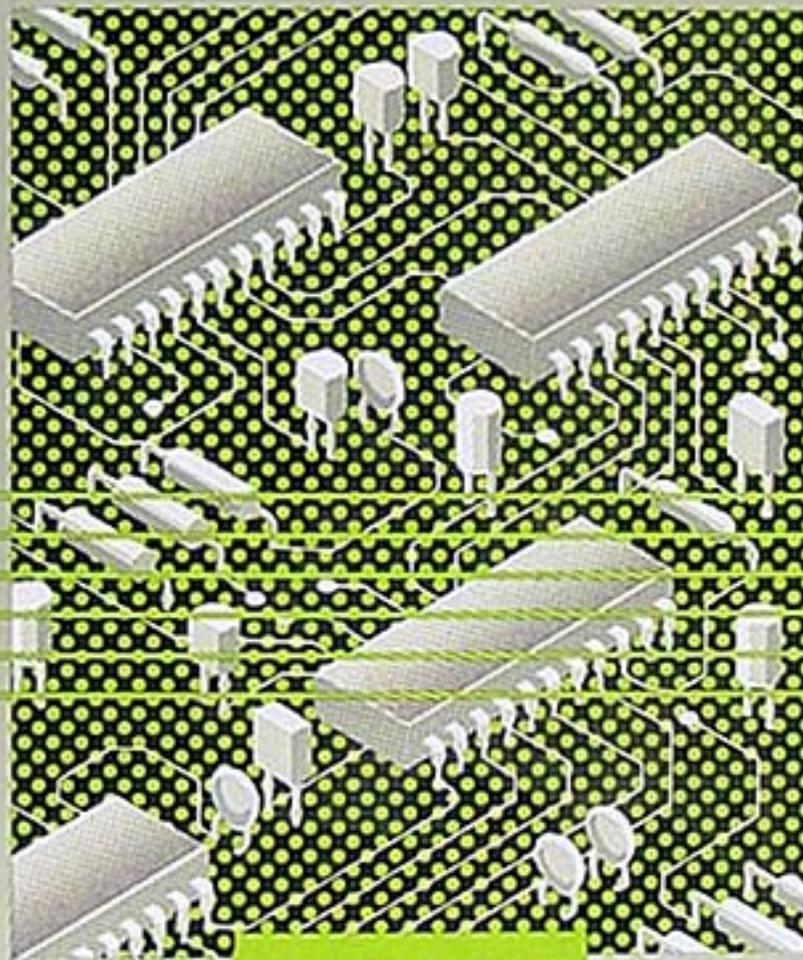


 **TOYOTA**  
**LAND CRUISER** Station Wagon

**ELECTRICAL WIRING DIAGRAM**

**1996 MODEL**



## A INTRODUCTION

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This manual consists of the following 11 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	POWER SOURCE (Current Flow Chart)	Describes power distribution from the power supply to various electrical loads.
I	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.
J	GROUND POINTS	Shows ground positions of all the parts described in this manual.
K	OVERALL ELECTRICAL WIRING DIAGRAM	Provides circuit diagrams showing the circuit connections.

