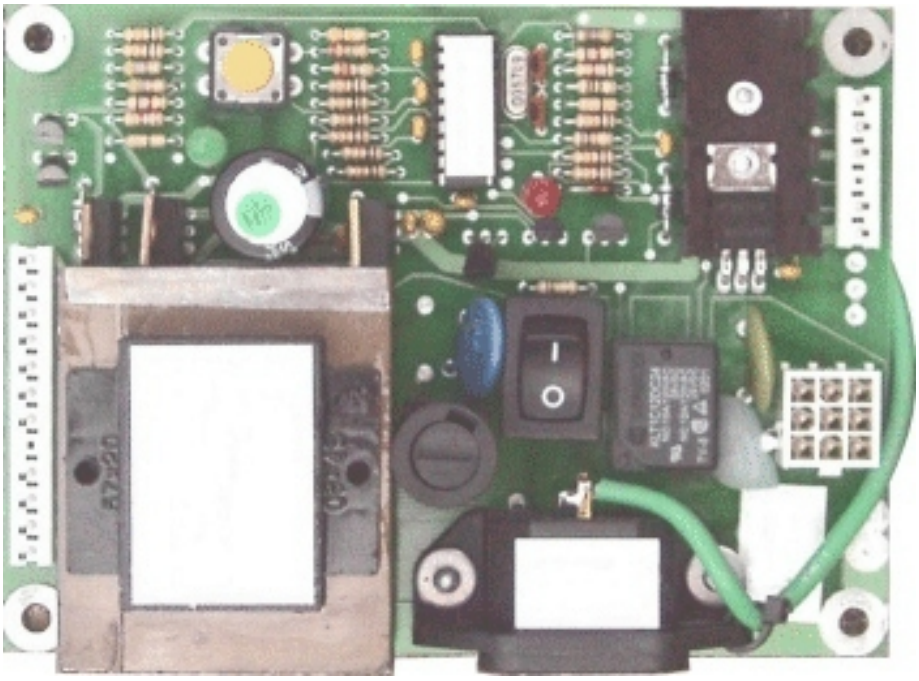
Electrical Wiring Diagrams - MY2004 Supplement

For Vehicle Production August 2004



HOW TO USE THIS MANUAL

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

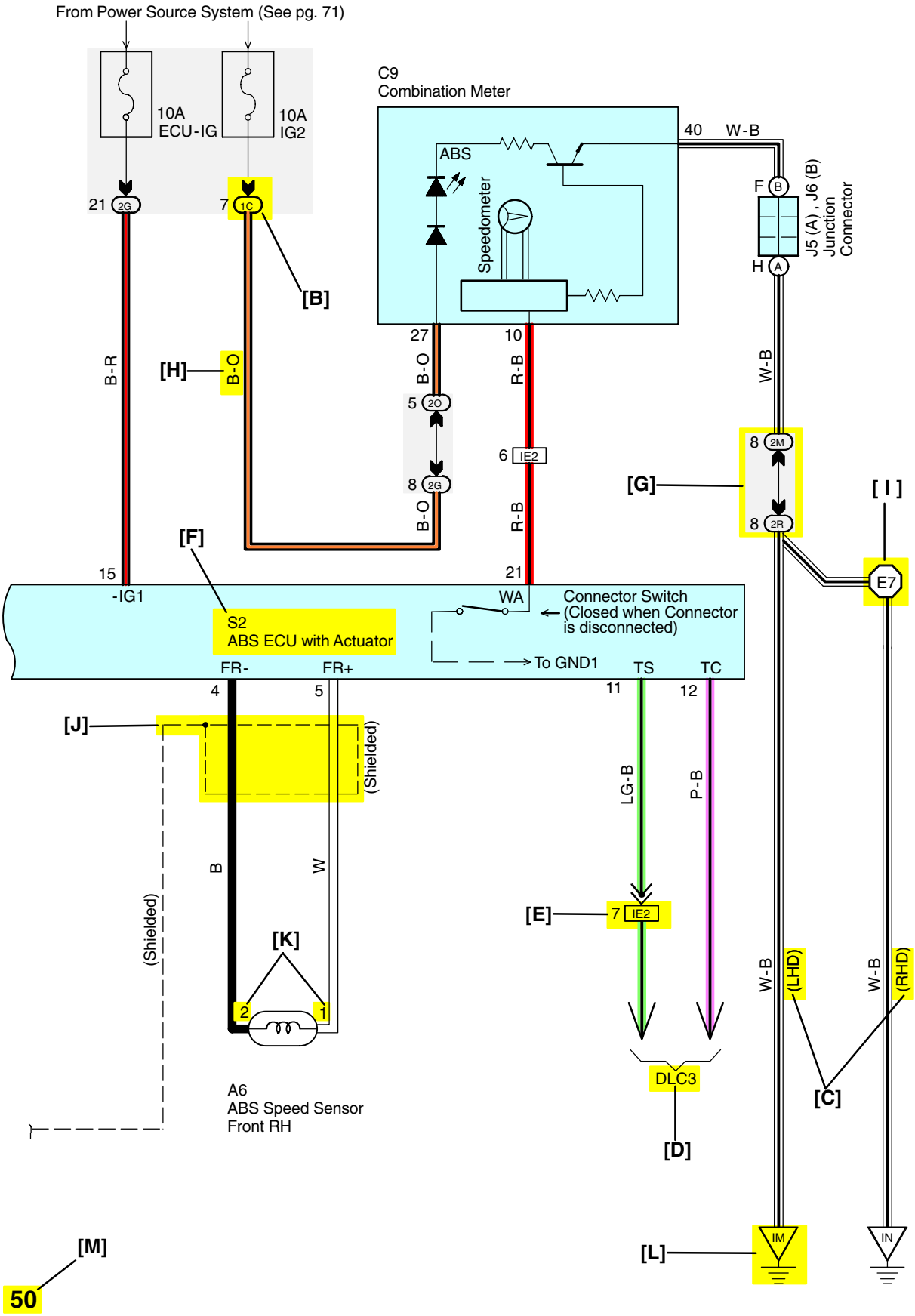
The actual wiring of each system circuit is shown from the point where the power source is received from the battery as far as each ground point.

All circuit diagrams are shown with the switches in the OFF position.

When troubleshooting a problem, first view the wiring diagram to understand the circuit operation.

When the circuit operation is understood, begin troubleshooting the problem circuit to isolate the cause. Use the Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, and ground points of each system circuit. Internal wiring for each junction block is also provided for a better understanding of connection within a junction block.

ABS [A]


From Power Source System (See pg. 71)
10A
ECU-IG
10A
IG2
21 2G
7 1C
[B]
B-R
[H]
B-O
C9
Combination Meter
ABS
Speedometer
27
10
B-O
R-B
5 2O
8 2G
6 IE2
B-O
R-B
40 W-B
F B
H A
J5 (A) , J6 (B)
Junction
Connector
W-B
8 2M
8 2R
[G]
[I]
E7
15
-IG1
[F]
S2
ABS ECU with Actuator
21
WA
Connector Switch
(Closed when Connector
is disconnected)
To GND1
FR-
FR+
TS
TC
4
5
11
12
[J]
(Shielded)
LG-B
P-B
B
W
(Shielded)
[E]
7 IE2
[K]
2
1
A6
ABS Speed Sensor
Front RH
DLC3
[D]
W-B
(LHD)
W-B
(RHD)
[C]
[M]
50
[L]
IM
IN

[A] : System Title

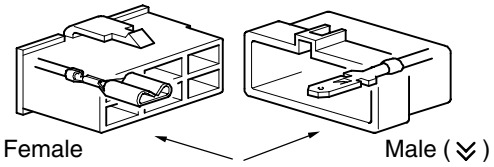
[B] : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

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.



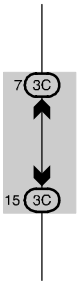
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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 light 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

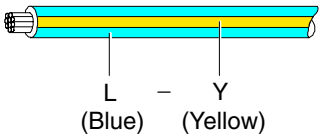
[H] : Indicates the wiring colour.

Wire colours are indicated by an alphabetical code.

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

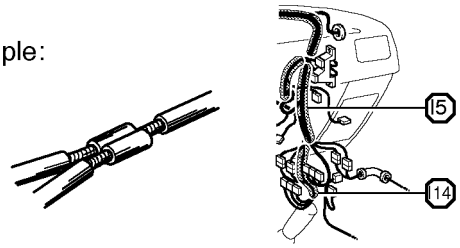
The first letter indicates the basic wire colour and the second letter indicates the colour of the stripe.

Example: L - Y



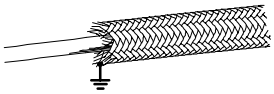
[I] : Indicates a wiring Splice Point (Codes are "E" for the Engine Room, "I" for the Instrument Panel, and "B" for the Body).

Example:



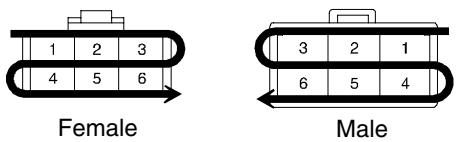
The Location of splice Point I 5 is indicated by the shaded section.

[J] : Indicates a shielded cable.



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

Example:



[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 Centre Pillar
BO	50	Back Panel Centre

[U] **: Splice Points**

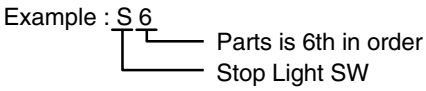
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

[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 “S6” (Stop Light SW) 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.

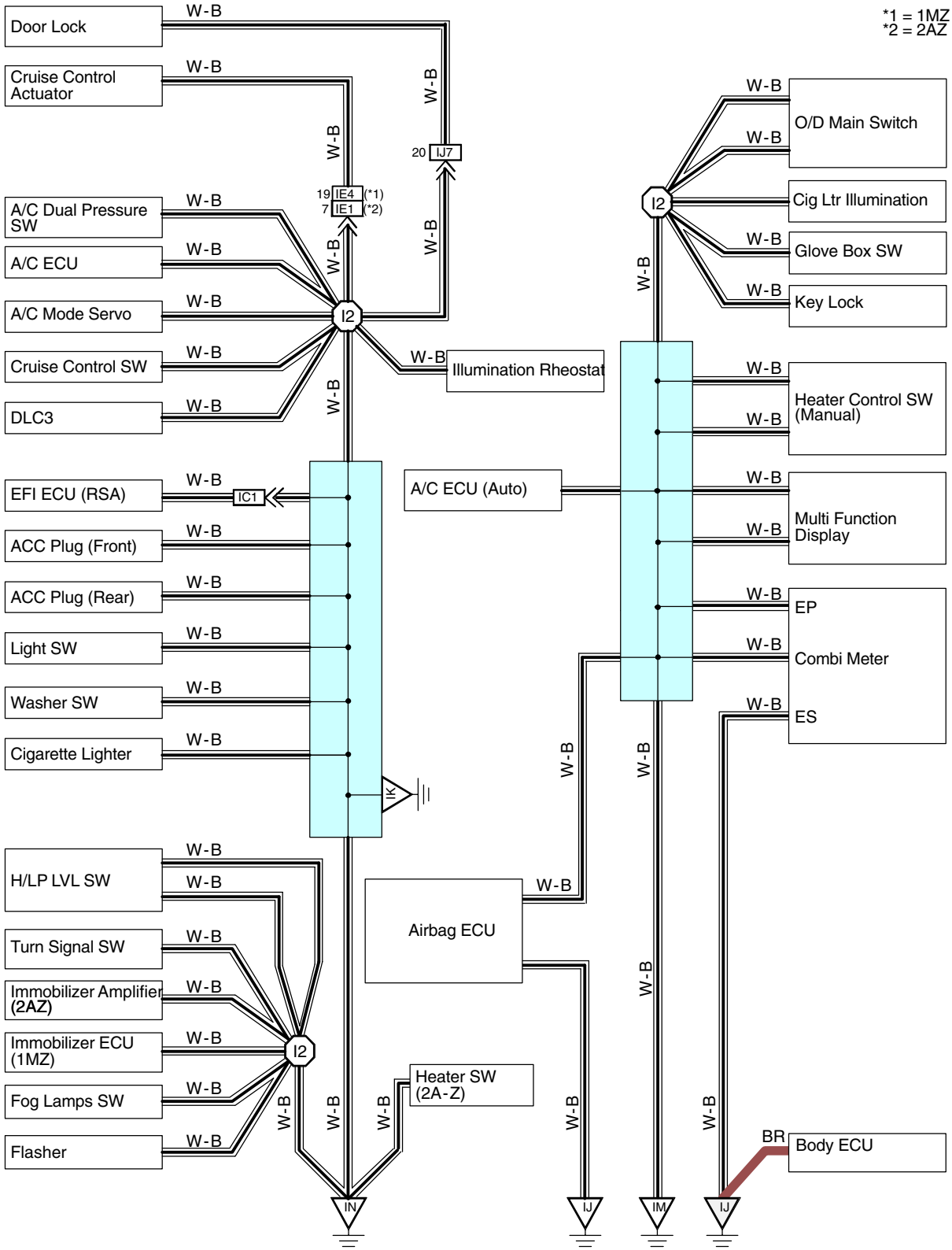
Example : Ground point “BO” is described on page 50 of this manual and is installed on the back panel centre.

[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.

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 (IN , IJ and IM shown below) can also be checked this way.

I GROUND POINTS

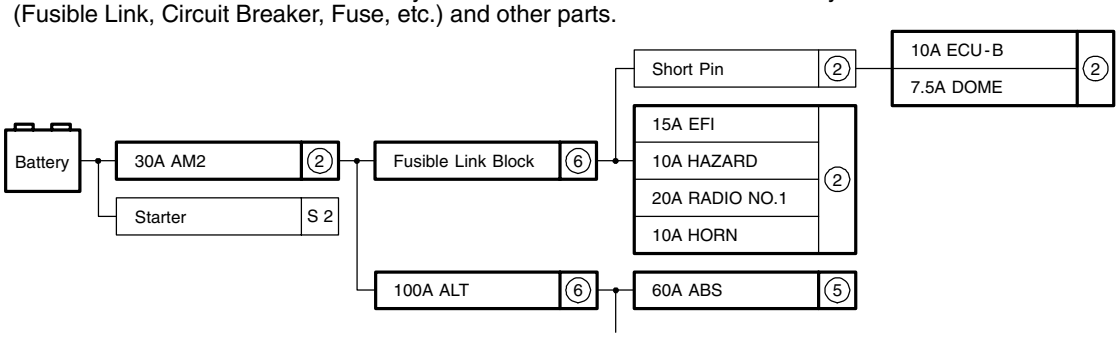


* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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)

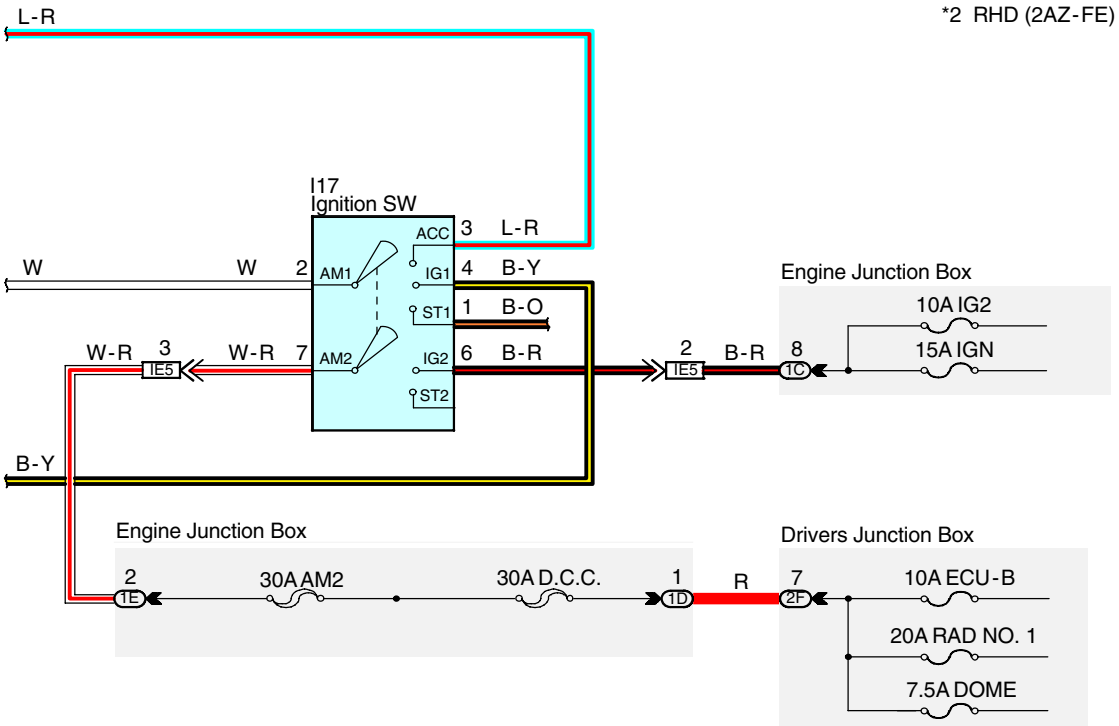
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



Engine Room R/B (See Page 20)

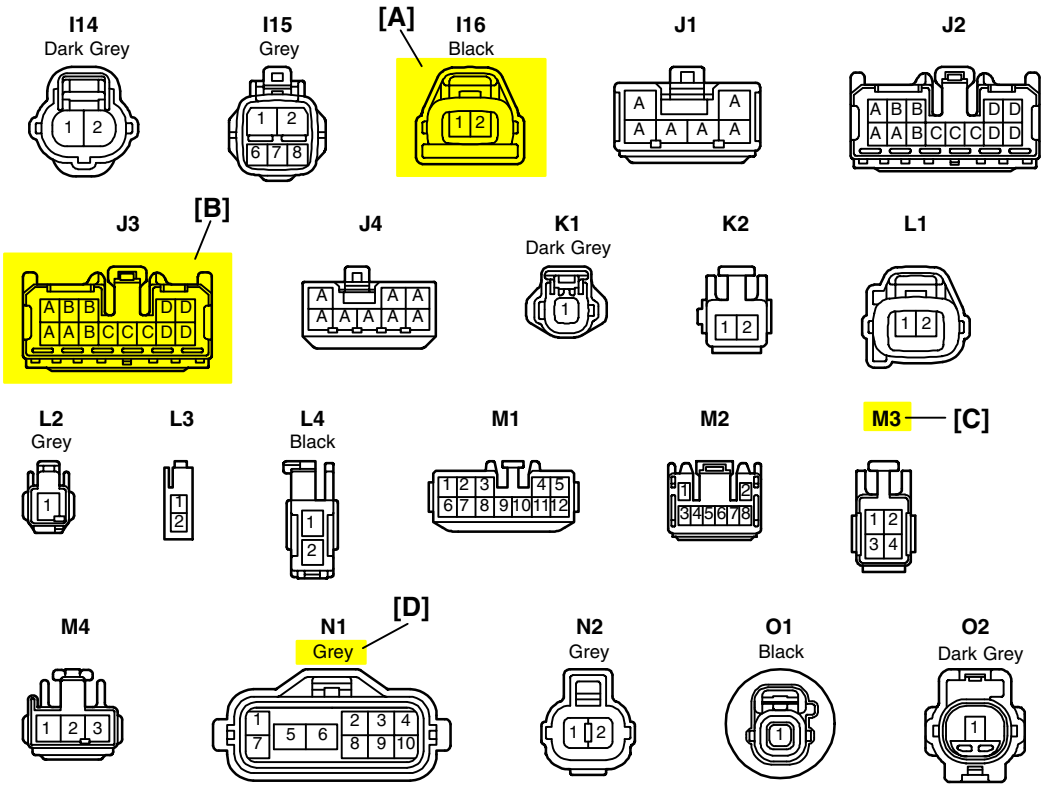
Fuse		System	Page
20A	STOP	ABS ABS and Traction Control Cruise Control Electronically Controlled Transmission Multiplex Communication System	194 187 180 166 210
10A	DOME	Cigarette Lighter Combination Meter Headlight Interior Light Key Reminder and Seat Belt Warning Light Auto Turn Off	214 230 112 122

Power Source



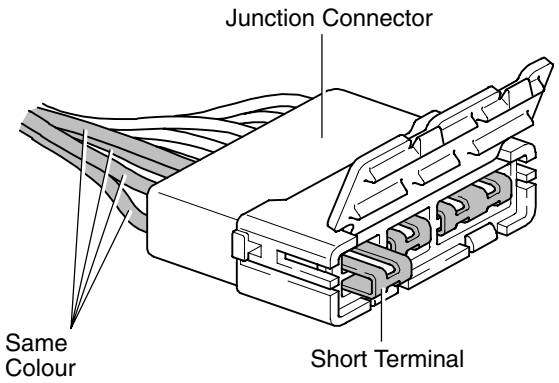
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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 colour.

[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 Colour
Connectors not indicated are milky white in colour.

L PART NUMBER OF CONNECTORS

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

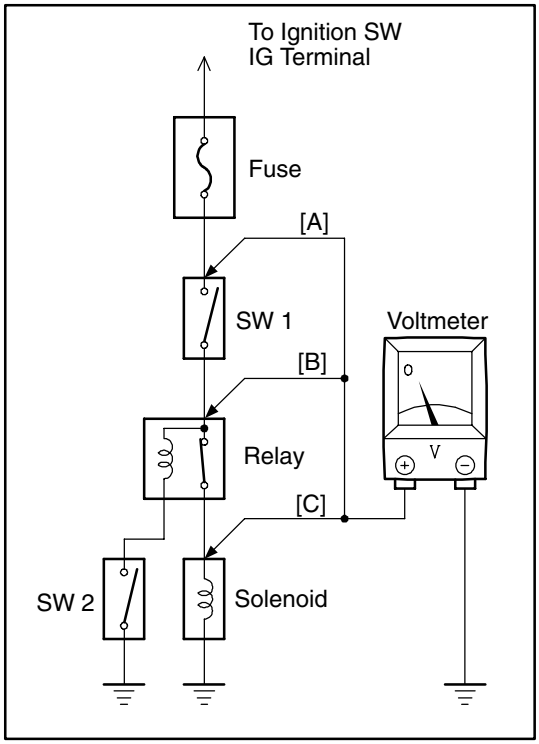
Code	Part Name	Part Number
D 4	Diode (Courtesy)	90980-11608
D 5	Diode (Interior Light)	90980-10962
D 6	Diode (Moon Roof)	90980-11608
D 7	Door Lock Control Relay	90980-10848
D 8	Door Lock Control SW LH	90980-11148
D 9	Door Lock Control SW RH	
D10	Door Courtesy SW LH	90980-11097
D11	Door Courtesy SW RH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

[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.

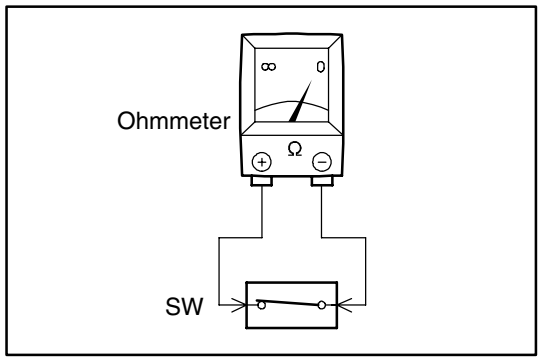


VOLTAGE CHECK

(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)

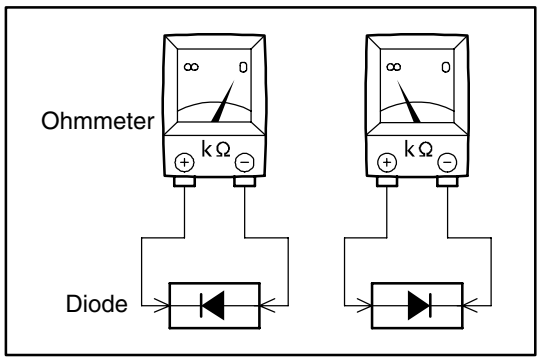
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.
This check can be done with a test light instead of a voltmeter.



CONTINUITY AND RESISTANCE CHECK

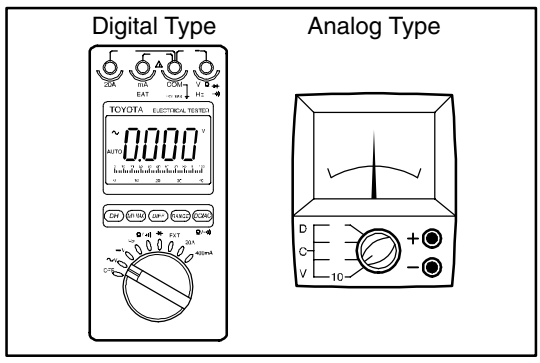
(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

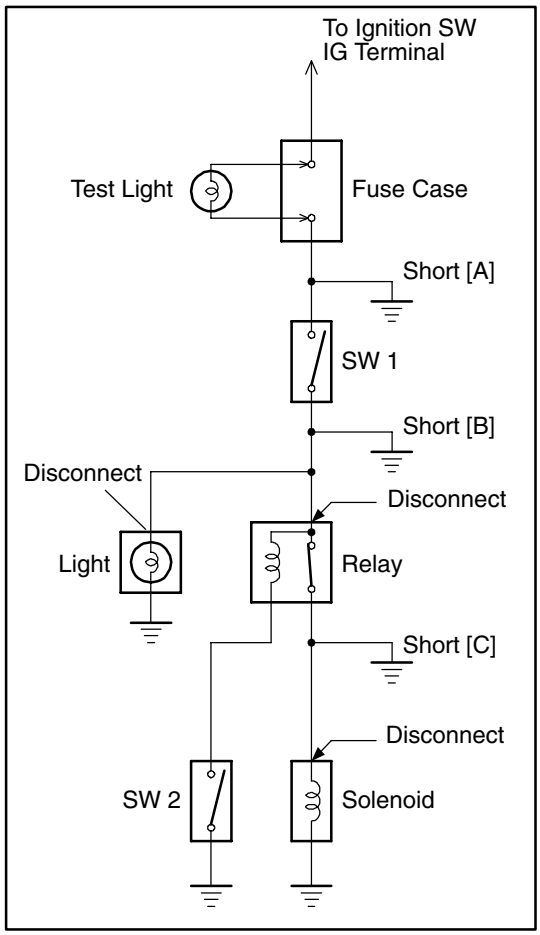
(b) Contact the two leads of an ohmmeter to each of the check points.



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:

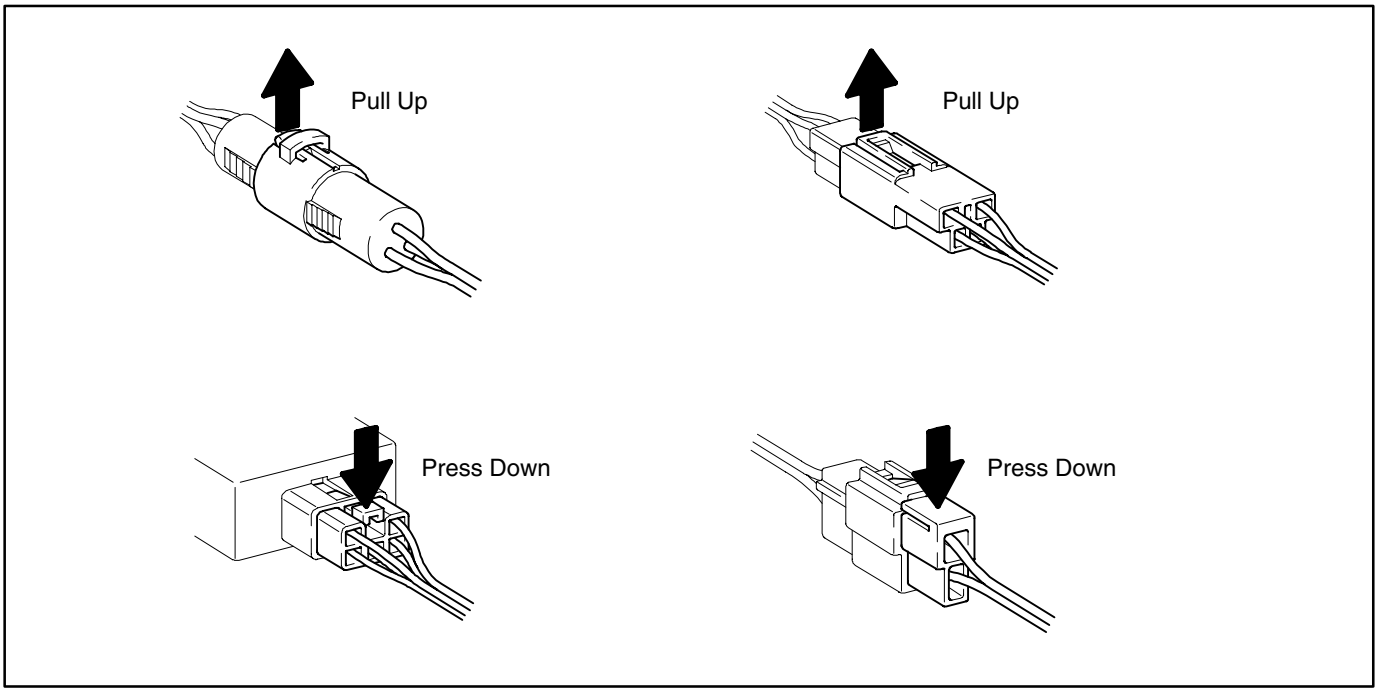
(a) Do not open the case of the ECU. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

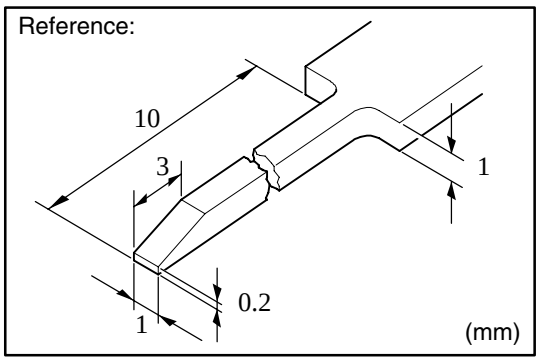
(b) Electronic devices and associated circuits are to be tested by fully qualified electricians only.

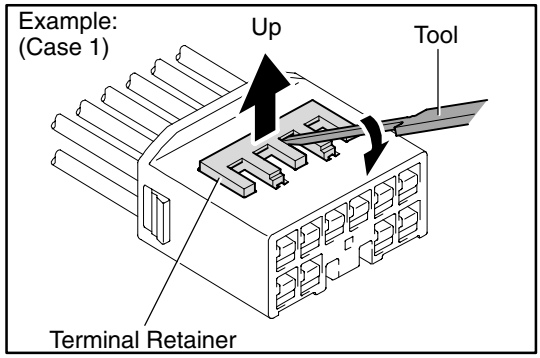
DISCONNECTION OF MALE AND FEMALE CONNECTORS

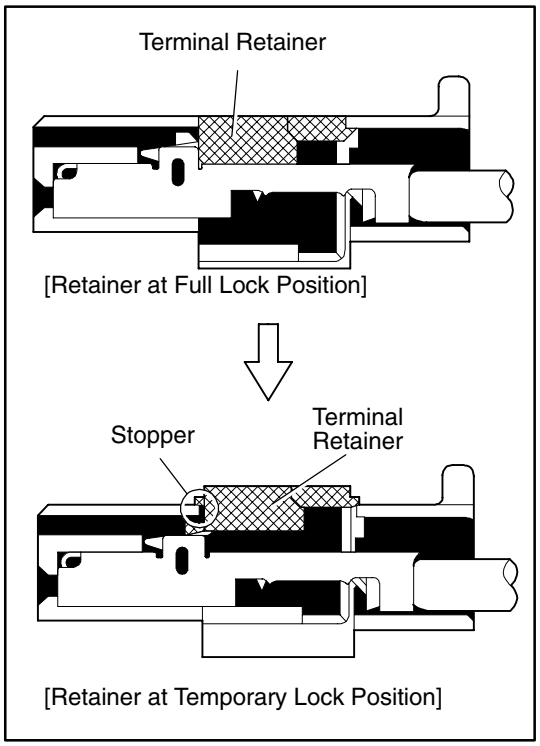
To pull apart the connectors, pull on the connector itself, not the wire harness.

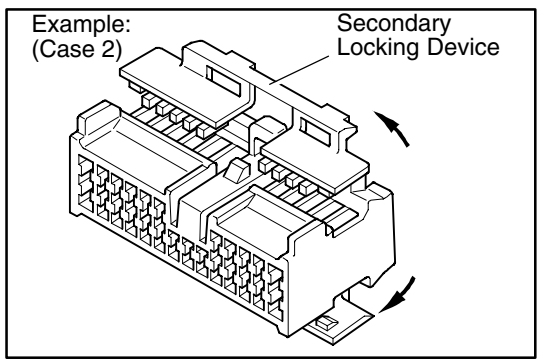
HINT : Check to see what kind of connector you are disconnecting before pulling apart.











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

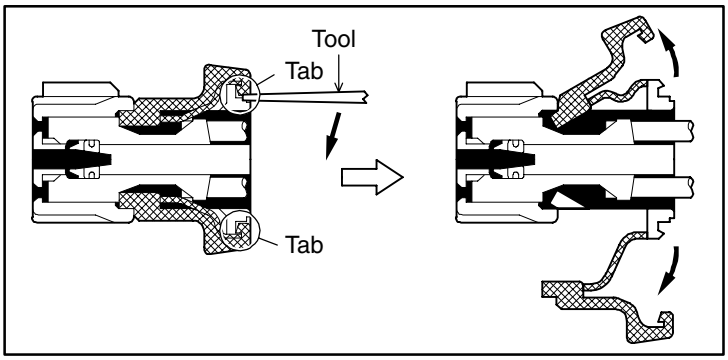
   HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

   "Case 1"

   Raise the terminal retainer up to the temporary lock position.

   "Case 2"

   Open the secondary locking device.

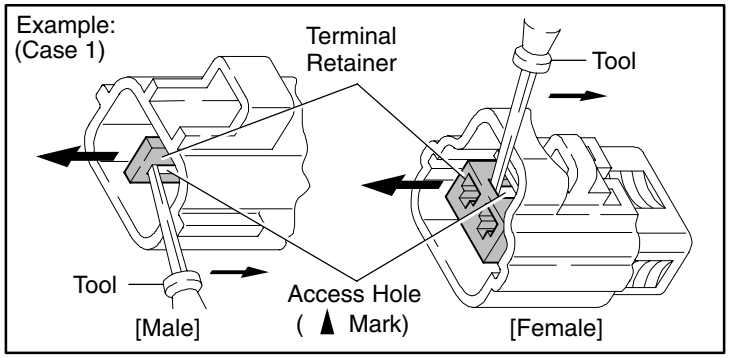


[B] For Waterproof Type Connector

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

Example:

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

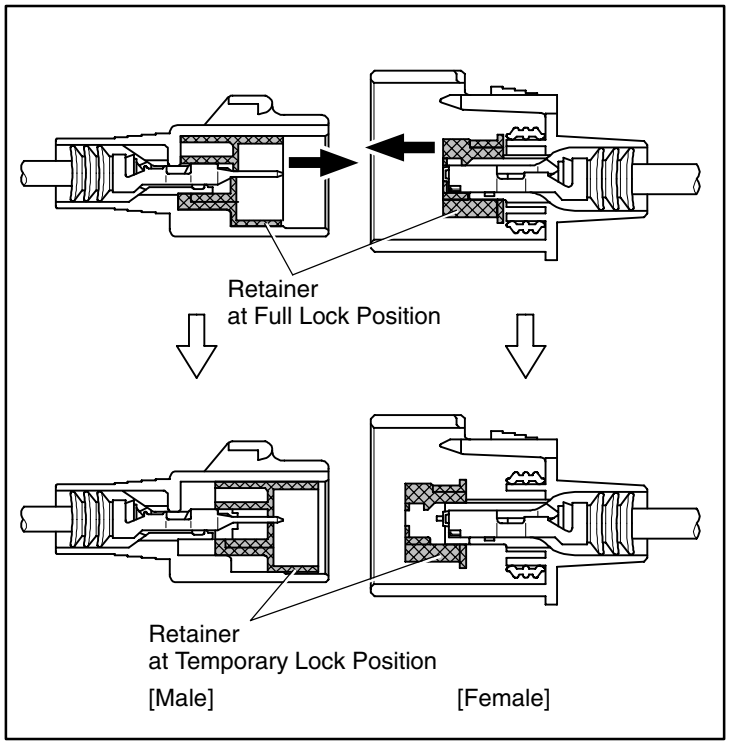


"Case 1"

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

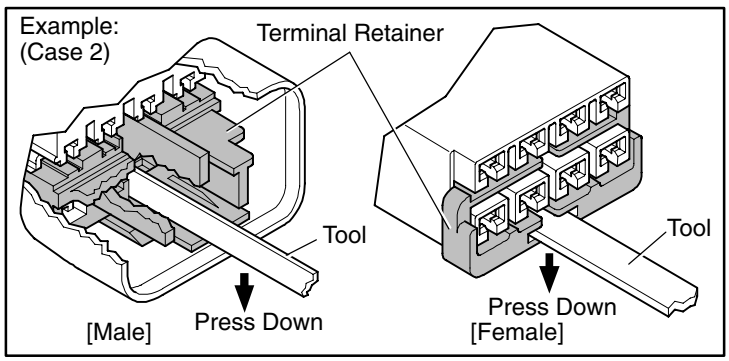
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

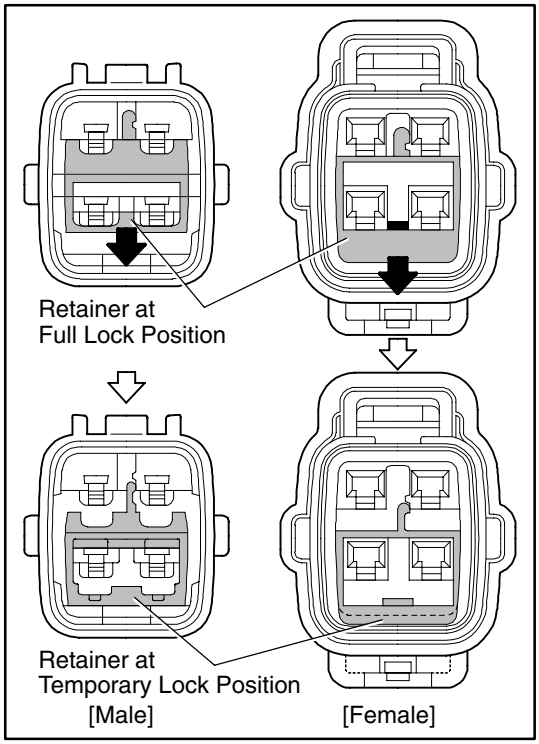
HINT : The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.



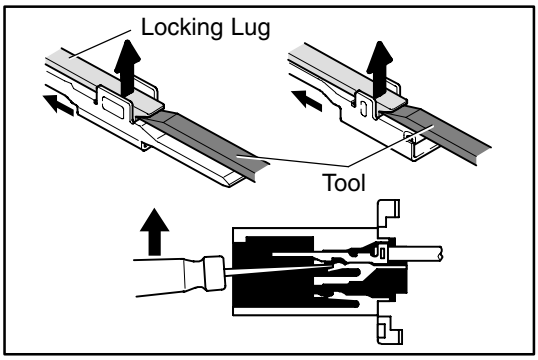
"Case 2"

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

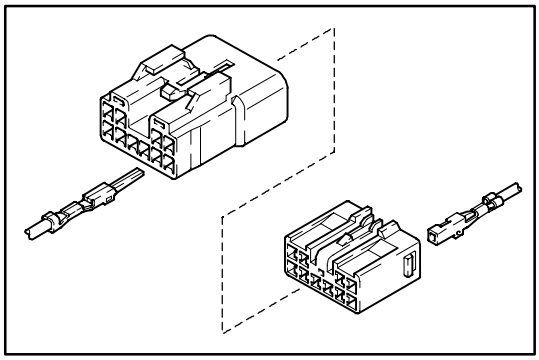




Push the terminal retainer down to the temporary lock position.



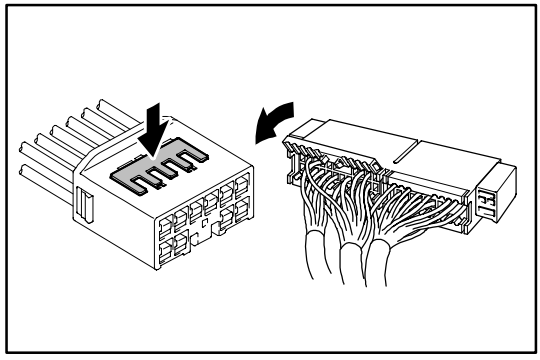
(c) Release the locking lug from terminal and pull the terminal out from rear.



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.

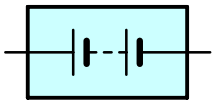
5. CONNECT CONNECTOR

ABBREVIATIONS

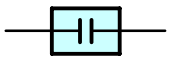
The following abbreviations are used in this manual.

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
EXC	=	Except
FL	=	Fusible Link
J/B	=	Junction Block
J/C	=	Junction Connector
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
VSV	=	Vacuum Switching Valve
VVT	=	Variable Valve Timing
w/	=	With
w/o	=	Without

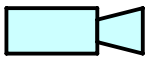
GLOSSARY OF TERMS AND SYMBOLS



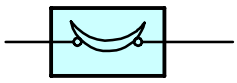
BATTERY
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.



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



CIGARETTE LIGHTER
An electric resistance heating element.

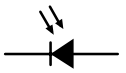


CIRCUIT BREAKER
Basically a reusable fuse, a circuit breaker will heat and open if too much current flows through it.
Some units automatically reset when cool, others must be manually reset.

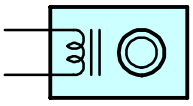
DIODE
A semiconductor which allows current flow in only one direction.



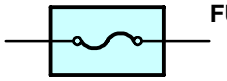
DIODE, ZENER
A diode which allows current flow in one direction but blocks reverse flow only up to a specific voltage. Above that potential, it passes the excess voltage. This acts as a simple voltage regulator.



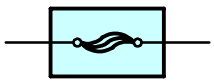
PHOTODIODE
The photodiode is a semiconductor which controls the current flow according to the amount of light.



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



(Medium Current Fuse)



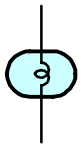
(High Current Fuse or Fusible Link)

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.

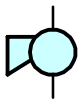


1. SINGLE FILAMENT

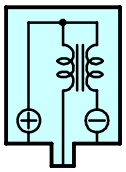


2. DOUBLE FILAMENT

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



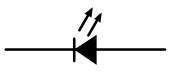
HORN
An electric device which sounds a loud audible signal.



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.

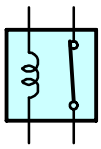


METER, DIGITAL
Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.



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

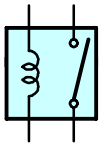
GLOSSARY OF TERMS AND SYMBOLS



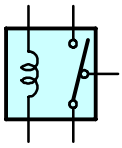
RELAY

1. NORMALLY CLOSED

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.

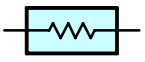


2. NORMALLY OPEN



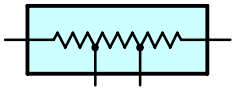
RELAY, DOUBLE THROW

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.



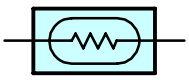
RESISTOR, TAPPED

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



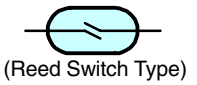
RESISTOR, VARIABLE or RHEOSTAT

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



SENSOR (Thermistor)

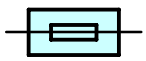
A resistor which varies its resistance with temperature.



(Reed Switch Type)

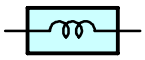
SENSOR, SPEED

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

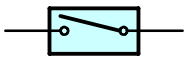
An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.



SPEAKER

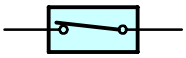
An electromechanical device which creates sound waves from current flow.

SWITCH, MANUAL

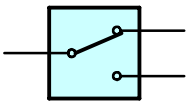


1. NORMALLY OPEN

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

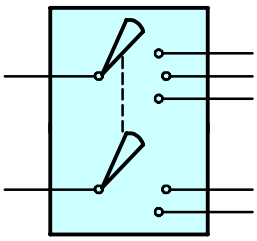


2. NORMALLY CLOSED



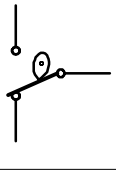
SWITCH, DOUBLE THROW

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



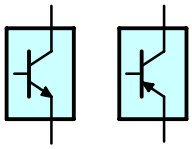
SWITCH, IGNITION

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



SWITCH, WIPER PARK

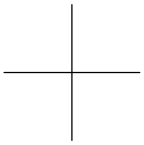
Automatically returns wipers to the stop position when the wiper switch is turned off.



TRANSISTOR

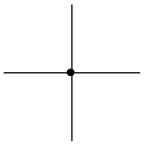
A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at “base”.

WIRES



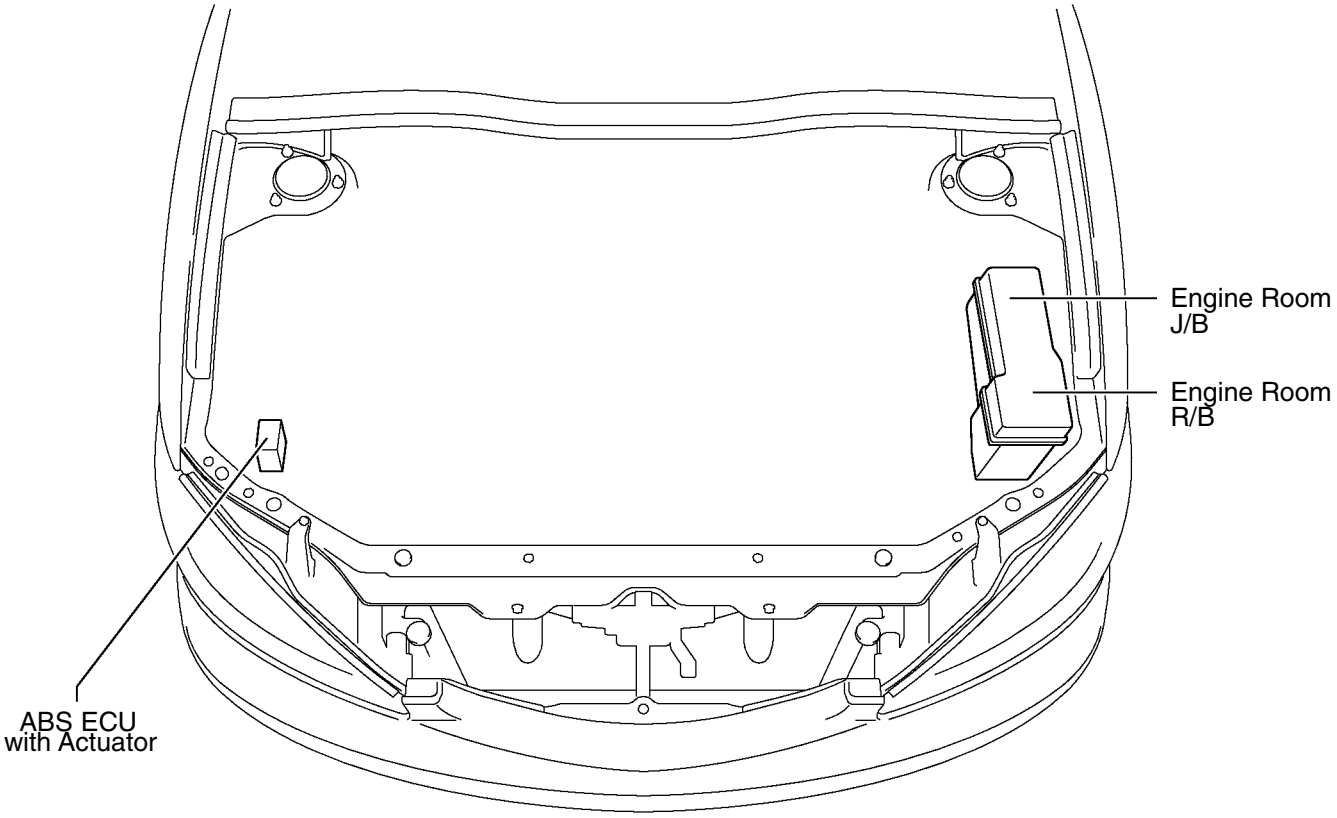
(1) NOT CONNECTED

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.

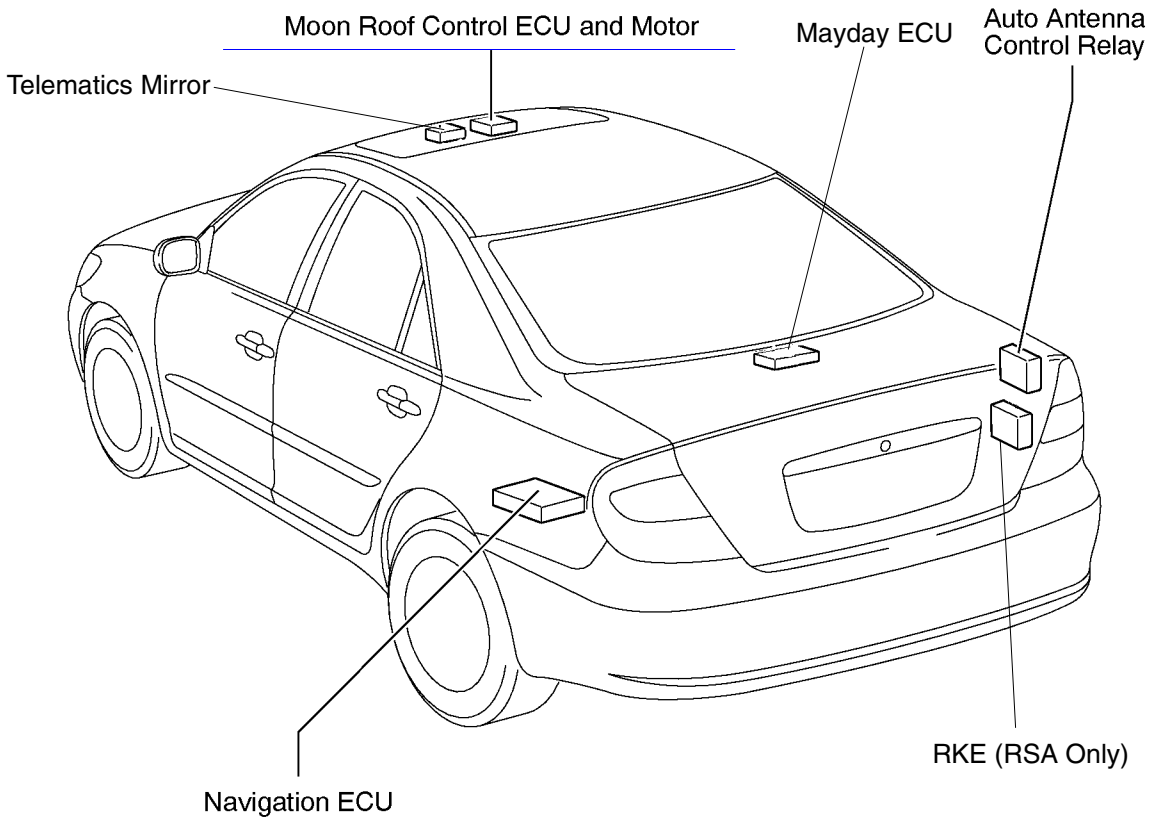


(2) SPLICED

[Engine Compartment]

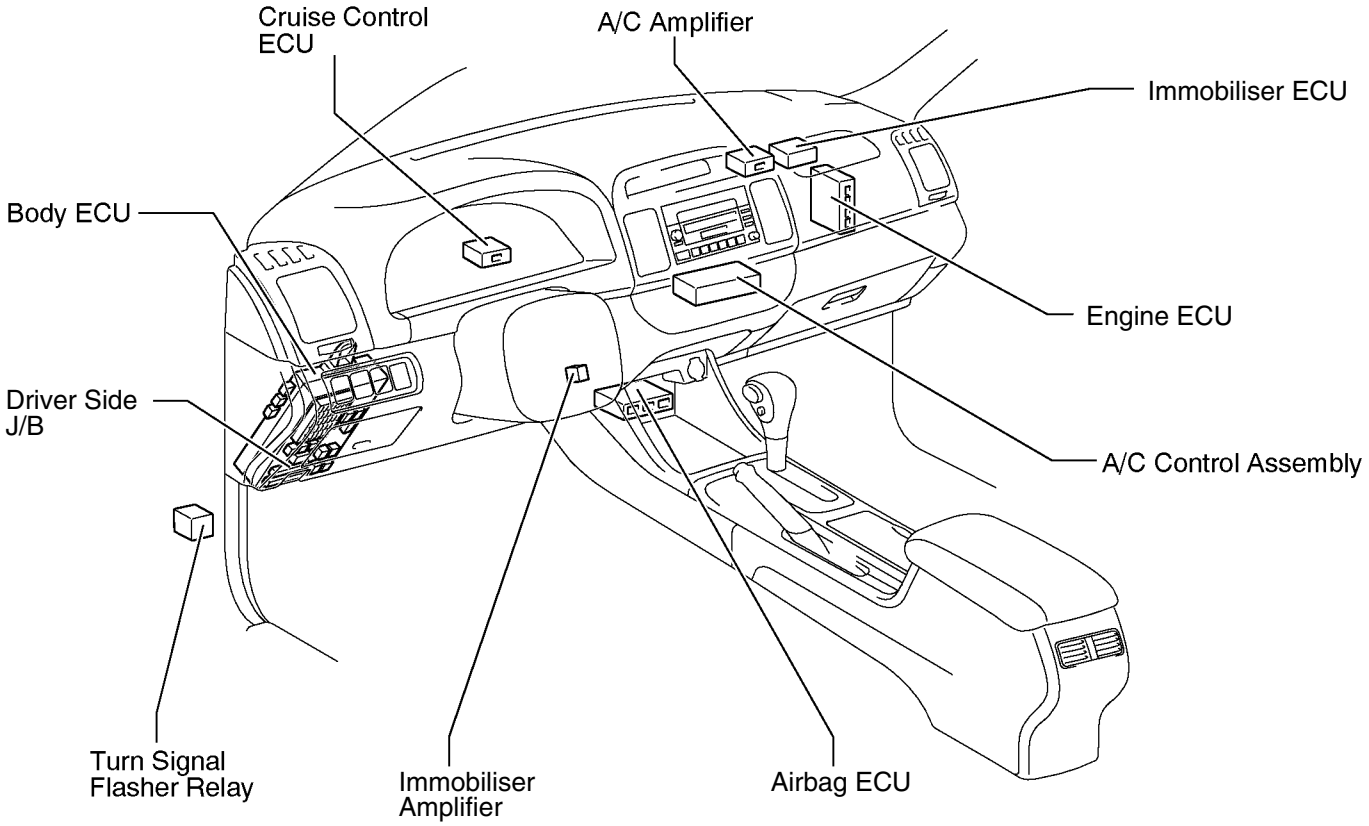


[Body]

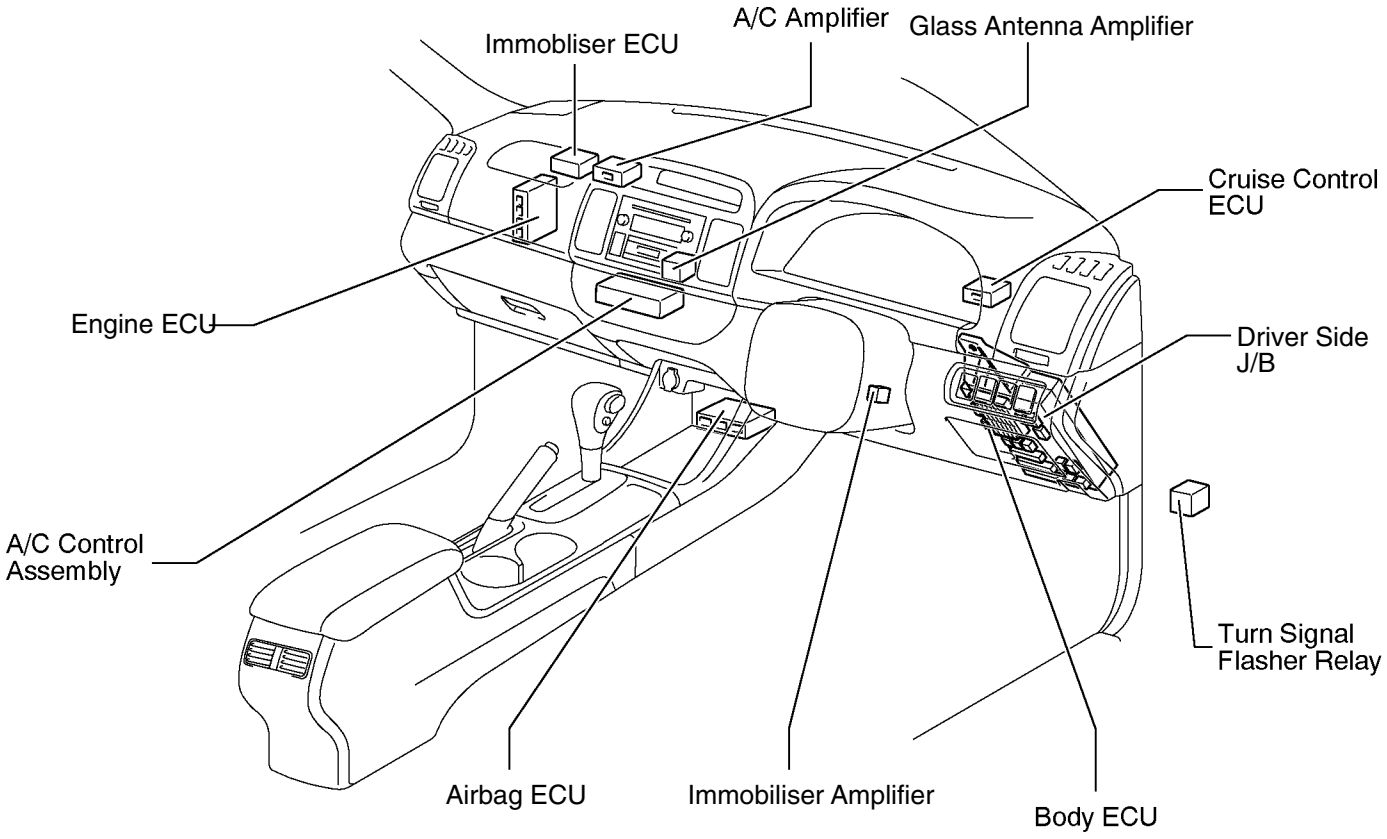


[Instrument Panel]

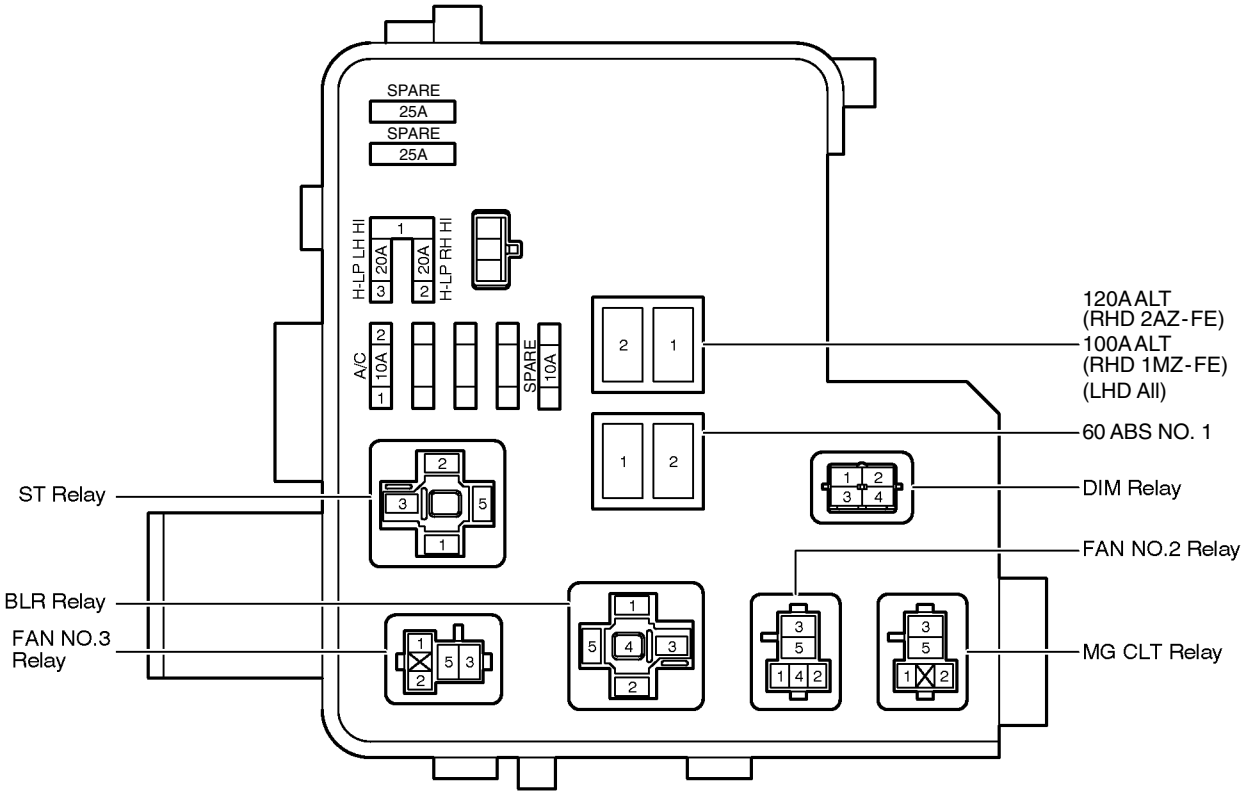
(LHD)



(RHD)

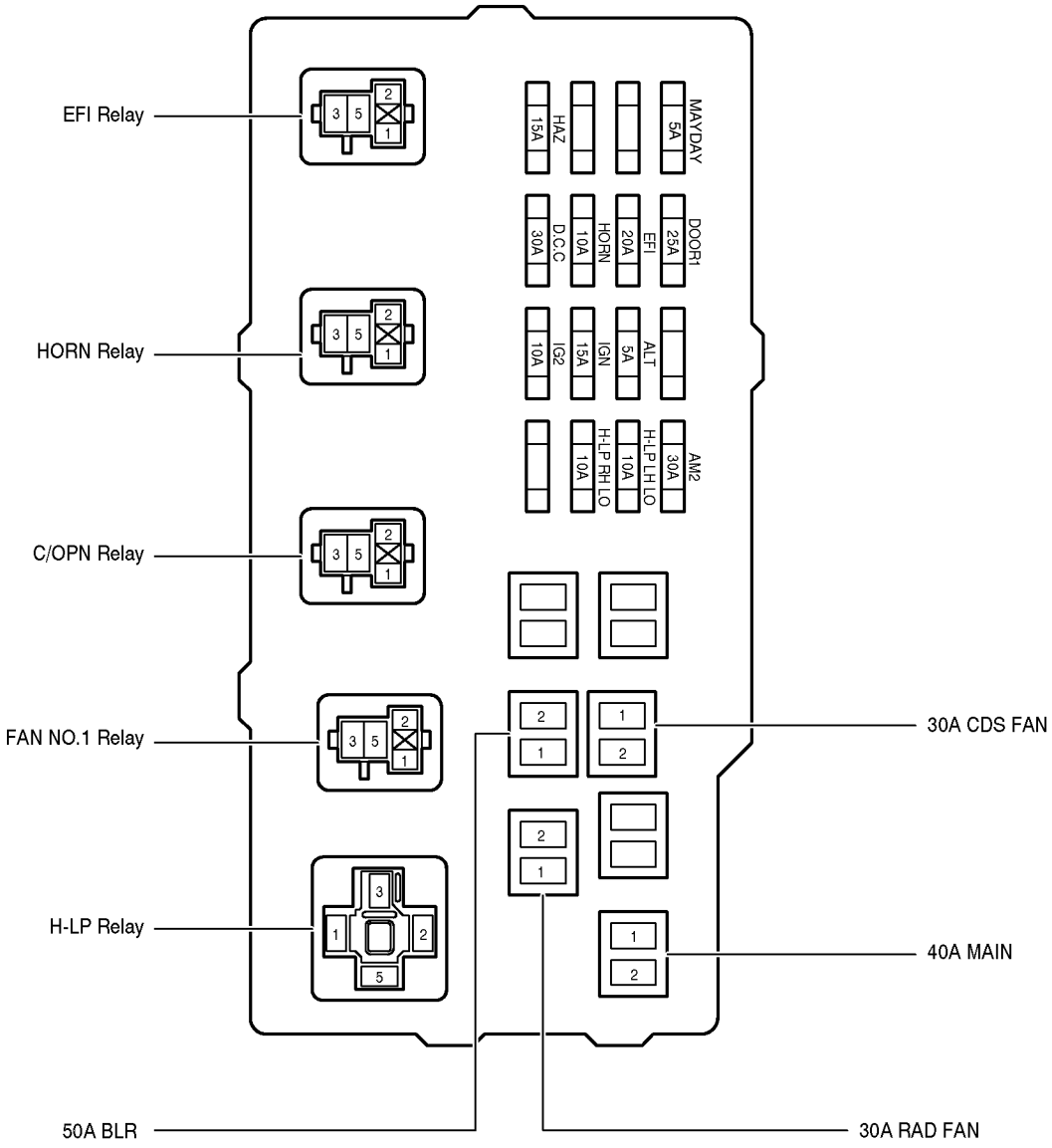


① : Engine Room R/B	Engine Compartment Left (See Page 20)

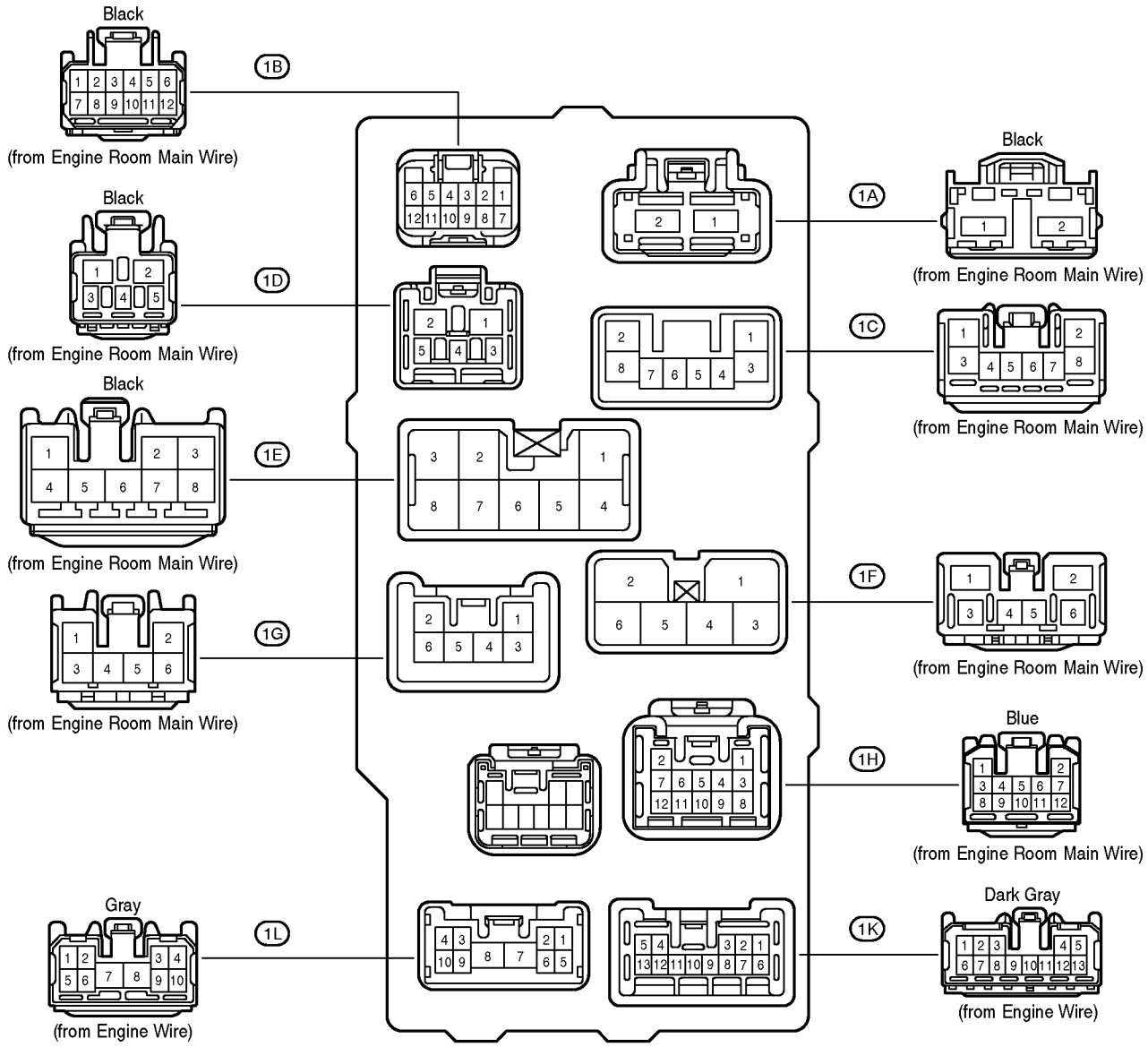


RELAY LOCATIONS

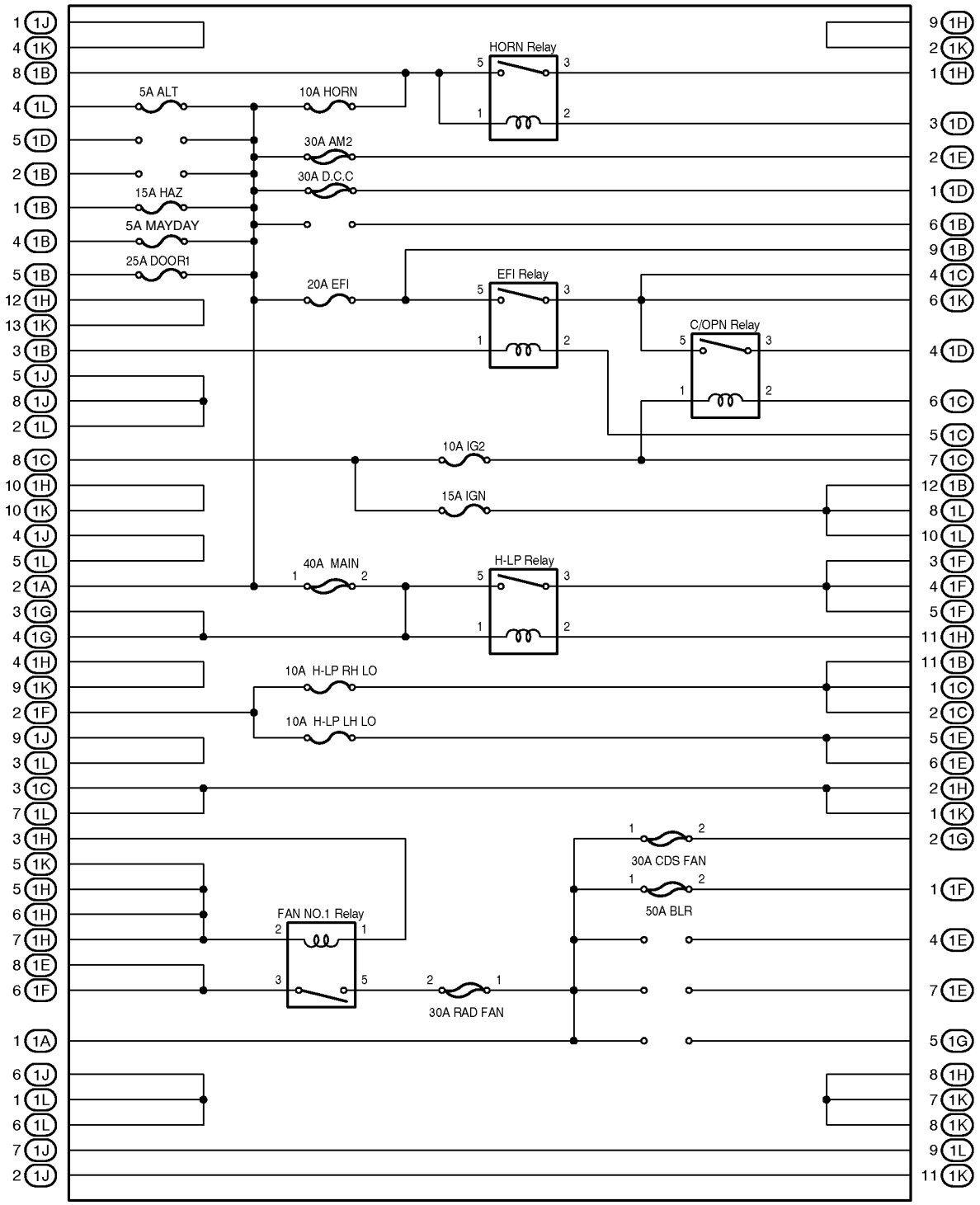
: Engine Room J/B	Engine Compartment Left (See Page 20)



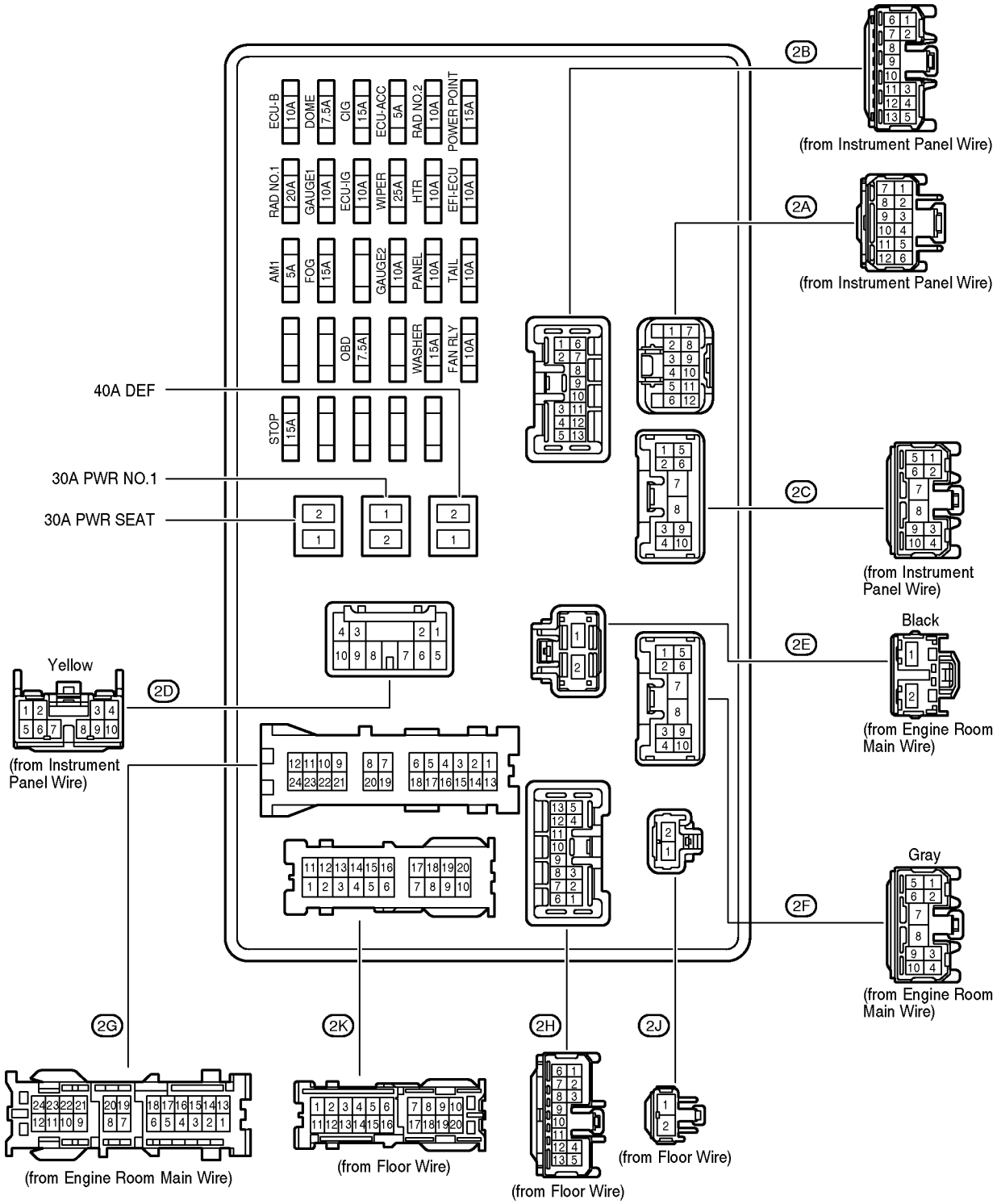
RELAY LOCATIONS



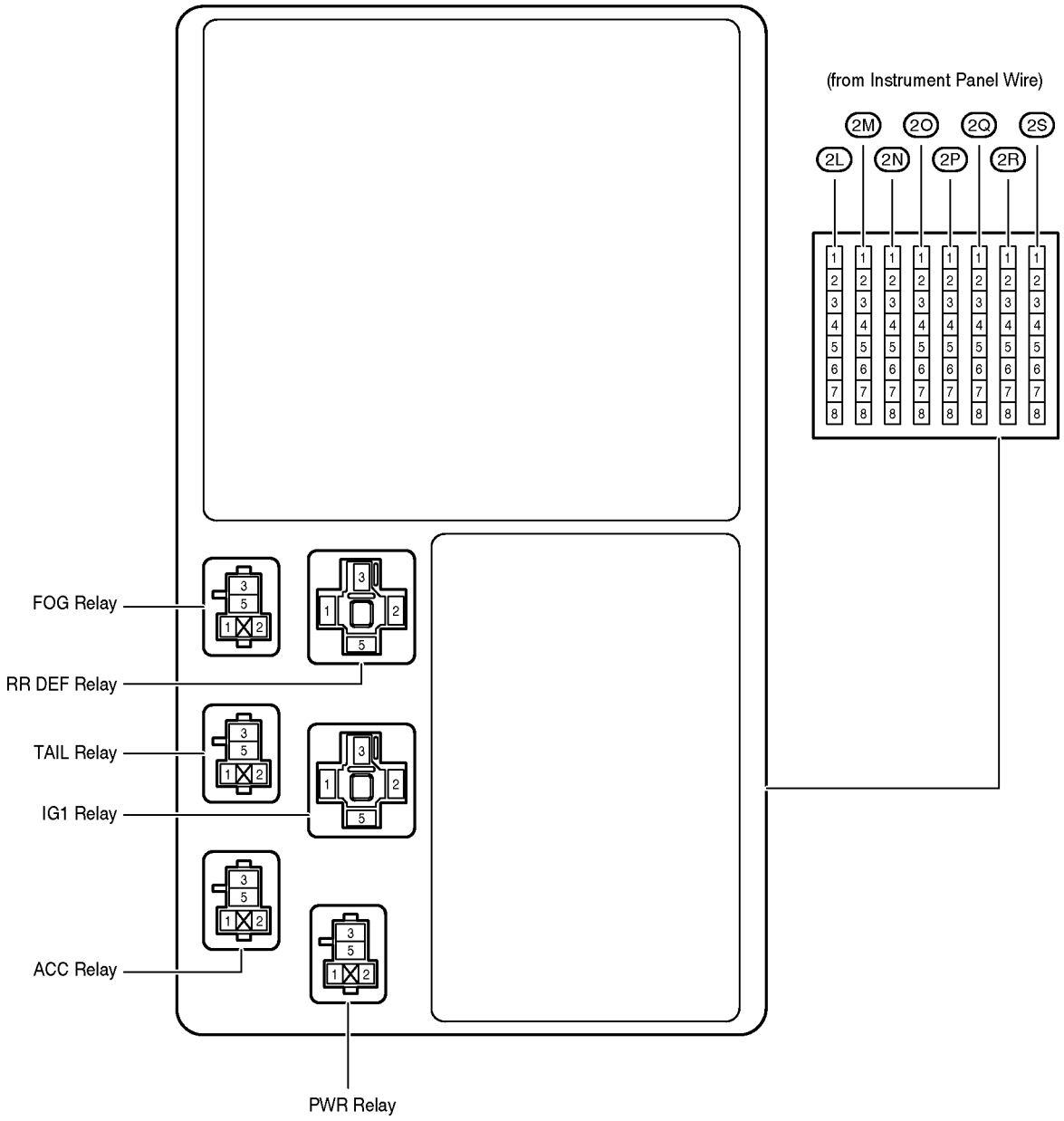
[Engine Room J/B Inner Circuit]



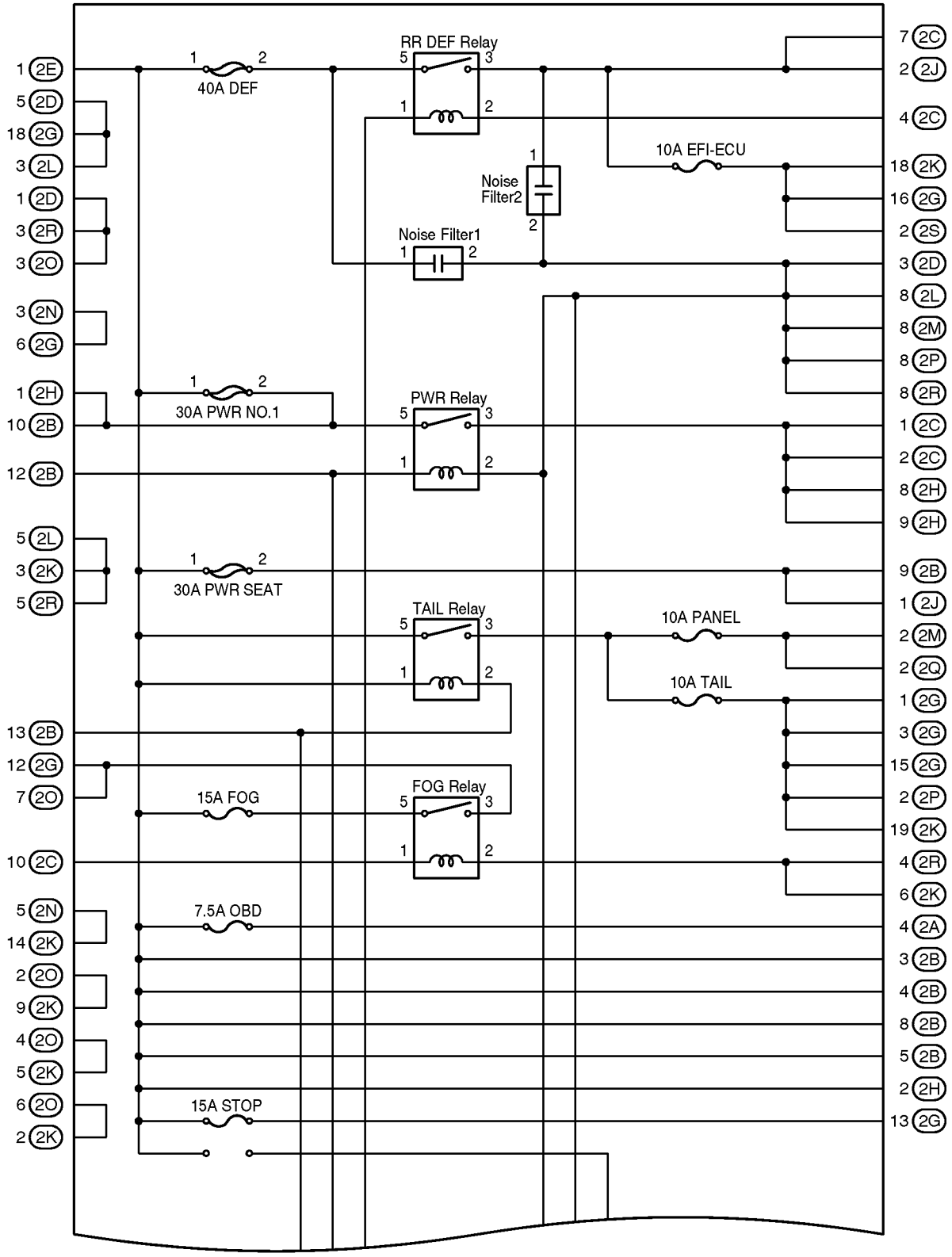
: Driver Side J/B	Lower Finish Panel (See Page 21)



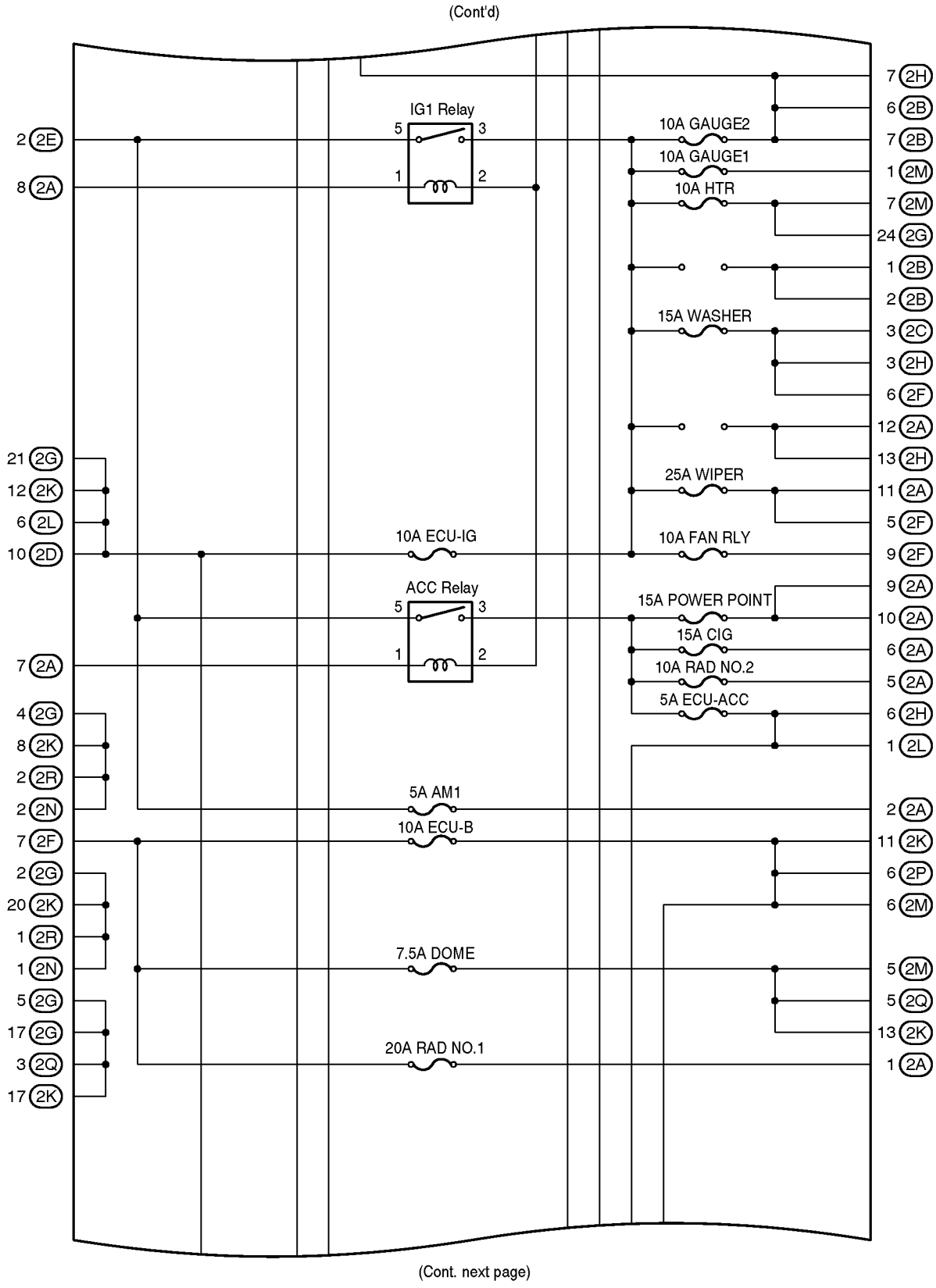
RELAY LOCATIONS

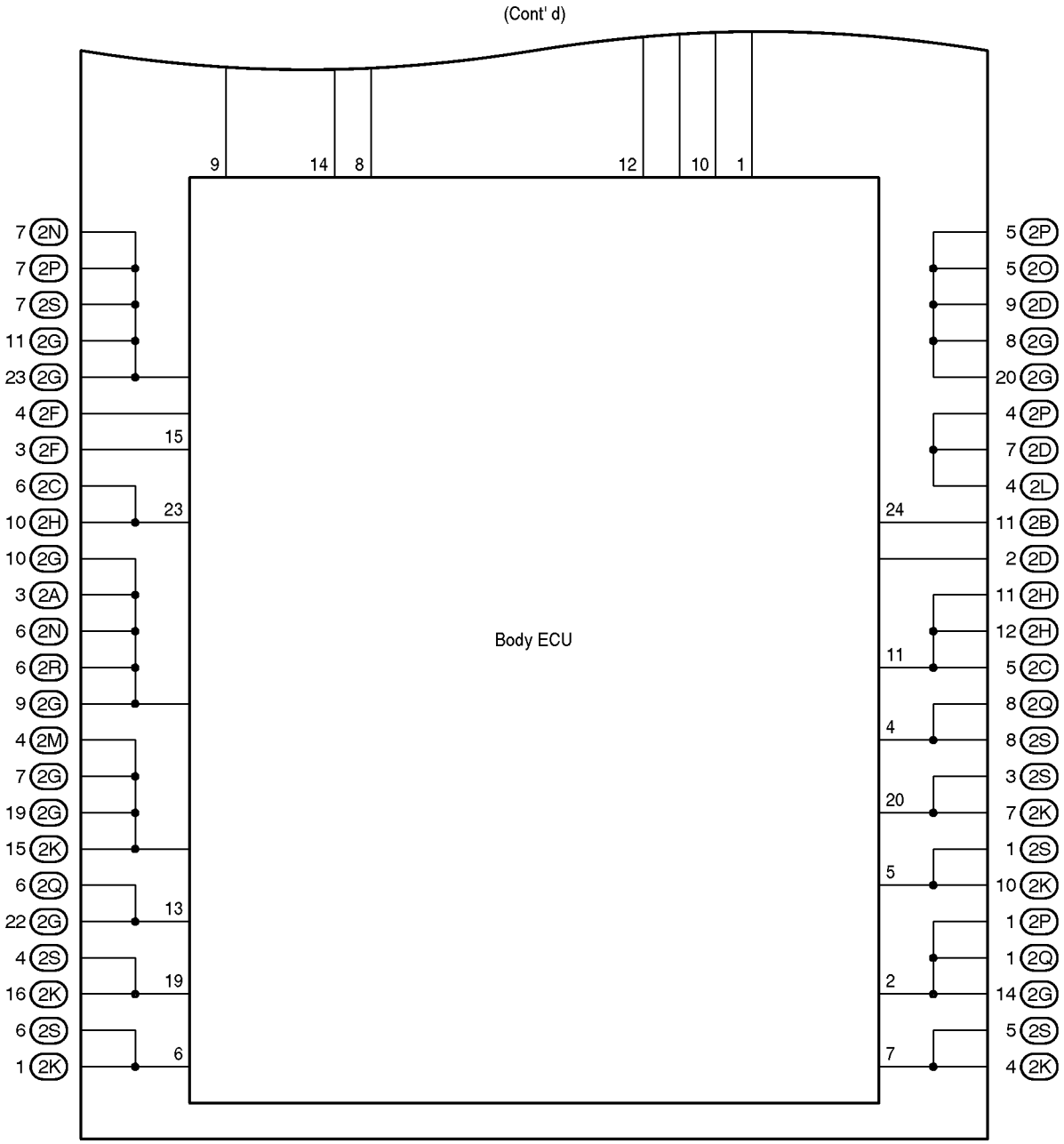


[Driver Side J/B Inner Circuit]



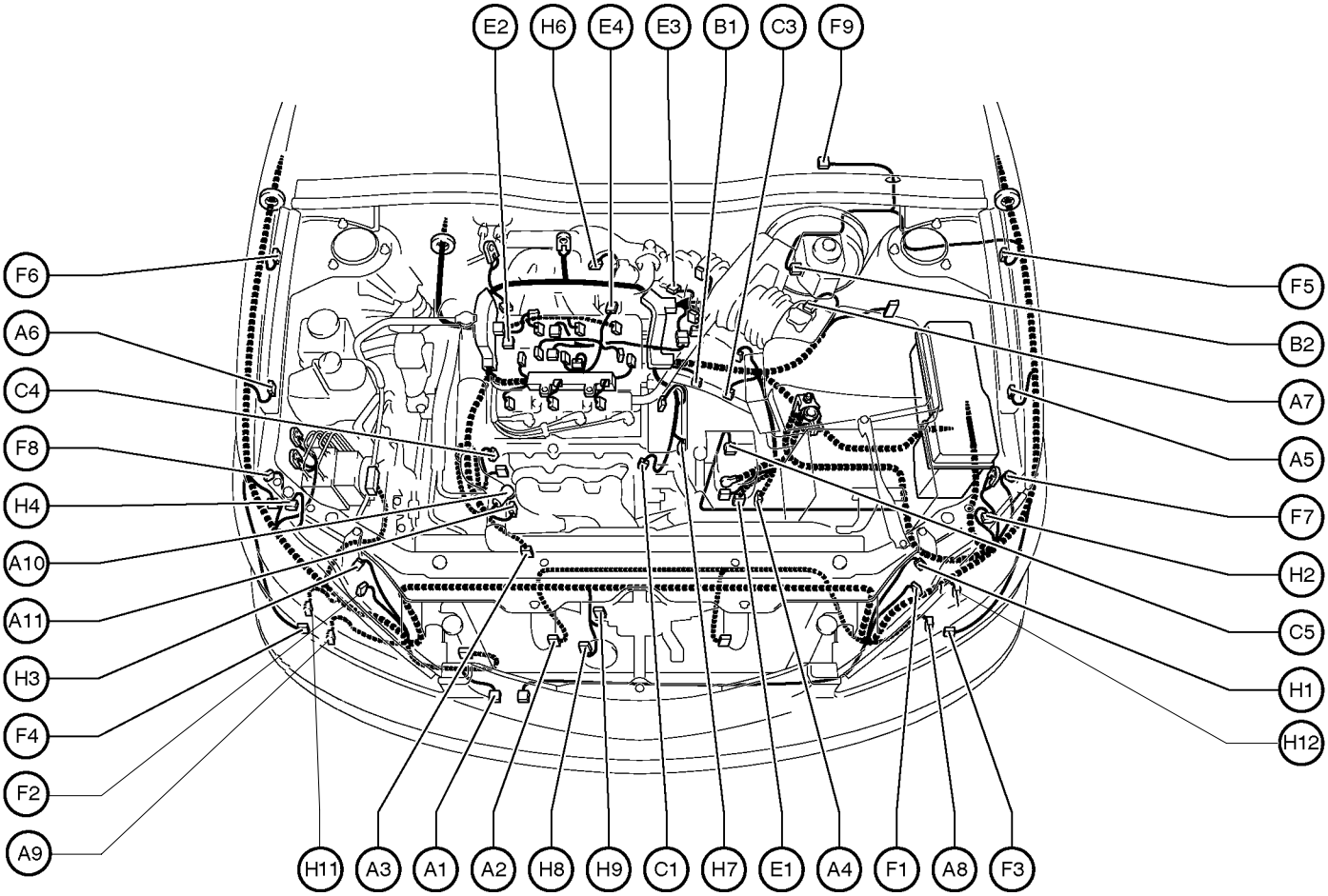
(Cont. next page)


(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 (Auto Transmission)
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 (Manual Transmission)
B 2 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 3 ECT
C 4 Crankshaft Position Sensor
C 5 Cruise Control Actuator

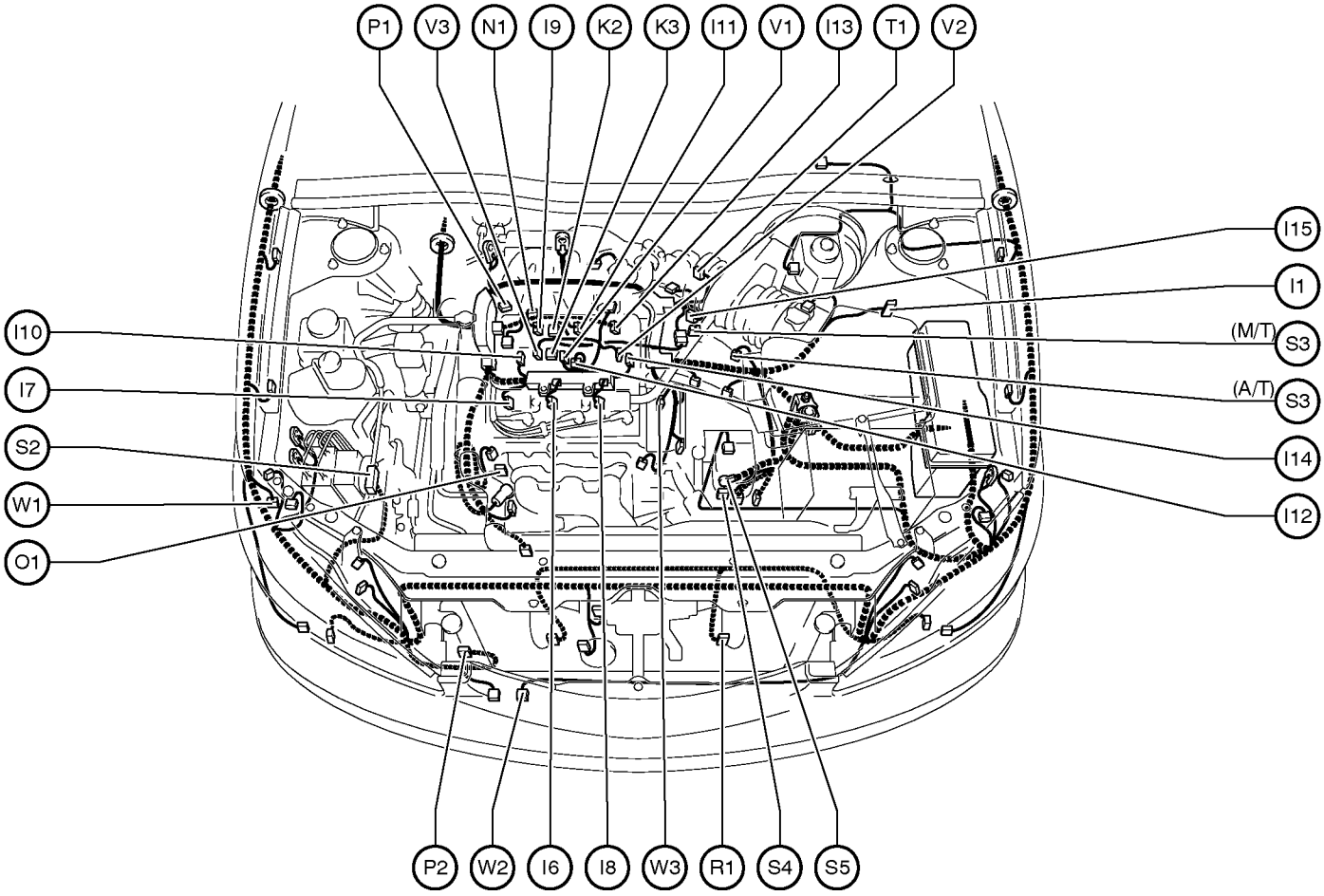
E 1 ECT Solenoids
E 2 EFI Water Temp. Sensor
E 3 EGR Sensor
E 4 EGR Valve Position Sensor

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)
H11 Headlamp Level Actuator LH
H12 Headlamp Level Actuator RH

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 ABS ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

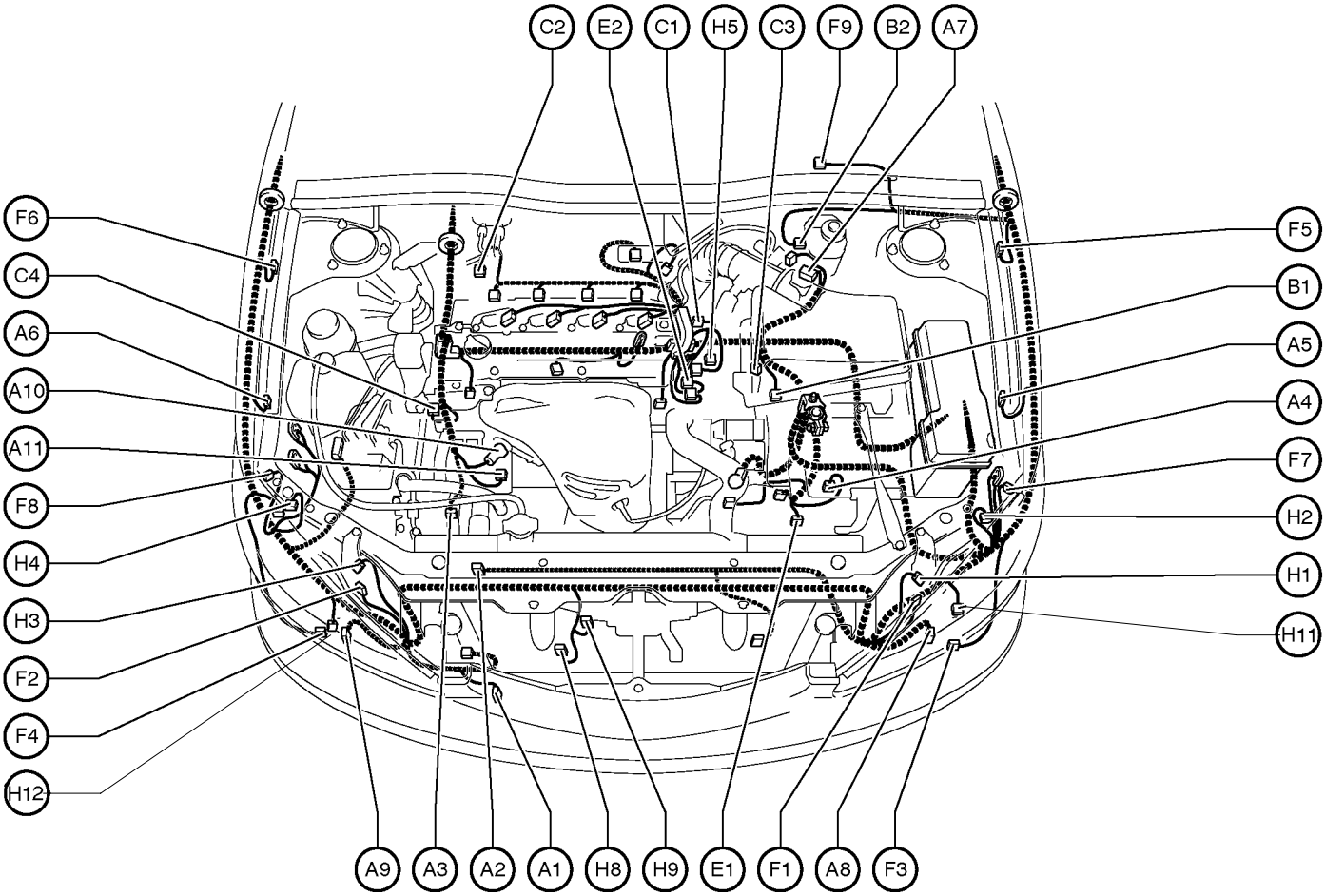
T 1 Throttle Position Sensor

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 (Auto Transmission)
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 (Manual Transmission)
B 2 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 2 Camshaft Timing Oil Control Valve
C 3 ECT
C 4 Crankshaft Position Sensor

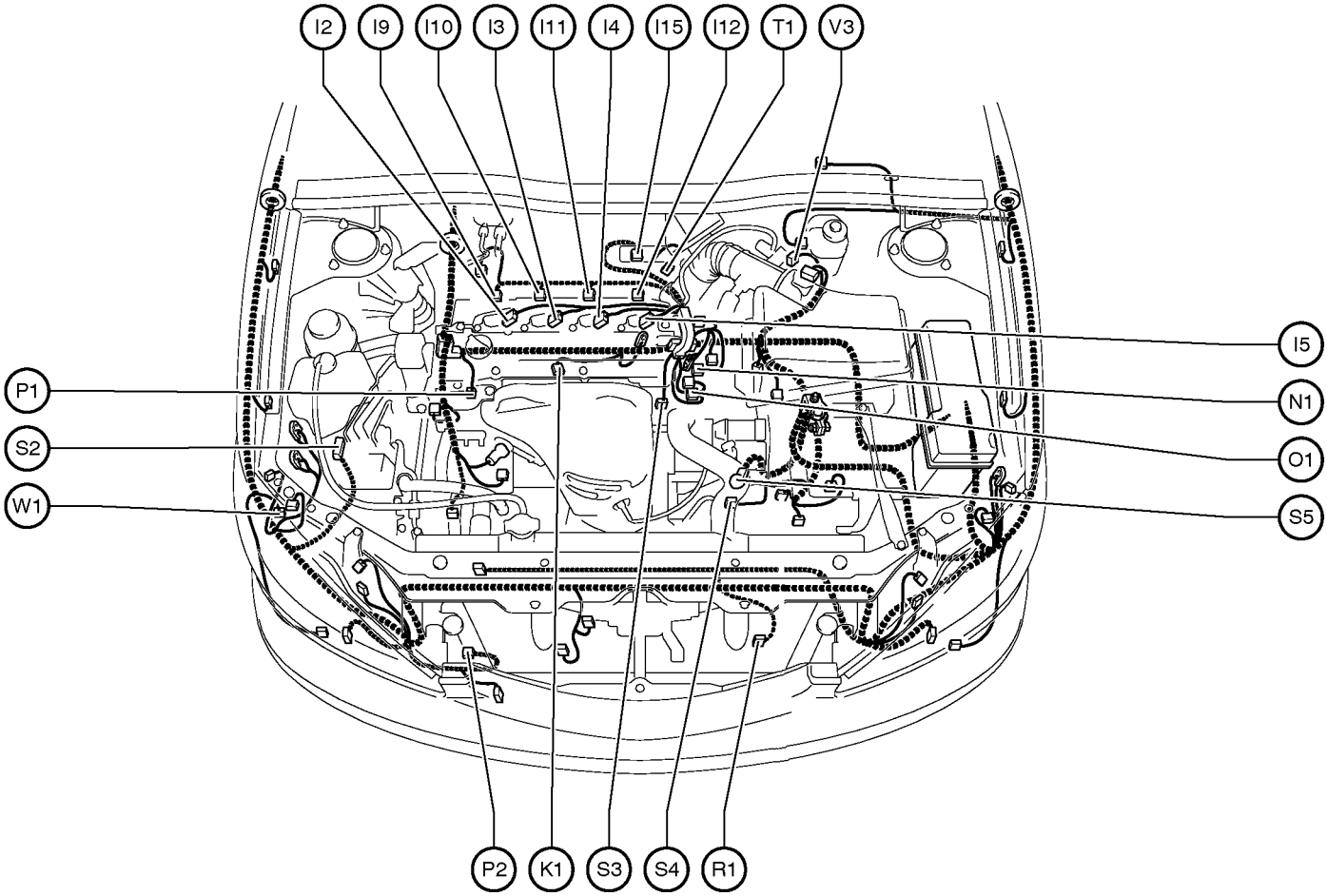
E 1 ECT Solenoids
E 2 EFI Water Temp. Sensor

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)
H11 Headlamp Leveling Actuator LH
H12 Headlamp Leveling Actuator RH

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 Control 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

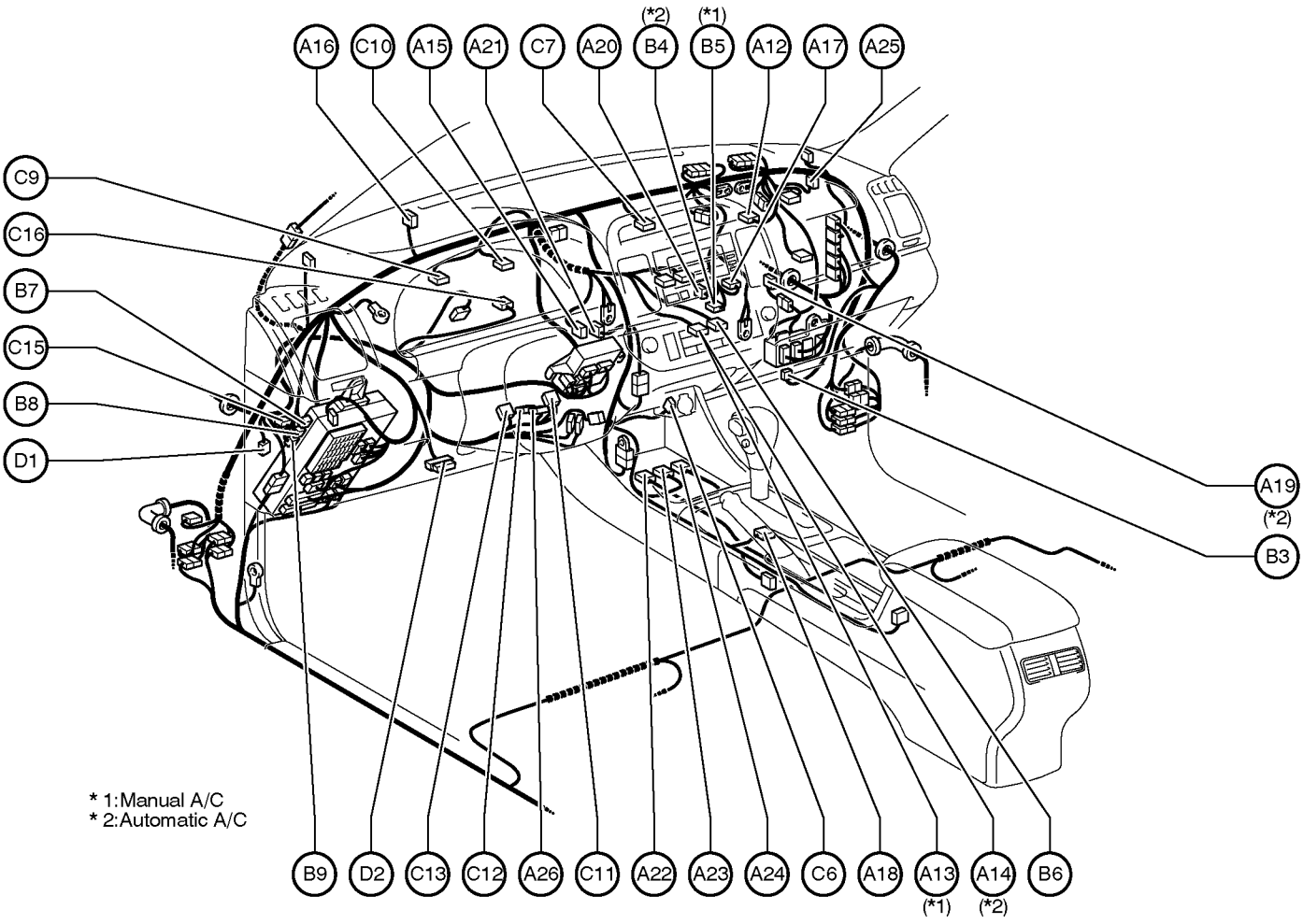
T 1 Throttle Position Sensor

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 ECU
A 23 Airbag ECU
A 24 Airbag ECU
A 25 Airbag Squib (Front Passenger Airbag Assembly)
A 26 Airbag Squib (Steering Wheel Pad)

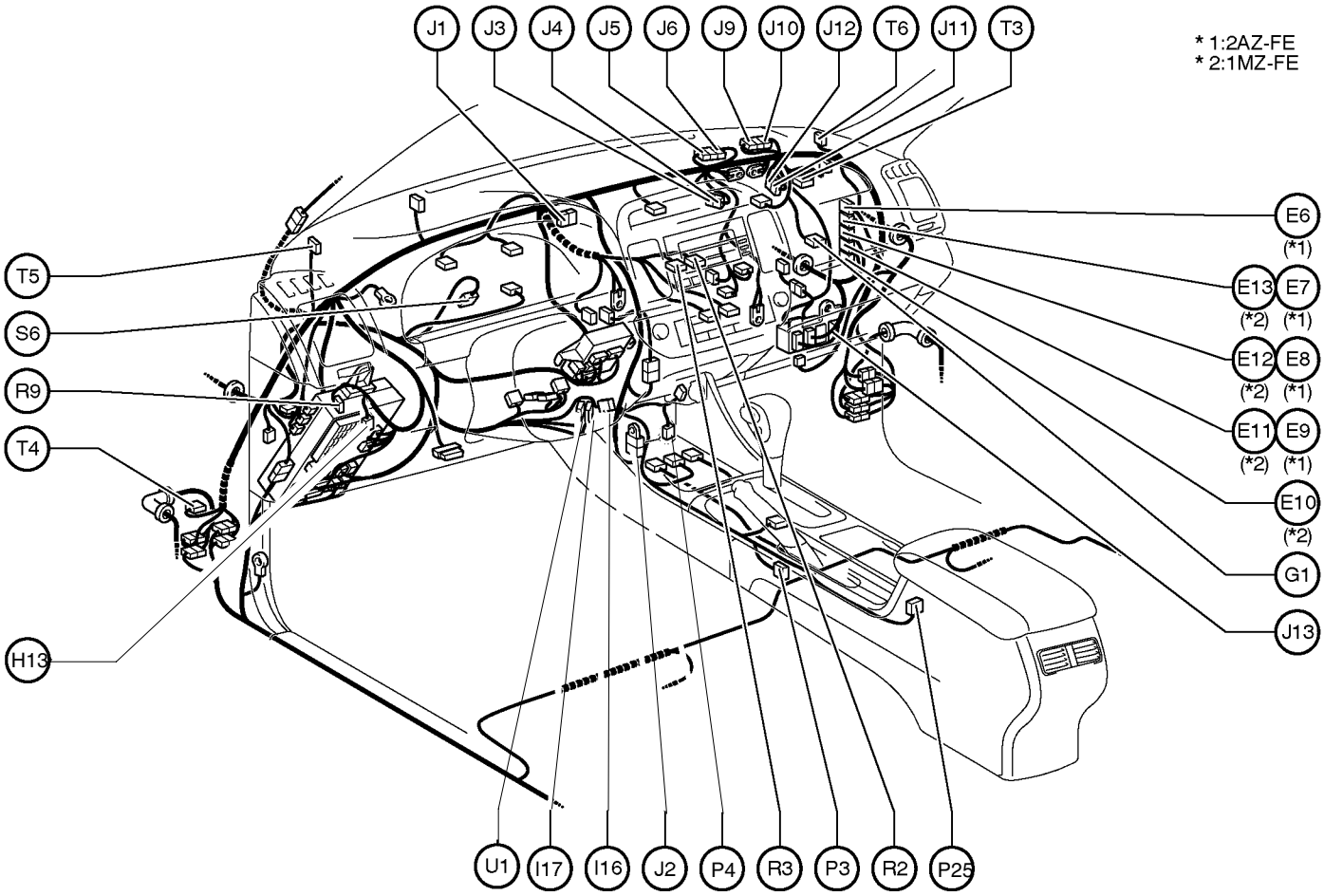
B 3 Blower Motor
B 4 Blower Motor Controller
B 5 Blower Resistor
B 6 Blower SW
B 7 Body ECU
B 8 Body ECU
B 9 Body ECU

C 6 Cigarette Lighter & Illumination
C 7 Multi Function Display
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 ECU
E 7 Engine ECU
E 8 Engine ECU
E 9 Engine ECU
E 10 Engine ECU
E 11 Engine ECU
E 12 Engine ECU
E 13 Engine ECU

