

## FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the LAND CRUISER / LAND CRUISER PRADO.

Applicable models: GRJ120, 125 Series  
RZJ120, 125 Series  
KDJ120, 125 Series  
KZJ120 Series  
LJ120, 125 Series

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

Manual Name	Pub. No.
● LAND CRUISER / LAND CRUISER PRADO Chassis and Body Repair Manual	
Volume 1	RM990E1
Volume 2	RM990E2
Volume 3	RM990E3
● LAND CRUISER / LAND CRUISER PRADO Chassis and Body Repair Manual Supplement	RM1017E
● 1GR-FE Engine Repair Manual	RM1005E
● 3RZ-FE Engine Repair Manual	RM991E
● 1KD-FTV Engine Repair Manual	RM992E
● 1KZ-TE Engine Repair Manual	RM997E
● 5L-E Engine Repair Manual	RM993E
● LAND CRUISER / LAND CRUISER PRADO New Car Features	NCF233E
● LAND CRUISER / LAND CRUISER PRADO New Car Features Supplement	NCF236E

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

**TOYOTA MOTOR CORPORATION**

### NOTICE

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



# LAND CRUISER / LAND CRUISER PRADO ELECTRICAL WIRING DIAGRAM

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## A INTRODUCTION

This manual consists of the following 13 sections:

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

## HOW TO USE THIS MANUAL B

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

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

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

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

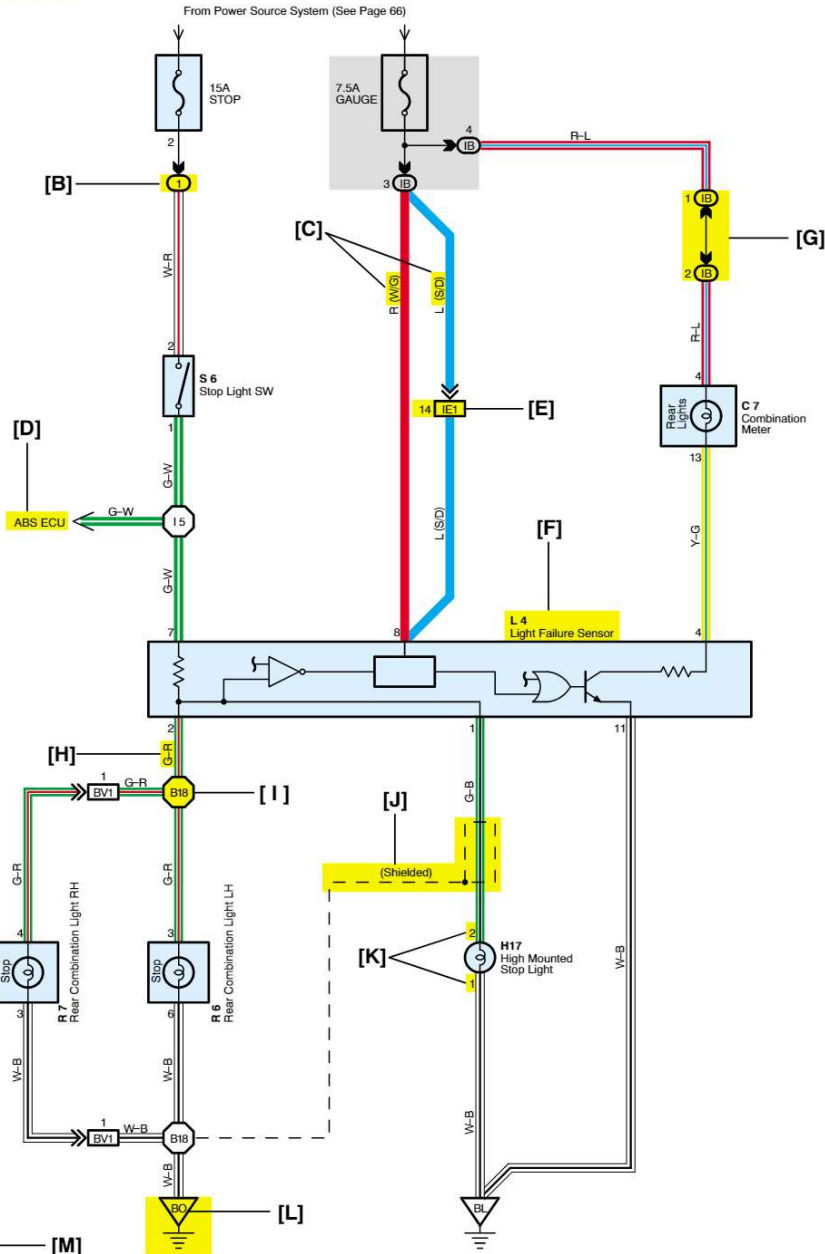
Wiring related to each system is indicated in each system circuit by arrows (from \_\_, to \_\_). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

## B HOW TO USE THIS MANUAL

[A]

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

### Stop Light




4 50 [M]

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**[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

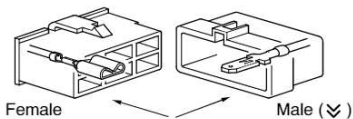
Example:  Indicates Relay Block No.1

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

**[D]** : Indicates related system.

**[E]** : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↘).

Outside numerals are pin numbers.

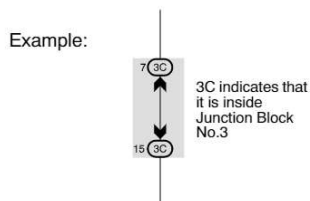


The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g. "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

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

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



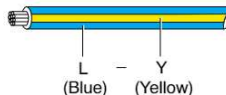
**[H]** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

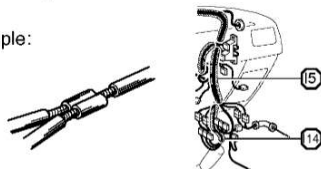
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



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

Example:

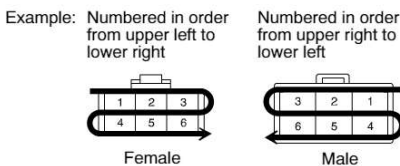


The Location of splice Point I 5 is indicated by the shaded section.

**[J]** : Indicates a shielded cable.



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



**[L]** : Indicates a ground point.

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

**[M]** : Page No.

## B HOW TO USE THIS MANUAL

### [N] System Outline

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

#### Stop Light Disconnection Warning

When the ignition SW is turned on and the brake pedal is pressed (Stop light SW on), if the stop light circuit is open, the current flowing from TERMINAL 7 of the light failure sensor to TERMINALS 1, 2 changes, so the light failure sensor detects the disconnection and the warning circuit of the light failure sensor is activated.

As a result, the current flows from TERMINAL 4 of the light failure sensor to TERMINAL 11 to GROUND and turns the rear lights warning light on. By pressing the brake pedal, the current flowing to TERMINAL 8 of the light failure sensor keeps the warning circuit on and holds the warning light on until the ignition SW is turned off.

### [O] Service Hints

#### S6 Stop Light SW

2-1 : Closed with the brake pedal depressed

#### L4 Light Failure Sensor

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

### [P] ○ : Parts Location

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

### [Q] ○ : Relay Blocks

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

### [R] ○ : Junction Block and Wire Harness Connector

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

### [S] □ : Connector Joining Wire Harness and Wire Harness

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

### [T] ▽ : Ground Points

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

### [U] ○ : Splice Points

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



**[N]** : Explains the system outline.

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

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

Example : Part "L4" (Light Failure Sensor) is on page 36 of the manual.

\* The letter in the code is from the first letter of the part, and the number indicates its order in parts starting with that letter.

Example : L 4  
          └─┬─┘ Parts is 4th in order  
            └─┘ Light Failure Sensor

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

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

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

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

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

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

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

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

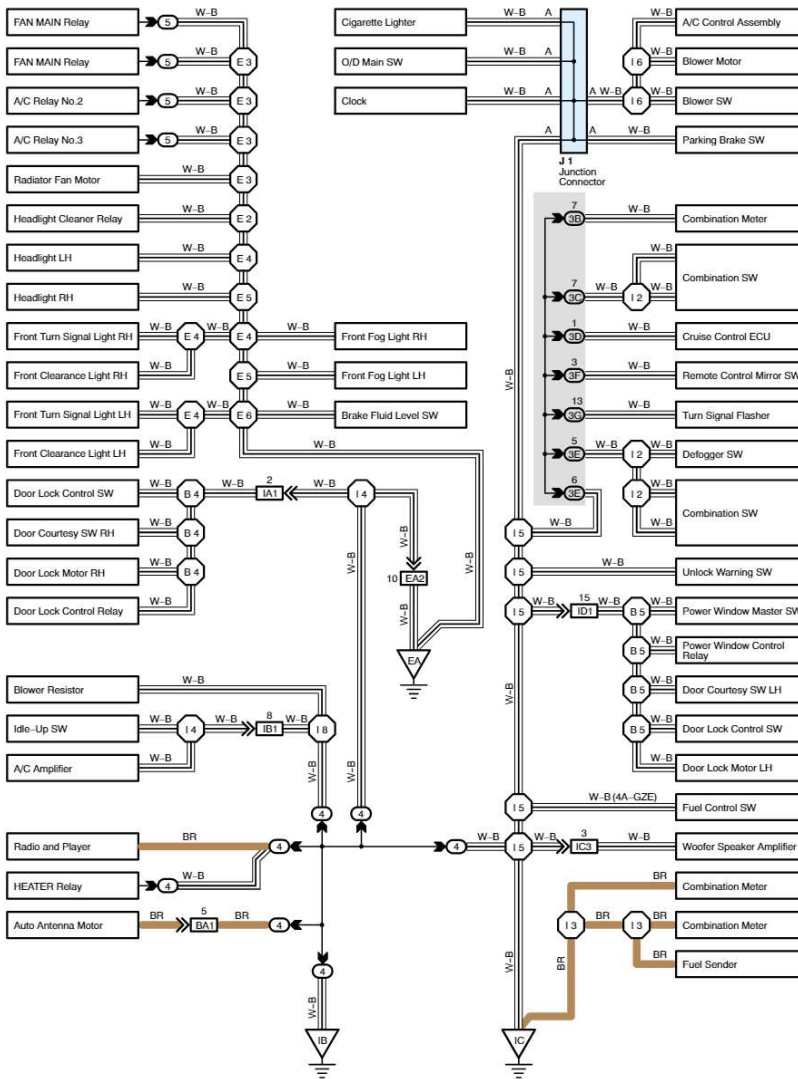
**[U]** : Indicates the reference page showing the position of the splice points on the vehicle.

Example : Splice point "15" is on the Cowl Wire Harness and is described on page 44 of this manual.

## B HOW TO USE THIS MANUAL

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

### I GROUND POINT

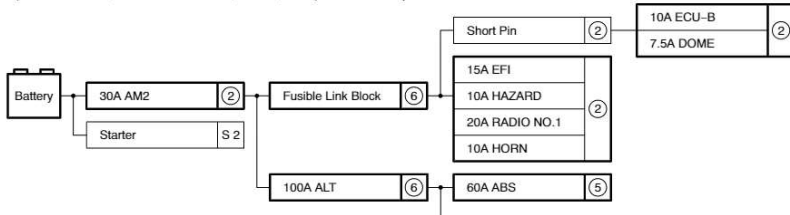


\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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

### J POWER SOURCE (Current Flow Chart)

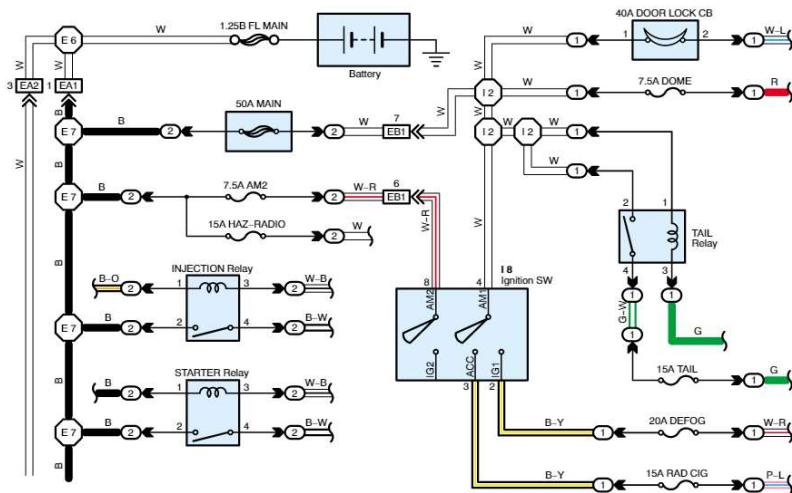
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



#### Engine Room R/B (See Page 20)

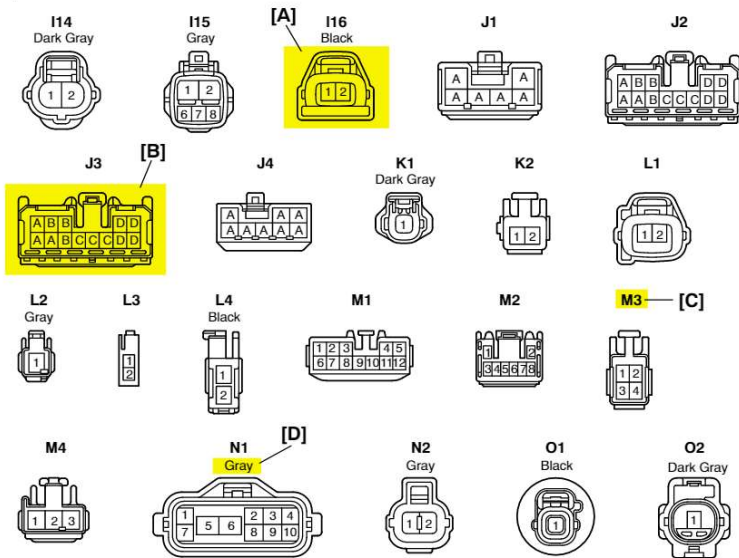
Fuse	System	Page
20A	STOP	194
	ABS	187
	ABS and Traction Control	180
	Cruise Control	166
	Electronically Controlled Transmission	210
10A	DOME	214
	Cigarette Lighter	230
	Combination Meter	112
	Headlight	122
	Interior Light	
	Key Reminder and Seat Belt Warning	

### Power Source



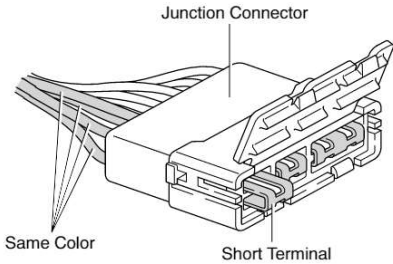
\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

**K CONNECTOR LIST**



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

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



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

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

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

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	D 4	Diode (Courtesy)	90980-11608
A 2	A/C Condenser Fan Motor	90980-11237	D 5	Diode (Interior Light)	90980-10962
A 3	A/C Condenser Fan Relay	90980-10940	D 6	Diode (Moon Roof)	90980-11608
A 4	A/C Condenser Fan Resistor	90980-10928	D 7	Door Lock Control Relay	90980-10848
A 5	A/C Magnetic Clutch	90980-11271	D 8	Door Lock Control SW LH	90980-11148
A 6	A/T Oil Temp. Sensor	90980-11413	D 9	Door Lock Control SW RH	
[A]	ABS Actual [B]	909 [C] 151	D10	Door Courtesy SW LH	90980-11097
A 8	ABS Actuator	90980-11009	D11	Door Courtesy SW RH	
A 9	ABS Speed Sensor Front LH	90980-10941	D12	Door Courtesy SW Front LH	90980-11156
A10	ABS Speed Sensor Front RH	90980-11002	D13	Door Courtesy SW Front RH	
A11	Airbag Sensor Front LH	90980-11856	D14	Door Courtesy SW Rear LH	
A12	Airbag Sensor Front RH		D15	Door Courtesy SW Rear RH	
A13	Airbag Sensor Front LH	90980-11194	D16	Door Courtesy SW LH	
		90980-11194			

[A] : Part Code

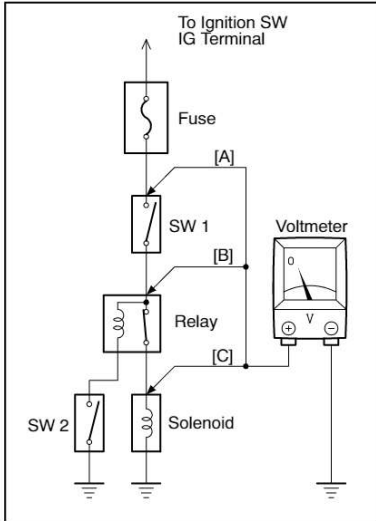
[B] : Part Name

[C] : Part Number

Toyota Part Number are indicated.

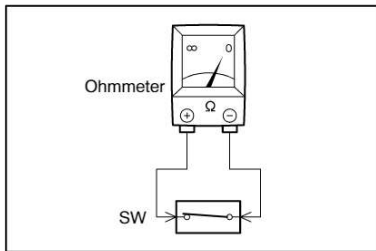
Not all of the above part numbers of the connector are established for the supply.

## C TROUBLESHOOTING



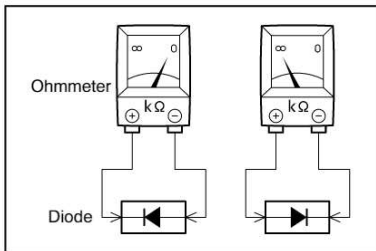
### VOLTAGE CHECK

- (a) Establish conditions in which voltage is present at the check point.  
Example:  
[A] - Ignition SW on  
[B] - Ignition SW and SW 1 on  
[C] - Ignition SW, SW 1 and Relay on (SW 2 off)
- (b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal.  
This check can be done with a test light instead of a voltmeter.

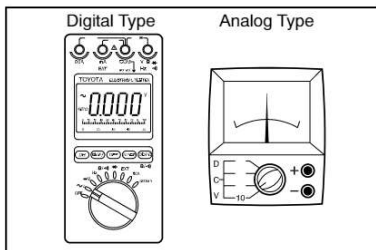


### CONTINUITY AND RESISTANCE CHECK

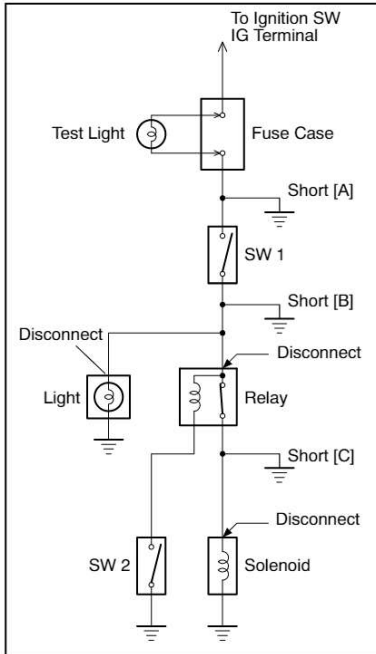
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



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



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



### FINDING A SHORT CIRCUIT

- Remove the blown fuse and disconnect all loads of the fuse.
- Connect a test light in place of the fuse.
- Establish conditions in which the test light comes on.
 

Example:

  - [A] - Ignition SW on
  - [B] - Ignition SW and SW 1 on
  - [C] - Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or Disconnect SW 2)
- Disconnect and reconnect the connectors while watching the test light. The short lies between the connector where the test light stays lit and the connector where the light goes out.
- Find the exact location of the short by lightly shaking the problem wire along the body.

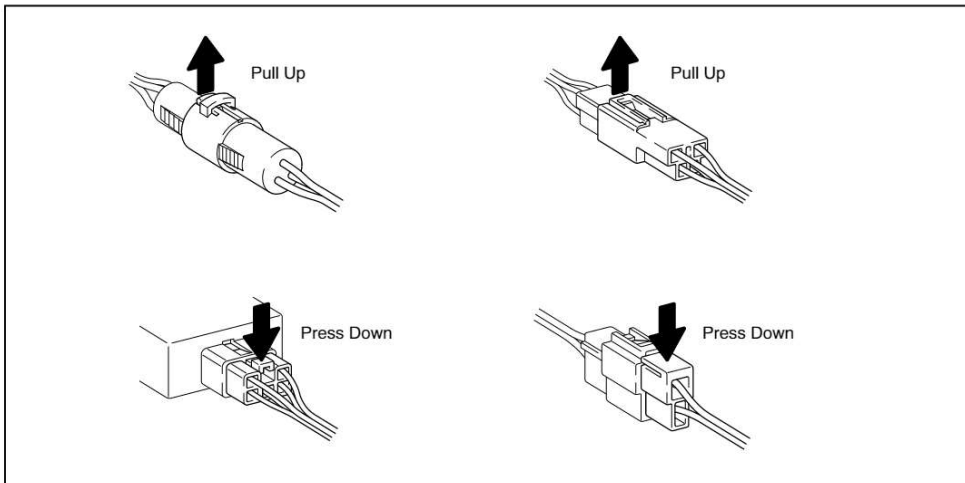
### CAUTION:

- Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)
- When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with the terminals of leads from the IC, etc. of the replacement part (spare part).

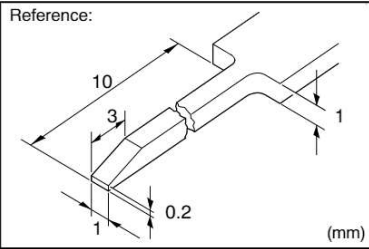
### DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

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



## C TROUBLESHOOTING



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

#### 1. PREPARE THE SPECIAL TOOL

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

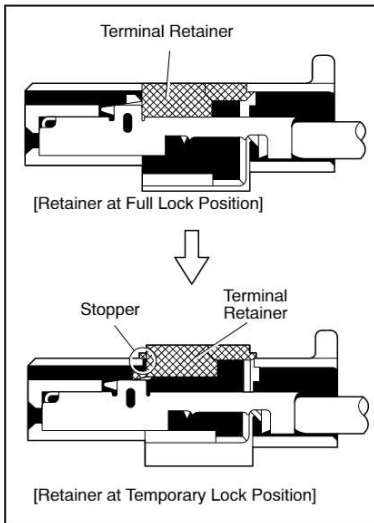
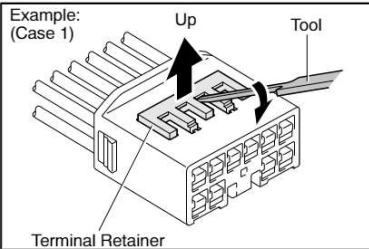
#### 2. DISCONNECT CONNECTOR

#### 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

- Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.
- Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

#### NOTICE:

**Do not remove the terminal retainer from connector body.**



#### [A] For Non-Waterproof Type Connector

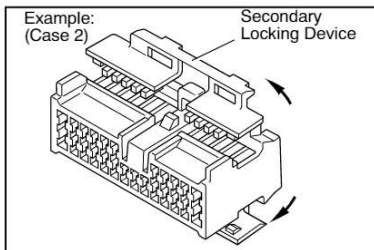
HINT : The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

#### "Case 1"

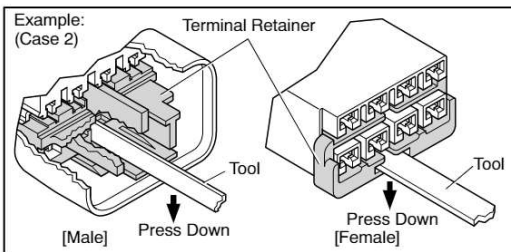
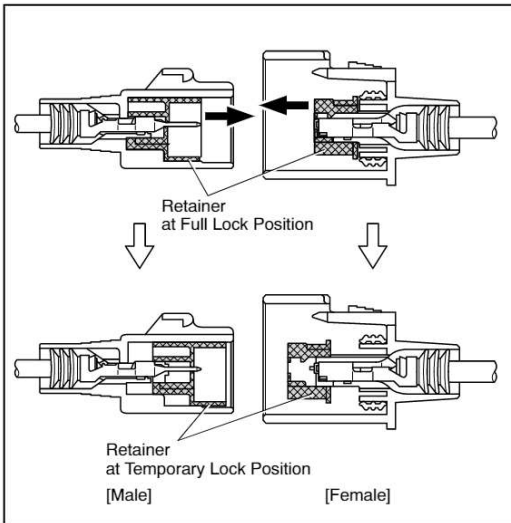
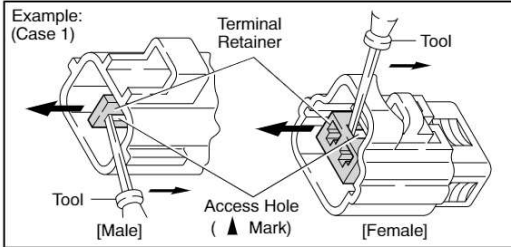
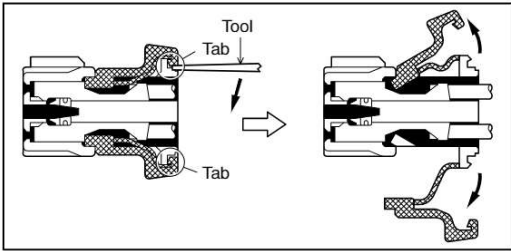
Raise the terminal retainer up to the temporary lock position.

#### "Case 2"

Open the secondary locking device.







[B] For Waterproof Type Connector

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

Example:

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

"Case 1"

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

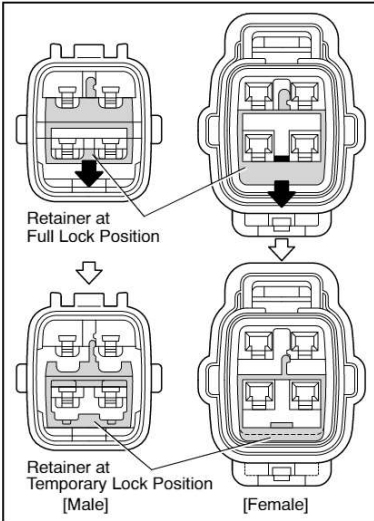
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

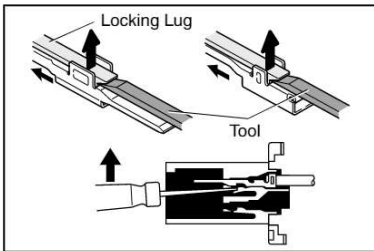
"Case 2"

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

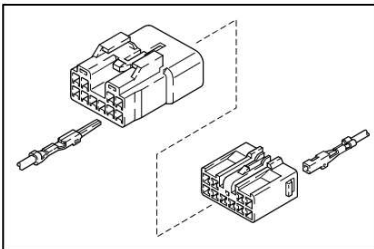
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

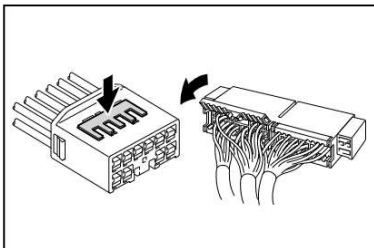


#### 4. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

HINT:

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



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

#### 5. CONNECT CONNECTOR

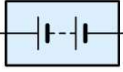

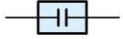






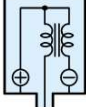











**ABBREVIATIONS**









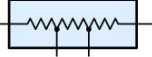
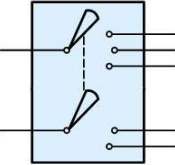



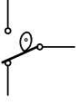

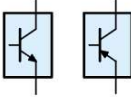

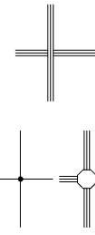
The following abbreviations are used in this manual.

4WD	=	Four Wheel Drive Vehicles
A/C	=	Air Conditioner
A/T	=	Automatic Transmission
ABS	=	Anti-Lock Brake System
BA	=	Brake Assist
CD	=	Compact Disc
COMB.	=	Combination
DIFF.	=	Differential
DLC3	=	Data Link Connector 3
ECT	=	Electronic Control Transmission
ECU	=	Electronic Control Unit
EFI	=	Electronic Fuel Injection
EGR	=	Exhaust Gas Recirculation
EVAP	=	Evaporative Emission
ISC	=	Idle Speed Control
J/B	=	Junction Block
LH	=	Left-Hand
LHD	=	Left-Hand Drive
M/T	=	Manual Transmission
MPX	=	Multiplex
PTC	=	Positive Temperature Coefficient
R/B	=	Relay Block
RH	=	Right-Hand
RHD	=	Right-Hand Drive
SW	=	Switch
TEMP.	=	Temperature
TRC	=	Traction Control
VRV	=	Vacuum Regulating Valve
VSC	=	Vehicle Stability Control
VSV	=	Vacuum Switching Valve
VVT	=	Variable Valve Timing
w/	=	With
w/o	=	Without

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

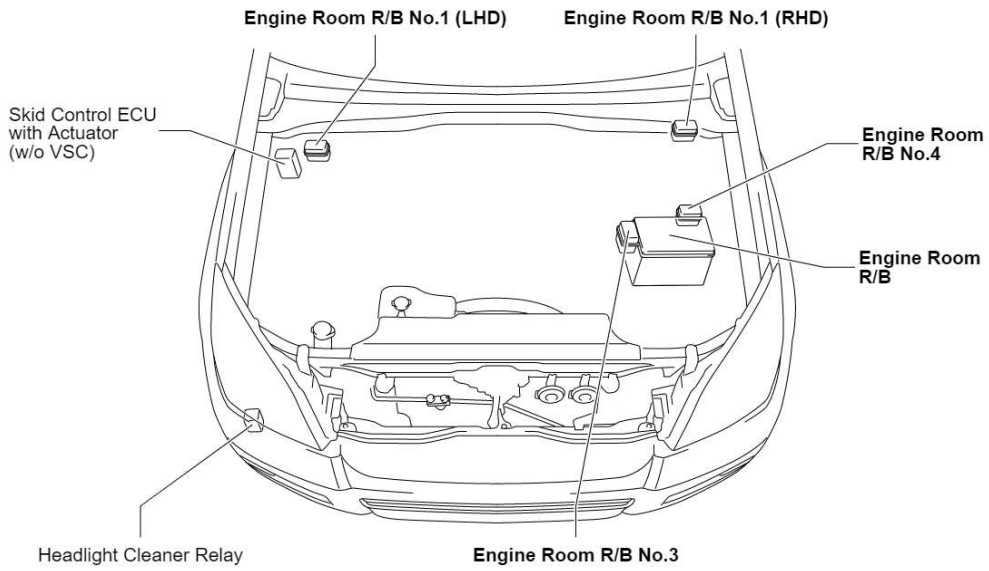
## E GLOSSARY OF TERMS AND SYMBOLS

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

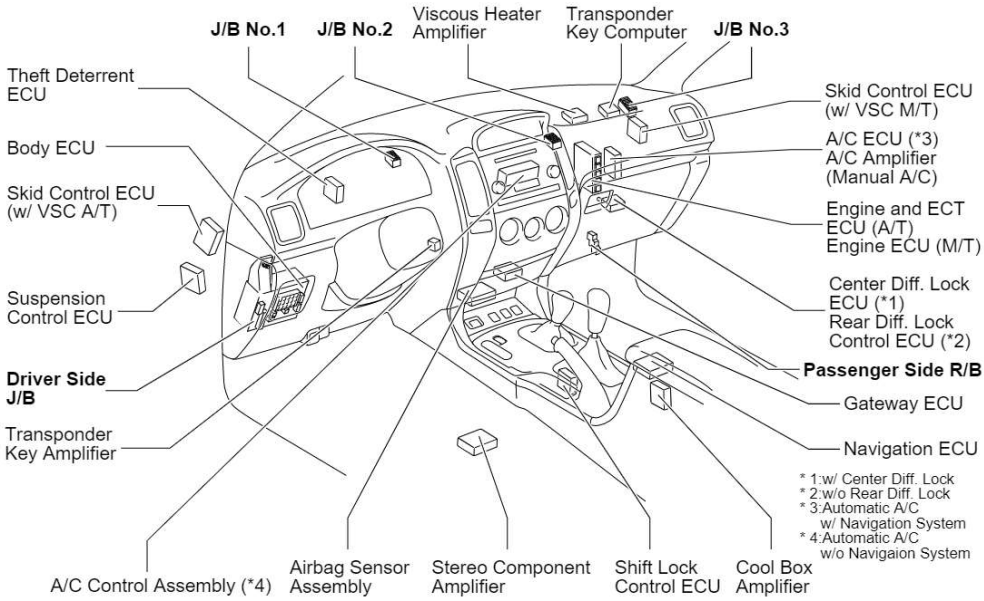
<p><b>RELAY</b> Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p> <p><b>1. NORMALLY CLOSED</b></p>  <p><b>2. NORMALLY OPEN</b></p> 	<p><b>SPEAKER</b> An electromechanical device which creates sound waves from current flow.</p> 
<p><b>RELAY, DOUBLE THROW</b> A relay which passes current through one set of contacts or the other.</p> 	<p><b>SWITCH, MANUAL</b> Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.</p> <p><b>1. NORMALLY OPEN</b></p>  <p><b>2. NORMALLY CLOSED</b></p> 
<p><b>RESISTOR</b> An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.</p> 	<p><b>SWITCH, DOUBLE THROW</b> A switch which continuously passes current through one set of contacts or the other.</p> 
<p><b>RESISTOR, TAPPED</b> A resistor which supplies two or more different non adjustable resistance values.</p> 	<p><b>SWITCH, IGNITION</b> A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.</p> 
<p><b>RESISTOR, VARIABLE or RHEOSTAT</b> A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.</p> 	<p><b>SENSOR (Thermistor)</b> A resistor which varies its resistance with temperature.</p> 
<p><b>SENSOR, SPEED</b> Uses magnetic impulses to open and close a switch to create a signal for activation of other components.</p> <p>(Reed Switch Type)</p> 	<p><b>SWITCH, WIPER PARK</b> Automatically returns wipers to the stop position when the wiper switch is turned off.</p> 
<p><b>SHORT PIN</b> Used to provide an unbroken connection within a junction block.</p> 	<p><b>TRANSISTOR</b> A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base".</p> 
<p><b>SOLENOID</b> An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p> 	<p><b>WIRES</b> Wires are always drawn as straight lines on wiring diagrams. (1) NOT CONNECTED Crossed wires (1) without a black dot at the junction are not joined; (2) SPLICED Crossed wires (2) with a black dot or octagonal (◻) mark at the junction are spliced (joined) connections.</p> 

## F RELAY LOCATIONS

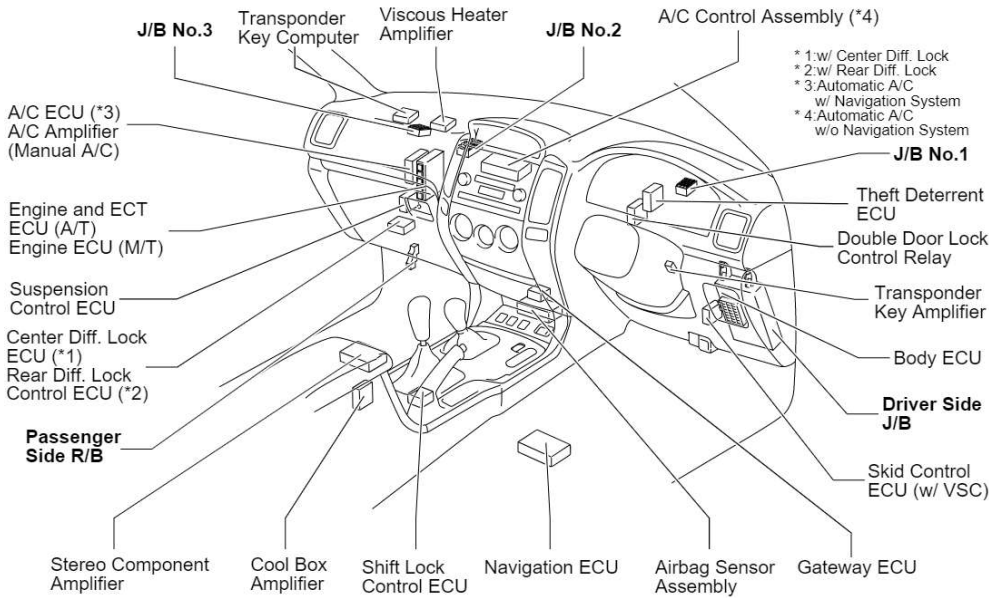
### [Engine Compartment]



**[Instrument Panel]  
(LHD)**



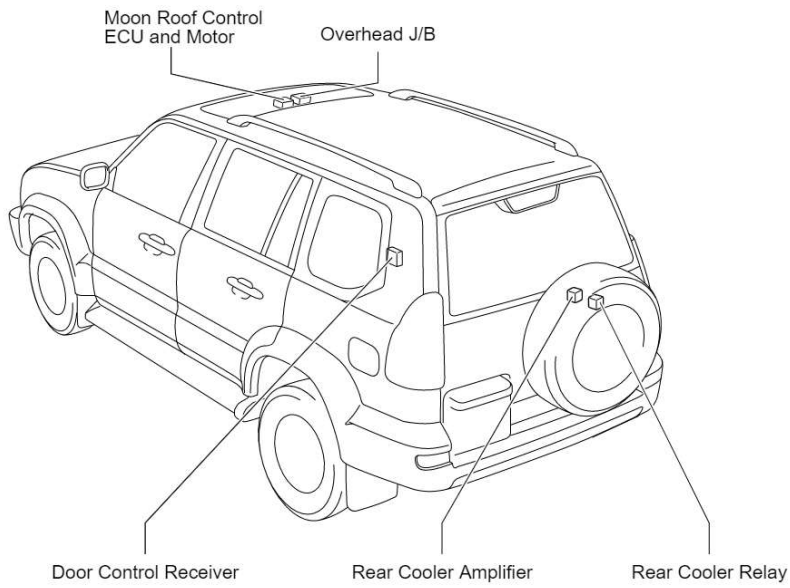
**(RHD)**



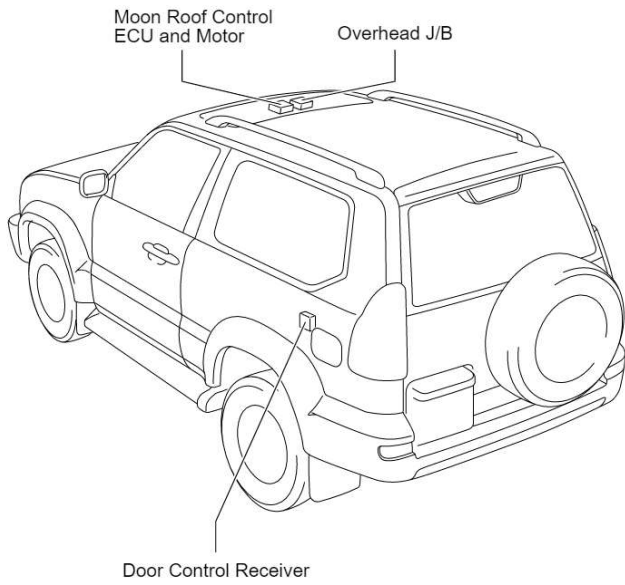
## F RELAY LOCATIONS

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### [Body] (5-Door)



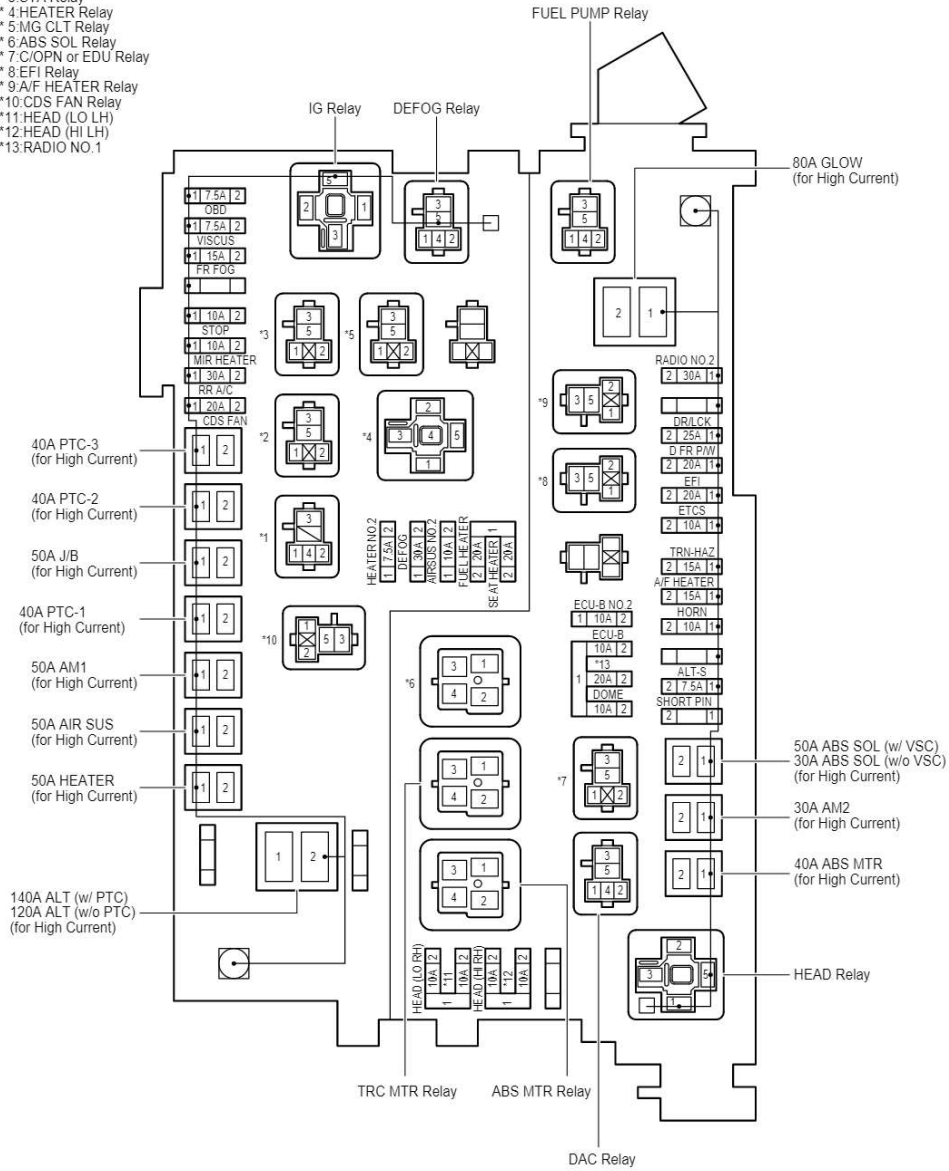
### (3-Door)





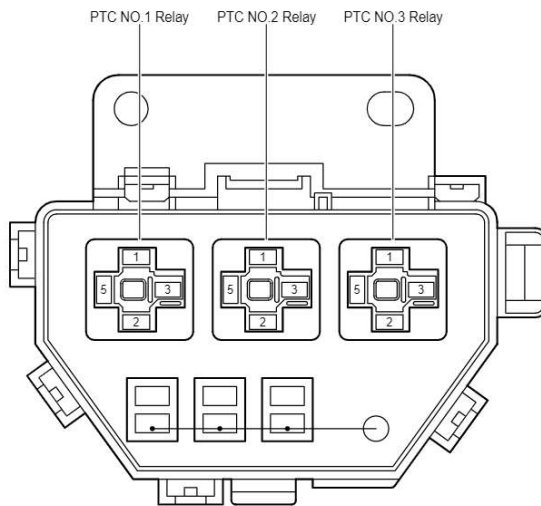
**② : Engine Room R/B Engine Compartment Left (See Page 20)**

- \*1:ACC CUT Relay
- \*2:FR FOG Relay
- \*3:STA Relay
- \*4:HEATER Relay
- \*5:MG CLT Relay
- \*6:ABS SOL Relay
- \*7:C/OPN or EDU Relay
- \*8:EFI Relay
- \*9:A/F HEATER Relay
- \*10:CDS FAN Relay
- \*11:HEAD (LO LH)
- \*12:HEAD (HI LH)
- \*13:RADIO NO.1

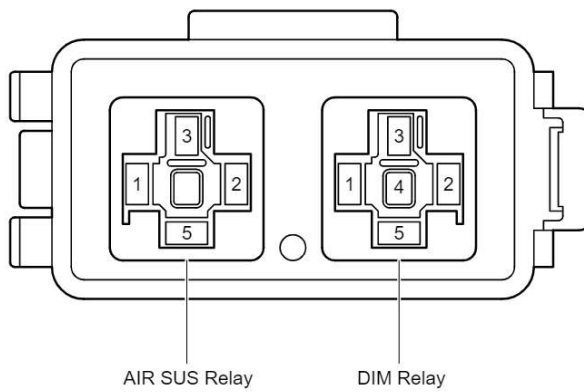


## F RELAY LOCATIONS

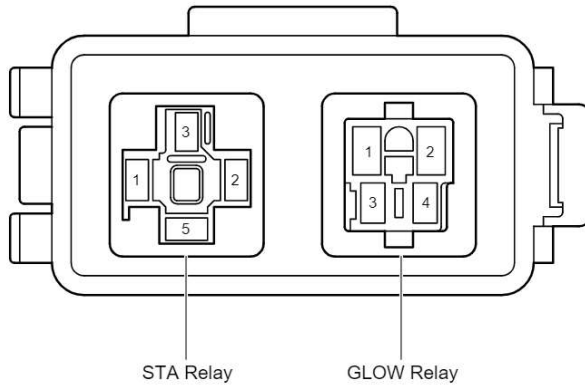
① : Engine Room R/B No.1	LHD : Engine Compartment Right (See Page 20)
	RHD : Engine Compartment Left (See Page 20)



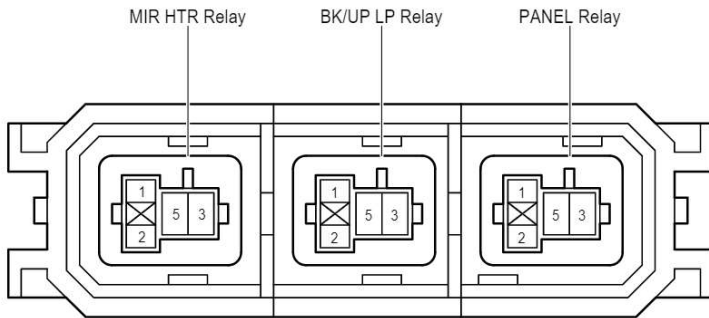
③ : Engine Room R/B No.3	Engine Compartment Left (See Page 20)
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**④ : Engine Room R/B No.4 Engine Compartment Left (See Page 20)**



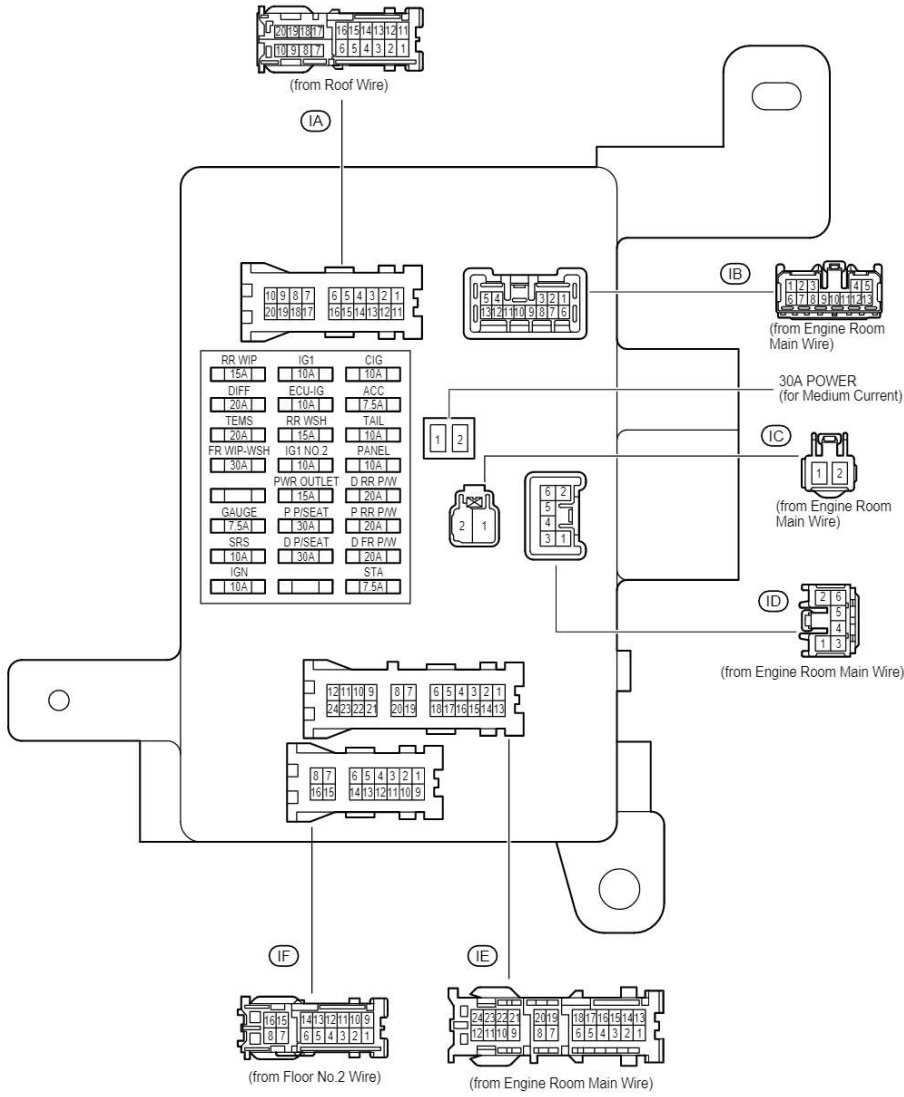
**⑤ : Passenger Side R/B**      **LHD : Right Kick Panel (See Page 21)**  
**RHD : Left Kick Panel (See Page 21)**

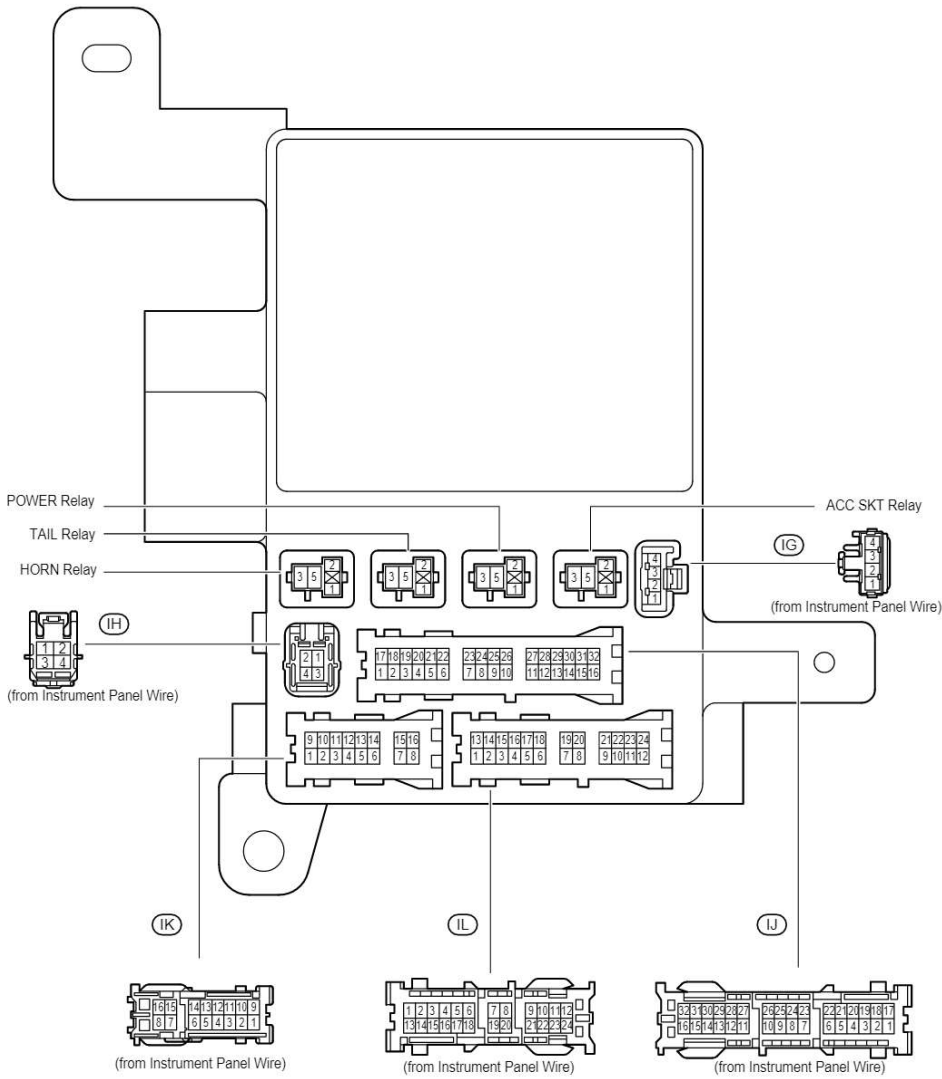


# F RELAY LOCATIONS

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

(LHD)

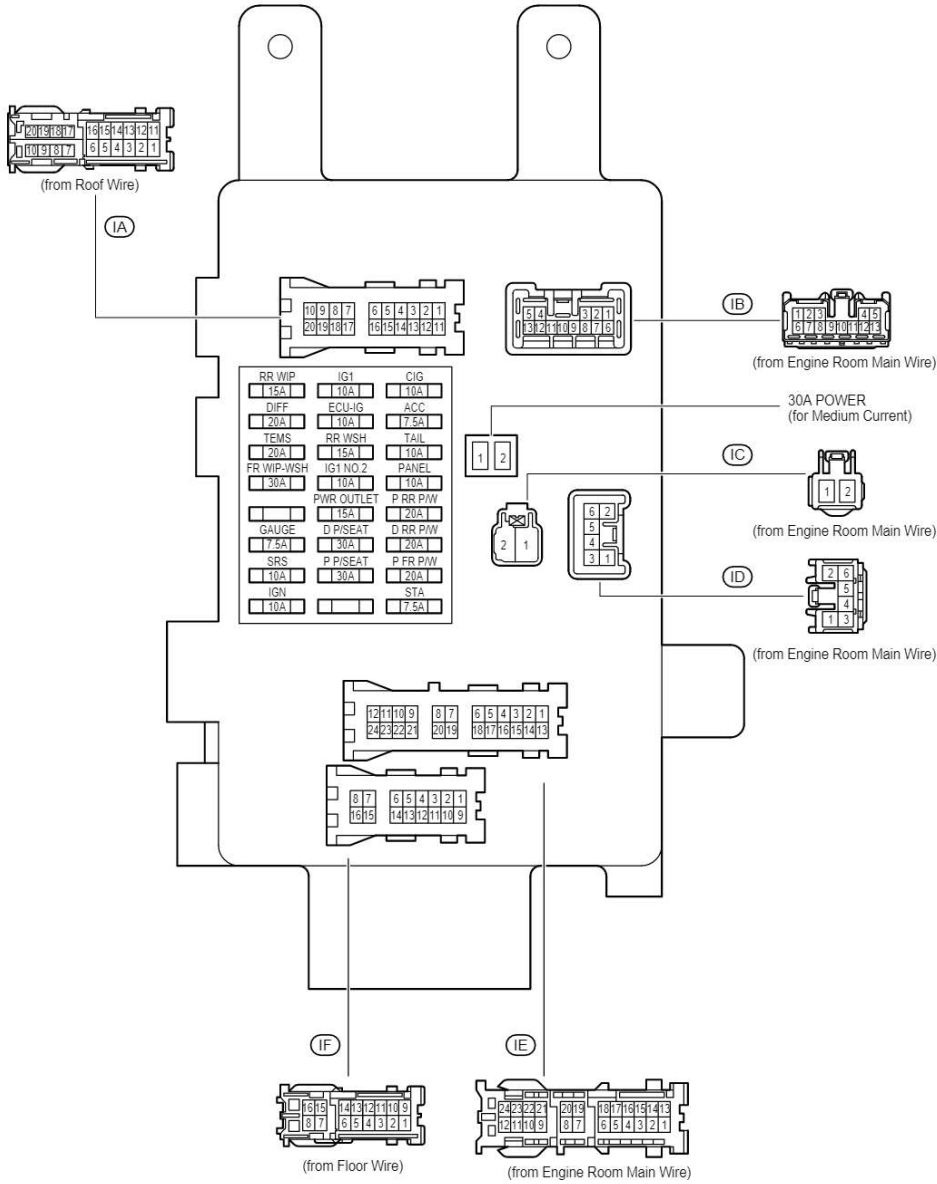


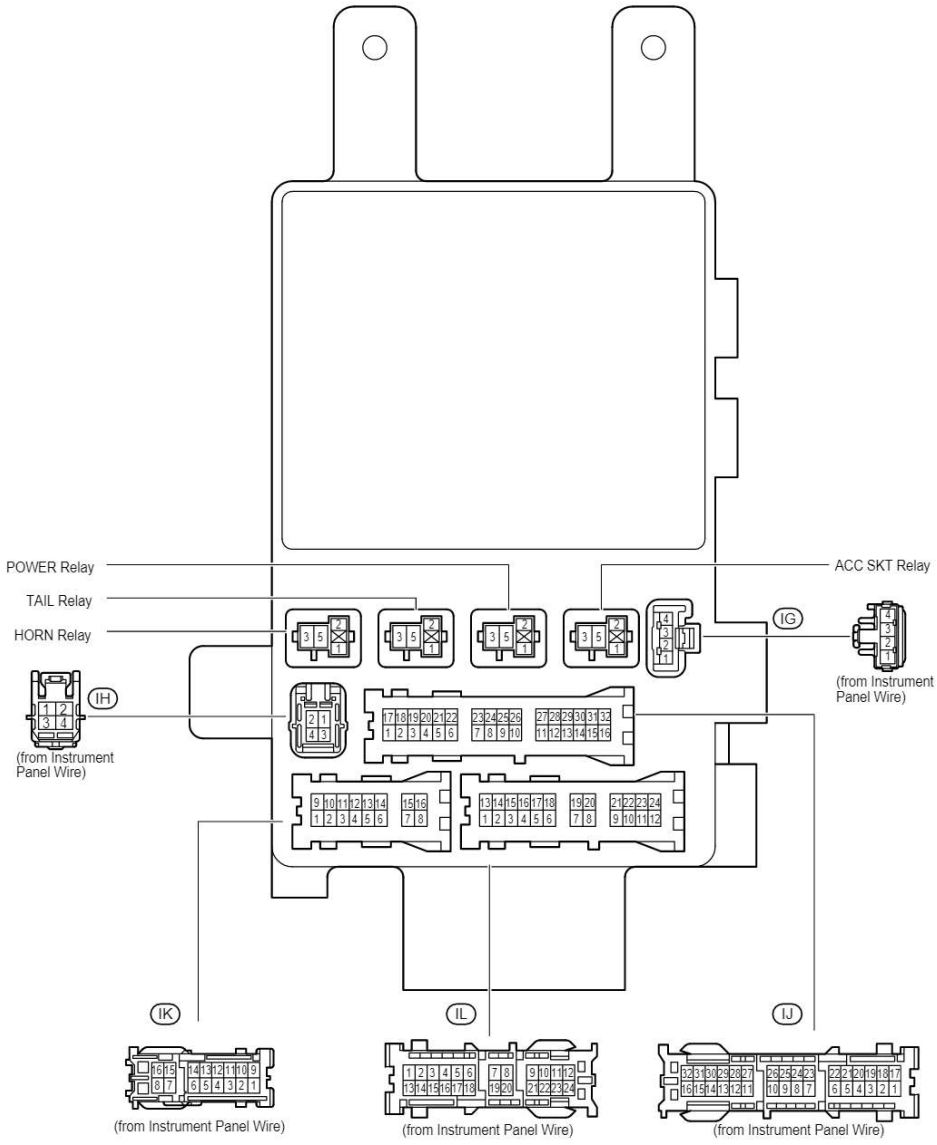


# F RELAY LOCATIONS

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

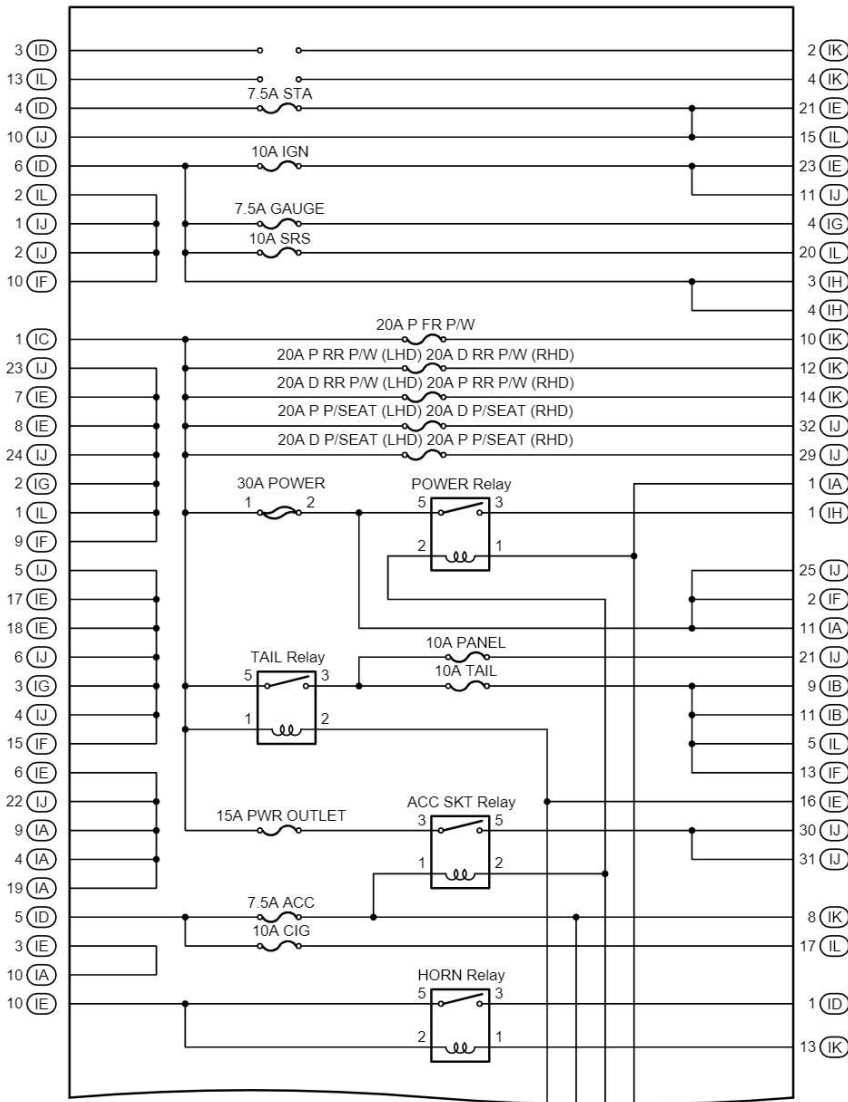
(RHD)





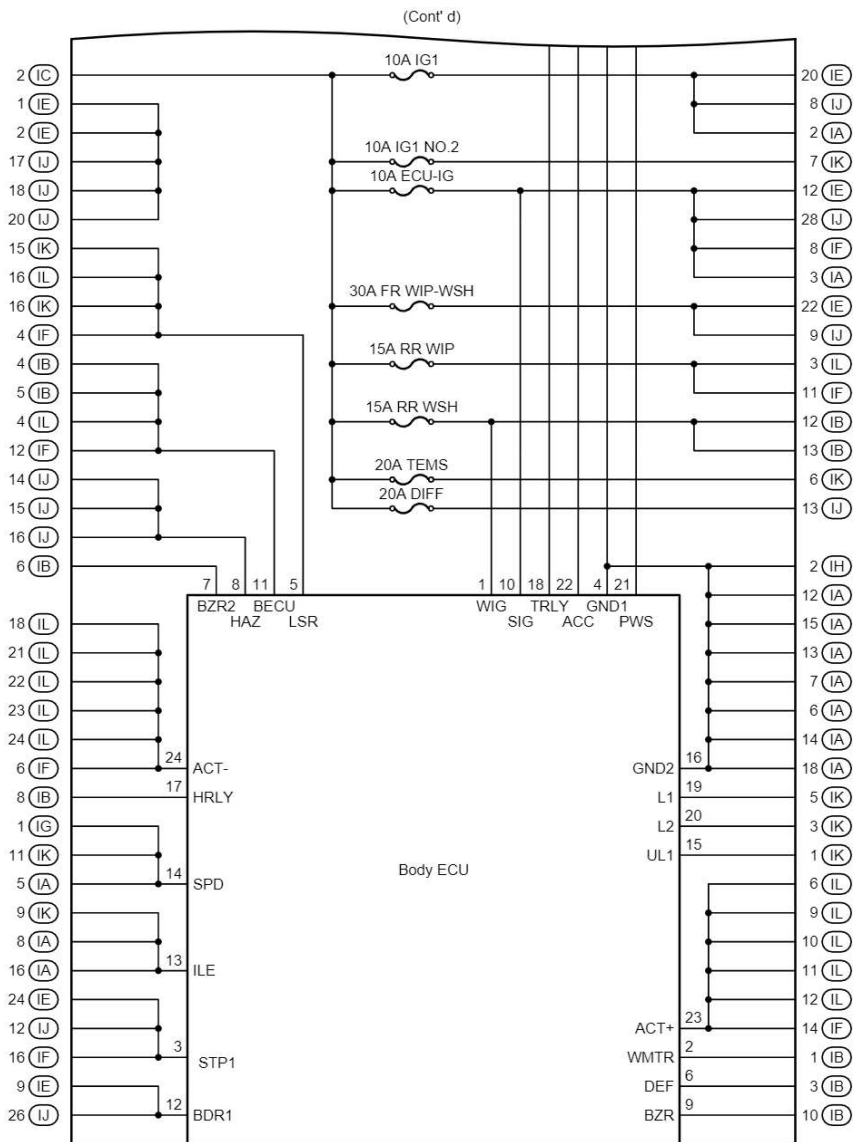
# F RELAY LOCATIONS

## [Driver Side J/B Inner Circuit]



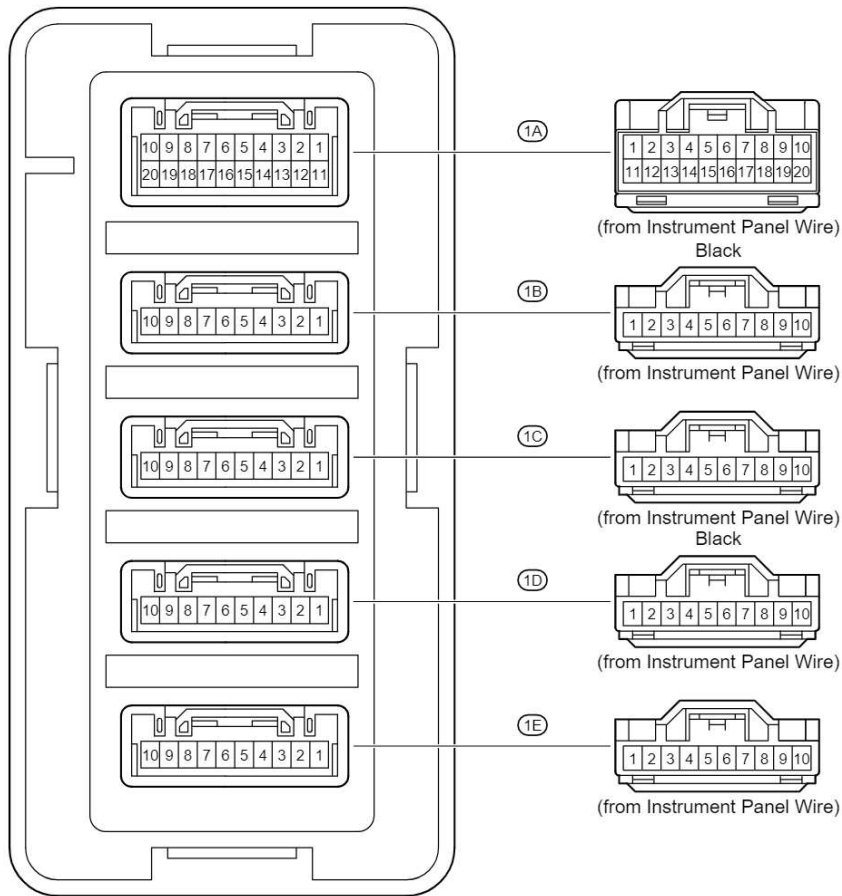
(Cont. Next Page)



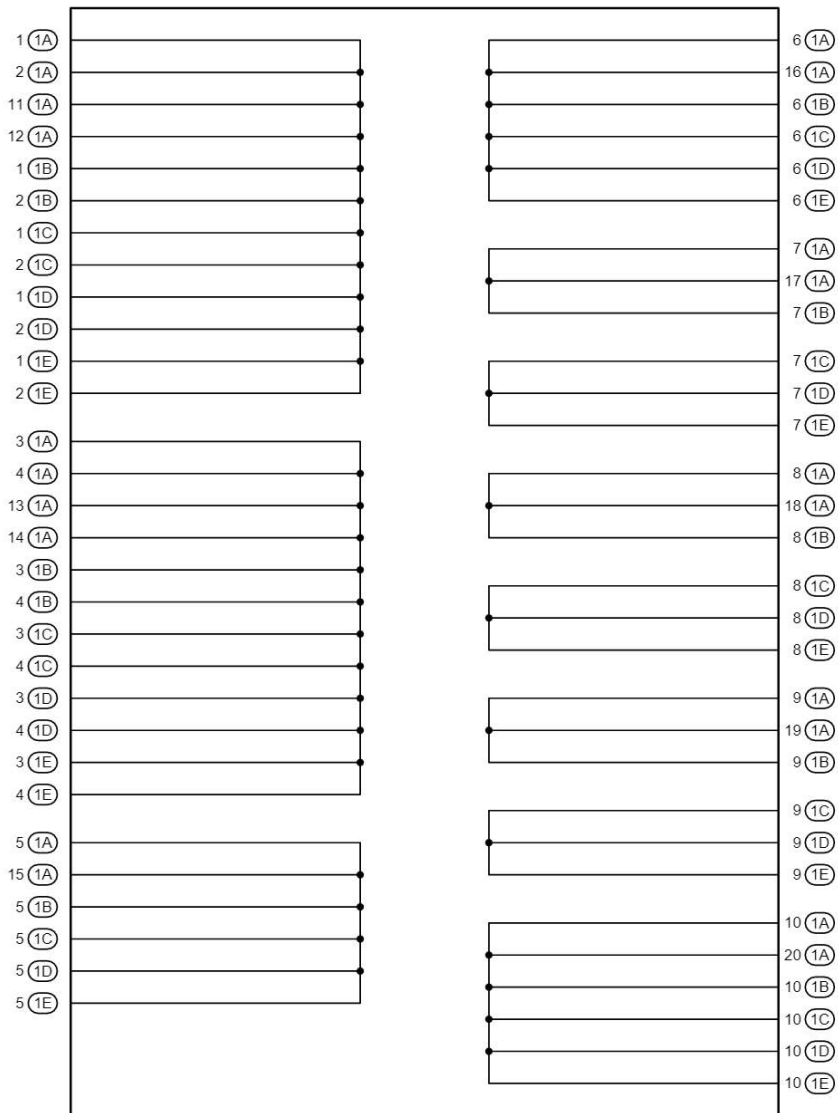


## F RELAY LOCATIONS

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

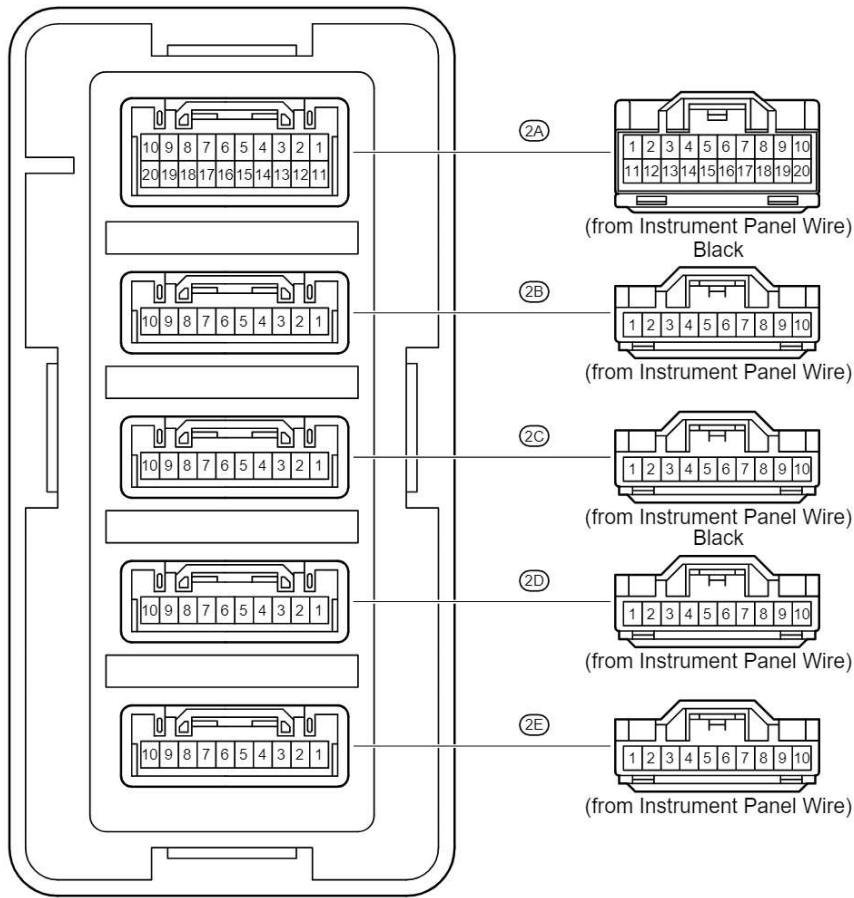


[J/B No.1 Inner Circuit]

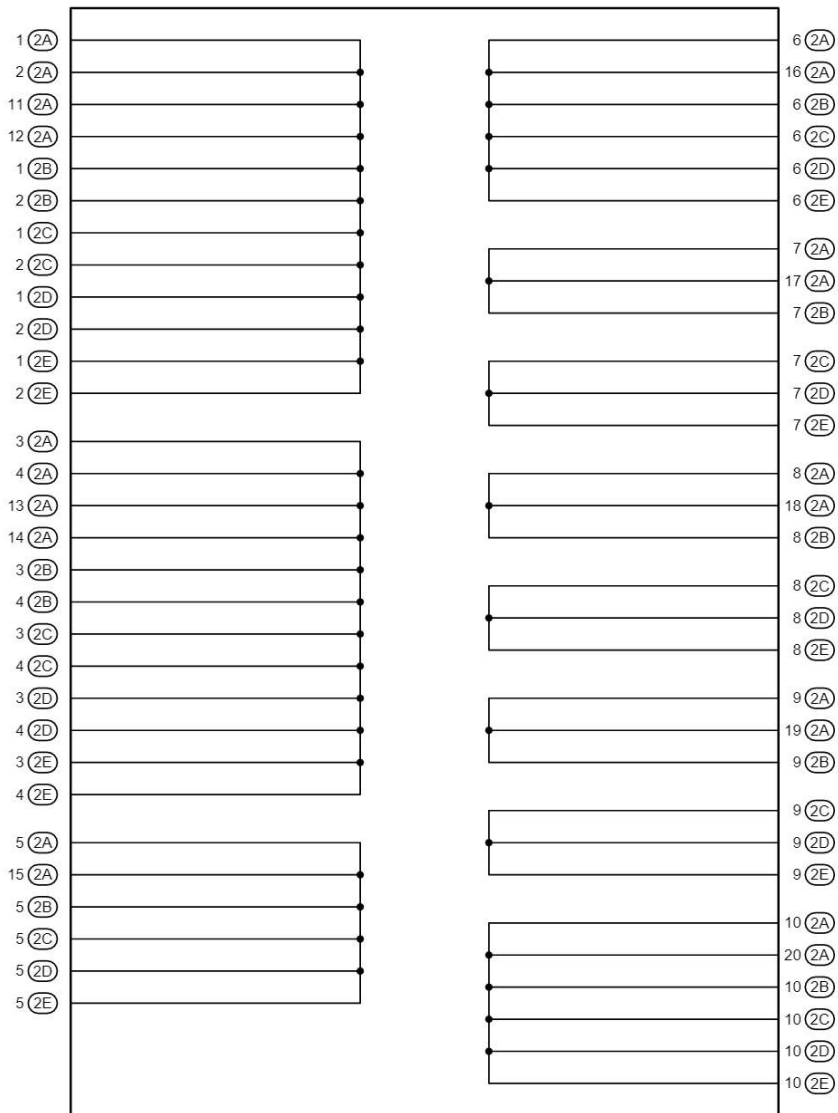


# F RELAY LOCATIONS

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

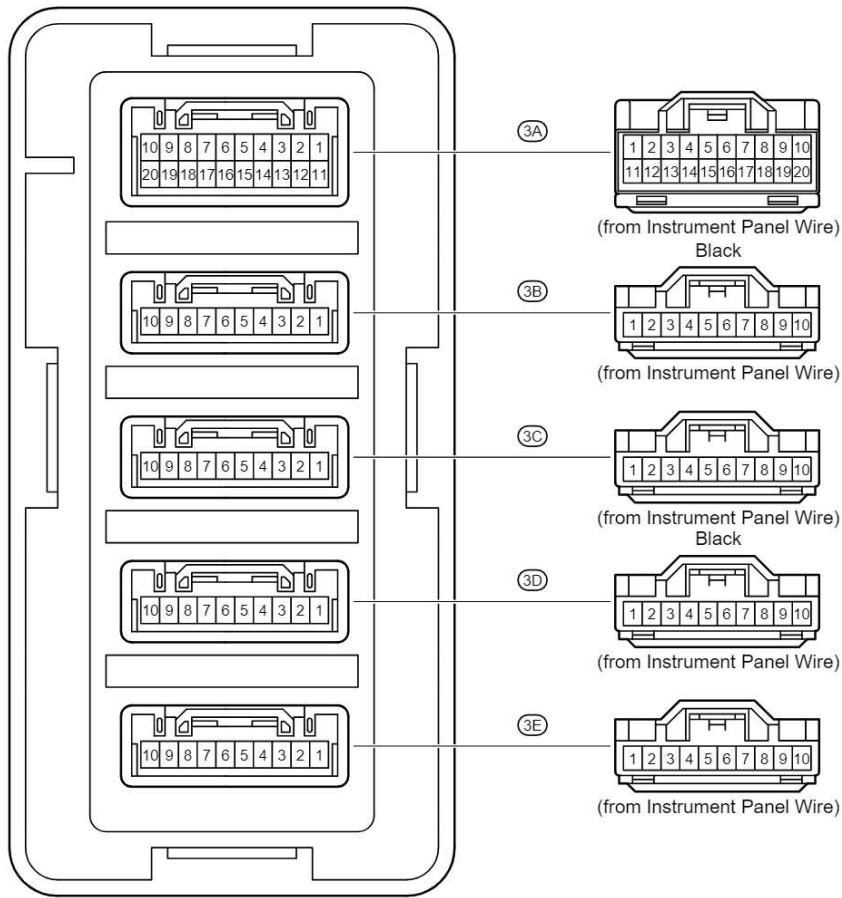


[J/B No.2 Inner Circuit]

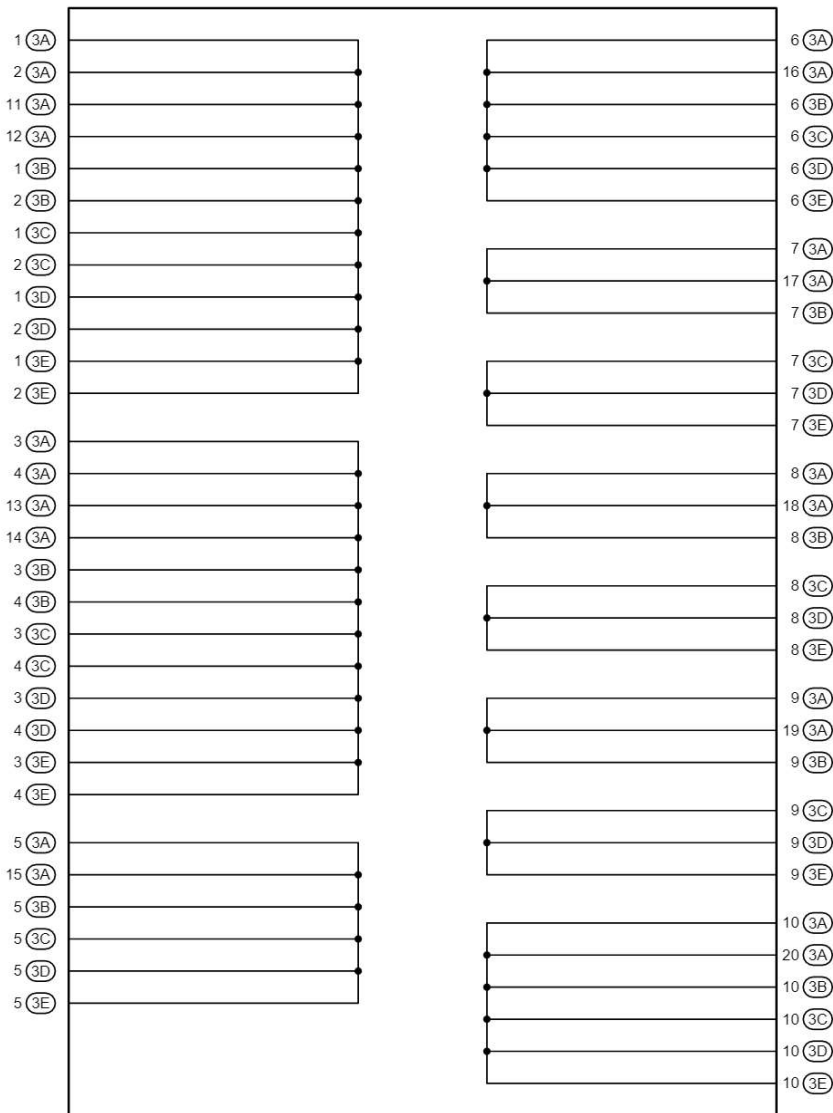


# F RELAY LOCATIONS

○ : J/B No.3	LHD : Instrument Panel Reinforcement Right (See Page 21)
	RHD : Instrument Panel Reinforcement Left (See Page 21)



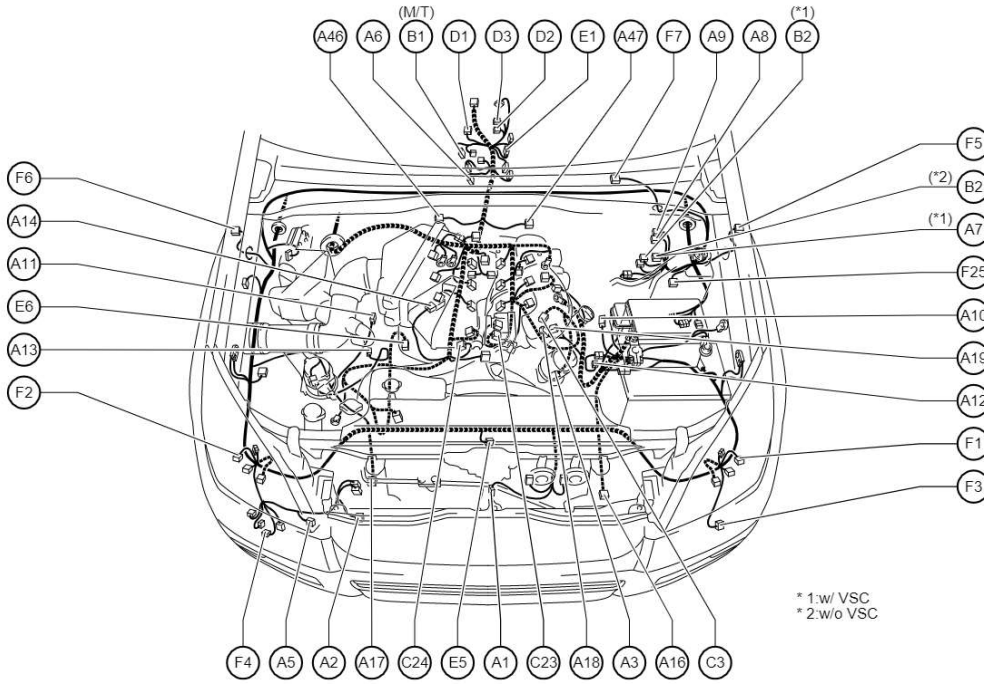
[J/B No.3 Inner Circuit]



# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[LHD : 1GR-FE]



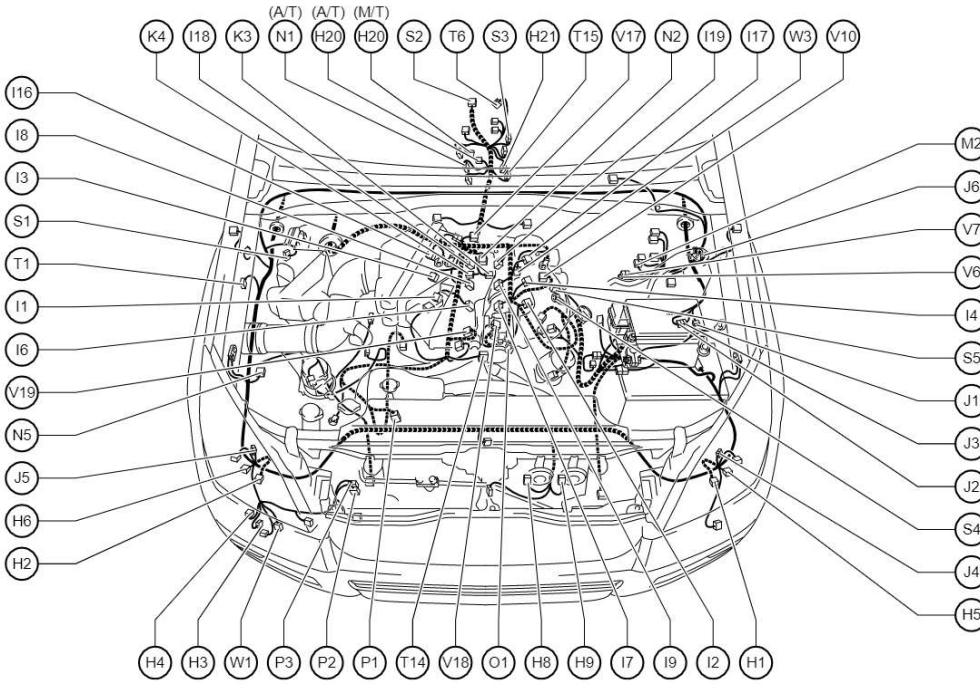
\* 1:w/ VSC  
\* 2:w/o VSC

- |  |  |
|--|--|
| A 1 A/C Ambient Temp. Sensor                 | C 3 Crankshaft Position Sensor               |
| A 2 A/C Condenser Fan Motor                  | C 23 Camshaft Timing Oil Control Valve LH    |
| A 3 A/C Lock Sensor                          | C 24 Camshaft Timing Oil Control Valve RH    |
| A/C Magnetic Clutch                          |  |
| A 5 A/C Magnetic Valve                       | D 1 Detection SW (Transfer 4WD Position)     |
| A 6 A/T Oil Temp. Sensor                     | D 2 Detection SW (Transfer L4 Position)      |
| A 7 ABS & BA & TRC & VSC Actuator            | D 3 Detection SW (Transfer Neutral Position) |
| A 8 ABS & BA & TRC & VSC Actuator            |  |
| A 9 ABS & BA & TRC & VSC Actuator            | E 1 ECT Solenoid                             |
| A 10 ABS Speed Sensor Front LH               | E 5 Engine Hood Courtesy SW                  |
| A 11 ABS Speed Sensor Front RH               | E 6 Engine Oil Level Sensor                  |
| A 12 Absorber Control Actuator Front LH      |  |
| A 13 Absorber Control Actuator Front RH      | F 1 Front Clearance Light LH                 |
| A 14 Air Flow Meter                          | Front Turn Signal Light LH                   |
| A 16 Airbag Sensor Front LH                  | F 2 Front Clearance Light RH                 |
| A 17 Airbag Sensor Front RH                  | Front Turn Signal Light RH                   |
| A 18 Alternator                              | F 3 Front Fog Light LH                       |
| A 19 Alternator                              | F 4 Front Fog Light RH                       |
| A 46 Air Fuel Ratio Sensor (Bank 1 Sensor 1) | F 5 Front Side Turn Signal Light LH          |
| A 47 Air Fuel Ratio Sensor (Bank 2 Sensor 1) | F 6 Front Side Turn Signal Light RH          |
|  | F 7 Front Wiper Motor                        |
| B 1 Back-Up Light SW                         | F 25 Fuel Pump Resistor                      |
| B 2 Brake Fluid Level Warning SW             |  |



## Position of Parts in Engine Compartment

[LHD : 1GR-FE]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 3 Headlight Cleaner Motor  
 H 4 Headlight Cleaner Relay  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)  
 H 20 Heated Oxygen Sensor (Bank 1 Sensor 2)  
 H 21 Heated Oxygen Sensor (Bank 2 Sensor 2)

I 1 Ignition Coil and Igniter No.1  
 I 2 Ignition Coil and Igniter No.2  
 I 3 Ignition Coil and Igniter No.3  
 I 4 Ignition Coil and Igniter No.4  
 I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4  
 I 16 Ignition Coil and Igniter No.5  
 I 17 Ignition Coil and Igniter No.6  
 I 18 Injector No.5  
 I 19 Injector No.6

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

K 3 Knock Sensor LH  
 K 4 Knock Sensor RH

M 2 Master Cylinder Pressure Sensor

N 1 Neutral Start SW  
 N 2 Noise Filter  
 N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 1 Power Steering Oil Pressure SW  
 P 2 Pressure SW  
 P 3 Pressure SW

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

T 1 Theft Deterrent Horn  
 T 6 Transfer Actuator  
 T 14 Throttle Control Motor  
 Throttle Position Sensor  
 T 15 Turbine Speed Sensor

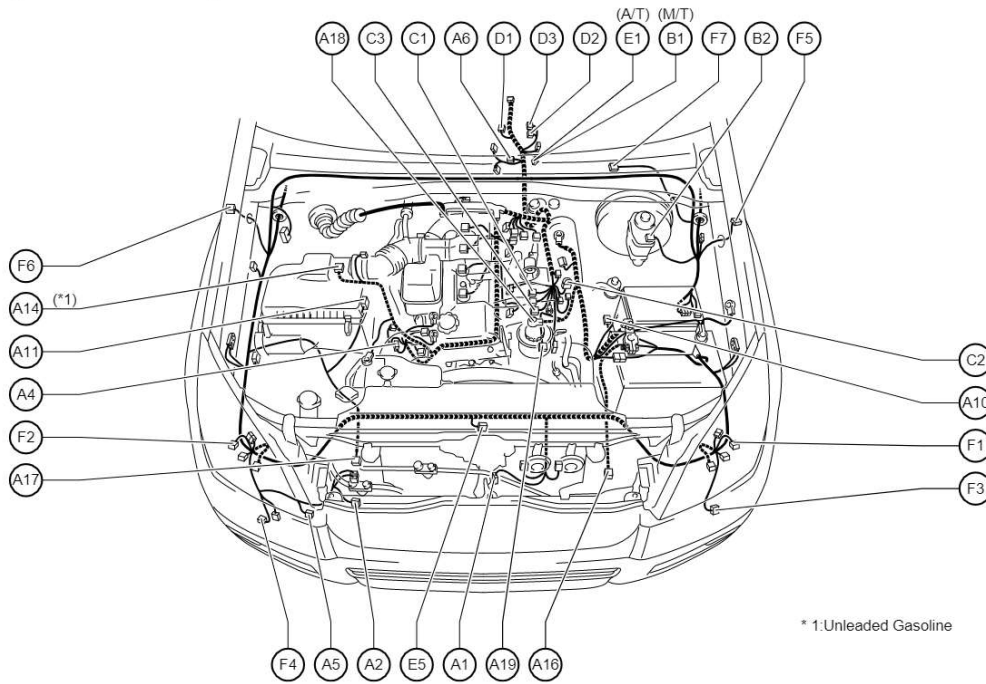
V 6 VSC Check Connector  
 V 7 VSC Check Connector  
 V 10 VSV (EVAP)  
 V 17 VSV (ACIS)  
 V 18 VVT Sensor LH  
 V 19 VVT Sensor RH

W 1 Washer Motor  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[LHD : 3RZ-FE]

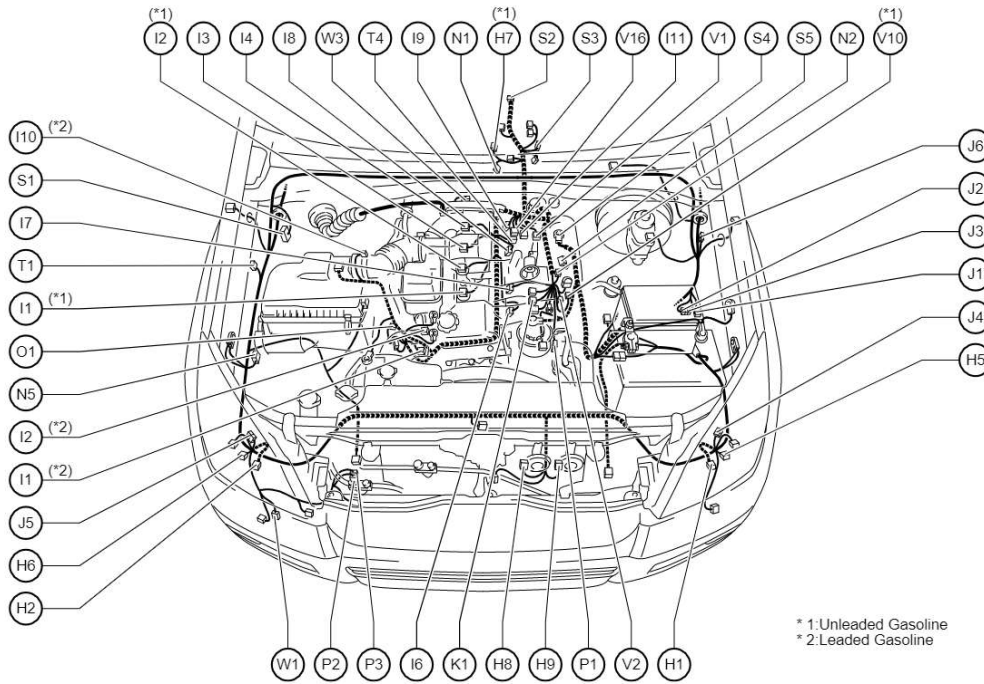


- A 1 A/C Ambient Temp. Sensor
- A 2 A/C Condenser Fan Motor
- A 4 A/C Magnetic Clutch
- A 5 A/C Magnetic Valve
- A 6 A/T Oil Temp. Sensor
- A 10 ABS Speed Sensor Front LH
- A 11 ABS Speed Sensor Front RH
- A 14 Air Flow Meter
- A 16 Airbag Sensor Front LH
- A 17 Airbag Sensor Front RH
- A 18 Alternator
- A 19 Alternator
- B 1 Back-Up Light SW
- B 2 Brake Fluid Level Warning SW
- C 1 Camshaft Position Sensor
- C 2 Check Connector
- C 3 Crankshaft Position Sensor

- D 1 Detection SW (Transfer 4WD Position)
- D 2 Detection SW (Transfer L4 Position)
- D 3 Detection SW (Transfer Neutral Position)
- E 1 ECT Solenoid
- E 5 Engine Hood Courtesy SW
- F 1 Front Clearance Light LH  
Front Turn Signal Light LH
- F 2 Front Clearance Light RH  
Front Turn Signal 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 Wiper Motor

## Position of Parts in Engine Compartment

[LHD : 3RZ-FE]



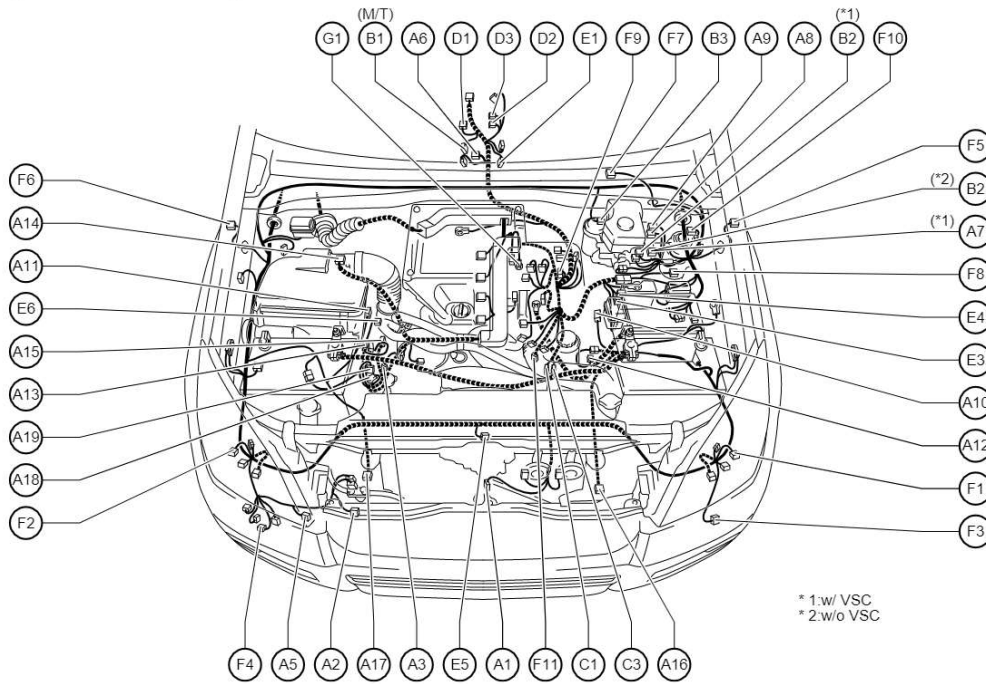
\* 1:Unleaded Gasoline  
\* 2:Leaded Gasoline

- |  |                                      |
|--|--------------------------------------|
| H 1 Headlight Beam Level Control Actuator LH | N 1 Neutral Start SW                 |
| H 2 Headlight Beam Level Control Actuator RH | N 2 Noise Filter                     |
| H 5 Headlight LH                             | N 5 Noise Filter (Condenser Fan)     |
| H 6 Headlight RH                             | O 1 Oil Pressure SW                  |
| H 7 Heated Oxygen Sensor                     | P 1 Power Steering Oil Pressure SW   |
| H 8 Horn (High)                              | P 2 Pressure SW                      |
| H 9 Horn (Low)                               | P 3 Pressure SW                      |
| I 1 Ignition Coil and Igniter No.1           | S 1 Skid Control ECU with Actuator   |
| I 2 Ignition Coil and Igniter No.2           | S 2 Speed Sensor (Combination Meter) |
| I 3 Ignition Coil and Igniter No.3           | S 3 Speed Sensor (ECT)               |
| I 4 Ignition Coil and Igniter No.4           | S 4 Starter                          |
| I 6 Injector No.1                            | S 5 Starter                          |
| I 7 Injector No.2                            | T 1 Theft Deterrent Horn             |
| I 8 Injector No.3                            | T 4 Throttle Position Sensor         |
| I 9 Injector No.4                            | V 1 Vacuum Sensor                    |
| I 10 Intake Air Temp. Sensor                 | V 2 Variable Resistor                |
| I 11 ISC Valve                               | V 10 VSV (EVAP)                      |
| J 1 Junction Connector                       | V 16 VSV (EGR)                       |
| J 2 Junction Connector                       | W 1 Washer Motor                     |
| J 3 Junction Connector                       | W 3 Water Temp. Sensor               |
| J 4 Junction Connector                       |                                      |
| J 5 Junction Connector                       |                                      |
| J 6 Junction Connector                       |                                      |
| K 1 Knock Sensor                             |                                      |

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[LHD : 1KD-FTV]

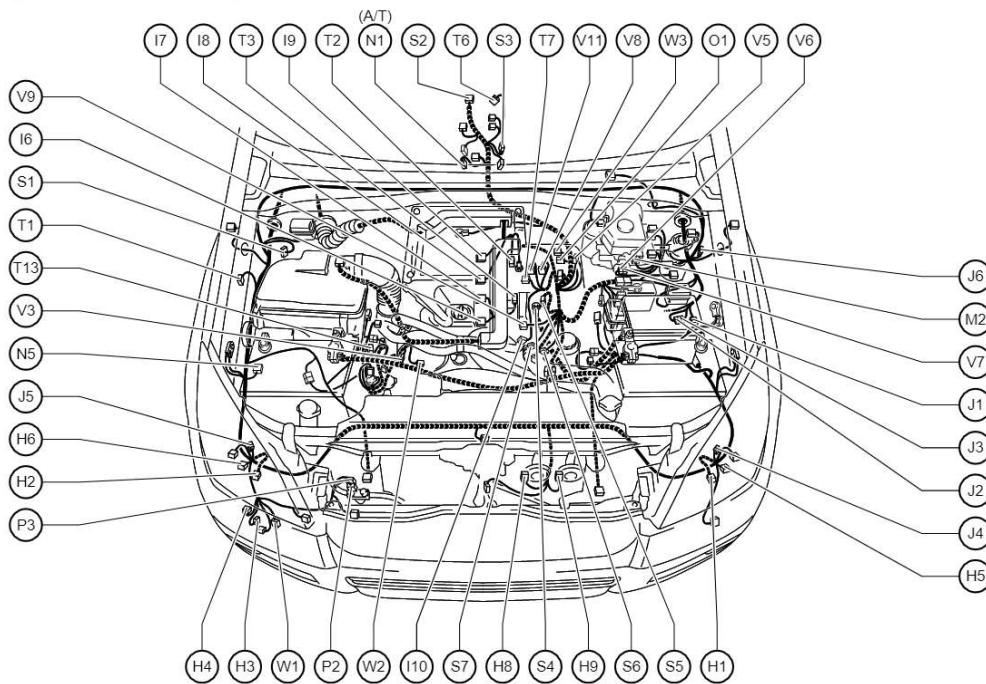


\* 1:w/ VSC  
\* 2:w/o VSC

- |   |  |
|---|--|
| A 1 A/C Ambient Temp. Sensor            | D 1 Detection SW (Transfer 4WD Position)     |
| A 2 A/C Condenser Fan Motor             | D 2 Detection SW (Transfer L4 Position)      |
| A 3 A/C Lock Sensor                     | D 3 Detection SW (Transfer Neutral Position) |
| A/C Magnetic Clutch                     |  |
| A 5 A/C Magnetic Valve                  | E 1 ECT Solenoid                             |
| A 6 A/T Oil Temp. Sensor                | E 3 Electronic Driver Unit                   |
| A 7 ABS & BA & TRC & VSC Actuator       | E 4 Electronic Driver Unit                   |
| A 8 ABS & BA & TRC & VSC Actuator       | E 5 Engine Hood Courtesy SW                  |
| A 9 ABS & BA & TRC & VSC Actuator       | E 6 Engine Oil Level Sensor                  |
| A 10 ABS Speed Sensor Front LH          |  |
| A 11 ABS Speed Sensor Front RH          | F 1 Front Clearance Light LH                 |
| A 12 Absorber Control Actuator Front LH | Front Turn Signal Light LH                   |
| A 13 Absorber Control Actuator Front RH | F 2 Front Clearance Light RH                 |
| A 14 Air Flow Meter                     | Front Turn Signal Light RH                   |
| A 15 Air Vent Control Servo Motor       | F 3 Front Fog Light LH                       |
| A 16 Airbag Sensor Front LH             | F 4 Front Fog Light RH                       |
| A 17 Airbag Sensor Front RH             | F 5 Front Side Turn Signal Light LH          |
| A 18 Alternator                         | F 6 Front Side Turn Signal Light RH          |
| A 19 Alternator                         | F 7 Front Wiper Motor                        |
|   | F 8 Fuel Heater                              |
| B 1 Back-Up Light SW                    | F 9 Fuel Pressure Sensor                     |
| B 2 Brake Fluid Level Warning SW        | F 10 Fuel Sedimentary SW                     |
| B 3 Brake Vacuum Warning SW             | F 11 Fuel Temp. Sensor                       |
| C 1 Camshaft Position Sensor            |  |
| C 3 Crankshaft Position Sensor          | G 1 Glow Plug                                |

## Position of Parts in Engine Compartment

[LHD : 1KD-FTV]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 3 Headlight Cleaner Motor  
 H 4 Headlight Cleaner Relay  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)

I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4  
 I 10 Intake Air Temp. Sensor

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

M 2 Master Cylinder Pressure Sensor

N 1 Neutral Start SW  
 N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 2 Pressure SW  
 P 3 Pressure SW

S 1 Skid Control ECU with Actuator  
 S 2 Speed Sensor (Combination Meter)  
 S 3 Speed Sensor (ECT)  
 S 4 Starter  
 S 5 Starter  
 S 6 Suction Control Valve No.1  
 S 7 Suction Control Valve No.2

T 1 Theft Deterrent Horn  
 T 2 Throttle Control Motor  
 T 3 Throttle Open SW  
 T 6 Transfer Actuator  
 T 7 Turbo Pressure Sensor  
 T 13 Turbo Charger Compensate Resistor

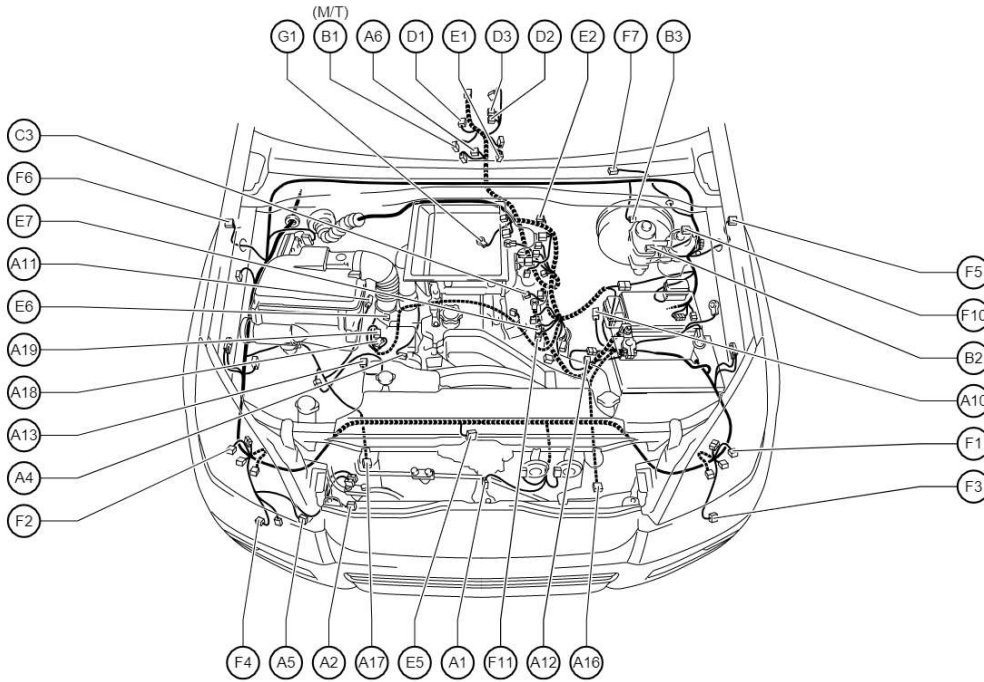
V 3 Viscous Heater Magnetic Clutch  
 V 5 VRV (EGR)  
 V 6 VSC Check Connector  
 V 7 VSC Check Connector  
 V 8 VSV (EGR Cut)  
 V 9 VSV (Engine Mount)  
 V 11 VSV (Pressure Charge Valve)

W 1 Washer Motor  
 W 2 Water Temp. Sender  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

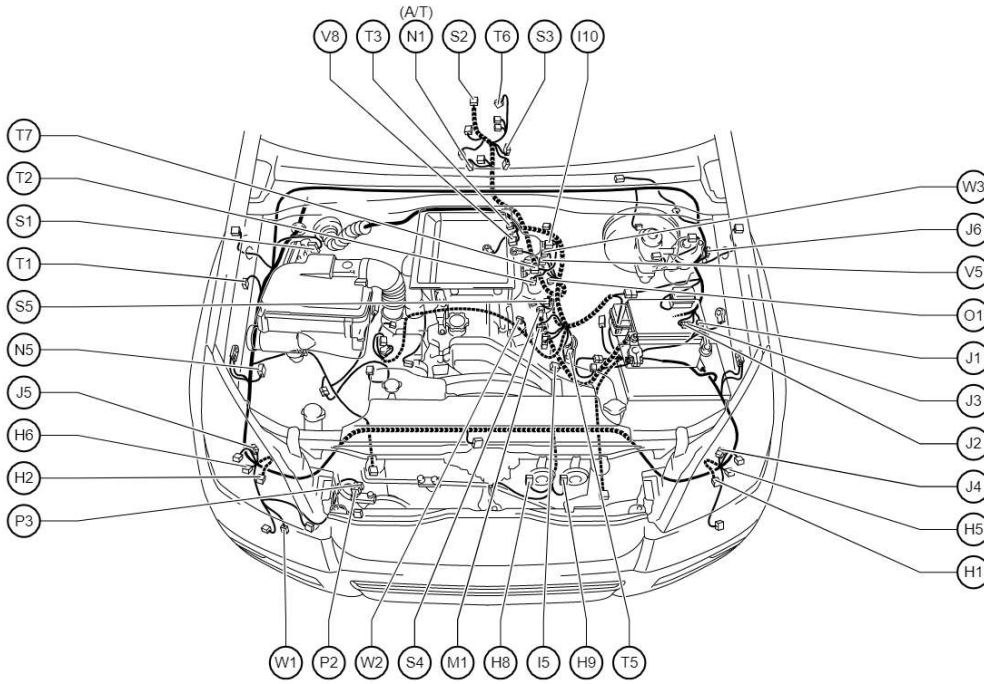
[LHD : 1KZ-TE]



- |  |  |
|--|--|
| A 1 A/C Ambient Temp. Sensor                 | E 1 ECT Solenoid   |
| A 2 A/C Condenser Fan Motor                  | E 2 EGR Valve Position Sensor                              |
| A 4 A/C Magnetic Clutch                      | E 5 Engine Hood Courtesy SW                                |
| A 5 A/C Magnetic Valve                       | E 6 Engine Oil Level Sensor                                |
| A 6 A/T Oil Temp. Sensor                     | E 7 Engine Speed Sensor                                    |
| A 10 ABS Speed Sensor Front LH               | F 1 Front Clearance Light LH<br>Front Turn Signal Light LH |
| A 11 ABS Speed Sensor Front RH               | F 2 Front Clearance Light RH<br>Front Turn Signal Light RH |
| A 12 Absorber Control Actuator Front LH      | F 3 Front Fog Light LH                                     |
| A 13 Absorber Control Actuator Front RH      | F 4 Front Fog Light RH                                     |
| A 16 Airbag Sensor Front LH                  | F 5 Front Side Turn Signal Light LH                        |
| A 17 Airbag Sensor Front RH                  | F 6 Front Side Turn Signal Light RH                        |
| A 18 Alternator                              | F 7 Front Wiper Motor                                      |
| A 19 Alternator                              | F 10 Fuel Sedimentary SW                                   |
| B 1 Back-Up Light SW                         | F 11 Fuel Temp. Sensor                                     |
| B 2 Brake Fluid Level Warning SW             |  |
| B 3 Brake Vacuum Warning SW                  |  |
| C 3 Crankshaft Position Sensor               | G 1 Glow Plug  |
| D 1 Detection SW (Transfer 4WD Position)     |  |
| D 2 Detection SW (Transfer L4 Position)      |  |
| D 3 Detection SW (Transfer Neutral Position) |  |

## Position of Parts in Engine Compartment

[LHD : 1KZ-TE]

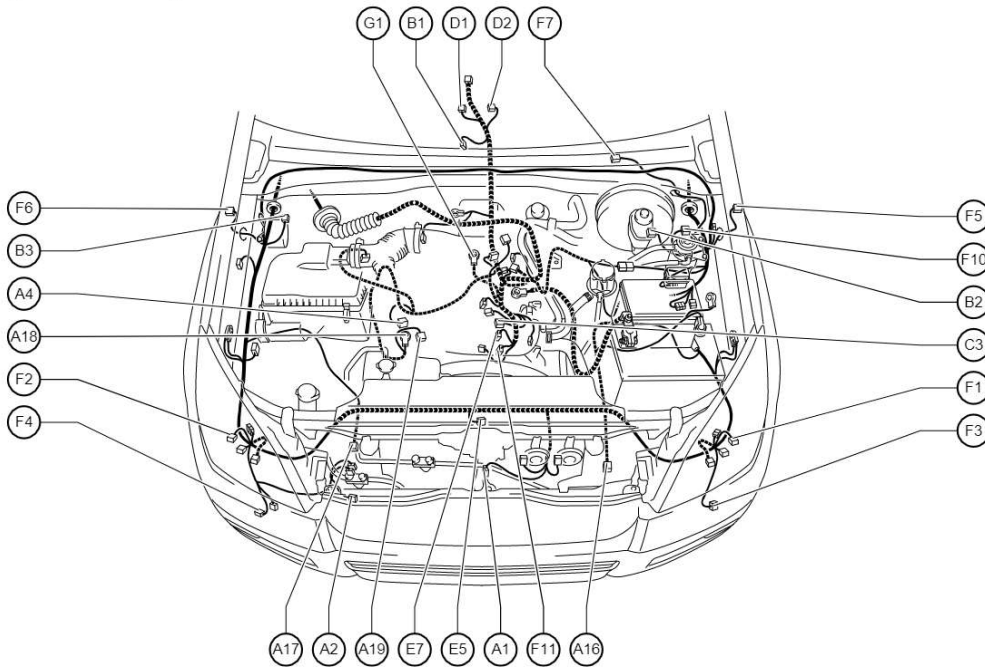


- |  |                                      |
|--|--------------------------------------|
| H 1 Headlight Beam Level Control Actuator LH | P 2 Pressure SW                      |
| H 2 Headlight Beam Level Control Actuator RH | P 3 Pressure SW                      |
| H 5 Headlight LH                             | S 1 Skid Control ECU with Actuator   |
| H 6 Headlight RH                             | S 2 Speed Sensor (Combination Meter) |
| H 8 Horn (High)                              | S 3 Speed Sensor (ECT)               |
| H 9 Horn (Low)                               | S 4 Starter                          |
| I 5 Injection Pump                           | S 5 Starter                          |
| I 10 Intake Air Temp. Sensor                 | T 1 Theft Deterrent Horn             |
| J 1 Junction Connector                       | T 2 Throttle Control Motor           |
| J 2 Junction Connector                       | T 3 Throttle Open SW                 |
| J 3 Junction Connector                       | T 5 Timing Control Valve             |
| J 4 Junction Connector                       | T 6 Transfer Actuator                |
| J 5 Junction Connector                       | T 7 Turbo Pressure Sensor            |
| J 6 Junction Connector                       | V 5 VRV (EGR)                        |
| M 1 Magnetic Spill Valve                     | V 8 VSV (EGR Cut)                    |
| N 1 Neutral Start SW                         | W 1 Washer Motor                     |
| N 5 Noise Filter (Condenser Fan)             | W 2 Water Temp. Sender               |
| O 1 Oil Pressure SW                          | W 3 Water Temp. Sensor               |

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Engine Compartment

[LHD : 5L-E]

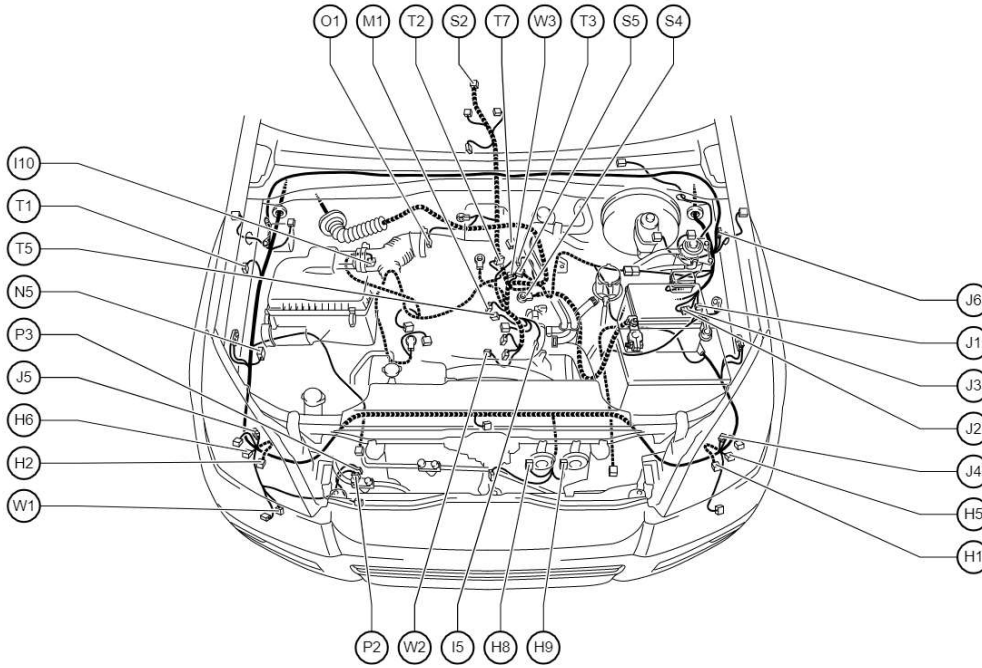


- |  |  |
|--|--|
| A 1 A/C Ambient Temp. Sensor             | E 5 Engine Hood Courtesy SW                                |
| A 2 A/C Condenser Fan Motor              | E 7 Engine Speed Sensor                                    |
| A 4 A/C Magnetic Clutch                  | F 1 Front Clearance Light LH<br>Front Turn Signal Light LH |
| A 16 Airbag Sensor Front LH              | F 2 Front Clearance Light RH<br>Front Turn Signal Light RH |
| A 17 Airbag Sensor Front RH              | F 3 Front Fog Light LH                                     |
| A 18 Alternator                          | F 4 Front Fog Light RH                                     |
| A 19 Alternator                          | F 5 Front Side Turn Signal Light LH                        |
| B 1 Back-Up Light SW                     | F 6 Front Side Turn Signal Light RH                        |
| B 2 Brake Fluid Level Warning SW         | F 7 Front Wiper Motor                                      |
| B 3 Brake Vacuum Warning SW              | F 10 Fuel Sedimentary SW                                   |
| C 3 Crankshaft Position Sensor           | F 11 Fuel Temp. Sensor                                     |
| D 1 Detection SW (Transfer 4WD Position) | G 1 Glow Plug  |
| D 2 Detection SW (Transfer L4 Position)  |  |



## Position of Parts in Engine Compartment

[LHD : 5L-E]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)

I 5 Injection Pump  
 I 10 Intake Air Temp. Sensor

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

M 1 Magnetic Spill Valve

N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 2 Pressure SW  
 P 3 Pressure SW

S 2 Speed Sensor (Combination Meter)  
 S 4 Starter  
 S 5 Starter

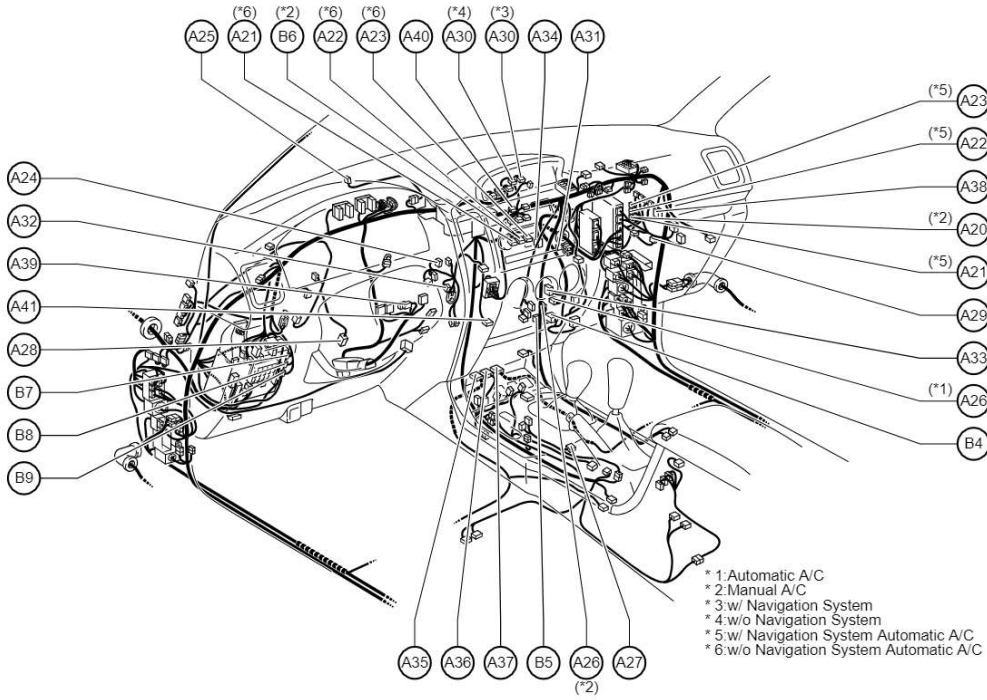
T 1 Theft Deterrent Horn  
 T 2 Throttle Control Motor  
 T 3 Throttle Open SW  
 T 5 Timing Control Valve  
 T 7 Turbo Pressure Sensor

W 1 Washer Motor  
 W 2 Water Temp. Sender  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel

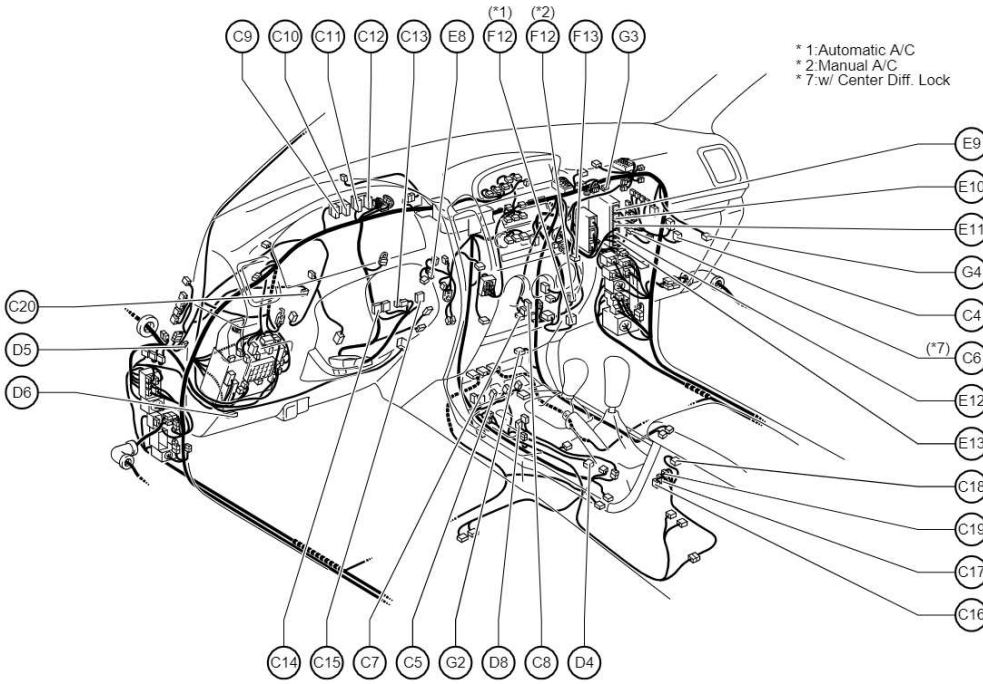
[LHD]



- |  |  |
|--|--|
| A20 A/C Amplifier  | A33 Air Mix Control Servo Motor RH                 |
| A21 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A34 Air Vent Mode Control Servo Motor              |
| A22 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A35 Airbag Sensor Assembly                         |
| A23 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A36 Airbag Sensor Assembly                         |
| A24 A/C Room Temp. Sensor  | A37 Airbag Sensor Assembly                         |
| A25 A/C Solar Sensor   | A38 Airbag Squib (Front Passenger Airbag Assembly) |
| A26 A/C Thermistor   | A39 Airbag Squib (Steering Wheel Pad)              |
| A27 A/T Shift Indicator  | A40 Antenna Amplifier                              |
| A28 Accel Position Sensor  | A41 Ashtray Illumination                           |
| A29 Acceleration Control Sensor Front  |  |
| A30 Accessory Meter  | B 4 Blower Motor Linear Controller                 |
| A31 Air Inlet Control Servo Motor  | B 5 Blower Resistor                                |
| A32 Air Mix Control Servo Motor LH   | B 6 Blower SW                                      |
|  | B 7 Body ECU                                       |
|  | B 8 Body ECU                                       |
|  | B 9 Body ECU                                       |

## Position of Parts in Instrument Panel

[LHD]



C 4 CD Automatic Changer  
 C 5 Center Diff. Lock Control SW  
 C 6 Center Diff. Lock ECU  
 C 7 Cigarette Lighter  
 C 8 Cigarette Lighter Illumination  
 C 9 Combination Meter  
 C10 Combination Meter  
 C11 Combination Meter  
 C12 Combination Meter  
 C13 Combination SW  
 C14 Combination SW  
 C15 Combination SW  
 C16 Cool Box Amplifier  
 C17 Cool Box Motor  
 C18 Cool Box SW  
 C19 Cool Box Thermistor  
 C20 Cruise Control Clutch SW

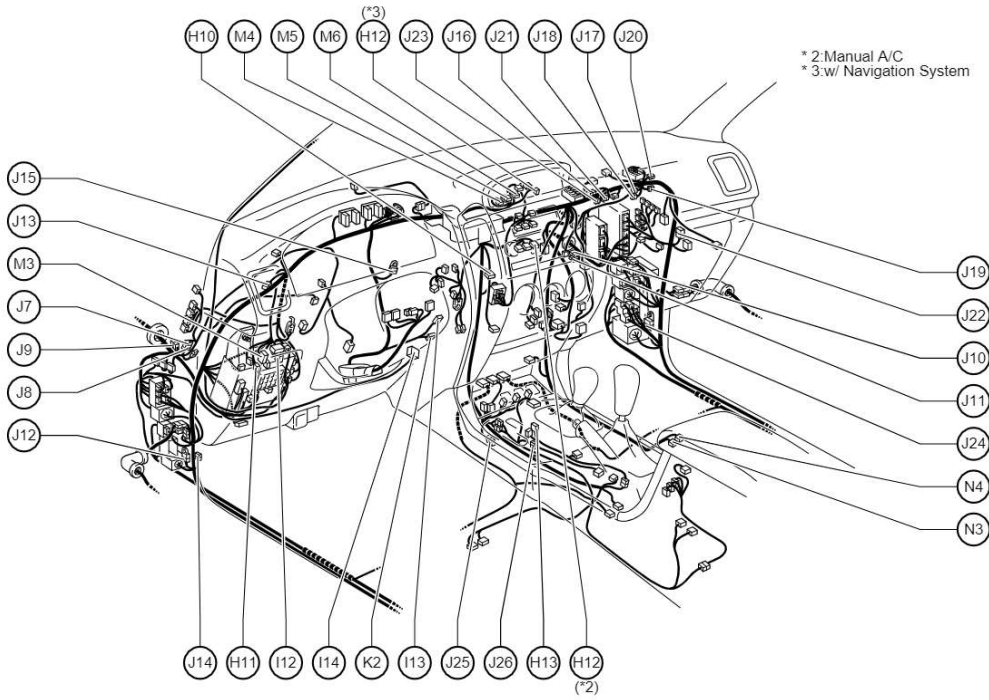
E 8 ECT Pattern Select SW  
 E 9 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E10 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E11 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E12 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E13 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 F 12 Front Blower Motor  
 F 13 Front Passenger's Seat Belt Warning Light  
 G 2 Gateway ECU  
 G 3 Glove Box Light  
 G 4 Glove Box Light SW

D 4 Deceleration Sensor  
 D 5 Diode (Front Fog Light)  
 D 6 DLC3  
 D 8 Downhill Assist Control SW

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel

[LHD]



H10 Hazard SW  
H11 Headlight Beam Level Control SW  
H12 Heater Control SW  
H13 Height Control and Suspension SW

I 12 Idle-Up SW  
I 13 Ignition Key Cylinder Light  
Transponder Key Amplifier  
I 14 Ignition SW

J 7 Junction Connector  
J 8 Junction Connector  
J 9 Junction Connector  
J 10 Junction Connector  
J 11 Junction Connector  
J 12 Junction Connector  
J 13 Junction Connector  
J 14 Junction Connector  
J 15 Junction Connector  
J 16 Junction Connector  
J 17 Junction Connector

J 18 Junction Connector  
J 19 Junction Connector  
J 20 Junction Connector  
J 21 Junction Connector  
J 22 Junction Connector  
J 23 Junction Connector  
J 24 Junction Connector  
J 25 Junction Connector  
J 26 Junction Connector

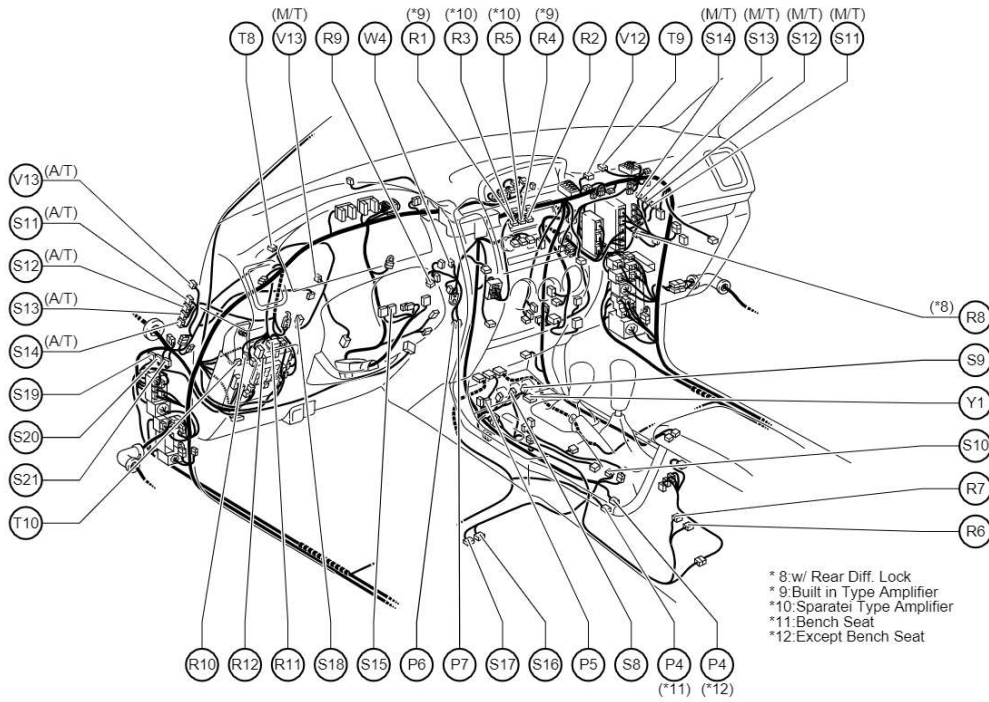
K 2 Key Interlock Solenoid  
Unlock Warning SW

M 3 Mirror Heater SW  
M 4 Multi-Display  
M 5 Multi-Display  
M 6 Multi-Display

N 3 Navigation ECU  
N 4 Navigation ECU

## Position of Parts in Instrument Panel

[LHD]



\* 8:w/ Rear Diff. Lock  
 \* 9:Built in Type Amplifier  
 \*10: Sparatef Type Amplifier  
 \*11: Bench Seat  
 \*12: Except Bench Seat

P 4 Parking Brake SW  
 P 5 Power Outlet (Front)  
 P 6 PTC Heater  
 P 7 PTC Heater

R 1 Radio and Player  
 R 2 Radio and Player  
 R 3 Radio and Player  
 R 4 Radio and Player  
 R 5 Radio and Player  
 R 6 Rear Blower SW  
 R 7 Rear Cooler Control SW  
 R 8 Rear Diff. Lock Control ECU  
 R 9 Rear Diff. Lock SW  
 R10 Rear Fog Light SW  
 R11 Remote Control Mirror SW  
 R12 Rheostat

S 8 Seat Heater SW Front LH  
 S 9 Seat Heater SW Front RH  
 S10 Shift Lock Control ECU  
 S11 Skid Control ECU

S12 Skid Control ECU  
 S13 Skid Control ECU  
 S14 Skid Control ECU  
 S15 Steering Sensor  
 S16 Stereo Component Amplifier  
 S17 Stereo Component Amplifier  
 S18 Stop Light SW  
 S19 Suspension Control ECU  
 S20 Suspension Control ECU  
 S21 Suspension Control ECU

T 8 Theft Deterrent ECU  
 T 9 Transponder Key Computer  
 T10 Turn Signal Flasher

V12 Viscous Heater Amplifier  
 V13 VSC Warning Buzzer

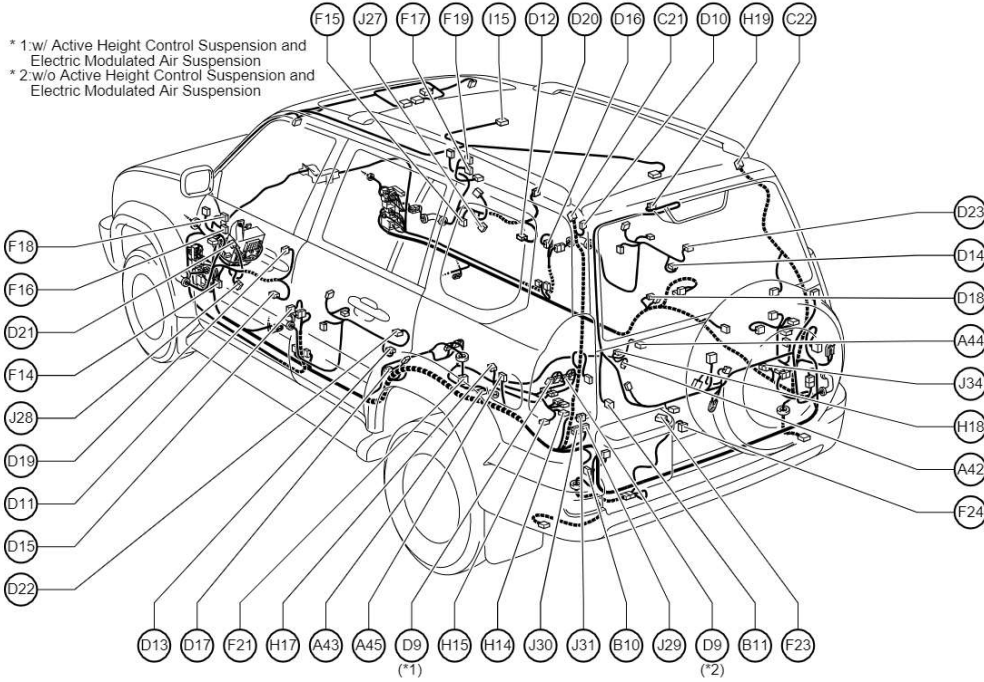
W 4 Water Temp. Sensor (A/C)

Y 1 Yaw Rate Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body

[LHD : 5-Door]

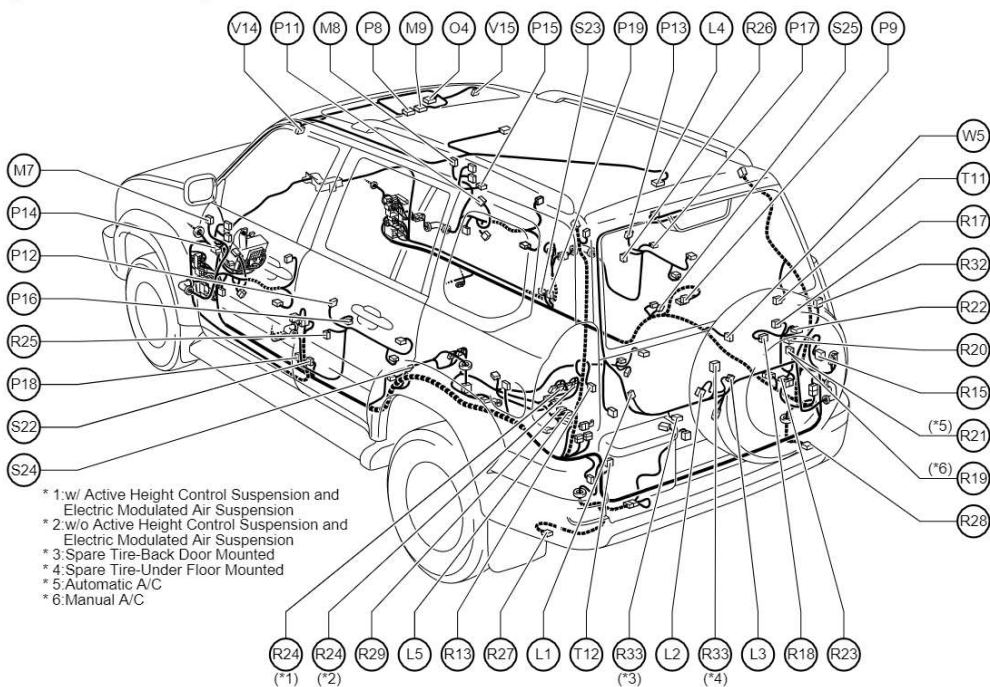


\* 1:w/ Active Height Control Suspension and Electric Modulated Air Suspension  
 \* 2:w/o Active Height Control Suspension and Electric Modulated Air Suspension

- |   |   |
|---|---|
| A 42 ABS Speed Sensor Rear                | D22 Door Lock Motor Rear LH               |
| A 43 Absorber Control Actuator Rear LH    | Door Unlock Detection SW Rear LH          |
| A 44 Absorber Control Actuator Rear RH    | D23 Door Lock Motor Rear RH               |
| A 45 Acceleration Control Sensor Rear     | Door Unlock Detection SW Rear RH          |
| B 10 Back Door Courtesy SW                | F 14 Front Door Speaker LH                |
| B 11 Back Door Key Lock and Unlock SW     | F 15 Front Door Speaker RH                |
| Back Door Lock Motor                      | F 16 Front Door Squawker LH               |
| Back Door Unlock Detection SW             | F 17 Front Door Squawker RH               |
| C 21 Curtain Shield Airbag Squib LH       | F 18 Front Door Tweeter Speaker LH        |
| C 22 Curtain Shield Airbag Squib RH       | F 19 Front Door Tweeter Speaker RH        |
| D 9 Detection SW (Rear Diff. Lock)        | F 21 Fuel Pump and Fuel Sender (Gasoline) |
| D 10 Door Control Receiver                | Fuel Sender (Diesel)                      |
| D 11 Door Courtesy Light Front LH         | F 23 Fuel Sender (Sub)                    |
| D 12 Door Courtesy Light Front RH         | F 24 Fuel Sender (Sub)                    |
| D 13 Door Courtesy Light Rear LH          | H 14 Height Control Compressor            |
| D 14 Door Courtesy Light Rear RH          | H 15 Height Control Exhaust Valve         |
| D 15 Door Courtesy SW Front LH            | H 17 Height Control Sensor Rear LH        |
| D 16 Door Courtesy SW Front RH            | H 18 Height Control Sensor Rear RH        |
| D 17 Door Courtesy SW Rear LH             | H 19 High Mounted Stop Light              |
| D 18 Door Courtesy SW Rear RH             | I 15 Interior Light                       |
| D 19 Door Key Lock and Unlock SW Front LH | J 27 Junction Connector                   |
| Door Lock Motor Front LH                  | J 28 Junction Connector                   |
| Door Unlock Detection SW Front LH         | J 29 Junction Connector                   |
| D 20 Door Key Lock and Unlock SW Front RH | J 30 Junction Connector                   |
| Door Lock Motor Front RH                  | J 31 Junction Connector                   |
| Door Unlock Detection SW Front RH         | J 34 Junction Connector                   |
| D 21 Door Lock Control SW                 |   |
| Power Window Master SW                    |   |

## Position of Parts in Body

[LHD : 5-Door]



L 1 License Plate Light  
L 2 License Plate Light LH  
L 3 License Plate Light RH  
L 4 Luggage Compartment Light  
L 5 Low Pressure Tank Valve

M 7 Mirror Heater LH  
Remote Control Mirror LH  
M 8 Mirror Heater RH  
Remote Control Mirror RH  
M 9 Moon Roof Control ECU and Motor

O 4 Overhead J/B

P 8 Personal Light  
P 9 Power Outlet (Rear)  
P 11 Power Window Control SW Front RH  
P 12 Power Window Control SW Rear LH  
P 13 Power Window Control SW Rear RH  
P 14 Power Window Motor Front LH  
P 15 Power Window Motor Front RH  
P 16 Power Window Motor Rear LH  
P 17 Power Window Motor Rear RH  
P 18 Pretensioner LH  
P 19 Pretensioner RH

R 13 Rear Combination Light LH  
R 15 Rear Combination Light RH

R 17 Rear Cooler Amplifier  
R 18 Rear Cooler Blower Motor  
R 19 Rear Cooler Blower Resistor  
R 20 Rear Cooler Magnetic Valve  
R 21 Rear Cooler Power Transistor  
R 22 Rear Cooler Relay  
R 23 Rear Cooler Thermistor  
R 24 Rear Diff. Lock Motor  
R 25 Rear Door Speaker LH  
R 26 Rear Door Speaker RH  
R 27 Rear Fog Light LH  
R 28 Rear Fog Light RH  
R 29 Rear Height Control Valve  
R 32 Rear Window Defogger  
R 33 Rear Wiper Motor

S 22 Side Airbag Sensor Front LH  
S 23 Side Airbag Sensor Front RH  
S 24 Side Airbag Sensor Rear LH  
S 25 Side Airbag Sensor Rear RH

T 11 Theft Deterrent Siren  
T 12 Trailer Socket

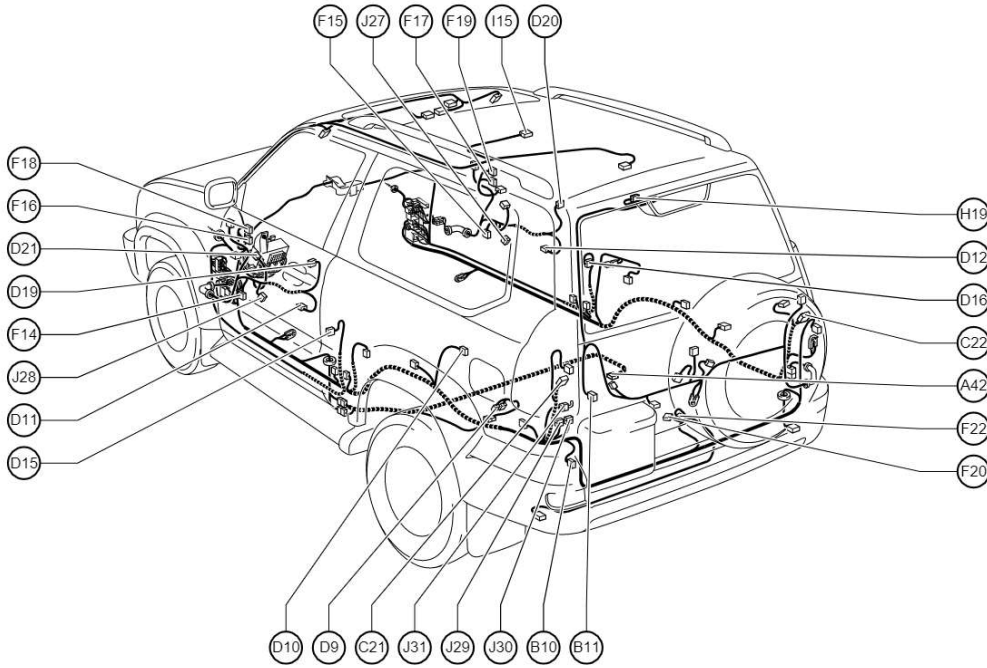
V 14 Vanity Light LH  
V 15 Vanity Light RH

W 5 Woofer Speaker

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body

[LHD : 3-Door]



- A42 ABS Speed Sensor Rear
- B10 Back Door Courtesy SW
- B11 Back Door Key Lock and Unlock SW  
Back Door Lock Motor  
Back Door Unlock Detection SW
- C21 Curtain Shield Airbag Squib LH
- C22 Curtain Shield Airbag Squib RH
- D 9 Detection SW (Rear Diff. Lock)
- D10 Door Control Receiver
- D11 Door Courtesy Light Front LH
- D12 Door Courtesy Light Front RH
- D15 Door Courtesy SW Front LH
- D16 Door Courtesy SW Front RH
- D19 Door Key Lock and Unlock SW Front LH  
Door Lock Motor Front LH  
Door Unlock Detection SW Front LH
- D20 Door Key Lock and Unlock SW Front RH  
Door Lock Motor Front RH  
Door Unlock Detection SW Front RH
- D21 Door Lock Control SW  
Power Window Master SW

- F14 Front Door Speaker LH
- F15 Front Door Speaker RH
- F16 Front Door Squawker LH
- F17 Front Door Squawker RH
- F18 Front Door Tweeter Speaker LH
- F19 Front Door Tweeter Speaker RH
- F20 Fuel Pump
- F22 Fuel Sender

H19 High Mounted Stop Light

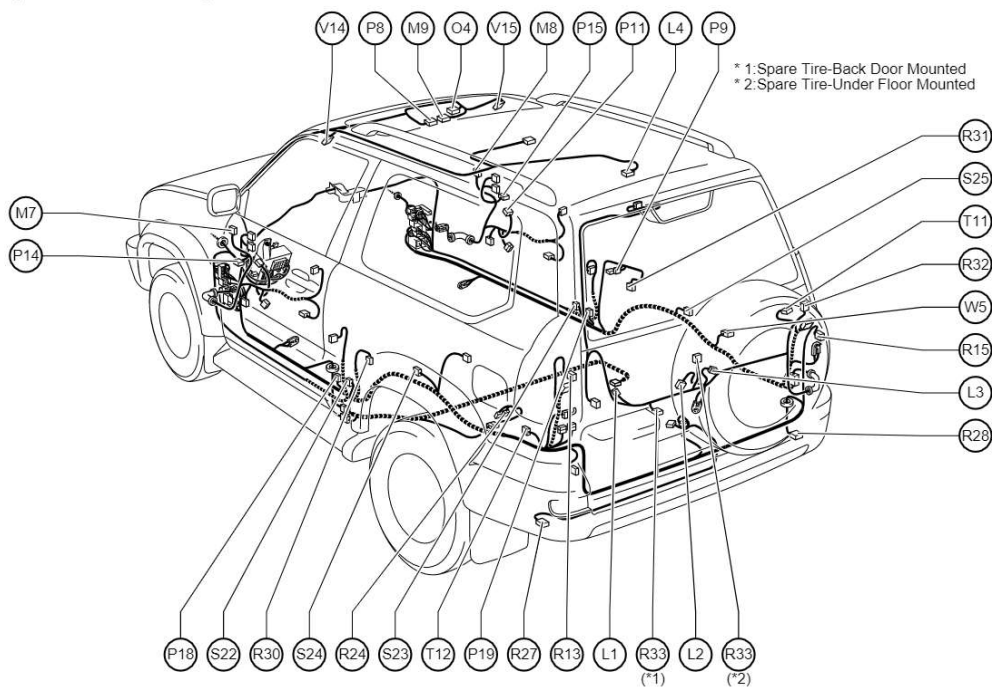
I 15 Interior Light

- J27 Junction Connector
- J28 Junction Connector
- J29 Junction Connector
- J30 Junction Connector
- J31 Junction Connecto



## Position of Parts in Body

[LHD : 3-Door]



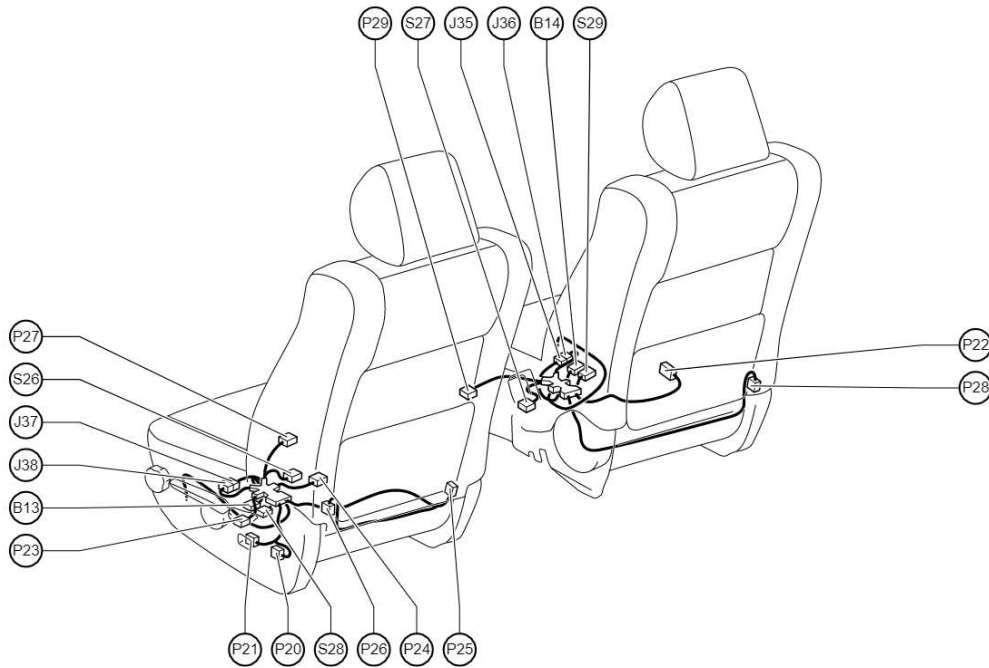
\* 1: Spare Tire-Back Door Mounted  
\* 2: Spare Tire-Under Floor Mounted

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| L 1 License Plate Light              | R13 Rear Combination Light LH   |
| L 2 License Plate Light LH           | R15 Rear Combination Light RH   |
| L 3 License Plate Light RH           | R24 Rear Diff. Lock Motor       |
| L 4 Luggage Compartment Light        | R27 Rear Fog Light LH           |
| M 7 Mirror Heater LH                 | R28 Rear Fog Light RH           |
| Remote Control Mirror LH             | R30 Rear Speaker LH             |
| M 8 Mirror Heater RH                 | R31 Rear Speaker RH             |
| Remote Control Mirror RH             | R32 Rear Window Defogger        |
| M 9 Moon Roof Control ECU and Motor  | R33 Rear Wiper Motor            |
| O 4 Overhead J/B                     | S22 Side Airbag Sensor Front LH |
| P 8 Personal Light                   | S23 Side Airbag Sensor Front RH |
| P 9 Power Outlet (Rear)              | S24 Side Airbag Sensor Rear LH  |
| P11 Power Window Control SW Front RH | S25 Side Airbag Sensor Rear RH  |
| P14 Power Window Motor Front LH      | T 11 Theft Deterrent Siren      |
| P15 Power Window Motor Front RH      | T 12 Trailer Socket             |
| P18 Pretensioner LH                  | V14 Vanity Light LH             |
| P19 Pretensioner RH                  | V15 Vanity Light RH             |
|                                      | W 5 Woofer Speaker              |

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Seat

[LHD : 8Way Power Seat]



B13 Buckle SW LH  
Seat Position Sensor  
B14 Buckle SW RH  
Occupant Detection Sensor

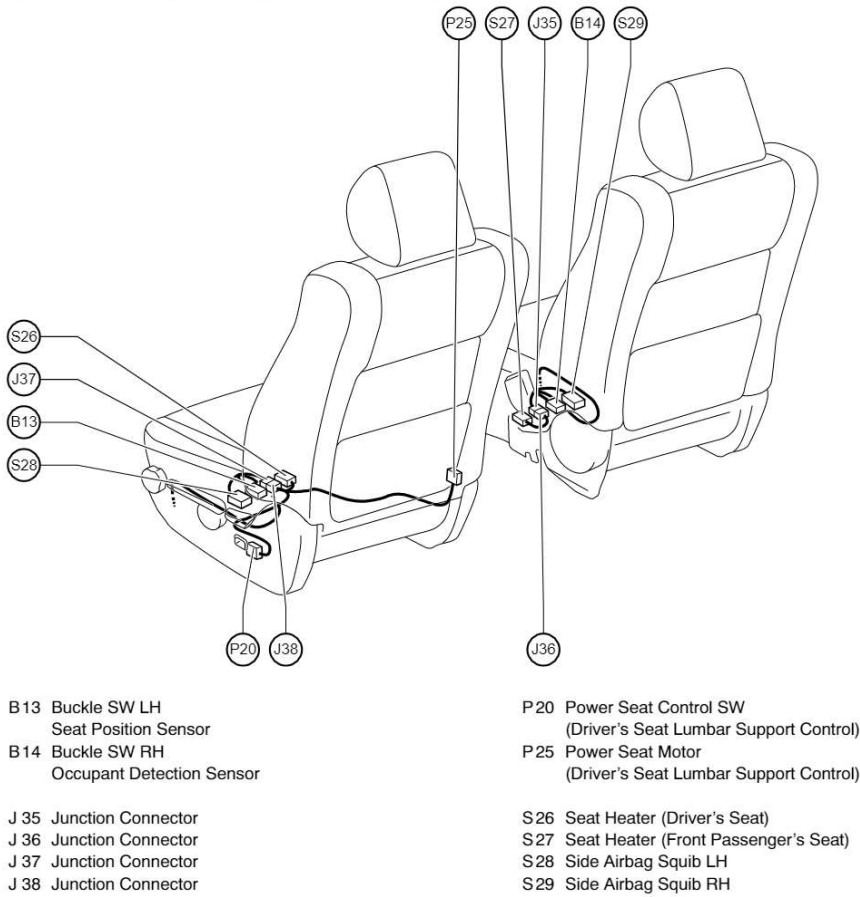
S26 Seat Heater (Driver's Seat)  
S27 Seat Heater (Front Passenger's Seat)  
S28 Side Airbag Squib LH  
S29 Side Airbag Squib RH

J35 Junction Connector  
J36 Junction Connector  
J37 Junction Connector  
J38 Junction Connector

P20 Power Seat Control SW  
(Driver's Seat Lumbar Support Control)  
P21 Power Seat Control SW (Driver's Seat)  
P22 Power Seat Control SW (Front Passenger's Seat)  
P23 Power Seat Motor (Driver's Seat Front Vertical Control)  
P24 Power Seat Motor (Driver's Seat Lifter Control)  
P25 Power Seat Motor  
(Driver's Seat Lumbar Support Control)  
P26 Power Seat Motor (Driver's Seat Reclining Control)  
P27 Power Seat Motor (Driver's Seat Slide Control)  
P28 Power Seat Motor  
(Front Passenger's Seat Reclining Control)  
P29 Power Seat Motor  
(Front Passenger's Seat Slide Control)

## Position of Parts in Seat

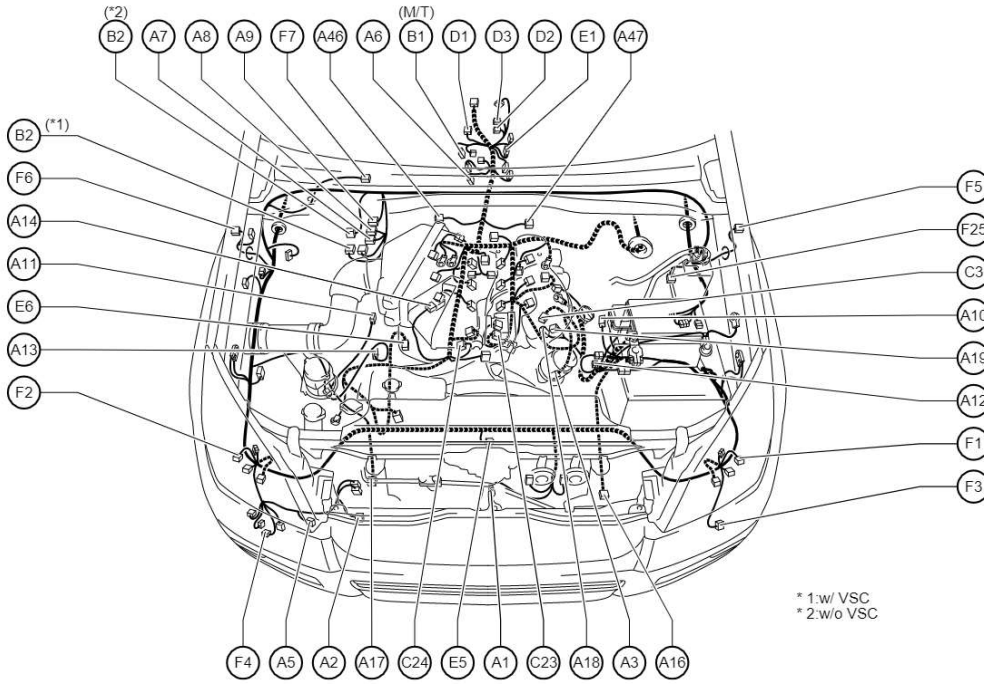
[LHD : Except 8Way Power Seat]



# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[RHD : 1GR-FE]

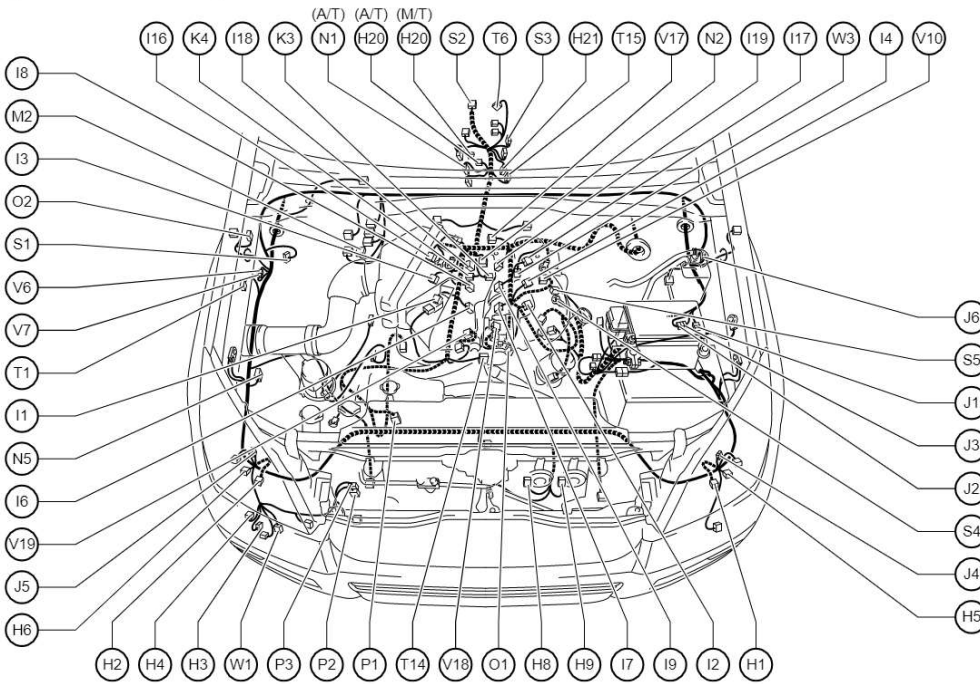


\* 1:w/ VSC  
\* 2:w/o VSC

- |  |  |
|--|--|
| A 1 A/C Ambient Temp. Sensor                 | C 3 Crankshaft Position Sensor               |
| A 2 A/C Condenser Fan Motor                  | C 23 Camshaft Timing Oil Control Valve LH    |
| A 3 A/C Lock Sensor                          | C 24 Camshaft Timing Oil Control Valve RH    |
| A/C Magnetic Clutch                          |  |
| A 5 A/C Magnetic Valve                       | D 1 Detection SW (Transfer 4WD Position)     |
| A 6 A/T Oil Temp. Sensor                     | D 2 Detection SW (Transfer L4 Position)      |
| A 7 ABS & BA & TRC & VSC Actuator            | D 3 Detection SW (Transfer Neutral Position) |
| A 8 ABS & BA & TRC & VSC Actuator            |  |
| A 9 ABS & BA & TRC & VSC Actuator            | E 1 ECT Solenoid                             |
| A 10 ABS Speed Sensor Front LH               | E 5 Engine Hood Courtesy SW                  |
| A 11 ABS Speed Sensor Front RH               | E 6 Engine Oil Level Sensor                  |
| A 12 Absorber Control Actuator Front LH      |  |
| A 13 Absorber Control Actuator Front RH      | F 1 Front Clearance Light LH                 |
| A 14 Air Flow Meter                          | Front Turn Signal Light LH                   |
| A 16 Airbag Sensor Front LH                  | F 2 Front Clearance Light RH                 |
| A 17 Airbag Sensor Front RH                  | Front Turn Signal Light RH                   |
| A 18 Alternator                              | F 3 Front Fog Light LH                       |
| A 19 Alternator                              | F 4 Front Fog Light RH                       |
| A 46 Air Fuel Ratio Sensor (Bank 1 Sensor 1) | F 5 Front Side Turn Signal Light LH          |
| A 47 Air Fuel Ratio Sensor (Bank 2 Sensor 1) | F 6 Front Side Turn Signal Light RH          |
|  | F 7 Front Wiper Motor                        |
| B 1 Back-Up Light SW                         | F 25 Fuel Pump Resistor                      |
| B 2 Brake Fluid Level Warning SW             |  |

## Position of Parts in Engine Compartment

[RHD : 1GR-FE]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 3 Headlight Cleaner Motor  
 H 4 Headlight Cleaner Relay  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)  
 H 20 Heated Oxygen Sensor (Bank 1 Sensor 2)  
 H 21 Heated Oxygen Sensor (Bank 2 Sensor 2)

I 1 Ignition Coil and Igniter No.1  
 I 2 Ignition Coil and Igniter No.2  
 I 3 Ignition Coil and Igniter No.3  
 I 4 Ignition Coil and Igniter No.4  
 I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4  
 I 16 Ignition Coil and Igniter No.5  
 I 17 Ignition Coil and Igniter No.6  
 I 18 Injector No.5  
 I 19 Injector No.6

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

K 3 Knock Sensor LH  
 K 4 Knock Sensor RH

M 2 Master Cylinder Pressure Sensor

N 1 Neutral Start SW  
 N 2 Noise Filter  
 N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW  
 O 2 Option Conector (Keyless Buzzer)

P 1 Power Steering Oil Pressure SW  
 P 2 Pressure SW  
 P 3 Pressure SW

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

T 1 Theft Deterrent Horn  
 T 6 Transfer Actuator  
 T 14 Throttle Control Motor  
 Throttle Position Sensor  
 T 15 Turbine Speed Sensor

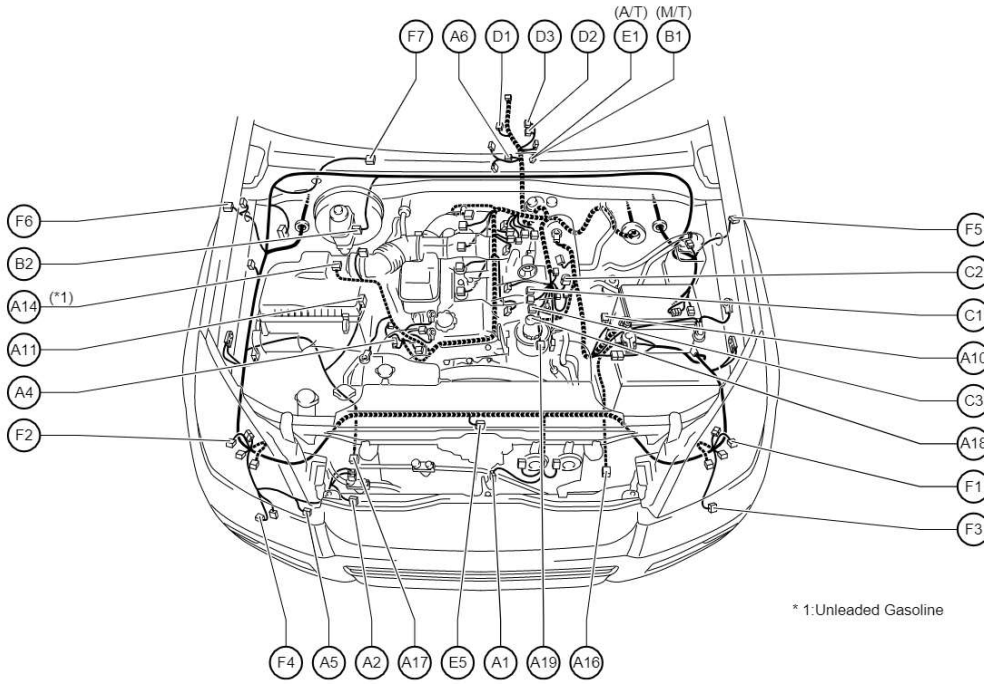
V 6 VSC Check Connector  
 V 7 VSC Check Connector  
 V 10 VSV (EVAP)  
 V 17 VSV (ACIS)  
 V 18 VVT Sensor LH  
 V 19 VVT Sensor RH

W 1 Washer Motor  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[RHD : 3RZ-FE]

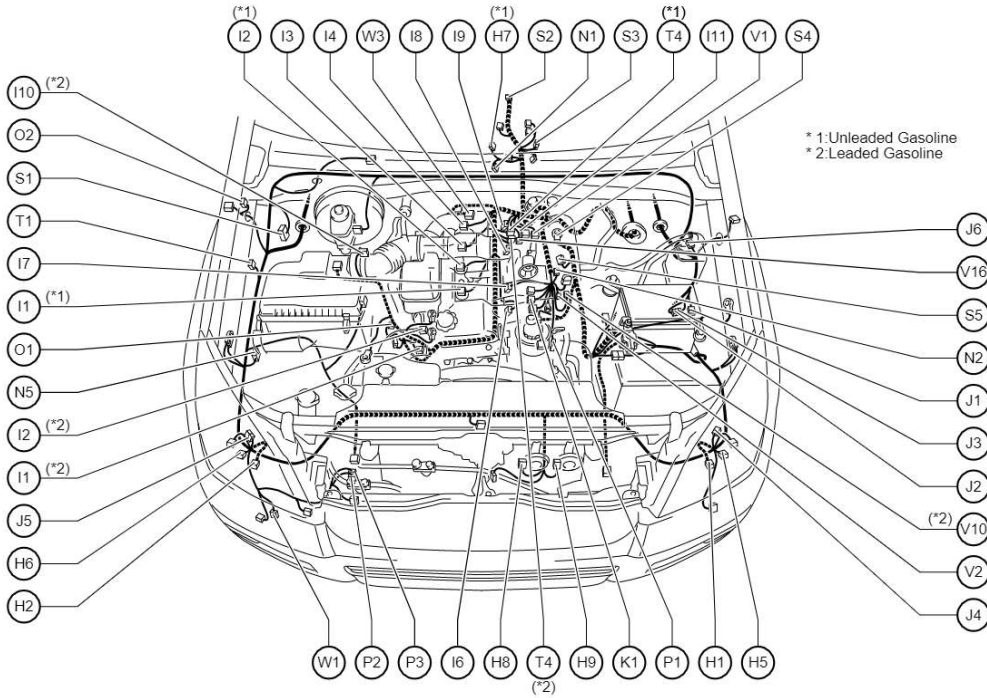


- A 1 A/C Ambient Temp. Sensor
- A 2 A/C Condenser Fan Motor
- A 4 A/C Magnetic Clutch
- A 5 A/C Magnetic Valve
- A 6 A/T Oil Temp. Sensor
- A 10 ABS Speed Sensor Front LH
- A 11 ABS Speed Sensor Front RH
- A 14 Air Flow Meter
- A 16 Airbag Sensor Front LH
- A 17 Airbag Sensor Front RH
- A 18 Alternator
- A 19 Alternator
  
- B 1 Back-Up Light SW
- B 2 Brake Fluid Level Warning SW
  
- C 1 Camshaft Position Sensor
- C 2 Check Connector
- C 3 Crankshaft Position Sensor

- D 1 Detection SW (Transfer 4WD Position)
- D 2 Detection SW (Transfer L4 Position)
- D 3 Detection SW (Transfer Neutral Position)
  
- E 1 ECT Solenoid
- E 5 Engine Hood Courtesy SW
  
- F 1 Front Clearance Light LH  
Front Turn Signal Light LH
- F 2 Front Clearance Light RH  
Front Turn Signal 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 Wiper Motor

## Position of Parts in Engine Compartment

[RHD : 3RZ-FE]



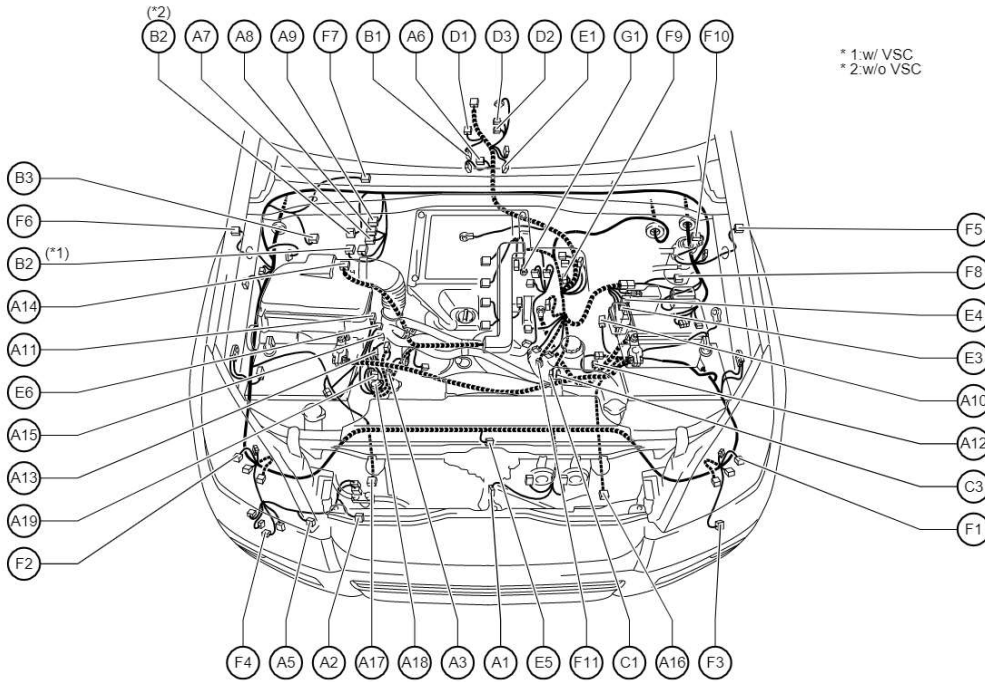
\* 1:Unleaded Gasoline  
\* 2:Leaded Gasoline

- |  |                                       |
|--|---------------------------------------|
| H 1 Headlight Beam Level Control Actuator LH | N 1 Neutral Start SW                  |
| H 2 Headlight Beam Level Control Actuator RH | N 2 Noise Filter                      |
| H 5 Headlight LH                             | N 5 Noise Filter (Condenser Fan)      |
| H 6 Headlight RH                             |                                       |
| H 7 Heated Oxygen Sensor                     | O 1 Oil Pressure SW                   |
| H 8 Horn (High)                              | O 2 Option Connector (Keyless Buzzer) |
| H 9 Horn (Low)                               |                                       |
| I 1 Ignition Coil and Igniter No.1           | P 1 Power Steering Oil Pressure SW    |
| I 2 Ignition Coil and Igniter No.2           | P 2 Pressure SW                       |
| I 3 Ignition Coil and Igniter No.3           | P 3 Pressure SW                       |
| I 4 Ignition Coil and Igniter No.4           |                                       |
| I 6 Injector No.1                            | S 1 Skid Control ECU with Actuator    |
| I 7 Injector No.2                            | S 2 Speed Sensor (Combination Meter)  |
| I 8 Injector No.3                            | S 3 Speed Sensor (ECT)                |
| I 9 Injector No.4                            | S 4 Starter                           |
| I 10 Intake Air Temp. Sensor                 | S 5 Starter                           |
| I 11 ISC Valve                               |                                       |
| J 1 Junction Connector                       | T 1 Theft Deterrent Horn              |
| J 2 Junction Connector                       | T 4 Throttle Position Sensor          |
| J 3 Junction Connector                       |                                       |
| J 4 Junction Connector                       | V 1 Vacuum Sensor                     |
| J 5 Junction Connector                       | V 2 Variable Resistor                 |
| J 6 Junction Connector                       | V 10 VSV (EVAP)                       |
|  | V 16 VSV (EGR)                        |
| K 1 Knock Sensor                             | W 1 Washer Motor                      |
|  | W 3 Water Temp. Sensor                |

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[RHD : 1KD-FTV]



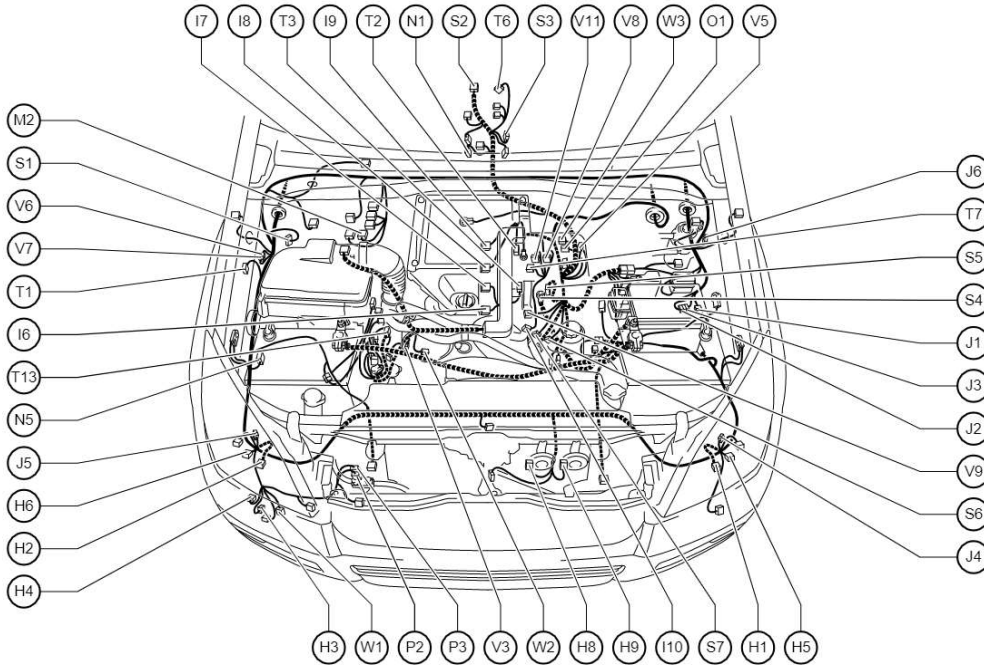
\* 1:w/ VSC  
\* 2:w/o VSC

- |   |  |
|---|--|
| A 1 A/C Ambient Temp. Sensor            | D 1 Detection SW (Transfer 4WD Position)     |
| A 2 A/C Condenser Fan Motor             | D 2 Detection SW (Transfer L4 Position)      |
| A 3 A/C Lock Sensor                     | D 3 Detection SW (Transfer Neutral Position) |
| A/C Magnetic Clutch                     |  |
| A 5 A/C Magnetic Valve                  | E 1 ECT Solenoid                             |
| A 6 A/T Oil Temp. Sensor                | E 3 Electronic Driver Unit                   |
| A 7 ABS & BA & TRC & VSC Actuator       | E 4 Electronic Driver Unit                   |
| A 8 ABS & BA & TRC & VSC Actuator       | E 5 Engine Hood Courtesy SW                  |
| A 9 ABS & BA & TRC & VSC Actuator       | E 6 Engine Oil Level Sensor                  |
| A 10 ABS Speed Sensor Front LH          |  |
| A 11 ABS Speed Sensor Front RH          | F 1 Front Clearance Light LH                 |
| A 12 Absorber Control Actuator Front LH | Front Turn Signal Light LH                   |
| A 13 Absorber Control Actuator Front RH | F 2 Front Clearance Light RH                 |
| A 14 Air Flow Meter                     | Front Turn Signal Light RH                   |
| A 15 Air Vent Control Servo Motor       | F 3 Front Fog Light LH                       |
| A 16 Airbag Sensor Front LH             | F 4 Front Fog Light RH                       |
| A 17 Airbag Sensor Front RH             | F 5 Front Side Turn Signal Light LH          |
| A 18 Alternator                         | F 6 Front Side Turn Signal Light RH          |
| A 19 Alternator                         | F 7 Front Wiper Motor                        |
|   | F 8 Fuel Heater                              |
| B 1 Back-Up Light SW                    | F 9 Fuel Pressure Sensor                     |
| B 2 Brake Fluid Level Warning SW        | F 10 Fuel Sedimentary SW                     |
| B 3 Brake Vacuum Warning SW             | F 11 Fuel Temp. Sensor                       |
| C 1 Camshaft Position Sensor            |  |
| C 3 Crankshaft Position Sensor          | G 1 Glow Plug                                |



## Position of Parts in Engine Compartment

[RHD : 1KD-FTV]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 3 Headlight Cleaner Motor  
 H 4 Headlight Cleaner Relay  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)

I 6 Injector No.1  
 I 7 Injector No.2  
 I 8 Injector No.3  
 I 9 Injector No.4  
 I 10 Intake Air Temp. Sensor

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

M 2 Master Cylinder Pressure Sensor

N 1 Neutral Start SW  
 N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 2 Pressure SW  
 P 3 Pressure SW

S 1 Skid Control ECU with Actuator  
 S 2 Speed Sensor (Combination Meter)  
 S 3 Speed Sensor (ECT)  
 S 4 Starter  
 S 5 Starter  
 S 6 Suction Control Valve No.1  
 S 7 Suction Control Valve No.2

T 1 Theft Deterrent Horn  
 T 2 Throttle Control Motor  
 T 3 Throttle Open SW  
 T 6 Transfer Actuator  
 T 7 Turbo Pressure Sensor  
 T 13 Turbo Charger Compensater Resistor

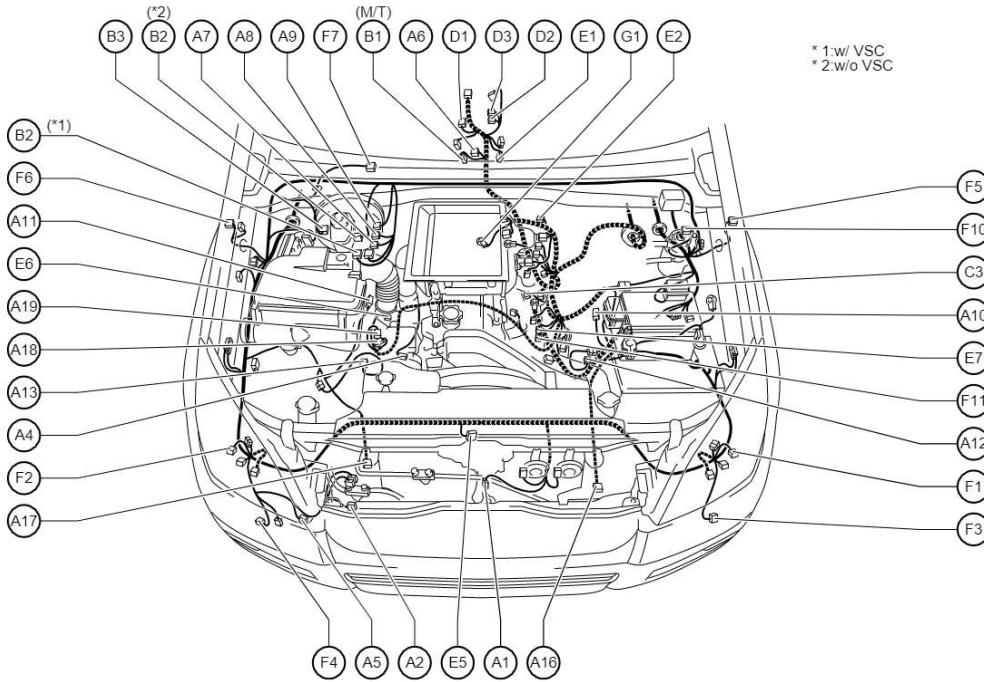
V 3 Viscous Heater Magnetic Clutch  
 V 5 VRV (EGR)  
 V 6 VSC Check Connector  
 V 7 VSC Check Connector  
 V 8 VSV (EGR Cut)  
 V 9 VSV (Engine Mount)  
 V 11 VSV (Pressure Charge Valve)

W 1 Washer Motor  
 W 2 Water Temp. Sender  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment

[RHD : 1KZ-TE]



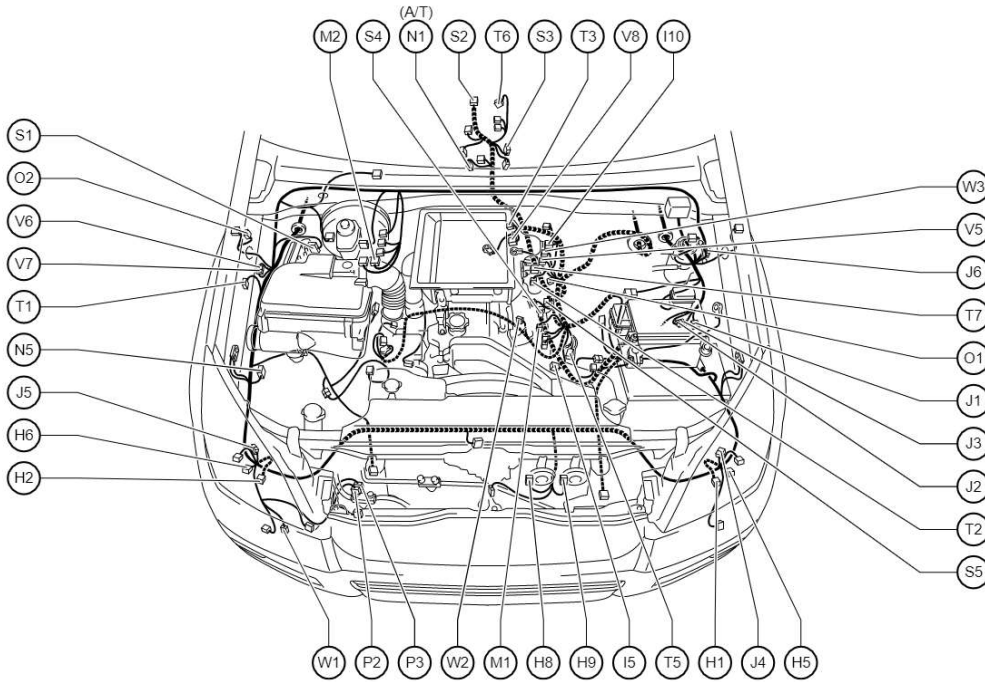
\* 1:w/ VSC  
\* 2:w/o VSC

- A 1 A/C Ambient Temp. Sensor
- A 2 A/C Condenser Fan Motor
- A 4 A/C Magnetic Clutch
- A 5 A/C Magnetic Valve
- A 6 A/T Oil Temp. Sensor
- A 7 ABS & BA & TRC & VSC Actuator
- A 8 ABS & BA & TRC & VSC Actuator
- A 9 ABS & BA & TRC & VSC Actuator
- A 10 ABS Speed Sensor Front LH
- A 11 ABS Speed Sensor Front RH
- A 12 Absorber Control Actuator Front LH
- A 13 Absorber Control Actuator Front RH
- A 16 Airbag Sensor Front LH
- A 17 Airbag Sensor Front RH
- A 18 Alternator
- A 19 Alternator
- B 1 Back-Up Light SW
- B 2 Brake Fluid Level Warning SW
- B 3 Brake Vacuum Warning SW
- C 3 Crankshaft Position Sensor

- D 1 Detection SW (Transfer 4WD Position)
- D 2 Detection SW (Transfer L4 Position)
- D 3 Detection SW (Transfer Neutral Position)
- E 1 ECT Solenoid
- E 2 EGR Valve Position Sensor
- E 5 Engine Hood Courtesy SW
- E 6 Engine Oil Level Sensor
- E 7 Engine Speed Sensor
- F 1 Front Clearance Light LH  
Front Turn Signal Light LH
- F 2 Front Clearance Light RH  
Front Turn Signal 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 Wiper Motor
- F 10 Fuel Sedimentary SW
- F 11 Fuel Temp. Sensor
- G 1 Glow Plug

## Position of Parts in Engine Compartment

[RHD : 1KZ-TE]

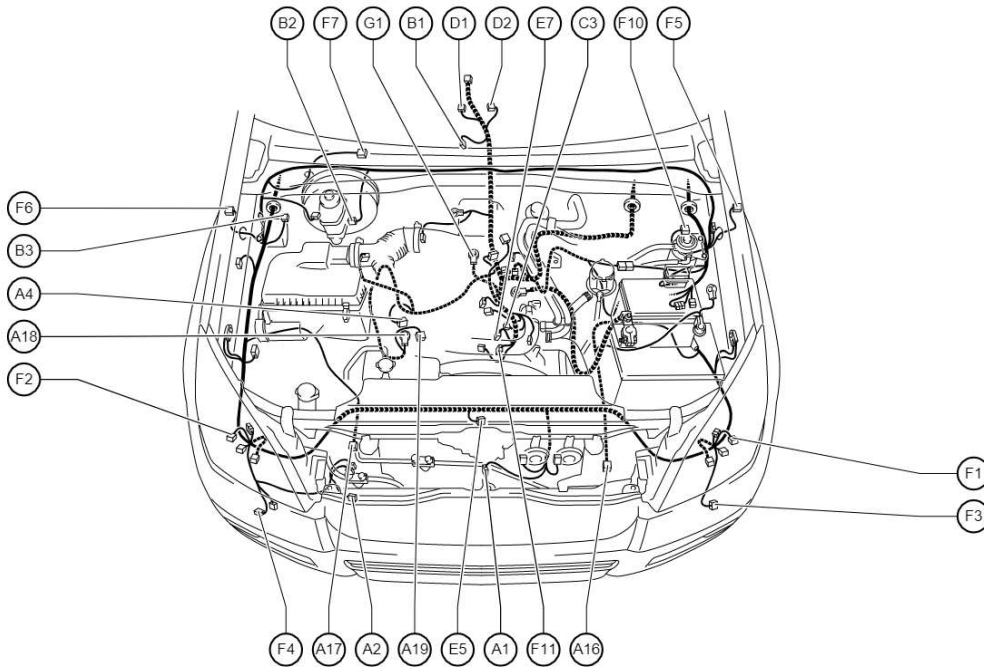


- |  |                                      |
|--|--------------------------------------|
| H 1 Headlight Beam Level Control Actuator LH | P 2 Pressure SW                      |
| H 2 Headlight Beam Level Control Actuator RH | P 3 Pressure SW                      |
| H 5 Headlight LH                             | S 1 Skid Control ECU with Actuator   |
| H 6 Headlight RH                             | S 2 Speed Sensor (Combination Meter) |
| H 8 Horn (High)                              | S 3 Speed Sensor (ECT)               |
| H 9 Horn (Low)                               | S 4 Starter                          |
| I 5 Injection Pump                           | S 5 Starter                          |
| I 10 Intake Air Temp. Sensor                 | T 1 Theft Deterrent Horn             |
| J 1 Junction Connector                       | T 2 Throttle Control Motor           |
| J 2 Junction Connector                       | T 3 Throttle Open SW                 |
| J 3 Junction Connector                       | T 5 Timing Control Valve             |
| J 4 Junction Connector                       | T 6 Transfer Actuator                |
| J 5 Junction Connector                       | T 7 Turbo Pressure Sensor            |
| J 6 Junction Connector                       | V 5 VRV (EGR)                        |
| M 1 Magnetic Spill Valve                     | V 6 VSC Check Connector              |
| M 2 Master Cylinder Pressure Sensor          | V 7 VSC Check Connector              |
| N 1 Neutral Start SW                         | V 8 VSV (EGR Cut)                    |
| N 5 Noise Filter (Condenser Fan)             | W 1 Washer Motor                     |
| O 1 Oil Pressure SW                          | W 2 Water Temp. Sender               |
| O 2 Option Connector (Keyless Buzzer)        | W 3 Water Temp. Sensor               |

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Engine Compartment

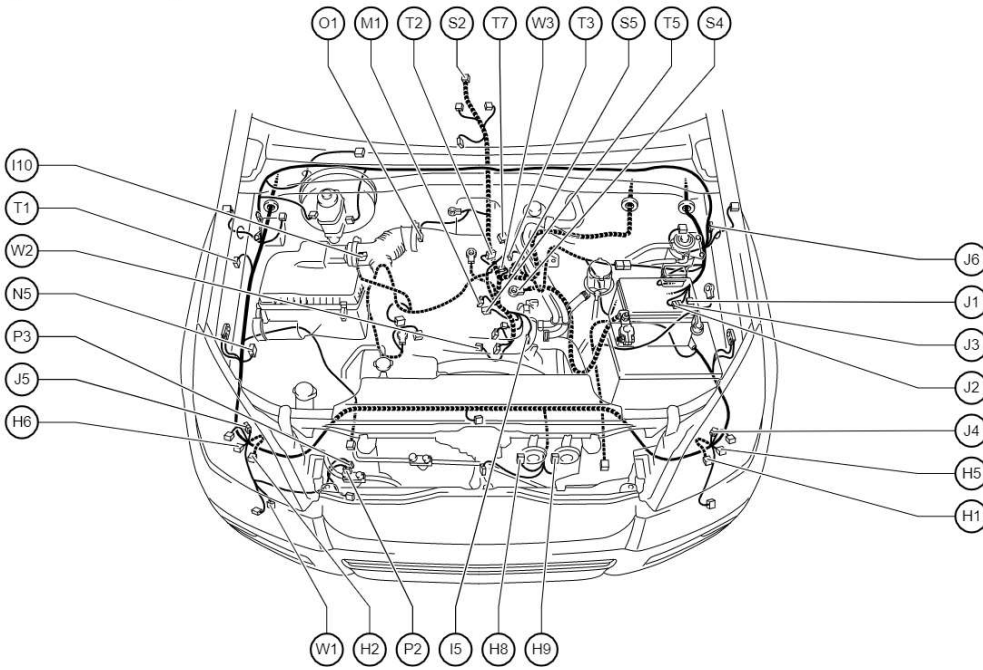
[RHD : 5L-E]



- |  |  |
|--|--|
| A 1 A/C Ambient Temp. Sensor             | E 5 Engine Hood Courtesy SW                                |
| A 2 A/C Condenser Fan Motor              | E 7 Engine Speed Sensor                                    |
| A 4 A/C Magnetic Clutch                  | F 1 Front Clearance Light LH<br>Front Turn Signal Light LH |
| A 16 Airbag Sensor Front LH              | F 2 Front Clearance Light RH<br>Front Turn Signal Light RH |
| A 18 Alternator                          | F 3 Front Fog Light LH                                     |
| A 19 Alternator                          | F 4 Front Fog Light RH                                     |
| B 1 Back-Up Light SW                     | F 5 Front Side Turn Signal Light LH                        |
| B 2 Brake Fluid Level Warning SW         | F 6 Front Side Turn Signal Light RH                        |
| B 3 Brake Vacuum Warning SW              | F 7 Front Wiper Motor                                      |
| C 3 Crankshaft Position Sensor           | F 10 Fuel Sedimentary SW                                   |
| D 1 Detection SW (Transfer 4WD Position) | F 11 Fuel Temp. Sensor                                     |
| D 2 Detection SW (Transfer L4 Position)  | G 1 Glow Plug  |

## Position of Parts in Engine Compartment

[RHD : 5L-E]



H 1 Headlight Beam Level Control Actuator LH  
 H 2 Headlight Beam Level Control Actuator RH  
 H 5 Headlight LH  
 H 6 Headlight RH  
 H 8 Horn (High)  
 H 9 Horn (Low)

I 5 Injection Pump  
 I 10 Intake Air Temp. Sensor

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

M 1 Magnetic Spill Valve

N 5 Noise Filter (Condenser Fan)

O 1 Oil Pressure SW

P 2 Pressure SW  
 P 3 Pressure SW

S 2 Speed Sensor (Combination Meter)  
 S 4 Starter  
 S 5 Starter

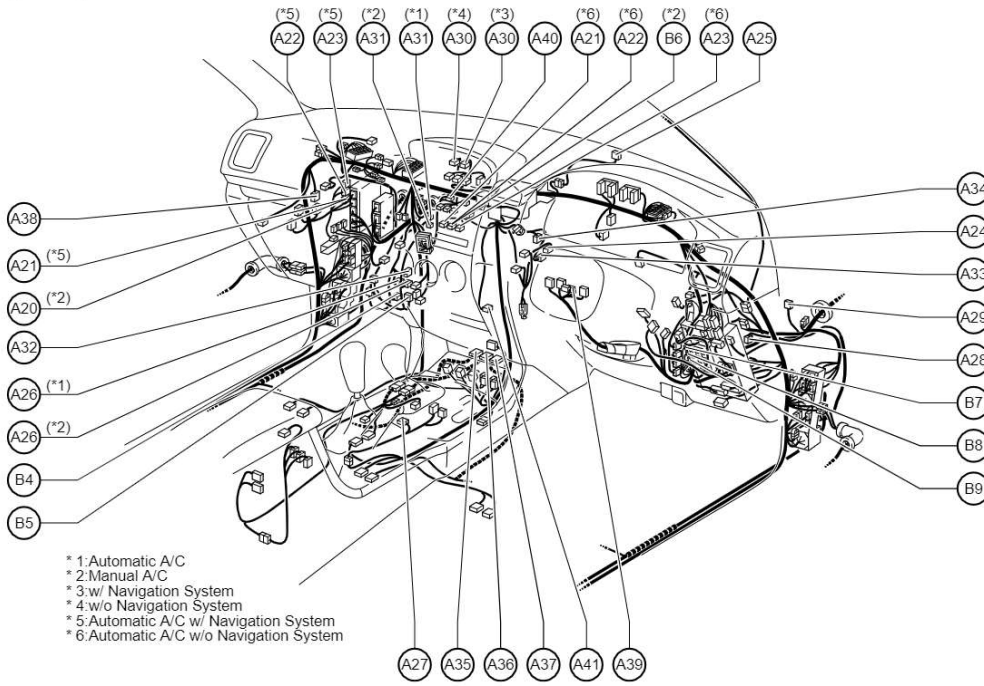
T 1 Theft Deterrent Horn  
 T 2 Throttle Control Motor  
 T 3 Throttle Open SW  
 T 5 Timing Control Valve  
 T 7 Turbo Pressure Sensor

W 1 Washer Motor  
 W 2 Water Temp. Sender  
 W 3 Water Temp. Sensor

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel

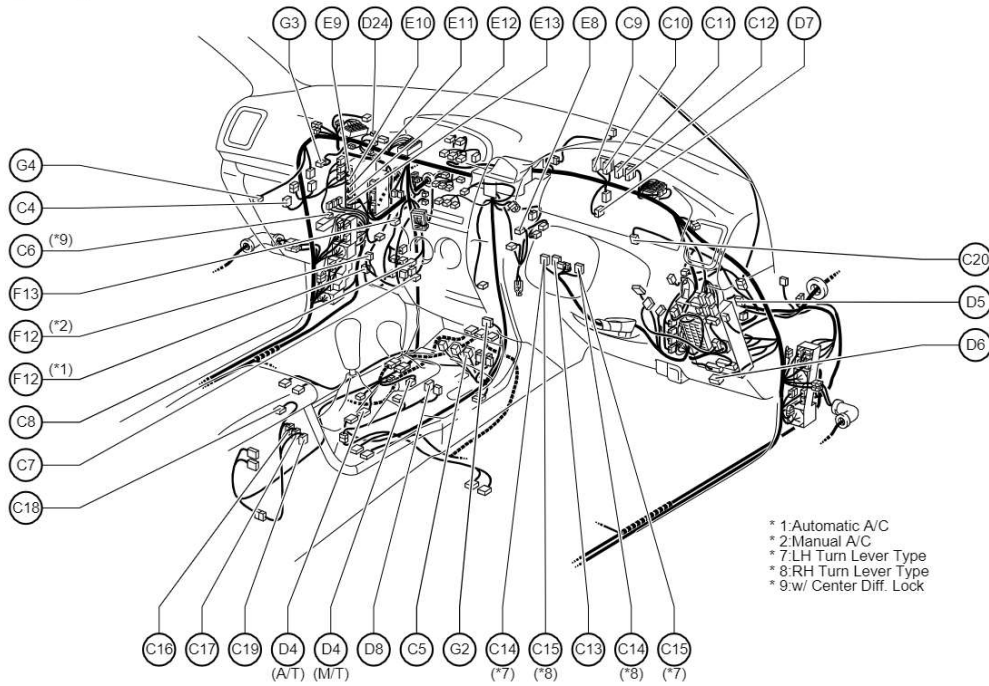
[RHD]



- |  |  |
|--|--|
| A20 A/C Amplifier  | A33 Air Mix Control Servo Motor RH                 |
| A21 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A34 Air Vent Mode Control Servo Motor              |
| A22 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A35 Airbag Sensor Assembly                         |
| A23 A/C Control Assembly (w/o Navigation System)<br>A/C ECU (w/ Navigation System) | A36 Airbag Sensor Assembly                         |
| A24 A/C Room Temp. Sensor  | A37 Airbag Sensor Assembly                         |
| A25 A/C Solar Sensor   | A38 Airbag Squib (Front Passenger Airbag Assembly) |
| A26 A/C Thermistor   | A39 Airbag Squib (Steering Wheel Pad)              |
| A27 A/T Shift Indicator  | A40 Antenna Amplifier                              |
| A28 Accel Position Sensor  | A41 Ashtray Illumination                           |
| A29 Acceleration Control Sensor Front  | B 4 Blower Motor Linear Controller                 |
| A30 Accessory Meter  | B 5 Blower Resistor                                |
| A31 Air Inlet Control Servo Motor  | B 6 Blower SW                                      |
| A32 Air Mix Control Servo Motor LH   | B 7 Body ECU                                       |
|  | B 8 Body ECU                                       |
|  | B 9 Body ECU                                       |

## Position of Parts in Instrument Panel

[RHD]



\* 1: Automatic A/C  
 \* 2: Manual A/C  
 \* 7: LH Turn Lever Type  
 \* 8: RH Turn Lever Type  
 \* 9: w/ Center Diff. Lock

C 4 CD Automatic Changer  
 C 5 Center Diff. Lock Control SW  
 C 6 Center Diff. Lock ECU  
 C 7 Cigarette Lighter  
 C 8 Cigarette Lighter Illumination  
 C 9 Combination Meter  
 C10 Combination Meter  
 C11 Combination Meter  
 C12 Combination Meter  
 C13 Combination SW  
 C14 Combination SW  
 C15 Combination SW  
 C16 Cool Box Amplifier  
 C17 Cool Box Motor  
 C18 Cool Box SW  
 C19 Cool Box Thermistor  
 C20 Cruise Control Clutch SW

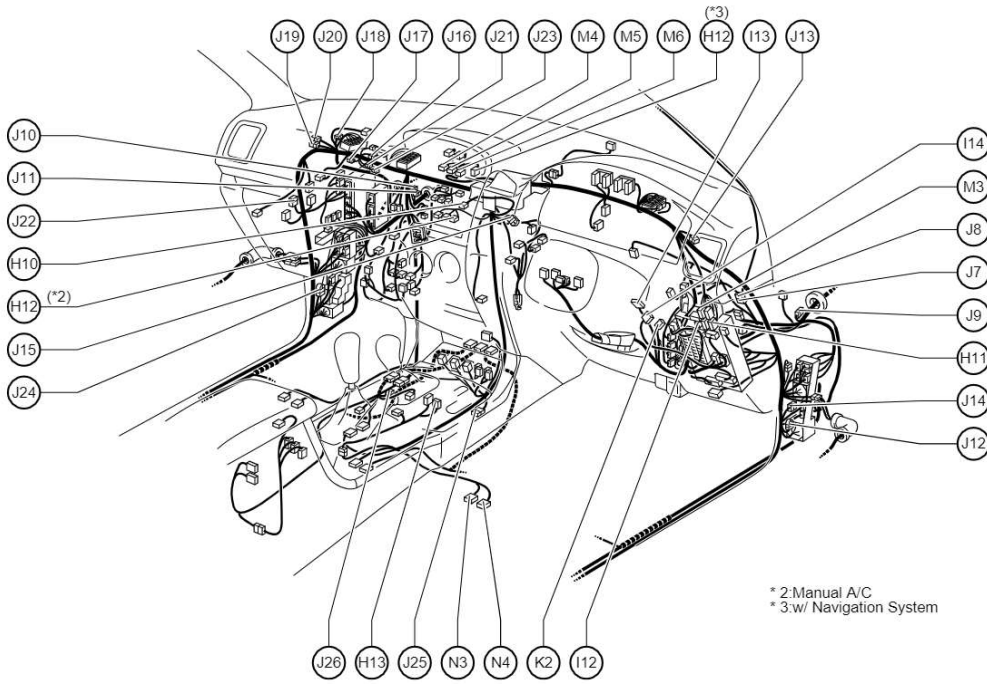
D 4 Deceleration Sensor  
 D 5 Diode (Front Fog Light)  
 D 6 DLC3  
 D 7 Double Door Lock Control Relay  
 D 8 Downhill Assist Control SW  
 D24 Diode (Back-Up Light)

E 8 ECT Pattern Select SW  
 E 9 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E10 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E11 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E12 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 E13 Engine and ECT ECU (A/T)  
     Engine ECU (M/T)  
 F 12 Front Blower Motor  
 F 13 Front Passenger's Seat Belt Warning Light  
 G 2 Gateway ECU  
 G 3 Glove Box Light  
 G 4 Glove Box Light SW

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel

[RHD]



- H10 Hazard SW
- H11 Headlight Beam Level Control SW
- H12 Heater Control SW
- H13 Height Control and Suspension SW

- I 12 Idle-Up SW
- I 13 Ignition Key Cylinder Light Transponder Key Amplifier
- I 14 Ignition SW

- J 7 Junction Connector
- J 8 Junction Connector
- J 9 Junction Connector
- J 10 Junction Connector
- J 11 Junction Connector
- J 12 Junction Connector
- J 13 Junction Connector
- J 14 Junction Connector
- J 15 Junction Connector
- J 16 Junction Connector
- J 17 Junction Connector

- J 18 Junction Connector
- J 19 Junction Connector
- J 20 Junction Connector
- J 21 Junction Connector
- J 22 Junction Connector
- J 23 Junction Connector
- J 24 Junction Connector
- J 25 Junction Connector
- J 26 Junction Connector

- K 2 Key Interlock Solenoid Unlock Warning SW

- M 3 Mirror Heater SW
- M 4 Multi-Display
- M 5 Multi-Display
- M 6 Multi-Display

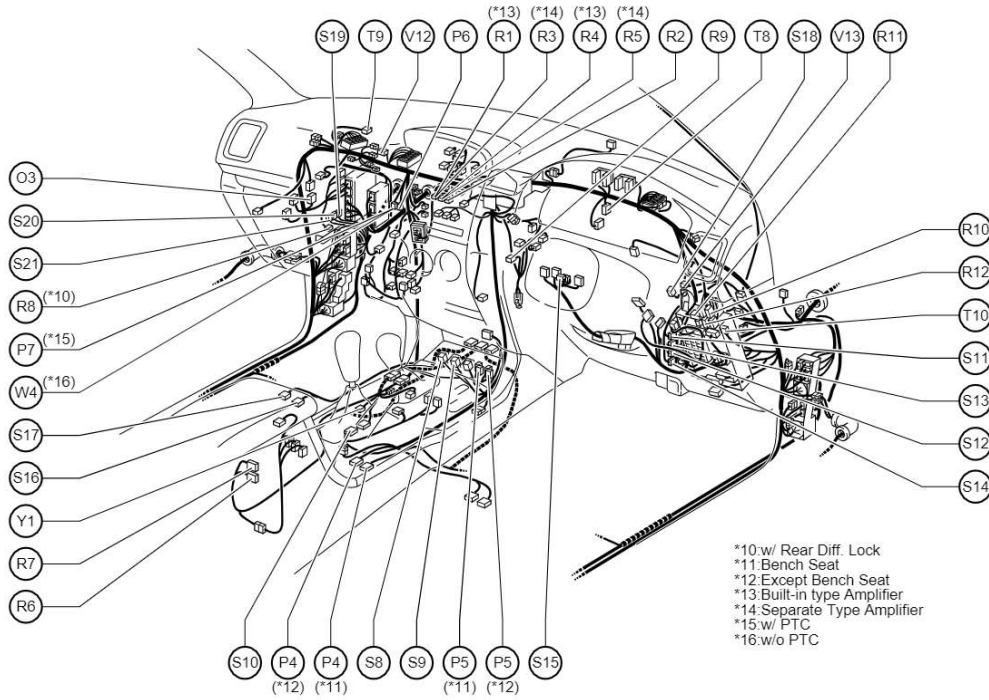
- N 3 Navigation ECU
- N 4 Navigation ECU

\* 2: Manual A/C  
\* 3: w/ Navigation System



## Position of Parts in Instrument Panel

[RHD]



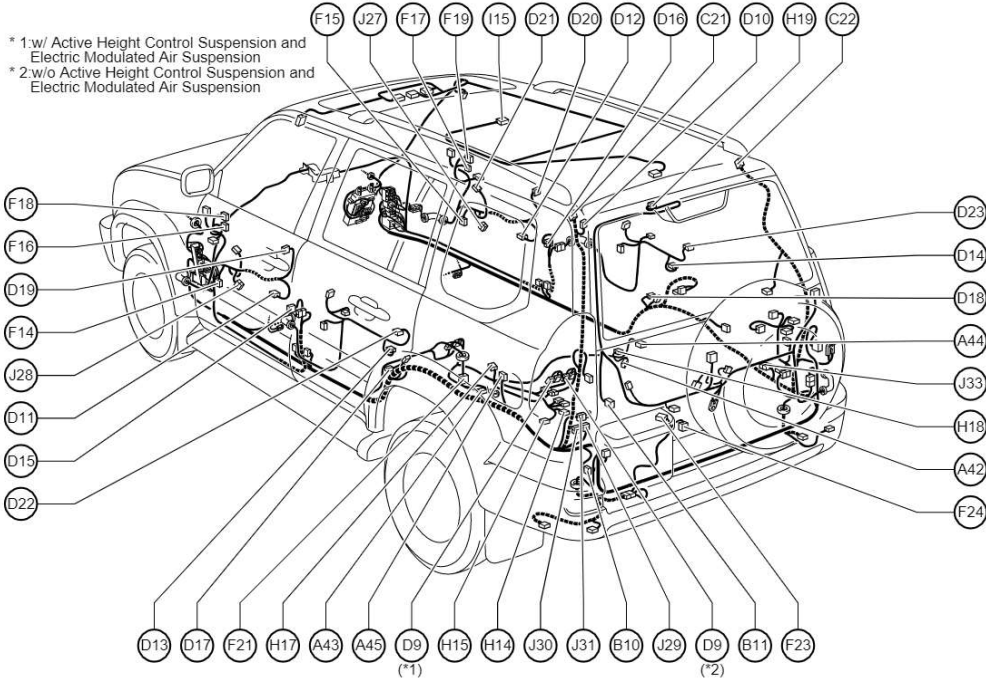
\*10:w/ Rear Diff. Lock  
 \*11:Bench Seat  
 \*12:Except Bench Seat  
 \*13:Built-in type Amplifier  
 \*14:Separate Type Amplifier  
 \*15:w/ PTC  
 \*16:w/o PTC

O 3 Option Connector (Door Control Receiver)	S 11 Skid Control ECU
P 4 Parking Brake SW	S 12 Skid Control ECU
P 5 Power Outlet (Front)	S 13 Skid Control ECU
P 6 PTC Heater	S 14 Skid Control ECU
P 7 PTC Heater	S 15 Steering Sensor
R 1 Radio and Player	S 16 Stereo Component Amplifier
R 2 Radio and Player	S 17 Stereo Component Amplifier
R 3 Radio and Player	S 18 Stop Light SW
R 4 Radio and Player	S 19 Suspension Control ECU
R 5 Radio and Player	S 20 Suspension Control ECU
R 6 Rear Blower SW	S 21 Suspension Control ECU
R 7 Rear Cooler Control SW	T 8 Theft Deterrent ECU
R 8 Rear Diff. Lock Control ECU	T 9 Transponder Key Computer
R 9 Rear Diff. Lock SW	T 10 Turn Signal Flasher
R 10 Rear Fog Light SW	V 12 Viscous Heater Amplifier
R 11 Remote Control Mirror SW	V 13 VSC Warning Buzzer
R 12 Rheostat	W 4 Water Temp. Sensor (A/C)
S 8 Seat Heater SW Front LH	Y 1 Yaw Rate Sensor
S 9 Seat Heater SW Front RH	
S 10 Shift Lock Control ECU	

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body

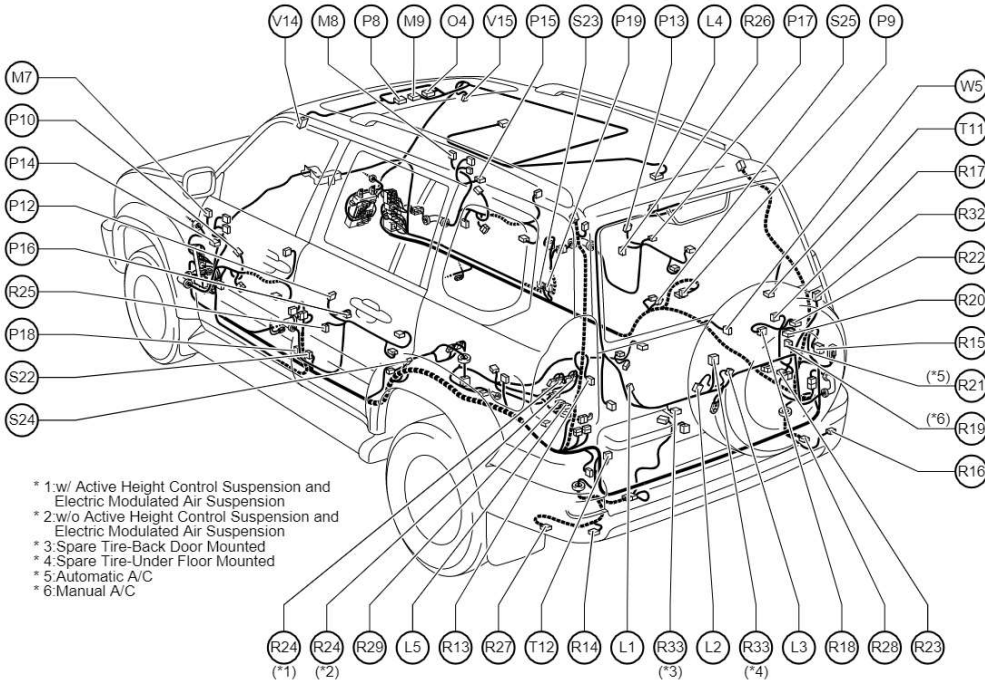
[RHD : 5-Door]



- |   |  |
|---|--|
| <p>A 42 ABS Speed Sensor Rear<br/> A 43 Absorber Control Actuator Rear LH<br/> A 44 Absorber Control Actuator Rear RH<br/> A 45 Acceleration Control Sensor Rear</p> <p>B 10 Back Door Courtesy SW<br/> B 11 Back Door Key Lock and Unlock SW<br/> Back Door Lock Motor<br/> Back Door Unlock Detection SW</p> <p>C 21 Curtain Shield Airbag Squib LH<br/> C 22 Curtain Shield Airbag Squib RH</p> <p>D 9 Detection SW (Rear Diff. Lock)<br/> D 10 Door Control Receiver<br/> D 11 Door Courtesy Light Front LH<br/> D 12 Door Courtesy Light Front RH<br/> D 13 Door Courtesy Light Rear LH<br/> D 14 Door Courtesy Light Rear RH<br/> D 15 Door Courtesy SW Front LH<br/> D 16 Door Courtesy SW Front RH<br/> D 17 Door Courtesy SW Rear LH<br/> D 18 Door Courtesy SW Rear RH<br/> D 19 Door Key Lock and Unlock SW Front LH<br/> Door Lock Motor Front LH<br/> Door Unlock Detection SW Front LH<br/> Double Door Lock Motor Front LH<br/> Position SW Front LH<br/> D 20 Door Key Lock and Unlock SW Front RH<br/> Door Lock Motor Front RH<br/> Door Unlock Detection SW Front RH<br/> Double Door Lock Motor Front RH<br/> Position SW Front RH<br/> D 21 Door Lock Control SW<br/> Power Window Master SW</p> | <p>D 22 Door Lock Motor Rear LH<br/> Door Unlock Detection SW Rear LH<br/> Double Door Lock Motor Rear LH<br/> Position SW Rear LH<br/> D 23 Door Lock Motor Rear RH<br/> Door Unlock Detection SW Rear RH<br/> Double Door Lock Motor Rear RH<br/> Position SW Rear RH</p> <p>F 14 Front Door Speaker LH<br/> F 15 Front Door Speaker RH<br/> F 16 Front Door Squawker LH<br/> F 17 Front Door Squawker RH<br/> F 18 Front Door Tweeter Speaker LH<br/> F 19 Front Door Tweeter Speaker RH<br/> F 21 Fuel Pump and Fuel Sender (Gasoline)<br/> Fuel Sender (Diesel)<br/> F 23 Fuel Sender (Sub)<br/> F 24 Fuel Sender (Sub)</p> <p>H 14 Height Control Compressor<br/> H 15 Height Control Exhaust Valve<br/> H 17 Height Control Sensor Rear LH<br/> H 18 Height Control Sensor Rear RH<br/> H 19 High Mounted Stop Light</p> <p>I 15 Interior Light</p> <p>J 27 Junction Connector<br/> J 28 Junction Connector<br/> J 29 Junction Connector<br/> J 30 Junction Connector<br/> J 31 Junction Connector<br/> J 33 Junction Connector</p> |
|---|--|

## Position of Parts in Body

[RHD : 5-Door]



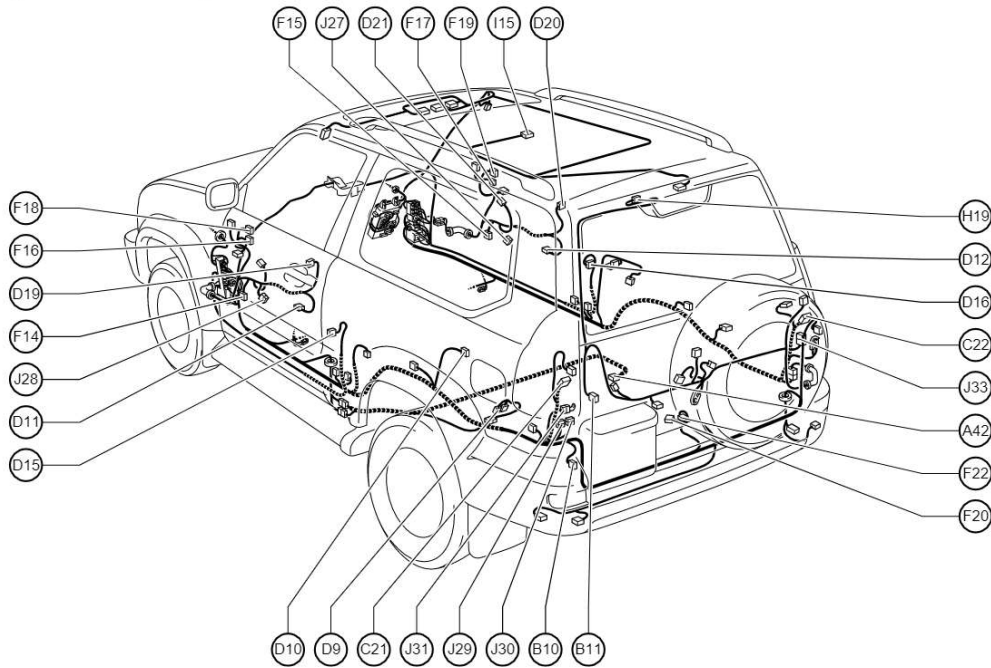
- \* 1:w/ Active Height Control Suspension and Electric Modulated Air Suspension
- \* 2:w/o Active Height Control Suspension and Electric Modulated Air Suspension
- \* 3:Spare Tire-Back Door Mounted
- \* 4:Spare Tire-Under Floor Mounted
- \* 5:Automatic A/C
- \* 6:Manual A/C

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>L 1 License Plate Light</li> <li>L 2 License Plate Light LH</li> <li>L 3 License Plate Light RH</li> <li>L 4 Luggage Compartment Light</li> <li>L 5 Low Pressure Tank Valve</li> </ul>  | <ul style="list-style-type: none"> <li>R 16 Rear Combination Light RH</li> <li>R 17 Rear Cooler Amplifier</li> <li>R 18 Rear Cooler Blower Motor</li> <li>R 19 Rear Cooler Blower Resistor</li> <li>R 20 Rear Cooler Magnetic Valve</li> <li>R 21 Rear Cooler Power Transistor</li> <li>R 22 Rear Cooler Relay</li> <li>R 23 Rear Cooler Thermistor</li> <li>R 24 Rear Diff. Lock Motor</li> <li>R 25 Rear Door Speaker LH</li> <li>R 26 Rear Door Speaker RH</li> <li>R 27 Rear Fog Light LH</li> <li>R 28 Rear Fog Light RH</li> <li>R 29 Rear Height Control Valve</li> <li>R 32 Rear Window Defogger</li> <li>R 33 Rear Wiper Motor</li> </ul> |
| <ul style="list-style-type: none"> <li>M 7 Mirror Heater LH</li> <li style="padding-left: 20px;">Remote Control Mirror LH</li> <li>M 8 Mirror Heater RH</li> <li style="padding-left: 20px;">Remote Control Mirror RH</li> <li>M 9 Moon Roof Control ECU and Motor</li> </ul>  | <ul style="list-style-type: none"> <li>S 22 Side Airbag Sensor Front LH</li> <li>S 23 Side Airbag Sensor Front RH</li> <li>S 24 Side Airbag Sensor Rear LH</li> <li>S 25 Side Airbag Sensor Rear RH</li> </ul>   |
| <ul style="list-style-type: none"> <li>O 4 Overhead J/B</li> </ul>   | <ul style="list-style-type: none"> <li>T 11 Theft Deterrent Siren</li> <li>T 12 Trailer Socket</li> </ul>  |
| <ul style="list-style-type: none"> <li>P 8 Personal Light</li> <li>P 9 Power Outlet (Rear)</li> <li>P 10 Power Window Control SW Front LH</li> <li>P 12 Power Window Control SW Rear LH</li> <li>P 13 Power Window Control SW Rear RH</li> <li>P 14 Power Window Motor Front LH</li> <li>P 15 Power Window Motor Front RH</li> <li>P 16 Power Window Motor Rear LH</li> <li>P 17 Power Window Motor Rear RH</li> <li>P 18 Pretensioner LH</li> <li>P 19 Pretensioner RH</li> </ul> | <ul style="list-style-type: none"> <li>V 14 Vanity Light LH</li> <li>V 15 Vanity Light RH</li> </ul>   |
| <ul style="list-style-type: none"> <li>R 13 Rear Combination Light LH</li> <li>R 14 Rear Combination Light LH</li> <li>R 15 Rear Combination Light RH</li> </ul>   | <ul style="list-style-type: none"> <li>W 5 Woofer Speaker</li> </ul>   |

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Body

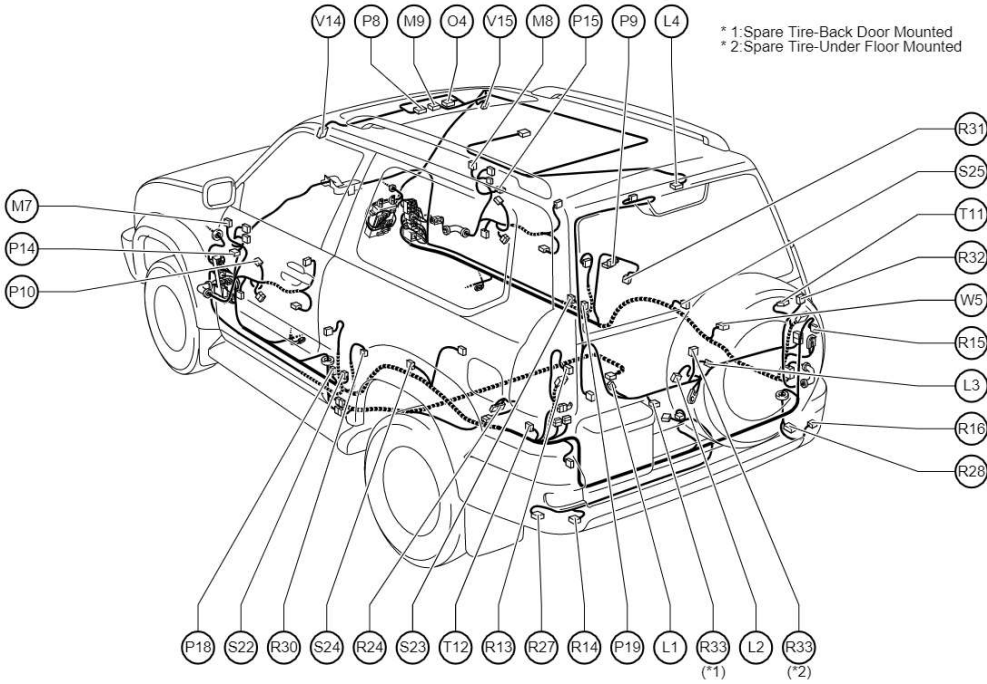
[RHD : 3-Door]



- |  |                                   |
|--|-----------------------------------|
| A42 ABS Speed Sensor Rear  | F14 Front Door Speaker LH         |
| B10 Back Door Courtesy SW  | F15 Front Door Speaker RH         |
| B11 Back Door Key Lock and Unlock SW<br>Back Door Lock Motor<br>Back Door Unlock Detection SW  | F16 Front Door Squawker LH        |
| C21 Curtain Shield Airbag Squib LH   | F17 Front Door Squawker RH        |
| C22 Curtain Shield Airbag Squib RH   | F18 Front Door Tweeter Speaker LH |
| D 9 Detection SW (Rear Diff. Lock)   | F19 Front Door Tweeter Speaker RH |
| D10 Door Control Receiver  | F20 Fuel Pump                     |
| D11 Door Courtesy Light Front LH   | F22 Fuel Sender                   |
| D12 Door Courtesy Light Front RH   | H19 High Mounted Stop Light       |
| D15 Door Courtesy SW Front LH  | I 15 Interior Light               |
| D16 Door Courtesy SW Front RH  | J27 Junction Connector            |
| D19 Door Key Lock and Unlock SW Front LH<br>Door Lock Motor Front LH<br>Door Unlock Detection SW Front LH<br>Double Door Lock Motor Front LH<br>Position SW Front LH | J28 Junction Connector            |
| D20 Door Key Lock and Unlock SW Front RH<br>Door Lock Motor Front RH<br>Door Unlock Detection SW Front RH<br>Double Door Lock Motor Front RH<br>Position SW Front RH | J29 Junction Connector            |
| D21 Door Lock Control SW<br>Power Window Master SW   | J30 Junction Connector            |
|  | J31 Junction Connector            |
|  | J33 Junction Connector            |

## Position of Parts in Body

[RHD : 3-Door]



L 1 License Plate Light  
L 2 License Plate Light LH  
L 3 License Plate Light RH  
L 4 Luggage Compartment Light

M 7 Mirror Heater LH  
Remote Control Mirror LH  
M 8 Mirror Heater RH  
Remote Control Mirror RH  
M 9 Moon Roof Control ECU and Motor

O 4 Overhead J/B

P 8 Personal Light  
P 9 Power Outlet (Rear)  
P10 Power Window Control SW Front LH  
P14 Power Window Motor Front LH  
P15 Power Window Motor Front RH  
P18 Pretensioner LH  
P19 Pretensioner RH

R13 Rear Combination Light LH  
R14 Rear Combination Light LH  
R15 Rear Combination Light RH  
R16 Rear Combination Light RH  
R24 Rear Diff. Lock Motor  
R27 Rear Fog Light LH  
R28 Rear Fog Light RH  
R30 Rear Speaker LH  
R31 Rear Speaker RH  
R32 Rear Window Defogger  
R33 Rear Wiper Motor

S22 Side Airbag Sensor Front LH  
S23 Side Airbag Sensor Front RH  
S24 Side Airbag Sensor Rear LH  
S25 Side Airbag Sensor Rear RH

T 11 Theft Deterrent Siren  
T 12 Trailer Socket

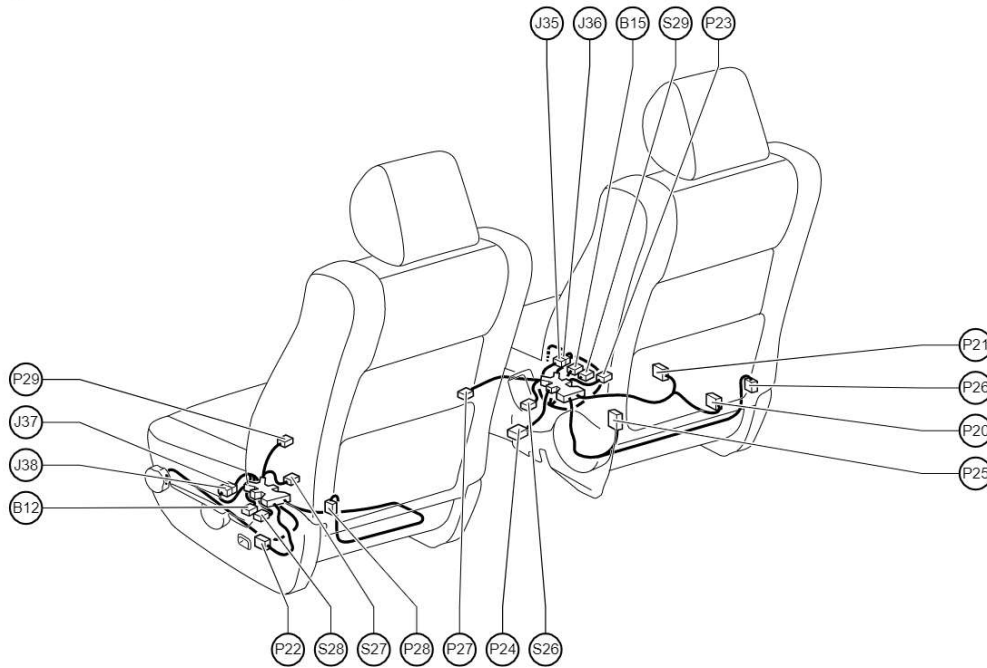
V 14 Vanity Light LH  
V 15 Vanity Light RH

W 5 Woofer Speaker

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Seat

[RHD : 8Way Power Seat]



B12 Buckle SW LH  
Occupant Detection Sensor  
B15 Buckle SW RH  
Seat Position Sensor

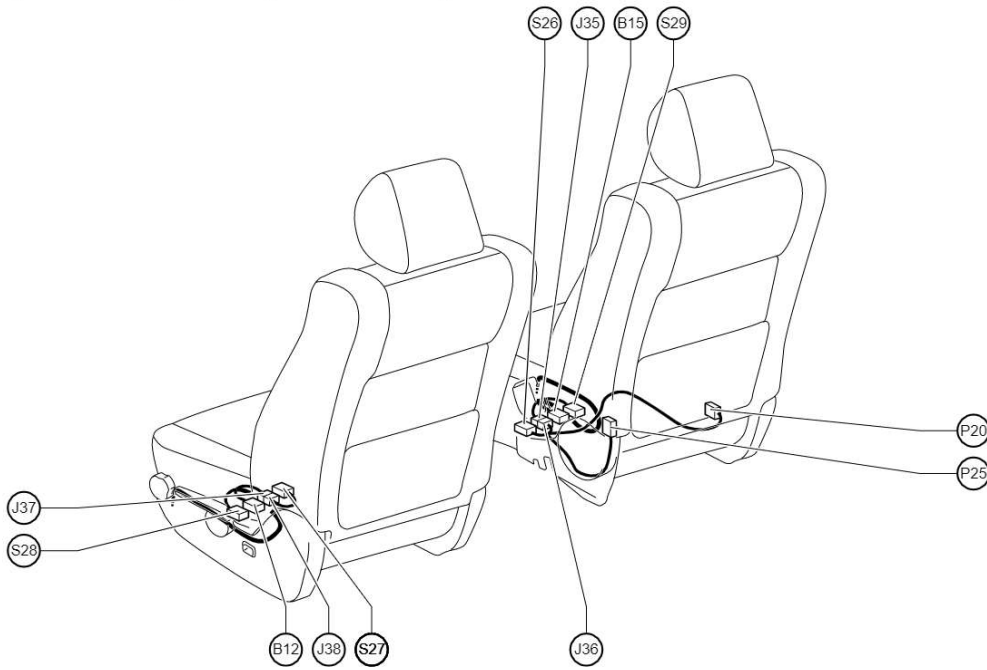
S26 Seat Heater (Driver's Seat)  
S27 Seat Heater (Front Passenger's Seat)  
S28 Side Airbag Squib LH  
S29 Side Airbag Squib RH

J35 Junction Connector  
J36 Junction Connector  
J37 Junction Connector  
J38 Junction Connector

P20 Power Seat Control SW  
(Driver's Seat Lumbar Support Control)  
P21 Power Seat Control SW (Driver's Seat)  
P22 Power Seat Control SW (Front Passenger's Seat)  
P23 Power Seat Motor (Driver's Seat Front Vertical Control)  
P24 Power Seat Motor (Driver's Seat Lifter Control)  
P25 Power Seat Motor  
(Driver's Seat Lumbar Support Control)  
P26 Power Seat Motor (Driver's Seat Reclining Control)  
P27 Power Seat Motor (Driver's Seat Slide Control)  
P28 Power Seat Motor  
(Front Passenger's Seat Reclining Control)  
P29 Power Seat Motor  
(Front Passenger's Seat Slide Control)

## Position of Parts in Seat

[RHD : Except 8Way Power Seat]



B12 Buckle SW LH  
Occupant Detection Sensor  
B15 Buckle SW RH  
Seat Position Sensor

J35 Junction Connector  
J36 Junction Connector  
J37 Junction Connector  
J38 Junction Connector

P20 Power Seat Control SW  
(Driver's Seat Lumbar Support Control)  
P25 Power Seat Motor  
(Driver's Seat Lumbar Support Control)

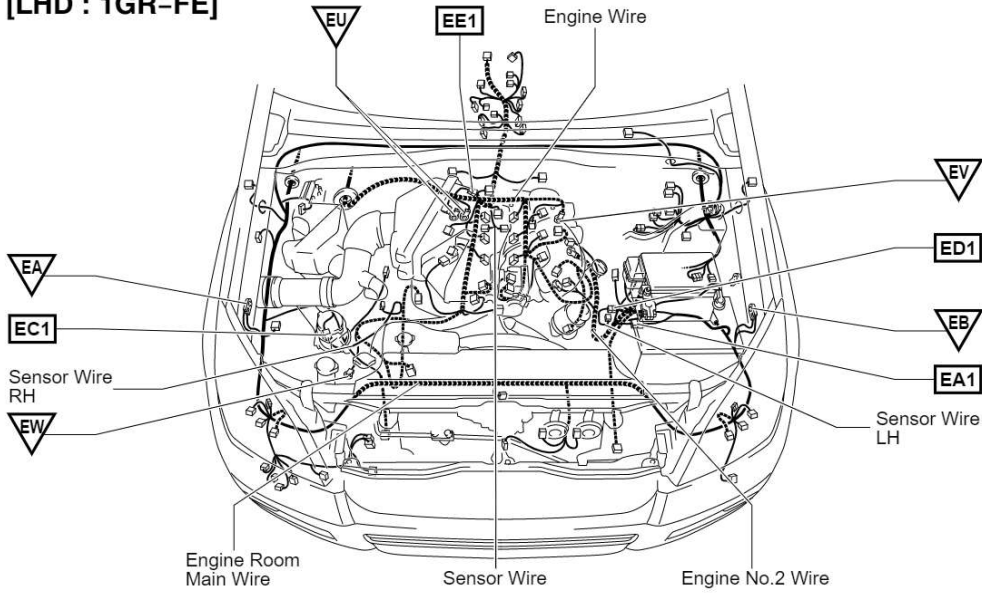
S26 Seat Heater (Driver's Seat)  
S27 Seat Heater (Front Passenger's Seat)  
S28 Side Airbag Squib LH  
S29 Side Airbag Squib RH

## G ELECTRICAL WIRING ROUTING

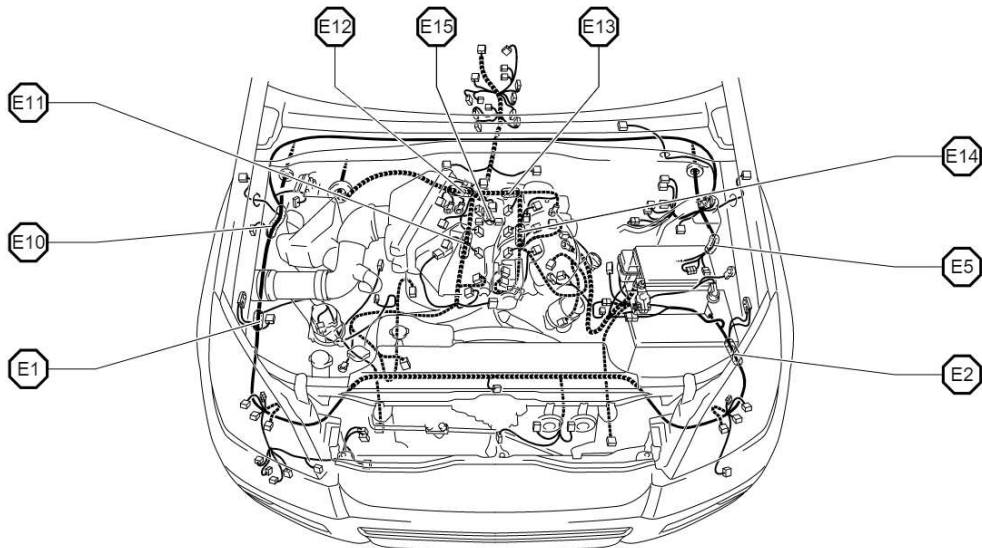
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[LHD : 1GR-FE]

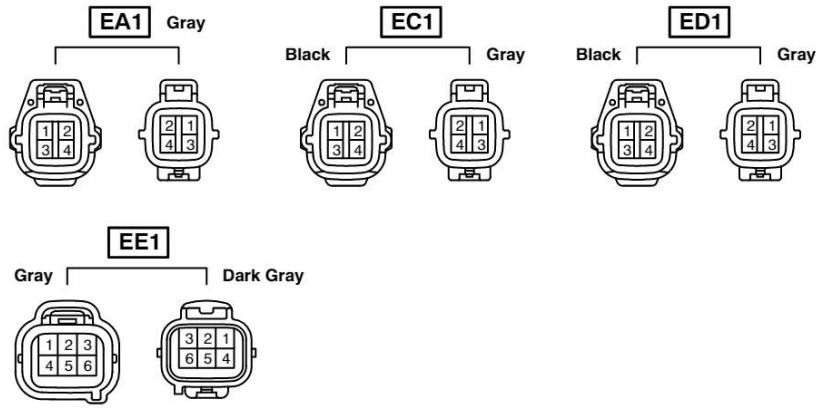


○ : Location of Splice Points





## Connector Joining Wire Harness and Wire Harness



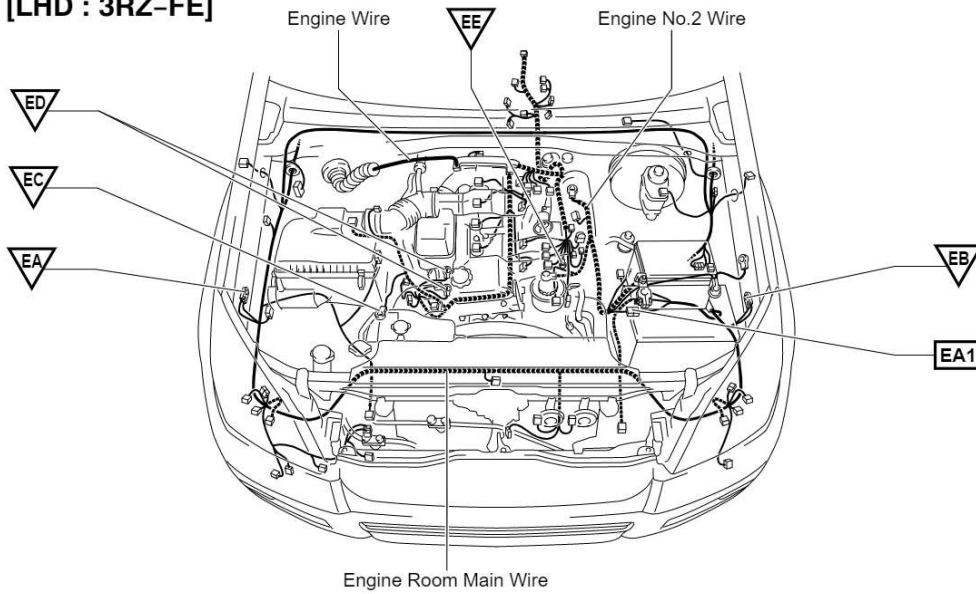
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)
EE1	Engine Wire and Sensor Wire (Behind the Cylinder Head RH)

## G ELECTRICAL WIRING ROUTING

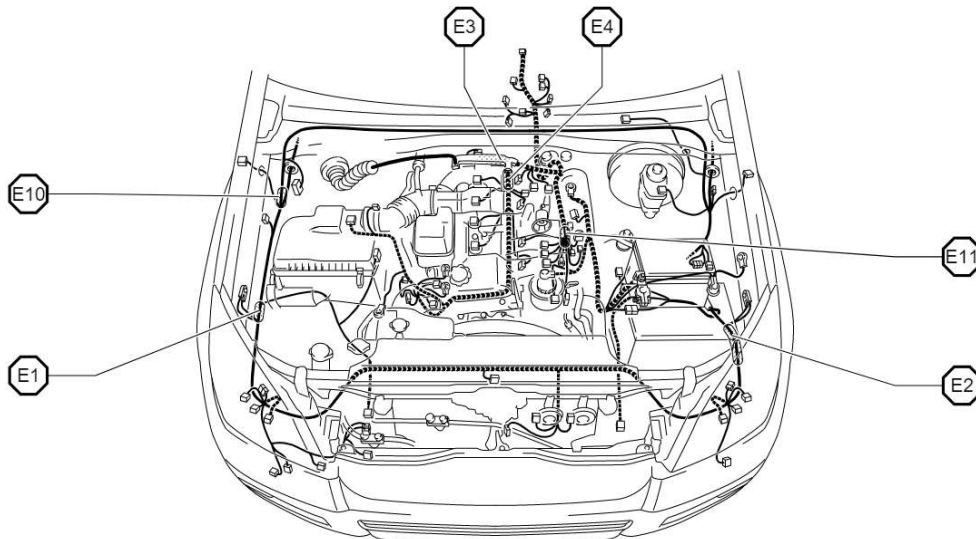
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

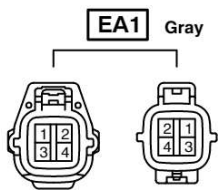
[LHD : 3RZ-FE]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



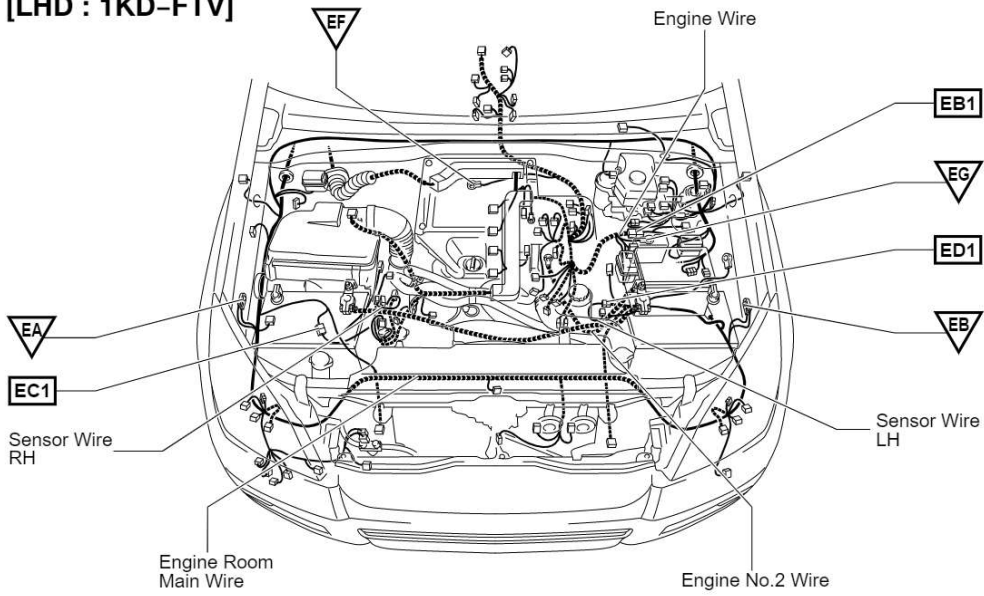
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

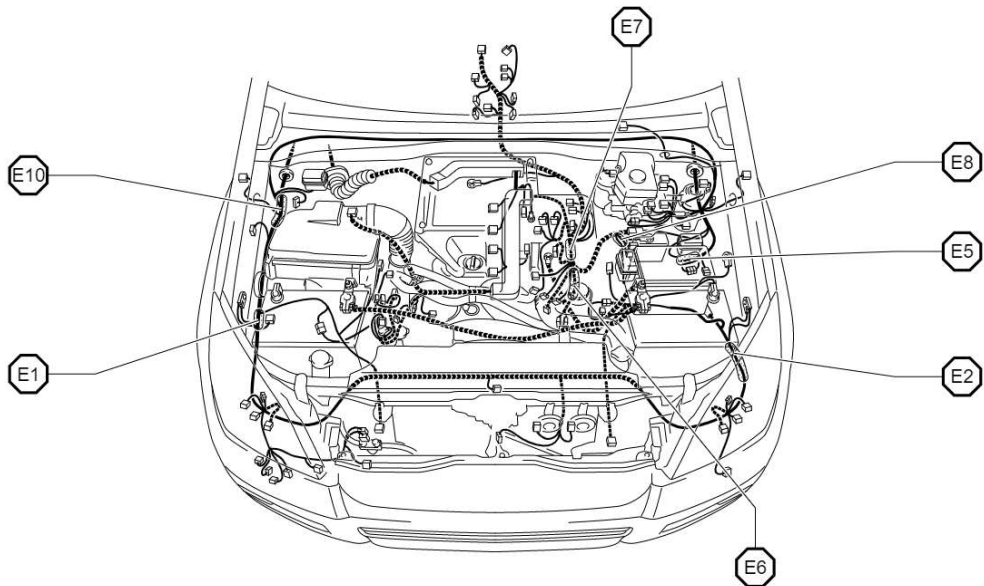
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

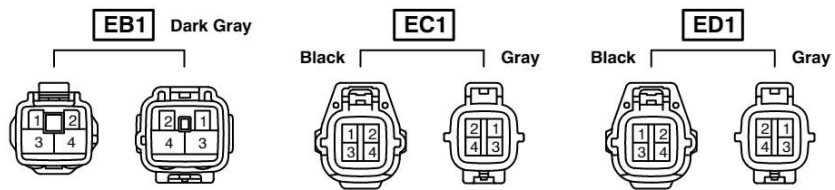
[LHD : 1KD-FTV]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



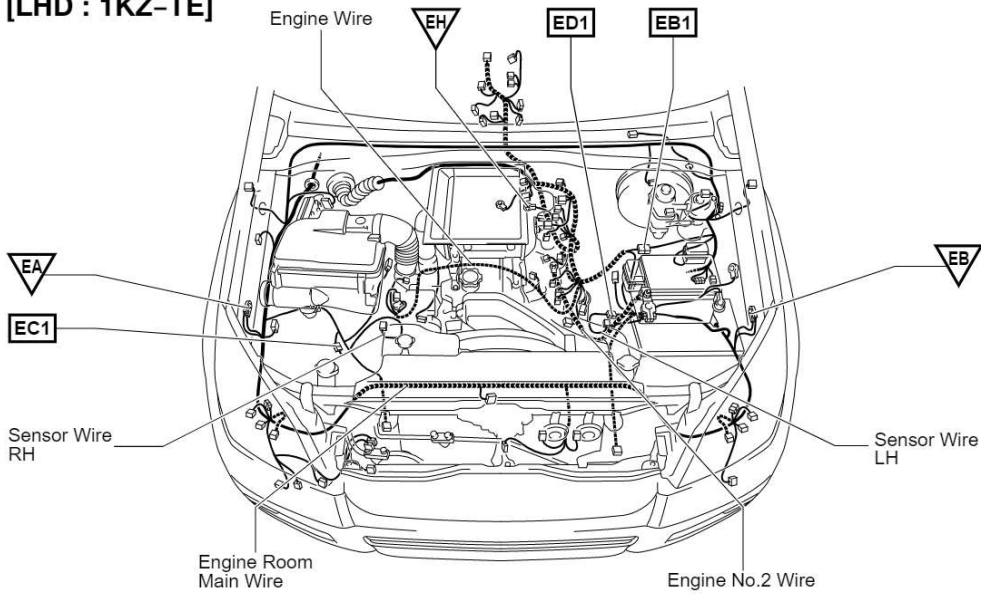
Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

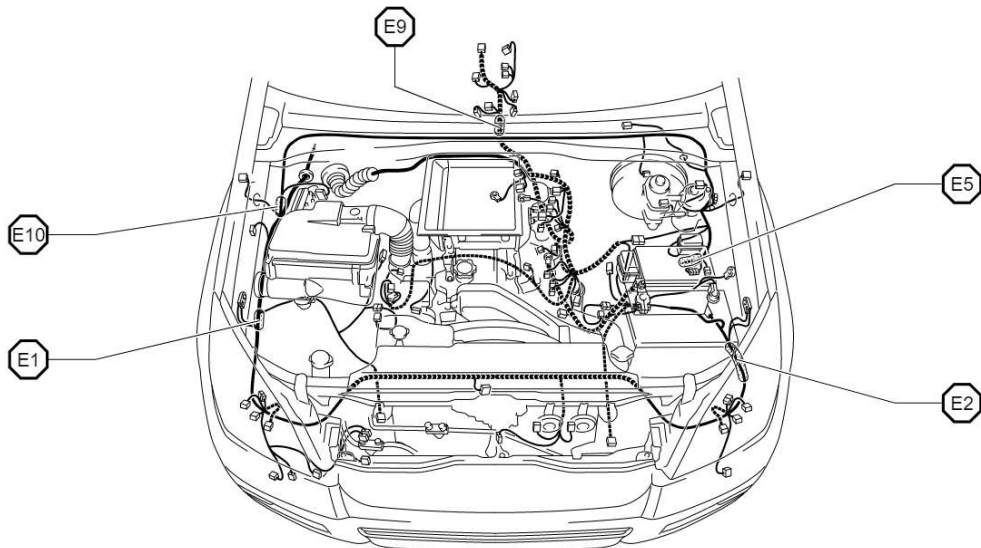
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

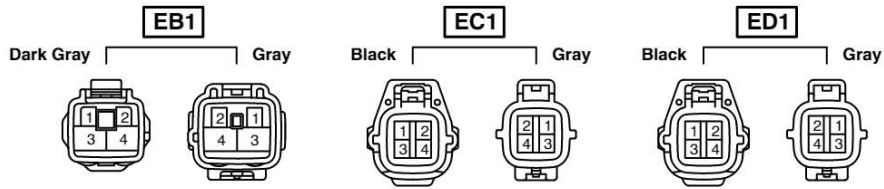
[LHD : 1KZ-TE]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



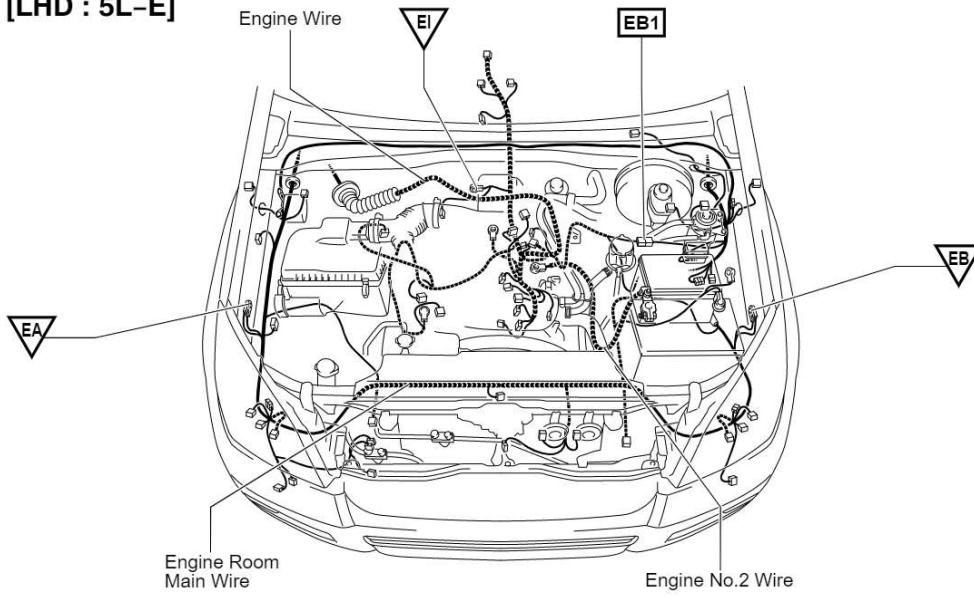
Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

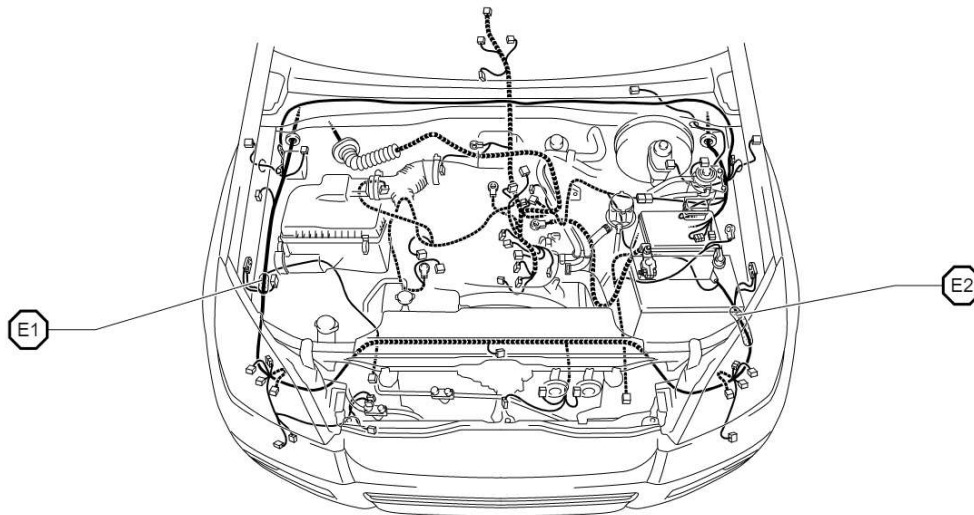
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[LHD : 5L-E]

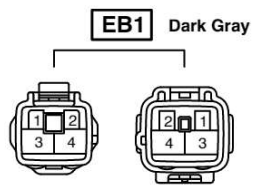


○ : Location of Splice Points





## Connector Joining Wire Harness and Wire Harness

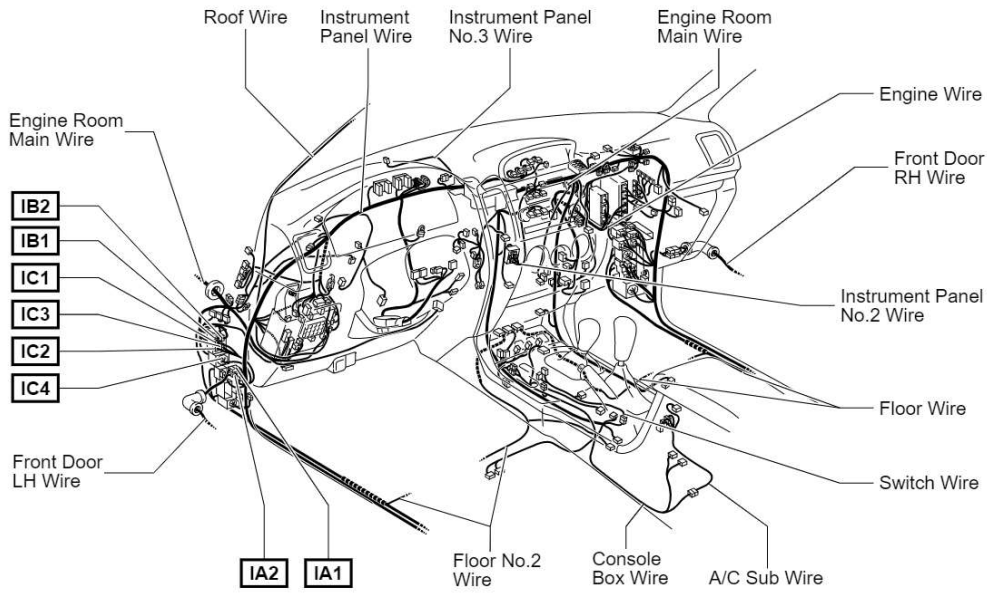


Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)

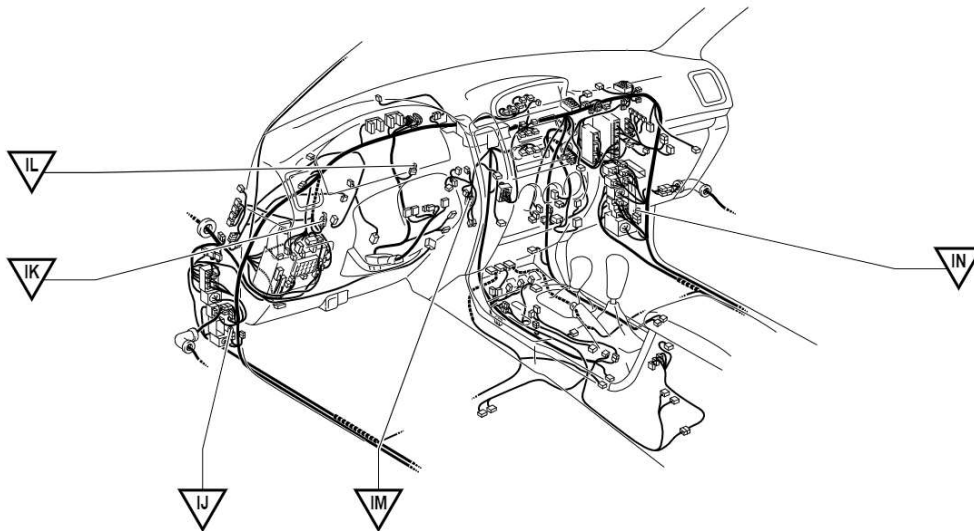
## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

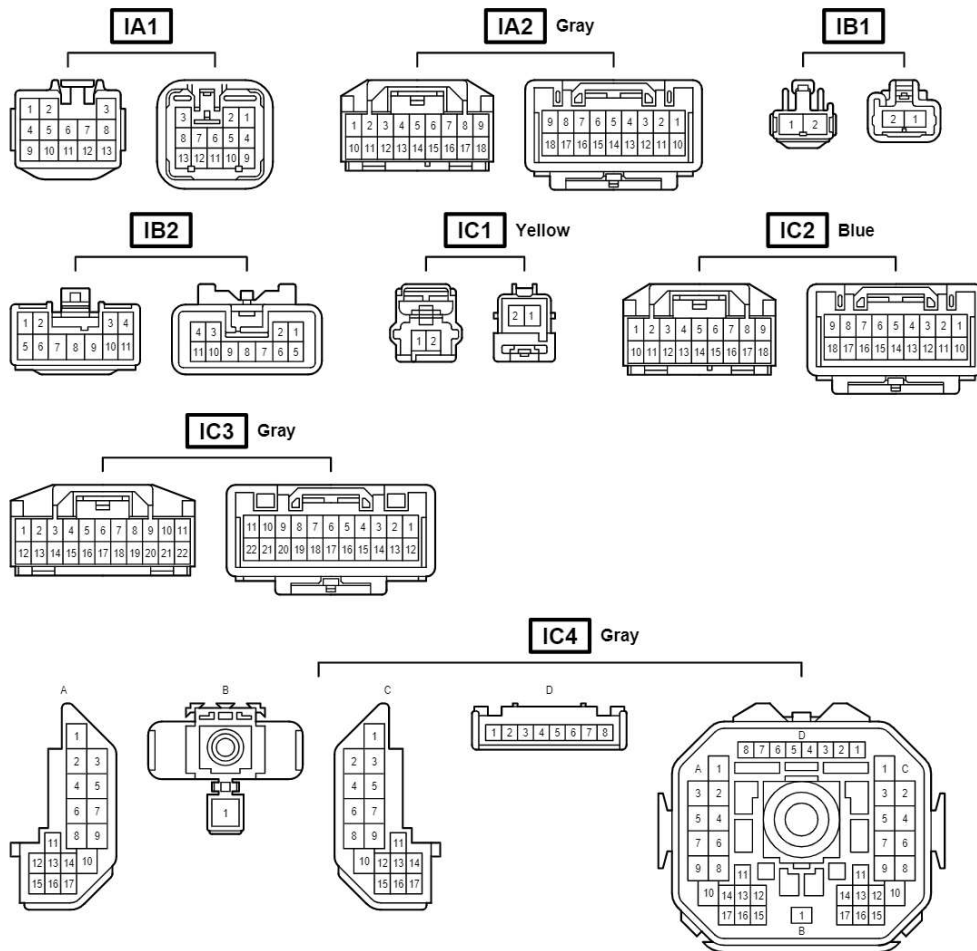
[LHD]



▽ : Location of Ground Points



### Connector Joining Wire Harness and Wire Harness

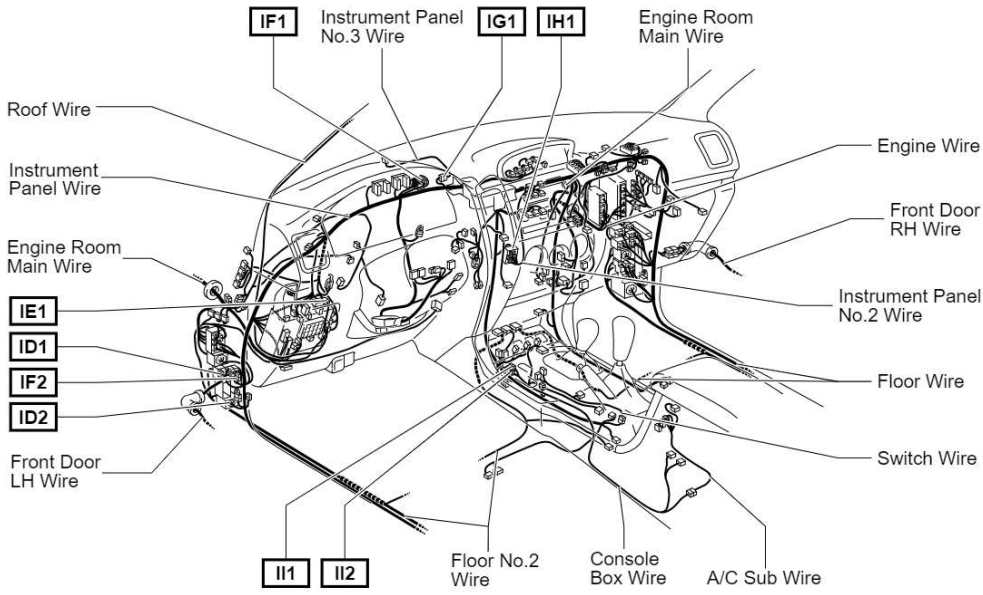


Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2	
IB1	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB2	
IC1	
IC2	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC3	
IC4	

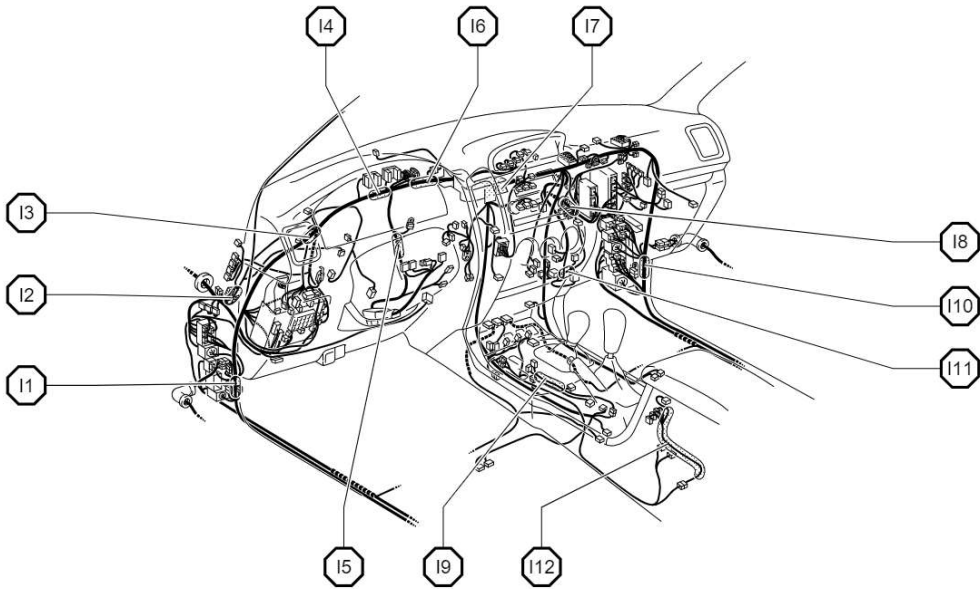
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

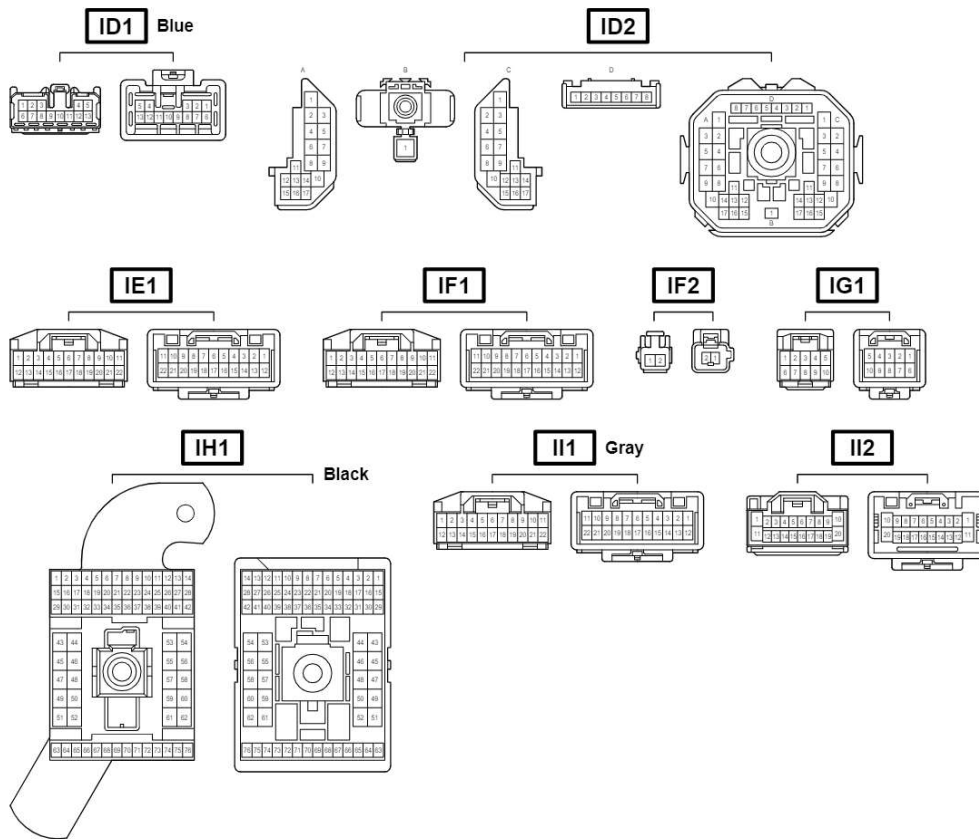
[LHD]



**○ : Location of Splice Points**




## Connector Joining Wire Harness and Wire Harness

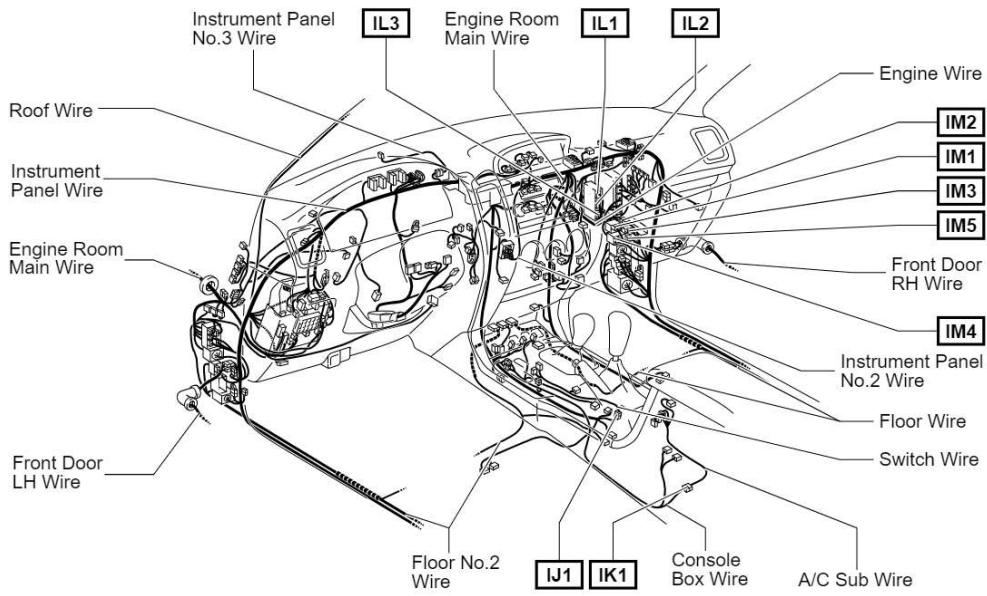


Code	Joining Wire Harness and Wire Harness (Connector Location)
ID1	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2	
IE1	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IF1	Instrument Panel Wire and Instrument Panel Wire (Near the Center J/B No.1)
IF2	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
IG1	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IH1	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
II1	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
II2	

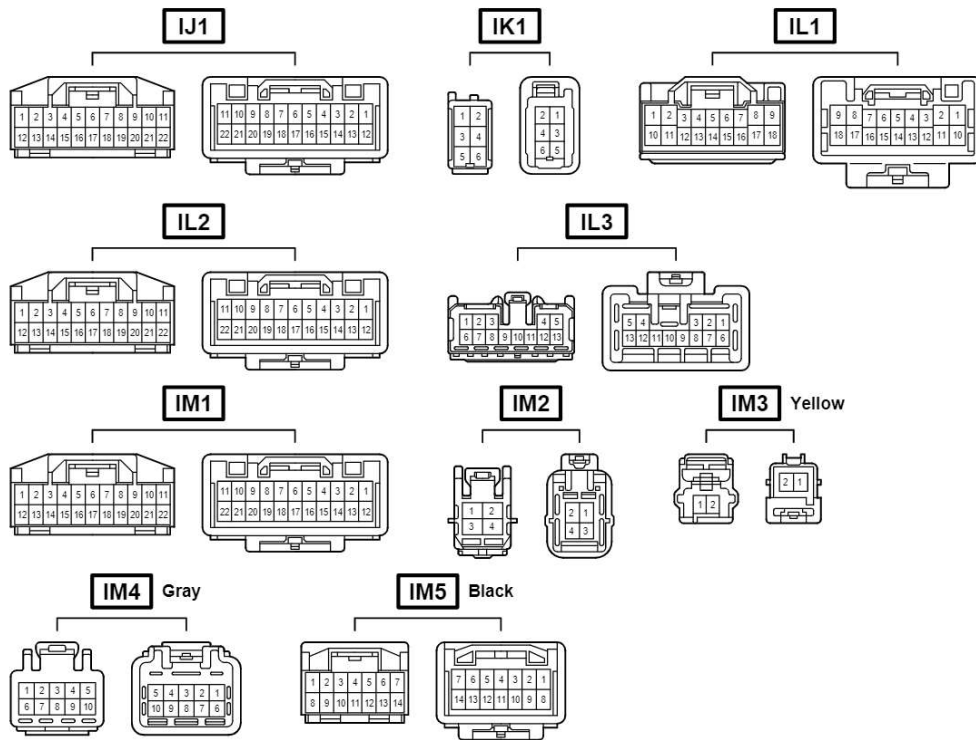
## G ELECTRICAL WIRING ROUTING

 : Location of Connector Joining Wire Harness and Wire Harness

[LHD]



## Connector Joining Wire Harness and Wire Harness

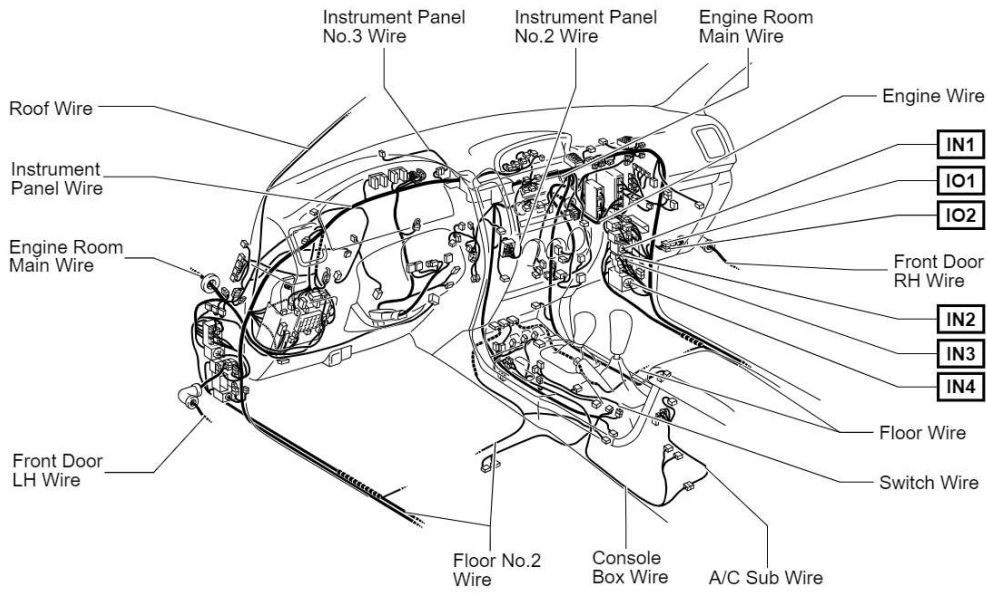


Code	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IK1	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
IL1	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IL2	
IL3	
IM1	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM2	
IM3	
IM4	
IM5	

## G ELECTRICAL WIRING ROUTING

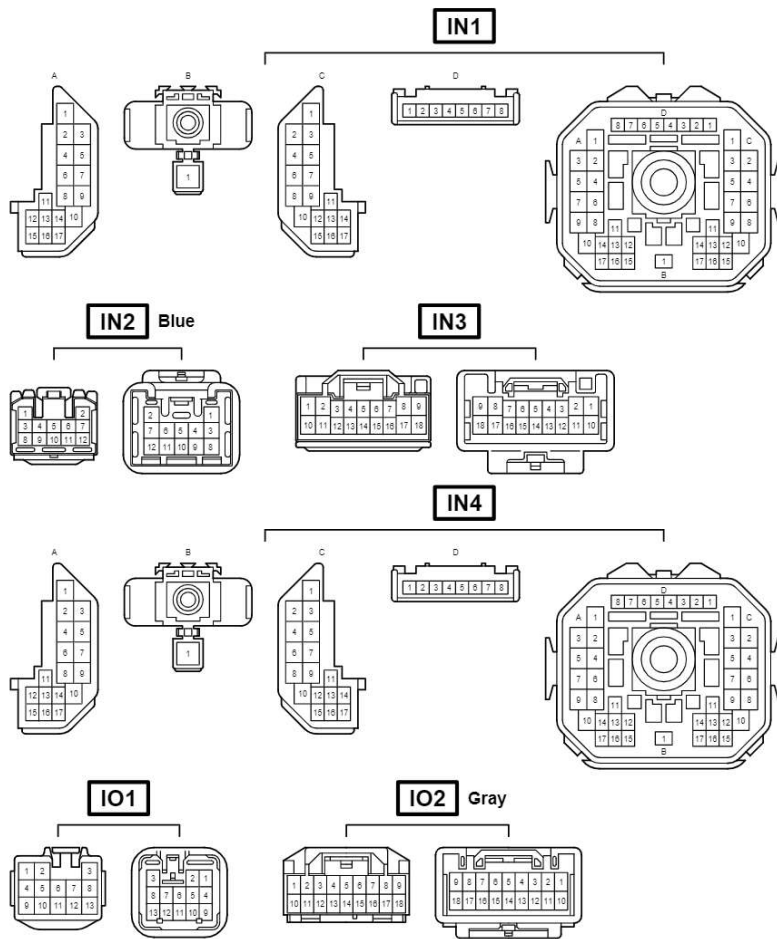
 : Location of Connector Joining Wire Harness and Wire Harness

[LHD]





## Connector Joining Wire Harness and Wire Harness

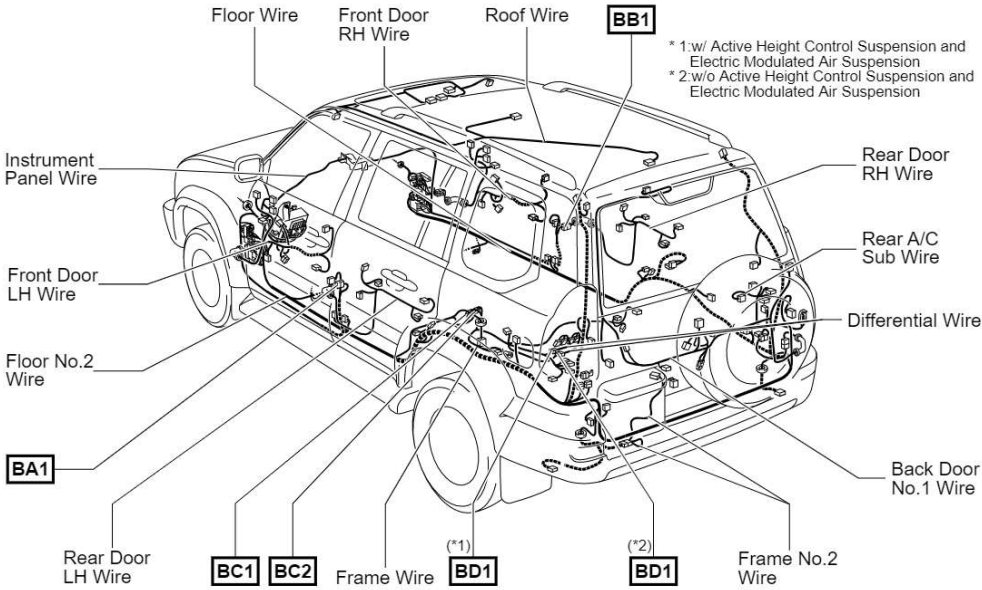


Code	Joining Wire Harness and Wire Harness (Connector Location)
IN1	
IN2	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN3	
IN4	
IO1	
IO2	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

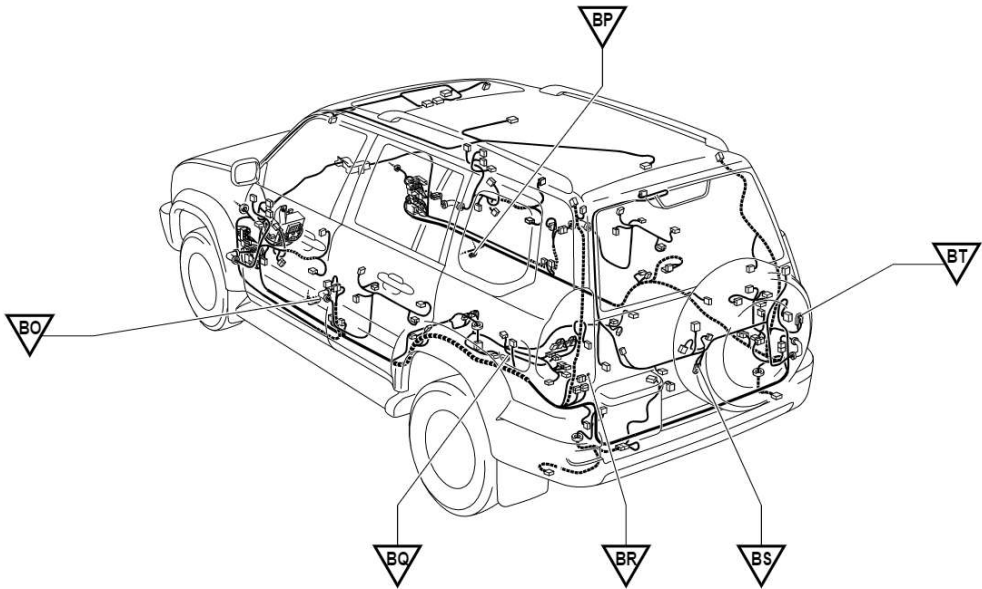
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