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

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

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

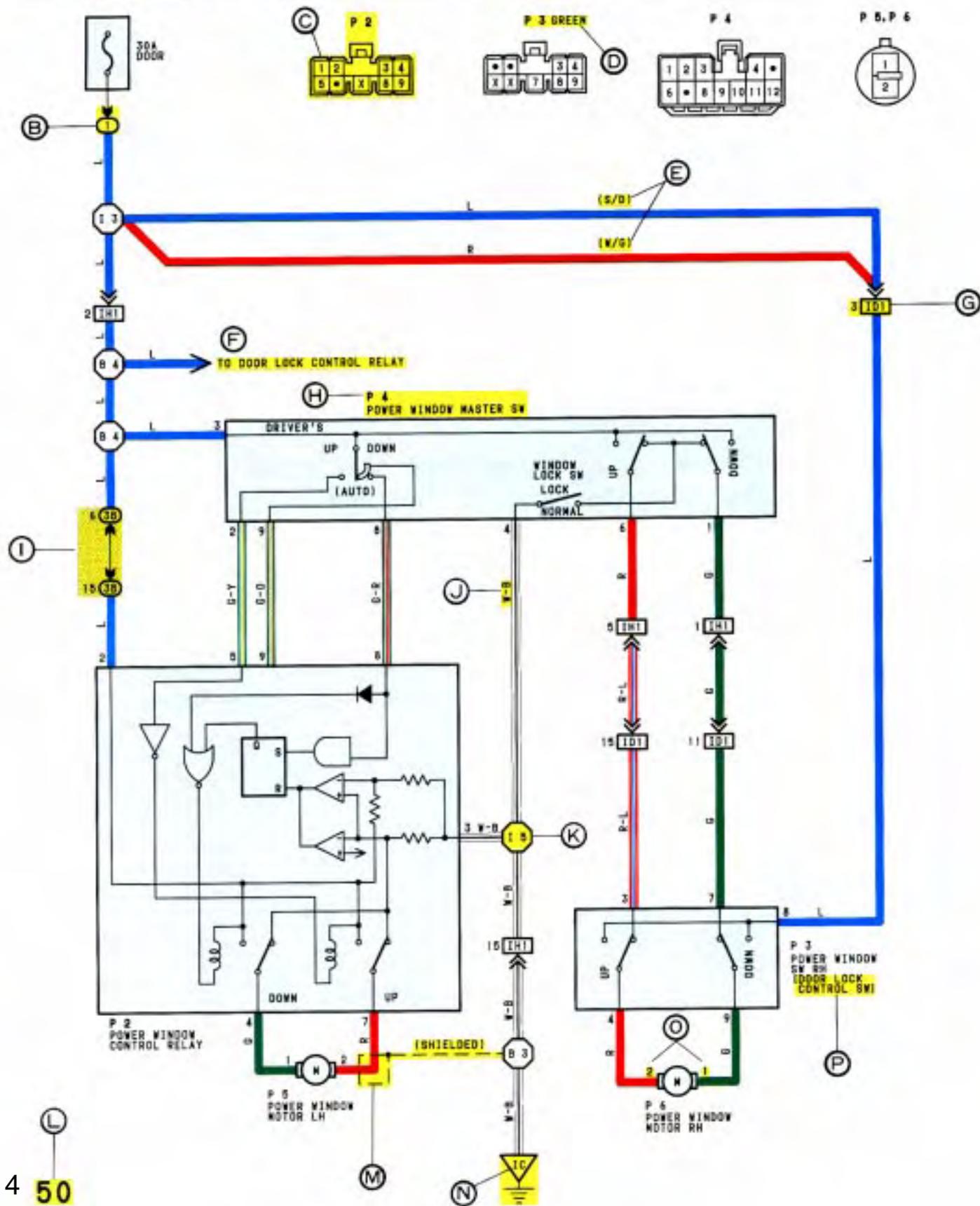
Wiring related to each system is indicated in each system circuit by arrows (from \_\_, to \_\_). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

# B HOW TO USE THIS MANUAL

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



## POWER WINDOW

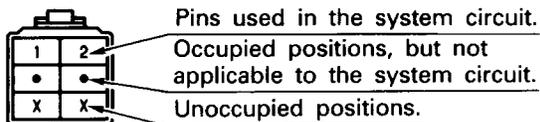


- (A)** : System Title
- (B)** : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.

Example:  Indicates Relay Block No. 1.

- (C)** : Indicates the connector to be connected to a part (the numeral indicates the pin No.)

Explanation of pin use.



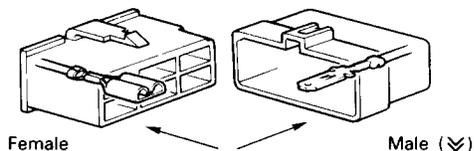
The pins shown are only for the highest grade, or only include those in the specification.

- (D)** : Connector Color  
Connectors not indicated are milky white in color.
- (E)** : ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.