G 1 Glove Box Light and SW

H13 Headlamp Leveling SW

I 16 Ignition Key Cylinder Light
Immobiliser 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 (Front)

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

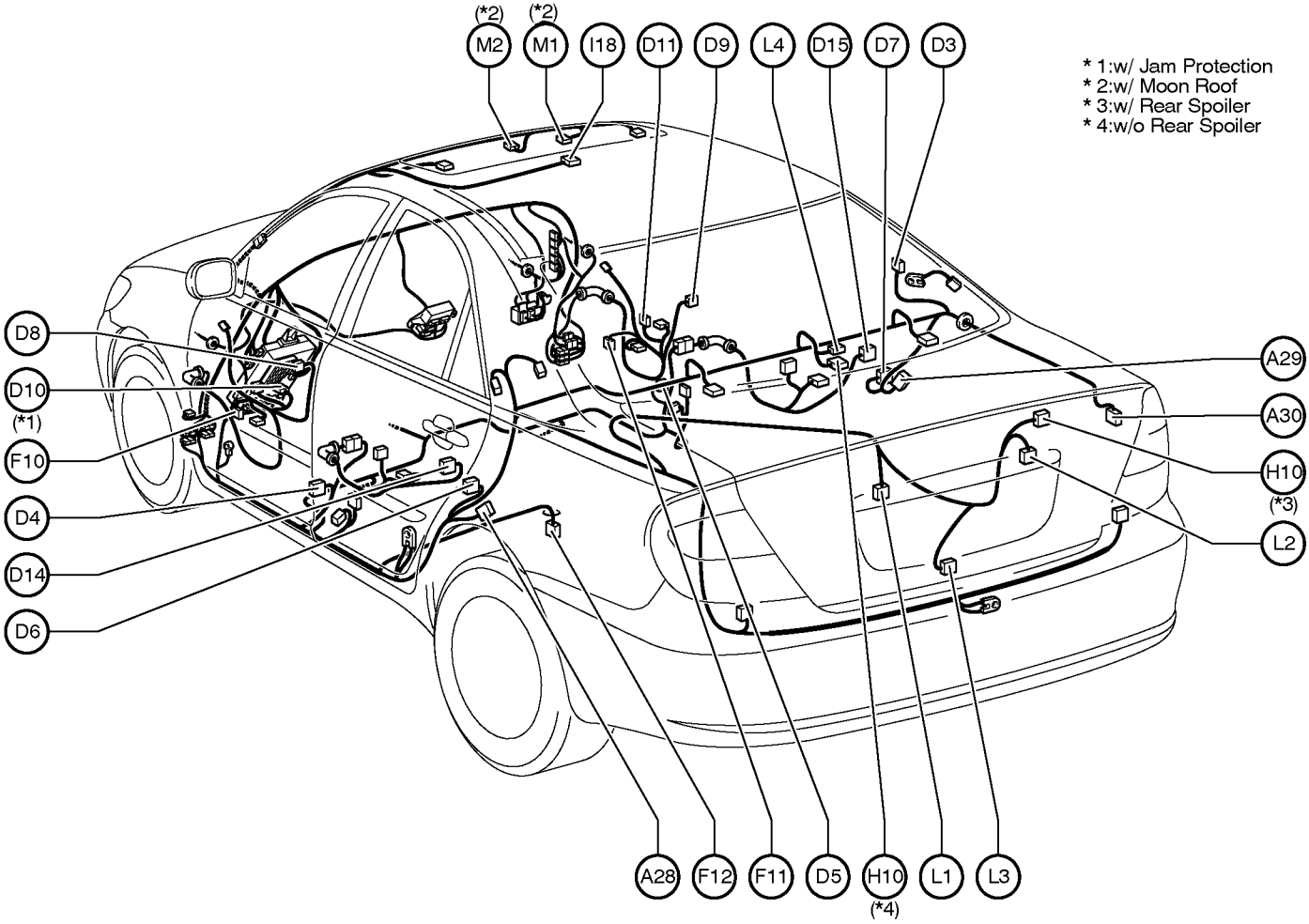
S 6 Stop Light SW

T 3 Immboiliser ECU
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]



A28 ABS Speed Sensor Rear LH
A29 ABS Speed Sensor Rear RH
A30 Auto Antenna Control Relay

D 3 Remote Key Entry
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
D11 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

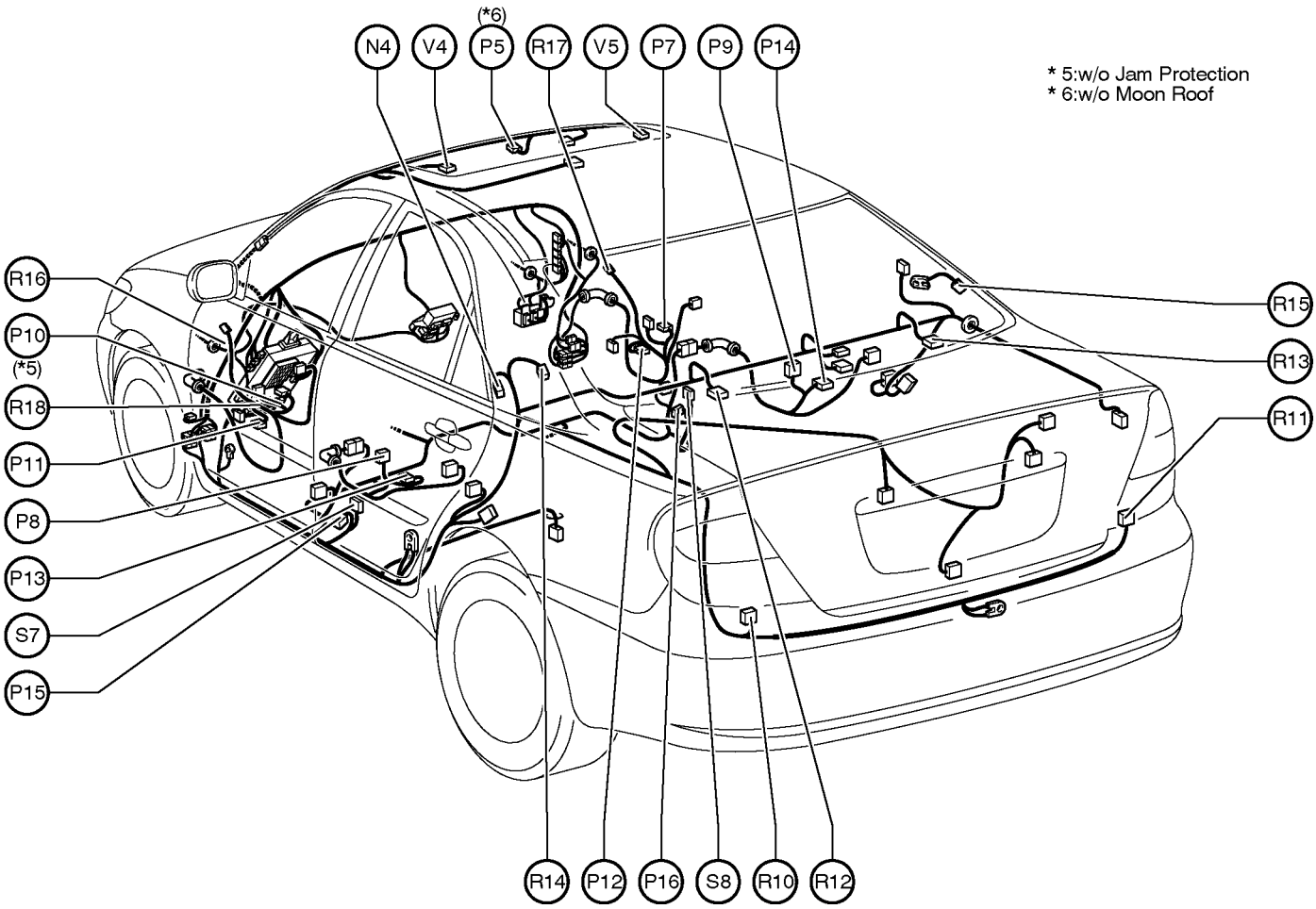
I 18 Interior Light

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
P10 Power Window Master SW
P11 Power Window Motor Front LH
P12 Power Window Motor Front RH
P13 Power Window Motor Rear LH
P14 Power Window Motor Rear RH
P15 Pretensioner LH
P16 Pretensioner RH

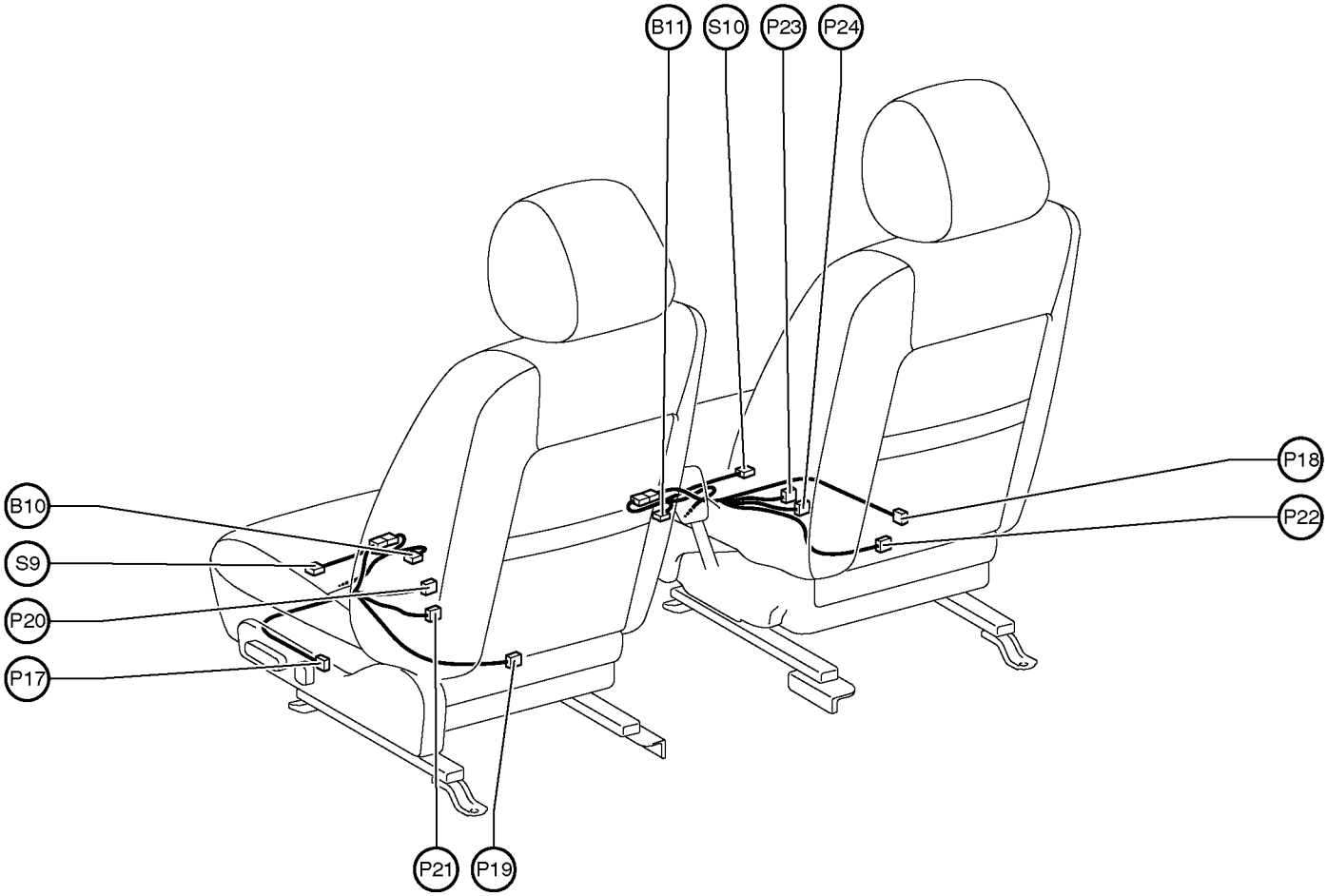
R10 Rear Combination Light LH
R11 Rear Combination Light RH
R12 Rear Speaker LH
R13 Rear Speaker RH
R14 Rear Window Defogger
R15 Rear Window Defogger
R16 Remote Control Mirror LH
R17 Remote Control Mirror RH
R18 Remote Control Mirror SW

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]



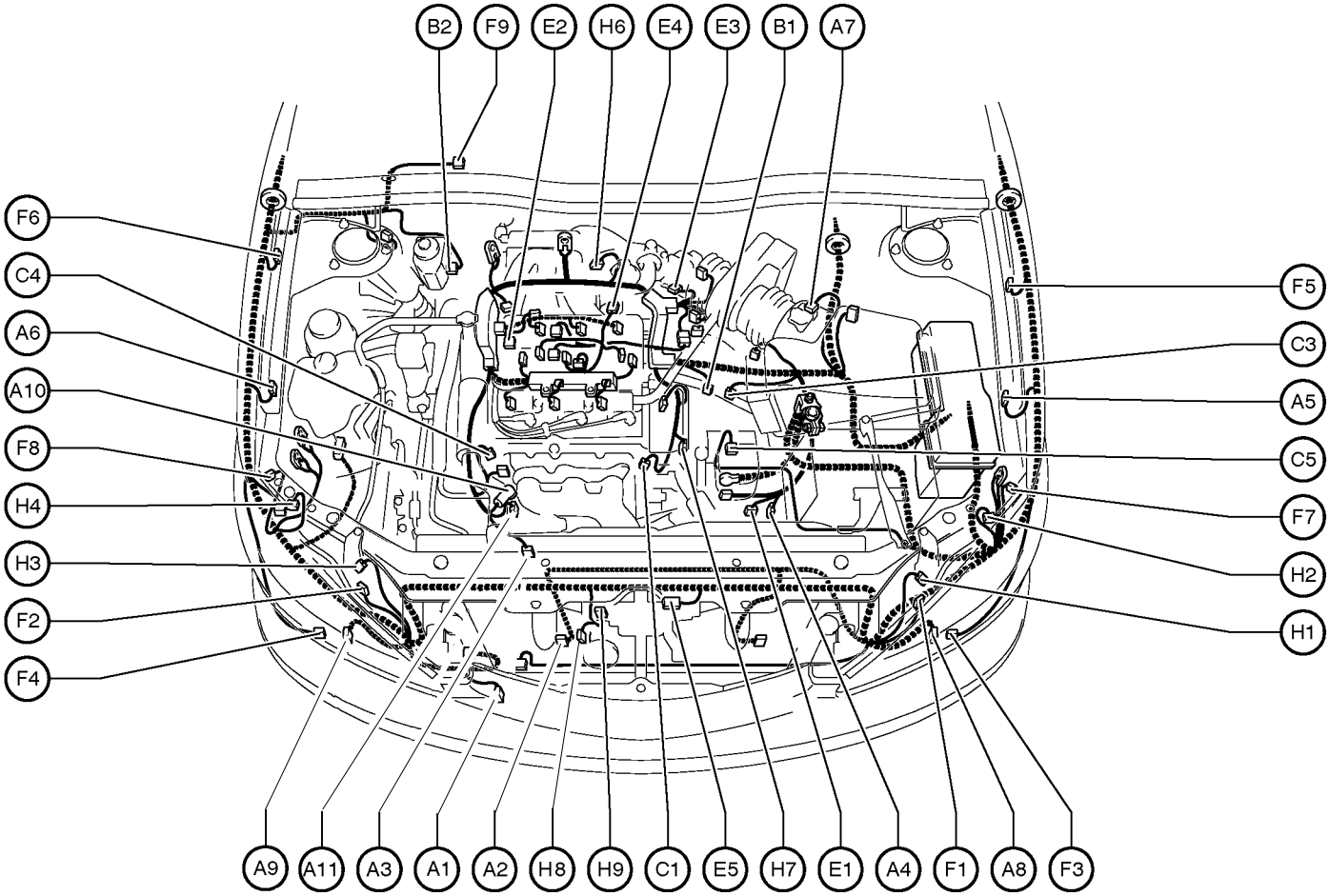
B10 Buckle SW LH
B11 Buckle SW RH
Occupant Detection Sensor

S 9 Side Airbag Squib LH
S10 Side Airbag Squib RH

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)

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 (Auto Transmission)
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 (Manual Transmission)
B 2 Brake Fluid Level Warning SW

C 1 Camshaft Position Sensor
C 3 ECT
C 4 Crankshaft Position Sensor
C 5 Cruise Control Actuator

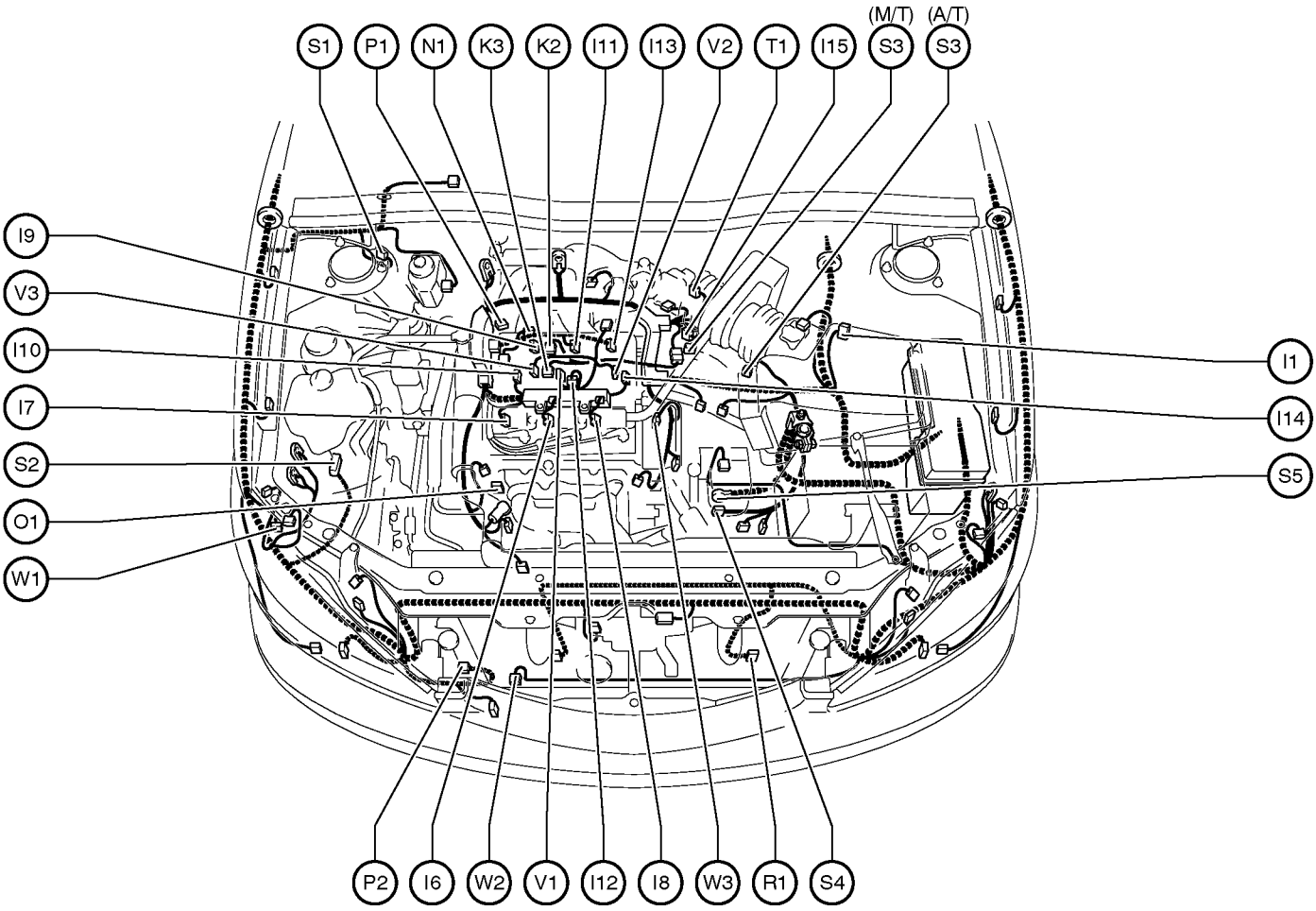
E 1 ECT Solenoids
E 2 EFI Water Temp. Sensor
E 3 EGR Gas Temp. Sensor
E 4 EGR Valve Position Sensor
E 5 Engine Hood Courtesy SW

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 8 Horn (High)(South Africa Only)
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 ABS Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

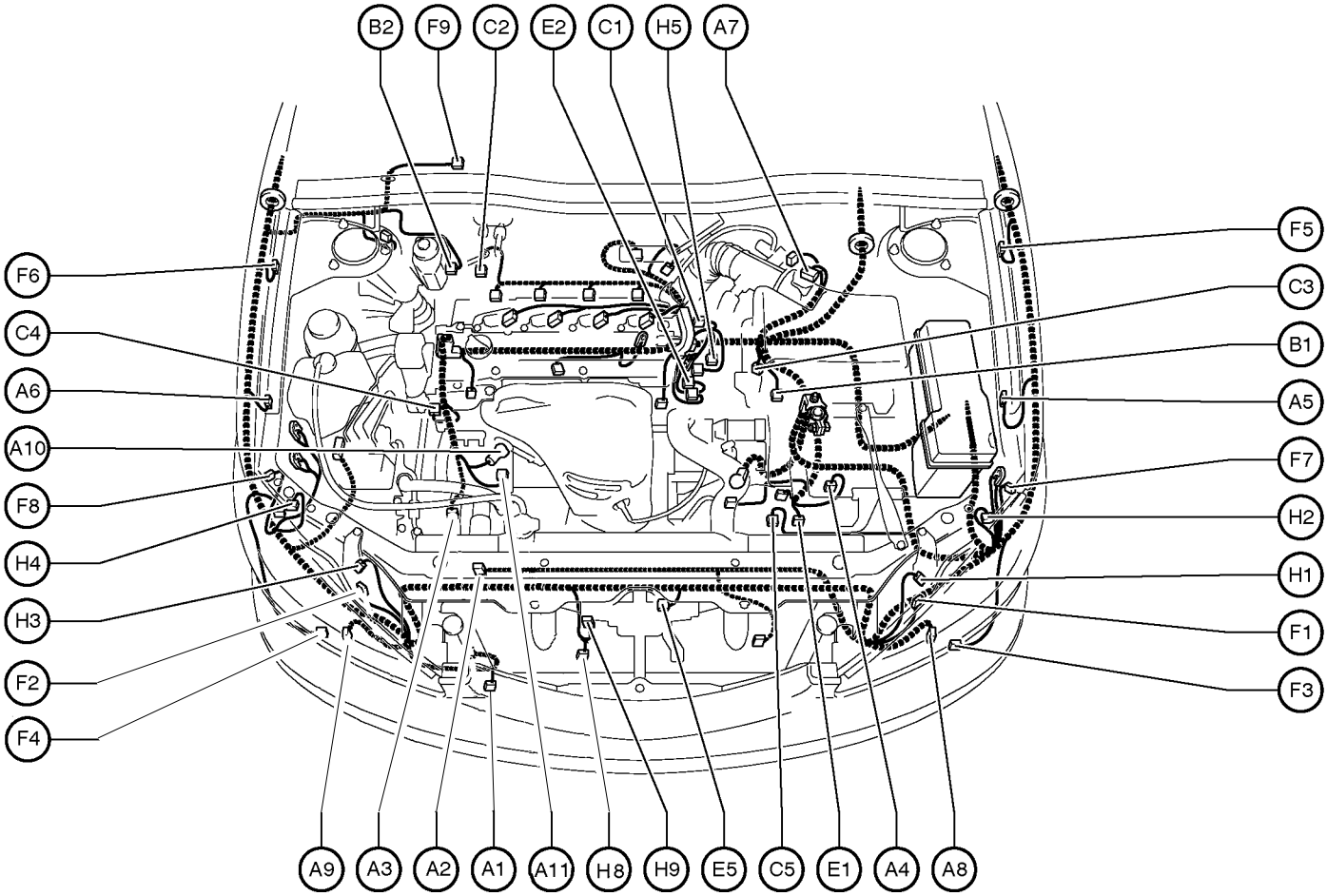
T 1 Throttle Position Sensor

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 (Auto Transmission)
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 (Manual Transmission)
B 2 Brake Fluid Level Warning SW

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

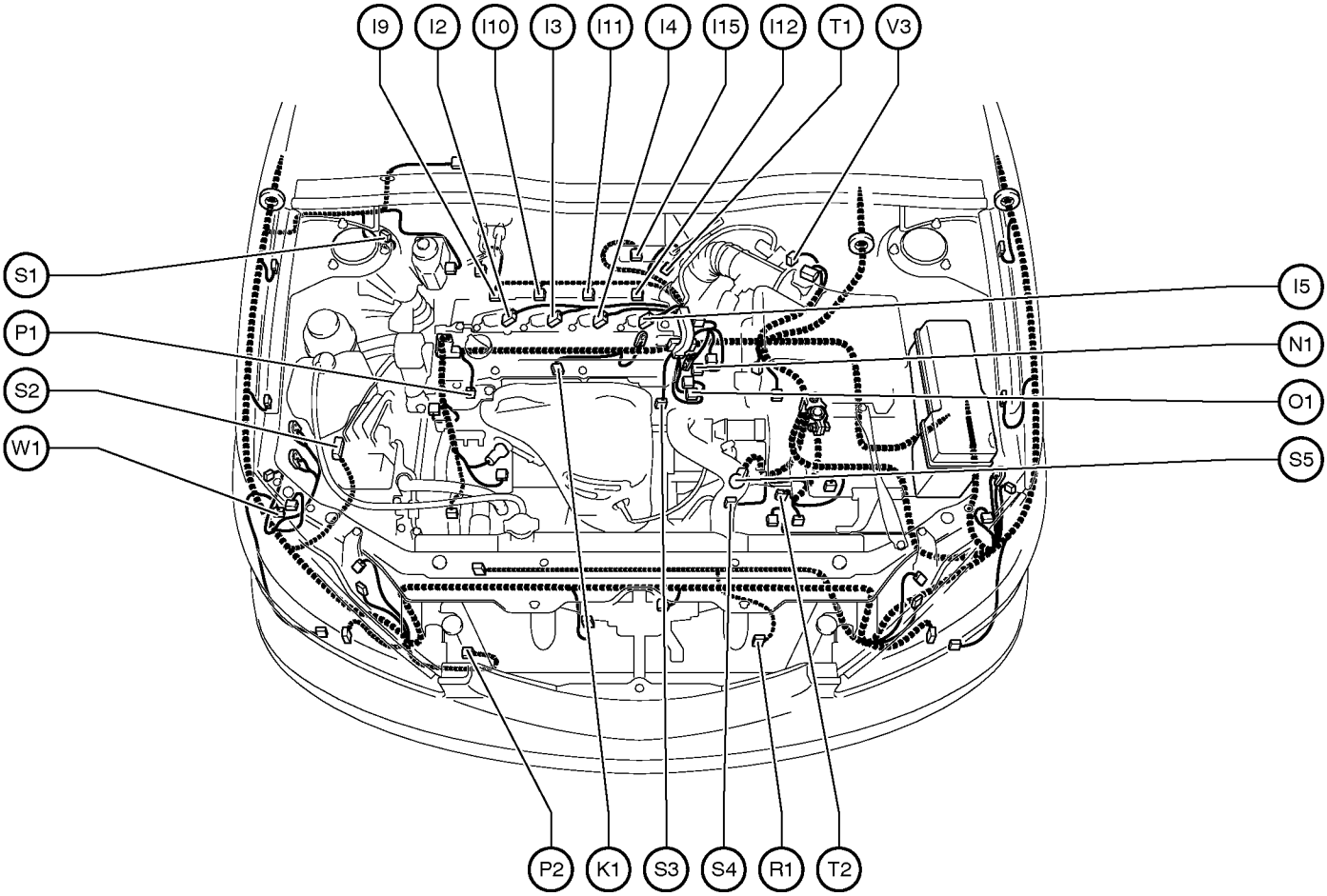
E 1 ECT Solenoids
E 2 EFI Water Temp. Sensor
E 5 Engine Hood Courtesy SW

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 8 Horn (High) (South Africa)
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 Control 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 ABS Control ECU with Actuator
S 3 Speed Sensor (Combination Meter)
S 4 Starter
S 5 Starter

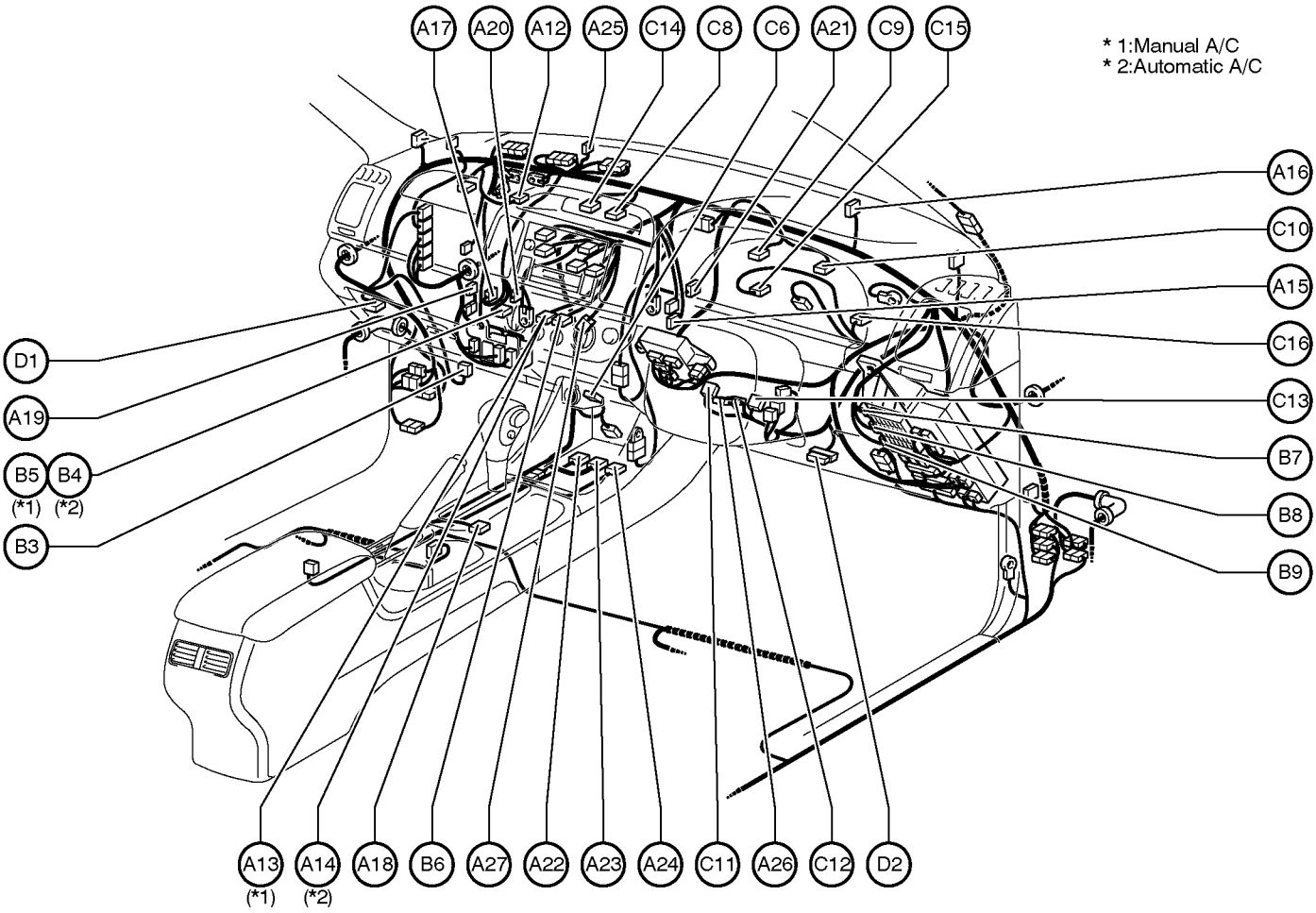
T 1 Throttle Position Sensor
T 2 ECT

V 3 VSV (EVAP)

W 1 Washer Motor

Position of Parts in Instrument Panel

[RHD]



A12 A/C Amplifier
A13 A/C Control Assembly
A14 A/C Control Assembly
A15 A/C Room Temp. Sensor
A16 A/C Solar Sensor
A17 A/C Thermistor
A18 A/T Shift Lever Illumination
O/D Main SW
A19 Air Inlet Control Servo Motor
A20 Air Mix Control Servo Motor
A21 Air Vent Mode Control Servo Motor
A22 Airbag ECU
A23 Airbag ECU
A24 Airbag ECU
A25 Airbag Squib (Front Passenger Airbag Assembly)
A26 Airbag Squib (Steering Wheel Pad)
A27 Antenna Amplifier

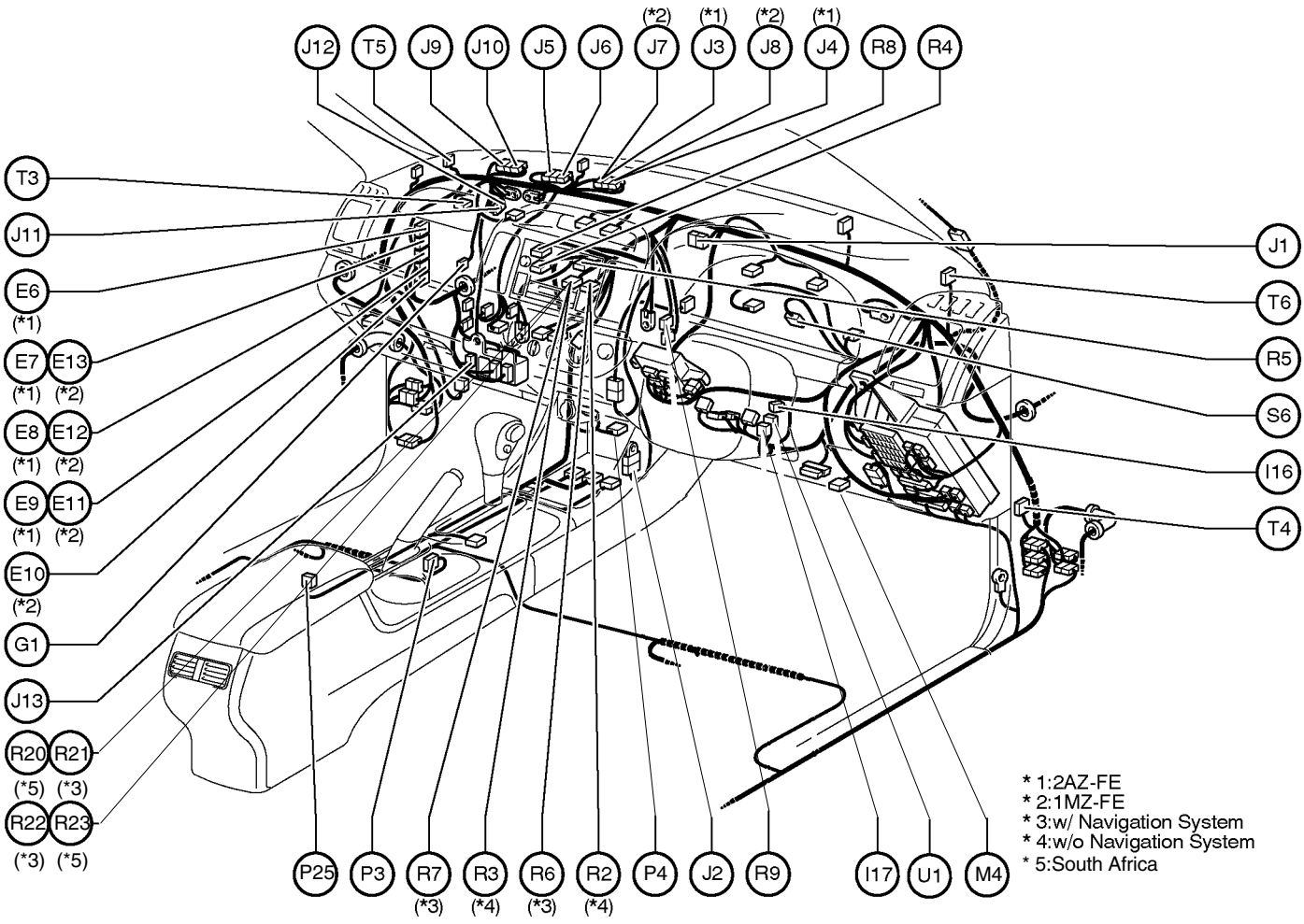
B 3 Blower Motor
B 4 Blower Motor Controller
B 5 Blower Resistor
B 6 Blower SW
B 7 Body ECU
B 8 Body ECU
B 9 Body ECU

C 6 Cigarette Light Illumination
Cigarette Lighter
C 8 Multi Function Display
C 9 Combination Meter
C10 Combination Meter
C11 Combination SW
C12 Combination SW
C13 Combination SW
C14 Monitor Drive SW
C15 Cruise Control Clutch SW
C16 Cruise Control ECU

D 1 Diode (A/C)
D 2 DLC3

Position of Parts in Instrument Panel

[RHD]



E 6 Engine ECU
E 7 Engine ECU
E 8 Engine ECU
E 9 Engine ECU
E10 Engine ECU
E11 Engine ECU
E12 Engine ECU
E13 Engine ECU

G 1 Glove Box Light and SW

I 16 Immobiliser 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
J10 Junction Connector
J11 Junction Connector
J12 Junction Connector
J13 Junction Connector

M 4 Mayday Speaker

P 3 Parking Brake SW
P 4 Power Outlet (FRT)
P25 Power Outlet (RR)

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
R20 Radio and Player (South Africa)
R21 Radio and Player with Display
R22 Radio and Player with Display
R23 Radio and Player (South Africa)

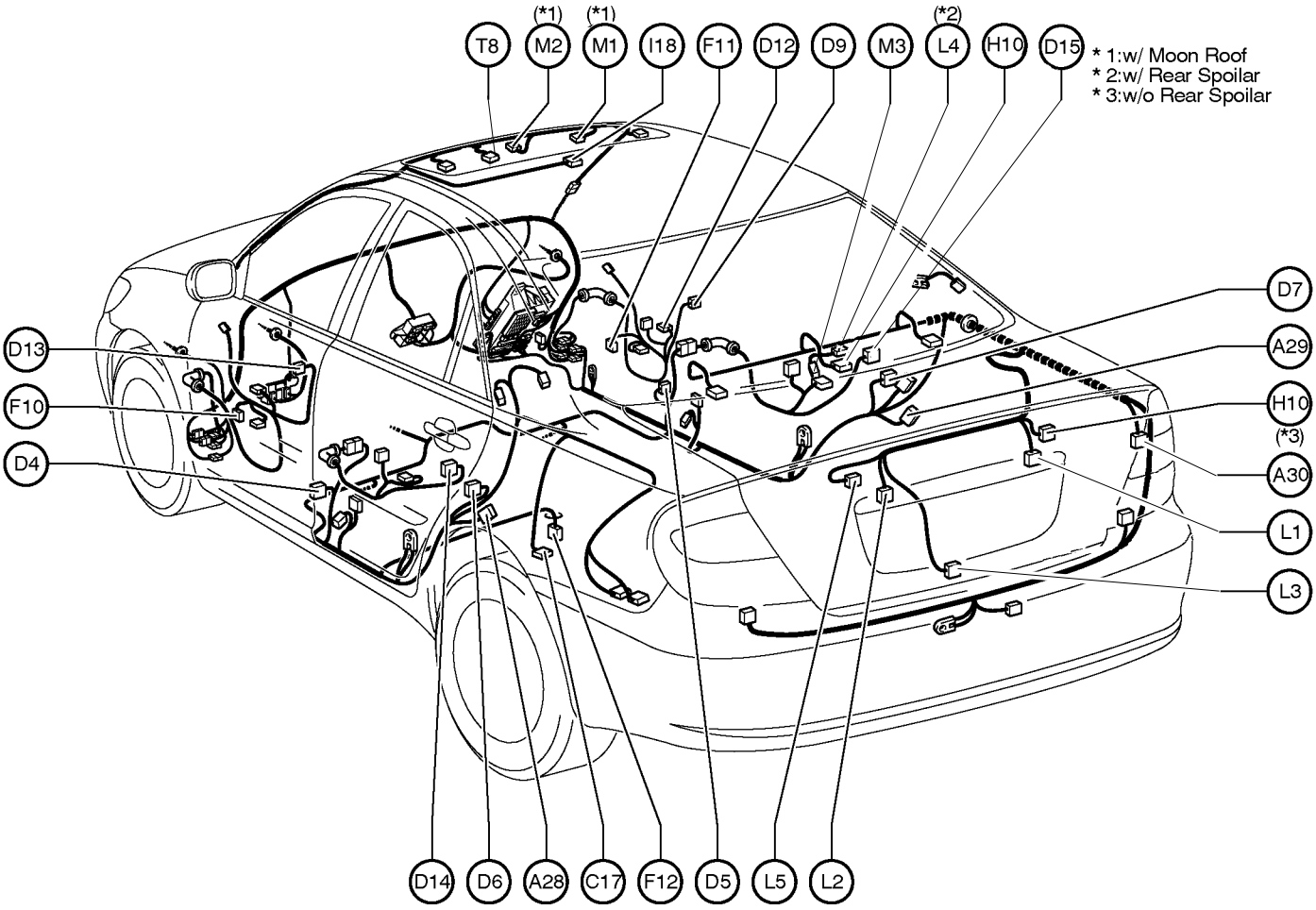
S 6 Stop Light SW

T 3 Immobiliser ECU
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]



A28 ABS Speed Sensor Rear LH
A29 ABS Speed Sensor Rear RH
A30 Auto Antenna Relay (South Africa)

C17 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

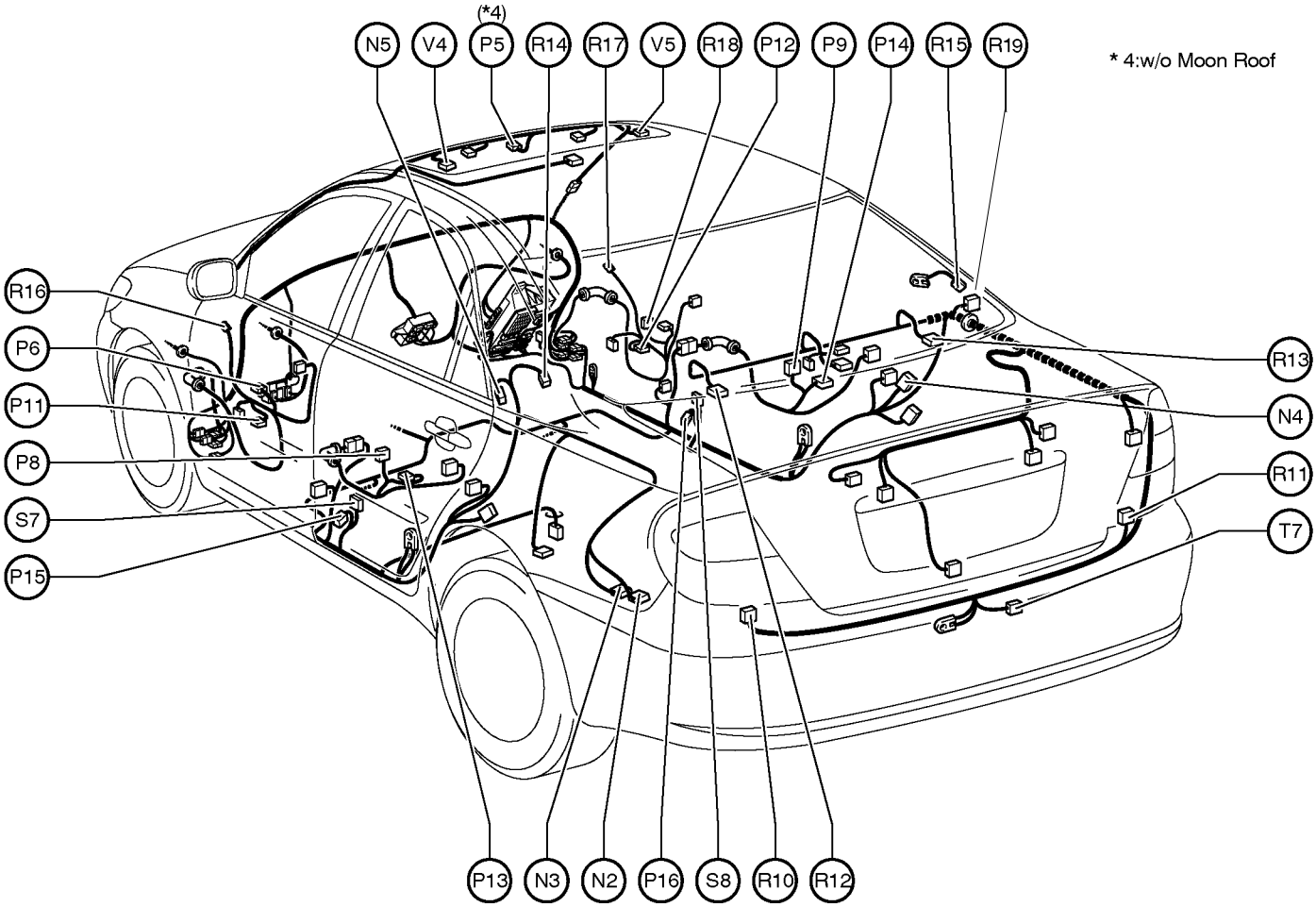
L 1 License Plate Light LH
L 2 License Plate Light RH
L 3 Luggage Compartment Door Opener Motor
Luggage Compartment Light SW
L 4 Luggage Compartment Light
L 5 Luggage Compartment Door Key Unlock SW

M 1 Moon Roof Control ECU and Motor
M 2 Moon Roof Control SW
Personal Light
M 3 Mayday ECU

T 8 Toyota Link Mirror

Position of Parts in Body

[RHD]



N 2 Navigation ECU
N 3 Navigation ECU
N 4 Noise Filter (Luggage Compartment)
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
R 19 Remote Key Entry (RSA)

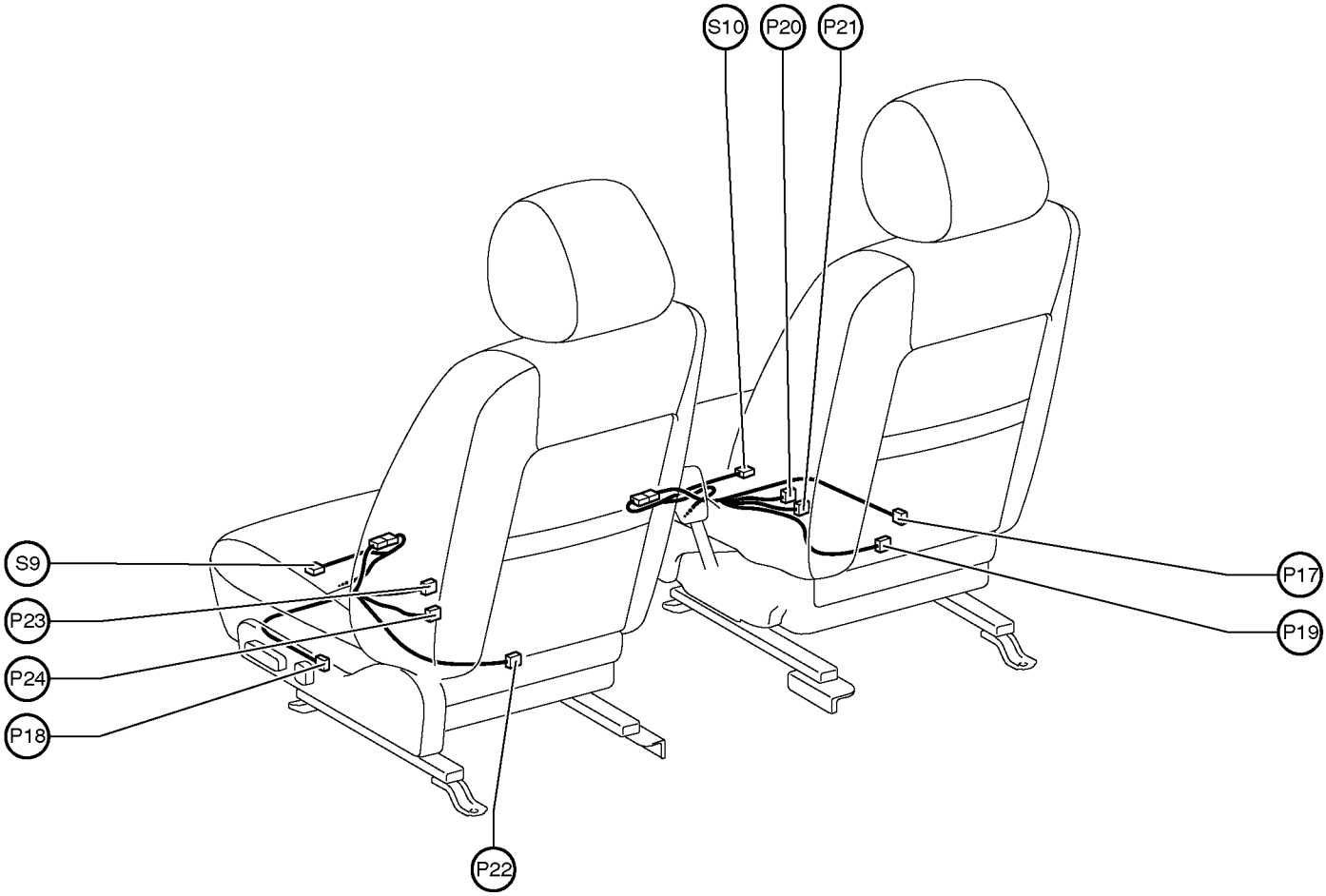
S 7 Side Airbag Sensor LH
S 8 Side Airbag Sensor RH

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)

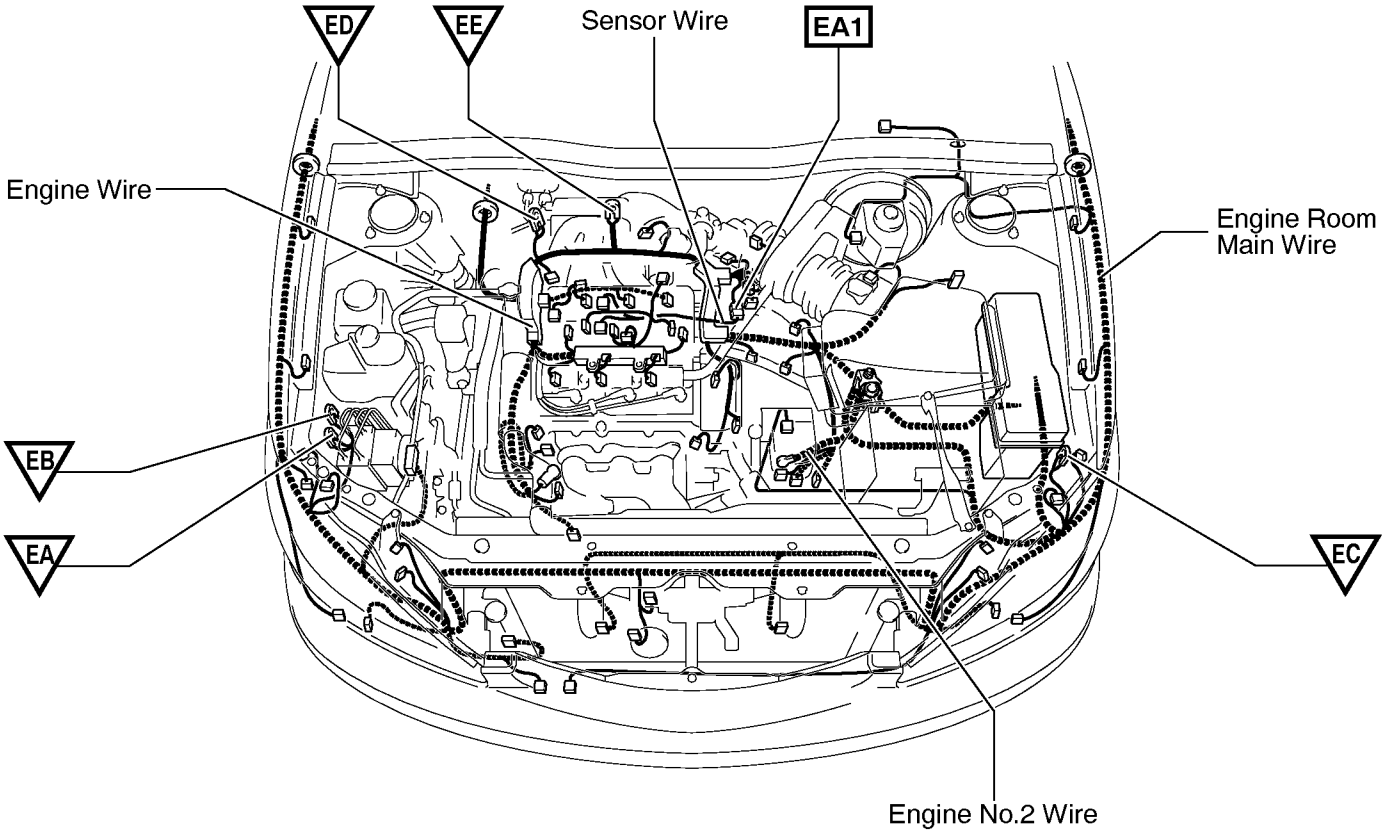
S 9 Side Airbag Squib LH
S10 Side Airbag Squib RH

Position of Parts in Engine Compartment

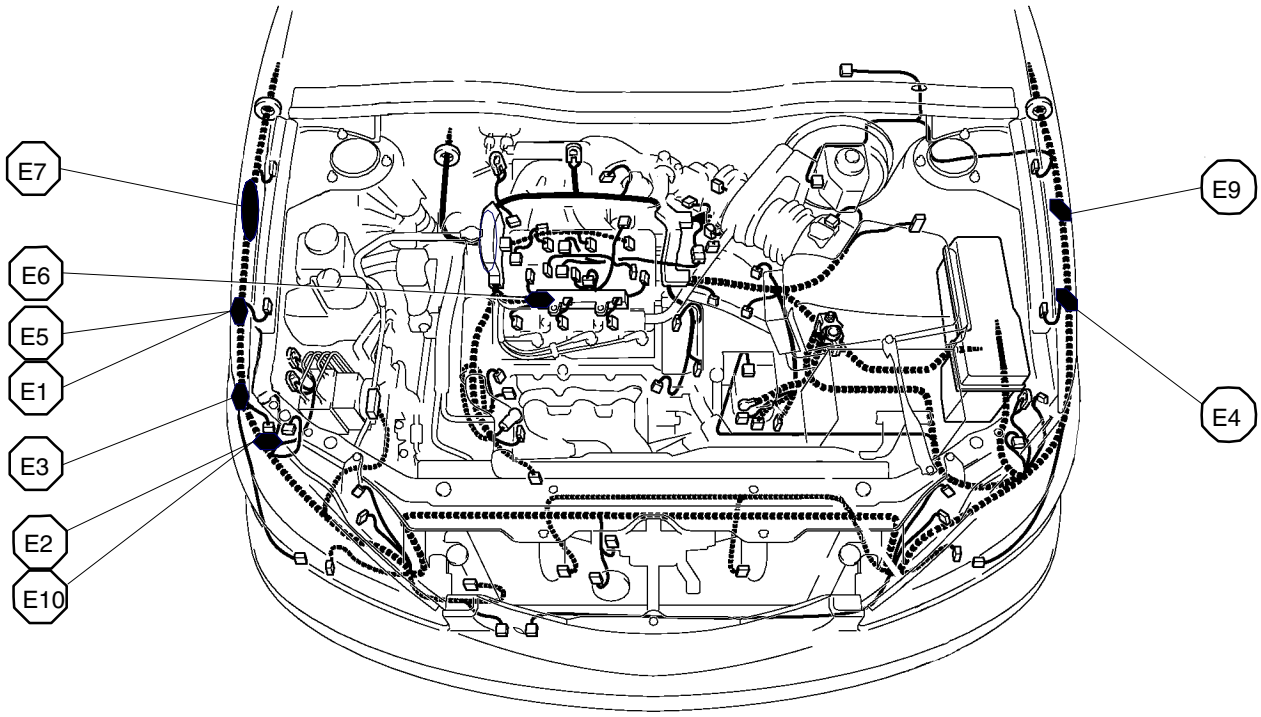
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

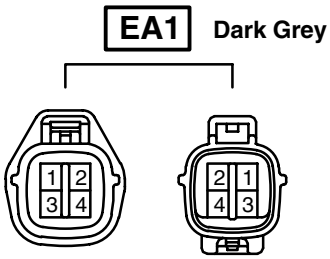
[LHD : 1MZ-FE]



⬡ : Location of Splice Points



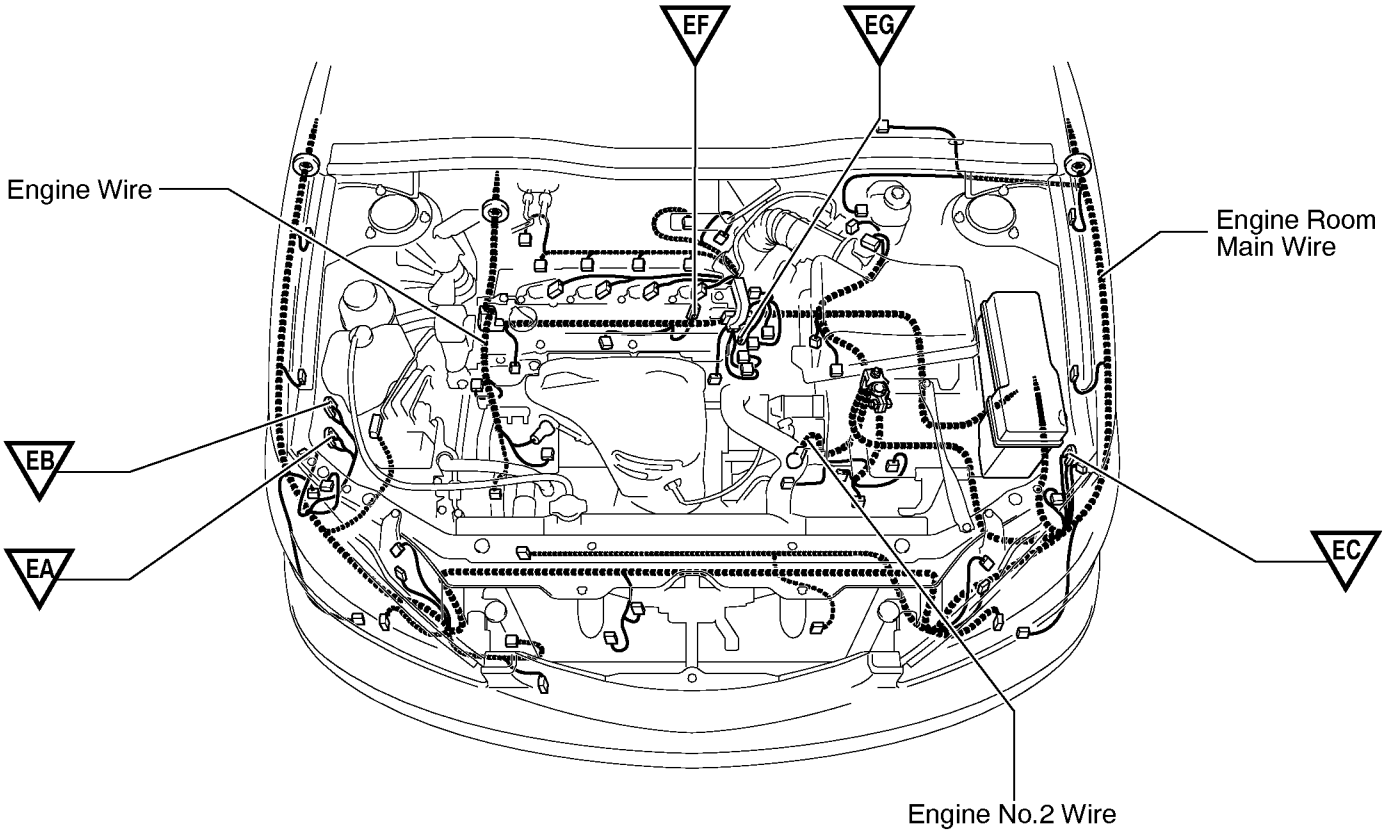
Connector Joining Wire Harness and Wire Harness



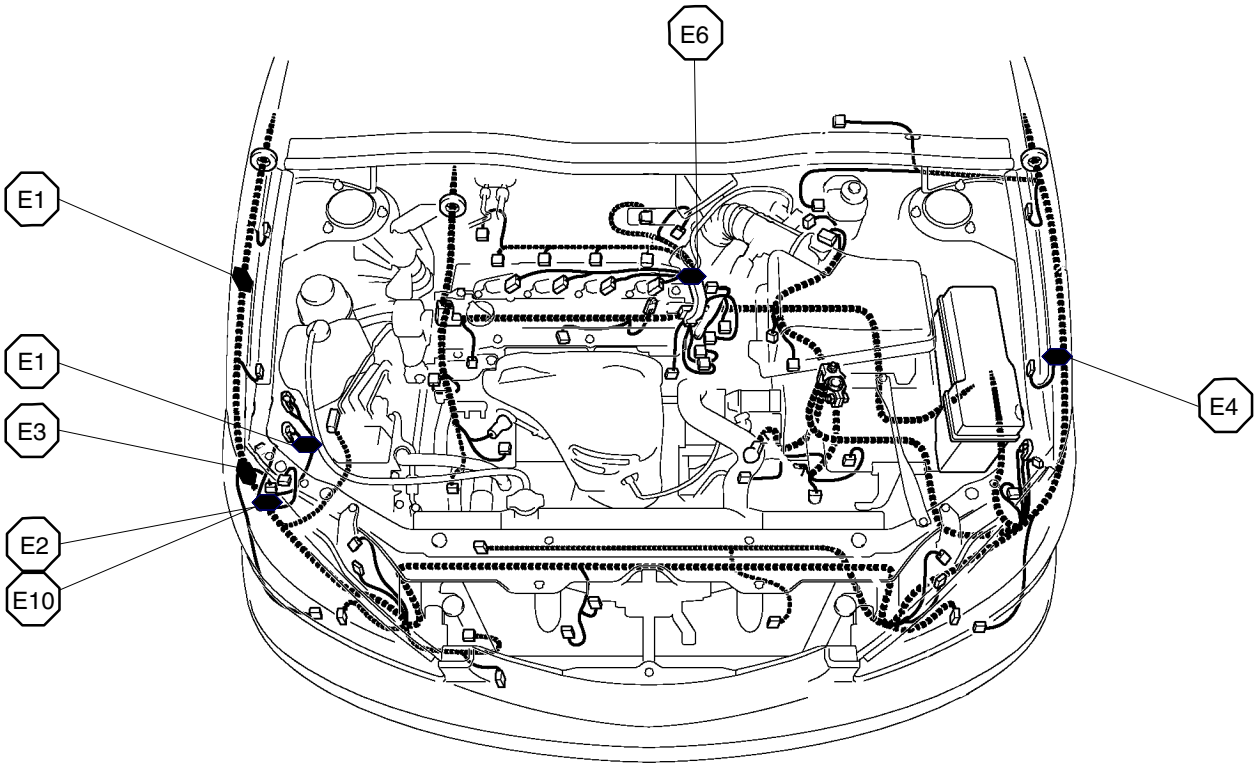
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Sensor Wire

▽ : Location of Ground Points

[LHD : 2AZ-FE]

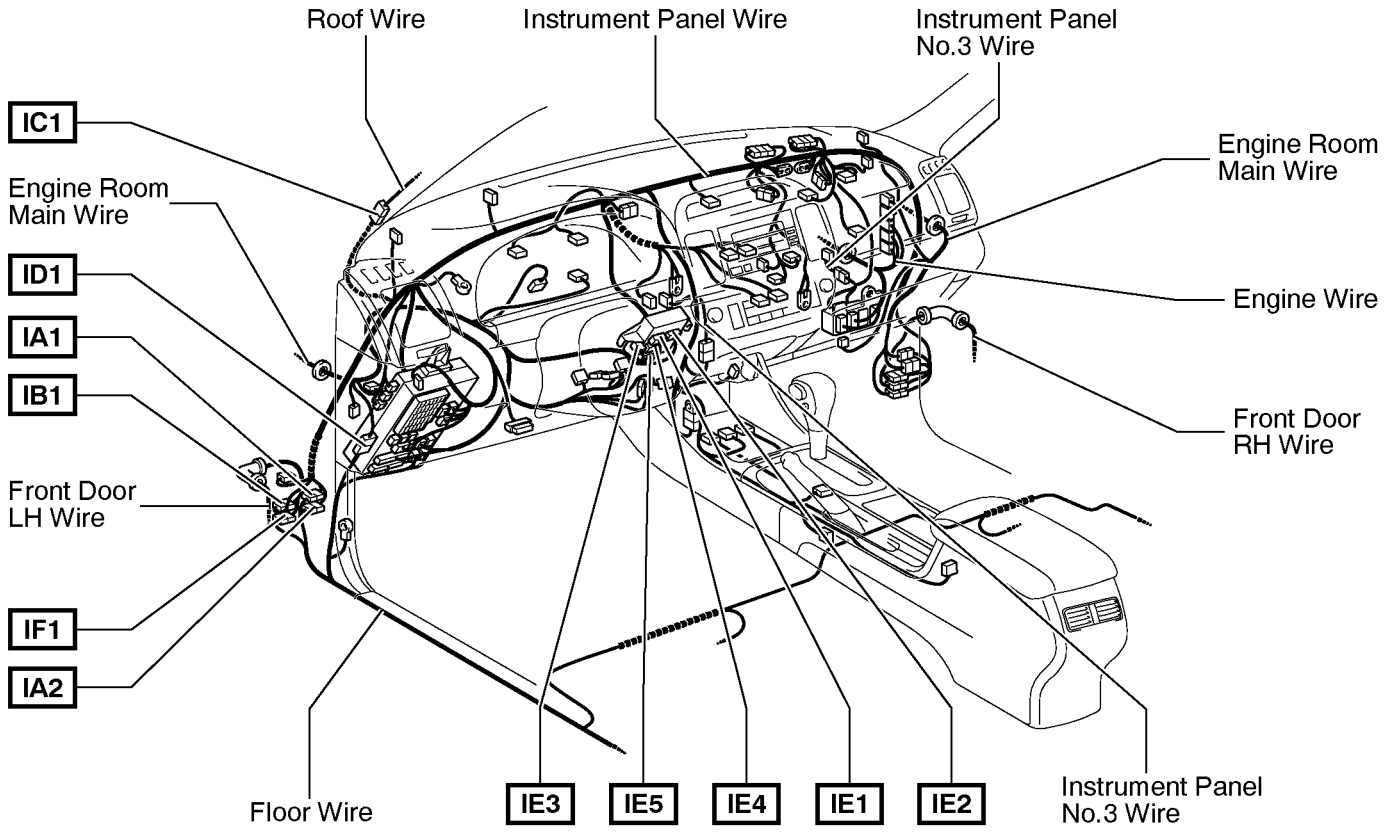


○ : Location of Splice Points

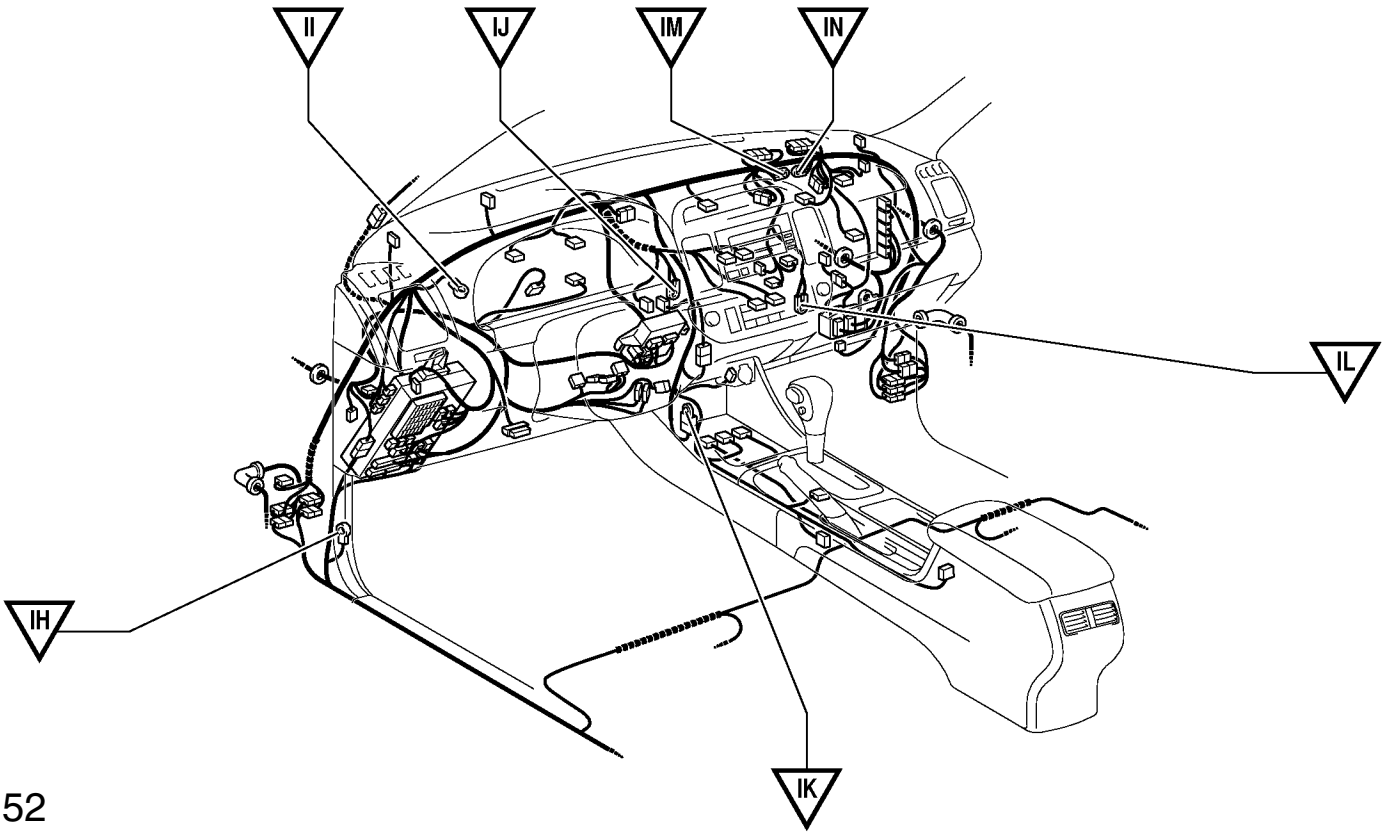


▭ : Location of Connector Joining Wire Harness and Wire Harness

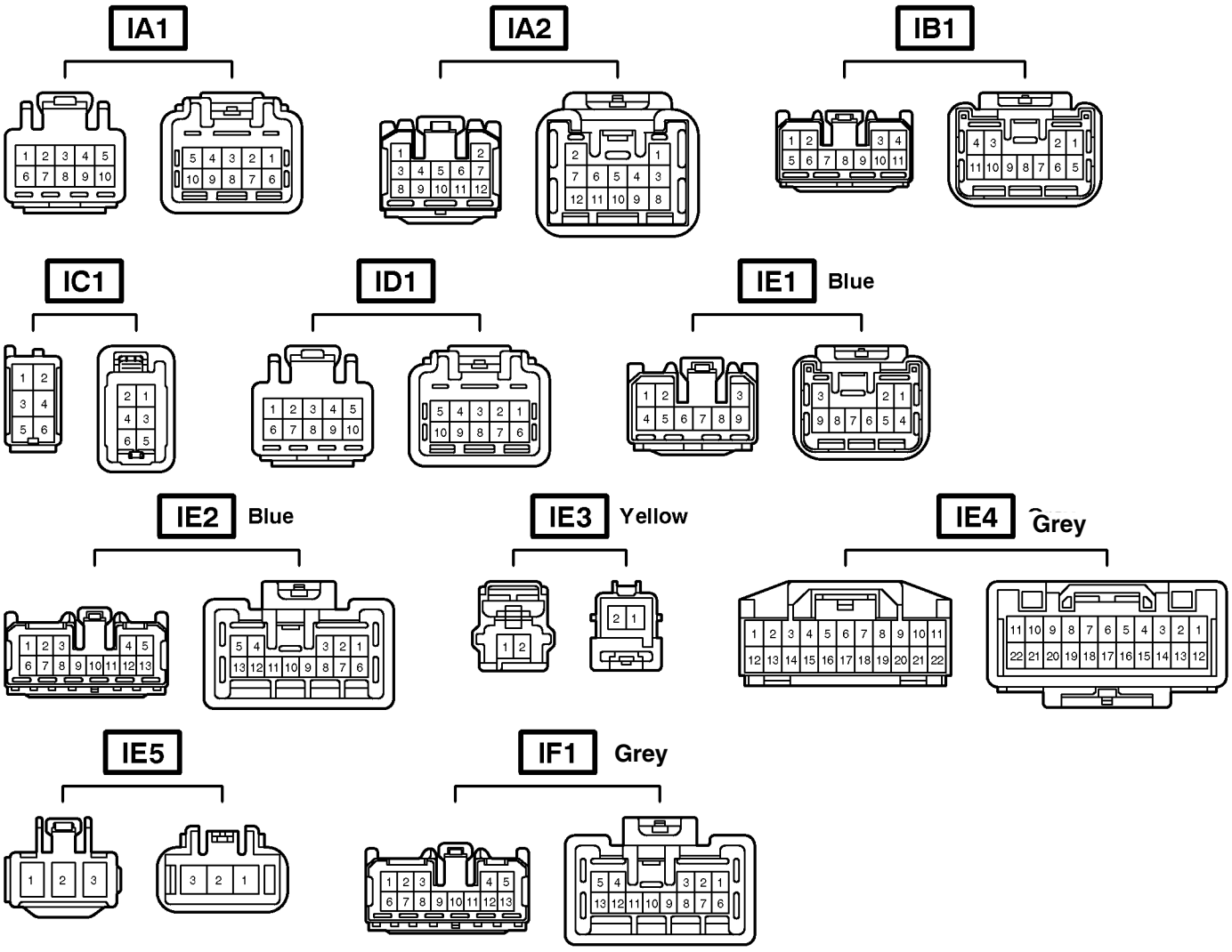
[LHD]



▽ : Location of Ground Points



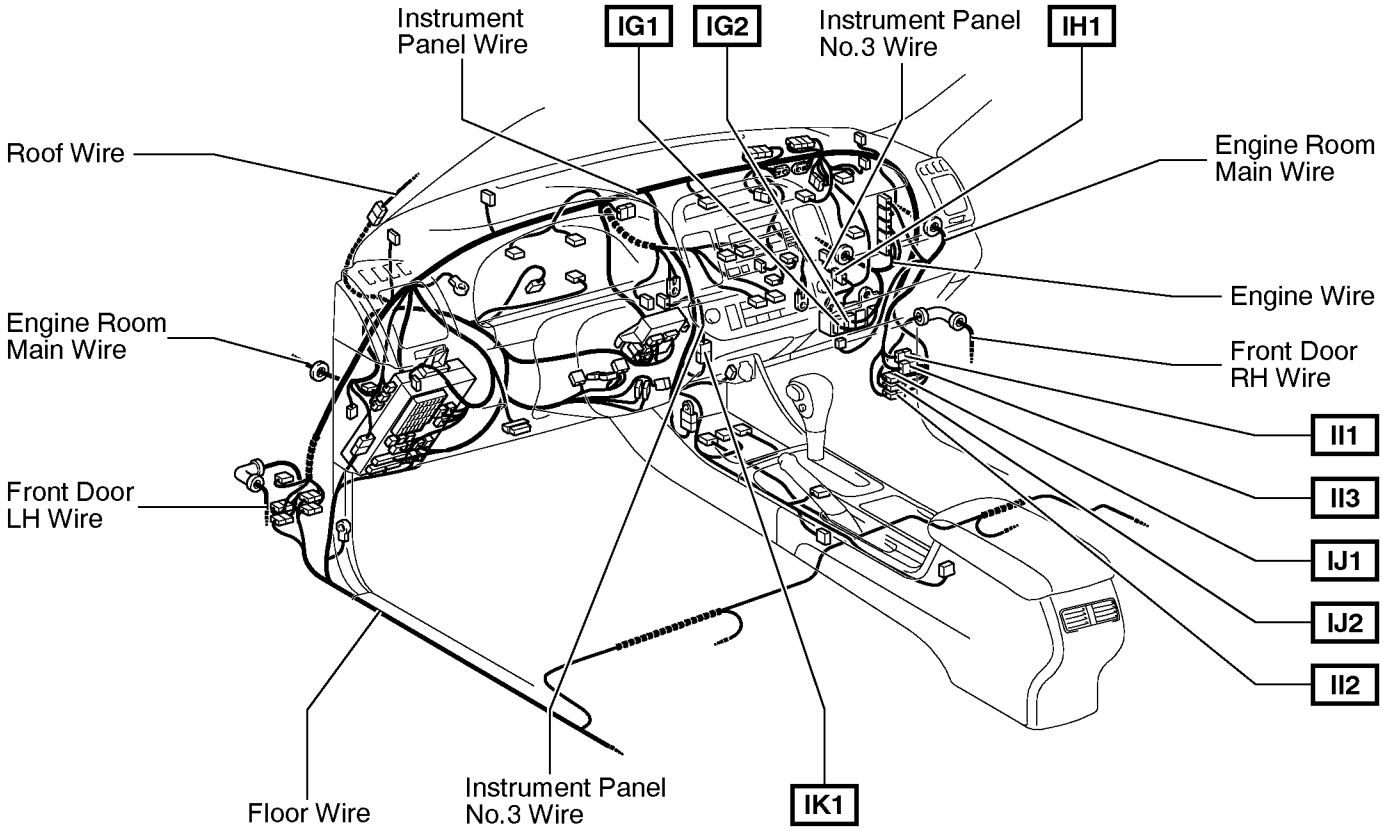
Connector Joining Wire Harness and Wire Harness



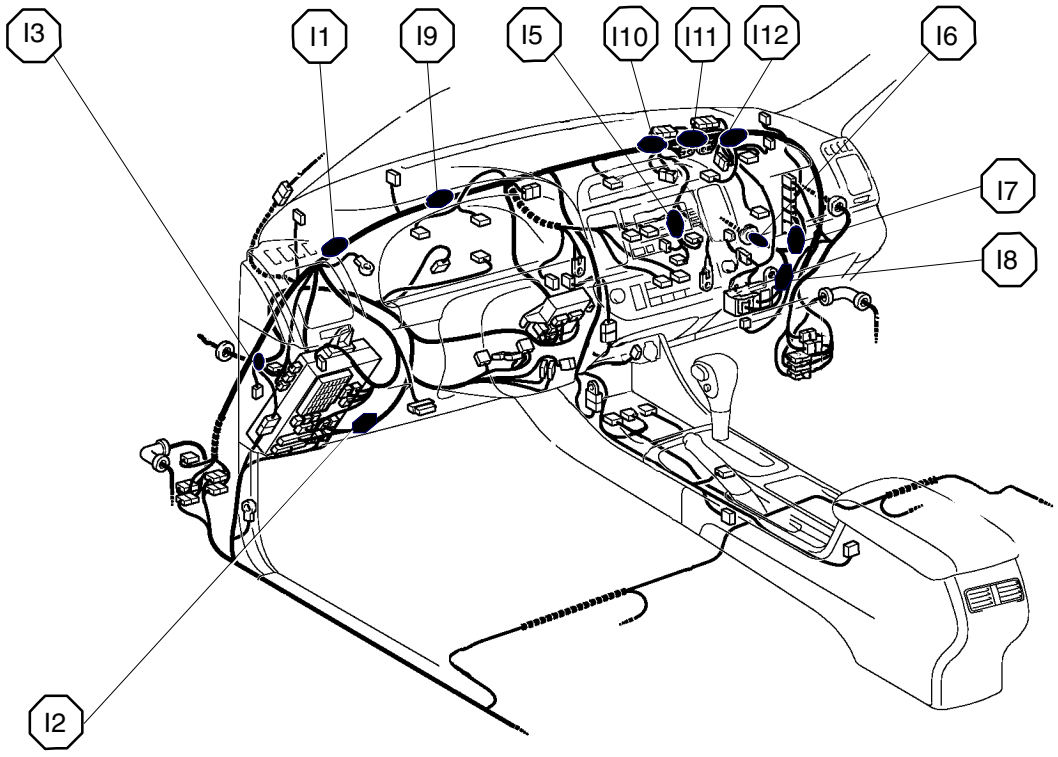
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IA2	
IB1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
ID1	Engine Room Main Wire and Floor 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

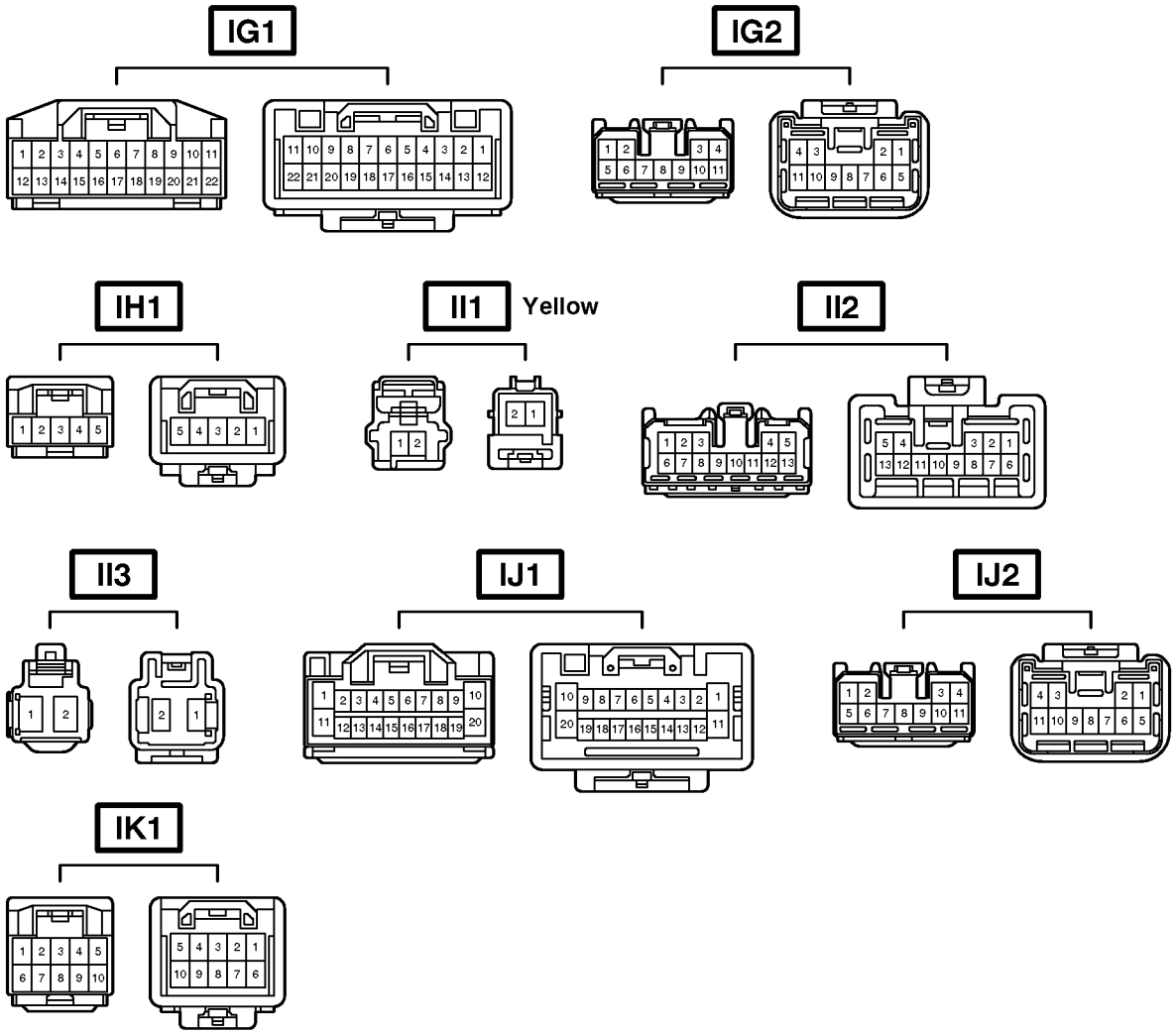
[LHD]



⬡ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

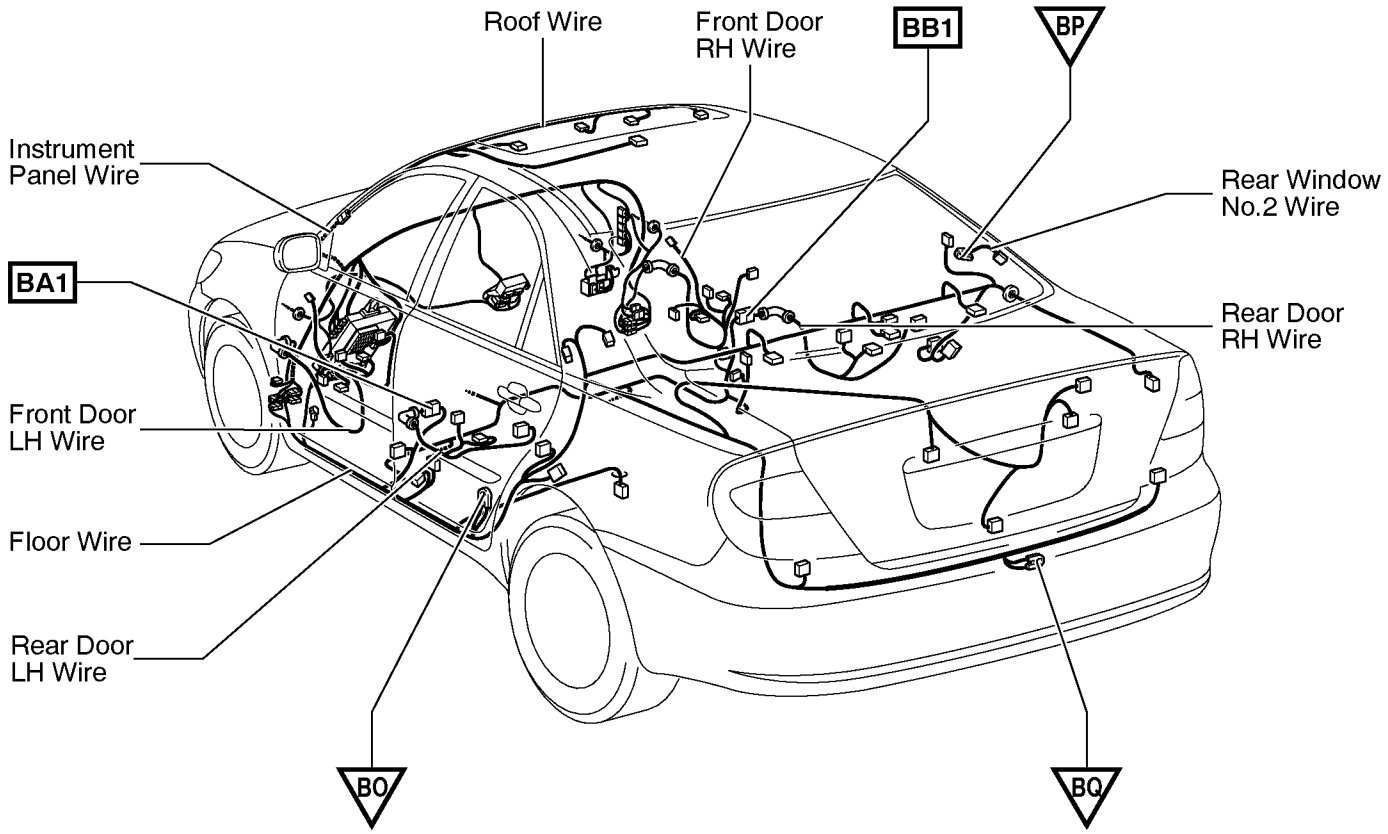


Code	Joining Wire Harness and Wire Harness (Connector Location)
IG1	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	
IH1	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II1	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
II2	
II3	
IJ1	Front Door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

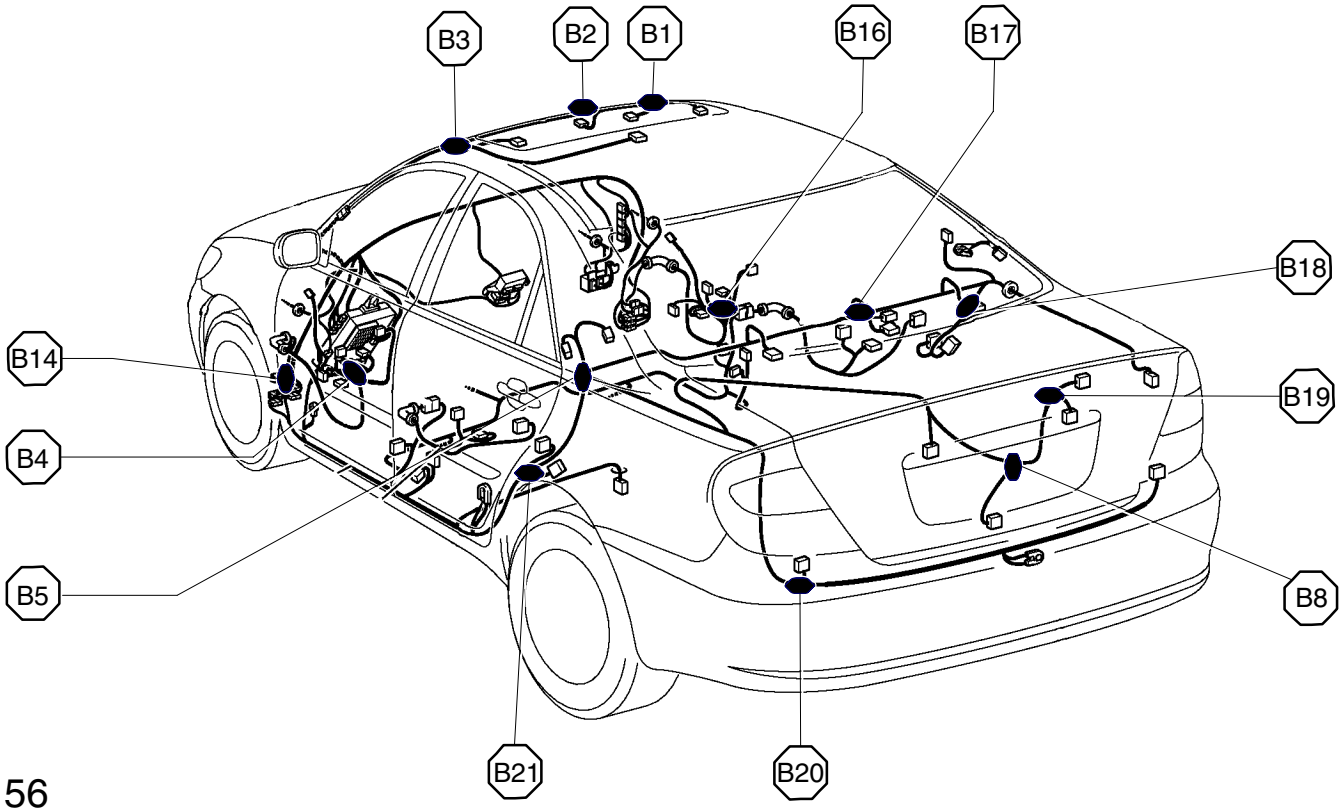
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

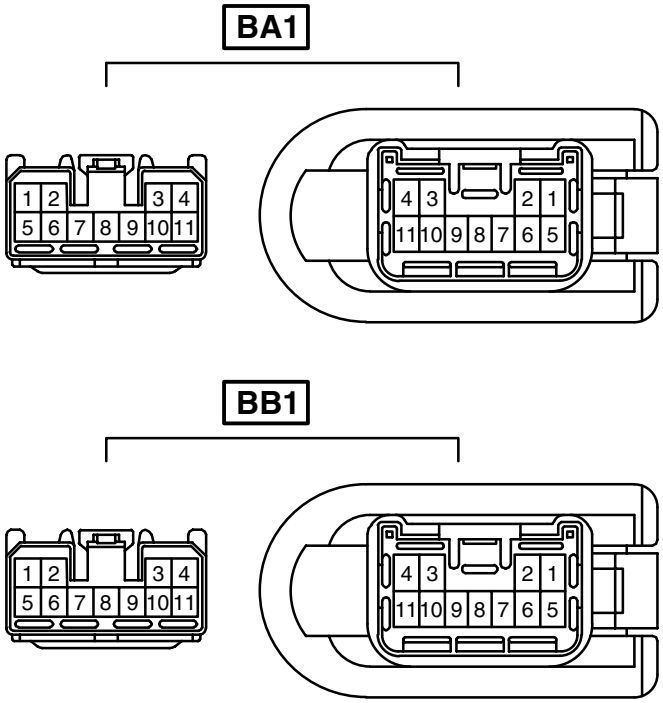
[LHD]



⬡ : Location of Splice Points



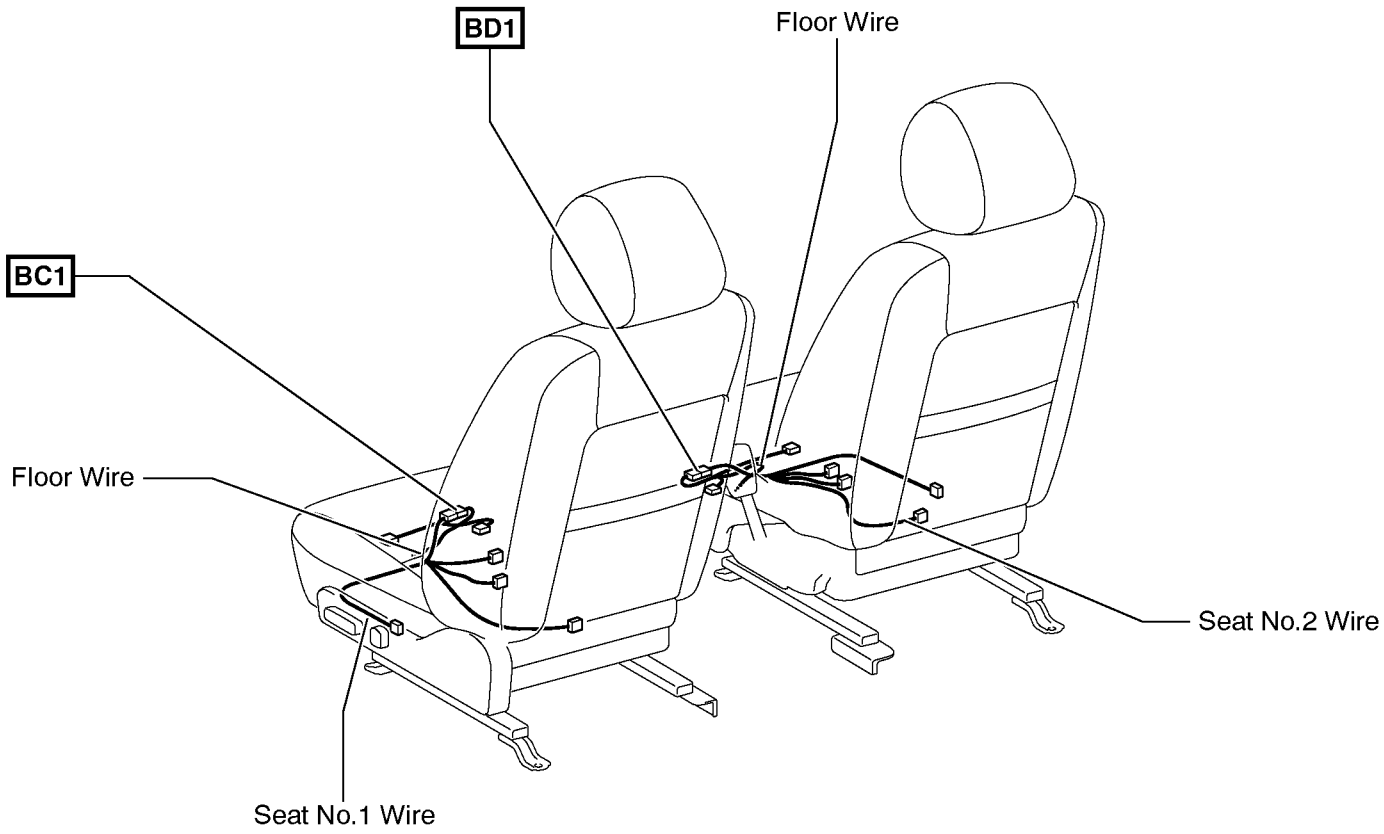
Connector Joining Wire Harness and Wire Harness



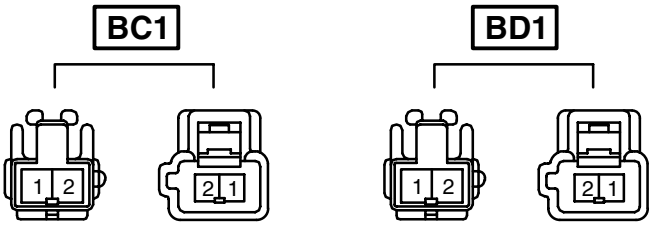
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
BB1	Rear Door RH Wire and Floor Wire (Right Centre Pillar)

▭ : Location of Connector Joining Wire Harness and Wire Harness

[LHD]



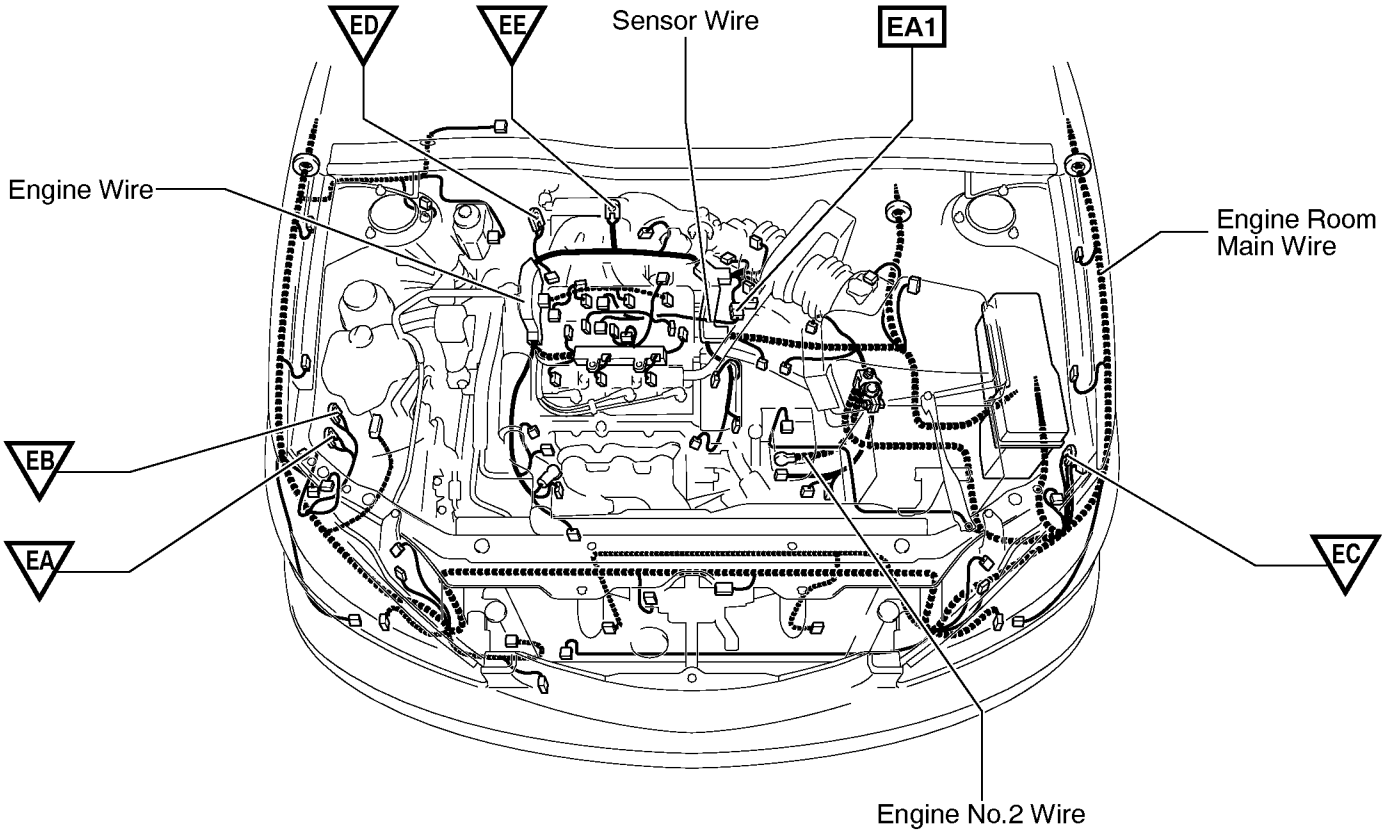
Connector Joining Wire Harness and Wire Harness



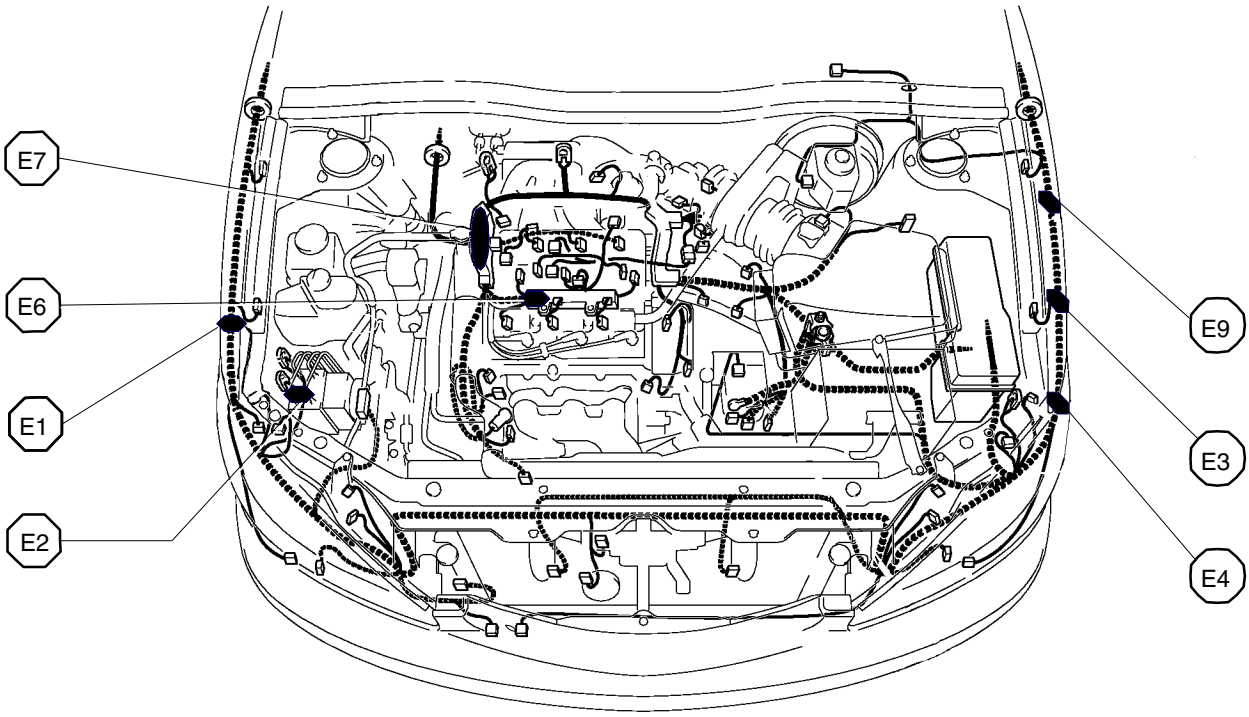
Code	Joining Wire Harness and Wire Harness (Connector Location)
BC1	Floor Wire and Seat No.1 Wire (Under the Driver's Seat)
BD1	Floor Wire and Seat No.2 Wire (Under the Front Passenger's Seat)

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

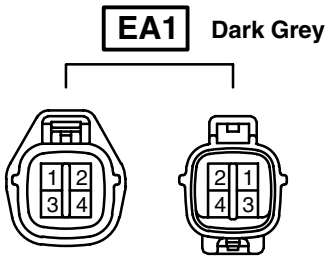
[RHD : 1MZ-FE]



: Location of Splice Points



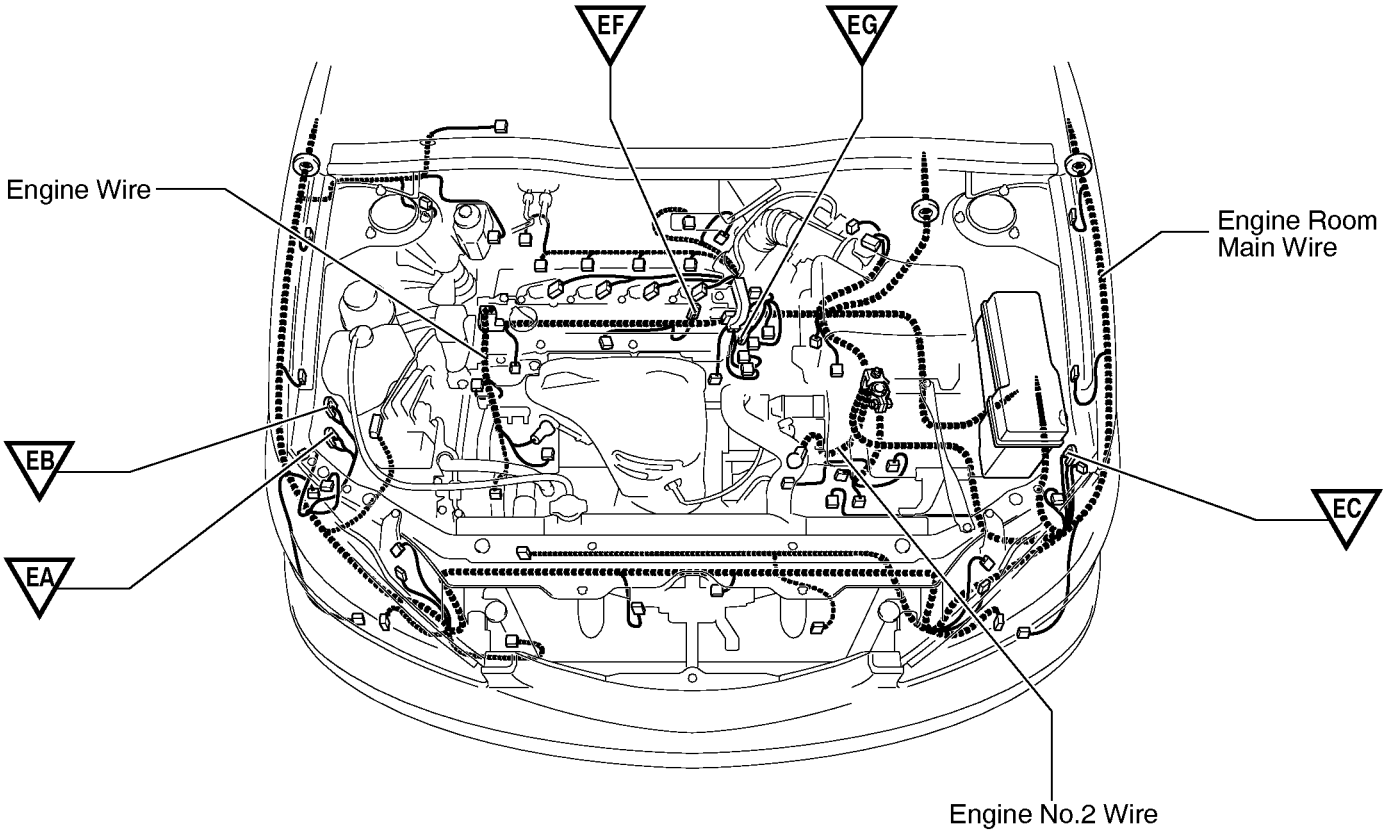
Connector Joining Wire Harness and Wire Harness



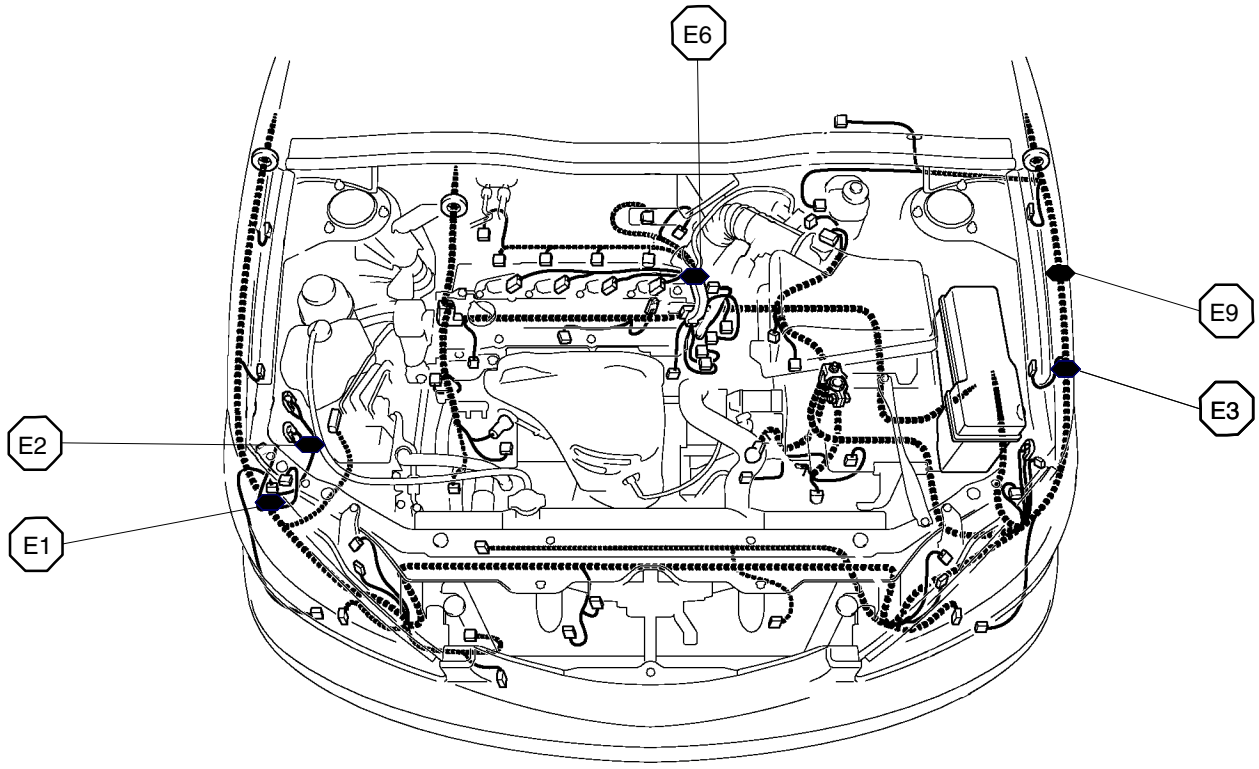
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Sensor Wire

▽ : Location of Ground Points

[RHD : 2AZ-FE]