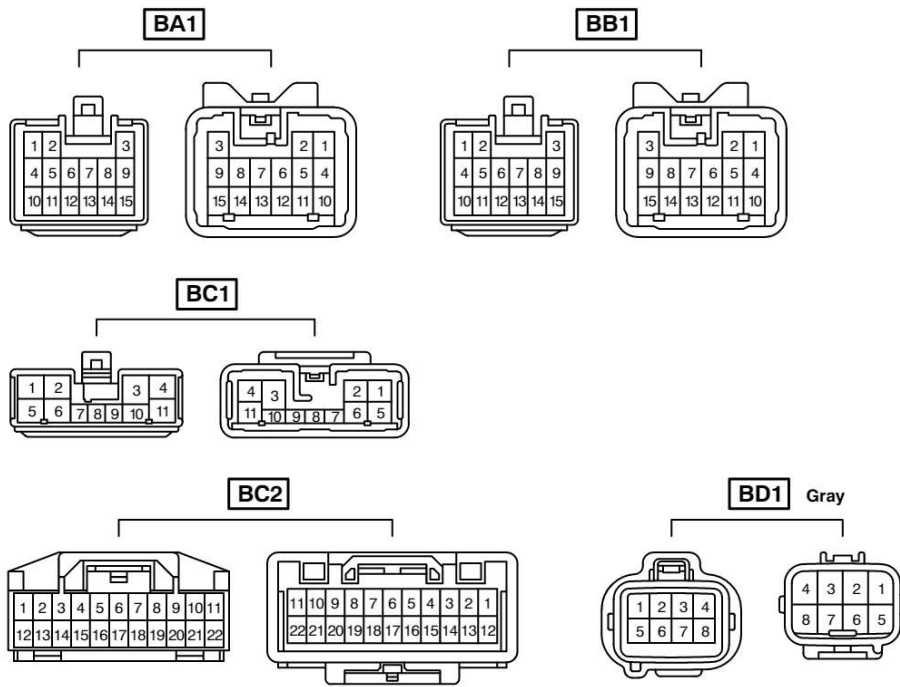
[LHD : 5-Door]



**▽ : Location of Ground Points**



## Connector Joining Wire Harness and Wire Harness

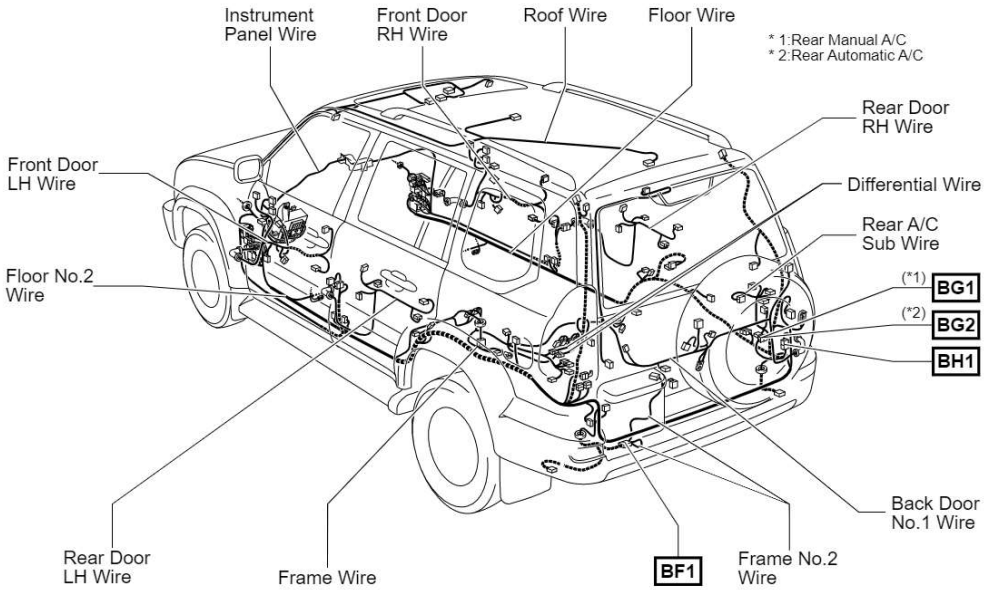


Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BC1	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BC2	
BD1	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)

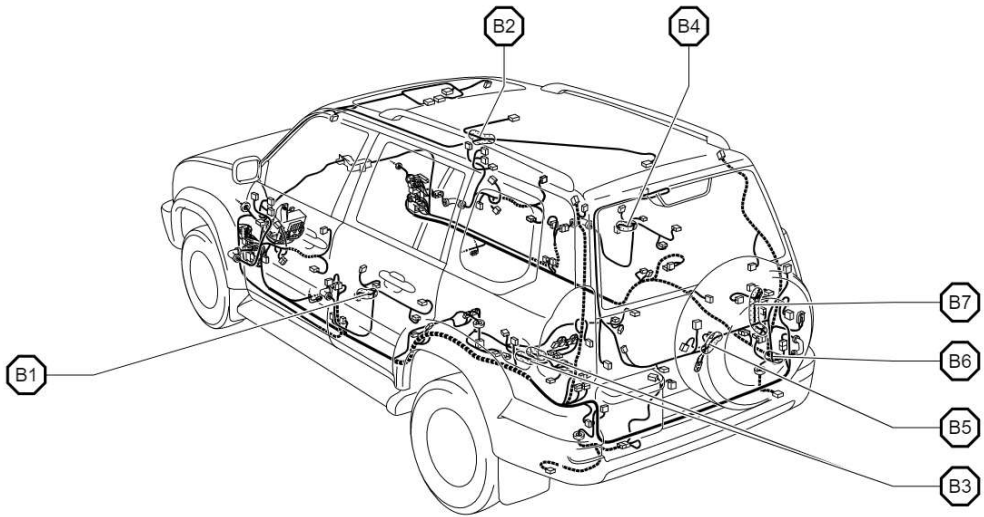
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

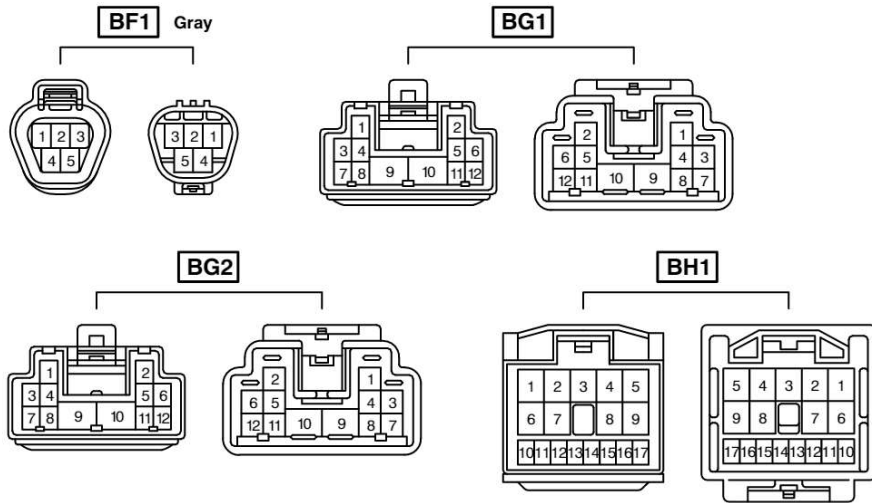
[LHD : 5-Door]



**○ : Location of Splice Points**



## Connector Joining Wire Harness and Wire Harness



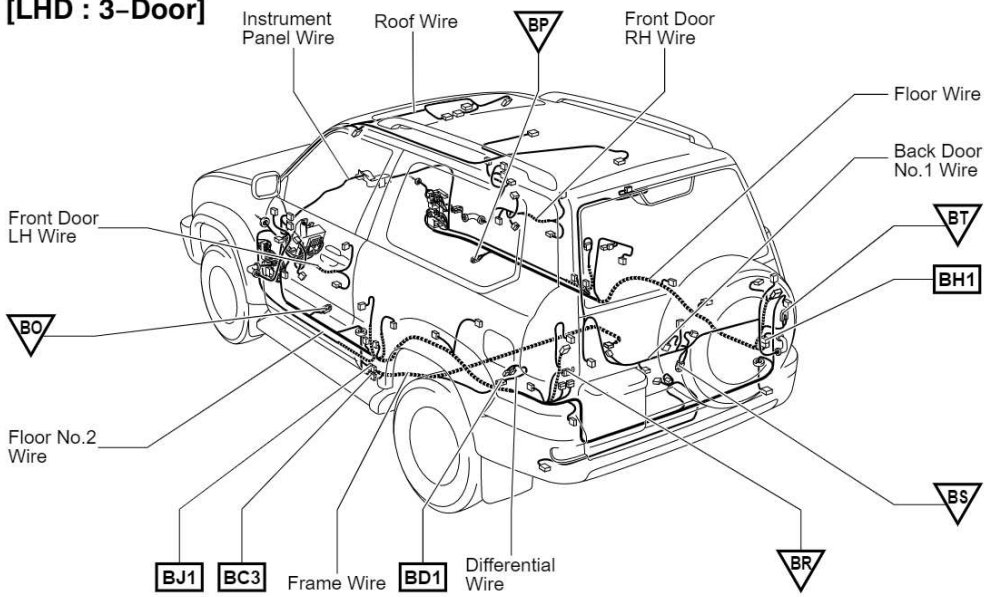
Code	Joining Wire Harness and Wire Harness (Connector Location)
BF1	Floor No.2 Wire and Frame No.2 Wire (Left Side of the Rear Floor)
BG1	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BG2	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

## G ELECTRICAL WIRING ROUTING

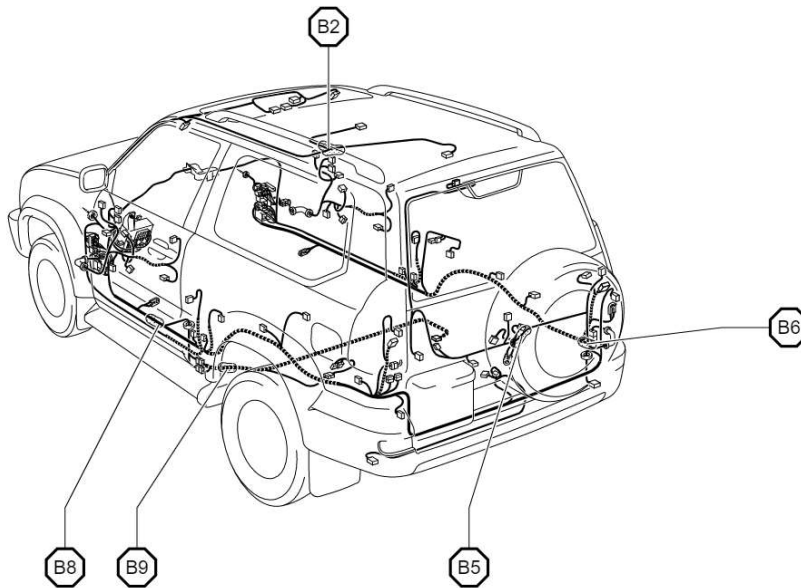
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

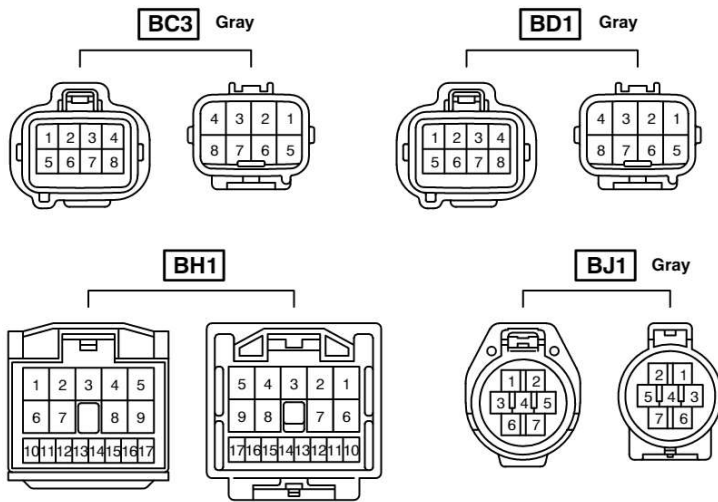
[LHD : 3-Door]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



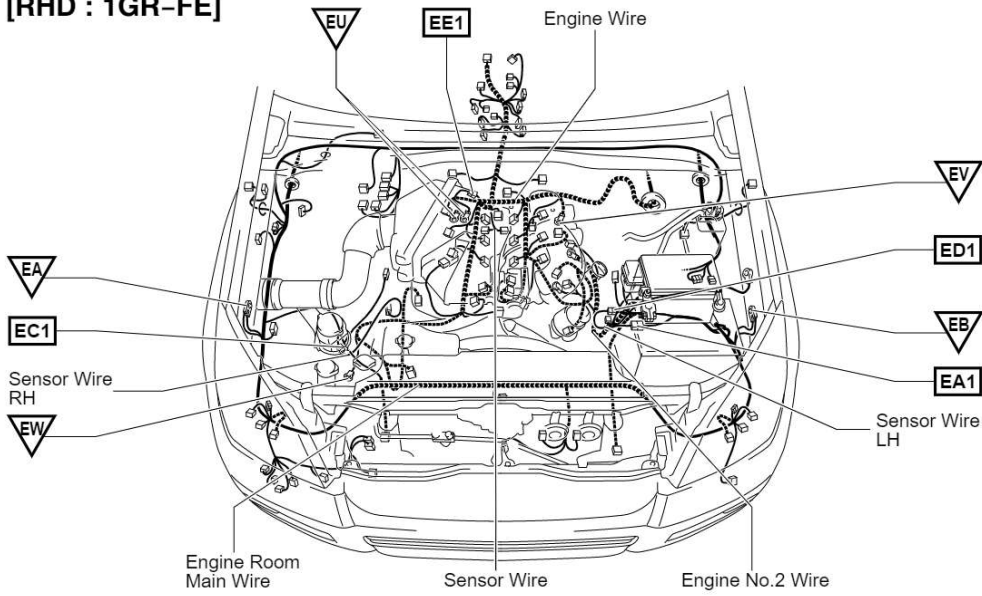
Code	Joining Wire Harness and Wire Harness (Connector Location)
BC3	Frame Wire and Floor No.2 Wire (Frame Side Rail LH)
BD1	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BJ1	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

## G ELECTRICAL WIRING ROUTING

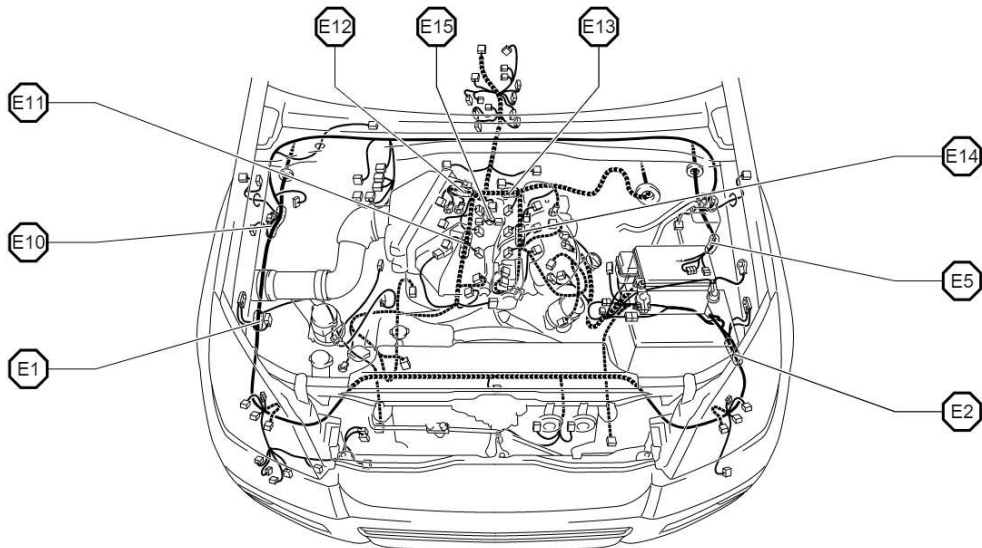
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[RHD : 1GR-FE]

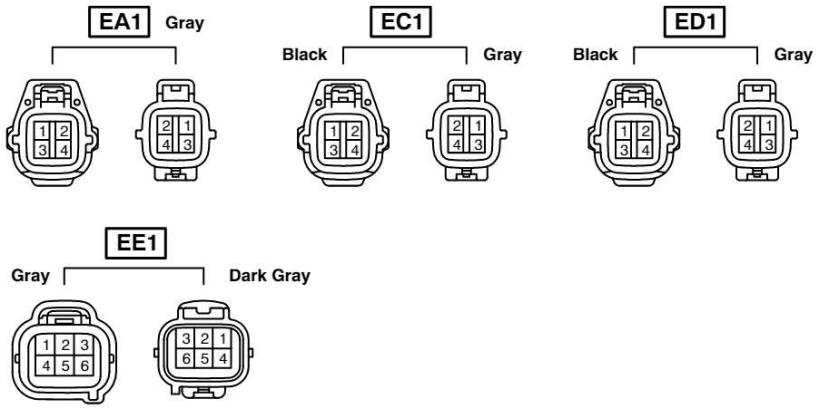


○ : Location of Splice Points





## Connector Joining Wire Harness and Wire Harness



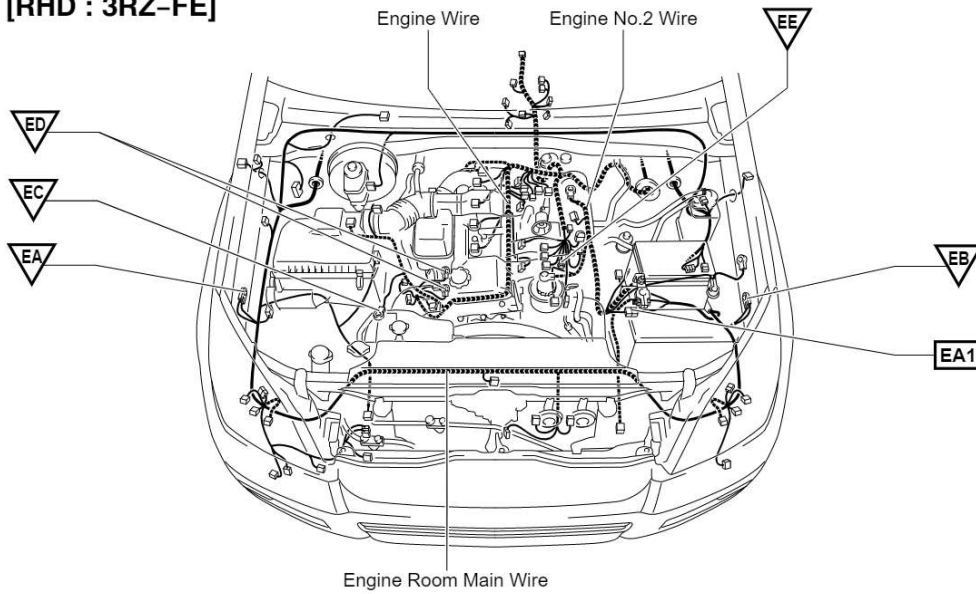
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)
EE1	Engine Wire and Sensor Wire (Behind the Cylinder Head RH)

## G ELECTRICAL WIRING ROUTING

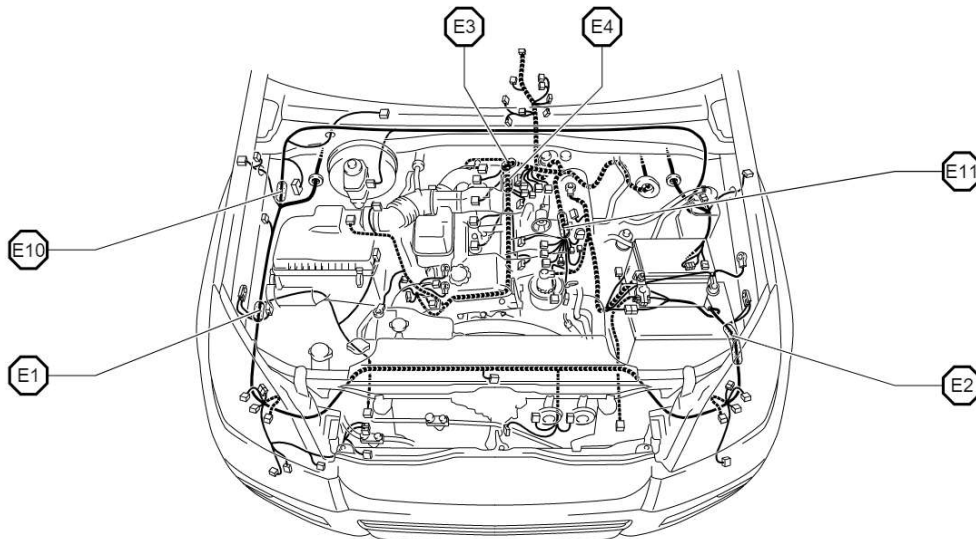
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

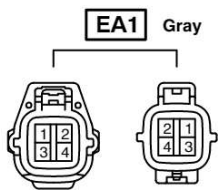
[RHD : 3RZ-FE]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



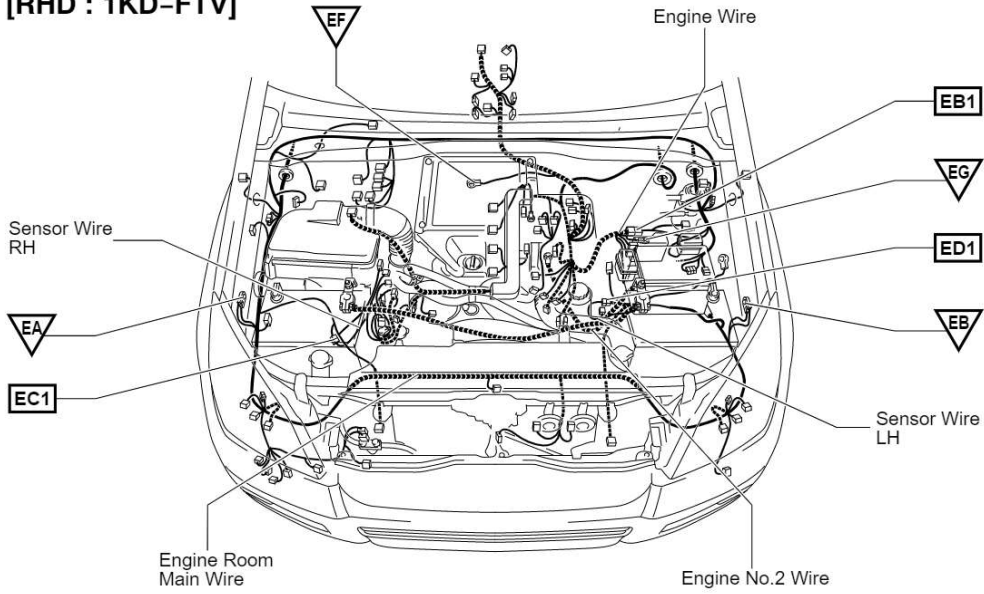
Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

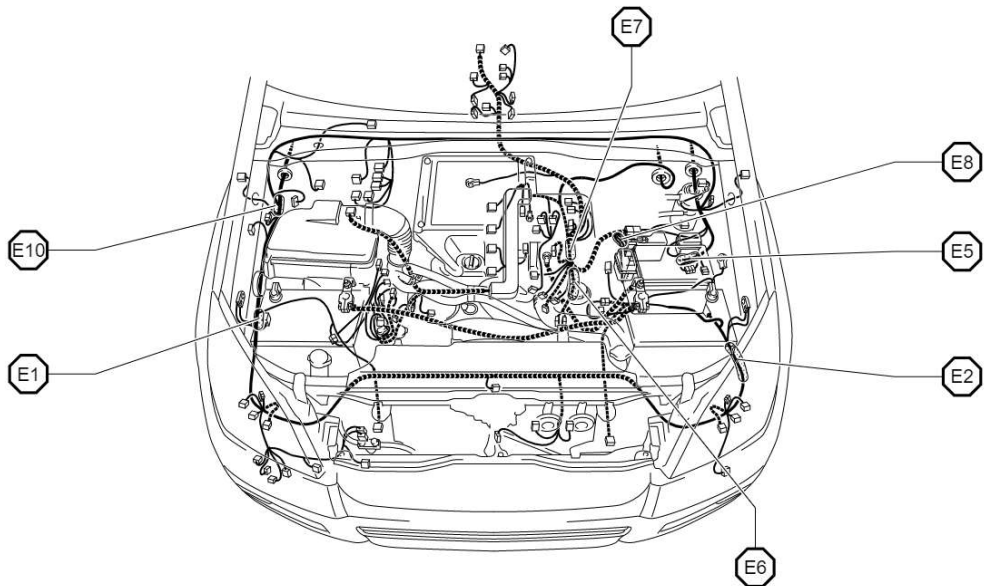
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

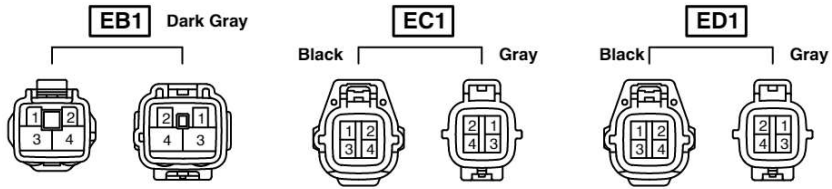
[RHD : 1KD-FTV]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



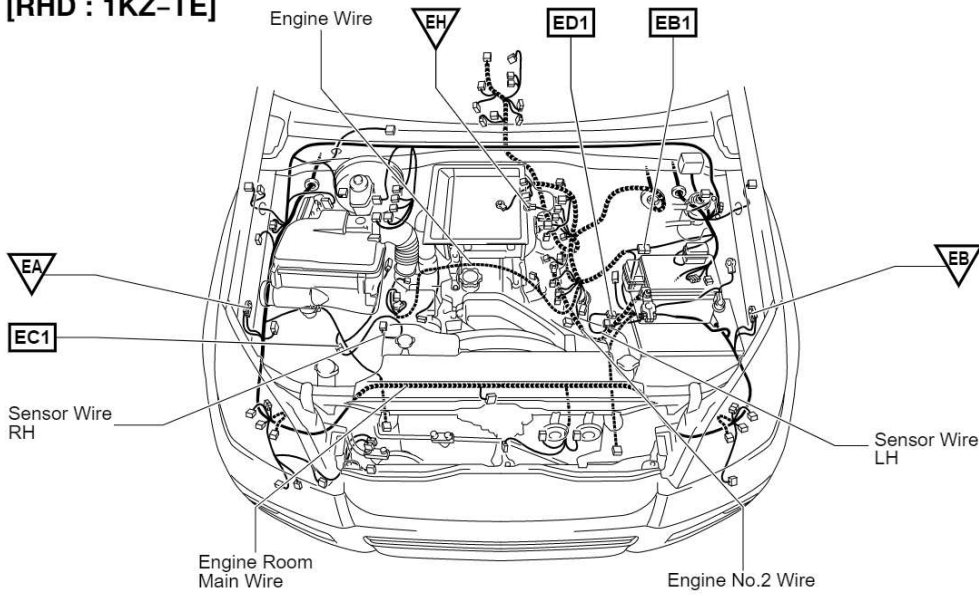
Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

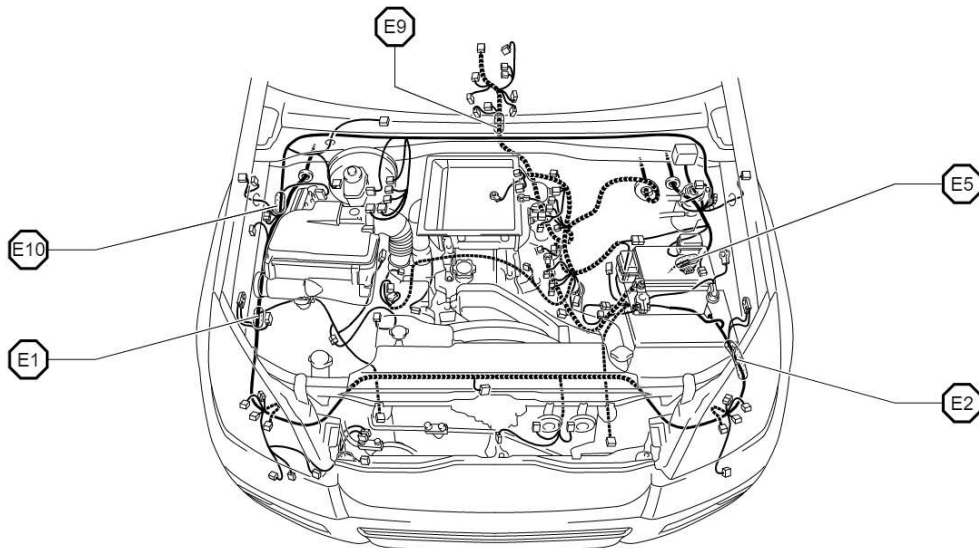
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

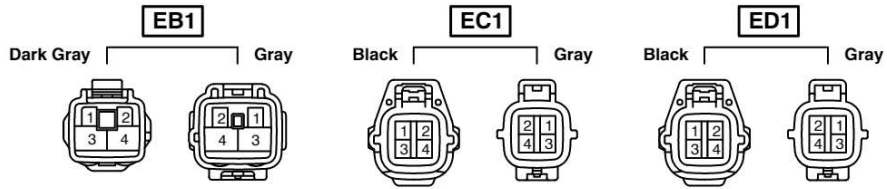
[RHD : 1KZ-TE]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



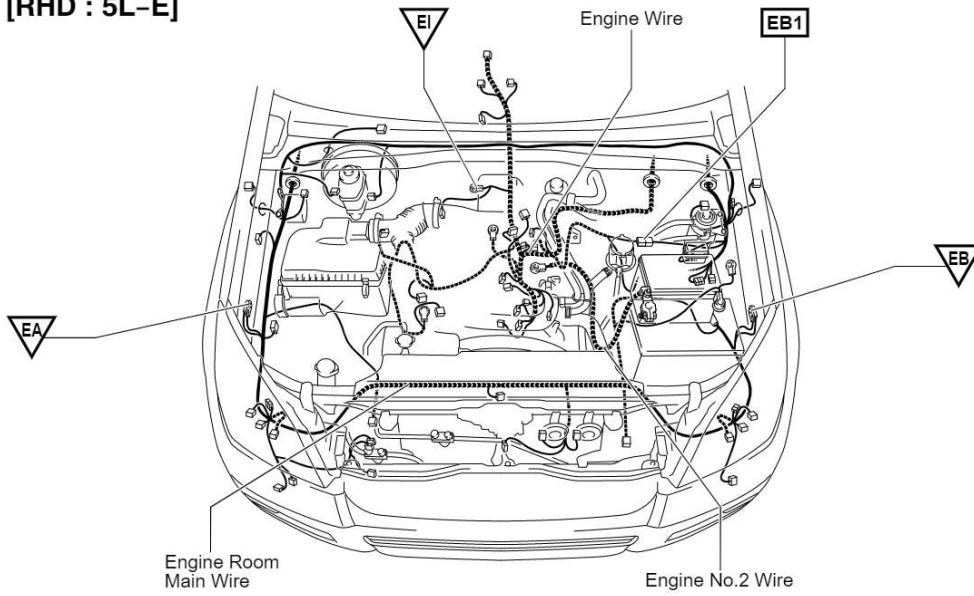
Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
EC1	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
ED1	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)

## G ELECTRICAL WIRING ROUTING

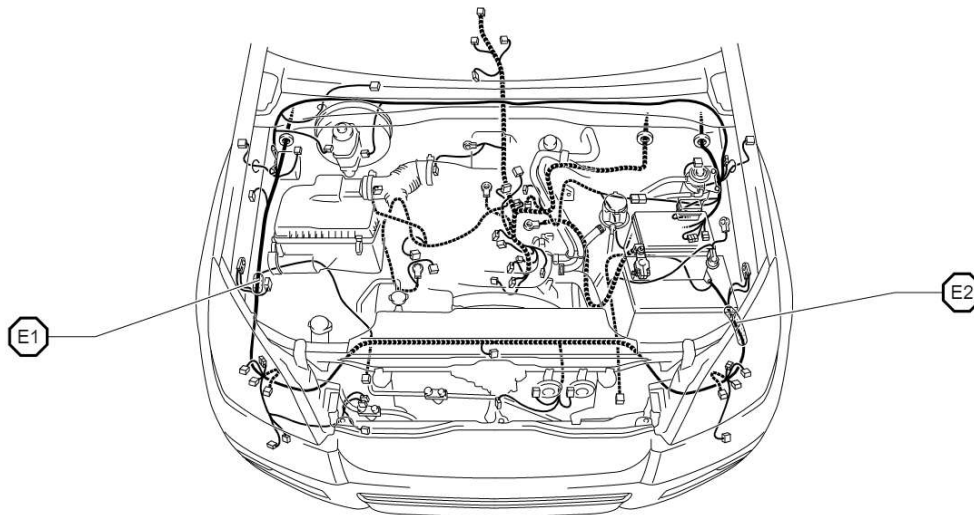
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[RHD : 5L-E]

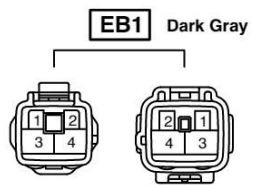


○ : Location of Splice Points





## Connector Joining Wire Harness and Wire Harness

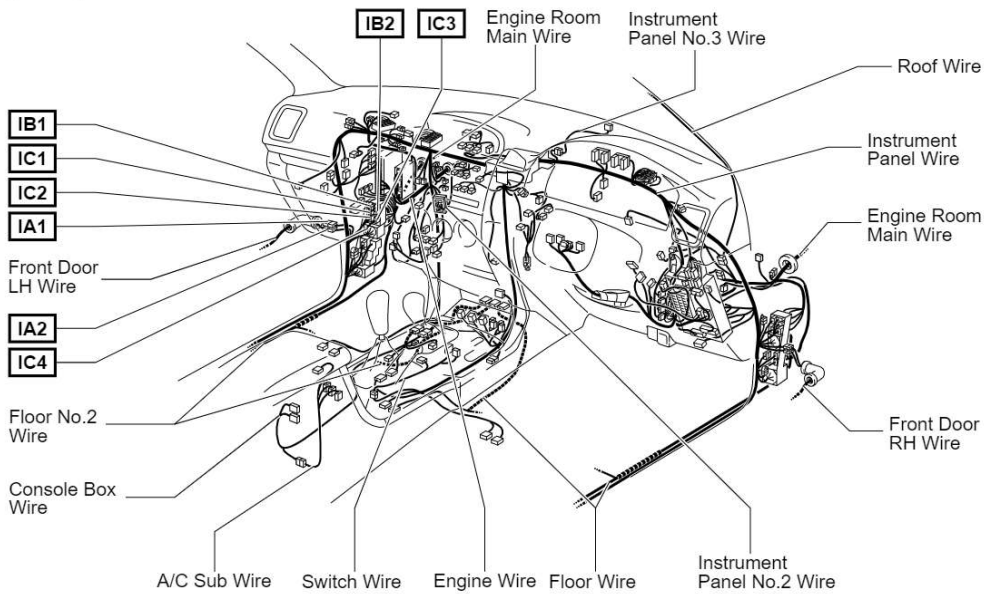


Code	Joining Wire Harness and Wire Harness (Connector Location)
EB1	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)

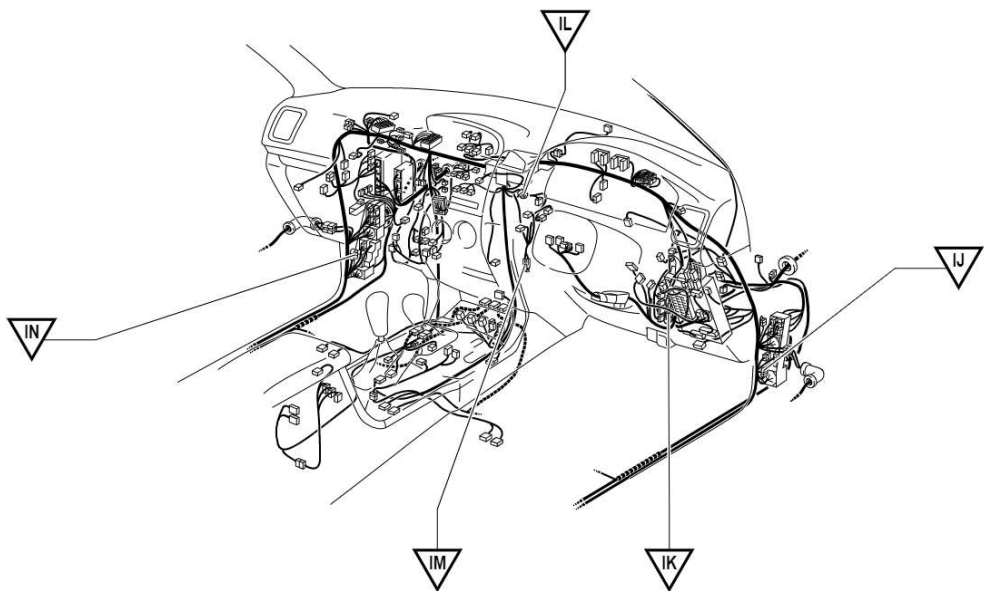
## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

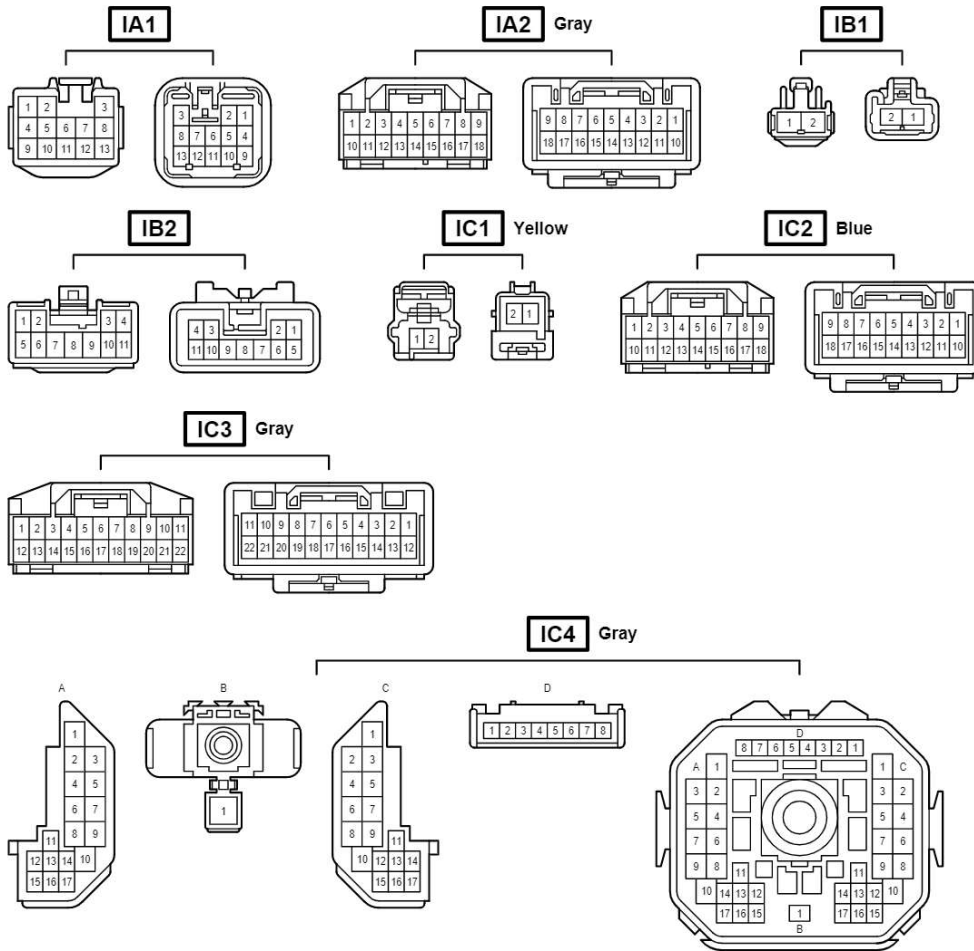
[RHD]



▽ : Location of Ground Points



## Connector Joining Wire Harness and Wire Harness

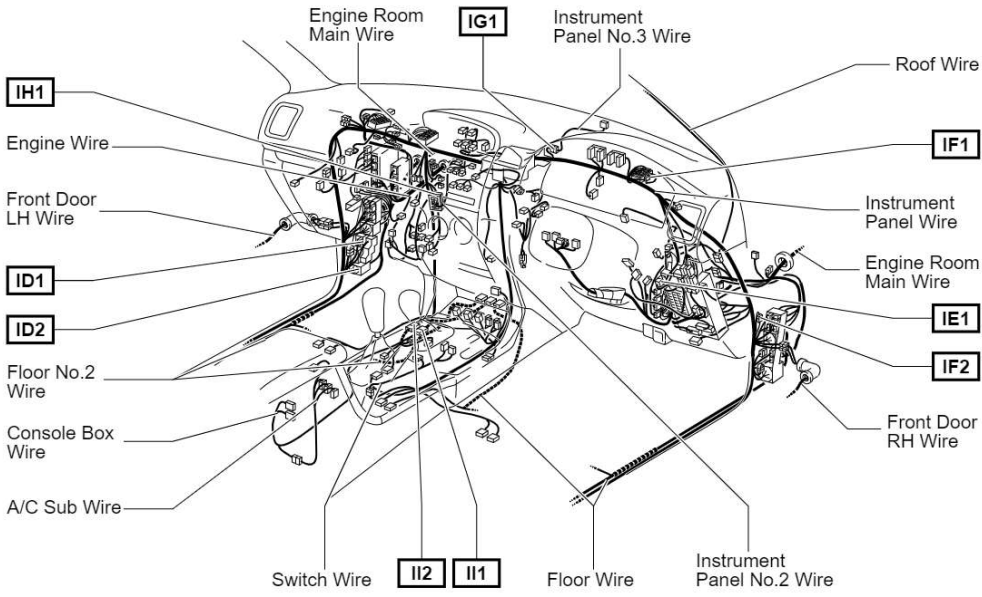


Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2	
IB1	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
IB2	
IC1	
IC2	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC3	
IC4	

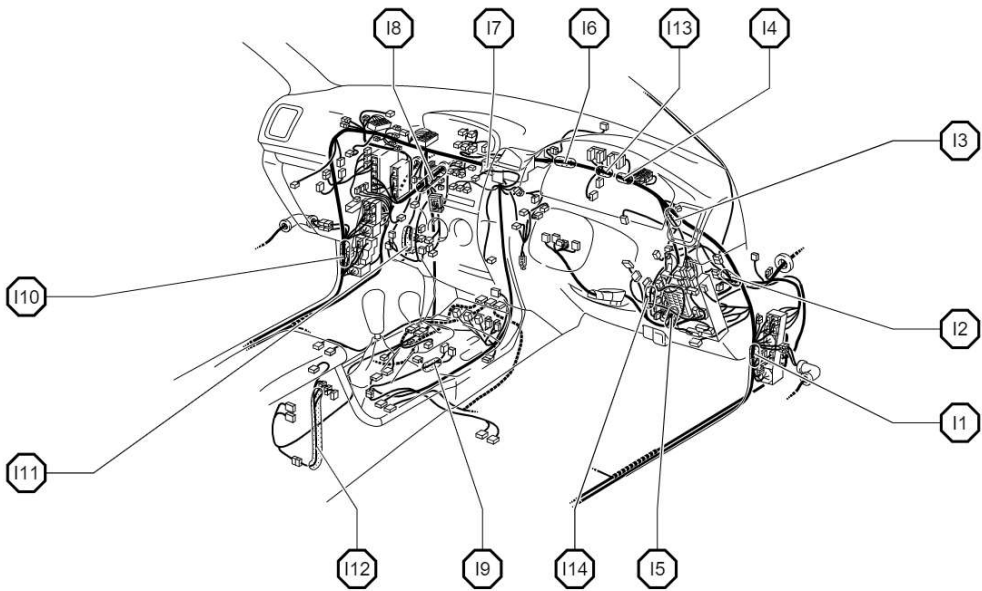
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

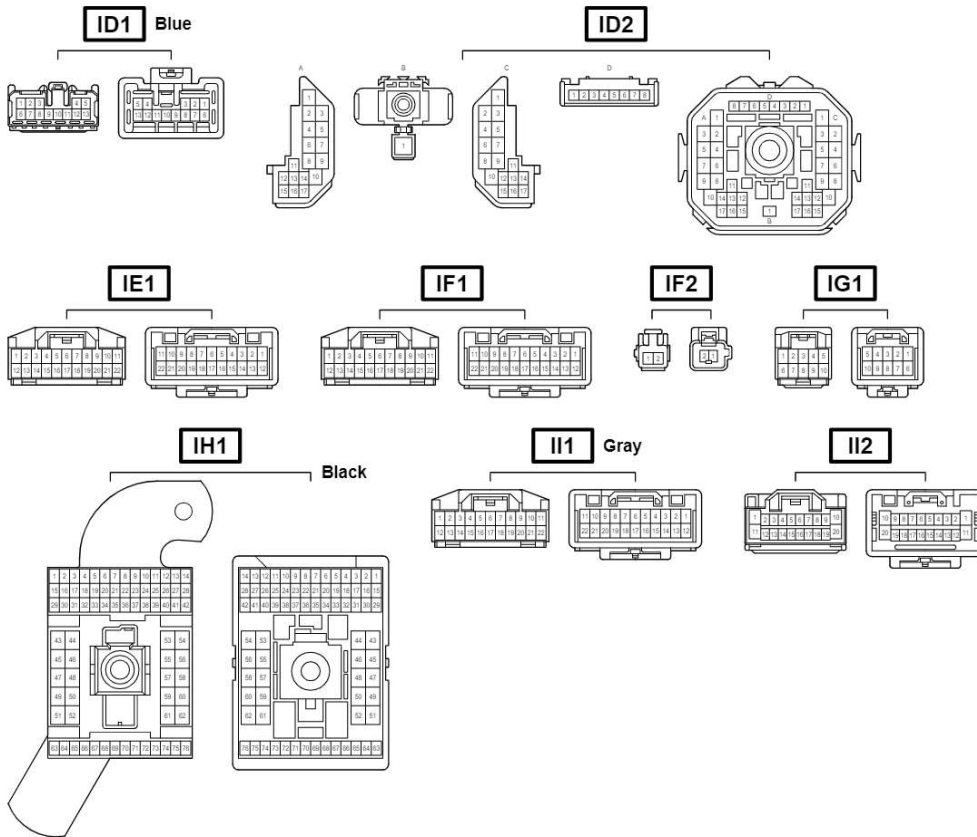
[RHD]



**○ : Location of Splice Points**




## Connector Joining Wire Harness and Wire Harness

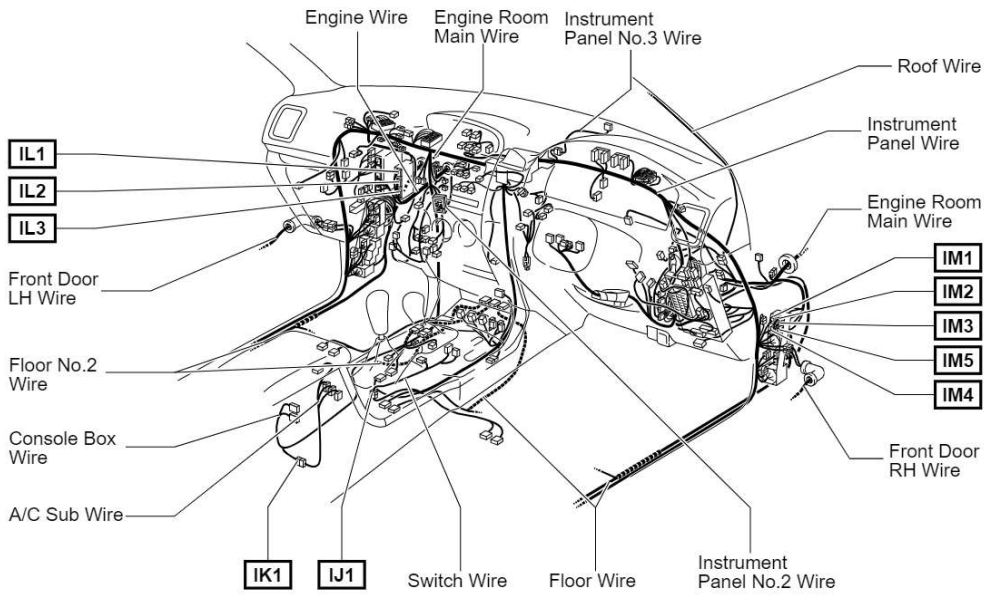


Code	Joining Wire Harness and Wire Harness (Connector Location)
ID1	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2	
IE1	Roof Wire and Instrument Panel Wire (Left Side of the Driver Side J/B)
IF1	Instrument Panel Wire and Instrument Panel Wire (Near the Center J/B No.1)
IF2	Instrument Panel Wire and Instrument Panel Wire (Right Kick Panel)
IG1	Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
IH1	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
II1	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
II2	

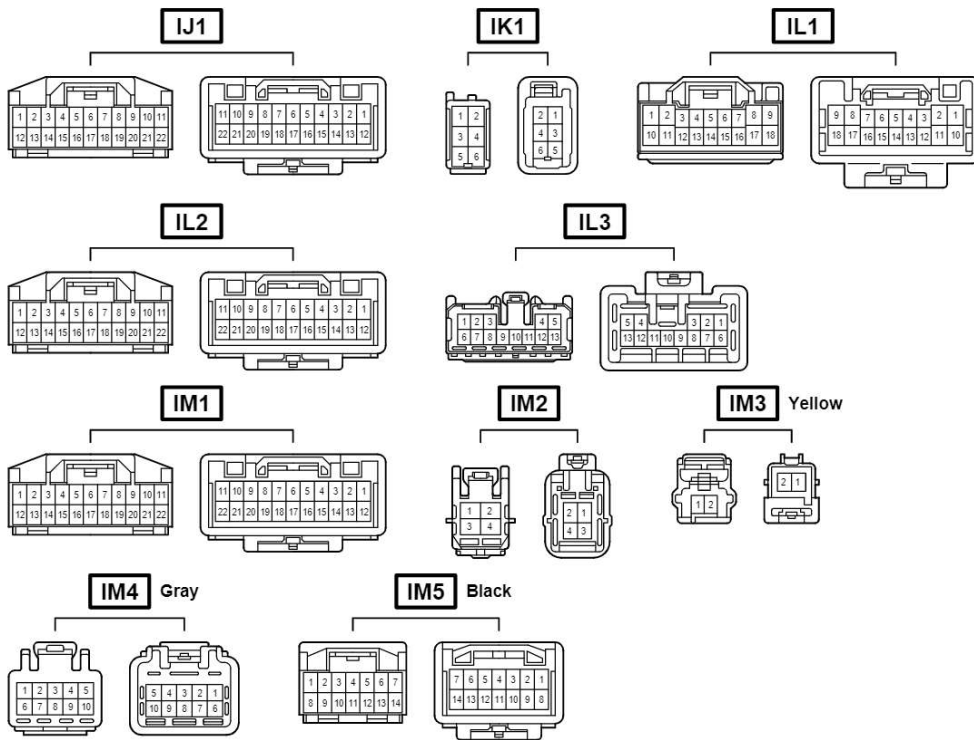
## G ELECTRICAL WIRING ROUTING

 : Location of Connector Joining Wire Harness and Wire Harness

[RHD]



## Connector Joining Wire Harness and Wire Harness

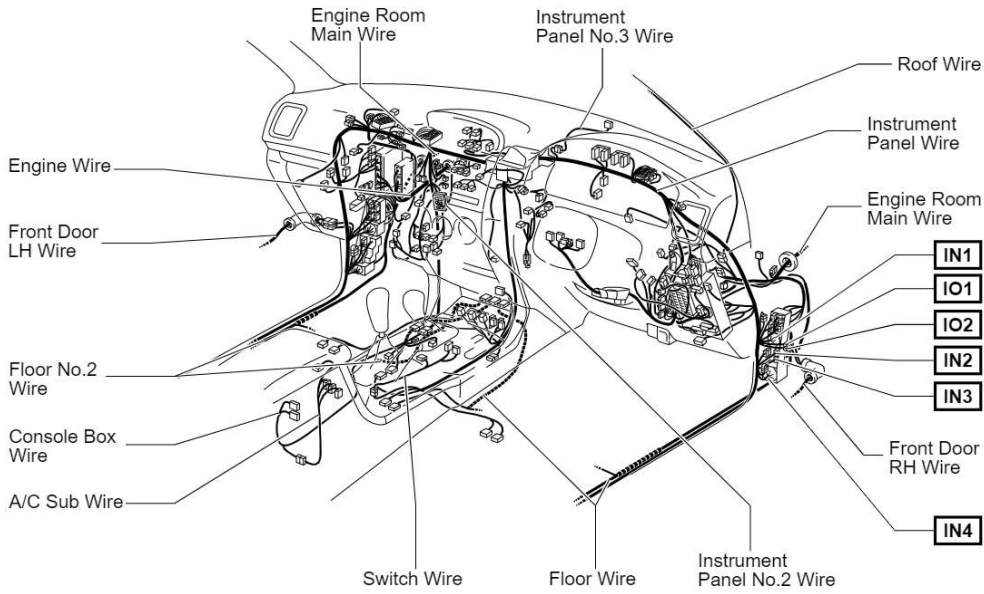


Code	Joining Wire Harness and Wire Harness (Connector Location)
IJ1	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IK1	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
IL1	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	
IL3	
IM1	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM2	
IM3	
IM4	
IM5	

## G ELECTRICAL WIRING ROUTING

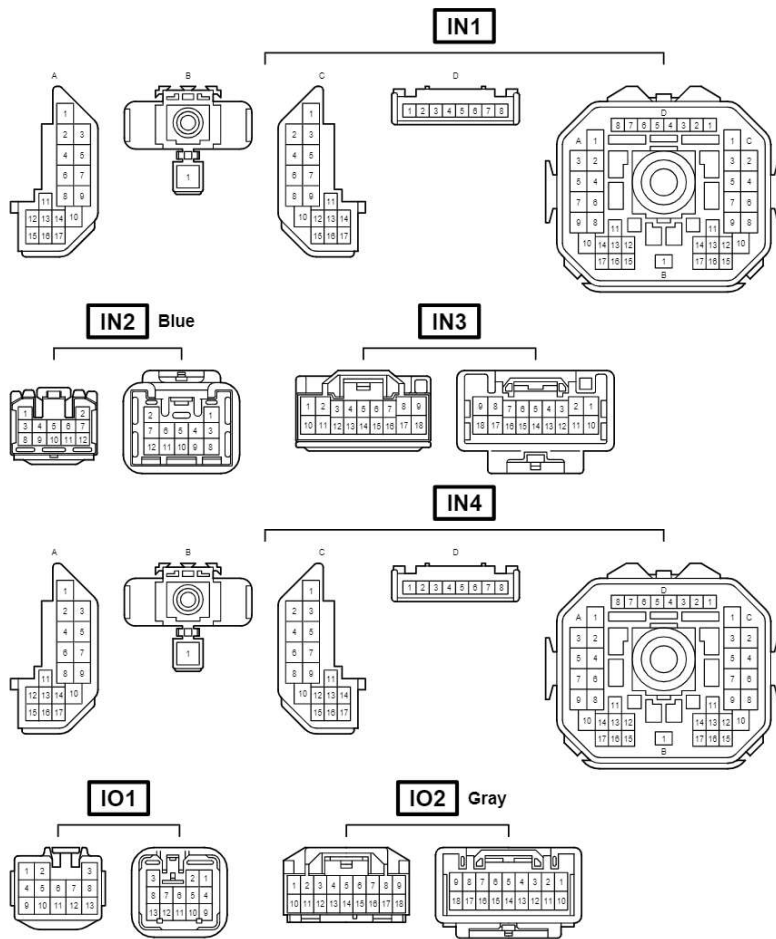
 : Location of Connector Joining Wire Harness and Wire Harness

[RHD]





## Connector Joining Wire Harness and Wire Harness

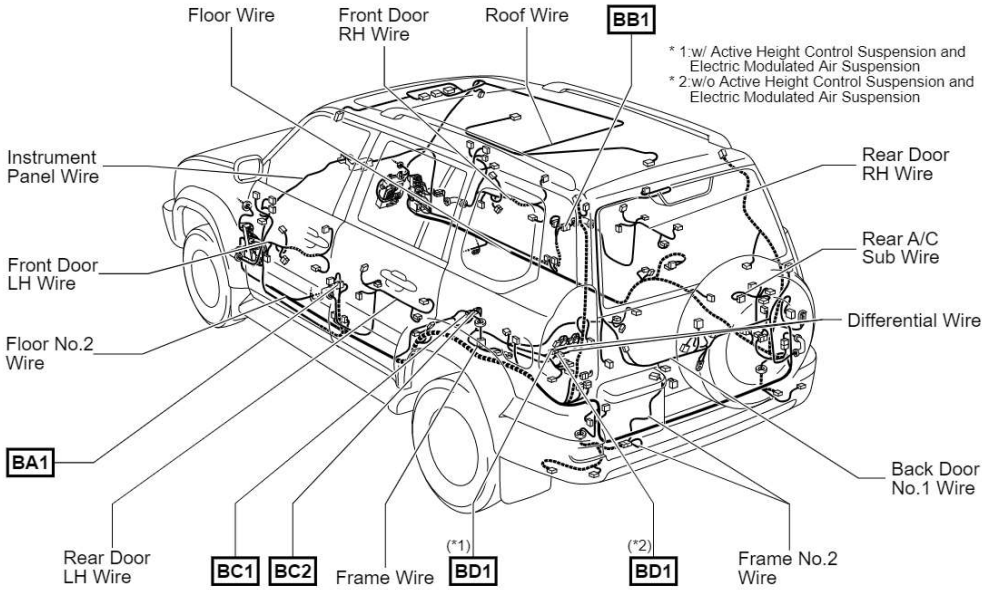


Code	Joining Wire Harness and Wire Harness (Connector Location)
IN1	
IN2	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN3	
IN4	
IO1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2	

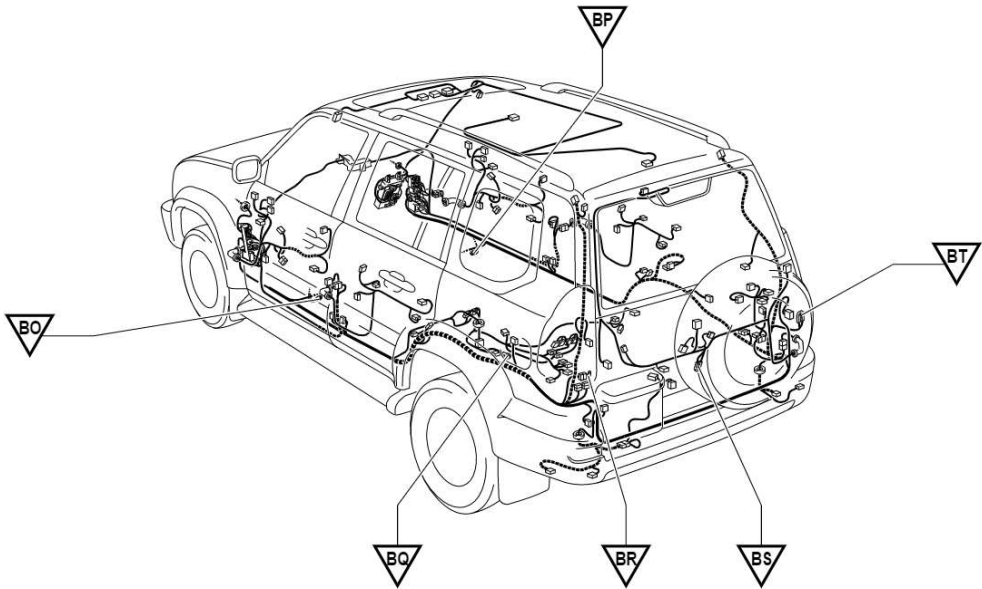
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

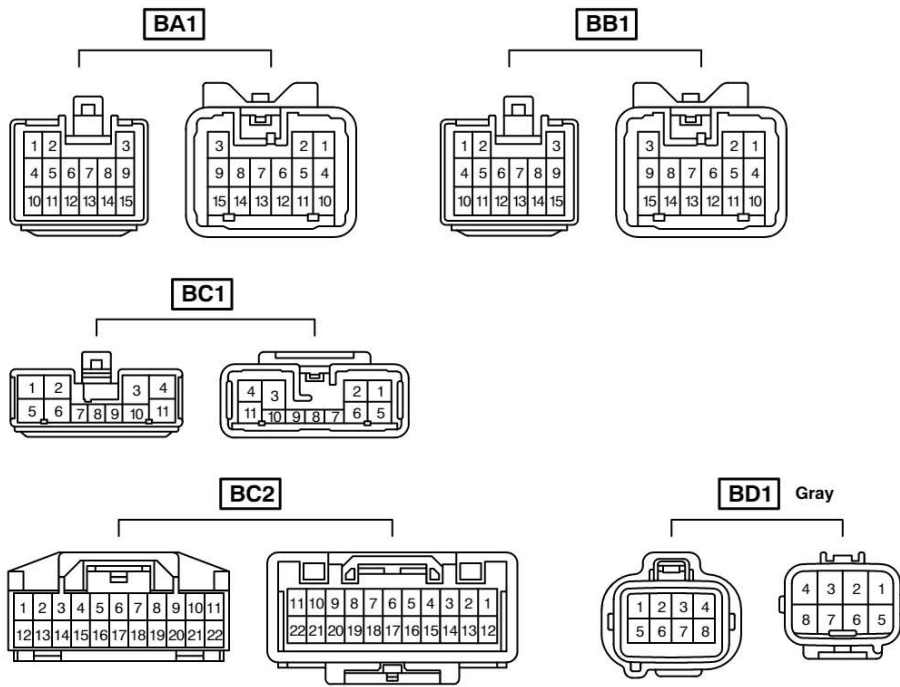
[RHD : 5-Door]



**▽ : Location of Ground Points**



## Connector Joining Wire Harness and Wire Harness

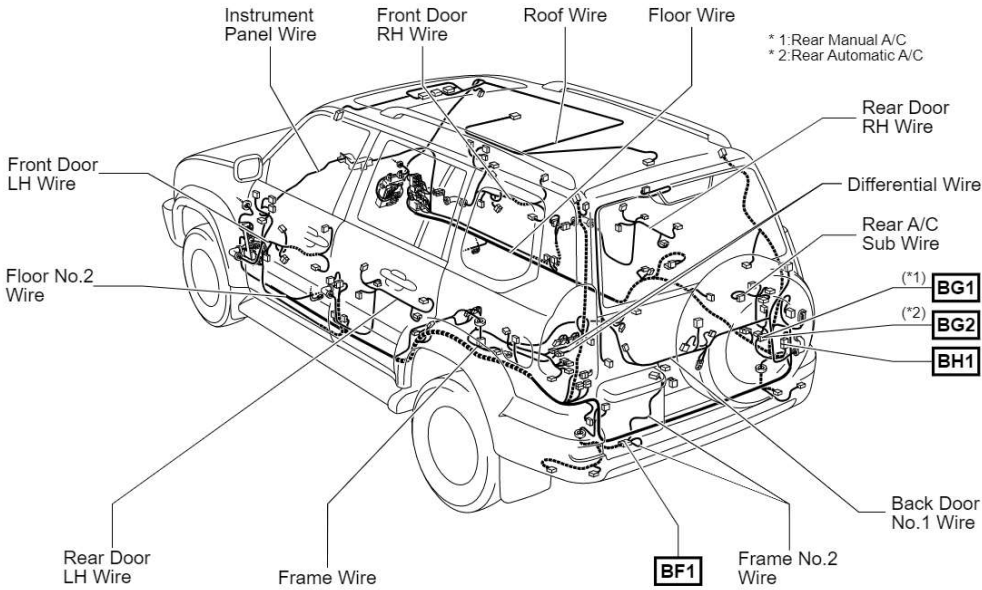


Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BC1	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BC2	
BD1	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)

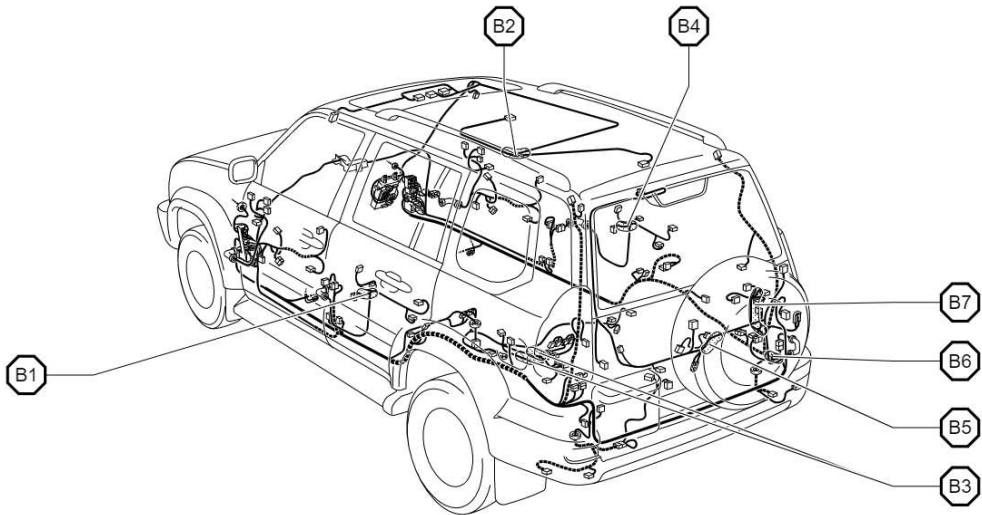
# G ELECTRICAL WIRING ROUTING

**□ : Location of Connector Joining Wire Harness and Wire Harness**

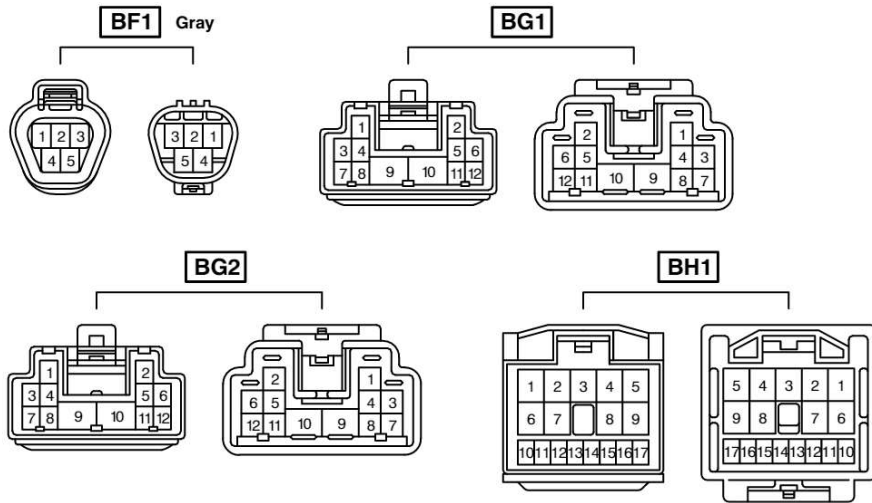
[RHD : 5-Door]



**○ : Location of Splice Points**



## Connector Joining Wire Harness and Wire Harness



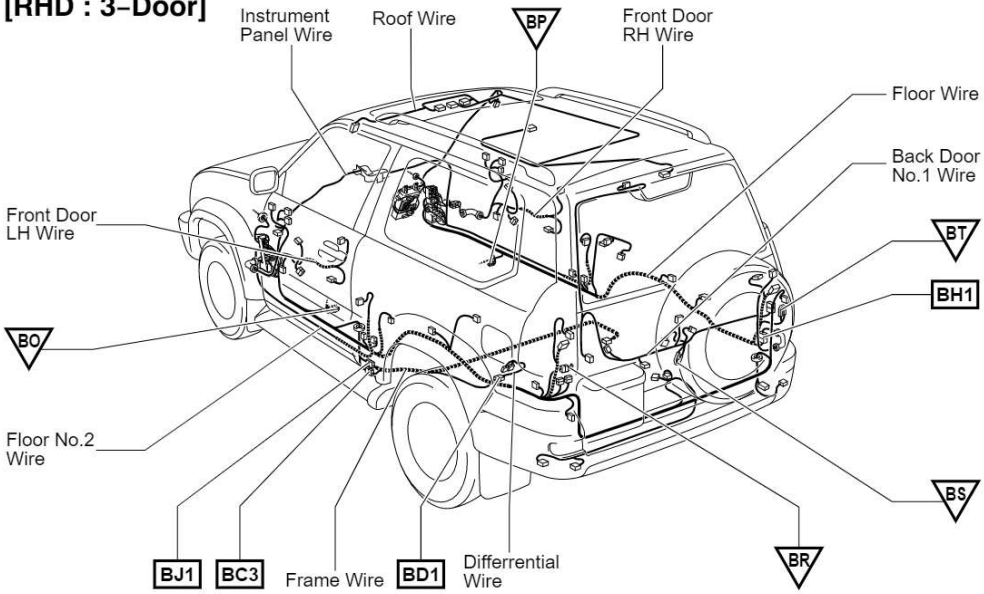
Code	Joining Wire Harness and Wire Harness (Connector Location)
BF1	Floor No.2 Wire and Frame No.2 Wire (Left Side of the Rear Floor)
BG1	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BG2	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)

# G ELECTRICAL WIRING ROUTING

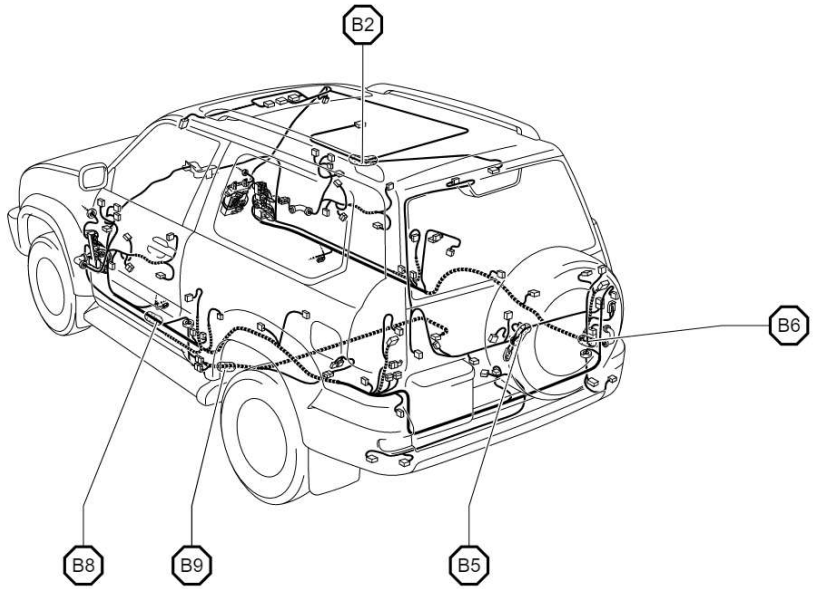
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

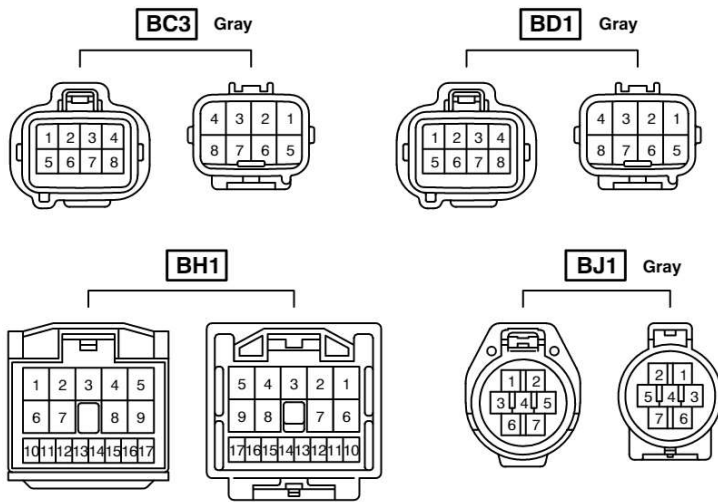
[RHD : 3-Door]



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



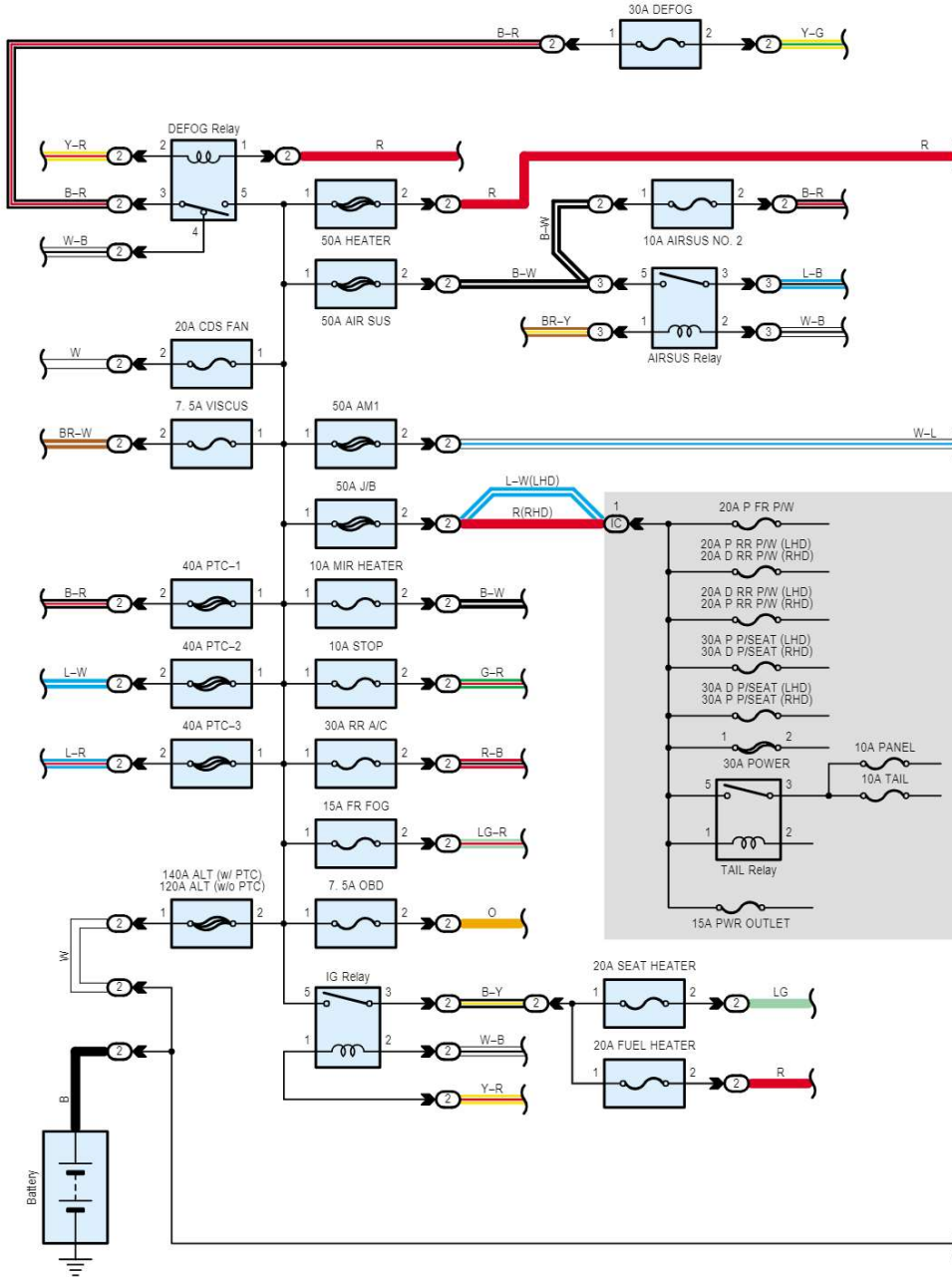
Code	Joining Wire Harness and Wire Harness (Connector Location)
BC3	Frame Wire and Floor No.2 Wire (Frame Side Rail LH)
BD1	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)
BH1	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
BJ1	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

# LAND CRUISER / LAND CRUISER PRADO ELECTRICAL WIRING DIAGRAM SYSTEM CIRCUITS

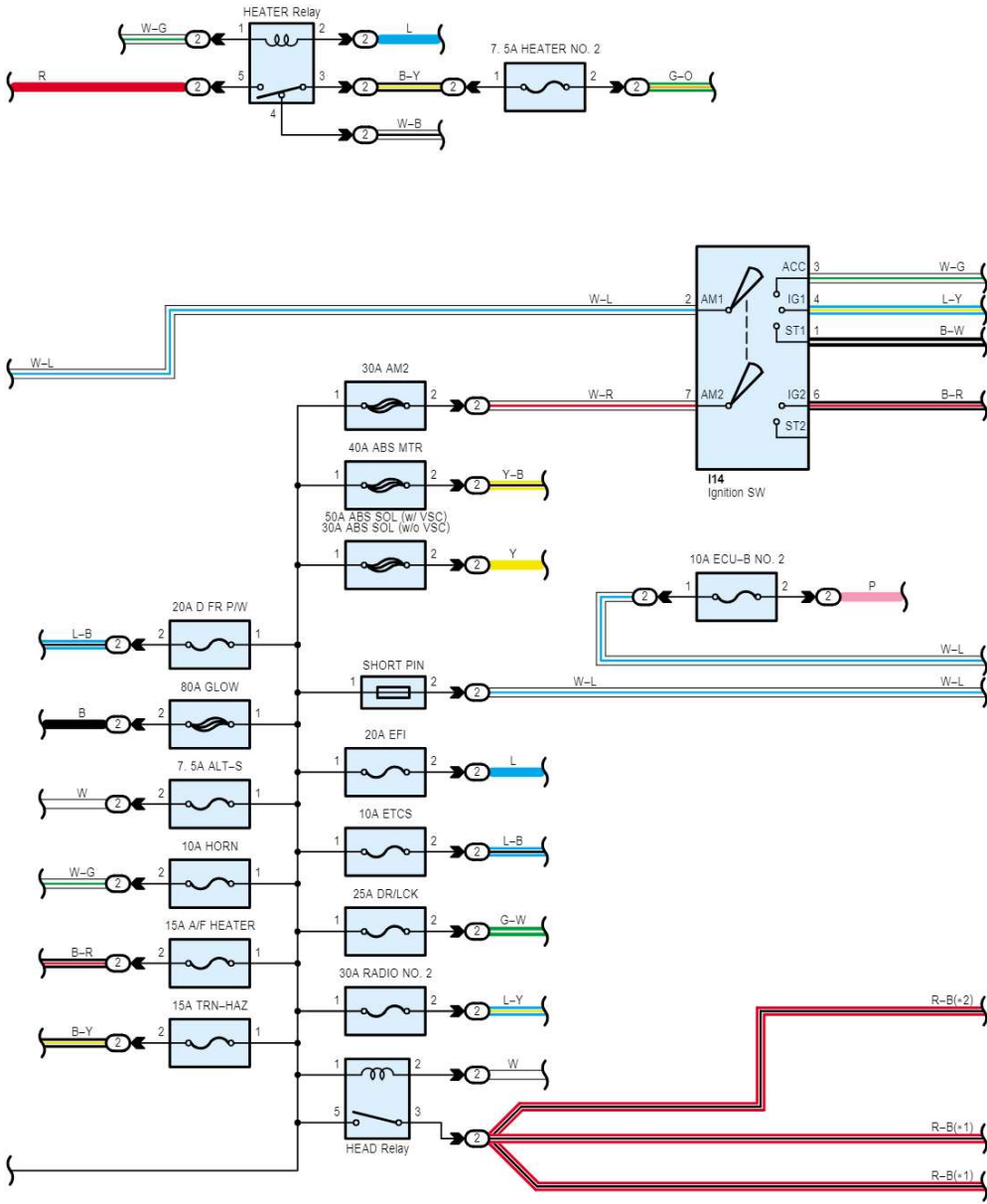
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ABS .....	572
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Air Conditioner (Automatic A/C) .....	694
Air Conditioner (Manual A/C Except 1GR-FE) .....	712
Air Conditioner (Manual A/C 1GR-FE) .....	708
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Center Differential Lock .....	592
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Condenser Fan .....	684
Cooler Box .....	726
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Cruise Control (1KD-FTV) .....	520
Cruise Control (1KZ-TE) .....	528
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ECT and A/T Indicator (3RZ-FE Leaded Gasoline) .....	480
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Engine Control (1GR-FE) .....	162
Engine Control (1KD-FTV) .....	196
Engine Control (1KZ-TE) .....	210
Engine Control (3RZ-FE Leaded Gasoline) .....	186
Engine Control (3RZ-FE Unleaded Gasoline) .....	174
Engine Control (5L-E) .....	222
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Radio and Player (Separate Type Amplifier) .....	660
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VSC (RHD) .....	562
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Wireless Door Lock Control (RHD) .....	408
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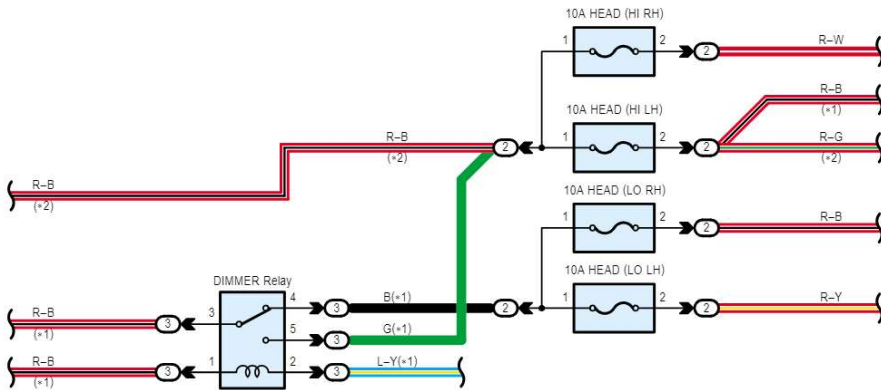
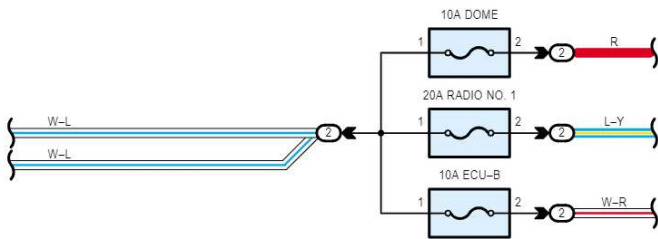
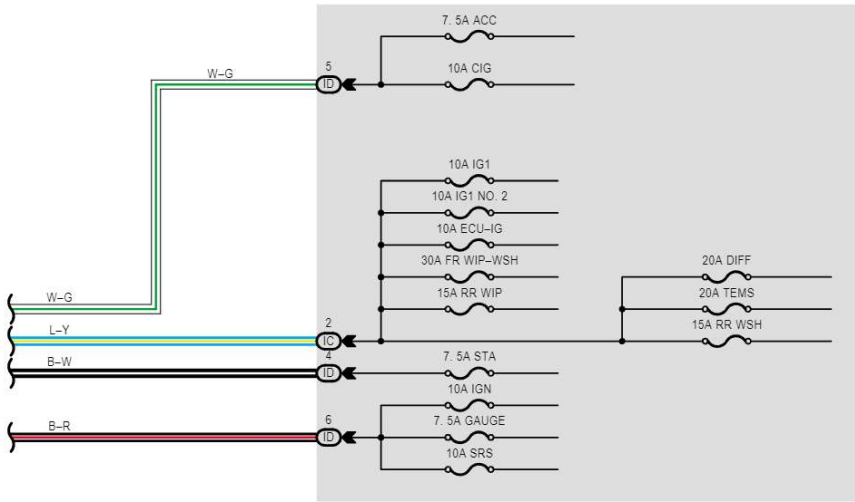


\* 1 : w/ Daytime Running Light  
 \* 2 : w/o Daytime Running Light



# Power Source

- \* 1 : w/ Daytime Running Light
- \* 2 : w/o Daytime Running Light



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints****HEAD Relay**

5-3 : Closed with light control SW at HEAD position or dimmer SW at FLASH position

**I14 Ignition SW**

2-3 : Closed with ignition key at ACC or ON position

2-4 : Closed with ignition key at ON or ST position

2-1 : Closed with ignition key at ST position

7-6 : Closed with ignition key at ON or ST position

**TAIL Relay**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
I14	50 (LHD)	I14	70 (RHD)		

**○ : Relay Blocks**

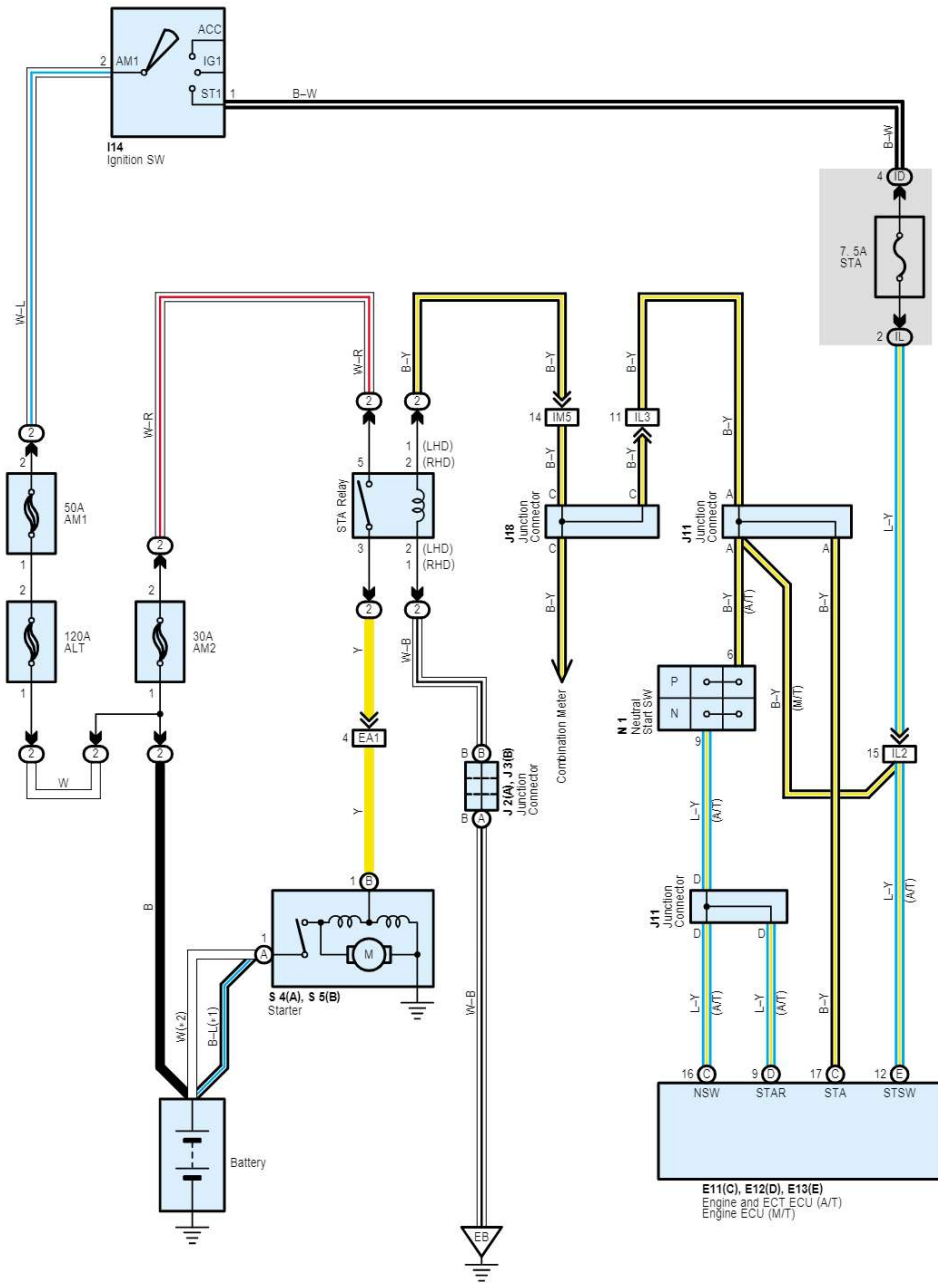
Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

# Starting (1GR-FE)

- 1 : Cold Area Spec.
- 2 : Except Cold Area Spec.



**Service Hints**

**I14 Ignition SW**

2-1 : Closed with the ignition SW at ST position  
7-8 : Closed with the ignition SW at ST position

**N1 Neutral Start SW**

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
E11	C	49 (LHD)	J2	A	39 (*1)
		69 (RHD)			N1
E12	D	49 (LHD)	J3	B	59 (*10)
		69 (RHD)			S4
E13	E	49 (LHD)	J11		39 (*1)
		69 (RHD)			S5
I14		50 (LHD)	J18		39 (*1)
		70 (RHD)			

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

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

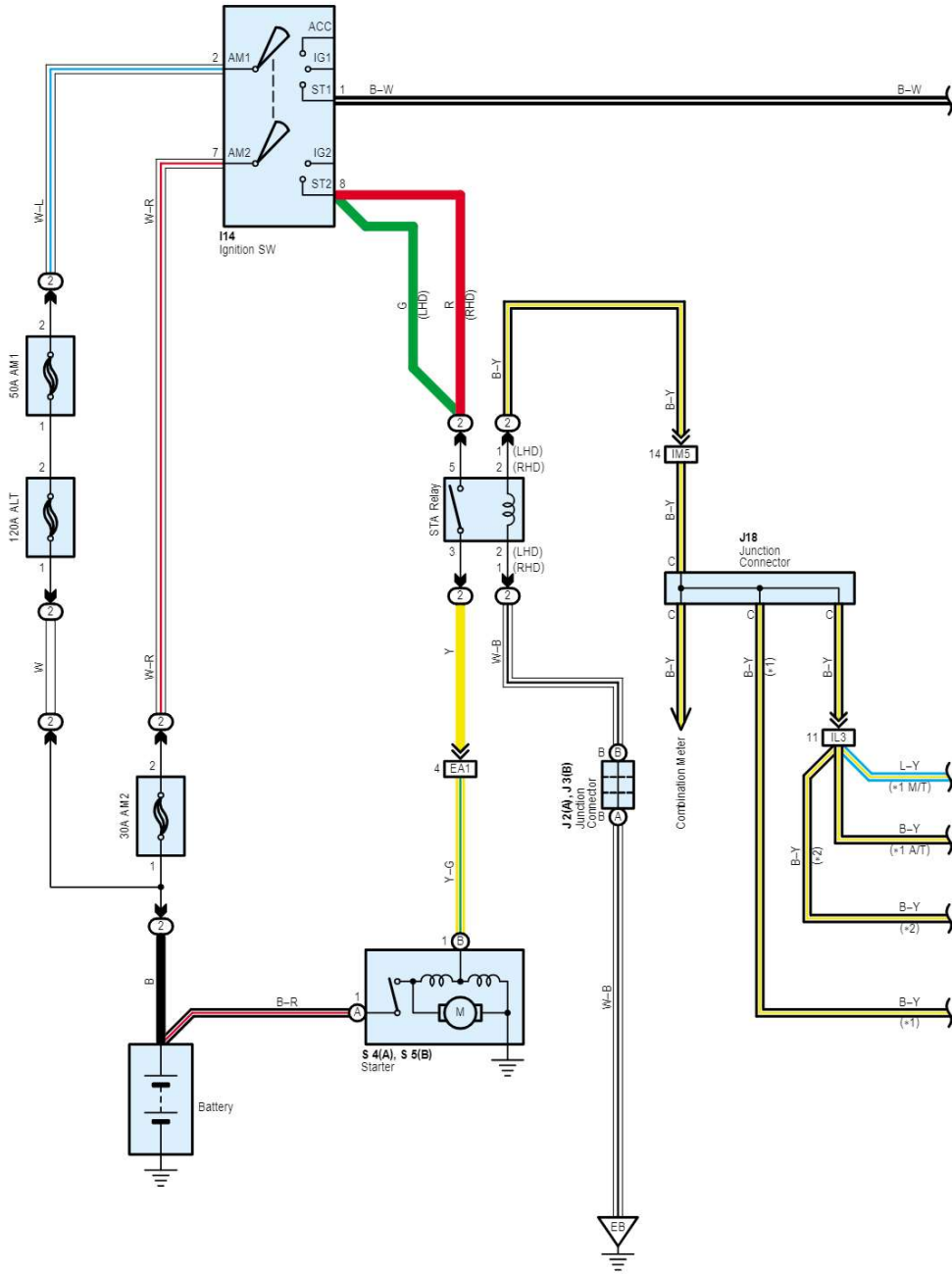
: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	78 (*1)	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
	102 (*10)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	
IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

: **Ground Points**

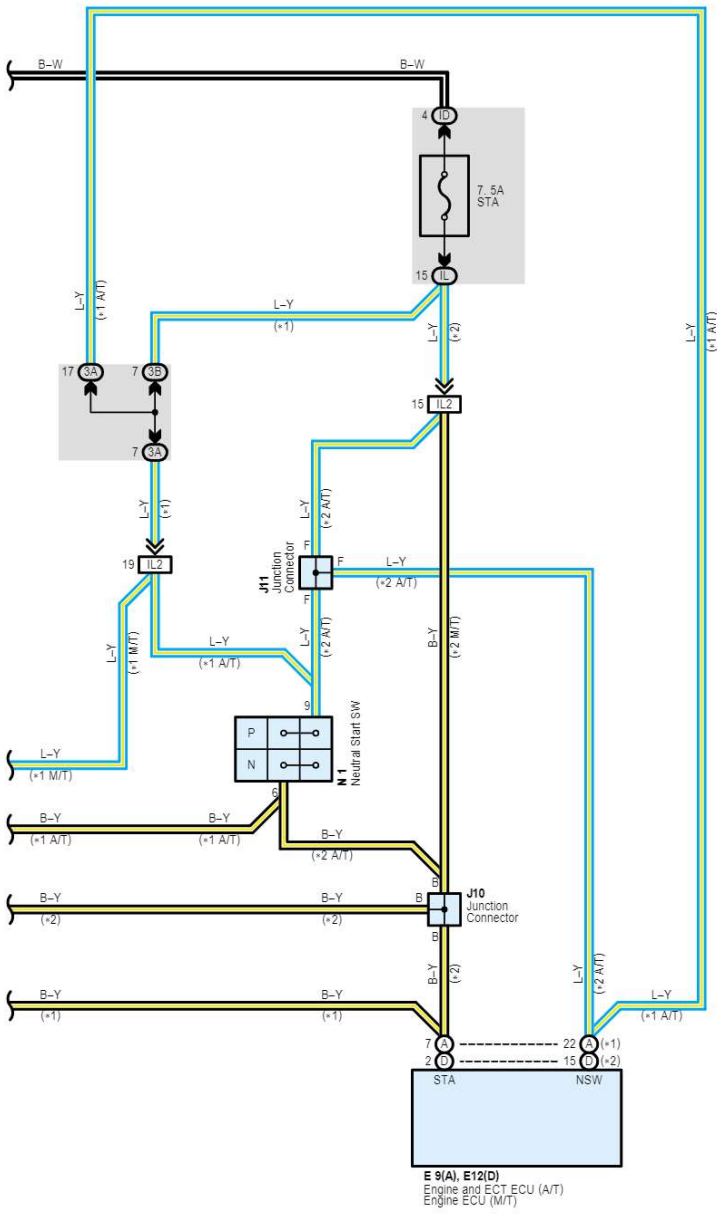
Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	102 (*10)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat





\* 1 : Unleaded Gasoline  
 \* 2 : Leaded Gasoline



## Starting (3RZ-FE)

### Service Hints

#### I14 Ignition SW

2-1 : Closed with the ignition SW at ST position  
7-8 : Closed with the ignition SW at ST position

#### N1 Neutral Start SW

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
E9	A	49 (LHD)	J3	B	41 (*2)	N1		41 (*2)
		69 (RHD)			61 (*11)			61 (*11)
E12	D	49 (LHD)	J10		50 (LHD)	S4	A	41 (*2)
		69 (RHD)			70 (RHD)			61 (*11)
I14		50 (LHD)	J11		50 (LHD)	S5	B	41 (*2)
		70 (RHD)			70 (RHD)			61 (*11)
J2	A	41 (*2)	J18		50 (LHD)			
		61 (*11)			70 (RHD)			

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IL	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	80 (*2)	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
	104 (*11)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

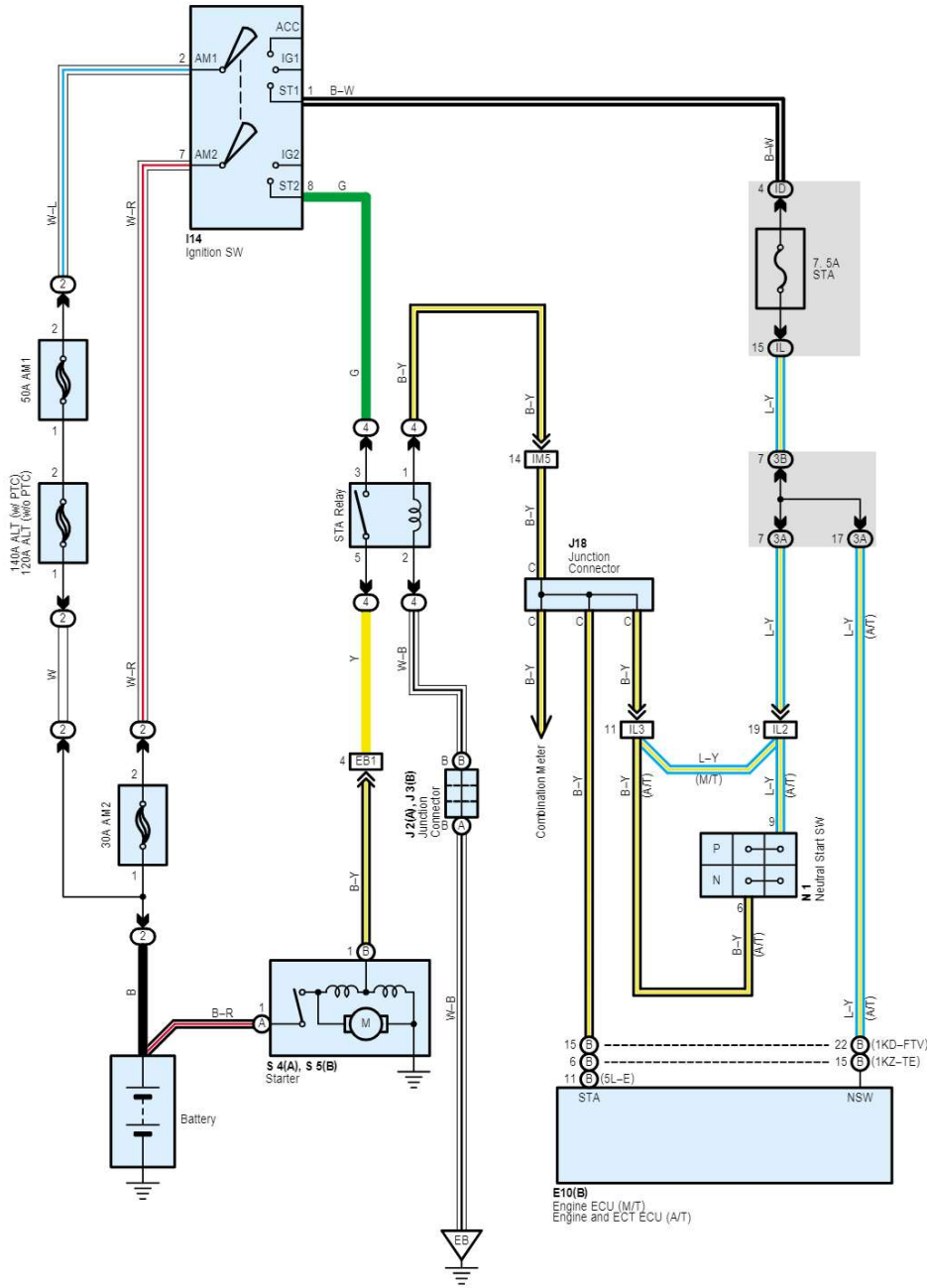
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

▽ : Ground Points

Code	See Page	Ground Points Location
EB	80 (*2)	Front Left Fender
	104 (*11)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Starting (Diesel)



**Service Hints**

**I14 Ignition SW**

2-1 : Closed with the ignition SW at ST position  
7-8 : Closed with the ignition SW at ST position

**N1 Neutral Start SW**

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
E10	B	49 (LHD)	J3	B	47 (*5)	S4	A	47 (*5)
		69 (RHD)			63 (*12)			63 (*12)
50 (LHD)	65 (*13)	65 (*13)						
70 (RHD)	67 (*14)	67 (*14)						
J2	A	43 (*3)	J18		50 (LHD)	S5	B	43 (*3)
		45 (*4)		70 (RHD)	45 (*4)			
		47 (*5)	N1	43 (*3)	47 (*5)			
		63 (*12)		45 (*4)	63 (*12)			
		65 (*13)		63 (*12)	65 (*13)			
67 (*14)	65 (*13)	67 (*14)						
J3	B	43 (*3)	S4	A	43 (*3)			
		45 (*4)			45 (*4)			

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IL	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Starting (Diesel)

### ☐ : Connector Joining Wire Harness and Wire Harness

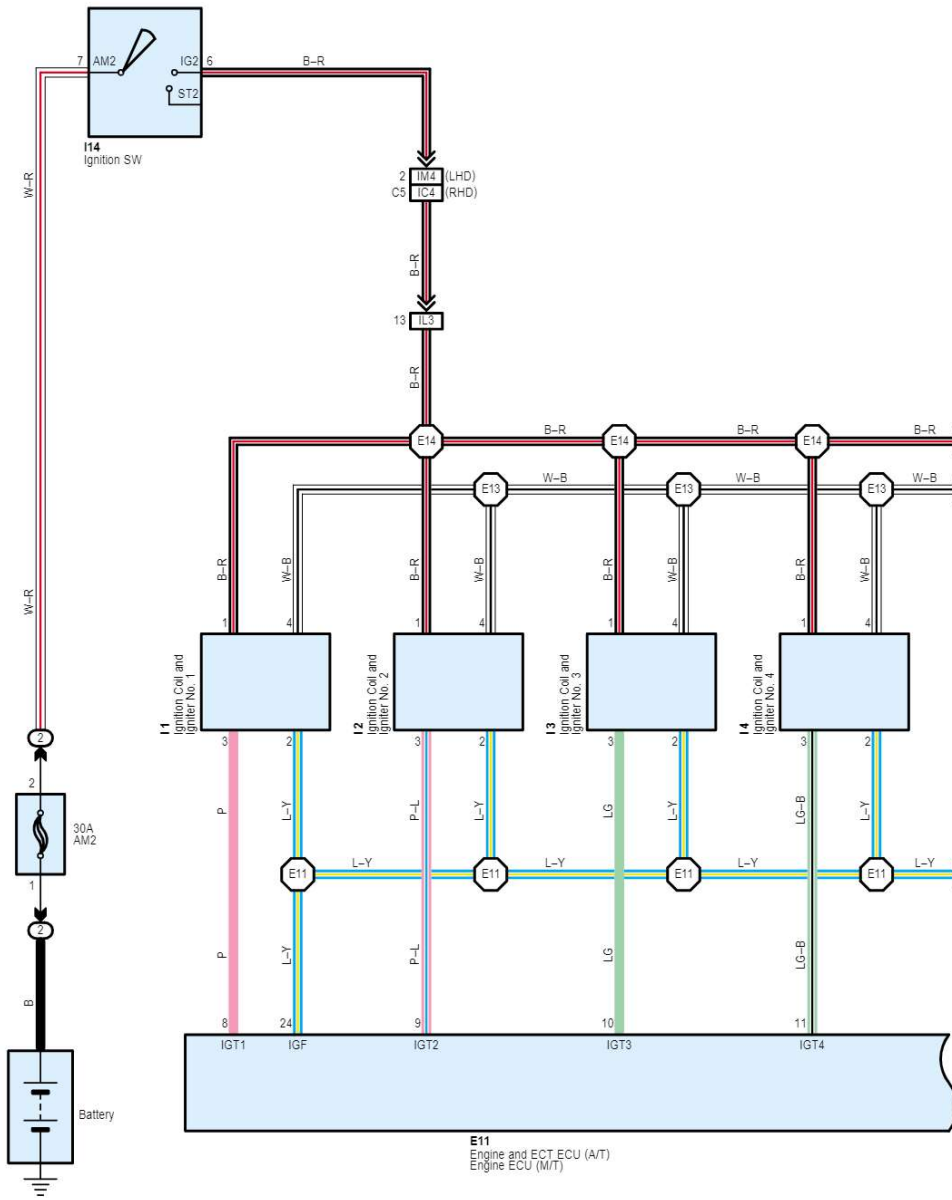
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	82 (*3)	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
	84 (*4)	
	86 (*5)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

### ▽ : Ground Points

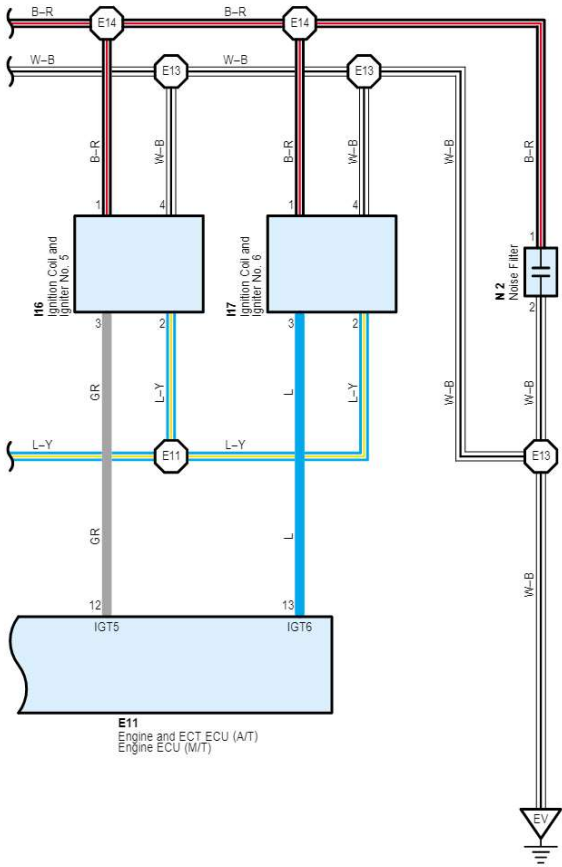
Code	See Page	Ground Points Location
EB	82 (*3)	Front Left Fender
	84 (*4)	
	86 (*5)	
	106 (*12)	
	108 (*13)	
	110 (*14)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat









## Ignition (1GR-FE)

### Service Hints

#### I14 Ignition SW

7-6 : Closed with the ignition SW at ON or ST position

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E11	49 (LHD)	I3	39 (*1)	I16	39 (*1)
	69 (RHD)		59 (*10)		59 (*10)
I1	39 (*1)	I4	39 (*1)	I17	39 (*1)
	59 (*10)		59 (*10)		59 (*10)
I2	39 (*1)	I14	50 (LHD)	N2	39 (*1)
	59 (*10)		70 (RHD)		59 (*10)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	

### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E11	78 (*1)	Engine Wire	E13	102 (*10)	Engine Wire
	102 (*10)		E14	78 (*1)	
E13	78 (*1)			102 (*10)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

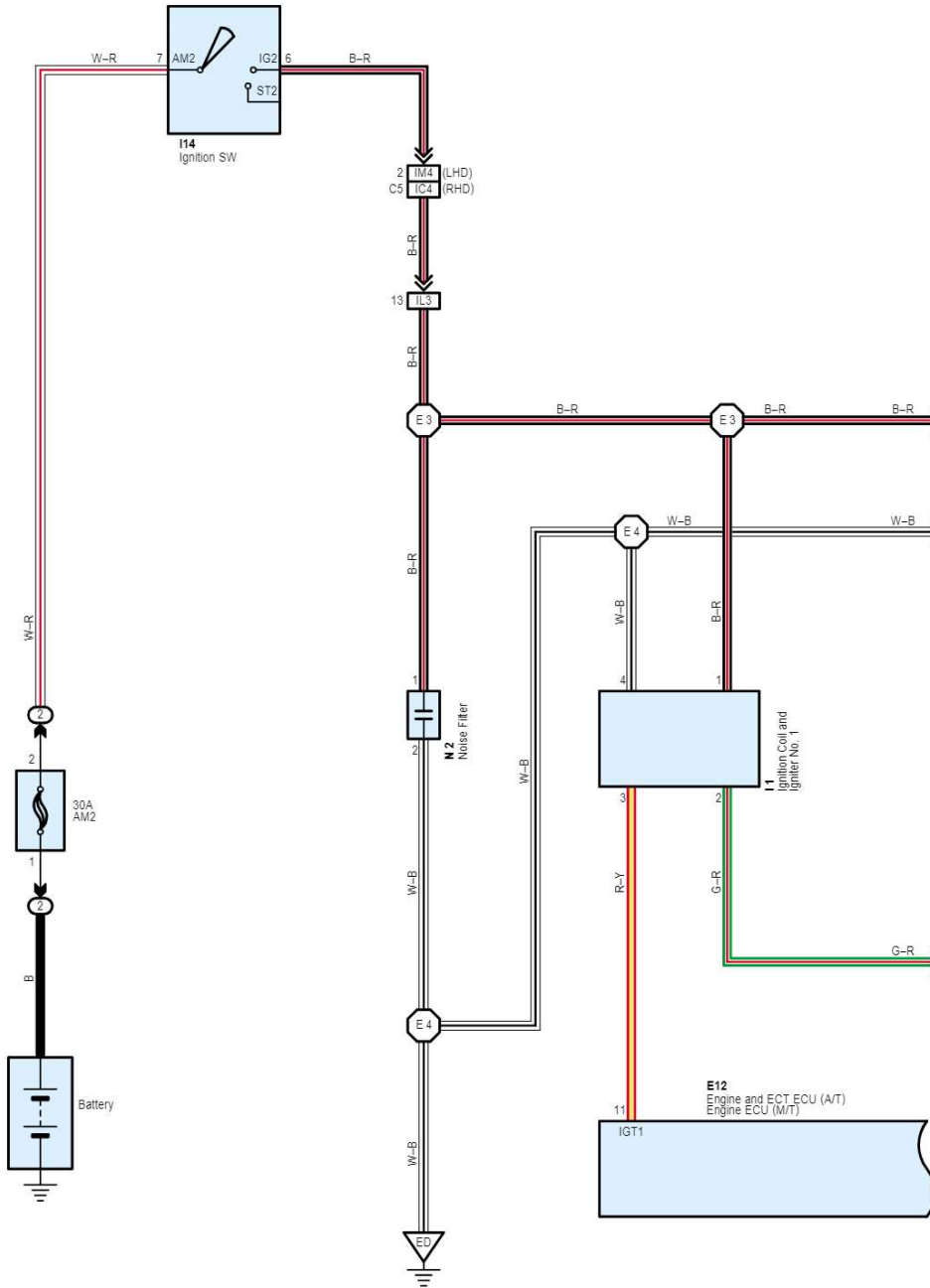
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

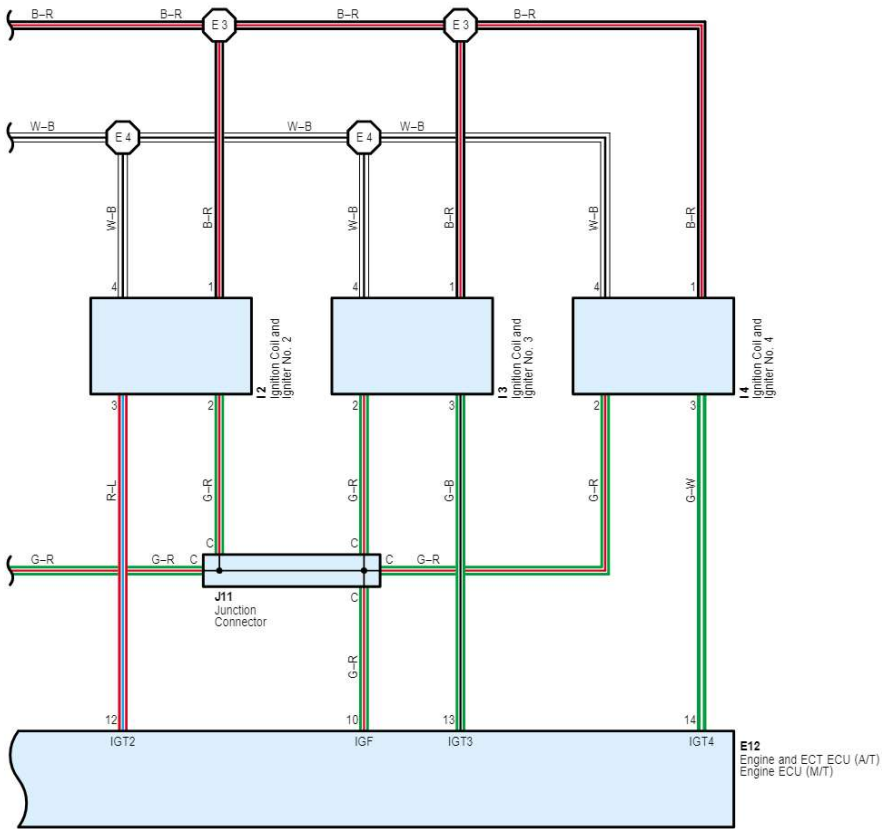
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat



# Ignition (3RZ-FE Unleaded Gasoline)





## Ignition (3RZ-FE Unleaded Gasoline)

### Service Hints

#### I1, I2, I3, I4 Ignition Coil and Igniter No.1, No.2, No.3, No.4

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
E12	49 (LHD)	I3	41 (*2)	J11	50 (LHD)
	69 (RHD)		61 (*11)		70 (RHD)
I1	41 (*2)	I4	41 (*2)	N2	41 (*2)
	61 (*11)		61 (*11)		61 (*11)
I2	41 (*2)	I14	50 (LHD)		
	61 (*11)		70 (RHD)		

### □ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	

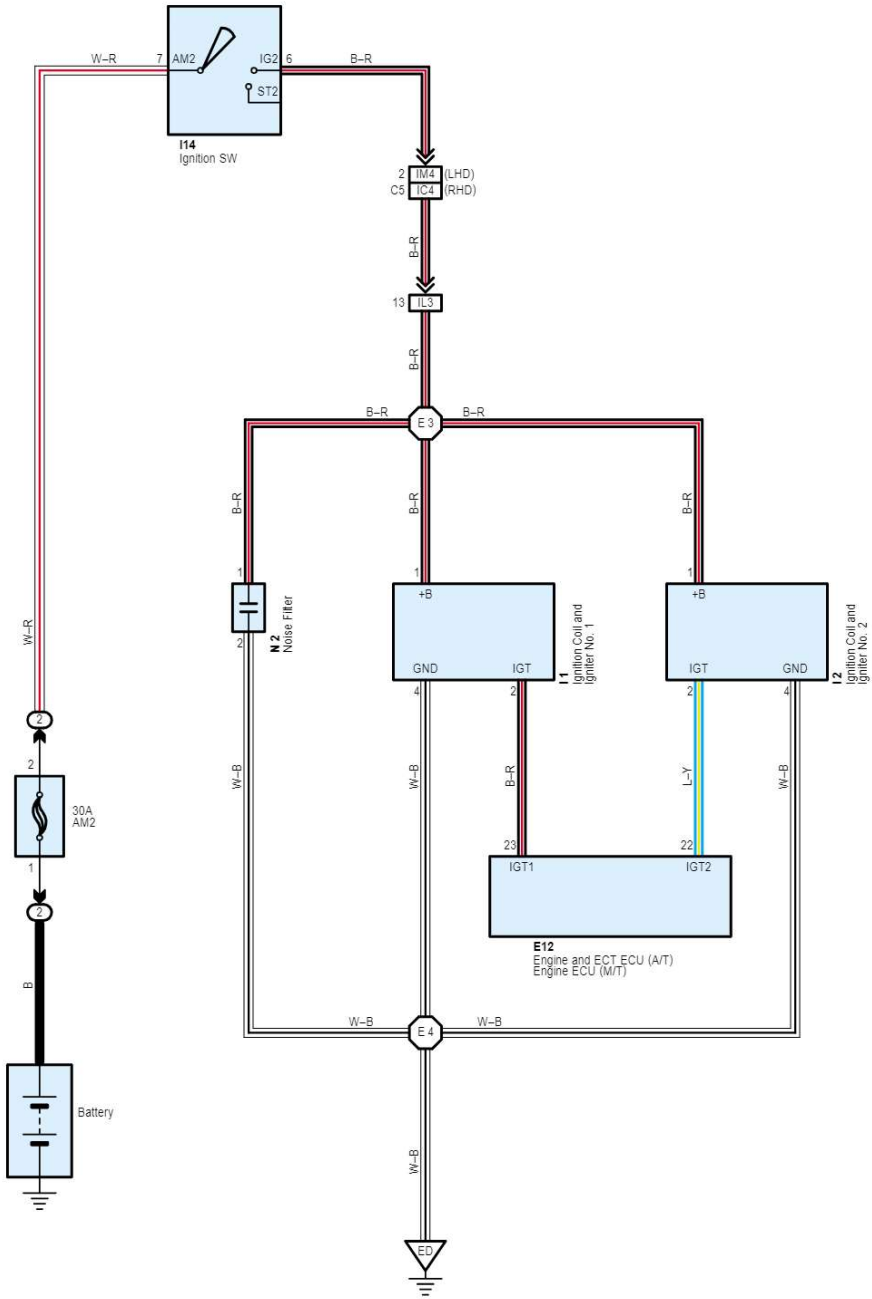
### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	80 (*2)	Engine Wire	E4	80 (*2)	Engine Wire
	104 (*11)			104 (*11)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



# Ignition (3RZ-FE Leaded Gasoline)





**Service Hints**

**I1, I2 Ignition Coil and Igniter No.1, No.2**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
E12	49 (LHD)	I2	41 (*2)	N2	41 (*2)
	69 (RHD)		61 (*11)		61 (*11)
I1	41 (*2)	I14	50 (LHD)		
	61 (*11)		70 (RHD)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

**▽ : Ground Points**

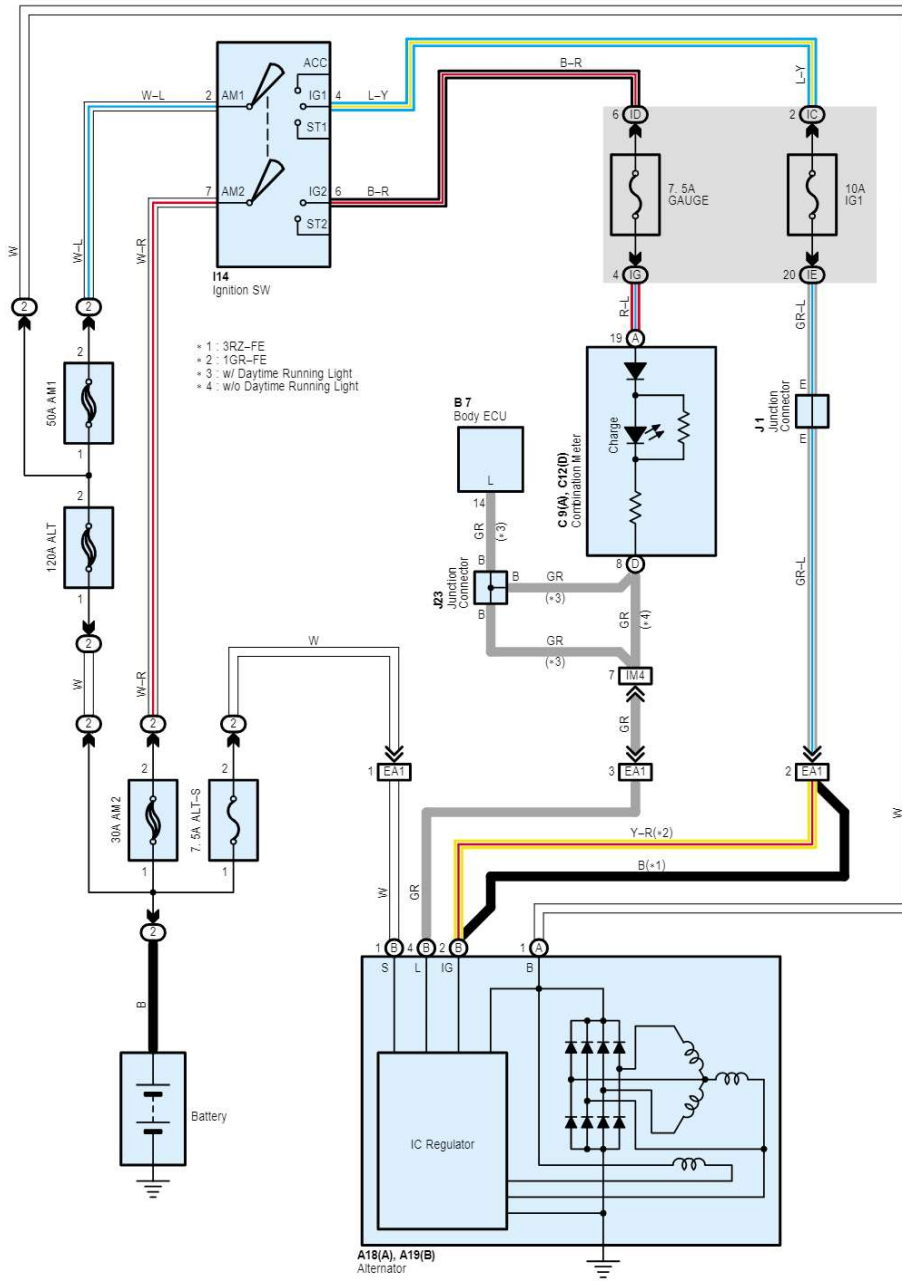
Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	

**○ : Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	80 (*2)	Engine Wire	E4	80 (*2)	Engine Wire
	104 (*11)			104 (*11)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Charging (Gasoline)



**Service Hints**

**A19 (B) Alternator**

- (B) 3-Ground : 13.9-15.1 volts with the engine running at 2000 rpm and 25°C (77°F)  
 13.5-14.3 volts with the engine running at 5000 rpm and 115°C (239°F)  
 (B) 1-Ground : 0-4 volts with the ignition SW at ON position and the engine not running

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A18	A	B7	48 (LHD)	J1	39 (*1)	
			68 (RHD)		41 (*2)	
		C9	A		49 (LHD)	59 (*10)
					69 (RHD)	61 (*11)
A19	B	C12	D	J23	50 (LHD)	
					69 (RHD)	70 (RHD)
		I14	50 (LHD)			
			70 (RHD)			

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

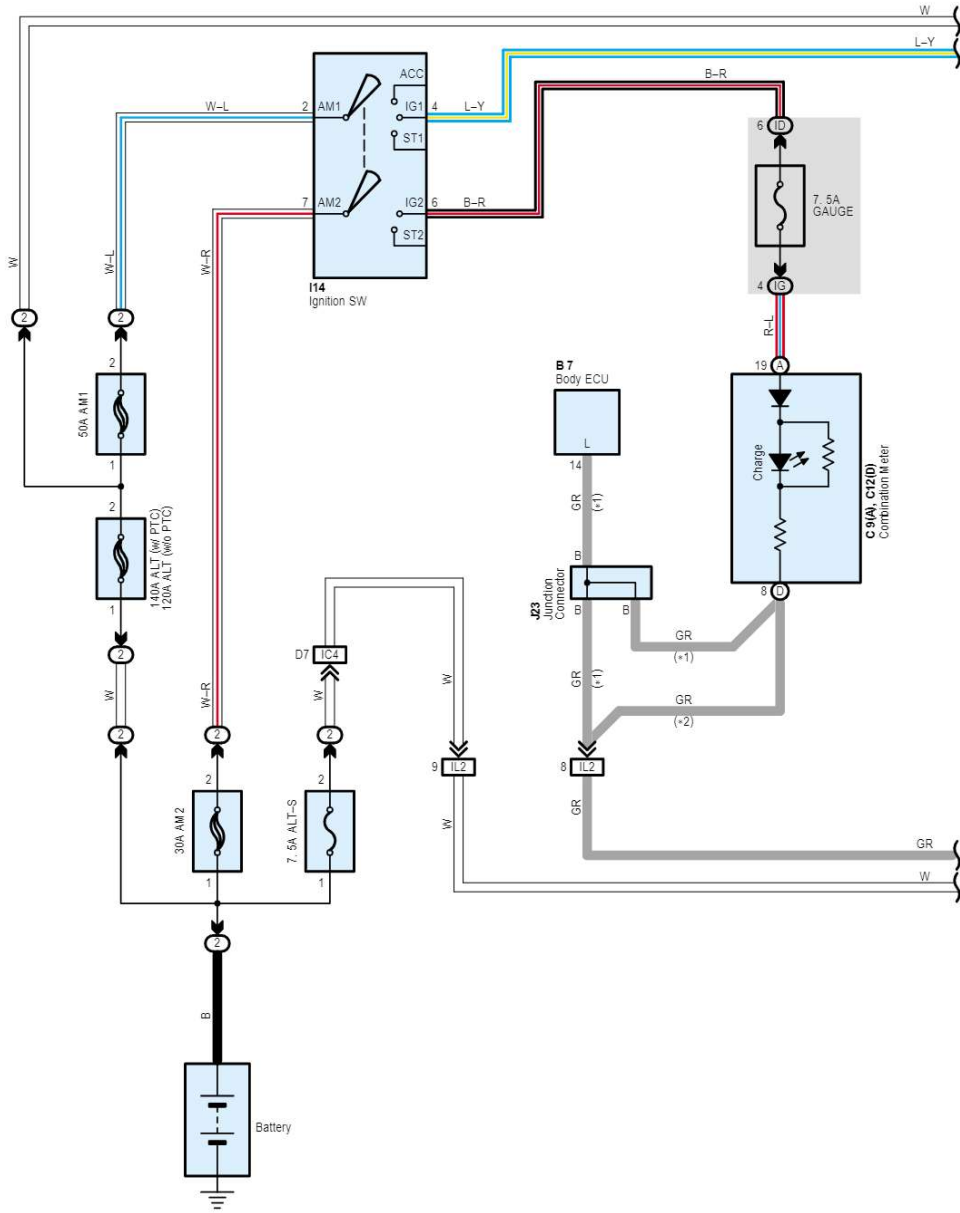
Code	See Page	Junction Block and Wire Harness (Connector Location)
IC	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
ID	26 (LHD)	
	28 (RHD)	
IE	26 (LHD)	
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	

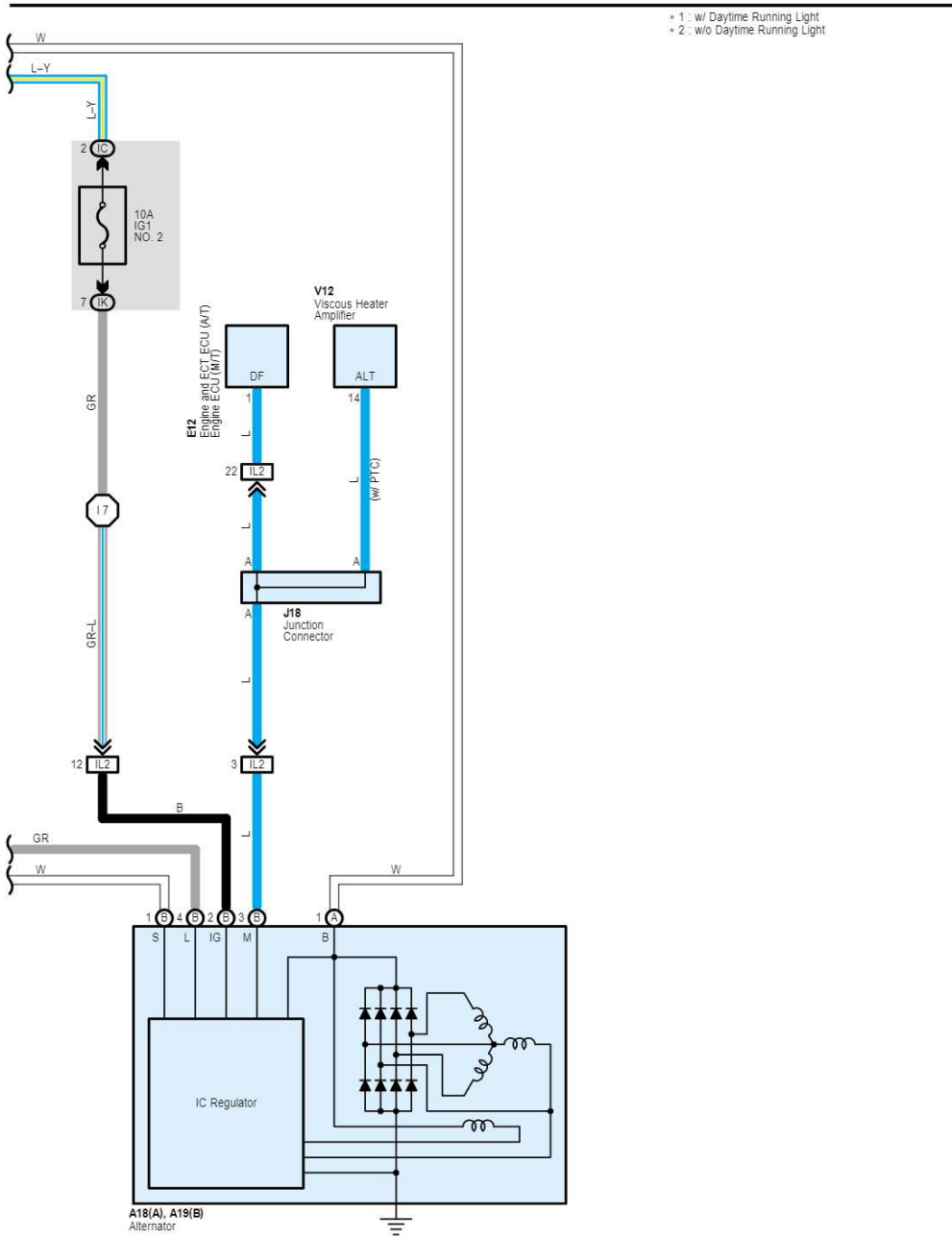
: **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	78 (*1)	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
	80 (*2)	
	102 (*10)	
	104 (*11)	
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Charging (1KD-FTV)





## Charging (1KD-FTV)

### Service Hints

#### A19 (B) Alternator

- (B) 3-Ground : 13.9-15.1 volts with the engine running at 2000 rpm and 25°C (77°F)  
 13.5-14.3 volts with the engine running at 5000 rpm and 115°C (239°F)  
 (B) 1-Ground : 0-4 volts with the ignition SW at ON position and the engine not running

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A18	A	42 (*3)	C9	A	69 (RHD)
		62 (*12)			49 (LHD)
A19	B	42 (*3)	C12	D	69 (RHD)
		62 (*12)			49 (LHD)
B7	B	48 (LHD)	E12	D	69 (RHD)
		68 (RHD)			49 (LHD)
C9	A	49 (LHD)	I14	D	69 (RHD)
					50 (LHD)
					71 (RHD)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

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

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

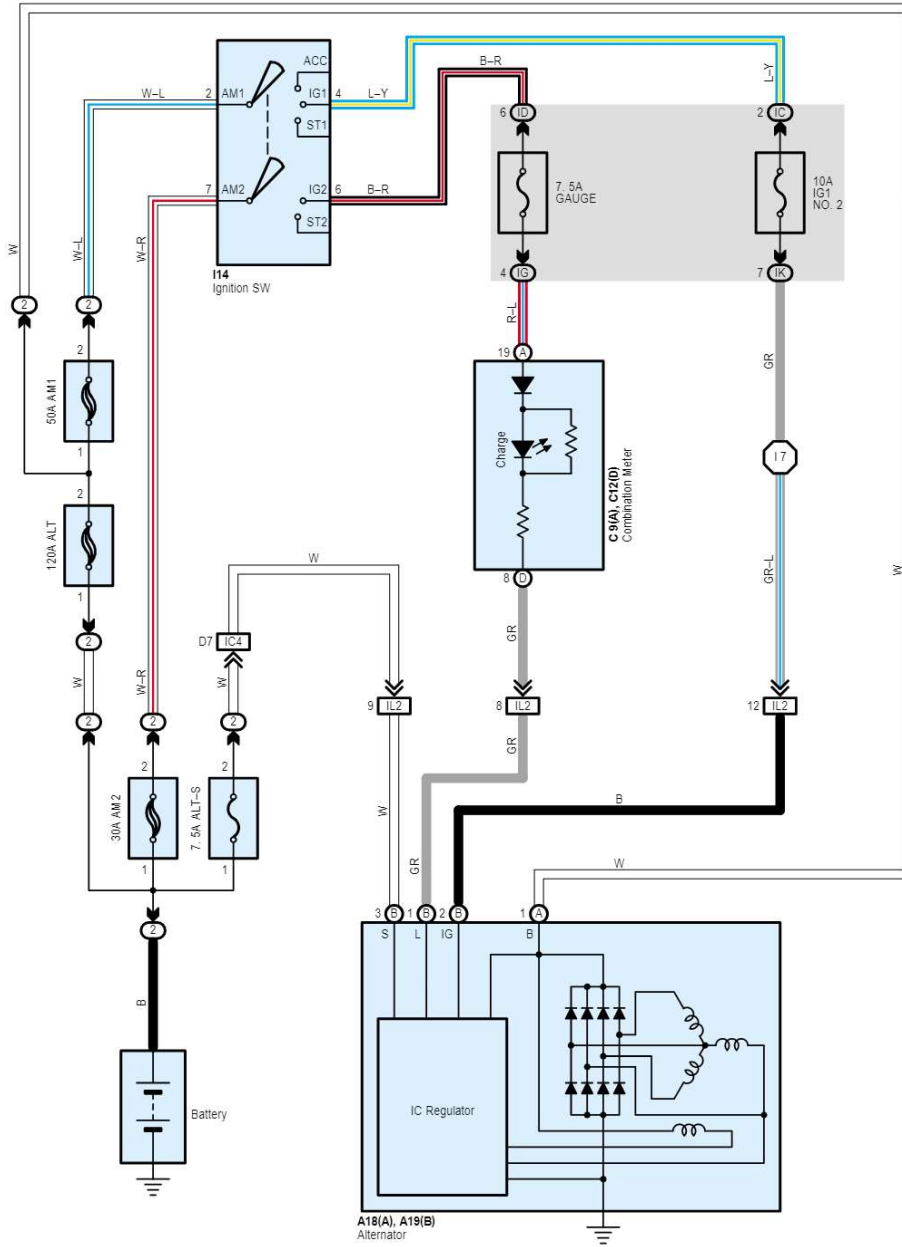
### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# Charging (1KZ-TE, 5L-E)





**Service Hints**

**A19 (B) Alternator**

- (B) 3-Ground : 13.9-15.1 volts with the engine running at 2000 rpm and 25°C (77°F)  
13.5-14.3 volts with the engine running at 5000 rpm and 115°C (239°F)
- (B) 1-Ground : 0-4 volts with the ignition SW at ON position and the engine not running

**○ : Parts Location**

Code		See Page	Code		See Page	Code		See Page
A18	A	44 (*4)	C9	A	49 (LHD)	I14		50 (LHD)
		64 (*13)			69 (RHD)			70 (RHD)
A19	B	44 (*4)	C12	D	49 (LHD)			
		64 (*13)			69 (RHD)			

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

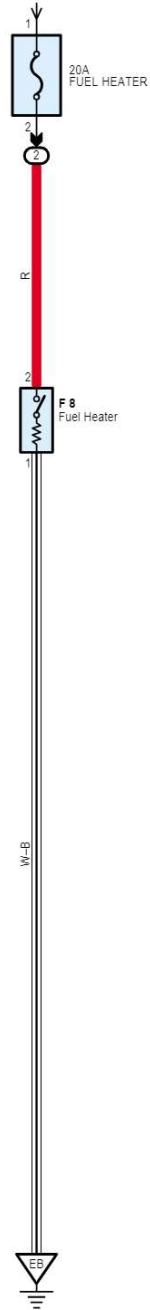
**○ : Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

# Fuel Heater

From Power Source System (See Page 128)



**Service Hints****F8 Fuel Heater**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
F8	42 (*3)	F8	62 (*12)		

**○ : Relay Blocks**

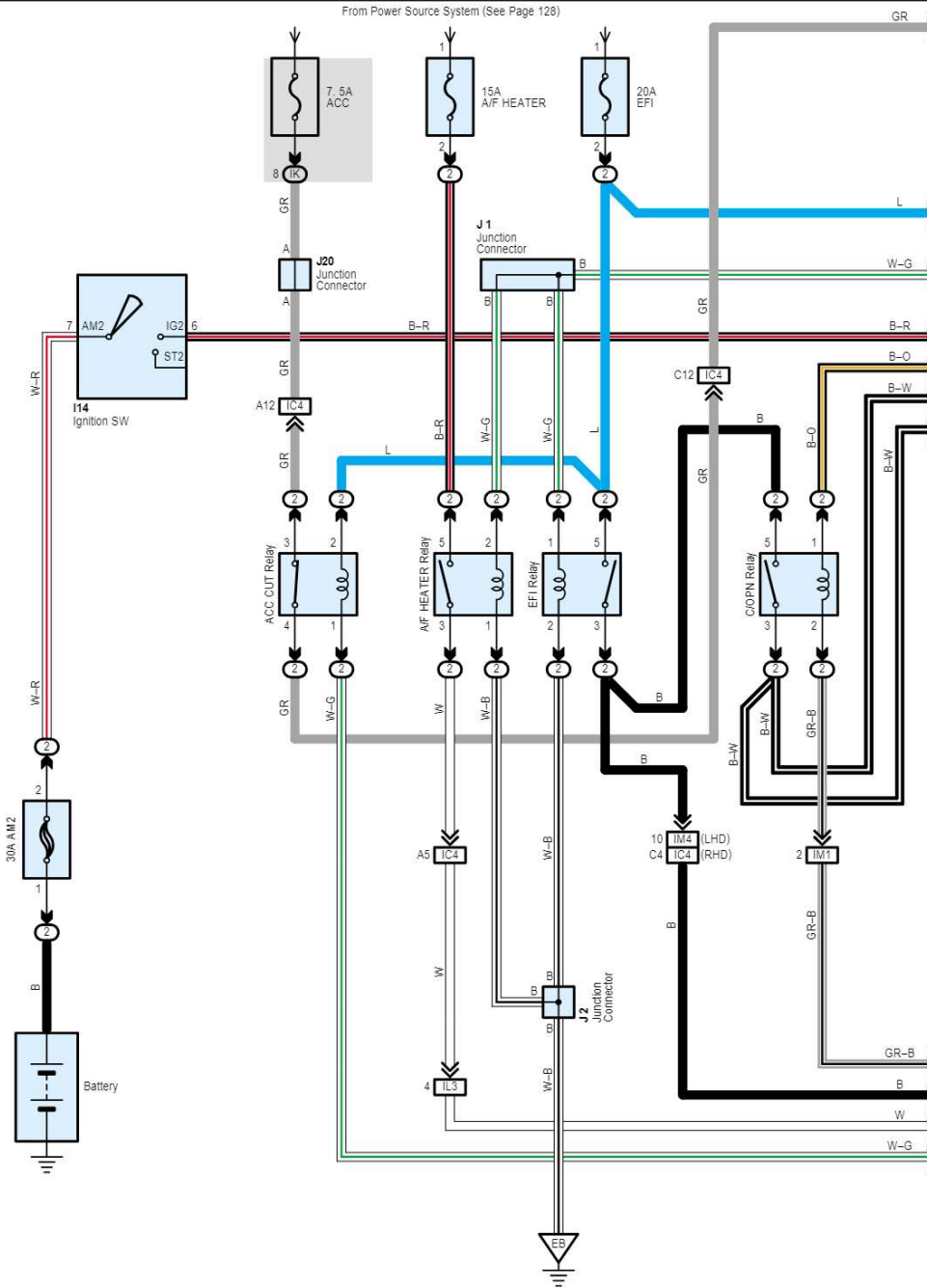
Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

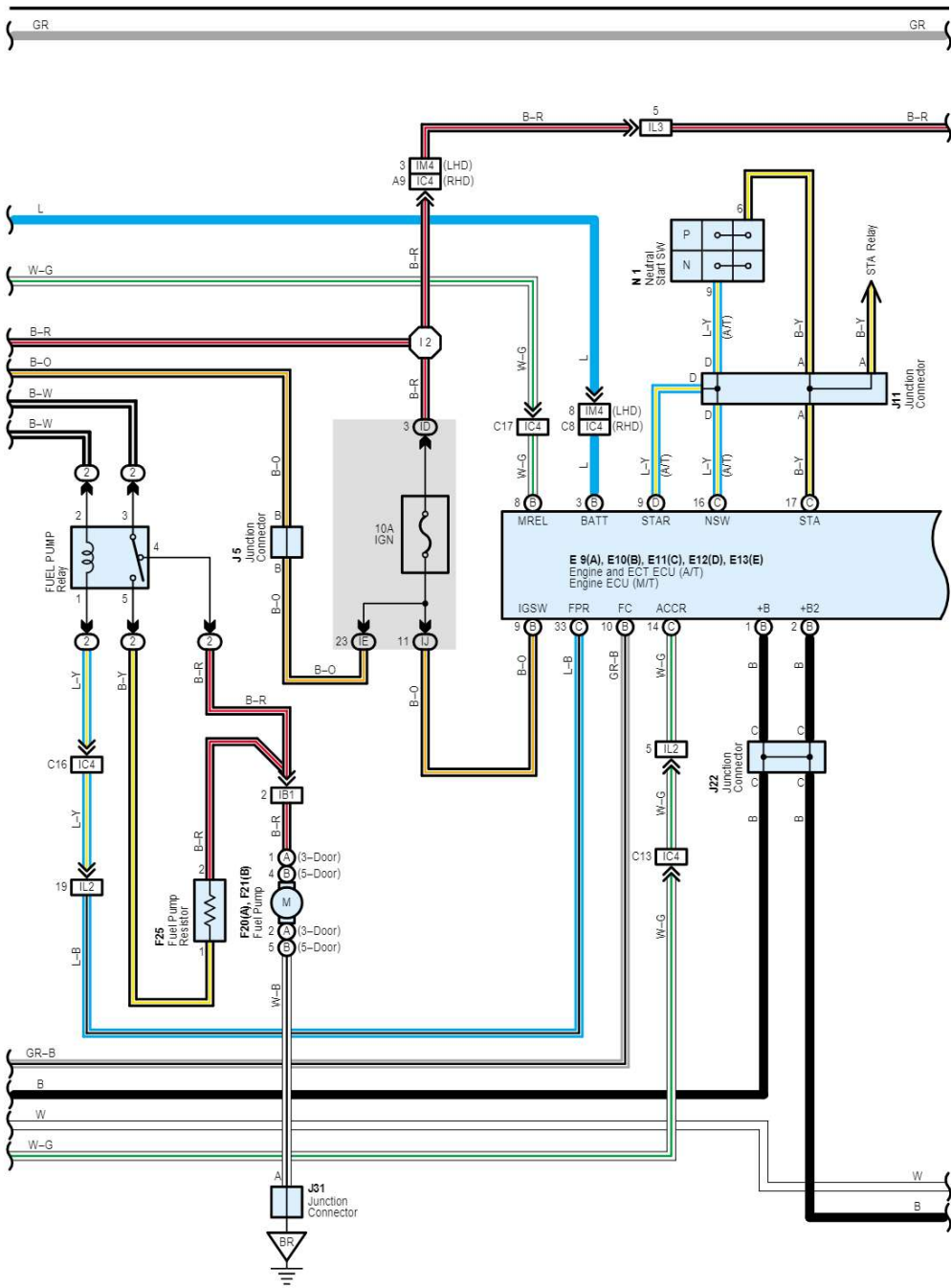
**▽ : Ground Points**

Code	See Page	Ground Points Location
EB	82 (*3)	Front Left Fender
	106 (*12)	

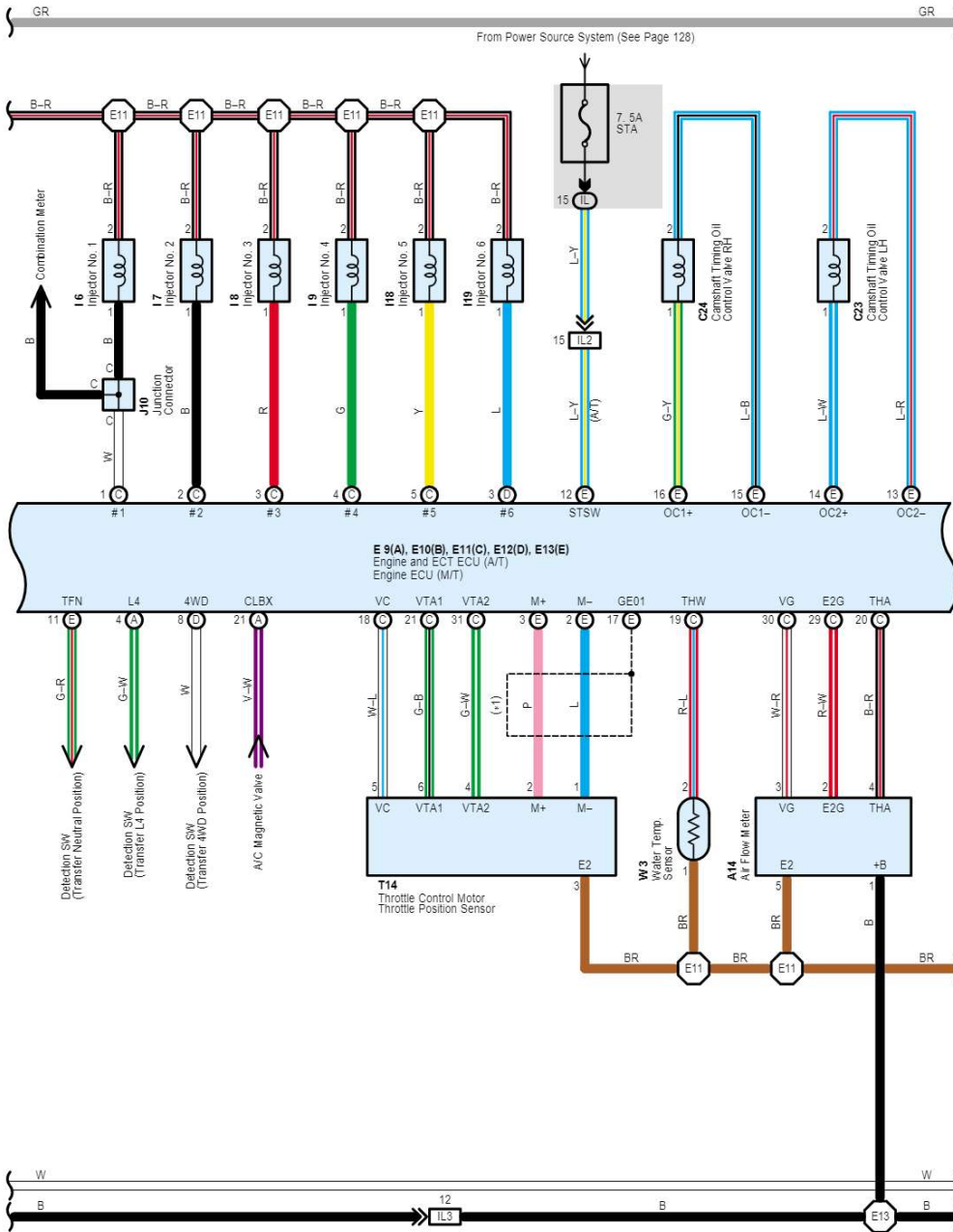
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

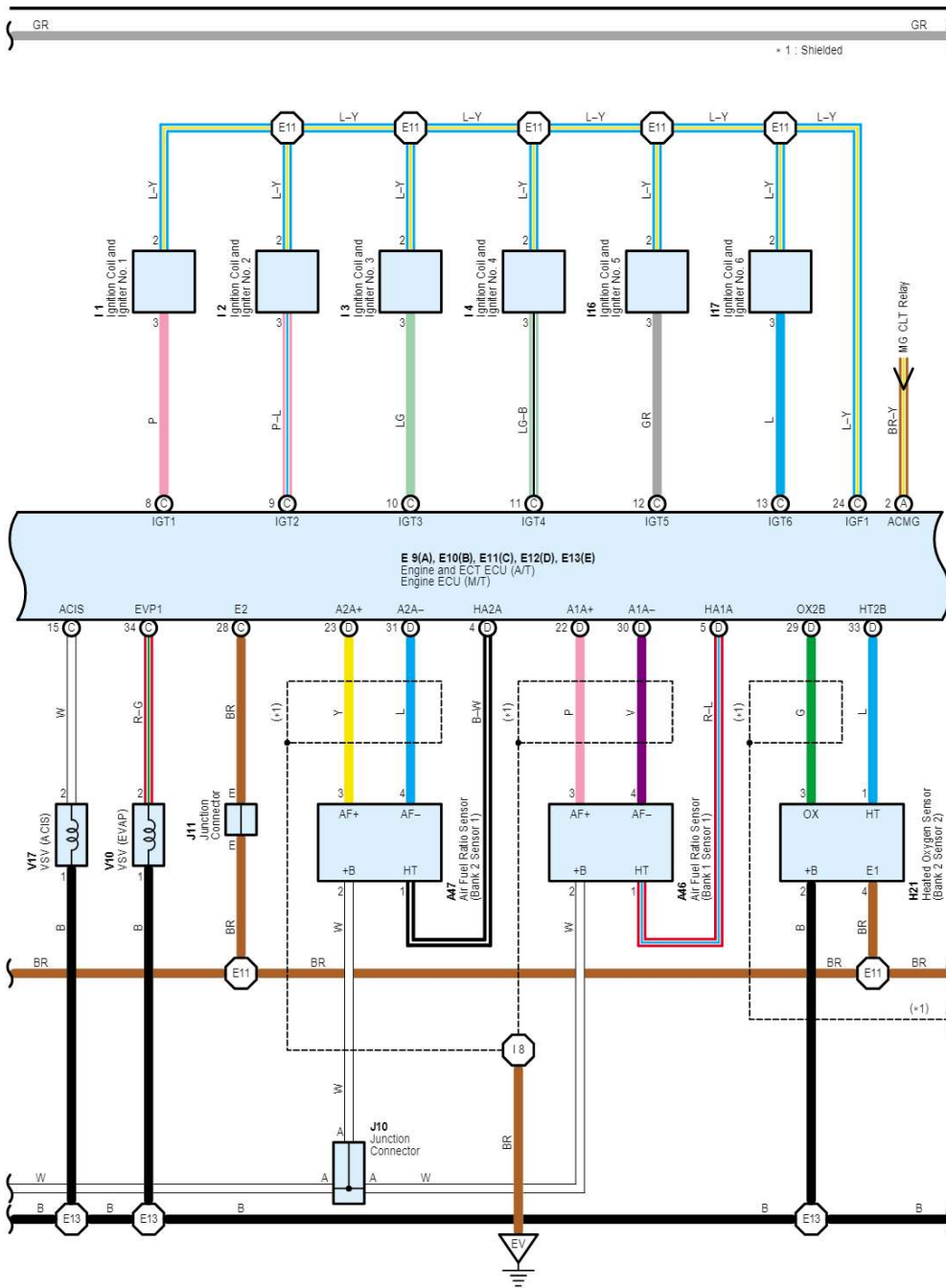
# Engine Control (1GR-FE)





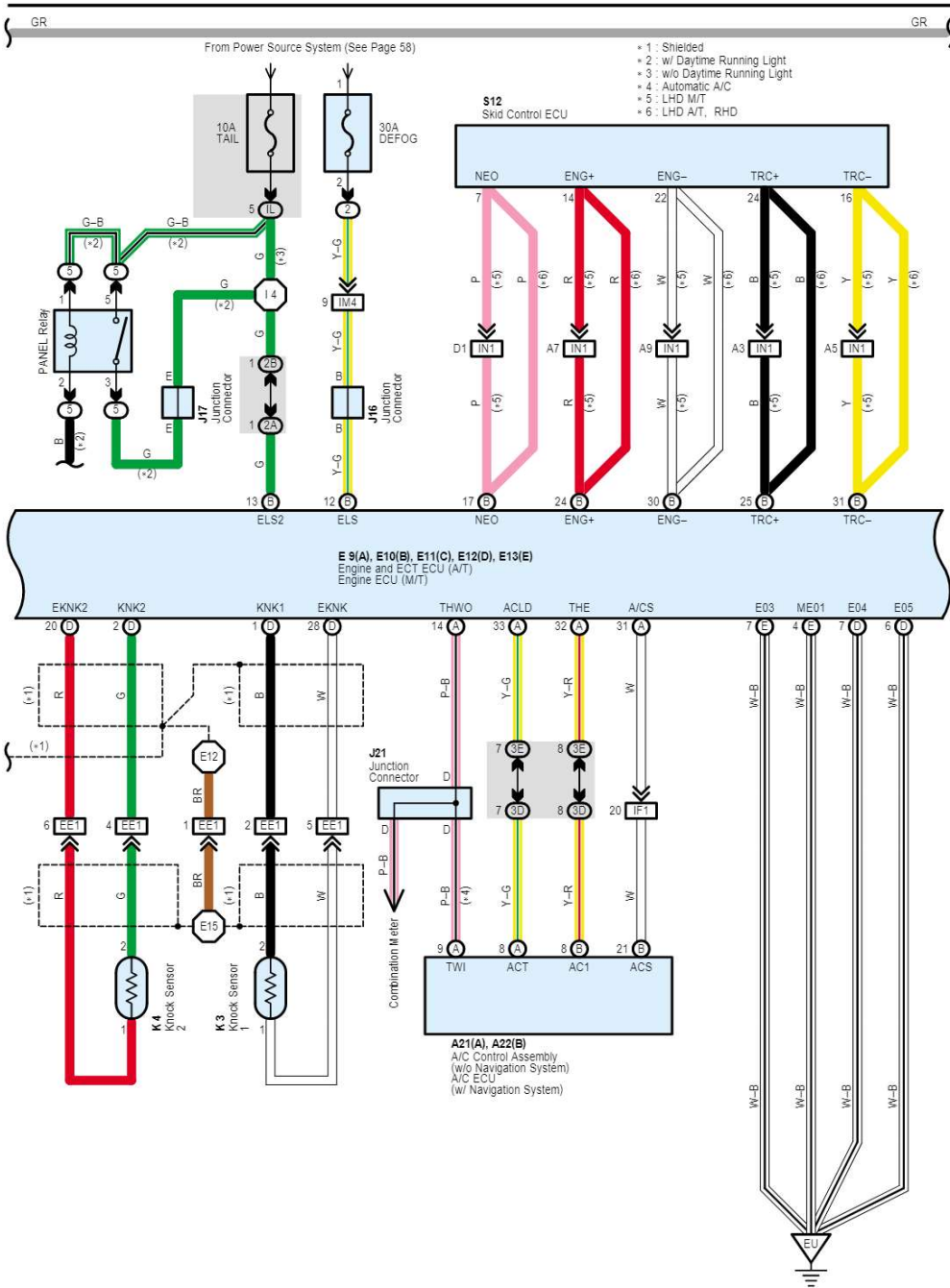
# Engine Control (1GR-FE)



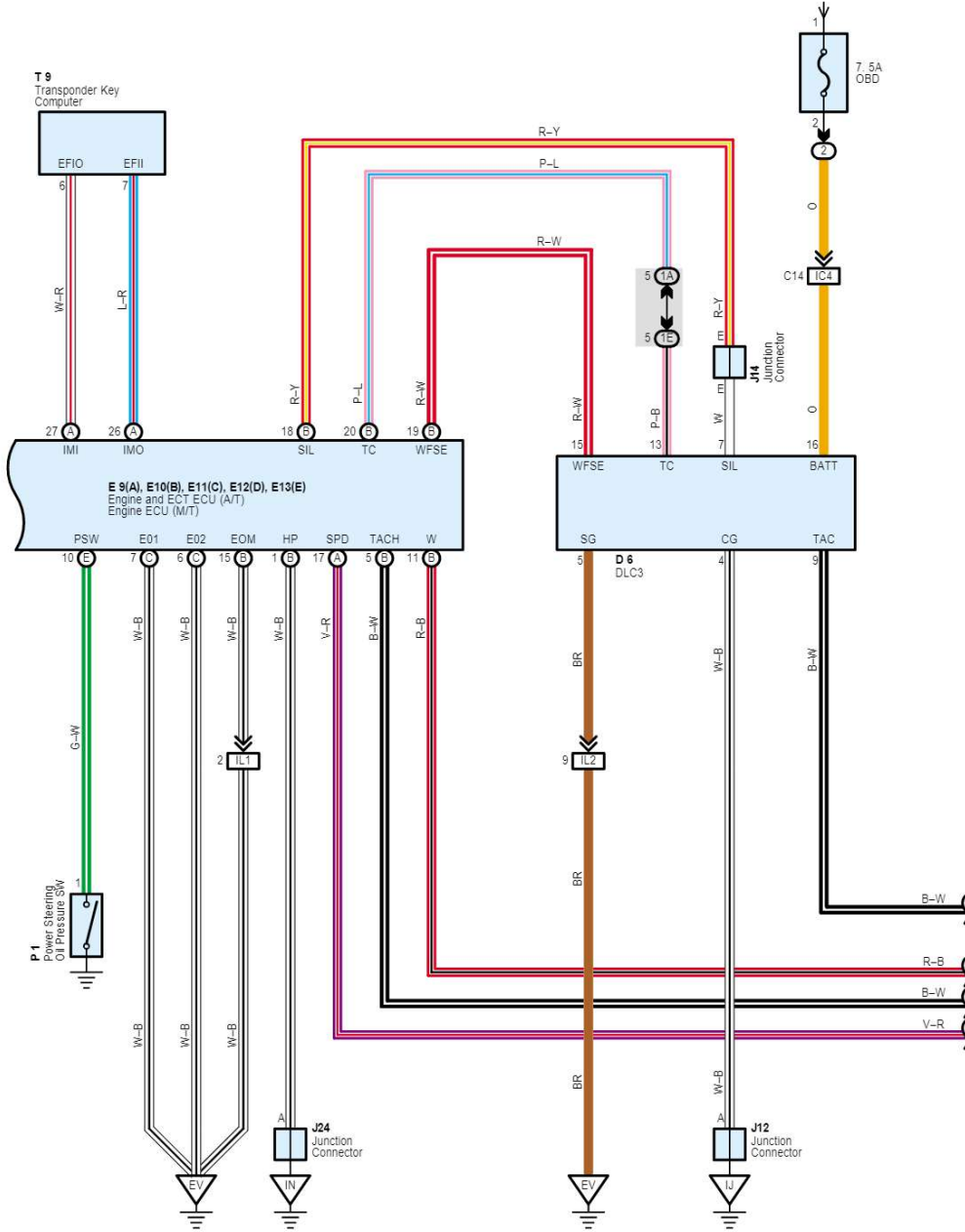


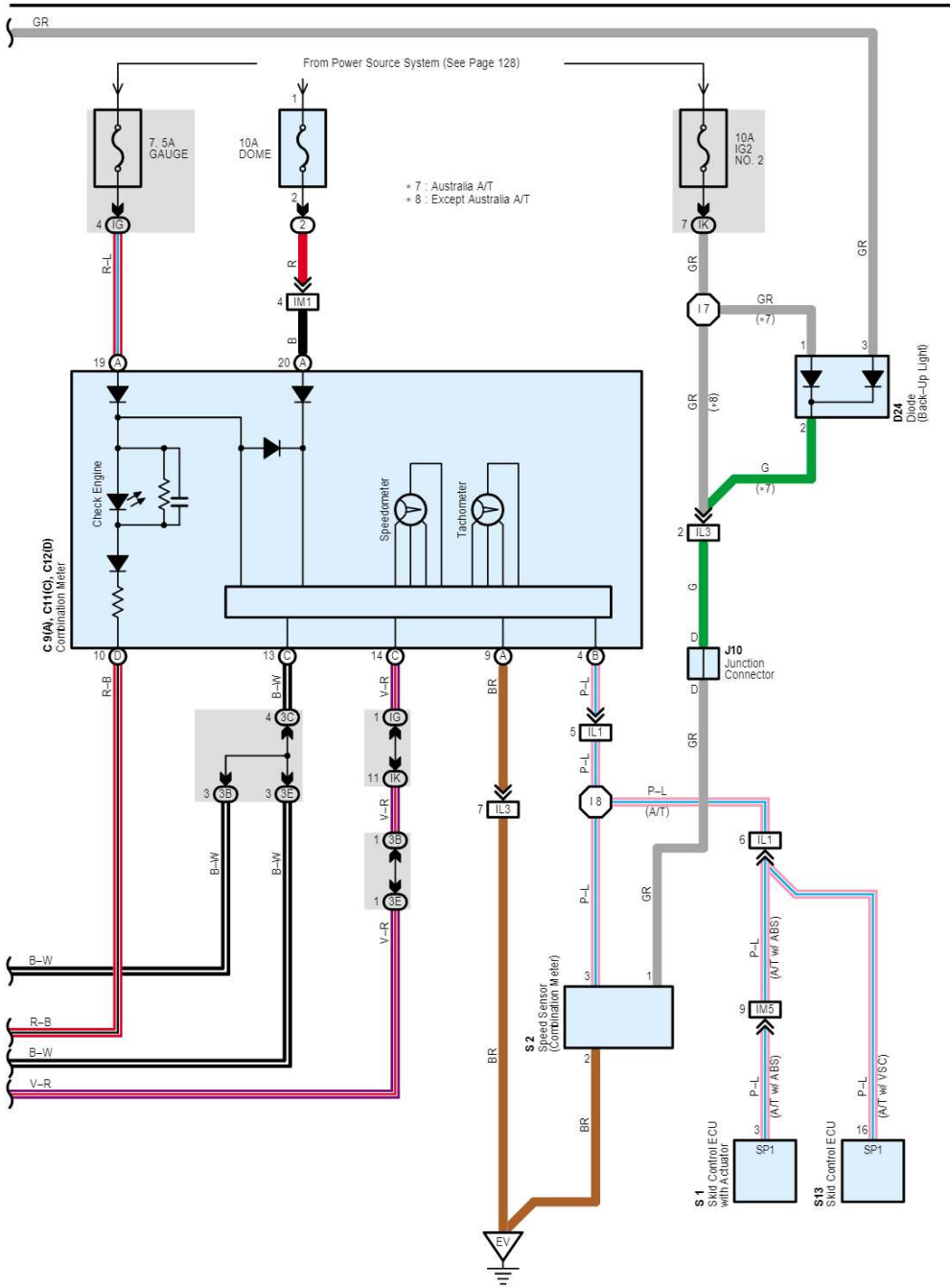






From Power Source System (See Page 128)





# Engine Control (1GR-FE)

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	38 (*1)	H21	39 (*1)	J17	70 (RHD)
	58 (*10)		59 (*10)	J20	50 (LHD)
A14	38 (*1)	I1	39 (*1)	J21	70 (RHD)
	58 (*10)		59 (*10)		50 (LHD)
A21	A	I2	39 (*1)	J22	70 (RHD)
			68 (RHD)		50 (LHD)
A22	B	I3	39 (*1)	J24	70 (RHD)
			68 (RHD)		50 (LHD)
A28		I4	39 (*1)		70 (RHD)
			68 (RHD)		52 (*6)
A36		I6	39 (*1)	J28	54 (*7)
			68 (RHD)		72 (*15)
A46		I7	39 (*1)		74 (*16)
			58 (*10)		52 (*6)
A47		I8	39 (*1)	J31	54 (*7)
			58 (*10)		72 (*15)
C3		I9	39 (*1)		74 (*16)
			58 (*10)		39 (*1)
C9	A	I14	50 (LHD)	K3	59 (*10)
			69 (RHD)		39 (*1)
C11	C	I16	39 (*1)	K4	59 (*10)
			69 (RHD)		39 (*1)
C12	D	I17	39 (*1)	N1	59 (*10)
			69 (RHD)		39 (*1)
C23		I18	39 (*1)	P1	59 (*10)
			58 (*10)		39 (*1)
C24		I19	39 (*1)	S1	59 (*10)
			58 (*10)		39 (*1)
D6		J1	39 (*1)	S2	59 (*10)
			69 (RHD)		51 (LHD)
D24		J2	39 (*1)	S12	71 (RHD)
			69 (RHD)		51 (LHD)
E9	A	J5	39 (*1)	S13	71 (RHD)
			49 (LHD)		51 (LHD)
E10	B	J7	59 (*10)	S18	71 (RHD)
			69 (RHD)		51 (LHD)
E11	C	J9	50 (LHD)	T9	51 (LHD)
			49 (LHD)		71 (RHD)
E12	D	J10	50 (LHD)	T14	39 (*1)
			49 (LHD)		59 (*10)
E13	E	J11	70 (RHD)	V10	39 (*1)
			69 (RHD)		59 (*10)
F20	A	J12	70 (RHD)	V17	39 (*1)
			74 (*16)		59 (*10)
F21	B	J14	50 (LHD)	V18	39 (*1)
			72 (*15)		59 (*10)
F25		J16	70 (RHD)	V19	39 (*1)
			58 (*10)		59 (*10)
H20		J17	70 (RHD)	W3	39 (*1)
			59 (*10)		59 (*10)

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
5	25 (LHD)	Passenger Side R/B (Right Kick Panel)
	25 (RHD)	Passenger Side R/B (Left Kick Panel)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)	
ID	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IE	26 (LHD)		
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2B			
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

## Engine Control (1GR-FE)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
EE1	78 (*1)	Engine Wire and Sensor Wire (Behind the Cylinder Head RH)	
	102 (*10)		
IB1	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)	
	112 (RHD)		
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)	
	112 (RHD)		
IC4	88 (LHD)		
	112 (RHD)		
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)	
	114 (RHD)		
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)		
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)		
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)		
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)	
	116 (RHD)		
IM4	92 (LHD)		
	116 (RHD)		
IM5	92 (LHD)		
	116 (RHD)		
IN1	94 (LHD)		Instrument Panel Wire and Floor Wire (Right Kick Panel)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	102 (*10)	
EU	78 (*1)	Rear Side of Right Bank Cylinder Block
	102 (*10)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
EW	78 (*1)	Near the Washer Tank
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

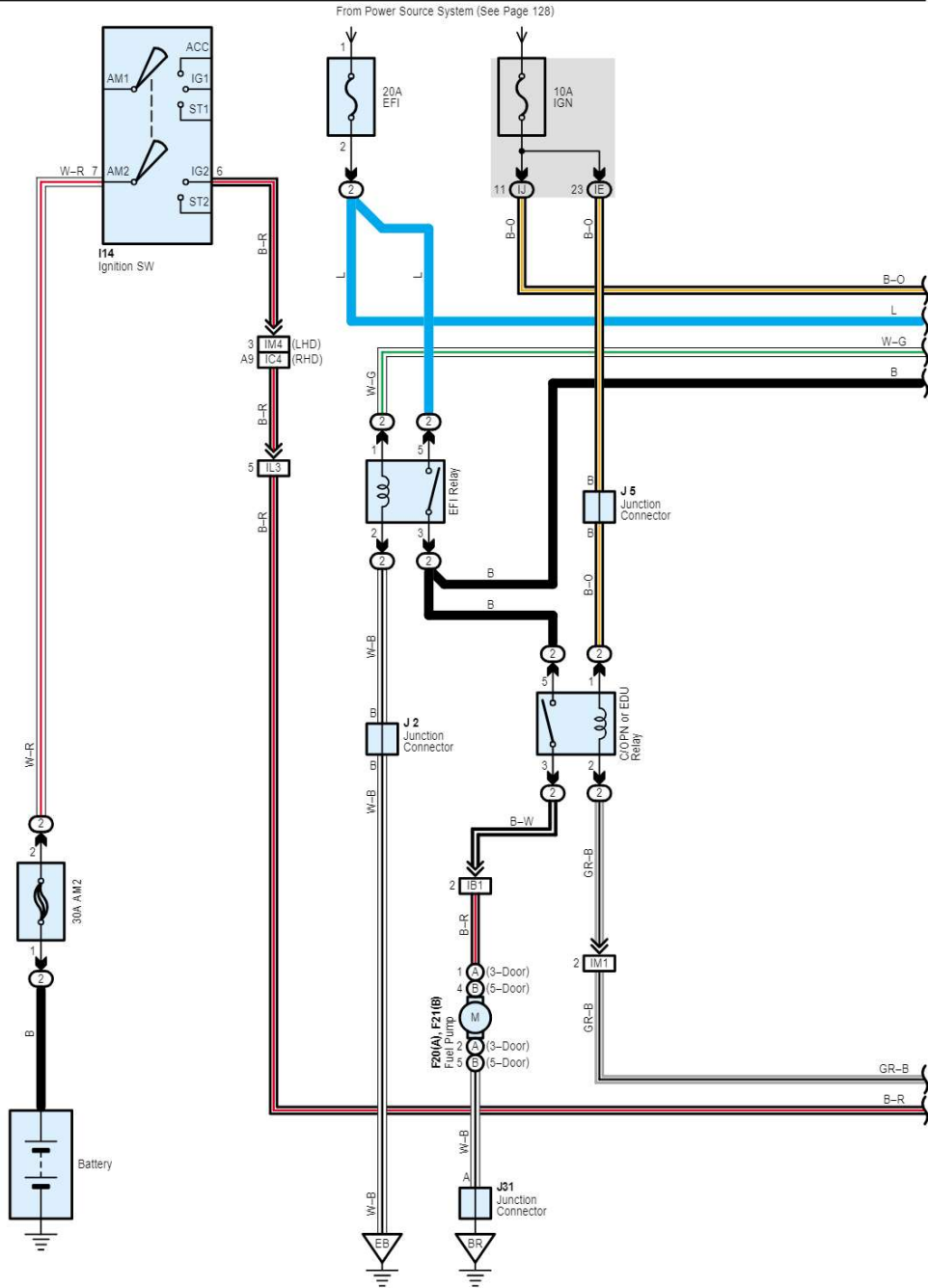
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Splice Points

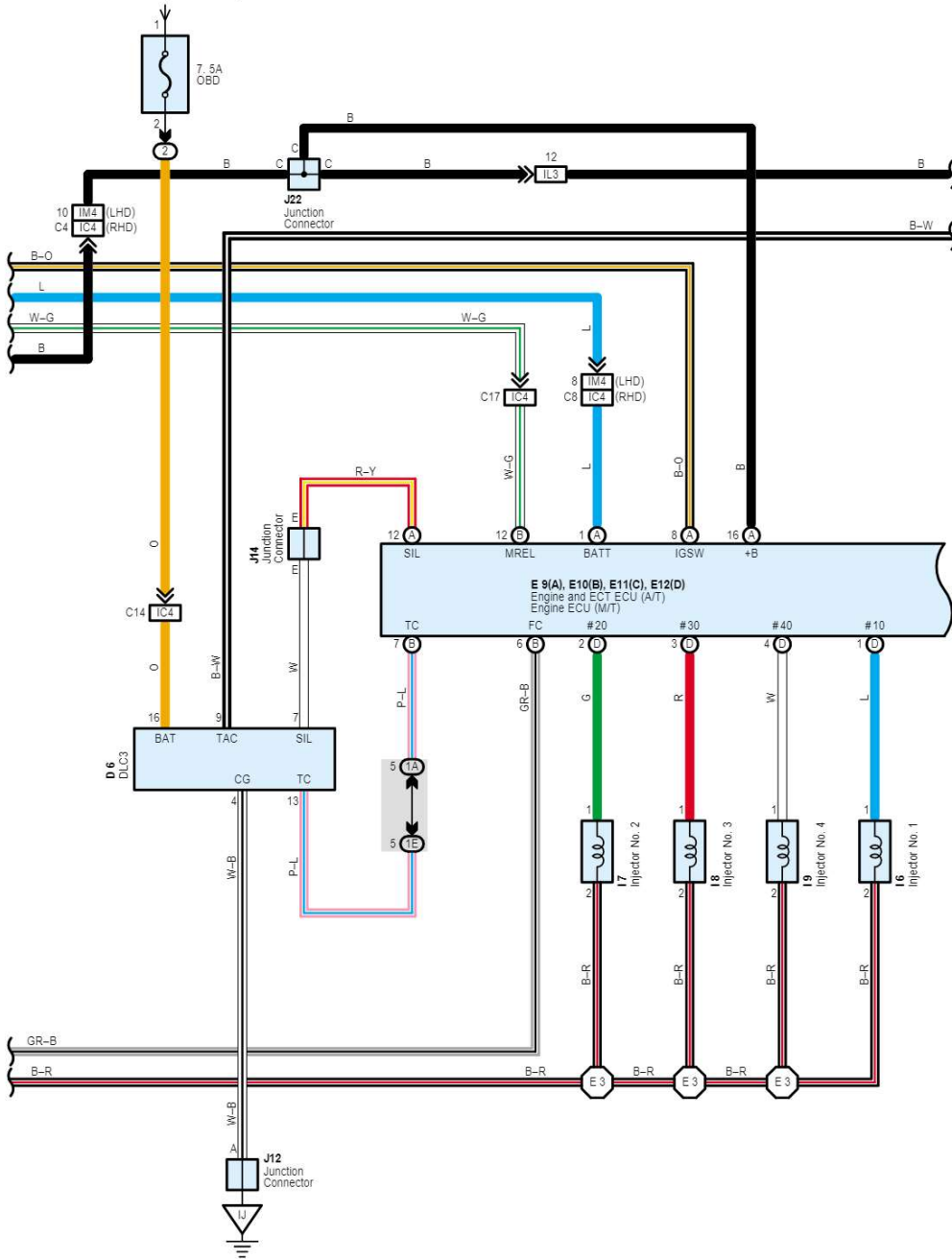
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points		
E11	78 (*1)	Engine Wire	I2	90 (LHD)	Engine Room Main Wire		
	102 (*10)			114 (RHD)	Instrument Panel Wire		
E12	78 (*1)		I4	90 (LHD)	Instrument Panel Wire		
	102 (*10)			114 (RHD)			
E13	78 (*1)		I7	90 (LHD)		Instrument Panel Wire	
	102 (*10)			114 (RHD)			
E15	78 (*1)		Sensor Wire	I8		90 (LHD)	Engine Wire
	102 (*10)					114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

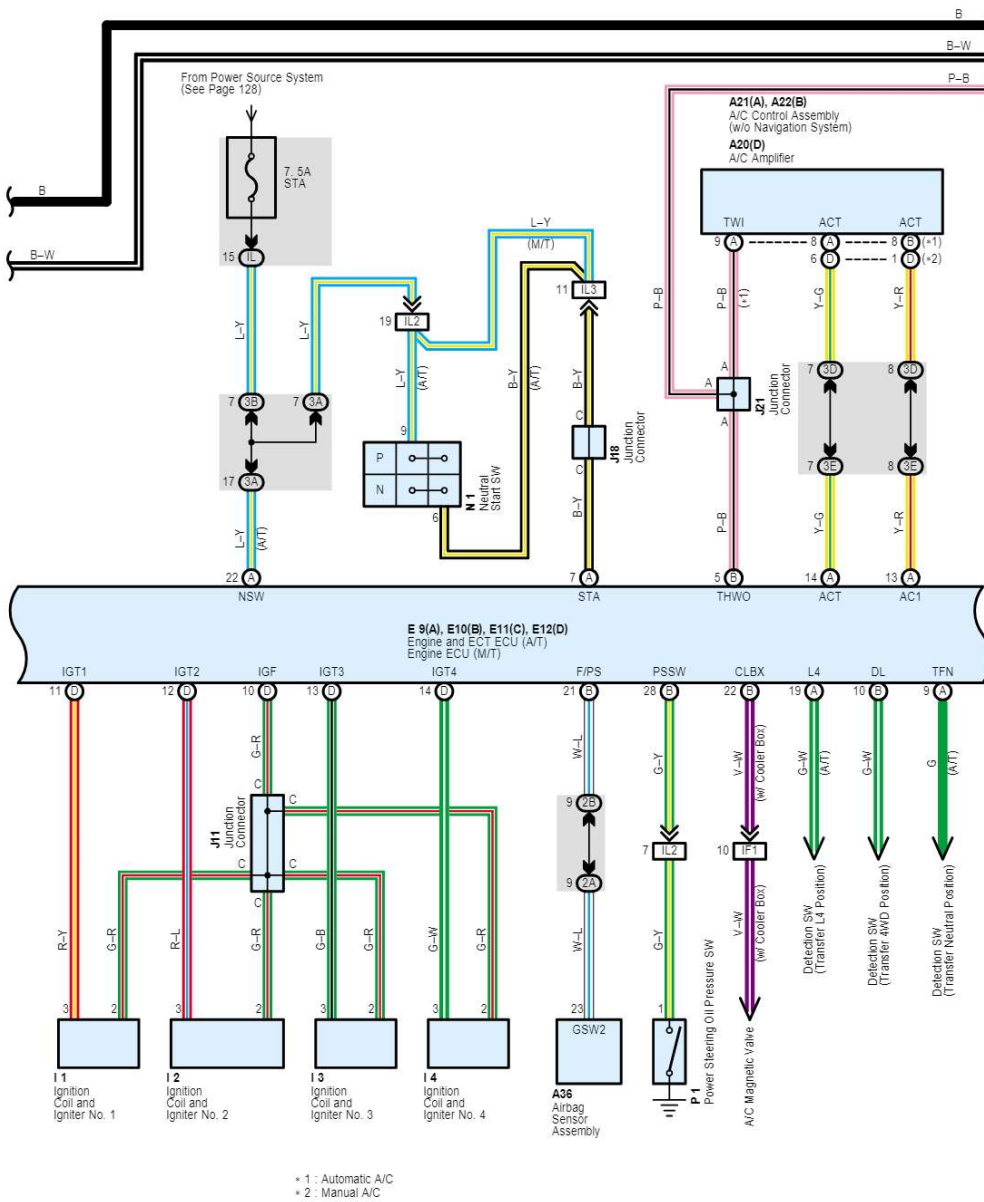
# Engine Control (3RZ-FE Unleaded Gasoline)

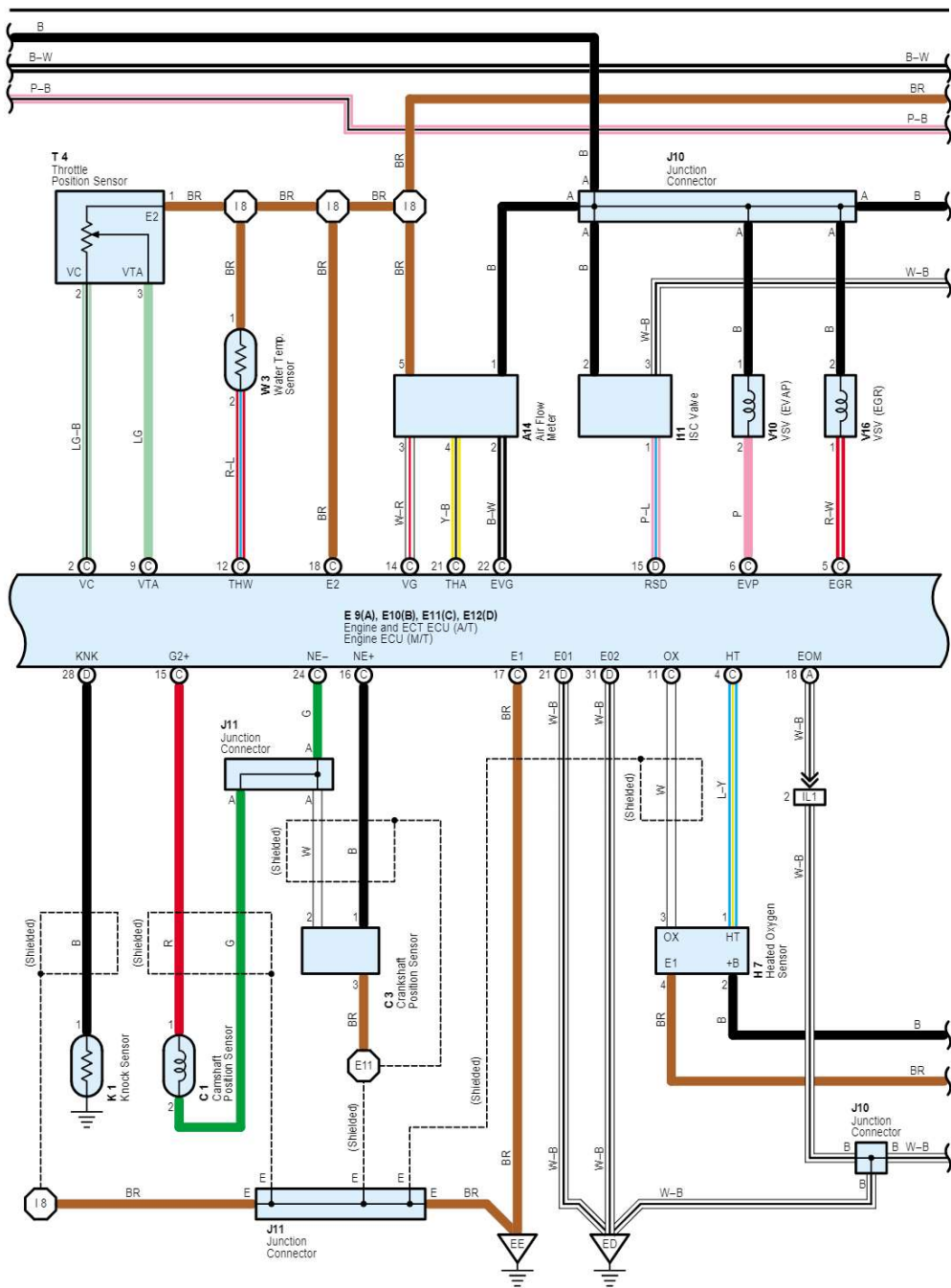




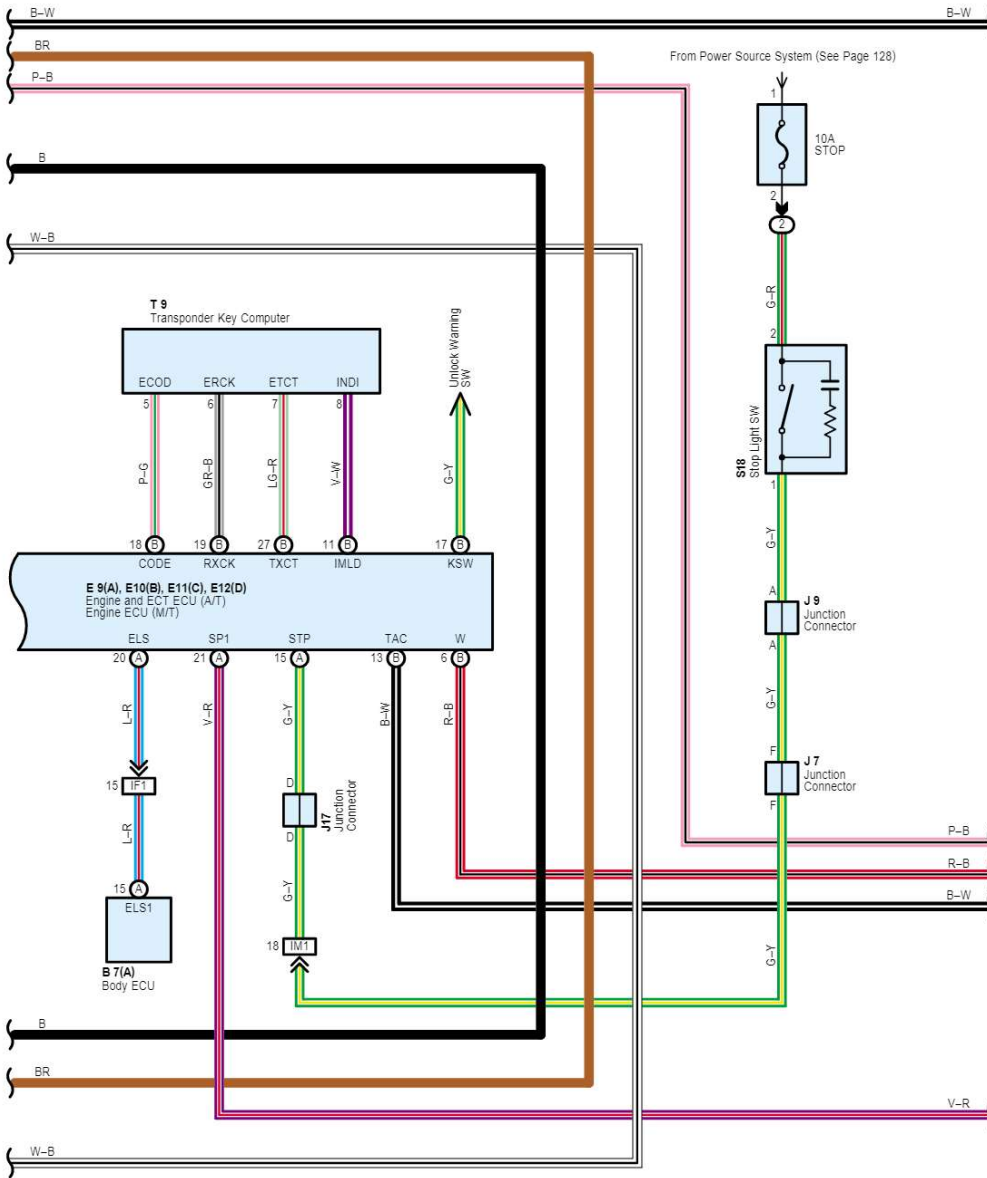


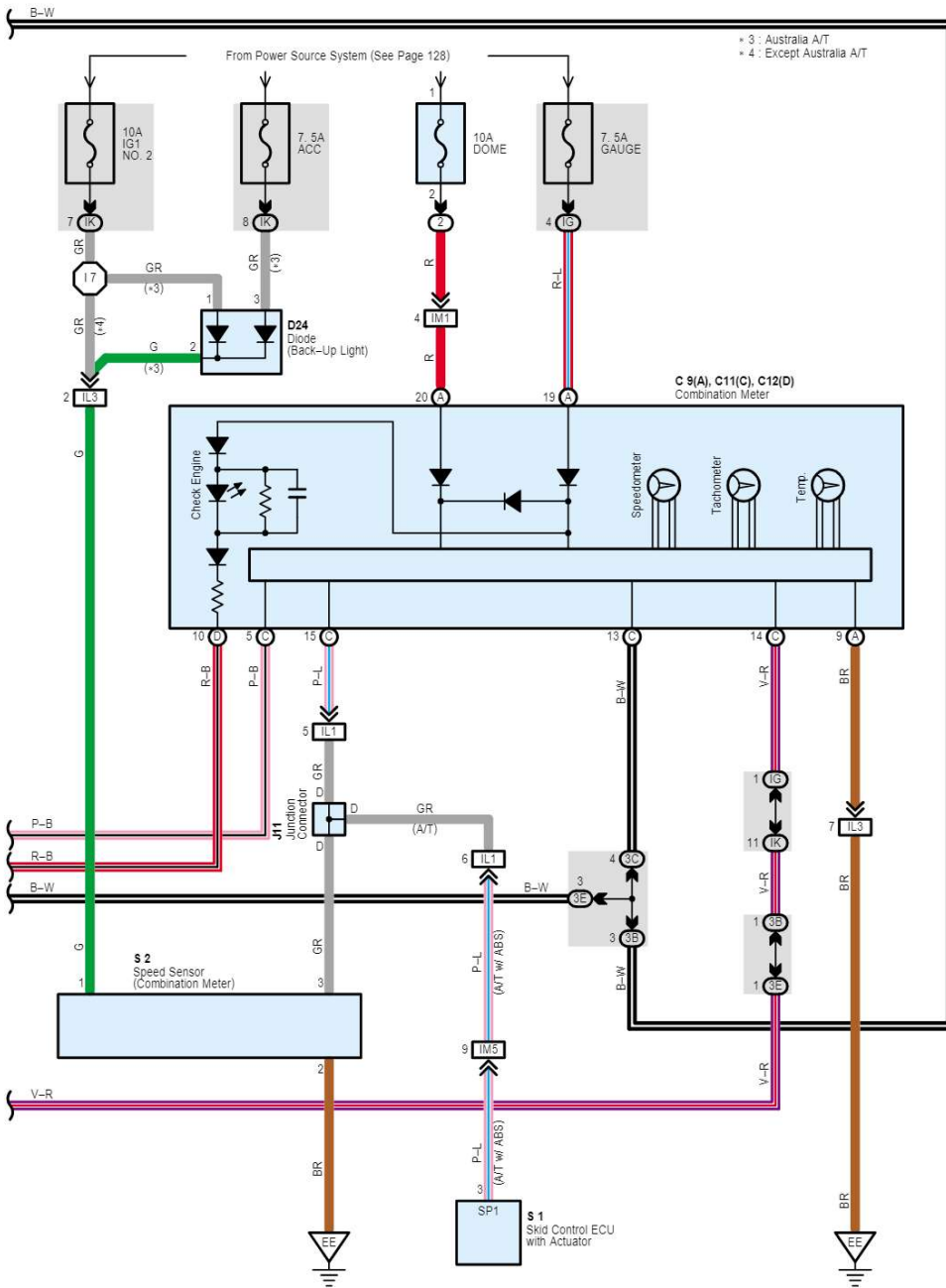
# Engine Control (3RZ-FE Unleaded Gasoline)





# Engine Control (3RZ-FE Unleaded Gasoline)





LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## Engine Control (3RZ-FE Unleaded Gasoline)

### System Outline

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

#### 1. Input Signals

(1) Engine coolant temp. signal circuit

The water temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. 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) RPM signal circuit

The camshaft position is detected by the camshaft position sensor and is input into TERMINAL G2+ of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal. Also, the engine RPM is detected by the crankshaft position sensor and the signal is input into TERMINAL NE+ of the engine and ECT ECU (A/T), engine ECU (M/T).

(4) Throttle position sensor 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).

(5) Vehicle speed circuit

The speed sensor detects the vehicle speed, and the signal is input into TERMINAL SP1 of the engine and ECT ECU (A/T), engine ECU (M/T) via the combination meter.

(6) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine and ECT ECU (A/T), engine ECU (M/T). When the ignition SW is turned on, the voltage for engine and ECT ECU (A/T), engine ECU (M/T) start up power supply is applied through the EFI relay, to TERMINAL +B of the engine and ECT ECU (A/T), engine ECU (M/T). The current from the IGN fuse flows to TERMINAL IGSW of the engine and ECT ECU (A/T), engine ECU (M/T).

(7) Intake air volume signal circuit

The intake air volume is detected by the air flow meter, and is input as a control signal to TERMINAL VG of the engine and ECT ECU (A/T), engine ECU (M/T).

(8) 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.

(9) Starter signal circuit

To confirm whether the engine is cranking, the voltage applied to the starter motor when the engine is cranking is detected, and is input into TERMINAL STA of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal.

(10) Engine knock signal circuit

Engine knocking is detected by the knock sensor, and is input into TERMINAL KNK of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal.

(11) A/C SW signal system

The operating voltage of the A/C control assembly (Automatic A/C), A/C amplifier (Manual A/C) is detected and input in the form of a control signal to TERMINAL AC1 of the engine and ECT ECU (A/T), engine ECU (M/T).

## 2. Control System

### \* EFI system

The EFI system monitors the engine condition through the signals input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). The control signal is sent to the engine and ECT ECU (A/T), engine ECU (M/T) TERMINALS #10, #20, #30 and #40 to operate the injector (Fuel injection). The EFI system controls the fuel injection by the engine and ECT ECU (A/T), engine ECU (M/T) in response to the driving conditions.

### \* ESA system

The ESA system monitors the engine condition through the signals input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). The best ignition timing is decided according to this data and the data memorized in the engine and ECT ECU (A/T), engine ECU (M/T). The control signal is output to TERMINALS IGT1, IGT2, IGT3 and IGT4, and these signals control the igniter to provide the best ignition timing.

## 3. 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 on the check engine warning light.

## 4. Fail-Safe System

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

## Service Hints

### EFI Relay

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

### W3 Water Temp. Sensor

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

### E9 (A), E10 (B), E11 (C), E12 (D) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT-E1 : Always 9.0-14.0 volts

IGSW-E1 : 9.0-14.0 volts with the ignition SW at ON position

+B-E1 : 9.0-14.0 volts with the ignition SW at ON position

VC-E1 : 4.5-5.5 volts with the ignition SW at ON position

VTA-E1 : 0.4-1.0 volts with the ignition SW on and throttle valve fully closed

: 3.2-4.8 volts with the ignition SW on and throttle valve fully open

THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)

THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)

STA-E1 : 6.0 volts or more with the engine cranking

W-E1 : 9.0-14.0 volts with the idling and check engine warning light off

SP1-E1 : Pulse generation with the vehicle moving

STP-E1 : 7.5-14.0 volts with the brake pedal depressed

## Engine Control (3RZ-FE Unleaded Gasoline)

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A14	40 (*2)	H7	41 (*2)	J14	70 (RHD)
	60 (*11)		61 (*11)	J17	50 (LHD)
A20	D	I1	41 (*2)		J18
			68 (RHD)	61 (*11)	
A21	A	I2	41 (*2)	J21	70 (RHD)
			68 (RHD)		61 (*11)
A22	B	I3	41 (*2)	J22	70 (RHD)
			68 (RHD)		61 (*11)
A36		I4	41 (*2)	J31	70 (RHD)
			68 (RHD)		61 (*11)
B7	A	I6	41 (*2)		54 (*7)
			68 (RHD)		61 (*11)
C1		I7	41 (*2)	K1	74 (*16)
			60 (*11)		61 (*11)
C3		I8	41 (*2)	N1	61 (*11)
			60 (*11)		61 (*11)
C9	A	I9	41 (*2)	P1	61 (*11)
			69 (RHD)		61 (*11)
C11	C	I11	41 (*2)	S1	61 (*11)
			69 (RHD)		61 (*11)
C12	D	I14	50 (LHD)	S2	61 (*11)
			69 (RHD)		70 (RHD)
D6		J2	41 (*2)	S18	61 (*11)
			69 (RHD)		61 (*11)
D24		J5	41 (*2)	T4	71 (RHD)
			49 (LHD)		61 (*11)
E9	A	J7	50 (LHD)	T9	61 (*11)
			69 (RHD)		70 (RHD)
E10	B	J9	50 (LHD)	V10	71 (RHD)
			49 (LHD)		70 (RHD)
E11	C	J10	50 (LHD)	V16	61 (*11)
			69 (RHD)		70 (RHD)
E12	D	J11	50 (LHD)	W3	61 (*11)
			49 (LHD)		70 (RHD)
F20	A	J12	54 (*7)		41 (*2)
			74 (*16)		50 (LHD)
F21	B	J14	52 (*6)		
			72 (*15)		70 (RHD)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2B			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

## Engine Control (3RZ-FE Unleaded Gasoline)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	80 (*2)	Front Left Fender
	104 (*11)	
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

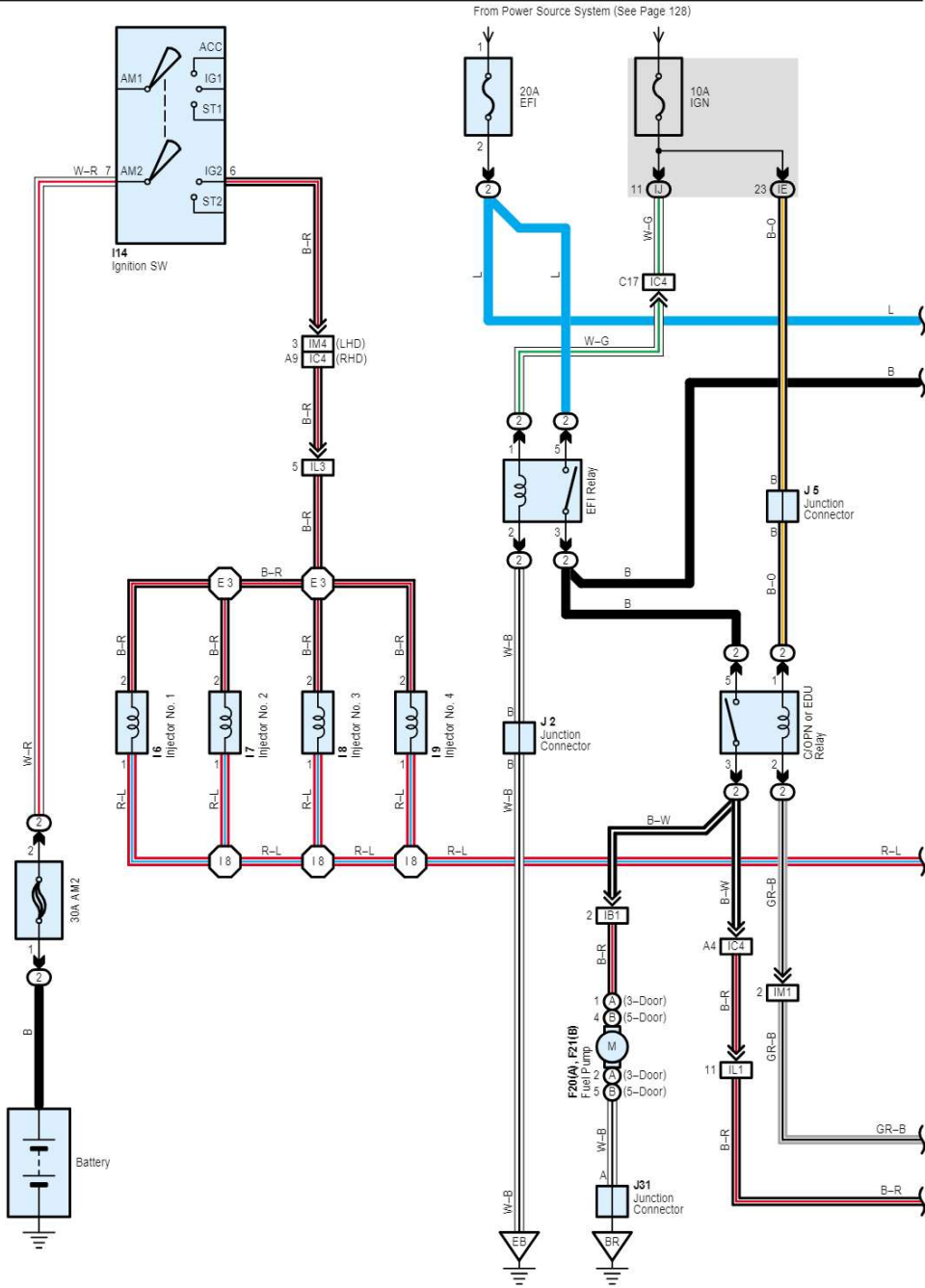
### ○ : Splice Points

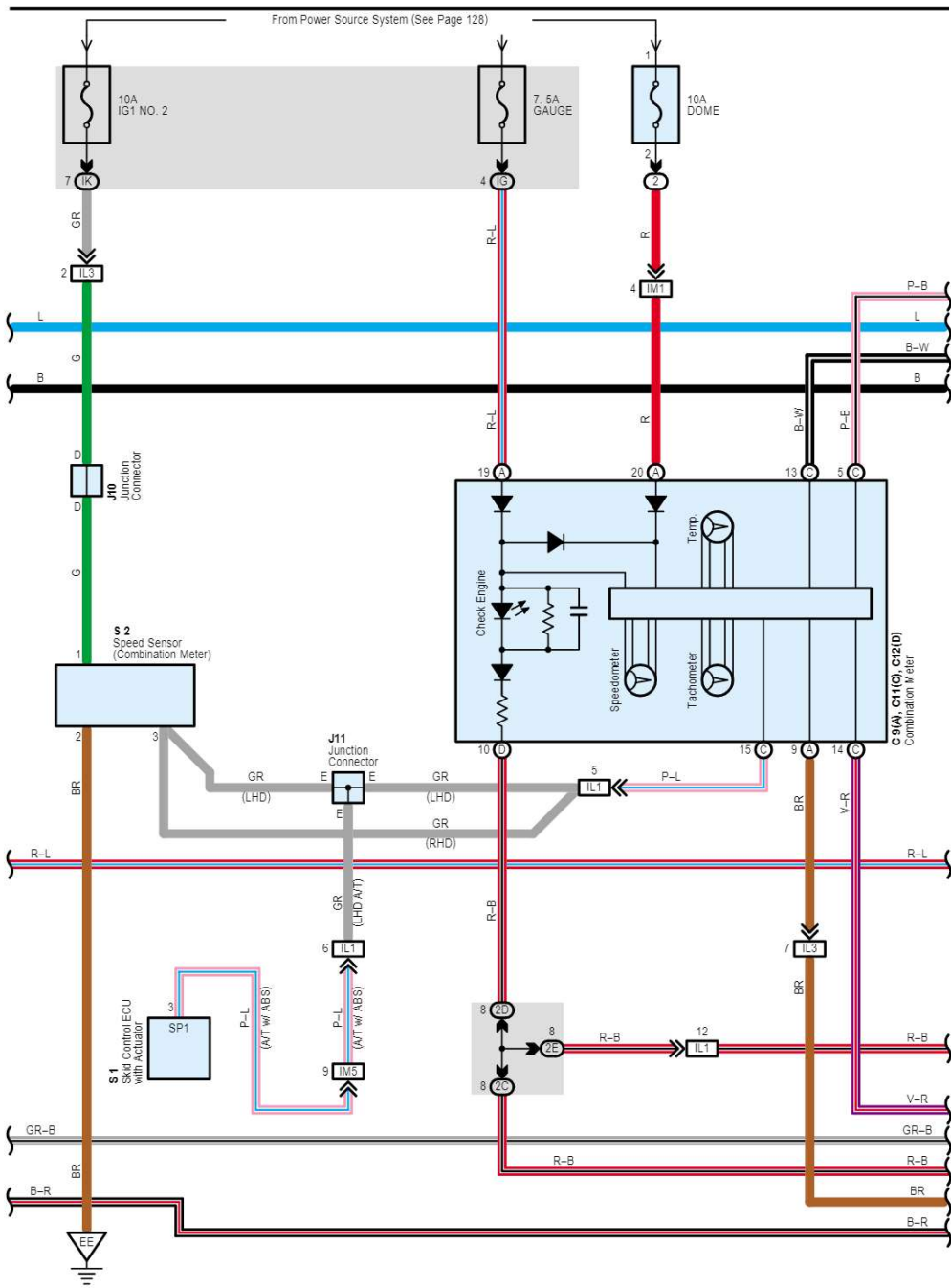
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	80 (*2)	Engine Wire	17	90 (LHD)	Instrument Panel Wire
	104 (*11)			114 (RHD)	
E11	80 (*2)		18	90 (LHD)	Engine Wire
	104 (*11)			114 (RHD)	

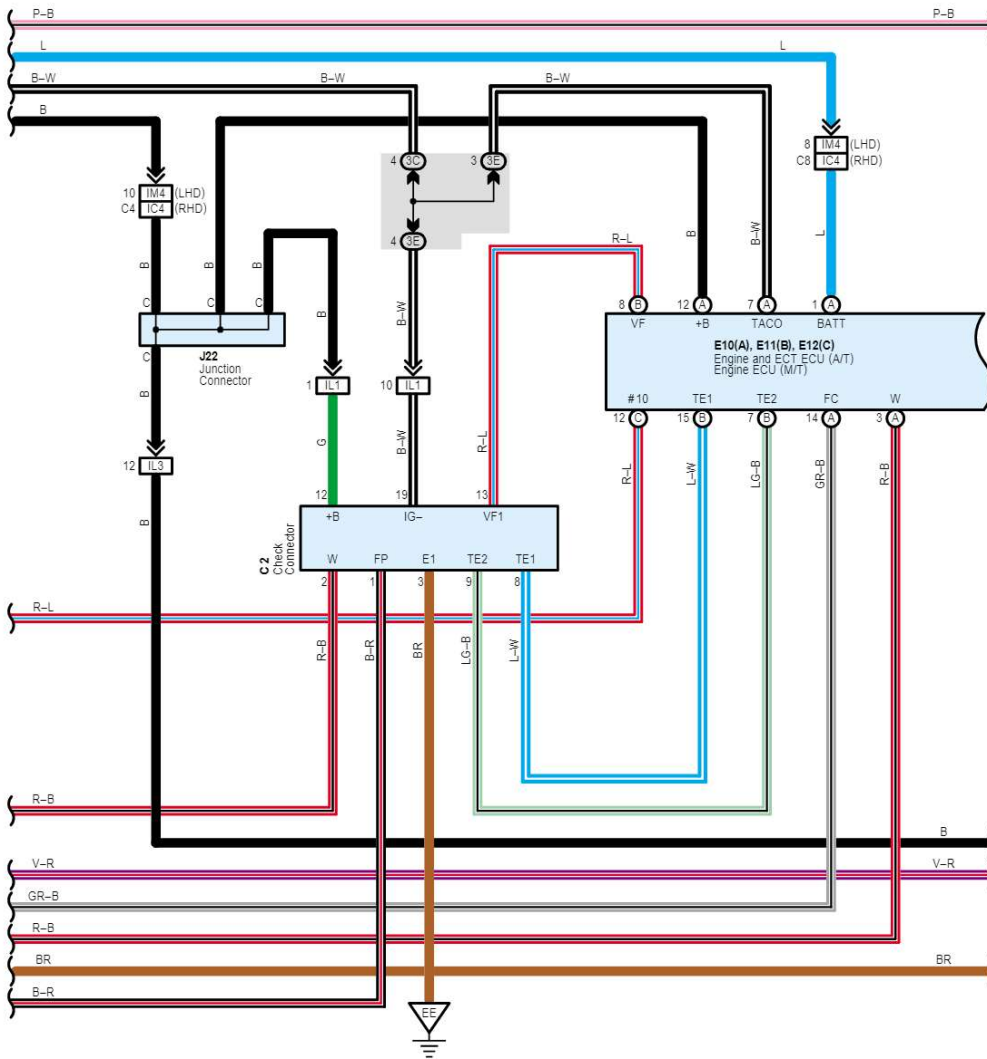
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

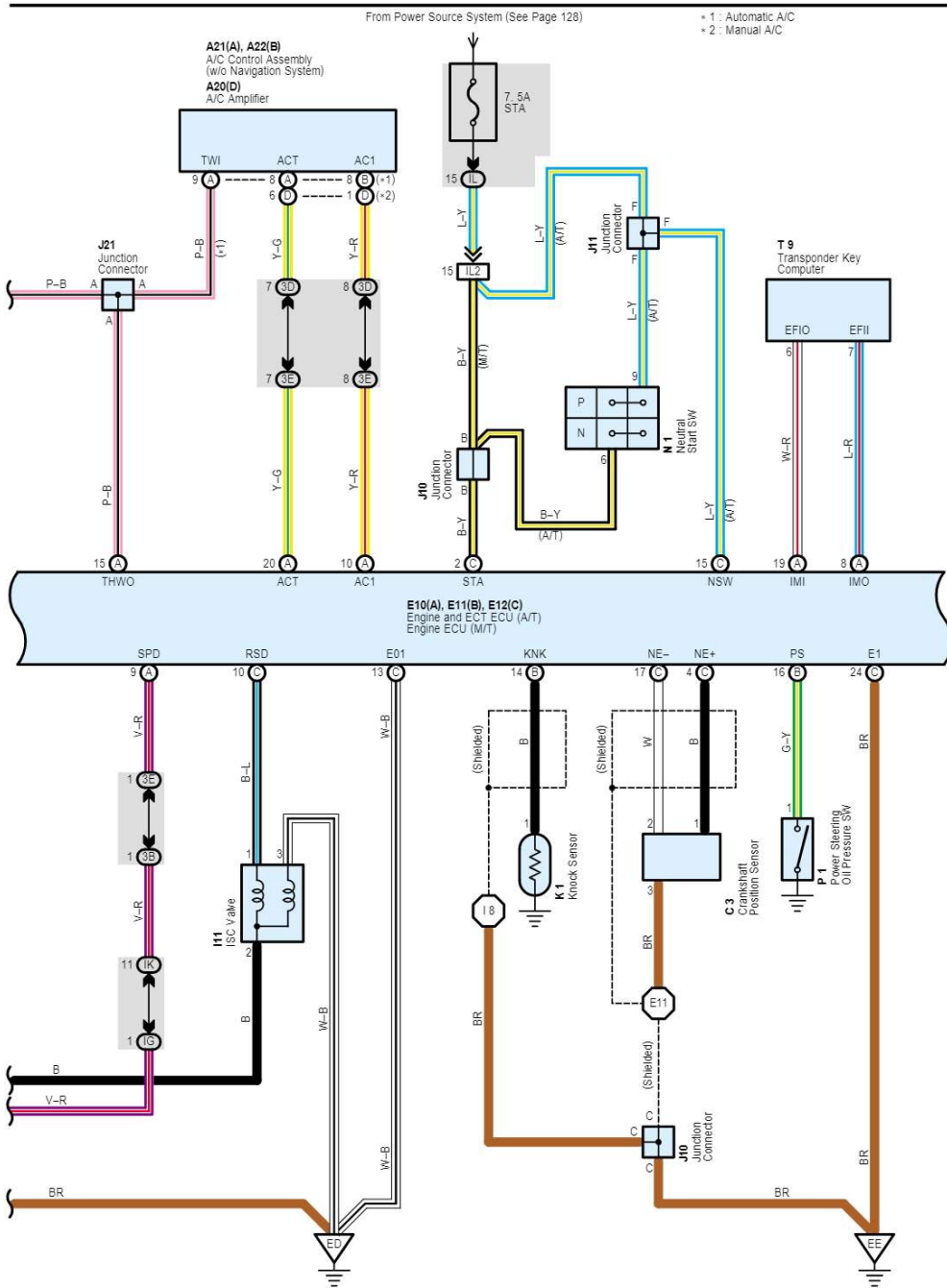


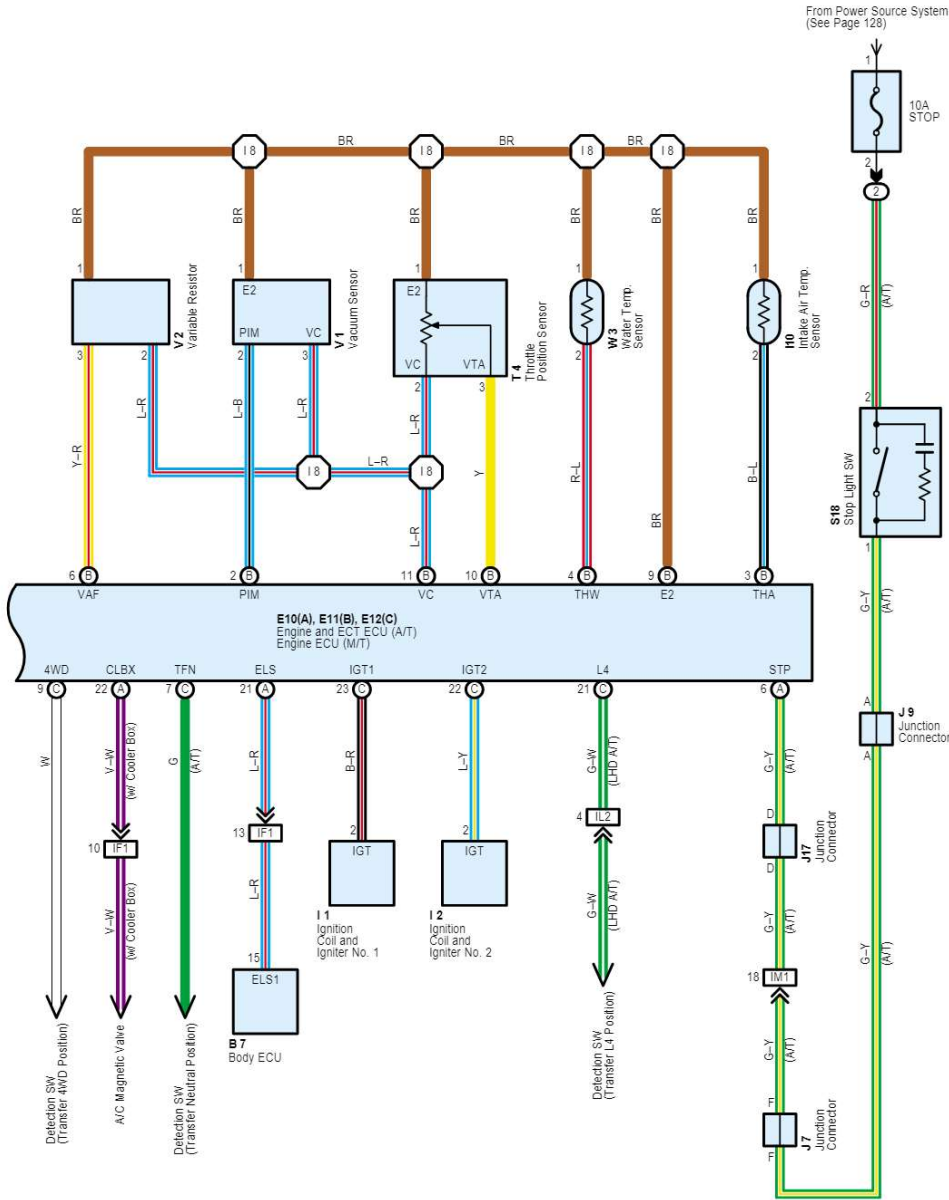
# Engine Control (3RZ-FE Leaded Gasoline)













## System Outline

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

### 1. Input Signals

- (1) Engine coolant temp. signal circuit  
The water temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. 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 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) RPM signal circuit  
The engine RPM is detected by the crankshaft position sensor and the signal is input into TERMINAL NE+ of the engine and ECT ECU (A/T), engine ECU (M/T).
- (4) Throttle position sensor 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).
- (5) Vehicle speed circuit  
The speed sensor detects the vehicle speed, and the signal is input into TERMINAL SPD of the engine and ECT ECU (A/T), engine ECU (M/T) via the combination meter.
- (6) Battery signal circuit  
Voltage is constantly applied to TERMINAL BATT of the engine and ECT ECU (A/T), engine ECU (M/T). When the ignition SW is turned on, the voltage for engine and ECT ECU (A/T), engine ECU (M/T) start up power supply is applied through the EFI relay, to TERMINAL +B of the engine and ECT ECU (A/T), engine ECU (M/T).
- (7) 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.
- (8) Starter signal circuit  
To confirm whether the engine is cranking, the voltage applied to the starter motor when the engine is cranking is detected, and is input into TERMINAL STA of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal.
- (9) Engine knock signal circuit  
Engine knocking is detected by the knock sensor, and is input into TERMINAL KNK of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal.
- (10) A/C SW signal system  
The operating voltage of the A/C control assembly (Automatic A/C), A/C amplifier (Manual A/C) is detected and input in the form of a control signal to TERMINAL AC1 of the engine and ECT ECU (A/T), engine ECU (M/T).

### 2. Control System

- \* EFI system  
The EFI system monitors the engine condition through the signals input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). The control signal is sent to the engine and ECT ECU (A/T), engine ECU (M/T) TERMINAL #10 to operate the injector (Fuel injection). The EFI system controls the fuel injection by the engine and ECT ECU (A/T), engine ECU (M/T) in response to the driving conditions.
- \* ESA system  
The ESA system monitors the engine condition through the signals input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). The best ignition timing is decided according to this data and the data memorized in the engine and ECT ECU (A/T), engine ECU (M/T). The control signal is output to TERMINALS IGT1, IGT2, and these signals control the igniter to provide the best ignition timing.

### 3. 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 on the check engine warning light.

### 4. Fail-Safe System

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

## Engine Control (3RZ-FE Leaded Gasoline)

### Service Hints

#### EFI Relay

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

#### W3 Water Temp. Sensor

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

#### E10 (A), E11 (B), E12 (C) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT-E1 : Always 9.0-14.0 volts

+B-E1 : 9.0-14.0 volts with the ignition SW at ON position

VC-E1 : 4.5-5.5 volts with the ignition SW at ON position

VTA-E1 : 0.4-1.0 volts with the ignition SW on and throttle valve fully closed

: 3.2-4.8 volts with the ignition SW on and throttle valve fully open

THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)

THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)

STA-E1 : 6.0 volts or more with the engine cranking

W-E1 : 9.0-14.0 volts with the idling and check engine warning light off

SPD-E1 : Pulse generation with the vehicle moving

STP-E1 : 7.5-14.0 volts with the brake pedal depressed

○ : Parts Location

Code		See Page	Code	See Page	Code	See Page	
A20	D	48 (LHD)	I2	41 (*2)	J21	50 (LHD)	
		68 (RHD)		61 (*11)		70 (RHD)	
A21	A	48 (LHD)	I6	41 (*2)	J22	50 (LHD)	
		68 (RHD)		61 (*11)		70 (RHD)	
A22	B	48 (LHD)	I7	41 (*2)	J31	52 (*6)	
		68 (RHD)		61 (*11)		54 (*7)	
B7		48 (LHD)	I8	41 (*2)		72 (*15)	
		68 (RHD)		61 (*11)		74 (*16)	
C2		40 (*2)	I9	41 (*2)		K1	41 (*2)
		60 (*11)		61 (*11)			61 (*11)
C3		40 (*2)	I10	41 (*2)	N1	41 (*2)	
		60 (*11)		61 (*11)		61 (*11)	
C9	A	49 (LHD)	I11	41 (*2)	P1	41 (*2)	
		69 (RHD)		61 (*11)		61 (*11)	
C11	C	49 (LHD)	I14	50 (LHD)	S1	41 (*2)	
		69 (RHD)		70 (RHD)		61 (*11)	
C12	D	49 (LHD)	J2	41 (*2)	S2	41 (*2)	
		69 (RHD)		61 (*11)		61 (*11)	
E10	A	49 (LHD)	J5	41 (*2)	S18	51 (LHD)	
		69 (RHD)		61 (*11)		71 (RHD)	
E11	B	49 (LHD)	J7	50 (LHD)	T4	41 (*2)	
		69 (RHD)		70 (RHD)		61 (*11)	
E12	C	49 (LHD)	J9	50 (LHD)	T9	51 (LHD)	
		69 (RHD)		70 (RHD)		71 (RHD)	
F20	A	54 (*7)	J10	50 (LHD)	V1	41 (*2)	
		74 (*16)		70 (RHD)		61 (*11)	
F21	B	52 (*6)	J11	50 (LHD)	V2	41 (*2)	
		72 (*15)		70 (RHD)		61 (*11)	
I1		41 (*2)	J17	50 (LHD)	W3	41 (*2)	
		61 (*11)		70 (RHD)		61 (*11)	

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat

## Engine Control (3RZ-FE Leaded Gasoline)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
2C	34		Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D			
2E			
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

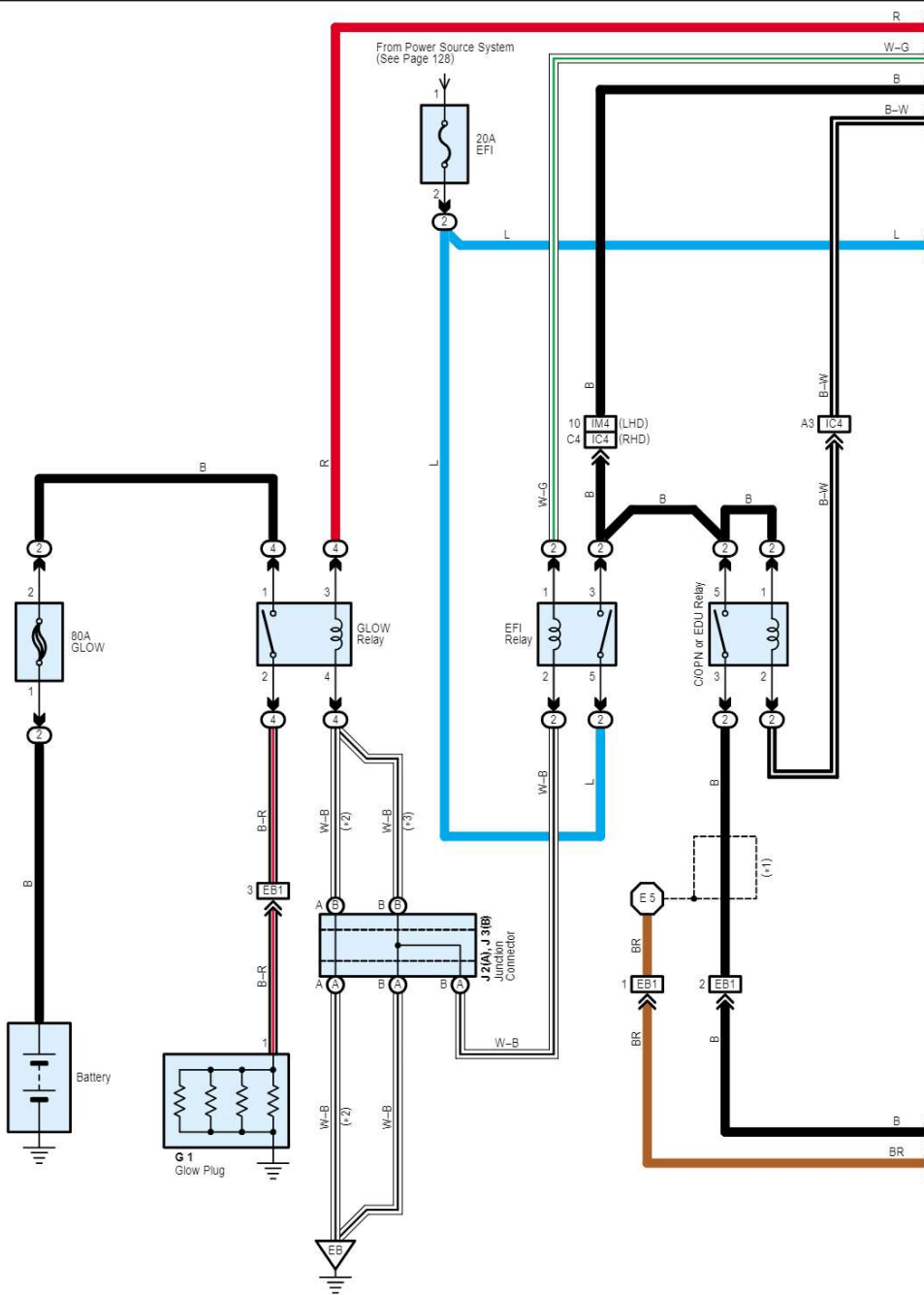
▽ : Ground Points

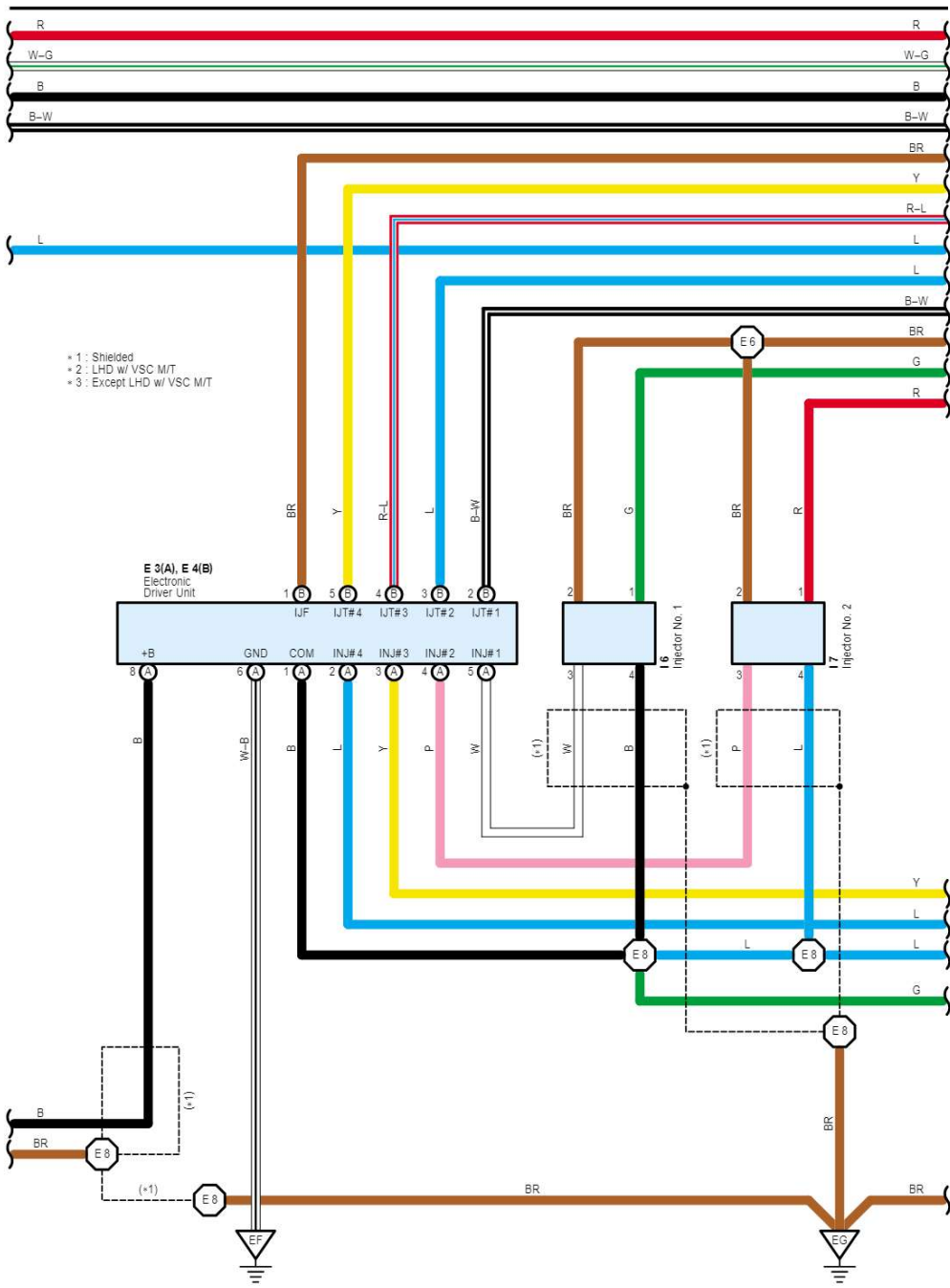
Code	See Page	Ground Points Location
EB	80 (*2)	Front Left Fender
	104 (*11)	
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	80 (*2)	Engine Wire	E11	104 (*11)	Engine Wire
	104 (*11)		18	90 (LHD)	
E11	80 (*2)				114 (RHD)

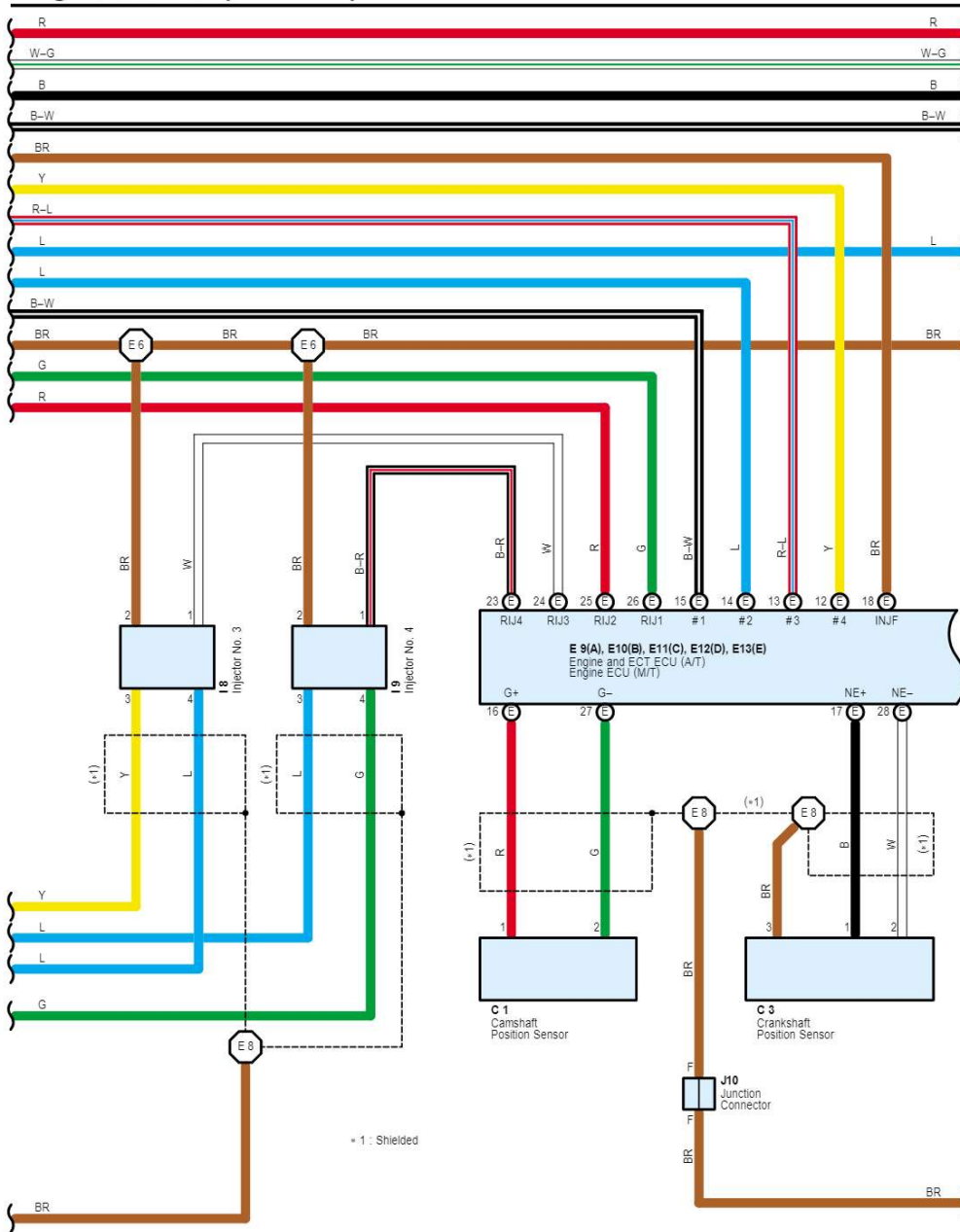
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat





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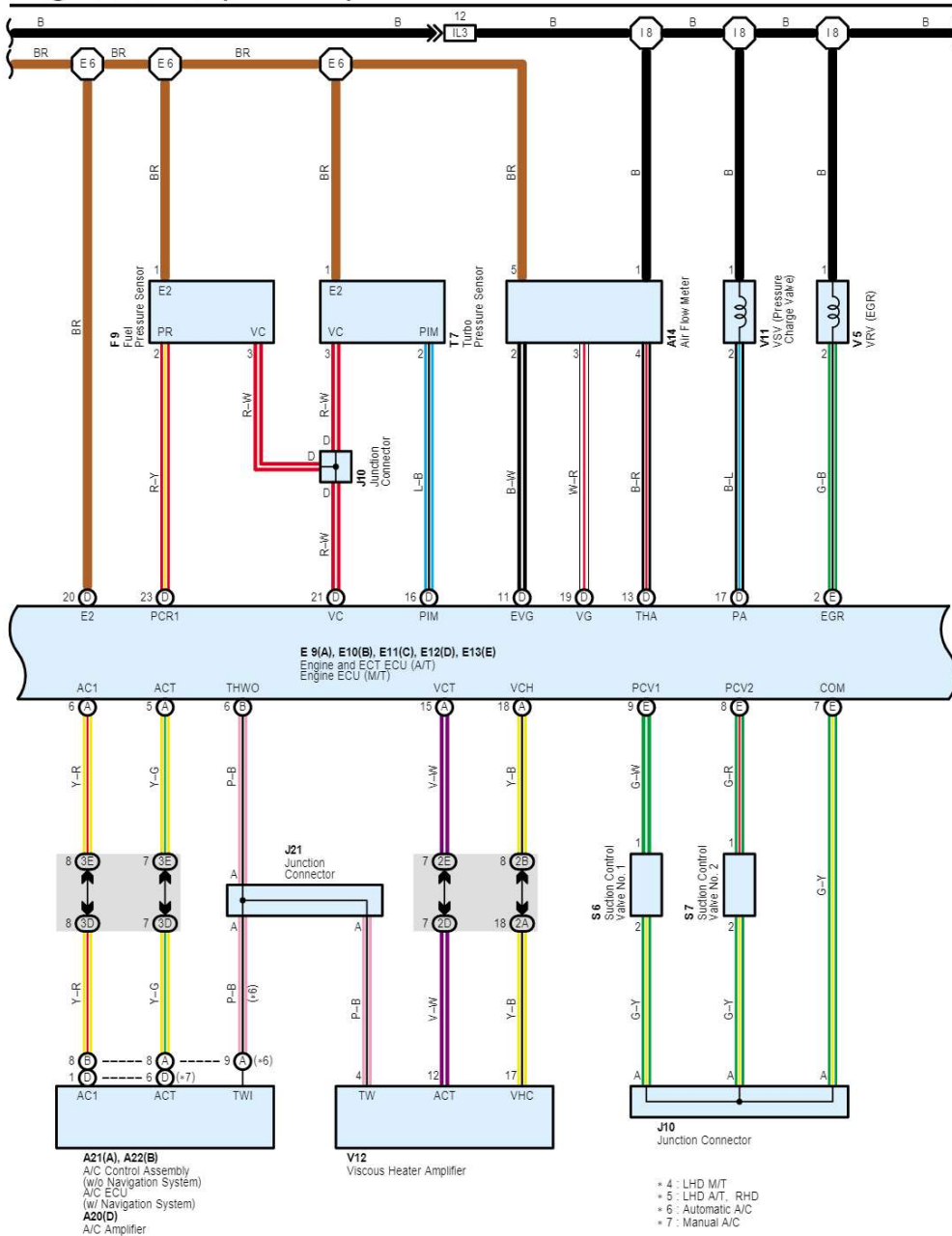
# Engine Control (1KD-FTV)

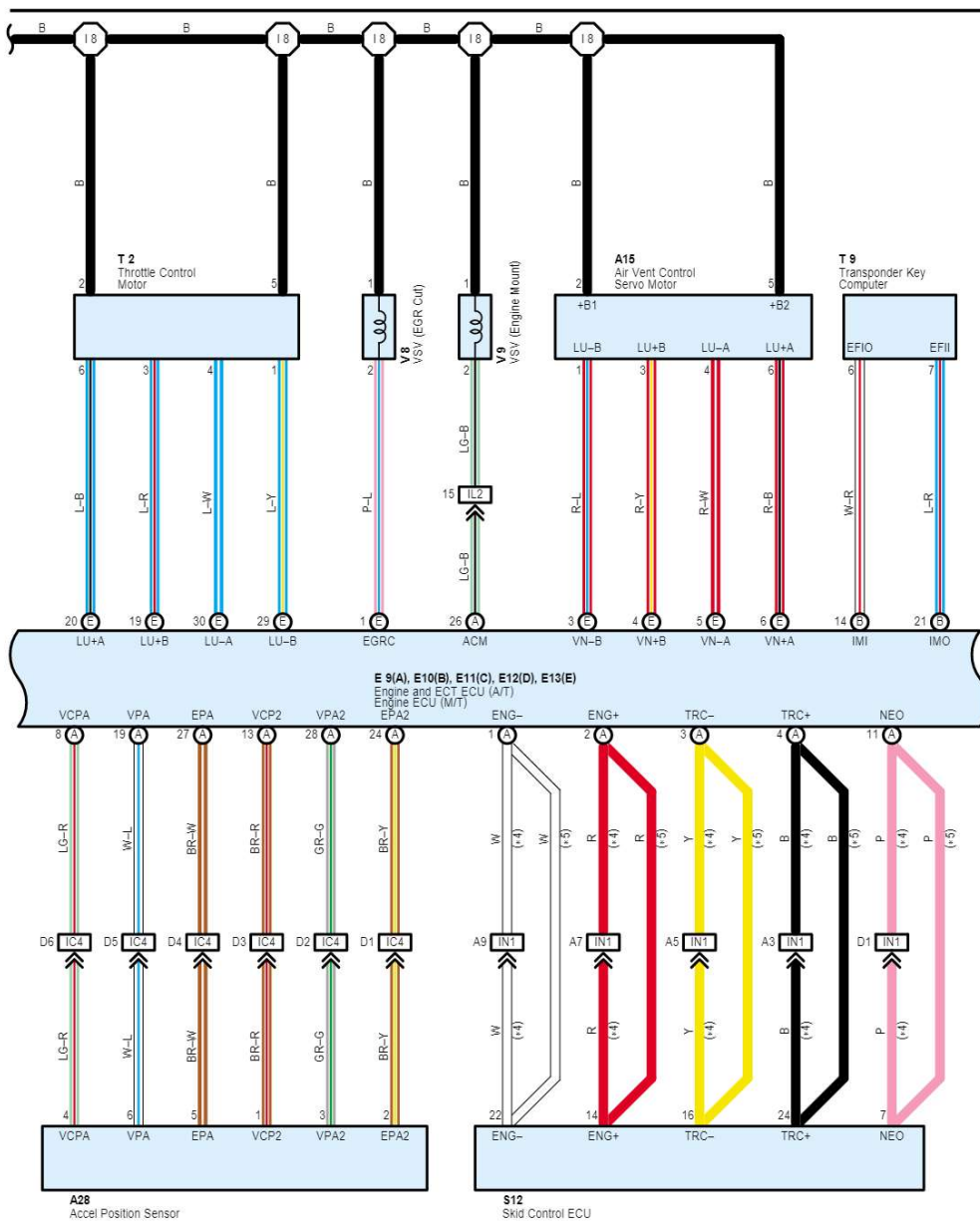




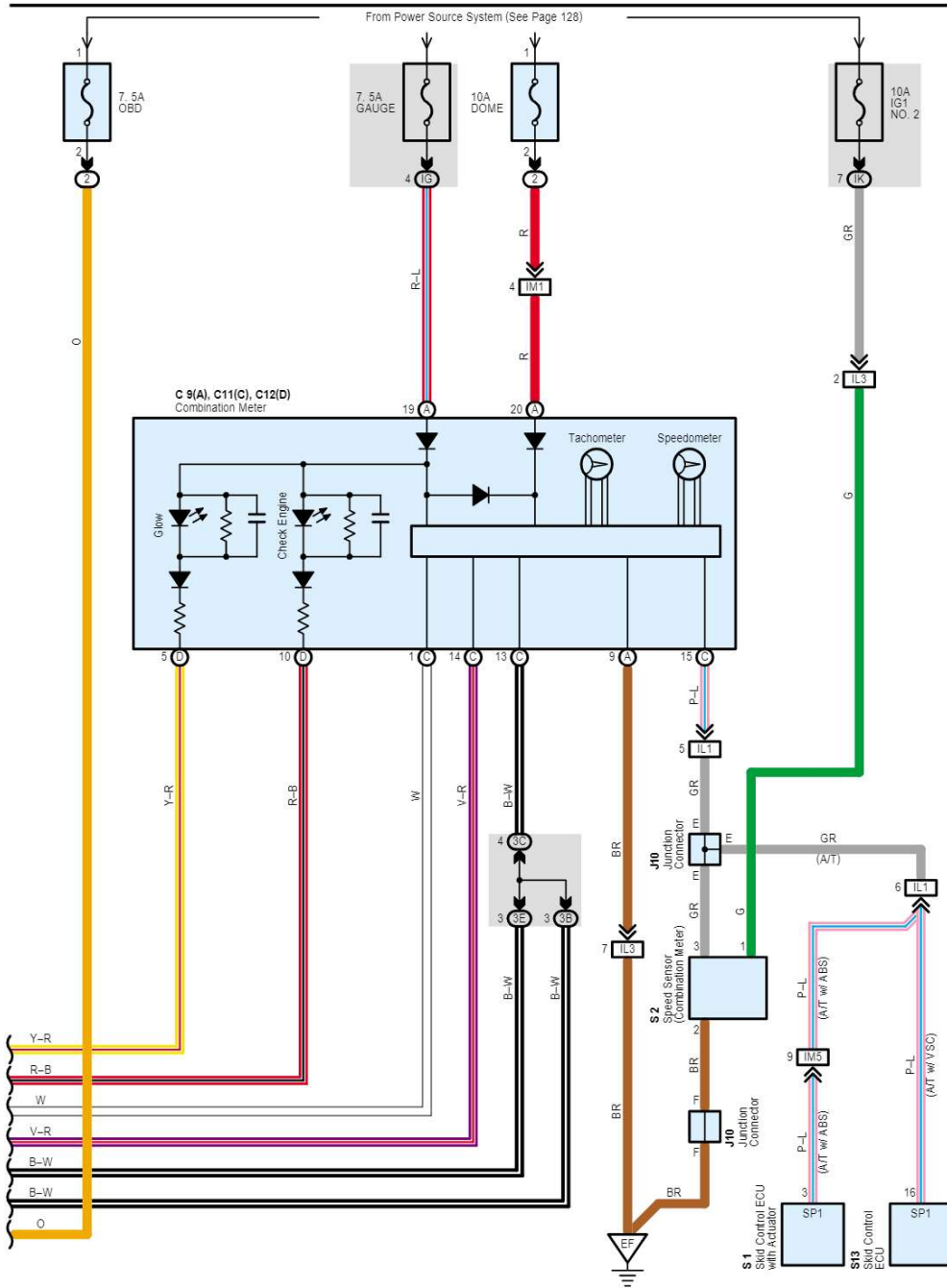


# Engine Control (1KD-FTV)









### System Outline

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

#### 1. Input Signals

- (1) Engine coolant temp. signal circuit  
The water temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the engine coolant temp. The engine coolant temp. 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) RPM signal circuit  
The camshaft position is detected by the camshaft position sensor and is input into TERMINAL G+ of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal. Also, the engine RPM is detected by the crankshaft position sensor and the signal is input into TERMINAL NE+ of the engine and ECT ECU (A/T), engine ECU (M/T).
- (4) Throttle signal circuit  
The accelerator pedal position sensor detects the accelerator pedal opening angle as a control signal, which is input into TERMINALS VPA1 and VPA2 of the engine and ECT ECU (A/T), engine ECU (M/T).
- (5) Vehicle speed circuit  
The speed sensor detects the vehicle speed, and the signal is input into TERMINAL SP1 of the engine and ECT ECU (A/T), engine ECU (M/T) via the combination meter.
- (6) Battery signal circuit  
Voltage is constantly applied to TERMINAL BATT of the engine and ECT ECU (A/T), engine ECU (M/T). When the ignition SW is turned on, the voltage for engine and ECT ECU (A/T), engine ECU (M/T) start up power supply is applied through the EFI relay, to TERMINAL +B of the engine and ECT ECU (A/T), engine ECU (M/T). The current from the IGN fuse flows to TERMINAL IGSW of the engine and ECT ECU (A/T), engine ECU (M/T).
- (7) Intake air volume signal circuit  
The intake air volume is detected by the air flow meter, and is input as a control signal to TERMINAL VG of the engine and ECT ECU (A/T), engine ECU (M/T).
- (8) 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.
- (9) Starter signal circuit  
To confirm whether the engine is cranking, the voltage applied to the starter motor when the engine is cranking is detected, and is input into TERMINAL STA of the engine and ECT ECU (A/T), engine ECU (M/T) as a control signal.
- (10) A/C SW signal system  
The operating voltage of the A/C control assembly (Automatic A/C), A/C amplifier (Manual A/C) is detected and input in the form of a control signal to TERMINAL AC1 of the engine and ECT ECU (A/T), engine ECU (M/T).
- (11) Intake air vacuum pressure signal circuit  
Intake air vacuum pressure is detected by the turbo pressure sensor and is input as a control signal to TERMINAL PIM of the engine and ECT ECU (A/T), engine ECU (M/T).

## 2. Control System

### \* GLOW relay control system

When the engine starts, the GLOW relay is controlled in response to engine coolant temp. At that time, the engine and ECT ECU (A/T), engine ECU (M/T) receives the signals (input signals (1, 3, 9) ), and the current is output to the TERMINALS SREL and GIND.

As a result, the engine and ECT ECU (A/T), engine ECU (M/T) controls the GLOW relay and makes the glow indicator light come on.

### \* EGR control system

The EGR control system detects the signals from each sensors (Input signals (1, 3, 4, 11) ), then the current is output to the TERMINAL EGR to control the VRV (EGR).

### \* A/C cut control system

When the vehicle suddenly accelerates from low engine speed, this system cuts off air conditioner operation for a fixed period of time in response to the vehicle speed, throttle valve opening angle and intake manifold pressure in order to maintain acceleration performance.

The engine and ECT ECU (A/T), engine ECU (M/T) receives input signals (3, 4, 5, 10, and 11), and outputs signals to TERMINAL ACT.

## 3. Diagnosis System

When the diagnosis system, when there is a malfunctioning in the engine and ECT ECU (A/T), engine ECU (M/T) signal system, the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the check engine warning light.

## 4. Fail-Safe System

When a malfunction occurs 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

### EFI Relay

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

### W3 Water Temp. Sensor

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

### E9 (A), E10 (B), E11 (C), E12 (D), E13 (E) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT-E1 : Always 9.0-14.0 volts

IGSW-E1 : 9.0-14.0 volts with the ignition SW at ON position

+B-E1 : 9.0-14.0 volts with the ignition SW at ON position

VC-E1 : 4.5-5.5 volts with the ignition SW at ON position

VPA-E1 : 0.3-0.9 volts with the ignition SW on and throttle valve fully closed

: 3.2-4.8 volts with the ignition SW on and throttle valve fully open

VPA2-E1 : 1.8-2.7 volts with the ignition SW on and throttle valve fully closed

: 4.7-5.1 volts with the ignition SW on and throttle valve fully open

THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)

THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)

STA-E1 : 6.0 volts or more with the engine cranking

W-E1 : 9.0-14.0 volts with the idling and check engine warning light off

SP1-E1 : Pulse generation with the vehicle moving

STP-E1 : 7.5-14.0 volts with the brake pedal depressed

# Engine Control (1KD-FTV)

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A14	42 (*3)	F9	62 (*12)	J22	50 (LHD)
	62 (*12)		42 (*3)		70 (RHD)
A15	42 (*3)	F11	62 (*12)	N1	43 (*3)
	62 (*12)		42 (*3)		63 (*12)
A19	42 (*3)	G1	62 (*12)	S1	43 (*3)
	62 (*12)		42 (*3)		63 (*12)
A20	48 (LHD)	I6	63 (*12)	S2	43 (*3)
	68 (RHD)		43 (*3)		63 (*12)
A21	48 (LHD)	I7	63 (*12)	S6	43 (*3)
	68 (RHD)		43 (*3)		63 (*12)
A22	48 (LHD)	I8	63 (*12)	S7	43 (*3)
	68 (RHD)		43 (*3)		63 (*12)
A28	48 (LHD)	I9	63 (*12)	S12	51 (LHD)
	68 (RHD)		43 (*3)		71 (RHD)
C1	42 (*3)	I10	63 (*12)	S13	51 (LHD)
	62 (*12)		50 (LHD)		71 (RHD)
C3	42 (*3)	I12	70 (RHD)	S18	51 (LHD)
	62 (*12)		43 (*3)		71 (RHD)
C9	49 (LHD)	J2	A	T2	43 (*3)
	69 (RHD)	J3	B		63 (*12)
C11	49 (LHD)	J5	43 (*3)	T3	43 (*3)
	69 (RHD)		63 (*12)		63 (*12)
C12	49 (LHD)	J7	63 (*12)	T7	43 (*3)
	69 (RHD)		50 (LHD)		63 (*12)
D6	49 (LHD)	J9	70 (RHD)	T9	51 (LHD)
	69 (RHD)		50 (LHD)		71 (RHD)
E3	42 (*3)	J10	70 (RHD)	T13	43 (*3)
	62 (*12)		50 (LHD)		63 (*12)
E4	42 (*3)	J12	70 (RHD)	V5	43 (*3)
	62 (*12)		50 (LHD)		63 (*12)
E9	49 (LHD)	J14	70 (RHD)	V8	43 (*3)
	69 (RHD)		50 (LHD)		63 (*12)
E10	49 (LHD)	J17	70 (RHD)	V9	43 (*3)
	69 (RHD)		50 (LHD)		63 (*12)
E11	49 (LHD)	J18	70 (RHD)	V11	43 (*3)
	69 (RHD)		50 (LHD)		63 (*12)
E12	49 (LHD)	J20	70 (RHD)	V12	51 (LHD)
	69 (RHD)		50 (LHD)		71 (RHD)
E13	49 (LHD)	J21	70 (RHD)	W3	43 (*3)
	69 (RHD)		50 (LHD)		63 (*12)
F9	42 (*3)		70 (RHD)		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2B			
2D			
2E			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	82 (*3)	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
	106 (*12)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	
IN1	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Engine Control (1KD-FTV)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	82 (*3)	Front Left Fender
	106 (*12)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EG	82 (*3)	Near the Engine Room R/B
	106 (*12)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel

### ○ : Splice Points

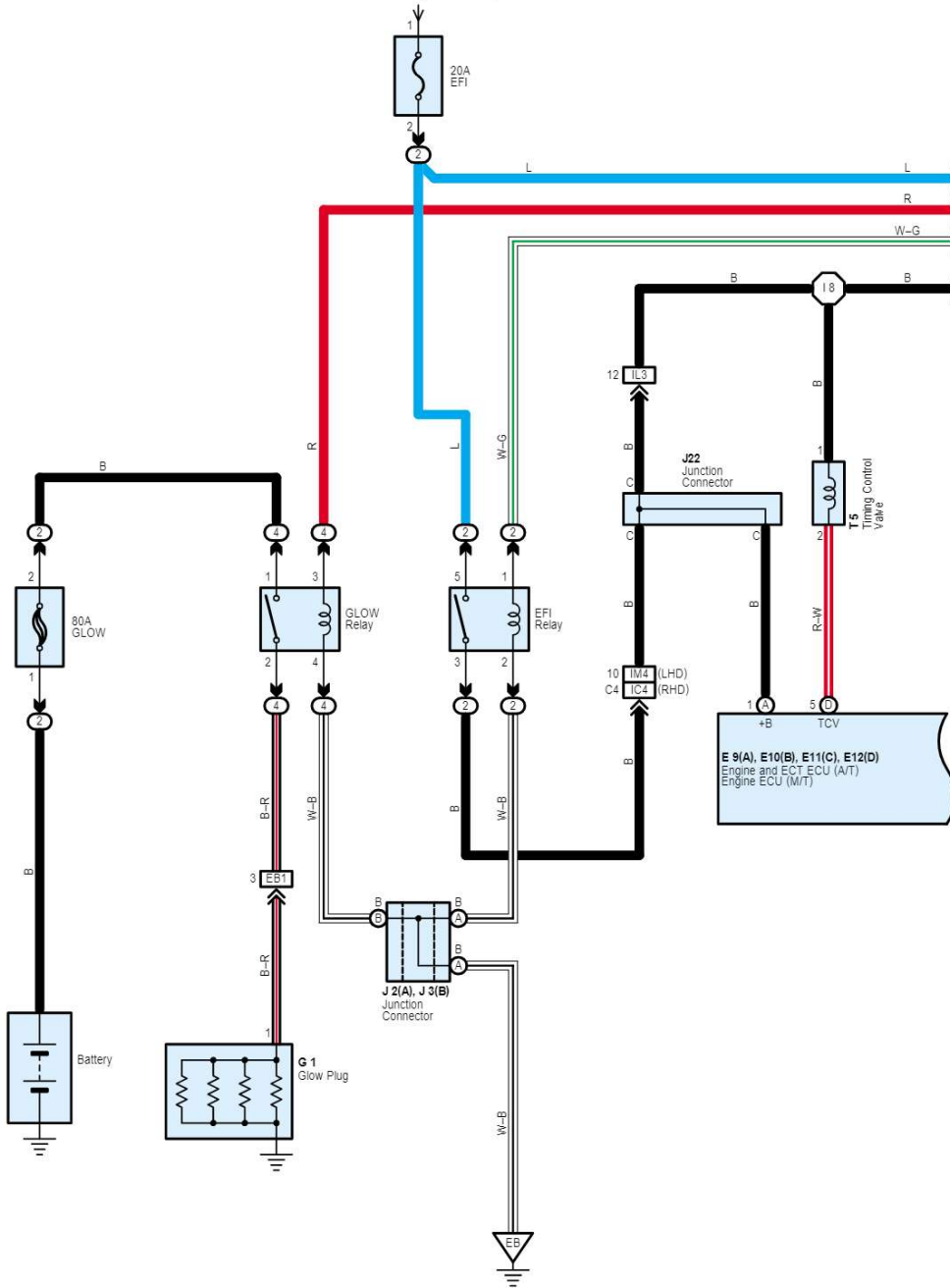
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	82 (*3)	Engine Room Main Wire	E8	82 (*3)	Engine Wire
	106 (*12)			106 (*12)	
E6	82 (*3)	Engine Wire	I8	90 (LHD)	
	106 (*12)			114 (RHD)	

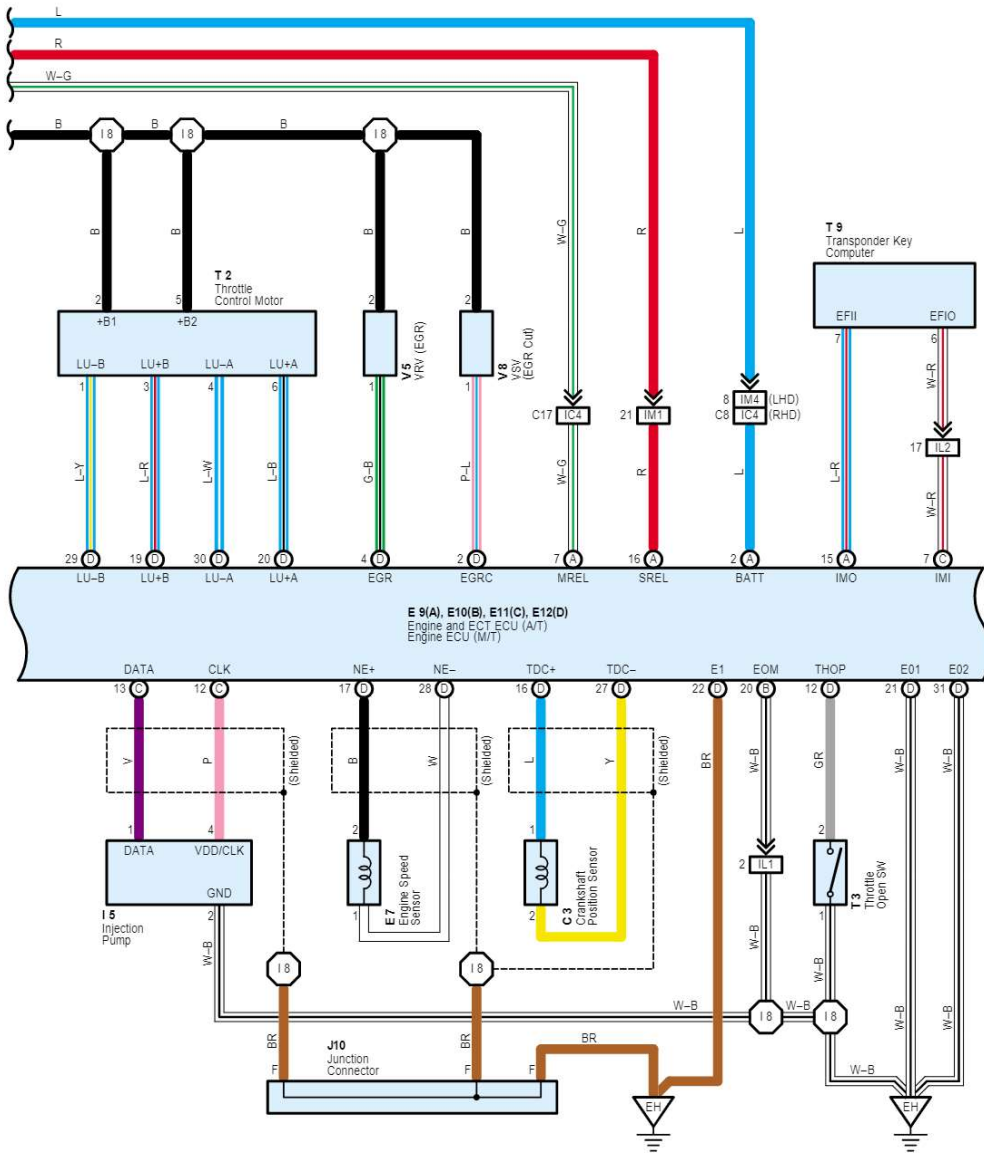
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# Engine Control (1KZ-TE)

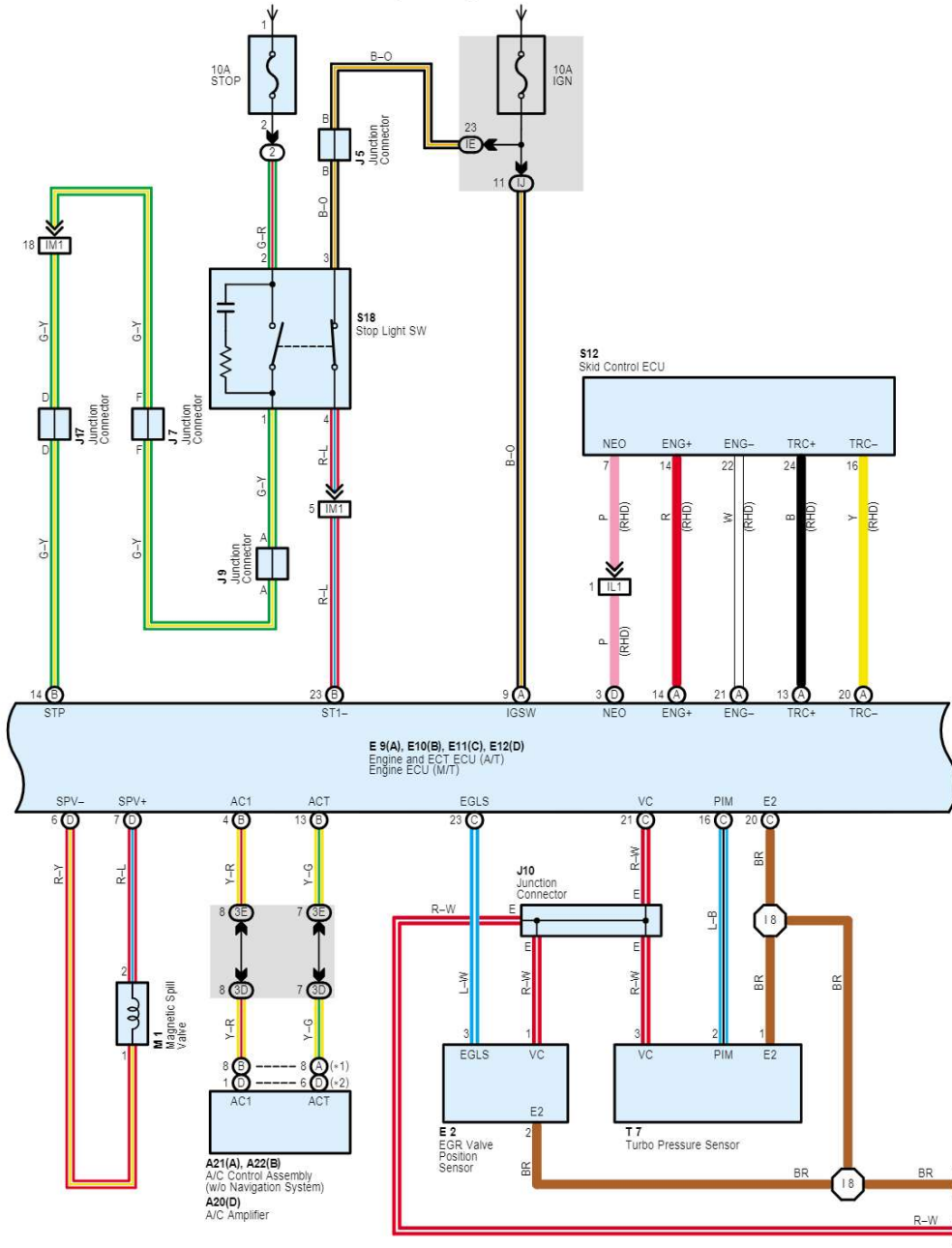
From Power Source System (See Page 128)

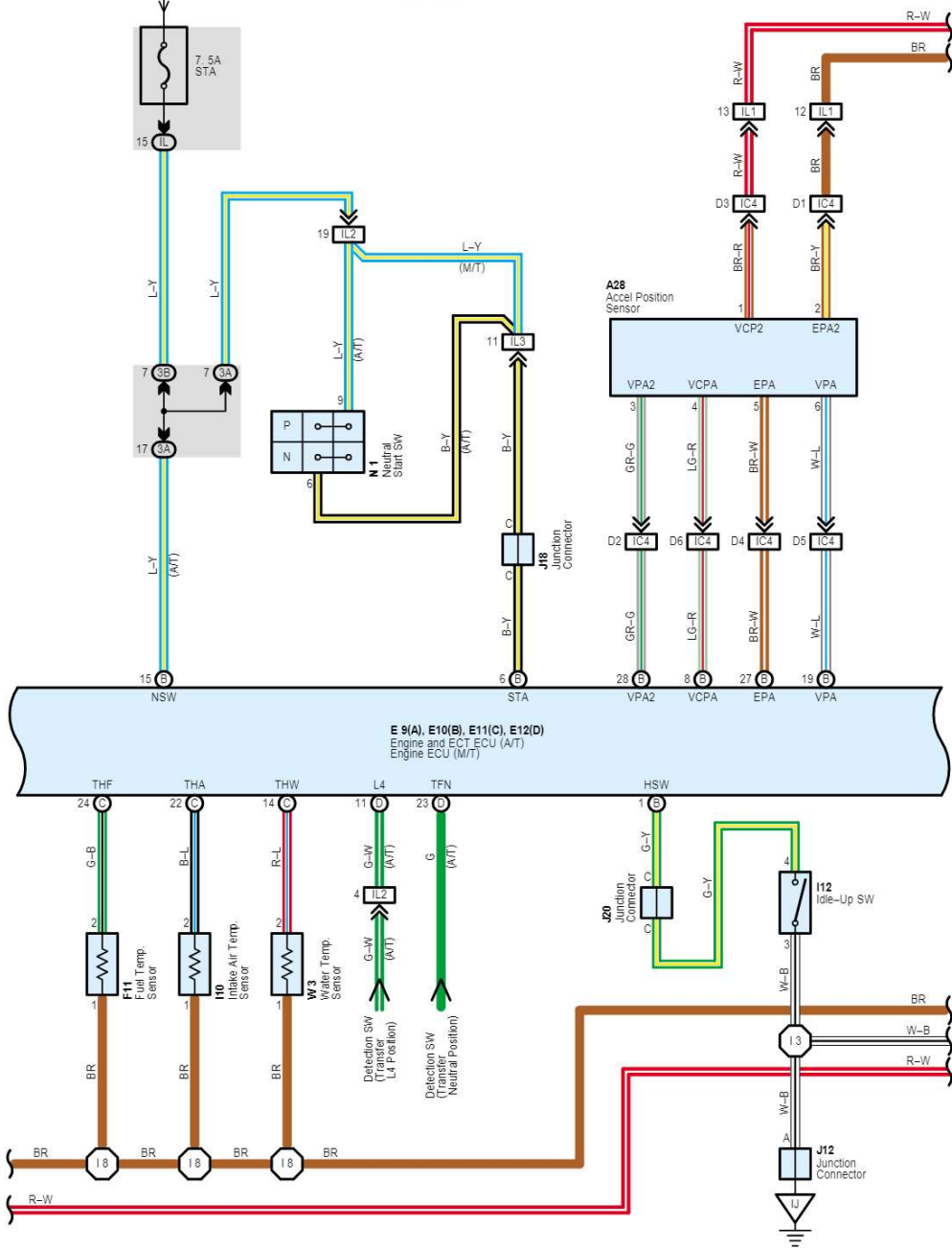




# Engine Control (1KZ-TE)

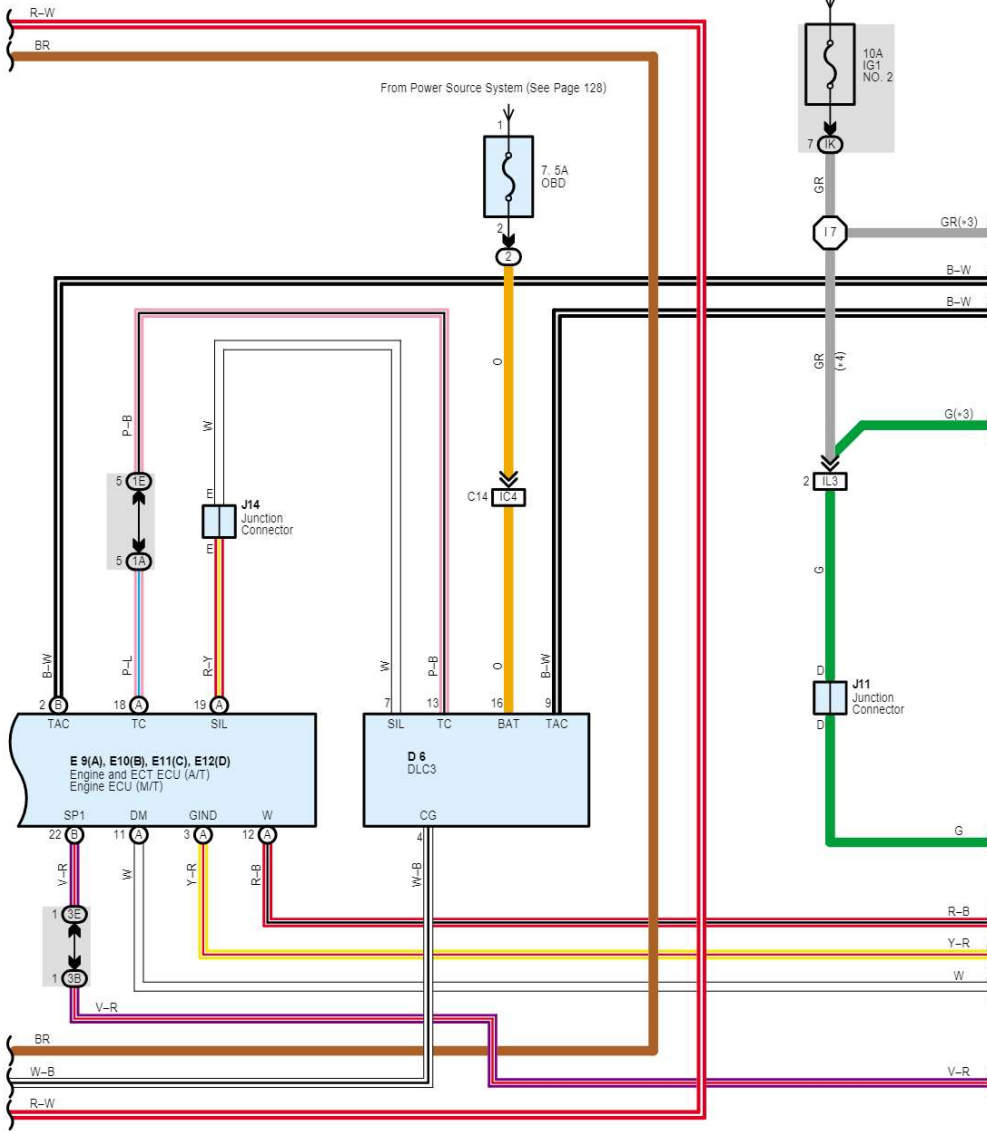
From Power Source System (See Page 128)



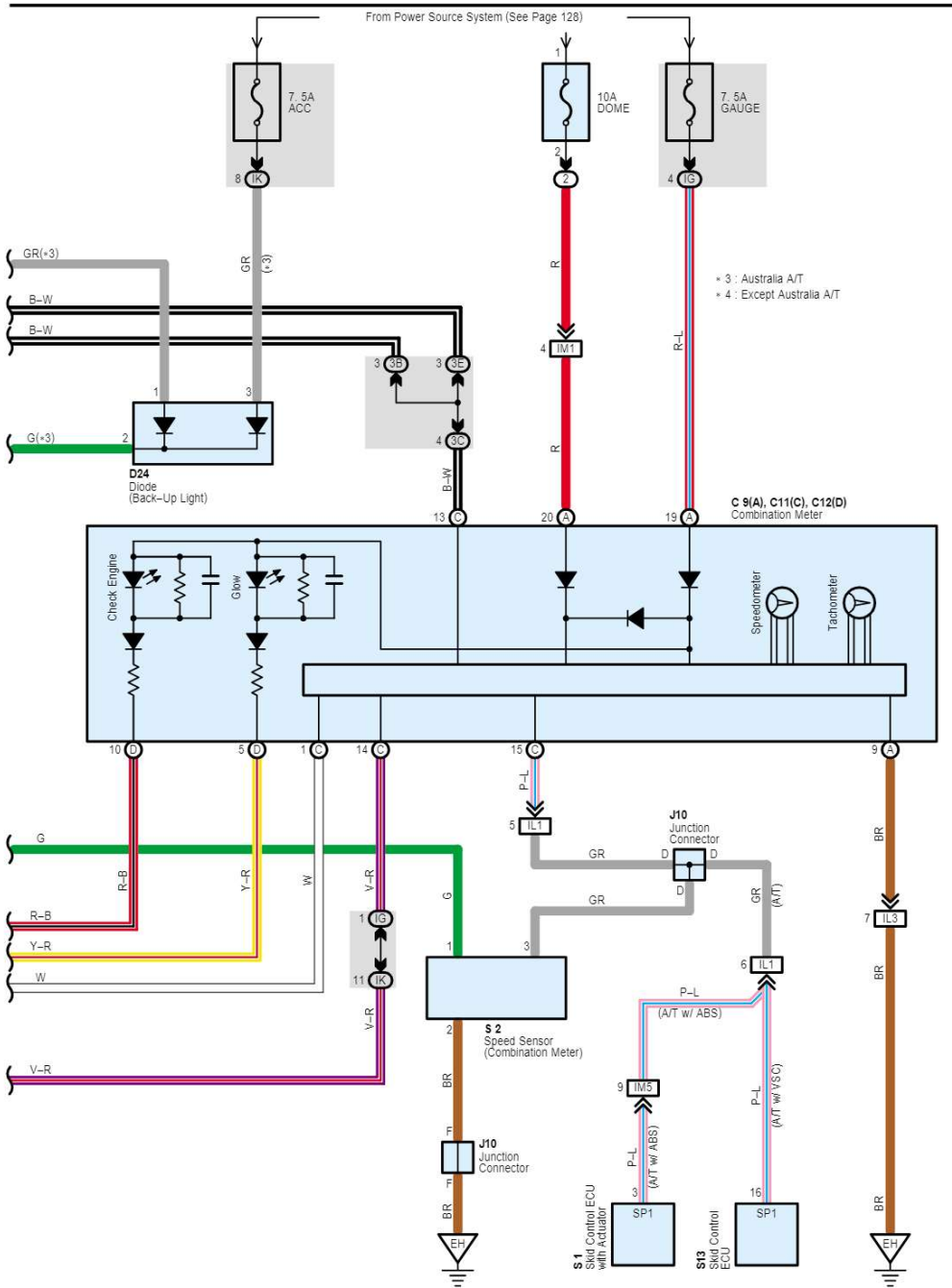


# Engine Control (1KZ-TE)

From Power Source System (See Page 128)







### System Outline

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

#### 1. Input Signals

##### (1) Engine coolant temp. signal system

The 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. Thus the engine coolant temp. is input in the form of a control signal to TERMINAL THW of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (2) Intake air temp. signal system

The intake air temp. sensor is 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) RPM signal system

Crankshaft position and camshaft position are detected by the crankshaft position sensor and engine speed sensor. Crankshaft position is input as a control signal to TERMINAL TDC+ of the engine and ECT ECU (A/T), engine ECU (M/T), and RPM is input to TERMINAL NE+.

##### (4) Throttle signal system

The accelerator pedal position sensor detects the accelerator pedal opening angle, which is input as a control signal to TERMINALS VPA, VPA2 of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (5) Vehicle speed signal system

The speed sensor detects the vehicle speed and input a control signal to TERMINAL SP1 of the engine and ECT ECU (A/T), engine ECU (M/T) via the combination meter.

##### (6) A/C SW signal system

The operating voltage of the A/C control assembly (Automatic A/C), A/C amplifier (Manual A/C) is detected and input in the form of a control signal to TERMINAL AC1 of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (7) Battery signal system

Voltage is constantly applied to TERMINAL BATT of the engine and ECT ECU (A/T), engine ECU (M/T). When the ignition SW is turned on, the voltage for engine and ECT ECU (A/T), engine ECU (M/T) start up power supply is applied through the EFI relay, to TERMINAL +B of the engine and ECT ECU (A/T), engine ECU (M/T). The current from the IGN fuse flows to TERMINAL IGSW of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (8) STA signal system

To confirm that the engine is cranking, the voltage applied to the starter motor during cranking is detected and is input as a control signal to TERMINAL STA of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (9) Fuel temp. signal system

The fuel temp. sensor is detects the fuel temp., which is input as a control signal to TERMINAL THF of the engine and ECT ECU (A/T), engine ECU (M/T).

##### (10) Intake air vacuum pressure signal system

Intake air vacuum pressure is detected by the turbo pressure sensor and is input as a control signal to TERMINAL PIM of the engine and ECT ECU (A/T), engine ECU (M/T).

## 2. Control System

- \* Fuel injection volume control system

The fuel injection volume control system monitors the engine conditions through the signals (Input signals (1, 2, 3, 4, 5, 9, 10) ) input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). Engine and ECT ECU (A/T), engine ECU (M/T) has basic data and the program (Memorized in the engine and ECT ECU (A/T), engine ECU (M/T) ) and decides the most appropriate fuel injection volume, and outputs the current to the TERMINAL SPV+ of the engine and ECT ECU (A/T), engine ECU (M/T), causing the spill control valve to operate it.

- \* Fuel injection timing control system

The fuel injection timing control system monitors the engine conditions through the signals (Input signals (1, 3, 4, 5, 10) ) input from each sensors to the engine and ECT ECU (A/T), engine ECU (M/T). Engine and ECT ECU (A/T), engine ECU (M/T) has basic data and the program (Memorized in the engine and ECT ECU (A/T), engine ECU (M/T) ) and decides the most appropriate fuel injection timing, and outputs the current to the TERMINAL TCV of the engine and ECT ECU (A/T), engine ECU (M/T), causing the timing control valve to operate it.

- \* GLOW relay control system

When the engine starts, the GLOW relay is controlled in response to engine coolant temp. At that time, the engine and ECT ECU (A/T), engine ECU (M/T) receives the signals (Input signals (1, 3, 8) ), and the current is output to the TERMINALS SREL and GIND.

As a result, the engine and ECT ECU (A/T), engine ECU (M/T) controls the GLOW relay and makes the glow indicator light come on.

- \* EGR control system

The EGR control system detects the signals from each sensors (Input signals (1, 3, 4, 10) ), then the current is output to the TERMINAL EGR to control the VRV (EGR).

- \* A/C cut control system

When the vehicle suddenly accelerates from low engine speed, this system cuts off air conditioner operation for a fixed period of time in response to the vehicle speed, throttle valve opening angle and intake manifold pressure in order to maintain acceleration performance.

The engine and ECT ECU (A/T), engine ECU (M/T) receives input signals (3, 4, 5, 6 and 10), and outputs signals to TERMINAL ACT.

## 3. Diagnosis System

With the diagnosis system, when there is a malfunctioning in the engine and ECT ECU (A/T), engine ECU (M/T) signal system, the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the check engine warning light.

## 4. Fail-Safe System

When a malfunction occurs 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.