- (F)** : Indicates related system.

- (G)** : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows ( ⇨ ).

Outside numerals are pin numbers.



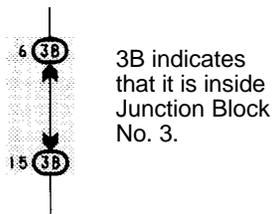
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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.

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

- (I)** : 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 (different junction blocks are shaded differently for further clarification).

Example:



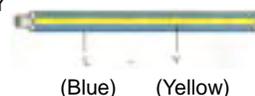
- (J)** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

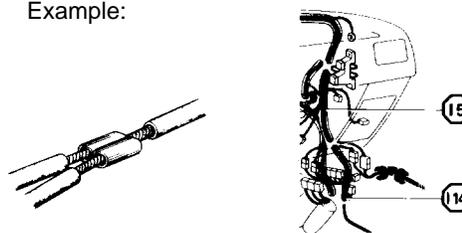
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



- (K)** : 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.

- (L)** : Page No.

- (M)** : Indicates a shielded cable.



- (N)** : 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.

- (O)** : Indicates the pin number of the connector.

The numbering system is different for female and male connectors.

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



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

# B HOW TO USE THIS MANUAL



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 3** OF THE POWER WINDOW MASTER SW, **TERMINAL 2** OF THE POWER WINDOW CONTROL RELAY AND **TERMINAL 8** OF THE POWER WINDOW SW THROUGH THE DOOR FUSE.

### 1. DRIVER'S WINDOW "MANUAL UP" OPERATION BY MASTER SW

HOLDING MANUAL SW (DRIVER'S) ON "UP" POSITION LOCATED IN POWER WINDOW MASTER SW, THE CURRENT FLOWS TO **TERMINAL 5** OF THE POWER WINDOW CONTROL RELAY THROUGH **TERMINAL 3** OF THE MASTER SW → **TERMINAL 2** TO OPERATE A POWER WINDOW CONTROL RELAY. THUS THE CURRENT INSIDE THE RELAY FLOWS FROM **TERMINAL 2** OF THE RELAY → **TERMINAL 1** → **TERMINAL 2** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE RELAY → **TERMINAL 3** → TO GROUND. THE MOTOR TURNS TO ASCENT THE WINDOW. RELEASING THIS SW, THE ROTATION OF MOTOR IS STOPPED AND THE WINDOWS CAN STOP AT WILL POINT.

(FOR THE "MANUAL DOWN" OPERATION, CURRENT FLOWS IN THE REVERSE DIRECTION BECAUSE THE TERMINALS WHERE IT FLOW ARE CHANGED).

### 2. DRIVER'S WINDOW "AUTO DOWN" OPERATION BY MASTER SW

ONCE THE "AUTO DOWN" BUTTON OF THE MASTER SW IS PUSHED, THE CURRENT FLOW **TERMINAL 9** OF THE POWER WINDOW CONTROL RELAY THROUGH **TERMINAL 3** OF THE MASTER SW → **TERMINALS 8 AND 9** TO OPERATE THE RELAY. THUS THE CURRENT INSIDE THE POWER WINDOW CONTROL RELAY FLOWS FROM **TERMINAL 2** OF THE RELAY → **TERMINAL 4** → **TERMINAL 1** OF THE POWER WINDOW MOTOR → **TERMINAL 2** → **TERMINAL 1** OF THE RELAY → **TERMINAL 3** → TO GROUND. THE MOTOR CONTINUES THE ROTATION ENABLING TO DESCENT THE WINDOW.

THE WINDOW DESCENDS TO THE END POSITION. THE CURRENT WILL BE CUT OFF TO RELEASE THE AUTO DOWN FUNCTION BASED ON THE INCREASING CURRENT BETWEEN **TERMINAL 2** OF THE RELAY AND **TERMINAL 1** IN RELAY.

