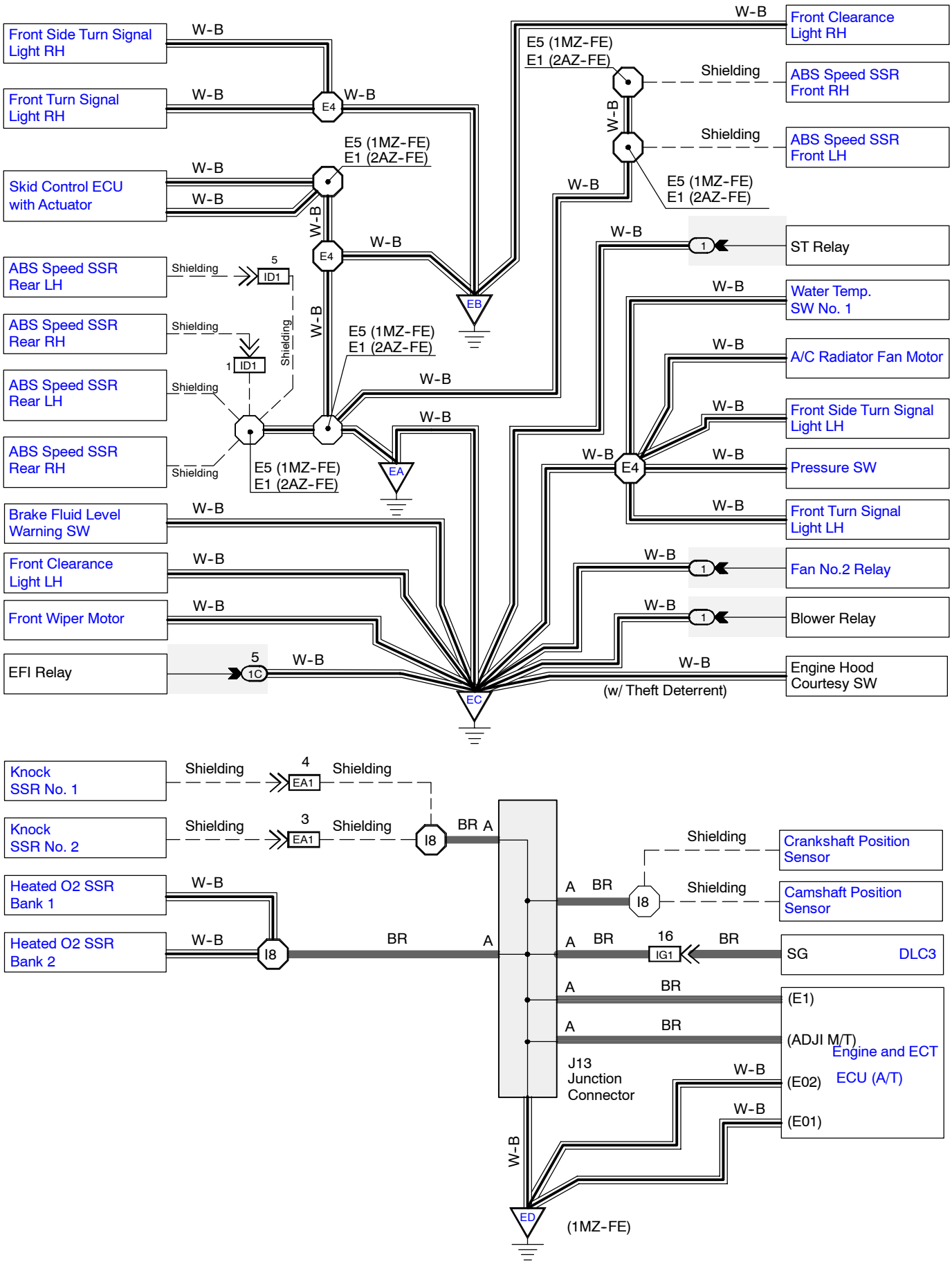
 : **Ground Points**

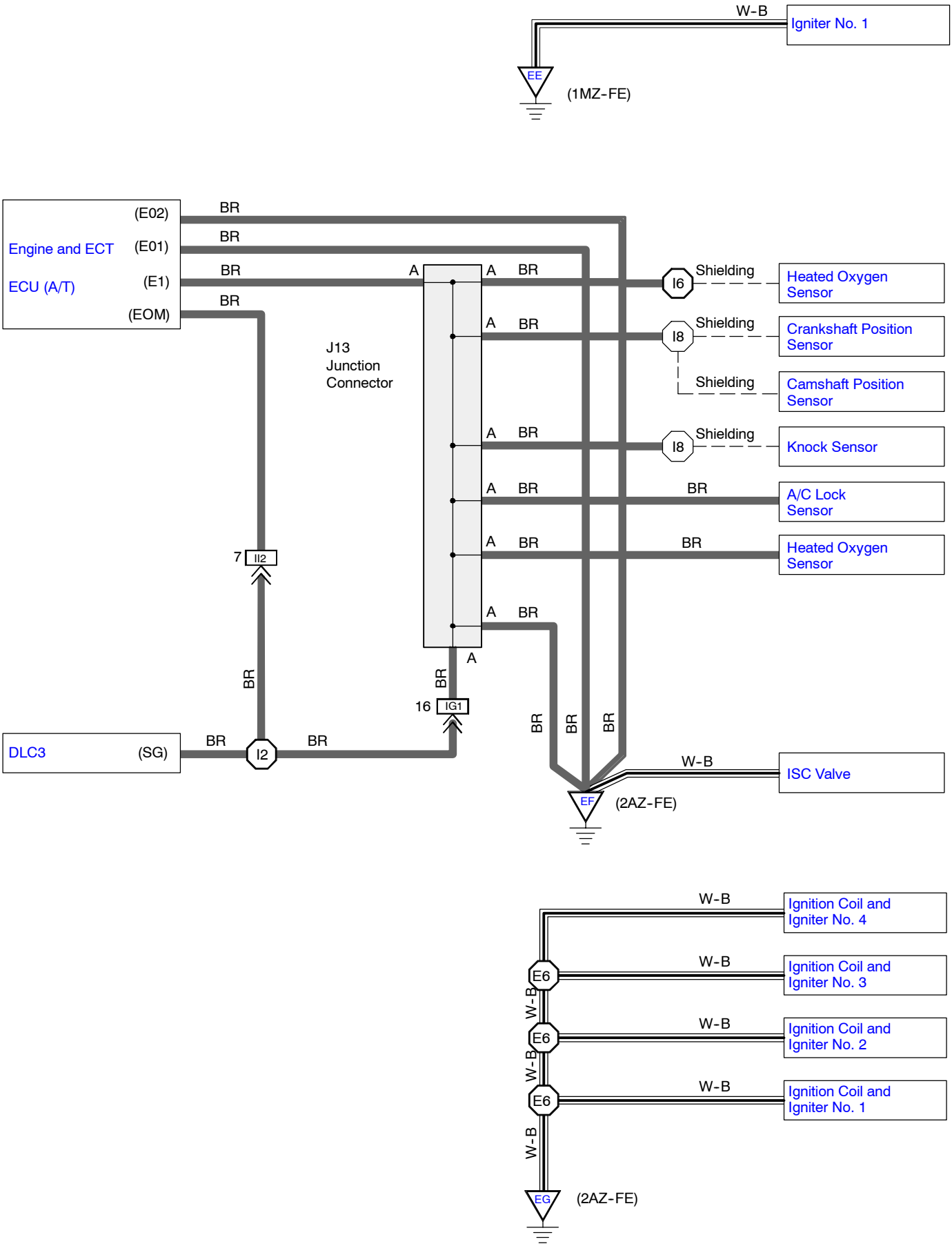
Code	See Page	Ground Points Location
EC	52 (LHD 1MZ–FE)	Left Fender
	64 (RHD 1MZ–FE)	
II	55 (LHD)	Instrument Panel Reinforcement LH
	67 (RHD)	
IH	67 (RHD)	Instrument Panel Reinforcement LH
IK	55 (LHD)	Instrument Panel Brace LH
	67 (RHD)	Instrument Panel Brace RH
IM	55 (LHD)	Instrument Panel Reinforcement RH
	67 (RHD)	
IN	55 (LHD)	Instrument Panel Reinforcement RH

 : **Splice Points**

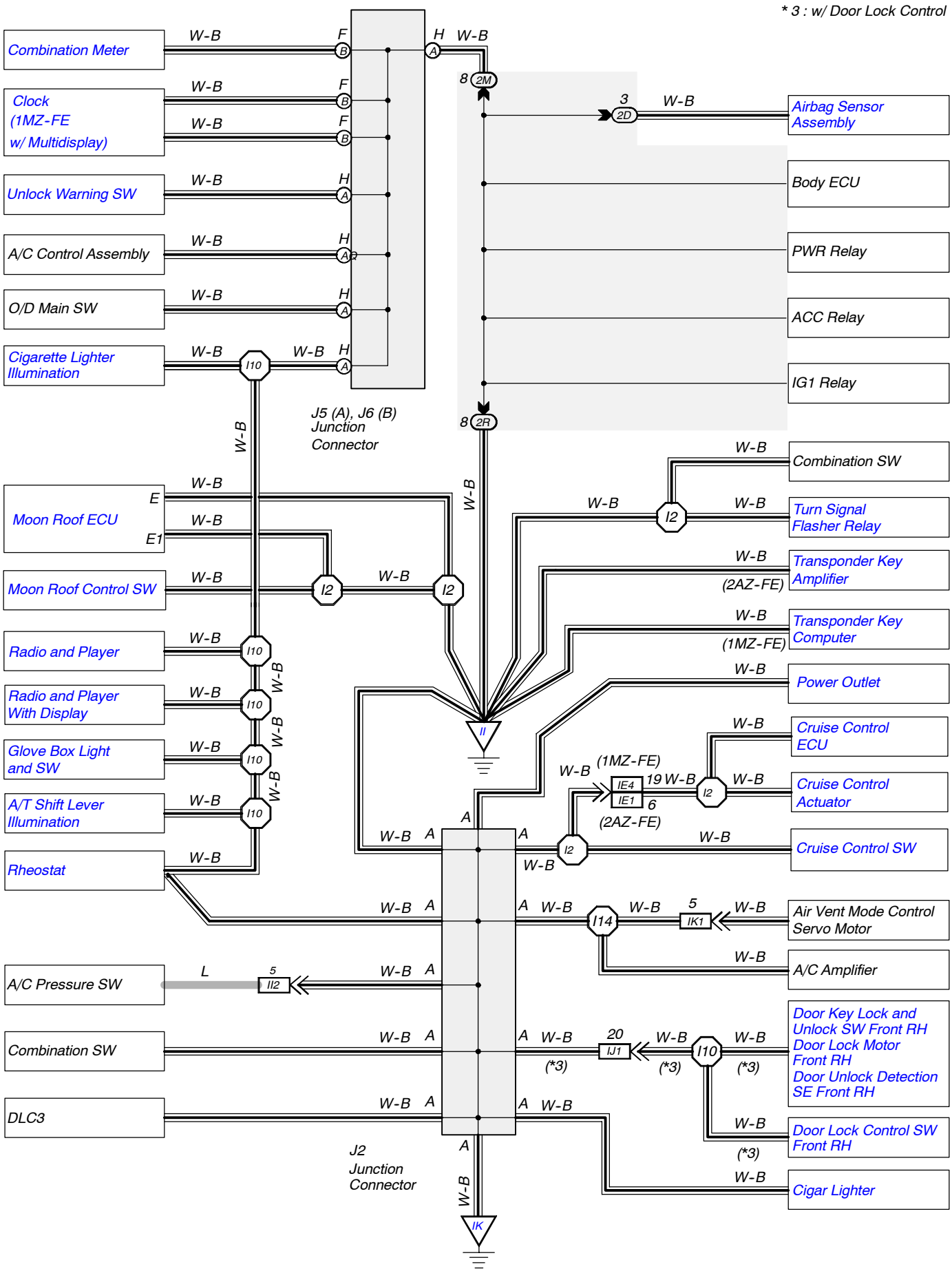
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I11	58 (LHD)	A/C Sub Wire	I14	70 (RHD)	A/C Sub Wire
I6	58 (LHD)				
	70 (RHD)				

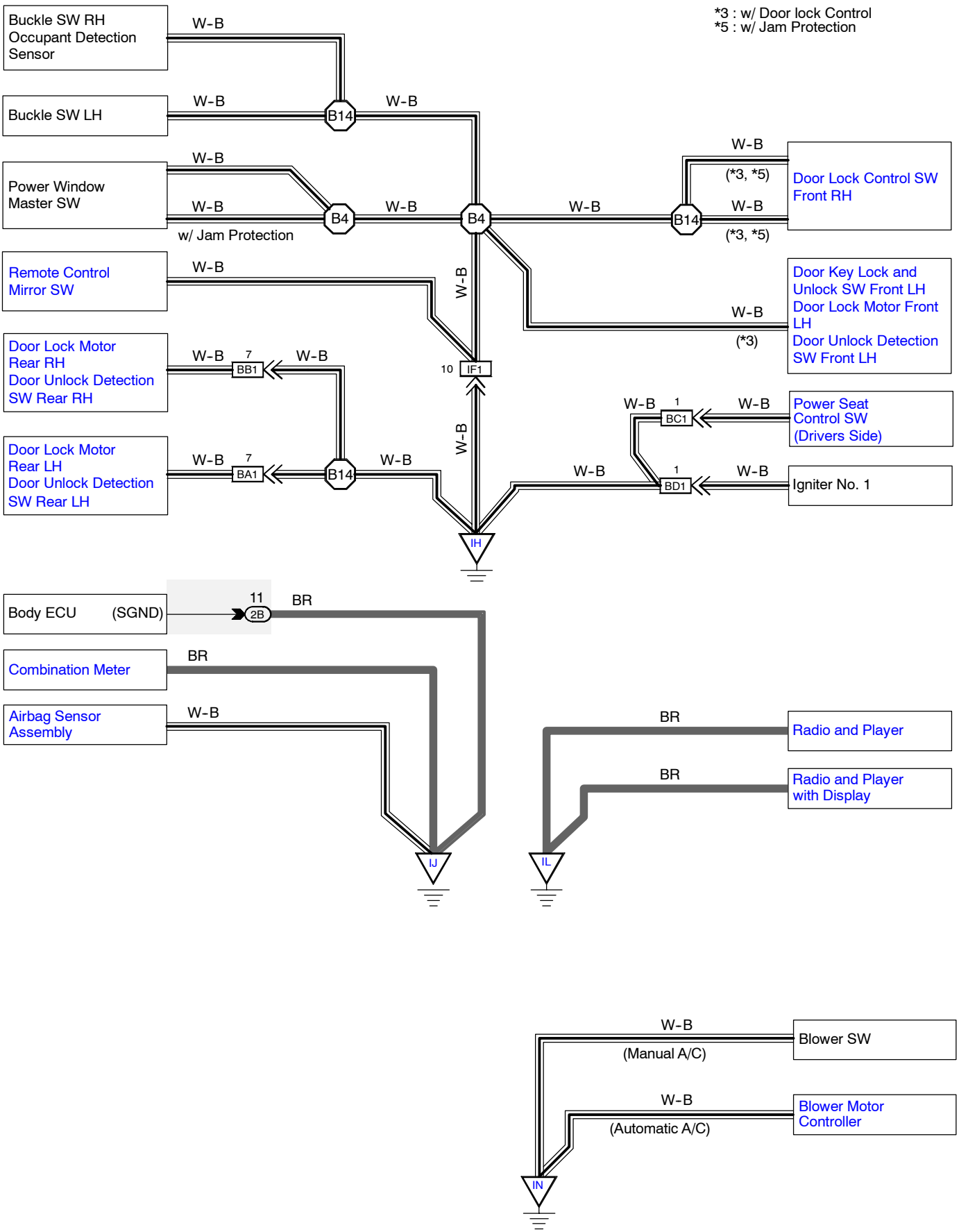
I GROUND POINTS (LHD)



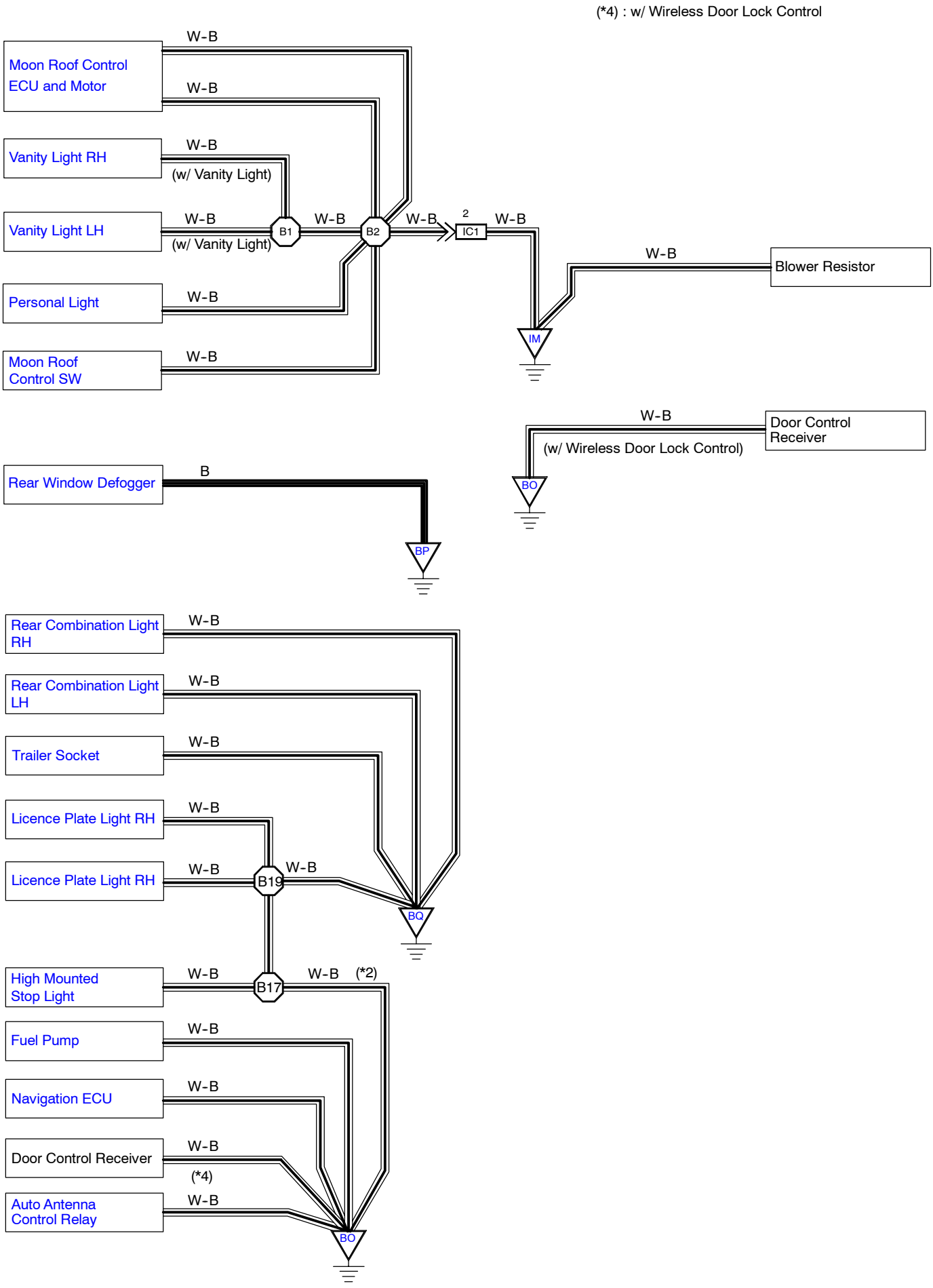

W-B
Igniter No. 1
EE
(1MZ-FE)
Engine and ECT
ECU (A/T)
(E02)
(E01)
(E1)
(EOM)
BR
J13
Junction
Connector
A
I6
Shielding
Heated Oxygen Sensor
I8
Crankshaft Position Sensor
Camshaft Position Sensor
Knock Sensor
A/C Lock Sensor
Heated Oxygen Sensor
7
II2
16
IG1
DLC3
(SG)
I2
W-B
ISC Valve
EF
(2AZ-FE)
Ignition Coil and Igniter No. 4
Ignition Coil and Igniter No. 3
Ignition Coil and Igniter No. 2
Ignition Coil and Igniter No. 1
E6
EG
(2AZ-FE)

I GROUND POINTS (LHD)




*3 : w/ Door lock Control
*5 : w/ Jam Protection
Buckle SW RH
Occupant Detection
Sensor
Buckle SW LH
Power Window
Master SW
w/ Jam Protection
Remote Control
Mirror SW
Door Lock Motor
Rear RH
Door Unlock Detection
SW Rear RH
Door Lock Motor
Rear LH
Door Unlock Detection
SW Rear LH
Door Lock Control SW
Front RH
Door Key Lock and
Unlock SW Front LH
Door Lock Motor Front
LH
Door Unlock Detection
SW Front LH
Power Seat
Control SW
(Drivers Side)
Igniter No. 1
B14
B4
BB1
BA1
BC1
BD1
IF1
IH
W-B
(*3, *5)
(*3)
Body ECU (SGND)
Combination Meter
Airbag Sensor
Assembly
Radio and Player
Radio and Player
with Display
BR
IJ
IL
Blower SW
(Manual A/C)
Blower Motor
Controller
(Automatic A/C)
IN

I GROUND POINTS (LHD)



: Parts Location

Code	See Page	Code	See Page	Code	See Page
J2	37 (LHD)	J6	37 (LHD)		
J5	37 (LHD)	J13	37 (LHD)		

: Relay Blocks

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

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2D		
2M	27	
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	60 (LHD)	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1	60 (LHD)	Rear Door RH Wire and Floor No.2 Wire (Right Center Pillar)
BC1	62 (LHD)	Floor Wire and Seat No.1 Wire (Under the Driver's Seat)
BD1	62 (LHD)	Floor Wire and Front Seat LH Wire (Under the Driver's Seat)
EA1	52 (LHD 2AZ-FE)	Engine Room Main Wire and Engine Room No.2 Wire (Radiator Side Support LH)
IC1	55 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
ID1	55 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE1	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IE4	55 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IF1	55 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
IG1	58 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II2	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	58 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IK1	58 (LHD)	Engine Wire and Instrument Panel Wire

I GROUND POINT (LHD)

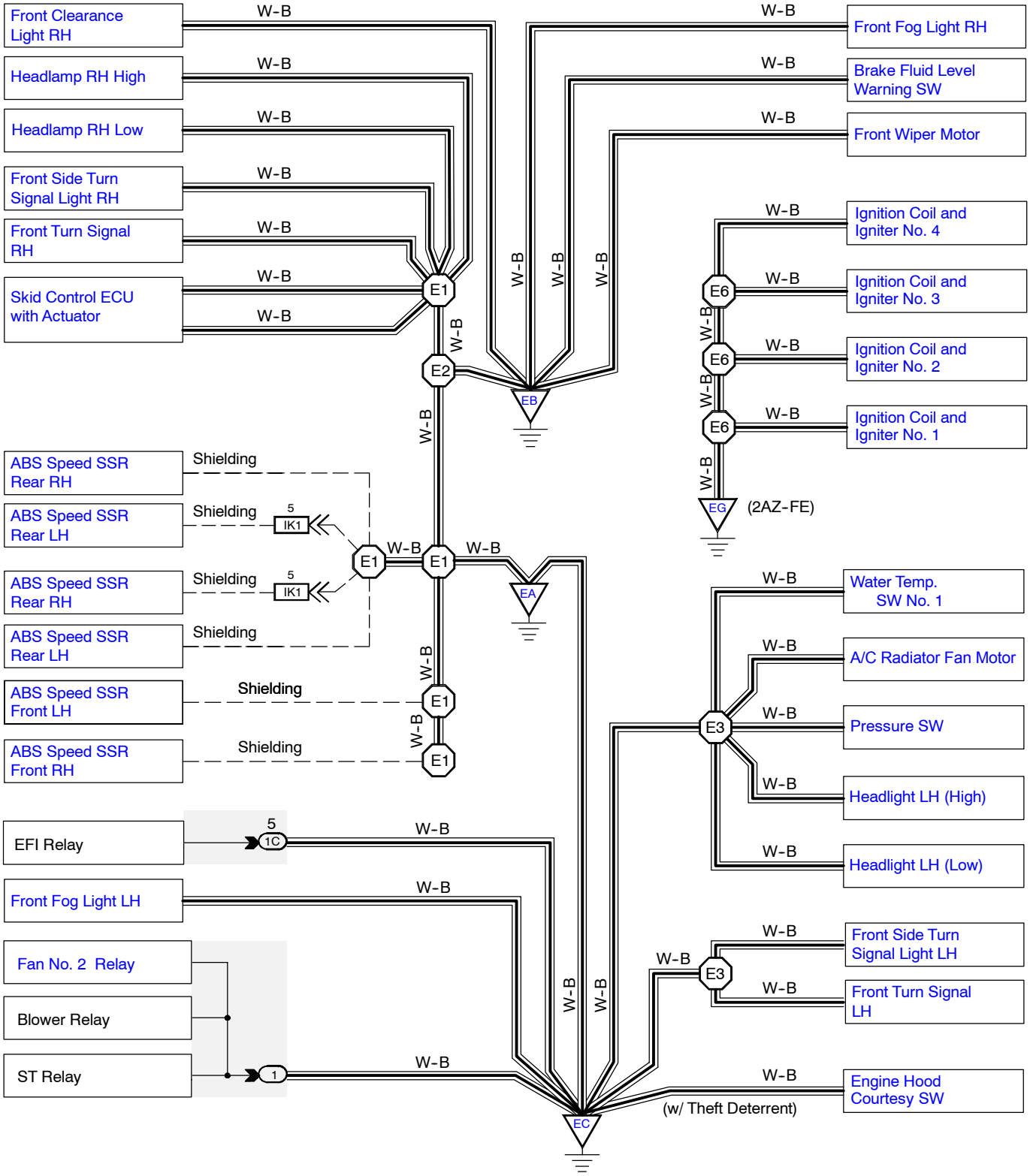
▽ : **Ground Points**

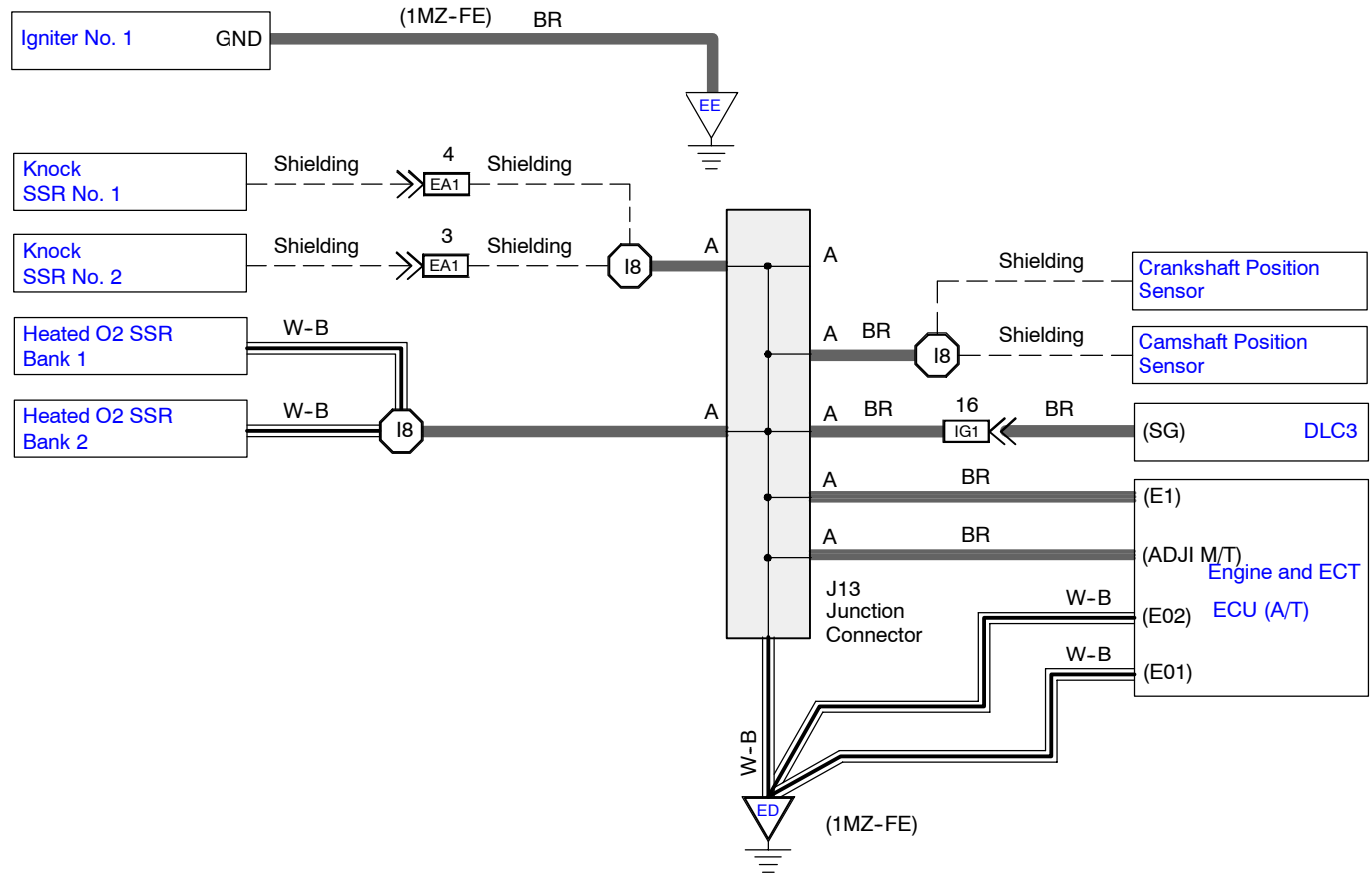
Code	See Page	Ground Points Location
EA	52 (LHD 1MZ-FE)	Right Fender
	54 (LHD 2AZ-FE)	
EB	52 (LHD 1MZ-FE)	
	54 (LHD 2AZ-FE)	
EC	52 (LHD 1MZ-FE)	Left Fender
	54 (LHD 2AZ-FE)	
ED	52 (LHD 1MZ-FE)	
EE	52 (LHD 1MZ-FE)	Engine Intake Manifold
EF	54 (LHD 2AZ-FE)	Rear Side of Surge Tank
EG	54 (LHD 2AZ-FE)	Left Side of Cylinder Head
IH	55 (LHD 2AZ-FE)	Left Kick Panel
II	55 (LHD)	Cowl Side Panel LH
IJ	55 (LHD)	Instrument Panel Brace LH
IK		
IL	55 (LHD)	Instrument Panel Brace RH
IM	55 (LHD)	Instrument Panel Reinforcement RH
IN		
BO	60 (LHD)	Under the Driver's Seat
BP	60 (LHD)	Under the Front Passenger's Seat
BQ	60 (LHD)	Front Side of Rear Quarter Wheel House LH

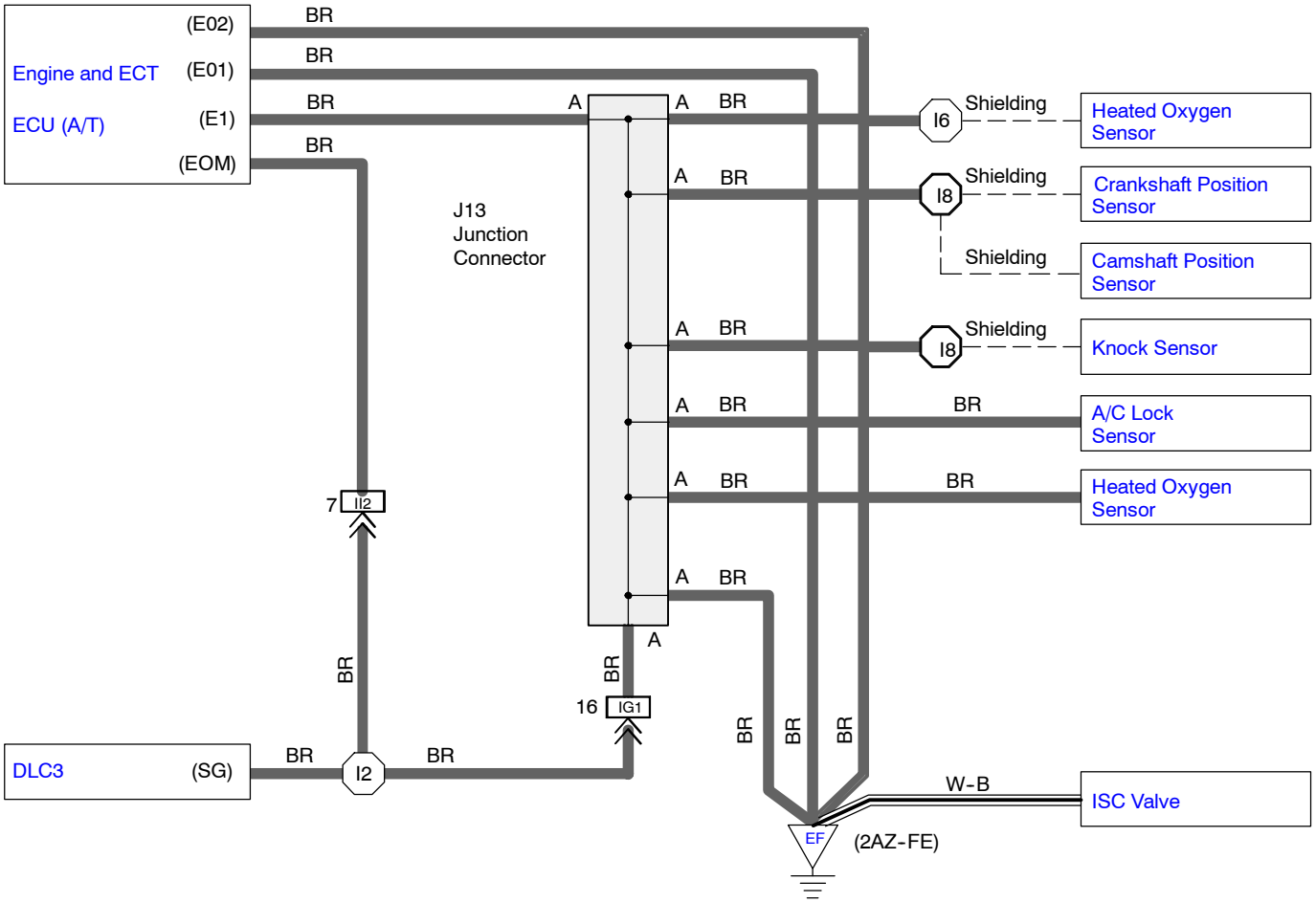
○ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	60 (LHD)	Roof Wire	E4	52 (LHD 1MZ-FE)	Engine Room Wire
B2	60 (LHD)	Front Door LH Wire		54 (LHD 2AZ-FE)	
B4	60 (LHD)	Instrument Panel	E5	54 (LHD 2AZ-FE)	Engine Wire
B14	60 (LHD)	Front Seat LH Wire	E6	54 (LHD)	
B15	60 (LHD)	Front Seat RH Wire	I2	58 (LHD)	Engine Room Main
B17	60 (LHD)	Floor Wire No. 2	I6	58 (LHD)	Engine Wire
B19	60 (LHD)		I8	58 (LHD)	Instrument Panel
E1	52 (LHD 1MZ-FE)	Engine Room Wire	I10	58 (LHD)	
	54 (LHD 2AZ-FE)		I11	58 (LHD)	
E4	52 (LHD 1MZ-FE)	Engine Room Wire			
	54 (LHD 2AZ-FE)				

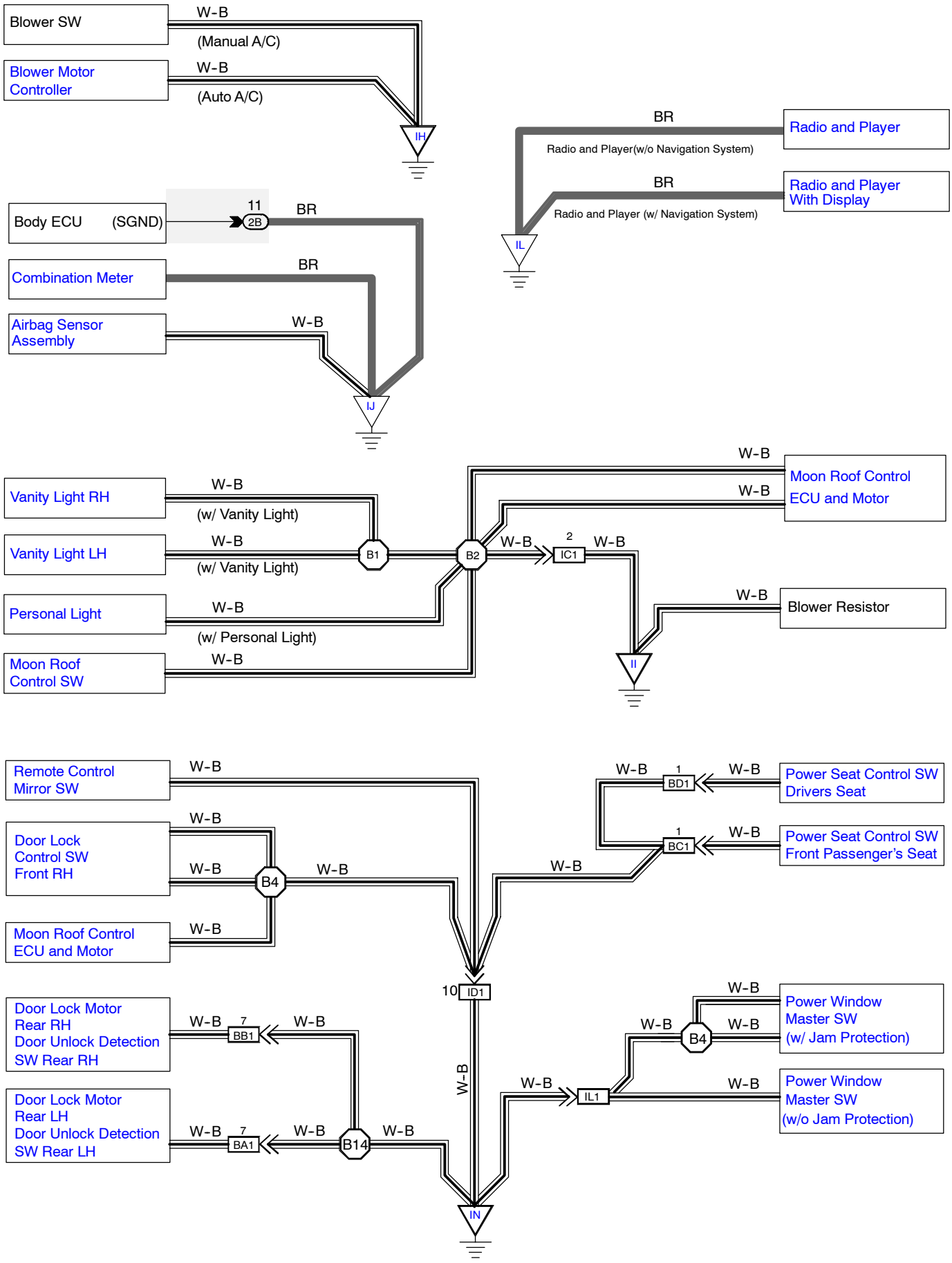
I GROUND POINT (RHD)

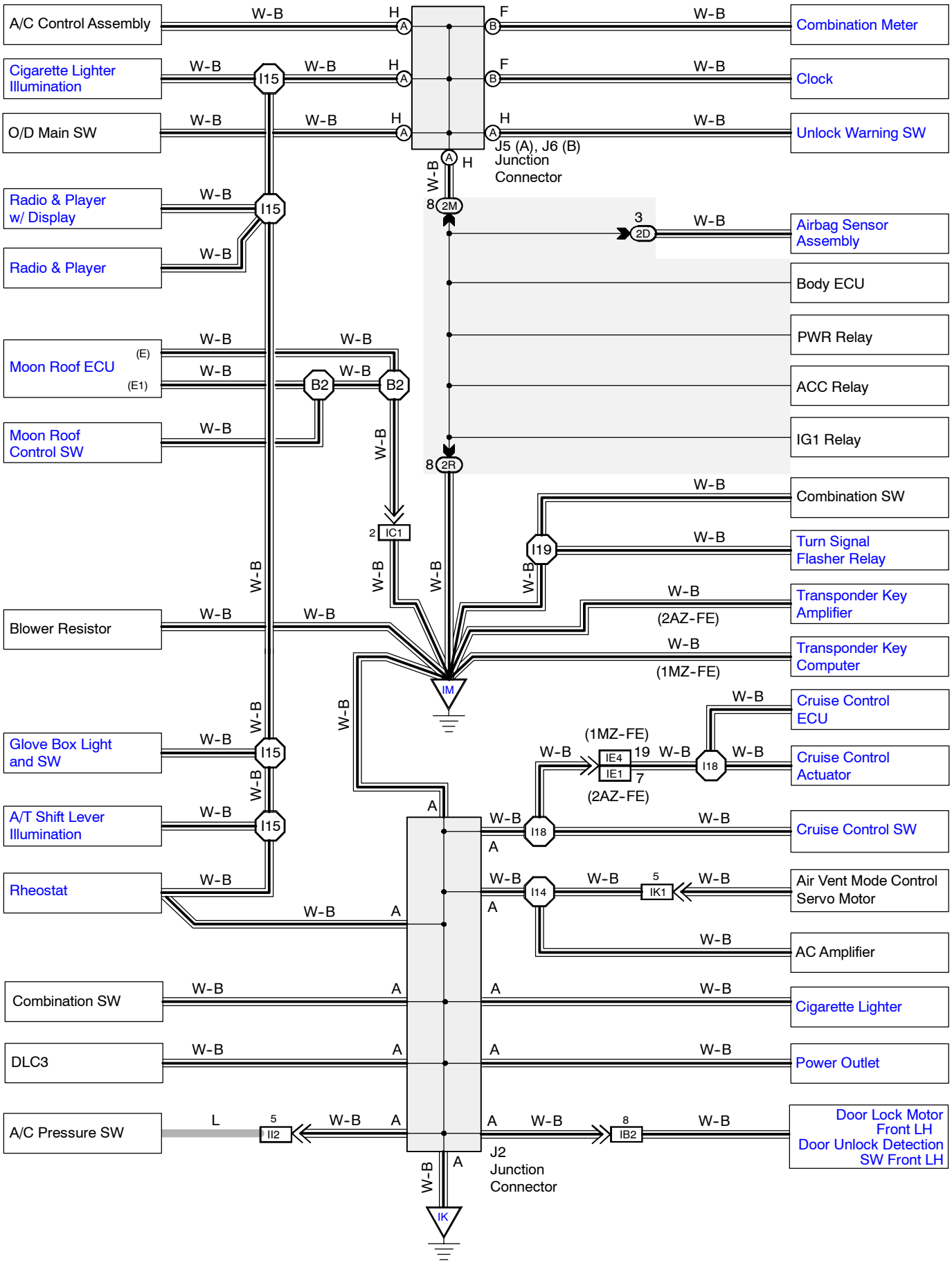



Igniter No. 1
GND
(1MZ-FE)
BR
EE
Knock SSR No. 1
Knock SSR No. 2
Heated O2 SSR Bank 1
Heated O2 SSR Bank 2
Shielding
4
EA1
3
W-B
I8
A
BR
16
IG1
Crankshaft Position Sensor
Camshaft Position Sensor
(SG)
DLC3
(E1)
(ADJI M/T)
Engine and ECT
ECU (A/T)
(E02)
(E01)
J13
Junction
Connector
ED
(1MZ-FE)

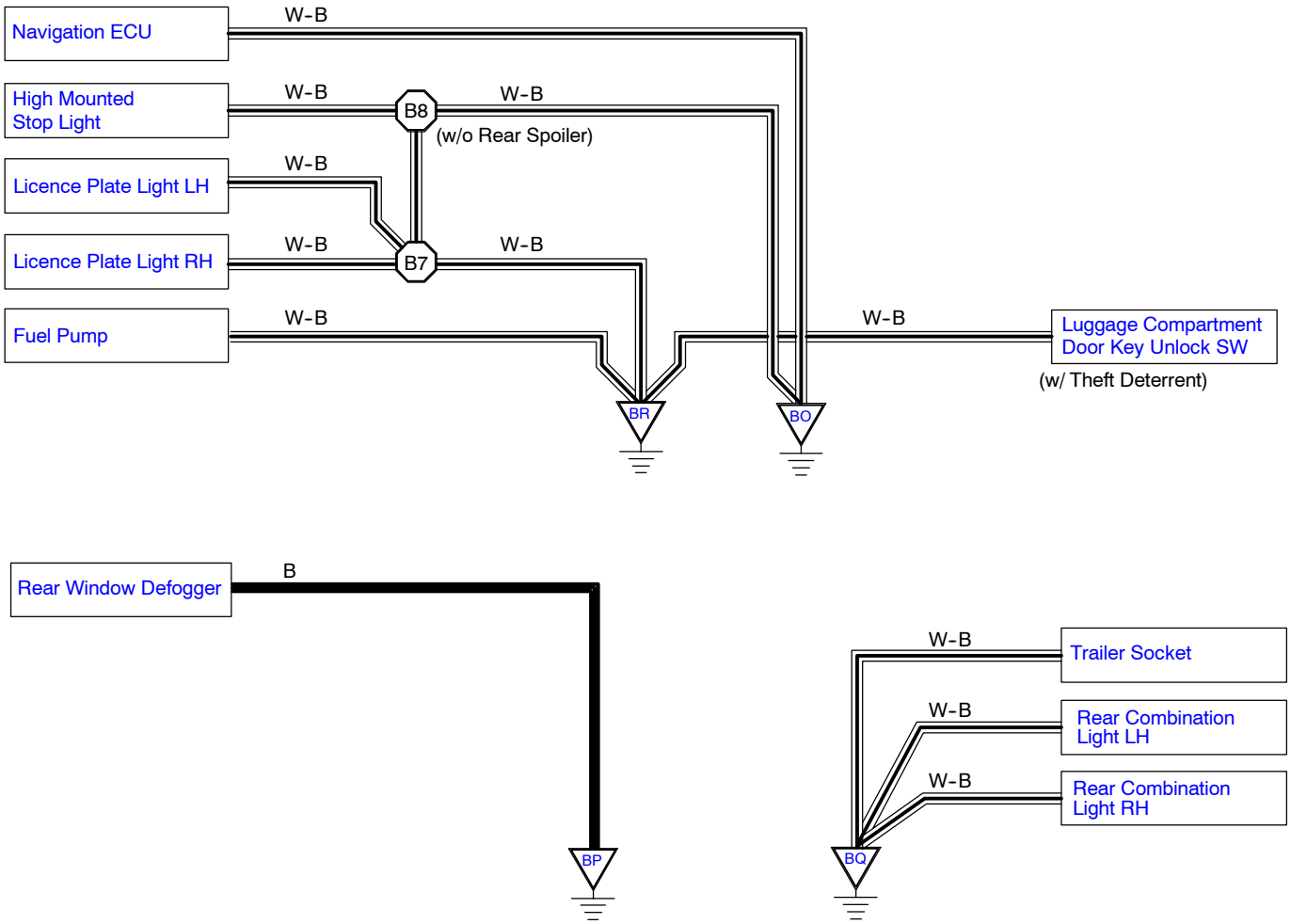

Engine and ECT
ECU (A/T)
(E02)
(E01)
(E1)
(EOM)
BR
A
J13
Junction
Connector
I6
I8
Shielding
Heated Oxygen Sensor
Crankshaft Position Sensor
Camshaft Position Sensor
Knock Sensor
A/C Lock Sensor
Heated Oxygen Sensor
7
I2
16
IG1
DLC3
(SG)
W-B
ISC Valve
EF
(2AZ-FE)

I GROUND POINT (RHD)