## Engine Control (1KZ-TE)

### Service Hints

#### EFI Relay

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

#### W3 Water Temp. Sensor

1-2 : Approx. 15.0 k $\Omega$  (-20°C, -4°F)

: Approx. 2.45 k $\Omega$  (20°C, 68°F)

: Approx. 0.32 k $\Omega$  (80°C, 176°F)

: Approx. 0.14 k $\Omega$  (110°C, 230°F)

#### E9 (A), E10 (B), E11 (C), E12 (D) Engine and ECT ECU (A/T), Engine ECU (M/T)

BATT-E1 : Always 9.0-14.0 volts

IGSW-E1 : 9.0-14.0 volts with the ignition SW at ON position

+B-E1 : 9.0-14.0 volts with the ignition SW at ON position

VC-E1 : 4.5-5.5 volts with the ignition SW at ON position

VPA-E1 : 0.3-0.9 volts with the ignition SW on and throttle valve fully closed

: 3.2-4.8 volts with the ignition SW on and throttle valve fully open

VPA2-E1 : 1.8-2.7 volts with the ignition SW on and throttle valve fully closed

: 4.7-5.1 volts with the ignition SW on and throttle valve fully open

THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)

THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)

STA-E1 : 6.0 volts or more with the engine cranking

W-E1 : 9.0-14.0 volts with the idling and check engine warning light off

SP1-E1 : Pulse generation with the vehicle moving

STP-E1 : 7.5-14.0 volts with the brake pedal depressed

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A20	D	48 (LHD)	G1	44 (*4)	J22	70 (RHD)
		68 (RHD)		64 (*13)	M1	45 (*4)
A21	A	48 (LHD)	I5	45 (*4)		N1
		68 (RHD)		65 (*13)	45 (*4)	
A22	B	48 (LHD)	I10	45 (*4)	S1	65 (*13)
		68 (RHD)		65 (*13)		45 (*4)
A28		48 (LHD)	I12	50 (LHD)	S2	65 (*13)
		68 (RHD)		70 (RHD)		45 (*4)
C3		44 (*4)	J2	A	S12	65 (*13)
		64 (*13)				45 (*4)
C9	A	49 (LHD)	J3	B	S13	71 (RHD)
		69 (RHD)				65 (*13)
C11	C	49 (LHD)	J5		S18	71 (RHD)
		69 (RHD)				45 (*4)
C12	D	49 (LHD)	J7		T2	71 (RHD)
		69 (RHD)				50 (LHD)
D6		49 (LHD)	J9		T3	65 (*13)
		69 (RHD)				70 (RHD)
D24		69 (RHD)	J10		T5	65 (*13)
						50 (LHD)
E2		44 (*4)	J11		T7	65 (*13)
		64 (*13)				70 (RHD)
E7		44 (*4)	J12		T9	65 (*13)
		64 (*13)				50 (LHD)
E9	A	49 (LHD)	J14		V5	71 (RHD)
		69 (RHD)				50 (LHD)
E10	B	49 (LHD)	J17		V8	65 (*13)
		69 (RHD)				70 (RHD)
E11	C	49 (LHD)	J18		W3	65 (*13)
		69 (RHD)				50 (LHD)
E12	D	49 (LHD)	J20			45 (*4)
		69 (RHD)				70 (RHD)
F11		44 (*4)	J22			
		64 (*13)				50 (LHD)

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Engine Control (1KZ-TE)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
IL	27 (LHD)	
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	84 (*4)	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
	108 (*13)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

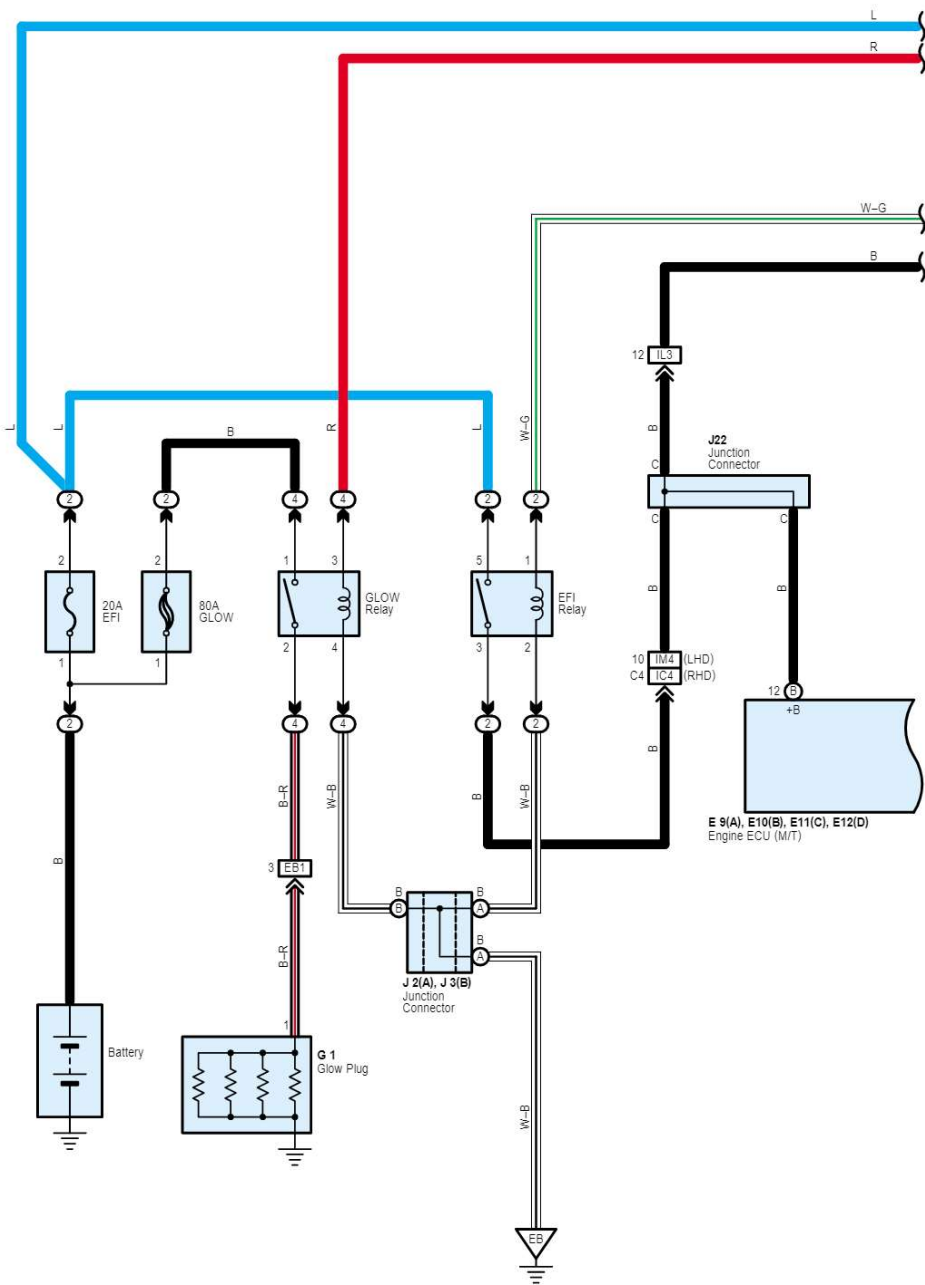
▽ : Ground Points

Code	See Page	Ground Points Location
EB	84 (*4)	Front Left Fender
	108 (*13)	
EH	84 (*4)	Rear Part of Cylinder Block
	108 (*13)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel

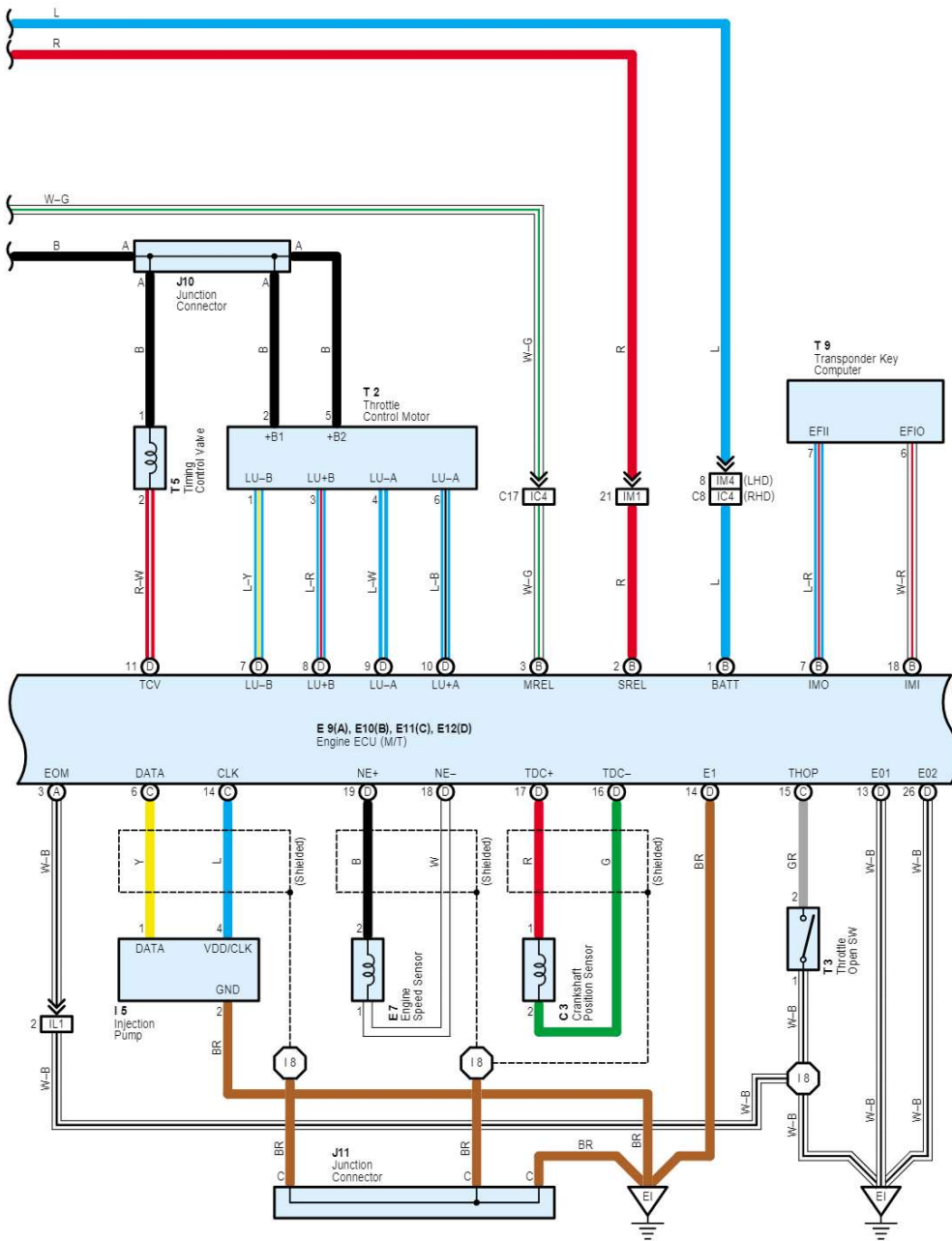
⬡ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
13	90 (LHD)	Instrument Panel Wire	17	114 (RHD)	Instrument Panel Wire
	114 (RHD)		18	90 (LHD)	Engine Wire
17	90 (LHD)	114 (RHD)			

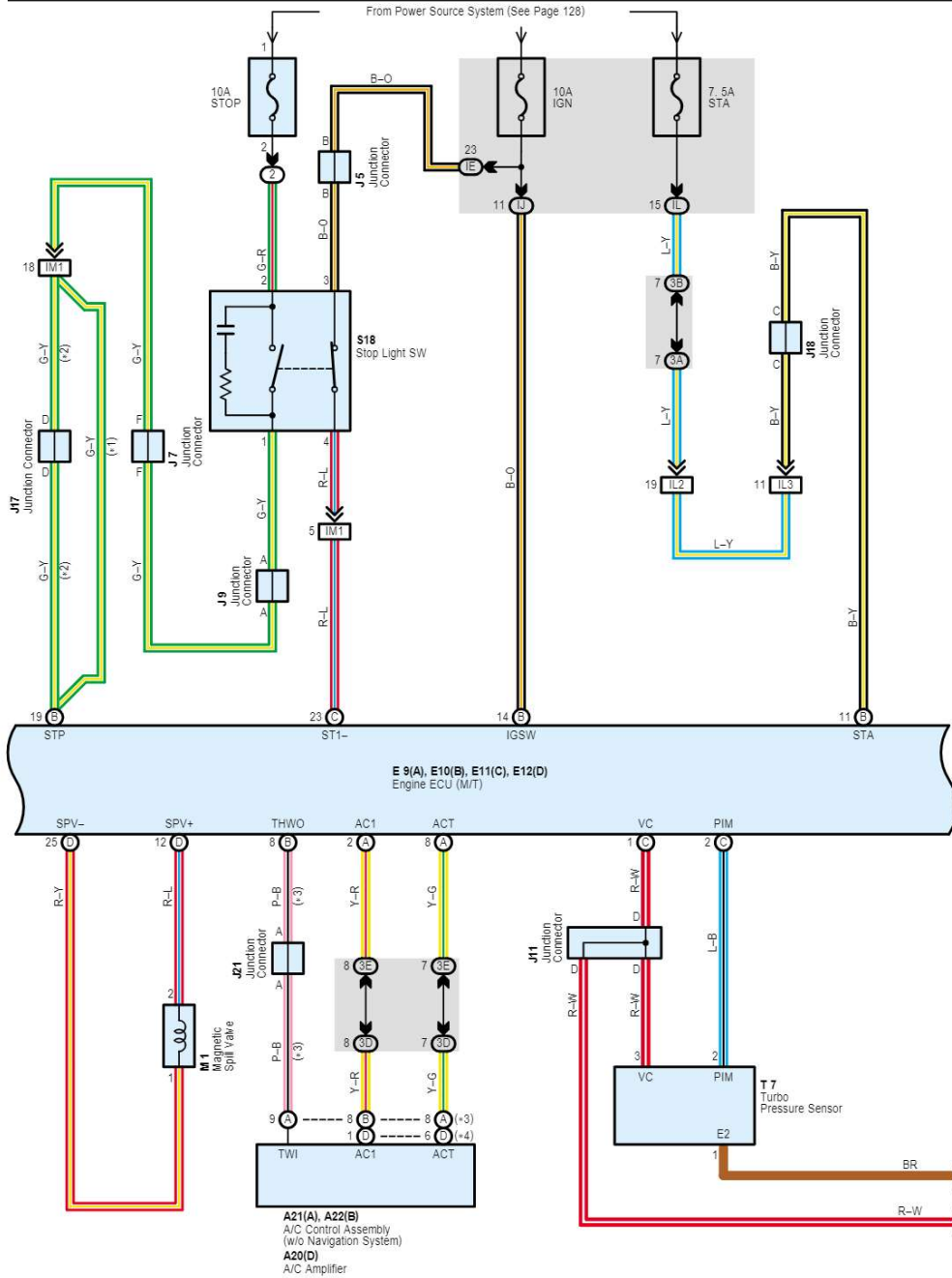
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

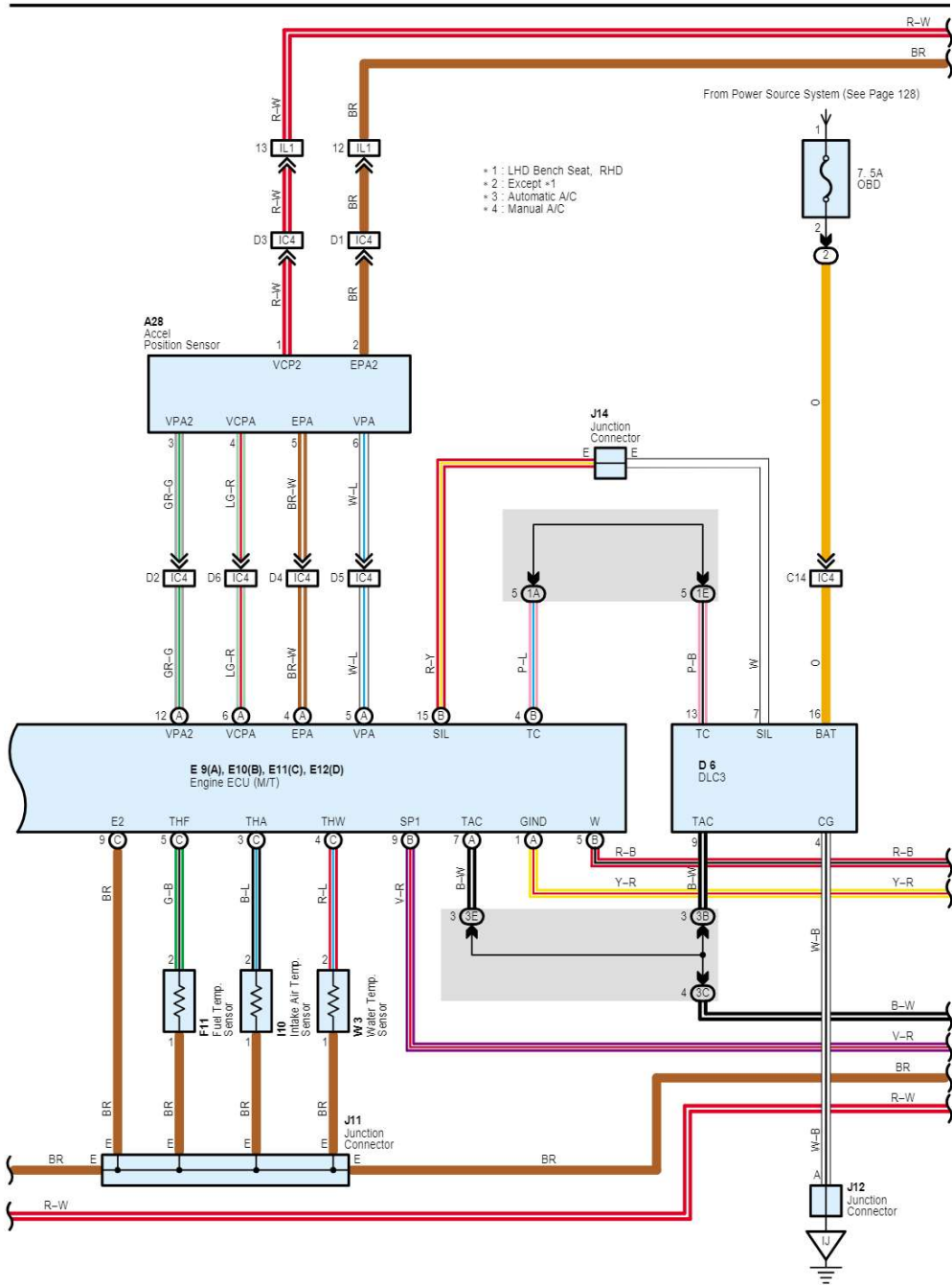




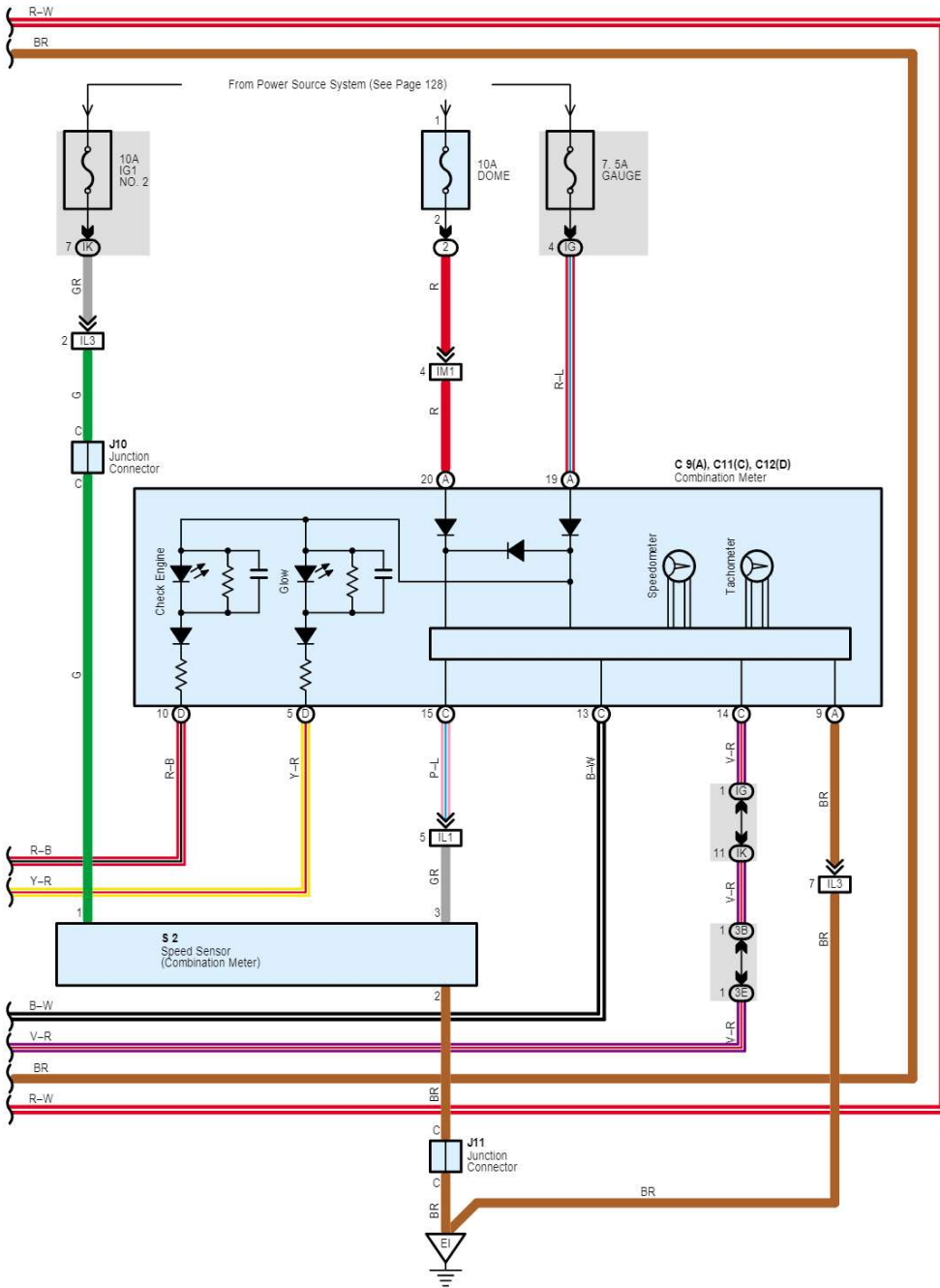


# Engine Control (5L-E)





# Engine Control (5L-E)



## System Outline

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

### 1. Input Signals

- (1) Engine coolant temp. signal system  
The water temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance which varies according to the water temp. Thus the water temp. is input in the form of a control signal to TERMINAL THW of the engine ECU.
- (2) Intake air temp. signal system  
The intake air temp. sensor is detects the intake air temp., which is input as a control signal to TERMINAL THA of the engine ECU.
- (3) RPM signal system  
Crankshaft position and camshaft position are detected by the crankshaft position sensor and engine speed sensor. Crankshaft position is input as a control signal to TERMINAL TDC+ of the engine ECU, and RPM is input to TERMINAL NE+.
- (4) Throttle signal system  
The accelerator pedal position sensor detects the accelerator pedal opening angle, which is input as a control signal to TERMINALS VPA, VPA2 of the engine ECU.
- (5) Vehicle speed signal system  
The speed sensor detects the vehicle speed and input a control signal to TERMINAL SP1 of the engine ECU via the combination meter.
- (6) A/C SW signal system  
The operating voltage of the A/C control assembly (Automatic A/C), A/C amplifier (Manual A/C) is detected and input in the form of a control signal to TERMINAL AC1 of the engine ECU.
- (7) Battery signal system  
Voltage is constantly applied to TERMINAL BATT of the engine ECU. When the ignition SW is turned to on, voltage for engine ECU operation is applied via the EFI relay to TERMINAL +B of the engine ECU.
- (8) STA signal system  
To confirm that the engine is cranking, the voltage applied to the starter motor during cranking is detected and is input as a control signal to TERMINAL STA of the engine ECU.
- (9) Fuel temp. signal system  
The fuel temp. sensor is detects the fuel temp., which is input as a control signal to TERMINAL THF of the engine ECU.
- (10) Intake air vacuum pressure signal system  
Intake air vacuum pressure is detected by the turbo pressure sensor and is input as a control signal to TERMINAL PIM of the engine ECU.

### 2. Control System

#### \* Fuel injection volume control system

The fuel injection volume control system monitors the engine conditions through the signals (Input signals (1, 2, 3, 4, 5, 9, 10) ) input from each sensors to the engine ECU. Engine ECU has basic data and the program (Memorized in the engine ECU) and decides the most appropriate fuel injection volume, and outputs the current to the TERMINAL SPV+ of the engine ECU, causing the spill control valve to operate it.

#### \* Fuel injection timing control system

The fuel injection timing control system monitors the engine conditions through the signals (Input signals (1, 3, 4, 5, 10) ) input from each sensors to the engine ECU. Engine ECU has basic data and the program (Memorized in the engine ECU) and decides the most appropriate fuel injection timing, and outputs the current to the TERMINAL TCV of the engine ECU, causing the timing control valve to operate it.

#### \* GLOW relay control system

When the engine starts, the GLOW relay is controlled in response to engine coolant temp. At that time, the engine ECU receives the signals (Input signals (1, 3, 8) ), and the current is output to the TERMINALS SREL and GIND.

As a result, the engine ECU controls the GLOW relay and makes the glow indicator light come on.

#### \* A/C cut control system

When the vehicle suddenly accelerates from low engine speed, this system cuts off air conditioner operation for a fixed period of time in response to the vehicle speed, throttle valve opening angle and intake manifold pressure in order to maintain acceleration performance.

The engine ECU receives input signals (3, 4, 5, 6 and 10), and outputs signals to TERMINAL ACT.

### 3. Diagnosis System

With the diagnosis system, when there is a malfunctioning in the engine ECU signal system, the malfunction system is recorded in the memory. The malfunctioning system can be found by reading the display (Code) of the check engine warning light.

### 4. Fail-Safe System

When a malfunction occurs 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 ECU memory or else stops the engine.

### Service Hints

#### EFI Relay

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

#### W3 Water Temp. Sensor

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

#### E9 (A), E10 (B), E11 (C), E12 (D) Engine ECU

BATT-E1 : Always 9.0-14.0 volts

IGSW-E1 : 9.0-14.0 volts with the ignition SW at ON position

+B-E1 : 9.0-14.0 volts with the ignition SW at ON position

VC-E1 : 4.5-5.5 volts with the ignition SW at ON position

VPA-E1 : 0.3-0.9 volts with the ignition SW on and throttle valve fully closed

: 3.2-4.8 volts with the ignition SW on and throttle valve fully open

VPA2-E1 : 1.8-2.7 volts with the ignition SW on and throttle valve fully closed

: 4.7-5.1 volts with the ignition SW on and throttle valve fully open

THA-E1 : 0.5-3.4 volts with the idling, intake air temp. 0°C (32°F) -80°C (176°F)

THW-E1 : 0.2-1.0 volts with the idling, engine coolant temp. 60°C (140°F) -120°C (248°F)

STA-E1 : 6.0 volts or more with the engine cranking

W-E1 : 9.0-14.0 volts with the idling and engine check warning light off

SP1-E1 : Pulse generation with the vehicle moving

STP-E1 : 7.5-14.0 volts with the brake pedal depressed

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A20	D	48 (LHD)	E12	D	69 (RHD)	J17	50 (LHD)	
		68 (RHD)			46 (*5)		70 (RHD)	
A21	A	48 (LHD)	F11		66 (*14)	J18	50 (LHD)	
		68 (RHD)			46 (*5)		70 (RHD)	
A22	B	48 (LHD)	G1		66 (*14)	J21	50 (LHD)	
		68 (RHD)			47 (*5)		70 (RHD)	
A28		48 (LHD)	I5		67 (*14)	J22	50 (LHD)	
		68 (RHD)			47 (*5)		70 (RHD)	
C3		46 (*5)	I10		67 (*14)	M1	47 (*5)	
		66 (*14)			47 (*5)		67 (*14)	
C9	A	49 (LHD)	J2	A	67 (*14)	S2	47 (*5)	
		69 (RHD)			47 (*5)		67 (*14)	
C11	C	49 (LHD)	J3	B	67 (*14)	S18	51 (LHD)	
		69 (RHD)			47 (*5)		71 (RHD)	
C12	D	49 (LHD)	J5		67 (*14)	T2	47 (*5)	
		69 (RHD)			50 (LHD)		67 (*14)	
D6		49 (LHD)	J7		70 (RHD)	T3	47 (*5)	
		69 (RHD)			50 (LHD)		67 (*14)	
E7		46 (*5)	J9		70 (RHD)	T5	47 (*5)	
		66 (*14)			50 (LHD)		67 (*14)	
E9	A	49 (LHD)	J10		70 (RHD)	T7	47 (*5)	
		69 (RHD)			50 (LHD)		67 (*14)	
E10	B	49 (LHD)	J11		70 (RHD)	T9	51 (LHD)	
		69 (RHD)			50 (LHD)		71 (RHD)	
E11	C	49 (LHD)	J12		70 (RHD)	W3	47 (*5)	
		69 (RHD)			50 (LHD)		67 (*14)	
E12	D	49 (LHD)	J14		70 (RHD)			

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Engine Control (5L-E)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EB1	86 (*5)	Engine Room Main Wire and Engine Wire (Rear Side of the Engine Room R/B)
	110 (*14)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	86 (*5)	Front Left Fender
	110 (*14)	
EI	86 (*5)	Rear Part of Cylinder Block
	110 (*14)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat



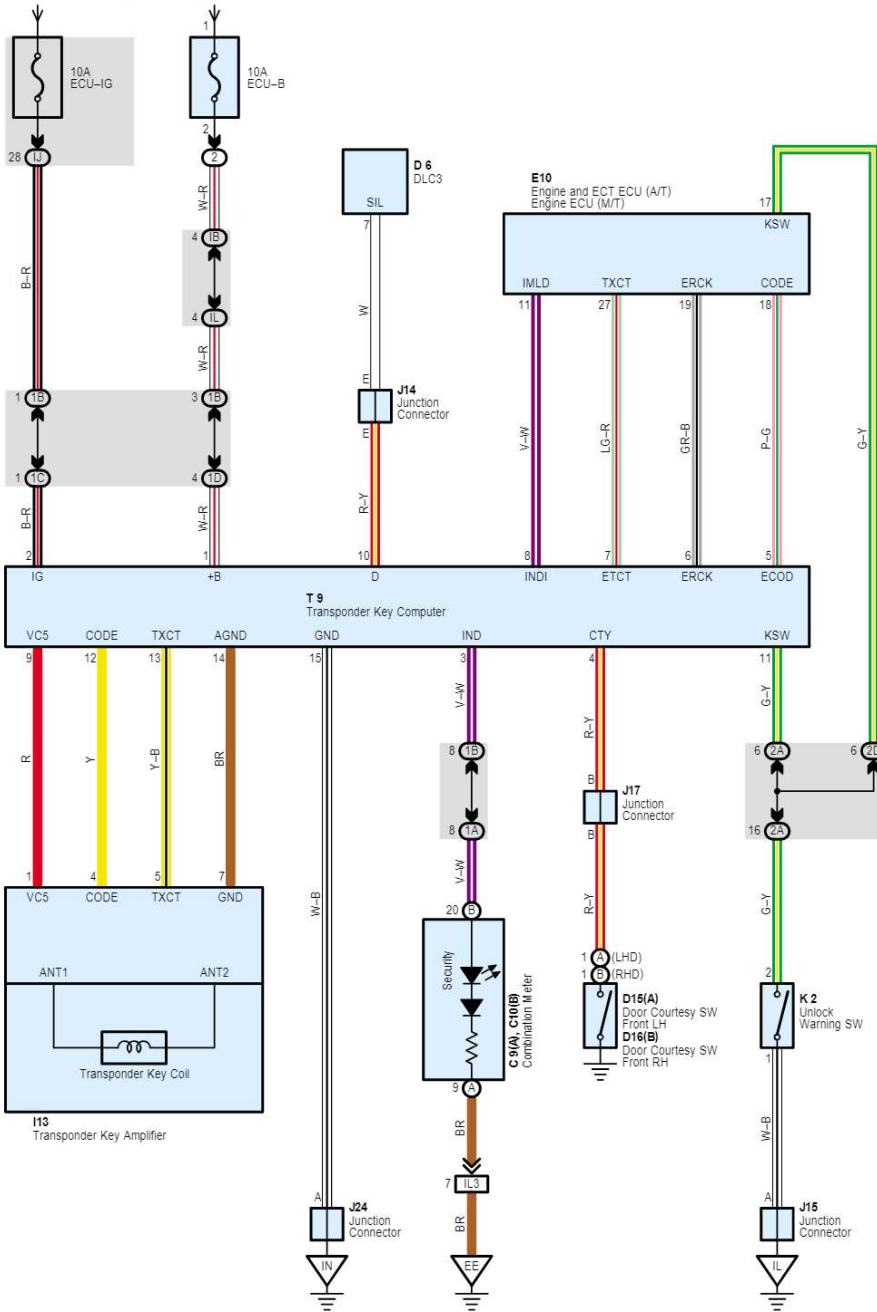
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 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
18	90 (LHD)	Engine Wire	18	114 (RHD)	Engine Wire

# Engine Immobiliser System (3RZ-FE Unleaded Gasoline)

From Power Source System (See Page 128)



**Service Hints**

**T9 Transponder Key Computer**

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

**○ : Parts Location**

Code		See Page	Code		See Page	Code		See Page
C9	A	49 (LHD)	D16	B	74 (*16)	J17	50 (LHD)	
		69 (RHD)					70 (RHD)	
C10	B	49 (LHD)	E10			J24	50 (LHD)	
		69 (RHD)					70 (RHD)	
D6		49 (LHD)	I13			K2	50 (LHD)	
		69 (RHD)					70 (RHD)	
D15	A	52 (*6)	J14			T9	51 (LHD)	
		54 (*7)					71 (RHD)	
D16	B	72 (*15)	J15				70 (RHD)	

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

## Engine Immobiliser System (3RZ-FE Unleaded Gasoline)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EE	80 (*2)	Intake Manifold
	104 (*11)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

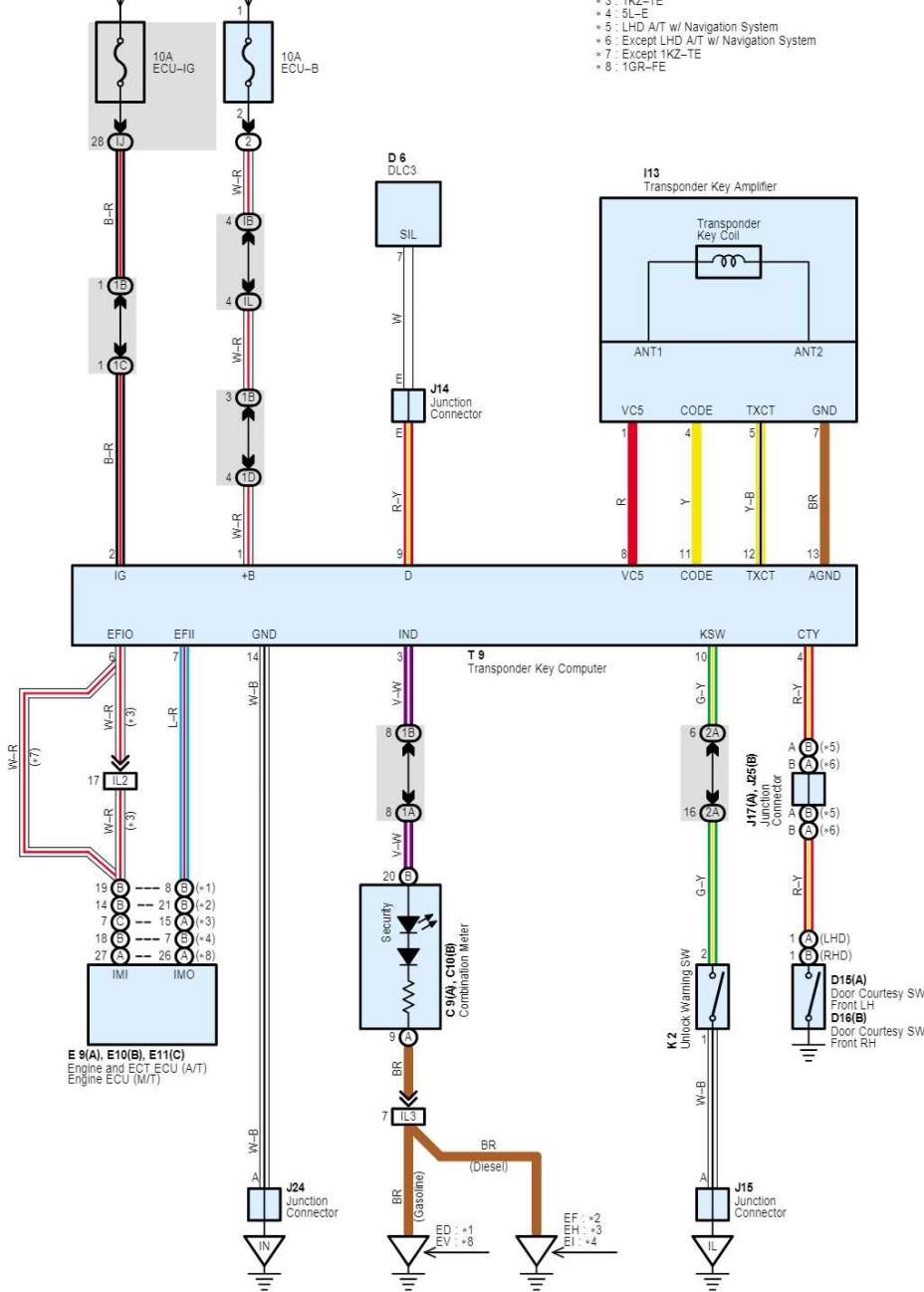
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



# Engine Immobiliser System (Except 3RZ-FE Unleaded Gasoline)

From Power Source System (See Page 128)

- \* 1 : 3RZ-FE Leaded Gasoline
- \* 2 : 1KD-FTV
- \* 3 : 1KZ-TE
- \* 4 : 5L-FE
- \* 5 : LHD A/T w/ Navigation System
- \* 6 : Except LHD A/T w/ Navigation System
- \* 7 : Except 1KZ-TE
- \* 8 : 1GR-FE



**Service Hints**

**T9 Transponder Key Computer**

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

**○ : Parts Location**

Code		See Page	Code		See Page	Code		See Page
C9	A	49 (LHD)	E9	A	69 (RHD)	J17	A	50 (LHD)
		69 (RHD)			49 (LHD)			70 (RHD)
C10	B	49 (LHD)	E10	B	69 (RHD)	J24		50 (LHD)
		69 (RHD)			49 (LHD)		70 (RHD)	
D6		49 (LHD)	E11	C	69 (RHD)	J25	B	50 (LHD)
		69 (RHD)			50 (LHD)			50 (LHD)
D15	A	52 (*6)	I13		70 (RHD)	K2		70 (RHD)
		54 (*7)		50 (LHD)	51 (LHD)			
D16	B	72 (*15)	J14		70 (RHD)	T9		71 (RHD)
		74 (*16)		50 (LHD)				
E9	A	49 (LHD)	J15		70 (RHD)			

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

## Engine Immobiliser System (Except 3RZ-FE Unleaded Gasoline)

### ▽ : Ground Points

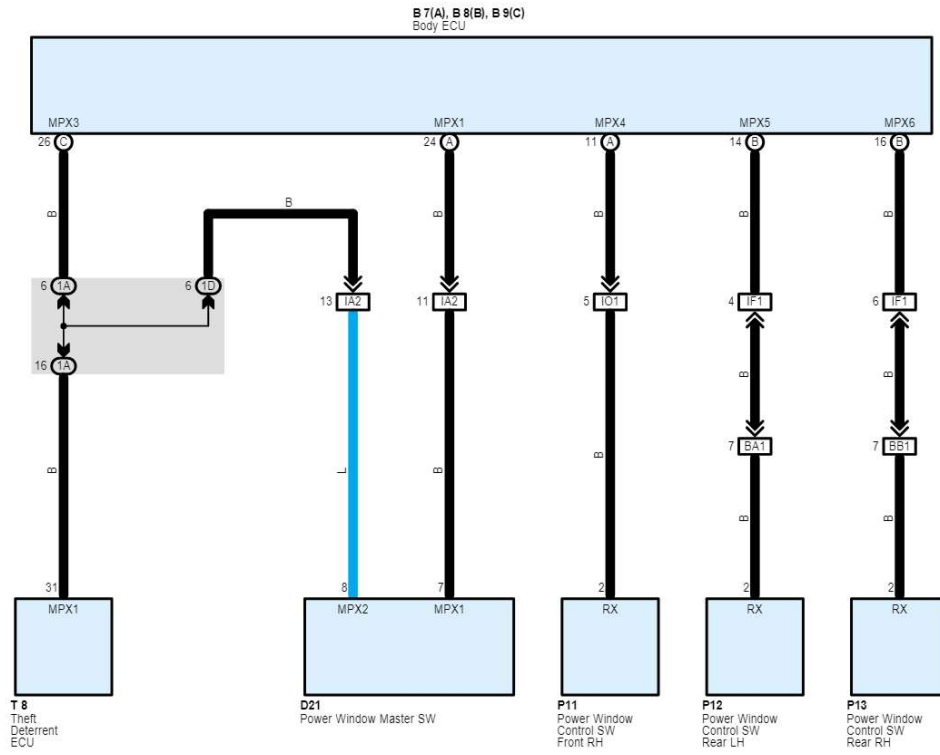
Code	See Page	Ground Points Location	
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
IL	88 (LHD)	Near the Right Side of Steering Column	
	112 (RHD)	Instrument Panel Brace RH	
IN	88 (LHD)	Right Kick Panel	
	112 (RHD)	Left Kick Panel	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat





# Multiplex Communication System (Communication Bus) (LHD)



**Multiplex Communication System Includes Following Systems**

- \* Door Lock Control
- \* Double Locking
- \* Headlight
- \* Interior Light
- \* Key Reminder
- \* Light Auto Turn Off
- \* Power Window
- \* Seat Belt Warning
- \* Theft Deterrent
- \* Wireless Door Lock Control

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
B7	A 48 (LHD)	D21	54 (*7)	P13	53 (*6)
B8	B 48 (LHD)	P11	53 (*6)	T8	51 (LHD)
B9	C 48 (LHD)		55 (*7)		
D21	52 (*6)	P12	53 (*6)		

**○ : Junction Block and Wire Harness Connector**

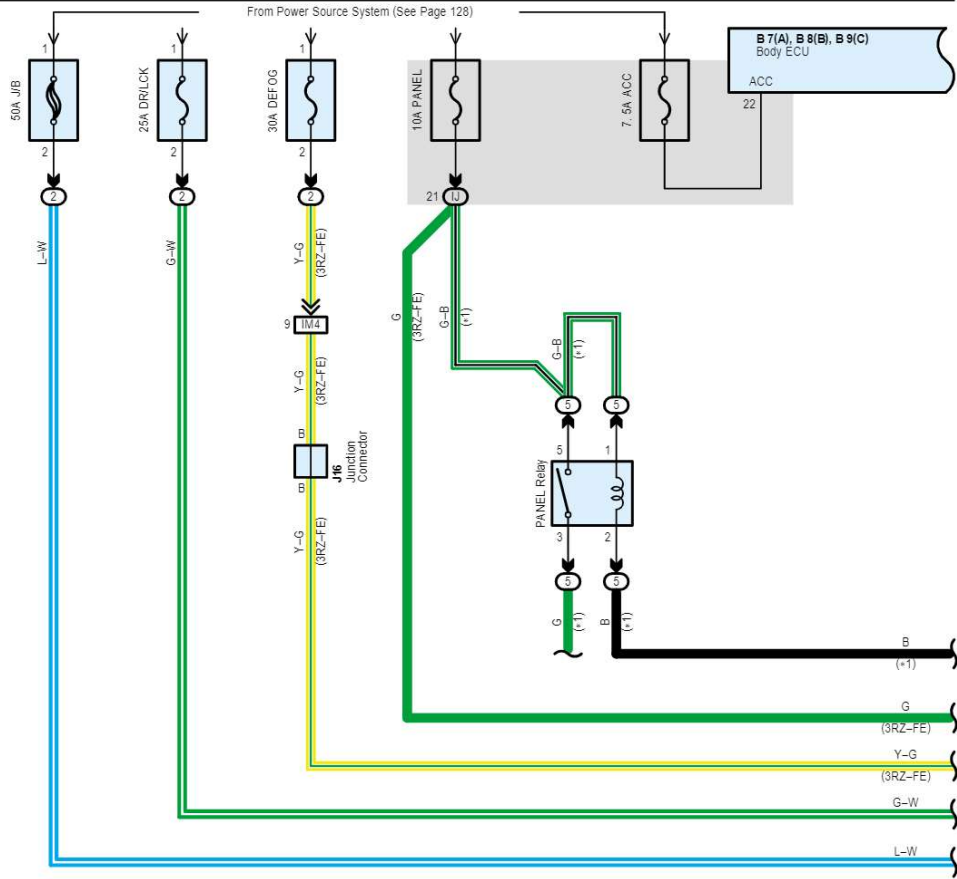
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1D		

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

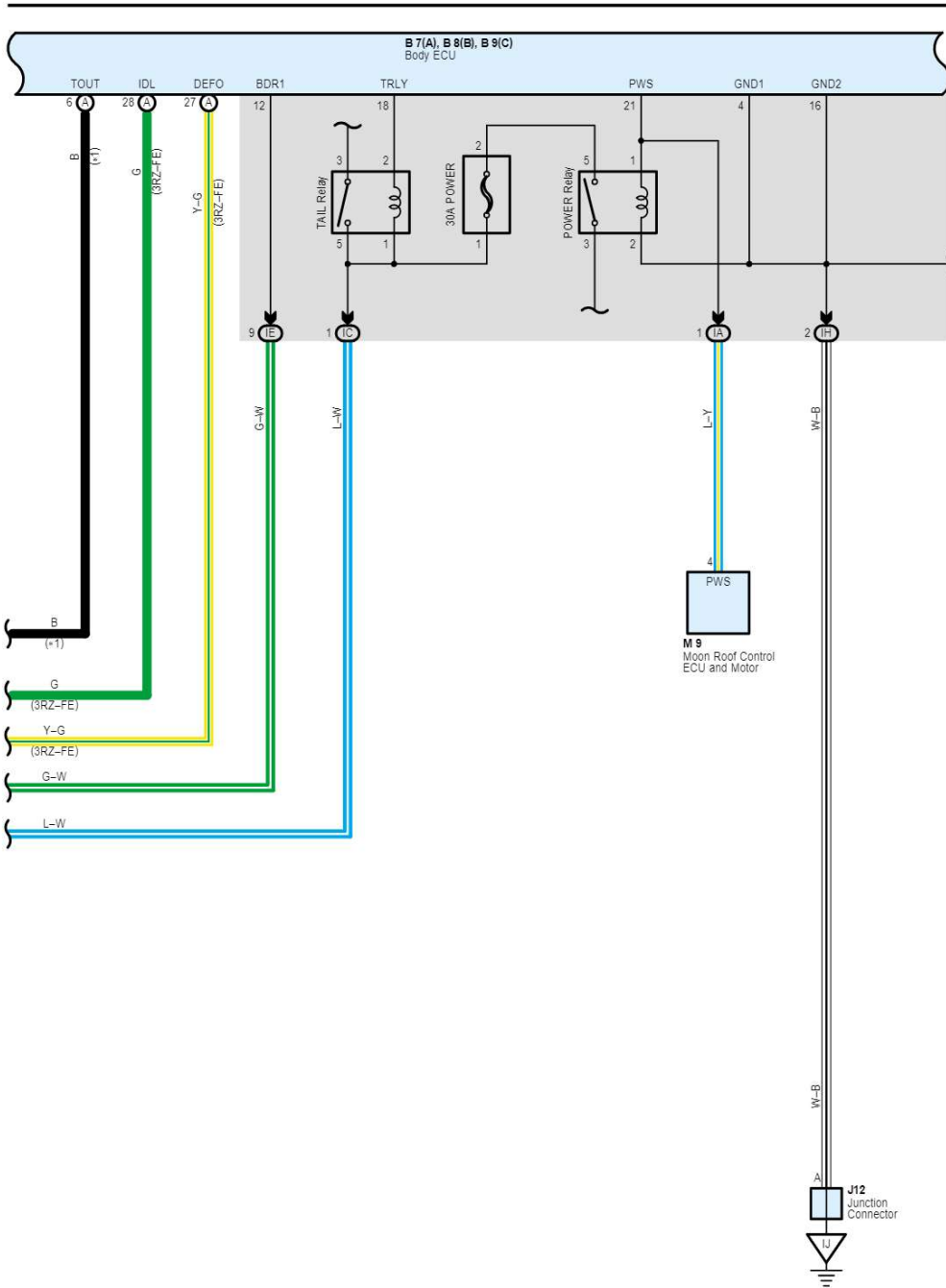
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

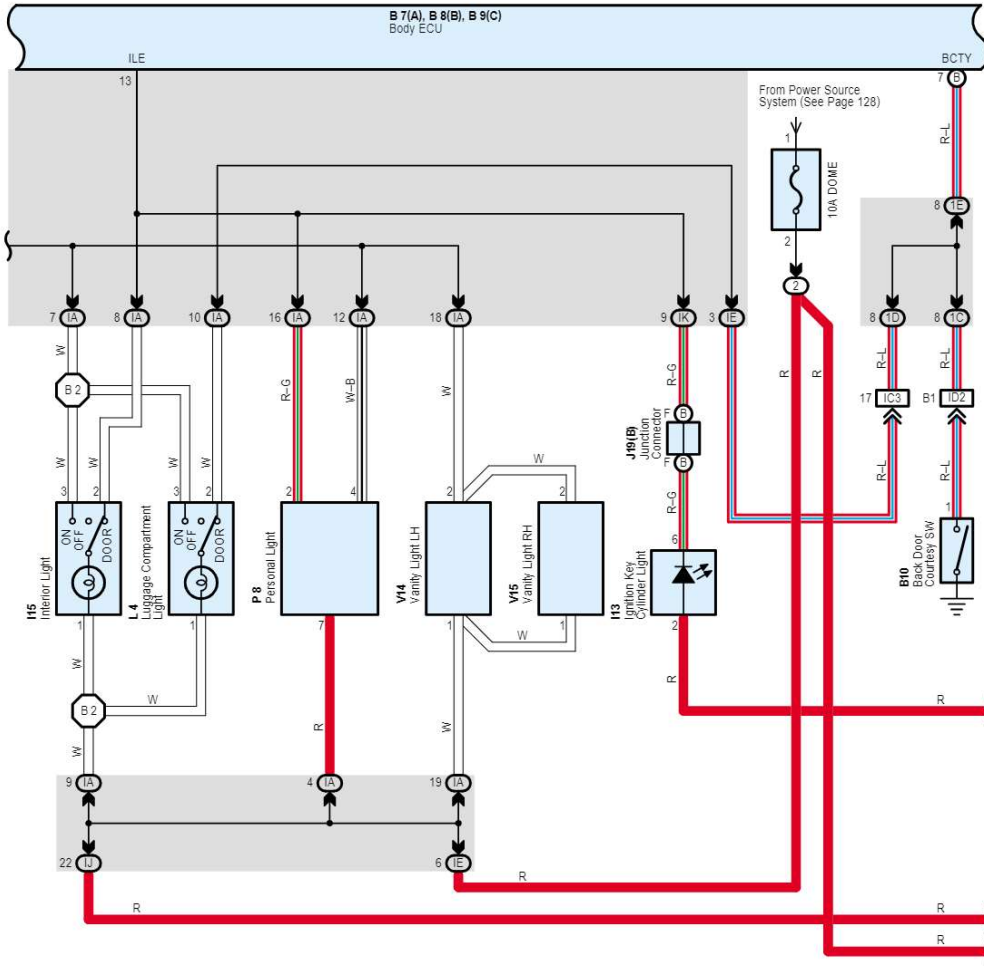
# Multiplex Communication System (LHD)

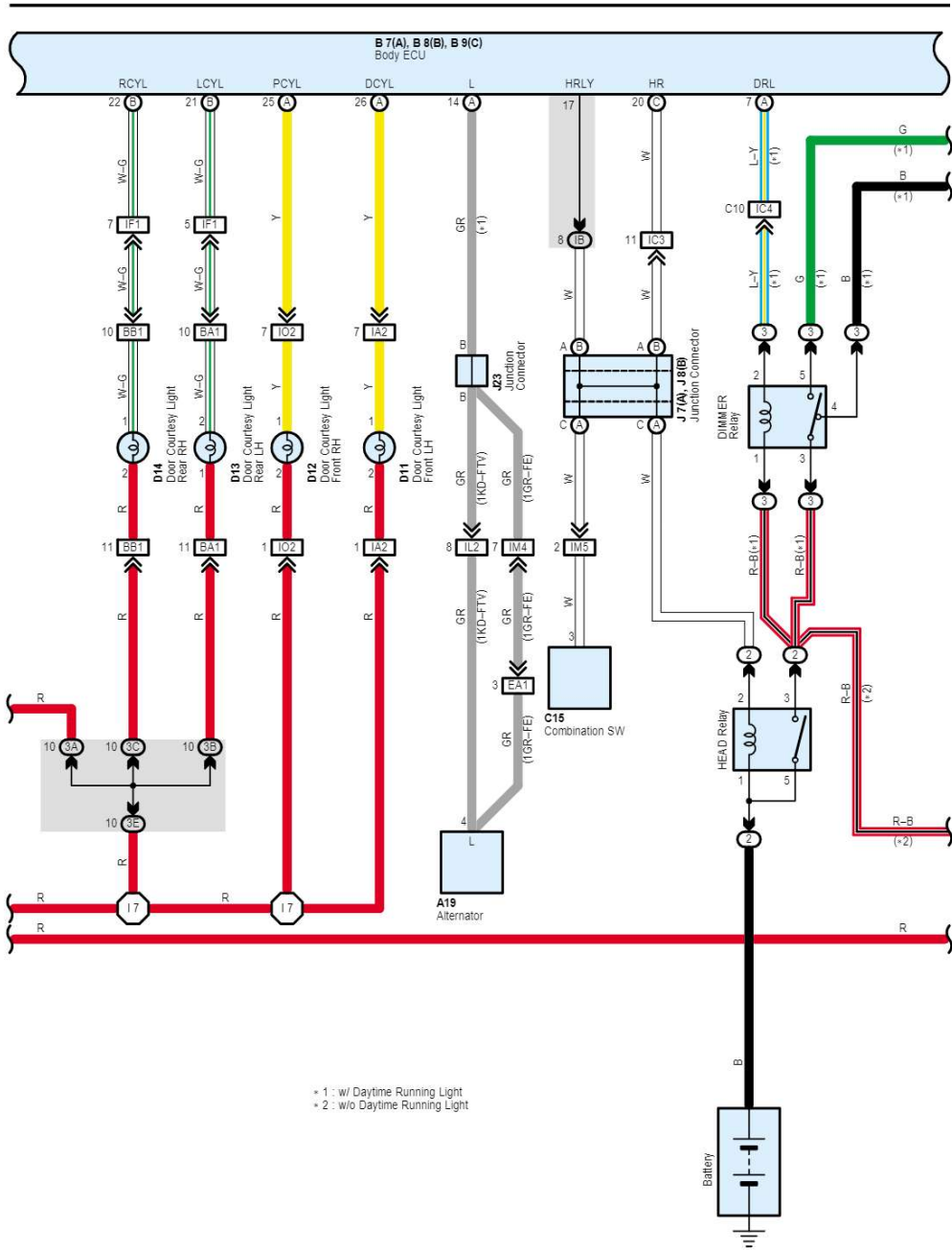


\* 1 : w/ Daytime Running Light



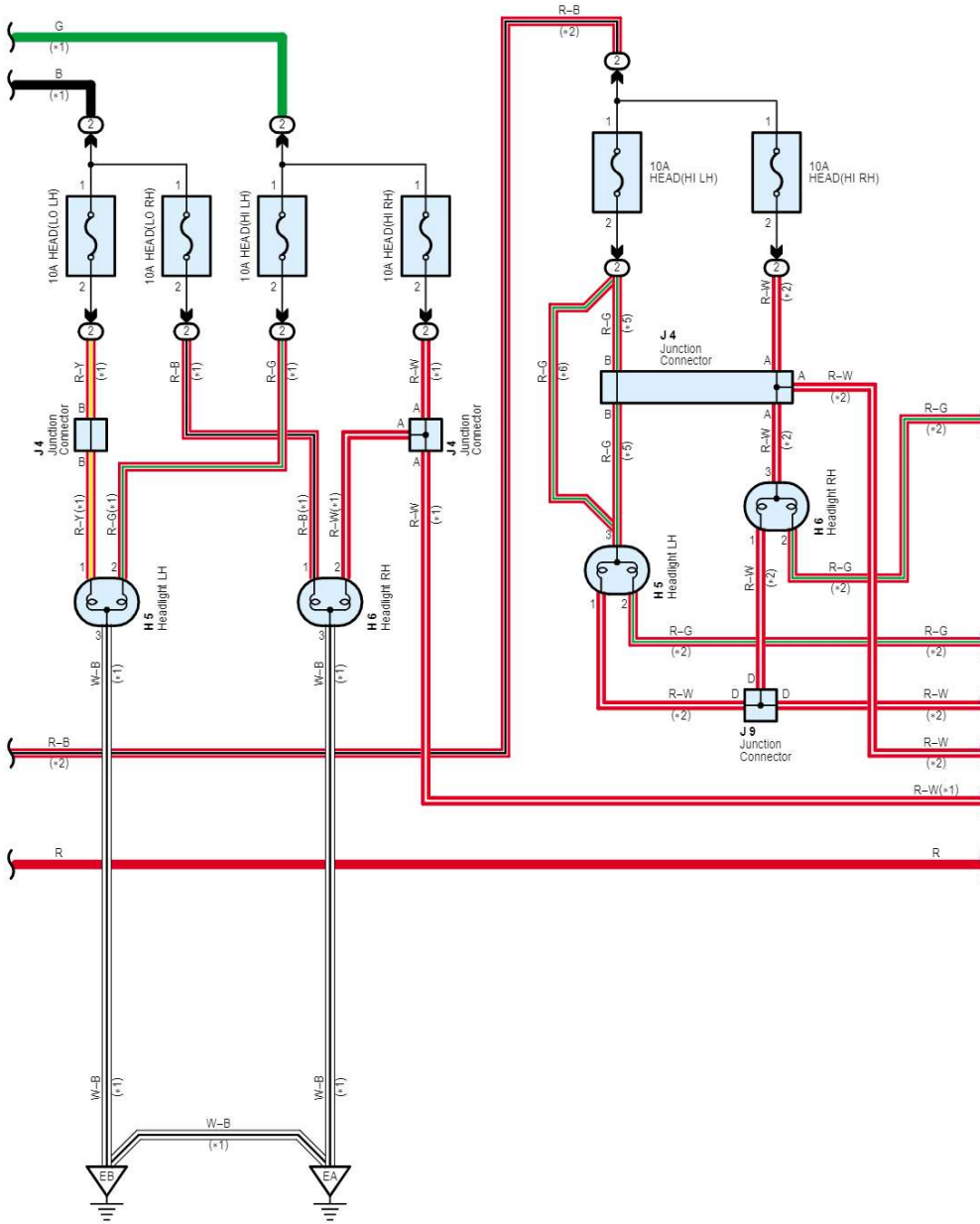
# Multiplex Communication System (LHD)





# Multiplex Communication System (LHD)

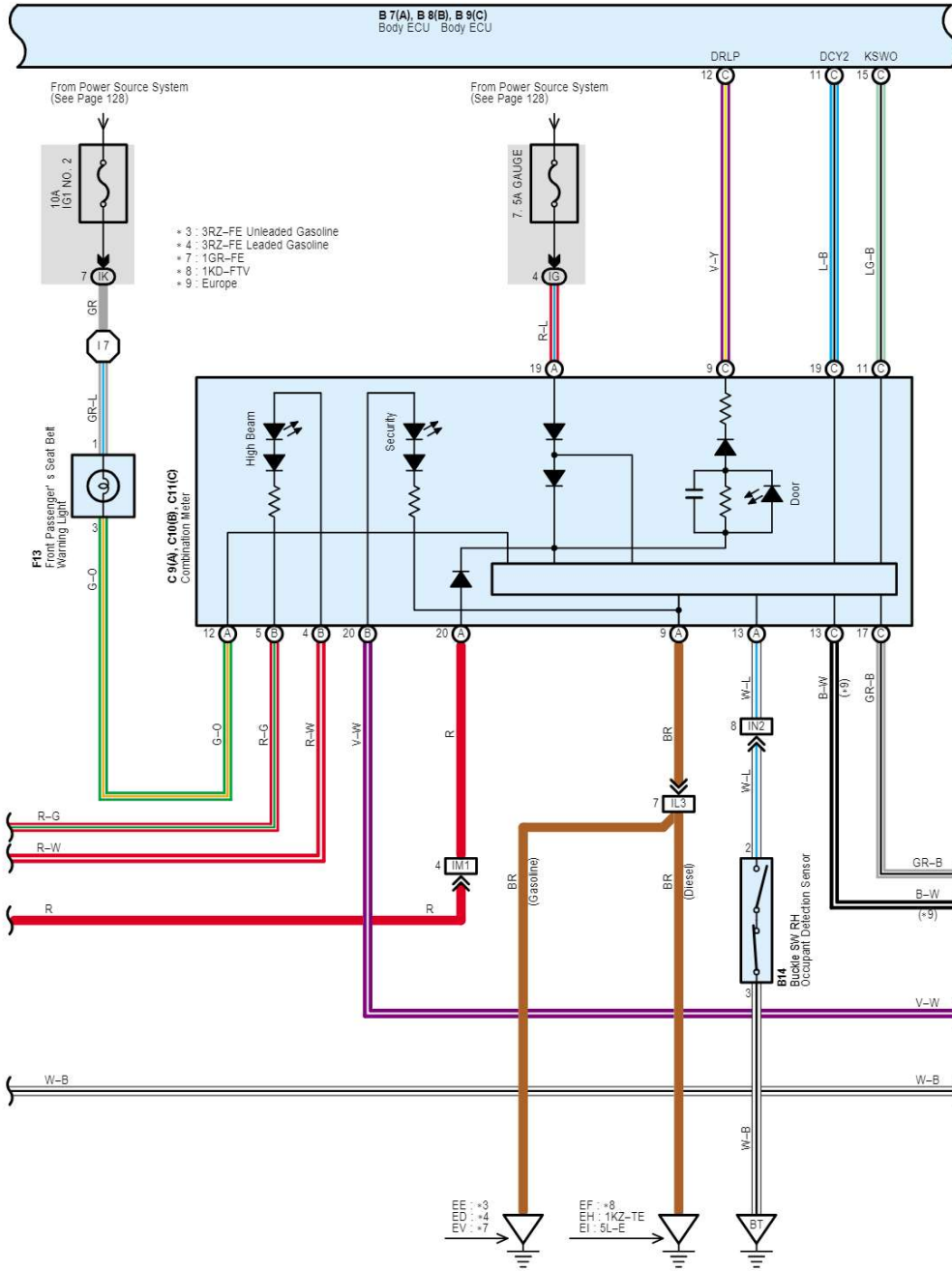
B 7(A), B 8(B), B 8(C)  
Body ECU

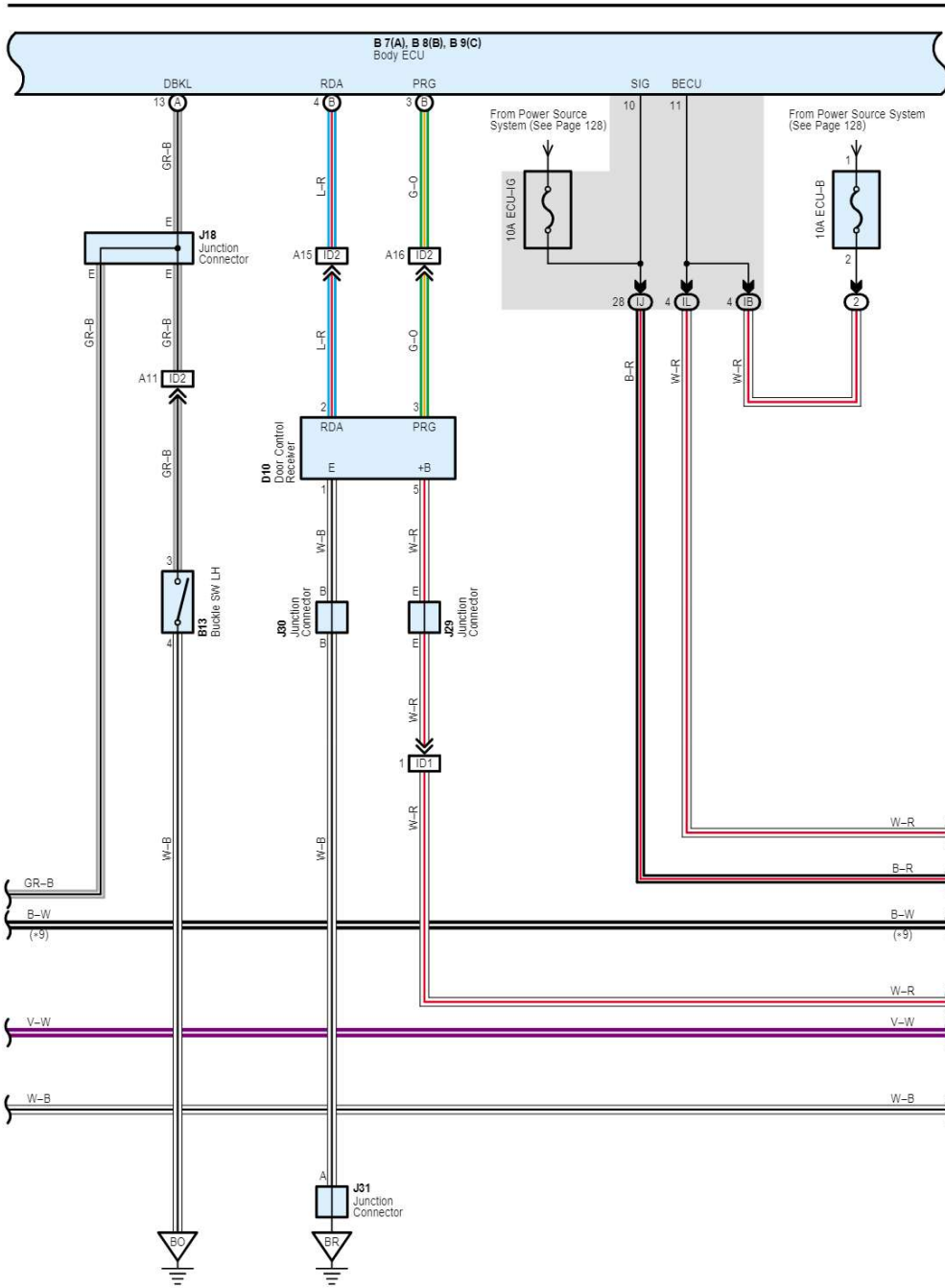






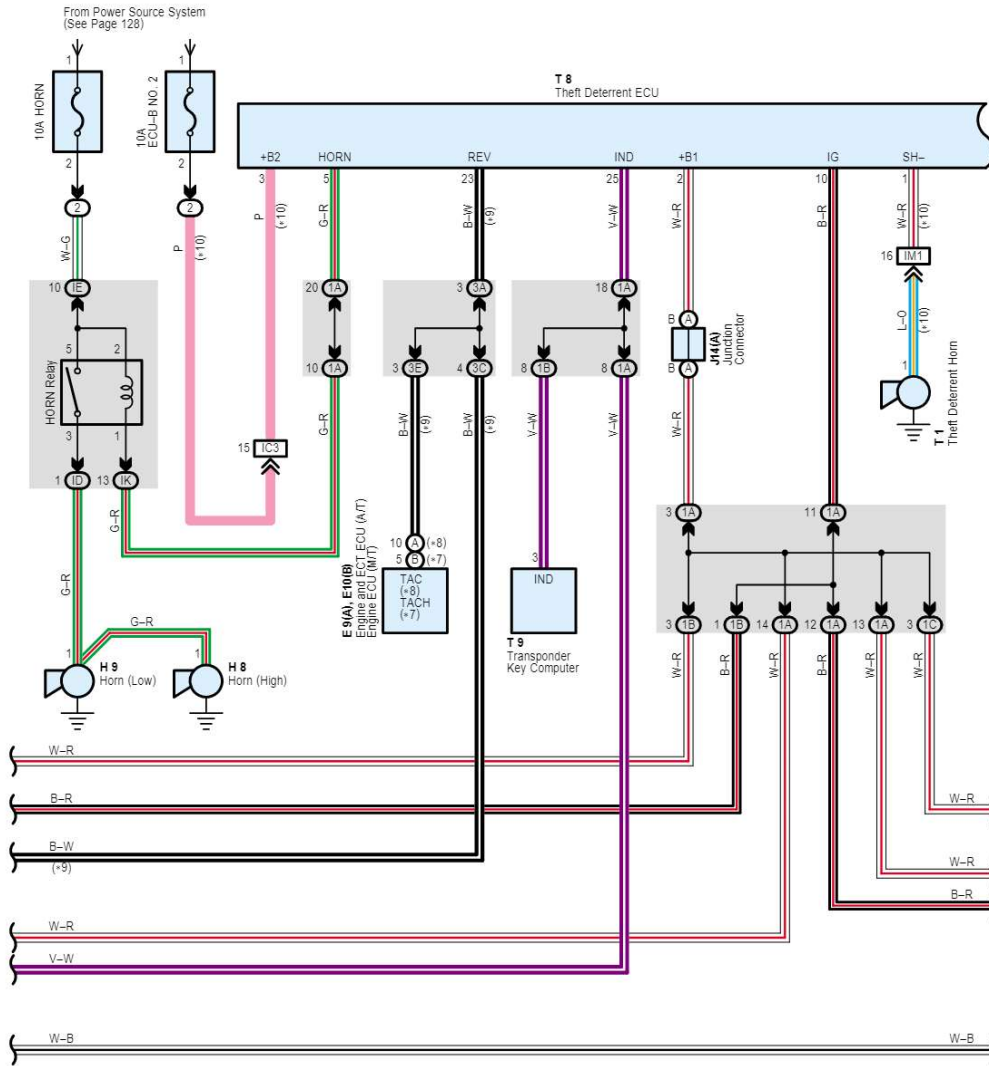
# Multiplex Communication System (LHD)



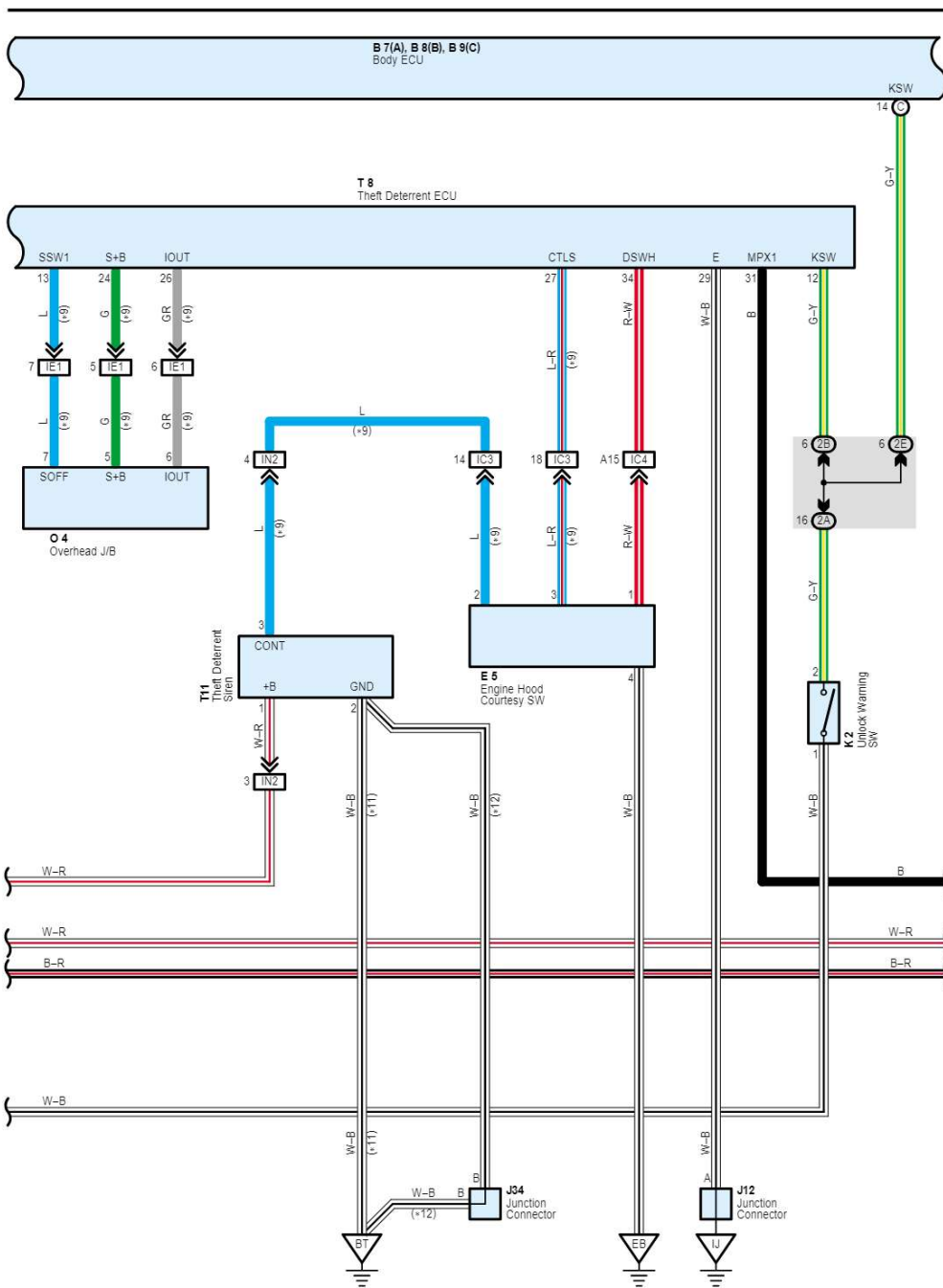


# Multiplex Communication System (LHD)

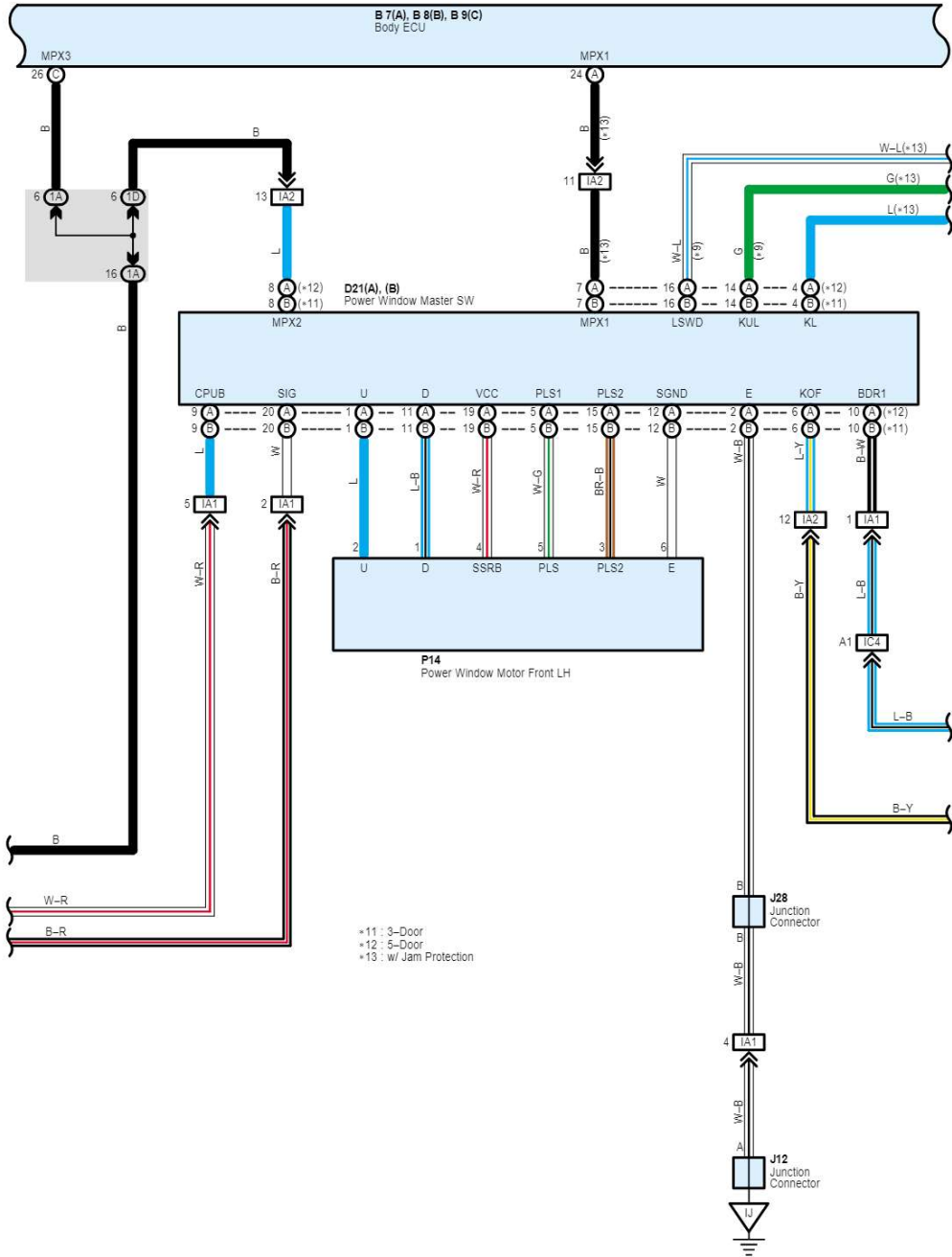
B 7(A), B 8(B), B 9(C)  
Body ECU

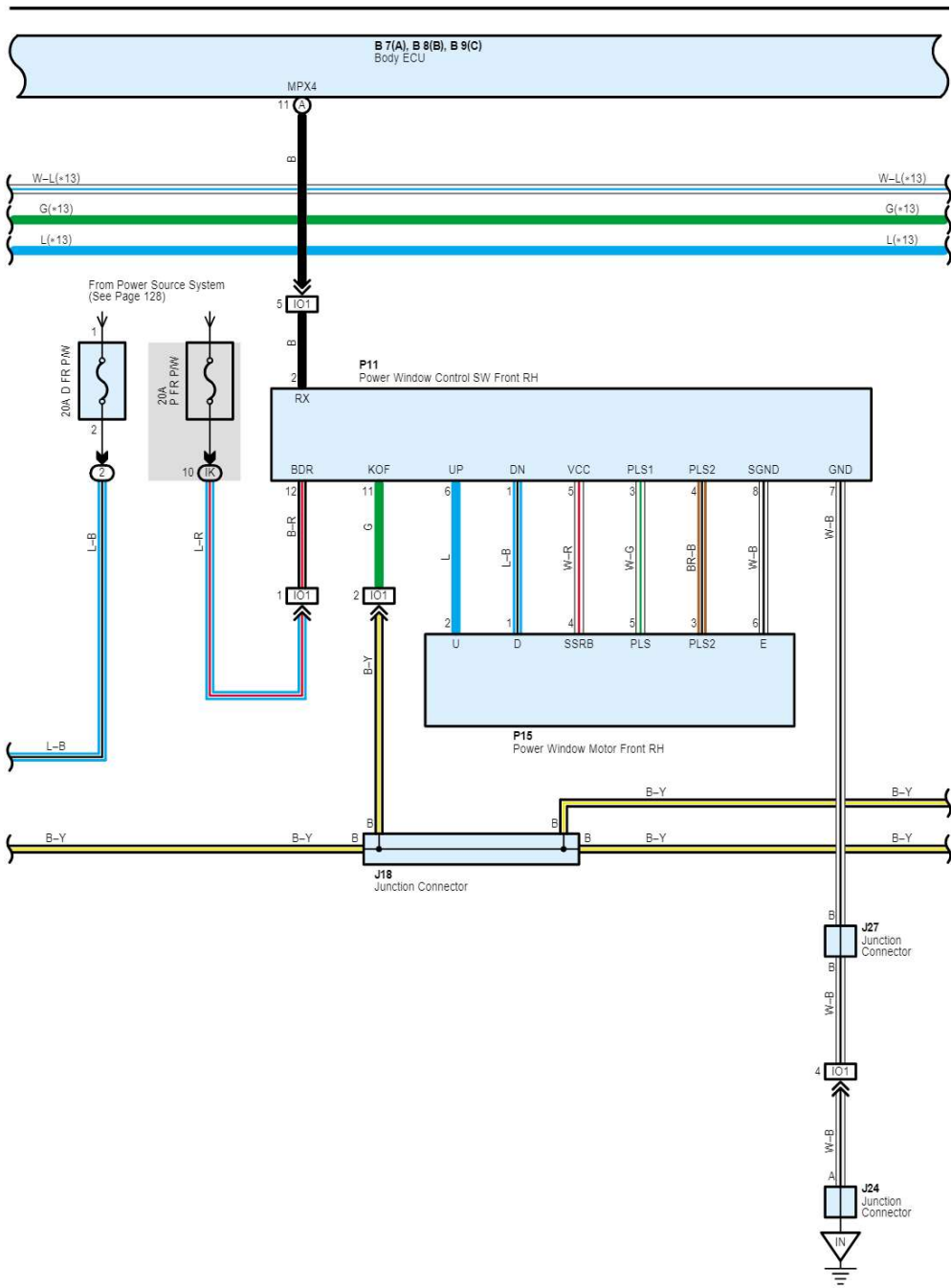


- \* 7 : 1GR-FE
- \* 8 : 1KD-FTV
- \* 9 : Europe
- \* 10 : Except Europe
- \* 11 : 3-Door
- \* 12 : 5-Door

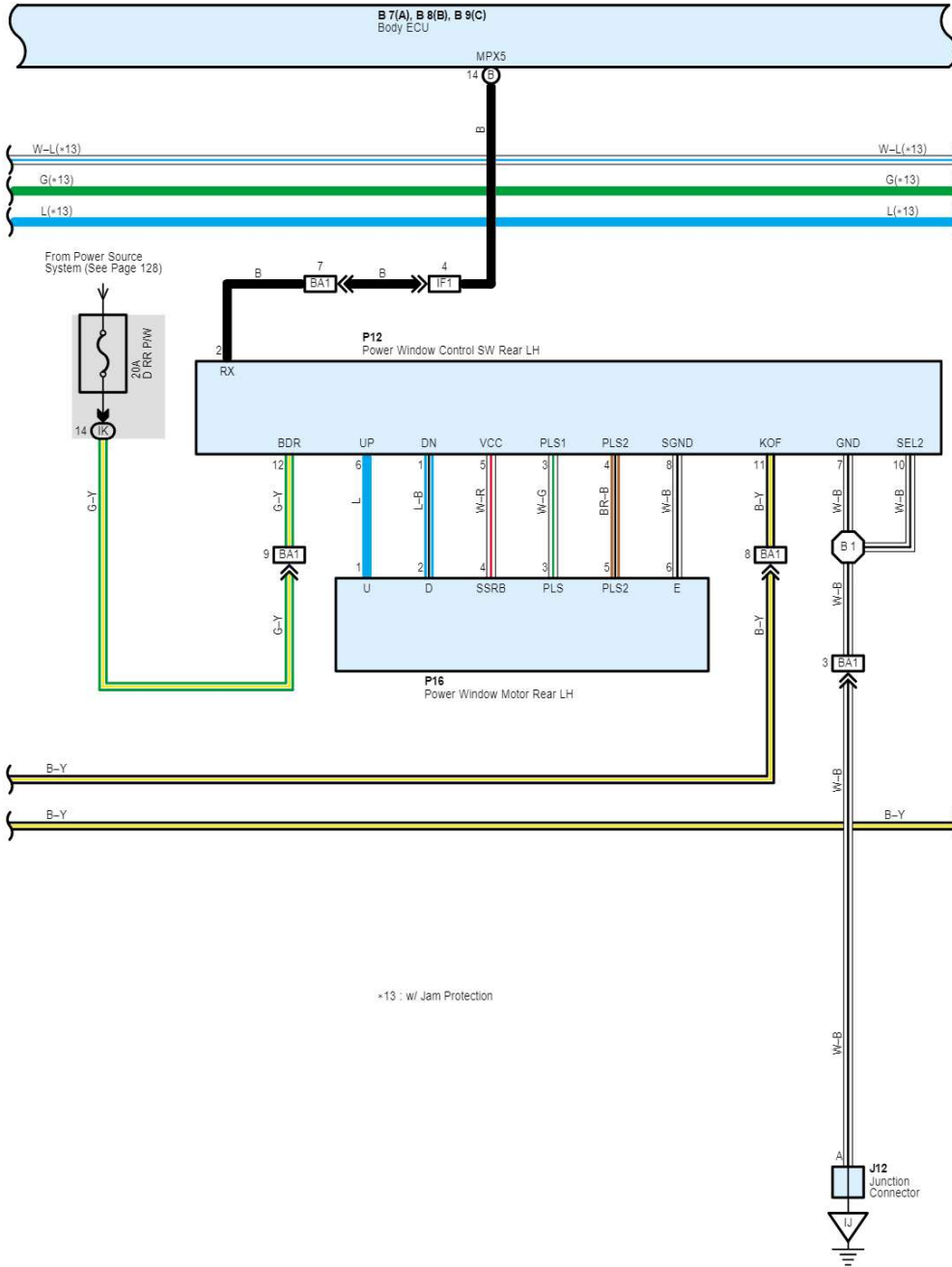


# Multiplex Communication System (LHD)

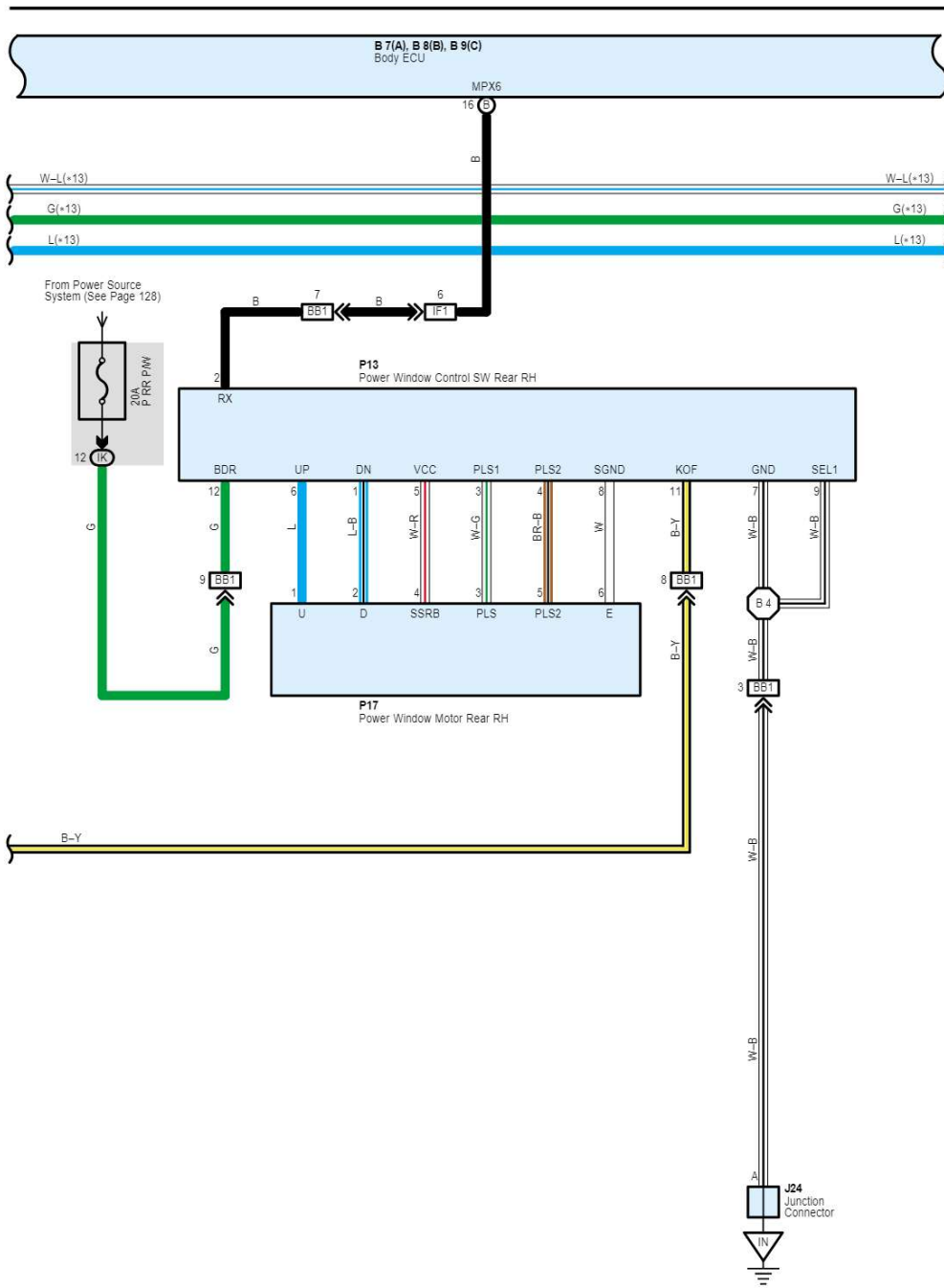




# Multiplex Communication System (LHD)



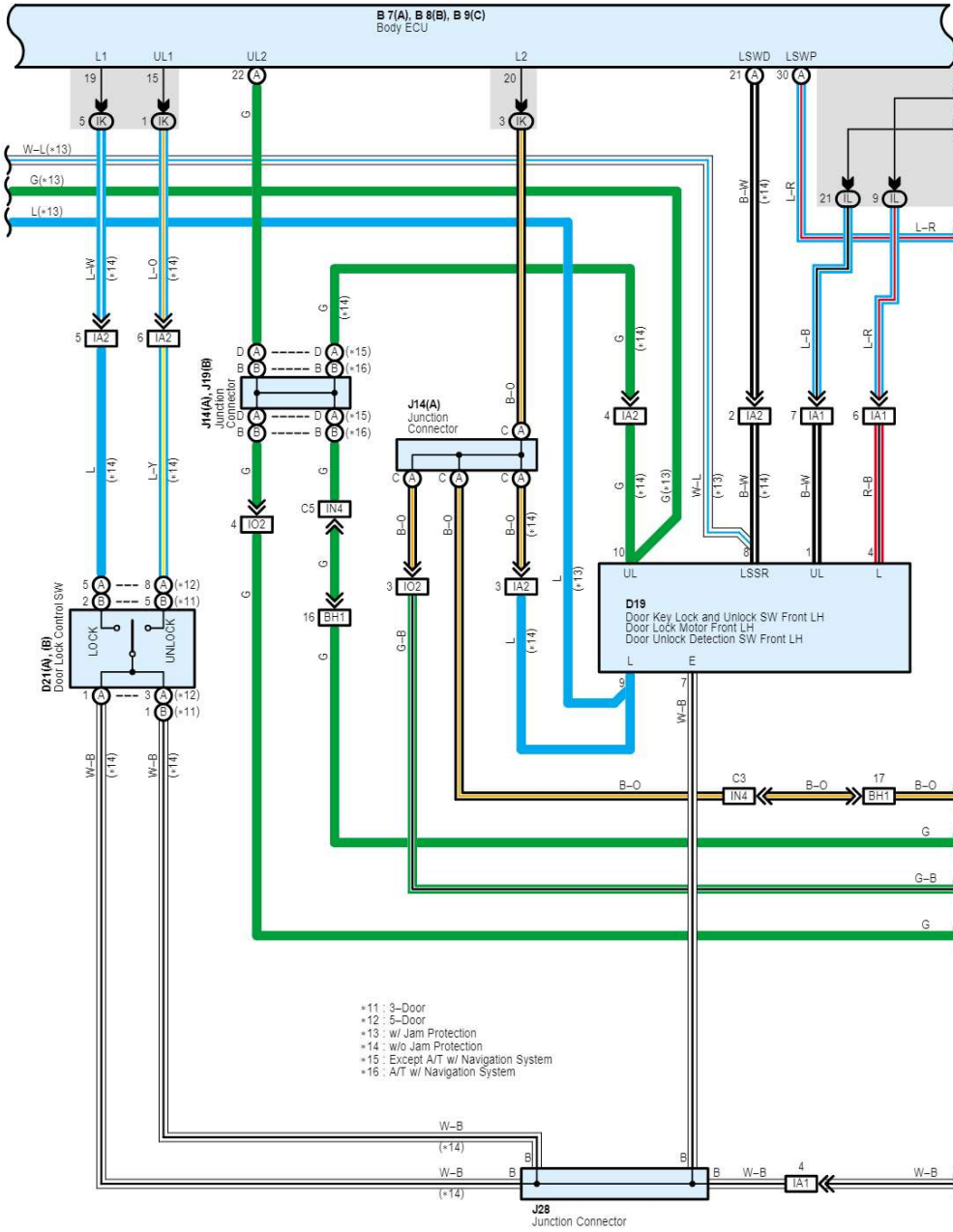




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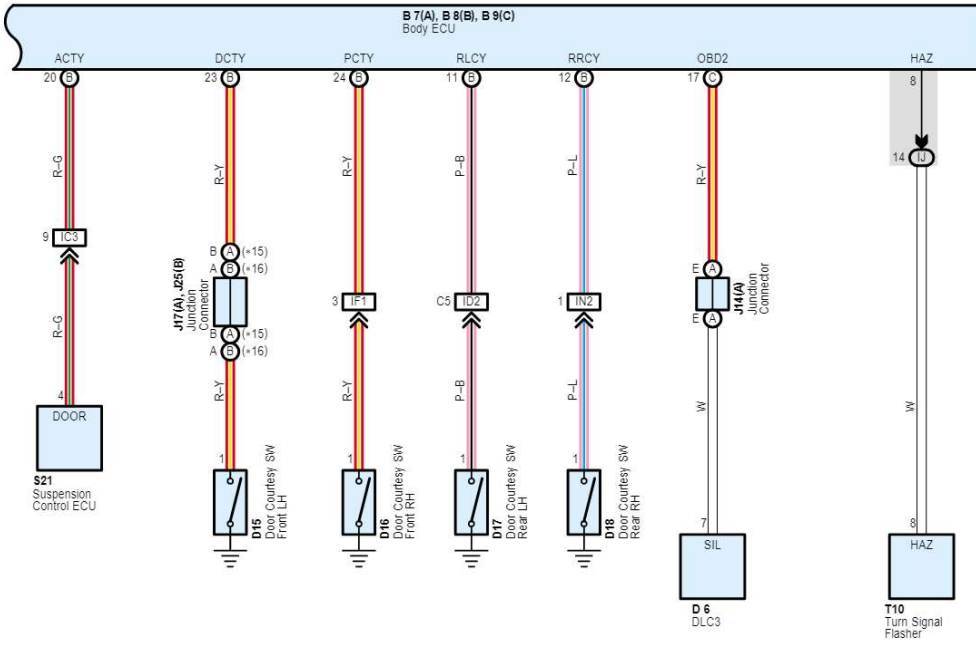
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Multiplex Communication System (LHD)





# Multiplex Communication System (LHD)



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#### System Outline

Multiplex communication system is controlled by body ECU, theft deterrent ECU, double lock ECU, etc.  
For example, when door is opened, signal from door courtesy SW is transmitted to body ECU and turns on indoor lamp.  
See new car features or repair manual for detail.

#### Service Hints

##### Body ECU

- 22-Ground : Approx. 12 volts with ignition SW at ACC or ON position
- 11, 12-Ground : Always approx. 12 volts
- 1, 10-Ground : Approx. 12 volts with ignition SW at ON position
- 4, 16-Ground : Always continuity

##### T8 Theft Deterrent ECU

- 2, 3-Ground : Always approx. 12 volts
- 10-Ground : Approx. 12 volts with ignition SW at ON position
- 29-Ground : Always continuity

# Multiplex Communication System (LHD)

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	38 (*1)	E5	44 (*4)	J27	52 (*6)
	40 (*2)		46 (*5)		54 (*7)
	42 (*3)	E9   A	49 (LHD)	J28	52 (*6)
	44 (*4)	E10   B	49 (LHD)		54 (*7)
	46 (*5)	F13	49 (LHD)	J29	52 (*6)
B7   A	48 (LHD)	39 (*1)	54 (*7)		
B8   B	48 (LHD)	H5	41 (*2)	J30	52 (*6)
B9   C	48 (LHD)		43 (*3)		54 (*7)
B10	52 (*6)		45 (*4)	J31	52 (*6)
	54 (*7)		47 (*5)		54 (*7)
B11	52 (*6)	H6	39 (*1)	J34	52 (*6)
	54 (*7)		41 (*2)	K2	50 (LHD)
B13	56 (*8)		43 (*3)	L4	53 (*6)
	57 (*9)		45 (*4)		55 (*7)
B14	56 (*8)	47 (*5)	M9	53 (*6)	
	57 (*9)	39 (*1)		55 (*7)	
C9   A	49 (LHD)	H8	41 (*2)	O4	53 (*6)
C10   B	49 (LHD)		43 (*3)		55 (*7)
C11   C	49 (LHD)		45 (*4)	P8	53 (*6)
C14	49 (LHD)	47 (*5)	55 (*7)		
C15	49 (LHD)	H9	39 (*1)	P11	53 (*6)
D6	49 (LHD)		41 (*2)		55 (*7)
D10	52 (*6)		43 (*3)	P12	53 (*6)
	54 (*7)		45 (*4)	P13	53 (*6)
D11	52 (*6)	47 (*5)	P14	53 (*6)	
	54 (*7)	50 (LHD)		55 (*7)	
D12	52 (*6)	I15	52 (*6)	P15	53 (*6)
	54 (*7)		54 (*7)		55 (*7)
D13	52 (*6)	J4	39 (*1)	P16	53 (*6)
D14	52 (*6)		41 (*2)	P17	53 (*6)
D15	52 (*6)		43 (*3)	R10	51 (LHD)
	54 (*7)		45 (*4)	S21	51 (LHD)
D16	52 (*6)	47 (*5)	T1	39 (*1)	
	54 (*7)	J7   A		50 (LHD)	41 (*2)
D17	52 (*6)	J8   B		50 (LHD)	43 (*3)
D18	52 (*6)	J9		50 (LHD)	45 (*4)
D19	52 (*6)	J12	50 (LHD)	47 (*5)	
	54 (*7)	J13	50 (LHD)	T8	51 (LHD)
D20	52 (*6)	J14   A	50 (LHD)	T9	51 (LHD)
	54 (*7)	J15	50 (LHD)	T10	51 (LHD)
D21	52 (*6)	J16	50 (LHD)	T11	53 (*6)
	54 (*7)	J17   A	50 (LHD)		55 (*7)
D22	52 (*6)	J18	50 (LHD)	V14	53 (*6)
D23	52 (*6)	J19   B	50 (LHD)		55 (*7)
E5	38 (*1)	J23	50 (LHD)	V15	53 (*6)
	40 (*2)	J24	50 (LHD)		55 (*7)
	42 (*3)	J25   B	50 (LHD)		

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)
5	25 (LHD)	Passenger Side R/B (Right Kick Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB		Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
ID		
IE		
IG	27 (LHD)	
IH		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
IJ		
IK		
IL		
1A	32 (LHD)	
1B		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
1C		
1D		
1E		
2A	34	
2B		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
2E		
3A		
3B		
3C	36 (LHD)	
3D		
3E		

## Multiplex Communication System (LHD)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	78 (*1)	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IE1	90 (LHD)	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IL3		
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM4		
IM5		
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



▽ : Ground Points

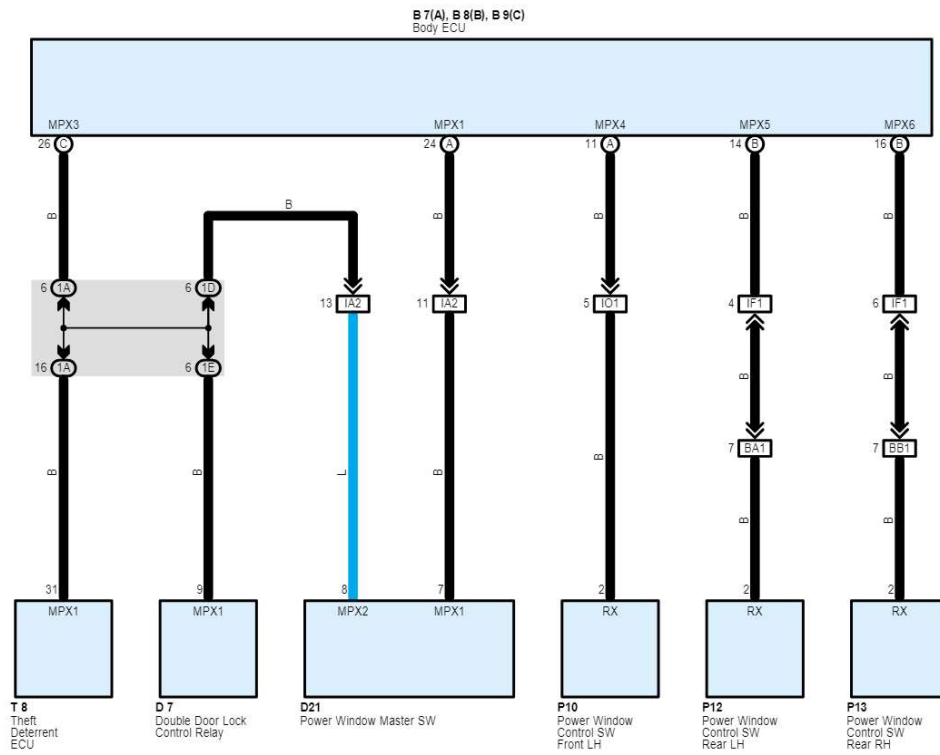
Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
ED	80 (*2)	Ignition Coil Bracket
EE	80 (*2)	Intake Manifold
EF	82 (*3)	Rear Part of Cylinder Block
EH	84 (*4)	
EI	86 (*5)	
EV	78 (*1)	
IJ	88 (LHD)	
IL	88 (LHD)	Near the Right Side of Steering Column
IN	88 (LHD)	Right Kick Panel
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
BS	96 (*6)	Back Door Panel Center
	100 (*7)	
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	90 (LHD)	Instrument Panel Wire	B2	98 (*6)	Roof Wire
I7				100 (*7)	
B1	98 (*6)	Rear Door No.1 Wire LH	B4	98 (*6)	Rear Door No.1 Wire RH

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# Multiplex Communication System (Communication Bus) (RHD)



**Multiplex Communication System Includes Following Systems**

- \* Door Lock Control
- \* Double Locking
- \* Headlight
- \* Interior Light
- \* Key Reminder
- \* Light Auto Turn Off
- \* Power Window
- \* Seat Belt Warning
- \* Theft Deterrent
- \* Wireless Door Lock Control

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
B7	A 68 (RHD)	D21	72 (*15)	P12	73 (*15)
B8	B 68 (RHD)		74 (*16)	P13	73 (*15)
B9	C 68 (RHD)	P10	73 (*15)	T8	71 (RHD)
D7	69 (RHD)		75 (*16)		

**○ : Junction Block and Wire Harness Connector**

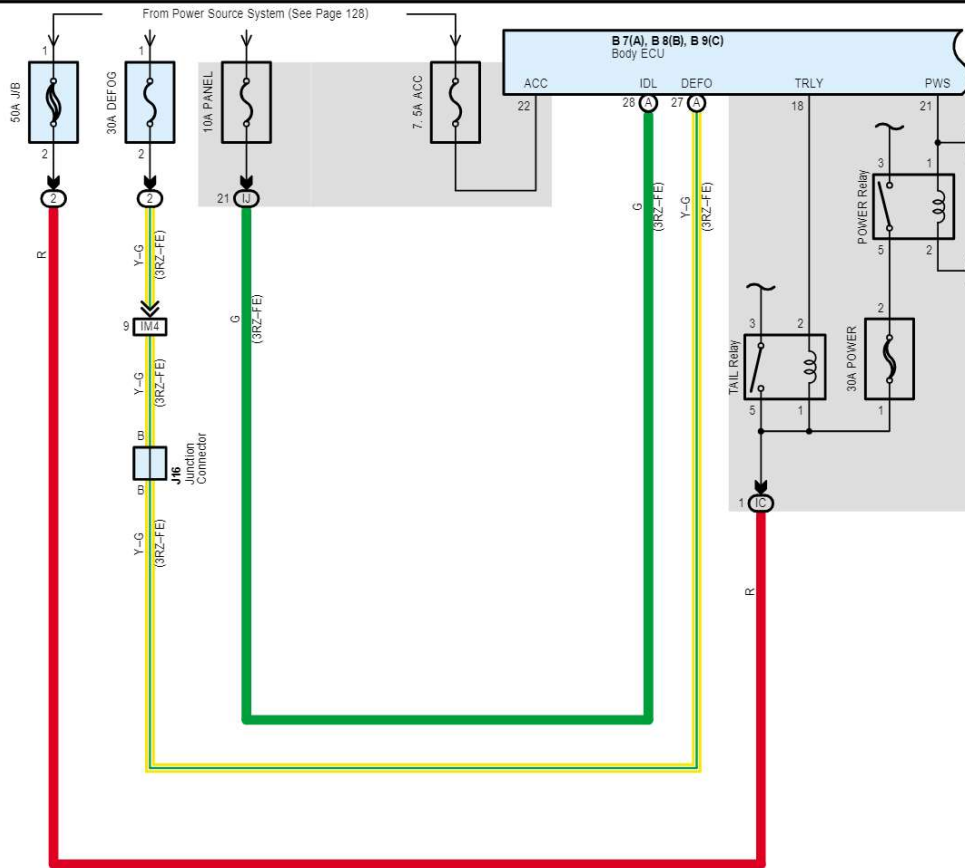
Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D		
1E		

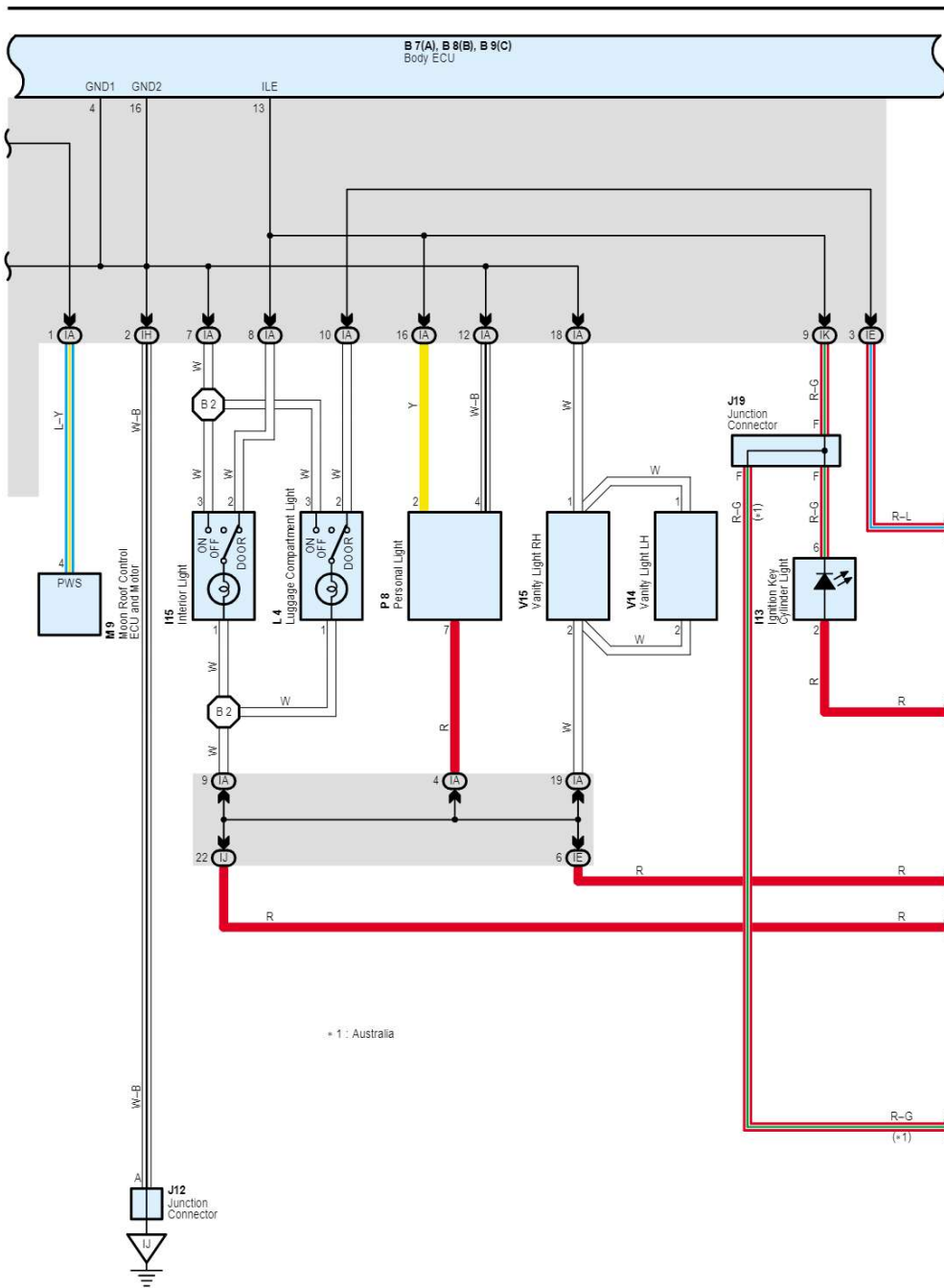
**□ : Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

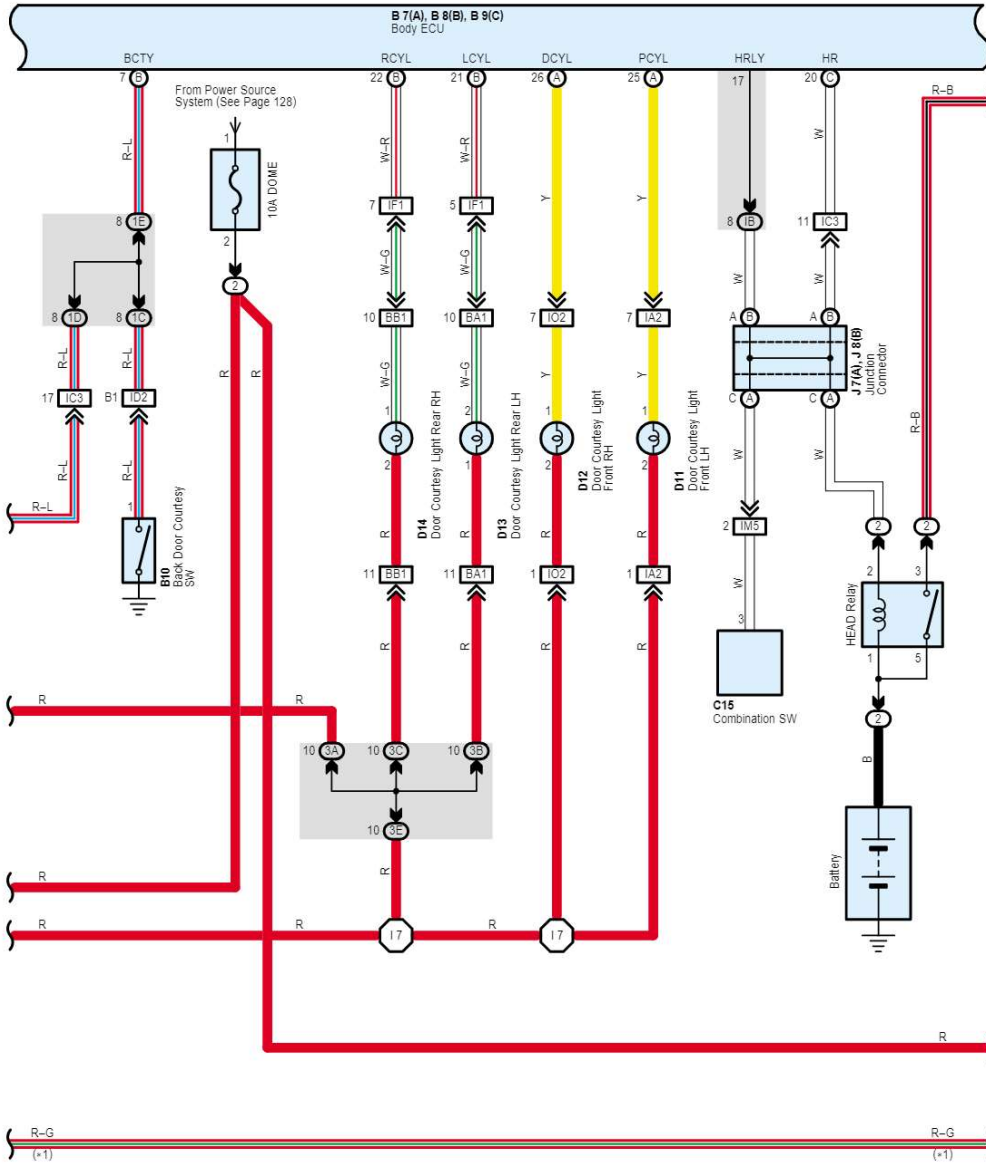
- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Multiplex Communication System (RHD)



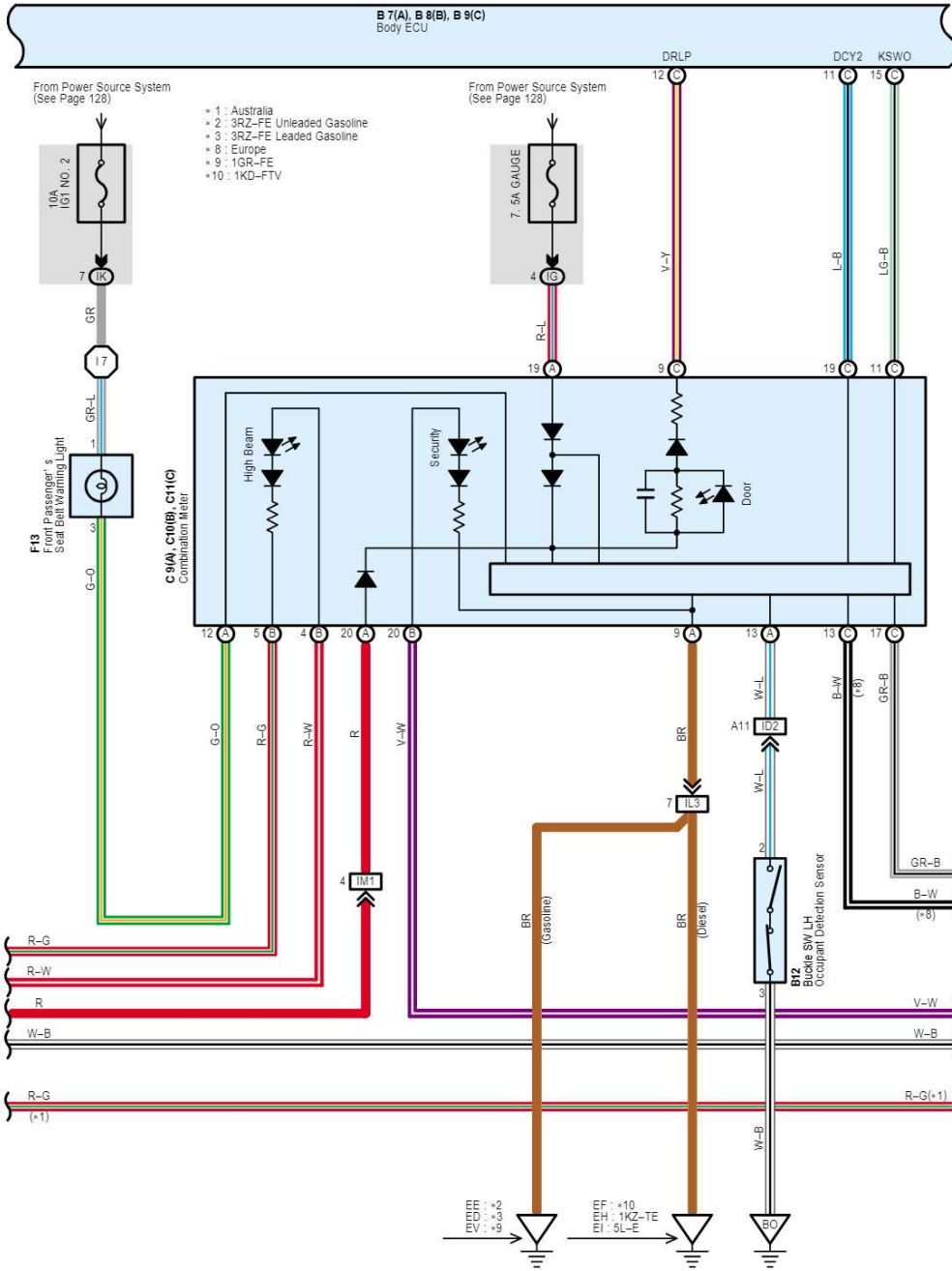


# Multiplex Communication System (RHD)

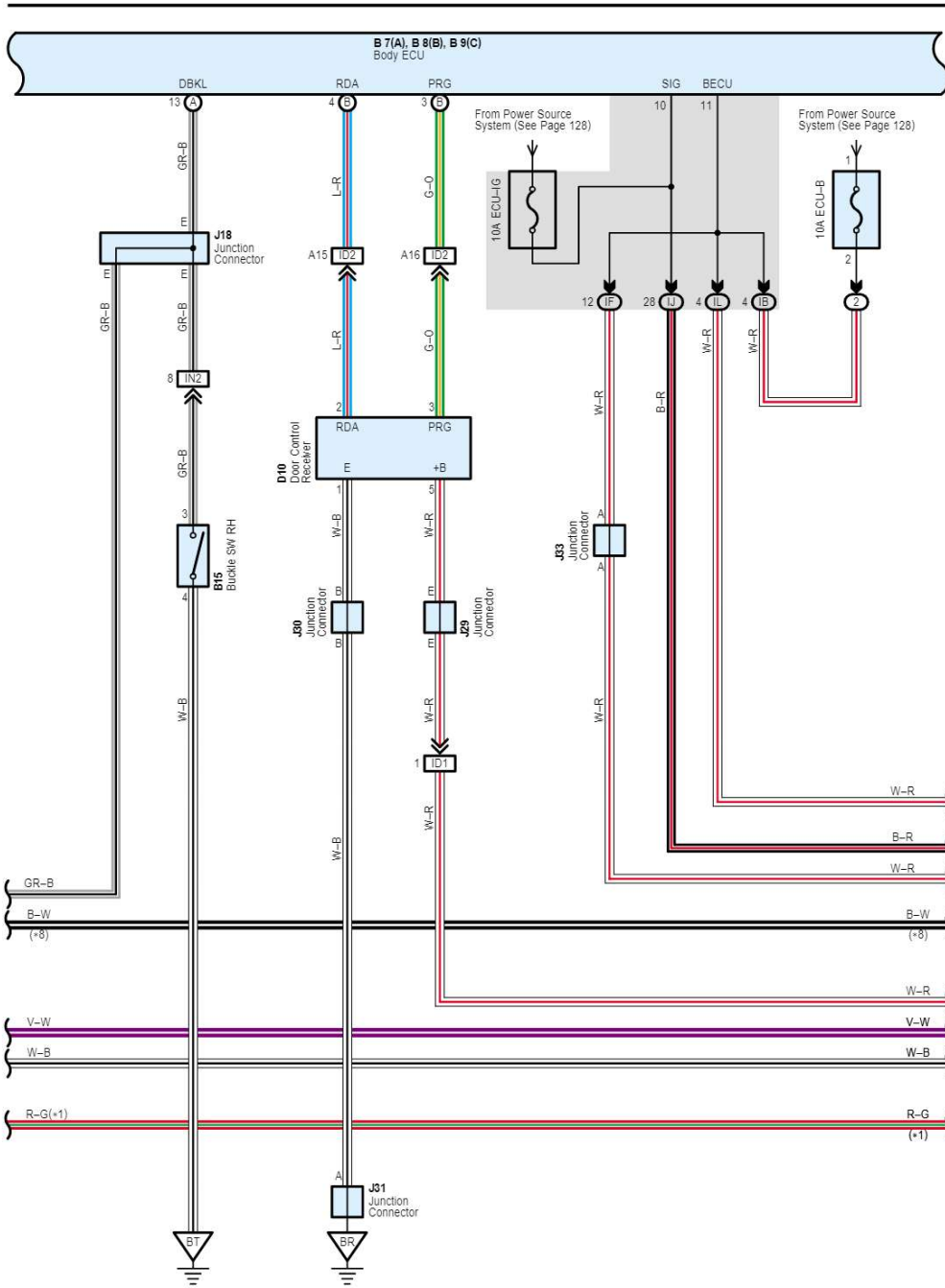




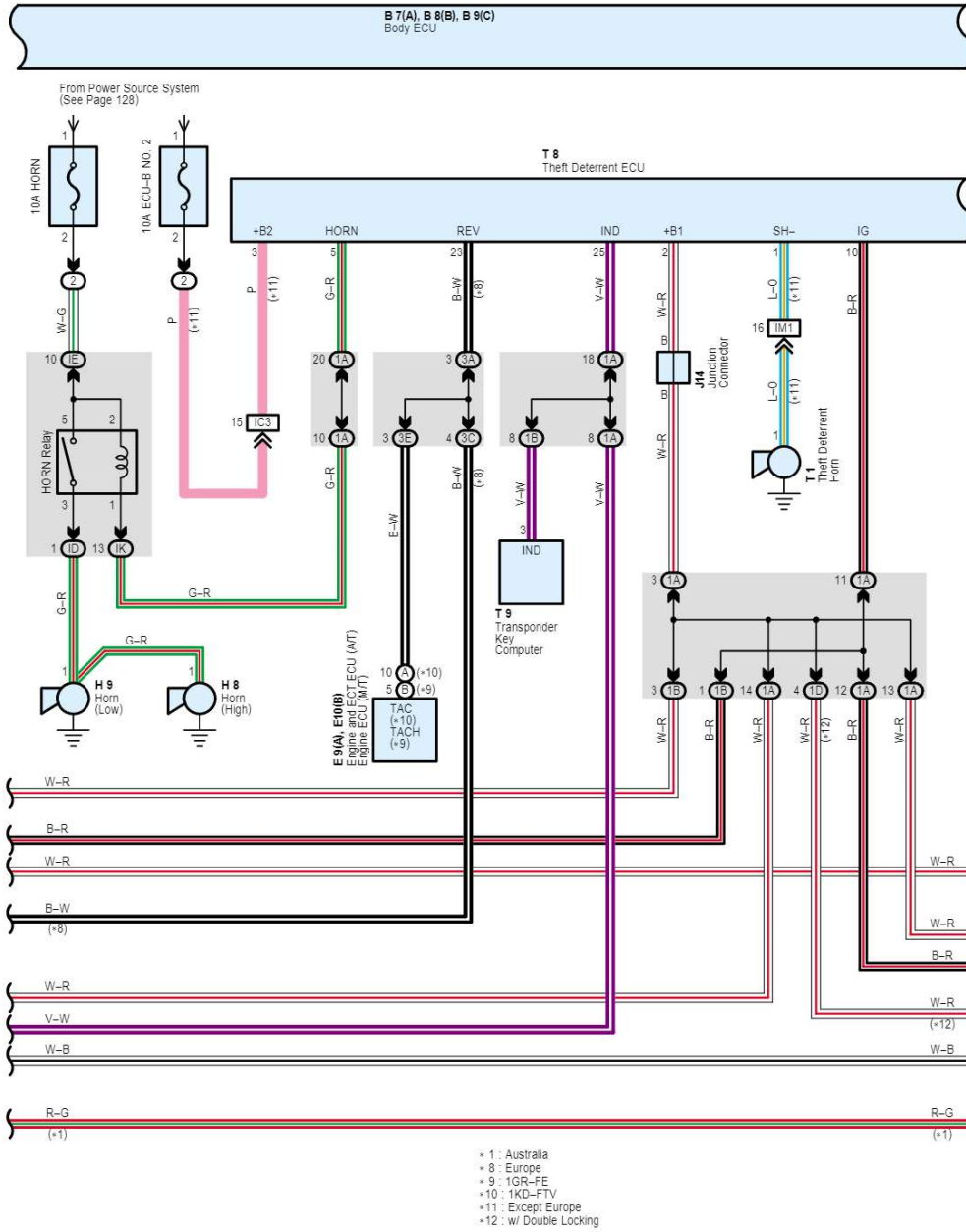
# Multiplex Communication System (RHD)

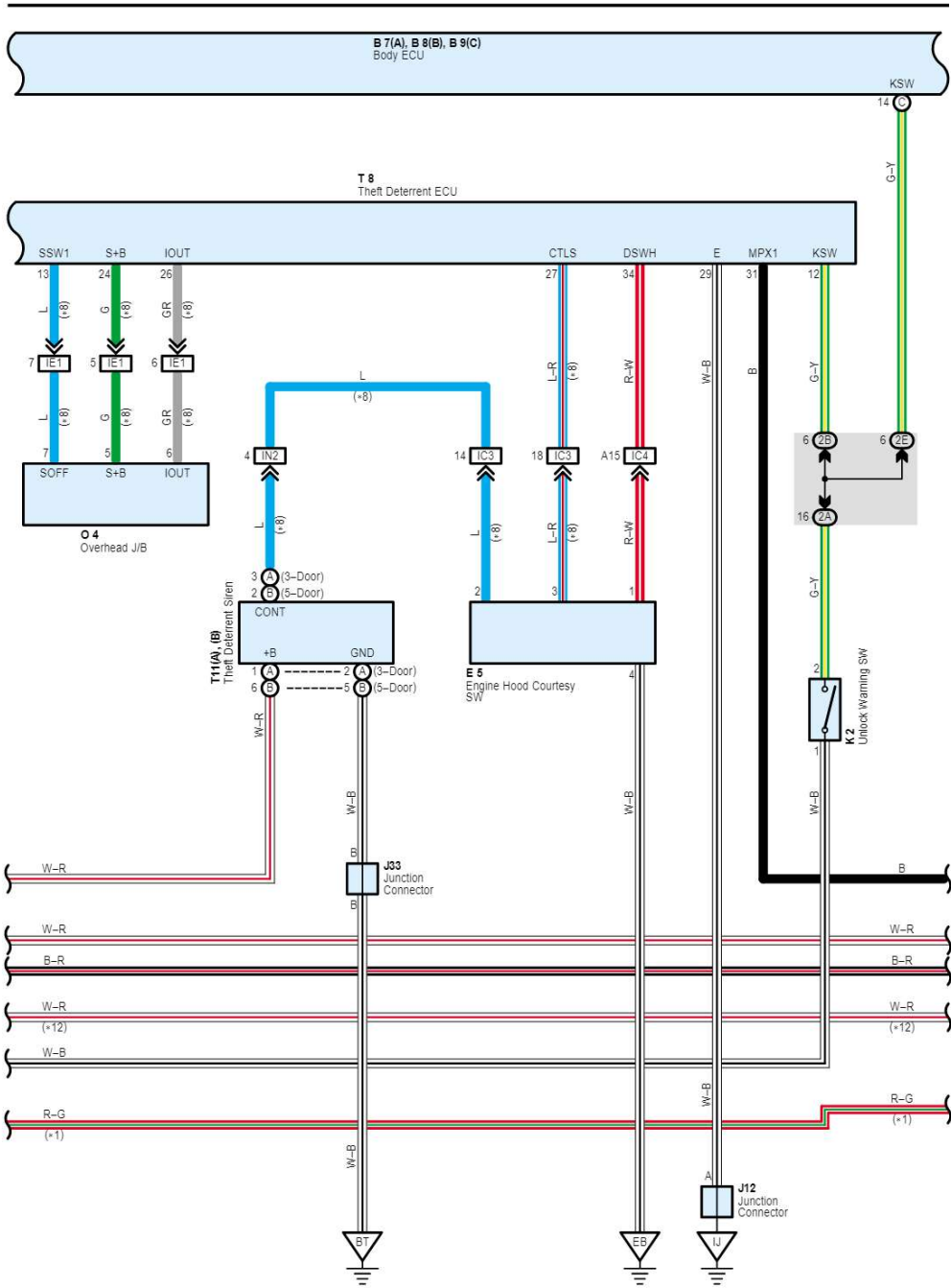




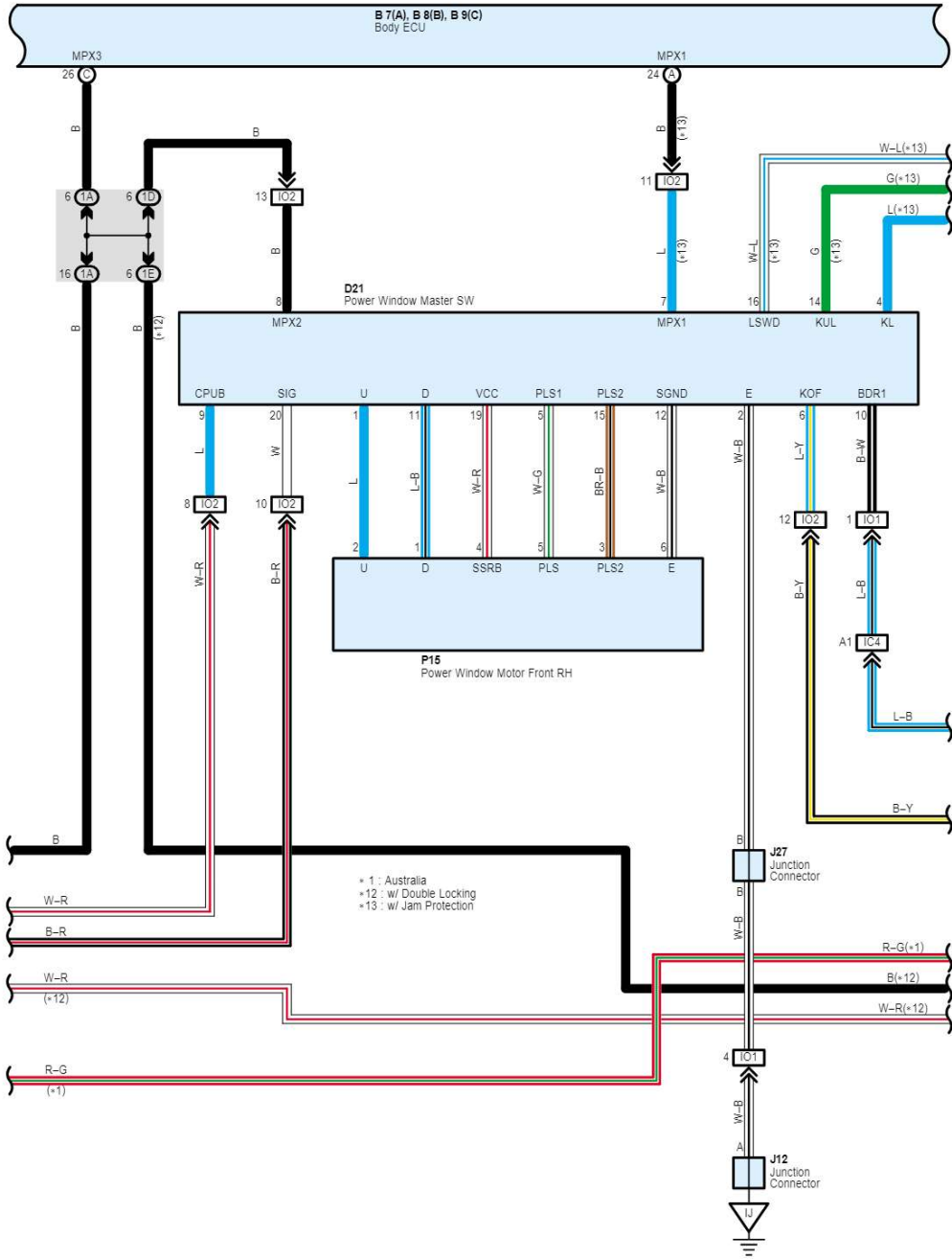


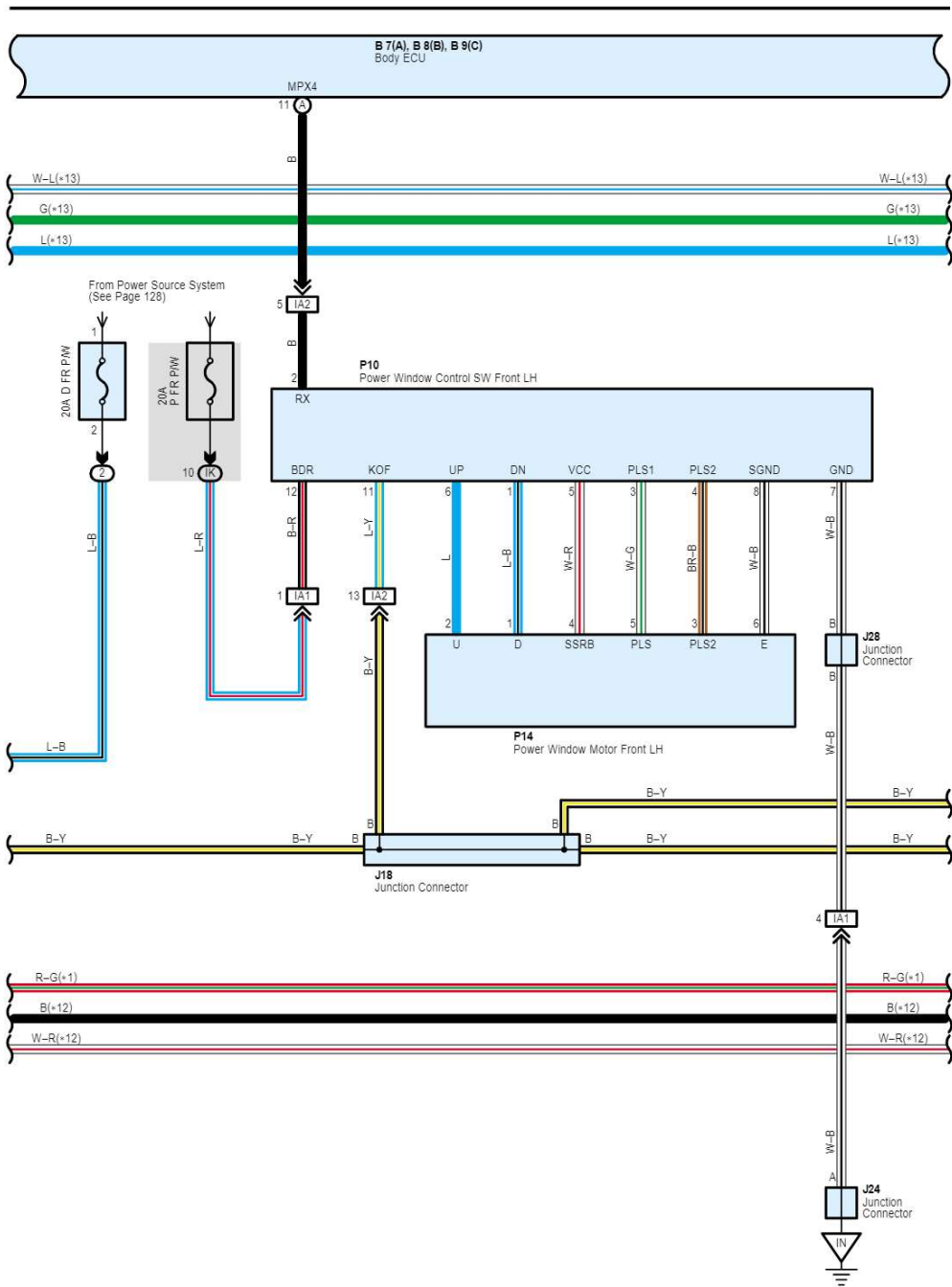
# Multiplex Communication System (RHD)



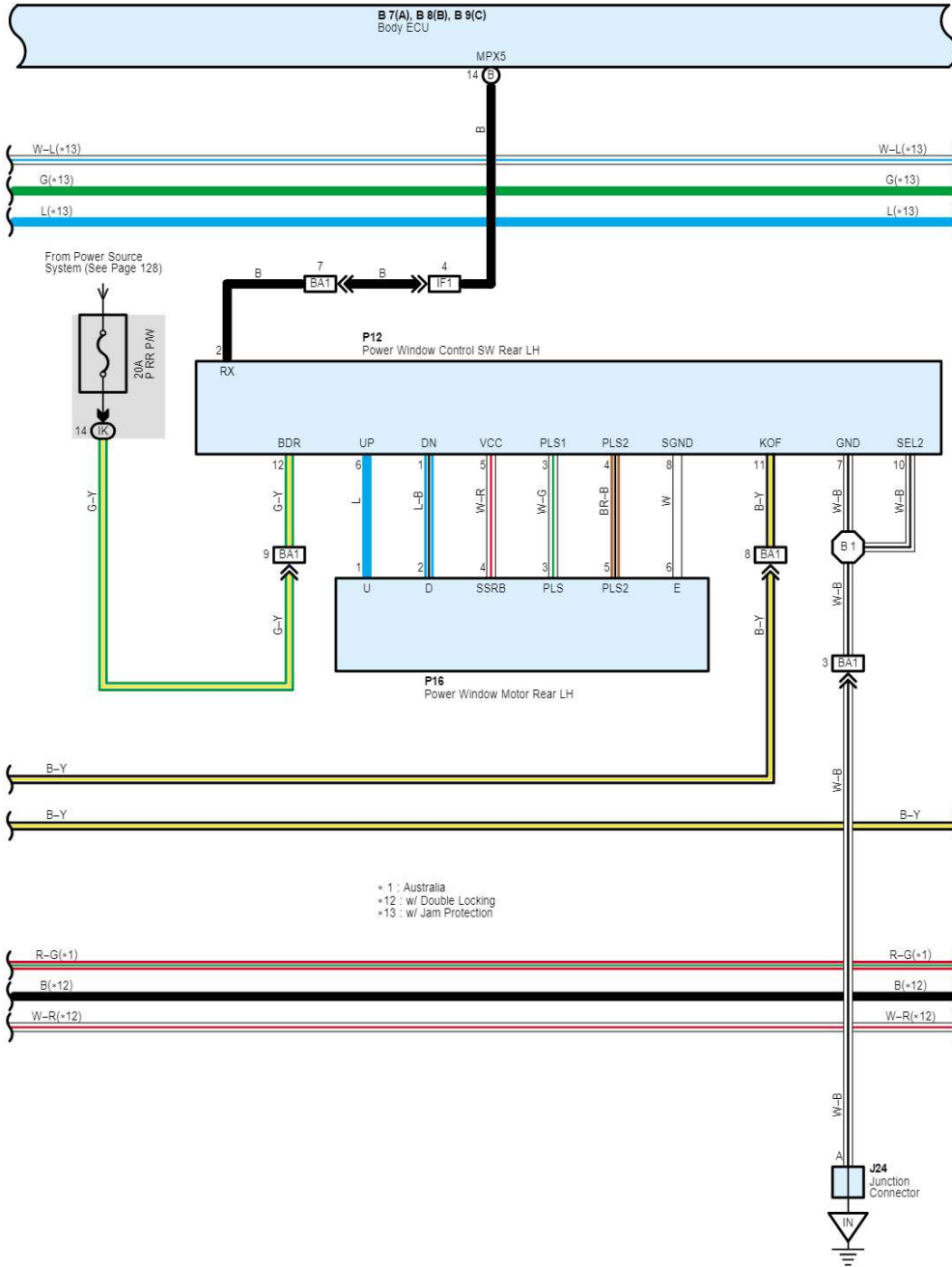


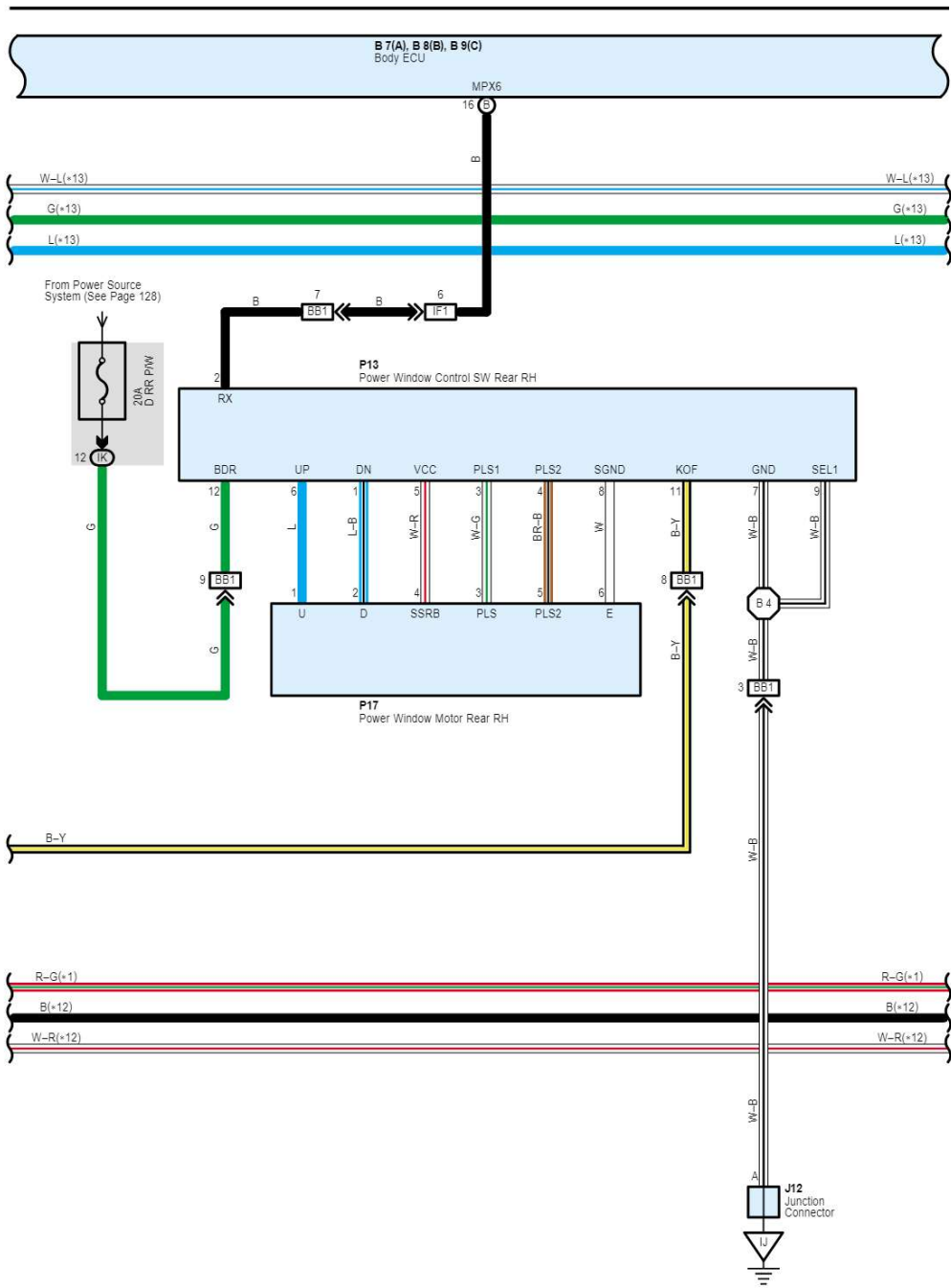
# Multiplex Communication System (RHD)



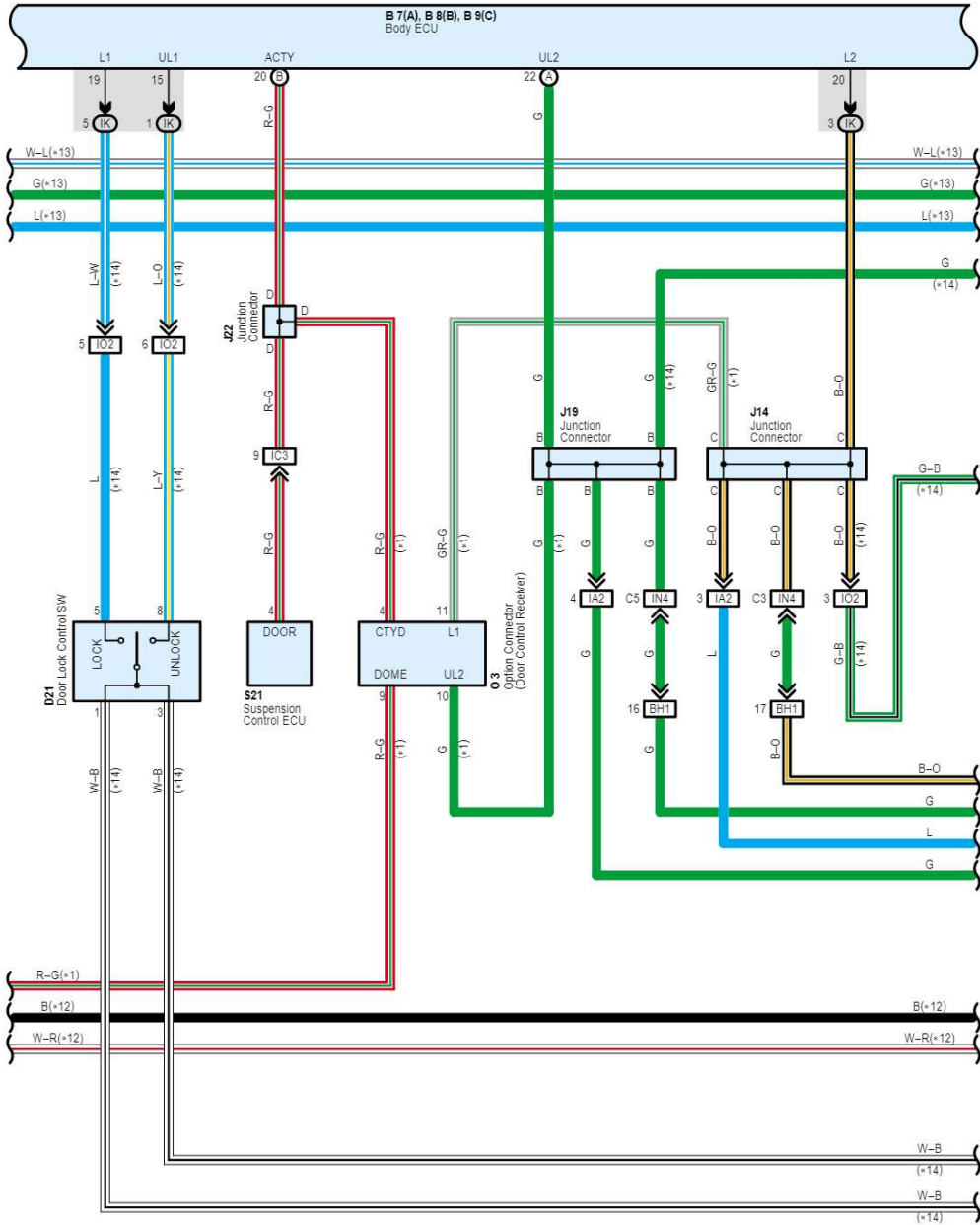


# Multiplex Communication System (RHD)

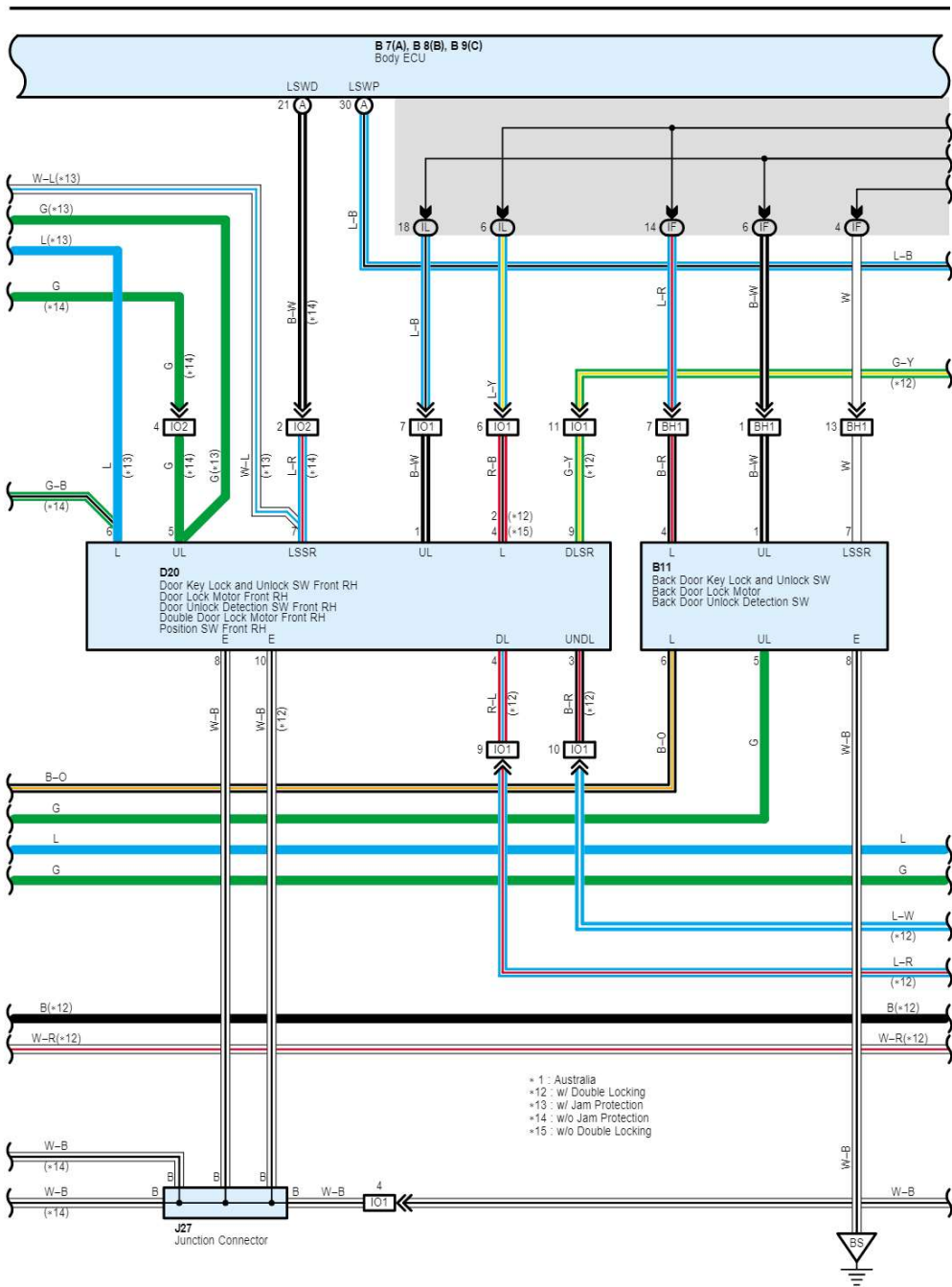




# Multiplex Communication System (RHD)

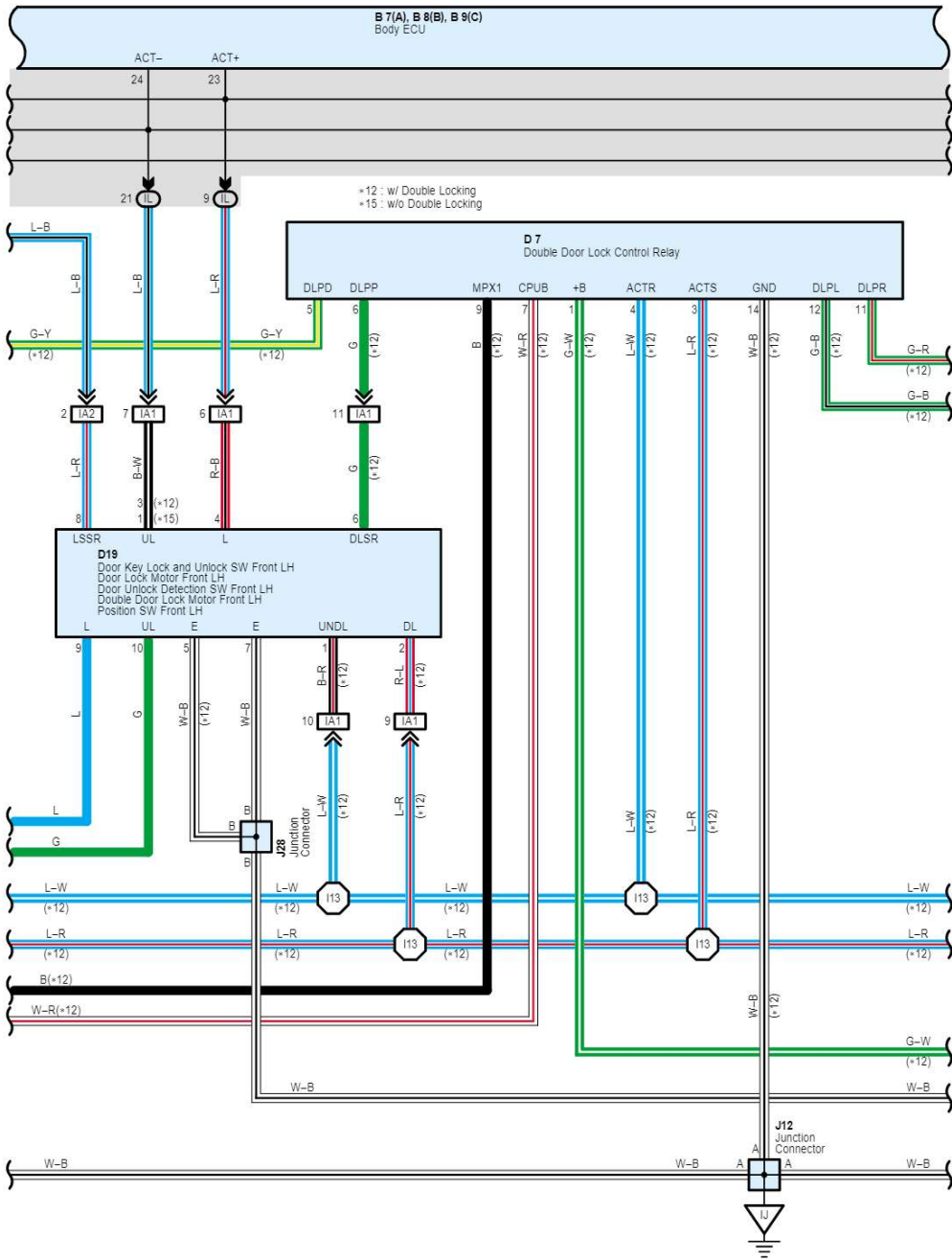


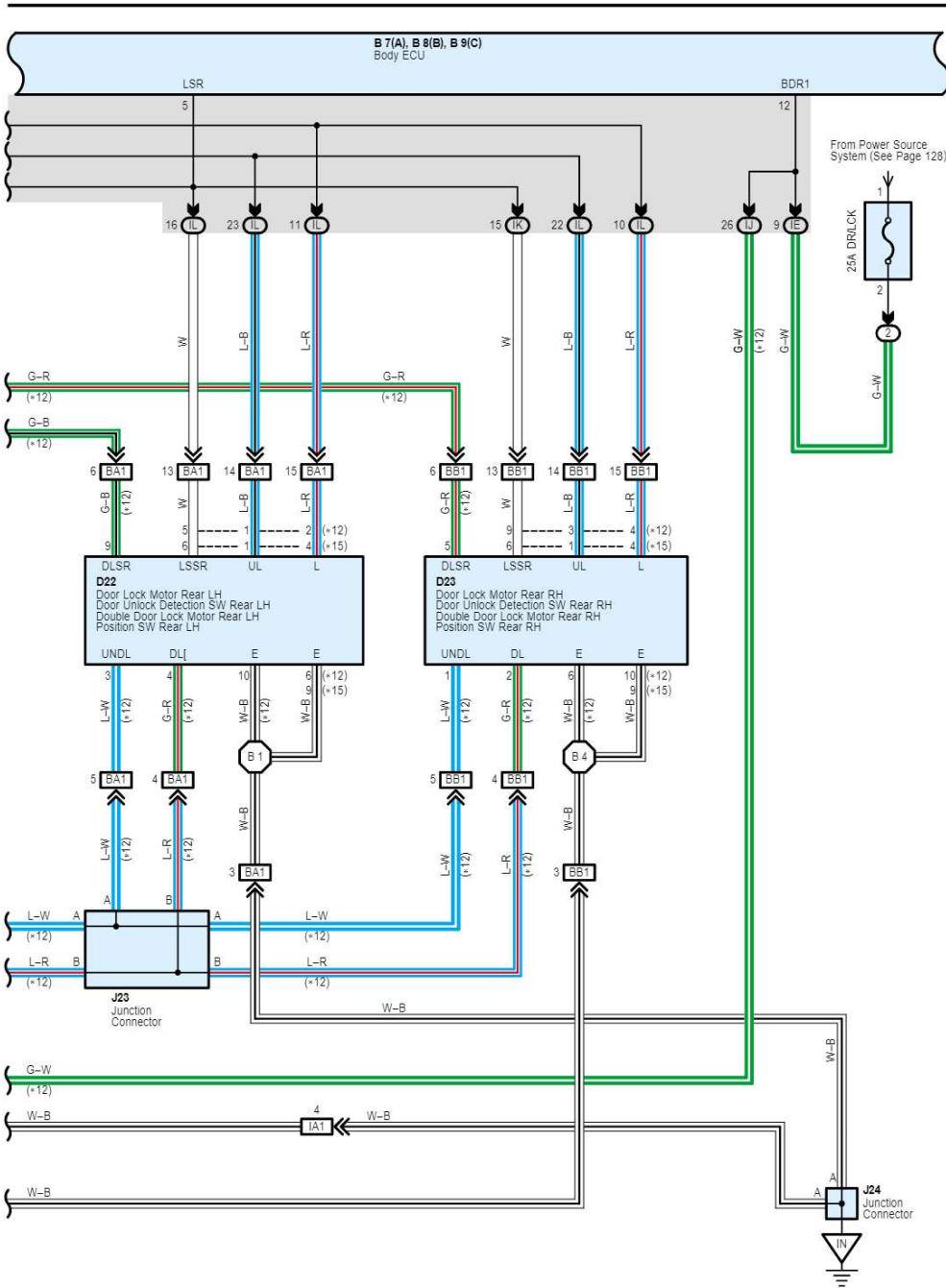




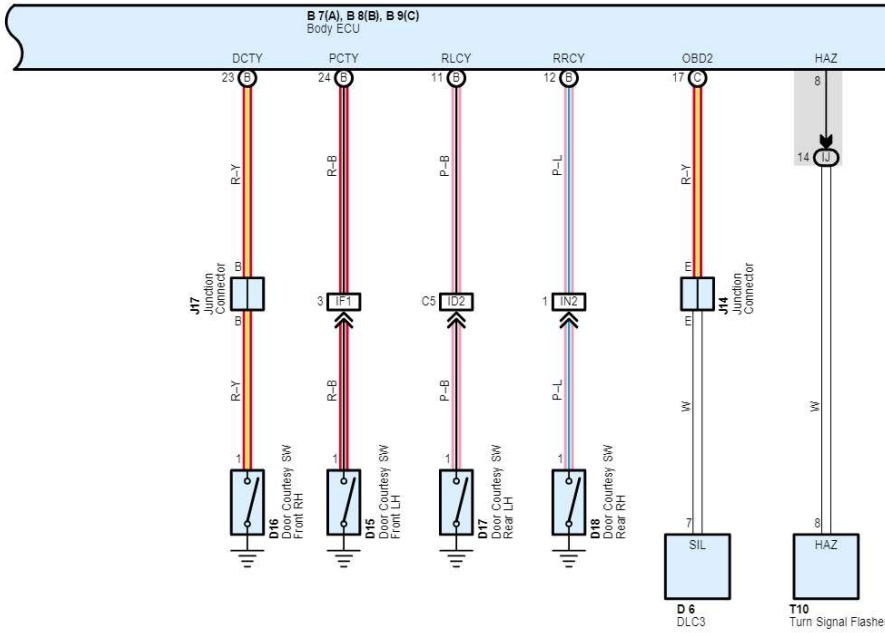
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Multiplex Communication System (RHD)





# Multiplex Communication System (RHD)



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#### System Outline

Multiplex communication system is controlled by body ECU, theft deterrent ECU, double lock ECU, etc.  
For example, when door is opened, signal from door courtesy SW is transmitted to body ECU and turns on indoor lamp.  
See new car features or repair manual for detail.

#### Service Hints

##### Body ECU

- 22-Ground : Approx. 12 volts with ignition SW at ACC or ON position
- 11, 12-Ground : Always approx. 12 volts
- 1, 10-Ground : Approx. 12 volts with ignition SW at ON position
- 4, 16-Ground : Always continuity

##### T8 Theft Deterrent ECU

- 2, 3-Ground : Always approx. 12 volts
- 10-Ground : Approx. 12 volts with ignition SW at ON position
- 29-Ground : Always continuity

# Multiplex Communication System (RHD)

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	68 (RHD)	E10	B	69 (RHD)	J28	72 (*15)	
B8	B	68 (RHD)	F13		69 (RHD)		74 (*16)	
B9	C	68 (RHD)	H5		59 (*10)	J29	72 (*15)	
B10		72 (*15)			61 (*11)		74 (*16)	
		74 (*16)			63 (*12)	J30	72 (*15)	
		72 (*15)			65 (*13)		74 (*16)	
B11		74 (*16)	H6		67 (*14)	J31	72 (*15)	
		76 (*17)			59 (*10)		74 (*16)	
		77 (*18)			61 (*11)	J33	72 (*15)	
		76 (*17)			63 (*12)		74 (*16)	
B15		77 (*18)	H8		65 (*13)	K2	70 (RHD)	
		69 (RHD)			67 (*14)	L4	73 (*15)	
C9	A	69 (RHD)			59 (*10)		75 (*16)	
C10	B	69 (RHD)			61 (*11)	M9	73 (*15)	
C11	C	69 (RHD)	H9		63 (*12)		75 (*16)	
C14		69 (RHD)			65 (*13)	O3	71 (RHD)	
C15		69 (RHD)			67 (*14)	O4	73 (*15)	
D6		69 (RHD)			59 (*10)		75 (*16)	
D7		69 (RHD)	I13		61 (*11)	P8	73 (*15)	
D10		72 (*15)			63 (*12)		75 (*16)	
		74 (*16)			65 (*13)	P10	73 (*15)	
		72 (*15)			67 (*14)		75 (*16)	
D11		74 (*16)	I15		70 (RHD)	P12	73 (*15)	
		72 (*15)			72 (*15)	P13	73 (*15)	
		74 (*16)			74 (*16)	P14	73 (*15)	
		72 (*15)			59 (*10)		75 (*16)	
D14		72 (*15)	J4		61 (*11)	P15	73 (*15)	
		74 (*16)			63 (*12)		75 (*16)	
		72 (*15)			65 (*13)	P16	73 (*15)	
		74 (*16)			67 (*14)	P17	73 (*15)	
D15		72 (*15)	J7		A	R10	71 (RHD)	
D16		74 (*16)			B		S21	71 (RHD)
D17		72 (*15)	J8		J9		59 (*10)	
D18		72 (*15)			J12			61 (*11)
D19		74 (*16)	J13		J13	T1	63 (*12)	
		72 (*15)			J14			65 (*13)
D20		74 (*16)	J15		J15		67 (*14)	
		72 (*15)			J16		T8	71 (RHD)
D21		74 (*16)	J17		J17	T9	71 (RHD)	
		72 (*15)			J18		T10	71 (RHD)
D22		72 (*15)	J19		J19	T11	A	
		72 (*15)			J22			B
D23		72 (*15)	J23		J23	V14	75 (*16)	
		58 (*10)			J24			73 (*15)
E5		60 (*11)	J27		J24		73 (*15)	
		62 (*12)			72 (*15)		V15	73 (*15)
		64 (*13)	J27				75 (*16)	
		66 (*14)			74 (*16)			
E9	A	69 (RHD)					75 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	28 (RHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB		
IC	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
ID		
IE		
IF		
IG	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IH		
IJ	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		
1A		
1B	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C		
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2E		
3A	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B		
3C		
3D		
3E		

## Multiplex Communication System (RHD)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC3	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID1	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IE1	114 (RHD)	Roof Wire and Instrument Panel Wire (Left Side of the Driver Side J/B)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IL3	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM4		
IM5		
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	102 (*10)	Front Left Fender
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
ED	104 (*11)	Ignition Coil Bracket
EE	104 (*11)	Intake Manifold
EF	106 (*12)	Rear Part of Cylinder Block
EH	108 (*13)	
EI	110 (*14)	
EV	102 (*10)	Rear Side of Left Bank Cylinder Block
IJ	112 (RHD)	Right Kick Panel
IL	112 (RHD)	Instrument Panel Brace RH
IN	112 (RHD)	Left Kick Panel
BO	120 (*15)	Under the Front Passenger's Seat
	124 (*16)	
BR	120 (*15)	Left Quarter Panel Inner
	124 (*16)	
BS	120 (*15)	Back Door Panel Center
	124 (*16)	
BT	120 (*15)	Right Quarter Panel Inner
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

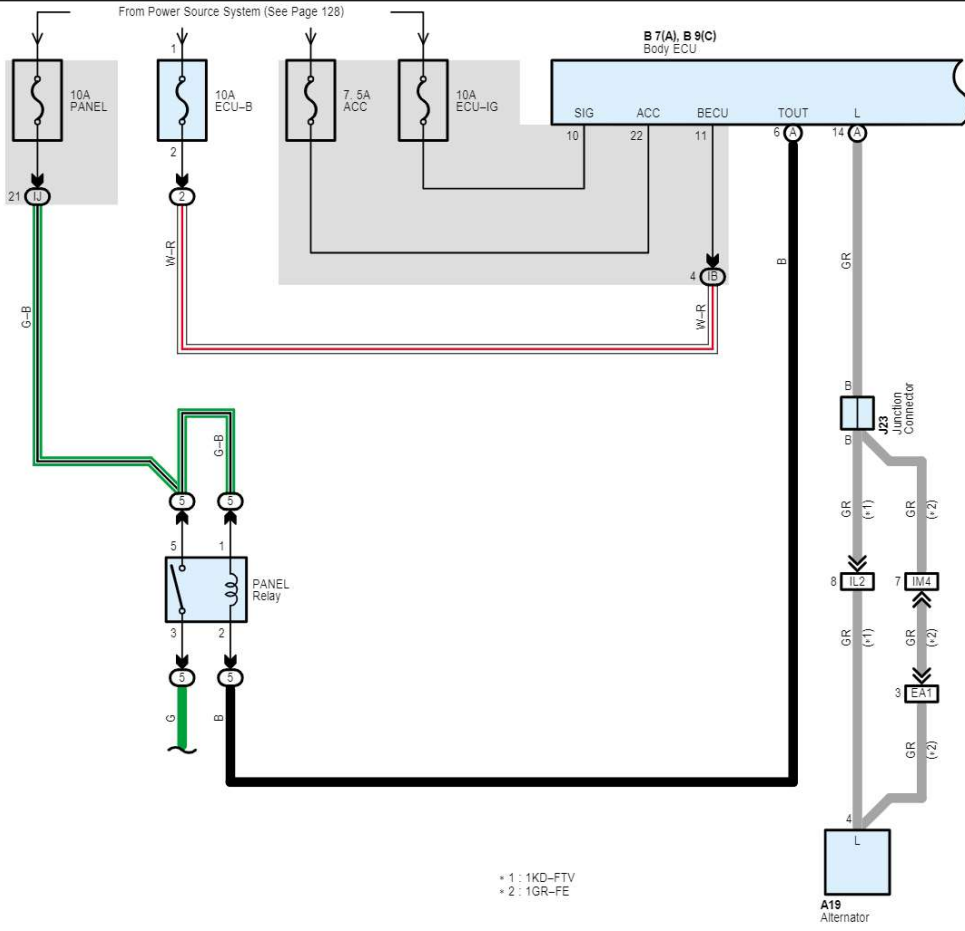


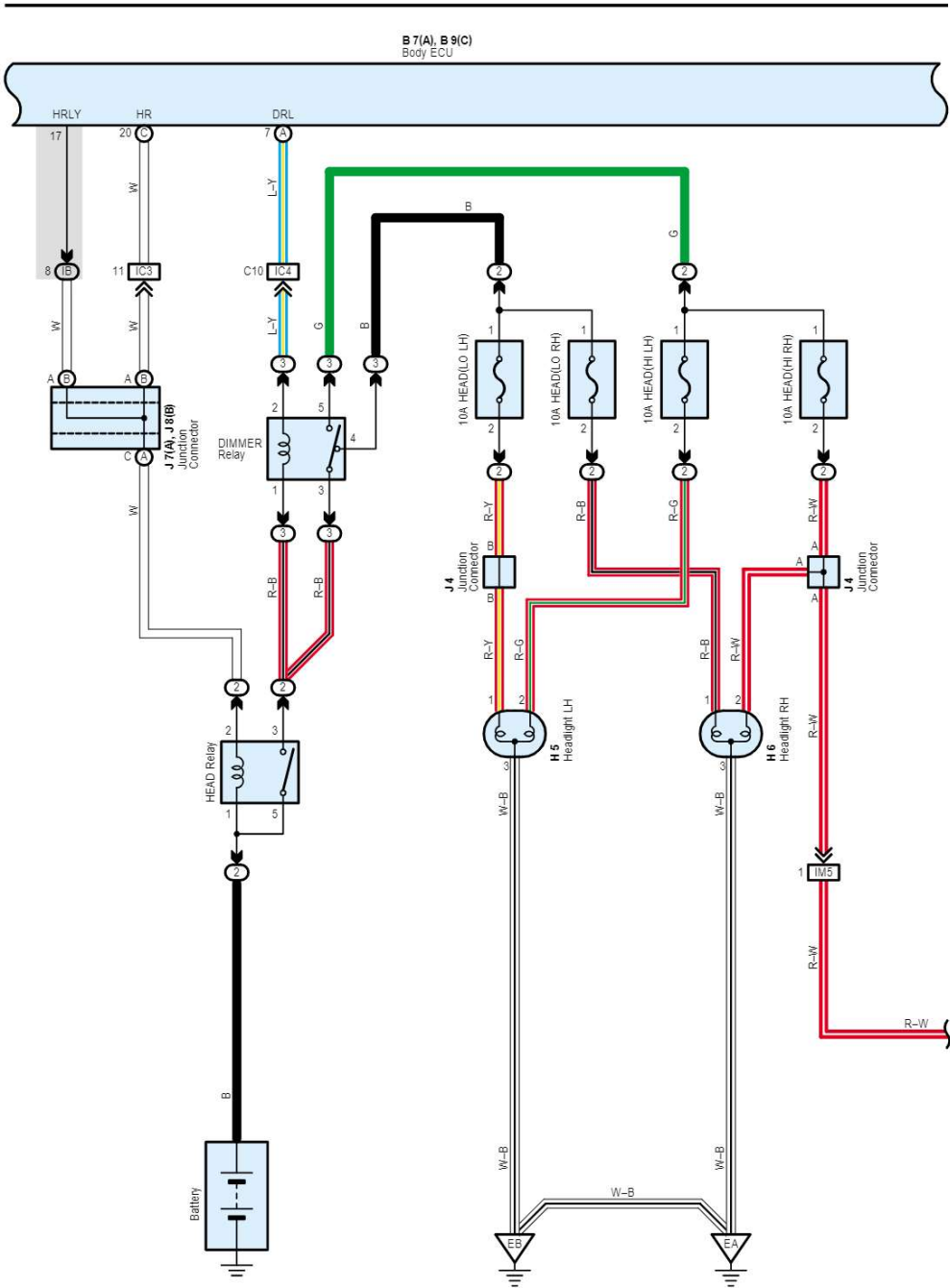
 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	114 (RHD)	Instrument Panel Wire	B2	122 (*15)	Roof Wire
I7				124 (*16)	
I13			B4	122 (*15)	Rear Door No.1 Wire RH
B1	122 (*15)	Rear Door No.1 Wire LH			

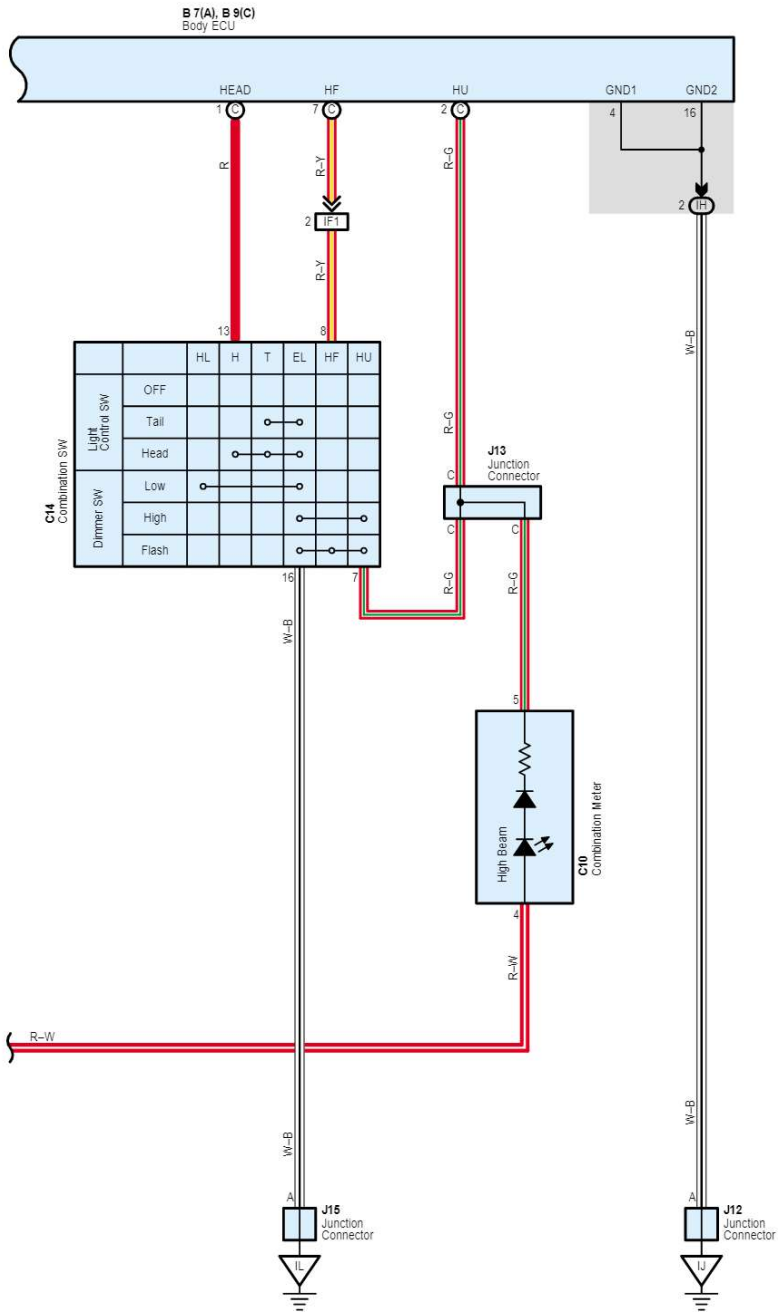
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Headlight (w/ Daytime Running Light)





# Headlight (w/ Daytime Running Light)



**System Outline**

The daytime running light system operates and the headlight and taillight are turned ON when the ignition SW is ON and the body ECU TERMINAL "L" ON condition is met with the light control SW at OFF position.

**Operation Cancel Condition**

- \* Ignition SW is turned OFF from ON
- \* Light control SW is at HEAD or TAIL position

**Service Hints****HEAD Relay**

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

**DIMMER Relay**

- 3-5 : Closed with the dimmer SW at HIGH or FLASH position

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A19	38 (*1)	H5	41 (*2)	J4	41 (*2)	
	40 (*2)		43 (*3)		43 (*3)	
	42 (*3)		45 (*4)		45 (*4)	
	44 (*4)		47 (*5)		47 (*5)	
	46 (*5)		39 (*1)		J7	A
B7	A	48 (LHD)	41 (*2)	J8	B	50 (LHD)
B9	C	48 (LHD)	43 (*3)	J12		50 (LHD)
C10	49 (LHD)		45 (*4)	J13		50 (LHD)
C14	49 (LHD)		47 (*5)	J15		50 (LHD)
H5	39 (*1)		J4	39 (*1)	J23	50 (LHD)

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)
5	25 (LHD)	Passenger Side R/B (Right Kick Panel)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	78 (*1)	Engine No.2 Wire and Engine Room Main Wire (Near the Engine Room R/B)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM5		

- \*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat

## Headlight (w/ Daytime Running Light)

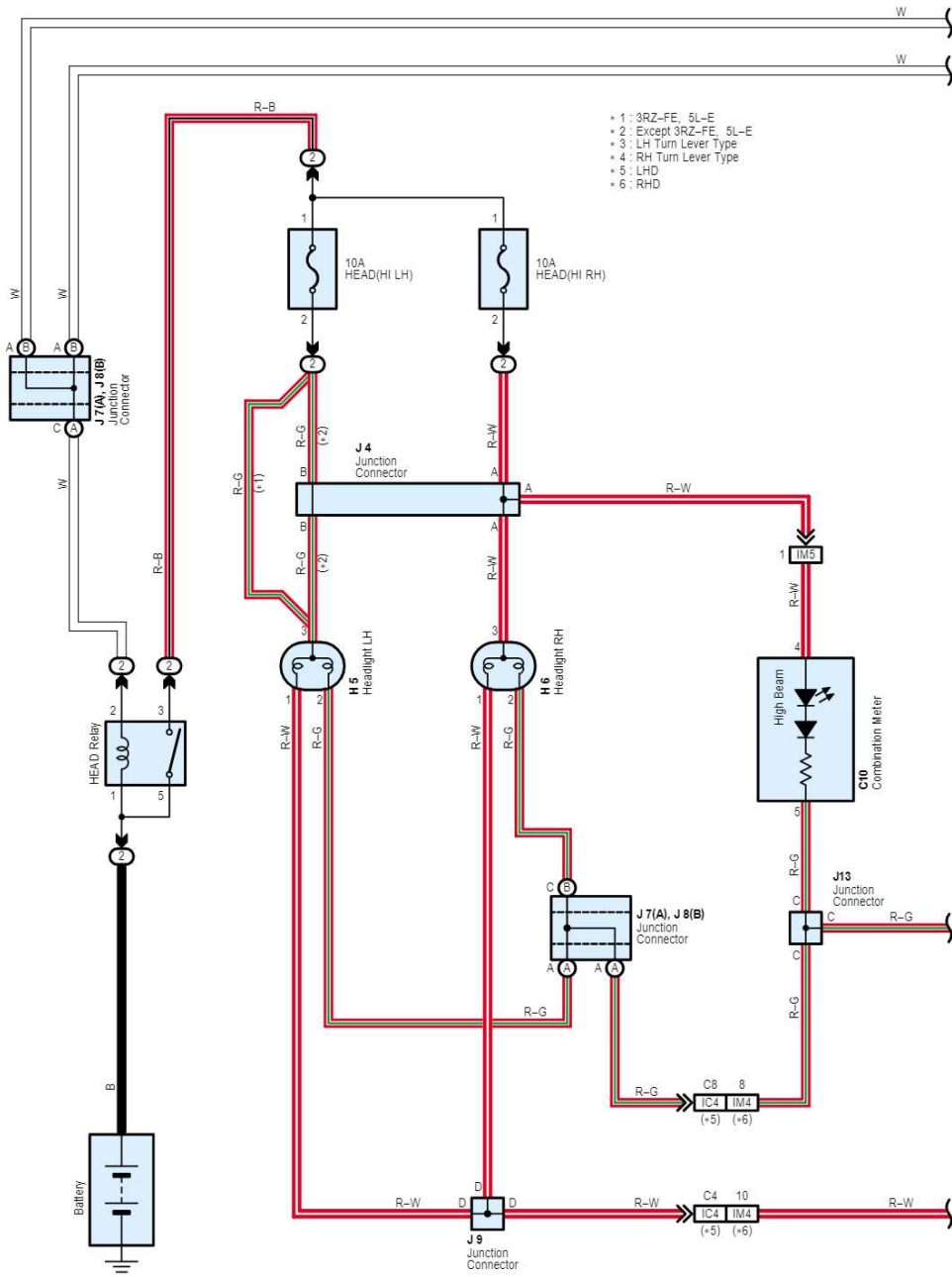
▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
IJ	88 (LHD)	Left Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column

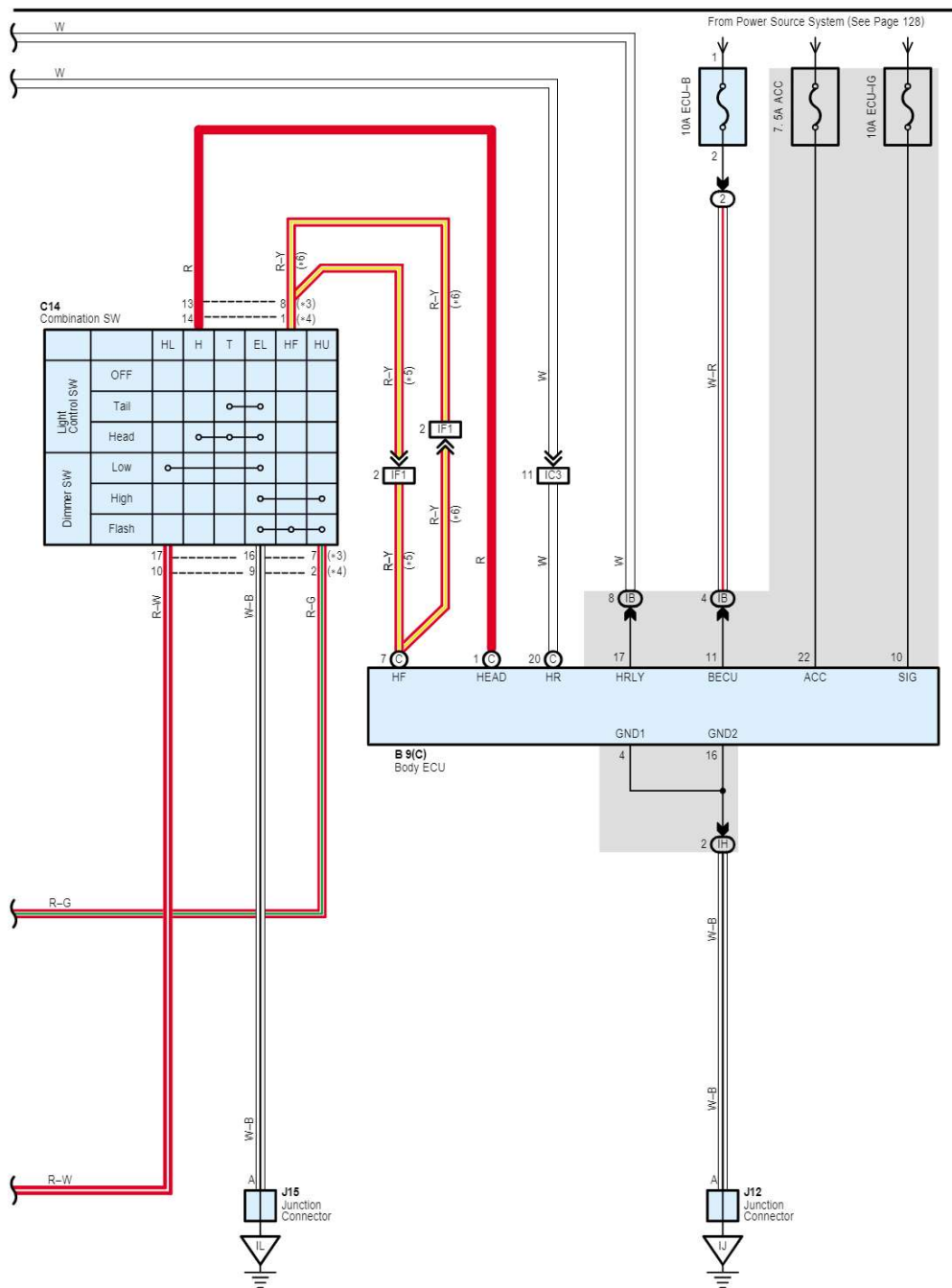
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# Headlight (w/o Daytime Running Light)







# Headlight (w/o Daytime Running Light)

## Service Hints

### HEAD Relay

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

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
B9	C	H6	39 (*1)	J4	61 (*11)		
			68 (RHD)		41 (*2)	63 (*12)	
49 (LHD)	43 (*3)		65 (*13)				
69 (RHD)	45 (*4)		67 (*14)				
C10			47 (*5)	J7	A	50 (LHD)	
			69 (RHD)			59 (*10)	70 (RHD)
C14			61 (*11)	J8	B	50 (LHD)	
			41 (*2)			63 (*12)	70 (RHD)
H5			65 (*13)	J9		50 (LHD)	
			45 (*4)			67 (*14)	70 (RHD)
			47 (*5)	J12		50 (LHD)	
			59 (*10)			41 (*2)	70 (RHD)
			61 (*11)	J13		50 (LHD)	
			63 (*12)			45 (*4)	70 (RHD)
		65 (*13)	J15		50 (LHD)		
		67 (*14)			47 (*5)	70 (RHD)	
		H6		J4	39 (*1)		
					41 (*2)		
					43 (*3)		
					45 (*4)		
					47 (*5)		
					59 (*10)		
61 (*11)							
63 (*12)							

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

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

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	

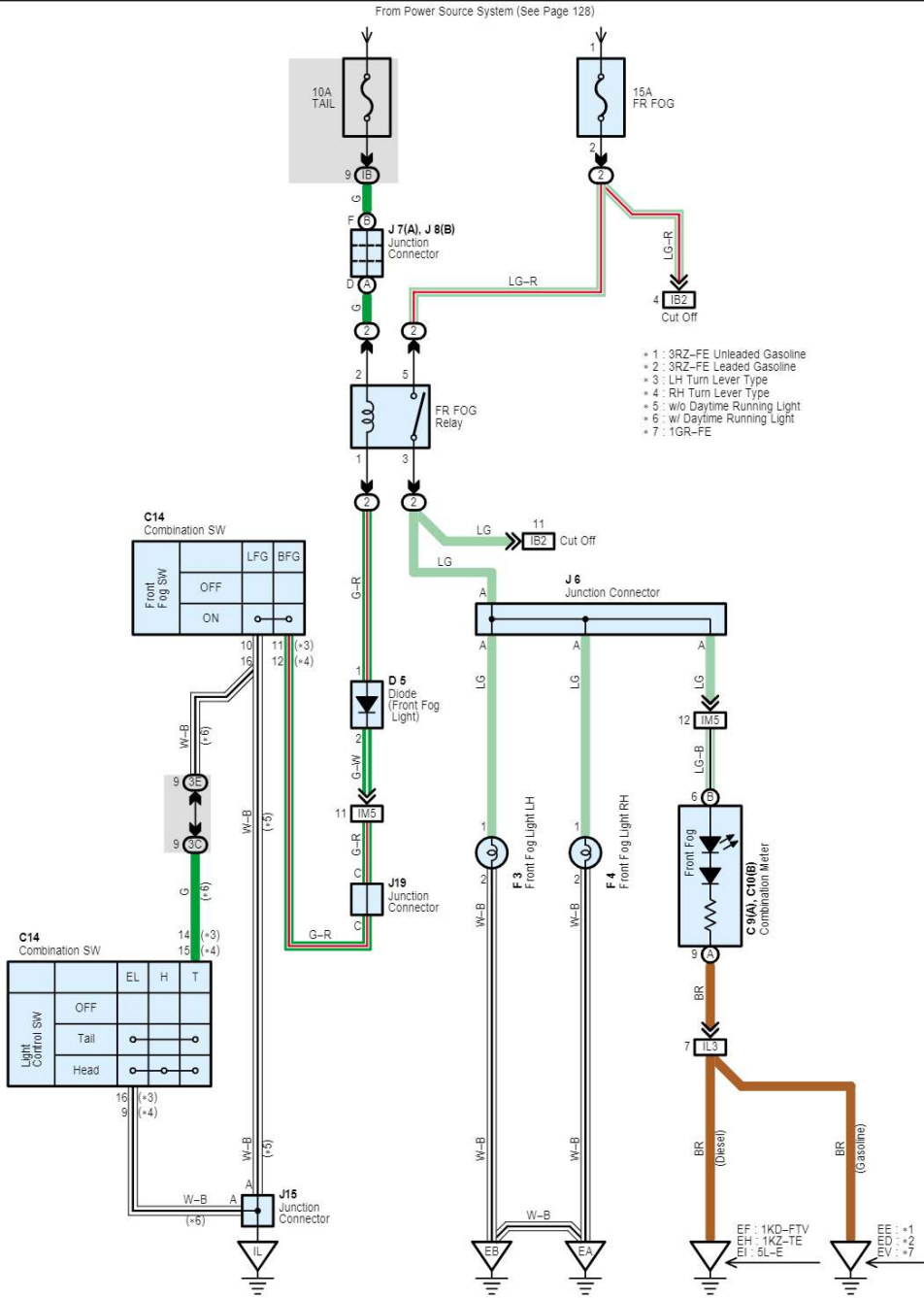
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

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▽ : Ground Points

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

# Front Fog Light



**Service Hints**

**FR FOG Relay**

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

**○ : Parts Location**

Code		See Page	Code	See Page	Code	See Page
C9	A	49 (LHD)	F3	64 (*13)	J6	47 (*5)
		69 (RHD)		66 (*14)		59 (*10)
C10	B	49 (LHD)	F4	38 (*1)	J7	61 (*11)
		69 (RHD)		40 (*2)		63 (*12)
C14		49 (LHD)	F4	42 (*3)	J8	65 (*13)
		69 (RHD)		44 (*4)		67 (*14)
D5		49 (LHD)	F4	46 (*5)	J7	A
		69 (RHD)		58 (*10)		70 (RHD)
F3		38 (*1)	J6	60 (*11)	J8	B
		40 (*2)		62 (*12)		50 (LHD)
		42 (*3)		64 (*13)		70 (RHD)
		44 (*4)		66 (*14)		J15
		46 (*5)		39 (*1)		50 (LHD)
		58 (*10)		41 (*2)		70 (RHD)
		60 (*11)		43 (*3)		J19
		62 (*12)		45 (*4)		50 (LHD)

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	
IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Front Fog Light

▽ : Ground Points

Code	See Page	Ground Points Location	
EA	78 (*1)	Front Right Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
	110 (*14)		
EB	78 (*1)	Front Left Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
	110 (*14)		
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EE	80 (*2)	Intake Manifold	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
IL	88 (LHD)		Near the Right Side of Steering Column
	112 (RHD)		
		Instrument Panel Brace RH	

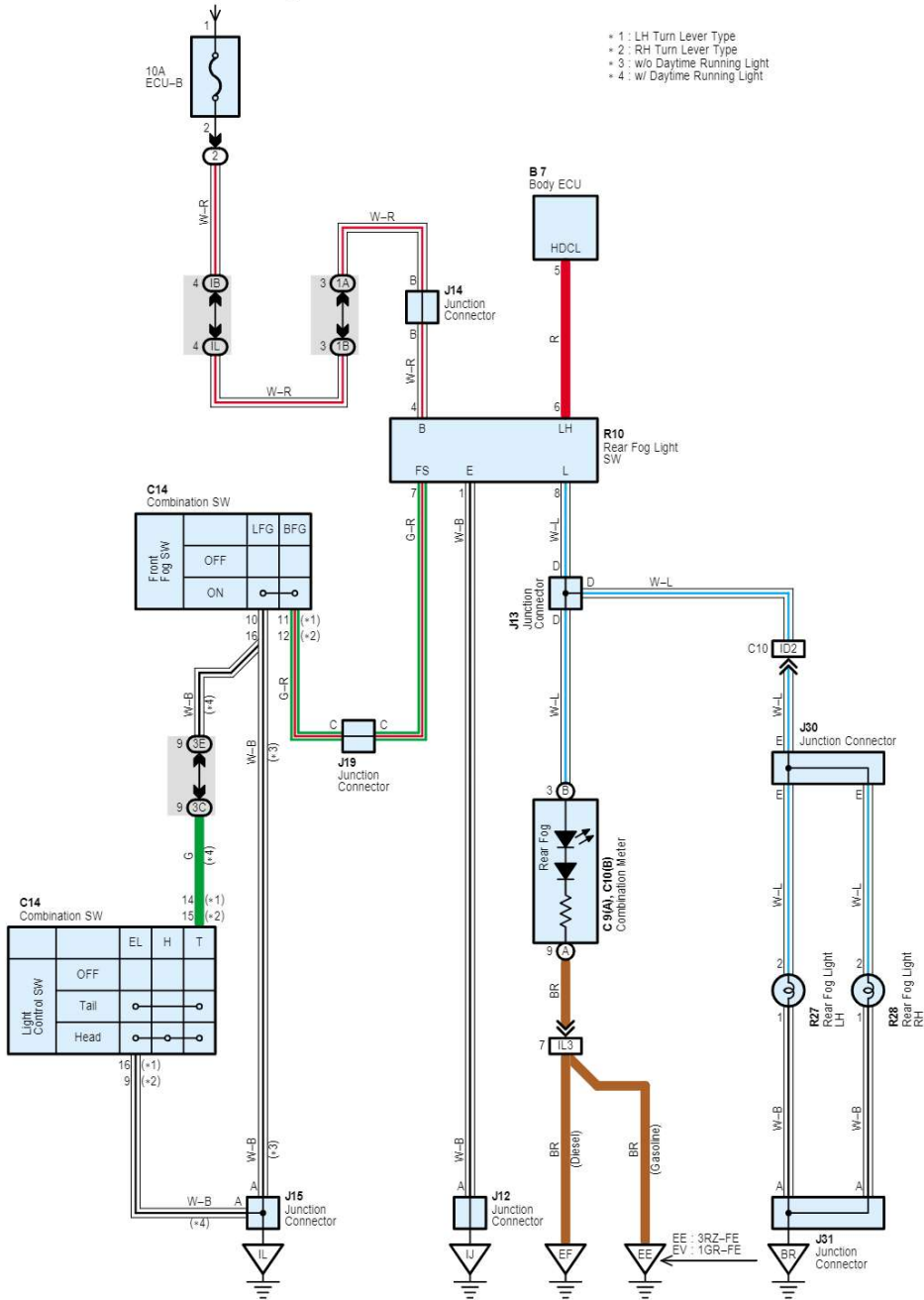
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



# Rear Fog Light

From Power Source System (See Page 128)

- \* 1 : LH Turn Lever Type
- \* 2 : RH Turn Lever Type
- \* 3 : w/o Daytime Running Light
- \* 4 : w/ Daytime Running Light





**Service Hints**

**R10 Rear Fog Light SW**

4-Ground : Always approx. 12 volts  
1-Ground : Always continuity

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page
B7	48 (LHD)	J14	50 (LHD)	J31	72 (*15)
	68 (RHD)		70 (RHD)		74 (*16)
C9	49 (LHD)	J15	50 (LHD)	R10	51 (LHD)
	69 (RHD)		70 (RHD)		71 (RHD)
C10	49 (LHD)	J19	50 (LHD)	R27	53 (*6)
	69 (RHD)		70 (RHD)		55 (*7)
C14	49 (LHD)	J30	52 (*6)	R28	73 (*15)
	69 (RHD)		54 (*7)		75 (*16)
J12	50 (LHD)	J31	72 (*15)	R28	53 (*6)
	70 (RHD)		74 (*16)		55 (*7)
J13	50 (LHD)	J31	52 (*6)	R28	73 (*15)
	70 (RHD)		54 (*7)		75 (*16)

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IL	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Rear Fog Light

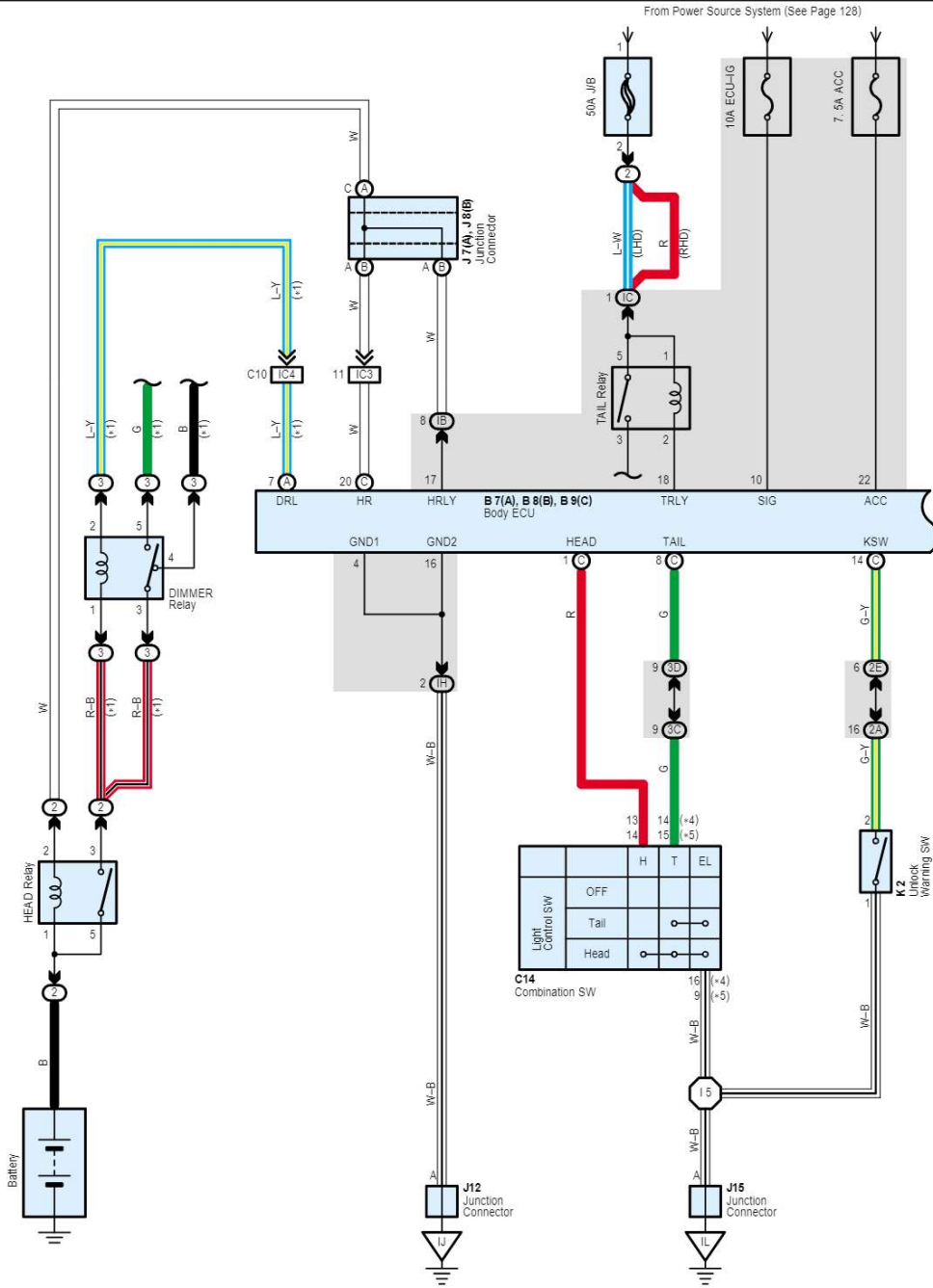
▽ : Ground Points

Code	See Page	Ground Points Location
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

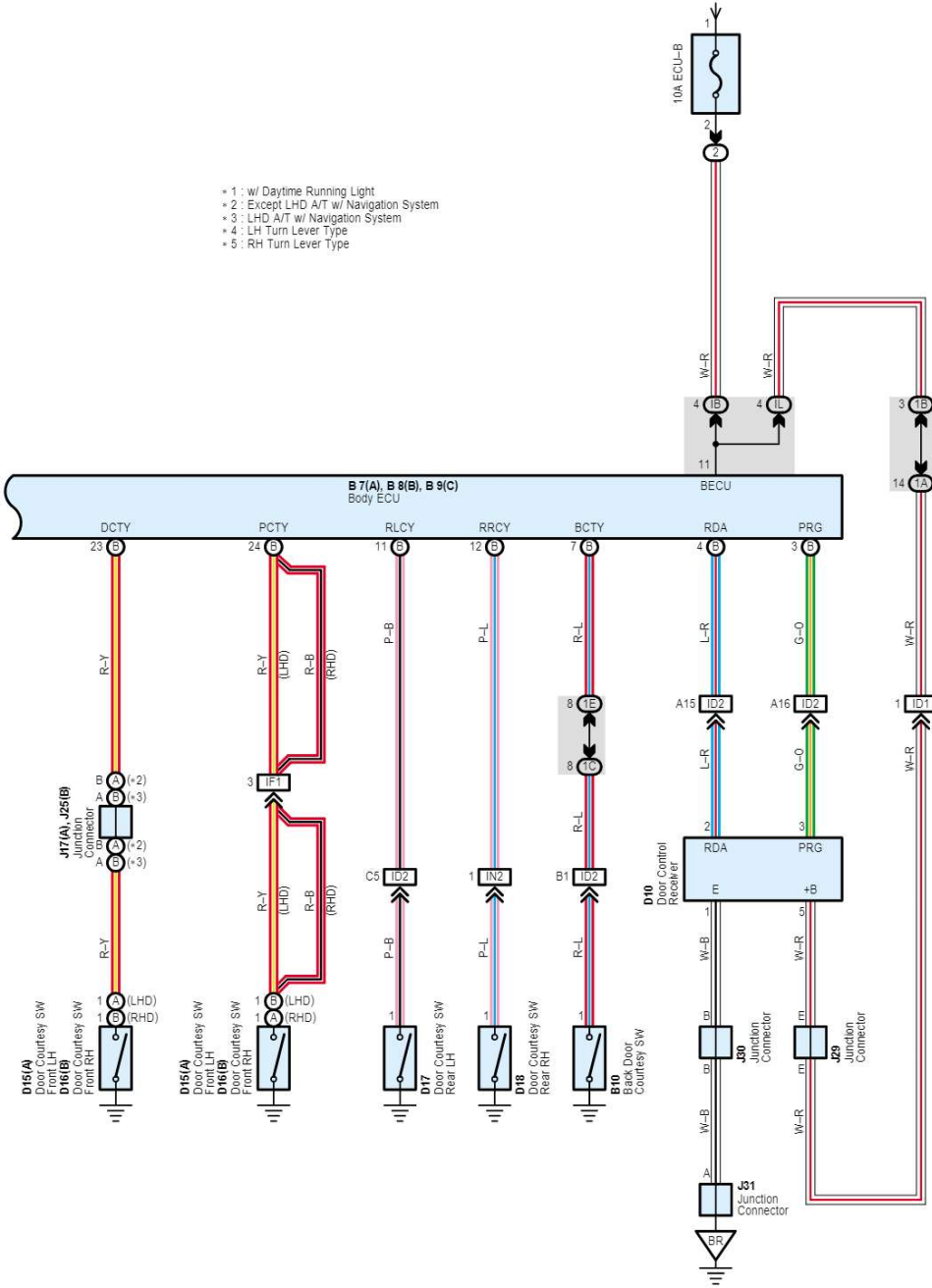
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



From Power Source System (See Page 128)



- \* 1 : w/ Daytime Running Light
- \* 2 : Except LHD A/T w/ Navigation System
- \* 3 : LHD A/T w/ Navigation System
- \* 4 : LH Turn Lever Type
- \* 5 : RH Turn Lever Type



# Light Auto Turn Off

## System Outline

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

## Service Hints

### TAIL Relay

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

### HEAD Relay

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

### Body ECU

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

4, 16-Ground : Always continuity

11-Ground : Always approx. 12 volts

### D15 (A), D16 (B) Door Courtesy SW Front LH, RH

1-Ground : Closed with the driver door open


## ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	48 (LHD)	D15	A	72 (*15)	J17	A	50 (LHD)
		68 (RHD)			74 (*16)			70 (RHD)
B8	B	48 (LHD)	D16	B	52 (*6)	J25	B	50 (LHD)
		68 (RHD)			54 (*7)			70 (RHD)
B9	C	48 (LHD)	D16	B	72 (*15)	J29		52 (*6)
		68 (RHD)			74 (*16)			54 (*7)
B10		52 (*6)	D17		52 (*6)	J30		72 (*15)
		54 (*7)			72 (*15)			74 (*16)
		72 (*15)	D18		52 (*6)			52 (*6)
		74 (*16)			72 (*15)			54 (*7)
C14		49 (LHD)	J7	A	50 (LHD)			72 (*15)
		69 (RHD)			70 (RHD)			74 (*16)
D10		52 (*6)	J8	B	50 (LHD)	J31		52 (*6)
		54 (*7)			70 (RHD)			54 (*7)
		72 (*15)	J12		50 (LHD)			72 (*15)
		74 (*16)			70 (RHD)			74 (*16)
D15	A	52 (*6)	J15		50 (LHD)	K2		50 (LHD)
		54 (*7)			70 (RHD)			70 (RHD)

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IC	26 (LHD)	
	28 (RHD)	
IH	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IL	27 (LHD)	
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
ID2	90 (LHD)	
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

 : Ground Points

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Light Auto Turn Off

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 : Splice Points

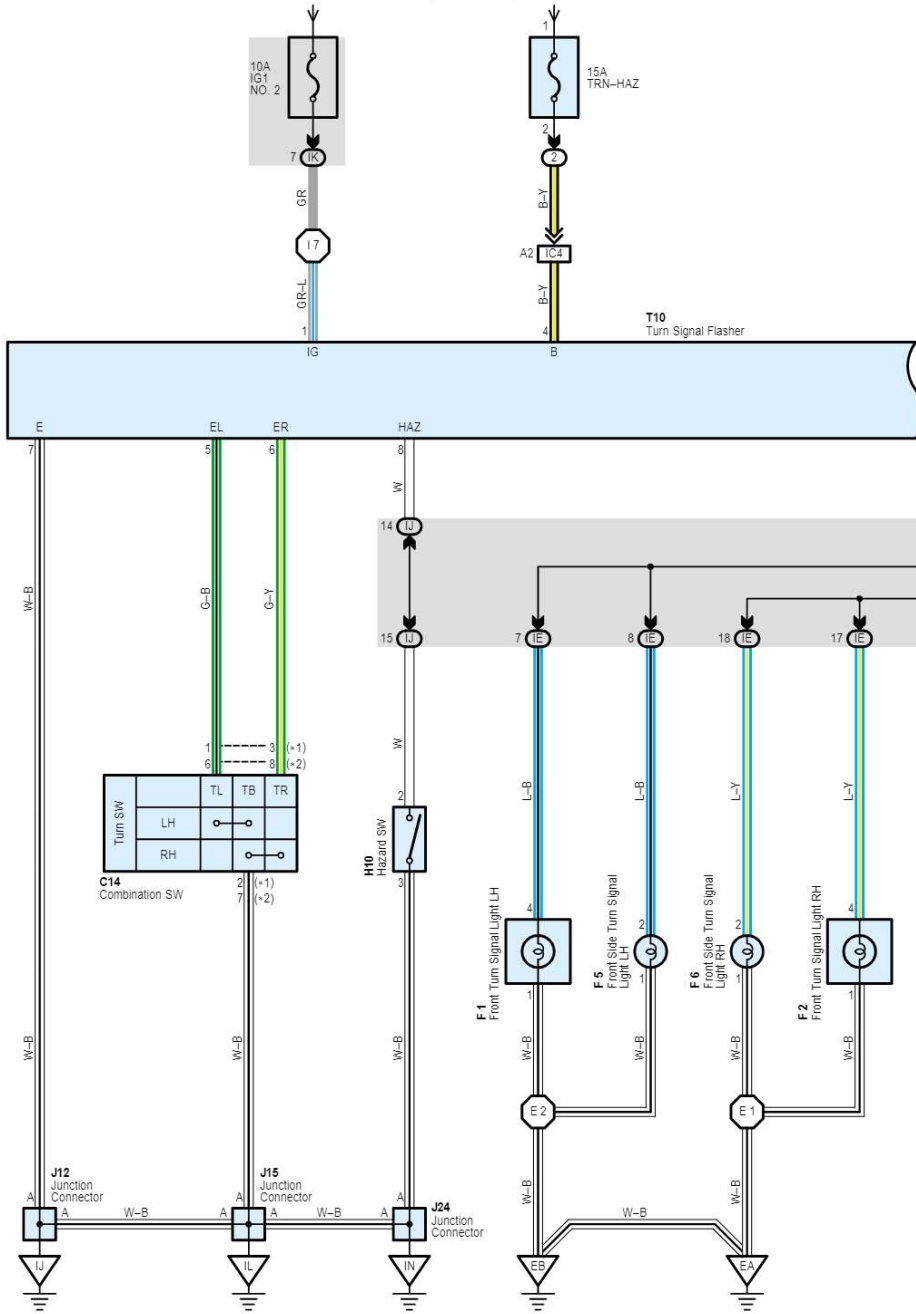
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
15	90 (LHD)	Instrument Panel Wire	15	114 (RHD)	Instrument Panel Wire



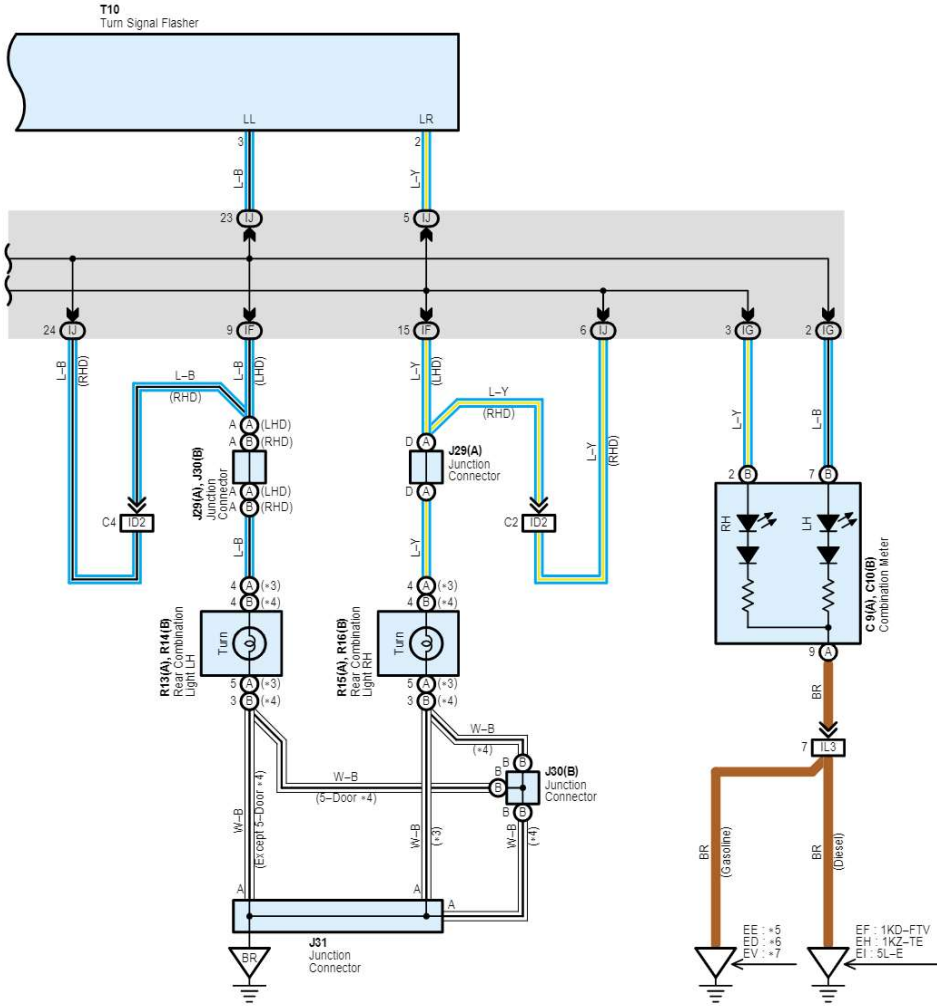


# Turn Signal and Hazard Warning Light

From Power Source System (See Page 128)



- \* 1 : LH Turn Lever Type
- \* 2 : RH Turn Lever Type
- \* 3 : Except Built-in Type
- \* 4 : Built-in Type
- \* 5 : 3PZ-FE Unleaded Gasoline
- \* 6 : 3R-FE Leaded Gasoline
- \* 7 : 1GR-FE



# Turn Signal and Hazard Warning Light

## Service Hints

### T10 Turn Signal Flasher

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

## ○ : Parts Location

Code		See Page	Code	See Page	Code	See Page	
C9	A	49 (LHD)	F5	40 (*2)	J29	A	52 (*6)
		69 (RHD)		42 (*3)			54 (*7)
C10	B	49 (LHD)		44 (*4)			72 (*15)
		69 (RHD)		46 (*5)			74 (*16)
C14		49 (LHD)		58 (*10)	J30	B	52 (*6)
		69 (RHD)		60 (*11)			54 (*7)
F1		38 (*1)		62 (*12)	J31		72 (*15)
		40 (*2)		64 (*13)			74 (*16)
		42 (*3)		66 (*14)	R13	A	52 (*6)
		44 (*4)		38 (*1)			53 (*6)
		46 (*5)	40 (*2)	55 (*7)			
		58 (*10)	42 (*3)	73 (*15)			
		60 (*11)	44 (*4)	75 (*16)			
		62 (*12)	46 (*5)	R14			B
		64 (*13)	58 (*10)		75 (*16)		
		F2		66 (*14)	60 (*11)	R15	A
38 (*1)	62 (*12)			55 (*7)			
40 (*2)	64 (*13)			R16	B	73 (*15)	
42 (*3)	66 (*14)					75 (*16)	
44 (*4)	H10			50 (LHD)	R16	B	51 (LHD)
46 (*5)				70 (RHD)			71 (RHD)
58 (*10)	J12			50 (LHD)	T10		
60 (*11)				70 (RHD)			
62 (*12)	J15			50 (LHD)			
64 (*13)				70 (RHD)			
66 (*14)	J24	50 (LHD)					
F5		38 (*1)	70 (RHD)				

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

## Turn Signal and Hazard Warning Light

▽ : Ground Points

Code	See Page	Ground Points Location	
EA	78 (*1)	Front Right Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
EB	78 (*1)	Front Left Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EE	80 (*2)	Intake Manifold	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
IJ	88 (LHD)		Left Kick Panel
	112 (RHD)	Right Kick Panel	
IL	88 (LHD)	Near the Right Side of Steering Column	
	112 (RHD)	Instrument Panel Brace RH	
IN	88 (LHD)	Right Kick Panel	
	112 (RHD)	Left Kick Panel	
BR	96 (*6)	Left Quarter Panel Inner	
	100 (*7)		
	120 (*15)		
	124 (*16)		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

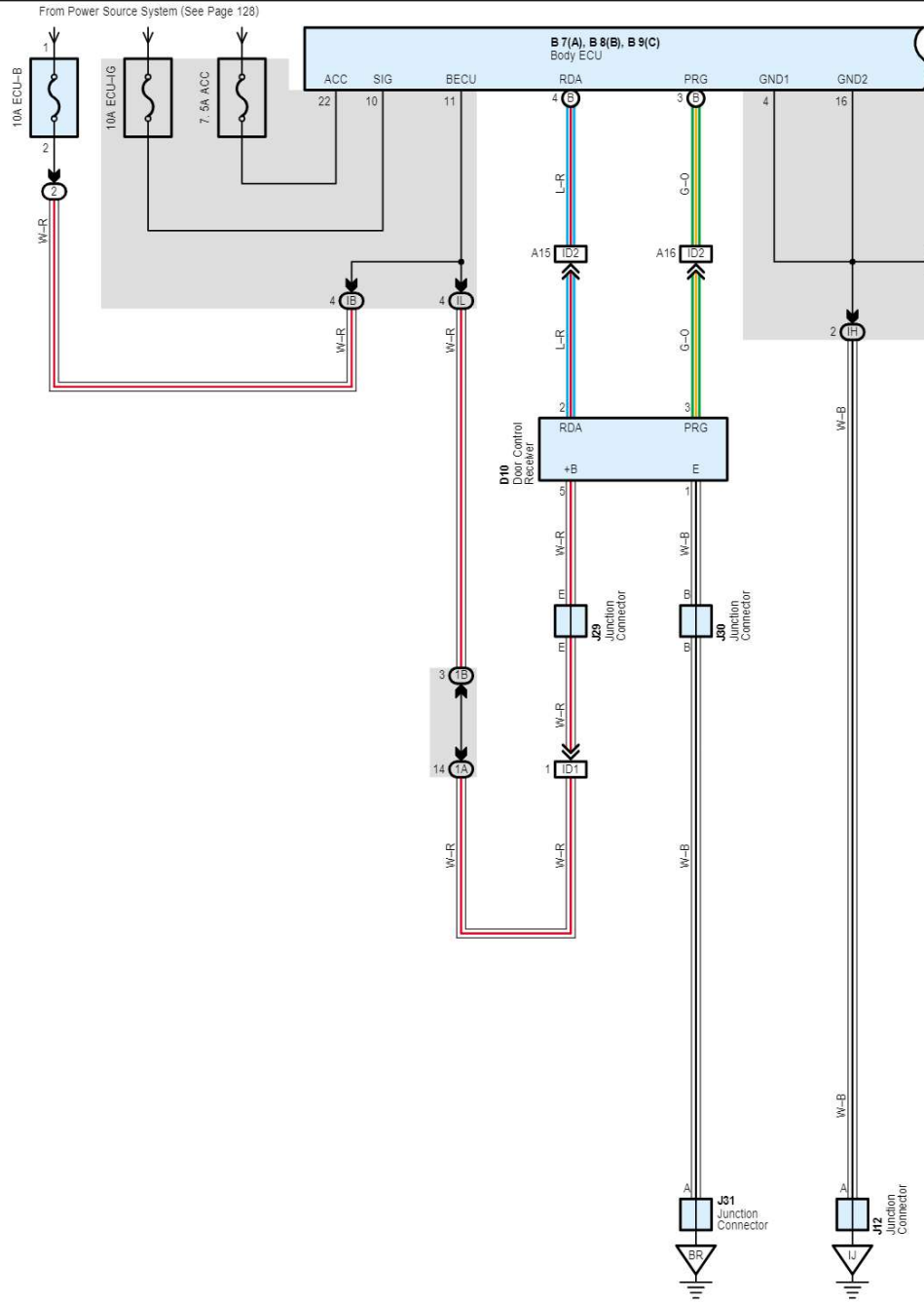
\* 18 : RHD Except 8Way Power Seat

 : Splice Points

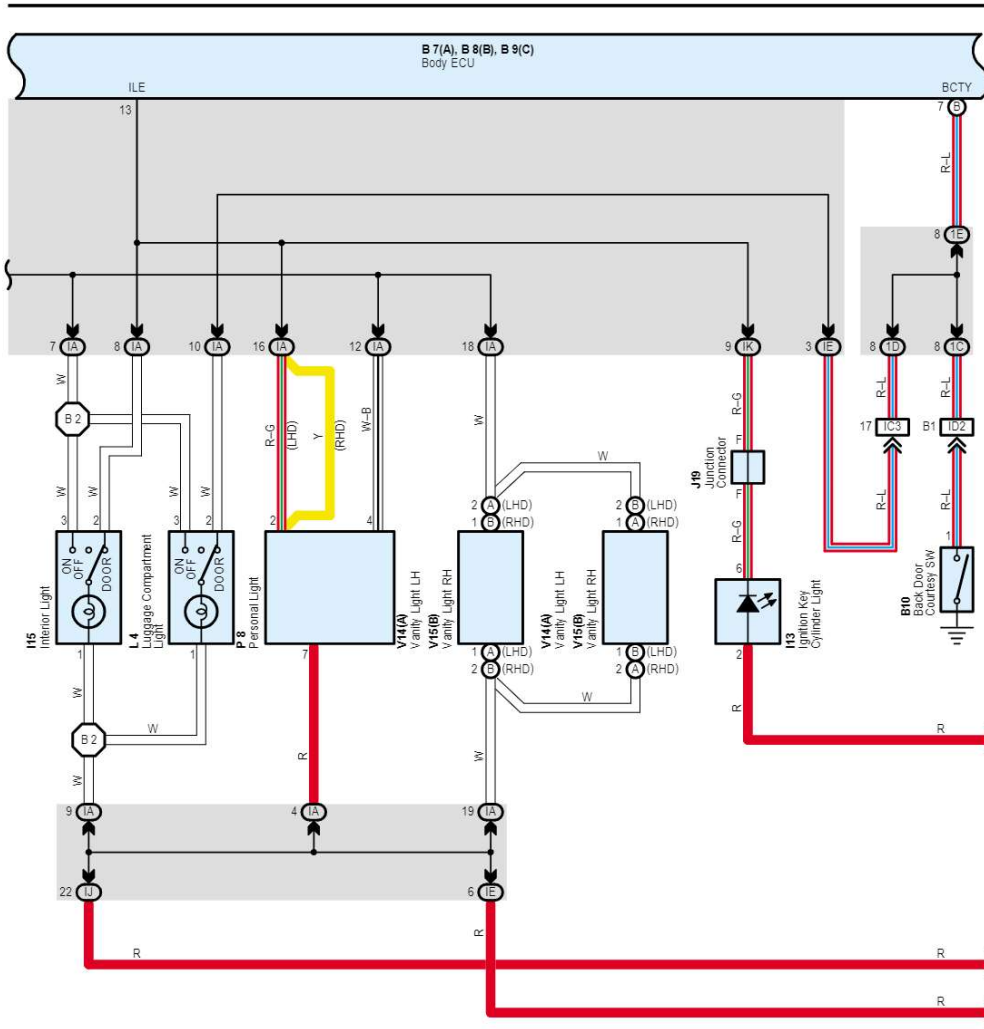
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	78 (*1)	Engine Room Main Wire	E2	80 (*2)	Engine Room Main Wire
	80 (*2)			82 (*3)	
	82 (*3)			84 (*4)	
	84 (*4)			86 (*5)	
	86 (*5)			102 (*10)	
	102 (*10)			104 (*11)	
	104 (*11)			106 (*12)	
	106 (*12)			108 (*13)	
	108 (*13)			110 (*14)	
	110 (*14)				
E2	78 (*1)		17	90 (LHD) 114 (RHD)	Instrument Panel Wire

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

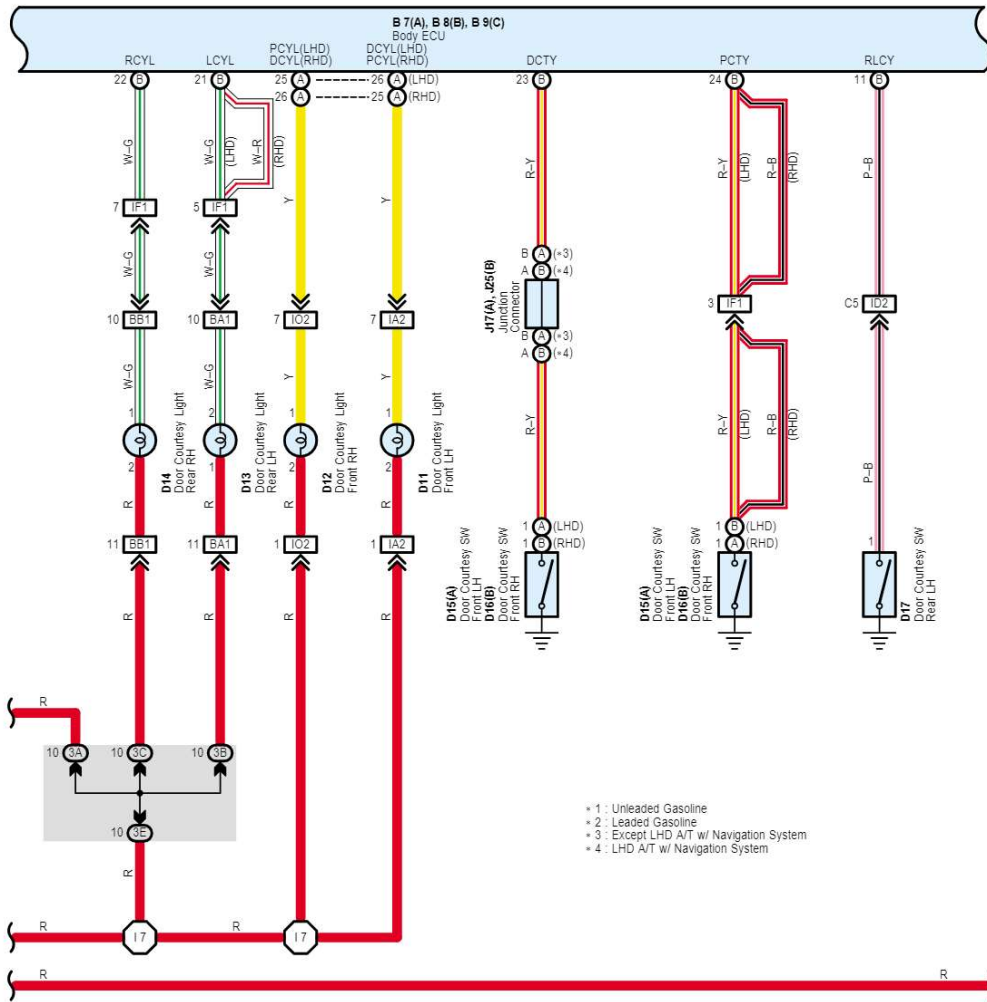
# Interior Light

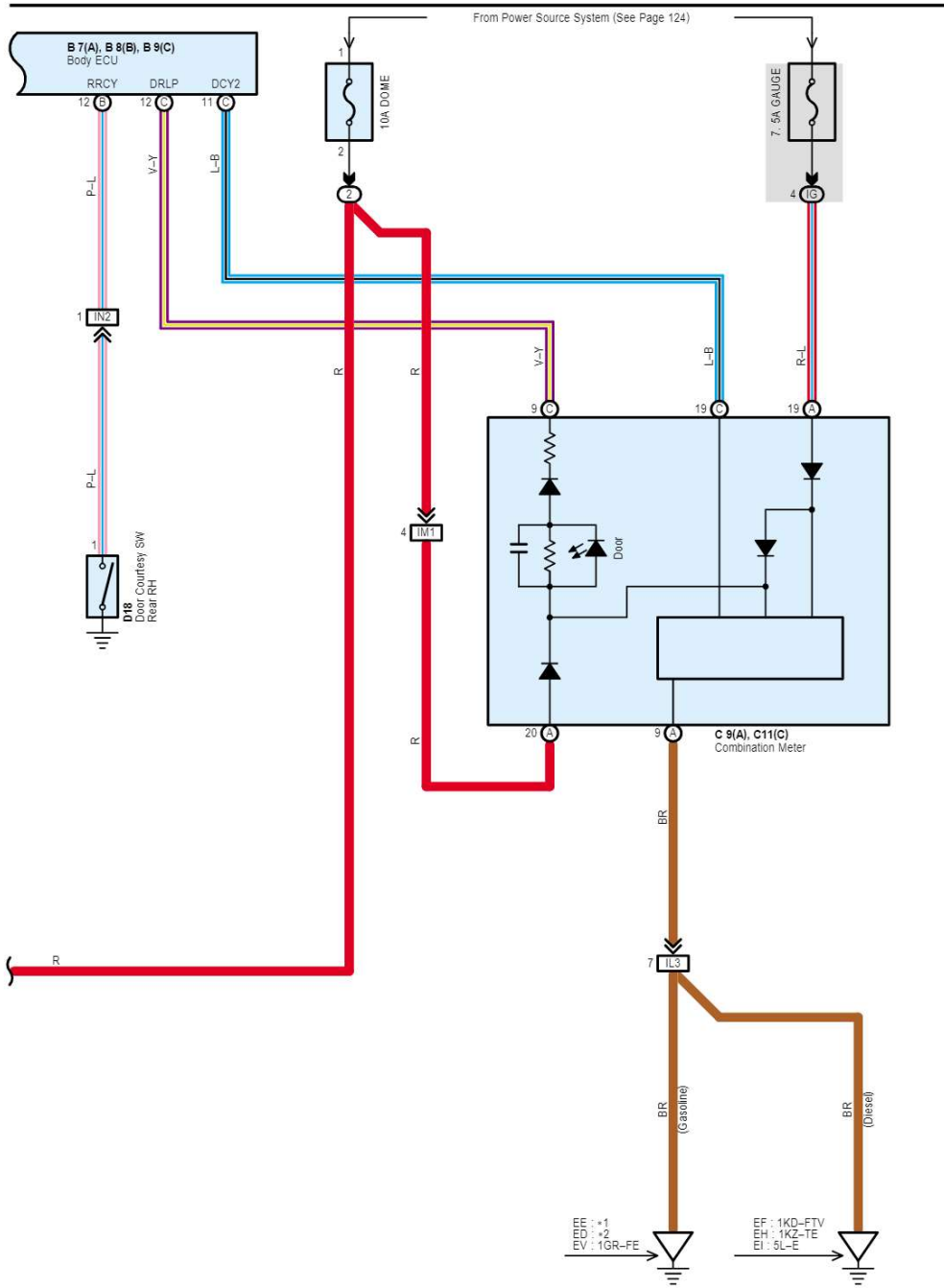






# Interior Light





# Interior Light

## System Outline

The interior light is controlled by the body ECU. This system has following features.

### 1. Normal Operation

- \* When one of the doors opened, the front interior light and open door warning light is turned on. When the all doors are closed, the front interior light and open warning light is turned off.
- \* When the back door opened, the rear interior light and open door warning light is turned on. When the back door is closed, the rear interior light and open warning light is turned off.

### 2. Illuminated Entry System

- \* When a door is unlocked through a key operation or transmitter operation, or if a door is opened or closed, the illuminated entry system turns ON the interior light and the ignition key illumination.
- \* If the ignition switch is turned to the ACC or ON position or if all doors are locked during the 15 seconds in which these lights are ON, they will immediately turn OFF.

## Service Hints

### Body ECU

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

## ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	48 (LHD)	D14		52 (*6)	J29		54 (*7)
		68 (RHD)			72 (*15)			72 (*15)
B8	B	48 (LHD)	D15	A	52 (*6)	J30		74 (*16)
		68 (RHD)			54 (*7)			52 (*6)
B9	C	48 (LHD)	D16	B	72 (*15)	J31		54 (*7)
		68 (RHD)			74 (*16)			72 (*15)
B10		52 (*6)	D17		52 (*6)	L4		74 (*16)
		54 (*7)			54 (*7)			52 (*6)
		72 (*15)			72 (*15)			54 (*7)
		74 (*16)			74 (*16)			72 (*15)
C9	A	49 (LHD)	D18		52 (*6)	P8		53 (*6)
		69 (RHD)			72 (*15)			55 (*7)
C11	C	49 (LHD)	I13		72 (*15)	V14	A	73 (*15)
		69 (RHD)			50 (LHD)			75 (*16)
D10		52 (*6)	I15		70 (RHD)	V15	B	53 (*6)
		54 (*7)			52 (*6)			55 (*7)
		72 (*15)			54 (*7)			73 (*15)
		74 (*16)			72 (*15)			75 (*16)
D11		52 (*6)	J12		74 (*16)	V15		53 (*6)
		54 (*7)			50 (LHD)			55 (*7)
		72 (*15)			70 (RHD)			73 (*15)
D12		74 (*16)	J17	A	50 (LHD)	V15		75 (*16)
		52 (*6)			70 (RHD)			53 (*6)
		54 (*7)			50 (LHD)			55 (*7)
		72 (*15)			70 (RHD)			73 (*15)
D13		74 (*16)	J25	B	50 (LHD)	V15		75 (*16)
		52 (*6)			52 (*6)			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IH	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IL	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

## Interior Light

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
	112 (RHD)	
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
ID2	90 (LHD)	
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
IO2	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	118 (RHD)	
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
	120 (*15)	
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
	120 (*15)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

### ○ : Splice Points

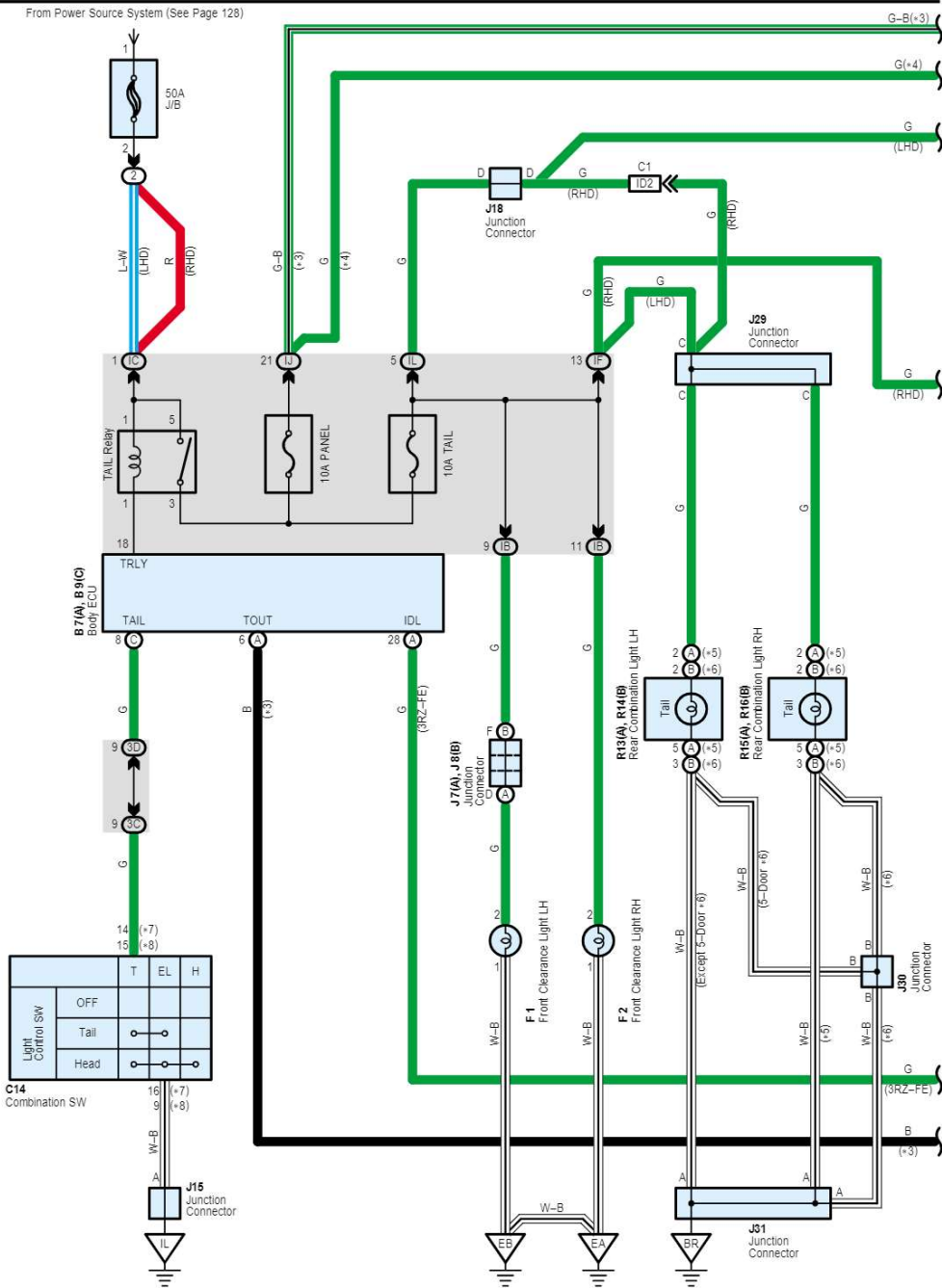
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	B2	100 (*7)	Roof Wire
	114 (RHD)				
B2	98 (*6)	Roof Wire		122 (*15)	
				124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

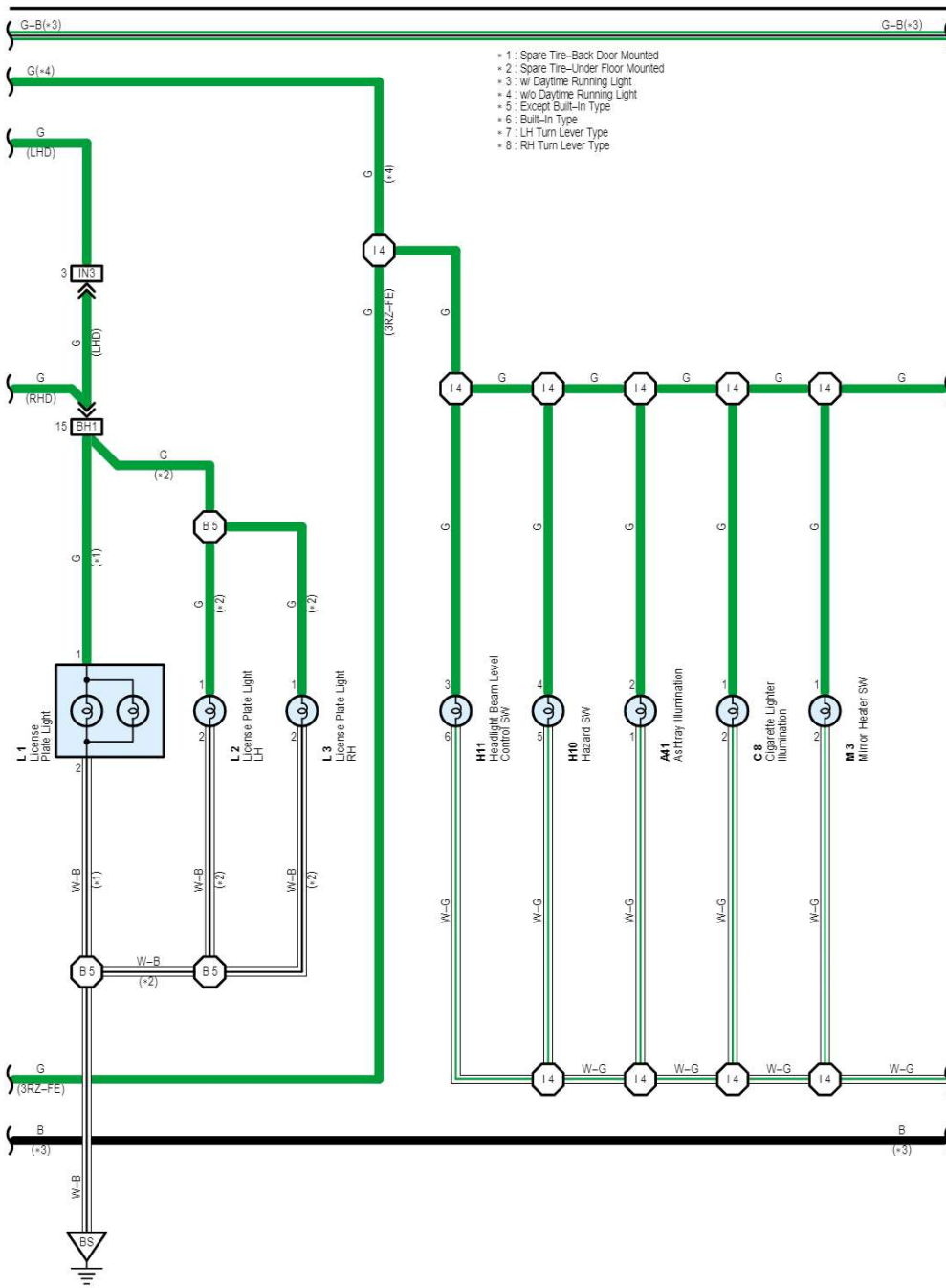


# Taillight and Illumination

From Power Source System (See Page 128)

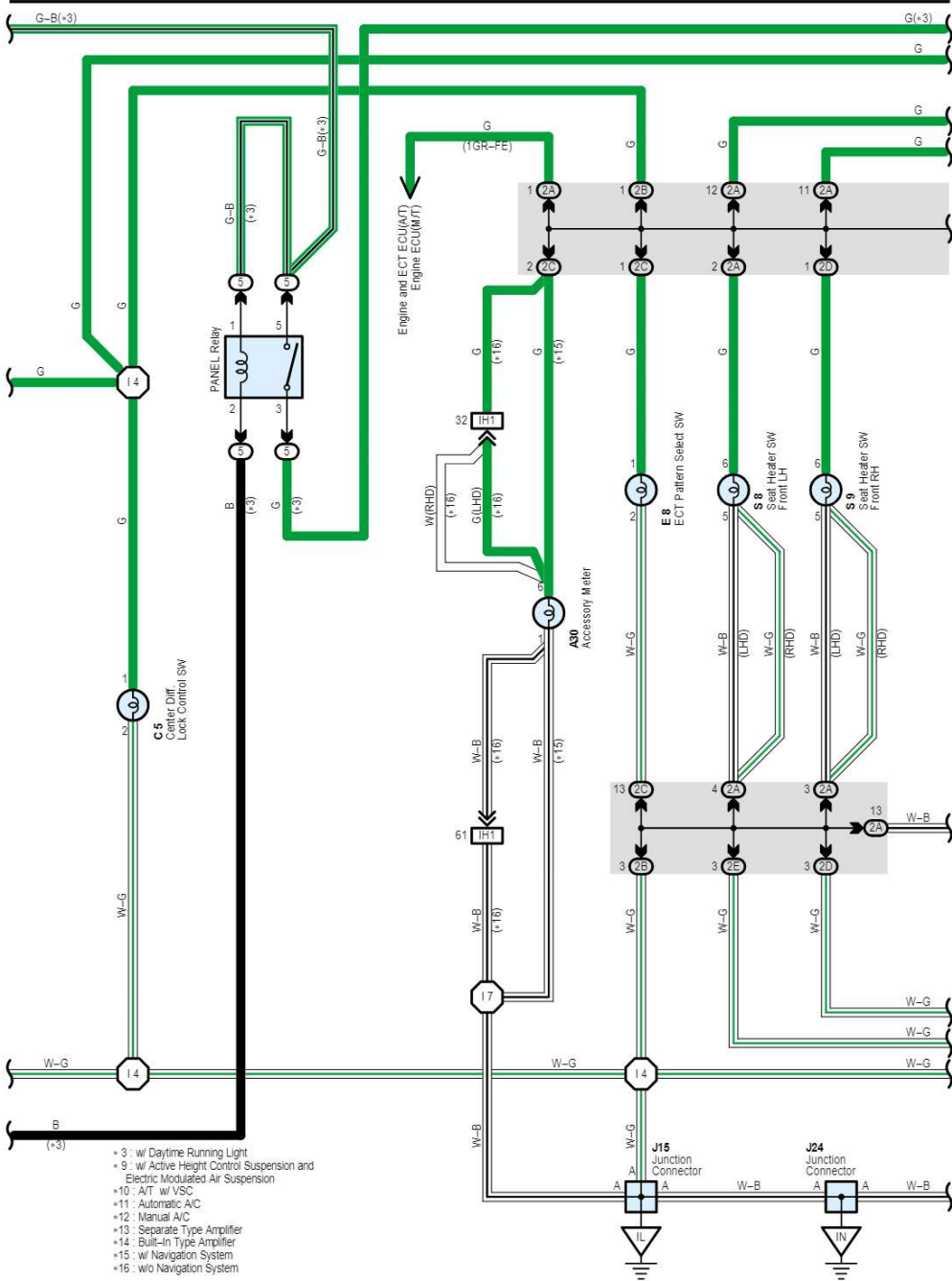


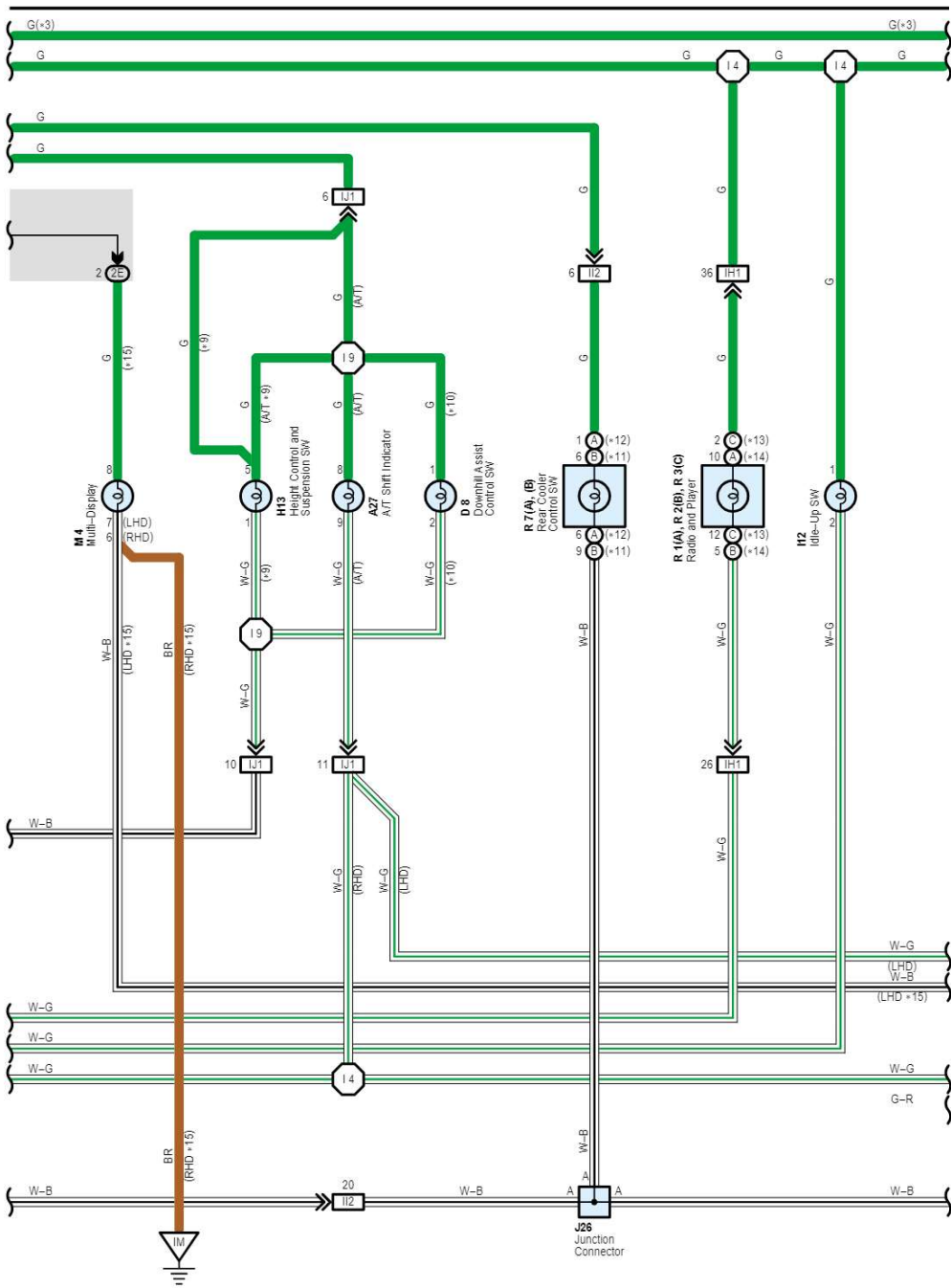




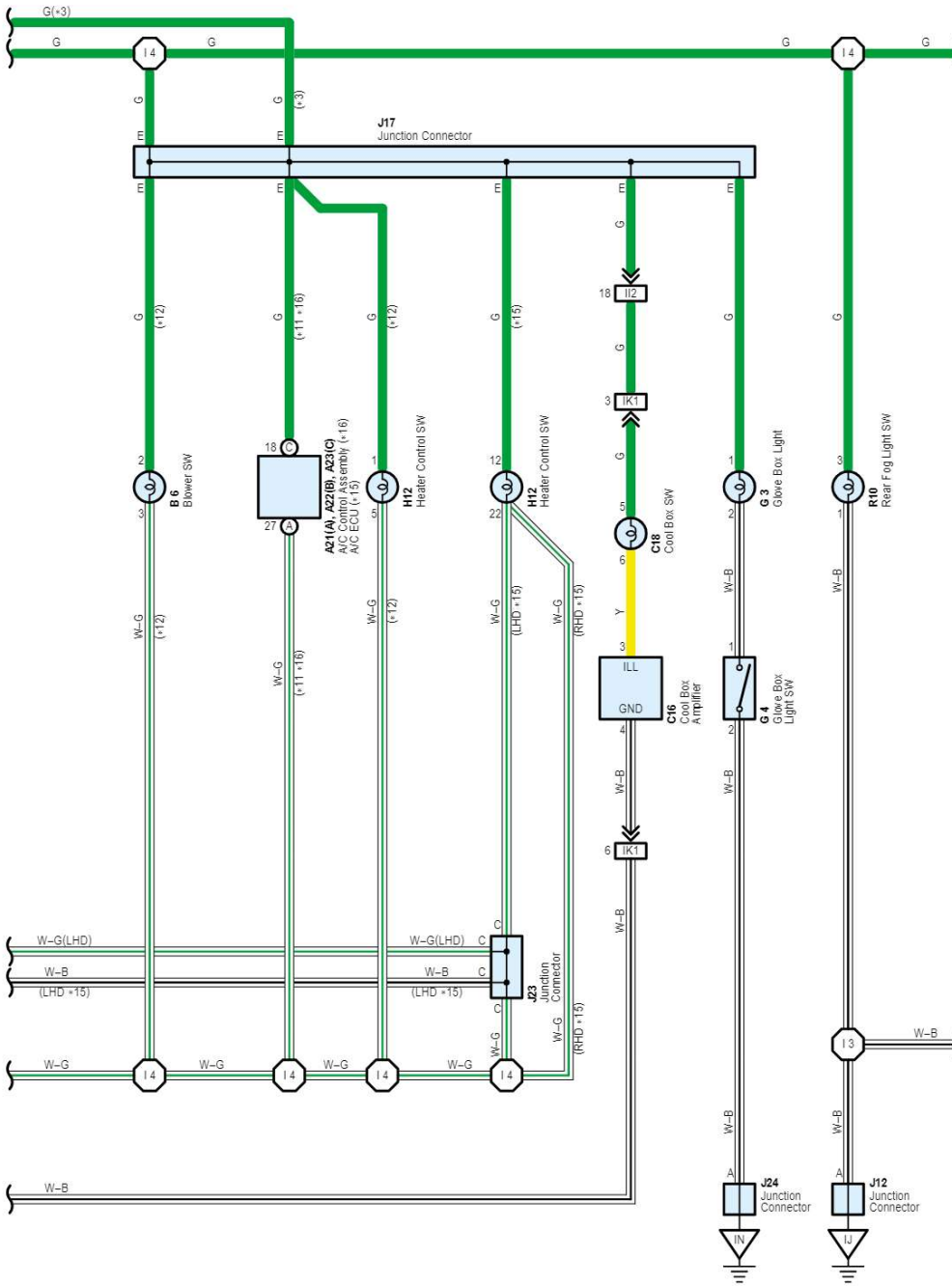
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

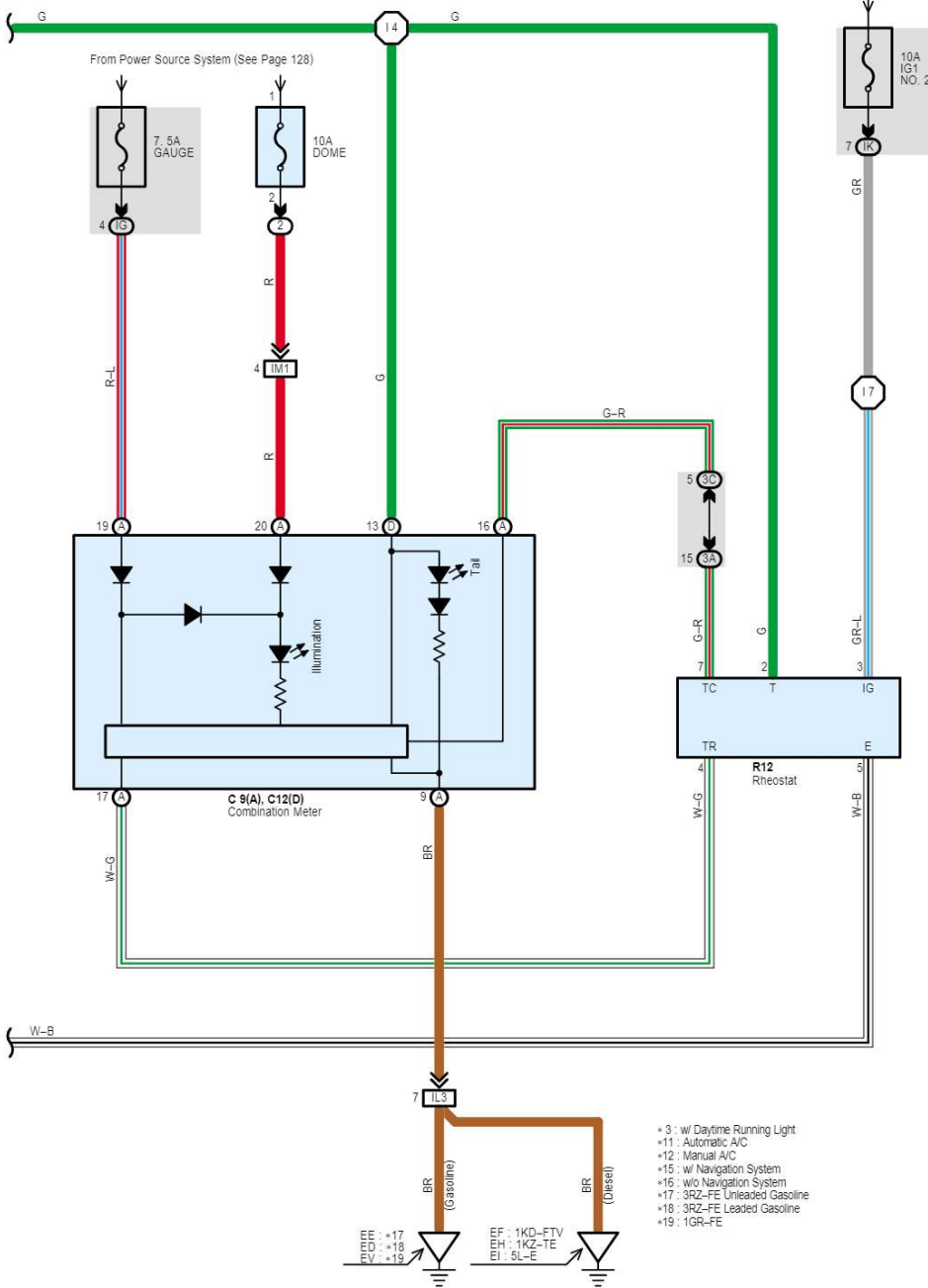
# Taillight and Illumination





# Taillight and Illumination





LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## Taillight and Illumination

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### Service Hints

#### C14 Combination SW

14-16 (LH turn lever type), 15-9 (RH turn lever type)-Ground : Continuity with the light control SW at TAIL or HEAD position

○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A21	A	48 (LHD)	F2	44 (*4)	J31	72 (*15)		
		68 (RHD)		46 (*5)		74 (*16)		
A22	B	48 (LHD)		58 (*10)	L1	53 (*6)		
		68 (RHD)		60 (*11)		55 (*7)		
A23	C	48 (LHD)		62 (*12)		73 (*15)		
		68 (RHD)		64 (*13)		75 (*16)		
A27		48 (LHD)		66 (*14)	L2	53 (*6)		
		68 (RHD)		49 (LHD)		55 (*7)		
A30		48 (LHD)		69 (RHD)		73 (*15)		
		68 (RHD)		49 (LHD)	75 (*16)			
A41		48 (LHD)		69 (RHD)	L3	53 (*6)		
		68 (RHD)		50 (LHD)		55 (*7)		
B6		48 (LHD)	70 (RHD)	73 (*15)				
		68 (RHD)	50 (LHD)	75 (*16)				
B7	A	48 (LHD)	70 (RHD)	M3	50 (LHD)			
		68 (RHD)	50 (LHD)		70 (RHD)			
B9	C	48 (LHD)	70 (RHD)	M4	50 (LHD)			
		68 (RHD)	50 (LHD)		70 (RHD)			
C5		49 (LHD)	70 (RHD)	R1	A	51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C8		49 (LHD)	70 (RHD)	R2	B	51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C9	A	49 (LHD)	70 (RHD)	R3	C	51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C12	D	49 (LHD)	70 (RHD)	R7	A	51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C14		49 (LHD)	70 (RHD)	R10	B	51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C16		49 (LHD)	70 (RHD)	R12		51 (LHD)		
		69 (RHD)	50 (LHD)		71 (RHD)			
C18		49 (LHD)	70 (RHD)	R13	A	53 (*6)		
		69 (RHD)	50 (LHD)		55 (*7)			
D8		49 (LHD)	70 (RHD)	73 (*15)				
		69 (RHD)	50 (LHD)	75 (*16)				
E8		49 (LHD)	70 (RHD)	R14	B	73 (*15)		
		69 (RHD)	50 (LHD)		75 (*16)			
F1		38 (*1)	70 (RHD)	R15	A	53 (*6)		
		40 (*2)	52 (*6)		55 (*7)			
		42 (*3)	54 (*7)	73 (*15)				
		44 (*4)	72 (*15)	75 (*16)				
		46 (*5)	74 (*16)	73 (*15)				
		58 (*10)	52 (*6)	75 (*16)				
		60 (*11)	54 (*7)	73 (*15)				
		62 (*12)	72 (*15)	75 (*16)				
		64 (*13)	74 (*16)					
		66 (*14)	52 (*6)					
F2		38 (*1)	54 (*7)	S8		51 (LHD)		
		40 (*2)	72 (*15)		71 (RHD)			
		42 (*3)	74 (*16)	S9		51 (LHD)		
			52 (*6)		71 (RHD)			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Taillight and Illumination

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
5	25 (LHD)	Passenger Side R/B (Right Kick Panel)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IC	26 (LHD)	
	28 (RHD)	
IF	26 (LHD)	Floor No.2 Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
IL	27 (LHD)	
	29 (RHD)	
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
2E		
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)



: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
	114 (RHD)	
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
	114 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IK1	92 (LHD)	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
	116 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN3	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	
	122 (*15)	
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# Taillight and Illumination

▽ : Ground Points

Code	See Page	Ground Points Location	
EA	78 (*1)	Front Right Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
EB	78 (*1)	Front Left Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EE	80 (*2)	Intake Manifold	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
IJ	88 (LHD)		Left Kick Panel
	112 (RHD)	Right Kick Panel	
IL	88 (LHD)	Near the Right Side of Steering Column	
	112 (RHD)	Instrument Panel Brace RH	
IM	112 (RHD)	Instrument Panel Brace RH	
IN	88 (LHD)	Right Kick Panel	
	112 (RHD)	Left Kick Panel	
BR	96 (*6)	Left Quarter Panel Inner	
	100 (*7)		
	120 (*15)		
	124 (*16)		
BS	96 (*6)	Back Door Panel Center	
	100 (*7)		
	120 (*15)		
	124 (*16)		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

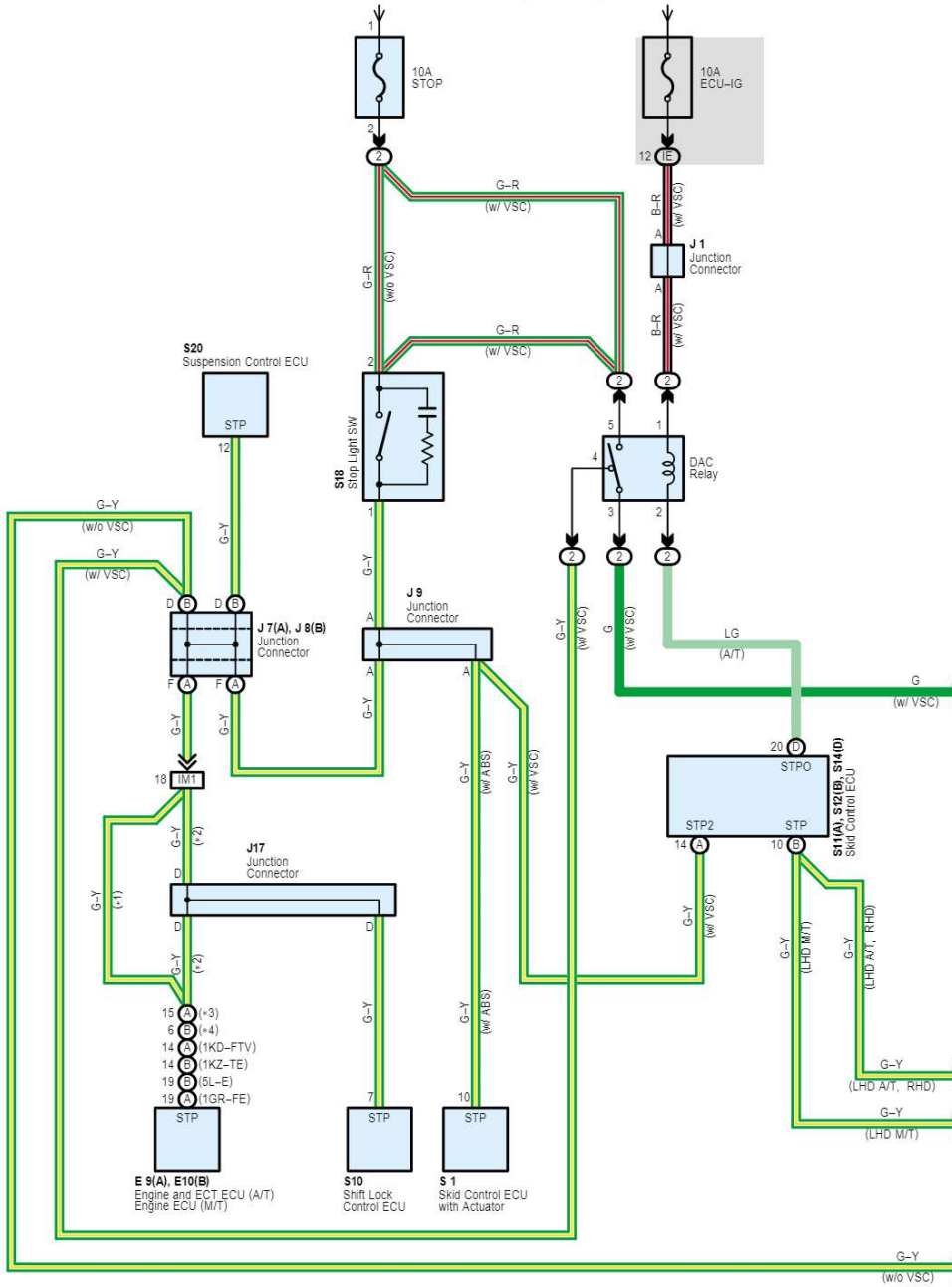
 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
13	90 (LHD)	Instrument Panel Wire	19	90 (LHD)	Switch Wire
	114 (RHD)			114 (RHD)	
14	90 (LHD)		B5	98 (*6)	Back Door No.1 Wire
	114 (RHD)			100 (*7)	
17	90 (LHD)			122 (*15)	
	114 (RHD)			124 (*16)	

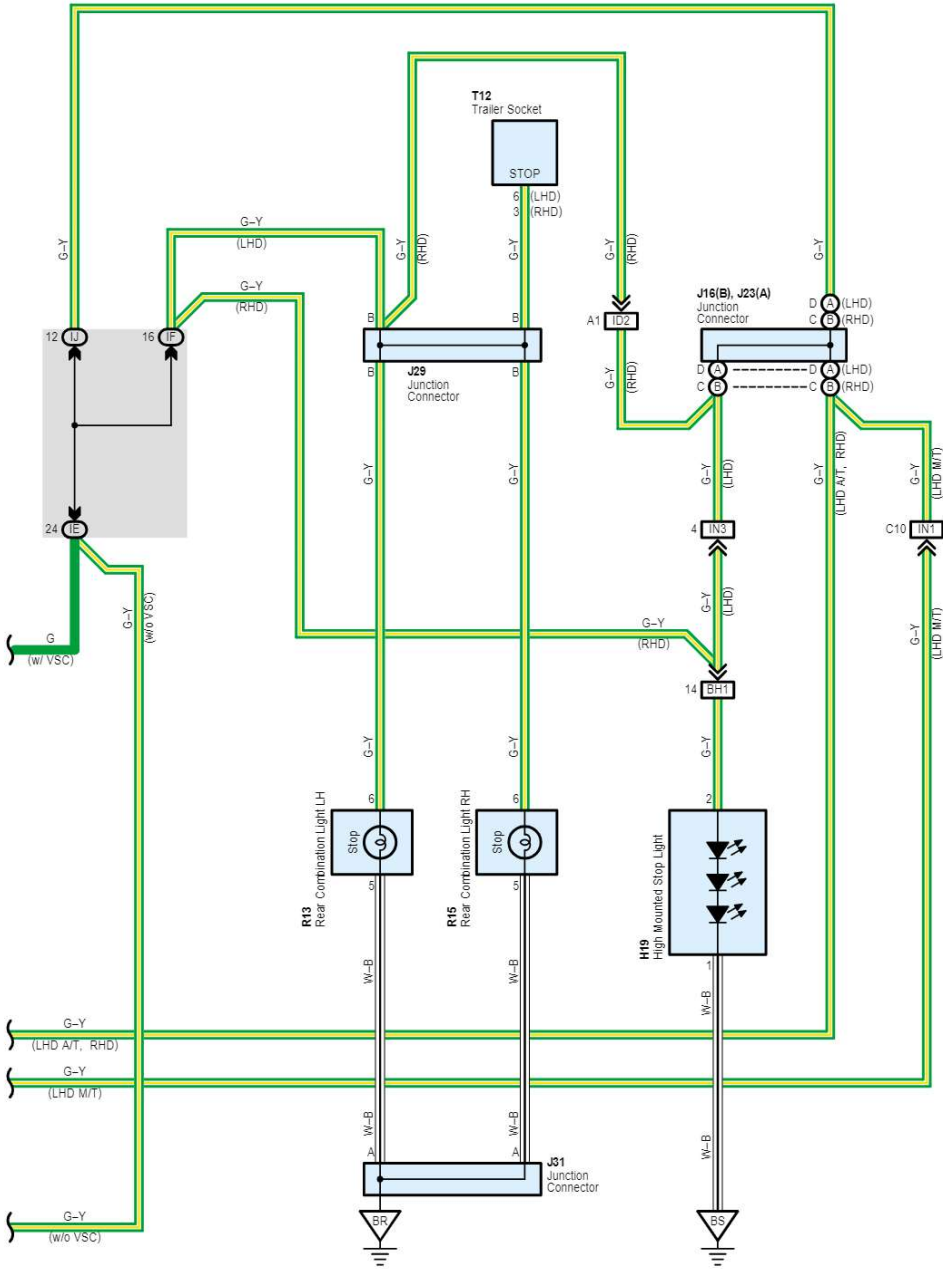
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Stop Light

From Power Source System (See Page 128)



- \* 1 : LHD 5L-E Bench Seat Type, RHD 5L-E
- \* 2 : Except \*1
- \* 3 : SRZ-FE Unleaded Gasoline
- \* 4 : SRZ-FE Leaded Gasoline



# Stop Light

## Service Hints

### S18 Stop Light SW

2-1 : Closed with the brake pedal depressed

## ○ : Parts Location

Code		See Page	Code	See Page	Code	See Page		
E9	A	49 (LHD)	J17	70 (RHD)	S1	45 (*4)		
		69 (RHD)	J23	A		50 (LHD)	59 (*10)	
E10	B	49 (LHD)	J29	52 (*6)	S10	61 (*11)		
		69 (RHD)		54 (*7)		63 (*12)		
H19		52 (*6)	J31	72 (*15)	S11	65 (*13)		
		54 (*7)		74 (*16)		51 (LHD)		
		72 (*15)		52 (*6)		71 (RHD)		
		74 (*16)		54 (*7)		51 (LHD)		
J1		39 (*1)	R13	72 (*15)	S12	A	71 (RHD)	
		43 (*3)		74 (*16)		B	51 (LHD)	
		59 (*10)		R15	53 (*6)	S14	D	71 (RHD)
		63 (*12)			55 (*7)		51 (LHD)	
		65 (*13)			73 (*15)		71 (RHD)	
J7	A	50 (LHD)	R15	75 (*16)	S18	51 (LHD)		
		70 (RHD)		53 (*6)		71 (RHD)		
J8	B	50 (LHD)	R15	55 (*7)	S20	51 (LHD)		
		70 (RHD)		73 (*15)		71 (RHD)		
J9		50 (LHD)	S1	75 (*16)	T12	53 (*6)		
		70 (RHD)		39 (*1)		55 (*7)		
J16	B	70 (RHD)	S1	41 (*2)			73 (*15)	
J17		50 (LHD)	S1	43 (*3)			75 (*16)	

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

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

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN1	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN3		
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	
	122 (*15)	
	124 (*16)	

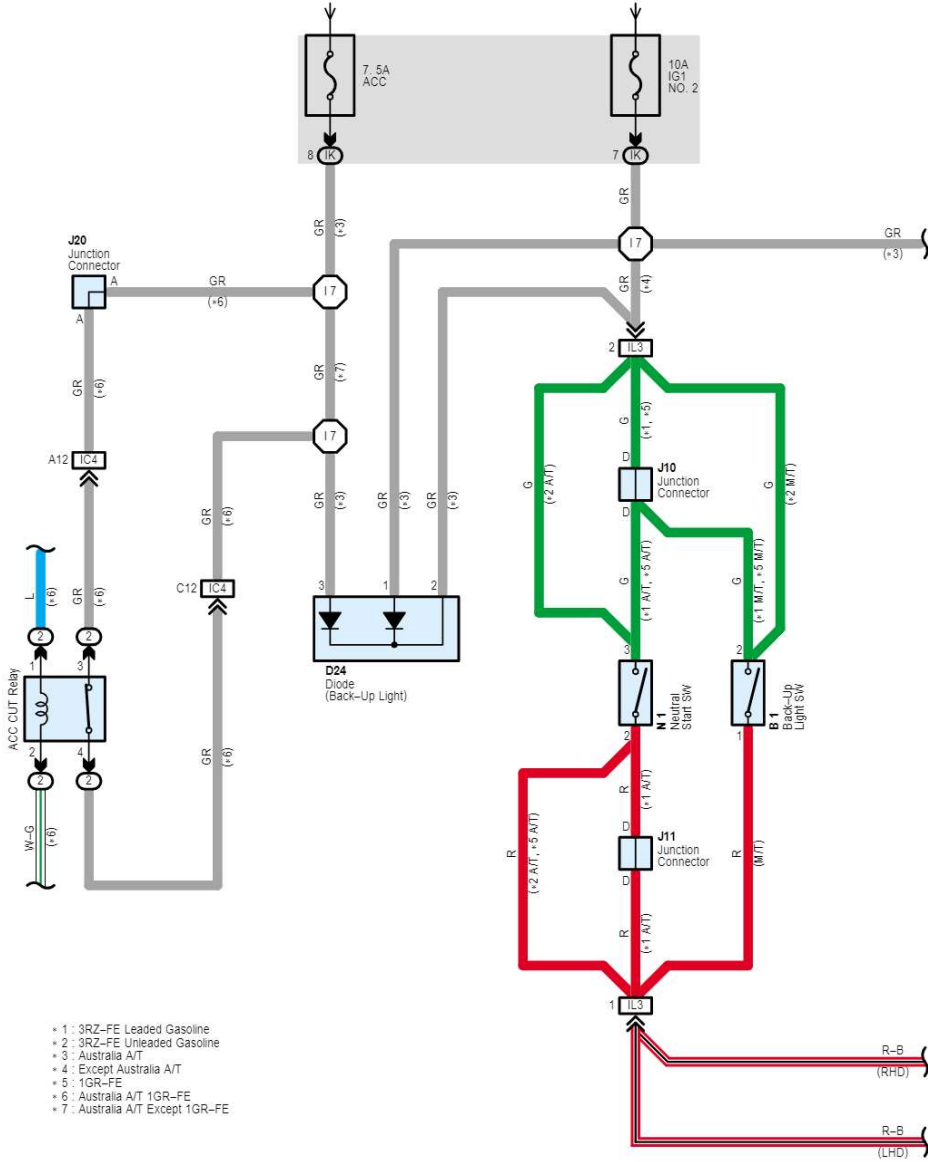
▽ : Ground Points

Code	See Page	Ground Points Location
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	
BS	96 (*6)	Back Door Panel Center
	100 (*7)	
	120 (*15)	
	124 (*16)	

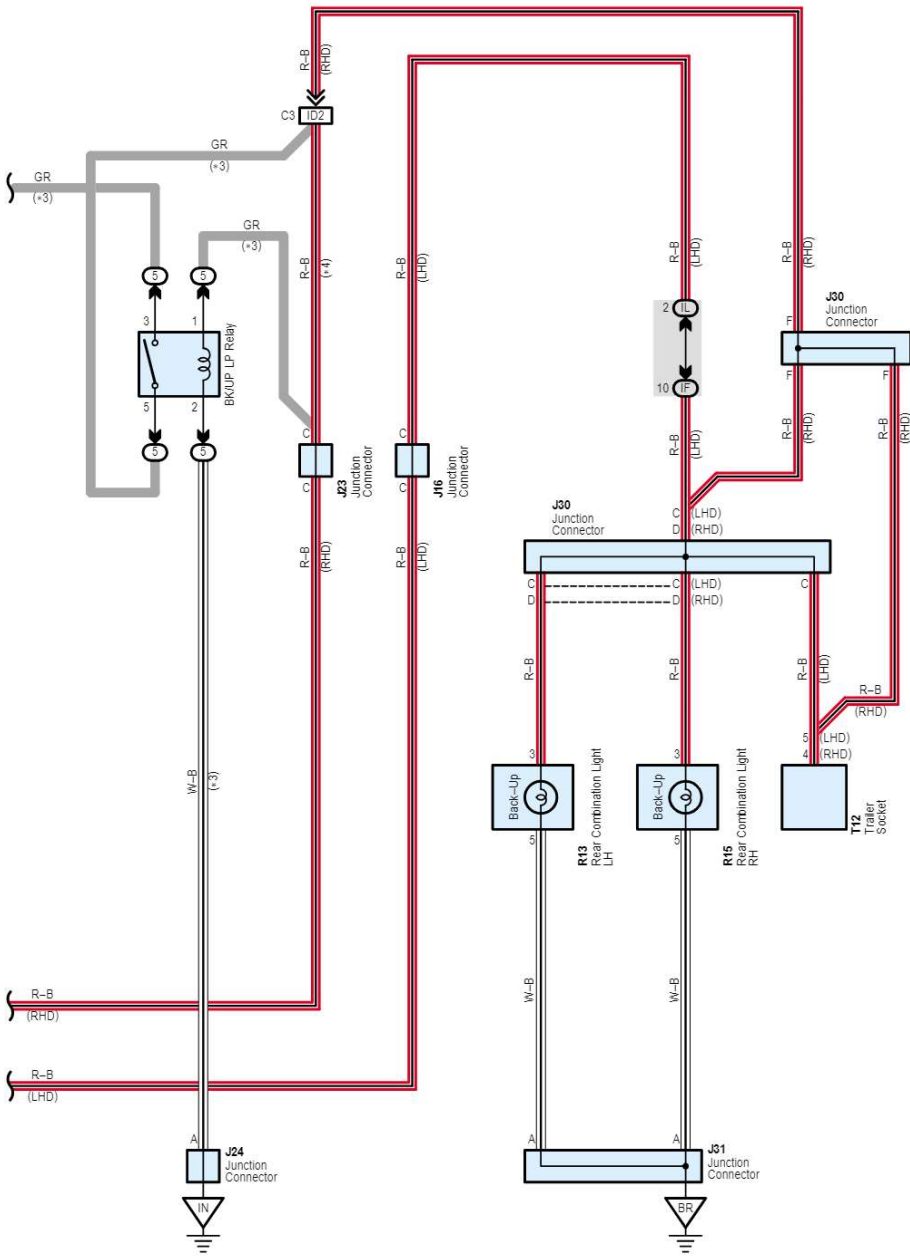
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Back-Up Light (Gasoline)

From Power Source System (See Page 128)







## Back-Up Light (Gasoline)

### Service Hints

#### N1 Neutral Start SW

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

#### B1 Back-Up Light SW

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B1	38 (*1)	J24	50 (LHD)	R13	53 (*6)
	40 (*2)		70 (RHD)		55 (*7)
	58 (*10)	J30	72 (*15)		73 (*15)
	60 (*11)		74 (*16)		75 (*16)
D24	69 (RHD)	J31	52 (*6)	R15	53 (*6)
J10	50 (LHD)		54 (*7)		55 (*7)
	70 (RHD)		72 (*15)		73 (*15)
J11	50 (LHD)		74 (*16)		75 (*16)
	70 (RHD)	N1	39 (*1)	T12	53 (*6)
J16	50 (LHD)		41 (*2)		55 (*7)
J20	70 (RHD)		59 (*10)		73 (*15)
J23	70 (RHD)		61 (*11)		75 (*16)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
5	25 (RHD)	Passenger Side R/B (Left Kick Panel)

### ○ : Junction Block and Wire Harness Connector

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

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

### ▽ : Ground Points

Code	See Page	Ground Points Location
IN	112 (RHD)	Left Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

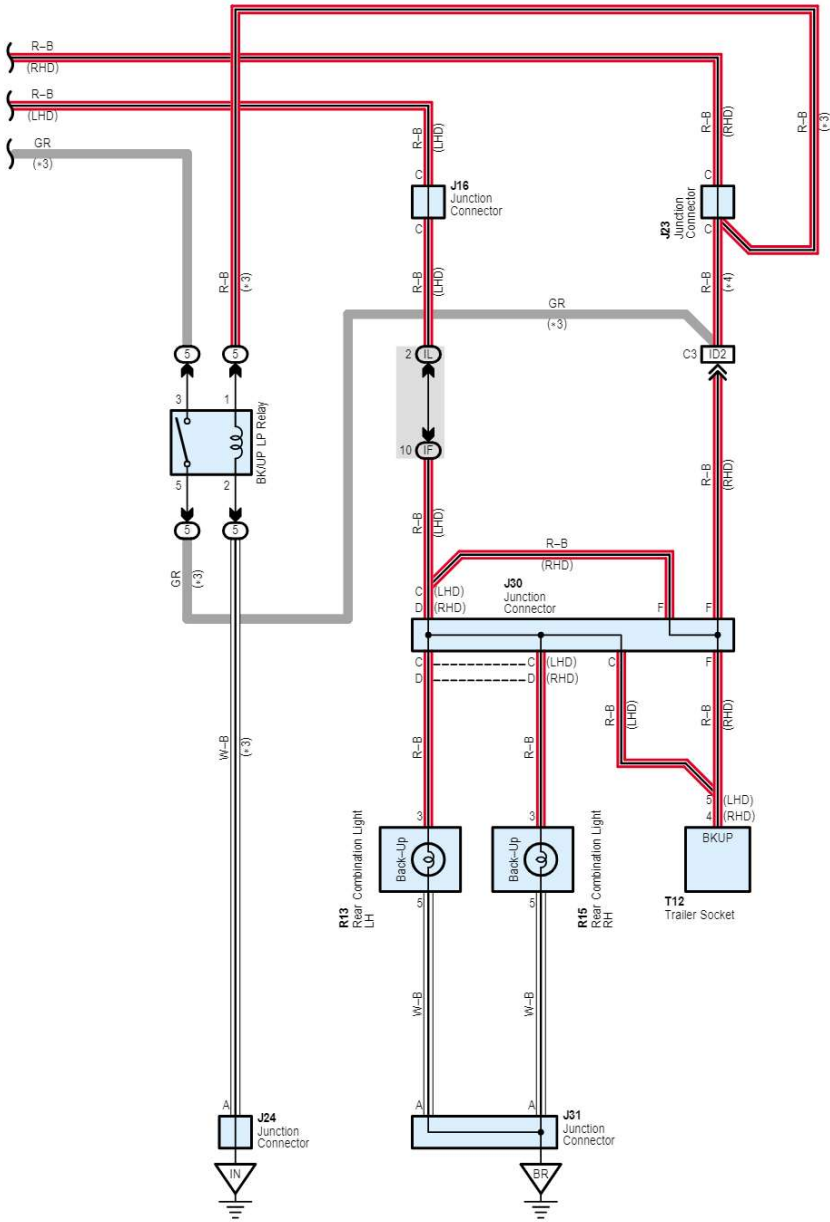
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 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	17	114 (RHD)	Instrument Panel Wire



- \* 1 : 1KZ-TE, 5L-E
- \* 2 : 1KD-FTV
- \* 3 : Australia A/T
- \* 4 : Except Australia A/T



## Back-Up Light (Diesel)

### Service Hints

#### N1 Neutral Start SW

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

#### B1 Back-Up Light SW

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B1	42 (*3)	J24	70 (RHD)	R13	53 (*6)
	44 (*4)	J30	52 (*6)		55 (*7)
	46 (*5)		54 (*7)		73 (*15)
	62 (*12)		72 (*15)		75 (*16)
	64 (*13)		74 (*16)		53 (*6)
	66 (*14)		52 (*6)		55 (*7)
D24	69 (RHD)		J31	54 (*7)	R15
J10	B	72 (*15)		75 (*16)	
		74 (*16)		53 (*6)	
J11	A	N1	43 (*3)	T12	55 (*7)
			70 (RHD)		45 (*4)
J16	50 (LHD)		63 (*12)		75 (*16)
J23	70 (RHD)		65 (*13)		

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
5	25 (RHD)	Passenger Side R/B (Left Kick Panel)

### ○ : Junction Block and Wire Harness Connector

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

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

### ▽ : Ground Points

Code	See Page	Ground Points Location
IN	112 (RHD)	Left Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

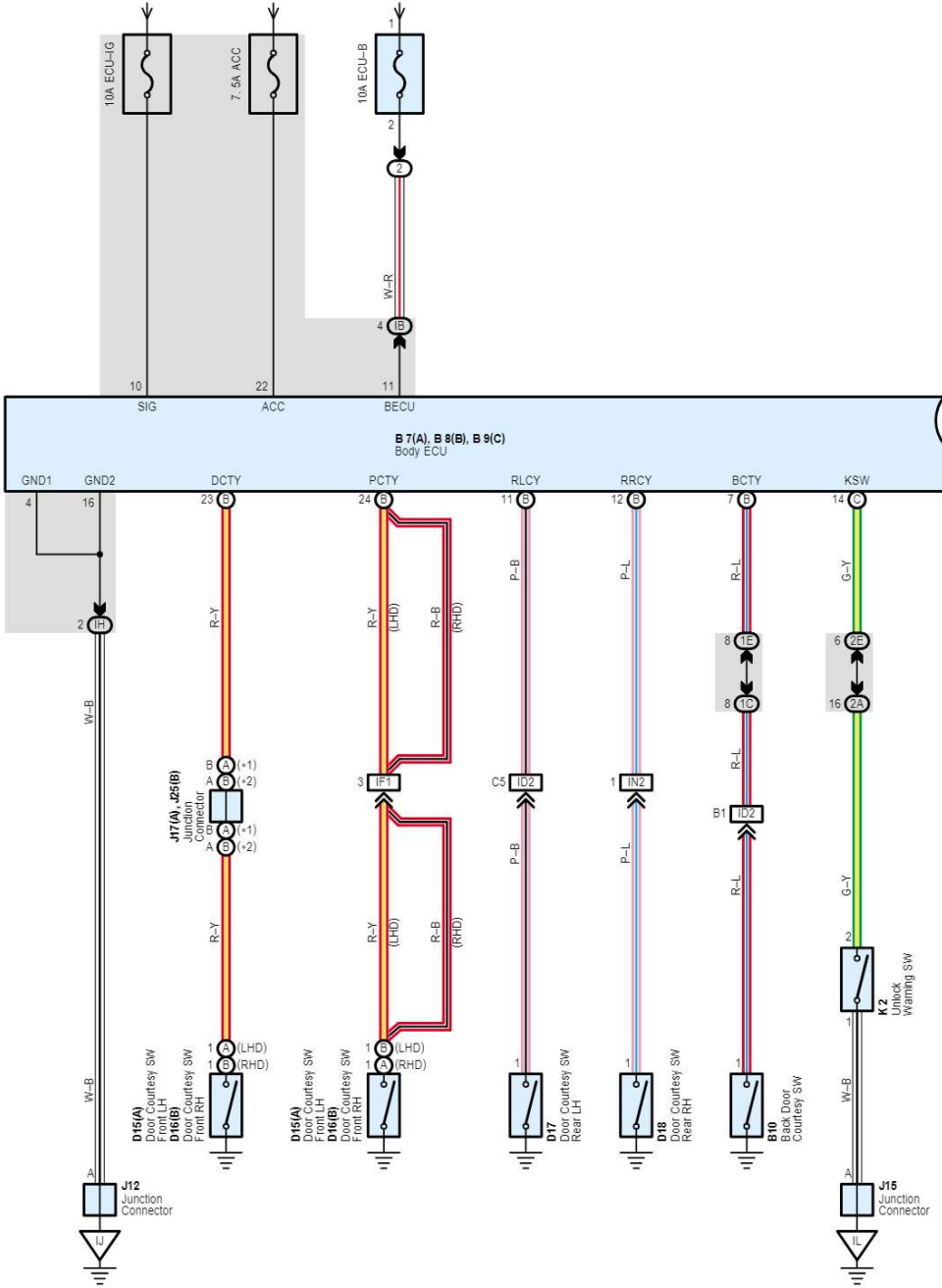
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

# Key Reminder and Seat Belt Warning

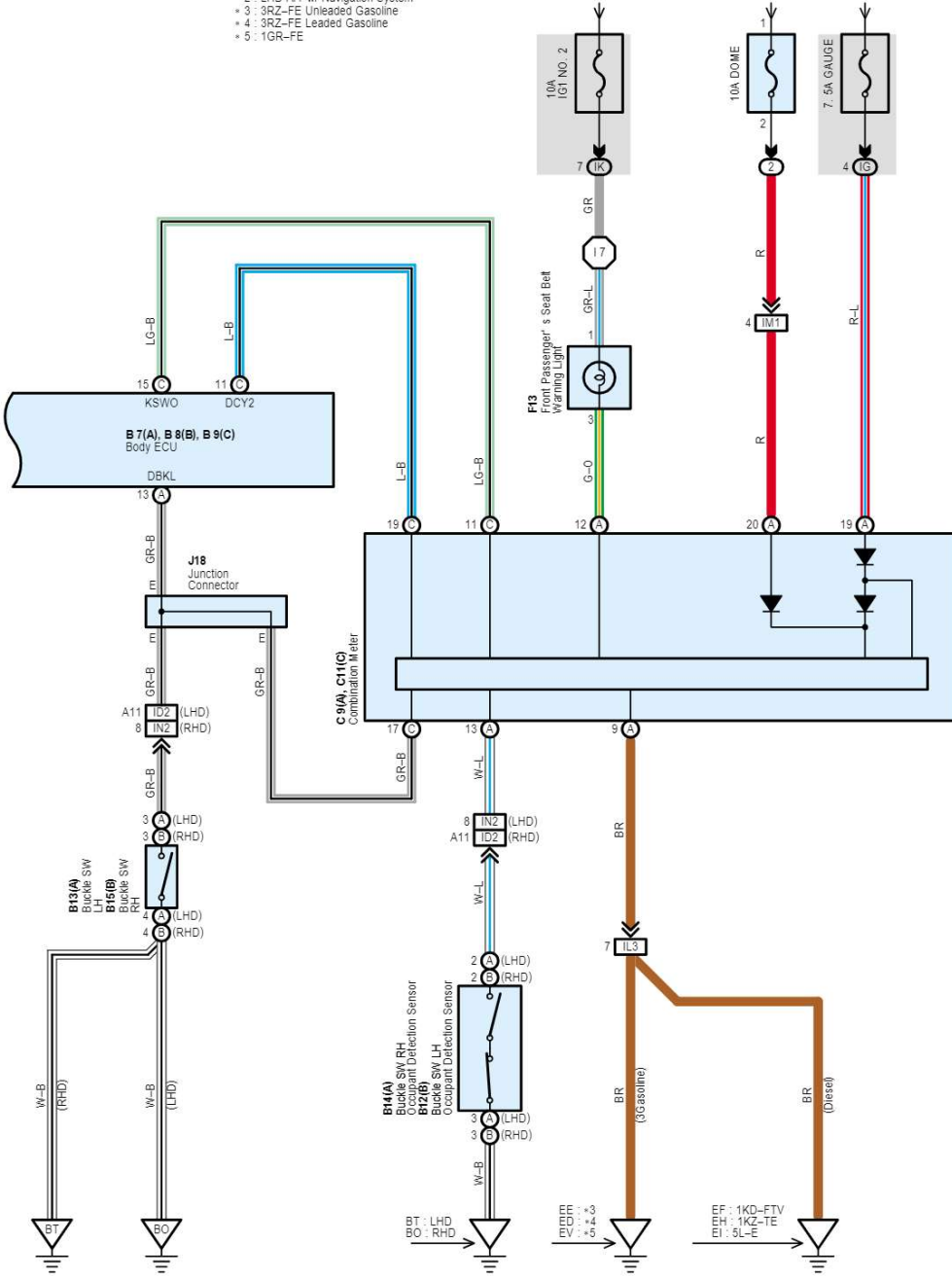
From Power Source System (See Page 128)





- \* 1 : Except LHD A/T w/ Navigation System
- \* 2 : LHD A/T w/ Navigation System
- \* 3 : 3RZ-FE Unleaded Gasoline
- \* 4 : 3RZ-FE Leaded Gasoline
- \* 5 : 1GR-FE

From Power Source System (See Page 128)



# Key Reminder and Seat Belt Warning

## System Outline

### 1. Key Reminder System

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

### 2. Seat Belt Warning System

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

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

## Service Hints

### Body ECU

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

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

4, 16-Ground : Always continuity

11-Ground : Always approx. 12 volts

### D15 (A), D16 (B) Door Courtesy SW Front LH, RH

1-Ground : Continuity with the driver door open

### K2 Unlock Warning SW

1-2 : Continuity with the ignition key in cylinder

### B13 (A), B15 (B) Buckle SW LH, RH

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

### B12 (A), B14 (B) Buckle SW RH, LH

#### Occupant Detection Sensor

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

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page			
B7	A	48 (LHD)	B15	B	76 (*17)	D18	52 (*6)	
		68 (RHD)			77 (*18)		72 (*15)	
B8	B	48 (LHD)	C9	A	49 (LHD)	F13	49 (LHD)	
		68 (RHD)			69 (RHD)		69 (RHD)	
B9	C	48 (LHD)	C11	C	49 (LHD)	J12	50 (LHD)	
		68 (RHD)			69 (RHD)		70 (RHD)	
B10		52 (*6)	D15	A	52 (*6)	J15	50 (LHD)	
		54 (*7)			54 (*7)		70 (RHD)	
		72 (*15)			72 (*15)	J17	A	50 (LHD)
		74 (*16)			74 (*16)			70 (RHD)
B12	B	76 (*17)	D16	B	52 (*6)	J18	50 (LHD)	
		77 (*18)			54 (*7)		70 (RHD)	
B13	A	56 (*8)			72 (*15)	J25	B	50 (LHD)
		57 (*9)			74 (*16)			70 (RHD)
B14	A	56 (*8)	D17	52 (*6)	K2	50 (LHD)		
		57 (*9)		72 (*15)		70 (RHD)		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat

: Junction Block and Wire Harness Connector

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

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

## Key Reminder and Seat Belt Warning

### : Ground Points

Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
	120 (*15)	Under the Front Passenger's Seat
	124 (*16)	
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

### : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

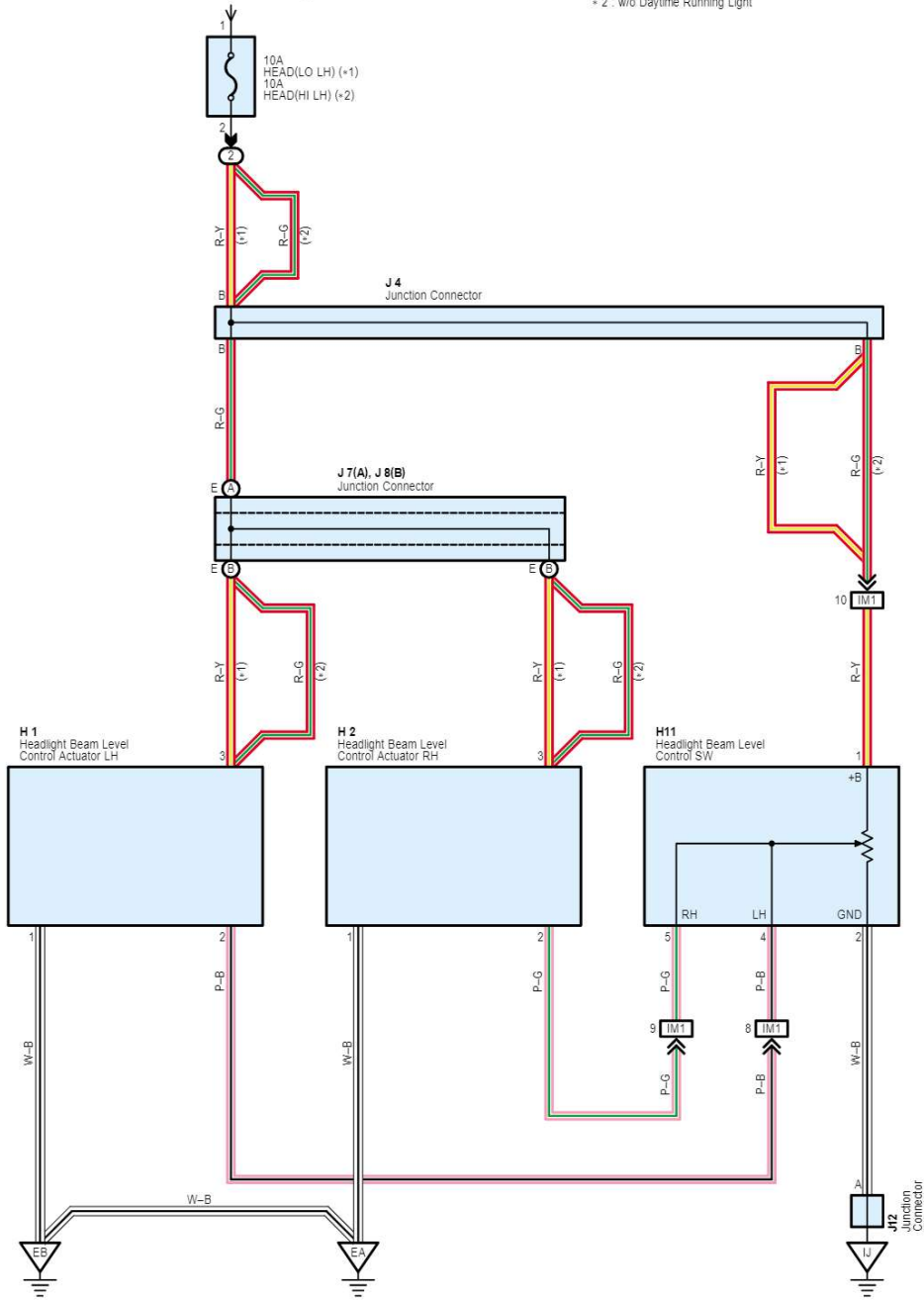
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# Headlight Beam Level Control

From Power Source System (See Page 128)

- \* 1 : w/ Daytime Running Light
- \* 2 : w/o Daytime Running Light



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**Service Hints**

**H11 Headlight Beam Level Control SW**

- 1-Ground : Approx. 12 volts with the light control SW at HEAD position
- 2-Ground : Always continuity

**H1, H2 Headlight Beam Level Control Actuator LH, RH**

- 3-Ground : Approx. 12 volts with the light control SW at HEAD position
- 1-Ground : Always continuity

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
H1	39 (*1)	H2	45 (*4)	J4	47 (*5)		
	41 (*2)		47 (*5)		59 (*10)		
	43 (*3)		59 (*10)		61 (*11)		
	45 (*4)		61 (*11)		63 (*12)		
	47 (*5)		63 (*12)		65 (*13)		
	59 (*10)		65 (*13)		67 (*14)		
	61 (*11)		67 (*14)		J7	A	50 (LHD)
	63 (*12)		H11		50 (LHD)		70 (RHD)
	65 (*13)		70 (RHD)		J8	B	50 (LHD)
	67 (*14)		39 (*1)				70 (RHD)
H2	39 (*1)	J4	41 (*2)	J12	50 (LHD)		
	41 (*2)		43 (*3)		70 (RHD)		
	43 (*3)		45 (*4)				

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

# Headlight Beam Level Control

▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

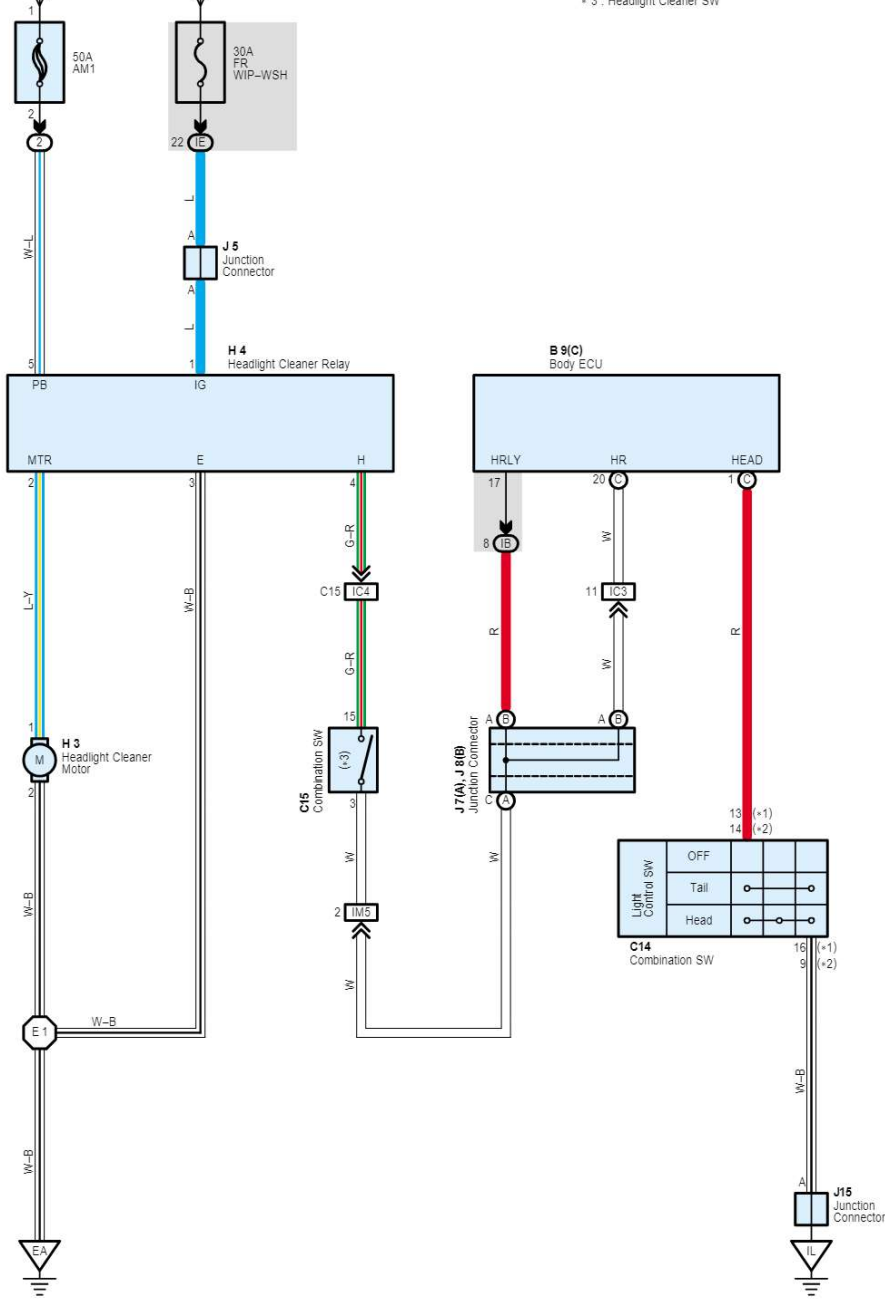




# Headlight Cleaner

From Power Source System (See Page 128)

- \* 1 : LH Turn Lever Type
- \* 2 : RH Turn Lever Type
- \* 3 : Headlight Cleaner SW



**Service Hints**

**H4 Headlight Cleaner Relay**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page				
B9	C	H4	48 (LHD)	J5	61 (*11)				
			68 (RHD)		63 (*12)				
C14	49 (LHD)		59 (*10)		65 (*13)				
	69 (RHD)		63 (*12)		67 (*14)				
C15			J5		49 (LHD)	J7	A	39 (*1)	50 (LHD)
					69 (RHD)			41 (*2)	70 (RHD)
H3		39 (*1)		J8	B	43 (*3)	50 (LHD)		
		43 (*3)				45 (*4)	70 (RHD)		
		59 (*10)				47 (*5)	50 (LHD)		
		63 (*12)				59 (*10)	70 (RHD)		
				J15					

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Headlight Cleaner

## ▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

## ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	78 (*1)	Engine Room Main Wire	E1	102 (*10)	Engine Room Main Wire
	80 (*2)			104 (*11)	
	82 (*3)			106 (*12)	
	84 (*4)			108 (*13)	
	86 (*5)			110 (*14)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat





### System Outline

With the ignition SW turned on, the current flows to TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW, TERMINAL 1 of the washer motor and TERMINAL 2 of the front wiper motor through the FR WIP-WSH fuse.