### 3. DRIVER'S WINDOW AUTO DOWN RELEASE OPERATION BY MASTER SW

HOLDING THE MANUAL SW (DRIVER'S) ON "UP" POSITION IN OPERATING AUTO DOWN. THE CURRENT FROM **TERMINAL 3** OF THE MASTER SW PASSING **TERMINAL 2** FLOWS **TERMINAL 5** OF THE RELAY AND RELEASES THE AUTO DOWN FUNCTION IN THE POWER WINDOW CONTROL RELAY. RELEASING THE HAND FROM SW, WINDOW STOPS AND CONTINUING ON TOUCHING SW, THE FUNCTION SWITCHES TO MANUAL UP OPERATION.

### 4. PASSENGER'S WINDOW UP OPERATION (MASTER SW) AND WINDOW LOCK SW OPERATION

HOLDING PASSENGER'S WINDOW SW (MASTER SW) ON "UP", THE CURRENT FLOWS FROM **TERMINAL 3** OF THE MASTER SW PASSING **TERMINAL 6** TO **TERMINAL 3** OF THE POWER WINDOW SW (PASSENGER'S) → **TERMINAL 4** → **TERMINAL 2** OF THE MOTOR → **TERMINAL 1** → **TERMINAL 9** OF THE POWER WINDOW SW → **TERMINAL 7** → **TERMINAL 1** OF THE MASTER SW → **TERMINAL 4** TO GROUND. THE MOTOR RUNS TO ASCENT THE WINDOW. RELEASING THIS SW, THE ROTATION OF MOTOR IS STOPPED AND WINDOW CAN STOP AT WILL PLACE.

SWITCHING THE WINDOW LOCK SW IN "LOCK" POSITION, THE CIRCUIT IS OPENED AND STOPPED THE MOTOR ROTATION.

(FOR THE DOWN OPERATION, CURRENT FLOWS IN THE REVERSE DIRECTION BECAUSE THE TERMINALS WHERE IT FLOWS ARE CHANGED).



## SERVICE HINTS

### P 2 POWER WINDOW CONTROL RELAY

3-GROUND: ALWAYS CONTINUITY

2-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION

5-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE MASTER SW AT UP POSITION

8-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE MASTER SW AT AUTO DOWN POSITION

9-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE MASTER SW AT DOWN OR AUTO DOWN POSITION

### P 4 POWER WINDOW MASTER SW

4-GROUND: ALWAYS CONTINUITY

3-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION

### WINDOW LOCK SW

OPEN WITH THE WINDOW LOCK SW AT LOCK POSITION



## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
P 2	21	P 4	21	P 6	21
P 3	21	P 5	21		



## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCK (RELAY BLOCK LOCATION)
1	16	R/B NO. 1 ( INSTRUMENT PANEL LEFT)



## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3B	14	J/B NO. 3 AND COWL WIRE (INSTRUMENT PANEL LEFT SIDE)



## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	26	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IH1	26	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)



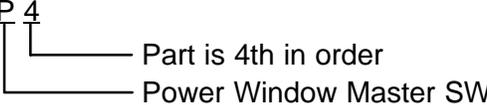
## ▽ : GROUND POINTS

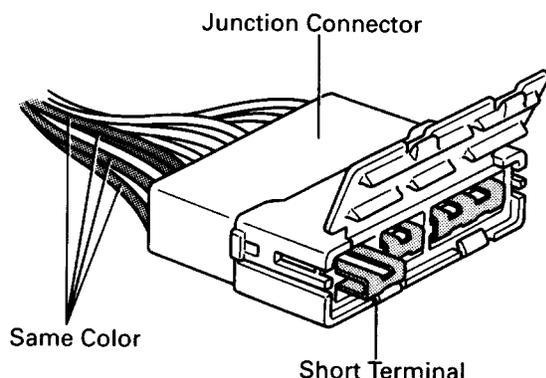
CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT



## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	24	COWL WIRE			

- Ⓚ : Explains the system outline.
- Ⓡ : Indicates values or explains the function for reference during troubleshooting.
- Ⓢ : Indicates the reference page showing the position on the vehicle of the parts in the system circuit.  
 Example: Part “P 4” (Power Window Master SW) is on page 21 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 the letter.  
 Example: P 4  