A/C Control Assembly
Cigarette Lighter Illumination
O/D Main SW
Radio & Player w/ Display
Radio & Player
Moon Roof ECU
(E)
(E1)
Moon Roof Control SW
Blower Resistor
Glove Box Light and SW
A/T Shift Lever Illumination
Rheostat
Combination SW
DLC3
A/C Pressure SW
W-B
H
F
L
I15
B2
I19
I18
I14
IC1
IM
IK
IE4
IE1
IK1
II2
IB2
2M
2D
2R
J5 (A), J6 (B) Junction Connector
J2 Junction Connector
(1MZ-FE)
(2AZ-FE)
Combination Meter
Clock
Unlock Warning SW
Airbag Sensor Assembly
Body ECU
PWR Relay
ACC Relay
IG1 Relay
Combination SW
Turn Signal Flasher Relay
Transponder Key Amplifier
Transponder Key Computer
Cruise Control ECU
Cruise Control Actuator
Cruise Control SW
Air Vent Mode Control Servo Motor
AC Amplifier
Cigarette Lighter
Power Outlet
Door Lock Motor Front LH
Door Unlock Detection SW Front LH

I GROUND POINT (RHD)



: Parts Location

Code	See Page	Code	See Page	Code	See Page
J2	47 (RHD)	J6	47 (RHD)		
J5	47 (RHD)	J13	47 (RHD)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
2B	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2D		
2M	27	
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	72 (RHD)	Rear Door LH Wire and Floor No.2 Wire (Left Center Pillar)
BB1	72 (RHD)	Rear Door RH Wire and Floor Wire (Right Center Pillar)
BC1	74	Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat)
BD1	74	Seat number 1 and 2 Wires RH
EA1	64 (RHD 1MZ-FE)	Engine Room Main Wire and Engine Room No.2 Wire (Radiator Side Support LH)
IB2	67 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	67	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
ID1	67	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE1	67 (RHD)	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
IE4	67	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	70	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II2	70	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1	70	Instrument Panel Wire and Instrument Panel No.3 Wire (Instrument Panel Brace RH)
IL1	70	Front Door RH Wire and Floor Wire (Right Kick Panel)

I GROUND POINT (RHD)

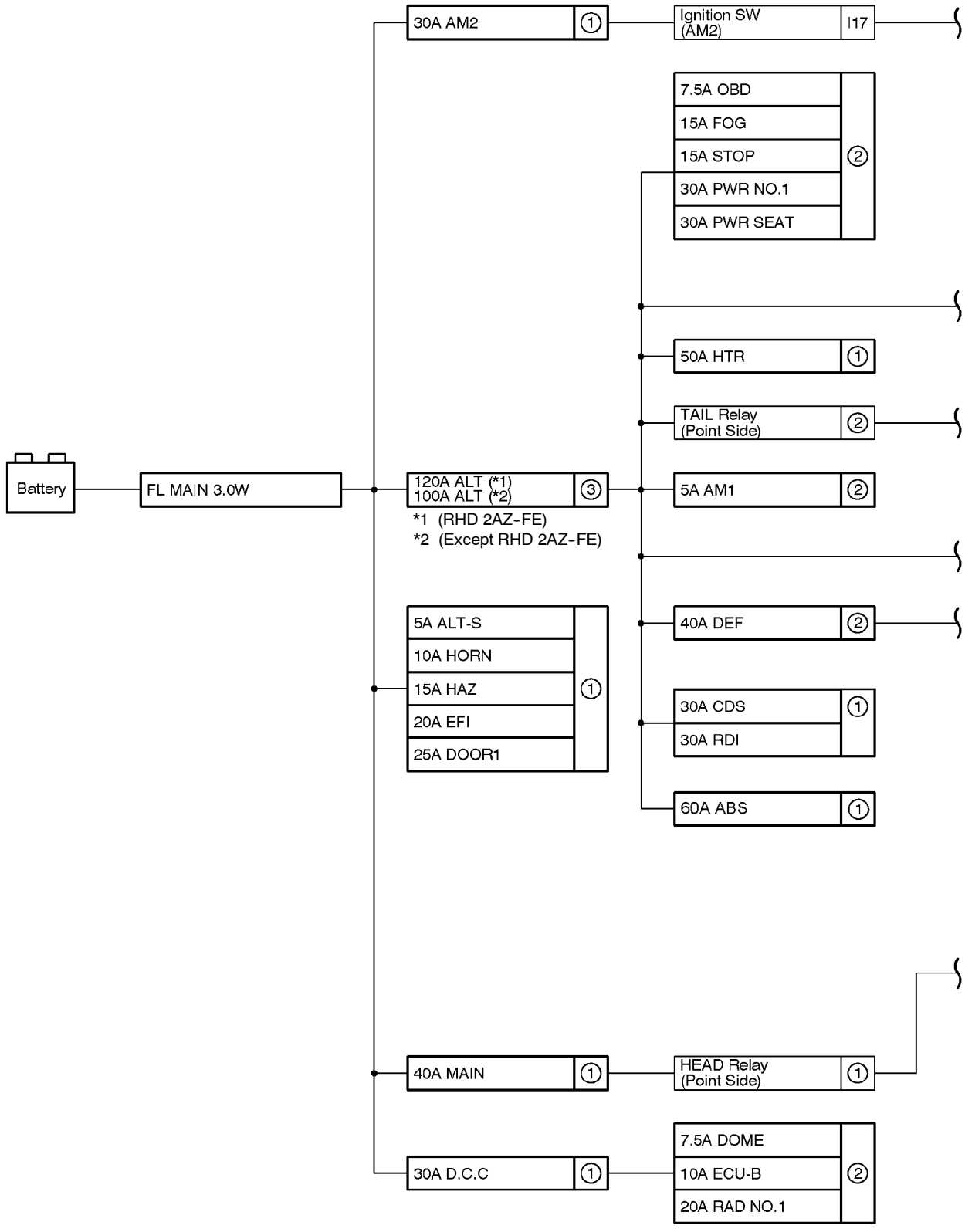
▽ : **Ground Points**

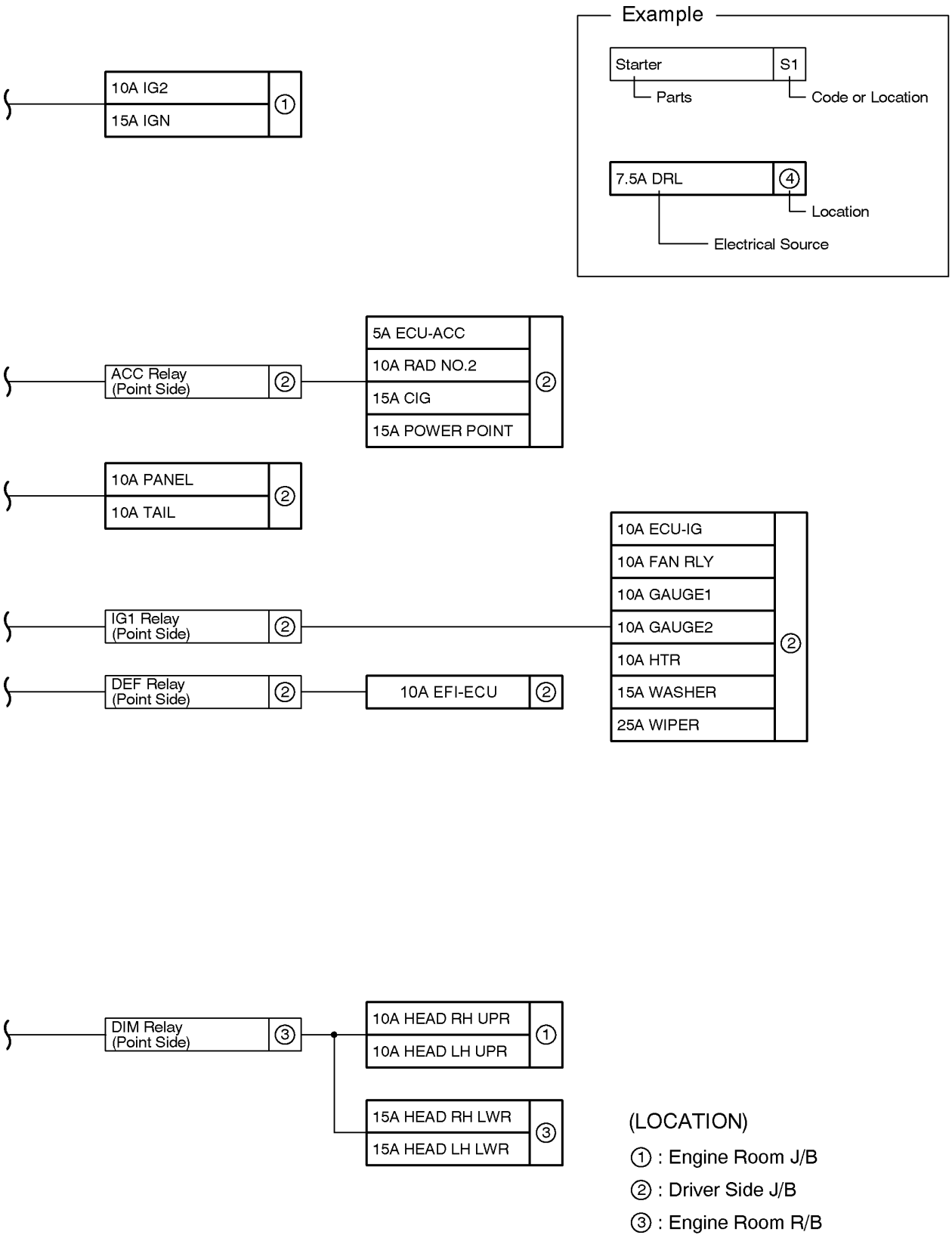
Code	See Page	Ground Points Location
EA	64 (RHD 1MZ-FE)	Right Fender
	66 (RHD 2AZ-FE)	
EB	64 (RHD 1MZ-FE)	
	66 (RHD 2AZ-FE)	
EC	64 (RHD 1MZ-FE)	Left Fender
ED	64 (RHD 1MZ-FE)	
EE	64 (RHD 1MZ-FE)	Surge Tank RH
EF	64 (RHD 2AZ-FE)	Rear Side of Surge Tank
EG	66 (RHD 2AZ-FE)	Left Side of Cylinder Head
IH	67 (RHD)	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II	67 (RHD)	Instrument Panel Reinforcement LH
IJ		
IK	67 (RHD)	Instrument Panel Brace LH
IL	67 (RHD)	Instrument Panel Brace RH
IM		
IN	67 (RHD)	Instrument Panel Reinforcement RH
BO	72 (RHD)	Under the Front Passenger's Seat
BP	72 (RHD)	Under the Driver's Seat
BQ	72 (RHD)	Front Side of Rear Quarter Wheel House LH
BR	72 (RHD)	Front Side of Rear Quarter Wheel House RH

○ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	72 (RHD)	Roof Wire	E3	64 (RHD 1MZ-FE)	Engine Room Main Wire
B2	72 (RHD)	Front Door LH Wire		66 (RHD 2AZ-FE)	
B3	72 (RHD)	Front Door RH Wire	E6	64 (RHD 1MZ-FE)	Engine Room Main Wire
B4	72 (RHD)	Floor Wire		66 (RHD 2AZ-FE)	Engine Room Main Wire
B7	72 (RHD)	Floor Wire No. 2	I2	70 (RHD)	Instrument Panel Wire
B8	72 (RHD)	Floor Wire	I6	70 (RHD)	Instrument Panel Wire
B12	72 (RHD)	Rear Door LH Wire	I8	70 (RHD)	
B13	72 (RHD)	Rear Door RH Wire	I14	70 (RHD)	
B14	72 (RHD)	Front Seat LH Wire	I15	70 (RHD)	
E1	64 (RHD 1MZ-FE)	Engine Room Main Wire	I19	70 (RHD)	
	66 (RHD 2AZ-FE)				
E2	64 (RHD 1MZ-FE)	Engine Room Main Wire			
	66 (RHD 2AZ-FE)				

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.




Example
Starter
S1
Parts
Code or Location
7.5A DRL
④
Location
Electrical Source
10A IG2
15A IGN
①
ACC Relay
(Point Side)
②
5A ECU-ACC
10A RAD NO.2
15A CIG
15A POWER POINT
②
10A PANEL
10A TAIL
②
IG1 Relay
(Point Side)
②
DEF Relay
(Point Side)
②
10A EFI-ECU
②
10A ECU-IG
10A FAN RLY
10A GAUGE1
10A GAUGE2
10A HTR
15A WASHER
25A WIPER
②
DIM Relay
(Point Side)
③
10A HEAD RH UPR
10A HEAD LH UPR
①
15A HEAD RH LWR
15A HEAD LH LWR
③
(LOCATION)
① : Engine Room J/B
② : Driver Side J/B
③ : Engine Room R/B

Engine Room J/B (See Page 22)

Fuse		System	Page
5A	ALT	Charging	90
10A	H–LP RH LO	Headlight (LHD) Headlight (RHD) Multiplex Communication System (LHD) Multiplex Communication System (RHD)	140 144 120 130
10A	H–LP LH LO	Headlight (LHD) Headlight (RHD) Multiplex Communication System (LHD) Multiplex Communication System (RHD)	140 144 120 130
10A	HORN	Horn	234
10A	IG2	ABS Charging Combination Meter ECT and A/T Indicator (1MZ–FE) ECT and A/T Indicator (2AZ–FE) Engine Control (1MZ–FE) Engine Control (2AZ–FE) SRS	198 90 252 212 218 92 104 203
15A	HAZ	Turn Signal and Hazard Warning Light	162
15A	IGN	Engine Control (1MZ–FE) Engine Control (2AZ–FE) Starting and Ignition (1MZ–FE) Starting and Ignition (2AZ–FE)	92 104 82 86
20A	EFI	ECT and A/T Indicator (1MZ–FE) ECT and A/T Indicator (2AZ–FE) Engine Control (1MZ–FE) Engine Control (2AZ–FE) Engine Immobiliser System (1MZ–FE) Engine Immobiliser System (2AZ–FE)	212 218 92 104 116 118
25A	DOOR1	Door Lock Control (LHD) Door Lock Control (RHD) Multiplex Communication System (LHD) Multiplex Communication System (RHD)	174 180 120 130
30A	AM2	Charging Engine Control (1MZ–FE) Engine Control (2AZ–FE) Starting and Ignition (1MZ–FE) Starting and Ignition (2AZ–FE)	90 92 104 82 86
30A	CDS	Radiator Fan and Condenser Fan	258
30A	RAD FAN	Radiator Fan and Condenser Fan	258

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

Fuse		System	Page
40A	MAIN	Headlight (LHD)	140
		Headlight (RHD)	144
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
50A	HTR	Automatic Air Conditioner	264
		Manual Air Conditioner (2AZ–FE)	272
		Manual Air Conditioner (1MZ–FE)	280

Driver Side J/B (See Page 26)

Fuse		System	Page
5A	AM1	Power Outlet	232
		Engine Control (1MZ–FE)	92
		Engine Control (2AZ–FE)	104
		Starting and Ignition (1MZ–FE)	82
		Starting and Ignition (2AZ–FE)	86
5A	ECU–ACC	Clock	240
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
		Remote Control Mirror	230
30A	D.C.C.	Engine Immobiliser (1MZ–FE)	116
7.5A	DOME	Interior Light	150
		Door Lock Control (RHD)	174
		Door Lock Control (LHD)	180
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
		Clock	240
7.5A	OBD	Engine Control (1MZ–FE)	92
		Engine Control (2AZ–FE)	104
10A	ECU–B	Automatic Air Conditioner	264
		Combination Meter	252
		Door Lock Control (LHD)	180
		Door Lock Control (RHD)	174
		Engine Control (1MZ–FE)	92
		Headlight (LHD)	140
		Headlight (RHD)	144
		Interior Light (LHD)	150
		Interior Light (RHD)	154
		Manual Air Conditioning (1MZ–FE)	280
		Manual Air Conditioning (2AZ–FE)	272
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130

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

J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
10A	ECU–IG	ABS	198
		Cruise Control	208
		Door Lock Control (LHD)	174
		Door Lock Control (RHD)	180
		Headlight (LHD)	140
		Headlight (RHD)	144
		Interior Light (LHD)	150
		Interior Light (RHD)	154
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
		Power Window with Jam Protection	188
		SRS	203
10A	FAN RLY	Radiator Fan and Condenser Fan	258
10A	GAUGE1	Auto Antenna	250
		Charging	90
		Clock	240
		Combination Meter	252
		Cruise Control	208
		Headlight (LHD)	140
		Headlight (RHD)	144
10A	GAUGE1	ECT and A/T Indicator (1MZ–FE)	212
		ECT and A/T Indicator (2AZ–FE)	218
		Engine Control (1MZ–FE)	92
		Engine Control (2AZ–FE)	104
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
		Seat Belt Warning (LHD)	228
		Turn Signal and Hazard Warning Light	162
10A	GAUGE2	Back–Up Light	172
		Cruise Control (1MZ–FE)	208
		Cruise Control (2AZ–FE)	208
		ECT and A/T Indicator (1MZ–FE)	212
		ECT and A/T Indicator (2AZ–FE)	218
		Moon Roof	186
		Rear Window Defogger	238
10A	HTR	Automatic Air Conditioner	264
		Manual Air Conditioning (2AZ–FE)	272
		Manual Air Conditioning (1MZ–FE)	280
10A	EFI–ECU	Engine Control (1MZ–FE)	92
		Rear Window Defogger and Mirror Heater	238
10A	PANEL	Illumination	158

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

Fuse		System	Page
10A	RAD NO.2	Auto Antenna Radio and Player (w/o TOYOTA Navigation System) Navigation System, Radio and Player	250 248 244
10A	TAIL	Engine Control (1MZ–FE) Front Fog Light Taillight	92 148 166
15A	CIG	Power Outlet and Cigarette Lighter	232
15A	FOG	Front Fog Light	148
15A	POWER POINT	Power Outlet and Cigarette Lighter	232
15A	STOP	Engine Control (1MZ–FE)	92
15A		Stop Light	170
15A	WASHER	Wiper and Washer	236
20A	RAD NO.1	Auto Antenna Radio and Player (w/o TOYOTA Navigation System) Navigation System, Radio and Player	250 248 244
25A	WIPER	Wiper and Washer	236
30A	PWR NO.1	Moon Roof Multiplex Communication System (LHD) Multiplex Communication System (RHD) Power Window with Jam Protection Power Window without Jam Protection	186 120 130 188 194
30A	PWR SEAT	Power Seat	224
40A	DEF	Rear Window Defogger and Mirror Heater	238

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

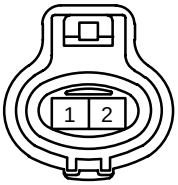
Engine Room R/B (See Page 22)

Fuse		System	Page
20A	H-LP LH HI	Headlight (LHD)	140
		Headlight (RHD)	144
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
		Door Lock Control (RHD)	180
20A	H-LP RH HI	Headlight (LHD)	140
		Headlight (RHD)	144
		Multiplex Communication System (LHD)	120
		Multiplex Communication System (RHD)	130
100A	ALT (Except RHD 2AZ-FE)	Charging	90
		ECT and A/T Indicator (1MZ-FE)	212
		Engine Control (1MZ-FE)	92
		ECT and A/T Indicator (2AZ-FE)	218
		Engine Control (2AZ-FE)	104
		Headlight (LHD)	140
		Headlight (RHD)	144
		Multiplex Communication System (LHD 1MZ-FE)	120
		Multiplex Communication System (RHD 1MZ-FE)	130
		Multiplex Communication System (LHD)	120
		Starting and Ignition (1MZ-FE)	82
		Starting and Ignition (2AZ-FE)	86
		Illumination	158
		Taillight	166
120A	ALT (RHD 2AZ-FE)	Charging	90
		ECT and A/T Indicator (2AZ-FE)	218
		Engine Control (2AZ-FE)	104
		Headlight (LHD)	140
		Headlight (RHD)	144
		Illumination	158
		Multiplex Communication System (RHD 2AZ-FE)	130
		Starting and Ignition (2AZ-FE)	86
		Taillight	166
60A	ABS No.1	ABS	198
50A	BLR	Manual Air Conditioning (1MZ-FE)	280
		Manual Air Conditioning (2AZ-FE)	272

A 1
Black



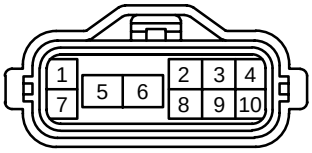
A 2
Gray



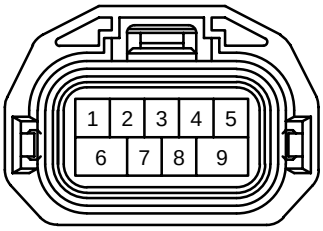
A 3
Gray



A 4
(1MZ–FE) Gray



A 4
(2AZ–FE) Gray



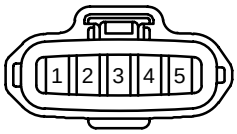
A 5
Gray



A 6
Gray



A 7
Black



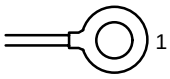
A 8
Yellow



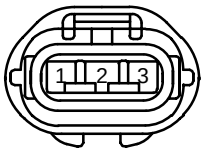
A 9
Yellow



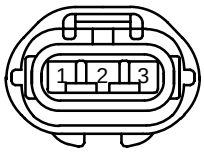
A10



A11
(LHD 1MZ–FE) Gray



A11
(LHD 2AZ–FE) Black



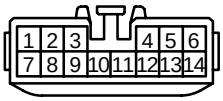
A11
(RHD 1MZ–FE) Gray



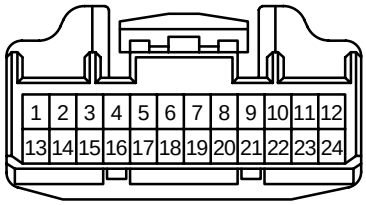
A11
(RHD 2AZ–FE) Black



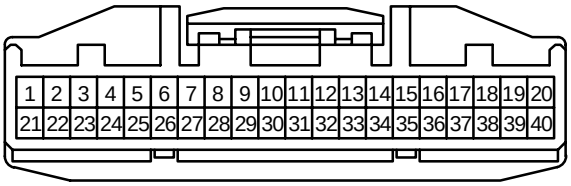
A12



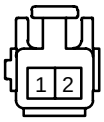
A13



A14



A15
Black



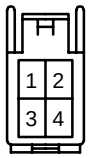
A16
Black



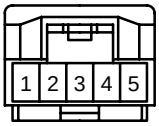
A17



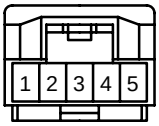
A18



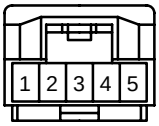
A19
Black



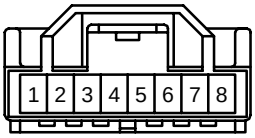
A20
Black



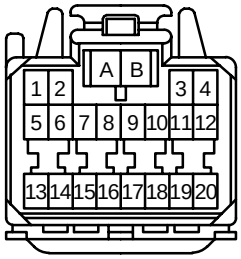
A21
(Automatic A/C) Black



A21
(Manual A/C) Black

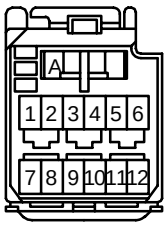


A22
(w/ Side Airbag) Yellow

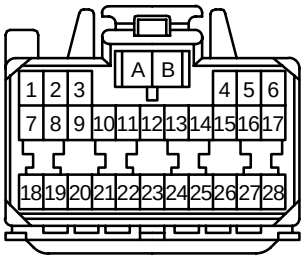


*1 : w/o Side Airbag

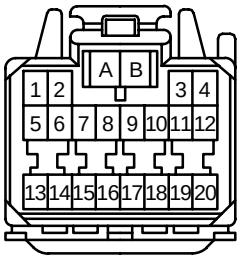
A22
(*1) Yellow



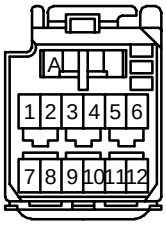
A23
Yellow



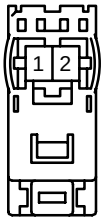
A24
(w/ Side Airbag) Yellow



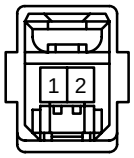
A24
(*1) Yellow



A25
Black



A26
Yellow



A27



A28
(LHD) Gray



A28
(RHD)



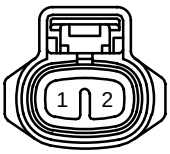
A29



A30
Blue



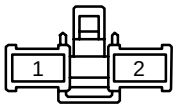
B 1
Gray



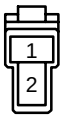
B 2
Gray



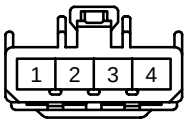
B 3
(LHD) Black



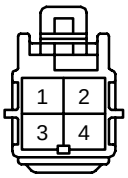
B 3
(RHD) Black



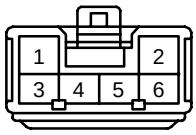
B 4
Black



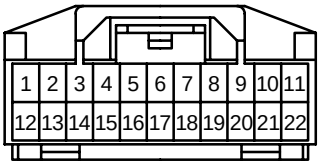
B 5
Black



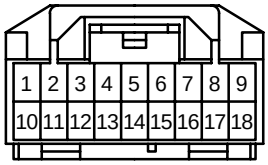
B 6



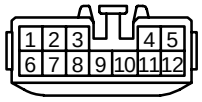
B 7



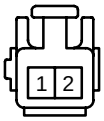
B 8



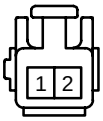
B 9



B10



B11



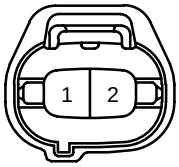
C 1
Black



C 2
Black



C 3
Black



C 4
(1MZ–FE) Black



C 4
(2AZ–FE) Dark Gray



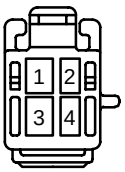
C 5
Black



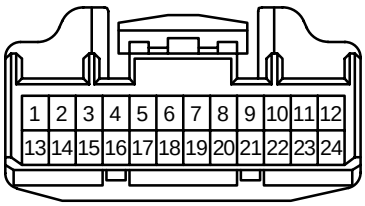
K CONNECTOR LIST

*2 : w/ Multi Display
*3 : w/o Multi Display

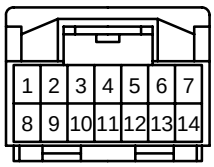
C 6



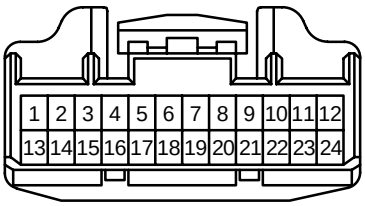
C 7
(*2)



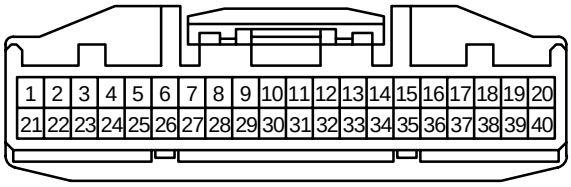
C 7
(*3)



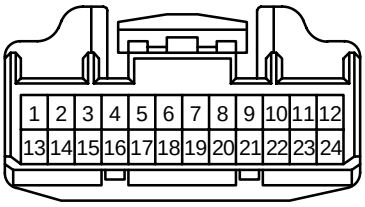
C 8



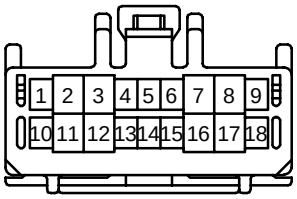
C 9



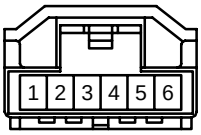
C10



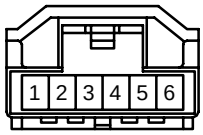
C11
Black



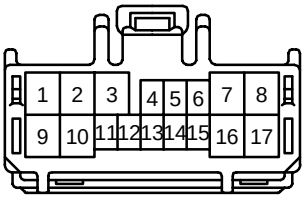
C12
(LHD)



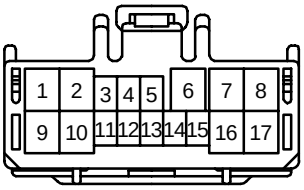
C12
(RHD) Black



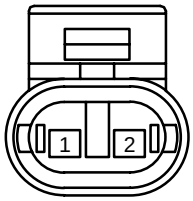
C13
(LHD)



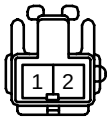
C13
(RHD) Black



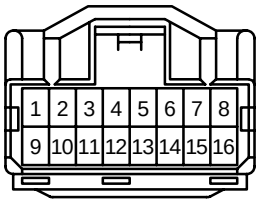
C14



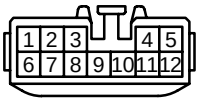
C15



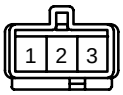
C16



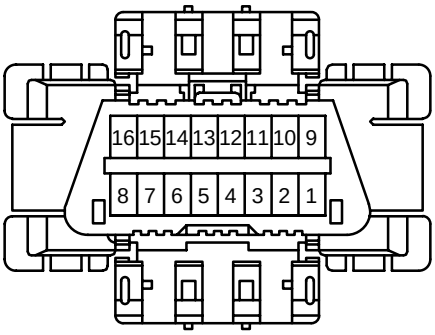
C17



D 1
Gray

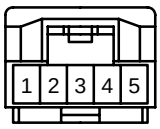


D 2



*4 : w/ Jam Protection
*5 : w/o Jam Protection

D 3



D 4



D 5



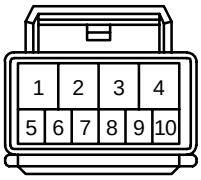
D 6



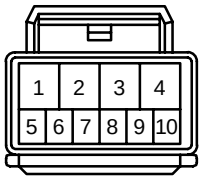
D 7



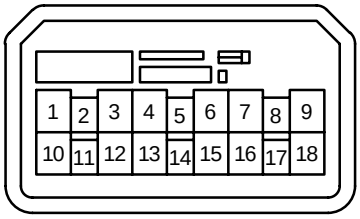
D 8



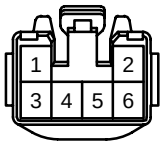
D 9



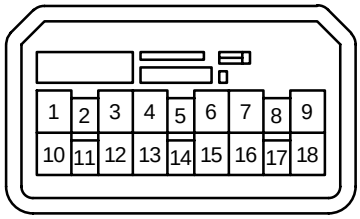
D10



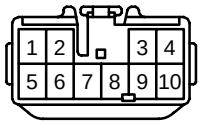
D11



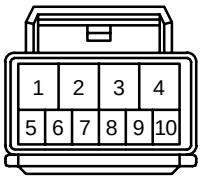
D12
(*4)



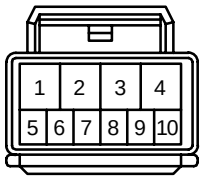
D12
(*5)



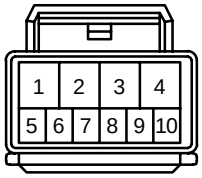
D13



D14



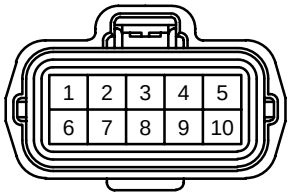
D15



E 1
(1MZ–FE) Gray



E 1
(2AZ–FE) Gray



E 2
(1MZ–FE) Dark Gray



E 2
(2AZ–FE) Dark Gray



E 3
Dark Gray



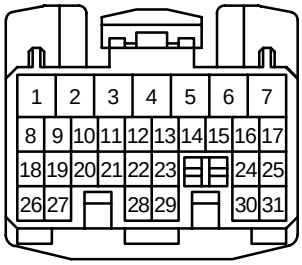
E 4
Black



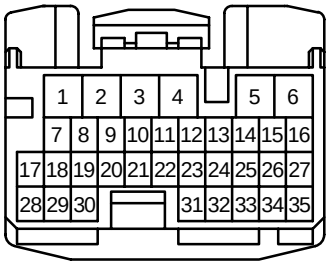
E 5
Black



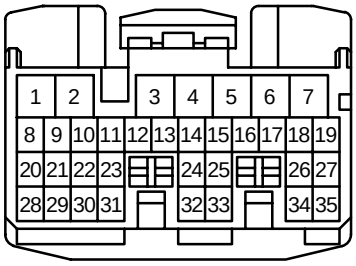
E 6



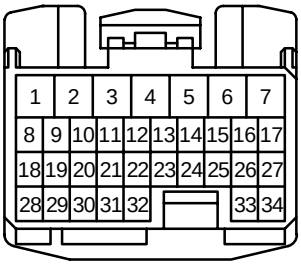
E 7



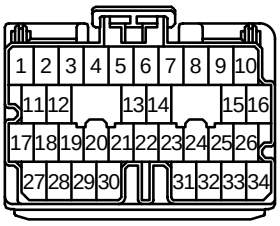
E 8



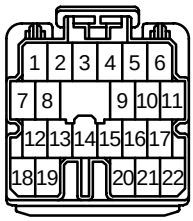
E 9



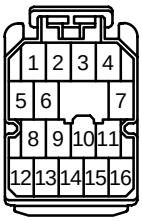
E10



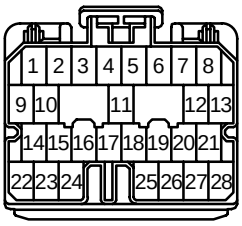
E11



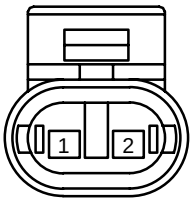
E12



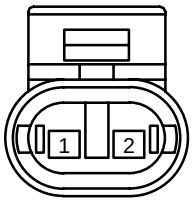
E13



F 1
Black



F 2
Black



F 3
Brown



F 4
Brown



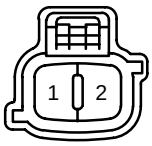
F 5



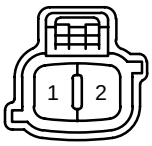
F 6



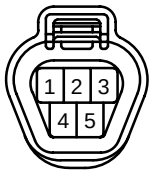
F 7
Gray



F 8
Gray



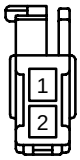
F 9
Gray



F10



F11



F12



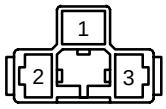
G 1
Black



H 1
Black



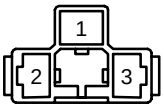
H 2
Black



H 3
Black



H 4
Black



H 5
Dark Gray



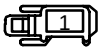
H 6
Dark Gray



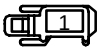
H 7
Dark Gray



H 8
Black



H 9
Black



*6 : w/ Rear Spoiler
*7 : w/o Rear Spoiler

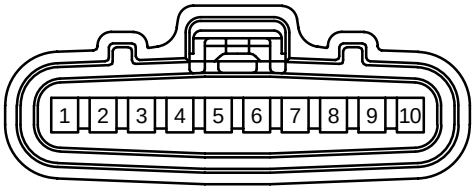
H10
(*6)



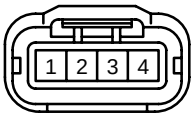
H10
(*7) Black



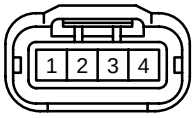
I 1
Black



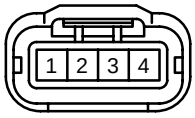
I 2
Black



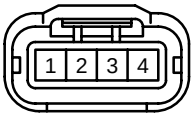
I 3
Black



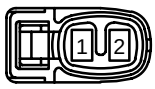
I 4
Black



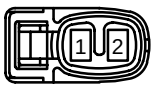
I 5
Black



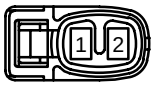
I 6
Black



I 7
Black



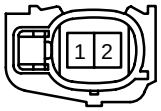
I 8
Black



I 9
(1MZ–FE) Gray



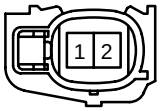
I 9
(2AZ–FE) Black



I10
(1MZ–FE) Gray



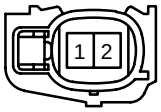
I10
(2AZ–FE) Black



I11
(1MZ–FE) Gray



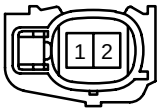
I11
(2AZ–FE) Black



I12
(1MZ–FE) Gray



I12
(2AZ–FE) Black



I13
Gray



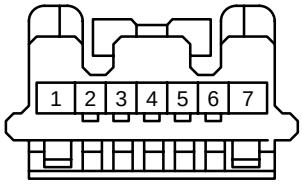
I14
Gray



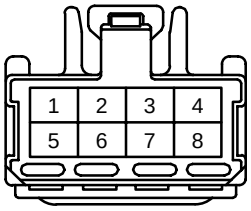
I15
Black



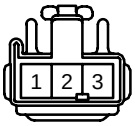
I16
Black



I17



I18
(w/ Moon Roof)



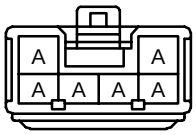
I18
(w/o Moon Roof)



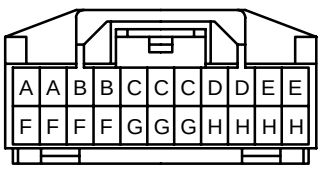
J 1



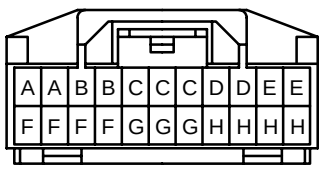
J 2



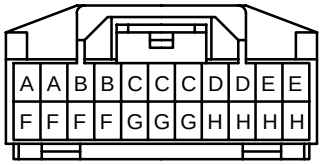
J 3



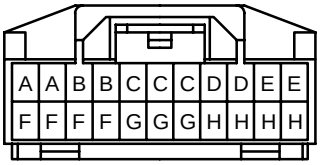
J 4



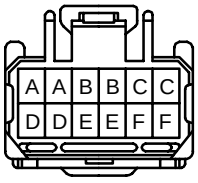
J 5



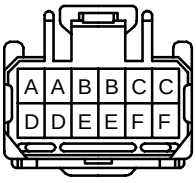
J 6



J 7

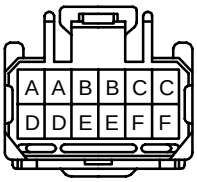


J 8

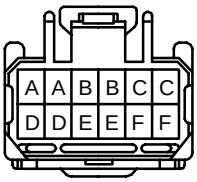


K CONNECTOR LIST

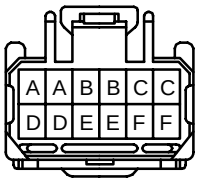
J 9



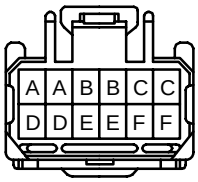
J10



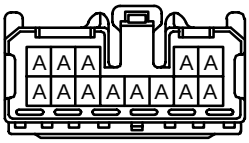
J11



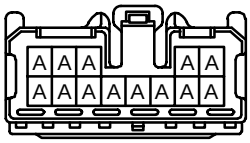
J12



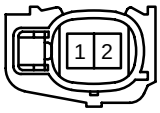
J13
(1MZ–FE)



J13
(2AZ–FE) Black



K 1
Black



K 2
Dark Gray



K 3
Dark Gray



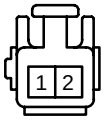
L 1



L 2



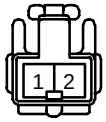
L 3
Black



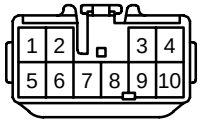
L 4



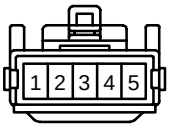
L 5
Black



M 1



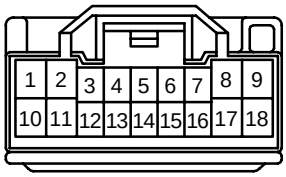
M 2



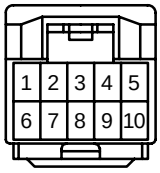
N 1
Gray



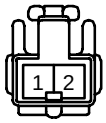
N 2



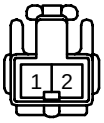
N 3



N 4



N 5



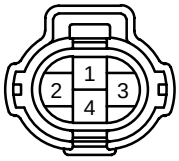
O 1
Gray



P 1
Black



P 2
Gray



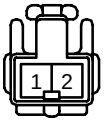
P 3



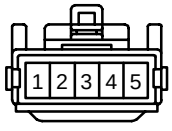
P 4



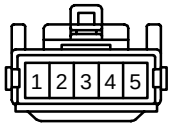
P 5



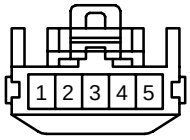
P 6
Black



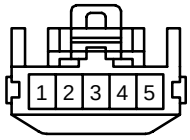
P 7
Black



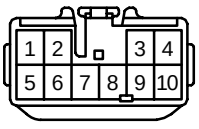
P 8



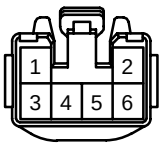
P 9



P10



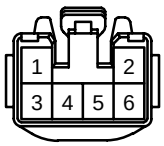
P11
Black



P12
Black



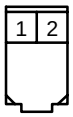
P13
Black



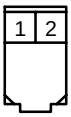
P14
Black



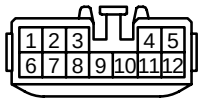
P15
Yellow



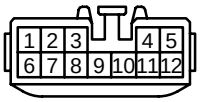
P16
Yellow



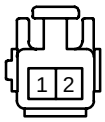
P17
Black



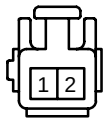
P18
Black



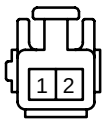
P19



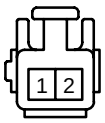
P20



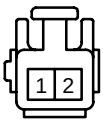
P21



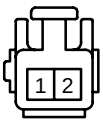
P22



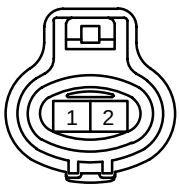
P23



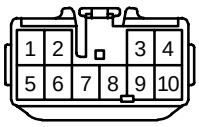
P24



R 1
Gray



R 2



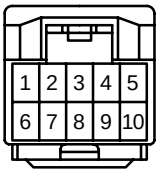
R 3
(LHD) Blue



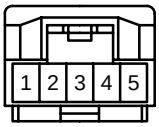
R 3
(RHD)



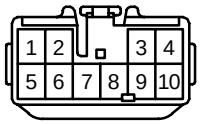
R 4



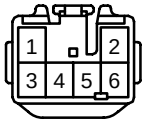
R 5



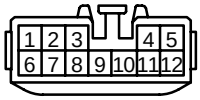
R 6



R 7



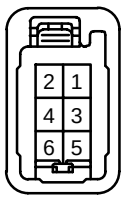
R 8



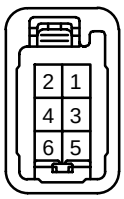
R 9



R10



R11



R12



R13



R14
Black



R15
Black



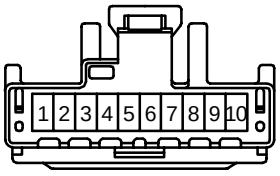
R16



R17



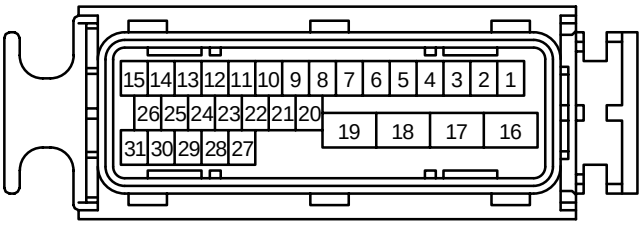
R18



S 1
Black



S 2
Black



S 3
Black

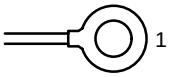


S 4
Black

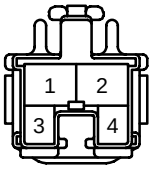


K CONNECTOR LIST

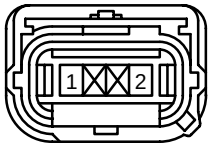
S 5



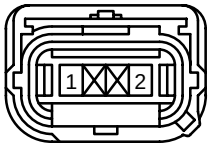
S 6
Blue



S 7
Yellow



S 8
Yellow



S 9
Yellow



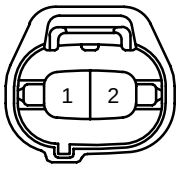
S10
Yellow



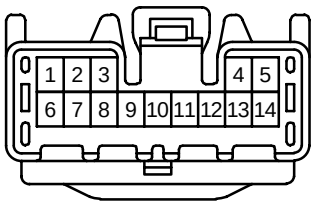
T 1
Black



T 2
Black



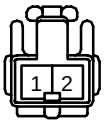
T 3



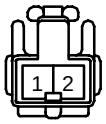
T 4
Black



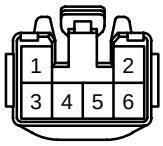
T 5



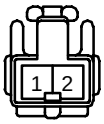
T 6



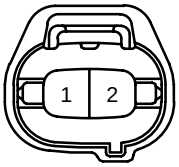
T 7
Blue



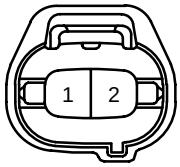
U 1



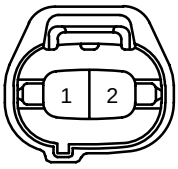
V 1
Brown



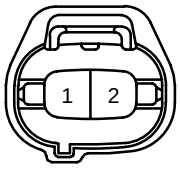
V 2
Brown



V 3
(1MZ–FE) Blue



V 3
(2AZ–FE) Black



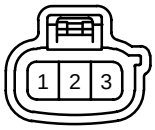
V 4
Blue



V 5
Blue



W 1
Black



W 2
Gray



W 3
Gray



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	90980-10928
A 3	A/C Lock Sensor	90980-11332
	A/C Magnetic Clutch	
A 4	A/T Indicator Light SW	90980-11784
	Back-Up Light SW	
	Neutral Start SW	
A 5	ABS Speed Sensor Front LH	90980-11002
A 6	ABS Speed Sensor Front RH	
A 7	Air Flow Meter	90980-11317
A8	Airbag Sensor Front LH	90980-11856
A9	Airbag Sensor Front RH	
A10	Alternator	90980-09213
A11	Alternator	90980-11964
A12	A/C Amplifier	90980-10807
A13	A/C Control Assembly	90980-12200
A14	A/C Control Assembly	90980-12169
A15	A/C Room Temp. Sensor	90980-10825
A16	A/C Solar Sensor	90980-11918
A17	A/C Thermistor	90980-11918
A18	A/T Shift Lever Illumination O/D Main SW	90980-12211
A19	Air Inlet Control Servo Motor	90980-11909
A20	Air Mix Control Servo Motor	
A21	Air Vent Mode Control Servo Motor (Automatic A/C)	
	Air Vent Mode Control Servo Motor (Manual A/C)	90980-11989
A22	Airbag Sensor Assembly	82824-50160
A23	Airbag Sensor Assembly	90980-11872
A24	Airbag Sensor Assembly	82824-50150
A25	Airbag Squib (Front Passenger Airbag Assembly)	90980-12219
A26	Airbag Squib (Steering Wheel Pad)	90980-12470
A27	Antenna Amplifier	90980-10871
A28	ABS Speed Sensor Rear LH	90980-11060
A29	ABS Speed Sensor Rear RH	
A30	Auto Antenna Control Relay	90980-11909
B 1	Back-Up Light SW	90980-11250
B 2	Brake Fluid Level Warning SW	90980-11207
B 3	Blower Motor	90980-10804
B 4	Blower Motor Controller	90980-11676
B 5	Blower Resistor	90980-11136
B 6	Blower Switch	90980-10976

Code	Part Name	Part Number
B 7	Body ECU	90980-11915
B 8	Body ECU	90980-11913
B 9	Body ECU	90980-10803
B10	Buckle SW LH (LHD)	90980-10825
B11	Buckle SW RH (LHD) Occupant Detection Sensor (LHD)	
C 1	Camshaft Position Sensor	90980-10947
C 3	Counter Gear Speed Sensor	90980-11156
C 2	Camshaft Timing Oil Control Valve (VVT)	90980-11162
C 4	Crankshaft Position Sensor	90980-10947
C 5	Cruise Control Actuator	90980-11150
C 6	Cigarette Lighter	90980-11606
C 7	Clock	90980-11911
C 8	Clock (Multi-Information Display)	90980-12200
C 9	Combination Meter	90980-12169
C10	Combination Meter	90980-12200
C11	Combination SW	90980-11594
C12	Combination SW	90980-12986
C13	Combination SW (LHD)	90980-11672
	Combination SW (RHD)	90980-11671
C14	Combination SW	90980-11884
C15	Cruise Control Clutch SW	90980-10906
C16	Cruise Control ECU	90980-12094
C17	CD Changer	90980-10803
D 1	Diode (A/C)	90980-11071
D 2	DLC3	90980-11665
D 3	Door Control Receiver	90980-11909
D 4	Door Courtesy SW Front LH	90980-10871
D 5	Door Courtesy SW Front RH	
D 6	Door Courtesy SW Rear LH	
D 7	Door Courtesy SW Rear RH	
D 8	Door Key Lock and Unlock SW Front LH	90980-12226
	Door Lock Motor Front LH	
	Door Unlock Detection SW Front LH	
	Position SW Front LH	
D 9	Door Key Lock and Unlock SW Front RH	
	Door Lock Motor Front RH	
	Door Unlock Detection SW Front RH	
	Position SW Front RH	
D10	Door Lock Control SW Front LH	90980-12122
	Power Window Master SW	
D11	Door Lock Control SW Front RH	90980-12226