#### 1. Low Speed Position

With the wiper and washer SW turned to LO position, the current flows from TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW to TERMINAL 7 (RH wiper lever type), 3 (LH wiper lever type) to TERMINAL 1 (LHD), 5 (RHD) of the front wiper motor to TERMINAL 5 (LHD), 4 (RHD) to GROUND and causes the front wiper motor to run at low speed.

#### 2. High Speed Position

With the wiper and washer SW turned to HI position, the current flows from TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW to TERMINAL 8 (RH wiper lever type), 2 (LH wiper lever type) to TERMINAL 4 (LHD), 3 (RHD) of the front wiper motor to TERMINAL 5 (LHD), 4 (RHD) to GROUND and causes the front wiper motor to run at high speed.

#### 3. INT Position

With the wiper and washer SW turned to INT position, the wiper relay operates and current flows from TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW to TERMINAL 2 (RH wiper lever type), 8 (LH wiper lever type) to GROUND. This activates the intermittent circuit and the current flows from TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW to TERMINAL 7 (RH wiper lever type), 3 (LH wiper lever type) to TERMINAL 1 (LHD), 5 (RHD) of the front wiper motor to TERMINAL 5 (LHD), 4 (RHD) to GROUND and the wiper operates. Intermittent operation is controlled by a condenser charge and discharge function in the relay.

#### 4. Washer Interlocking Operation

With the wiper and washer SW pulled to washer position (Washer SW ON position), the current flows from the FR WIP-WSH fuse to TERMINAL 1 of the washer motor to TERMINAL 2 to TERMINAL 11 (RH wiper lever type), 17 (LH wiper lever type) of the wiper and washer SW to TERMINAL 2 (RH wiper lever type), 8 (LH wiper lever type) to GROUND and causes the washer motor to run and the window washer to spray. Simultaneously, current flows from the FR WIP-WSH fuse to TERMINAL 17 (RH wiper lever type), 11 (LH wiper lever type) of the wiper and washer SW to TERMINAL 7 (RH wiper lever type), 11 (LH wiper lever type) to TERMINAL 1 (LHD), 5 (RHD) of the front wiper motor to TERMINAL 5 (LHD), 4 (RHD) to GROUND, causing the wiper to function.

### Service Hints

#### C15 Combination SW

2 (RH wiper lever type), 8 (LH wiper lever type)-Ground : Always continuity

17 (RH wiper lever type), 11 (LH wiper lever type)-Ground : Approx. 12 volts with the ignition SW at ON position

7 (RH wiper lever type), 3 (LH wiper lever type)-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 (RH wiper lever type), 12 (LH wiper lever type)-Ground : Approx. 12 volts with the ignition SW on and unless the front wiper motor at STOP position

8 (RH wiper lever type), 2 (LH wiper lever type)-Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at HI position

#### F7 Front Wiper Motor

2-3 (LHD), 2-1 (RHD) : Closed unless the front wiper motor at STOP position

# Front Wiper and Washer

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C15	49 (LHD)	J2	A	59 (*10)	63 (*12)	
	69 (RHD)			61 (*11)	J5	65 (*13)
F7	38 (*1)			63 (*12)	J15	67 (*14)
	40 (*2)			65 (*13)		50 (LHD)
	42 (*3)			67 (*14)	70 (RHD)	
	44 (*4)			39 (*1)	W1	39 (*1)
	46 (*5)	41 (*2)	41 (*2)			
	58 (*10)	43 (*3)	43 (*3)			
	60 (*11)	45 (*4)	45 (*4)			
	62 (*12)	47 (*5)	47 (*5)			
	64 (*13)	39 (*1)	59 (*10)			
	66 (*14)	41 (*2)	61 (*11)			
J2	39 (*1)	J5	43 (*3)	63 (*12)		
	41 (*2)		45 (*4)	65 (*13)		
	43 (*3)		47 (*5)	67 (*14)		
	45 (*4)		59 (*10)			
	47 (*5)		61 (*11)			

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IM4	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

## ▽ : Ground Points

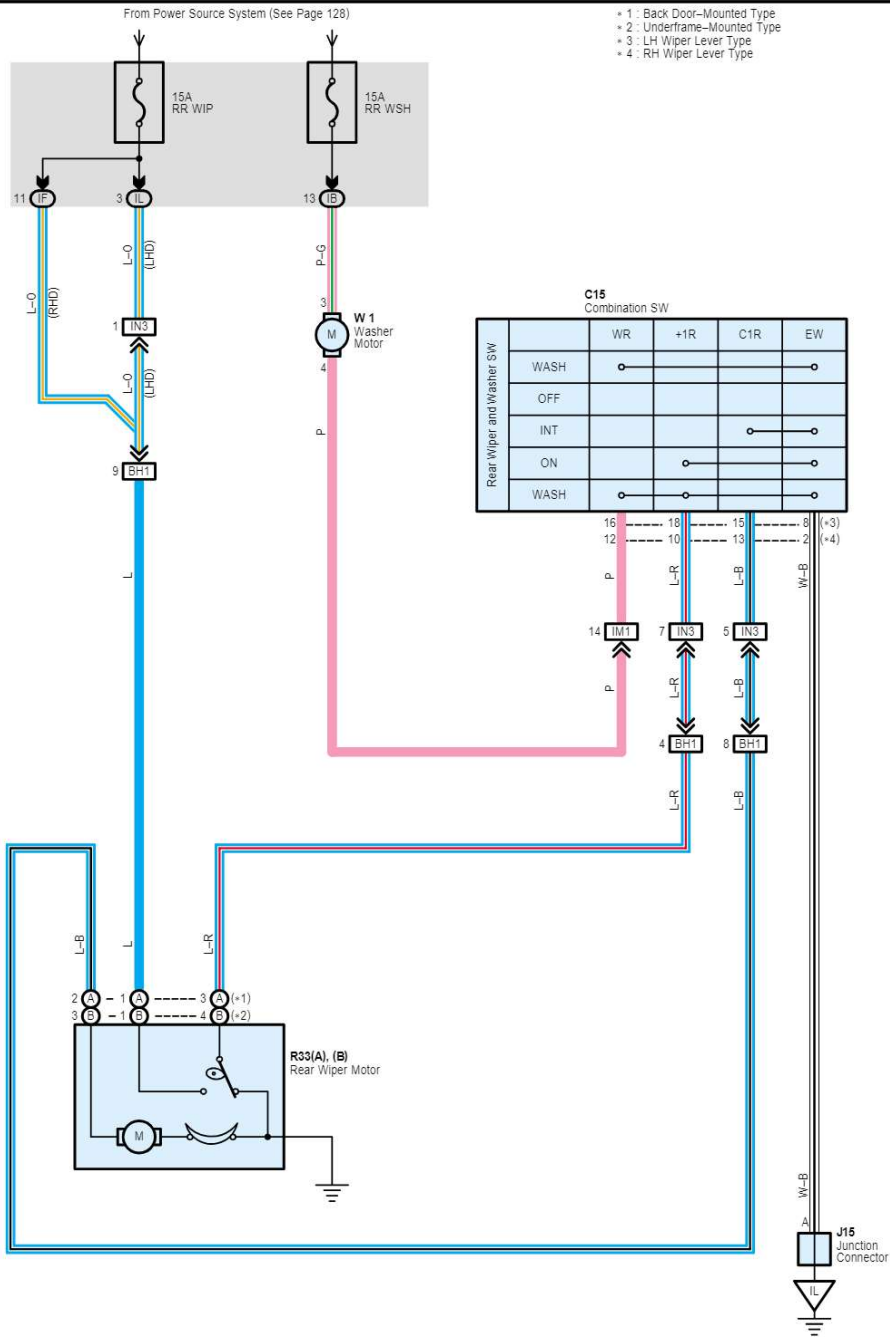
Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat





# Rear Wiper and Washer



**Service Hints**

**C15 Combination SW**

8 (LH wiper lever type), 2 (RH wiper lever type)–Ground : Continuity with the rear wiper SW at ON position  
 15 (LH wiper lever type), 13 (RH wiper lever type)–Ground : Continuity with the rear wiper SW at INT position  
 18 (LH wiper lever type), 10 (RH wiper lever type)–Ground : Always continuity

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
C15	49 (LHD)	R33	B	W1	47 (*5)	
	69 (RHD)				59 (*10)	
J15	50 (LHD)				73 (*15)	61 (*11)
	70 (RHD)				75 (*16)	63 (*12)
R33	A	W1	53 (*6)	39 (*1)	65 (*13)	
			55 (*7)	41 (*2)	67 (*14)	
			73 (*15)	43 (*3)		
			75 (*16)	45 (*4)		

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IF	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IL	27 (LHD)	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)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN3	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	
	122 (*15)	
	124 (*16)	

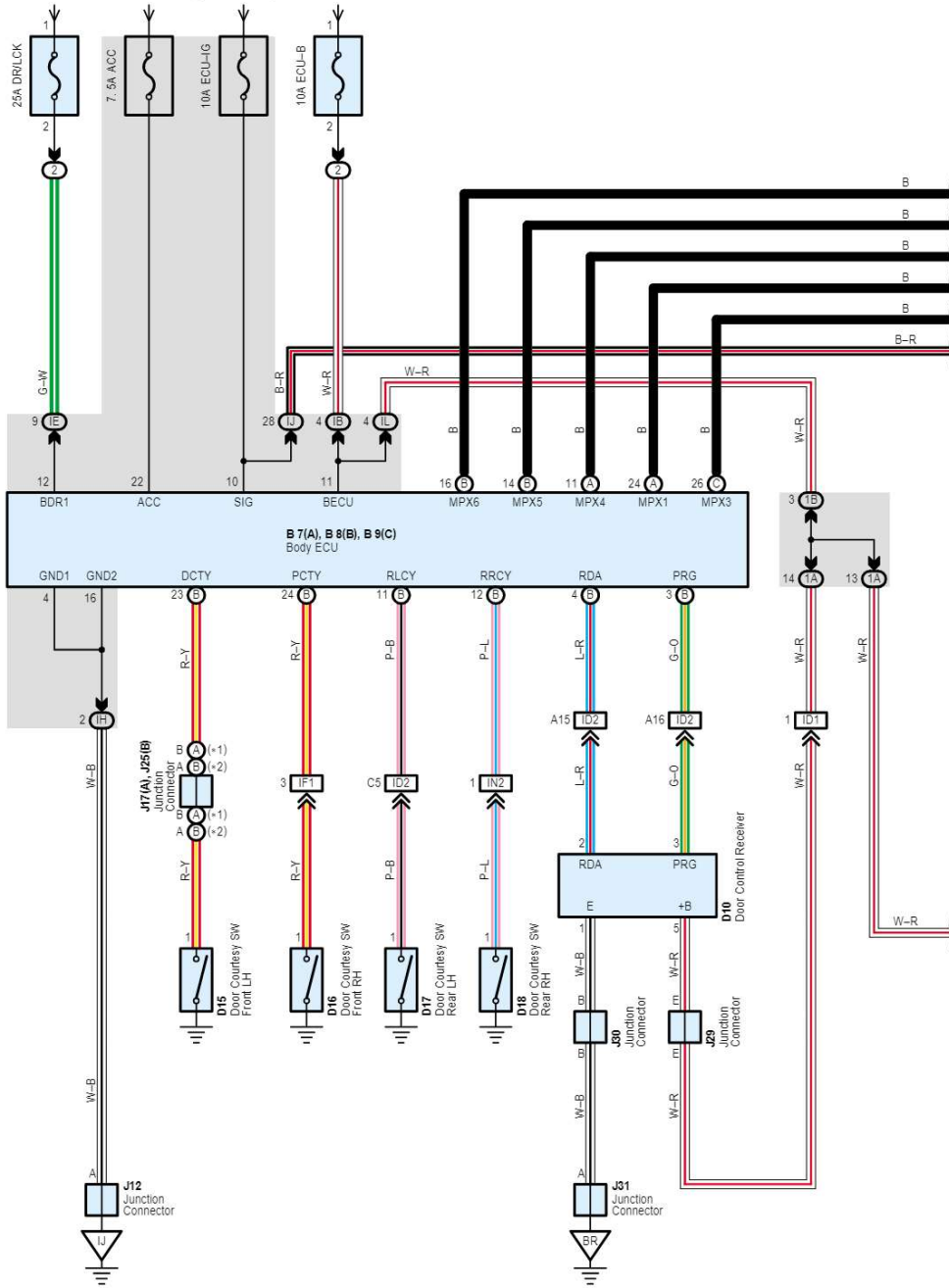
**▽ : Ground Points**

Code	See Page	Ground Points Location
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Power Window (LHD w/ Jam Protection)

From Power Source System (See Page 128)

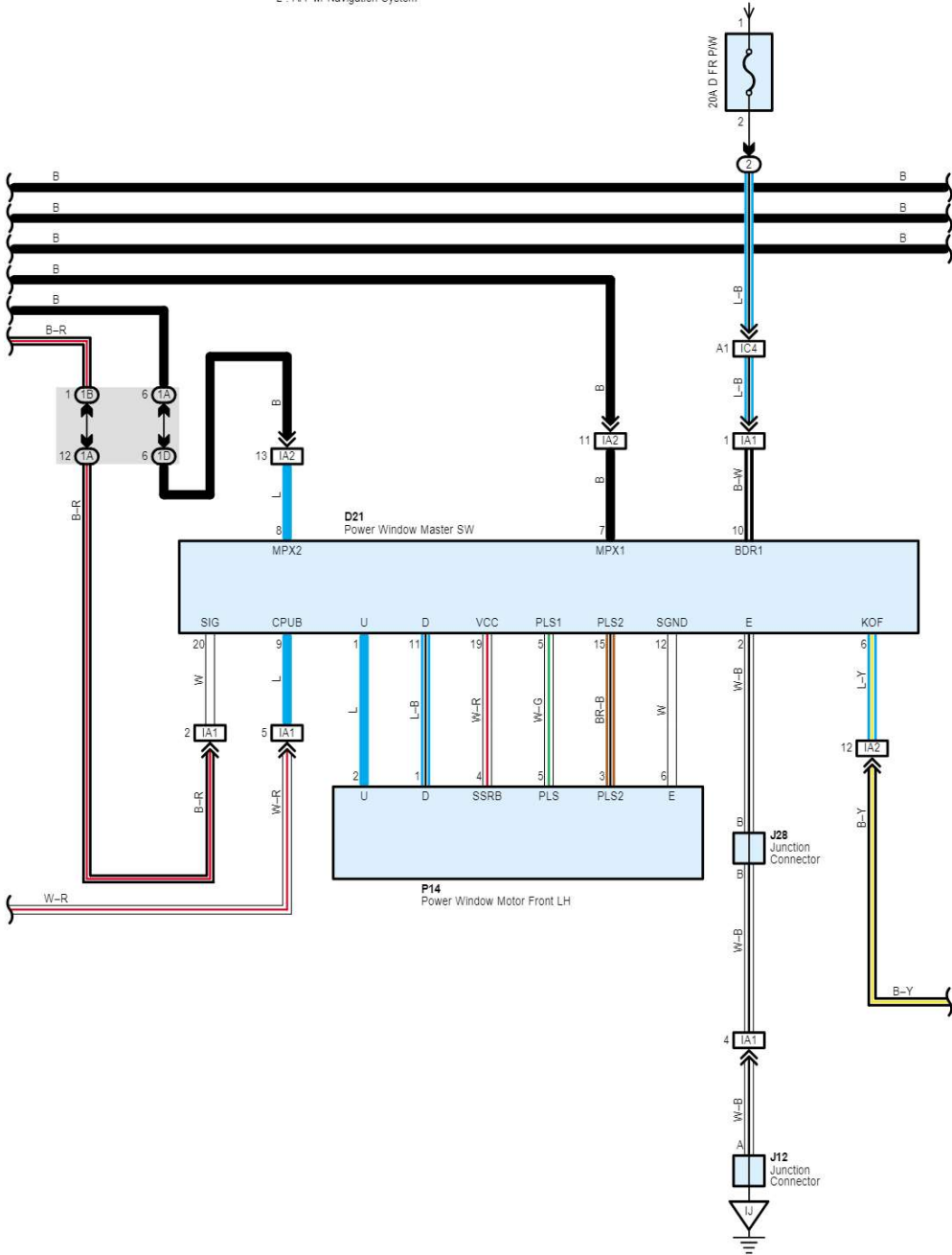


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+ 1 : Except A/T w/ Navigation System  
 + 2 : A/T w/ Navigation System

From Power Source System (See Page 128)

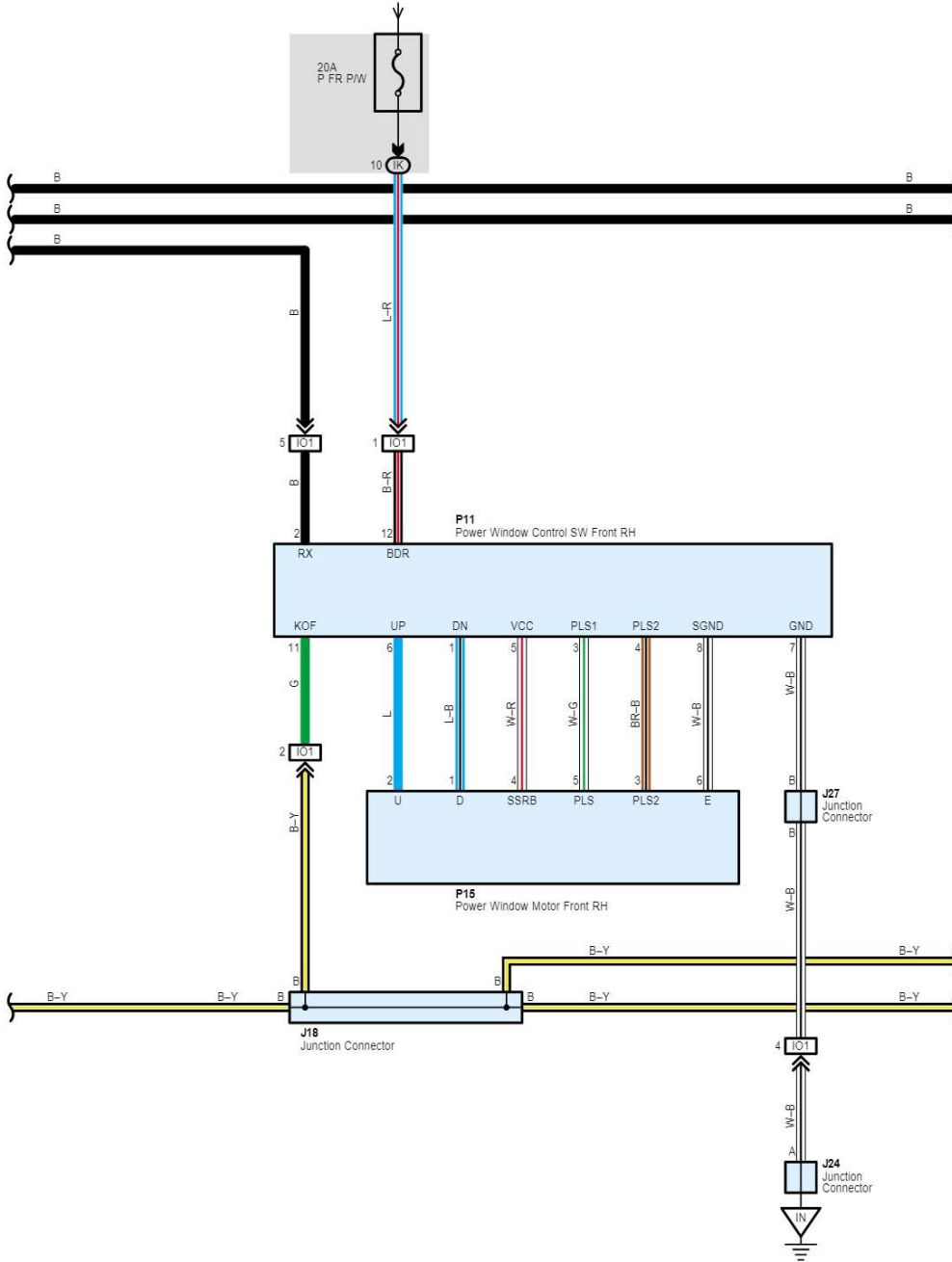


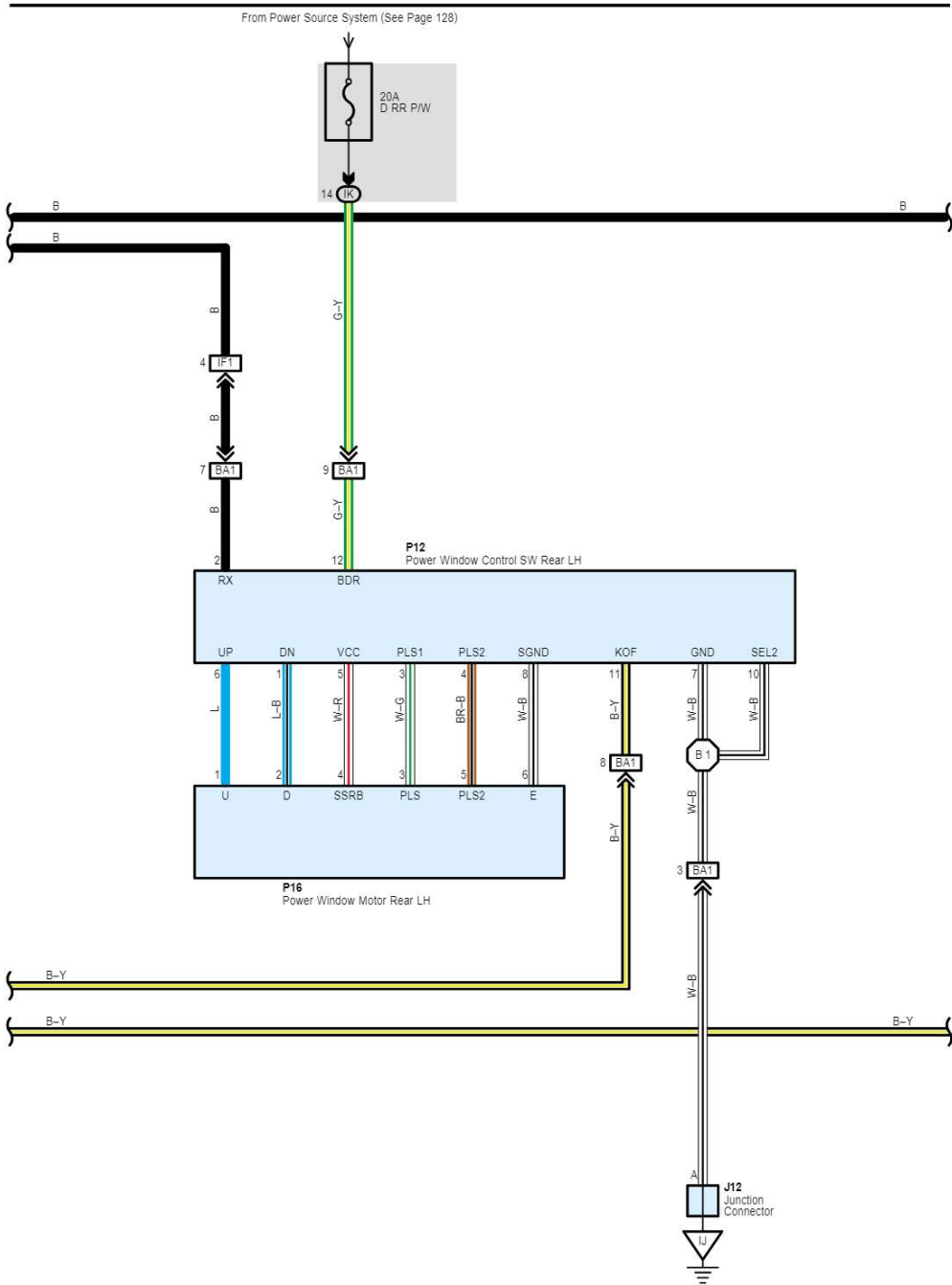
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# Power Window (LHD w/ Jam Protection)

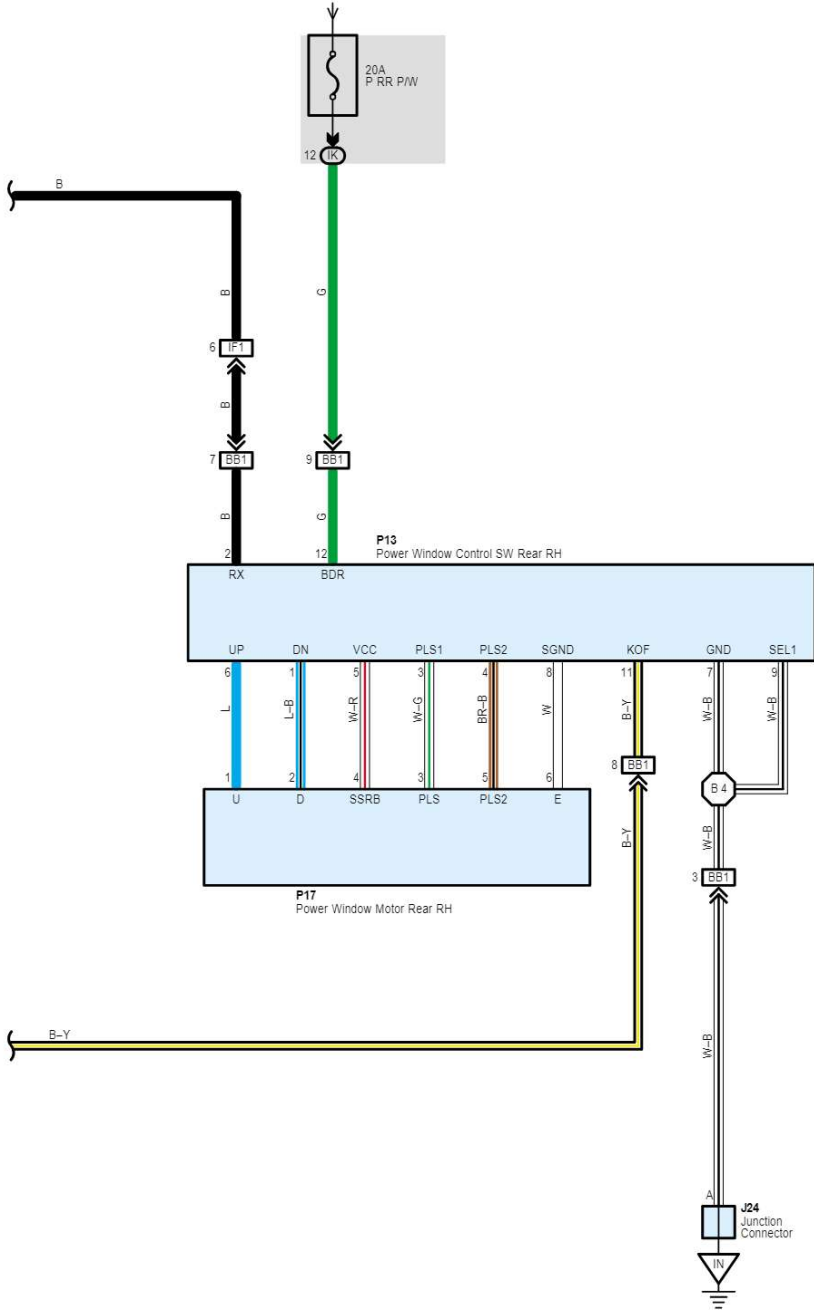
From Power Source System (See Page 128)





# Power Window (LHD w/ Jam Protection)

From Power Source System (See Page 128)



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### System Outline

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

#### 1. Manual Up and Down Function

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

#### 2. One-Touch Auto Up and Down Function

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

#### 3. Jam Protection Function

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

#### 4. Remote Control Function

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

#### 5. Key-Off Operation Function

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

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

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

### Service Hints

#### Body ECU

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

11, 12-Ground : Always approx. 12 volts

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

4, 16-Ground : Always continuity

#### D21 Power Window Master SW

9, 10-Ground : Always approx. 12 volts

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

2-Ground : Always continuity

#### P11 Power Window Control SW Front RH

12-Ground : Always approx. 12 volts

7-Ground : Always continuity

#### P12 Power Window Control SW Rear LH

12-Ground : Always approx. 12 volts

7, 10-Ground : Always continuity

#### P13 Power Window Control SW Rear RH

12-Ground : Always approx. 12 volts

7, 9-Ground : Always continuity

## Power Window (LHD w/ Jam Protection)

### : Parts Location

Code	See Page	Code	See Page	Code	See Page	
B7	A	48 (LHD)	J12	50 (LHD)	J31	52 (*6)
B8	B	48 (LHD)	J17	A	50 (LHD)	54 (*7)
B9	C	48 (LHD)	J18	50 (LHD)	P11	53 (*6)
D10		52 (*6)	J24	50 (LHD)		55 (*7)
		54 (*7)	J25	B	50 (LHD)	P12
D15		52 (*6)	J27	52 (*6)	P13	53 (*6)
		54 (*7)		54 (*7)	P14	53 (*6)
D16		52 (*6)	J28	52 (*6)		P15
		54 (*7)		54 (*7)	53 (*6)	
D17		52 (*6)	J29	52 (*6)		55 (*7)
D18		52 (*6)		54 (*7)	P16	53 (*6)
D21		52 (*6)	J30	52 (*6)	P17	53 (*6)
		54 (*7)		54 (*7)		

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

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

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

▽ : Ground Points

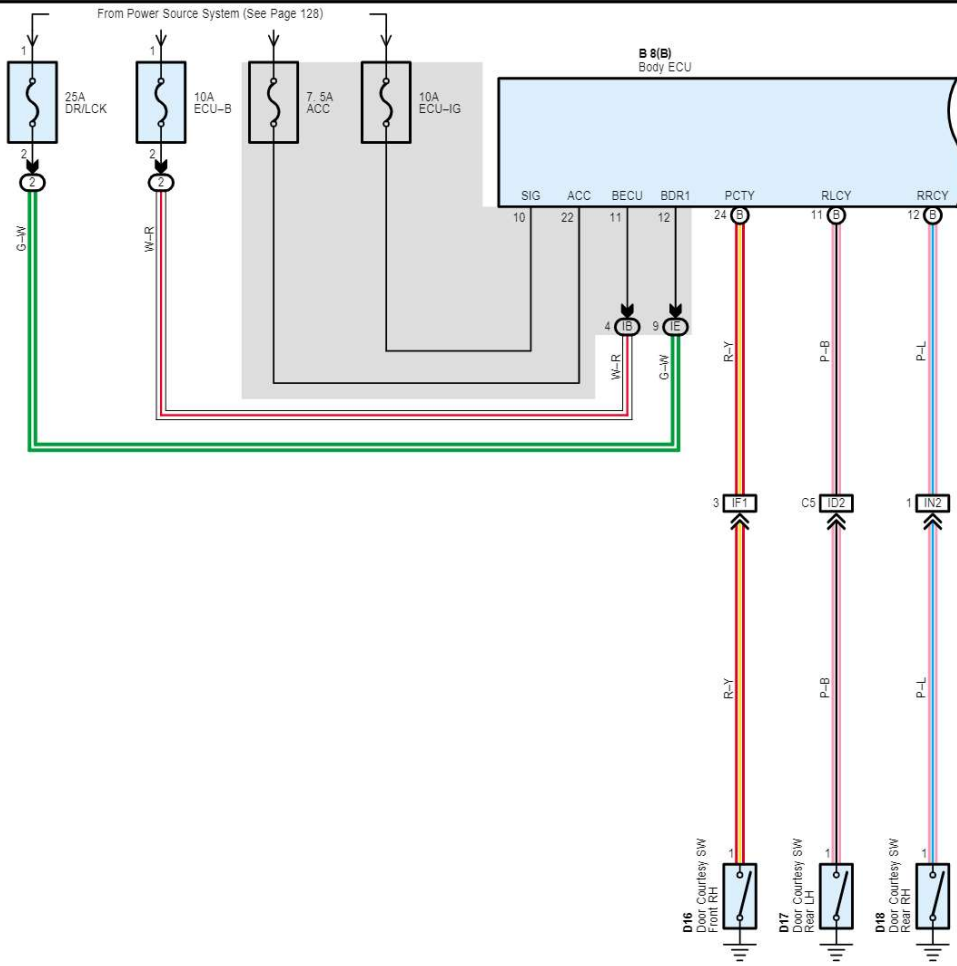
Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
IN	88 (LHD)	Right Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	

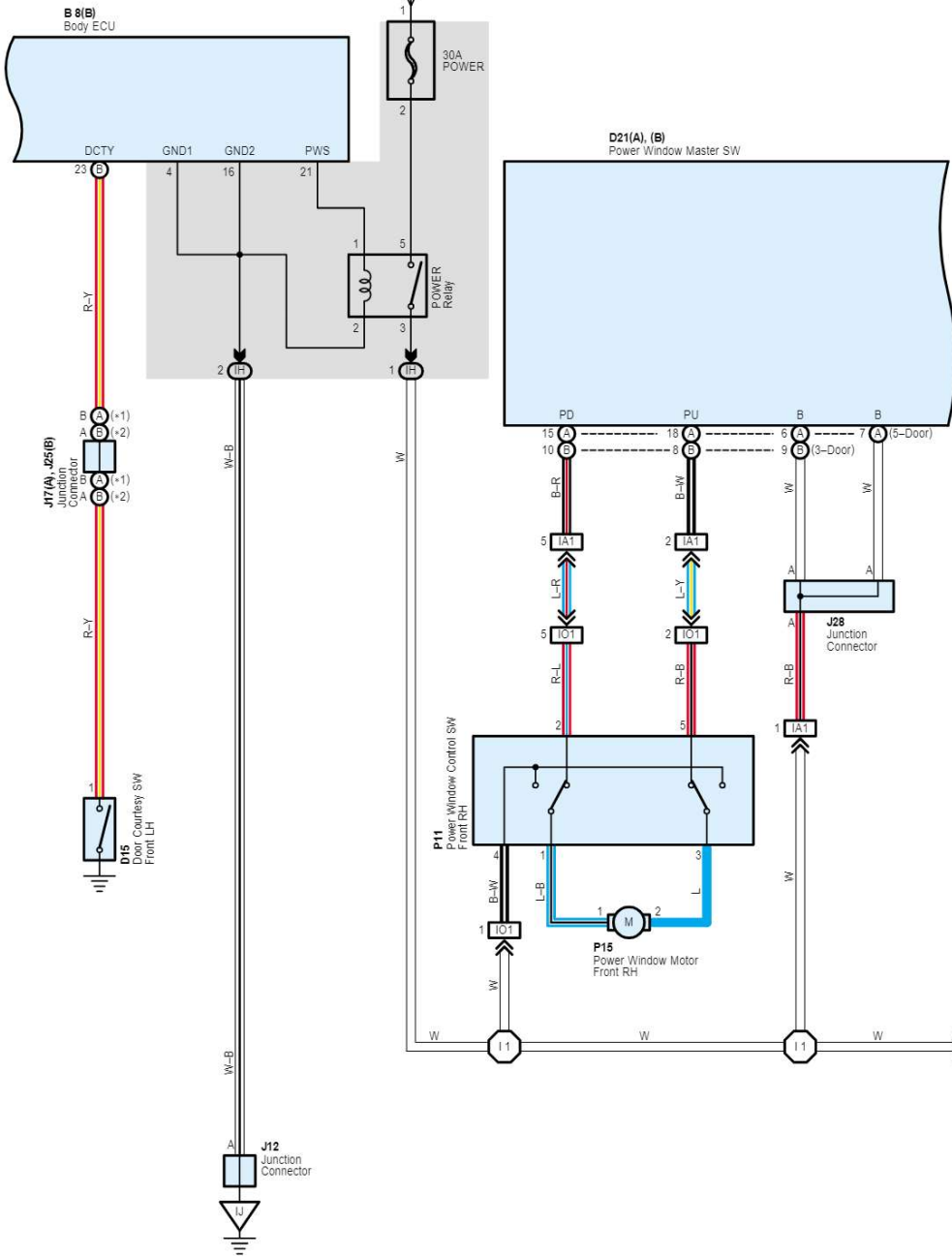
○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	98 (*6)	Rear Door No.1 Wire LH	B4	98 (*6)	Rear Door No.1 Wire RH

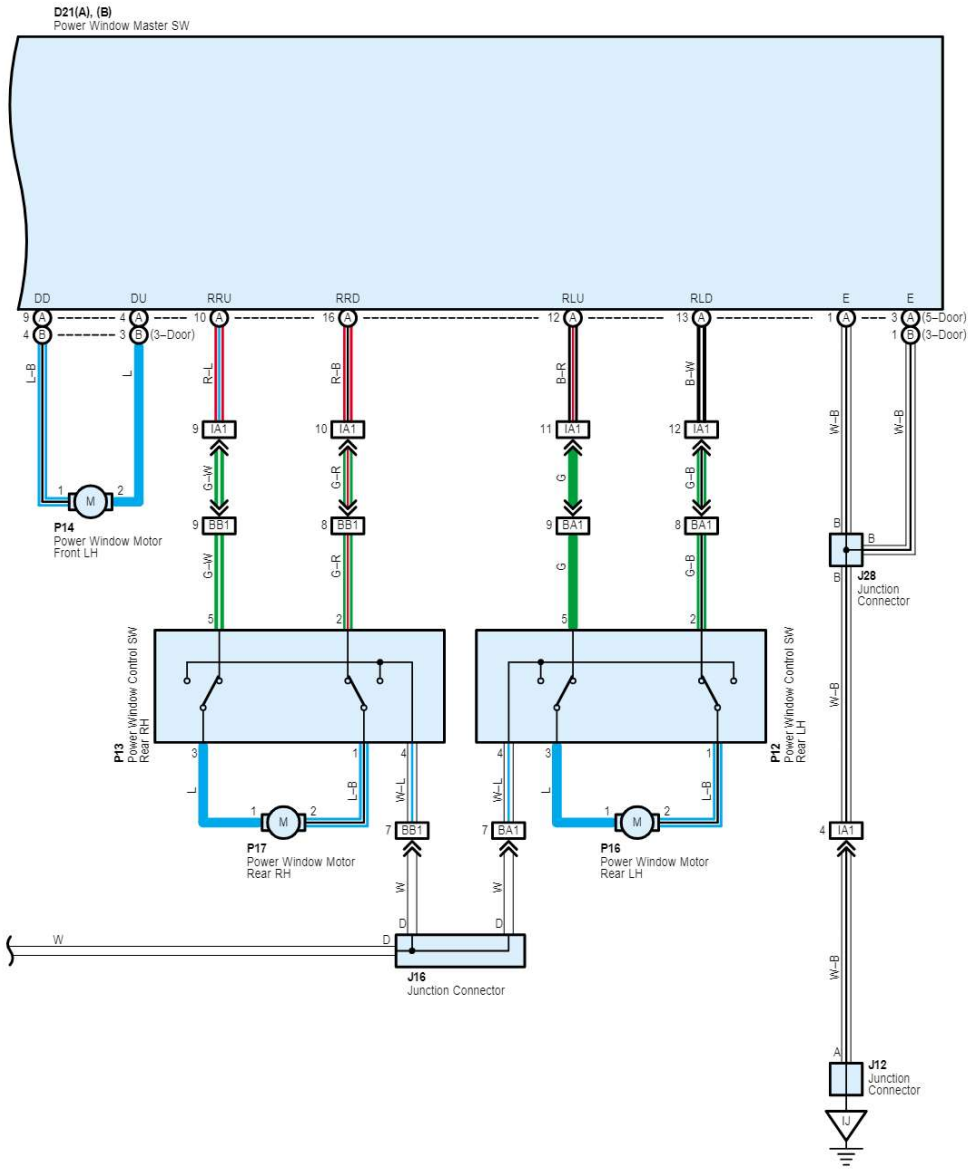
\* 1 : LHD 1GR-FE   \* 2 : LHD 3RZ-FE   \* 3 : LHD 1KD-FTV   \* 4 : LHD 1KZ-TE   \* 5 : LHD 5L-E   \* 6 : LHD 5-Door   \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat   \* 9 : LHD Except 8Way Power Seat   \* 10 : RHD 1GR-FE   \* 11 : RHD 3RZ-FE   \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE   \* 14 : RHD 5L-E   \* 15 : RHD 5-Door   \* 16 : RHD 3-Door   \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Power Window (LHD w/o Jam Protection)





# Power Window (LHD w/o Jam Protection)



### System Outline

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

#### 1. Manual Up and Down Function

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

#### 2. Driver's Door One-Touch Auto Up and Down Function

The driver's door one-touch auto down function enables the window of front doors to be fully opened at a touch of the power window switch.

#### 3. Remote Control Function

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

#### 4. Key-Off Operation Function

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

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

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

### Service Hints

#### Body ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B8	B	48 (LHD)	J12		50 (LHD)	P13		53 (*6)
D15		52 (*6)	J16		50 (LHD)	P14		53 (*6)
		54 (*7)	J17	A	50 (LHD)			55 (*7)
D16		52 (*6)	J25	B	50 (LHD)	P15		53 (*6)
		54 (*7)	J28		52 (*6)			55 (*7)
D17		52 (*6)			54 (*7)	P16		53 (*6)
D18		52 (*6)				P17		53 (*6)
D21	A	52 (*6)	P11		53 (*6)			
	B	54 (*7)	P12		55 (*7)			
					53 (*6)			

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

- \* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door
- \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV
- \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat
- \* 18 : RHD Except 8Way Power Seat

## Power Window (LHD w/o Jam Protection)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	27 (LHD)	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	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

### : Ground Points

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel

### : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	90 (LHD)	Instrument Panel Wire			

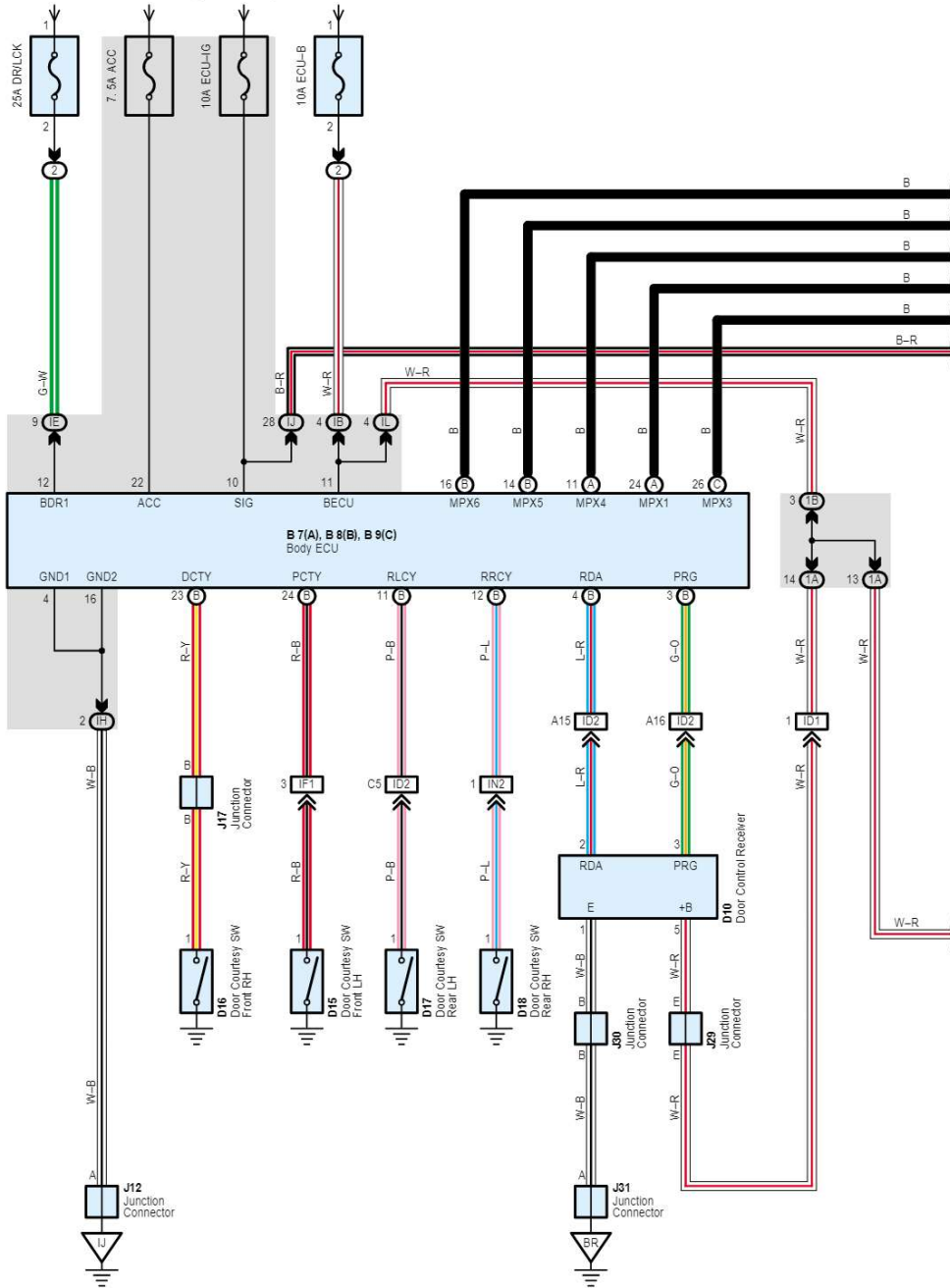
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

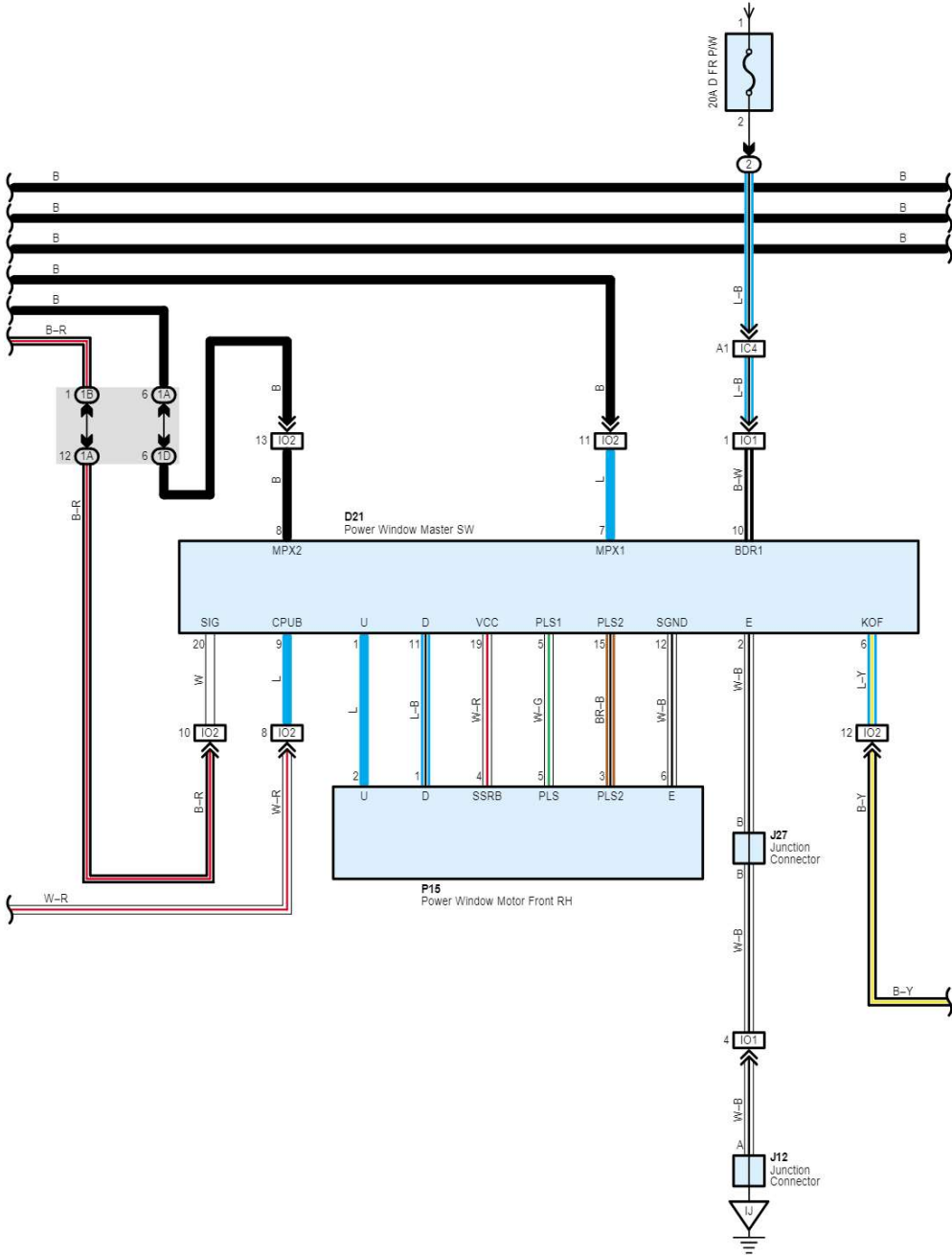




# Power Window (RHD w/ Jam Protection)

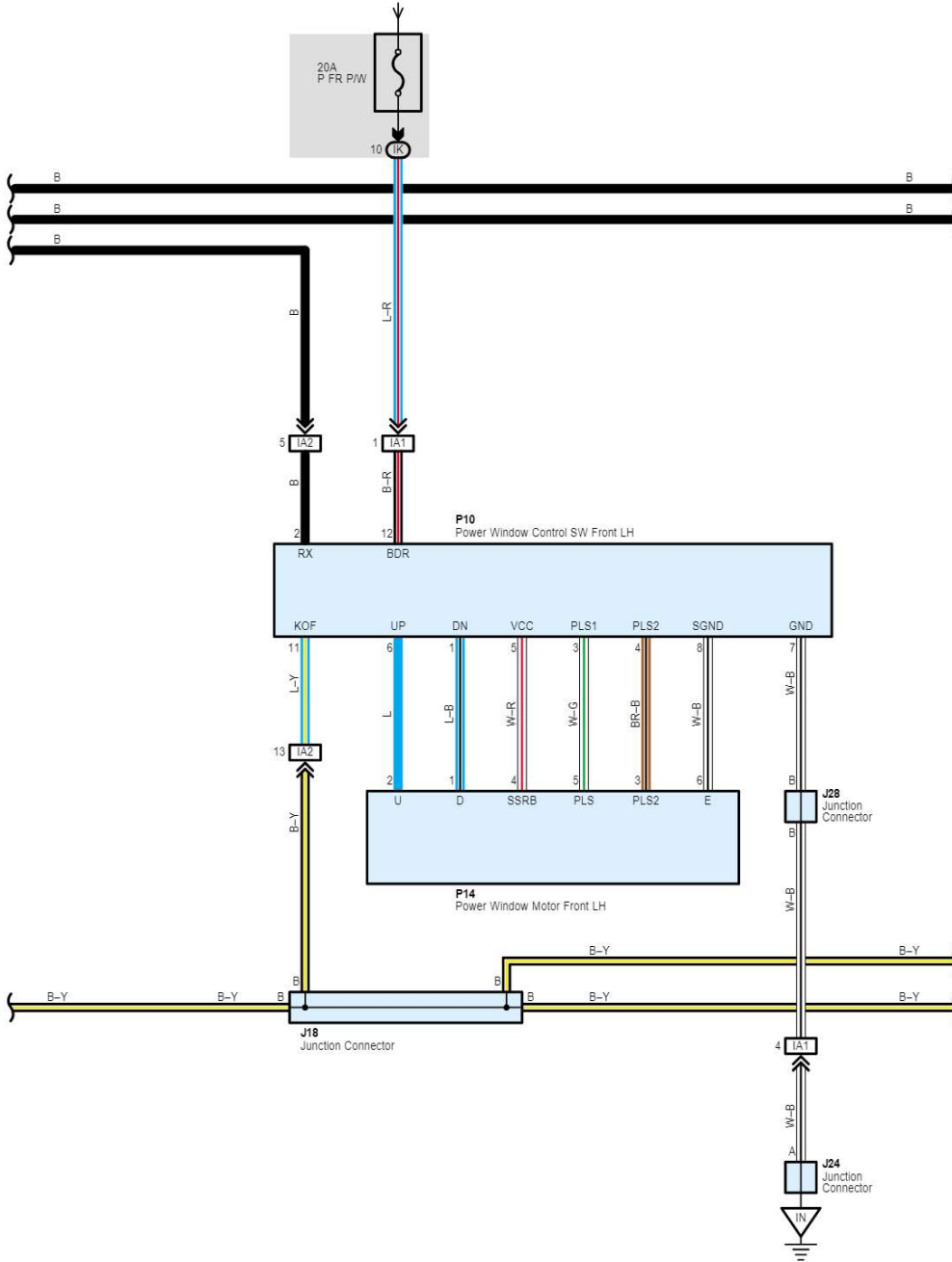
From Power Source System (See Page 128)

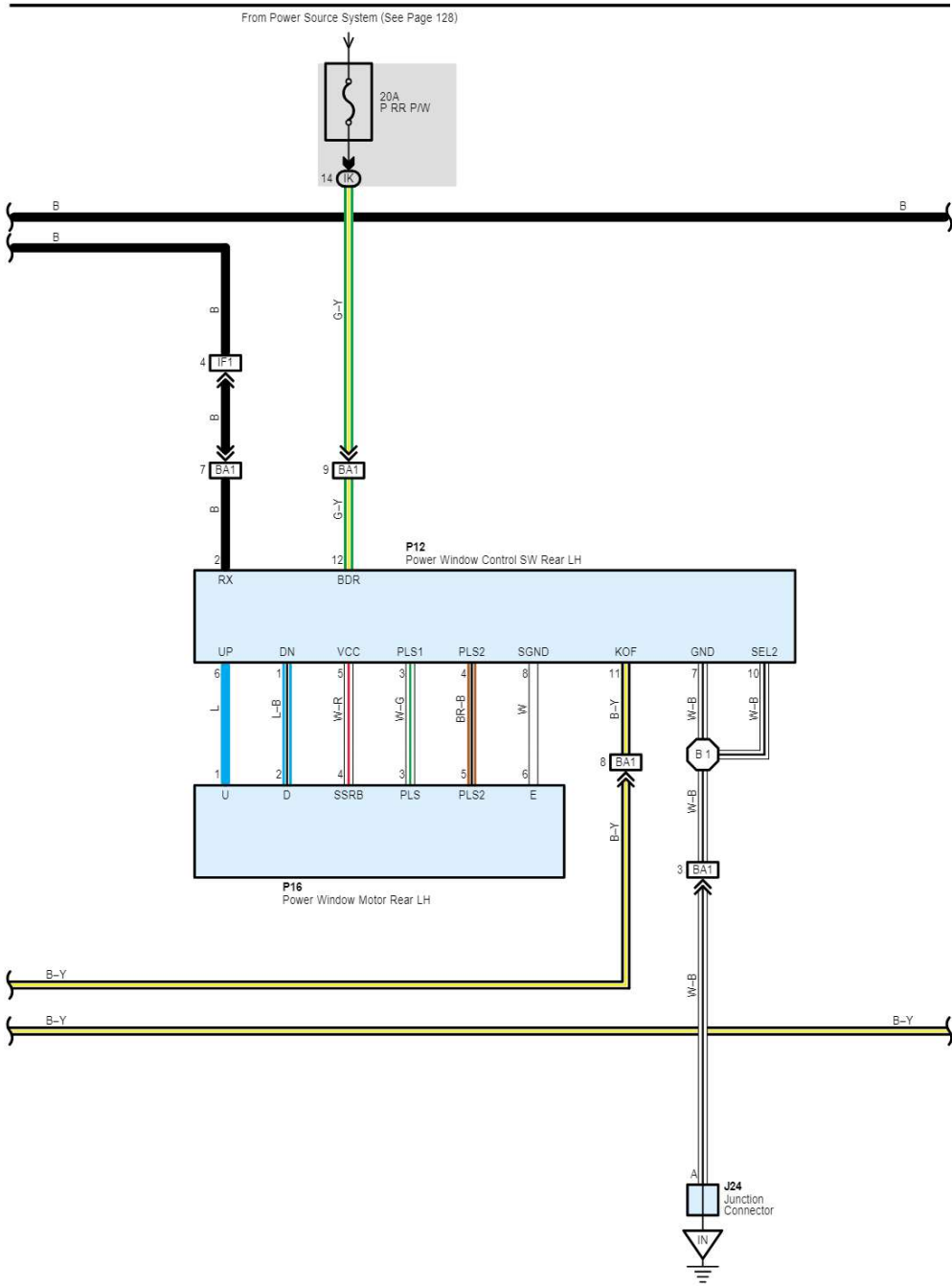




# Power Window (RHD w/ Jam Protection)

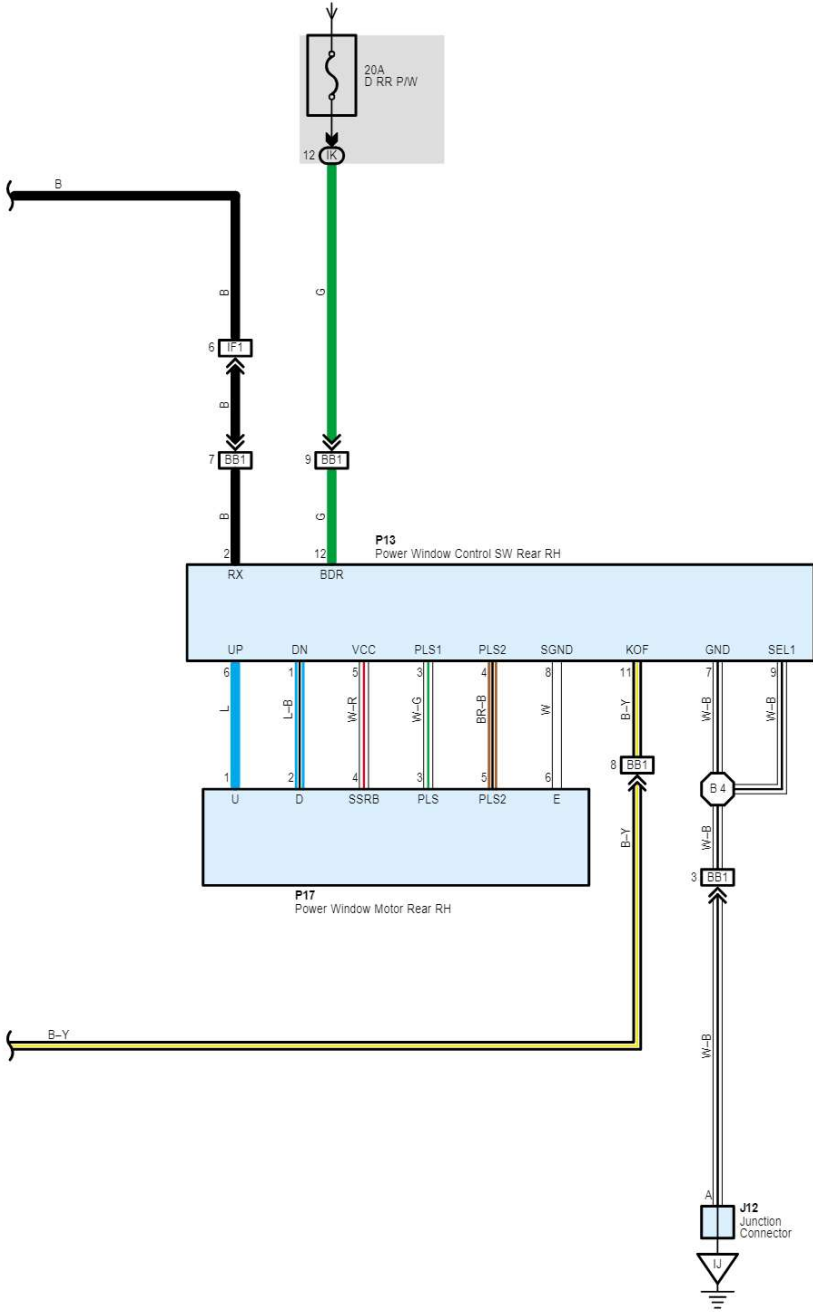
From Power Source System (See Page 128)





# Power Window (RHD w/ Jam Protection)

From Power Source System (See Page 128)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

### System Outline

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

#### 1. Manual Up and Down Function

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

#### 2. One-Touch Auto Up and Down Function

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

#### 3. Jam Protection Function

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

#### 4. Remote Control Function

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

#### 5. Key-Off Operation Function

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

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

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

### Service Hints

#### Body ECU

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

11, 12-Ground : Always approx. 12 volts

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

4, 16-Ground : Always continuity

#### D21 Power Window Master SW

9, 10-Ground : Always approx. 12 volts

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

2-Ground : Always continuity

#### P10 Power Window Control SW Front LH

12-Ground : Always approx. 12 volts

7-Ground : Always continuity

#### P12 Power Window Control SW Rear LH

12-Ground : Always approx. 12 volts

7, 10-Ground : Always continuity

#### P13 Power Window Control SW Rear RH

12-Ground : Always approx. 12 volts

7, 9-Ground : Always continuity

## Power Window (RHD w/ Jam Protection)

### : Parts Location

Code		See Page	Code	See Page	Code	See Page
B7	A	68 (RHD)	J12	70 (RHD)	J31	74 (*16)
B8	B	68 (RHD)	J17	70 (RHD)	P10	73 (*15)
B9	C	68 (RHD)	J18	70 (RHD)		75 (*16)
D10		72 (*15)	J24	70 (RHD)	P12	73 (*15)
		74 (*16)	J27	72 (*15)	P13	73 (*15)
D15		72 (*15)			74 (*16)	P14
		74 (*16)	J28	72 (*15)	75 (*16)	
D16		72 (*15)			74 (*16)	P15
		74 (*16)	J29	72 (*15)	75 (*16)	
D17		72 (*15)			74 (*16)	P16
D18		72 (*15)	J30	72 (*15)	P17	73 (*15)
D21		72 (*15)				74 (*16)
		74 (*16)	J31	72 (*15)		

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH		
IJ		
IK	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IL		
1A		
1B	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D		

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



▽ : Ground Points

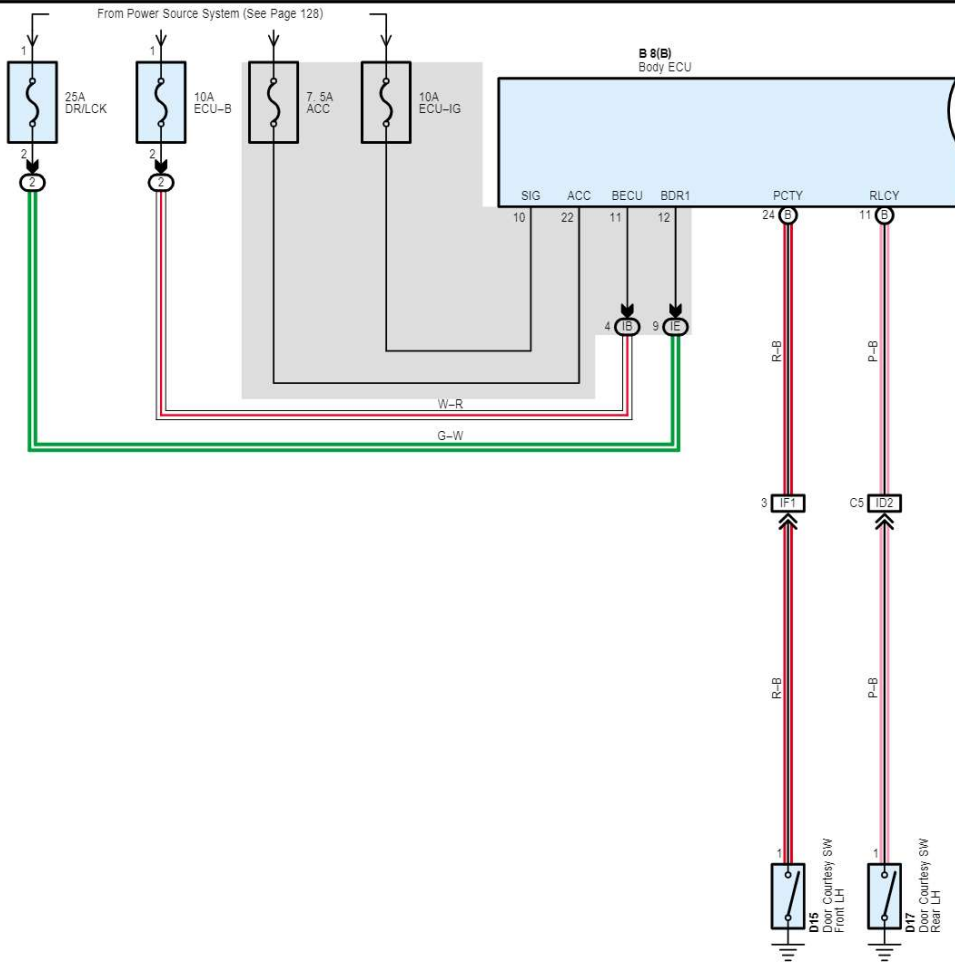
Code	See Page	Ground Points Location
IJ	112 (RHD)	Right Kick Panel
IN	112 (RHD)	Left Kick Panel
BR	120 (*15)	Left Quarter Panel Inner
	124 (*16)	

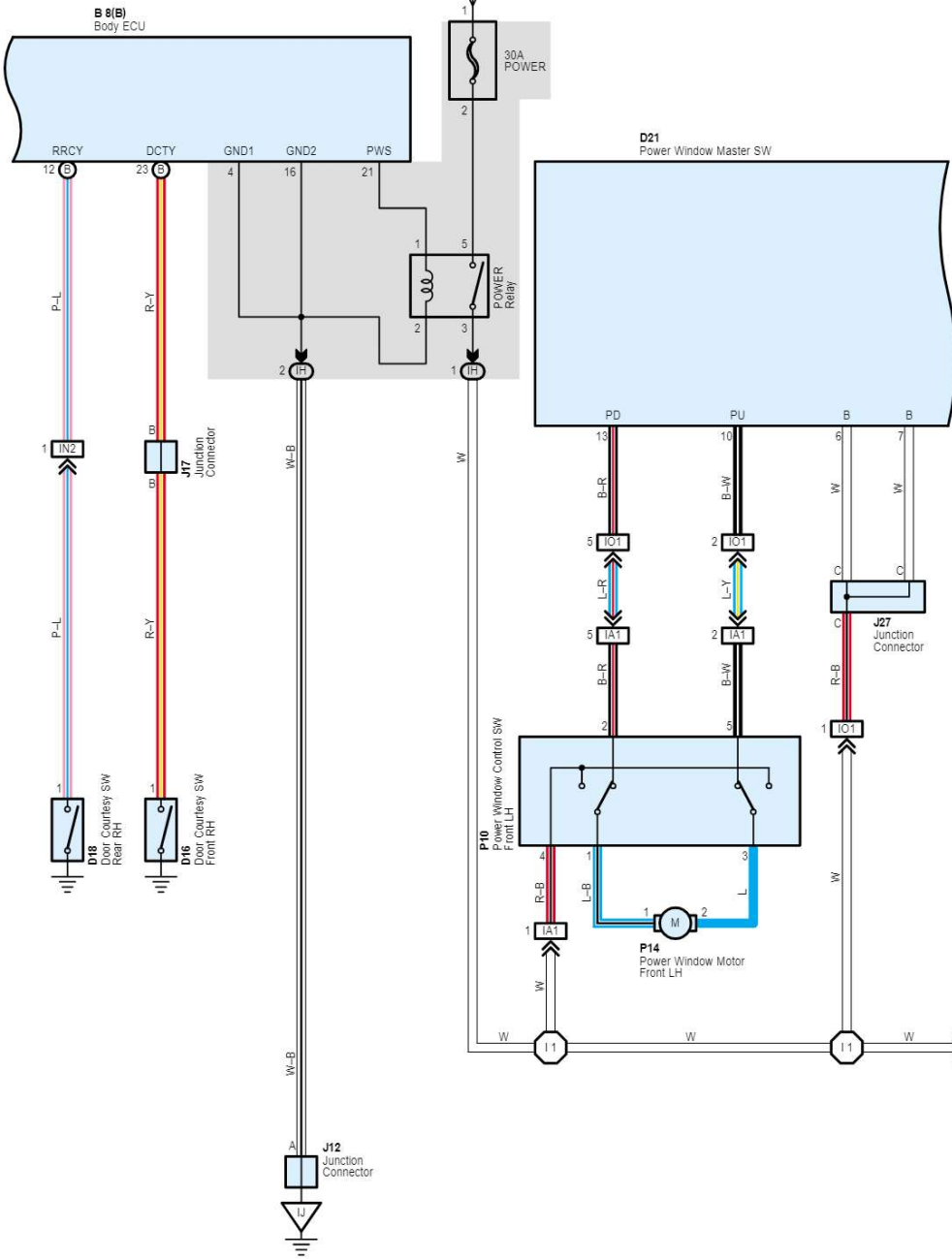
○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	122 (*15)	Rear Door No.1 Wire LH	B4	122 (*15)	Rear Door No.1 Wire RH

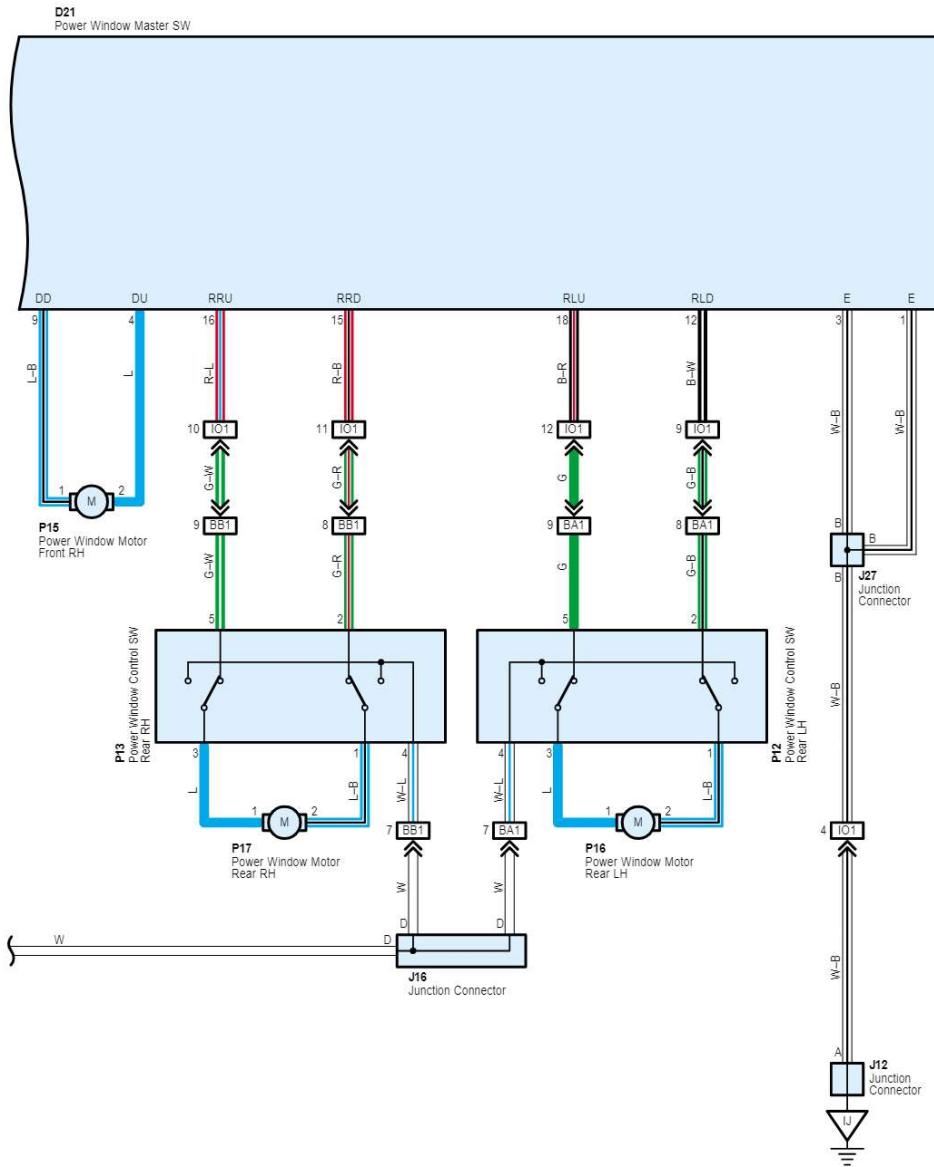
\* 1 : LHD 1GR-FE   \* 2 : LHD 3RZ-FE   \* 3 : LHD 1KD-FTV   \* 4 : LHD 1KZ-TE   \* 5 : LHD 5L-E   \* 6 : LHD 5-Door   \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat   \* 9 : LHD Except 8Way Power Seat   \* 10 : RHD 1GR-FE   \* 11 : RHD 3RZ-FE   \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE   \* 14 : RHD 5L-E   \* 15 : RHD 5-Door   \* 16 : RHD 3-Door   \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Power Window (RHD w/o Jam Protection)





# Power Window (RHD w/o Jam Protection)



### System Outline

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

#### 1. Manual Up and Down Function

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

#### 2. Driver's Door One-Touch Auto Up and Down Function

The driver's door one-touch auto down function enables the window of front doors to be fully opened at a touch of the power window switch.

#### 3. Remote Control Function

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

#### 4. Key-Off Operation Function

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

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

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

### Service Hints

#### Body ECU

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
B8	B	68 (RHD)	D21	74 (*16)	P12	73 (*15)
D15		72 (*15)	J12	70 (RHD)	P13	73 (*15)
		74 (*16)	J16	70 (RHD)	P14	73 (*15)
D16		72 (*15)	J17	70 (RHD)		75 (*16)
		74 (*16)	J27	72 (*15)	P15	73 (*15)
D17		74 (*16)		75 (*16)		
D18		72 (*15)	P10	73 (*15)	P16	73 (*15)
D21		72 (*15)		75 (*16)	P17	73 (*15)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Power Window (RHD w/o Jam Protection)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)

### ▽ : Ground Points

Code	See Page	Ground Points Location
IJ	112 (RHD)	Right Kick Panel

### ○ : Splice Points

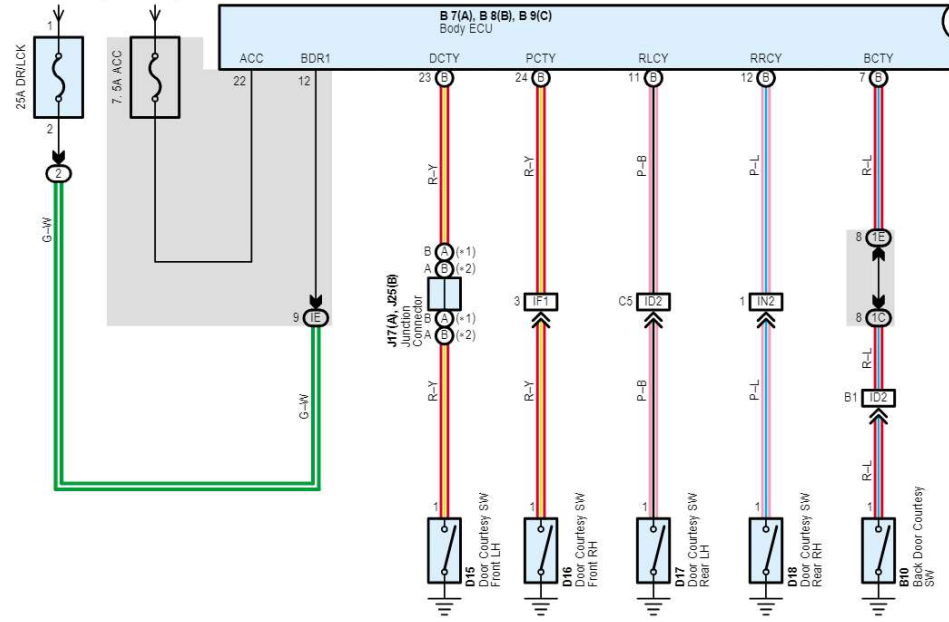
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	114 (RHD)	Instrument Panel Wire			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# Wireless Door Lock Control (LHD)

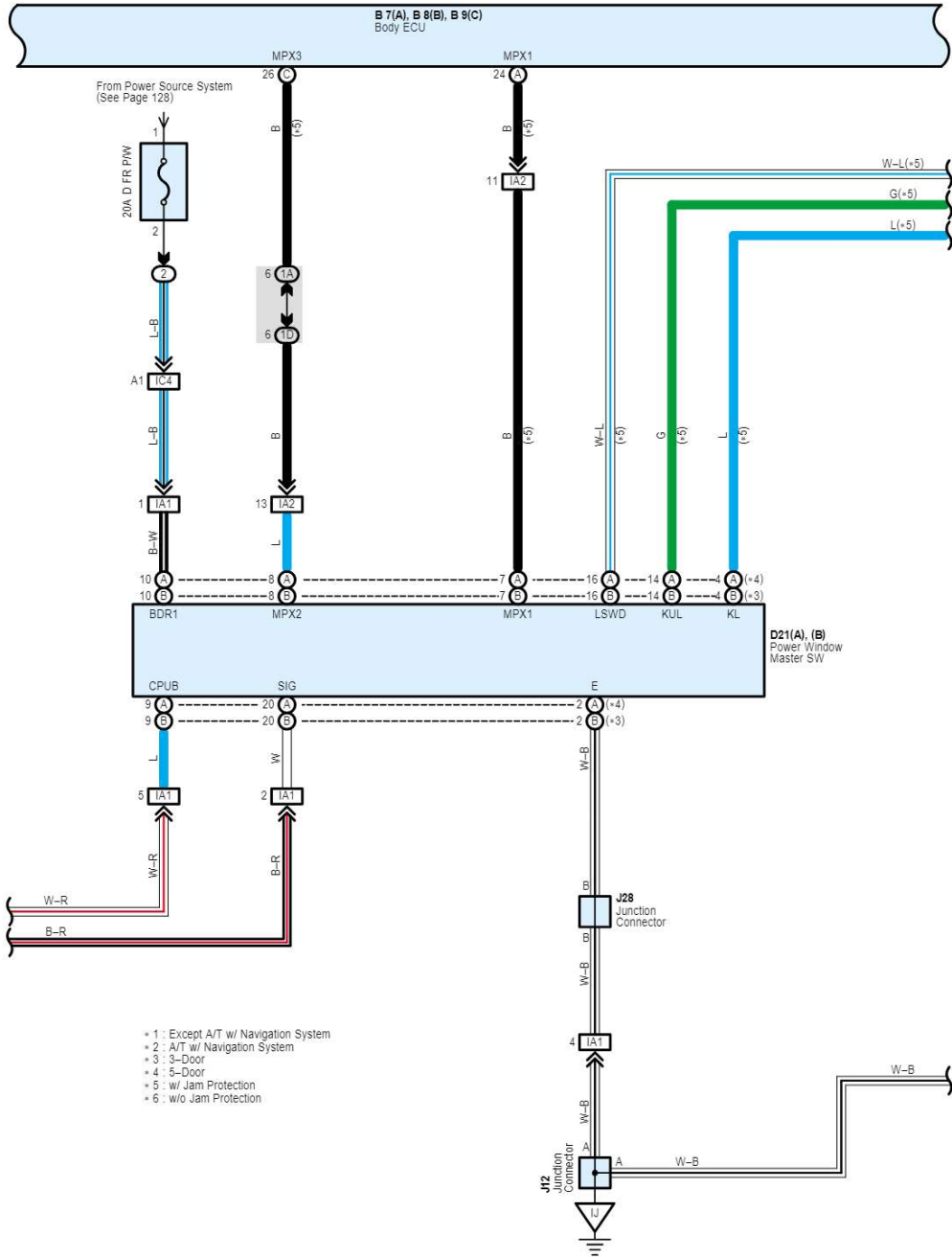
From Power Source System (See Page 128)

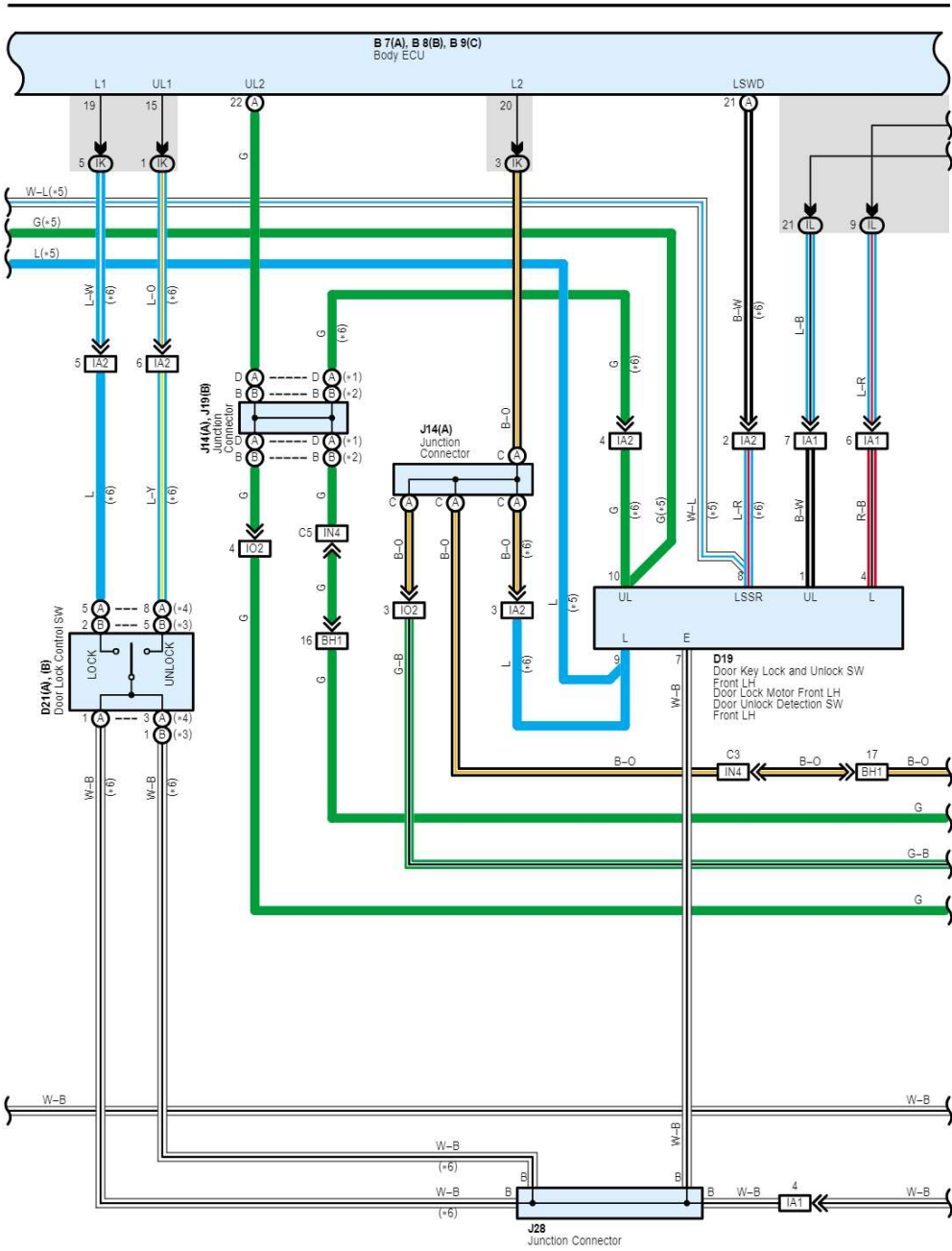




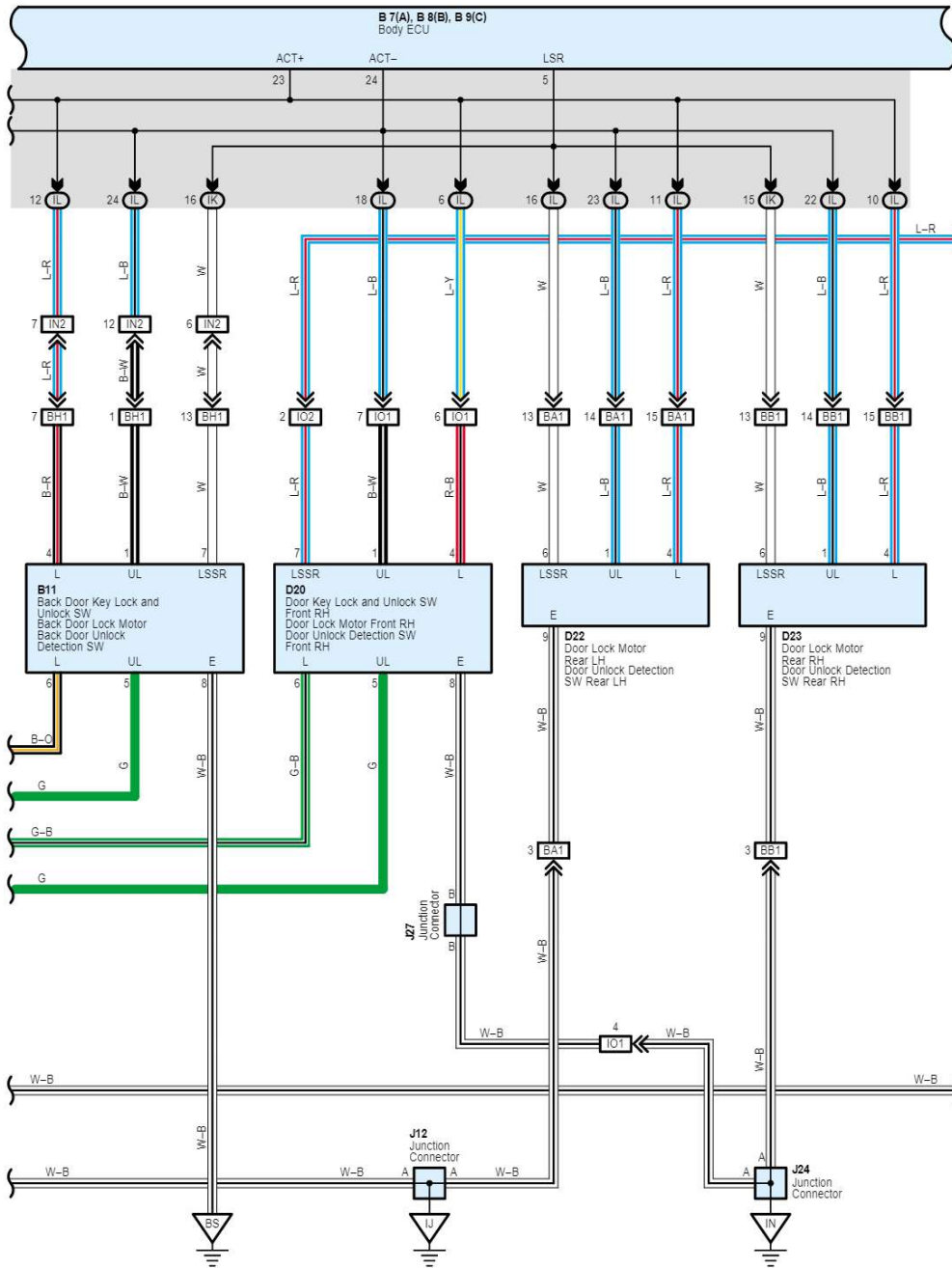


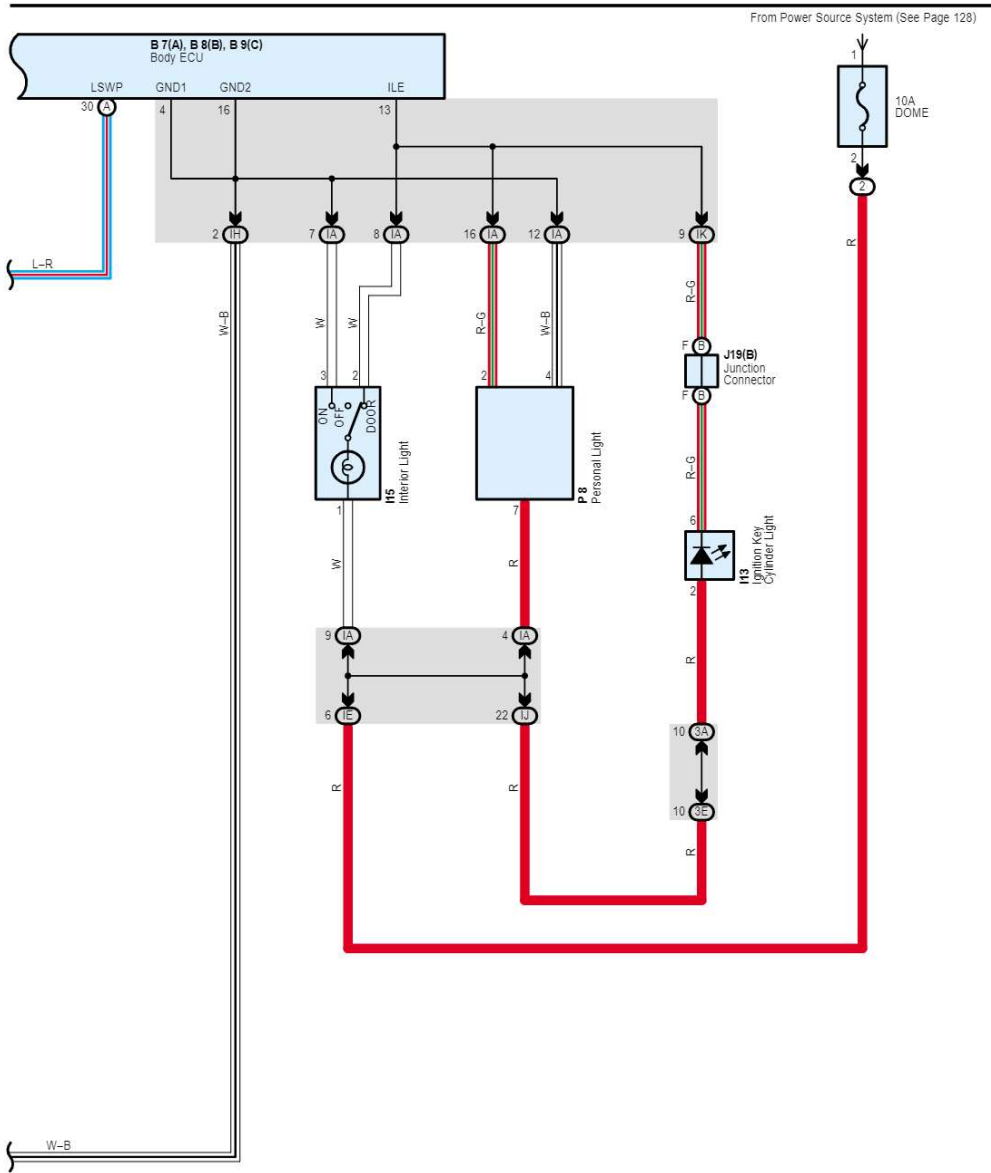
# Wireless Door Lock Control (LHD)





# Wireless Door Lock Control (LHD)





## Wireless Door Lock Control (LHD)

### System Outline

Door lock control (Lock and unlock) and panic control (Theft alarm and flash) is performed by remote control, without the ignition key inserted in the door key cylinder, using low-power electrical waves emitted by a transmitter.

#### 1. Normal Operation

- \* Lock operation  
When the lock SW on the transmitter is pressed, all the doors are locked.
- \* Unlock operation  
When the unlock SW on the transmitter is pressed, all the doors are unlocked.

#### 2. Auto Lock Function

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

- \* Any door is opened.
- \* The ignition key is inserted into the ignition SW.
- \* When the lock detection SW of all the doors are locked.

#### 3. Wireless Door Lock Stop Function

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

Lock operation

- \* When any door is open (Door courtesy SW on)
- \* The ignition key is inserted into the ignition SW (Unlock warning SW on)
- \* Ignition SW is on

Unlock operation

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

#### 4. Visual Confirmation of Lock or Unlock

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

#### 5. Repeat Function

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

#### 6. Illuminated Entry Function

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

### Service Hints

#### Body ECU

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

: Parts Location

Code	See Page	Code	See Page	Code	See Page	
B7	A	48 (LHD)	D19	54 (*7)	J25 B	50 (LHD)
B8	B	48 (LHD)	D20	52 (*6)	J27	52 (*6)
B9	C	48 (LHD)		54 (*7)		54 (*7)
B10		52 (*6)	D21	A	J28	52 (*6)
		54 (*7)		B		54 (*7)
B11		52 (*6)	D22	52 (*6)	J29	52 (*6)
		54 (*7)	D23	52 (*6)		54 (*7)
D10		52 (*6)	I13	50 (LHD)	J30	52 (*6)
		54 (*7)	I15	52 (*6)		54 (*7)
D15		52 (*6)		J12	54 (*7)	J31
		54 (*7)	50 (LHD)		54 (*7)	
D16		52 (*6)	J14	A	K2	50 (LHD)
		54 (*7)	J15			50 (LHD)
D17		52 (*6)	J17	A	P8	55 (*7)
D18		52 (*6)	J19	B		50 (LHD)
D19		52 (*6)	J24		T10	51 (LHD)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IH		
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		
1A		
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1C		
1D		
1E		
2A		
2E	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Wireless Door Lock Control (LHD)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
IN	88 (LHD)	Right Kick Panel
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
BS	96 (*6)	Back Door Panel Center
	100 (*7)	

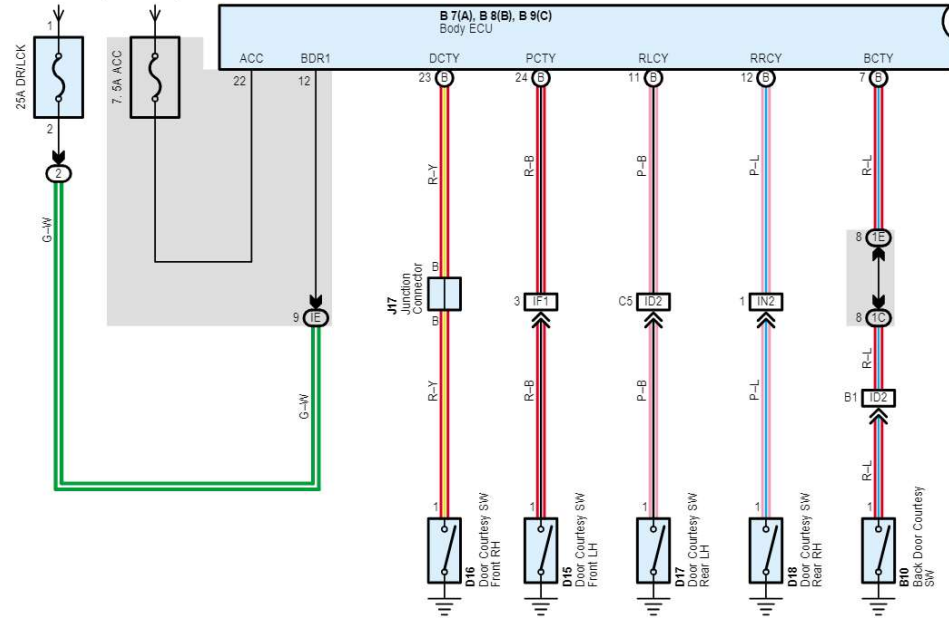
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

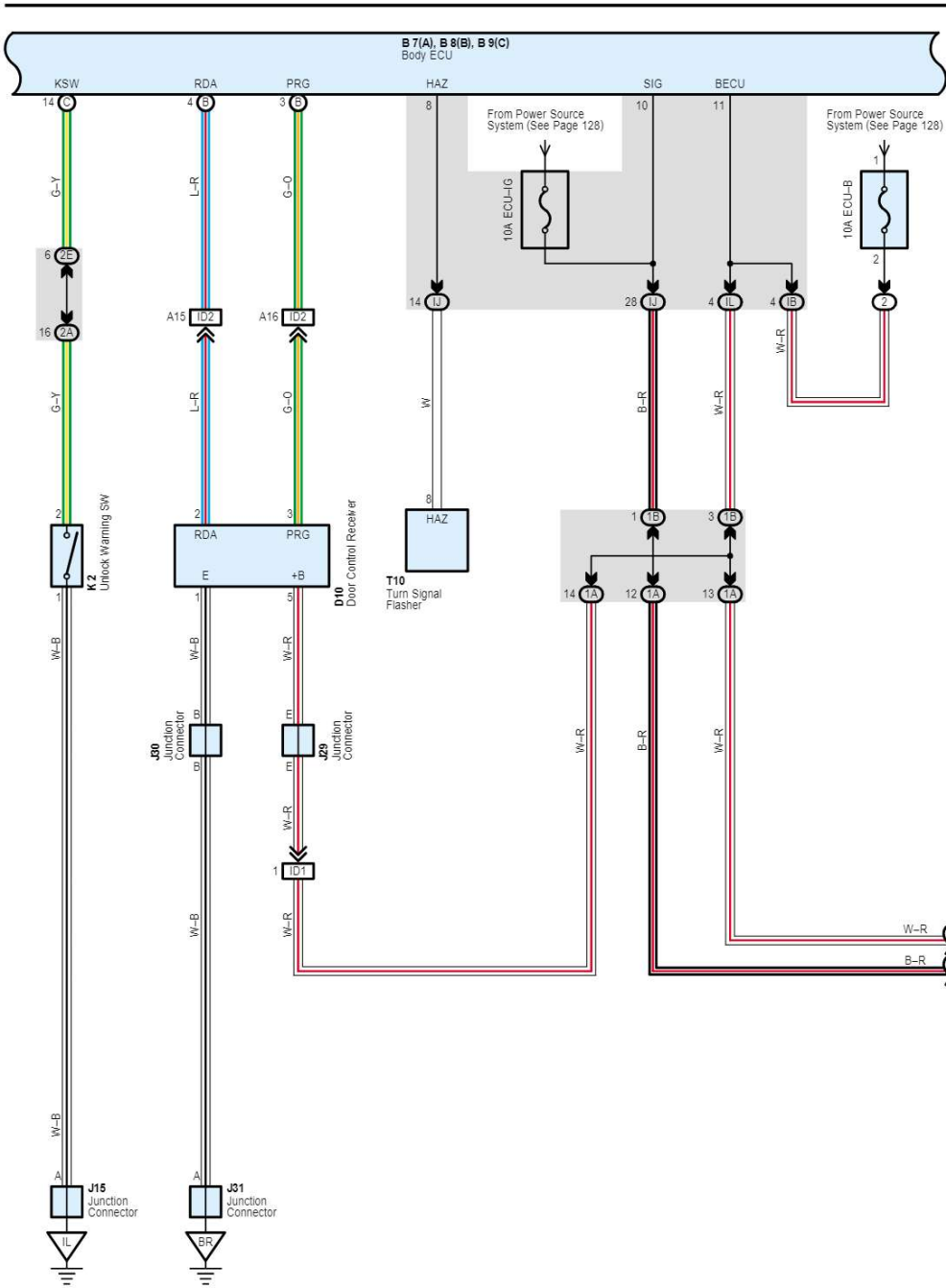




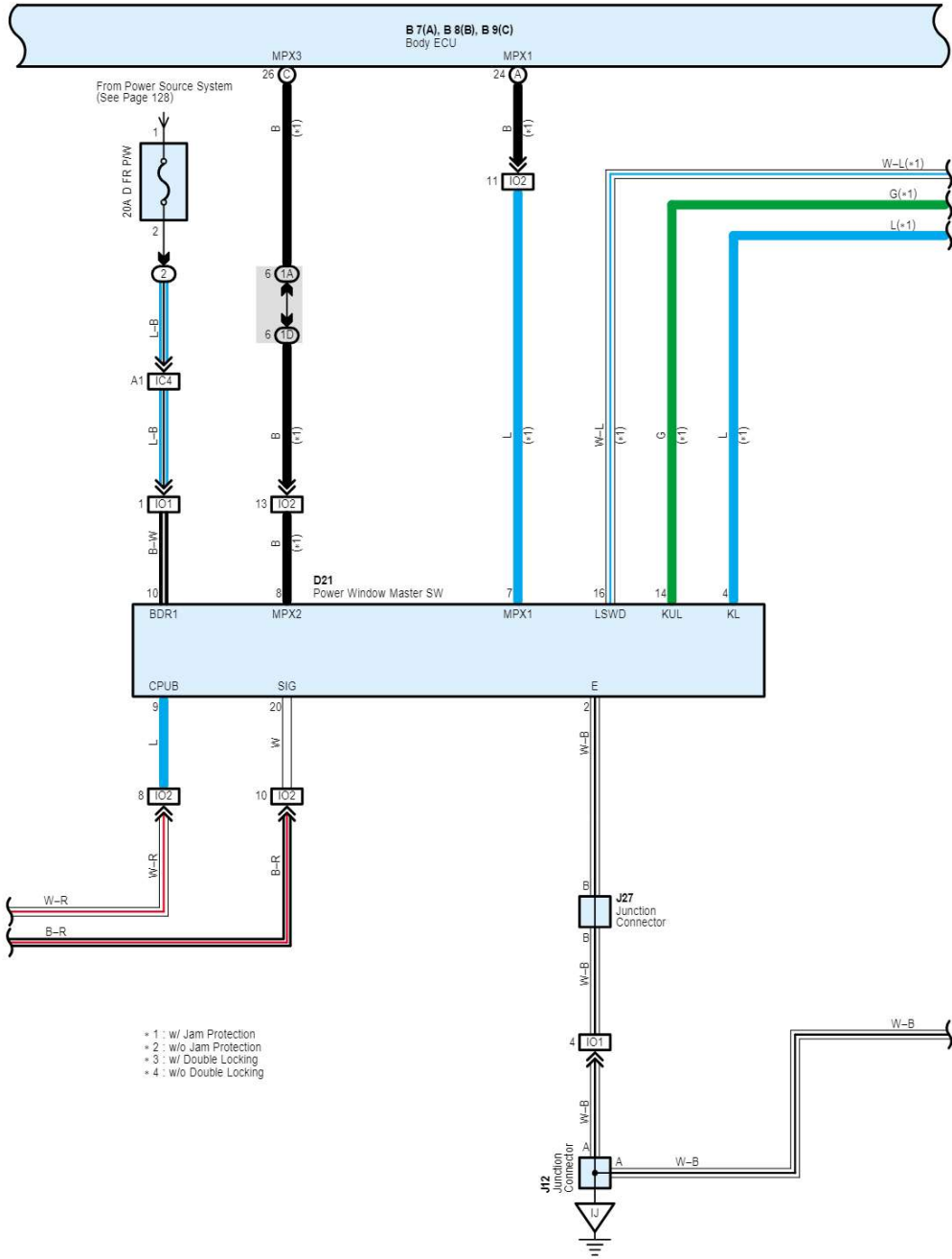
# Wireless Door Lock Control (RHD)

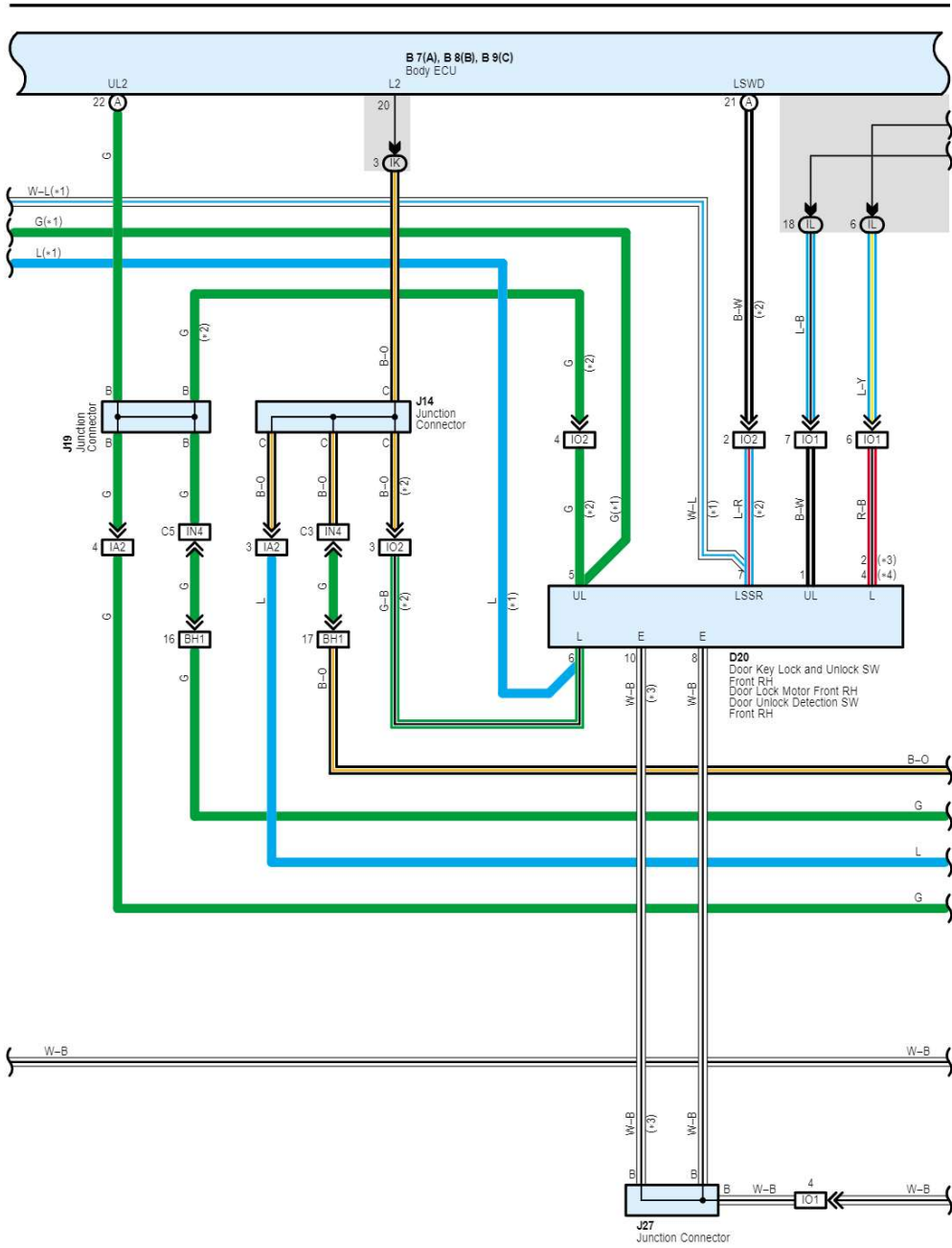
From Power Source System (See Page 128)



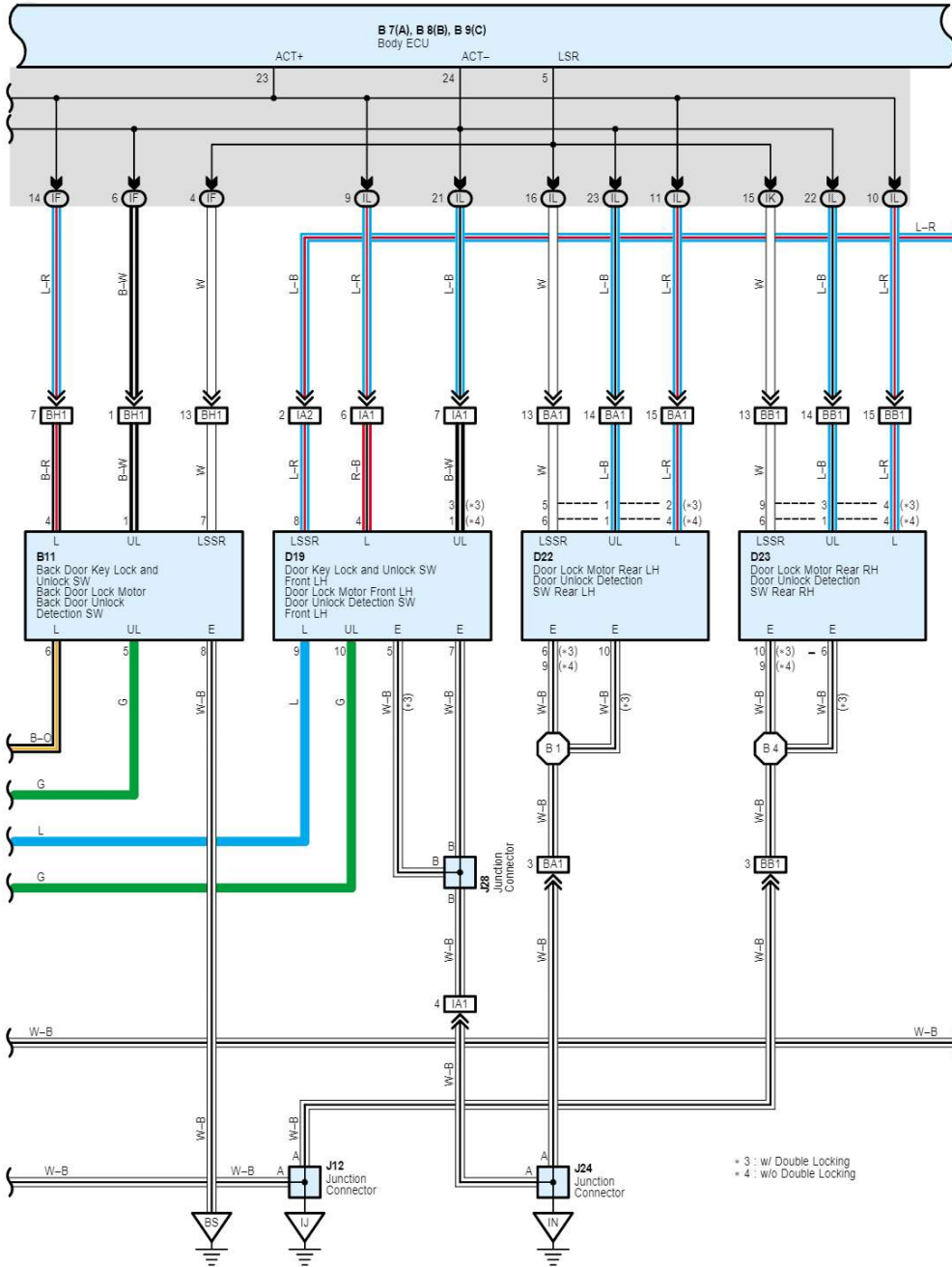


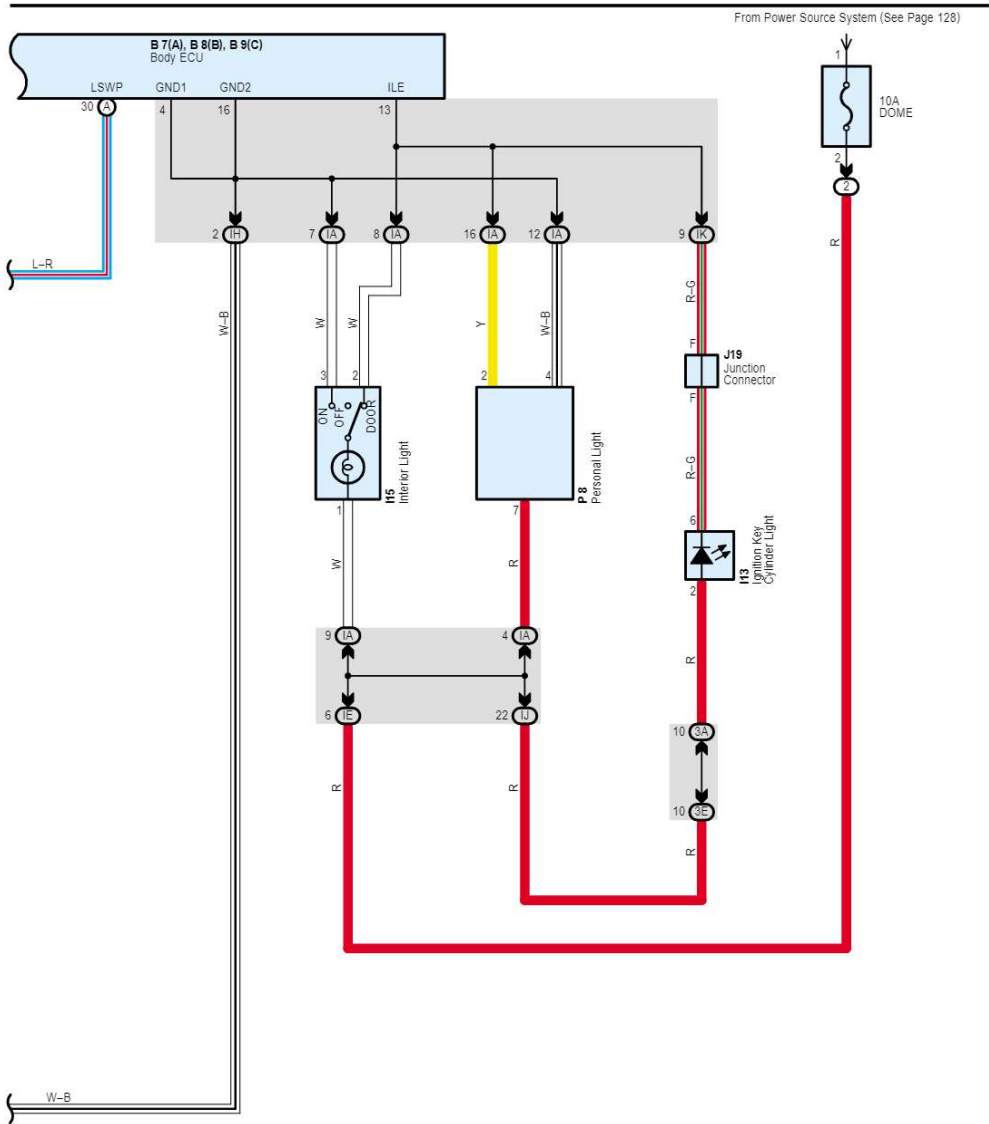
# Wireless Door Lock Control (RHD)





# Wireless Door Lock Control (RHD)





## Wireless Door Lock Control (RHD)

### System Outline

Door lock control (Lock and unlock) and panic control (Theft alarm and flash) is performed by remote control, without the ignition key inserted in the door key cylinder, using low-power electrical waves emitted by a transmitter.

#### 1. Normal Operation

- \* Lock operation  
When the lock SW on the transmitter is pressed, all the doors are locked.
- \* Unlock operation  
When the unlock SW on the transmitter is pressed, all the doors are unlocked.

#### 2. Auto Lock Function

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

- \* Any door is opened.
- \* The ignition key is inserted into the ignition SW.
- \* When the lock detection SW of all the doors are locked.

#### 3. Wireless Door Lock Stop Function

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

Lock operation

- \* When any door is open (Door courtesy SW on)
- \* The ignition key is inserted into the ignition SW (Unlock warning SW on)
- \* Ignition SW is on

Unlock operation

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

#### 4. Visual Confirmation of Lock or Unlock

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

#### 5. Repeat Function

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

#### 6. Illuminated Entry Function

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

### Service Hints

#### Body ECU

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



: Parts Location

Code	See Page	Code	See Page	Code	See Page	
B7	A	68 (RHD)	D19	74 (*16)	J27	72 (*15)
B8	B	68 (RHD)	D20	72 (*15)		74 (*16)
B9	C	68 (RHD)		74 (*16)	J28	72 (*15)
B10		72 (*15)	D21	72 (*15)		74 (*16)
		74 (*16)		74 (*16)	J29	72 (*15)
B11		72 (*15)	D22	72 (*15)		74 (*16)
		74 (*16)	D23	72 (*15)	J30	72 (*15)
D10		72 (*15)	I13	70 (RHD)		74 (*16)
		74 (*16)		72 (*15)	J31	72 (*15)
D15		72 (*15)	I15	74 (*16)		74 (*16)
		74 (*16)		70 (RHD)	K2	70 (RHD)
D16		72 (*15)	J14	70 (RHD)	P8	73 (*15)
		74 (*16)	J15	70 (RHD)		75 (*16)
D17		72 (*15)	J17	70 (RHD)	T10	71 (RHD)
D18		72 (*15)	J19	70 (RHD)		
D19		72 (*15)	J24	70 (RHD)		

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	28 (RHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IF	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A		
1B	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C		
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		
3A	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Wireless Door Lock Control (RHD)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
ID2		
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
IJ	112 (RHD)	Right Kick Panel
IL	112 (RHD)	Instrument Panel Brace RH
IN	112 (RHD)	Left Kick Panel
BR	120 (*15)	Left Quarter Panel Inner
	124 (*16)	
BS	120 (*15)	Back Door Panel Center
	124 (*16)	

### ○ : Splice Points

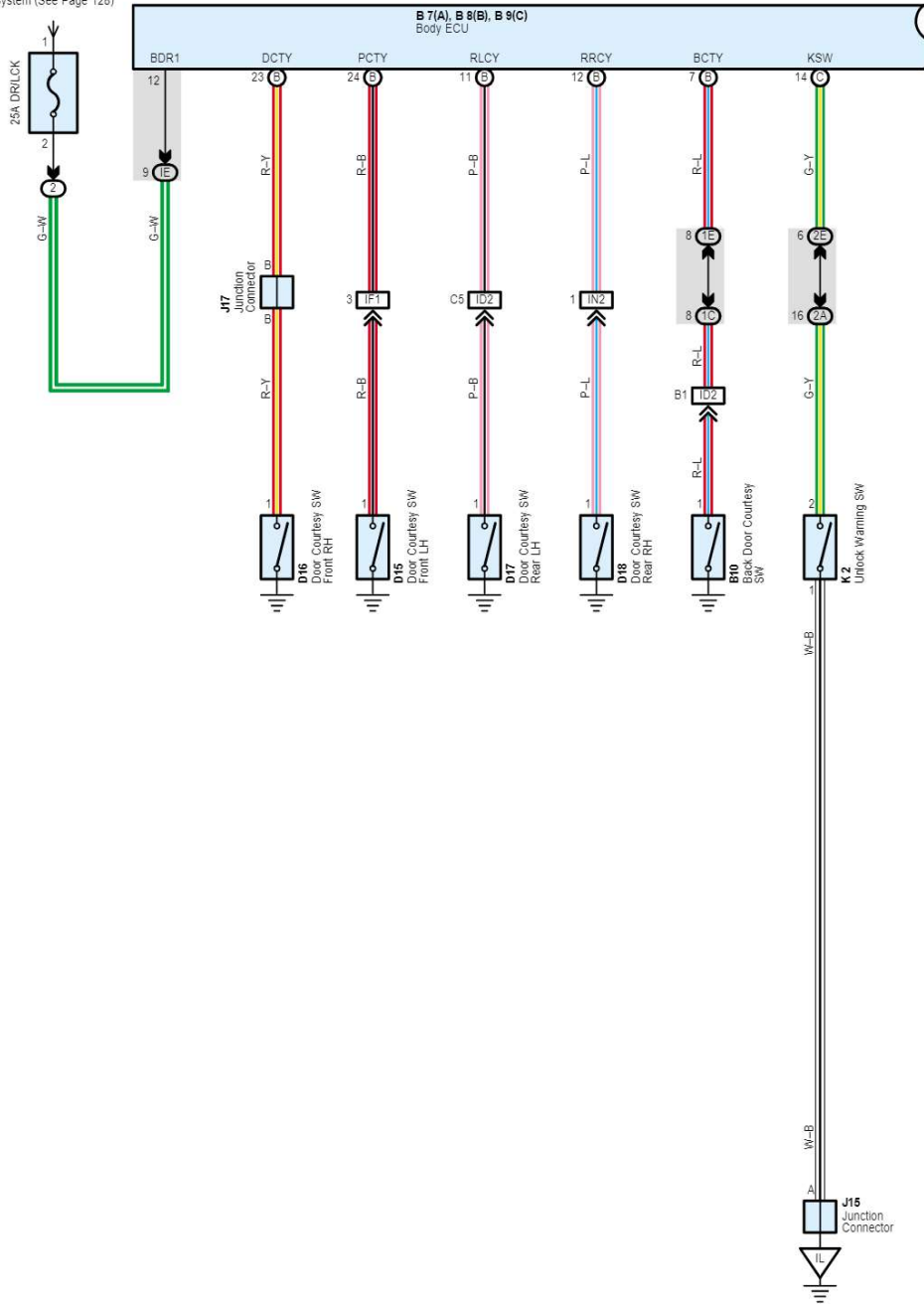
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	122 (*15)	Rear Door No.1 Wire LH	B4	122 (*15)	Rear Door No.1 Wire RH

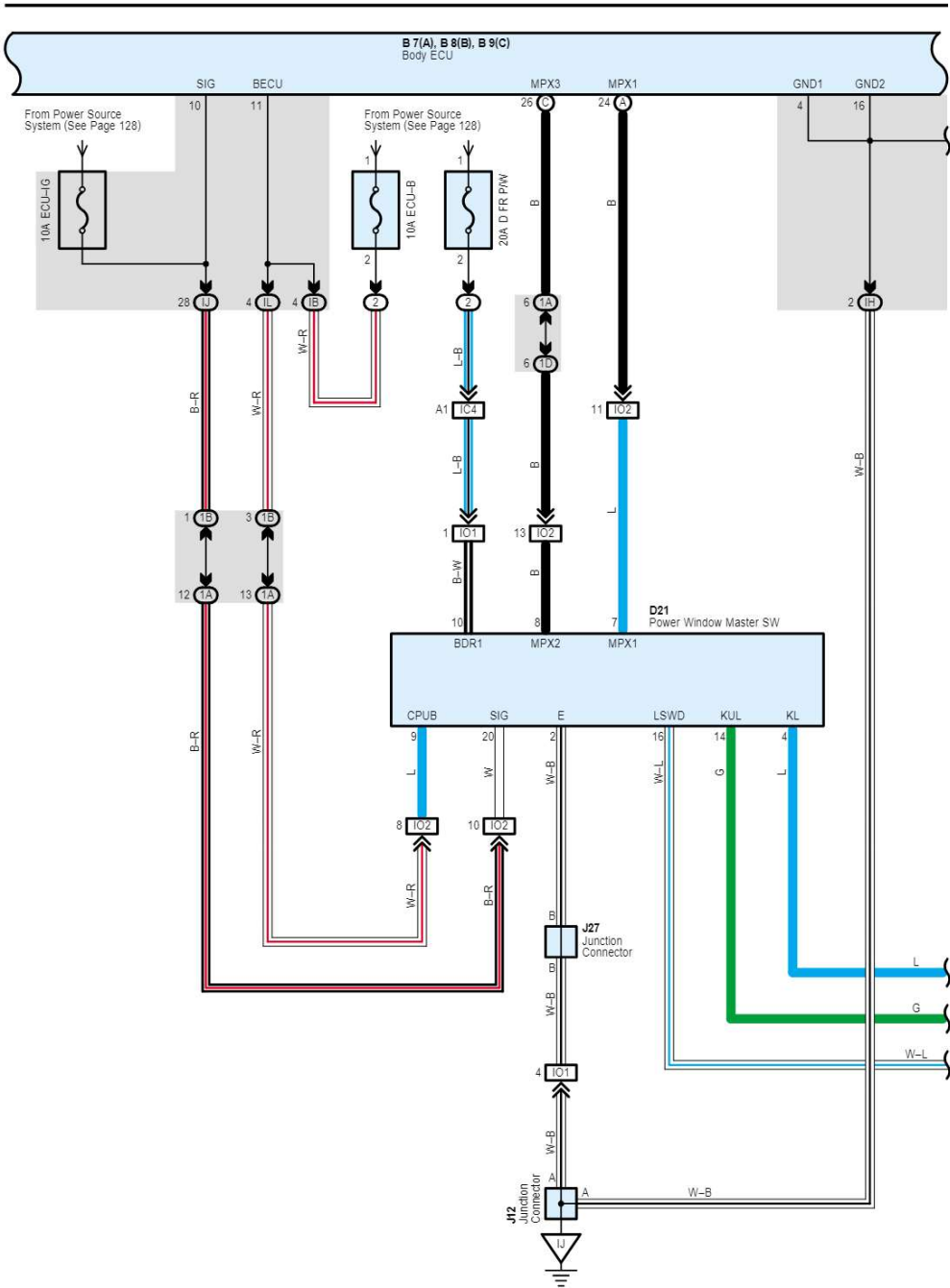
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



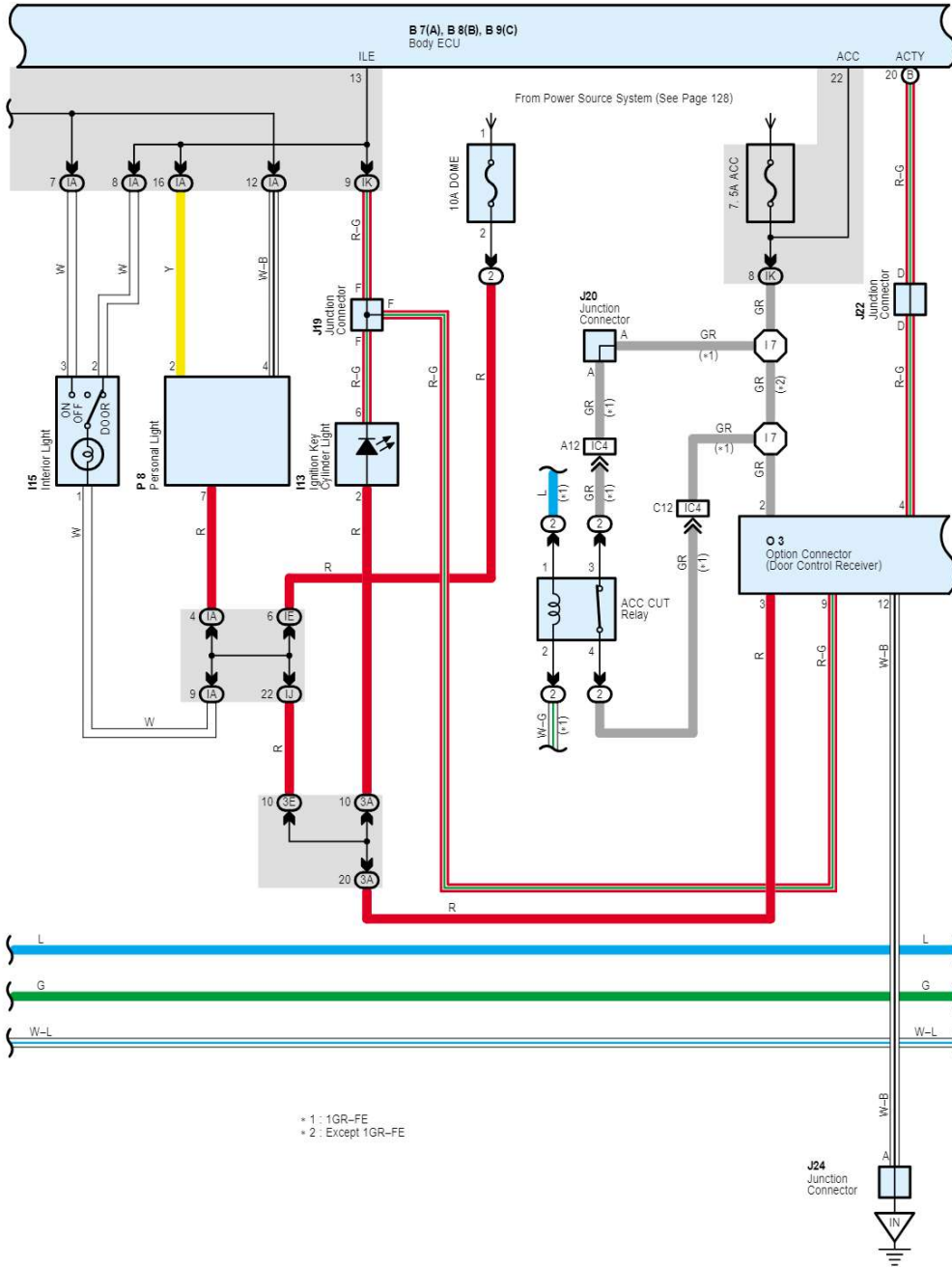
# Option Connector (Wireless Door Lock Control)

From Power Source System (See Page 128)



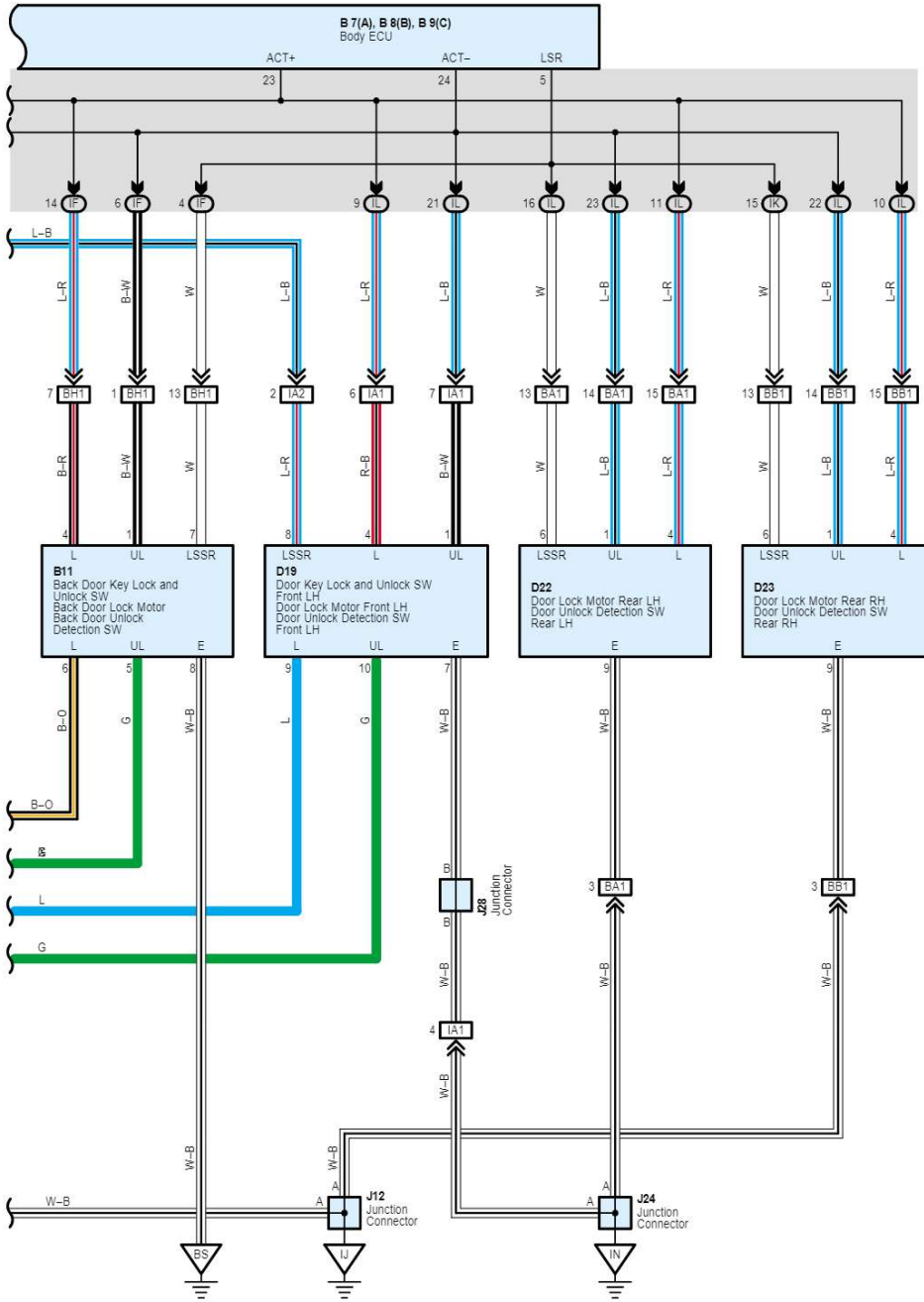


# Option Connector (Wireless Door Lock Control)





# Option Connector (Wireless Door Lock Control)





**Service Hints**

**O3 Option Connector (Door Control Receiver)**

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

**○ : Parts Location**

Code		See Page	Code	See Page	Code	See Page
B7	A	68 (RHD)	D20	72 (*15)	J22	70 (RHD)
B8	B	68 (RHD)		74 (*16)	J24	70 (RHD)
B9	C	68 (RHD)	D21	72 (*15)	J27	72 (*15)
B10		72 (*15)		74 (*16)		74 (*16)
		74 (*16)	D22	72 (*15)	J28	72 (*15)
B11		72 (*15)	D23	72 (*15)		74 (*16)
		74 (*16)	I13	70 (RHD)	K2	70 (RHD)
D15		72 (*15)	I15	72 (*15)	O2	61 (*11)
		74 (*16)		74 (*16)		63 (*12)
D16		72 (*15)	J12	70 (RHD)		65 (*13)
		74 (*16)	J14	70 (RHD)	O3	71 (RHD)
D17		72 (*15)	J15	70 (RHD)	P8	73 (*15)
D18		72 (*15)	J17	70 (RHD)		75 (*16)
D19		72 (*15)	J19	70 (RHD)	T10	71 (RHD)
		74 (*16)	J20	70 (RHD)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	28 (RHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IF		
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B		
1C		
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		
3A	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Option Connector (Wireless Door Lock Control)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
IJ	112 (RHD)	Right Kick Panel
IL	112 (RHD)	Instrument Panel Brace RH
IN	112 (RHD)	Left Kick Panel
BS	120 (*15)	Back Door Panel Center
	124 (*16)	

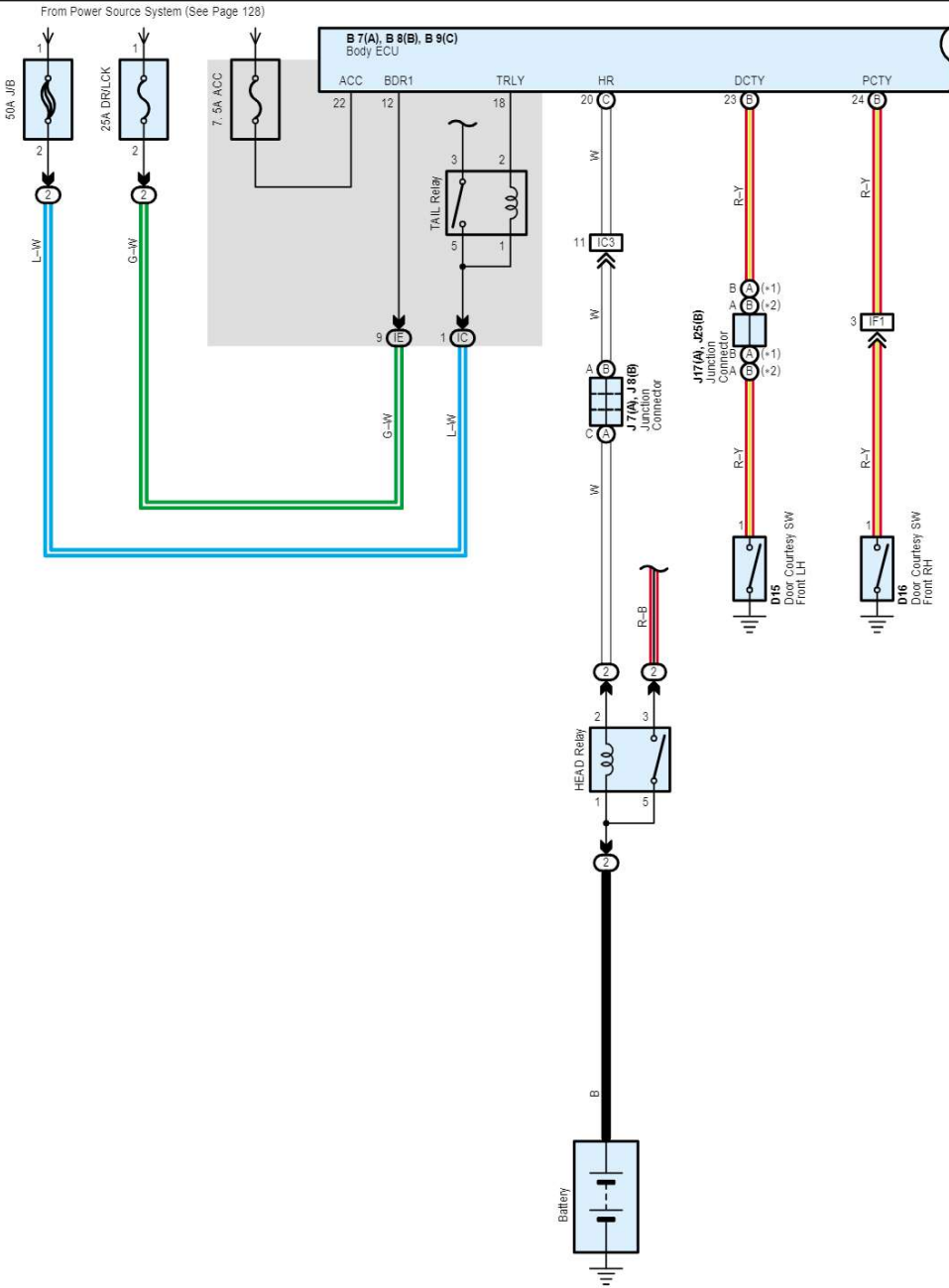
### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	114 (RHD)	Instrument Panel Wire			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

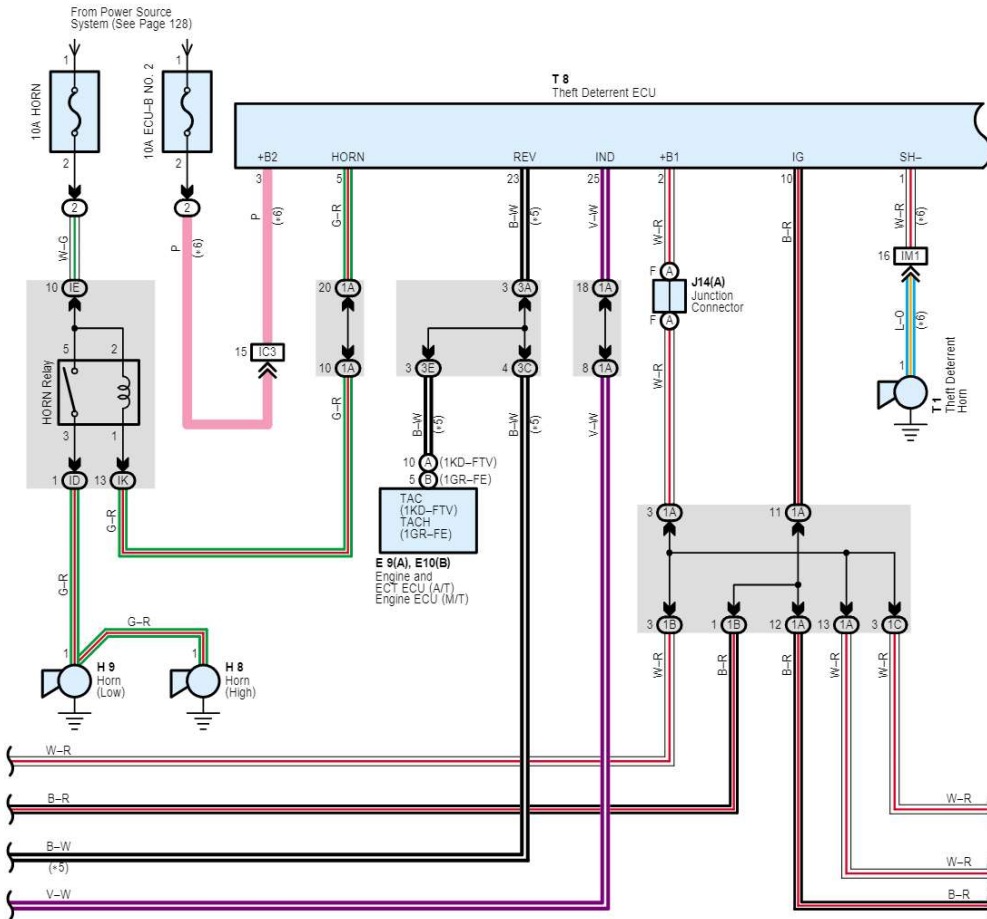


# Door Lock Control and Theft Deterrent (LHD)



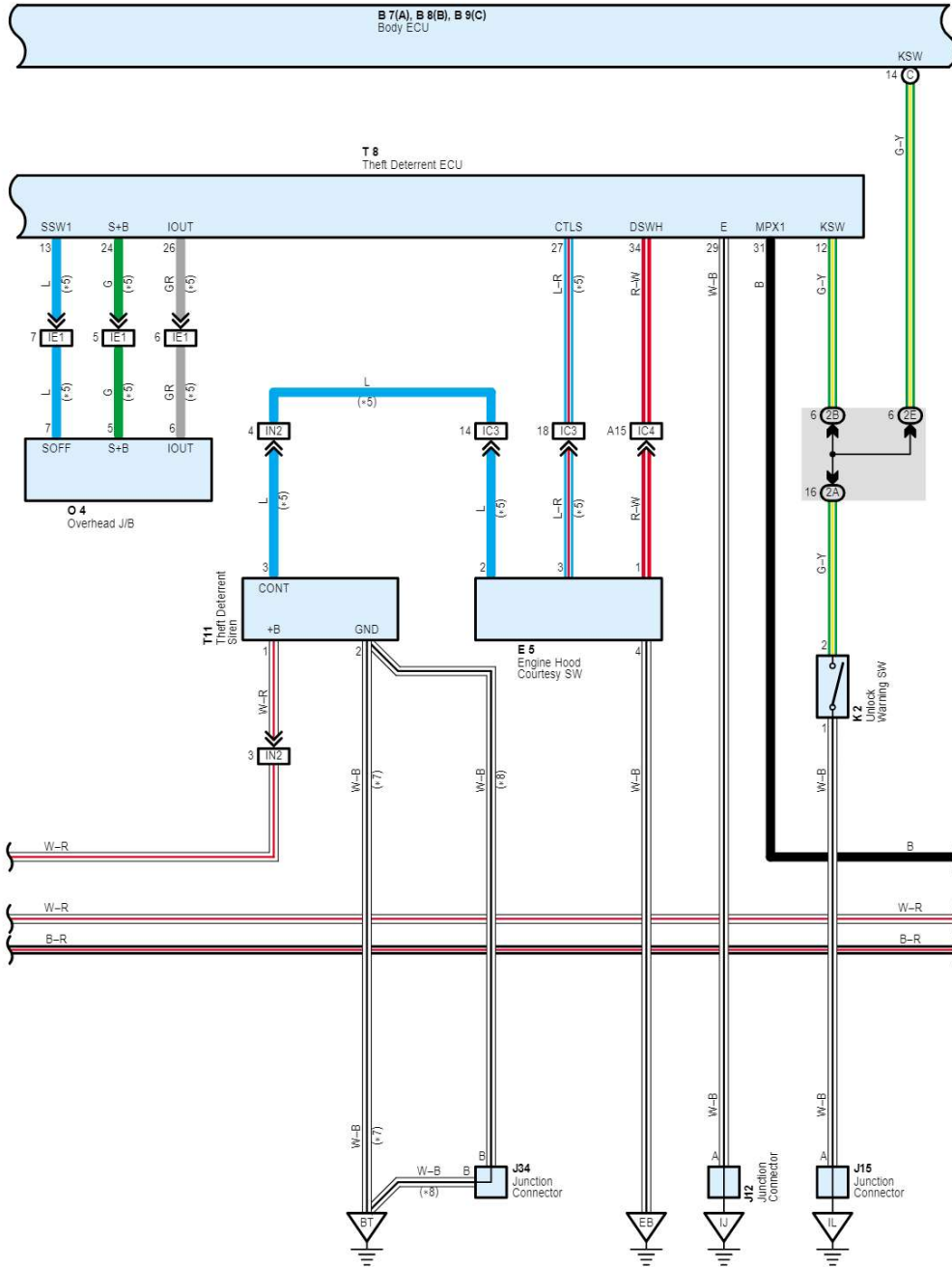






- 3 : 3RZ-FE Unleaded Gasoline
- 4 : 3RZ-FE Leaded Gasoline
- 5 : Europe
- 6 : Except Europe

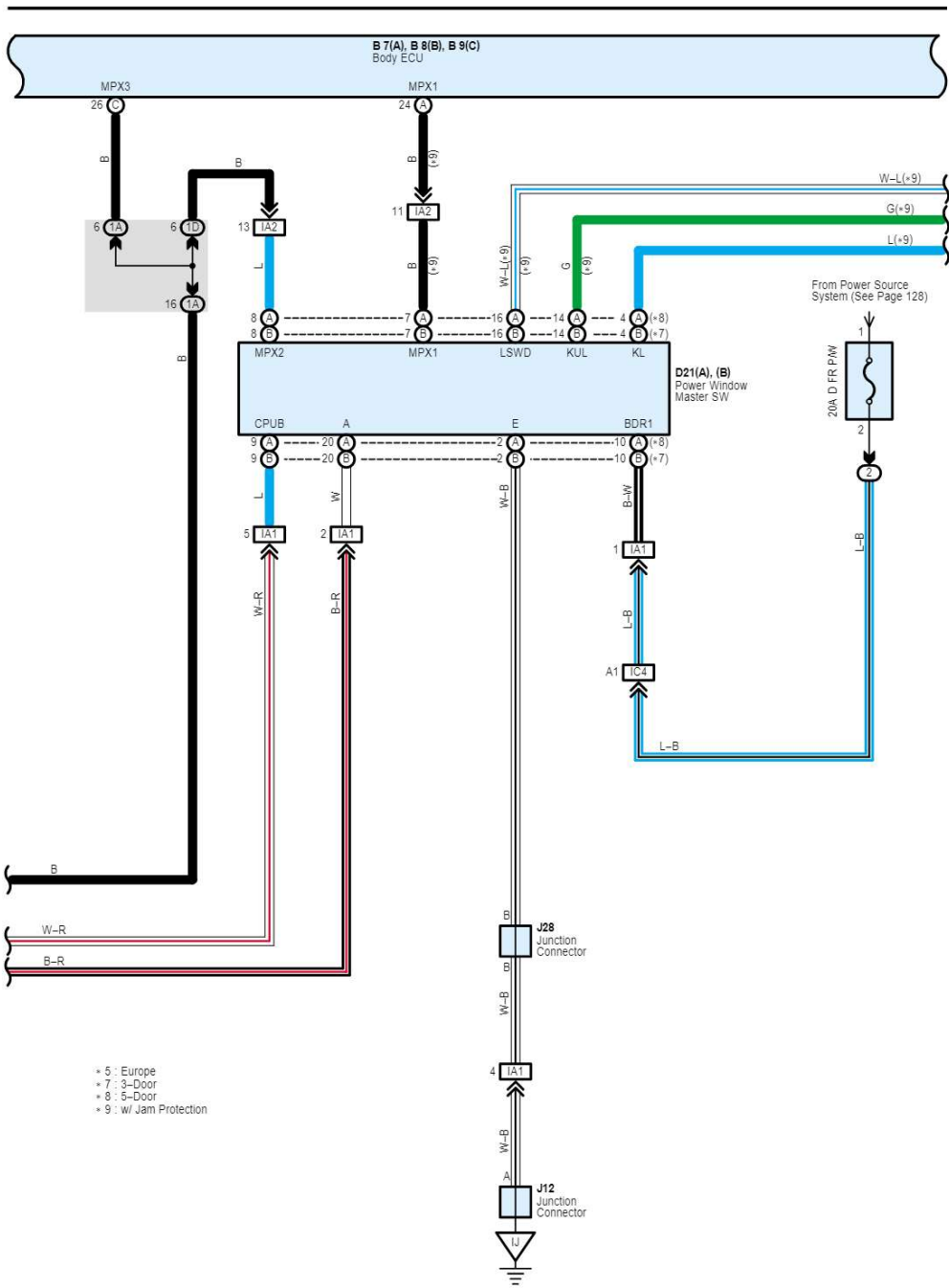
# Door Lock Control and Theft Deterrent (LHD)



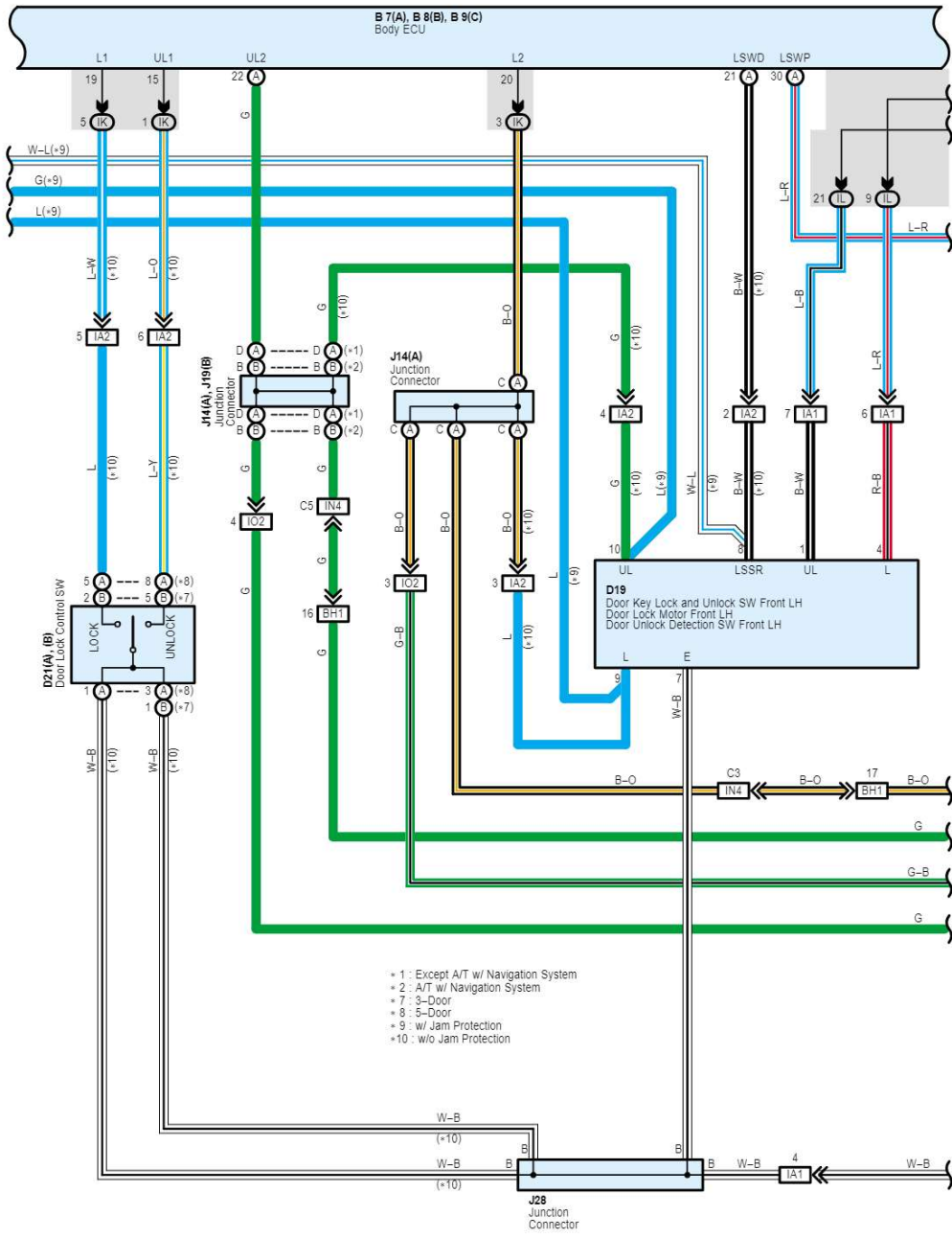
430

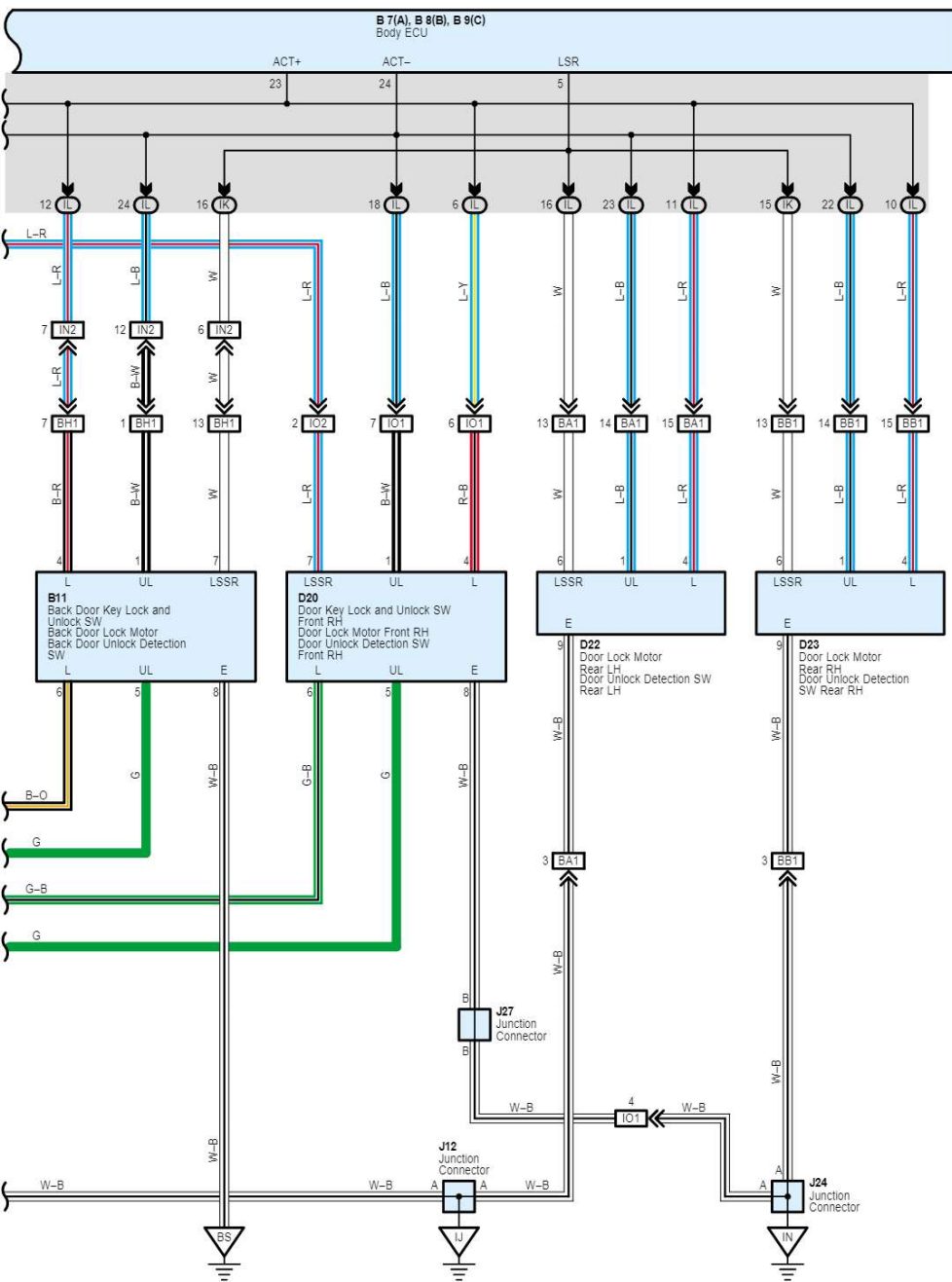
LAND CRUISER / LAND CRUISER PRADO (EWD527E)





# Door Lock Control and Theft Deterrent (LHD)





## Door Lock Control and Theft Deterrent (LHD)

### System Outline

The door lock control is controlled through the various signals input into the body ECU through communication control of the body ECU etc.

#### 1. Manual Unlock Operation

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

#### 2. Manual Lock Operation

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

#### 3. Door Key Unlock Operation

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

#### 4. Ignition Key Reminder Operation

When the door lock operation is made using the door knob with the ignition key remained inserted in the key cylinder and the door open, unlock operation is automatically made. Additionally, if lock operation is made with the door lock control SW or door key lock and unlock SW, unlock operation is automatically made after the lock operation has been completed.

### Service Hints

#### Body ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
B7	A	48 (LHD)	E5		38 (*1)		J15	50 (LHD)
B8	B	48 (LHD)			40 (*2)	J17	A	50 (LHD)
B9	C	48 (LHD)			42 (*3)	J19	B	50 (LHD)
B10		52 (*6)			44 (*4)		J24	50 (LHD)
		54 (*7)			46 (*5)	J25	B	50 (LHD)
B11		52 (*6)	E9	A	49 (LHD)			52 (*6)
		54 (*7)	E10	B	49 (LHD)	J27		54 (*7)
C9	A	49 (LHD)	H8		39 (*1)		J28	52 (*6)
C10	B	49 (LHD)			41 (*2)			54 (*7)
C11	C	49 (LHD)			43 (*3)	J34		52 (*6)
D15		52 (*6)			45 (*4)		K2	50 (LHD)
		54 (*7)		47 (*5)		O4	53 (*6)	
D16		52 (*6)	H9		39 (*1)			55 (*7)
		54 (*7)			41 (*2)		P8	53 (*6)
D17		52 (*6)			43 (*3)			55 (*7)
D18		52 (*6)			45 (*4)			39 (*1)
D19		52 (*6)		47 (*5)				41 (*2)
		54 (*7)	I13		50 (LHD)		T1	43 (*3)
D20		52 (*6)	I15		52 (*6)			45 (*4)
		54 (*7)			54 (*7)			47 (*5)
D21	A	52 (*6)	J7	A	50 (LHD)		T8	51 (LHD)
	B	54 (*7)	J8	B	50 (LHD)		T10	51 (LHD)
D22		52 (*6)		J12	50 (LHD)			53 (*6)
D23		52 (*6)	J14	A	50 (LHD)		T11	55 (*7)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB		
IC	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
ID		
IE		
IG		
IH	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1B		
1C		
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2E		
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3C		
3E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IE1	90 (LHD)	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Door Lock Control and Theft Deterrent (LHD)

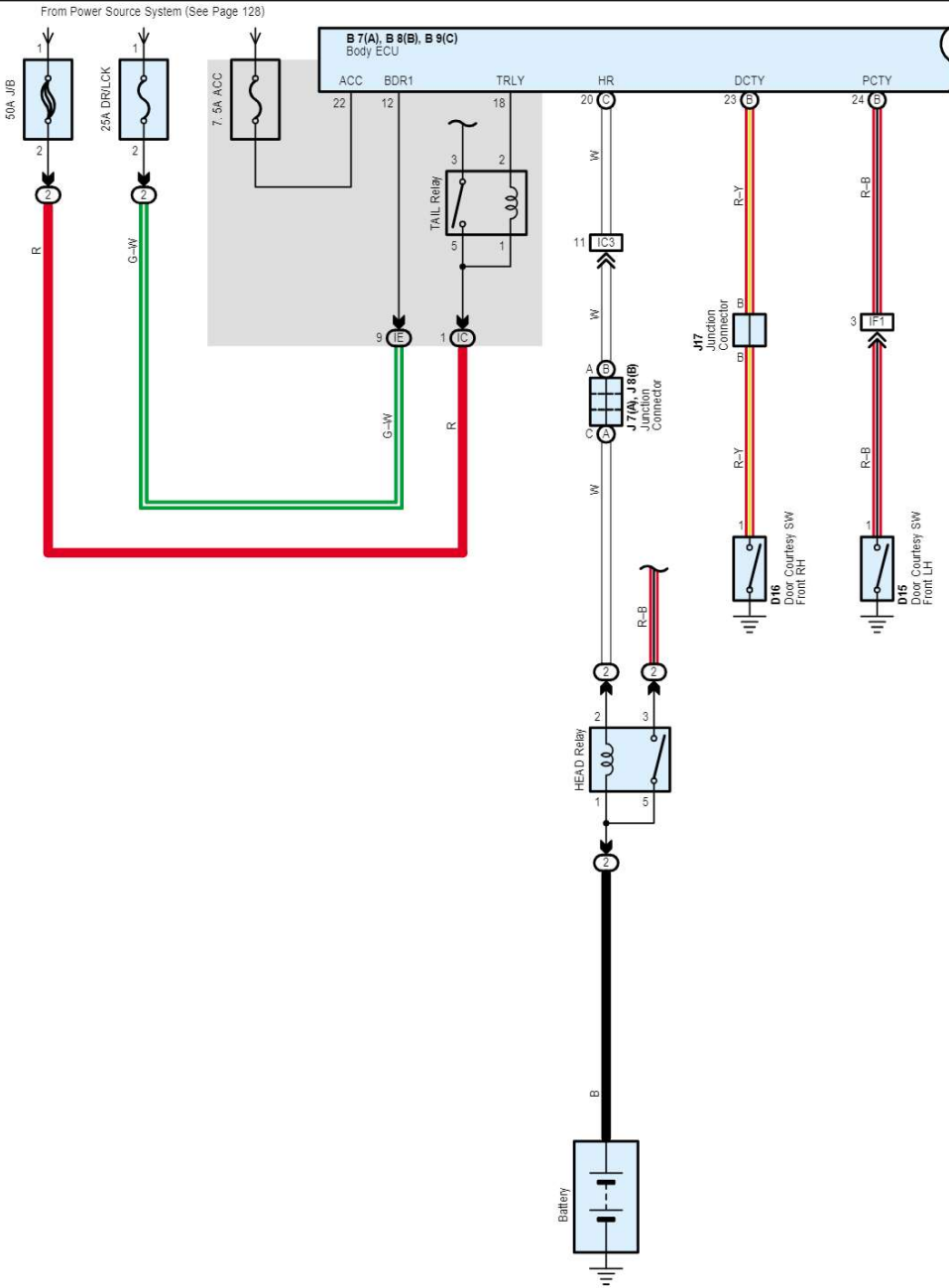
▽ : Ground Points

Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
ED	80 (*2)	Ignition Coil Bracket
EE	80 (*2)	Intake Manifold
EF	82 (*3)	Rear Part of Cylinder Block
EH	84 (*4)	
EI	86 (*5)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
IJ	88 (LHD)	Left Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
IN	88 (LHD)	Right Kick Panel
BS	96 (*6)	Back Door Panel Center
	100 (*7)	
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



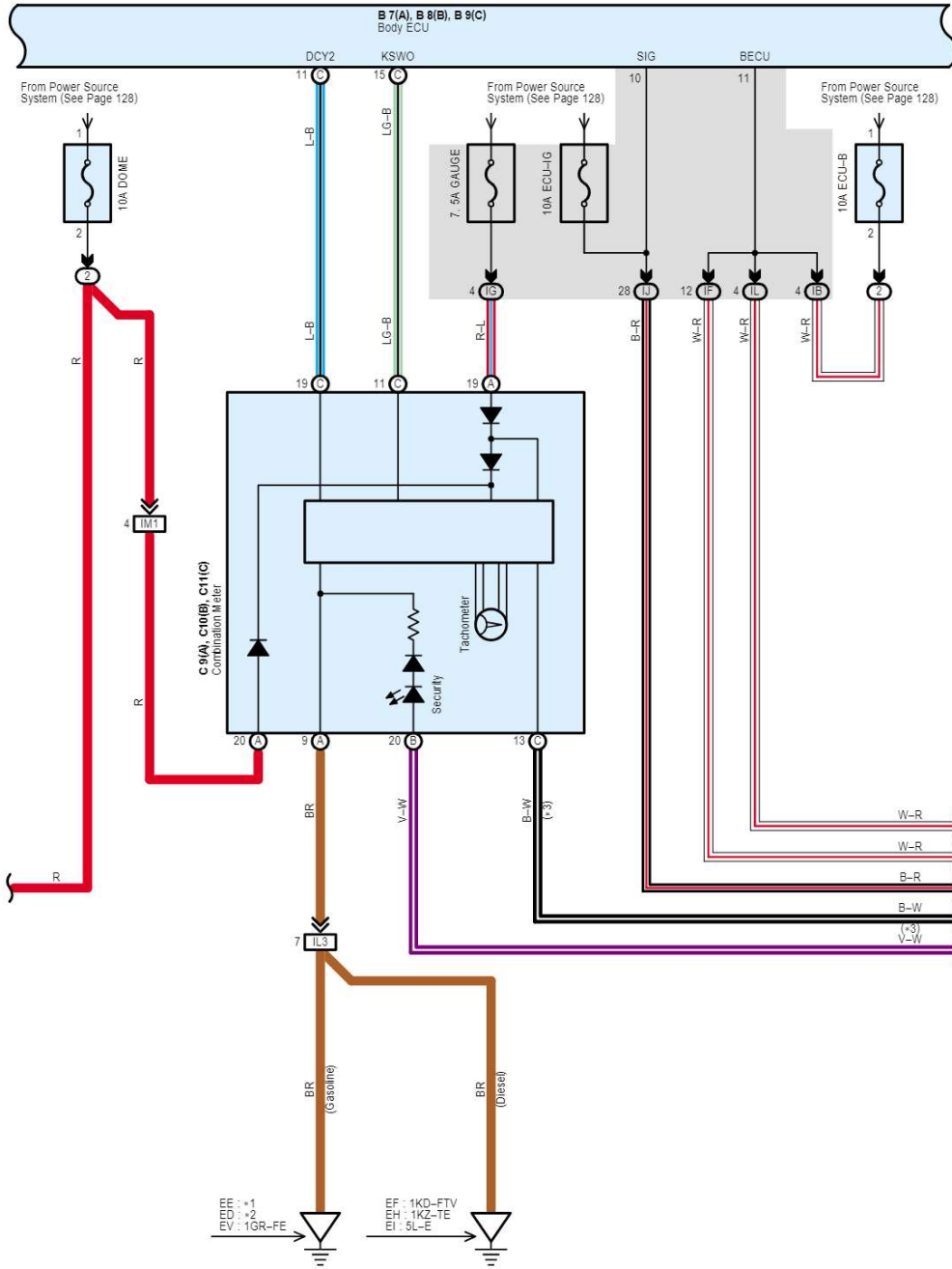
# Door Lock Control and Theft Deterrent (RHD)

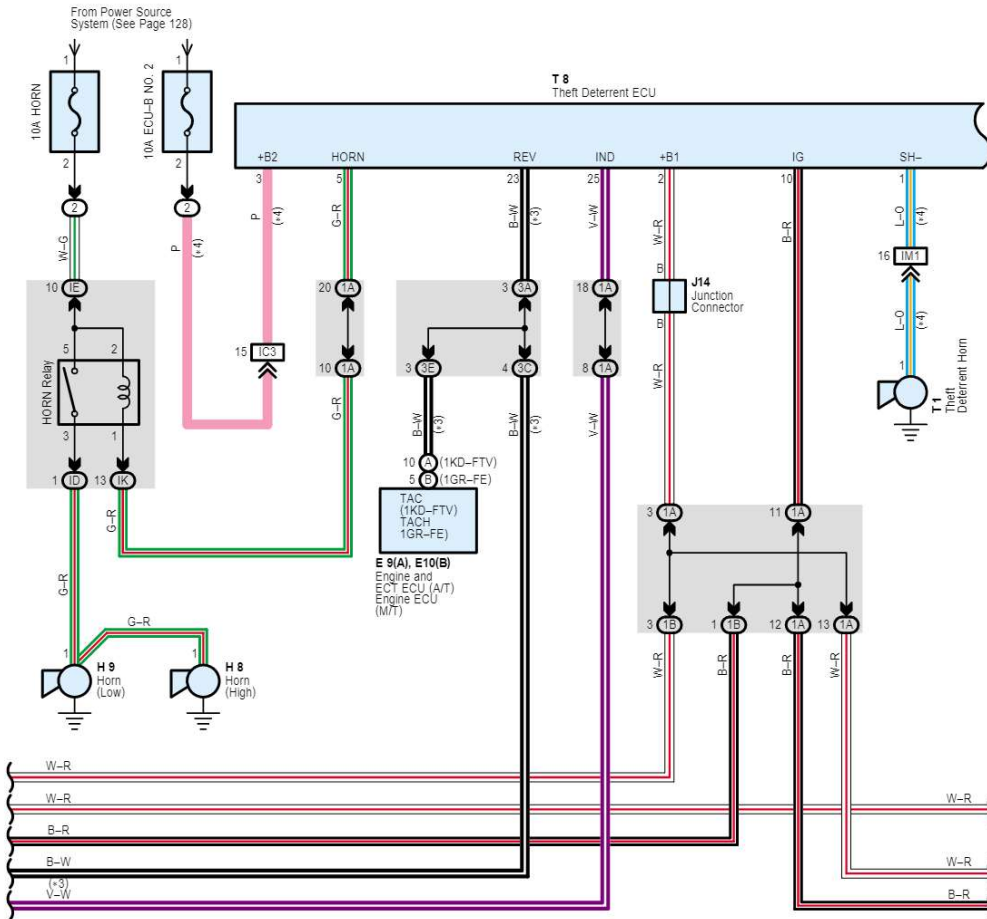






# Door Lock Control and Theft Deterrent (RHD)

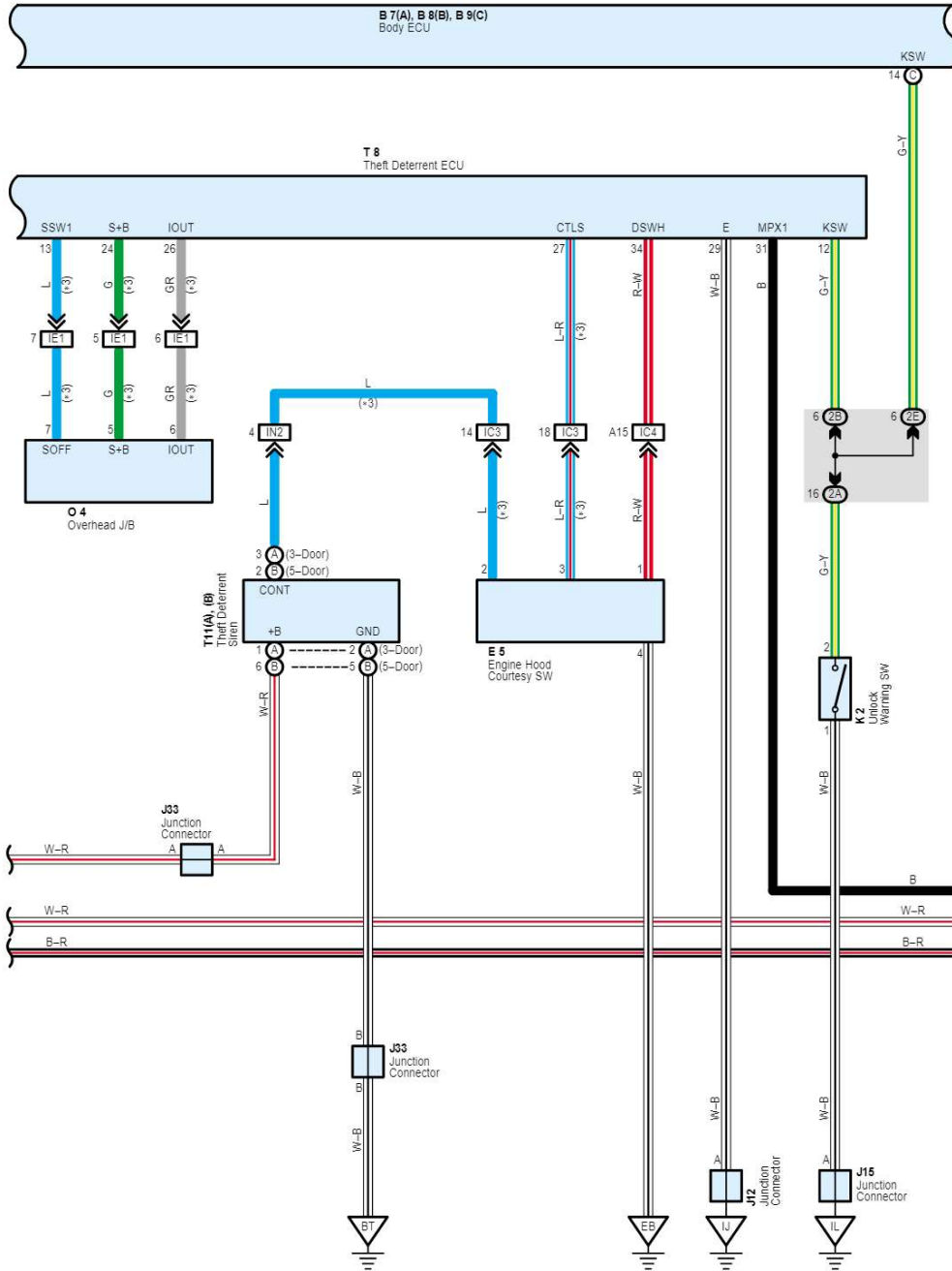


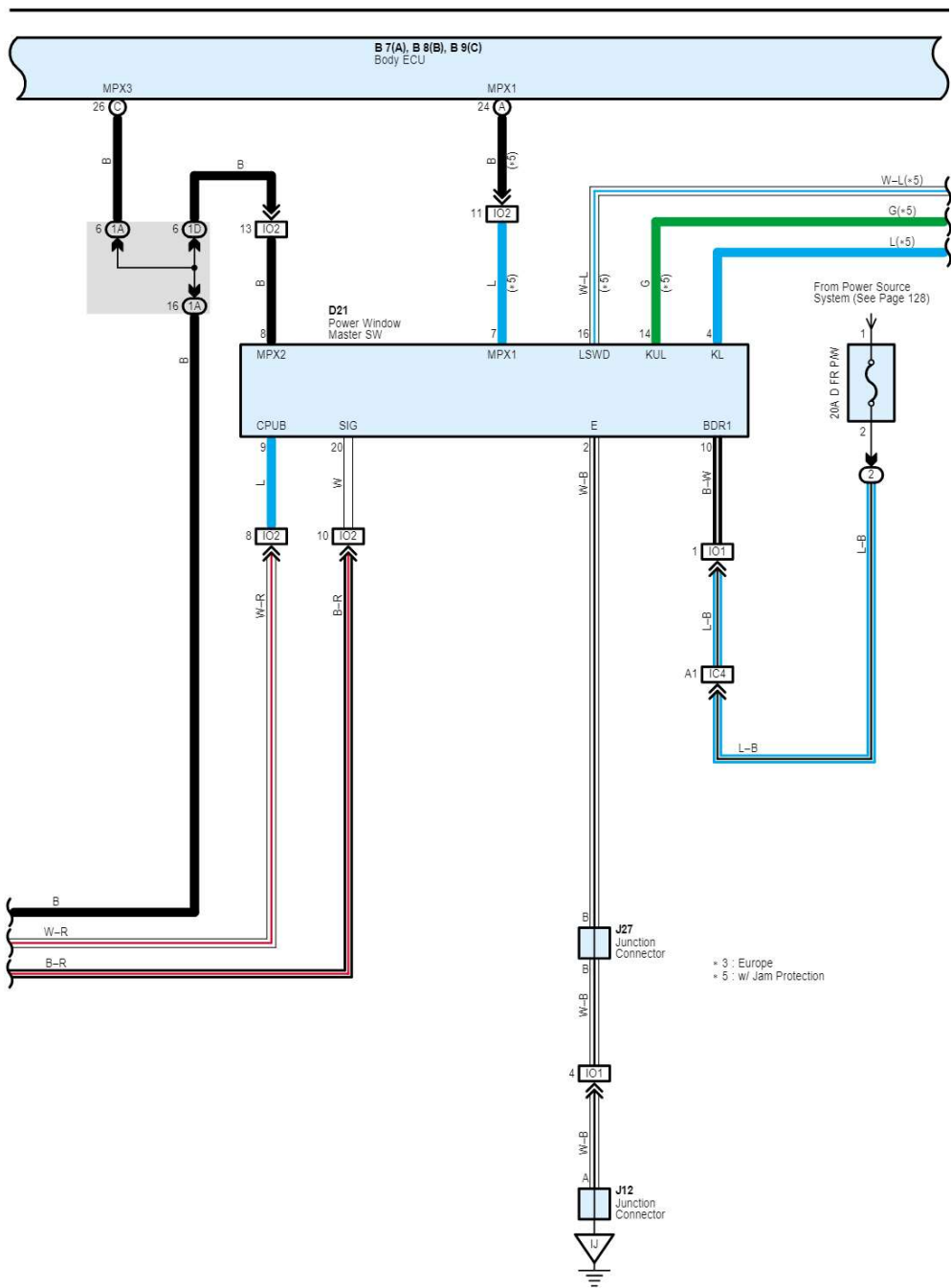


E 9(A), E10(B)  
Engine and  
ECT ECU (A/T)  
Engine ECU  
(M/T)

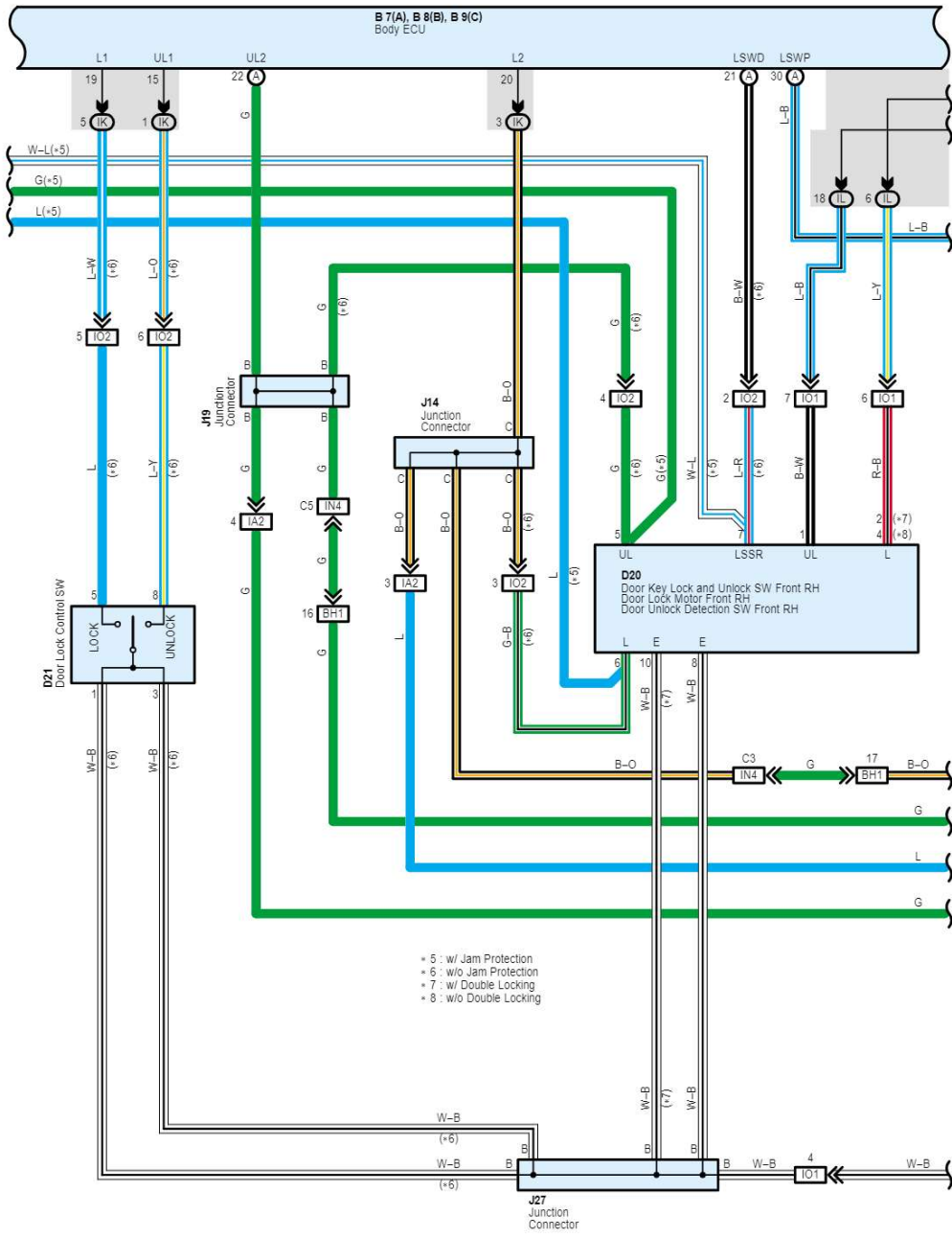
- 1 : 3RZ-FE Unleaded Gasoline
- 2 : 3RZ-FE Leaded Gasoline
- 3 : Europe
- 4 : Except Europe

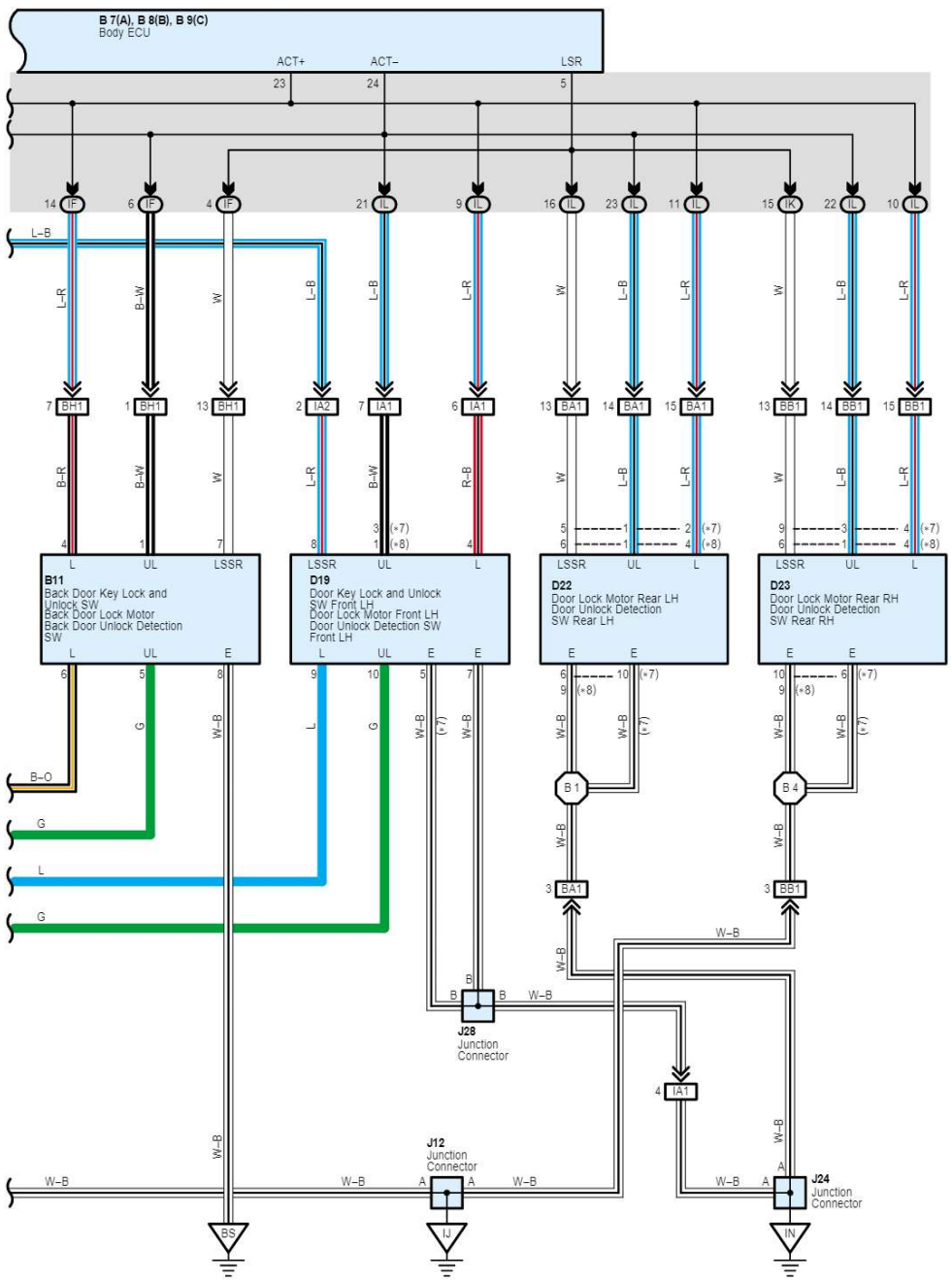
# Door Lock Control and Theft Deterrent (RHD)





# Door Lock Control and Theft Deterrent (RHD)





## Door Lock Control and Theft Deterrent (RHD)

### System Outline

The door lock control is controlled through the various signals input into the body ECU through communication control of the body ECU etc.

#### 1. Manual Unlock Operation

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

#### 2. Manual Lock Operation

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

#### 3. Door Key Unlock Operation

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

#### 4. Ignition Key Reminder Operation

When the door lock operation is made using the door knob with the ignition key remained inserted in the key cylinder and the door open, unlock operation is automatically made. Additionally, if lock operation is made with the door lock control SW or door key lock and unlock SW, unlock operation is automatically made after the lock operation has been completed.

### Service Hints

#### Body ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page	
B7	A	68 (RHD)	E5		58 (*10)	J15		70 (RHD)	
B8	B	68 (RHD)			60 (*11)	J17		70 (RHD)	
B9	C	68 (RHD)			62 (*12)	J19		70 (RHD)	
B10		72 (*15)			64 (*13)	J24		70 (RHD)	
		74 (*16)			66 (*14)		J27		72 (*15)
B11		72 (*15)		E9	A	69 (RHD)			74 (*16)
		74 (*16)	E10	B	69 (RHD)		J28	72 (*15)	
C9	A	69 (RHD)	H8		59 (*10)			74 (*16)	
C10	B	69 (RHD)			61 (*11)		J33	72 (*15)	
C11	C	69 (RHD)			63 (*12)			74 (*16)	
D15		72 (*15)			65 (*13)		K2		70 (RHD)
		74 (*16)		67 (*14)			O4	73 (*15)	
D16		72 (*15)	H9		59 (*10)			75 (*16)	
		74 (*16)			61 (*11)			P8	73 (*15)
D17		72 (*15)			63 (*12)			75 (*16)	
D18		72 (*15)			65 (*13)			59 (*10)	
D19		72 (*15)		67 (*14)				61 (*11)	
		74 (*16)	I13		70 (RHD)			T1	63 (*12)
D20		72 (*15)	I15		72 (*15)			65 (*13)	
		74 (*16)			74 (*16)			67 (*14)	
D21		72 (*15)	J7	A	70 (RHD)		T8	71 (RHD)	
		74 (*16)	J8	B	70 (RHD)		T10	71 (RHD)	
D22		72 (*15)	J12		70 (RHD)			A	75 (*16)
D23		72 (*15)	J14		70 (RHD)		T11	B	73 (*15)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	28 (RHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IC		
ID		
IE		
IF		
IG	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B		
1C		
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2E		
3A	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C		
3E		

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC3	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IE1	114 (RHD)	Roof Wire and Instrument Panel Wire (Left Side of the Driver Side J/B)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IL3	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Door Lock Control and Theft Deterrent (RHD)

### : Ground Points

Code	See Page	Ground Points Location
EB	102 (*10)	Front Left Fender
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
ED	104 (*11)	Ignition Coil Bracket
EE	104 (*11)	Intake Manifold
EF	106 (*12)	Rear Part of Cylinder Block
EH	108 (*13)	
EI	110 (*14)	
EV	102 (*10)	Rear Side of Left Bank Cylinder Block
IJ	112 (RHD)	Right Kick Panel
IL	112 (RHD)	Instrument Panel Brace RH
IN	112 (RHD)	Left Kick Panel
BS	120 (*15)	Back Door Panel Center
	124 (*16)	
BT	120 (*15)	Right Quarter Panel Inner
	124 (*16)	

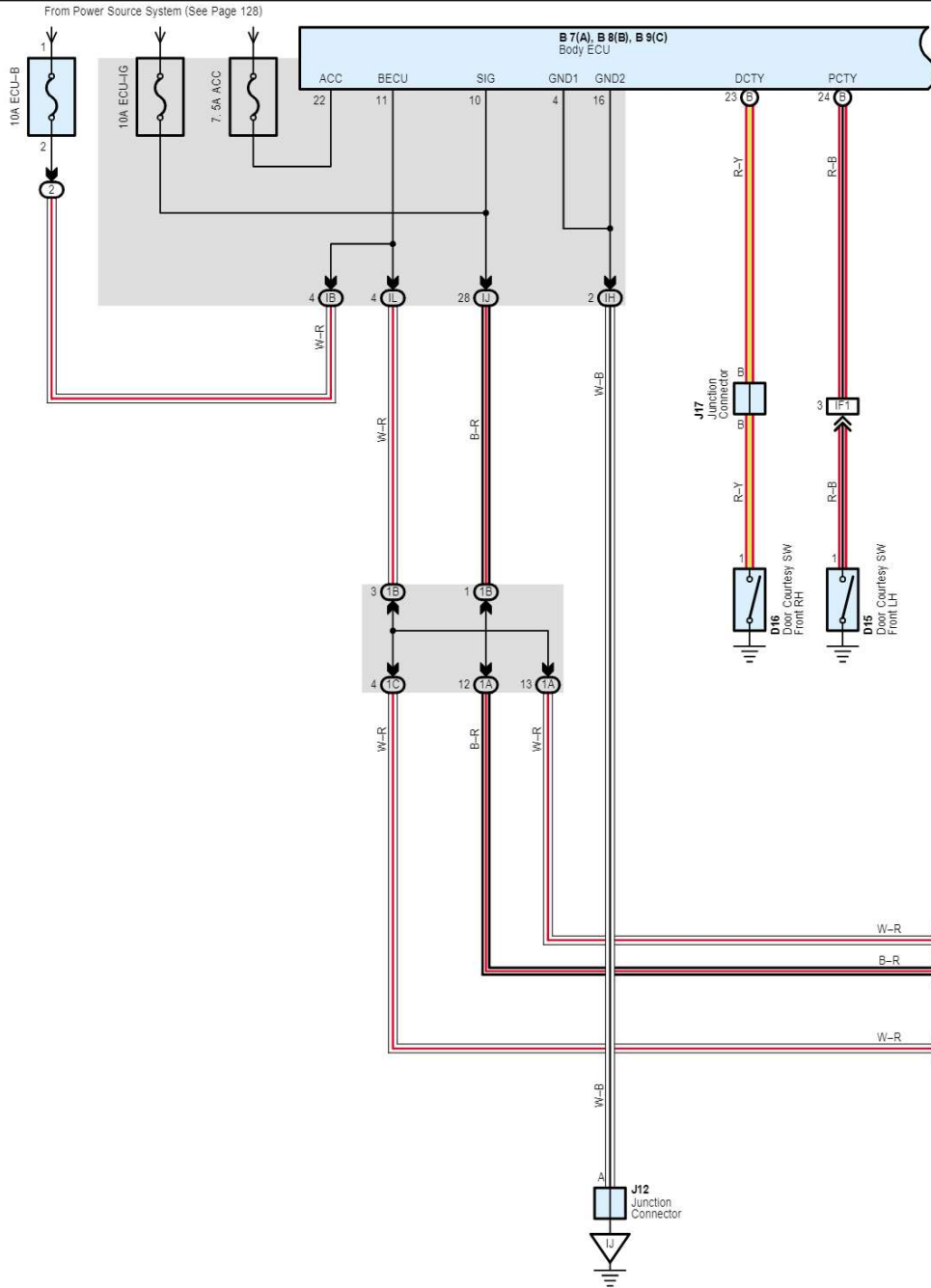
### : Splice Points

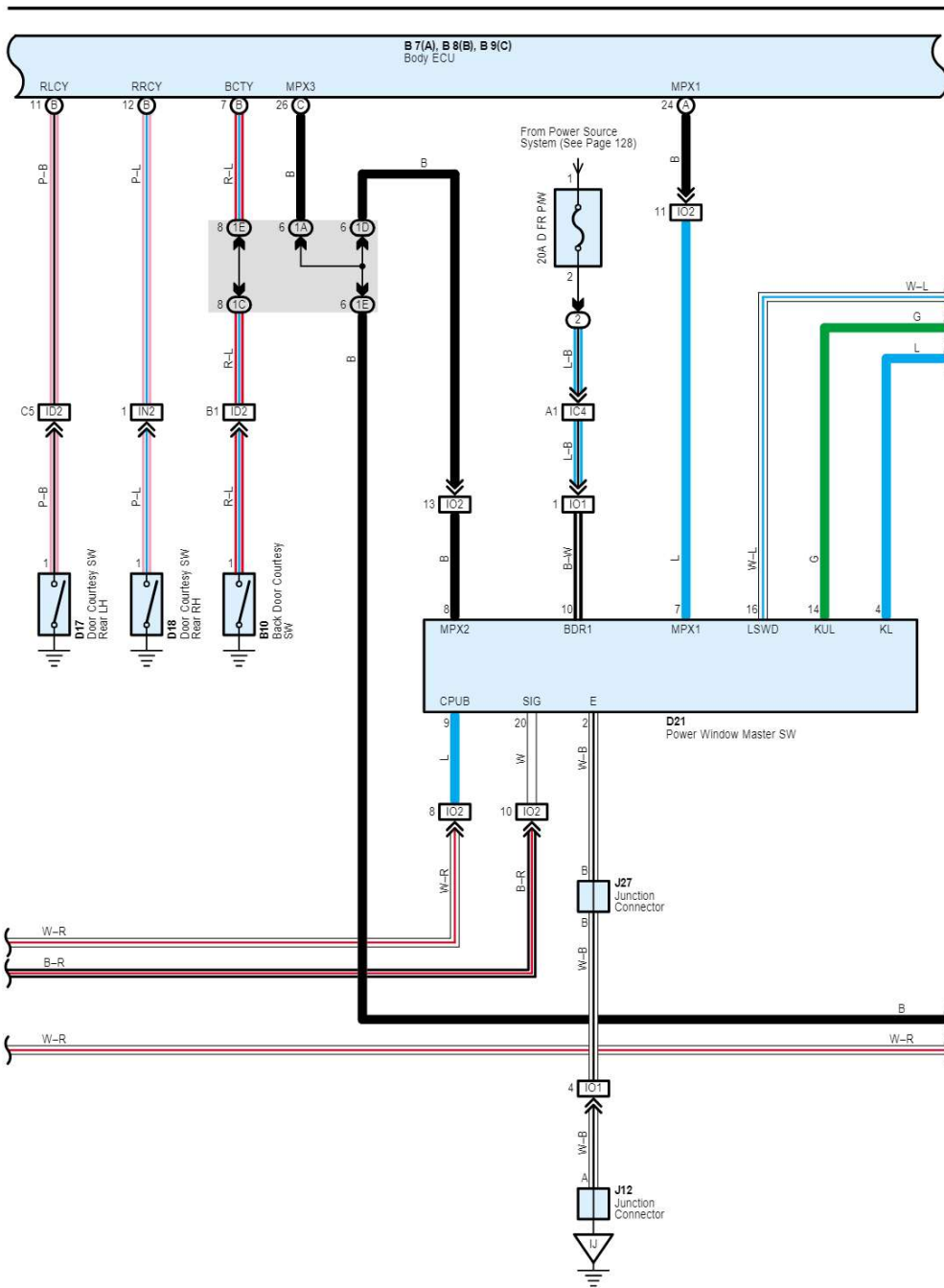
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	122 (*15)	Rear Door No.1 Wire LH	B4	122 (*15)	Rear Door No.1 Wire RH

\* 1 : LHD 1GR-FE   \* 2 : LHD 3RZ-FE   \* 3 : LHD 1KD-FTV   \* 4 : LHD 1KZ-TE   \* 5 : LHD 5L-E   \* 6 : LHD 5-Door   \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat   \* 9 : LHD Except 8Way Power Seat   \* 10 : RHD 1GR-FE   \* 11 : RHD 3RZ-FE   \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE   \* 14 : RHD 5L-E   \* 15 : RHD 5-Door   \* 16 : RHD 3-Door   \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

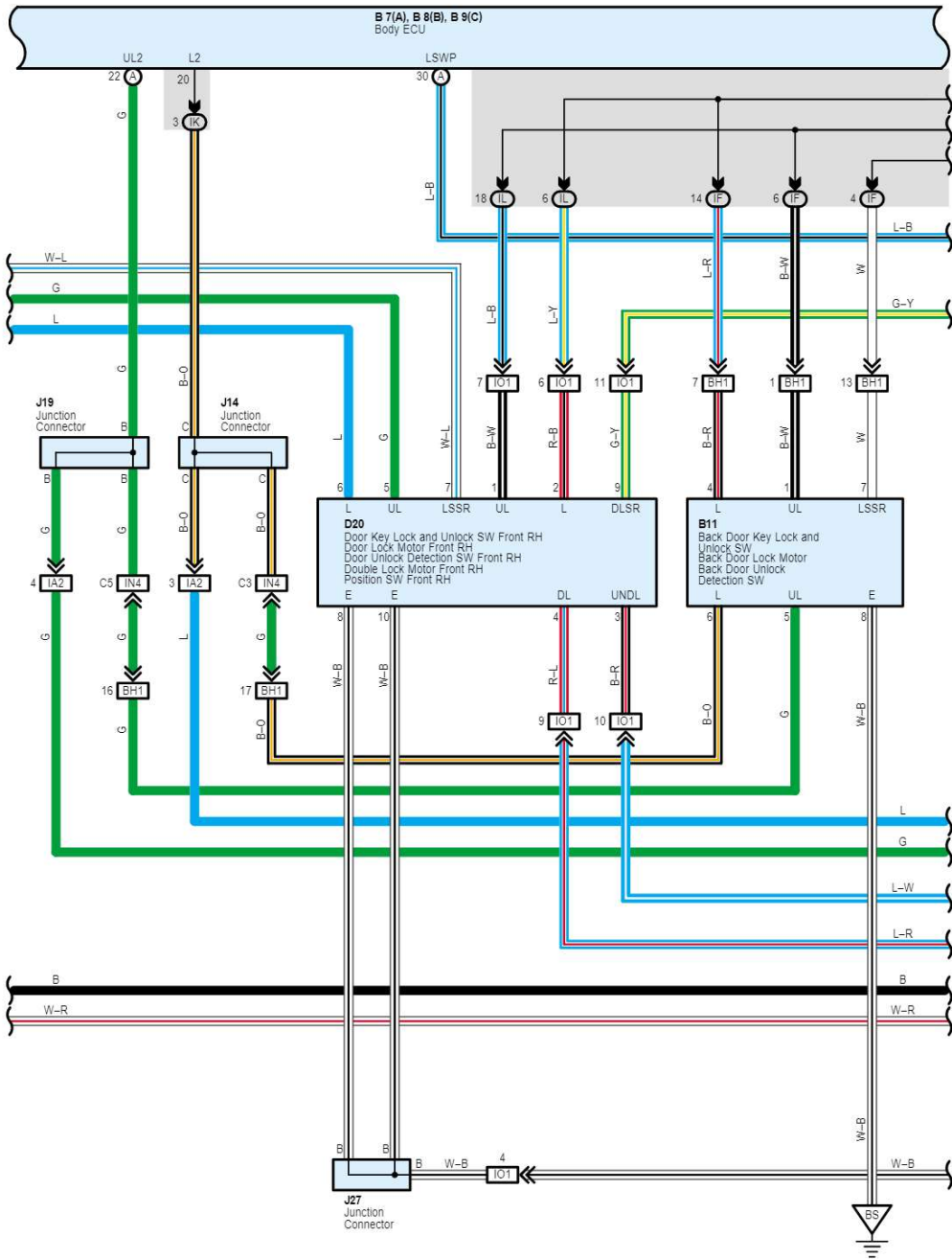


# Double Locking



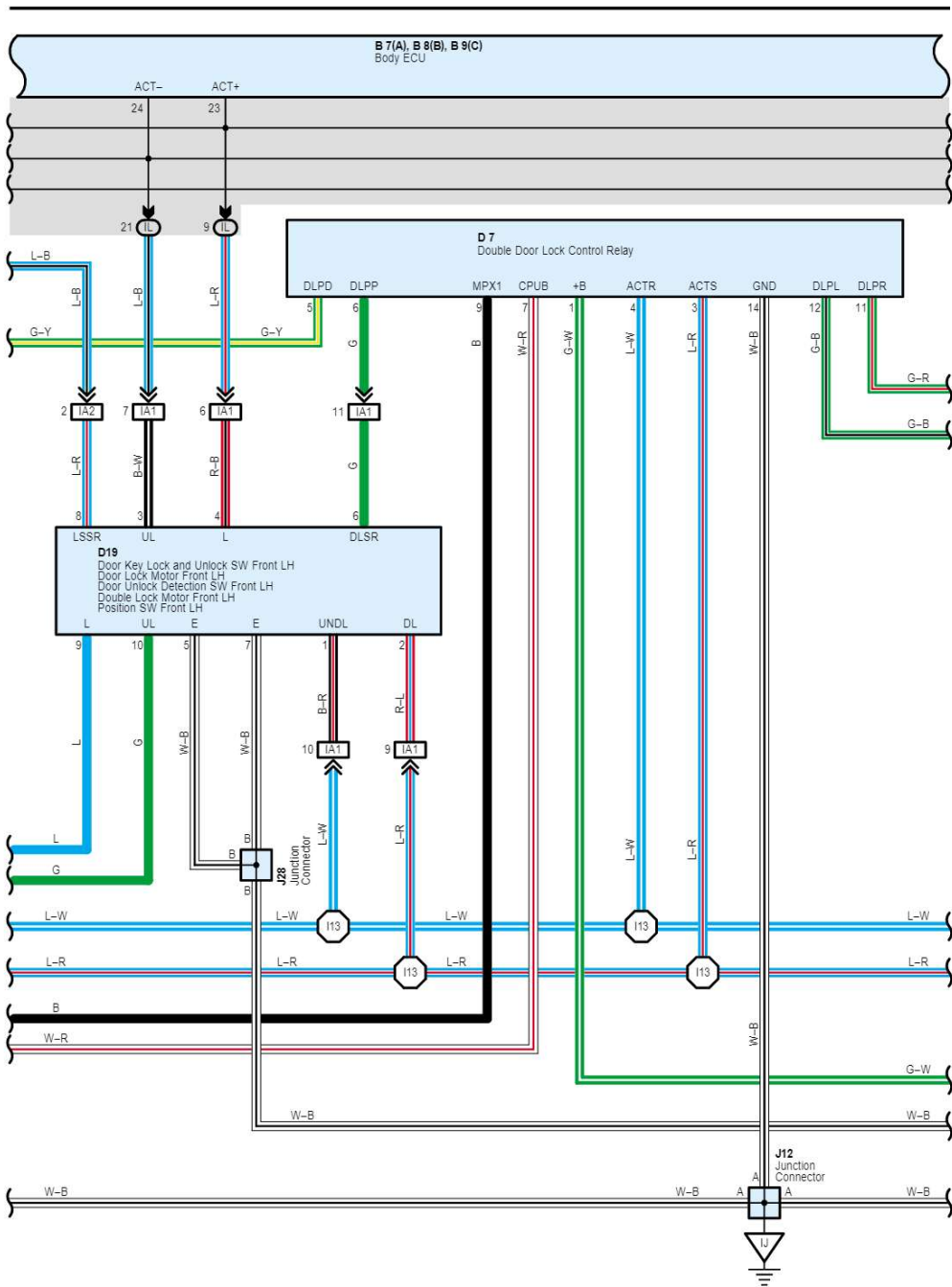


# Double Locking

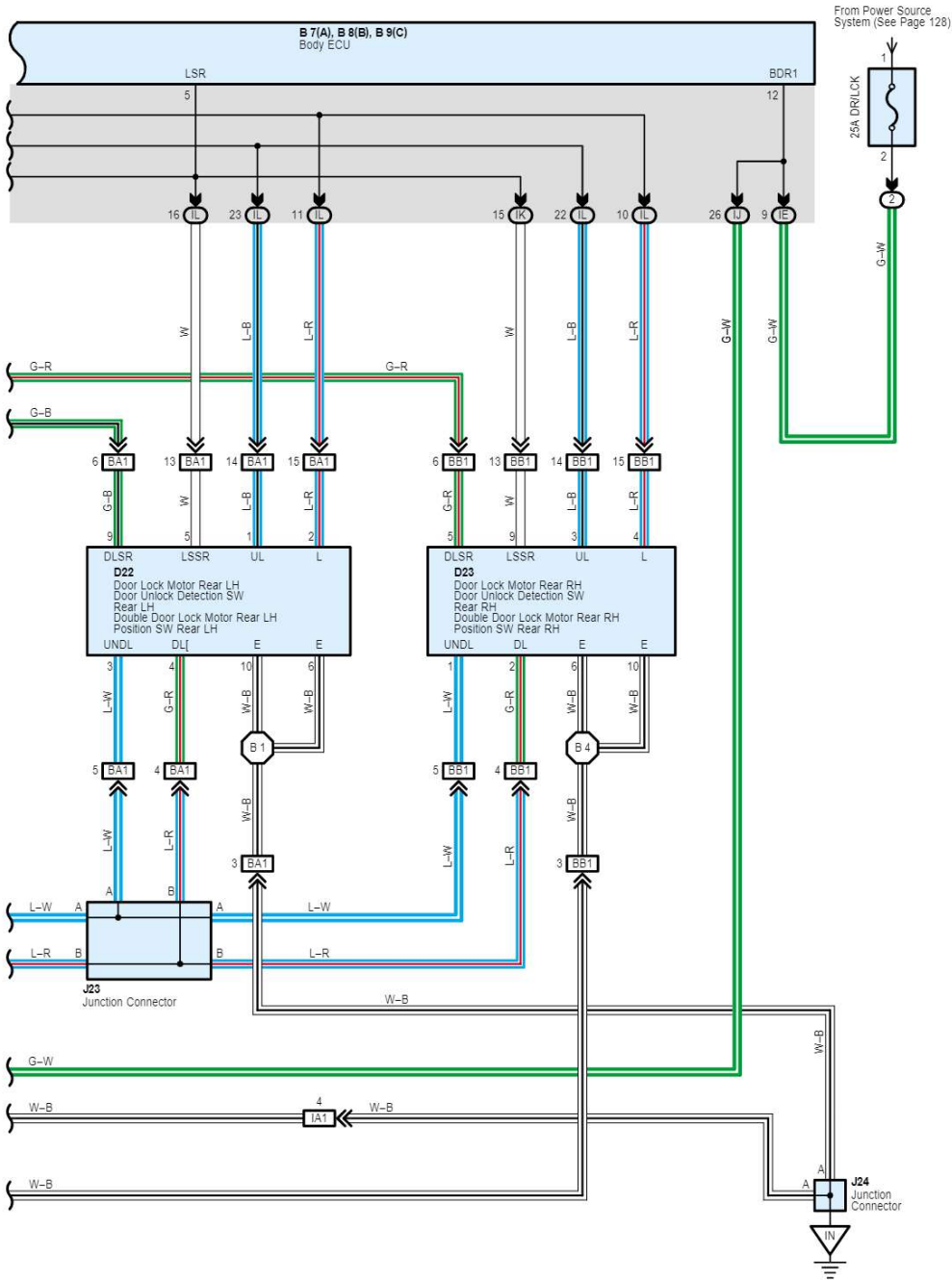


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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



# Double Locking





**Service Hints**

**Body ECU**

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

**D7 Double Door Lock Control Relay**

1, 7-Ground : Always approx. 12 volts  
 14-Ground : Always continuity

**○ : Parts Location**

Code		See Page	Code	See Page	Code	See Page
B7	A	68 (RHD)	D16	74 (*16)	J12	70 (RHD)
B8	B	68 (RHD)	D17	72 (*15)	J14	70 (RHD)
B9	C	68 (RHD)	D18	72 (*15)	J17	70 (RHD)
B10		72 (*15)	D19	72 (*15)	J19	70 (RHD)
		74 (*16)		74 (*16)	J23	70 (RHD)
B11		72 (*15)	D20	72 (*15)	J24	70 (RHD)
		74 (*16)		74 (*16)	J27	72 (*15)
D7		69 (RHD)	D21	72 (*15)	J28	74 (*16)
D15		72 (*15)		74 (*16)		72 (*15)
		74 (*16)	D22	72 (*15)	74 (*16)	
D16		72 (*15)	D23	72 (*15)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IF	28 (RHD)	Floor Wire and Driver Side J/B (Lower Finish Panel)
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1A		
1B	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C		
1D		
1E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Double Locking

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IA2		
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IN2	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IO2		
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
IJ	112 (RHD)	Right Kick Panel
IN	112 (RHD)	Left Kick Panel
BS	120 (*15)	Back Door Panel Center
	124 (*16)	

### ○ : Splice Points

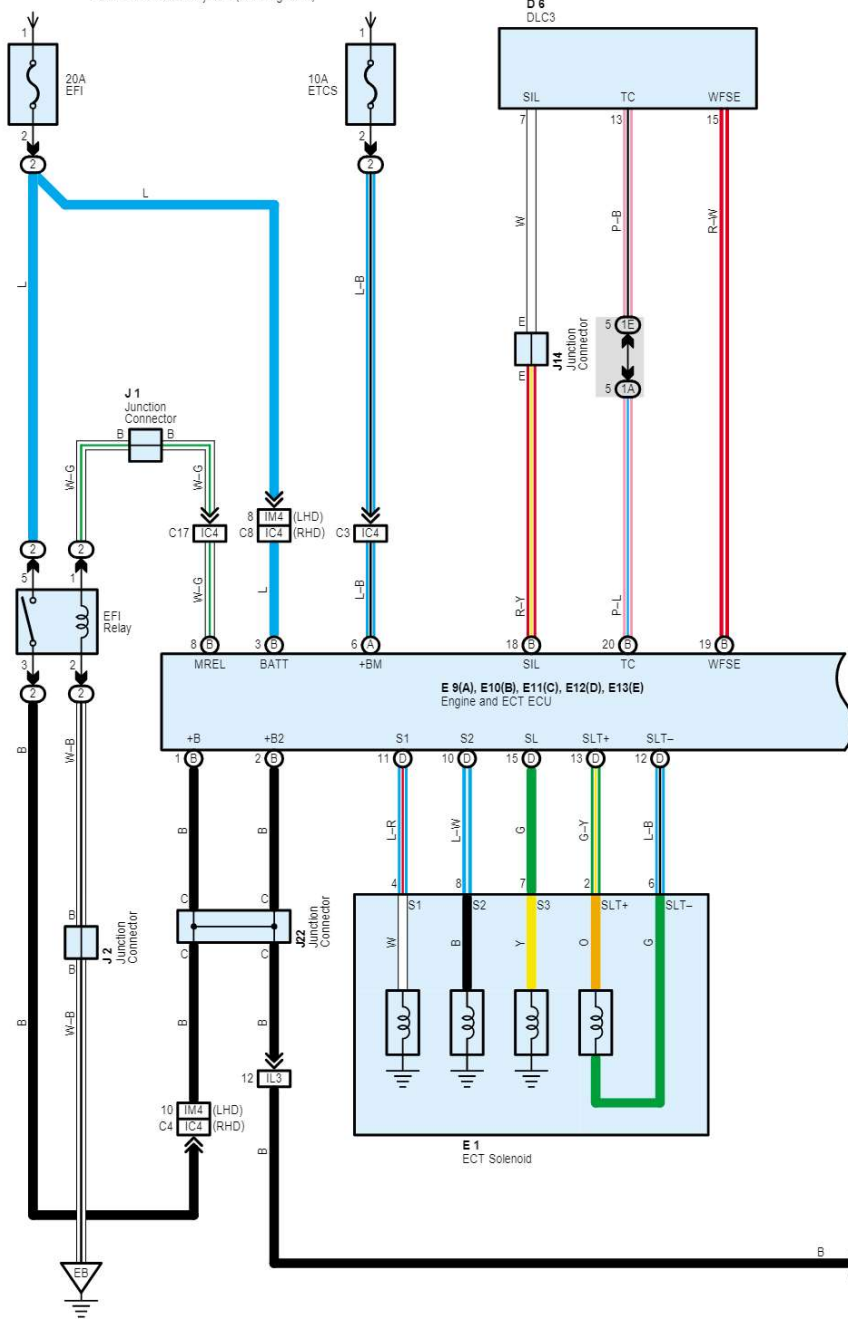
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I13	114 (RHD)	Instrument Panel Wire	B4	122 (*15)	Rear Door No.1 Wire RH
B1	122 (*15)	Rear Door No.1 Wire LH			

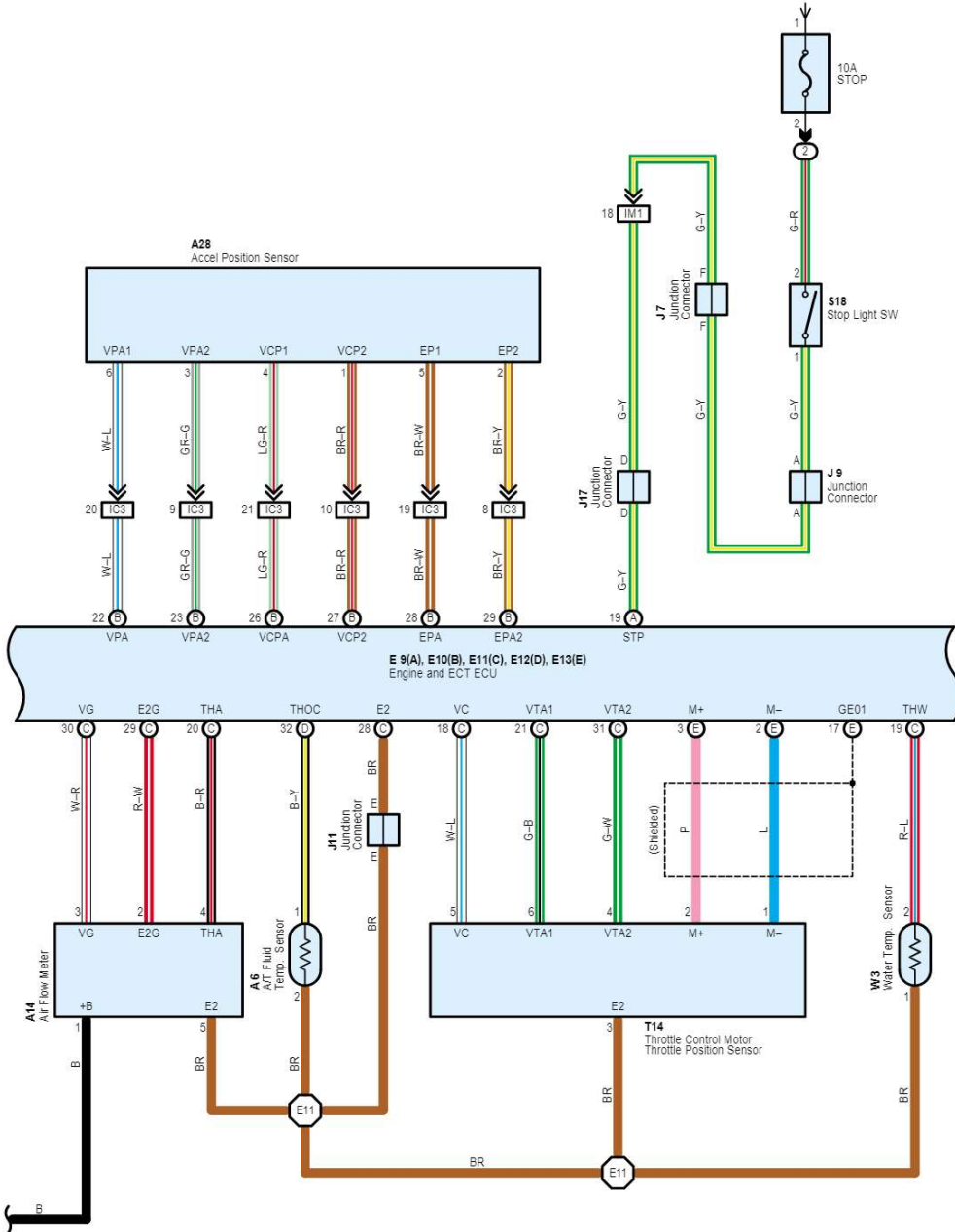
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



# ECT and A/T Indicator (1GR-FE)

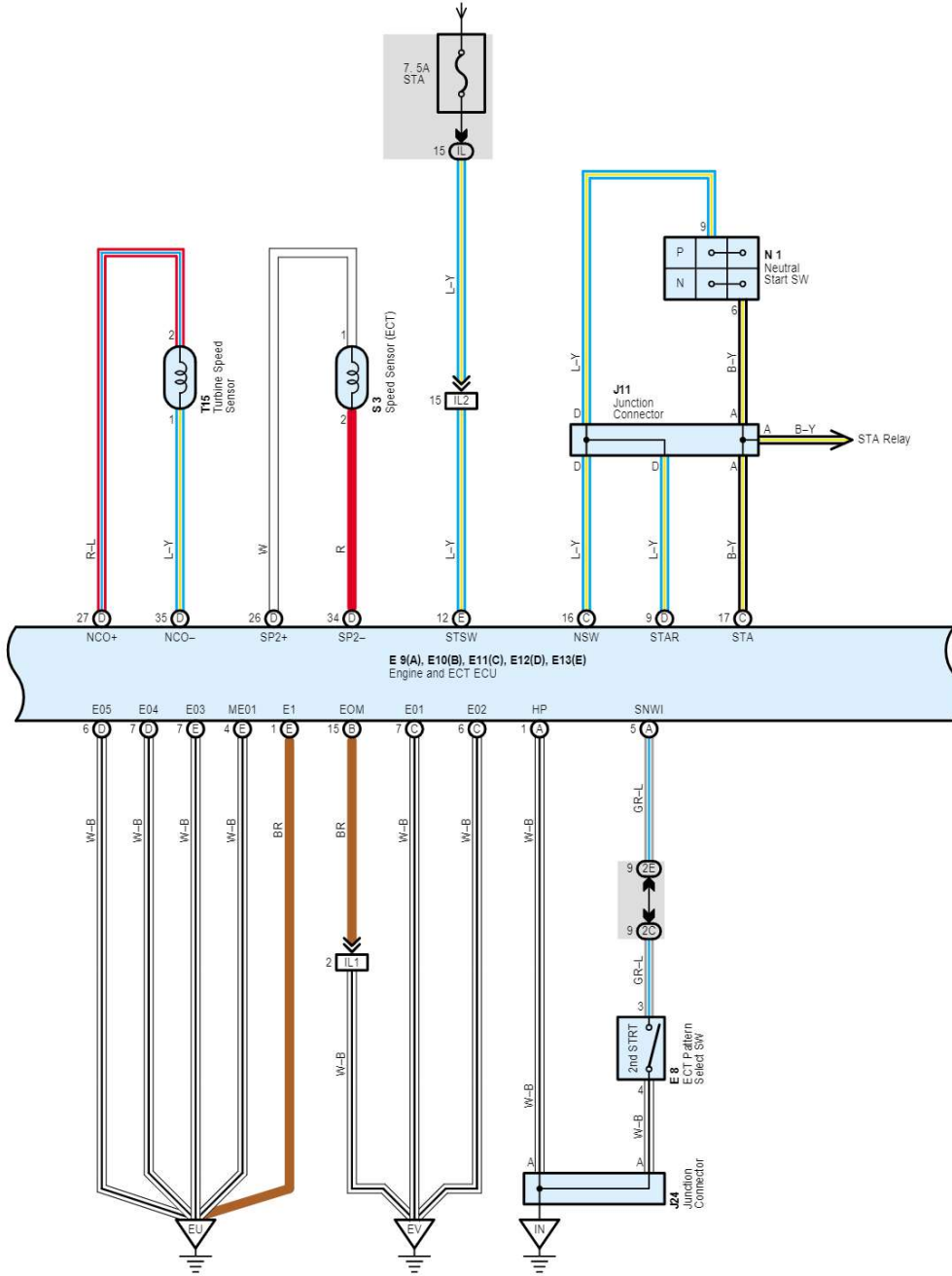
From Power Source System (See Page 128)

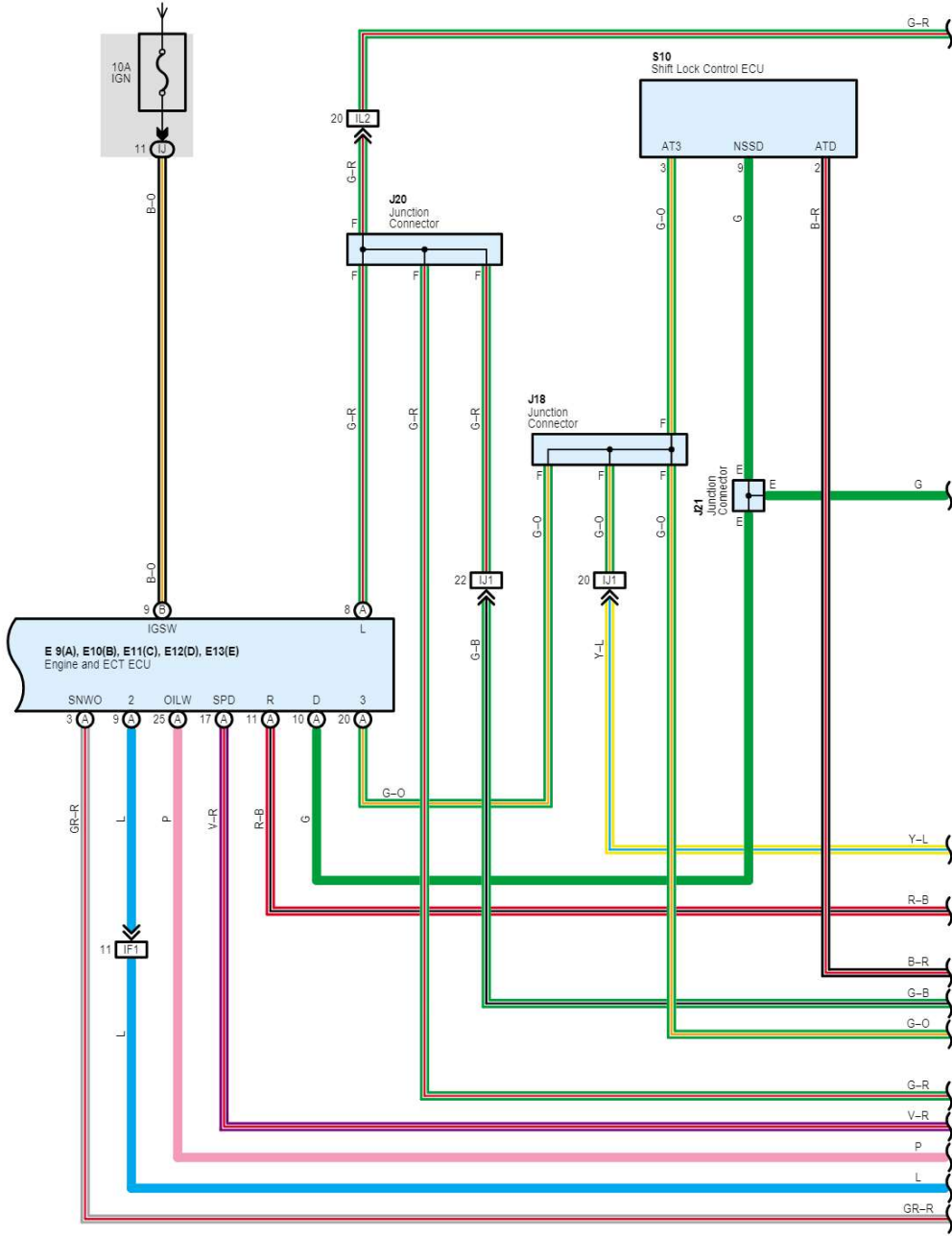




# ECT and A/T Indicator (1GR-FE)

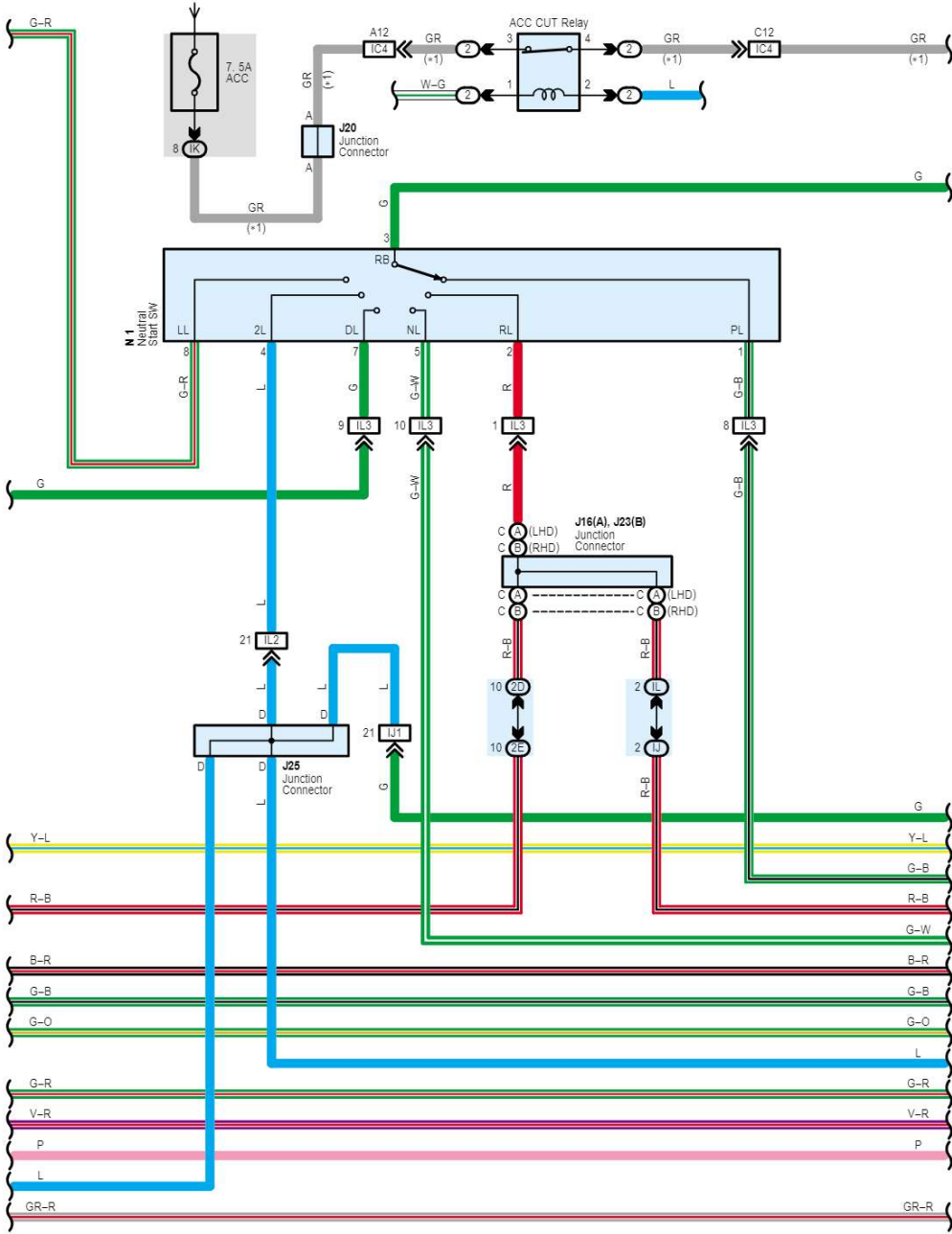
From Power Source System (See Page 128)



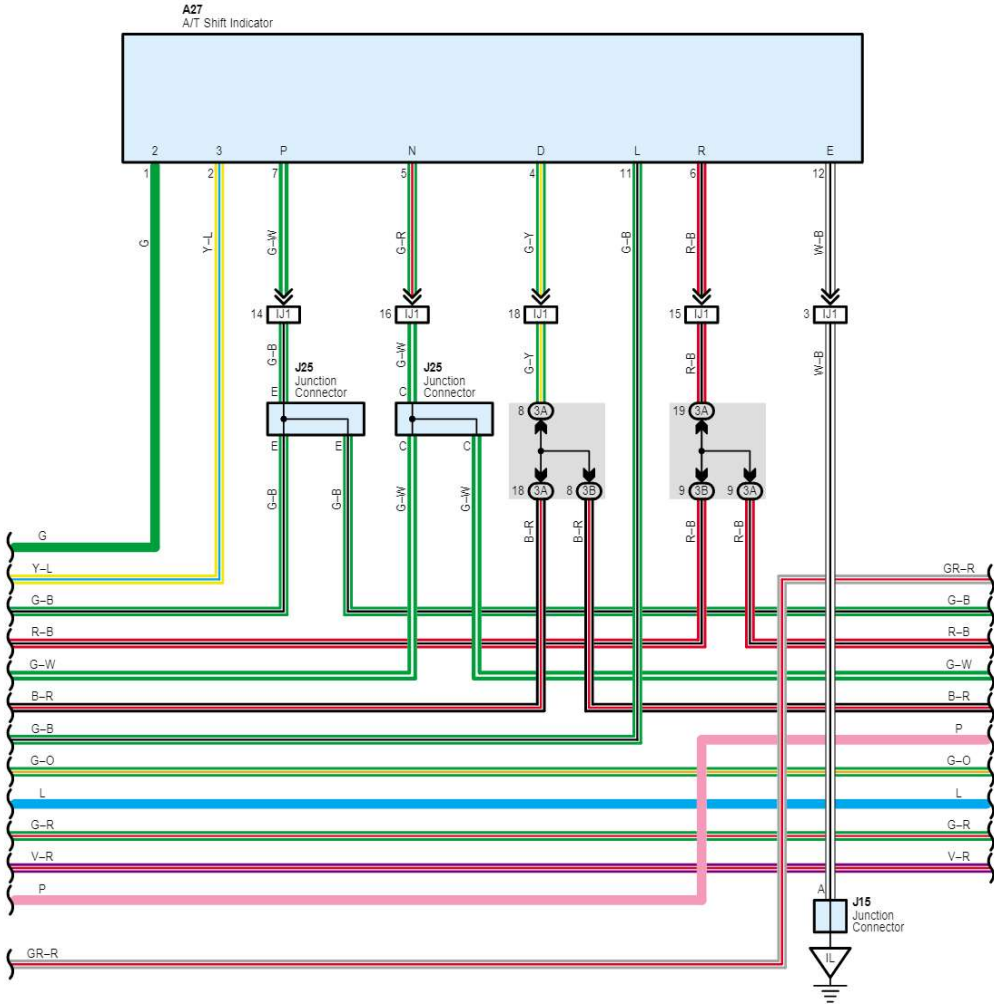
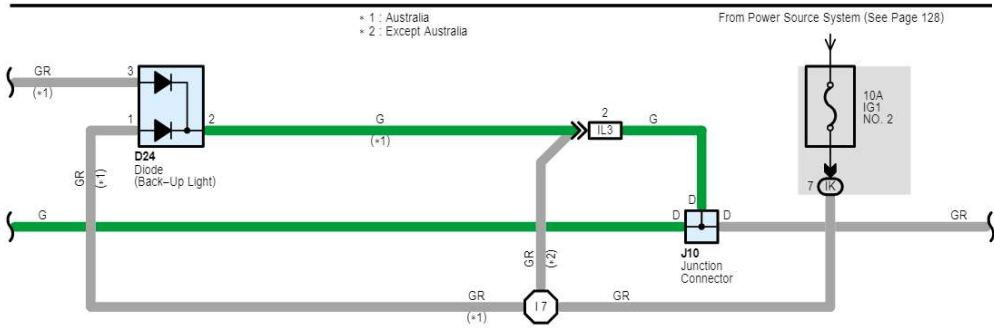


# ECT and A/T Indicator (1GR-FE)

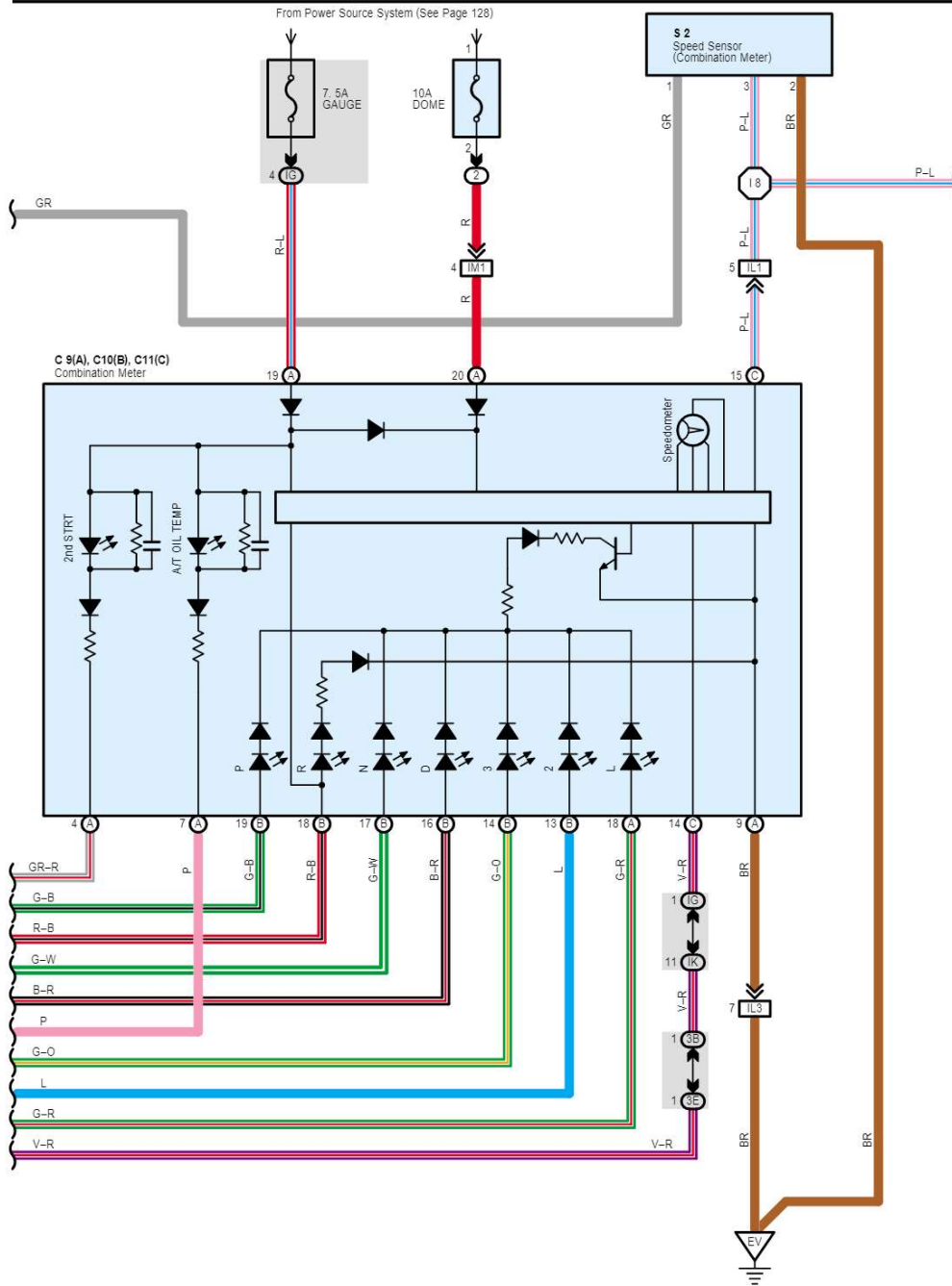
From Power Source System (See Page 128)

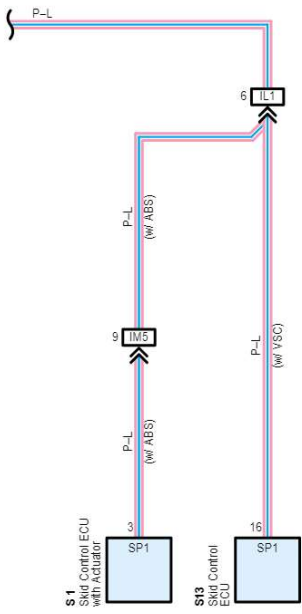






# ECT and A/T Indicator (1GR-FE)





### System Outline

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

#### 1. Gear Shift Operation

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

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

#### 2. Lock-Up Operation

When the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SL of the engine and ECT ECU to TERMINAL 7 of the ECT solenoid to GROUND, causing 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.

### Service Hints

#### E9 (A), E10 (B), E11 (C), E12 (D), E13 (E) Engine and ECT ECU

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

(D) 6, (E) 3-Ground : Always approx. 12 volts

(A) 16-Ground : Approx. 12 volts with the ignition SW at ST position

(D) 19-Ground : Approx. 12 volts with the brake pedal depressed

(A) 6, (A) 7, (B) 6, (B) 7, (C) 1, (C) 4, (C) 7, (D) 1, (E) 15-Ground : Always continuity

#### N1 Neutral Start SW

3-1 : Closed with the shift lever in P position

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

3-5 : Closed with the shift lever in N position

3-7 : Closed with the shift lever in D position

3-4 : Closed with the shift lever in 2 position

3-8 : Closed with the shift lever in L position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
A6	38 (*1)	E12	D	69 (RHD)	J22	50 (LHD)	
	58 (*10)						E13
A14	38 (*1)	J1		69 (RHD)	J23	B	
	58 (*10)						39 (*1)
A27	48 (LHD)	J2		59 (*10)	J24		
	68 (RHD)						39 (*1)
A28	48 (LHD)	J7		50 (LHD)	J25		
	68 (RHD)						59 (*10)
C9	A	49 (LHD)		70 (RHD)	N1		
							69 (RHD)
C10	B	49 (LHD)		70 (RHD)	S1		
							69 (RHD)
C11	C	49 (LHD)		70 (RHD)	S2		
							69 (RHD)
D6		49 (LHD)		70 (RHD)	S3		
							69 (RHD)
D24		69 (RHD)		70 (RHD)	S10		
E1		38 (*1)		50 (LHD)	S13		51 (LHD)
E8		49 (LHD)	J16	A	50 (LHD)	S18	51 (LHD)
E9	A	49 (LHD)		70 (RHD)	T14		39 (*1)
E10	B	49 (LHD)		70 (RHD)	T15		39 (*1)
E11	C	49 (LHD)		70 (RHD)	W3		39 (*1)
E12	D	49 (LHD)		70 (RHD)			

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## ECT and A/T Indicator (1GR-FE)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2D			
2E			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

▽ : Ground Points

Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	102 (*10)	
EU	78 (*1)	Rear Side of Right Bank Cylinder Block
	102 (*10)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

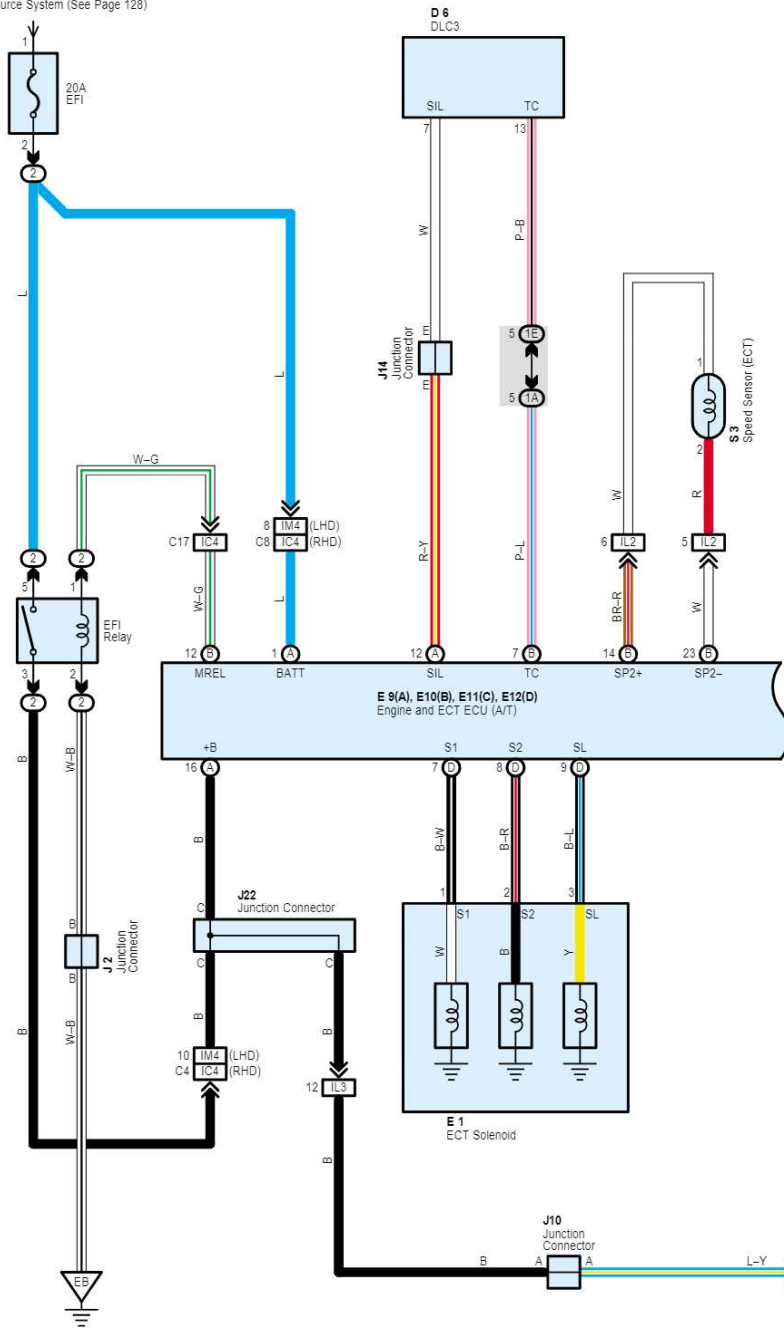
○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E11	78 (*1)	Engine Wire	I7	114 (RHD)	Instrument Panel Wire
	102 (*10)			90 (LHD)	Engine Wire
I7	90 (LHD)	Instrument Panel Wire	I8	114 (RHD)	

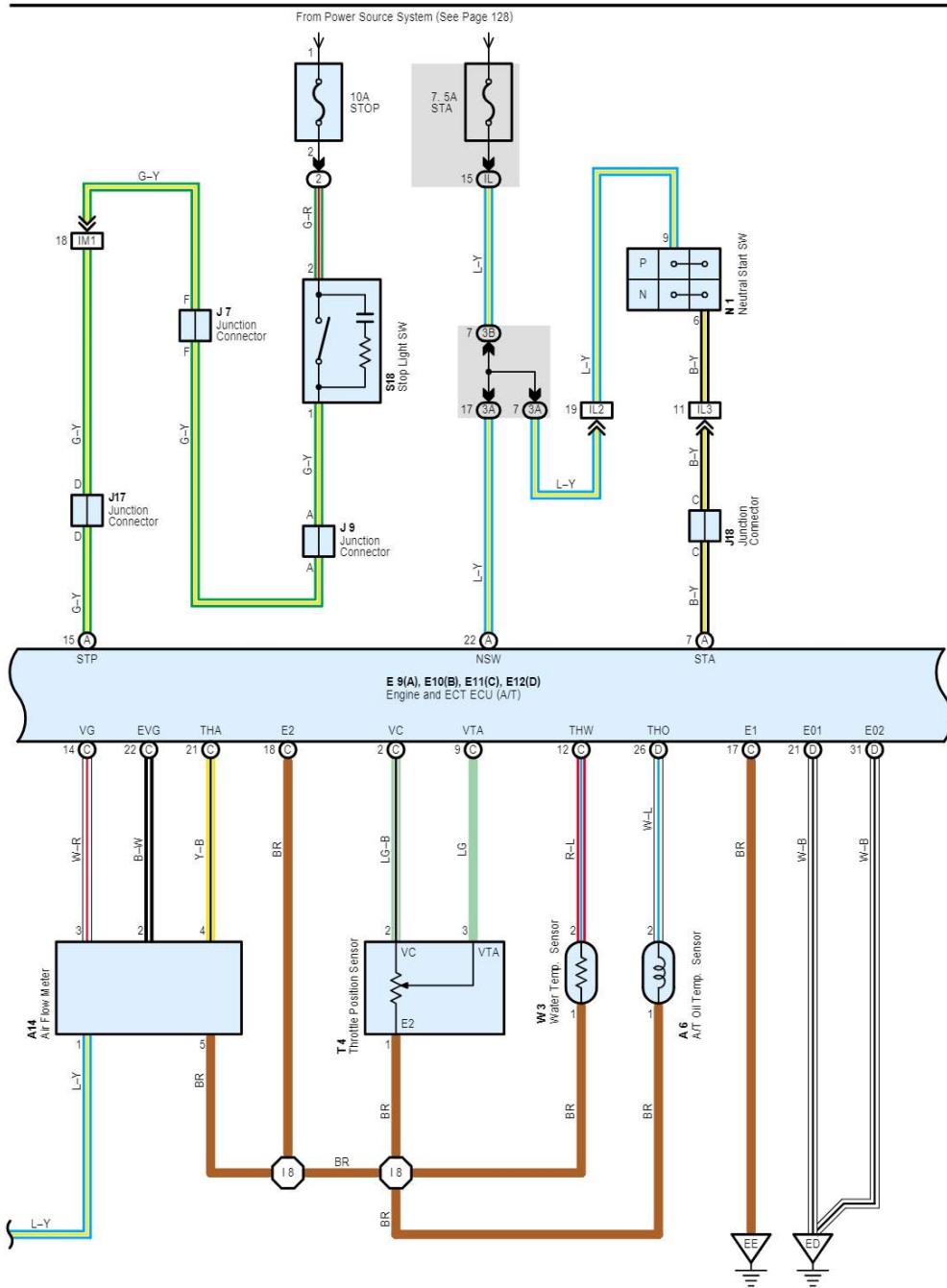
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)

From Power Source System (See Page 128)

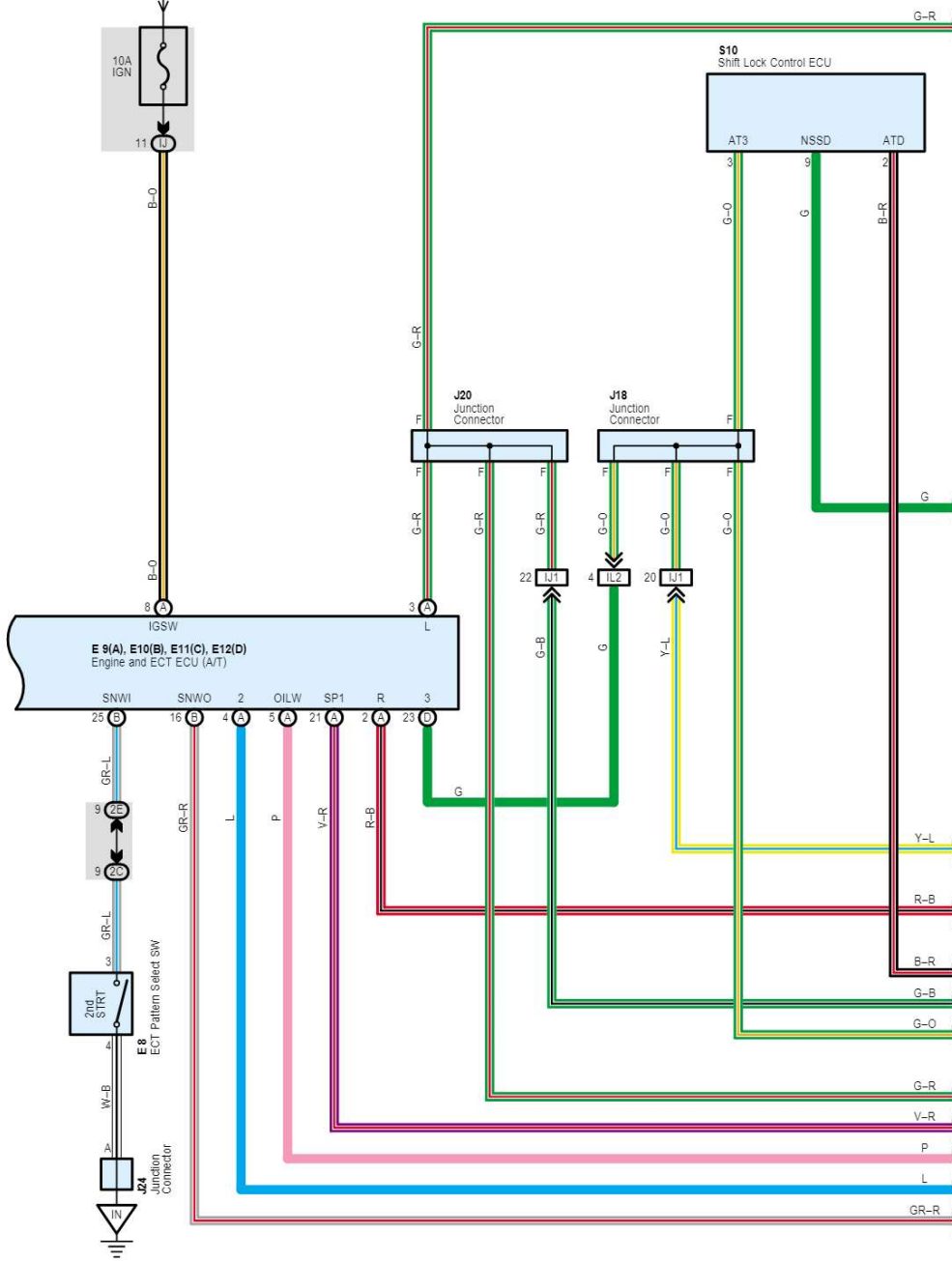






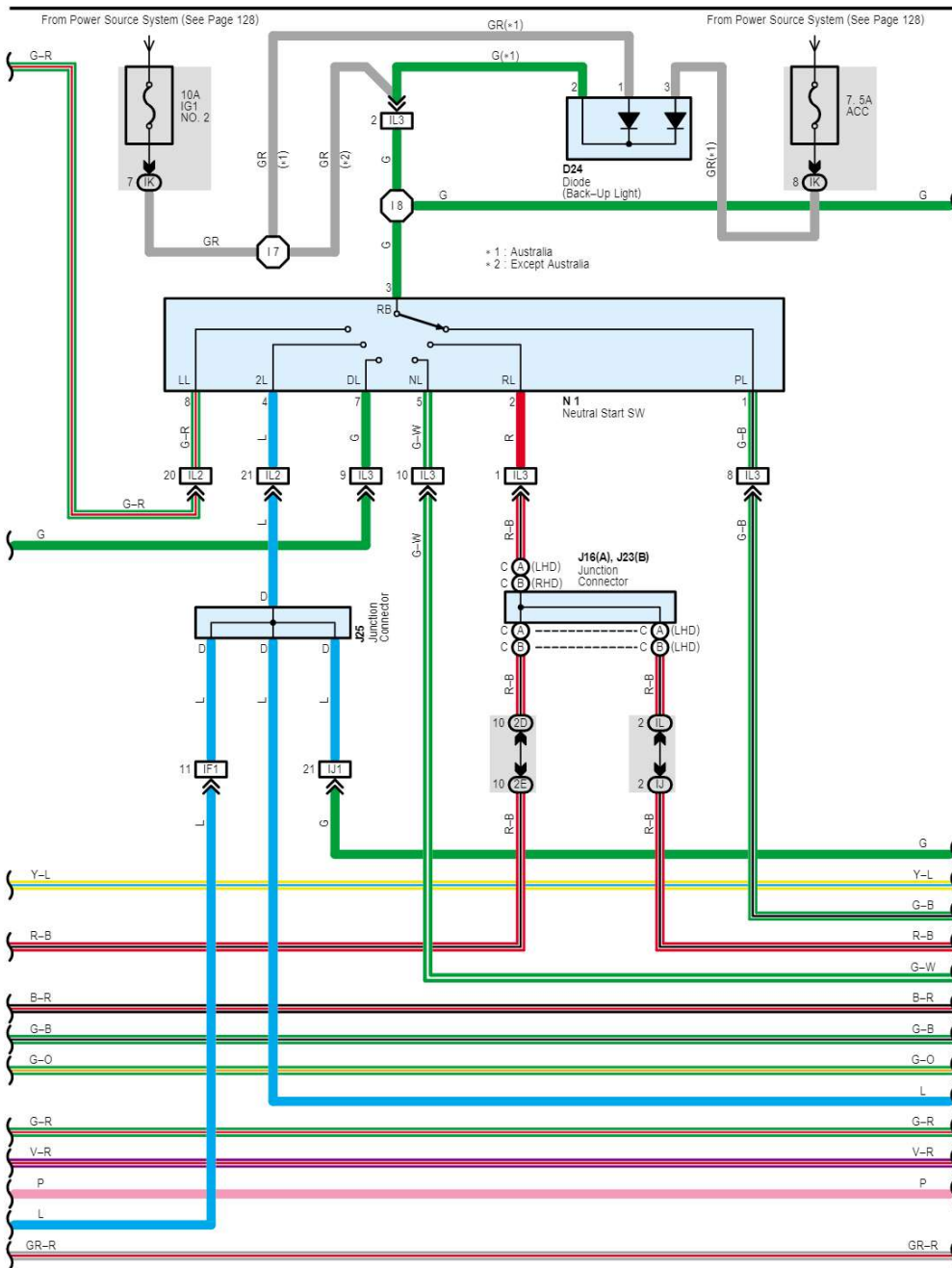
# ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)

From Power Source System (See Page 128)

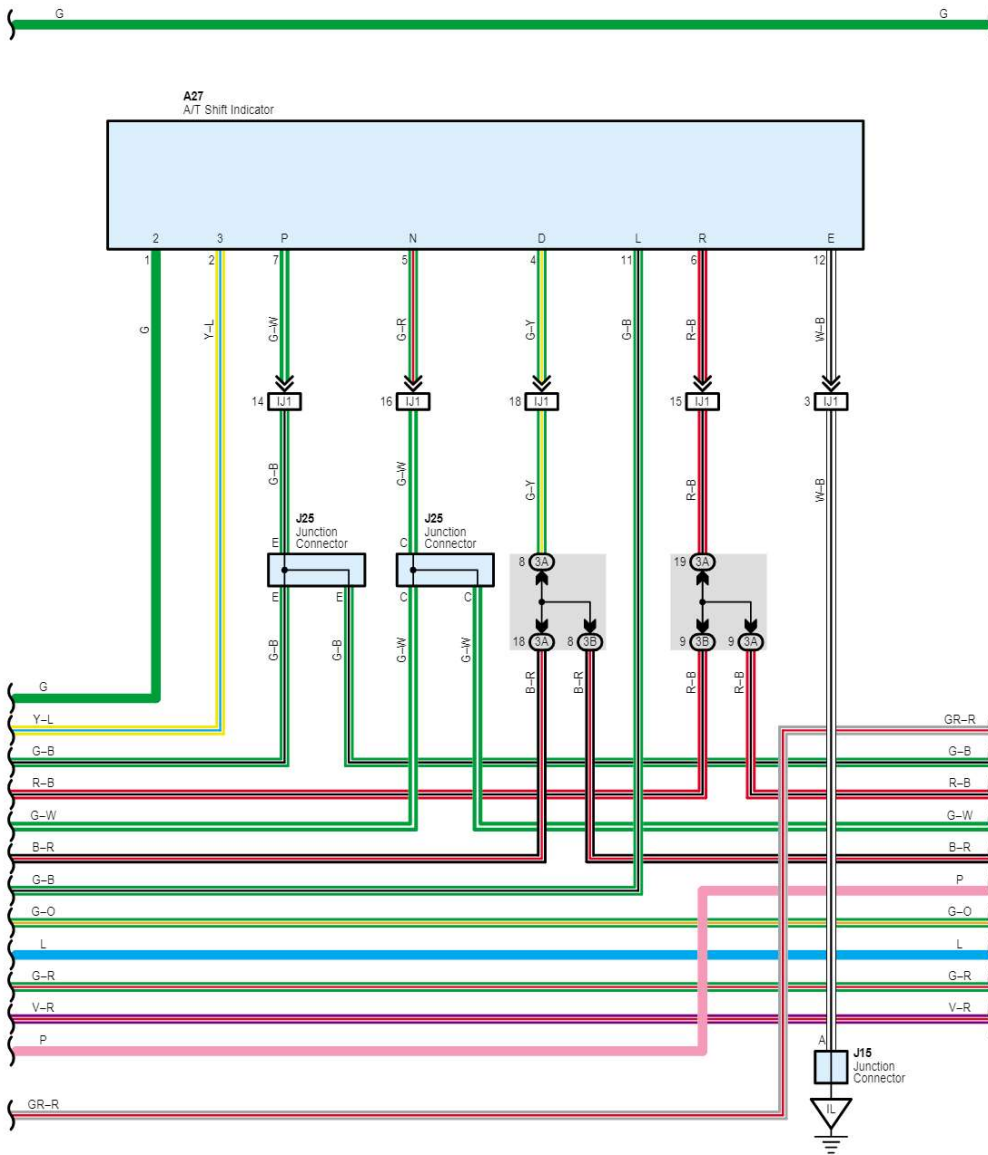


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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

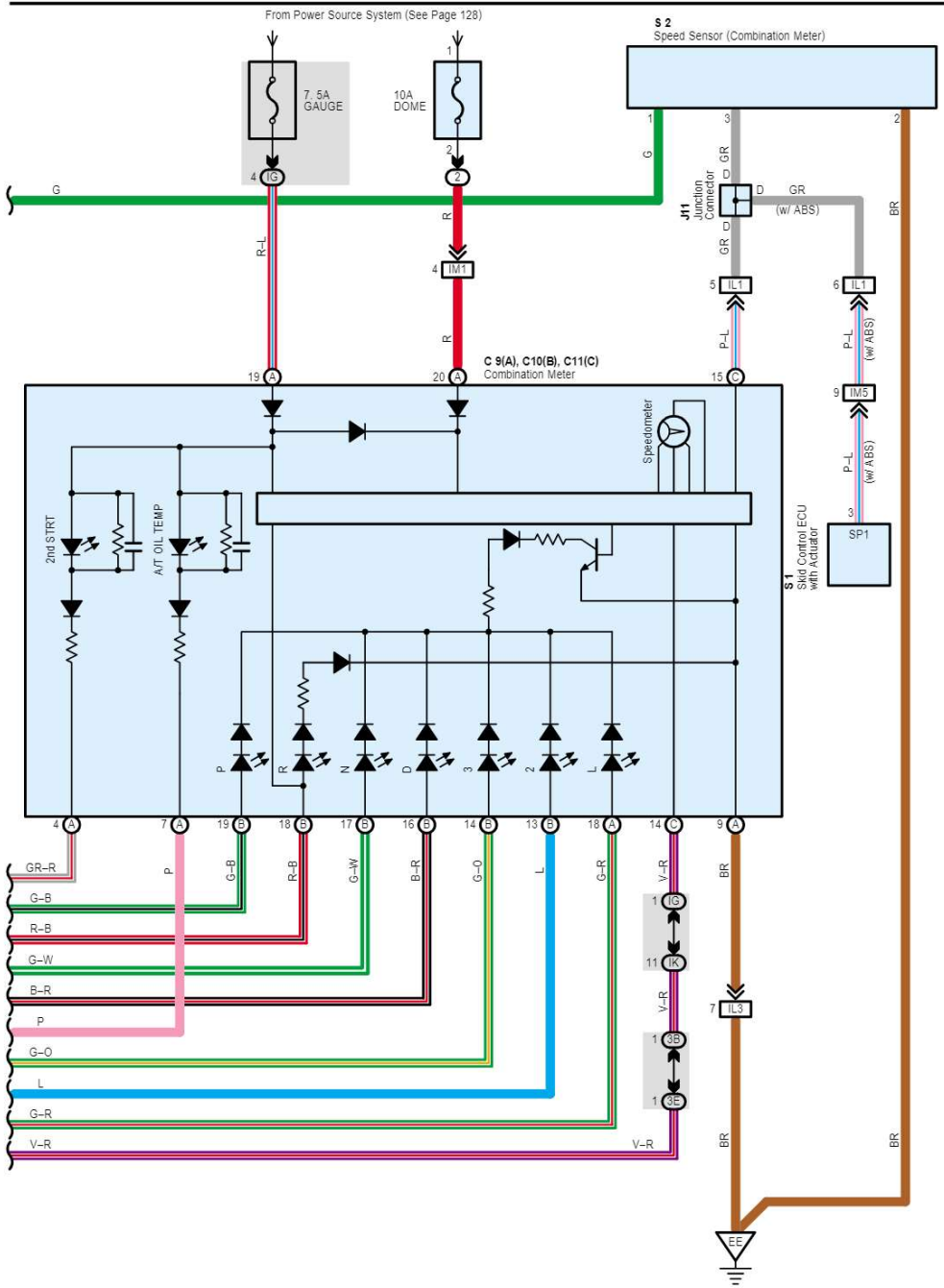


# ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)



474

LAND CRUISER / LAND CRUISER PRADO (EWD527E)



475

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)

### System Outline

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

#### 1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the water temp. sensor and the vehicle speed signal from speed sensor is input to TERMINAL SP2+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINAL VTA1 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 the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SL of the engine and ECT ECU to TERMINAL 3 of the ECT solenoid to GROUND, causing 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.