- Ⓣ : 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 16 of this manual and is installed on the left side of the instrument panel.
- Ⓤ : Indicates the reference page showing the position on the vehicle of J/B and Wire Harness in the system circuit.  
 Example: Connector “3B” connects the Cowl Wire and J/B No. 3. It is described on page 14 of this manual, and is installed on the instrument panel left side.
- Ⓥ : 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 “ID1” connects the front door RH wire (female) and cowl wire (male). It is described on page 26 of this manual, and is installed on the right side kick panel.
- Ⓦ : Indicates the reference page showing the position of the ground points on the vehicle.  
 Example: Ground point “IC” is described on page 24 of this manual and is installed on the cowl left side.
- Ⓧ : Indicates the reference page showing the position of the splice points on the vehicle.  
 Example: Splice point “I 5” is on the Cowl Wire Harness and is described on page 24 of this manual.

**HINT:**

Junction connector (code: J1, J2, J3, J4, J5, J6, J7, J8, J9) 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.

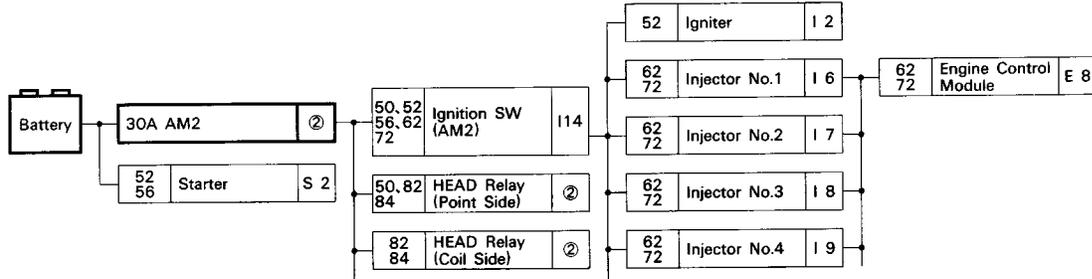
## B HOW TO USE THIS MANUAL

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.

### H 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.

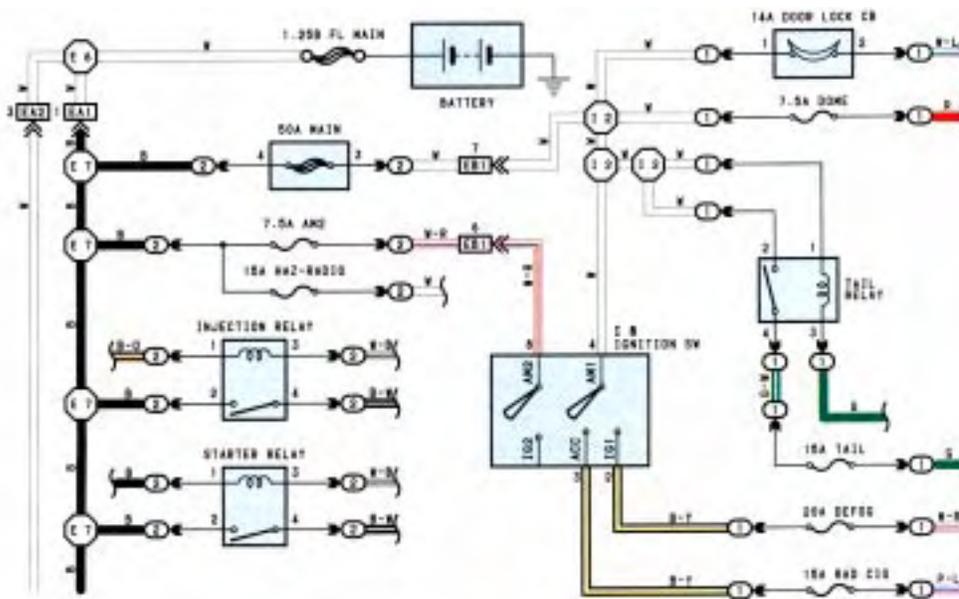
The next page and following pages show the parts to which each electrical source outputs current.