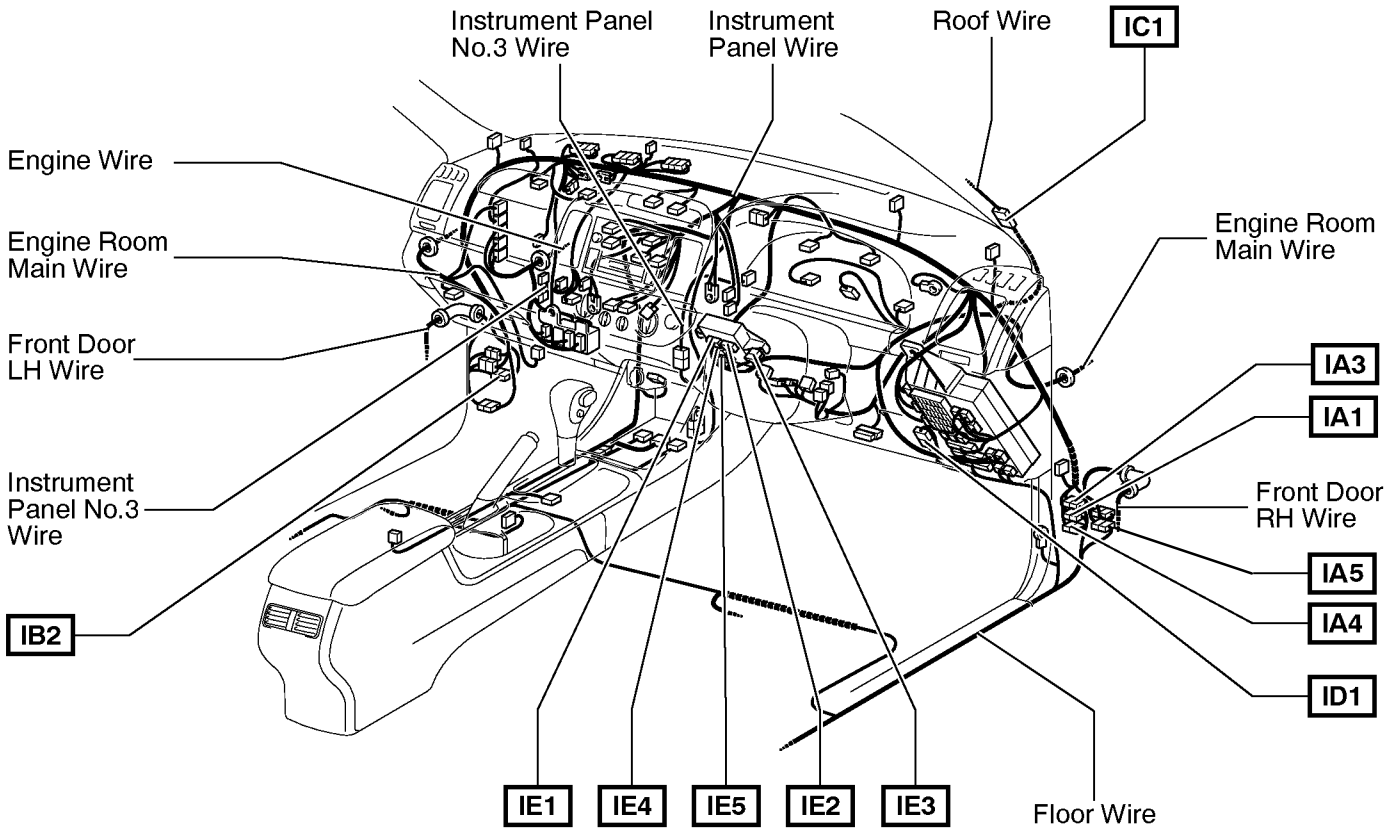


⬡ : Location of Splice Points

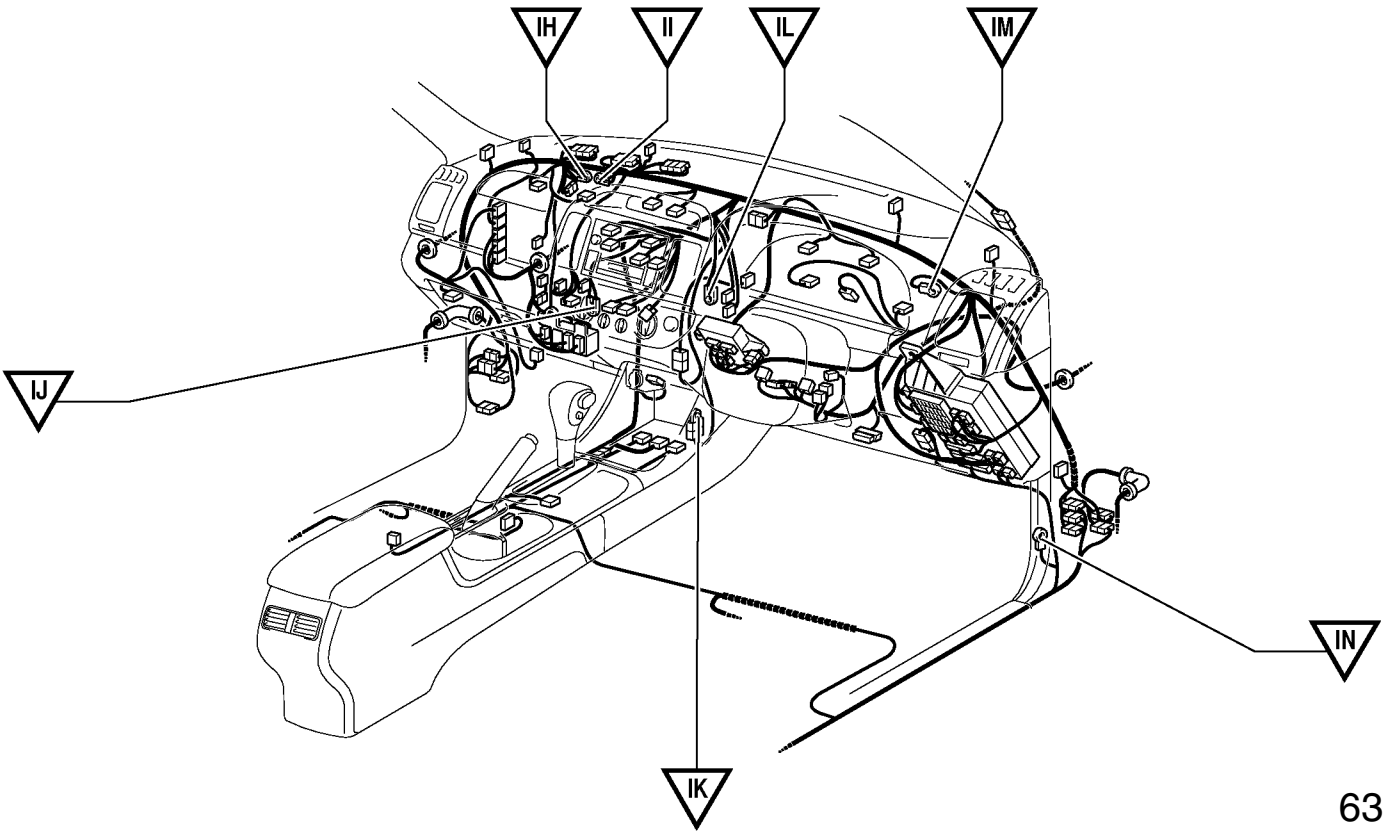


▭ : Location of Connector Joining Wire Harness and Wire Harness

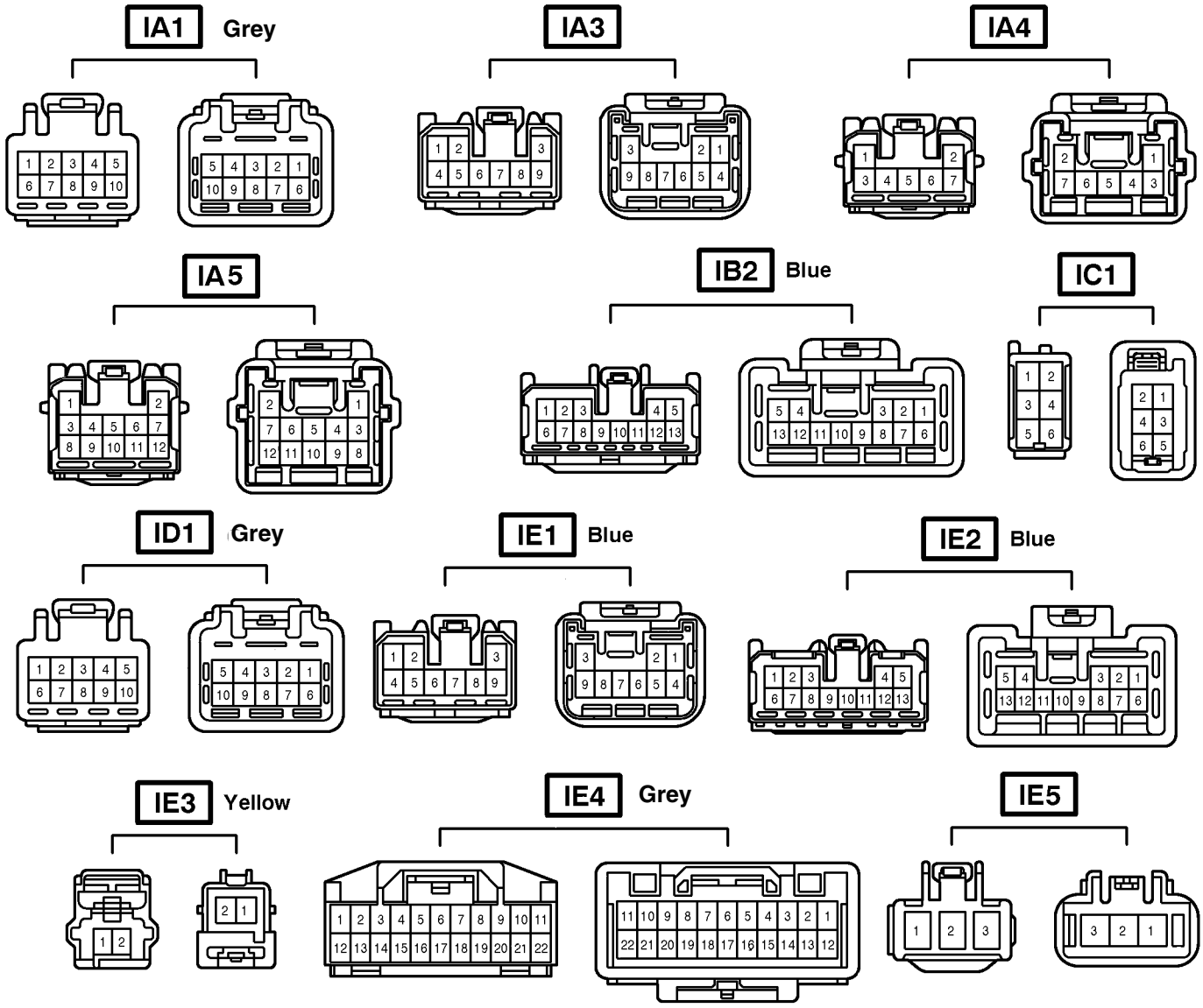
[RHD]



▽ : Location of Ground Points



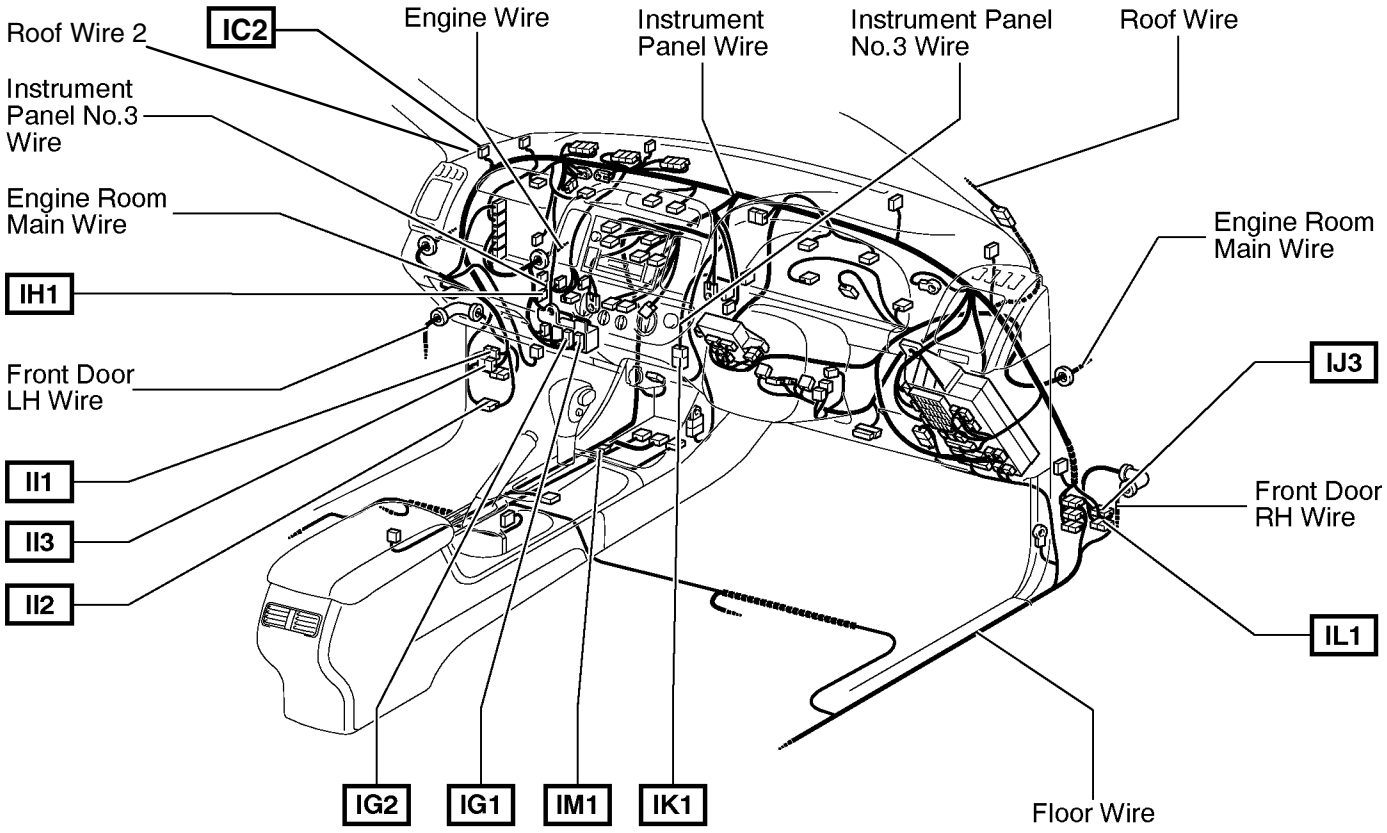
Connector Joining Wire Harness and Wire Harness



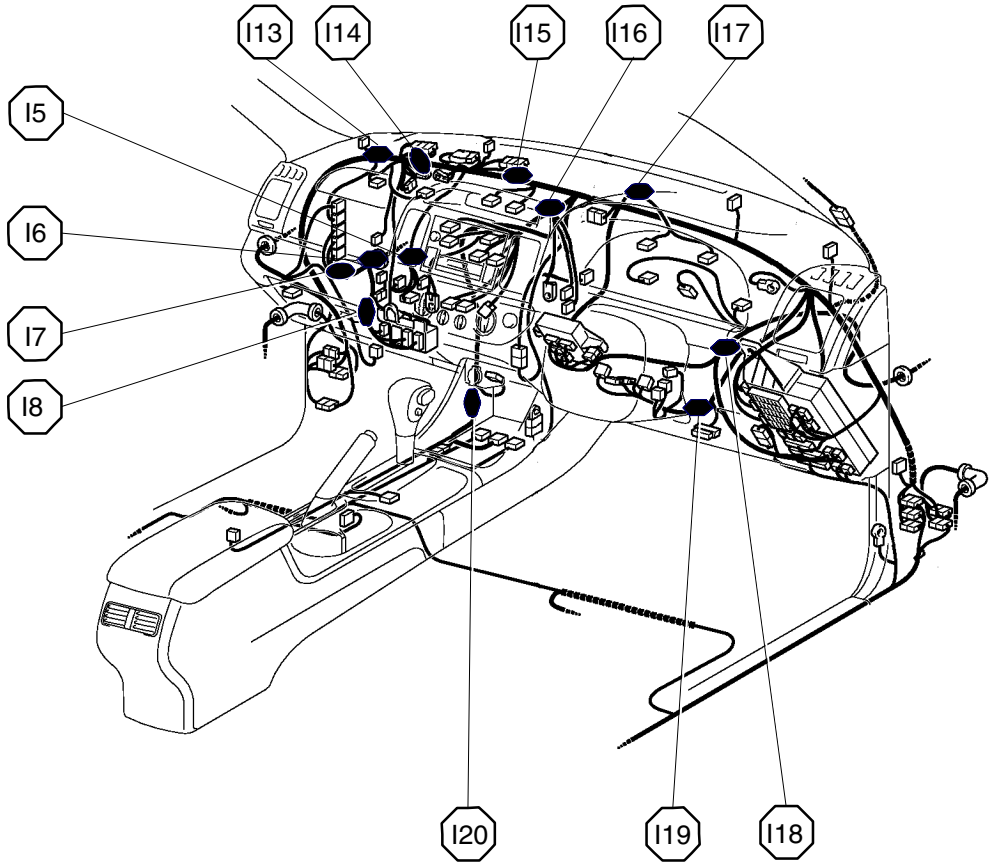
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA3	
IA4	
IA5	
IB2	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
ID1	Engine Room Main Wire 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

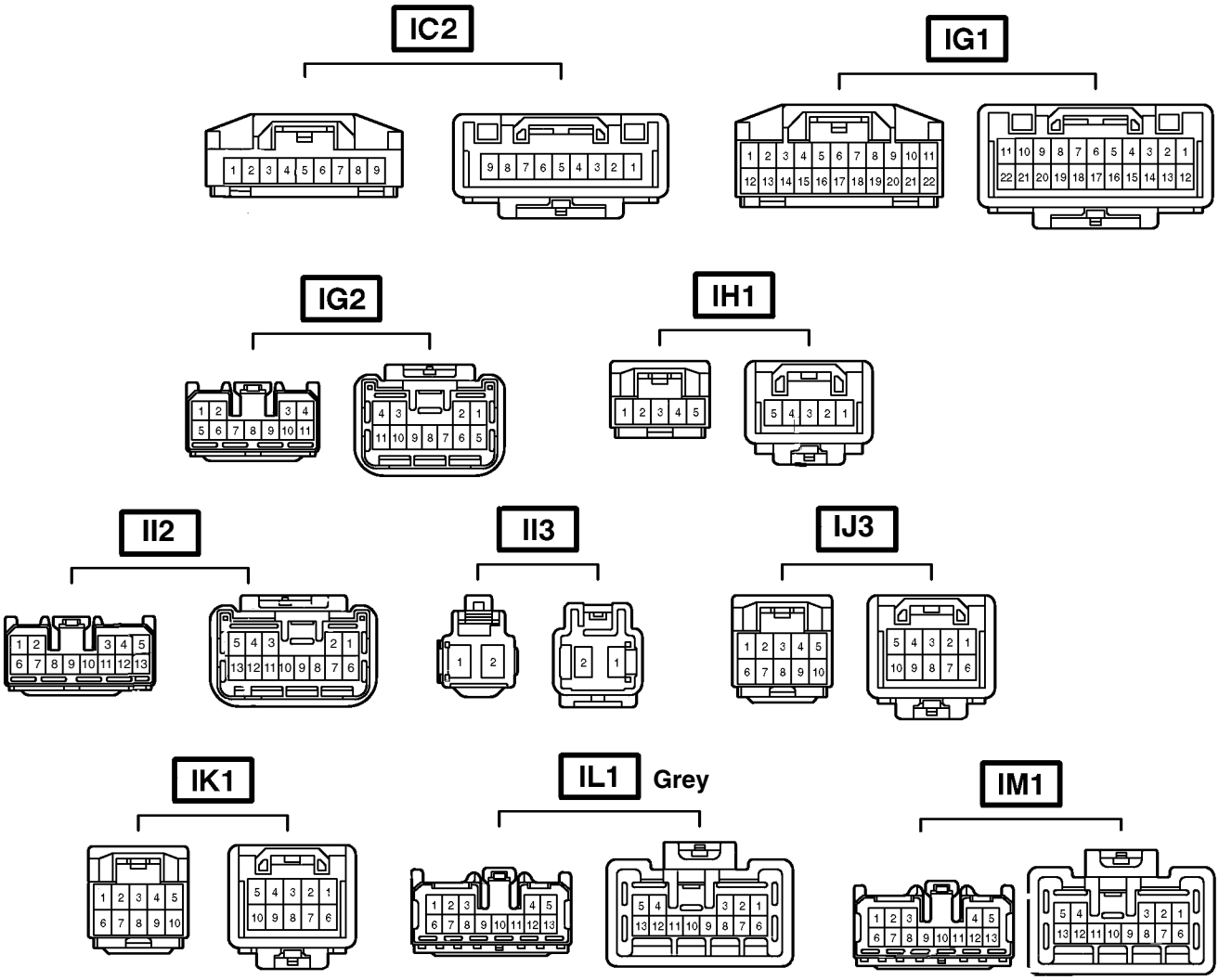
[RHD]



⬡ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

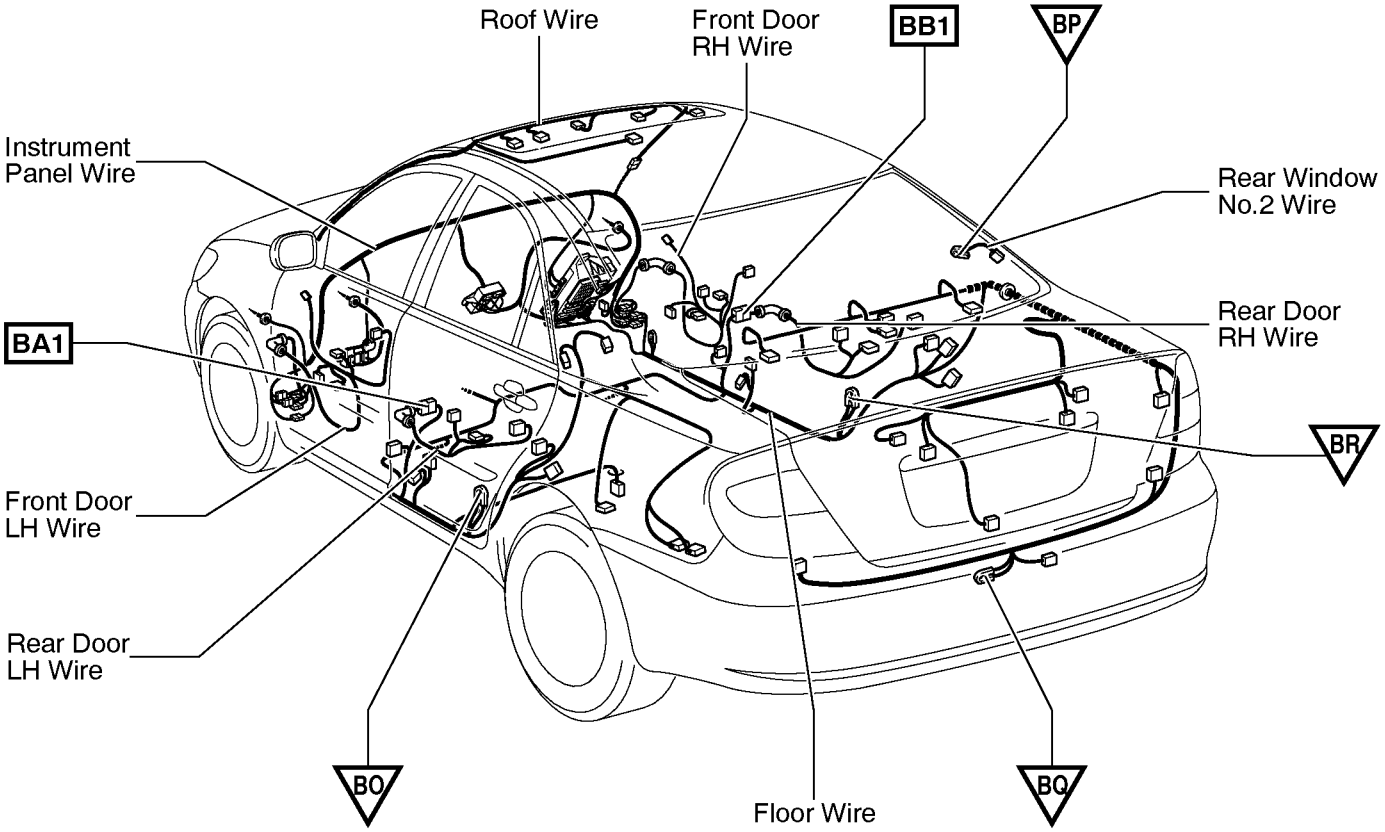


Code	Joining Wire Harness and Wire Harness (Connector Location)
IC2	Roof Wire (No.2)(Left Hand Front Pillar)
IG1	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	
IH1	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)(With Auto A/C Only)
II2	Engine Room Main Wire to Instrument Panel Wire
II3	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IJ3	Instrument Main Wire to Right Hand Front Door Wire
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)

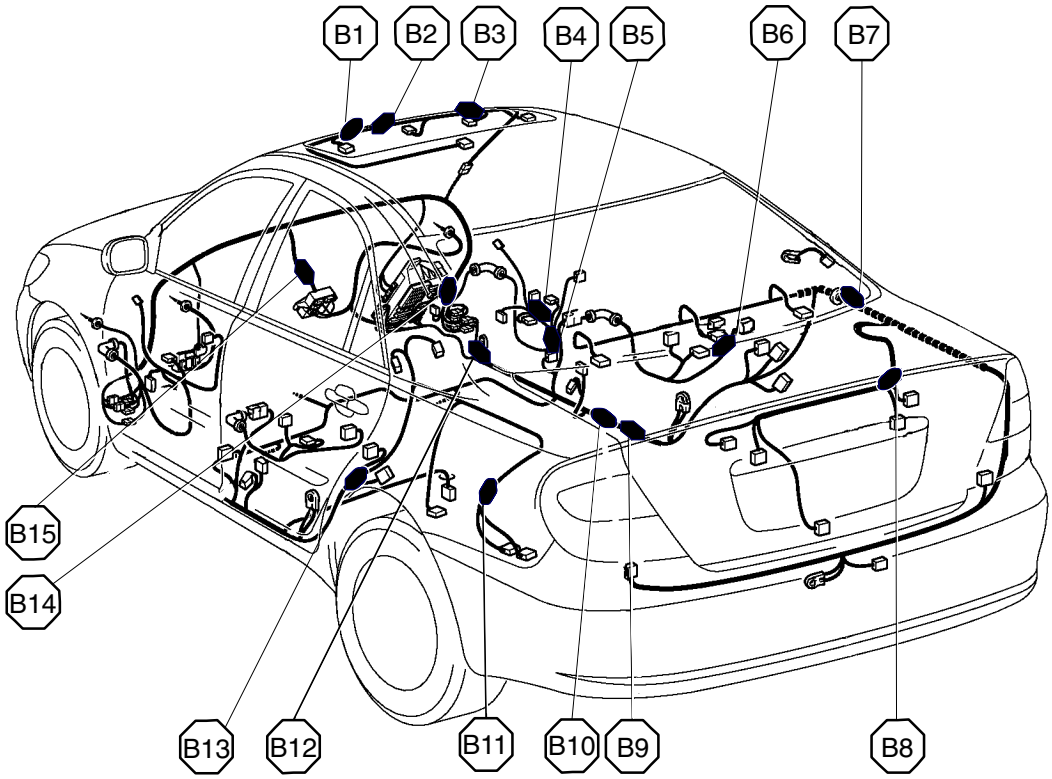
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

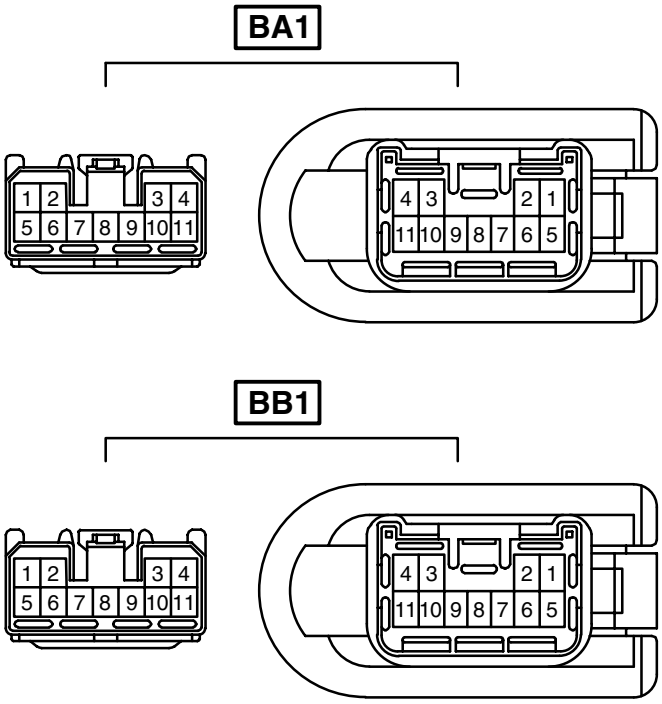
[RHD]



○ : Location of Splice Points



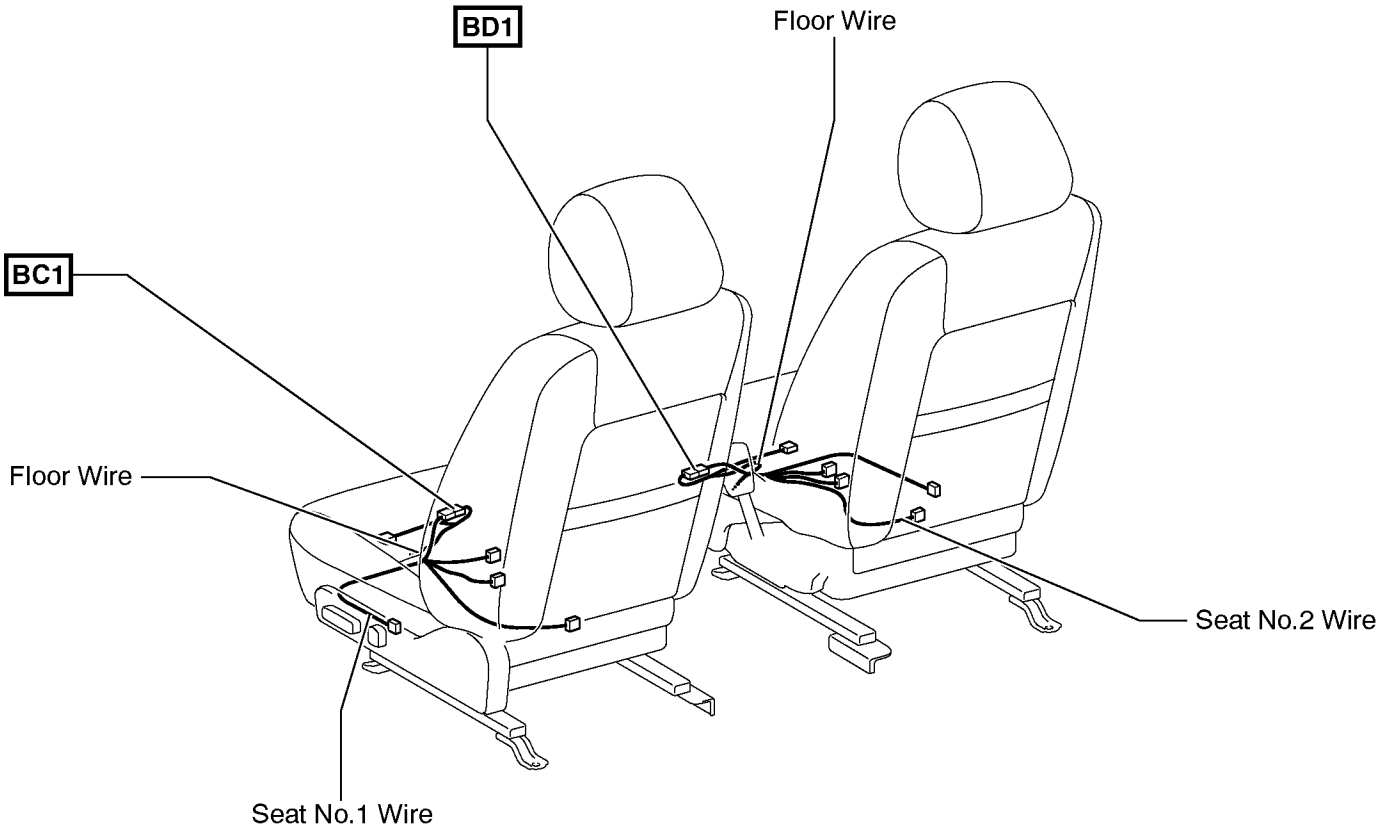
Connector Joining Wire Harness and Wire Harness



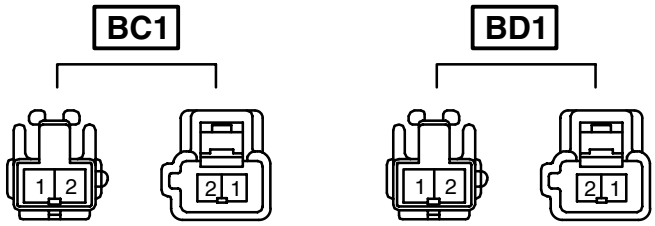
Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
BB1	Rear Door RH Wire and Floor Wire (Right Centre Pillar)

▭ : Location of Connector Joining Wire Harness and Wire Harness

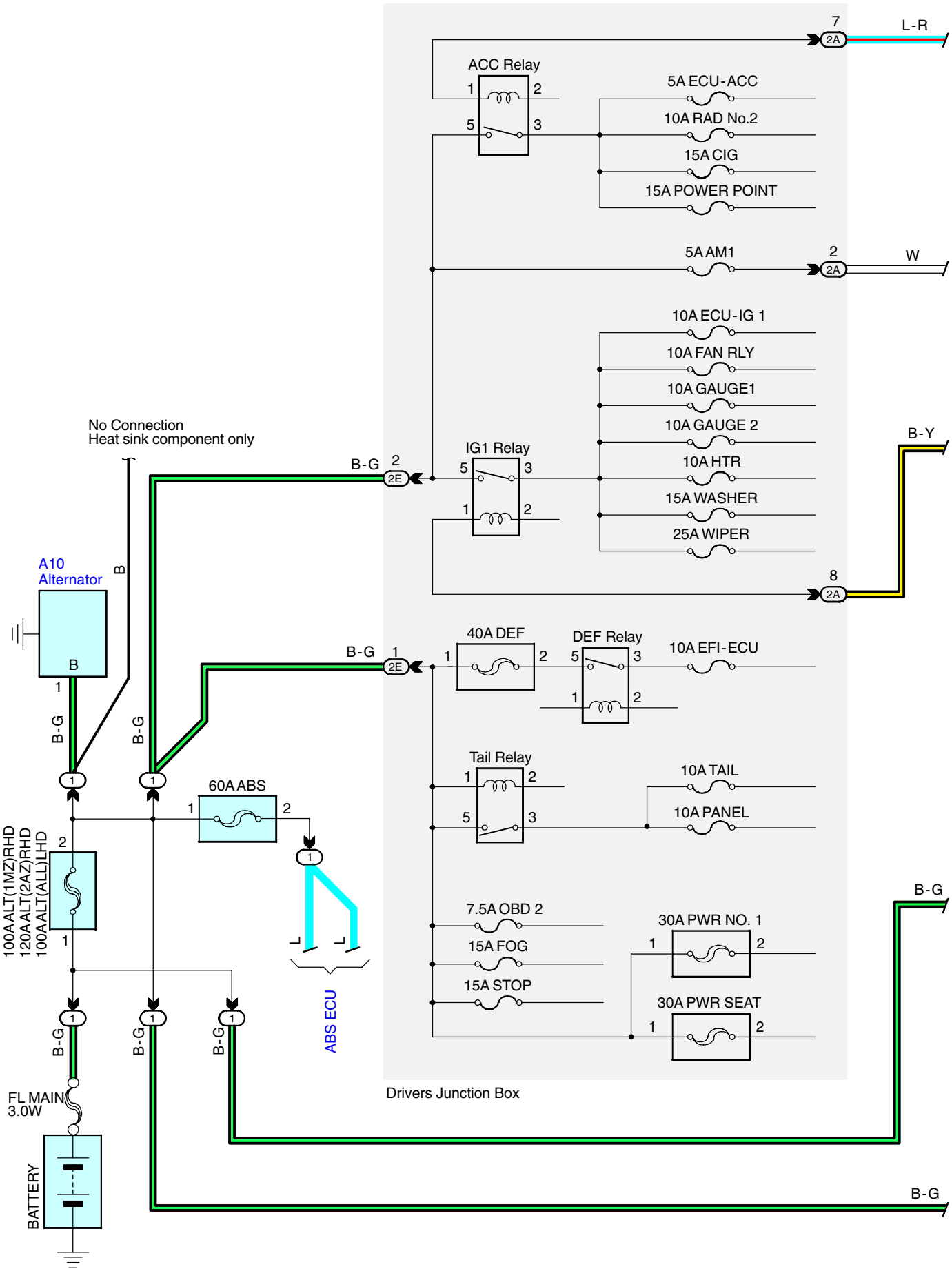
[RHD]



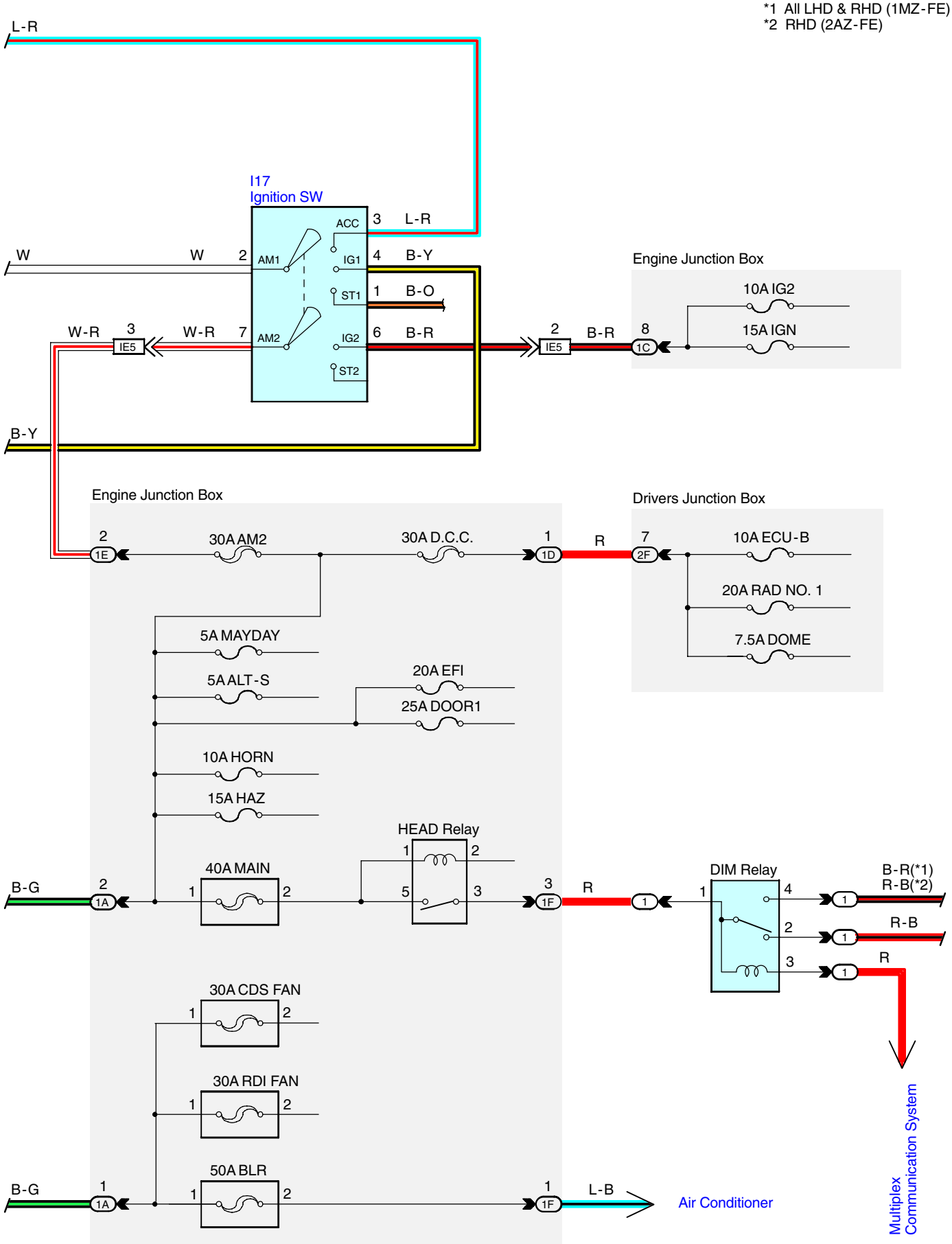
Connector Joining Wire Harness and Wire Harness



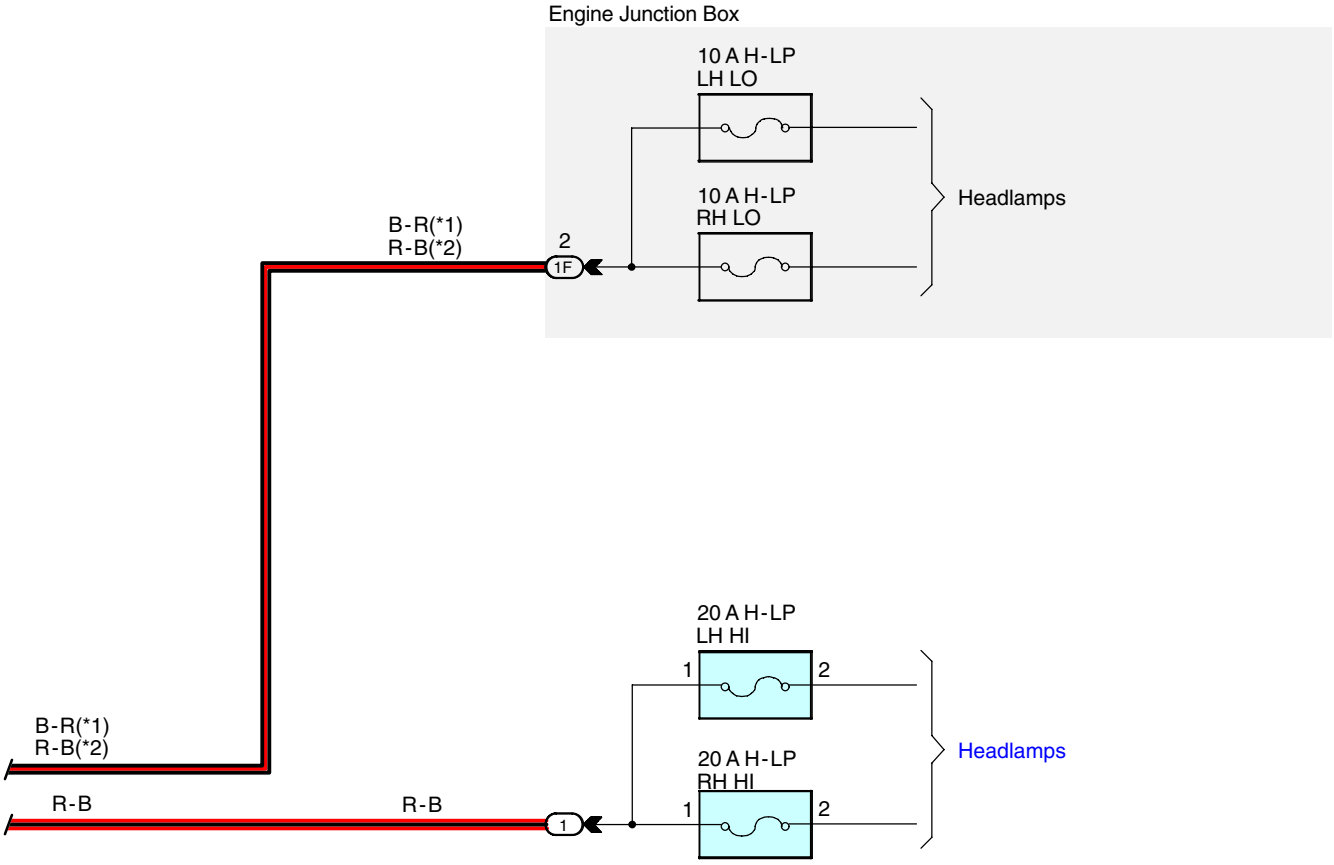
Code	Joining Wire Harness and Wire Harness (Connector Location)
BC1	Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat)
BD1	Floor Wire and Seat No.2 Wire (Under the Driver's Seat)


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 1
10A FAN RLY
10A GAUGE1
10A GAUGE 2
10A HTR
15A WASHER
25A WIPER
B-Y
8
2A
No Connection
Heat sink component only
B-G
2
2E
IG1 Relay
A10
Alternator
B
B
1
B-G
B-G
1
2E
40A DEF
DEF Relay
10A EFI-ECU
Tail Relay
10A TAIL
10A PANEL
60A ABS
100A ALT(1MZ)RHD
120A ALT(2AZ)RHD
100A ALT(ALL)LHD
7.5A OBD 2
15A FOG
15A STOP
30A PWR NO. 1
30A PWR SEAT
ABS ECU
B-G
FL MAIN
3.0W
BATTERY
B-G
B-G
Drivers Junction Box

*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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A15	33 (LHD)	I17	36 (LHD)		
	42 (RHD)		45 (RHD)		

: Relay Blocks

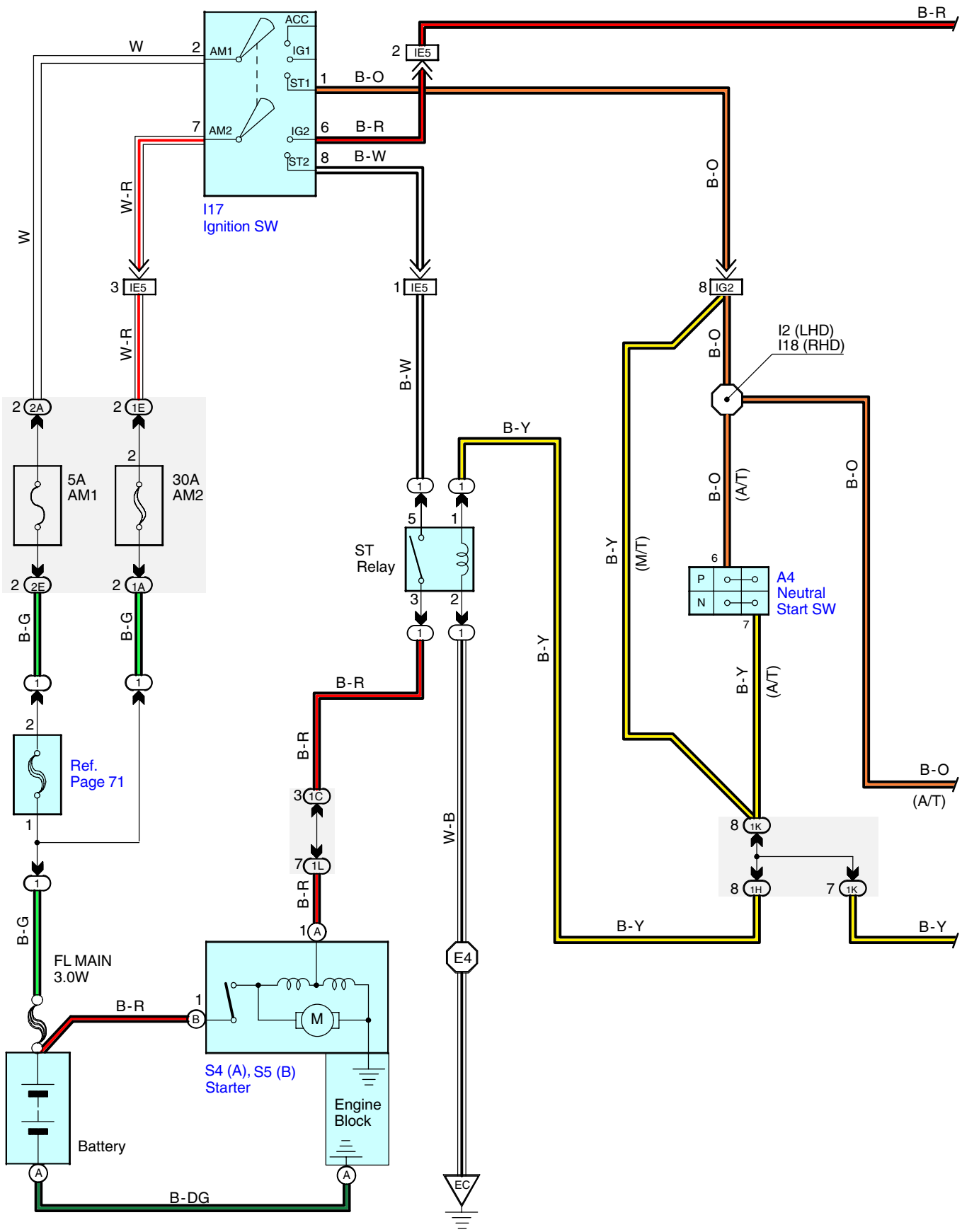
Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B (Engine Compartment Left)

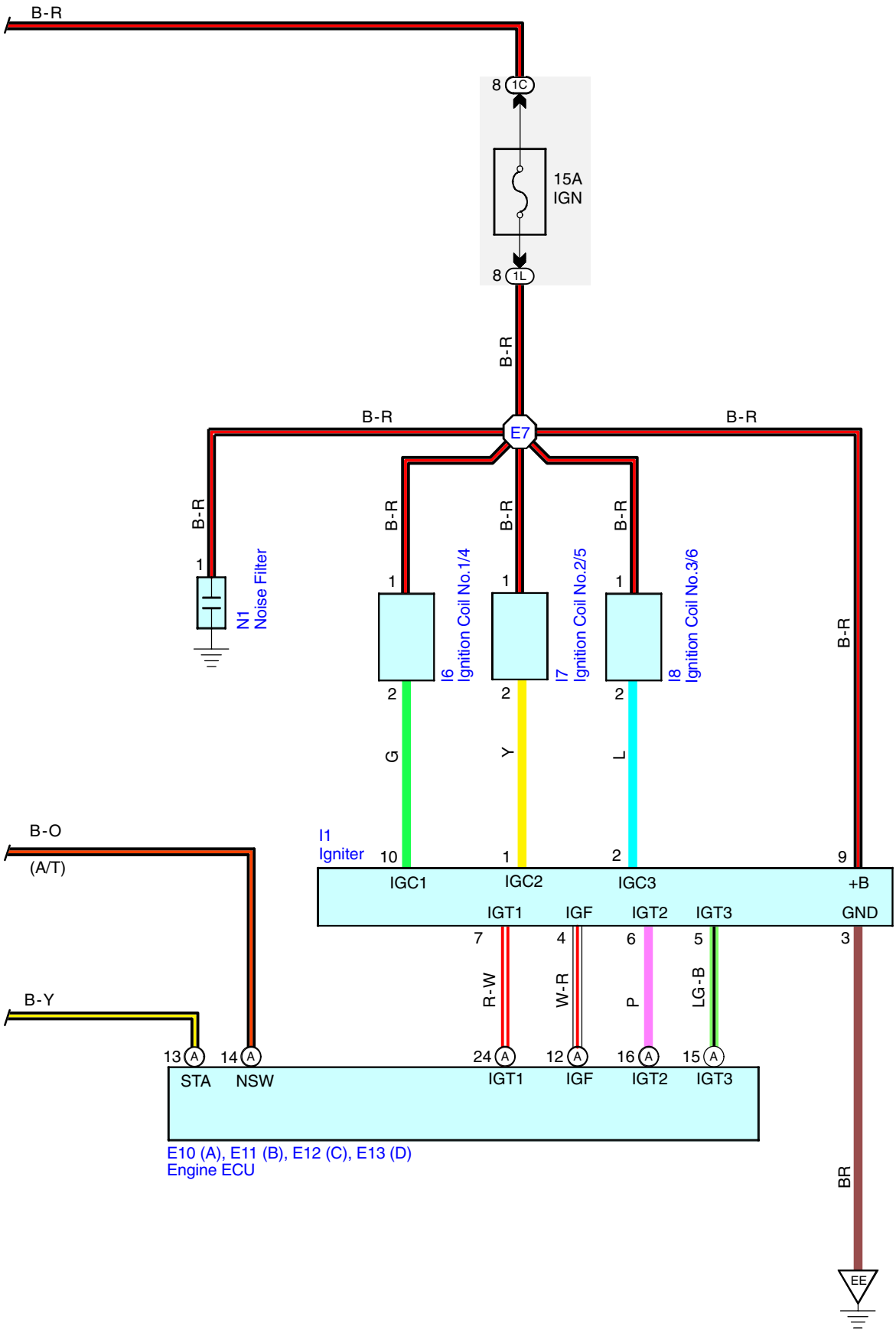
Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1C		
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	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)


ACC
IG1
ST1
IG2
ST2
AM1
AM2
I17
Ignition SW
W
W-R
B-O
B-R
B-W
IE5
IG2
I2 (LHD)
I18 (RHD)
2A
1E
2E
1A
5A
AM1
30A
AM2
ST
Relay
B-G
B-Y
(M/T)
(A/T)
A4
Neutral
Start SW
P
N
Ref.
Page 71
1C
1L
1K
1H
FL MAIN
3.0W
M
S4 (A), S5 (B)
Starter
Engine
Block
Battery
B-DG
E4
EC


B-R
8
1C
15A
IGN
8
1L
B-R
B-R
E7
B-R
B-R
1
N1
Noise Filter
B-R
1
I6
Ignition Coil No.1/4
2
G
B-R
1
I7
Ignition Coil No.2/5
2
Y
B-R
1
I8
Ignition Coil No.3/6
2
L
B-R
B-O
(A/T)
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
B-Y
13
A
14
A
24
A
12
A
16
A
15
A
STA
NSW
IGT1
IGF
IGT2
IGT3
E10 (A), E11 (B), E12 (C), E13 (D)
Engine ECU
BR
EE

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		31 (LHD)	I1	41 (RHD)	N1		32 (LHD)
		40 (RHD)	I6	32 (LHD)			41 (RHD)
E10	A	36 (LHD)		41 (RHD)	S4	A	32 (LHD)
		45 (RHD)	I7	32 (LHD)			41 (RHD)
E11	B	36 (LHD)		41 (RHD)	S5	B	32 (LHD)
		45 (RHD)	I8	32 (LHD)			41 (RHD)
E12	C	36 (LHD)		41 (RHD)			
		45 (RHD)	I17	36 (LHD)			
E13	D	36 (LHD)		45 (RHD)			
		45 (RHD)					

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	36	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

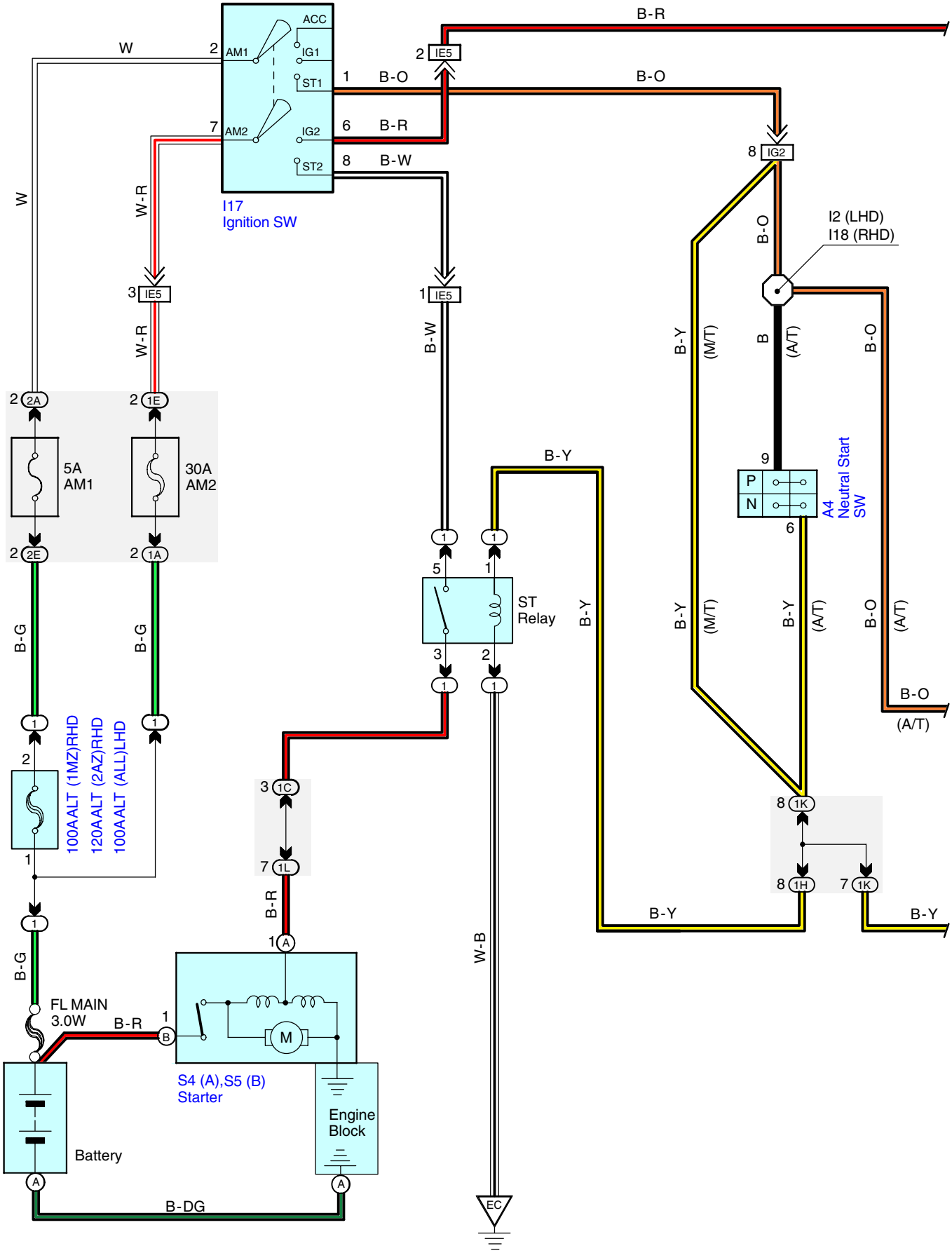
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire
IG2	65 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)

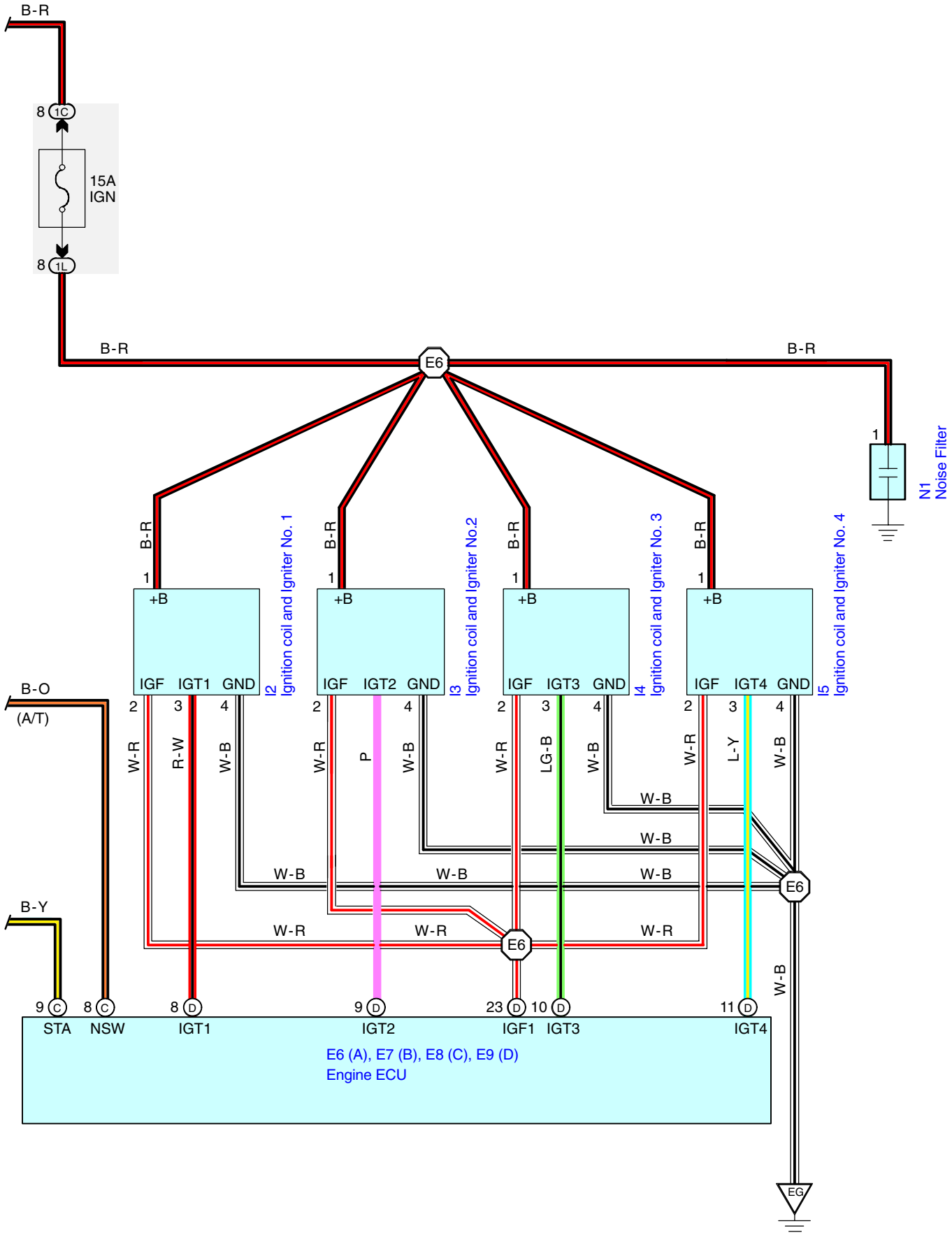
▽ : **Ground Points**

Code	See Page	Ground Points Location
EC	49 (LHD)	Left Fender
	60 (RHD)	
EE	49 (LHD)	Rear Side of Surge Tank
	60 (RHD)	

○ : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54 (LHD)	Engine Room Main Wire	E7	60 (RHD)	Engine Wire
E4	49 (LHD)	Engine Wire	I18	65 (RHD)	Engine Room Main Wire


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


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

: Parts Location

Code		See Page	Code	See Page	Code		See Page
A4		33 (LHD) 42 (RHD)	I2	34 (LHD) 43 (RHD)	N1	A	34 (LHD) 43 (RHD)
E6	A	33 (LHD) 42 (RHD)	I3	34 (LHD) 43 (RHD)	S4	A	34 (LHD) 43 (RHD)
E7	B	33 (LHD) 42 (RHD)	I4	34 (LHD) 43 (RHD)	S5	B	34 (LHD) 43 (RHD)
E8	C	33 (LHD) 42 (RHD)	I5	34 (LHD) 43 (RHD)			
E9	B	34 (LHD) 43 (RHD)	I17	34 (LHD) 43 (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

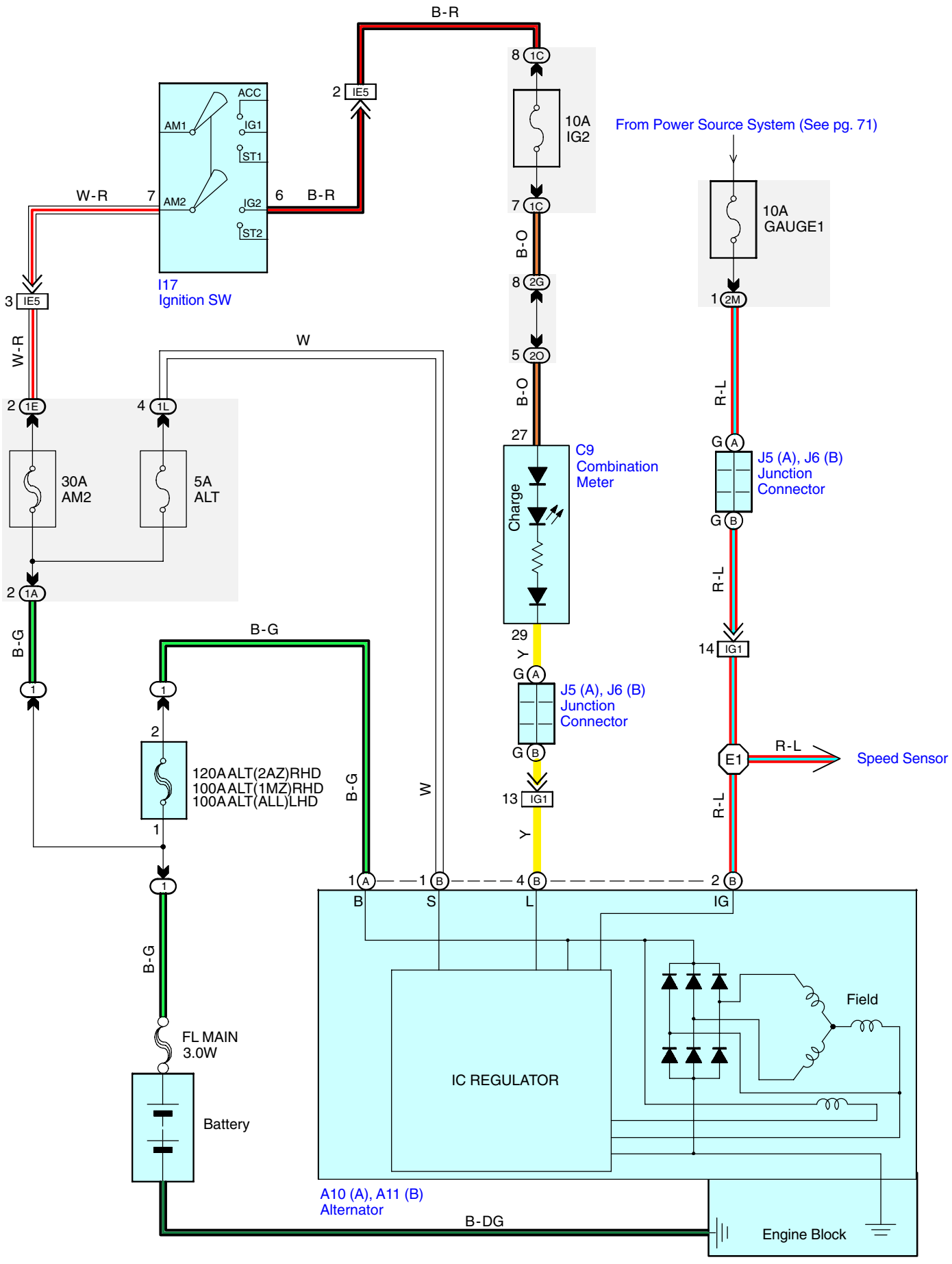
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG2	54 (LHD)	Engine Room Wire and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	Engine Room Wire and Instrument Panel Wire (Behind Glove Box)

: **Ground Points**

Code	See Page	Ground Points Location
EC	51 (LHD) 62 (RHD)	Left Fender
EG	51 (LHD) 62 (RHD)	Left Side of Cylinder Head

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	52 (LHD) 63 (RHD)	Engine Wire	E6	51 (LHD) 62 (RHD)	Engine Wire


B-R
8 1C
10A
IG2
7 1C
B-O
8 2G
5 2O
B-O
27
C9
Combination
Meter
Charge
29
Y
G A
J5 (A), J6 (B)
Junction
Connector
G B
13 IG1
Y
2 IE5
ACC
AM1
IG1
ST1
AM2
IG2
ST2
W-R
7
6
B-R
I17
Ignition SW
3 IE5
W-R
W
2 1E
4 1L
30A
AM2
5A
ALT
2 1A
B-G
1
B-G
1
2
120A ALT(2AZ)RHD
100A ALT(1MZ)RHD
100A ALT(ALL)LHD
1
B-G
1
FL MAIN
3.0W
Battery
B-DG
1 A
1 B
4 B
2 B
B
S
L
IG
IC REGULATOR
Field
A10 (A), A11 (B)
Alternator
Engine Block
From Power Source System (See pg. 71)
10A
GAUGE1
1 2M
R-L
G A
J5 (A), J6 (B)
Junction
Connector
G B
R-L
14 IG1
E1
R-L
Speed Sensor
R-L

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	31 (LHD 1MZ-FE)	A11	B	33 (LHD 2AZ-FE)	J5	A	36 (LHD)
		40 (RHD 1MZ-FE)			42 (RHD 2AZ-FE)			45 (RHD)
		33 (LHD 2AZ-FE)	C9		35 (LHD)	J6	B	36 (LHD)
		42 (RHD 2AZ-FE)			44 (RHD)			45 (RHD)
A11	B	31 (LHD 1MZ-FE)	I17		36 (LHD)			
		40 (RHD 1MZ-FE)			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

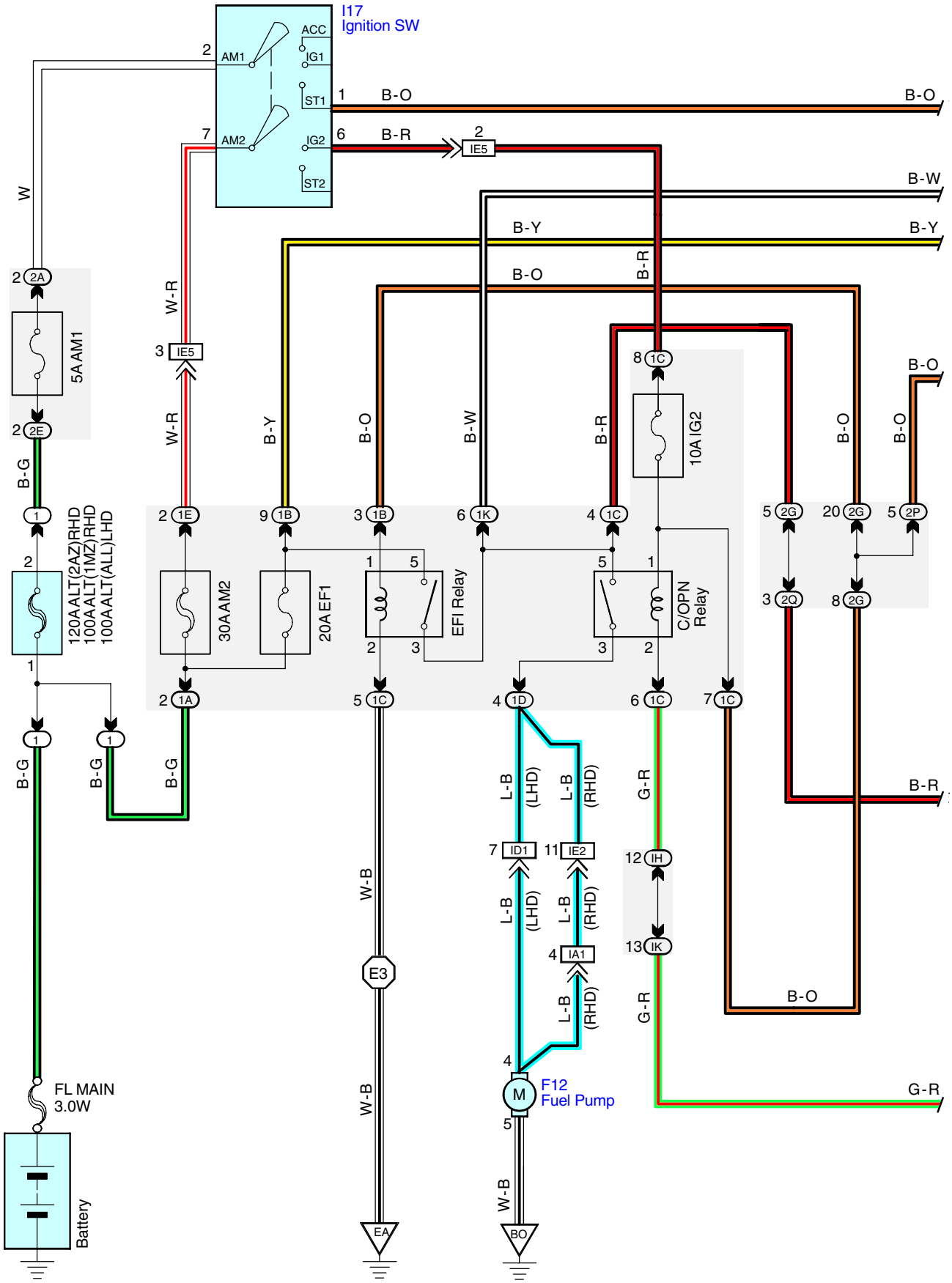
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Engine Room Main Wire and Engine Room J/B
1C		
1E		
1L	24	Engine Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2O	27	

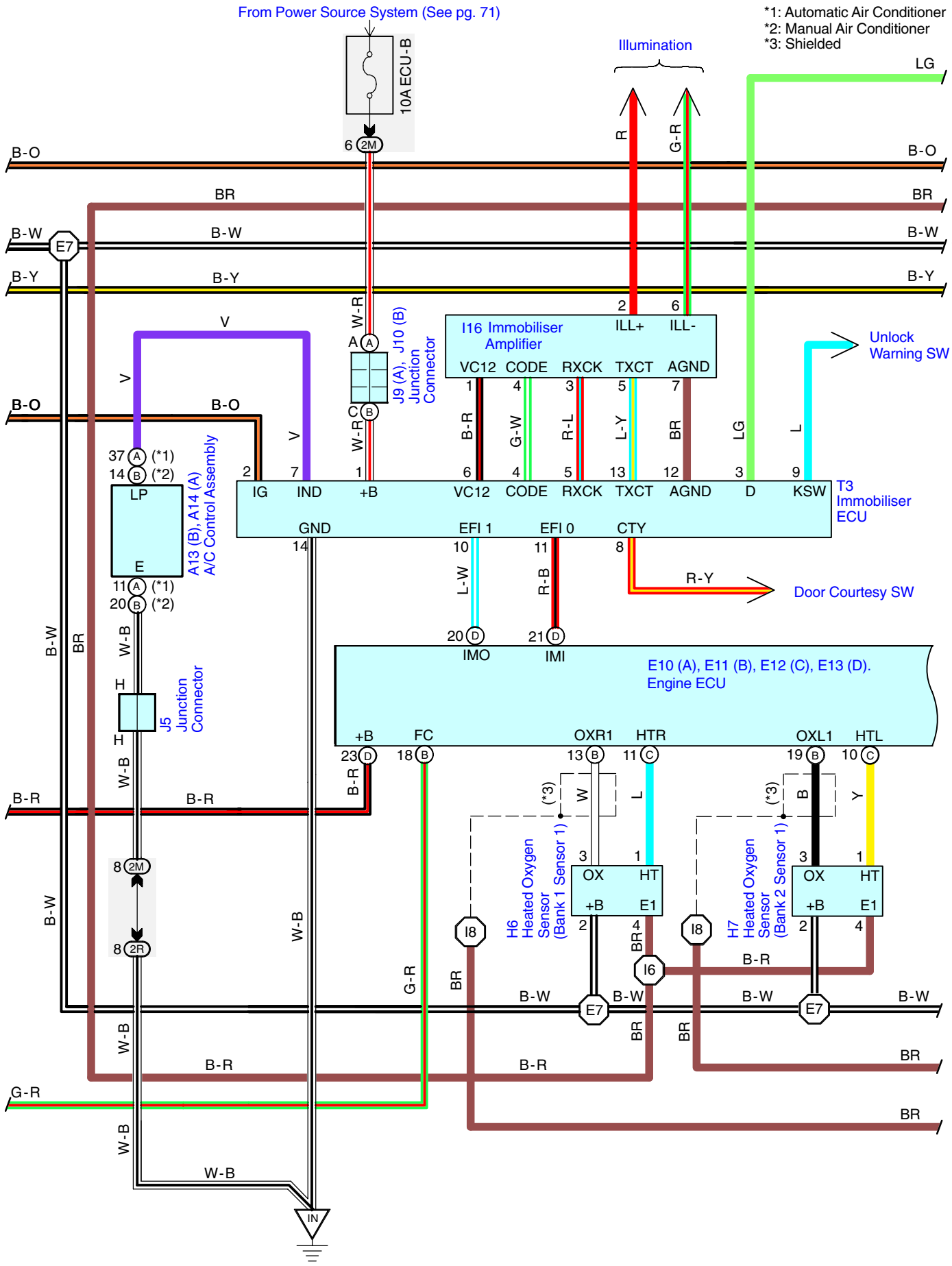
: Connector Joining Wire Harness and Wire Harness

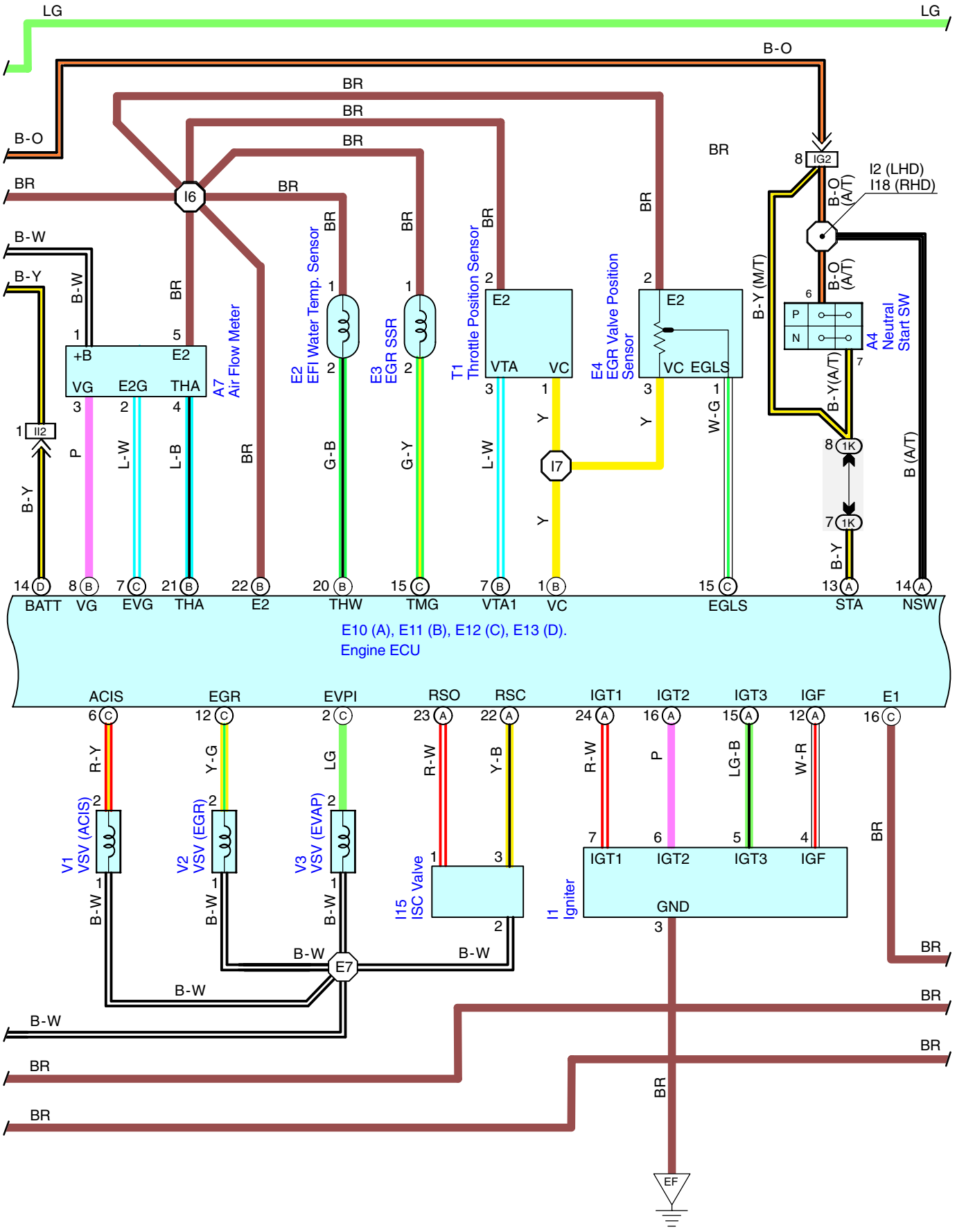
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE5	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Behind Glove Box)

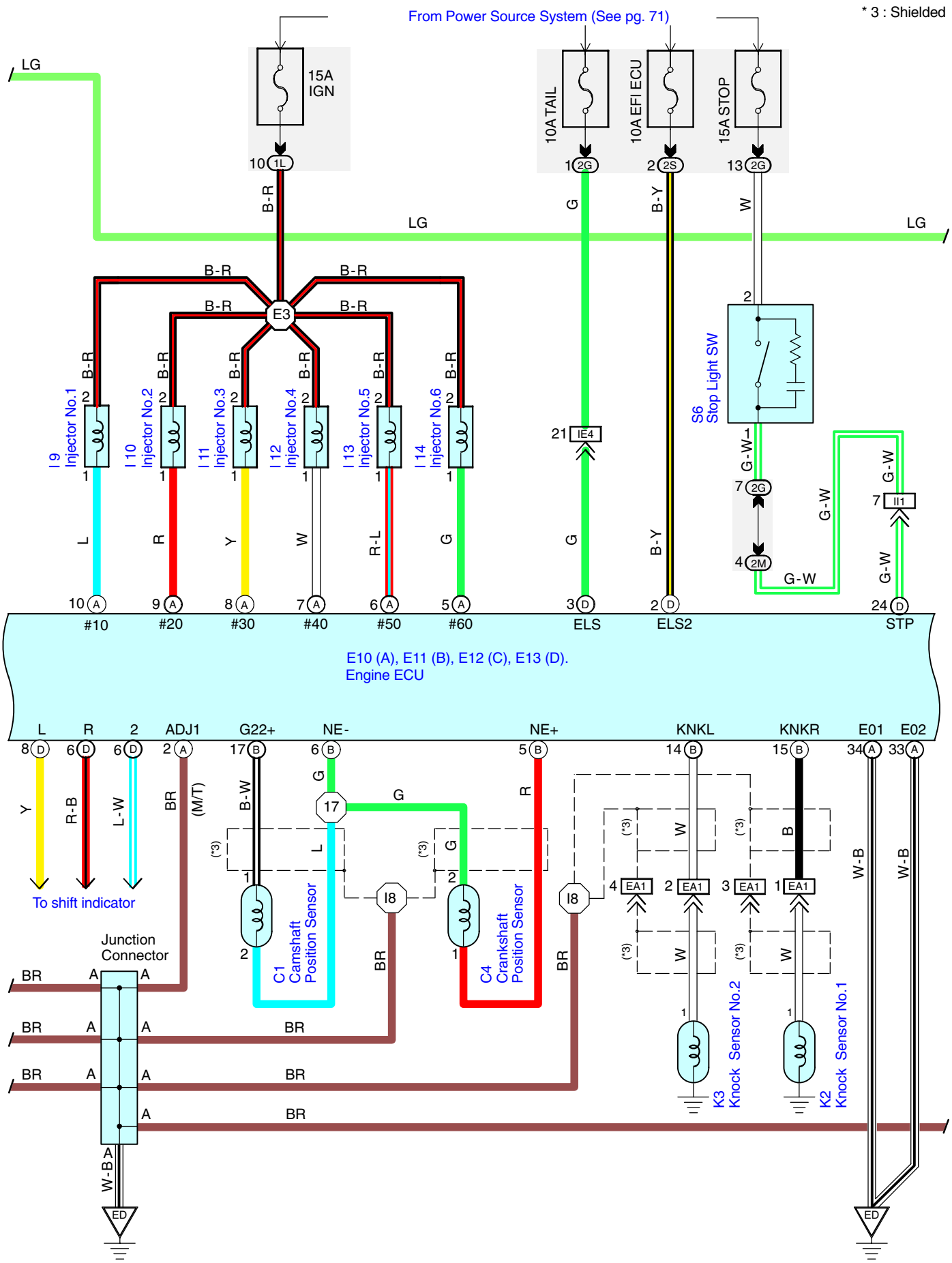
: Splice Points

Code	See Page	Wire Harness with Splice Points
E1	49 (LHD 1MZ-FE)	Engine Wire
	60 (RHD1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	

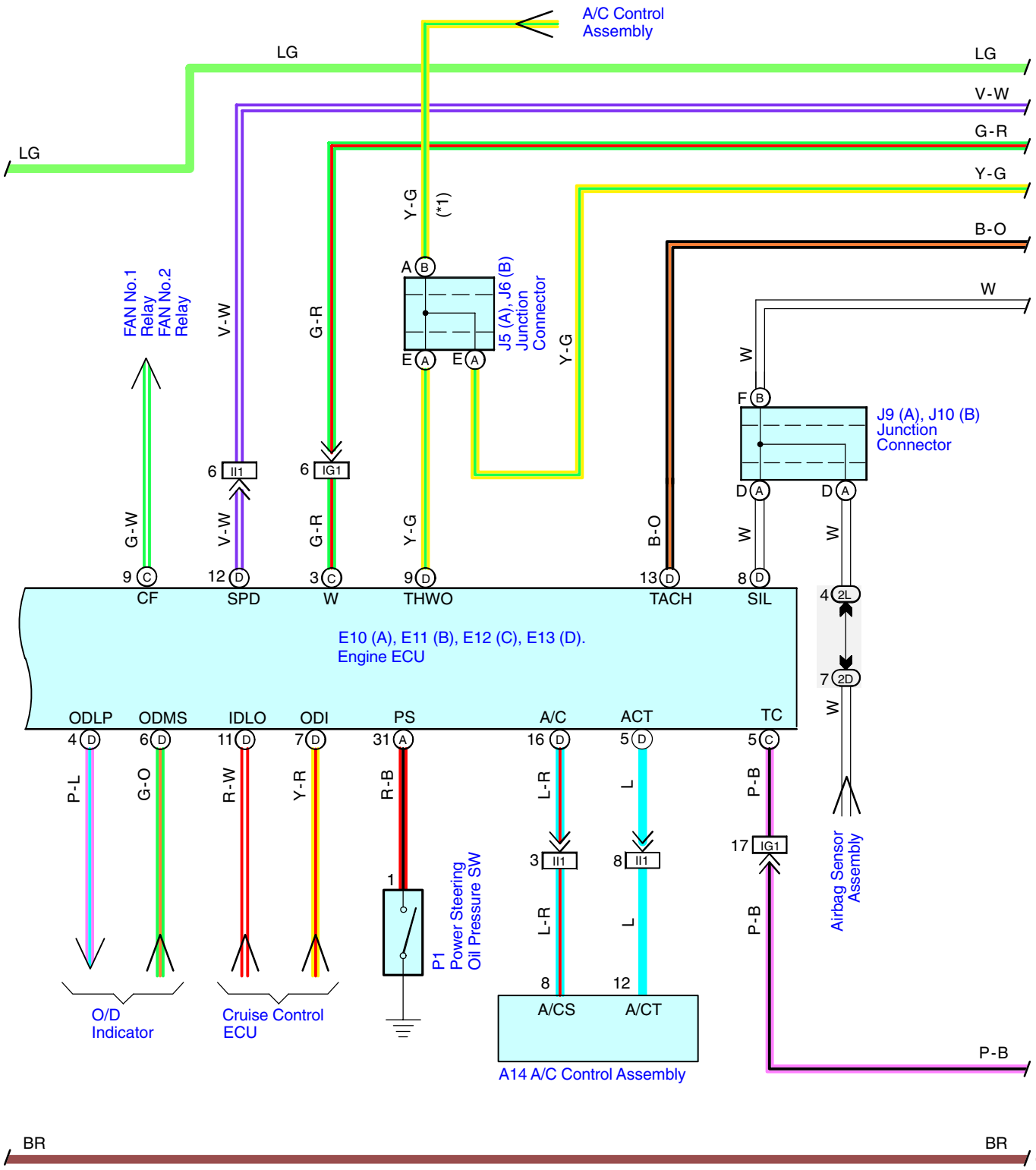

I17
Ignition SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
B-O
B-R
B-W
B-Y
W
W-R
W-B
B-G
G-R
L-B
5A AM1
120A ALT(2AZ)RHD
100A ALT(1MZ)RHD
100A ALT(ALL)LHD
30A AM2
20A EF1
EFI Relay
10A IG2
C/OPN Relay
FL MAIN
3.0W
Battery
F12
Fuel Pump
(LHD)
(RHD)
E3
EA
BO
IE5
IE2
ID1
IA1
IH
IK
1A
1B
1C
1D
1E
1K
2A
2E
2G
2P
2Q

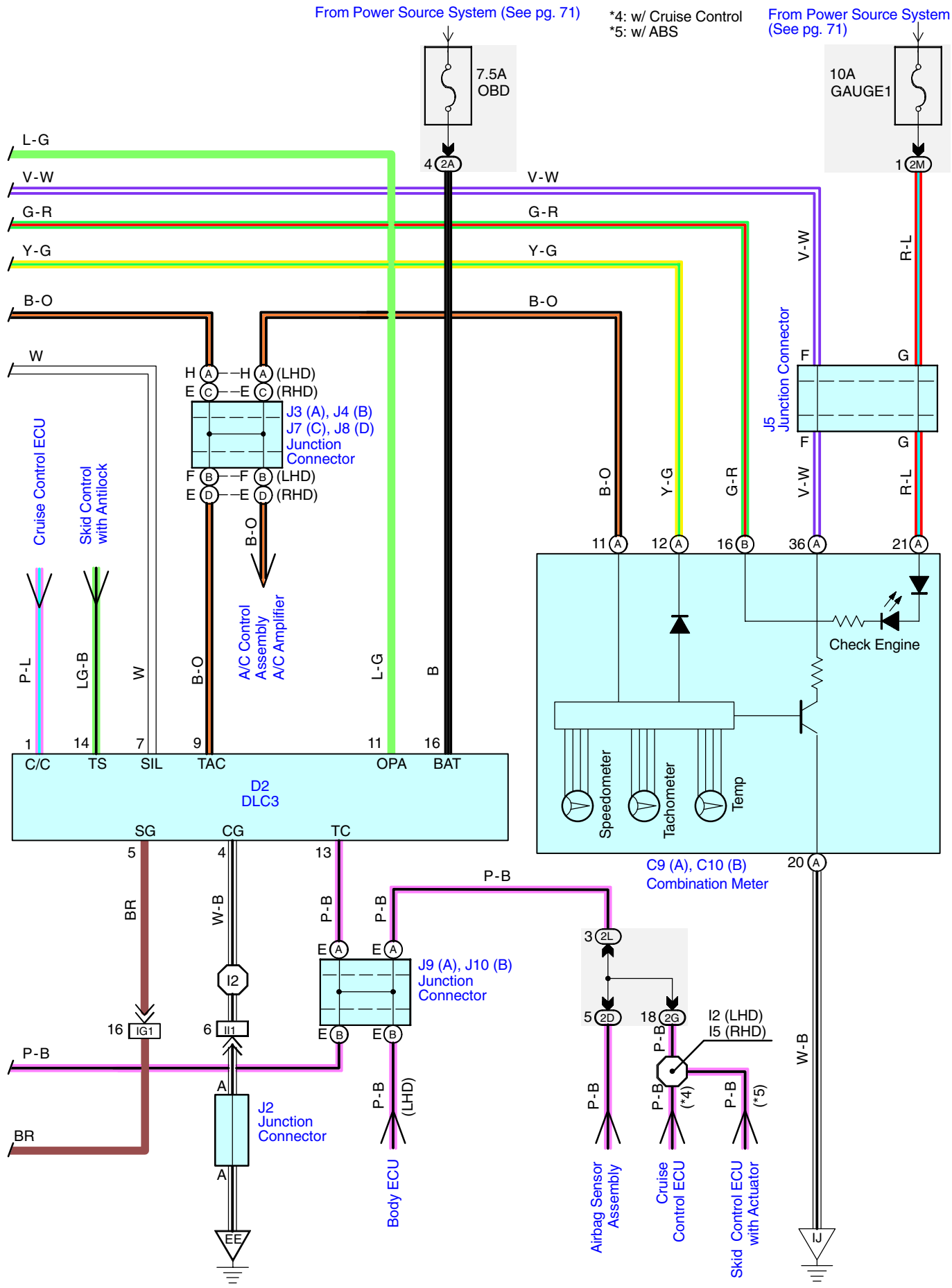

From Power Source System (See pg. 71)
*1: Automatic Air Conditioner
*2: Manual Air Conditioner
*3: Shielded
Illumination
10A ECU-B
6 2M
I16 Immobiliser Amplifier
VC12 CODE RXCK TXCT AGND
ILL+ ILL-
J9 (A), J10 (B) Junction Connector
Unlock Warning SW
T3 Immobiliser ECU
IG IND +B VC12 CODE RXCK TXCT AGND D KSW
GND EFI 1 EFI 0 CTY
A13 (B), A14 (A) A/C Control Assembly
LP E
J5 Junction Connector
Door Courtesy SW
IMO IMI
E10 (A), E11 (B), E12 (C), E13 (D). Engine ECU
+B FC OXR1 HTR OXL1 HTL
H6 Heated Oxygen Sensor (Bank 1 Sensor 1)
H7 Heated Oxygen Sensor (Bank 2 Sensor 1)
OX HT +B E1
I8 I6 E7 IN
B-O BR B-W B-Y V W-R B-R G-W R-L L-Y BR LG L R G-R L-W R-B R-Y W-B G-R


LG
LG
B-O
B-O
BR
BR
BR
BR
BR
BR
I6
B-W
B-Y
B-W
1
5
+B
E2
VG
E2G
THA
3
2
4
P
L-W
L-B
BR
A7
Air Flow Meter
I1
2
1
B-Y
E2
EFI Water Temp. Sensor
1
2
G-B
BR
E3
EGR SSR
1
2
G-Y
BR
T1
Throttle Position Sensor
E2
VTA
VC
2
3
1
L-W
Y
I7
Y
Y
E4
EGR Valve Position Sensor
E2
VC
EGLS
2
3
1
Y
W-G
BR
8
IG2
I2 (LHD)
I18 (RHD)
B-O
(A/T)
B-O
(A/T)
6
P
N
7
A4
Neutral
Start SW
B-Y (M/T)
B-Y(A/T)
8
1K
7
1K
B-Y
B (A/T)
14 D
BATT
8 B
VG
7 C
EVG
21 B
THA
22 B
E2
20 B
THW
15 C
TMG
7 B
VTA1
1 B
VC
15 C
EGLS
13 A
STA
14 A
NSW
E10 (A), E11 (B), E12 (C), E13 (D).
Engine ECU
ACIS
EGR
EVPI
RSO
RSC
IGT1
IGT2
IGT3
IGF
E1
6 C
12 C
2 C
23 A
22 A
24 A
16 A
15 A
12 A
16 C
R-Y
Y-G
LG
R-W
Y-B
R-W
P
LG-B
W-R
BR
V1
VSV (ACIS)
V2
VSV (EGR)
V3
VSV (EVAP)
2
2
2
1
3
7
6
5
4
B-W
B-W
B-W
I15
ISC Valve
I1
Igniter
IGT1
IGT2
IGT3
IGF
GND
3
E7
B-W
B-W
B-W
BR
BR
BR
BR
BR
EF


* 3 : Shielded
From Power Source System (See pg. 71)
LG
15A IGN
10A TAIL
10A EFI ECU
15A STOP
B-R
G
B-Y
W
E3
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 ECU
L
R
2
ADJ1
G22+
NE-
NE+
KNKL
KNKR
E01
E02
To shift indicator
Junction Connector
(M/T)
(*3)
C1 Camshaft Position Sensor
C4 Crankshaft Position Sensor
K3 Knock Sensor No.2
K2 Knock Sensor No.1
W-B
BR

* 1 : Automatic Air Conditioner




From Power Source System (See pg. 71)
*4: w/ Cruise Control
*5: w/ ABS
From Power Source System (See pg. 71)
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)
B-O
A/C Control Assembly
A/C Amplifier
Cruise Control ECU
Skid Control with Antilock
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
J5 Junction Connector
F
G
R-L
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
I2
16 IG1
6 II1
E A
E B
J9 (A), J10 (B)
Junction Connector
3 2L
5 2D
18 2G
I2 (LHD)
I5 (RHD)
(*4)
(*5)
A
J2
Junction
Connector
EE
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 has a built-in thermistor with a resistance which varies according to the water temp. The resulting voltage is applied toTERMINAL 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 OXR1 and OXL1 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 (HTR and HTL).

(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 the ABS speed sensor of the skid control ECU, from the 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 or parking, 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/C 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.
B+ supplies positive when C/OPN relay operates with ignition on.

(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.

2. Control System

* EFI system
  The EFI system monitors the engine condition through the signals which are input from each sensor to the engine and ECT ECU. The best fuel injection volume is decided based on this data and the program memorised 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 controls the fuel injection opening time by the engine and ECT ECU in response to the driving conditions.
* Electronic Spark Advance(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 memorised 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, voltage is output to TERMINALS HTR and HTL, controlling the heater.
* EGR control system
  The EGR control system detects the signals from each sensor, and outputs current to TERMINAL EGLS 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 engine control system or 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 shift position in any position except P or N)
Below 3.0 volts (Ignition SW on and shift position in P or N)
SPD-E1 : Pulse generation (Ignition SW on and rotate driving wheel slowly)
W-E1 : Below 3.0 volts
A/C-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)
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	31 (LHD) 40 (RHD)	H6	31 (LHD) 40 (RHD)	J8 D	36 (LHD) 45 (RHD)
A7	31 (LHD) 40 (RHD)	H7	31 (LHD) 40 (RHD)	J9 A	36 (LHD) 45 (RHD)
A13	35 (LHD) 44 (RHD)	I1	32 (LHD) 41 (RHD)	J10 B	36 (LHD) 45 (RHD)
A14	35 (LHD) 44 (RHD)	I9	32 (LHD) 41 (RHD)	K2	32 (LHD) 41 (RHD)
C1	31 (LHD) 40 (RHD)	I10	32 (LHD) 41 (RHD)	K3	32 (LHD) 41 (RHD)
C4	31 (LHD) 40 (RHD)	I11	32 (LHD) 41 (RHD)	P1	32 (LHD) 41 (RHD)
C9 A	35 (LHD) 44 (RHD)	I12	32 (LHD) 41 (RHD)	S6	36 (LHD) 45 (RHD)
C10 B	35 (LHD) 44 (RHD)	I13	32 (LHD) 41 (RHD)	T1	32 (LHD) 41 (RHD)
D2	35 (LHD) 44 (RHD)	I14	32 (LHD) 41 (RHD)	T3	36 (LHD) 45 (RHD)
E2	31 (LHD) 40 (RHD)	I15	32 (LHD) 41 (RHD)	V1	32 (LHD) 41 (RHD)
E3	31 (LHD) 40 (RHD)	I16	36 (LHD) 45 (RHD)	V2	32 (LHD) 41 (RHD)
E4	31 (LHD) 40 (RHD)	J3 A	36 (LHD) 45 (RHD)	V3	32 (LHD) 41 (RHD)
E10 A	36 (LHD) 45 (RHD)	J4 B	36 (LHD) 45 (RHD)		
E11 B	36 (LHD) 45 (RHD)	J5	36 (LHD) 45 (RHD)		
E12 C	36 (LHD) 45 (RHD)	J5 A	36 (LHD) 45 (RHD)		
E13 D	36 (LHD) 45 (RHD)	J6 B	36 (LHD) 45 (RHD)		
F12	37 (LHD) 46 (RHD)	J7 C	36 (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)
1B	24	Engine Room Main Wire and Engine Room J/B
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**

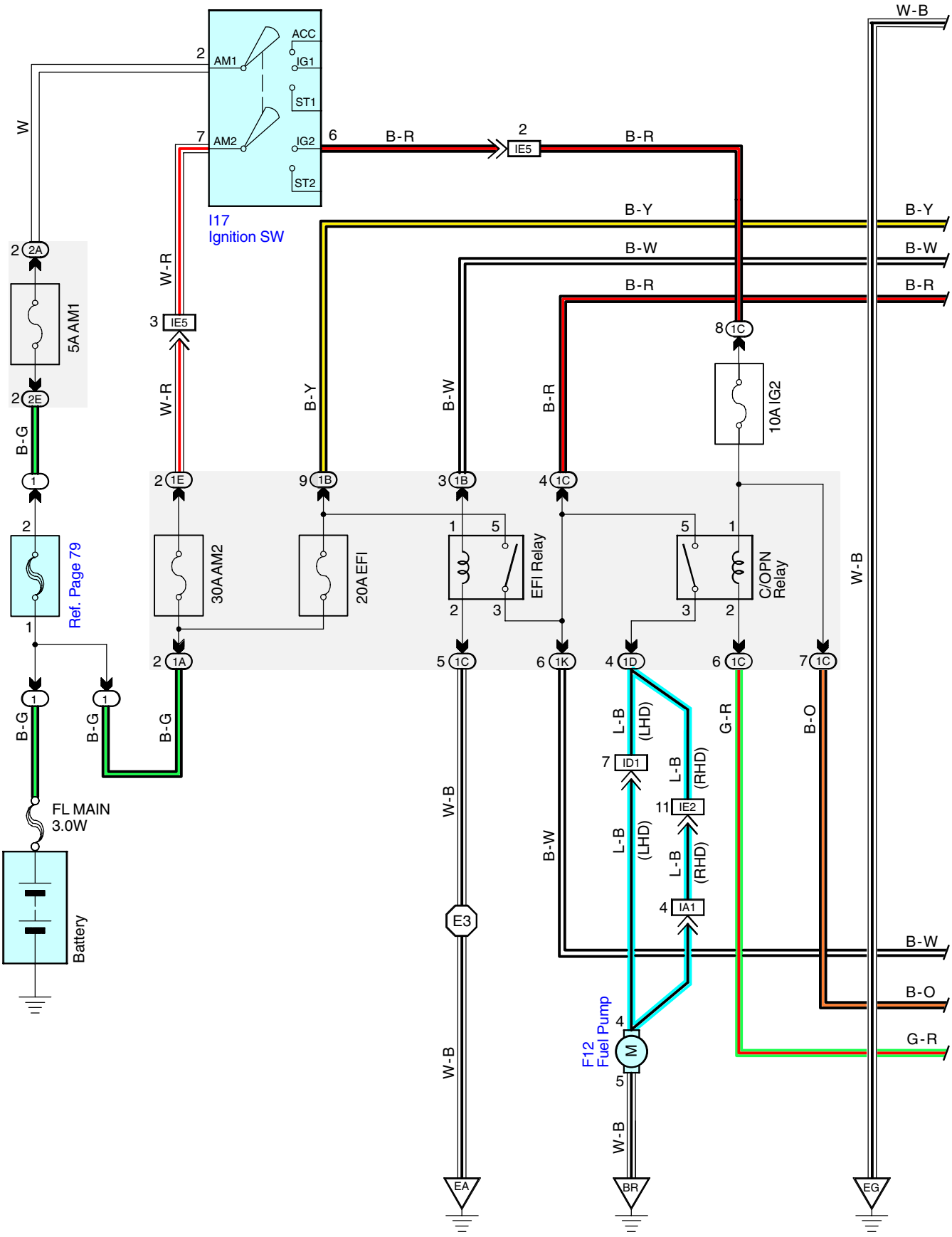
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	49 (LHD)	Engine Wire and Sensor Wire (Left Fender)
	60 (RHD)	
IA1	52 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
	63 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IE2	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
IE4	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
IE5	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column)
ID1	52 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II1	54 (LHD)	Engine Room Main Wire and Instrument Panel (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel (Left Kick Panel)
II2	54 (LHD)	Engine Room Main Wire and Instrument Panel (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel (Left Kick Panel)

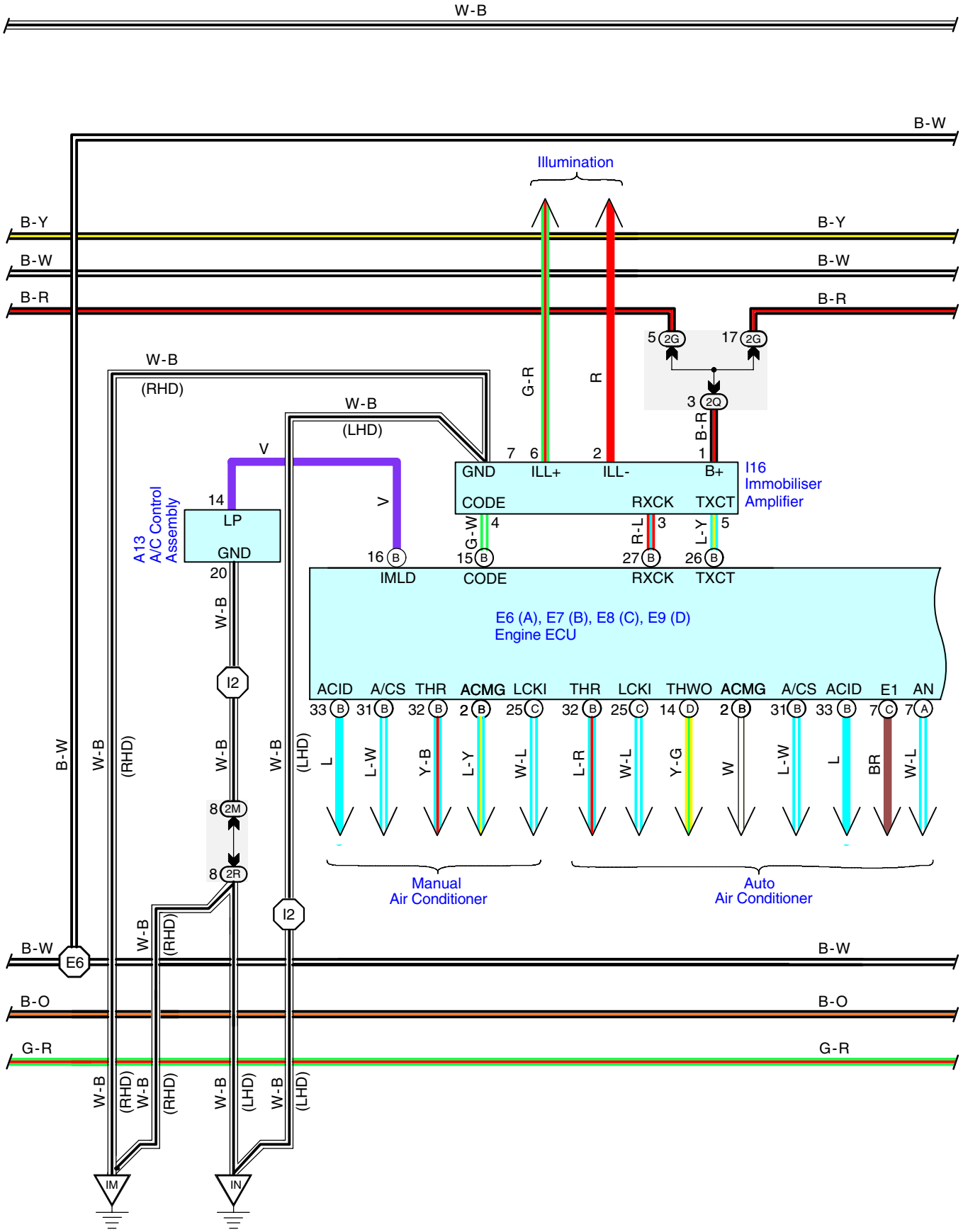
 : **Ground Points**

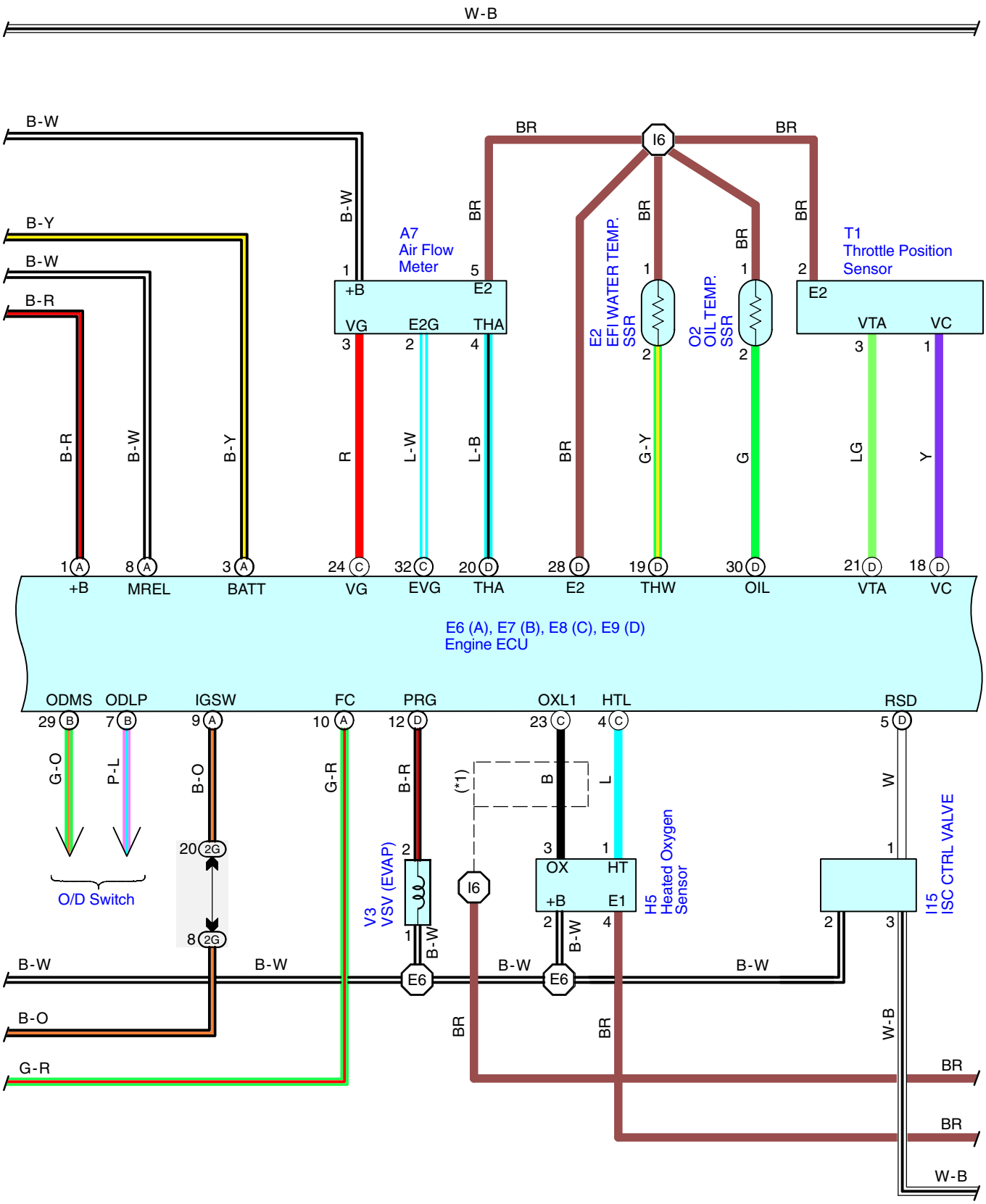
Code	See Page	Ground Points Location
BO	56 (LHD)	Front Side of Rear Quarter Wheel House LH
EA	49 (LHD) 60 (RHD)	Right Fender
EE	49 (LHD) 60 (RHD)	Rear Side of Surge Tank
ED	49 (LHD) 60 (RHD)	Surge Tank RH
II	52 (LHD) 63 (RHD)	Instrument Panel Reinforcement LH
IJ	52 (LHD)	Instrument Panel Brace LH
	63 (RHD)	Instrument Panel Brace RH
IN	52 (LHD) 63 (RHD)	Instrument Panel Reinforcement RH

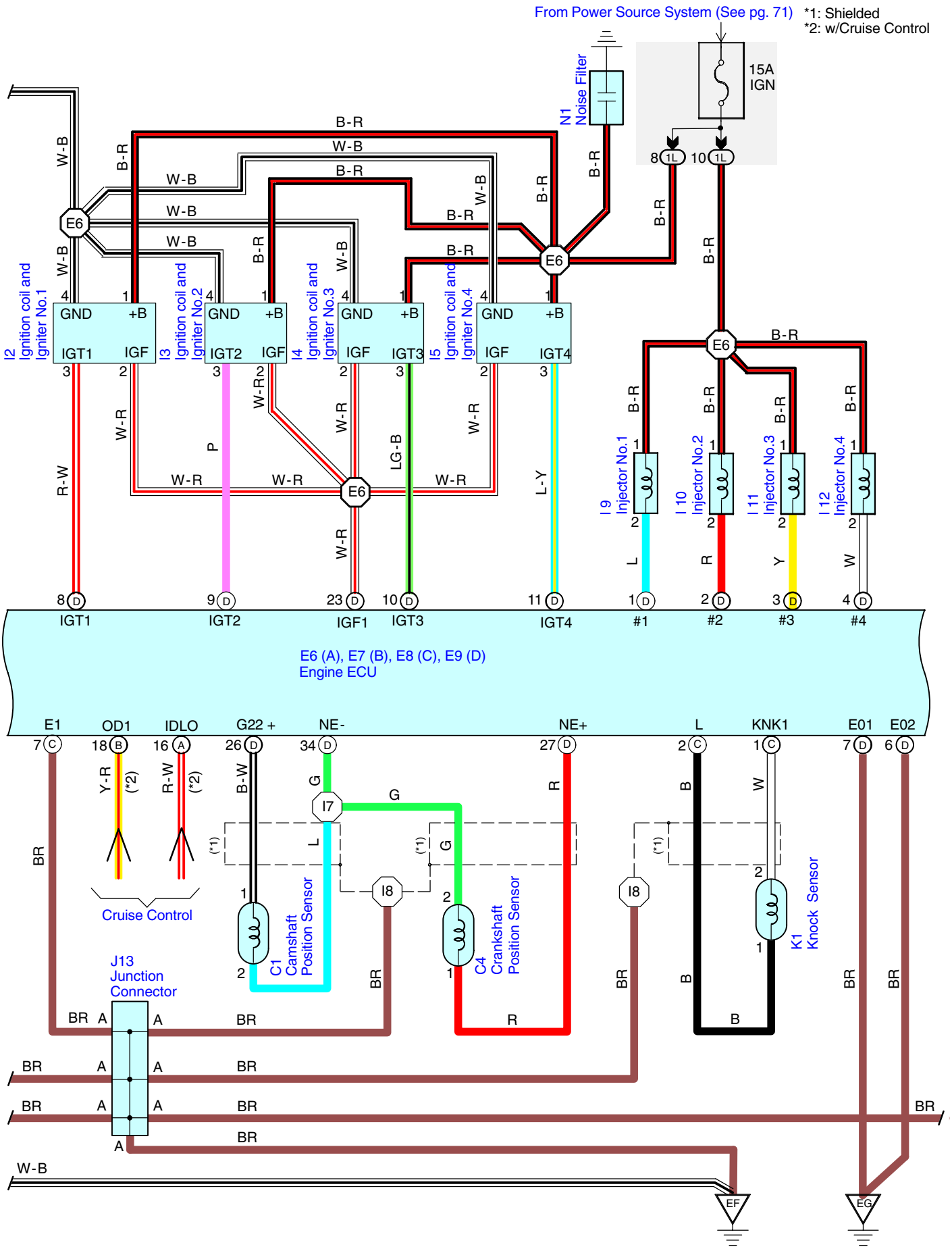
 : **Splice Points**

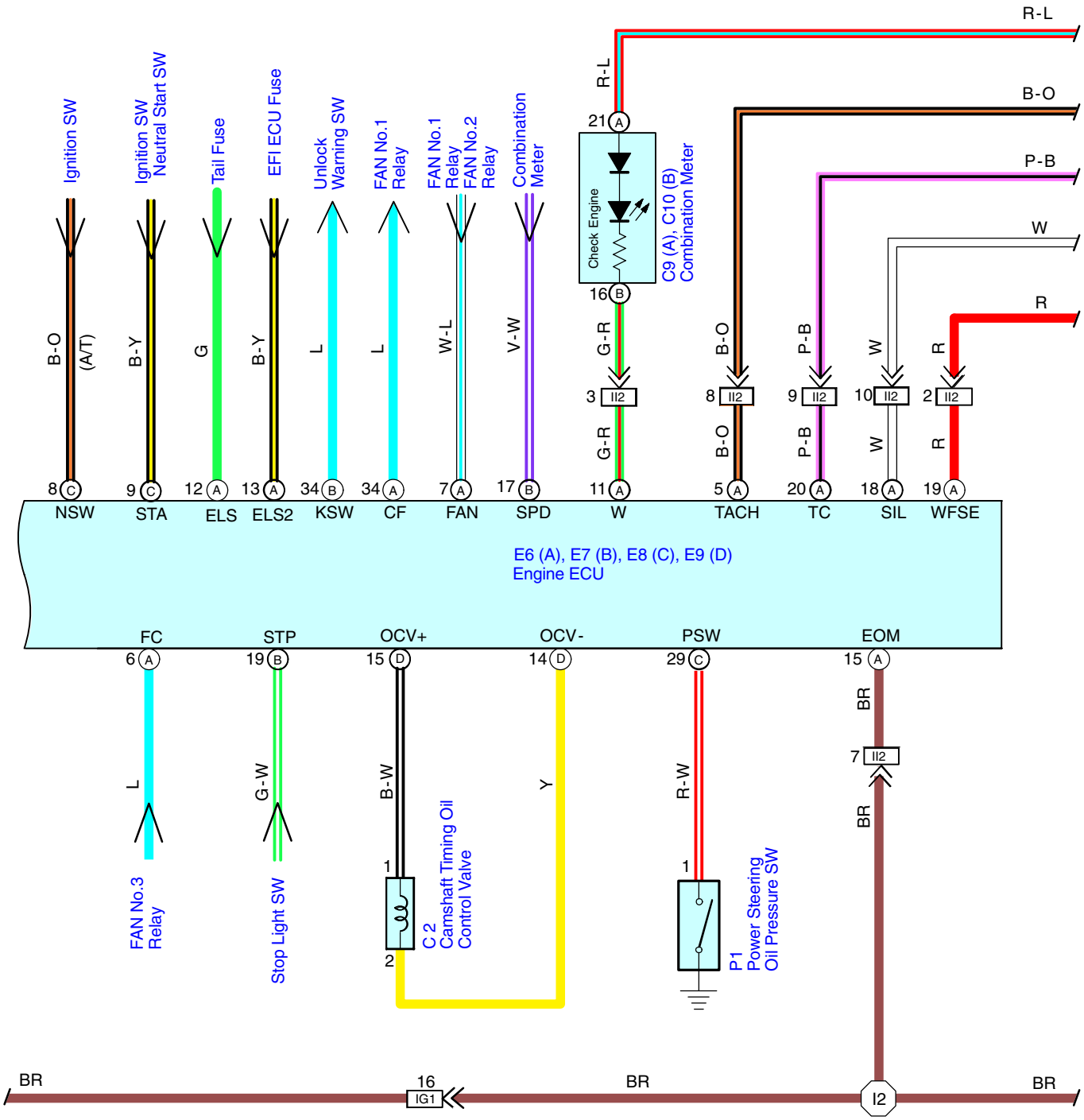
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	51 (LHD) 62 (RHD)	Engine Wire	I2	55 (LHD) 65 (RHD)	Instrument Panel
E7	51 (LHD) 62 (RHD)		I6	55 (LHD) 65 (RHD)	
I7	55 (LHD) 65 (RHD)	Instrument Panel			
I8	55 (LHD) 65 (RHD)				

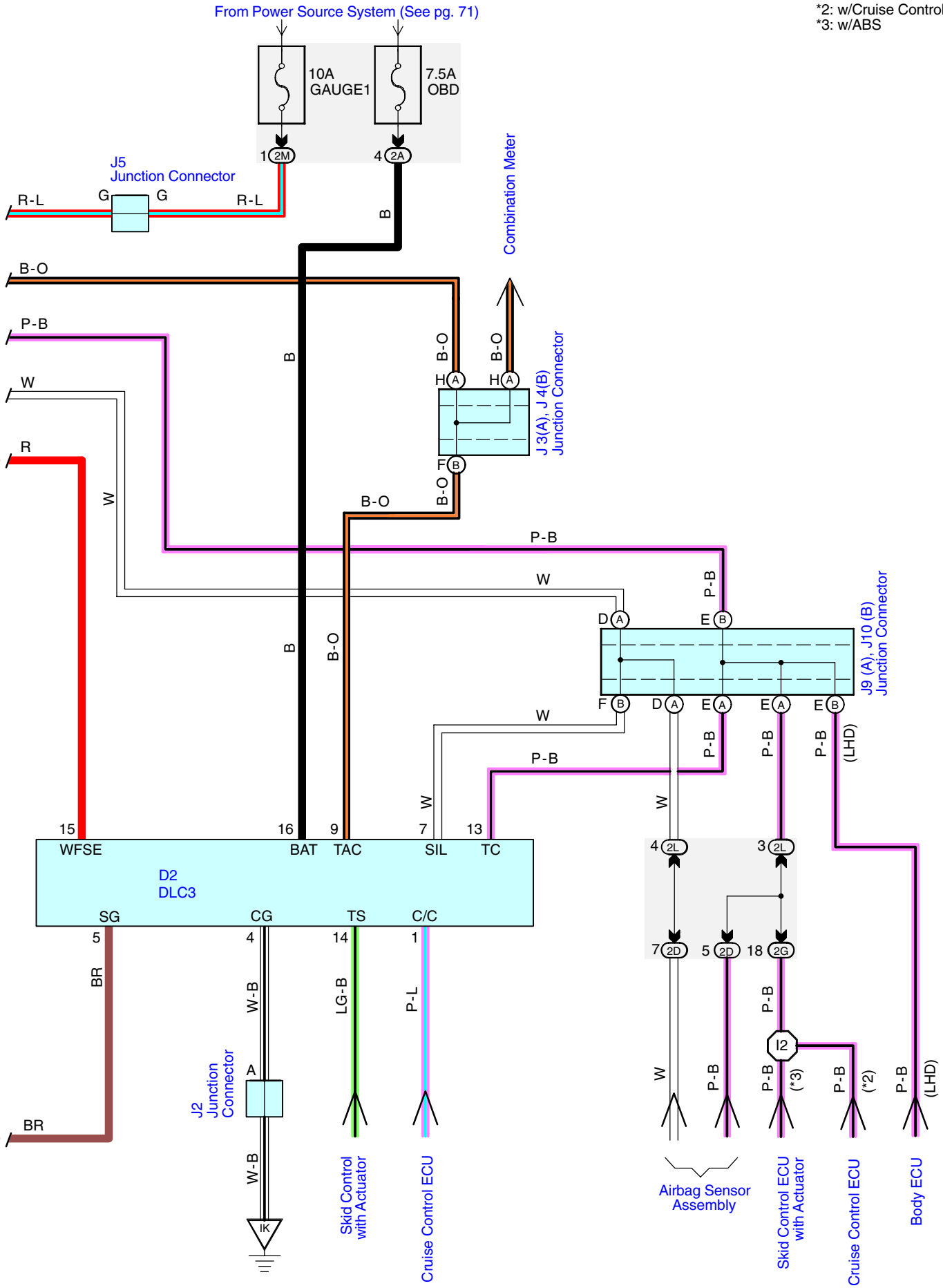

I17
Ignition SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
W
W-R
B-R
B-Y
B-W
B-G
W-B
B-O
G-R
L-B
5A AM1
30A AM2
20A EFI
10A IG2
EFI Relay
C/OPN Relay
Ref. Page 79
FL MAIN
3.0W
Battery
F12
Fuel Pump
(LHD)
(RHD)
E3
EA
BR
EG


W-B
B-W
Illumination
B-Y
B-W
B-R
5 2G
17 2G
3 2Q
G-R
R
B-R
W-B
(RHD)
W-B
(LHD)
V
7 6 2 1
GND ILL+ ILL- B+
I16
Immobiliser
Amplifier
CODE RXCK TXCT
G-W 4
R-L 3
L-Y 5
A13
A/C Control
Assembly
14
LP
GND
20
V
16 B
15 B
27 B
26 B
IMLD
CODE
RXCK
TXCT
E6 (A), E7 (B), E8 (C), E9 (D)
Engine ECU
ACID A/CS THR ACMG LCKI THR LCKI THWO ACMG A/CS ACID E1 AN
33 B 31 B 32 B 2 B 25 C 32 B 25 C 14 D 2 B 31 B 33 B 7 C 7 A
L L-W Y-B L-Y W-L L-R W-L Y-G W L-W L BR W-L
Manual
Air Conditioner
Auto
Air Conditioner
W-B
(RHD)
W-B
(LHD)
I2
8 2M
8 2R
B-W
E6
B-O
G-R
IM
IN


W-B
B-W
B-Y
B-W
B-R
B-W
BR
I6
BR
A7
Air Flow
Meter
+B
E2
VG
E2G
THA
E2
EFI WATER TEMP.
SSR
O2
OIL TEMP.
SSR
T1
Throttle Position
Sensor
E2
VTA
VC
B-R
B-W
B-Y
R
L-W
L-B
BR
G-Y
G
LG
Y
1 (A) +B
8 (A) MREL
3 (A) BATT
24 (C) VG
32 (C) EVG
20 (D) THA
28 (D) E2
19 (D) THW
30 (D) OIL
21 (D) VTA
18 (D) VC
E6 (A), E7 (B), E8 (C), E9 (D)
Engine ECU
ODMS
ODLP
IGSW
FC
PRG
OXL1
HTL
RSD
29 (B)
7 (B)
9 (A)
10 (A)
12 (D)
23 (C)
4 (C)
5 (D)
G-O
P-L
B-O
G-R
B-R
B
L
W
O/D Switch
20 2G
8 2G
(*1)
V3
VSV (EVAP)
I6
OX
HT
+B
E1
H5
Heated Oxygen
Sensor
I15
ISC CTRL VALVE
B-W
B-W
B-W
B-W
B-O
G-R
E6
E6
BR
BR
W-B
BR
BR
W-B


From Power Source System (See pg. 71)
*1: Shielded
*2: w/Cruise Control
N1 Noise Filter
15A IGN
E6
I2 Ignition coil and Igniter No.1
I3 Ignition coil and Igniter No.2
I4 Ignition coil and Igniter No.3
I5 Ignition coil and Igniter No.4
GND
+B
IGT1
IGF
IGT2
IGT3
IGT4
I9 Injector No.1
I10 Injector No.2
I11 Injector No.3
I12 Injector No.4
IGF1
E6 (A), E7 (B), E8 (C), E9 (D)
Engine ECU
E1
OD1
IDLO
G22 +
NE-
NE+
L
KNK1
E01
E02
Cruise Control
I7
I8
C1 Camshaft Position Sensor
C4 Crankshaft Position Sensor
K1 Knock Sensor
J13 Junction Connector
EF
EG


R-L
B-O
P-B
W
R
Ignition SW
Ignition SW
Neutral Start SW
Tail Fuse
EFI ECU Fuse
Unlock Warning SW
FAN No.1 Relay
FAN No.1 Relay
FAN No.2 Relay
Combination Meter
Check Engine
C9 (A), C10 (B) Combination Meter
B-O (A/T)
B-Y
G
B-Y
L
L
W-L
V-W
R-L
G-R
G-R
B-O
B-O
P-B
P-B
W
W
R
R
8 C NSW
9 C STA
12 A ELS
13 A ELS2
34 B KSW
34 A CF
7 A FAN
17 B SPD
21 A
16 B
3 II2
11 A W
8 II2
5 A TACH
9 II2
20 A TC
10 II2
18 A SIL
2 II2
19 A WFSE
E6 (A), E7 (B), E8 (C), E9 (D)
Engine ECU
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
BR
FAN No.3 Relay
Stop Light SW
1
2
C 2
Camshaft Timing Oil Control Valve
1
P1
Power Steering Oil Pressure SW
BR
16 IG1
BR
I2
BR


From Power Source System (See pg. 71)
*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
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
A
J2 Junction Connector
W
P-B
P-B
(*3)
P-B
(*2)
P-B
(LHD)
W-B
BR
IK
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 resulting voltage 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 OXL1 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 inputs it to the ABS speed sensor of the ABS ECU,the signal is then input from the ABS 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.