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

Code	Part Name	Part Number
D12	Door Lock Control SW Front RH	90980-12122
	Power Window Master SW	
D13	Door Lock Motor Front LH	90980-12226
	Door Unlock Detection SW Front LH	
D14	Door Lock Motor Rear LH	
	Door Unlock Detection SW Rear LH	
	Double Door Lock Motor Rear LH	
	Position SW Rear LH	
D15	Door Lock Motor Rear RH	
	Door Unlock Detection SW Rear RH	
	Position SW Rear RH	
E 1	ECT Solenoid	90980-11854
E 2	EFI Water Temp. Sensor (1MZ-FE)	90980-10737
	EFI Water Temp. Sensor (2AZ-FE)	90980-11061
E 3	EGR Gas Temp. Sensor	90980-10899
E 4	EGR Valve Position Sensor	90980-11143
E5	Engine Hood Courtesy SW	90980-11003
E 6	Engine and ECT ECU (A/T)	90980-12142
	Engine ECU (M/T)	
E 7	Engine and ECT ECU (A/T)	90980-12146
	Engine ECU (M/T)	
E 8	Engine and ECT ECU (A/T)	90980-12145
	Engine ECU (M/T)	
E 9	Engine and ECT ECU (A/T)	90980-12144
	Engine ECU (M/T)	
E10	Engine and ECT ECU (A/T)	90980-11221
	Engine ECU (M/T)	
E11	Engine and ECT ECU (A/T)	90980-11220
	Engine ECU (M/T)	
E12	Engine and ECT ECU (A/T)	90980-11219
	Engine ECU (M/T)	
E13	Engine and ECT ECU (A/T)	90980-11218
	Engine ECU (M/T)	
F 1	Front Clearance Light LH	90980-11128
F 2	Front Clearance Light RH	90980-11128
F 3	Front Fog Light LH	90980-11096
F 4	Front Fog Light RH	
F 5	Front Side Turn Signal Light LH	90980-11128
F 6	Front Side Turn Signal Light RH	
F 7	Front Turn Signal Light LH	90980-10598
F 8	Front Turn Signal Light RH	
F 9	Front Wiper Motor	90980-11599
F10	Front Door Speaker LH	90980-10935
F11	Front Door Speaker RH	90980-10935

Code	Part Name	Part Number
F12	Fuel Pump	90980-11077
	Fuel Sender	
G 1	Glove Box Light and SW	90980-11098
H 1	Headlight LH (High)	90980-10228
H 2	Headlight LH (Low)	
H 3	Headlight RH (High)	
H 4	Headlight RH (Low)	
H 5	Heated Oxygen Sensor	90980-11028
H6	Heated Oxygen Sensor (Bank 1 Sensor 1)	
H7	Heated Oxygen Sensor (Bank 2 Sensor 1)	
H8	Horn (High)	90980-10619
H9	Horn (Low)	
H10	High Mounted Stop Light (w/ Rear Spoiler)	90980-11060
	High Mounted Stop Light (w/o Rear Spoiler)	90980-10474
I1	Igniter	90980-11653
I2	Ignition Coil and Igniter No.1	90980-11885
I3	Ignition Coil and Igniter No.2	
I4	Ignition Coil and Igniter No.3	
I5	Ignition Coil and Igniter No.4	
I 6	Ignition Coil No.1 (1MZ-FE)	90980-11246
I 7	Ignition Coil No.2 (1MZ-FE)	
I 8	Ignition Coil No.3 (1MZ-FE)	
I 9	Injector No.1 (1MZ-FE)	90980-11153
	Injector No.1 (2AZ-FE)	90980-11875
I 10	Injector No.2 (1MZ-FE)	90980-11153
	Injector No.2 (2AZ-FE)	90980-11875
I 11	Injector No.3 (1MZ-FE)	90980-11153
	Injector No.3 (2AZ-FE)	90980-11875
I12	Injector No.4 (1MZ-FE)	90980-11153
	Injector No.4 (2AZ-FE)	90980-11875
I13	Injector No.5 (1MZ-FE)	90980-11153
I14	Injector No.6 (1MZ-FE)	
I15	ISC Valve	90980-11145
I16	Ignition Key Cylinder Light	90980-12092
	Transponder Key Amplifier	
I17	Ignition SW	90980-11615
I18	Interior Light	90980-10121
J 1	Junction Connector	90980-11542
J 2	Junction Connector	90980-10583
J 3	Junction Connector	90980-10803
J 4	Junction Connector	90980-10976
J 5	Junction Connector	90980-11661
J 6	Junction Connector	

L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
J 7	Junction Connector	90980-11661
J 8	Junction Connector	
J 9	Junction Connector	90980-11661
J10	Junction Connector	90980-11661
J11	Junction Connector	90980-11661
J12	Junction Connector	90980-11915
J13	Junction Connector	
K 1	Knock Sensor	90980-11875
K 2	Knock Sensor No.1	90980-11269
K 3	Knock Sensor No.2	
L 1	License Plate Light LH	90980-10474
L 2	License Plate Light RH	
L 3	Luggage Compartment Door Opener Motor	90980-10825
	Luggage Compartment Light SW	
L 4	Luggage Compartment Light	90980-11148
L 5	Luggage Compartment Door Key Unlock SW	90980-11060
M 1	Moon Roof Control ECU and Motor	90980-10997
M 2	Moon Roof Control SW	90980-10789
	Personal Light	
N 1	Noise Filter (Ignition)	90980-10843
N 2	Navigation ECU	90980-11973
N 3	Navigation ECU	90980-11923
N 4	Noise Filter	90980-10860
N 5	Noise Filter (Rear Window Defogger)	
O 1	Oil Pressure Sensor	90980-11363
P 1	Power Steering Oil Pressure SW	90980-11428
P 2	Pressure SW	90980-10943
P 3	Parking Brake SW	90980-10871
P 4	Power Outlet (Front)	90980-10760
P 5	Personal Light	90980-10621
P 6	Power Window Control SW Front LH	90980-10789
P 7	Power Window Control SW Front RH	
P 8	Power Window Control SW Rear LH	
P 9	Power Window Control SW Rear RH	
P10	Power Window Master SW (w/ jam protection)	90980-12122
	Power Window Master SW (w/o jam protection)	90980-10997
P11	Power Window Motor Front LH	90980-12226
P12	Power Window Motor Front RH	
P13	Power Window Motor Rear LH	
P14	Power Window Motor Rear RH	
P15	Pretensioner LH	90980-11862
P16	Pretensioner RH	

Code	Part Name	Part Number
P17	Power Seat Control SW (Driver's Seat)	90980-10803
P18	Power Seat Control SW (Front Passenger's Seat)	
P19	Power Seat Motor (Driver's Seat Rear Vertical Control)	90980-10825
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 Rear Vertical Control)	
P23	Power Seat Motor (Front Passenger's Seat Reclining Control)	
P24	Power Seat Motor (Front Passenger's Seat Slide Control)	
R 1	Radiator Fan Motor	90980-10928
R 2	Radio and Player	90980-10997
R 3	Radio and Player	90980-10996
R 4	Radio and Player with Display	90980-11923
R 5	Radio and Player with Display	90980-11909
R 6	Radio and Player with Display	90980-10997
R 7	Radio and Player with Display	90980-10996
R 8	Radio and Player with Display	90980-10803
R 9	Rheostat	90980-11296
R10	Rear Combination Light LH	90980-11587
R11	Rear Combination Light RH	
R12	Rear Speaker LH	90980-11060
R13	Rear Speaker RH	
R14	Rear Window Defogger	90980-10913
R15	Rear Window Defogger	90980-10913
R16	Remote Control Mirror LH	90980-10394
R17	Remote Control Mirror RH	
R18	Remote Control Mirror SW	90980-11657
S 1	Security Horn	90980-11235
S 2	ABS Actuator	90980-98070
S 3	Speed Sensor Combination Meter	90980-11143
S 4	Starter (1MZ-FE)	90980-09689
	Starter (2AZ-FE)	90980-09532
S 5	Starter (1MZ-FE)	90980-11400
	Starter (2AZ-FE)	90980-11400
S 6	Stop Light SW	90980-11118
S 7	Side Airbag Sensor LH	90980-12241
S 8	Side Airbag Sensor RH	
S 9	Side Airbag Squib LH	90980-11864
S10	Side Airbag Squib RH	

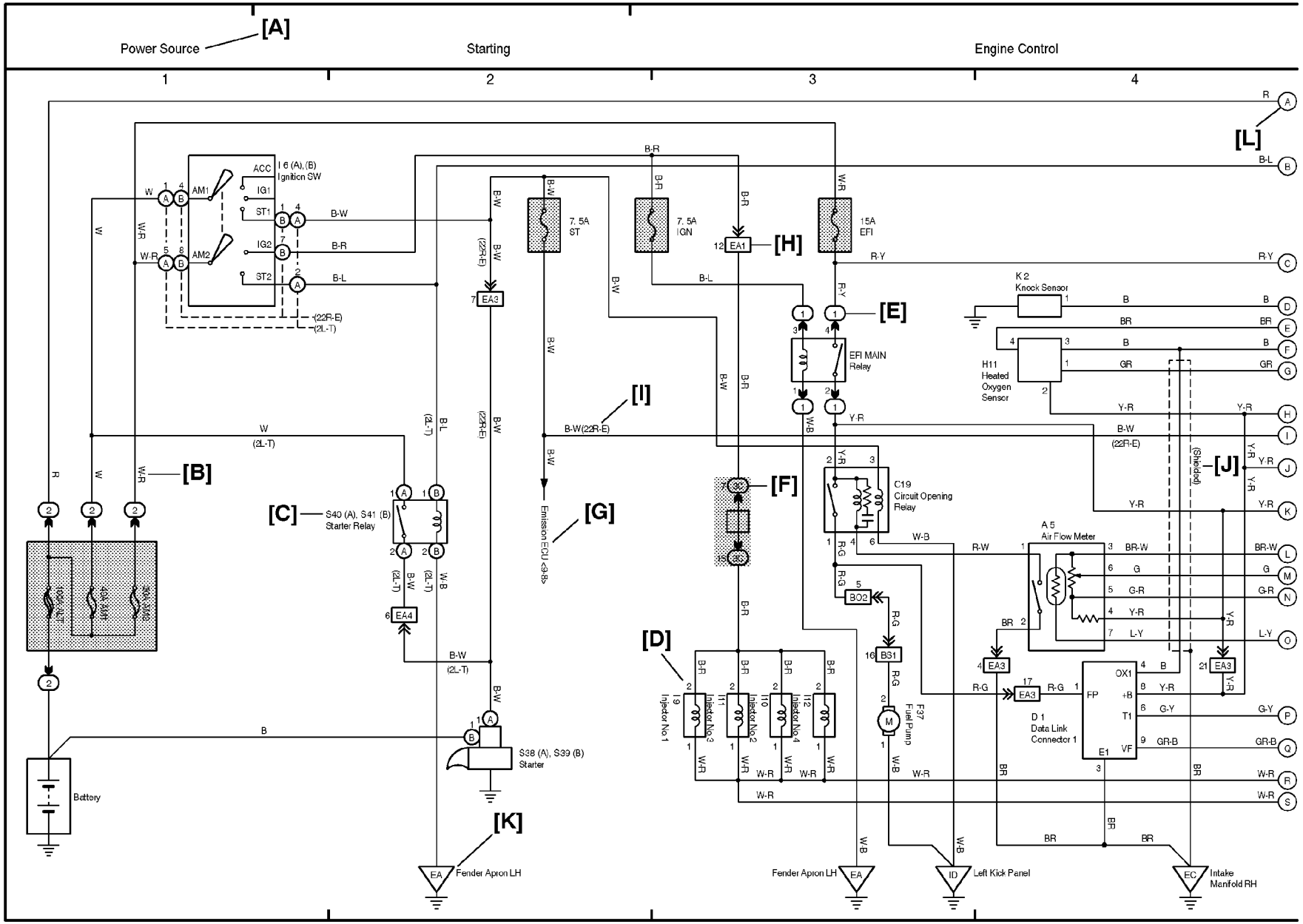
Note: Not all of the above connector part numbers are established for supply.

Code	Part Name	Part Number
T 1	Throttle Position Sensor (1MZ-FE)	90980-11261
	Throttle Position Sensor (2AZ-FE)	90980-11261
T 3	Immobiliser ECU	90980-11556
T 4	Turn Signal Flasher Relay	90980-10799
T 5	Tweeter LH	90980-10860
T 6	Tweeter RH	
T 7	Trailer Socket	90980-10797
U 1	Unlock Warning SW	90980-10860

Code	Part Name	Part Number
V 1	VSV (ACIS)	90980-11149
V 2	VSV (EGR)	90980-11149
V 3	VSV (EVAP)	90980-11156
V 4	Vanity Light LH	90980-10621
V 5	Vanity Light RH	
W 1	Washer Motor	90980-10981
W 2	Water Temp. SW No.1	90980-10737
W 3	Water Temp. SW No.2	90980-11243

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.



[A] : System Title

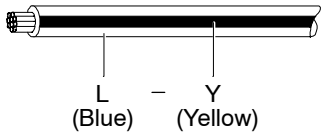
[B] : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

Example: L – Y

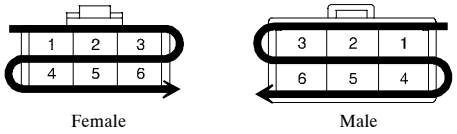


[C] : The position of the parts is the same as shown in the wiring diagram and wire routing.

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

Example : Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



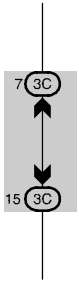
The numbering system for the overall wiring diagram is the same as above

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

Example : (1) Indicates Relay Block No.1

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

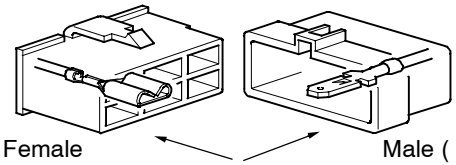
Example:



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

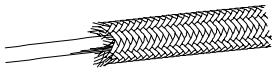
[G] : Indicates related system.

[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.

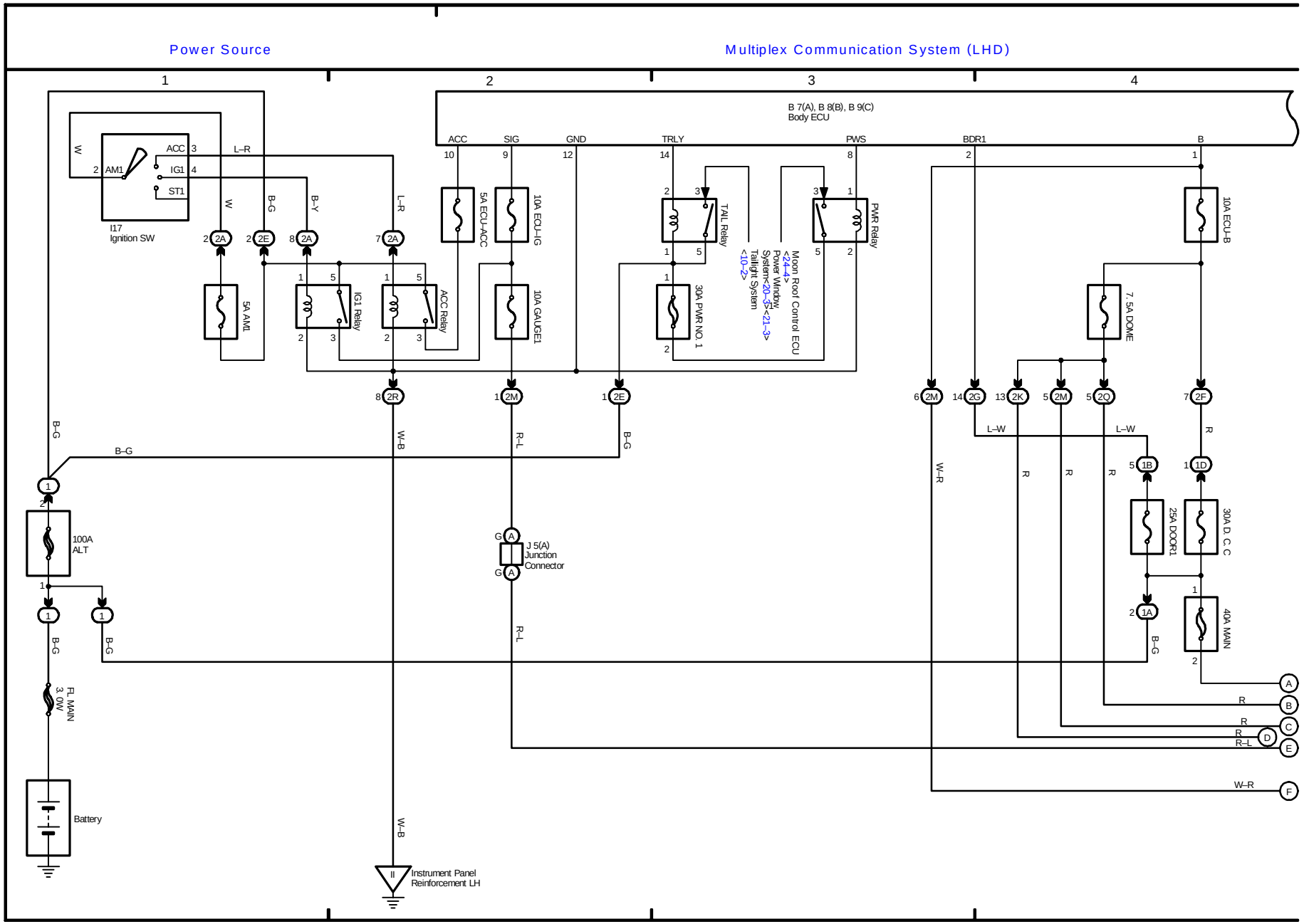
[L] : The same code occuring on the next page indicates that the wire harness is continuous.

SYSTEM INDEX

SYSTEMS	LOCATION
ABS	16–2
Auto Antenna (LHD)	29–3
Automatic Air Conditioner	32–2
Back-Up Light	13–2
Charging	5–2
Cigarette Lighter	24–2
Clock	26–2
Combination Meter	30–2
Cruise Control	15–2
ECT and A/T Indicator (1MZ-FE)	8–2
ECT and A/T Indicator (2AZ-FE)	9–2
Engine Control (1MZ-FE)	6–5
Engine Control (2AZ-FE)	7–4
Engine Immobiliser System (1MZ-FE)	6–3
Engine Immobiliser System (2AZ-FE)	7–2
Front Fog Light	14–2
Heater	34–2
Horn	19–4
Ignition (1MZ-FE)	3–2
Ignition (2AZ-FE)	4–2
Illumination	11–2
Manual Air Conditioner (1MZ-FE)	33–2
Manual Air Conditioner (2AZ-FE)	34–3
Moon Roof	24–4
Multiplex Communication System (LHD)	1–2
Multiplex Communication System (RHD)	2–2
* Door Lock Control	
* Headlight	
* Interior Light	
* Key Reminder	
* Light Auto Turn Off	

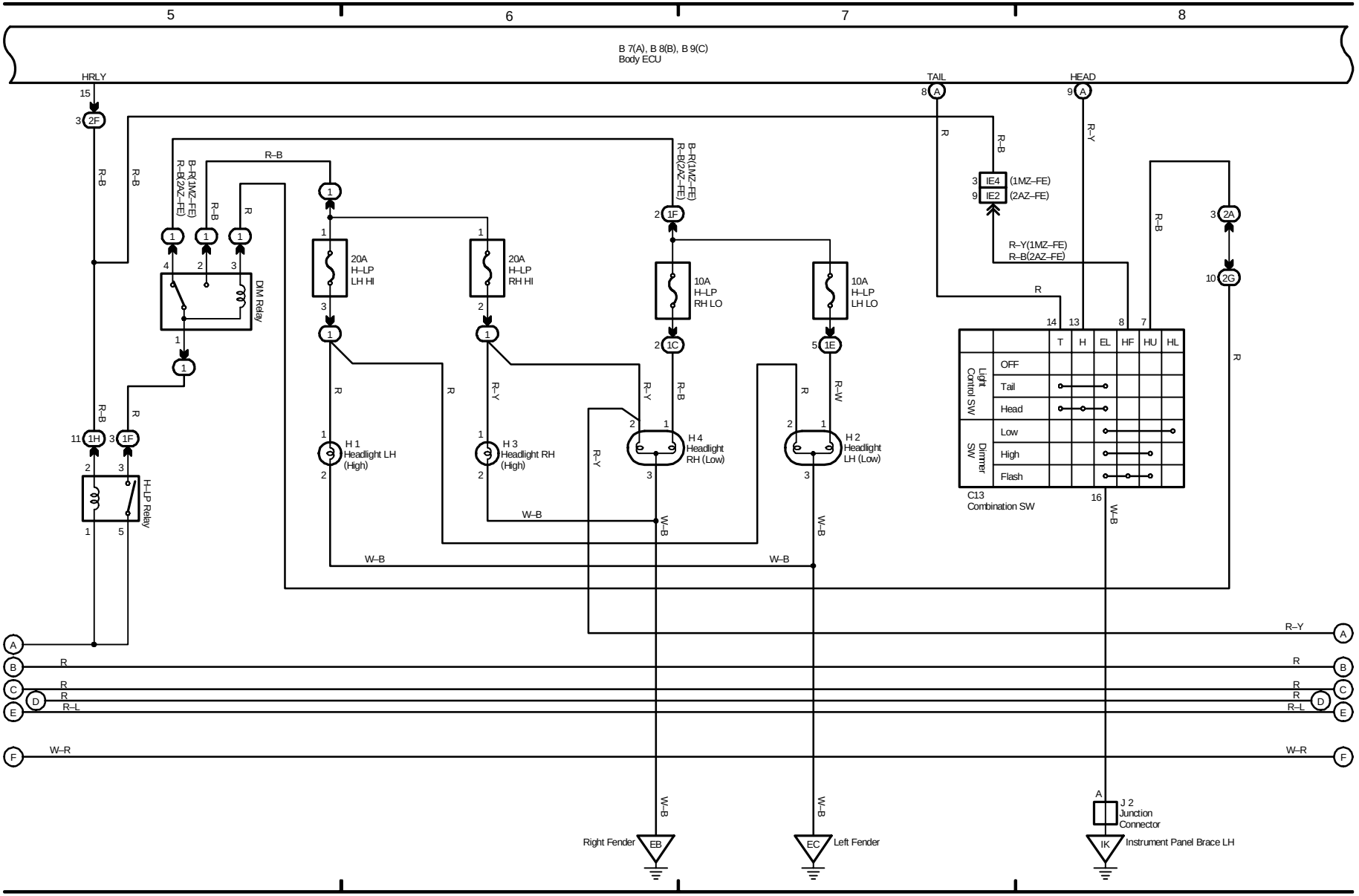
SYSTEMS	LOCATION
* Luggage Compartment Door Opener	
* Theft Deterrent	
* Wireless Door Lock Control	
Navigation System, Radio and Player	27–2
Power Outlet and Cigarette Lighter	24–2
Power Seat	25–2
Power Sources	1~34–1
Power Window (w/ Jam Protection)	20–3
Power Window (w/o Jam Protection)	21–2
Radiator Fan and Condenser Fan	31–2
Radio and Player (w/ Navigation System)	27–2
Radio and Player (w/o Navigation System)	28–2
Rear Window Defogger	23–2
Remote Control Mirror	22–2
Seat Belt Warning (LHD)	19–2
SRS	17–2
Starting (1MZ-FE)	3–2
Starting (2AZ-FE)	4–2
Stop Light	10–3
Taillight	10–2
Trailer Socket	14–4
Turn Signal and Hazard Warning Light	12–2
Wiper and Washer	18–2

(Cont. next page)



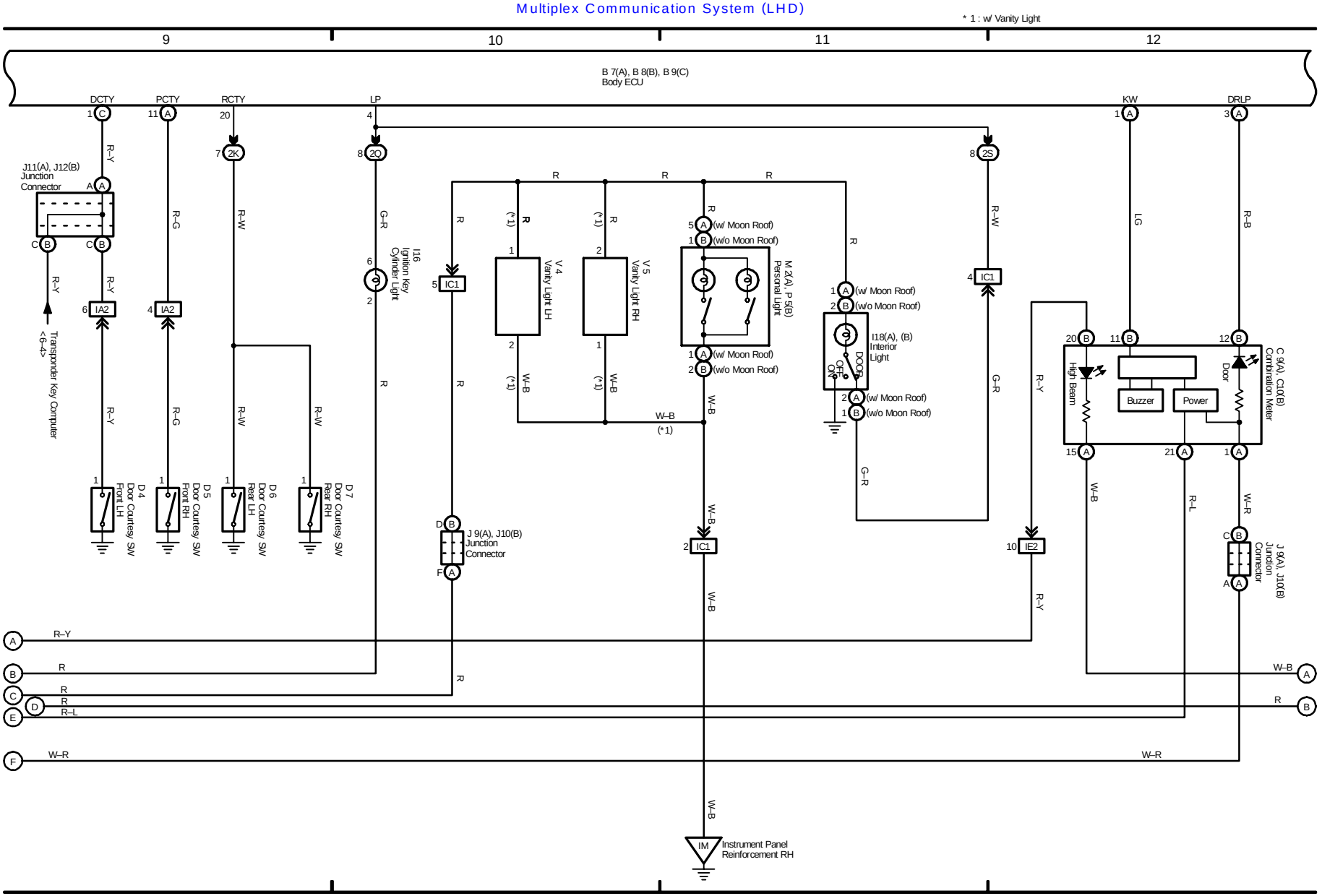
(Cont. next page)

Multiplex Communication System (LHD)

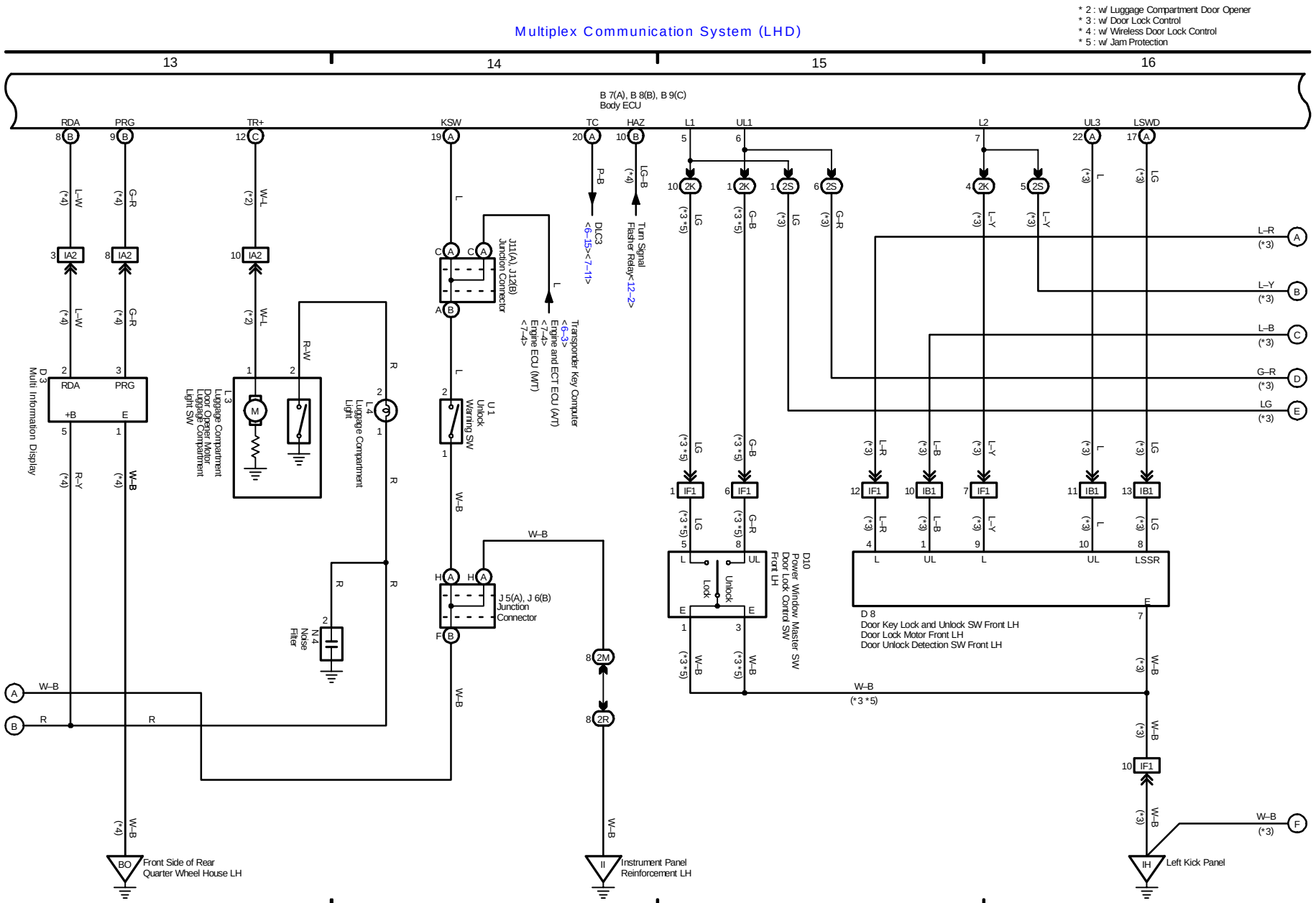


(Cont. next page)

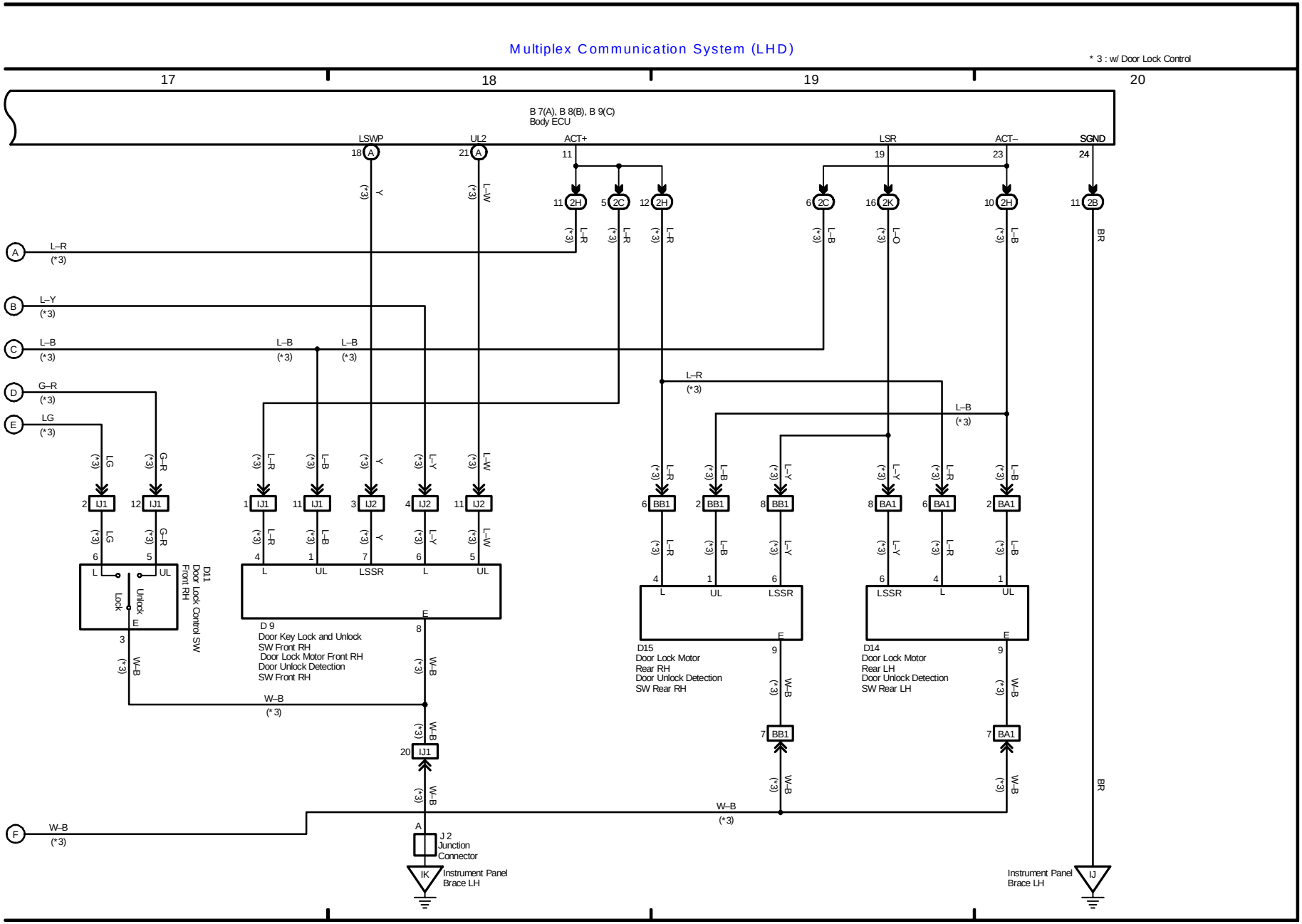
Multiplex Communication System (LHD)



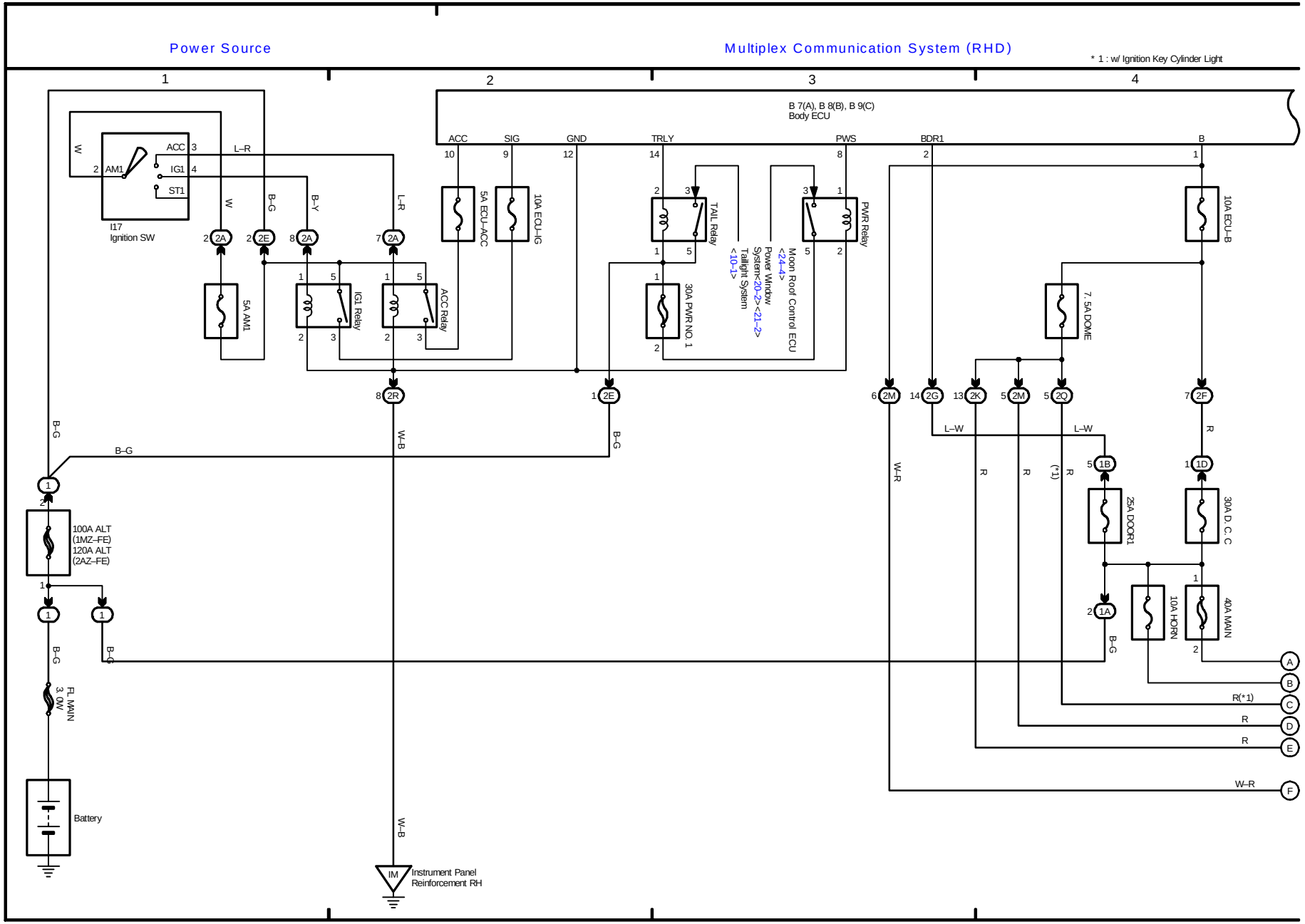
(Cont. next page)



1 CAMRY (Cont' d)



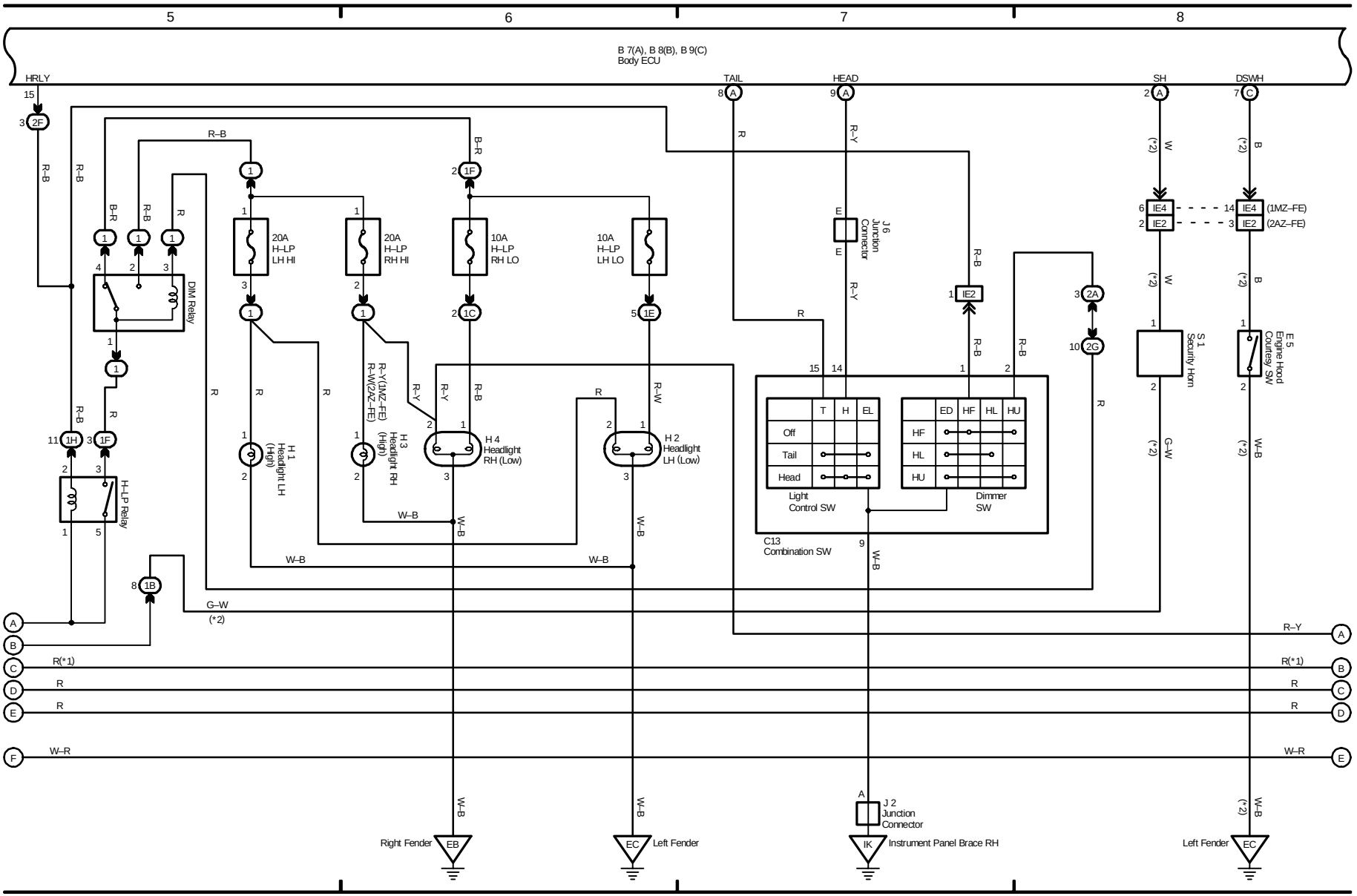
(Cont. next page)



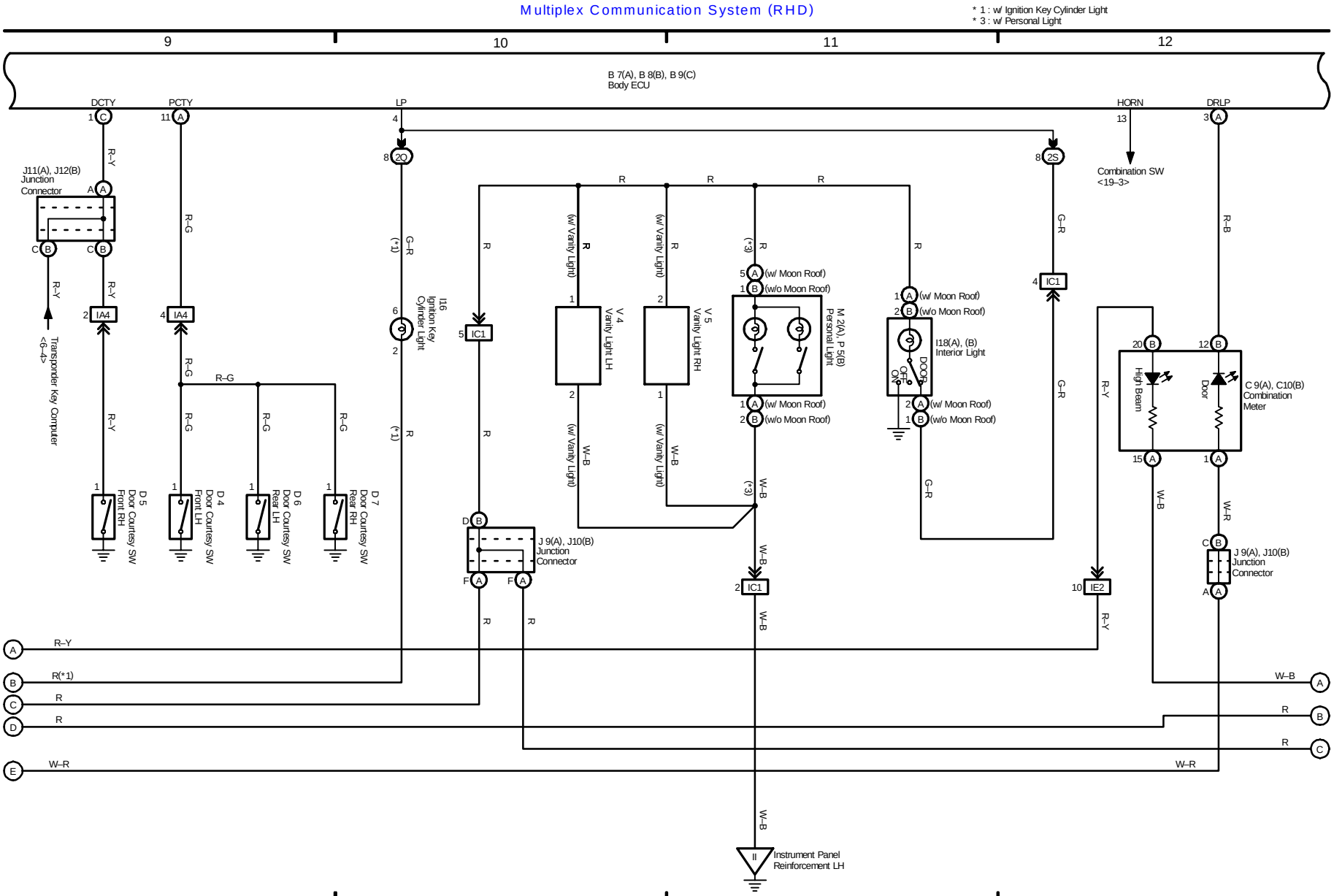
(Cont. next page)

Multiplex Communication System (RHD)