### Service Hints

#### E9 (A), E11 (C), E12 (D) Engine and ECT ECU

(A) 8-Ground : Approx. 12 volts with the ignition SW at ON position

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

(A) 22-Ground : Approx. 12 volts with the ignition SW at ST position

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

(D) 21, (D) 31, (C) 17-Ground : Always continuity

#### N1 Neutral Start SW

3-1 : Closed with the shift lever in P position

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

3-5 : Closed with the shift lever in N position

3-7 : Closed with the shift lever in D position or 3 position

3-4 : Closed with the shift lever in 2 position

3-8 : Closed with the shift lever in L position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A6	40 (*2)	E11	C	69 (RHD)	J22	50 (LHD)
	60 (*11)	E12	D	49 (LHD)	J23	B
A14	40 (*2)			69 (RHD)		
	60 (*11)	J2	41 (*2)	J24	50 (LHD)	
A27	48 (LHD)		61 (*11)		70 (RHD)	
	68 (RHD)	J7	50 (LHD)	J25	50 (LHD)	
C9	A		49 (LHD)		70 (RHD)	70 (RHD)
	C10	B	69 (RHD)	J9	50 (LHD)	N1
49 (LHD)			70 (RHD)		61 (*11)	
C11	C	69 (RHD)	J10	50 (LHD)	S1	41 (*2)
		49 (LHD)		70 (RHD)		61 (*11)
D6	49 (LHD)	J11	50 (LHD)	S2	41 (*2)	
	69 (RHD)		70 (RHD)		61 (*11)	
D24	69 (RHD)	J14	50 (LHD)	S3	41 (*2)	
	40 (*2)		70 (RHD)		61 (*11)	
E1	60 (*11)	J15	50 (LHD)	S10	51 (LHD)	
	49 (LHD)		70 (RHD)		71 (RHD)	
E8	69 (RHD)	J16	A	50 (LHD)	S18	51 (LHD)
	49 (LHD)	J17	50 (LHD)	71 (RHD)		
E9	A		70 (RHD)	J18	50 (LHD)	T4
	69 (RHD)	70 (RHD)	61 (*11)			
E10	B	49 (LHD)	J20	50 (LHD)	W3	41 (*2)
		69 (RHD)		70 (RHD)		61 (*11)
E11	C	49 (LHD)		70 (RHD)		

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2D			
2E			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	



▽ : Ground Points

Code	See Page	Ground Points Location
EB	80 (*2)	Front Left Fender
	104 (*11)	
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	

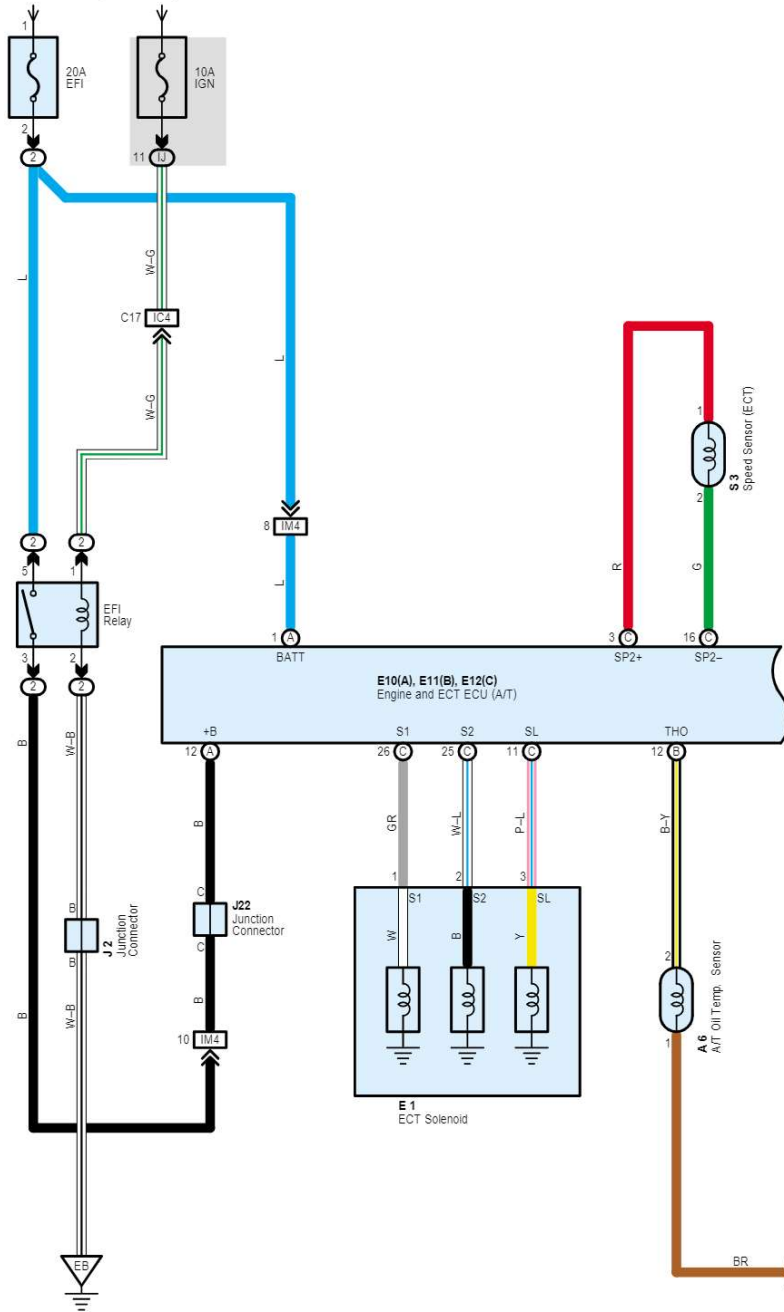
○ : Splice Points

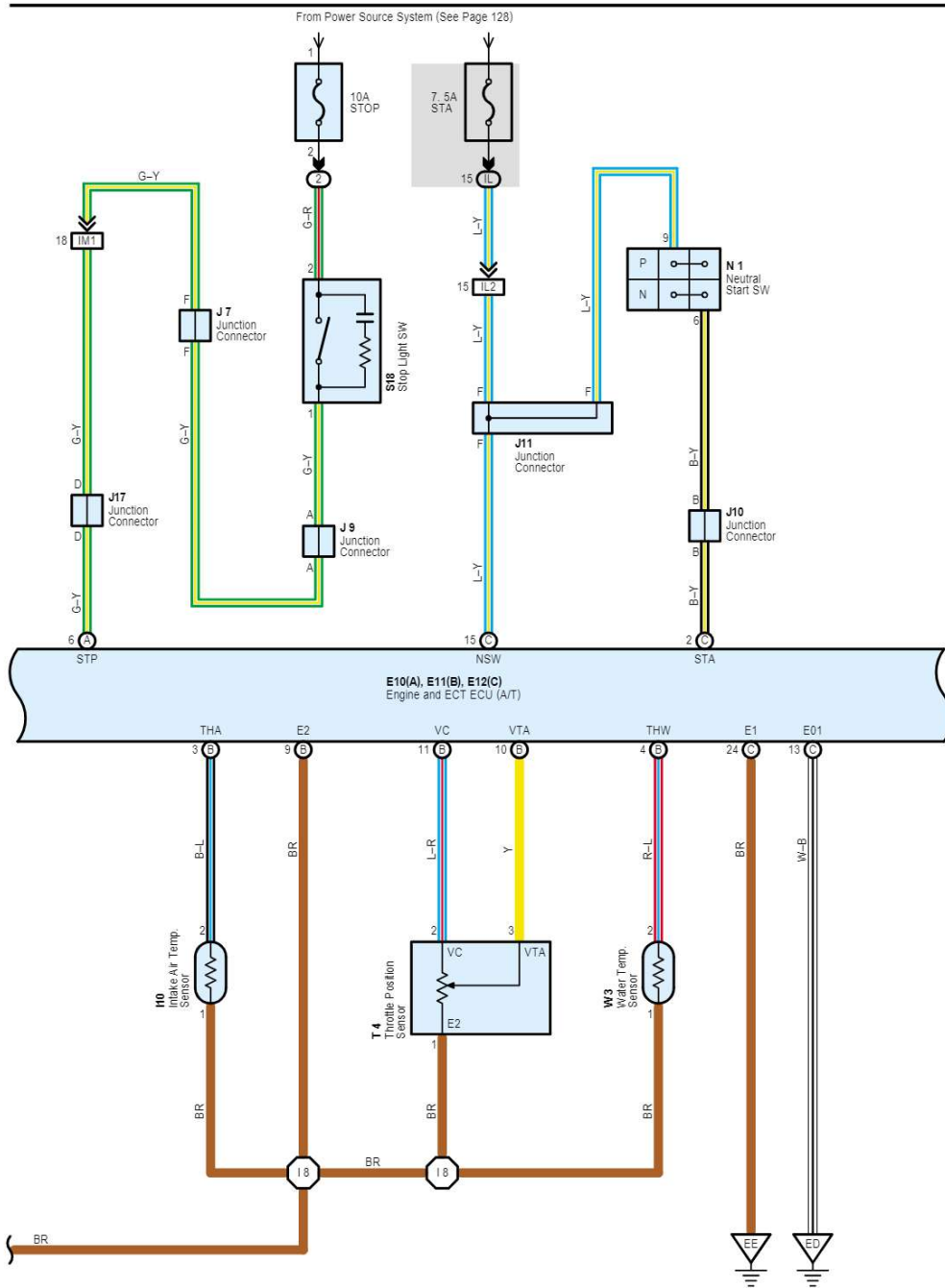
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

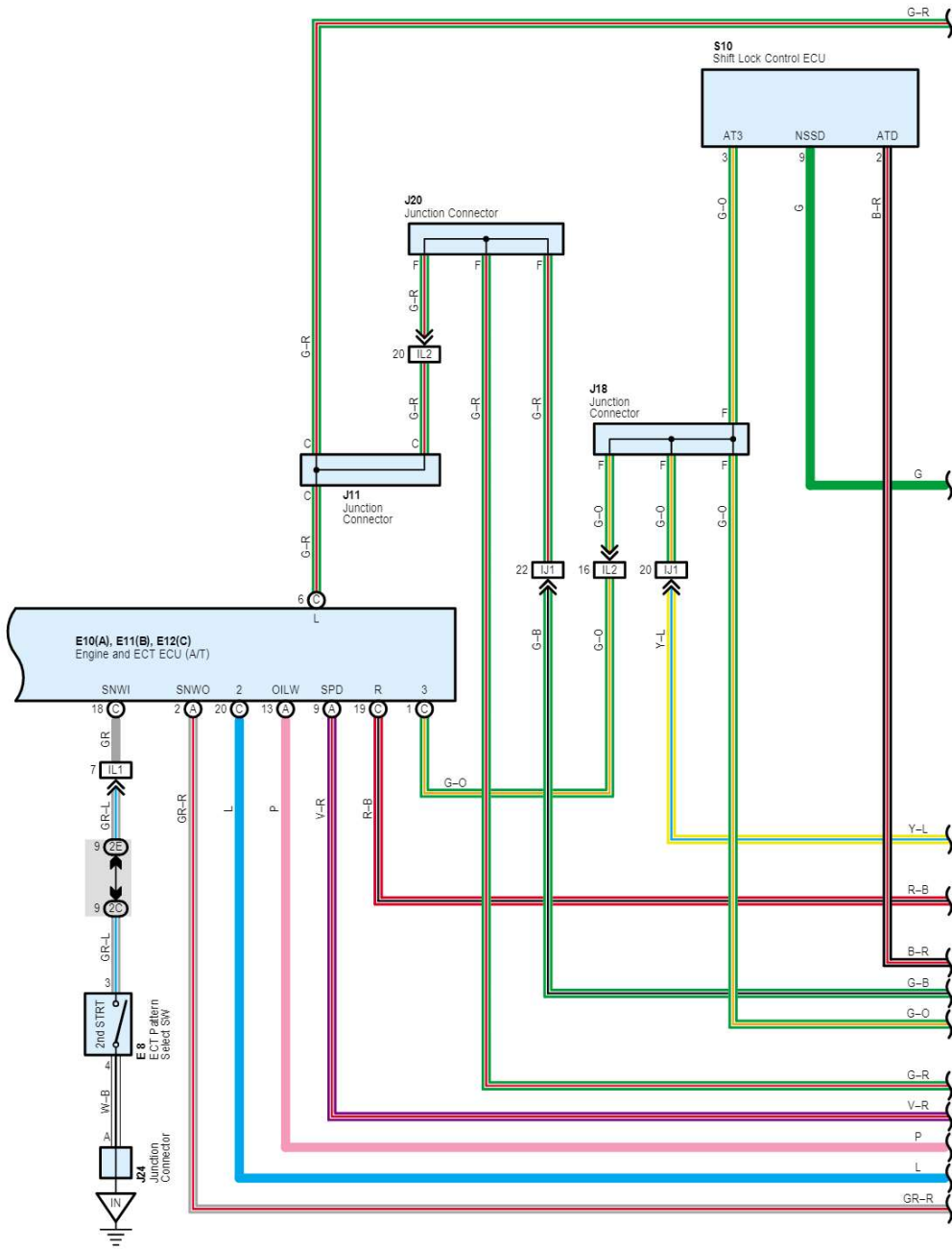
# ECT and A/T Indicator (3RZ-FE Leaded Gasoline)

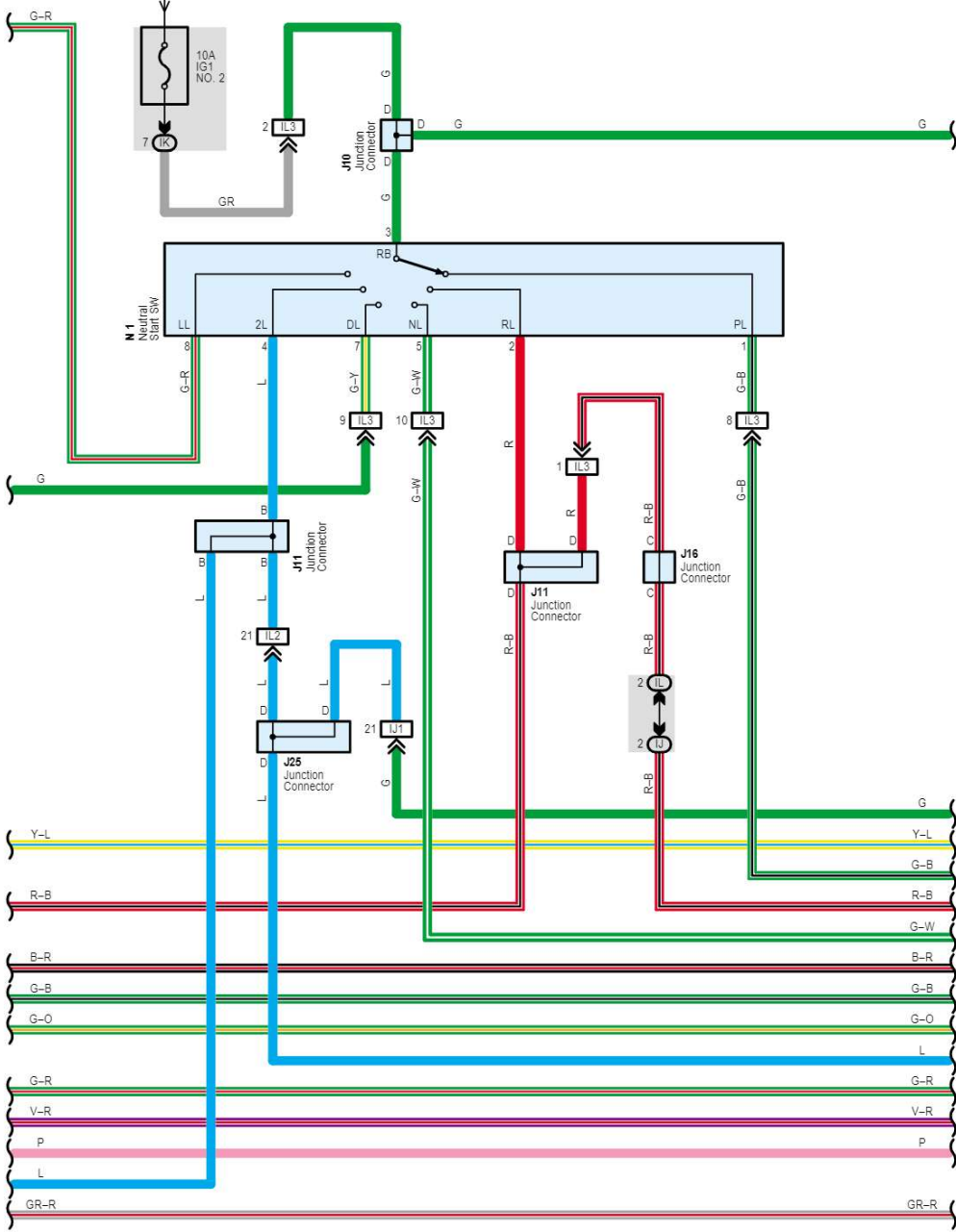
From Power Source System (See Page 128)



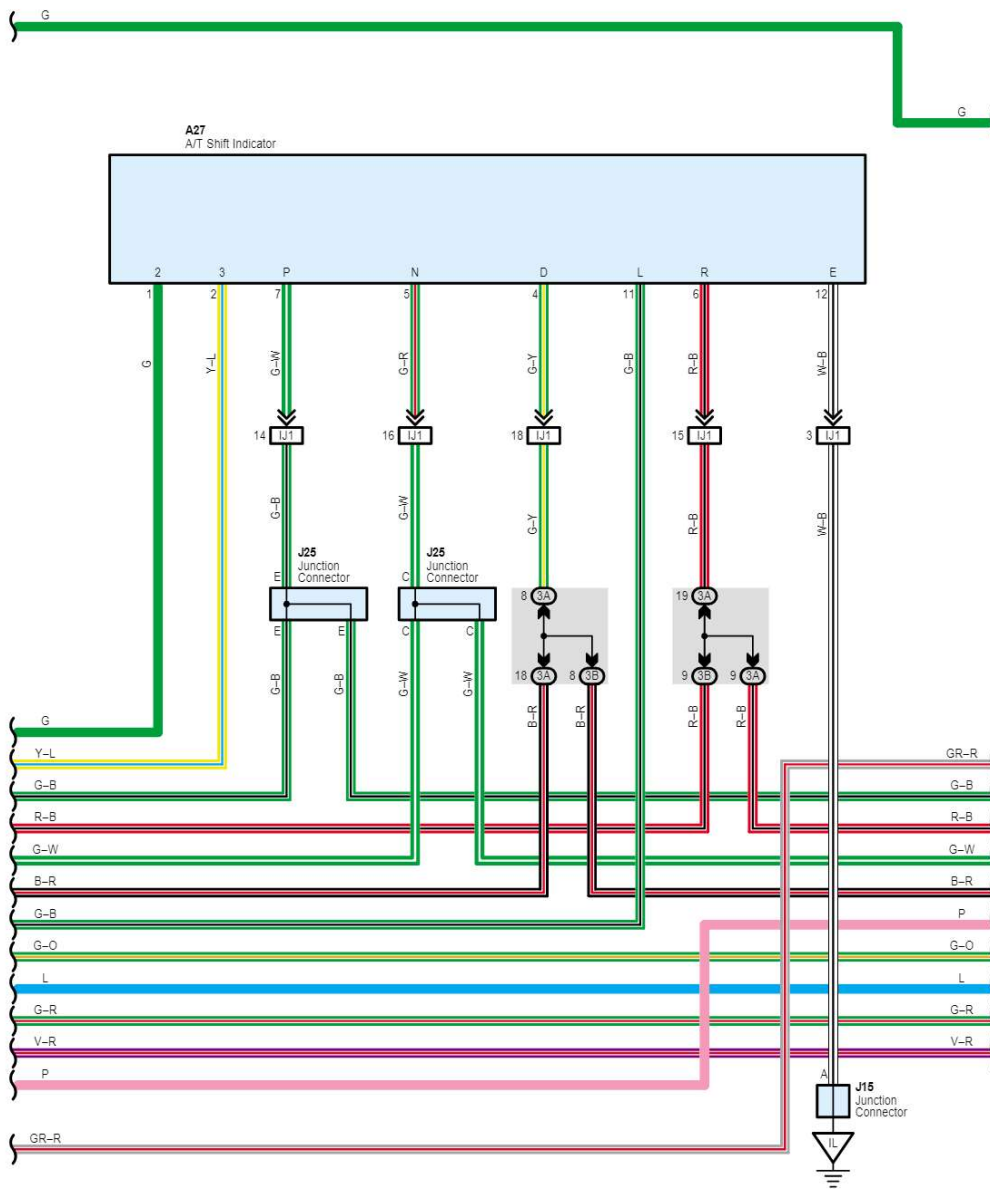


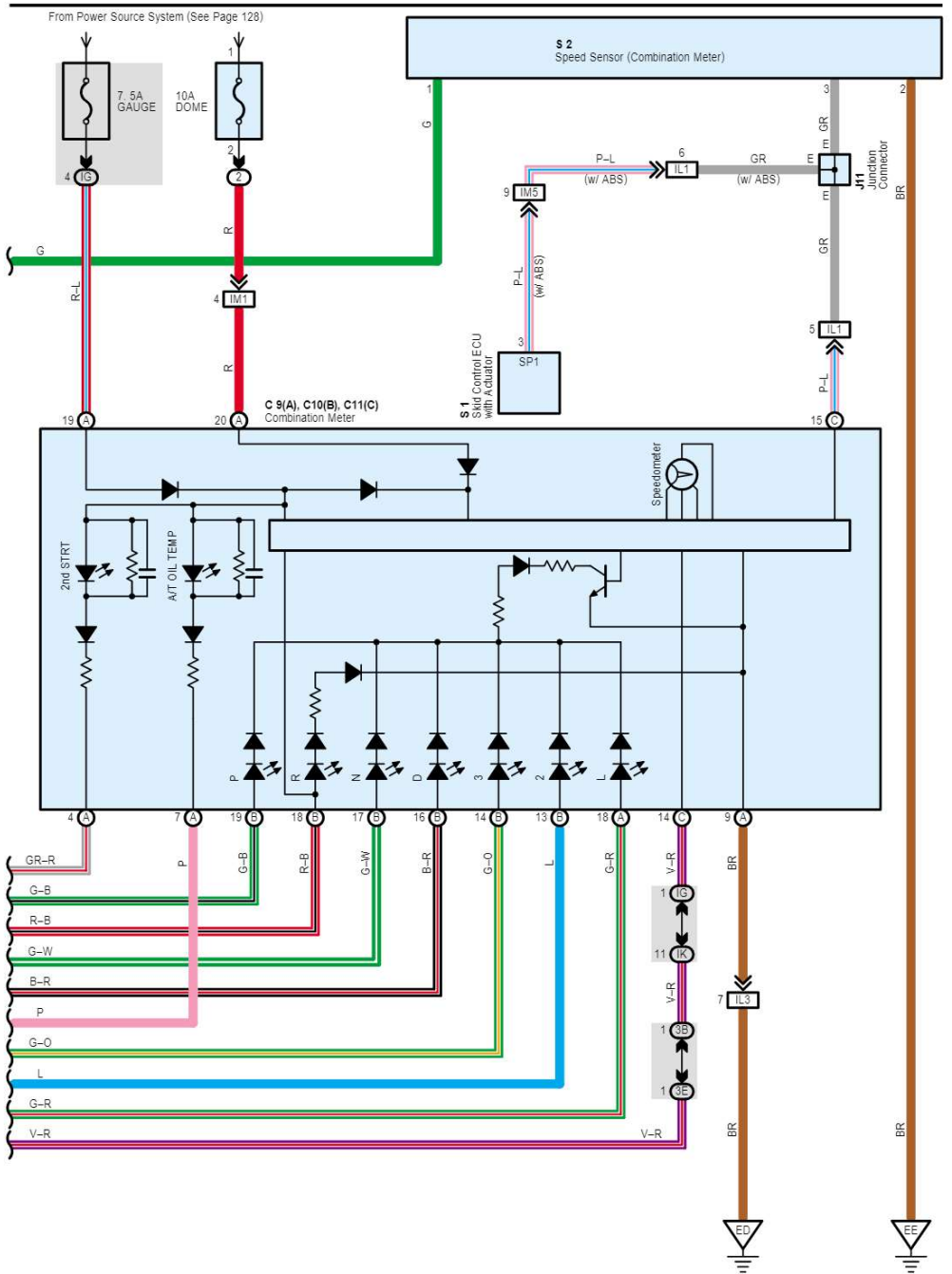
# ECT and A/T Indicator (3RZ-FE Leaded Gasoline)





# ECT and A/T Indicator (3RZ-FE Leaded Gasoline)





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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## ECT and A/T Indicator (3RZ-FE Leaded Gasoline)

### System Outline

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

#### 1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the water temp. sensor and the vehicle speed signal from speed sensor is input to TERMINAL SP2+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle position sensor is input to TERMINAL VTA1 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 the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SL of the engine and ECT ECU to TERMINAL 3 of the ECT solenoid to GROUND, causing 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.

### Service Hints

#### E10 (A), E12 (C) Engine and ECT ECU

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

(C) 15-Ground : Approx. 12 volts with the ignition SW at ST position

(A) 6-Ground : Approx. 12 volts with the brake pedal depressed

(C) 13, (C) 24-Ground : Always continuity

#### N1 Neutral Start SW

3-1 : Closed with the shift lever in P position

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

3-5 : Closed with the shift lever in N position

3-7 : Closed with the shift lever in D position or 3 position

3-4 : Closed with the shift lever in 2 position

3-8 : Closed with the shift lever in L position

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A6	40 (*2)	J2	41 (*2)	J24	50 (LHD)
A27	48 (LHD)	J7	50 (LHD)	J25	50 (LHD)
C9	A 49 (LHD)	J9	50 (LHD)	N1	41 (*2)
C10	B 49 (LHD)	J10	50 (LHD)	S1	41 (*2)
C11	C 49 (LHD)	J11	50 (LHD)	S2	41 (*2)
E1	40 (*2)	J15	50 (LHD)	S3	41 (*2)
E8	49 (LHD)	J16	50 (LHD)	S10	51 (LHD)
E10	A 49 (LHD)	J17	50 (LHD)	S18	51 (LHD)
E11	B 49 (LHD)	J18	50 (LHD)	T4	41 (*2)
E12	C 49 (LHD)	J20	50 (LHD)	W3	41 (*2)
I10	41 (*2)	J22	50 (LHD)		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat



 : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2E		
3A		
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3E		

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IL2		
IL3		
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM4		
IM5		

 : Ground Points

Code	See Page	Ground Points Location
EB	80 (*2)	Front Left Fender
ED	80 (*2)	Ignition Coil Bracket
EE	80 (*2)	Intake Manifold
IL	88 (LHD)	Near the Right Side of Steering Column
IN	88 (LHD)	Right Kick Panel

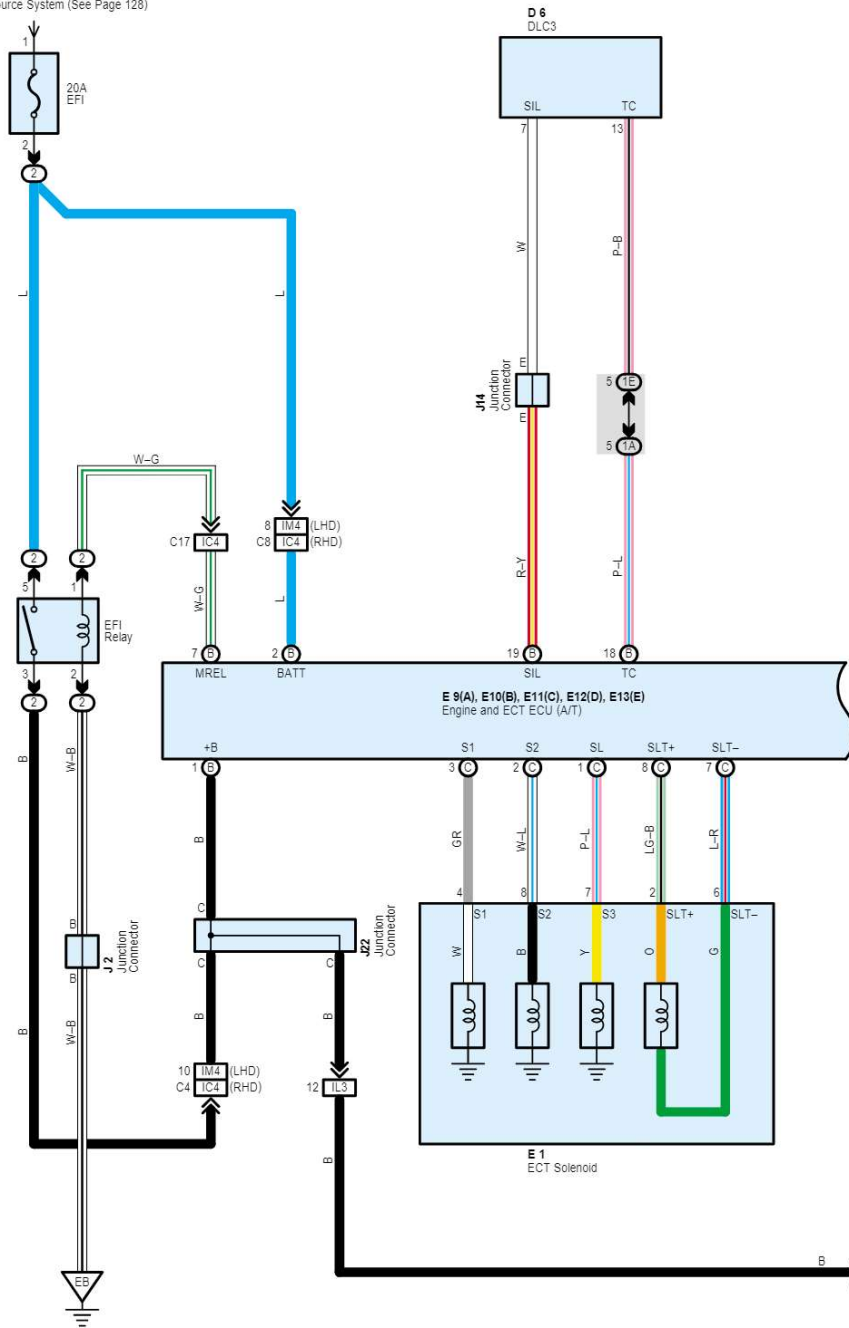
 : Splice Points

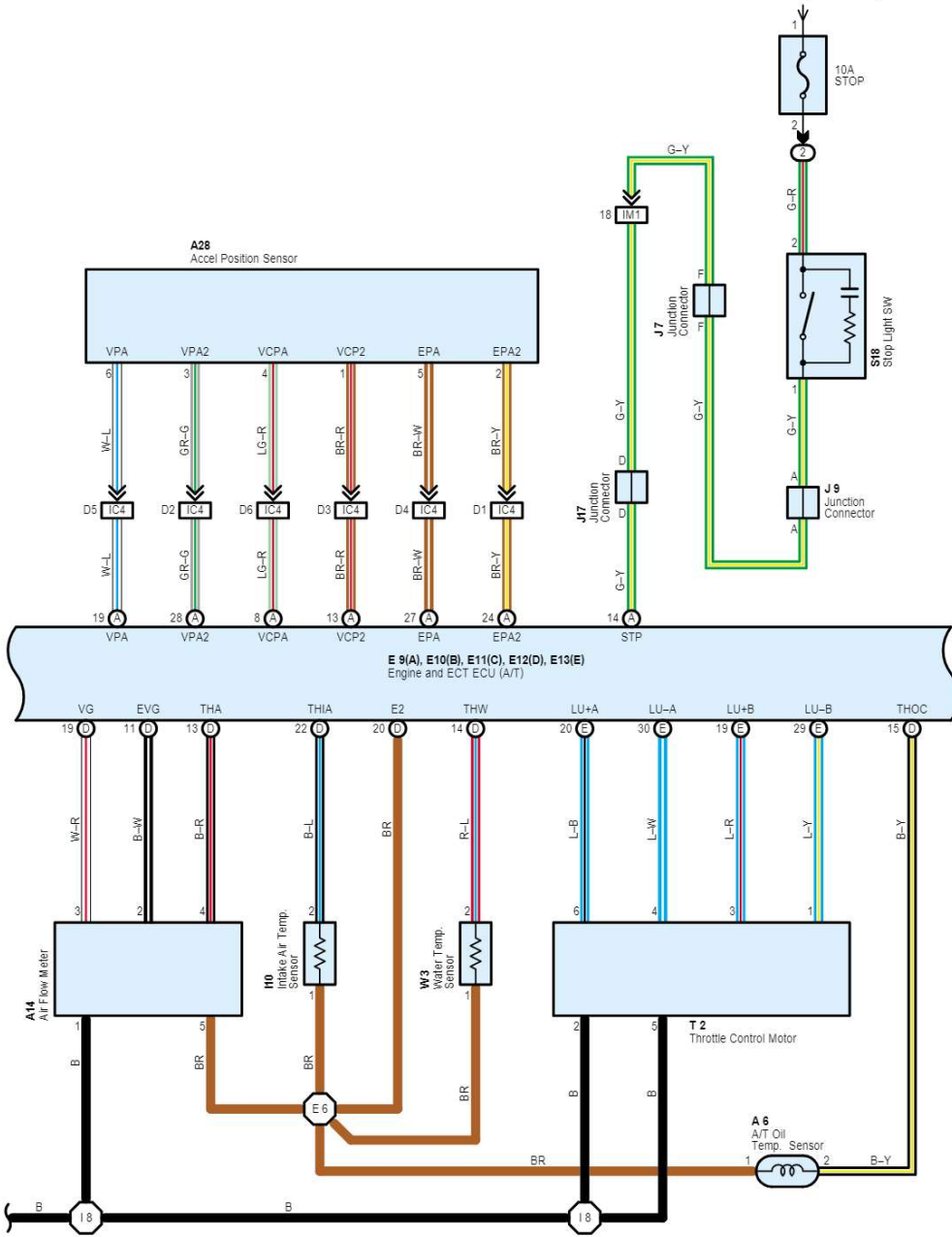
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I8	90 (LHD)	Engine Wire			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# ECT and A/T Indicator (1KD-FTV)

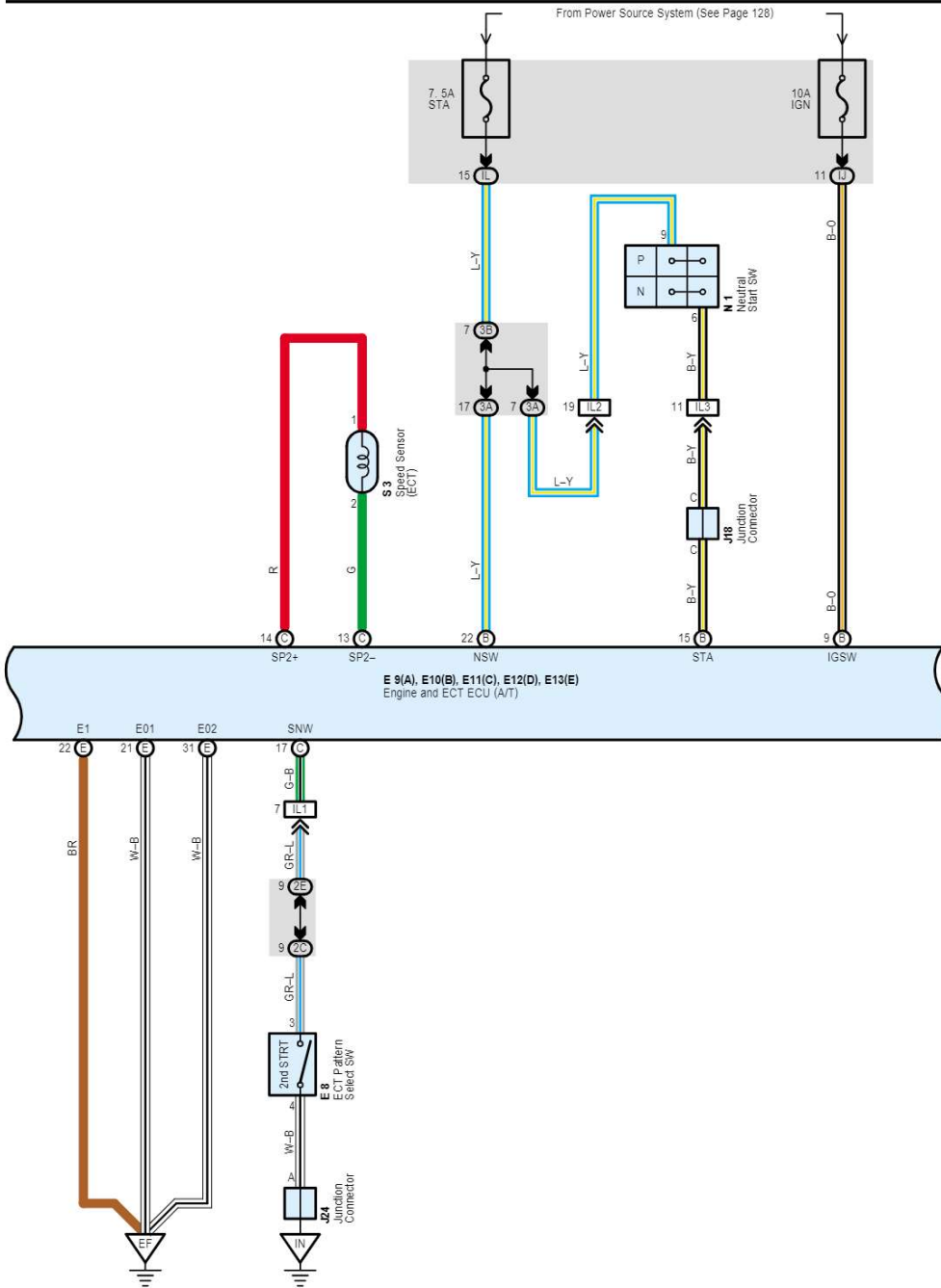
From Power Source System (See Page 128)

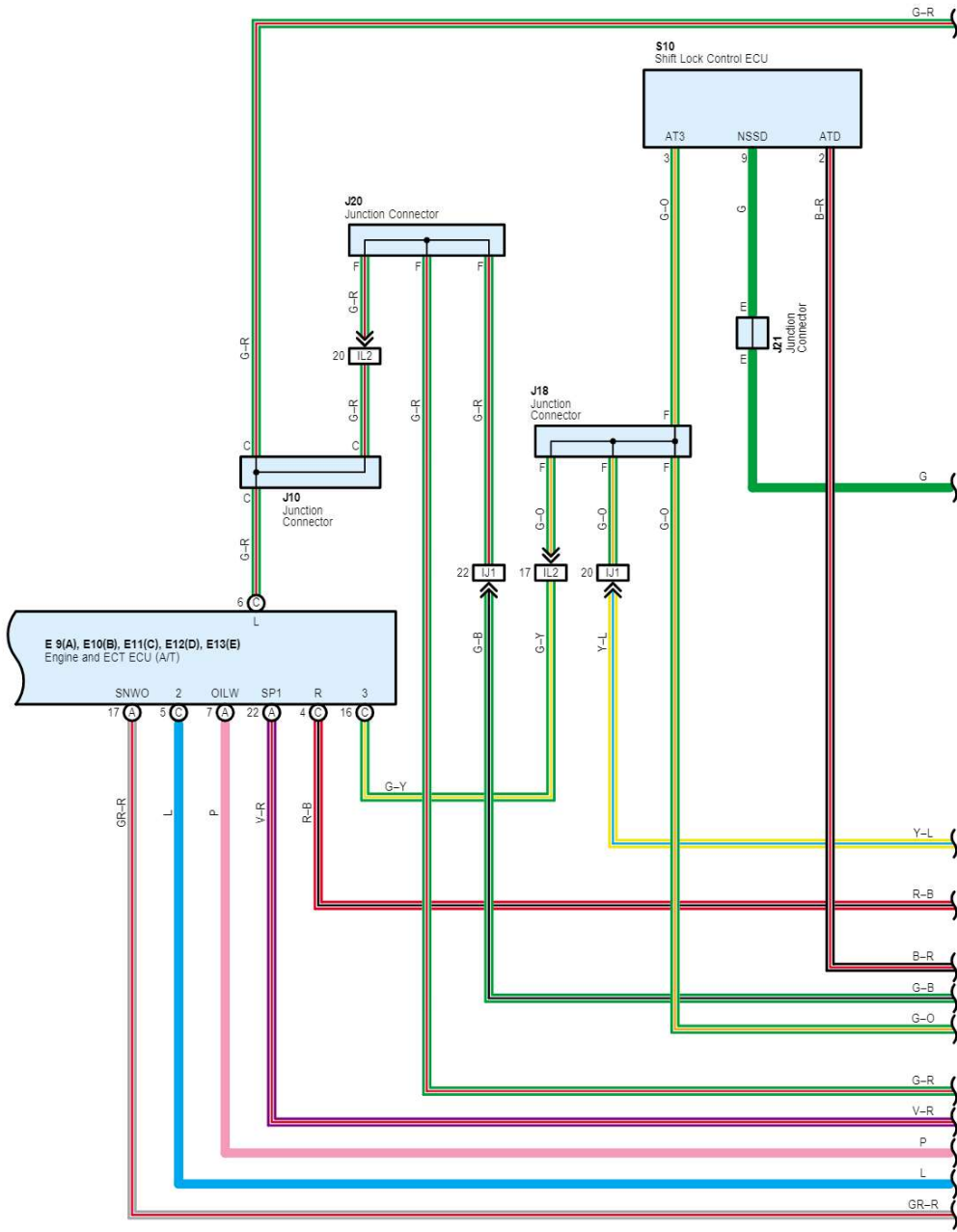




# ECT and A/T Indicator (1KD-FTV)

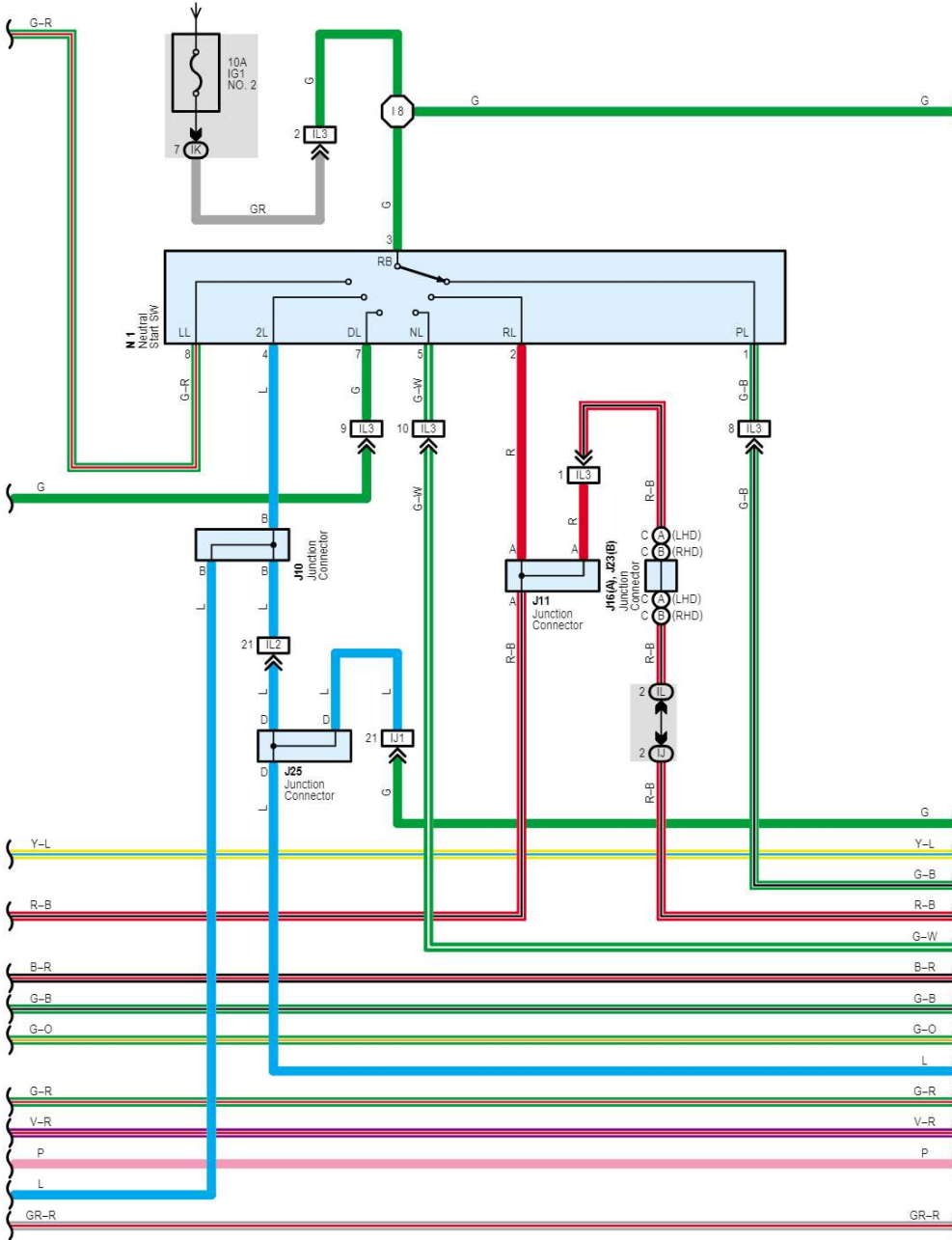
From Power Source System (See Page 128)

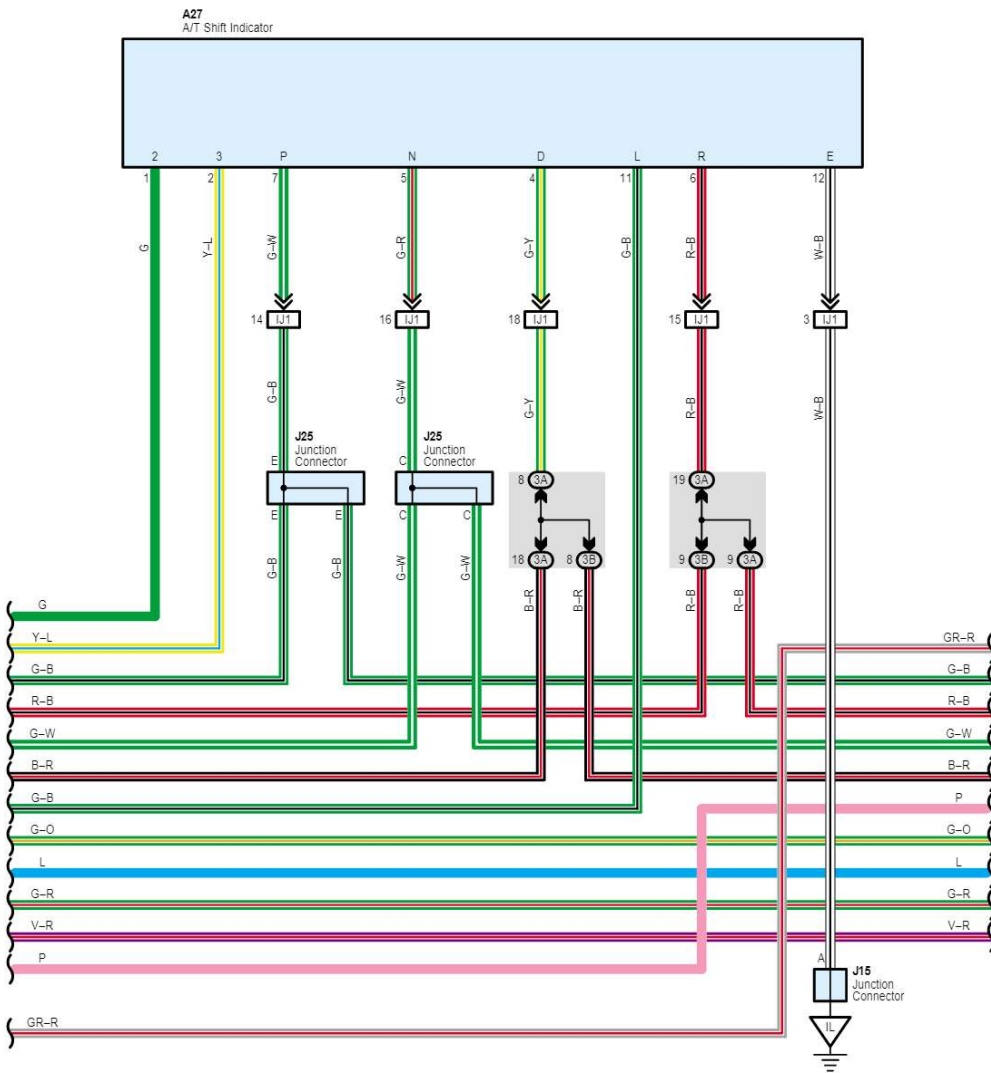




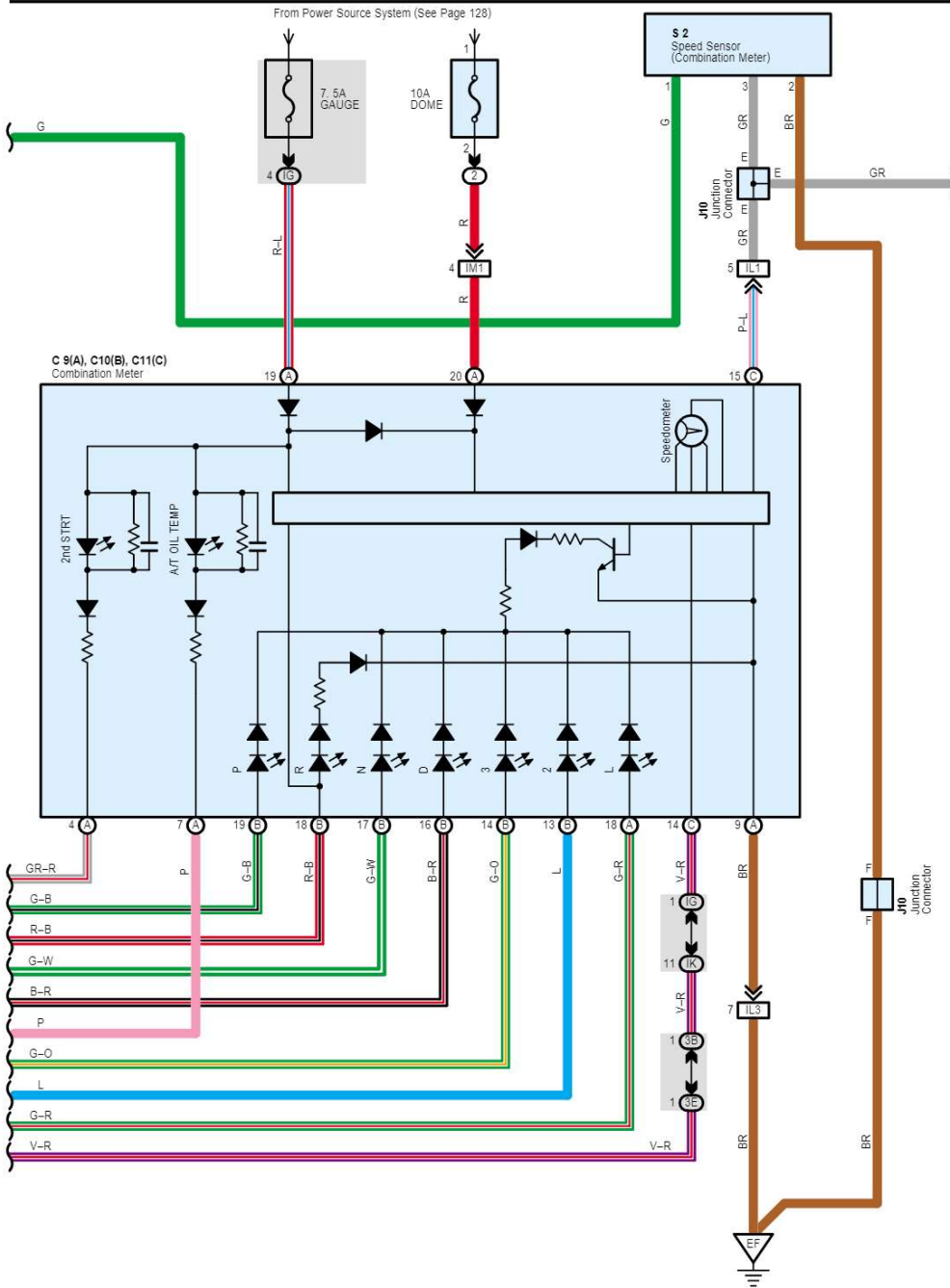
# ECT and A/T Indicator (1KD-FTV)

From Power Source System (See Page 128)

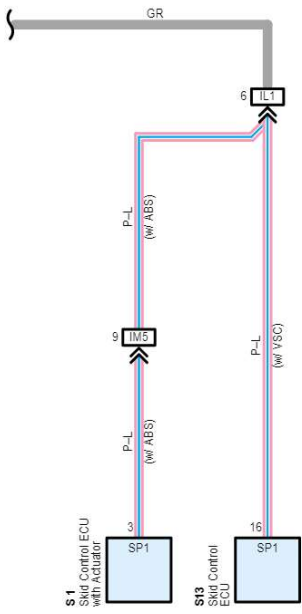




# ECT and A/T Indicator (1KD-FTV)







### System Outline

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

#### 1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the water temp. sensor and the vehicle speed signal from speed sensor is input to TERMINAL SP2+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle control motor is input to TERMINALS LU+A and LU+B 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 the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SL of the engine and ECT ECU to TERMINAL 7 of the ECT solenoid to GROUND, causing 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.

### Service Hints

#### E9 (A), E10 (B), E13 (E) Engine and ECT ECU

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

(B) 2-Ground : Always approx. 12 volts

(B) 22-Ground : Approx. 12 volts with the ignition SW at ST position

(A) 14-Ground : Approx. 12 volts with the brake pedal depressed

(E) 21, (E) 22, (E) 31-Ground : Always continuity

#### N1 Neutral Start SW

3-1 : Closed with the shift lever in P position

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

3-5 : Closed with the shift lever in N position

3-7 : Closed with the shift lever in D position or 3 position

3-4 : Closed with the shift lever in 2 position

3-8 : Closed with the shift lever in L position

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A6	42 (*3)	E12	D	69 (RHD)	J21	70 (RHD)
	62 (*12)	E13	E	49 (LHD)	J22	50 (LHD)
A14	42 (*3)			69 (RHD)		70 (RHD)
	62 (*12)	I10		43 (*3)	J23	B
A27	48 (LHD)			63 (*12)	J24	50 (LHD)
	68 (RHD)	43 (*3)	70 (RHD)			
A28	48 (LHD)	J2		63 (*12)	J25	50 (LHD)
	68 (RHD)			50 (LHD)		70 (RHD)
C9	A	J7		70 (RHD)	N1	43 (*3)
				69 (RHD)		63 (*12)
C10	B	J9		50 (LHD)	S1	43 (*3)
				49 (LHD)		63 (*12)
C11	C	J10		70 (RHD)	S2	43 (*3)
				69 (RHD)		63 (*12)
D6		J11		50 (LHD)	S3	43 (*3)
				49 (LHD)		63 (*12)
E1		J14		50 (LHD)	S10	51 (LHD)
				42 (*3)		70 (RHD)
E8		J15		50 (LHD)	S13	51 (LHD)
				49 (LHD)		70 (RHD)
E9	A	J16	A	50 (LHD)	S18	51 (LHD)
				69 (RHD)		71 (RHD)
E10	B	J17		50 (LHD)	T2	43 (*3)
				49 (LHD)		63 (*12)
E11	C	J18		70 (RHD)	W3	43 (*3)
				49 (LHD)		63 (*12)
E12	D	J20		50 (LHD)		
		J21		50 (LHD)		

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## ECT and A/T Indicator (1KD-FTV)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2E			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	82 (*3)	Front Left Fender
	106 (*12)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

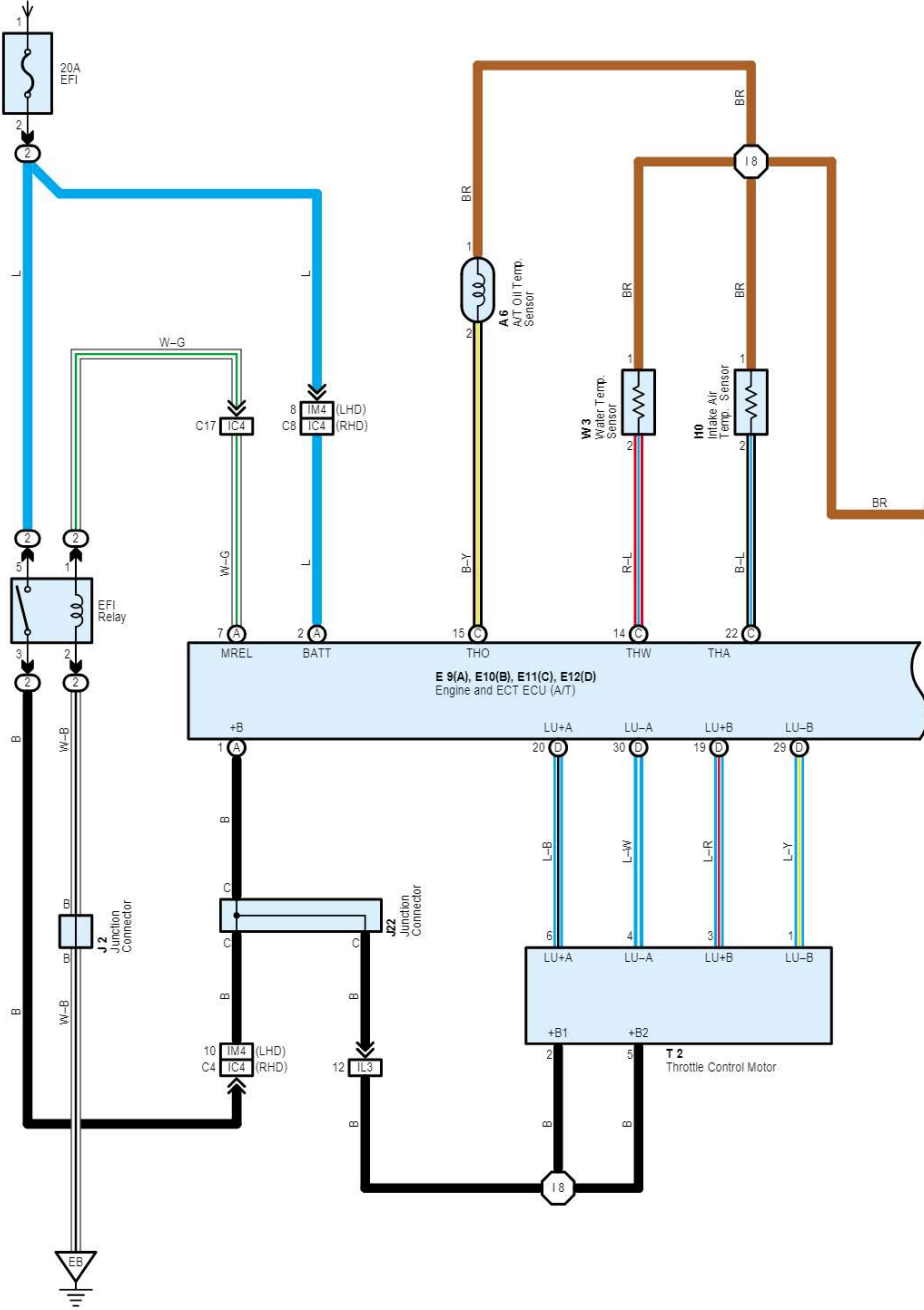
 : Splice Points

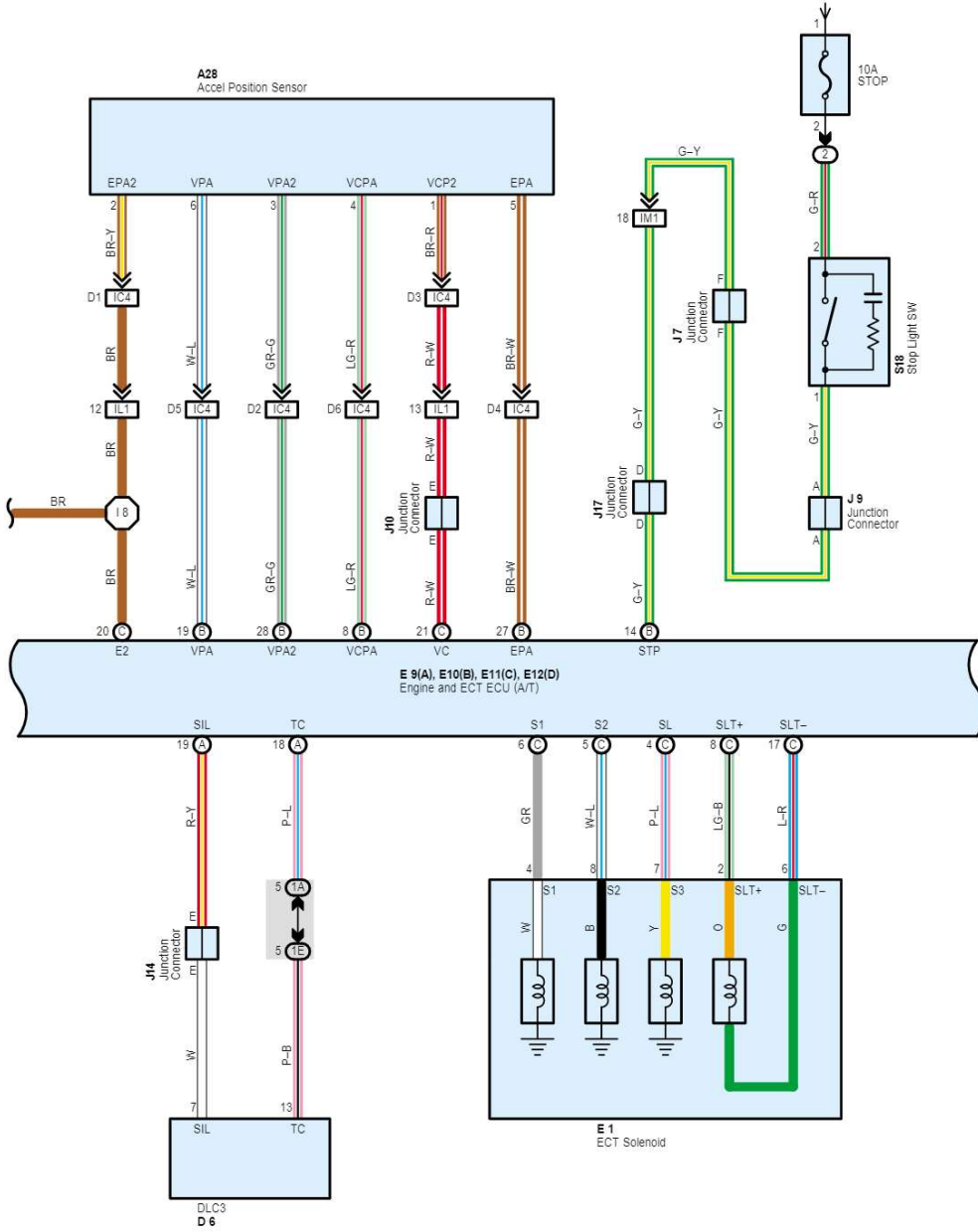
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E6	82 (*3)	Engine Wire	I8	90 (LHD)	Engine Wire
	106 (*12)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# ECT and A/T Indicator (1KZ-TE)

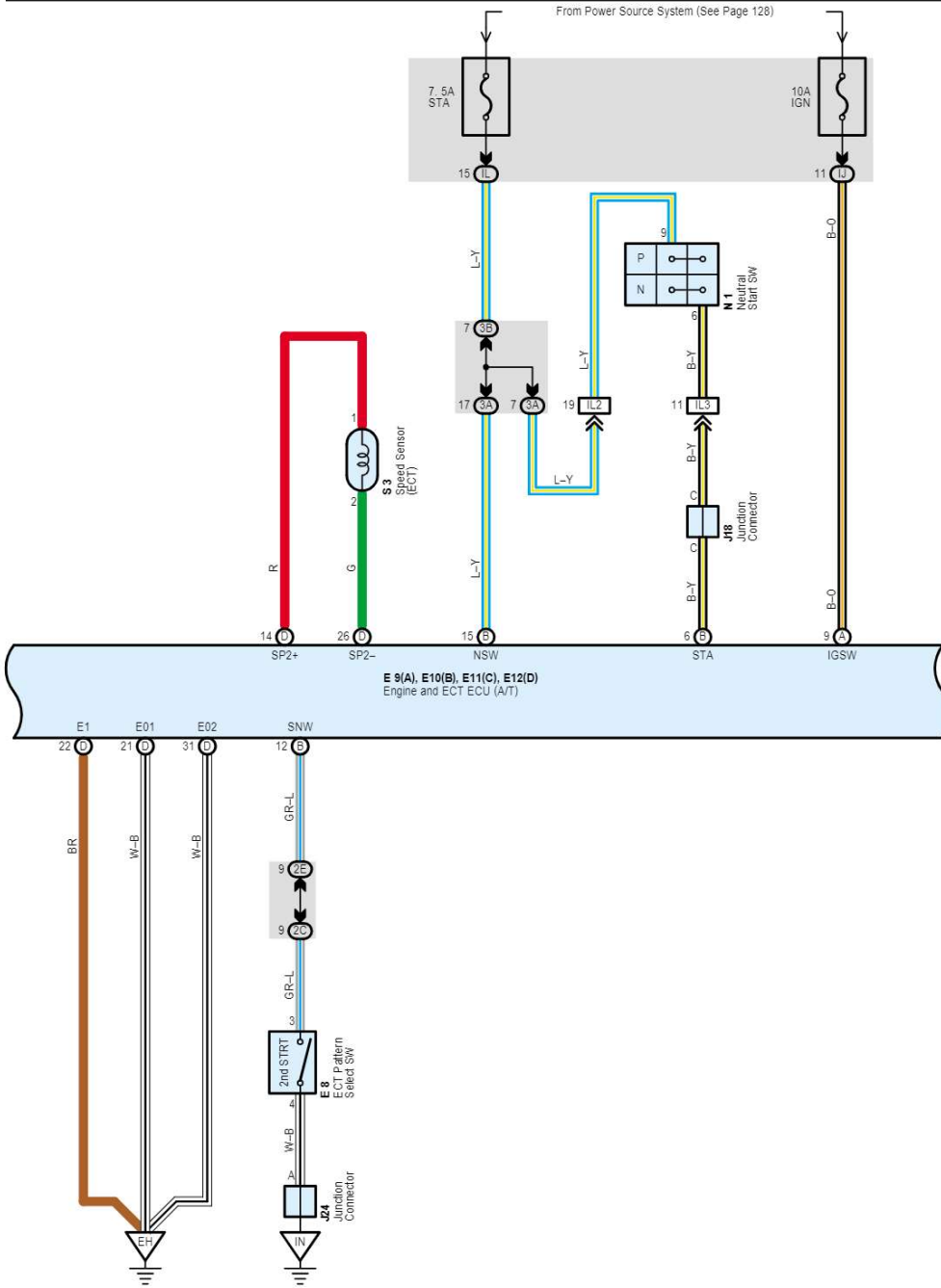
From Power Source System (See Page 128)





# ECT and A/T Indicator (1KZ-TE)

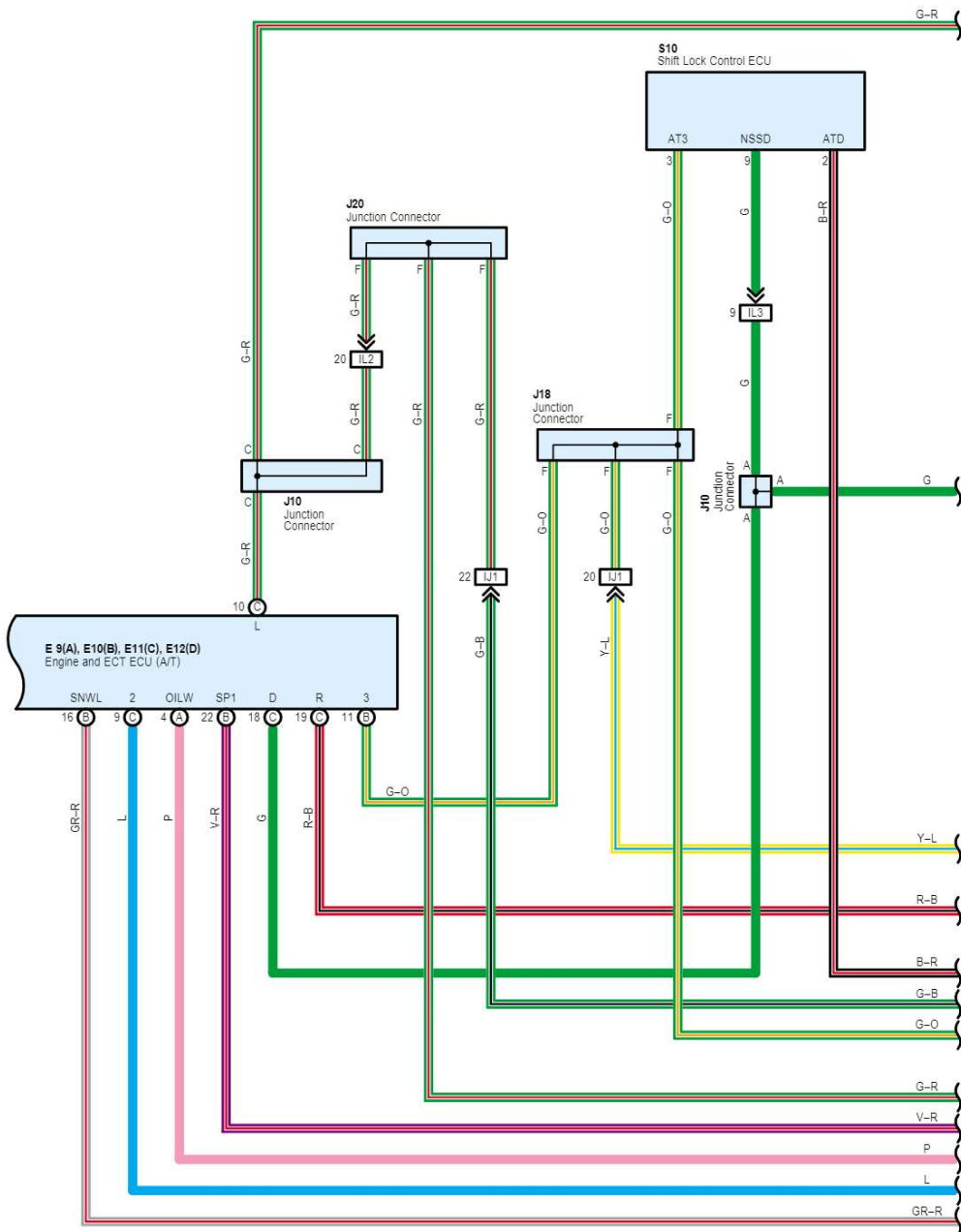
From Power Source System (See Page 128)



502

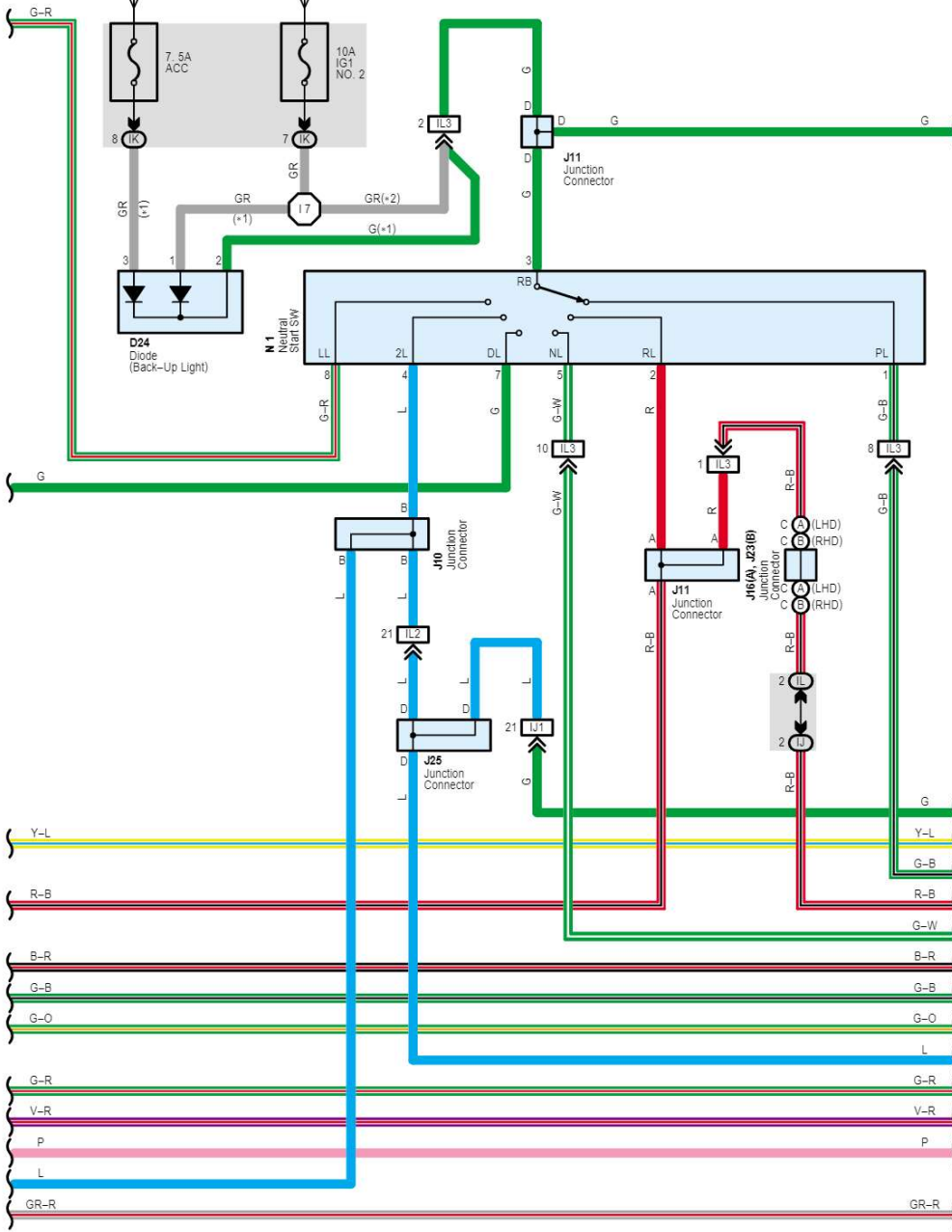
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

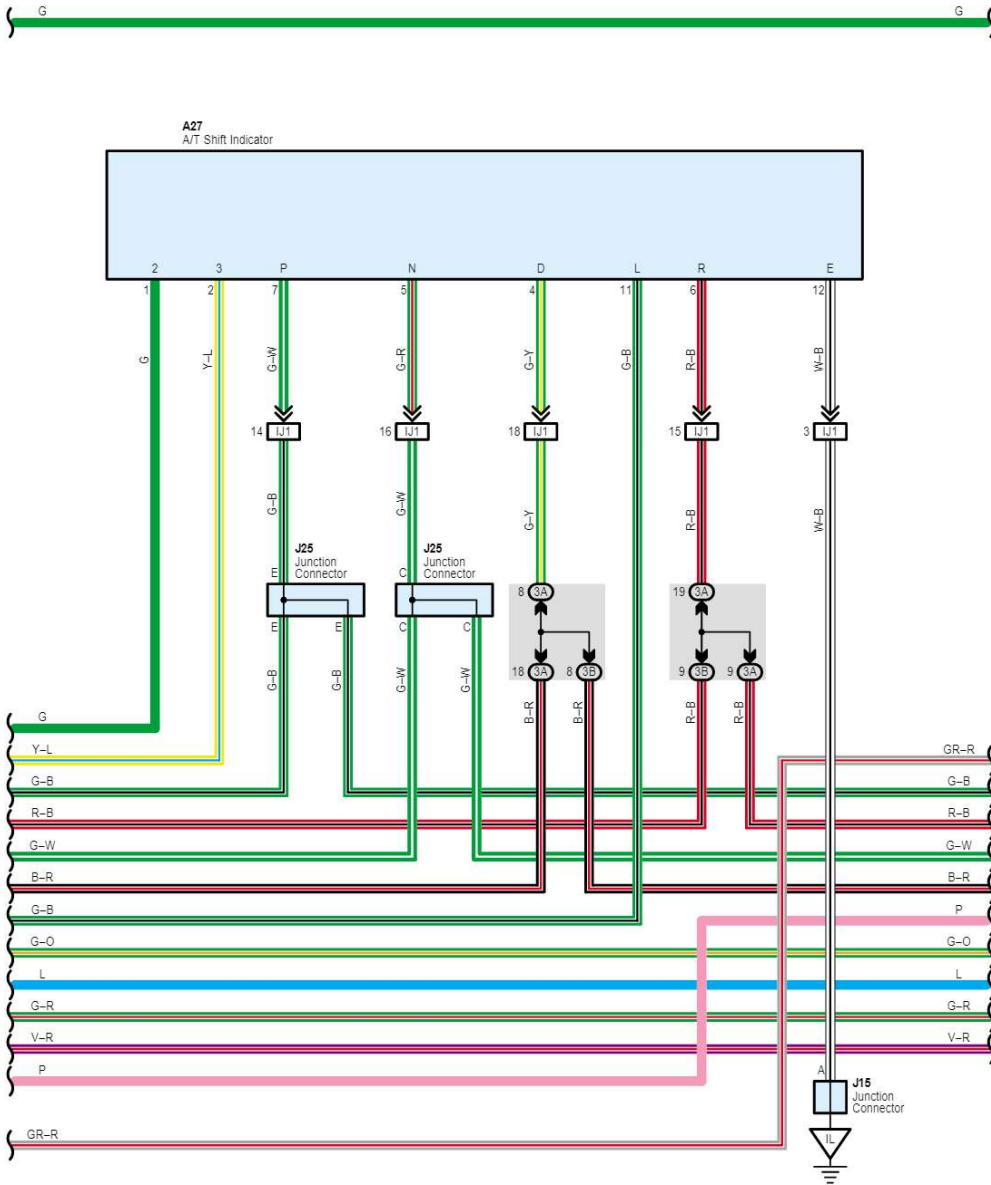




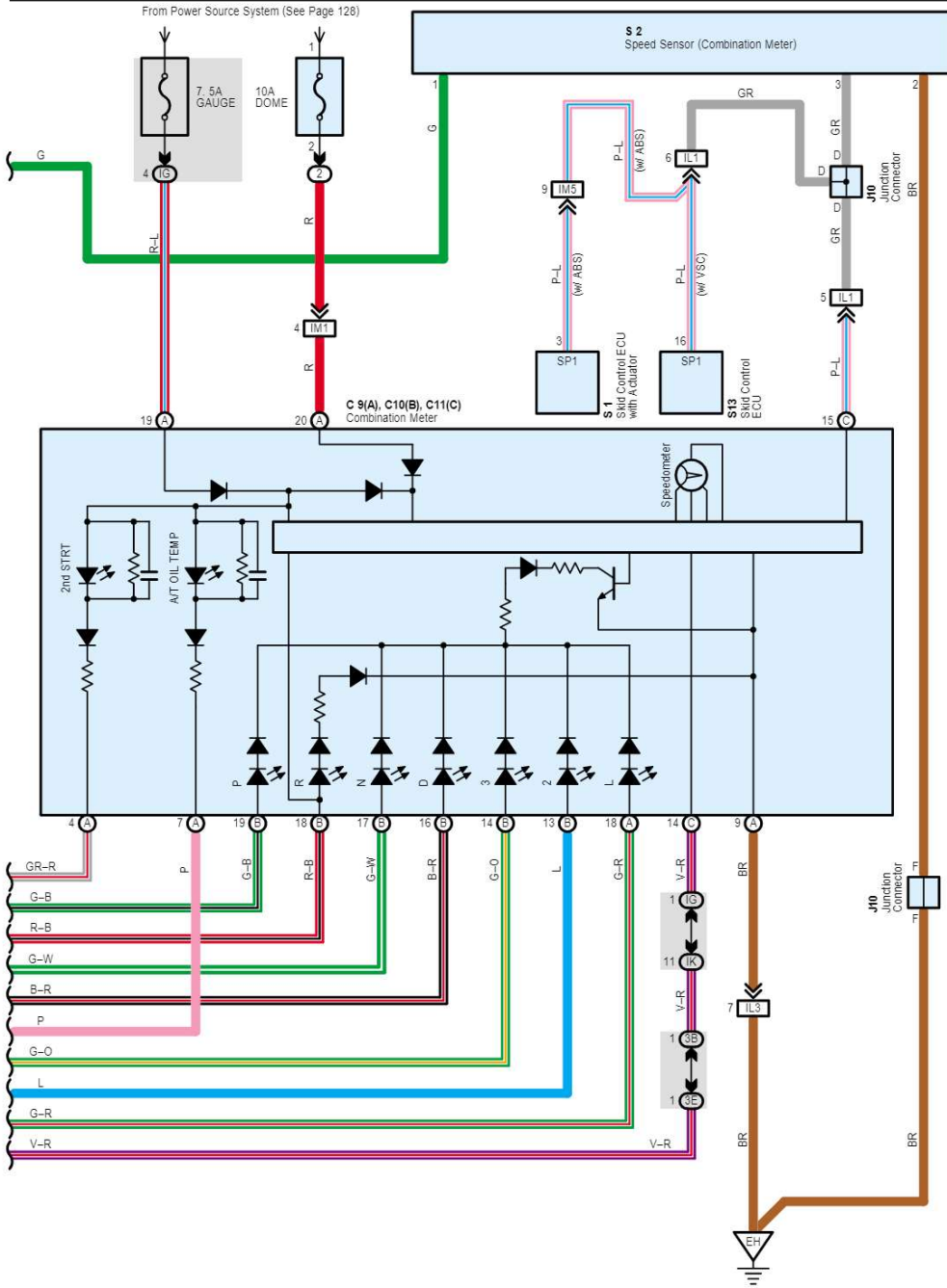
# ECT and A/T Indicator (1KZ-TE)

From Power Source System (See Page 128)





# ECT and A/T Indicator (1KZ-TE)



### System Outline

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

#### 1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine and ECT ECU from the water temp. sensor and the vehicle speed signal from speed sensor is input to TERMINAL SP2+ of the engine and ECT ECU. At the same time, the throttle valve opening signal from the throttle control motor is input to TERMINALS LU+A and LU+B 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 the engine and ECT ECU decides based on each signal that the lock-up condition has been met, the current flows through TERMINAL SL of the engine and ECT ECU to TERMINAL 7 of the ECT solenoid to GROUND, causing 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.

### Service Hints

#### E9 (A), E10 (B), E12 (D) Engine and ECT ECU

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

(A) 2-Ground : Always approx. 12 volts

(B) 15-Ground : Approx. 12 volts with the ignition SW at ST position

(B) 14-Ground : Approx. 12 volts with the brake pedal depressed

(D) 21, (D) 22, (D) 31-Ground : Always continuity

#### N1 Neutral Start SW

3-1 : Closed with the shift lever in P position

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

3-5 : Closed with the shift lever in N position

3-7 : Closed with the shift lever in D position or 3 position

3-4 : Closed with the shift lever in 2 position

3-8 : Closed with the shift lever in L position

# ECT and A/T Indicator (1KZ-TE)

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A6	44 (*4)	E12	D	49 (LHD)	J22
	64 (*13)				
A27	48 (LHD)	I10		45 (*4)	J23
	68 (RHD)				
A28	48 (LHD)	J2		65 (*13)	J24
	68 (RHD)				
C9	49 (LHD)	J7		45 (*4)	J25
	69 (RHD)				
C10	49 (LHD)	J9		50 (LHD)	N1
	69 (RHD)				
C11	49 (LHD)	J10		70 (RHD)	S1
	69 (RHD)				
D6	49 (LHD)	J11		50 (LHD)	S2
	69 (RHD)				
D24	69 (RHD)	J14		50 (LHD)	S3
E1	44 (*4)				
	64 (*13)	J15		50 (LHD)	S10
49 (LHD)	71 (RHD)				
E8	69 (RHD)	J16	A	50 (LHD)	S13
	49 (LHD)	J17		50 (LHD)	S18
69 (RHD)	71 (RHD)				
E10	49 (LHD)	J18		50 (LHD)	T2
	69 (RHD)				
E11	49 (LHD)	J20		70 (RHD)	W3
	69 (RHD)				

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)	
2E			
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

**▽ : Ground Points**

Code	See Page	Ground Points Location
EB	84 (*4)	Front Left Fender
	108 (*13)	
EH	84 (*4)	Rear Part of Cylinder Block
	108 (*13)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## ECT and A/T Indicator (1KZ-TE)

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 : Splice Points

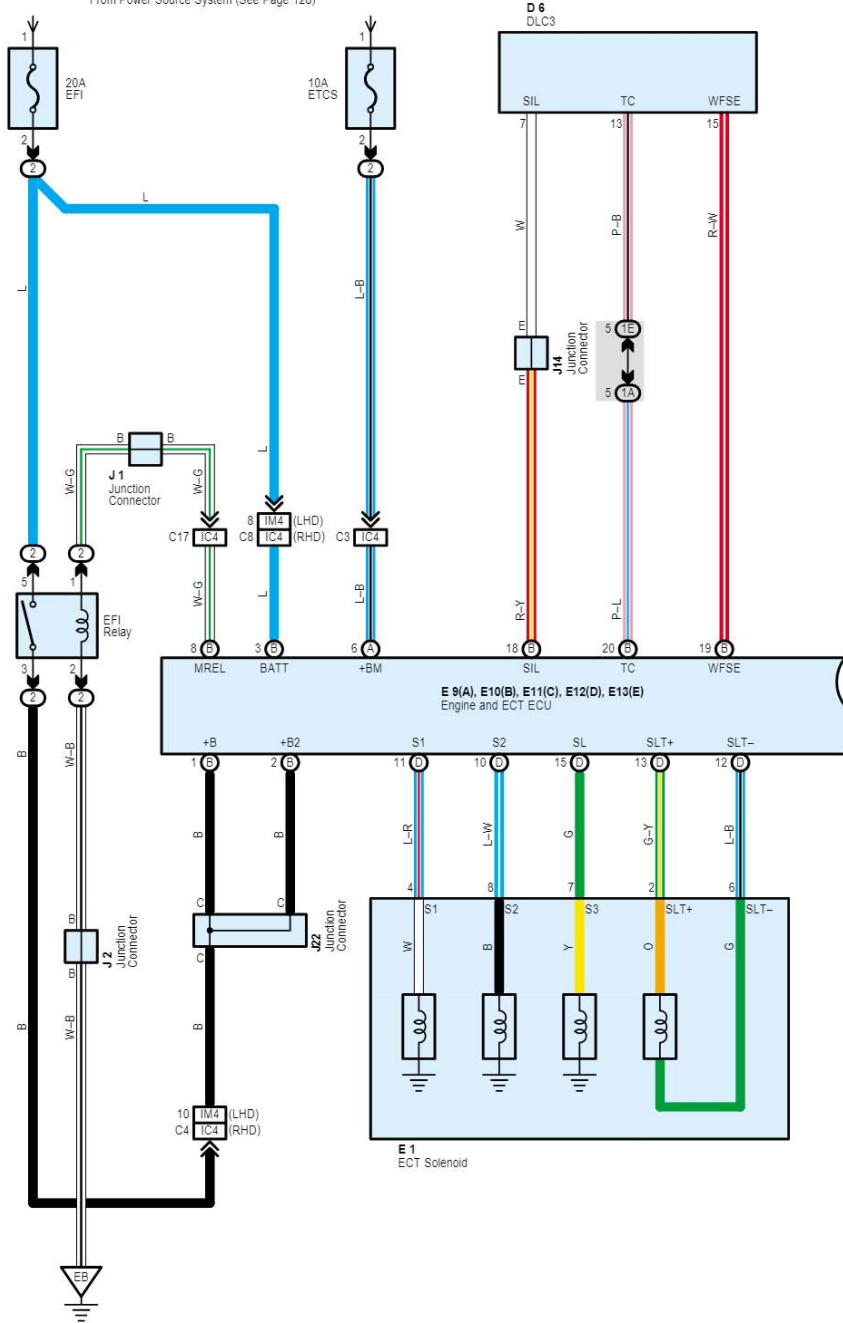
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

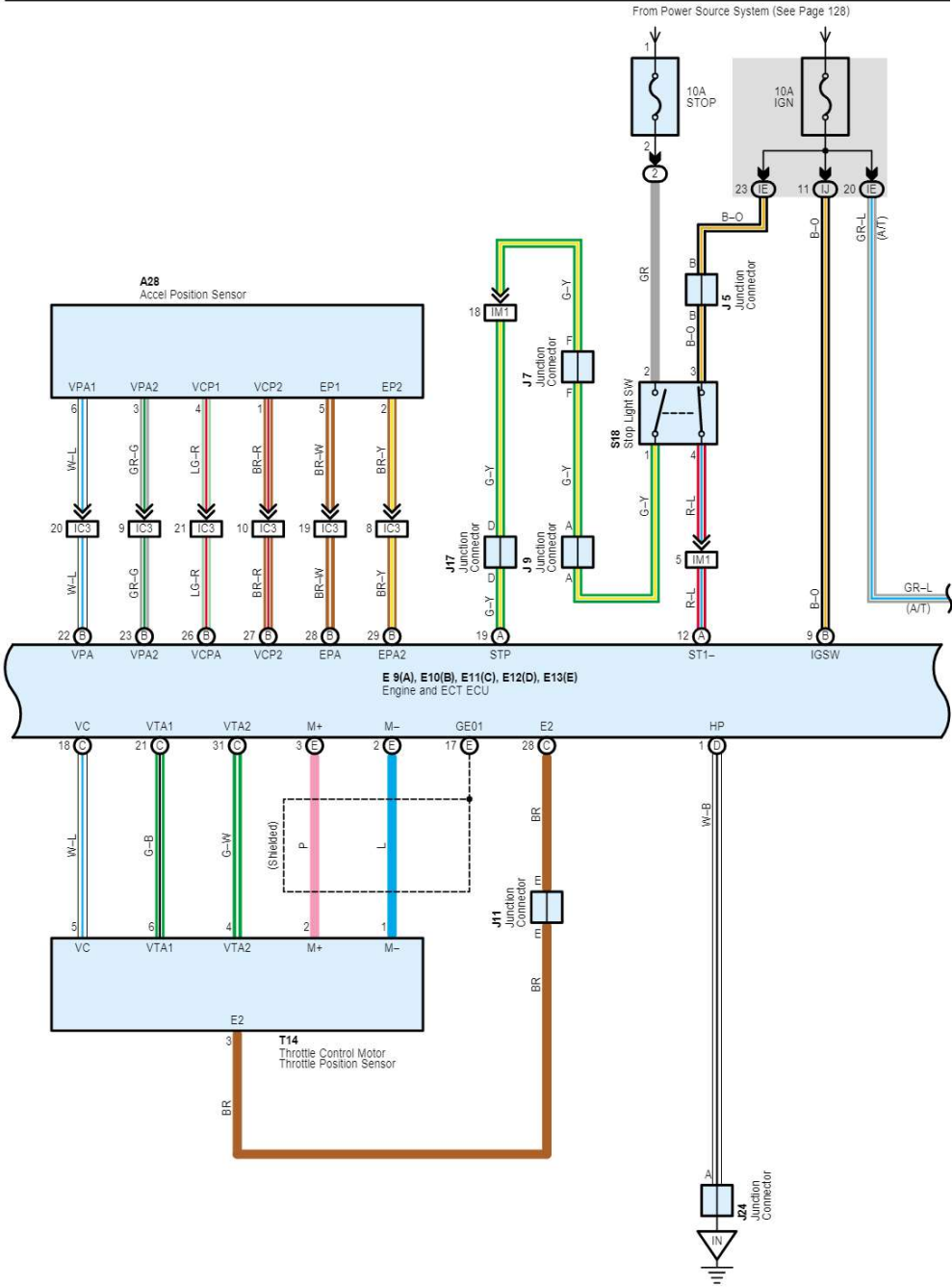




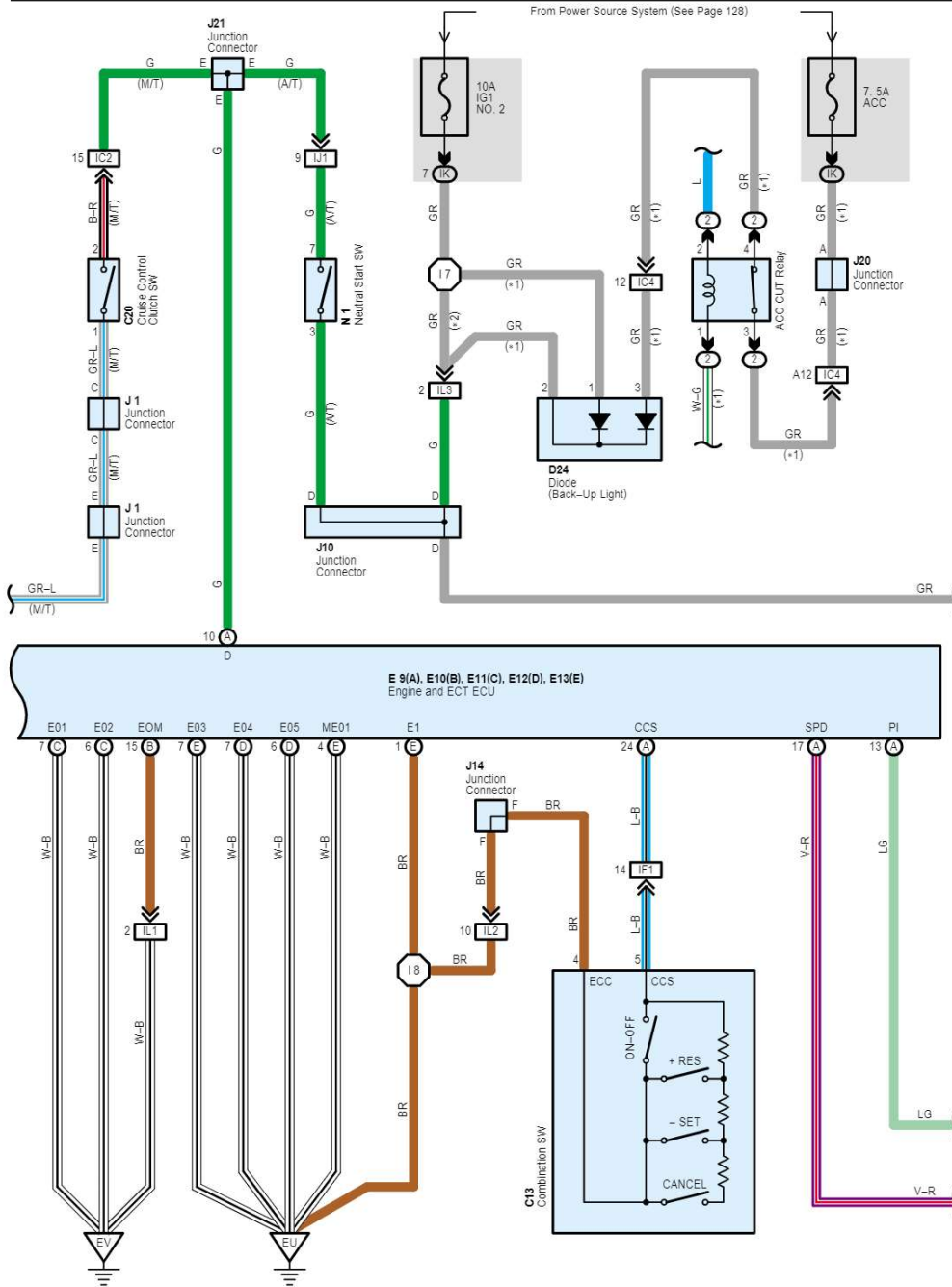
# Cruise Control (1GR-FE)

From Power Source System (See Page 128)





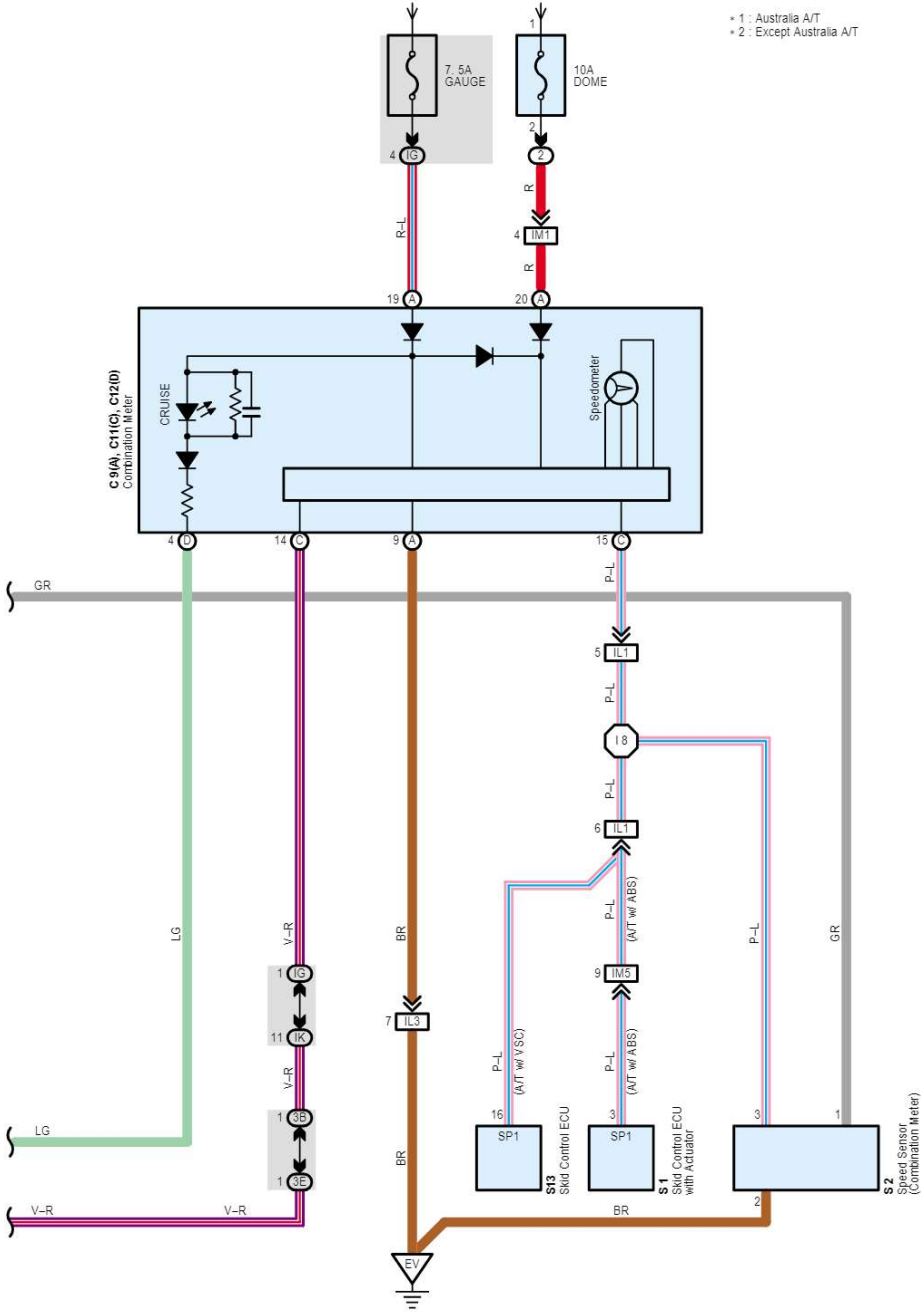
# Cruise Control (1GR-FE)



514

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

- \* 1 : Australia A/T
- \* 2 : Except Australia A/T



## Cruise Control (1GR-FE)

### System Outline

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

#### 1. Set Operation

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

#### 2. Set Speed Control

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

#### 3. Coast Control

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

#### 4. Accel Control

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

#### 5. Resume Control

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

#### 6. Manual Cancel Mechanism

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

- \* The stop light SW is turned on.
- \* The CANCEL SW is turned on.
- \* The ON-OFF SW is turned off.

#### 7. Auto Cancel Function

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

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

#### 8. Overdrive Control Function

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

### Service Hints

#### E9 (A), E10 (B), E11 (C), E12 (D), E13 (E) Engine and ECT ECU (A/T), Engine ECU (M/T)

- (B) 9-Ground : Approx. 12 volts with ignition SW at ON position  
(A) 6, (B) 3-Ground : Always approx. 12 volts  
(D) 6, (D) 7, (C) 6, (C) 7, (D) 1, (E) 4, (E) 7, (E) 1, (B) 15-Ground : Always continuity  
(A) 19-Ground : Approx. 12 volts with brake pedal depressed  
(A) 24-Ground : Continuity with cruise control ON-OFF SW at on  
Approx. 1540  $\Omega$  with CANCEL SW on in cruise control SW  
Approx. 240  $\Omega$  with + RES SW on in cruise control SW  
Approx. 630  $\Omega$  with - SET SW on in cruise control SW

#### C13 Combination SW

- 5-4 : Approx. 1540  $\Omega$  with CANCEL SW on  
Approx. 240  $\Omega$  with + RES SW on  
Approx. 630  $\Omega$  with - SET SW on

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A28	48 (LHD)	E11	C	69 (RHD)	J17	70 (RHD)
	68 (RHD)					
C9	A	49 (LHD)	E13	E	49 (LHD)	70 (RHD)
		69 (RHD)				
C11	C	49 (LHD)	J1	39 (*1)	J22	70 (RHD)
		69 (RHD)				
C12	D	49 (LHD)	J2	39 (*1)	J24	50 (LHD)
		69 (RHD)				
C13	49 (LHD)	J5	39 (*1)	N1	39 (*1)	59 (*10)
	69 (RHD)					
C20	49 (LHD)	J7	50 (LHD)	S1	39 (*1)	59 (*10)
	69 (RHD)					
D6	49 (LHD)	J9	50 (LHD)	S2	39 (*1)	59 (*10)
	69 (RHD)					
D24	69 (RHD)	J10	50 (LHD)	S13	51 (LHD)	71 (RHD)
	38 (*1)					
E1	58 (*10)	J11	50 (LHD)	S18	51 (LHD)	71 (RHD)
	49 (LHD)					
E9	A	69 (RHD)	J14	50 (LHD)	T14	39 (*1)
		49 (LHD)				
E10	B	69 (RHD)	J17	50 (LHD)		59 (*10)
		49 (LHD)				
E11	C					

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	29 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
	32 (RHD)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
	36 (RHD)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Cruise Control (1GR-FE)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)	
	112 (RHD)		
IC3	88 (LHD)		
	112 (RHD)		
IC4	88 (LHD)		
	112 (RHD)		
IF1	90 (LHD)		Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)		
IJ1	92 (LHD)		Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)		
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)	
	116 (RHD)		
IM4	92 (LHD)		
IM5	92 (LHD)		
	116 (RHD)		

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	102 (*10)	
EU	78 (*1)	Rear Side of Right Bank Cylinder Block
	102 (*10)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

### ⊗ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

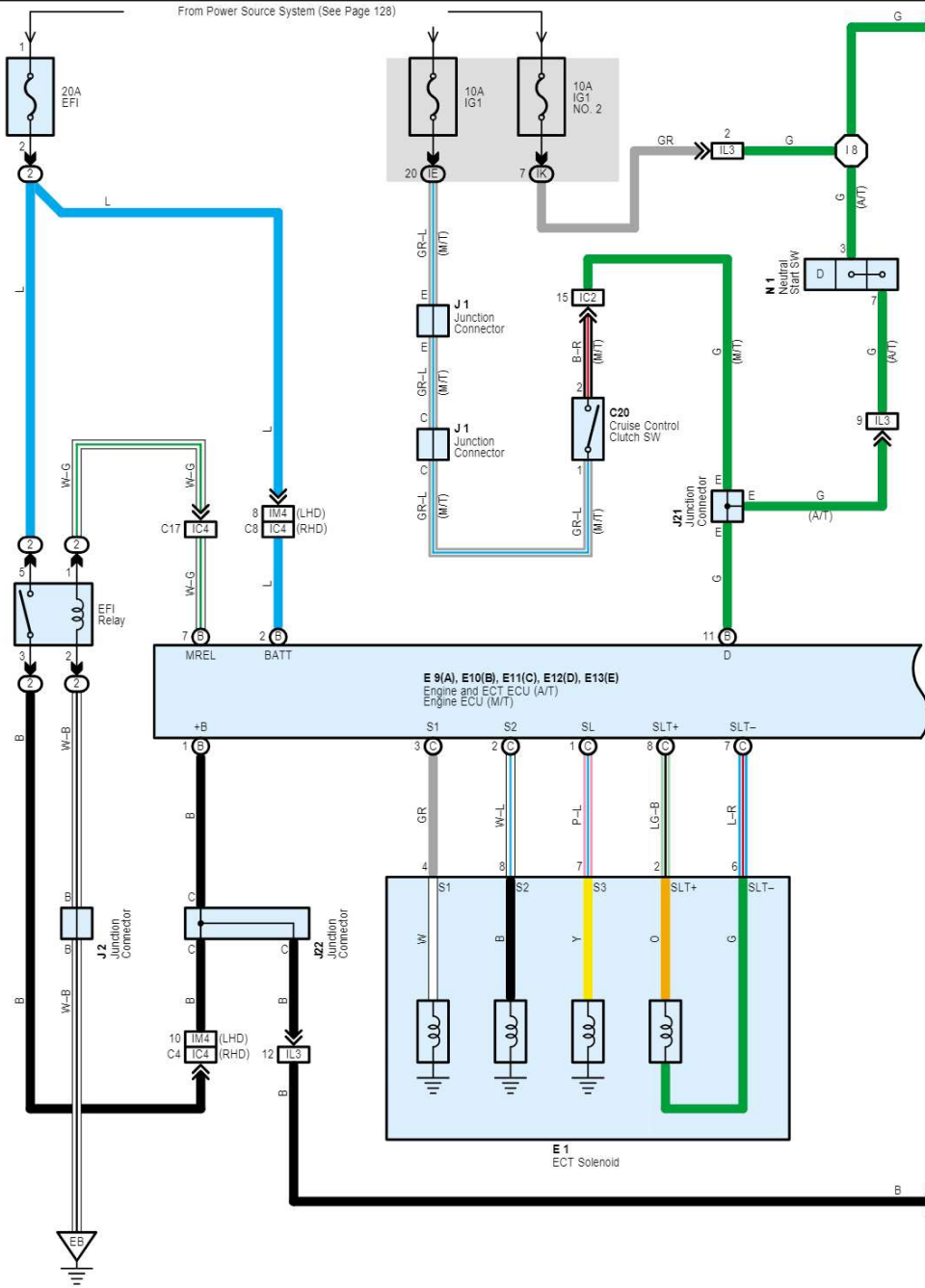
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

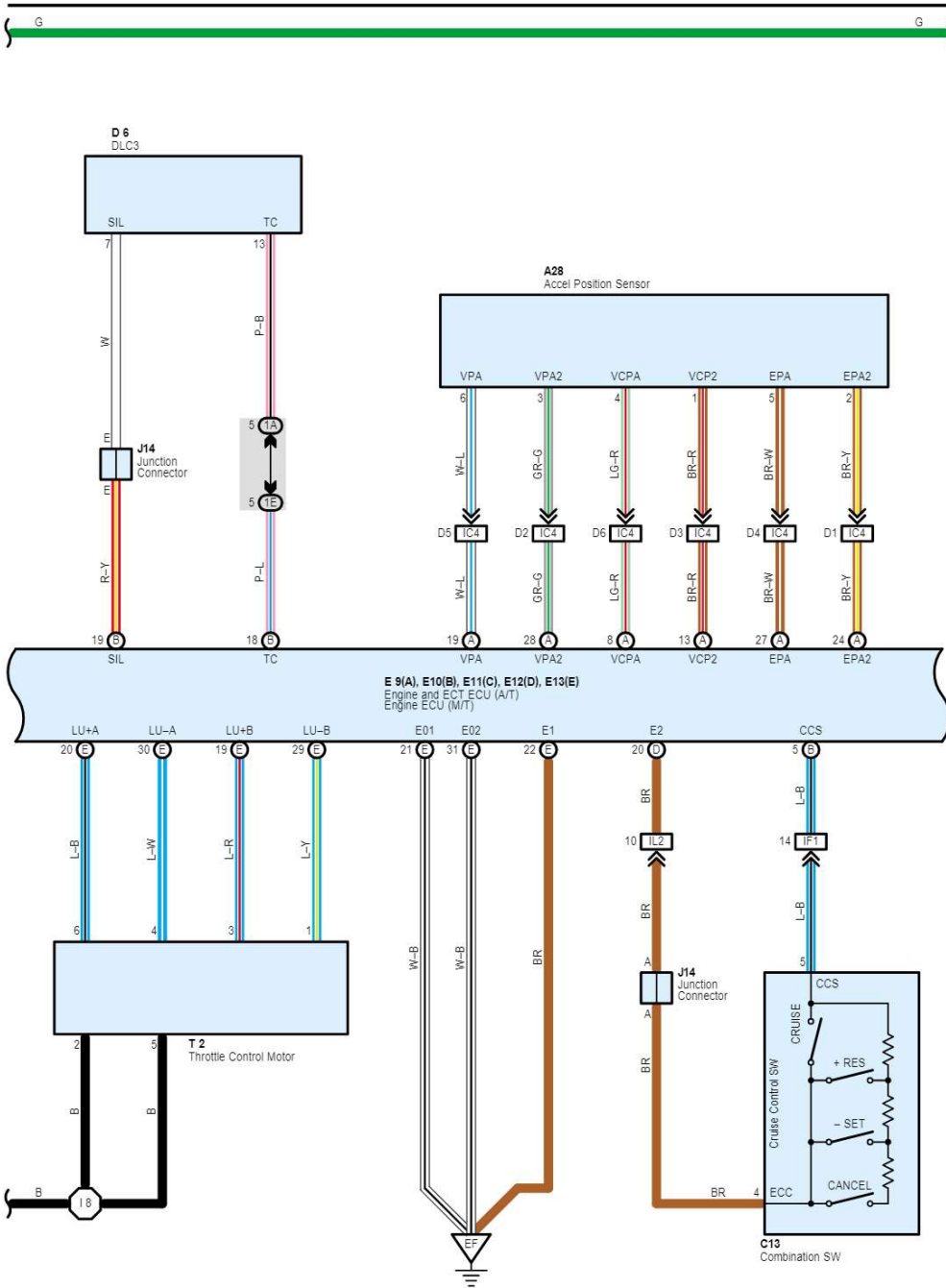
\* 18 : RHD Except 8Way Power Seat



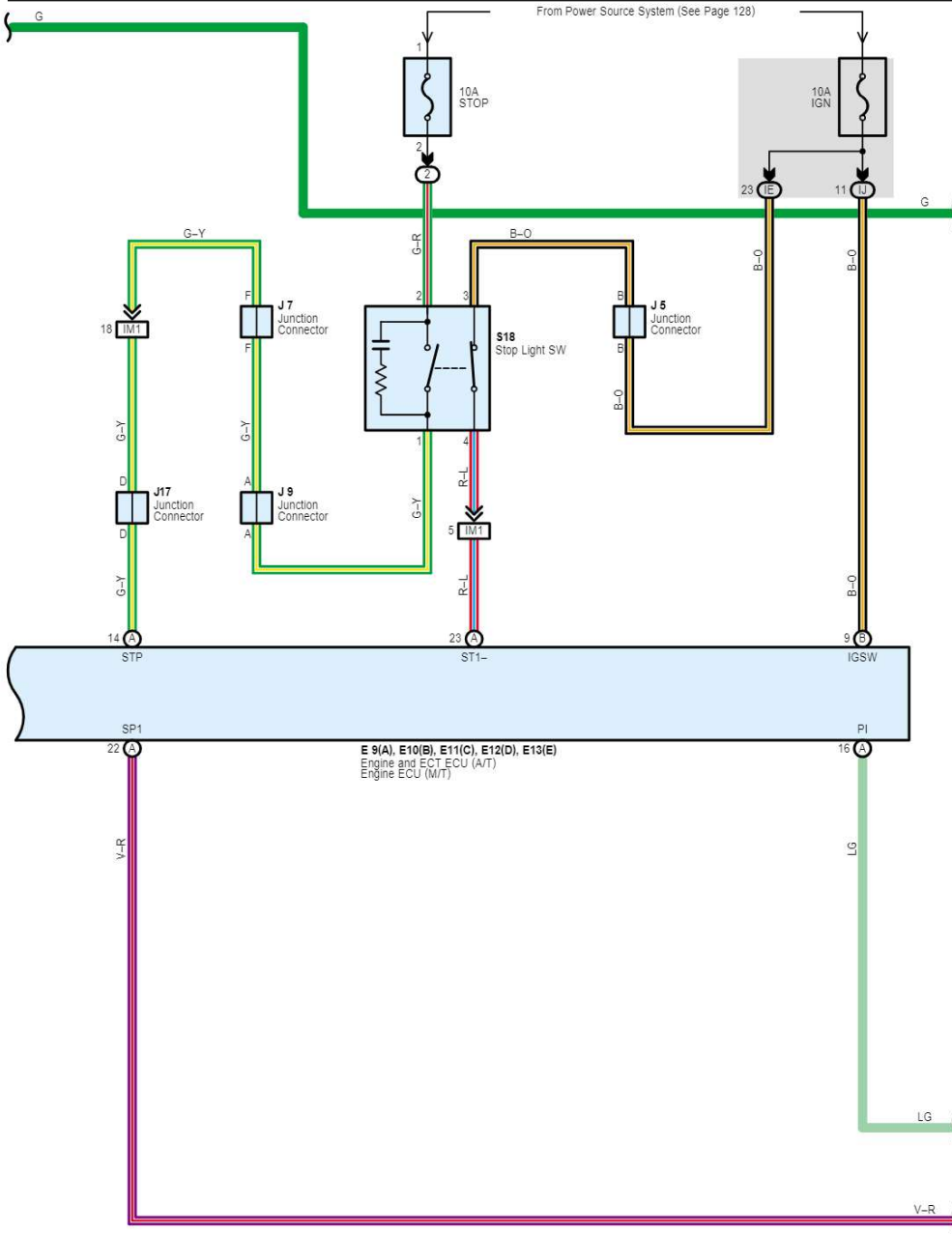


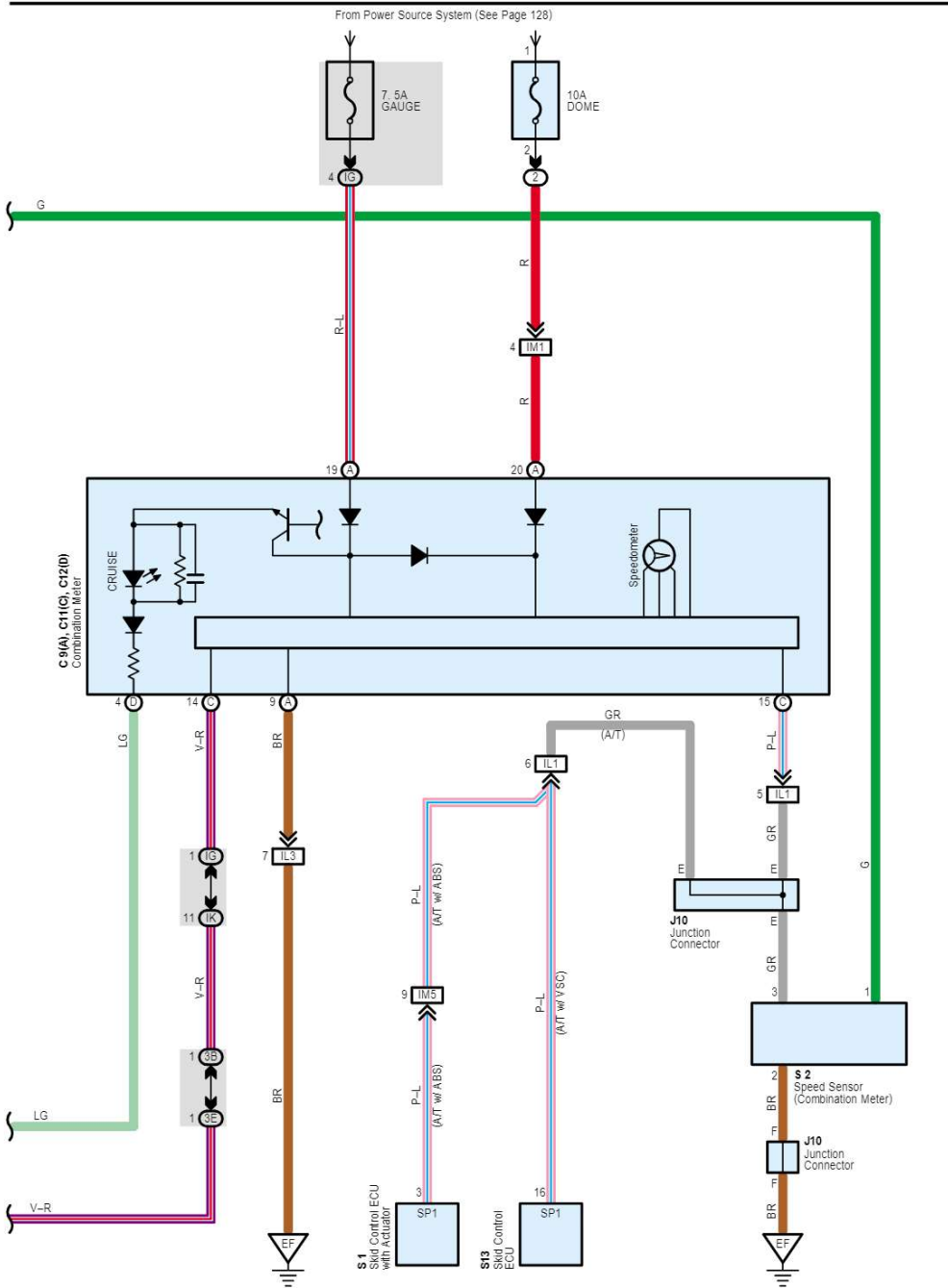
# Cruise Control (1KD-FTV)





# Cruise Control (1KD-FTV)





## Cruise Control (1KD-FTV)

### System Outline

Cruise control system is constant speed driving control in which fuel injection is controlled by switch operation at hand without stepping on the acceleration pedal when driving at constant speed is desired.

#### 1. Set Operation

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

#### 3. Coast Control

When - SET SW is continuously turned on, fuel injection is controlled for decreasing, which reduces the speed of vehicle. Every time the - SET SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.5 km/h.

#### 4. Accel Control

When + RES SW is continuously turned on, fuel injection is controlled for increasing, which accelerates the vehicle. Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.5 km/h.

#### 5. Resume Control

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

#### 6. Manual Cancel Mechanism

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

- \* The stop light SW is turned on.
- \* The CANCEL SW is turned on.
- \* The MAIN SW is turned off.
- \* The cruise control clutch SW is turn on (M/T)

#### 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.
- \* Fuel injection system abnormal

#### 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 minus 2 km/h, minus 1.2 mph) and it is decided that the slope is finished, the vehicle returns to the overdrive control mode again.

### Service Hints

#### E9 (A), E10 (B), E13 (E) Engine and ECT ECU (A/T), Engine ECU (M/T)

- (B) 9-Ground : Approx. 12 volts with ignition SW at ON position
- (B) 2-Ground : Always approx. 12 volts
- (E) 21, (E) 22, (E) 31-Ground : Always continuity
- (A) 14-Ground : Approx. 12 volts with brake pedal depressed
- (B) 5-Ground : Continuity with cruise control main SW at on
  - Approx. 1540  $\Omega$  with CANCEL SW on in cruise control SW
  - Approx. 240  $\Omega$  with + RES SW on in cruise control SW
  - Approx. 630  $\Omega$  with - SET SW on in cruise control SW

#### C13 Combination SW

- 5-4 : Approx. 1540  $\Omega$  with CANCEL SW on
- Approx. 240  $\Omega$  with + RES SW on
- Approx. 630  $\Omega$  with - SET SW on

: Parts Location

Code	See Page	Code	See Page	Code	See Page
A28	48 (LHD)	E11	C	J17	49 (LHD)
	68 (RHD)				69 (RHD)
C9	A	E12	D	J21	49 (LHD)
					69 (RHD)
C11	C	E13	E	J22	49 (LHD)
					69 (RHD)
C12	D	J1		N1	43 (*3)
					69 (RHD)
C13		J2		S1	43 (*3)
					69 (RHD)
C20		J5		S2	43 (*3)
					69 (RHD)
D6		J7		S13	50 (LHD)
					69 (RHD)
E1		J9		S18	50 (LHD)
					62 (*12)
E9	A	J10		T2	50 (LHD)
					69 (RHD)
E10	B	J14			50 (LHD)
					69 (RHD)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Cruise Control (1KD-FTV)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	82 (*3)	Front Left Fender
	106 (*12)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	

### ○ : Splice Points

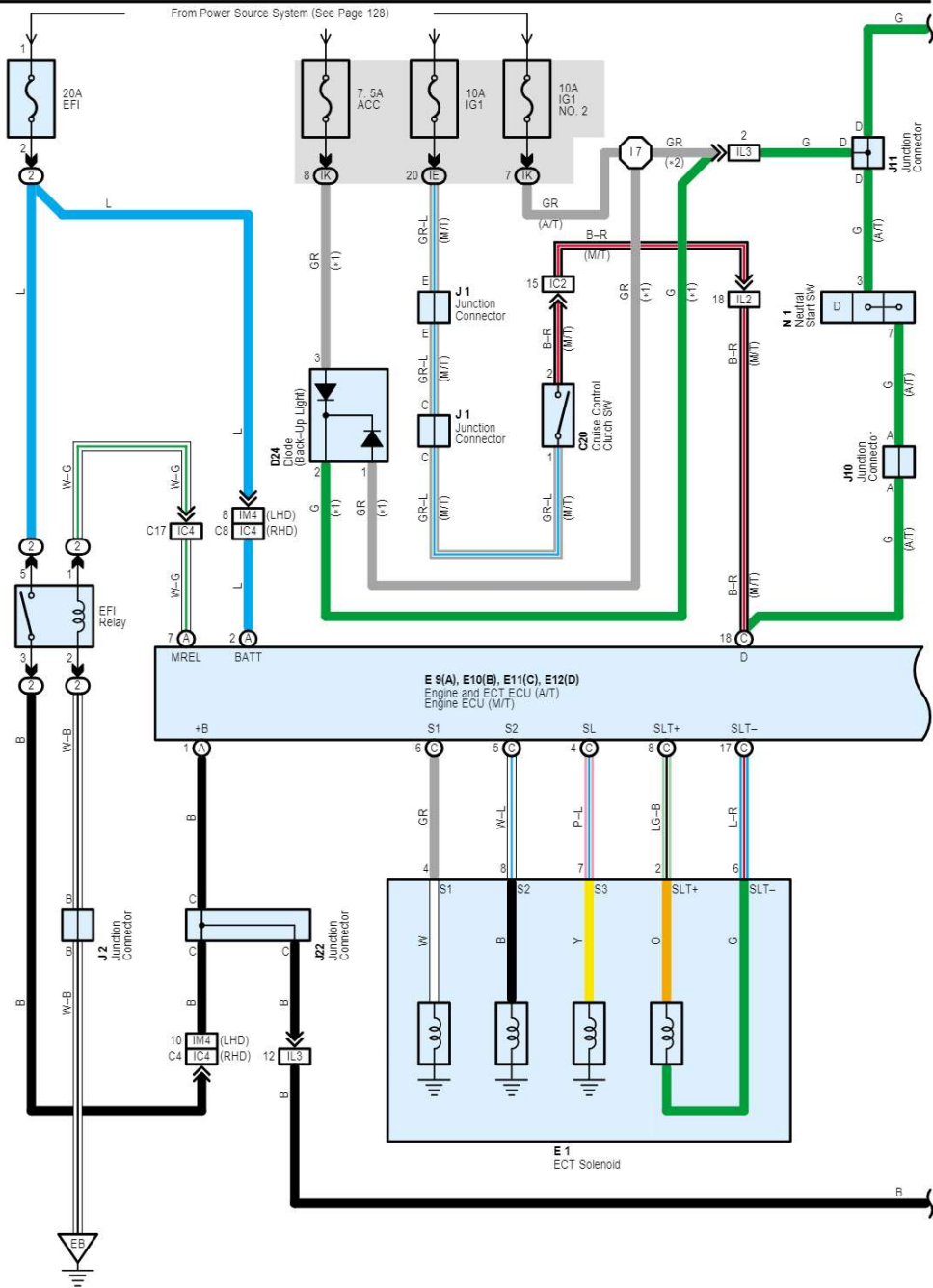
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I8	90 (LHD)	Engine Wire	I8	114 (RHD)	Engine Wire

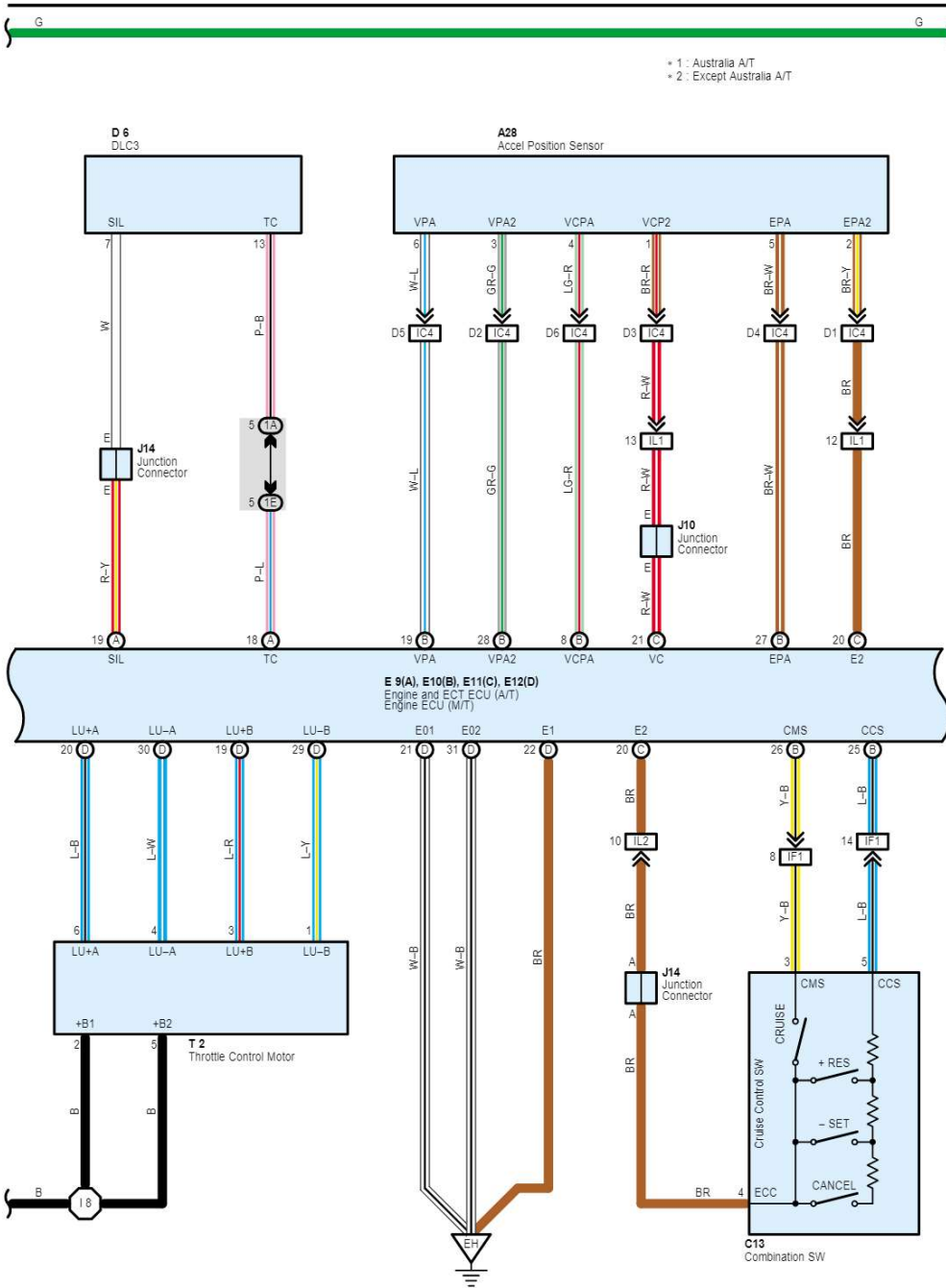
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



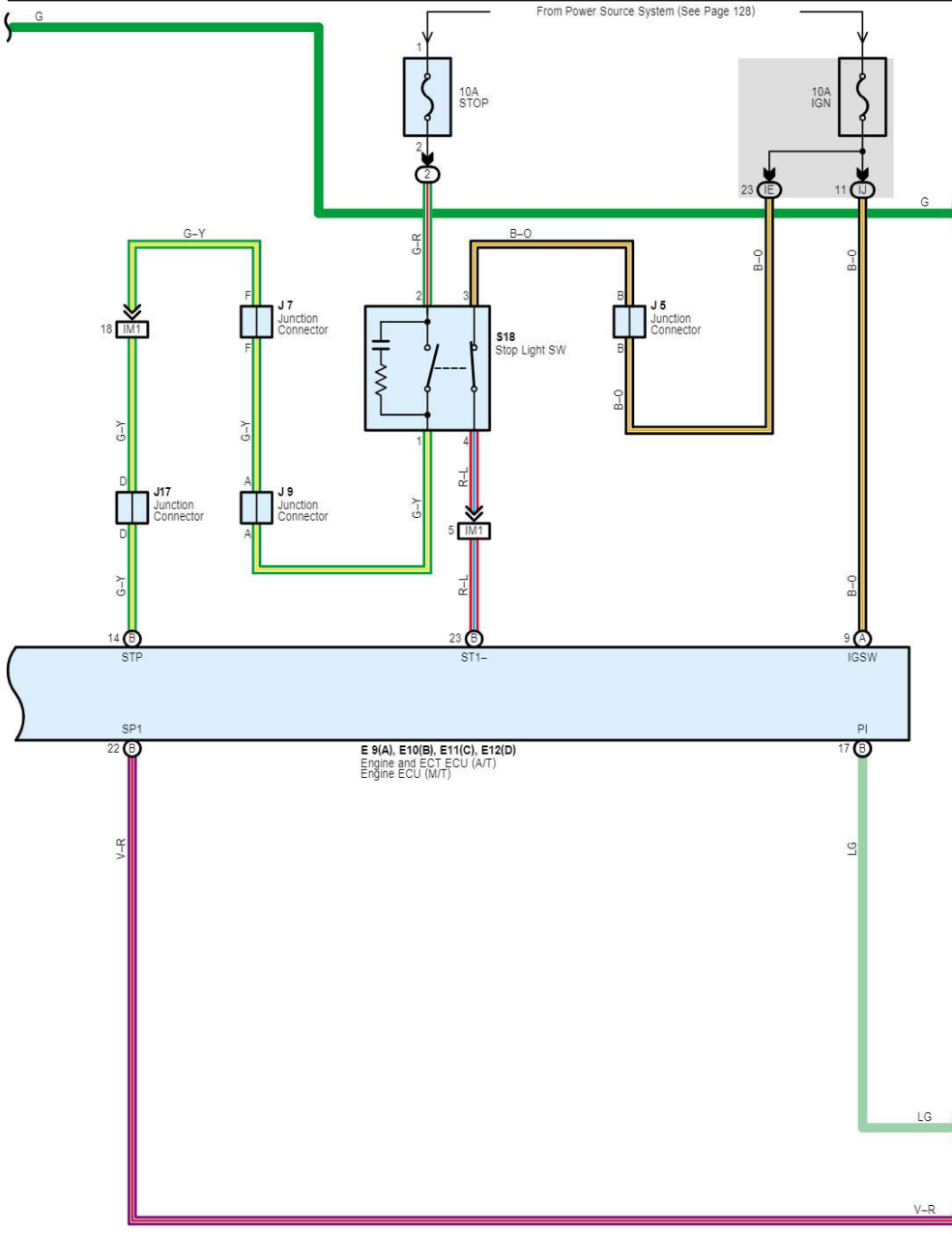


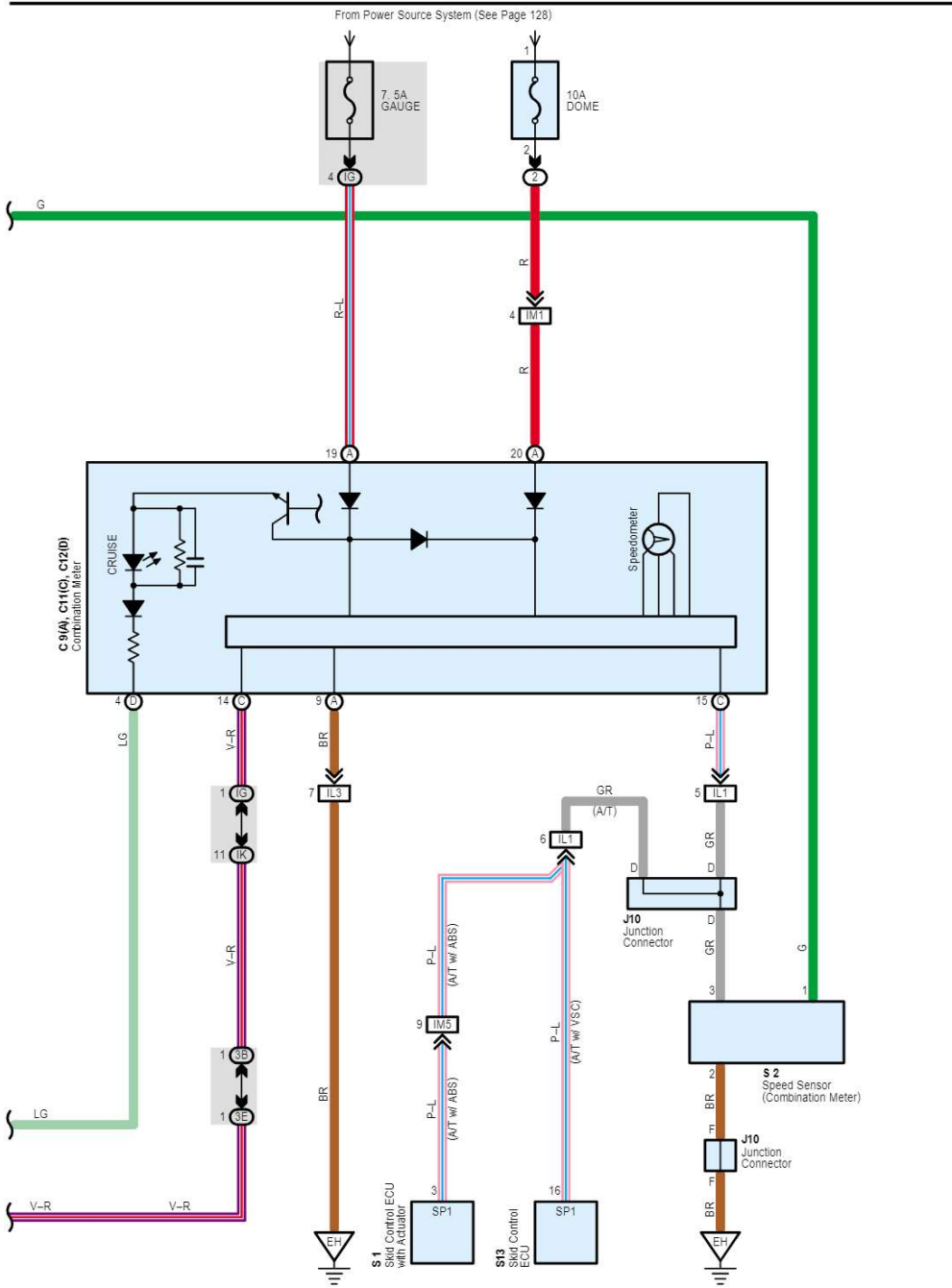
# Cruise Control (1KZ-TE)





# Cruise Control (1KZ-TE)





## Cruise Control (1KZ-TE)

### System Outline

Cruise control system is constant speed driving control in which fuel injection is controlled by switch operation at hand without stepping on the acceleration pedal when driving at constant speed is desired.

#### 1. Set Operation

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

#### 3. Coast Control

When - SET SW is continuously turned on, fuel injection is controlled for decreasing, which reduces the speed of vehicle. Every time the - SET SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.5 km/h.

#### 4. Accel Control

When + RES SW is continuously turned on, fuel injection is controlled for increasing, which accelerates the vehicle. Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.5 km/h.

#### 5. Resume Control

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

#### 6. Manual Cancel Mechanism

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

- \* The stop light SW is turned on.
- \* The CANCEL SW is turned on.
- \* The MAIN SW is turned off.
- \* The cruise control clutch SW is turn on (M/T)

#### 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.
- \* Fuel injection system abnormal

#### 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 minus 2 km/h, minus 1.2 mph) and it is decided that the slope is finished, the vehicle returns to the overdrive control mode again.

### Service Hints

#### E9 (A), E10 (B), E12 (D) Engine and ECT ECU (A/T), Engine ECU (M/T)

- (A) 9-Ground : Approx. 12 volts with ignition SW at ON position
- (A) 2-Ground : Always approx. 12 volts
- (D) 21, (D) 22, (D) 31-Ground : Always continuity
- (B) 14-Ground : Approx. 12 volts with brake pedal depressed
- (B) 26-Ground : Approx. 12 volts with cruise control main SW on
- (B) 25-Ground : Approx. 1540  $\Omega$  with CANCEL SW on in cruise control SW
  - Approx. 240  $\Omega$  with + RES SW on in cruise control SW
  - Approx. 630  $\Omega$  with - SET SW on in cruise control SW

#### C13 Combination SW

- 5-4 : Approx. 1540  $\Omega$  with CANCEL SW on
  - Approx. 240  $\Omega$  with + RES SW on
  - Approx. 630  $\Omega$  with - SET SW on
- 3-4 : Continuity with cruise control main SW at on

: Parts Location

Code	See Page	Code	See Page	Code	See Page	
A28	48 (LHD)	E10	B	49 (LHD)	J11	70 (RHD)
	68 (RHD)					69 (RHD)
C9	A	E11	C	49 (LHD)	J17	70 (RHD)
						69 (RHD)
C11	C	E12	D	49 (LHD)	J22	70 (RHD)
						69 (RHD)
C12	D	J1		45 (*4)	N1	70 (RHD)
						69 (RHD)
C13		J2		45 (*4)	S1	65 (*13)
						69 (RHD)
C20		J5		45 (*4)	S2	65 (*13)
						69 (RHD)
D6		J7		50 (LHD)	S13	65 (*13)
						69 (RHD)
D24		J9		50 (LHD)	S18	71 (RHD)
						69 (RHD)
E1		J10		50 (LHD)	T2	71 (RHD)
						44 (*4)
E9	A	J11		50 (LHD)		65 (*13)
						64 (*13)

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Cruise Control (1KZ-TE)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EB	84 (*4)	Front Left Fender
	108 (*13)	
EH	84 (*4)	Rear Part of Cylinder Block
	108 (*13)	

### ○ : Splice Points

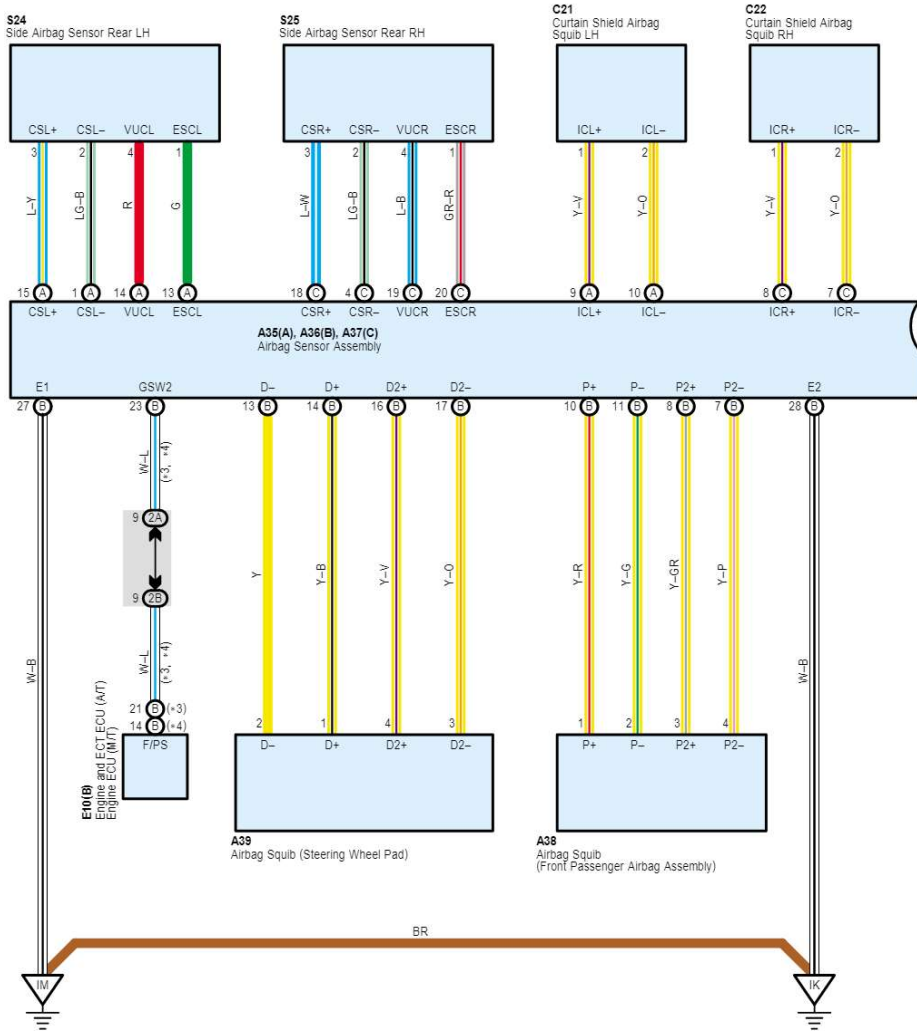
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



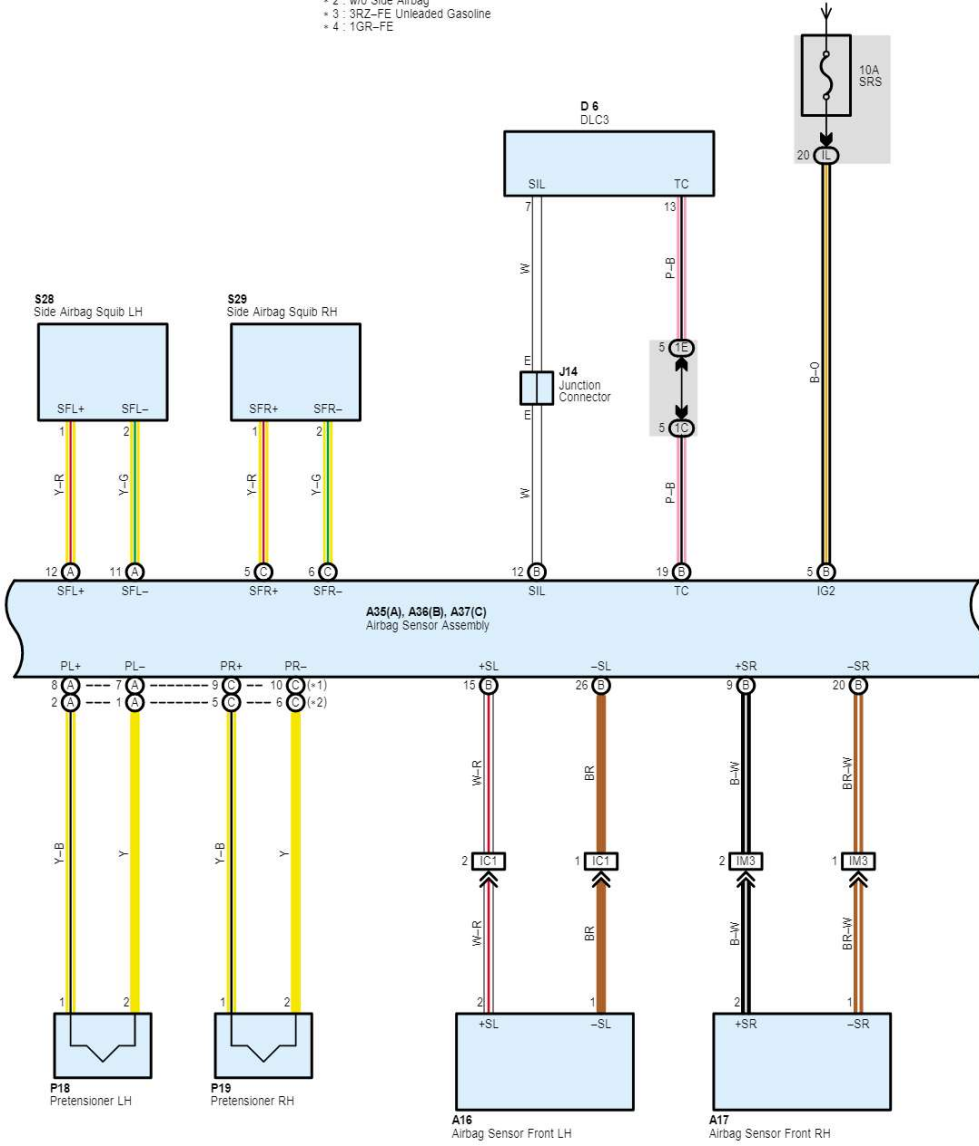
NOTICE: When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual for the applicable model year.

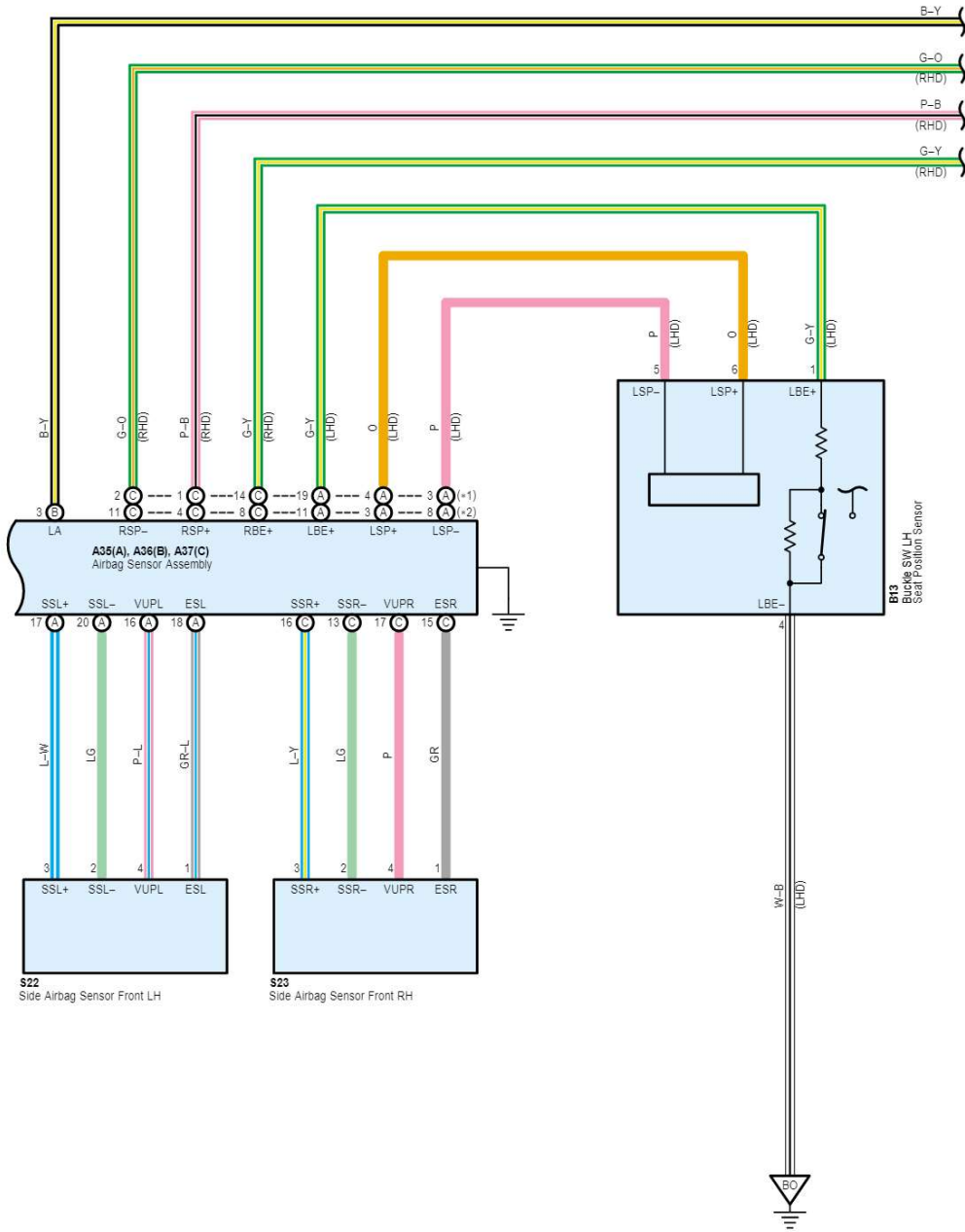
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started after 90 seconds from when the ignition switch is turned to the "LOCK" position and the negative (-) terminal cable is disconnected from the battery.**  
**(The SRS is equipped with a back-up power source so that if work is started within 90 seconds from disconnecting the negative (-) terminal cable of the battery, the SRS may be deployed.)**
- When the negative (-) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. This vehicle has power tilt and power telescopic steering, power seat and power outside rear view mirror which are all equipped with memory function. However, it is not possible to make a record of the memory contents. So when the work is finished, it will be necessary to explain this fact 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, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly directly to hot air or flames.
- Even in cases of a minor collision where the SRS does not deploy, the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly and side airbag sensor assembly should be inspected.
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly in order to reuse it.
- If the steering wheel pad, front passenger airbag assembly, side airbag assembly, curtain shield airbag assembly, seat belt pretensioner, front airbag sensor assembly, airbag sensor assembly or side airbag sensor assembly has been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace them with new ones.
- Use a volt/ohmmeter with high impedance (10 k $\Omega$ /V minimum) for troubleshooting the system's electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- After work on the SRS is completed, perform the SRS warning light check.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.

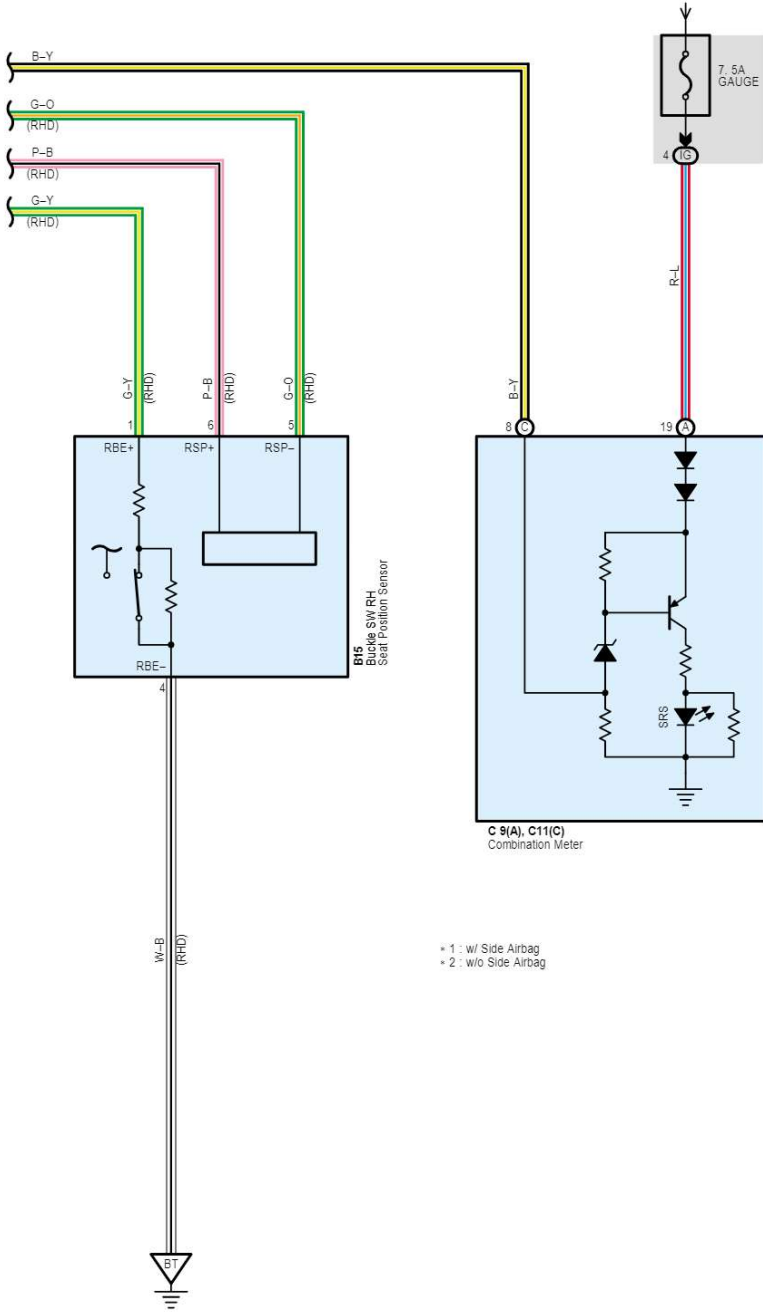


- \* 1 : w/ Side Airbag
- \* 2 : w/o Side Airbag
- \* 3 : 3RZ-FE Unleaded Gasoline
- \* 4 : 1GR-FE

From Power Source System (See Page 128)







- 1 : w/ Side Airbag
- 2 : w/o Side Airbag

**System Outline**

The SRS is a driver and front passenger protection device which has a supplemental role to the seat belts.  
 When the ignition SW is turned to ON, the current from the SRS fuse flows to TERMINAL (C) 5 of the airbag sensor assembly.  
 If an accident occurs while driving, when the frontal impact exceeds a set level, the current from the SRS fuse flows to TERMINALS (B) 14, (B) 16, (B) 10, (B) 8, (A) 8 (w/ side airbag) or (A) 2 (w/o side airbag) and (C) 9 (w/ side airbag) or (C) 5 (w/o side airbag) of the airbag sensor assembly to the airbag squibs and the pretensioners to TERMINALS (B) 13, (B) 17, (B) 11, (B) 7, (B) 7 (w/ side airbag) or (A) 1 (w/o side airbag) and (C) 10 (w/ side airbag) or (C) 6 (w/o side airbag) of the airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, so that current flows to the airbag squibs and the pretensioners and causes them to operate.  
 When the side impact also exceeds a set level, the current from the SRS fuse flows to TERMINALS (A) 12, (C) 5, (A) 9 and (D) 8 of the airbag sensor assembly to the side airbag squibs and the curtain shield airbag squibs TERMINALS (A) 11, (D) 6, (A) 10 and (C) 7 of the airbag sensor assembly to TERMINAL (B) 27, (B) 28 or BODY GROUND to GROUND, causing side airbag squibs and curtain shield airbag squibs to operate.  
 The airbag stored inside the steering wheel pad is instantaneously expanded to soften the shock to the driver.  
 The airbag stored inside the passenger's instrument panel is instantaneously expanded to soften the shock to the front passenger.  
 Side airbags are instantaneously expanded to soften the shock of side to the driver and front passenger.  
 The curtain shield airbag can ease an impact on the head of the front and rear passengers and reduce risks of injury.  
 The pretensioners make sure of the seat belt restrainability.

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A16	38 (*1)	A39	48 (LHD)	P19	53 (*6)	
	40 (*2)		68 (RHD)		55 (*7)	
	42 (*3)	B13	56 (*8)		73 (*15)	
	44 (*4)		57 (*9)	75 (*16)		
	46 (*5)	B15	76 (*17)	S22	53 (*6)	
	58 (*10)		77 (*18)		55 (*7)	
	60 (*11)	C9	A	49 (LHD)	73 (*15)	
	62 (*12)			69 (RHD)	75 (*16)	
	64 (*13)	C11	C	49 (LHD)	S23	53 (*6)
	66 (*14)			69 (RHD)		55 (*7)
A17	38 (*1)	C21	52 (*6)	S24	73 (*15)	
	40 (*2)		54 (*7)		75 (*16)	
	42 (*3)		72 (*15)	53 (*6)		
	44 (*4)		74 (*16)	55 (*7)		
	46 (*5)	C22	52 (*6)	S25	73 (*15)	
	58 (*10)		54 (*7)		75 (*16)	
	60 (*11)		72 (*15)	53 (*6)		
	62 (*12)		74 (*16)	55 (*7)		
	64 (*13)	D6	49 (LHD)	S28	73 (*15)	
	66 (*14)		69 (RHD)		75 (*16)	
A35	A	E10	B	S28	56 (*8)	
					48 (LHD)	69 (RHD)
A36	B	J14	50 (LHD)		76 (*17)	
			68 (RHD)		70 (RHD)	77 (*18)
A37	C	P18	53 (*6)		S29	56 (*8)
			48 (LHD)			55 (*7)
A38	C		73 (*15)	76 (*17)		
			68 (RHD)	75 (*16)		77 (*18)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Junction Block and Wire Harness Connector

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

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IM3	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

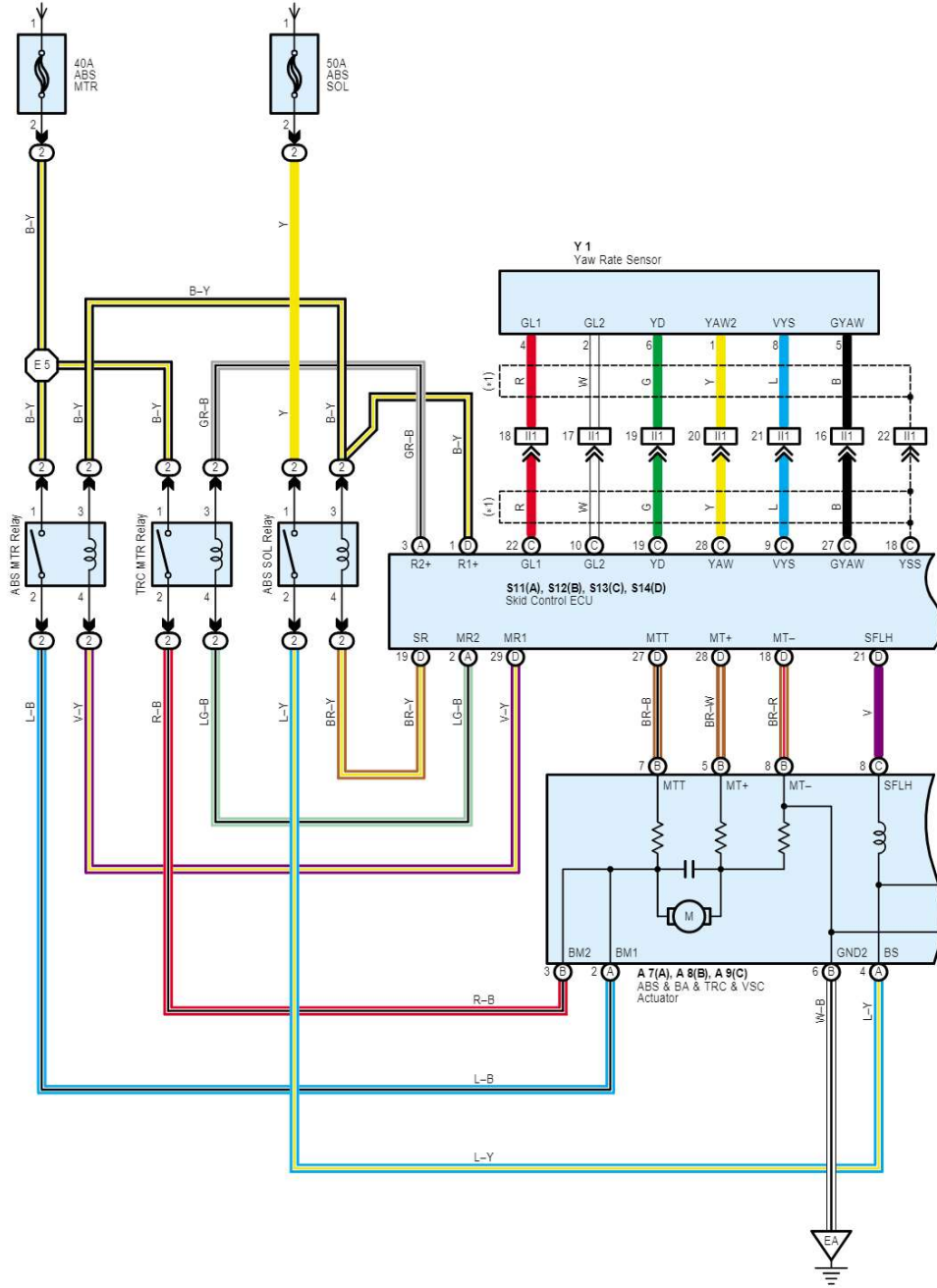
 : Ground Points

Code	See Page	Ground Points Location
IK	88 (LHD)	Near the Left Side of Steering Column
	112 (RHD)	Near the Right Side of Steering Column
IM	88 (LHD)	Instrument Panel Brace LH
	112 (RHD)	Instrument Panel Brace RH
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
BT	120 (*15)	Right Quarter Panel Inner
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

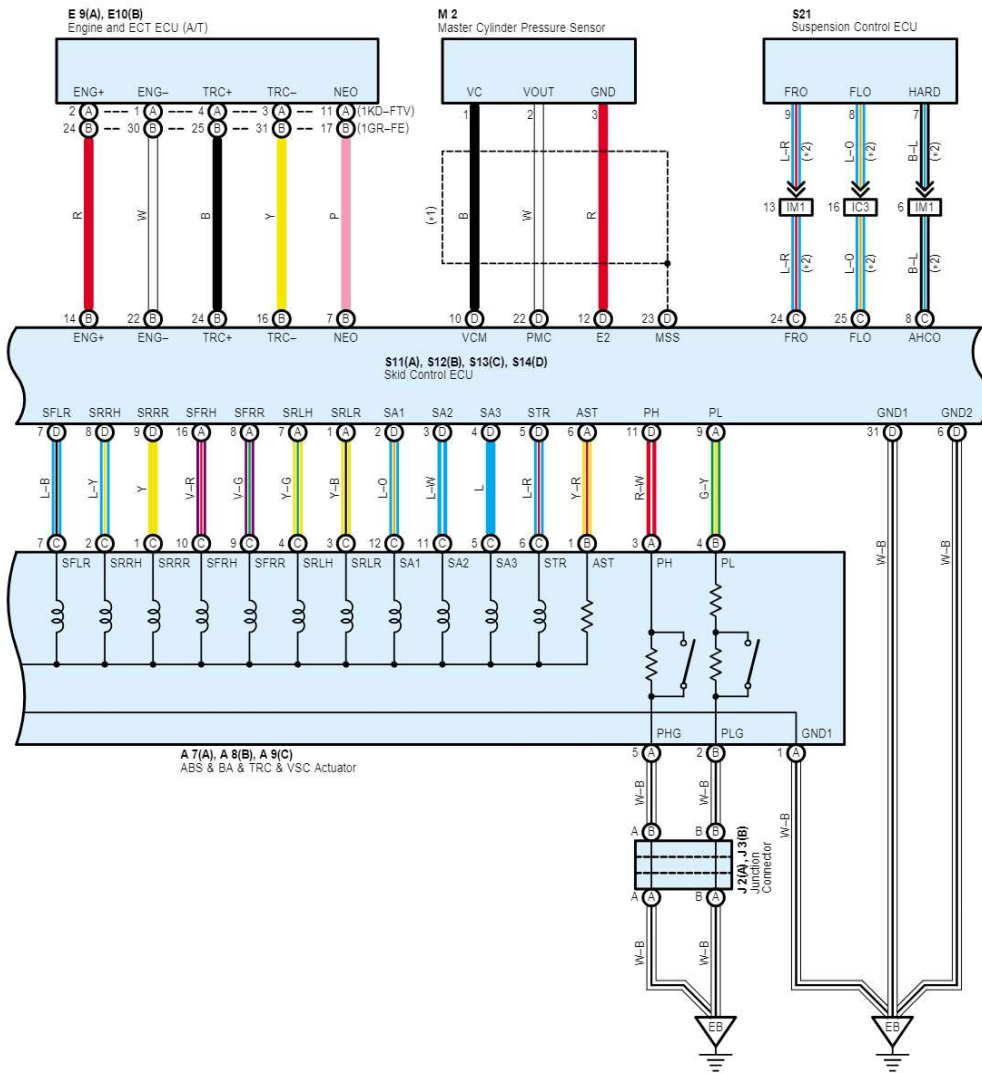
# VSC (LHD A/T)

From Power Source System (See Page 128)



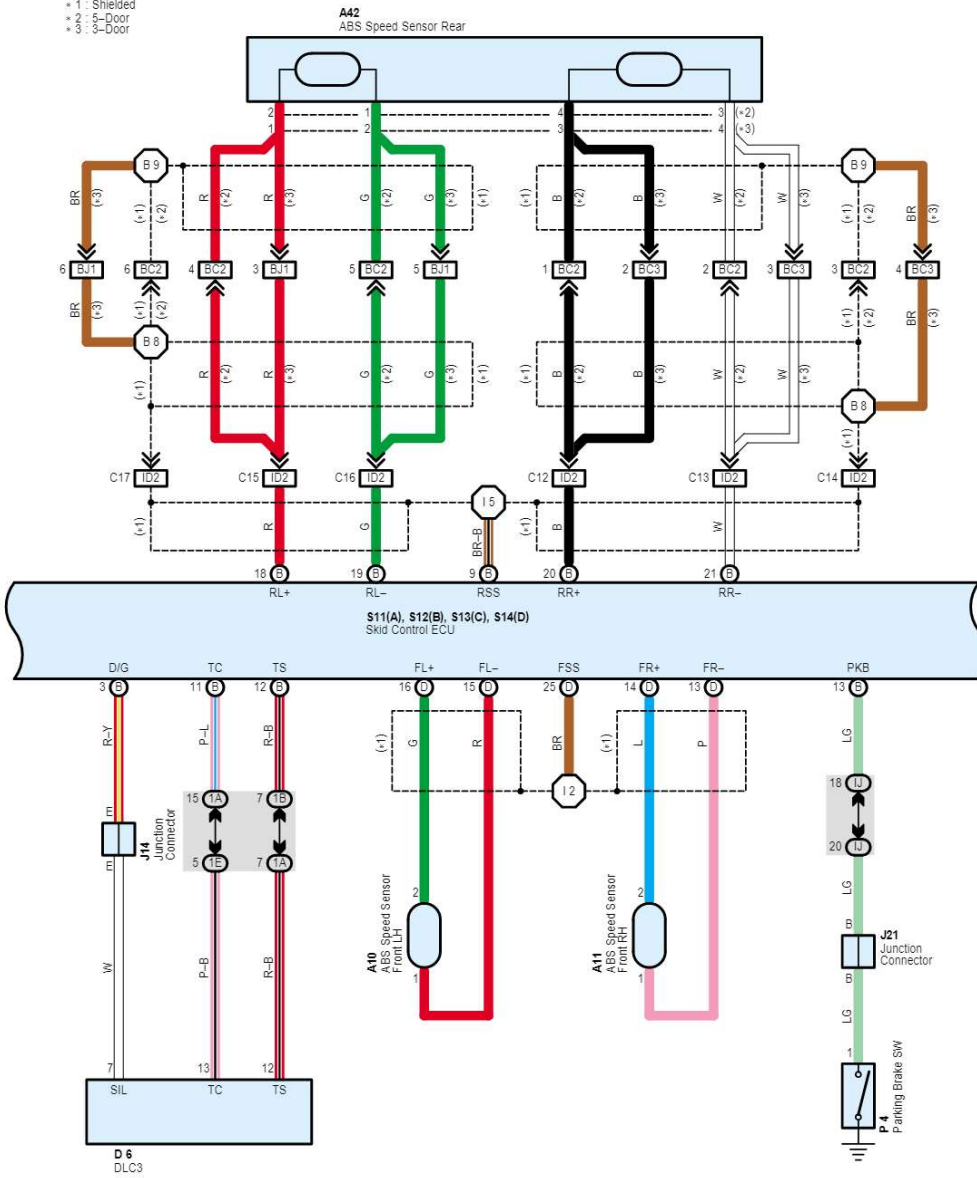


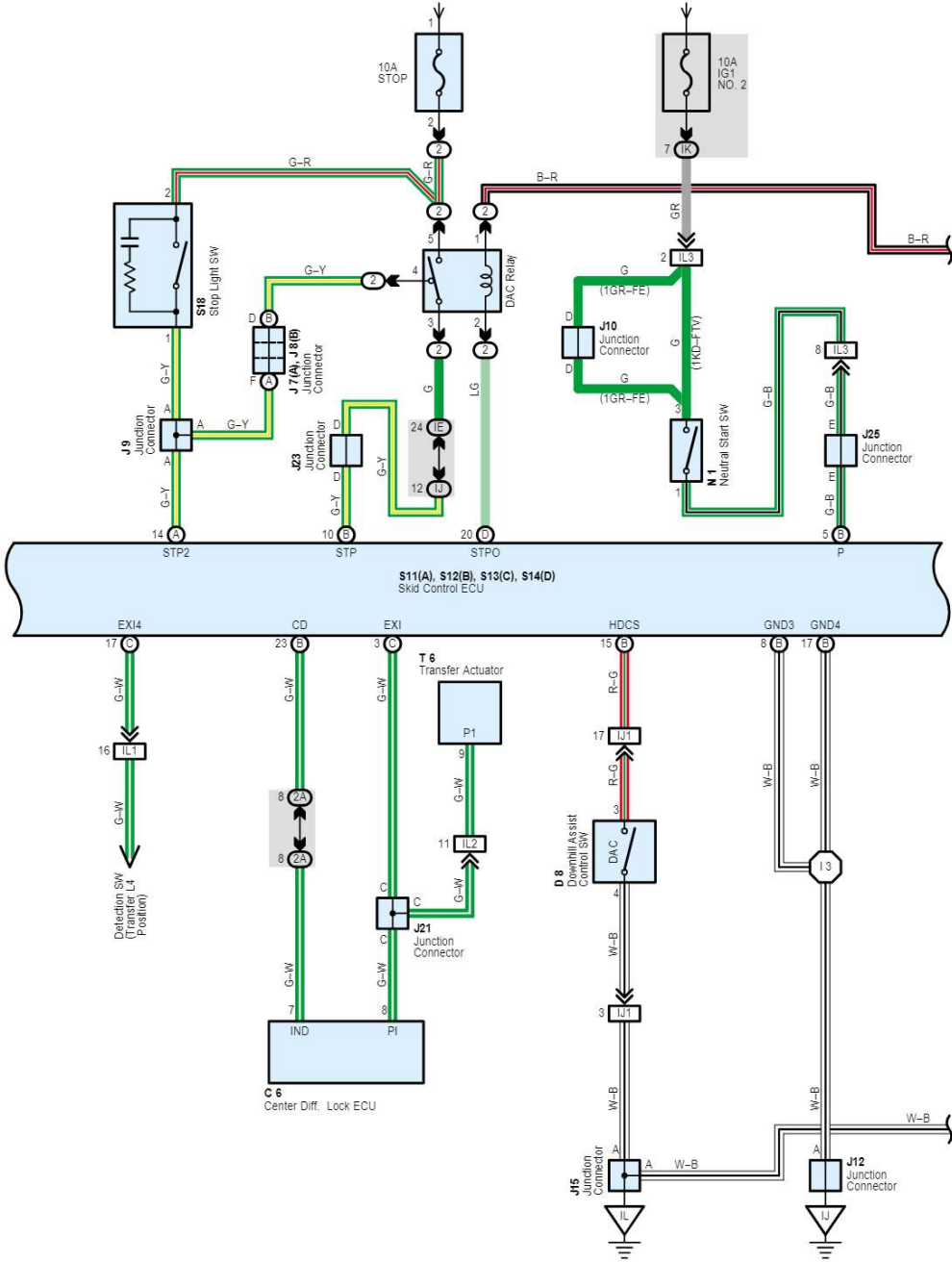
\* 1 : Shielded  
 \* 2 : 5-Door



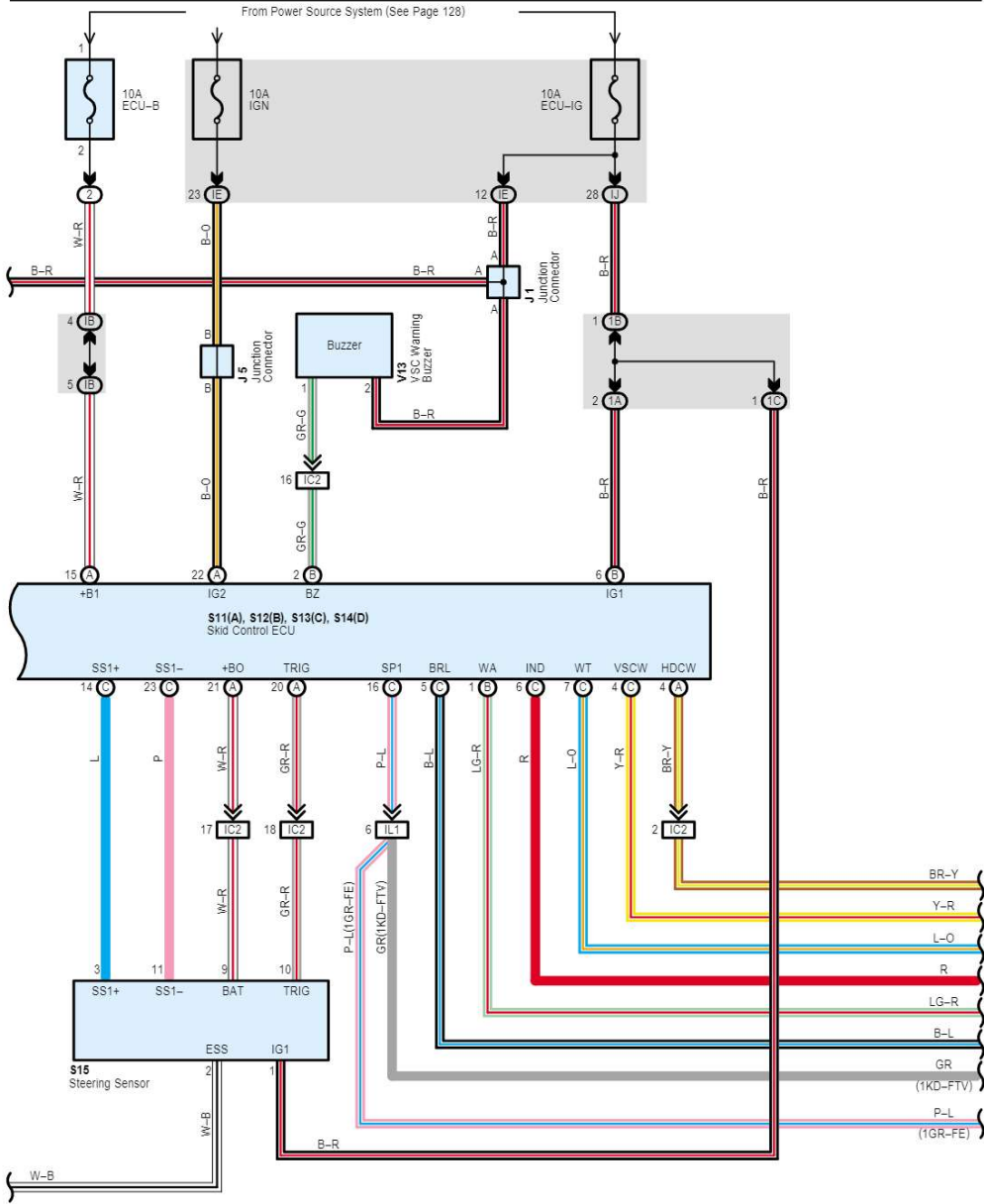
# VSC (LHD A/T)

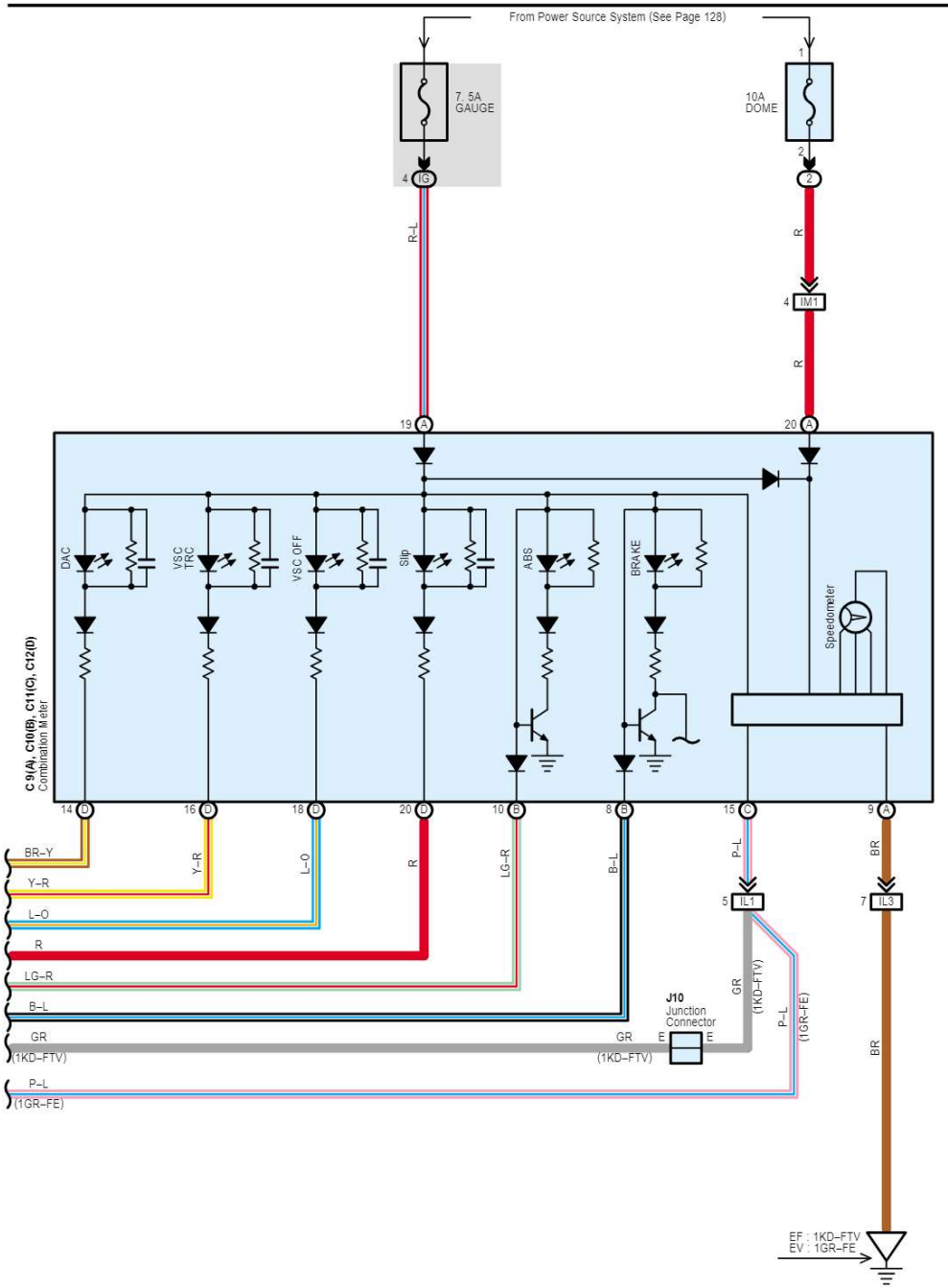
- \* 1 - Shielded
- \* 2 - Door
- \* 3 - Door





# VSC (LHD A/T)





### System Outline

#### 1. Normal Operation

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

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

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

#### 2. Downhill Assist Control Operation

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

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

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

#### 3. Hill-Start Support Control Operation

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

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

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

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

### Service Hints

#### S11 (A), S12 (B), S14 (D) Skid Control ECU

(D) 6, (D) 31, (B) 8, (B) 17-Ground : Always continuity

(B) 6, (A) 22-Ground : Approx. 12 volts with the ignition SW at ON position

(A) 15-Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	A	38 (*1)	E9	A	49 (LHD)
		42 (*3)	E10	B	49 (LHD)
A8	B	38 (*1)	J1		39 (*1)
		42 (*3)			43 (*3)
A9	C	38 (*1)	J2	A	39 (*1)
		42 (*3)			43 (*3)
A10		38 (*1)	J3	B	39 (*1)
		42 (*3)			43 (*3)
A11		38 (*1)	J5		39 (*1)
		42 (*3)			43 (*3)
A42		52 (*6)	J7	A	50 (LHD)
		54 (*7)	J8	B	50 (LHD)
C6		49 (LHD)	J9		50 (LHD)
C9	A	49 (LHD)	J10		50 (LHD)
C10	B	49 (LHD)	J12		50 (LHD)
C11	C	49 (LHD)	J14		50 (LHD)
C12	D	49 (LHD)	J15		50 (LHD)
D6		49 (LHD)	J21		50 (LHD)
D8		49 (LHD)	J23		50 (LHD)
				J25	50 (LHD)
				M2	39 (*1)
				N1	39 (*1)
				P4	43 (*3)
				S11	A 51 (LHD)
				S12	B 51 (LHD)
				S13	C 51 (LHD)
				S14	D 51 (LHD)
				S15	51 (LHD)
				S18	51 (LHD)
				S21	51 (LHD)
				T6	39 (*1)
				V13	43 (*3)
				Y1	51 (LHD)

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

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

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## VSC (LHD A/T)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2 IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
II1	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IJ1 IL1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IL2 IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
BC2 BC3	96 (*6)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BJ1	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1) 82 (*3)	Front Right Fender
EB	78 (*1) 82 (*3)	Front Left Fender
EF	82 (*3)	Rear Part of Cylinder Block
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
IJ	88 (LHD)	Left Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column

### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	78 (*1)	Engine Room Main Wire	I5	90 (LHD)	Instrument Panel Wire
	82 (*3)		B8	100 (*7)	Floor No.2 Wire
I2	90 (LHD)	Instrument Panel Wire	B9	100 (*7)	Frame Wire
I3	90 (LHD)				

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

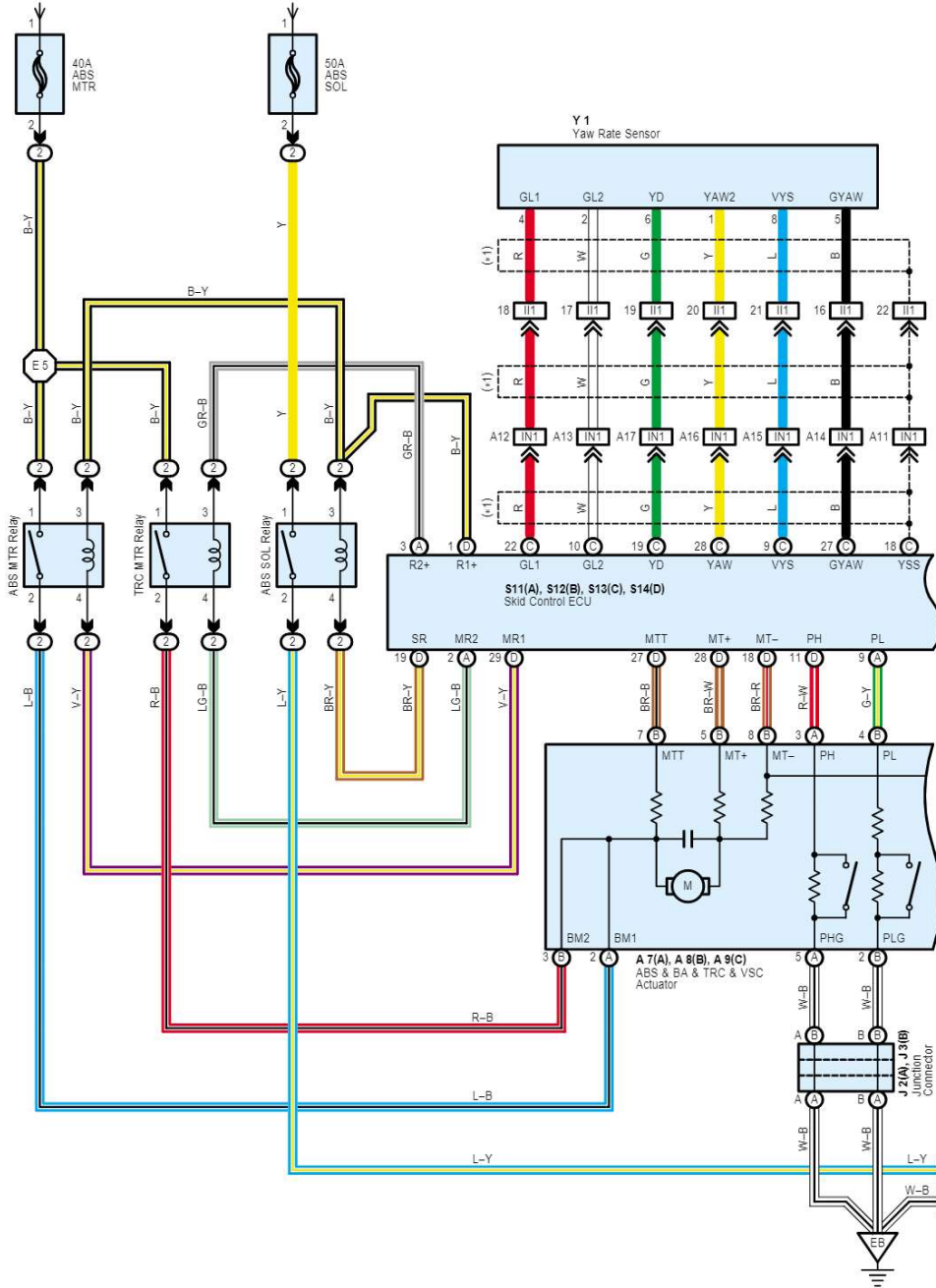


551

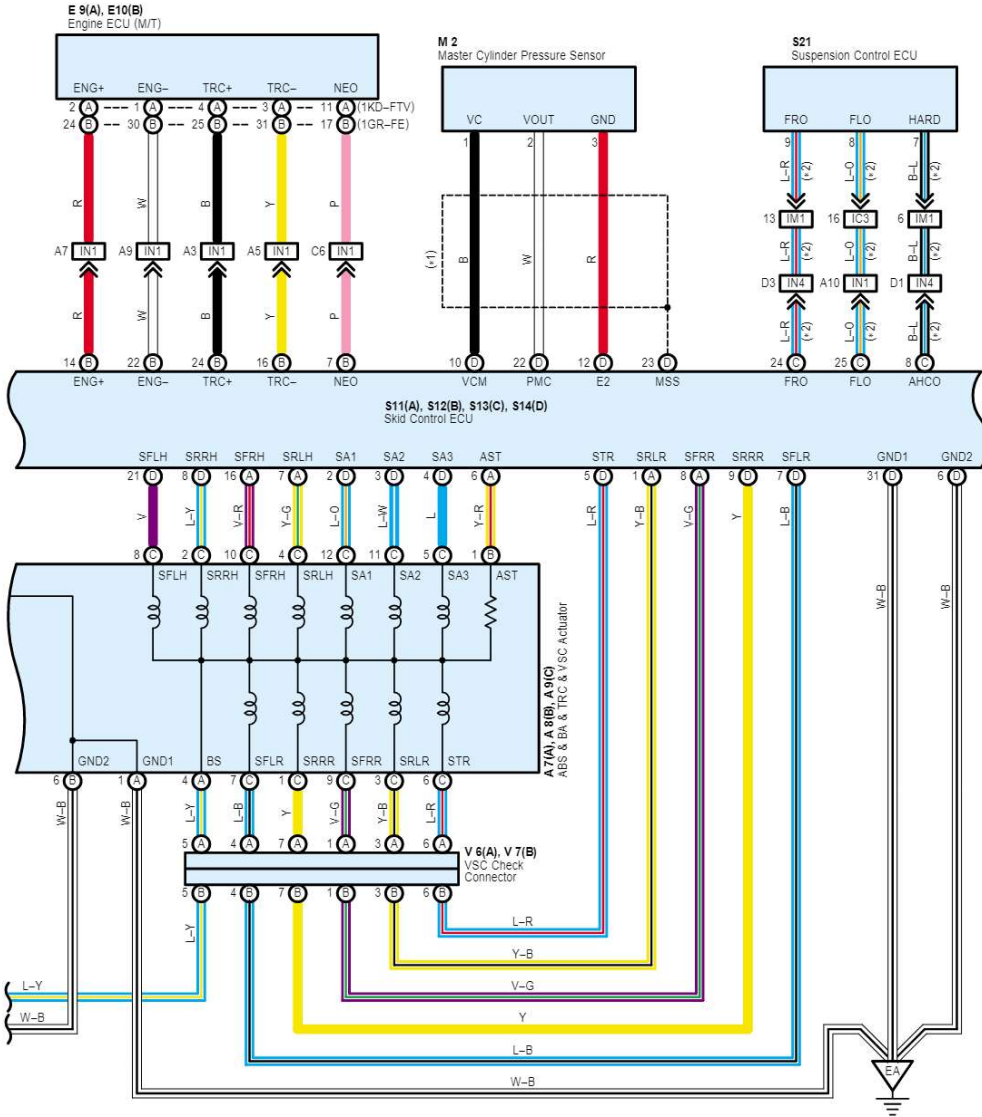
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# VSC (LHD M/T)

From Power Source System (See Page 128)

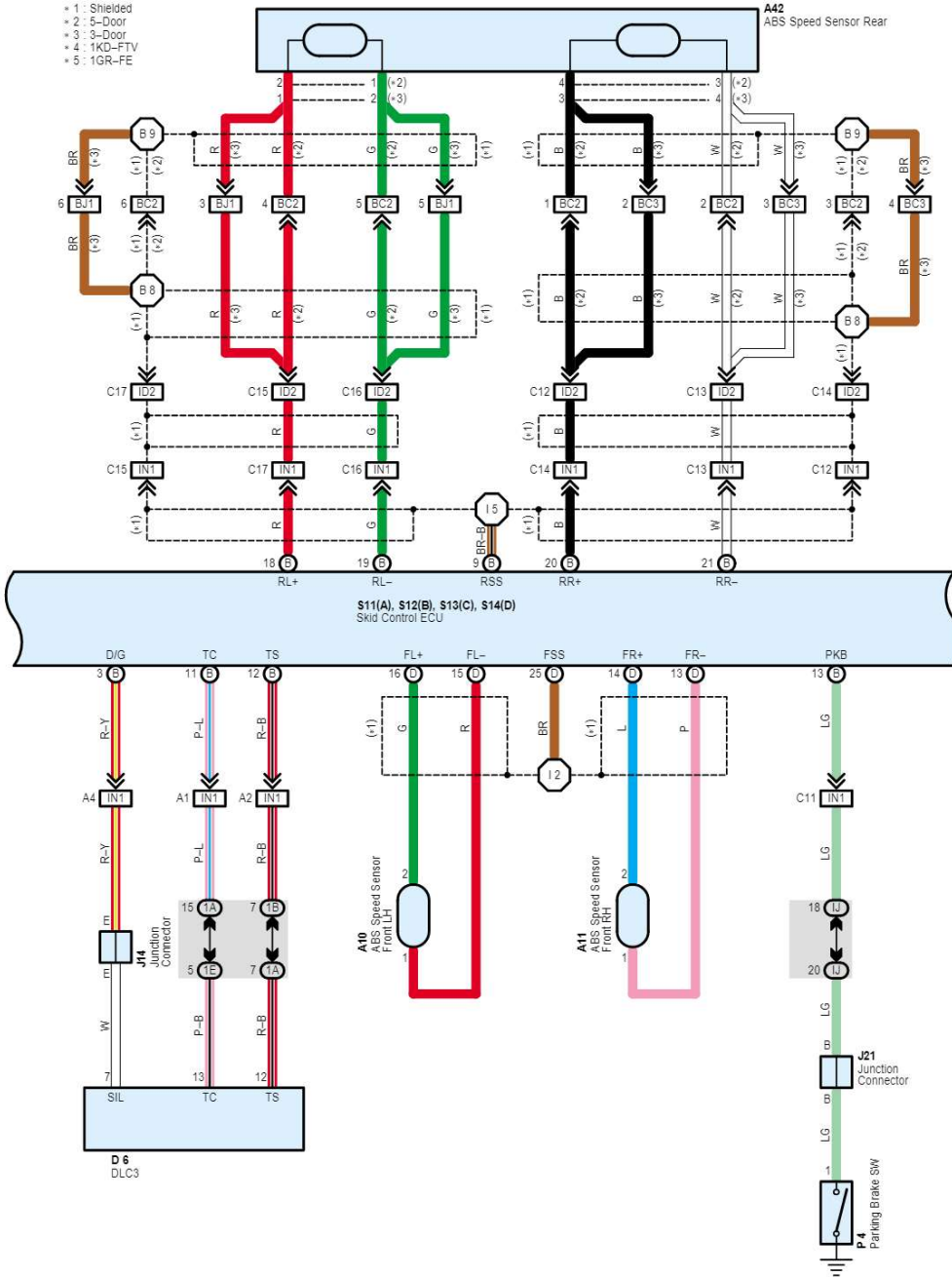


\* 1 : Shielded  
 \* 2 : 5-Door

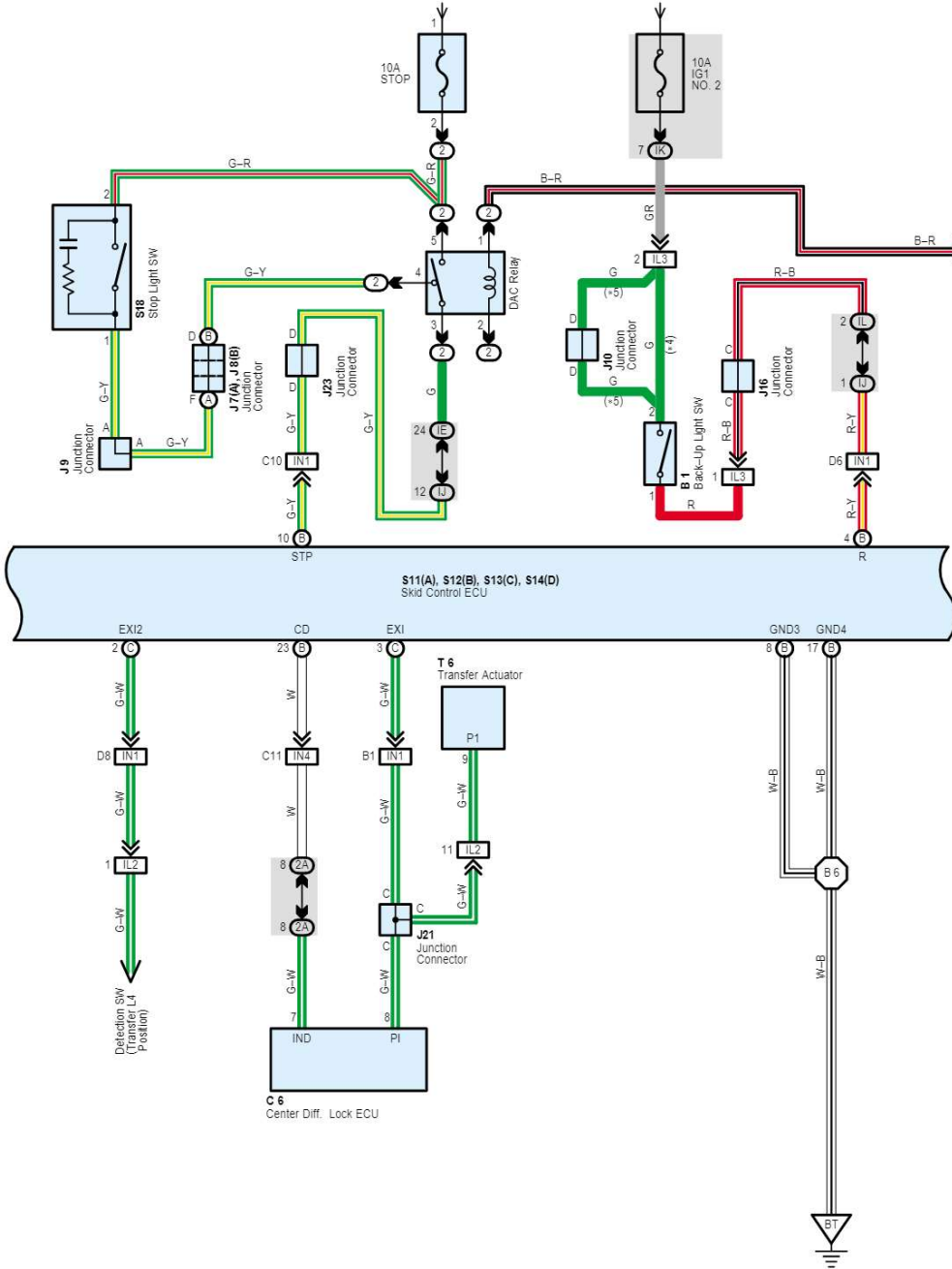


# VSC (LHD M/T)

- \* 1: Shielded
- \* 2: 5-Door
- \* 3: 3-Door
- \* 4: 1KD-FTV
- \* 5: 1GR-FE



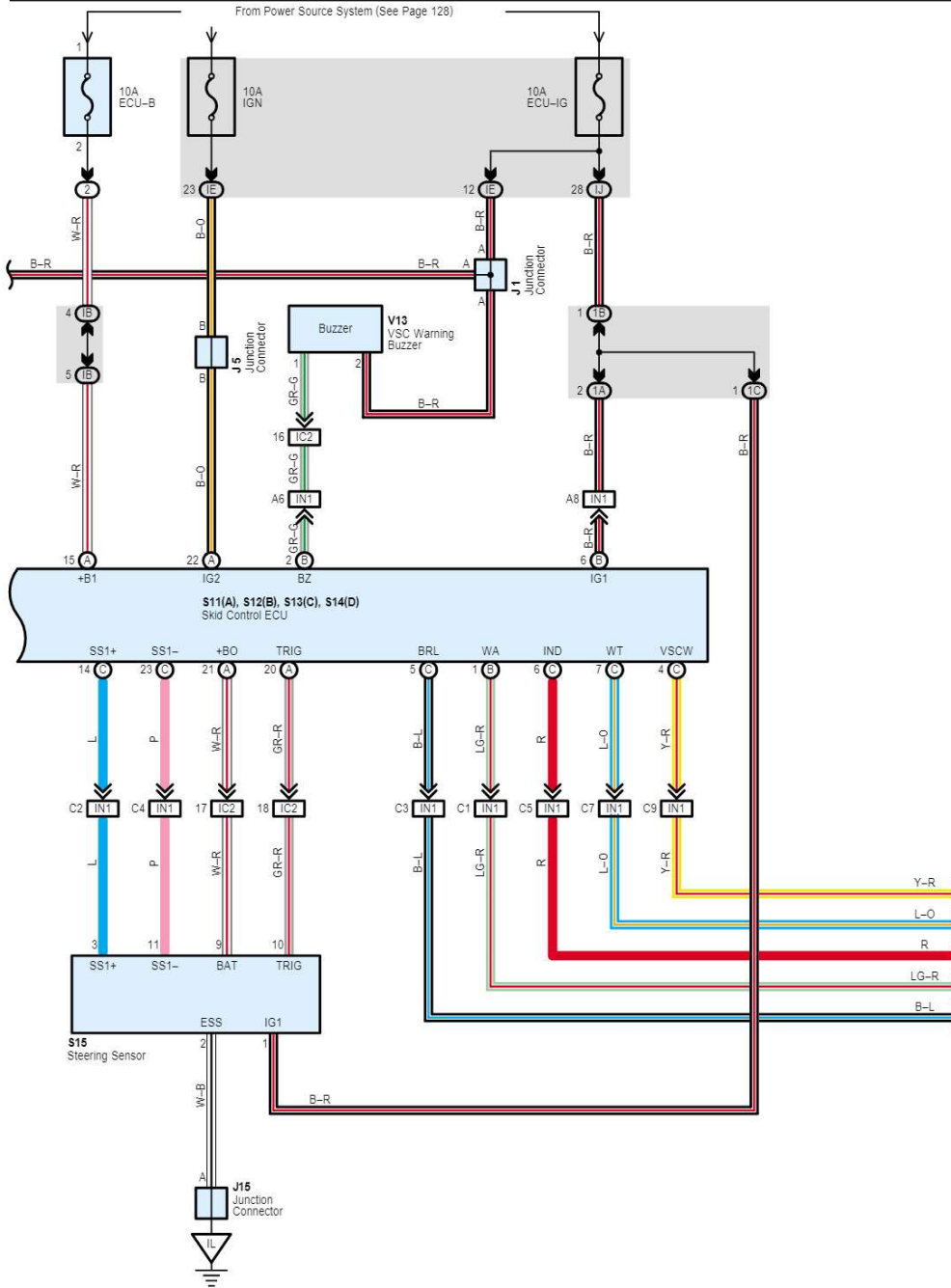
From Power Source System (See Page 128)



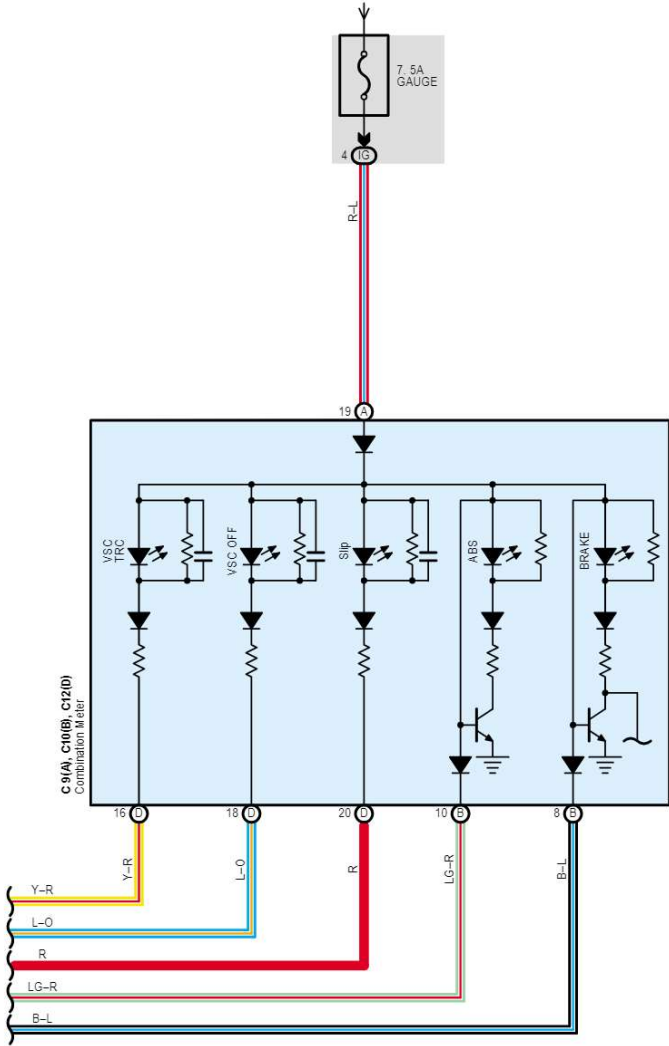
555

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# VSC (LHD M/T)



From Power Source System (See Page 128)



## System Outline

### 1. Normal Operation

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

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

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

### 2. Downhill Assist Control Operation

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

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

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

### 3. Hill-Start Support Control Operation

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

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

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

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

## Service Hints

### S11 (A), S12 (B), S14 (D) Skid Control ECU

(D) 6, (D) 31, (B) 8, (B) 17-Ground : Always continuity

(B) 6, (A) 22-Ground : Approx. 12 volts with the ignition SW at ON position

(A) 15-Ground : Always approx. 12 volts



○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	A	38 (*1)	E9	A	49 (LHD)
		42 (*3)	E10	B	49 (LHD)
A8	B	38 (*1)	J1		39 (*1)
		42 (*3)			43 (*3)
A9	C	38 (*1)	J2	A	39 (*1)
		42 (*3)			43 (*3)
A10		38 (*1)	J3	B	39 (*1)
		42 (*3)			43 (*3)
A11		38 (*1)	J5		39 (*1)
		42 (*3)			43 (*3)
A42		52 (*6)	J7	A	50 (LHD)
		54 (*7)	J8	B	50 (LHD)
B1		38 (*1)	J9		50 (LHD)
		42 (*3)			J10
C6		49 (LHD)	J14		50 (LHD)
C9	A	49 (LHD)	J15		50 (LHD)
C10	B	49 (LHD)	J16		50 (LHD)
C12	D	49 (LHD)	J21		50 (LHD)
D6		49 (LHD)	J23		50 (LHD)

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

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

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## VSC (LHD M/T)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2 IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
II1	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IL2 IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IN1 IN4	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BC2	96 (*6)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BC3 BJ1	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

### ▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1) 82 (*3)	Front Right Fender
EB	78 (*1) 82 (*3)	Front Left Fender
IL	88 (LHD)	Near the Right Side of Steering Column
BT	96 (*6) 100 (*7)	Right Quarter Panel Inner

### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	78 (*1) 82 (*3)	Engine Room Main Wire	B6	98 (*6) 100 (*7)	Floor Wire
I2	90 (LHD)		B8	100 (*7)	Floor No.2 Wire
I5	90 (LHD)	Instrument Panel Wire	B9	100 (*7)	Frame Wire

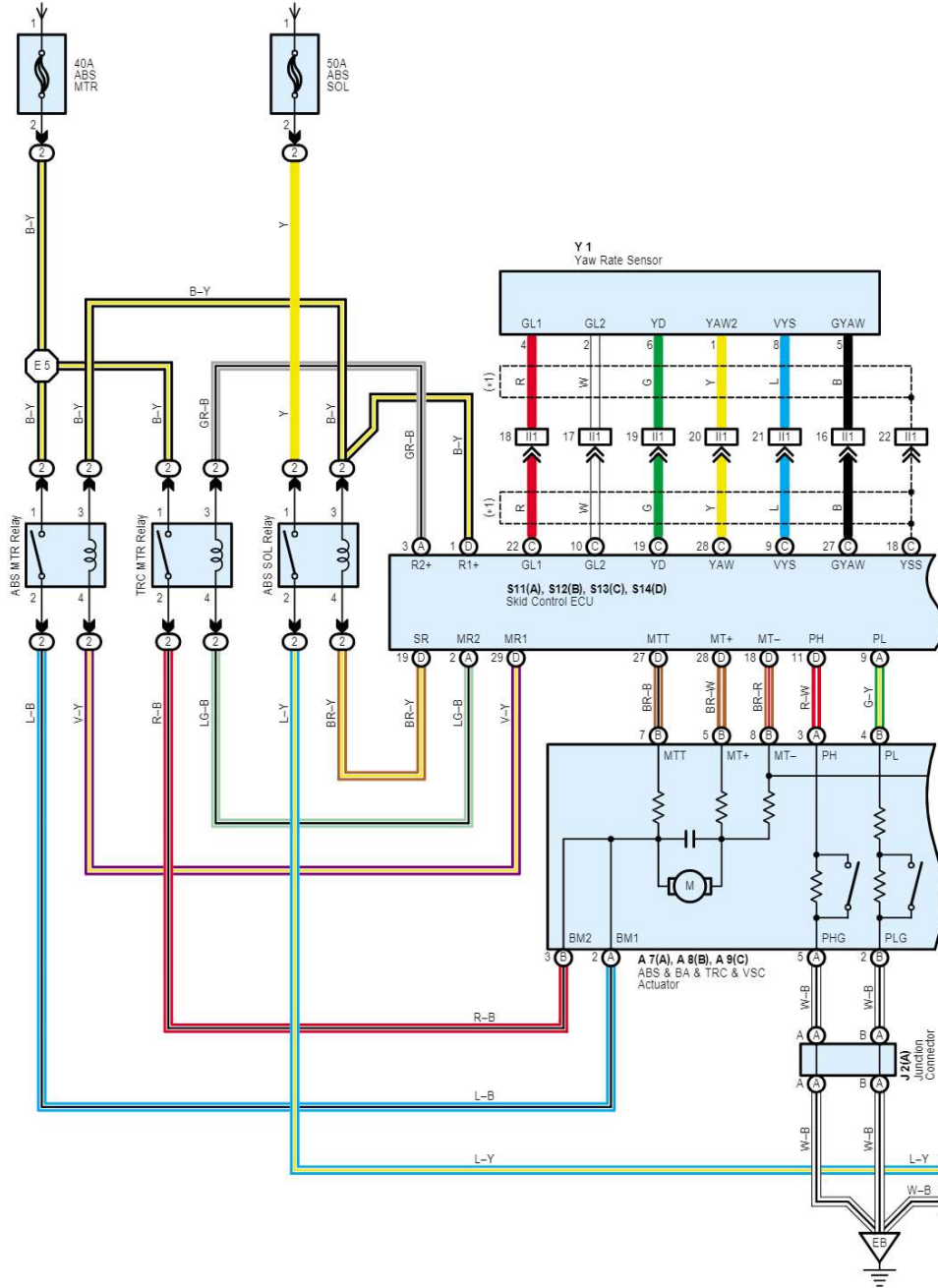
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

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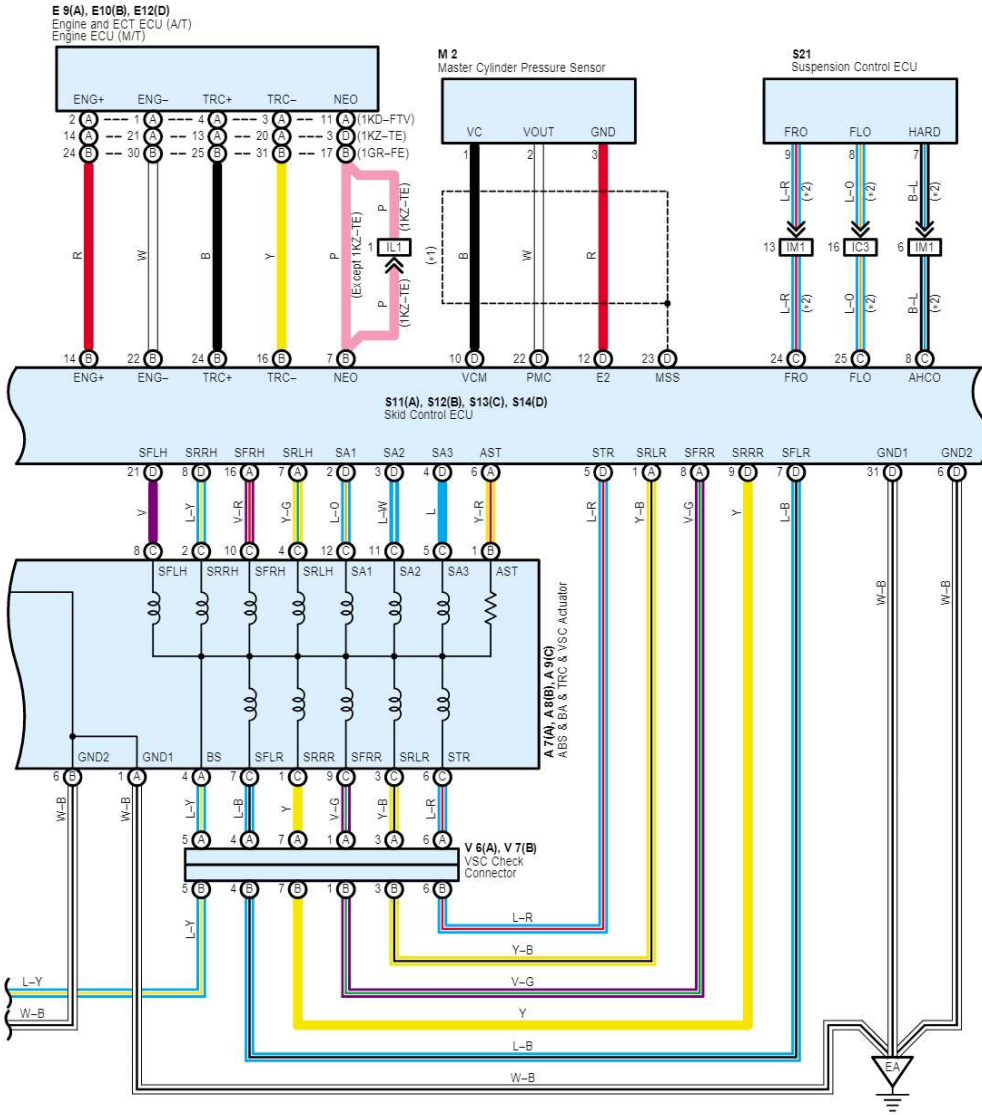
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

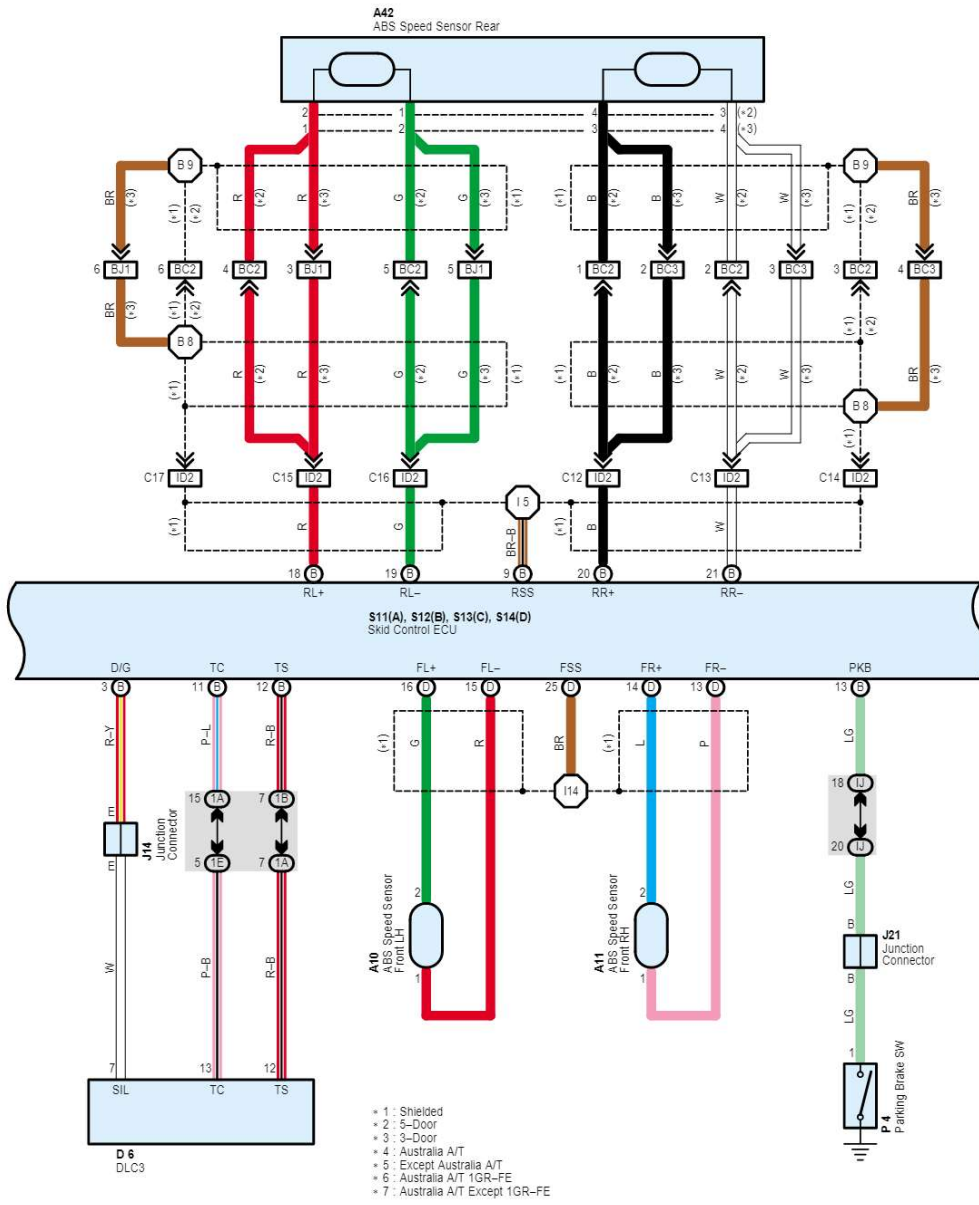
# VSC (RHD)

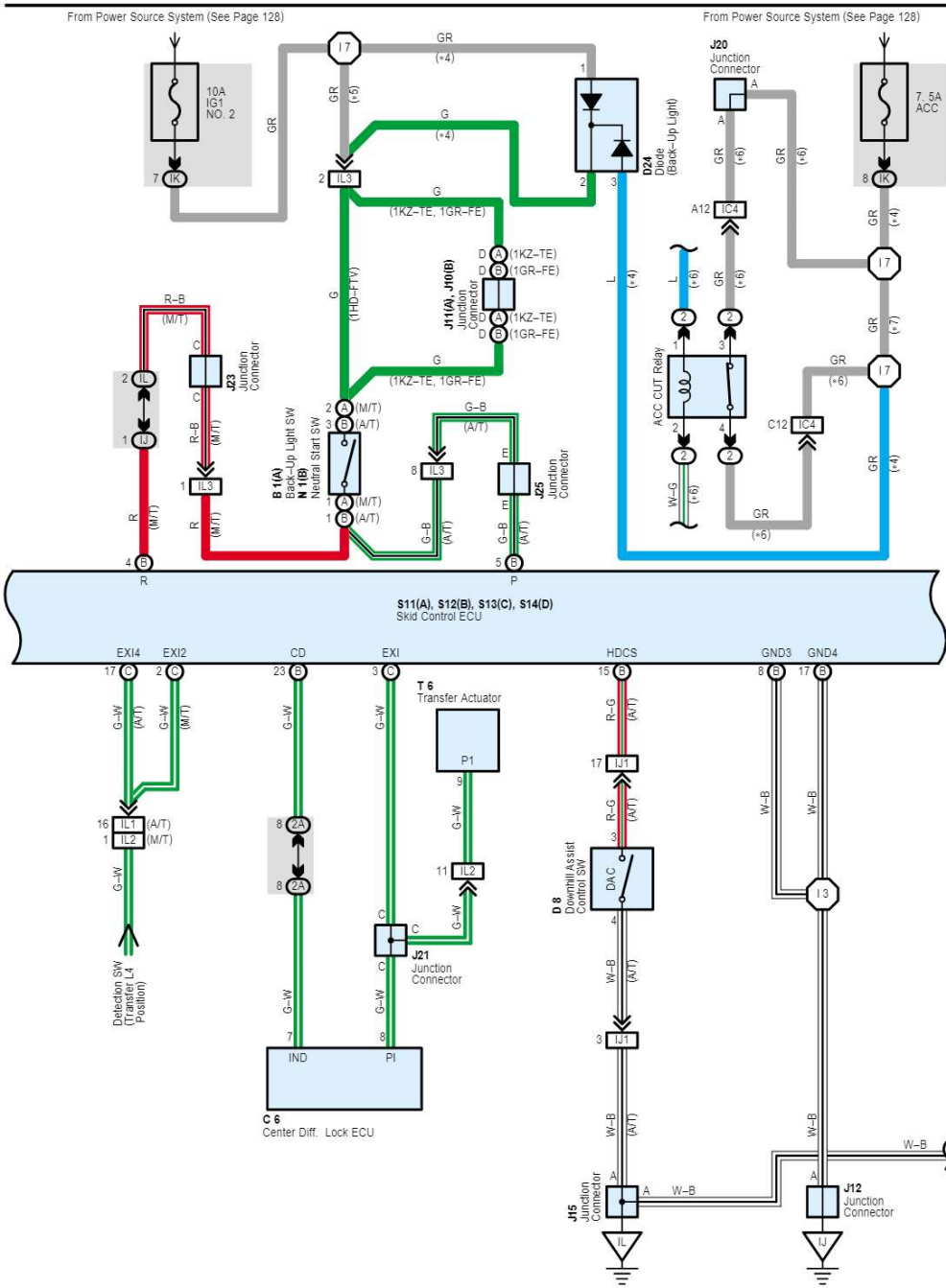
From Power Source System (See Page 128)

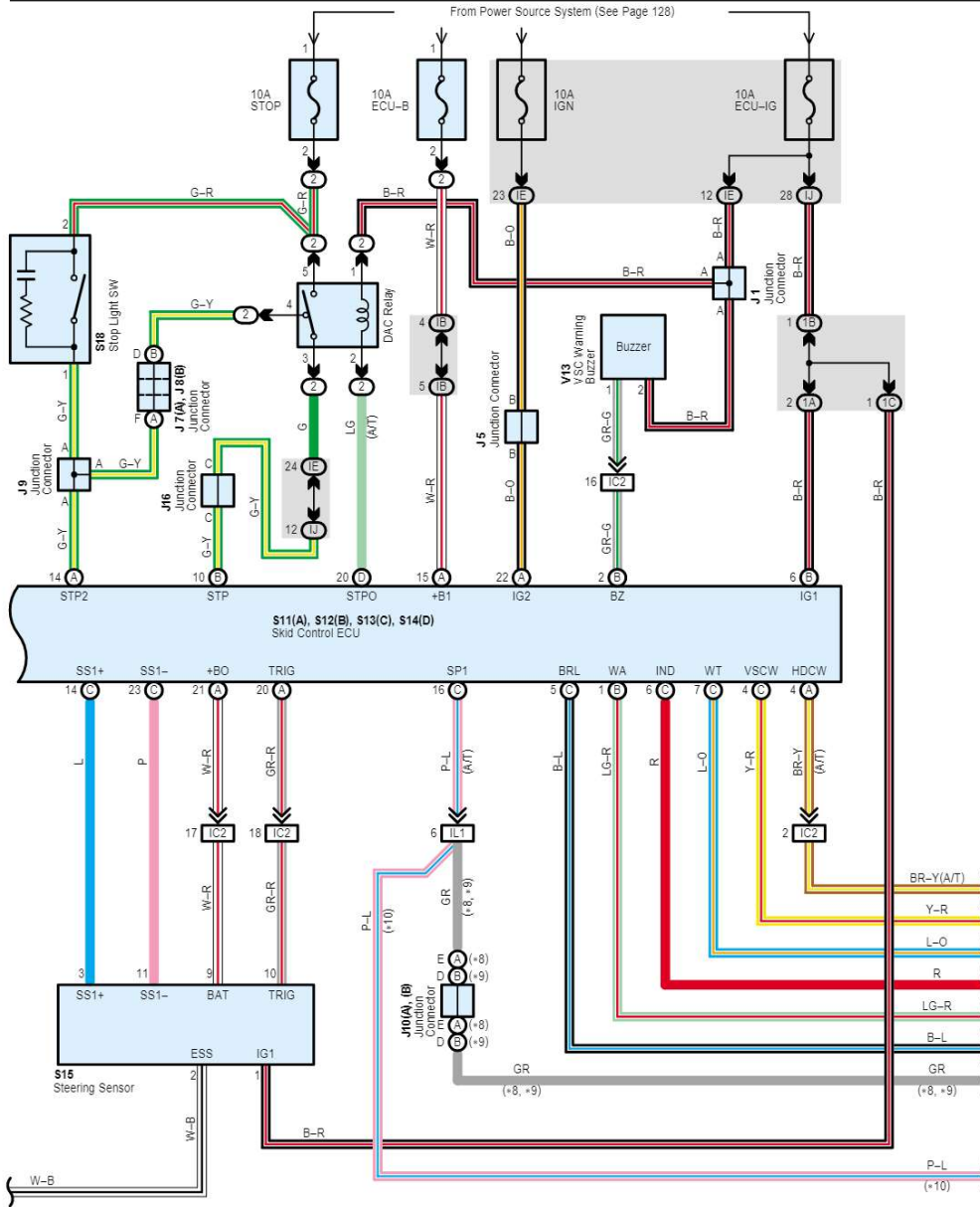


\* 1 : Shielded  
 \* 2 : 5-Door





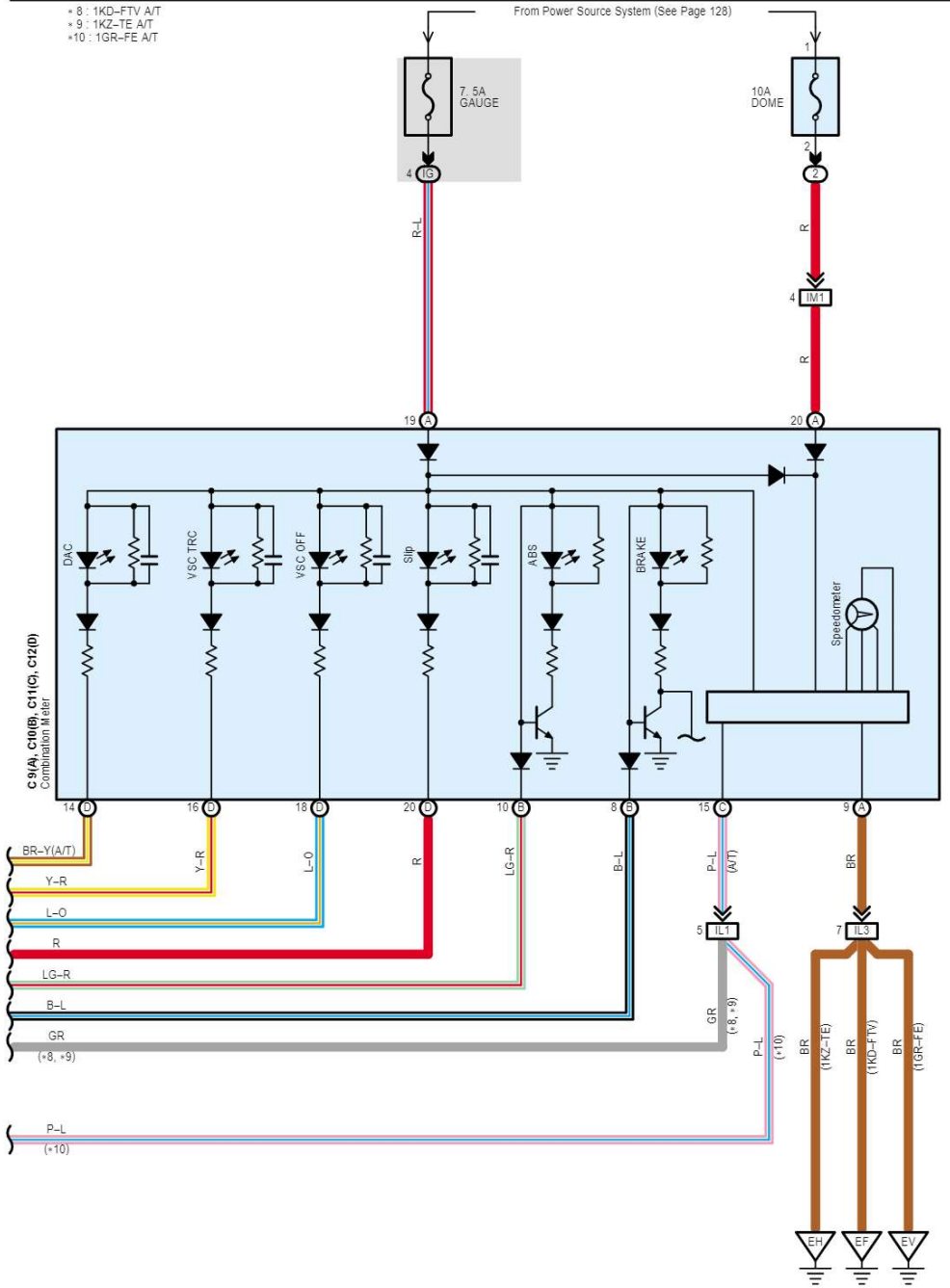






+ 8 : 1KD-FTV A/T  
 + 9 : 1KZ-TE A/T  
 +10 : 1GR-FE A/T

From Power Source System (See Page 128)



### System Outline

#### 1. Normal Operation

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

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

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

#### 2. Downhill Assist Control Operation

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

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

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

#### 3. Hill-Start Support Control Operation

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

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

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

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

### Service Hints

#### S11 (A), S12 (B), S14 (D) Skid Control ECU

(D) 6, (D) 31, (B) 8, (B) 17-Ground : Always continuity

(B) 6, (A) 22-Ground : Approx. 12 volts with the ignition SW at ON position

(A) 15-Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page			
A7	A	58 (*10)	D24	69 (RHD)	59 (*10)			
		62 (*12)	E9	A	69 (RHD)	63 (*12)		
		64 (*13)	E10	B	69 (RHD)	65 (*13)		
A8	B	58 (*10)	E12	D	69 (RHD)	59 (*10)		
		62 (*12)	J1	59 (*10)	N1	B	63 (*12)	
		64 (*13)		63 (*12)			65 (*13)	
A9	C	58 (*10)	J2	A	65 (*13)	P4	71 (RHD)	
		62 (*12)			59 (*10)	S11	A	71 (RHD)
		64 (*13)			63 (*12)	S12	B	71 (RHD)
A10		58 (*10)	J5	65 (*13)	S13	C	71 (RHD)	
		62 (*12)		59 (*10)	S14	D	71 (RHD)	
		64 (*13)		63 (*12)	S15		71 (RHD)	
A11		58 (*10)	J7	A	65 (*13)	S18	71 (RHD)	
		62 (*12)			70 (RHD)	S21	71 (RHD)	
		64 (*13)			70 (RHD)			59 (*10)
A42		72 (*15)	J9	70 (RHD)	T6		63 (*12)	
		74 (*16)		A		70 (RHD)	65 (*13)	
		58 (*10)	J10	B		70 (RHD)		59 (*10)
B1	A	62 (*12)	J11	A	70 (RHD)	V6	A	63 (*12)
		64 (*13)	J12	70 (RHD)				65 (*13)
		C6		J14	70 (RHD)			59 (*10)
C9	A	69 (RHD)	J15	70 (RHD)	V7	B	63 (*12)	
C10	B	69 (RHD)	J16	70 (RHD)			65 (*13)	
C11	C	69 (RHD)	J20	70 (RHD)			V13	71 (RHD)
C12	D	69 (RHD)	J21	70 (RHD)	Y1	71 (RHD)		
D6		69 (RHD)	J23	70 (RHD)				
D8		69 (RHD)	J25	70 (RHD)				

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IE		
IG		
IJ	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IK		
IL		
1A	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B		
1C		
1E	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2A		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## VSC (RHD)

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC3		
IC4		
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
II1	114 (RHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IJ1	116 (RHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IL1	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2		
IL3		
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
BC2	120 (*15)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
BC3	124 (*16)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
BJ1		

### ▽ : Ground Points

Code	See Page	Ground Points Location
EA	102 (*10)	Front Right Fender
	106 (*12)	
	108 (*13)	
EB	102 (*10)	Front Left Fender
	106 (*12)	
	108 (*13)	
EF	106 (*12)	Rear Part of Cylinder Block
EH	108 (*13)	
EV	102 (*10)	Rear Side of Left Bank Cylinder Block
IJ	112 (RHD)	Right Kick Panel
IL	112 (RHD)	Instrument Panel Brace RH

### ○ : Splice Points

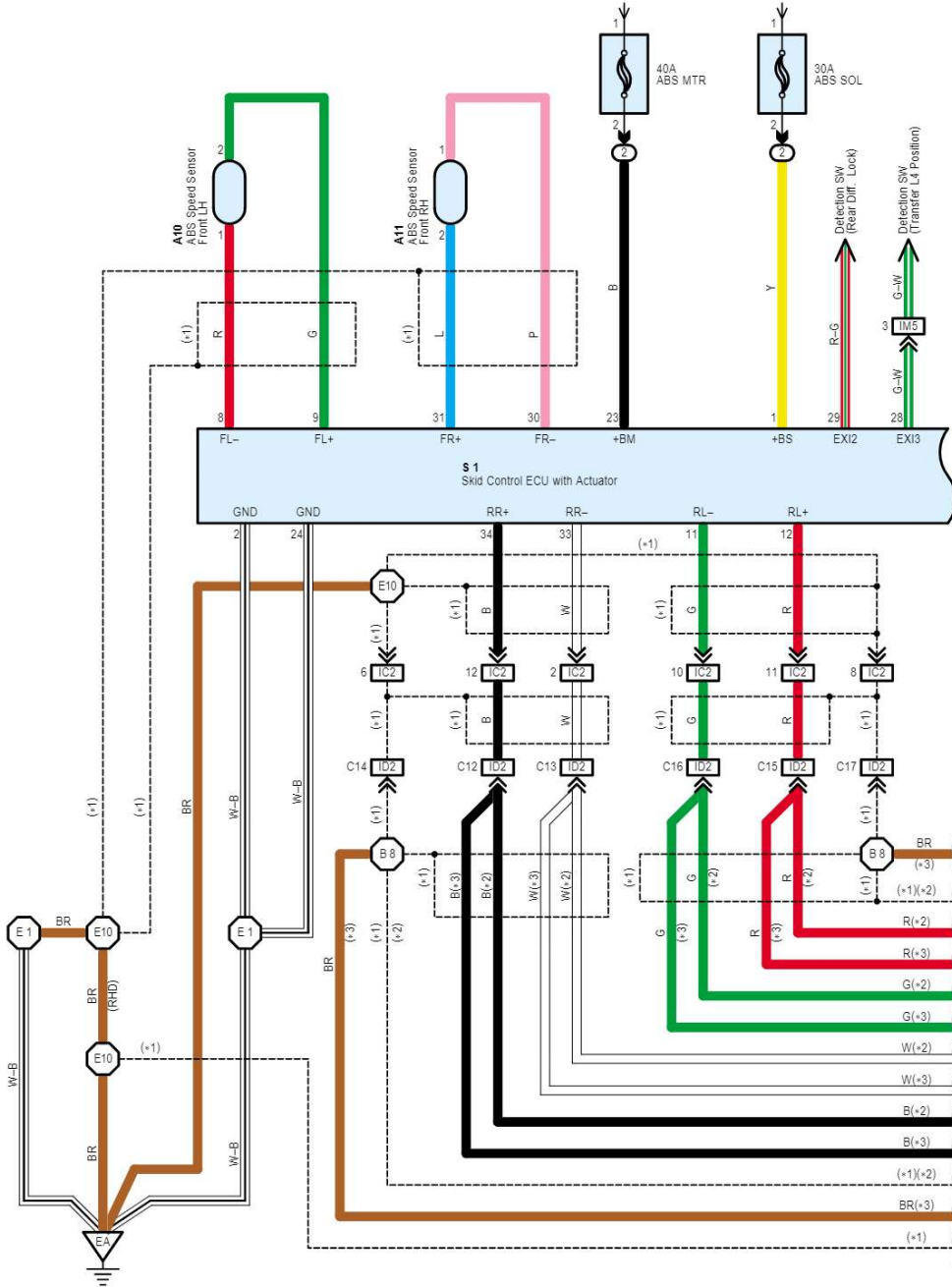
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	102 (*10)	Engine Room Main Wire	I7	114 (RHD)	Instrument Panel Wire
	106 (*12)		I14	114 (RHD)	Engine Room Main Wire
	108 (*13)		B8	124 (*16)	Floor No.2 Wire
I3	114 (RHD)	Instrument Panel Wire	B9	124 (*16)	Frame Wire
I5					

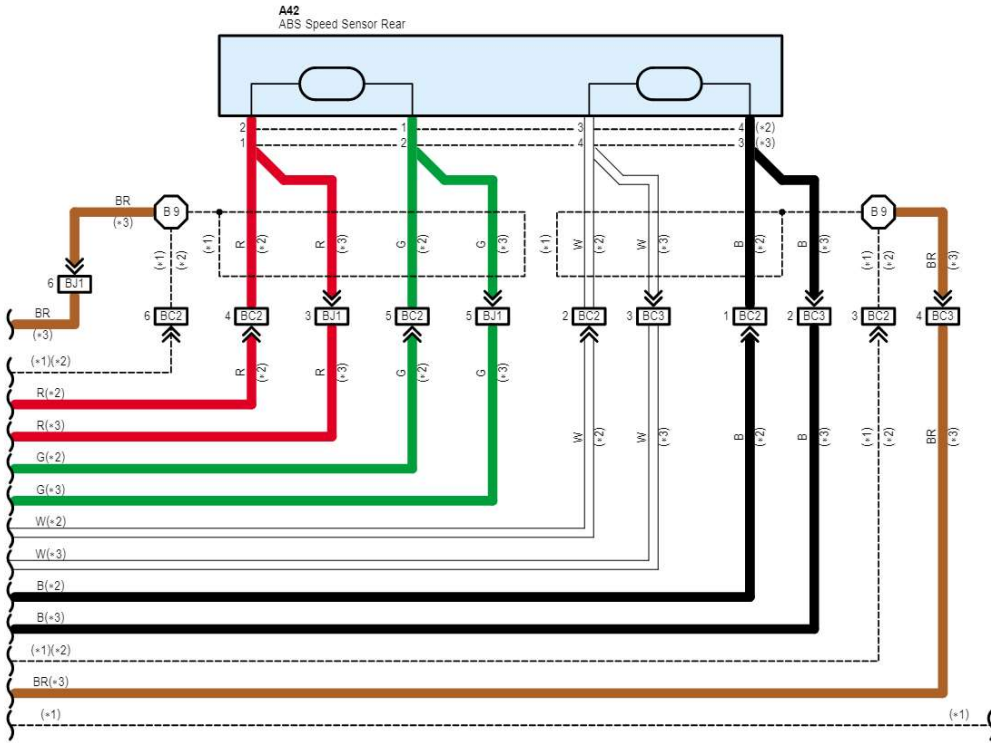
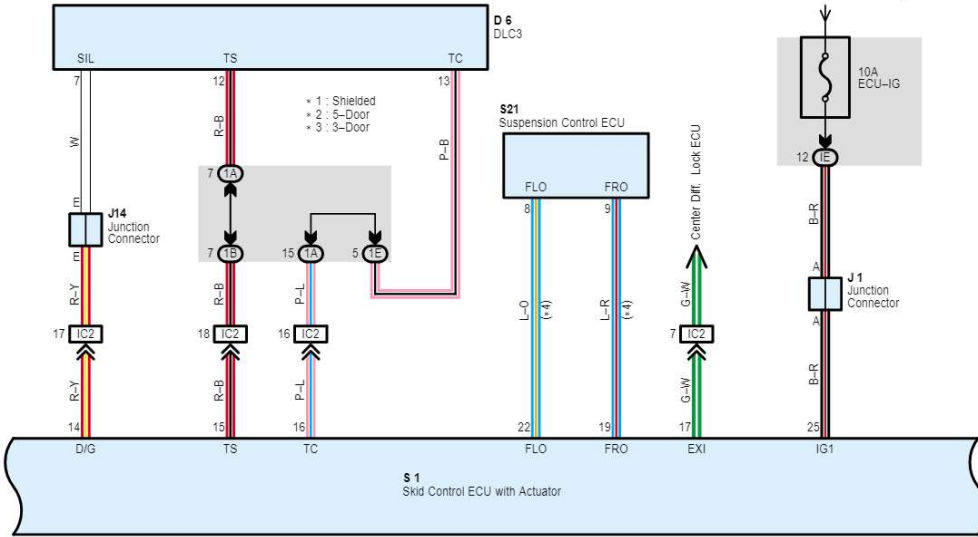
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

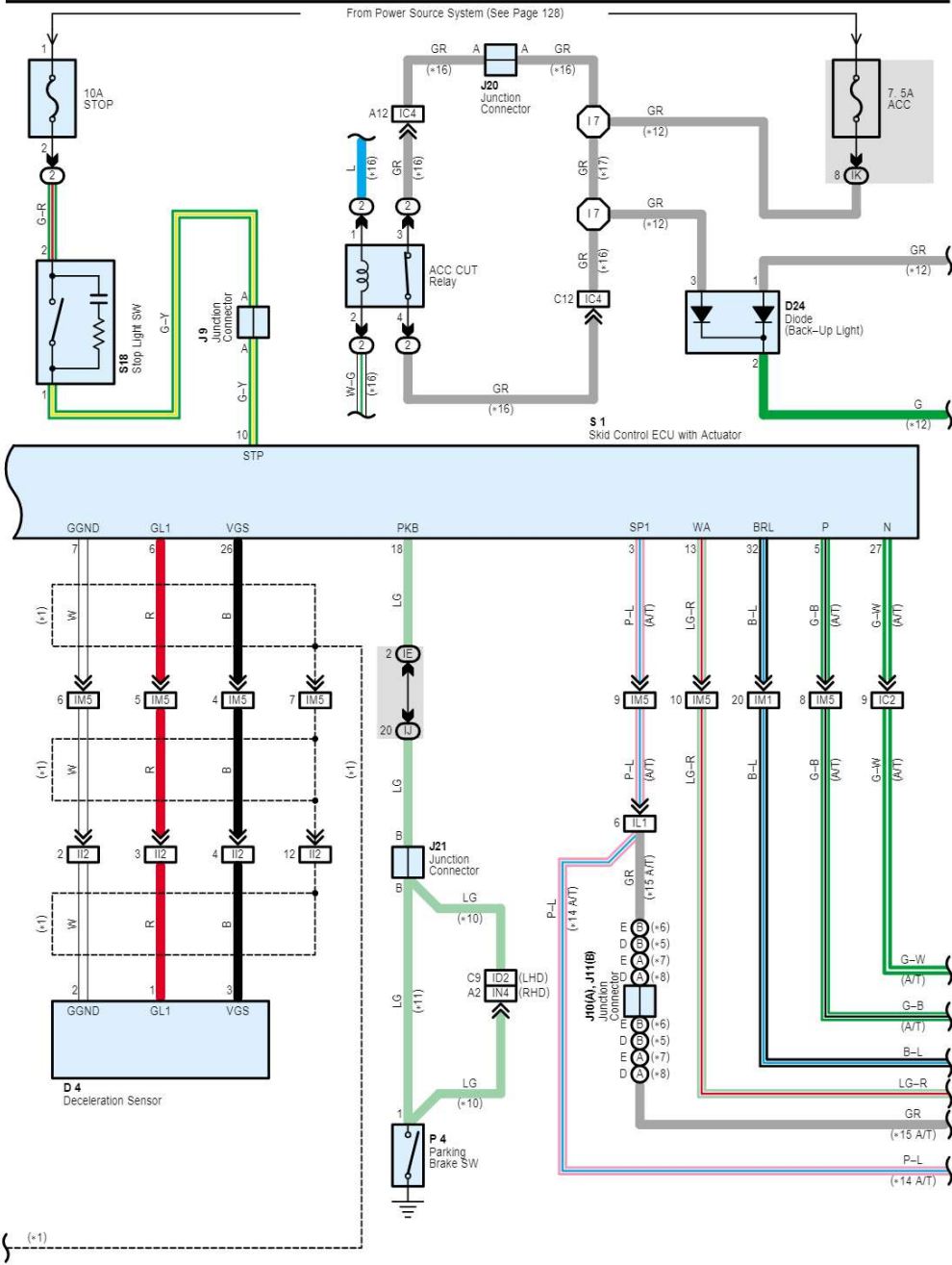
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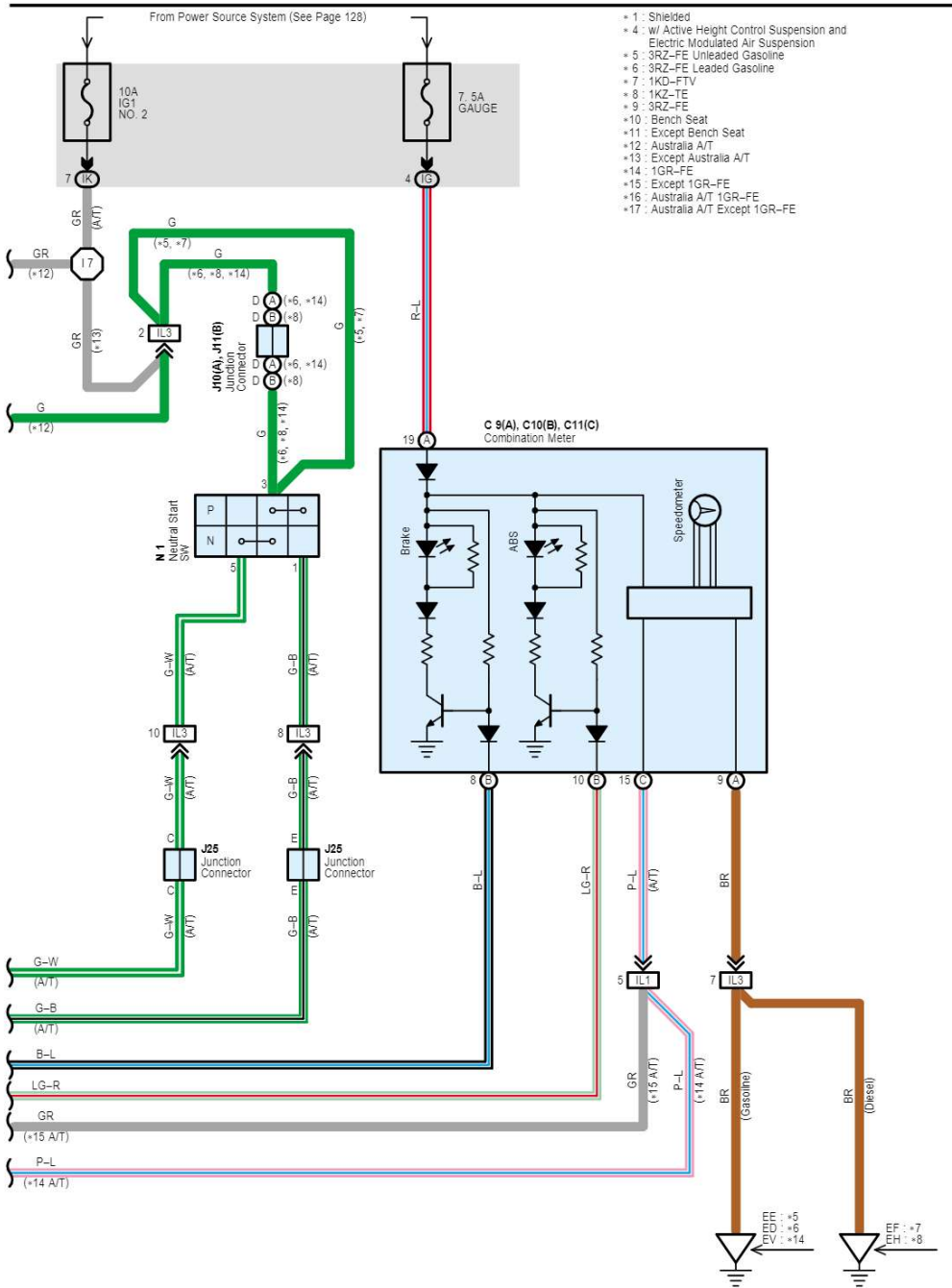
From Power Source System (See Page 128)











## 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 9, 12, 31 and 34 of the skid control ECU with actuator.

(2) Stop light SW signal

A signal is input to TERMINAL 10 of the skid control ECU with actuator when the brake pedal is depressed.

### 2. System Operation

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

If the skid control ECU with actuator judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current on the solenoid is controlled and the hydraulic pressure is increased. Holding of the hydraulic pressure is also controlled by the skid control ECU with actuator, 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

### S1 Skid Control ECU with Actuator

2, 24-Ground : Always continuity

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

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

1, 23-Ground : Always approx. 12 volts

○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A10	38 (*1)	C11	C	69 (RHD)	J21	70 (RHD)
	40 (*2)	D4		49 (LHD)	J25	50 (LHD)
	42 (*3)			69 (RHD)		70 (RHD)
	44 (*4)	D6		49 (LHD)	N1	39 (*1)
	58 (*10)			69 (RHD)		41 (*2)
	60 (*11)	D24		69 (RHD)		43 (*3)
	62 (*12)			39 (*1)		45 (*4)
	64 (*13)	J1		41 (*2)		59 (*10)
A11	38 (*1)			43 (*3)		61 (*11)
	40 (*2)			45 (*4)		63 (*12)
	42 (*3)			59 (*10)		65 (*13)
	44 (*4)			61 (*11)	51 (LHD)	
	58 (*10)			63 (*12)	71 (RHD)	
	60 (*11)			65 (*13)	39 (*1)	
	62 (*12)			J9		50 (LHD)
	64 (*13)	70 (RHD)	43 (*3)			
A42	52 (*6)	J10	A	50 (LHD)	S1	45 (*4)
	54 (*7)	J11	B	70 (RHD)		59 (*10)
	72 (*15)			50 (LHD)		61 (*11)
	74 (*16)			70 (RHD)		63 (*12)
C9	A			J14		50 (LHD)
		69 (RHD)	70 (RHD)			51 (LHD)
C10	B	J20		50 (LHD)	S18	71 (RHD)
				69 (RHD)		70 (RHD)
C11	C	J21		50 (LHD)	S21	71 (RHD)

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	112 (RHD)	
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	
IN4	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BC2	96 (*6)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
	120 (*15)	
BC3	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
	124 (*16)	
BJ1	100 (*7)	
	124 (*16)	

**▽ : Ground Points**

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

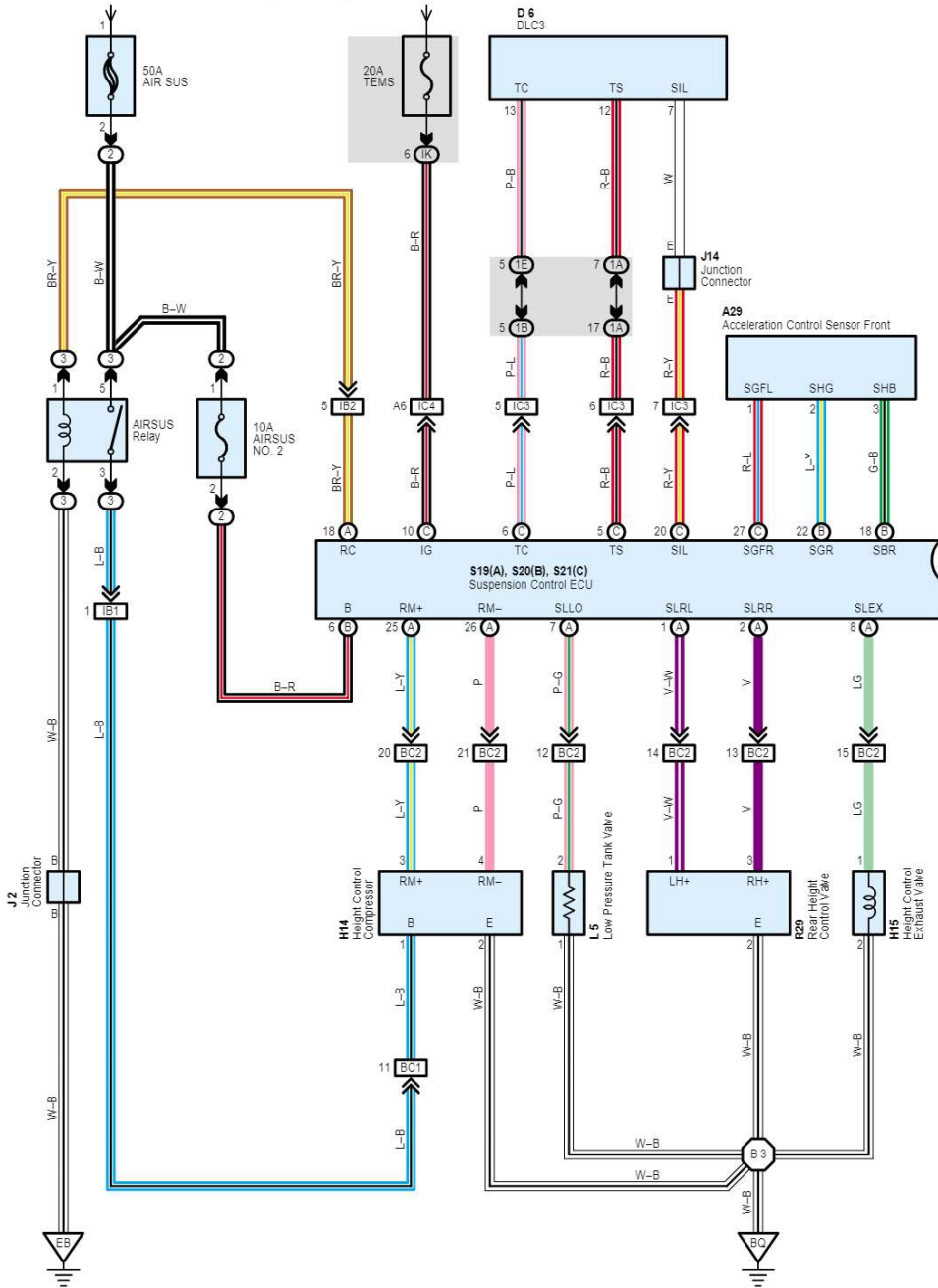
 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	78 (*1)	Engine Room Main Wire	E10	84 (*4)	Engine Room Main Wire
	80 (*2)			102 (*10)	
	82 (*3)			104 (*11)	
	84 (*4)			106 (*12)	
	102 (*10)			108 (*13)	
	104 (*11)		I7	90 (LHD)	Instrument Panel Wire
	106 (*12)			114 (RHD)	
	108 (*13)		B8	100 (*7)	Floor No.2 Wire
78 (*1)	124 (*16)				
E10	80 (*2)		B9	100 (*7)	Frame Wire
	82 (*3)	124 (*16)			

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

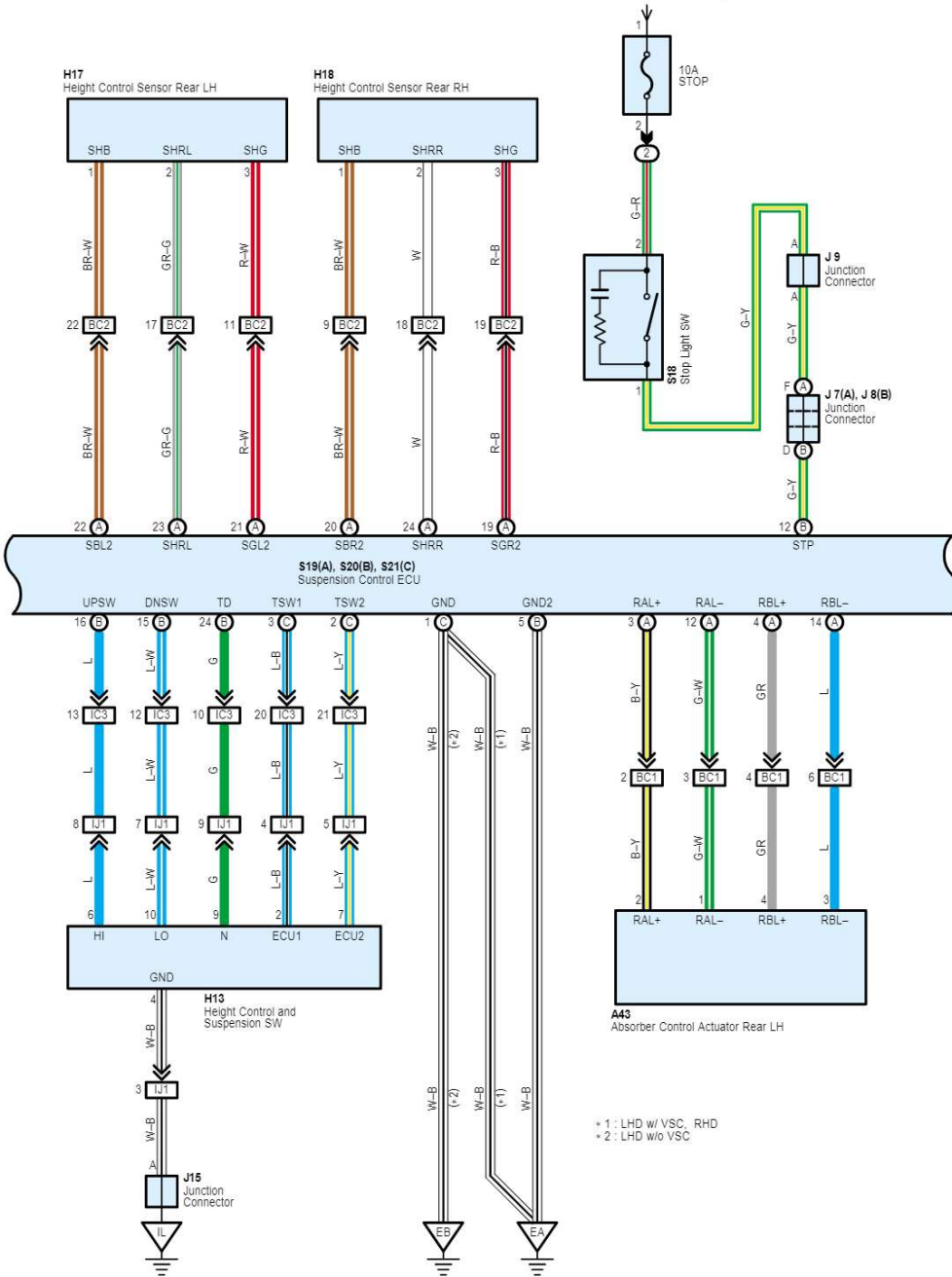
# Active Height Control Suspension and

From Power Source System (See Page 128)

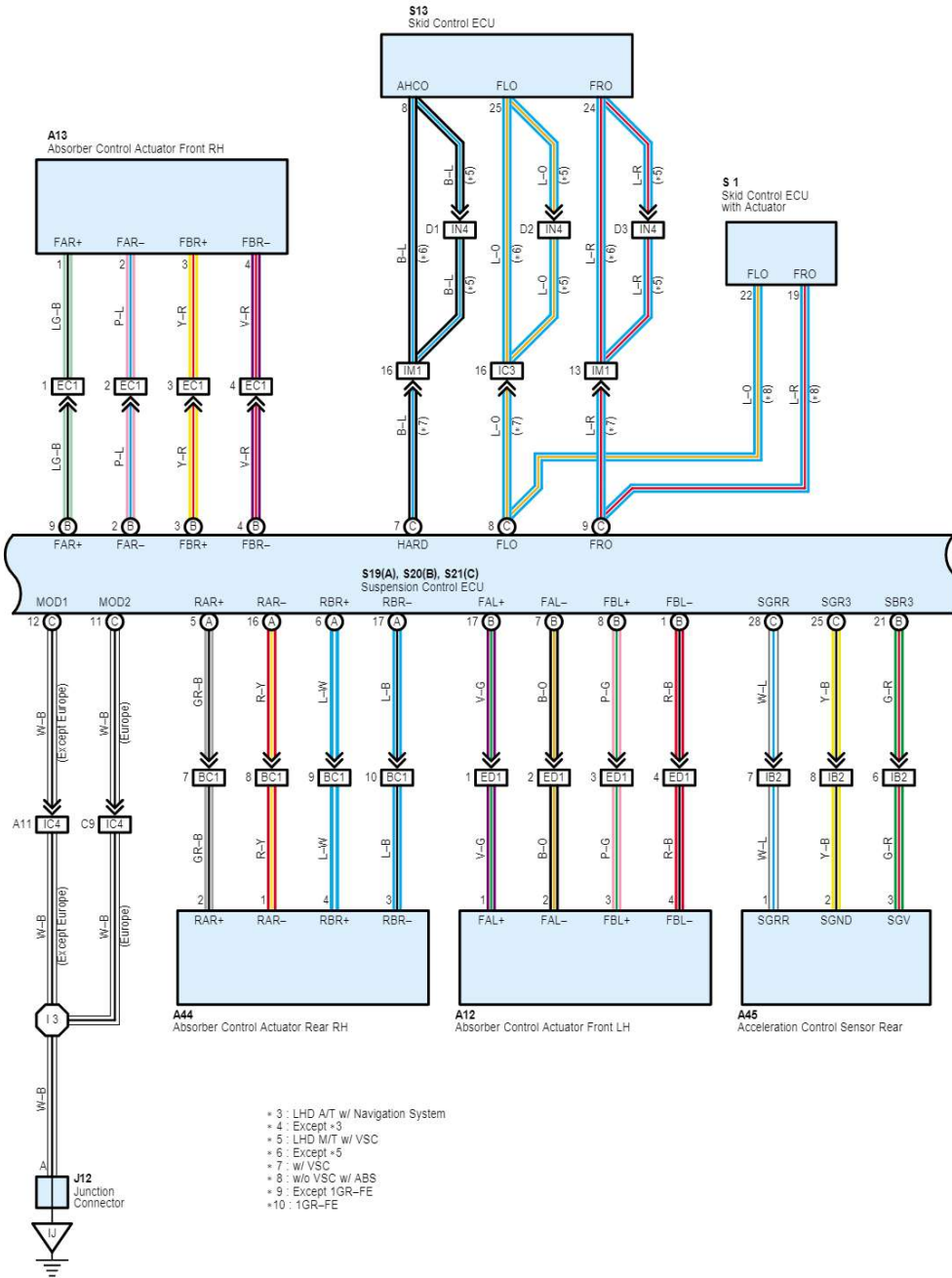


# Electric Modulated Air Suspension

From Power Source System (See Page 128)



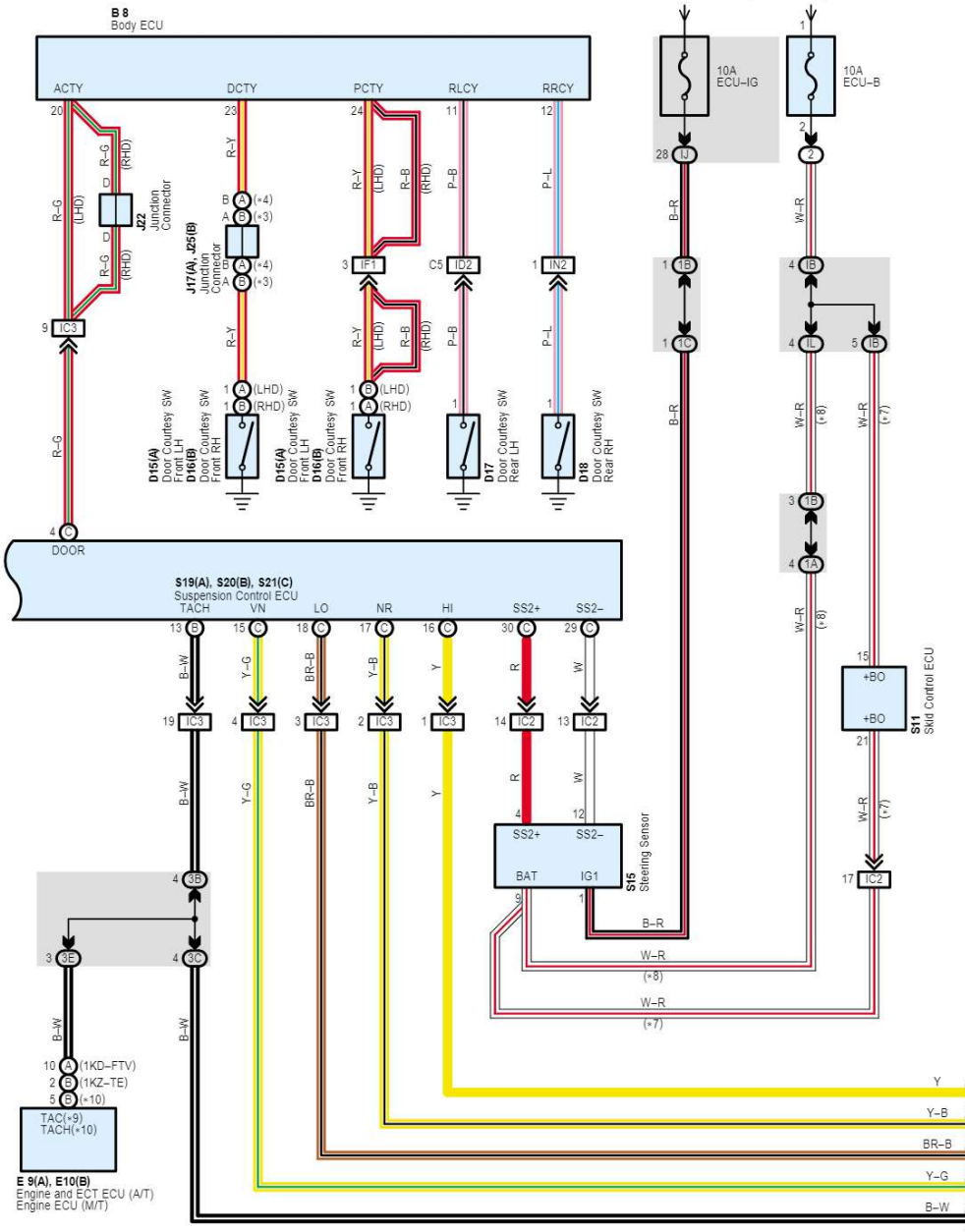
# Active Height Control Suspension and



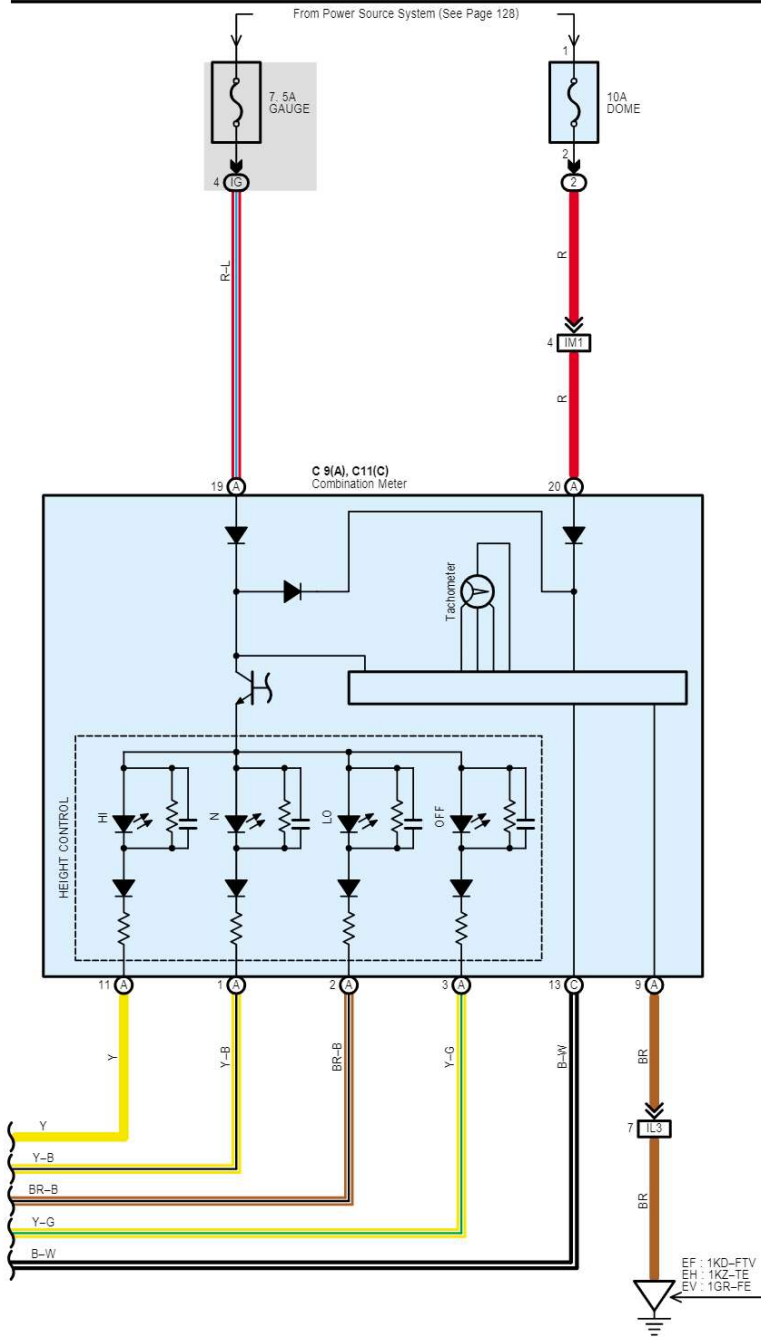


# Electric Modulated Air Suspension

From Power Source System (See Page 128)



# Active Height Control Suspension and



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## Electric Modulated Air Suspension

### System Outline

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

### Service Hints

#### S20 (B), S21 (C) Suspension Control ECU

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

## Active Height Control Suspension and

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
A12	38 (*1)	D16	B	72 (*15)	J14	50 (LHD)	
	42 (*3)			74 (*16)		70 (RHD)	
	44 (*4)	D17		52 (*6)	J15	50 (LHD)	
	58 (*10)			72 (*15)		70 (RHD)	
	62 (*12)	D18		52 (*6)	J17	A	50 (LHD)
64 (*13)	72 (*15)			70 (RHD)			
A13	38 (*1)	E9	A	49 (LHD)	J22	70 (RHD)	
	42 (*3)			69 (RHD)		50 (LHD)	
	44 (*4)	E10	B	49 (LHD)	J25	B	70 (RHD)
	58 (*10)			69 (RHD)			53 (*6)
	62 (*12)	H13		50 (LHD)	L5		73 (*15)
	64 (*13)			70 (RHD)			53 (*6)
48 (LHD)	H14						52 (*6)
68 (RHD)		72 (*15)	39 (*1)				
A29	52 (*6)	H15		52 (*6)	S1	43 (*3)	
	72 (*15)			72 (*15)		45 (*4)	
A43	52 (*6)	H17		52 (*6)	S1	59 (*10)	
	72 (*15)			72 (*15)		63 (*12)	
A44	52 (*6)	H18		52 (*6)	S11	65 (*13)	
	72 (*15)			72 (*15)		51 (LHD)	
A45	48 (LHD)	J2		39 (*1)	S11	71 (RHD)	
	68 (RHD)			43 (*3)		51 (LHD)	
B8	49 (LHD)			45 (*4)	S13	71 (RHD)	
	69 (RHD)			59 (*10)		51 (LHD)	
C9	A			49 (LHD)	63 (*12)	S15	71 (RHD)
				69 (RHD)	65 (*13)		51 (LHD)
C11	C	49 (LHD)	50 (LHD)	S18	71 (RHD)		
		69 (RHD)	70 (RHD)		51 (LHD)		
D6		J7	A	50 (LHD)	S19	A	71 (RHD)
				70 (RHD)			51 (LHD)
D15	A	J8	B	50 (LHD)	S20	B	71 (RHD)
				70 (RHD)			51 (LHD)
		J9		50 (LHD)	S21	C	71 (RHD)
				70 (RHD)			51 (LHD)
D16	B	J12		50 (LHD)			71 (RHD)
				70 (RHD)			

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Electric Modulated Air Suspension

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IJ	27 (LHD)		
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1A	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
1C	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)	
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

## Active Height Control Suspension and

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EC1	78 (*1)	Sensor Wire RH and Engine Room Main Wire (Near the Air Cleaner)
	82 (*3)	
	84 (*4)	
	102 (*10)	
	106 (*12)	
	108 (*13)	
ED1	78 (*1)	Sensor Wire LH and Engine Room Main Wire (Near the Engine Room R/B)
	82 (*3)	
	84 (*4)	
	102 (*10)	
	106 (*12)	
	108 (*13)	
IB1	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IB2	88 (LHD)	
	112 (RHD)	
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC3	88 (LHD)	
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
	116 (RHD)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
IN4	94 (LHD)	
BC1	96 (*6)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
	120 (*15)	
BC2	96 (*6)	
	120 (*15)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# Electric Modulated Air Suspension

## ▽ : Ground Points

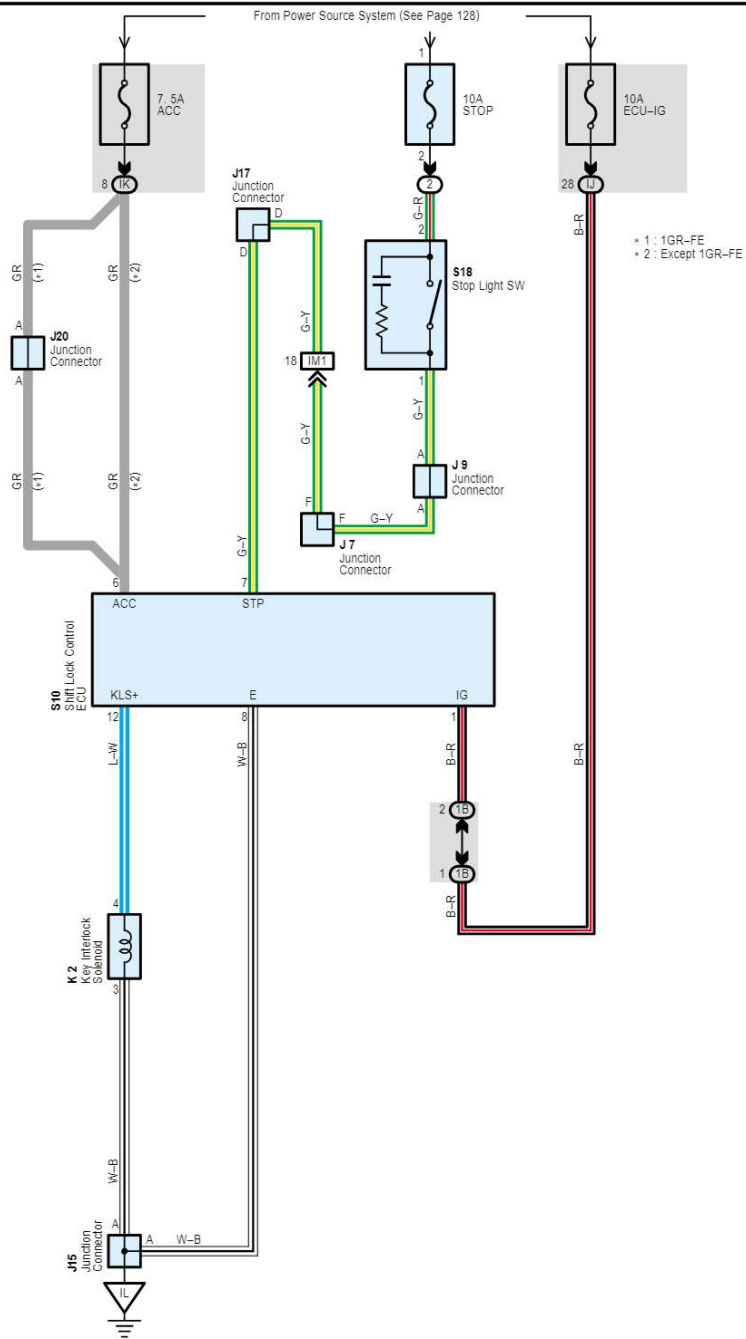
Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	82 (*3)	
	84 (*4)	
	102 (*10)	
	106 (*12)	
	108 (*13)	
EB	78 (*1)	Front Left Fender
	82 (*3)	
	84 (*4)	
	102 (*10)	
	106 (*12)	
	108 (*13)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
BQ	96 (*6)	Near the Left Side of No.5 Cross Member
	120 (*15)	

## ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I3	90 (LHD)	Instrument Panel Wire	B3	98 (*6)	Frame Wire
	114 (RHD)			122 (*15)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Shift Lock



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### System Outline

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

#### 1. Shift Lock Mechanism

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

#### 2. Key Interlock Mechanism

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

### Service Hints

#### S10 Shift Lock Control ECU

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

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

8-Ground : Always continuity

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

#### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J7	50 (LHD)	J17	50 (LHD)	S10	51 (LHD)
	70 (RHD)		70 (RHD)		71 (RHD)
J9	50 (LHD)	J20	50 (LHD)	S18	51 (LHD)
	70 (RHD)		70 (RHD)		71 (RHD)
J15	50 (LHD)	K2	50 (LHD)		
	70 (RHD)		70 (RHD)		

#### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

#### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IJ	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)

#### □ : Connector Joining Wire Harness and Wire Harness

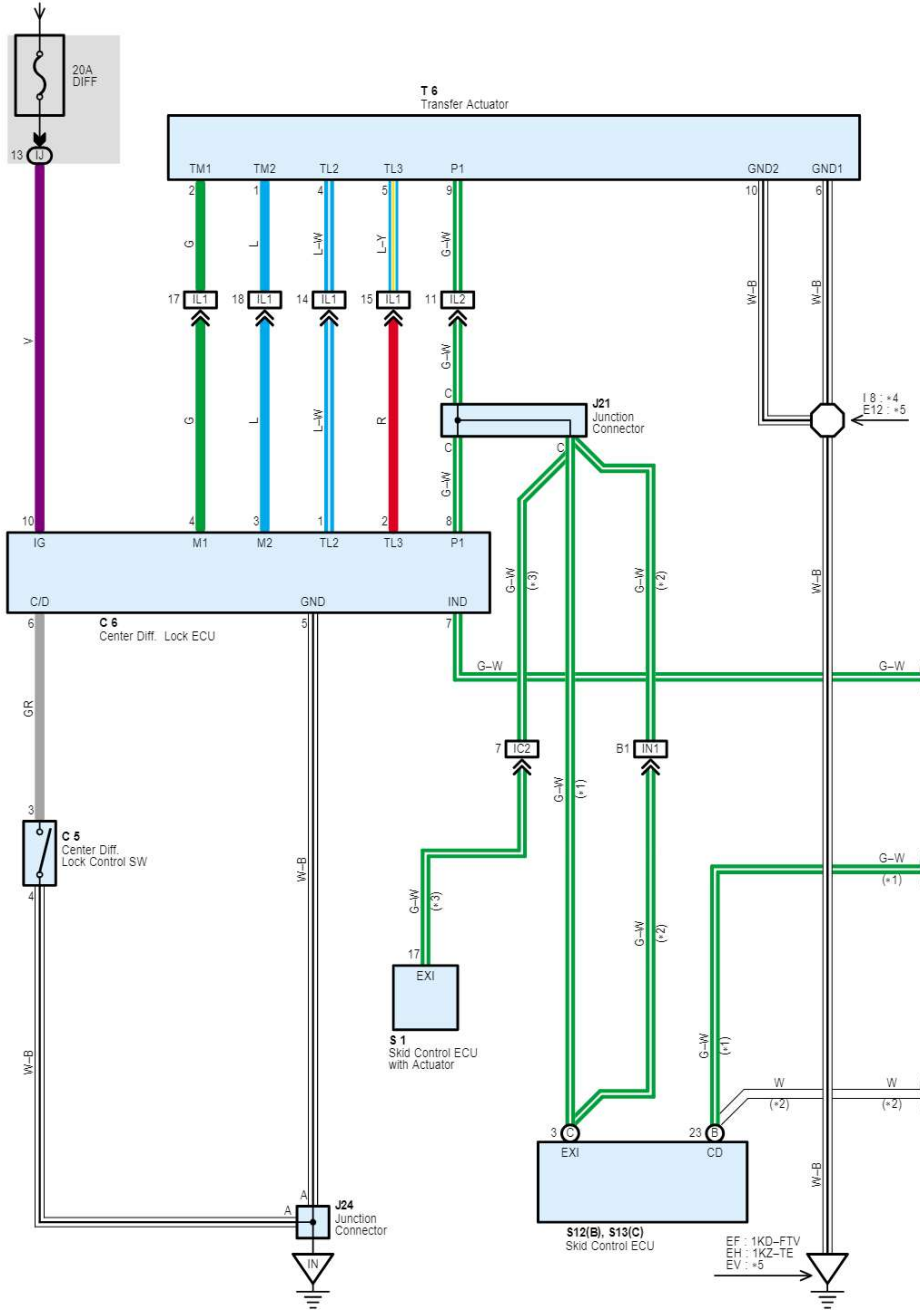
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

#### ▽ : Ground Points

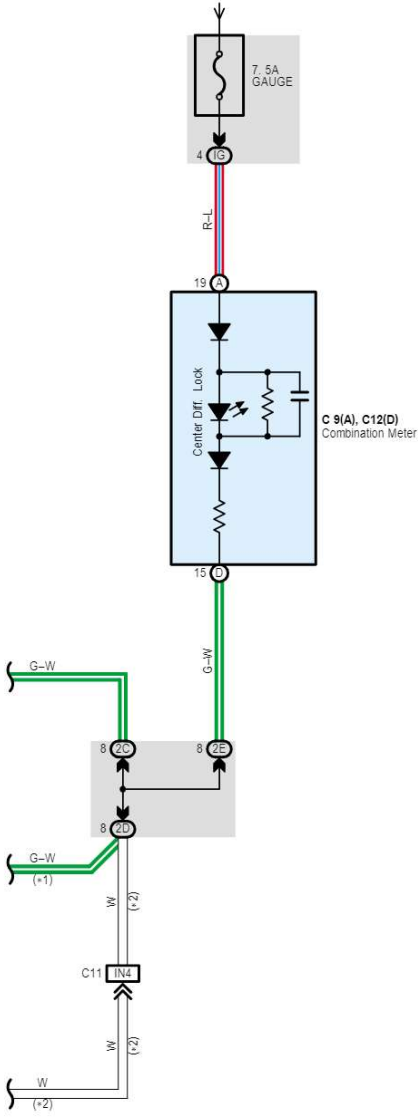
Code	See Page	Ground Points Location
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

# Center Differential Lock

From Power Source System (See Page 128)



- 1 : w/ VSC LHD A/T, RHD
- 2 : w/ VSC LHD M/T
- 3 : w/o VSC w/ ABS
- 4 : Except TGR-FE
- 5 : TGR-FE



# Center Differential Lock

## System Outline

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

## Service Hints

### C6 Center Diff. Lock ECU

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

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C5	49 (LHD)	J24	50 (LHD)	S13	C	51 (LHD)
	69 (RHD)		70 (RHD)			71 (RHD)
C6	49 (LHD)	S1	39 (*1)	T6		39 (*1)
	69 (RHD)		43 (*3)			43 (*3)
C9	49 (LHD)		45 (*4)			45 (*4)
	69 (RHD)		59 (*10)			59 (*10)
C12	49 (LHD)		63 (*12)			63 (*12)
	69 (RHD)		65 (*13)			65 (*13)
J21	50 (LHD)	S12	B			51 (LHD)
	70 (RHD)					71 (RHD)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	
	29 (RHD)	
2C	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
2E		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IN1	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

 : Ground Points

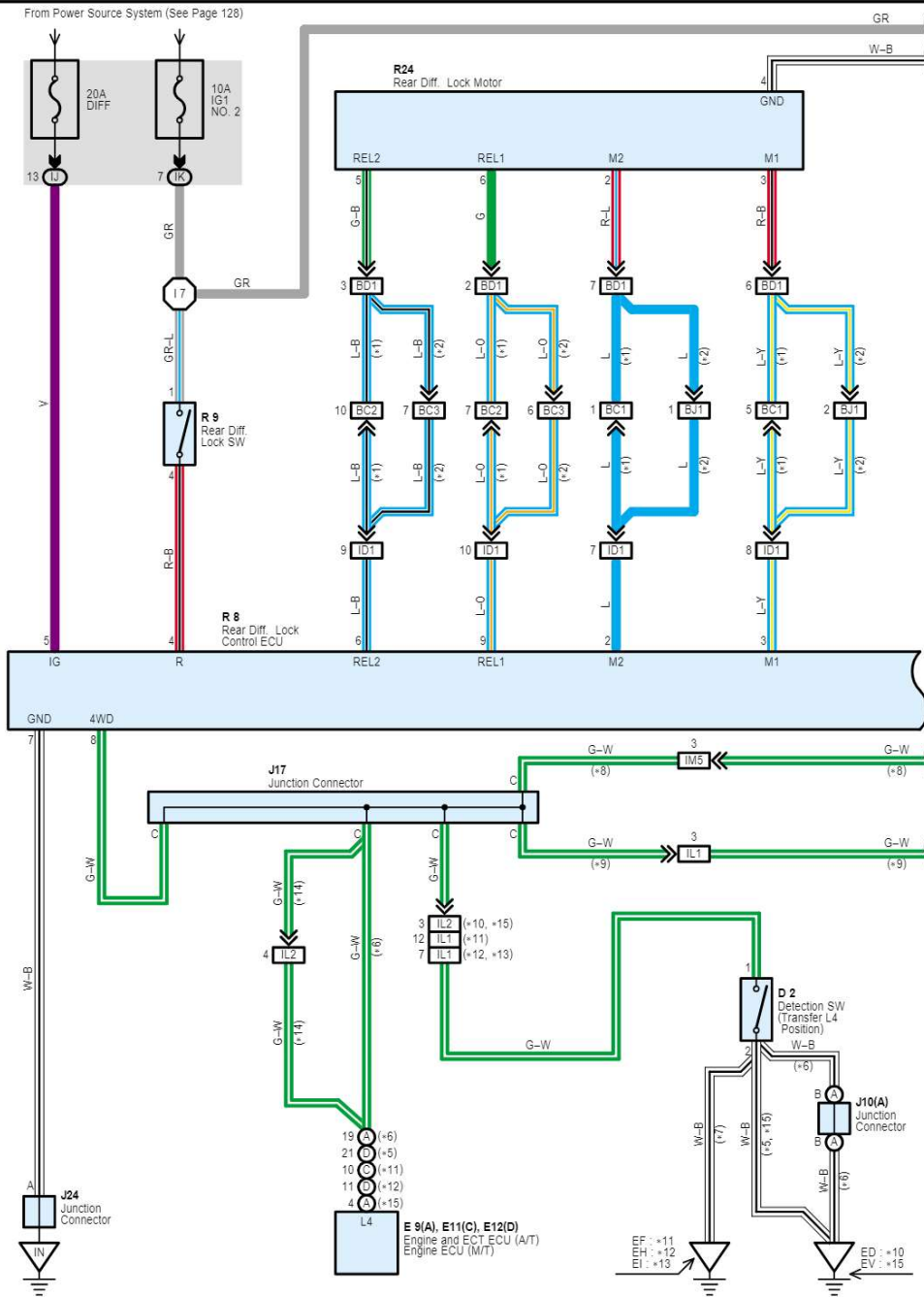
Code	See Page	Ground Points Location
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E12	78 (*1)	Engine Wire	18	90 (LHD)	Engine Wire
	102 (*10)			114 (RHD)	

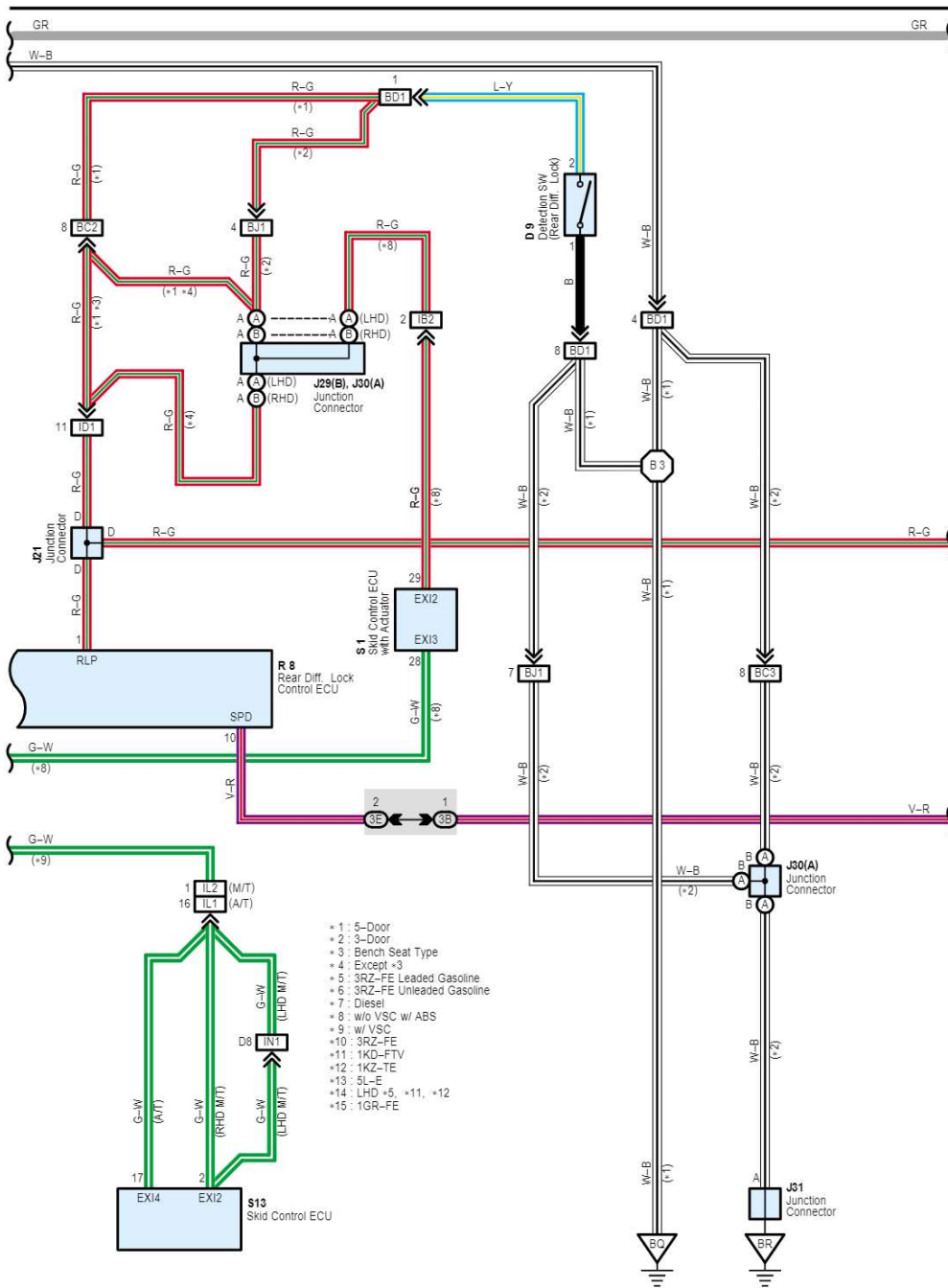
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Rear Differential Lock



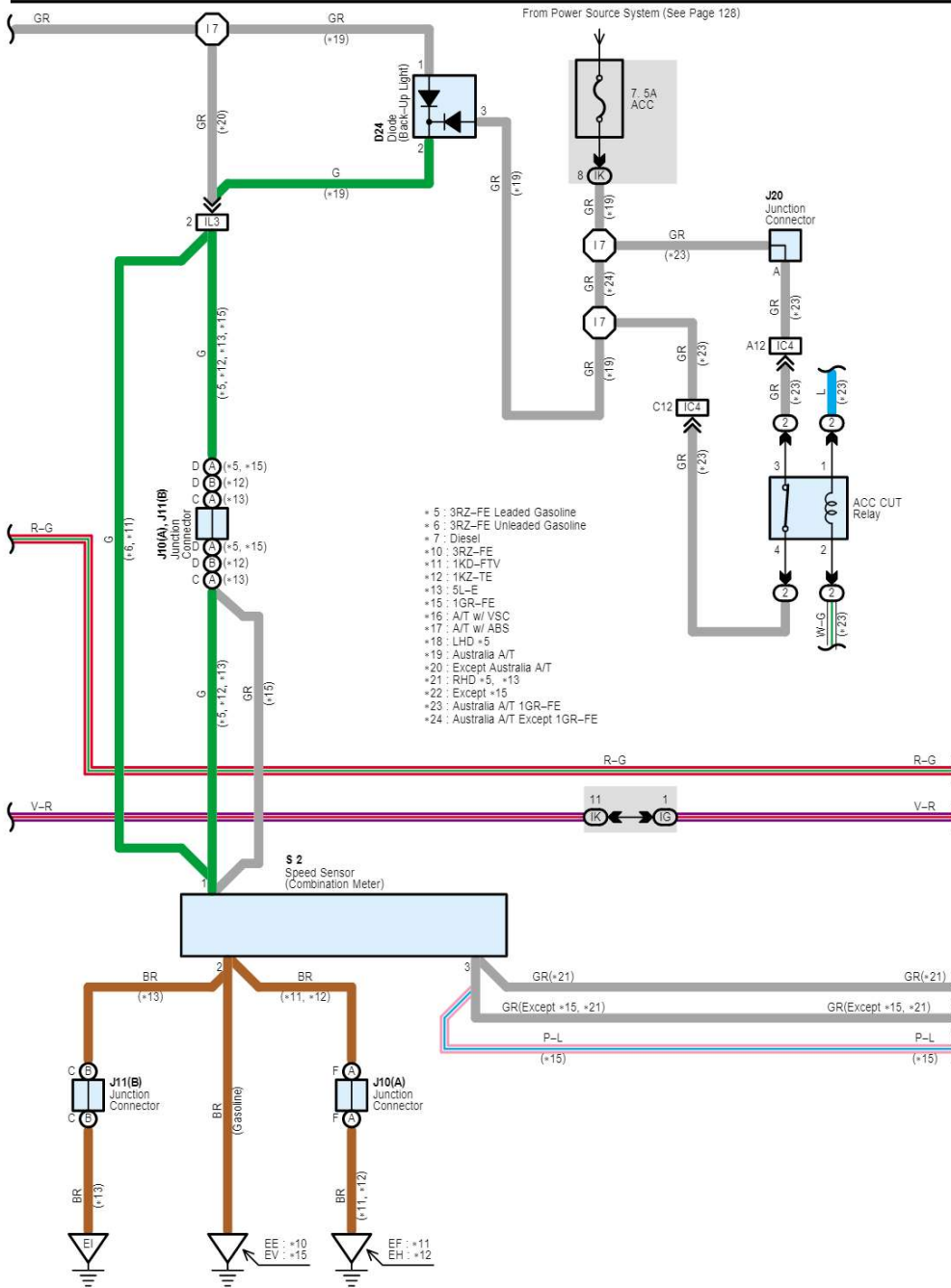
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



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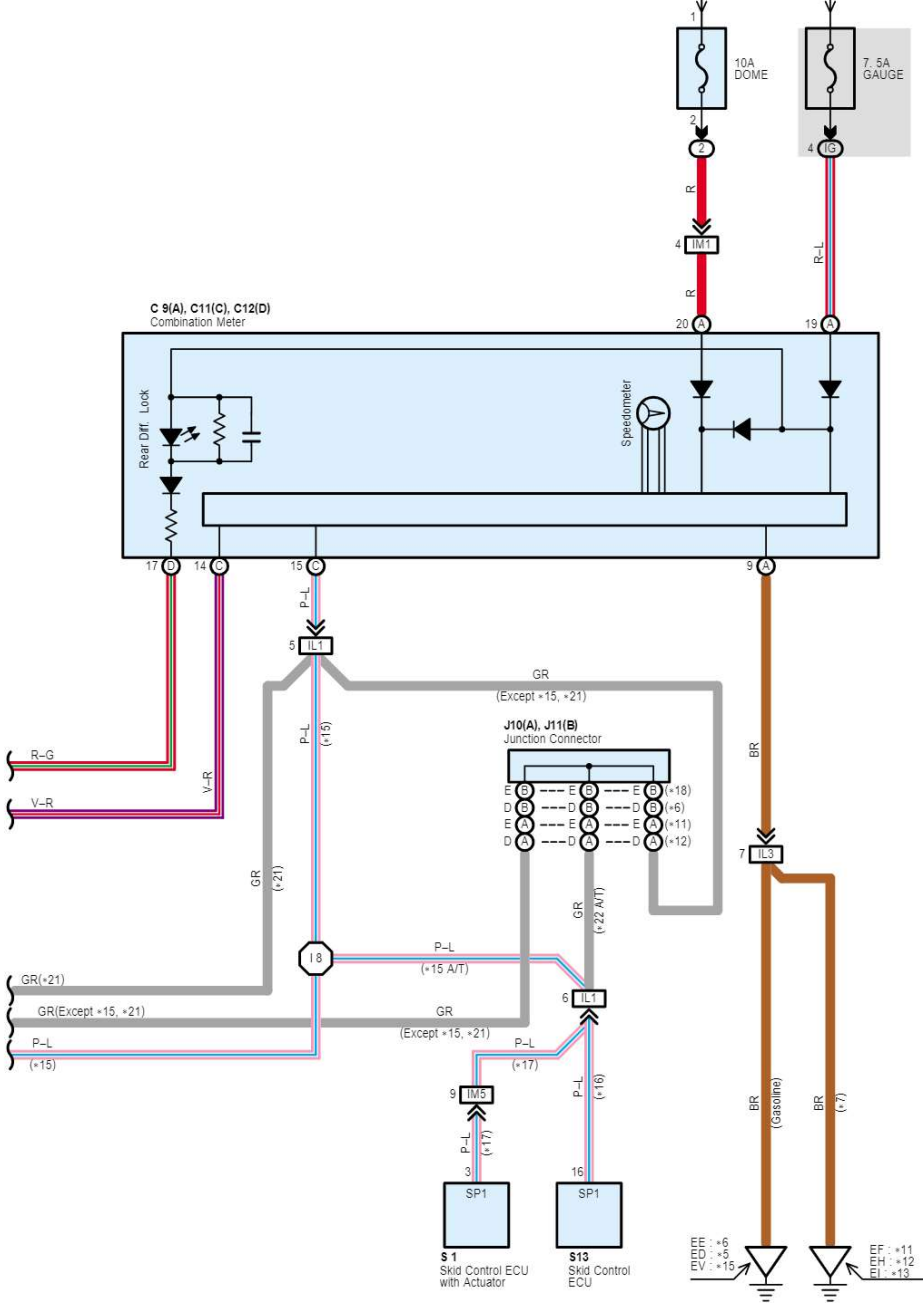
# Rear Differential Lock



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## Rear Differential Lock

### System Outline

Operation the rear differential lock control switch located in the driver side instrument panel, the rear differential lock ECU operated the rear differential lock motor, moves the shift fork to the right and the left, and switches to the differential lock condition or differential free condition.