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.
* Electronic Spark Advance (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 HTL 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)
PRG-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		33 (LHD) 42 (RHD)	F12	37 (LHD) 46 (RHD)	J2		36 (LHD) 45 (RHD)
A13		35 (LHD) 44 (RHD)	H5	33 (LHD) 42 (RHD)	J3	A	36 (LHD) 45 (RHD)
C1		33 (LHD) 42 (RHD)	I2	34 (LHD) 43 (RHD)	J4	B	36 (LHD) 45 (RHD)
C2		33 (LHD) 42 (RHD)	I3	34 (LHD) 43 (RHD)	J5		36 (LHD) 45 (RHD)
C4		33 (LHD) 42 (RHD)	I4	34 (LHD) 43 (RHD)	J9	A	36 (LHD) 45 (RHD)
C9	A	35 (LHD) 44 (RHD)	I5	34 (LHD) 43 (RHD)	J10	B	36 (LHD) 45 (RHD)
C10	B	35 (LHD) 44 (RHD)	I9	34 (LHD) 43 (RHD)	J13		36 (LHD) 45 (RHD)
D2		35 (LHD) 44 (RHD)	I10	34 (LHD) 43 (RHD)	K1		34 (LHD) 43 (RHD)
E2		33 (LHD) 42 (RHD)	I11	34 (LHD) 43 (RHD)	P1		34 (LHD) 43 (RHD)
E6	A	36 (LHD) 45 (RHD)	I12	34 (LHD) 43 (RHD)	T1		34 (LHD) 43 (RHD)
E7	B	36 (LHD) 45 (RHD)	I15	34 (LHD) 43 (RHD)	V3		34 (LHD) 43 (RHD)
E8	C	36 (LHD) 45 (RHD)	I16	36 (LHD) 45 (RHD)			
E9	D	36 (LHD) 45 (RHD)	I17	34 (LHD) 43 (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 (Engine Compartment Left)
1B		
1C		
1D		
1E		
1K	24	Engine Wire and Engine Room J/B (Engine Compartment Left)
1L		
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2D	26	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
2E		
2G		
2L	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2M		
2O		
2Q		
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	63 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
ID1	52 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE2	63 (RHD)	Engine Room Main Wire and Instrument Panel (Left Side of Steering Column Tube)
IE5	52 (LHD)	Engine Room Main Wire and Instrument Panel (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel (Left Side of Steering Column Tube)
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

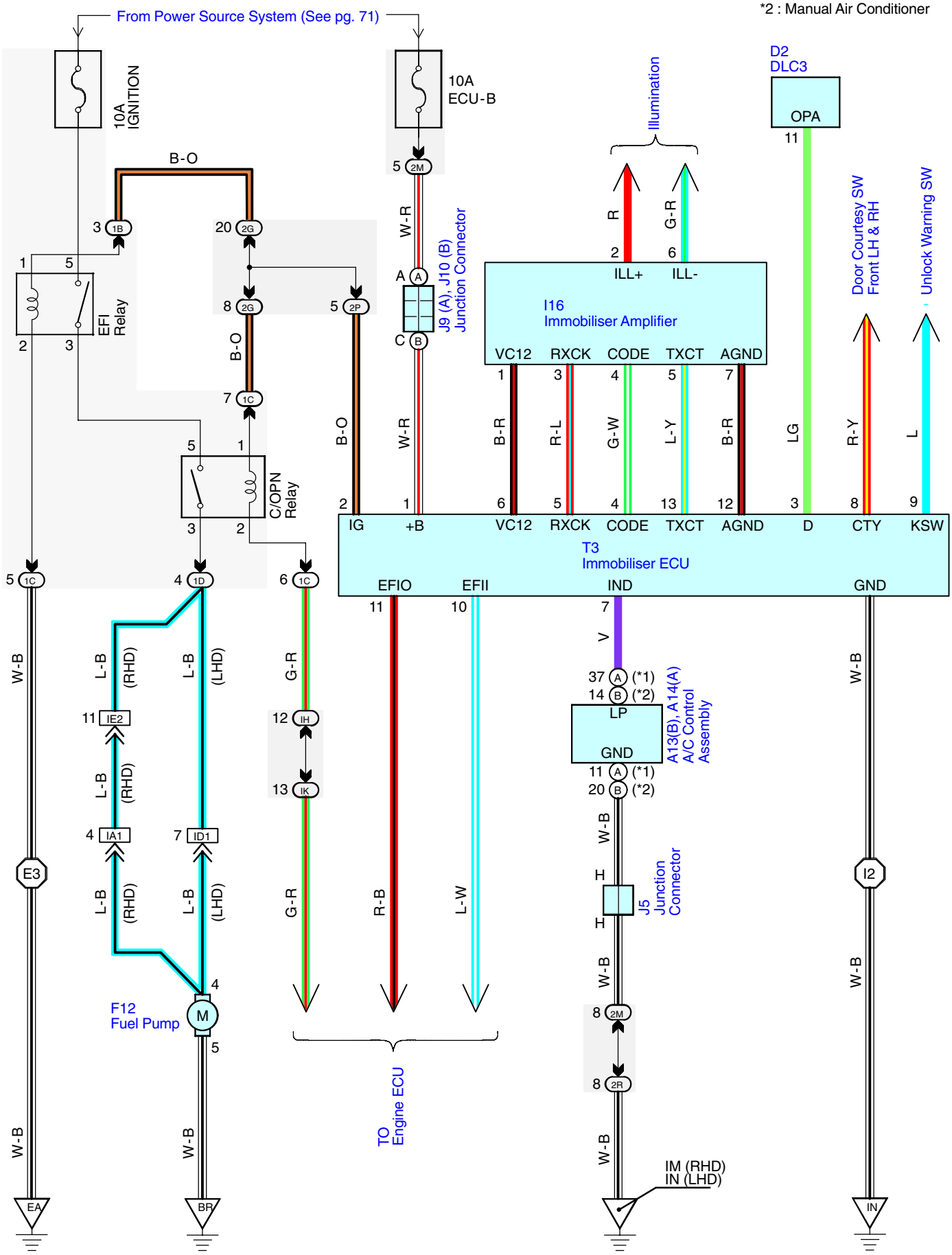
: Ground Points

Code	See Page	Ground Points Location
BO	56 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	67 (RHD)	Front Side of Rear Quarter Wheel House RH
EA	51 (LHD)	Right Fender
	62 (RHD)	
EF	51 (LHD)	Intake Side of Cylinder Block
	62 (RHD)	
EG	51 (LHD)	Left Side of Cylinder Head
	62 (RHD)	
IK	52 (LHD)	Instrument Panel Brace LH
	63 (RHD)	Instrument Panel Brace RH
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	52 (LHD)	

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	62 (RHD)	Engine Wire	I6	65 (RHD)	Engine Wire
E6	51 (LHD)	Engine Wire	I7	54 (LHD)	
	62 (RHD)			65 (RHD)	
I2	52 (LHD)	Instrument Panel Wire	I8	54 (LHD)	
	63 (RHD)			65 (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	35 (LHD) 44 (RHD)	F12	37 (LHD) 46 (RHD)	J9	A	36 (LHD) 45 (RHD)
A14	B	35 (LHD) 44 (RHD)	I16	36 (LHD) 45 (RHD)	J10	B	36 (LHD) 45 (RHD)
D2		35 (LHD) 44 (RHD)	J5	36 (LHD) 45 (RHD)	T3		36 (LHD) 45 (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	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
ID1	52 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
IE2	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)

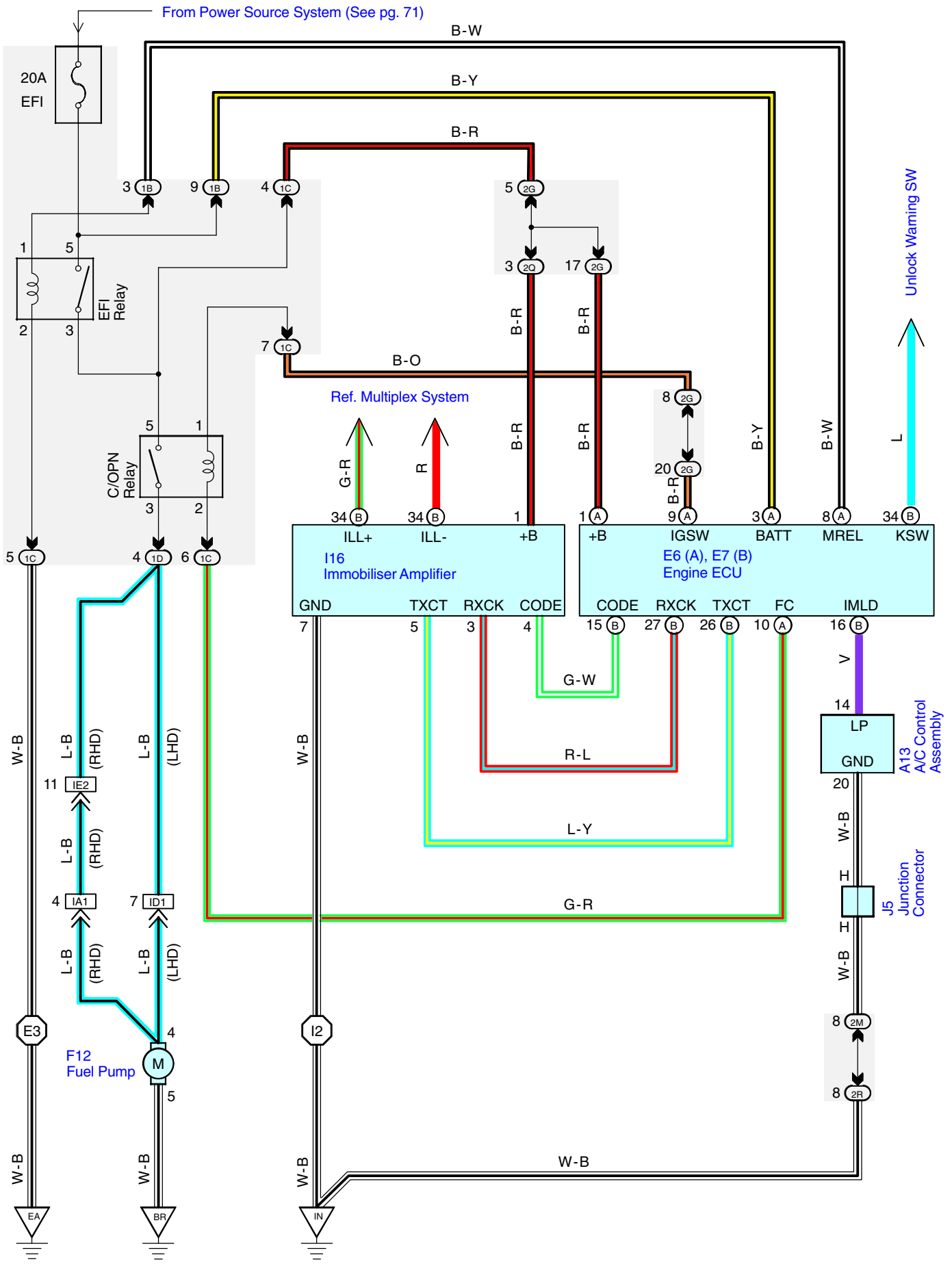
: Ground Points

Code	See Page	Ground Points Location
BO	56 (LHD)	Front Side of Rear Quarter Wheel House LH
BR	67 (RHD)	Front Side of Rear Quarter Wheel House RH
EA	49 (LHD) 60 (RHD)	Right Fender
IN	63 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54 (LHD)	Instrument Panel			

Engine Immobiliser System (2AZ-FE)



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		35 (LHD) 44 (RHD)	E7	B	36 (LHD) 45 (RHD)	I16	36 (LHD) 45 (RHD)
E6	A	36 (LHD) 45 (RHD)	F12		36 (LHD) 45 (RHD)	J5	36 (LHD) 45 (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
2M	27	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2Q 2R	26 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)
IA1	52 (LHD) 63 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IE2	52 (LHD) 63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
ID1	52 (LHD) 63 (RHD)	Engine Room Main Wire and Floor Wire (Right Kick Panel)

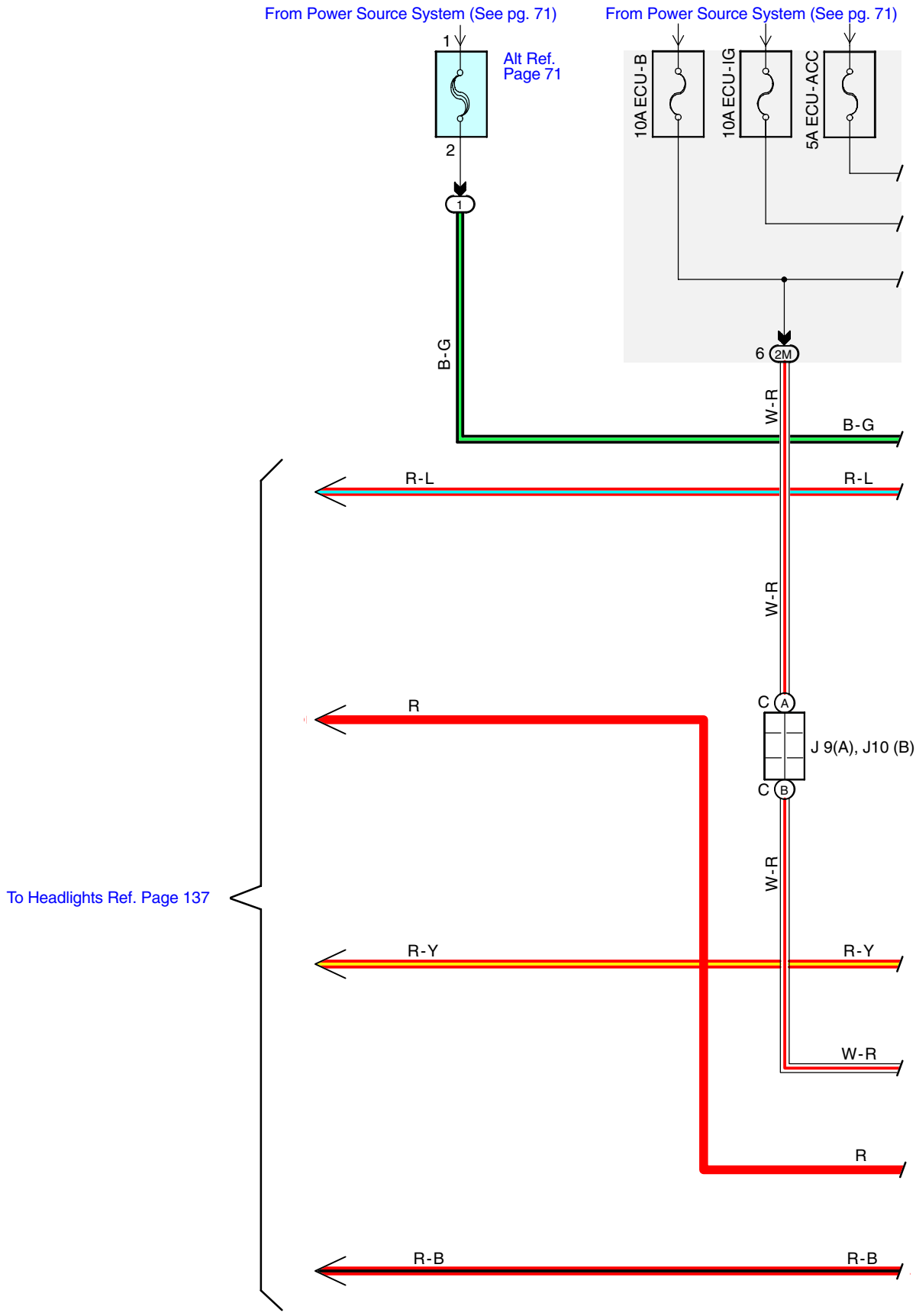
: Ground Points

Code	See Page	Ground Points Location
BR	67 (RHD)	Front Side of Rear Quarter Wheel House RH
EA	51 (LHD) 62 (RHD)	Right Fender
IN	52 (LHD) 63 (RHD)	Instrument Panel Reinforcement RH

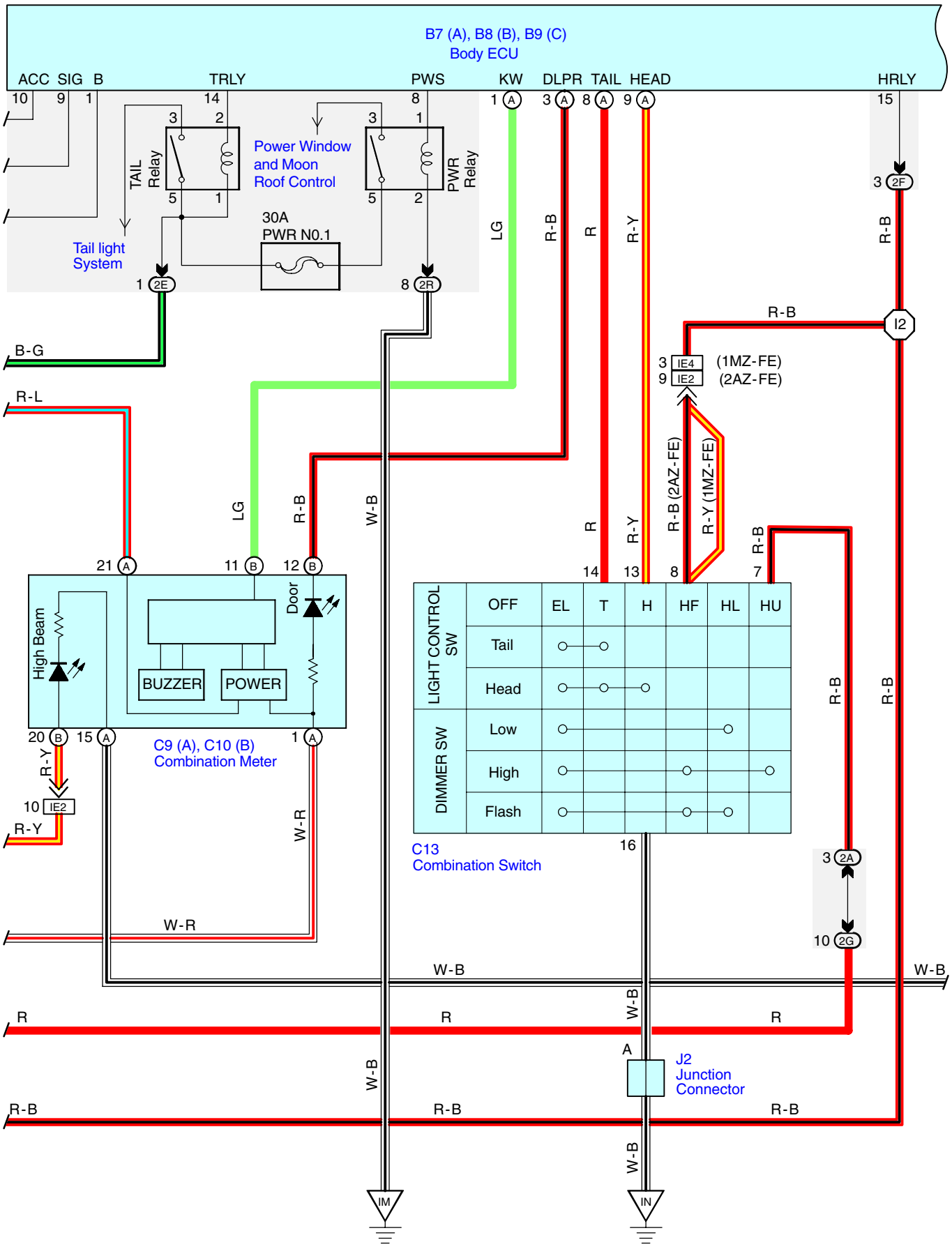
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	62 (RHD)	Engine Room Main Wire	I2	54 (LHD)	Instrument Panel Wire

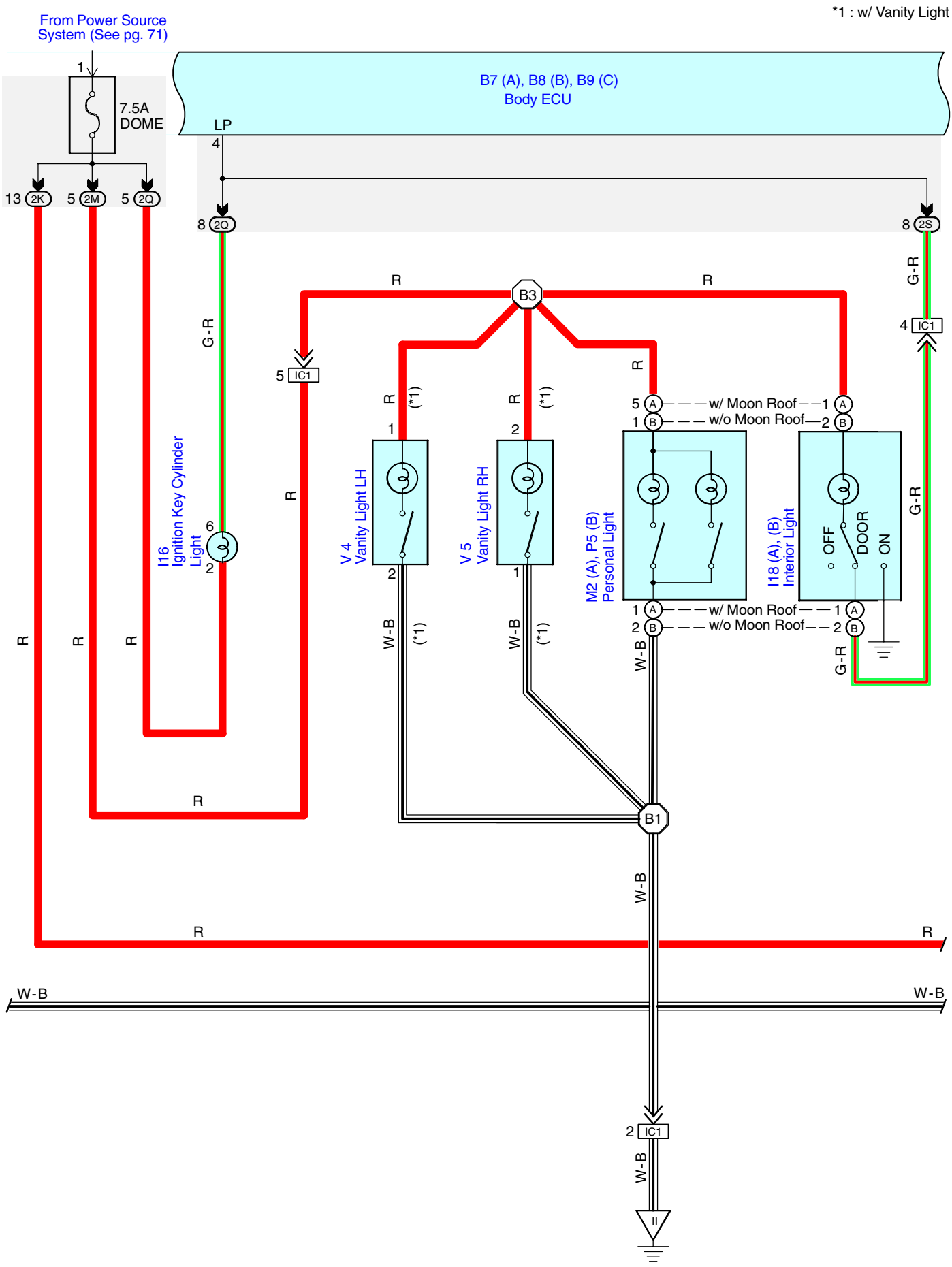
Multiplex Communication System (LHD)



Multiplex Communication System (LHD)

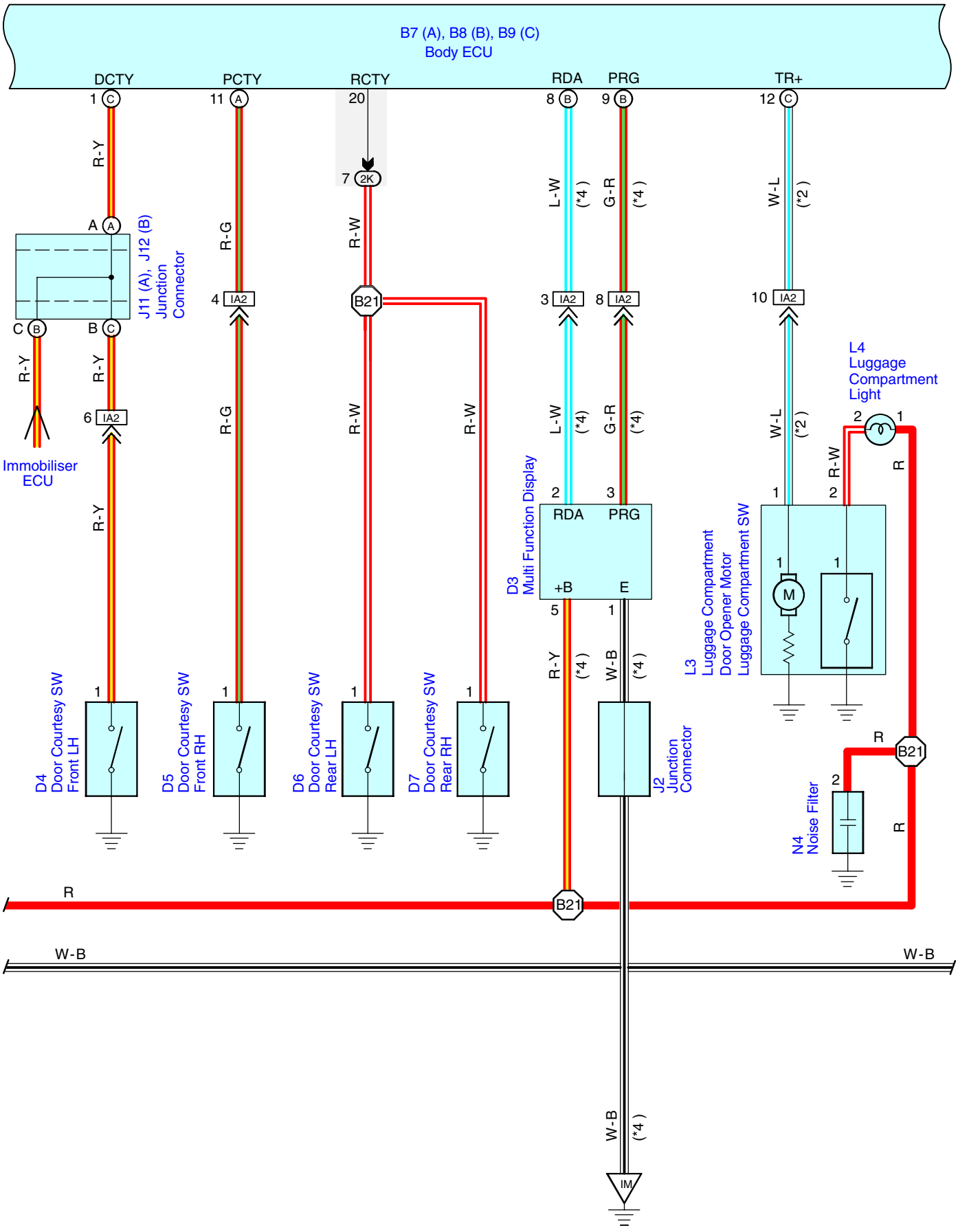


Multiplex Communication System (LHD)



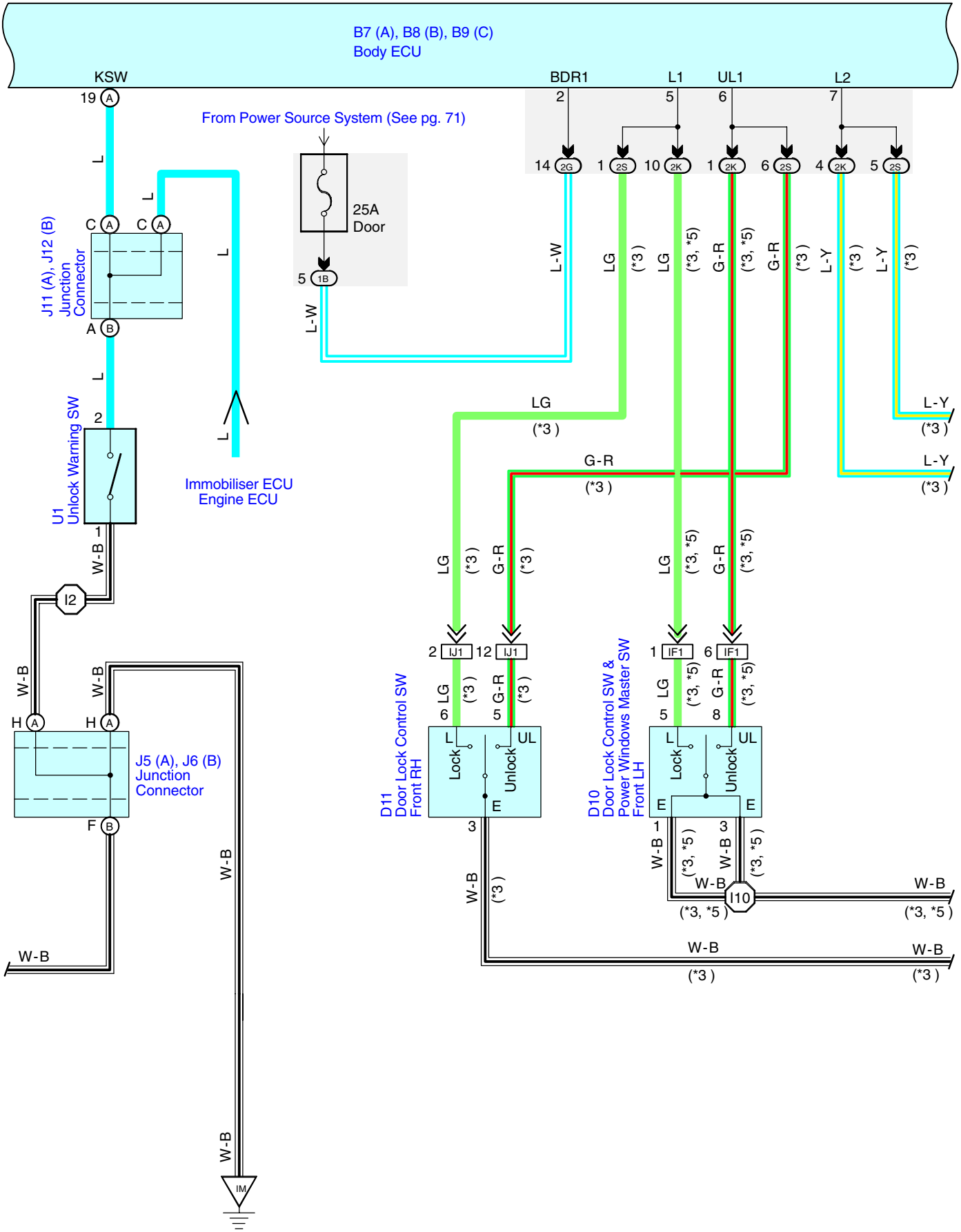
Multiplex Communication System (LHD)

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



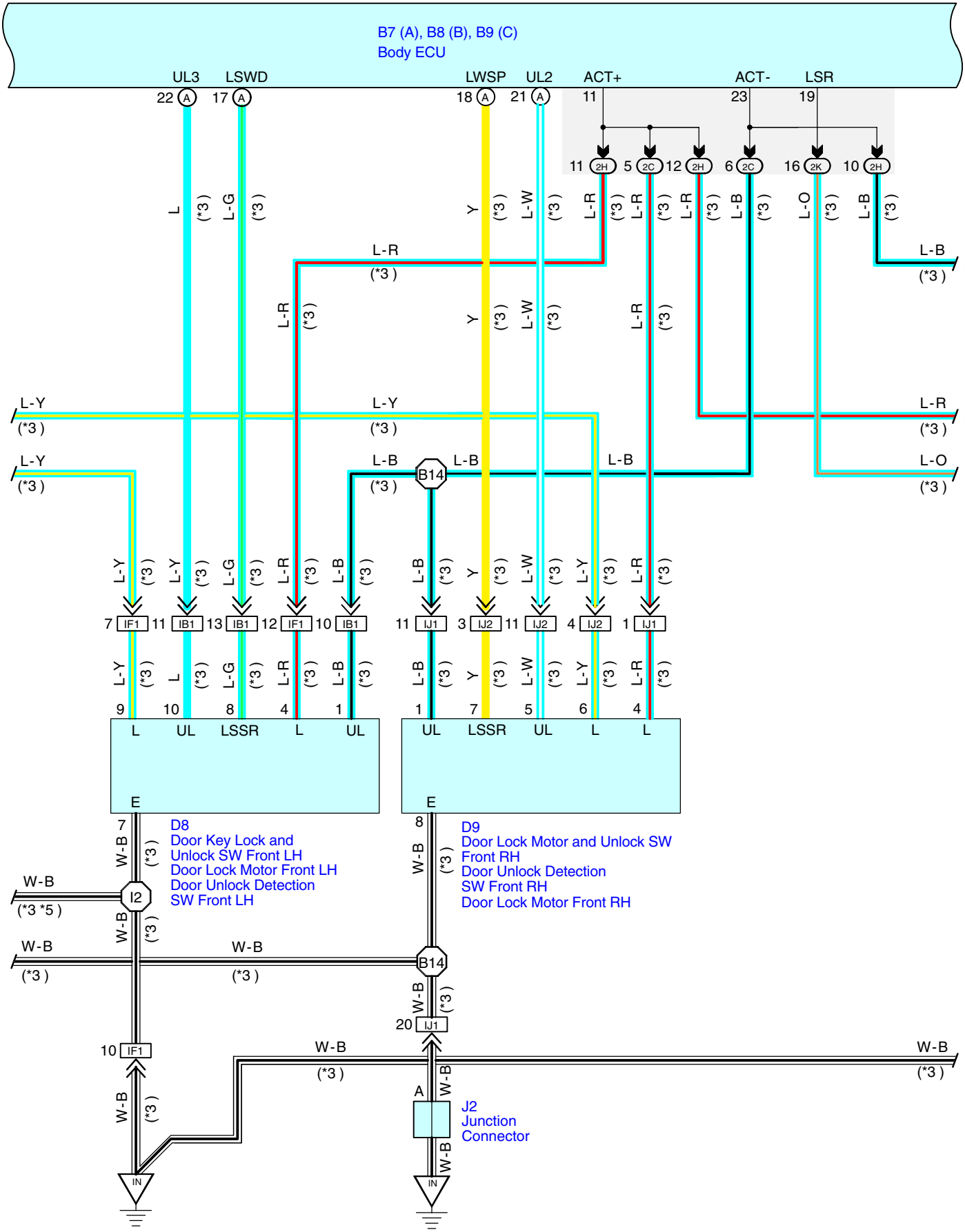
Multiplex Communication System (LHD)

*3 : Door Lock Control
*5 : Jam Protection



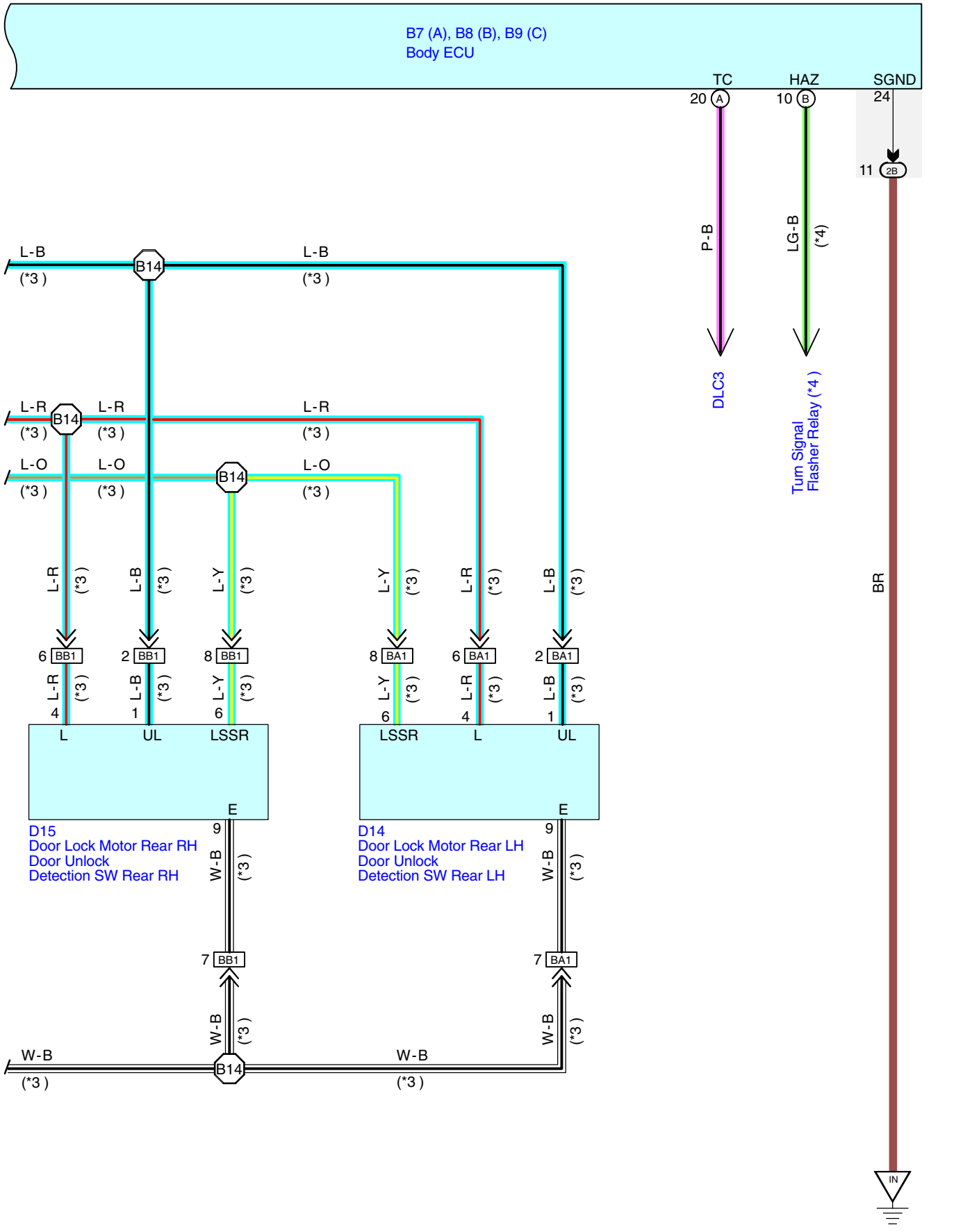
Multiplex Communication System (LHD)

*3 : Door Lock Control
*5 : Jam Protection



Multiplex Communication System (LHD)

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



Multiplex Communication System (LHD)

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	35	D11		37	L4		37
B8	B		D14			M2	A	37
B9	C		D15			N4		38
C9	A	35	I16		36	P5	B	38
C10	B		I18	A	37	U1		36
C13			I18	B		V4		38
D3		37	J2		36	V5		
D4			J5	A				
D5			J6	B				
D6			J9	A				
D7			J10	B				
D8			J11	A				
D9			J12	B				
D10			L3		37			

⬭ : 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
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	56	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
BB1	56	Rear Door RH Wire and Floor Wire (Right Centre Pillar)
IA2	52	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IB1	52	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	52	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
IE2	52	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
IE4	52	
IF1	52	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ1	54	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ2	54	

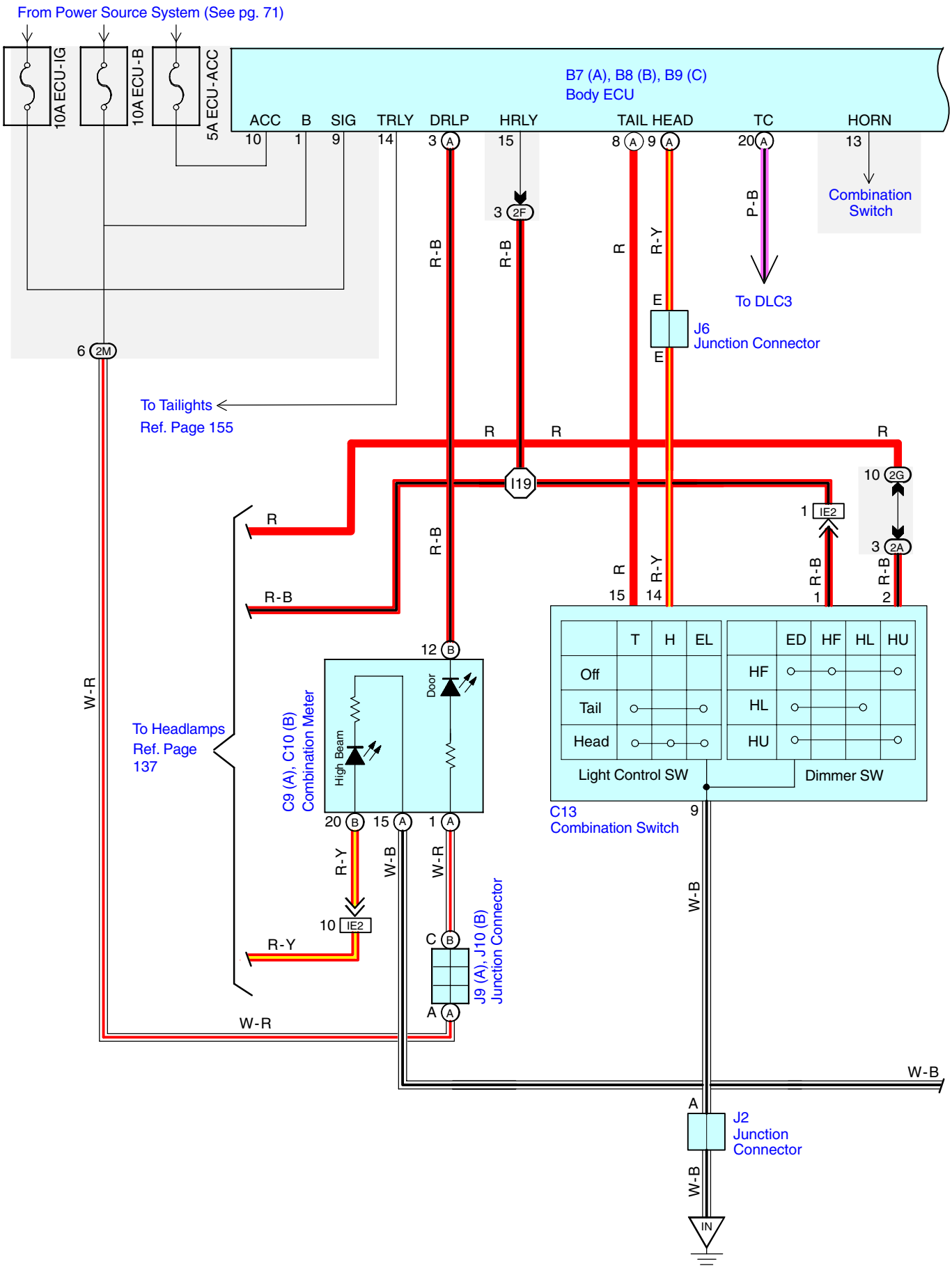
 : **Ground Points**

Code	See Page	Ground Points Location
II	52	Left Fender
IJ	52	Right Fender
IM	56	Instrument Panel Reinforcement RH
IN	52	

 : **Splice Points**

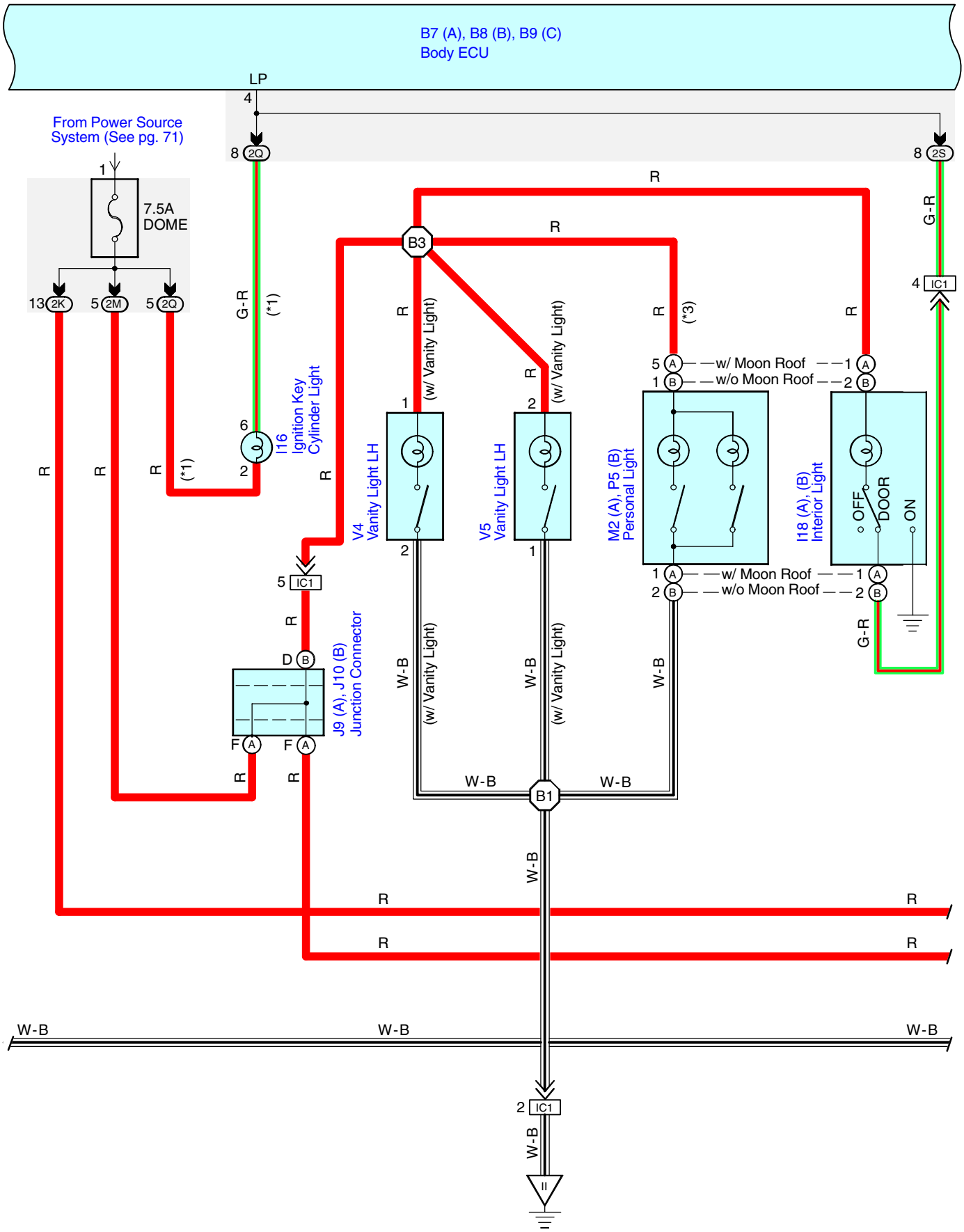
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	56	Roof Wire	I2	54	Instrument Panel Wire
B2			I10	54	
B3					
B14	56	Floor Wire			
B21					

Multiplex Communication System (RHD)(Exc. South Africa)



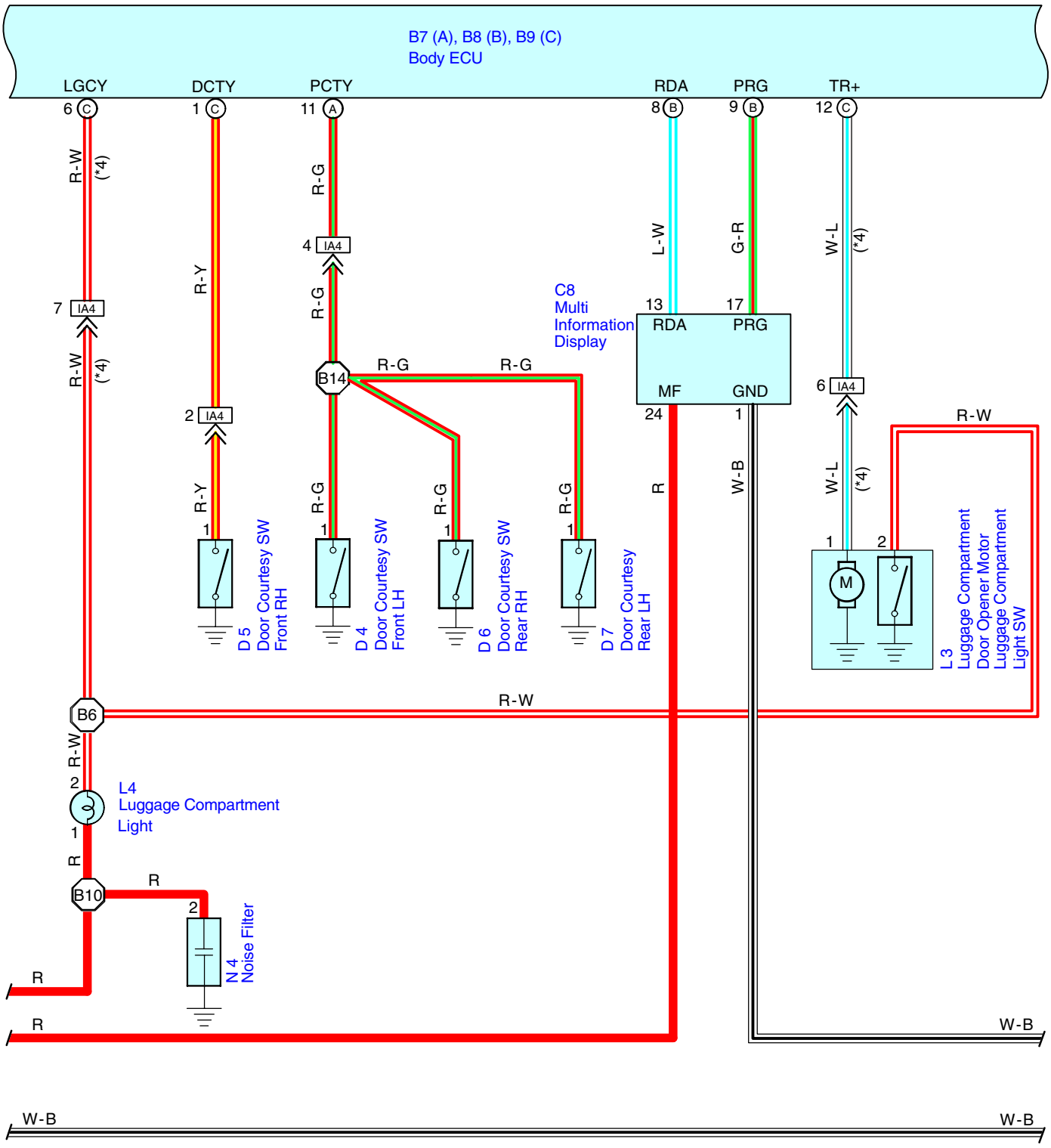
Multiplex Communication System (RHD)(Exc. South Africa)

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



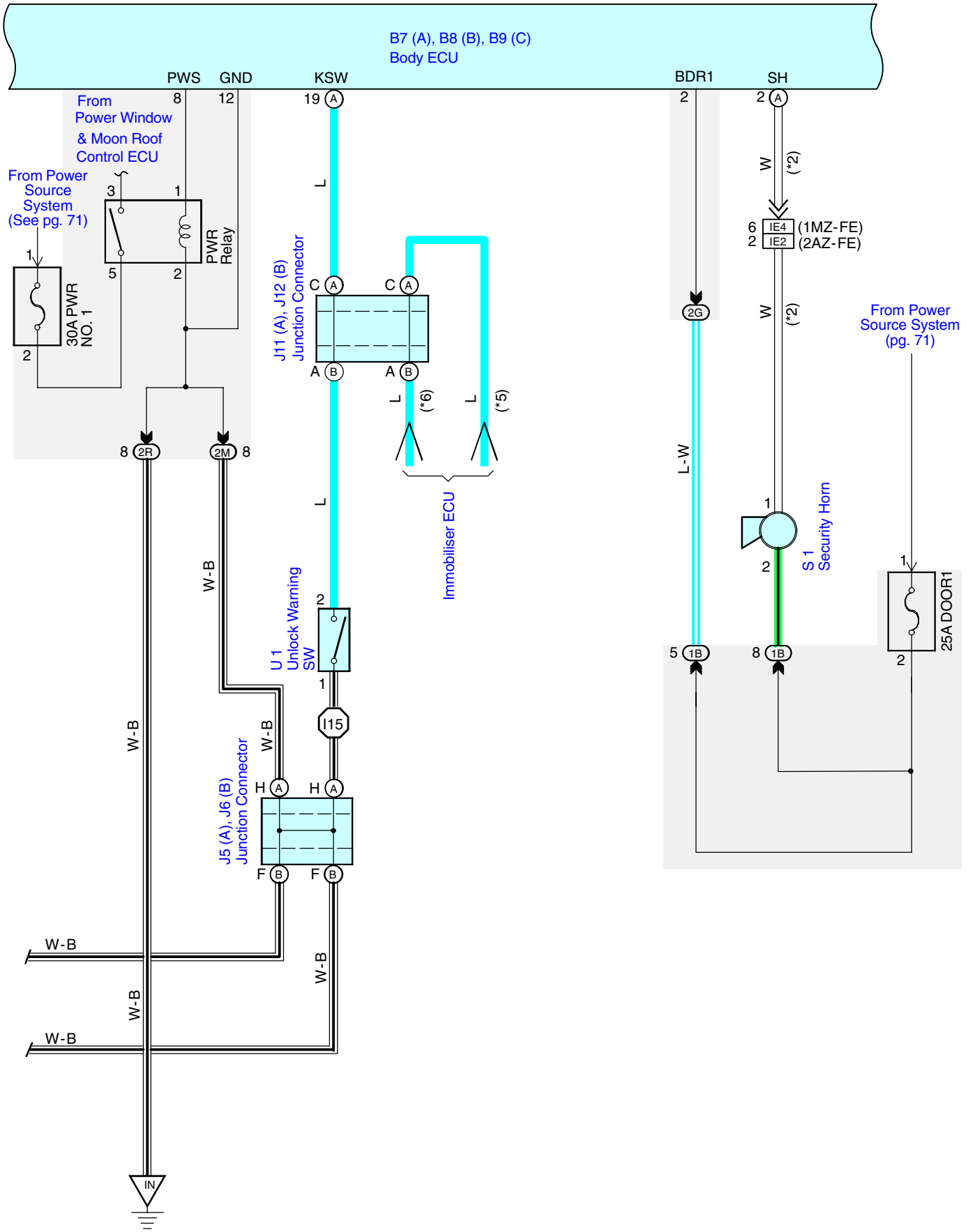
Multiplex Communication System (RHD)(Exc. South Africa)

*4 : w/ Luggage Compartment Door Opener



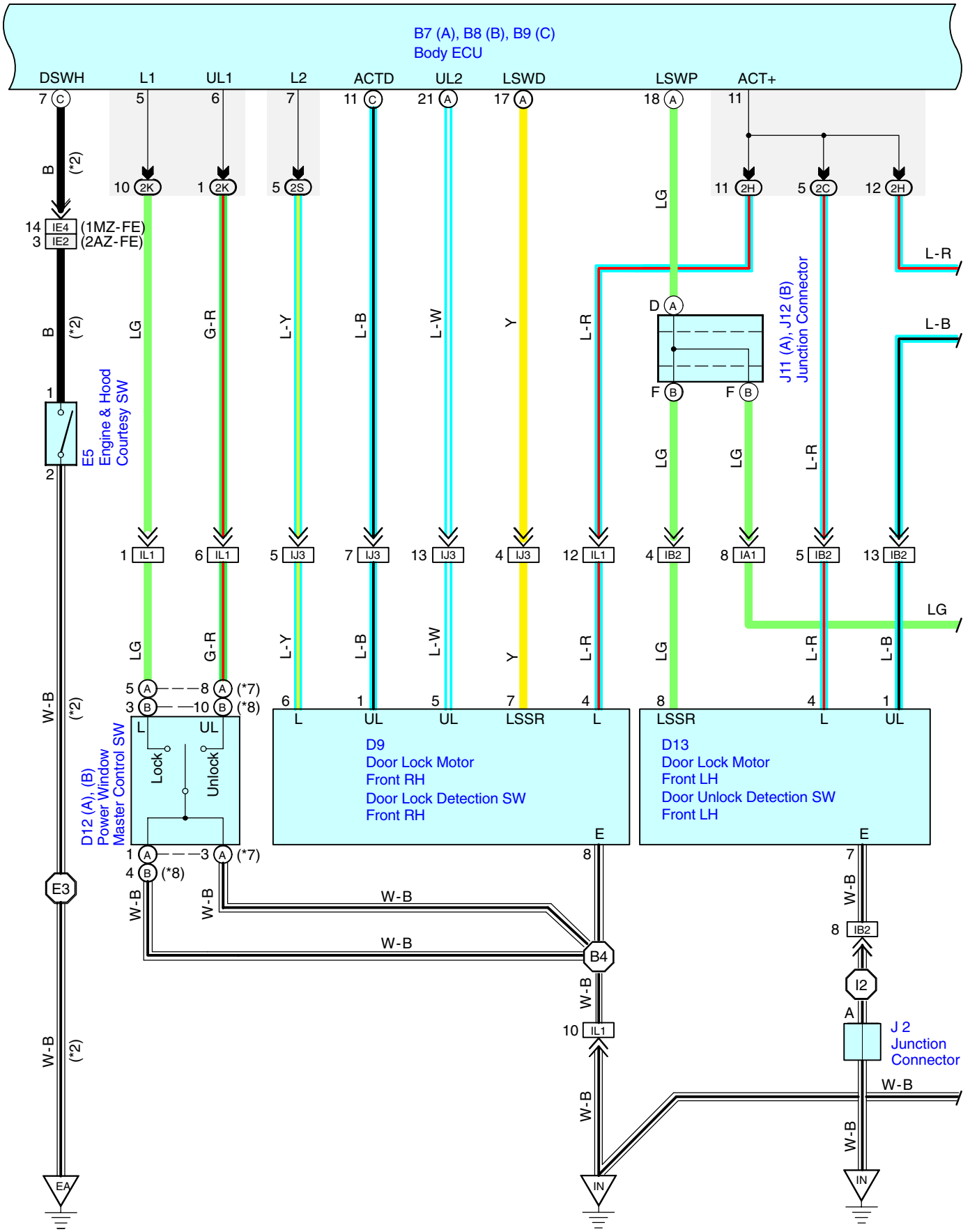
Multiplex Communication System (RHD)(Exc. South Africa)

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



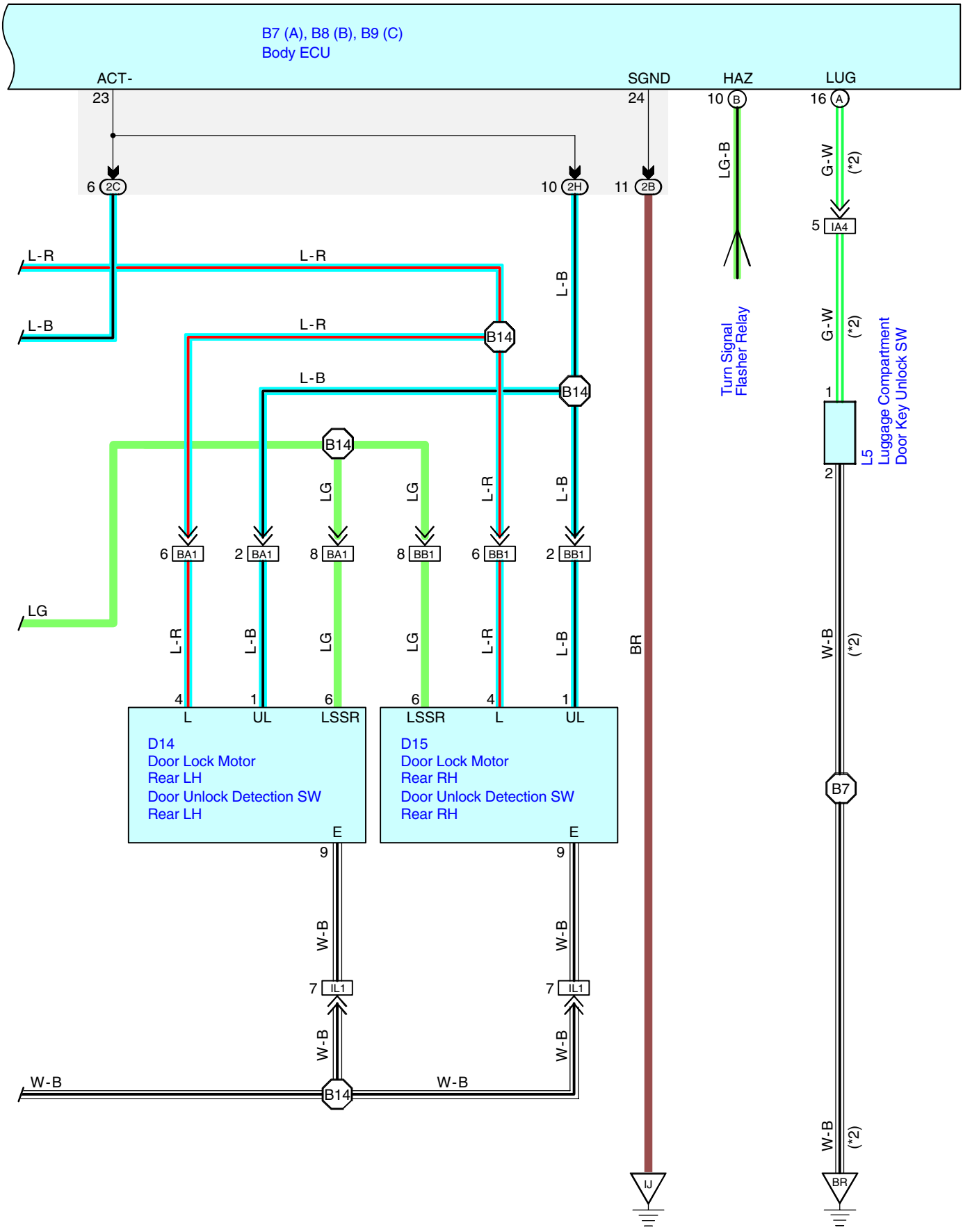
Multiplex Communication System (RHD)(Exc. South Africa)

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



Multiplex Communication System (RHD)(Exc. South Africa)

*2 : w/ Theft Deterrent



Multiplex Communication System (RHD)(Exc. South Africa)

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**
- **Security Horn**

Service Hints

Body ECU

SIG-Ground : Approx. 12 volts with ignition SW at ON or ST position
SGND & GND
12, 24-Ground : Always continuity
B-Ground : Always approx. 12 volts

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	44	D15		46	N4		47
B8	B		E5		40 (1MZ-FE)	P5	B	
B9	C				42 (2AZ-FE)	S1		43
C8			I16		45	U1		41
C9	A		I18		46	V4		47
C10	B		J2		45	V5		
C13			J5		45			
D4		46	J6		45			
D5			J9	A	45			
D6			J10	B				
D7			J11	A				
D9			J12	B				
D12	A		L3		46			
D12	B		L4					
D13		46	L5					
D14		46	M2	A				

⬭ : 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
2A	26	Instrument Panel Wire and Driver Side J/B
2B		
2C		
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	67	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
BB1	67	Rear Door RH Wire and Floor Wire (Right Centre Pillar)
IA1	63	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA4		
IB2	63	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	63	Instrument Panel Wire and Roof Wire (Inside of Front Right Panel)
IE2	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE4	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IJ3	65	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IL1	65	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

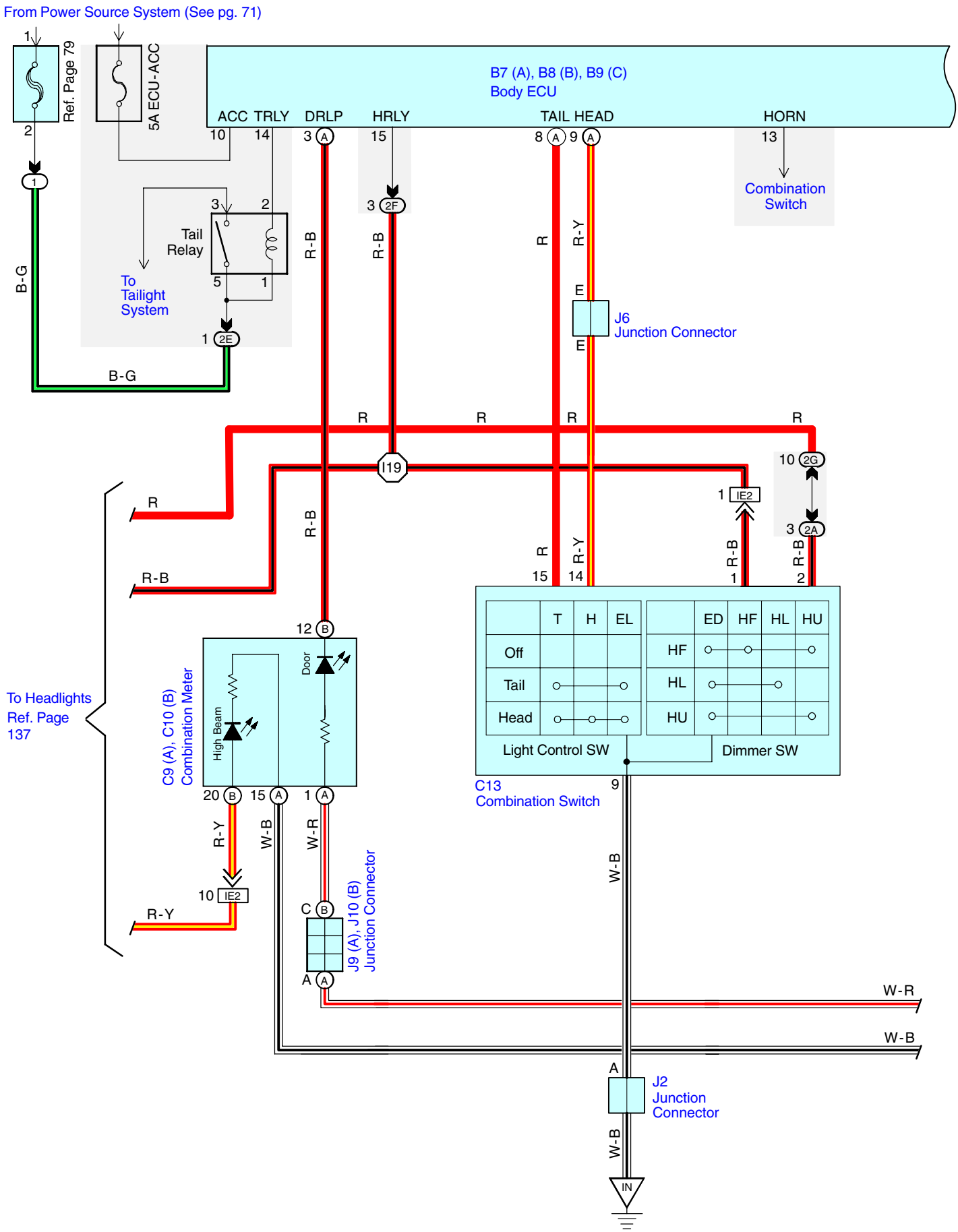
 : **Ground Points**

Code	See Page	Ground Points Location
BR	67	Front Side of Rear Wheel House RH
EA	62	Right Fender
II	63	Instrument Panel Reinforcement LH
IJ	63	Instrument Panel Brace RH
IN	63	Right Kick Panel

 : **Splice Points**

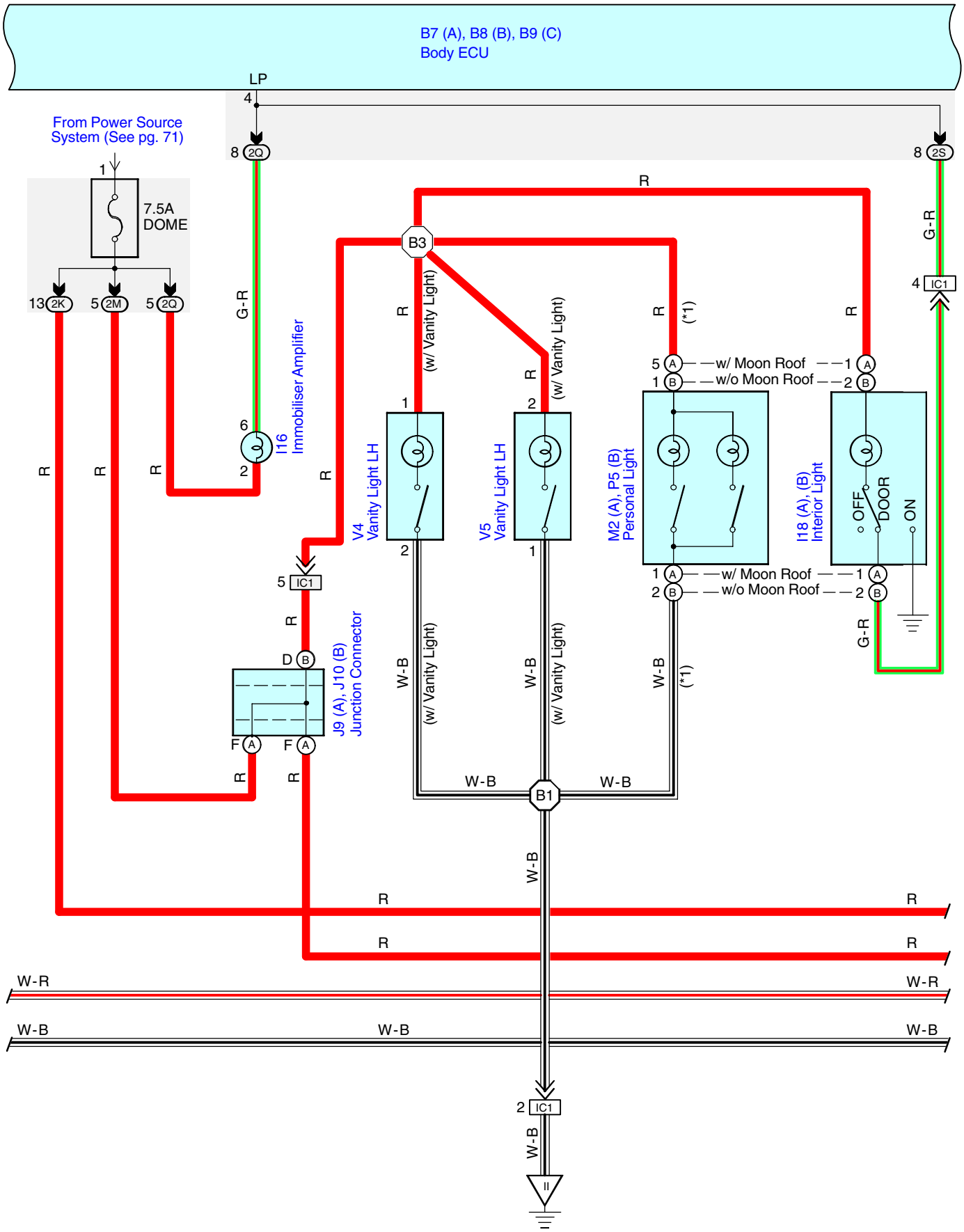
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	67	Roof Wire	B14	67	Floor Wire
B3			I15	65	Instrument Panel Wire
B4	67	Floor Wire			
B6	67		I19	65	Instrument Panel Wire
B7	67		E3	62	Left Fender
B10	67				

Multiplex Communication System (RHD)(South Africa)



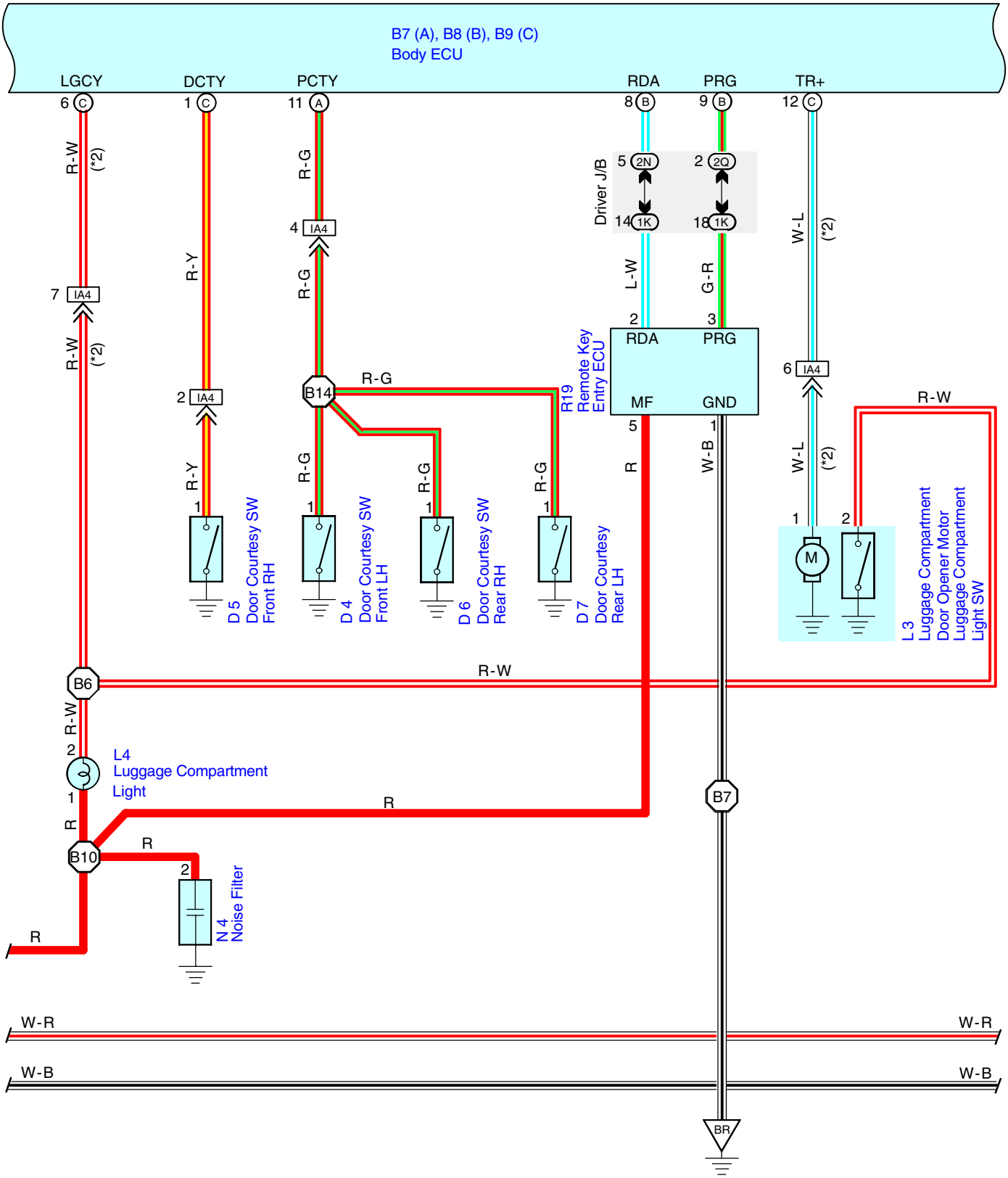
Multiplex Communication System (RHD)(South Africa)

*1 : w/ Personal Light



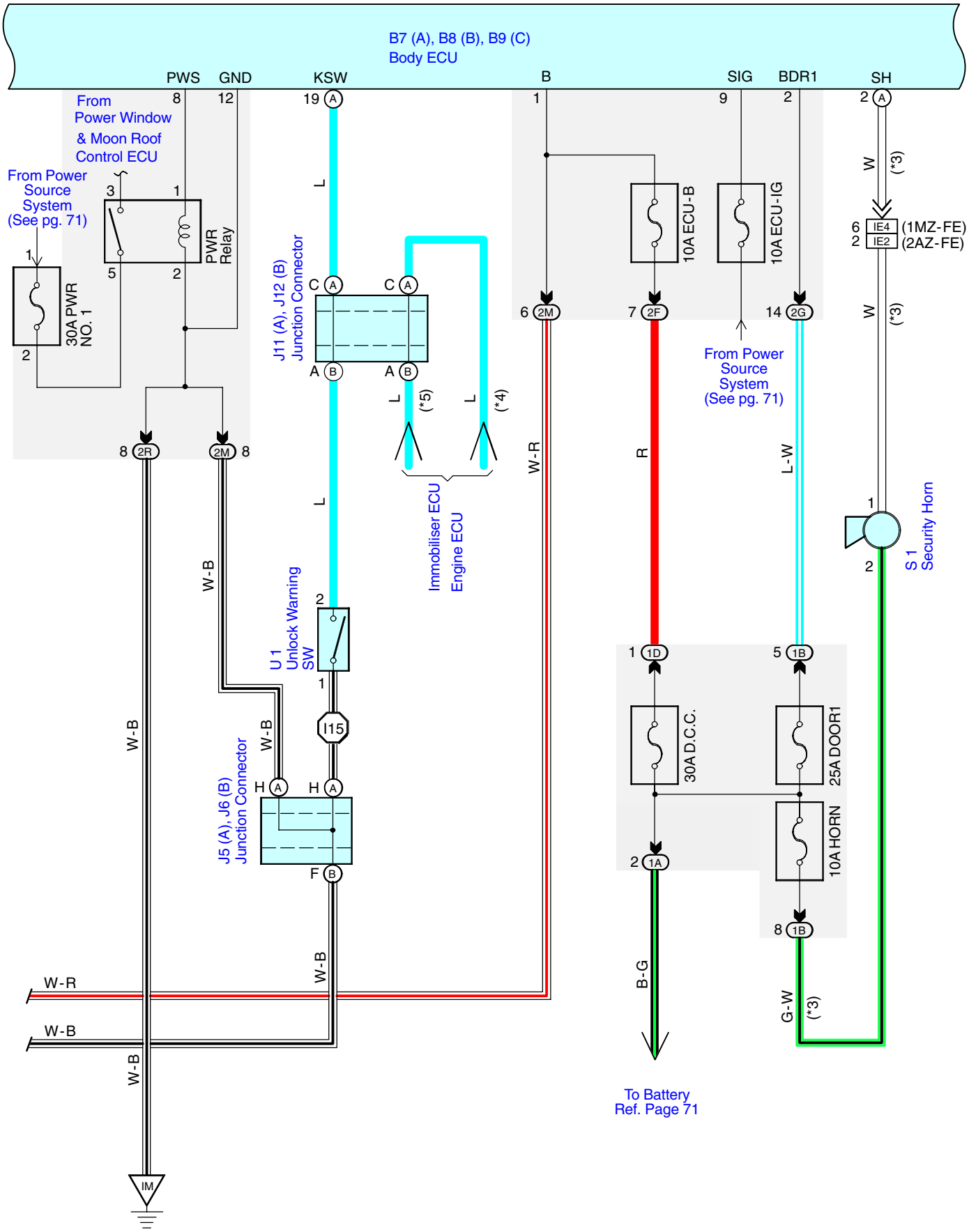
Multiplex Communication System (RHD)(South Africa)

*2 : w/ Luggage Compartment Door Opener



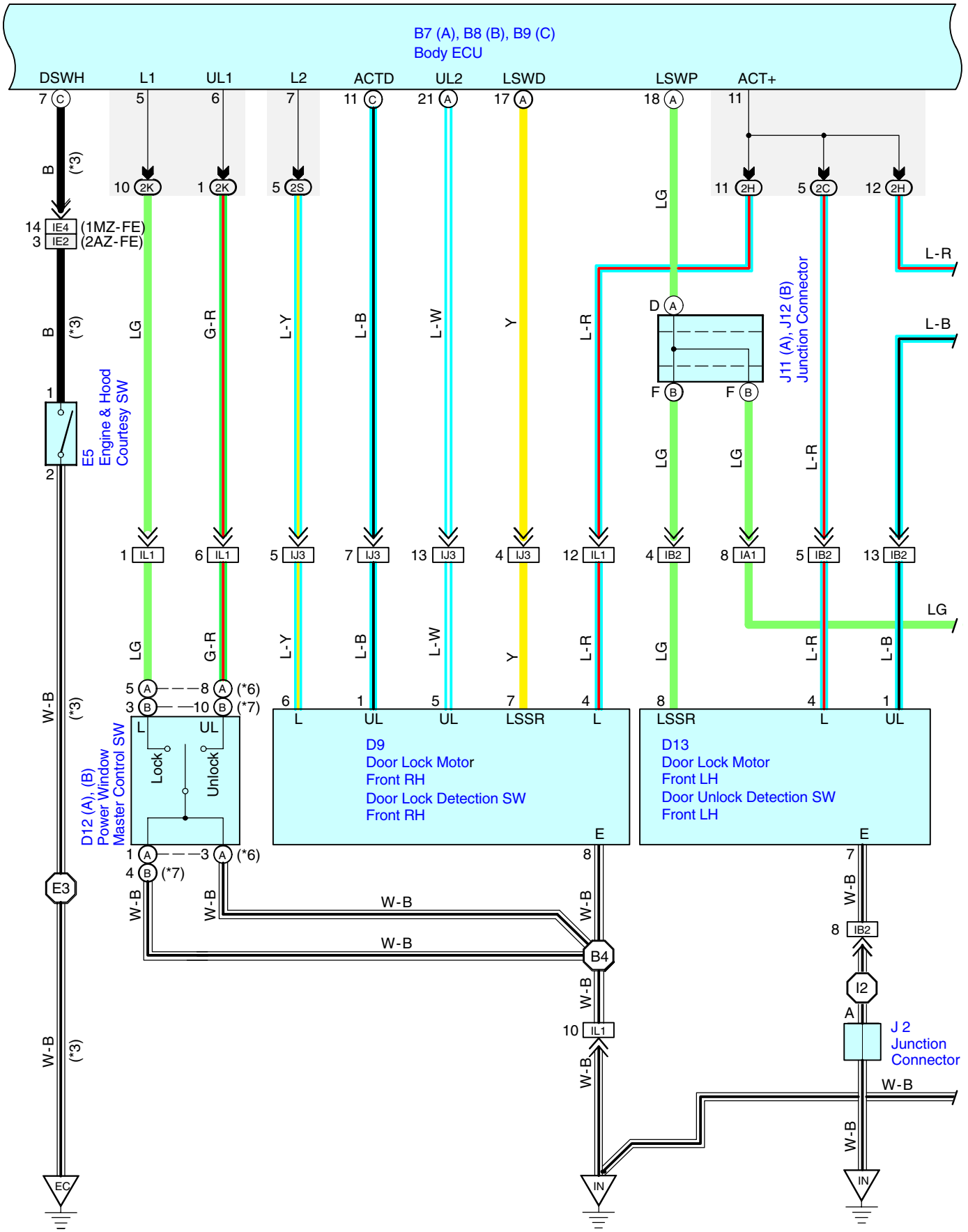
Multiplex Communication System (RHD)(South Africa)

*3 : w/ Theft Deterrent
*4 : 1MZ-FE
*5 : 2AZ-FE



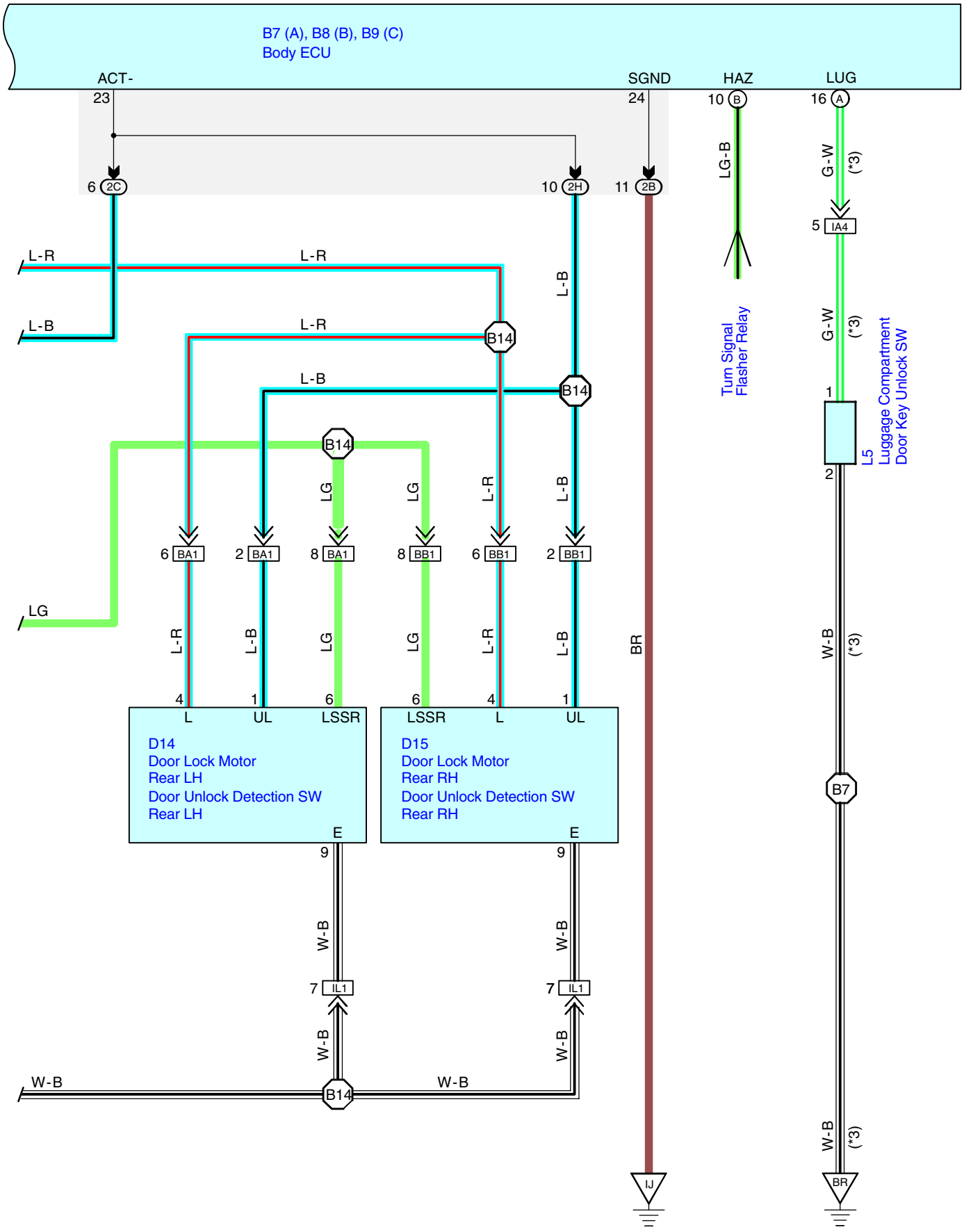
Multiplex Communication System (RHD)(South Africa)

*3 : w/ Theft Deterrent
*6 : w/ Jam Protection
*7 : w/o Jam Protection



Multiplex Communication System (RHD)(South Africa)

*3 : 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

SIG-Ground : Approx. 12 volts with ignition SW at ON or ST position
SGND & GND
12, 24-Ground : Always continuity
B-Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	44	D12	B	46	J11	A	45
B8	B		D13			J12	B	
B9	C		D14			L3		46
C9	A		D15			L4		
			E5		40 (1MZ-FE)	L5		
C10	B				42 (2AZ-FE)	M2	A	47
C13			I16		45	N4		
D4		46	I18		46	P5	B	
D5			J2		45	R19		44
D6			J5			S1		43
D7			J6			U1		41
D9			J9	A		V4		47
D12	A		J10	B		V5		

: 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)
1A	24	Engine Room Main Wire and Engine Room J/B
1B		
1D		
2A	26	Instrument Panel Wire and Driver Side J/B
2B		
2C	26	Instrument Panel Wire and Driver Side J/B
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

 : **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	26	Instrument Panel Wire and Driver Side J/B
2Q		
2R		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	67	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
BB1	67	Rear Door RH Wire and Floor Wire (Right Centre Pillar)
IA1	63	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA4		
IB2	63	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	63	Instrument Panel Wire and Roof Wire (Inside of Front Right Panel)
IE2	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE4	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IJ3	65	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IL1	65	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

 : **Ground Points**

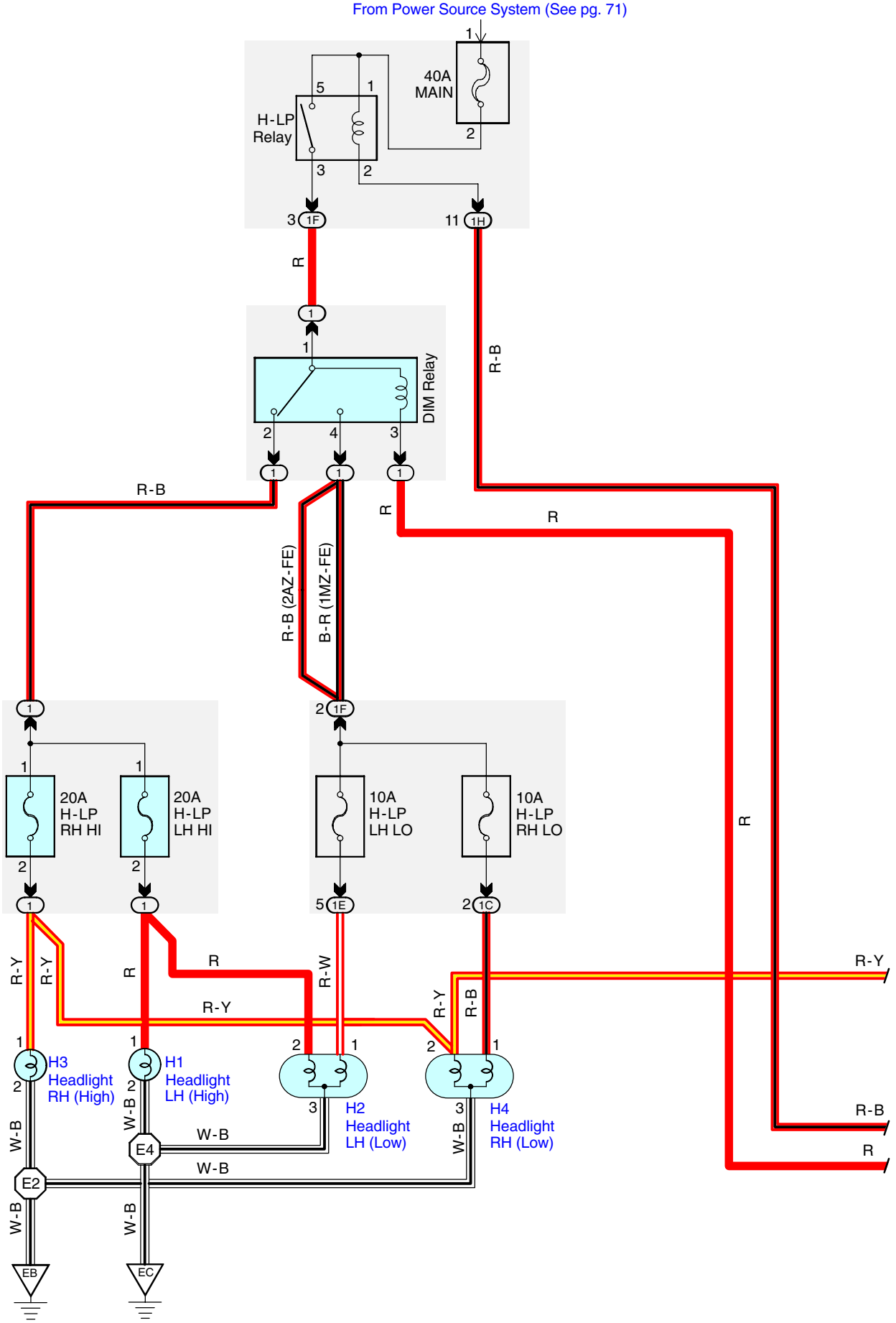
Code	See Page	Ground Points Location
BR	67	Front Side of Rear Wheel House RH
EC	60 (1MZ-FE)	
	62 (2AZ-FE)	
II	63	Instrument Panel Reinforcement LH
IJ	63	Instrument Panel Brace RH
IM	63	Instrument Panel Reinforcement RH
IN	63	Right Kick Panel

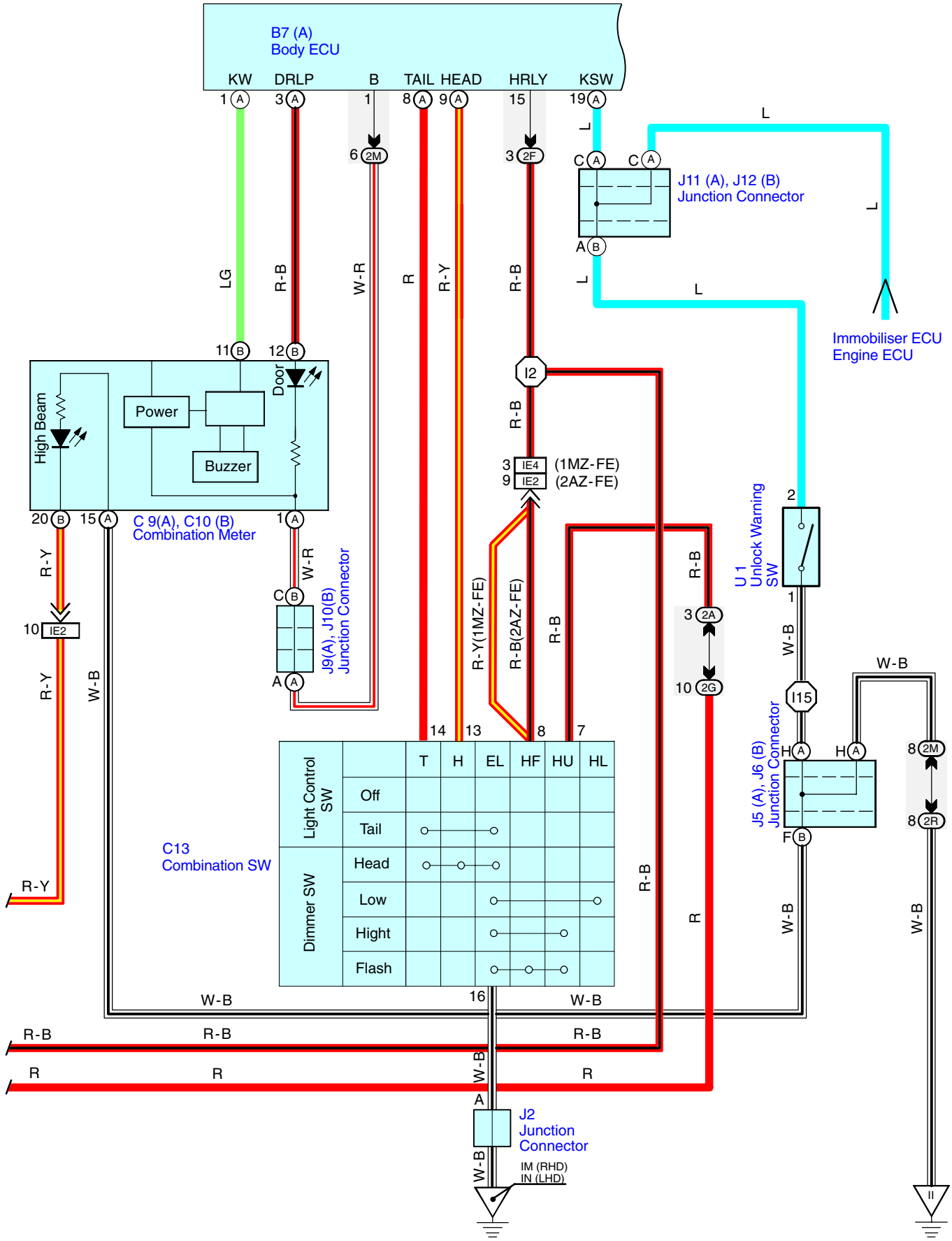
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	67	Roof Wire	B14	67	Floor Wire
B3	67		E3	60	Engine Room Main Wire
B4	67	Floor Wire	I2	65	Instrument Panel Wire
B6			I15		
B7			I19		
B10	67	Floor Wire			

Headlights

From Power Source System (See pg. 71)




B7 (A)
Body ECU
KW
DRLP
B
TAIL
HEAD
HRLY
KSW
J11 (A), J12 (B)
Junction Connector
Immobiliser ECU
Engine ECU
High Beam
Power
Buzzer
Door
C 9(A), C10 (B)
Combination Meter
J9(A), J10(B)
Junction Connector
(1MZ-FE)
(2AZ-FE)
U 1
Unlock Warning
SW
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
IM (RHD)
IN (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	35	H2	40 (RHD 1MZ-FE)	J5	A	36
B8	B	35		42 (RHD 2AZ-FE)	J6	B	
B9	C	35	H3	31 (LHD 1MZ-FE)	J9	A	
C9	A	35		33 (LHD 2AZ-FE)	J10	B	
C10	B	35		40 (RHD 1MZ-FE)	J11	A	
C13		35		42 (RHD 2AZ-FE)	J12	B	
H1		31 (LHD 1MZ-FE)	H4	31 (LHD 1MZ-FE)	U1		
		33 (LHD 2AZ-FE)		33 (LHD 2AZ-FE)			
		40 (RHD 1MZ-FE)		40 (RHD 1MZ-FE)			
		42 (RHD 2AZ-FE)		42 (RHD 2AZ-FE)			
H2		31 (LHD 1MZ-FE)	J2	36			
		33 (LHD 2AZ-FE)	J5				

: 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

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	52	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)
IE4		

: Ground Points

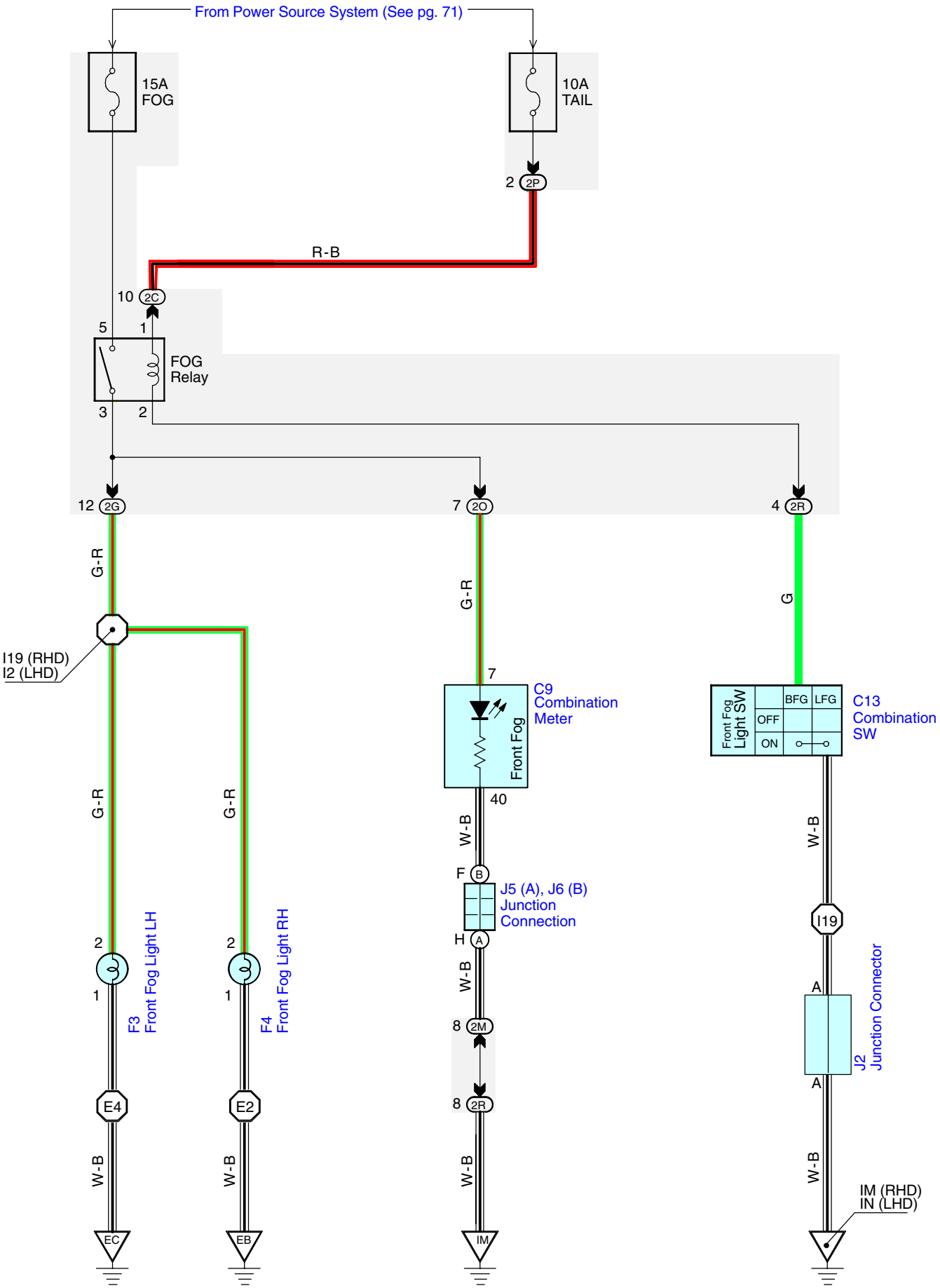
Code	See Page	Ground Points Location
EB	49	Right Fender
	51	
EC	49	Left Fender
	51	
II	52	Instrument Panel Reinforcement LH
IN	52	Instrument Panel Brace LH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E2	49 (1MZ-FE)	Engine Room Main Wire	E4	49 (1MZ-FE)	Engine Room Main Wire
	51 (2AZ-FE)			51 (2AZ-FE)	

: **SPLICE POINTS**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54	Instrument Panel	I15	54	Instrument Panel


From Power Source System (See pg. 71)
15A
FOG
10A
TAIL
2
2P
R-B
10
2C
5
1
FOG
Relay
3
2
12
2G
7
2O
4
2R
G-R
G-R
G
I19 (RHD)
I2 (LHD)
7
C9
Combination
Meter
Front Fog
40
C13
Combination
SW
Front Fog
Light SW
BFG
LFG
OFF
ON
W-B
W-B
F
B
J5 (A), J6 (B)
Junction
Connection
H
A
I19
A
J2
Junction Connector
A
W-B
W-B
8
2M
8
2R
W-B
IM (RHD)
IN (LHD)
G-R
G-R
2
1
F3
Front Fog Light LH
2
1
F4
Front Fog Light RH
E4
E2
W-B
W-B
EC
EB
IM

Front Fog Lights

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	44	F3	42	J5	A	45
C13	44	F4	40 (1MZ-FE)	J6	B	45
F3	40		42 (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
2O	26	Instrument Panel Wire and Driver Side J/B
2P		
2R		

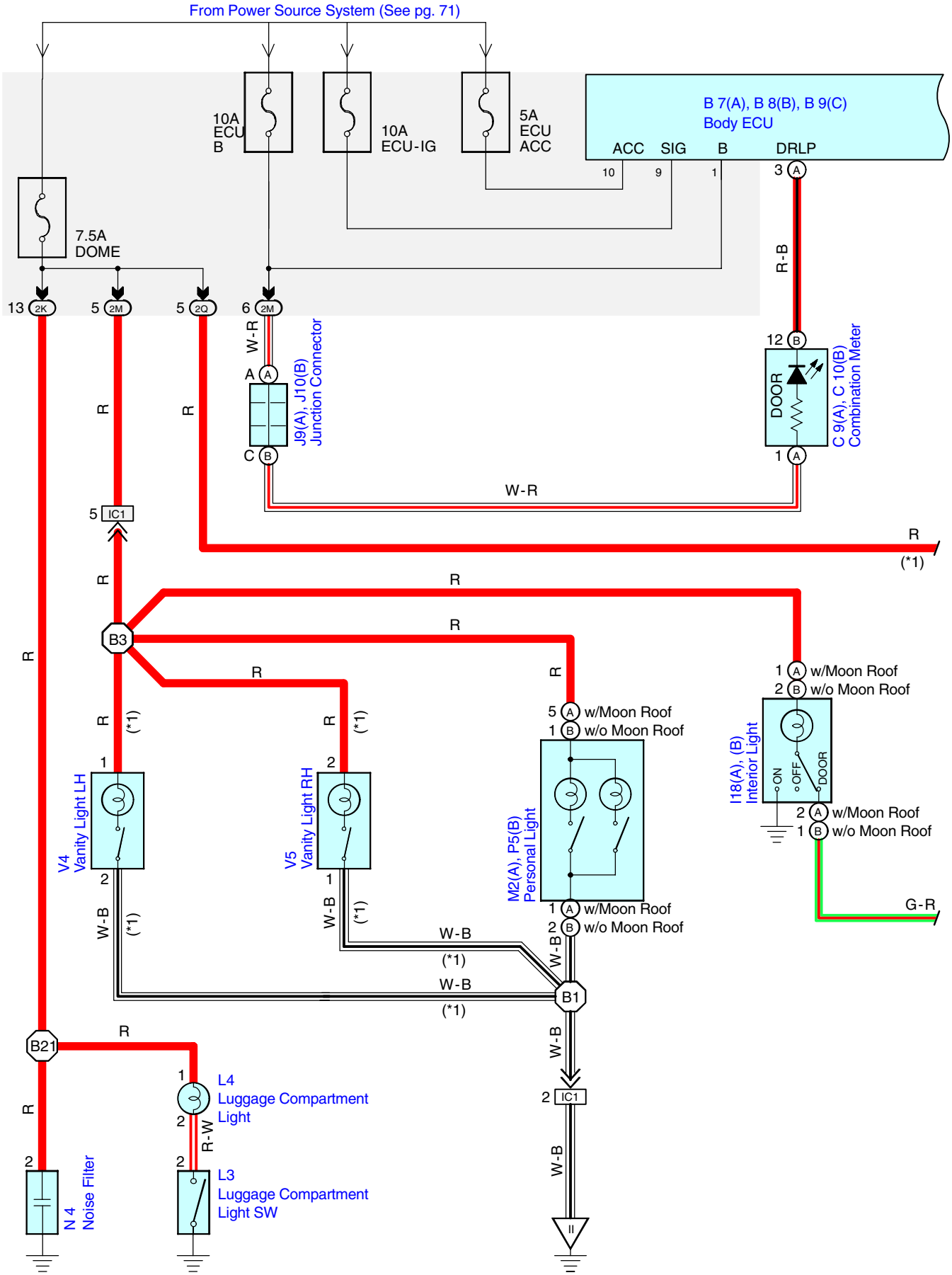
: Ground Points

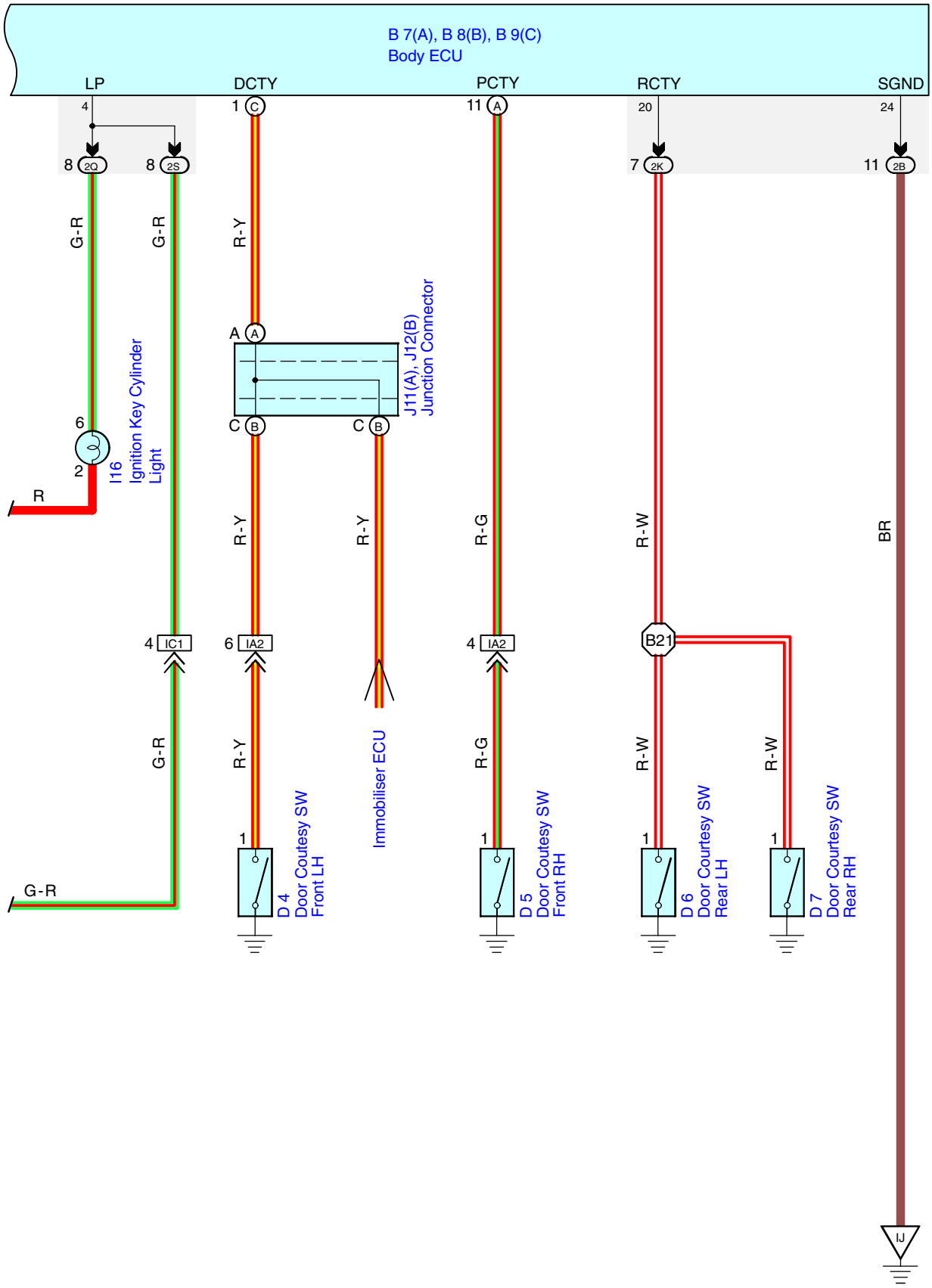
Code	See Page	Ground Points Location
EB	49 (LHD 1MZ-FE)	Right Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
EC	49 (LHD 1MZ-FE)	Left Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	52 (LHD)	