* 1 : w/ Ignition Key Cylinder Light
* 2 : w/ Theft Deterrent



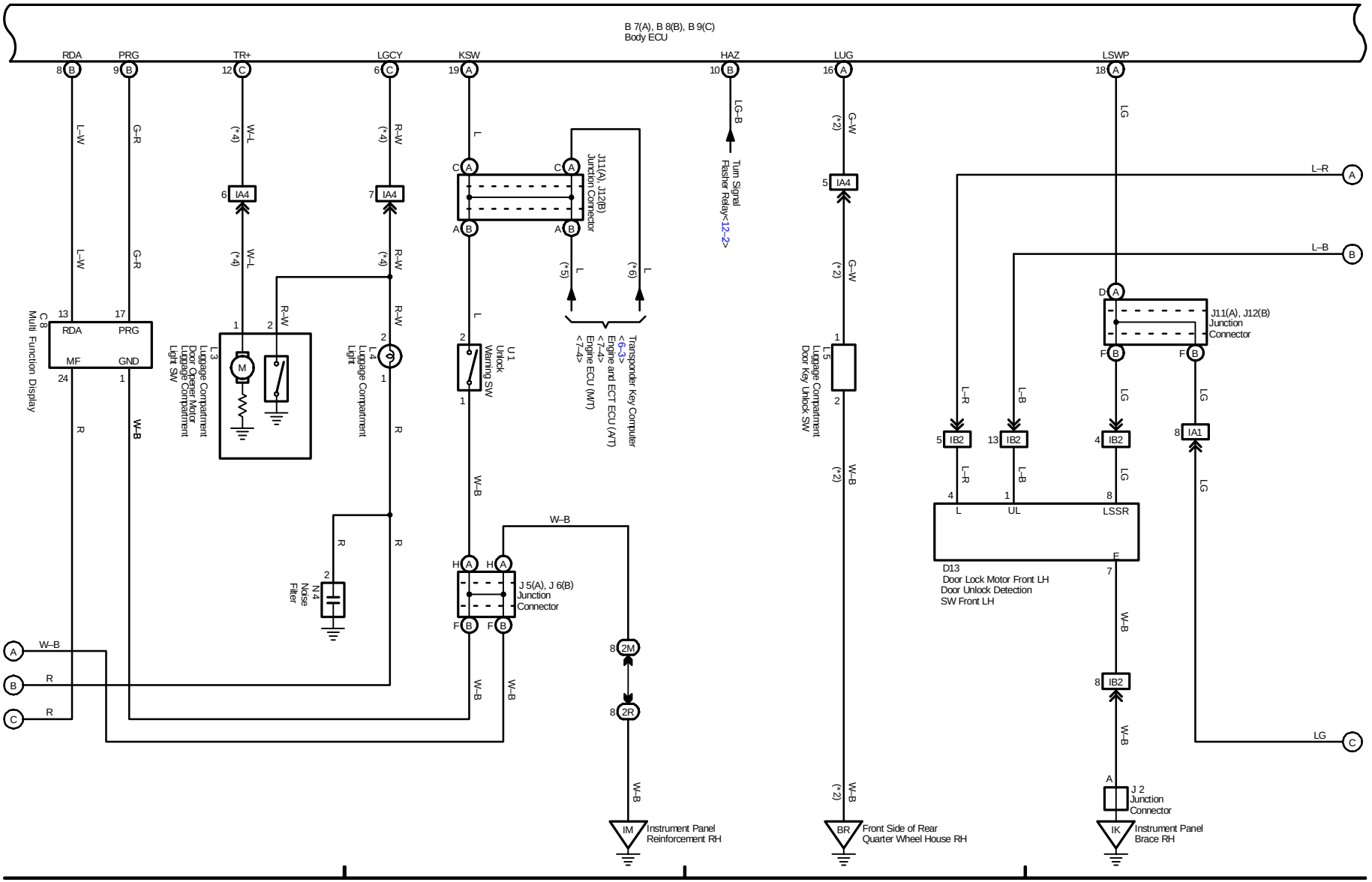
(Cont. next page)

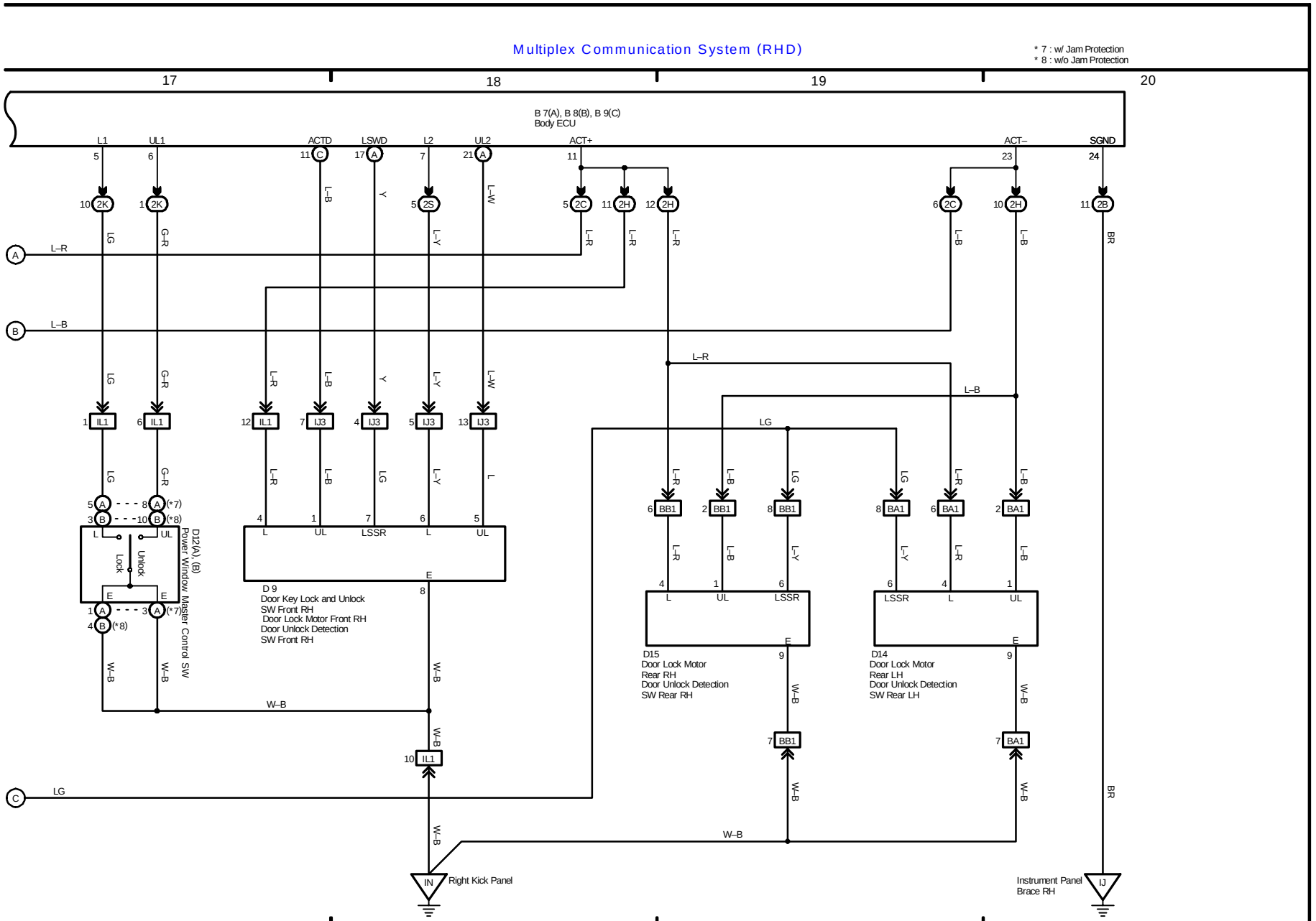


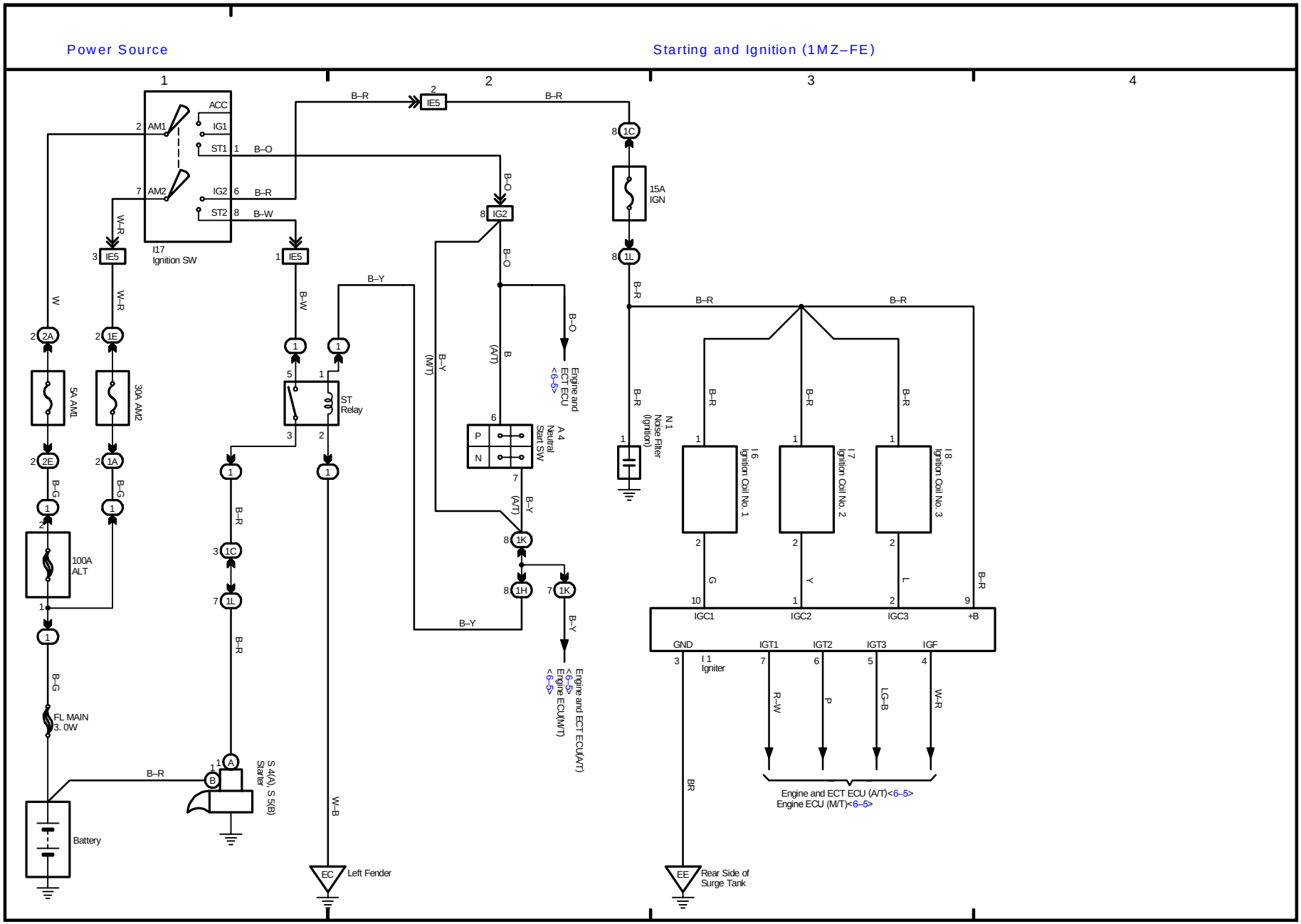
(Cont. next page)

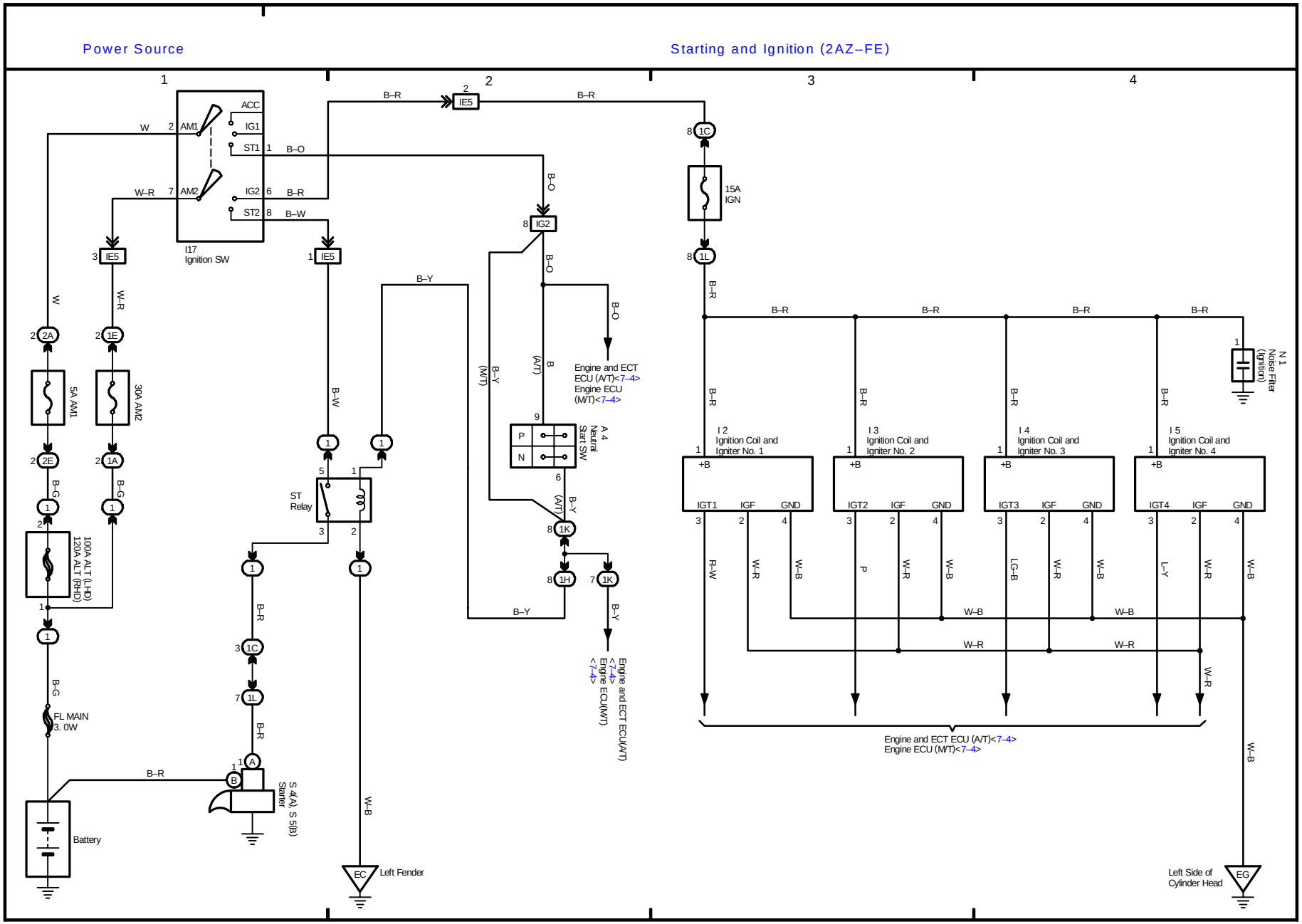
Multiplex Communication System (RHD)

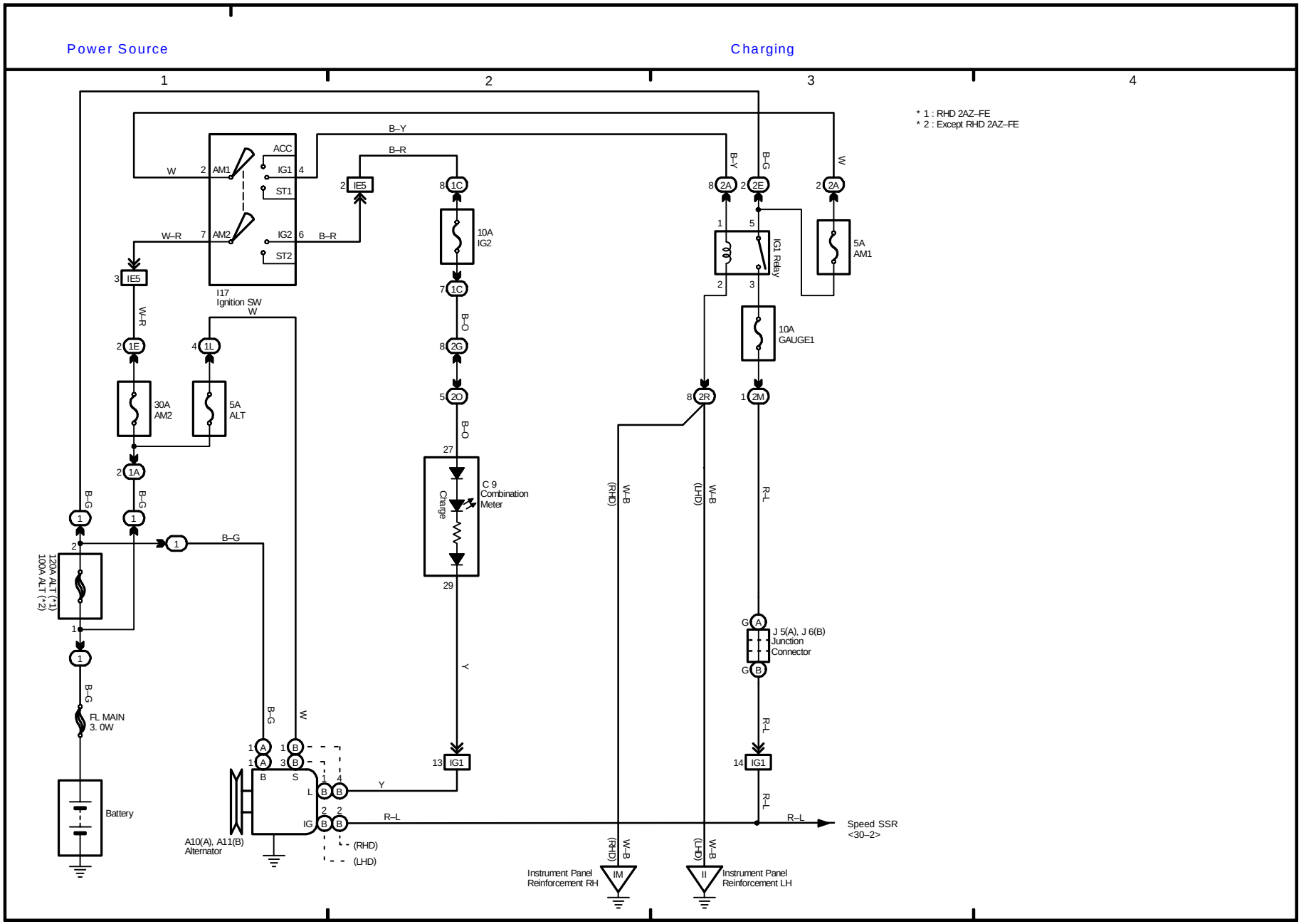
* 2 : w/ Theft Deterrent
* 4 : w/ Luggage Compartment Door Opener
* 5 : RHD 1MZ–FE
* 6 : Except RHD 1MZ–FE



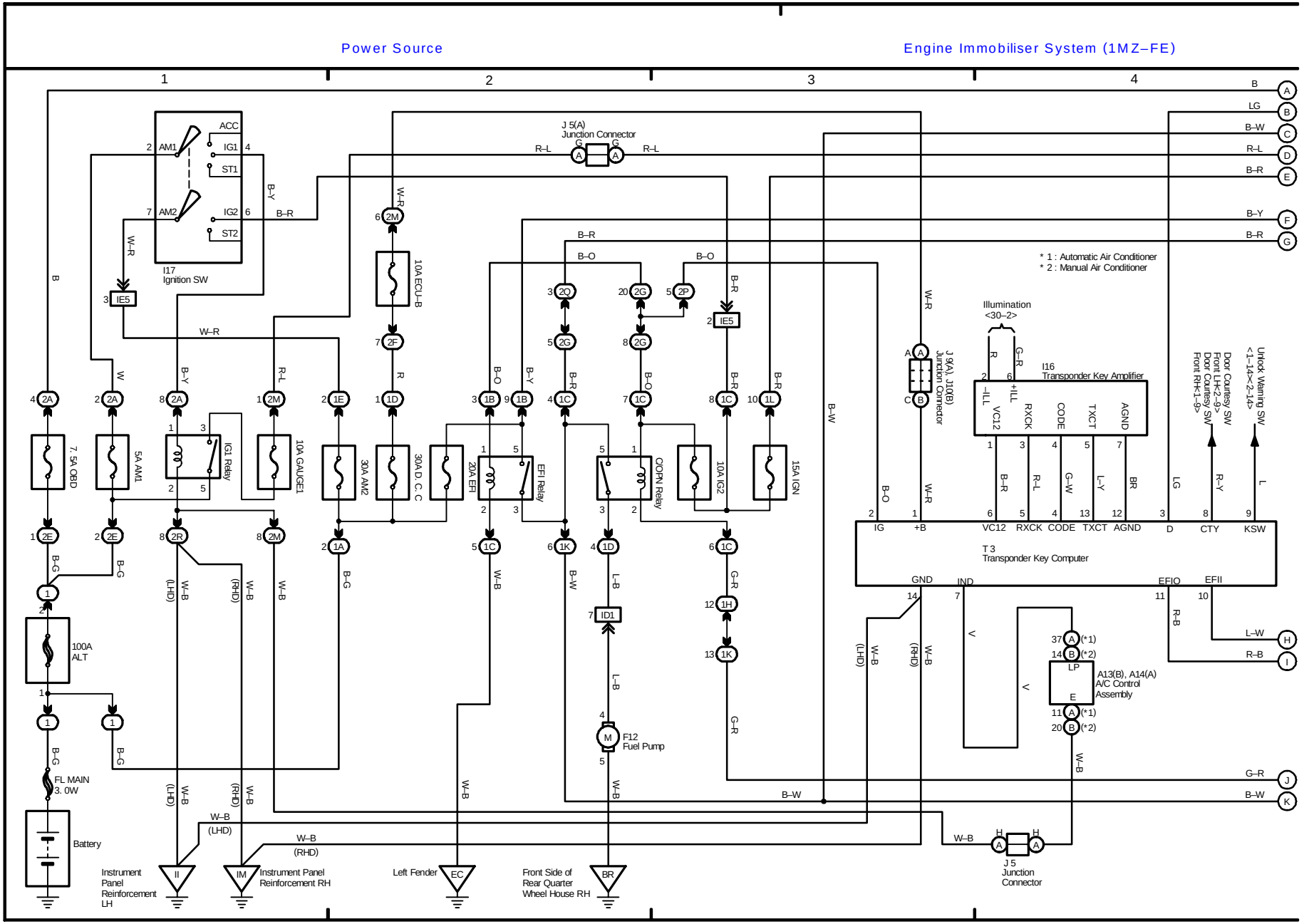

Multiplex Communication System (RHD)
* 7 : w/ Jam Protection
* 8 : w/o Jam Protection
17
18
19
20
B 7(A), B 8(B), B 9(C)
Body ECU
L1
UL1
ACTD
LSWD
L2
UL2
ACT+
ACT–
SGND
D 9
Door Key Lock and Unlock SW Front RH
Door Lock Motor Front RH
Door Unlock Detection SW Front RH
D12(A), (B)
Power Window Master Control SW
Lock
Unlock
D15
Door Lock Motor Rear RH
Door Unlock Detection SW Rear RH
D14
Door Lock Motor Rear LH
Door Unlock Detection SW Rear LH
Right Kick Panel
Instrument Panel Brace RH


Power Source
Starting and Ignition (1MZ–FE)
1
2
3
4
ACC
IG1
ST1
AM1
AM2
IG2
ST2
I17
Ignition SW
IE5
1C
15A
IGN
1L
2A
1E
2E
1A
5A AM1
30A AM2
100A
ALT
FL MAIN
3. 0W
Battery
S 4(A), S 5(B)
Starter
ST
Relay
1K
1H
P
N
A 4
Neutral
Start SW
Engine and
ECT ECU
<6–5>
Engine and ECT ECU(A/T)
<6–5>
Engine ECU(M/T)
<6–5>
N 1
Noise Filter
(Ignition)
I 6
Ignition Coil No. 1
I 7
Ignition Coil No. 2
I 8
Ignition Coil No. 3
IGC1
IGC2
IGC3
+B
GND
IGT1
IGT2
IGT3
IGF
I 1
Igniter
Engine and ECT ECU (A/T)<6–5>
Engine ECU (M/T)<6–5>
EC
Left Fender
EE
Rear Side of
Surge Tank
B–R
B–O
W–R
W
B–W
B–Y
B–G
W–B
BR
R–W
P
LG–B
W–R
G
Y
L
(A/T)
(M/T)


Power Source
Starting and Ignition (2AZ–FE)
1
2
3
4
ACC
IG1
ST1
IG2
ST2
AM1
AM2
I17
Ignition SW
IE5
1C
15A
IGN
1L
2A
1E
2E
1A
5A AM1
30A AM2
100A ALT (LHD)
120A ALT (RHD)
FL MAIN
3. 0W
Battery
ST
Relay
S 4(A), S 5(B)
Starter
EC
Left Fender
IG2
P
N
A 4
Neutral
Start SW
1K
1H
Engine and ECT
ECU (A/T)<7–4>
Engine ECU
(M/T)<7–4>
Engine and ECT ECU(A/T)
<7–4>
Engine ECU(M/T)
<7–4>
I 2
Ignition Coil and
Igniter No. 1
I 3
Ignition Coil and
Igniter No. 2
I 4
Ignition Coil and
Igniter No. 3
I 5
Ignition Coil and
Igniter No. 4
+B
IGT1
IGT2
IGT3
IGT4
IGF
GND
N 1
Noise Filter
(Ignition)
Engine and ECT ECU (A/T)<7–4>
Engine ECU (M/T)<7–4>
Left Side of
Cylinder Head
EG
B–R
B–O
B–W
B–Y
B–G
W
W–R
W–B
R–W
P
LG–B
L–Y

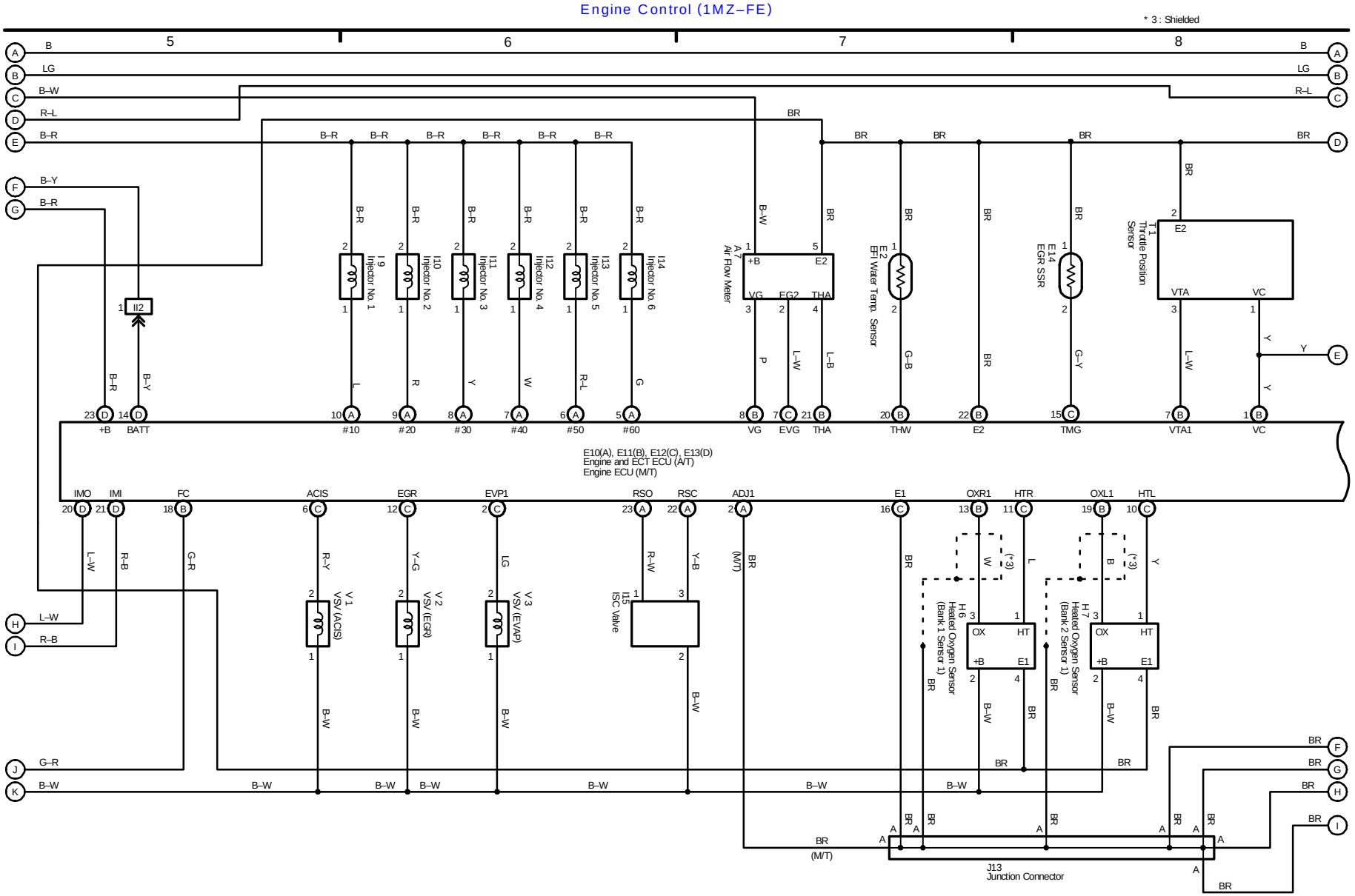

Power Source
Charging
1
2
3
4
* 1 : RHD 2AZ–FE
* 2 : Except RHD 2AZ–FE
I17
Ignition SW
ACC
AM1
IG1
ST1
AM2
IG2
ST2
W
W–R
B–R
B–Y
B–G
B–O
Y
R–L
W–B
IE5
1E
1L
1A
1C
2G
2O
2A
2E
2R
2M
10A
IG2
30A
AM2
5A
ALT
IG1 Relay
5A
AM1
10A
GAUGE1
C 9
Combination
Meter
Charge
J 5(A), J 6(B)
Junction
Connector
IG1
120A ALT (*1)
100A ALT (*2)
FL MAIN
3. 0W
Battery
A10(A), A11(B)
Alternator
B
S
L
IG
(RHD)
(LHD)
Speed SSR
<30–2>
Instrument Panel
Reinforcement RH
Instrument Panel
Reinforcement LH
IM
II

(Cont. next page)



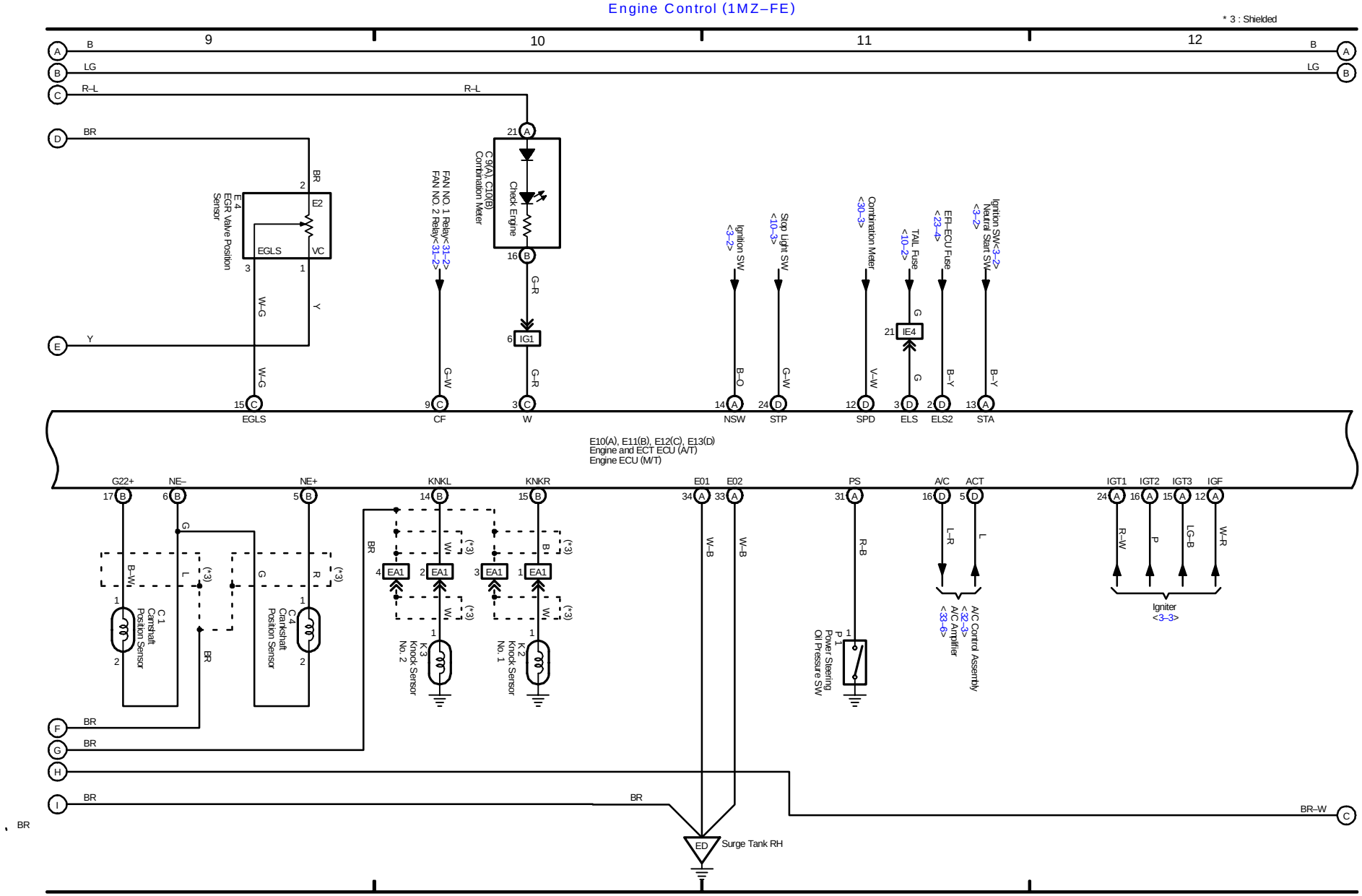
OVERALL ELECTRICAL WIRING DIAGRAM M

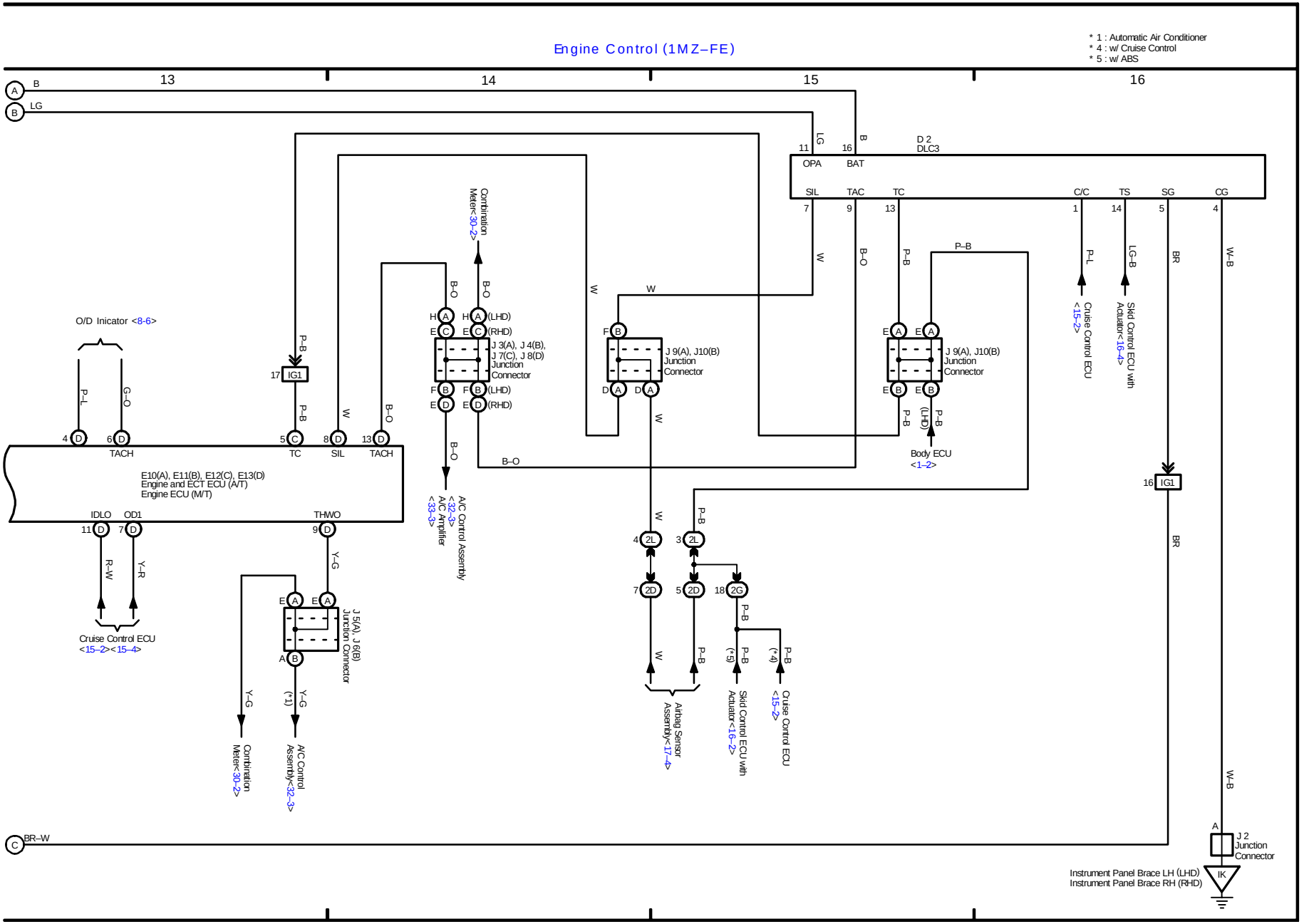
(Cont. next page)



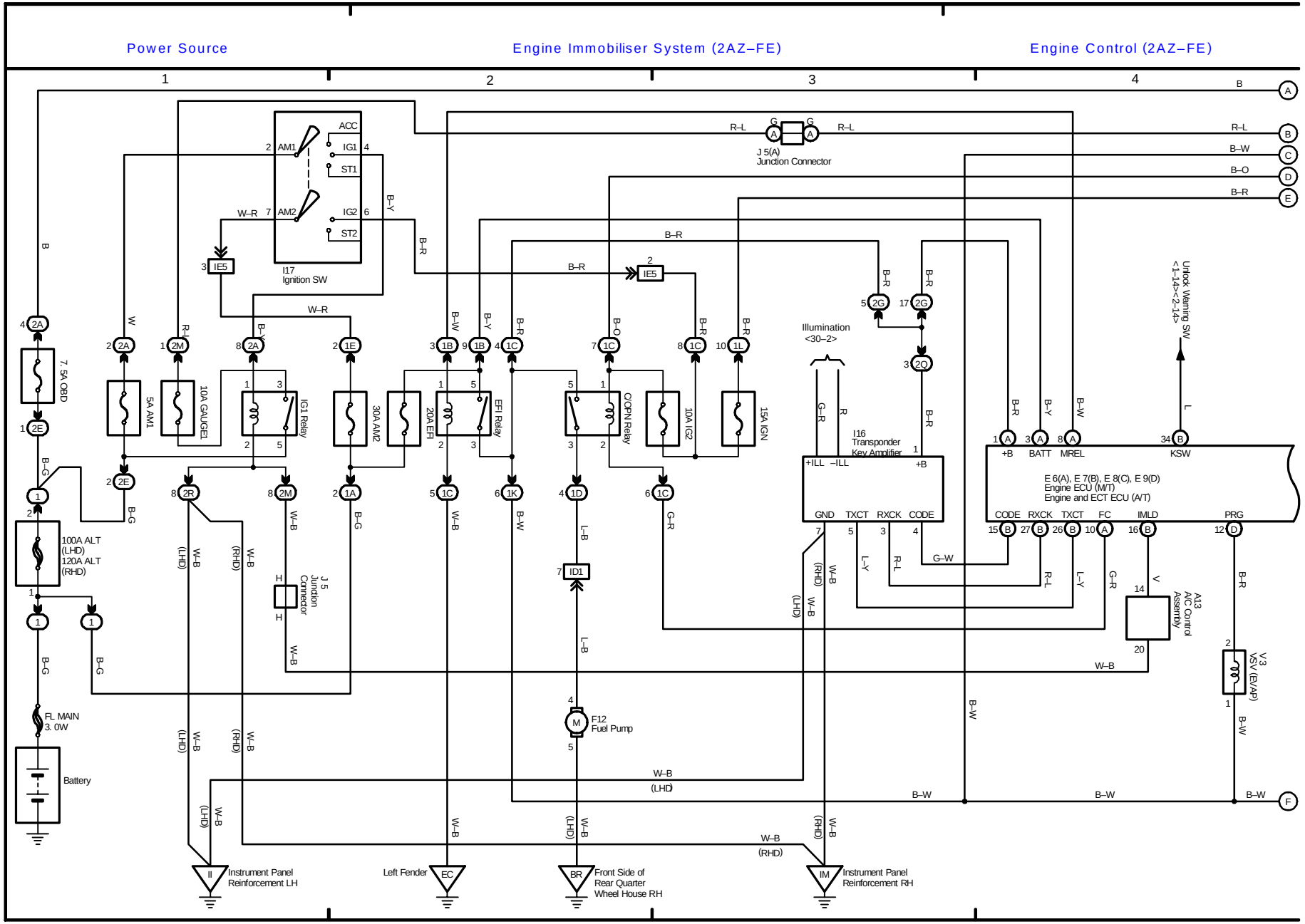
(Cont. next page)

Engine Control (1MZ–FE)

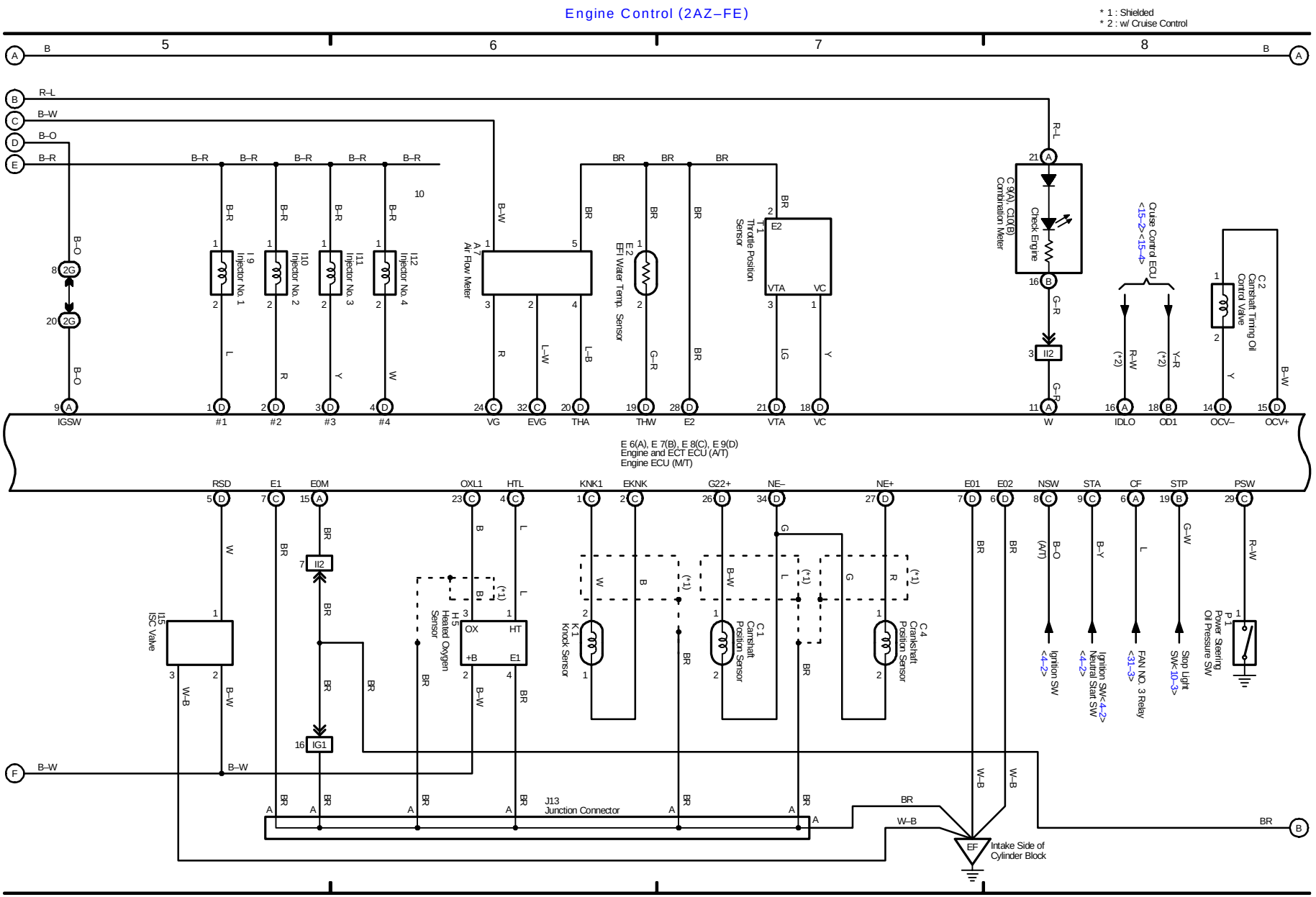


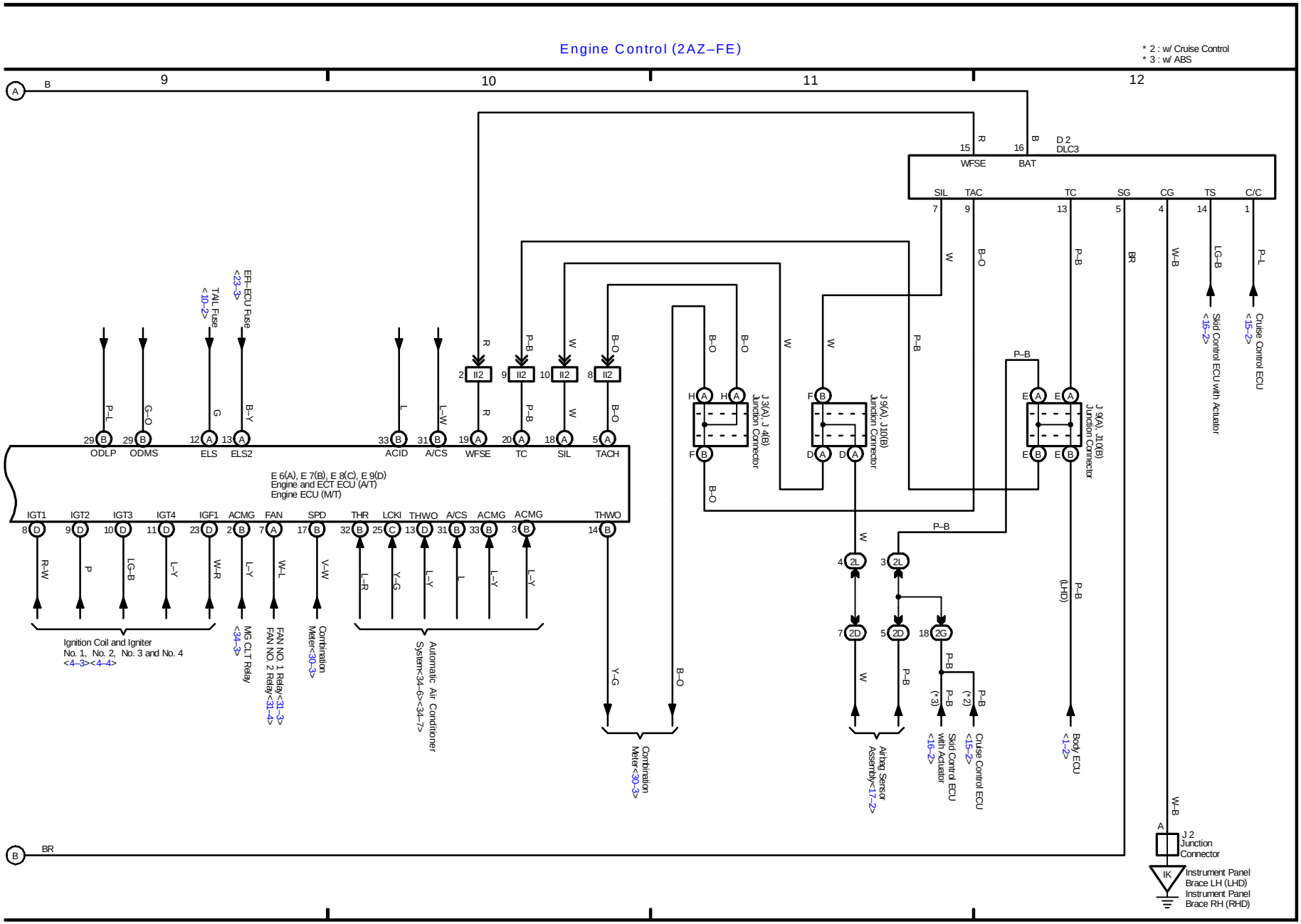

Engine Control (1MZ–FE)
* 1 : Automatic Air Conditioner
* 4 : w/ Cruise Control
* 5 : w/ ABS
13
14
15
16
A B
B LG
11 OPA
16 BAT
D 2 DLC3
SIL 7
TAC 9
TC 13
C/C 1
TS 14
SG 5
CG 4
Cruise Control ECU <15–2>
Skid Control ECU with Actuator<16–4>
Body ECU <1–2>
J 9(A), J10(B) Junction Connector
Combination Meter<30–2>
J 3(A), J 4(B), J 7(C), J 8(D) Junction Connector
O/D Inicator <8-6>
17 IG1
16 IG1
4 D TACH
6 D
5 C TC
8 D SIL
13 D TACH
E10(A), E11(B), E12(C), E13(D) Engine and ECT ECU (A/T) Engine ECU (M/T)
IDLO 11 D
OD1 7 D
THWO 9 D
Cruise Control ECU <15–2><15–4>
A/C Control Assembly <32–3> A/C Amplifier <33–3>
J 5(A), J 6(B) Junction Connector
Combination Meter<30–2>
A/C Control Assembly<32–3>
Airbag Sensor Assembly<17–4>
Skid Control ECU with Actuator<16–2>
Cruise Control ECU <15–2>
J 2 Junction Connector
IK
Instrument Panel Brace LH (LHD)
Instrument Panel Brace RH (RHD)
C BR–W