### Service Hints

#### R8 Rear Diff. Lock Control ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page				
C9	A	49 (LHD)	E12	D	69 (RHD)	R9		71 (RHD)				
		69 (RHD)						50 (LHD)	53 (*6)			
C11	C	49 (LHD)	J10	A	70 (RHD)	R24		55 (*7)				
		69 (RHD)			50 (LHD)			73 (*15)				
C12	D	49 (LHD)	J11	B	70 (RHD)			75 (*16)				
		69 (RHD)			50 (LHD)			39 (*1)				
D2		38 (*1)	J17		70 (RHD)	S1		41 (*2)				
		40 (*2)			J20			50 (LHD)	43 (*3)			
		42 (*3)						70 (RHD)	45 (*4)			
		44 (*4)	J21	50 (LHD)	59 (*10)							
		46 (*5)		70 (RHD)	61 (*11)							
		58 (*10)	J24	50 (LHD)	63 (*12)							
		60 (*11)		70 (RHD)	65 (*13)							
		62 (*12)	J29	B	72 (*15)			39 (*1)				
		64 (*13)			74 (*16)			41 (*2)				
		66 (*14)			52 (*6)			43 (*3)				
		D9						52 (*6)	J30	A	54 (*7)	S2
			54 (*7)	72 (*15)				47 (*5)				
72 (*15)	74 (*16)		59 (*10)									
74 (*16)	52 (*6)		61 (*11)									
D24		69 (RHD)	J31		54 (*7)			63 (*12)				
					72 (*15)			65 (*13)				
E9	A	69 (RHD)			74 (*16)			67 (*14)				
E11	C	49 (LHD)	R8		51 (LHD)	S13		51 (LHD)				
		69 (RHD)			71 (RHD)			71 (RHD)				
E12	D	49 (LHD)			R9			51 (LHD)				

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	
IN1	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BC1	96 (*6)	Frame Wire and Floor No.2 Wire (Under the Left Side of Rear Seat Cushion)
	120 (*15)	
BC2	96 (*6)	
	120 (*15)	
BC3	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
	124 (*16)	
BD1	96 (*6)	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)
	100 (*7)	
	120 (*15)	
	124 (*16)	
BJ1	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

## Rear Differential Lock

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel
BQ	96 (*6)	Near the Left Side of No.5 Cross Member
	120 (*15)	
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

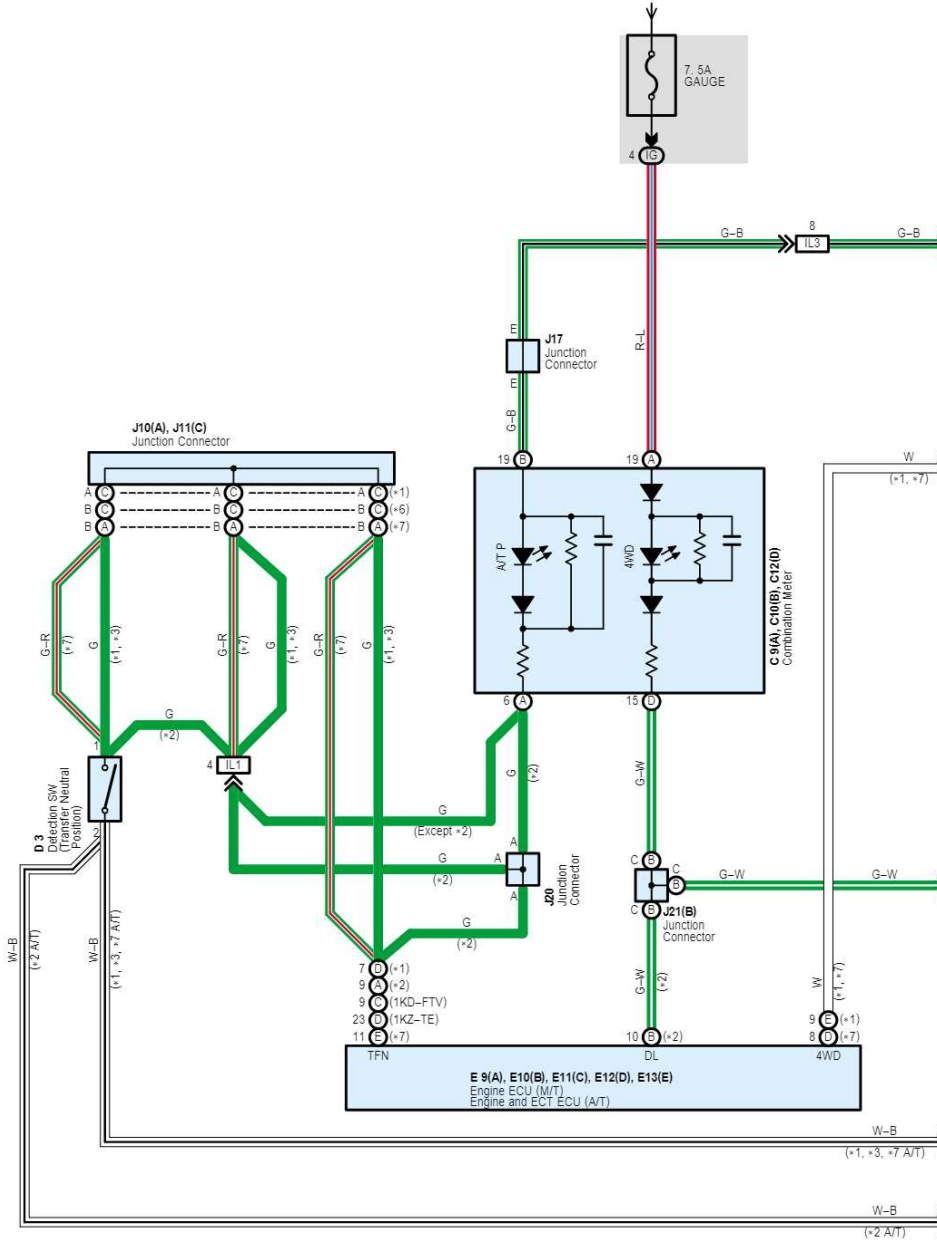
### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	114 (RHD)	Engine Wire
	114 (RHD)			B3	98 (*6)
I8	90 (LHD)	Engine Wire	122 (*15)		

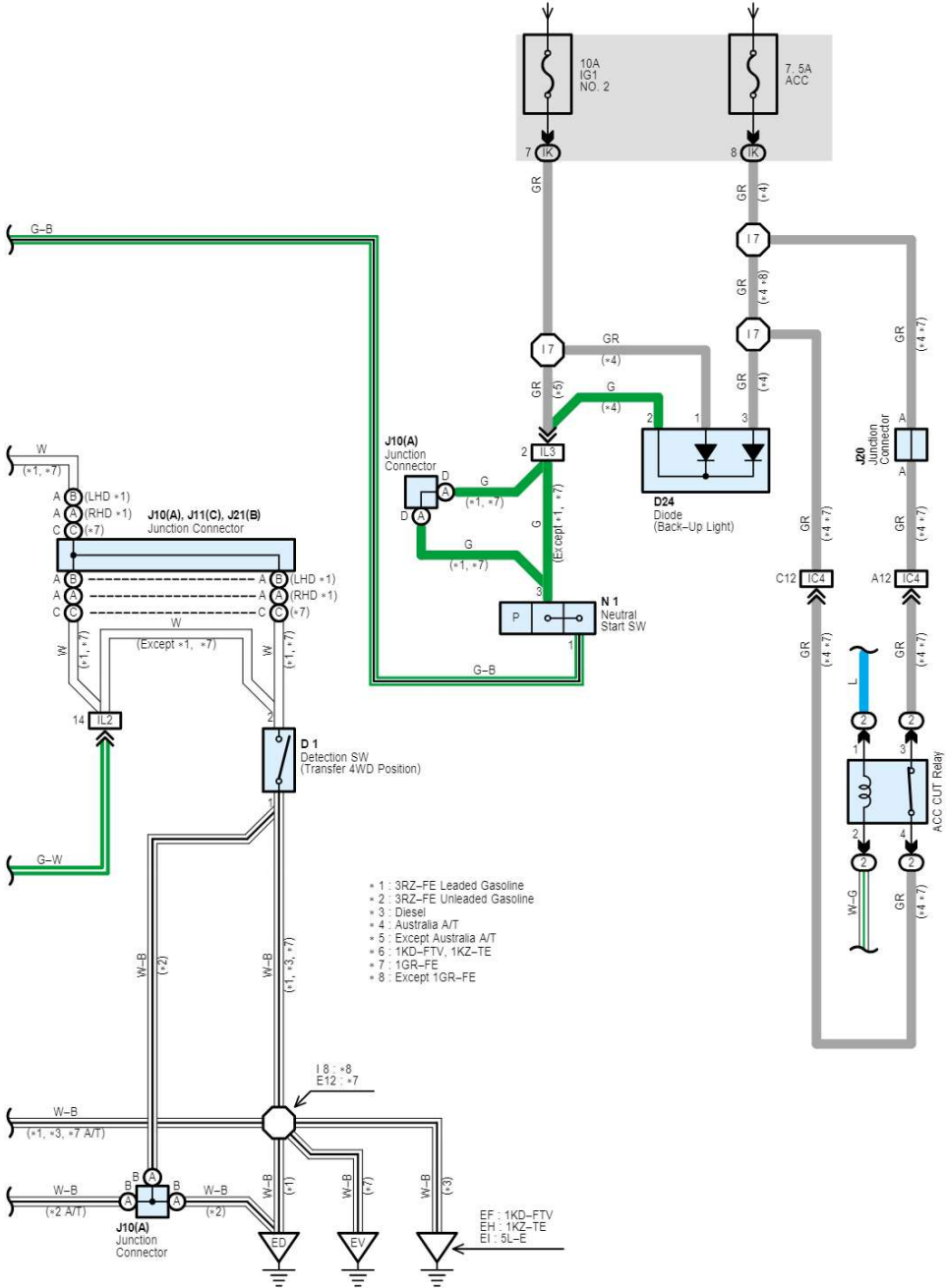
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



From Power Source System (See Page 128)



**Service Hints**

**N1 Neutral Start SW**

3-1 : Closed with A/T shift lever at P position

**D3 Detection SW (Transfer Neutral Position)**

1-2 : Closed with transfer position at N position

**○ : Parts Location**

Code		See Page	Code	See Page	Code	See Page		
C9	A	49 (LHD)	D3	42 (*3)	J10	A	70 (RHD)	
		69 (RHD)		44 (*4)	J11	C	50 (LHD)	
49 (LHD)	58 (*10)	70 (RHD)						
C10	B	69 (RHD)		60 (*11)	J17		50 (LHD)	
		49 (LHD)		62 (*12)		70 (RHD)		
C12	D	69 (RHD)		64 (*13)	J20		50 (LHD)	
		38 (*1)		69 (RHD)		70 (RHD)		
D1		40 (*2)		D24			50 (LHD)	
		42 (*3)		E9	A	J21	B	70 (RHD)
		44 (*4)						39 (*1)
		46 (*5)	E10	B	N1		41 (*2)	
		58 (*10)				43 (*3)		
		60 (*11)	E11	C		45 (*4)		
		62 (*12)				59 (*10)		
		64 (*13)	E12	D		61 (*11)		
		66 (*14)				63 (*12)		
	D3		38 (*1)	E13		E	65 (*13)	
		40 (*2)	J10	A		50 (LHD)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



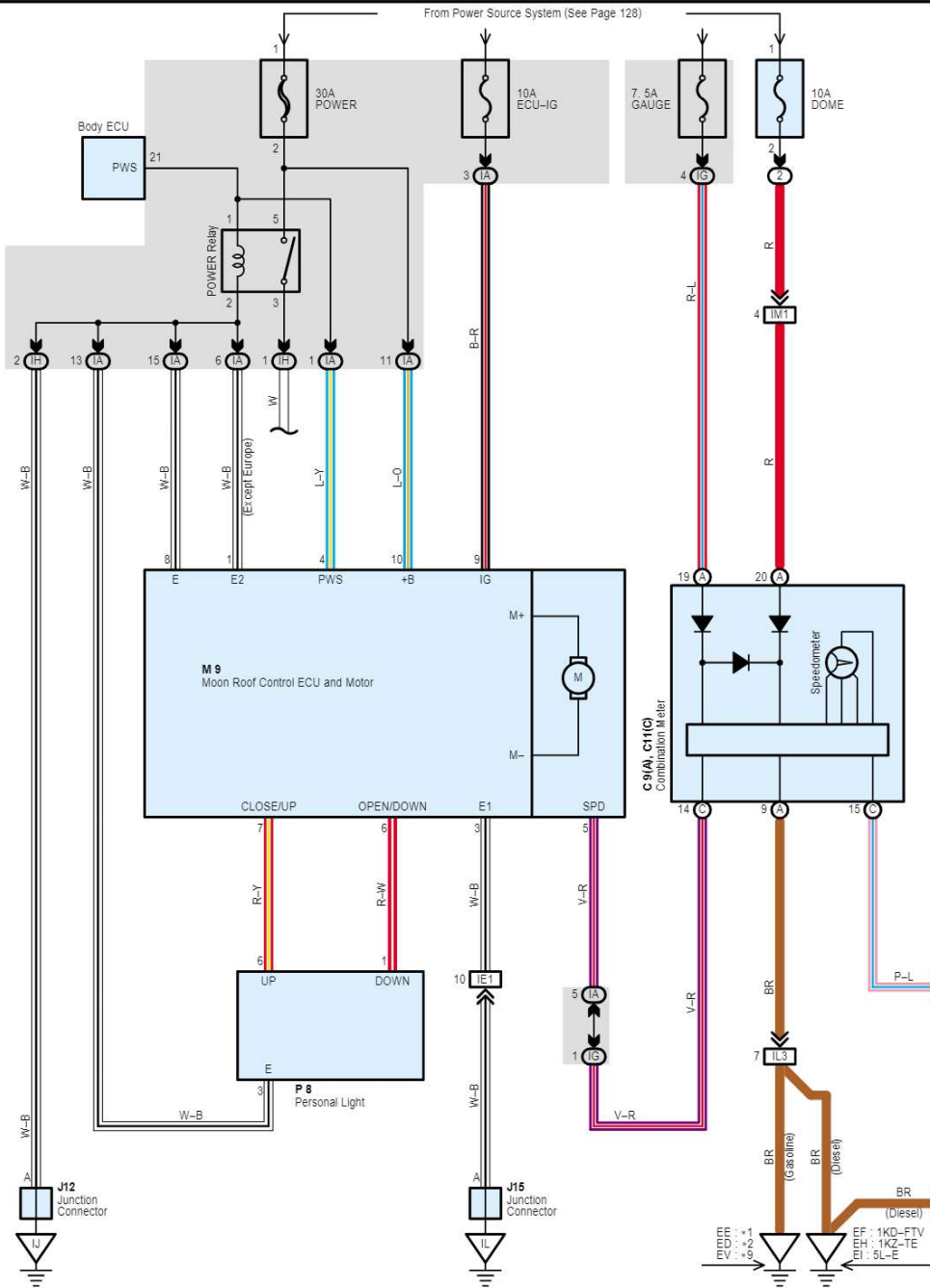
▽ : Ground Points

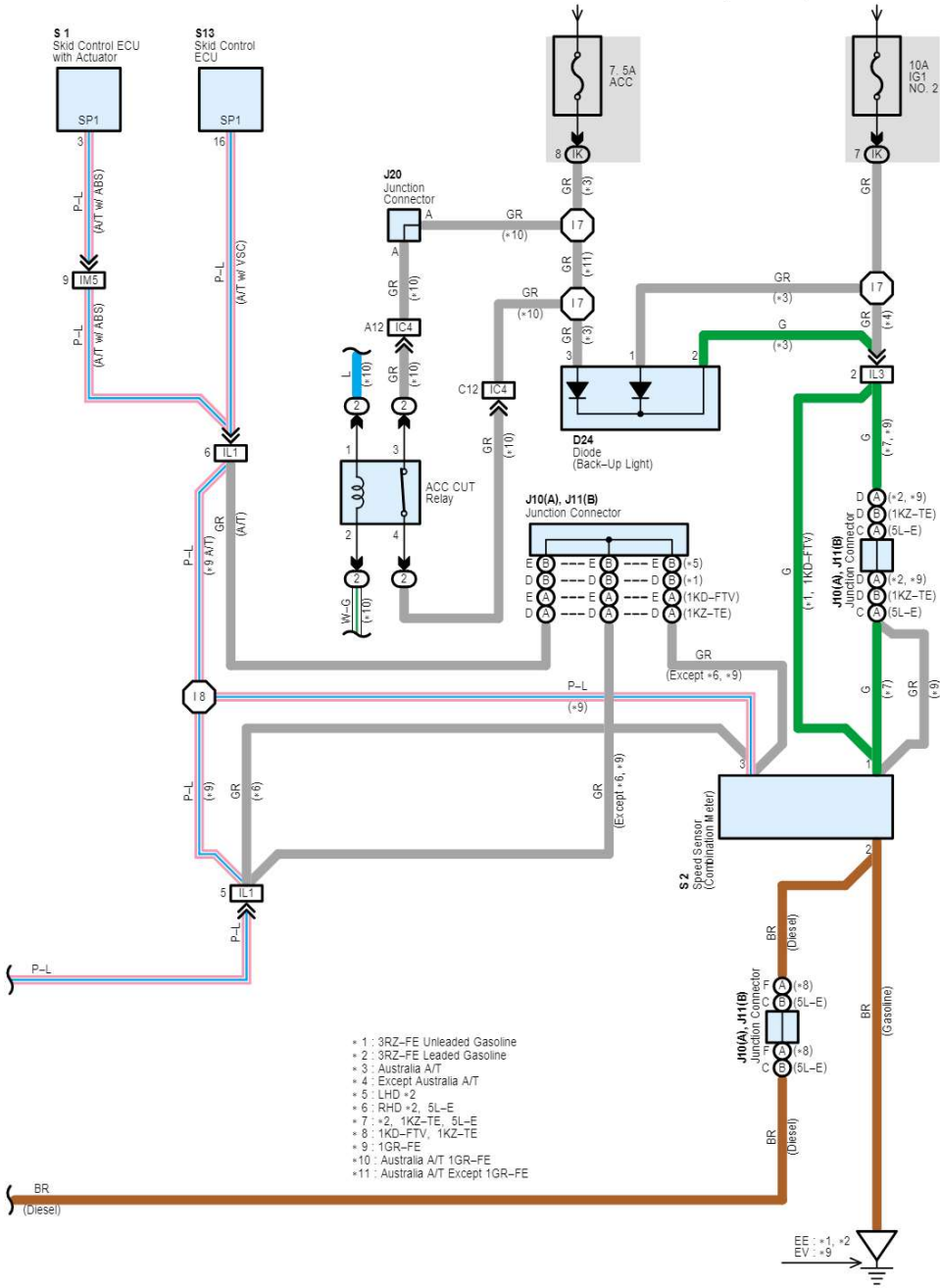
Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	

○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E12	78 (*1)	Engine Wire	I7	114 (RHD)	Instrument Panel Wire
	102 (*10)			90 (LHD)	Engine Wire
I7	90 (LHD)	Instrument Panel Wire	I8	114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat





# Moon Roof

## System Outline

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

### 1. Moon Roof Open/Close Operation

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

### 2. Key-Off Operation

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

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

### 3. Overload Reverse Operation

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

### 4. Deflector Control Function

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

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

- (1) Reconnect the battery terminal or fuse.
- (2) Turn ON the ignition switch.
- (3) Operate the moon roof control SW to open the roof halfway or more.
- (4) Then operate the moon roof control SW to fully close the roof.  
Do not release the switch for at least one second after the roof is fully closed.

## Service Hints

### M9 Moon Roof Control ECU and Motor

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

10-Ground : Always approx. 12 volts

1, 8, 3-Ground : Always continuity

## ○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
C9	A	49 (LHD)	M9	53 (*6)	S1	63 (*12)
		69 (RHD)		55 (*7)		65 (*13)
C11	C	49 (LHD)		73 (*15)	S2	39 (*1)
		69 (RHD)		75 (*16)		41 (*2)
D24	69 (RHD)	53 (*6)		43 (*3)		
J10	A	50 (LHD)		55 (*7)		45 (*4)
		70 (RHD)	73 (*15)	47 (*5)		
J11	B	50 (LHD)	75 (*16)	59 (*10)		
		70 (RHD)	39 (*1)	61 (*11)		
J12		50 (LHD)	S1	41 (*2)		63 (*12)
		70 (RHD)		43 (*3)		65 (*13)
J15		50 (LHD)		45 (*4)		67 (*14)
		70 (RHD)		59 (*10)	51 (LHD)	
J20	70 (RHD)	61 (*11)		S13	71 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IE1	90 (LHD)	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
	114 (RHD)	Roof Wire and Instrument Panel Wire (Left Side of the Driver Side J/B)
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	

**▽ : Ground Points**

Code	See Page	Ground Points Location
EE	80 (*2)	Intake Manifold
	104 (*11)	
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	
	106 (*12)	
EH	84 (*4)	Rear Part of Cylinder Block
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Moon Roof

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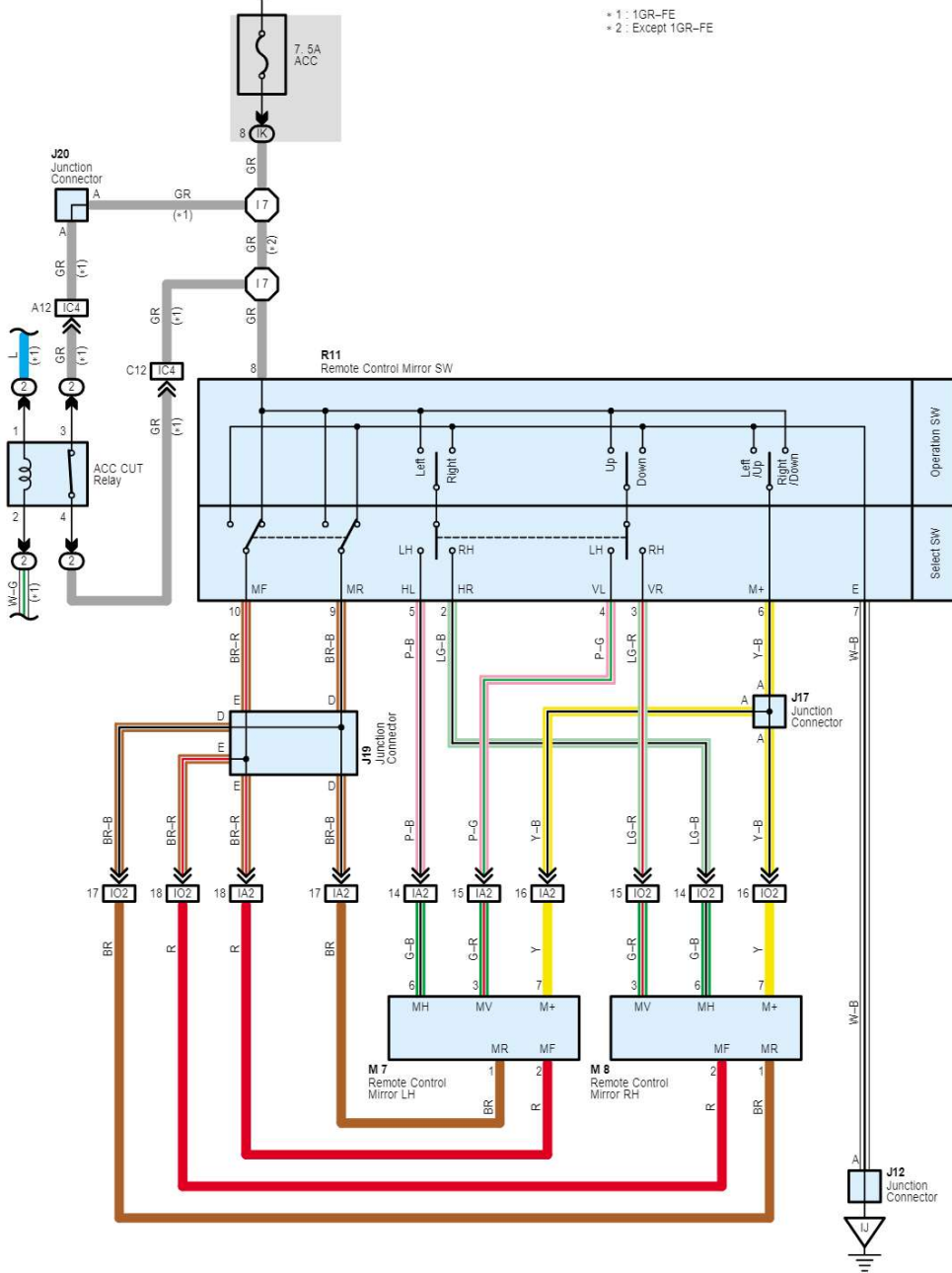
 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	



# Remote Control Mirror

From Power Source System (See Page 128)



614

LAND CRUISER / LAND CRUISER PRADO (EWD527E)



**Service Hints**

**R11 Remote Control Mirror SW**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
J12	50 (LHD)	J20	50 (LHD)	M8	53 (*6)
	70 (RHD)		70 (RHD)		55 (*7)
J17	50 (LHD)	M7	53 (*6)		73 (*15)
	70 (RHD)		55 (*7)		75 (*16)
J19	50 (LHD)		73 (*15)	R11	51 (LHD)
	70 (RHD)		75 (*16)		71 (RHD)

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA2	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IO2	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	118 (RHD)	

**▽ : Ground Points**

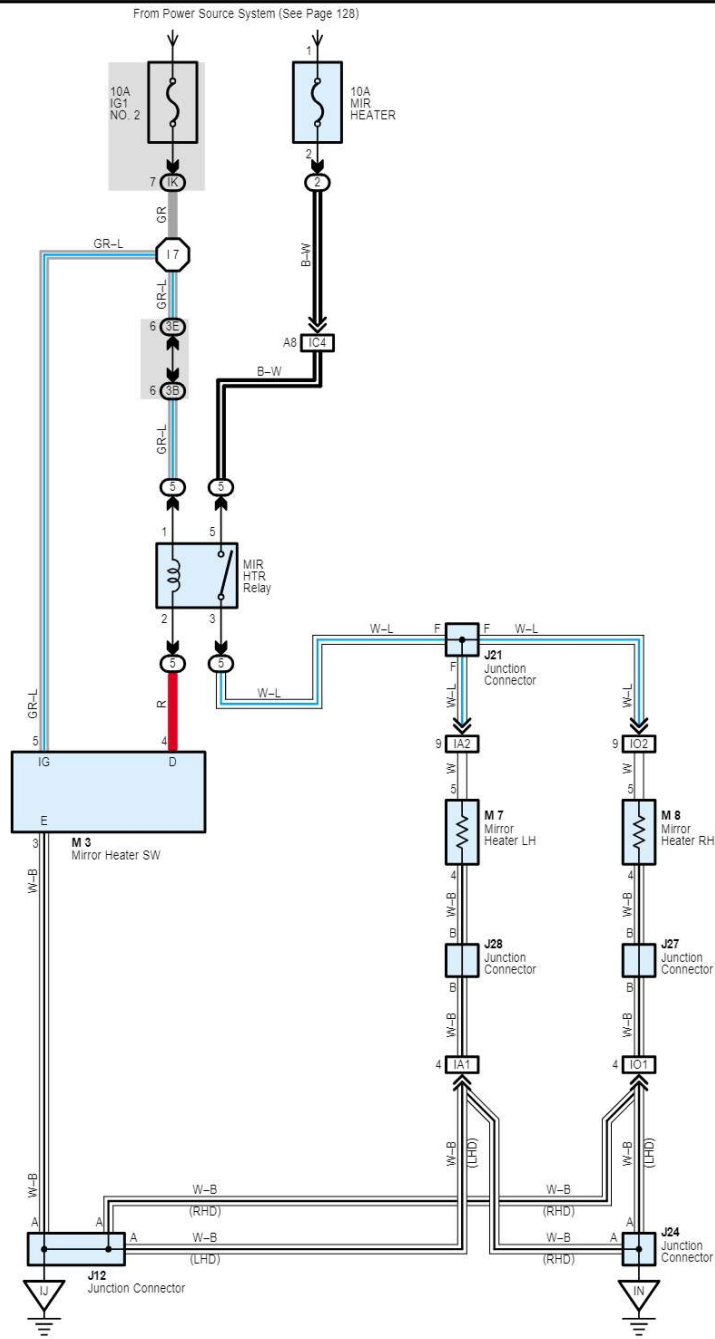
Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel

**○ : Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Mirror Heater



616

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints**

**M3 Mirror Heater SW**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
J12	50 (LHD)	J27	72 (*15)	M7	53 (*6)
	70 (RHD)		74 (*16)		55 (*7)
J21	50 (LHD)	J28	52 (*6)		73 (*15)
	70 (RHD)		54 (*7)	75 (*16)	
J24	50 (LHD)		M3	72 (*15)	M8
	70 (RHD)	74 (*16)		55 (*7)	
J27	52 (*6)	50 (LHD)		73 (*15)	
	54 (*7)	70 (RHD)	75 (*16)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)
5	25 (LHD)	Passenger Side R/B (Right Kick Panel)
	25 (RHD)	Passenger Side R/B (Left Kick Panel)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
	112 (RHD)	
IA2	88 (LHD)	
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	118 (RHD)	
IO2	94 (LHD)	
	118 (RHD)	

**▽ : Ground Points**

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IN	88 (LHD)	Left Kick Panel
	112 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Mirror Heater

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 : Splice Points

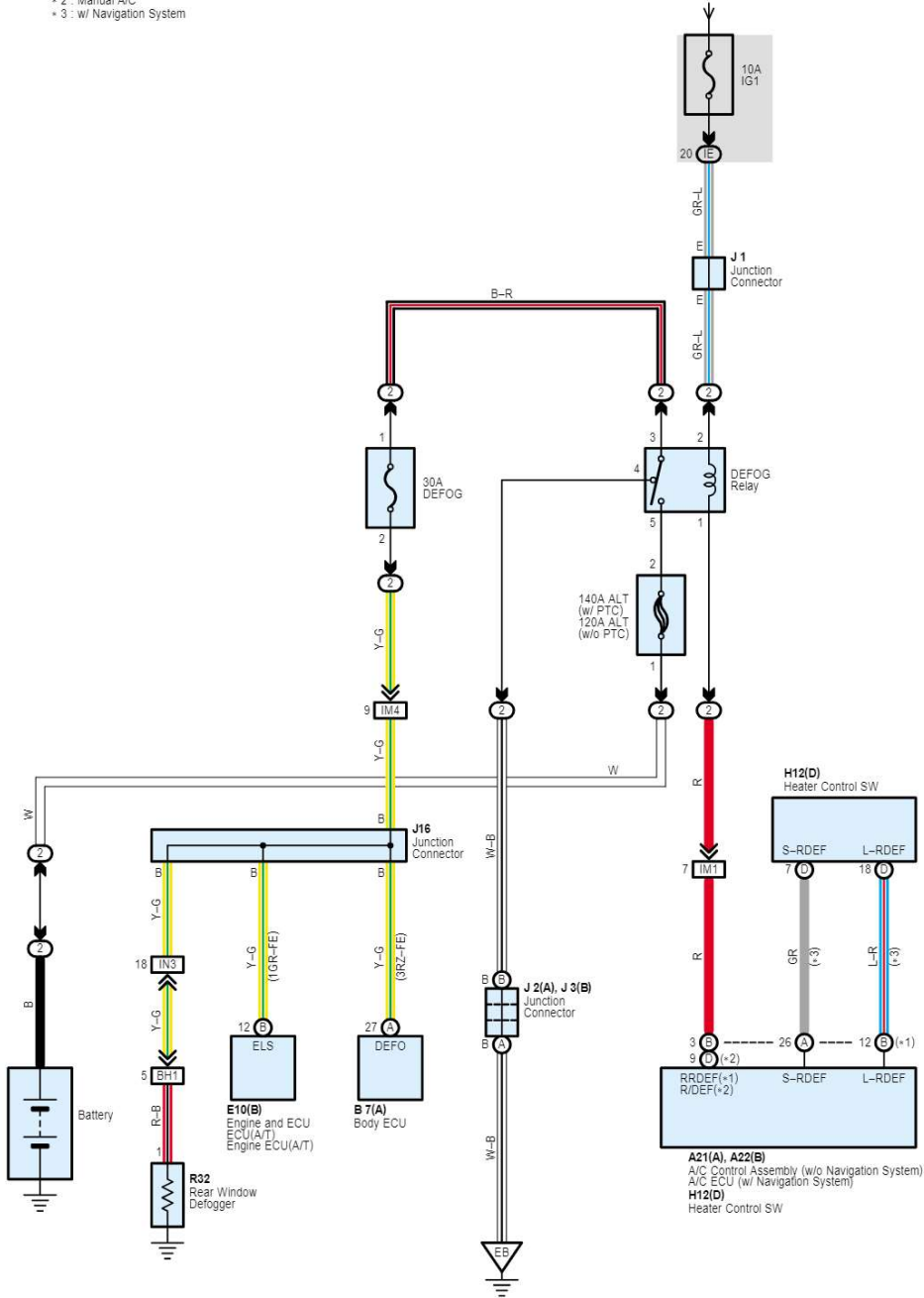
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	17	114 (RHD)	Instrument Panel Wire



# Rear Window Defogger

- \* 1 : Automatic A/C
- \* 2 : Manual A/C
- \* 3 : w/ Navigation System

From Power Source System (See Page 128)



**Service Hints**

**DEFOG Relay**

5-3 : Closed with the ignition SW at ON position and rear window defogger SW on

**○ : Parts Location**

Code		See Page	Code		See Page	Code		See Page				
A21	A	48 (LHD)	J1		61 (*11)	J3	B	43 (*3)				
		68 (RHD)			63 (*12)			45 (*4)				
A22	B	48 (LHD)			65 (*13)			47 (*5)				
		68 (RHD)			67 (*14)			59 (*10)				
B7	A	48 (LHD)			39 (*1)			J16				61 (*11)
		68 (RHD)			41 (*2)							63 (*12)
E10	B	49 (LHD)	43 (*3)	R32								65 (*13)
		69 (RHD)	45 (*4)									67 (*14)
H12	D	50 (LHD)	47 (*5)									50 (LHD)
		70 (RHD)	59 (*10)									70 (RHD)
J1		39 (*1)	61 (*11)					53 (*6)				
		41 (*2)	63 (*12)					55 (*7)				
		43 (*3)	65 (*13)	73 (*15)								
		45 (*4)	67 (*14)	75 (*16)								
		47 (*5)	39 (*1)									
		59 (*10)	41 (*2)									

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
	116 (RHD)	
IN3	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	
	122 (*15)	
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Rear Window Defogger

▽ : Ground Points

Code	See Page	Ground Points Location
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	

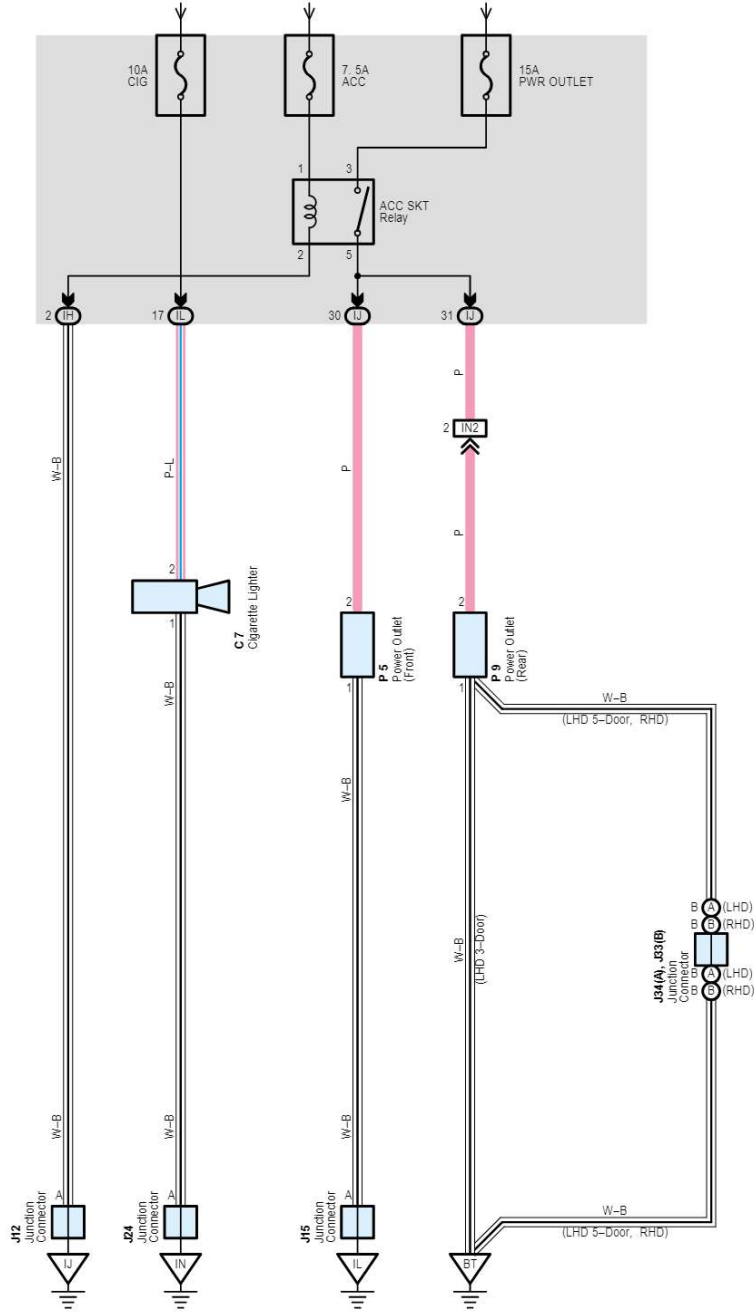
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat





# Cigarette Lighter and Power Outlet

From Power Source System (See Page 128)



624

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints**

**C7 Cigarette Lighter**

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

**P5 Power Outlet (Front)**

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

**P9 Power Outlet (Rear)**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
C7	49 (LHD)	J24	50 (LHD)	P5	71 (RHD)
	69 (RHD)		70 (RHD)		53 (*6)
J12	50 (LHD)	J33	B	P9	55 (*7)
	70 (RHD)				72 (*15)
J15	50 (LHD)	J34	A		52 (*6)
	70 (RHD)				P5

**□ : Junction Block and Wire Harness Connector**

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

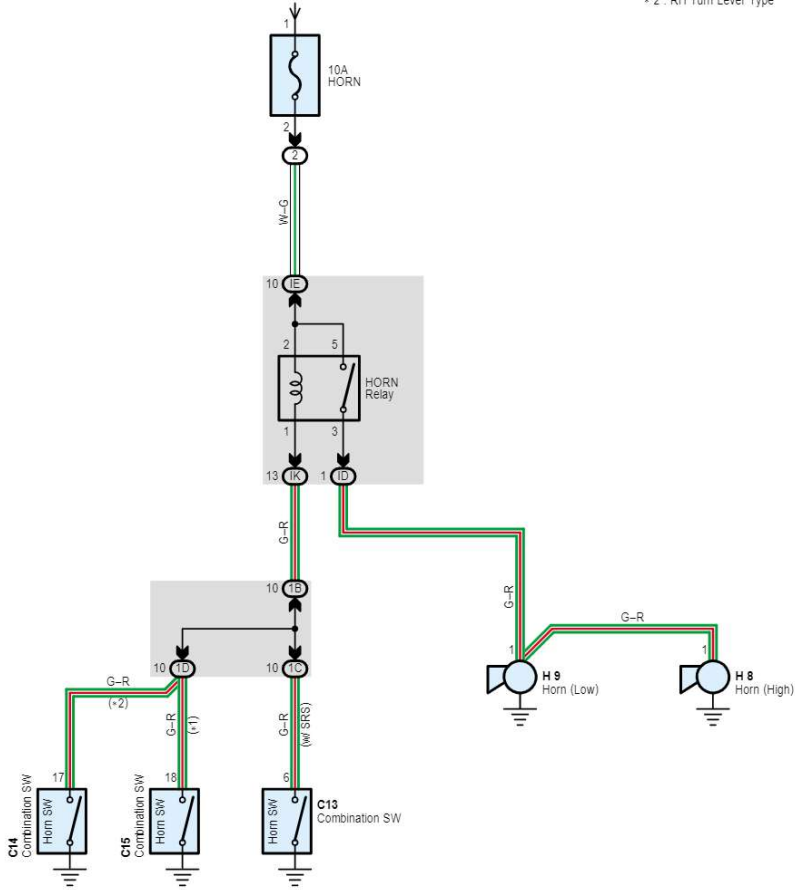
**□ : Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

**▽ : Ground Points**

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



**Service Hints**

**HORN Relay**

5-3 : Closed with the horn SW on

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C13	49 (LHD)	H8	45 (*4)	H9	43 (*3)
	69 (RHD)		47 (*5)		45 (*4)
C14	49 (LHD)		59 (*10)		47 (*5)
	69 (RHD)		61 (*11)		59 (*10)
C15	49 (LHD)		63 (*12)		61 (*11)
	69 (RHD)		65 (*13)		63 (*12)
H8	39 (*1)	67 (*14)	65 (*13)		
	41 (*2)	39 (*1)	67 (*14)		
	43 (*3)	H9	41 (*2)		

: **Relay Blocks**

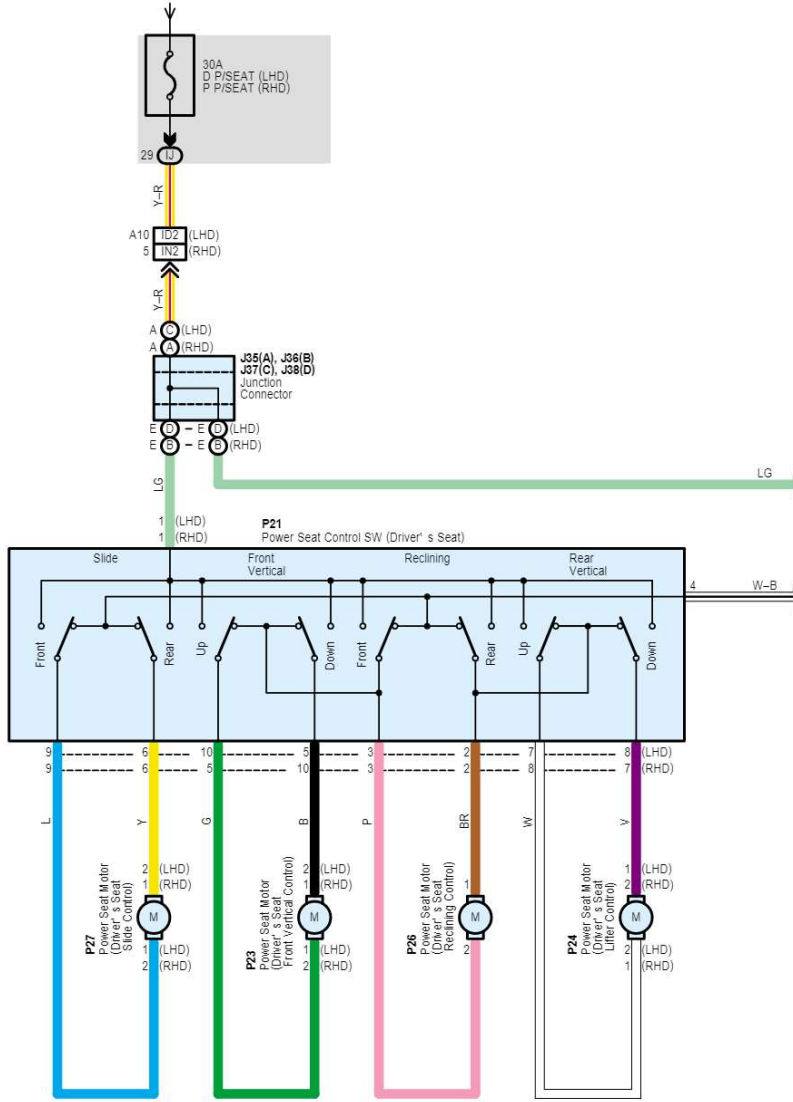
Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

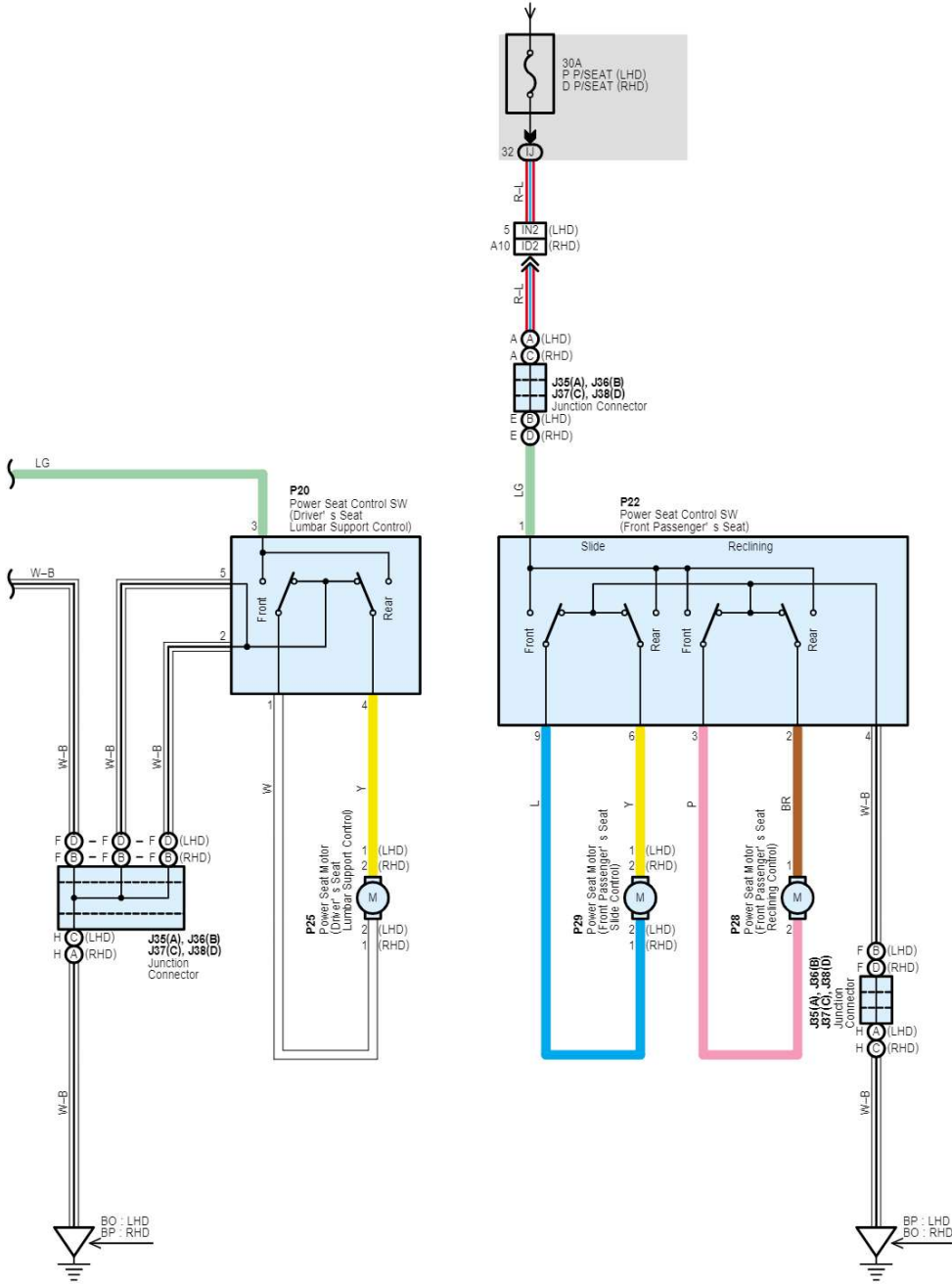
: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
ID	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IE	26 (LHD)	
	28 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

From Power Source System (See Page 128)





# Power Seat

## Service Hints

### P20 Power Seat Control SW (Driver's Seat Lumber Support Control)

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

### P21 Power Seat Control SW (Driver's Seat)

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

### P22 Power Seat Control SW (Front Passenger's Seat)

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

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
J35	A	J38	D	P20	56 (*8)
					57 (*9)
					76 (*17)
					77 (*18)
J36	B	P21	P25	P26	76 (*17)
					56 (*8)
					57 (*9)
					76 (*17)
J37	C	P22	P27	P28	56 (*8)
					57 (*9)
					76 (*17)
					77 (*18)
J38	D	P23	P29	P24	56 (*8)
					57 (*9)

## ○ : Junction Block and Wire Harness Connector

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

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



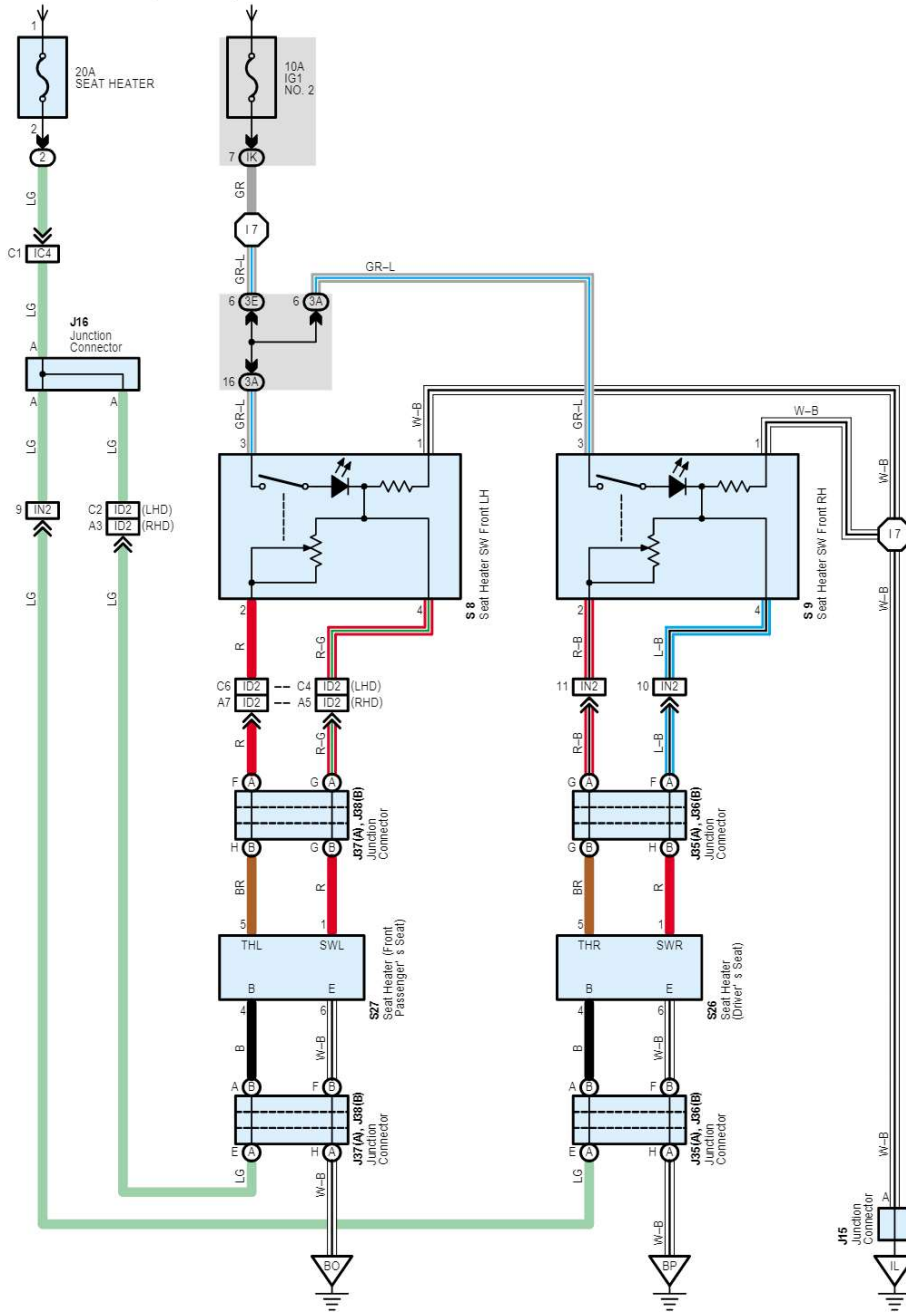
▽ : Ground Points

Code	See Page	Ground Points Location
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
	120 (*15)	Under the Front Passenger's Seat
	124 (*16)	
BP	96 (*6)	Under the Front Passenger's Seat
	100 (*7)	
	120 (*15)	Under the Driver's Seat
	124 (*16)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Seat Heater

From Power Source System (See Page 128)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints**

**S8, S9 Seat Heater SW Front LH, RH**

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

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page	
J15	50 (LHD)	J36	B	77 (*18)	S9	51 (LHD)
	70 (RHD)					71 (RHD)
J16	50 (LHD)	J37	A	57 (*9)	S26	56 (*8)
	70 (RHD)					57 (*9)
J35	56 (*8)	J38	B	56 (*8)	S27	76 (*17)
	57 (*9)					77 (*18)
	76 (*17)					56 (*8)
	77 (*18)					57 (*9)
J36	56 (*8)	S8		76 (*17)		57 (*9)
	57 (*9)					77 (*18)
	76 (*17)					51 (LHD)
						71 (RHD)

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IN2	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Seat Heater

### : Ground Points

Code	See Page	Ground Points Location
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
	120 (*15)	Under the Front Passenger's Seat
	124 (*16)	
BP	96 (*6)	Under the Front Passenger's Seat
	100 (*7)	
	120 (*15)	Under the Driver's Seat
	124 (*16)	

### : Splice Points

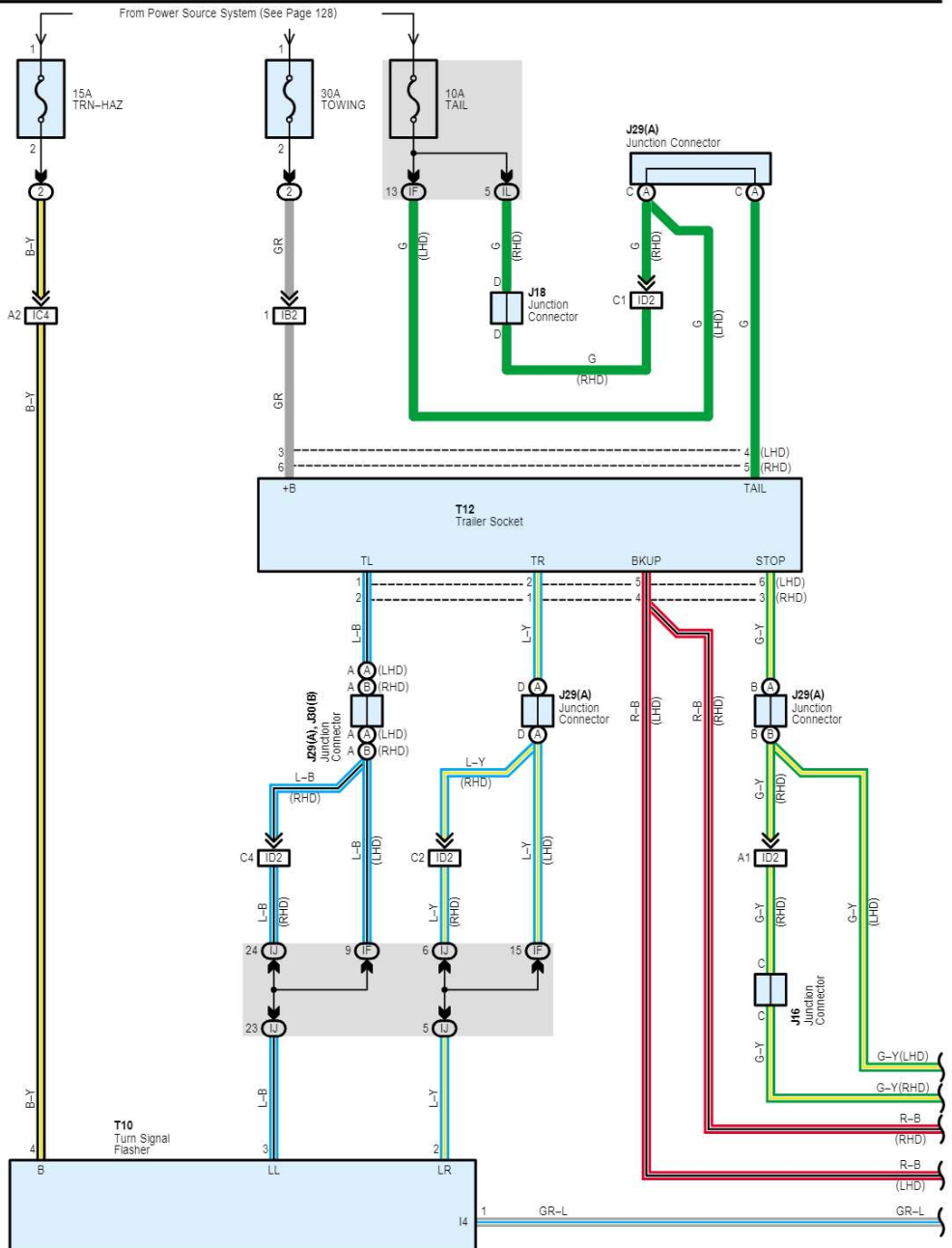
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

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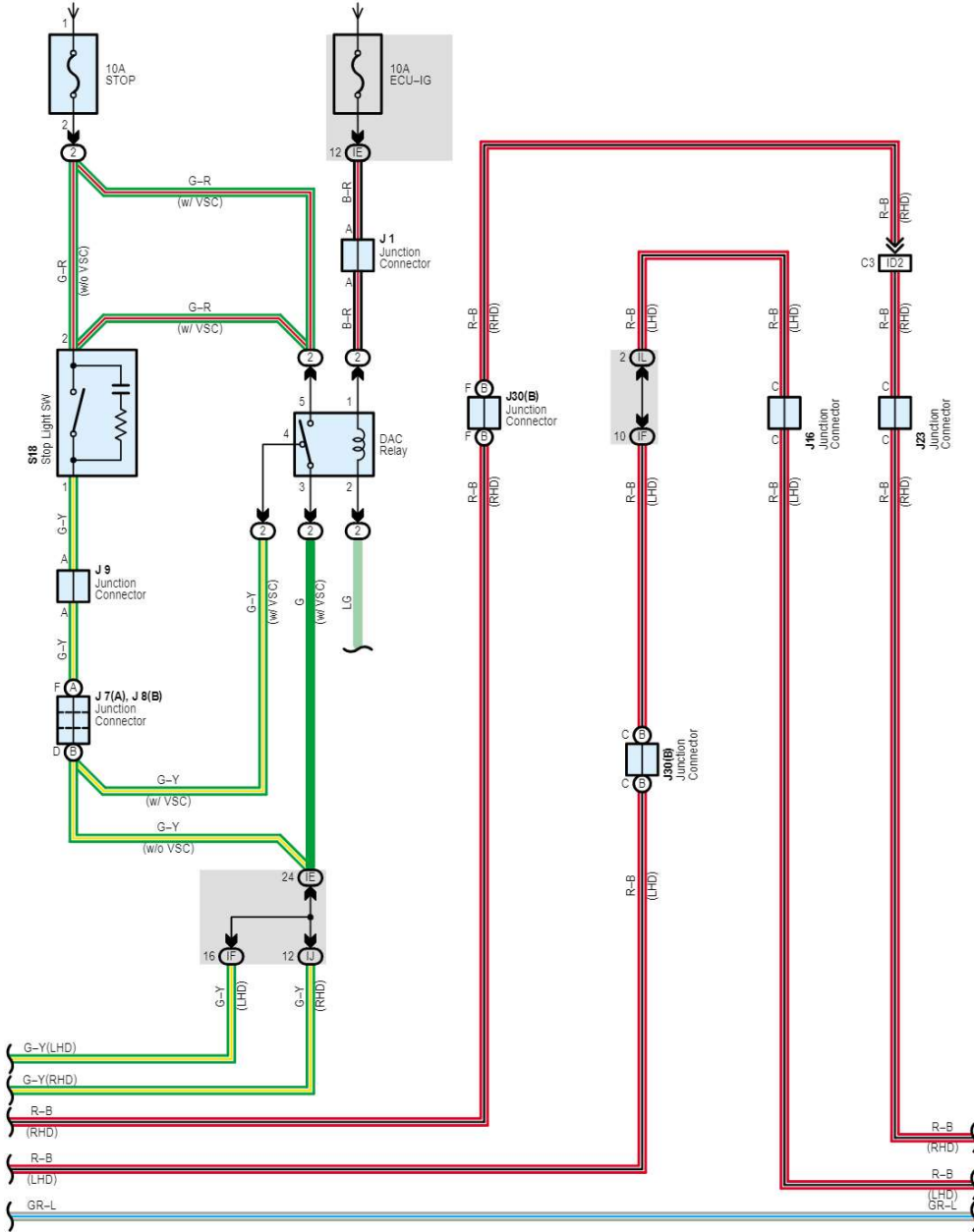
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Trailer Towing

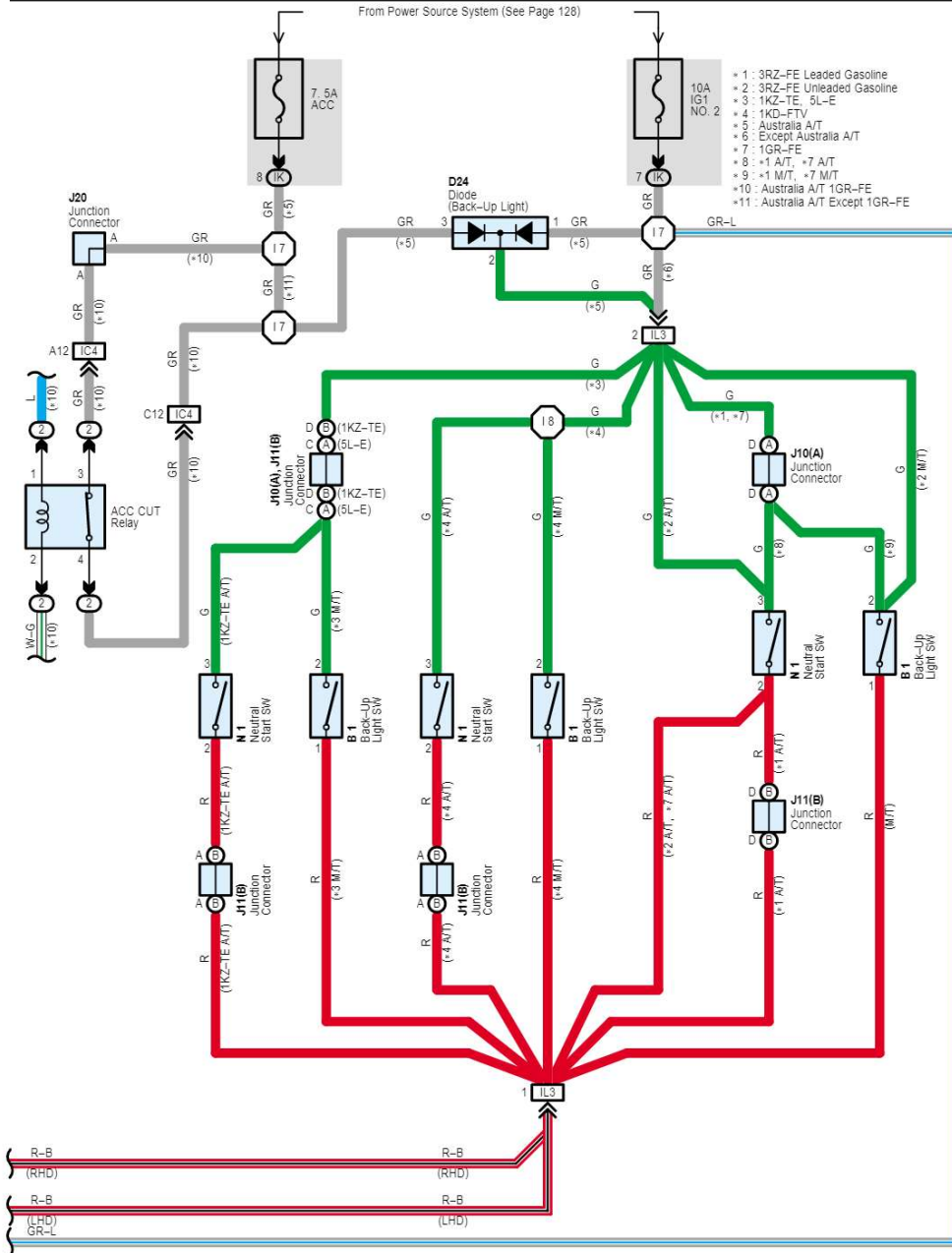


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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



From Power Source System (See Page 128)





**Service Hints**

**T12 Trailer Socket**

4 (LHD), 5 (RHD)–Ground : Approx. 12 volts with light control SW at TAIL or HEAD position  
 5 (LHD), 4 (RHD)–Ground : Approx. 12 volts with ignition SW at ON position and shift lever in R position

: **Parts Location**

Code	See Page	Code	See Page	Code	See Page		
B1	38 (*1)	J1	67 (*14)	J30	B	52 (*6)	
	40 (*2)	J7	A			50 (LHD)	54 (*7)
	42 (*3)					70 (RHD)	72 (*15)
	44 (*4)	J8	B			50 (LHD)	74 (*16)
	46 (*5)			70 (RHD)	39 (*1)		
	58 (*10)	J9	50 (LHD)	N1	41 (*2)		
	60 (*11)		70 (RHD)		43 (*3)		
	62 (*12)	J10	A		50 (LHD)	45 (*4)	
	64 (*13)				70 (RHD)	59 (*10)	
	66 (*14)	J11	B		50 (LHD)	61 (*11)	
	D24				69 (RHD)	70 (RHD)	63 (*12)
	J1	39 (*1)	J16		50 (LHD)	S18	65 (*13)
		41 (*2)			70 (RHD)		51 (LHD)
		43 (*3)	J18		70 (RHD)	T10	71 (RHD)
45 (*4)		J20	70 (RHD)		51 (LHD)		
47 (*5)		J23	70 (RHD)	71 (RHD)			
59 (*10)		J29	A	52 (*6)	T12	53 (*6)	
61 (*11)				54 (*7)		55 (*7)	
63 (*12)				72 (*15)		73 (*15)	
65 (*13)				74 (*16)		75 (*16)	

: **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

: **Junction Block and Wire Harness Connector**

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

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Trailer Towing

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	88 (LHD)	Floor No.2 Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)

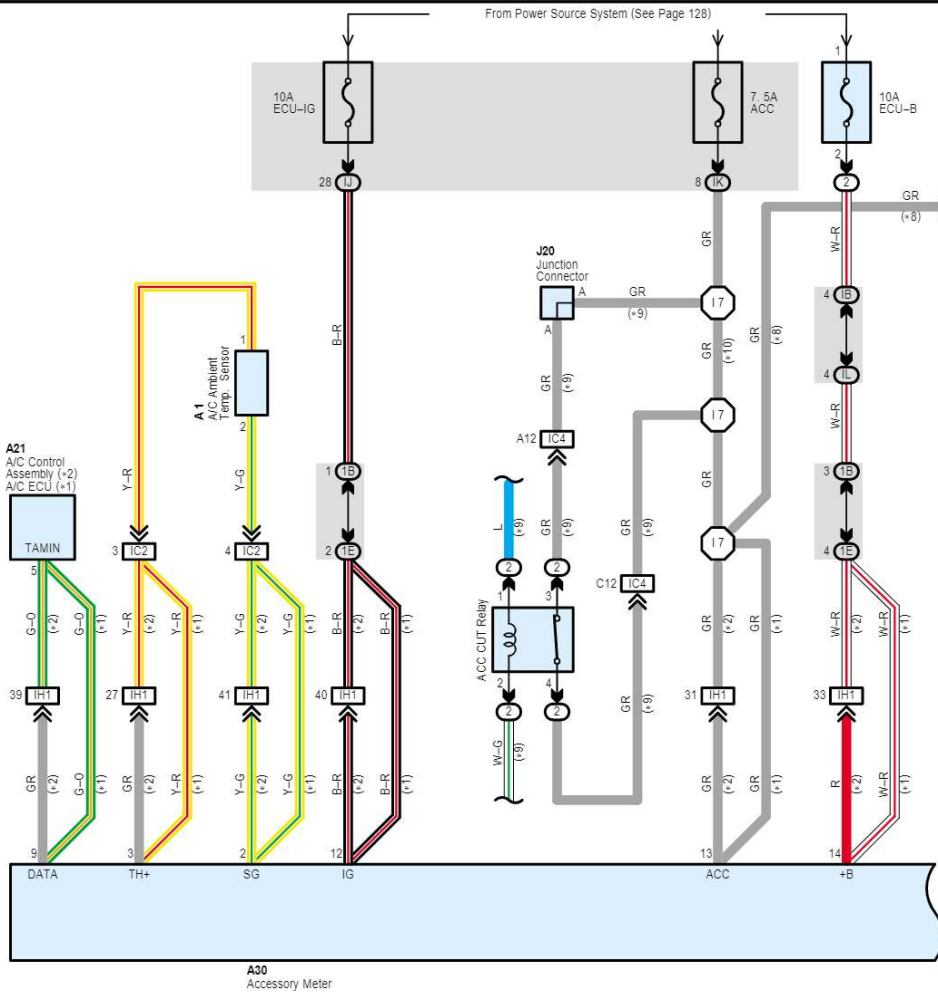
### : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

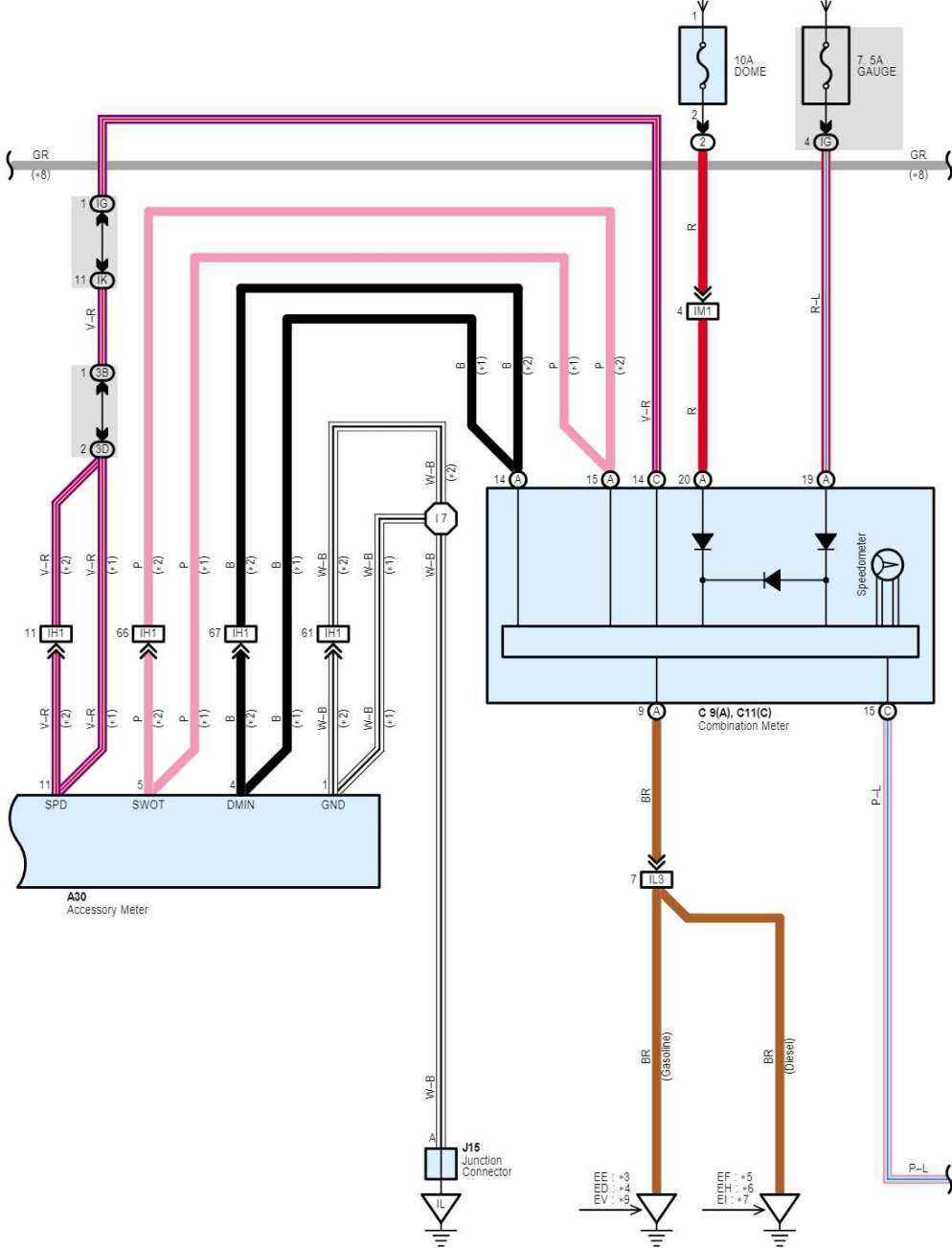
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Accessory Meter

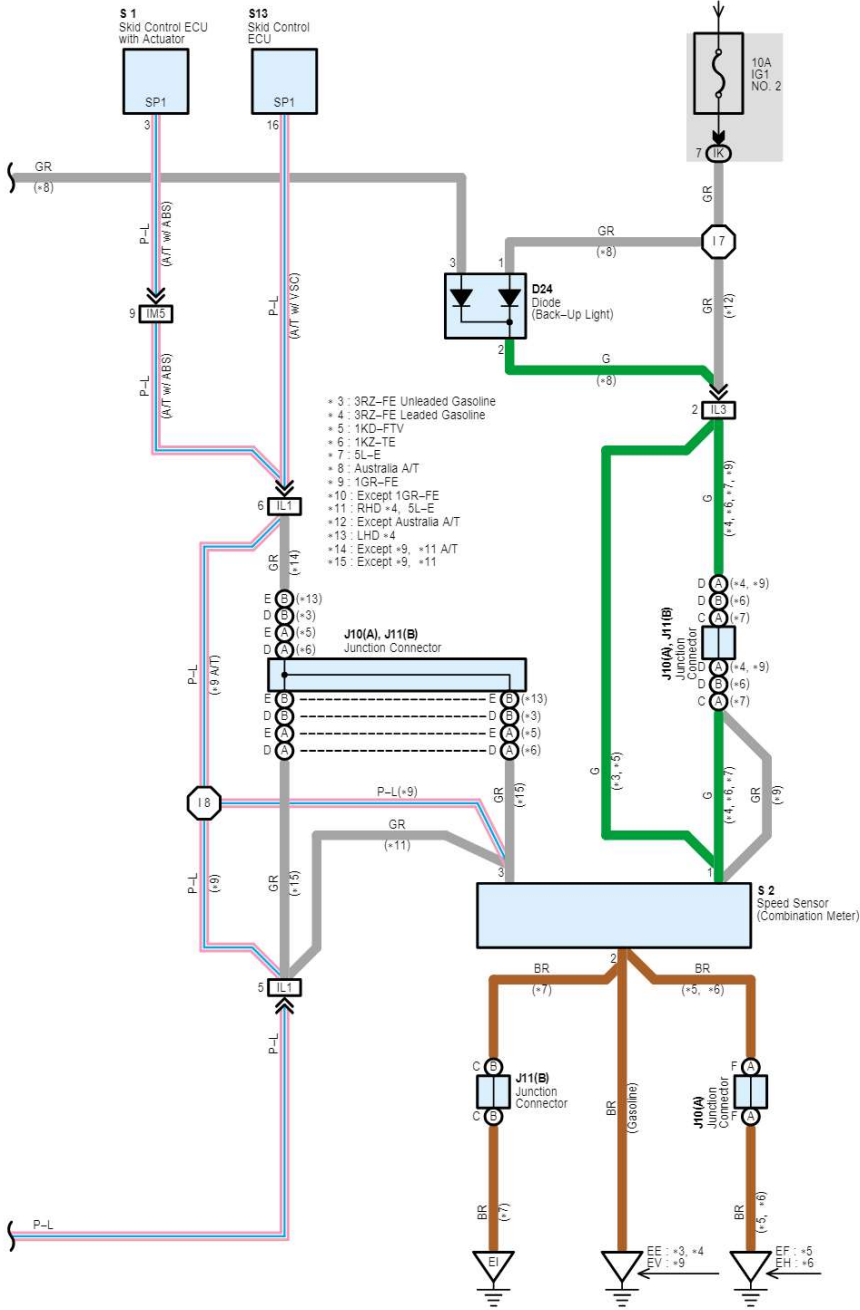


- \* 1 : w/ Navigation System
- \* 2 : w/o Navigation System
- \* 3 : 3RZ-FE Unleaded Gasoline
- \* 4 : 3RZ-FE Leaded Gasoline
- \* 5 : 1KD-FTV
- \* 6 : 1KZ-TE
- \* 7 : 5L-E
- \* 8 : Australia A/T
- \* 9 : 1GR-FE
- \* 10 : Except 1GR-FE



# Accessory Meter

From Power Source System (See Page 128)



**Service Hints**

**A30 Accessory Meter**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A1	38 (*1)	C11	C	S1	49 (LHD)	
	40 (*2)				69 (RHD)	
	42 (*3)	D24	69 (RHD)		61 (*11)	
	44 (*4)		63 (*12)			
	46 (*5)	J10	A		65 (*13)	
	58 (*10)	J11	B		50 (LHD)	39 (*1)
	60 (*11)				70 (RHD)	41 (*2)
	62 (*12)	J15	B		50 (LHD)	43 (*3)
	64 (*13)				70 (RHD)	45 (*4)
	66 (*14)	J20	B		50 (LHD)	47 (*5)
48 (LHD)	70 (RHD)			59 (*10)		
A21	68 (RHD)	S1	S1	61 (*11)		
A30	48 (LHD)			39 (*1)	63 (*12)	
	C9	68 (RHD)	S1	S13	65 (*13)	
A		41 (*2)			67 (*14)	
C9	49 (LHD)	S1	S13	51 (LHD)		
	69 (RHD)			43 (*3)	71 (RHD)	
				45 (*4)		
				59 (*10)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)	
	28 (RHD)		
IG	27 (LHD)		
	29 (RHD)		
IJ	27 (LHD)		Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
IL	27 (LHD)		
	29 (RHD)		
1B	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)		Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3B	36 (LHD)		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Accessory Meter

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	80 (*2)	Ignition Coil Bracket
	104 (*11)	
EE	80 (*2)	Intake Manifold
	104 (*11)	
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EH	84 (*4)	
	108 (*13)	
EI	86 (*5)	
	110 (*14)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

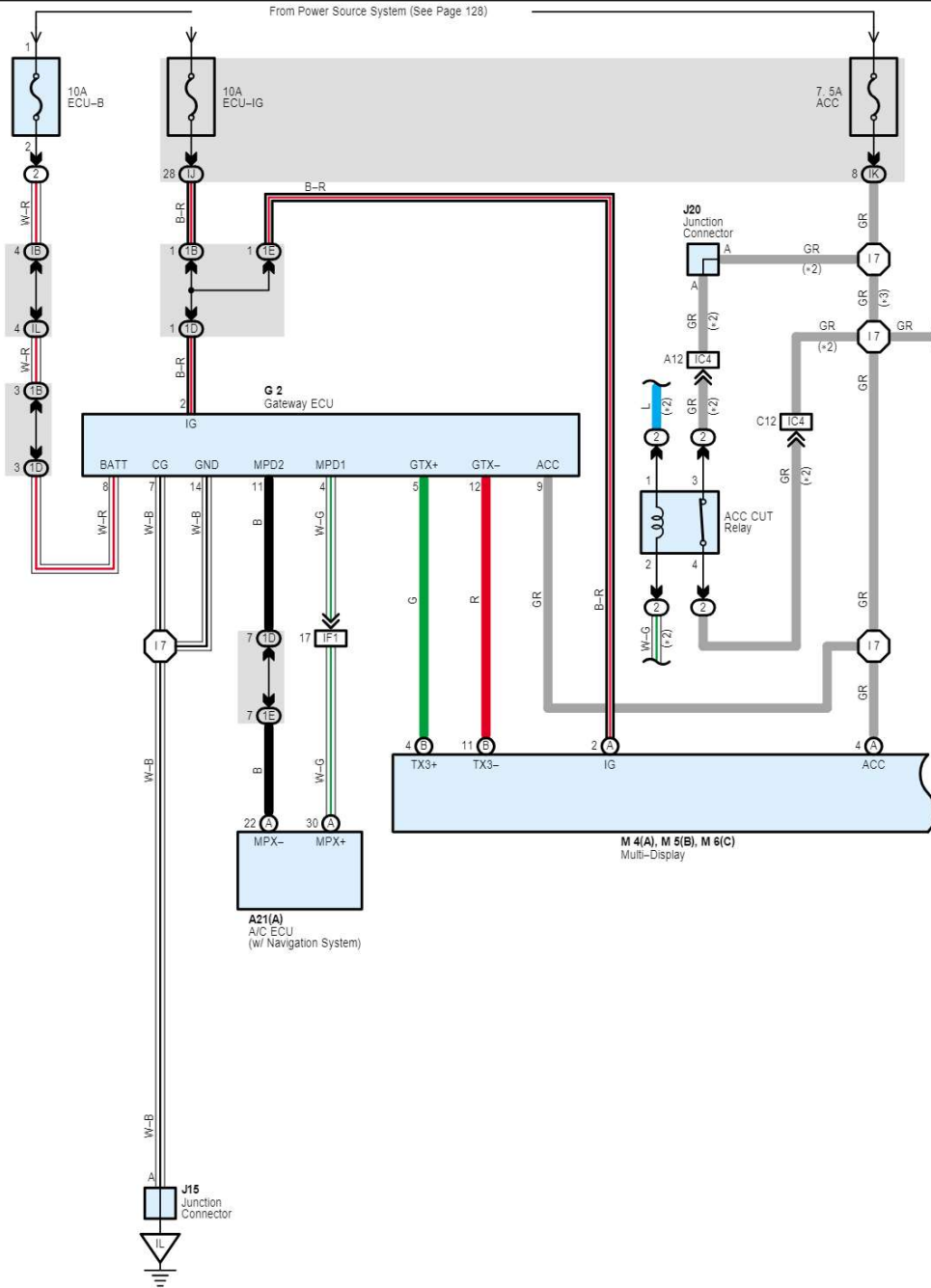
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

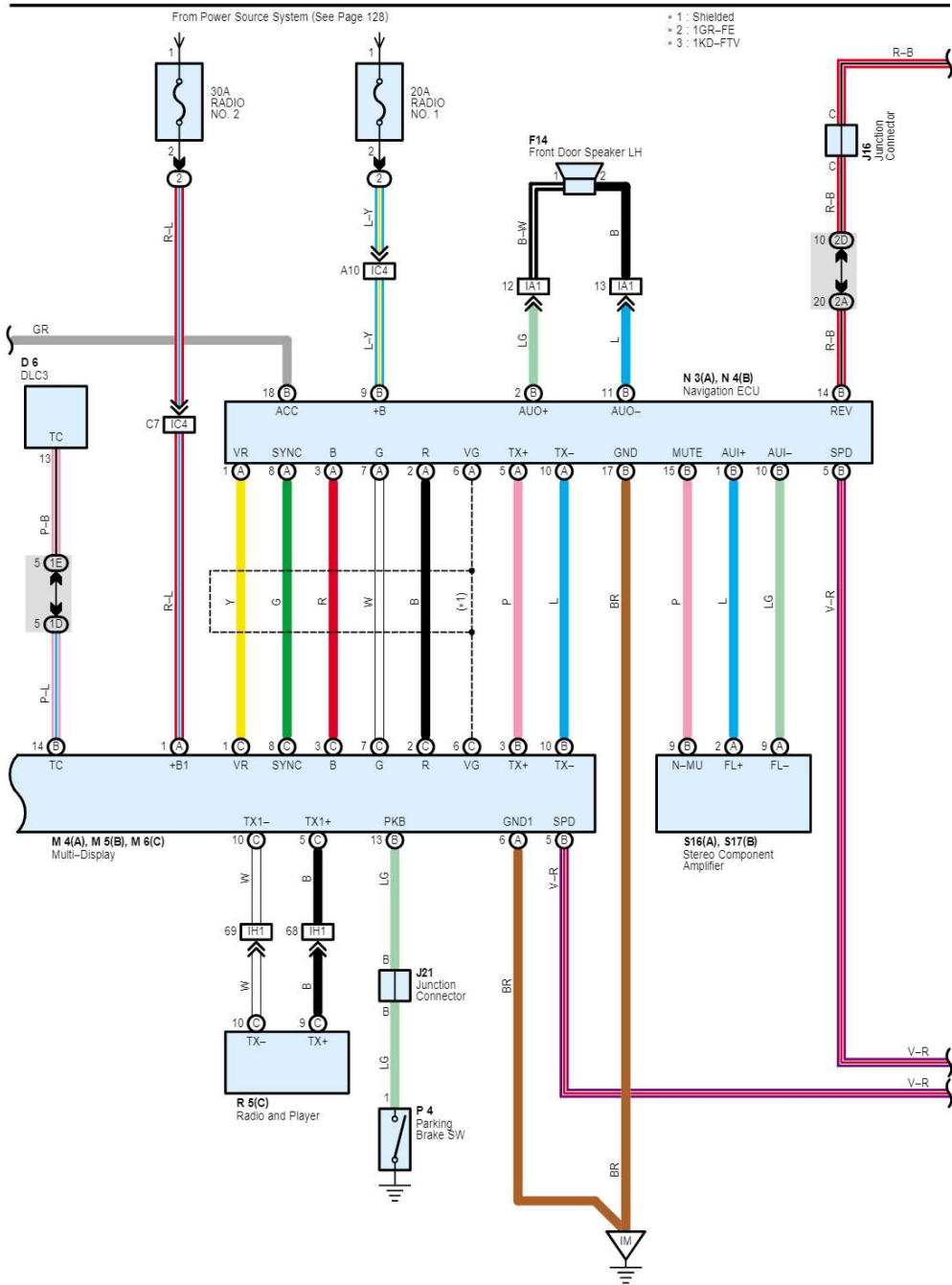
\* 18 : RHD Except 8Way Power Seat





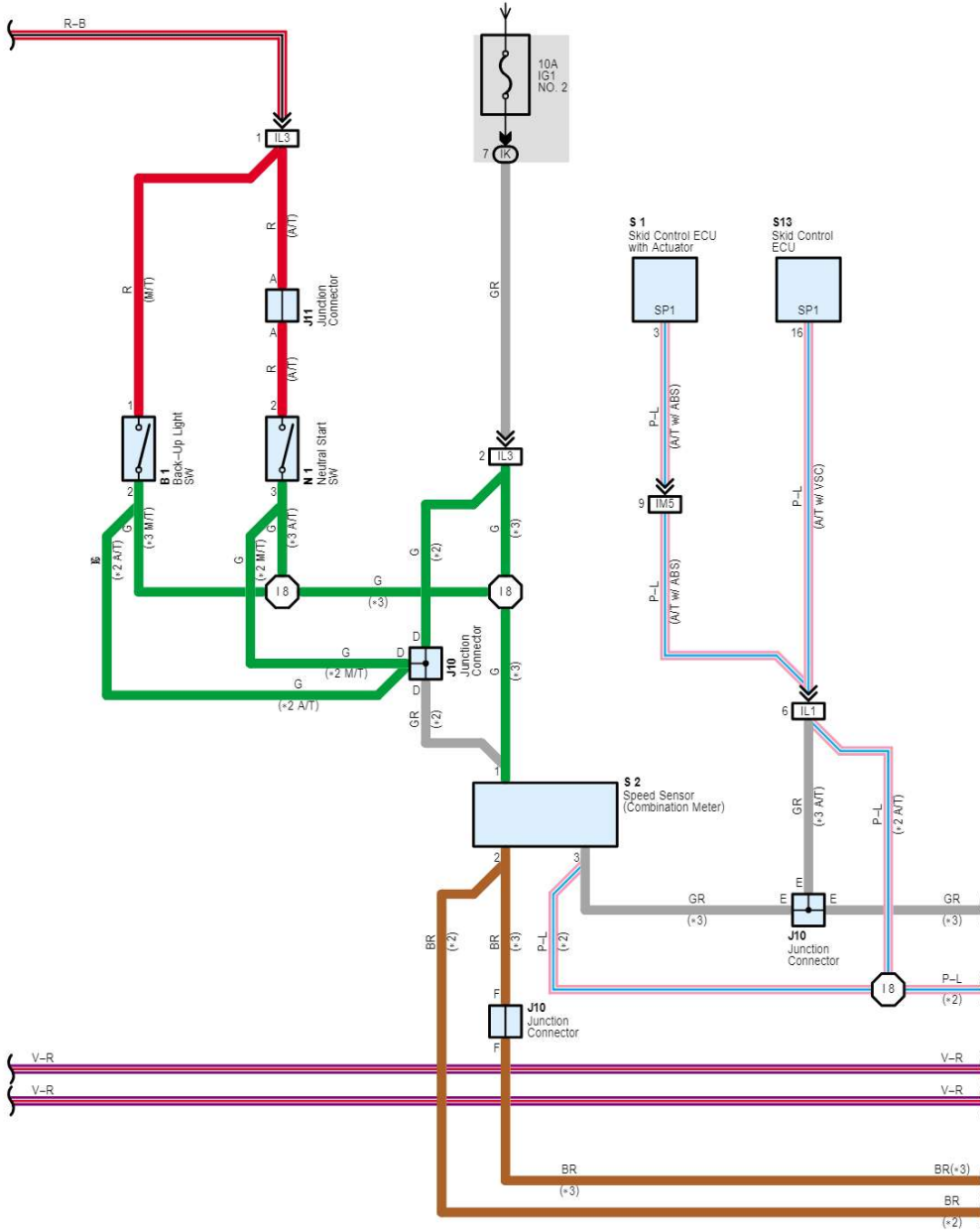
# Navigation System (LHD)





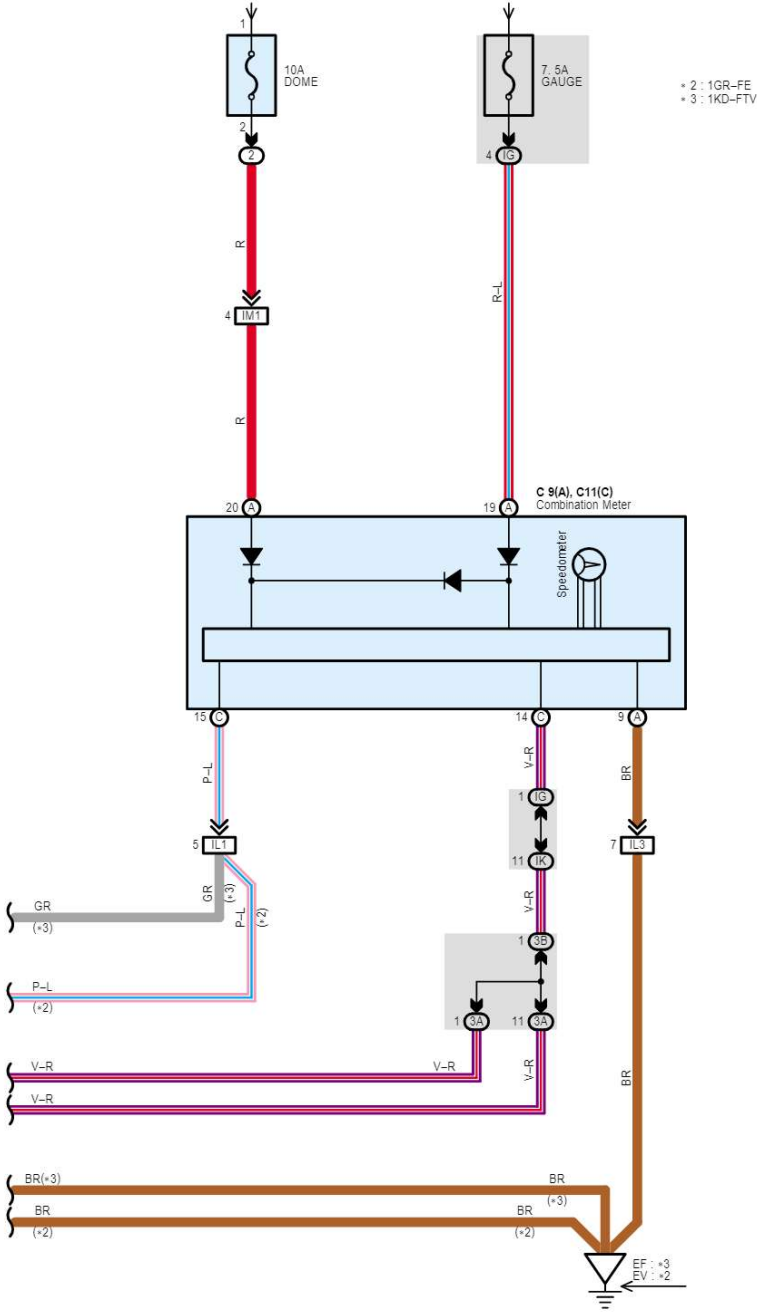
# Navigation System (LHD)

From Power Source System (See Page 128)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



## Navigation System (LHD)

### System Outline

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

### Service Hints

#### N4 (B) Navigation ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A21	A	48 (LHD)	J15		50 (LHD)	P4		51 (LHD)
B1		38 (*1)	J16		50 (LHD)	R5	C	51 (LHD)
		42 (*3)	J20		50 (LHD)	S1		39 (*1)
C9	A	49 (LHD)	J21		50 (LHD)			43 (*3)
C11	C	49 (LHD)	M4	A	50 (LHD)	S2		39 (*1)
D6		49 (LHD)	M5	B	50 (LHD)			43 (*3)
F14		52 (*6)	M6	C	50 (LHD)	S13		51 (LHD)
		54 (*7)	N1		39 (*1)	S16	A	51 (LHD)
G2					43 (*3)	S17	B	51 (LHD)
J10		50 (LHD)	N3	A	50 (LHD)			
J11		50 (LHD)	N4	B	50 (LHD)			


### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1B		
1D	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
1E	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2A		
2D		
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
3B		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IL1 IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IM1 IM5	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)

 : Ground Points

Code	See Page	Ground Points Location
EF	82 (*3)	Rear Part of Cylinder Block
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
IL	88 (LHD)	Near the Right Side of Steering Column
IM	88 (LHD)	Instrument Panel Brace LH

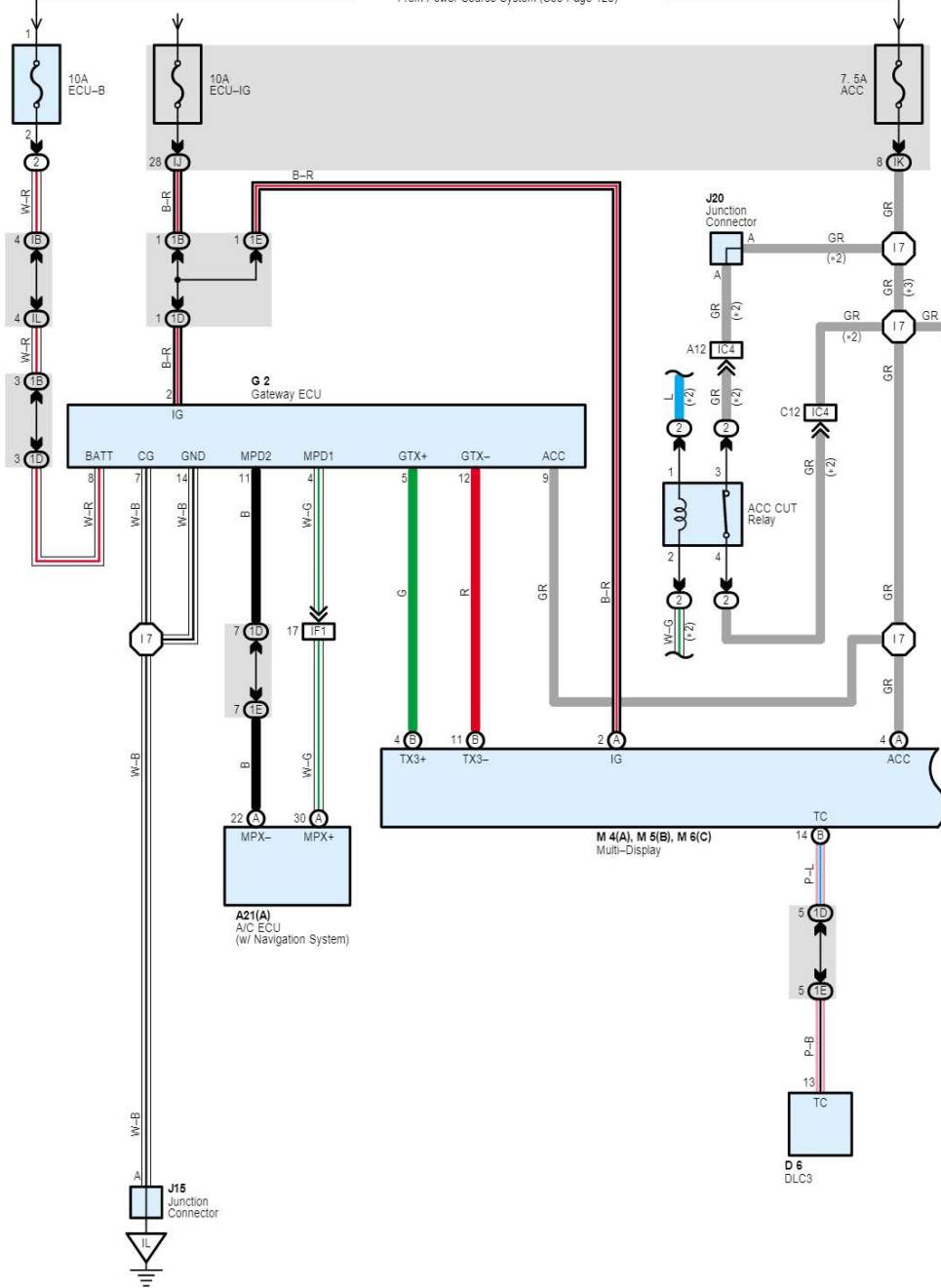
 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	90 (LHD)	Engine Wire

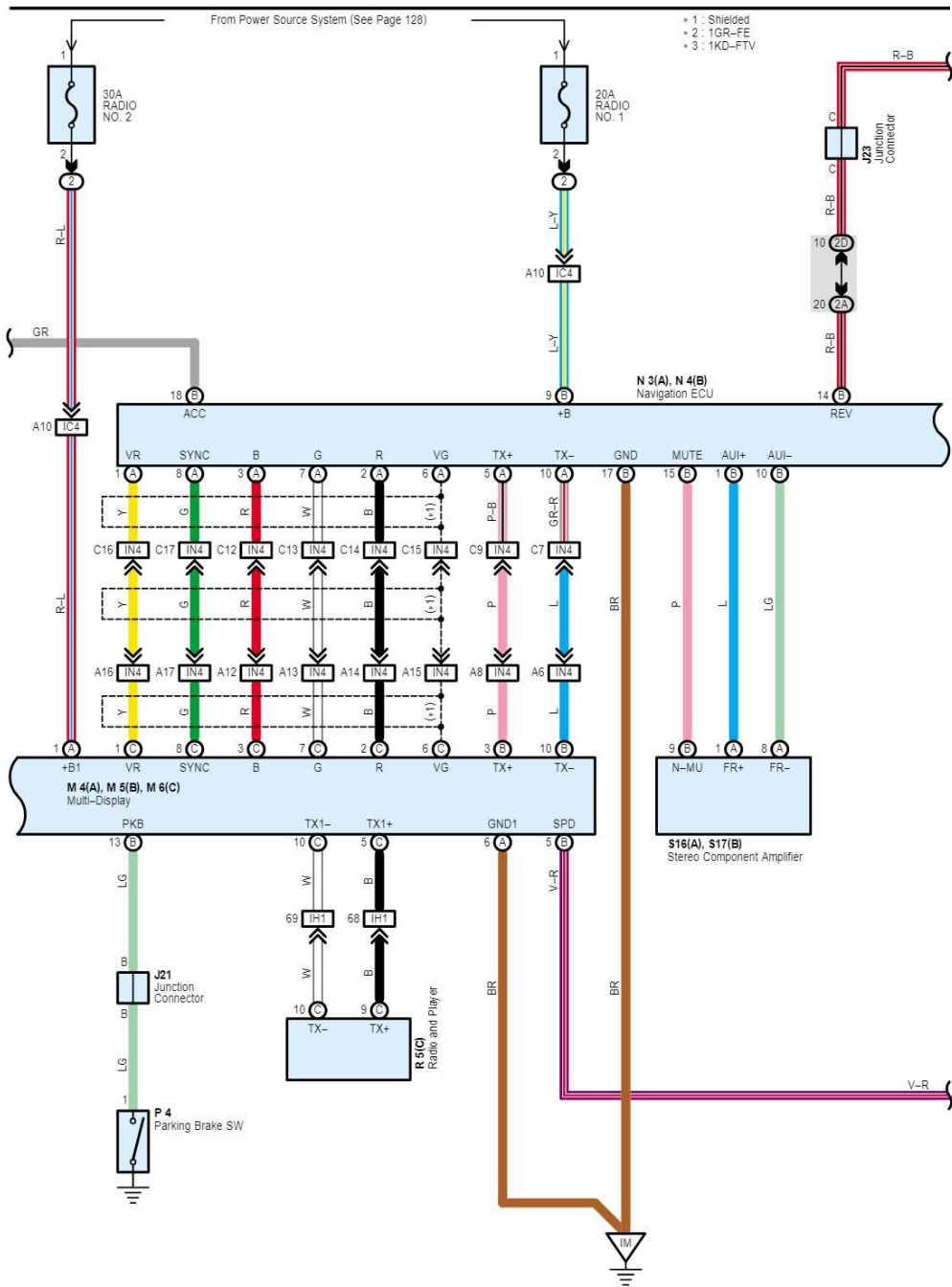
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Navigation System (RHD)

From Power Source System (See Page 128)

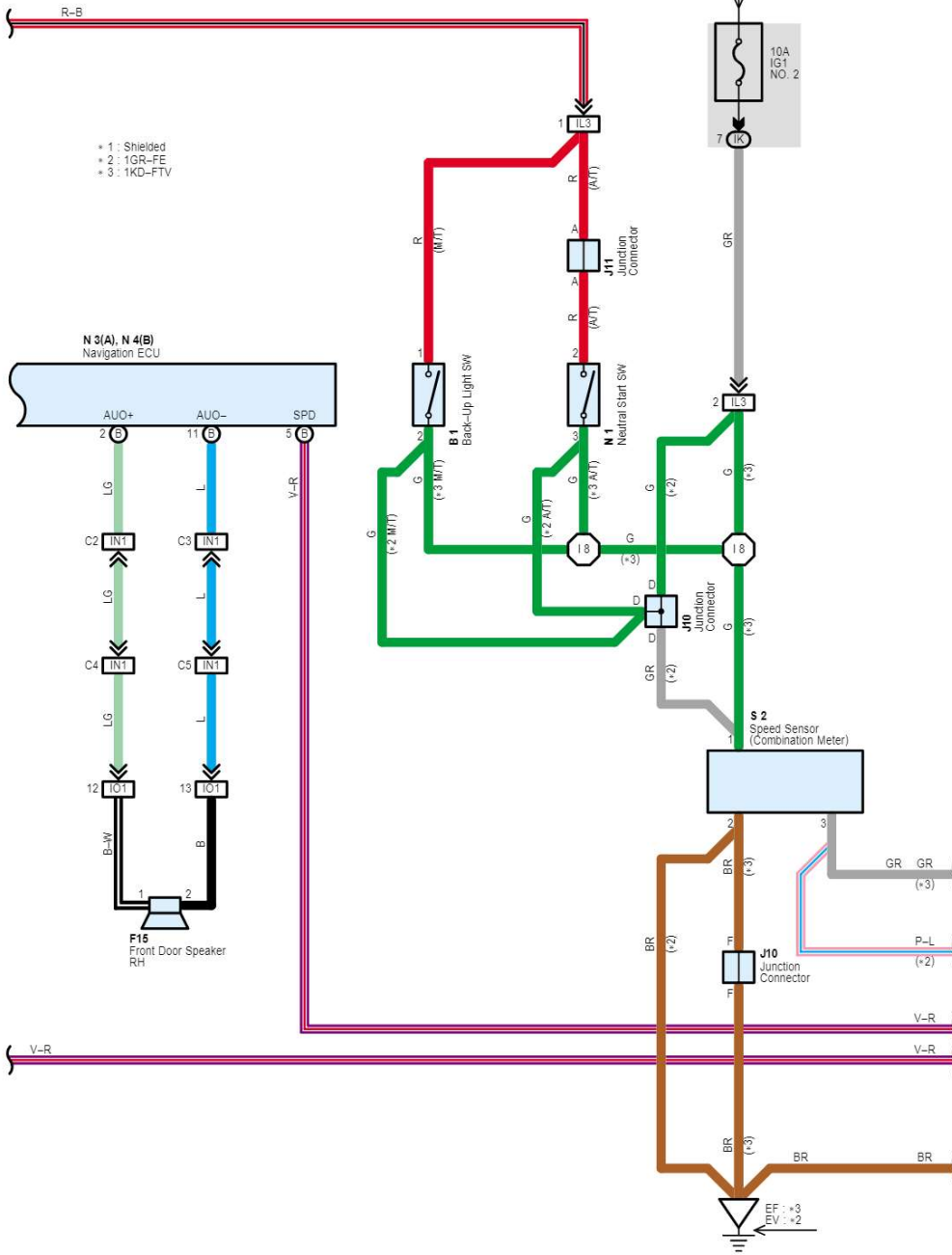






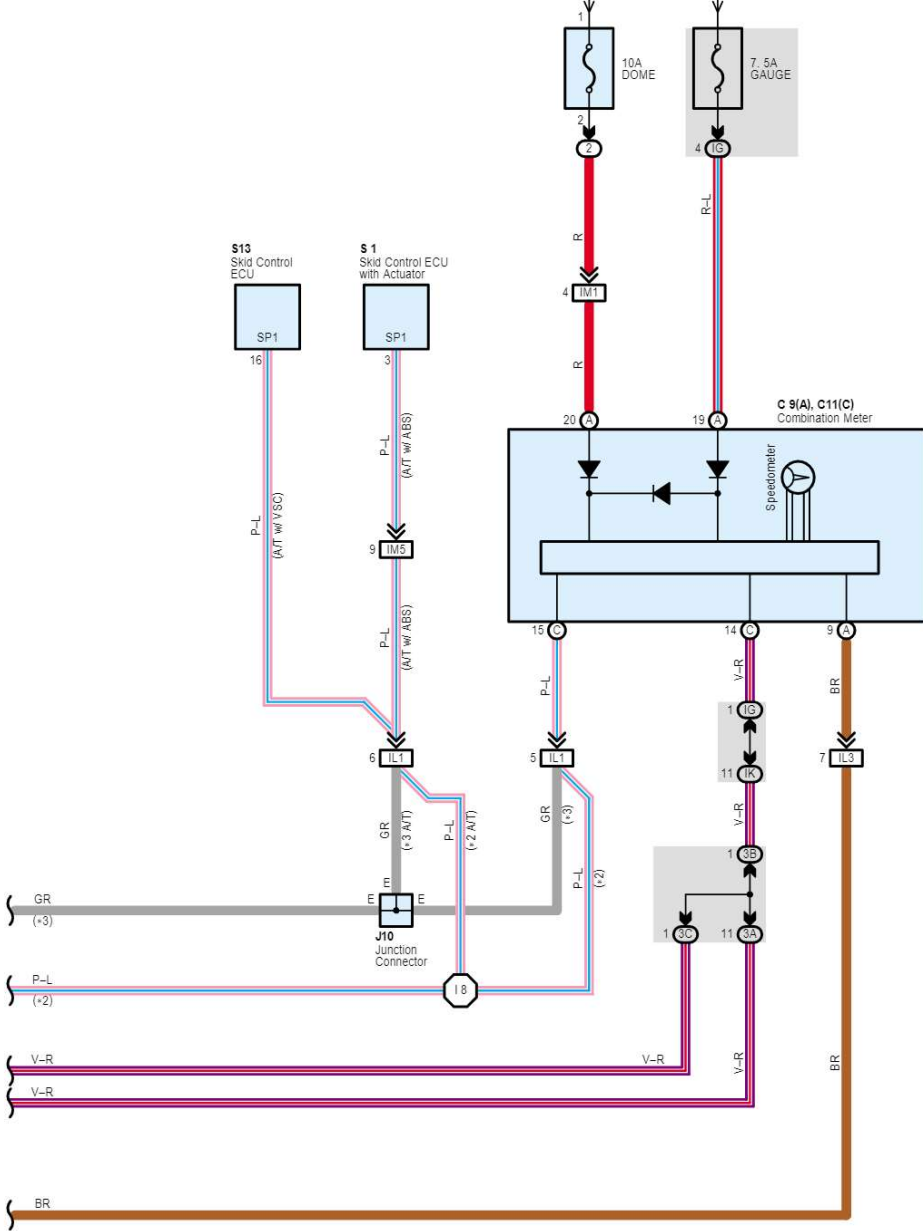
# Navigation System (RHD)

From Power Source System (See Page 128)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



## Navigation System (RHD)

### System Outline

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

### Service Hints

#### N4 (B) Navigation ECU

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

### ○ : Parts Location

Code		See Page	Code		See Page	Code		See Page
A21	A	68 (RHD)	J15		70 (RHD)	P4		71 (RHD)
B1		58 (*10)	J20		70 (RHD)	R5	C	71 (RHD)
		62 (*12)	J21		70 (RHD)	S1		59 (*10)
C9	A	69 (RHD)	J23		70 (RHD)			63 (*12)
C11	C	69 (RHD)	M4	A	70 (RHD)	S2		59 (*10)
D6		69 (RHD)	M5	B	70 (RHD)			63 (*12)
F15		72 (*15)	M6	C	70 (RHD)	S13		71 (RHD)
		74 (*16)	N1		59 (*10)	S16	A	71 (RHD)
G2		69 (RHD)			63 (*12)	S17	B	71 (RHD)
J10		70 (RHD)	N3	A	70 (RHD)			
J11		70 (RHD)	N4	B	70 (RHD)			


### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	28 (RHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
IG	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
IJ		
IK		
IL		
1B	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D		
1E		
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2D		
3A	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B		
3C		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IF1	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
IH1	114 (RHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
IL1	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3		
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM5		
IN1	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IN4		
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

 : Ground Points

Code	See Page	Ground Points Location
EF	106 (*12)	Rear Part of Cylinder Block
EV	102 (*10)	Rear Side of Left Bank Cylinder Block
IL	112 (RHD)	Instrument Panel Brace RH
IM		

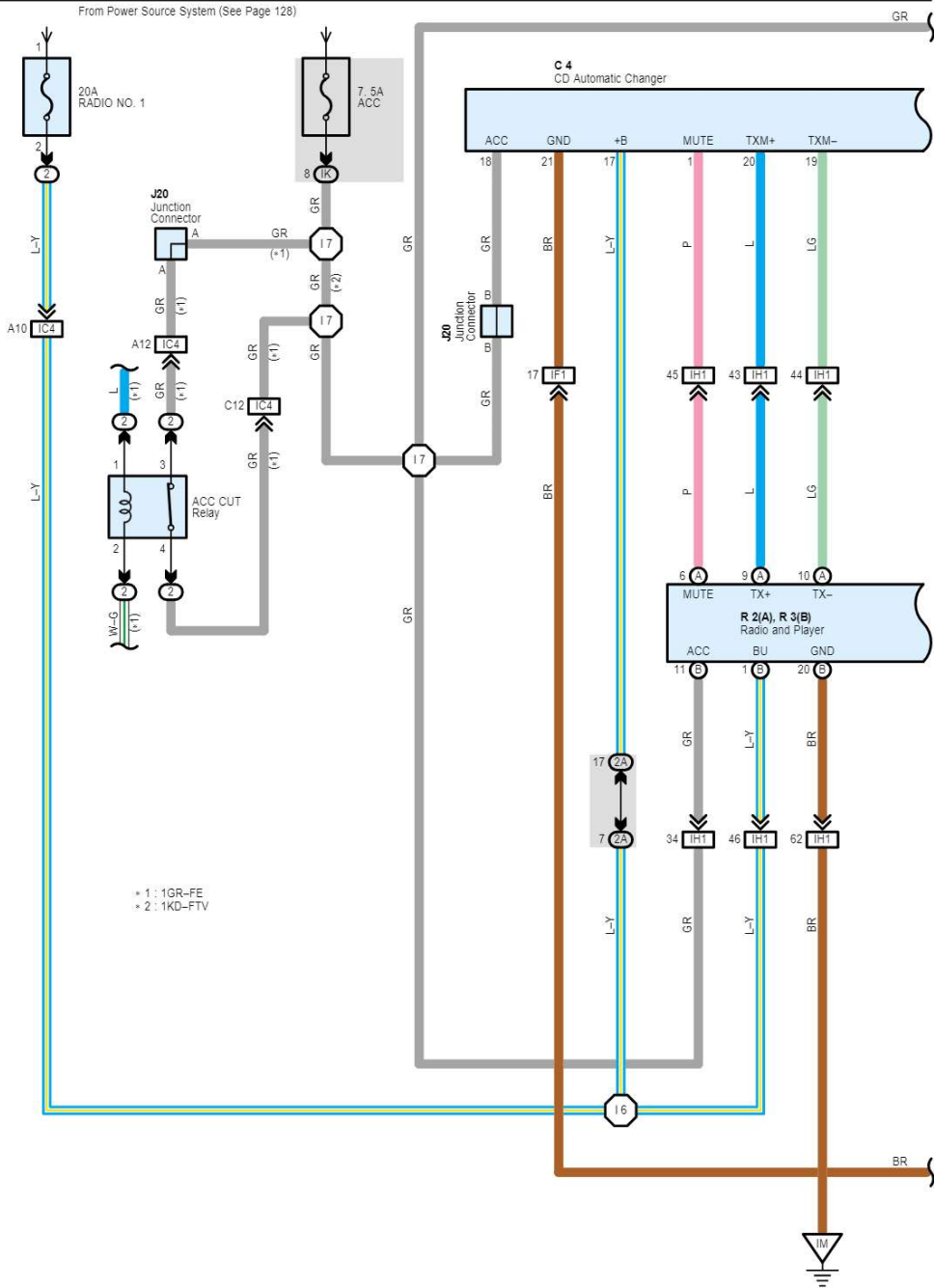
 : Splice Points

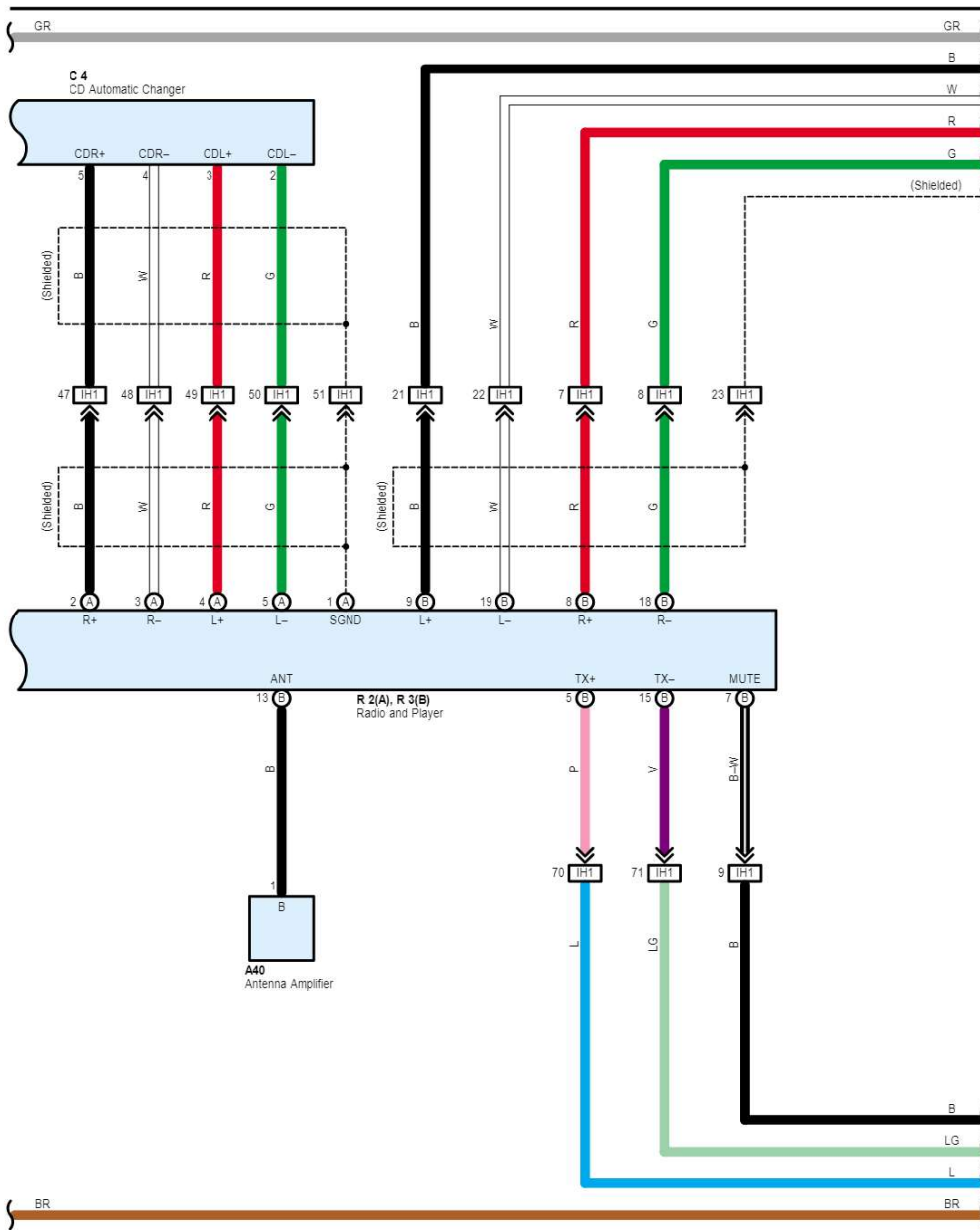
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	114 (RHD)	Instrument Panel Wire	I8	114 (RHD)	Engine Wire

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

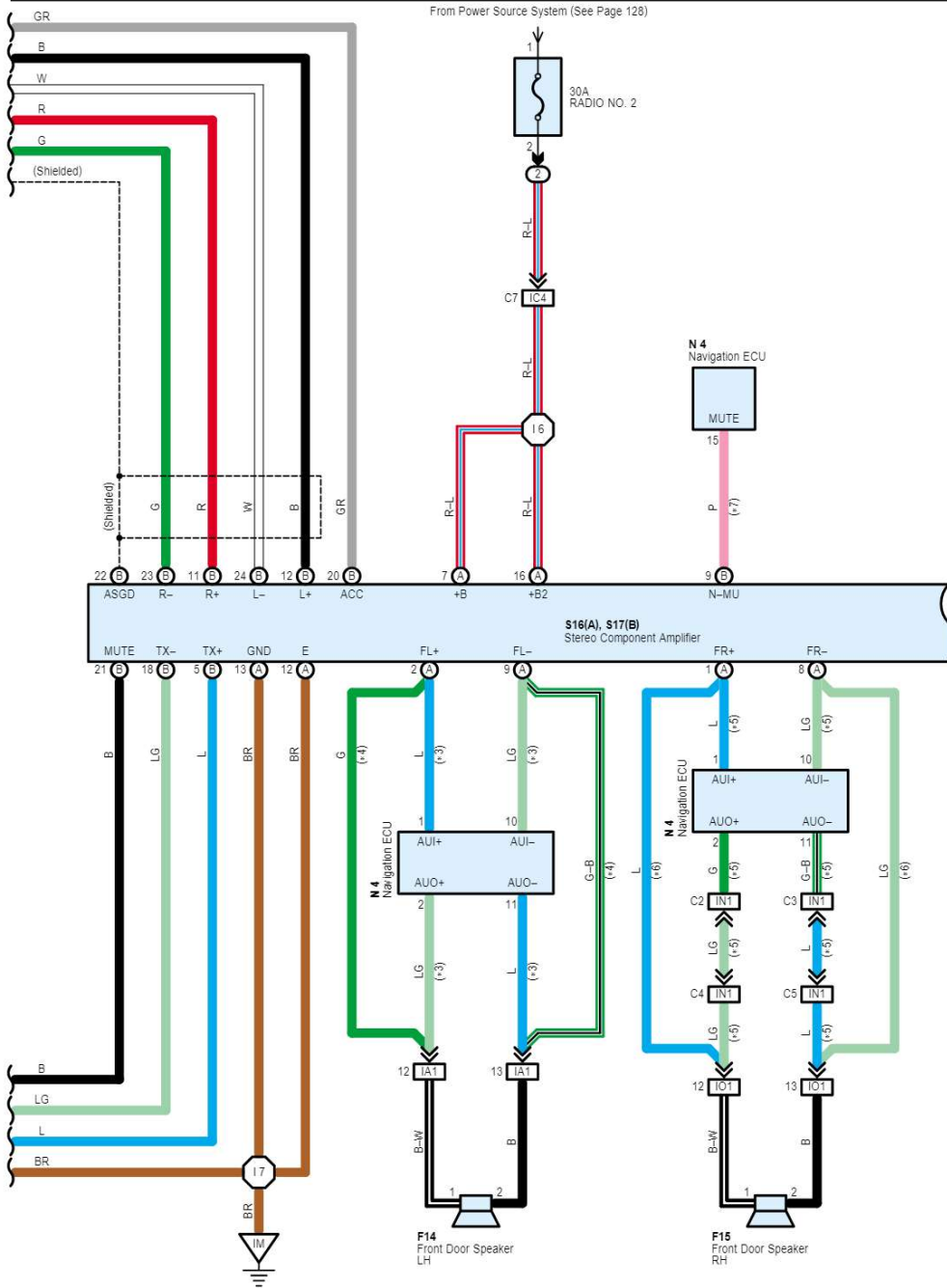
# Radio and Player (Separate Type Amplifier)

From Power Source System (See Page 128)





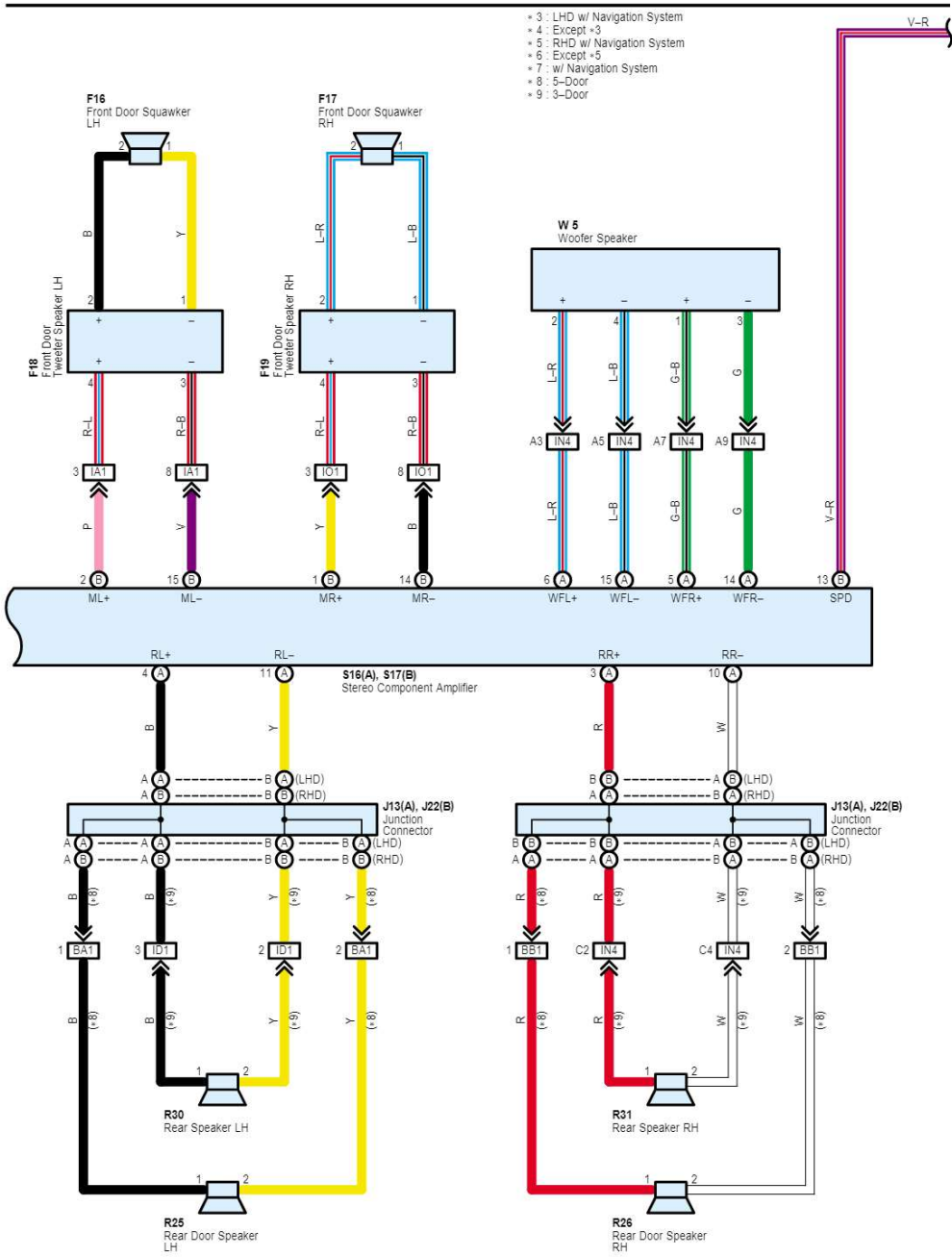
# Radio and Player (Separate Type Amplifier)



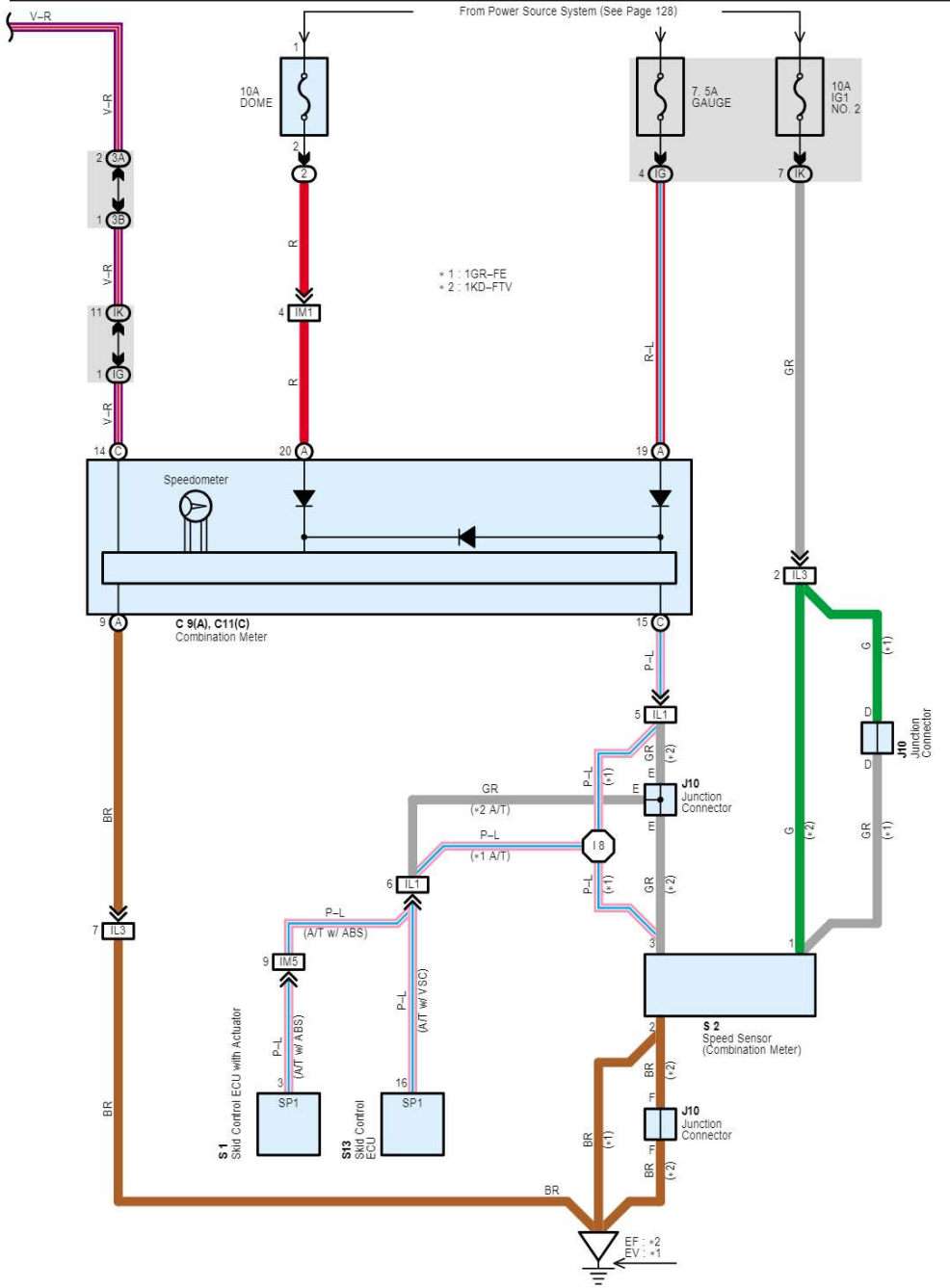
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)





# Radio and Player (Separate Type Amplifier)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints**

**R3 (B) Radio and Player**

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

**S16 (A), S17 (B) Stereo Component Amplifier**

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

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A40	48 (LHD)	F18	52 (*6)	R26	53 (*6)	
	68 (RHD)		54 (*7)		73 (*15)	
C4	49 (LHD)		72 (*15)	R30	55 (*7)	
	69 (RHD)		74 (*16)		75 (*16)	
C9	A	F19	52 (*6)	R31	55 (*7)	
	69 (RHD)		54 (*7)		75 (*16)	
C11	C		72 (*15)	S1	39 (*1)	
	69 (RHD)		74 (*16)		43 (*3)	
F14	52 (*6)	J10	50 (LHD)		59 (*10)	
	54 (*7)		70 (RHD)		63 (*12)	
	72 (*15)	J13	A	39 (*1)		
	74 (*16)		70 (RHD)	43 (*3)		
F15	52 (*6)	J20	50 (LHD)	59 (*10)		
	54 (*7)		70 (RHD)	63 (*12)		
	72 (*15)	J22	B	51 (LHD)		
	74 (*16)		70 (RHD)	71 (RHD)		
F16	52 (*6)	N4	50 (LHD)	S16	A	51 (LHD)
	54 (*7)		70 (RHD)		71 (RHD)	
	72 (*15)	R2	A	S17	B	51 (LHD)
	74 (*16)		51 (LHD)		71 (RHD)	
F17	52 (*6)	R3	B	W5	53 (*6)	
	54 (*7)		51 (LHD)		55 (*7)	
	72 (*15)	R25	53 (*6)		73 (*15)	
	74 (*16)		73 (*15)		75 (*16)	

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Radio and Player (Separate Type Amplifier)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)	
	29 (RHD)		
IK	27 (LHD)		
	29 (RHD)		
2A	34		Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
3A	36 (LHD)		Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)	
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)	

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM5	92 (LHD)	
	116 (RHD)	
IN1	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	94 (LHD)	
IN4	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	94 (LHD)	
IO1	118 (RHD)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
	96 (*6)	
BA1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
	96 (*6)	
BB1	120 (*15)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
	102 (*10)	
IM	88 (LHD)	Instrument Panel Brace LH
	112 (RHD)	Instrument Panel Brace RH

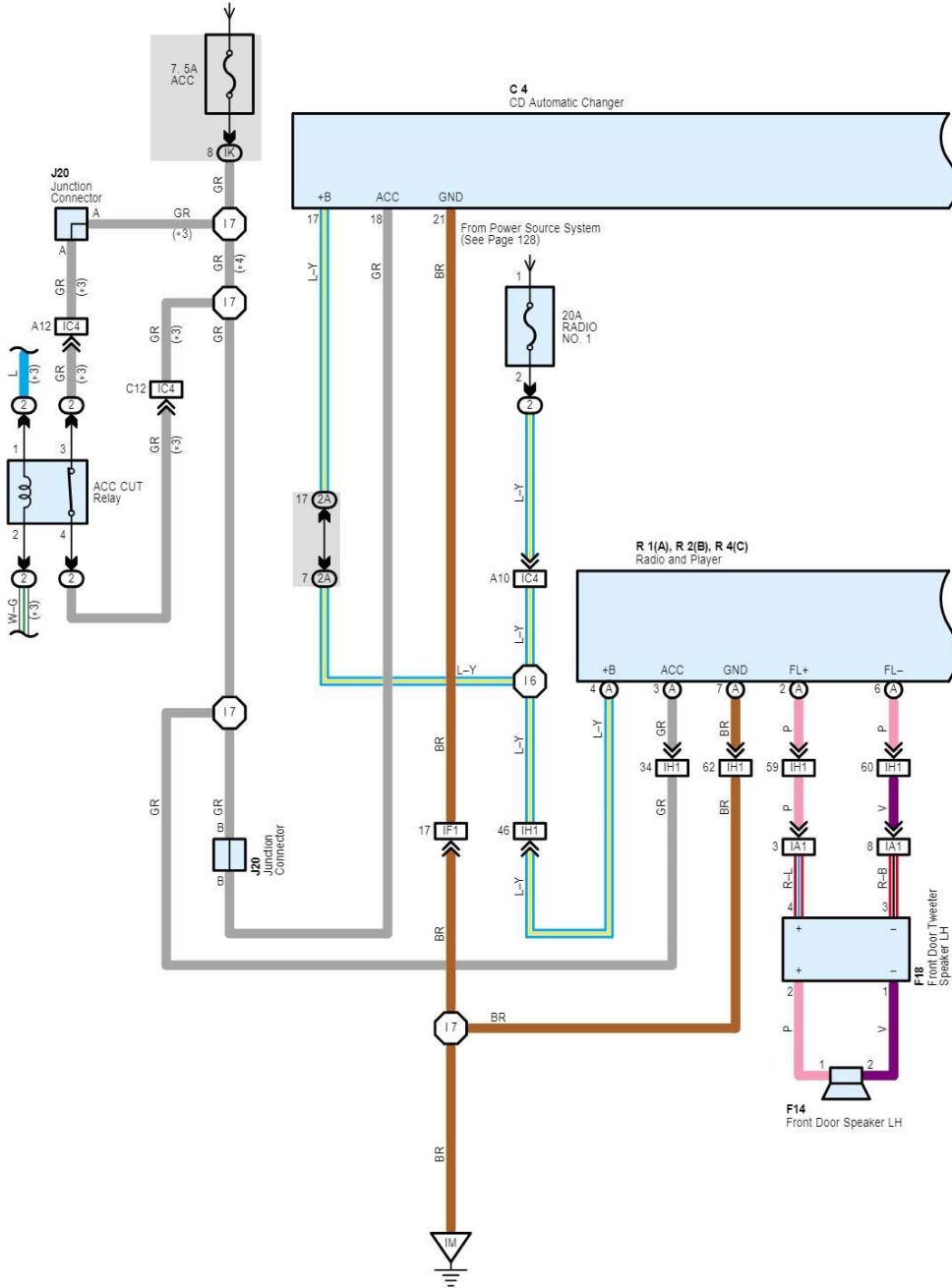
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Splice Points

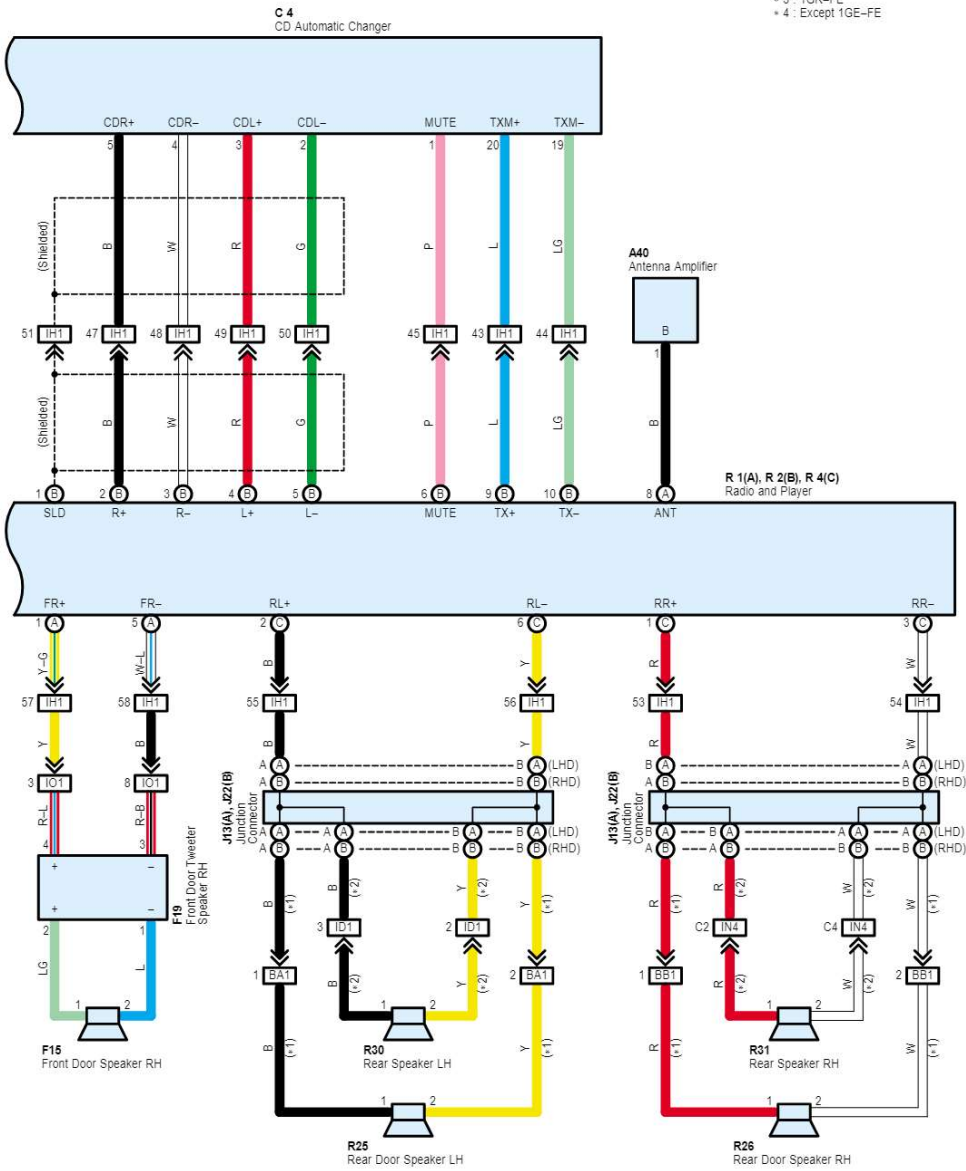
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
16	90 (LHD)	Instrument Panel Wire	17	114 (RHD)	Instrument Panel Wire
	114 (RHD)			90 (LHD)	Engine Wire
17	90 (LHD)		18	114 (RHD)	

# Radio and Player (Built-In Type Amplifier)

From Power Source System (See Page 128)



- \* 1 : 5-Door
- \* 2 : 3-Door
- \* 3 : 1GR-FE
- \* 4 : Except 1GE-FE



## Radio and Player (Built-In Type Amplifier)

### Service Hints

#### R1 (A) 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
A40	48 (LHD)	F18	72 (*15)	R2	B
	68 (RHD)		74 (*16)		
C4	49 (LHD)	F19	52 (*6)	R4	C
	69 (RHD)		54 (*7)		
F14	52 (*6)		72 (*15)	R25	53 (*6)
	54 (*7)		74 (*16)		73 (*15)
	72 (*15)	J13	A	R26	53 (*6)
	74 (*16)				50 (LHD)
F15	52 (*6)	J20	50 (LHD)	R30	55 (*7)
	54 (*7)		70 (RHD)		75 (*16)
	72 (*15)	J22	B	R31	55 (*7)
	74 (*16)				50 (LHD)
F18	52 (*6)	R1	A		
	54 (*7)			51 (LHD)	
			71 (RHD)		

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

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

- \*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
 \*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
 \*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
 \*18 : RHD Except 8Way Power Seat



 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
ID1	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
	114 (RHD)	
IN4	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
	118 (RHD)	
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
	120 (*15)	
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
	120 (*15)	

 : Ground Points

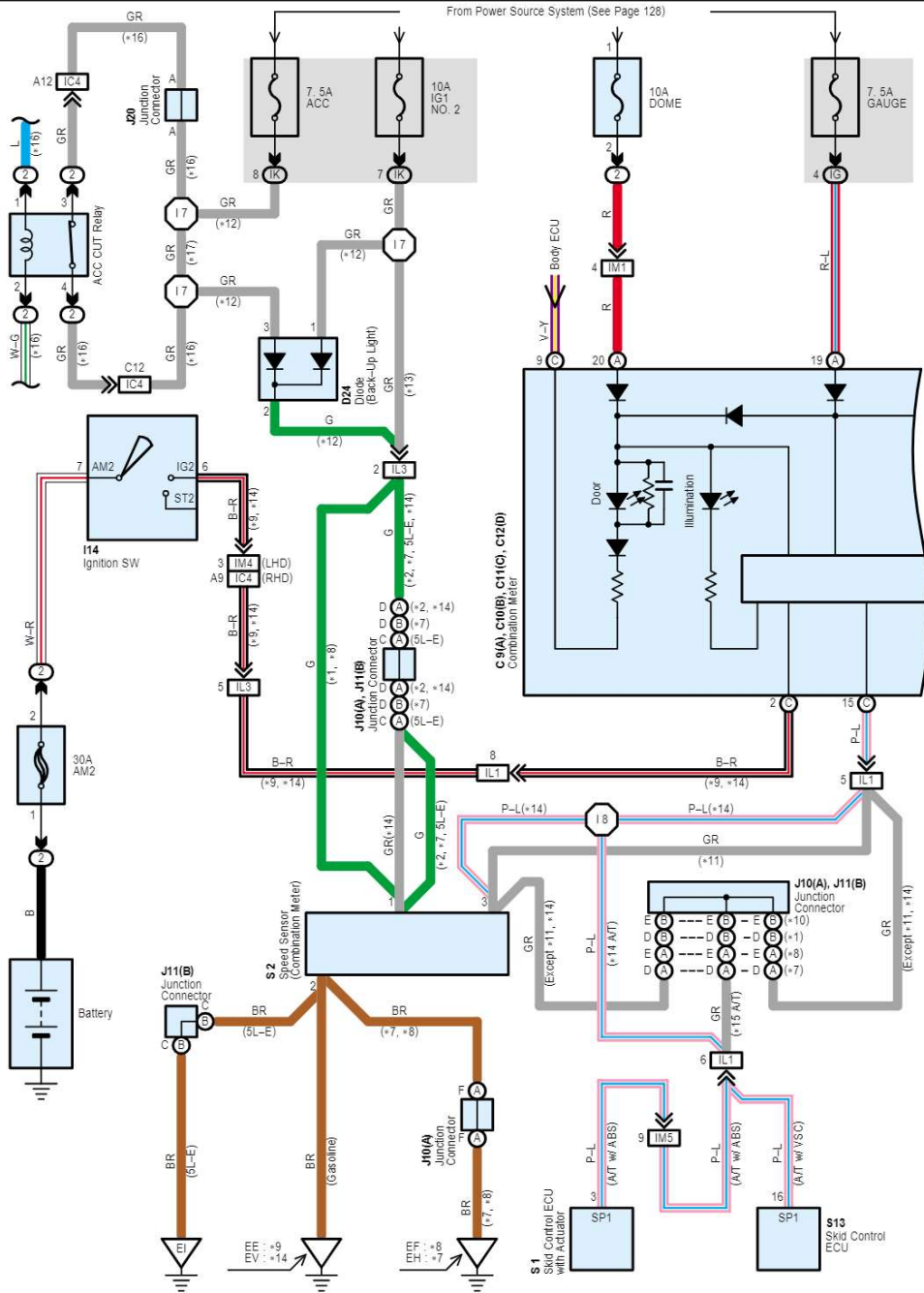
Code	See Page	Ground Points Location
IM	88 (LHD)	Instrument Panel Brace LH
	112 (RHD)	Instrument Panel Brace RH

 : Splice Points

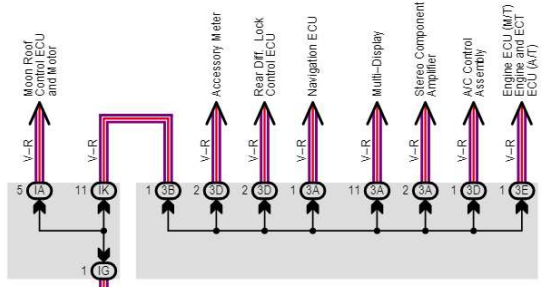
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I6	90 (LHD)	Instrument Panel Wire	I7	90 (LHD)	Instrument Panel Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

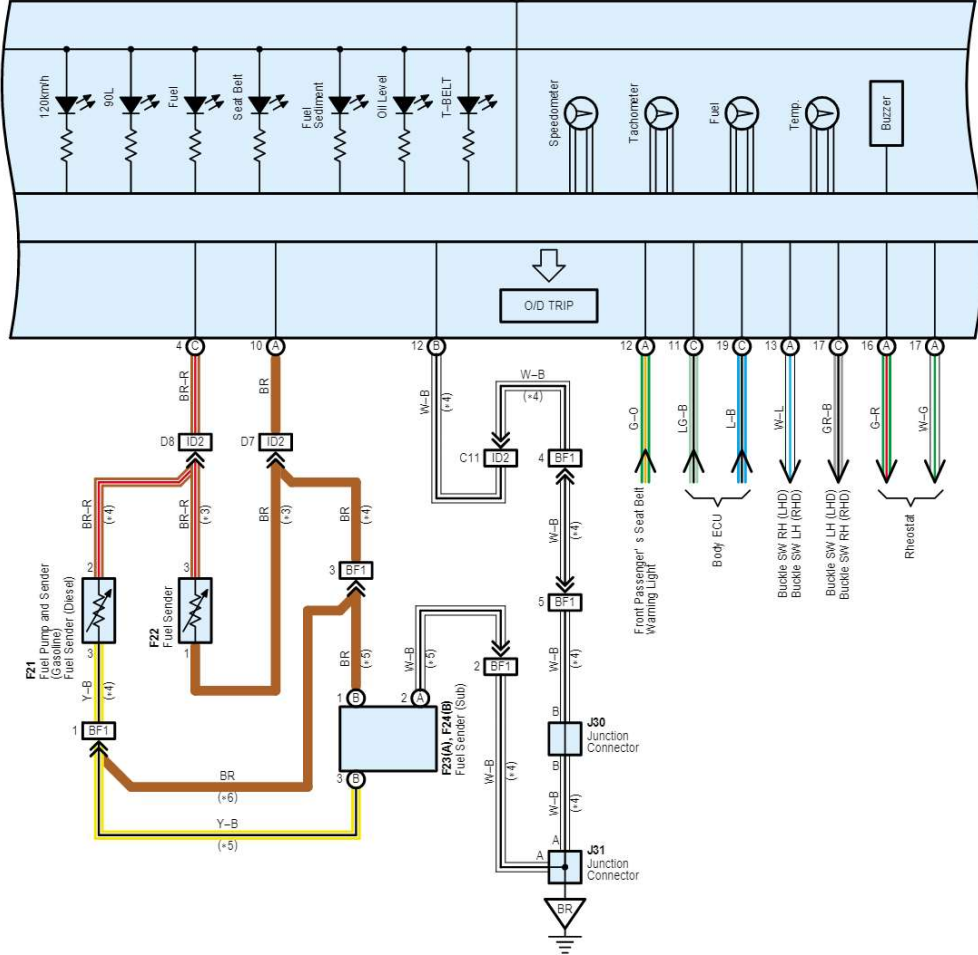
# Combination Meter



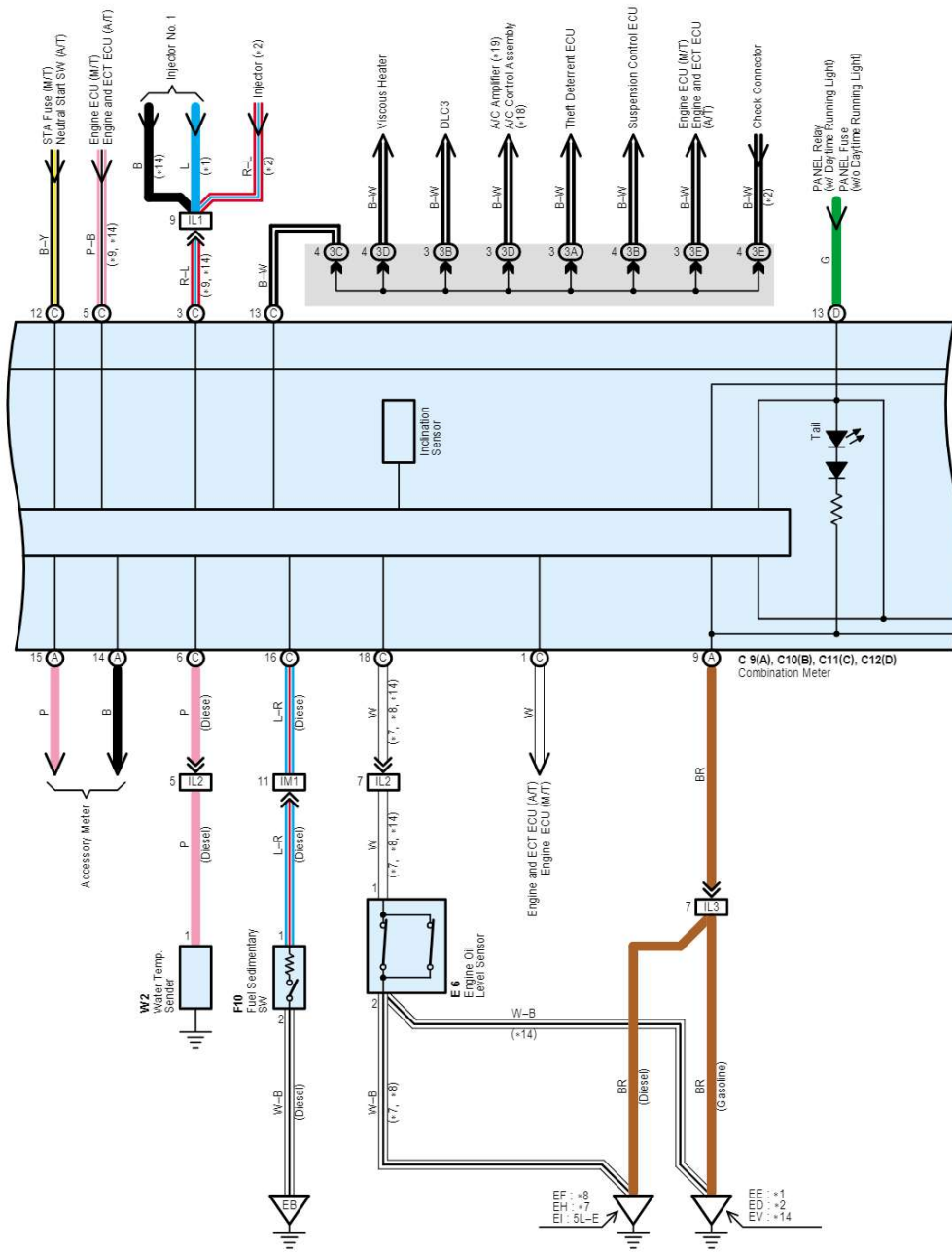
- \*1 : 3RZ-FE Unleaded Gasoline
- \*2 : 3RZ-FE Leaded Gasoline
- \*3 : Door
- \*4 : Door
- \*5 : w/ Sub Fuel Tank
- \*6 : w/o Sub Fuel Tank
- \*7 : 1KZ-TE
- \*8 : 1KD-FTV
- \*9 : 3RZ-FE
- \*10 : LHD \*2
- \*11 : RHD \*2, 5L-E
- \*12 : Australia A/T
- \*13 : Except Australia A/T
- \*14 : 1GR-FE
- \*15 : Except \*14
- \*16 : Australia A/T 1GR-FE
- \*17 : Australia A/T Except 1GR-FE



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

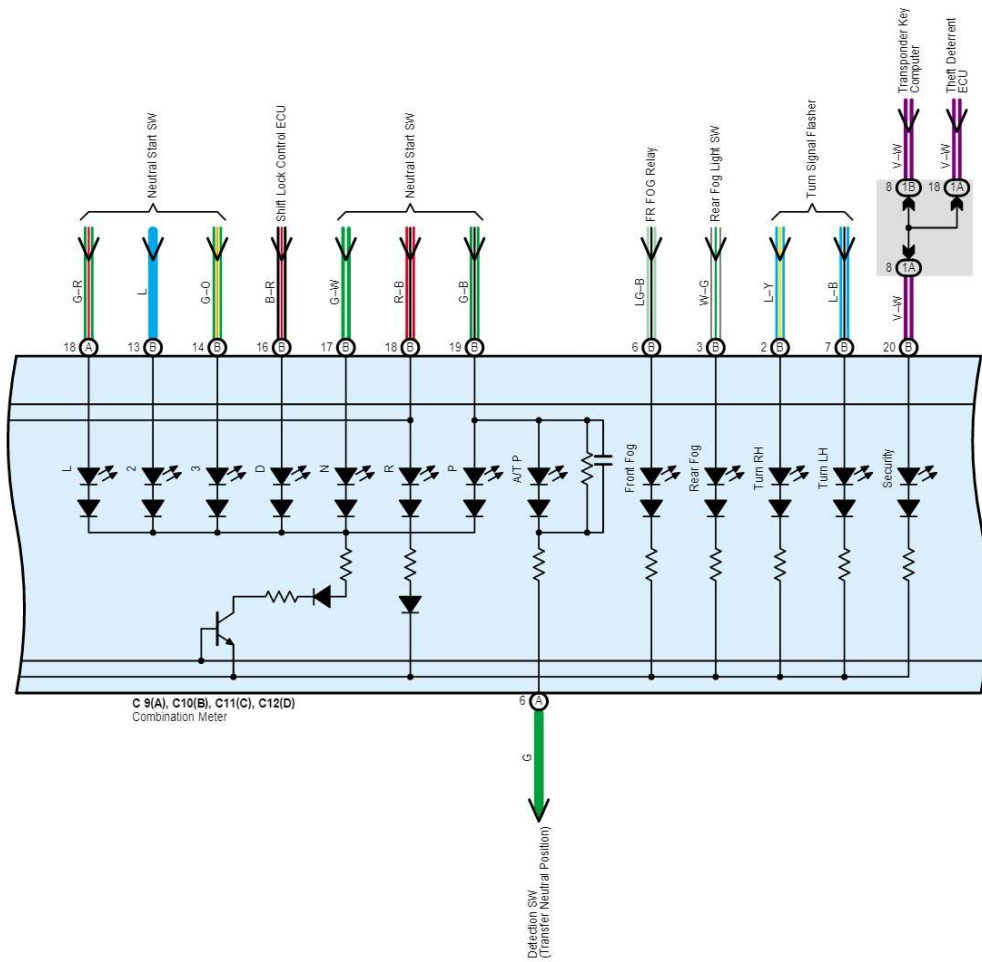


# Combination Meter



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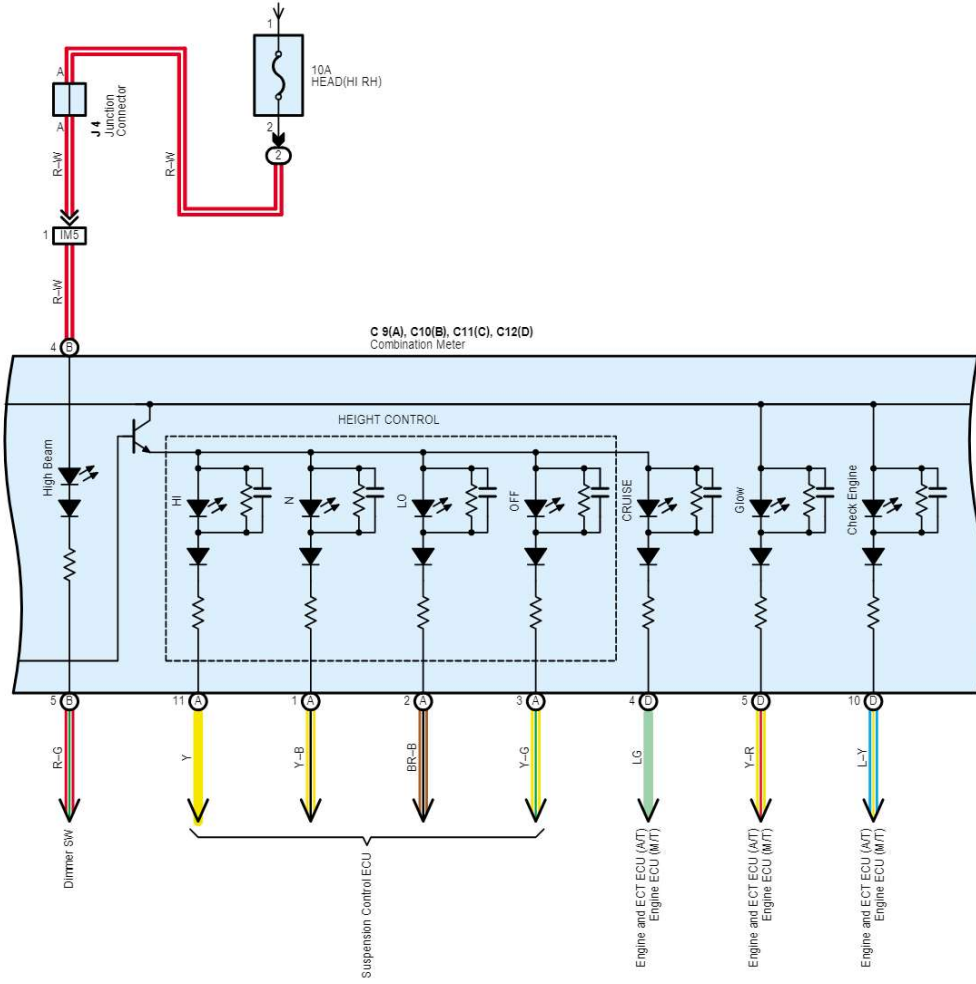
LAND CRUISER / LAND CRUISER PRADO (EWD527E)



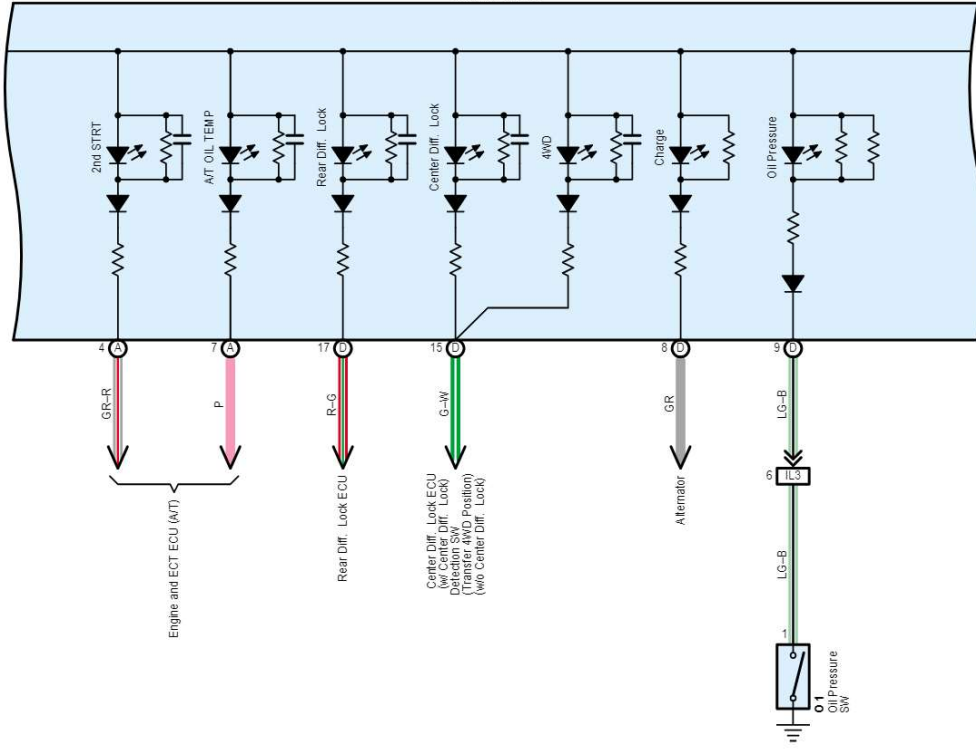
- \* 1 : 3RZ-FE Unleaded Gasoline
- \* 2 : 3RZ-FE Leaded Gasoline
- \* 7 : 1KZ-TE
- \* 8 : 1KD-FTV
- \* 9 : 3RZ-FE
- \* 14 : 1GR-FE
- \* 18 : Automatic A/C
- \* 19 : Manual A/C

# Combination Meter

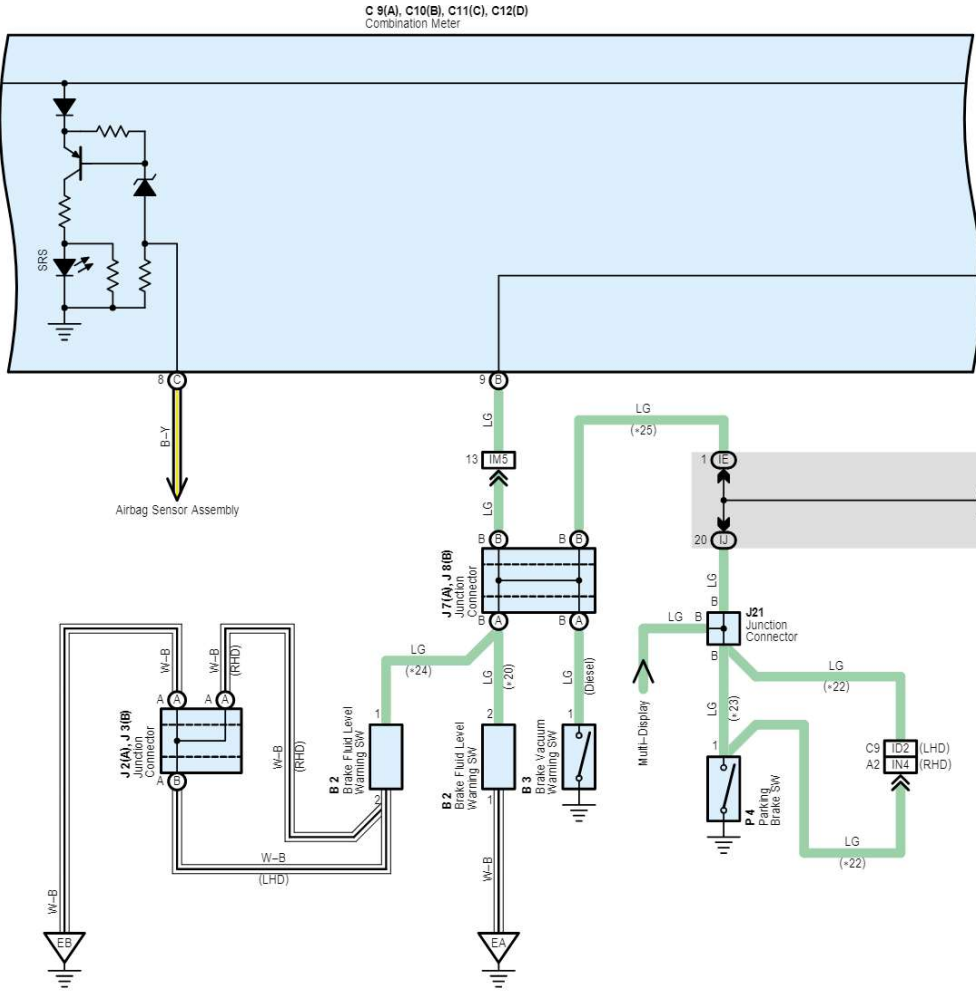
From Power Source System (See Page 128)



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



# Combination Meter



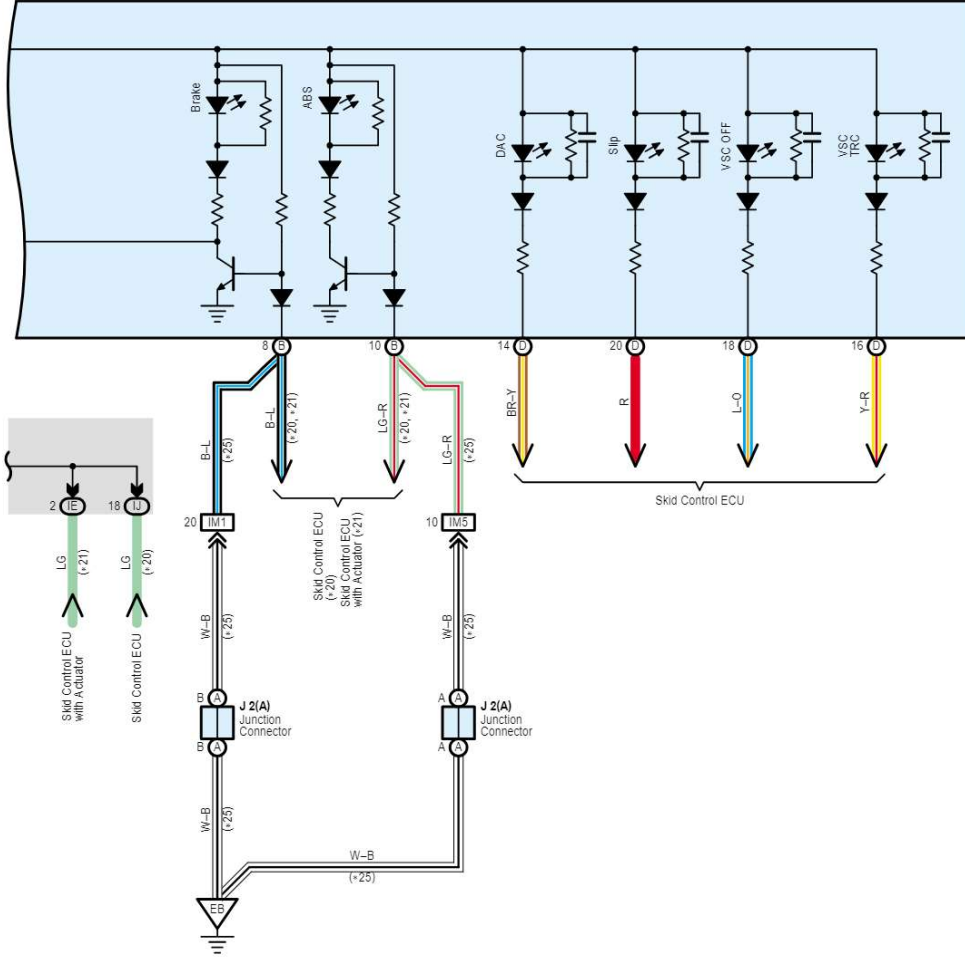
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



- \*20 : w/ VSC
- \*21 : w/o VSC w/ ABS
- \*22 : Bench Seat
- \*23 : Separate Seat
- \*24 : w/o VSC
- \*25 : w/o VSC w/o ABS

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



## Combination Meter

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### Service Hints

#### **C9 (A), C10 (B) Combination Meter**

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

(A) 9, (B) 12-Ground : Always continuity

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

○ : Parts Location

Code		See Page	Code		See Page	Code	See Page	
B2		38 (*1)	F24	B	72 (*15)	J31	52 (*6)	
		40 (*2)	I14		50 (LHD)		54 (*7)	
		42 (*3)			70 (RHD)		72 (*15)	
		44 (*4)			39 (*1)		74 (*16)	
		46 (*5)	J2	A	41 (*2)	O1	39 (*1)	
		58 (*10)			43 (*3)		41 (*2)	
		60 (*11)			45 (*4)		43 (*3)	
		62 (*12)			47 (*5)		45 (*4)	
		64 (*13)			59 (*10)		47 (*5)	
		66 (*14)			61 (*11)		59 (*10)	
B3		42 (*3)	J3	B	63 (*12)		61 (*11)	
		44 (*4)			65 (*13)		63 (*12)	
		46 (*5)			67 (*14)		65 (*13)	
		62 (*12)			39 (*1)		67 (*14)	
		64 (*13)			41 (*2)	P4	51 (LHD)	
		66 (*14)			43 (*3)		71 (RHD)	
C9	A	49 (LHD)			45 (*4)	S1	39 (*1)	
		69 (RHD)			47 (*5)		41 (*2)	
C10	B	49 (LHD)			39 (*1)		43 (*3)	
		69 (RHD)			41 (*2)		45 (*4)	
C11	C	49 (LHD)			43 (*3)		59 (*10)	
		69 (RHD)			45 (*4)		61 (*11)	
C12	D	49 (LHD)			47 (*5)		63 (*12)	
		69 (RHD)			59 (*10)		65 (*13)	
D24		69 (RHD)			61 (*11)		S2	39 (*1)
E6		38 (*1)	J7	A	63 (*12)			41 (*2)
		42 (*3)			65 (*13)	43 (*3)		
		44 (*4)			67 (*14)	45 (*4)		
		58 (*10)			50 (LHD)	47 (*5)		
		62 (*12)			70 (RHD)	59 (*10)		
		64 (*13)			50 (LHD)	61 (*11)		
F10		42 (*3)	J8	B	70 (RHD)	63 (*12)		
		44 (*4)	J10	A	50 (LHD)	65 (*13)		
		46 (*5)			70 (RHD)	67 (*14)		
		62 (*12)	J11	B	50 (LHD)	S13	51 (LHD)	
		64 (*13)			70 (RHD)		71 (RHD)	
		66 (*14)			50 (LHD)	W2	43 (*3)	
F21		52 (*6)	J20		70 (RHD)		45 (*4)	
		72 (*15)			50 (LHD)		47 (*5)	
F22		54 (*7)	J21		70 (RHD)		63 (*12)	
		74 (*16)			52 (*6)		65 (*13)	
F23	A	52 (*6)			54 (*7)			67 (*14)
		72 (*15)			72 (*15)			
F24	B	52 (*6)			74 (*16)			

○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# Combination Meter

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IJ	27 (LHD)	
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3A	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC4	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
	114 (RHD)	
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM4	92 (LHD)	
IM5	92 (LHD)	
	116 (RHD)	
IN4	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
BF1	98 (*6)	Floor No.2 Wire and Frame No.2 Wire (Left Side of the Rear Floor)
	122 (*15)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

▽ : Ground Points

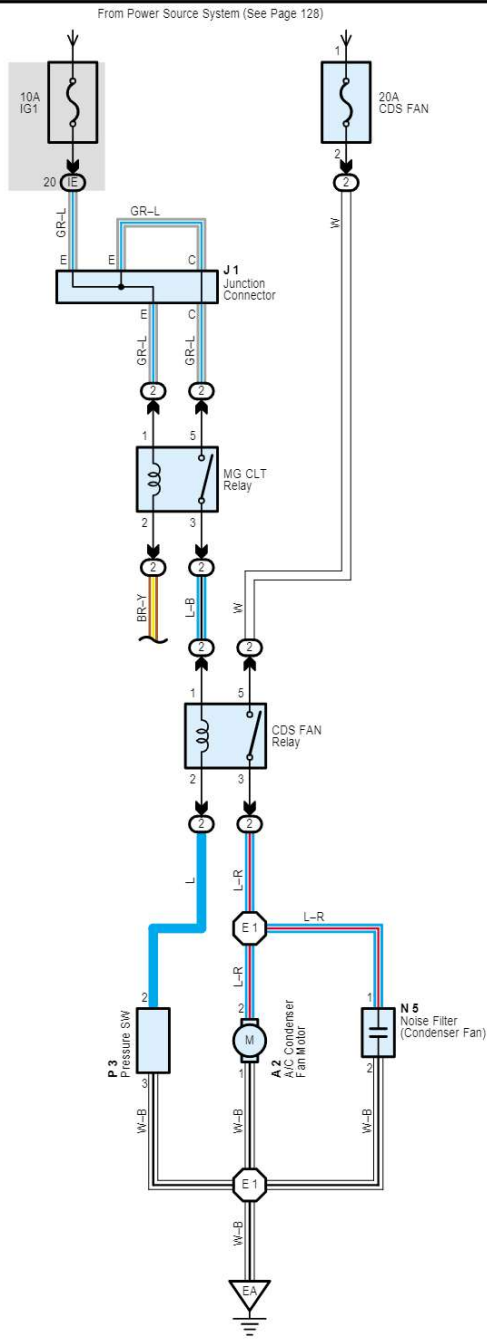
Code	See Page	Ground Points Location	
EA	78 (*1)	Front Right Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
EB	78 (*1)	Front Left Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EE	80 (*2)	Intake Manifold	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
BR	96 (*6)		Left Quarter Panel Inner
	100 (*7)		
	120 (*15)		
	124 (*16)		

⊕ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I8	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

# Condenser Fan



684

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

**Service Hints**

**P3 Pressure SW**

3-2 : Close above approx. 15.5 kgf/cm<sup>2</sup> (224 psi, 1520 kpa)  
 Open below approx. 12.5 kgf/cm<sup>2</sup> (181 psi, 1225 kpa)

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A2	38 (*1)	J1	47 (*5)	N5	65 (*13)	
	40 (*2)		59 (*10)		67 (*14)	
	42 (*3)		61 (*11)	39 (*1)		
	44 (*4)		63 (*12)	41 (*2)		
	46 (*5)		65 (*13)	43 (*3)		
	58 (*10)		67 (*14)	45 (*4)		
	60 (*11)		39 (*1)	47 (*5)		
	62 (*12)	41 (*2)	59 (*10)			
	64 (*13)	43 (*3)	61 (*11)			
	66 (*14)	45 (*4)	63 (*12)			
	J1	39 (*1)	N5	47 (*5)	P3	65 (*13)
		41 (*2)		59 (*10)		67 (*14)
		43 (*3)		61 (*11)		
		45 (*4)		63 (*12)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

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

**▽ : Ground Points**

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
	102 (*10)	
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Condenser Fan

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	78 (*1)	Engine Room Main Wire	E1	102 (*10)	Engine Room Main Wire
	80 (*2)			104 (*11)	
	82 (*3)			106 (*12)	
	84 (*4)			108 (*13)	
	86 (*5)			110 (*14)	

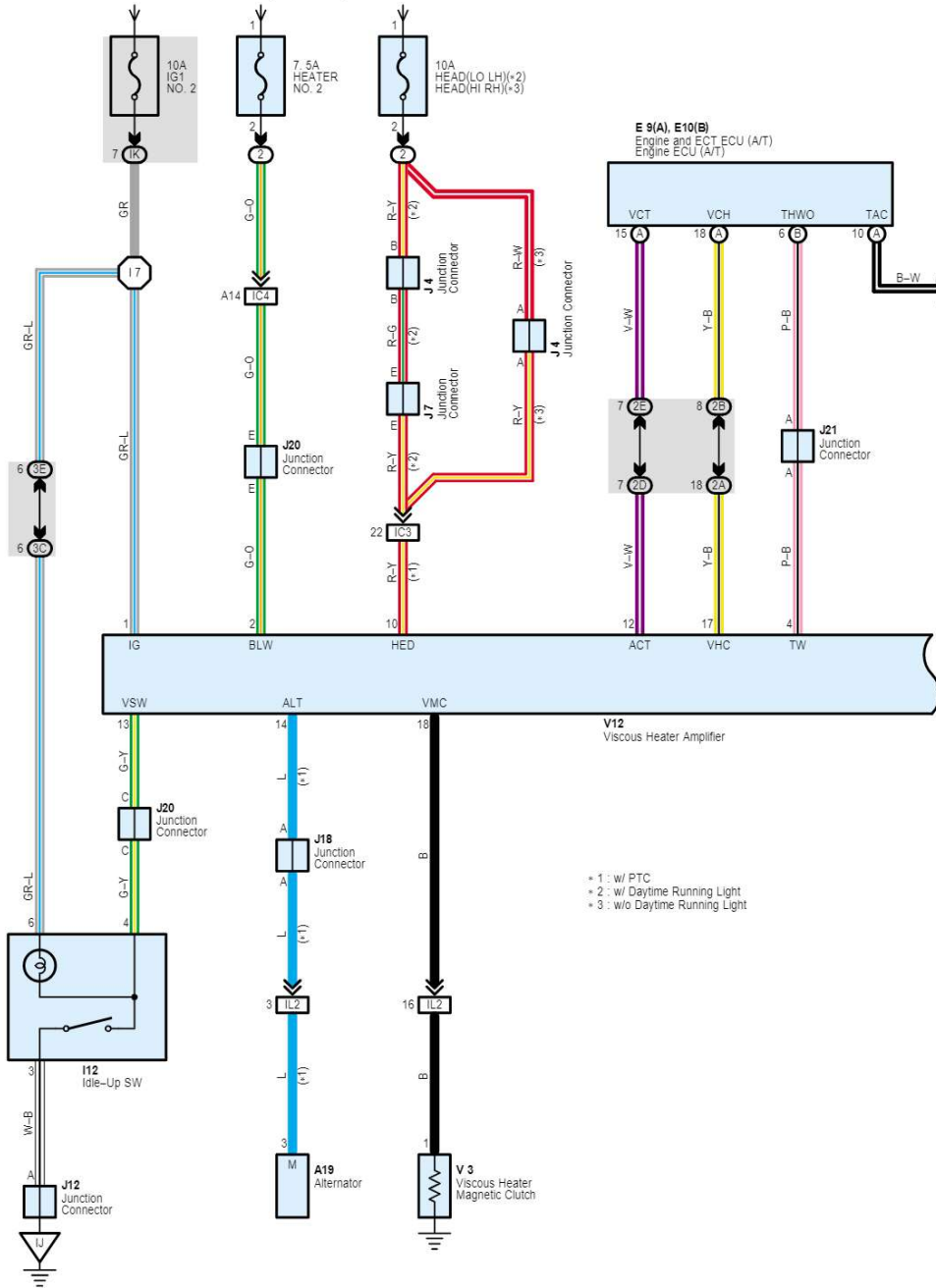
\* 1 : LHD 1GR-FE   \* 2 : LHD 3RZ-FE   \* 3 : LHD 1KD-FTV   \* 4 : LHD 1KZ-TE   \* 5 : LHD 5L-E   \* 6 : LHD 5-Door   \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat   \* 9 : LHD Except 8Way Power Seat   \* 10 : RHD 1GR-FE   \* 11 : RHD 3RZ-FE   \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE   \* 14 : RHD 5L-E   \* 15 : RHD 5-Door   \* 16 : RHD 3-Door   \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

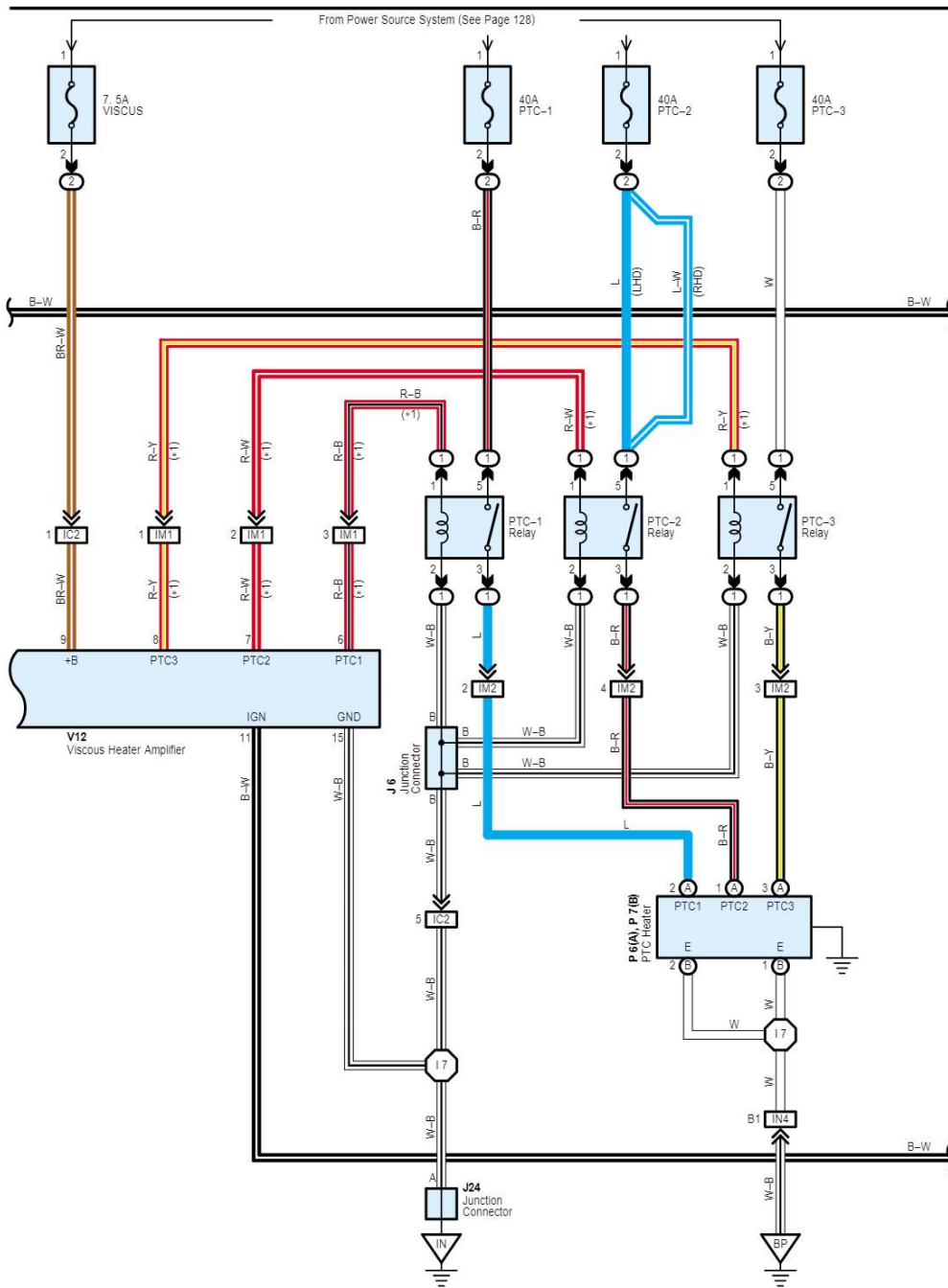




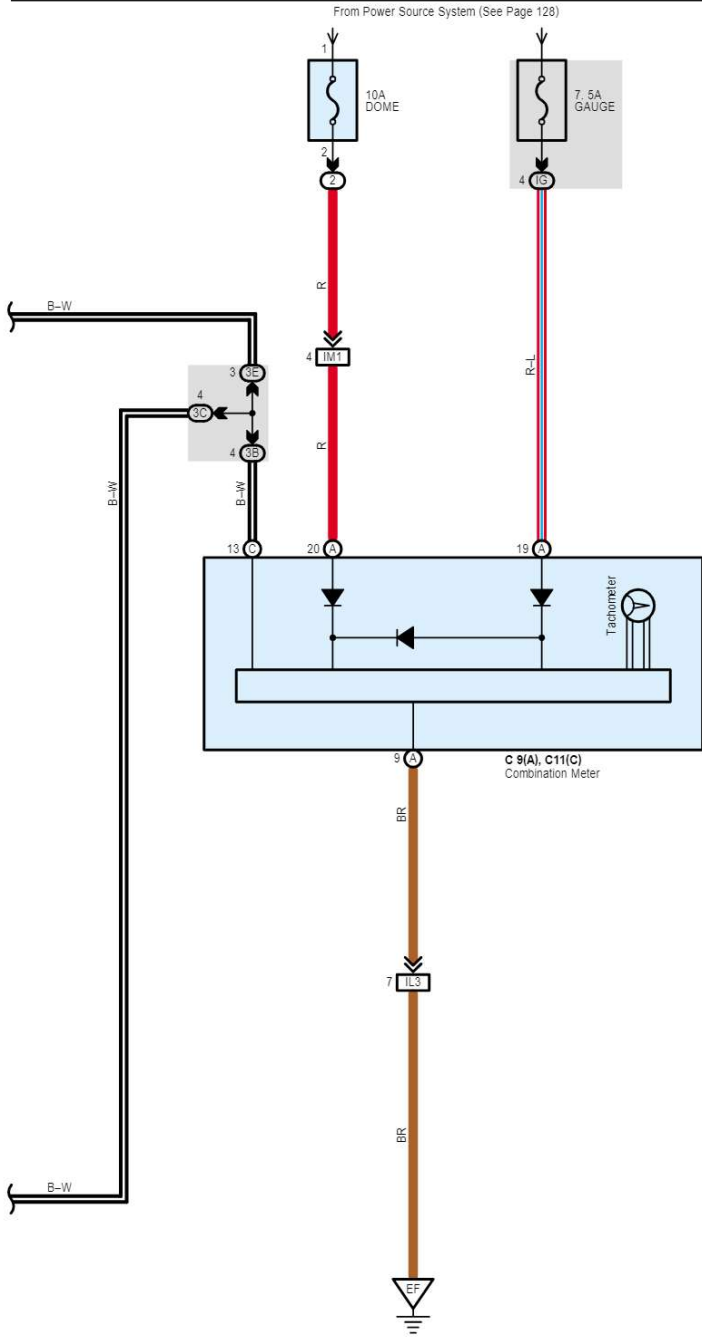
# Viscous Heater

From Power Source System (See Page 128)





# Viscous Heater



690

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

### System Outline

A drive belt drives the viscous heater, which is located on top of the engine. Pressing the power heater switch provided in the instrument panel engages the magnetic clutch causing the rotor in the viscous heater to rotate and the silicon oil to mix. With the rise of the coolant temperature caused by these factors such as the shear heat generated when the silicon oil is mixed and the engine load at this time, the viscous heater supplements the rise of heater operation temperature.

### Service Hints

#### V12 Viscous Heater Amplifier

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

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A19	42 (*3)	J4	43 (*3)	J21	50 (LHD)
	62 (*12)		63 (*12)		70 (RHD)
C9	49 (LHD)	J6	43 (*3)	J24	50 (LHD)
	69 (RHD)		63 (*12)		70 (RHD)
C11	49 (LHD)	J7	50 (LHD)	P6	A
	69 (RHD)		70 (RHD)		
E9	49 (LHD)	J12	50 (LHD)	P7	B
	69 (RHD)		70 (RHD)		
E10	49 (LHD)	J18	50 (LHD)	V3	43 (*3)
	69 (RHD)		70 (RHD)		63 (*12)
I12	50 (LHD)	J20	50 (LHD)	V12	51 (LHD)
	70 (RHD)		70 (RHD)		71 (RHD)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24 (LHD)	Engine Room R/B No.1 (Engine Compartment Right)
	24 (RHD)	Engine Room R/B No.1 (Engine Compartment Left)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
	29 (RHD)	
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2D		
2E		
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3C	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## Viscous Heater

### ☐ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC3	88 (LHD)	
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM2	92 (LHD)	
	116 (RHD)	
IN4	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	

### ▽ : Ground Points

Code	See Page	Ground Points Location
EF	82 (*3)	Rear Part of Cylinder Block
	106 (*12)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel
BP	96 (*6)	Under the Front Passenger's Seat
	100 (*7)	
	120 (*15)	Under the Driver's Seat
	124 (*16)	

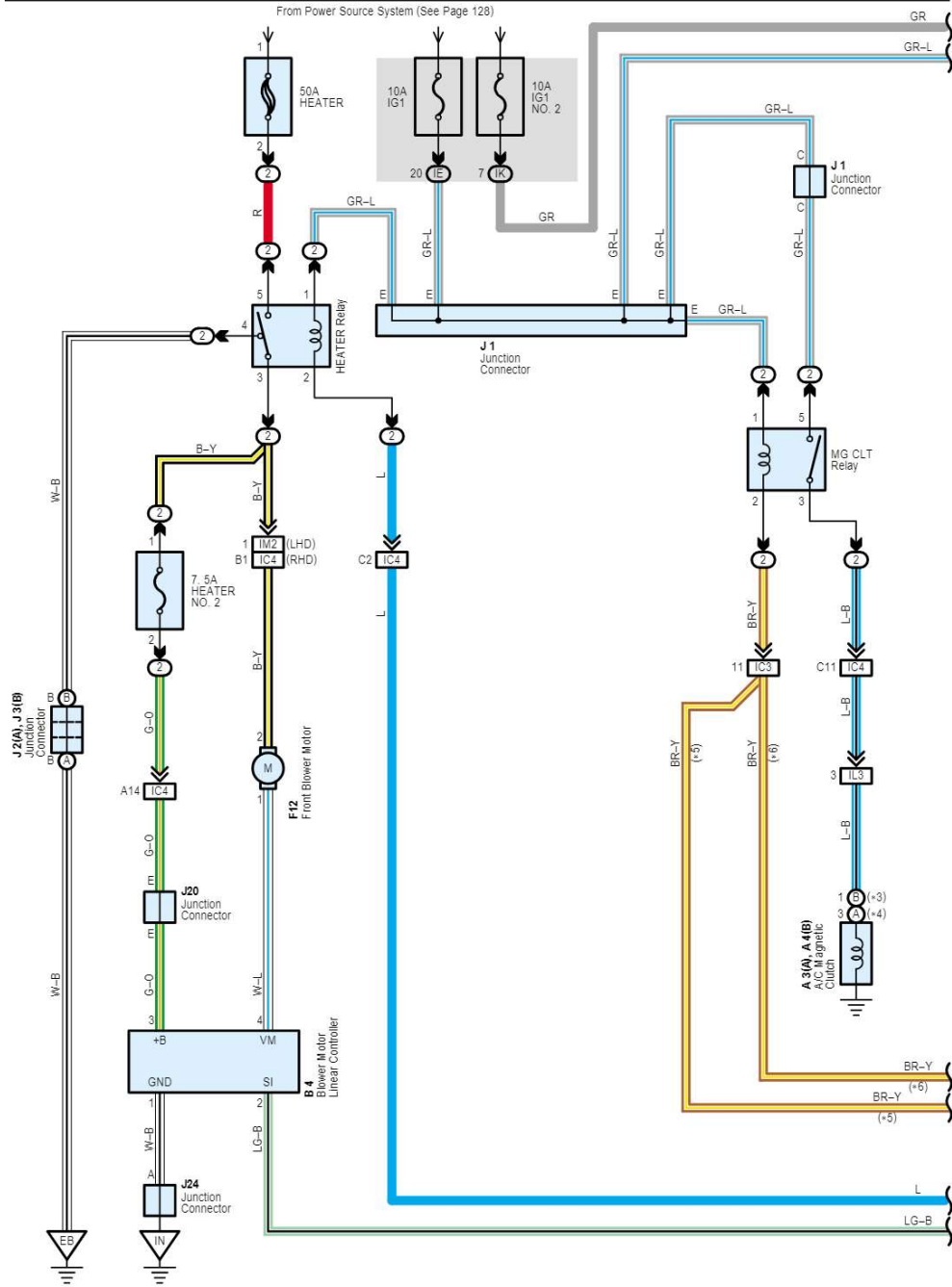
### ⊗ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I7	114 (RHD)	Instrument Panel Wire

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



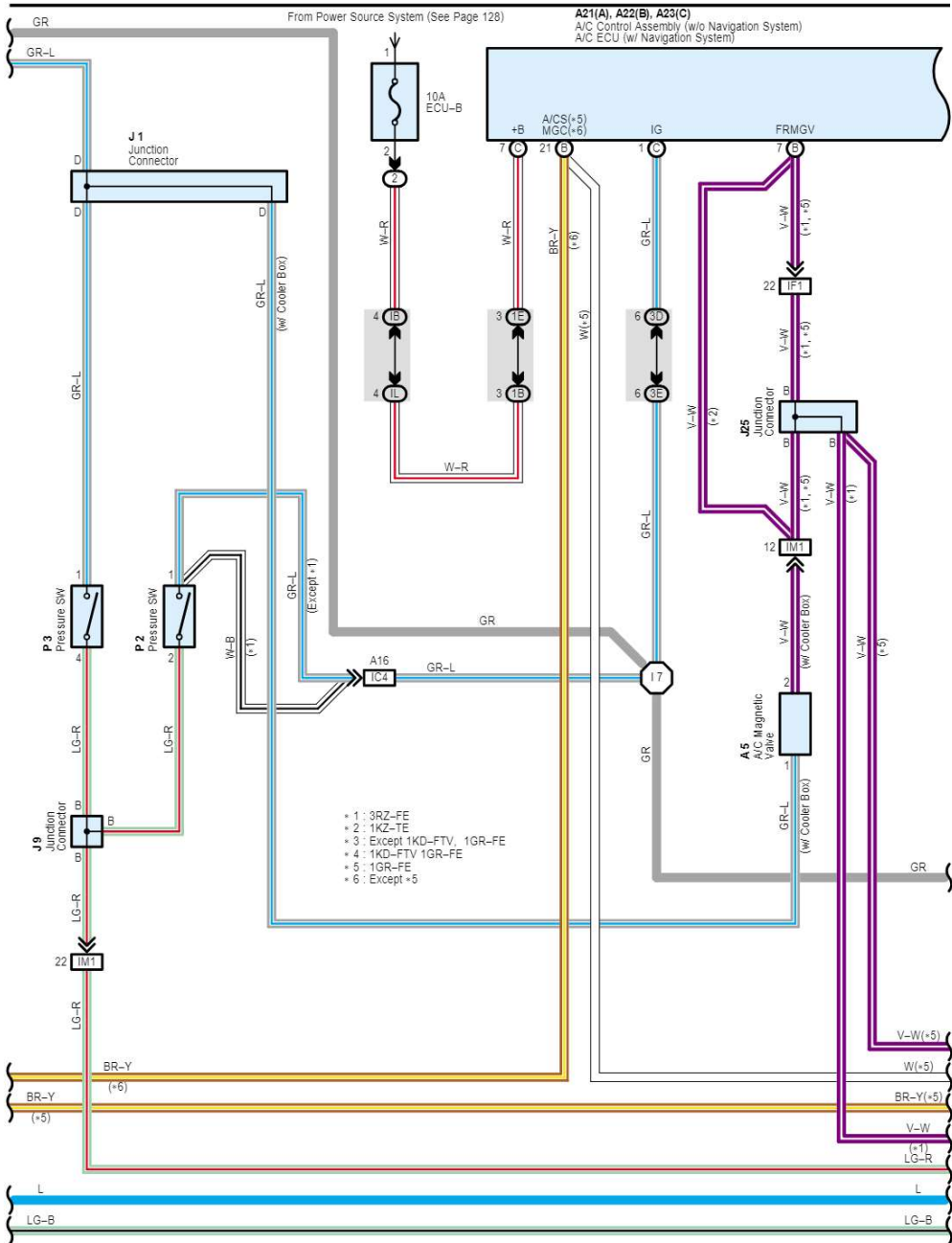
# Air Conditioner (Automatic A/C)



694

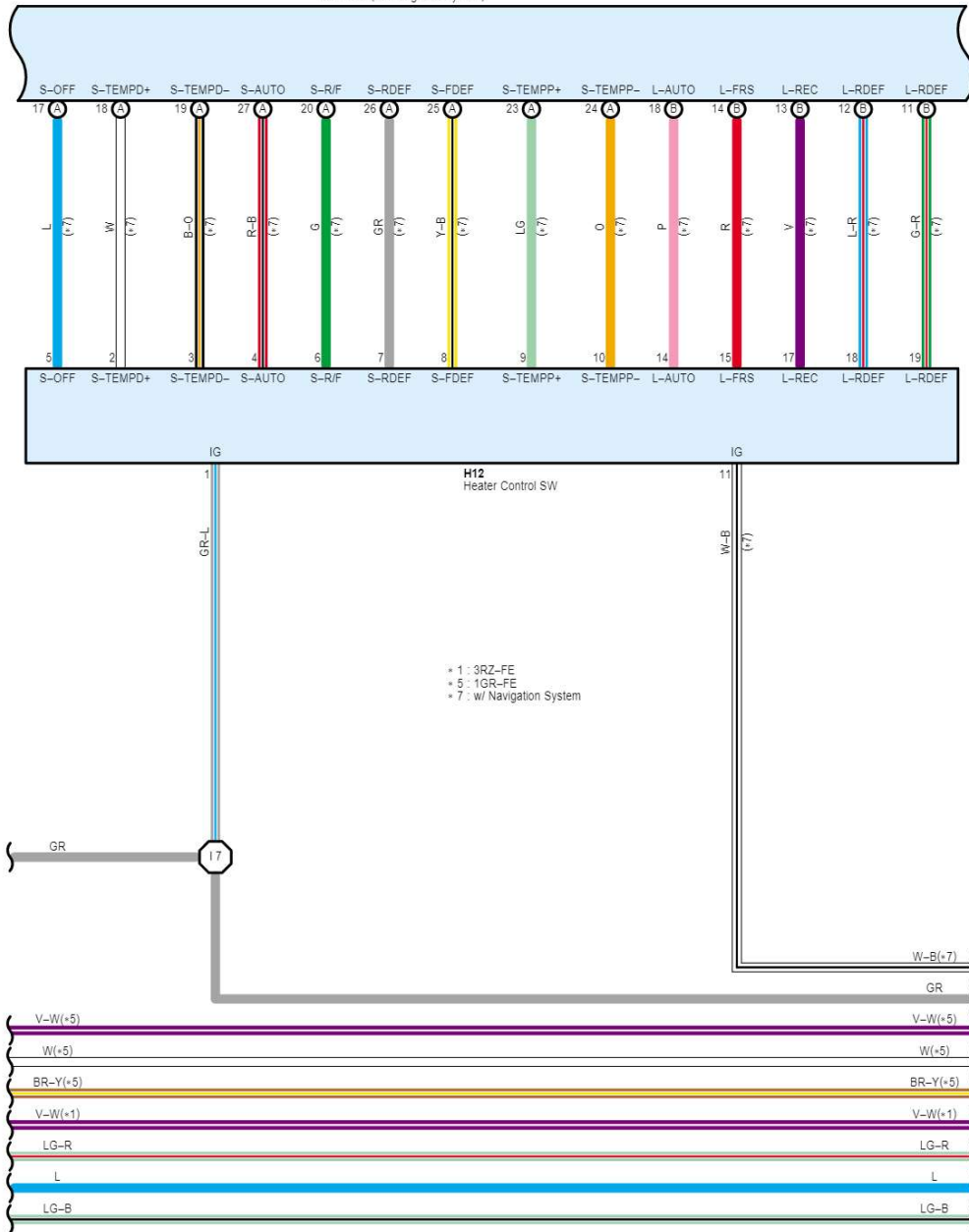
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

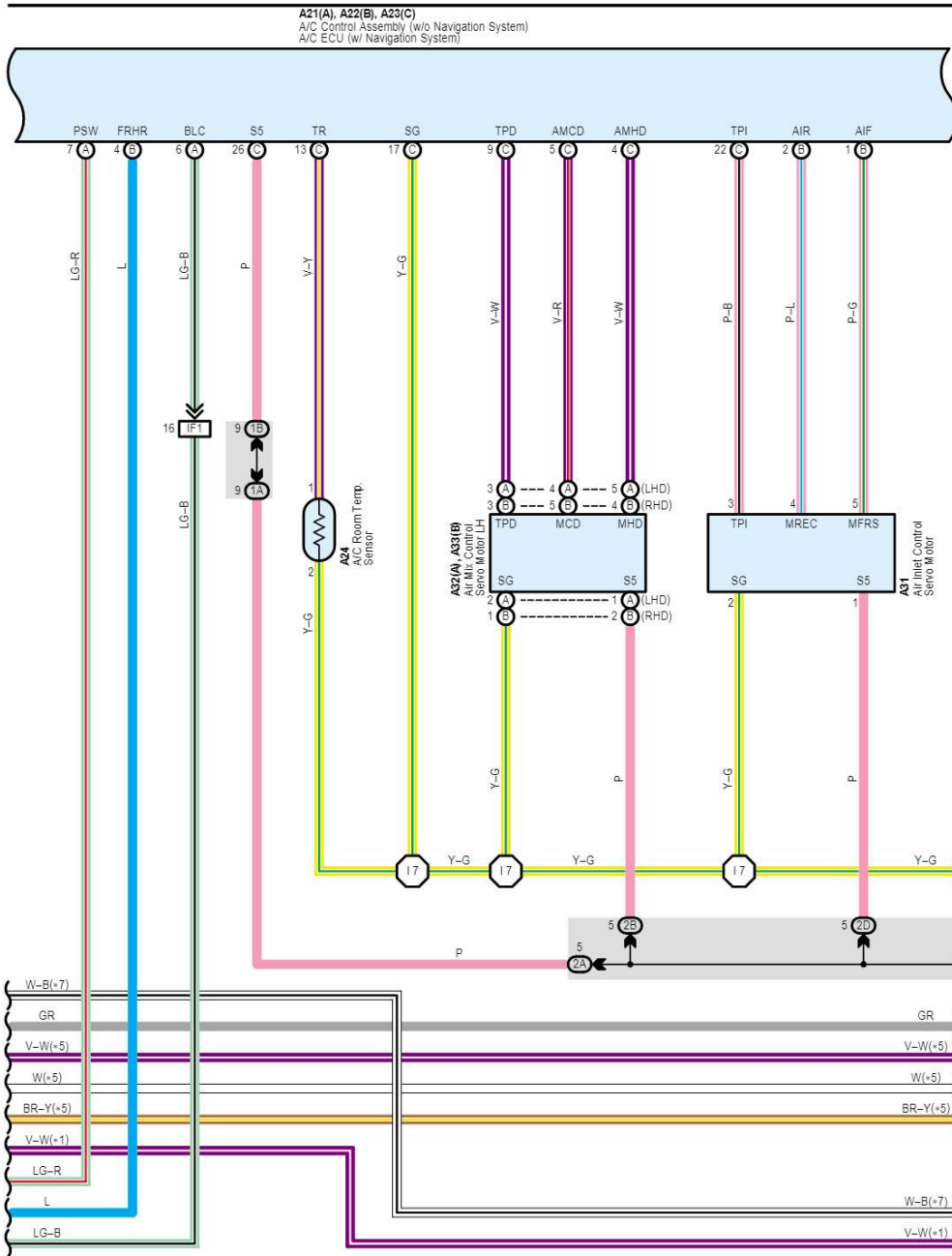




# Air Conditioner (Automatic A/C)

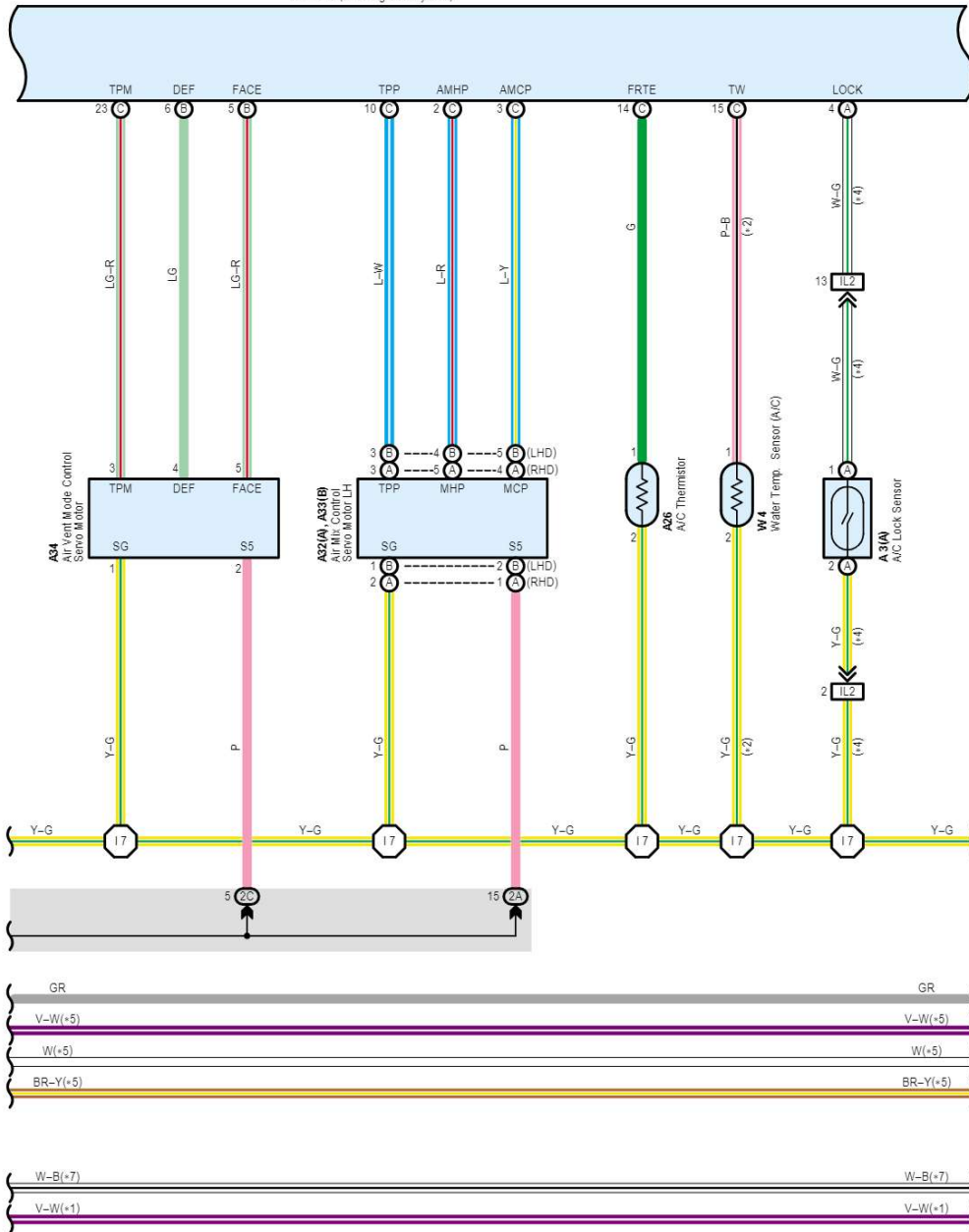
A21(A), A22(B), A23(C)  
 A/C Control Assembly (w/o Navigation System)  
 A/C ECU (w/ Navigation System)



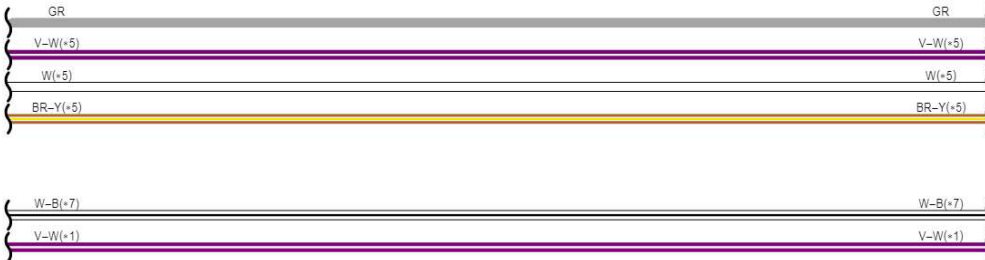
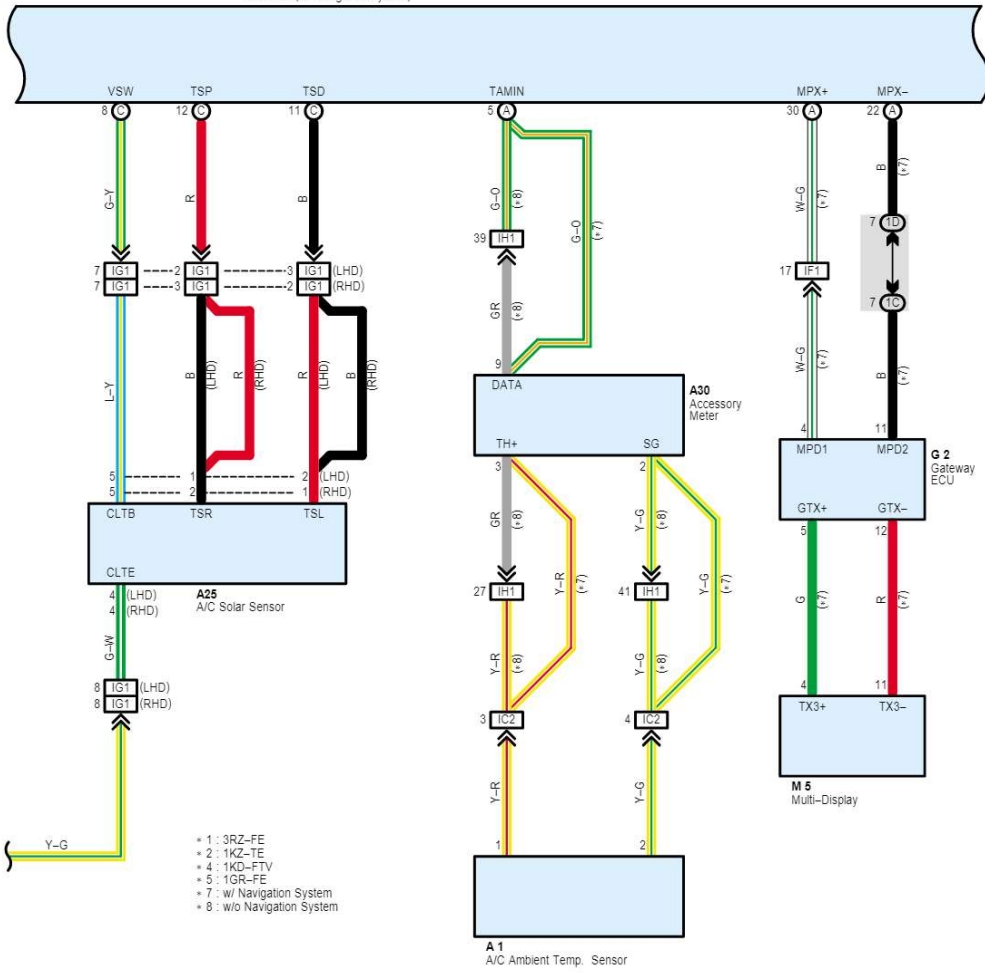


# Air Conditioner (Automatic A/C)

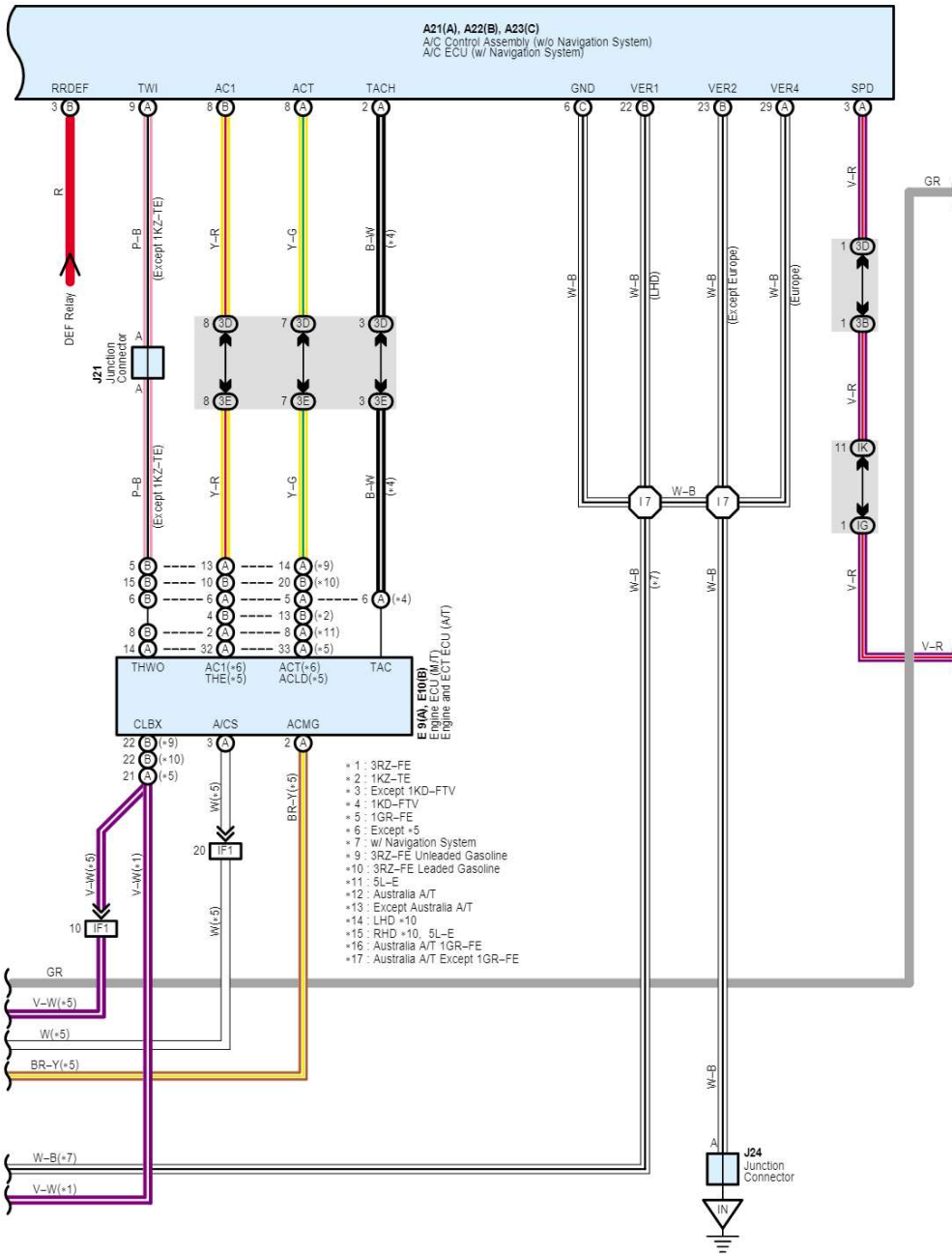
A21(A), A22(B), A23(C)  
 A/C Control Assembly (w/o Navigation System)  
 A/C ECU (w/ Navigation System)



A21(A), A22(B), A23(C)  
 A/C Control Assembly (w/o Navigation System)  
 A/C ECU (w/ Navigation System)

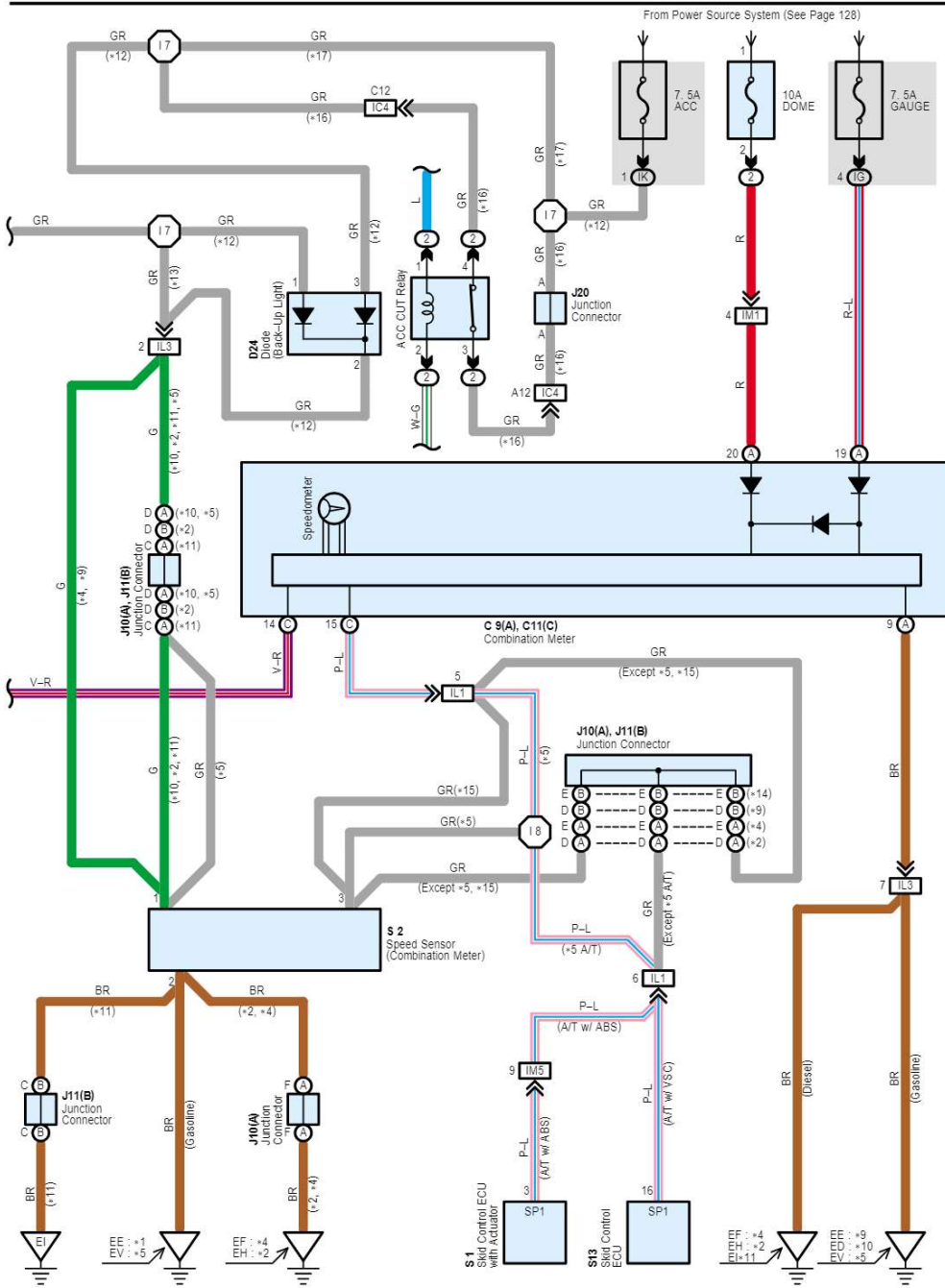


# Air Conditioner (Automatic A/C)



700

LAND CRUISER / LAND CRUISER PRADO (EWD527E)



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Air Conditioner (Automatic A/C)

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

### 3. Air Vent Mode Control Servo Motor Control

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

### 4. Air Mix Control Servo Motor Control

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

### 5. Air Conditioning Operation

The A/C control assembly receives various signals, I.E., the engine RPM from the engine and ECT ECU (A/T), engine ECU (M/T), outside air temperature signal from the A/C ambient temp. sensor and coolant temperature from the engine and ECT ECU (A/T), engine ECU (M/T), 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 IG1 fuse to TERMINAL 1 of the MG CLT relay to TERMINAL 2 to TERMINAL MGC of the A/C control assembly to GROUND, turning the MG CLT relay on, so that the magnetic clutch is on and the A/C compressor operates.

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

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

## Service Hints

### P2 Pressure SW

1-2 : Open with the refrigerant pressure at less than approx. 216 kpa (2.2 kgf/cm<sup>2</sup>, 31 psi) or more than approx. 3138 kpa (32 kgf/cm<sup>2</sup>, 455 psi)

### A21 (A), A22 (B), A23 (C) A/C Control Assembly (w/o Navigation System), A/C ECU (w/ Navigation System)

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

(C) 1-Ground : Approx. 12 volts with ignition SW at ON or ST position

(B) 22, (B) 23, (C) 6, (A) 29-Ground : Always continuity

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat



○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A1	38 (*1)	C9	A	49 (LHD)	J20	70 (RHD)
	40 (*2)			69 (RHD)	J21	50 (LHD)
	42 (*3)	C11	C	49 (LHD)		J24
	44 (*4)			69 (RHD)	50 (LHD)	
	46 (*5)	D24		69 (RHD)	J25	70 (RHD)
	58 (*10)	E9	A	49 (LHD)		50 (LHD)
	60 (*11)			69 (RHD)	70 (RHD)	
	62 (*12)	E10	B	49 (LHD)	M5	50 (LHD)
	64 (*13)			69 (RHD)		70 (RHD)
	66 (*14)	F12		49 (LHD)	P2	39 (*1)
38 (*1)	G2		69 (RHD)	41 (*2)		
42 (*3)	H12		49 (LHD)	43 (*3)		
58 (*10)	J1		69 (RHD)	45 (*4)		
62 (*12)	J1		50 (LHD)	47 (*5)		
64 (*13)	J1		70 (RHD)	59 (*10)		
66 (*14)	J1		39 (*1)	61 (*11)		
38 (*1)	J1		41 (*2)	63 (*12)		
40 (*2)	J1		43 (*3)	65 (*13)		
42 (*3)	J1		45 (*4)	67 (*14)		
A5	44 (*4)	J1		47 (*5)	P3	39 (*1)
	46 (*5)	J1		59 (*10)		41 (*2)
	60 (*11)	J1		61 (*11)		43 (*3)
	64 (*13)	J1		63 (*12)		45 (*4)
	66 (*14)	J1		65 (*13)		47 (*5)
	38 (*1)	J1		67 (*14)		59 (*10)
	40 (*2)	J1		39 (*1)		61 (*11)
	42 (*3)	J1		41 (*2)		63 (*12)
A21	A	J2	A	43 (*3)	S1	65 (*13)
				48 (LHD)		67 (*14)
68 (RHD)	45 (*4)					
A22	B			47 (*5)		39 (*1)
				48 (LHD)		41 (*2)
68 (RHD)	59 (*10)			43 (*3)		
A23	C			61 (*11)		45 (*4)
				48 (LHD)		65 (*13)
68 (RHD)	67 (*14)			59 (*10)		
A24				67 (*14)		61 (*11)
		48 (LHD)	63 (*12)			
68 (RHD)	39 (*1)	65 (*13)				
A25		J3	B	41 (*2)	S2	39 (*1)
				48 (LHD)		43 (*3)
68 (RHD)	45 (*4)					
A26				47 (*5)		41 (*2)
				48 (LHD)		43 (*3)
68 (RHD)	59 (*10)			45 (*4)		
A30				61 (*11)		47 (*5)
				48 (LHD)		63 (*12)
68 (RHD)	65 (*13)			59 (*10)		
A31				67 (*14)		61 (*11)
		48 (LHD)	63 (*12)			
68 (RHD)	65 (*13)	67 (*14)				
A32	A	J9		50 (LHD)	S13	51 (LHD)
		J9		70 (RHD)		71 (RHD)
A33	B	J10	A	48 (LHD)	W4	51 (LHD)
				48 (LHD)		70 (RHD)
A34		J11	B	50 (LHD)	W4	51 (LHD)
				48 (LHD)		70 (RHD)
B4		J20		50 (LHD)		
		68 (RHD)				

## Air Conditioner (Automatic A/C)

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IE	26 (LHD)	
	28 (RHD)	
IG	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IK	27 (LHD)	
	29 (RHD)	
IL	27 (LHD)	
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1C	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1D	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
3B	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)	
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)	
	112 (RHD)		
IC3	88 (LHD)		
	112 (RHD)		
IC4	88 (LHD)		
	112 (RHD)		
IF1	90 (LHD)		Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)		
IG1	90 (LHD)		Instrument Panel No.3 Wire and Instrument Panel Wire (Near the Combination Meter)
	114 (RHD)		
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)	
	114 (RHD)		
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)	
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)	
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)	
	116 (RHD)		
IM2	92 (LHD)		
IM5	92 (LHD)		
	116 (RHD)		

## Air Conditioner (Automatic A/C)

### ▽ : Ground Points

Code	See Page	Ground Points Location	
EB	78 (*1)	Front Left Fender	
	80 (*2)		
	82 (*3)		
	84 (*4)		
	86 (*5)		
	102 (*10)		
	104 (*11)		
	106 (*12)		
	108 (*13)		
110 (*14)			
ED	80 (*2)	Ignition Coil Bracket	
	104 (*11)		
EE	80 (*2)	Intake Manifold	
	104 (*11)		
EF	82 (*3)	Rear Part of Cylinder Block	
	106 (*12)		
EH	84 (*4)		
	108 (*13)		
EI	86 (*5)		
	110 (*14)		
EV	78 (*1)		Rear Side of Left Bank Cylinder Block
	102 (*10)		
IN	88 (LHD)		Right Kick Panel
	112 (RHD)	Left Kick Panel	

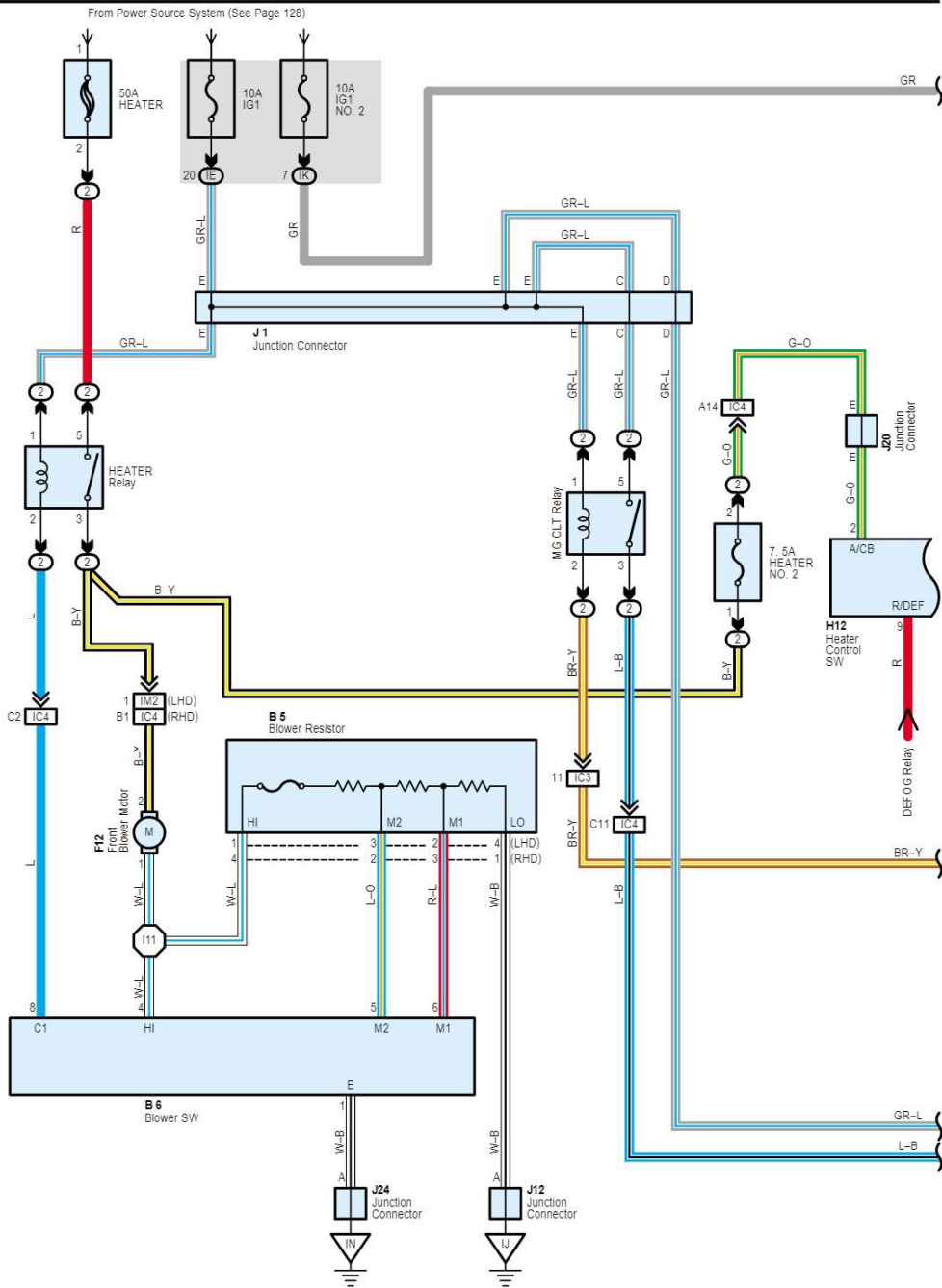
### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
17	90 (LHD)	Instrument Panel Wire	18	90 (LHD)	Engine Wire
	114 (RHD)			114 (RHD)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

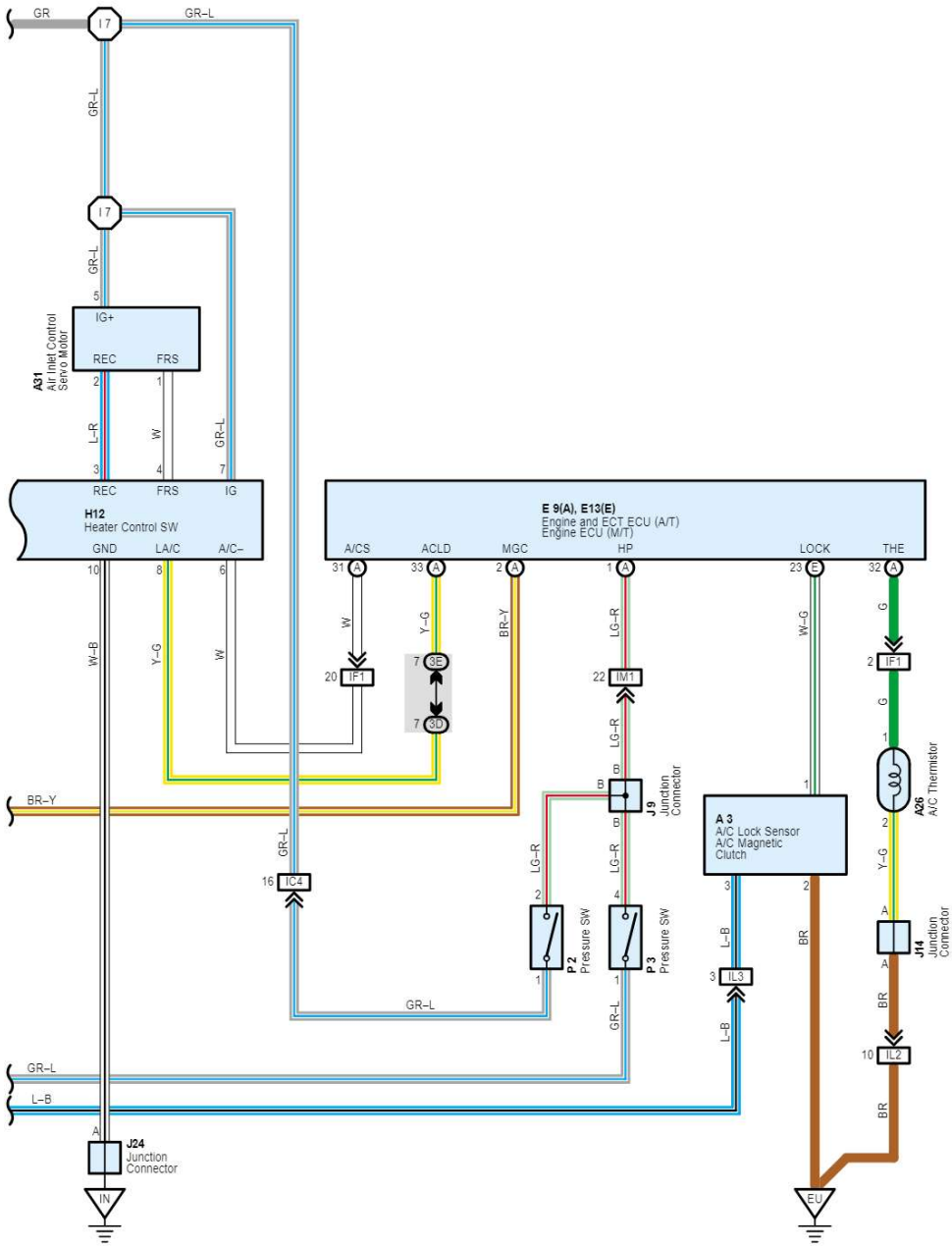


# Air Conditioner (Manual A/C 1GR-FE)



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



# Air Conditioner (Manual A/C 1GR-FE)

## System Outline

### 1. Heater Blower Motor Operation

\* Low speed operation

When the blower SW is moved to LO position, current flows to TERMINAL C1 of the blower SW to GROUND, activating the HEATER relay. This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the front blower motor to TERMINAL 1 to TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 4 (LHD), 1 (RHD) to GROUND, causing the blower motor to rotate at low speed.

\* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, current flows to TERMINAL C1 of the blower SW to GROUND, turning the HEATER relay to switch on. This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the front blower motor to TERMINAL 1 to TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 2 (LHD), 3 (RHD) to TERMINAL 6 of the blower SW to GROUND. At this time, the blower resistance of the blower resistor is less than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, current flows through the motor flows from TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 3 (LHD), 2 (RHD) to TERMINAL 5 of the blower SW to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

\* High speed operation

When the blower SW is moved to HIGH position, current flows to TERMINAL C1 of the blower SW to GROUND, turning the HEATER relay to switch on.

This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 4 of the blower SW to GROUND, causing the blower motor to rotate at high speed.

## Service Hints

### HEATER Relay

5-3 : Closed with the ignition SW on and the blower SW on

### MG CLT Relay

5-3 : Closed with the ignition SW on, the blower SW on and the A/C SW on

### P2 Pressure SW

1-2 : Open with pressure 2.0 kgf/cm<sup>2</sup> (29 psi, 196 kpa) or above 32 kgf/cm<sup>2</sup> (464 psi, 3138 kpa)

## ○ : Parts Location


Code	See Page	Code	See Page	Code	See Page
A3	38 (*1)	E13	E	J14	49 (LHD)
	58 (*10)				69 (RHD)
A26	48 (LHD)	F12		J20	49 (LHD)
	68 (RHD)				69 (RHD)
A31	48 (LHD)	H12		J24	50 (LHD)
	68 (RHD)				70 (RHD)
B5	48 (LHD)	J1		P2	39 (*1)
	68 (RHD)				59 (*10)
B6	48 (LHD)	J9		P3	39 (*1)
	68 (RHD)				50 (LHD)
E9	A	J12			49 (LHD)
					69 (RHD)

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat



 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM2	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	

 : Ground Points

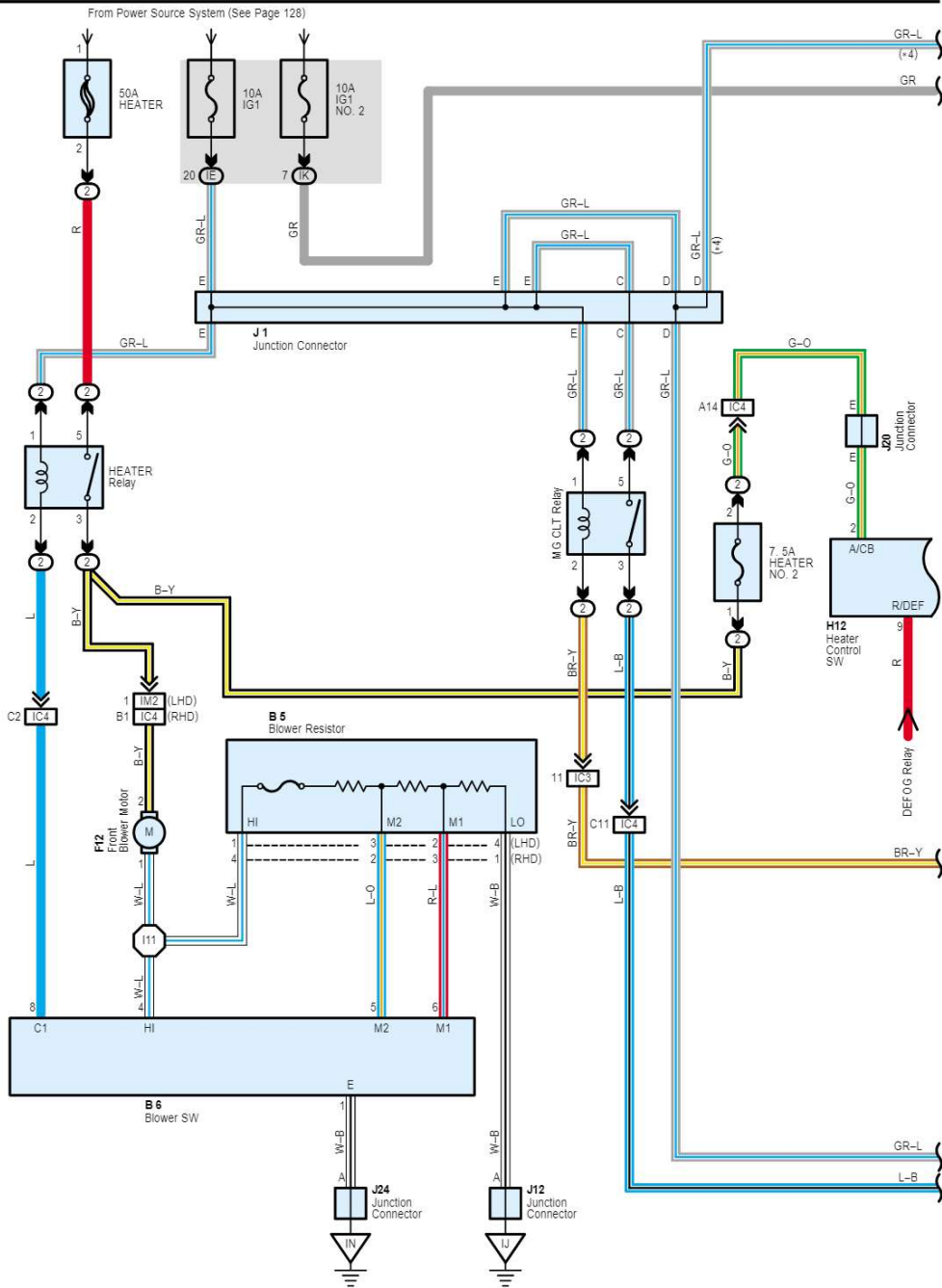
Code	See Page	Ground Points Location
EU	78 (*1)	Rear Side of Right Bank Cylinder Block
	102 (*10)	
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I11	90 (LHD)	Instrument Panel Wire
	114 (RHD)			114 (RHD)	

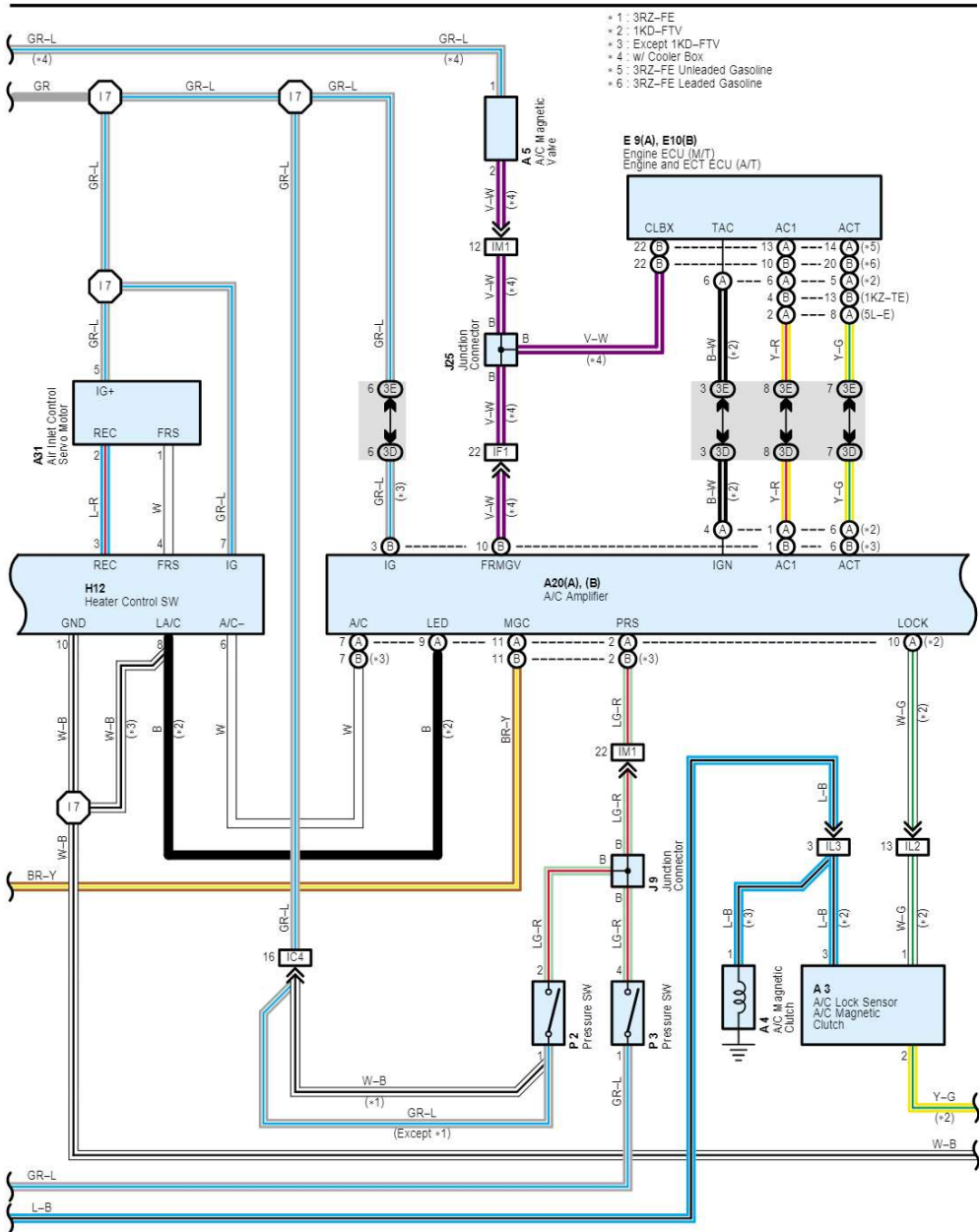
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Air Conditioner (Manual A/C Except 1GR-FE)



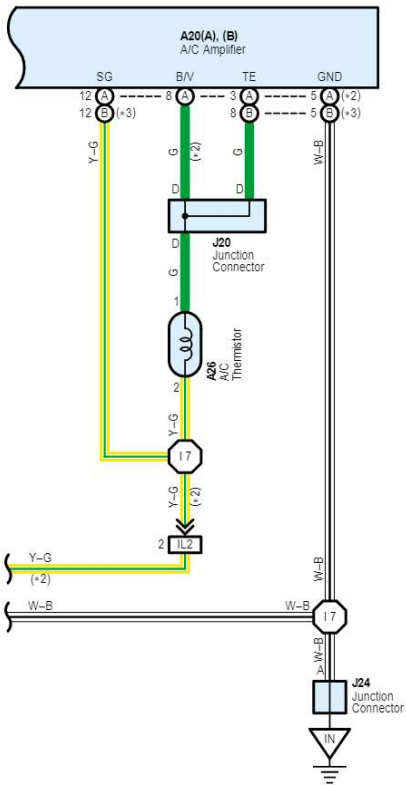
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



# Air Conditioner (Manual A/C Except 1GR-FE)

- 2 : 1KD-FTV
- 3 : Except 1KD-FTV



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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## System Outline

### 1. Heater Blower Motor Operation

#### \* Low speed operation

When the blower SW is moved to LO position, current flows to TERMINAL C1 of the blower SW to GROUND, activating the HEATER relay. This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the front blower motor to TERMINAL 1 to TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 4 (LHD), 1 (RHD) to GROUND, causing the blower motor to rotate at low speed.

#### \* Medium speed operation (Operation at M1, M2)

When the blower SW is moved to M1 position, current flows to TERMINAL C1 of the blower SW to GROUND, turning the HEATER relay to switch on. This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the front blower motor to TERMINAL 1 to TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 2 (LHD), 3 (RHD) to TERMINAL 6 of the blower SW to GROUND. At this time, the blower resistance of the blower resistor is less than at low speed, so the blower motor rotates at medium low speed.

When the blower SW is moved to M2 position, current flows through the motor flows from TERMINAL 1 (LHD), 4 (RHD) of the blower resistor to TERMINAL 3 (LHD), 2 (RHD) to TERMINAL 5 of the blower SW to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

#### \* High speed operation

When the blower SW is moved to HIGH position, current flows to TERMINAL C1 of the blower SW to GROUND, turning the HEATER relay to switch on.

This causes the current to flow from the HEATER fuse to TERMINAL 5 of the HEATER relay to TERMINAL 3 to TERMINAL 2 of the blower motor to TERMINAL 1 to TERMINAL 4 of the blower SW to GROUND, causing the blower motor to rotate at high speed.

## Service Hints

### HEATER Relay

5-3 : Closed with the ignition SW on and the blower SW on

### MG CLT Relay

5-3 : Closed with the ignition SW on, the blower SW on and the A/C SW on

### P2 Pressure SW

1-2 : Open with pressure 2.0 kgf/cm<sup>2</sup> (29 psi, 196 kpa) or above 32 kgf/cm<sup>2</sup> (464 psi, 3138 kpa)

## Air Conditioner (Manual A/C Except 1GR-FE)

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	42 (*3)	B5	68 (RHD)	J20	50 (LHD)
	62 (*12)		48 (LHD)		70 (RHD)
A4	40 (*2)	B6	68 (RHD)	J24	50 (LHD)
	44 (*4)		49 (LHD)		70 (RHD)
	46 (*5)	E9	A	J25	50 (LHD)
	60 (*11)				69 (RHD)
	64 (*13)	E10	B	P2	41 (*2)
	66 (*14)				49 (LHD)
	A5	40 (*2)	F12		69 (RHD)
42 (*3)		49 (LHD)			47 (*5)
44 (*4)		H12	50 (LHD)		63 (*12)
60 (*11)			70 (RHD)		65 (*13)
62 (*12)		J1	41 (*2)		67 (*14)
64 (*13)			47 (*5)	41 (*2)	
A20	A		61 (*11)	43 (*3)	
			63 (*12)	45 (*4)	
A20	B	65 (*13)	47 (*5)		
		67 (*14)	61 (*11)		
A26	A	J9	50 (LHD)	63 (*12)	
			70 (RHD)	65 (*13)	
A31	A	J12	50 (LHD)	67 (*14)	
			70 (RHD)		
B5	48 (LHD)				

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IE	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC3	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
	112 (RHD)	
IC4	88 (LHD)	
	112 (RHD)	
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IL2	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL3	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IM2	92 (LHD)	
	116 (RHD)	

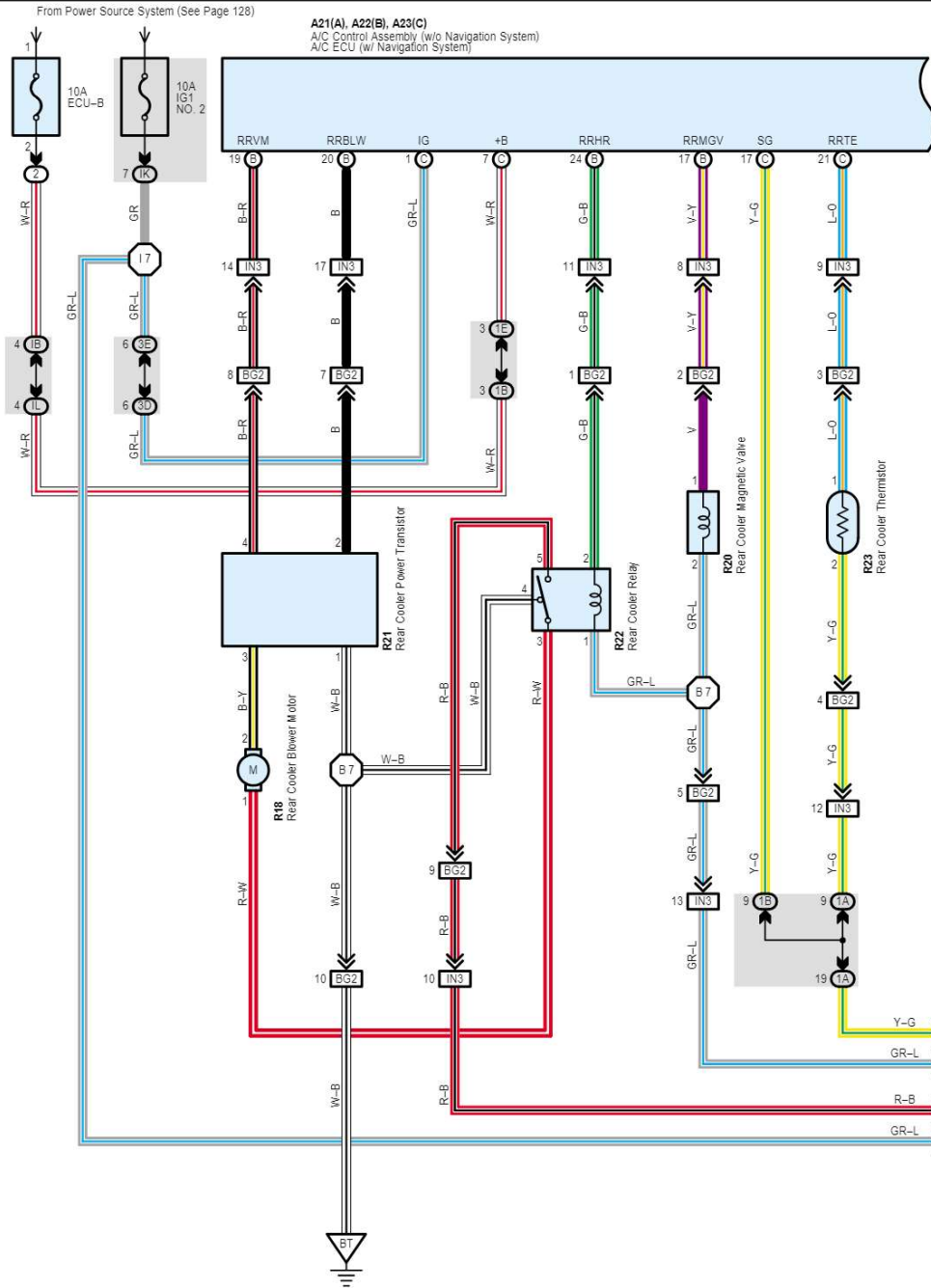
 : Ground Points

Code	See Page	Ground Points Location
IJ	88 (LHD)	Left Kick Panel
	112 (RHD)	Right Kick Panel
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I11	90 (LHD)	Instrument Panel Wire
	114 (RHD)			114 (RHD)	

# Rear Air Conditioner (Automatic A/C)



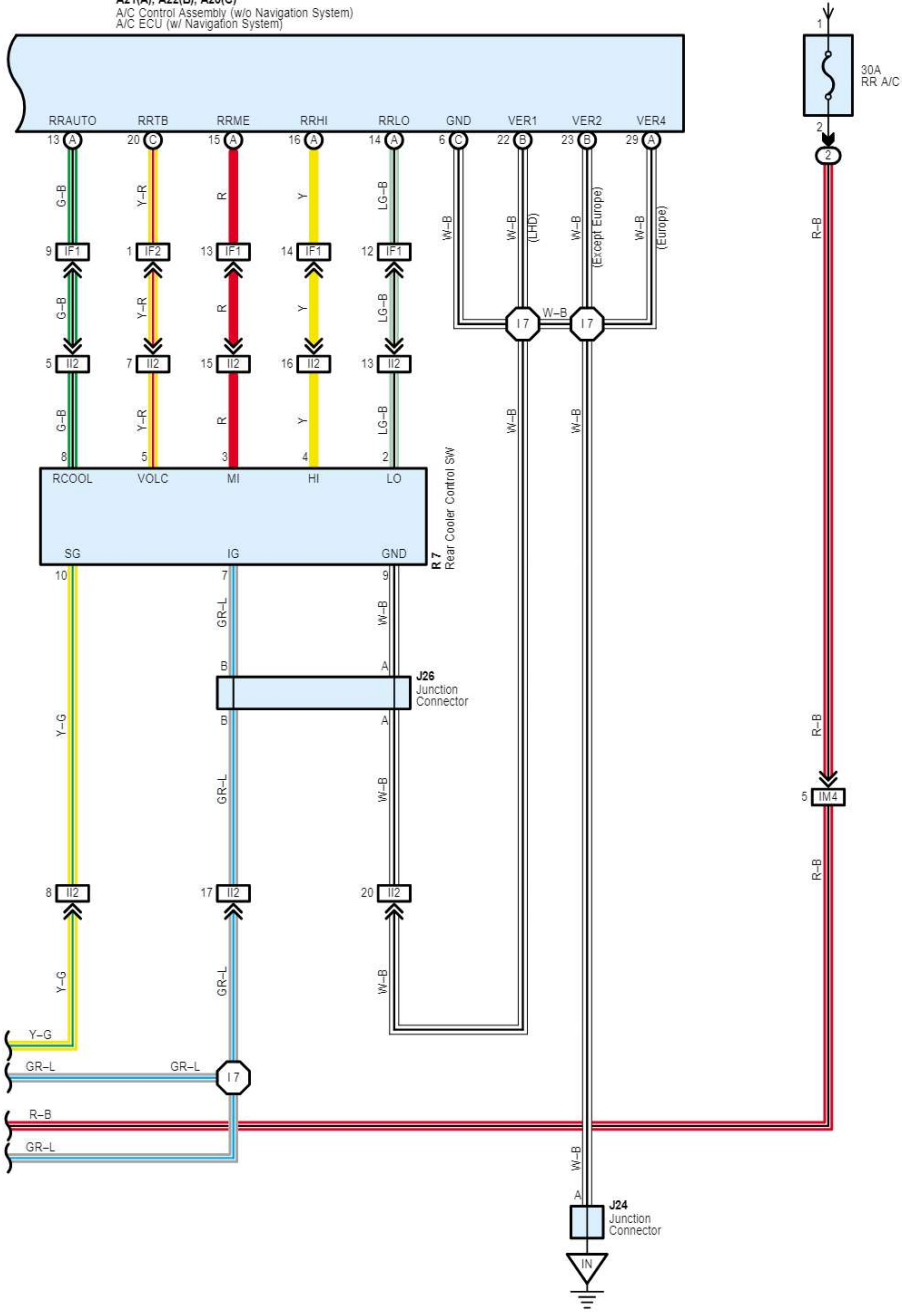
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



A21(A), A22(B), A23(C)  
 A/C Control Assembly (w/o Navigation System)  
 A/C ECU (w/ Navigation System)

From Power Source System (See Page 128)



719

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# Rear Air Conditioner (Automatic A/C)

## System Outline

### 1. Manual Operation

When air volume is set by blower control SW within rear A/C control SW, signal is transmitted from rear A/C control SW to A/C control assembly. A/C control assembly controls power transistor, and controls the blower motor at preset air volume.