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	62 (RHD)	Engine Room Main Wire	E5	49 (LHD)	Engine Room Main Wire
E3	62 (RHD)		I2	52 (LHD)	
E4	51 (LHD)		I19	63 (RHD)	

*1 : w/ Vanity Lights




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
D 4
Door Coutesy SW
Front LH
Immobiliser ECU
D 5
Door Coutesy SW
Front RH
D 6
Door Courtesy SW
Rear LH
D 7
Door Courtesy SW
Rear RH
G-R
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

D4, D5, D6, D7 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	35	D7		37	L4		37
B8	B	35	I16		36	M2	A	37
B9	C	35	I18		37	N4		38
C9	A	35	J9	A	36	P5	B	38
C10	B	35	J10	B	36	V4		38
D4		37	J11	A	36	V5		38
D5		37	J12	B	36			
D6		37	L3		37			

: 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	52	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IC1	52	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)

: Ground Points

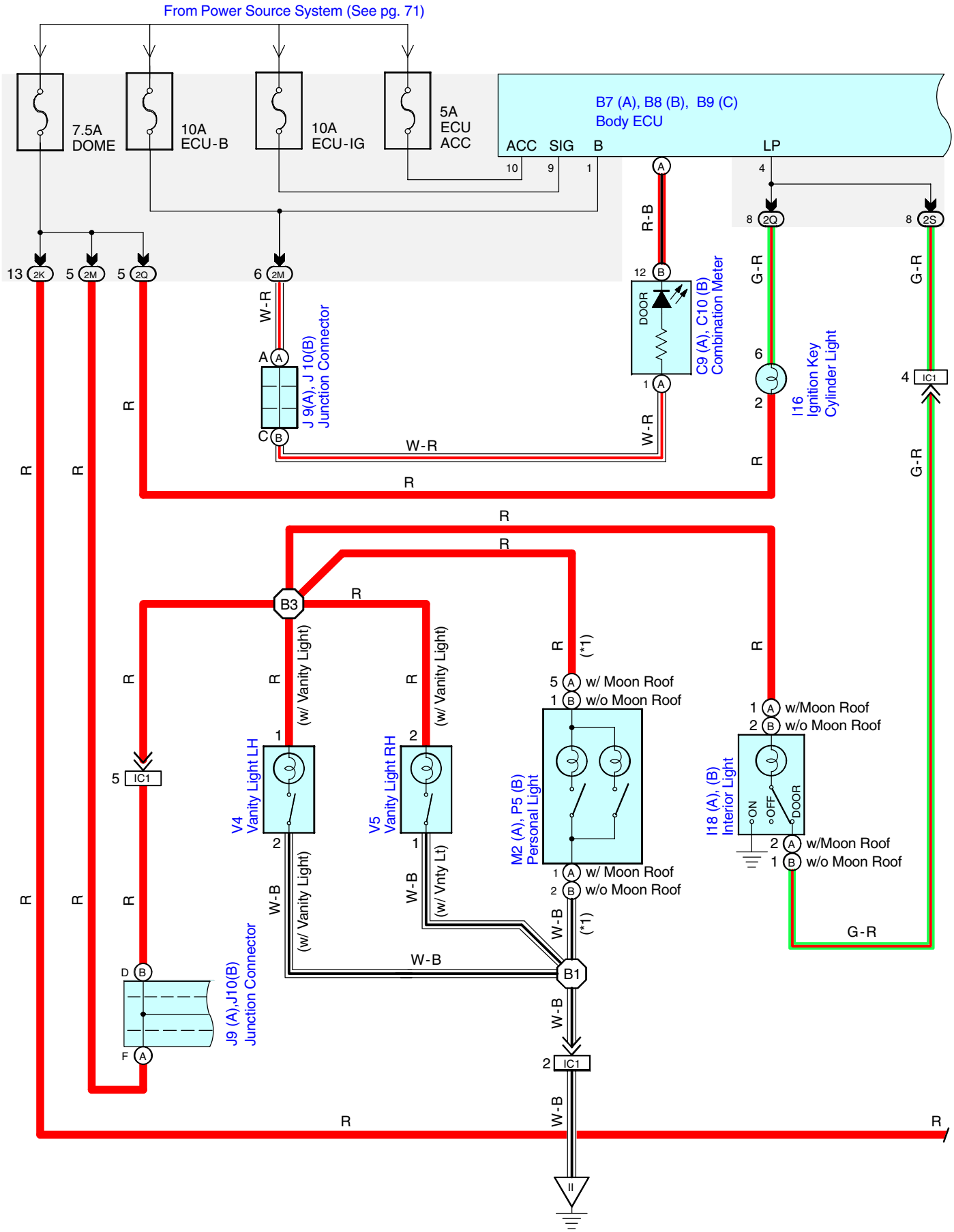
Code	See Page	Ground Points Location
IJ	52	Instrument Panel Brace LH
II		

: Splice Points

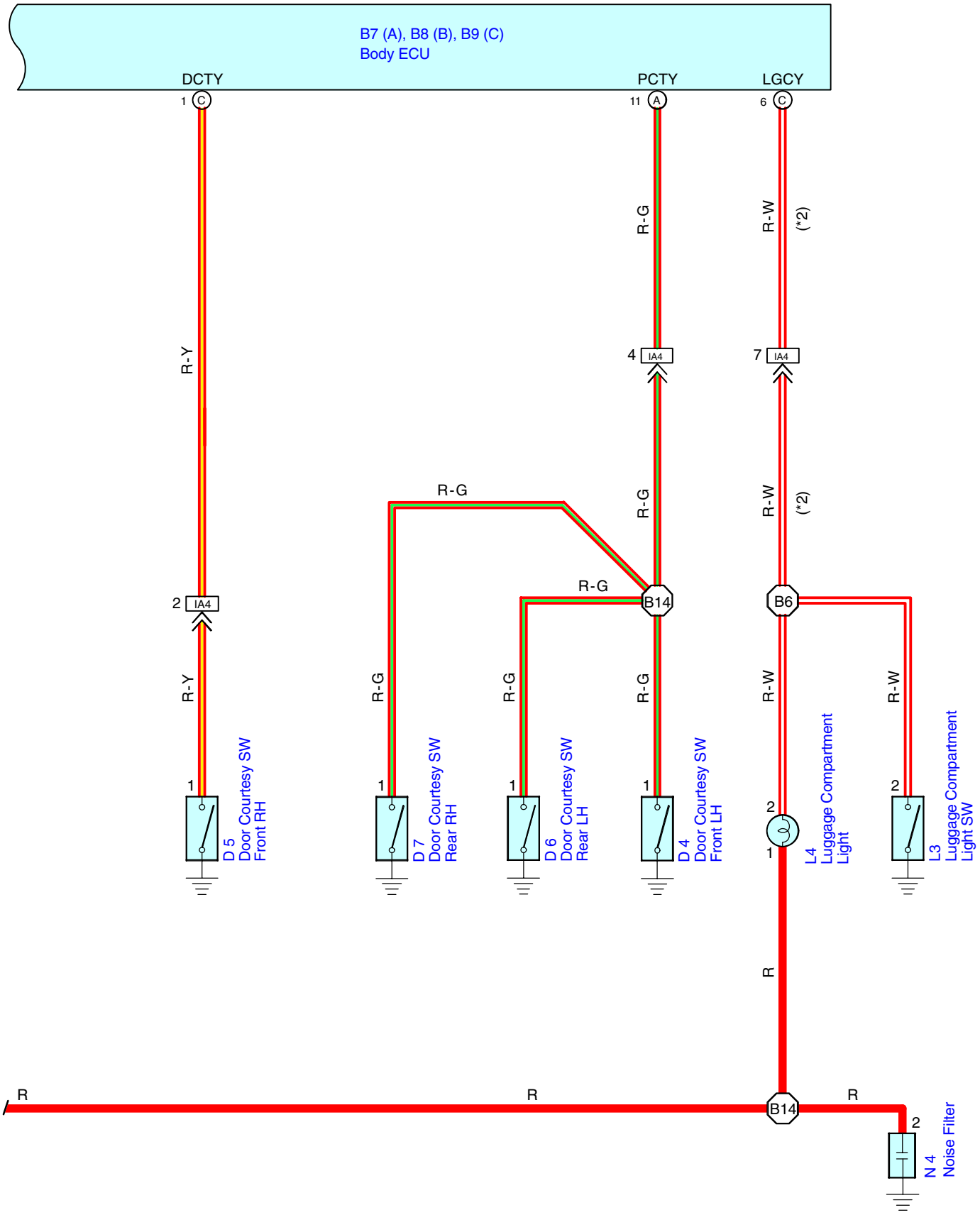
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	56	Roof Wire	B21	56	Roof Wire
B3					

Interior Light (RHD)

*1 : w/ Personal Light



*2 : 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

D4, D5, D6, D7 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	44	D6		46	L3		46
B8	B	44	D7		46	L4		
B9	C	44	I16		46	M2	A	
C8		44	I18	A	46	N4		47
C9	A	44		B		P5	B	
C10	B	44	J9	A	45	V4		
D4		46	J10	B	45	V5		
D5		46	J11	A	45			

: 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

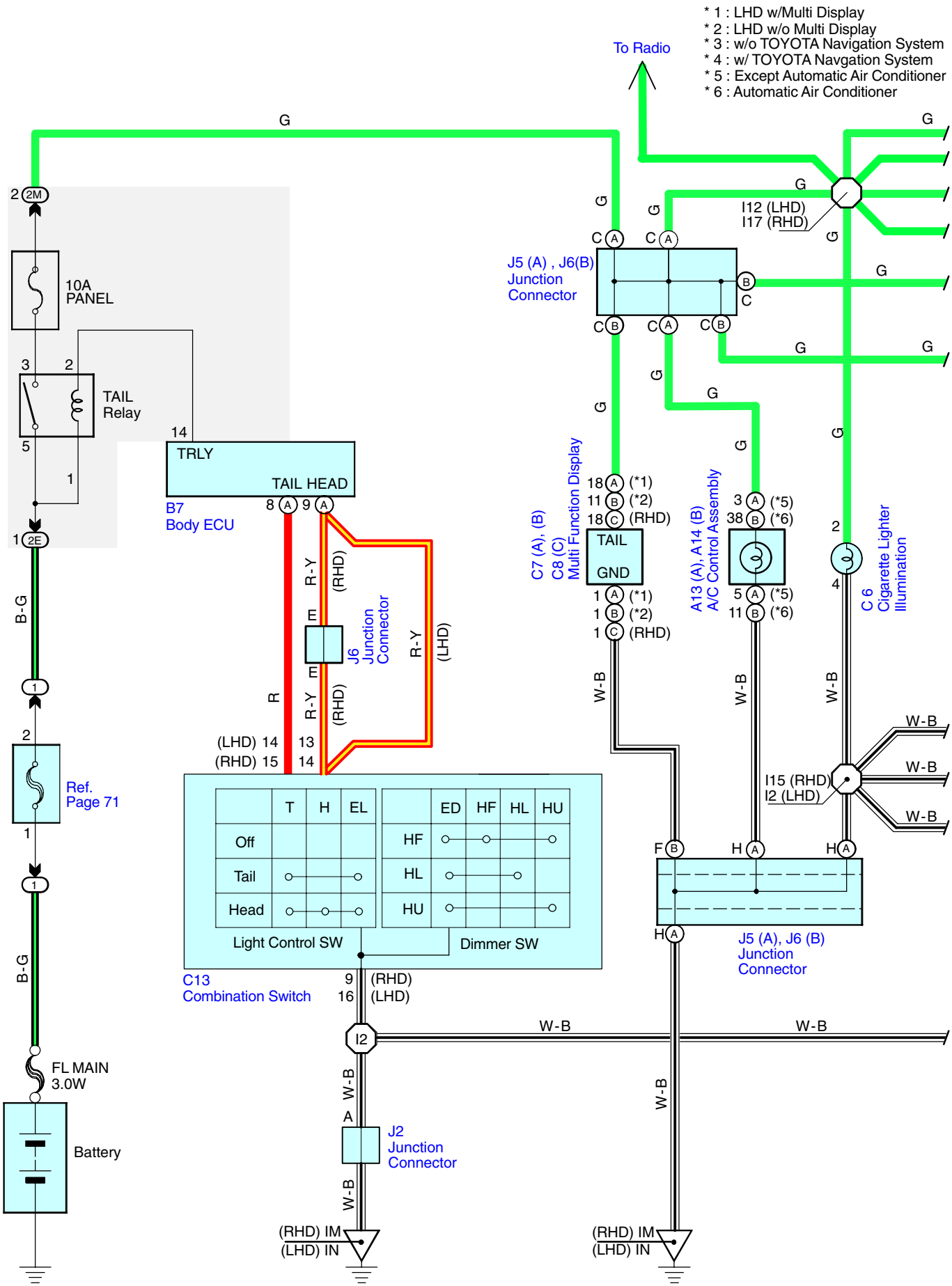
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA4	63	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IC1	63	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)

: Ground Points

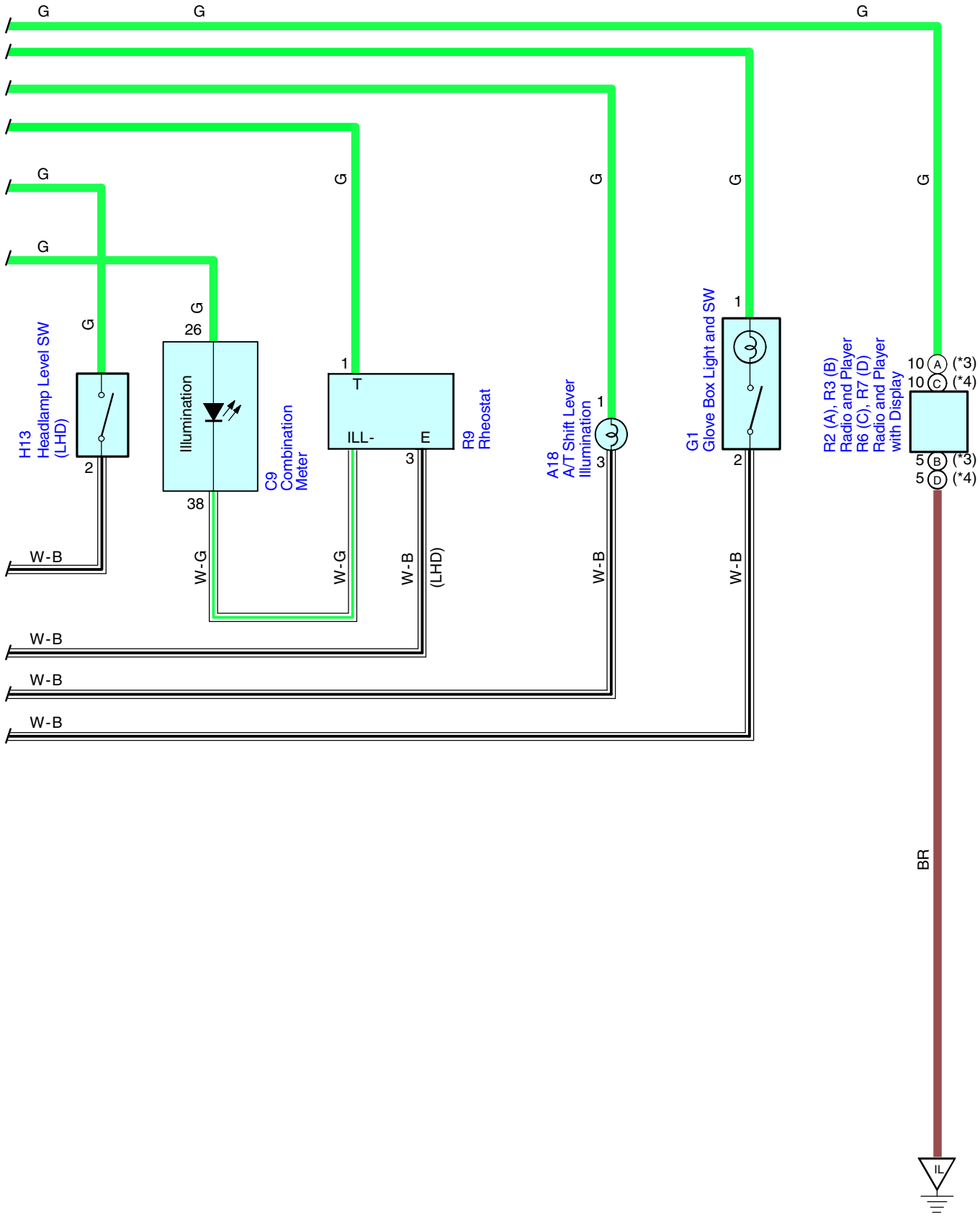
Code	See Page	Ground Points Location
II	63	Instrument Panel Reinforcement LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	67	Roof Wire	B6	67	Floor Wire
B3	67	Roof Wire	B14	67	Floor 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
To Radio
G
2 2M
10A PANEL
3 2
TAIL Relay
5
1
1 2E
B-G
1
2
Ref. Page 71
1
1
B-G
FL MAIN 3.0W
Battery
14
TRLY
TAIL HEAD
B7 Body ECU
8 A 9 A
R-Y (RHD)
E
J6 Junction Connector
E
R-Y (LHD)
R
R-Y (RHD)
(LHD) 14 13
(RHD) 15 14
T H EL
Off
Tail
Head
ED HF HL HU
HF
HL
HU
Light Control SW
Dimmer SW
C13 Combination Switch
9 (RHD)
16 (LHD)
I2
W-B
A
J2 Junction Connector
W-B
(RHD) IM
(LHD) IN
J5 (A) , J6(B) Junction Connector
C A C A
C B C A C B
B
C
I12 (LHD)
I17 (RHD)
C7 (A), (B)
C8 (C)
Multi Function Display
18 A (*1)
11 B (*2)
18 C (RHD)
TAIL
GND
1 A (*1)
1 B (*2)
1 C (RHD)
A13 (A), A14 (B)
A/C Control Assembly
3 A (*5)
38 B (*6)
5 A (*5)
11 B (*6)
2
4
C 6
Cigarette Lighter Illumination
W-B
I15 (RHD)
I2 (LHD)
F B H A H A
H A
J5 (A), J6 (B) Junction Connector
W-B
(RHD) IM
(LHD) IN

* 3 : w/o TOYOTA Navigation System
* 4 : w/ TOYOTA Navigation 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	35 (LHD) 44 (RHD)	C8	44 (RHD)	J5	A	36 (LHD) 45 (RHD)
A14	B	35 (LHD) 44 (RHD)	C9	35 (LHD) 44 (RHD)	J6	B	36 (LHD) 45 (RHD)
A18		35 (LHD) 44 (RHD)	C13	35 (LHD) 44 (RHD)	R2	A	36 (LHD) 45 (RHD)
B7		35 (LHD) 44 (RHD)	G1	36 (LHD) 45 (RHD)	R3	B	36 (LHD) 45 (RHD)
C6		35 (LHD) 44 (RHD)	H13	36 (LHD)	R6	C	45 (RHD)
					R7	D	45 (RHD)
C7	A	35 (LHD)	J2	36 (LHD)	R9		36 (LHD)
	B	35 (LHD)		45 (RHD)			45 (RHD)

: Relay Blocks

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

: Junction Block and Wire Harness Connector

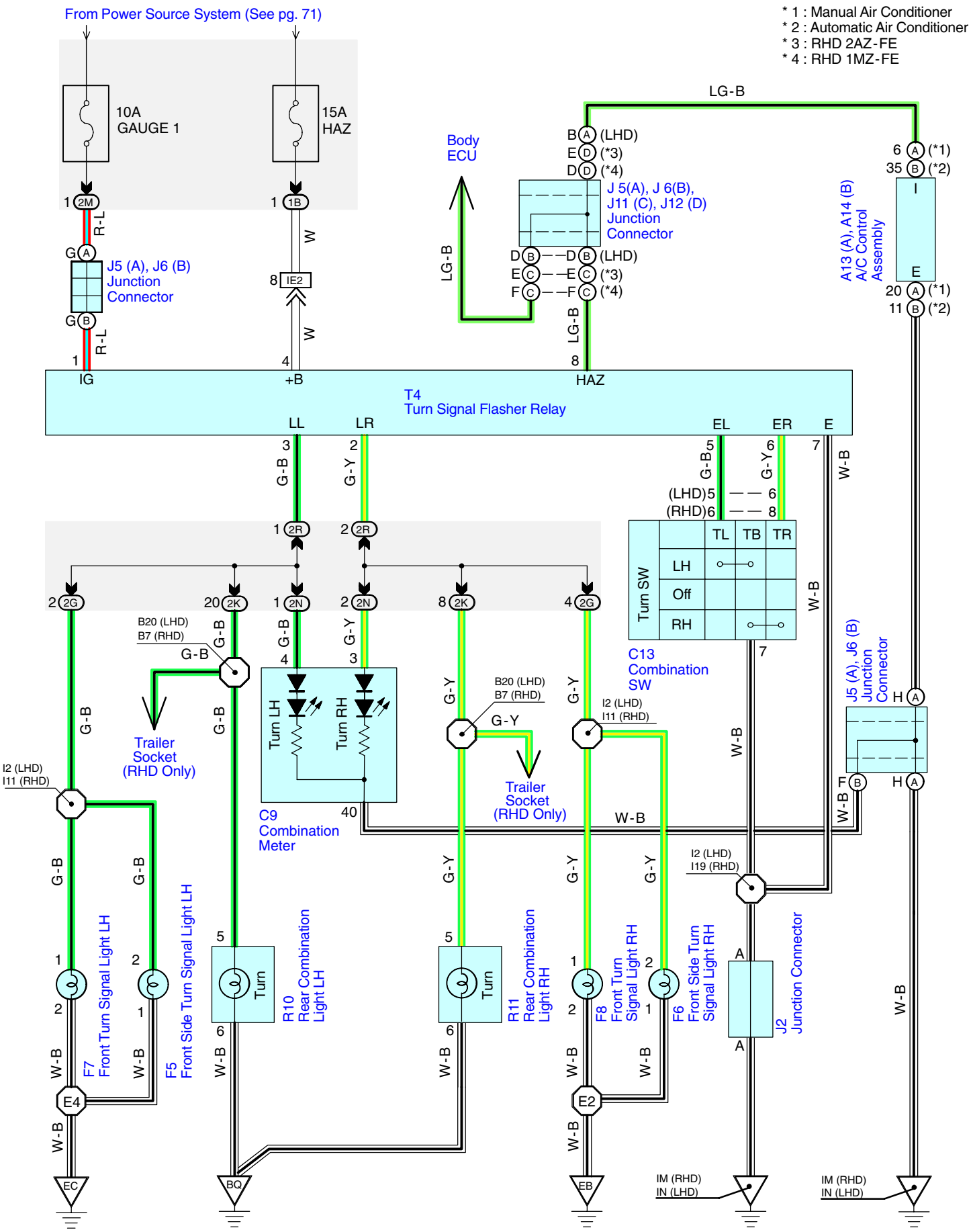
Code	See Page	Junction Block and Wire Harness (Connector Location)
2E	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B

: Ground Points

Code	See Page	Ground Points Location
IL	52 (LHD)	Instrument Panel Brace RH
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	52 (LHD)	Instrument Panel Brace RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54 (LHD)	Instrument Panel Wire	I15	65 (RHD)	Instrument Panel Wire
I12	54 (LHD)		I17	65 (RHD)	


From Power Source System (See pg. 71)
* 1 : Manual Air Conditioner
* 2 : Automatic Air Conditioner
* 3 : RHD 2AZ-FE
* 4 : RHD 1MZ-FE
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
E
Turn SW
TL
TB
TR
LH
Off
RH
C13 Combination SW
B20 (LHD) B7 (RHD)
Trailer Socket (RHD Only)
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
J2 Junction Connector
E4
E2
EC
BQ
EB
IM (RHD) IN (LHD)

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	35 (LHD)	F5	31 (LHD 1MZ-FE)	J11	C	36 (LHD)
		44 (RHD)	F6	33 (LHD 2AZ-FE)			45 (RHD)
A14	B	35 (LHD)	F7	40 (RHD 1MZ-FE)	J12	D	36 (LHD)
		44 (RHD)	F8	42 (RHD 2AZ-FE)			45 (RHD)
C9		35 (LHD)	J2	36 (LHD)	R10		38 (LHD)
		44 (RHD)		45 (RHD)			47 (RHD)
C13	A	35 (LHD)	J5	A 36 (LHD)	R11		38 (LHD)
		44 (RHD)		45 (RHD)			47 (RHD)
C13	B	35 (LHD)	J6	B 36 (LHD)	T4		36 (LHD)
		44 (RHD)		45 (RHD)			45 (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

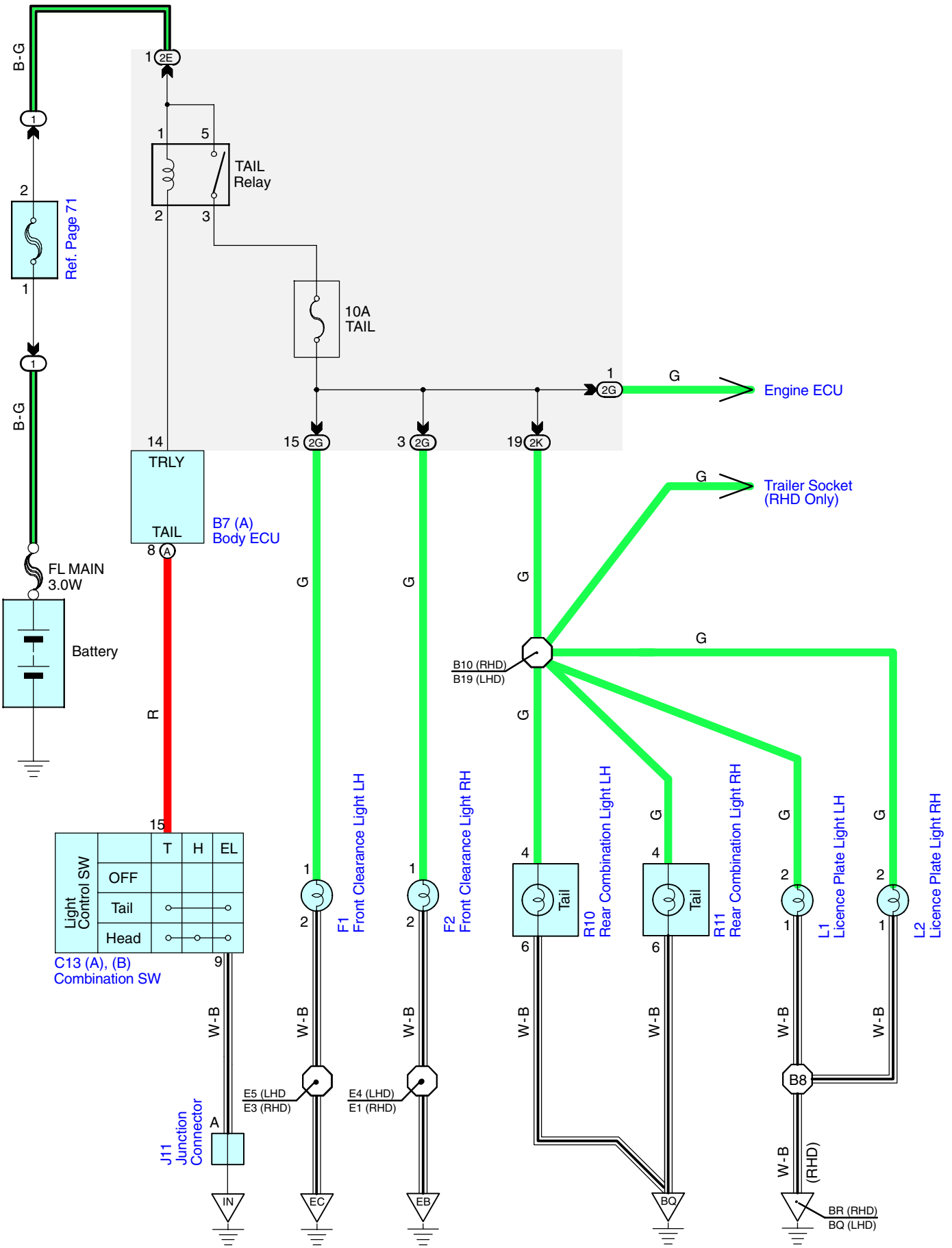
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)

: Ground Points

Code	See Page	Ground Points Location
EB	49 (LHD 1MZ-FE)	Right Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
EC	49 (LHD 1MZ-FE)	Left Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
BQ	56 (LHD)	Lower Back Panel Center
	67 (RHD)	
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	52 (LHD)	

: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	67 (RHD)	Floor Wire	I2	54 (LHD)	Instrument Panel Wire
B20	56 (LHD)		I11	54 (LHD)	
E2	60 (RHD 1MZ-FE)	Engine Room Main Wire	I19	65 (RHD)	
	62 (RHD 2AZ-FE)				
E4	49 (LHD 1MZ-FE)	Engine Room Main Wire			
	51 (LHD 2AZ-FE)				


B-G
1
2E
1
5
TAIL
Relay
2
3
2
Ref. Page 71
1
10A
TAIL
1
2G
G
Engine ECU
B-G
1
14
15 2G
3 2G
19 2K
TRLY
TAIL
B7 (A)
Body ECU
8 A
G
Trailer Socket
(RHD Only)
FL MAIN
3.0W
Battery
G
G
G
G
B10 (RHD)
B19 (LHD)
R
15
T
H
EL
Light
Control SW
OFF
Tail
Head
C13 (A), (B)
Combination SW
9
W-B
1
2
F1
Front Clearance Light LH
1
2
F2
Front Clearance Light RH
4
Tail
6
R10
Rear Combination Light LH
G
4
Tail
6
R11
Rear Combination Light RH
G
2
1
L1
Licence Plate Light LH
G
2
1
L2
Licence Plate Light RH
W-B
W-B
W-B
W-B
W-B
W-B
B8
E5 (LHD)
E3 (RHD)
E4 (LHD)
E1 (RHD)
A
J11
Junction
Connector
IN
EC
EB
BQ
W-B
(RHD)
BR (RHD)
BQ (LHD)

: Parts Location

Code		See Page	Code	See Page	Code	See Page
B7	A	35 (LHD)	F2	40 (RHD 1MZ-FE)	L2	37 (LHD)
		44 (RHD)		42 (RHD 2AZ-FE)		46 (RHD)
C13	A	35 (LHD)		31 (LHD 1MZ-FE)	R10	47 (RHD)
C13	B	44 (RHD)		33 (LHD 2AZ-FE)		38 (LHD)
F1		33 (LHD 2AZ-FE)	J11	36 (LHD)	R11	47 (RHD)
		31 (LHD 1MZ-FE)		45 (RHD)		38 (LHD)
		42 (RHD 2AZ-FE)	L1	37 (LHD)		
		40 (RHD 1MZ-FE)		46 (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

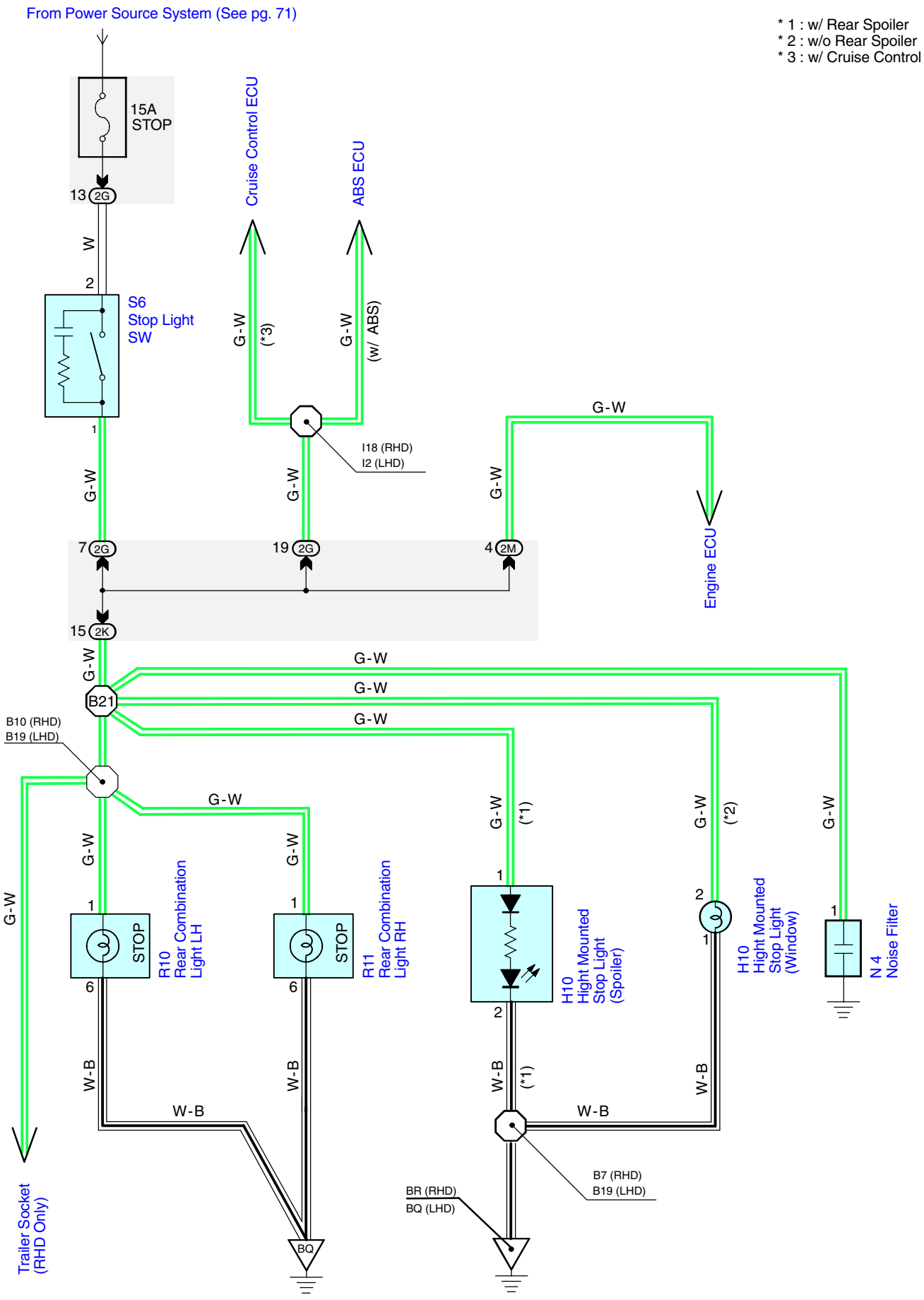
: Ground Points

Code	See Page	Ground Points Location
EB	49 (LHD 1MZ-FE)	Right Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
EC	49 (LHD 1MZ-FE)	Left Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	
BR	67 (RHD)	Front Side of Rear Quarter Wheel House RH
BQ	56 (LHD)	Lower Back Panel Centre
	67 (RHD)	
IN	52 (LHD)	Instrument Panel Brace RH
	63 (RHD)	Instrument Panel Brace RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	67 (RHD)	Floor No. 2 Wire	E1	62 (RHD)	Engine Room Main Wire
	56 (LHD)		E3	62 (RHD)	
B10	67 (RHD)		E4	49 (LHD)	
B19	56 (LHD)	Floor No. 2 Wire	E5	49 (LHD)	

Stop Light


From Power Source System (See pg. 71)
* 1 : w/ Rear Spoiler
* 2 : w/o Rear Spoiler
* 3 : w/ Cruise Control
15A
STOP
13 2G
W
2
S6
Stop Light
SW
1
G-W
7 2G
15 2K
Cruise Control ECU
ABS ECU
G-W (*3)
G-W (w/ ABS)
I18 (RHD)
I2 (LHD)
19 2G
4 2M
Engine ECU
B21
B10 (RHD)
B19 (LHD)
R10
Rear Combination
Light LH
R11
Rear Combination
Light RH
STOP
6
W-B
BQ
Trailer Socket
(RHD Only)
H10
Hight Mounted
Stop Light
(Spoiler)
(*1)
H10
Hight Mounted
Stop Light
(Window)
(*2)
N 4
Noise Filter
BR (RHD)
BQ (LHD)
B7 (RHD)
B19 (LHD)

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	37 (LHD)	R10	38 (LHD)	S6	36 (LHD)
	46 (RHD)		47 (RHD)		45 (RHD)
N4	38 (LHD)	R11	38 (LHD)		
	47 (RHD)		47 (RHD)		

: Junction Block and Wire Harness Connector

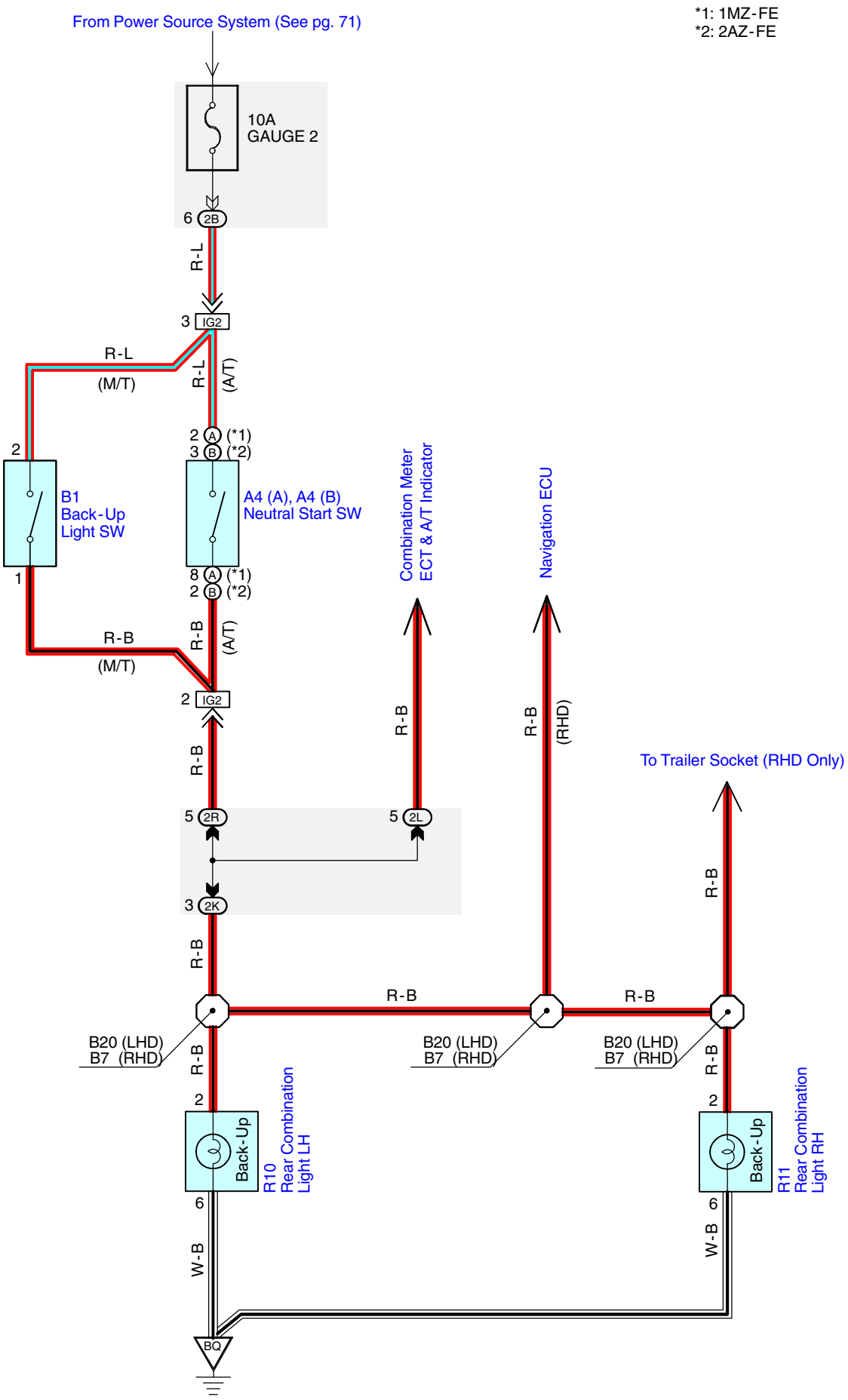
Code	See Page	Junction Block and Wire Harness (Connector Location)
2G	26	Engine Room Main Wire and Driver Side J/B
2K		Floor Wire and Driver Side J/B
2M		Instrument Panel Wire and Driver Side J/B

: Ground Points

Code	See Page	Ground Points Location
BQ	56 (LHD)	Lower Back Panel Centre
	67 (RHD)	
BR	67 (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	67 (RHD)	Floor Wire	B21	56 (LHD)	Floor Wire
B10	67 (RHD)		I2	54 (LHD)	
B19	56 (LHD)		I18	65 (RHD)	Instrument Panel


From Power Source System (See pg. 71)
*1: 1MZ-FE
*2: 2AZ-FE
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)
Neutral Start SW
8 A (*1)
2 B (*2)
Combination Meter
ECT & A/T Indicator
Navigation ECU
R-B
(M/T)
R-B
(A/T)
2 IG2
R-B
R-B
(RHD)
To Trailer Socket (RHD Only)
5 2R
5 2L
3 2K
R-B
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

Back-Up Light

Service Hints

B1 Back-Up Light SW (M/T)

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

A4 Back-Up Light SW (A/T)

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

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

: Parts Location

Code		See Page	Code	See Page	Code	See Page
A4	A	31 (LHD)	B1	31 (LHD 1MZ-FE)	R10	38 (LHD)
		40 (RHD)		40 (RHD 1MZ-FE)		47 (RHD)
A4	B	33 (LHD)		33 (LHD 2AZ-FE)	R11	38 (LHD)
		42 (RHD)		42 (RHD 2AZ-FE)		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
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	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	65 (RHD)	

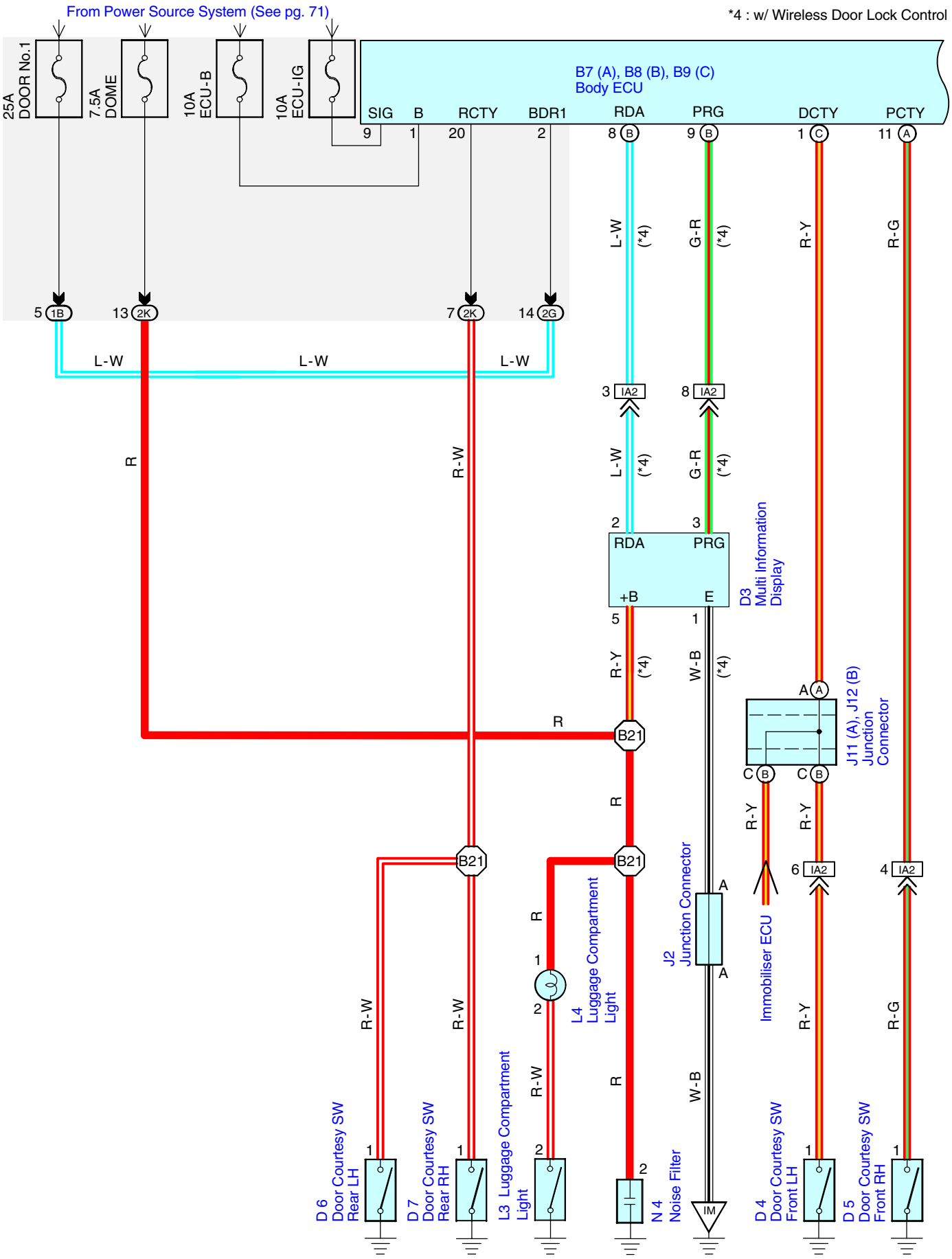
: Ground Points

Code	See Page	Ground Points Location
BQ	56 (LHD)	Lower Back Panel Centre
	67 (RHD)	

: Splice Points

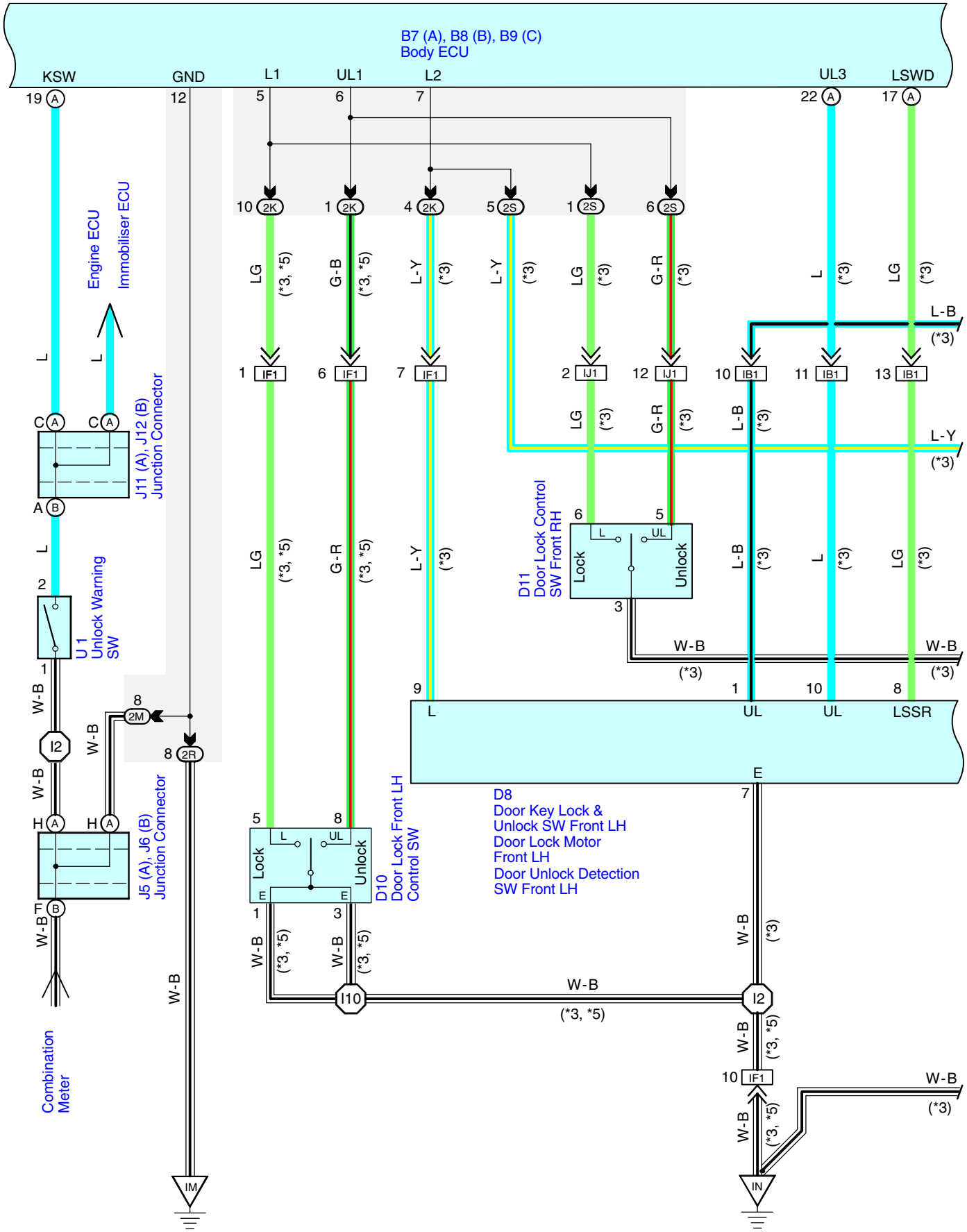
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	67 (RHD)	Floor Wire	B20	56 (LHD)	Floor Wire

Door Lock Control (LHD)

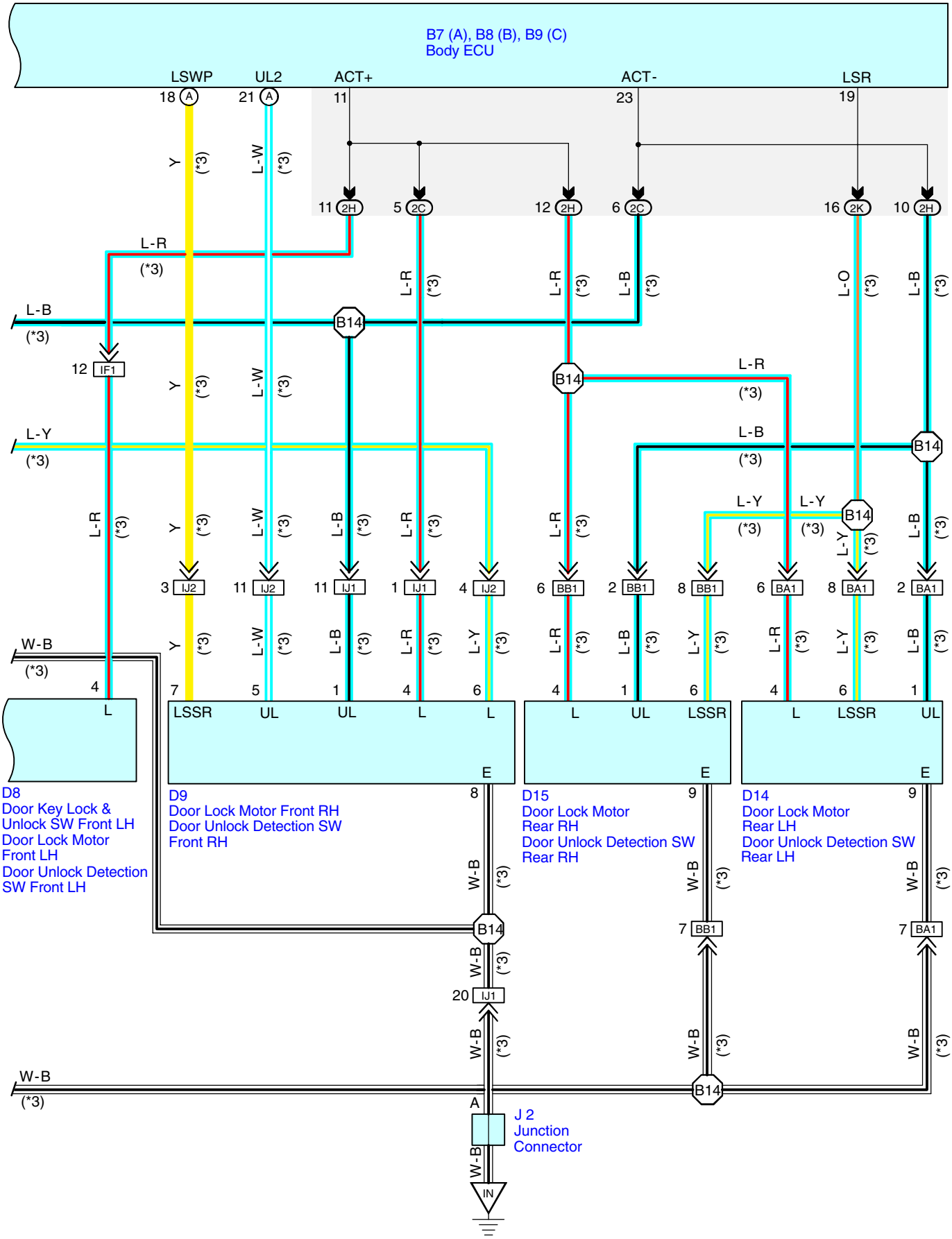


Door Lock Control (LHD)

* 3 : Door Lock Control
* 5 : Jam Protection



* 3 : Door Lock Control



Door Lock Control (LHD)

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	35	D8	37	J6		36
B8	B		D9		J11	A	
B9	C		D10		J12	B	
D3		37	D11		L3		37
D4			D14		L4		
D5			D15		N4		
D6			J2	36	U1		36
D7			J5				

: 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

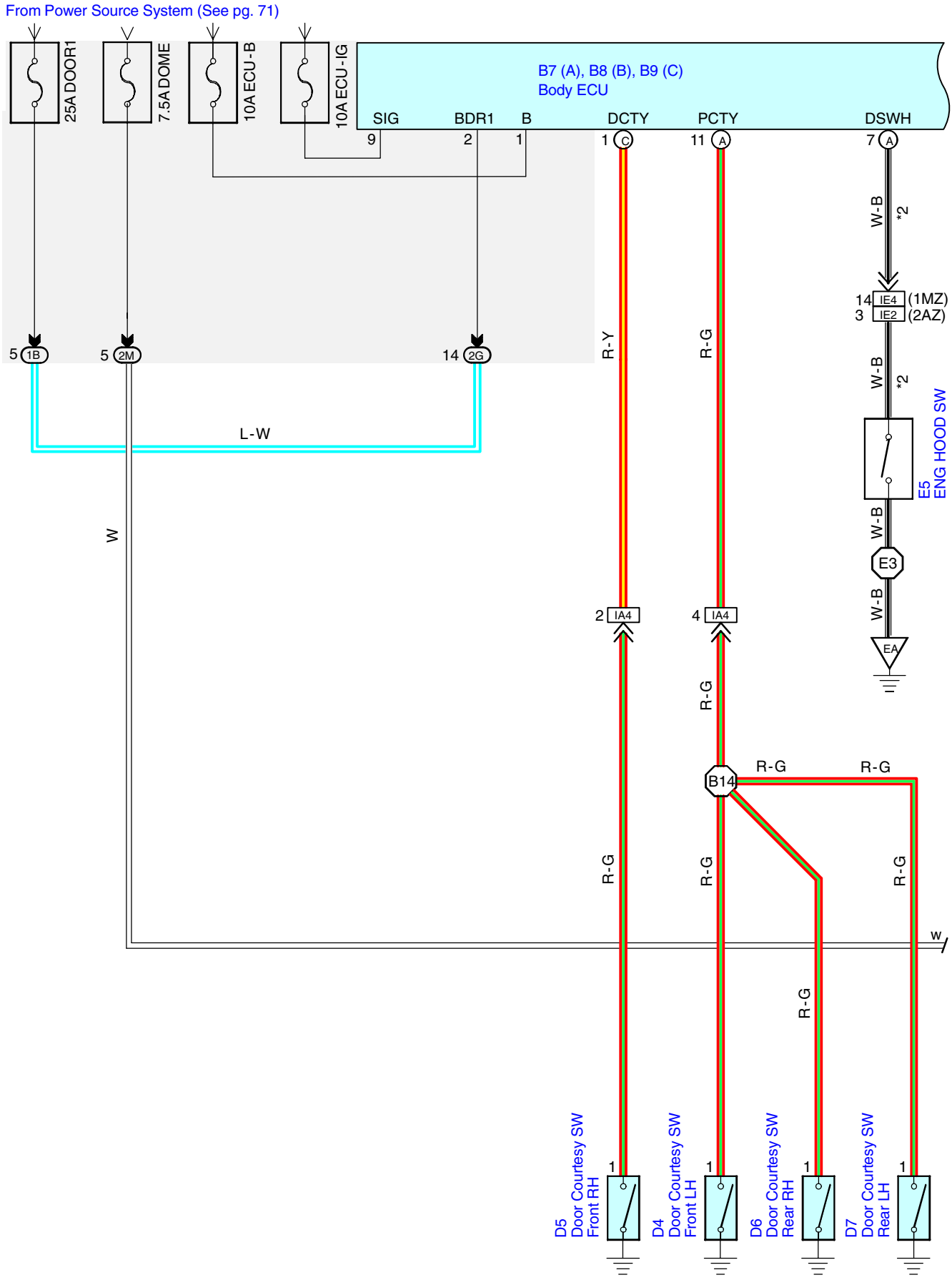
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	56	Rear Door LH Wire and Floor Wire (Left Center Pillar)
BB1		Rear Door RH Wire and Floor Wire (Right Center Pillar)
IA2	54	Instrument Panel Wire and Floor Wire (Left Kick Panel)
IB1		Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1		Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ1		Rear Door RH Wire and Floor Wire (Left Center Pillar)
IJ2		Rear Door RH Wire and Floor Wire (Left Center Pillar)

: Ground Points

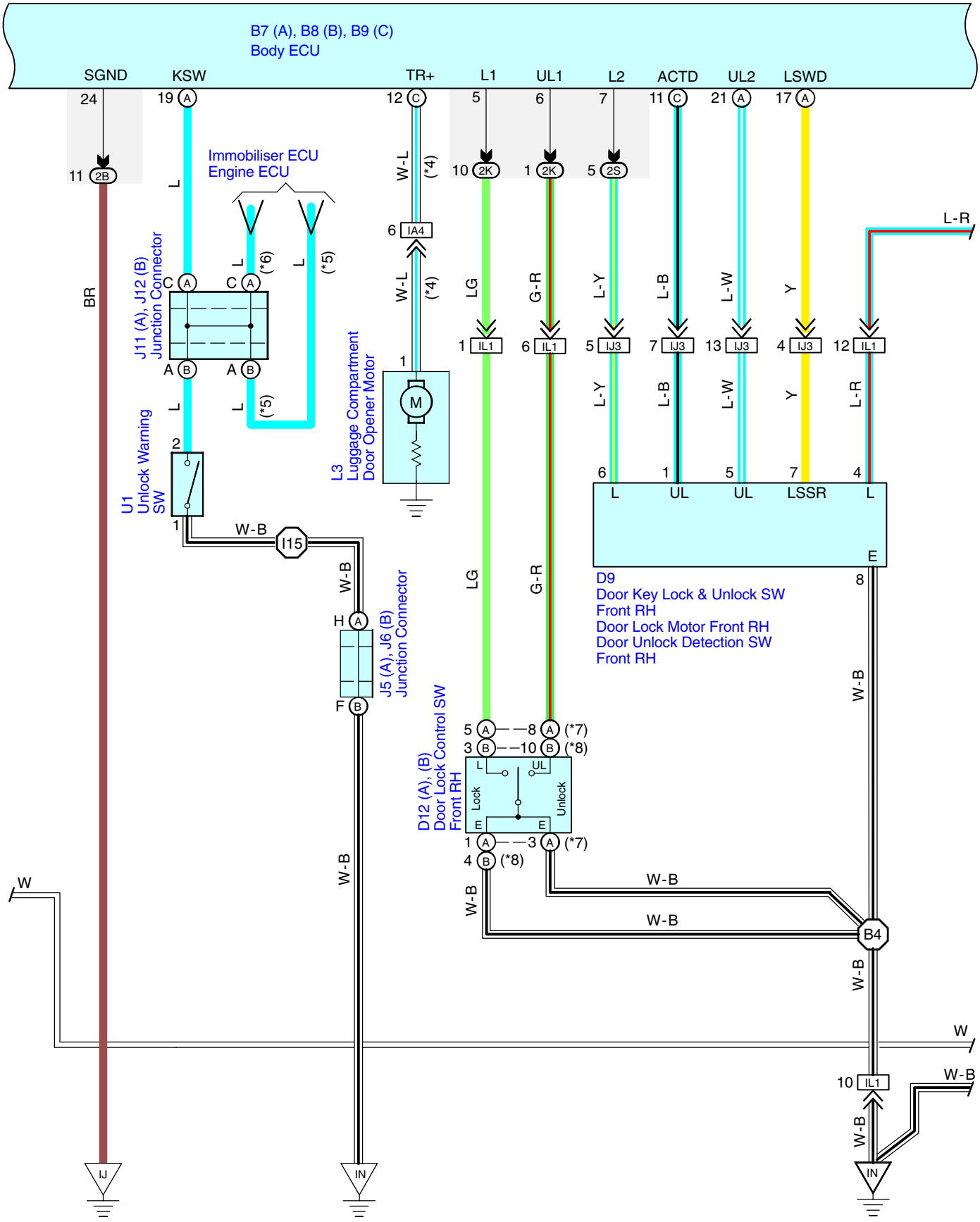
Code	See Page	Ground Points Location
IM	52	Instrument Panel Brace RH
IN		Instrument Panel Brace RH

: Splice Points

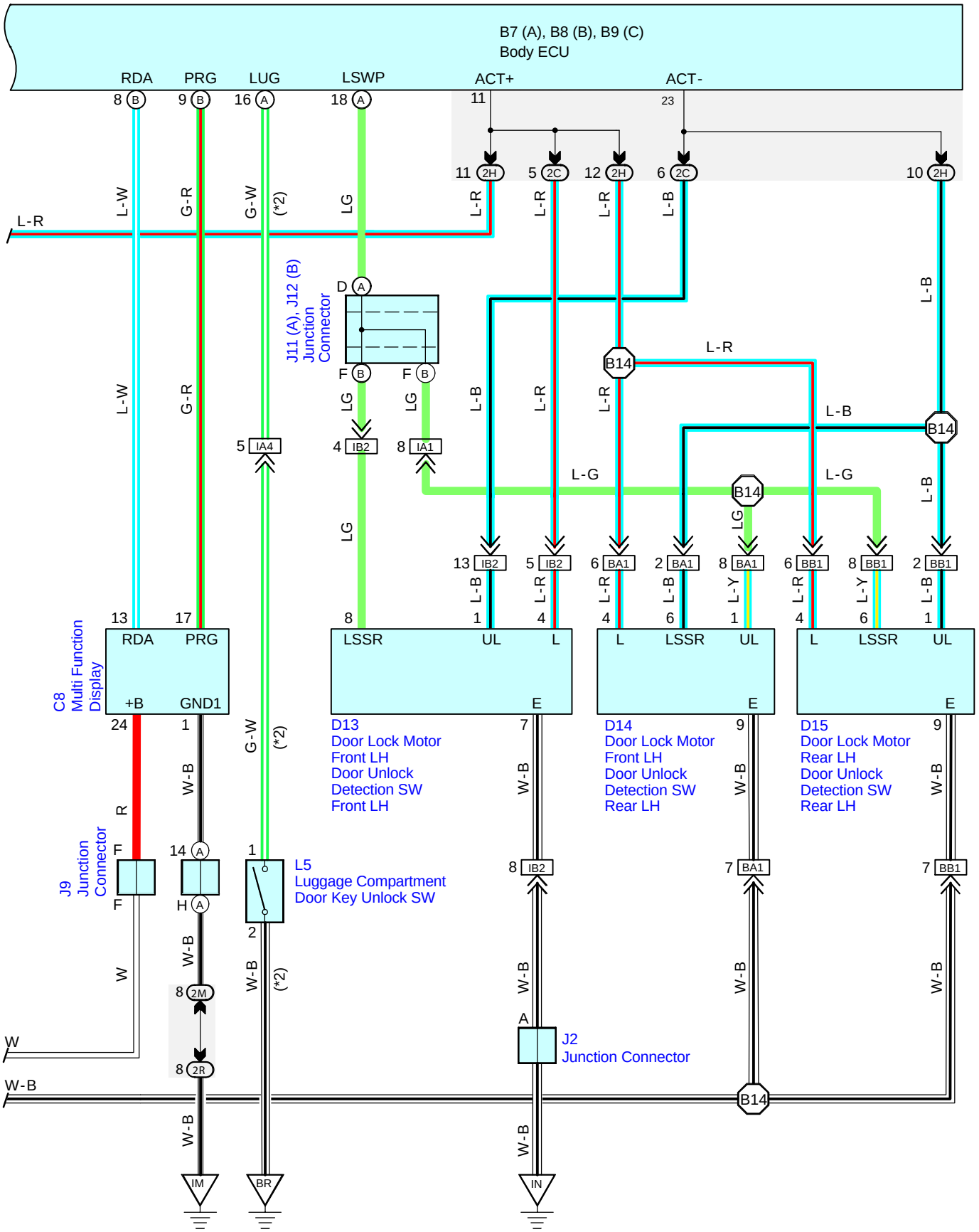
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	56	Floor Wire	I12	54	Instrument Panel Wire
B21			I10		Instrument Panel Brace
I2	54	Door Wire			


From Power Source System (See pg. 71)
25A DOOR1
7.5A DOME
10A ECU-B
10A ECU-IG
B7 (A), B8 (B), B9 (C)
Body ECU
SIG
BDR1
B
DCTY
PCTY
DSWH
9
2
1
1 C
11 A
7 A
W-B
*2
14 IE4 (1MZ)
3 IE2 (2AZ)
W-B
*2
E5
ENG HOOD SW
W-B
E3
W-B
EA
5 1B
5 2M
14 2G
L-W
W
R-Y
R-G
2 IA4
4 IA4
R-G
B14
R-G
R-G
R-G
R-G
R-G
R-G
W
D5
Door Courtesy SW
Front RH
D4
Door Courtesy SW
Front LH
D6
Door Courtesy SW
Rear RH
D7
Door Courtesy SW
Rear LH
1
1
1
1

* 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



Door Lock Control (RHD)

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	44	D9	46	J6		45
B8	B		D10		J9		
B9	C		D11		J11	A	
C8			D12		J12	B	
D4		46	D13		L3		46
D5			D14		L5		
D6			D15		U1		45
D7			J5	45			

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	25	Engine Room Main Wire & Engine Room J/B
2B	28	Instrument Panel & Driver Side J/B
2C		
2G		Engine Room Main Wire & Driver Side J/B
2H		Floor Wire & Driver Side J/B
2K		Instrument Panel & Driver Side J/B
2M		
2S		

: Connector Joining Wire Harness and Wire Harness

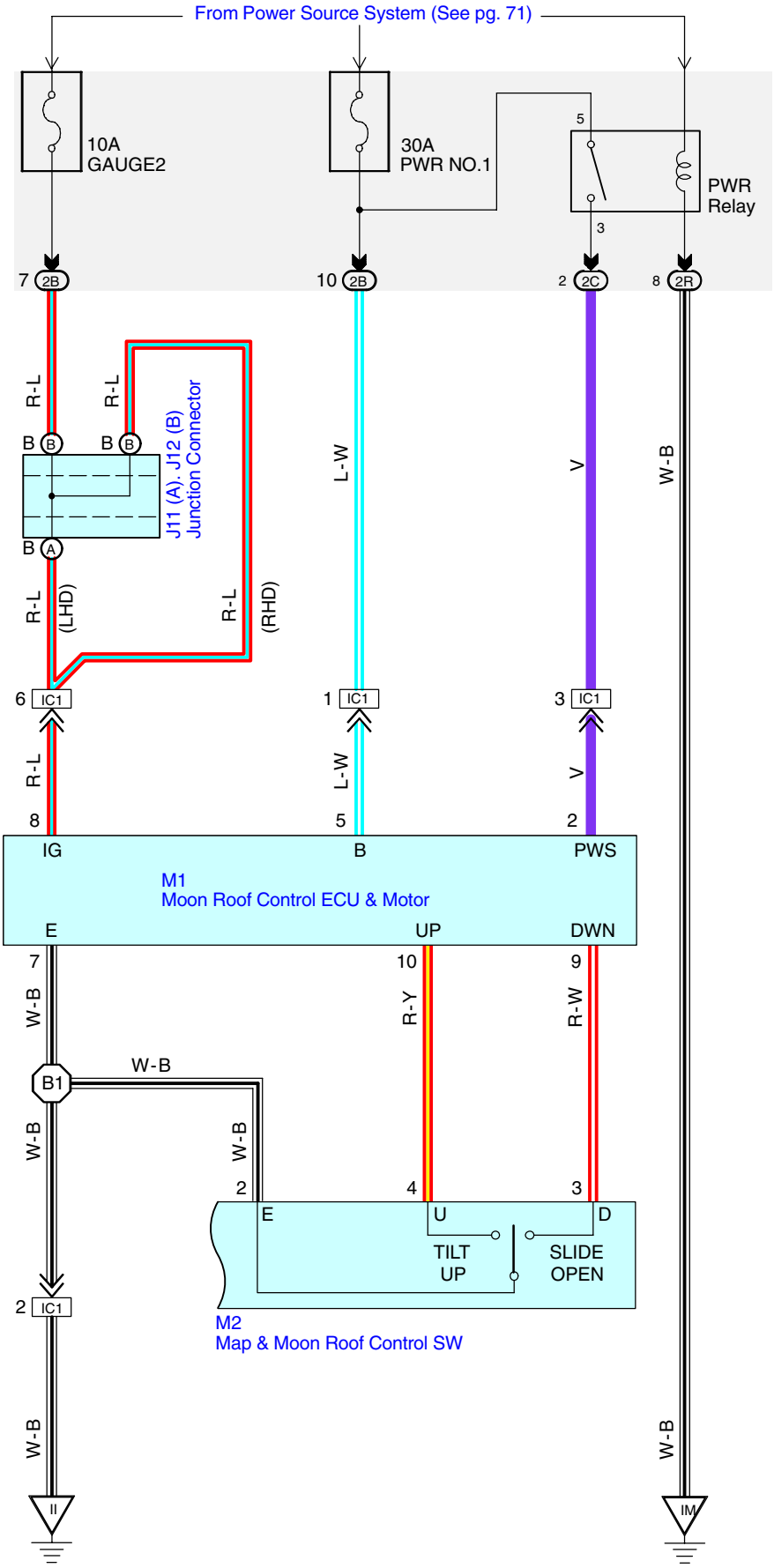
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	68	RR Door LH Wire & Floor Wire
BB1		RR Door RH Wire & Floor Wire
IA1	64	Instrument Panel Wire & Floor Wire
IA4		
IB2		Front Door LH Wire & Instrument Panel Wire
IE2		Engine Room Main Wire & Instrument Panel Wire
IE4		
IJ3		
IL1	66	

: Ground Points

Code	See Page	Ground Points Location
BR	67	Right Kick Panel
EA	62	
IJ	63	
IN		

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	44	Floor Wire	E3		Floor Wire
B14			I15		Instrument Panel Wire


From Power Source System (See pg. 71)
10A
GAUGE2
30A
PWR NO.1
PWR
Relay
5
3
7 2B
10 2B
2 2C
8 2R
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
6 IC1
1 IC1
3 IC1
R-L
8
L-W
5
V
2
IG
B
PWS
M1
Moon Roof Control ECU & Motor
E
UP
DWN
7
W-B
10
R-Y
9
R-W
W-B
B1
W-B
W-B
2
4
3
E
U
D
TILT
UP
SLIDE
OPEN
2 IC1
M2
Map & Moon Roof Control SW
W-B
W-B
II
IM

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	36 (LHD)	M1	37 (LHD)	M2	37 (LHD)
		45 (RHD)		46 (RHD)		46 (RHD)
J12	B	36 (LHD)				
		45 (RHD)				

: Junction Block and Wire Harness Connector

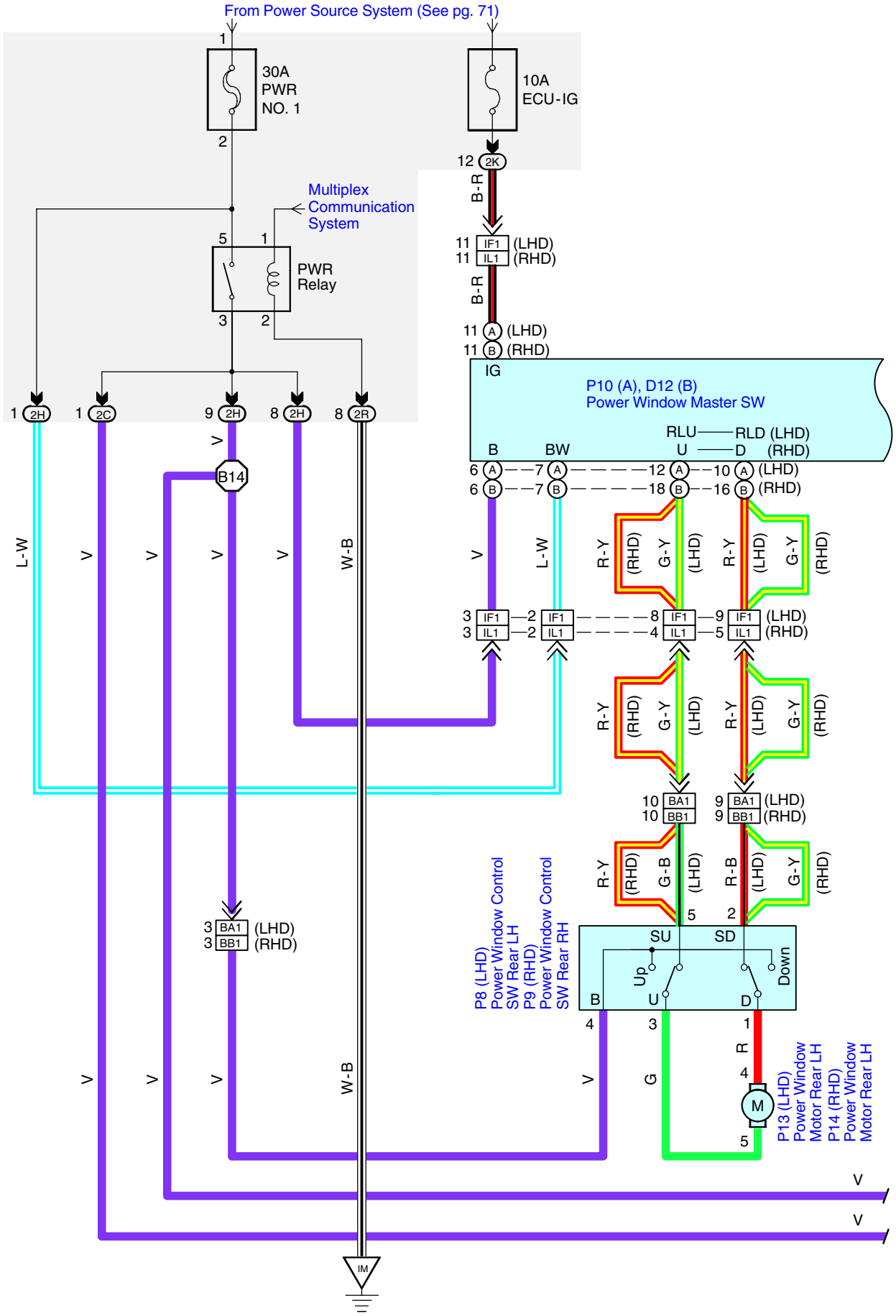
Code	See Page	Junction Block and Wire Harness (Connector Location)
2B	26	Instrument Panel Wire and Driver Side J/B
2C		
2R		

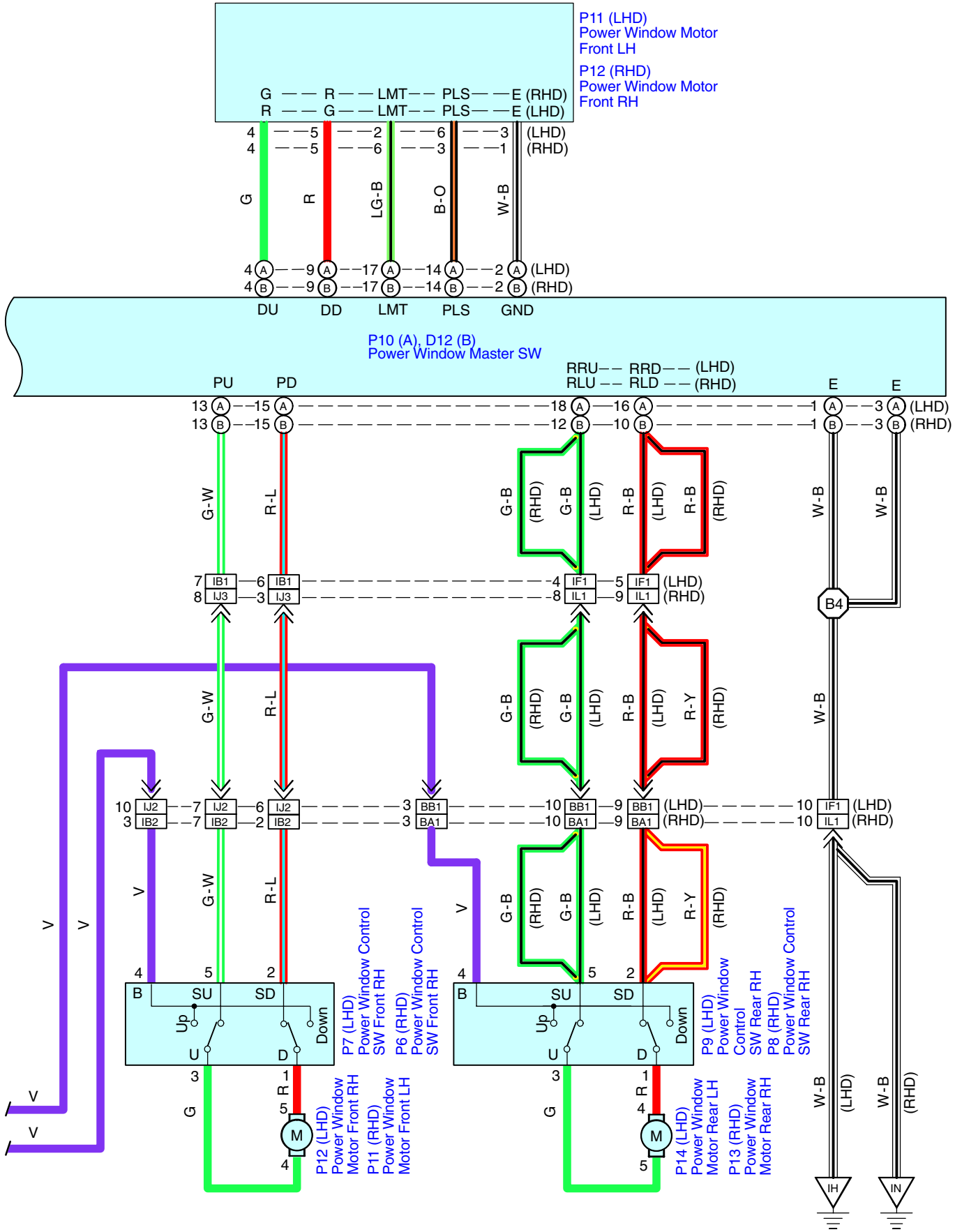
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	52 (LHD)	Instrument Panel Wire and Roof Wire (Inside of Front Left Pillar)
	63 (RHD)	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)

: Ground Points

Code	See Page	Ground Points Location
B1	56 (LHD)	Roof Wire
	67 (RHD)	
II	52 (LHD)	Instrument Panel Reinforcement LH
	63 (RHD)	
IM	52 (LHD)	Instrument Panel Reinforcement RH
	63 (RHD)	


From Power Source System (See pg. 71)
30A PWR NO. 1
10A ECU-IG
Multiplex Communication System
PWR Relay
IG
P10 (A), D12 (B)
Power Window Master SW
RLU
RLD (LHD)
U
D
(RHD)
B
BW
B14
IM
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 LH
SU
SD
Up
Down
B
U
D
M
L-W
W-B
R-Y
G-Y
G-B
R-B
V
R
G


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
P10 (A), D12 (B)
Power Window Master SW
PU
PD
RRU — RRD — (LHD)
RLU — RLD — (RHD)
E
E
G-W
R-L
G-B
R-B
W-B
R-Y
B4
IB1
IB2
IJ2
IJ3
IF1
IL1
BB1
BA1
SU
SD
Up
Down
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)(LH Side in LHD Vehicles, RH Side in RHD Vehicles)

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)(LH Side in LHD Vehicles, RH Side in RHD Vehicles)

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 (Passenger's Window)(LH Side in LHD Vehicles, RH Side in RHD Vehicles)

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 with 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
P10	A	37 (LHD)	P8	38 (LHD)	P13	38 (LHD)
		46 (RHD)		47 (RHD)		47 (RHD)
D12	B	37 (LHD)	P9	38 (LHD)	P14	38 (LHD)
		46 (RHD)		47 (RHD)		47 (RHD)
P6		38 (LHD)	P11	38 (LHD)		
		47 (RHD)		47 (RHD)		
P7		38 (LHD)	P12	38 (LHD)		
		47 (RHD)		47 (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

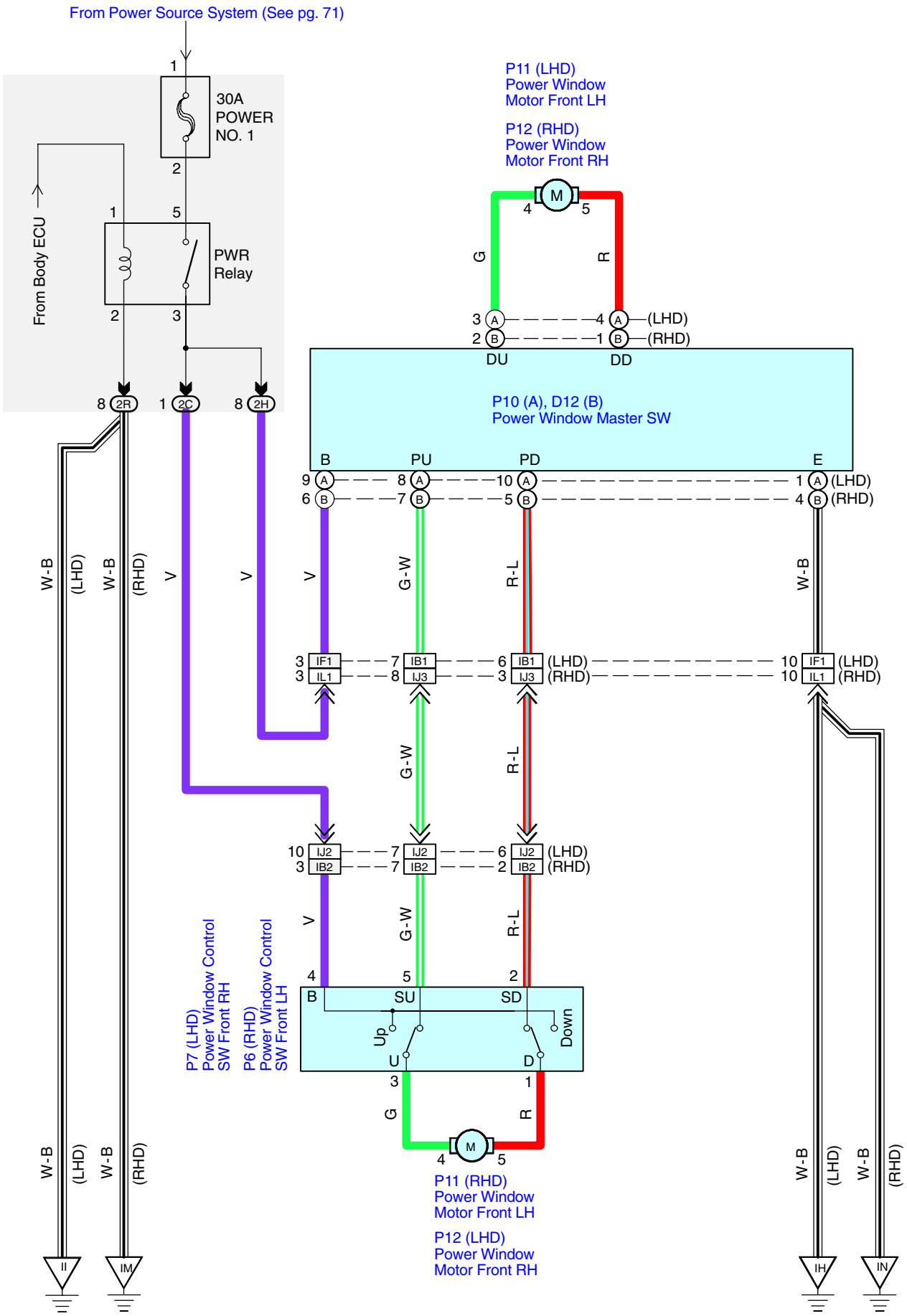
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	56 (LHD)	Rear Door LH Wire and Floor Wire (Left Centre Pillar)
	67 (RHD)	Rear Door LH Wire and Floor No.2 Wire (Left Centre Pillar)
BB1	56 (LHD)	Rear Door RH Wire and Floor No.2 Wire (Right Centre Pillar)
	67 (RHD)	Rear Door RH Wire and Floor Wire (Right Centre Pillar)
IB1	52 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	63 (RHD)	
IF1	52 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	54 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	
IJ3	54 (LHD)	Front Door Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	
IL1	65 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IM	63 (RHD)	Instrument Panel Reinforcement RH
IH	52 (LHD)	Right Kick Panel
IN	63 (RHD)	Left Kick Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B4	56 (LHD)	Floor Wire	B14	56 (LHD)	Floor Wire
	67 (RHD)			67 (RHD)	


From Power Source System (See pg. 71)
30A POWER NO. 1
PWR Relay
From Body ECU
P11 (LHD) Power Window Motor Front LH
P12 (RHD) Power Window Motor Front RH
P10 (A), D12 (B) Power Window Master SW
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
(LHD)
(RHD)
W-B
V
G-W
R-L
G
R

Power Window without Jam Protection

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 4 of the power window motor to TERMINAL 5 to TERMINAL D 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 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 U 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)(LH Side in LHD Vehicles, RH Side in RHD Vehicles)

When the driver's window SW is pushed strongly to the down side, the current flowing to TERMINAL B 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 of the power window master SW to TERMINAL D to TERMINAL 5 of the power window motor to TERMINAL 4 to TERMINAL U 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 of the power window master SW to TERMINAL D 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 of the power window master SW to TERMINAL D 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 of the power window master SW to TERMINAL U to TERMINAL 4 of the power window motor to TERMINAL 5 to TERMINAL D 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 (Passenger's Window)(RH Side in LHD Vehicles, LH Side in RHD Vehicles)

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. Key Off Power Window Operation

With the ignition SW turned from on to off, the body ECU(Ref. Page 134) operates and current flows from the ECU-B fuse to TERMINAL 1 of the body ECU to TERMINAL 8 to TERMINAL 1 of the power relay to TERMINAL 2 to GROUND for about 43 seconds. The same as normal operation, the current flows from the PWR NO.1 fuse to TERMINAL 5 of the power relay to TERMINAL 3 to TERMINAL B of the power window master SW and TERMINAL 4 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

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	46 (RHD)	P7		39 (LHD)	P11	47 (RHD)
P6		47 (RHD)	P10	A	39 (LHD)	P12	39 (LHD)

: Junction Block and Wire Harness Connector

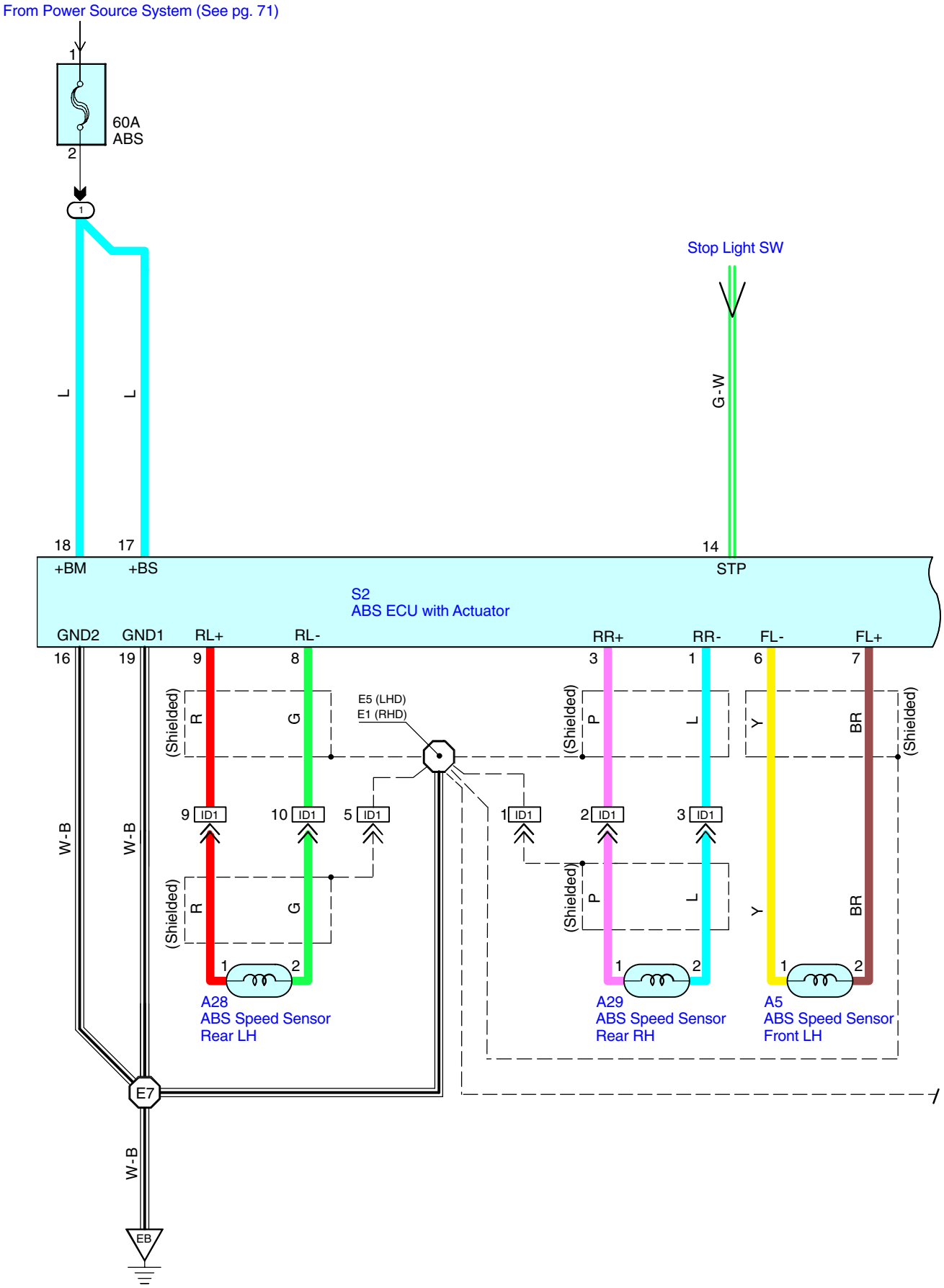
Code	See Page	Junction Block and Wire Harness (Connector Location)
2C	26	Instrument Panel Wire and Driver Side J/B
2H		Floor Wire and Driver Side J/B (Lower Finish Panel)
2R		Instrument Panel Wire and Driver Side J/B

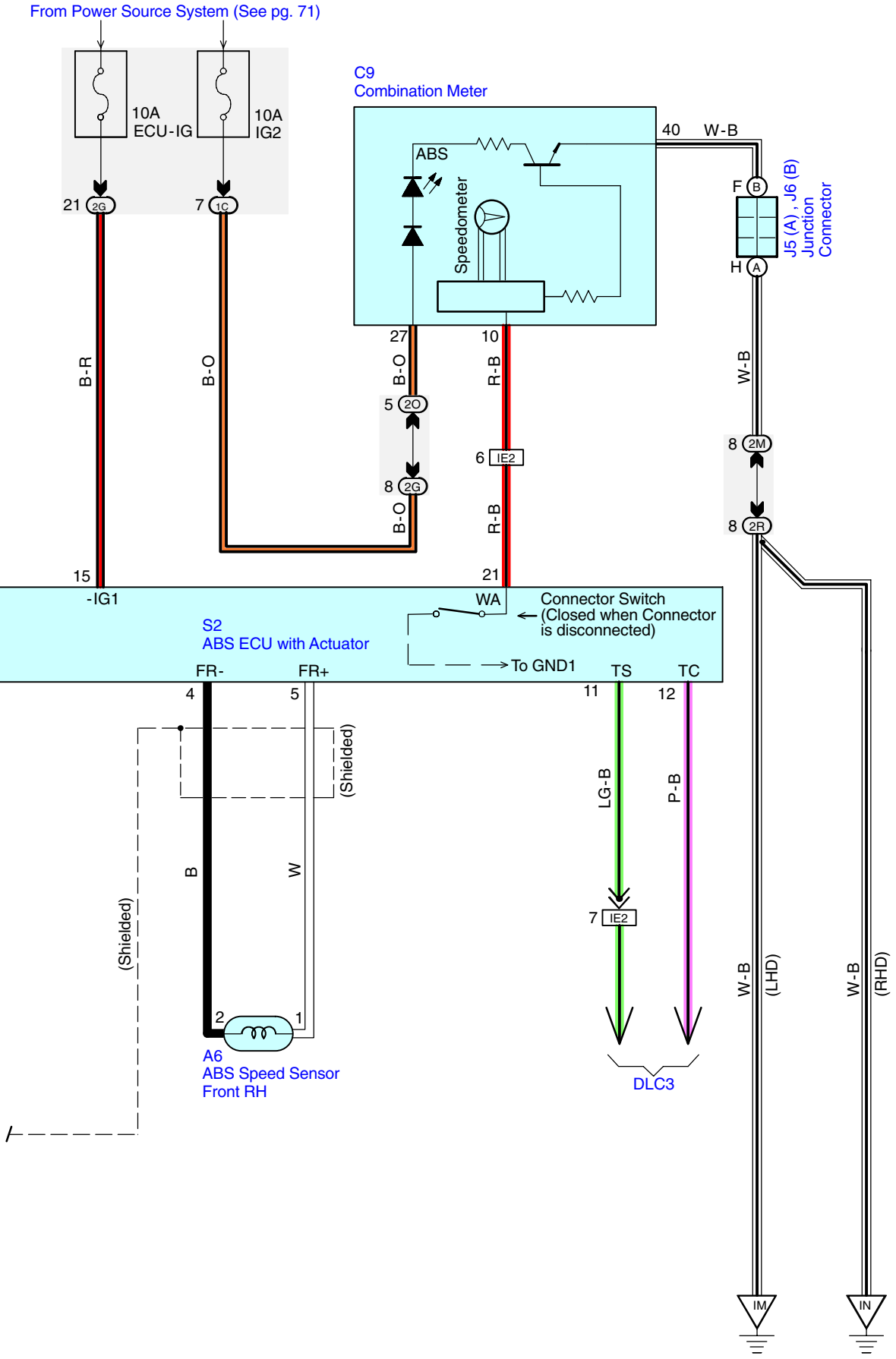
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	52 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	63 (RHD)	
IF1	52 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	54 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	65 (RHD)	
IL1	65 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

▽ : Ground Points

Code	See Page	Ground Points Location
IH	52 (LHD)	Left Kick Panel
II	52 (LHD)	Instrument Panel Reinforcement LH
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	63 (RHD)	Right Kick Panel


From Power Source System (See pg. 71)
1
60A
ABS
2
1
L
L
Stop Light SW
G-W
18
+BM
17
+BS
14
STP
S2
ABS ECU with Actuator
GND2
GND1
RL+
RL-
RR+
RR-
FL-
FL+
16
19
9
8
3
1
6
7
(Shielded)
R
G
P
L
Y
BR
E5 (LHD)
E1 (RHD)
ID1
W-B
E7
EB
A28
ABS Speed Sensor
Rear LH
A29
ABS Speed Sensor
Rear RH
A5
ABS Speed Sensor
Front LH


From Power Source System (See pg. 71)
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
Connector Switch
(Closed when Connector
is disconnected)
S2
ABS ECU with Actuator
To GND1
FR-
FR+
TS
TC
4
5
11
12
(Shielded)
LG-B
P-B
B
W
7
IE2
(Shielded)
2
1
A6
ABS Speed Sensor
Front RH
DLC3
W-B
(LHD)
W-B
(RHD)
IM
IN

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 5, 3, 9 and 6 of the ABS ECU.

(2) Stop light SW signal

A signal is input to TERMINAL 14 of the ECU when the brake pedal is depressed.

2. System Operation

During sudden braking the 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 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 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 ABS 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.
Note: Connector switch closes when main connector is disconnected from ABS ECU.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A5	31 (LHD 1MZ-FE)	A28	37 (LHD)	J6 B	36 (LHD)
	40 (RHD 1MZ-FE)		46 (RHD)		45 (RHD)
	33 (LHD 2AZ-FE)	A29	37 (LHD)	S2	32 (LHD 1MZ-FE)
	44 (RHD 2AZ-FE)		46 (RHD)		41 (RHD 1MZ-FE)
A6	31 (LHD 1MZ-FE)	C9	35 (LHD)		34 (LHD 2AZ-FE)
	40 (RHD 1MZ-FE)		44 (RHD)		43 (RHD 2AZ-FE)
	33 (LHD 2AZ-FE)	J5 A	36 (LHD)		
	44 (RHD 2AZ-FE)		45 (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 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	52 (LHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
	63 (RHD)	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE2	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (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
EB	49 (LHD 1MZ-FE)	Right Fender	IN	63 (RHD)	Instrument Panel Reinforcement RH
	60 (RHD 1MZ-FE)		IM	52 (LHD)	Instrument Panel Reinforcement RH
	51 (LHD 2AZ-FE)				
	62 (RHD 2AZ-FE)				

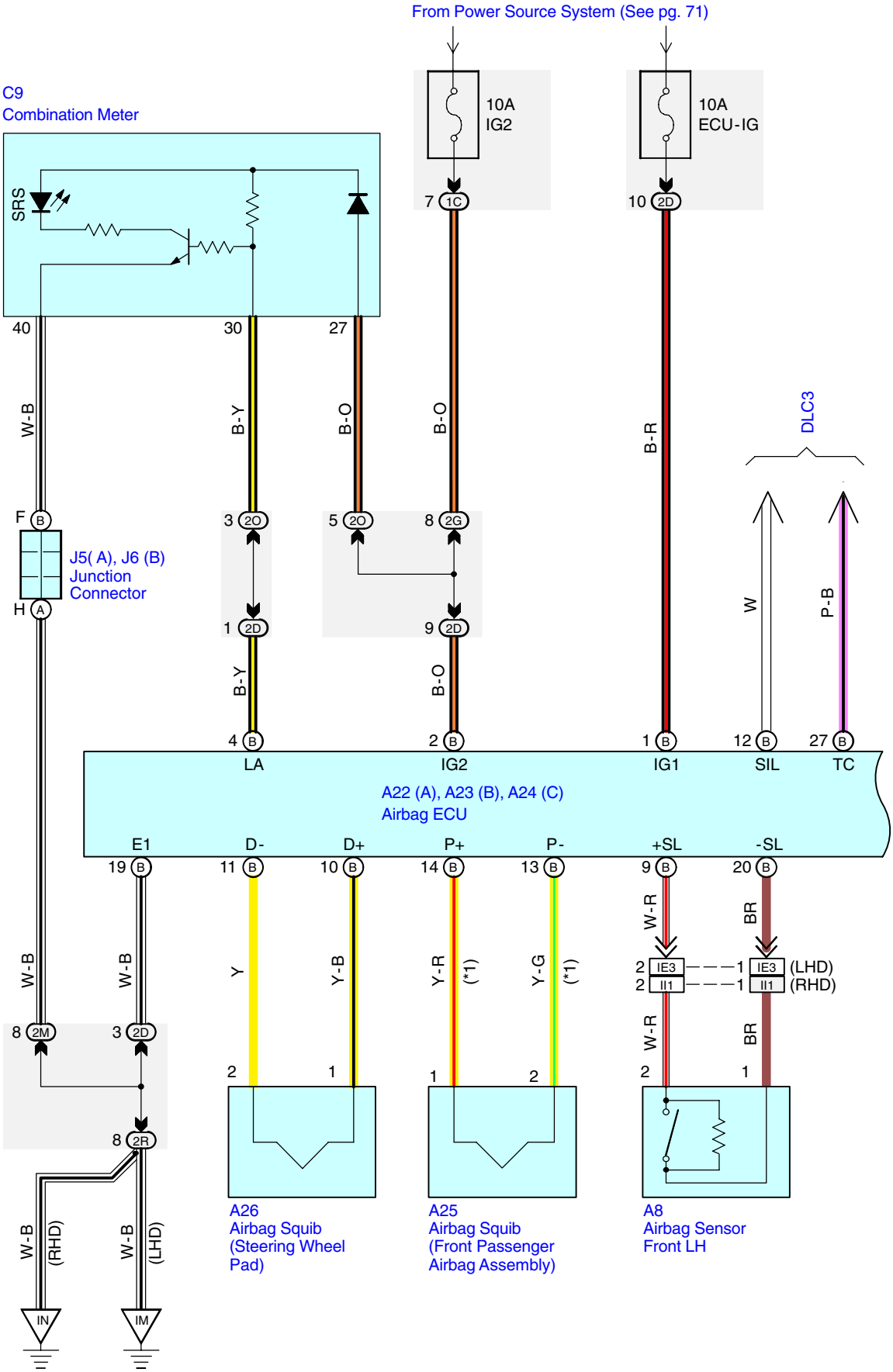
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	60 (RHD 1MZ-FE)	Engine Room Main Wire	E5	49 (LHD 1MZ-FE)	Engine Room Main Wire
	62 (RHD 2AZ-FE)			50 (LHD 2AZ-FE)	
E7	60 (RHD 1MZ-FE)				
	62 (RHD 2AZ-FE)				

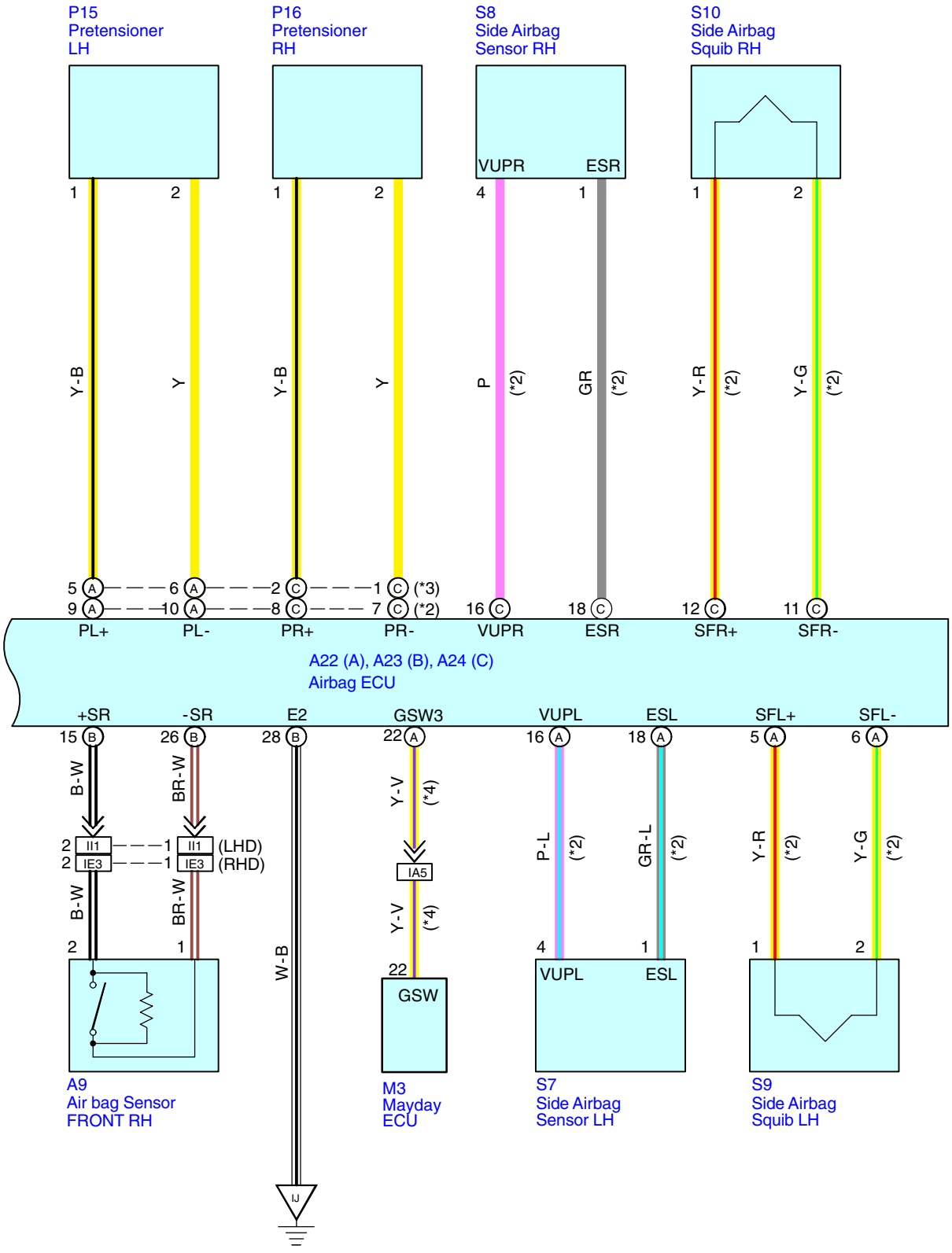
NOTICE: When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual for the applicable model year.

- 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 memorised 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 to 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, 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, 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, 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 MAYDAY 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
* 4 : w/ Mayday



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 ECU, and from the IG2 fuse to TERMINAL (B) 2 of the Airbag ECU.
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. If a Mayday ECU is fitted, a voltage signal from terminal (A)22 of airbag ECU is sent to terminal 22 of the Mayday ECU
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 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 to operate. If a Mayday ECU is fitted, a voltage signal from terminal (A)22 of airbag ECU is sent to terminal 22 of the Mayday ECU
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 pretensioners restrict the seat belt travel.

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A8	31 (LHD 1MZ-FE)	A24 C	44 (RHD)	P15	38 (LHD)
	40 (RHD 1MZ-FE)				47 (RHD)
	33 (LHD 2AZ-FE)	A25	35 (LHD)	P16	38 (LHD)
	42 (RHD 2AZ-FE)		44 (RHD)		47 (RHD)
A9	31 (LHD 1MZ-FE)	A26	35 (LHD)	S7	38 (LHD)
	40 (RHD 1MZ-FE)		44 (RHD)		47 (RHD)
	33 (LHD 2AZ-FE)	C9	35 (LHD)	S8	38 (LHD)
	42 (RHD 2AZ-FE)		44 (RHD)		47 (RHD)
A22 A	35 (LHD)	J5 A	36 (LHD)	S9	38 (LHD)
	44 (RHD)		45 (RHD)		47 (RHD)
A23 B	35 (LHD)	J6 B	36 (LHD)	S10	39 (LHD)
	44 (RHD)		45 (RHD)		48 (RHD)
A24 C	35 (LHD)	M3	46 (RHD)		

: Junction Block and Wire Harness Connector

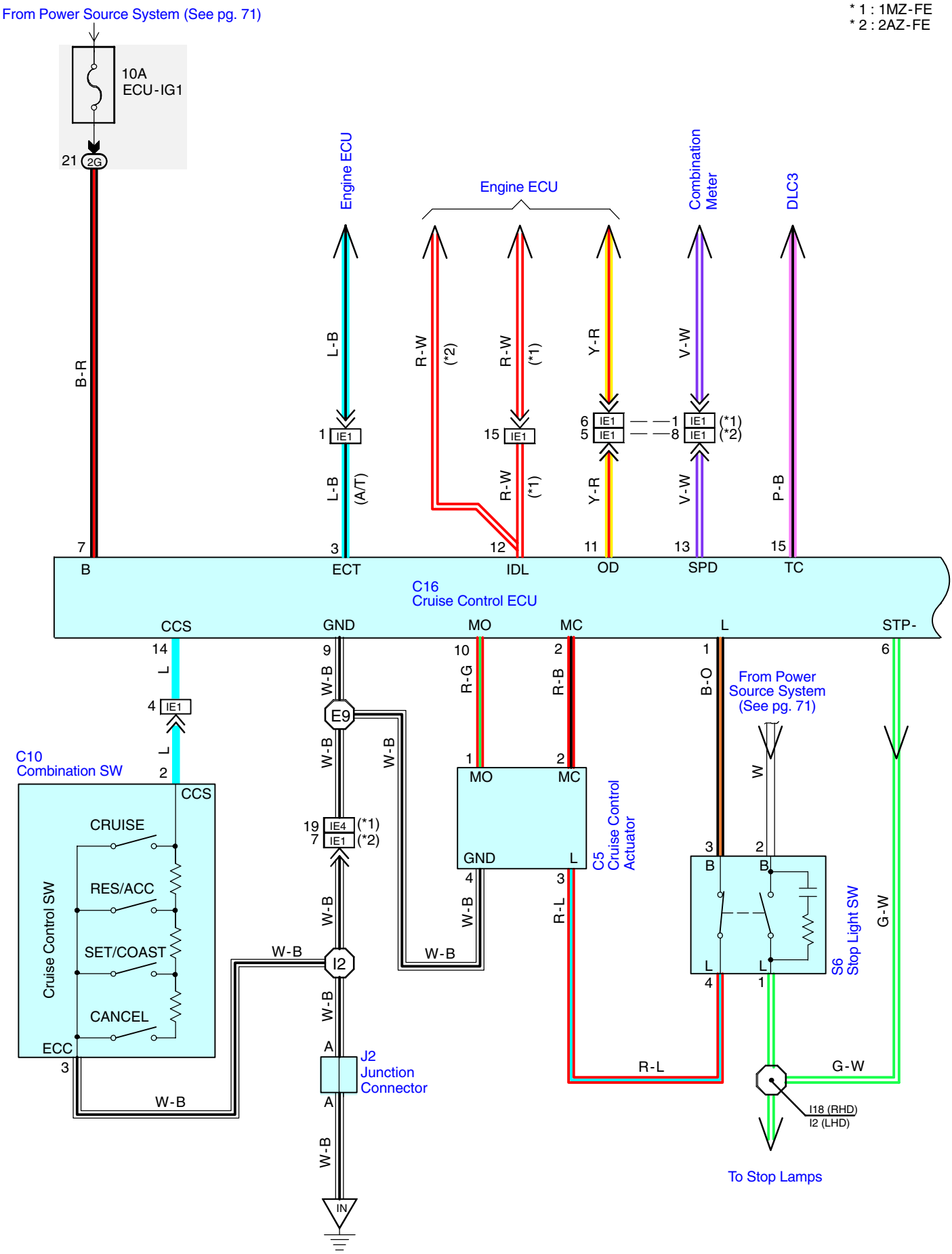
Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	Engine Room Main Wire and Engine Room J/B
2D	26	Instrument Panel Wire and Driver Side J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2M	26	Instrument Panel Wire and Driver Side J/B
2O		
2R		

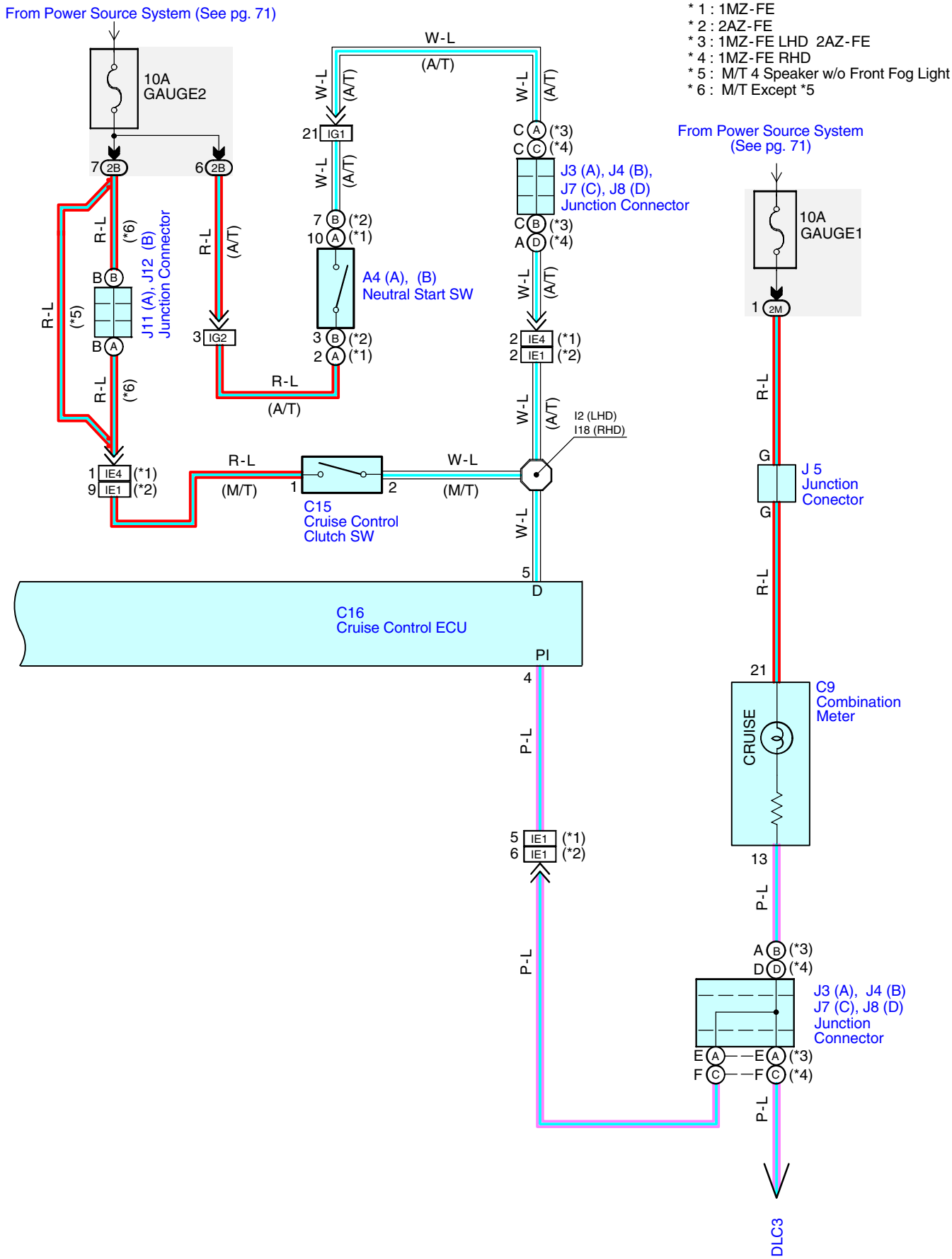
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA5	63 (RHD)	Instrument Panel Wire and Floor Wire
IE3	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
II1	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

▽ : **Ground Points**

Code	See Page	Ground Points Location
IJ	52 (LHD)	Instrument Panel Brace LH
	63 (RHD)	Instrument Panel Brace RH
IM	63 (RHD)	Instrument Panel Reinforcement RH
IN	52 (LHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 71)
* 1 : 1MZ-FE
* 2 : 2AZ-FE
10A
ECU-IG1
21
2G
Engine ECU
Engine ECU
Combination Meter
DLC3
B-R
L-B
R-W
(*2)
R-W
(*1)
Y-R
V-W
P-B
1
IE1
15
IE1
6
IE1
5
IE1
1
IE1
8
IE1
(*1)
(*2)
L-B
(A/T)
R-W
(*1)
Y-R
V-W
7
3
12
11
13
15
B
ECT
IDL
OD
SPD
TC
C16
Cruise Control ECU
CCS
GND
MO
MC
L
STP-
14
L
4
IE1
L
2
9
W-B
E9
W-B
10
R-G
2
R-B
1
B-O
6
From Power Source System (See pg. 71)
C10
Combination SW
CCS
CRUISE
RES/ACC
SET/COAST
CANCEL
Cruise Control SW
ECC
3
19
IE4
(*1)
7
IE1
(*2)
W-B
I2
W-B
W-B
W-B
W-B
W-B
A
A
J2
Junction
Connector
W-B
IN
1
2
MO
MC
GND
L
4
3
C5
Cruise Control
Actuator
R-L
R-L
3
2
B
B
L
L
4
1
S6
Stop Light SW
W
G-W
G-W
I18 (RHD)
I2 (LHD)
To Stop Lamps


From Power Source System (See pg. 71)
* 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)
J3 (A), J4 (B), J7 (C), J8 (D) Junction Connector
A4 (A), (B) Neutral Start SW
J11 (A), J12 (B) Junction Connector
R-L
(A/T)
(M/T)
(*1)
(*2)
(*3)
(*4)
(*5)
(*6)
I2 (LHD)
I18 (RHD)
C15 Cruise Control Clutch SW
C16 Cruise Control ECU
From Power Source System (See pg. 71)
10A GAUGE1
J 5 Junction Conector
C9 Combination Meter
CRUISE
P-L
J3 (A), J4 (B) J7 (C), J8 (D) Junction Connector
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 accelerator 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. Accelerator 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.
* The Clutch Pedal is depressed (Manual Transmission Only)

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.