Location	Page Nos. of Related Systems	Parts		Code or Location
		Part	Code or Location	
CB or Fuse		ABS Actuator	A 2	120
		ABS Relay	A 3	120
		ADD Indicator SW	A 4	132 138
		Auto Antenna Motor	A 6	166
		ABS Deceleration Sensor	A 8	120
		ABS ECU	A 9	132 138
		A/C Amplifier	A 10	120
		A/C Dual Pressure SW	A 12	174
		A/C SW	A 13	90 174
		ADD Control Relay	A 14	138
		Airbag Sensor Assembly	A 16	127
		Ashtray Illumination	A 17	90
		Auto Antenna Control Relay	A 19	166 168
		Back-Up Light SW	A 20	98
		Brake Fluid Level Warning SW	B 1	170
		Back-Up Light Relay	B 2	98
		Cigarette Lighter	B 3	164
		Cigarette Lighter Illumination	C 4	90
		Circuit Opening Relay	C 5	62 72
		Clock	C 6	164



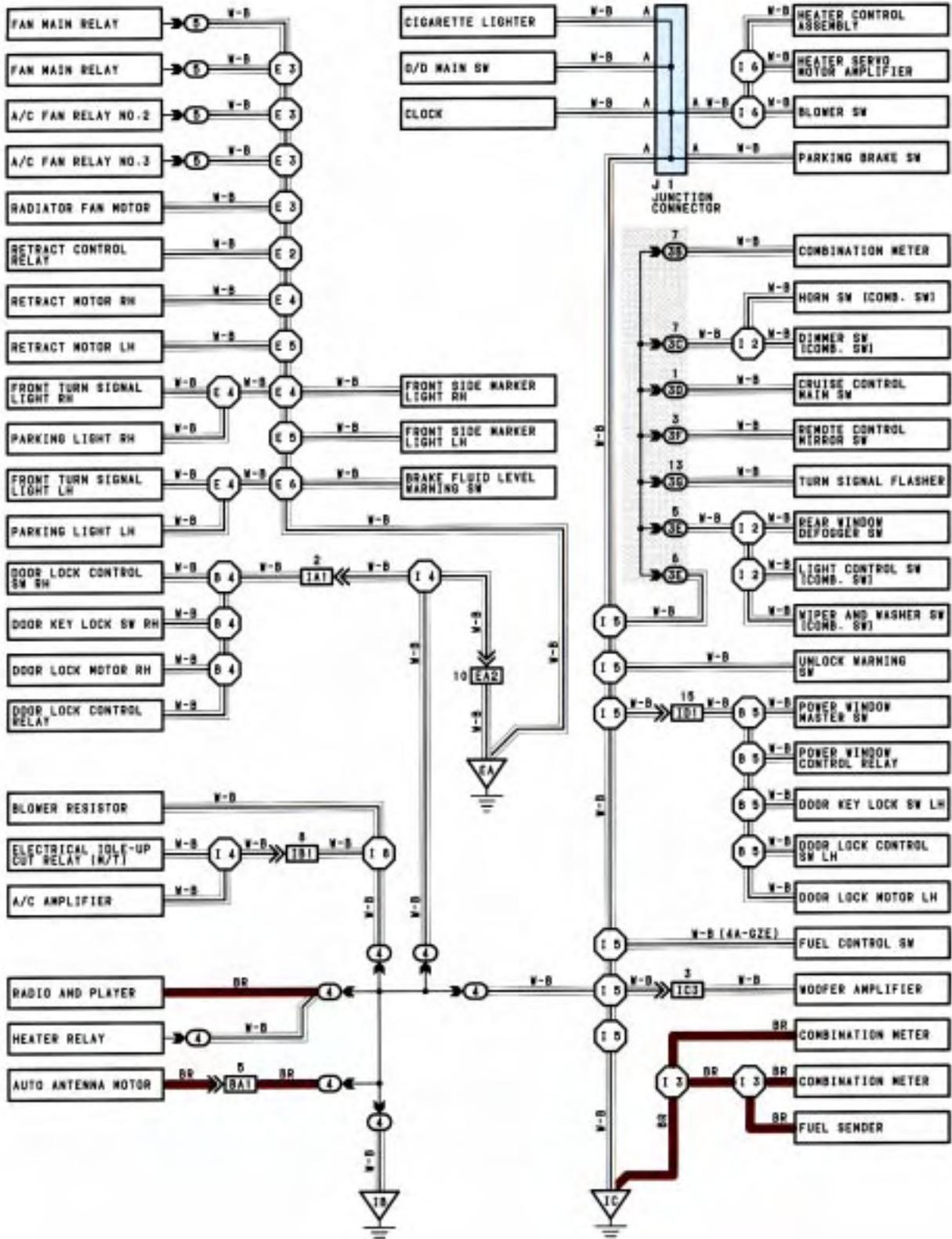