### 2. Auto Operation

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

### 3. Temperature control

Temperature control of rear air conditioner can be set up to + / -5 °C of front air conditioner temperature setting.  
 \* Rear air conditioner works only when front air conditioner is operating, and only blows air when front air conditioner is off.

## Service Hints

### A21 (A), A22 (B), A23 (C) A/C Control Assembly (w/o Navigation System), A/C ECU (w/ Navigation System)

(B) 22, (B) 23, (C) 6, (A) 29-Ground : Always continuity

### R7 Rear Cooler Control SW

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

9-Ground : Always continuity

## ○ : Parts Location

Code		See Page	Code	See Page	Code	See Page
A21	A	48 (LHD)	J26	50 (LHD)	R21	53 (*6)
		68 (RHD)		70 (RHD)		73 (*15)
A22	B	48 (LHD)	R7	51 (LHD)	R22	53 (*6)
		68 (RHD)		71 (RHD)		73 (*15)
A23	C	48 (LHD)	R18	53 (*6)	R23	53 (*6)
		68 (RHD)		73 (*15)		73 (*15)
J24		50 (LHD)	R20	53 (*6)		
		70 (RHD)		73 (*15)		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IL	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
1E	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)
3D	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)
3E	36 (LHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Right)
	36 (RHD)	Instrument Panel Wire and J/B No.3 (Instrument Panel Reinforcement Left)

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
IF2	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Left Kick Panel)
	114 (RHD)	Instrument Panel Wire and Instrument Panel Wire (Right Kick Panel)
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
	114 (RHD)	
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN3	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
BG2	98 (*6)	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
	122 (*15)	

 : Ground Points

Code	See Page	Ground Points Location
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

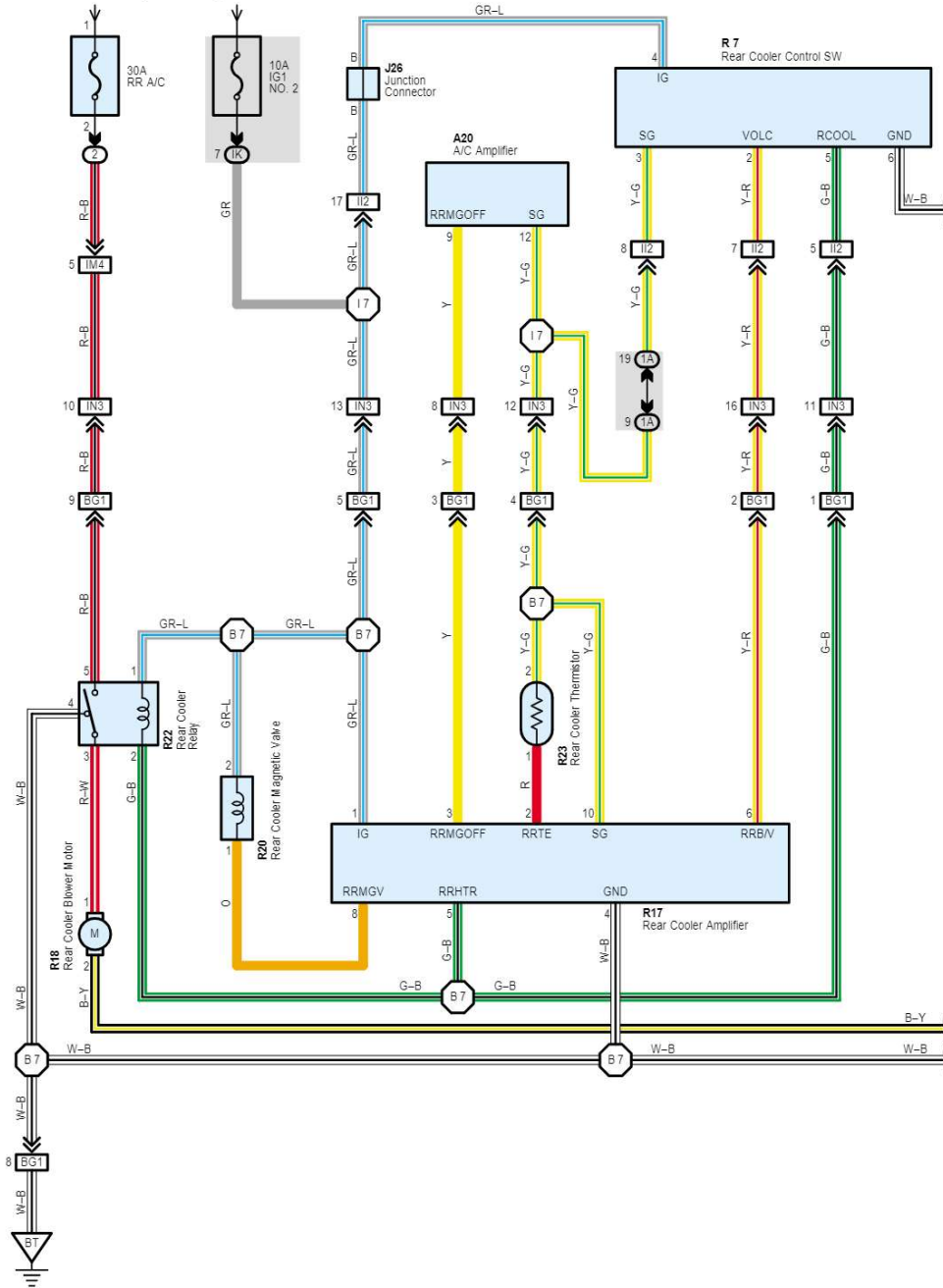
 : Splice Points

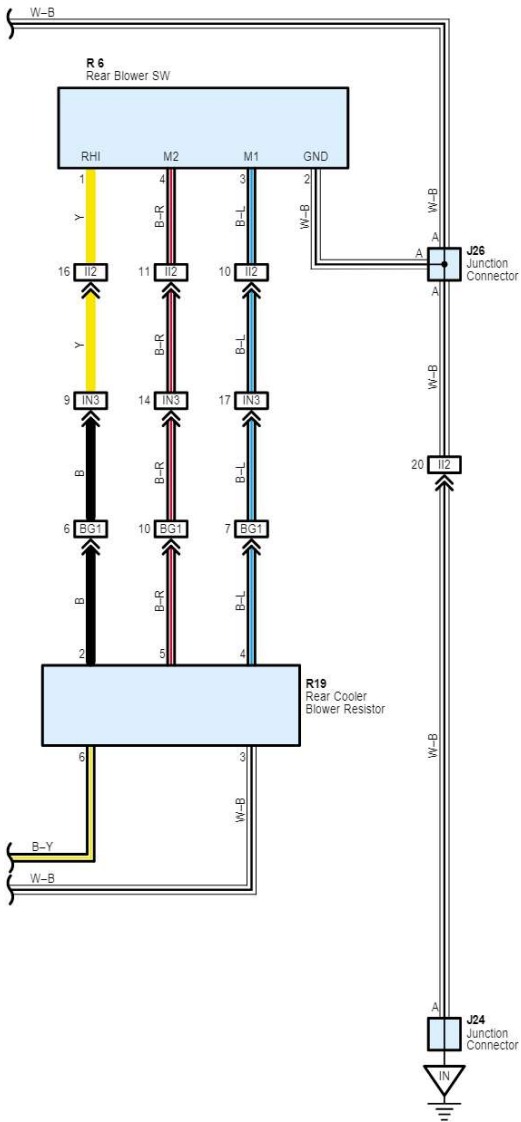
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	B7	98 (*6)	A/C Sub Wire
	114 (RHD)			122 (*15)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Rear Air Conditioner (Manual A/C)

From Power Source System (See Page 128)





# Rear Air Conditioner (Manual A/C)

## System Outline

### 1. Heater Blower Motor Operation

\* Low speed operation

When the REAR COOL SW in the rear A/C control SW is pushed to on and the rear blower control SW is moved to LO position, current flows to TERMINAL RCOOL of the rear A/C control SW to GROUND, activating the rear A/C relay. This causes the current to flow from the RR A/C fuse to TERMINAL 5 of the rear A/C relay to TERMINAL 3 to TERMINAL 1 of the rear blower motor to TERMINAL 2 to TERMINAL 6 of the rear blower resistor to TERMINAL 3 to GROUND, causing the blower motor to rotate at low speed.

\* Medium speed operation (Operation at M1, M2)

When the REAR COOL SW in the rear A/C control SW is pushed to on and the rear blower control SW is moved to M1 position, current flows to TERMINAL RCOOL of the rear A/C control SW to GROUND, turning the rear A/C relay to switch on. This causes the current to flow from the RR A/C fuse to TERMINAL 5 of the rear A/C relay to TERMINAL 3 to TERMINAL 1 of the rear blower motor to TERMINAL 2 to TERMINAL 6 of the rear blower resistor to TERMINAL 4 to TERMINAL 3 of the rear blower control SW to GROUND. At this time, the blower resistance of the rear blower resistor is less than at low speed, so the blower motor rotates at medium low speed.

When the rear blower control SW is moved to M2 position, current flows through the motor flows from TERMINAL 6 of the rear blower resistor to TERMINAL 5 to TERMINAL 4 of the rear blower control SW to GROUND. At this time, resistance of the blower resistor is less than at M1 position, so the blower motor rotates at medium high speed.

\* High speed operation

When the REAR COOL SW in the rear A/C control SW is pushed to on and the rear blower control SW is moved to HIGH position, current flows to TERMINAL RCOOL of the rear A/C control SW to GROUND, turning the rear A/C relay to switch on.

This causes the current to flow from the RR A/C fuse to TERMINAL 5 of the rear A/C relay to TERMINAL 3 to TERMINAL 1 of the rear blower motor to TERMINAL 2 to TERMINAL 6 of the rear blower resistor to TERMINAL 2 to TERMINAL 1 of the rear blower control SW to GROUND, causing the blower motor to rotate at high speed.

## Service Hints

### R22 Rear Cooler Relay

5-3 : Closed with the ignition SW on and the REAR COOL SW in the rear A/C control SW on

### R17 Rear Cooler Amplifier

1-Ground : Approx. 12 volts with ignition SW at ON  
4-Ground : Always continuity


## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A20	48 (LHD)	R7	51 (LHD)	R20	53 (*6)
	68 (RHD)		71 (RHD)		73 (*15)
J24	50 (LHD)	R17	53 (*6)	R22	53 (*6)
	70 (RHD)		73 (*15)		73 (*15)
J26	50 (LHD)	R18	53 (*6)	R23	53 (*6)
	70 (RHD)		73 (*15)		73 (*15)
R6	51 (LHD)	R19	53 (*6)		
	71 (RHD)		73 (*15)		


## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
1A	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
	114 (RHD)	
IM4	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
	116 (RHD)	
IN3	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
	118 (RHD)	
BG1	98 (*6)	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
	122 (*15)	

 : Ground Points

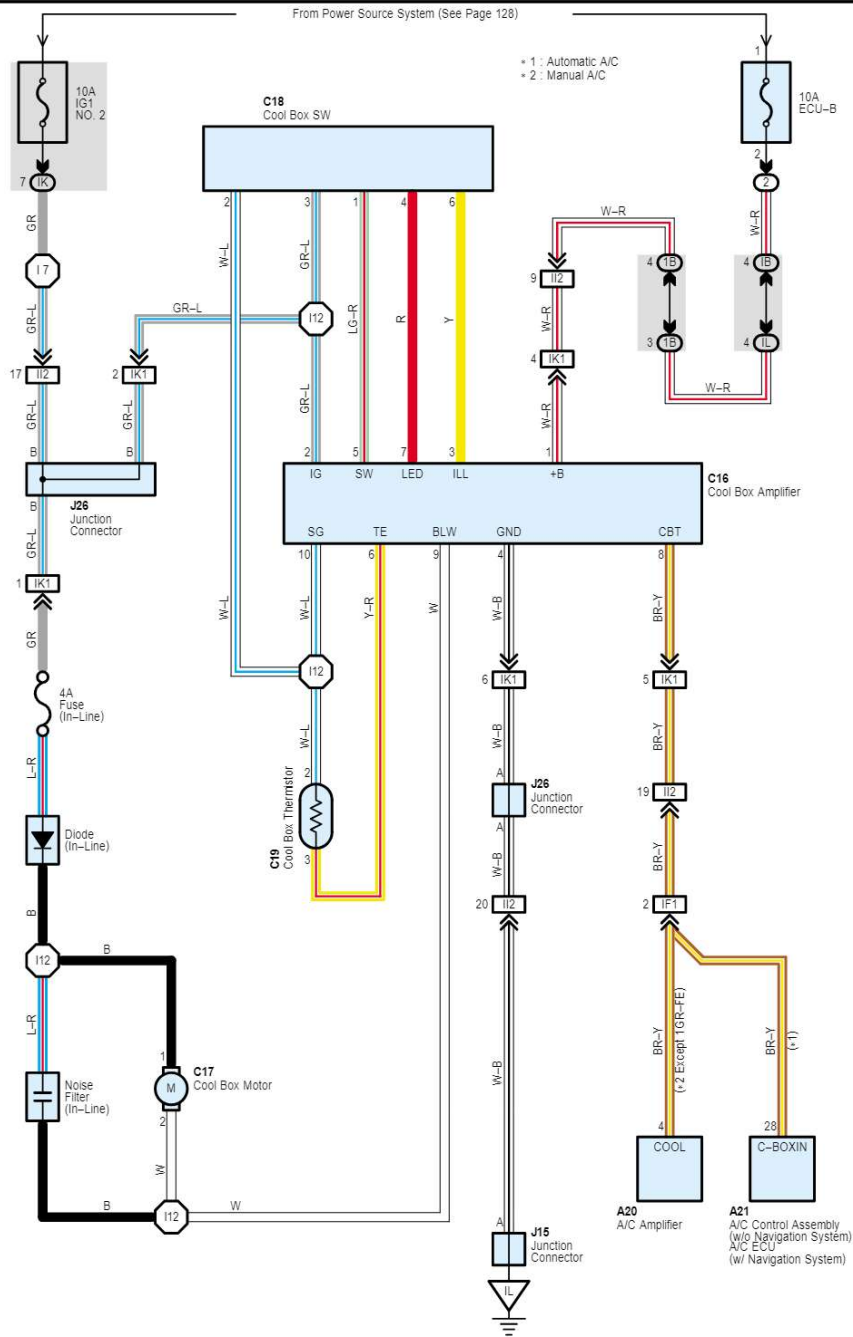
Code	See Page	Ground Points Location
IN	88 (LHD)	Right Kick Panel
	112 (RHD)	Left Kick Panel
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	
	120 (*15)	
	124 (*16)	

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	B7	98 (*6)	A/C Sub Wire
	114 (RHD)			122 (*15)	

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

# Cooler Box



726

LAND CRUISER / LAND CRUISER PRADO (EWD527E)



**System Outline**

When cooler SW is turned on, signal enters TERMINAL 5 of cooler box amplifier. Cooler box amplifier outputs compressor drive signal to A/C control assembly (Automatic A/C) and A/C amplifier (Manual A/C) and turns off compressor drive and magnet valve. When the temperature in the box is above 3°C, signal from thermistor is transmitted to cooler box amplifier, by which the motor rotates. Cooling medium is introduced into the evaporator by the motor, and air circulated by motor in the box is cooled when passing through the evaporator.

**Service Hints****C16 Cool Box Amplifier**

- 1-Ground : Always approx. 12 volts
- 4-Ground : Always continuity

**○ : Parts Location**

Code	See Page	Code	See Page	Code	See Page
A20	48 (LHD)	C17	49 (LHD)	J15	50 (LHD)
	68 (RHD)		69 (RHD)		70 (RHD)
A21	48 (LHD)	C18	49 (LHD)	J26	50 (LHD)
	68 (RHD)		69 (RHD)		70 (RHD)
C16	49 (LHD)	C19	49 (LHD)		
	69 (RHD)		69 (RHD)		

**○ : Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	23	Engine Room R/B (Engine Compartment Left)

**○ : Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	26 (LHD)	Engine Room Main Wire and Driver Side J/B (Lower Finish Panel)
	28 (RHD)	
IK	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
	29 (RHD)	
IL	27 (LHD)	
	29 (RHD)	
1B	32 (LHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Left)
	32 (RHD)	Instrument Panel Wire and J/B No.1 (Instrument Panel Reinforcement Right)

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

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IF1	90 (LHD)	Instrument Panel Wire and Instrument Panel Wire (Near the J/B No.1)
	114 (RHD)	
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
	114 (RHD)	
IK1	92 (LHD)	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
	116 (RHD)	

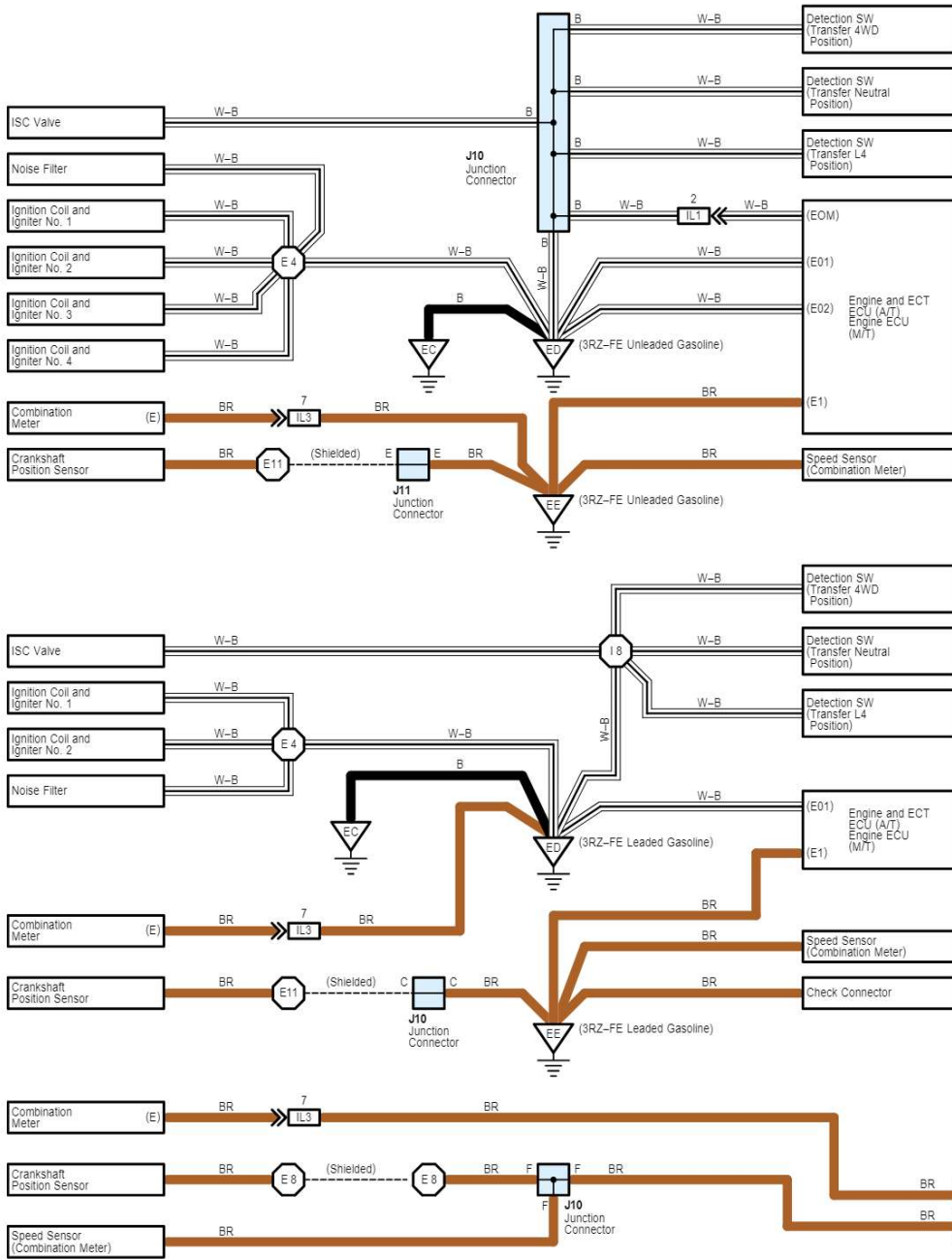
**▽ : Ground Points**

Code	See Page	Ground Points Location
IL	88 (LHD)	Near the Right Side of Steering Column
	112 (RHD)	Instrument Panel Brace RH

**○ : Splice Points**

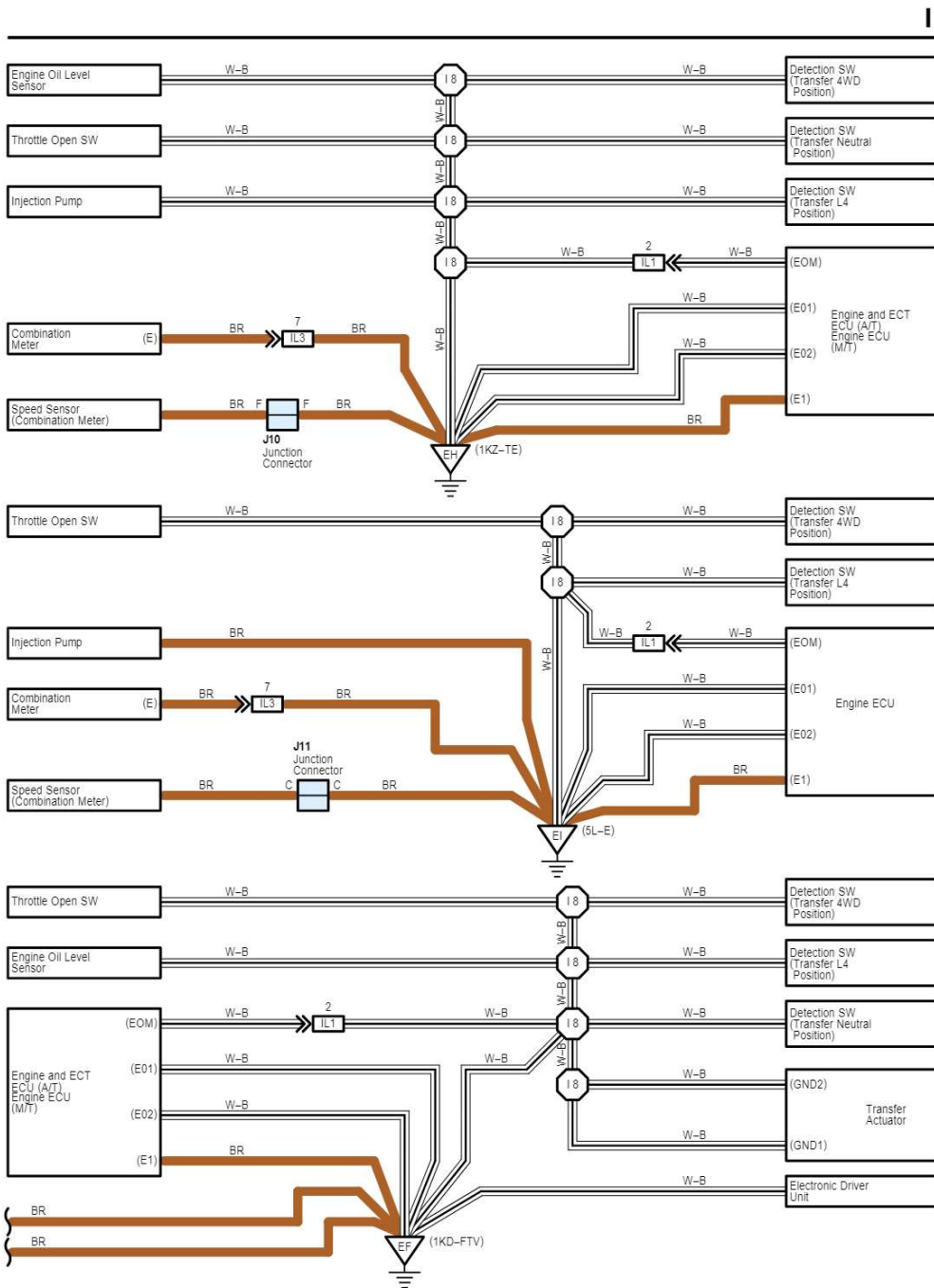
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I7	90 (LHD)	Instrument Panel Wire	I12	90 (LHD)	A/C Sub Wire
	114 (RHD)			114 (RHD)	

# I GROUND POINT (LHD)

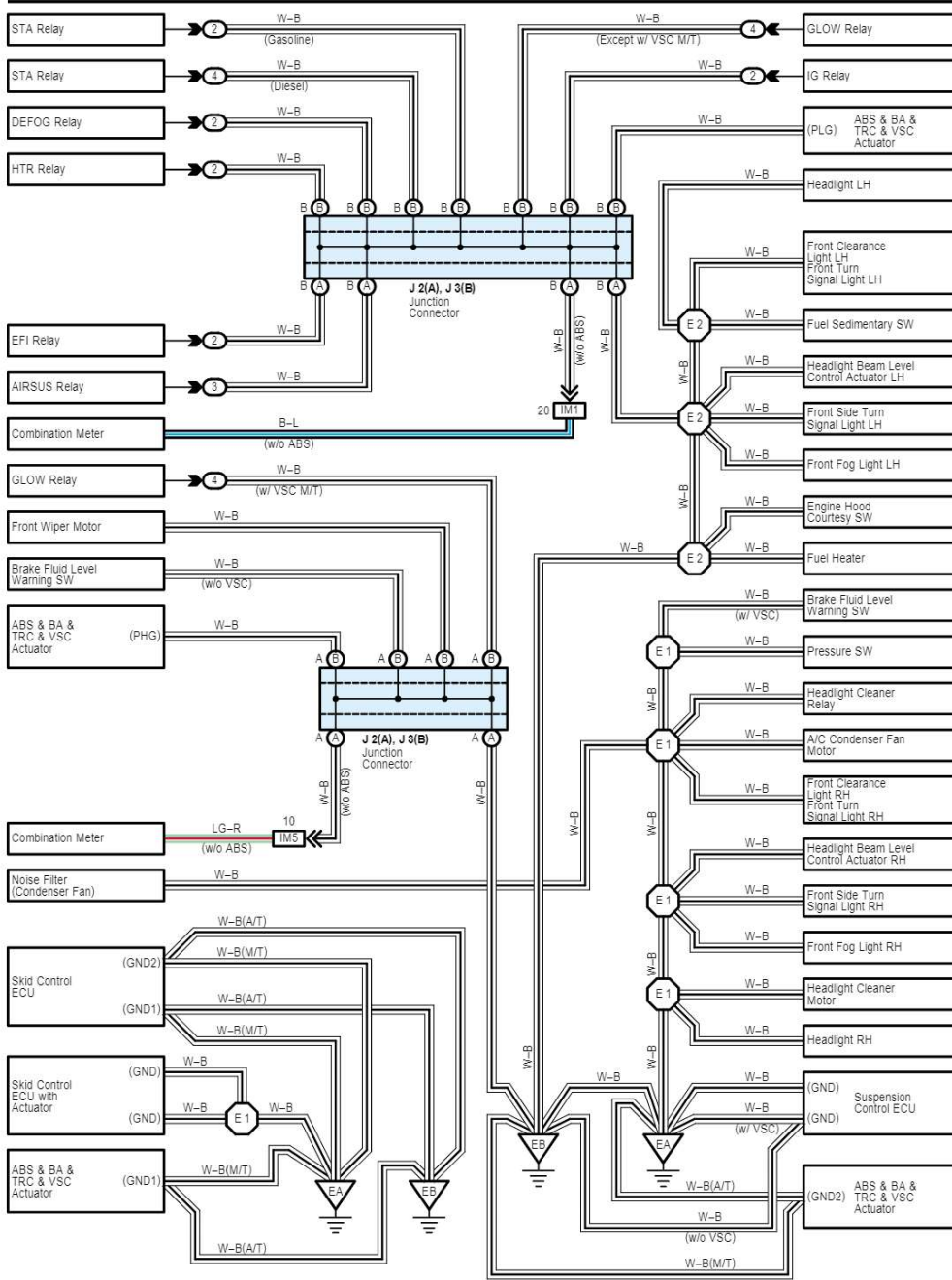


728

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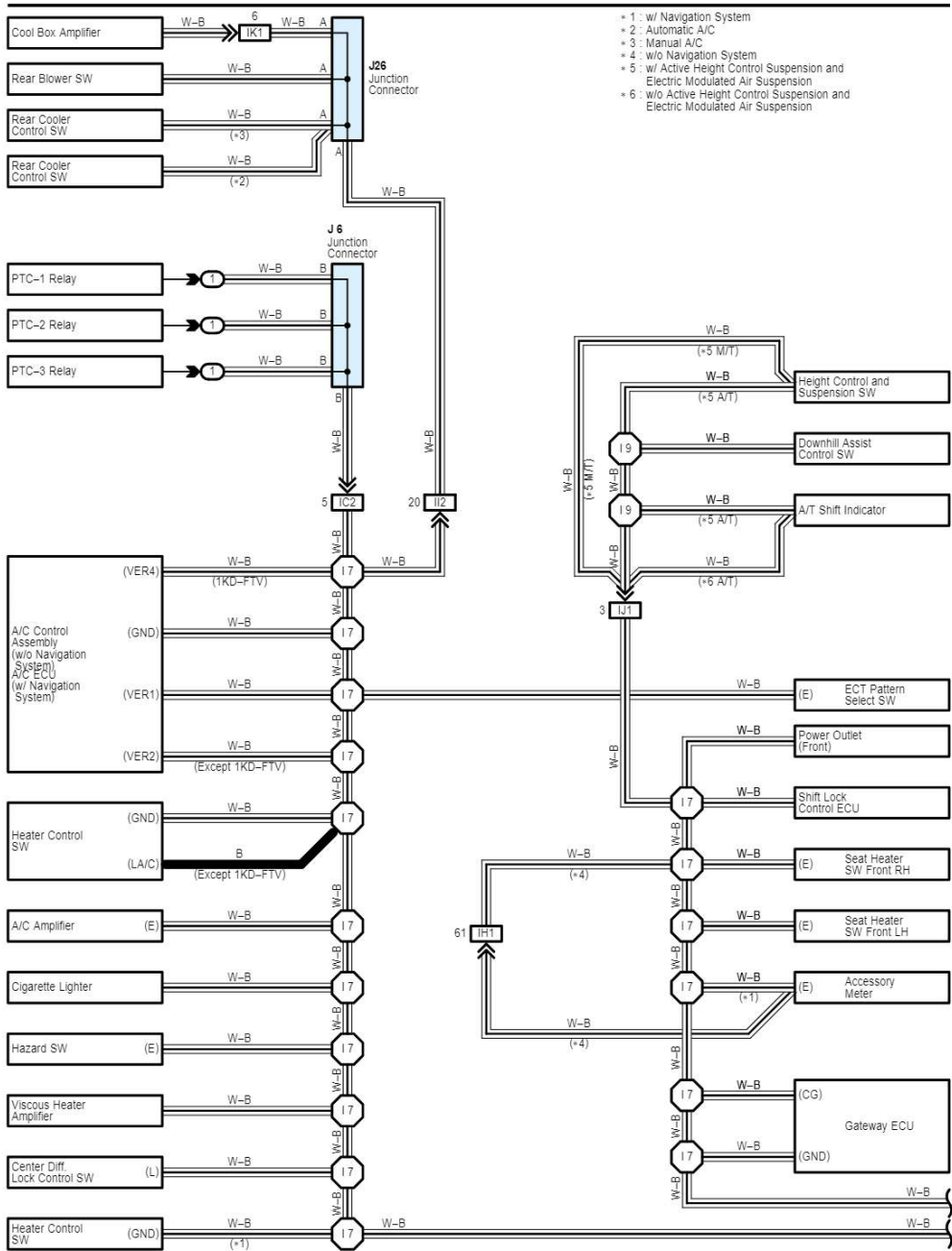


# I GROUND POINT (LHD)



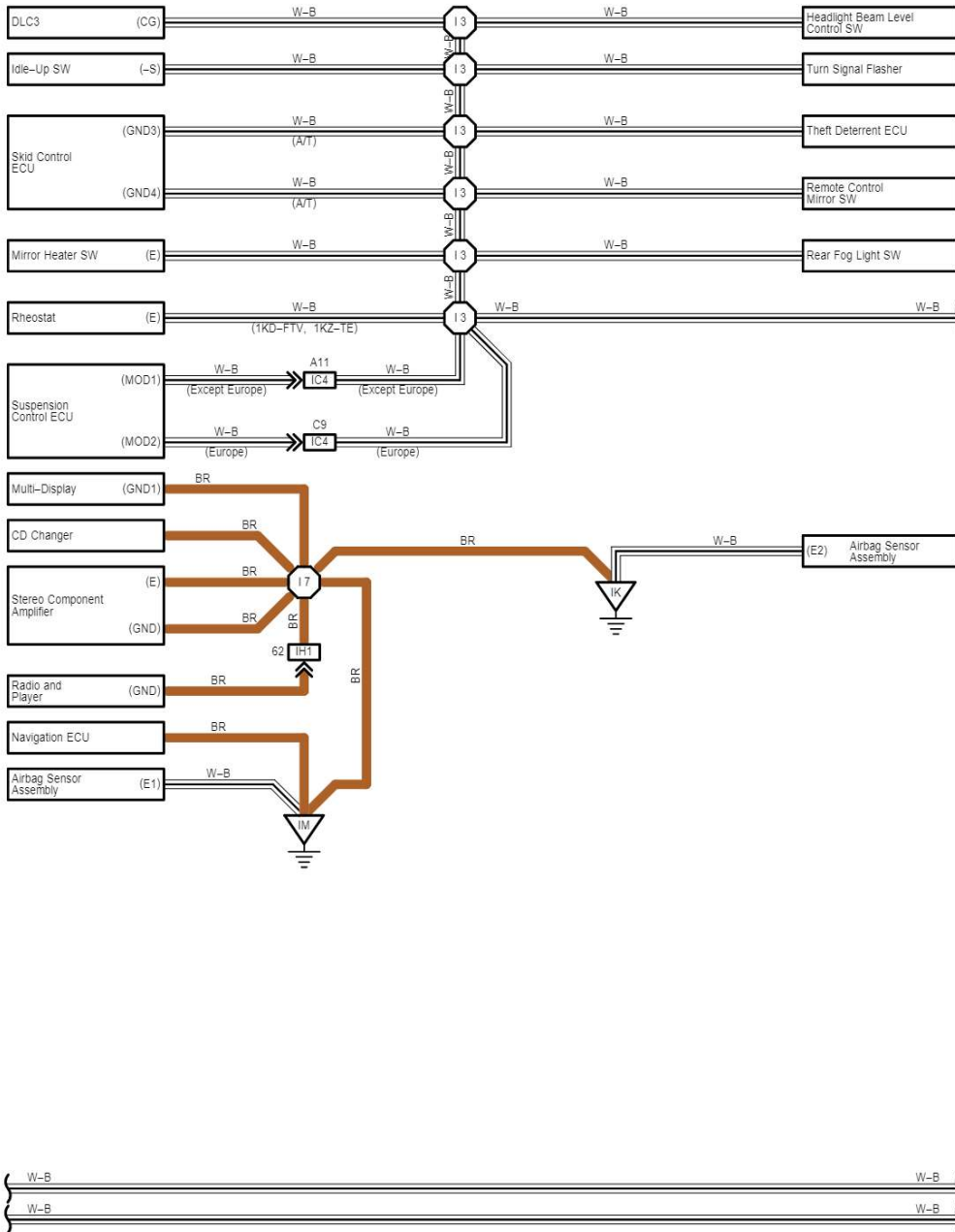
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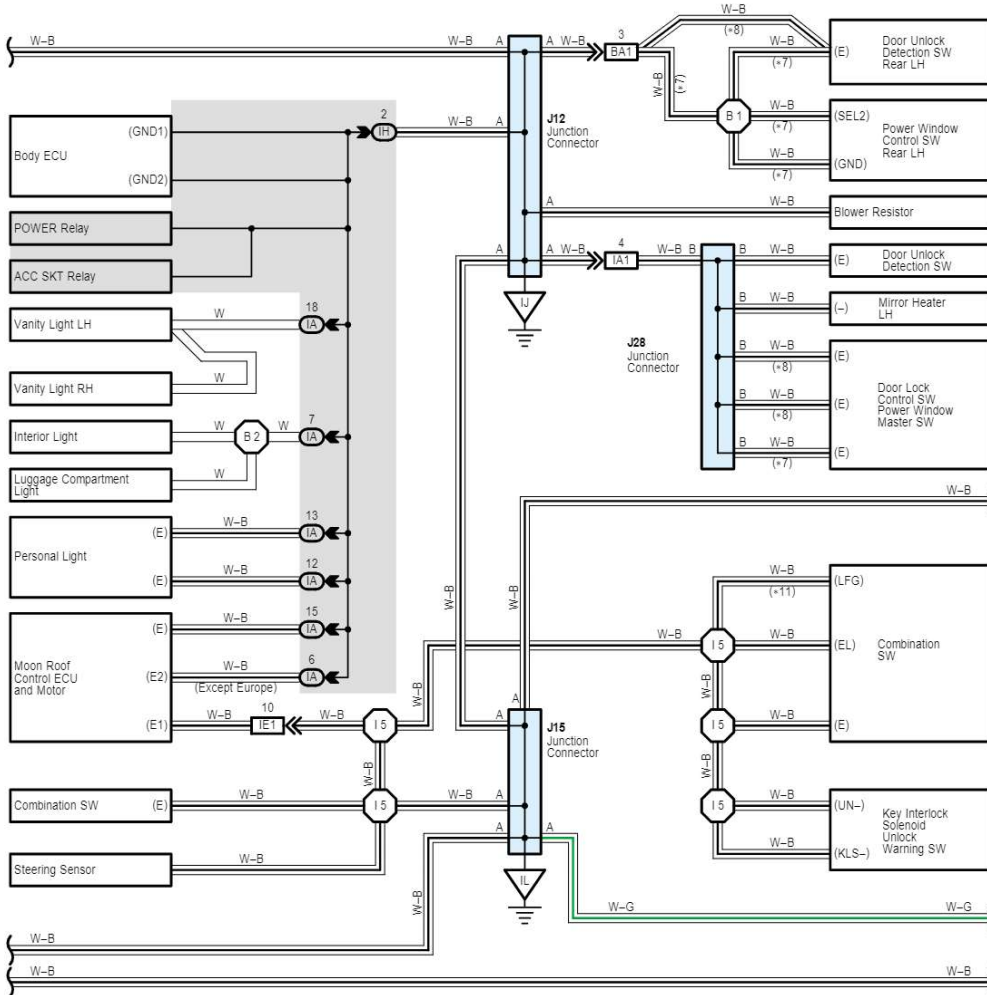


- \* 1 : w/ Navigation System
- \* 2 : Automatic A/C
- \* 3 : Manual A/C
- \* 4 : w/o Navigation System
- \* 5 : w/ Active Height Control Suspension and Electric Modulated Air Suspension
- \* 6 : w/o Active Height Control Suspension and Electric Modulated Air Suspension

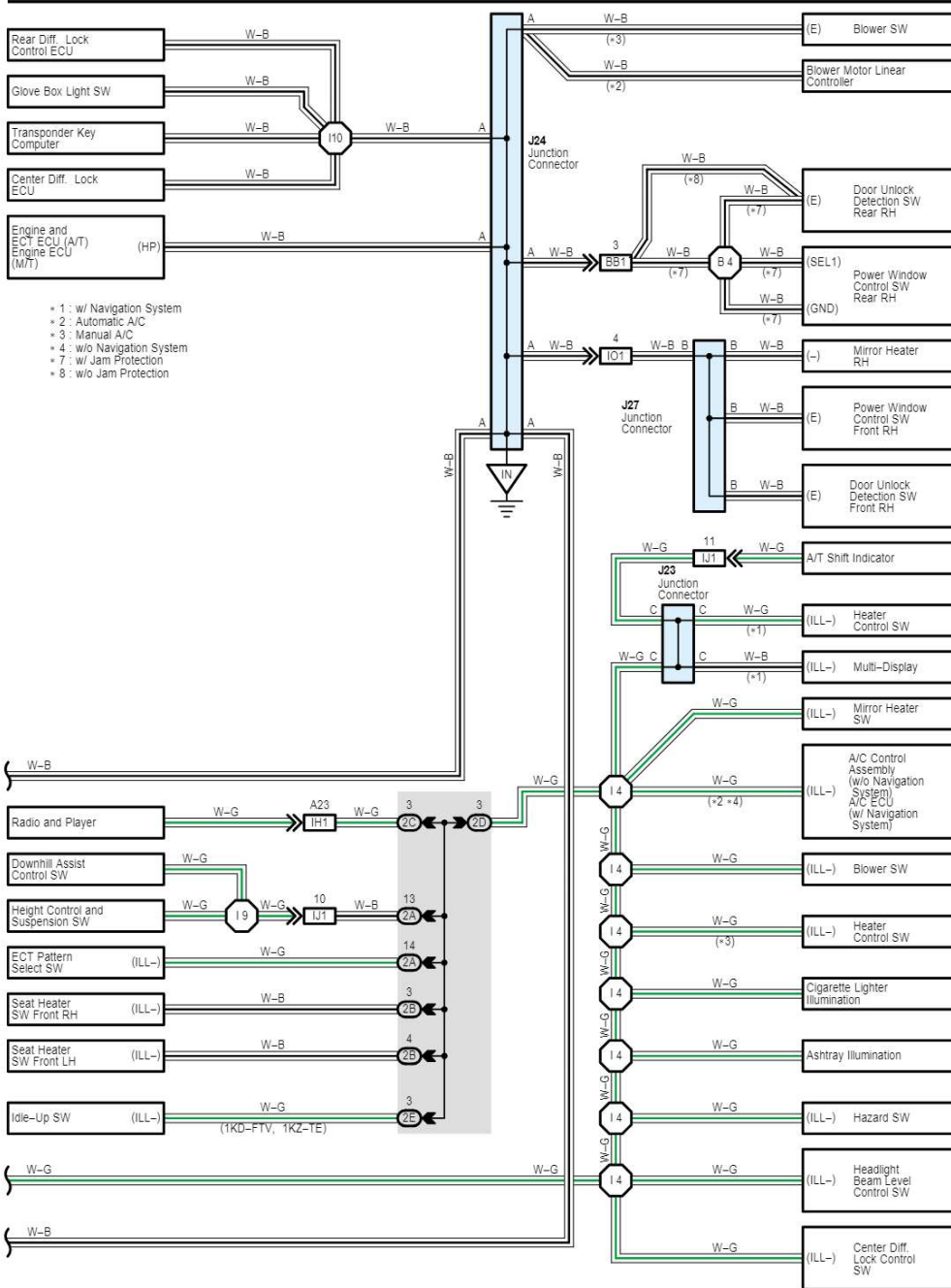
# I GROUND POINT (LHD)



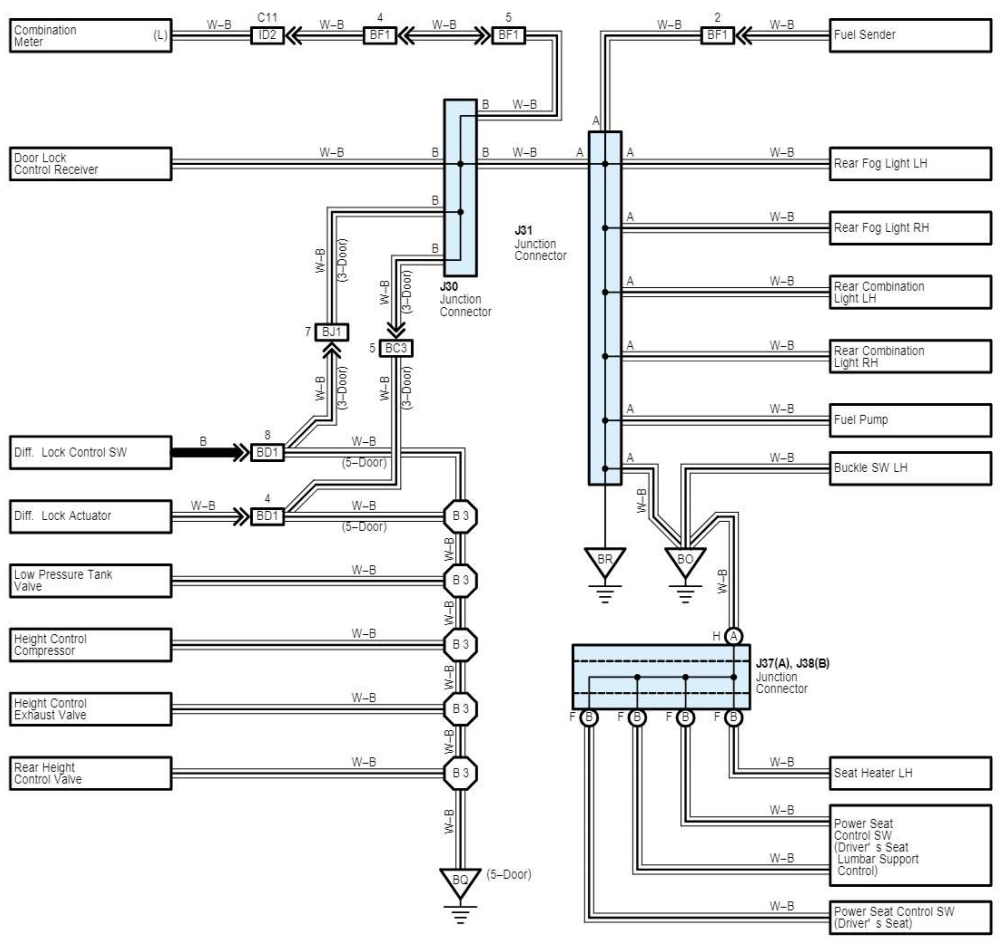
- \* 1 : w/ Navigation System
- \* 2 : Automatic A/C
- \* 3 : Manual A/C
- \* 4 : w/o Navigation System
- \* 7 : w/ Jam Protection
- \* 8 : w/o Jam Protection



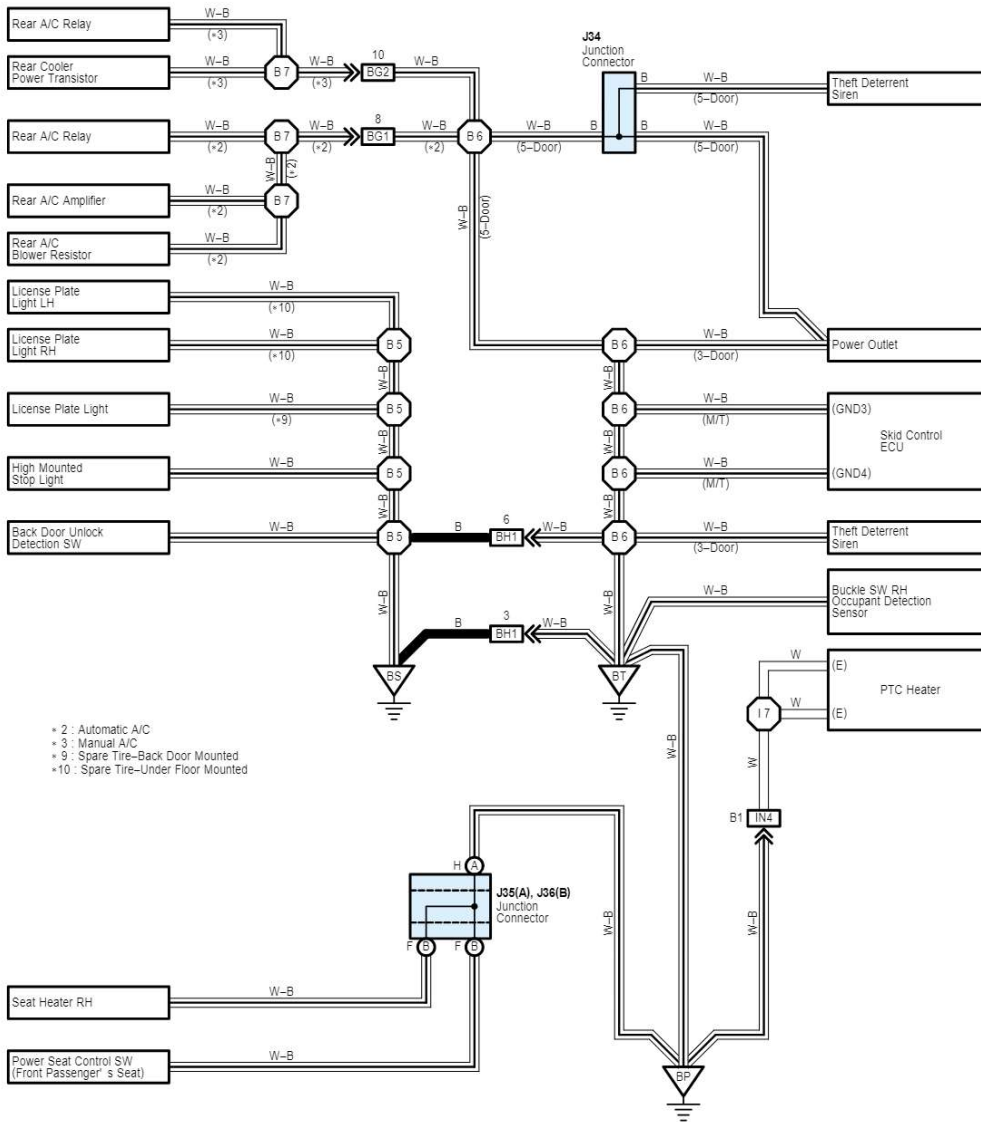
# I GROUND POINT (LHD)

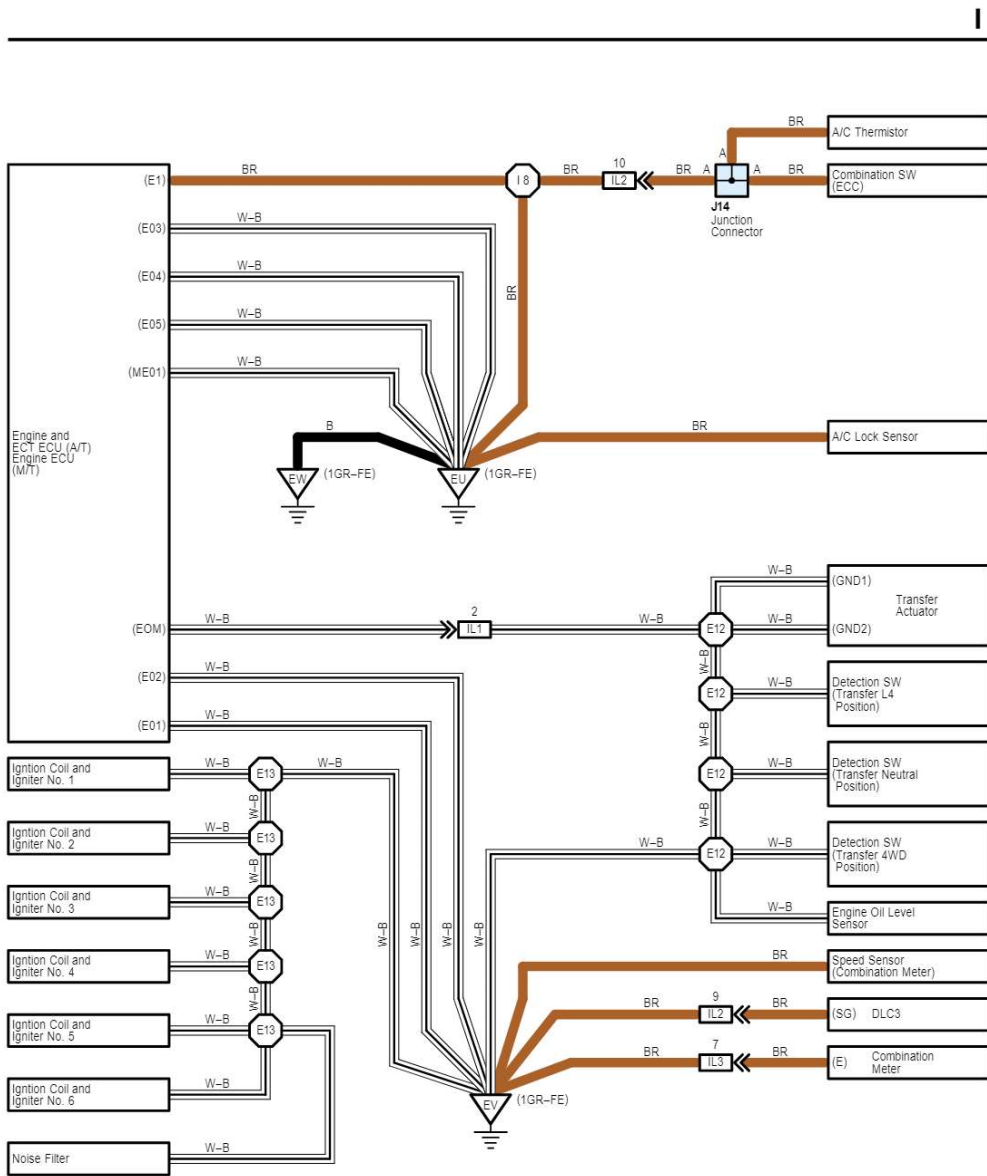






# I GROUND POINT (LHD)





# I GROUND POINT (LHD)

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page		
J2	A	39 (*1)	J6	47 (*5)	J30		
		41 (*2)	J10	50 (LHD)	J31		
		43 (*3)	J11	50 (LHD)		54 (*7)	
		45 (*4)	J12	50 (LHD)	J34	52 (*6)	
		47 (*5)	J14	50 (LHD)	J35	A	
39 (*1)	J15	50 (LHD)	56 (*8)				
J3	B	41 (*2)	J23	50 (LHD)	J36		
		43 (*3)	J24	50 (LHD)		B	
		45 (*4)	J26	50 (LHD)	J37	A	
		47 (*5)	J27	52 (*6)			56 (*8)
		39 (*1)		54 (*7)			57 (*9)
J6		41 (*2)	J28	52 (*6)	J38		
		43 (*3)		54 (*7)		B	
		45 (*4)	J30	52 (*6)	56 (*8)		
					57 (*9)		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24 (LHD)	Engine Room R/B No.1 (Engine Compartment Right)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	26 (LHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IH	27 (LHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
2E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	88 (LHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	88 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID2	90 (LHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IE1	90 (LHD)	Roof Wire and Instrument Panel Wire (Upper the Driver Side J/B)
IH1	90 (LHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
II2	90 (LHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IJ1	92 (LHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IK1	92 (LHD)	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
IL1	92 (LHD)	Engine Wire and Instrument Panel Wire (Right Side of the Blower Unit)
IL2		
IL3		
IM1	92 (LHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM5		
IN4	94 (LHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	94 (LHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	96 (*6)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	96 (*6)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BC3	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
BD1	96 (*6)	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)
	100 (*7)	
BF1	98 (*6)	Floor No.2 Wire and Frame No.2 Wire (Left Side of the Rear Floor)
BG1	98 (*6)	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BG2		
BH1	98 (*6)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	100 (*7)	
BJ1	100 (*7)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat

# I GROUND POINT (LHD)

▽ : Ground Points

Code	See Page	Ground Points Location
EA	78 (*1)	Front Right Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
EB	78 (*1)	Front Left Fender
	80 (*2)	
	82 (*3)	
	84 (*4)	
	86 (*5)	
EC	80 (*2)	Near the Air Cleaner
ED	80 (*2)	Ignition Coil Bracket
EE	80 (*2)	Intake Manifold
EF	82 (*3)	Rear Part of Cylinder Block
EH	84 (*4)	
EI	86 (*5)	
EU	78 (*1)	Rear Side of Right Bank Cylinder Block
EV	78 (*1)	Rear Side of Left Bank Cylinder Block
EW	78 (*1)	Near the Washer Tank
IJ	88 (LHD)	Left Kick Panel
IK	88 (LHD)	Near the Left Side of Steering Column
IL	88 (LHD)	Near the Right Side of Steering Column
IM	88 (LHD)	Instrument Panel Brace LH
IN	88 (LHD)	Right Kick Panel
BO	96 (*6)	Under the Driver's Seat
	100 (*7)	
BP	96 (*6)	Under the Front Passenger's Seat
	100 (*7)	
BQ	96 (*6)	Near the Left Side of No.5 Cross Member
BR	96 (*6)	Left Quarter Panel Inner
	100 (*7)	
BS	96 (*6)	Back Door Panel Center
	100 (*7)	
BT	96 (*6)	Right Quarter Panel Inner
	100 (*7)	

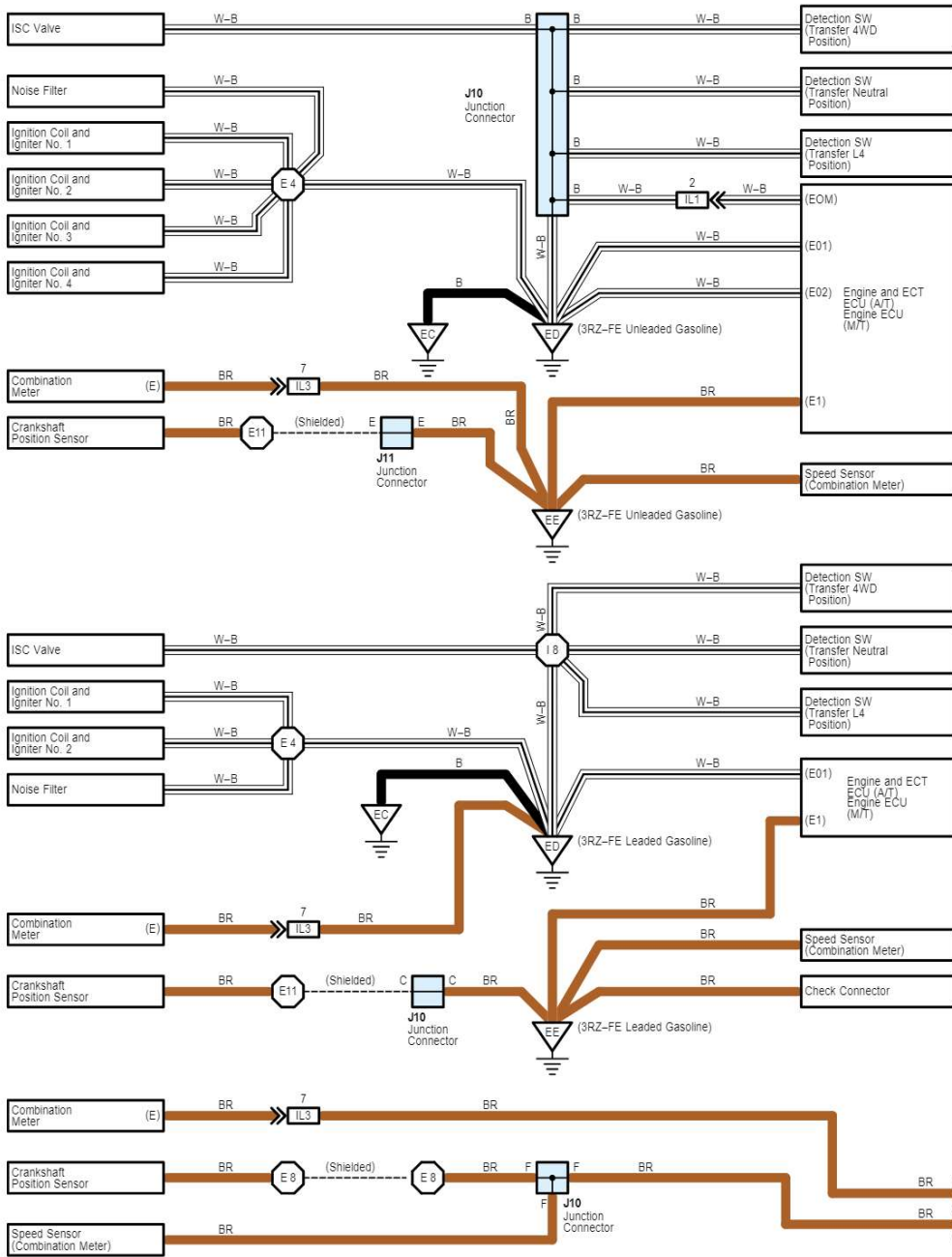
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
\* 18 : RHD Except 8Way Power Seat

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	78 (*1)	Engine Room Main Wire	I4	90 (LHD)	Instrument Panel Wire
	80 (*2)		I5		
	82 (*3)		I7		
	84 (*4)		I8	90 (LHD)	Engine Wire
	86 (*5)		I9	90 (LHD)	Switch Wire
E2	78 (*1)		I10	90 (LHD)	Instrument Panel Wire
	80 (*2)		B1	98 (*6)	Rear Door No.1 Wire LH
	82 (*3)		B2	98 (*6)	Roof Wire
	84 (*4)			100 (*7)	
	86 (*5)		B3	98 (*6)	Frame Wire
E4	80 (*2)	B4	98 (*6)	Rear Door No.1 Wire RH	
E8	82 (*3)	Engine Wire	B5	98 (*6)	Back Door No.1 Wire
E11	80 (*2)			100 (*7)	
E12	78 (*1)		B6	98 (*6)	Floor Wire
E13				100 (*7)	
I3	90 (LHD)		Instrument Panel Wire	B7	98 (*6)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

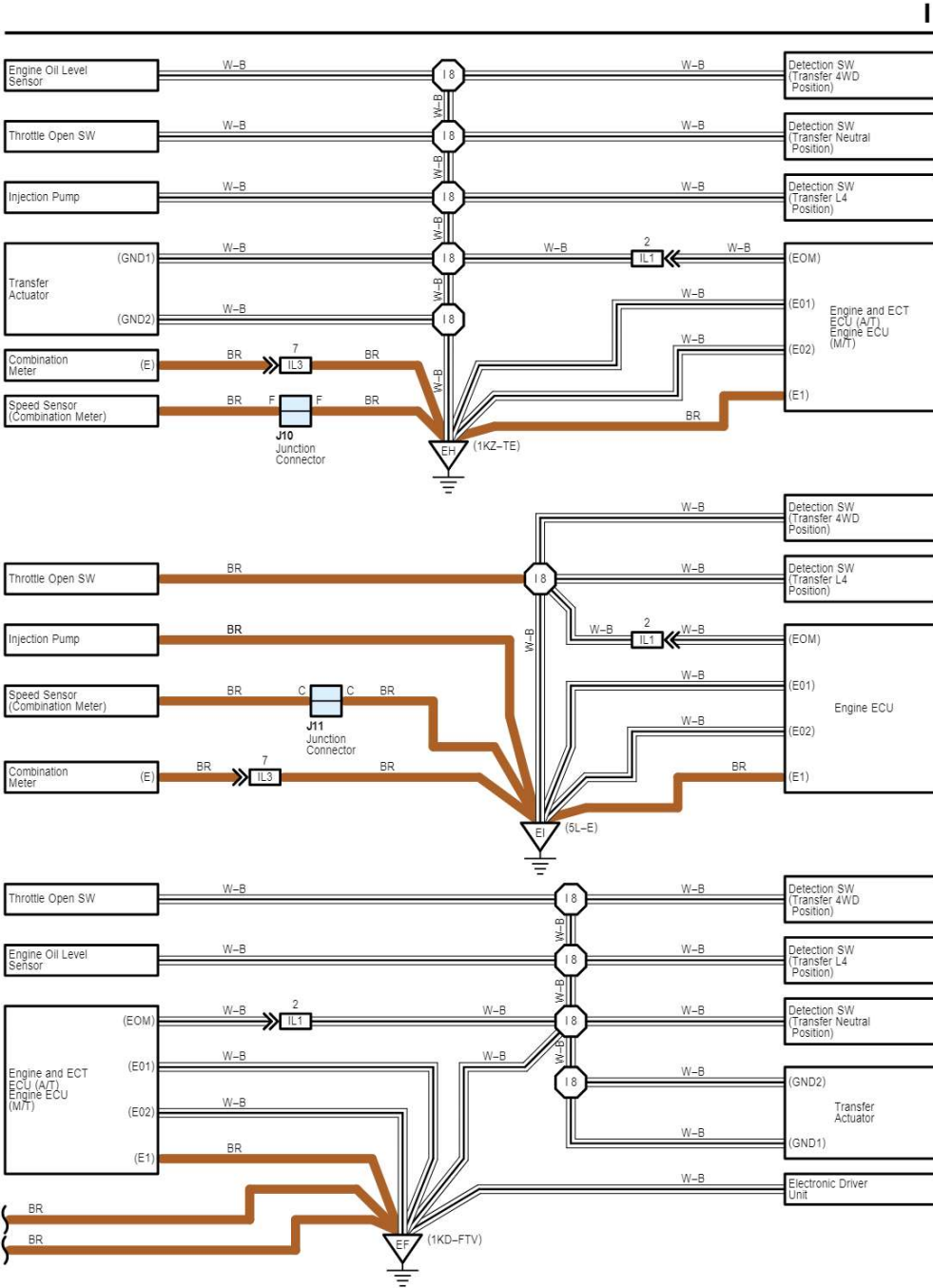
# I GROUND POINT (RHD)



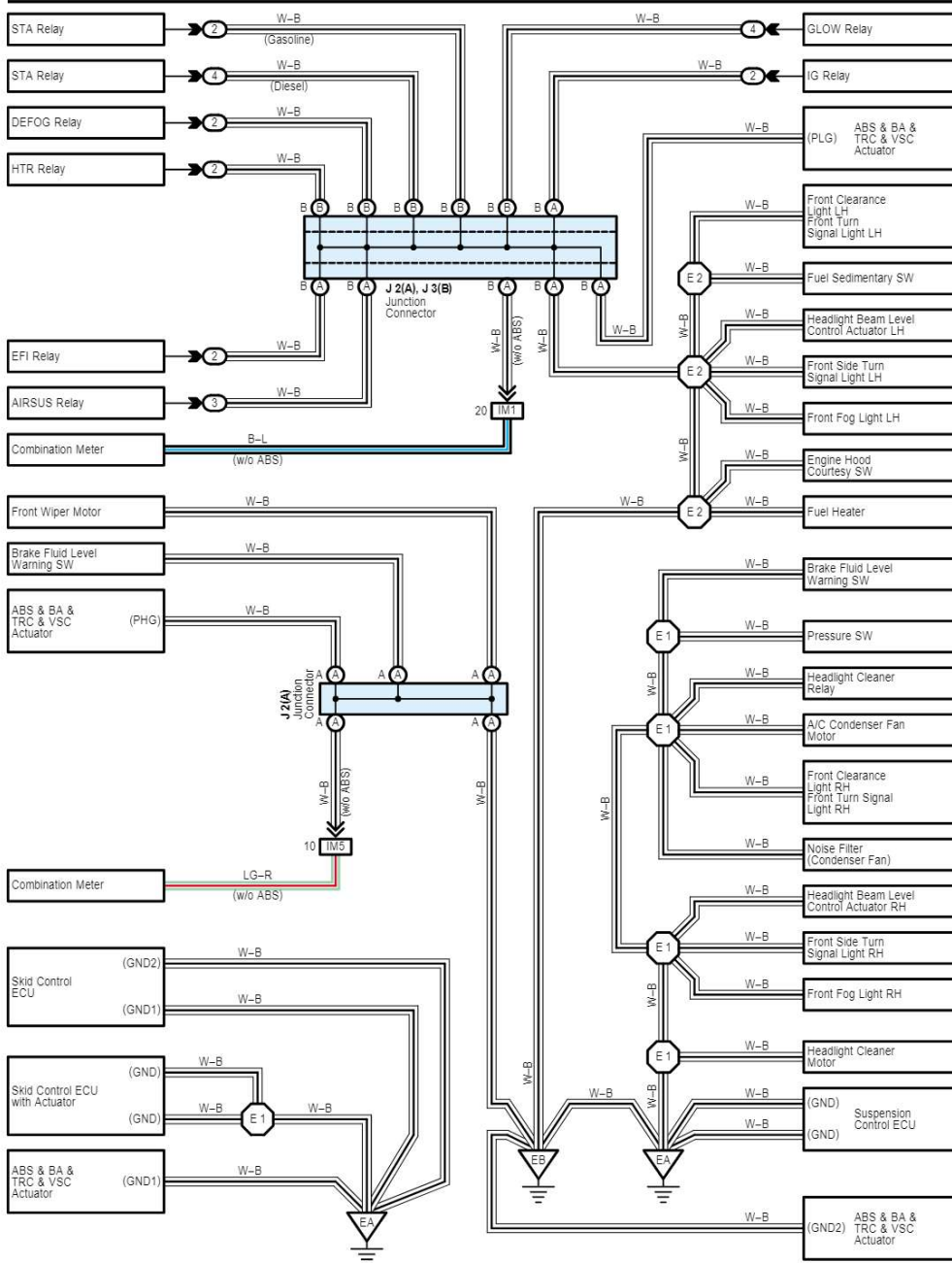
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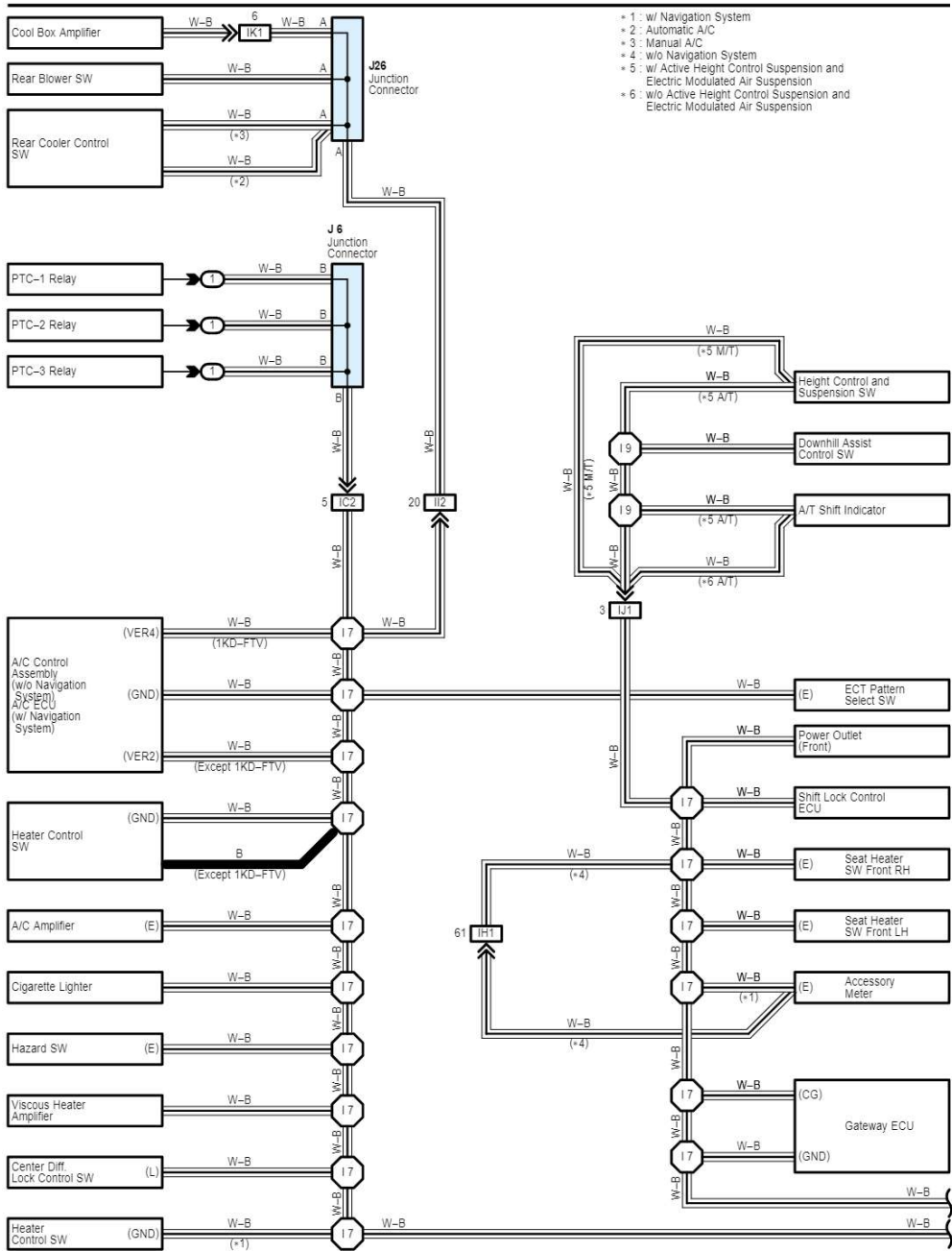
LAND CRUISER / LAND CRUISER PRADO (EWD527E)



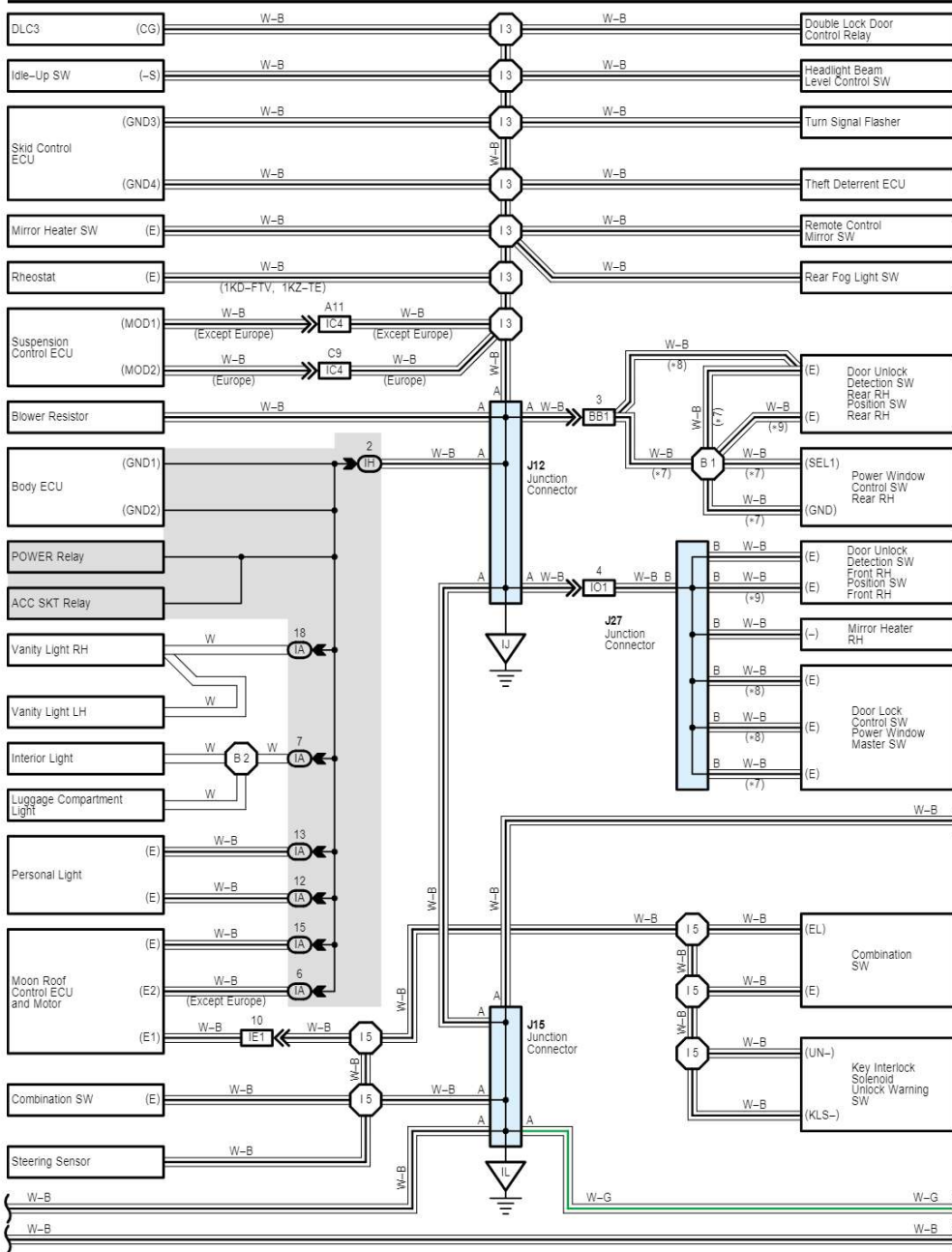


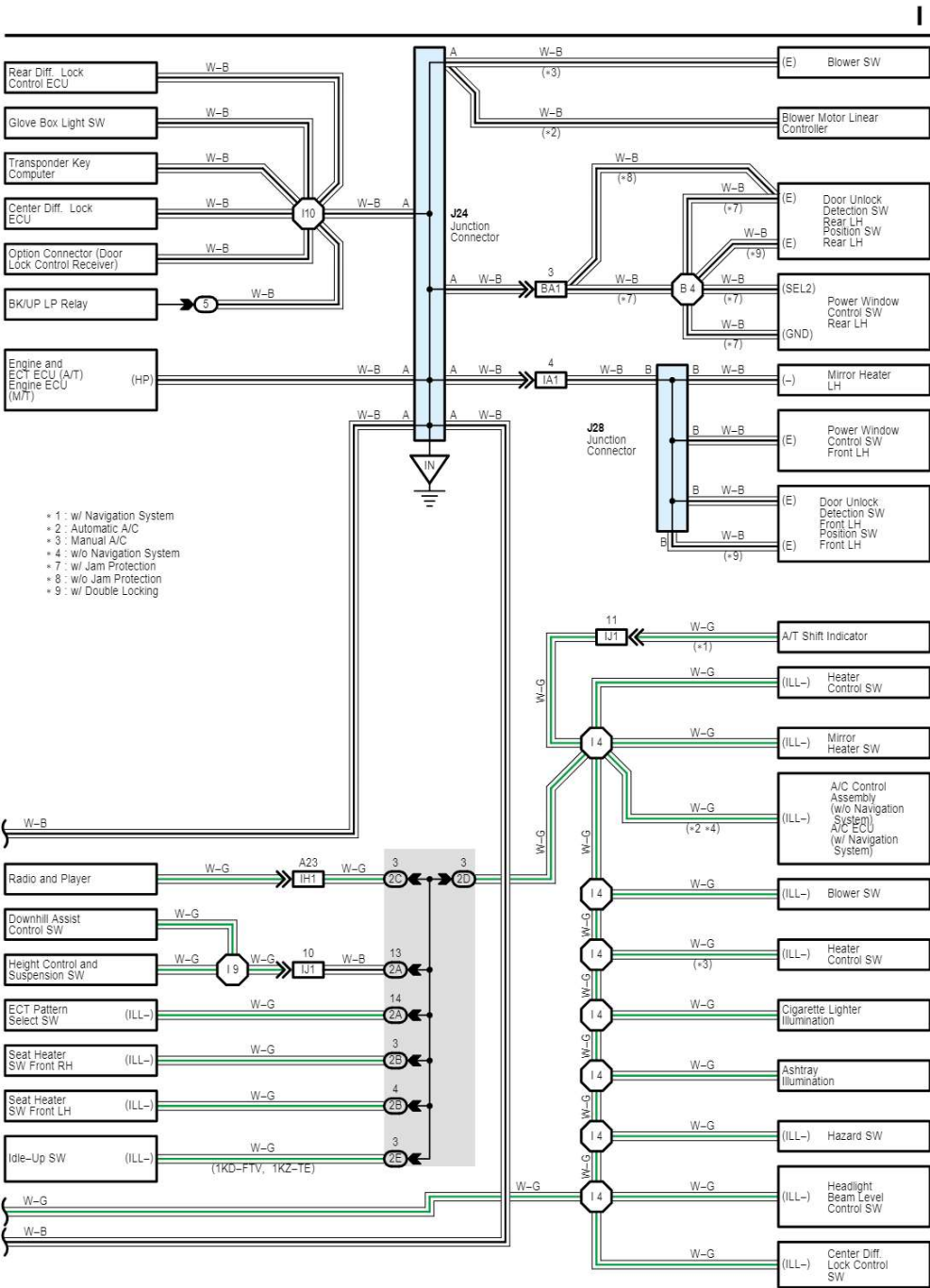
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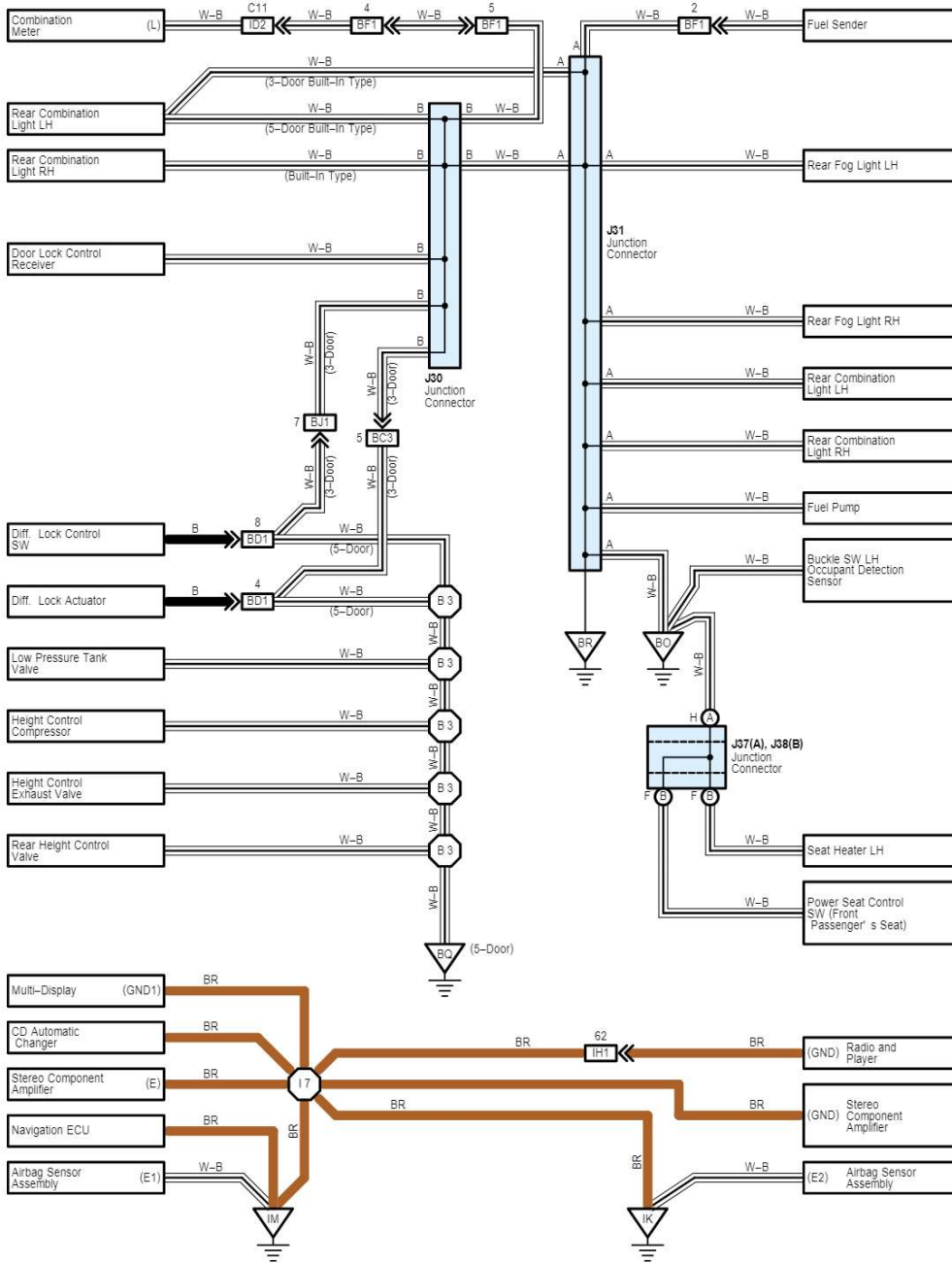


# I GROUND POINT (RHD)



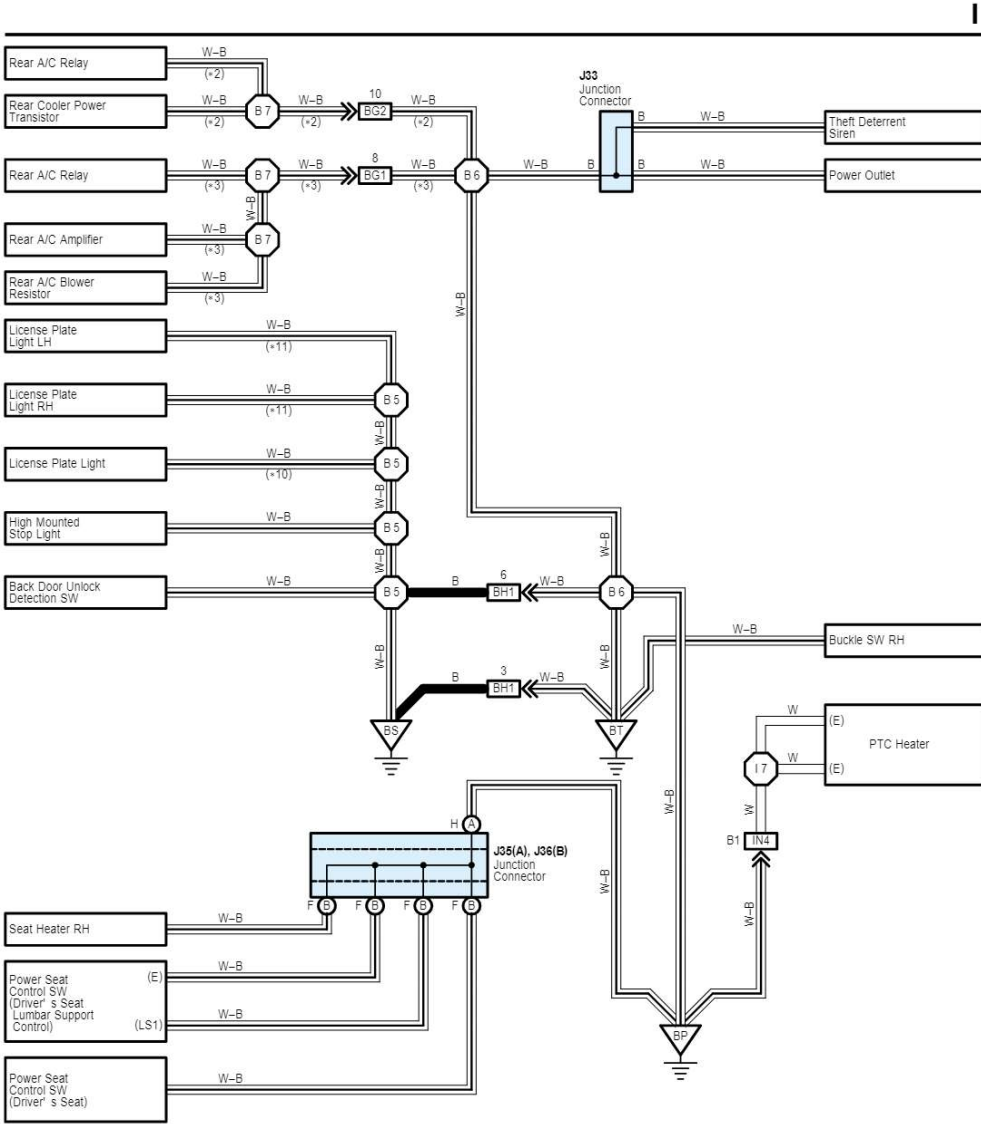


# I GROUND POINT (RHD)



748

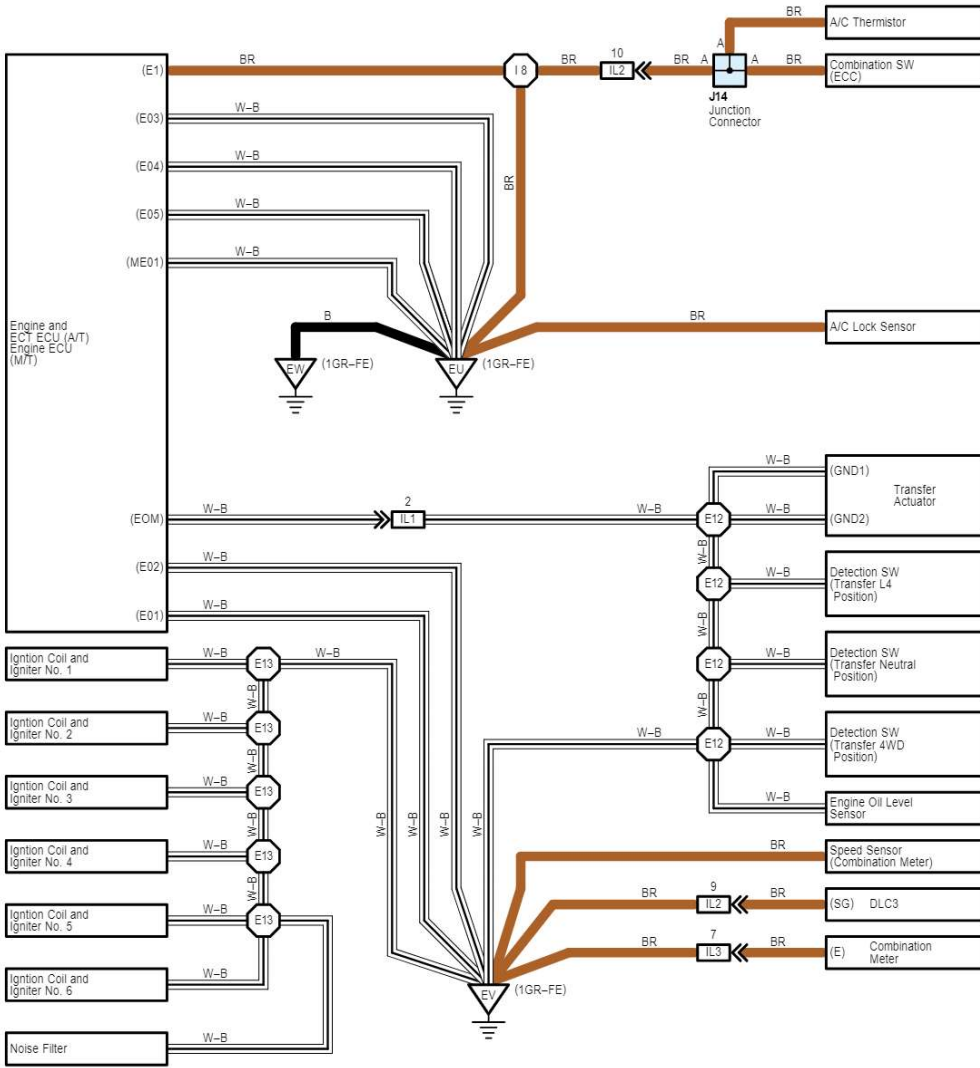
LAND CRUISER / LAND CRUISER PRADO (EWD527E)



- \* 2 : Automatic A/C
- \* 3 : Manual A/C
- \* 10 : Spare Tire-Back Door Mounted
- \* 11 : Spare Tire-Under Floor Mounted

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

# I GROUND POINT (RHD)



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: Parts Location

Code	See Page	Code	See Page	Code	See Page
J2	A	59 (*10)	J6	67 (*14)	J31
		61 (*11)	J10	70 (RHD)	
		63 (*12)	J11	70 (RHD)	J33
		65 (*13)	J12	70 (RHD)	
		67 (*14)	J14	70 (RHD)	J35
59 (*10)	J15	70 (RHD)	A		
J3	B	61 (*11)	J24	70 (RHD)	J36
		63 (*12)	J26	70 (RHD)	
		65 (*13)	J27	72 (*15)	J37
		67 (*14)		74 (*16)	
		59 (*10)	J28	72 (*15)	J38
61 (*11)	74 (*16)	B			
J6		63 (*12)	J30	72 (*15)	
		65 (*13)		74 (*16)	

: Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	24 (RHD)	Engine Room R/B No.1 (Engine Compartment Left)
2	23	Engine Room R/B (Engine Compartment Left)
3	24	Engine Room R/B No.3 (Engine Compartment Left)
4	25	Engine Room R/B No.4 (Engine Compartment Left)
5	25 (RHD)	Passenger Side R/B (Left Kick Panel)

: Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IA	28 (RHD)	Roof Wire and Driver Side J/B (Lower Finish Panel)
IH	29 (RHD)	Instrument Panel Wire and Driver Side J/B (Lower Finish Panel)
2A	34	Instrument Panel Wire and J/B No.2 (Instrument Panel Reinforcement Center)
2B		
2C		
2D		
2E		

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

## I GROUND POINT (RHD)

: Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	112 (RHD)	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	112 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Left Kick Panel)
IC4		
ID2	114 (RHD)	Instrument Panel Wire and Floor No.2 Wire (Left Kick Panel)
IE1	114 (RHD)	Roof Wire and Instrument Panel Wire (Left Side of the Driver Side J/B)
IH1	114 (RHD)	Instrument Panel Wire and Instrument Panel No.2 Wire (Instrument Panel Brace LH)
II2	114 (RHD)	Console Box Wire and Instrument Panel Wire (Under the Instrument Panel Brace LH)
IJ1	116 (RHD)	Instrument Panel Wire and Switch Wire (Front Side of the Console Box)
IK1	116 (RHD)	Console Box Wire and A/C Sub Wire (Rear Side of the Console Box)
IL1	116 (RHD)	Engine Wire and Instrument Panel Wire (Left Side of the Blower Unit)
IL2		
IL3		
IM1	116 (RHD)	Instrument Panel Wire and Engine Room Main Wire (Right Kick Panel)
IM5		
IN4	118 (RHD)	Instrument Panel Wire and Floor Wire (Right Kick Panel)
IO1	118 (RHD)	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
BA1	120 (*15)	Rear Door LH Wire and Instrument Panel Wire (Center Pillar LH)
BB1	120 (*15)	Rear Door RH Wire and Instrument Panel Wire (Center Pillar RH)
BC3	124 (*16)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)
BD1	120 (*15)	Frame Wire and Differential Wire (Left Side of the No.6 Cross Member)
	124 (*16)	
BF1	122 (*15)	Floor No.2 Wire and Frame No.2 Wire (Left Side of the Rear Floor)
BG1	122 (*15)	Floor Wire and Rear A/C Sub Wire (Right Quarter Panel Inner)
BG2		
BH1	122 (*15)	Back Door No.1 Wire and Floor Wire (Right Quarter Panel Inner)
	124 (*16)	
BJ1	124 (*16)	Floor No.2 Wire and Frame Wire (Frame Side Rail LH)

\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door

\* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV

\* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat

\* 18 : RHD Except 8Way Power Seat

 : Ground Points

Code	See Page	Ground Points Location
EA	102 (*10)	Front Right Fender
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
EB	102 (*10)	Front Left Fender
	104 (*11)	
	106 (*12)	
	108 (*13)	
	110 (*14)	
EC	104 (*11)	Near the Air Cleaner
ED	104 (*11)	Ignition Coil Bracket
EE	104 (*11)	Intake Manifold
EF	106 (*12)	Rear Part of Cylinder Block
EH	108 (*13)	
EI	110 (*14)	
EU	102 (*10)	Rear Side of Right Bank Cylinder Block
EV	102 (*10)	Rear Side of Left Bank Cylinder Block
EW	102 (*10)	Near the Washer Tank
IJ	112 (RHD)	Right Kick Panel
IK	112 (RHD)	Near the Right Side of Steering Column
IL	112 (RHD)	Instrument Panel Brace RH
IM		
IN	112 (RHD)	Left Kick Panel
BO	120 (*15)	Under the Front Passenger's Seat
	124 (*16)	
BP	120 (*15)	Under the Driver's Seat
	124 (*16)	
BQ	120 (*15)	Near the Left Side of No.5 Cross Member
BR	120 (*15)	Left Quarter Panel Inner
	124 (*16)	
BS	120 (*15)	Back Door Panel Center
	124 (*16)	
BT	120 (*15)	Right Quarter Panel Inner
	124 (*16)	

\*1 : LHD 1GR-FE \*2 : LHD 3RZ-FE \*3 : LHD 1KD-FTV \*4 : LHD 1KZ-TE \*5 : LHD 5L-E \*6 : LHD 5-Door \*7 : LHD 3-Door  
\*8 : LHD 8Way Power Seat \*9 : LHD Except 8Way Power Seat \*10 : RHD 1GR-FE \*11 : RHD 3RZ-FE \*12 : RHD 1KD-FTV  
\*13 : RHD 1KZ-TE \*14 : RHD 5L-E \*15 : RHD 5-Door \*16 : RHD 3-Door \*17 : RHD 8Way Power Seat  
\*18 : RHD Except 8Way Power Seat

# I GROUND POINT (RHD)

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points	
E1	102 (*10)	Engine Room Main Wire	I4	114 (RHD)	Instrument Panel Wire	
	104 (*11)		I5			
	106 (*12)		I7			
	108 (*13)		I8	114 (RHD)	Engine Wire	
	110 (*14)		I9	114 (RHD)	Switch Wire	
E2	102 (*10)		Engine Wire	I10	114 (RHD)	Instrument Panel Wire
	104 (*11)			B1	122 (*15)	Rear Door No.1 Wire LH
	106 (*12)			B2	122 (*15)	Roof Wire
	108 (*13)				124 (*16)	
	110 (*14)			B3	122 (*15)	Frame Wire
E4	104 (*11)	B4	122 (*15)	Rear Door No.1 Wire RH		
E8	106 (*12)	Engine Wire	B5	122 (*15)	Back Door No.1 Wire	
E11	104 (*11)			124 (*16)		
E12	102 (*10)		B6	122 (*15)	Floor Wire	
E13				124 (*16)		
I3	114 (RHD)		Instrument Panel Wire	B7	122 (*15)	A/C Sub Wire

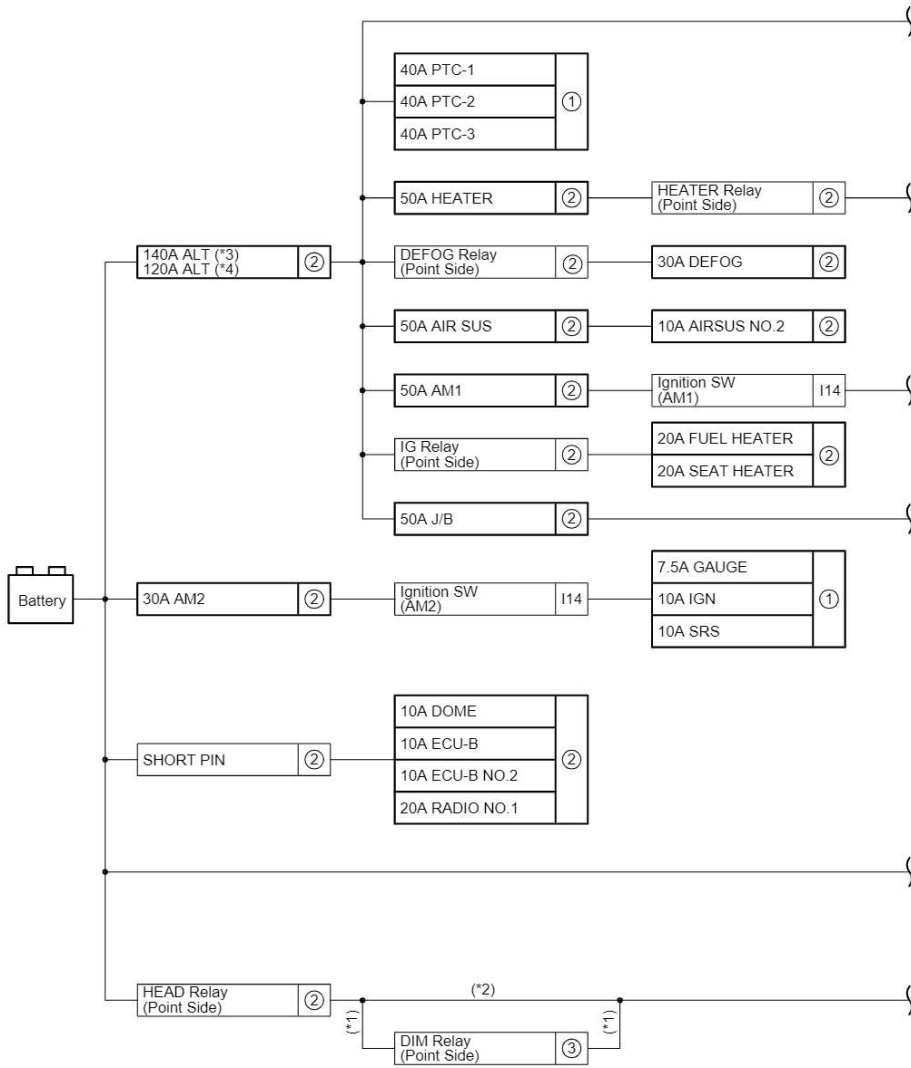
\* 1 : LHD 1GR-FE \* 2 : LHD 3RZ-FE \* 3 : LHD 1KD-FTV \* 4 : LHD 1KZ-TE \* 5 : LHD 5L-E \* 6 : LHD 5-Door \* 7 : LHD 3-Door  
 \* 8 : LHD 8Way Power Seat \* 9 : LHD Except 8Way Power Seat \* 10 : RHD 1GR-FE \* 11 : RHD 3RZ-FE \* 12 : RHD 1KD-FTV  
 \* 13 : RHD 1KZ-TE \* 14 : RHD 5L-E \* 15 : RHD 5-Door \* 16 : RHD 3-Door \* 17 : RHD 8Way Power Seat  
 \* 18 : RHD Except 8Way Power Seat

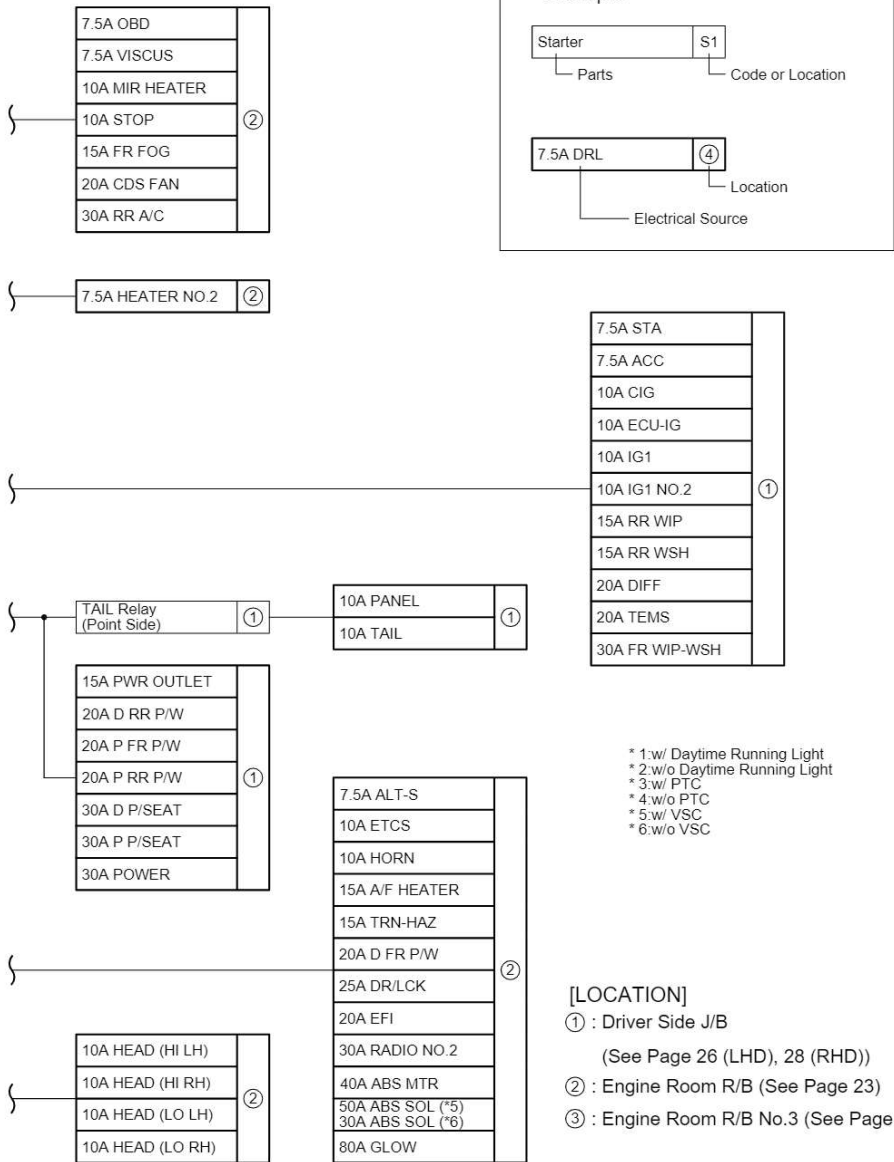
755

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## 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.





## J POWER SOURCE (Current Flow Chart)

### Driver Side J/B (See Page 26 (LHD), 28 (RHD))

Fuse	System	Page	
7.5A	ACC	ABS	572
		Accessory Meter	642
		Air Conditioner (Automatic A/C)	694
		Back-Up Light (Diesel)	346
		Back-Up Light (Gasoline)	342
		Cigarette Lighter and Power Outlet	624
		Combination Meter	672
		Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
		Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Double Locking	450
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Headlight (w/ Daytime Running Light)	288
		Headlight (w/o Daytime Running Light)	294
		Interior Light	318
		Key Reminder and Seat Belt Warning	350
		Light Auto Turn Off	306
		Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Option Connector (Wireless Door Lock Control)	418
		Power Window (LHD w/ Jam Protection)	370
		Power Window (LHD w/o Jam Protection)	378
		Power Window (RHD w/ Jam Protection)	384
		Power Window (RHD w/o Jam Protection)	392
		Radio and Player (Built-in Type Amplifier)	668
		Radio and Player (Separate Type Amplifier)	660
		Rear Differential Lock	596
		Remote Control Mirror	614
		Shift Lock	590
		Trailer Towing	636
VSC (RHD)	562		
Wireless Door Lock Control (LHD)	398		

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



Fuse		System	Page
7.5A	ACC	Wireless Door Lock Control (RHD)	408
		4WD	604
7.5A	GAUGE	ABS	572
		Accessory Meter	642
		Active Height Control Suspension and Electric Modulated Air Suspension	580
		Air Conditioner (Automatic A/C)	694
		Center Differential Lock	592
		Charging (Gasoline)	152
		Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158
		Combination Meter	672
		Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
		Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
		Interior Light	318
		Key Reminder and Seat Belt Warning	350
		Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Radio and Player (Separate Type Amplifier)	660
		Rear Differential Lock	596
		SRS	535
		Taillight and Illumination	326
Viscous Heater	688		
VSC (LHD A/T)	542		
VSC (LHD M/T)	552		
VSC (RHD)	562		
4WD	604		

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

## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
7.5A	STA	ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
		Starting (Diesel)	138
		Starting (1GR-FE)	132
Starting (3RZ-FE)	134		
10A	CIG	Cigarette Lighter and Power Outlet	624
10A	ECU-IG	ABS	572
		Accessory Meter	642
		Active Height Control Suspension and Electric Modulated Air Suspension	580
		Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Double Locking	450
		Engine Immobiliser (Except 3RZ-FE Unleaded Gasoline)	236
		Engine Immobiliser (3RZ-FE Unleaded Gasoline)	232
		Headlight (w/ Daytime Running Light)	288
		Headlight (w/o Daytime Running Light)	294
		Interior Light	318
		Key Reminder and Seat Belt Warning	350
		Light Auto Turn Off	306
		Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Option Connector (Wireless Door Lock Control)	418
		Power Window (LHD w/ Jam Protection)	370
		Power Window (LHD w/o Jam Protection)	378
		Power Window (RHD w/ Jam Protection)	384
		Power Window (RHD w/o Jam Protection)	392
		Shift Lock	590
		Stop Light	338
		Trailer Towing	636
		VSC (LHD A/T)	542
VSC (LHD M/T)	552		
VSC (RHD)	562		

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

Fuse		System	Page
10A	ECU-IG	Wireless Door Lock Control (LHD)	398
		Wireless Door Lock Control (RHD)	408
10A	IGN	Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
VSC (LHD A/T)	542		
VSC (LHD M/T)	552		
VSC (RHD)	562		
10A	IG1	Air Conditioner (Automatic A/C)	694
		Air Conditioner (Manual A/C Except 1GR-FE)	712
		Air Conditioner (Manual A/C 1GR-FE)	708
		Charging (Gasoline)	152
		Condenser Fan	684
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
Rear Window Defogger	620		
10A	IG1 NO.2	ABS	572
		Accessory Meter	642
		Air Conditioner (Automatic A/C)	694
		Air Conditioner (Manual A/C Except 1GR-FE)	712
		Air Conditioner (Manual A/C 1GR-FE)	708
		Back-Up Light (Diesel)	346
		Back-Up Light (Gasoline)	342
		Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158
		Combination Meter	672
		Cooler Box	726
		Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
ECT and A/T Indicator (1GR-FE)	458		
ECT and A/T Indicator (1KD-FTV)	488		
ECT and A/T Indicator (1KZ-TE)	500		

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

## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
10A	IG1 NO.2	ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
		Key Reminder and Seat Belt Warning	350
		Mirror Heater	616
		Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Radio and Player (Separate Type Amplifier)	660
		Rear Air Conditioner (Automatic A/C)	718
		Rear Air Conditioner (Manual A/C)	722
		Rear Differential Lock	596
		Seat Heater	632
		Taillight and Illumination	326
10A	PANEL	Headlight (w/ Daytime Running Light)	288
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
10A	SRS	Taillight and Illumination	326
		SRS	535
		10A	TAIL
Taillight and Illumination	326		
Trailer Towing	636		
15A	PWR OUTLET	Cigarette Lighter and Power Outlet	624
15A	RR WIP	Rear Wiper and Washer	368
15A	RR WSH	Rear Wiper and Washer	368
20A	D RR P/W	Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Power Window (LHD w/ Jam Protection)	370
		Power Window (RHD w/ Jam Protection)	384

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

Fuse		System	Page
20A	DIFF	Center Differential Lock	592
		Rear Differential Lock	596
20A	P FR P/W	Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Power Window (LHD w/ Jam Protection)	370
		Power Window (RHD w/ Jam Protection)	384
20A	P RR P/W	Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Power Window (LHD w/ Jam Protection)	370
		Power Window (RHD w/ Jam Protection)	384
20A	TEMS	Active Height Control Suspension and Electric Modulated Air Suspension	580
30A	D P/SEAT	Power Seat	628
30A	FR WIP-WSH	Front Wiper and Washer	364
		Headlight Cleaner	360
30A	P P/SEAT	Power Seat	628
30A	POWER	Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Power Window (LHD w/o Jam Protection)	378
		Power Window (RHD w/o Jam Protection)	392

### Engine Room R/B (See Page 23)

Fuse		System	Page
7.5A	ALT-S	Charging (Gasoline)	152
		Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158
7.5A	HEATER NO.2	Air Conditioner (Automatic A/C)	694
		Air Conditioner (Manual A/C Except 1GR-FE)	712
		Air Conditioner (Manual A/C 1GR-FE)	708
		Viscous Heater	688
7.5A	OBD	Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
7.5A	VISCUS	Viscous Heater	688
10A	AIRSUS NO.2	Active Height Control Suspension and Electric Modulated Air Suspension	580
10A	DOME	Accessory Meter	642
		Active Height Control Suspension and Electric Modulated Air Suspension	580
		Air Conditioner (Automatic A/C)	694
		Combination Meter	672

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

## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
10A	DOME	Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
		Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
		Interior Light	318
		Key Reminder and Seat Belt Warning	350
		Moon Roof	608
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Option Connector (Wireless Door Lock Control)	418
		Radio and Player (Separate Type Amplifier)	660
		Rear Differential Lock	596
		Taillight and Illumination	326
		Viscous Heater	688
		VSC (LHD A/T)	542
		VSC (RHD)	562
		Wireless Door Lock Control (LHD)	398
		Wireless Door Lock Control (RHD)	408
10A	ECU-B	Accessory Meter	642
		Active Height Control Suspension and Electric Modulated Air Suspension	580
		Air Conditioner (Automatic A/C)	694
		Cooler Box	726
		Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Double Locking	450
		Engine Immobiliser (Except 3RZ-FE Unleaded Gasoline)	236
		Engine Immobiliser (3RZ-FE Unleaded Gasoline)	232
		Headlight (w/ Daytime Running Light)	288
		Headlight (w/o Daytime Running Light)	294
		Interior Light	318

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

Fuse		System	Page
10A	ECU-B	Key Reminder and Seat Belt Warning	350
		Light Auto Turn Off	306
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Navigation System (LHD)	648
		Navigation System (RHD)	654
		Option Connector (Wireless Door Lock Control)	418
		Power Window (LHD w/ Jam Protection)	370
		Power Window (LHD w/o Jam Protection)	378
		Power Window (RHD w/ Jam Protection)	384
		Power Window (RHD w/o Jam Protection)	392
		Rear Air Conditioner (Automatic A/C)	718
		Rear Fog Light	302
		VSC (LHD A/T)	542
		VSC (LHD M/T)	552
		VSC (RHD)	562
Wireless Door Lock Control (LHD)	398		
Wireless Door Lock Control (RHD)	408		
10A	ECU-B NO.2	Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
10A	ETCS	Cruise Control (1GR-FE)	512
		ECT and A/T Indicator (1GR-FE)	458
		Engine Control (1GR-FE)	162
10A	HEAD(HI LH)	Headlight (w/ Daytime Running Light)	288
		Headlight (w/o Daytime Running Light)	294
		Headlight Beam Level Control	356
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
10A	HEAD(HI RH)	Combination Meter	672
		Headlight (w/ Daytime Running Light)	288
		Headlight (w/o Daytime Running Light)	294
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Viscous Heater	688
10A	HEAD(LO LH)	Headlight (w/ Daytime Running Light)	288
		Headlight Beam Level Control	356
		Multiplex Communication System (LHD)	240
		Viscous Heater	688
10A	HEAD(LO RH)	Headlight (w/ Daytime Running Light)	288
		Multiplex Communication System (LHD)	240
10A	HORN	Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438

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

## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
10A	HORN	Horn	626
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
10A	MIR HEATER	Mirror Heater	616
10A	STOP	ABS	572
		Active Height Control Suspension and Electric Modulated Air Suspension	580
		Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520
		Cruise Control (1KZ-TE)	528
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Engine Control (5L-E)	222
		Shift Lock	590
		Stop Light	338
		Trailer Towing	636
VSC (LHD A/T)	542		
VSC (LHD M/T)	552		
VSC (RHD)	562		
15A	A/F HEATER	Engine Control (1GR-FE)	162
15A	FR FOG	Front Fog Light	298
15A	TRN-HAZ	Trailer Towing	636
		Turn Signal and Hazard Warning Light	312
20A	CDS FAN	Condenser Fan	684
20A	D FR P/W	Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Double Locking	450
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Option Connector (Wireless Door Lock Control)	418
		Power Window (LHD w/ Jam Protection)	370
		Power Window (RHD w/ Jam Protection)	384
20A	EFI	Cruise Control (1GR-FE)	512
		Cruise Control (1KD-FTV)	520

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



Fuse		System	Page
20A	EFI	Cruise Control (1KZ-TE)	528
		ECT and A/T Indicator (1GR-FE)	458
		ECT and A/T Indicator (1KD-FTV)	488
		ECT and A/T Indicator (1KZ-TE)	500
		ECT and A/T Indicator (3RZ-FE Leaded Gasoline)	480
		ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)	470
		Engine Control (1GR-FE)	162
		Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
	Engine Control (5L-E)	222	
20A	FUEL HEATER	Fuel Heater	160
20A	RADIO NO.1	Navigation System (LHD)	648
		Navigation System (RHD)	654
		Radio and Player (Built-in Type Amplifier)	668
		Radio and Player (Separate Type Amplifier)	660
20A	SEAT HEATER	Seat Heater	632
25A	DR/LCK	Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Double Locking	450
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Option Connector (Wireless Door Lock Control)	418
		Power Window (LHD w/ Jam Protection)	370
		Power Window (LHD w/o Jam Protection)	378
		Power Window (RHD w/ Jam Protection)	384
		Power Window (RHD w/o Jam Protection)	392
		Wireless Door Lock Control (LHD)	398
	Wireless Door Lock Control (RHD)	408	
30A	ABS SOL	ABS	572
30A	AM2	Charging (Gasoline)	152
		Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158
		Combination Meter	672
		Engine Control (1GR-FE)	162
		Engine Control (3RZ-FE Leaded Gasoline)	186
		Engine Control (3RZ-FE Unleaded Gasoline)	174
		Ignition (1GR-FE)	142
		Ignition (3RZ-FE Leaded Gasoline)	150
		Ignition (3RZ-FE Unleaded Gasoline)	146
		Starting (Diesel)	138
		Starting (1GR-FE)	132
			Starting (3RZ-FE)

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

## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
30A	DEFOG	Engine Control (1GR-FE)	162
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Rear Window Defogger	620
30A	RADIO NO.2	Navigation System (LHD)	648
		Navigation System (RHD)	654
		Radio and Player (Separate Type Amplifier)	660
30A	RR A/C	Rear Air Conditioner (Automatic A/C)	718
		Rear Air Conditioner (Manual A/C)	722
30A	TOWING	Trailer Towing	636
40A	ABS MTR	ABS	572
		VSC (LHD A/T)	542
		VSC (LHD M/T)	552
		VSC (RHD)	562
40A	PTC-1	Viscous Heater	688
40A	PTC-2	Viscous Heater	688
40A	PTC-3	Viscous Heater	688
50A	ABS SOL	VSC (LHD A/T)	542
		VSC (LHD M/T)	552
		VSC (RHD)	562
50A	AIR SUS	Active Height Control Suspension and Electric Modulated Air Suspension	580
50A	AM1	Charging (Gasoline)	152
		Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158
		Headlight Cleaner	360
		Starting (Diesel)	138
		Starting (1GR-FE)	132
		Starting (3RZ-FE)	134
50A	HEATER	Air Conditioner (Automatic A/C)	694
		Air Conditioner (Manual A/C Except 1GR-FE)	712
		Air Conditioner (Manual A/C 1GR-FE)	708
50A	J/B	Door Lock Control and Theft Deterrent (LHD)	426
		Door Lock Control and Theft Deterrent (RHD)	438
		Light Auto Turn Off	306
		Multiplex Communication System (LHD)	240
		Multiplex Communication System (RHD)	264
		Taillight and Illumination	326
80A	GLOW	Engine Control (1KD-FTV)	196
		Engine Control (1KZ-TE)	210
		Engine Control (5L-E)	222
120A	ALT (w/o PTC)	Charging (1KD-FTV)	154
		Charging (1KZ-TE, 5L-E)	158

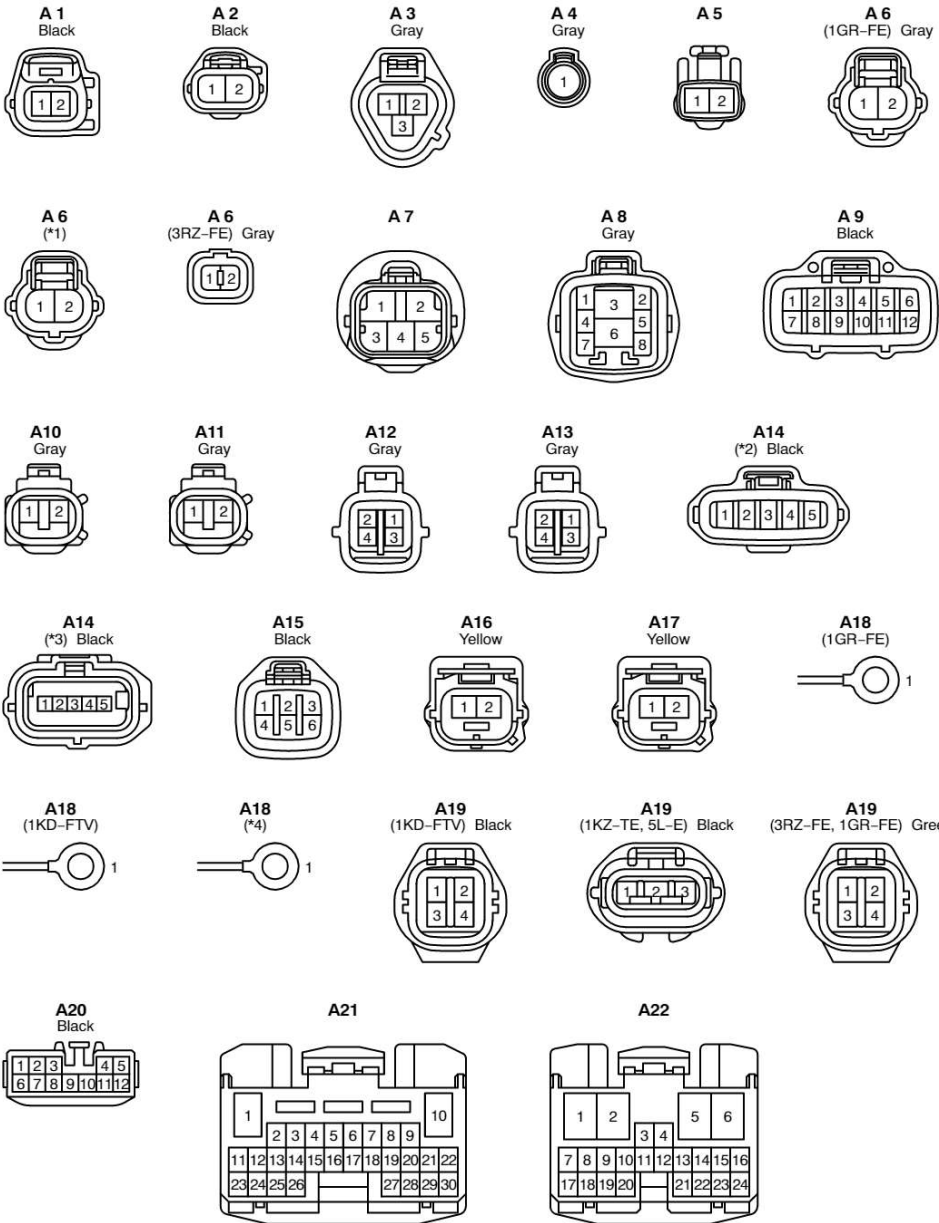
\* These are the page numbers of the first page on which the related system is shown.

Fuse		System	Page
120A	ALT (w/o PTC)	Rear Window Defogger	620
		Starting (Diesel)	138
		Starting (1GR-FE)	132
		Starting (3RZ-FE)	134
		Charging (Gasoline)	152
140A	ALT (w/ PTC)	Charging (1KD-FTV)	154
		Rear Window Defogger	620
		Starting (Diesel)	138

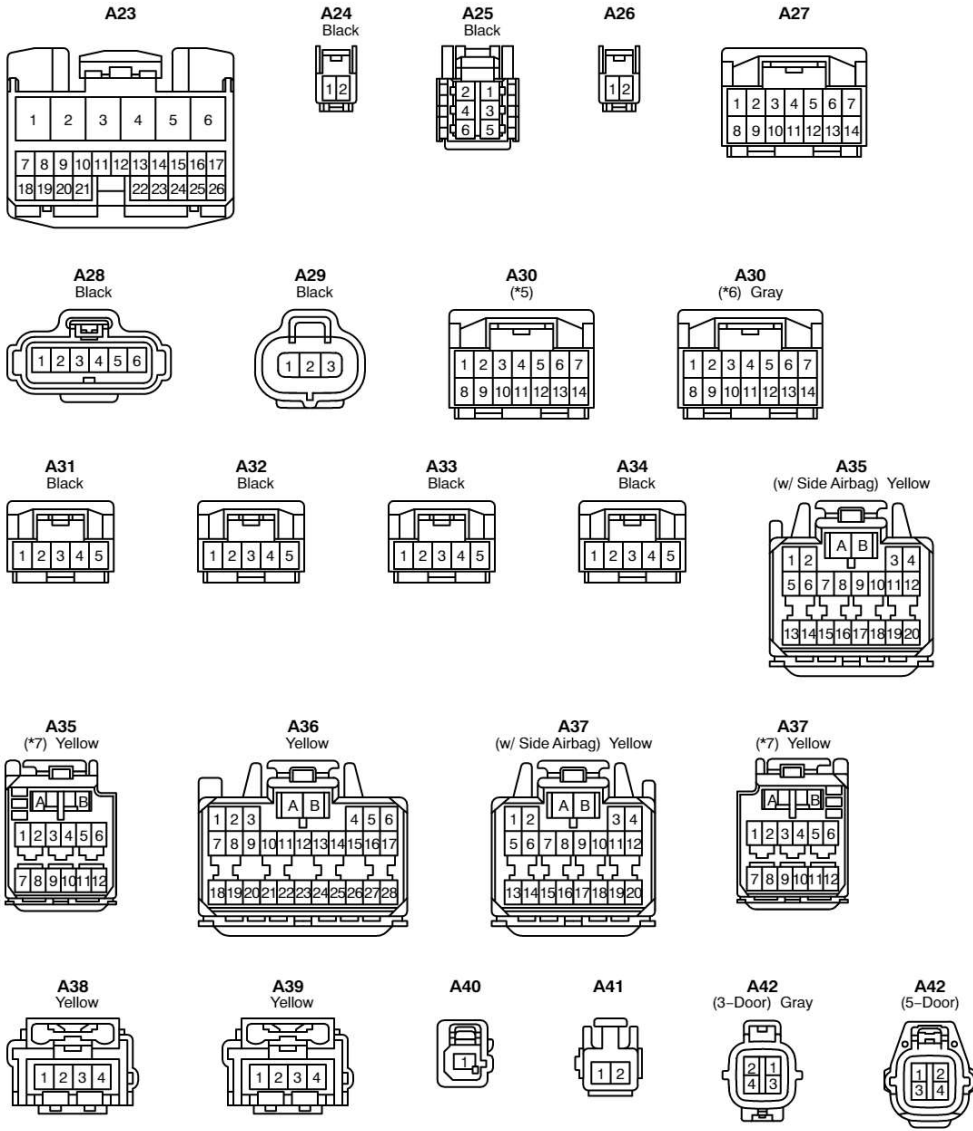
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# K CONNECTOR LIST

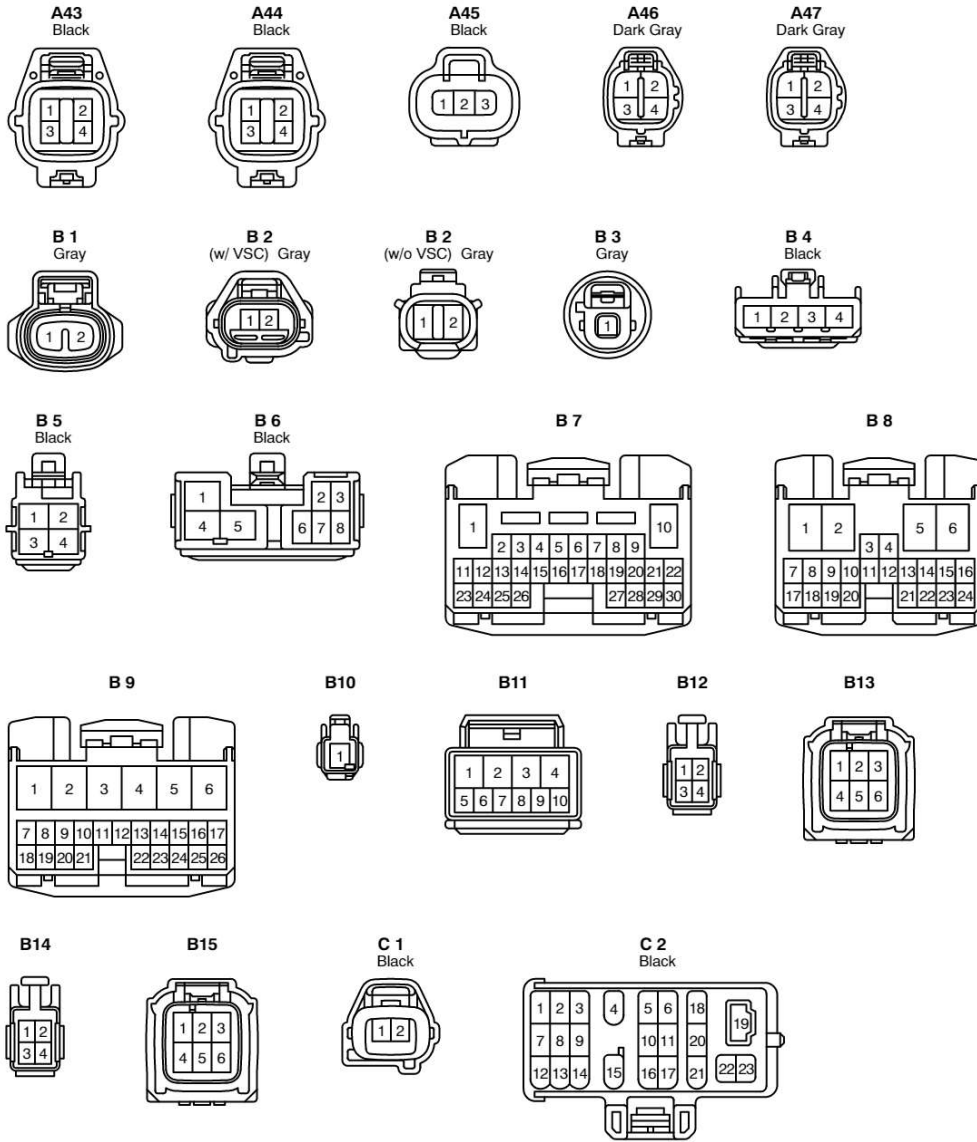
\*1 : 1KD-FTV, 1KZ-TE      \*3 : 3RZ-FE Unleaded Gasoline  
 \*2 : 1KD-FTV, 1GR-FE      \*4 : 3RZ-FE, 1KZ-TE, 5L-E



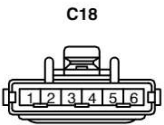
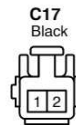
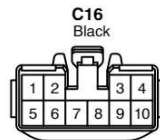
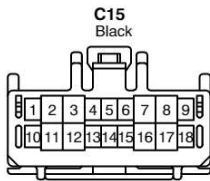
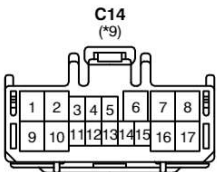
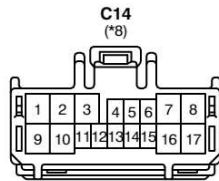
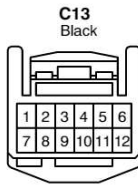
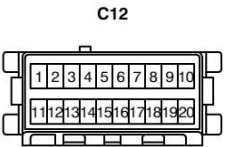
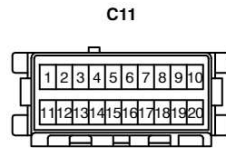
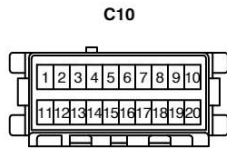
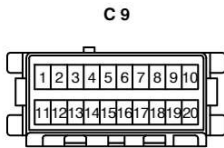
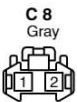
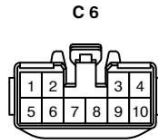
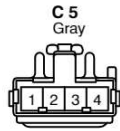
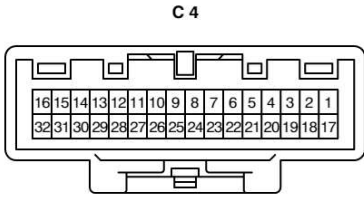
\*5 : w/ Navigation System  
 \*6 : w/o Navigation System  
 \*7 : w/o Side Airbag



# K CONNECTOR LIST

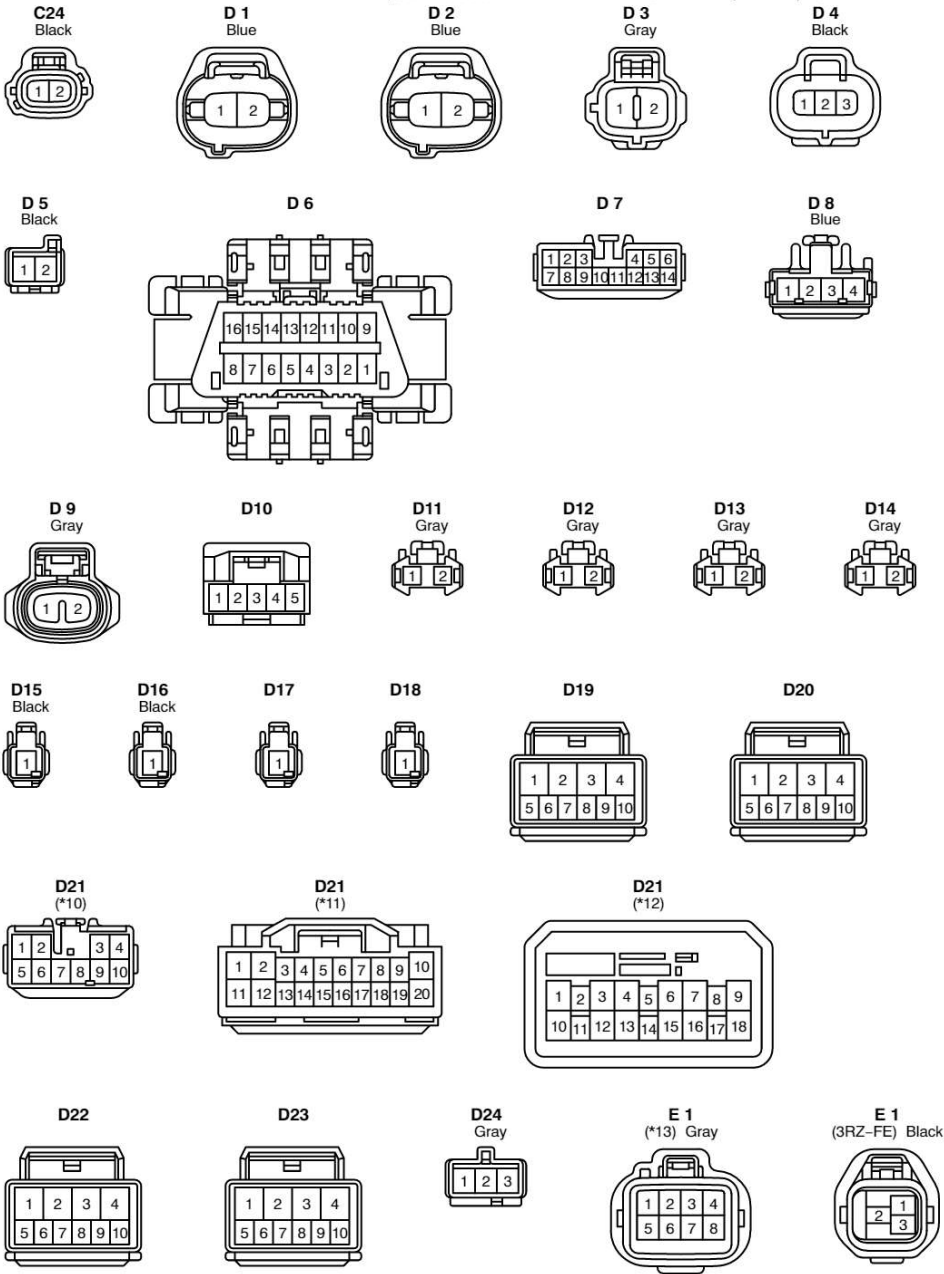


\*8 : LH Turn Lever Type  
 \*9 : RH Turn Lever Type



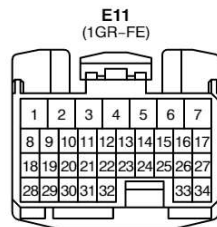
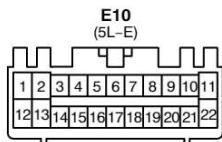
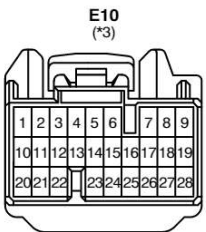
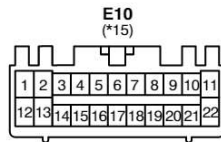
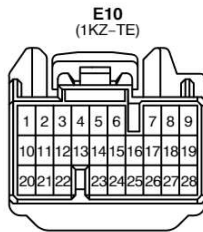
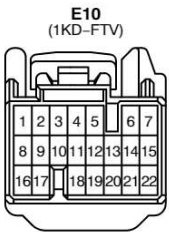
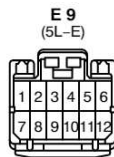
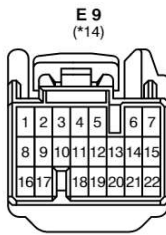
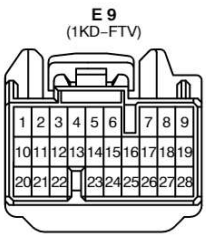
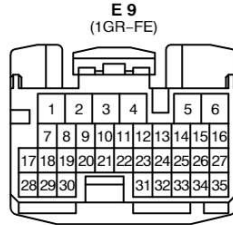
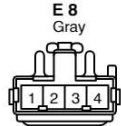
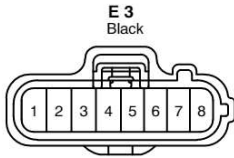
# K CONNECTOR LIST

\*10 : LHD 3-Door w/o Jam Protection  
 \*11 : w/ Jam Protection  
 \*12 : w/o Jam Protection Except LHD 3-Door  
 \*13 : 1KD-FTV, 1KZ-TE, 1GR-FE



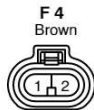
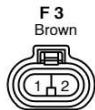
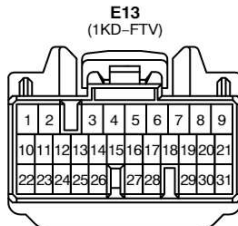
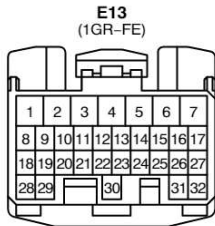
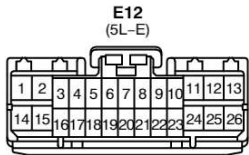
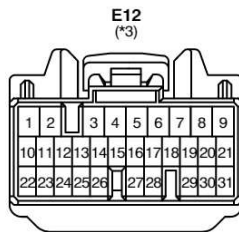
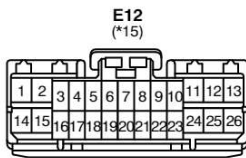
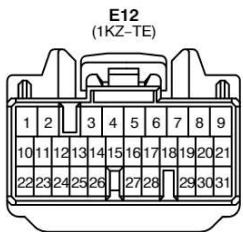
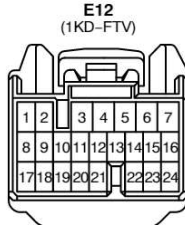
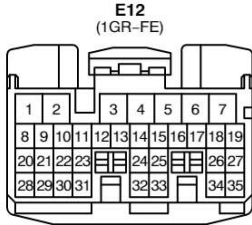
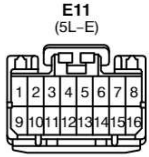
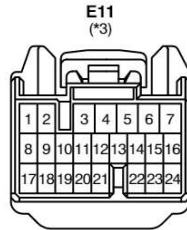
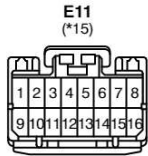
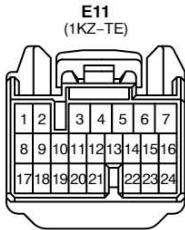
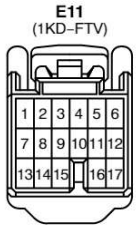


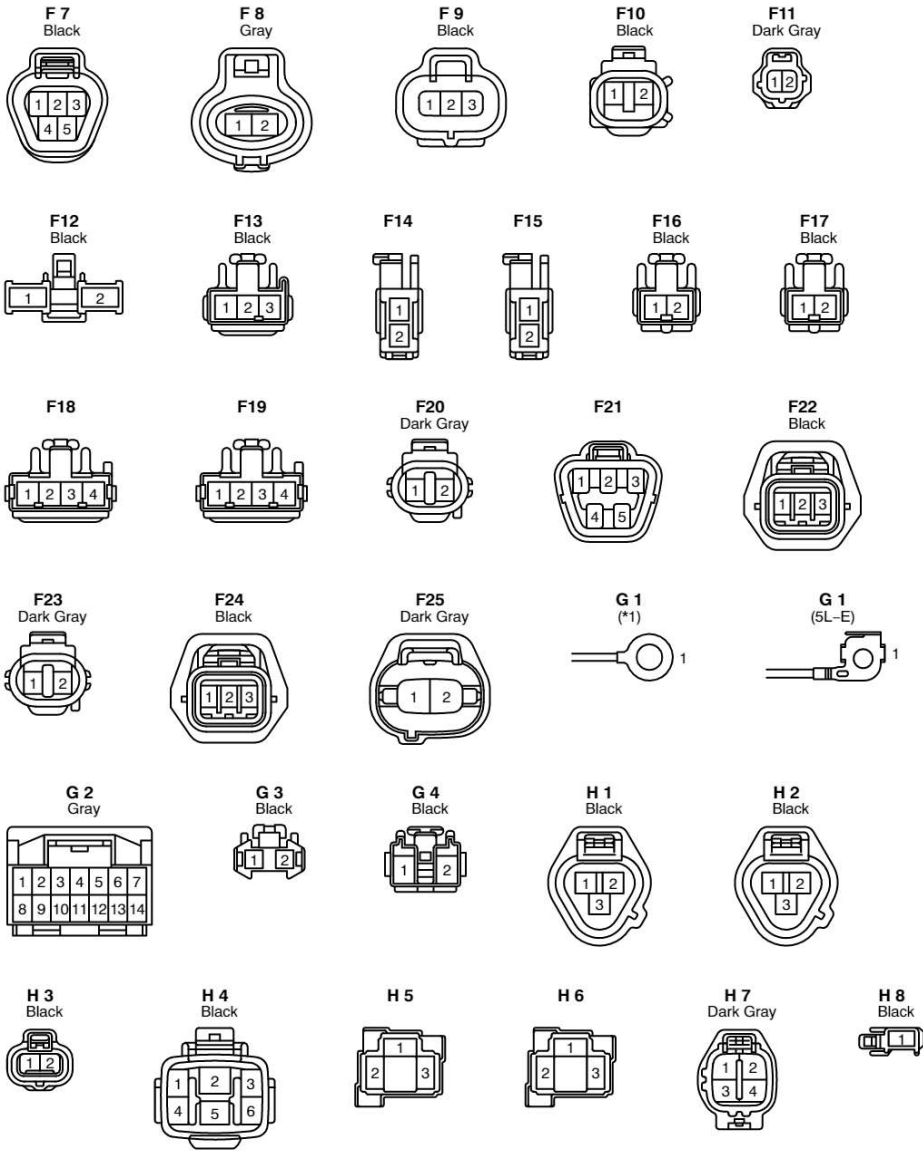
\*3 : 3RZ-FE Unleaded Gasoline  
 \*14 : 1KZ-TE, 3RZ-FE Unleaded Gasoline  
 \*15 : 3RZ-FE Leaded Gasoline



# K CONNECTOR LIST

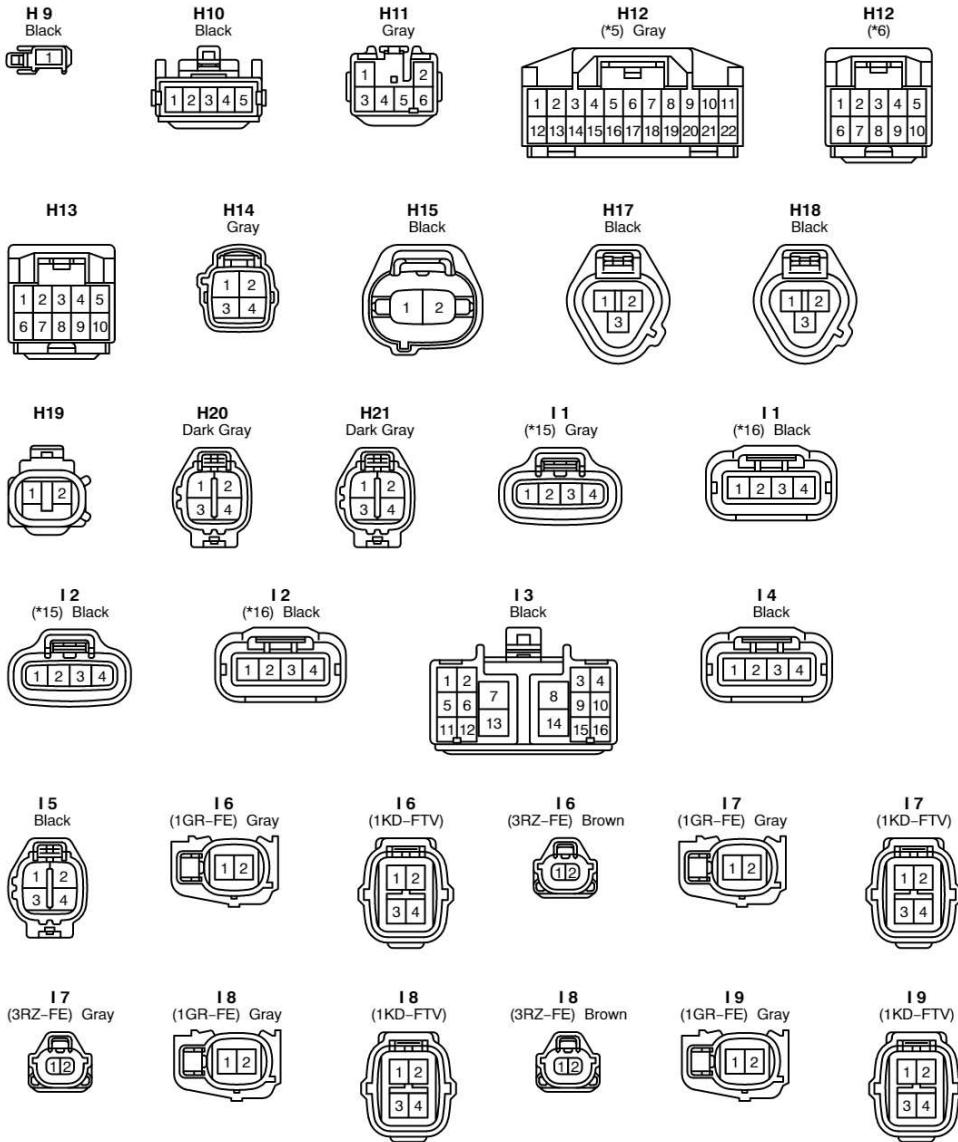
\*3 : 3RZ-FE Unleaded Gasoline  
 \*15 : 3RZ-FE Leaded Gasoline





# K CONNECTOR LIST

\*5 : w/ Navigation System  
 \*6 : w/o Navigation System  
 \*15 : 3RZ-FE Leaded Gasoline  
 \*16 : 3RZ-FE Unleaded Gasoline, 1GR-FE



\*1 : 1KD-FTV, 1KZ-TE  
 \*3 : 3RZ-FE Unleaded Gasoline  
 \*17 : 3RZ-FE Leaded Gasoline, 1GR-FE

**I 9**  
 (3RZ-FE) Gray



**I10**  
 (\*1) Dark Gray



**I10**  
 (3RZ-FE, 5L-E) Dark Gray



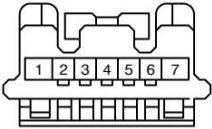
**I11**  
 Black



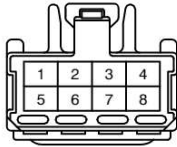
**I12**  
 Black



**I13**  
 Black



**I14**



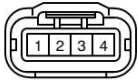
**I15**



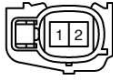
**I16**  
 Black



**I17**  
 Black



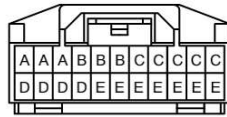
**I18**  
 Gray



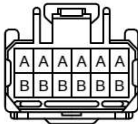
**I19**  
 Gray



**J 1**



**J 2**



**J 3**



**J 4**  
 Dark Gray



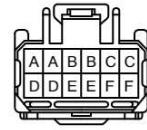
**J 5**  
 Dark Gray



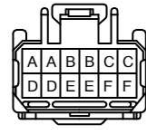
**J 6**  
 Dark Gray



**J 7**



**J 8**



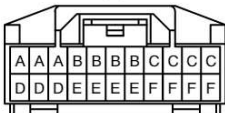
**J 9**  
 (LHD) Black



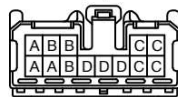
**J 9**  
 (RHD)



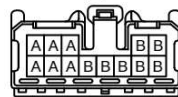
**J10**  
 (\*1)



**J10**  
 (\*17)



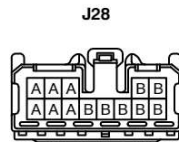
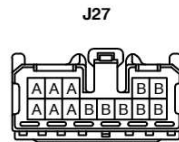
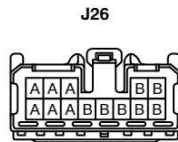
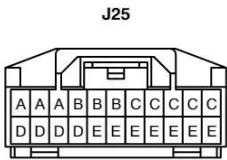
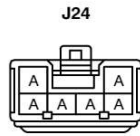
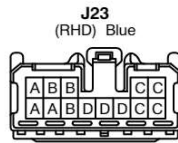
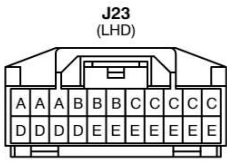
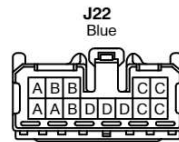
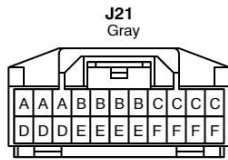
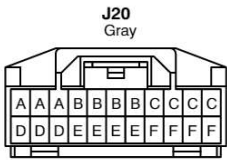
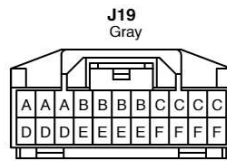
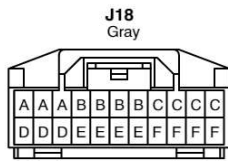
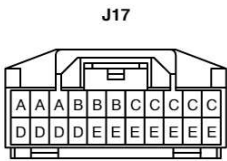
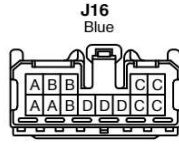
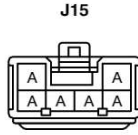
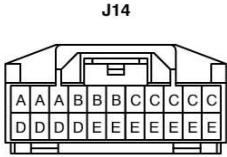
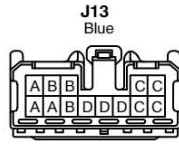
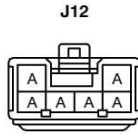
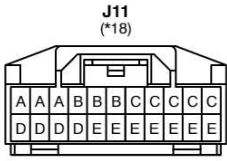
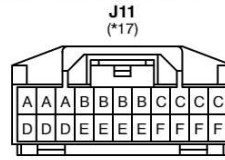
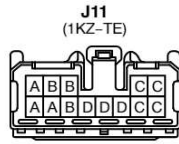
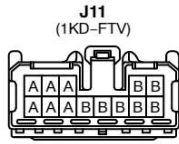
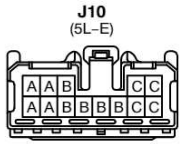
**J10**  
 (\*3)



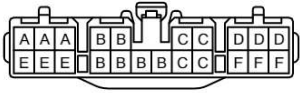
# K CONNECTOR LIST

\*17 : 3RZ-FE Leaded Gasoline, 1GR-FE

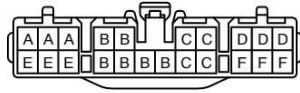
\*18 : 3RZ-FE Unleaded Gasoline, 5L-E



J29



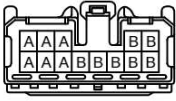
J30



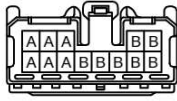
J31



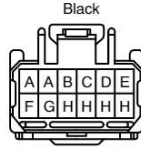
J33



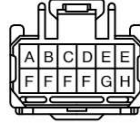
J34



J35



J36

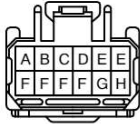


J37

Black



J38

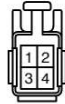


K 1

Dark Gray

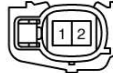


K 2



K 3

Black



K 4

Black



L 1

Gray



L 2



L 3



L 4



L 5

Black



M 1

Gray



M 2

Gray



M 3

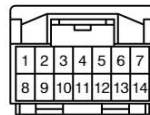
Blue



M 4



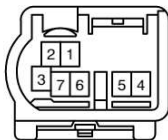
M 5



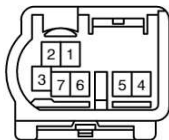
M 6



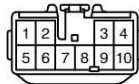
M 7



M 8

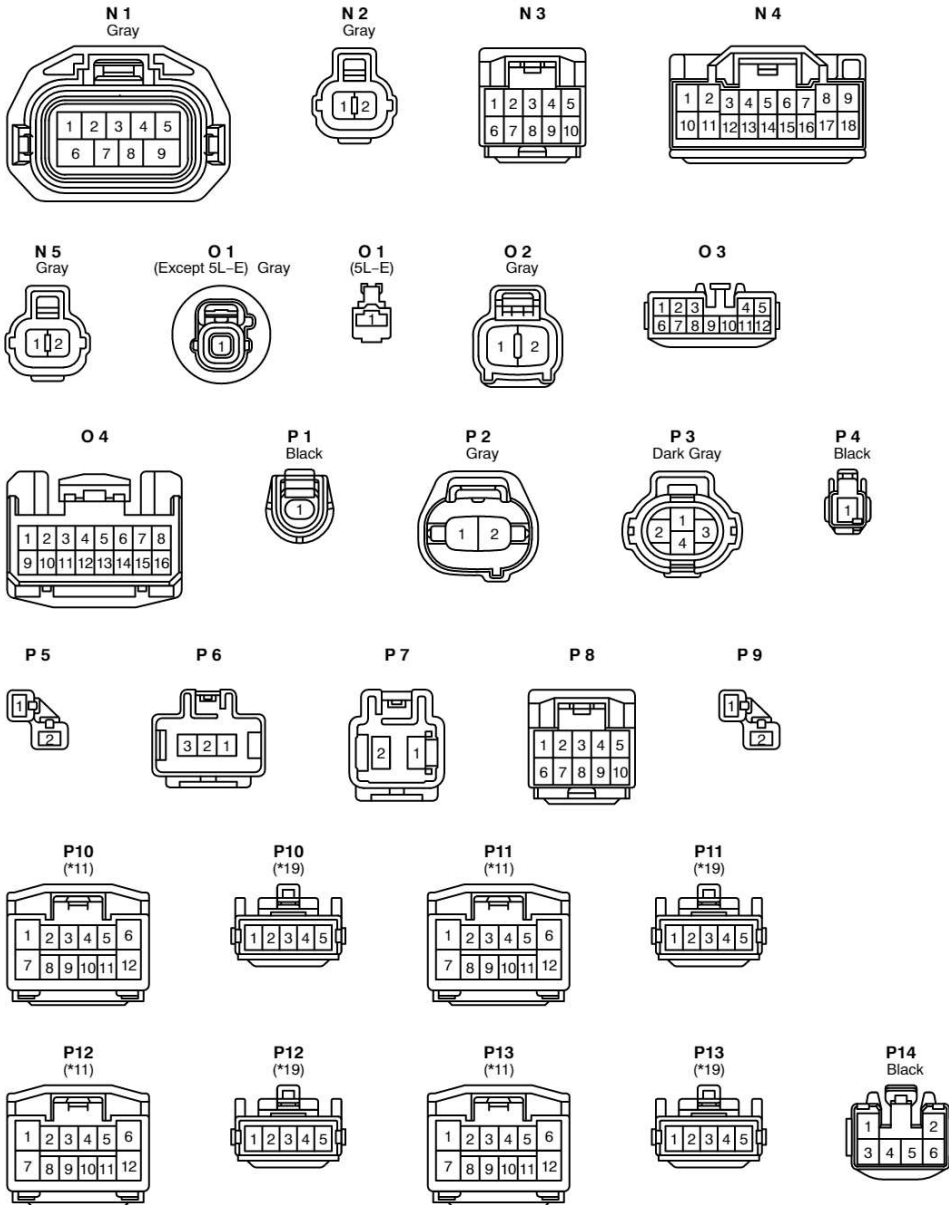


M 9

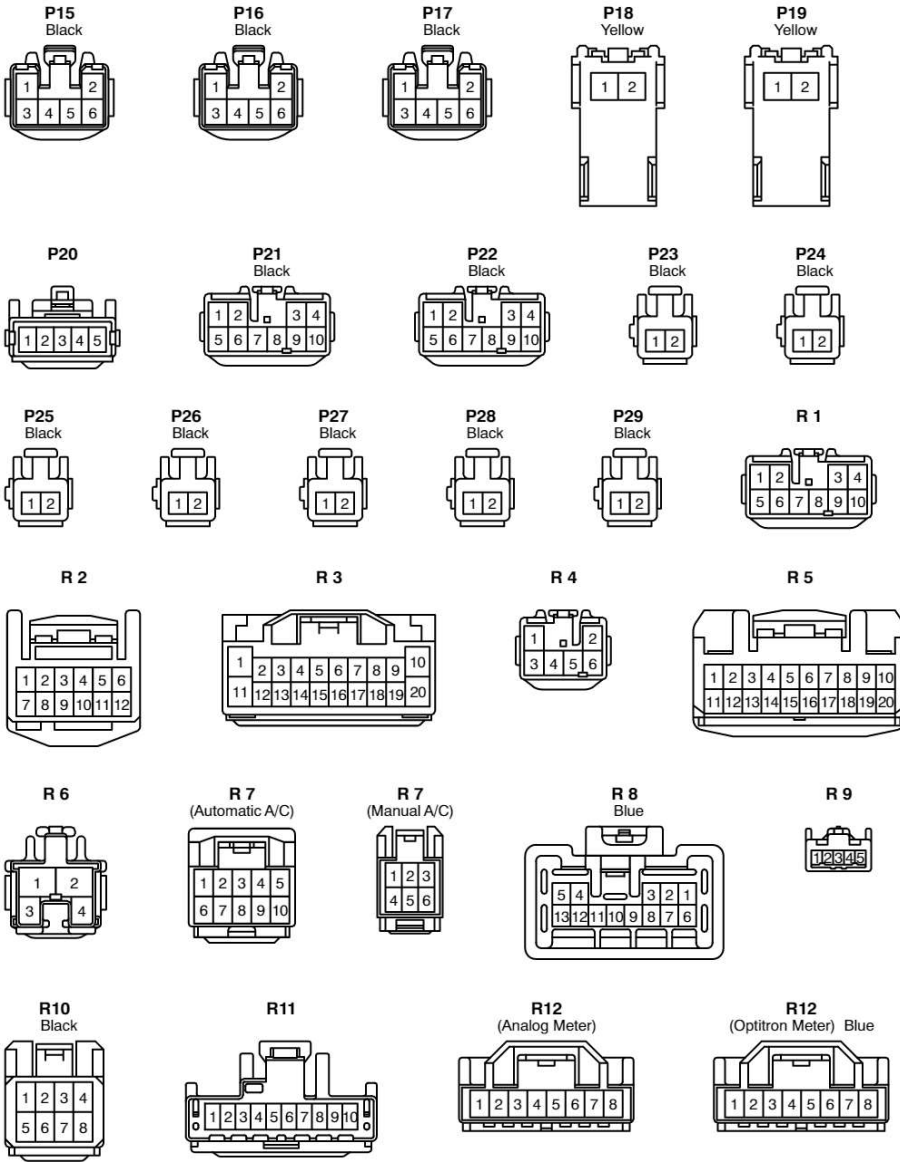


# K CONNECTOR LIST

\*11 : w/ Jam Protection  
 \*19 : w/o Jam Protection



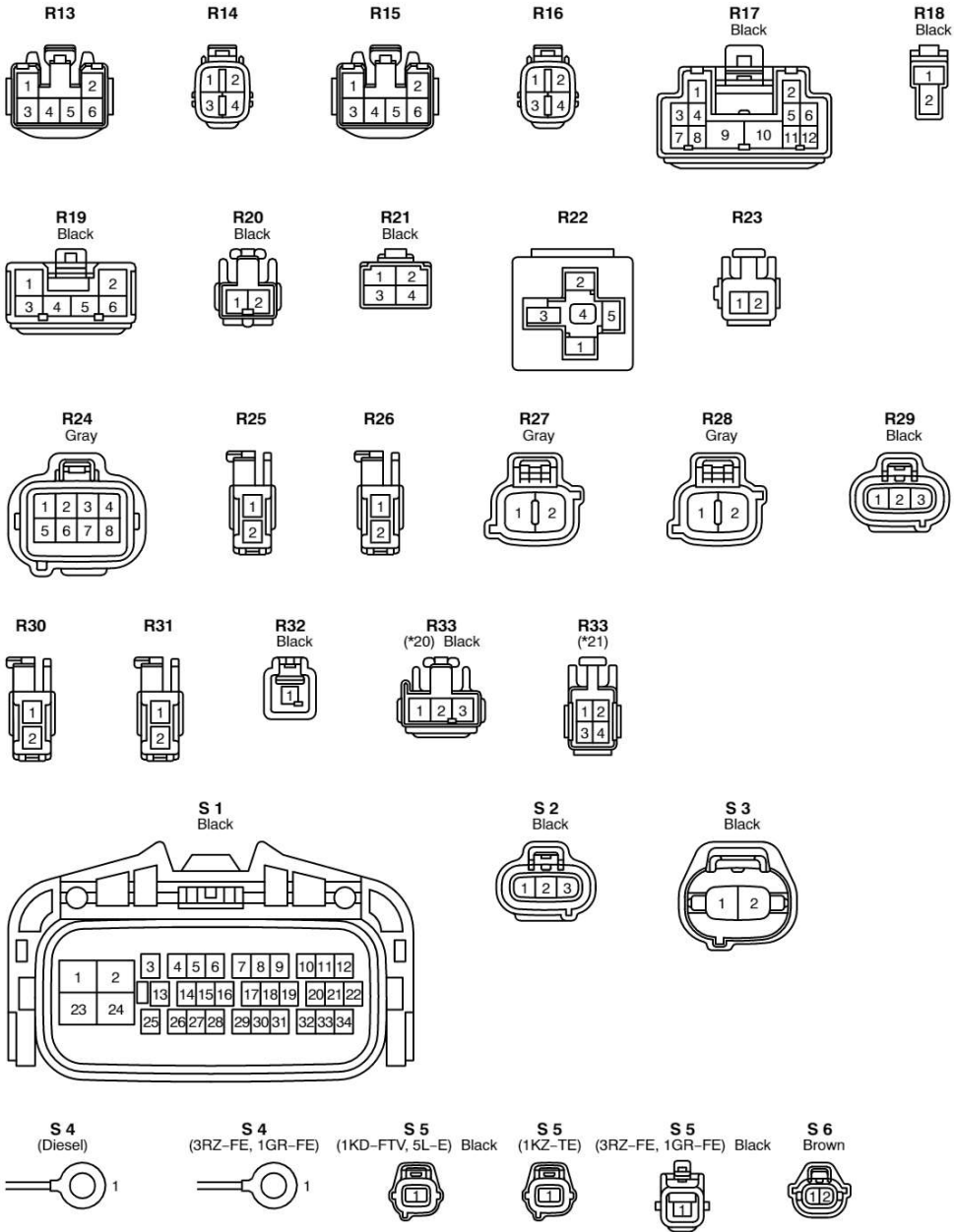


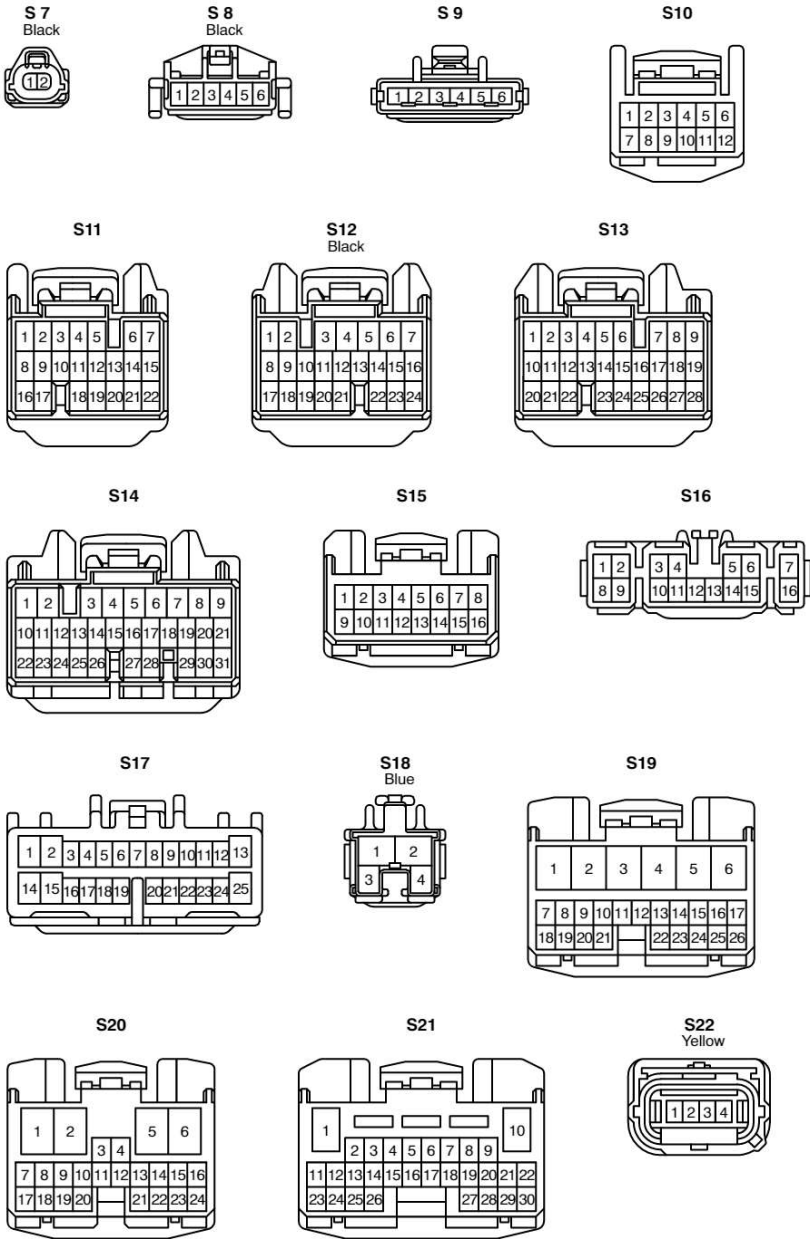


# K CONNECTOR LIST

\*20 : Spare Tire-Back Door Mounted

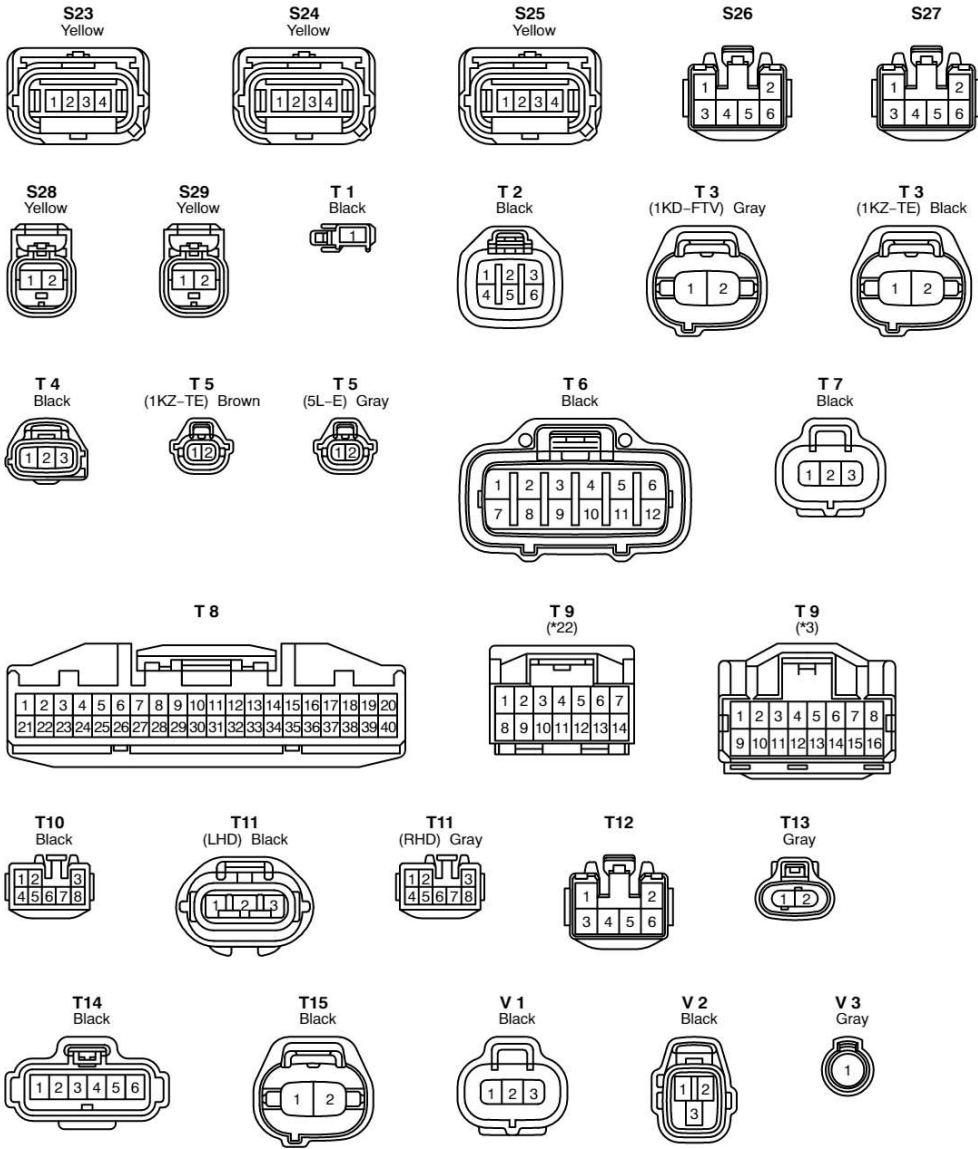
\*21 : Spare Tire-Under Floor Mounted





# K CONNECTOR LIST

\*3 : 3RZ-FE Unleaded Gasoline  
 \*22 : Except 3RZ-FE Unleaded Gasoline



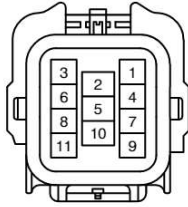
**V 5**  
(1KD-FTV) Brown



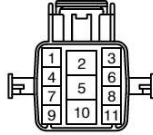
**V 5**  
(1KZ-TE) Black



**V 6**  
Black



**V 7**  
Black



**V 8**  
(1KD-FTV) Blue



**V 8**  
(1KZ-TE) Black



**V 9**  
Brown



**V10**  
(Except 1GR-FE) Black



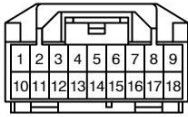
**V10**  
(1GR-FE) Gray



**V11**  
Brown



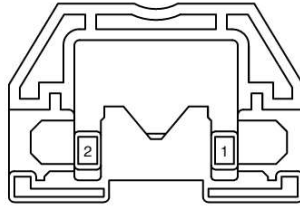
**V12**



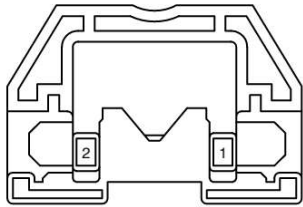
**V13**  
Black



**V14**



**V15**



**V16**  
Green



**V17**  
Brown

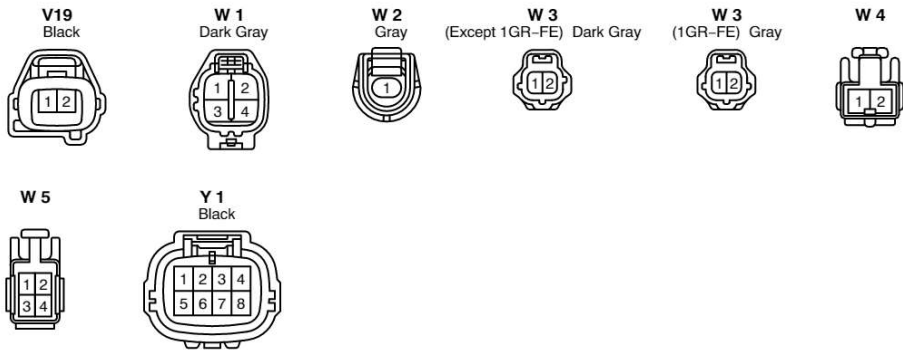


**V18**  
Black



# K CONNECTOR LIST

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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	A34	Air Vent Mode Control Servo Motor	90980-11909
A 2	A/C Condenser Fan Motor	90980-11237	A35	Airbag Sensor Assembly (w/ Side Airbag)	82824-50160
A 3	A/C Lock Sensor	90980-11016		Airbag Sensor Assembly (w/o Side Airbag)	90980-11869
	A/C Magnetic Clutch		A36	Airbag Sensor Assembly	90980-11872
A 4	A/C Magnetic Clutch	90980-11271	A37	Airbag Sensor Assembly (w/ Side Airbag)	82824-50150
A 5	A/C Magnetic Valve	90980-11075		Airbag Sensor Assembly (w/o Side Airbag)	90980-11867
A 6	A/T Oil Temp. Sensor (1GR-FE)	90980-11025	A38	Airbag Squib (Front Passenger Airbag Assembly)	90980-12160
	A/T Oil Temp. Sensor (1KD-FTV, 1KZ-TE)		A39	Airbag Squib (Steering Wheel Pad)	
	A/T Oil Temp. Sensor (3RZ-FE)	90980-10706	A40	Antenna Amplifier	90980-11146
A 7	ABS & BA & TRC & VSC Actuator	90980-11413	A41	Ashtray Illumination	90980-10825
A 8	ABS & BA & TRC & VSC Actuator	90980-10895	A42	ABS Speed Sensor Rear (3-Door)	90980-10941
A 9	ABS & BA & TRC & VSC Actuator	90980-11151		ABS Speed Sensor Rear (5-Door)	90980-10942
A10	ABS Speed Sensor Front LH	90980-11003	A43	Absorber Control Actuator Rear LH	90980-11930
A11	ABS Speed Sensor Front RH		A44	Absorber Control Actuator Rear RH	
A12	Absorber Control Actuator Front LH	90980-11929	A45	Acceleration Control Sensor Rear	90980-10845
A13	Absorber Control Actuator Front RH		A46	Air Fuel Ratio Sensor (Bank 1 Sensor 1)	
A14	Air Flow Meter (1KD-FTV, 1GR-FE)	90980-11317	A47	Air Fuel Ratio Sensor (Bank 2 Sensor 1)	90980-11178
	Air Flow Meter (3RZ-FE Unleaded Gasoline)	90980-12292	B 1	Back-Up Light SW	90980-11250
A15	Air Vent Control Servo Motor	90980-11144	B 2	Brake Fluid Level Warning SW (w/ VSC)	90980-11009
A16	Airbag Sensor Front LH	90980-11856		Brake Fluid Level Warning SW (w/o VSC)	90980-11207
A17	Airbag Sensor Front RH		B 3	Brake Vacuum Warning SW	90980-11252
A18	Alternator (1GR-FE)	90980-09372	B 4	Blower Motor Linear Controller	90980-11676
	Alternator (1KD-FTV)	90980-09213	B 5	Blower Resistor	90980-11136
	Alternator (3RZ-FE, 1KZ-TE, 5L-E)	90980-09212	B 6	Blower SW	90980-10877
A19	Alternator (1KD-FTV)	90980-11964	B 7	Body ECU	90980-12151
	Alternator (1KZ-TE, 5L-E)	90980-11349	B 8	Body ECU	90980-12149
	Alternator (3RZ-FE, 1GR-FE)	90980-11964	B 9	Body ECU	90980-12150
A20	A/C Amplifier	90980-10803	B10	Back Door Courtesy SW	90980-10871
A21	A/C Control Assembly (w/o Navigation System)	90980-12151	B11	Back Door Key Lock and Unlock SW	90980-12226
	A/C ECU (w/ Navigation System)			Back Door Lock Motor	
A22	A/C Control Assembly (w/o Navigation System)	90980-12149		Back Door Unlock Detection SW	
	A/C ECU (w/ Navigation System)		B12	Buckle SW LH	90980-10795
A23	A/C Control Assembly (w/o Navigation System)	90980-12150	Occupant Detection Sensor		
	A/C ECU (w/ Navigation System)		B13	Buckle SW LH	90980-12257
A24	A/C Room Temp. Sensor	90980-11918	Seat Position Sensor		
A25	A/C Solar Sensor	90980-12056	B14	Buckle SW RH	90980-10795
A26	A/C Thermistor	90980-11918		Occupant Detection Sensor	
A27	A/T Shift Indicator	90980-11911	B15	Buckle SW RH	90980-12257
A28	Accel Position Sensor	90980-11858	Seat Position Sensor		
A29	Acceleration Control Sensor Front	90980-10845	C 1	Camshaft Position Sensor	90980-10947
A30	Accessory Meter	90980-11911	C 2	Check Connector	90980-11323
A31	Air Inlet Control Servo Motor	90980-11909	C 3	Crankshaft Position Sensor (1GR-FE)	90980-12028
	Air Mix Control Servo Motor LH			Crankshaft Position Sensor (1KD-FTV)	90980-11016
	Air Mix Control Servo Motor RH			Crankshaft Position Sensor (1KZ-TE, 5L-E)	90980-11162
				Crankshaft Position Sensor (3RZ-FE)	90980-11016

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



Code	Part Name	Part Number	Code	Part Name	Part Number	
C 4	CD Automatic Changer	90980-12262	D20	Door Key Lock and Unlock SW Front RH	90980-12226	
C 5	Center Diff. Lock Control SW	90980-11013		Door Lock Motor Front RH		
C 6	Center Diff. Lock ECU	90980-10801		Door Unlock Detection SW Front RH		
C 7	Cigarette Lighter	90980-10760		Double Door Lock Motor Front RH		
C 8	Cigarette Lighter Illumination	90980-11148		Position SW Front RH		
C 9	Combination Meter	82824-35040	D21	Door Lock Control SW (LHD 3-Door w/o Jam Protection)	90980-10997	
C10	Combination Meter	82824-35030		Door Lock Control SW (w/ Jam Protection)	90980-12166	
C11	Combination Meter	82824-35040		Door Lock Control SW (w/o Jam Protection Except LHD 3-Door)	90980-12122	
C12	Combination Meter	82824-35030		Power Window Master SW (LHD 3-Door w/o Jam Protection)	90980-10997	
C13	Combination SW	90980-12183		Power Window Master SW (w/ Jam Protection)	90980-12166	
C14	Combination SW (LH Turn Lever Type)	90980-11672		Power Window Master SW (w/o Jam Protection Except LHD 3-Door)	90980-12122	
C14	Combination SW (RH Turn Lever Type)	90980-11671		D22	Door Lock Motor Rear LH	90980-12226
C15	Combination SW	90980-11594			Door Unlock Detection SW Rear LH	
C16	Cool Box Amplifier	90980-10801			Double Door Lock Motor Rear LH	
C17	Cool Box Motor	90980-10825			Position SW Rear LH	
C18	Cool Box SW	90980-10933	D23		Door Lock Motor Rear RH	
C19	Cool Box Thermistor	90980-10216		Door Unlock Detection SW Rear RH		
C20	Cruise Control Clutch SW	90980-10906		Double Door Lock Motor Rear RH		
C21	Curtain Shield Airbag Squib LH	90980-12219		Position SW Rear RH		
C22	Curtain Shield Airbag Squib RH		D24	Diode (Back-Up Light)	90980-11071	
C23	Camshaft Timing Oil Control Valve LH	90980-11162		E 1	ECT Solenoid (1KD-FTV, 1KZ-TE, 1GR-FE)	90980-10891
C24	Camshaft Timing Oil Control Valve RH				ECT Solenoid (3RZ-FE)	90980-10919
D 1	Detection SW (Transfer 4WD Position)	90980-11156		E 2	EGR Valve Position Sensor	90980-11143
D 2	Detection SW (Transfer L4 Position)		E 3	Electronic Driver Unit	90980-11592	
D 3	Detection SW (Transfer Neutral Position)		90980-10923	E 4	Electronic Driver Unit	90980-11024
D 4	Deceleration Sensor	90980-10845	E 5	Engine Hood Courtesy SW	90980-10942	
D 5	Diode (Front Fog Light)	90980-10962	E 6	Engine Oil Level Sensor	90980-11235	
D 6	DLC3	90980-11978	E 7	Engine Speed Sensor	90980-11250	
D 7	Double Door Lock Control Relay	90980-10807	E 8	ECT Pattern Select SW	90980-11013	
D 8	Downhill Assist Control SW	90980-11013	E 9	Engine and ECT ECU (A/T) (1GR-FE)	90980-12146	
D 9	Detection SW (Rear Diff. Lock)	90980-11250		Engine and ECT ECU (A/T) (1KD-FTV)	90980-11637	
D10	Door Control Receiver	90980-11909		Engine and ECT ECU (A/T) (1KZ-TE, 3RZ-FE Unleaded Gasoline)	90980-11638	
D11	Door Courtesy Light Front LH	90980-11148		Engine and ECT ECU (A/T) (5L-E)	90980-11408	
D12	Door Courtesy Light Front RH			Engine ECU (M/T) (1GR-FE)	90980-12146	
D13	Door Courtesy Light Rear LH			Engine ECU (M/T) (1KD-FTV)	90980-11637	
D14	Door Courtesy Light Rear RH			Engine ECU (M/T) (1KZ-TE, 3RZ-FE Unleaded Gasoline)	90980-11638	
D15	Door Courtesy SW Front LH	90980-10871		Engine ECU (M/T) (5L-E)	90980-11408	
D16	Door Courtesy SW Front RH			D19	Door Key Lock and Unlock SW Front LH	90980-12226
D17	Door Courtesy SW Rear LH				Door Lock Motor Front LH	
D18	Door Courtesy SW Rear RH		Door Unlock Detection SW Front LH			
D19	Door Key Lock and Unlock SW Front LH	90980-12226	Double Door Lock Motor Front LH			
			Position SW Front LH			

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
E10	Engine and ECT ECU (A/T) (1GR-FE)	90980-12142	E13	Engine and ECT ECU (A/T) (1GR-FE)	90980-12143
	Engine and ECT ECU (A/T) (1KD-FTV)	90980-11638		Engine and ECT ECU (A/T) (1KD-FTV)	90980-11421
	Engine and ECT ECU (A/T) (1KZ-TE)	90980-11637		Engine ECU (M/T) (1GR-FE)	90980-12143
	Engine and ECT ECU (A/T) (3RZ-FE Leaded Gasoline)	90980-10765		Engine ECU (M/T) (1KD-FTV)	90980-11421
	Engine and ECT ECU (A/T) (3RZ-FE Unleaded Gasoline)	90980-11637	F 1	Front Clearance Light LH	90980-10942
	Engine and ECT ECU (A/T) (5L-E)	90980-10765		Front Turn Signal Light LH	
	Engine ECU (M/T) (1GR-FE)	90980-12142	F 2	Front Clearance Light RH	
	Engine ECU (M/T) (1KD-FTV)	90980-11638		Front Turn Signal Light RH	
	Engine ECU (M/T) (1KZ-TE)	90980-11637	F 3	Front Fog Light LH	90980-11096
	Engine ECU (M/T) (3RZ-FE Leaded Gasoline)	90980-10765	F 4	Front Fog Light RH	
	Engine ECU (M/T) (3RZ-FE Unleaded Gasoline)	90980-11637	F 5	Front Side Turn Signal Light LH	90980-11162
	Engine ECU (M/T) (5L-E)	90980-10765	F 6	Front Side Turn Signal Light RH	
	E11	Engine and ECT ECU (A/T) (1GR-FE)	90980-12144	F 7	Front Wiper Motor
Engine and ECT ECU (A/T) (1KD-FTV)		90980-11586	F 8	Fuel Heater	90980-10928
Engine and ECT ECU (A/T) (1KZ-TE)		90980-11476	F 9	Fuel Pressure Sensor	90980-10845
Engine and ECT ECU (A/T) (3RZ-FE Leaded Gasoline)		90980-11391	F 10	Fuel Sedimentary SW	90980-11003
Engine and ECT ECU (A/T) (3RZ-FE Unleaded Gasoline)		90980-11476	F 11	Fuel Temp. Sensor	90980-10737
Engine and ECT ECU (A/T) (5L-E)		90980-11391	F 12	Front Blower Motor	90980-10385
Engine ECU (M/T) (1GR-FE)		90980-12144	F 13	Front Passenger's Seat Belt Warning Light	90980-11296
Engine ECU (M/T) (1KD-FTV)		90980-11586	F 14	Front Door Speaker LH	90980-10935
Engine ECU (M/T) (1KZ-TE)		90980-11476	F 15	Front Door Speaker RH	
Engine ECU (M/T) (3RZ-FE Leaded Gasoline)		90980-11391	F 16	Front Door Squawker LH	90980-10860
Engine ECU (M/T) (3RZ-FE Unleaded Gasoline)		90980-11476	F 17	Front Door Squawker RH	
Engine ECU (M/T) (5L-E)		90980-11391	F 18	Front Door Tweeter Speaker LH	90980-11013
Engine and ECT ECU (A/T) (1GR-FE)		90980-12145	F 19	Front Door Tweeter Speaker RH	
Engine and ECT ECU (A/T) (1KD-FTV)	90980-11476	F 20	Fuel Pump	90980-11038	
Engine and ECT ECU (A/T) (1KZ-TE)	90980-11421	F21	Fuel Pump and Sender (Gasoline)	90980-11077	
Engine and ECT ECU (A/T) (3RZ-FE Leaded Gasoline)	90980-11390		Fuel Sender (Diesel)		
Engine and ECT ECU (A/T) (3RZ-FE Unleaded Gasoline)	90980-11421	F 22	Fuel Sender	82890-32030	
Engine and ECT ECU (A/T) (5L-E)	90980-11390	F 23	Fuel Sender (Sub)	90980-11038	
Engine ECU (M/T) (1GR-FE)	90980-12145	F 24	Fuel Sender (Sub)	82890-32030	
Engine ECU (M/T) (1KD-FTV)	90980-11476	F 25	Fuel Pump Resistor	90980-11156	
Engine ECU (M/T) (1KZ-TE)	90980-11421	G 1	Glow Plug (1KD-FTV, 1KZ-TE)	99141-13004	
Engine and ECT ECU (A/T) (3RZ-FE Leaded Gasoline)	90980-11390		Glow Plug (5L-E)	90980-09318	
Engine and ECT ECU (A/T) (3RZ-FE Unleaded Gasoline)	90980-11421	G 2	Gateway ECU	90980-11911	
Engine and ECT ECU (A/T) (5L-E)	90980-11390	G 3	Glove Box Light	90980-11148	
Engine ECU (M/T) (1GR-FE)	90980-12145	G 4	Glove Box Light SW	90980-11098	
Engine ECU (M/T) (1KD-FTV)	90980-11476	H 1	Headlight Beam Level Control Actuator LH	90980-11016	
Engine ECU (M/T) (1KZ-TE)	90980-11421	H 2	Headlight Beam Level Control Actuator RH		
Engine ECU (M/T) (3RZ-FE Leaded Gasoline)	90980-11390	H 3	Headlight Cleaner Motor	90980-11410	
Engine ECU (M/T) (3RZ-FE Unleaded Gasoline)	90980-11421	H 4	Headlight Cleaner Relay	90980-10939	
Engine ECU (M/T) (5L-E)	90980-11390	H 5	Headlight LH	90980-11314	
		H 6	Headlight RH		

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

Code	Part Name	Part Number	Code	Part Name	Part Number
H 7	Heated Oxygen Sensor	90980-11028	I16	Ignition Coil and Igniter No.5	90980-11885
H 8	Horn (High)	90980-10619	I17	Ignition Coil and Igniter No.6	
H 9	Horn (Low)		I18	Injector No.5	90980-11875
H10	Hazard SW	90980-10789	I19	Injector No.6	
H11	Headlight Beam Level Control SW	90980-10996	J 1	Junction Connector	90980-11915
H12	Heater Control SW (w/ Navigation System)	90980-11915	J 2	Junction Connector	90980-11661
	Heater Control SW (w/o Navigation System)	90980-11923	J 3	Junction Connector	
H13	Height Control and Suspension SW	90980-11923	J 4	Junction Connector	90980-10891
H14	Height Control Compressor	90980-10990	J 5	Junction Connector	
H15	Height Control Exhaust Valve	90980-11156	J 6	Junction Connector	
H17	Height Control Sensor Rear LH	90980-11016	J 7	Junction Connector	90980-11661
H18	Height Control Sensor Rear RH		J 8	Junction Connector	
H19	High Mounted Stop Light	90980-11003	J 9	Junction Connector	90980-10803
H20	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980-11028	J10	Junction Connector (1KD-FTV, 1KZ-TE)	90980-11915
H21	Heated Oxygen Sensor (Bank 2 Sensor 2)			Junction Connector (3RZ-FE Leaded Gasoline, 1GR-FE)	90980-11542
I 1	Ignition Coil and Igniter No.1 (3RZ-FE Leaded Gasoline)	90980-11150		Junction Connector (3RZ-FE Unleaded Gasoline)	
	Ignition Coil and Igniter No.1 (3RZ-FE Unleaded Gasoline, 1GR-FE)	90980-11885	Junction Connector (5L-E)		
I 2	Ignition Coil and Igniter No.2 (3RZ-FE Leaded Gasoline)	90980-11150	J11	Junction Connector (1KD-FTV)	90980-11542
	Ignition Coil and Igniter No.2 (3RZ-FE Unleaded Gasoline, 1GR-FE)	90980-11885		Junction Connector (1KZ-TE)	90980-11915
I 3	Ignition Coil and Igniter No.3	90980-10885		Junction Connector (3RZ-FE Leaded Gasoline, 1GR-FE)	
I 4	Ignition Coil and Igniter No.4	90980-11885	Junction Connector (3RZ-FE Unleaded Gasoline, 5L-E)		
I 5	Injection Pump	90980-11028	J12	Junction Connector	90980-10976
I 6	Injector No.1 (1GR-FE)	90980-11875	J13	Junction Connector	90980-11542
	Injector No.1 (1KD-FTV)	90980-12005	J14	Junction Connector	90980-11915
	Injector No.1 (3RZ-FE)	90980-11153	J15	Junction Connector	90980-10976
I 7	Injector No.2 (1GR-FE)	90980-11875	J16	Junction Connector	90980-11542
	Injector No.2 (1KD-FTV)	90980-12005	J17	Junction Connector	90980-11915
Injector No.2 (3RZ-FE)	90980-11153	J18	Junction Connector		
I 8	Injector No.3 (1GR-FE)	90980-11875	J19	Junction Connector	
	Injector No.3 (1KD-FTV)	90980-12005	J20	Junction Connector	
	Injector No.3 (3RZ-FE)	90980-11153	J21	Junction Connector	
I 9	Injector No.4 (1GR-FE)	90980-11875	J22	Junction Connector	90980-11542
	Injector No.4 (1KD-FTV)	90980-12005	J23	Junction Connector (LHD)	90980-11915
	Injector No.4 (3RZ-FE)	90980-11153		Junction Connector (RHD)	90980-11542
I10	Intake Air Temp. Sensor (1KD-FTV, 1KZ-TE)	90980-11025	J24	Junction Connector	90980-10976
	Intake Air Temp. Sensor (3RZ-FE, 5L-E)	90980-11163	J25	Junction Connector	90980-11915
I11	ISC Valve	90980-11145	J26	Junction Connector	90980-11542
I12	Idle-Up SW	90980-10933	J27	Junction Connector	
I13	Ignition Key Cylinder Light	90980-12092	J28	Junction Connector	
	Transponder Key Amplifier		J29	Junction Connector	
I14	Ignition SW	90980-11615	J30	Junction Connector	90980-11686
I15	Interior Light	90980-12321	J31	Junction Connector	

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
J33	Junction Connector	90980-11542	P10	Power Window Control SW Front LH (w/ Jam Protection)	90980-11947
J34	Junction Connector			Power Window Control SW Front LH (w/o Jam Protection)	90980-10789
J35	Junction Connector	90980-11661	P11	Power Window Control SW Front RH (w/ Jam Protection)	90980-11947
J36	Junction Connector			Power Window Control SW Front RH (w/o Jam Protection)	90980-10789
J37	Junction Connector		P12	Power Window Control SW Rear LH (w/ Jam Protection)	90980-11947
J38	Junction Connector			Power Window Control SW Rear LH (w/o Jam Protection)	90980-10789
K1	Knock Sensor	90980-11166	P13	Power Window Control SW Rear RH (w/ Jam Protection)	90980-11947
K2	Key Interlock Solenoid Unlock Warning SW	90980-10795		Power Window Control SW Rear RH (w/o Jam Protection)	90980-10789
K3	Knock Sensor LH	90980-11875	P14	Power Window Motor Front LH	90980-10797
K4	Knock Sensor RH		P15	Power Window Motor Front RH	
L1	License Plate Light	90980-11002	P16	Power Window Motor Rear LH	
L2	License Plate Light LH	90980-11148	P17	Power Window Motor Rear RH	
L3	License Plate Light RH		P18	Pretensioner LH	
L4	Luggage Compartment Light	90980-12321	P19	Pretensioner RH	
L5	Low Pressure Tank Valve	90980-11156	P20	Power Seat Control SW (Driver's Seat Lumbar Support Control)	90980-10789
M1	Magnetic Spill Valve	90980-11284	P21	Power Seat Control SW (Driver's Seat)	90980-10997
M2	Master Cylinder Pressure Sensor	90980-11451	P22	Power Seat Control SW (Front Passenger's Seat)	
M3	Mirror Heater SW	90980-10789	P23	Power Seat Motor (Driver's Seat Front Vertical Control)	90980-10825
M4	Multi-Display	90980-10799	P24	Power Seat Motor (Driver's Seat Lifter Control)	
M5	Multi-Display	90980-11911	P25	Power Seat Motor (Driver's Seat Lumbar Support Control)	
M6	Multi-Display	90980-11923	P26	Power Seat Motor (Driver's Seat Reclining Control)	
M7	Mirror Heater LH Remote Control Mirror LH	90980-12059	P27	Power Seat Motor (Driver's Seat Slide Control)	
M8	Mirror Heater RH Remote Control Mirror RH		P28	Power Seat Motor (Front Passenger's Seat Reclining Control)	
M9	Moon Roof Control ECU and Motor	90980-10997	P29	Power Seat Motor (Front Passenger's Seat Slide Control)	
N1	Neutral Start SW	90980-11784	R1	Radio and Player	90980-10997
N2	Noise Filter	90980-10843	R2	Radio and Player	90980-12183
N3	Navigation ECU	90980-11923	R3	Radio and Player	90980-12038
N4	Navigation ECU	90980-11973	R4	Radio and Player	90980-10996
N5	Noise Filter (Condenser Fan)	90980-10843	R5	Radio and Player	90980-12259
O1	Oil Pressure SW (Except 5L-E)	90980-11363	R6	Rear Blower SW	90980-11118
	Oil Pressure SW (5L-E)	90980-10703	R7	Rear Cooler Control SW (Automatic A/C)	90980-11923
O2	Option Connector (Keyless Buzzer)	90980-11051		Rear Cooler Control SW (Manual A/C)	90980-12012
O3	Option Connector (Door Control Receiver)	90980-10803	R8	Rear Diff. Lock Control ECU	90980-11541
O4	Overhead J/B	90980-12155	R9	Rear Diff. Lock SW	90980-10631
P1	Power Steering Oil Pressure SW	90980-11428			
P2	Pressure SW	90980-11149			
P3	Pressure SW	90980-10943			
P4	Parking Brake SW	90980-10871			
P5	Power Outlet (Front)	90980-10760			
P6	PTC Heater	90980-11385			
P7	PTC Heater	90980-10958			
P8	Personal Light	90980-11923			
P9	Power Outlet (Rear)	90980-10760			

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

Code	Part Name	Part Number	Code	Part Name	Part Number
R10	Rear Fog Light SW	90980-12113	S18	Stop Light SW	90980-11118
R11	Remote Control Mirror SW	90980-11657	S19	Suspension Control ECU	90980-12150
R12	Rheostat	90980-11989	S20	Suspension Control ECU	90980-12149
R13	Rear Combination Light LH	90980-10797	S21	Suspension Control ECU	90980-12151
R14	Rear Combination Light LH	90980-11292	S22	Side Airbag Sensor Front LH	90980-12225
R15	Rear Combination Light RH	90980-10797	S23	Side Airbag Sensor Front RH	
R16	Rear Combination Light RH	90980-11292	S24	Side Airbag Sensor Rear LH	
R17	Rear Cooler Amplifier	90980-10879	S25	Side Airbag Sensor Rear RH	
R18	Rear Cooler Blower Motor	90980-10214	S26	Seat Heater (Driver's Seat)	90980-10797
R19	Rear Cooler Blower Resistor	90980-10976	S27	Seat Heater (Front Passenger's Seat)	
R20	Rear Cooler Magnetic Valve	90980-10860	S28	Side Airbag Squib LH	90980-11864
R21	Rear Cooler Power Transistor	90980-10171	S29	Side Airbag Squib RH	
R22	Rear Cooler Relay	-	T 1	Theft Deterrent Horn	90980-10619
R23	Rear Cooler Thermistor	90980-10825	T 2	Throttle Control Motor	90980-11144
R24	Rear Diff. Lock Motor	90980-10897	T 3	Throttle Open SW	90980-11156
R25	Rear Door Speaker LH	90980-10935	T 4	Throttle Position Sensor	90980-11261
R26	Rear Door Speaker RH				
R27	Rear Fog Light LH	90980-11019	T 5	Timing Control Valve	90980-11285
R28	Rear Fog Light RH				
R29	Rear Height Control Valve	90980-11143	T 6	Transfer Actuator	90980-11664
R30	Rear Speaker LH	90980-10935	T 7	Turbo Pressure Sensor	90980-10845
R31	Rear Speaker RH				
R32	Rear Window Defogger	90980-10870	T 8	Theft Deterrent ECU	90980-12169
R33	Rear Wiper Motor (Spare Tire-Back Door Mounted)	90980-10908	T 9	Transponder Key Computer (Except 3RZ-FE Unleaded Gasoline)	90980-11911
	Rear Wiper Motor (Spare Tire-Under Floor Mounted)	90980-10795		Transponder Key Computer (3RZ-FE Unleaded Gasoline)	90980-12094
S 1	Skid Control ECU with Actuator	90980-12020	T10	Turn Signal Flasher	90980-10799
S 2	Speed Sensor (Combination Meter)	90980-11143	T11	Theft Deterrent Siren (LHD)	90980-11349
S 3	Speed Sensor (ECT)	90980-11156		Theft Deterrent Siren (RHD)	90980-10799
S 4	Starter (Diesel)	90980-09529	T12	Trailer Socket	90980-10797
	Starter (3RZ-FE, 1GR-FE)	90980-09463	T13	Turbo Charger Compensate Resistor	90980-11163
S 5	Starter (1KD-FTV, 5L-E)	90980-11184	T14	Throttle Control Motor	90980-11858
	Starter (1KZ-TE)			Throttle Position Sensor	
	Starter (3RZ-FE, 1GR-FE)	90980-11400	T15	Turbine Speed Sensor	90980-11156
S 6	Suction Control Valve No.1	90980-11285	V 1	Vacuum Sensor	90980-10845
S 7	Suction Control Valve No.2	90980-11284	V 2	Variable Resistor	90980-10902
S 8	Seat Heater SW Front LH	90980-10964	V 3	Viscous Heater Magnetic Clutch	90980-11271
S 9	Seat Heater SW Front RH	90980-10933	V 5	VRV (EGR)	90980-11162
S10	Shift Lock Control ECU	90980-12183	V 6	VSC Check Connector	90980-11609
S11	Skid Control ECU	90980-11638	V 7	VSC Check Connector	90980-11612
S12	Skid Control ECU	90980-11476	V 8	VSV (EGR Cut) (1KD-FTV)	90980-11156
S13	Skid Control ECU	90980-11637		VSV (EGR Cut) (1KZ-TE)	90980-11149
S14	Skid Control ECU	90980-11935	V 9	VSV (Engine Mount)	90980-11149
S15	Steering Sensor	90980-12155	V10	VSV (EVAP)	90980-11156
S16	Stereo Component Amplifier	90980-10848	V11	VSV (Pressure Charge Valve)	90980-11149
S17	Stereo Component Amplifier	90980-11877	V12	Viscous Heater Amplifier	90980-11913
			V13	VSC Warning Buzzer	90980-10906
			V14	Vanity Light LH	90980-12322
			V15	Vanity Light RH	









**[A]** : System Title

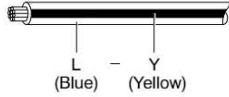
**[B]** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

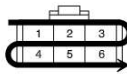
Example: L - Y



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

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

Example : Numbered in order from upper left to lower right



Female

Numbered in order from upper right to lower left



Male

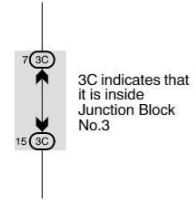
The numbering system for the overall wiring diagram is the same as above

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

Example : ① Indicates Relay Block No.1

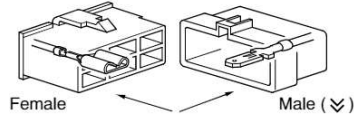
**[F]** : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

Example:



**[G]** : Indicates related system.

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



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

**[J]** : Indicates a shielded cable.



**[K]** : Indicates and located on ground point.

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

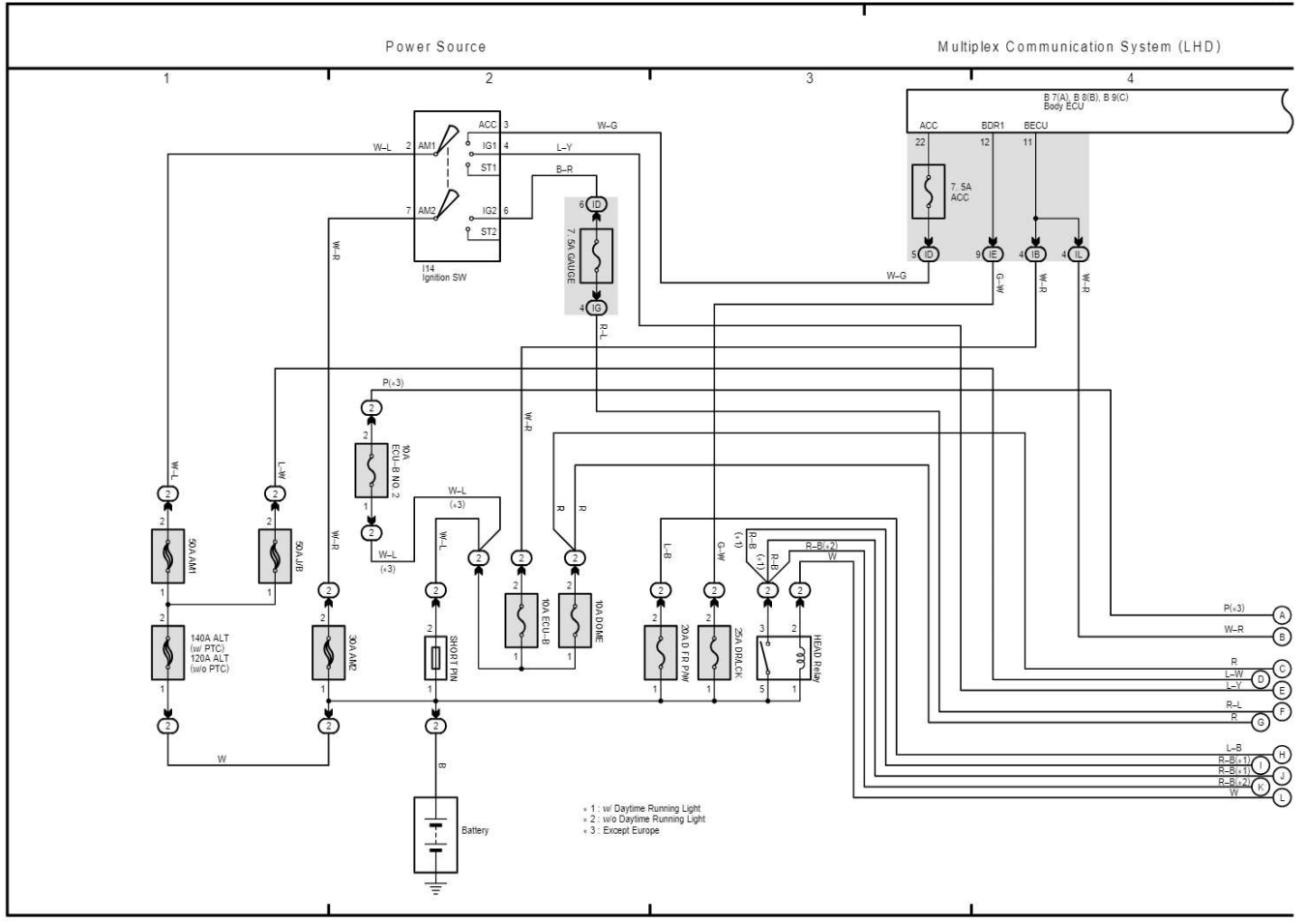
## SYSTEM INDEX

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Air Conditioner (Manual A/C Except 1GR-FE) .....	55-3	Engine Control (1KZ-TE) .....	12-3
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LAND CRUISER / LAND CRUISER PRADO (EWD527E)



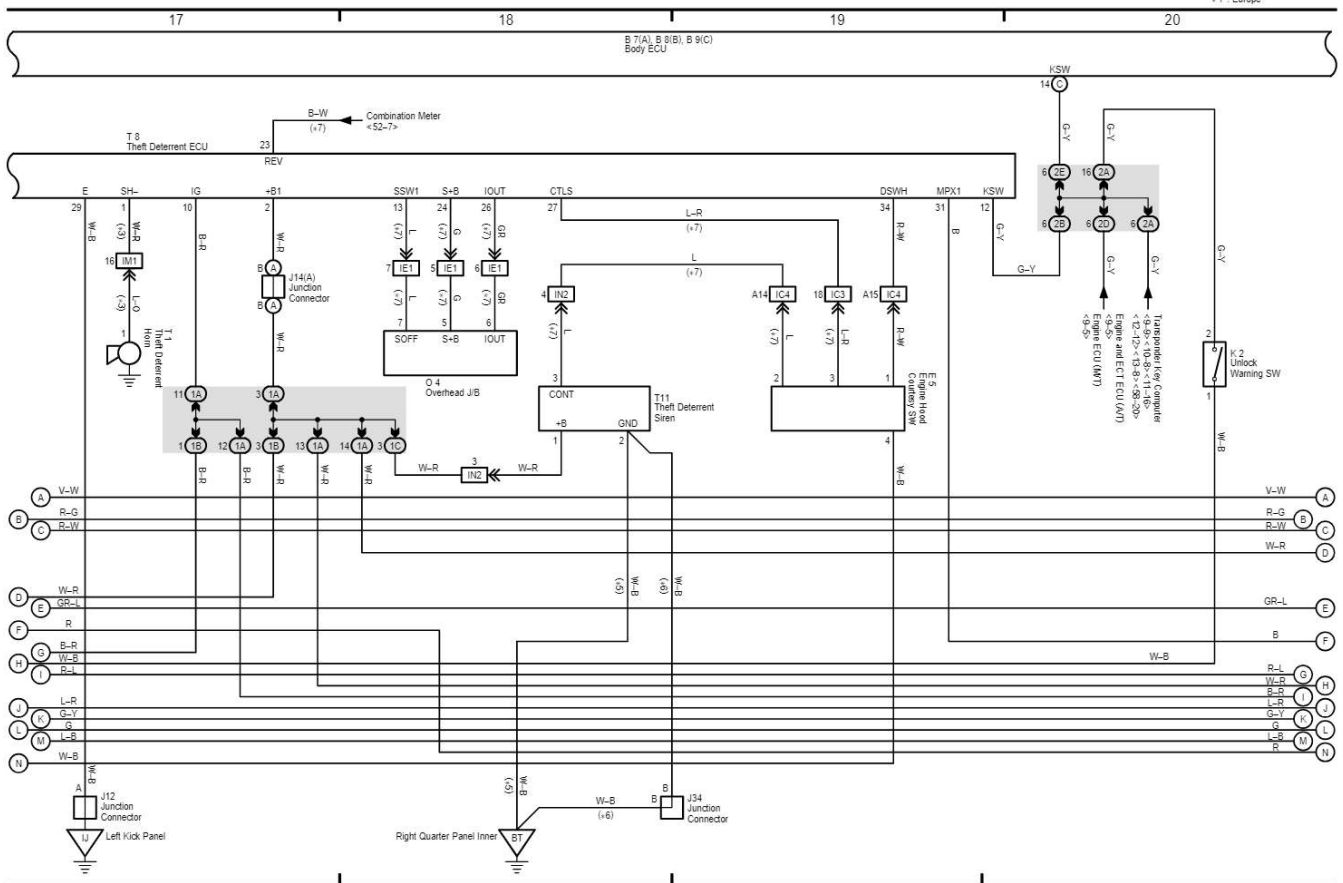






Multiplex Communication System (LHD)

- 3 Except Europe
- 5 3-Door
- 6 S-Door
- 7 Europe

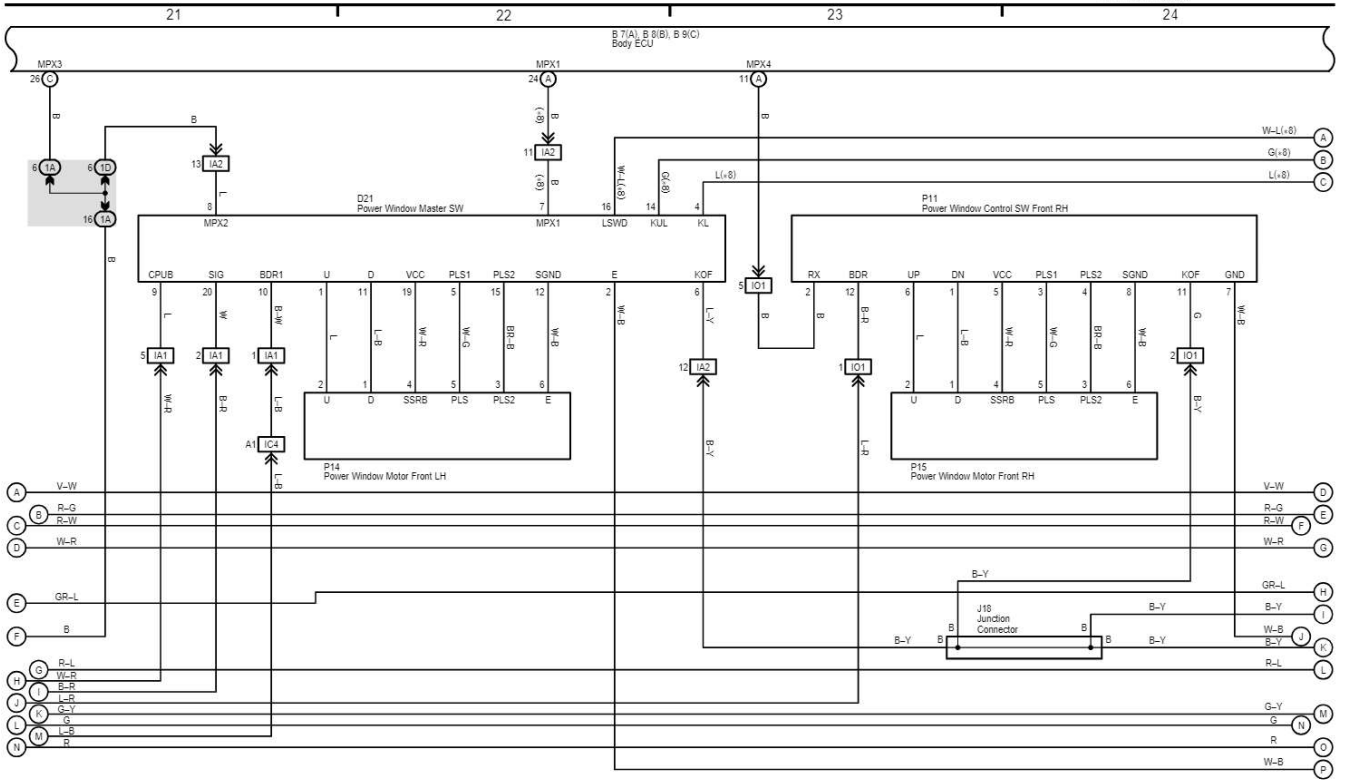


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



Multiplex Communication System (LHD)

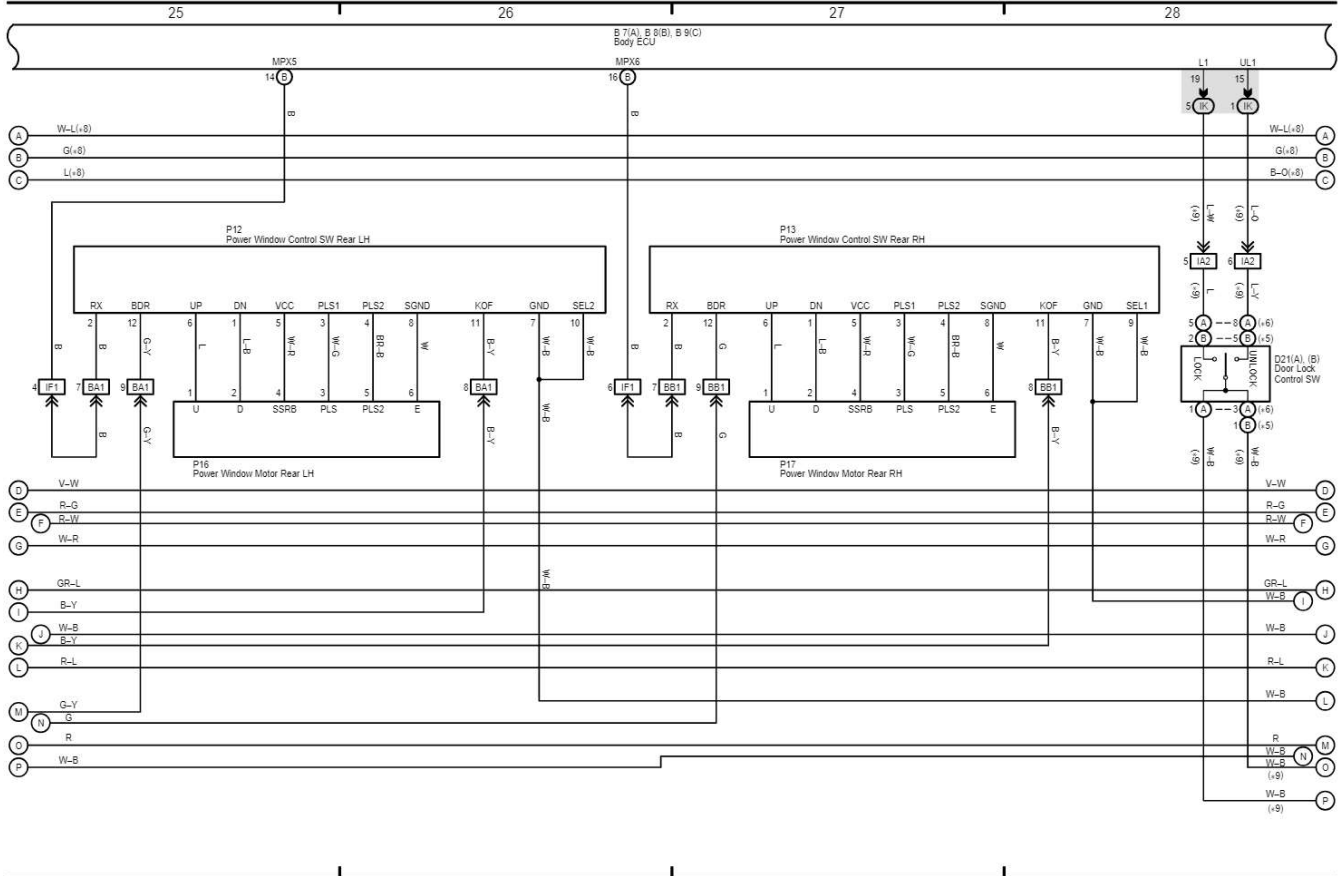
\* 8 : w/ Jam Protection



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Multiplex Communication System (LHD)

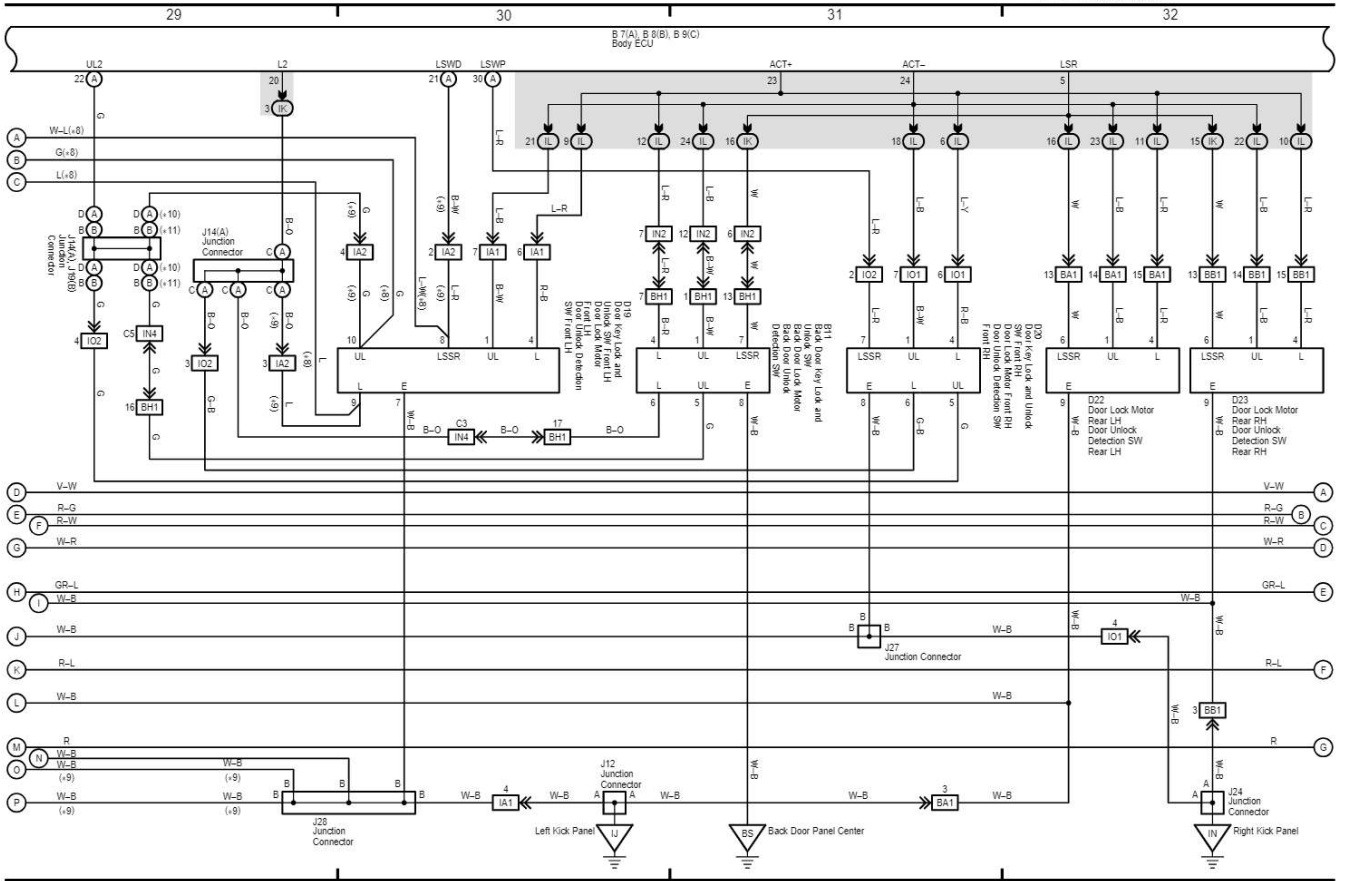
- + 5: 3-Door
- + 6: 5-Door
- + 8: w/ Jam Protection
- + 9: w/o Jam Protection



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Multiplex Communication System (LHD)

- \* 8 : w/ Jam Protection
- \* 9 : w/o Jam Protection
- \* 10 : Except AT w/ Navigation System
- \* 11 : AT w/ Navigation System

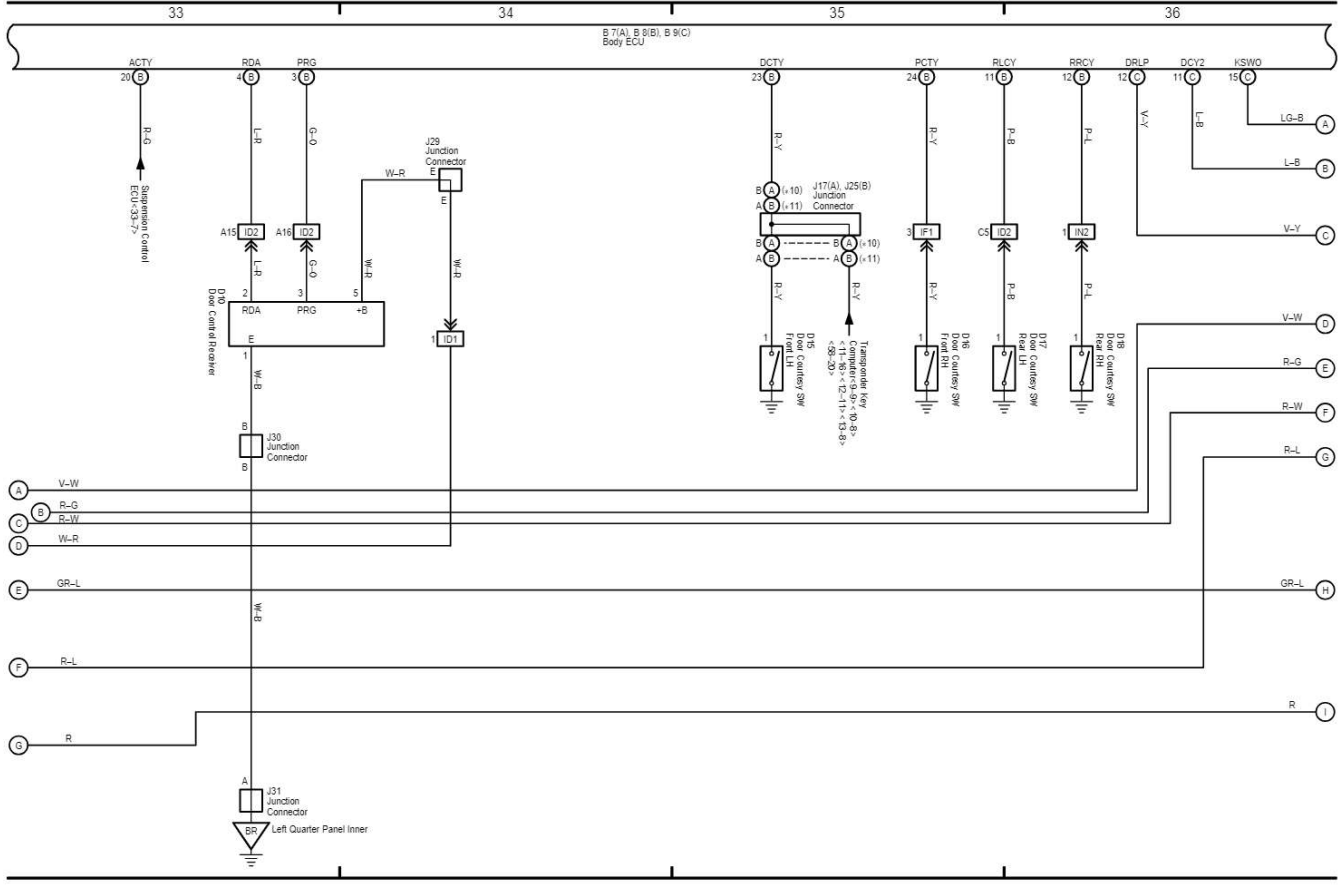


LAND CRUISER / LAND CRUISER PRADO (EWD527E)

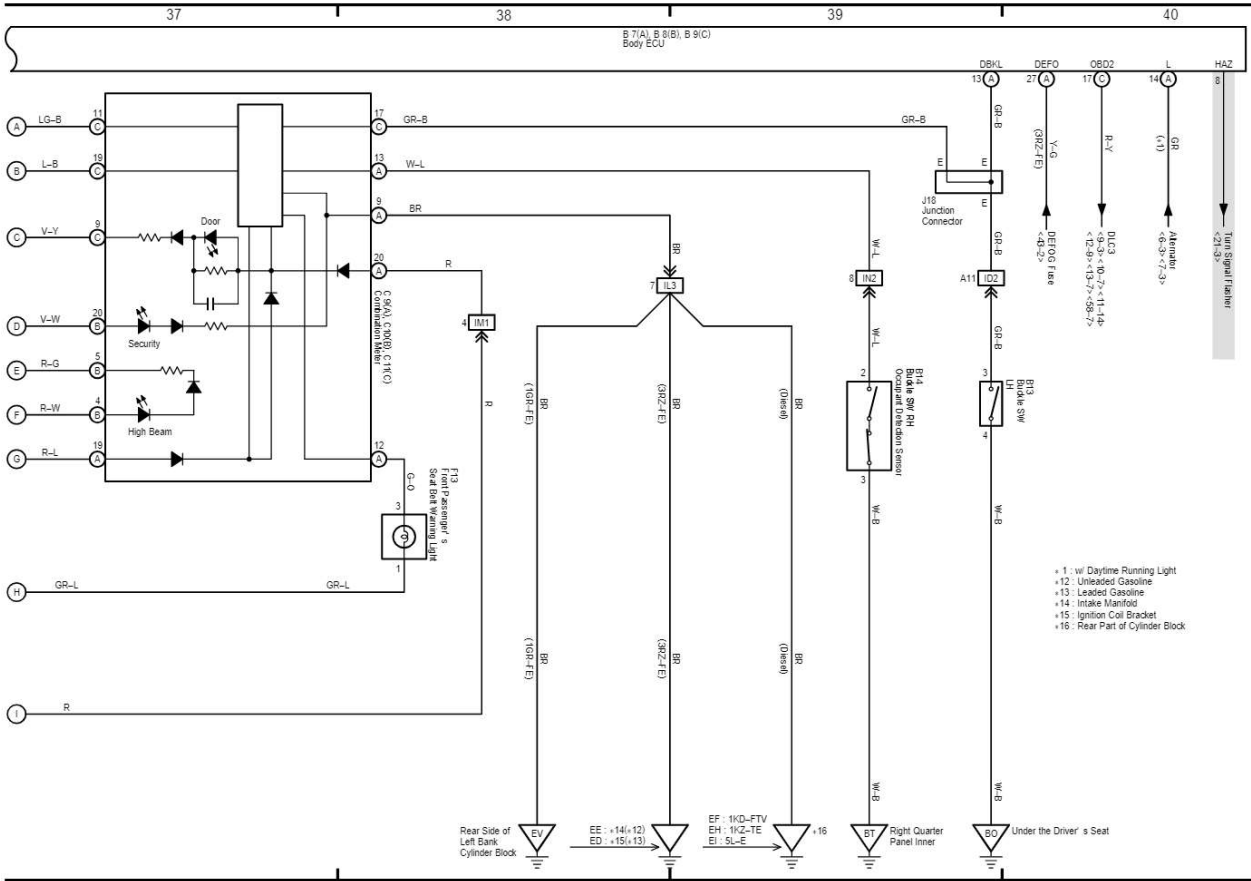
LAND CRUISER / LAND CRUISER PRADO (EWDS27E)

Multiplex Communication System (LHD)

+10 - Except A/T w/ Navigation System  
+11 - A/T w/ Navigation System



Multiplex Communication System (LHD)





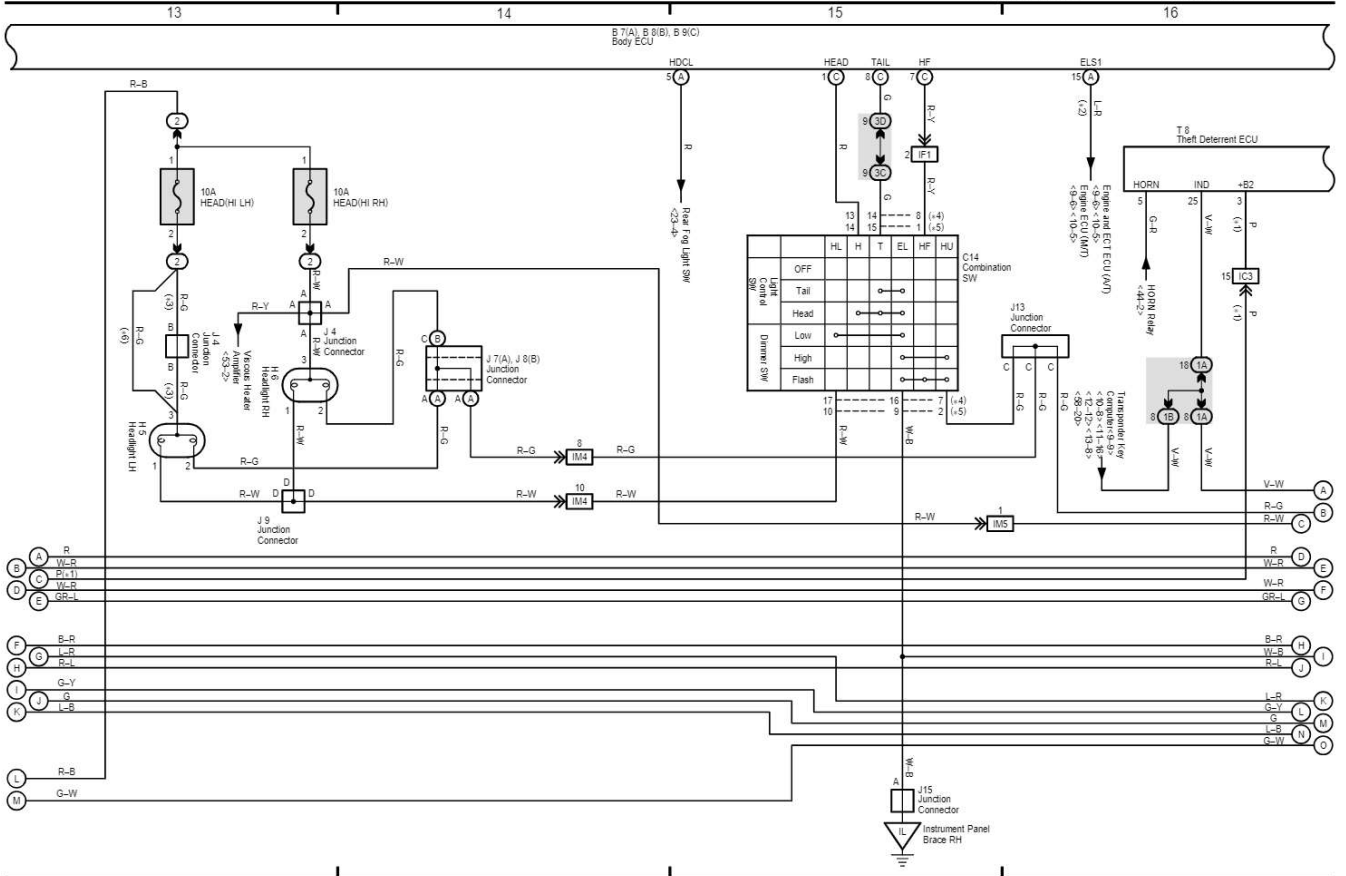






Multiplex Communication System (RHD)

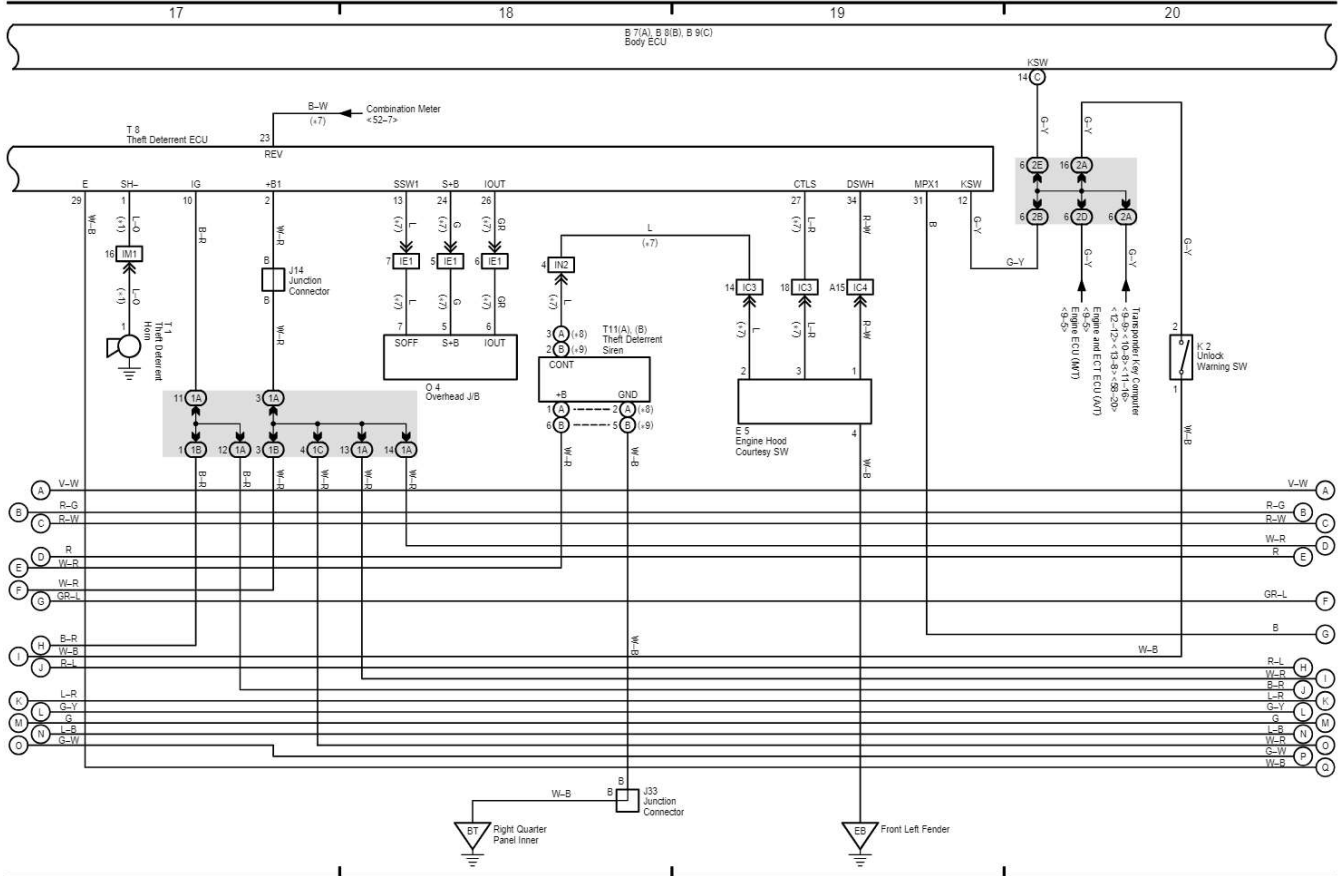
- + 1 : Except Europe
- + 2 : 3RZ-FE
- + 3 : Except 3RZ-FE, 5L-E
- + 4 : LH Turn Lever Type
- + 5 : RH Turn Lever Type
- + 6 : 3RZ-FE, 5L-E



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

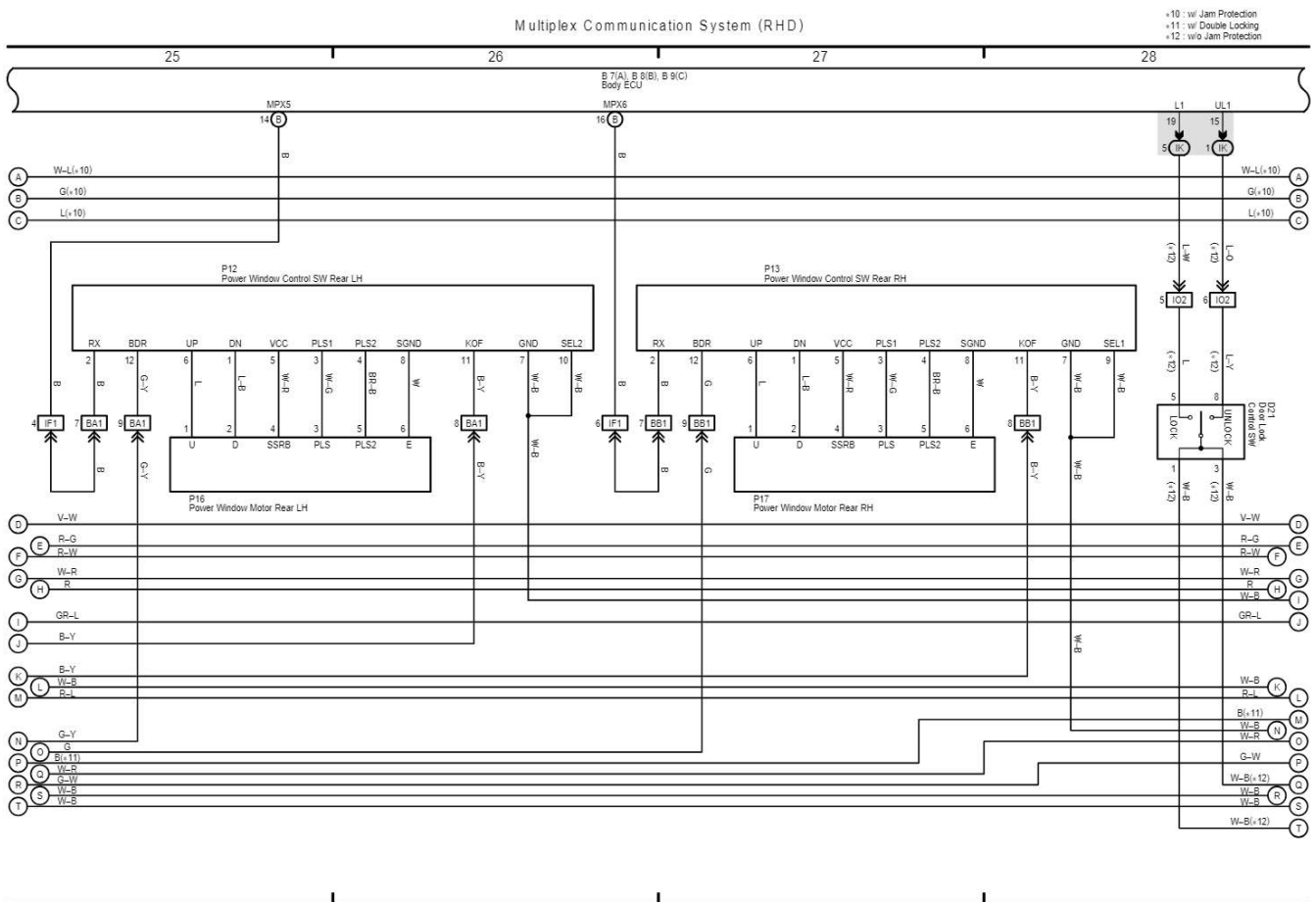
Multiplex Communication System (RHD)

- 1 Except Europe
- 7 Europe
- 8 3-Door
- 9 5-Door



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

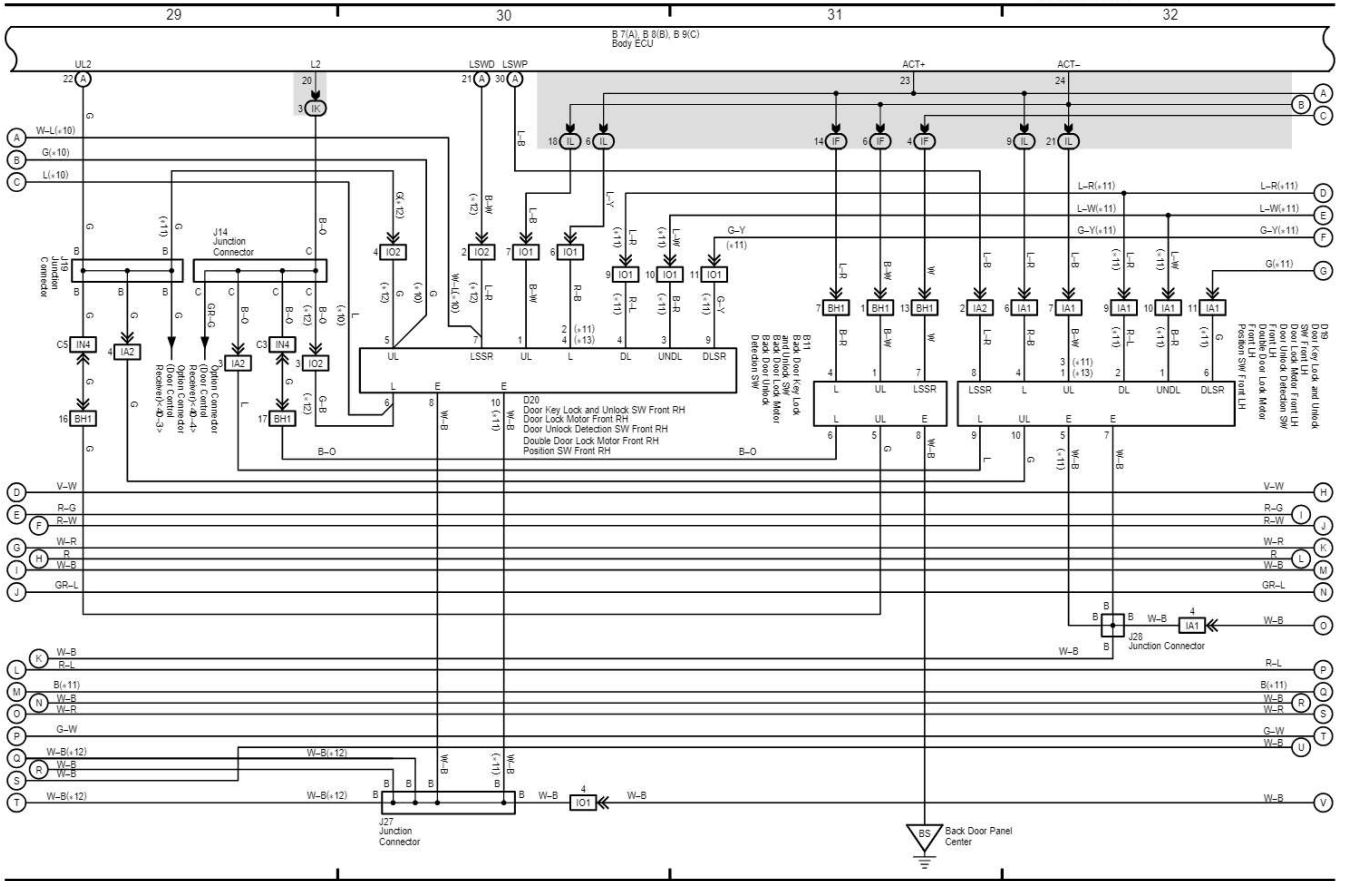




LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Multiplex Communication System (RHD)

- +10 : w/ Jam Protection
- +11 : w/ Double Locking
- +12 : w/o Jam Protection
- +13 : w/o Double Locking

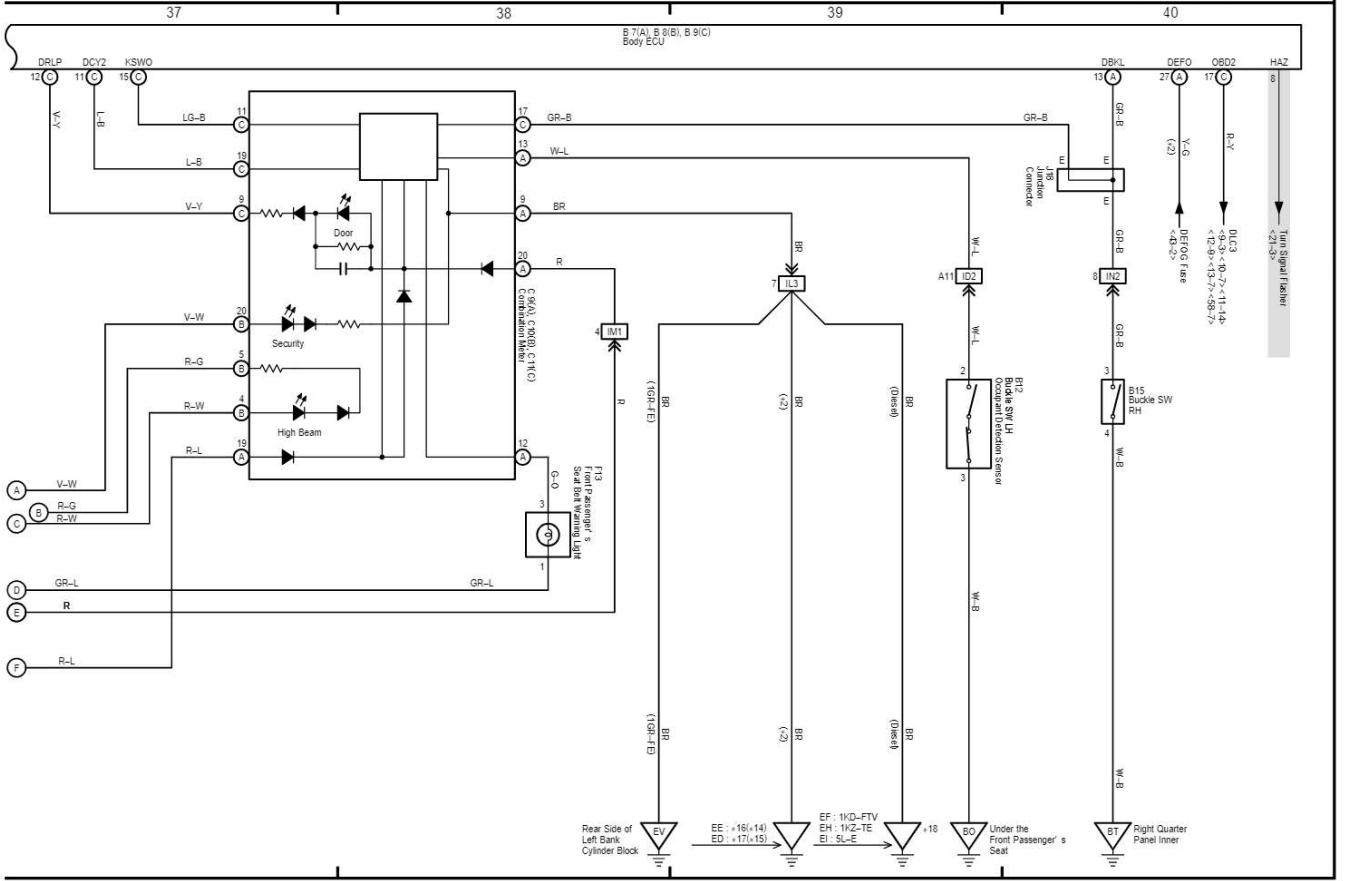


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



Multiplex Communication System (RHD)

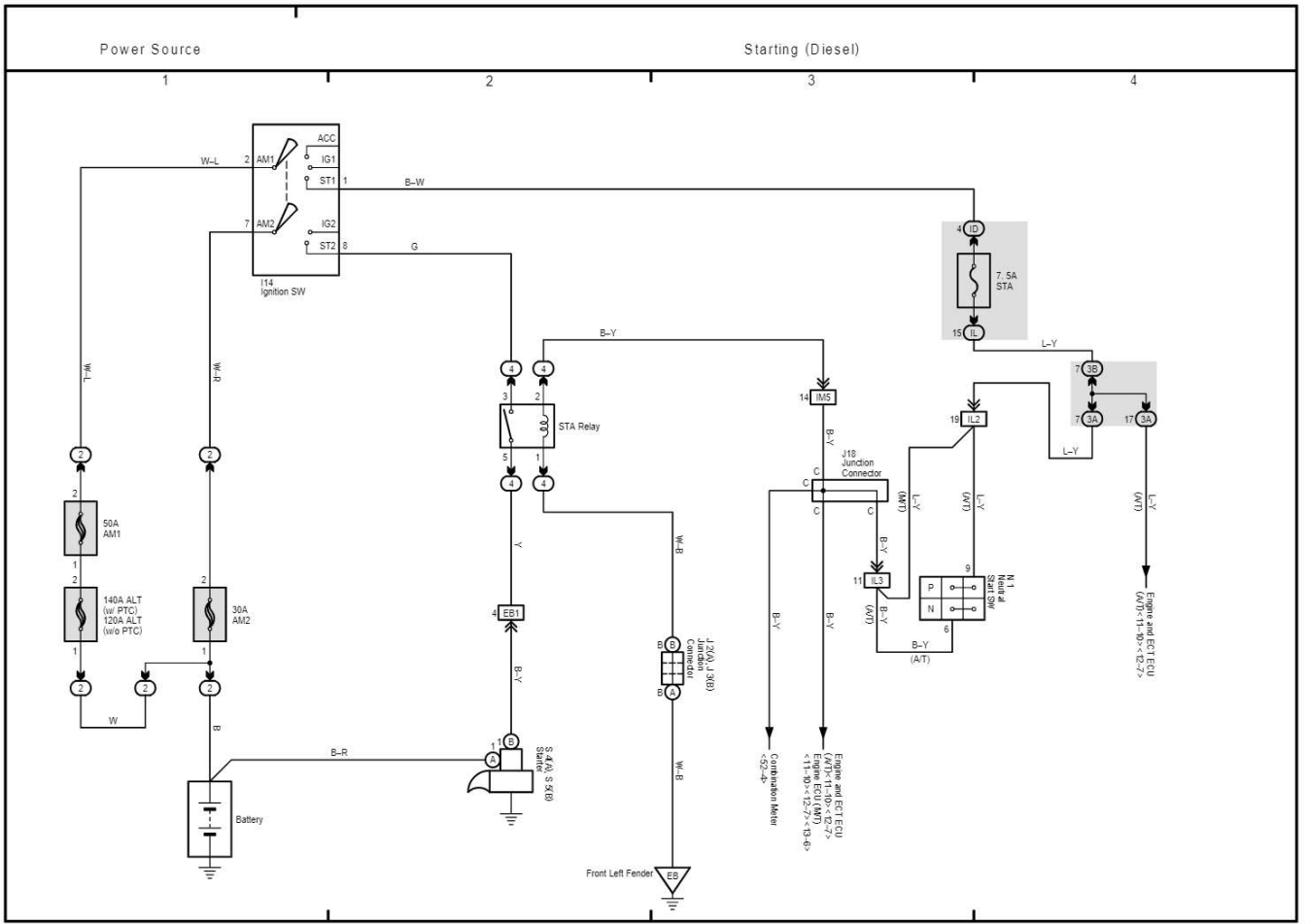
- + 2 : 3RZ-FE
- + 14 : Unleaded Gasoline
- + 15 : Leaded Gasoline
- + 16 : Intake Manifold
- + 17 : Ignition Coil Bracket
- + 18 : Rear Part of Cylinder Block



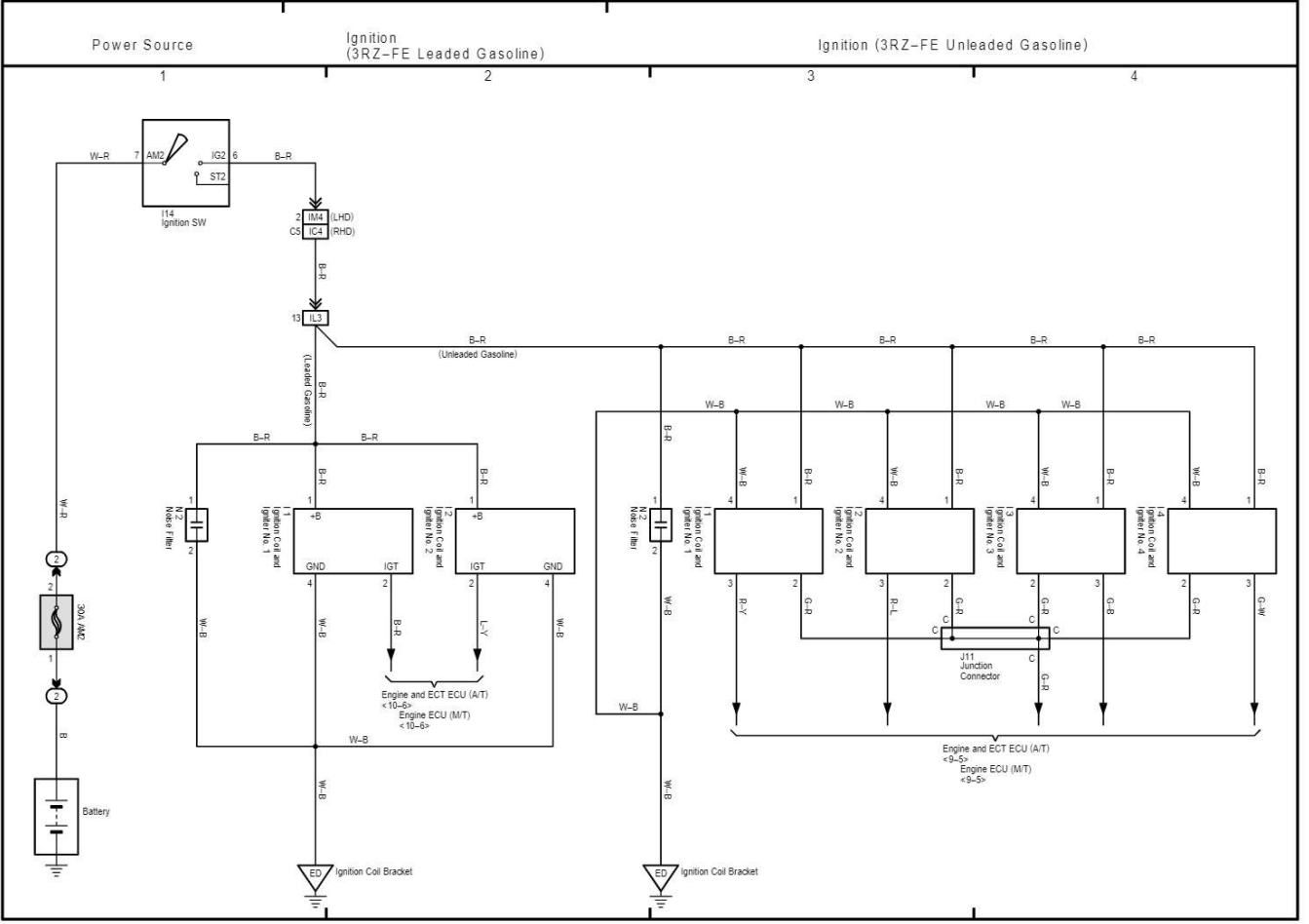
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

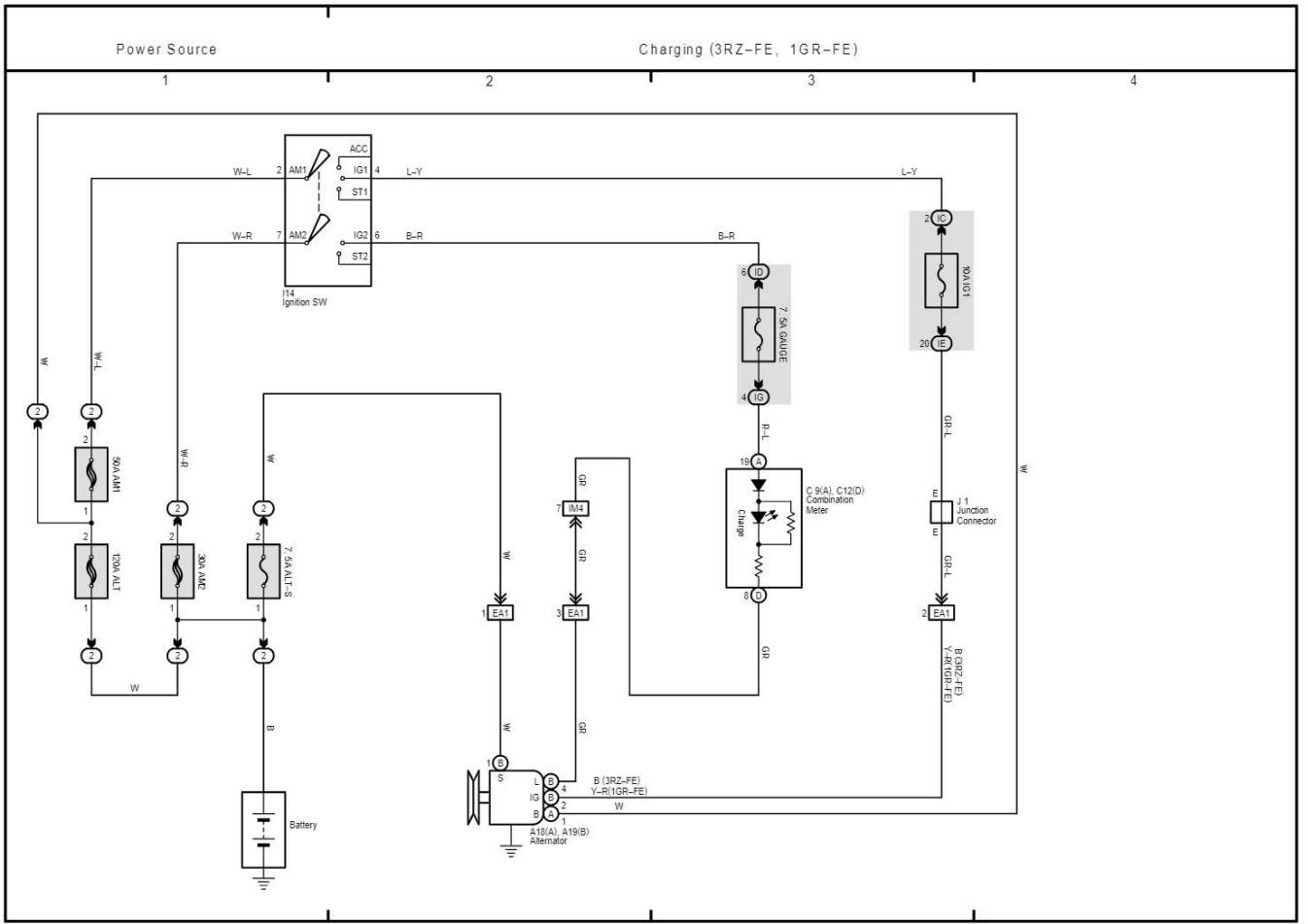




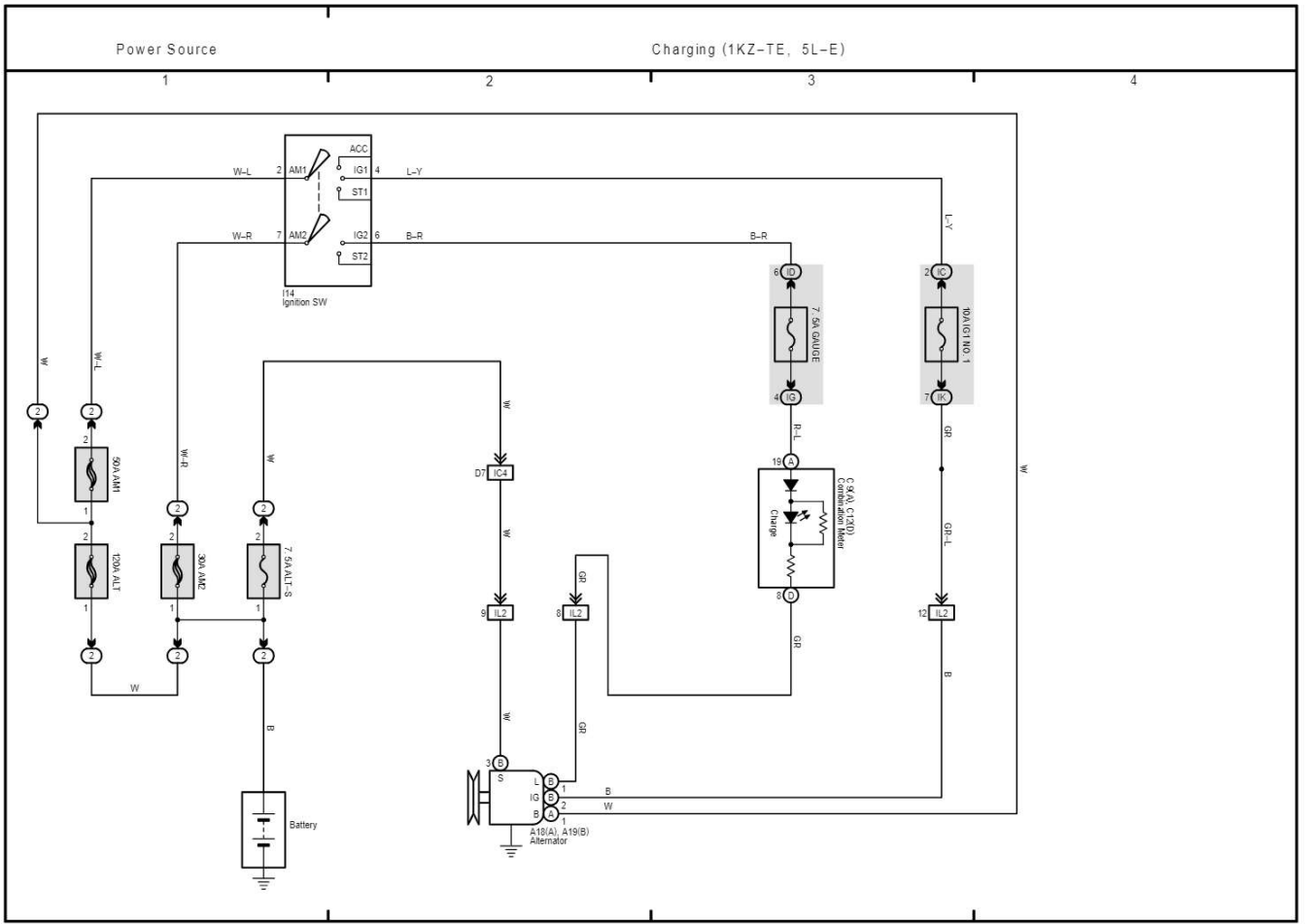


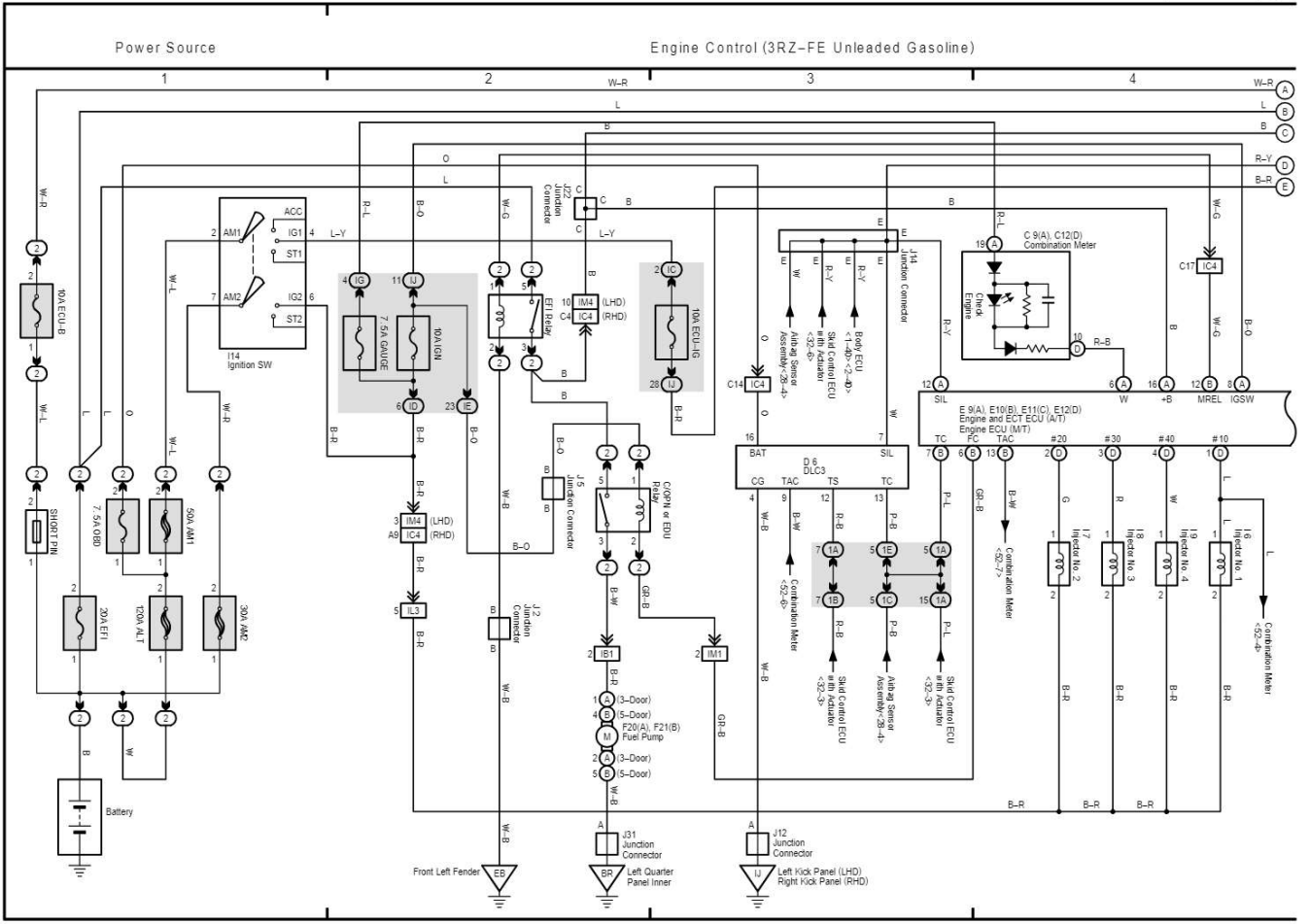
5 LAND CRUISER / LAND CRUISER PRADO







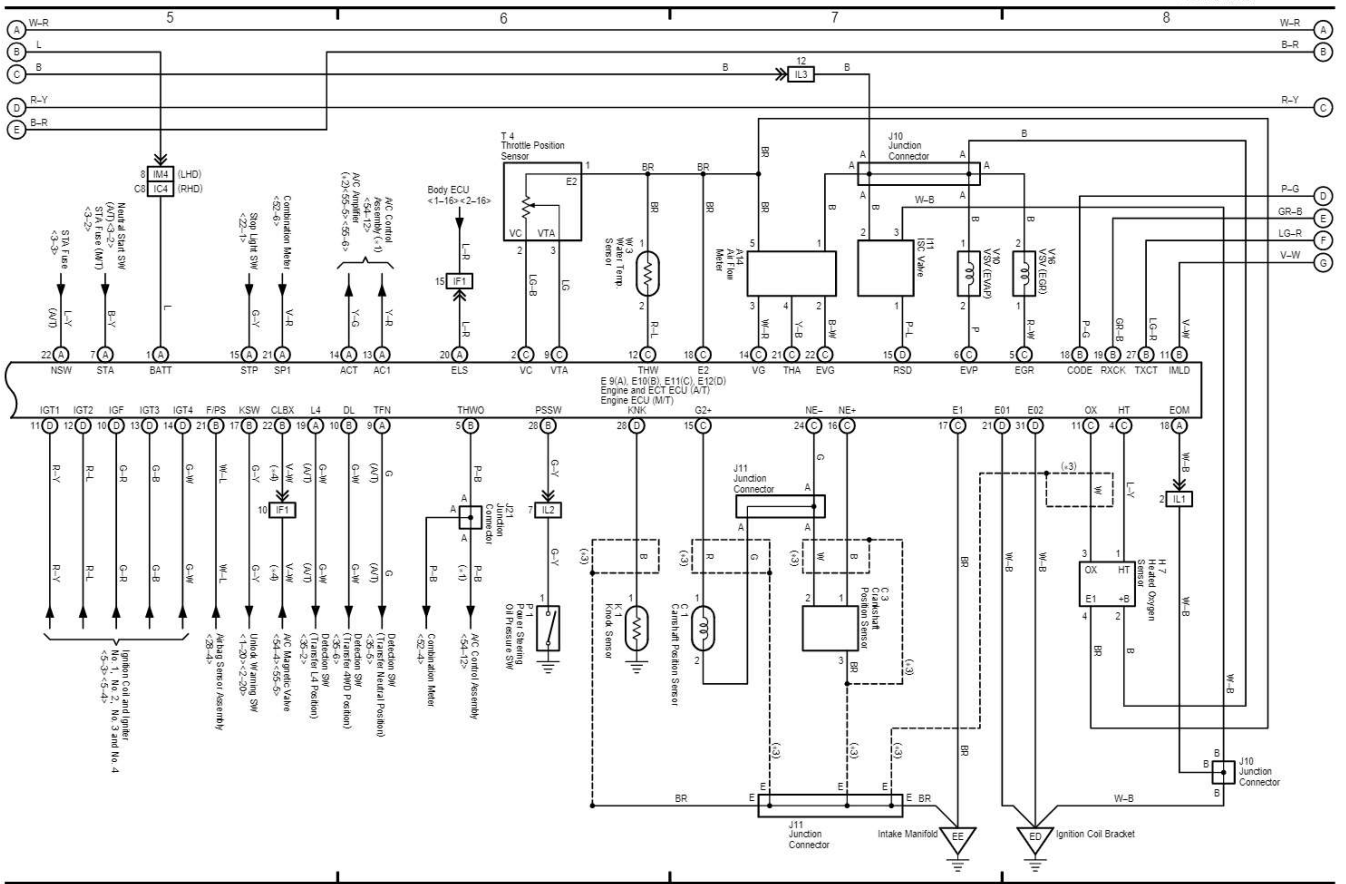




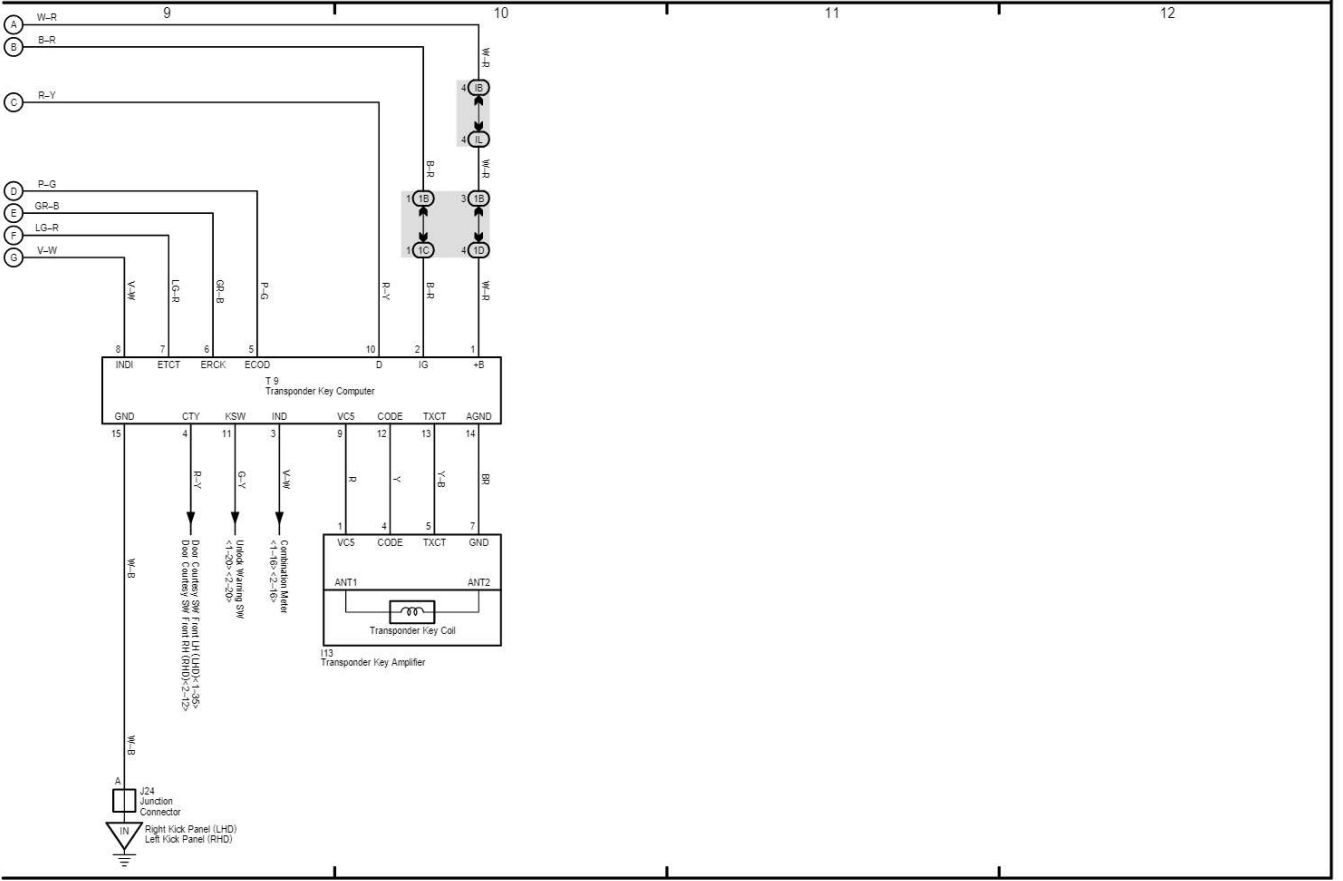
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Engine Control (3RZ-FE Unleaded Gasoline)

- + 1: Automatic A/C
- + 2: Manual A/C
- + 3: Shielded
- + 4: w/ Cooler Box



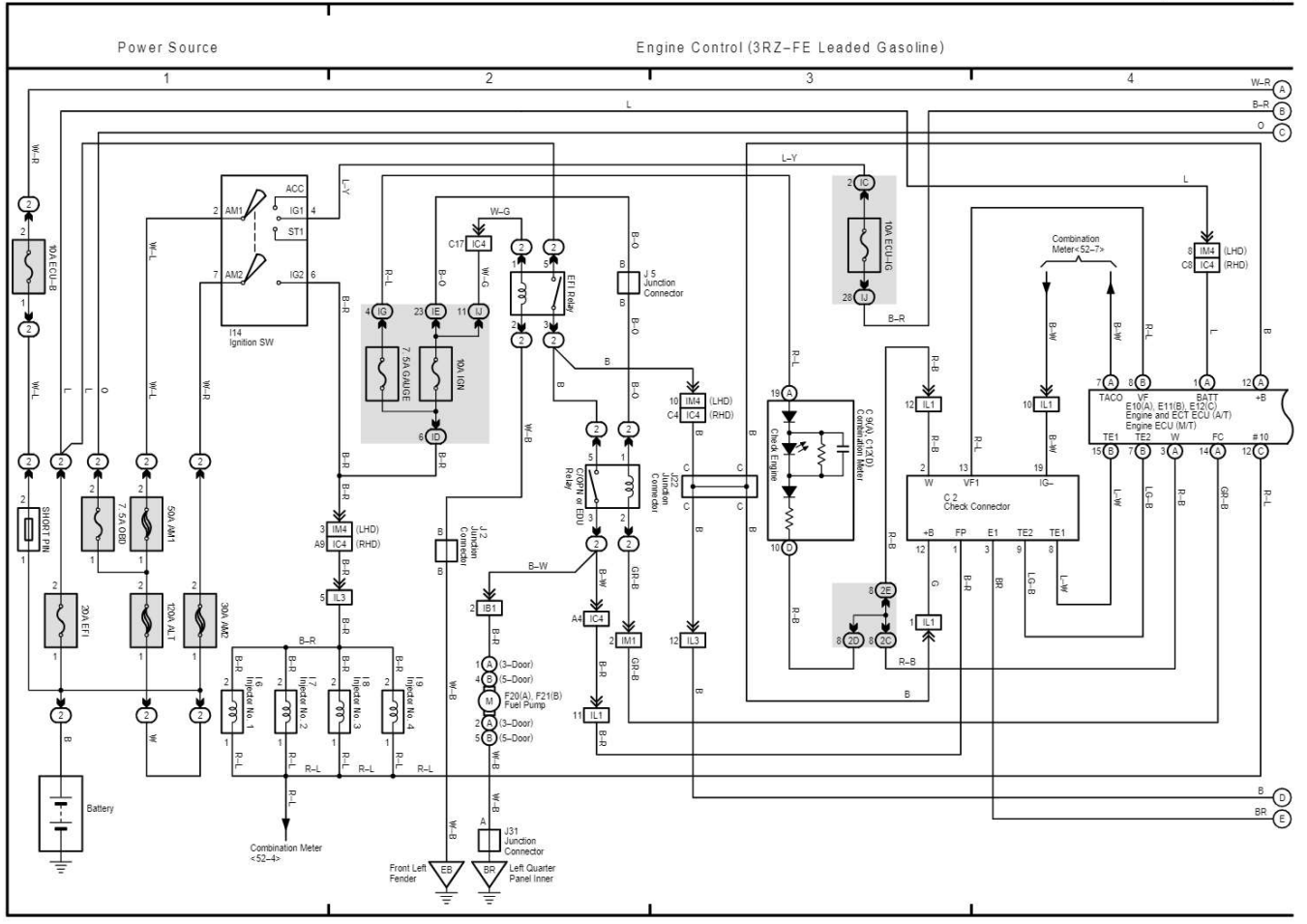
Engine Immobiliser System (3RZ-FE Unleaded Gasoline)