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

E6 (A), E7 (B), E8 (C), E9 (D), E10 (E) 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 CANCEL 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

C10 Combination SW

2-3 : Approx. 1540 Ω with CANCEL 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	31 (LHD 1MZ-FE)	C15	35 (LHD)	J7	C	36 (LHD)
		40 (RHD 1MZ-FE)		44 (RHD)			45 (RHD)
A4	B	33 (LHD 2AZ-FE)	C16	35 (LHD)	J8	9	36 (LHD)
		42 (RHD 2AZ-FE)		44 (RHD)			45 (RHD)
C5		31 (LHD 1MZ-FE)	J2	36 (LHD)	J11	A	36 (LHD)
		40 (RHD 1MZ-FE)		45 (RHD)			45 (RHD)
		33 (LHD 2AZ-FE)	J3	36 (LHD)	J12	B	36 (LHD 1MZ-FE)
		42 (RHD 2AZ-FE)		45 (RHD)			45 (RHD 1MZ-FE)
C9		35 (LHD)	J4	36 (LHD)	S6		36 (LHD 1MZ-FE)
		44 (RHD)		45 (RHD)			45 (RHD 1MZ-FE)
C10		35 (LHD)	J5	36 (LHD)			
		44 (RHD)		45 (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	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IE1	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG2	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	65 (RHD)	
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	65 (RHD)	

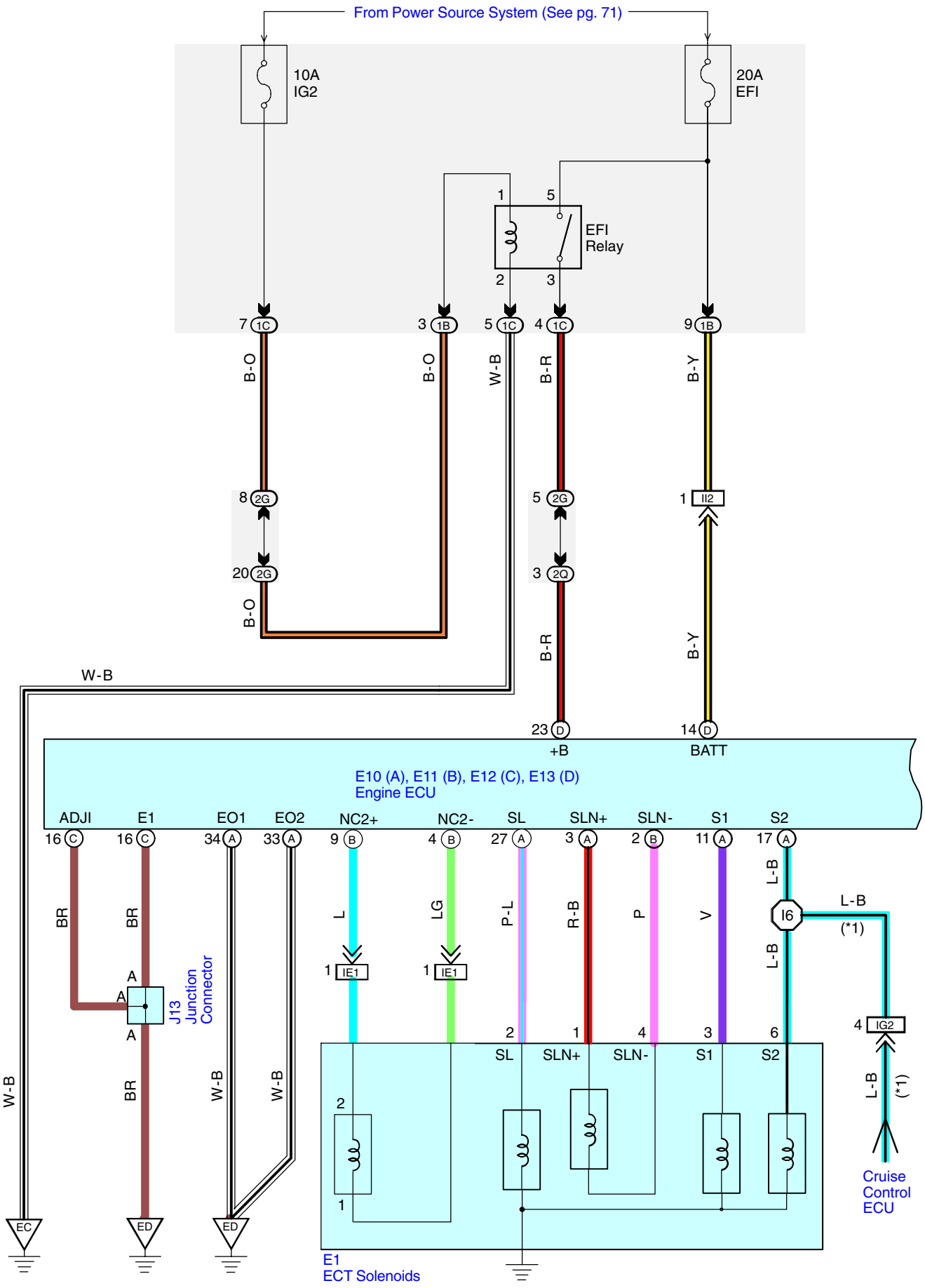
: Ground Points

Code	See Page	Ground Points Location
IN	63 (RHD)	Right Kick Panel

: Splice Points

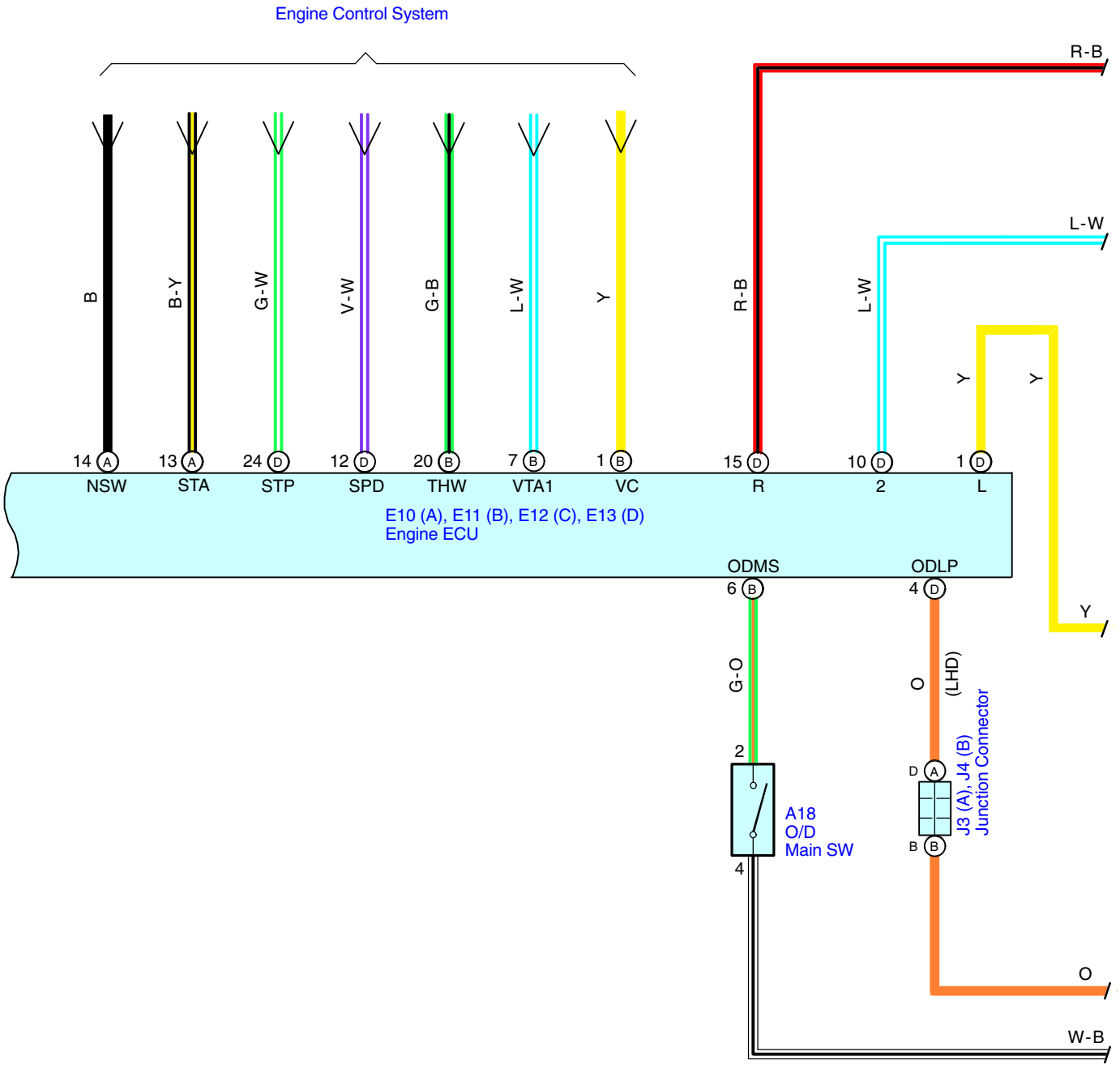
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E9	36 (LHD)	Engine Room Main	I2	54 (LHD)	Instrument Panel
	45 (RHD)		I8	65 (RHD)	

Automatic Transmission (ECT) & Indicator (1MZ-FE)

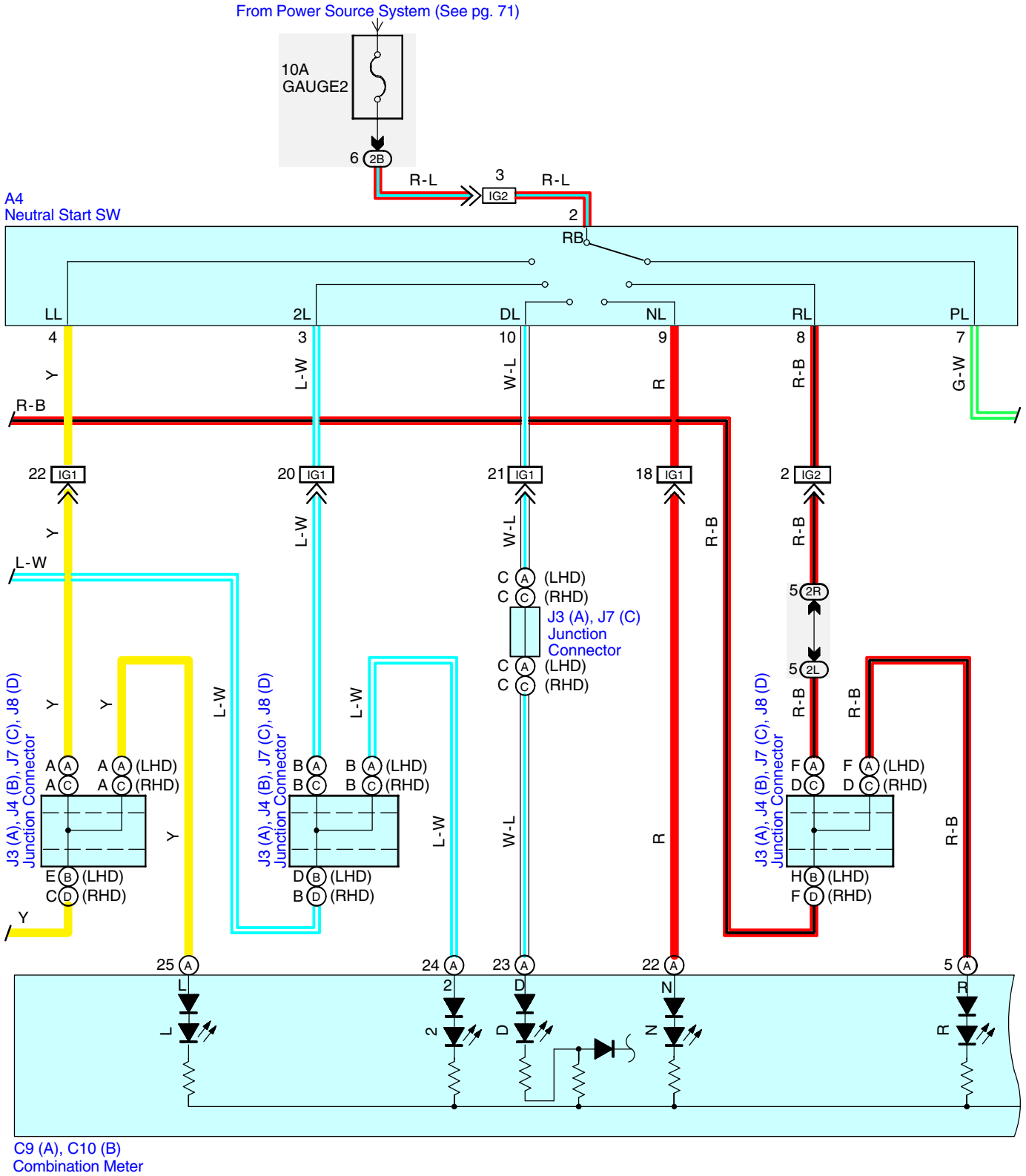


Automatic Transmission (ECT) & Indicator (1MZ-FE)

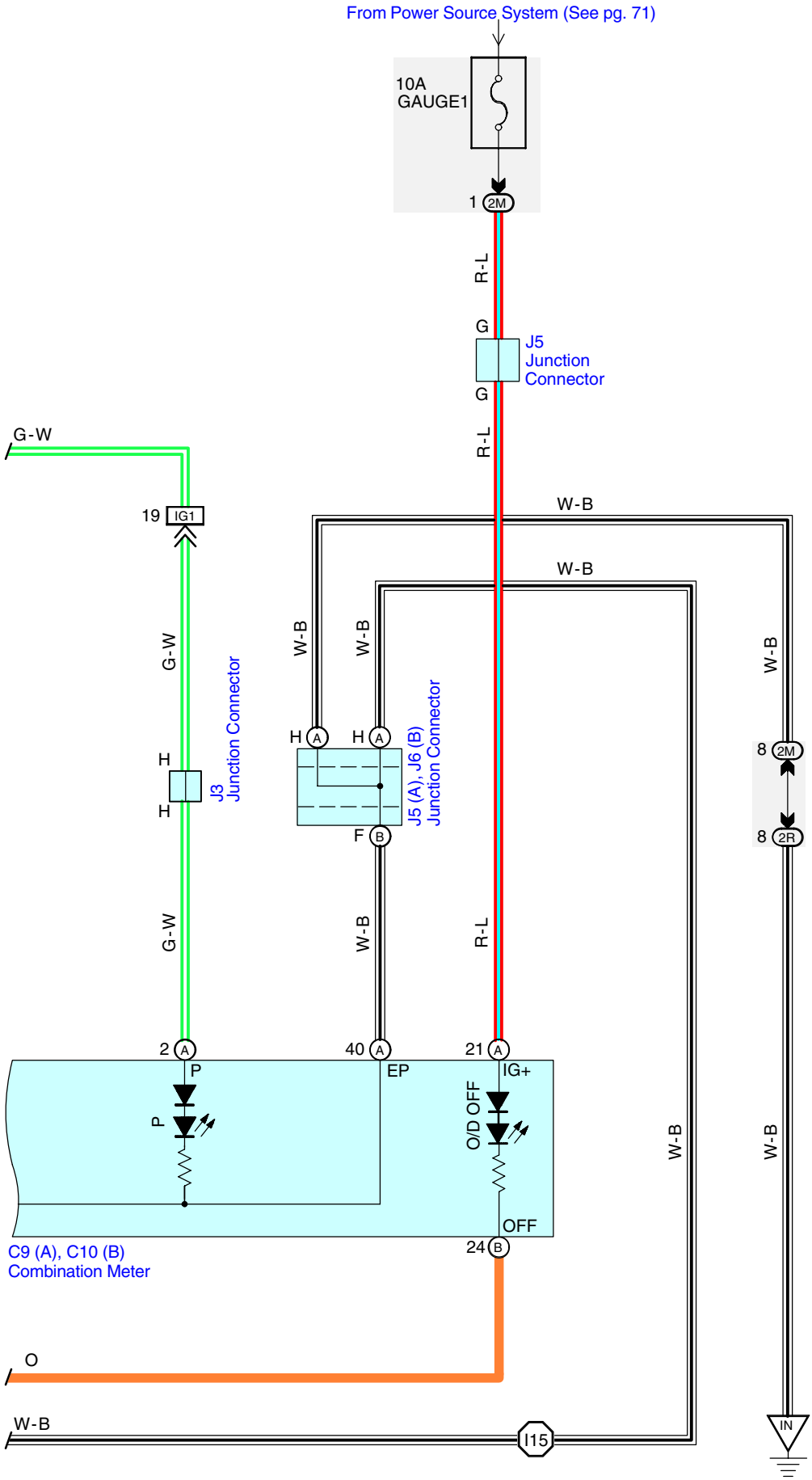
* 1: w/ Cruise Control



Automatic Transmission (ECT) & Indicator (1MZ-FE)



Automatic Transmission (ECT) & Indicator (1MZ-FE)



System Outline

Previous automatic transaxle have selected each gear shift using mechanically controlled throttle hydraulic pressure, governor 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		31 (LHD 1MZ-FE) 40 (RHD 1MZ-FE)	E10	A	36 (LHD) 45 (RHD)	J4	B	45 (RHD)
						J5	A	36 (LHD)
A18		35 (LHD) 44 (RHD)	E11	B	36 (LHD) 45 (RHD)	J6	B	36 (LHD) 45 (RHD)
C9	A	35 (LHD) 44 (RHD)	E12	C	36 (LHD) 45 (RHD)	J7	C	36 (LHD) 45 (RHD)
C10	B	35 (LHD) 44 (RHD)	E13	D	36 (LHD) 45 (RHD)	J8	D	36 (LHD) 45 (RHD)
E1		31 (LHD 1MZ-FE) 40 (RHD 1MZ-FE)	J3	A	36 (LHD) 45 (RHD)	J13		36 (LHD) 45 (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		Engine Room Main Wire and Engine Room J/B
2L		Instrument Panel Wire and Driver Side J/B
2M		
2Q		
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
IG2	54 (LHD) 65 (RHD)	
II2	54 (LHD) 65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)

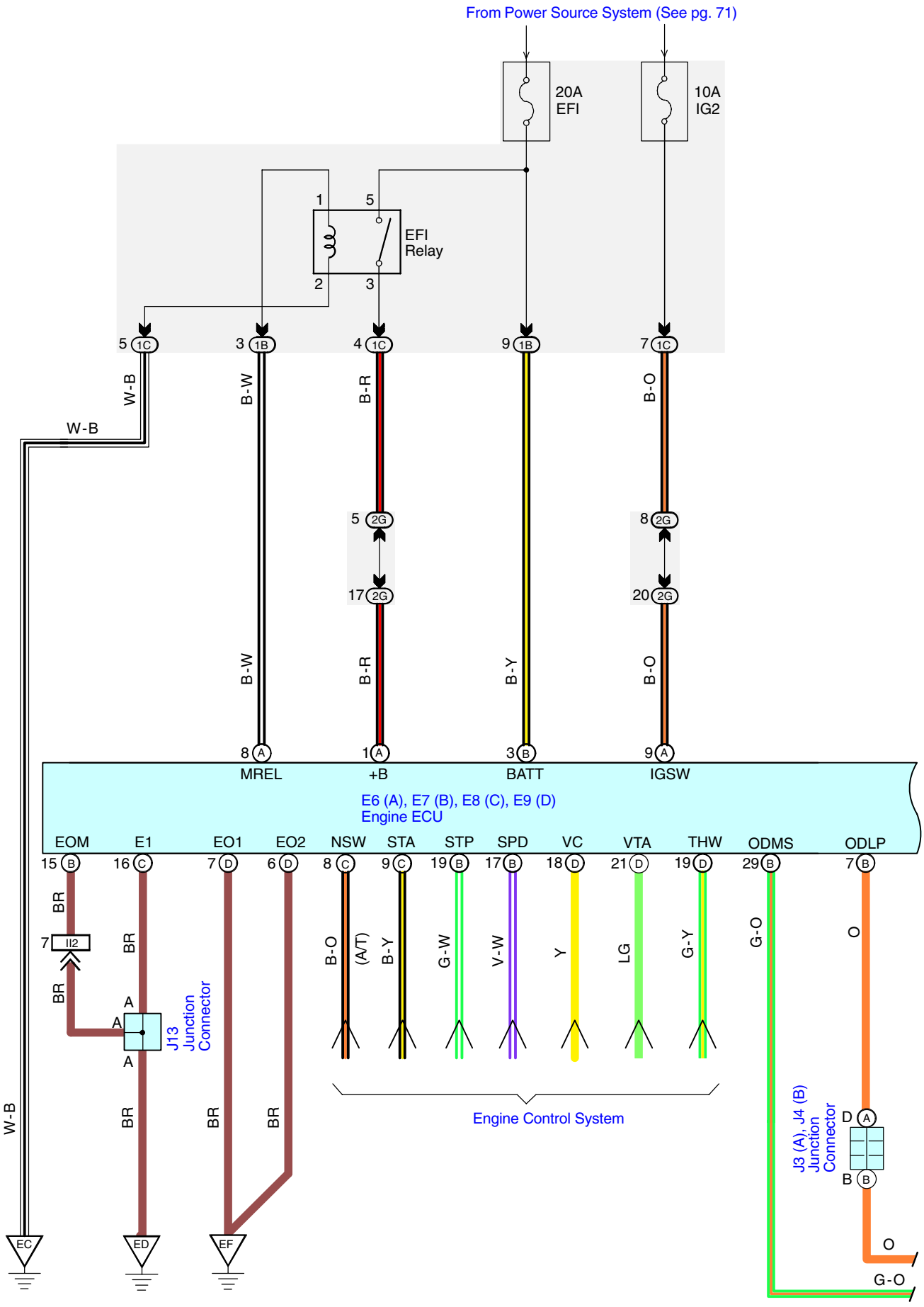
: Ground Points

Code	See Page	Ground Points Location
EC	49 (LHD 1MZ-FE) 60 (RHD 1MZ-FE)	Left Fender
ED	49 (LHD 1MZ-FE) 60 (RHD 1MZ-FE)	Surge Tank RH
IN	63 (RHD)	Right Kick Panel

: Splice Points

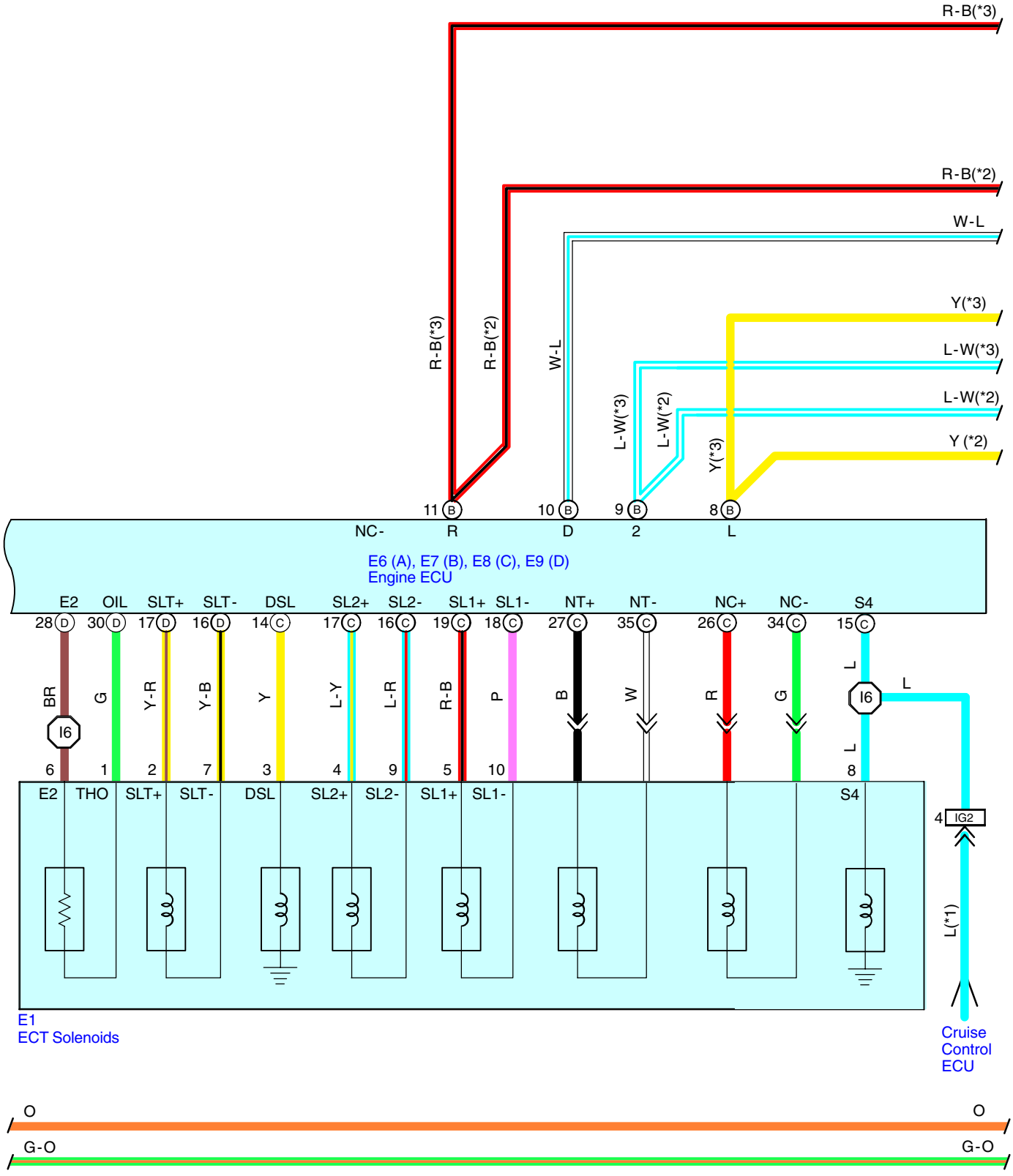
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	54 (LHD)	Instrument Panel	I6	65 (RHD)	Instrument Panel

Automatic Transmission (ECT) & Indicator (2AZ-FE)

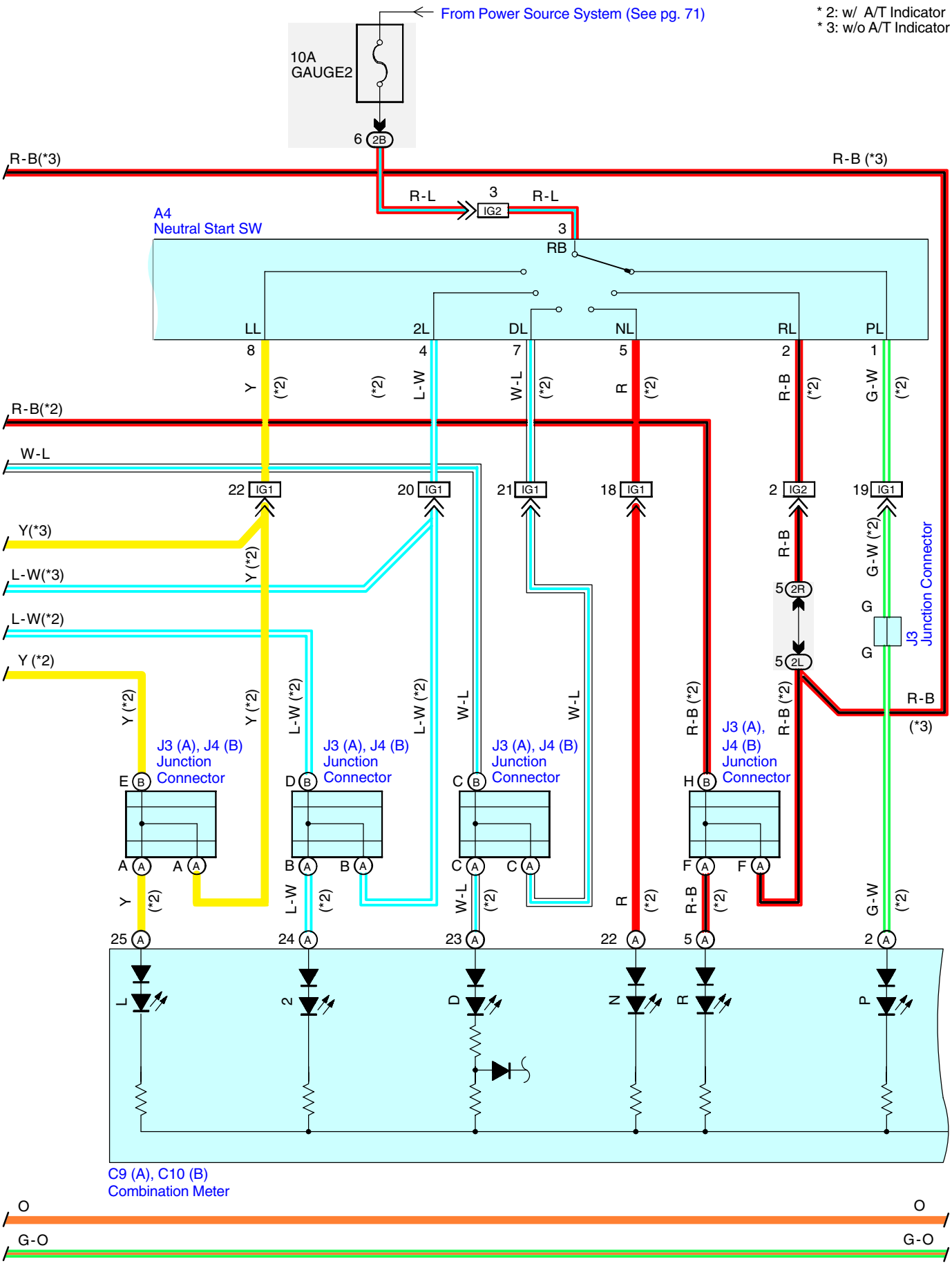


Automatic Transmission (ECT) & Indicator (2AZ-FE)

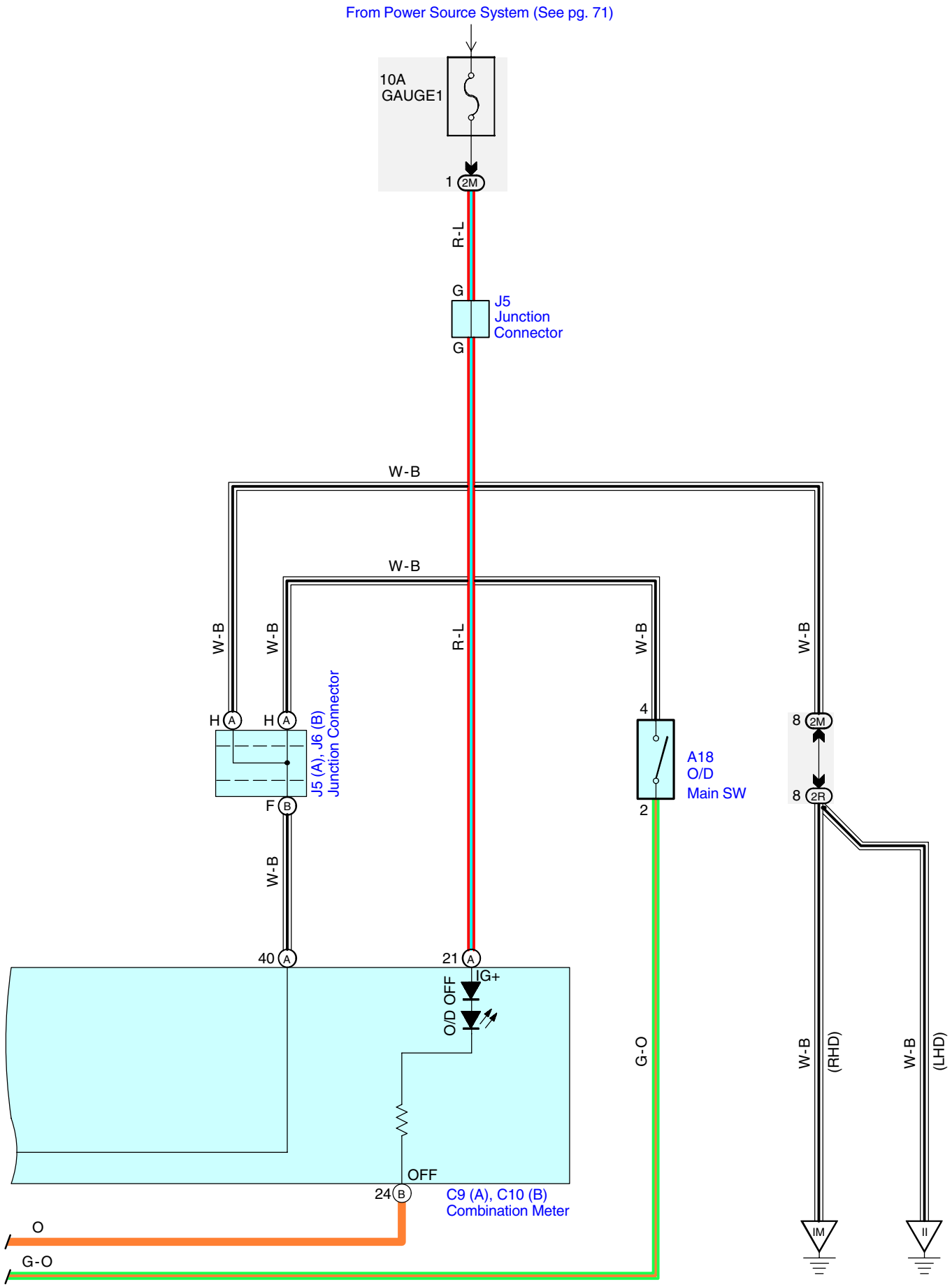
* 1: w/ Cruise Control
* 2: w/ A/T Indicator
* 3: w/o A/T Indicator



Automatic Transmission (ECT) & Indicator (2AZ-FE)



Automatic Transmission (ECT) & Indicator (2AZ-FE)



System Outline

Previous automatic transaxle 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		33 (LHD 2AZ-FE) 42 (RHD 2AZ-FE)	E7	B	36 (LHD) 45 (RHD)	J6	B	36 (LHD) 45 (RHD)
A18		35 (LHD) 44 (RHD)	E8	C	36 (LHD) 45 (RHD)	J13		36 (LHD) 45 (RHD)
C9	A	35 (LHD) 44 (RHD)	E9	D	36 (LHD) 45 (RHD)			
C10	B	35 (LHD) 44 (RHD)	J3	A	36 (LHD) 45 (RHD)			
E1		33 (LHZ 2AZ-FE) 42 (RHD 2AZ-FE)	J4	B	36 (LHD) 45 (RHD)			
E6	A	36 (LHD) 45 (RHD)	J5	A	36 (LHD) 45 (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

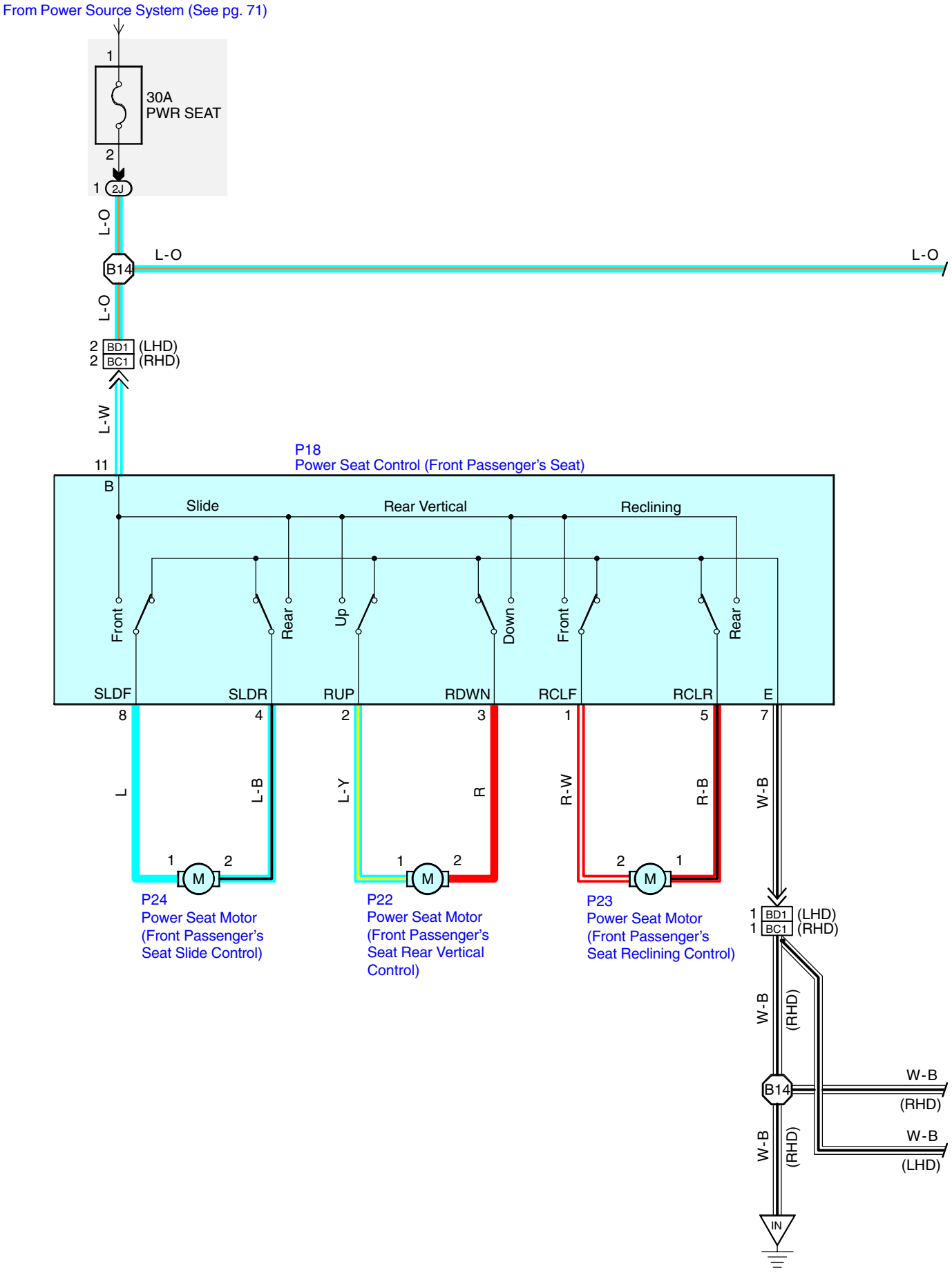
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
IG2	65 (RHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
II2	54 (LHD)	Right Kick Panel
II2	65 (RHD)	Left Kick Panel

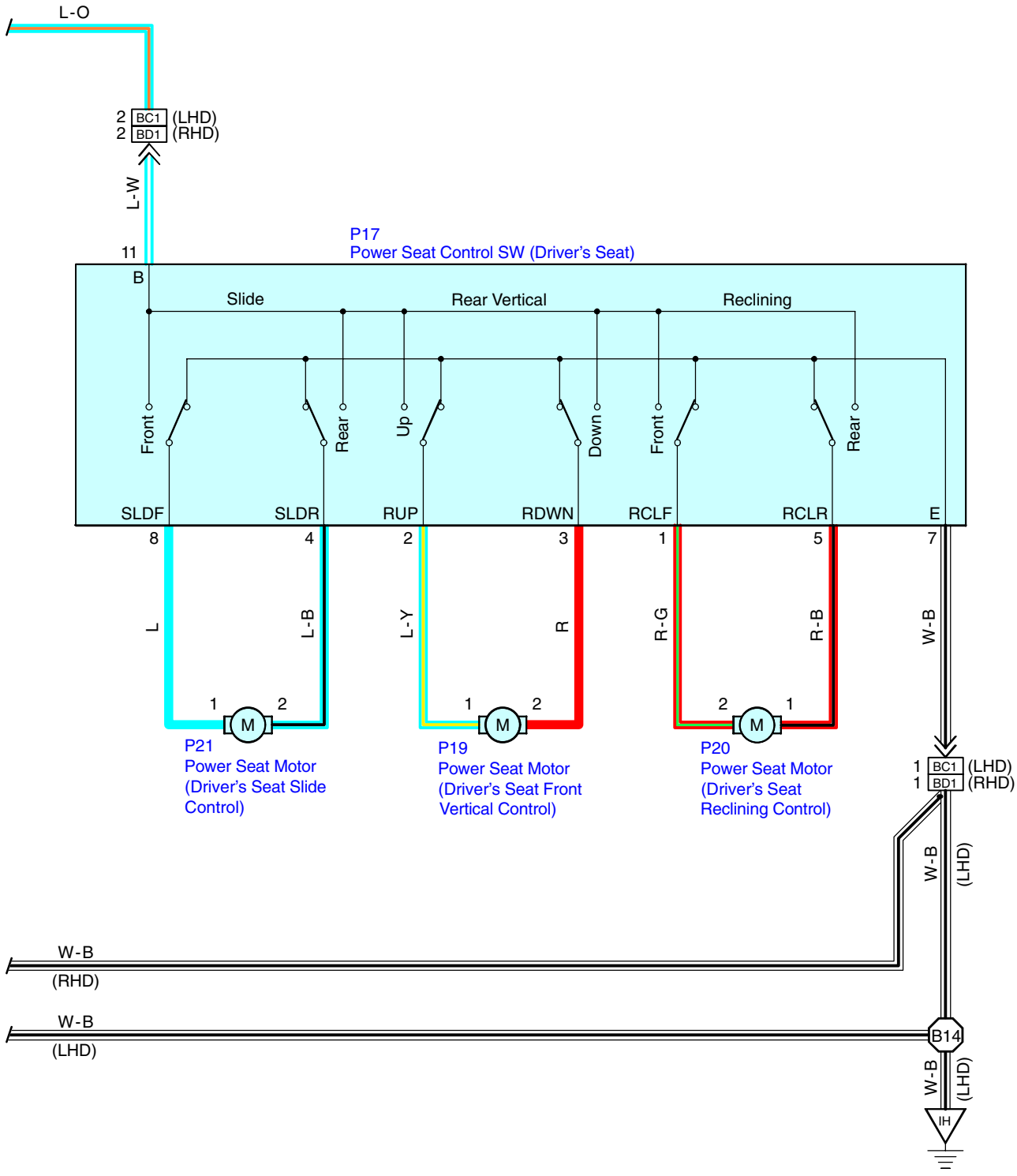
: Ground Points

Code	See Page	Ground Points Location
EC	51 (LHD 2AZ-FE) 62 (RHD 2AZ-FE)	Left Fender
ED	60	Firewall RH
EF	51 (LHD 2AZ-FE) 62 (RHD 2AZ-FE)	Intake Side of Cylinder Block
II	52 (LHD)	Instrument Panel Reinforcement LH
IM	63 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	54 (LHD)	Instrument Panel	I6	65 (RHD)	Instrument Panel


From Power Source System (See pg. 71)
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-W
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
B
P17
Power Seat Control SW (Driver's Seat)
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
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

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	39 (LHD)	P20	39 (LHD)	P23	39 (LHD)
	48 (RHD)		48 (RHD)		48 (RHD)
P18	39 (LHD)	P21	39 (LHD)	P24	39 (LHD)
	48 (RHD)		48 (RHD)		48 (RHD)
P19	39 (LHD)	P22	39 (LHD)		
	48 (RHD)		48 (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	58 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Right Kick Panel)
	69 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
BC1	58 (LHD)	Floor Wire and Front Seat LH Wire (Under the Driver's Seat)
	69 (RHD)	Floor No.2 Wire and Front Seat LH Wire (Under the Front Passenger's Seat)

: Ground Points

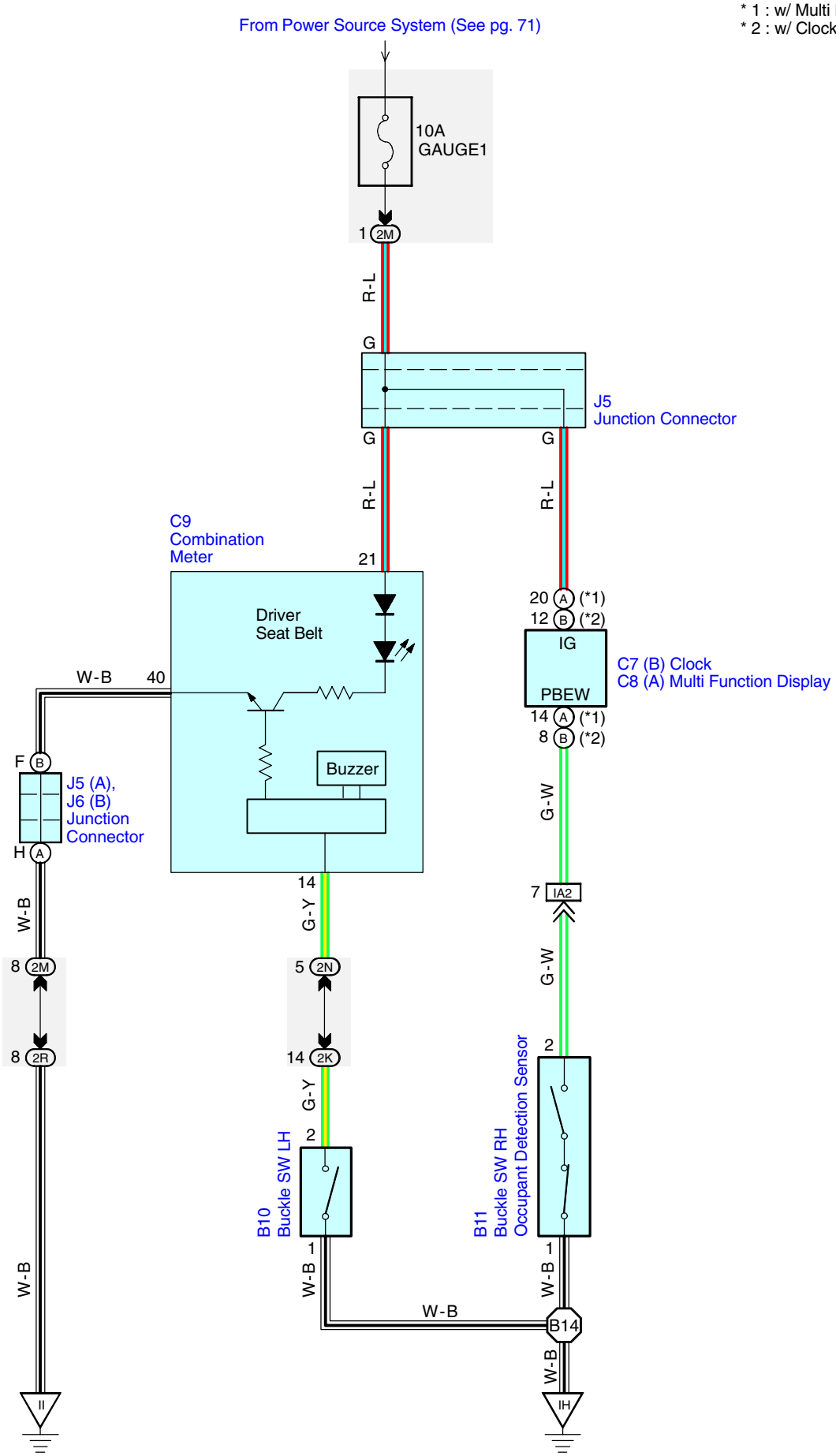
Code	See Page	Ground Points Location
IH	52 (LHD)	Left Kick Panel
IN	63 (RHD)	Right Kick Panel

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	56 (LHD)	Floor wire			
	67 (RHD)				

Seat Belt Warning (LHD)

* 1 : w/ Multi Display
* 2 : w/ Clock



Seat Belt Warning (LHD)

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	39 (LHD)	C9		35 (LHD)			
B11	39 (LHD)	J5	A	36 (LHD)			
C7	35 (LHD)	J6	B	36 (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

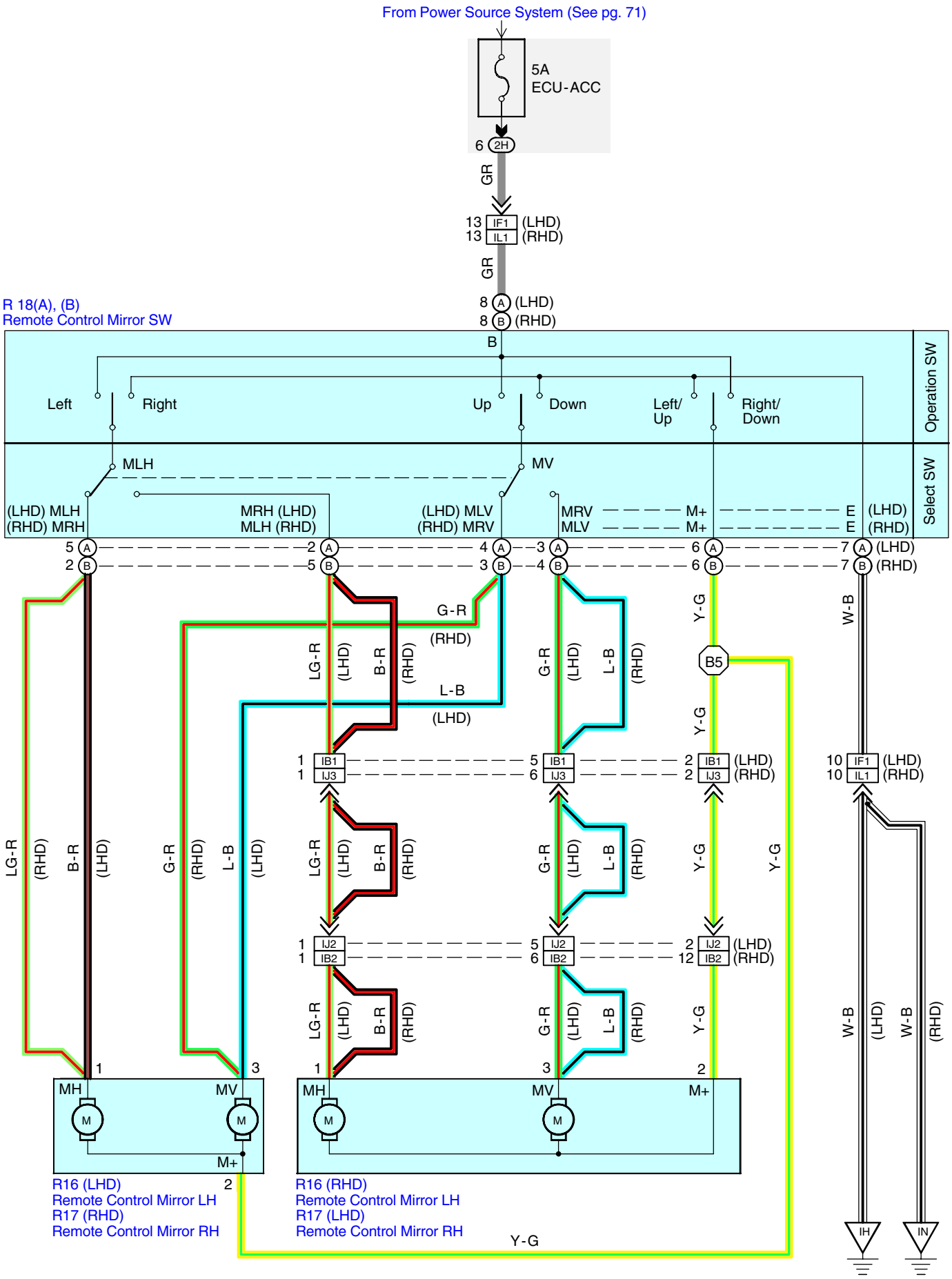
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	52 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IH	52 (LHD)	Left Kick Panel
II	52 (LHD)	Instrument Panel Reinforcement LH

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	56	Flooor wire			


From Power Source System (See pg. 71)
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
Y-G
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

Remote Control Mirror

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	38 (LHD)	R18	A	38 (LHD)		
	47 (RHD)			47 (RHD)		
R17	38 (LHD)		B	38 (LHD)		
	47 (RHD)			47 (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

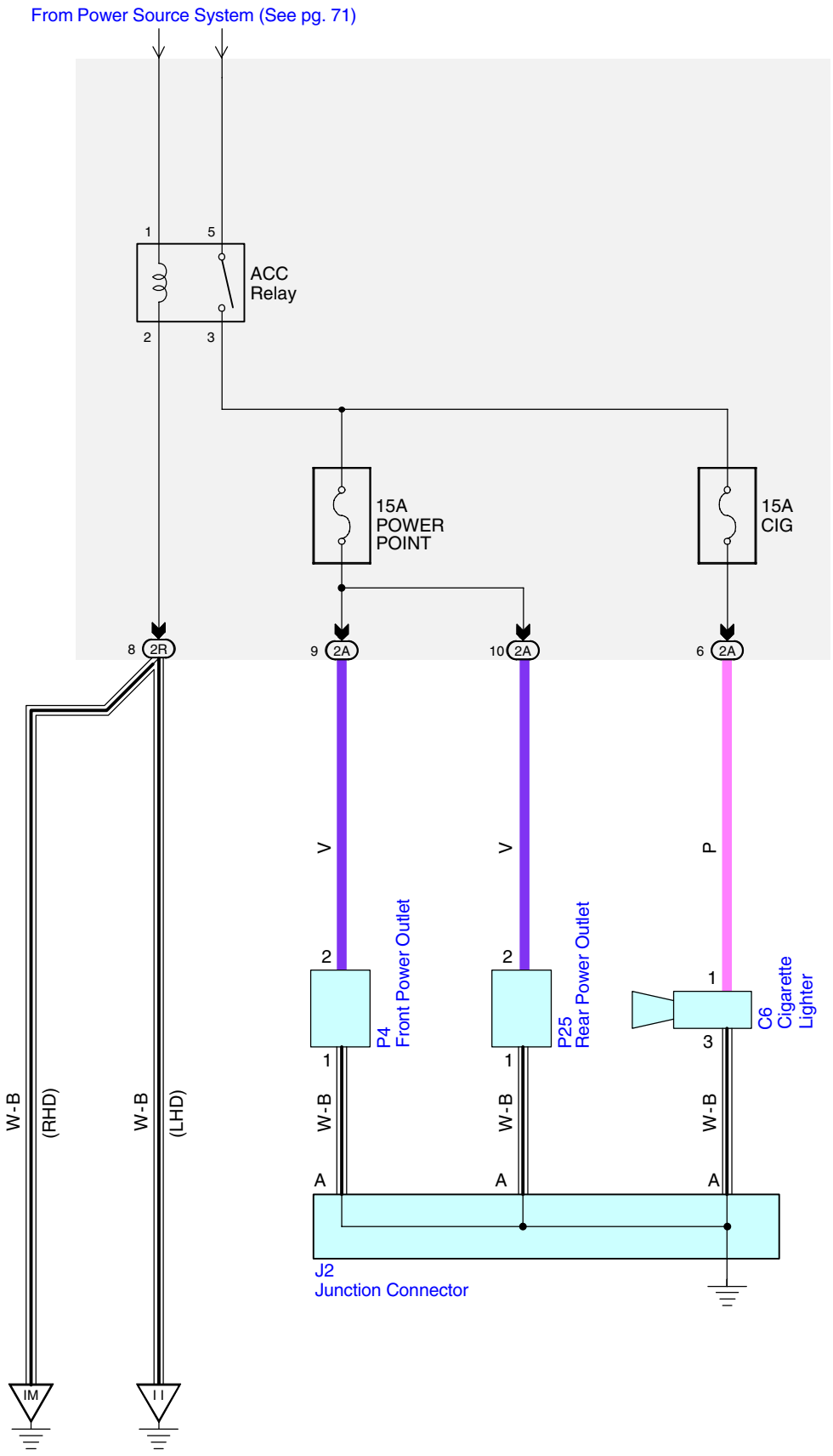
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	52 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	63 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	54 (LHD)	Front Door LH Wire and Floor Wire (Left Kick Panel)
IJ2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	65 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IL1	65 (RHD)	Front Door RH Wire and Floor Wire (Right Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
IH	52 (LHD)	Left Kick Panel
IN	63 (RHD)	Right Kick Panel

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B5	56 (LHD)	Front Door LH Wire			
	67 (RHD)	Front Door RH Wire			


From Power Source System (See pg. 71)
1
5
ACC
Relay
2
3
15A
POWER
POINT
15A
CIG
8 2R
9 2A
10 2A
6 2A
V
V
P
2
2
1
P4
Front Power Outlet
P25
Rear Power Outlet
C6
Cigarette
Lighter
1
1
3
W-B
W-B
W-B
A
A
A
J2
Junction Connector
W-B
(RHD)
W-B
(LHD)
IM
I I

Power Outlet and Cigarette Lighter

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

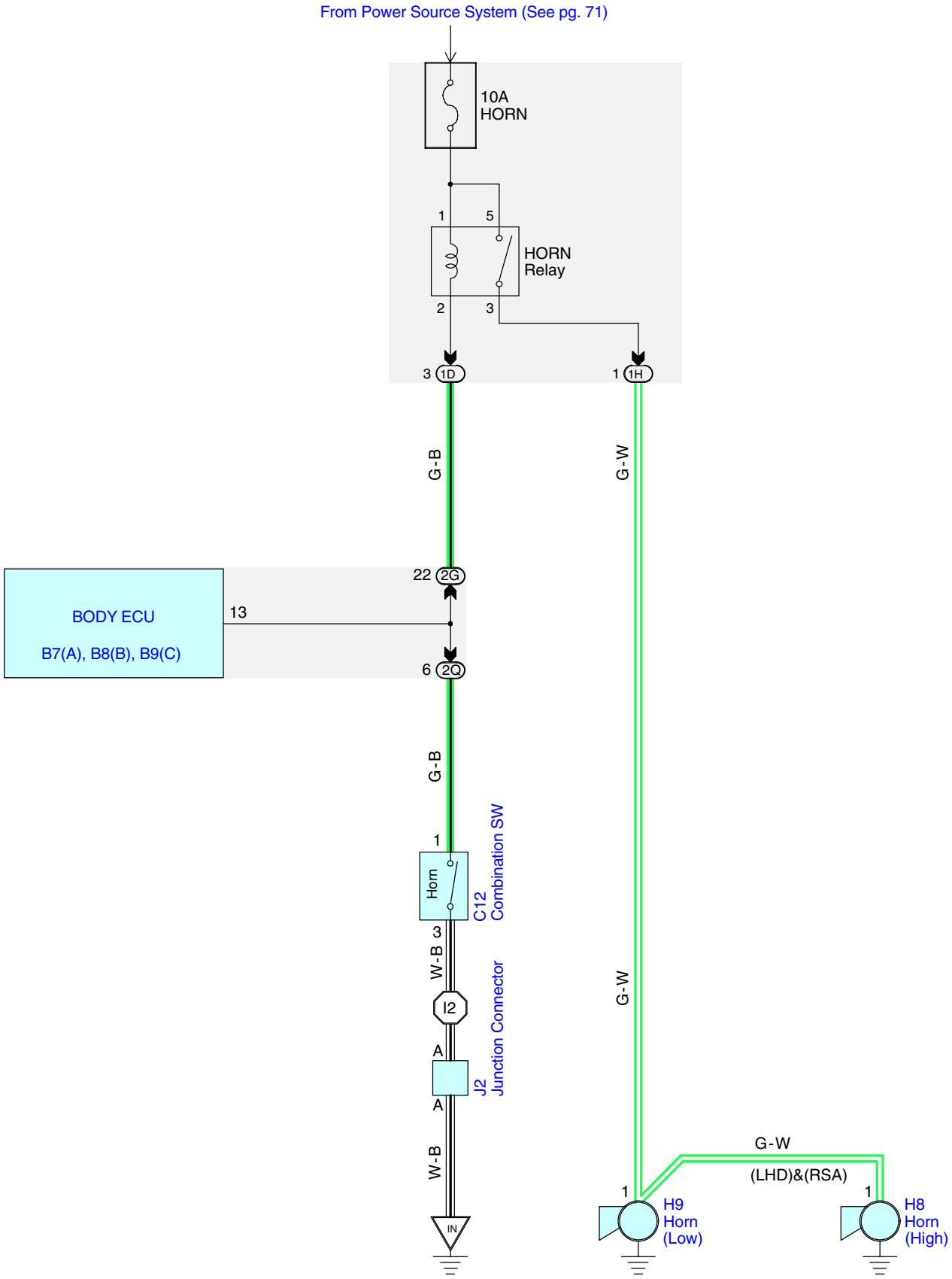
Code	See Page	Code	See Page	Code	See Page
C6	35 (LHD)	J2	45 (RHD)	P25	45 (RHD)
	44 (RHD)	P4	36 (LHD)		
J2	36 (LHD)		45 (RHD)		

: 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	52 (LHD)	Instrument Panel Reinforcement LH
IM	63 (RHD)	Instrument Panel Reinforcement RH


From Power Source System (See pg. 71)
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
6
2Q
G-B
1
Horn
C12
Combination SW
3
W-B
I2
A
J2
Junction Connector
A
W-B
IN
G-W
G-W
(LHD)&(RSA)
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	35 (LHD)	H9	33 (LHD 2AZ-FE)	B8	35 (LHD)
	44 (RHD)		42 (RHD 2AZ-FE)		44 (RHD)
H8	31 (LHD 1MZ-FE)	J2	36 (LHD)	B9	35 (LHD)
	33 (LHD 2AZ-FE)		45 (RHD)		44 (RHD)
H9	31 (LHD 1MZ-FE)	B7	35 (LHD)		
	40 (RHD 1MZ-FE)		44 (RHD)		

: Junction Block and Wire Harness Connector

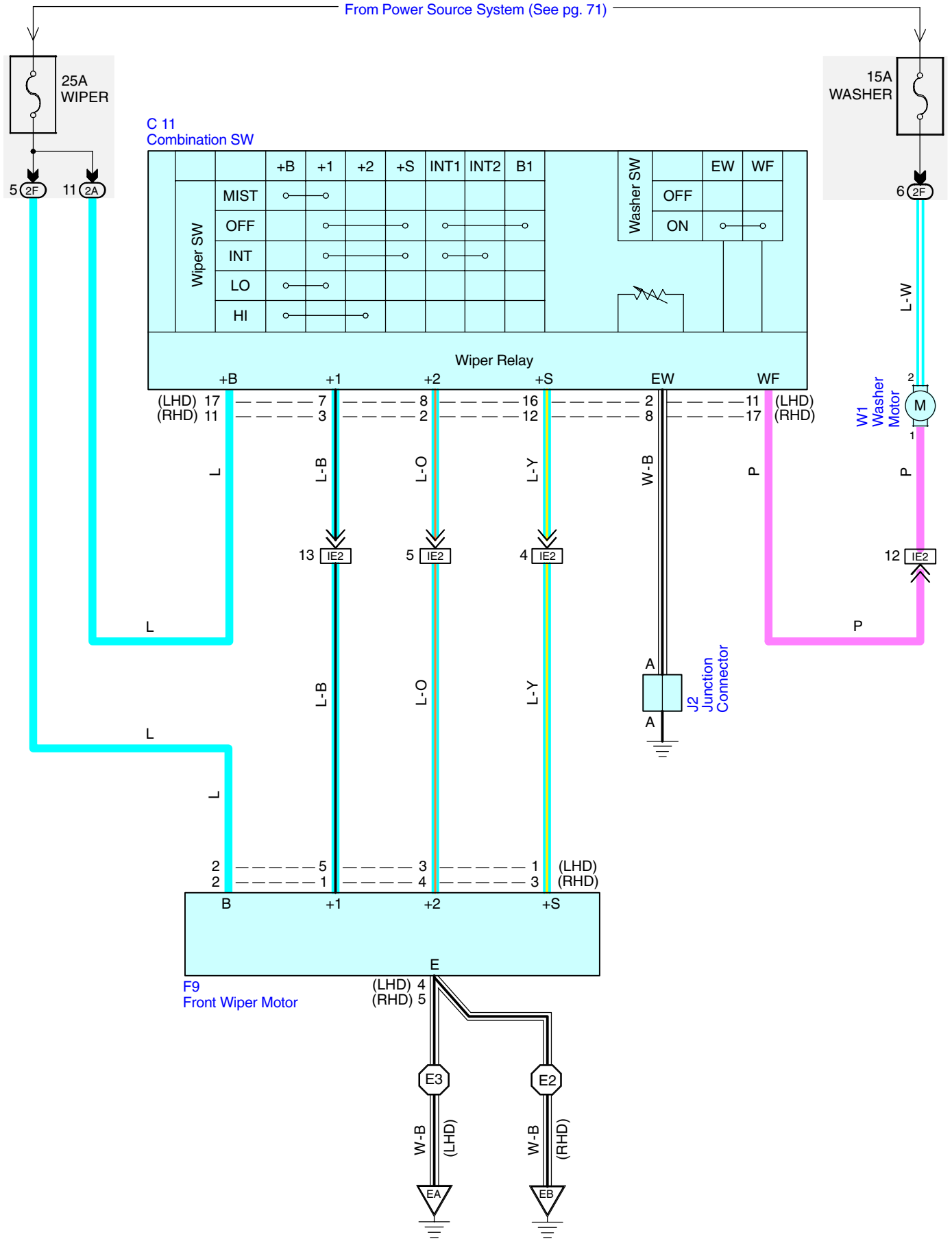
Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	Engine Room Main Wire and Engine Room J/B (Engine Compartment Left)
1H	24	Engine Room Main Wire and Engine Room J/B
2G	26	Engine Room Main Wire and Driver Side J/B
2Q	27	Instrument Panel Wire and Driver Side J/B

: GROUND POINTS

Code	See Page	Ground Points Location
IN	52 (LHD)	Instrument Panel Brace
	63 (RHD)	

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54	Instrument Panel			


From Power Source System (See pg. 71)
25A
WIPER
15A
WASHER
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
(LHD) 17
(RHD) 11
7
3
8
2
16
12
2
8
11
17
(LHD)
(RHD)
W1
Washer
Motor
L
L-B
L-O
L-Y
W-B
P
13 IE2
5 IE2
4 IE2
12 IE2
A
J2
Junction
Connector
2
2
5
1
3
4
1
3
(LHD)
(RHD)
B
E
F9
Front Wiper Motor
(LHD) 4
(RHD) 5
E3
E2
EA
EB

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	35 (LHD)	F9	33 (LHD 2AZ-FE)	W1	32 (LHD 1MZ-FE)
	44 (RHD)		42 (RHD 2AZ-FE)		41 (RHD 1MZ-FE)
F9	31 (LHD 1MZ-FE)	J2	36 (LHD)		34 (LHD 2AZ-FE)
	40 (RHD 1MZ-FE)		45 (RHD)		43 (RHD 2AZ-FE)

: Junction Block and Wire Harness Connector

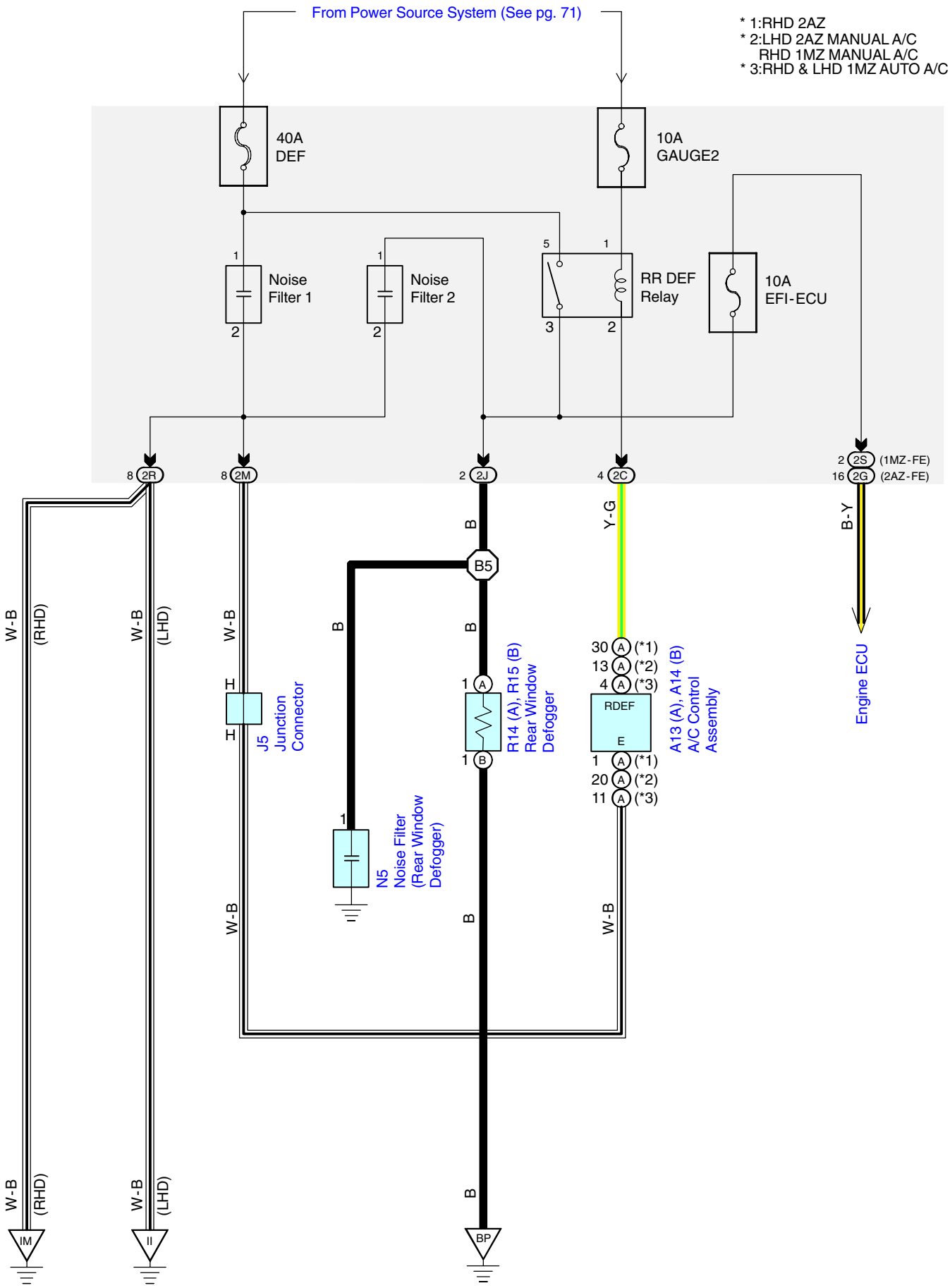
Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2F	26	

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column Tube)

▽ : Ground Points

Code	See Page	Ground Points Location
EB	60 (RHD 1MZ-FE)	Right Fender
	62 (RHD 2AZ-FE)	
EA	49 (LHD 1MZ-FE)	Right Fender
	51 (LHD 2AZ-FE)	


From Power Source System (See pg. 71)
* 1:RHD 2AZ
* 2:LHD 2AZ MANUAL A/C
RHD 1MZ MANUAL A/C
* 3:RHD & LHD 1MZ AUTO A/C
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)
B5
W-B
(RHD)
W-B
(LHD)
B
Y-G
B-Y
J5
Junction
Connector
R14 (A), R15 (B)
Rear Window
Defogger
N5
Noise Filter
(Rear Window
Defogger)
RDEF
A13 (A), A14 (B)
A/C Control
Assembly
Engine ECU
30 (*1)
13 (*2)
4 (*3)
1 (*1)
20 (*2)
11 (*3)
IM
II
BP

Rear Window Defogger

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	35 (LHD)	J5	36 (LHD)	R14	A	43 (RHD)
	44 (RHD)		45 (RHD)	R15	B	33 (LHD)
A14	35 (LHD)	N5	47 (RHD)			43 (RHD)
	44 (RHD)	R14 A	33 (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		

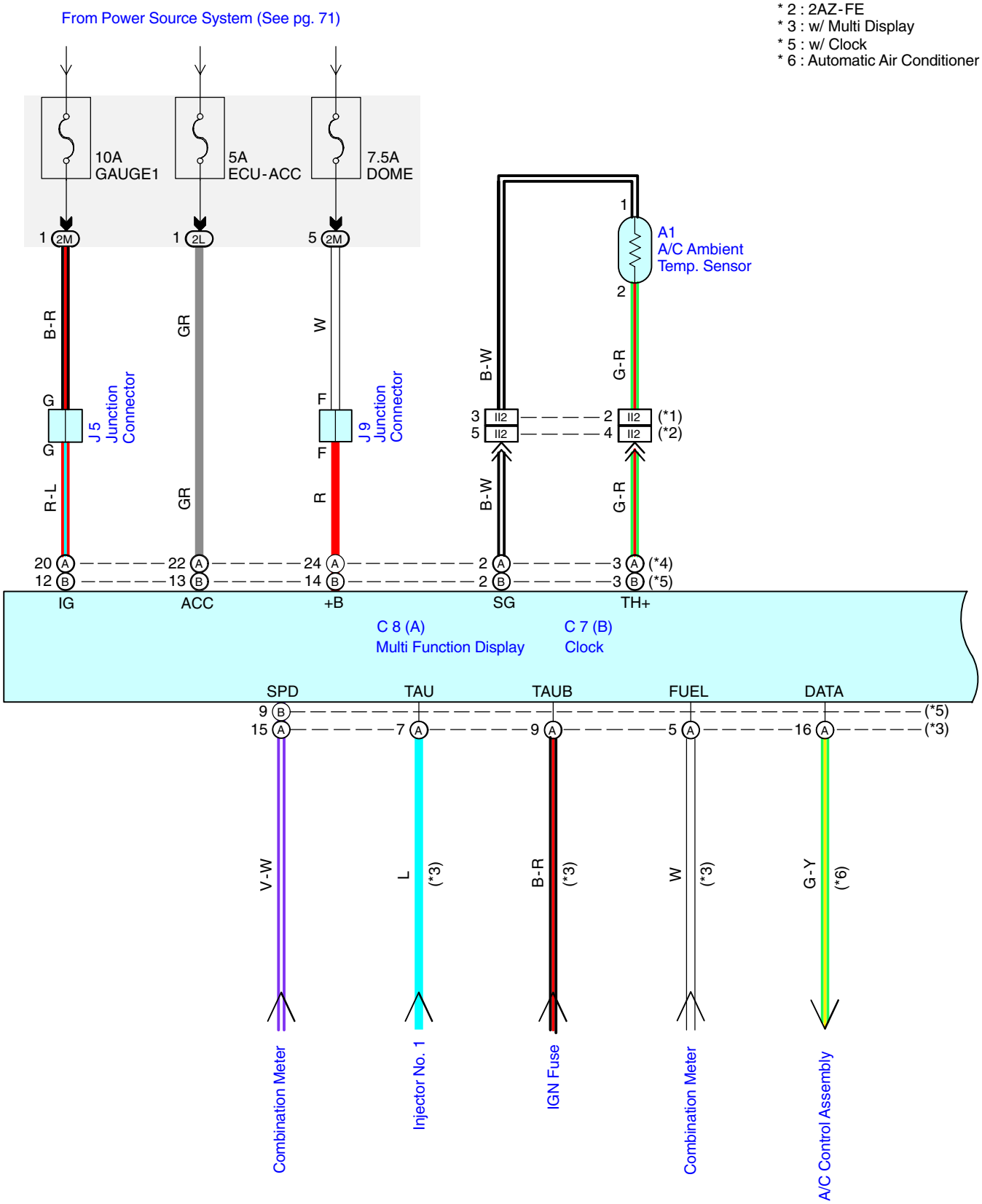
: Ground Points

Code	See Page	Ground Points Location
II	52 (LHD)	Cowl Side Panel LH
IM	63 (RHD)	Instrument Panel Reinforcement RH
BP	56 (LHD)	“C” Pillar
	67 (RHD)	

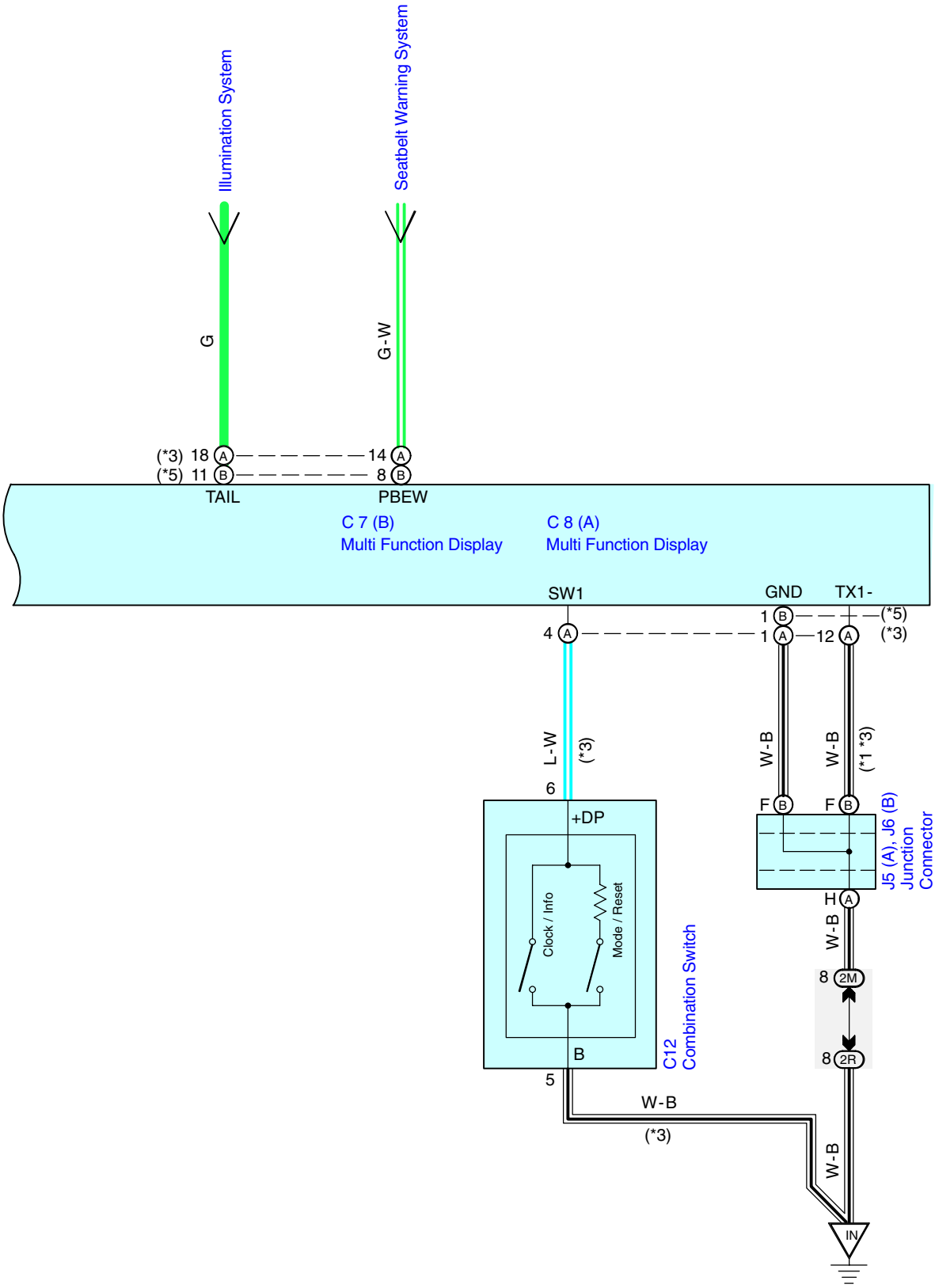
: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B5	56 (LHD	Floor wire			
	67 (RHD)				

* 1 : 1MZ-FE
* 2 : 2AZ-FE
* 3 : w/ Multi Display
* 5 : w/ Clock
* 6 : Automatic Air Conditioner



* 1 : 1MZ-FE
* 3 : w/ Multi Display
* 5 : w/ Clock



Service Hints

C8(A), C7(B)

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

: Parts Location

Code		See Page	Code		See Page	Code		See Page
A1		31 (1MZ-FE)	C7	B	35	J6	B	36
		33 (2AZ-FE)	C12		35	J9		36
C8	A	35	J5	A	36			

: 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

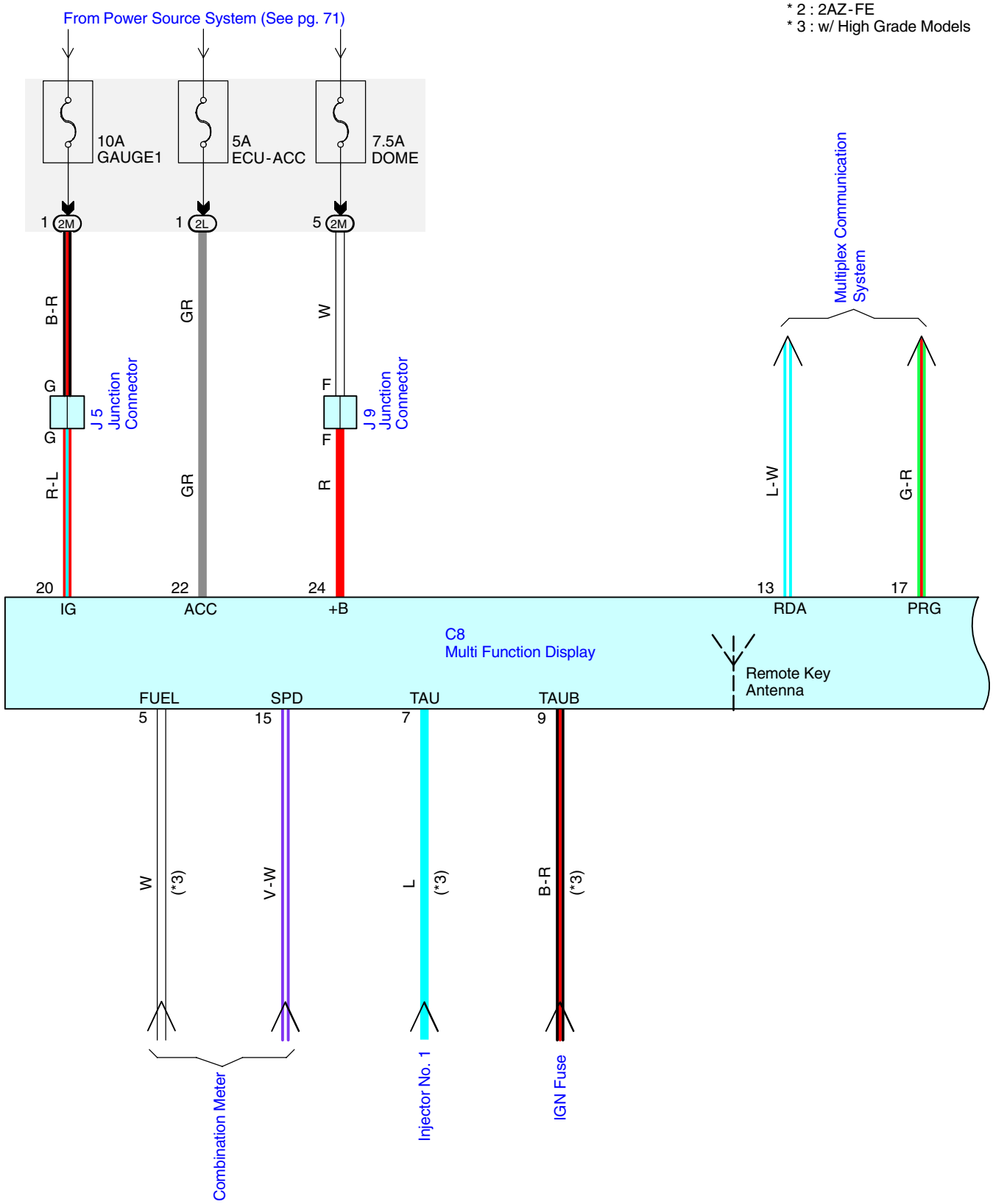
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II2	54	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)

: Ground Points

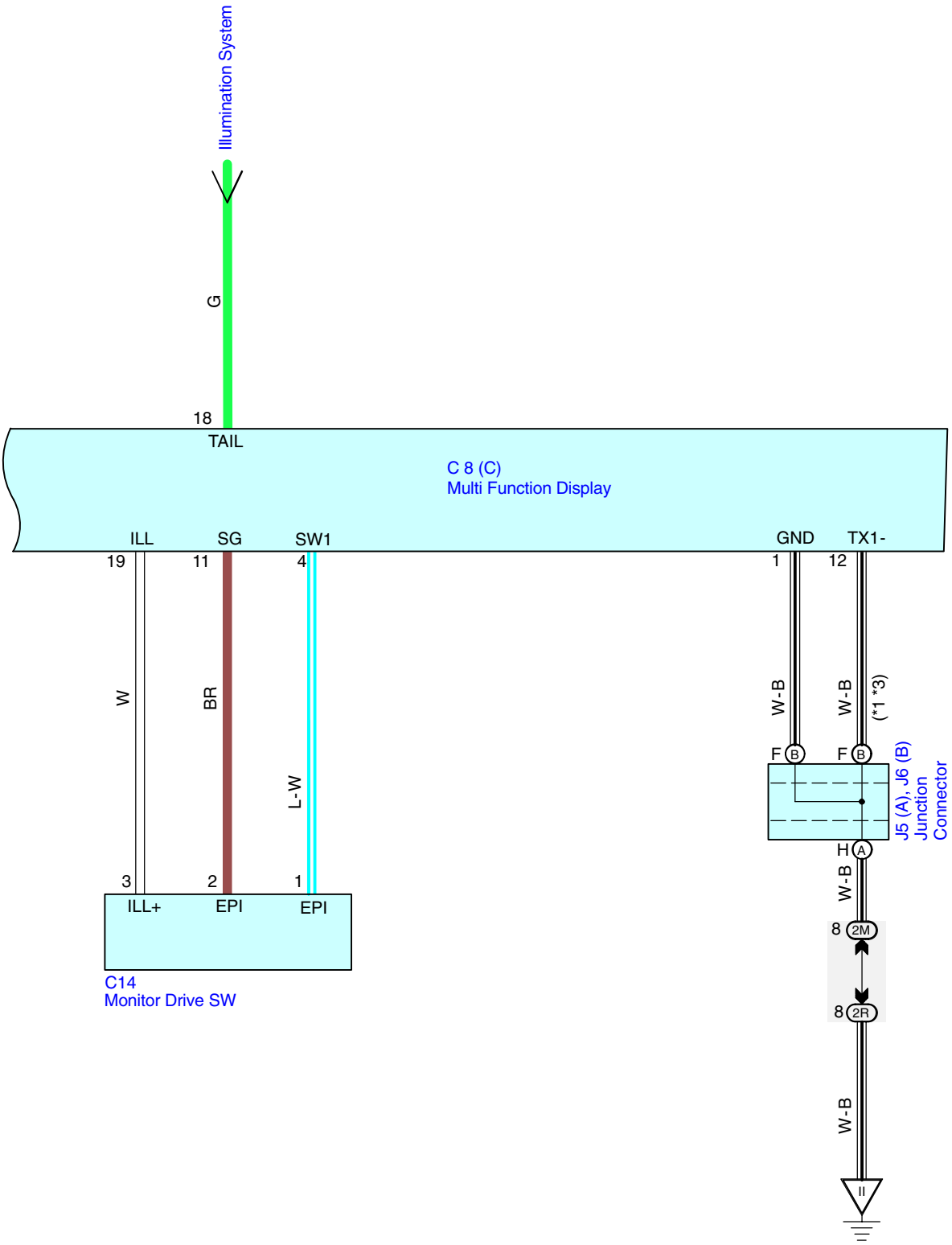
Code	See Page	Ground Points Location
IN	52	Instrument Panel Reinforcement

Multi Function Display (RHD)(Exc. South Africa)

* 1 : 1MZ-FE
* 2 : 2AZ-FE
* 3 : w/ High Grade Models



* 1 : 1MZ-FE
* 3 : w/ High Grade Models



Multi Function Display (RHD)(Exc. South Africa)

Service Hints

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

20, 12 - Ground: Approx. 12 volts with ignition SW at ON or ST position
22, 13 - Ground: Approx. 12 volts with ignition SW at ACC or ON position
24, 14 - Ground: Always approx. 12 volts
1 - Ground : Always continuity

: Parts Location

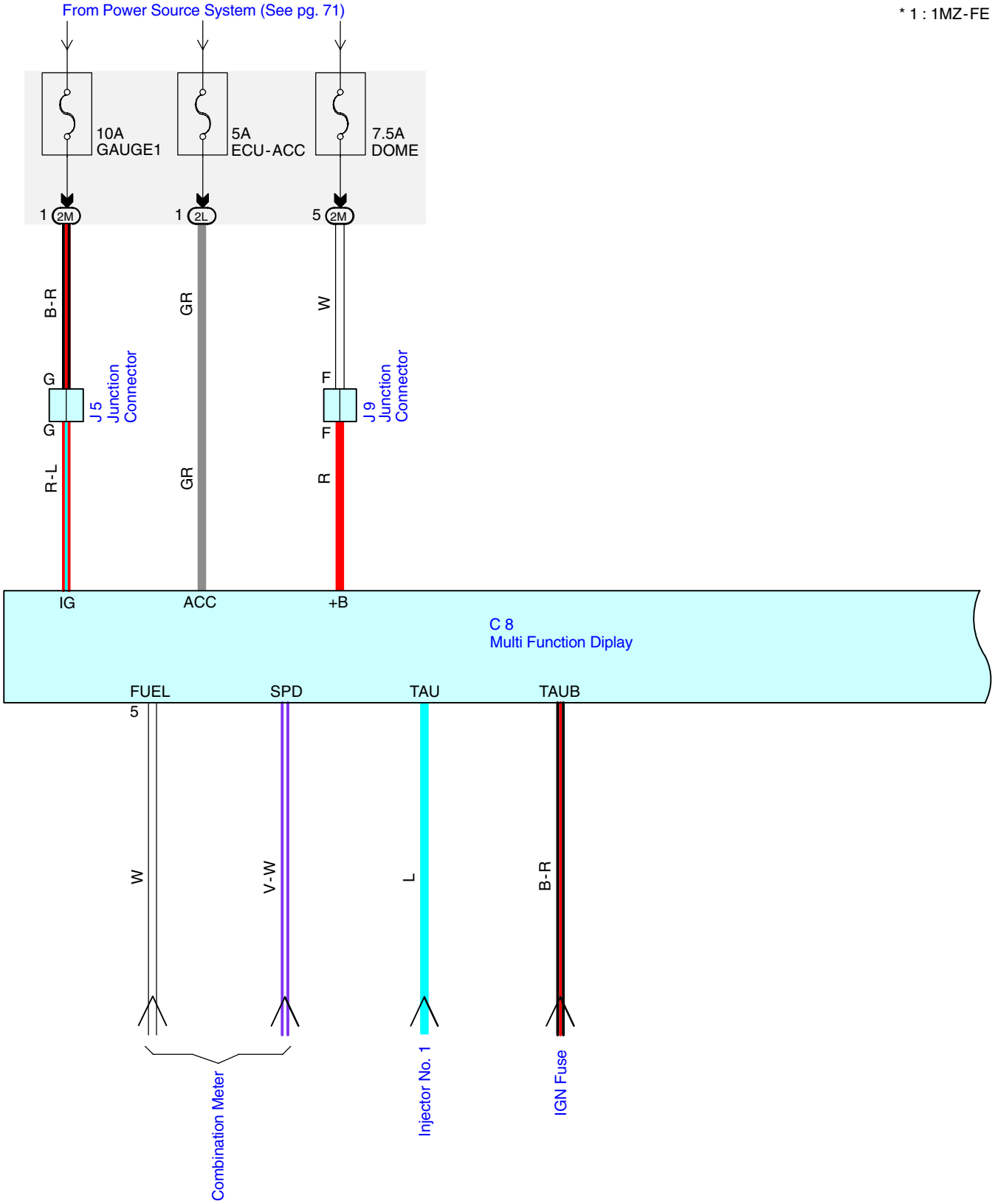
Code	See Page	Code		See Page	Code	See Page
C8	44	J5	A	45	J9	45
C14	44	J6	B	45		

: Junction Block and Wire Harness Connector

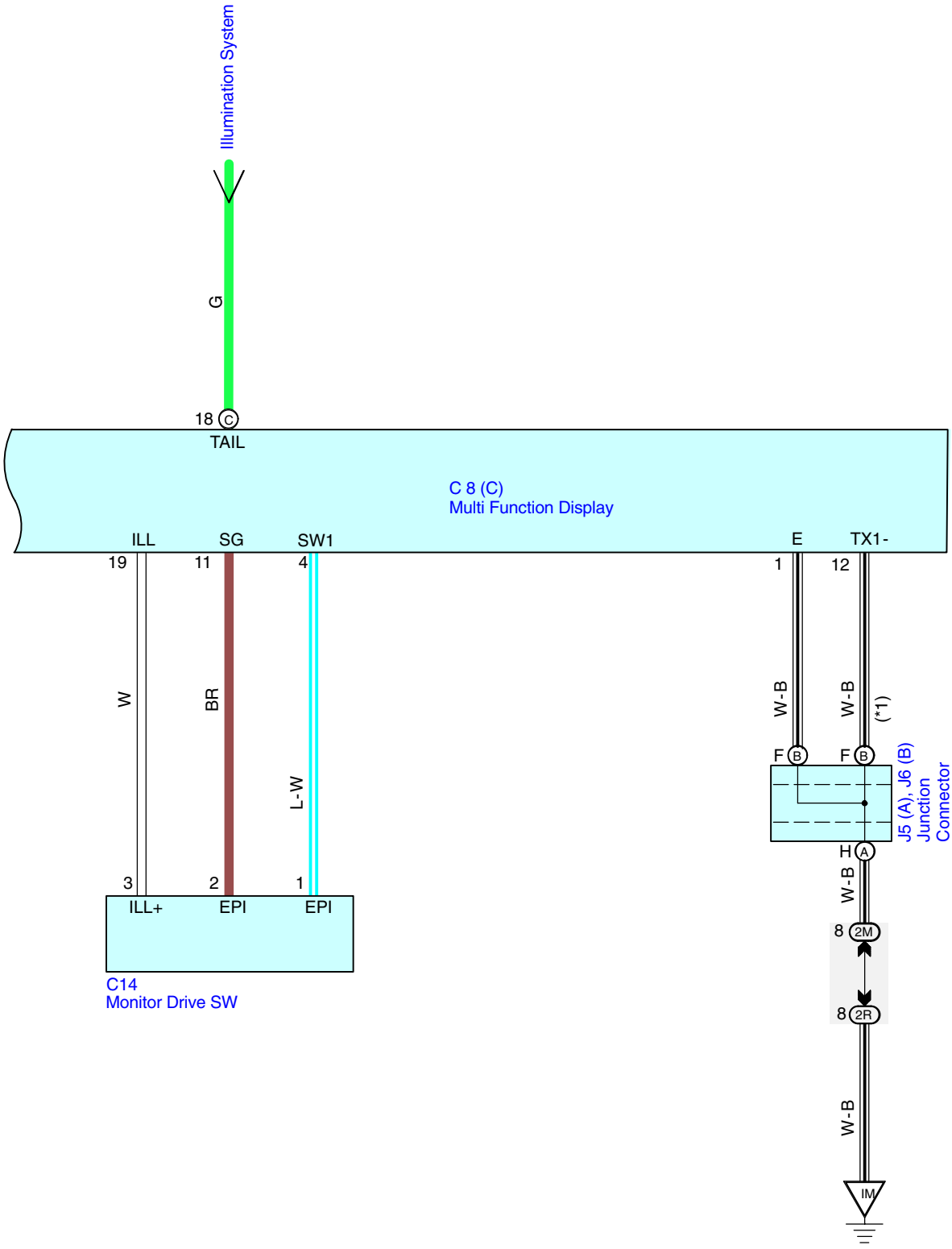
Code	See Page	Junction Block and Wire Harness (Connector Location)
2L	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2M		
2R		

: Ground Points

Code	See Page	Ground Points Location
II	63	Instrument Panel Brace LH


From Power Source System (See pg. 71)
* 1 : 1MZ-FE
10A
GAUGE1
5A
ECU-ACC
7.5A
DOME
1 2M
1 2L
5 2M
B-R
GR
W
G
G
F
F
J 5
Junction
Connector
J 9
Junction
Connector
R-L
GR
R
IG
ACC
+B
C 8
Multi Function Diplay
FUEL
SPD
TAU
TAUB
5
W
V-W
L
B-R
Combination Meter
Injector No. 1
IGN Fuse

* 1 : 1MZ-FE


Illumination System
G
18 C
TAIL
C 8 (C)
Multi Function Display
ILL
SG
SW1
E
TX1-
19
11
4
1
12
W
BR
L-W
W-B
W-B
(*1)
F B
F B
J5 (A), J6 (B)
Junction
Connector
H A
W-B
8 2M
8 2R
W-B
IM
3
2
1
ILL+
EPI
EPI
C14
Monitor Drive SW

Multi Function Diplay (South Africa)

Service Hints

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

20, 12 - Ground: Approx. 12 volts with ignition SW at ON or ST position
22, 13 - Ground: Approx. 12 volts with ignition SW at ACC or ON position
24, 14 - Ground: Always approx. 12 volts
1 - Ground : Always continuity

: Parts Location

Code	See Page	Code		See Page	Code	See Page
C8	44	J5	A	45	J9	45
C14	44	J6	B	45		

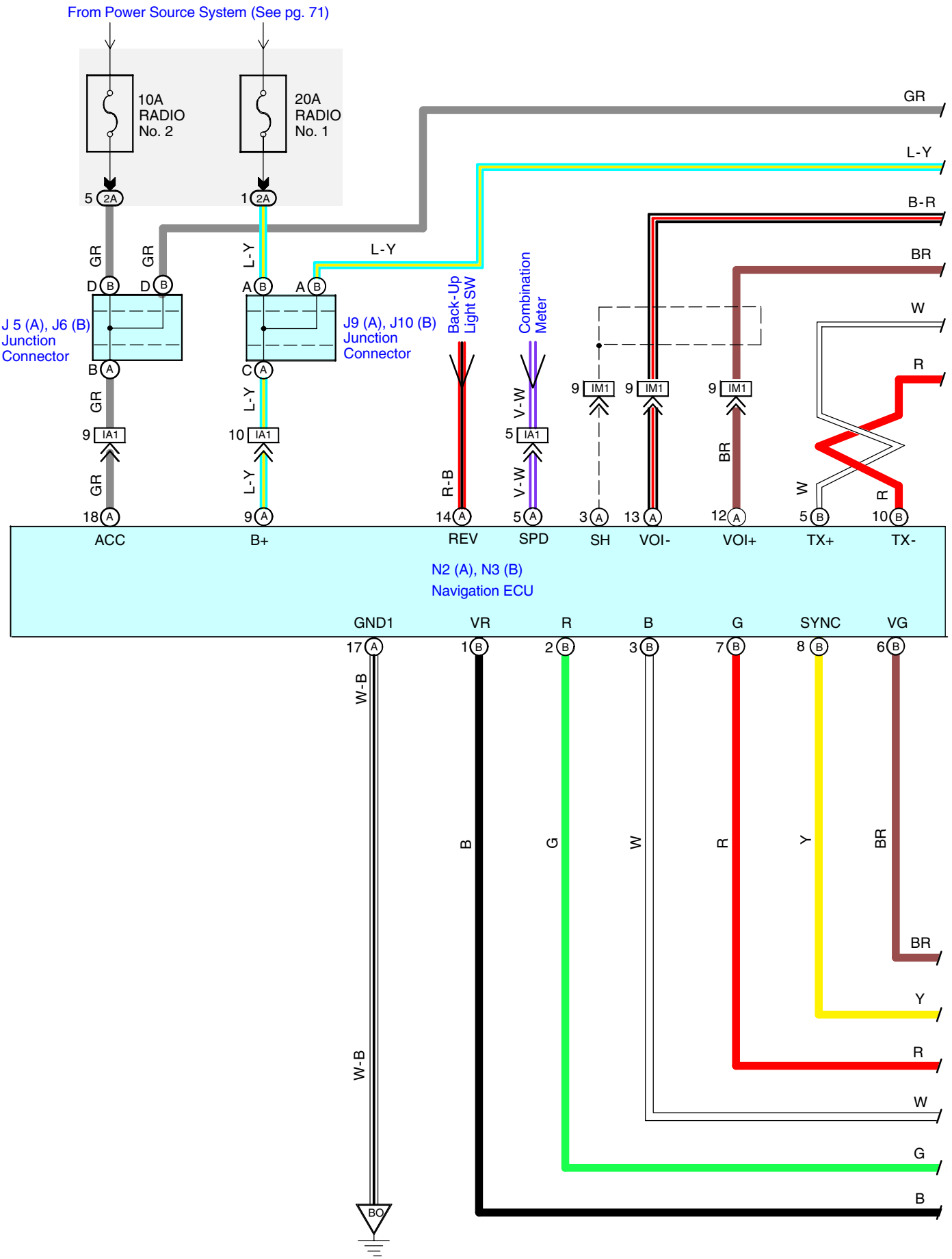
: Junction Block and Wire Harness Connector

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

: Ground Points

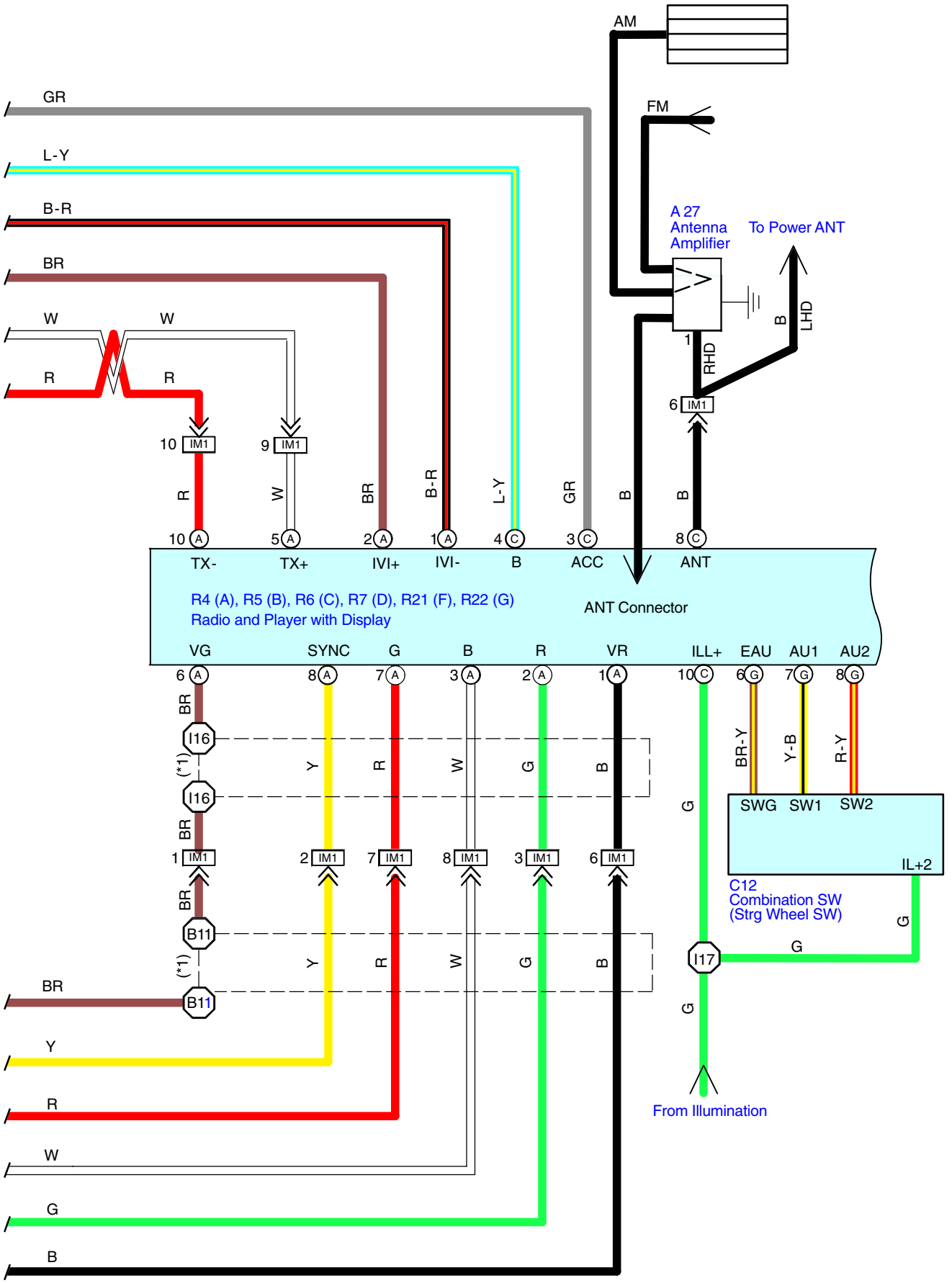
Code	See Page	Ground Points Location
IM	63	Instrument Panel Reinforcement RH

Radio and Player (with Navigation System)

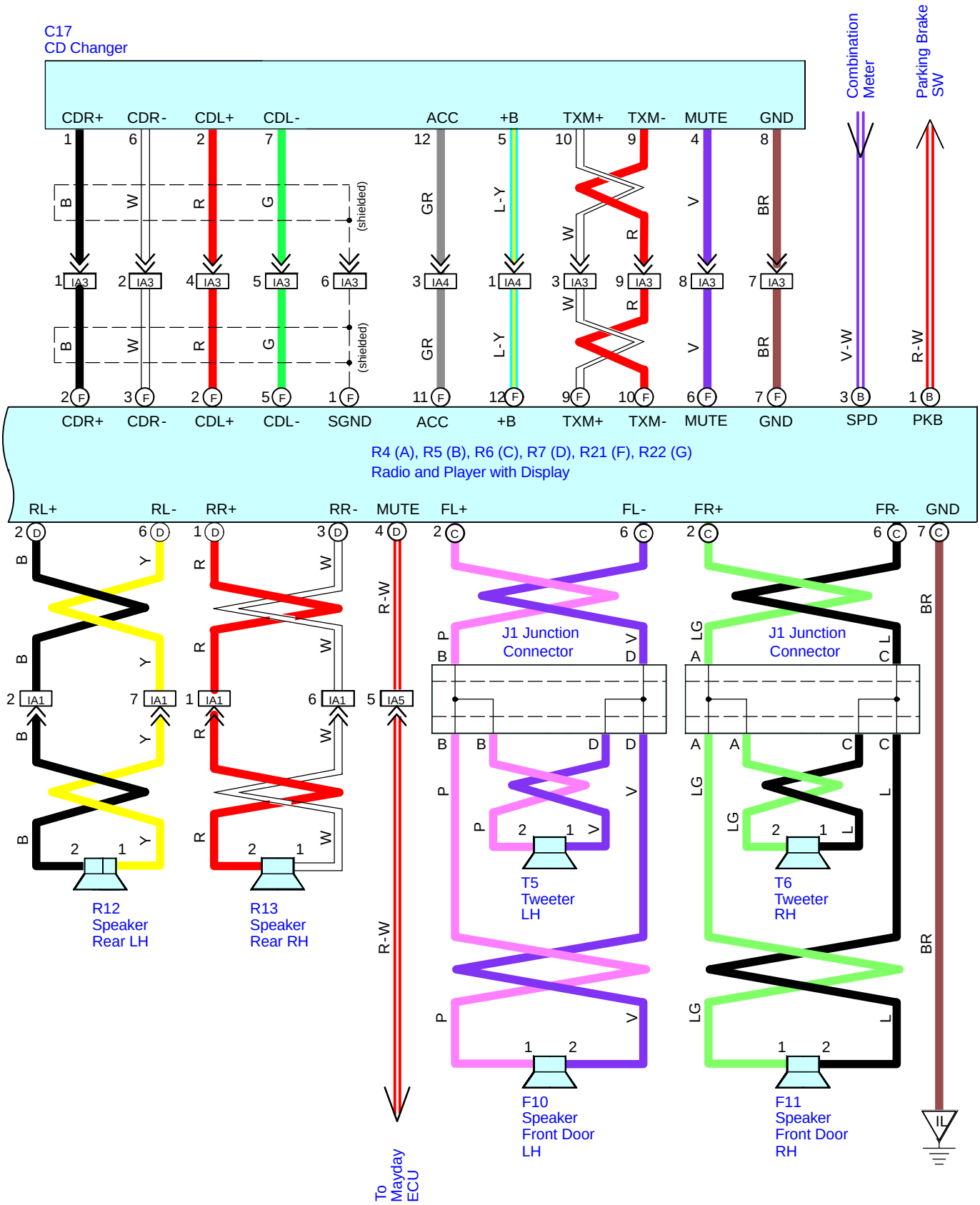


Radio and Player (with Navigation System)

*1 : Shielding



Radio and Player (with Navigation System)



Radio and Player (with Navigation System)

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	44	J9 A	45	R7 D	45
C12		J10 B		R12	47
C17		N2 A	47	R13	47
F10	48	N3 B	47	R21	
F11	48			R22	
J1	45	R4 A	45	T5	45
J5 A		R5 B	45	T6	45
J6 B		R6 C	45		

: 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	63	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA3	63	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA4	63	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	63	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IM1	63	Instrument Panel Wire and Floor Wire (Instrument Panel Brace LH)