(Cont. next page)



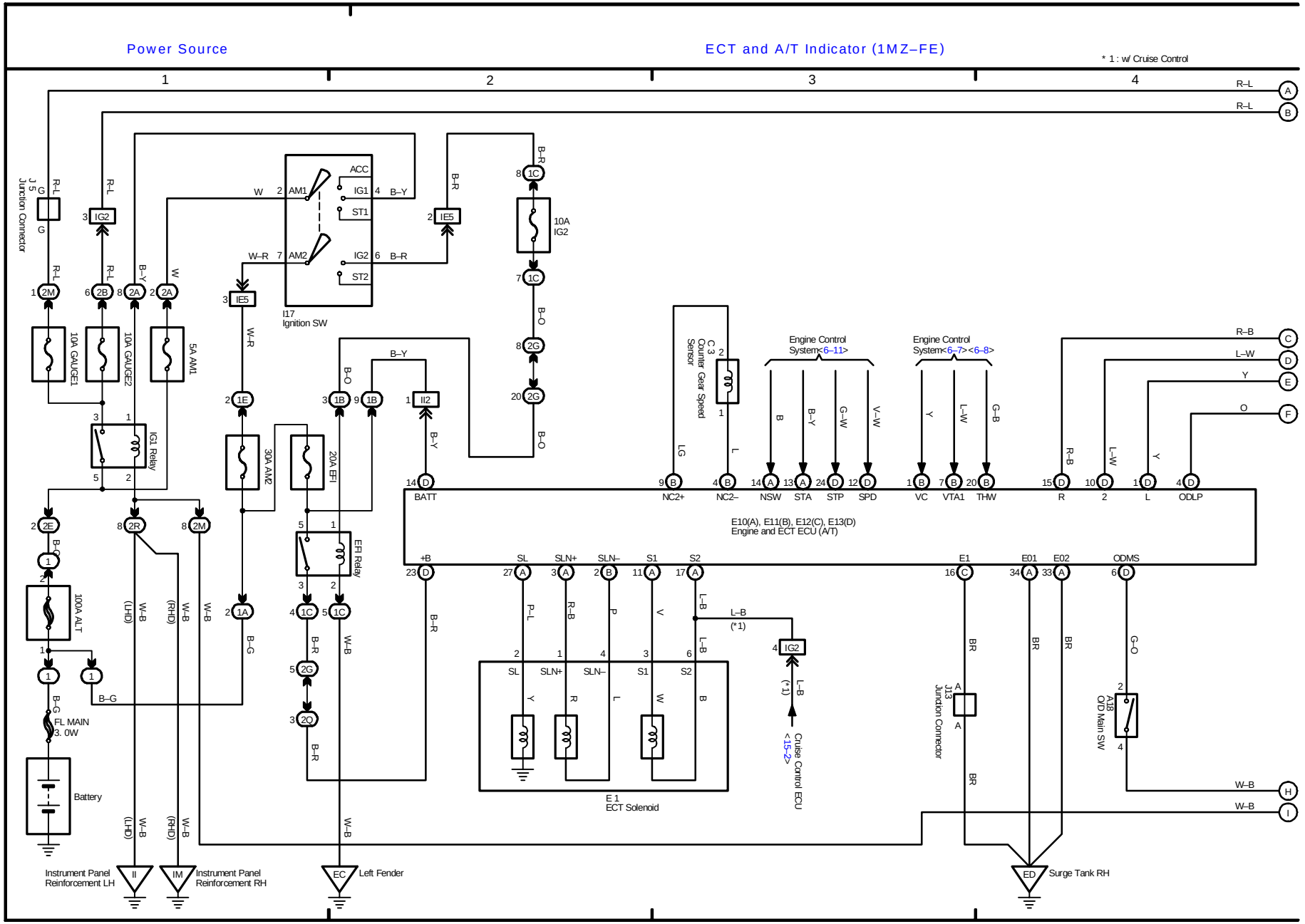
(Cont. next page)

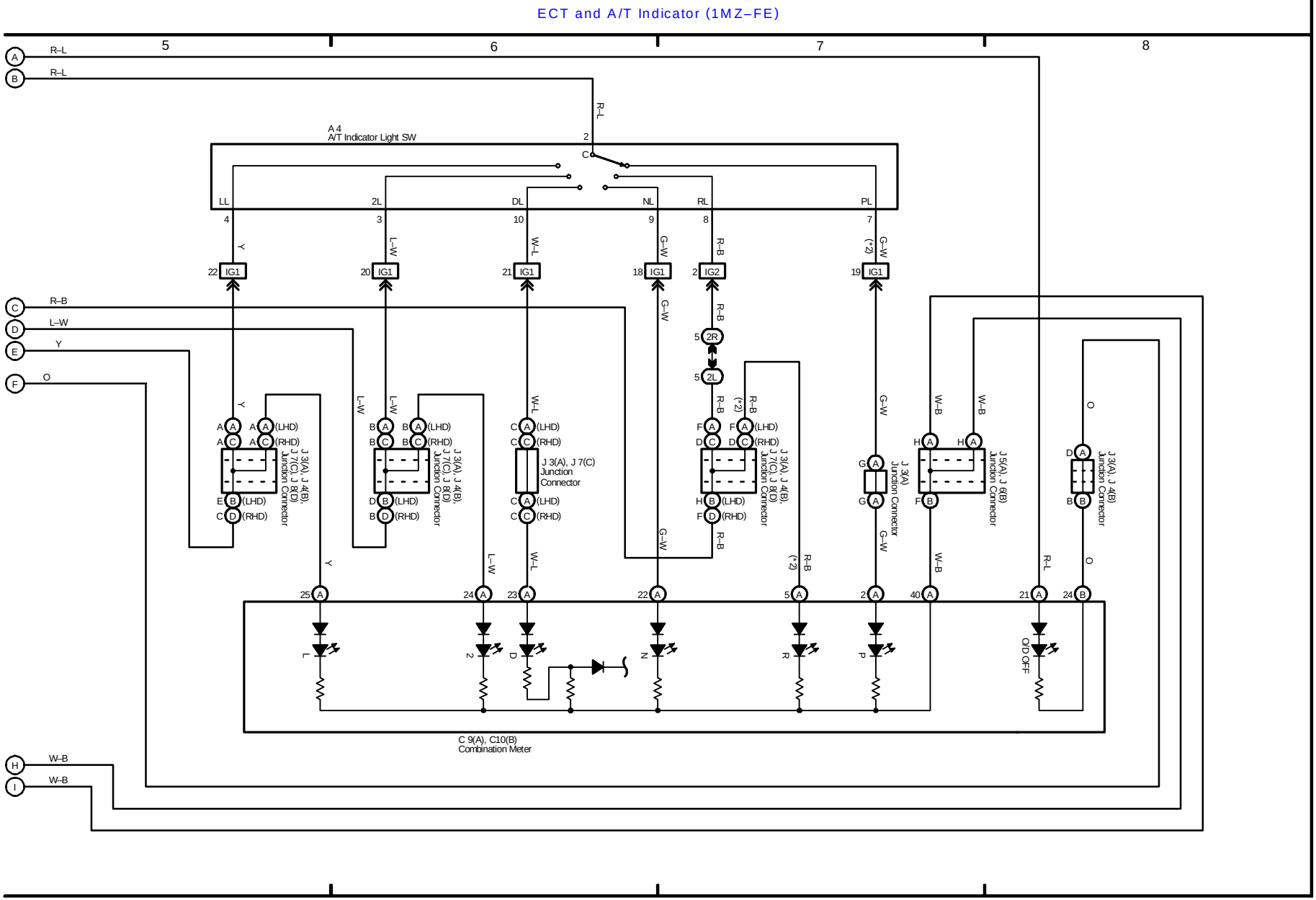




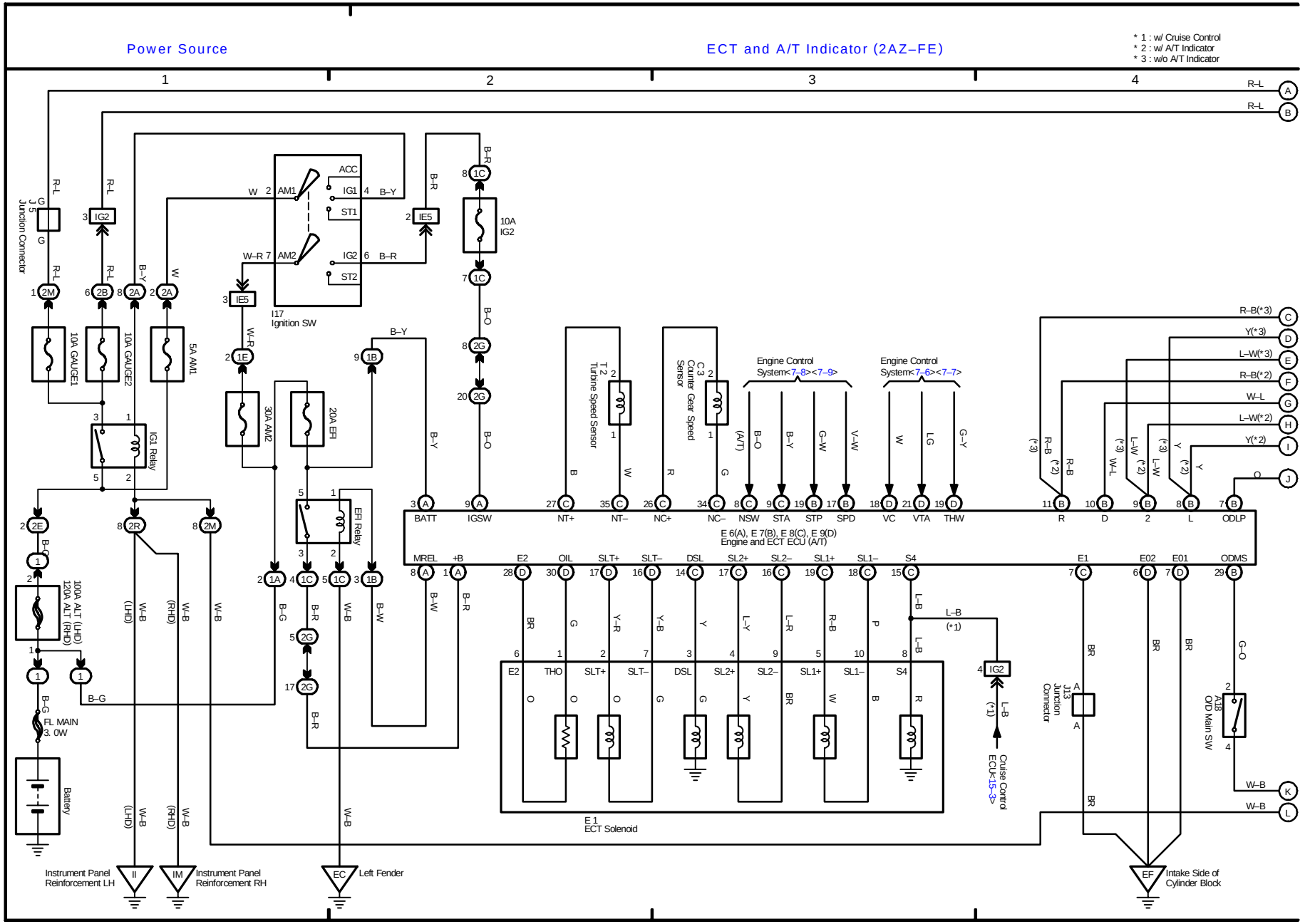
OVERALL ELECTRICAL WIRING DIAGRAM M

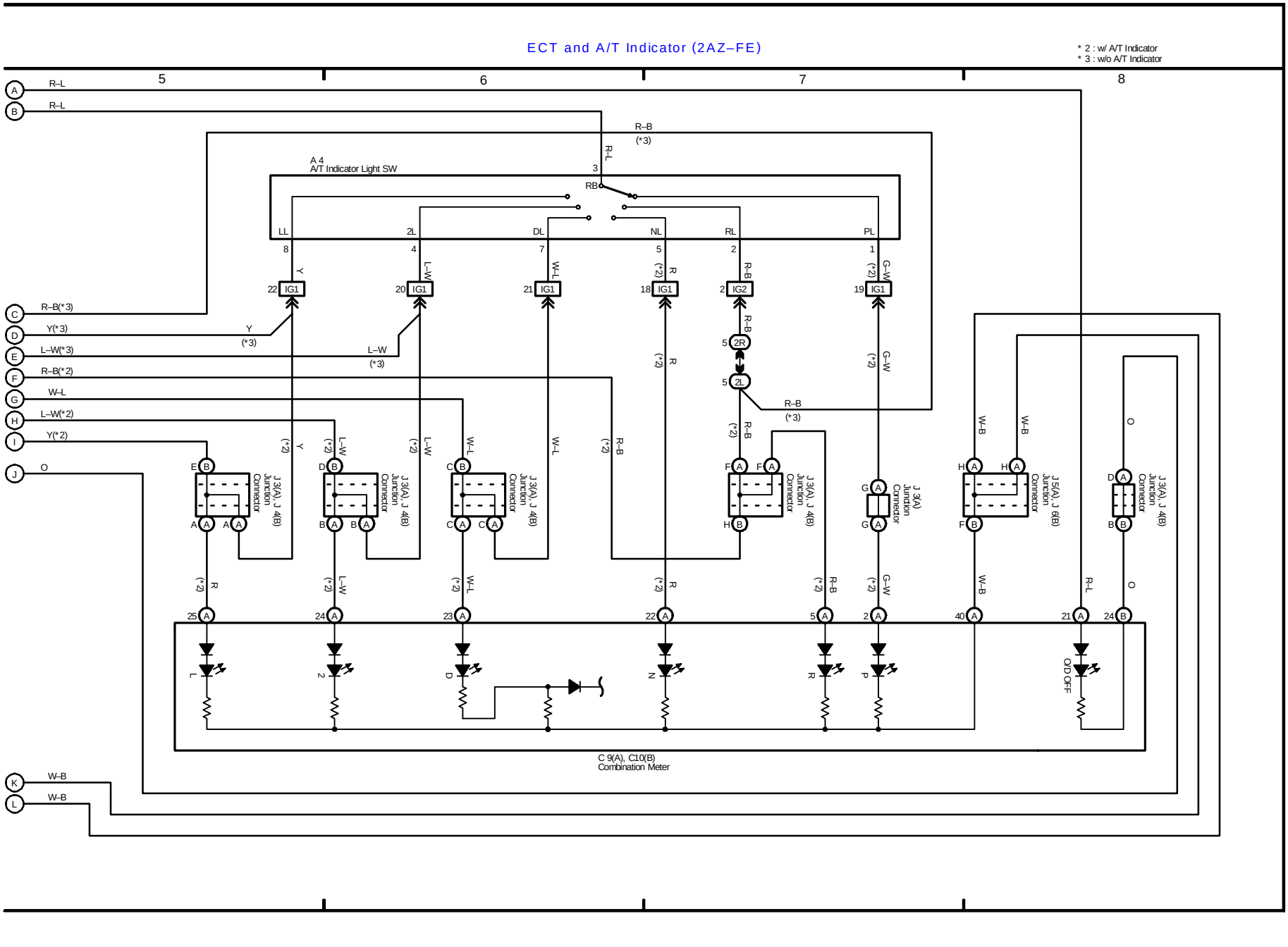
(Cont. next page)

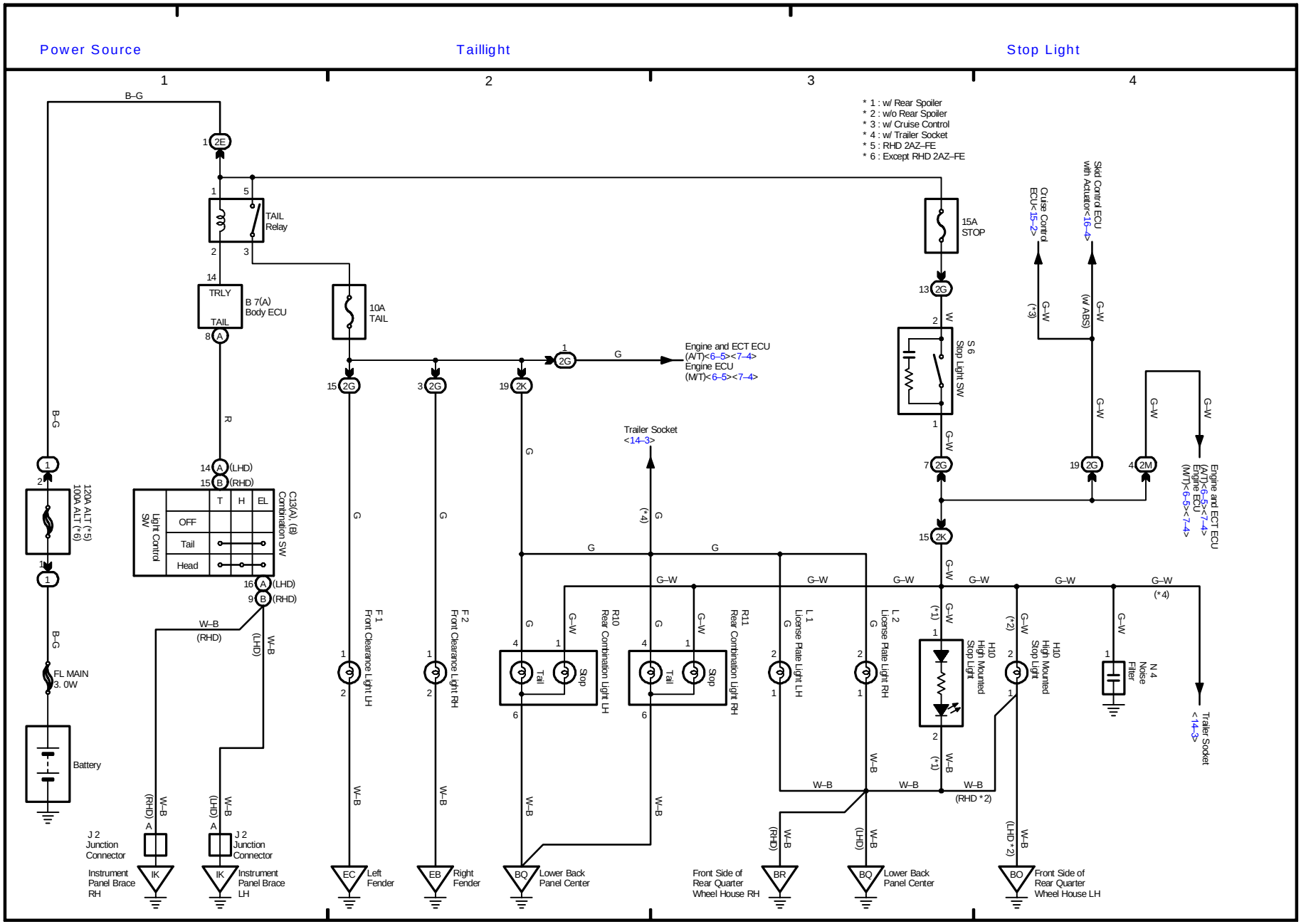


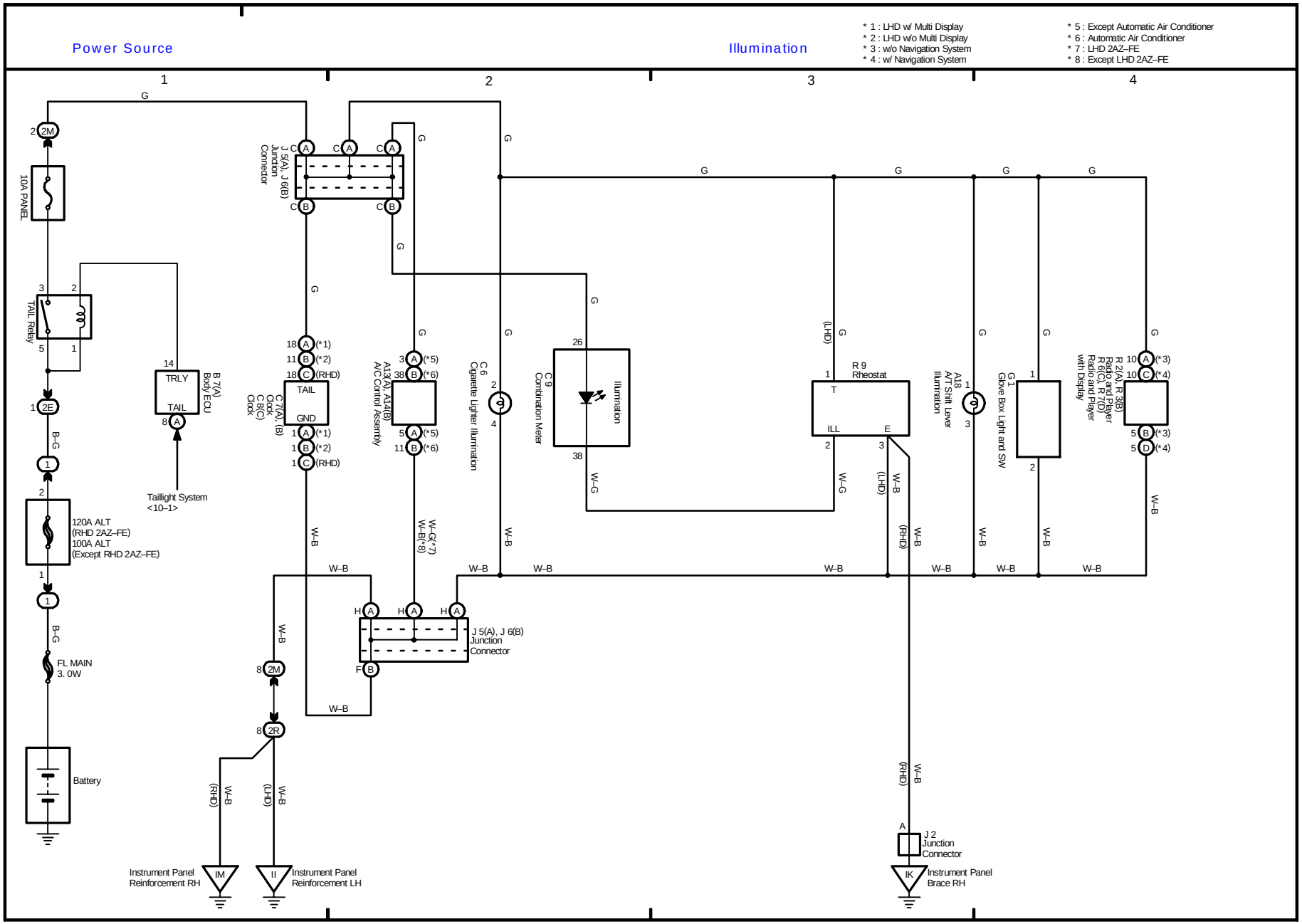

ECT and A/T Indicator (1MZ–FE)
5
6
7
8
A 4
A/T Indicator Light SW
LL
2L
DL
NL
RL
PL
IG1
IG2
J 3(A), J 4(B), J 7(C), J 8(D) Junction Connector
J 3(A), J 7(C) Junction Connector
J 3(A) Junction Connector
J 5(A), J 6(B) Junction Connector
C 9(A), C10(B) Combination Meter
O/D OFF
(LHD)
(RHD)
R–L
R–B
L–W
Y
O
W–B
W–L
G–W
G–B

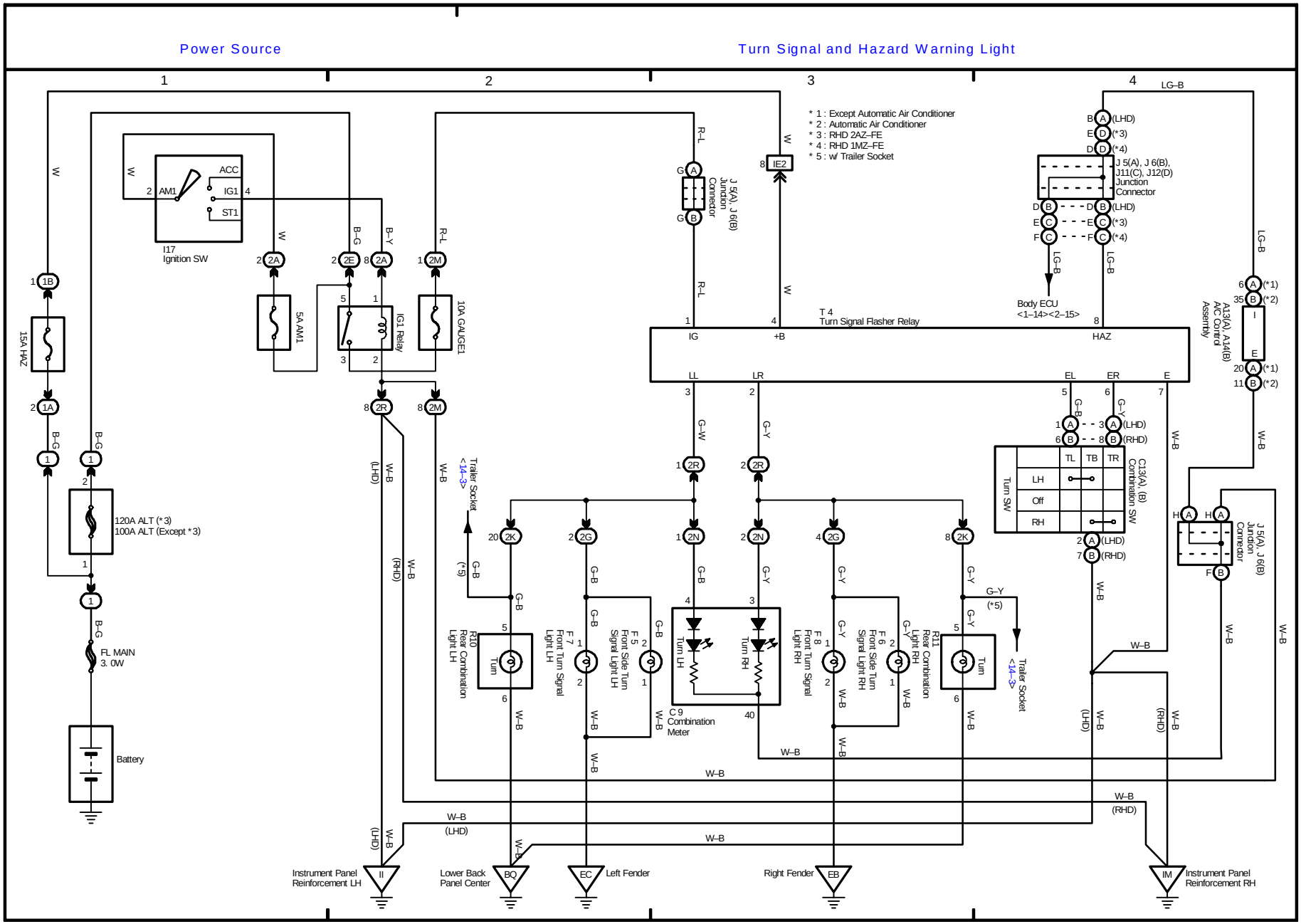
(Cont. next page)

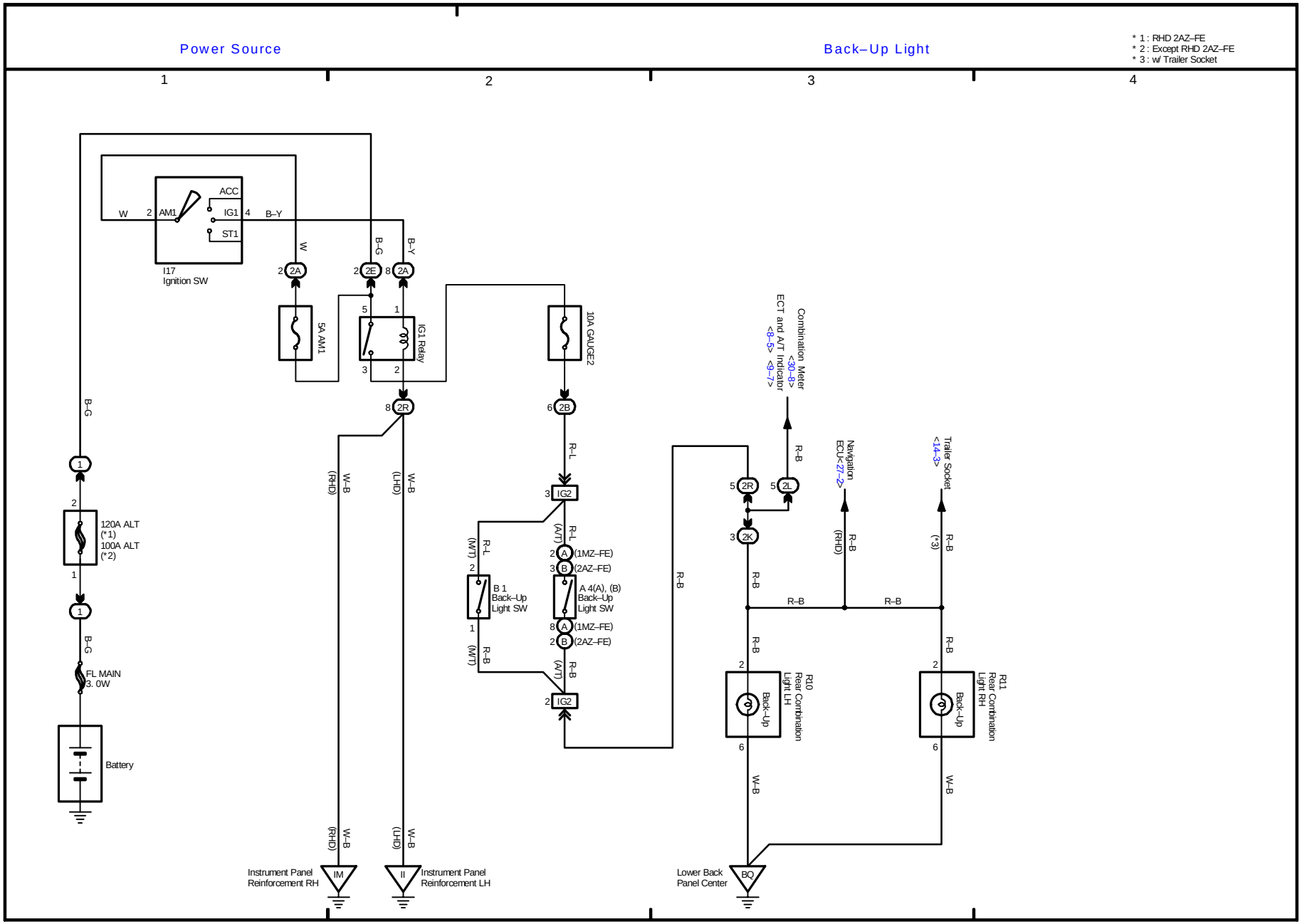


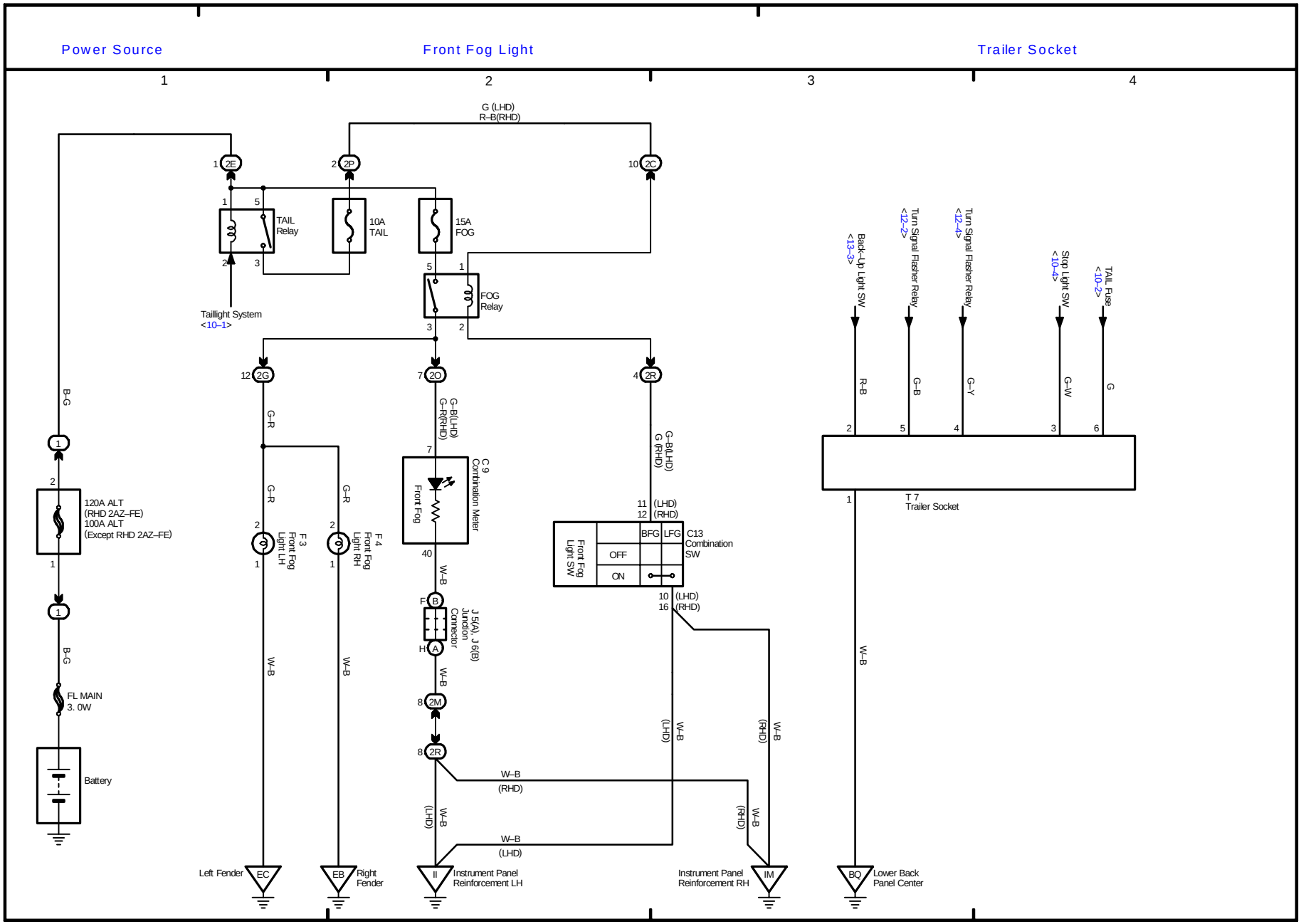

ECT and A/T Indicator (2AZ–FE)
* 2 : w/ A/T Indicator
* 3 : w/o A/T Indicator
5
6
7
8
A 4
A/T Indicator Light SW
LL
2L
DL
NL
RL
PL
IG1
IG2
R–L
R–B
(*3)
R–B(*3)
Y(*3)
L–W(*3)
R–B(*2)
W–L
L–W(*2)
Y(*2)
O
W–B
J 3(A) Junction Connector
J3(A), J 4(B) Junction Connector
J5(A), J 6(B) Junction Connector
C 9(A), C10(B) Combination Meter
L
2
D
N
R
P
O/D OFF

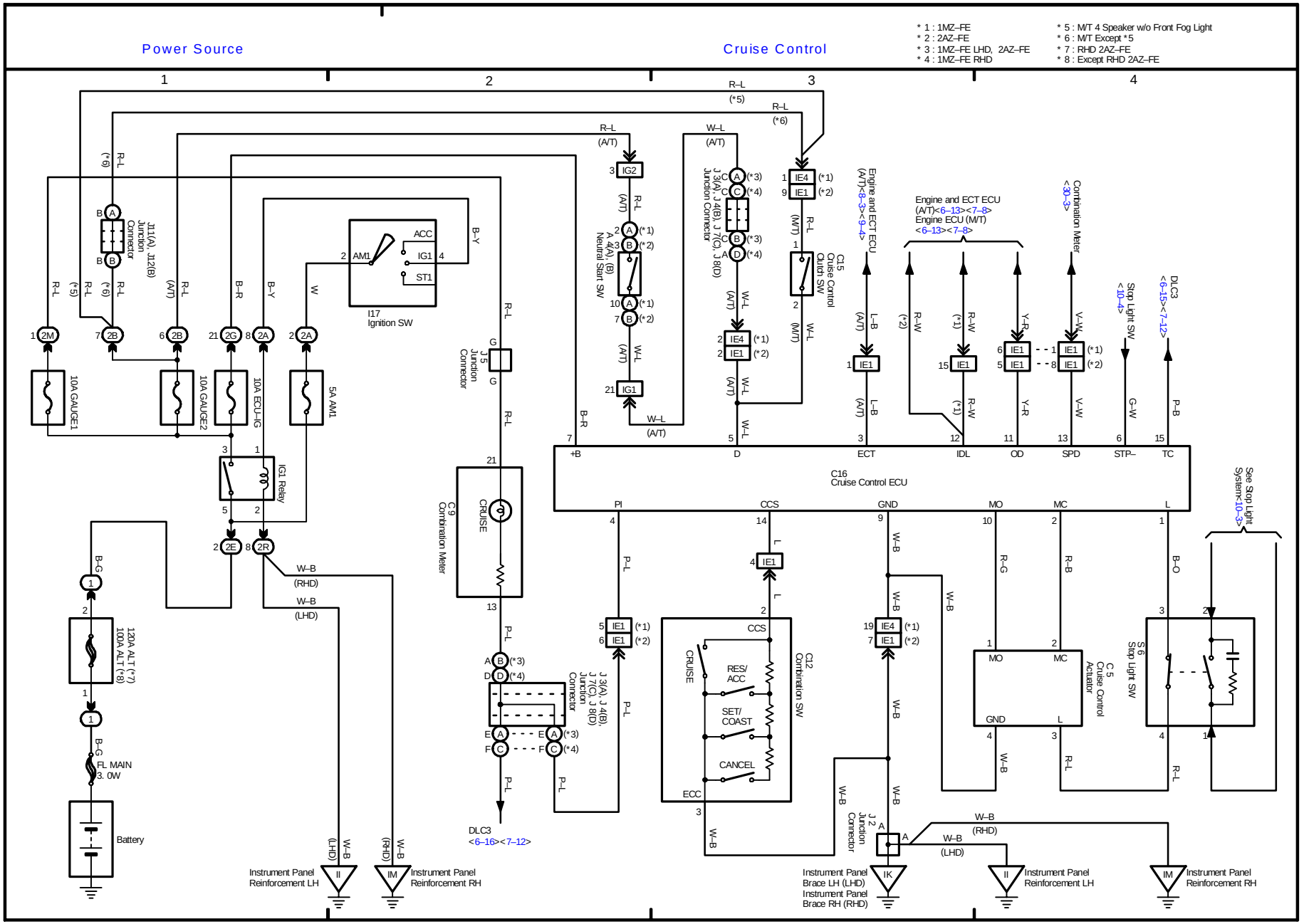

Power Source
Taillight
Stop Light
1
2
3
4
* 1 : w/ Rear Spoiler
* 2 : w/o Rear Spoiler
* 3 : w/ Cruise Control
* 4 : w/ Trailer Socket
* 5 : RHD 2AZ–FE
* 6 : Except RHD 2AZ–FE
B–G
TAIL Relay
TRLY
TAIL
B 7(A) Body ECU
10A TAIL
15A STOP
Cruise Control ECU<15–2>
Skid Control ECU with Actuator<16–4>
S 6 Stop Light SW
Engine and ECT ECU (A/T)<6–5><7–4> Engine ECU (M/T)<6–5><7–4>
Trailer Socket <14–3>
120A ALT (*5) 100A ALT (*6)
FL MAIN 3. 0W
Battery
Light Control SW
C13(A), (B) Combination SW
OFF
Tail
Head
T
H
EL
(LHD)
(RHD)
F 1 Front Clearance Light LH
F 2 Front Clearance Light RH
R10 Rear Combination Light LH
R11 Rear Combination Light RH
Tail
Stop
L 1 License Plate Light LH
L 2 License Plate Light RH
H10 High Mounted Stop Light
N 4 Noise Filter
J 2 Junction Connector
Instrument Panel Brace RH
Instrument Panel Brace LH
Left Fender
Right Fender
Lower Back Panel Center
Front Side of Rear Quarter Wheel House RH
Front Side of Rear Quarter Wheel House LH
W–B
G–W
G


Power Source
Illumination
* 1 : LHD w/ Multi Display
* 2 : LHD w/o Multi Display
* 3 : w/o Navigation System
* 4 : w/ Navigation System
* 5 : Except Automatic Air Conditioner
* 6 : Automatic Air Conditioner
* 7 : LHD 2AZ–FE
* 8 : Except LHD 2AZ–FE
1
2
3
4
10A PANEL
TAIL Relay
B 7(A) Body ECU
TRLY
TAIL
Taillight System <10–1>
120A ALT (RHD 2AZ–FE) 100A ALT (Except RHD 2AZ–FE)
FL MAIN 3. 0W
Battery
J 5(A), J 6(B) Junction Connector
C 7(A), (B) Clock
C 8(C) Clock
A13(A), A14(B) A/C Control Assembly
C 6 Cigarette Lighter Illumination
C 9 Combination Meter
Illumination
R 9 Rheostat
A18 A/T Shift Lever Illumination
G 1 Glove Box Light and SW
R 2(A), R 3(B) Radio and Player R6(C) and R7(D) Radio and Player with Display
J 2 Junction Connector
Instrument Panel Reinforcement RH
Instrument Panel Reinforcement LH
Instrument Panel Brace RH
TAIL
GND
ILL
(LHD)
(RHD)

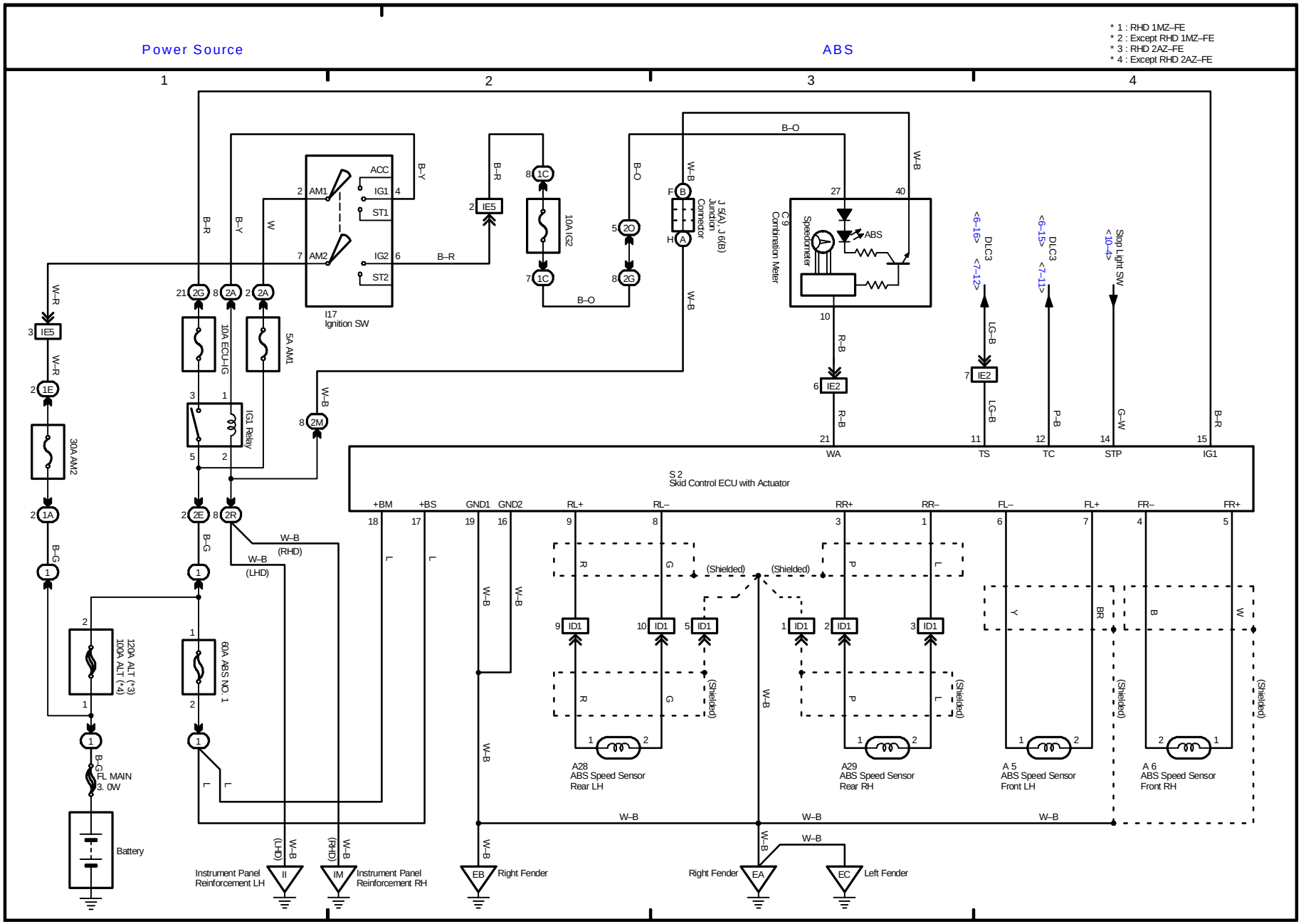

Power Source
Turn Signal and Hazard Warning Light
1
2
3
4
* 1 : Except Automatic Air Conditioner
* 2 : Automatic Air Conditioner
* 3 : RHD 2AZ–FE
* 4 : RHD 1MZ–FE
* 5 : w/ Trailer Socket
I17 Ignition SW
ACC
AM1
IG1
ST1
15A HAZ
5A AM1
IG1 Relay
10A GAUGE1
120A ALT (*3)
100A ALT (Except *3)
FL MAIN
3. 0W
Battery
J 5(A), J 6(B) Junction Connector
IE2
T 4
Turn Signal Flasher Relay
IG
+B
HAZ
Body ECU
<1–14><2–15>
J 5(A), J 6(B), J11(C), J12(D) Junction Connector
A13(A), A14(B) A/C Control Assembly
Trailer Socket
<14–3>
C 9 Combination Meter
Turn LH
Turn RH
F 5 Front Side Turn Signal Light LH
F 6 Front Side Turn Signal Light RH
F 7 Front Turn Signal Light LH
F 8 Front Turn Signal Light RH
R10 Rear Combination Light LH
R11 Rear Combination Light RH
C13(A), (B) Combination SW
Turn SW
TL
TB
TR
LH
Off
RH
Instrument Panel Reinforcement LH
Lower Back Panel Center
Left Fender
Right Fender
Instrument Panel Reinforcement RH
(LHD)
(RHD)