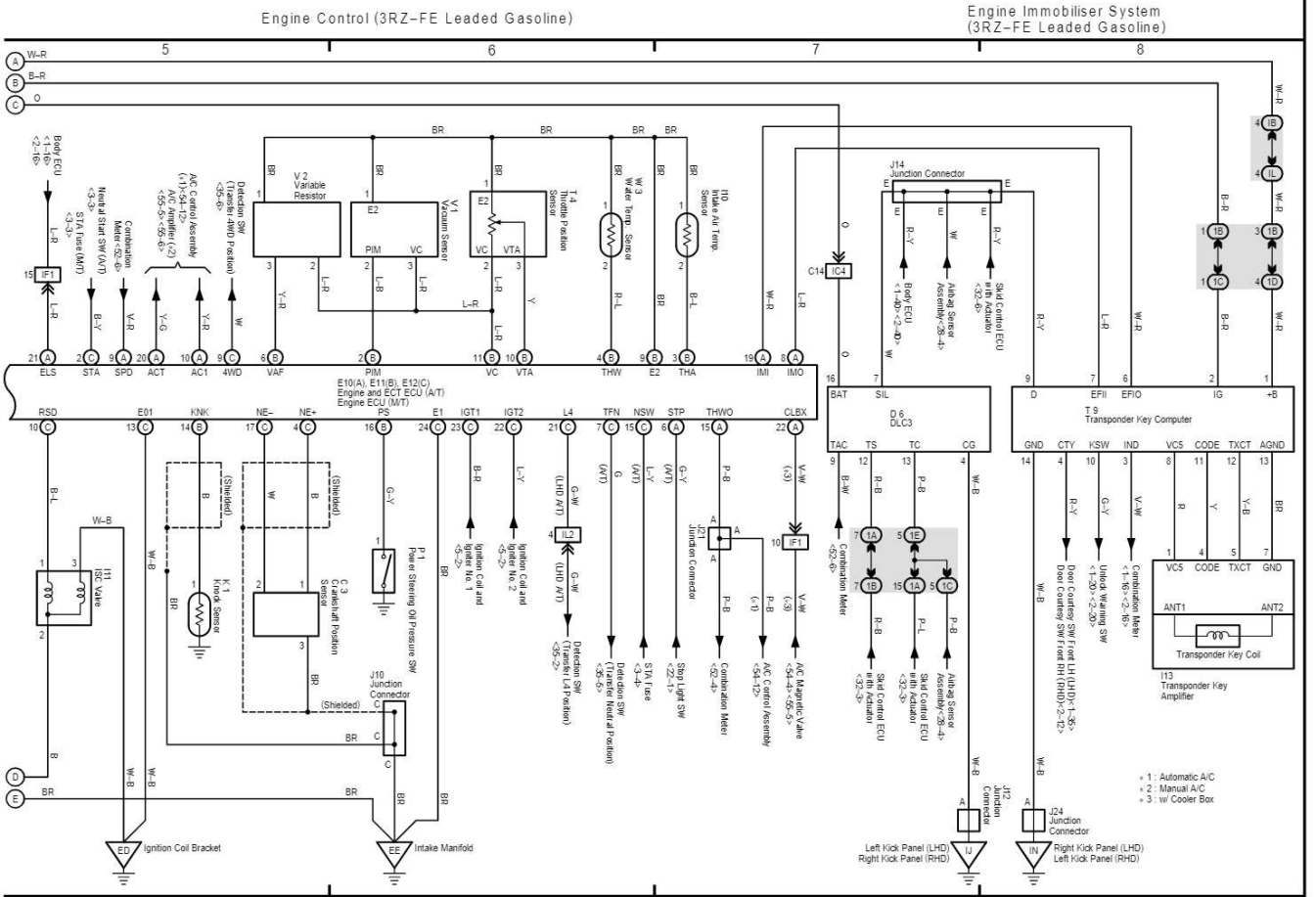


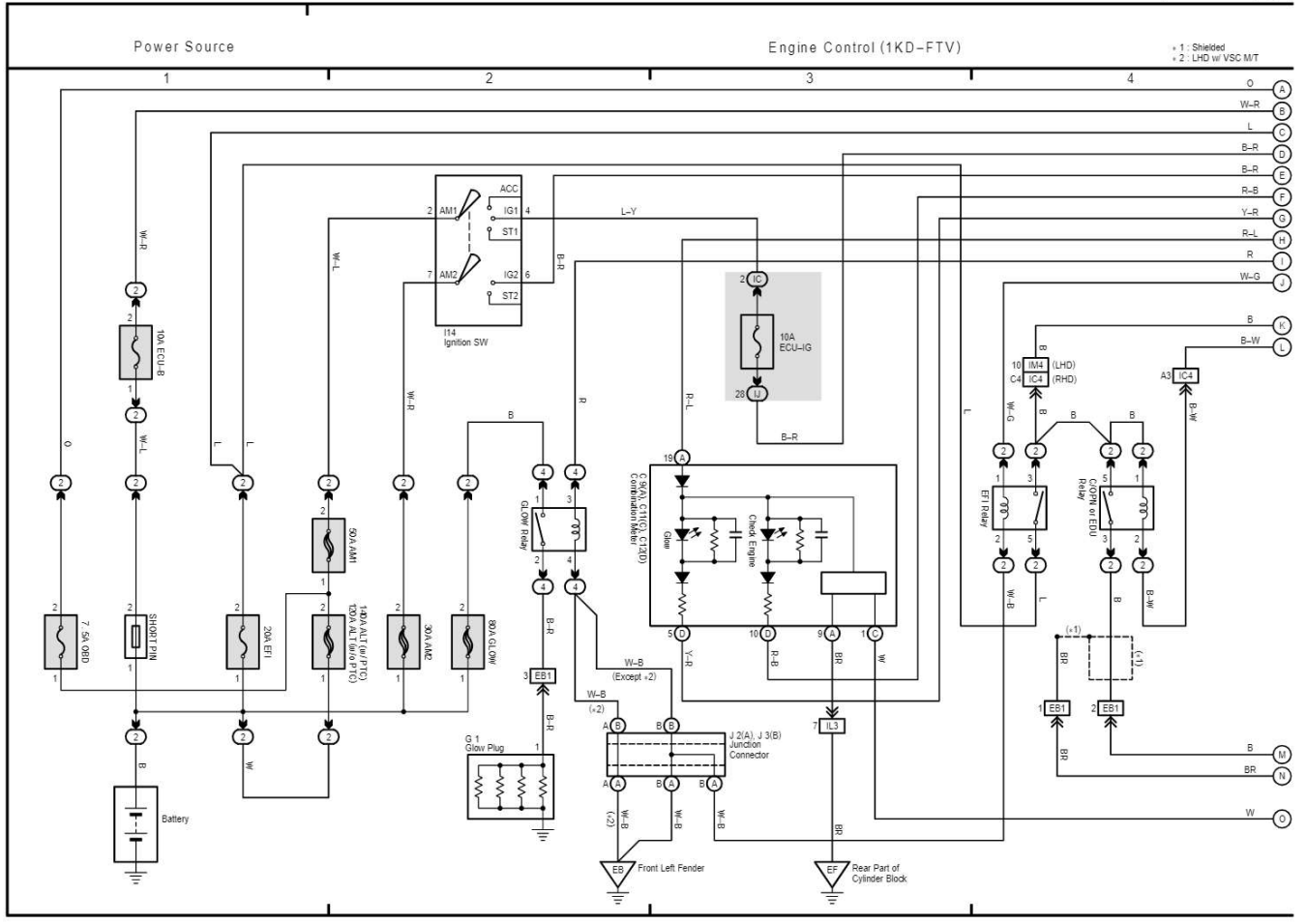
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

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LAND CRUISER / LAND CRUISER PRADO (EWD527E)

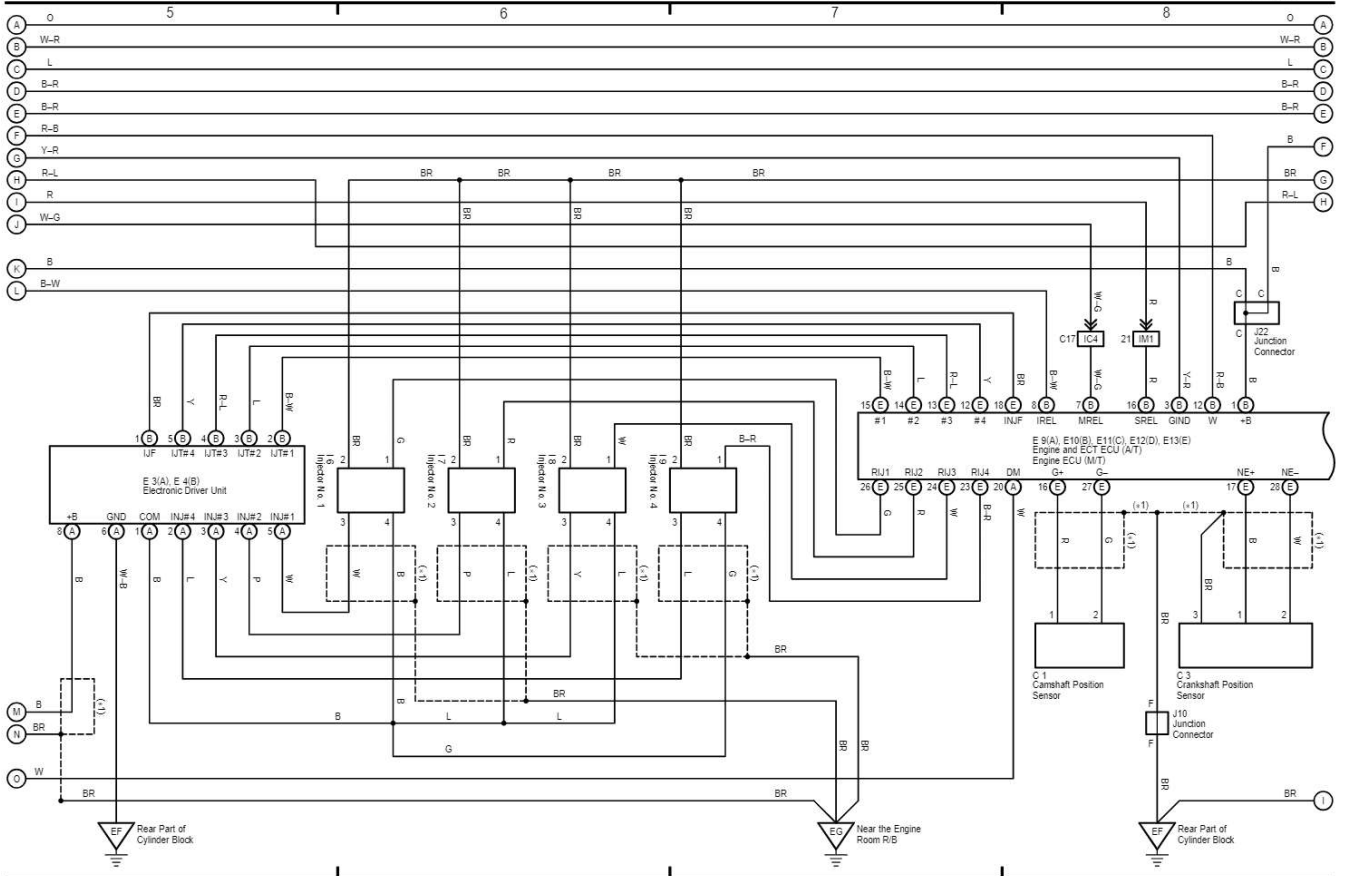




LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Engine Control (1KD-FTV)

\* 1: Shielded



LAND CRUISER / LAND CRUISER PRADO (EWD527E)





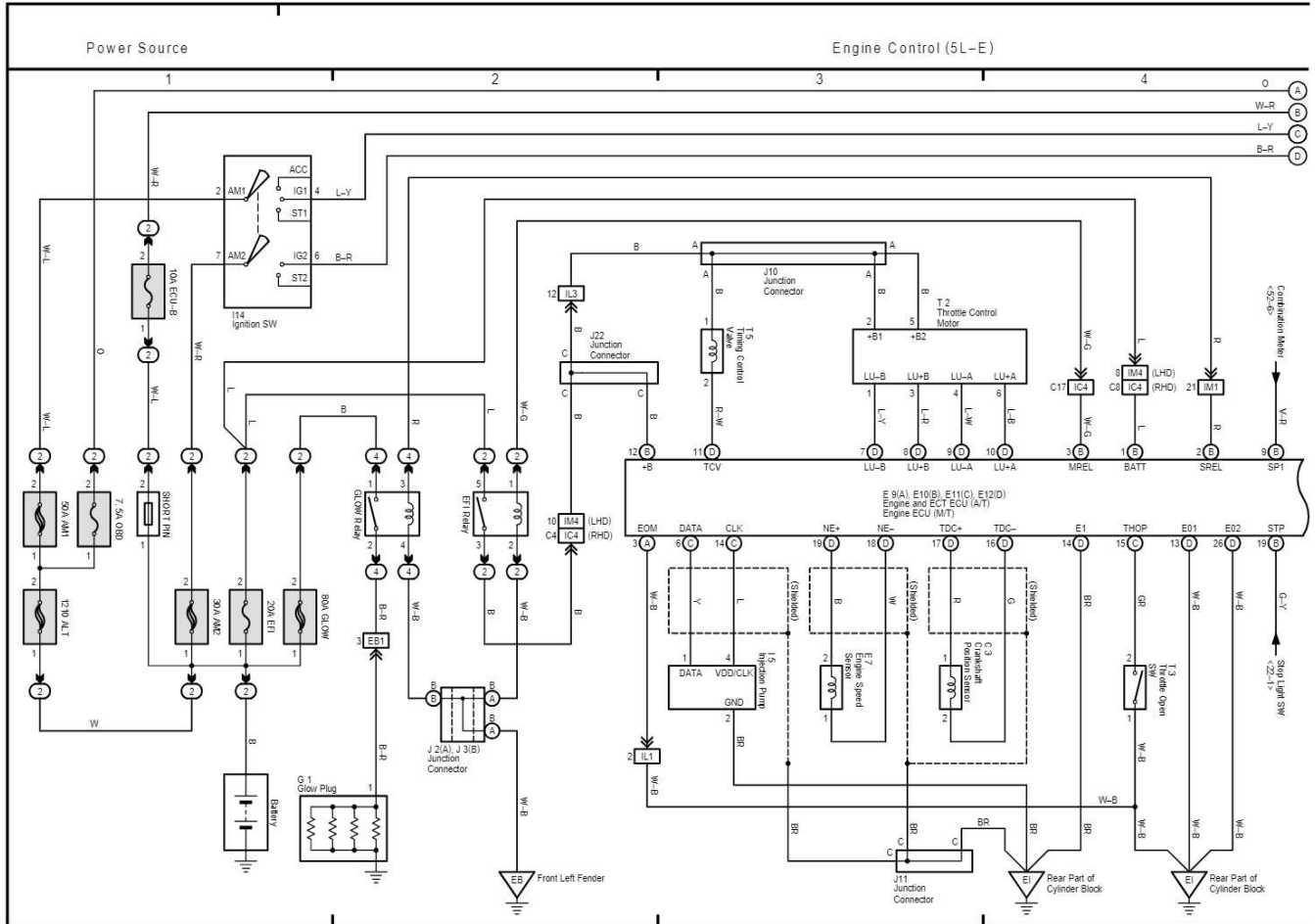
838 LAND CRUISER / LAND CRUISER PRADO (EWD527E)



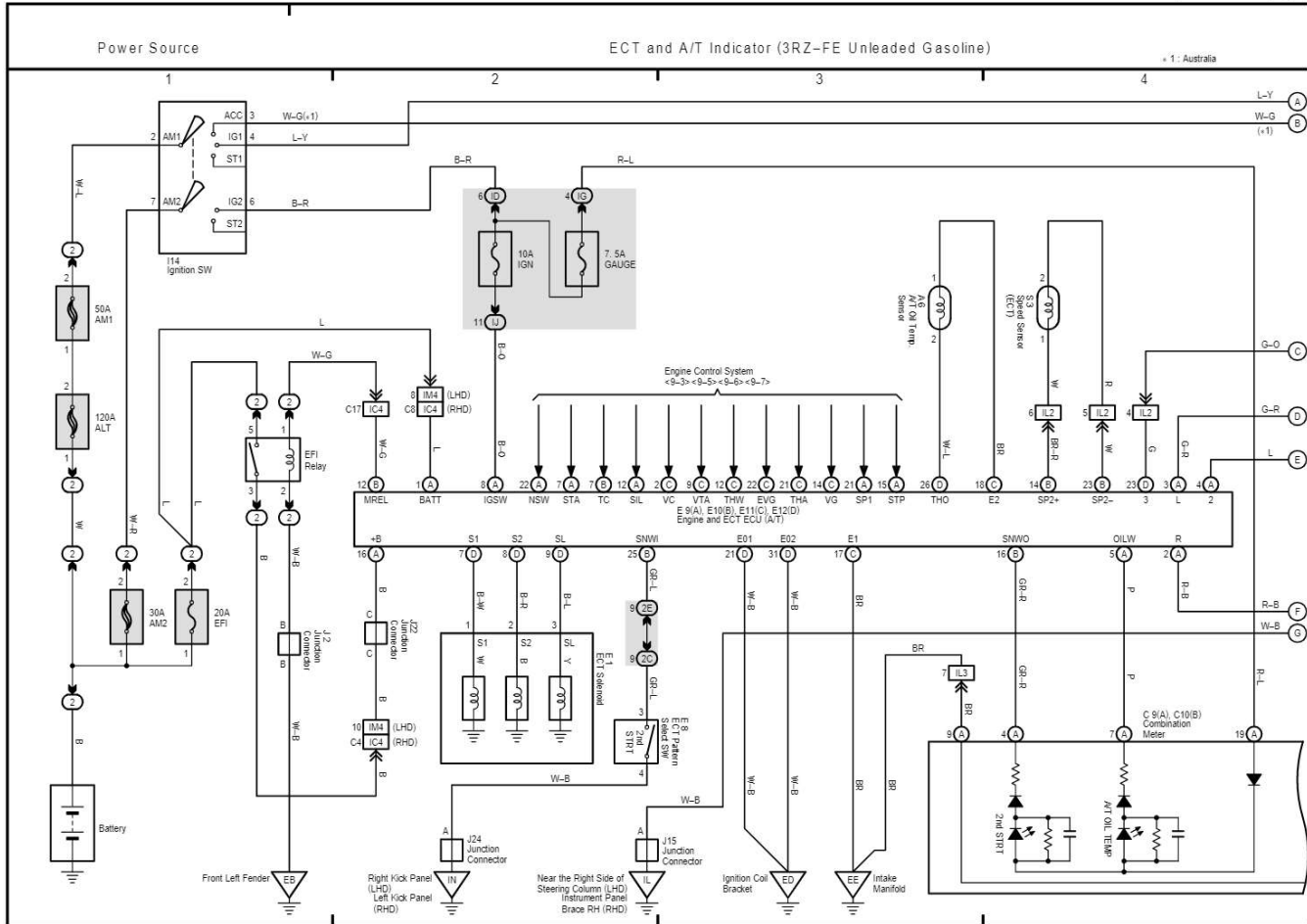








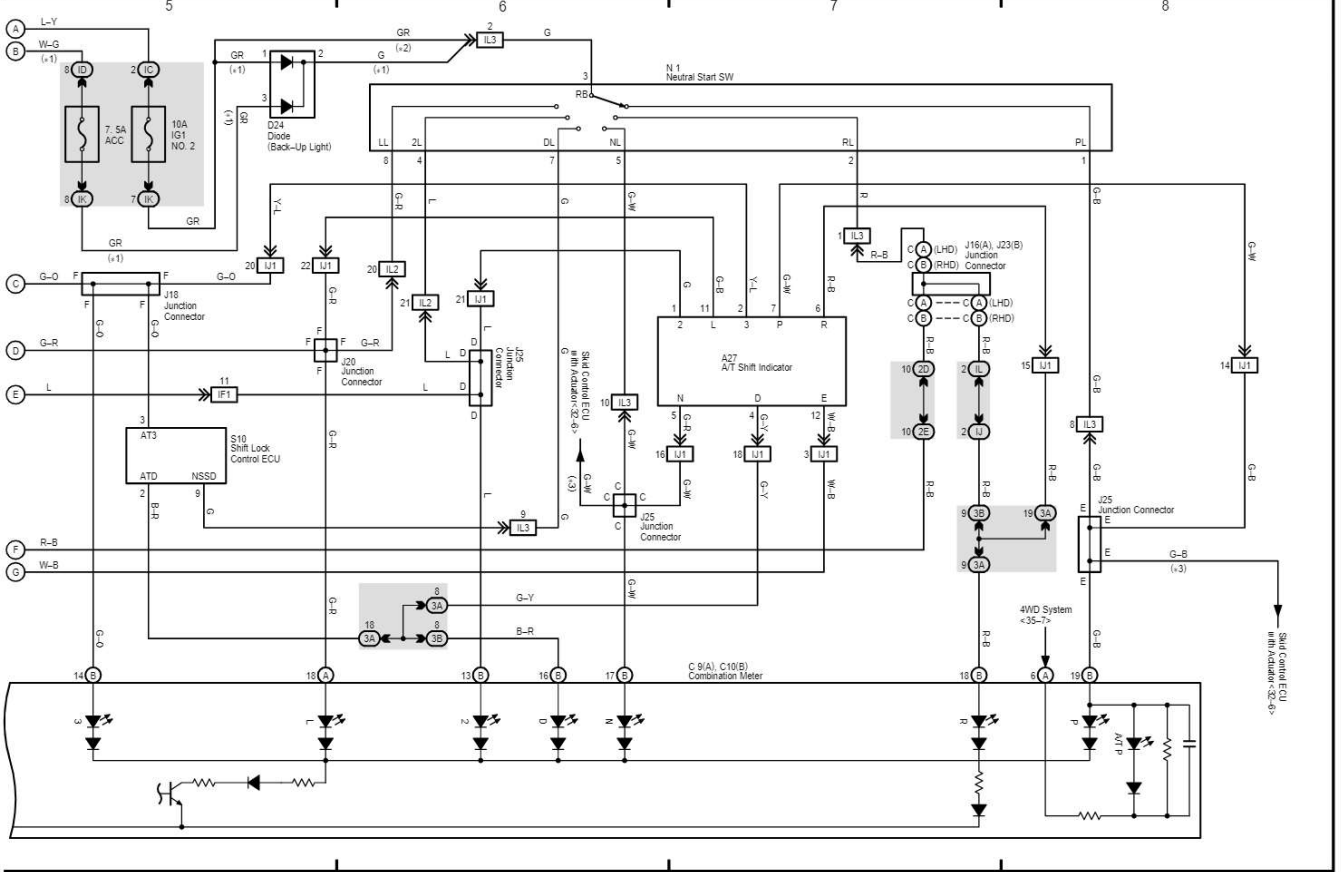




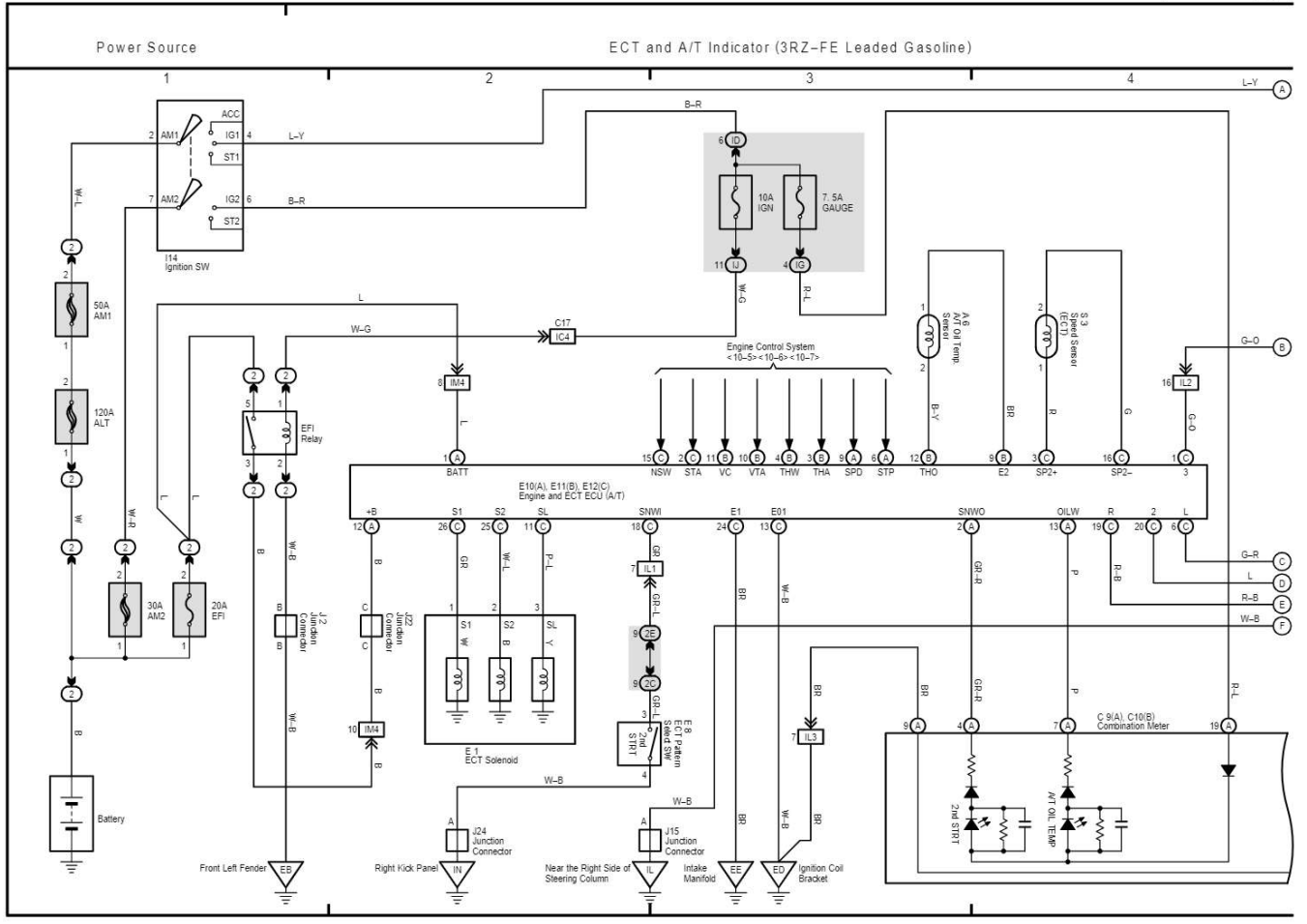
M OVERALL ELECTRICAL WIRING DIAGRAM

ECT and A/T Indicator (3RZ-FE Unleaded Gasoline)

- \* 1 : Australia
- \* 2 : Except Australia
- \* 3 : w/ ABS



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

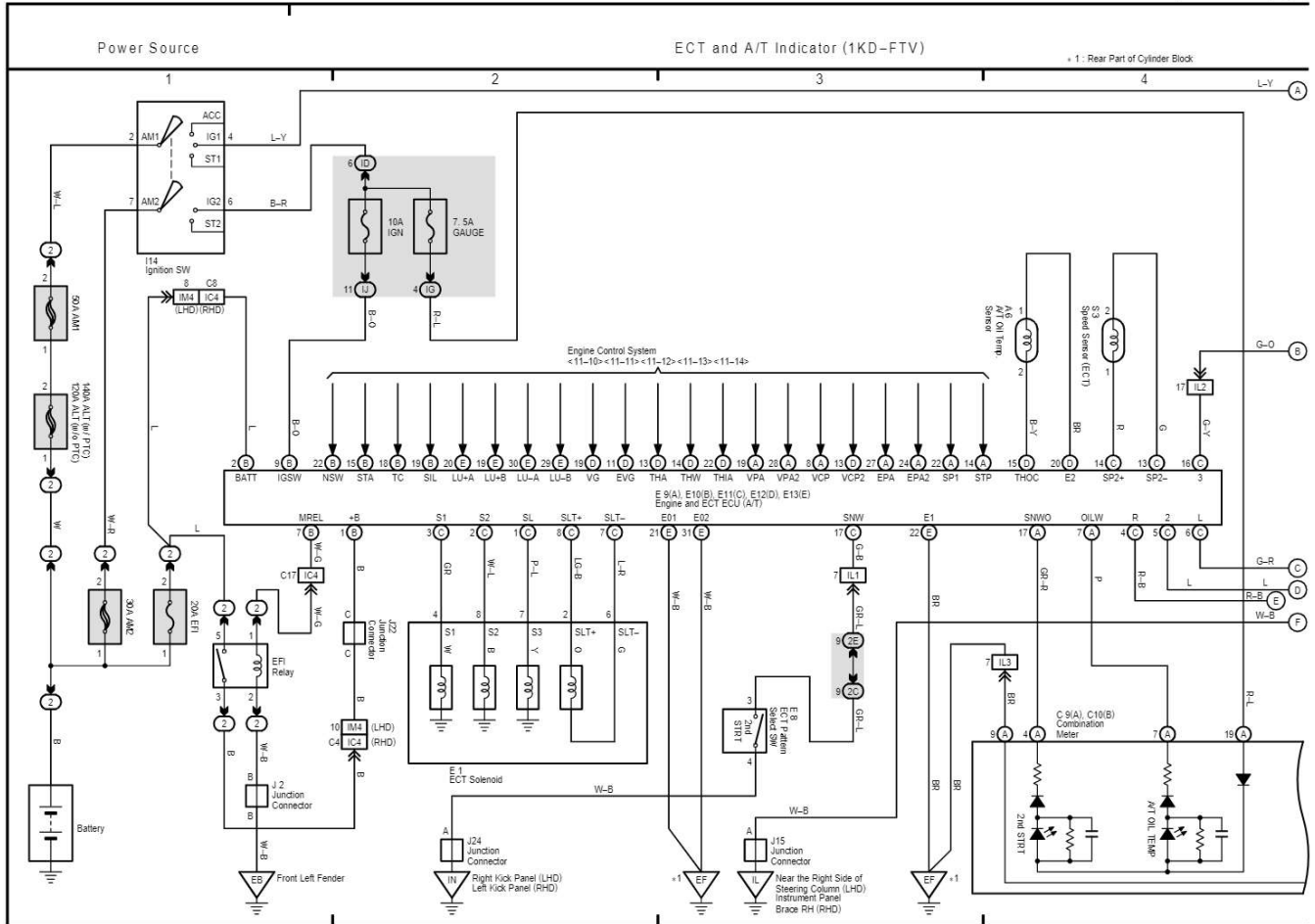


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



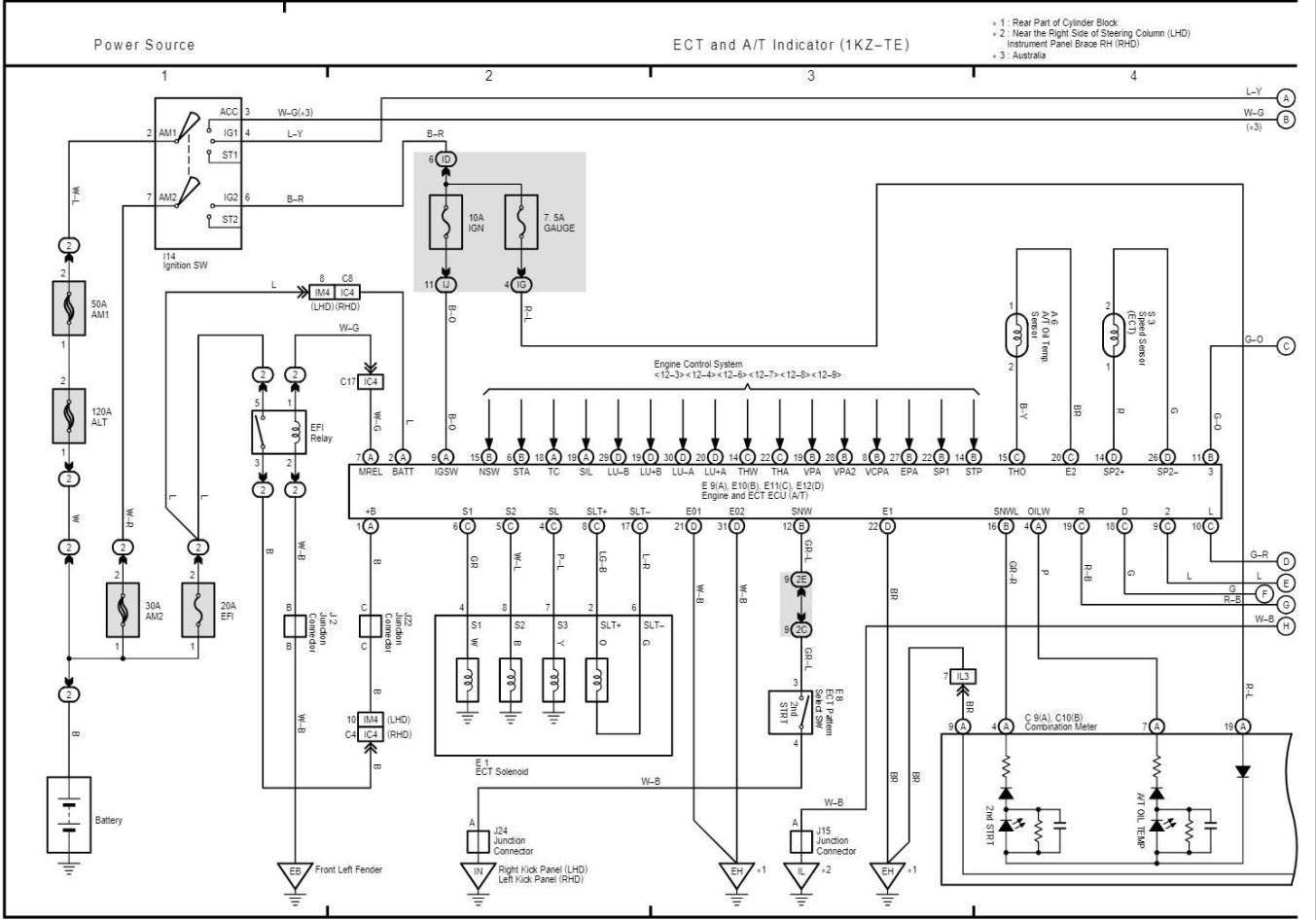


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



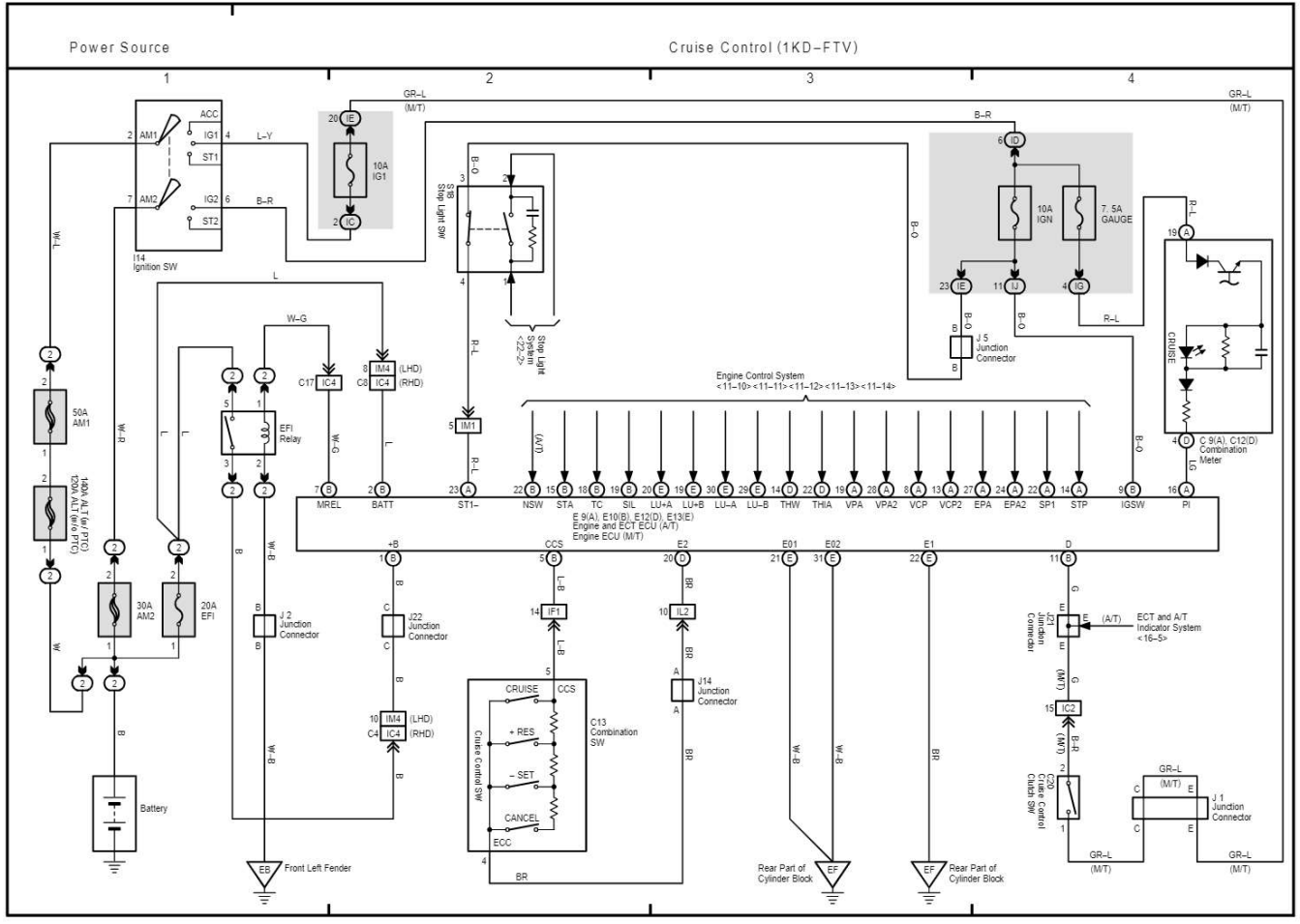


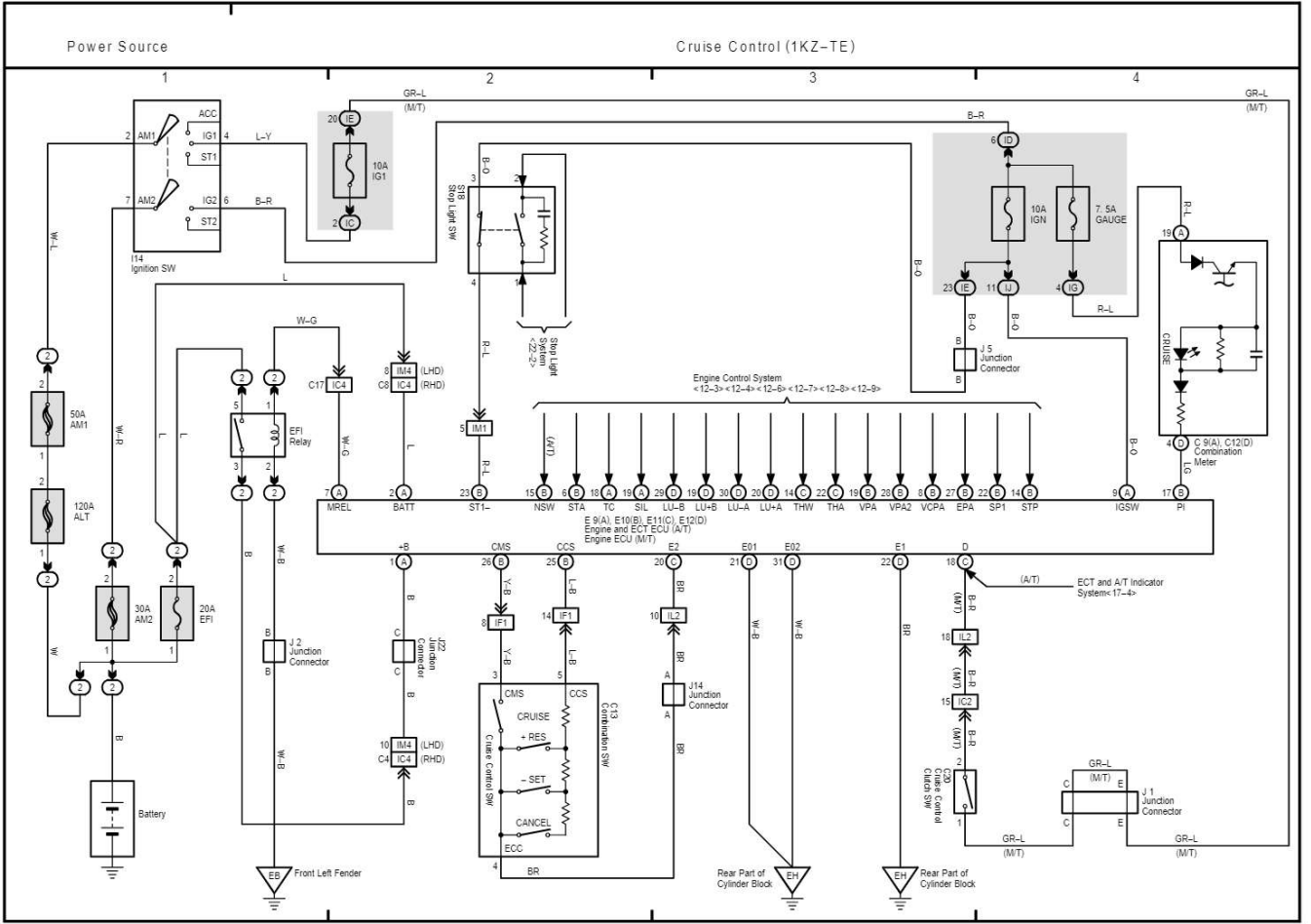
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

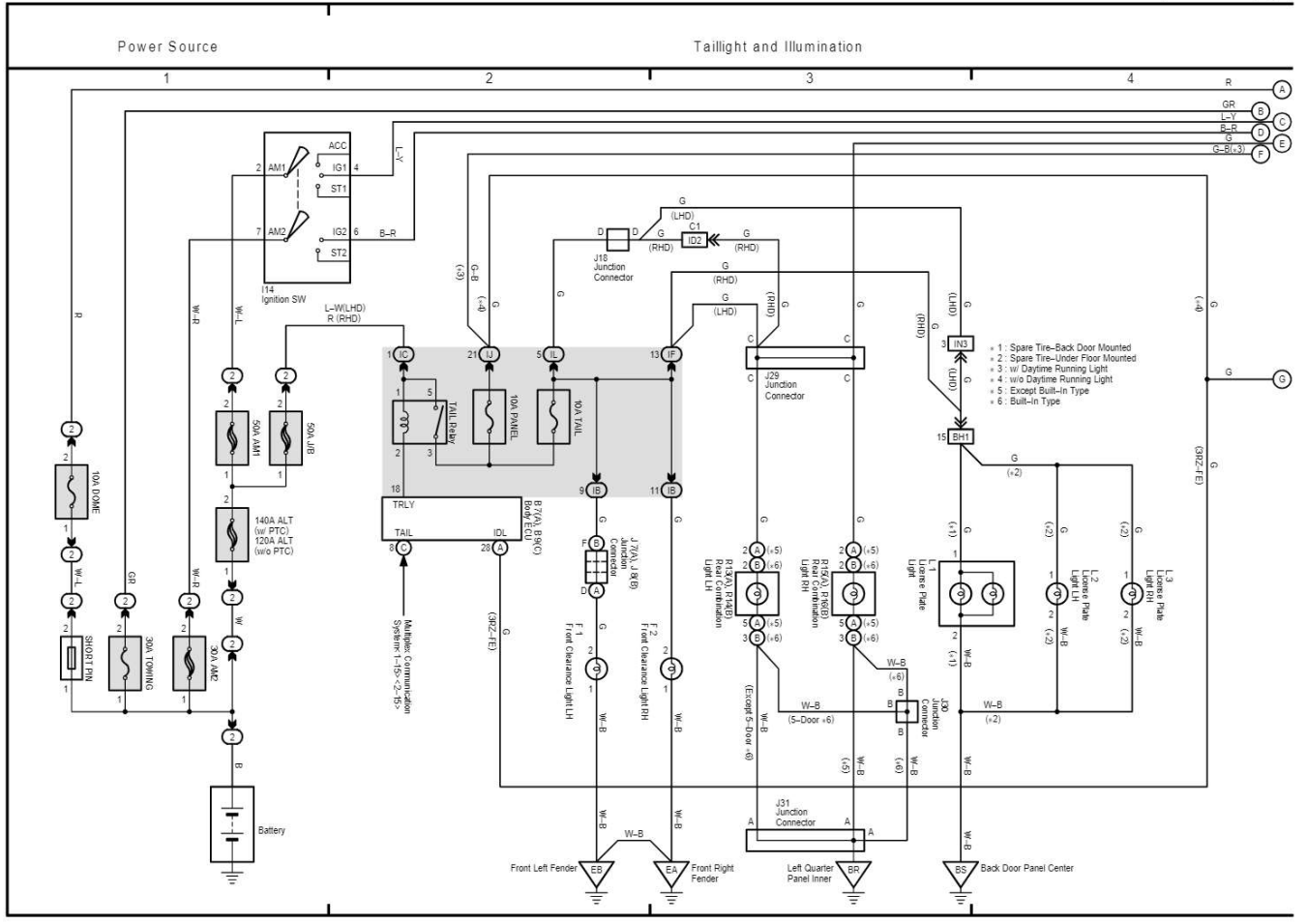




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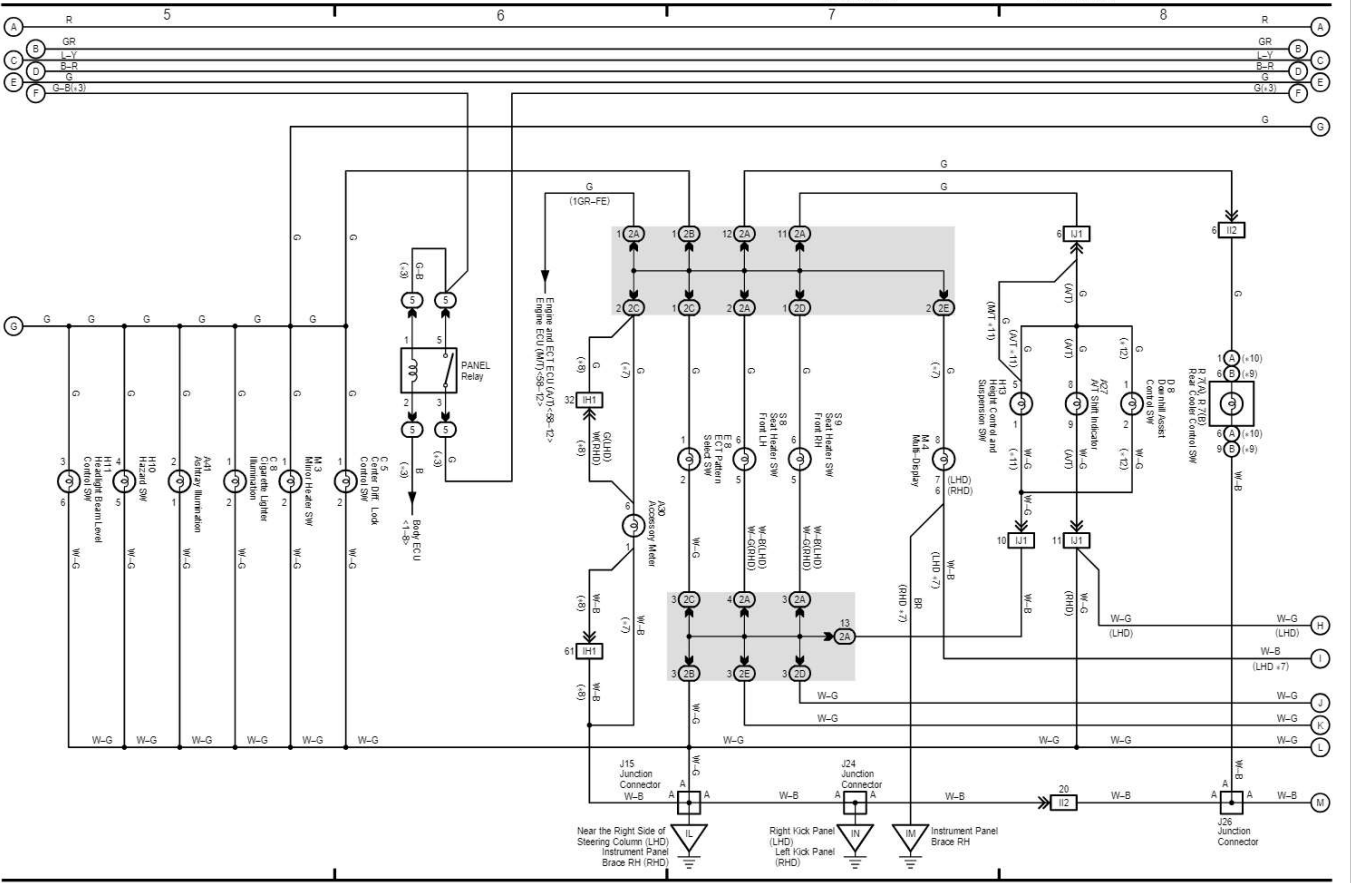


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



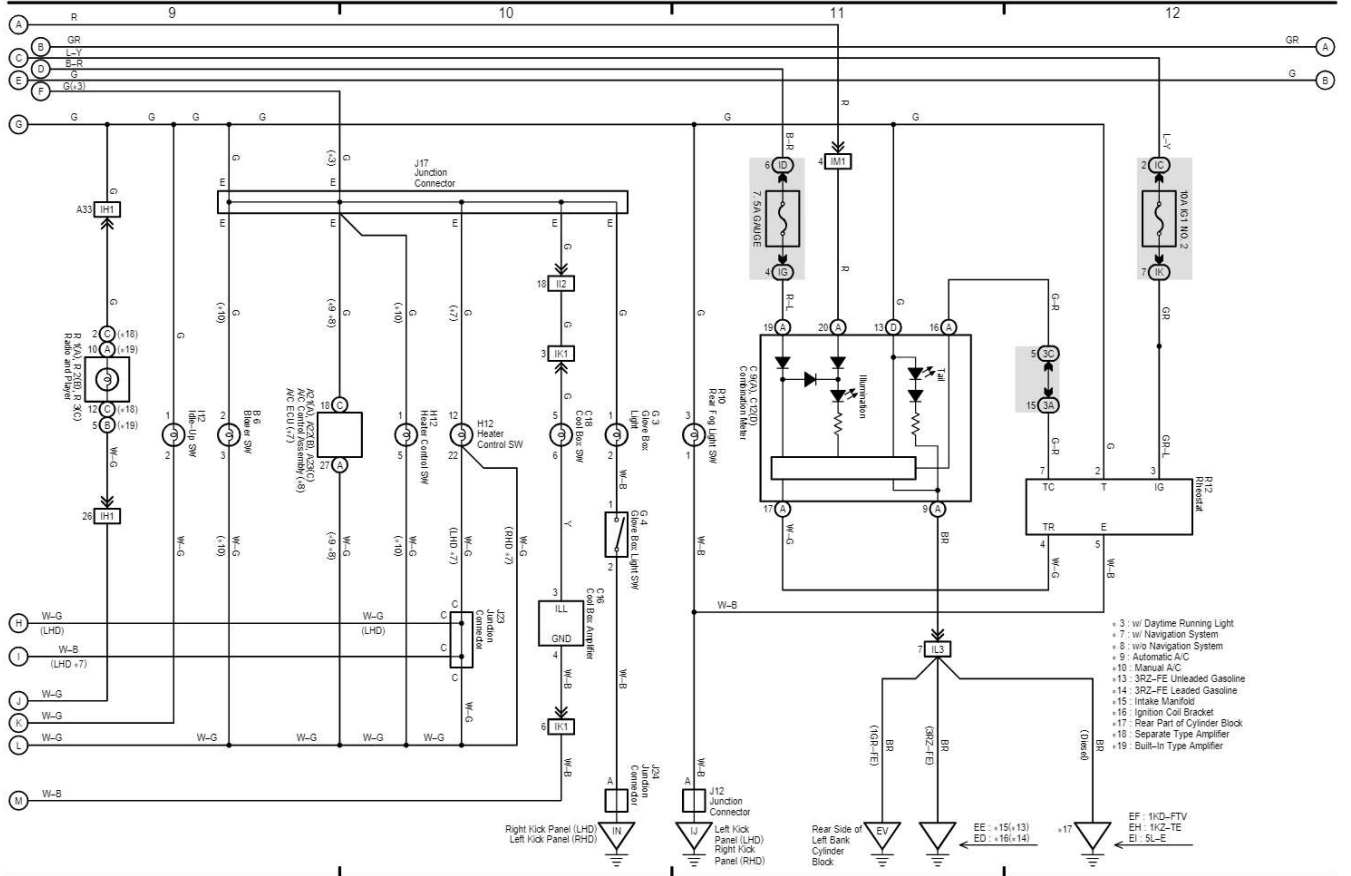
Taillight and Illumination

- + 3 : w/ Daytime Running Light
- + 7 : w/ Navigation System
- + 8 : w/o Navigation System
- + 9 : Automatic A/C
- + 10 : Manual A/C
- + 11 : w/ Active Height Control Suspension and Electric Modulated Air Suspension
- + 12 : A/T w/ VSC



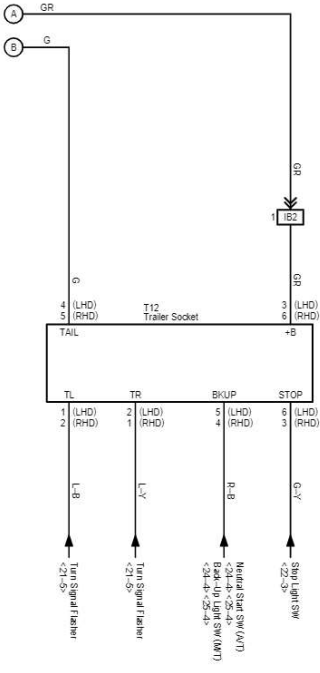
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

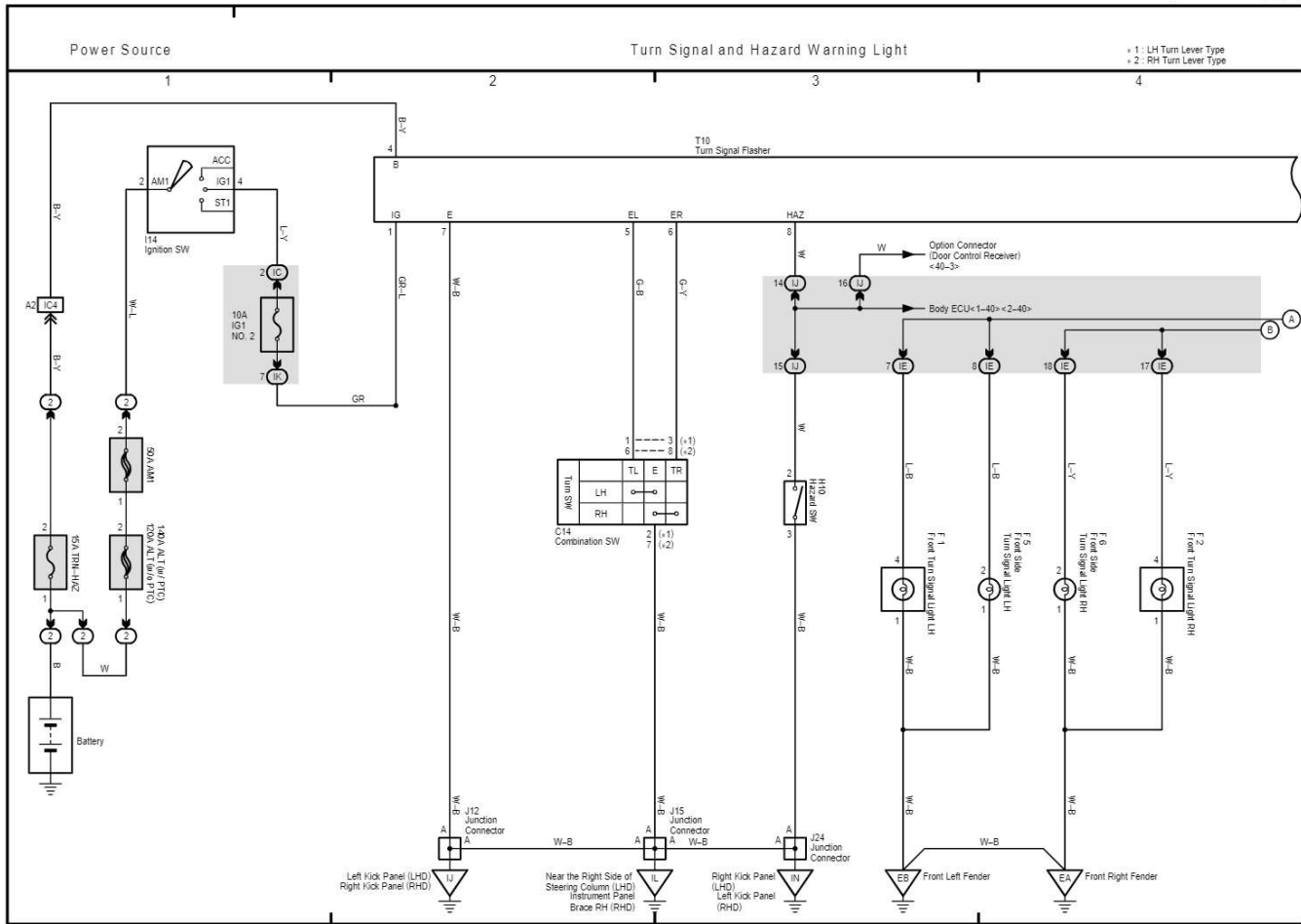
Taillight and Illumination



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Trailer Towing

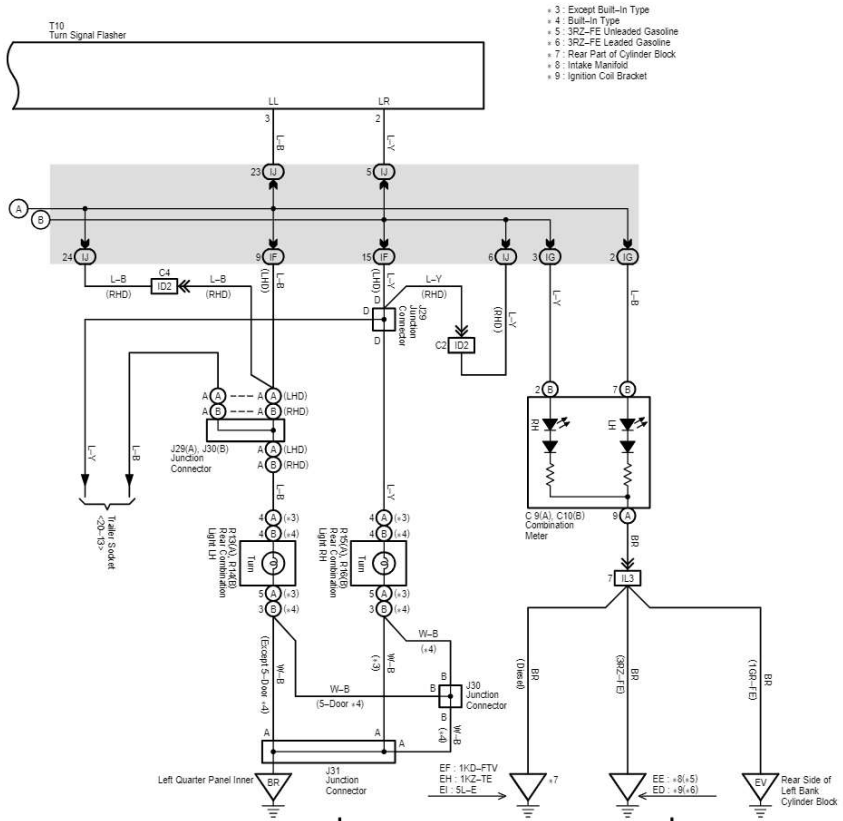




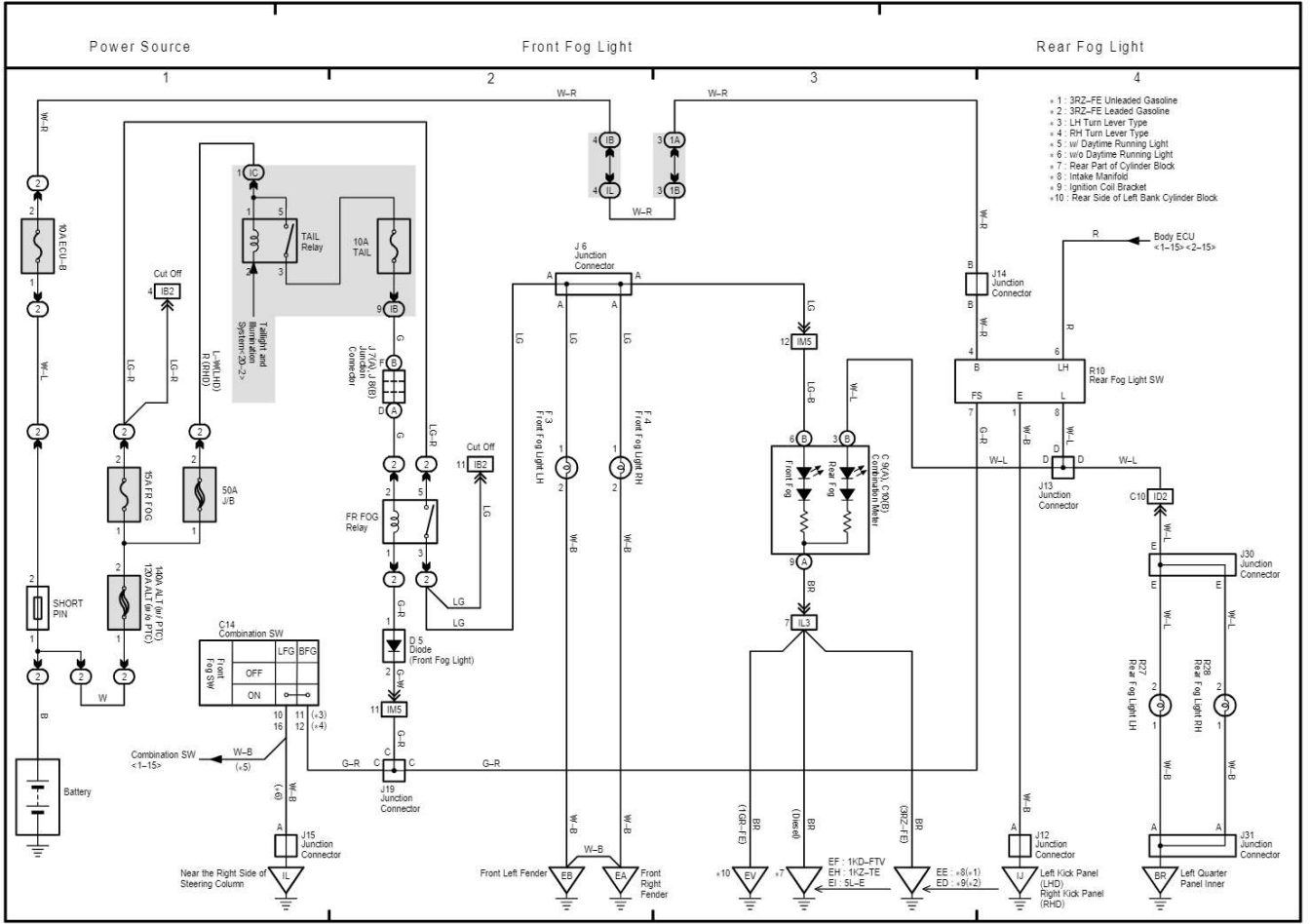
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Turn Signal and Hazard Warning Light

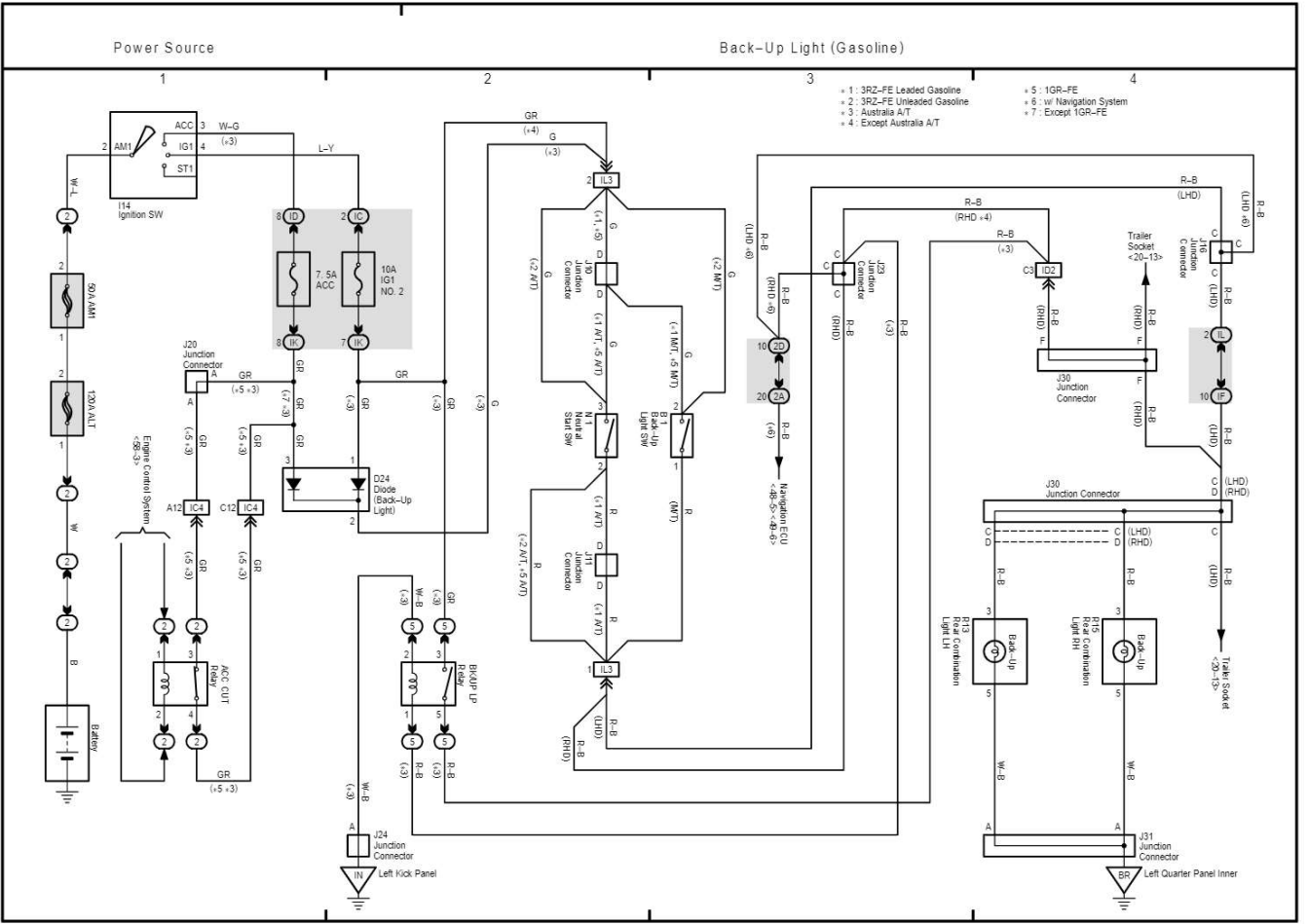
5 6 7 8



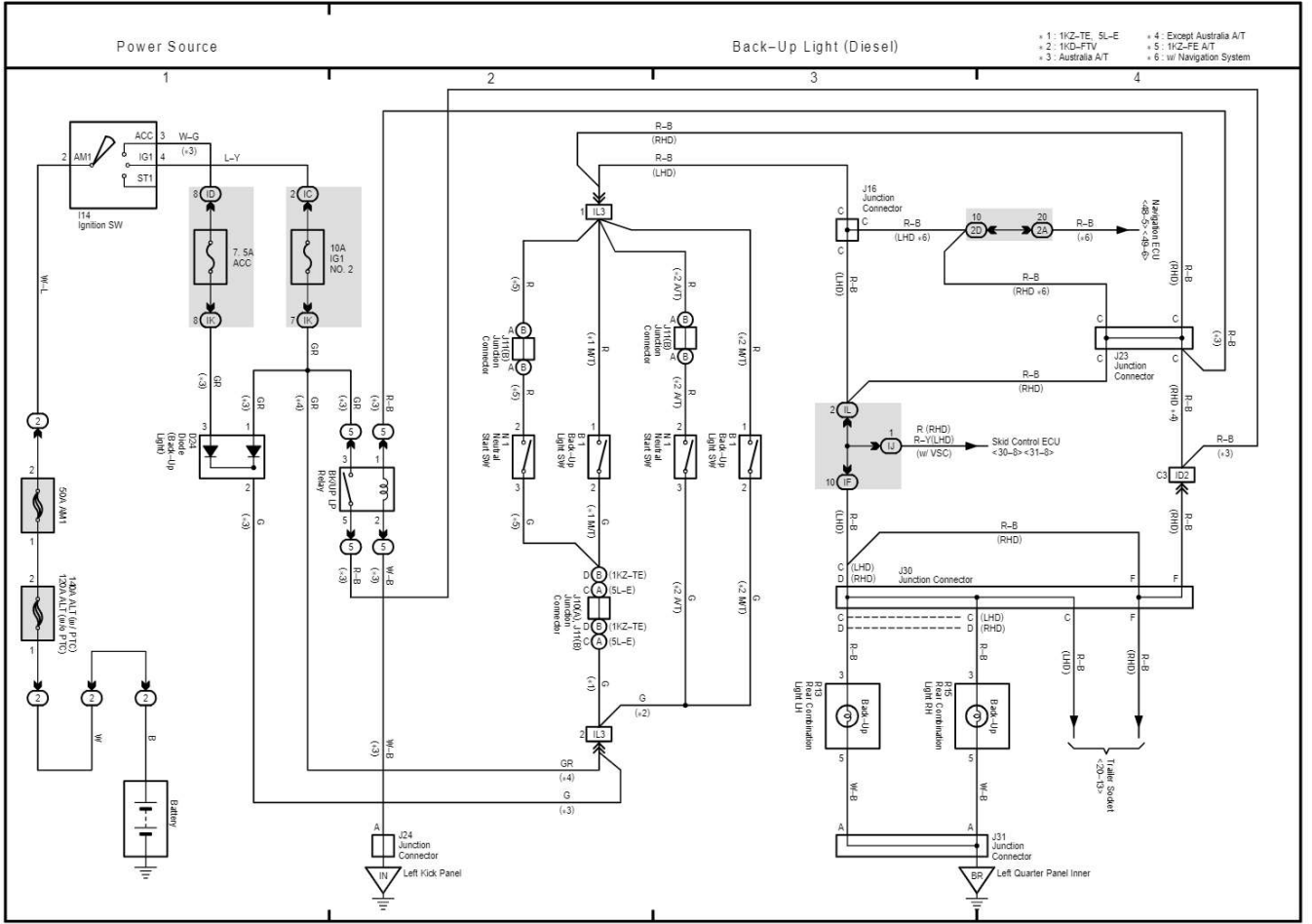




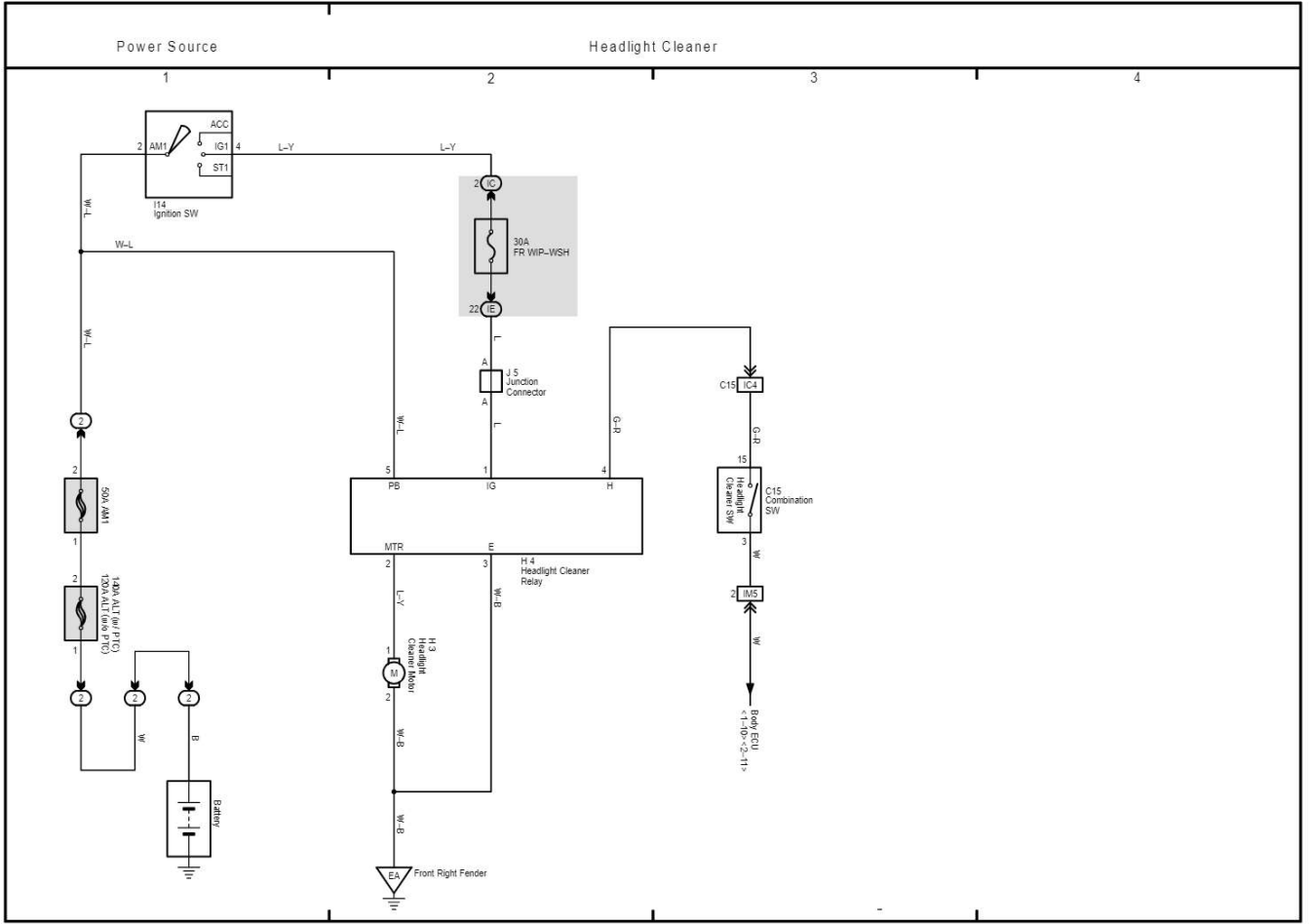
24 LAND CRUISER / LAND CRUISER PRADO

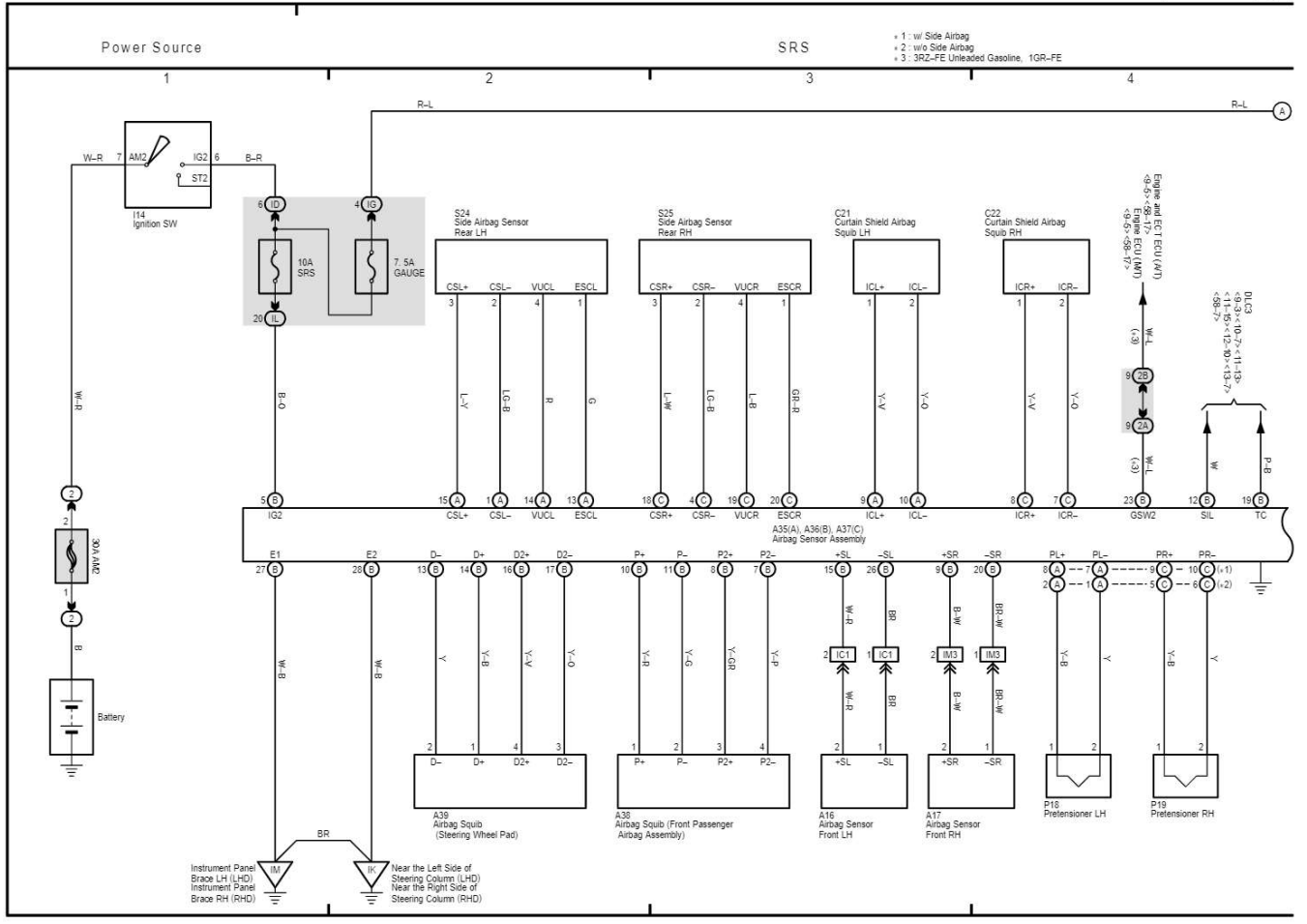






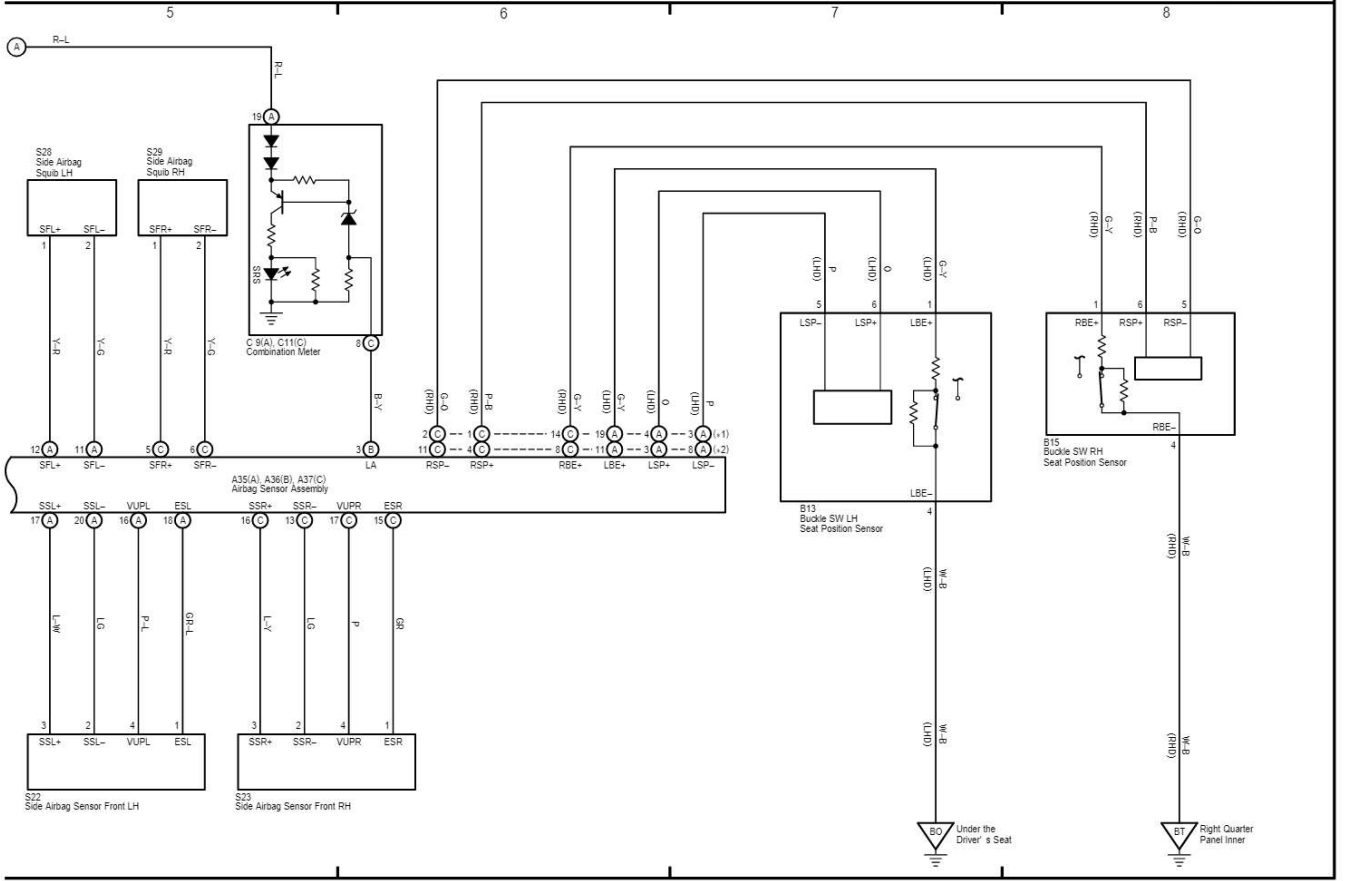




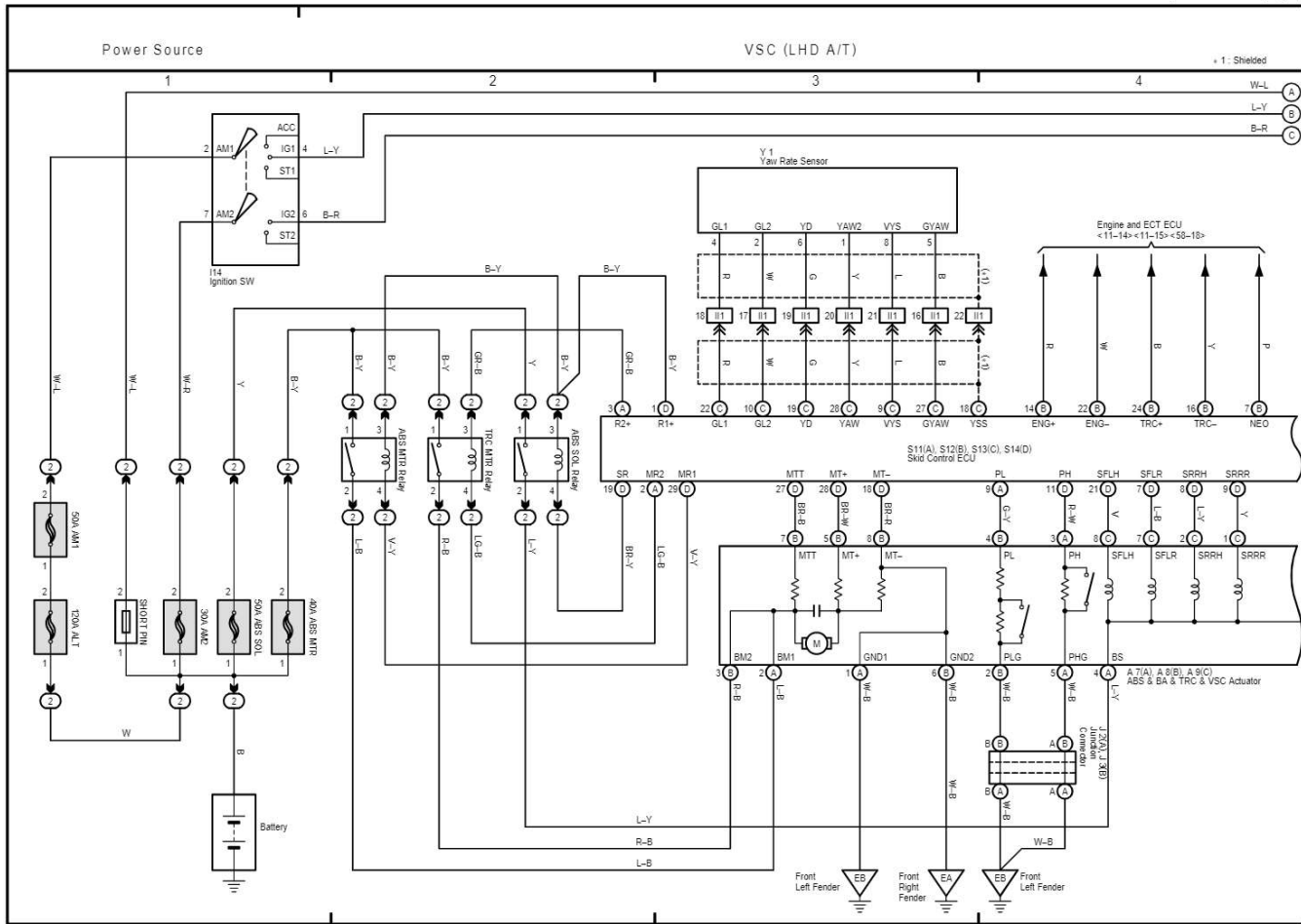


SRS

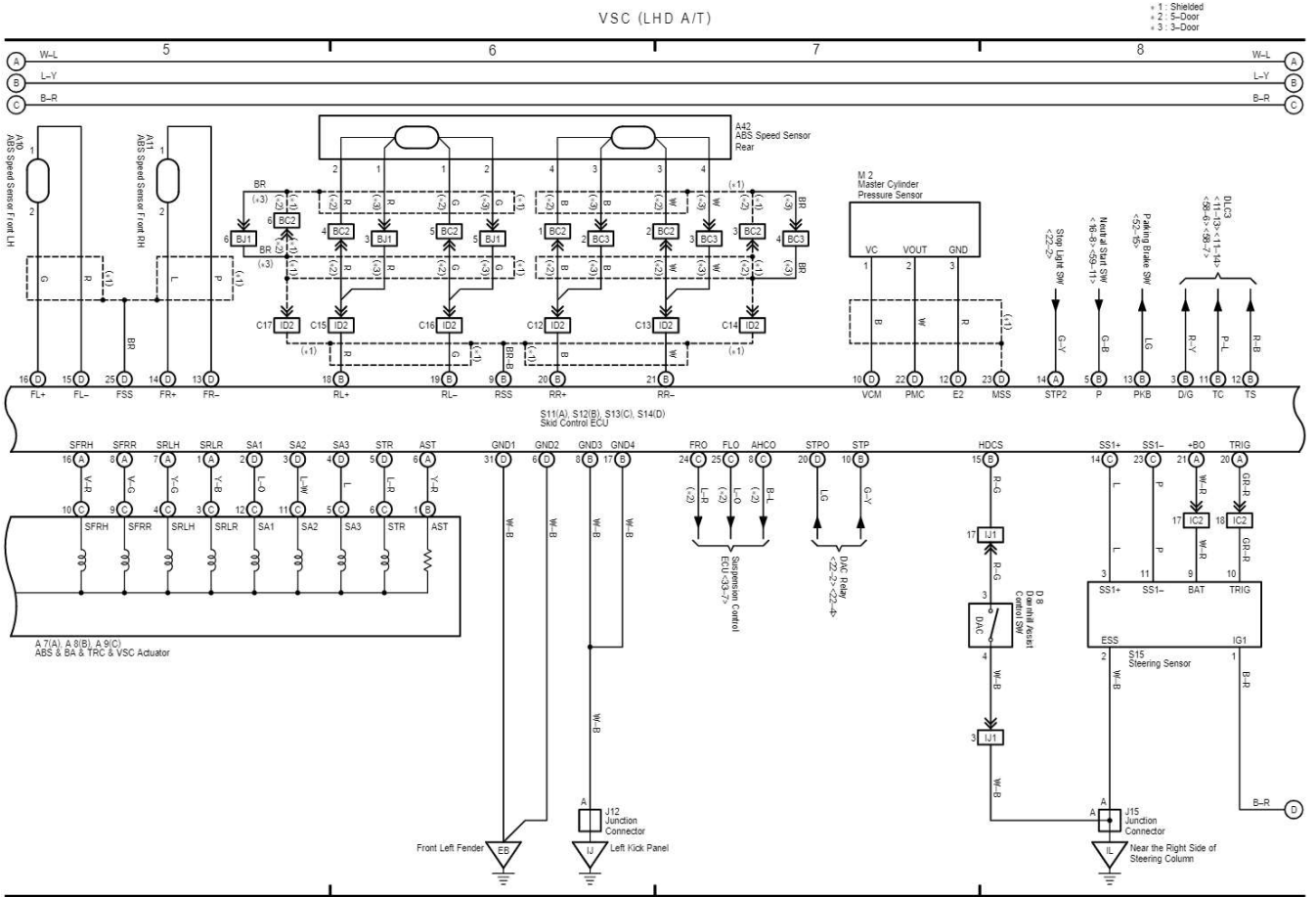
+ 1: w/ Side Airbag  
+ 2: w/o Side Airbag



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

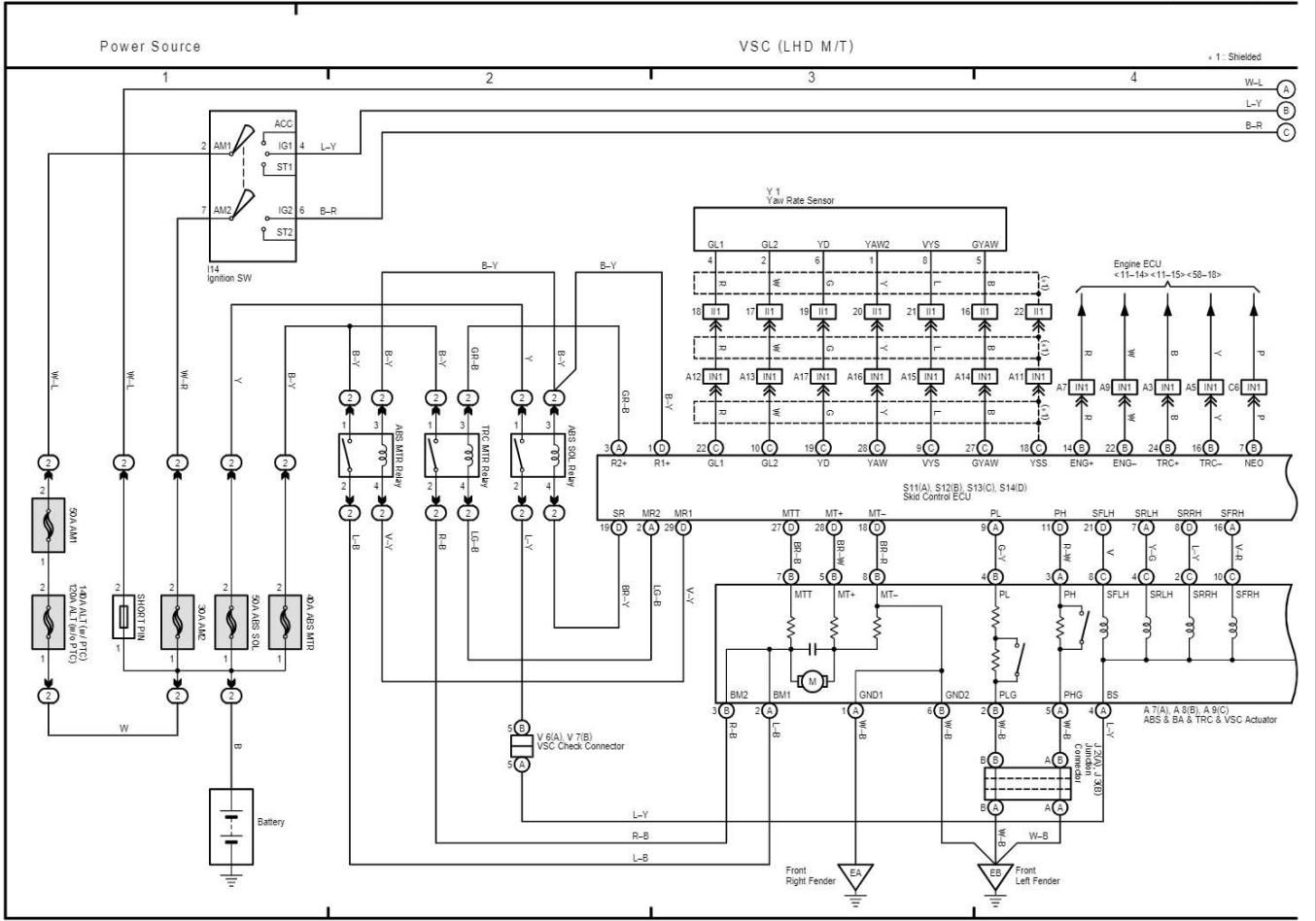


LAND CRUISER / LAND CRUISE PRADO (EWD527E)



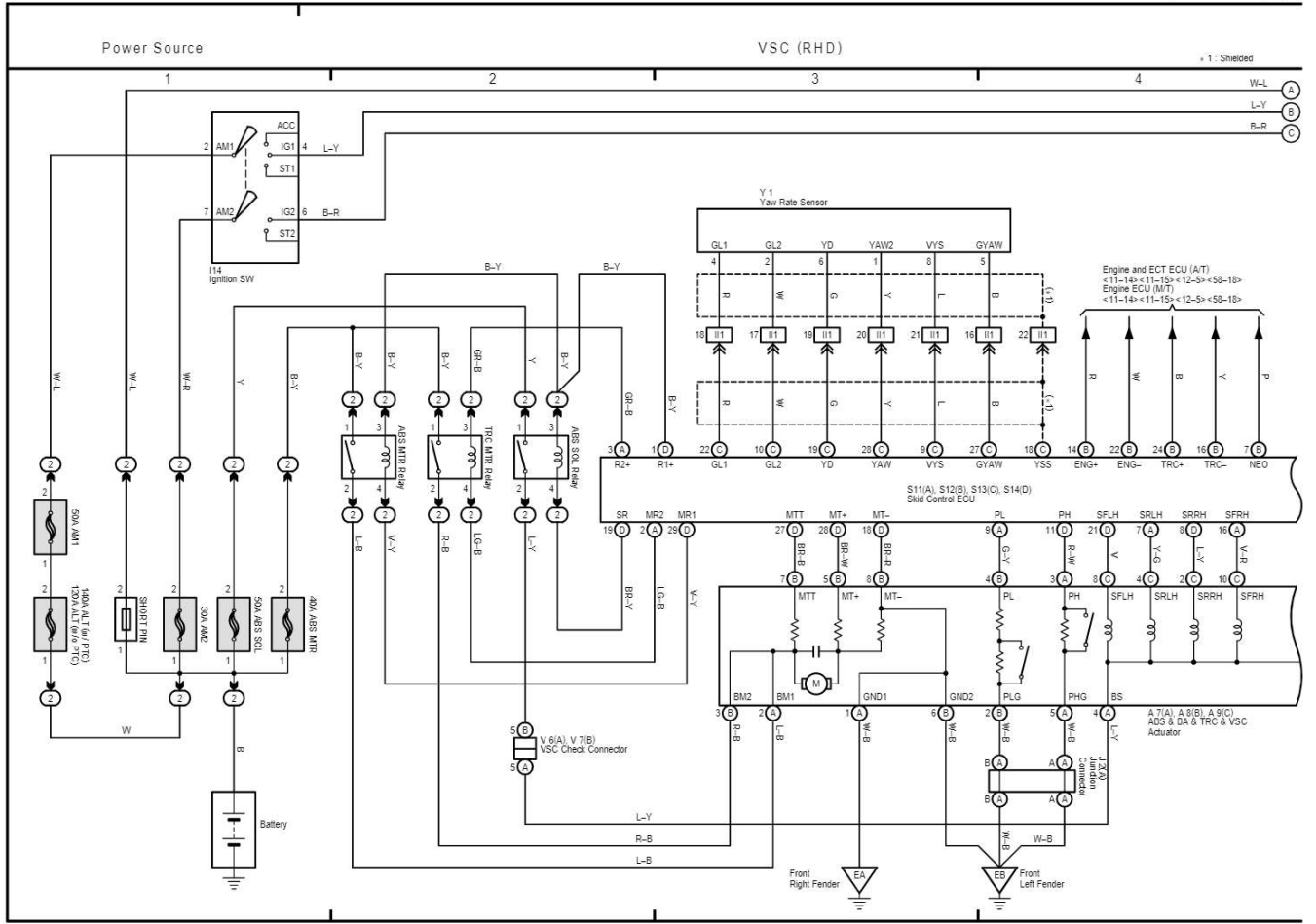




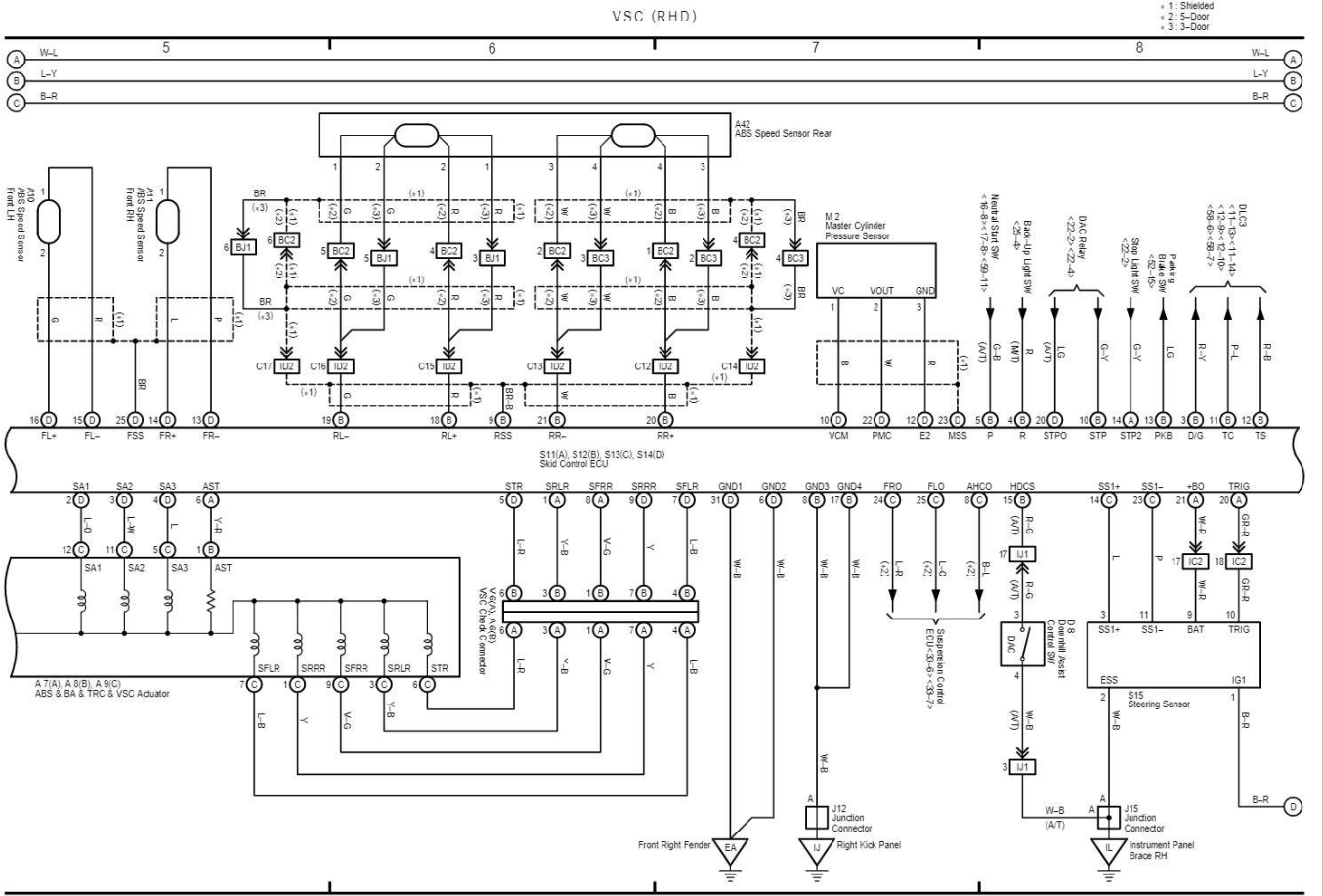








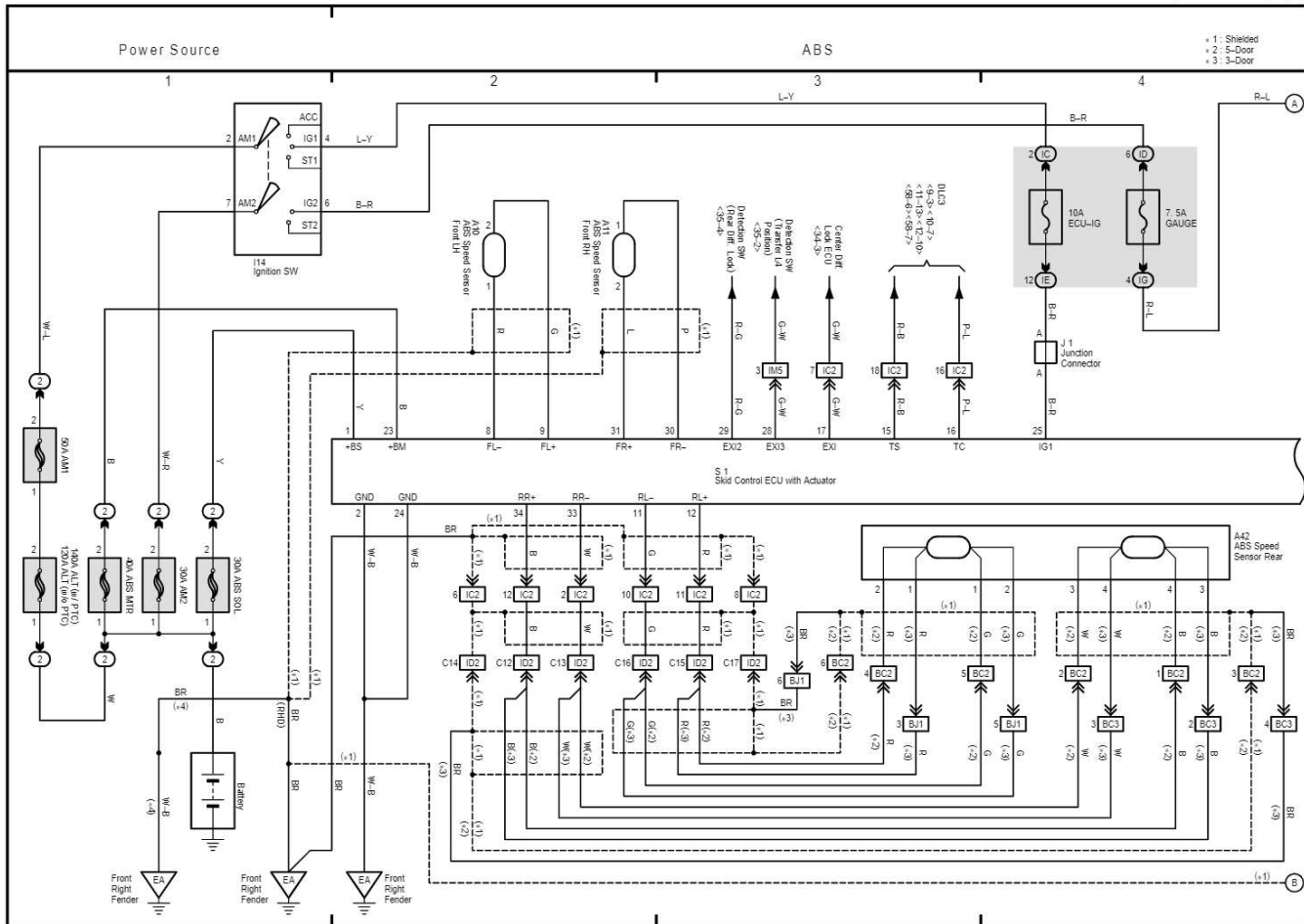
LAND CRUISER / LAND CRUISE PRADO (EWD527E)





LAND CRUISER / LAND CRUISER PRADO (EWD527E)

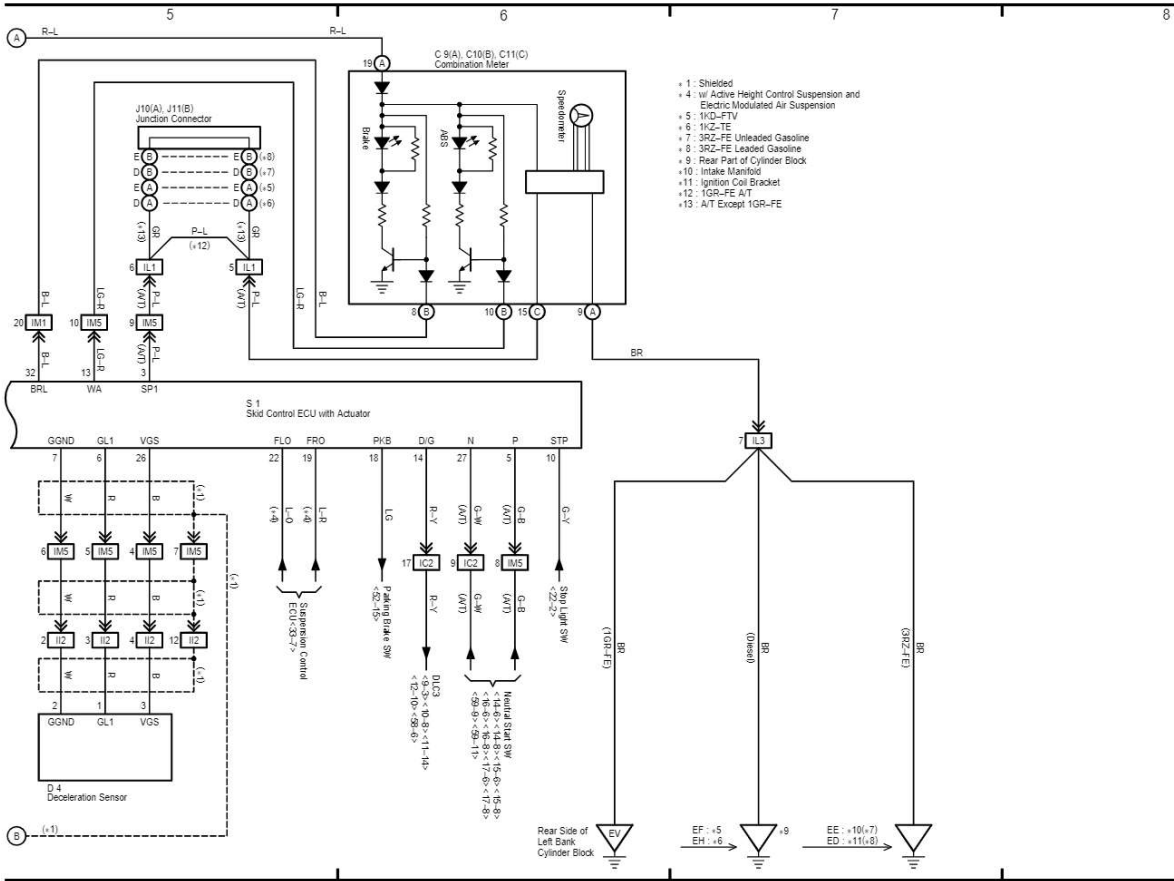
877

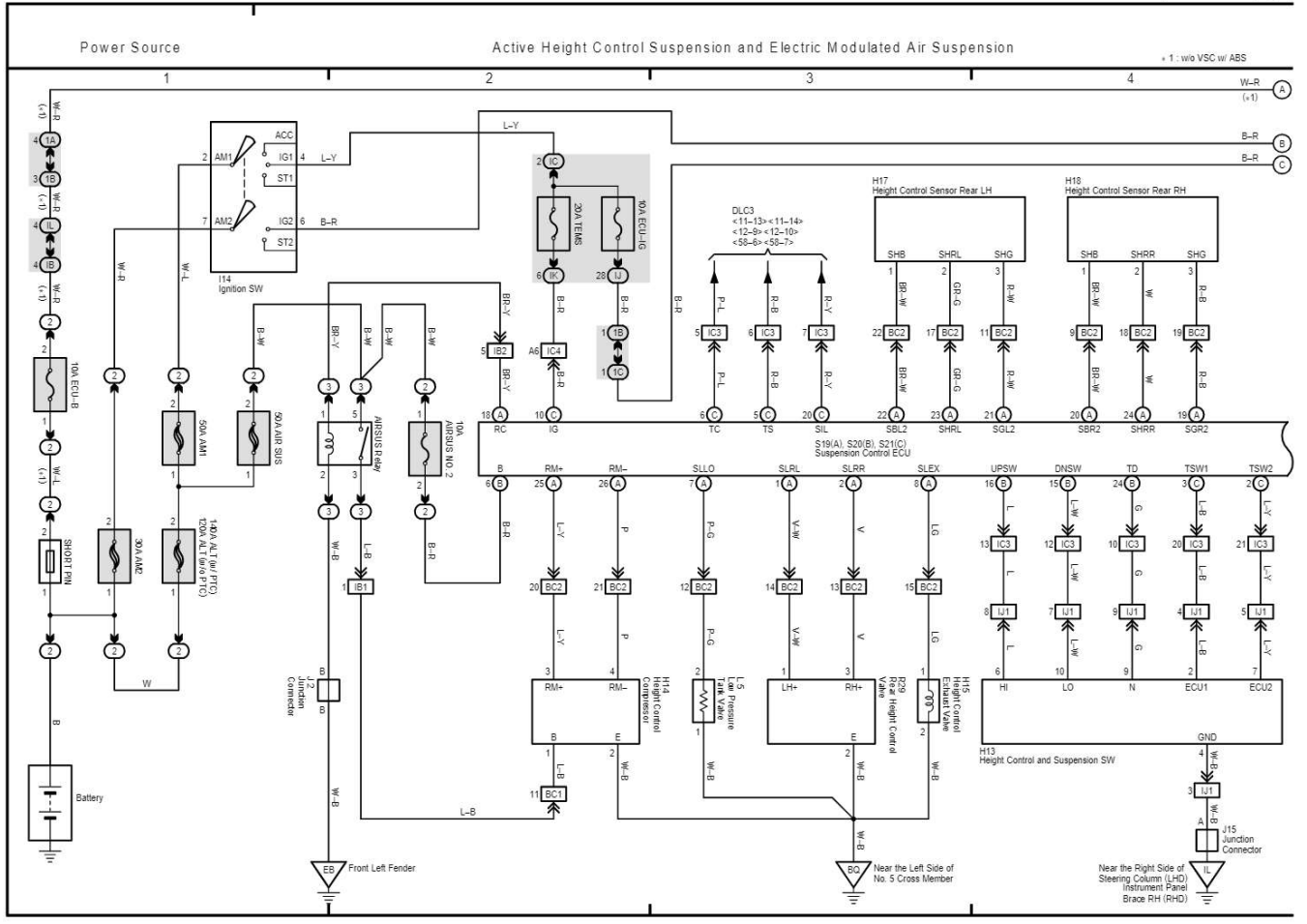


LAND CRUISER / LAND CRUISER PRADO (EWD527E)



ABS

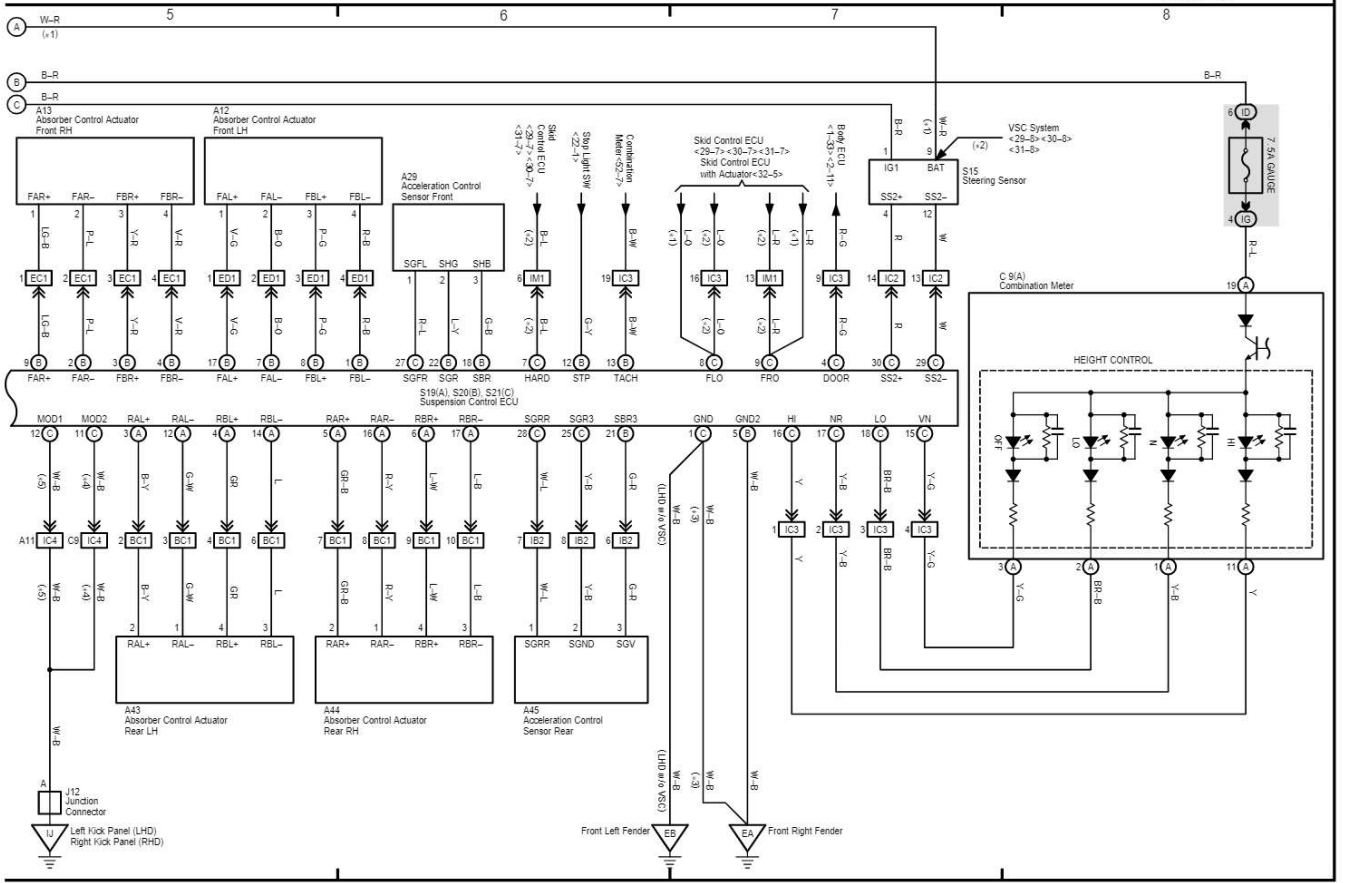




LAND CRUISER / LAND CRUISER PRADO (EWD527E)

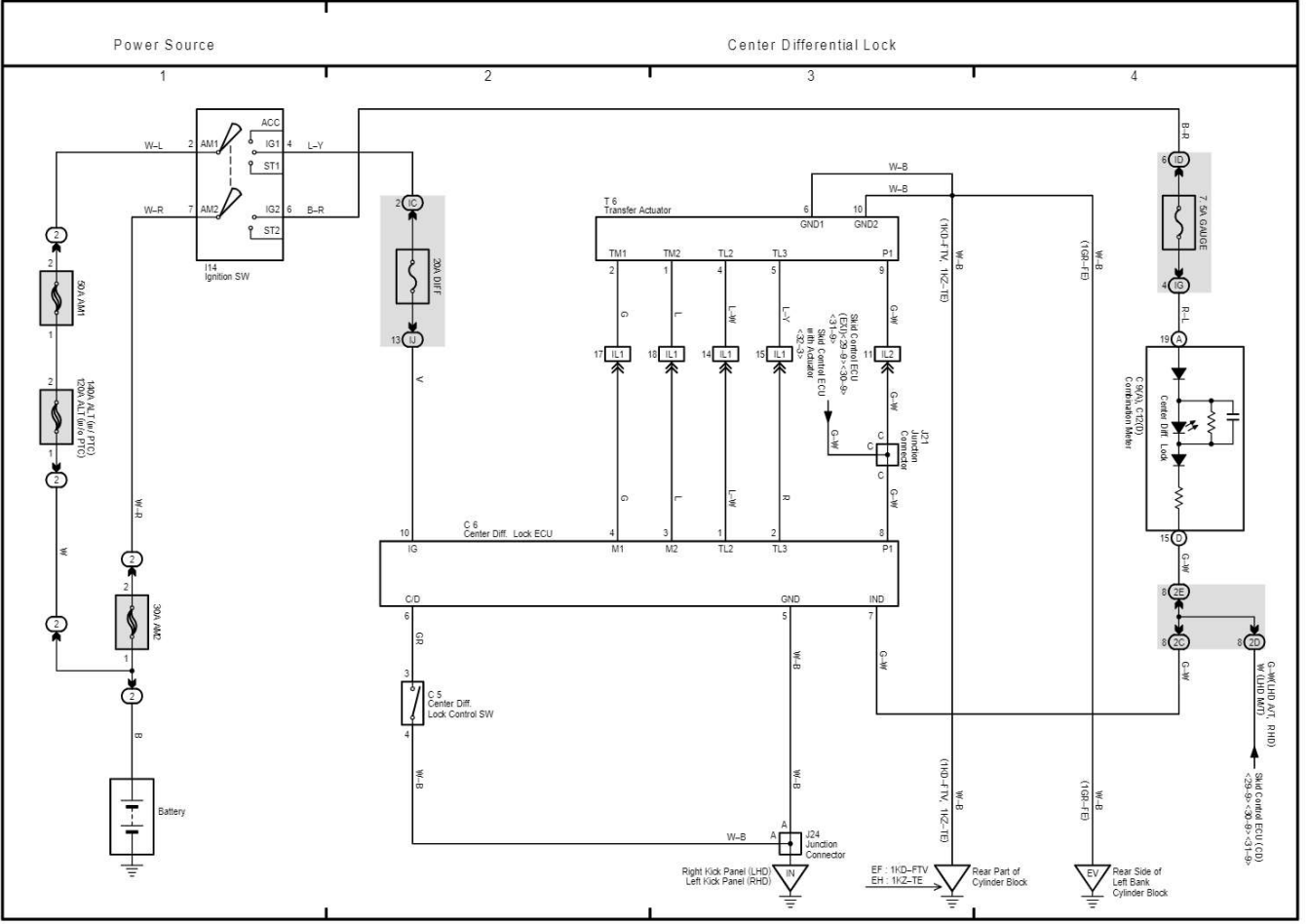
Active Height Control Suspension and Electric Modulated Air Suspension

- + 1 : w/o VSC w/ ABS
- + 2 : w/ VSC
- + 3 : LHD w/ VSC, RHD
- + 4 : Europe
- + 5 : Except Europe



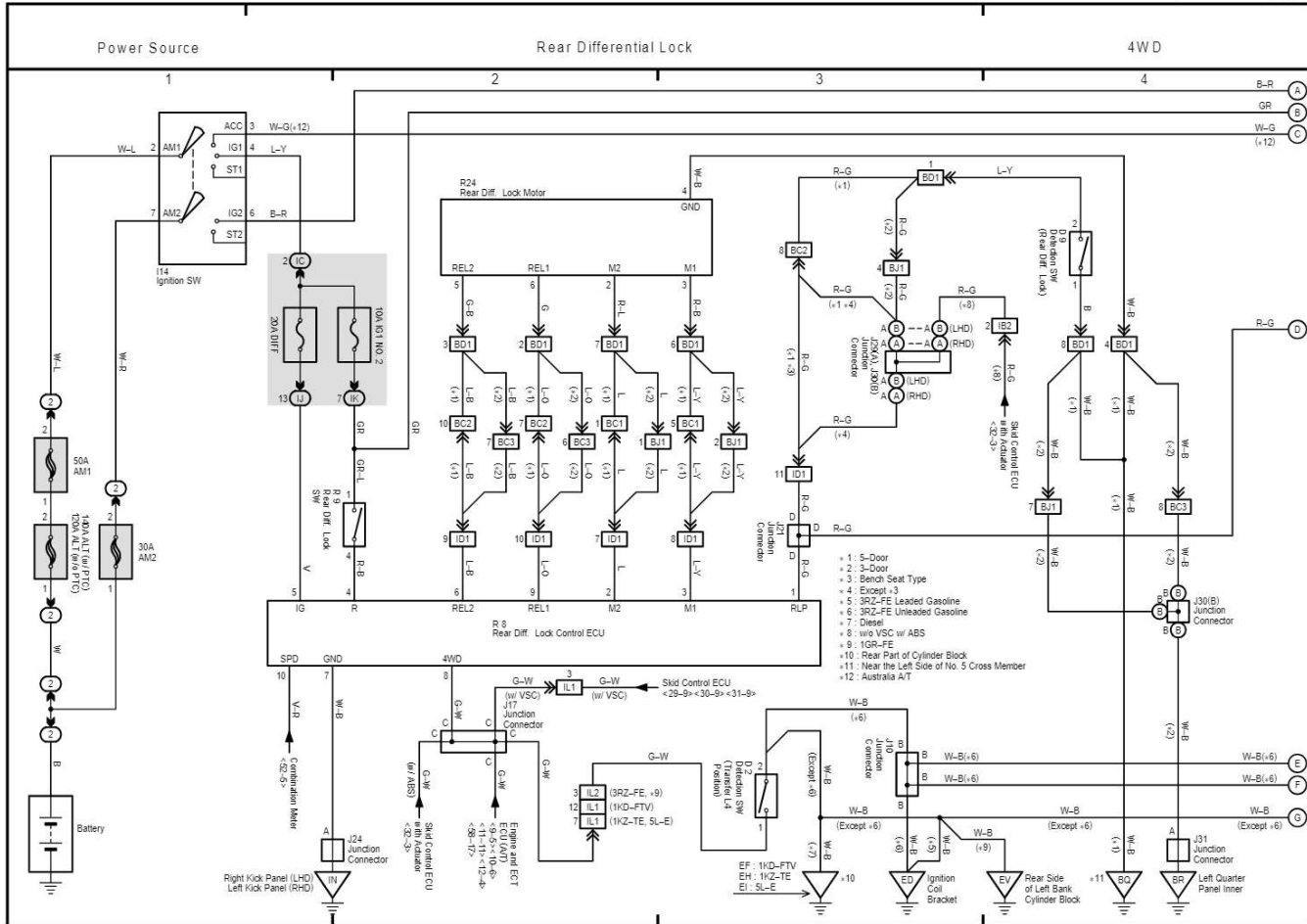
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

34 LAND CRUISER / LAND CRUISER PRADO

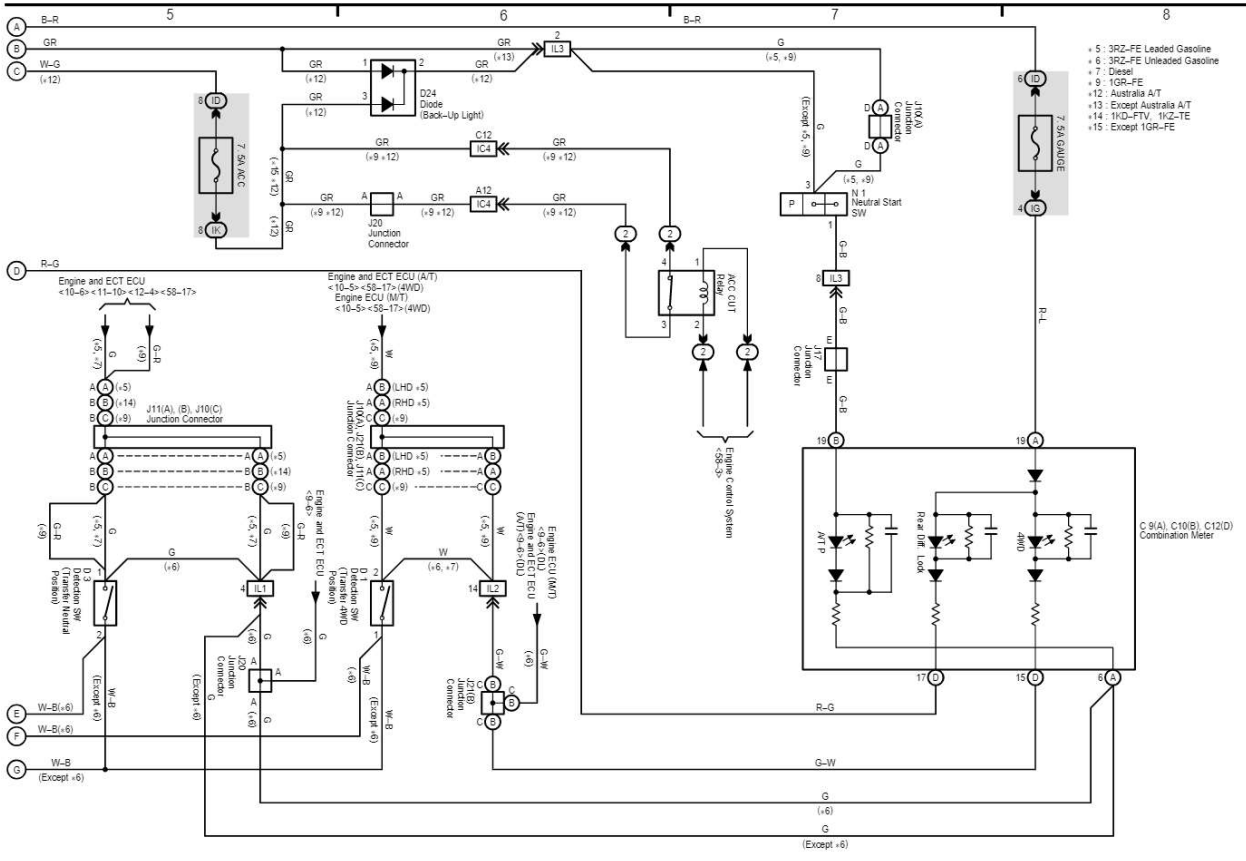


LAND CRUISER / LAND CRUISER PRADO (EWD527E)

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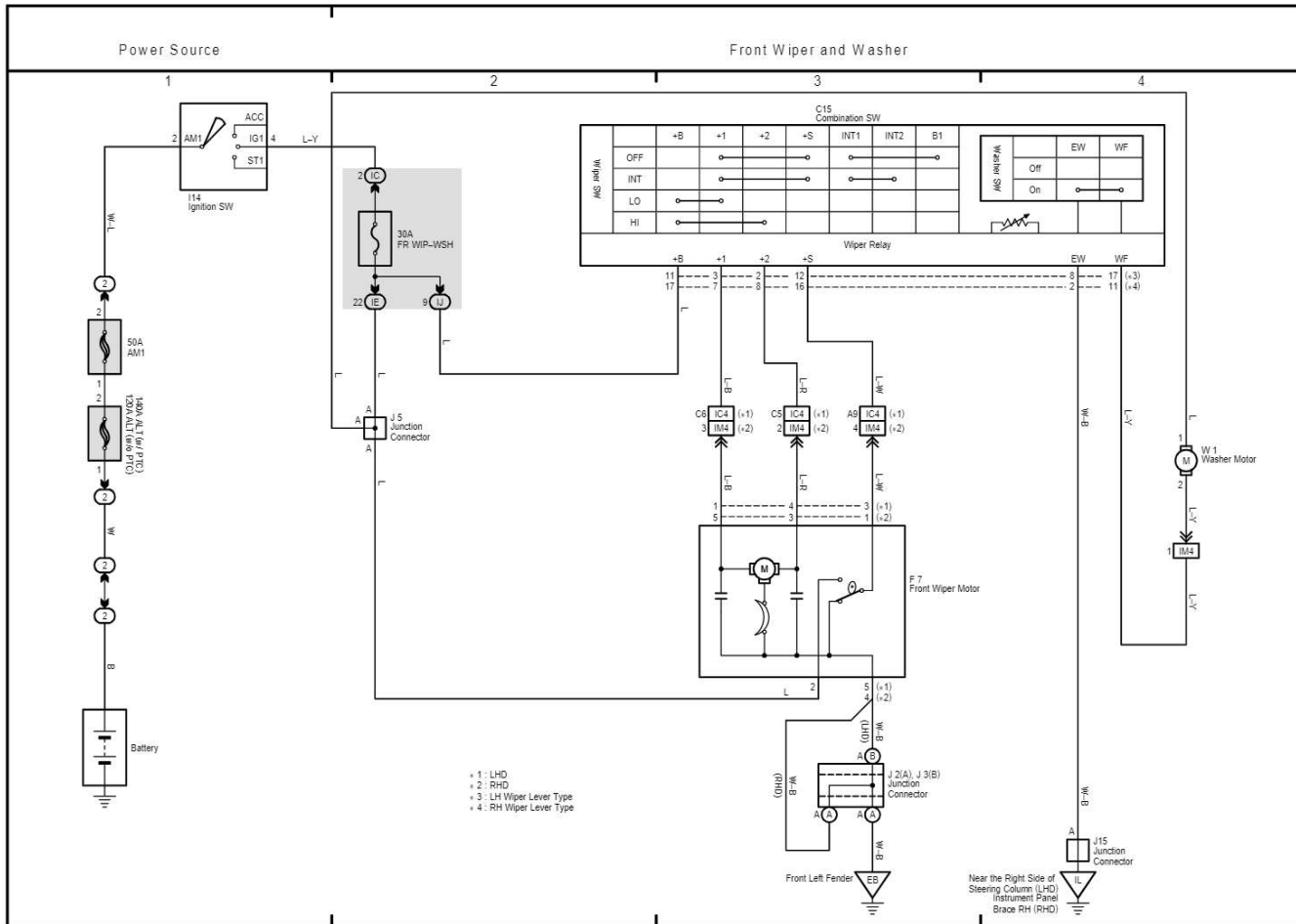
4WD



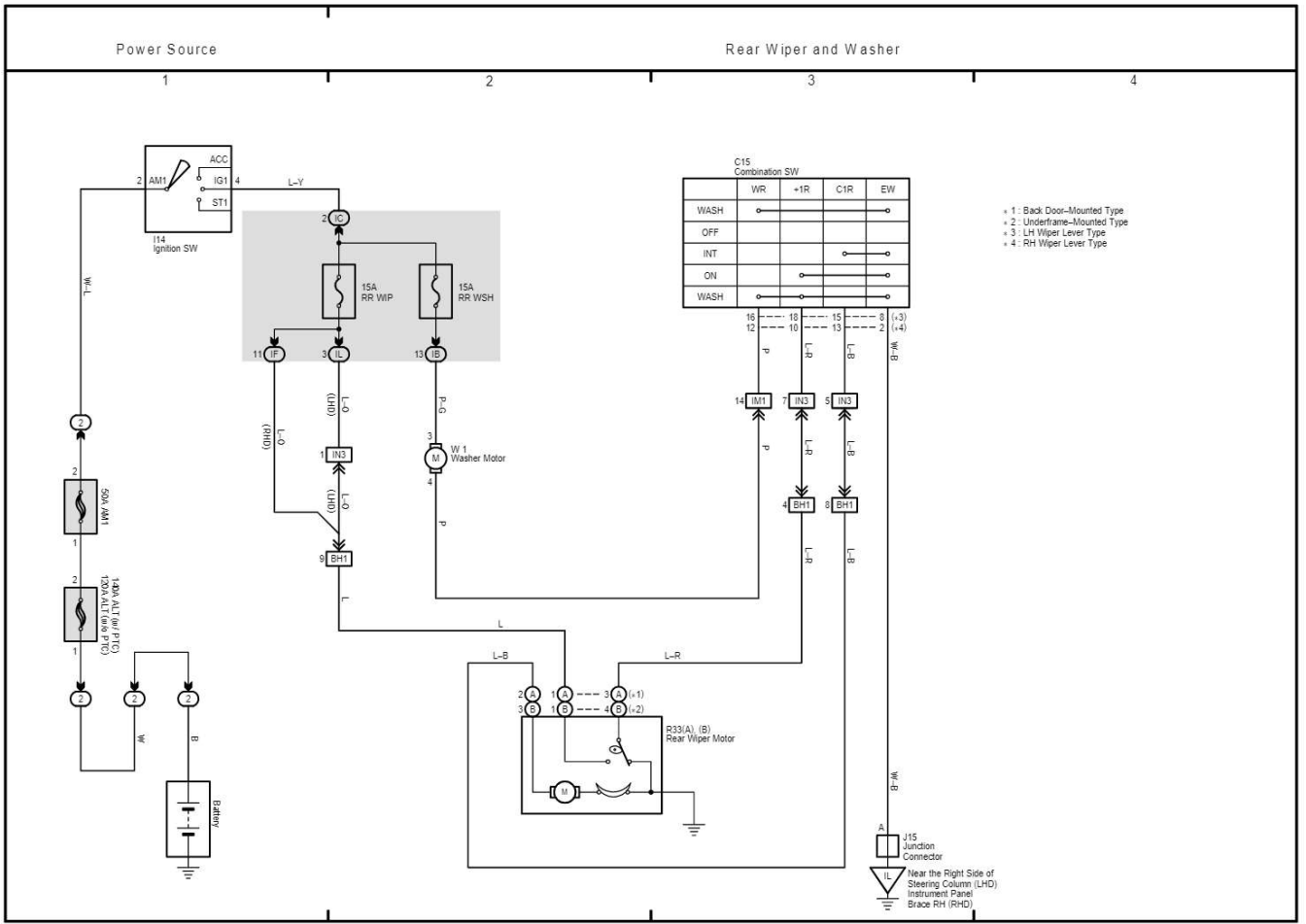
- + 5: 3RZ-FE Leaded Gasoline
- + 6: 3RZ-FE Unleaded Gasoline
- + 7: Diesel
- + 9: 1GR-FE
- + 12: Australia AT
- + 13: Except Australia AT
- + 14: 1KD-FTV, 1K2-TE
- + 15: Except 1GR-FE

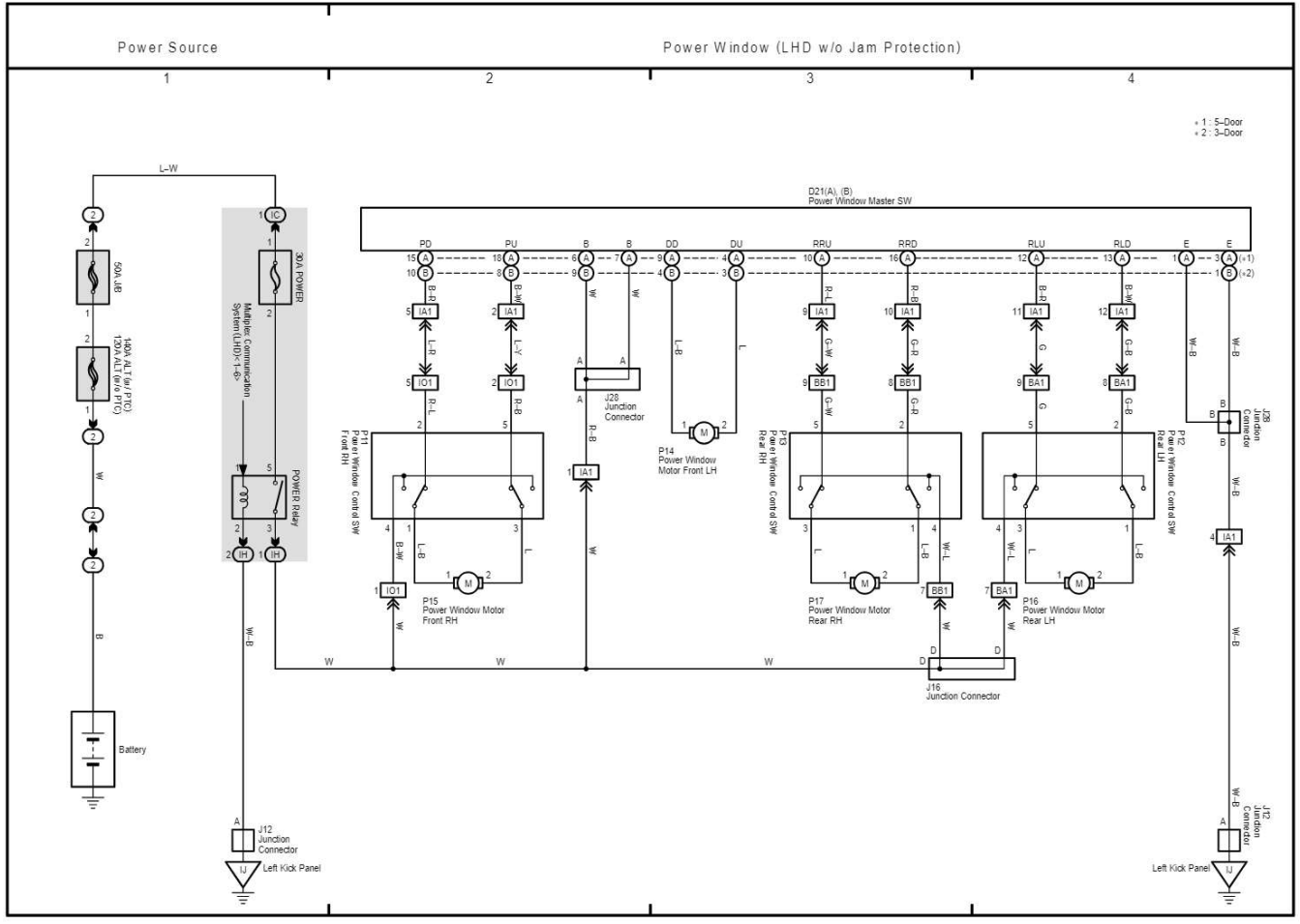
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

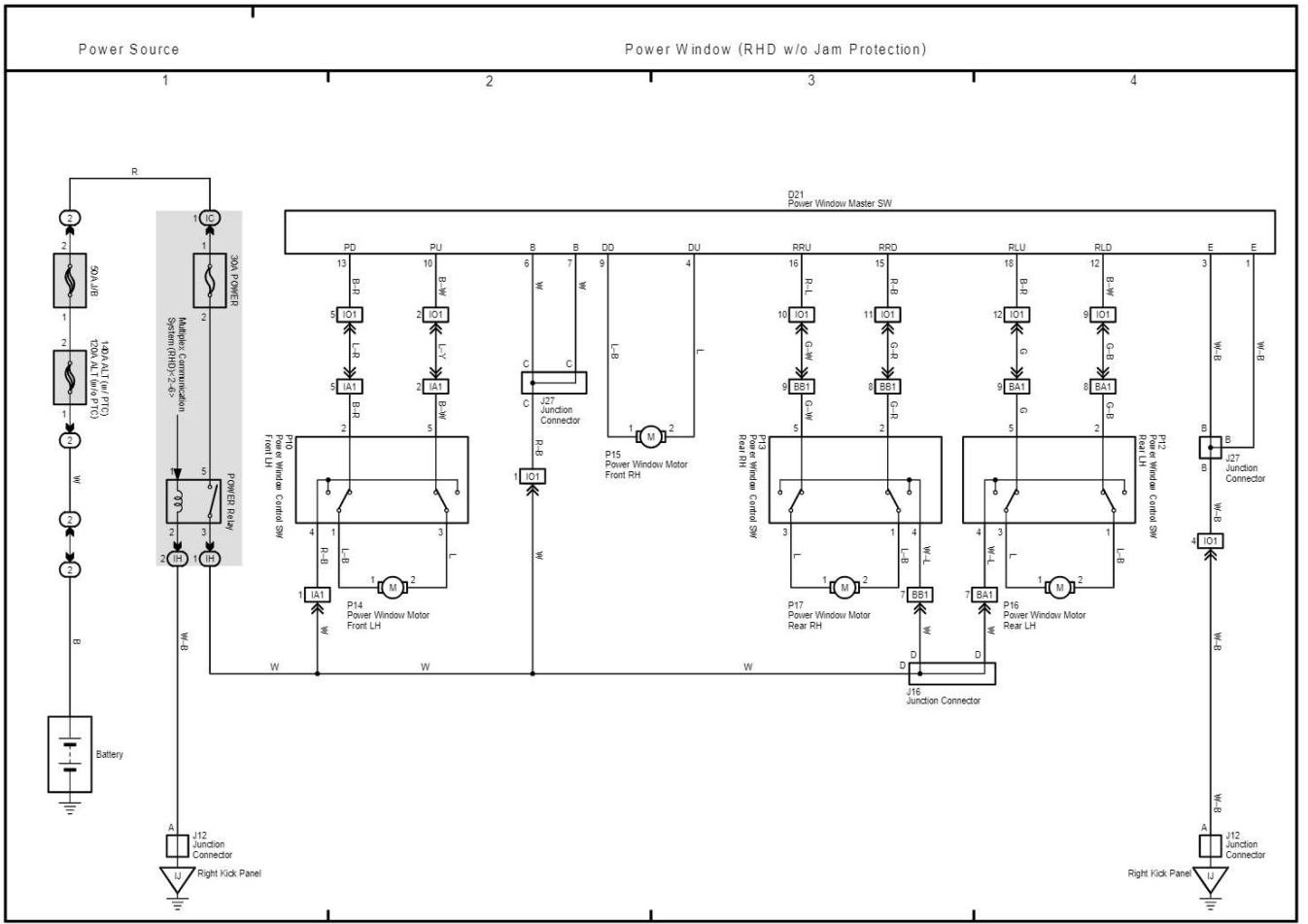
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

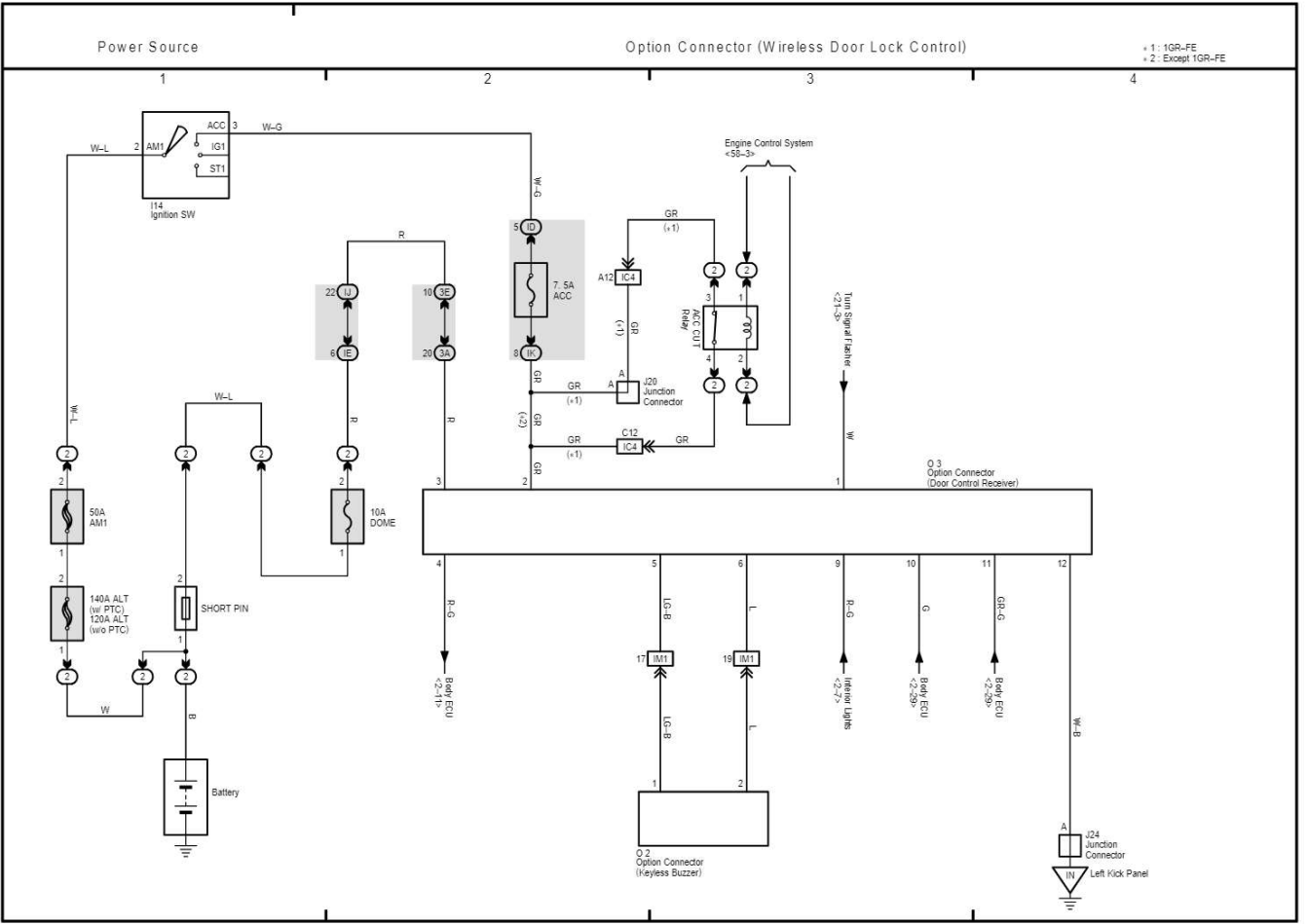


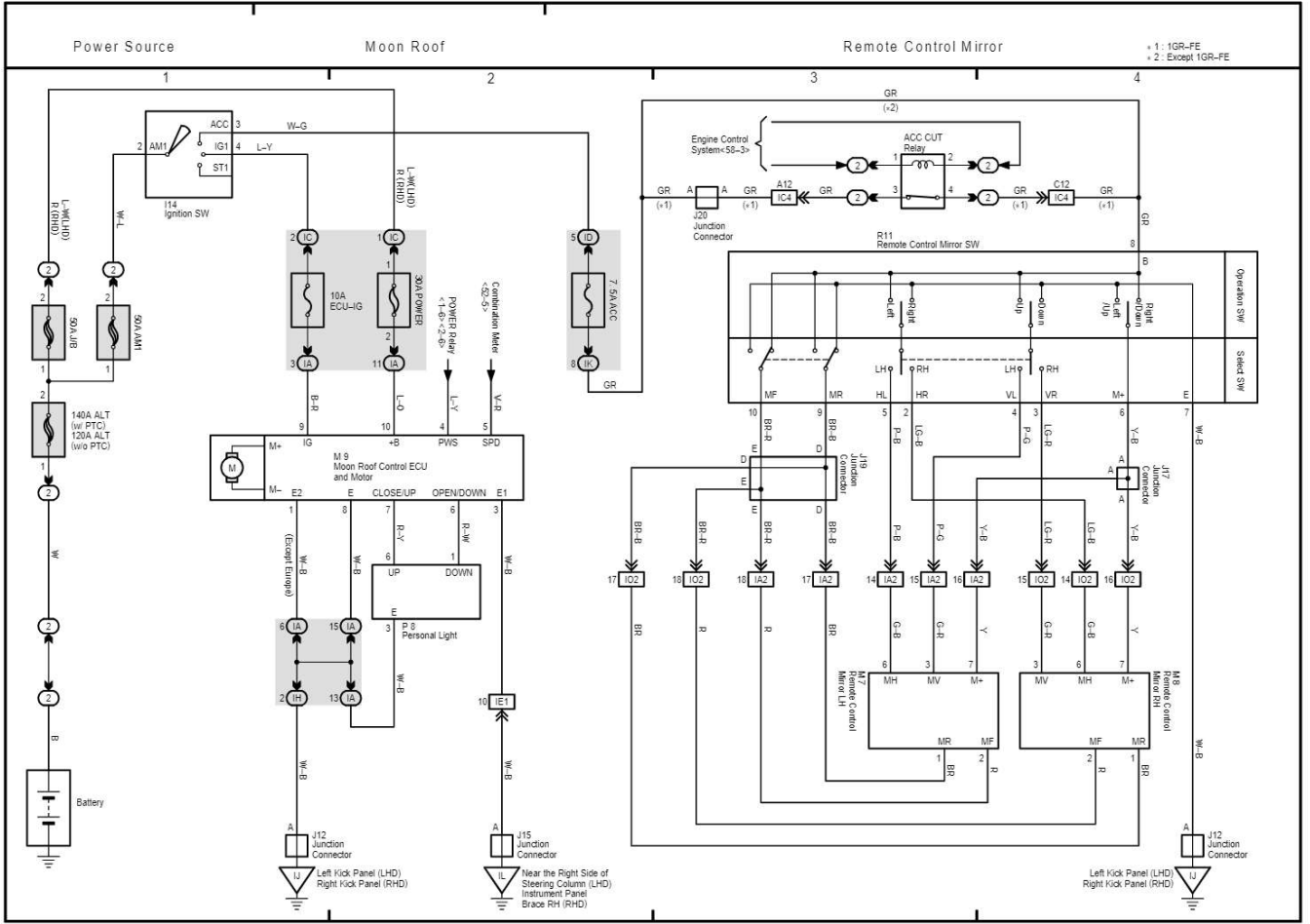




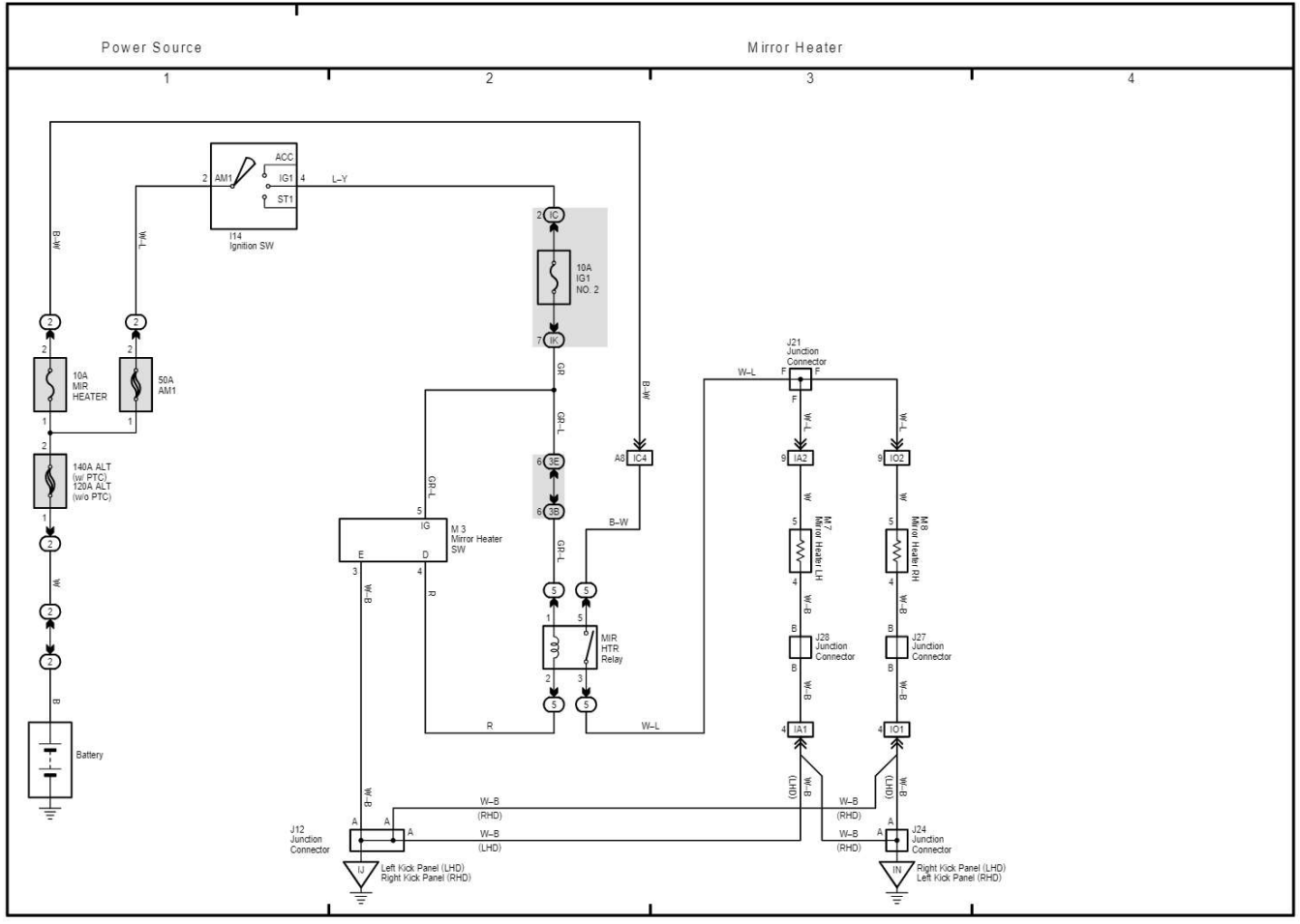








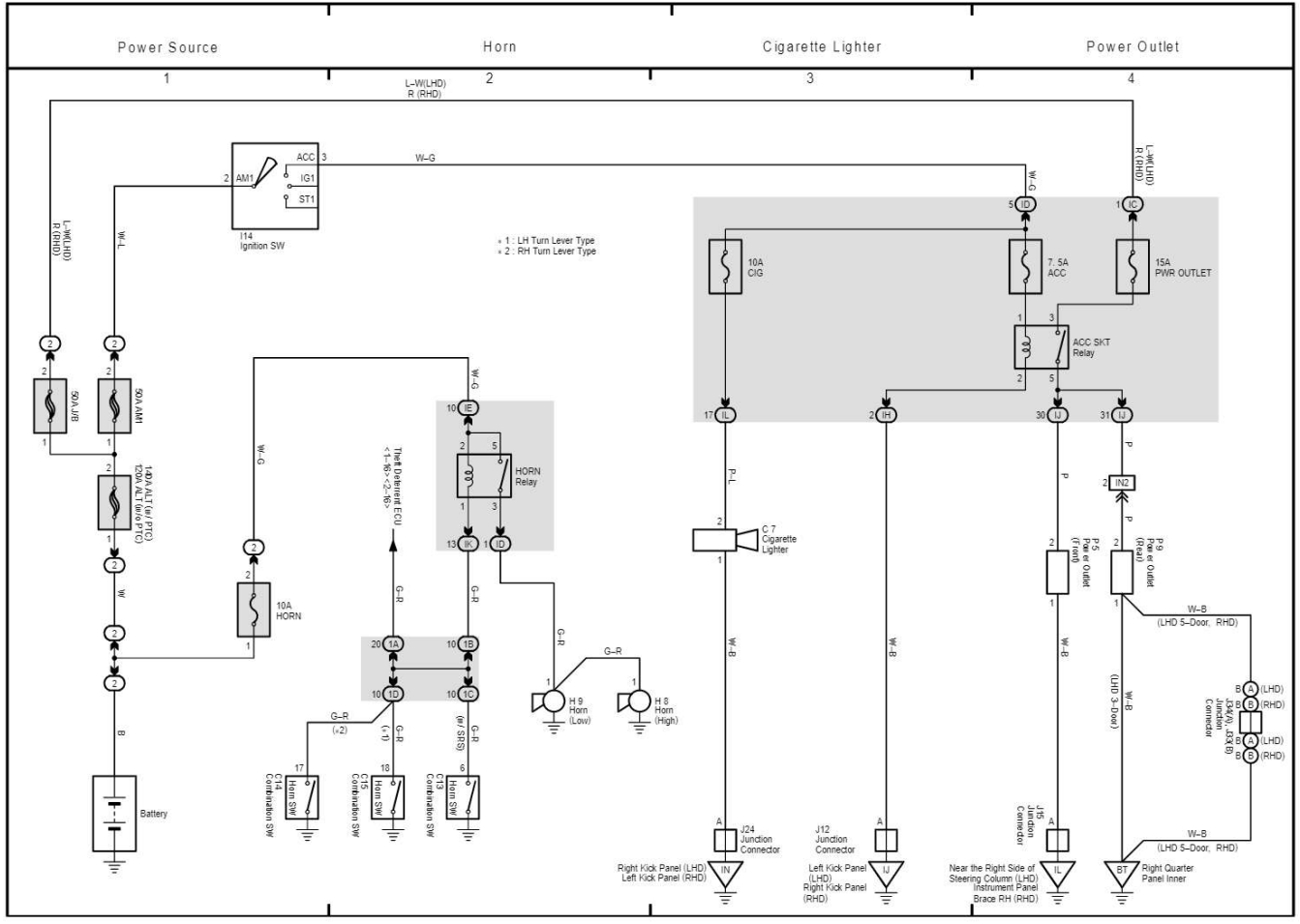
LAND CRUISER / LAND CRUISER PRADO (EWD527E)





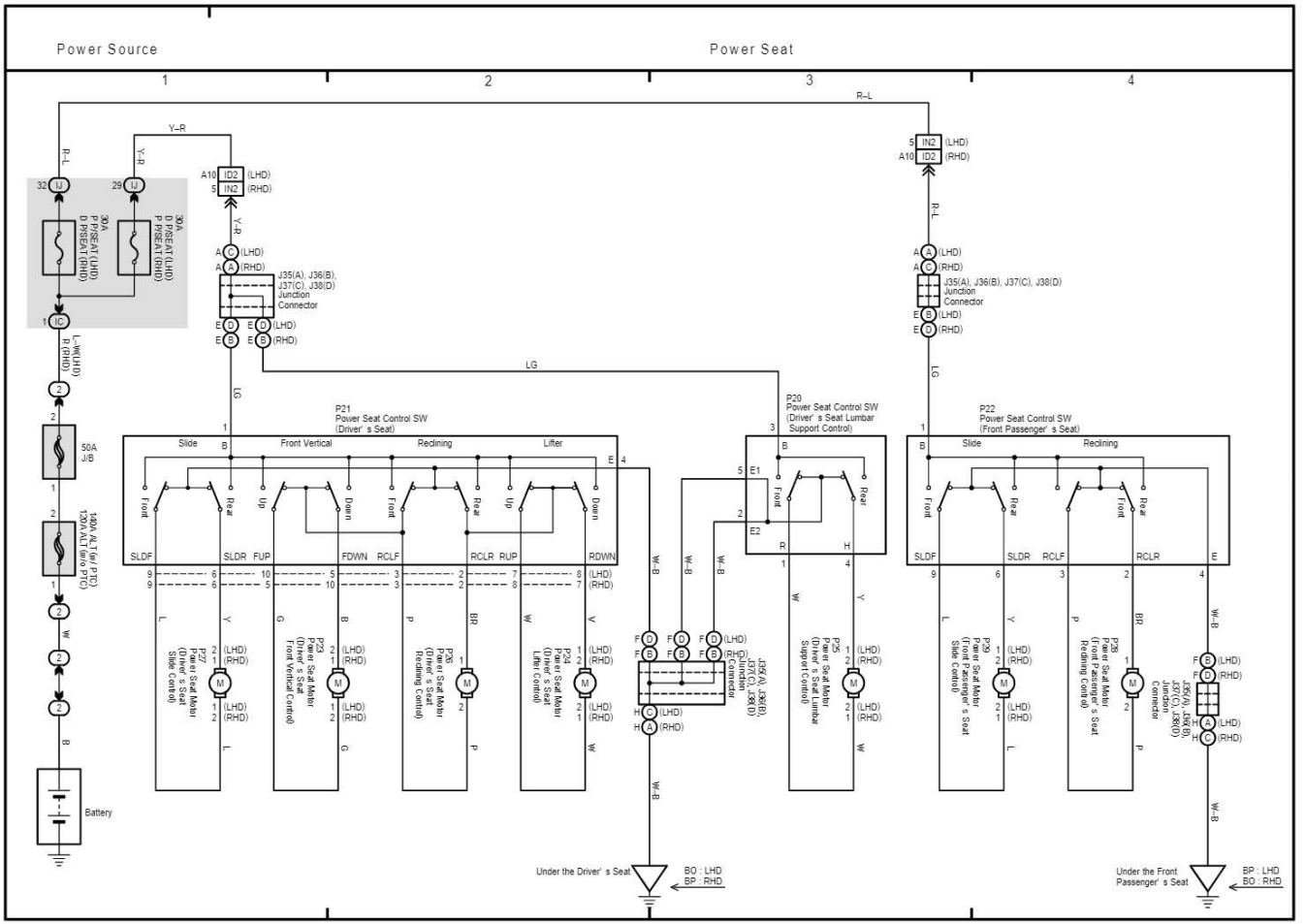
44 LAND CRUISER / LAND CRUISER PRADO

M OVERALL ELECTRICAL WIRING DIAGRAM

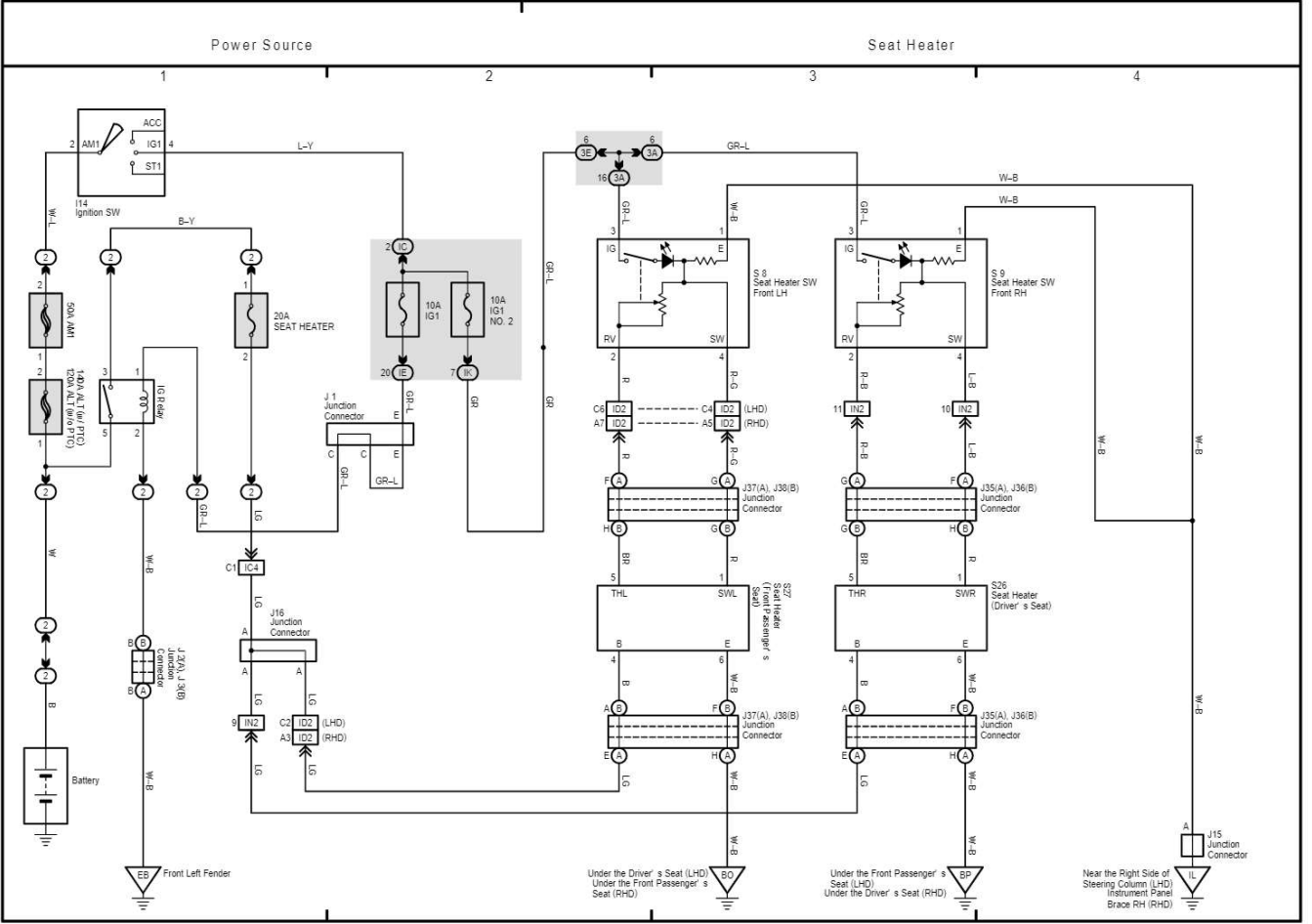


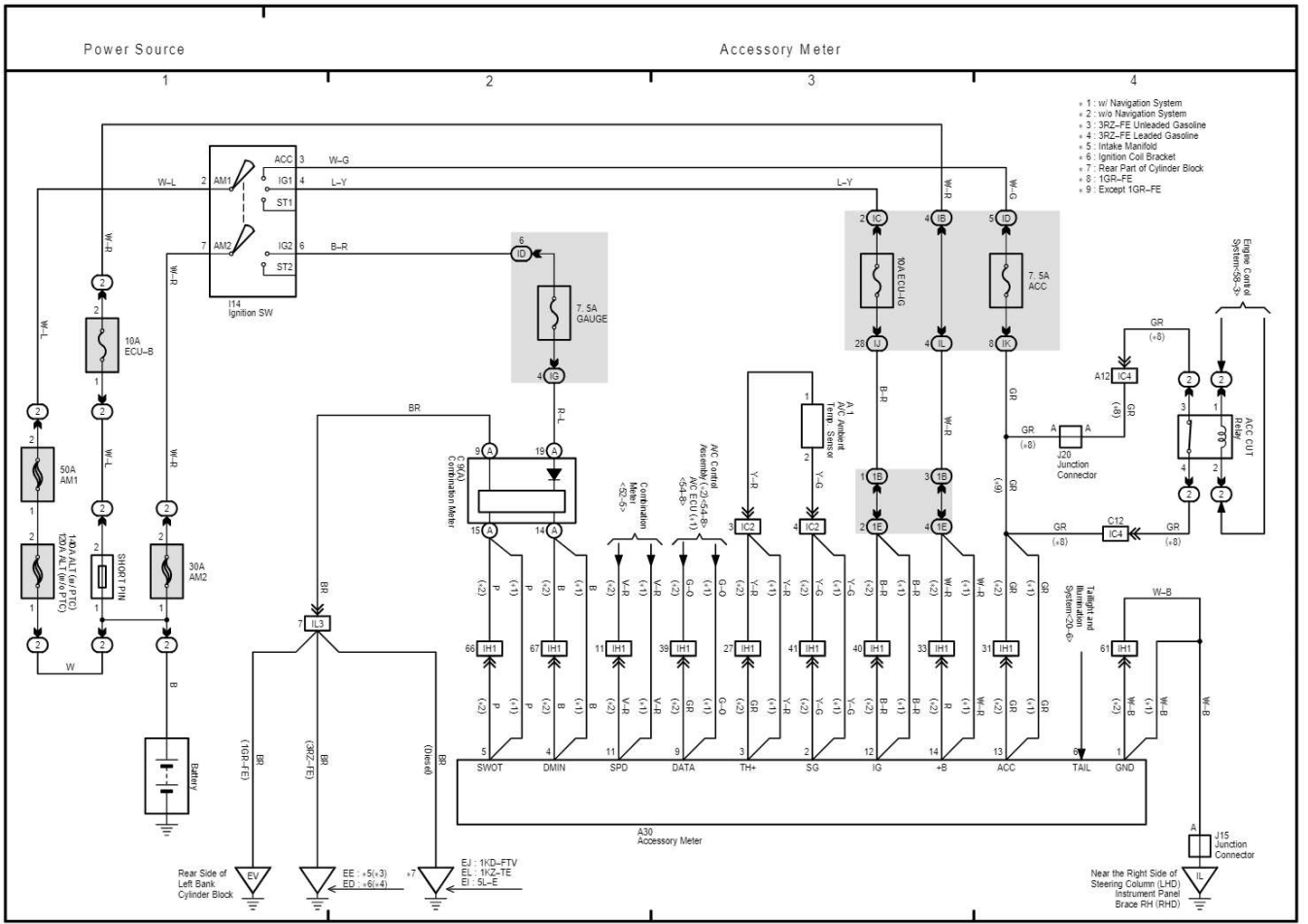
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

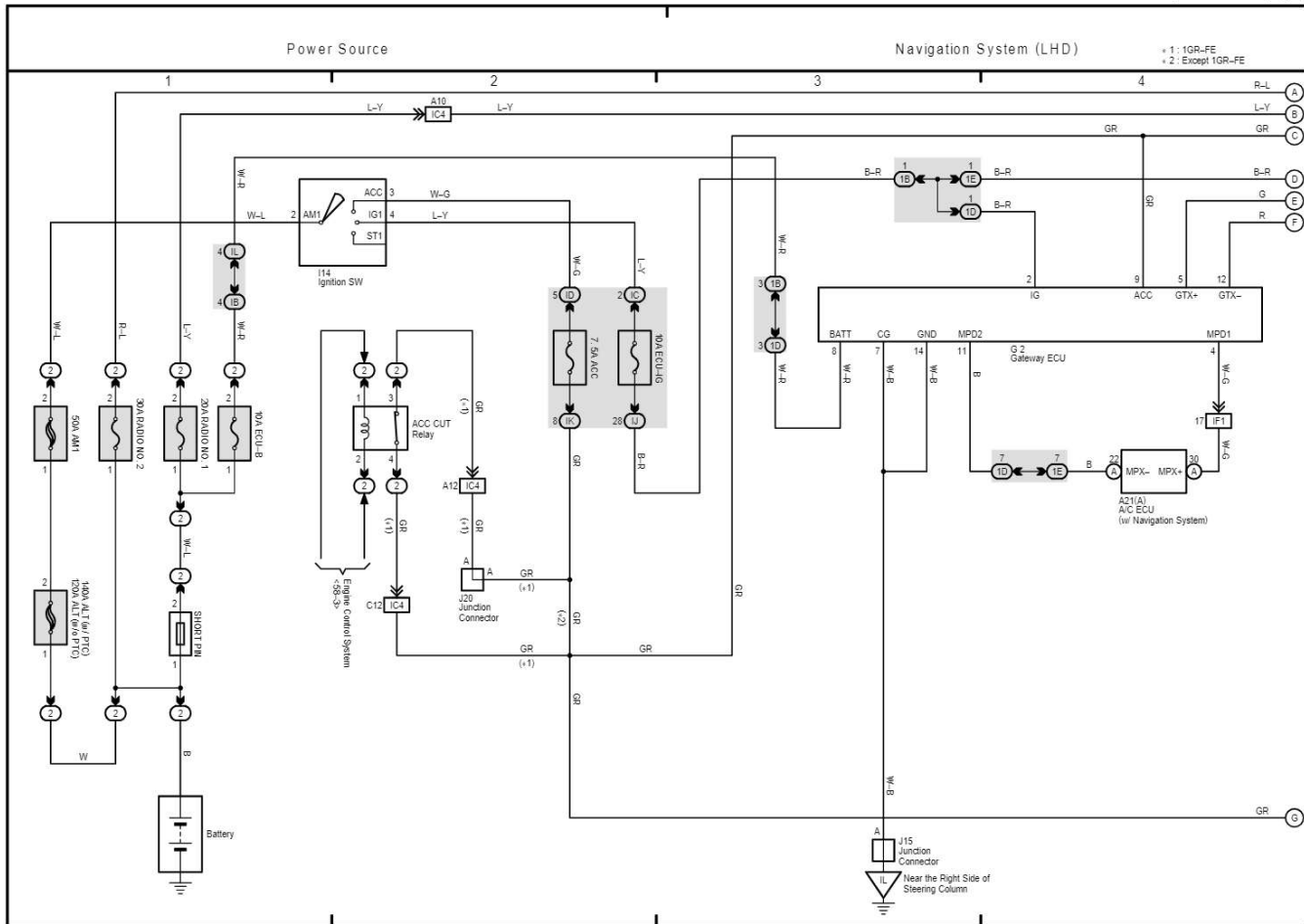




46 LAND CRUISER / LAND CRUISER PRADO



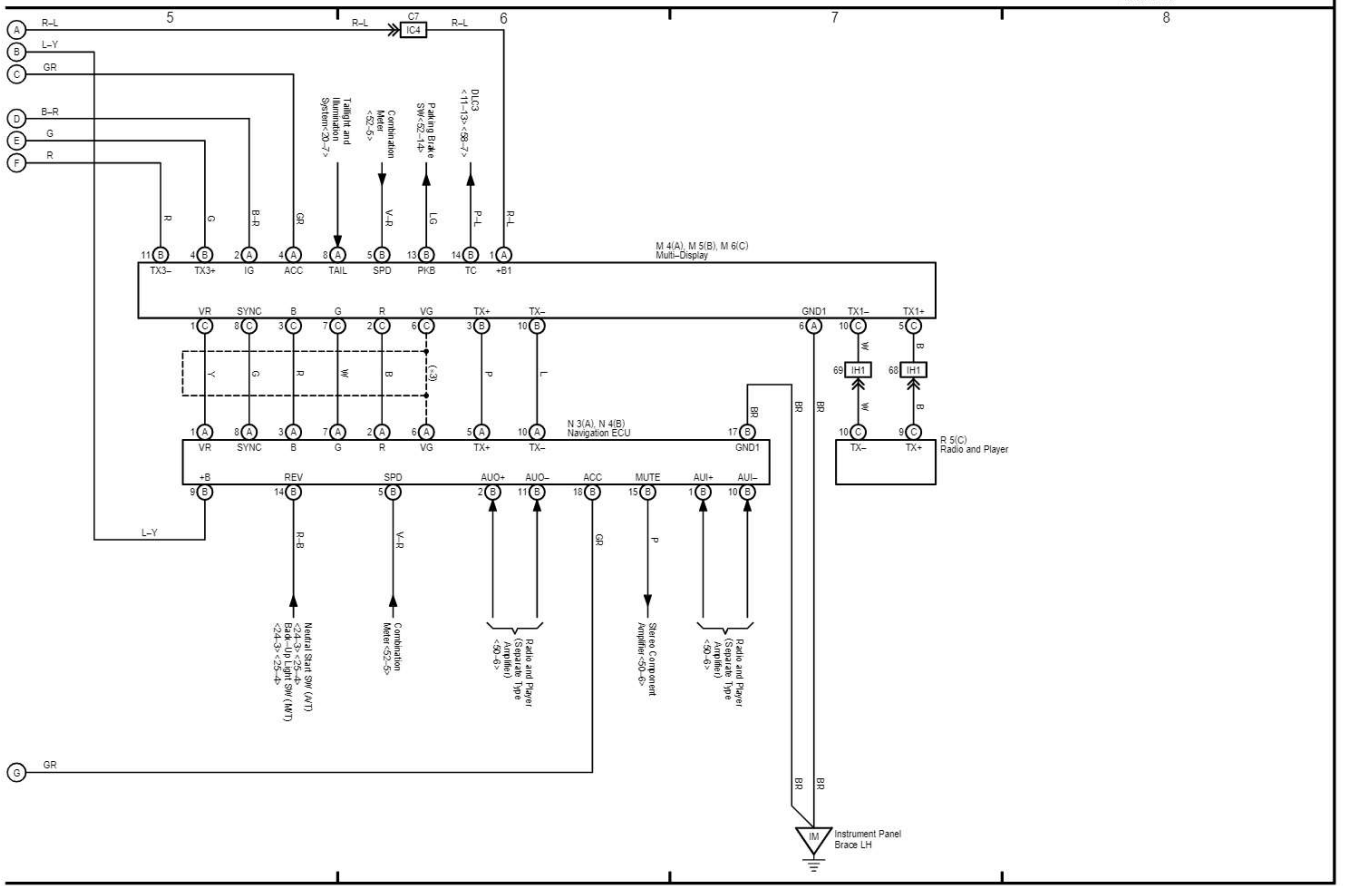


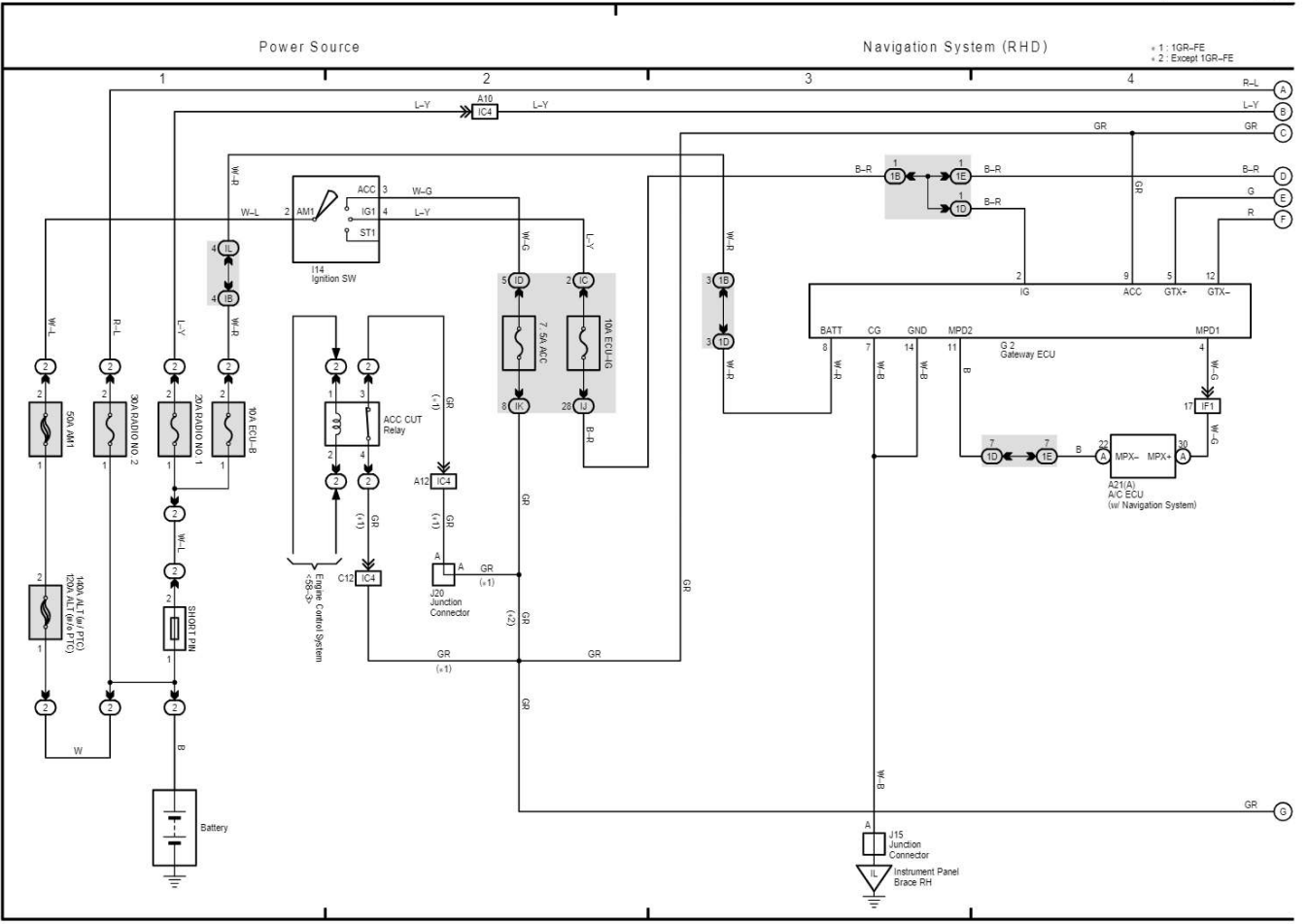


LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Navigation System (LHD)

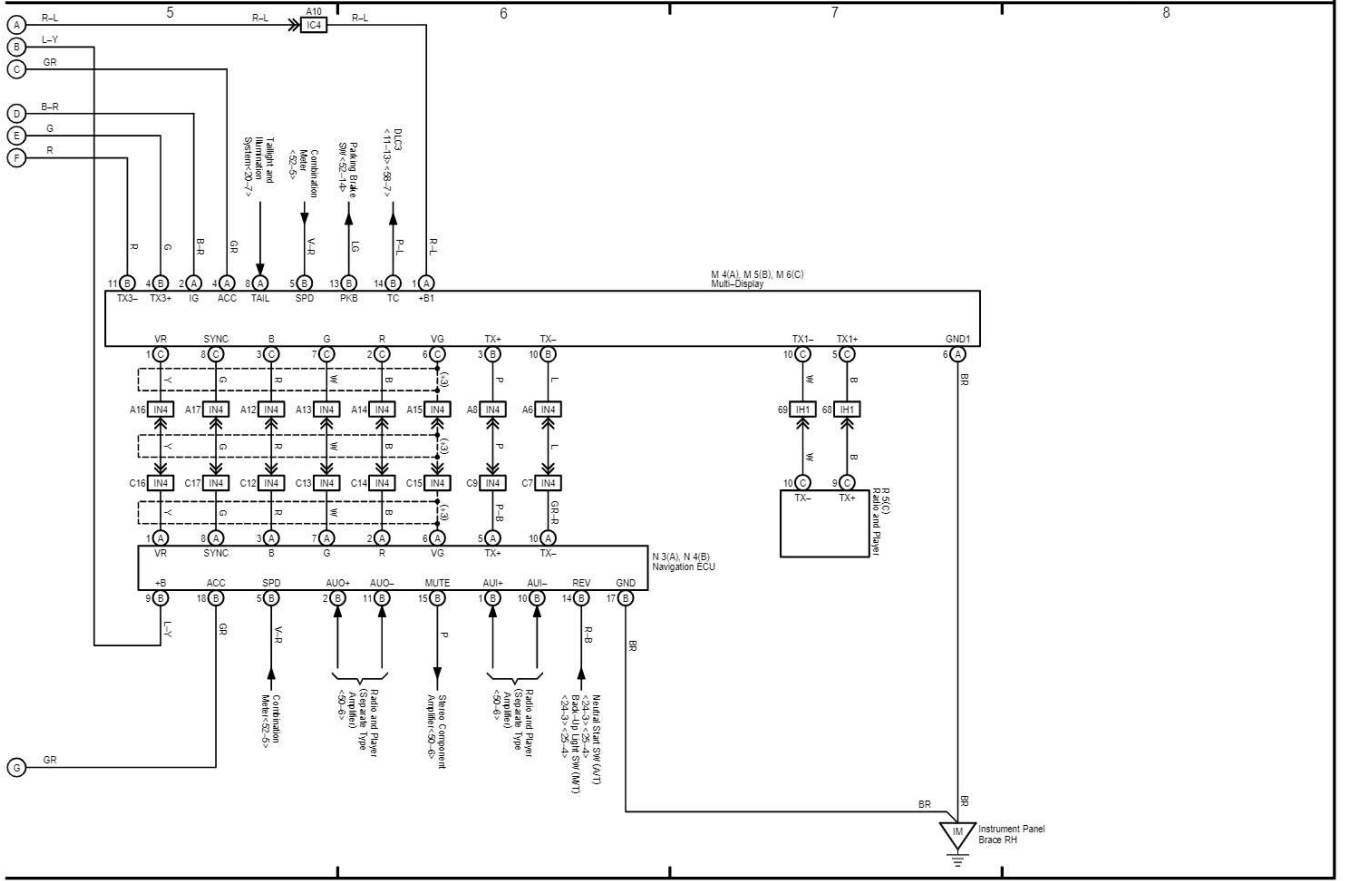
+ 3 : Shielded





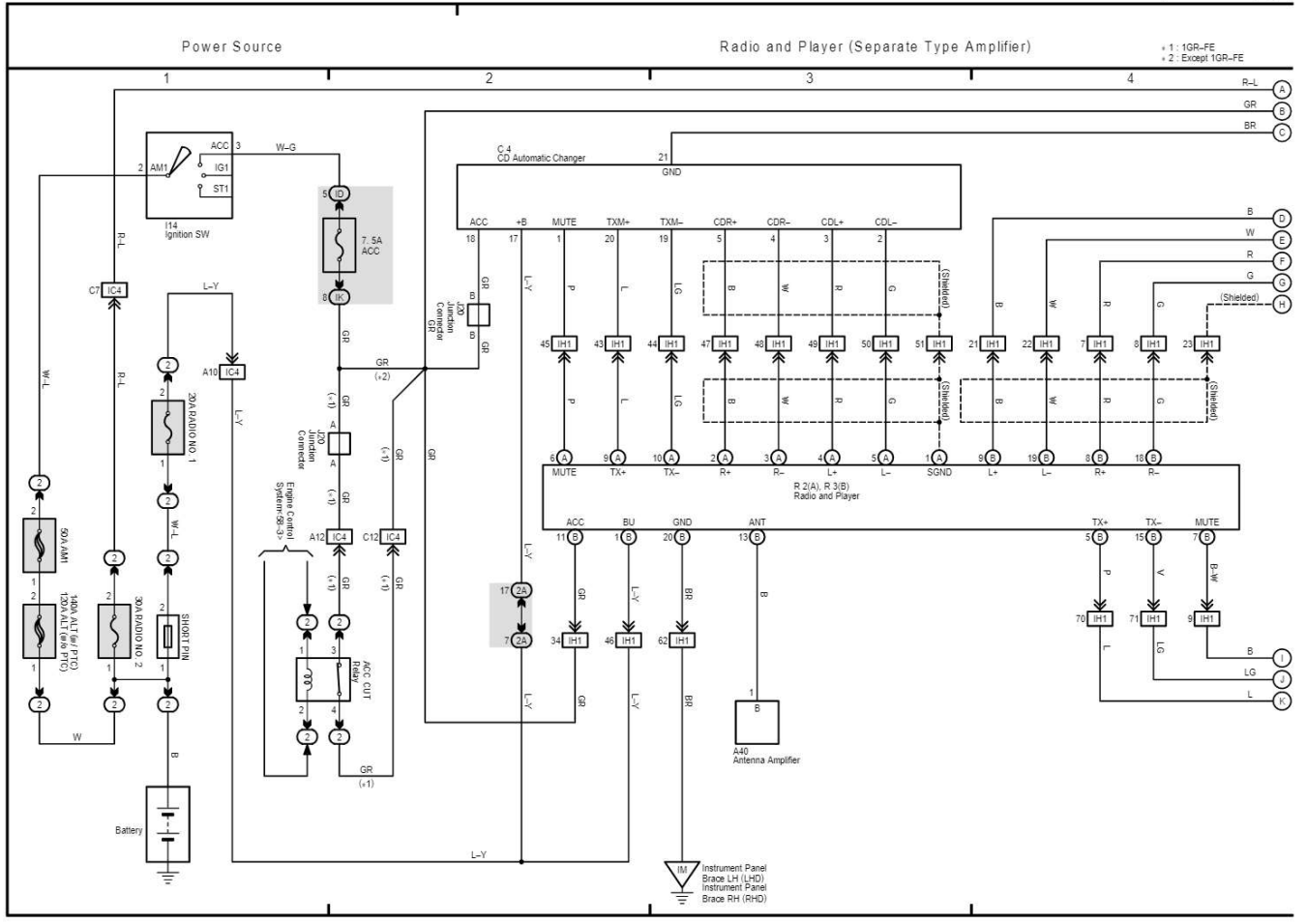
Navigation System (RHD)

+ 3 : Shielded



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

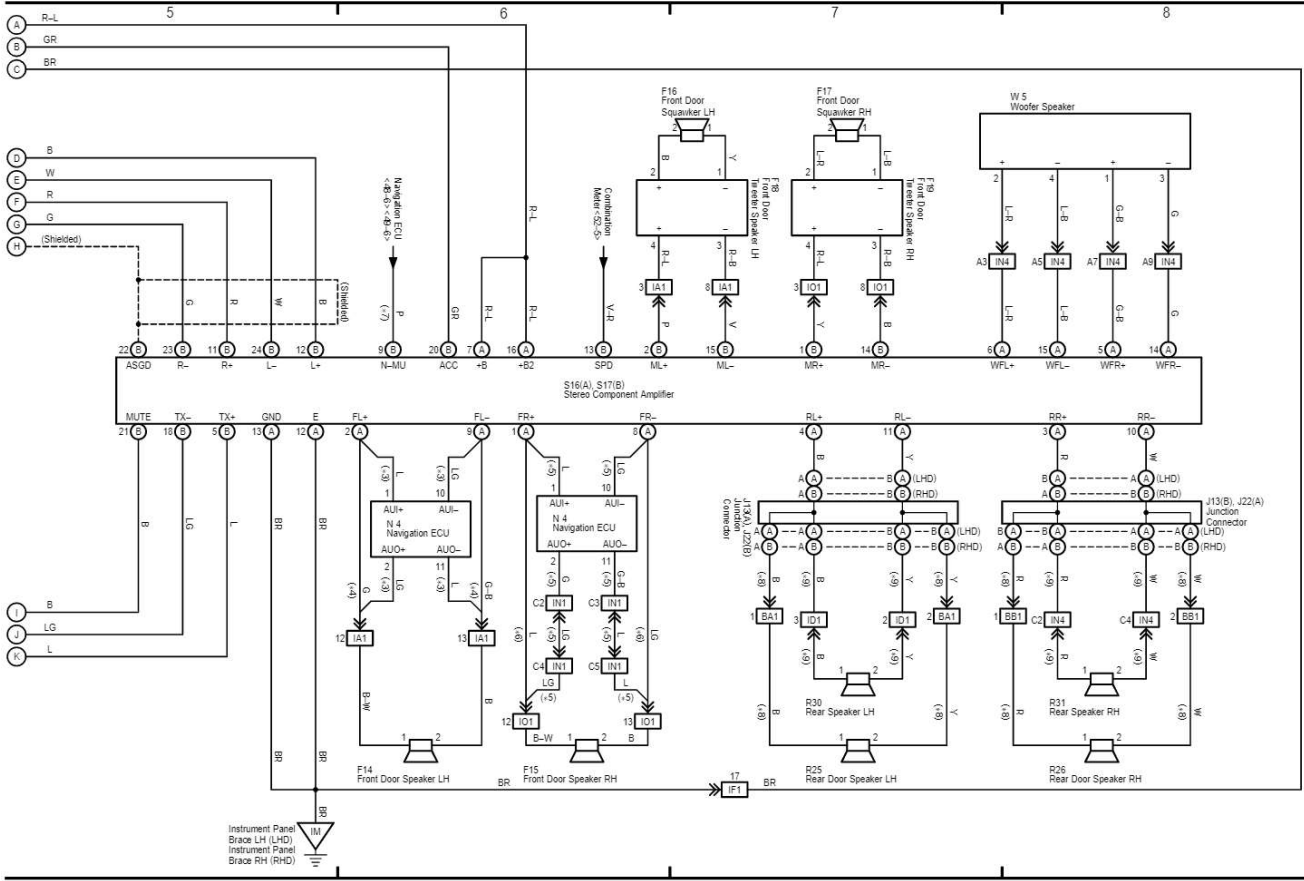
LAND CRUISER / LAND CRUISER PRADO (EWD527E)





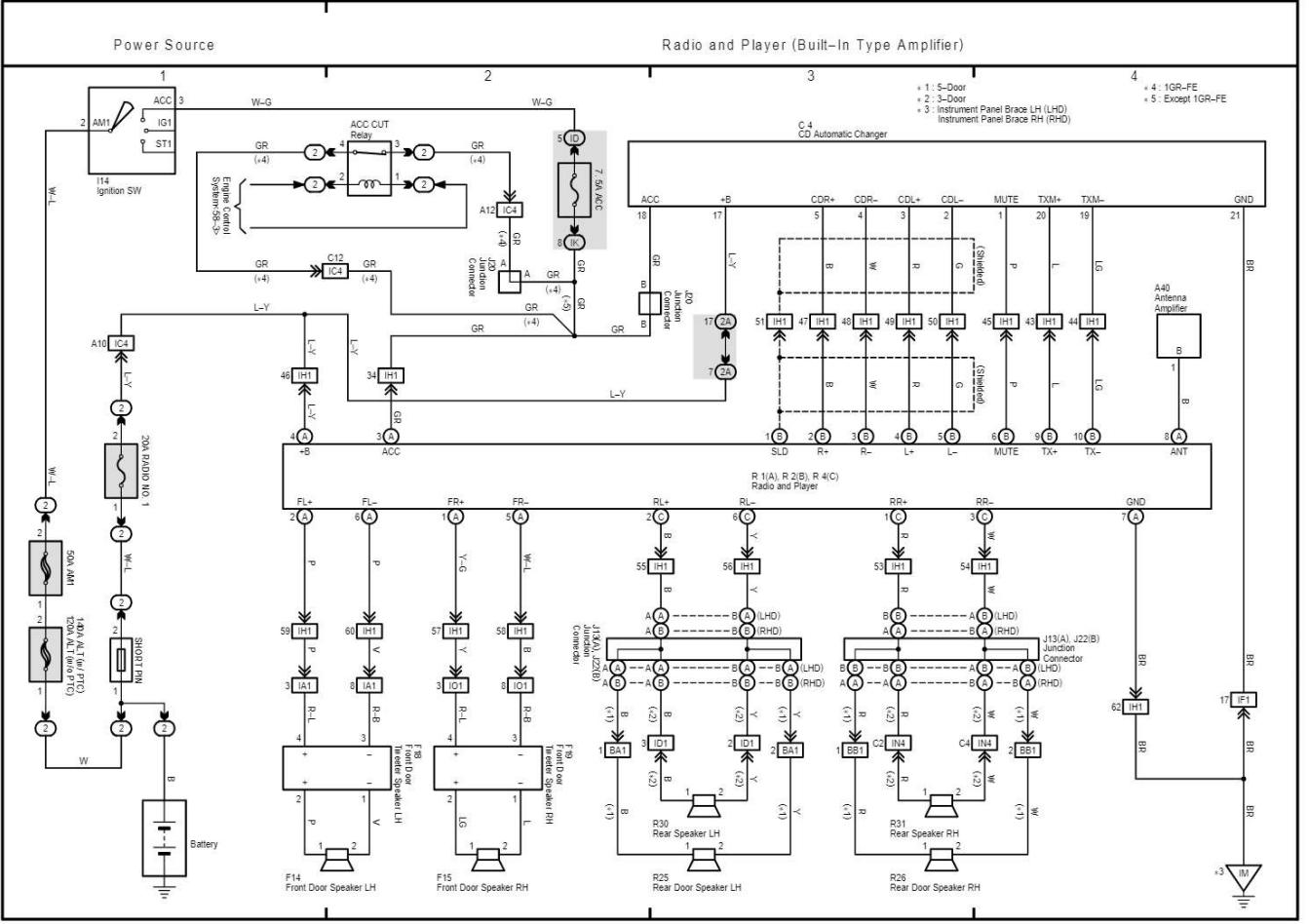
Radio and Player (Separate Type Amplifier)

- \* 3 : LHD w/ Navigation System
- \* 4 : Except \* 3
- \* 5 : RHD w/ Navigation System
- \* 6 : Except \* 5
- \* 7 : w/ Navigation System
- \* 8 : 5-Door
- \* 9 : 3-Door



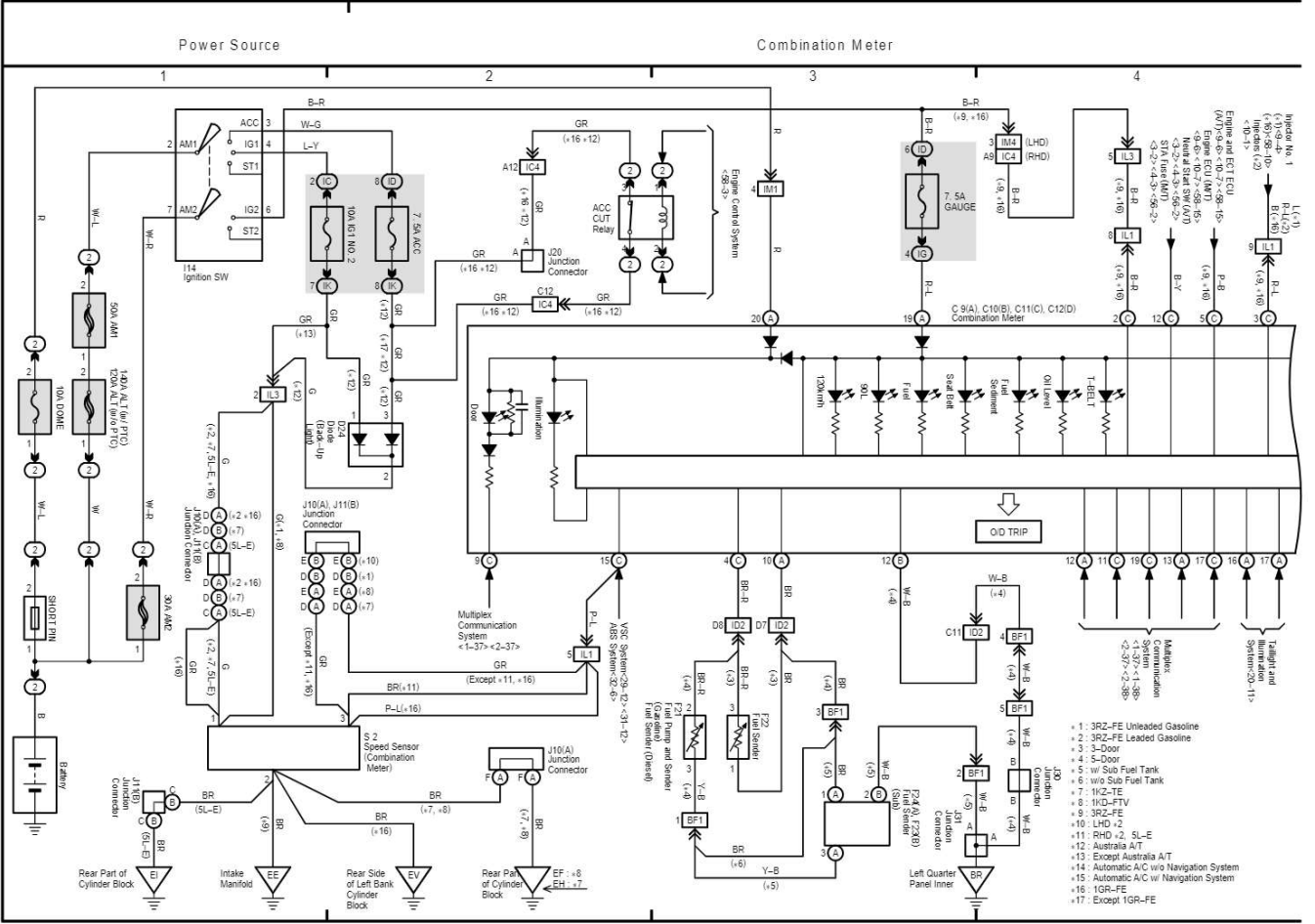
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

51 LAND CRUISER / LAND CRUISER PRADO

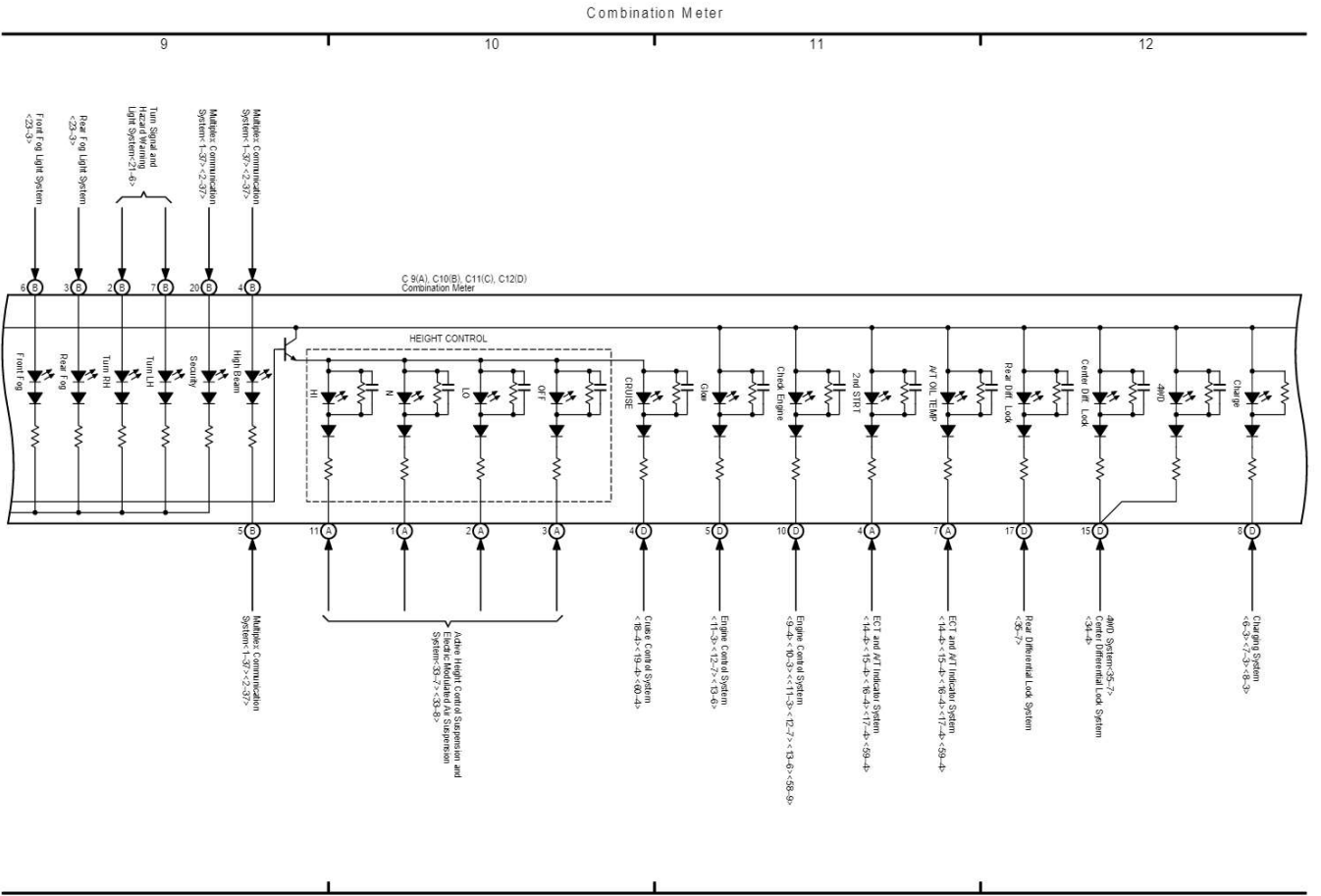


LAND CRUISER / LAND CRUISER PRADO (EWD527E)

905







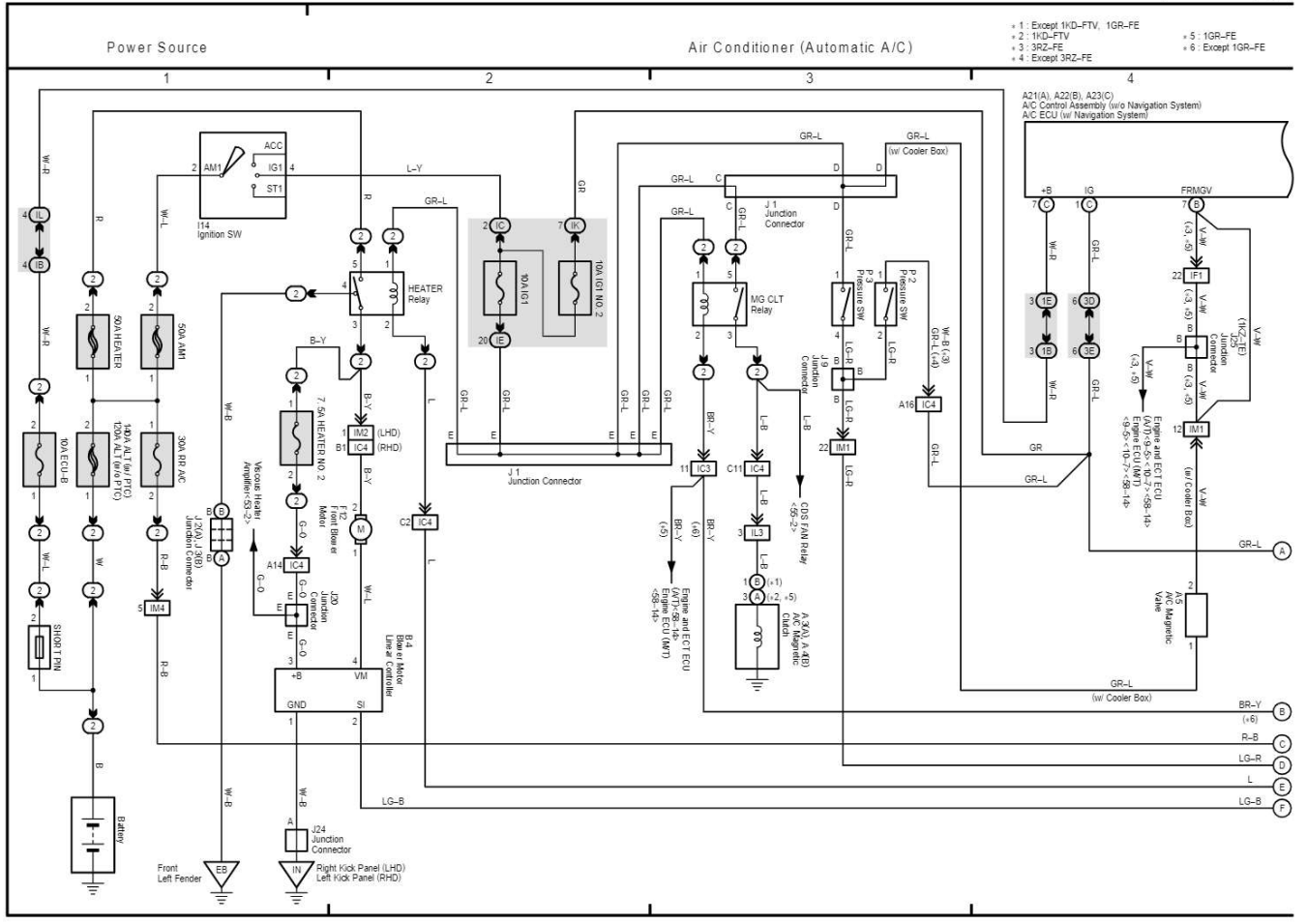




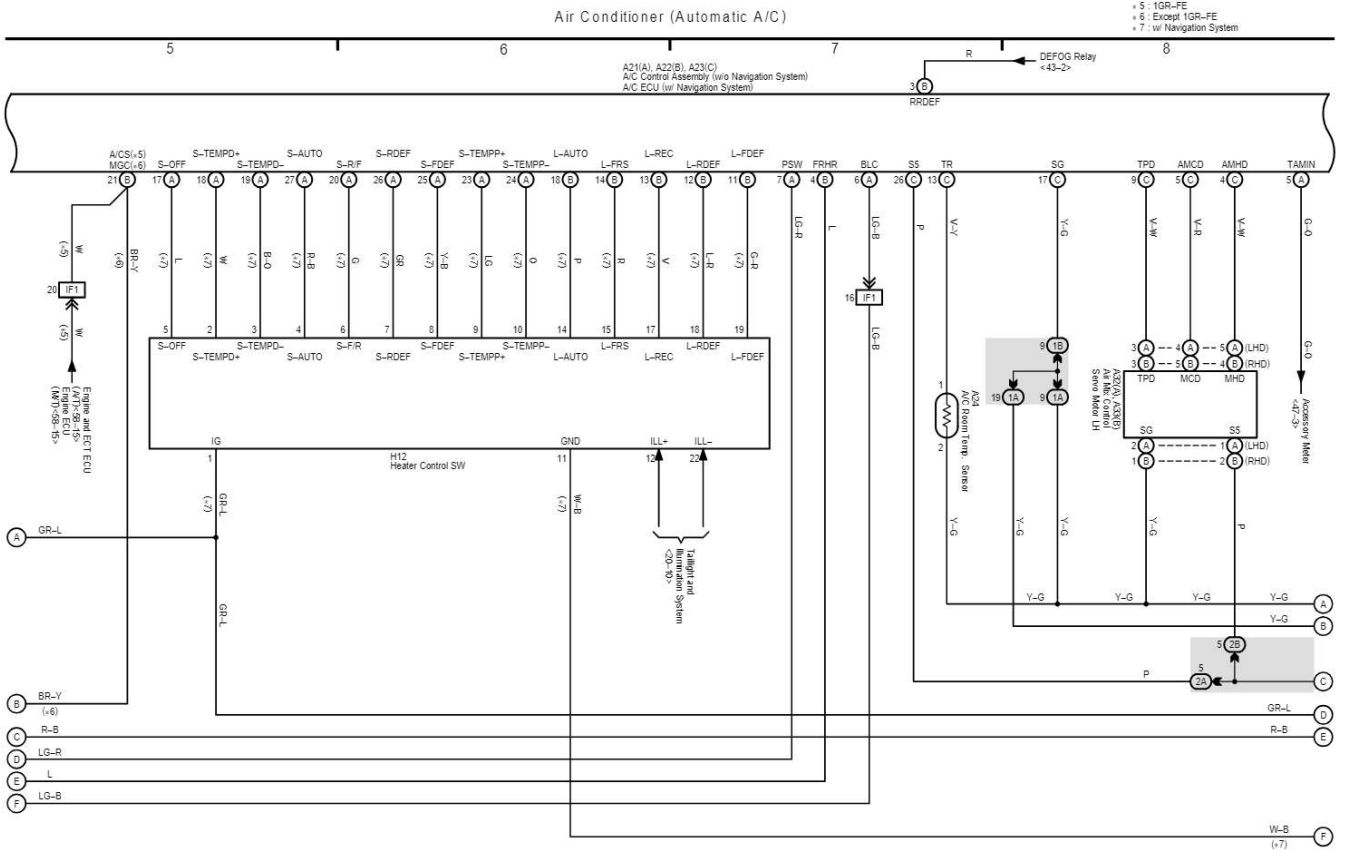


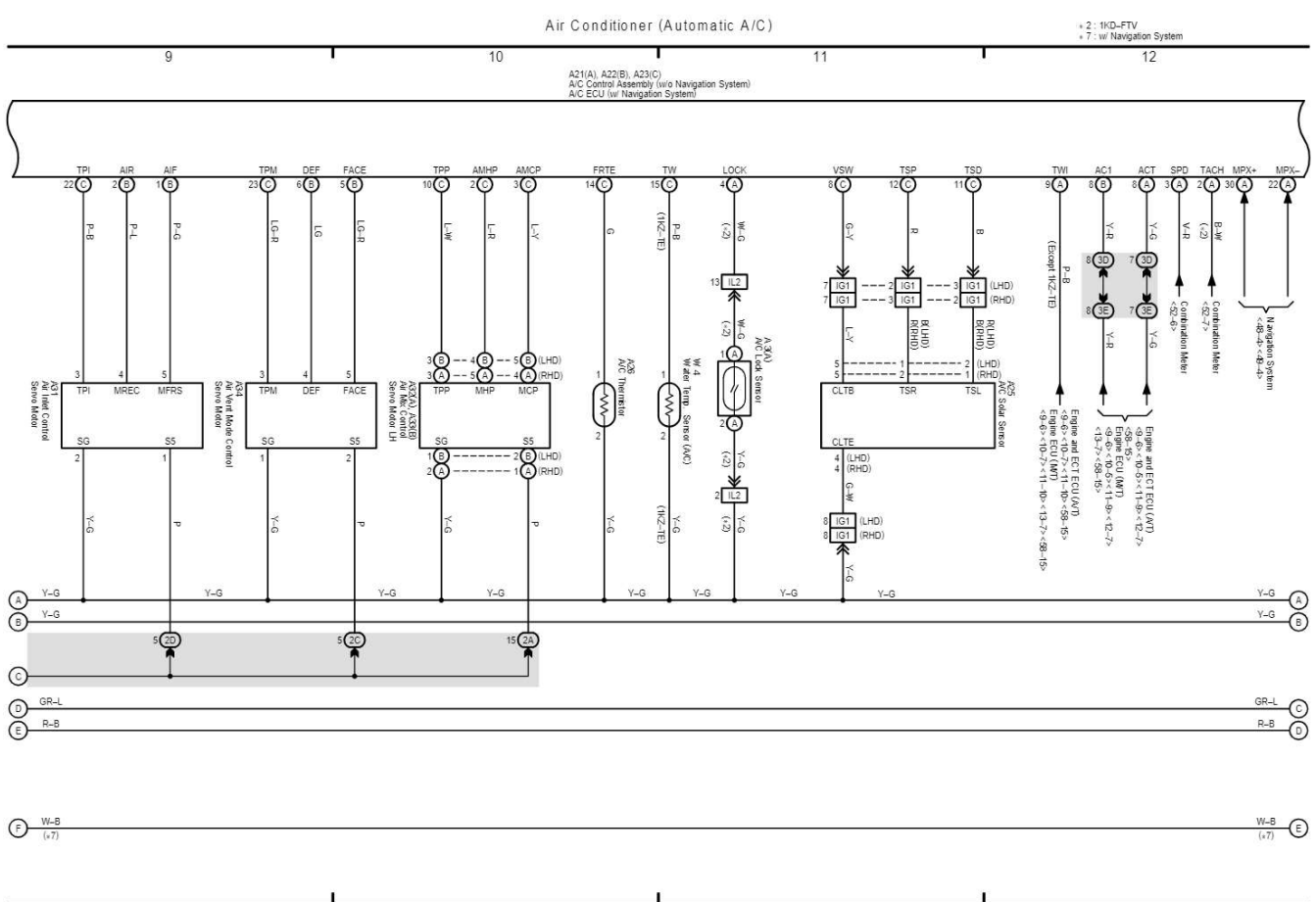
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

911



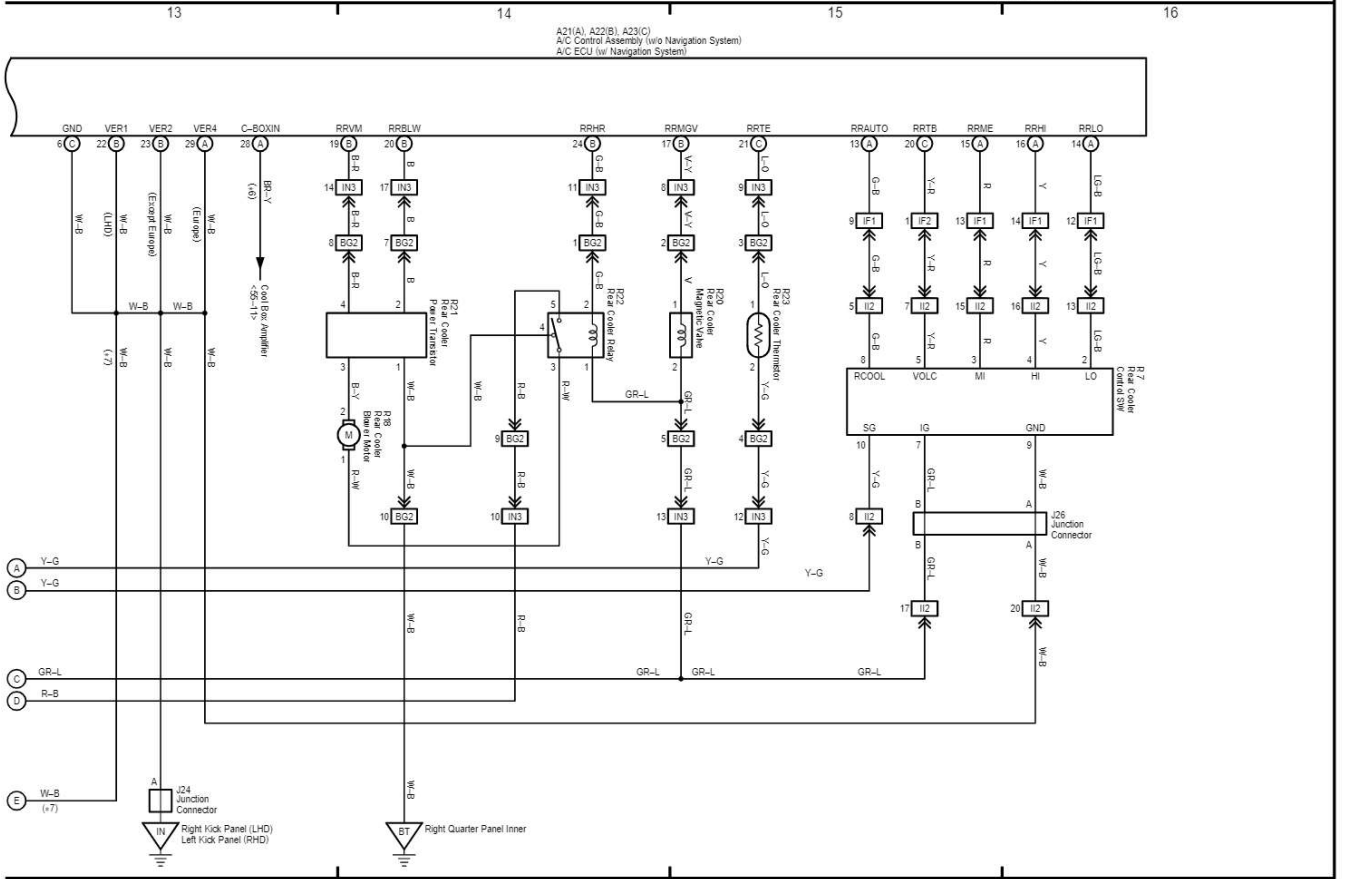
M OVERALL ELECTRICAL WIRING DIAGRAM

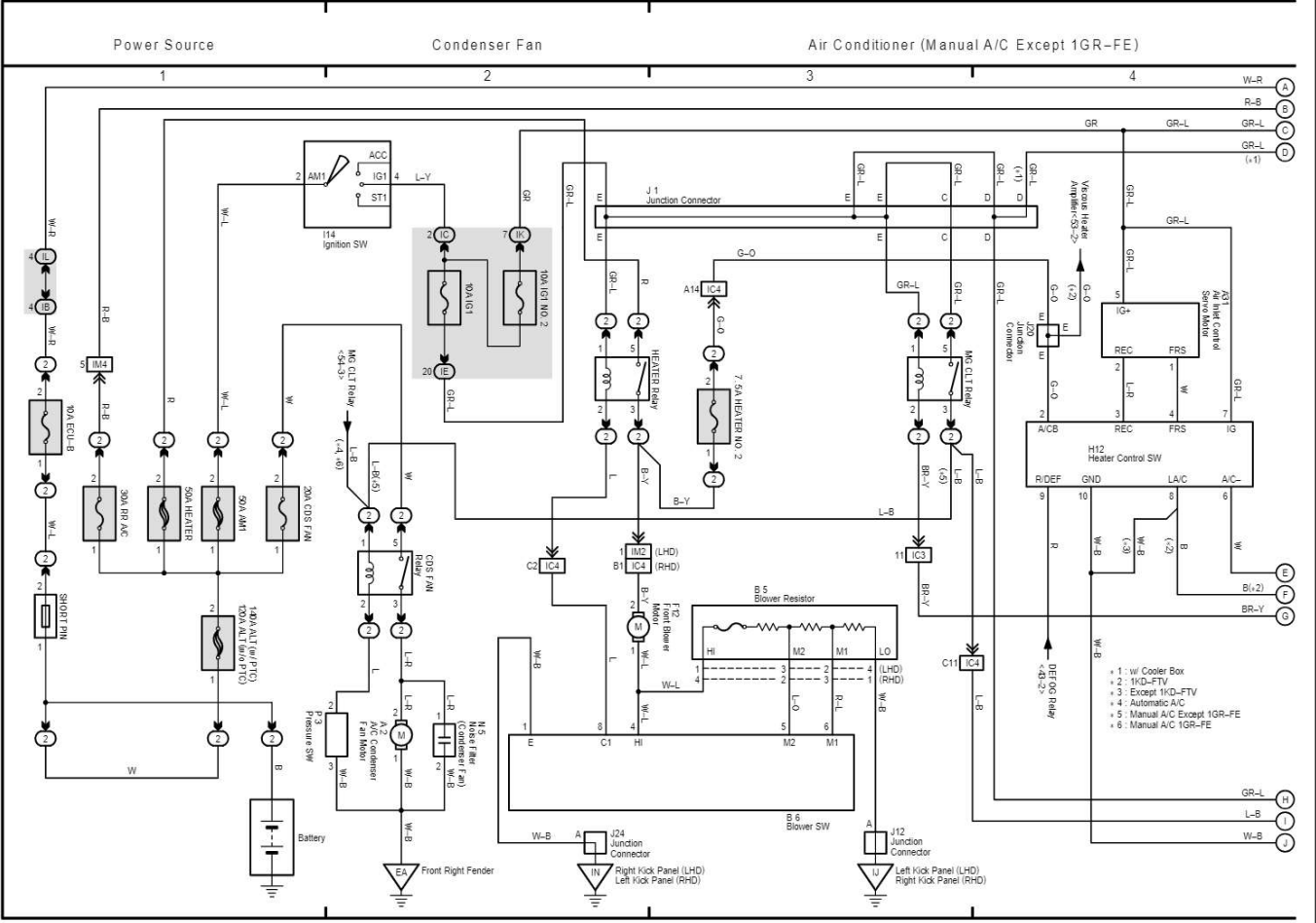




Rear Air Conditioner (Automatic A/C)

• 6 : w/ Cooler Box  
 • 7 : w/ Navigation System

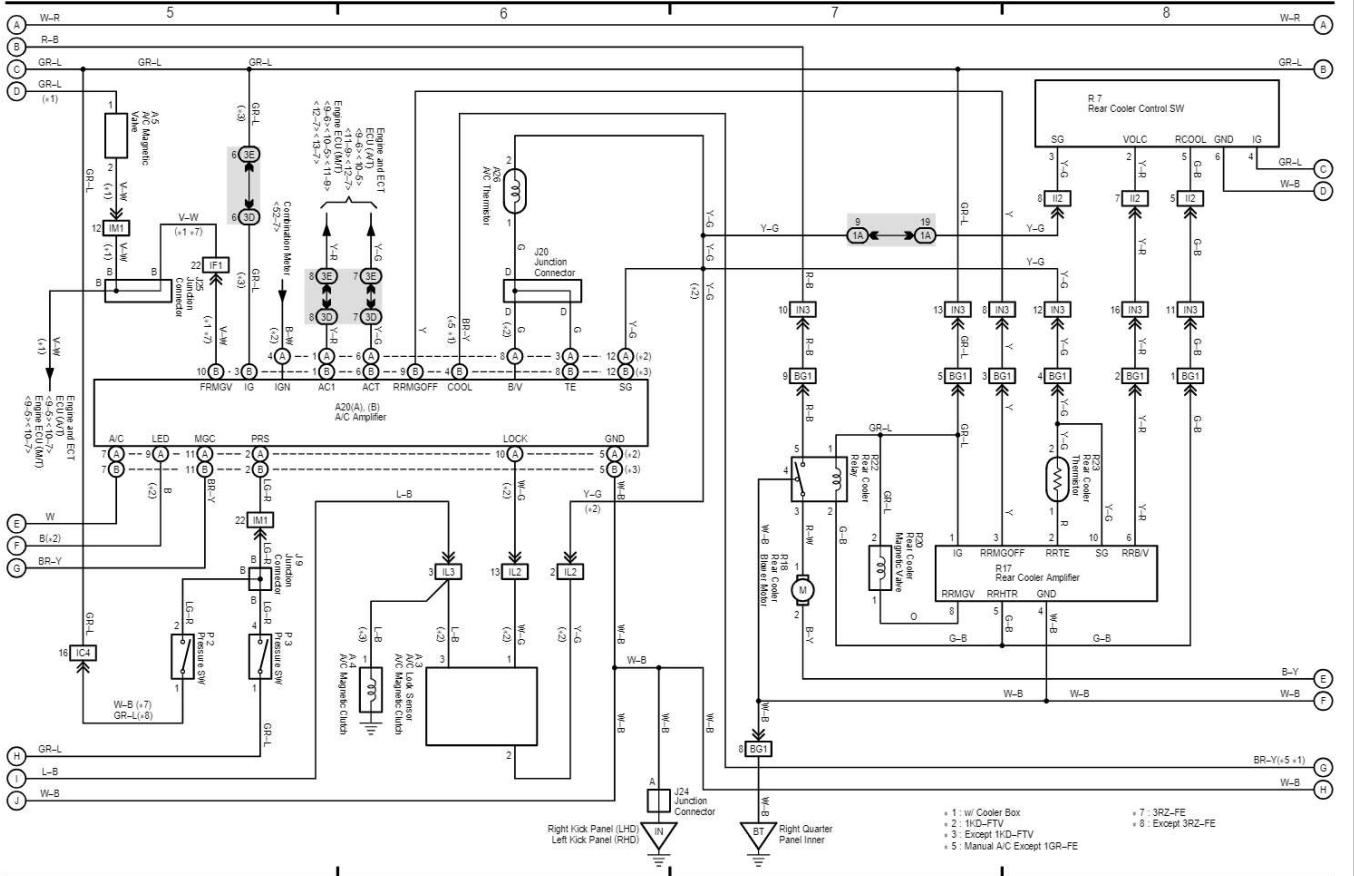




LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Air Conditioner (Manual A/C Except 1GR-FE)

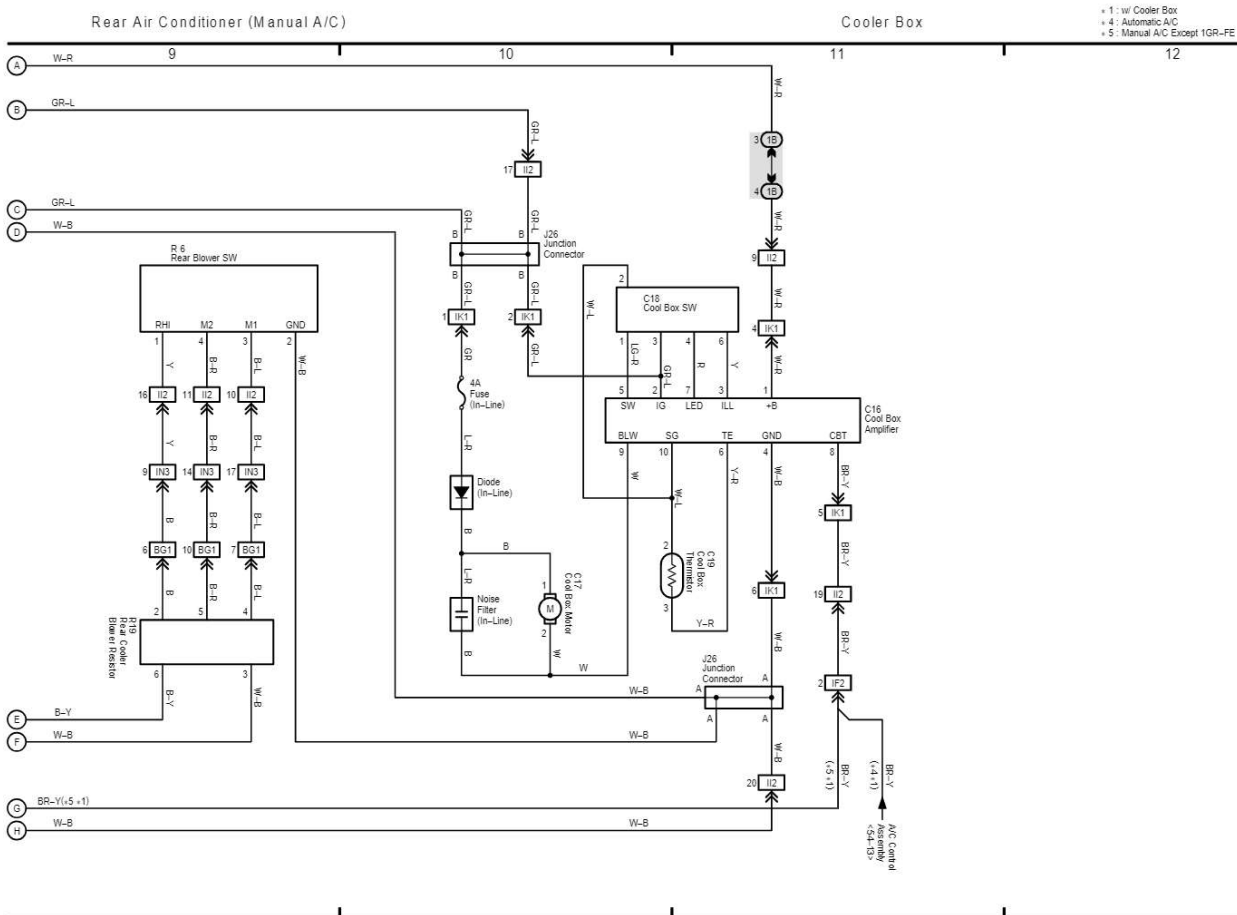
Rear Air Conditioner (Manual A/C)



- + 1 : w/ Cooler Box
- + 2 : 1K-D-FTV
- + 3 : Except 1K-D-FTV
- + 5 : Manual A/C Except 1GR-FE
- + 7 : 3RZ-FE
- + 8 : Except 3RZ-FE

Right Kick Panel (LHD)  
Left Kick Panel (RHD)

Right Quarter  
Panel Timer





Power Source

Starting (1GR-FE)

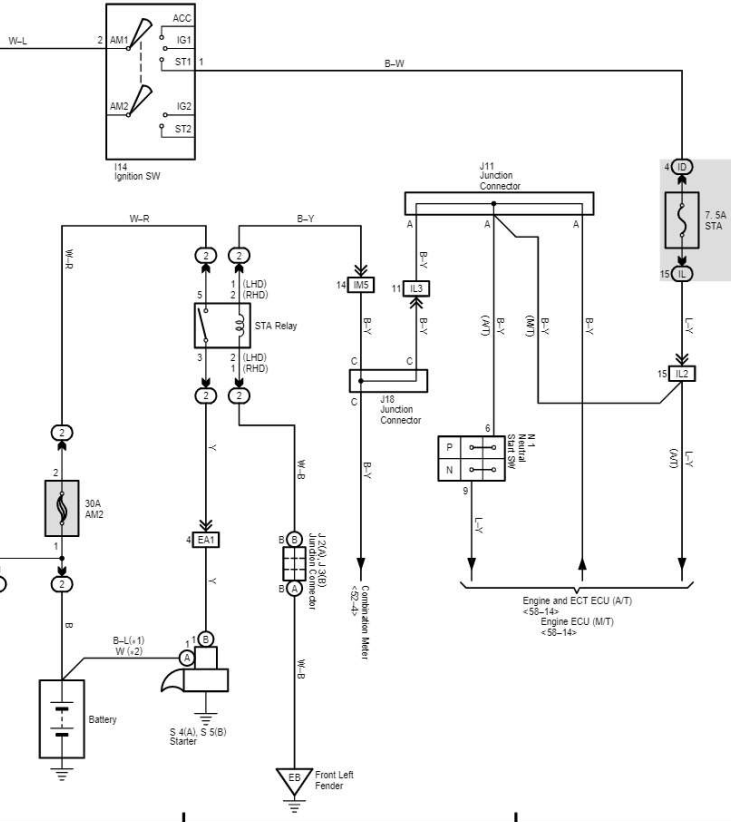
- \* 1 Cold Area Spec
- \* 2 Except Cold Area Spec

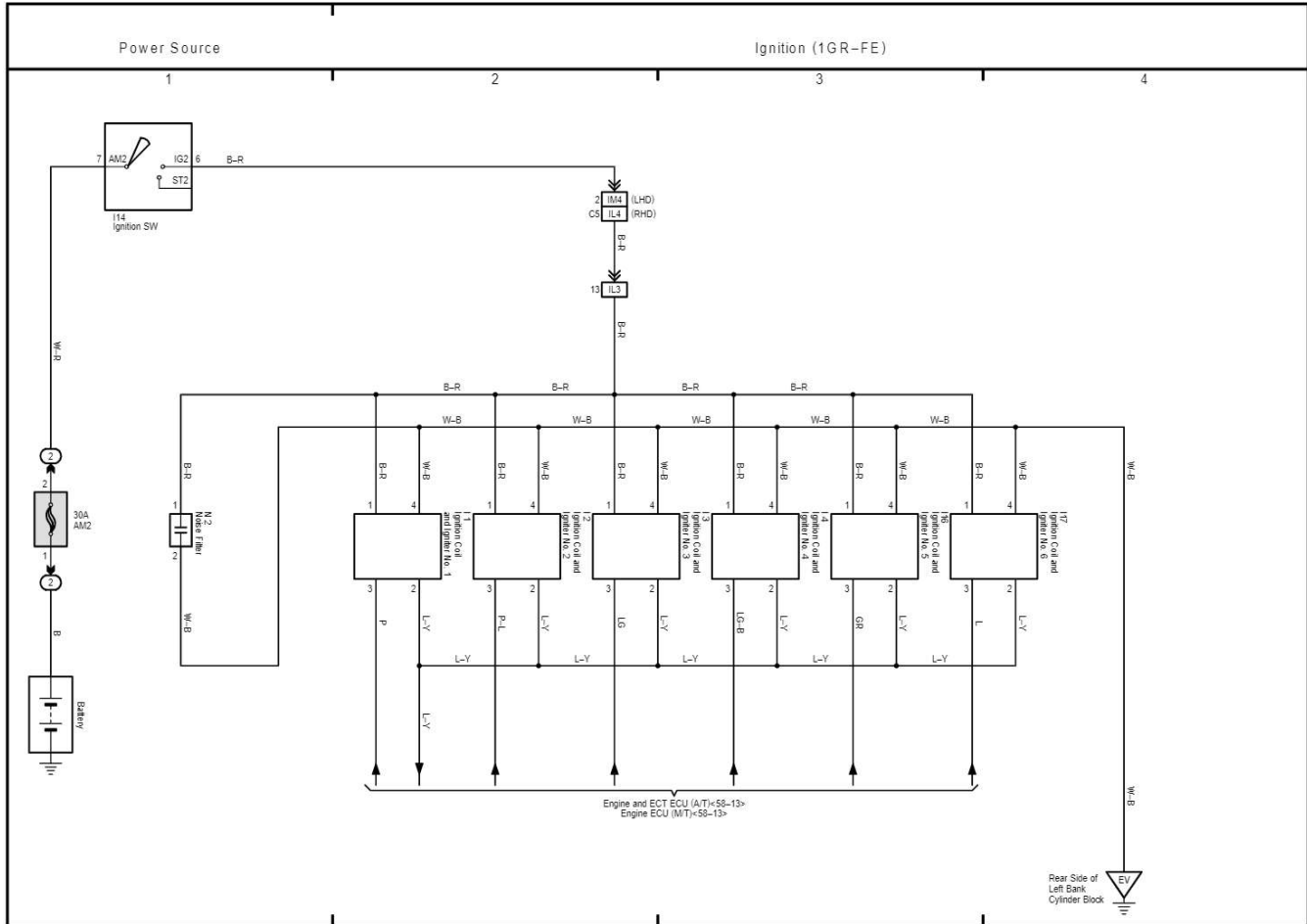
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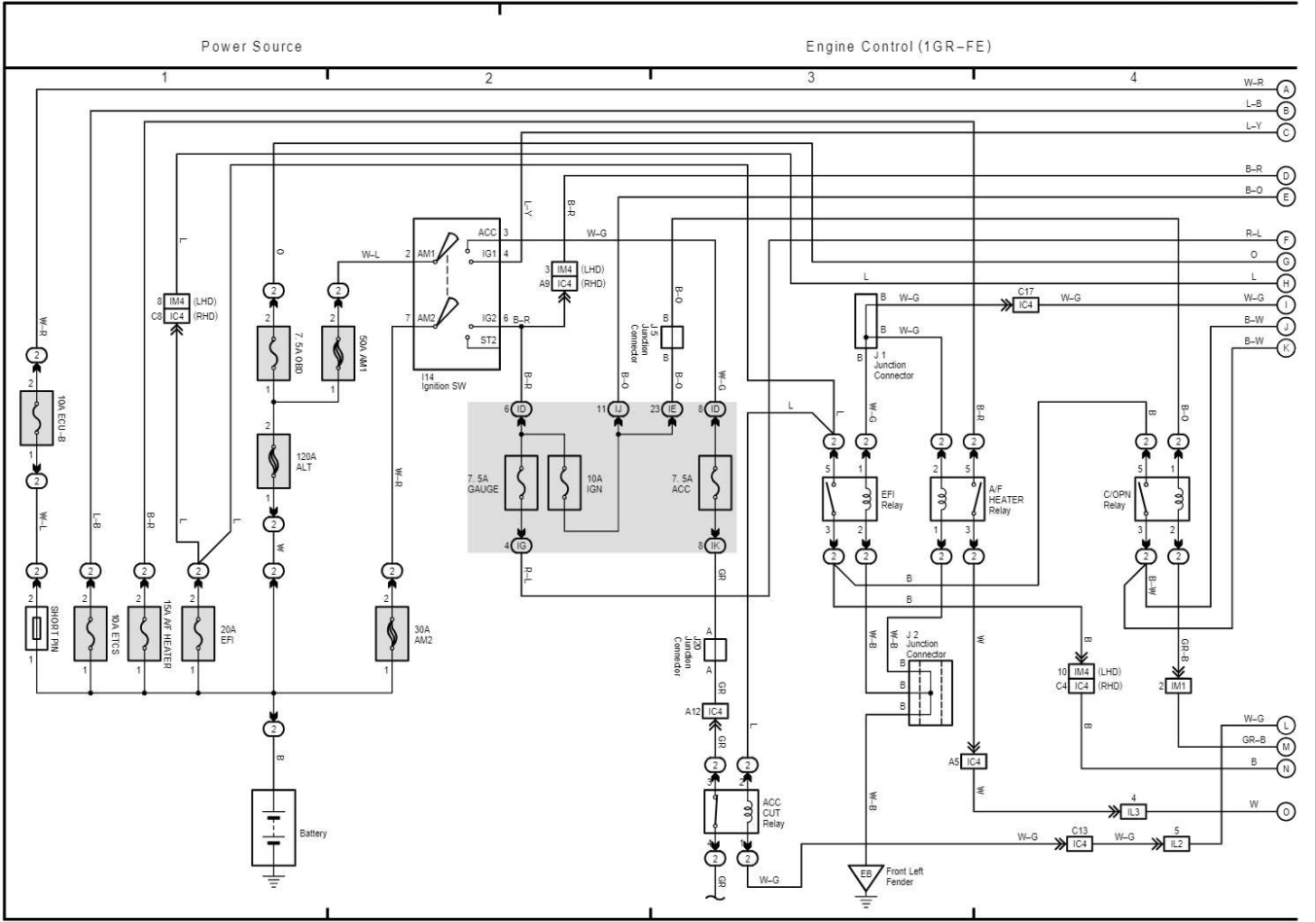
2

3

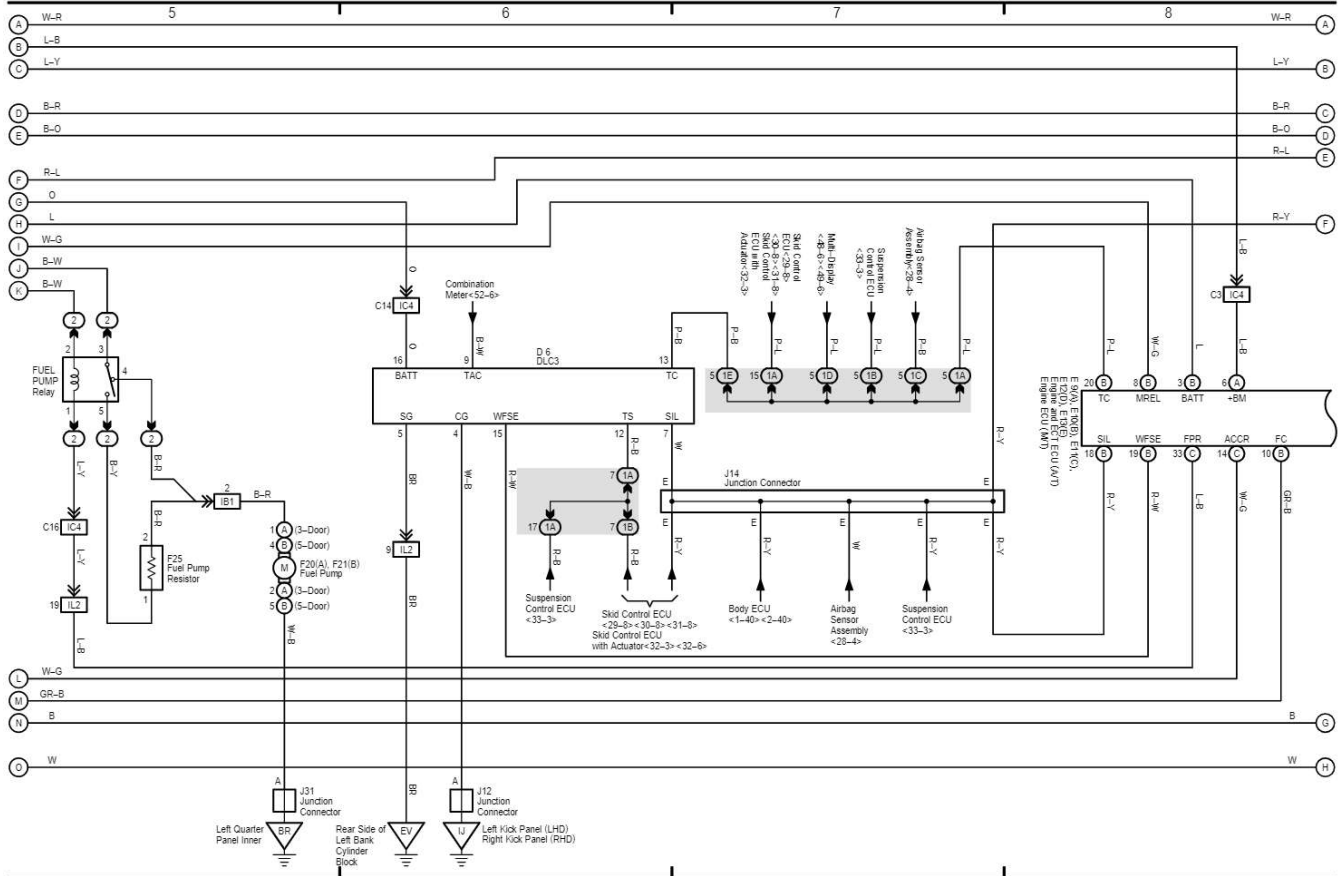
4







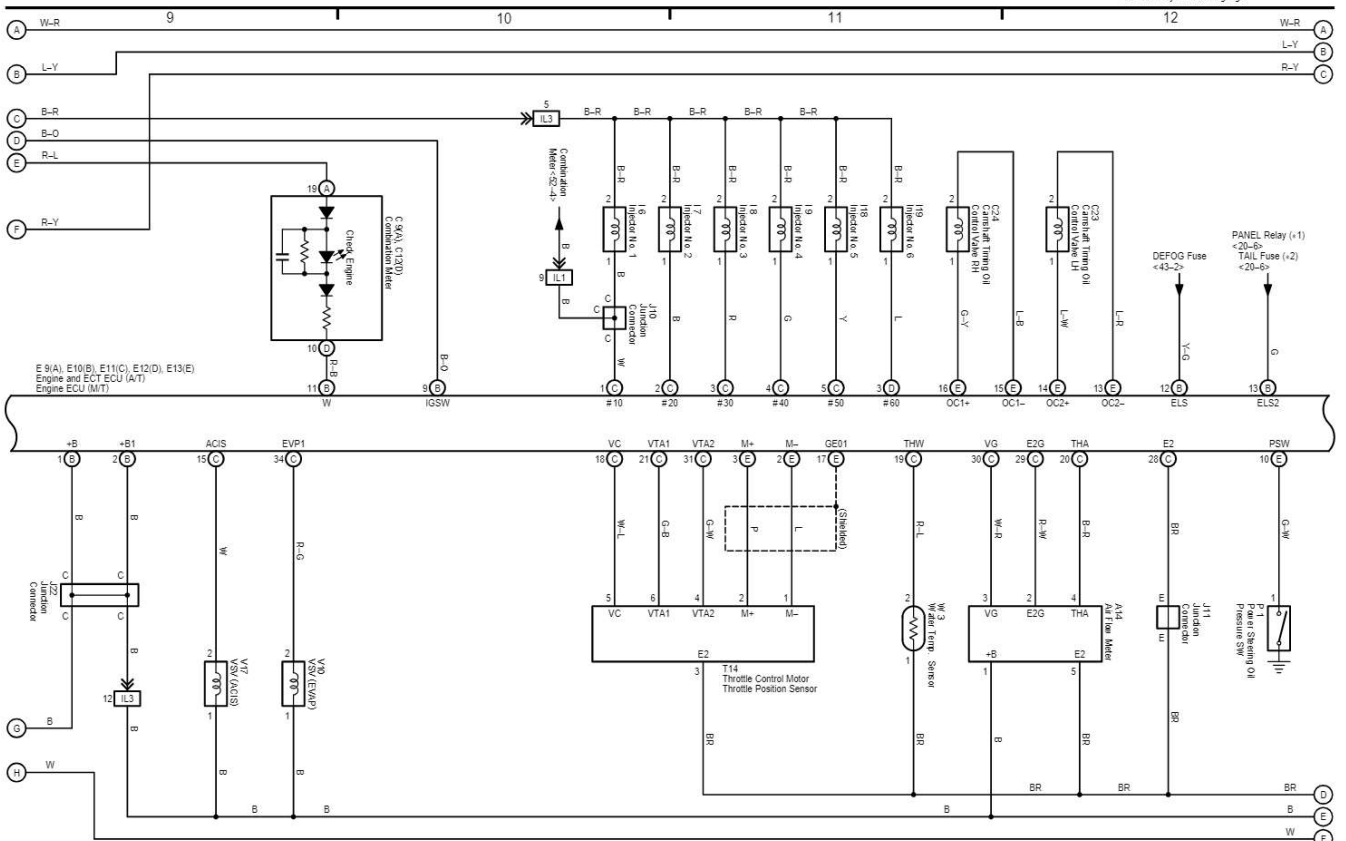
Engine Control (1GR-FE)



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

Engine Control (1GR-FE)

\* 1 : w/ Daytime Running Light  
 \* 2 : w/o Daytime Running Light

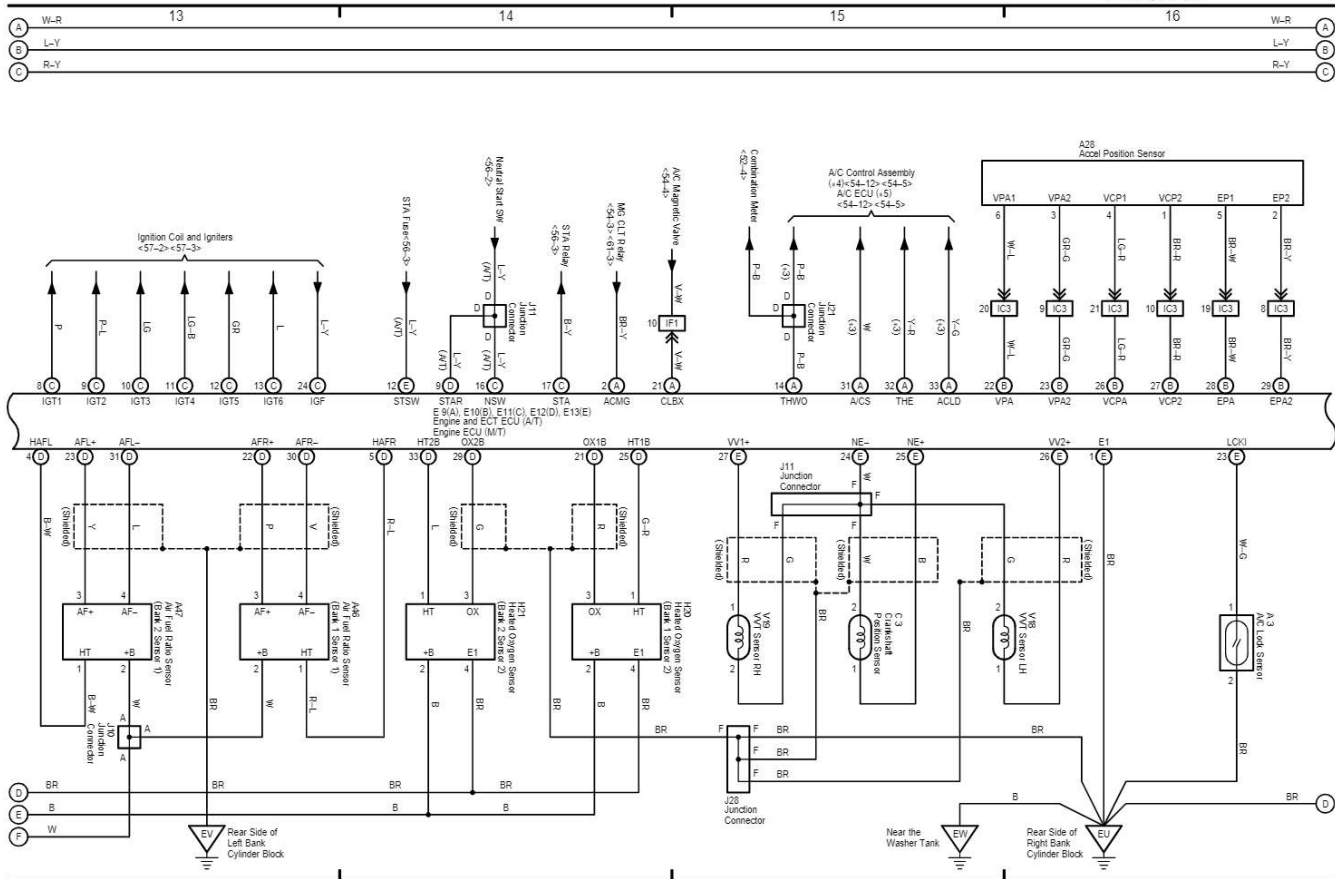


LAND CRUISER / LAND CRUISER PRADO (EWD527E)

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

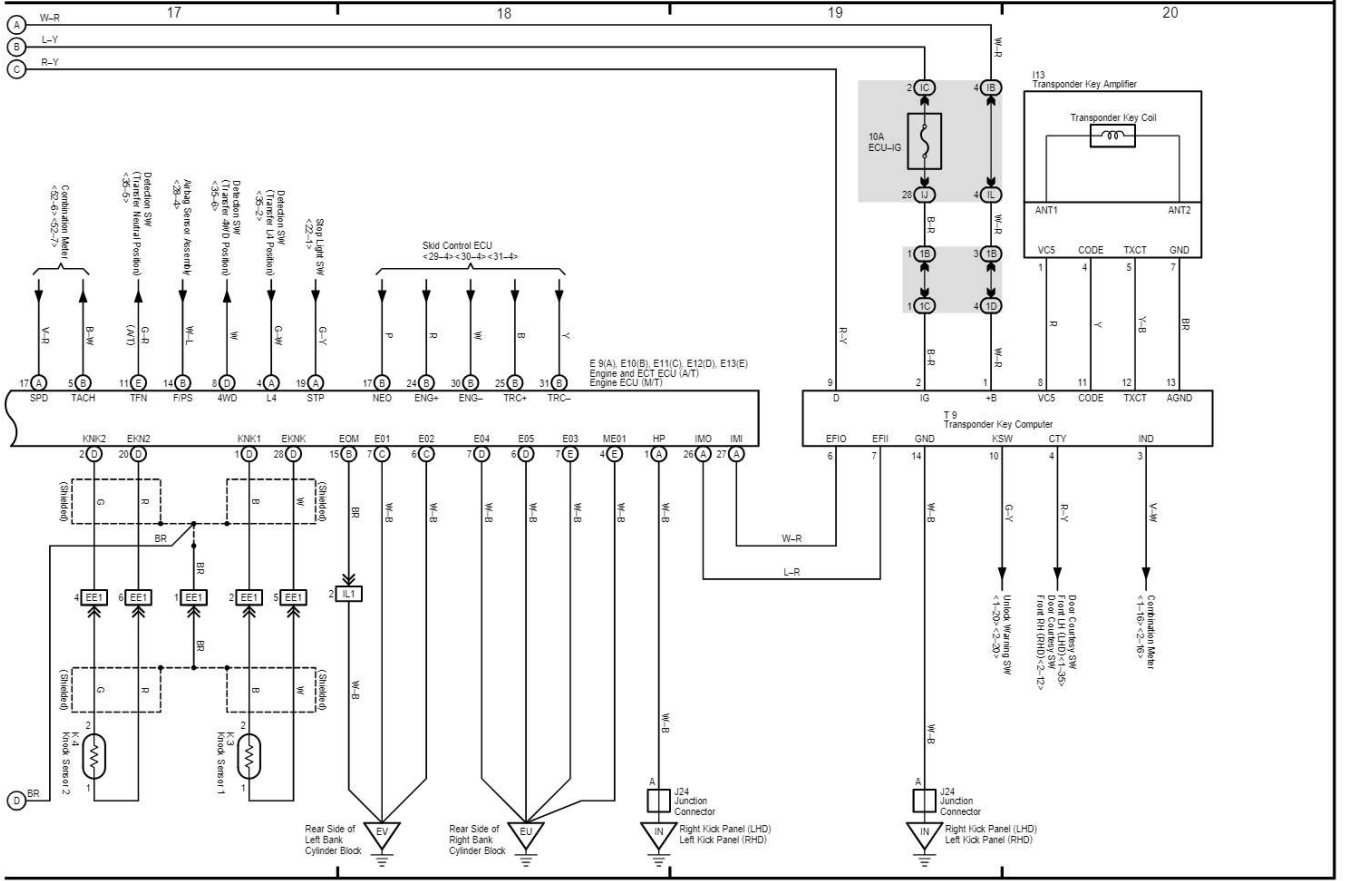
Engine Control (1GR-FE)

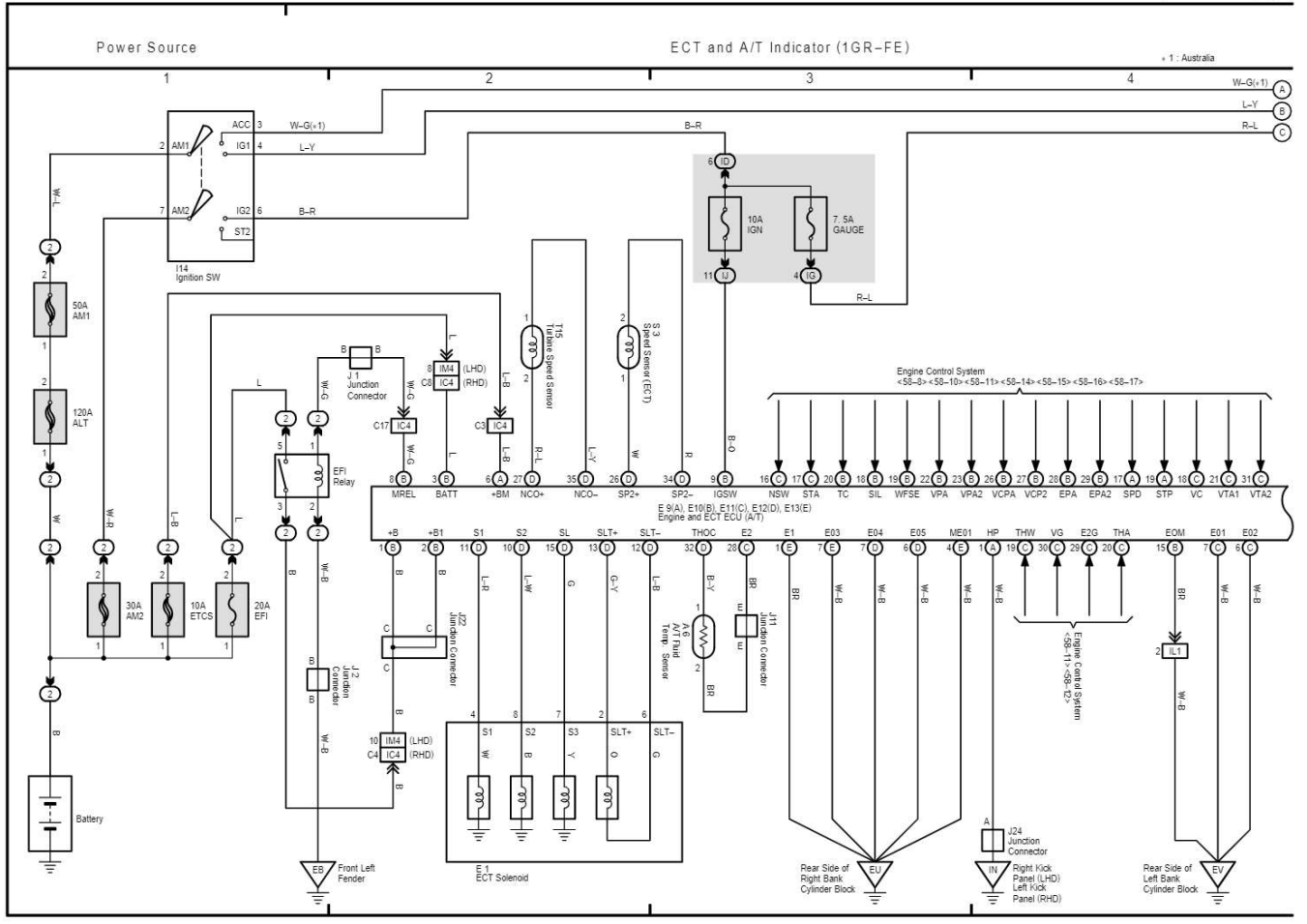
- 3 : Automatic A/C
- 4 : w/o Navigation System
- 5 : w/ Navigation System



Engine Control (1GR-FE)

Engine Immobiliser System (1GR-FE)

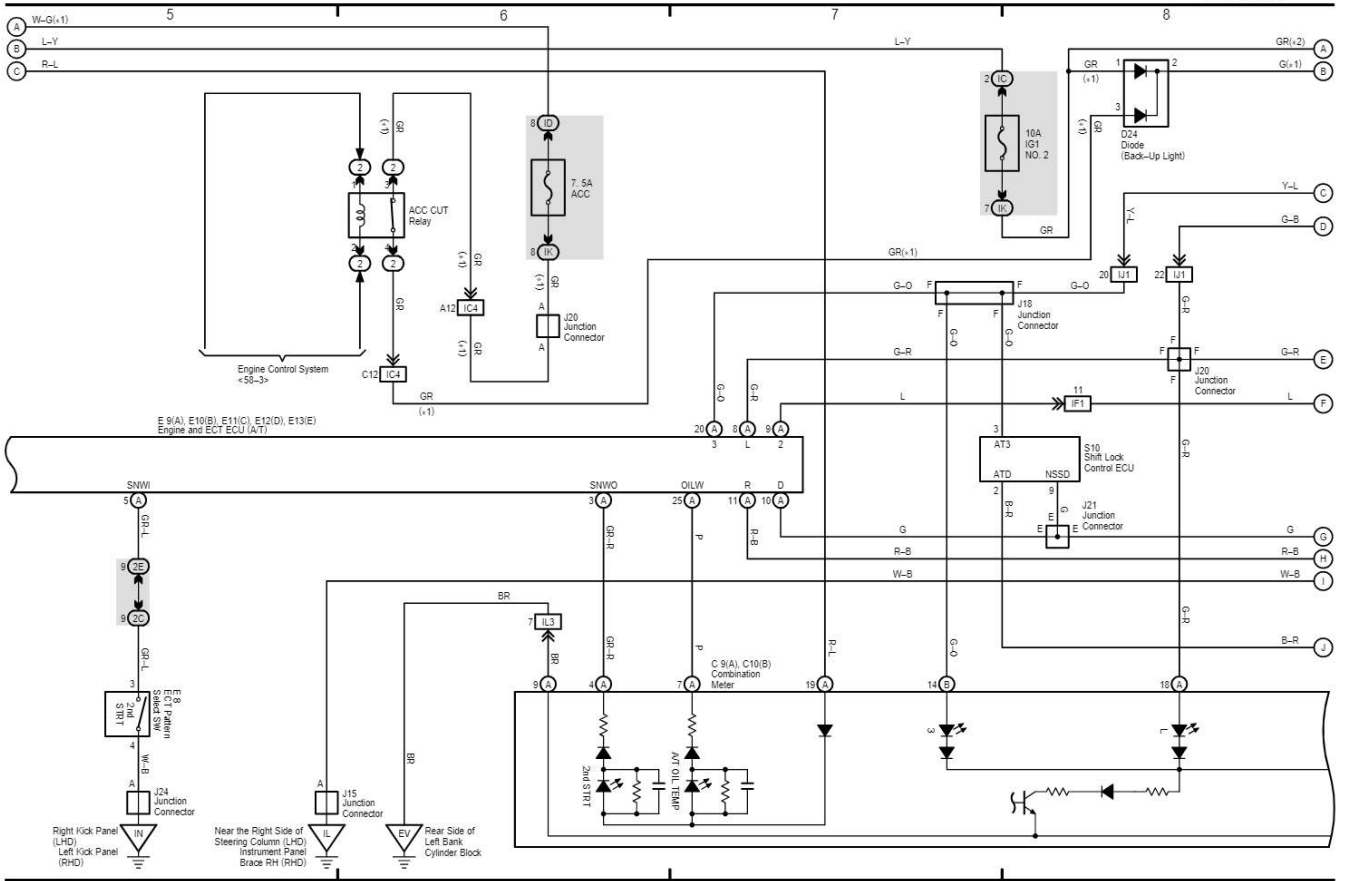






ECT and A/T Indicator (1GR-FE)

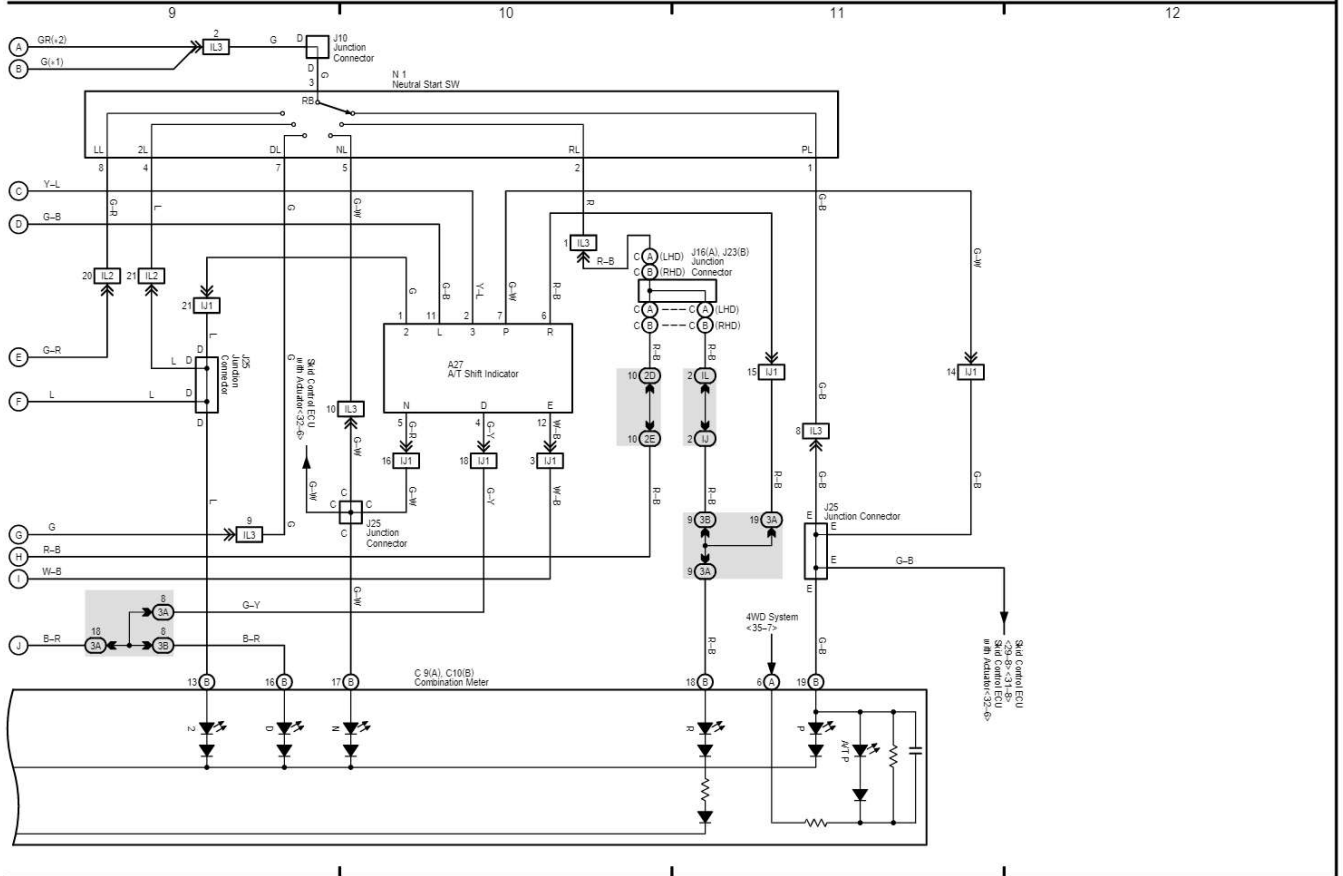
+ 1 : Australia  
+ 2 : Except Australia



LAND CRUISER / LAND CRUISER PRADO (EWD527E)

ECT and A/T Indicator (1GR-FE)

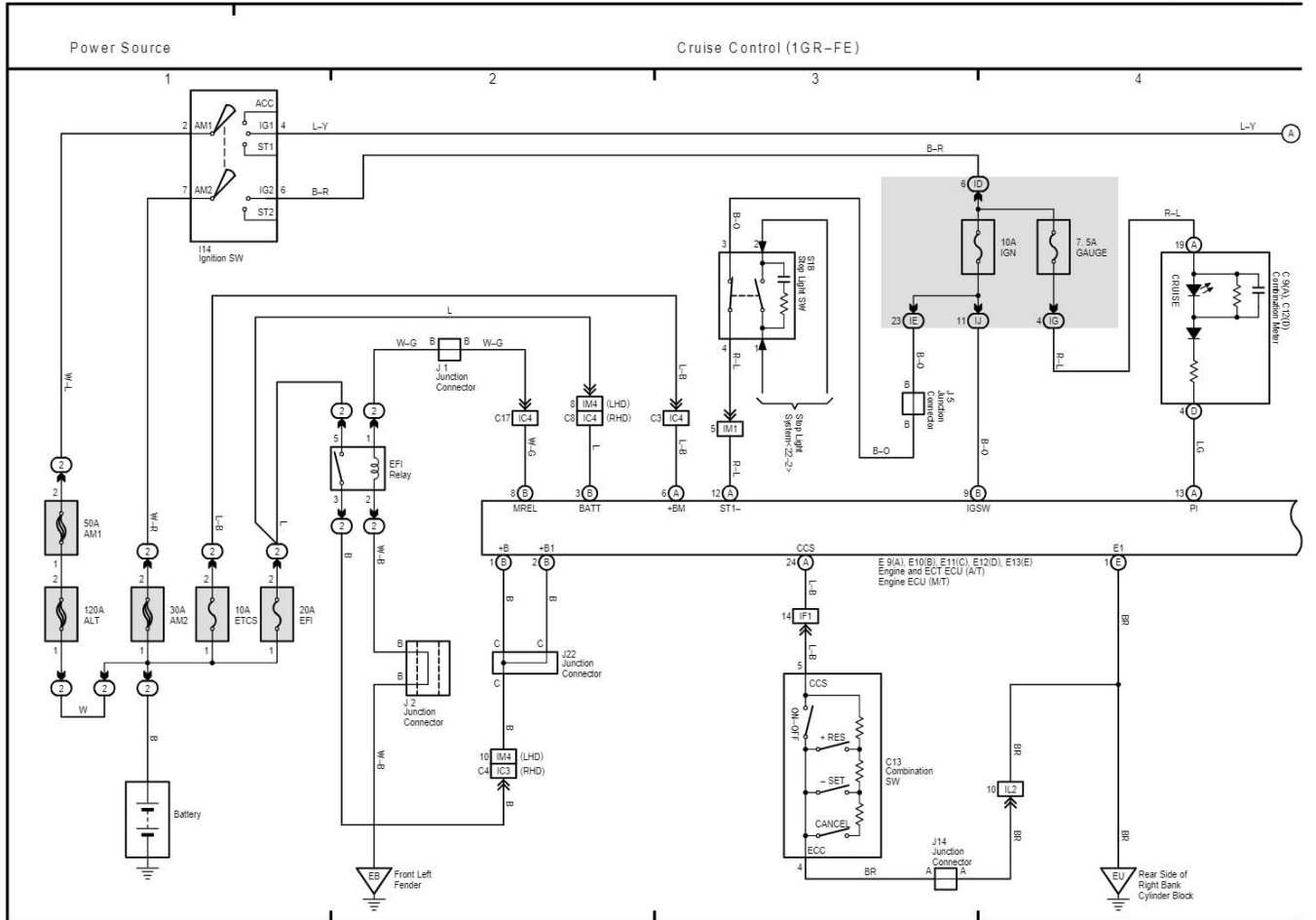
+ 1 : Australia  
+ 2 : Except Australia



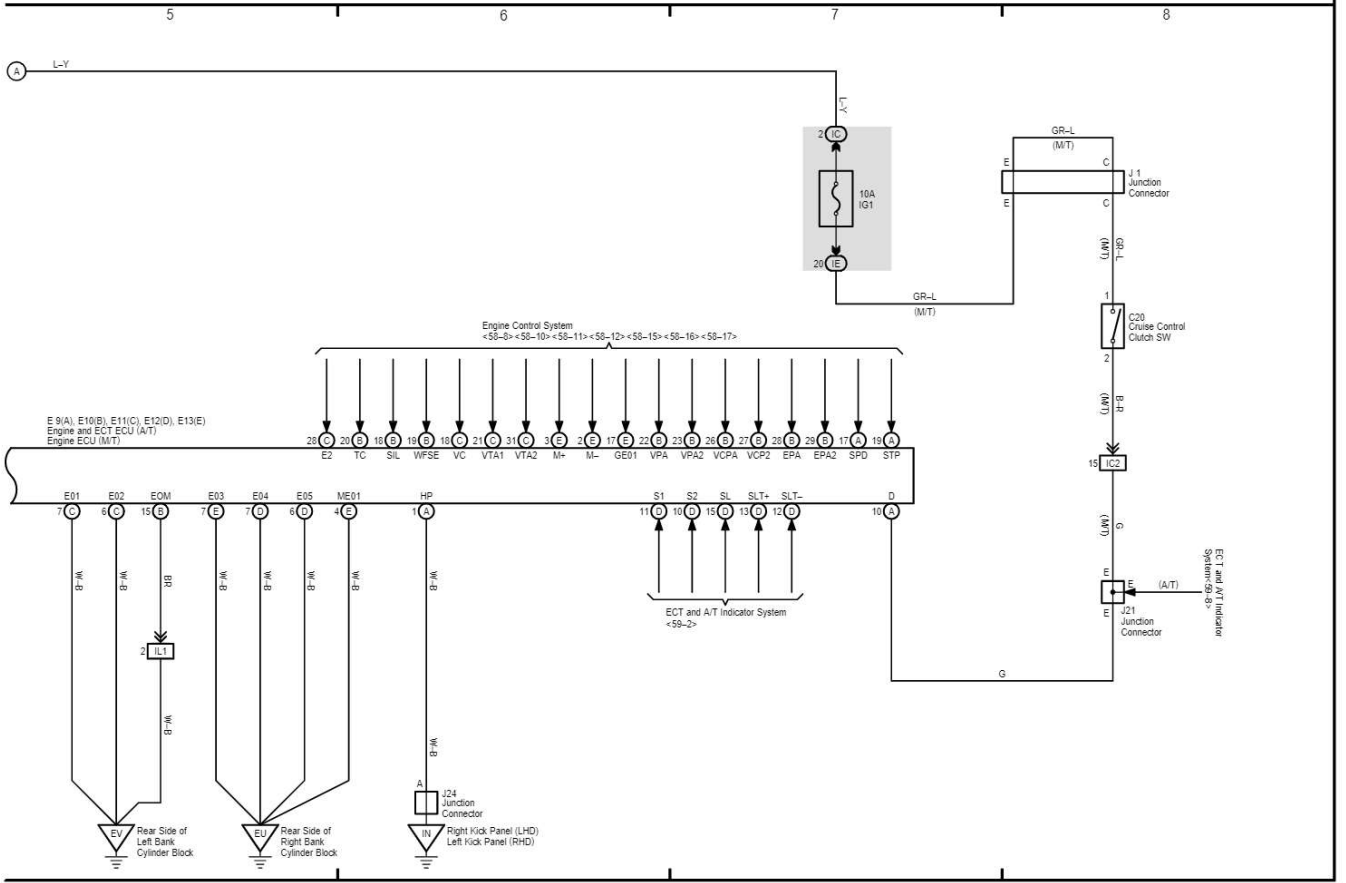
LAND CRUISER / LAND CRUISER PRADO (EWD527E)

LAND CRUISER / LAND CRUISER PRADO (EWD527E)

929

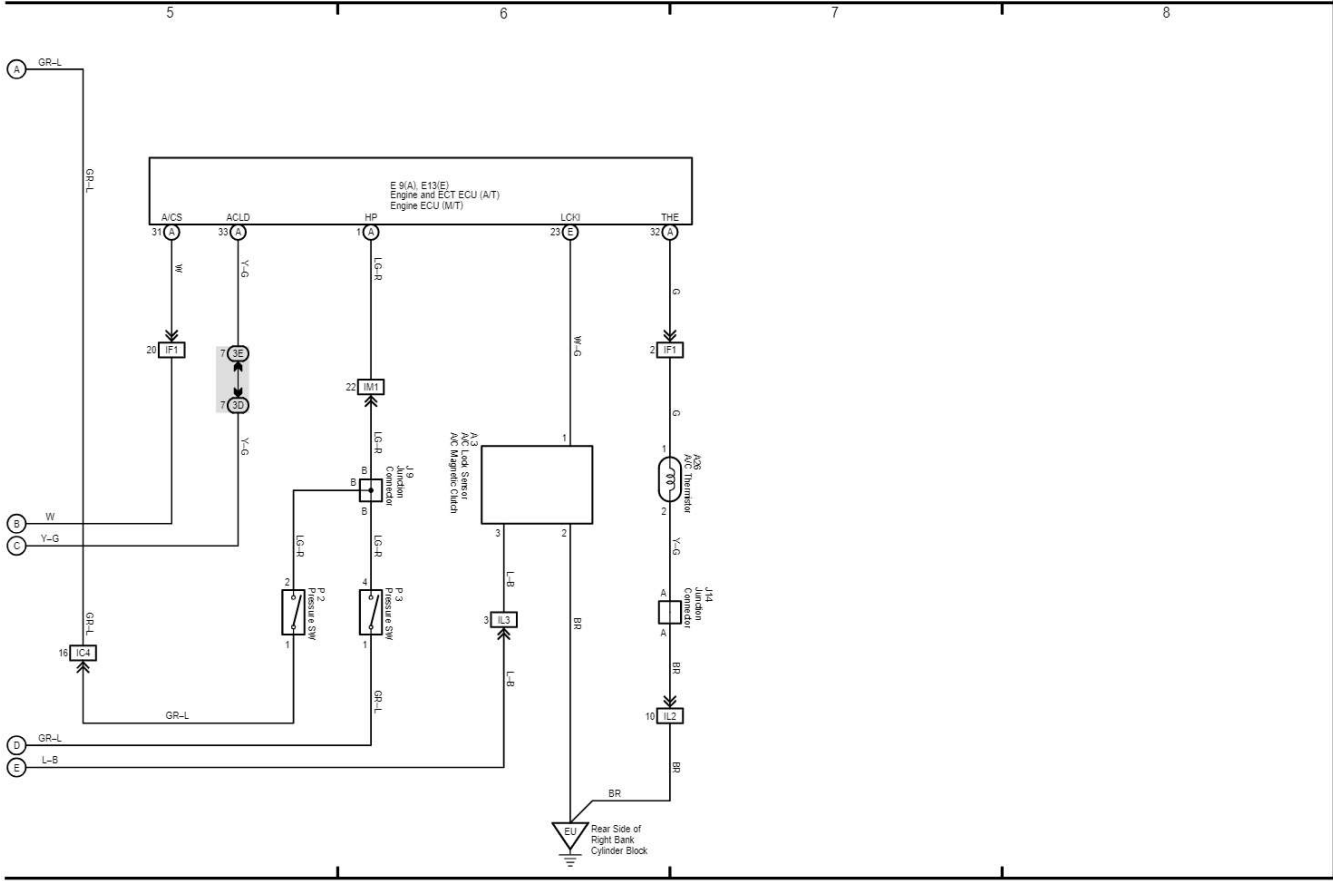


Cruise Control (1GR-FE)





Air Conditioner (Manual A/C 1GR-FE)



LAND CRUISER / LAND CRUISER PRADO (EWD527E)