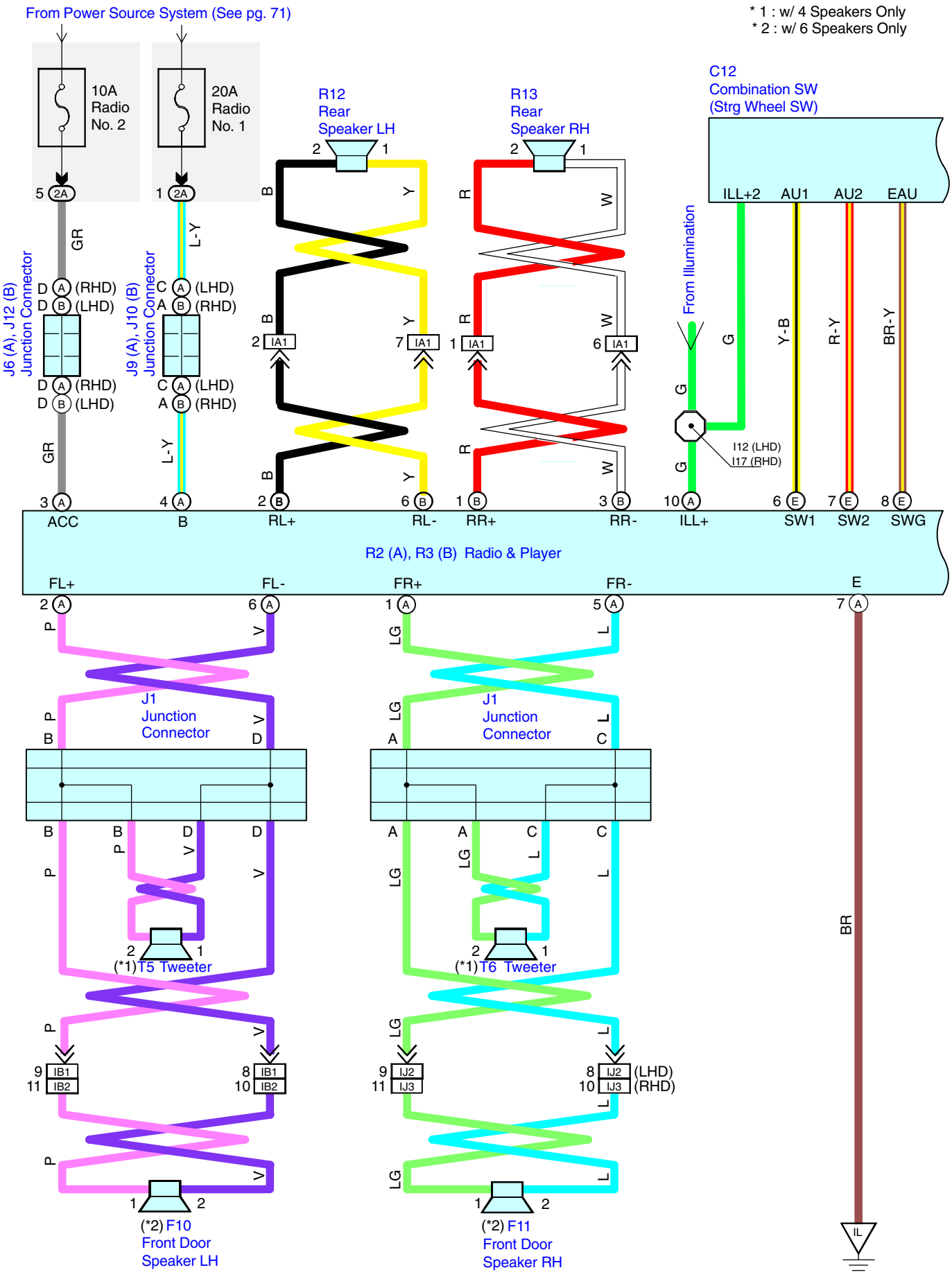
: Ground Points

Code	See Page	Ground Points Location
IL	63	Instrument Panel Brace RH
BO	67	Front Side of Rear Quarter Wheel House LH

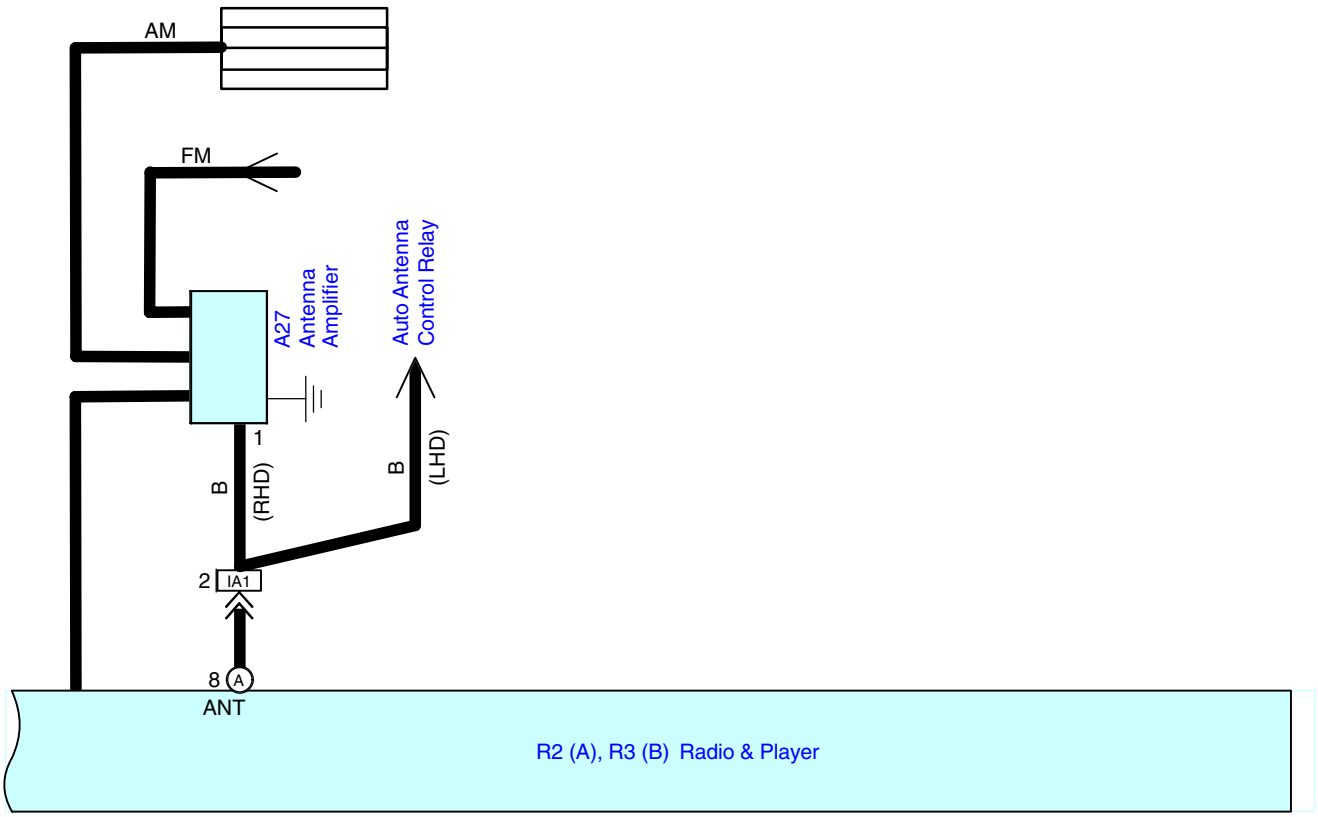
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B11	67	Floor No.2 Wire	I16	65	Instrument Panel Brace

Radio and Player (w/o Satellite Navigation System)



Radio and Player (w/o Satellite Navigation System)



Radio and Player (w/o Satellite Navigation System)

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	44 (RHD)	J6 A	45 (RHD)	R12	39 (LHD)
C12	45 (RHD)	J9 A	36 (LHD)		47 (RHD)
F10	37 (LHD)		45 (RHD)	R13	39 (LHD)
	46 (RHD)	J10 B	36 (LHD)		47 (RHD)
F11	37 (LHD)		45 (RHD)	T5	36 (LHD)
	46 (RHD)	J12 B	36 (LHD)		45 (RHD)
J1	36 (LHD)		45 (RHD)	T6	36 (LHD)
	45 (RHD)	R2	36 (LHD)		45 (RHD)
J6 A	36 (LHD)	R3	45 (RHD)		

: Junction Block and Wire Harness Connector

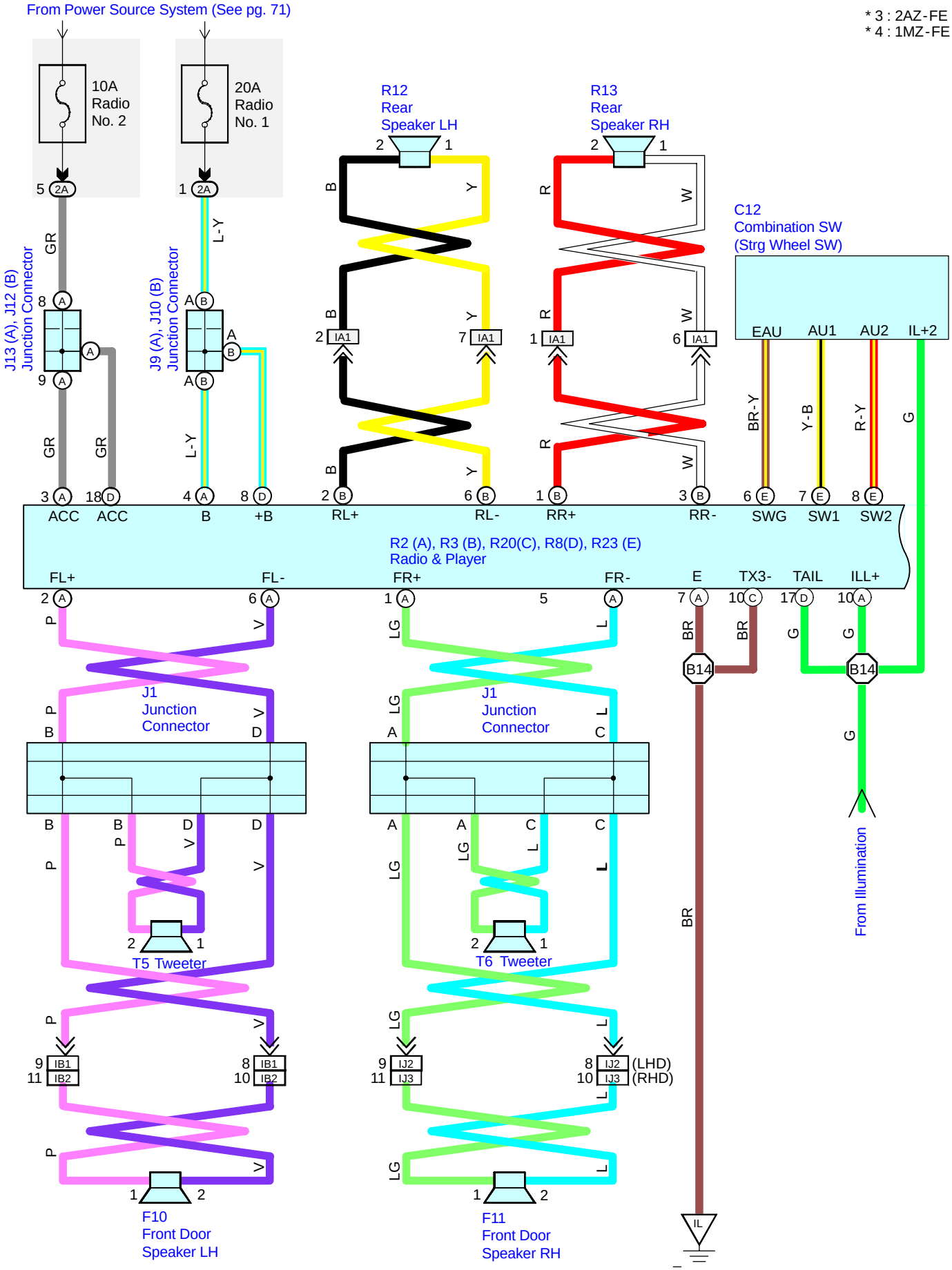
Code	See Page	Junction Block and Wire Harness (Connector Location)
2A	26	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

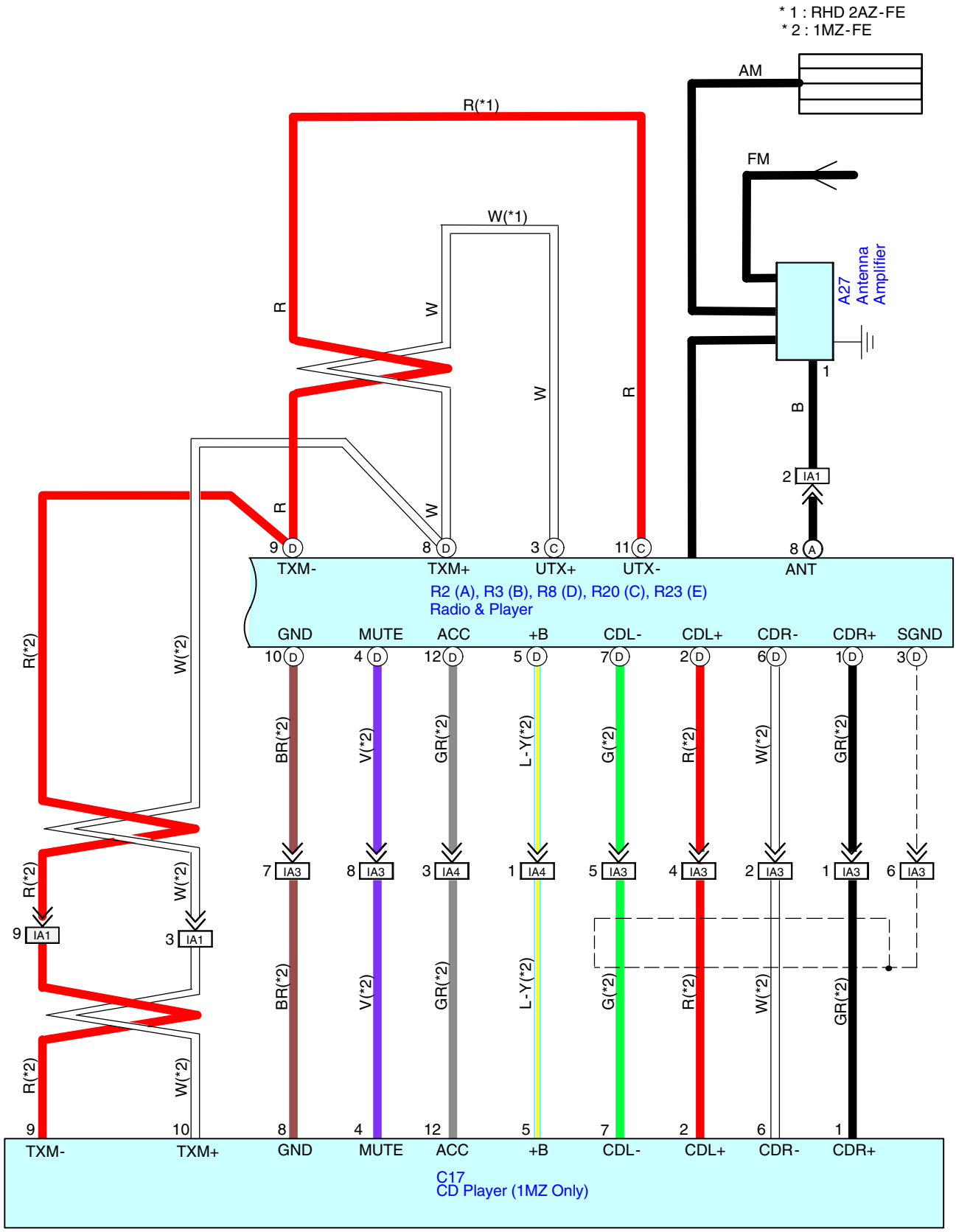
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	52 (LHD)	Instrument Panel Wire and Floor Wire (Left Kick Panel)
	63 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IB1	52 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	63 (RHD)	Instrument Panel Wire
IJ2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IJ3	65 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IM1	66 (RHD)	Instrument Panel Wire and Antenna Cable

: Ground Points

Code	See Page	Ground Points Location
IL	52 (LHD)	Instrument Panel Brace RH
	63 (RHD)	


From Power Source System (See pg. 71)
* 3 : 2AZ-FE
* 4 : 1MZ-FE
10A Radio No. 2
20A Radio No. 1
R12 Rear Speaker LH
R13 Rear Speaker RH
C12 Combination SW (Strg Wheel SW)
J13 (A), J12 (B) Junction Connector
J9 (A), J10 (B) Junction Connector
EAU
AU1
AU2
IL+2
ACC
ACC
B
+B
RL+
RL-
RR+
RR-
SWG
SW1
SW2
R2 (A), R3 (B), R20(C), R8(D), R23 (E) Radio & Player
FL+
FL-
FR+
FR-
E
TX3-
TAIL
ILL+
J1 Junction Connector
J1 Junction Connector
T5 Tweeter
T6 Tweeter
From Illumination
F10 Front Door Speaker LH
F11 Front Door Speaker RH
(LHD)
(RHD)


* 1 : RHD 2AZ-FE
* 2 : 1MZ-FE
AM
FM
R(*1)
W(*1)
A27
Antenna
Amplifier
R
W
B
1
2 IA1
9 D
8 D
3 C
11 C
8 A
TXM-
TXM+
UTX+
UTX-
ANT
R2 (A), R3 (B), R8 (D), R20 (C), R23 (E)
Radio & Player
GND
MUTE
ACC
+B
CDL-
CDL+
CDR-
CDR+
SGND
10 D
4 D
12 D
5 D
7 D
2 D
6 D
1 D
3 D
BR(*2)
V(*2)
GR(*2)
L-Y(*2)
G(*2)
R(*2)
W(*2)
GR(*2)
R(*2)
W(*2)
9 IA1
3 IA1
7 IA3
8 IA3
3 IA4
1 IA4
5 IA3
4 IA3
2 IA3
1 IA3
6 IA3
9
10
8
4
12
5
7
2
6
1
TXM-
TXM+
GND
MUTE
ACC
+B
CDL-
CDL+
CDR-
CDR+
C17
CD Player (1MZ Only)

Service Hints

R2 Radio and Player

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

: Parts Location

Code		See Page	Code		See Page	Code	See Page
C12	A		J9	A	45	R13	47
C17		44				R20	
F10		46	J10	B		R23	
F11			J12	B		T5	45
J1		45	R2			T6	
J6	A		R3				
			R8				
			R12		47		

: 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	63	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IA4		
IB1	63	Instrument Panel Wire
IB2		
IJ2	65	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ3		

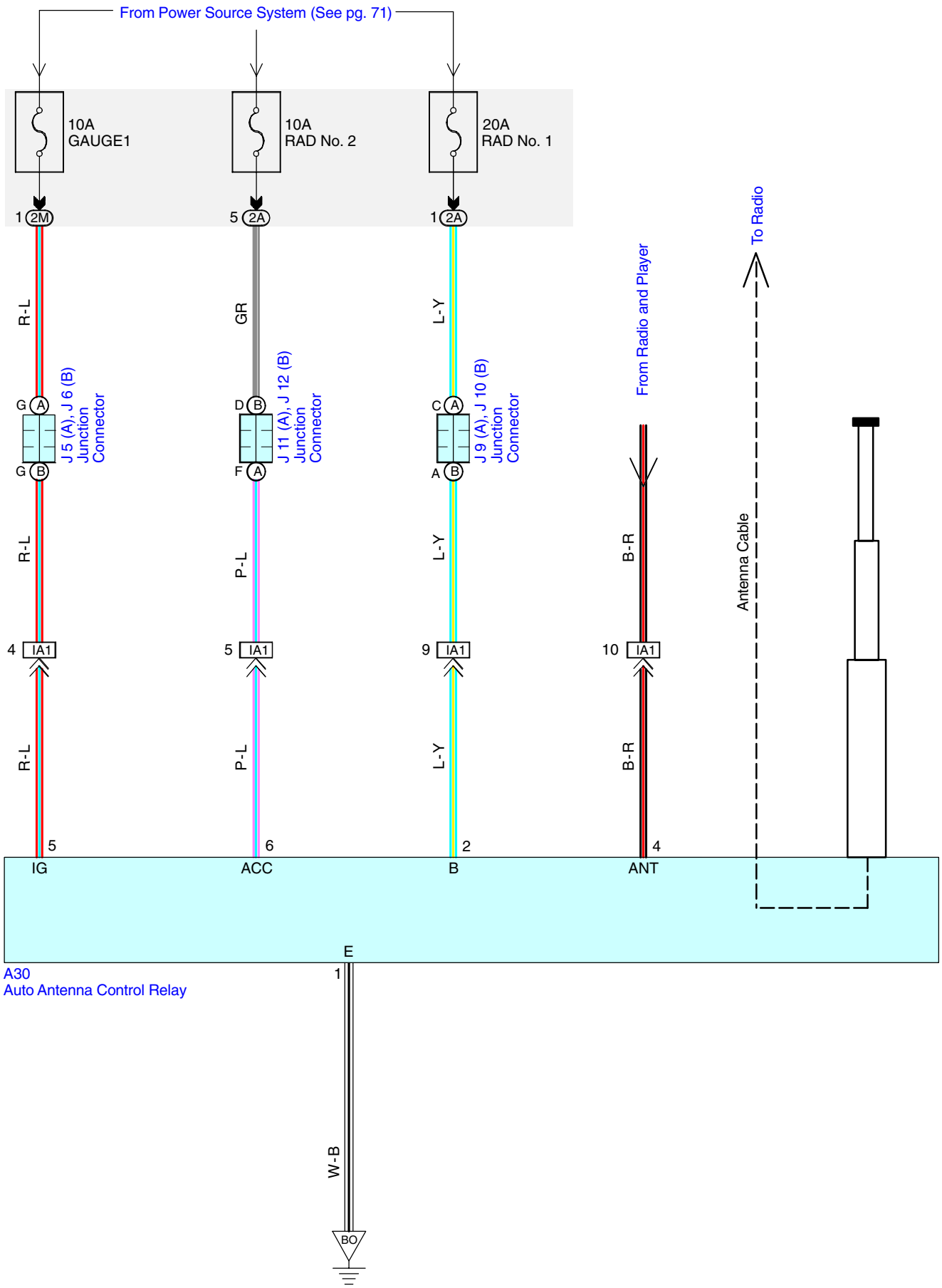
: Ground Points

Code	See Page	Ground Points Location
IL	52 (LHD)	Instrument Panel Brace RH
	63 (RHD)	

: SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B14	56	Flooor wire			

Auto Antenna (LHD)



Auto Antenna (LHD)

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		37 (LHD)	J6	B	36 (LHD)	J11	A	36 (LHD)
		46 (RHD)			45 (RHD)	J12	B	36 (LHD)
J5	A	36 (LHD)	J9	A	36 (LHD)			
		45 (RHD)	J10	B	36 (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

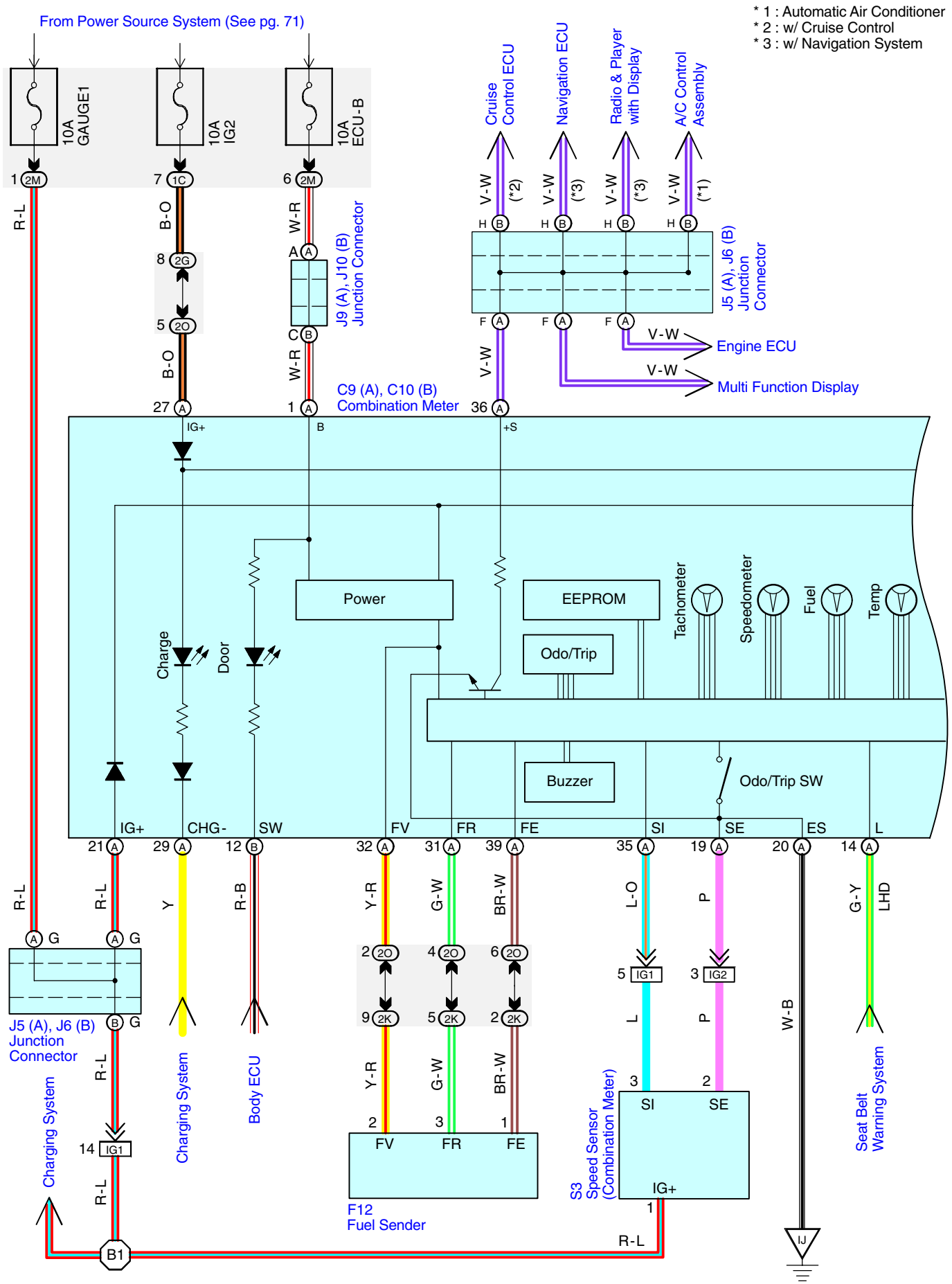
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	52 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	63 (RHD)	

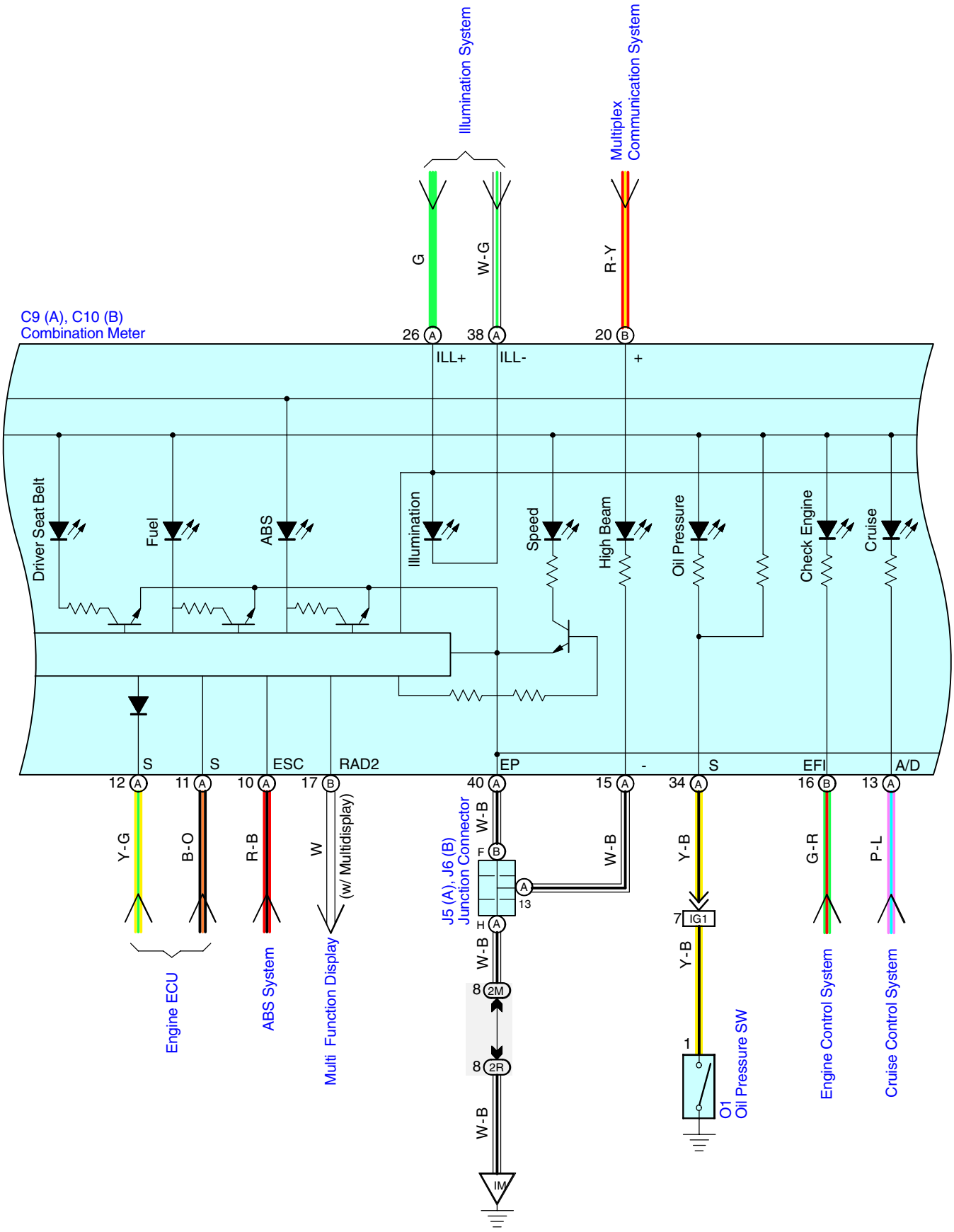
: Ground Points

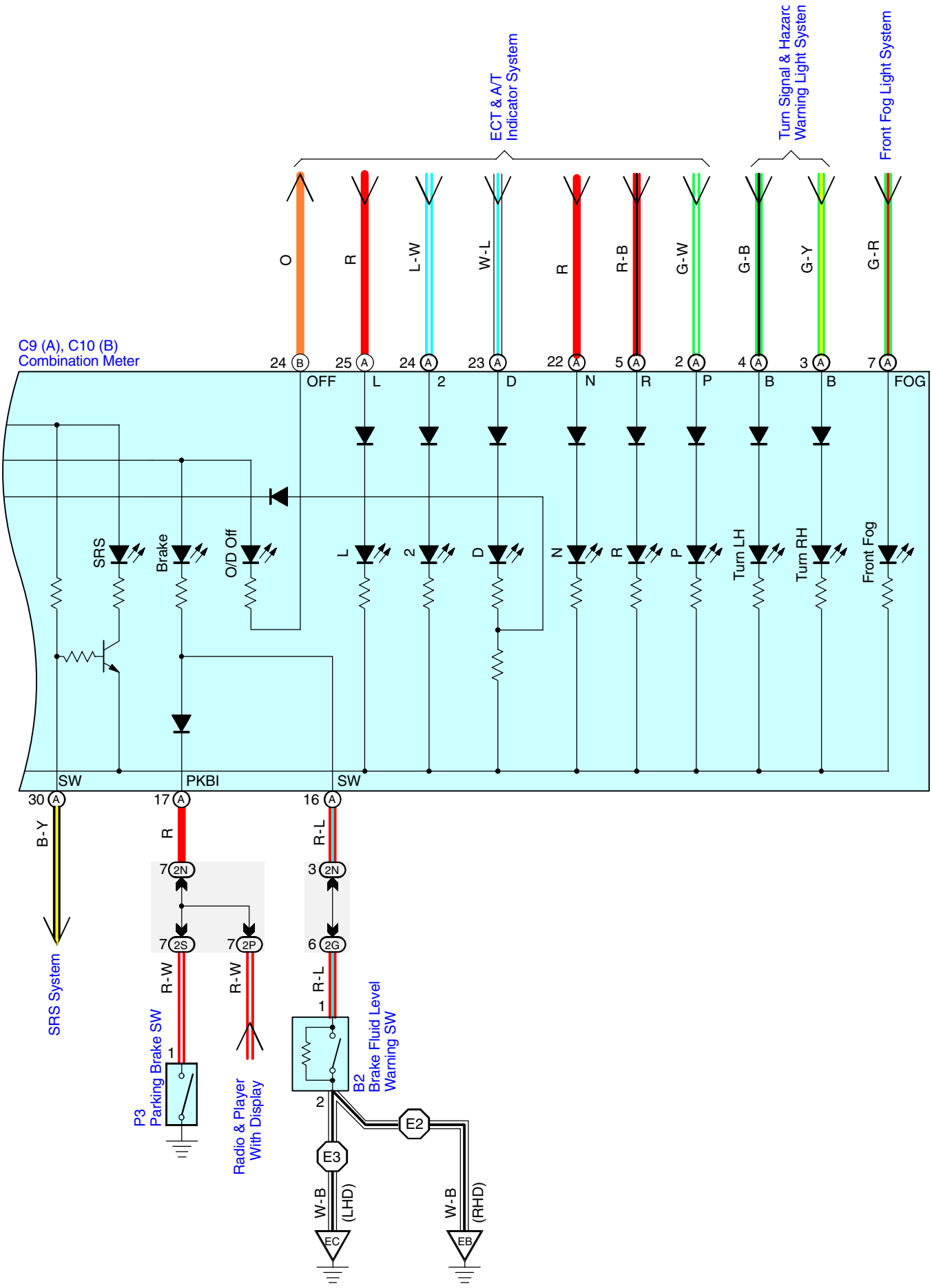
Code	See Page	Ground Points Location
BO	56	Front Side of Rear Quarter Wheel House LH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B17	67 (RHD)				


* 1 : Automatic Air Conditioner
* 2 : w/ Cruise Control
* 3 : w/ Navigation System
From Power Source System (See pg. 71)
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 ECU
Multi Function Display
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
J5 (A), J6 (B) Junction Connector
Charging System
Body ECU
F12 Fuel Sender
S3 Speed Sensor (Combination Meter)
Seat Belt Warning System
LHD
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
EFI
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
W-B
Y-B
G-R
P-L
J5 (A), J6 (B)
Junction Connector
F B
A 13
H A
W-B
8 2M
8 2R
W-B
IM
7 IG1
Y-B
1
O1
Oil Pressure SW
Engine ECU
ABS System
Multi Function Display
Engine Control System
Cruise Control System


ECT & A/T Indicator System
Turn Signal & Hazarc Warning Light Syste
Front Fog Light System
C9 (A), C10 (B)
Combination Meter
O
R
L-W
W-L
R
R-B
G-W
G-B
G-Y
G-R
24 (B)
25 (A)
24 (A)
23 (A)
22 (A)
5 (A)
2 (A)
4 (A)
3 (A)
7 (A)
OFF
L
2
D
N
R
P
B
B
FOG
SRS
Brake
O/D Off
Turn LH
Turn RH
Front Fog
SW
PKBI
SW
30 (A)
17 (A)
16 (A)
B-Y
R
R-L
7 (2N)
3 (2N)
7 (2S)
7 (2P)
6 (2G)
R-W
R-W
R-L
SRS System
P3
Parking Brake SW
Radio & Player
With Display
B2
Brake Fluid Level
Warning SW
E2
E3
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)

P3 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		31 (LHD 1MZ-FE)	J9	A	36 (LHD)	P3		32 (LHD 1MZ-FE)
		42 (RHD 1MZ-FE)			45 (RHD)			41 (RHD 1MZ-FE)
		33 (RHD 2AZ-FE)	J10	B	36 (LHD)			34 (LHD 2AZ-FE)
		42 (RHD 2AZ-FE)			45 (RHD)			43 (RHD 2AZ-FE)
C9	A	35 (LHD)	F12		37 (LHD)	S3		32 (LHD 1MZ-FE)
		44 (RHD)			46 (RHD)			41 (RHD 1MZ-FE)
C10	B	35 (LHD)	O1		32 (LHD 1MZ-FE)			34 (LHD 2AZ-FE)
		44 (RHD)			41 RHD 1MZ-FE)			43 (RHD 2AZ-FE)
J5	A	36 (LHD)			34 (LHD 2AZ-FE)			
		45 (RHD)			43 (RHD 2AZ-FE)			
J6	B	36 (LHD)						
		45 (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	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind the Glove Box)
	65 (RHD)	
IG2	54 (LHD)	
	65 (RHD)	

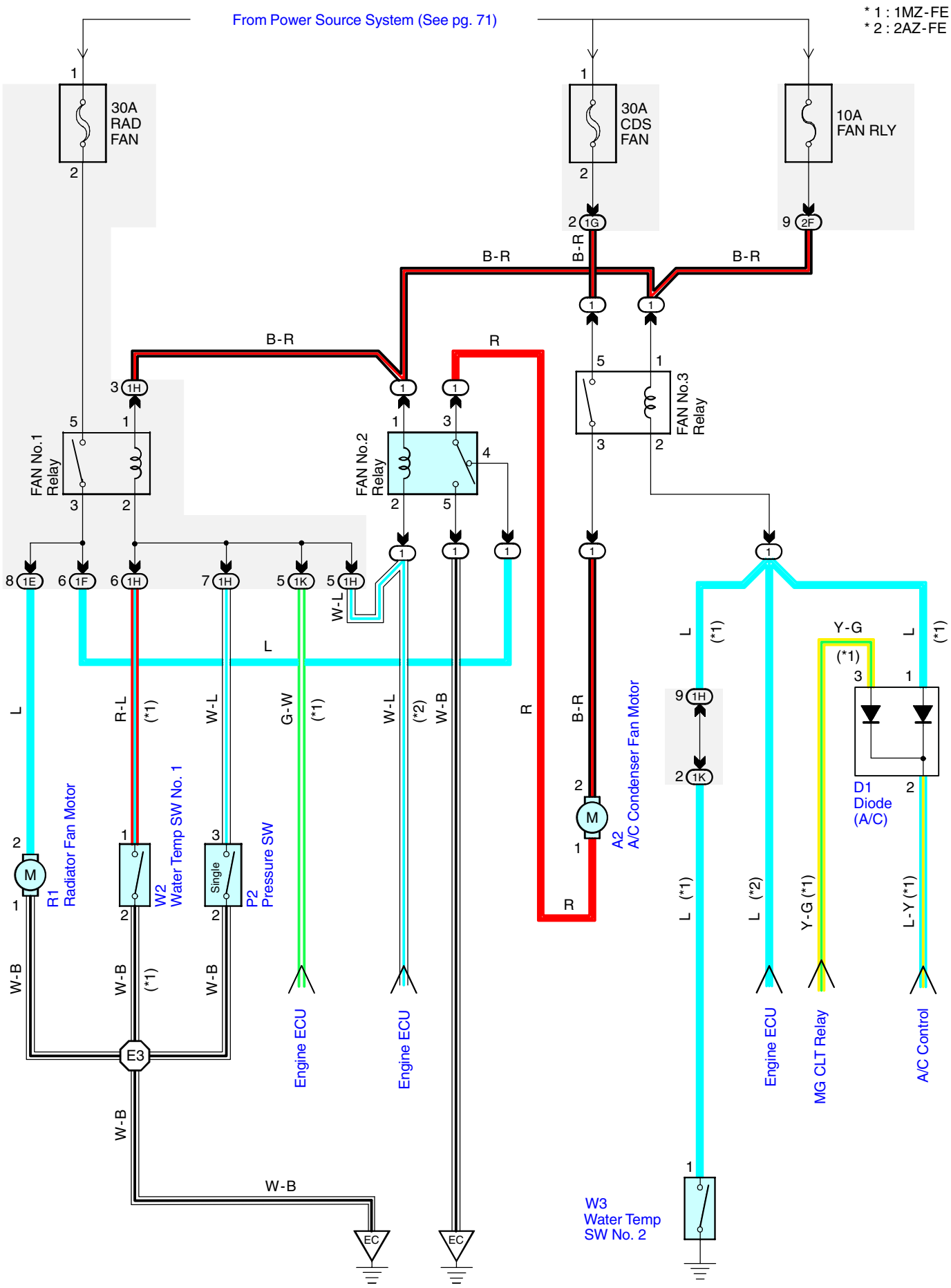
 **: Ground Points**

Code	See Page	Ground Points Location
EB	60 (RHD-1MZ-FE) 62 (RHD-2AZ-FE)	Right Front Fender
EC	49 (LHD-1MZ-FE) 51 (LHD-2AZ-FE)	Left Front Fender
IJ	52 (LHD) 63 (RHD)	Instrument Panel Brace
IM	63 (RHD)	Instrument Panel Reinforcement RH

 **: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	56 (LHD) 67 (RHD)				
E2	49				
E3					

Radiator Fan and Condenser Fan



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	31 (LHD 1MZ-FE)	P2	34 (LHD 2AZ-FE)	W3	32 (LHD 1MZ-FE)
	40 (RHD 1MZ-FE)		43 (RHD 2AZ-FE)		41 (RHD 1MZ-FE)
	33 (LHD 2AZ-FE)	R1	32 (LHD 1MZ-FE)		
	42 (RHD 2AZ-FE)		41 (RHD 1MZ-FE)		
D1	35 (LHD)		34 (LHD 2AZ-FE)		
	44 (RHD)		43 (RHD 2AZ-FE)		
P2	32 (LHD 1MZ-FE)	W2	32 (LHD 1MZ-FE)		
	41 (RHD 1MZ-FE)		41 (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	49 (LHD 1MZ-FE)	Left Fender
	60 (RHD 1MZ-FE)	
	51 (LHD 2AZ-FE)	
	62 (RHD 2AZ-FE)	

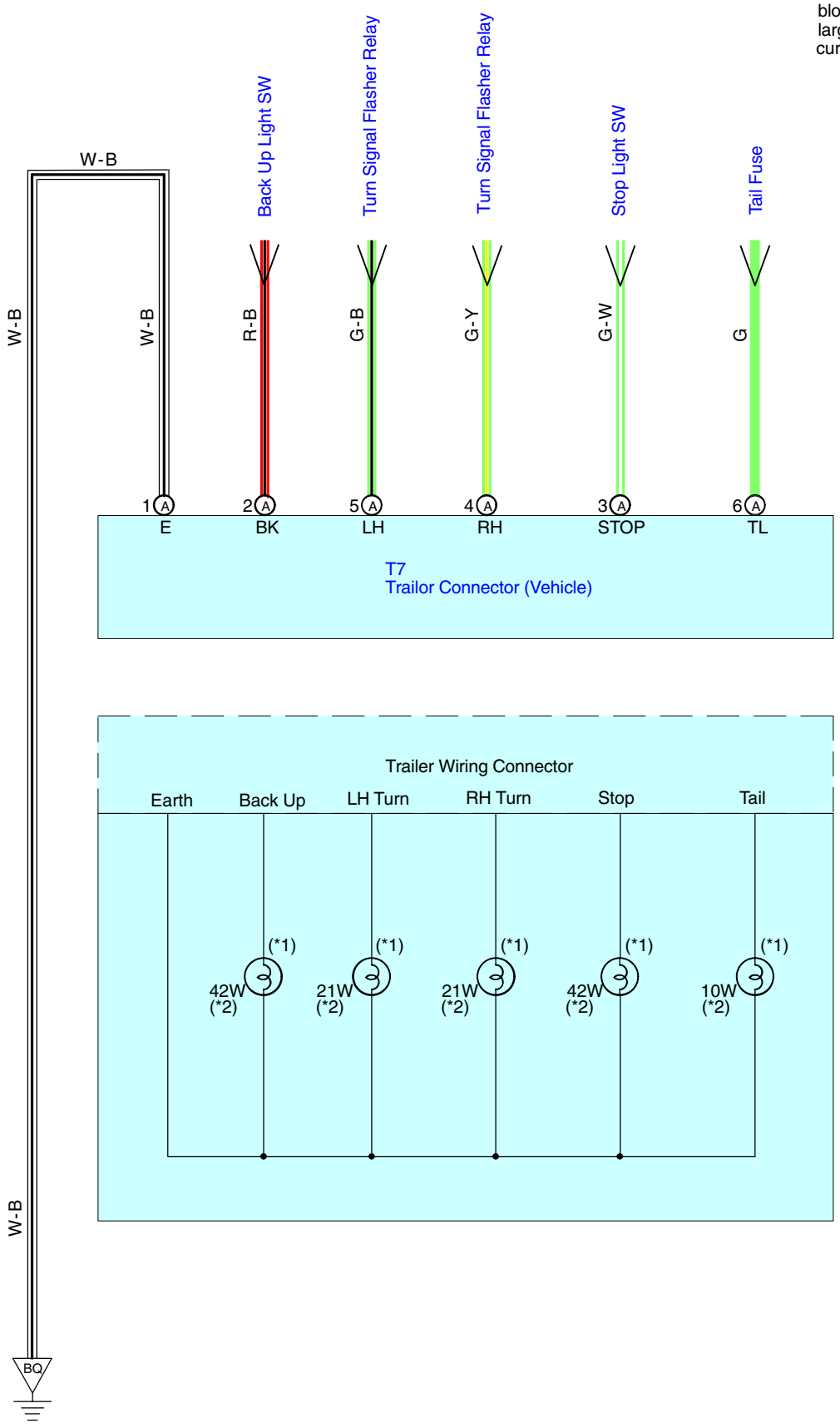
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	49 (LHD 1MZ-FE)	Engine Room Main Wire			
	60 (RHD 1MZ-FE)				

Trailer Socket (RHD Only)

*1:Trailer/Caravan Lamps
*2:Maximum Recommended Wattage

*Note: Exceeding these values will blow towing vehicle fuses. Using larger fuses will exceed the wirings current carrying capacity.



Trailer Socket (RHD Only)

Service Hints

Trailer Connection

1- Ground : Always Continuity
2-1 : 10-14Volts with the ign switch ON and the transmission in reverse.
3-1 : 10-14Volts with the ign switch ON and the brake pedal depressed.
4-1 : 10-14Volts with the ign switch ON and the RH indicator operating.
5-1 : 10-14Volts with the ign switch ON and the LH indicator operating.
6-1 : 10-14Volts with the ign switch ON and the tails operating.

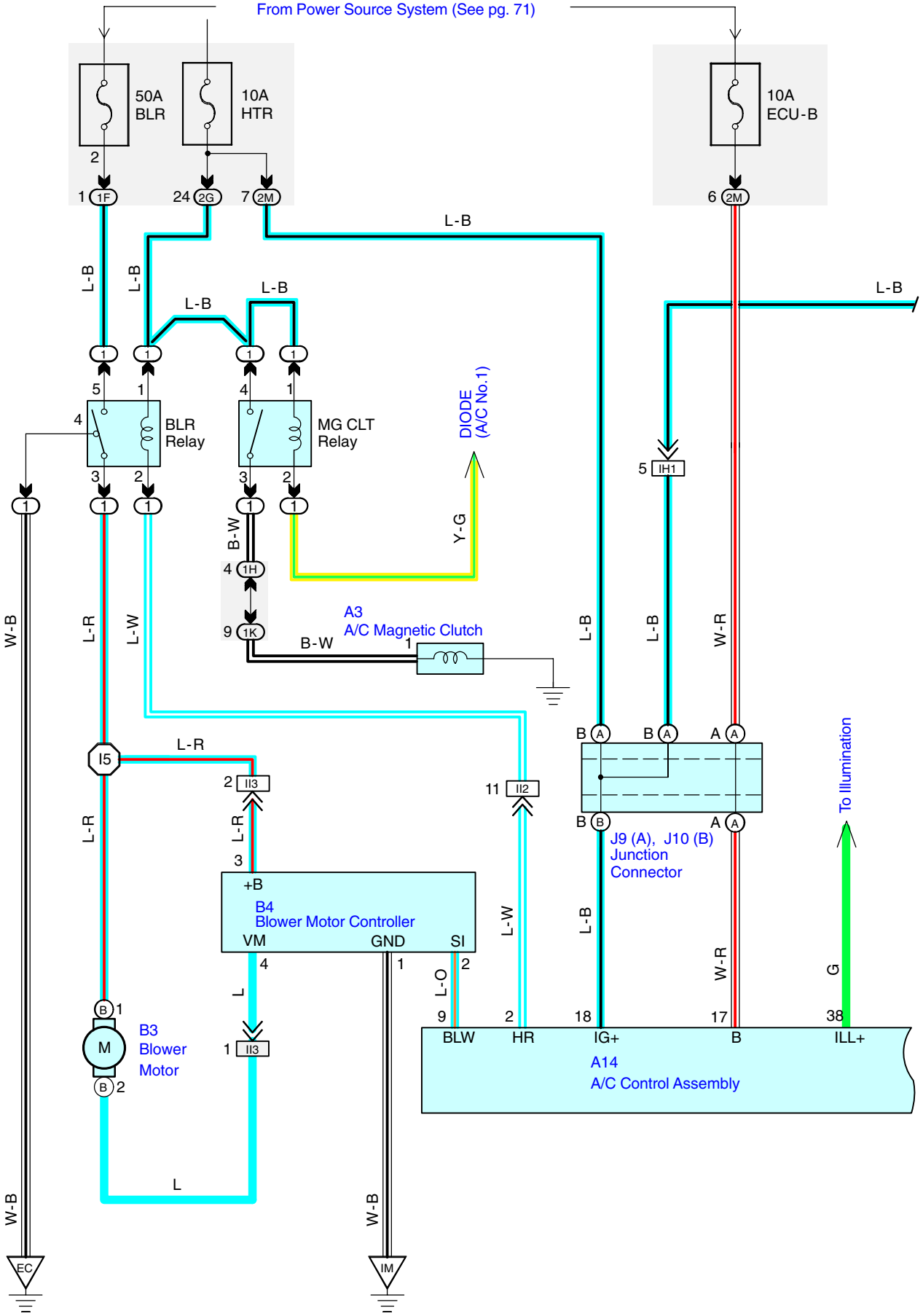
○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
T7	47 (RHD)				

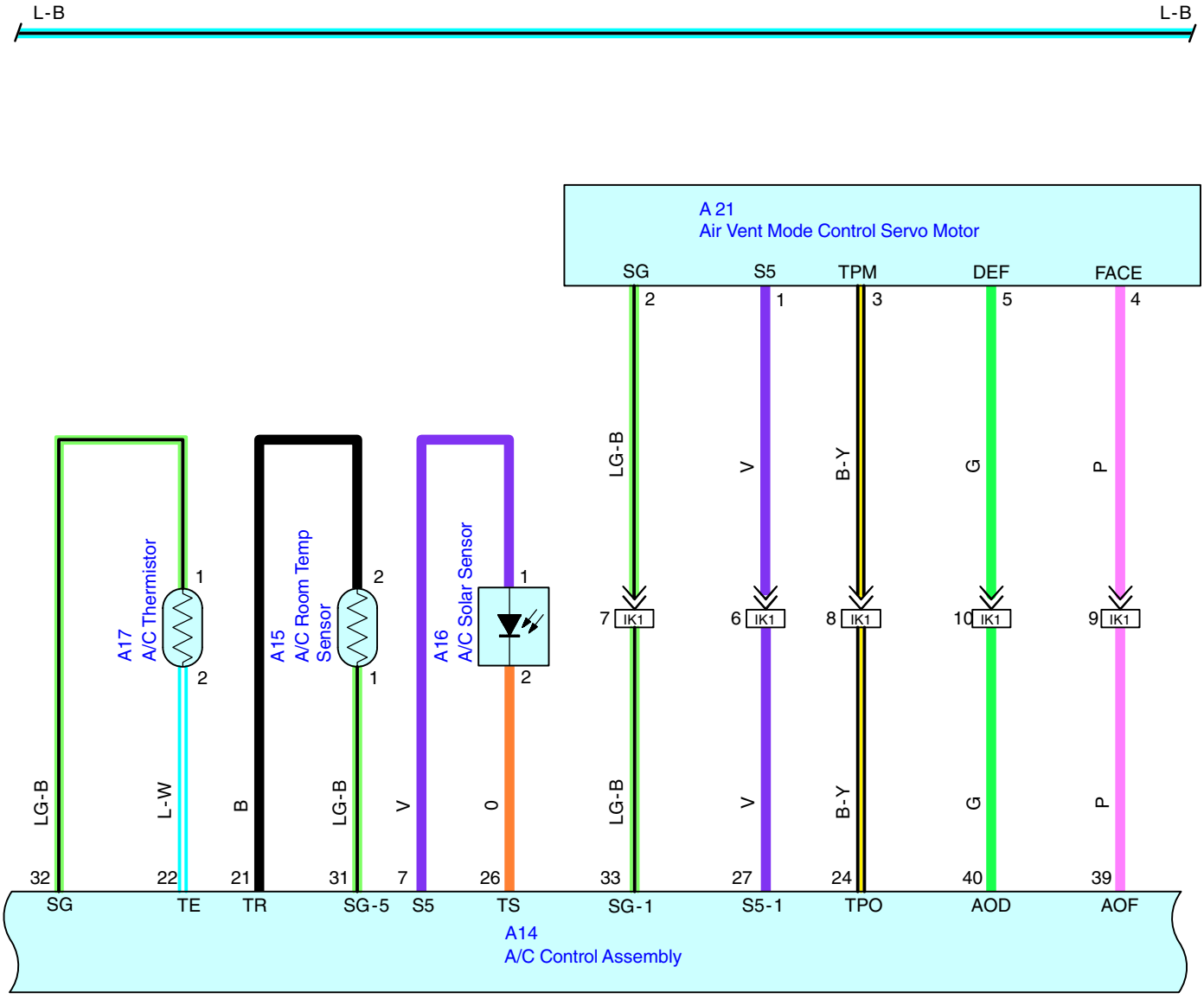
▽ : Ground Points

Code	See Page	Ground Points Location
BQ	67 (RHD)	Floor wire - Luggage compartment

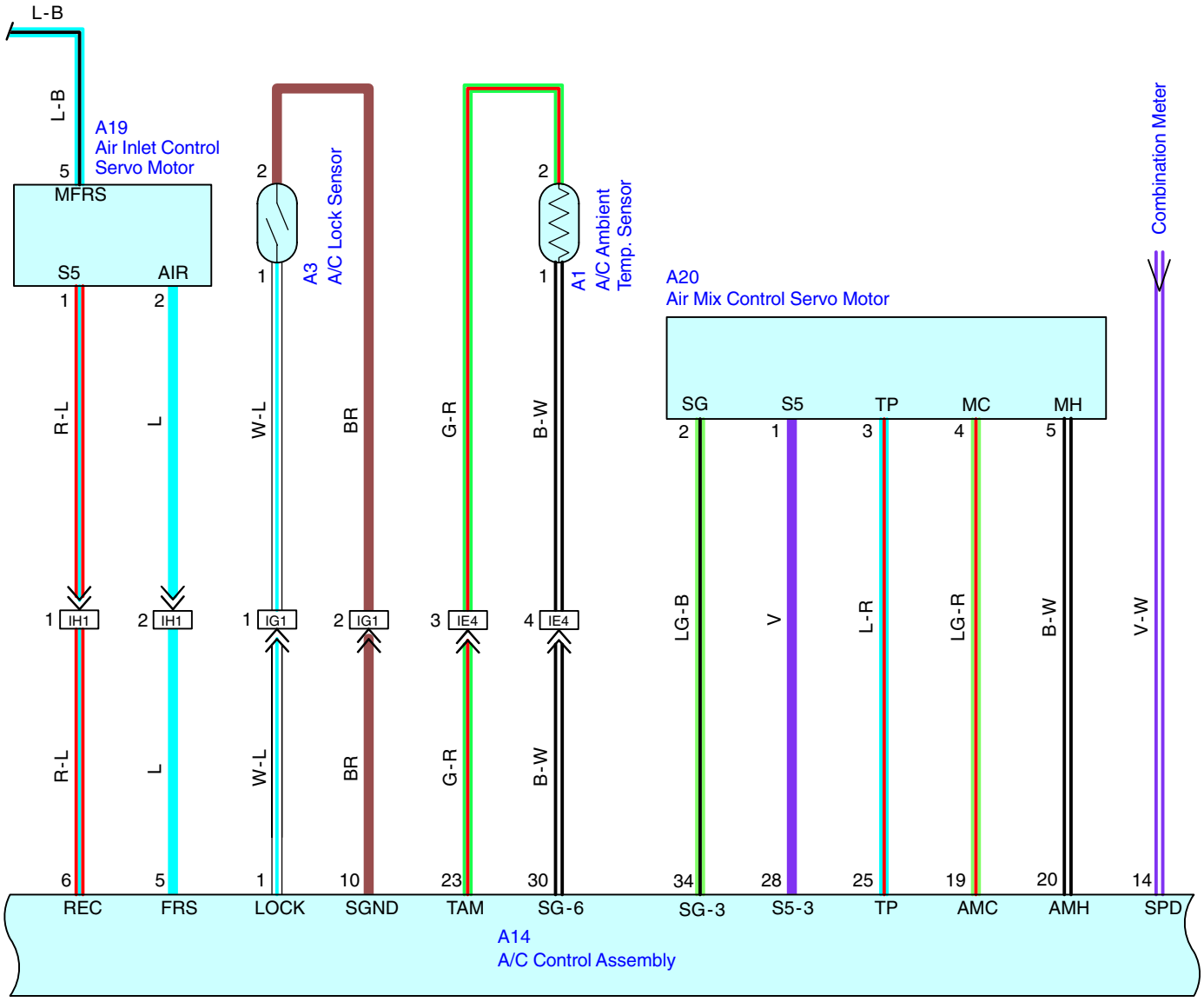
Automatic Air Conditioner (RHD)(1MZ-FE)(Exc. South Africa)



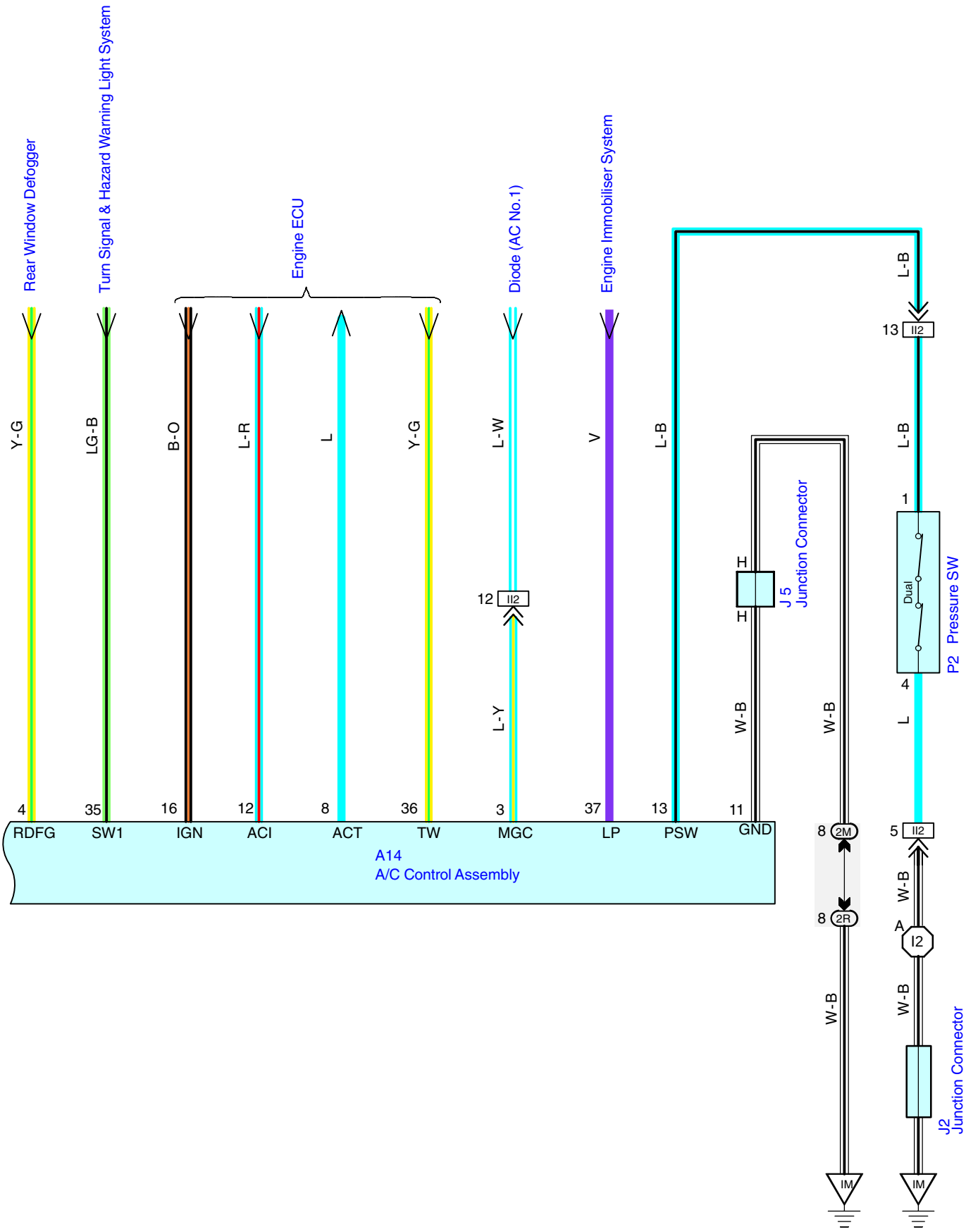
Automatic Air Conditioner (RHD)(1MZ-FE)(Exc. South Africa)



Automatic Air Conditioner (RHD)(1MZ-FE)(Exc. South Africa)



Automatic Air Conditioner (RHD)(1MZ-FE)(Exc. South Africa)



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/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	40	A19	44	J5		45
A3		A20		J9	A	
A14	44	A21		J10	B	
A15		B3		P2		41
A16		B4				
A17		J2	45			

: 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	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	65	Engine Room and Instrument Panel Wire (Behind Glove Box)
IH1		Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II2		Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3		Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1		Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)

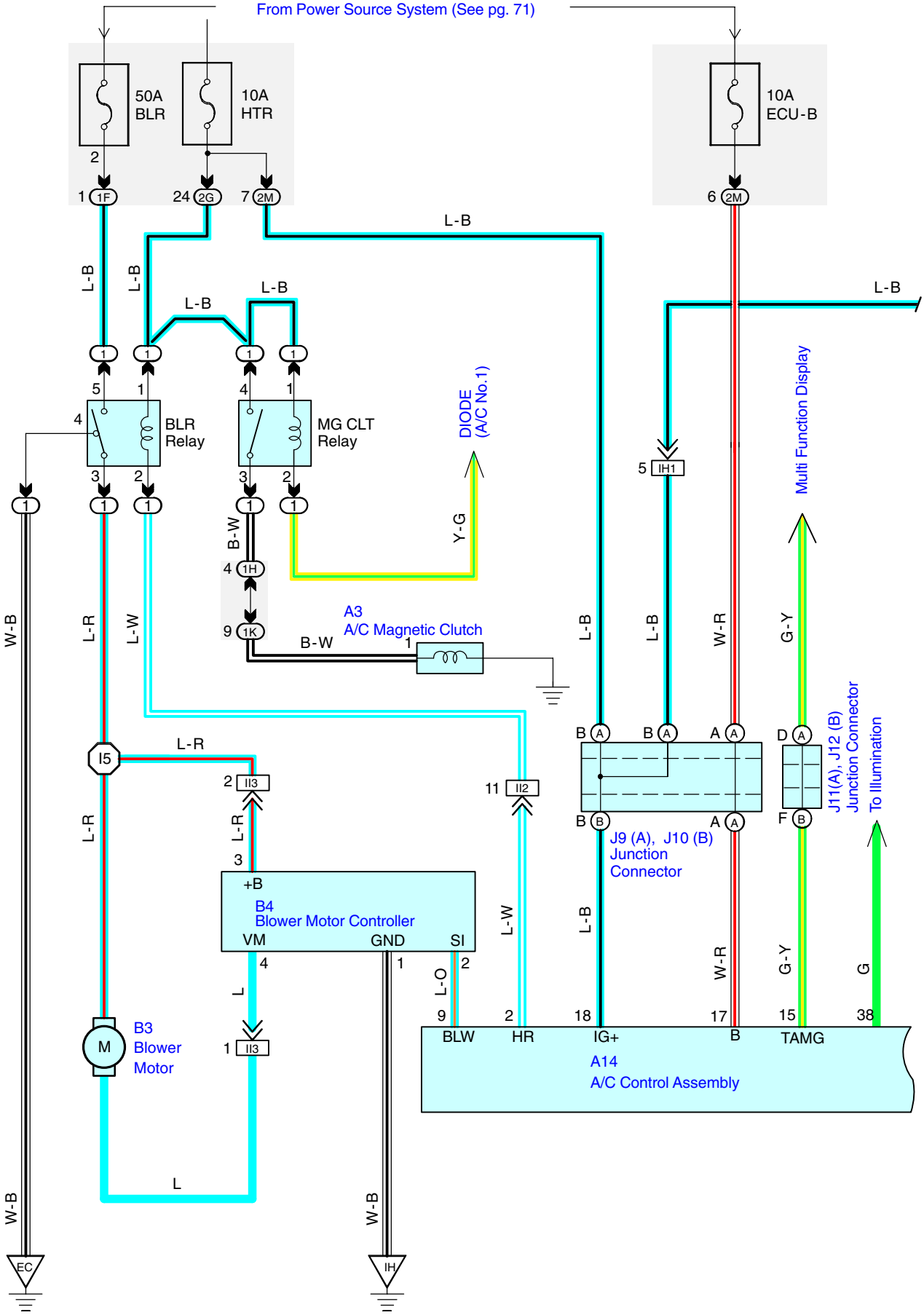
: Ground Points

Code	See Page	Ground Points Location
EC	60	Left Fender
	62	
IM	63	Instrument Panel Reinforcement RH

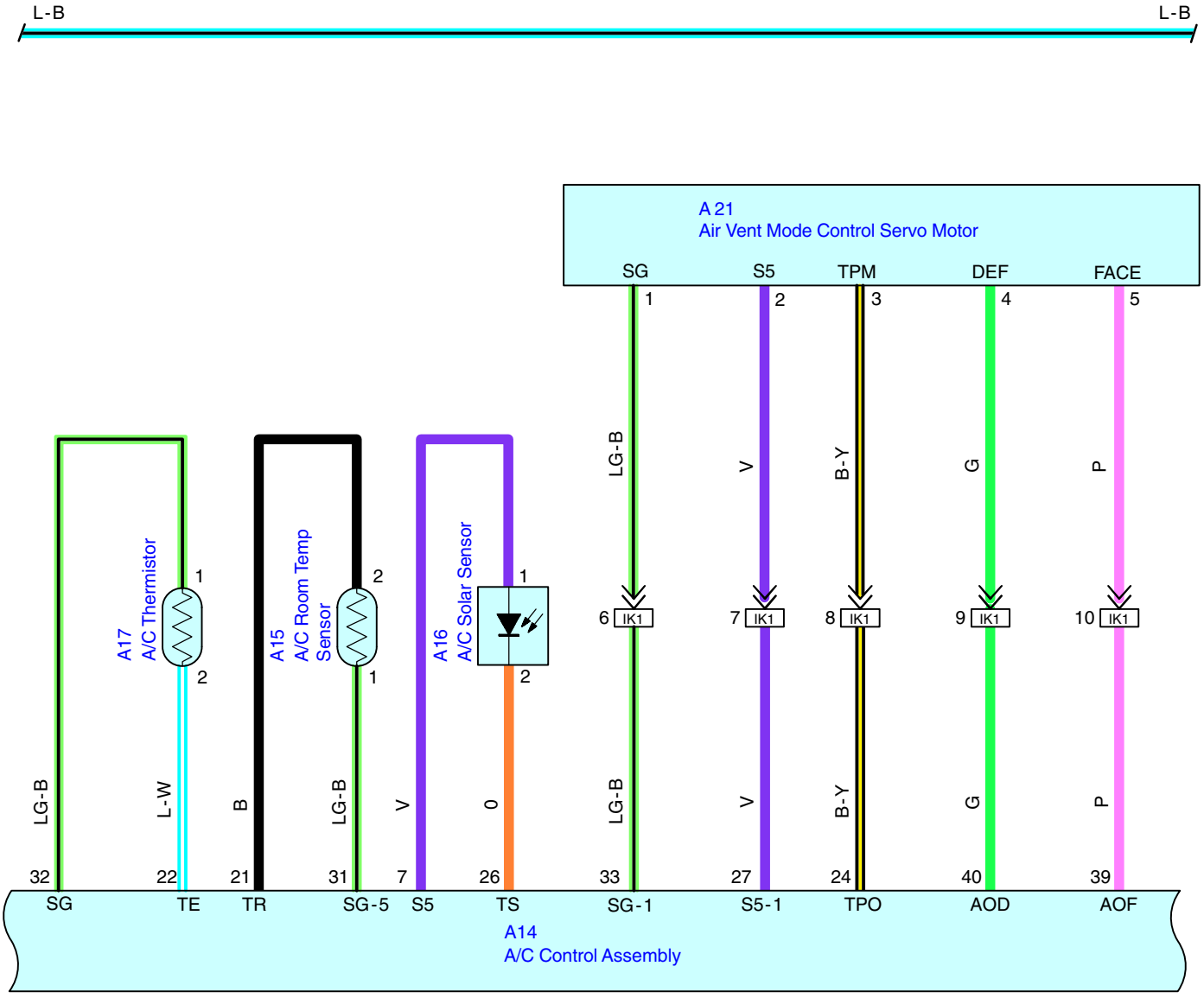
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	65	Instrument Panel Wire			

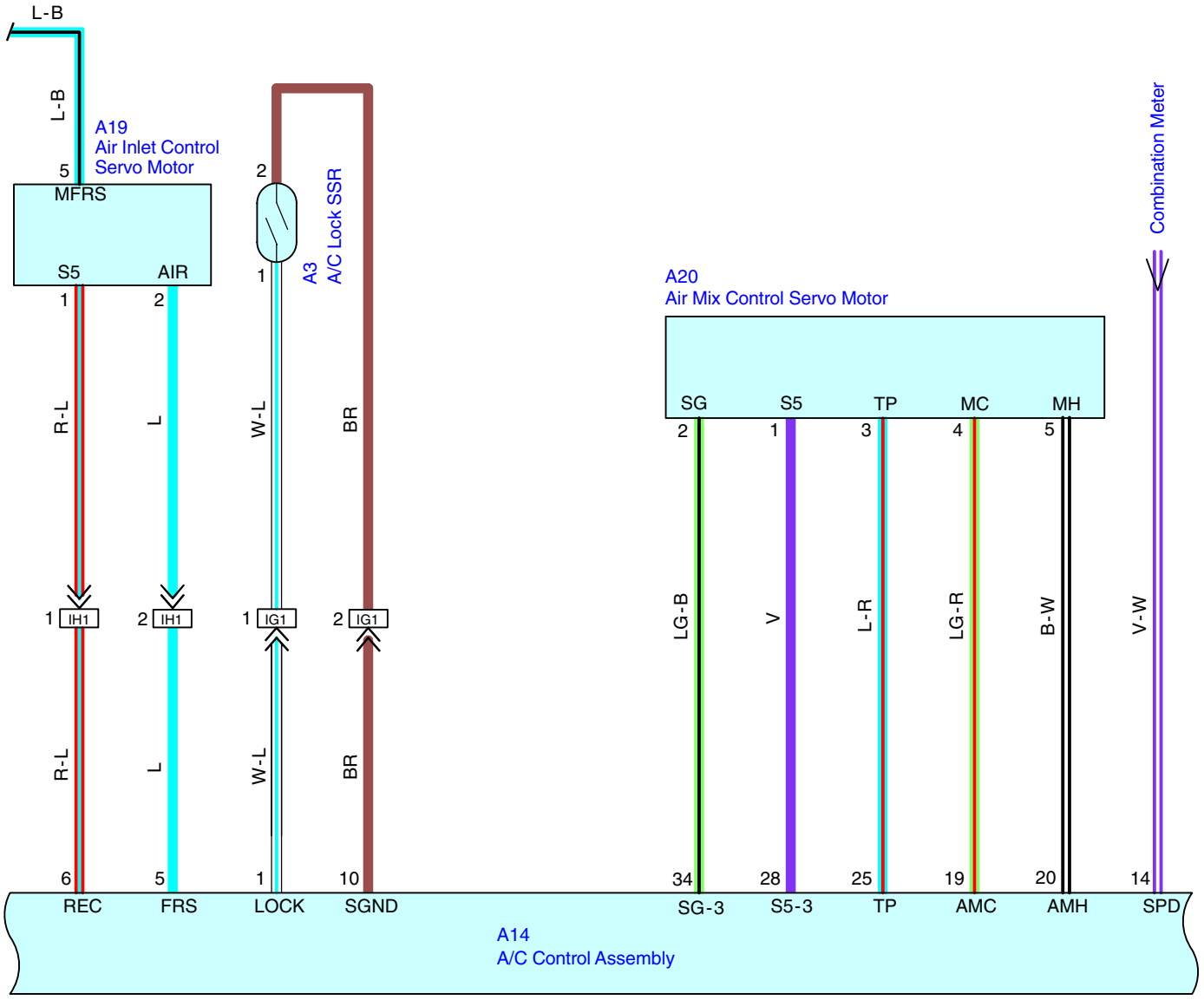
Automatic Air Conditioner (LHD)(1MZ-FE)



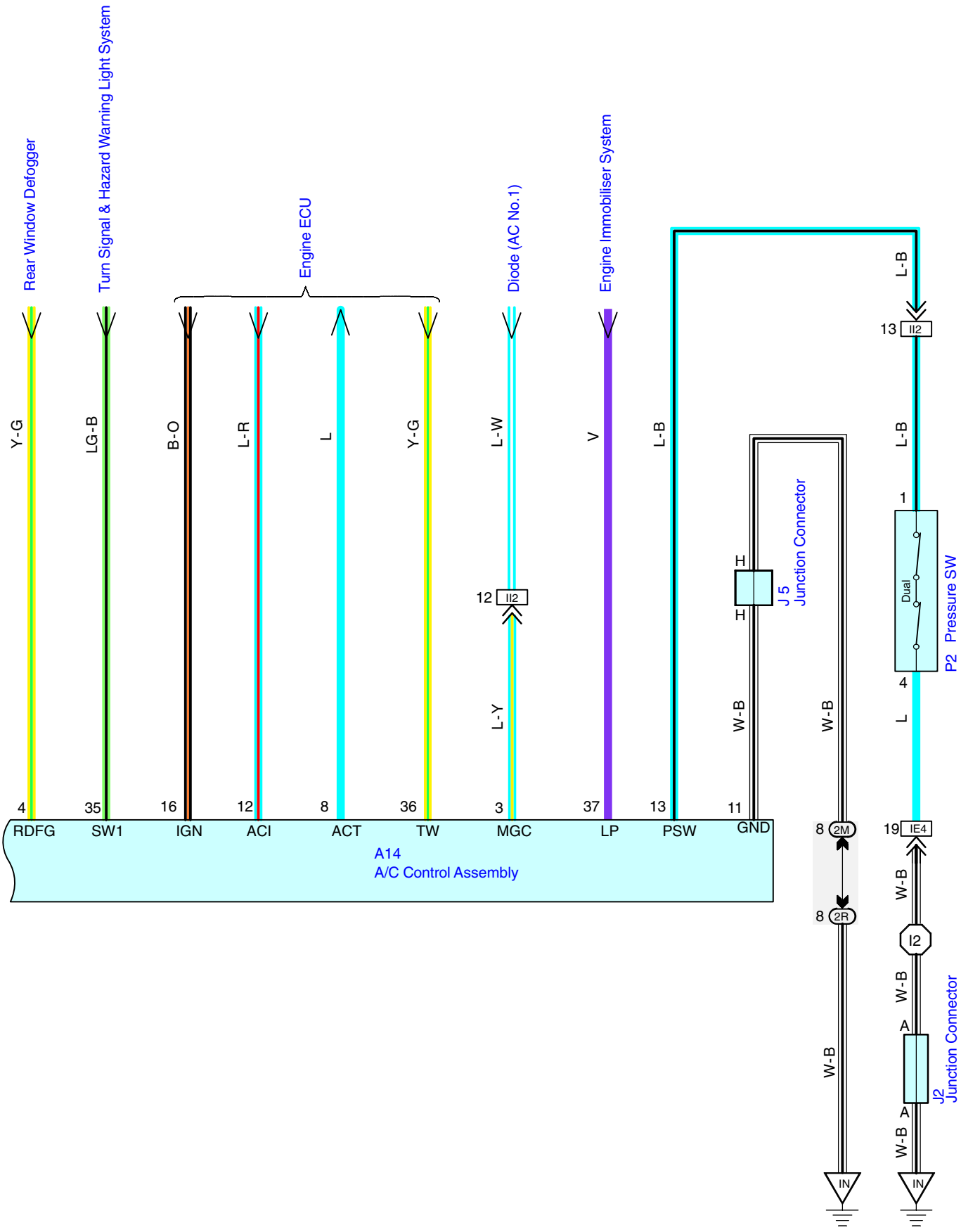
Automatic Air Conditioner (LHD)(1MZ-FE)



Automatic Air Conditioner (LHD)(1MZ-FE)



Automatic Air Conditioner (LHD)(1MZ-FE)



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
A3	31	A20	35	J9	A	36
A14	35	A21		J10	B	
A15		B3		J11	A	
A16		B4		J12	B	
A17		J2	36	P2		32
A19		J5				

: 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	54	Instrument Panel Wire and Engine Room Main Wire
IG1		Engine Room and Instrument Panel Wire (Behind Glove Box)
IH1		Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II2		Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
II3		Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
IK1		Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)

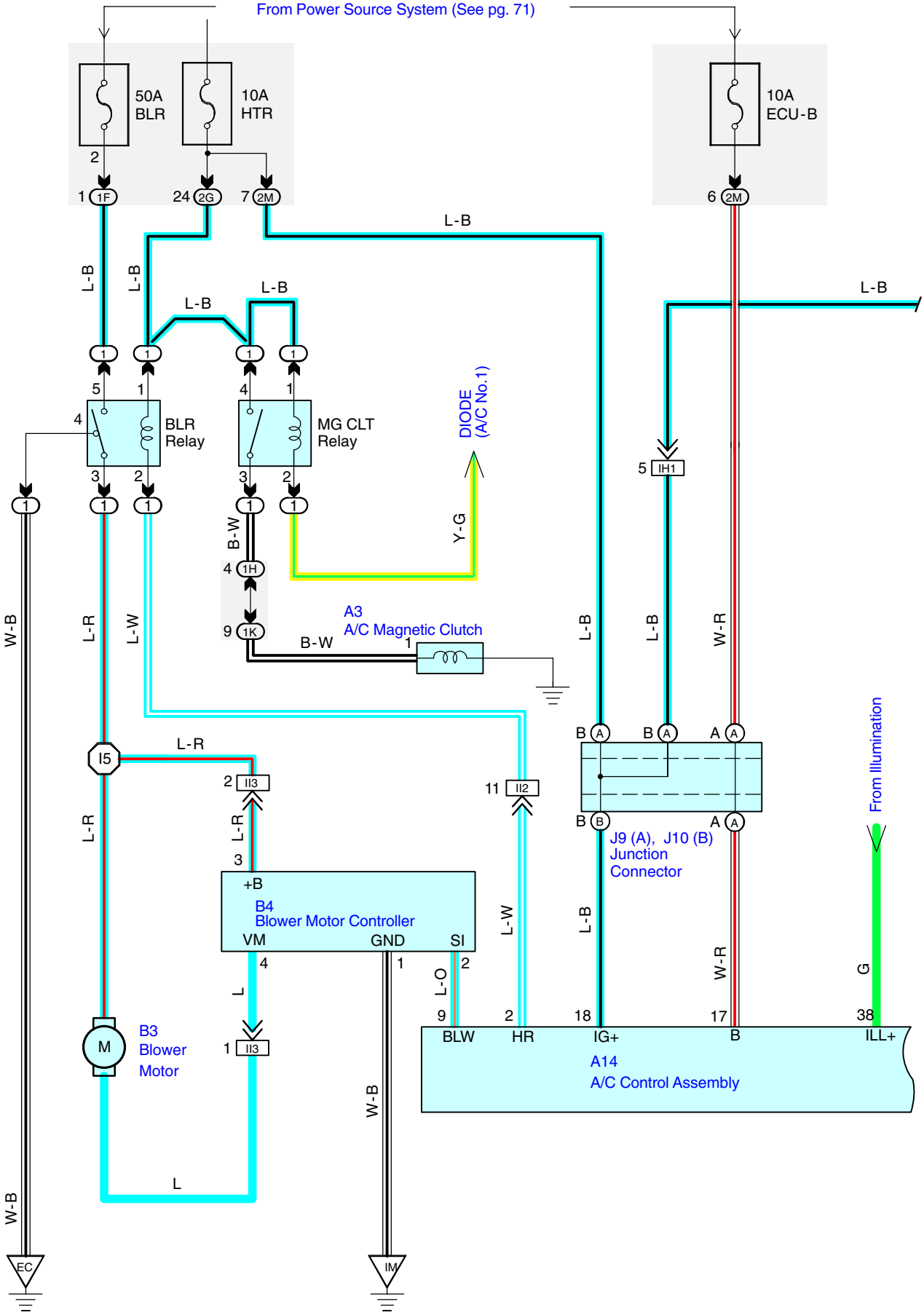
: Ground Points

Code	See Page	Ground Points Location
EC	49	Left Fender
	51	
IK	52	Instrument Panel Brace LH
IH	52	Instrument Panel Reinforcement RH
IN		

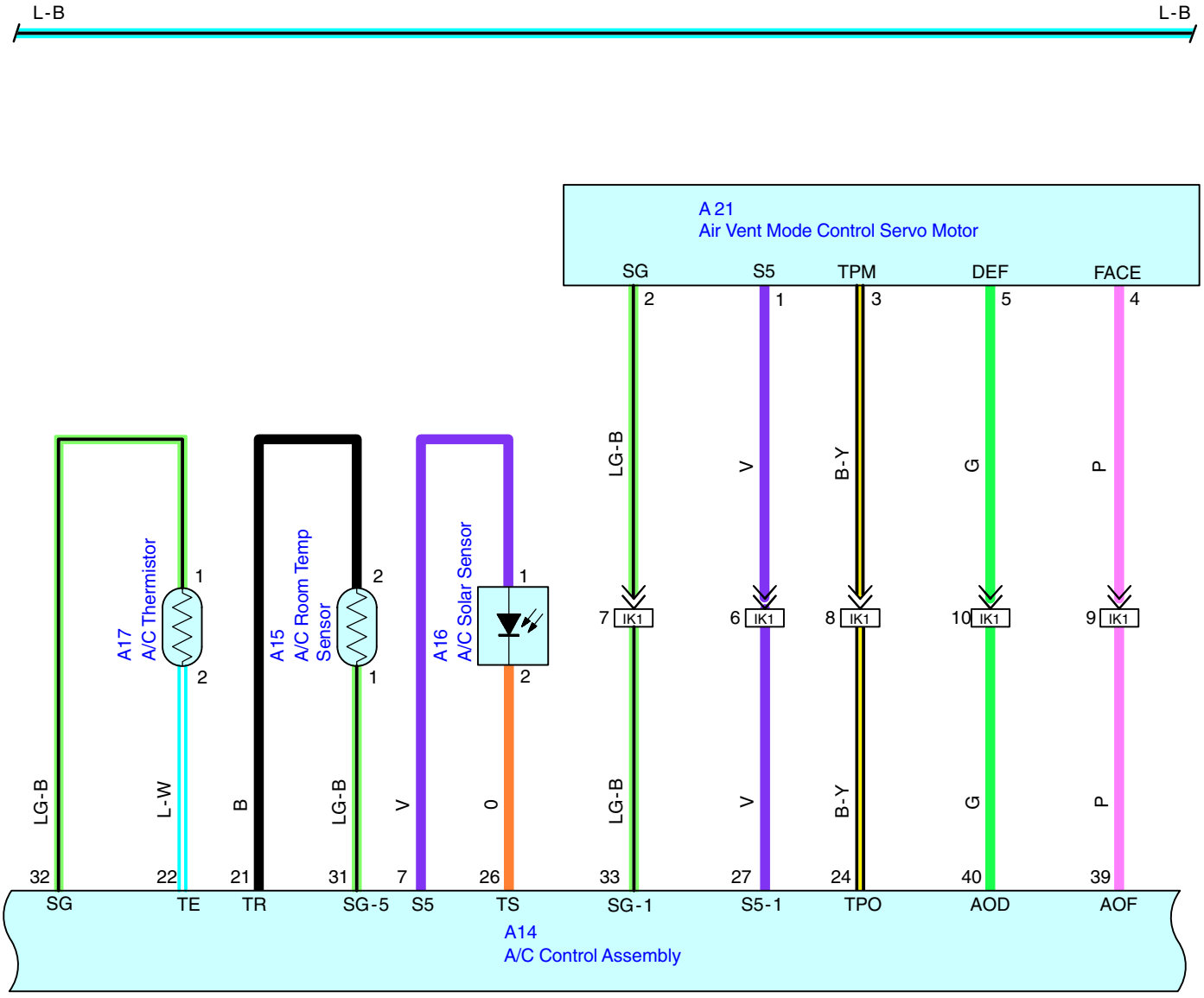
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54	Instrument Panel WIre	I5	54	Instrument Panel WIre

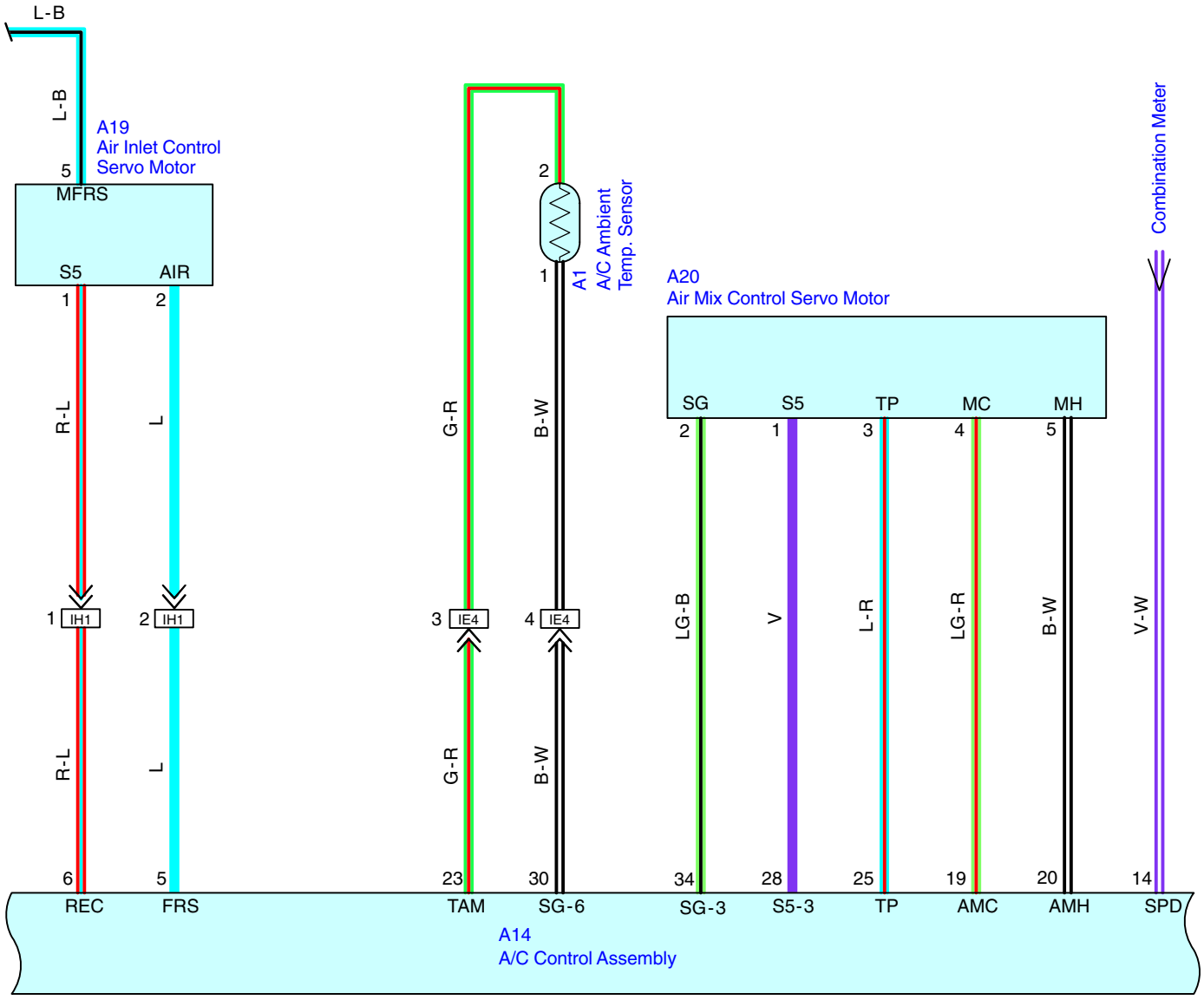
Automatic Air Conditioner (2AZ-FE)(South Africa)



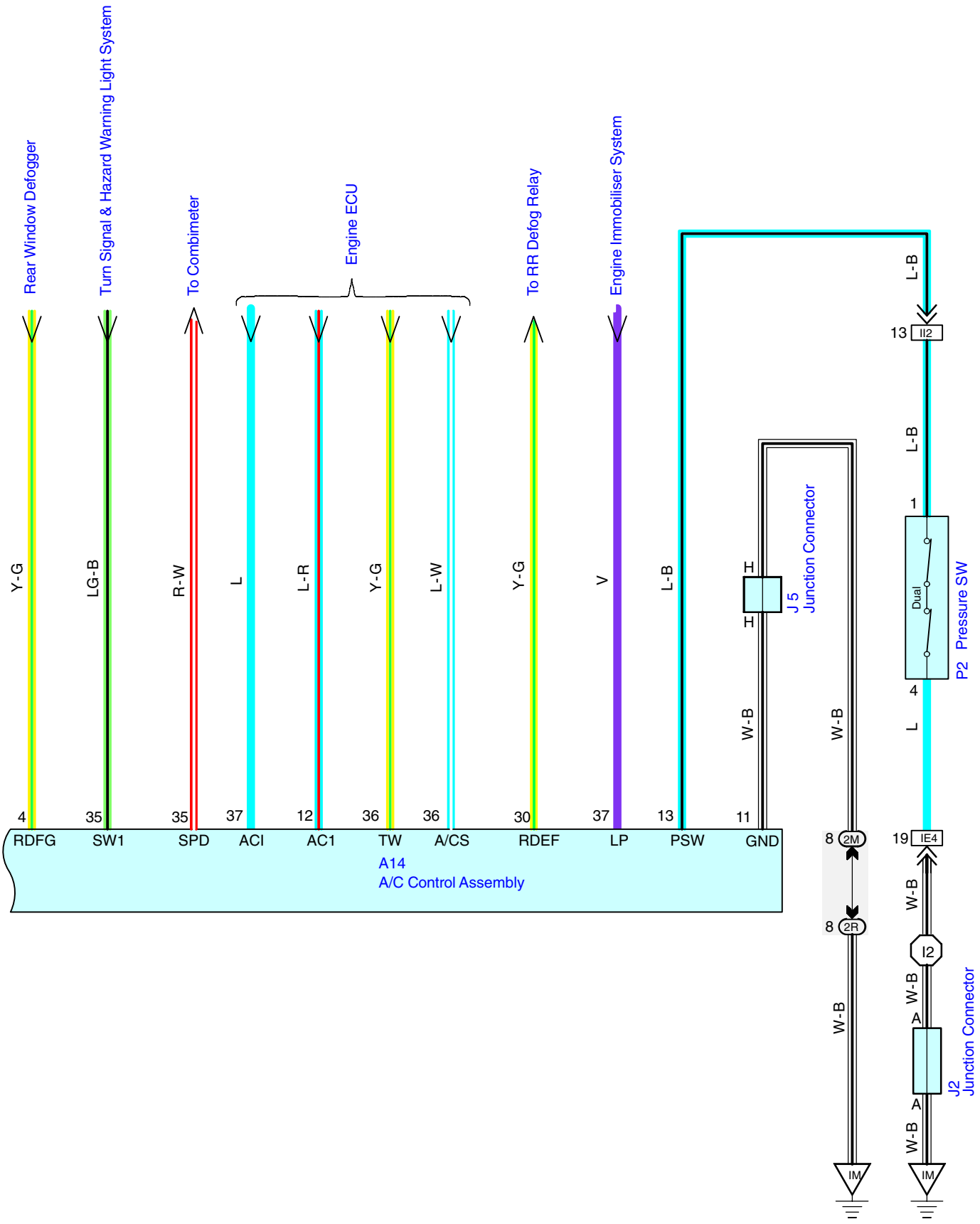
Automatic Air Conditioner (2AZ-FE)(South Africa)



Automatic Air Conditioner (2AZ-FE)(South Africa)



Automatic Air Conditioner (2AZ-FE)(South Africa)



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	40	A19	44	J5	45
A3		A20		J9 A	
A14	44	A21		J10 B	
A15		B3		P2	41
A16		B4			
A17		J2	45		

: 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	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IH1	65	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II2		Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3		Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1		Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)

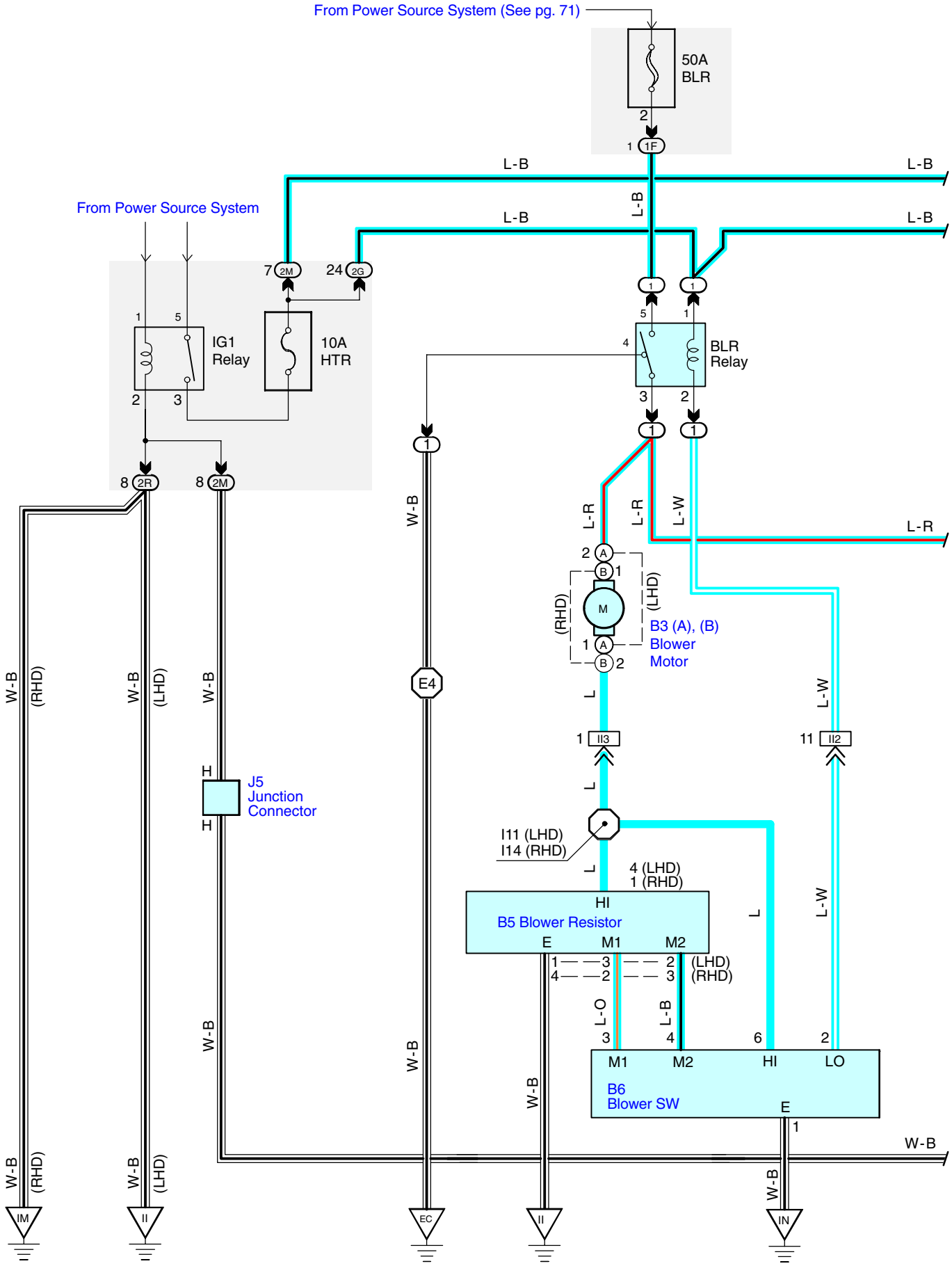
: Ground Points

Code	See Page	Ground Points Location
EC	60	Left Fender
	62	
IM	63	Instrument Panel Reinforcement RH

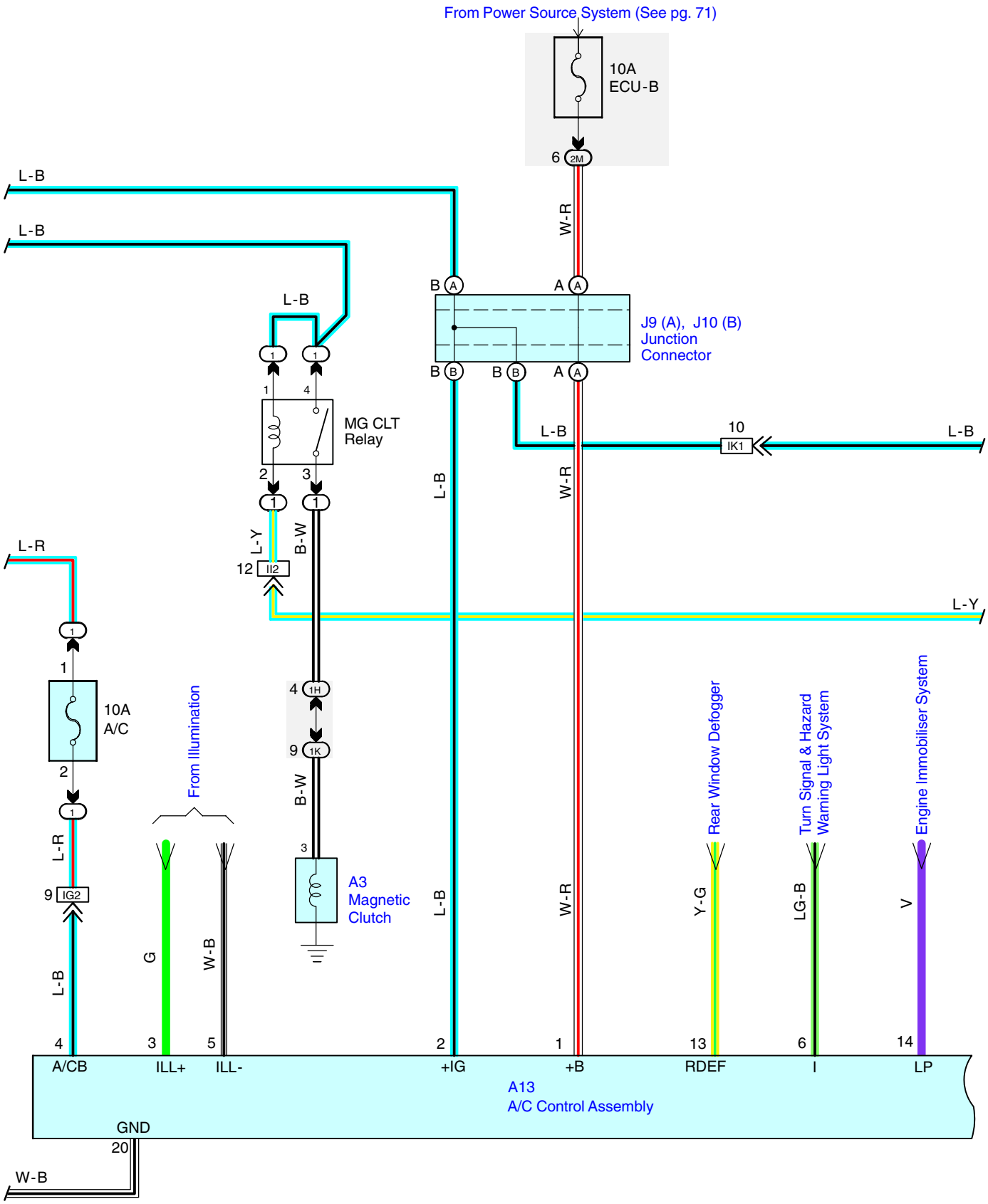
: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	65	Instrument Panel Wire			

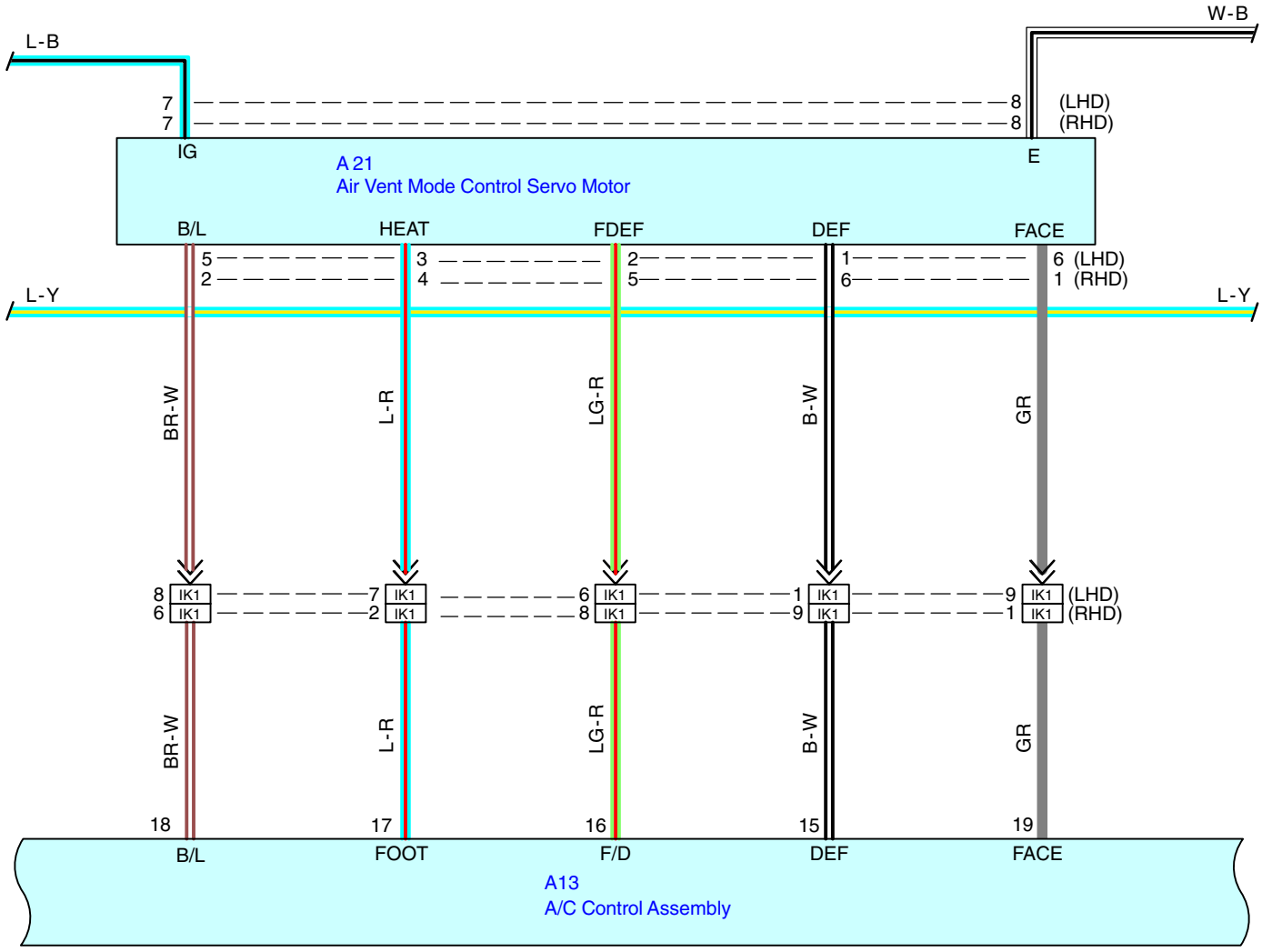
Manual Air Conditioner (2AZ-FE)



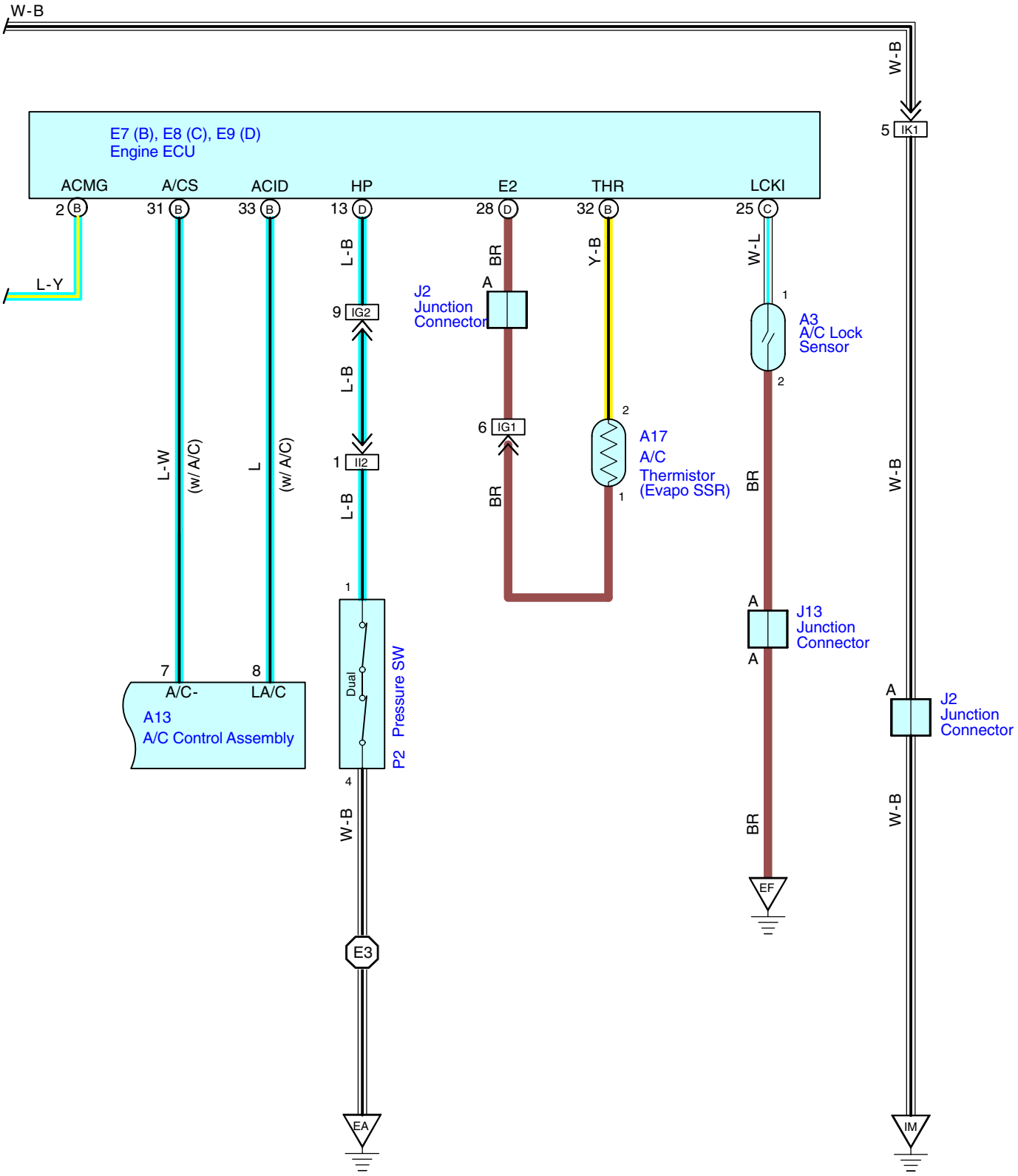
Manual Air Conditioner (2AZ-FE)



Manual Air Conditioner (2AZ-FE)



Manual Air Conditioner (2AZ-FE)



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	33 (LHD 2AZ-FE)	B5	44 (RHD)	J5	36 (LHD)
	40 (RHD 2AZ-FE)	B6	35 (LHD)		45 (RHD)
A13	35 (LHD)		44 (RHD)	J9	36 (LHD)
	44 (RHD)	E7 B	36 (LHD)		45 (RHD)
A17	35 (LHD)		45 (RHD)	J10	36 (LHD)
	44 (RHD)	E8 C	36 (LHD)		45 (RHD)
A21	35 (LHD)		45 (RHD)	J13	36 (LHD)
	44 (RHD)	E9 D	36 (LHD)		45 (RHD)
B3	35 (LHD)		45 (RHD)	P2	34 (LHD)
	44 (RHD)	J2	36 (LHD)		43 (RHD)
B5	35 (LHD)		45 (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	52 (LHD)	Engine Room and Instrument Panel Wire (Instrument Panel Brace)
	63 (RHD)	
IG2	54 (LHD)	Engine Room and Instrument Panel Wire (Left Side of Steering Column)
	65 (RHD)	
II2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3	54 (LHD)	Engine Room and Instrument Panel Wire (Right Side of Steering Column)
	65 (RHD)	
IK1	54 (LHD)	Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)
	65 (RHD)	

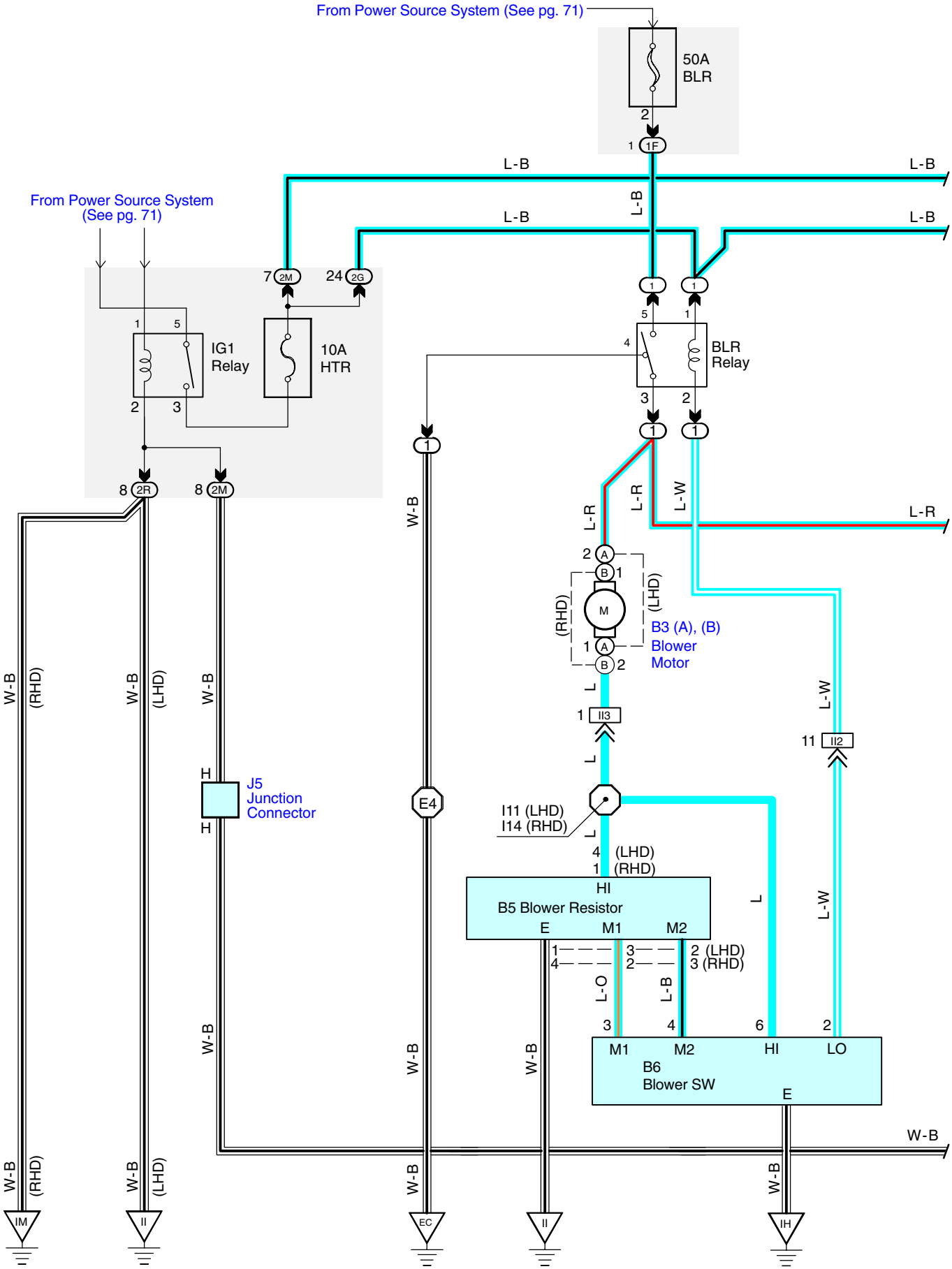
: Ground Points

Code	See Page	Ground Points Location
EC	51 (LHD 2AZ-FE)	Left Fender
	62 (RHD 2AZ-FE)	
II	52 (LHD)	Instrument Panel Reinforcement LH
	63 (RHD)	Instrument Panel Reinforcement LH
IM	52 (LHD)	Instrument Panel Reinforcement RH
	63 (RHD)	
IN	52 (LHD)	Instrument Panel Reinforcement RH
EA	51 (LHD)	Engine Room Main Wire
	62 (RHD)	
EF	51 (LHD)	Engine Room Main Wire
	62 (RHD)	

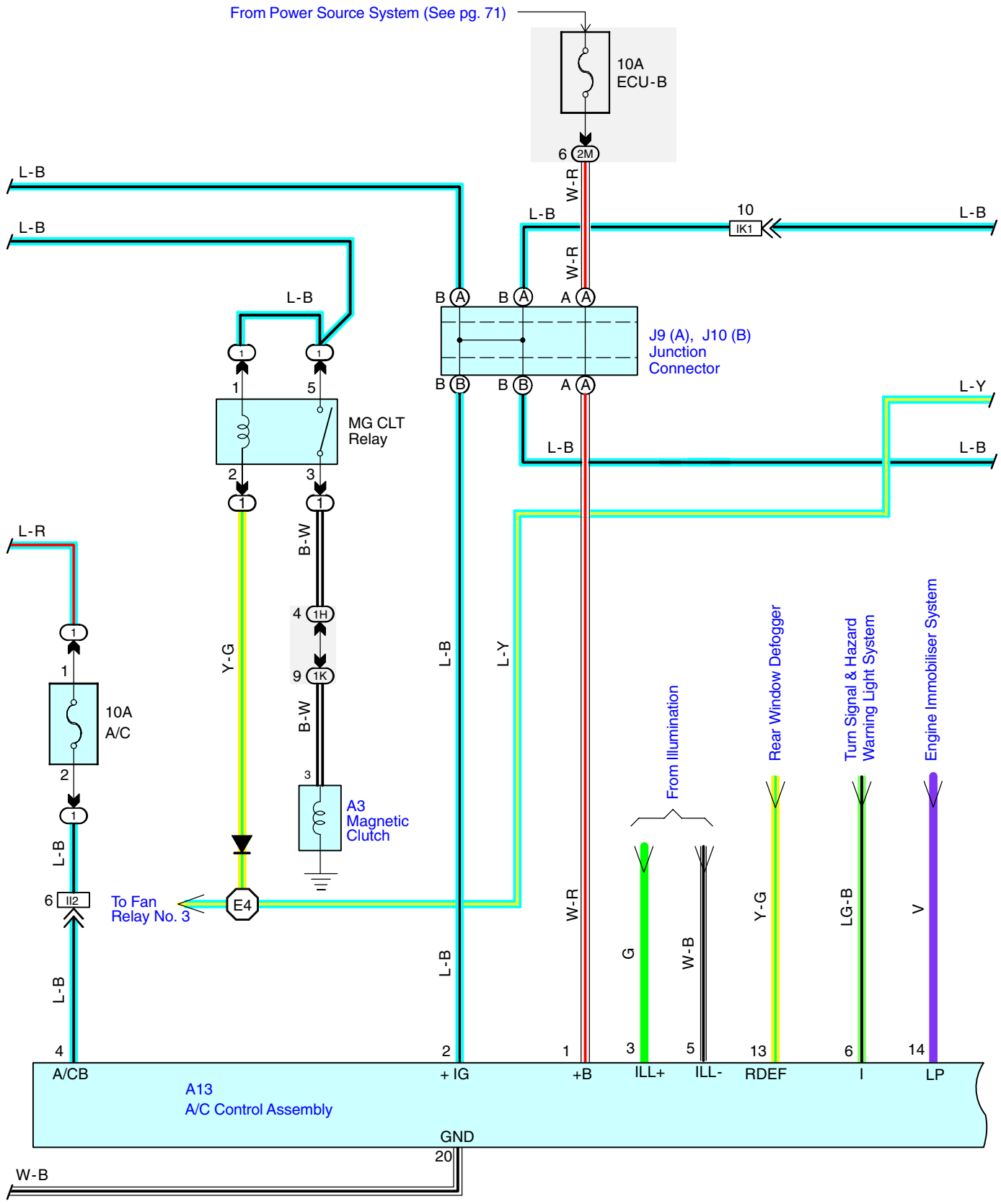
 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	40	A/C Sub Wire	I11	54 (LHD)	A/C Sub Wire
E5			I14	65 (RHD)	