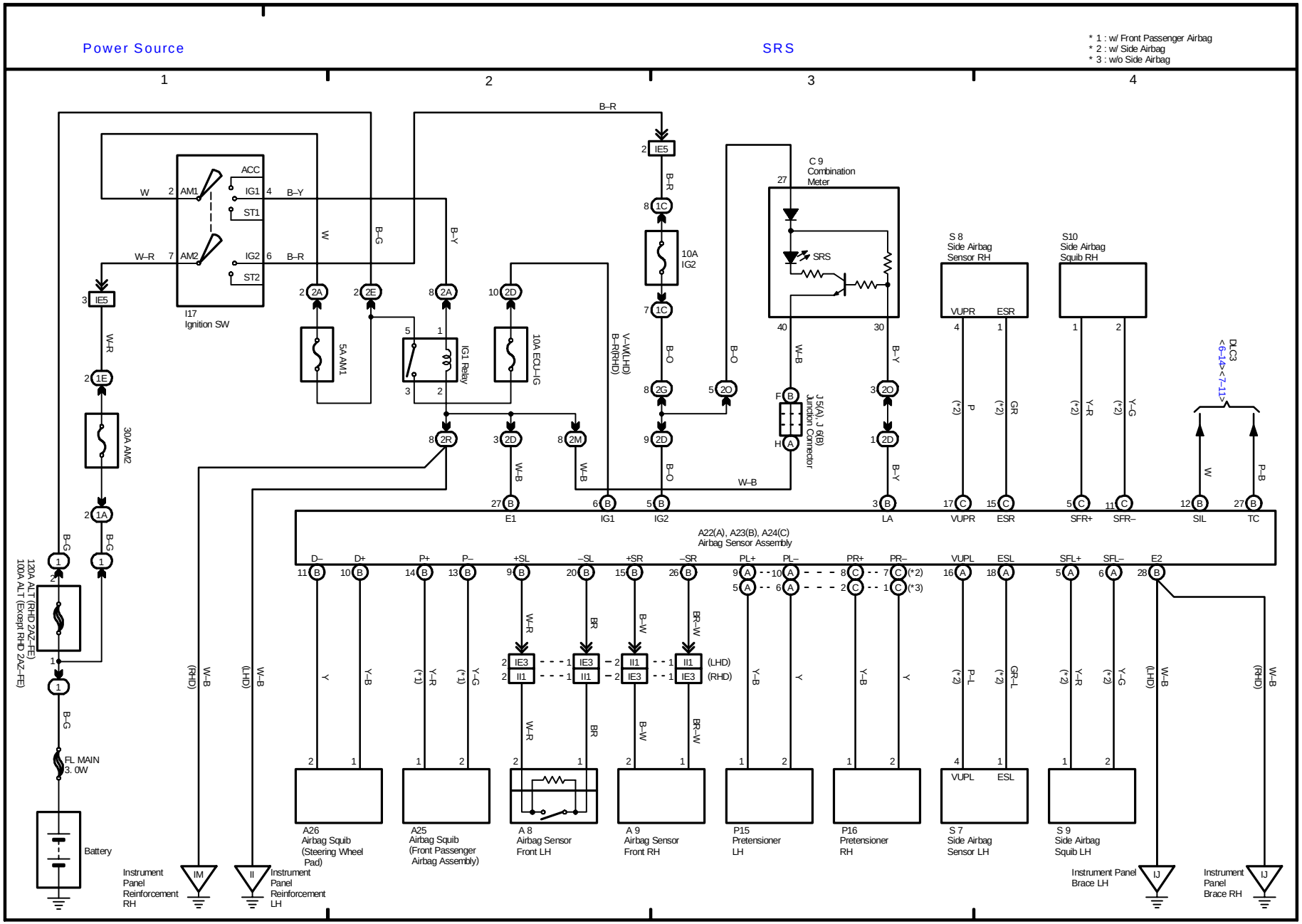

Power Source
Back–Up Light
* 1 : RHD 2AZ–FE
* 2 : Except RHD 2AZ–FE
* 3 : w/ Trailer Socket
1
2
3
4
ACC
IG1
ST1
AM1
W
B–Y
I17
Ignition SW
B–G
5A AM1
IG1 Relay
10A GAUGE2
120A ALT
(*1)
100A ALT
(*2)
FL MAIN
3. 0W
Battery
R–L
W–B
(RHD)
(LHD)
B 1
Back–Up
Light SW
A 4(A), (B)
Back–Up
Light SW
(1MZ–FE)
(2AZ–FE)
(M/T)
(A/T)
R–B
Combination Meter
<30–8>
ECT and A/T Indicator
<8–5> <9–7>
Navigation
ECU<27–2>
Trailer Socket
<14–3>
(*3)
RL0
Rear Combination
Light LH
RL1
Rear Combination
Light RH
Back–Up
Instrument Panel
Reinforcement RH
Instrument Panel
Reinforcement LH
Lower Back
Panel Center
IM
II
BQ

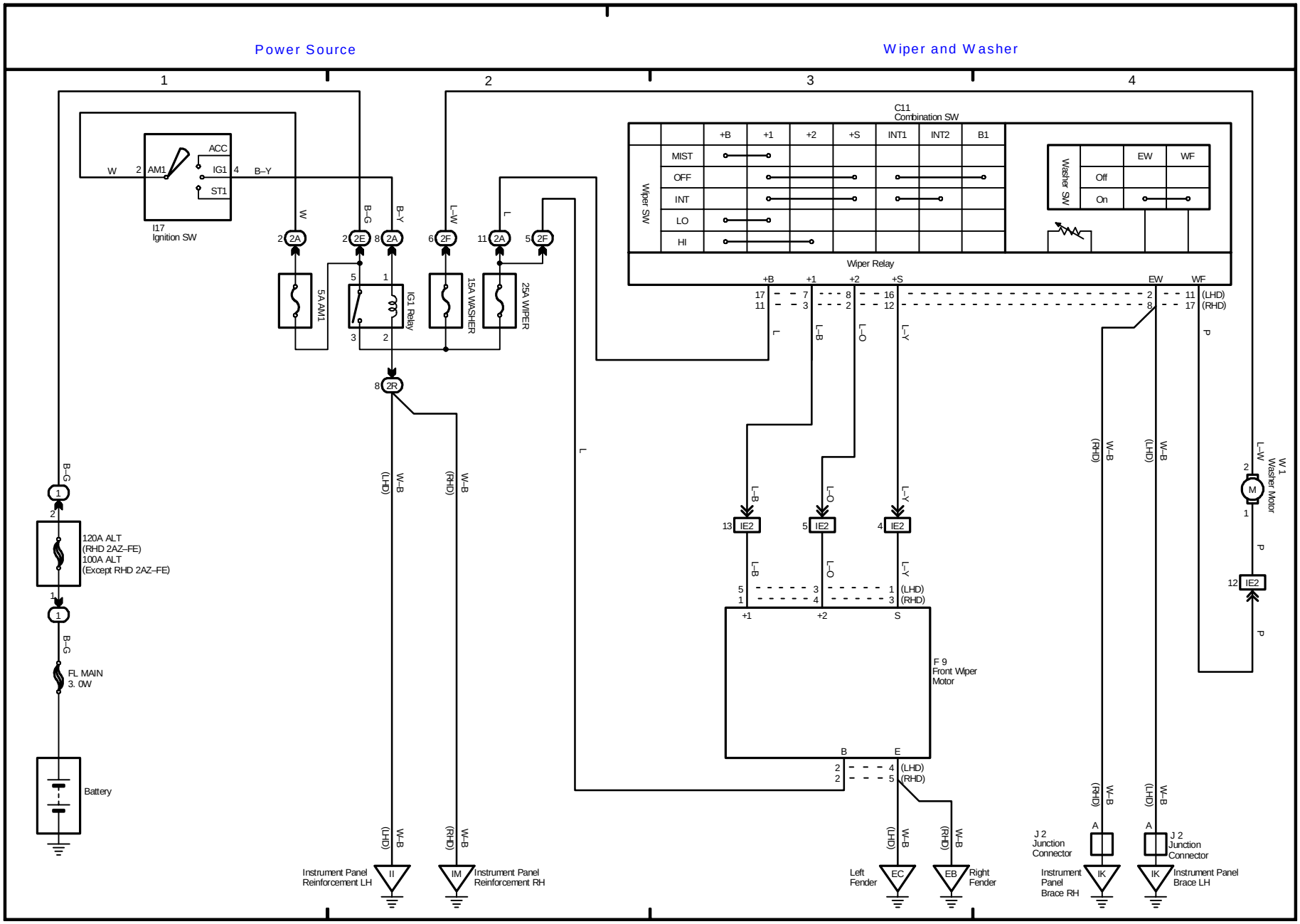

Power Source
Front Fog Light
Trailer Socket
1
2
3
4
G (LHD)
R–B(RHD)
2E
2P
2C
TAIL Relay
10A TAIL
15A FOG
FOG Relay
Taillight System
<10–1>
2G
2O
2R
B–G
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
FL MAIN
3. 0W
Battery
G–R
W–B
F 3
Front Fog Light LH
F 4
Front Fog Light RH
G–B(LHD)
G–R(RHD)
C 9
Combination Meter
Front Fog
J 5(A), J 6(B)
Junction Connector
2M
G–B(LHD)
G (RHD)
11 (LHD)
12 (RHD)
Front Fog Light SW
BFG
LFG
C13
Combination SW
OFF
ON
10 (LHD)
16 (RHD)
W–B (LHD)
W–B (RHD)
W–B (RHD)
W–B (LHD)
W–B (LHD)
W–B (RHD)
Back–Up Light SW
<13–3>
Turn Signal Flasher Relay
<12–2>
Turn Signal Flasher Relay
<12–4>
Stop Light SW
<10–4>
TAIL Fuse
<10–2>
R–B
G–B
G–Y
G–W
G
T 7
Trailer Socket
Left Fender
EC
Right Fender
EB
Instrument Panel Reinforcement LH
Instrument Panel Reinforcement RH
IM
Lower Back Panel Center
BQ

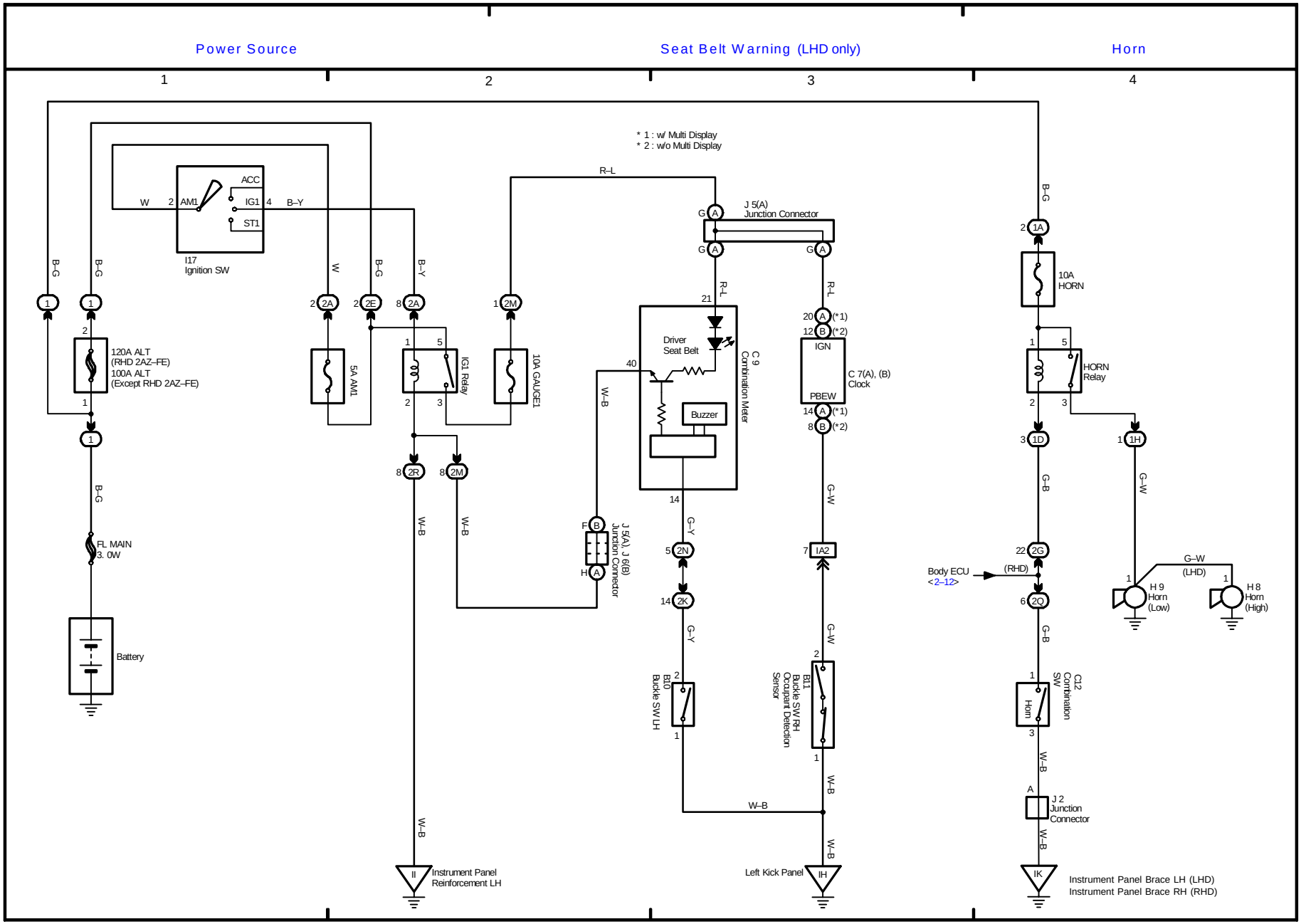


OVERALL ELECTRICAL WIRING DIAGRAM M

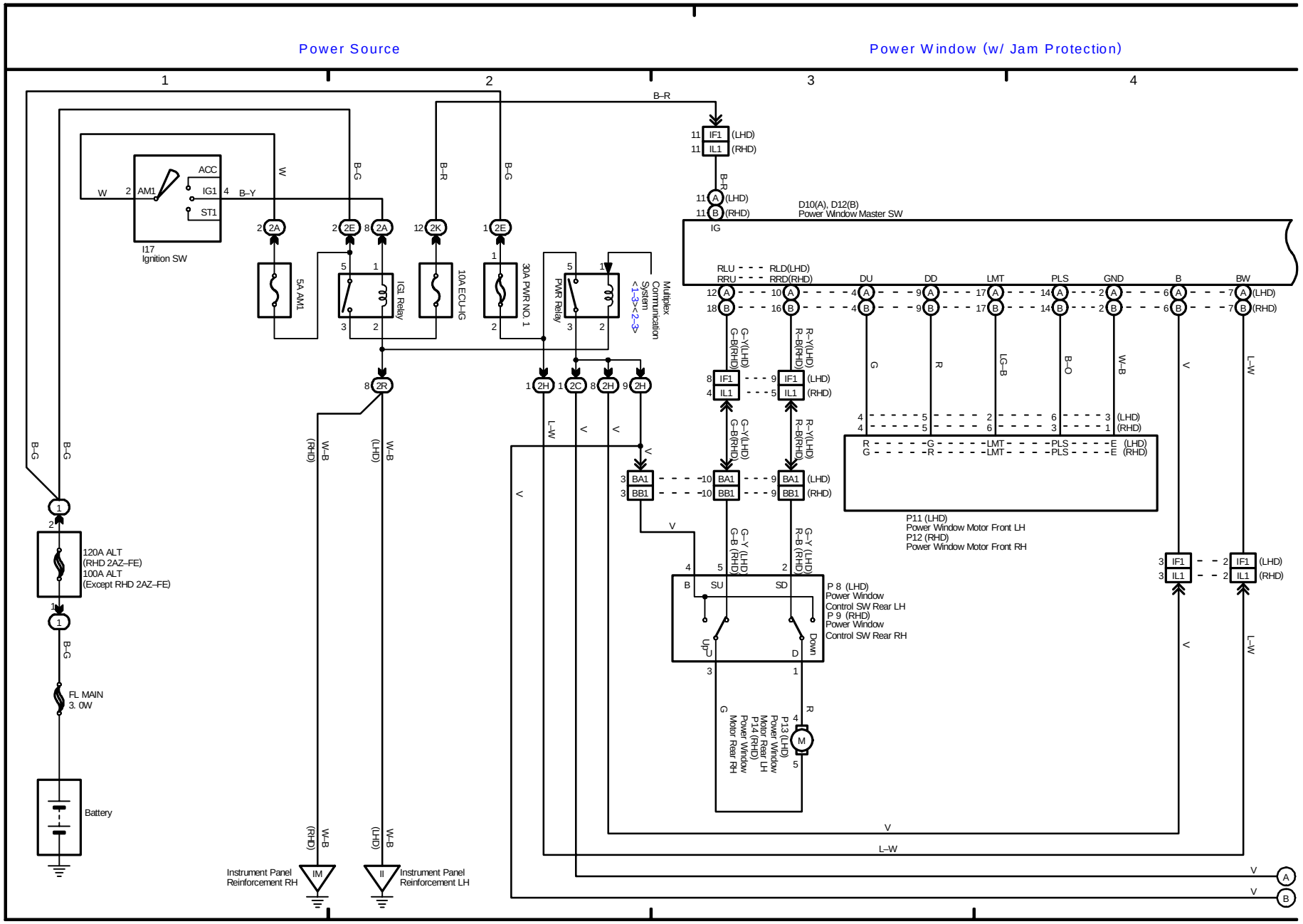

Power Source
ABS
* 1 : RHD 1MZ–FE
* 2 : Except RHD 1MZ–FE
* 3 : RHD 2AZ–FE
* 4 : Except RHD 2AZ–FE
1
2
3
4
ACC
IG1
ST1
IG2
ST2
AM1
AM2
I17
Ignition SW
IG1 Relay
10A ECU-IG
5A AM1
30A AM2
120A ALT (*3)
100A ALT (*4)
60A ABS NO. 1
FL MAIN
3. 0W
Battery
J 5(A), J 6(B)
Junction
Connector
C 9
Combination Meter
Speedometer
ABS
10A IG2
DLC3
Stop Light SW
S 2
Skid Control ECU with Actuator
+BM
+BS
GND1
GND2
RL+
RL–
RR+
RR–
FL–
FL+
FR–
FR+
WA
TS
TC
STP
IG1
A28
ABS Speed Sensor
Rear LH
A29
ABS Speed Sensor
Rear RH
A 5
ABS Speed Sensor
Front LH
A 6
ABS Speed Sensor
Front RH
(Shielded)
Instrument Panel
Reinforcement LH
Instrument Panel
Reinforcement RH
Right Fender
Left Fender
W–B
(RHD)
W–B
(LHD)


Power Source
SRS
* 1 : w/ Front Passenger Airbag
* 2 : w/ Side Airbag
* 3 : w/o Side Airbag
1
2
3
4
I17
Ignition SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
5A AM1
IG1 Relay
10A ECU-IG
10A IG2
30A AM2
120A ALT (RHD 2AZ-FE)
100A ALT (Except RHD 2AZ-FE)
FL MAIN
3. 0W
Battery
C 9
Combination
Meter
SRS
J5(A), J 6(B)
Junction Connector
S 8
Side Airbag
Sensor RH
S10
Side Airbag
Squib RH
DLC3
<6-14><7-11>
A22(A), A23(B), A24(C)
Airbag Sensor Assembly
E1
IG1
IG2
LA
VUPR
ESR
SIL
TC
SFR+
SFR–
D–
D+
P+
P–
+SL
–SL
+SR
–SR
PL+
PL–
PR+
PR–
VUPL
ESL
SFL+
SFL–
E2
A26
Airbag Squib
(Steering Wheel
Pad)
A25
Airbag Squib
(Front Passenger
Airbag Assembly)
A 8
Airbag Sensor
Front LH
A 9
Airbag Sensor
Front RH
P15
Pretensioner
LH
P16
Pretensioner
RH
S 7
Side Airbag
Sensor LH
S 9
Side Airbag
Squib LH
Instrument
Panel
Reinforcement
RH
Instrument
Panel
Reinforcement
LH
Instrument Panel
Brace LH
Instrument
Panel
Brace RH
(LHD)
(RHD)

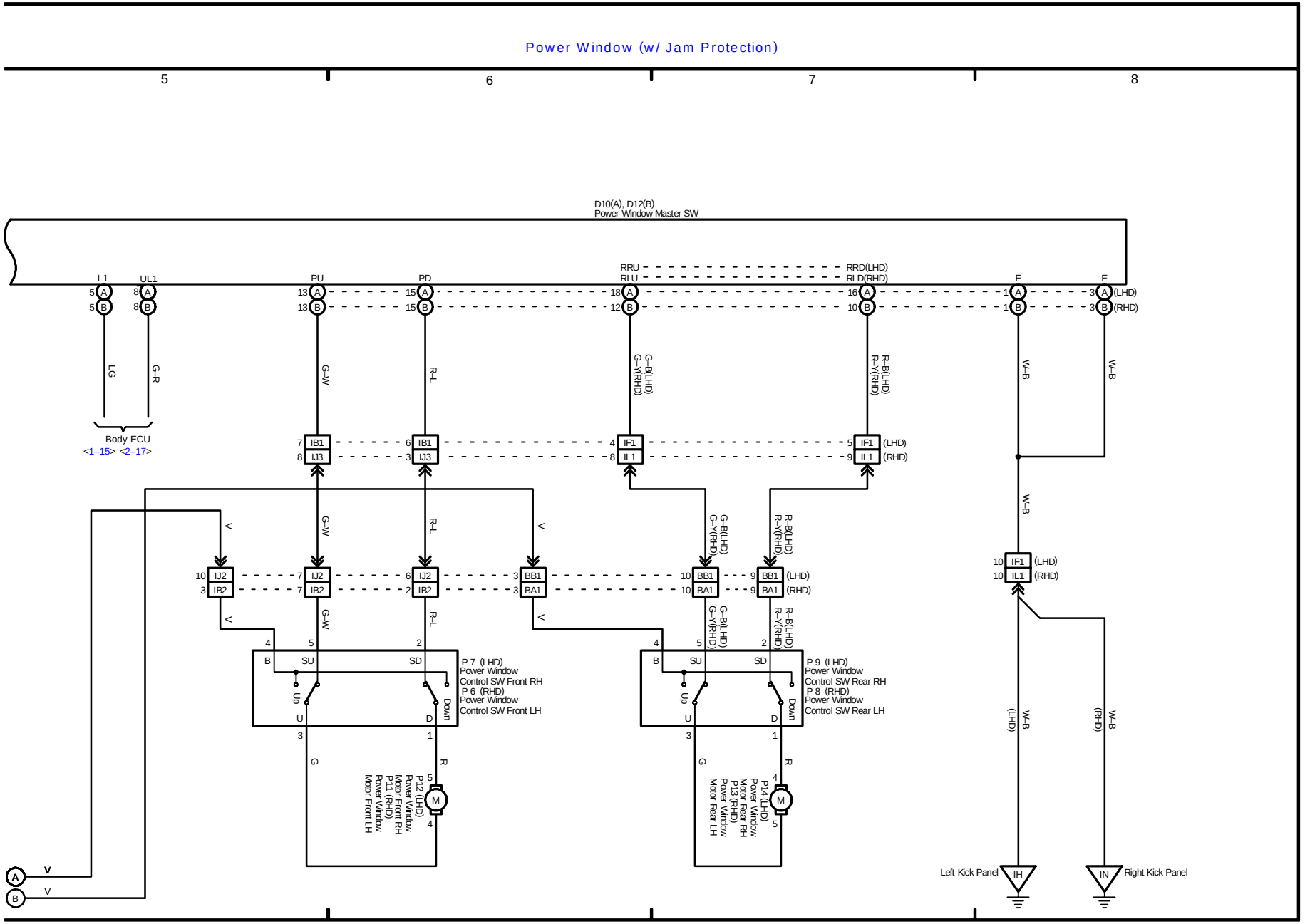

Power Source
Wiper and Washer
1
2
3
4
I17
Ignition SW
ACC
IG1
ST1
AM1
C11
Combination SW
Wiper SW
MIST
OFF
INT
LO
HI
+B
+1
+2
+S
INT1
INT2
B1
Washer SW
Off
On
EW
WF
Wiper Relay
5A AM1
IG1 Relay
15A WASHER
25A WIPER
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
FL MAIN
3. 0W
Battery
F 9
Front Wiper
Motor
W 1
Washer Motor
(LHD)
(RHD)
Instrument Panel
Reinforcement LH
Instrument Panel
Reinforcement RH
Left
Fender
Right
Fender
J 2
Junction
Connector
Instrument
Panel
Brace RH
Instrument Panel
Brace LH

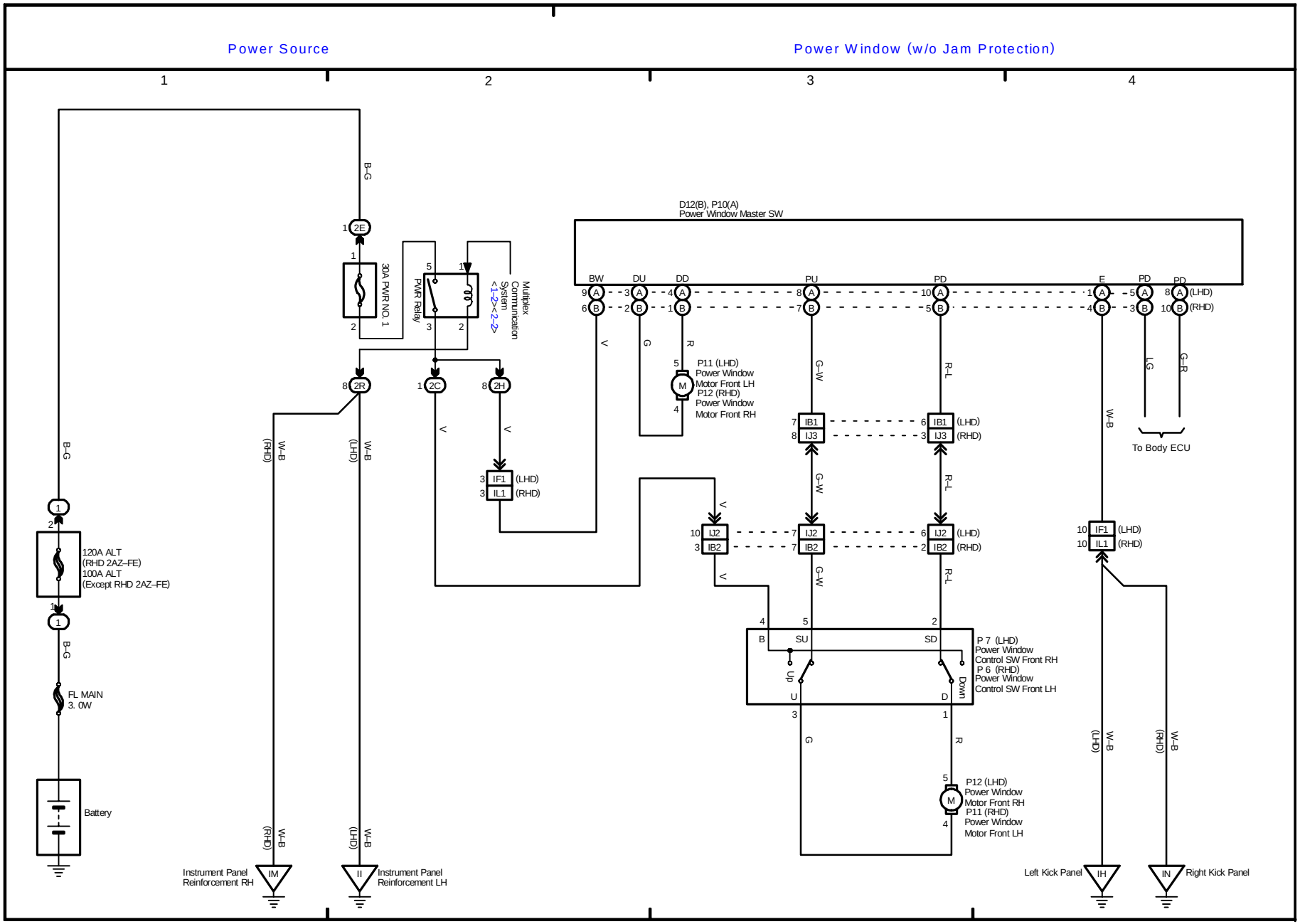

Power Source
Seat Belt Warning (LHD only)
Horn
1
2
3
4
* 1 : w/ Multi Display
* 2 : w/o Multi Display
ACC
IG1
ST1
AM1
I17
Ignition SW
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
5A AM1
IG1 Relay
10A GAUGE1
FL MAIN
3. 0W
Battery
J 5(A)
Junction Connector
Driver
Seat Belt
Buzzer
C 9
Combination Meter
C 7(A), (B)
Clock
IGN
PBEW
J 5(A), J 6(B)
Junction Connector
B10
Buckle SW LH
B11
Buckle SW RH
Occupant Detection
Sensor
Instrument Panel
Reinforcement LH
Left Kick Panel
10A
HORN
HORN
Relay
Body ECU
<2–12>
(RHD)
(LHD)
H 9
Horn
(Low)
H 8
Horn
(High)
C12
Combination
SW
Horn
J 2
Junction
Connector
Instrument Panel Brace LH (LHD)
Instrument Panel Brace RH (RHD)

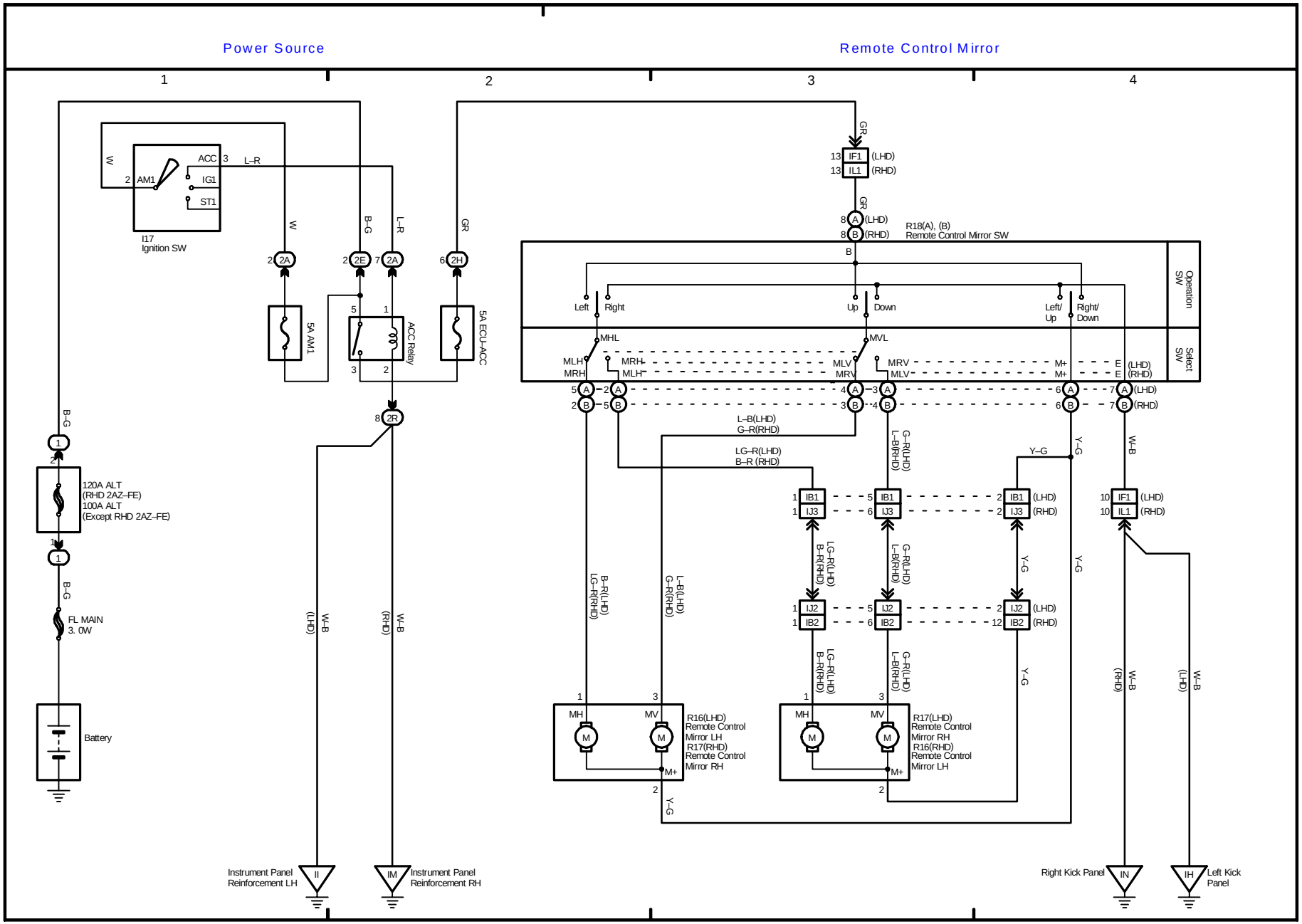
(Cont. next page)

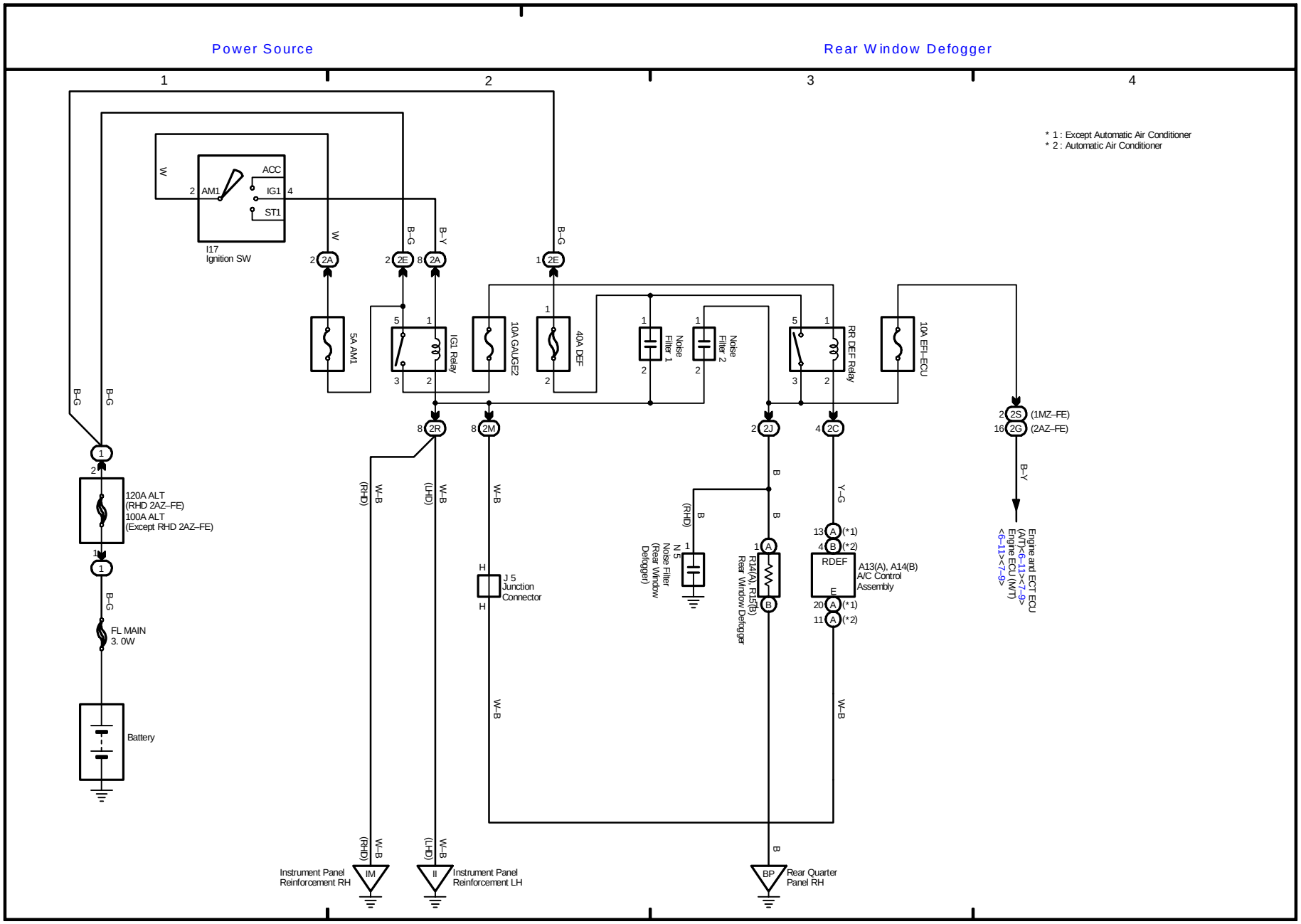


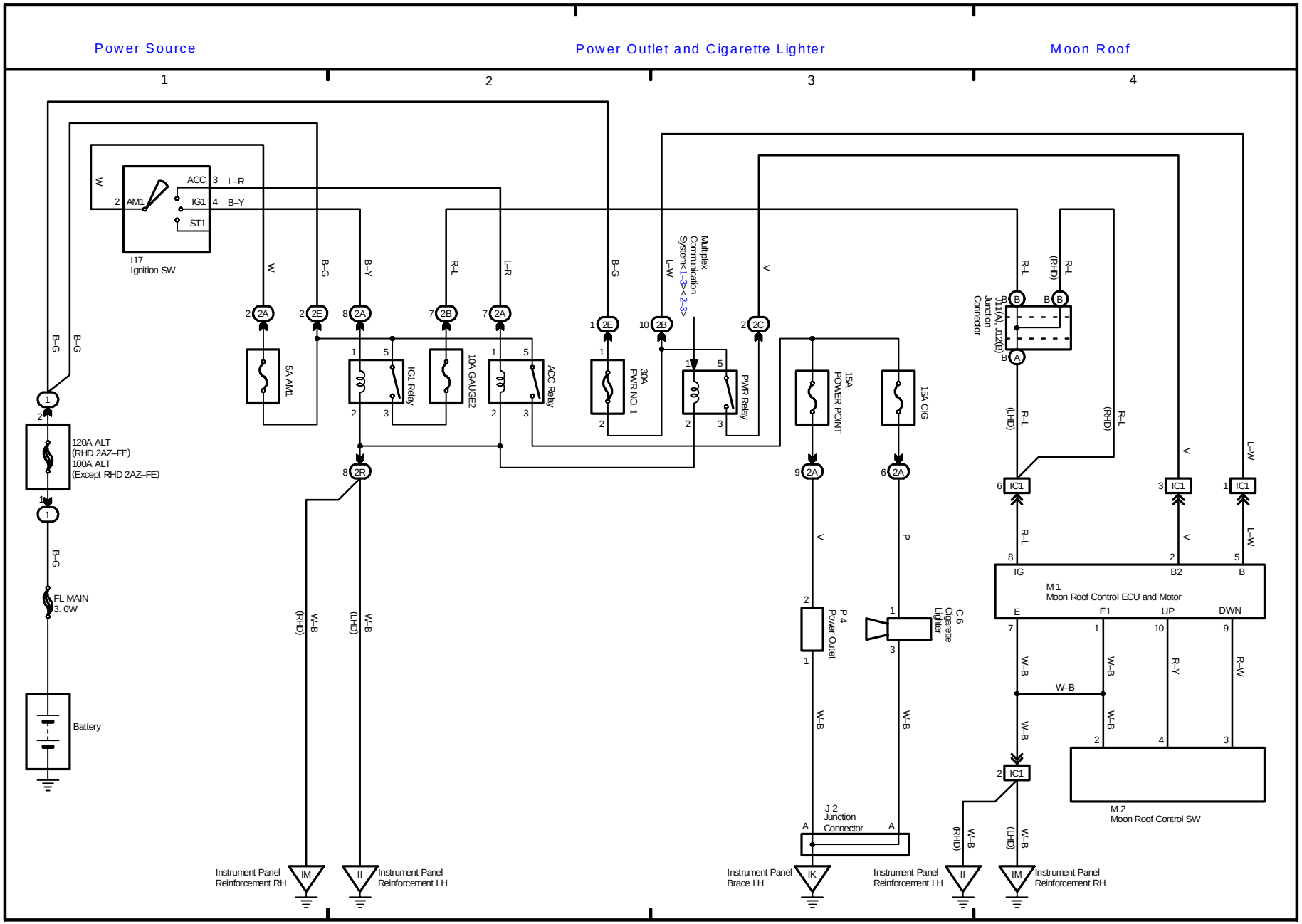
Power Window (w/ Jam Protection)

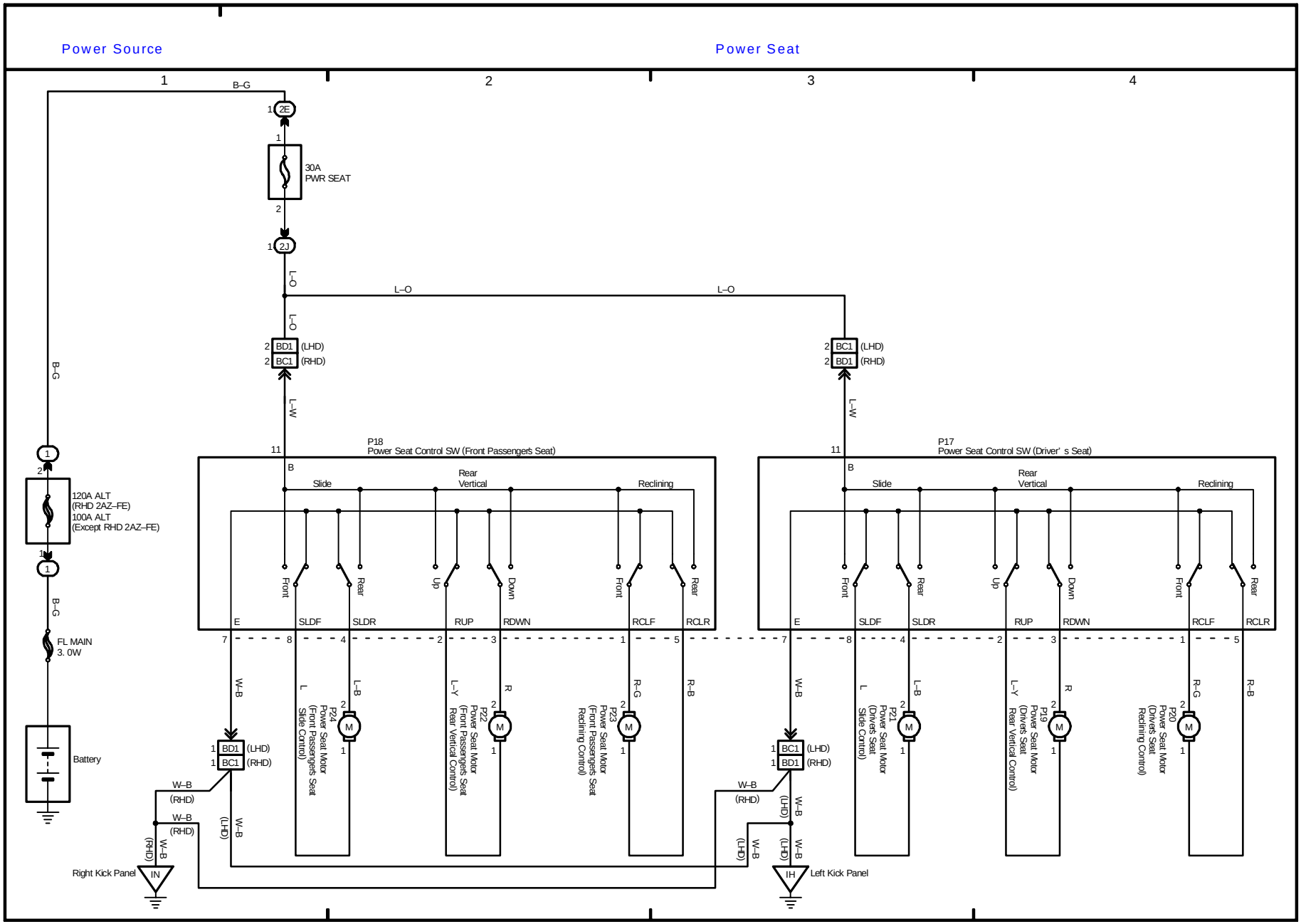


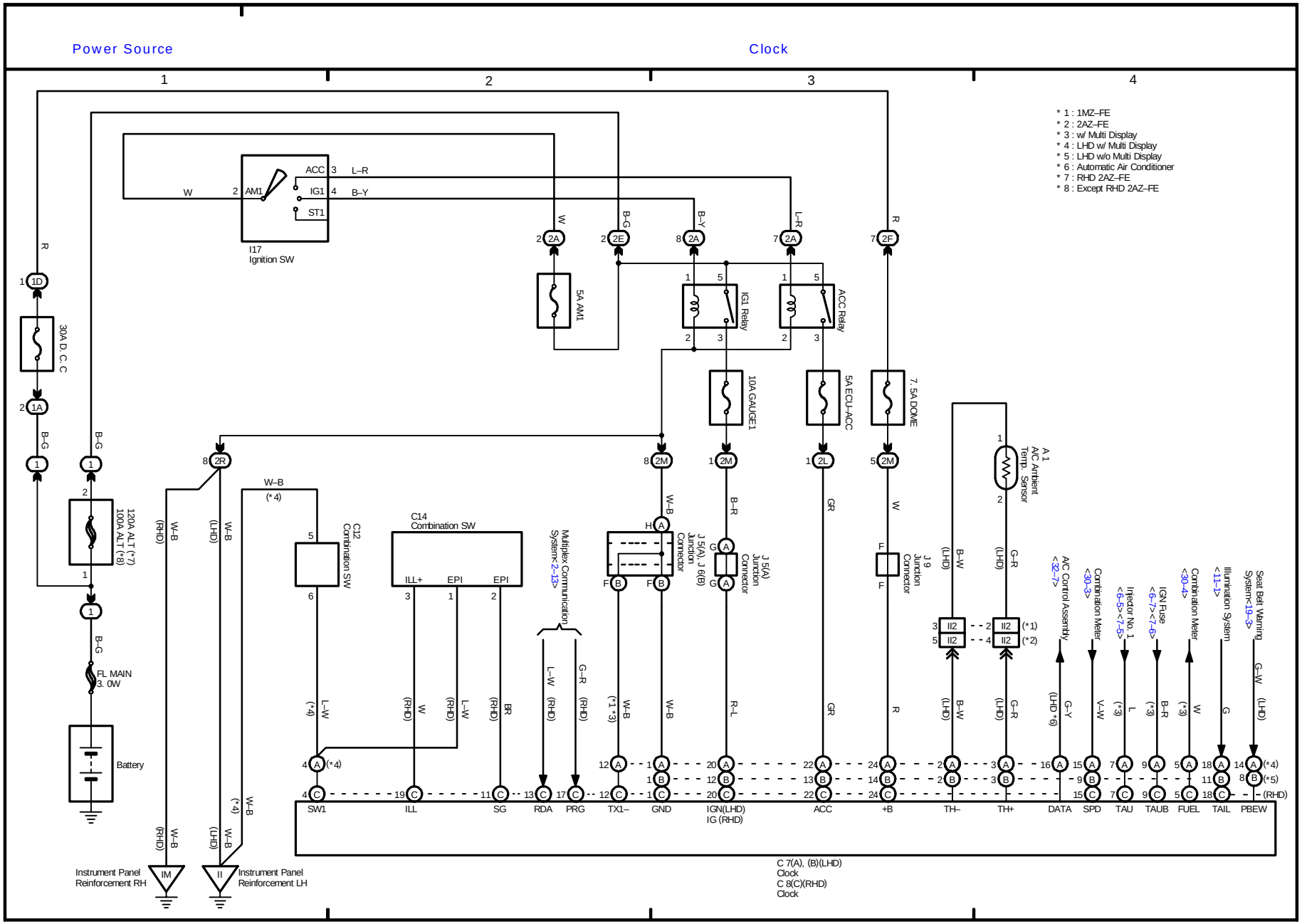

Power Source
Power Window (w/o Jam Protection)
1
2
3
4
D12(B), P10(A)
Power Window Master SW
BW
DU
DD
PU
PD
E
PD
PD
(LHD)
(RHD)
B-G
2E
30A PWR NO. 1
PWR Relay
Multiplex Communication System
<1-2><2-2>
2R
2C
2H
V
G
R
P11 (LHD)
Power Window
Motor Front LH
P12 (RHD)
Power Window
Motor Front RH
G-W
R-L
W-B
LG
G-R
To Body ECU
IB1
IJ3
IF1
IL1
IJ2
IB2
120A ALT
(RHD 2AZ-FE)
100A ALT
(Except RHD 2AZ-FE)
FL MAIN
3. 0W
Battery
P 7 (LHD)
Power Window
Control SW Front RH
P 6 (RHD)
Power Window
Control SW Front LH
SU
SD
Up
Down
P12 (LHD)
Power Window
Motor Front RH
P11 (RHD)
Power Window
Motor Front LH
Instrument Panel
Reinforcement RH
Instrument Panel
Reinforcement LH
Left Kick Panel
Right Kick Panel
IM
II
IH
IN


Power Source
Remote Control Mirror
1
2
3
4
I17
Ignition SW
ACC
IG1
ST1
AM1
L–R
W
B–G
GR
5A AM1
ACC Relay
5A ECU–ACC
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
FL MAIN
3. 0W
Battery
Instrument Panel
Reinforcement LH
Instrument Panel
Reinforcement RH
R18(A), (B)
Remote Control Mirror SW
Operation SW
Select SW
Left
Right
Up
Down
Left/
Up
Right/
Down
MHL
MVL
MLH
MRH
MRV
MLV
L–B(LHD)
G–R(RHD)
LG–R(LHD)
B–R (RHD)
G–R(LHD)
L–B(RHD)
Y–G
W–B
R16(LHD)
Remote Control
Mirror LH
R17(RHD)
Remote Control
Mirror RH
R17(LHD)
Remote Control
Mirror RH
R16(RHD)
Remote Control
Mirror LH
Right Kick Panel
Left Kick
Panel

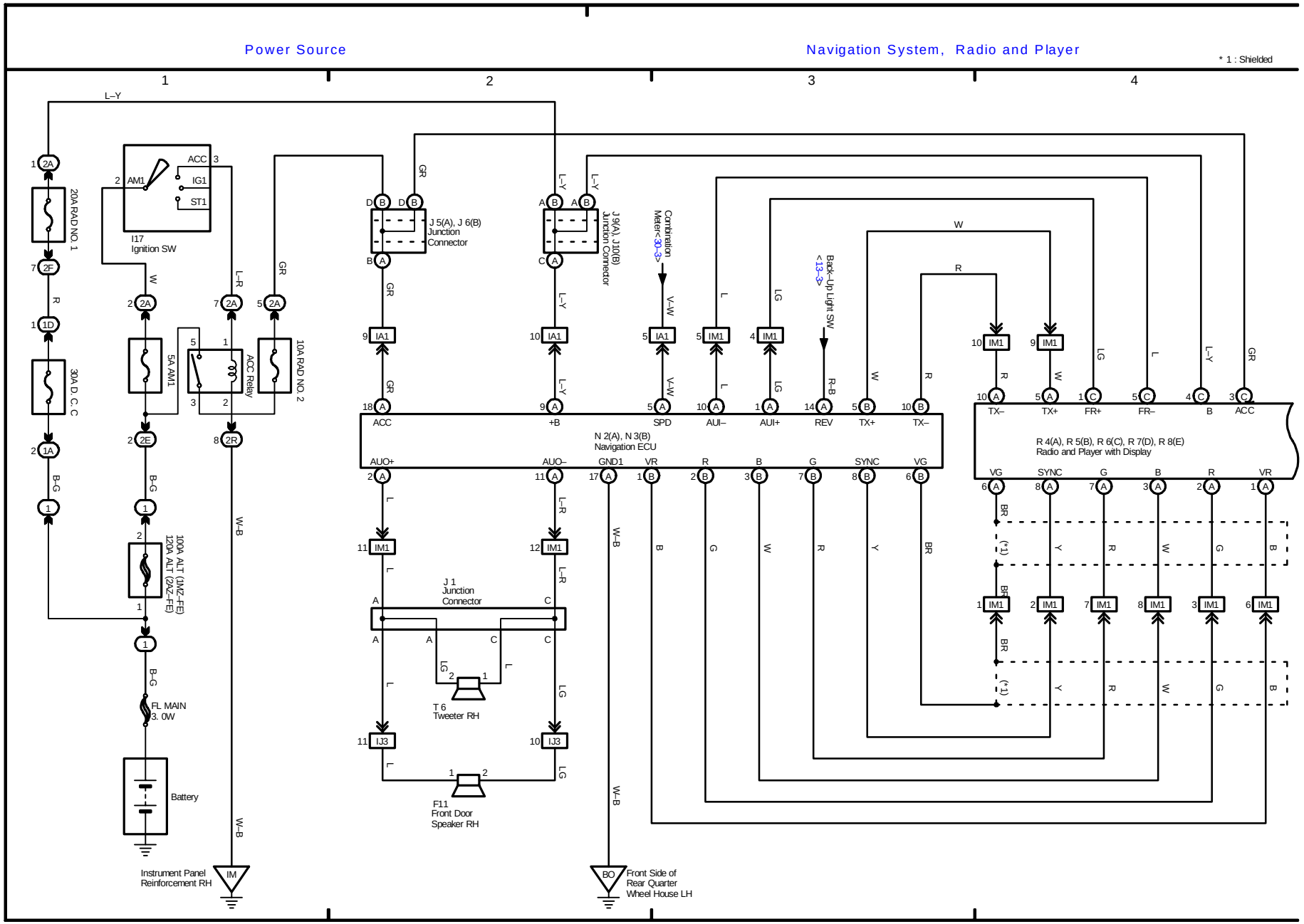

Power Source
Rear Window Defogger
1
2
3
4
* 1 : Except Automatic Air Conditioner
* 2 : Automatic Air Conditioner
ACC
IG1
ST1
AM1
I17
Ignition SW
5A AM1
IG1 Relay
10A GAUGE2
40A DEF
Noise Filter 1
Noise Filter 2
RR DEF Relay
10A EFI-ECU
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
FL MAIN
3. 0W
Battery
J 5
Junction Connector
N 5
Noise Filter
(Rear Window Defogger)
R14(A), R15(B)
Rear Window Defogger
A13(A), A14(B)
A/C Control Assembly
RDEF
(1MZ–FE)
(2AZ–FE)
Engine and ECT ECU (A/T)
Engine ECU (M/T)
Instrument Panel Reinforcement RH
Instrument Panel Reinforcement LH
Rear Quarter Panel RH
IM
II
BP


Power Source
Power Outlet and Cigarette Lighter
Moon Roof
1
2
3
4
I17
Ignition SW
ACC
IG1
ST1
AM1
5A AM1
IG1 Relay
10A GAUGE2
ACC Relay
30A PWR NO. 1
PWR Relay
Multiplex Communication System
15A POWER POINT
15A CIG
120A ALT (RHD 2AZ–FE)
100A ALT (Except RHD 2AZ–FE)
FL MAIN 3. 0W
Battery
P 4 Power Outlet
C 6 Cigarette Lighter
J 2 Junction Connector
J11(A), J12(B) Junction Connector
M 1 Moon Roof Control ECU and Motor
M 2 Moon Roof Control SW
Instrument Panel Reinforcement RH
Instrument Panel Reinforcement LH
Instrument Panel Brace LH
Instrument Panel Reinforcement LH
Instrument Panel Reinforcement RH

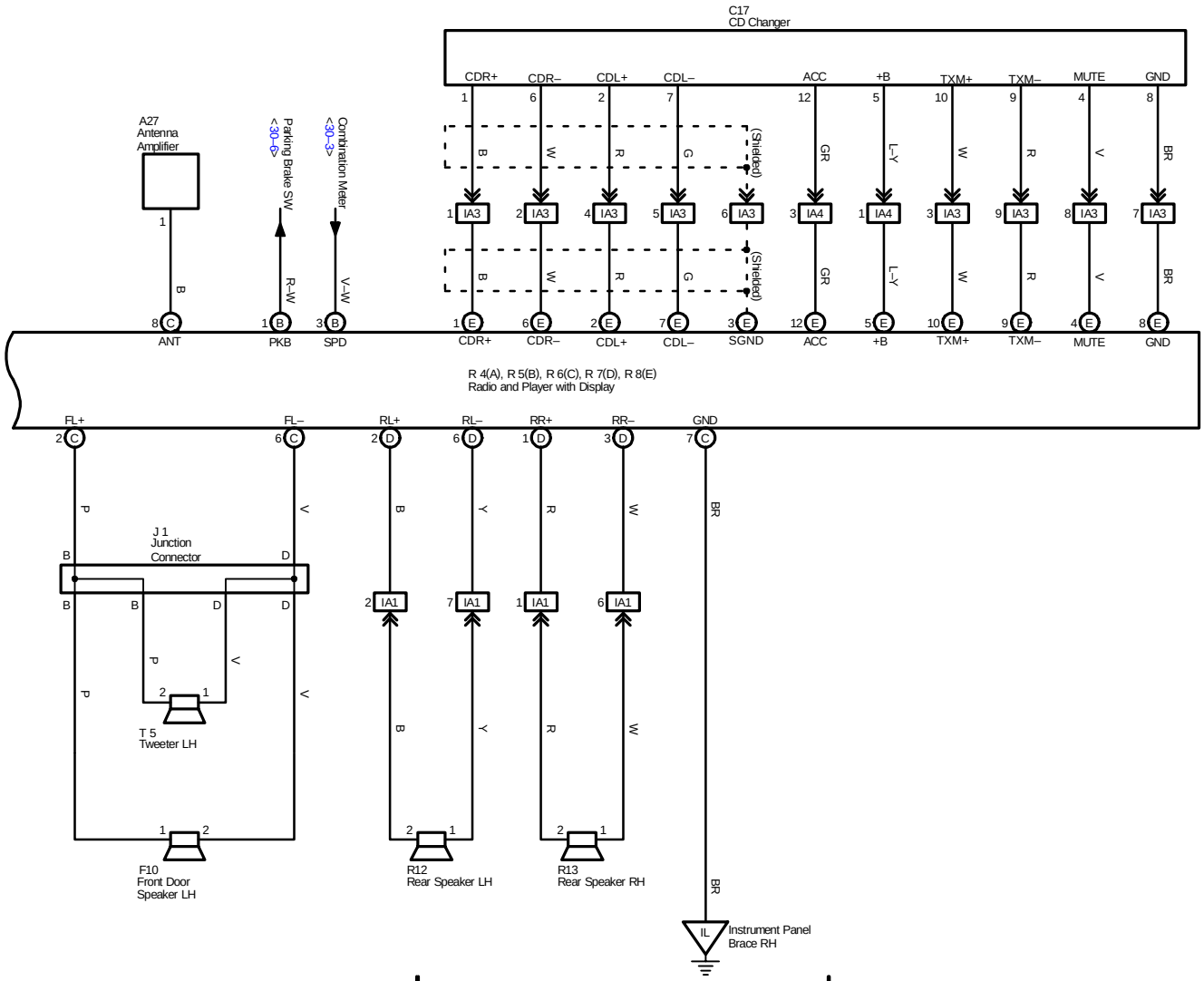

Power Source
Power Seat
1
2
3
4
B–G
2E
30A
PWR SEAT
2J
L–O
L–O
L–O
BD1 (LHD)
BC1 (RHD)
BC1 (LHD)
BD1 (RHD)
L–W
L–W
B–G
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
B–G
FL MAIN
3. 0W
Battery
P18
Power Seat Control SW (Front Passenger's Seat)
P17
Power Seat Control SW (Driver' s Seat)
Slide
Rear Vertical
Reclining
Front
Rear
Up
Down
E
SLDF
SLDR
RUP
RDWN
RCLF
RCLR
W–B
L
L–B
L–Y
R
R–G
R–B
P21 Power Seat Motor (Front Passenger's Seat Slide Control)
P22 Power Seat Motor (Front Passenger's Seat Rear Vertical Control)
P23 Power Seat Motor (Front Passenger's Seat Reclining Control)
P21 Power Seat Motor (Driver's Seat Slide Control)
P19 Power Seat Motor (Driver's Seat Rear Vertical Control)
P20 Power Seat Motor (Driver's Seat Reclining Control)
W–B (RHD)
W–B (LHD)
Right Kick Panel
IN
Left Kick Panel
IH

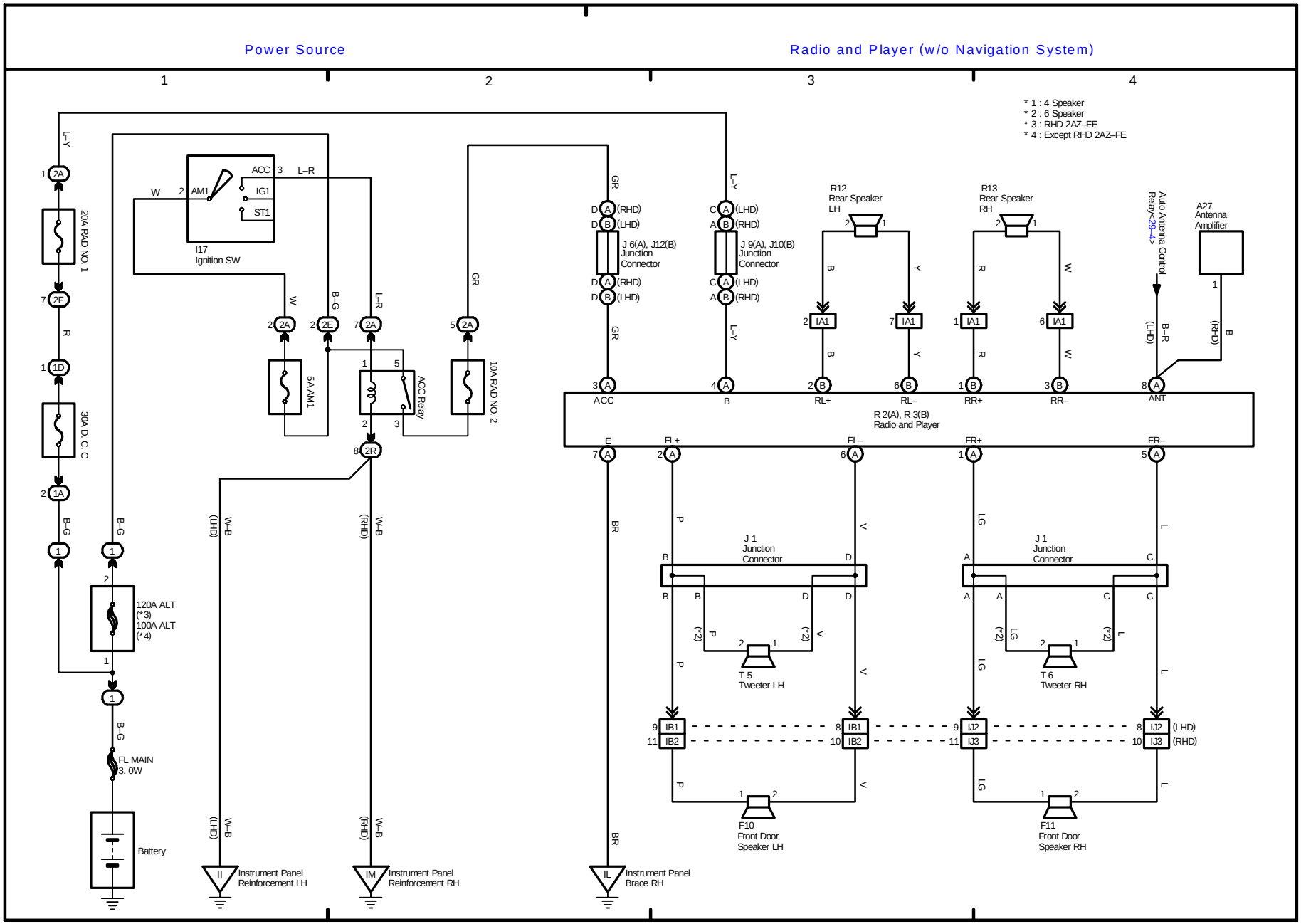

Power Source
Clock
1
2
3
4
* 1 : 1MZ–FE
* 2 : 2AZ–FE
* 3 : w/ Multi Display
* 4 : LHD w/ Multi Display
* 5 : LHD w/o Multi Display
* 6 : Automatic Air Conditioner
* 7 : RHD 2AZ–FE
* 8 : Except RHD 2AZ–FE
I17
Ignition SW
ACC
IG1
ST1
AM1
30A D. C. C
5A AM1
IG1 Relay
ACC Relay
10A GAUGE1
5A ECU–ACC
7. 5A DOME
120A ALT (*7)
100A ALT (*8)
FL MAIN
3. 0W
Battery
C12
Combination SW
C14
Combination SW
ILL+
EPI
EPI
Multiplex Communication System<2–13>
J 5(A), J 6(B)
Junction Connector
J 5(A)
Junction Connector
J 9
Junction Connector
A 1
A/C Ambient Temp. Sensor
A/C Control Assembly <32–7>
Combination Meter <30–3>
Injector No. 1 <6–5><7–5>
IGN Fuse <6–7><7–6>
Combination Meter <30–4>
Illumination System <11–1>
Seat Belt Warning System<19–3>
Instrument Panel Reinforcement RH
Instrument Panel Reinforcement LH
SW1
ILL
SG
RDA
PRG
TX1–
GND
IGN(LHD)
IG (RHD)
ACC
+B
TH–
TH+
DATA
SPD
TAU
TAUB
FUEL
TAIL
PBEW
C 7(A), (B)(LHD)
Clock
C 8(C)(RHD)
Clock

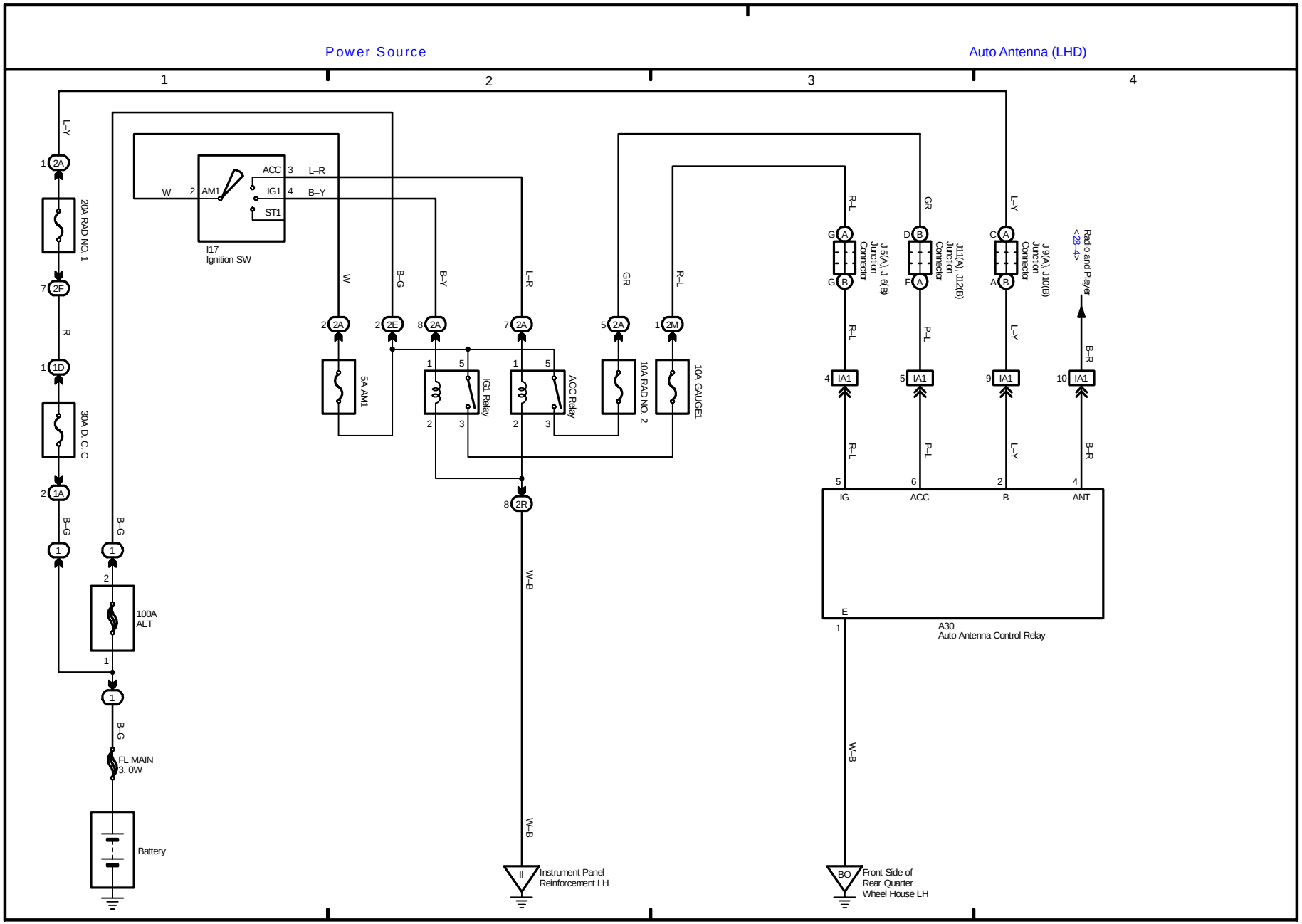
(Cont. next page)



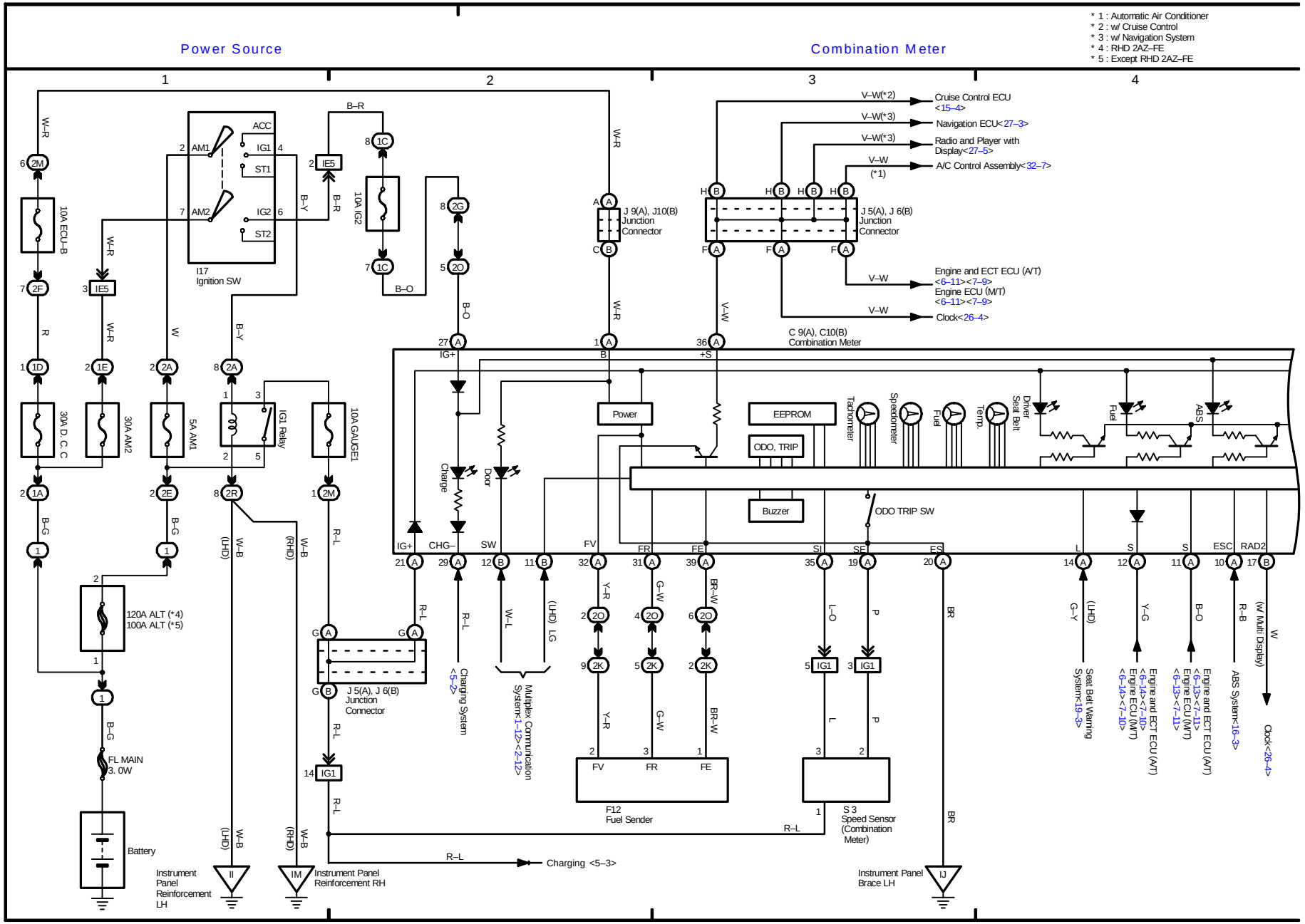
Navigation System, Radio and Player

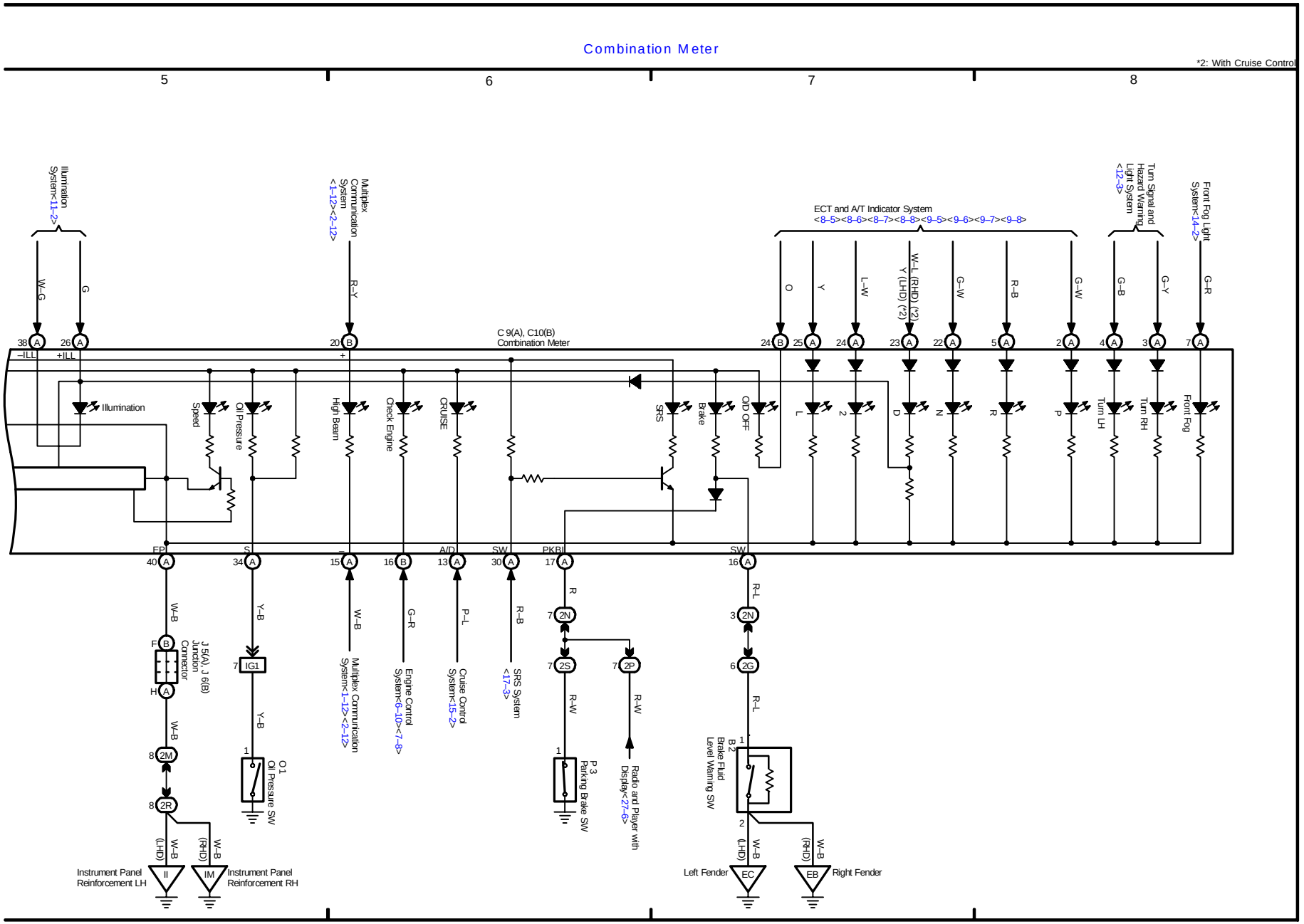


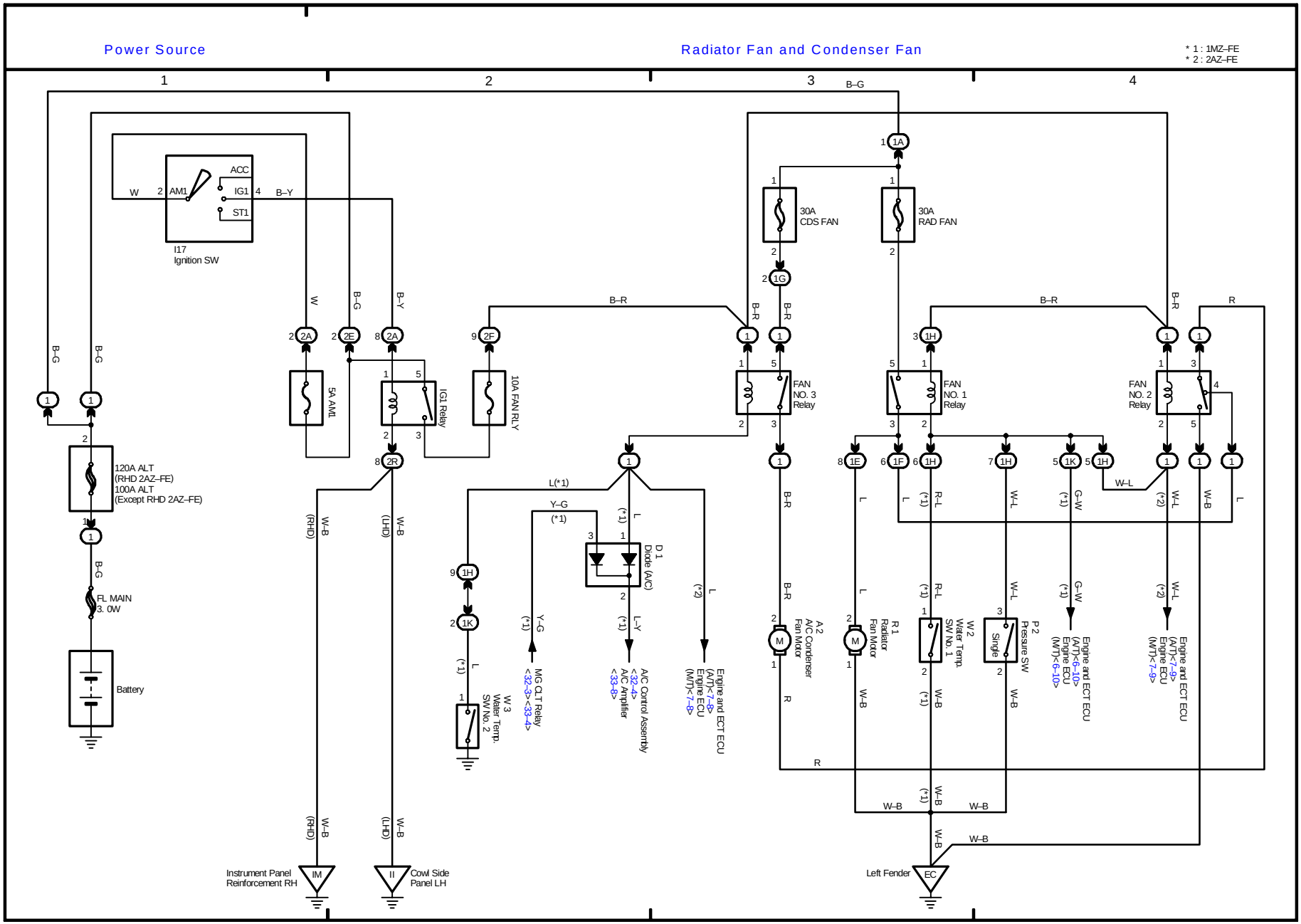

Power Source
Radio and Player (w/o Navigation System)
1
2
3
4
* 1 : 4 Speaker
* 2 : 6 Speaker
* 3 : RHD 2AZ–FE
* 4 : Except RHD 2AZ–FE
20A RAD NO.1
30A D. C. C
120A ALT (*3) 100A ALT (*4)
FL MAIN 3. 0W
Battery
I17 Ignition SW
ACC
IG1
ST1
AM1
5A AM1
ACC Relay
10A RAD NO. 2
J 6(A), J12(B) Junction Connector
J 9(A), J10(B) Junction Connector
R12 Rear Speaker LH
R13 Rear Speaker RH
Auto Antenna Control Relay<29-4>
A27 Antenna Amplifier
ACC
B
RL+
RL–
RR+
RR–
ANT
R 2(A), R 3(B) Radio and Player
J 1 Junction Connector
T 5 Tweeter LH
T 6 Tweeter RH
F10 Front Door Speaker LH
F11 Front Door Speaker RH
Instrument Panel Reinforcement LH
Instrument Panel Reinforcement RH
Instrument Panel Brace RH


Power Source
Auto Antenna (LHD)
1
2
3
4
L–Y
2A
20A RAD NO. 1
7
2F
R
1D
30A D. C. C
2A
1A
B–G
1
100A ALT
FL MAIN 3. 0W
Battery
W
AM1
ACC
IG1
ST1
L–R
B–Y
I17 Ignition SW
2A
5A AM1
2E
B–G
8
2A
IG1 Relay
B–Y
7
2A
ACC Relay
L–R
5
2A
10A RAD NO. 2
GR
1
2M
10A GAUGE1
R–L
8
2R
W–B
II
Instrument Panel Reinforcement LH
G
A
G
B
J5(A), J 6(B) Junction Connector
R–L
4
IA1
R–L
5
IG
D
B
F
A
J11(A), J12(B) Junction Connector
GR
P–L
5
IA1
P–L
6
ACC
C
A
A
B
J9(A), J10(B) Junction Connector
L–Y
9
IA1
L–Y
2
B
Radio and Player
<28-4>
B–R
10
IA1
B–R
4
ANT
E
1
A30
Auto Antenna Control Relay
W–B
BO
Front Side of Rear Quarter Wheel House LH

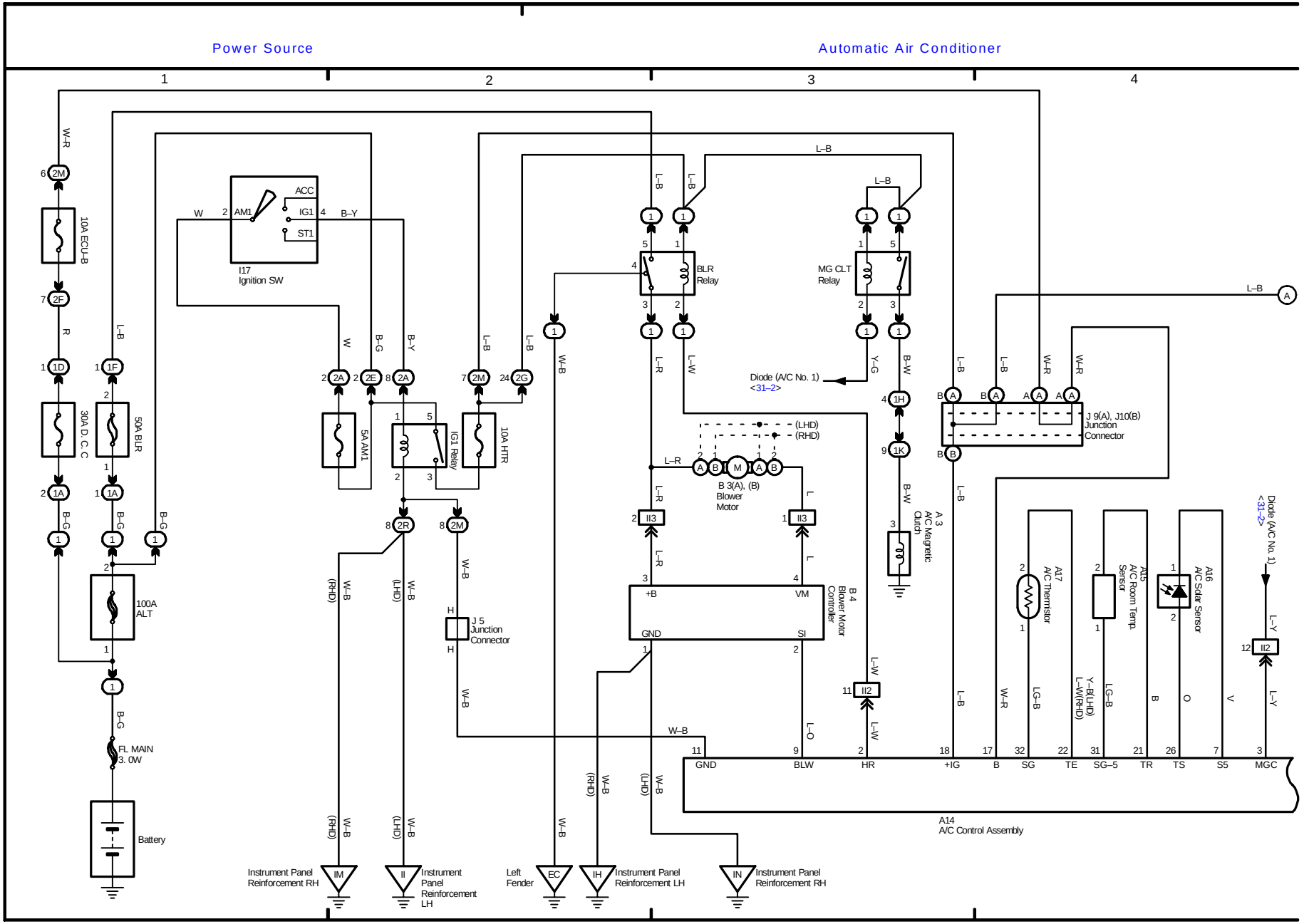
(Cont. next page)



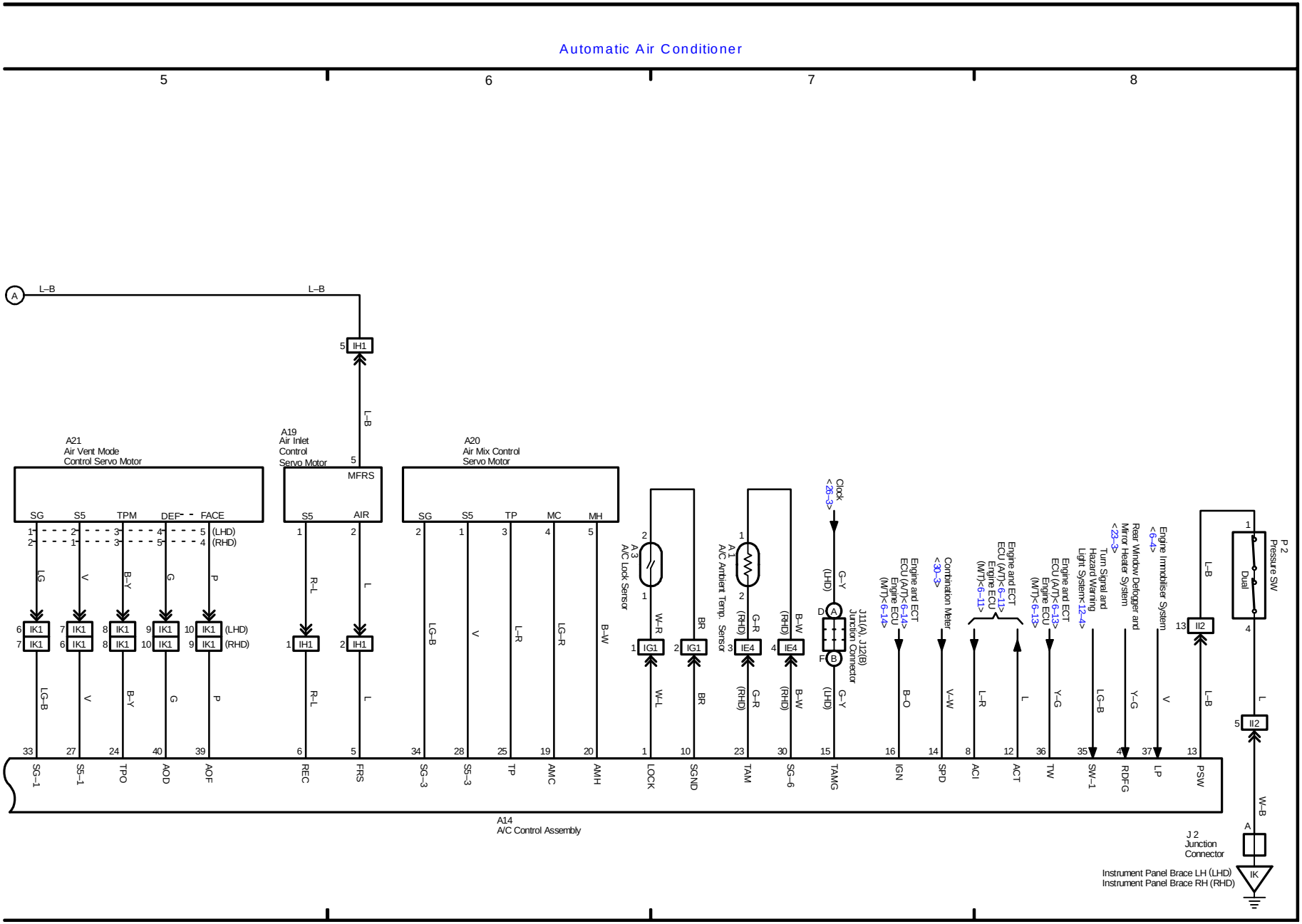

Combination Meter
*2: With Cruise Control
5
6
7
8
Illumination System<11-2>
Multiplex Communication System <1-12><2-12>
ECT and A/T Indicator System <8-5><8-6><8-7><8-8><9-5><9-6><9-7><9-8>
Turn Signal and Hazard Warning Light System <12-3>
Front Fog Light System<14-2>
W-G
G
R-Y
O
Y
L-W
W-L (RHD) (*2)
Y (LHD) (*2)
G-W
R-B
G-W
G-B
G-Y
G-R
C 9(A), C10(B) Combination Meter
38 A -ILL
26 A +ILL
20 B +
24 B
25 A
24 A
23 A
22 A
5 A
2 A
4 A
3 A
7 A
Illumination
Speed
Oil Pressure
High Beam
Check Engine
CRUISE
SRS
Brake
O/D OFF
L
2
D
N
R
P
Turn LH
Turn RH
Front Fog
EP 40 A
S 34 A
15 A
16 B
A/D 13 A
SW 30 A
PKB 17 A
SW 16 A
W-B
Y-B
W-B
G-R
P-L
R-B
R
R-L
F B
H A
J5(A), J6(B) Junction Connector
7 IG1
7 2N
3 2N
7 2S
7 2P
6 2G
R-W
R-W
R-L
8 2M
8 2R
1
O1 Oil Pressure SW
P3 Parking Brake SW
Radio and Player with Display<27-6>
B1 B2 Brake Fluid Level Warning SW
2
(LHD) W-B
(RHD) W-B
Instrument Panel Reinforcement LH
II
IM
Instrument Panel Reinforcement RH
Multiplex Communication System<1-12><2-12>
Engine Control System<6-10><7-8>
Cruise Control System<15-2>
SRS System <17-3>
Left Fender
EC
EB
Right Fender


Power Source
Radiator Fan and Condenser Fan
* 1 : 1MZ–FE
* 2 : 2AZ–FE
1
2
3
4
I17
Ignition SW
ACC
IG1
ST1
AM1
W
B–Y
B–G
B–R
R
W–B
L
Y–G
L–Y
G–W
W–L
R–L
5A AM1
IG1 Relay
10A FAN RLY
30A
CDS FAN
30A
RAD FAN
FAN
NO. 3
Relay
FAN
NO. 1
Relay
FAN
NO. 2
Relay
120A ALT
(RHD 2AZ–FE)
100A ALT
(Except RHD 2AZ–FE)
FL MAIN
3. 0W
Battery
D 1
Diode (A/C)
A 2
A/C Condenser
Fan Motor
R 1
Radiator
Fan Motor
W 2
Water Temp.
SW No. 1
P 2
Pressure SW
Single
W 3
Water Temp.
SW No. 2
MG CLT Relay
<32-3><33-4>
A/C Control Assembly
<32-4>
A/C Amplifier
<33-8>
Engine and ECT ECU
(A/T)<7-8>
Engine ECU
(M/T)<7-8>
Engine and ECT ECU
(A/T)<6-10>
Engine ECU
(M/T)<6-10>
Engine and ECT ECU
(A/T)<7-9>
Engine ECU
(M/T)<7-9>
Instrument Panel
Reinforcement RH
IM
Cowl Side
Panel LH
II
Left Fender
EC

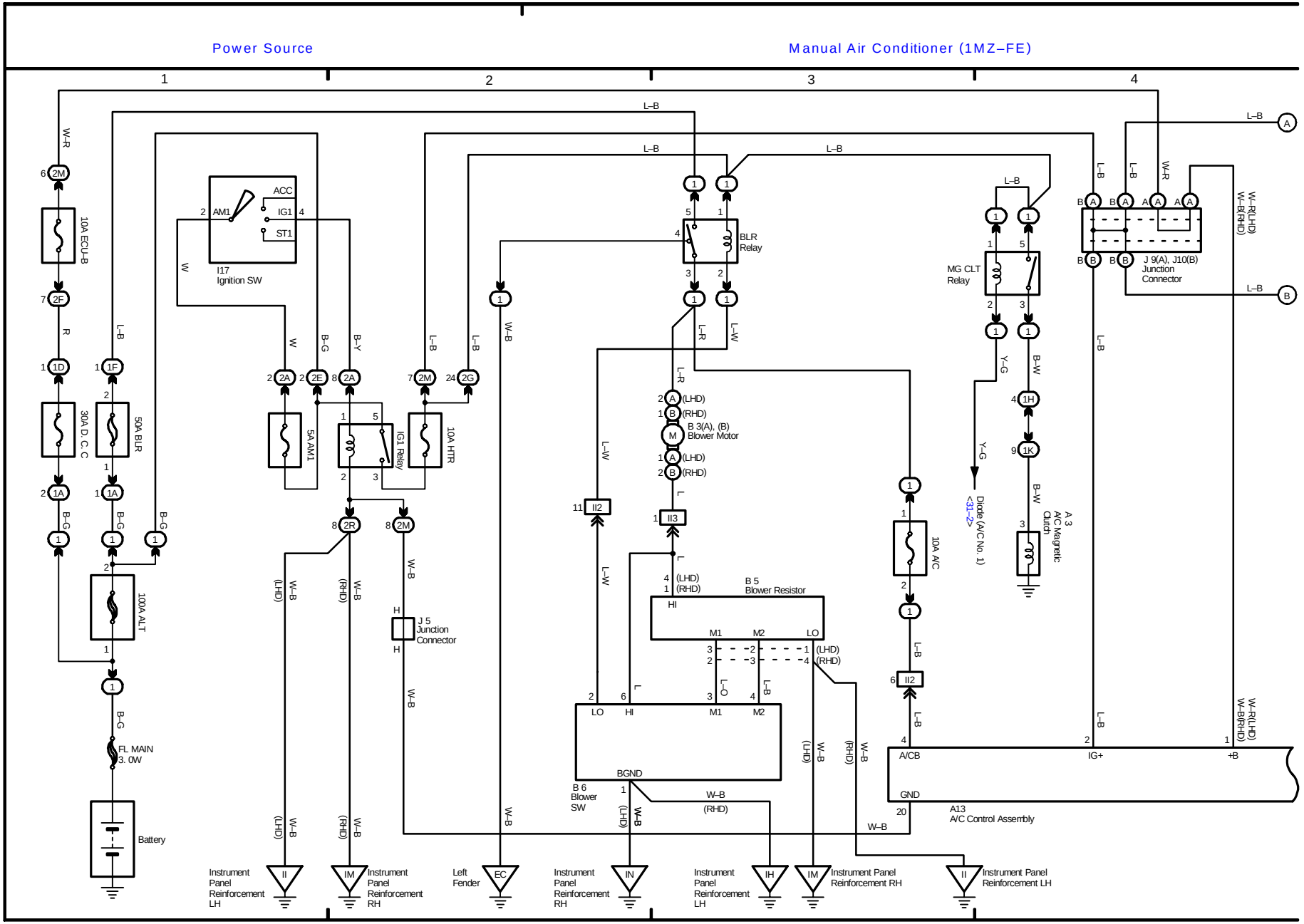
(Cont. next page)