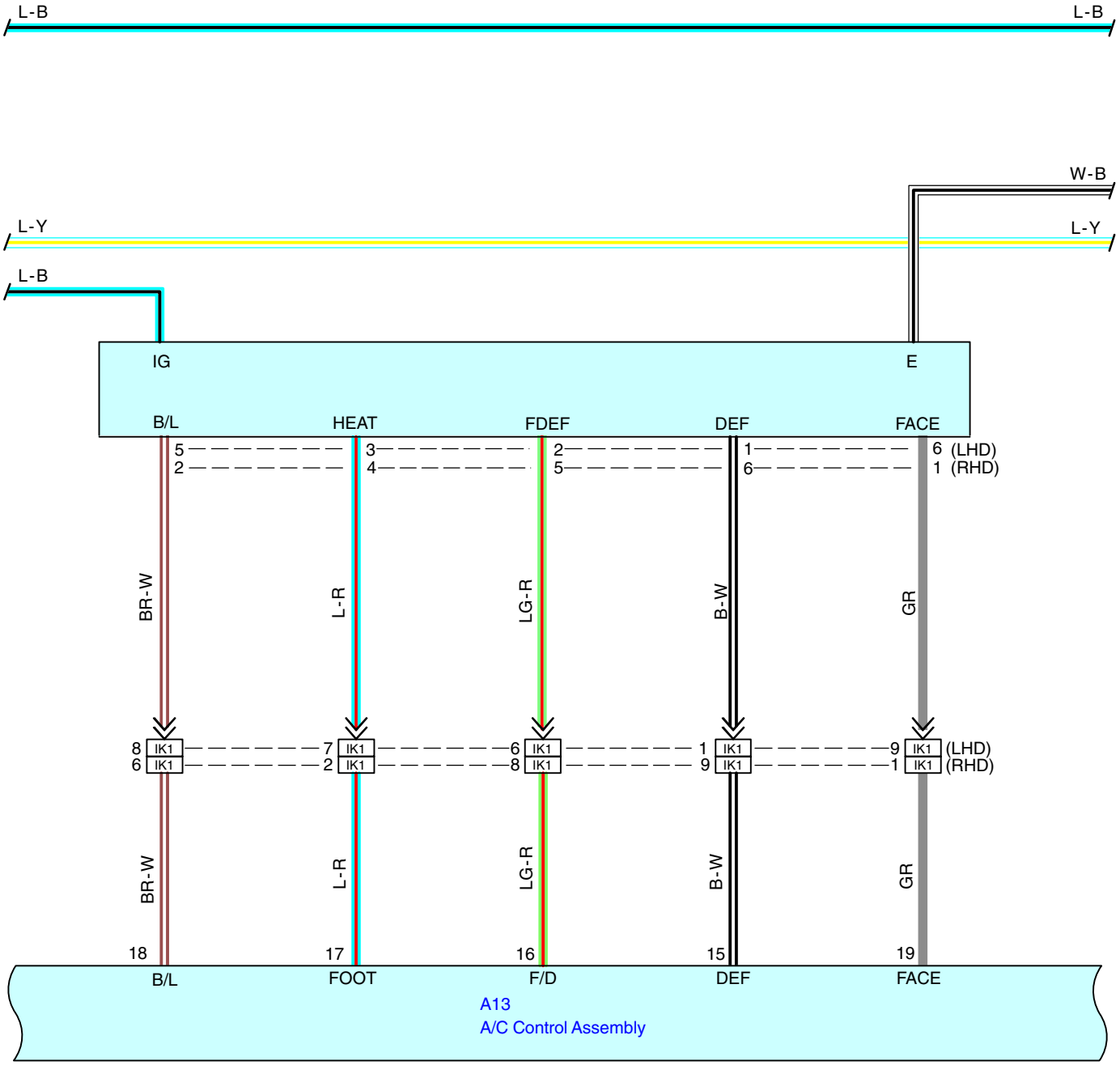
Manual Air Conditioner (1MZ-FE)



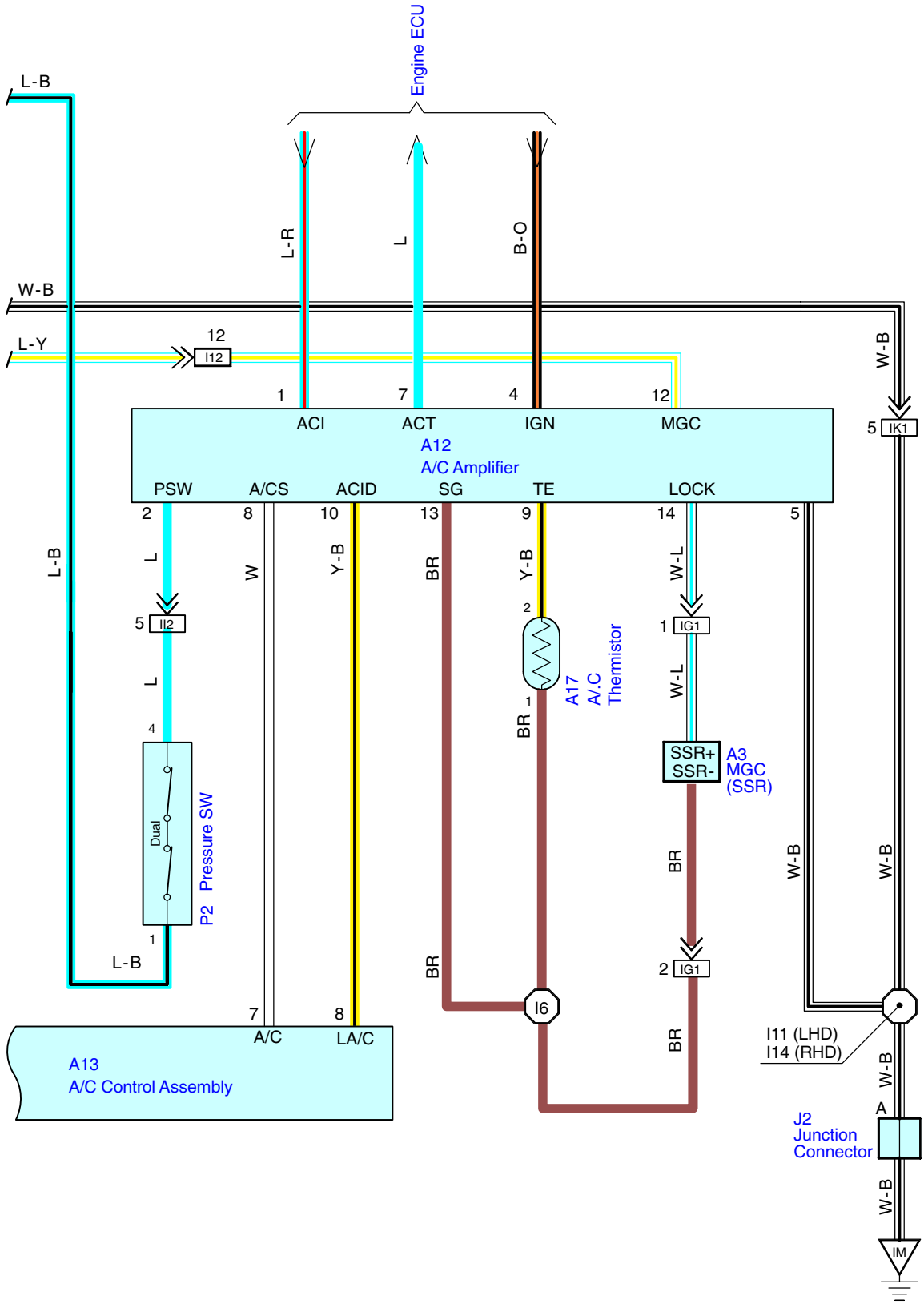
Manual Air Conditioner (1MZ-FE)



Manual Air Conditioner (1MZ-FE)



Manual Air Conditioner (1MZ-FE)



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	31 (LHD 1MZ-FE)	B4	35 (LHD)	J10 B	36 (LHD)
	40 (RHD 1MZ-FE)		44 (RHD)		45 (RHD)
A12	35 (LHD)	B5	35 (LHD)	P2	32 (LHD)
	44 (RHD)		44 (RHD)		41 (RHD)
A13	35 (LHD)	B6	35 (LHD)		
	44 (RHD)		44 (RHD)		
A17	35 (LHD)	J2	36 (LHD)		
	44 (RHD)		45 (RHD)		
A21	35 (LHD)	J5	36 (LHD)		
	44 (RHD)		45 (RHD)		
B3	35 (LHD)	J9 A	36 (LHD)		
	44 (RHD)		45 (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	54 (LHD)	Engine Room and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	
II2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
II3	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1	54 (LHD)	Instrument Panel Wire and Instrument Panel No. 3 Wire (Behind Glove Box)
	65 (RHD)	

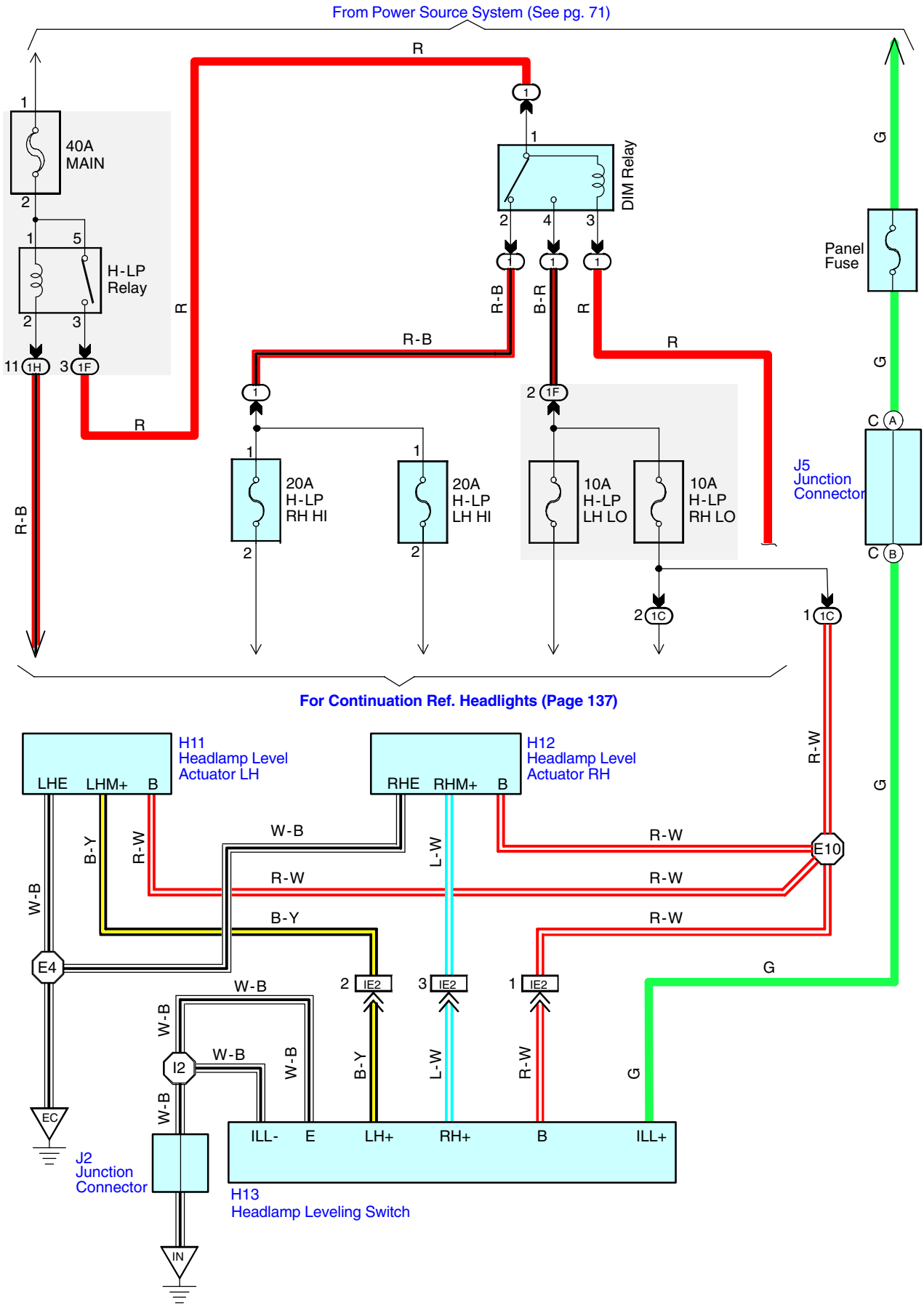
: Ground Points

Code	See Page	Ground Points Location
EC	49 (LHD 1MZ-FE)	Left Fender
	60 (RHD 1MZ-FE)	
II	52 (LHD)	Instrument Panel Reinforcement LH
	63 (RHD)	
IM	52 (LHD)	Instrument Panel Reinforcement RH
	63 (RHD)	

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	49 (LHD)	Engine Wire	I11	54 (LHD)	Instrument Panel Wire
I6	54 (LHD)	Instrument Panel Wire	I14	65 (RHD)	A/C Sub Wire

Headlamp Leveling System (LHD)



Headlamp Leveling System (LHD)

Service Hints

Headlamp Leveling SW & Actuators

B-Ground : Approx. 12 volts with light SW in low beam position

: Parts Location

Code	See Page	Code	See Page	Code	See Page
H11	31 (1MZ-FE) 33 (2AZ-FE)	H13	35	J5	36
H12	31 (1MZ-FE) 33 (2AZ-FE)	J2	36		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	22	Engine Room R/B
1C	25	
1F		
1H		

: Connector Joining Wire Harness and Wire Harness

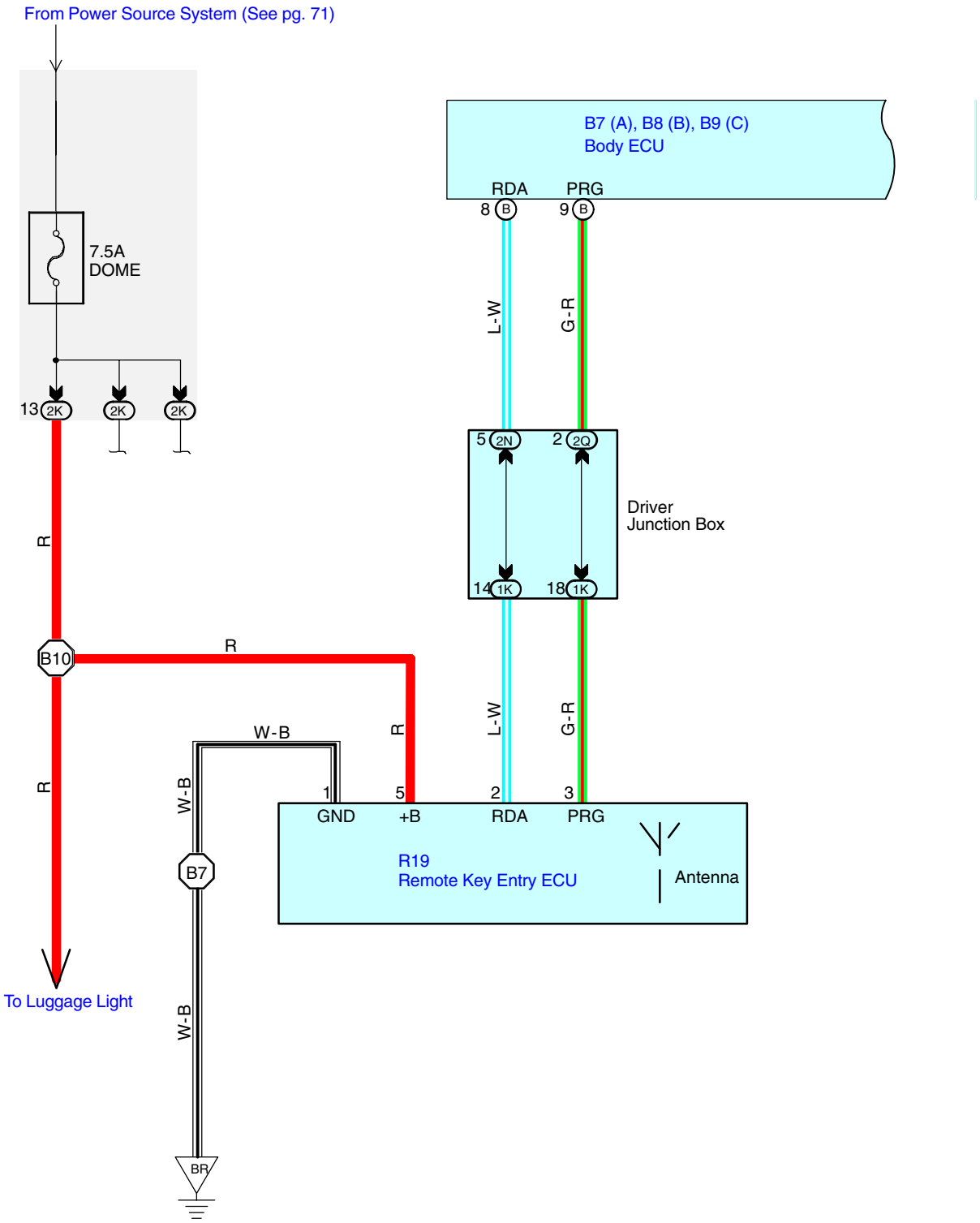
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE2	63	Engine Room Main Wire and Instrument Panel Wire (Right Side of Steering Column)

: Ground Points

Code	See Page	Ground Points Location
IN	52 (LHD)	Instrument Panel Brace RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E4	49 (1MZ-FE)	Engine Room Main Wire	E10	54	Instrument Panel Wire
	51 (2AZ-FE)		I2	54	


From Power Source System (See pg. 71)
7.5A
DOME
13
2K
2K
2K
B7 (A), B8 (B), B9 (C)
Body ECU
RDA
PRG
8
B
9
B
L-W
G-R
5
2N
2
2Q
Driver
Junction Box
14
1K
18
1K
R
B10
R
R
W-B
R
L-W
G-R
W-B
1
5
2
3
GND
+B
RDA
PRG
R19
Remote Key Entry ECU
Antenna
B7
To Luggage Light
W-B
BR

Service Hints

Body ECU

+B - Ground : Always continuity

GND - Ground : Always approx. 12 volts

: Parts Location

Code		See Page	Code	See Page	Code	See Page
B7	A	44				
B8	B	44				
B9	C	44				
R19		44				

: 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)
2K	26	Instrument Panel Wire and Driver Side J/B

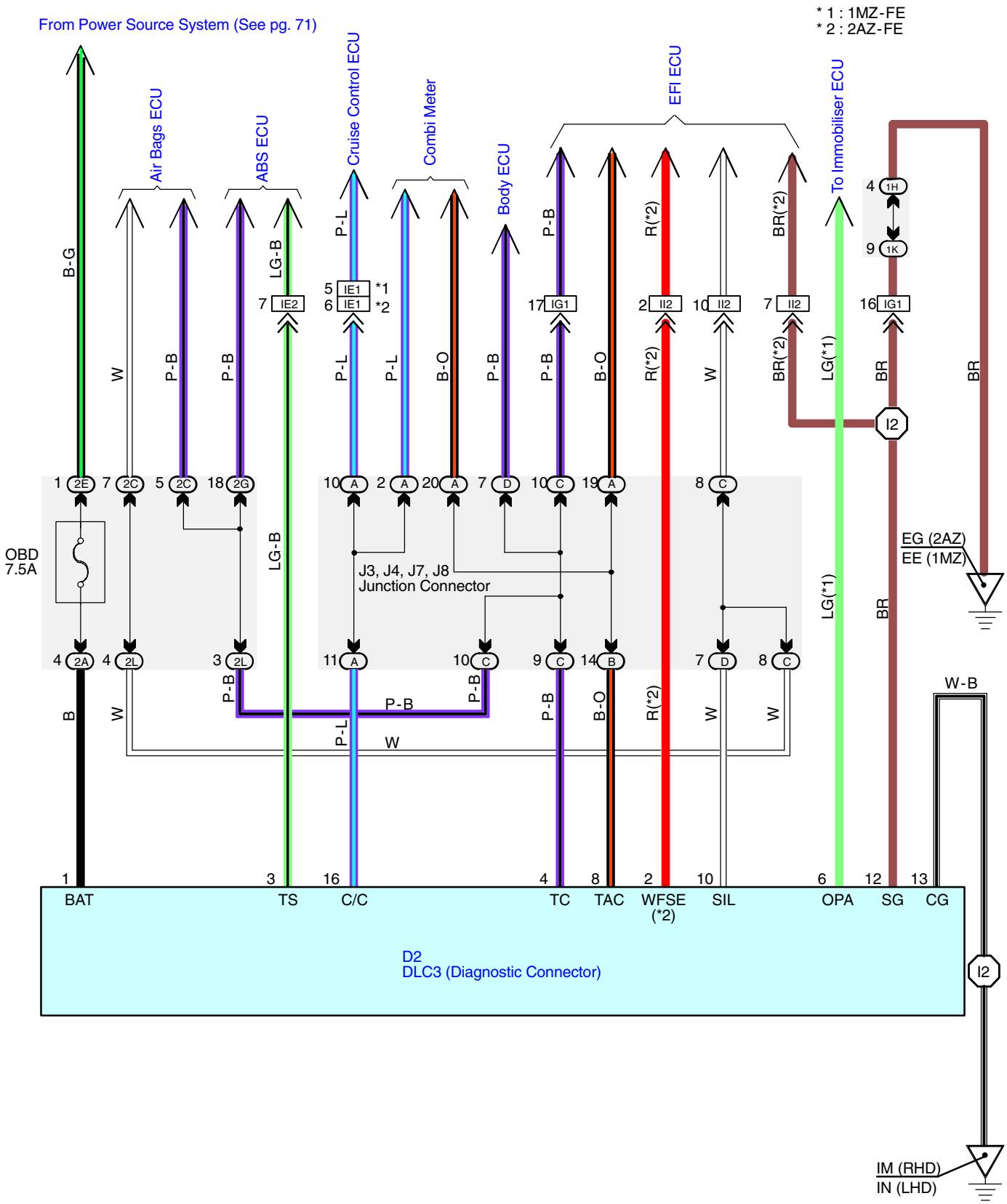
: Ground Points

Code	See Page	Ground Points Location
BR	67	Right Fender

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	67	Engine Room Main Wire			
B10					

DLC3 (Diagnostic Connector)



DLC3 (Diagnostic Connector)

Service Hints

D2 DLC3

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
D2		35 (LHD)	J4	B	36 (LHD)	J8	D	36 (LHD)
		44 (RHD)			45 (RHD)			45 (RHD)
J3	A	36 (LHD)	J7	C	36 (LHD)			
		45 (RHD)			45 (RHD)			

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

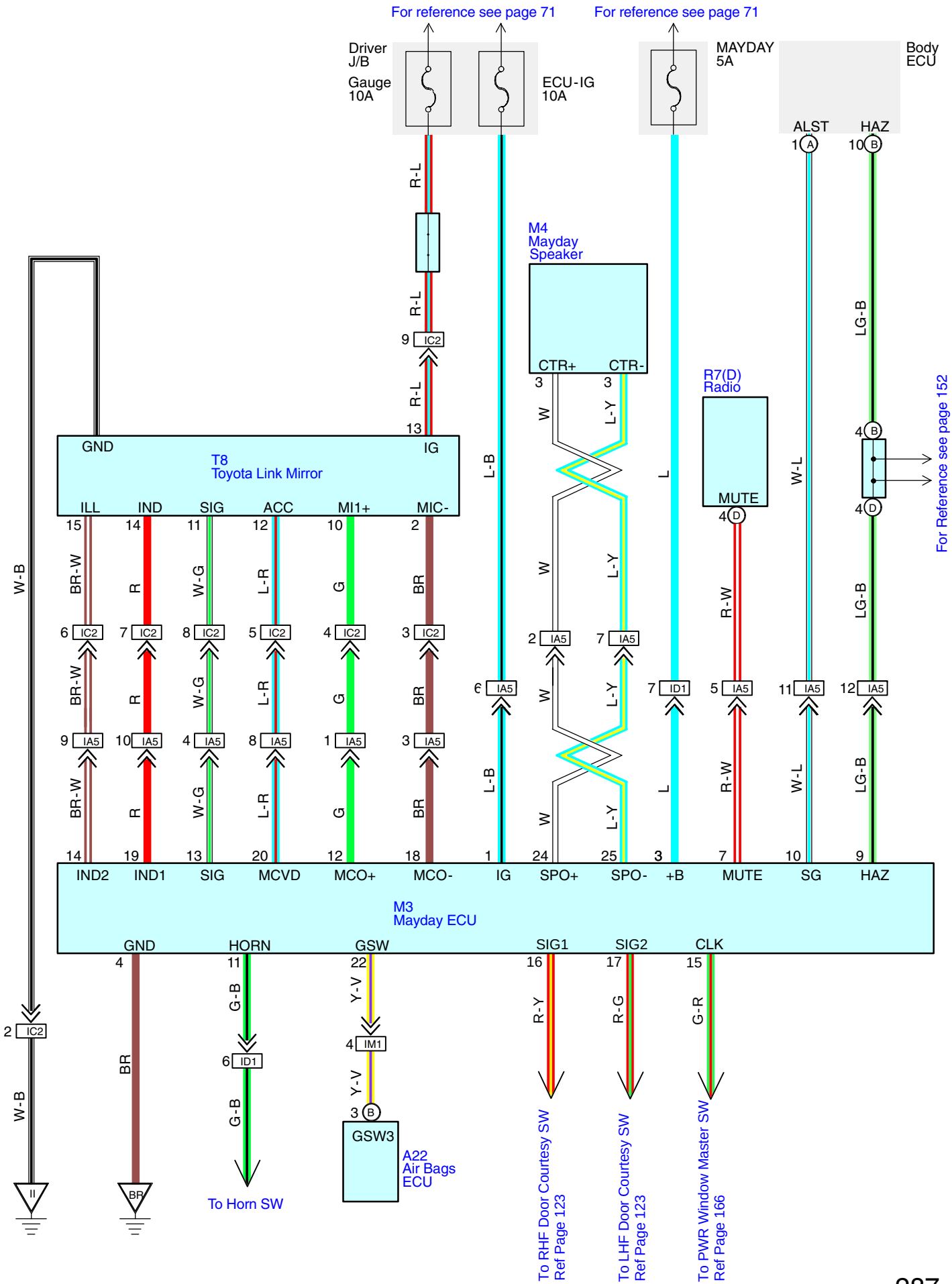
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IE2	52 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	63 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IG1	54 (LHD)	Engine Wire and Instrument Panel Wire (Behind Glove Box)
	65 (RHD)	
II2	54 (LHD)	Engine Room Main Wire and Instrument Panel Wire (Right Kick Panel)
	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)

: Ground Points

Code	See Page	Ground Points Location
EE	49 (LHD 1MZ-FE)	Engine Wire and Sensor Wire (Left Fender)
	60 (RHD 1MZ-FE)	
EG	51 (LHD 2AZ-FE)	Engine Wire and Sensor Wire (Left Fender)
	62 (RHD 2AZ-FE)	
IM	52 (LHD)	
	63 (RHD)	
IN	52 (LHD)	
	63 (RHD)	Instrument Panel Reinforcement RH

: Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	54 (LHD)				


For reference see page 71
For reference see page 71
Driver J/B
Gauge 10A
ECU-IG 10A
MAYDAY 5A
Body ECU
ALST
HAZ
M4 Mayday Speaker
CTR+
CTR-
R7(D) Radio
MUTE
For Reference see page 152
GND
T8 Toyota Link Mirror
IG
ILL
IND
SIG
ACC
MI1+
MIC-
W-B
BR-W
R
W-G
L-R
G
BR
R-L
L-B
W
L-Y
L
R-W
W-L
LG-B
IC2
IA5
ID1
IND2
IND1
SIG
MCVD
MCO+
MCO-
IG
SPO+
SPO-
+B
MUTE
SG
HAZ
M3 Mayday ECU
GND
HORN
GSW
SIG1
SIG2
CLK
G-B
Y-V
R-Y
R-G
G-R
IM1
GSW3
A22 Air Bags ECU
To Horn SW
To RHF Door Courtesy SW Ref Page 123
To LHF Door Courtesy SW Ref Page 123
To PWR Window Master SW Ref Page 166

Service Hints

M3 Mayday ECU

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

+B - Ground: Approx. 12 volts at all times

T8 Telematics Mirror

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page
M3		T8		A22	44
M4		R7 D	45 (RHD)	J6	
				J12	

: 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)
2C	26	
2G	26	
2L	27	

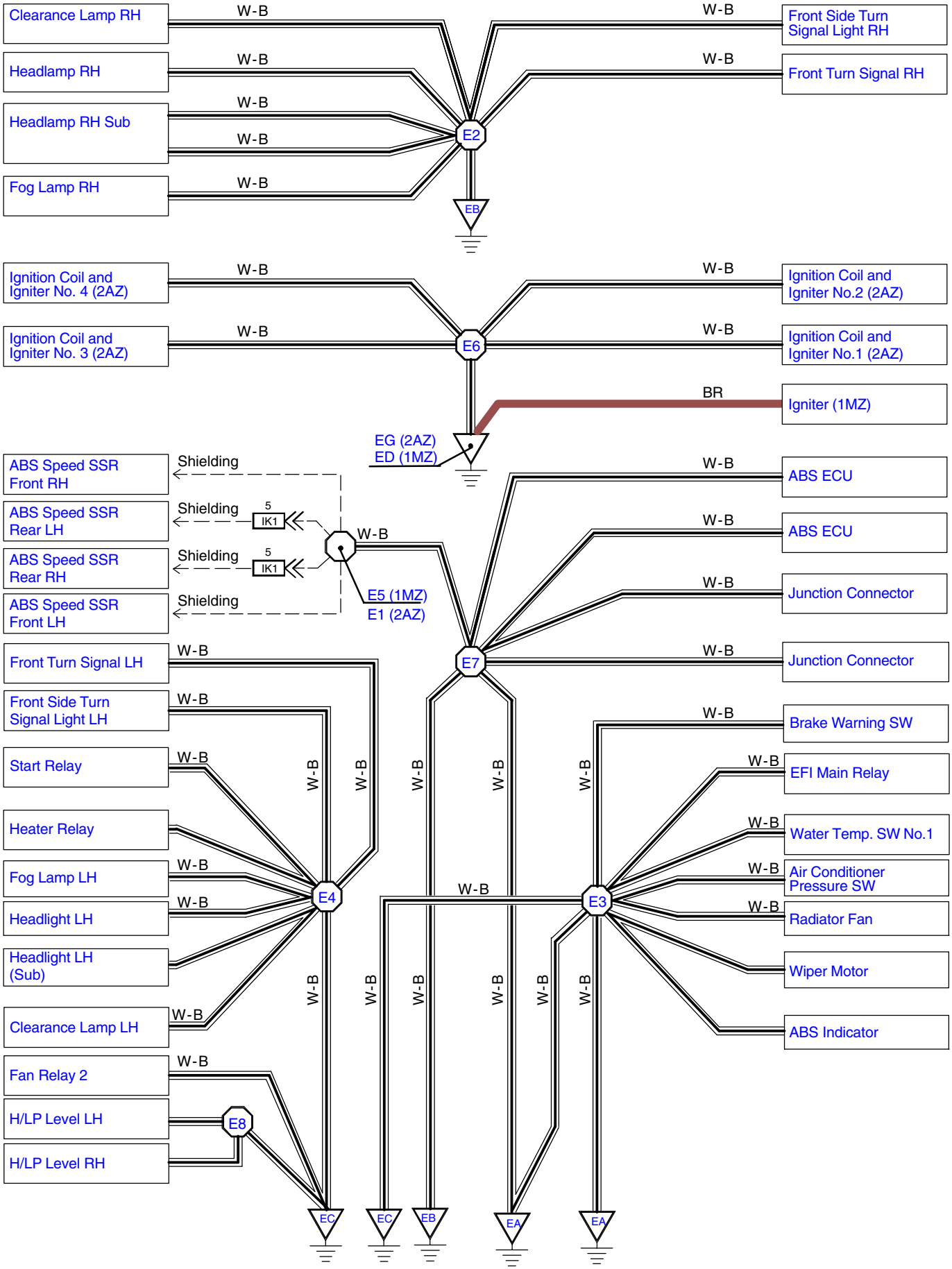
: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA5	63 (RHD)	Instrument Panel Wire (LH Kick Panel & Floor Wire)
IC2	63 (RHD)	Instrument Panel Wire and Roof Wire (LH Front Pillar)
ID1	63 (RHD)	Engine Room Main Wire and Floor Wire (Left Kick Panel)
II2	65 (RHD)	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IM1		

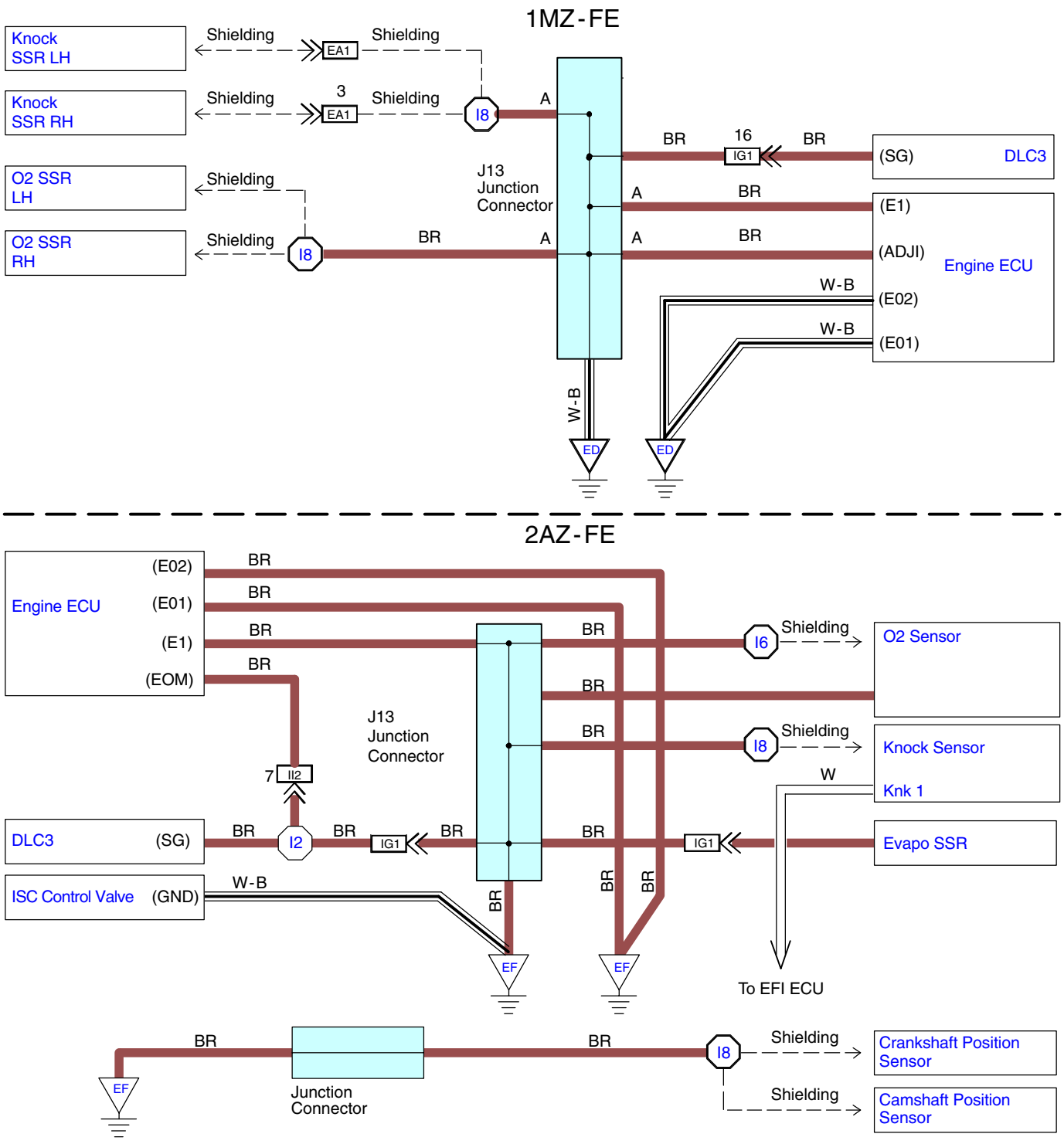
: Ground Points

Code	See Page	Ground Points Location
BR	67	Front Side of Rear Quarter Wheel House LH
II	63	Instrument Panel Reinforcement LH

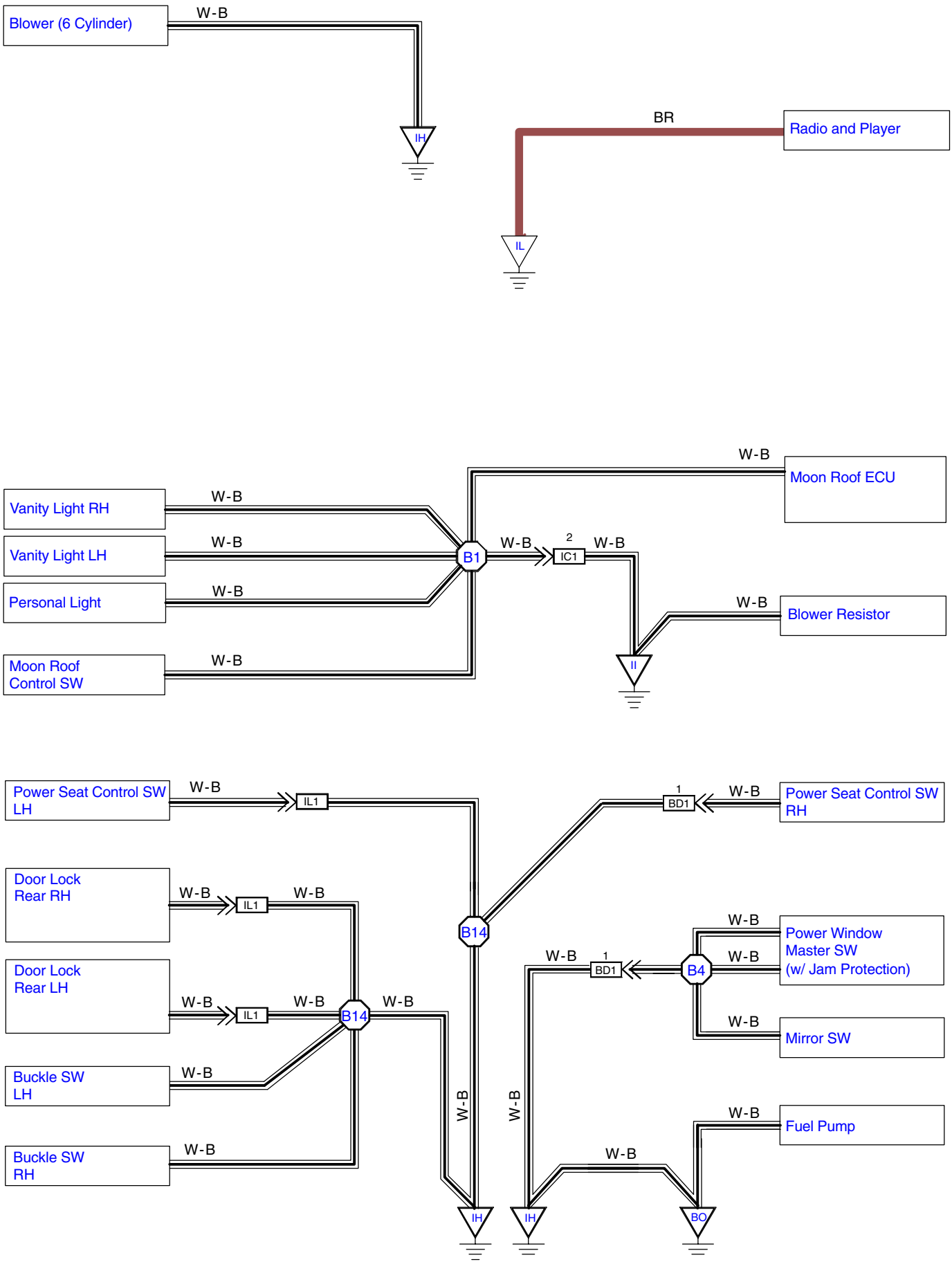
GROUND POINTS (Engine Compartment)(LHD)



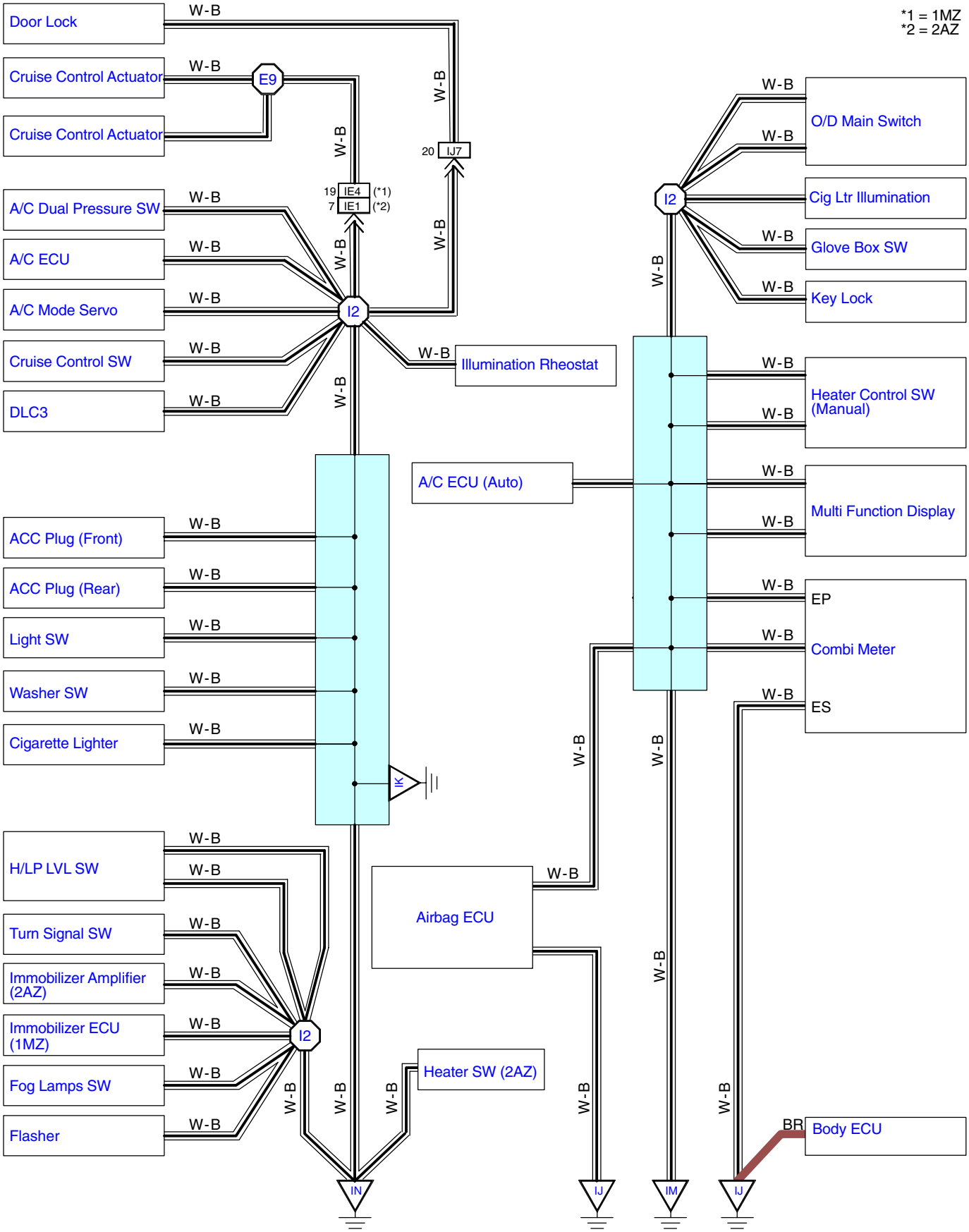
GROUND POINTS (Engine Compartment)(LHD)



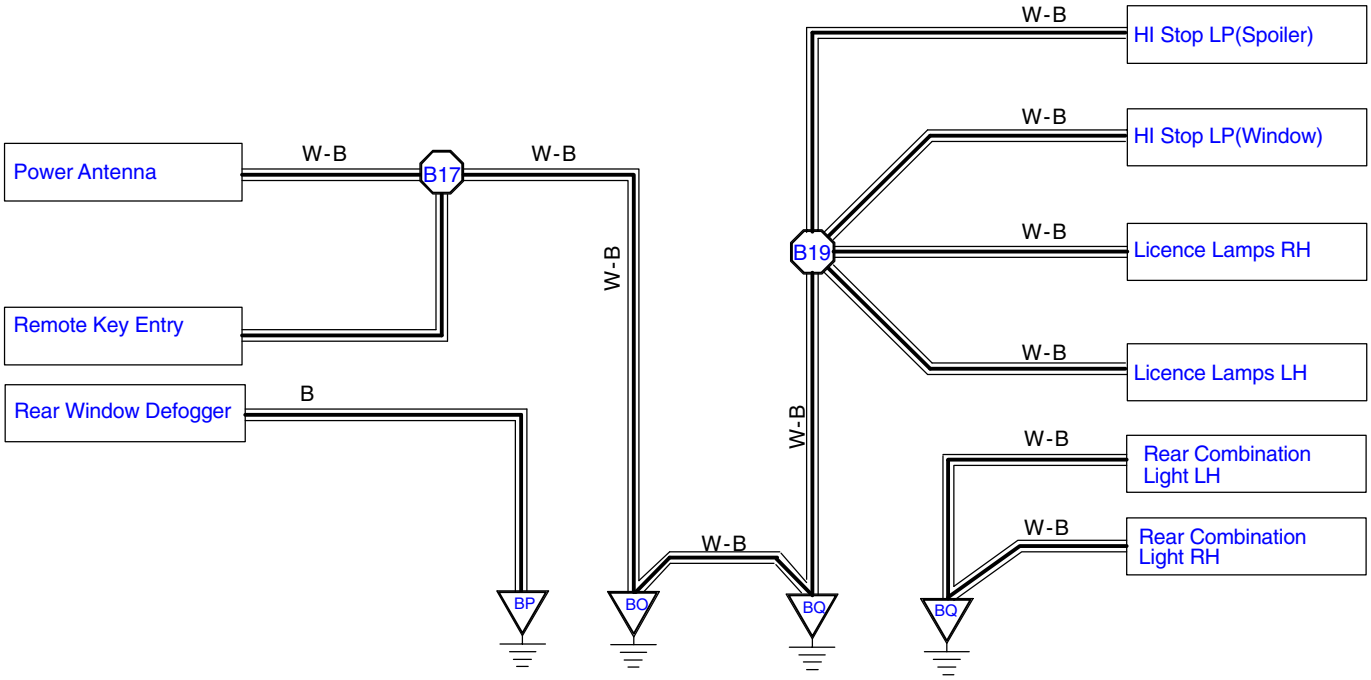
GROUND POINTS (Passenger Compartment)(LHD)



GROUND POINTS (Passenger Compartment)(LHD)



GROUND POINTS (Luggage Compartment)(LHD)



GROUND POINTS (LHD)

○ : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
J2	36	J6	36		
J5	36	J13	36		

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	76	Rear Door LH Wire and Floor No.2 Wire (Left Center Pillar)
BB1	76	Rear Door RH Wire and Floor Wire (Right Center Pillar)
BC1	69	Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat)
BD1	58	Seat number 1 and 2 Wires RH
EA1	68 (1MZ-FE) 65(2AZ-FE)	Engine Room Main Wire and Engine Room No.2 Wire (Radiator Side Support LH)
IB2	63	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	63	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
ID1	63	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE1	72	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
IE4	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	65	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II2		Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IJ7		
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)

▽ : **Ground Points**

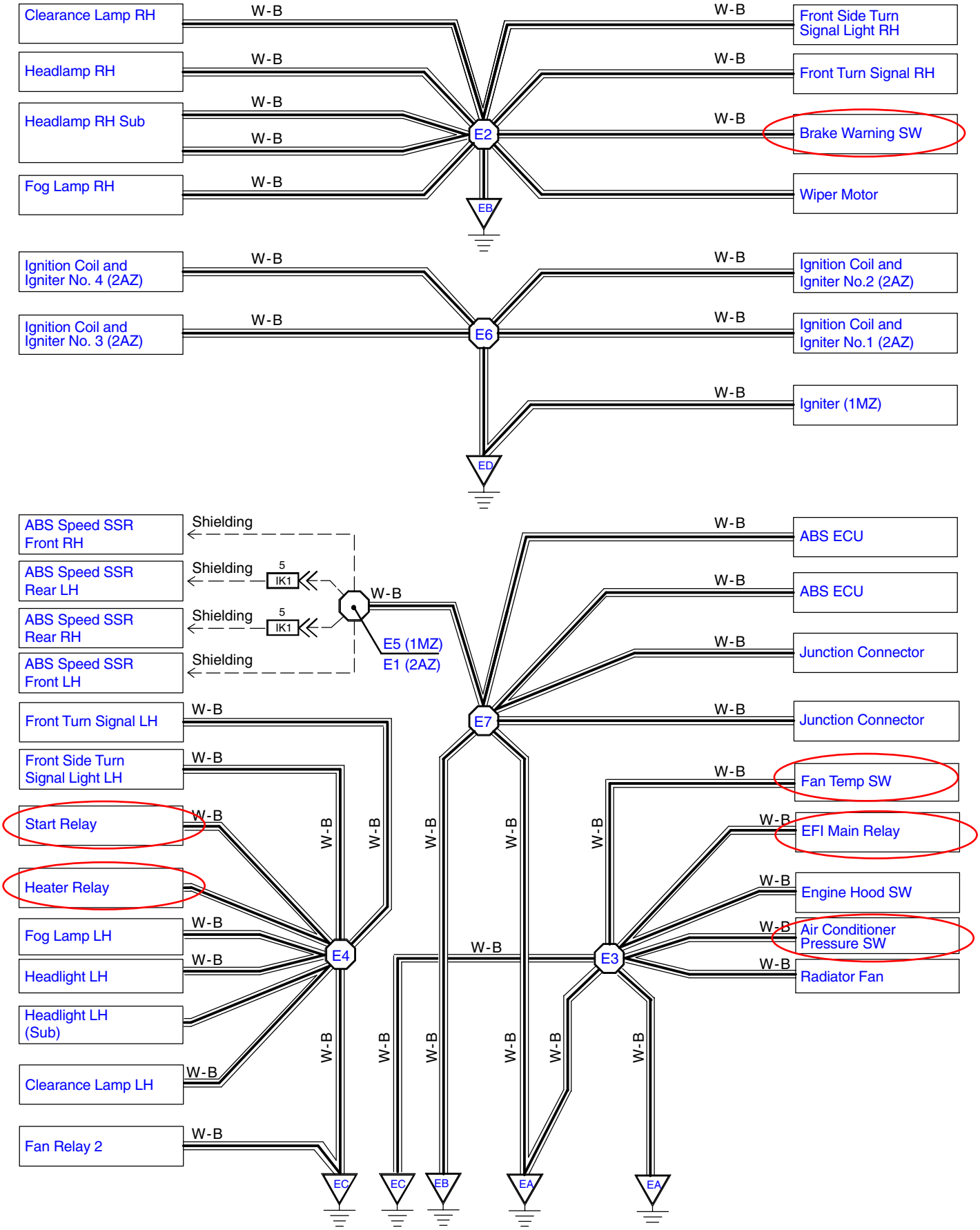
Code	See Page	Ground Points Location
EA	49 (1MZ-FE) 51 (2AZ-FE)	Right Fender
EB	49 (1MZ-FE) 51 (2AZ-FE)	
EC	49 (1MZ-FE)	Left Fender
ED	49 (1MZ-FE)	
EE	49 (1MZ-FE)	Surge Tank RH
EF	49 (2AZ-FE)	Rear Side of Surge Tank
EG	51 (2AZ-FE)	Left Side of Cylinder Head
IH	54	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II	52	Instrument Panel Reinforcement LH
IJ		
IK	52	Instrument Panel Brace LH
IL	52	Instrument Panel Brace RH
IM		
IN	52	Instrument Panel Reinforcement RH
BO	56	Under the Front Passenger's Seat
BP	56	Under the Driver's Seat
BQ	56	Front Side of Rear Quarter Wheel House LH
BR	56	Front Side of Rear Quarter Wheel House RH

GROUND POINTS (LHD)

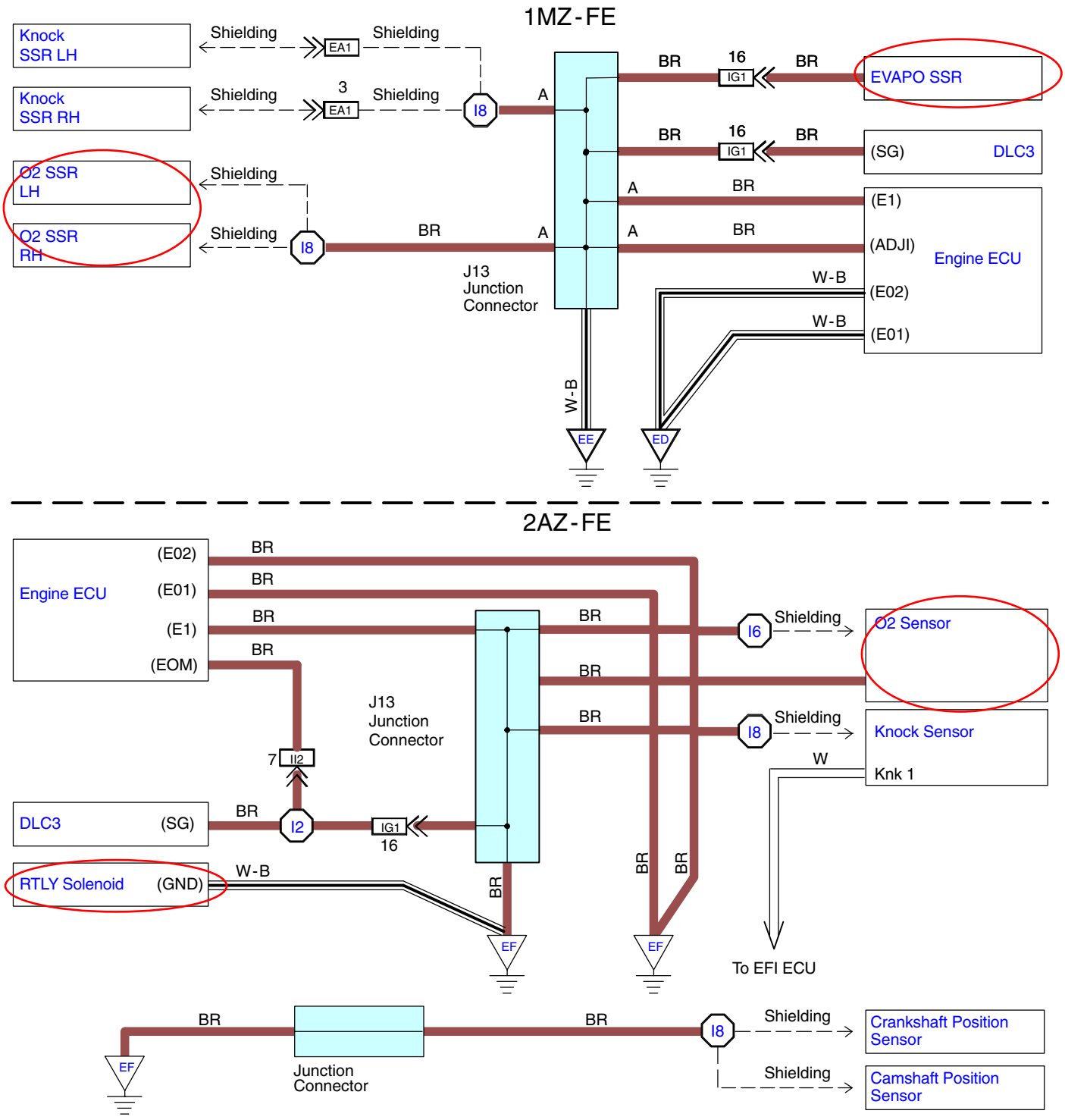
: **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	56	Roof Wire	E5	51 (2AZ-FE)	Engine Wire
B2	56	Front Door LH Wire	E6	51 (2AZ-FE)	
B4	56	Instrument Panel	E7	49 (1MZ-FE)	Engine Room Wire
B14	56	Front Seat LH Wire		51 (2AZ-FE)	
B15	56	Front Seat RH Wire	I2	54	Engine Room Main
B17	56	Floor Wire No. 2	I6	54	Engine Wire
B19	56		I8	54	Instrument Panel
E1	49 (1MZ-FE)	Engine Room Wire	I10	54	
	51 (2AZ-FE)		I11	54	
E2	49 (1MZ-FE)	Engine Room Wire			
	51 (2AZ-FE)				
E3	49 (1MZ-FE)	Engine Room Wire			
	51 (2AZ-FE)				

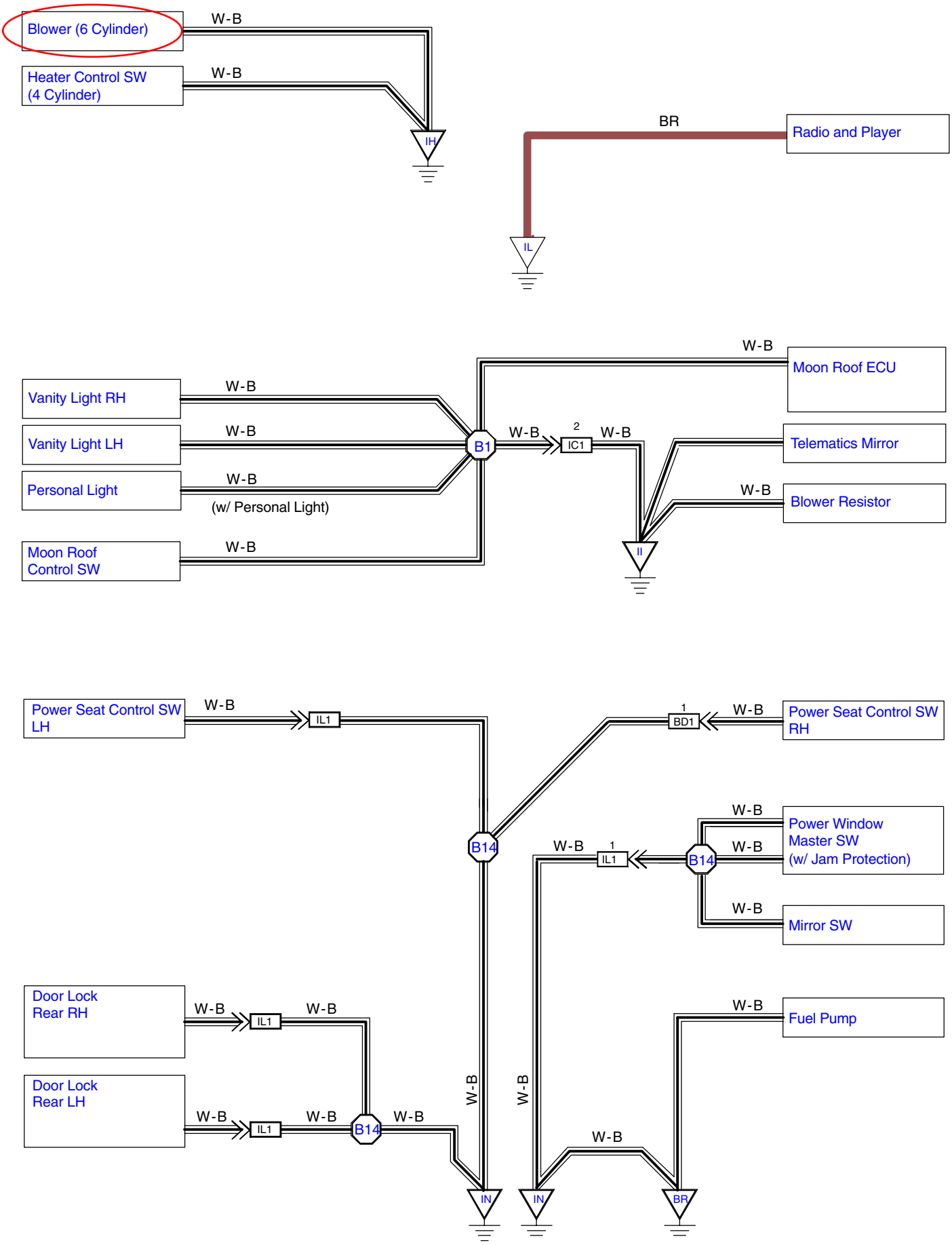
GROUND POINTS (Engine Compartment)(RHD)



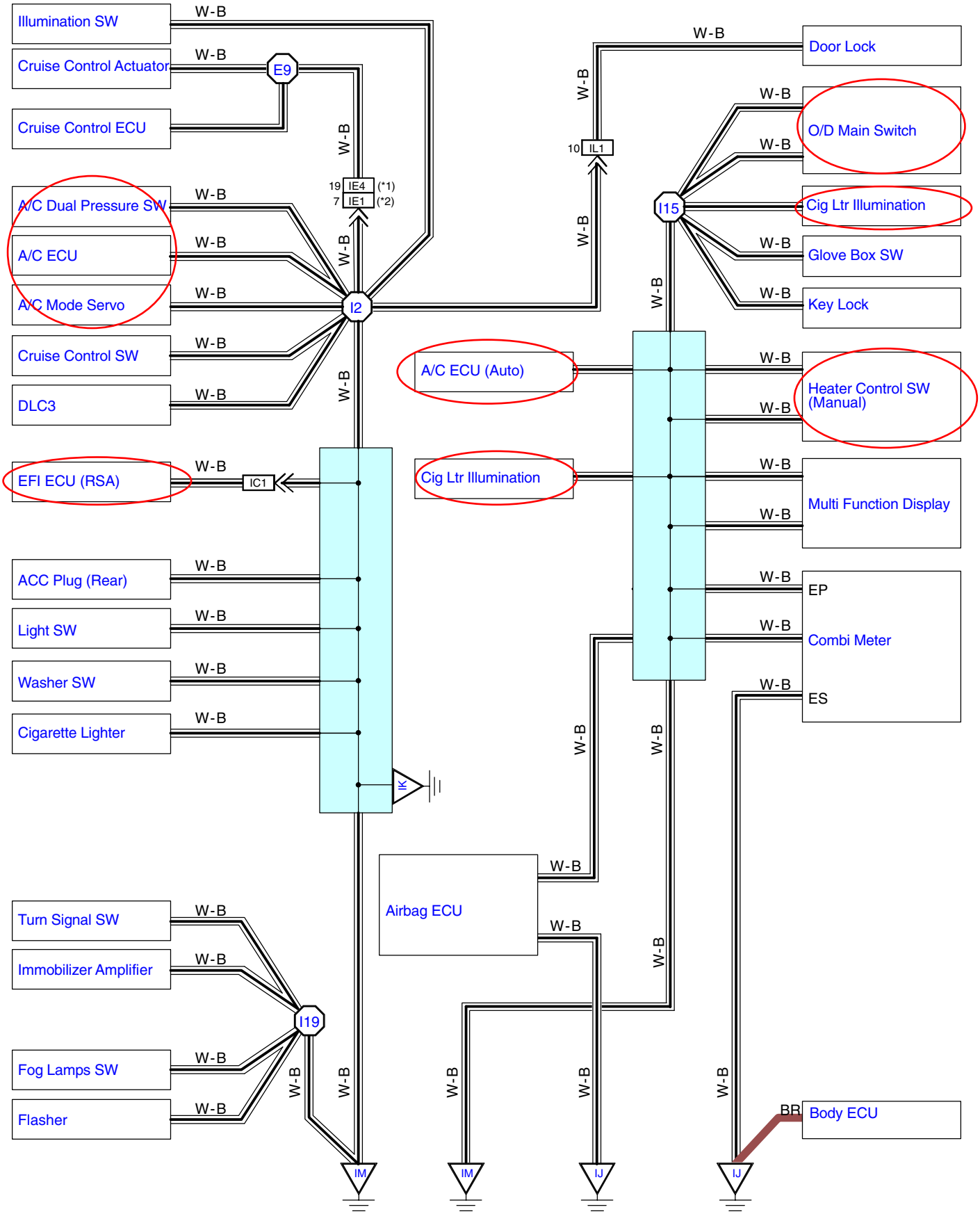
GROUND POINTS (Engine Compartment)(RHD)



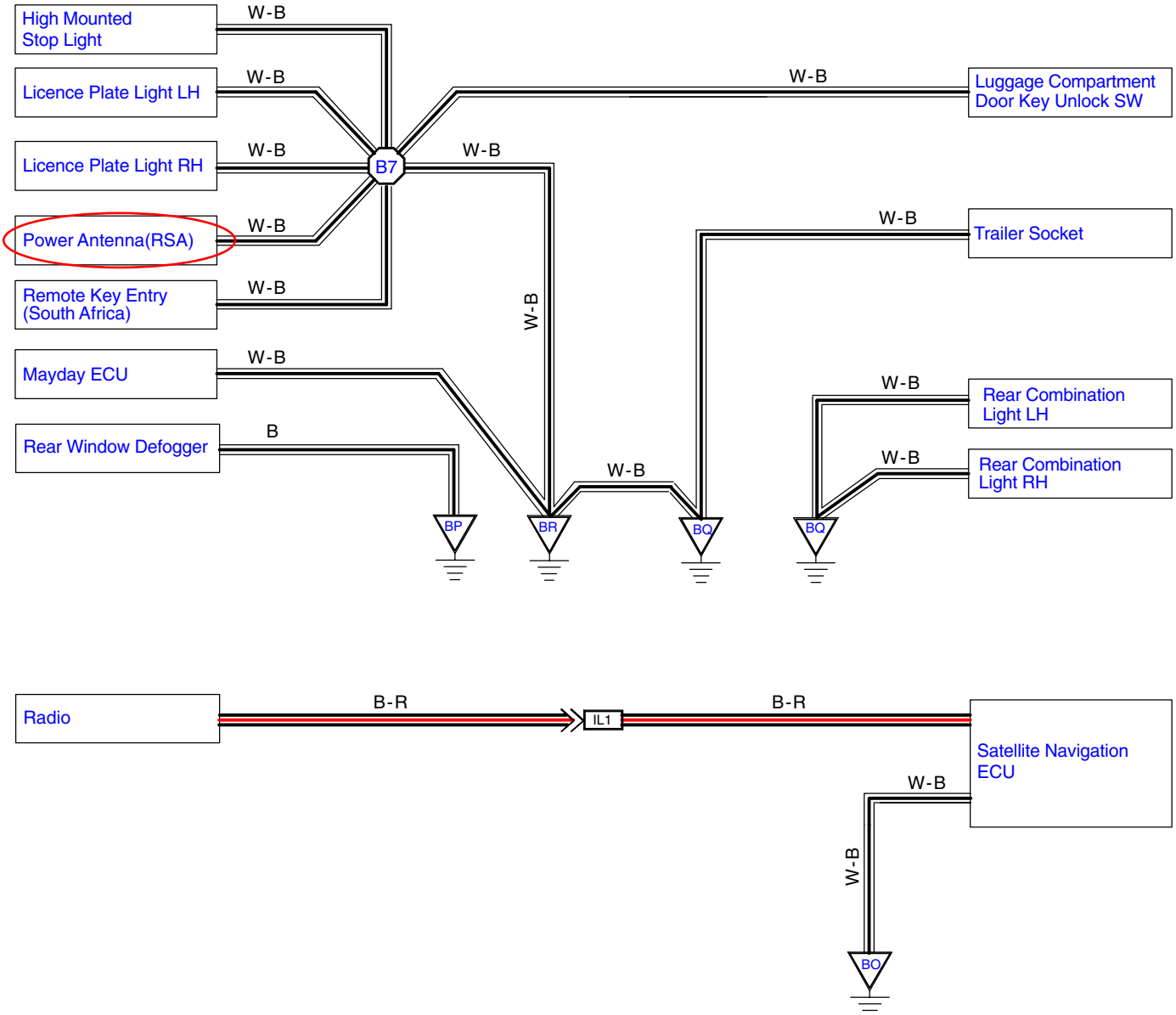
GROUND POINTS (Passenger Compartment)(RHD)



GROUND POINTS (Passenger Compartment)(RHD)



GROUND POINTS (Luggage Compartment)(RHD)



GROUND POINTS (RHD)

: Parts Location

Code	See Page	Code	See Page	Code	See Page
J2	45	J6	45		
J5	45	J13	45		

: 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	27	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2D		
2M	29	
2R		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
BA1	76	Rear Door LH Wire and Floor No.2 Wire (Left Centre Pillar)
BB1	76	Rear Door RH Wire and Floor Wire (Right Centre Pillar)
BC1	69	Floor Wire and Seat No.1 Wire (Under the Front Passenger's Seat)
BD1	58	Seat number 1 and 2 Wires RH
EA1	68 (1MZ-FE)	Engine Room Main Wire and Engine Room No.2 Wire (Radiator Side Support LH)
	70 (2AZ-FE)	
IB2	63	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	63	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
ID1	63	Engine Room Main Wire and Floor Wire (Right Kick Panel)
IE1	72	Instrument Panel Wire and Roof Wire (Inside of Front Right Pillar)
IE4	63	Engine Room Main Wire and Instrument Panel Wire (Left Side of Steering Column Tube)
IG1	65	Engine Wire and Instrument Panel Wire (Behind Glove Box)
II2	65	Engine Room Main Wire and Instrument Panel Wire (Left Kick Panel)
IK1	65	Instrument Panel Wire and Instrument Panel No.3 Wire (Instrument Panel Brace RH)
IL1	65	Front Door RH Wire and Floor Wire (Right Kick Panel)

GROUND POINTS (RHD)

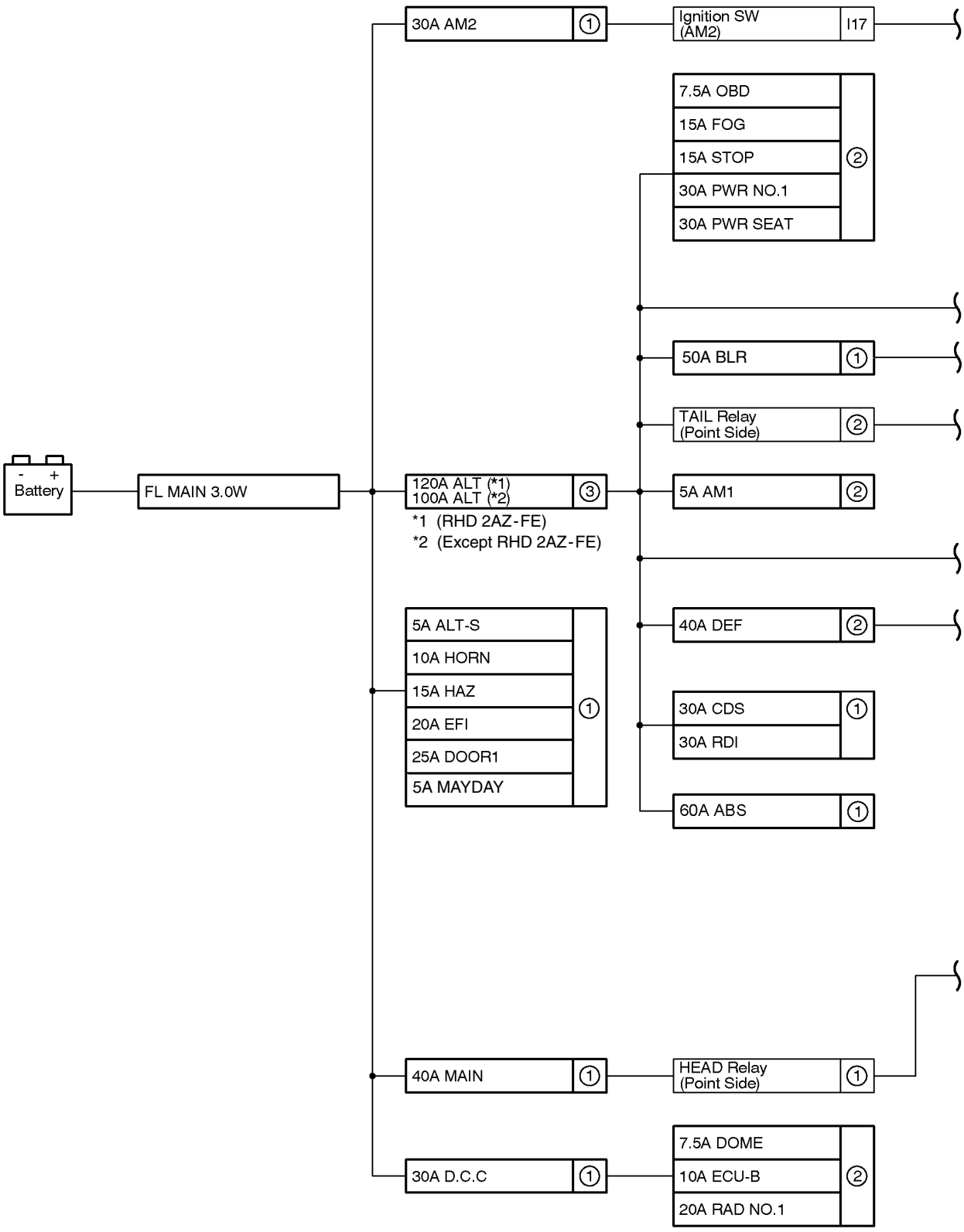
▽ : **Ground Points**

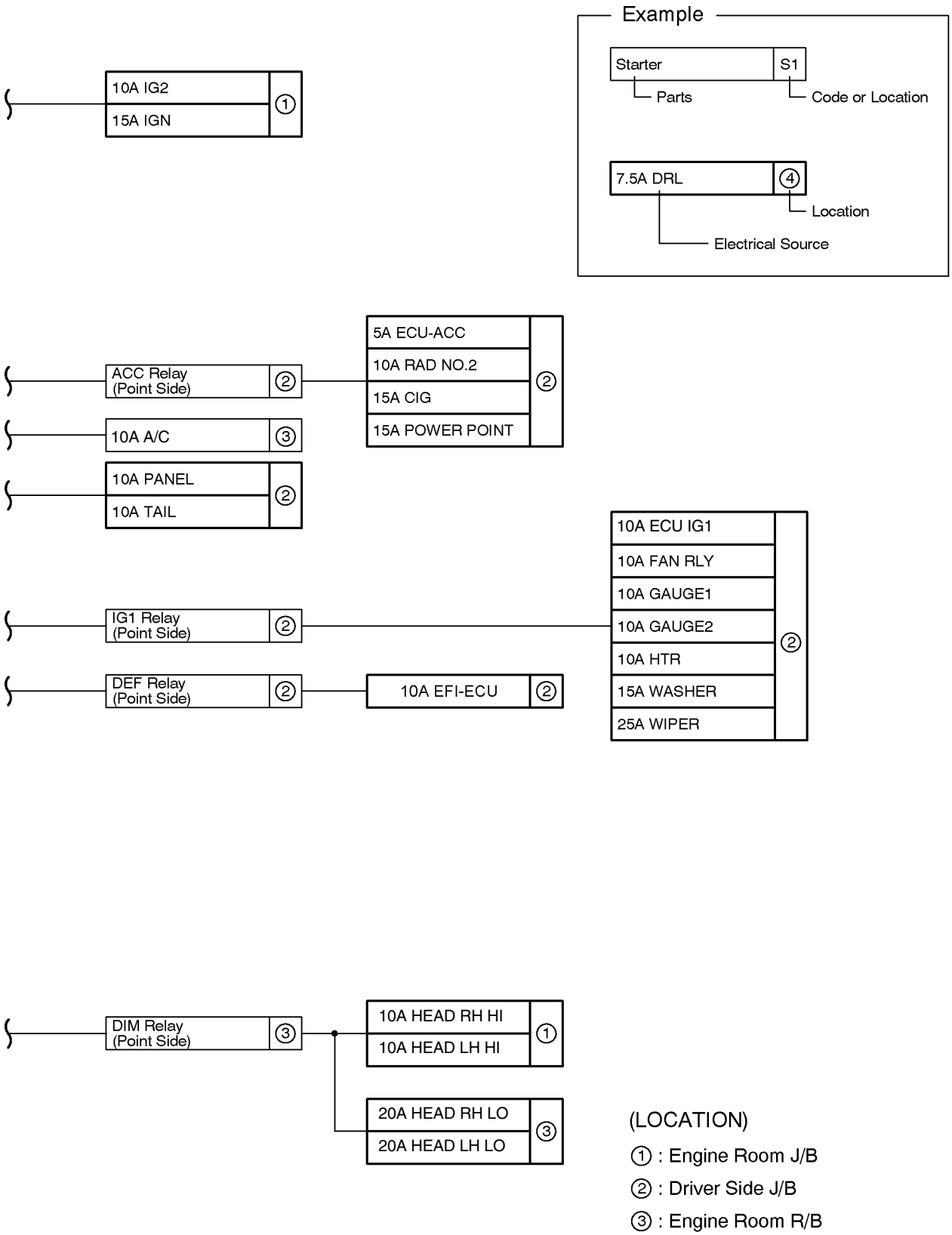
Code	See Page	Ground Points Location
EA	60 (1MZ-FE)	Right Fender
	62 (2AZ-FE)	
EB	60 (1MZ-FE)	
	62 (2AZ-FE)	
EC	60 (1MZ-FE)	Left Fender
ED	60 (1MZ-FE)	
EE	60 (1MZ-FE)	Surge Tank RH
EF	60 (2AZ-FE)	Rear Side of Surge Tank
EG	62 (2AZ-FE)	Left Side of Cylinder Head
IH	65	Instrument Panel Wire and Instrument Panel No.3 Wire (Behind Glove Box)
II	63	Instrument Panel Reinforcement LH
IJ		
IK	63	Instrument Panel Brace LH
IL	63	Instrument Panel Brace RH
IM		
IN	63	Instrument Panel Reinforcement RH
BO	67	Under the Front Passenger's Seat
BP	67	Under the Driver's Seat
BQ	67	Front Side of Rear Quarter Wheel House LH
BR	67	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	67	Roof Wire	E3	60 (1MZ-FE)	Engine Room Main Wire
B2	67	Front Door LH Wire		62 (2AZ-FE)	
B3	67	Front Door RH Wire	E6	60 (1MZ-FE)	Engine Room Main Wire
B4	67	Floor Wire		62 (2AZ-FE)	Engine Room Main Wire
B7	67	Floor Wire No. 2	I2	65	Instrument Panel Wire
B8	67	Floor Wire	I6	65	Instrument Panel Wire
B12	67	Rear Door LH Wire	I8	65	
B13	67	Rear Door RH Wire	I14	65	
B14	67	Front Seat LH Wire	I15	65	
E1	60 (1MZ-FE)	Engine Room Main Wire	I19	65	
	62 (2AZ-FE)				
E2	60 (1MZ-FE)	Engine Room Main Wire			
	62 (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
10A A/C
3
10A PANEL
10A TAIL
2
5A ECU-ACC
10A RAD NO.2
15A CIG
15A POWER POINT
2
IG1 Relay (Point Side)
2
DEF Relay (Point Side)
2
10A EFI-ECU
2
10A ECU IG1
10A FAN RLY
10A GAUGE1
10A GAUGE2
10A HTR
15A WASHER
25A WIPER
2
DIM Relay (Point Side)
3
10A HEAD RH HI
10A HEAD LH HI
1
20A HEAD RH LO
20A HEAD LH LO
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
5A	ALT	Charging
10A	H-LP RH LO	Headlight
10A	H-LP LH LO	Headlight
10A	HORN	Horn
10A	IG2	ABS Charging Combination Meter Engine Control (1MZ-FE) Engine Control (2AZ-FE) Engine Immobiliser (1MZ-FE)
15A	HAZ	Turn Signal and Hazard Warning Light
15A	IGN	Engine Control (1MZ-FE) Engine Control (2AZ-FE) Starting and Ignition (1MZ-FE) Starting and Ignition (2AZ-FE)
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)
25A	DOOR1	Door Lock Control (LHD) Door Lock Control (RHD) Remote Key Entry (SA) Security Horn
30A	AM2	Starting and Ignition (1MZ-FE) Starting and Ignition (2AZ-FE)
30A	CDS	Radiator Fan and Condenser Fan
30A	RAD FAN	Radiator Fan and Condenser Fan
40A	MAIN	Headlight Headlamp Level Actuators (LHD)
50A	BLR	Automatic Air Conditioner Manual Air Conditioner (2AZ-FE) Manual Air Conditioner (1MZ-FE)
5A	MAYDAY	Mayday ECU

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

Driver Side J/B (See Page 26)

Fuse		System
5A	AM1	Power Outlet Engine Control (1MZ-FE) Engine Control (2AZ-FE) Starting and Ignition (1MZ-FE) Starting and Ignition (2AZ-FE)
5A	ECU-ACC	Multi Function Display Multiplex Communication System (LHD) Multiplex Communication System (RHD) Remote Control Mirror
30A	D.C.C.	Engine Immobiliser (1MZ-FE)
7.5A	DOME	Interior Light Door Lock Control (RHD) Door Lock Control (LHD) Multiplex Communication System (LHD) Multiplex Communication System (RHD) Multi Function Display Remote Key Entry (South Africa)
7.5A	OBD	Engine Control (1MZ-FE) Engine Control (2AZ-FE)
10A	ECU-B	Automatic Air Conditioner Combination Meter Engine Immobiliser (1MZ-FE)
10A	ECU-IG	ABS Power Window with Jam Protection SRS Mayday ECU
10A	FAN RLY	Radiator Fan and Condenser Fan
10A	GAUGE1	Charging Multi Function Display Combination Meter Turn Signals
10A	GAUGE2	Back-Up Light Cruise Control (1MZ-FE) Cruise Control (2AZ-FE) A/T Indicator (1MZ-FE) A/T Indicator (2AZ-FE) Moon Roof Rear Window Defogger Telematics Mirror

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

Fuse		System
10A	HTR	Automatic Air Conditioner Manual Air Conditioning (2AZ-FE) Manual Air Conditioning (1MZ-FE)
10A	EFI-ECU	Engine Control (1MZ-FE)
10A	PANEL	Illumination
10A	RAD NO.2	Auto Antenna Radio and Player (w/o TOYOTA Navigation System) Navigation System, Radio and Player
10A	TAIL	Engine Control (1MZ-FE) Front Fog Light Taillight
15A	CIG	Cigarette Lighter
15A	FOG	Front Fog Light
15A	POWER POINT	Power Outlet
15A	STOP	Engine Control (1MZ-FE)
		Stop Light
15A	WASHER	Washer
20A	RAD NO.1	Auto Antenna Radio and Player (w/o TOYOTA Navigation System) Navigation System, Radio and Player
25A	WIPER	Wiper
30A	PWR NO.1	Moon Roof Power Window with Jam Protection Power Window without Jam Protection
30A	PWR SEAT	Power Seat
40A	DEF	Rear Window Defogger
5A	MAYDAY	Mayday ECU

Engine Room R/B (See Page 22)

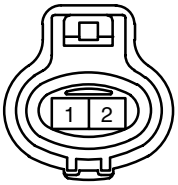
Fuse		System
20A	H-LP LH HI	Headlight
20A	H-LP RH HI	Headlight
100A	ALT (Except RHD 2AZ-FE)	Battery, Fans and Headlights
120A	ALT (RHD 2AZ-FE)	Battery, Fans and Headlights
60A	ABS	ABS
50A	BLR	Manual Air Conditioning (1MZ-FE) Manual Air Conditioning (2AZ-FE)
10A	A/C	Manual Air Conditioning (1MZ-FE) Manual Air Conditioning (2AZ-FE)
-	Fusible Link(FL Main 3.0W)	All Circuits Note:Functional Only when alternator is not charging

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

A 1
Black



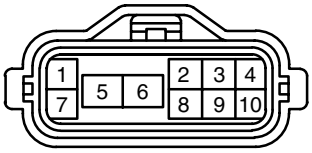
A 2
Grey



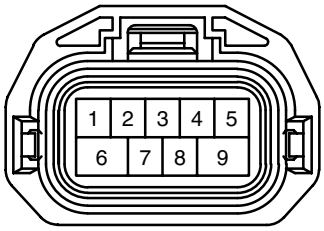
A 3
Grey



A 4
(1MZ-FE) Grey



A 4
(2AZ-FE) Grey



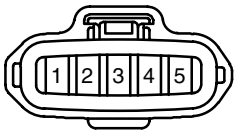
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Grey



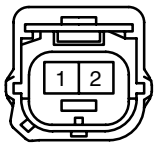
A 6
Grey



A 7
Black



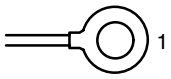
A 8
Yellow



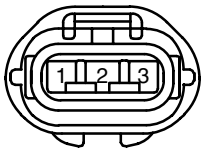
A 9
Yellow



A10



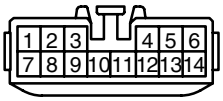
A11
(LHD 2AZ-FE) Black
(LHD 1MZ-FE) Grey



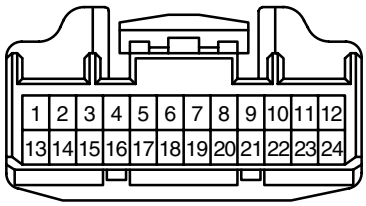
A11
(RHD ALL) Black



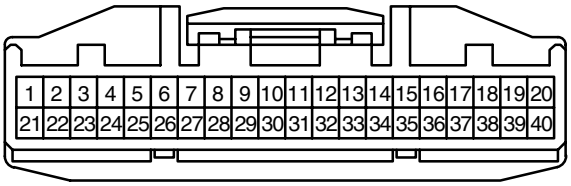
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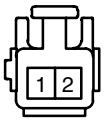
A13



A14



A15
Black



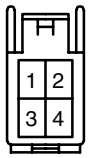
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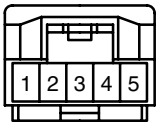
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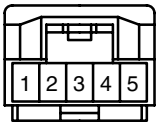
A18



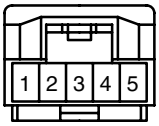
A19
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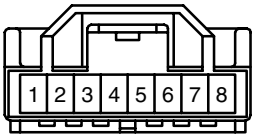
A20
Black



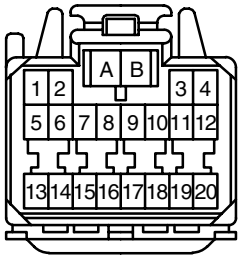
A21
(Automatic A/C) Black



A21
(Manual A/C) Black



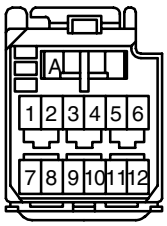
A22
(w/ Side Airbag) Yellow



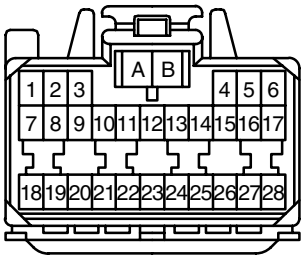
CONNECTOR LIST

*1 : w/o Side Airbag

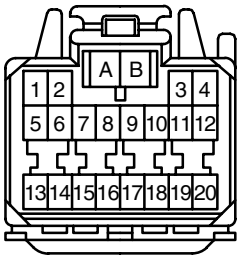
A22
(*1) Yellow



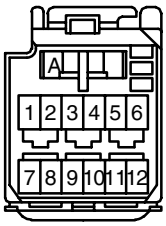
A23
Yellow



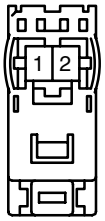
A24
(w/ Side Airbag) Yellow



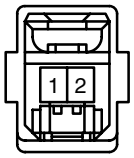
A24
(*1) Yellow



A25
Black



A26
Yellow



A27



A28
(LHD) Grey



A28
(RHD)



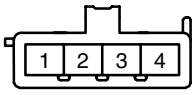
A29



A30
Blue



A31
Yellow



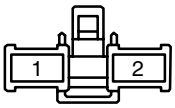
B 1
Grey



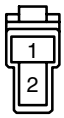
B 2
Grey



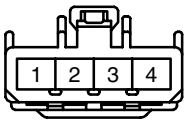
B 3
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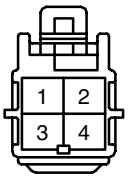
B 3
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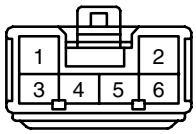
B 4
Black



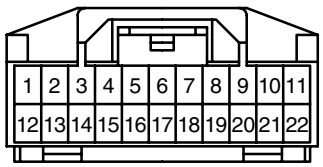
B 5
Black



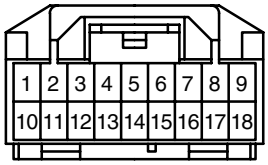
B 6



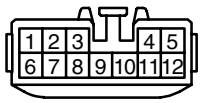
B 7



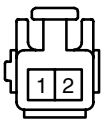
B 8



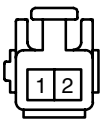
B 9



B10



B11



C 1
Black



C 2
Black



C 4
(1MZ-FE) Black



C 4
(2AZ-FE) Dark Grey

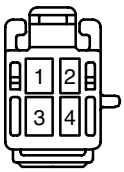


C 5
Black

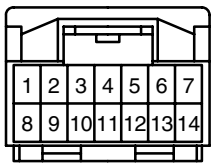


*2 : RHD
*3 : LHD

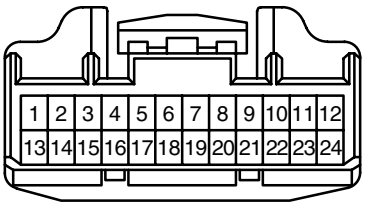
C 6



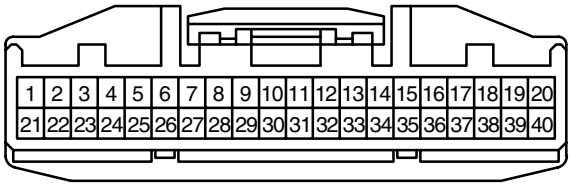
C 7
(*3)



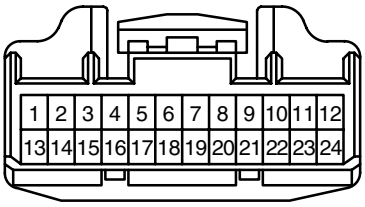
C 8



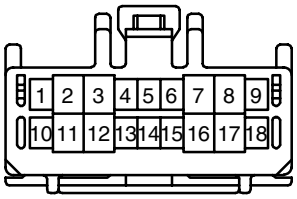
C 9



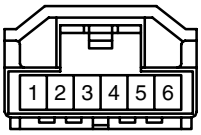
C10



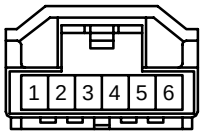
C11
Black



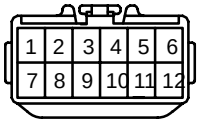
C12
(LHD)



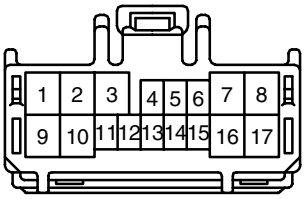
C12
(RHD) Black (w/o Strg SW)



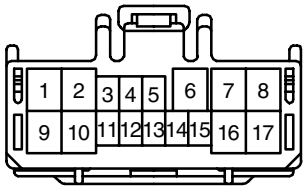
C12
(RHD) (w/ Strg SW)



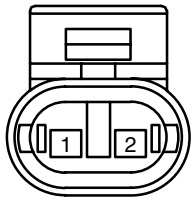
C13
(LHD)



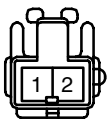
C13
(RHD) Black



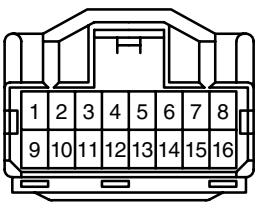
C14



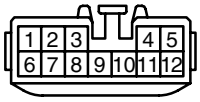
C15



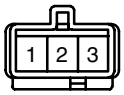
C16



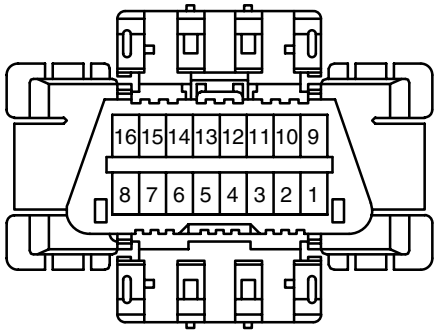
C17



D 1
Grey



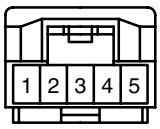
D 2



CONNECTOR LIST

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

D 3



D 4



D 5



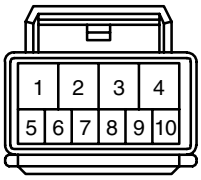
D 6



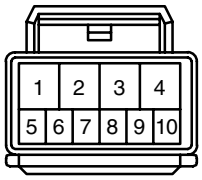
D 7



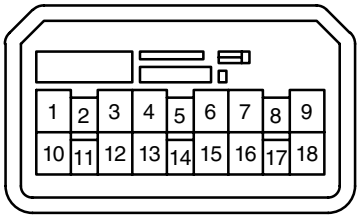
D 8



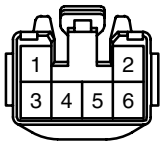
D 9



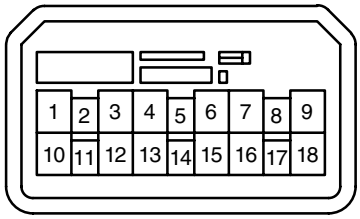
D10



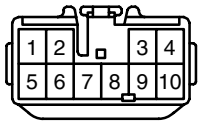
D11



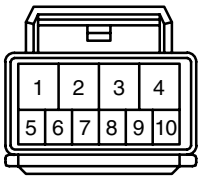
D12
(*4)



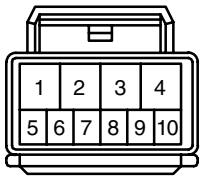
D12
(*5)



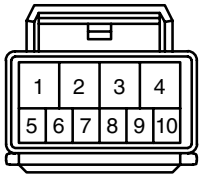
D13



D14



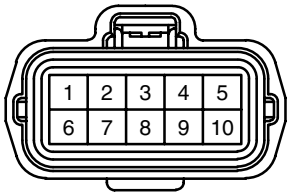
D15



E 1
(1MZ-FE) Grey



E 1
(2AZ-FE) Grey



E 2
(1MZ-FE) Dark Grey



E 2
(2AZ-FE) Dark Grey



E 3
Dark Grey



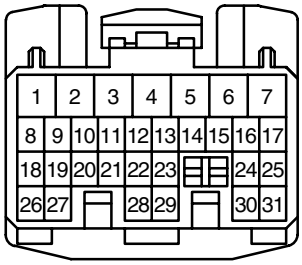
E 4
Black



E 5
Black

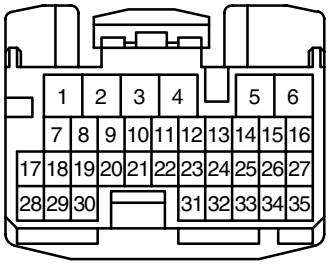


E 6

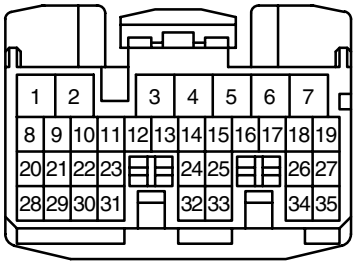


*6 : Spoiler
*7 : Behind Glass

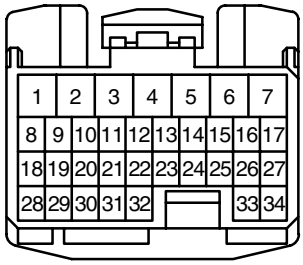
E 7



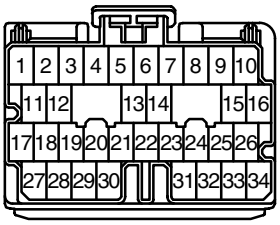
E 8



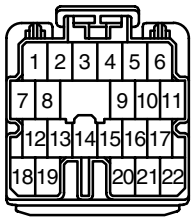
E 9



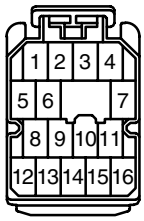
E10



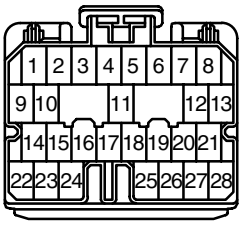
E11



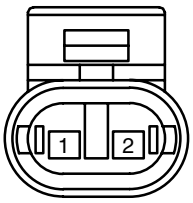
E12



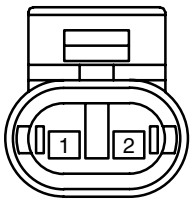
E13



F 1
Black



F 2
Black



F 3
Brown



F 4
Brown



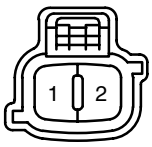
F 5



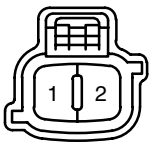
F 6



F 7
Grey



F 8
Grey



F 9
Grey



F10



F11



F12



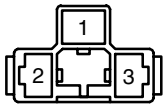
G 1
Black



H 1
Black



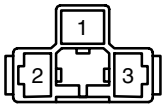
H 2
Black



H 3
Black



H 4
Black



H 5
Dark Grey



H 6
Dark Grey



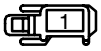
H 7
Dark Grey



H 8
Black



H 9
Black



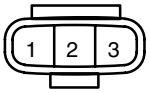
H10
(*6)



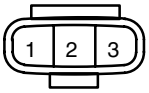
H10
(*7) Black



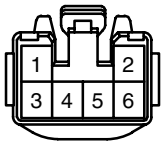
H11
Black



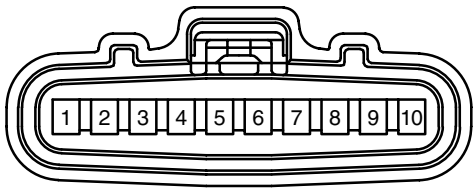
H12
Black



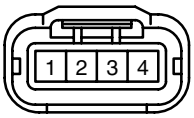
H13
White



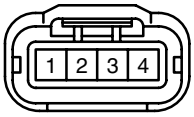
I 1
Black



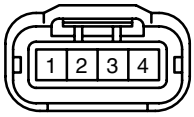
I 2
Black



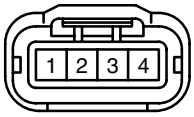
I 3
Black



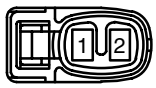
I 4
Black



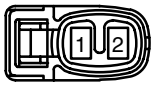
I 5
Black



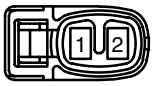
I 6
Black



I 7
Black



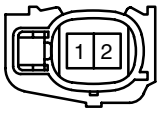
I 8
Black



I 9
(1MZ-FE) Grey



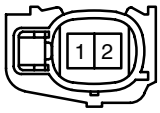
I 9
(2AZ-FE) Black



I10
(1MZ-FE) Grey



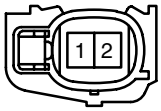
I10
(2AZ-FE) Black



I11
(1MZ-FE) Grey



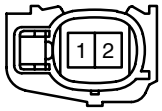
I11
(2AZ-FE) Black



I12
(1MZ-FE) Grey



I12
(2AZ-FE) Black



I13
Grey



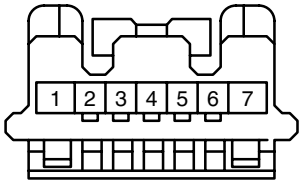
I14
Grey



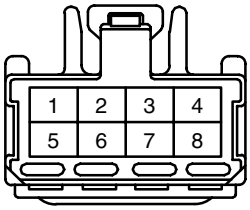
I15
Black



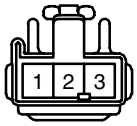
I16
Black



I17



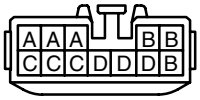
I18
(w/ Moon Roof)



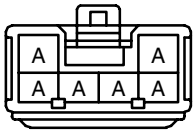
I18
(w/o Moon Roof)



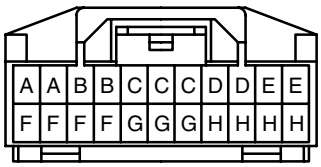
J 1



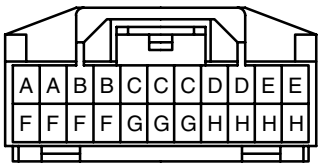
J 2



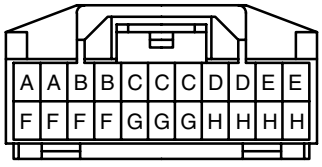
J 3



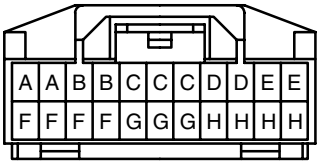
J 4



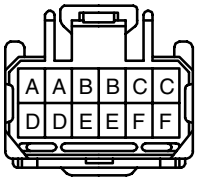
J 5



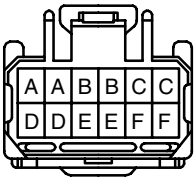
J 6



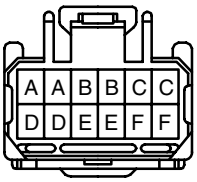
J 7



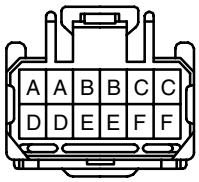
J 8



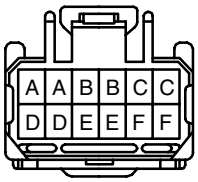
J 9



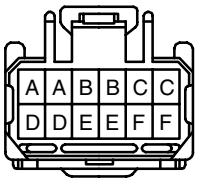
J10



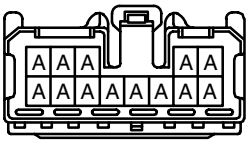
J11



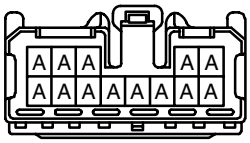
J12



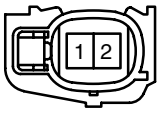
J13
(1MZ-FE)



J13
(2AZ-FE) Black



K 1
Black



K 2
Dark Grey



K 3
Dark Grey



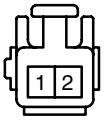
L 1



L 2



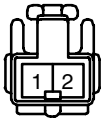
L 3
Black



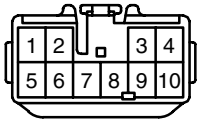
L 4



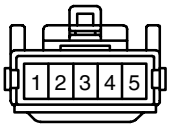
L 5
Black



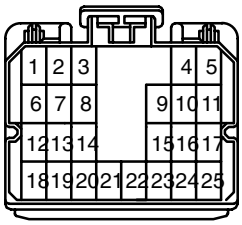
M 1



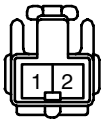
M 2



M 3



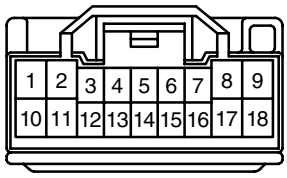
M 4



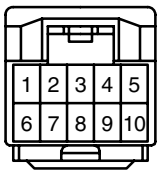
N 1
Grey



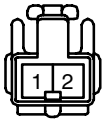
N 2



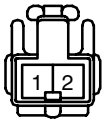
N 3



N 4



N 5



O 1
Grey



P 1
Black



P 2
Grey



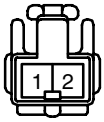
P 3



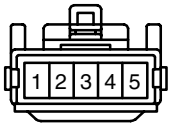
P 4



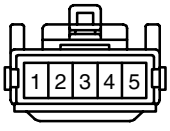
P 5



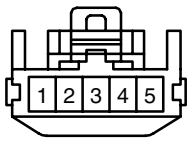
P 6
Black



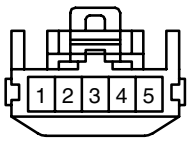
P 7
Black



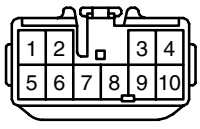
P 8



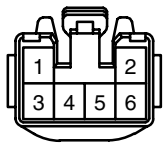
P 9



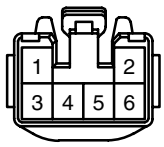
P10



P11
Black

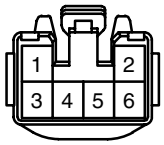


P12
Black

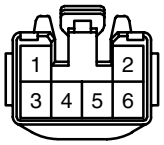


CONNECTOR LIST

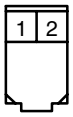
P13 Black



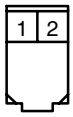
P14 Black



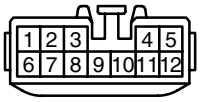
P15 Yellow



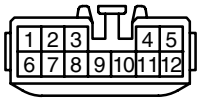
P16 Yellow



P17 Black



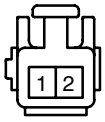
P18 Black



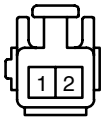
P19



P20



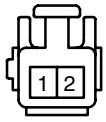
P21



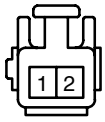
P22



P23



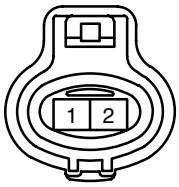
P24



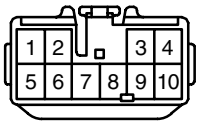
P 25



R 1 Grey



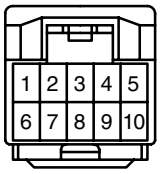
R 2



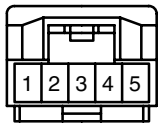
R 3



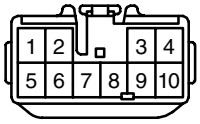
R 4



R 5



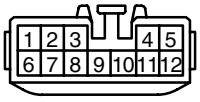
R 6



R 7



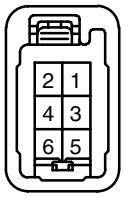
R 8



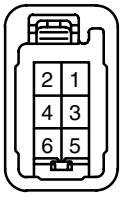
R 9



R10



R11



R12



R13



R14 Black



R15 Black



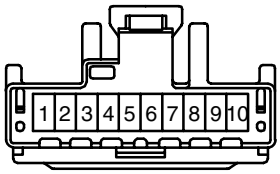
R16



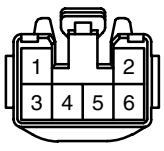
R17



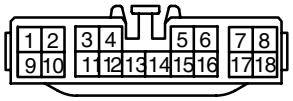
R18



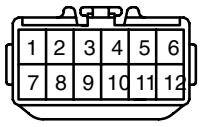
R19



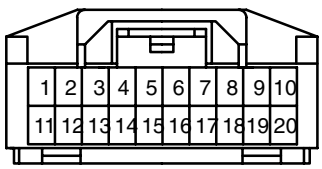
R20



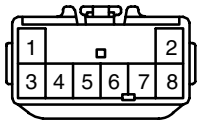
R 21



R 22



R 23

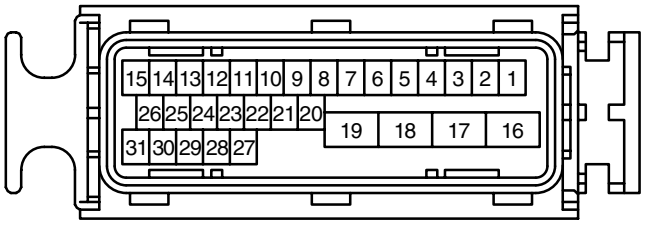


CONNECTOR LIST

S 1
Black



S 2
Black



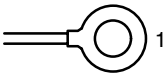
S 3
Black



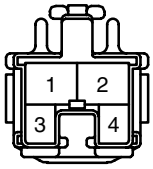
S 4
Black



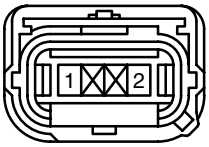
S 5



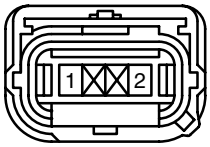
S 6
Blue



S 7
Yellow



S 8
Yellow



S 9
Yellow



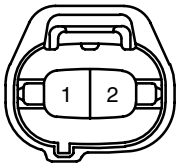
S10
Yellow



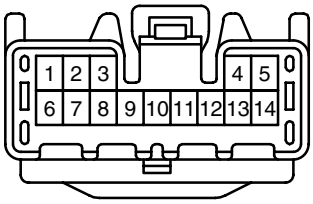
T 1
Black



T2
Black



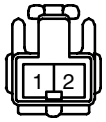
T 3



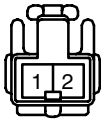
T 4
Black



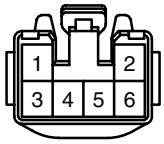
T 5



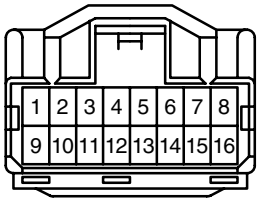
T 6



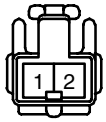
T 7
Blue



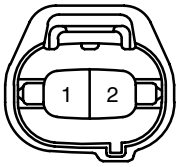
T 8



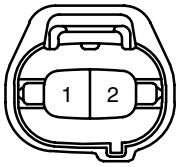
U 1



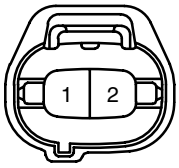
V 1
Brown



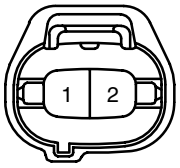
V 2
Brown



V 3
(1MZ-FE) Blue



V 3
(2AZ-FE) Black



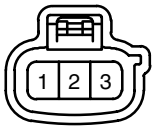
V 4
Blue



V 5
Blue



W 1
Black



W 2
Grey



W 3
Grey



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 (Auto Transmission)	
	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 (RHD All)	90980-11964
	Alternator (LHD 1MZ)	90980-11349 (Grey)
	Alternator (LHD 2AZ)	90980-11349 (Black)
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	
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 ECU	82824-50160
A23	Airbag ECU	90980-11872
A24	Airbag ECU	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 (Manual Transmission)	90980-11250
B 2	Brake Fluid Level Warning SW	90980-11207
B 3	Blower Motor (LHD)	90980-10385
	Blower Motor (RHD)	90980-10804
B 4	Blower Motor Controller	90980-11676

Code	Part Name	Part Number
B 5	Blower Resistor	90980-11136
B 6	Blower Switch	90980-10976
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 2	Camshaft Timing Oil Control Valve	90980-11162
C 4	Crankshaft Position Sensor	90980-10947
C 5	Cruise Control Actuator	90980-11150
C 6	Cigarette Lighter	90980-11606
C 7	Multi Function Display (LHD)	90980-11911
C 8	Multi Function Display (RHD)	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	Monitor Drive 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	Remote Key Entry	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

PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
D12	Power Window Master SW W/O Jam Protection	90980-10997
	Power Window Master SW W/ Jam Protection	90980-12122
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 Solenoids (1MZ)	90980-11854
	ECT Solenoids (2AZ)	90980-11658
E 2	EFI Water Temp. Sensor (1MZ-FE)	90980-10737
	EFI Water Temp. Sensor (2AZ-FE)	90980-11061
E 3	EGR Sensor	90980-10899
E 4	EGR Valve Position Sensor	90980-11143
E5	Engine Hood Courtesy SW	90980-11003
E 6	Engine ECU	90980-12142
E 7	Engine ECU	90980-12146
E 8	Engine ECU	90980-12145
E 9	Engine ECU	90980-12144
E10	Engine ECU	90980-11221
E11	Engine ECU	90980-11220
E12	Engine ECU	90980-11219
E13	Engine ECU	90980-11218
F 1	Front Clearance Light LH	90980-11128
F 2	Front Clearance Light RH	
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	
F12	Fuel Pump	90980-11077
	Fuel Sender	

Code	Part Name	Part Number
G 1	Glove Box Light and SW	90980-11098
H 1	Headlight LH (High)	90980-11095
H 2	Headlight LH (Low)	90980-10228
H 3	Headlight RH (High)	90980-11095
H 4	Headlight RH (Low)	90980-10228
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
H11	Headlamp Level Actuator LH	DELPHI -400905
H12	Headlamp Level Actuator RH	DELPHI -400905
H13	Headlamp Leveling SW	90980-10797
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 (1MZ-FE)	90980-11145
	ISC Control Valve (2AZ-FE)	
I16	Ignition Key Cylinder Light	90980-12092
	Immobiliser 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

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

PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
J 4	Junction Connector	90980-10976
J 5	Junction Connector	90980-11661
J 6	Junction Connector	
J 7	Junction Connector	
J 8	Junction Connector	
J 9	Junction Connector	
J10	Junction Connector	
J11	Junction Connector	
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	
M 3	Mayday ECU	90980-11375
M 4	Mayday Speaker	90980-11299
N 1	Noise Filter (Ignition)	90980-10843
N 2	Navigation ECU	90980-11973
N 3	Navigation ECU	90980-11923
N 4	Noise Filter (Luggage Compartment)	90980-10860
N 5	Noise Filter (Rear Window Defogger)	
O 1	Oil Pressure Switch	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

Code	Part Name	Part Number
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	
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)	
P25	Power Outlet (Front)	90980-10760
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
R19	Remote Key Entry ECU	90980-11909
R20	Radio & Player	90980-10819
R21	Radio & Player with Display	90980-12183
R22	Radio & Player with Display	90980-12259
R23	Radio & Player	90980-11533

PART NUMBER OF CONNECTORS

Code	Part Name	Part Number
S 1	Security Horn	90980-11235
S 2	ABS ECU & Actuator	90980-98070
S 3	Speed Sensor (Combination Meter)	90980-11143
S 4	Starter (1MZ-FE) (Solenoid)	90980-09689
	Starter (2AZ-FE) (Solenoid)	90980-09532
S 5	Starter	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	
T 1	Throttle Position Sensor (1MZ-FE)	90980-11261
	Throttle Position Sensor (2AZ-FE)	
T 2	ECT	90980-11156
T 3	Immobiliser ECU	90980-11556

Code	Part Name	Part Number
T 4	Turn Signal Flasher Relay	90980-10799
T 5	Tweeter LH	90980-10860
T 6	Tweeter RH	
T 7	Trailer Socket	90980-10797
T 8	Telematics Mirror	7283-1766-30
U 1	Unlock Warning SW	90980-10860
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

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