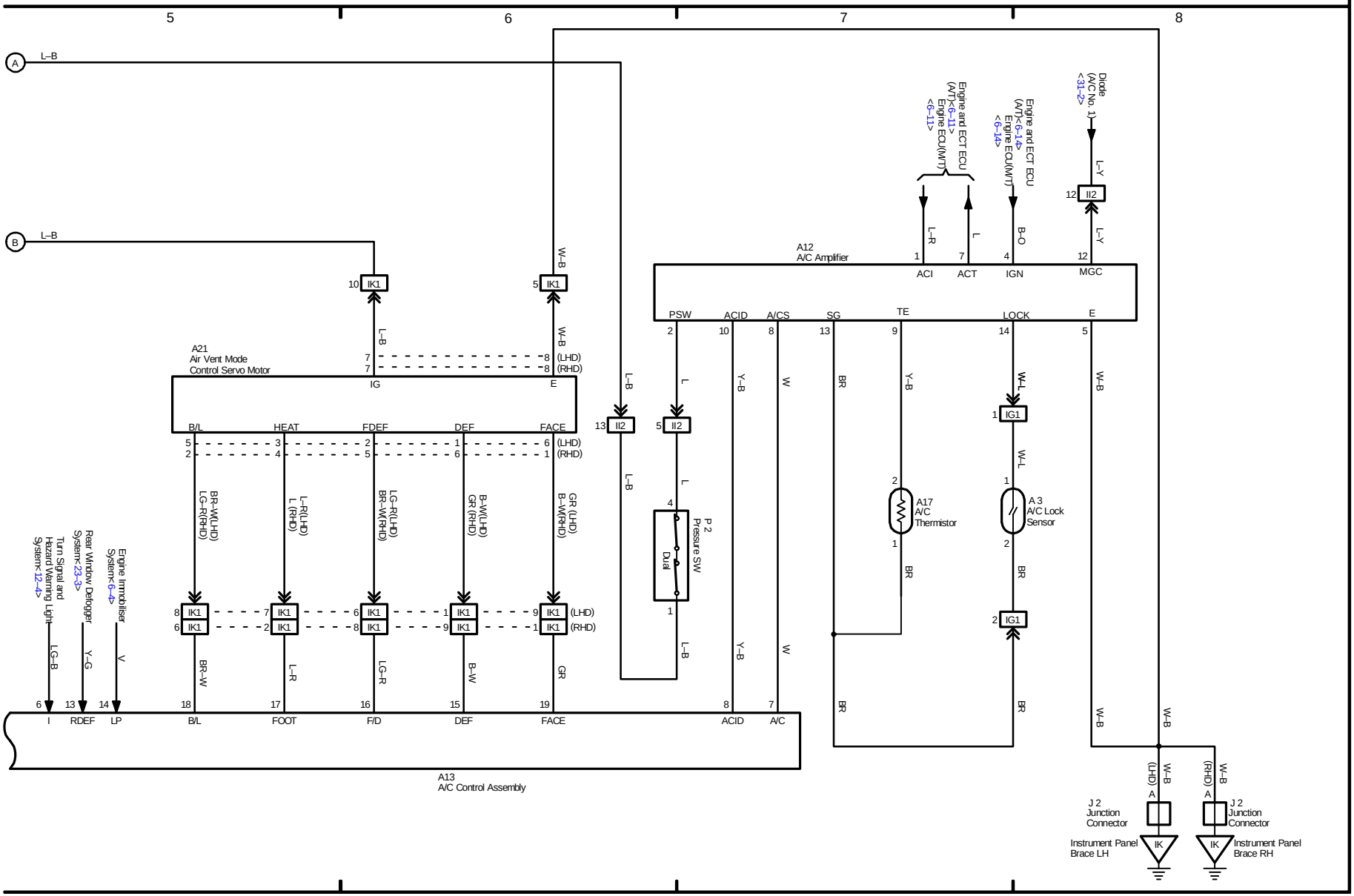
Automatic Air Conditioner



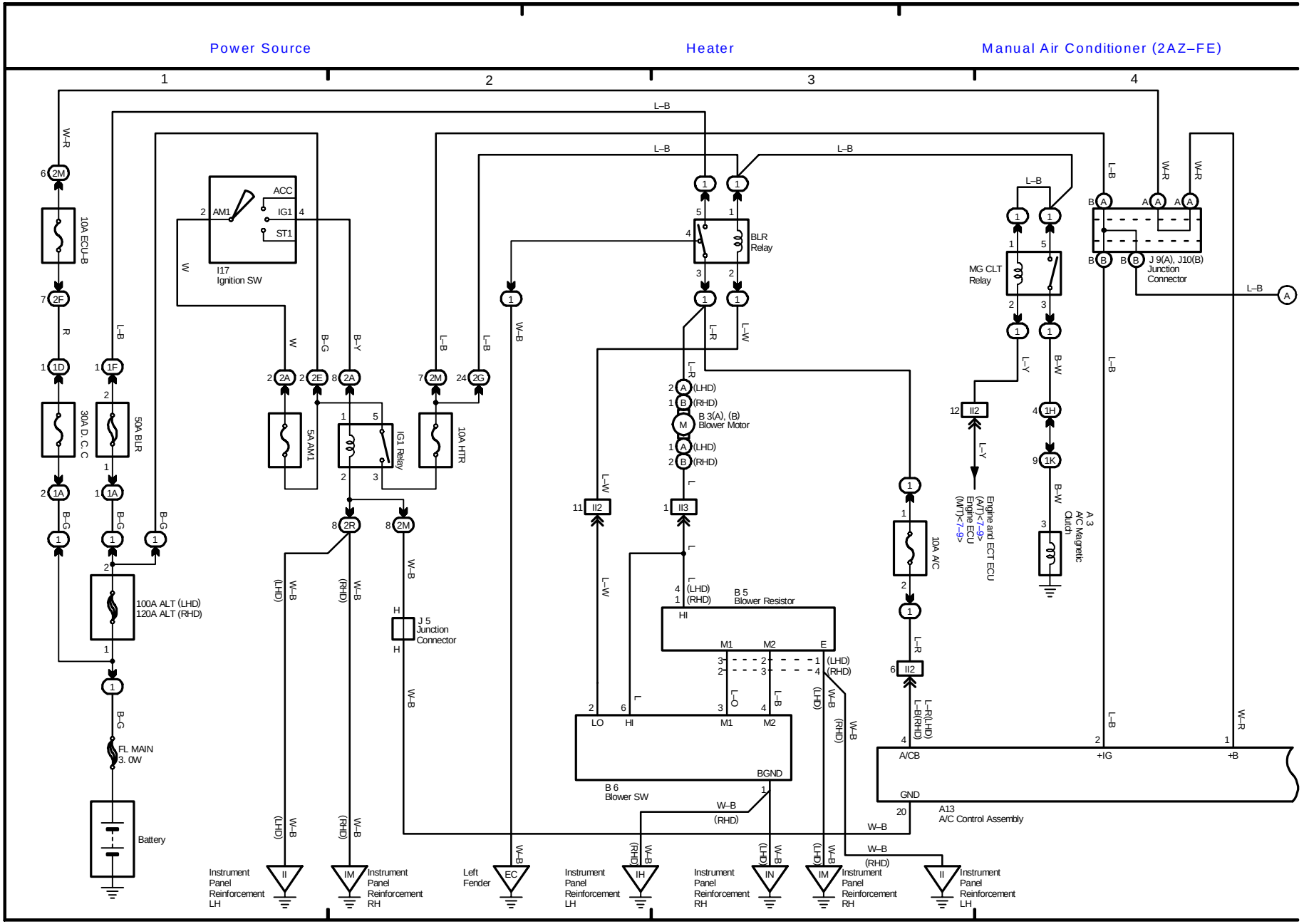
(Cont. next page)



Manual Air Conditioner (1MZ–FE)

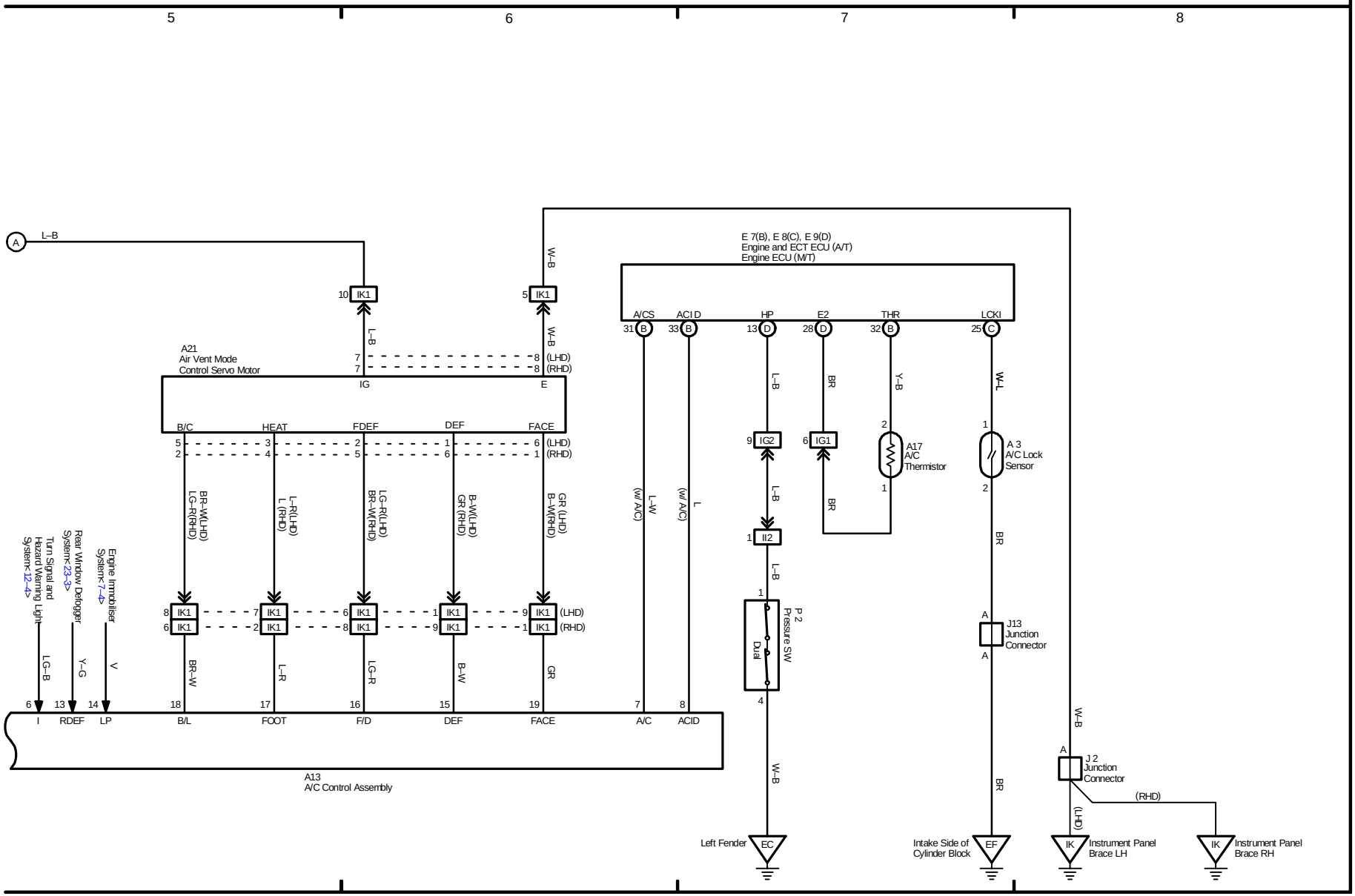


(Cont. next page)



OVERALL ELECTRICAL WIRING DIAGRAM M

Manual Air Conditioner (2AZ–FE)



PARTS POSITION LOCATION FOR LHD

Part Code	Part Name	Circuit Name	Engine
A1	A/C Ambient Temp. Sensor	Clock	
		Automatic Air Conditioner	
A2	A/C Condenser Fan Motor	Radiator Fan and Condenser Fan	
A3	A/C Lock Sensor A/C Magnetic Clutch	Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
A4	A/T Indicator Light SW Back -- Up Light SW Neutral Start SW	Starting and Ignition	1MZ
			2AZ
		Engine Control	1MZ
		Back -- Up Light	
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
A5	ABS Speed Sensor Front LH	ABS	
A6	ABS Speed Sensor Front RH	ABS	
A7	Air Flow Meter	Engine Control	1MZ
A8	Airbag Sensor Front LH	SRS	
A9	Airbag Sensor Front RH	SRS	
A10	Alternator	Charging	
A11	Alternator	Charging	
A12	A /C Amplifier	Manual Air Conditioner	1MZ
A13	A/C Control Assembly	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Illumination	
		Turn Signal and Hazard Warning Light	
		Rear Window Defogger	
		Manual Air Conditioner	1MZ
			2AZ
A14	A/C Control Assembly	Engine Control	1MZ
		Engine Immobiliser System	1MZ
		Illumination	
		Turn Signal and Hazard Warning Light	
		Rear Window Defogger	
		Automatic Air Conditioner	
A15	A/C Room Temp. Sensor	Automatic Air Conditioner	
A16	A/C Solar Sensor	Automatic Air Conditioner	
A17	A/C Thermistor	Automatic Air Conditioner	
A18	A/T Shift Lever Illumination O/D Main SW	Illumination	
		ECT and A/T Indicator	1MZ
			2AZ
A19	Air Inlet Control Servo Motor	Automatic Air Conditioner	
A20	Air Mix Control Servo Motor	Automatic Air Conditioner	
A21	Air Vent Mode Control Servo Motor	Manual Air Conditioner	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
A22	Airbag Sensor Assembly	SRS	
A23	Airbag Sensor Assembly		
A24	Airbag Sensor Assembly		
A25	Airbag Squib (Front Passenger Airbag Assembly)		
A26	Airbag Squib (Steering Wheel Pad)		
A28	ABS Speed Sensor Rear LH	ABS	
A29	ABS Speed Sensor Rear RH	ABS	
A30	Auto Antenna Control Relay	Auto Antenna	
B1	Back -- Up Light SW	Back -- Up Light	
B2	Brake Fluid Level Warning SW	Combination Meter	
B3	Blower Motor	Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
B4	Blower Motor Controller	Automatic Air Conditioner	
B5	Blower Resister	Manual Air Conditioner	1MZ
			2AZ
B6	Blower SW	Manual Air Conditioner	1MZ
			2AZ
B7	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Taillight	
		Door Lock Control	
		Horn	
B8	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Door Lock Control	
		Horn	
B9	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Door Lock Control	
		Horn	
B10	Buckle SW LH Occupant Detection Sensor	Seat Belt Warning	
B11	Buckle SW RH	Seat Belt Warning	
C1	Camshaft Position Sensor	Engine Control	1MZ
			2AZ
C2	Camshaft Timing Oil Control Valve	Engine Control	2AZ
C3	Counter Gear Speed Sensor	ECT and A/T Indicator	1MZ
			2AZ
C4	Crankshaft Position Sensor	Engine Control	1MZ
			2AZ
C5	Cruise Control Actuator	Cruise Control	
C6	Cigarette Light Illumination	Illumination	
	Cigarette Lighter	Power Outlet and Cigarette Lighter	
C7	Clock	Illumination	
		Seat Belt Warning	
		Clock	

Part Code	Part Name	Circuit Name	Engine
C9	Combination Meter	Charging	
		Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Interior Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		ABS	
		SRS	
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
		Seat Belt Warning	
		Combination Meter	
C10	Combination Meter	Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		ECT and A/T Indicator	1MZ
			2AZ
		Combination Meter	
C11	Combination Switch	Wiper and Washer	
C12	Combination Switch	Horn	
		Clock	
C13	Combination Switch	Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Taillight	
C15	Cruise Control Clutch SW	Cruise Control	
C16	Cruise Control E C U	Cruise Control	
D1	Diode (A/C)	Radiator Fan and Condenser Fan	
D2	DLC3	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
D3	Door Control Receiver	Multiplex Communication System	
		Door Lock Control	
D4	Door Courtesy SW Front LH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D5	Door Courtesy SW Front RH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D6	Door Courtesy SW Rear LH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D7	Door Courtesy SW Rear RH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	

Part Code	Part Name	Circuit Name	Engine
D8	Door Key Lock and Unlock SW Front LH Door Lock Motor Front LH Door Unlock Detection SW Front LH	Multiplex Communication System	
		Door Lock Control	
D9	Door Key Lock and Unlock SW Front RH Door Lock Motor Front RH Door Unlock Detection SW Front RH	Multiplex Communication System	
		Door Lock Control	
D10	Door Lock Control SW Front LH Power Window Master SW	Multiplex Communication System	
		Door Lock Control	
		Power Window with Jam Protection	
D11	Door Lock Control SW Front RH	Multiplex Communication System	
		Door Lock Control	
D14	Door Lock Motor Rear LH Door Unlock Detection SW Rear LH	Multiplex Communication System	
		Door Lock Control	
D15	Door Lock Motor Rear RH Door Unlock Detection SW Rear RH	Multiplex Communication System	
		Door Lock Control	
E1	ECT Solenoid	ECT and A/T Indicator	1MZ
			2AZ
E2	EFI Water Temp. Sensor	Engine Control	1MZ
			2AZ
E3	EGR Gas Temp. Sensor	Engine Control	1MZ
E4	EGR Valve Position Sensor	Engine Control	1MZ
E6	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E7	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E8	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E9	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E10	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E11	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E12	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E13	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
F1	Front Clearance Light LH	Taillight	
F2	Front Clearance Light RH	Taillight	
F3	Front Fog Light LH	Front Fog Light	

Part Code	Part Name	Circuit Name	Engine
F4	Front Fog Light RH	Front Fog Light	
F5	Front Side Turn Signal Light LH	Turn Signal and Hazard Warning Light	
F6	Front Side Turn Signal Light RH	Turn Signal and Hazard Warning Light	
F7	Front Turn Signal Light LH	Turn Signal and Hazard Warning Light	
F8	Front Turn Signal Light RH	Turn Signal and Hazard Warning Light	
F9	Front Wiper Motor	Wiper and Washer	
F10	Front Door Speaker LH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
F11	Front Door Speaker RH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
F12	Fuel Pump Fuel Sender	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Combination Meter	
G1	Glove Box Light and SW	Illumination	
H1	Headlight LH (High)	Multiplex Communication System	
		Headlight	
H2	Headlight LH (Low)	Multiplex Communication System	
		Headlight	
H3	Headlight RH (High)	Multiplex Communication System	
		Headlight	
H4	Headlight RH (Low)	Multiplex Communication System	
		Headlight	
H5	Heated Oxygen Sensor	Engine Control	2AZ
H6	Heated Oxygen Sensor (Bank 1 Sensor 1)	Engine Control	2AZ
H7	Heated Oxygen Sensor (Bank 2 Sensor 1)	Engine Control	1MZ
H8	Horn (High)	Horn	
H9	Horn (Low)		
H10	High Mounted Stop Light	Stop Light	
I1	Igniter	Starting and Ignition	1MZ
		Engine Control	1MZ
I2	Ignition Coil and Igniter No.1	Starting and Ignition	2AZ
I3	Ignition Coil and Igniter No.2		
I4	Ignition Coil and Igniter No.3		
I5	Ignition Coil and Igniter No.4		
I6	Ignition Coil No.1	Starting and Ignition	1MZ
I7	Ignition Coil No.2		
I8	Ignition Coil No.3		
I9	Injector No .1	Engine Control	1MZ
I10	Injector No .2		
I11	Injector No .3		
I12	Injector No .4	Engine Control	1MZ
I13	Injector No .5		
I14	Injector No .6		

Part Code	Part Name	Circuit Name	Engine
I15	ISC Valve	Engine Control	1MZ
			2AZ
I16	Ignition Key Cylinder Light Transponder Key Amplifier	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Multiplex Communication System	
		Interior Light	
I17	Ignition SW	Starting and Ignition	1MZ
			2AZ
		Charging	
		Engine Control	1MZ
			2AZ
I18	Interior Light	Multiplex Communication System	
		Interior Light	
J1	Junction Connector	Radio and Player (with Navigation System)	
		Radio and Player (w/o Satellite Navigation System)	
J2	Junction Connector	Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Illumination	
		Door Lock Control	
		Power Outlet and Cigarette Lighter	
		Horn	
		Wiper and Washer	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J3	Junction Connector	Engine Control	1MZ
			2AZ
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
J4	Junction Connector	Engine Control	1MZ
			2AZ
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
J5	Junction Connector	Charging	
		Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		ABS	
		SRS	
		ECT and A/T Indicator	1MZ
			2AZ
		Seat Belt Warning	
		Rear Window Defogger	
		Clock	
		Radio and Player (with Navigation System)	
		Auto Antenna	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J6	Junction Connector	Charging	
		Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		ABS	
		SRS	
		ECT and A/T Indicator	1MZ
			2AZ
		Seat Belt Warning	
		Clock	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Auto Antenna	
		Combination Meter	

Part Code	Part Name	Circuit Name	Engine
J9	Junction Connector	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		Door Lock Control	
		Clock	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Auto Antenna	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J10	Junction Connector	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Auto Antenna	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J11	Junction Connector	Multiplex Communication System	
		Headlight	
		Interior Light	
		Turn Signal and Hazard Warning Light	
		Taillight	
		Door Lock Control	
		Moon Roof	
		Cruise Control	
		Auto Antenna	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
J12	Junction Connector	Multiplex Communication System	
		Headlight	
		Interior Light	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		Moon Roof	
		Cruise Control	
		Radio and Player (without Navigation System)	
		Auto Antenna	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ

Part Code	Part Name	Circuit Name	Engine
J13	Junction Connector	Engine Control	1MZ
			2AZ
		ECT and A/T Indicator	1MZ
			2AZ
		Manual Air Conditioner	2AZ
K1	Knock Sensor	Engine Control	2AZ
K2	Knock Sensor No.1	Engine Control	1MZ
K3	Knock Sensor No.2		
L1	License Plate Light LH	Taillight	
L2	License Plate Light RH	Taillight	
L3	Luggage Compartment Door Opener Motor Luggage Compartment Light SW	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
L4	Luggage Compartment Light	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
M1	Moon Roof Control ECU and Motor	Moon Roof	
M2	Moon Roof Control SW Personal Light	Multiplex Communication System	
		Interior Light	
		Moon Roof	
N1	Noise Filter (Ignition)	Starting and Ignition	1MZ
			2AZ
N4	Noise Filter	Multiplex Communication System	
		Interior Light	
		Stop Light	
		Door Lock Control	
O1	Oil Pressure SW	Combination Meter	
P1	Power Steering Oil Pressure SW	Engine Control	1MZ
			2AZ
P2	Pressure SW	Radiator Fan and Condenser Fan	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
P3	Parking Brake SW	Combination Meter	
P4	Power Outlet	Power Outlet and Cigarette Lighter	
P5	Personal Light	Multiplex Communication System	
		Interior Light	
P7	Power Window Control SW Front RH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P8	Power Window Control SW Rear LH	Power Window with Jam Protection	
P9	Power Window Control SW Rear RH	Power Window with Jam Protection	
P10	Power Window Master SW	Power Window without Jam Protection	
P11	Power Window Motor Front LH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P12	Power Window Motor Front RH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P13	Power Window Motor Rear LH	Power Window with Jam Protection	
P14	Power Window Motor Rear RH	Power Window with Jam Protection	

Part Code	Part Name	Circuit Name	Engine
P15	Pretensioner LH	SRS	
P16	Pretensioner RH	SRS	
P17	Power Seat Control SW (Driver's Seat)	Power Seat	
P18	Power Seat Control SW (Passenger's Seat)	Power Seat	
P19	Power Seat Motor (Driver's Seat Rear Vertical Control)	Power Seat	
P20	Power Seat Motor (Driver's Seat Reclining Control)	Power Seat	
P21	Power Seat Motor (Driver's Seat Slide Control)	Power Seat	
P22	Power Seat Motor (Front Passengers Seat Rear Vertical Control)	Power Seat	
P23	Power Seat Motor (Front Passengers Seat Reclining Control)	Power Seat	
P24	Power Seat Motor (Front Passengers Seat Slide Control)	Power Seat	
R1	Radiator Fan Motor	Radiator Fan and Condenser Fan	
R2	Radio and Player	Illumination	
		Radio and Player (without Navigation System)	
R3	Radio and Player	Illumination	
		Radio and Player (without Navigation System)	
R9	Rheostat	Illumination	
R10	Rear Combination Light LH	Turn Signal and Hazard Warning Light	
		Taillight	
		Stop Light	
		Back – Up Light	
R11	Rear Combination Light RH	Turn Signal and Hazard Warning Light	
		Taillight	
		Stop Light	
		Back – Up Light	
R12	Rear Speaker LH	Radio and Player (without Navigation System)	
		Radio and Player (with Navigation System)	
R13	Rear Speaker RH	Radio and Player (without Navigation System)	
		Radio and Player (with Navigation System)	
R14	Rear Window Defogger	Rear Window Defogger	
R15	Rear Window Defogger	Rear Window Defogger	
R16	Remote Control Mirror LH	Remote Control Mirror	
R17	Remote Control Mirror RH	Remote Control Mirror	
R18	Remote Control Mirror SW	Remote Control Mirror	
S2	Skid Control ECU with Actuator	ABS	
S3	Speed Sensor (Combination Meter)	Combination Meter	
S4	Starter	Starting and Ignition	1MZ
			2AZ
S5	Starter	Starting and Ignition	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
S6	Stop Light SW	Engine Control	1MZ
		Cruise Control	
S7	Side Airbag Sensor LH	SRS	
S8	Side Airbag Sensor RH	SRS	
S9	Side Airbag Squib LH	SRS	
S10	Side Airbag Squib RH	SRS	
T1	Throttle Position Sensor	Engine Control	1MZ
			2AZ
T2	Turbine Speed Sensor	ECT and A/T Indicator	2AZ
T3	Transponder Key Computer	Engine Control	1MZ
		Engine Immobiliser System	1MZ
T4	Turn Signal Flasher Relay	Turn Signal and Hazard Warning Light	
T5	Tweeter LH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
T6	Tweeter RH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
U1	Unlock Warning SW	Multiplex Communication System	
		Headlight	
		Door Lock Control	
V1	VSV (ACIS)	Engine Control	1MZ
V2	VSV (EGR)	Engine Control	1MZ
V3	VSV (EVAP)	Engine Control	1MZ
			2AZ
V4	Vanity Light LH	Multiplex Communication System	
		Interior Light	
V5	Vanity Light RH	Multiplex Communication System	
		Interior Light	
W1	Washer Motor	Wiper and Washer	
W2	Water Temp. SW No.1	Radiator Fan and Condenser Fan	
W3	Water Temp. SW No.2		

PARTS POSITION LOCATION FOR RHD

Part Code	Part Name	Circuit Name	Engine
A1	A/C Ambient Temp. Sensor	Clock	
		Automatic Air Conditioner	
A2	A/C Condenser Fan Motor	Radiator Fan and Condenser Fan	
A3	A/C Lock Sensor A/C Magnetic Clutch	Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
A4	A/T Indicator Light SW Back – Up Light SW Neutral Start SW	Starting and Ignition	1MZ
			2AZ
		Engine Control	1MZ
		Back – Up Light	
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
A5	ABS Speed Sensor Front LH	ABS	
A6	ABS Speed Sensor Front RH	ABS	
A7	Air Flow Meter	Engine Control	1MZ
A8	Airbag Sensor Front LH	SRS	
A9	Airbag Sensor Front RH	SRS	
A10	Alternator	Charging	
A11	Alternator	Charging	
A12	A /C Amplifier	Manual Air Conditioner	1MZ
A13	A/C Control Assembly	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Illumination	
		Turn Signal and Hazard Warning Light	
		Rear Window Defogger	
		Manual Air Conditioner	1MZ
			2AZ
A14	A/C Control Assembly	Engine Control	1MZ
		Engine Immobiliser System	1MZ
		Illumination	
		Turn Signal and Hazard Warning Light	
		Rear Window Defogger	
		Automatic Air Conditioner	
A15	A/C Room Temp. Sensor	Automatic Air Conditioner	
A16	A/C Solar Sensor	Automatic Air Conditioner	
A17	A/C Thermistor	Automatic Air Conditioner	
A18	A/T Shift Lever Illumination O/D Main SW	Illumination	
		ECT and A/T Indicator	1MZ
			2AZ
A19	Air Inlet Control Servo Motor	Automatic Air Conditioner	
A20	Air Mix Control Servo Motor	Automatic Air Conditioner	
A21	Air Vent Mode Control Servo Motor	Manual Air Conditioner	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
A22	Airbag Sensor Assembly	SRS	
A23	Airbag Sensor Assembly		
A24	Airbag Sensor Assembly		
A25	Airbag Squib (Front Passenger Airbag Assembly)		
A26	Airbag Squib (Steering Wheel Pad)		
A27	Antenna Amplifier	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
A28	ABS Speed Sensor Rear LH	ABS	
A29	ABS Speed Sensor Rear RH	ABS	
B1	Back – Up Light SW	Back – Up Light	
B2	Brake Fluid Level Warning SW	Combination Meter	
B3	Blower Motor	Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
B4	Blower Motor Controller	Automatic Air Conditioner	
B5	Blower Resister	Manual Air Conditioner	1MZ
			2AZ
B6	Blower SW	Manual Air Conditioner	1MZ
			2AZ
B7	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Taillight	
		Door Lock Control	
		Horn	
B8	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Door Lock Control	
		Horn	
B9	Body ECU	Multiplex Communication System	
		Headlight	
		Interior Light	
		Illumination	
		Door Lock Control	
		Horn	
C1	Camshaft Position Sensor	Engine Control	1MZ
			2AZ
C2	Camshaft Timing Oil Control Valve	Engine Control	2AZ
C3	Counter Gear Speed Sensor	ECT and A/T Indicator	1MZ
			2AZ
C4	Crankshaft Position Sensor	Engine Control	1MZ
			2AZ
C5	Cruise Control Actuator	Cruise Control	
C6	Cigarette Light Illumination Cigarette Lighter	Illumination	
		Power Outlet and Cigarette Lighter	
C8	Clock	Illumination	
		Clock	

Part Code	Part Name	Circuit Name	Engine
C9	Combination Meter	Charging	
		Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Interior Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		ABS	
		SRS	
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
		Combination Meter	
C10	Combination Meter	Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		ECT and A/T Indicator	1MZ
			2AZ
		Combination Meter	
C11	Combination Switch	Wiper and Washer	
C12	Combination Switch	Horn	
		Clock	
C13	Combination Switch	Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Taillight	
C14	Combination Switch	Clock	
C15	Cruise Control Clutch SW	Cruise Control	
C16	Cruise Control E C U	Cruise Control	
C17	CD Player	Radio and Player (with Navigation System)	
D1	Diode (A/C)	Radiator Fan and Condenser Fan	
D2	DLC3	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
D3	Door Control Receiver	Multiplex Communication System	
		Door Lock Control	
D4	Door Courtesy SW Front LH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D5	Door Courtesy SW Front RH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D6	Door Courtesy SW Rear LH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
D7	Door Courtesy SW Rear RH	Multiplex Communication System	
		Interior Light	
		Door Lock Control	

Part Code	Part Name	Circuit Name	Engine
D9	Door Key Lock and Unlock SW Front RH Door Lock Motor Front RH Door Unlock Detection SW Front RH	Multiplex Communication System	
		Door Lock Control	
D12	Door Lock Control SW Front RH Power Window Master SW	Multiplex Communication System	
		Door Lock Control	
D13	Door Lock Motor Front LH Door Unlock Detection SW Front LH	Multiplex Communication System	
		Door Lock Control	
D14	Door Lock Motor Rear LH Door Unlock Detection SW Rear LH	Multiplex Communication System	
		Door Lock Control	
D15	Door Lock Motor Rear RH Door Unlock Detection SW Rear RH	Multiplex Communication System	
		Door Lock Control	
E1	ECT Solenoid	ECT and A/T Indicator	1MZ
			2AZ
E2	EFI Water Temp. Sensor	Engine Control	1MZ
			2AZ
E3	EGR Gas Temp. Sensor	Engine Control	1MZ
E4	EGR Valve Position Sensor	Engine Control	1MZ
E5	Engine Hood Courtesy SW	Multiplex Communication System	
E6	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E7	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E8	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E9	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	2AZ
		Engine Control	2AZ
		Engine Immobiliser System	2AZ
		ECT and A/T Indicator	2AZ
E10	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E11	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E12	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
E13	Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ
		Engine Control	1MZ
		ECT and A/T Indicator	1MZ
F1	Front Clearance Light LH	Taillight	
F2	Front Clearance Light RH	Taillight	
F3	Front Fog Light LH	Front Fog Light	
F4	Front Fog Light RH	Front Fog Light	
F5	Front Side Turn Signal Light LH	Turn Signal and Hazard Warning Light	

Part Code	Part Name	Circuit Name	Engine
F6	Front Side Turn Signal Light RH	Turn Signal and Hazard Warning Light	
F7	Front Turn Signal Light LH	Turn Signal and Hazard Warning Light	
F8	Front Turn Signal Light RH	Turn Signal and Hazard Warning Light	
F9	Front Wiper Motor	Wiper an d Washer	
F10	Front Door Speaker LH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
F11	Front Door Speaker RH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
F12	Fuel Pump Fuel Sender	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Combination Meter	
G1	Glove Box Light and SW	Illumination	
H1	Headlight LH (High)	Multiplex Communication System	
		Headlight	
H2	Headlight LH (Low)	Multiplex Communication System	
		Headlight	
H3	Headlight RH (High)	Multiplex Communication System	
		Headlight	
H4	Headlight RH (Low)	Multiplex Communication System	
		Headlight	
H5	Heated Oxygen Sensor	Engine Control	2AZ
H6	Heated Oxygen Sensor (Bank 1 Sensor 1)	Engine Control	2AZ
H7	Heated Oxygen Sensor (Bank 2 Sensor 1)	Engine Control	1MZ
H9	Horn (Low)	Horn	
H10	High Mounted Stop Light	Stop Light	
I1	Igniter	Starting and Ignition	1MZ
		Engine Control	1MZ
I2	Ignition Coil and Igniter No.1	Starting and Ignition	2AZ
I3	Ignition Coil and Igniter No.2		
I4	Ignition Coil and Igniter No.3		
I5	Ignition Coil and Igniter No.4		
I6	Ignition Coil No.1	Starting and Ignition	1MZ
I7	Ignition Coil No.2		
I8	Ignition Coil No.3		
I9	Injector No .1	Engine Control	1MZ
I10	Injector No .2		
I11	Injector No .3		
I12	Injector No .4	Engine Control	1MZ
I13	Injector No .5		
I14	Injector No .6		
I15	ISC Valve	Engine Control	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
I16	Ignition Key Cylinder Light Transponder Key Amplifier	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Multiplex Communication System	
		Interior Light	
I17	Ignition SW	Starting and Ignition	1MZ
			2AZ
		Charging	
		Engine Control	1MZ
			2AZ
I18	Interior Light	Multiplex Communication System	
		Interior Light	
J1	Junction Connector	Radio and Player (with Navigation System)	
		Radio and Player (w/o Satellite Navigation System)	
J2	Junction Connector	Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Illumination	
		Door Lock Control	
		Power Outlet and Cigarette Lighter	
		Horn	
		Wiper and Washer	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J3	Junction Connector	Engine Control	1MZ
			2AZ
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ
J4	Junction Connector	Engine Control	1MZ
			2AZ
		Cruise Control	
		ECT and A/T Indicator	1MZ
			2AZ

Part Code	Part Name	Circuit Name	Engine
J5	Junction Connector	Charging	
		Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		ABS	
		SRS	
		ECT and A/T Indicator	1MZ
			2AZ
		Rear Window Defogger	
		Clock	
		Radio and Player (with Navigation System)	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J6	Junction Connector	Charging	
		Engine Control	1MZ
			2AZ
		Multiplex Communication System	
		Headlight	
		Front Fog Light	
		Illumination	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		ABS	
		SRS	
		ECT and A/T Indicator	1MZ
			2AZ
		Clock	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Combination Meter	
J7	Junction Connector	Engine Control	1MZ
		Cruise Control	
		ECT and A/T Indicator	1MZ
J8	Junction Connector	Engine Control	1MZ
		Cruise Control	
		ECT and A/T Indicator	1MZ

Part Code	Part Name	Circuit Name	Engine
J9	Junction Connector	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		Door Lock Control	
		Clock	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J10	Junction Connector	Engine Control	1MZ
			2AZ
		Engine Immobiliser System	1MZ
		Multiplex Communication System	
		Headlight	
		Interior Light	
		Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
		Combination Meter	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
J11	Junction Connector	Multiplex Communication System	
		Headlight	
		Interior Light	
		Turn Signal and Hazard Warning Light	
		Taillight	
		Door Lock Control	
		Moon Roof	
		Cruise Control	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
J12	Junction Connector	Multiplex Communication System	
		Headlight	
		Interior Light	
		Turn Signal and Hazard Warning Light	
		Door Lock Control	
		Moon Roof	
		Cruise Control	
		Radio and Player (without Navigation System)	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ

Part Code	Part Name	Circuit Name	Engine
J13	Junction Connector	Engine Control	1MZ
			2AZ
		ECT and A/T Indicator	1MZ
			2AZ
		Manual Air Conditioner	2AZ
K1	Knock Sensor	Engine Control	2AZ
K2	Knock Sensor No.1	Engine Control	1MZ
K3	Knock Sensor No.2		
L1	License Plate Light LH	Taillight	
L2	License Plate Light RH	Taillight	
L3	Luggage Compartment Door Opener Motor Luggage Compartment Light SW	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
L4	Luggage Compartment Light	Multiplex Communication System	
		Interior Light	
		Door Lock Control	
L5	Luggage Compartment Door Key Unlock SW	Multiplex Communication System	
		Door Lock Control	
M1	Moon Roof Control ECU and Motor	Moon Roof	
M2	Moon Roof Control SW Personal Light	Multiplex Communication System	
		Interior Light	
		Moon Roof	
N1	Noise Filter (Ignition)	Starting and Ignition	1MZ
			2AZ
N2	Navigation ECU	Radio and Player (with Navigation System)	
N3	Navigation ECU	Radio and Player (with Navigation System	
N4	Noise Filter	Multiplex Communication System	
		Interior Light	
		Stop Light	
		Door Lock Control	
N5	Noise Filter (Rear Window Defogger)	Rear Window Defogger	
O1	Oil Pressure SW	Combination Meter	
P1	Power Steering Oil Pressure SW	Engine Control	1MZ
			2AZ
P2	Pressure SW	Radiator Fan and Condenser Fan	
		Automatic Air Conditioner	
		Manual Air Conditioner	1MZ
			2AZ
P3	Parking Brake SW	Combination Meter	
P4	Power Outlet	Power Outlet and Cigarette Lighter	
P5	Personal Light	Multiplex Communication System	
		Interior Light	
P6	Power Window Control SW Front LH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P7	Power Window Control SW Front RH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P8	Power Window Control SW Rear LH	Power Window with Jam Protection	
P9	Power Window Control SW Rear RH	Power Window with Jam Protection	

Part Code	Part Name	Circuit Name	Engine
P11	Power Window Motor Front LH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P12	Power Window Motor Front RH	Power Window with Jam Protection	
		Power Window without Jam Protection	
P13	Power Window Motor Rear LH	Power Window with Jam Protection	
P14	Power Window Motor Rear RH	Power Window with Jam Protection	
P15	Pretensioner LH	SRS	
P16	Pretensioner RH	SRS	
P17	Power Seat Control SW (Driver's Seat)	Power Seat	
P18	Power Seat Control SW (Passenger's Seat)	Power Seat	
P19	Power Seat Motor (Driver's Seat Rear Vertical Control)	Power Seat	
P20	Power Seat Motor (Driver's Seat Reclining Control)	Power Seat	
P21	Power Seat Motor (Driver's Seat Slide Control)	Power Seat	
P22	Power Seat Motor (Front Passengers Seat Rear Vertical Control)	Power Seat	
P23	Power Seat Motor (Front Passengers Seat Reclining Control)	Power Seat	
P24	Power Seat Motor (Front Passengers Seat Slide Control)	Power Seat	
R1	Radiator Fan Motor	Radiator Fan and Condenser Fan	
R2	Radio and Player	Illumination	
		Radio and Player (without Navigation System)	
R3	Radio and Player	Illumination	
		Radio and Player (without Navigation System)	
R4	Radio and Player with Display	Radio and Player (with Navigation System)	
R5	Radio and Player with Display	Radio and Player (with Navigation System)	
R6	Radio and Player with Display	Radio and Player (with Navigation System)	
R7	Radio and Player with Display	Radio and Player (with Navigation System)	
R8	Radio and Player with Display	Radio and Player (with Navigation System)	
R9	Rheostat	Illumination	
R10	Rear Combination Light LH	Turn Signal and Hazard Warning Light	
		Taillight	
		Stop Light	
		Back – Up Light	
R11	Rear Combination Light RH	Turn Signal and Hazard Warning Light	
		Taillight	
		Stop Light	
		Back – Up Light	

Part Code	Part Name	Circuit Name	Engine
R12	Rear Speaker LH	Radio and Player (without Navigation System)	
		Radio and Player (with Navigation System)	
R13	Rear Speaker RH	Radio and Player (without Navigation System)	
		Radio and Player (with Navigation System)	
R14	Rear Window Defogger	Rear Window Defogger	
R15	Rear Window Defogger	Rear Window Defogger	
R16	Remote Control Mirror LH	Remote Control Mirror	
R17	Remote Control Mirror RH	Remote Control Mirror	
R18	Remote Control Mirror SW	Remote Control Mirror	
S1	Security Horn	Multiplex Communication System	
S2	Skid Control ECU with Actuator	ABS	
S3	Speed Sensor (Combination Meter)	Combination Meter	
S4	Starter	Starting and Ignition	1MZ
			2AZ
S5	Starter	Starting and Ignition	1MZ
			2AZ
S6	Stop Light SW	Engine Control	1MZ
		Cruise Control	
S7	Side Airbag Sensor LH	SRS	
S8	Side Airbag Sensor RH	SRS	
S9	Side Airbag Squib LH	SRS	
S10	Side Airbag Squib RH	SRS	
T1	Throttle Position Sensor	Engine Control	1MZ
			2AZ
T2	Turbine Speed Sensor	ECT and A/T Indicator	2AZ
T3	Transponder Key Computer	Engine Control	1MZ
		Engine Immobiliser System	1MZ
T4	Turn Signal Flasher Relay	Turn Signal and Hazard Warning Light	
T5	Tweeter LH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
T6	Tweeter RH	Radio and Player (with Navigation System)	
		Radio and Player (without Navigation System)	
T7	Trailer Socket	Back – Up Light	
		Trailer Socket	
U1	Unlock Warning SW	Multiplex Communication System	
		Headlight	
		Door Lock Control	
V1	VSV (ACIS)	Engine Control	1MZ
V2	VSV (EGR)	Engine Control	1MZ
V3	VSV (EVAP)	Engine Control	1MZ
			2AZ
V4	Vanity Light LH	Multiplex Communication System	
		Interior Light	
V5	Vanity Light RH	Multiplex Communication System	
		Interior Light	
W1	Washer Motor	Wiper and Washer	
W2	Water Temp. SW No.1	Radiator Fan and Condenser Fan	
W3	Water Temp. SW No.2		

Relay Parts Location

Relay Name	Circuit Name	Engine	Model
Engine Room J/B	Engine Control	1MZ	RHD/LHD
		2AZ	
	Engine Immobiliser System	1MZ	RHD/LHD
		2AZ	
	ECT and A/T Indicator	1MZ	RHD/LHD
		2AZ	
	Power Source		RHD/LHD
	Starting and Ignition	1MZ	RHD/LHD
		2AZ	
	Charging		RHD/LHD
	Multiplex Communication System		LHD
			RHD
	Headlight		LHD
			RHD
	ABS		RHD/LHD
	SRS		RHD/LHD
	Combination Meter		RHD/LHD
	Horn		RHD/LHD
	Wiper and Washer		RHD/LHD
	Radiator Fan and Condenser Fan		RHD/LHD
	Automatic Air Conditioner		RHD/LHD
	Manual Air Conditioner	1MZ	
		2AZ	

Engine Room R/B	Starting and Ignition	1MZ	RHD/LHD
	Automatic Air Conditioner		RHD/LHD
	Manual Air Conditioner	1MZ	RHD/LHD
		2AZ	
	Multiplex Communication System		LHD
			RHD
	Headlight		LHD
			RHD
	ABS		RHD/LHD

Skid Control ECU with Actuator	ABS		RHD/LHD

Moon Roof Control ECU and Motor	Moon Roof		RHD/LHD

Auto Antenna Control Relay	Auto Antenna		LHD

Navigation ECU	Radio and Player (with Navigation System)		RHD

Relay Parts Location

Relay Name	Circuit Name	Engine	Model
Body ECU	Multiplex Communication System		LHD
			RHD
	Headlight		LHD
			RHD
	Interior Light		LHD
			RHD
	Illumination		RHD/LHD
	Taillight		RHD/LHD
	Door Lock Control		LHD
			RHD
	Power Window with Jam Protection		RHD/LHD
	Power Window without Jam Protection		RHD/LHD
	Horn		RHD/LHD
Cruise Control ECU	Cruise Control		RHD/LHD
A/C Amplifier	Manual Air Conditioner	1MZ	RHD/LHD
Transponder Key Computer	Engine Control	1MZ	RHD
	Engine Immobiliser System	1MZ	RHD
Engine and ECT ECU (A/T) Engine ECU (M/T)	Starting and Ignition	1MZ	RHD/LHD
		2AZ	
	Engine Control	1MZ	RHD/LHD
		2AZ	
	Engine Immobiliser System	2AZ	RHD/LHD
Engine and ECT ECU (A/T)	ECT and A/T Indicator	1MZ	RHD/LHD
		2AZ	
A/C Control Assembly	Automatic Air Conditioner		RHD/LHD
	Manual Air Conditioner	1MZ	RHD/LHD
		2AZ	
Air bag Sensor Assembly	SRS		RHD/LHD
Transponder Key Amplifier	Engine Control	1MZ	RHD/LHD
		2AZ	
	Engine Immobiliser System	1MZ	RHD/LHD
		2AZ	
Turn Signal and Flasher Relay	Turn Signal and Hazard Warning Light		RHD/LHD
Antenna Amplifier	Rear Window Defogger		RHD

Relay Parts Location

Relay Name	Circuit Name	Engine	Model
Drivers Side J/B	Power Source		RHD/LHD
	Starting and Ignition	1MZ	RHD/LHD
		2AZ	
	Engine Control	1MZ	RHD/LHD
		2AZ	
	Multiplex Communication System		LHD
			RHD
	Headlight		LHD
			RHD
	ECT and A/T Indicator	1MZ	RHD/LHD
		2AZ	
	Power Outlet and Cigarette Lighter		RHD/LHD
	Wiper and Washer		RHD/LHD
	Radio and Player (with Navigation System)		RHD/LHD
	Radio and Player (without Navigation System)		RHD/LHD
	Auto Antenna		LHD
	Interior Light		LHD
			RHD
	Back -- Up Light		RHD/LHD
	Moon Roof		RHD/LHD
	Cruise Control		RHD/LHD
	Front Fog Light		RHD/LHD
	Door Lock Control		LHD
			RHD
	Power Window with Jam Protection		RHD/LHD
	Power Window without Jam Protection		RHD/LHD
	Rear Window Defogger		RHD/LHD
	Illumination		RHD/LHD
	Taillight		RHD/LHD
	Radiator Fan and Condenser Fan		RHD/LHD
	SRS		RHD/LHD
	Charging		RHD/LHD
	Engine Immobiliser System	2AZ	RHD/LHD
	Turn Signal and Hazard Warning Light		RHD/LHD
	Stop Light		RHD/LHD
	ABS		RHD/LHD
	Horn		RHD/LHD
	Combination Meter		RHD/LHD
	Automatic Air Conditioner		RHD/LHD
	Manual Air Conditioner	1MZ	RHD/LHD
		2AZ	
	Seat Belt Warning		LHD
	Remote Control Mirror		RHD/LHD
	Power Seat		RHD/LHD