### POWER SOURCE



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

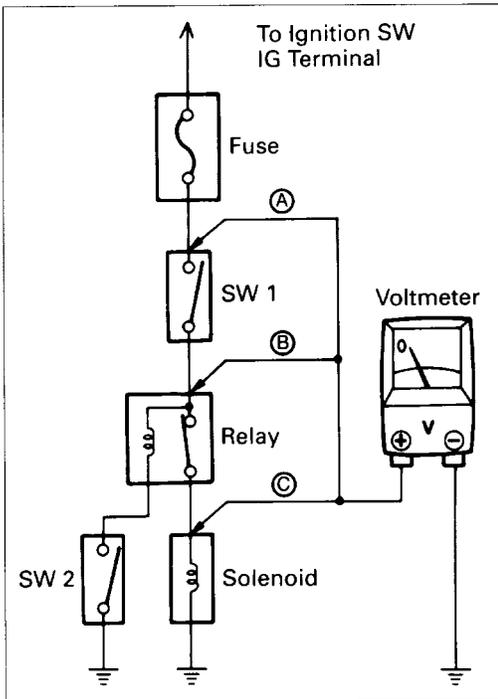
The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points (EA,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

## J GROUND POINT



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

## C TROUBLESHOOTING

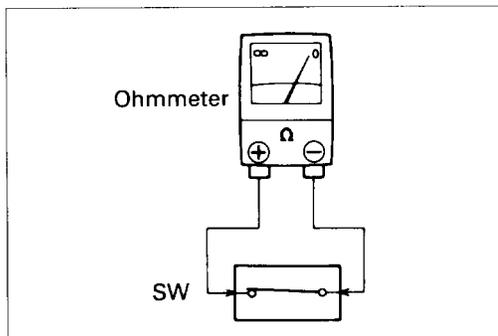


### VOLTAGE CHECK

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

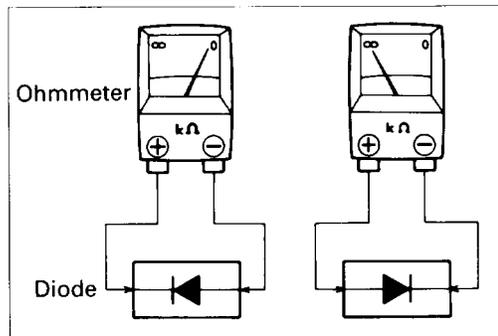
Example:

- Ⓐ - Ignition SW on
  - Ⓑ - Ignition SW and SW 1 on
  - Ⓒ - Ignition SW, SW 1 and Relay on (SW2 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

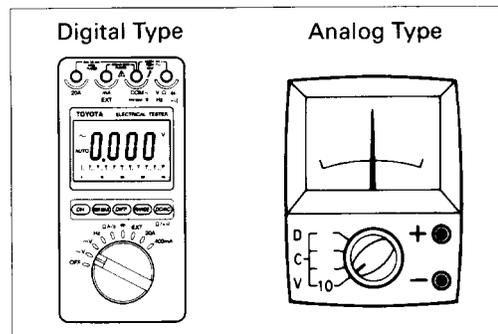
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



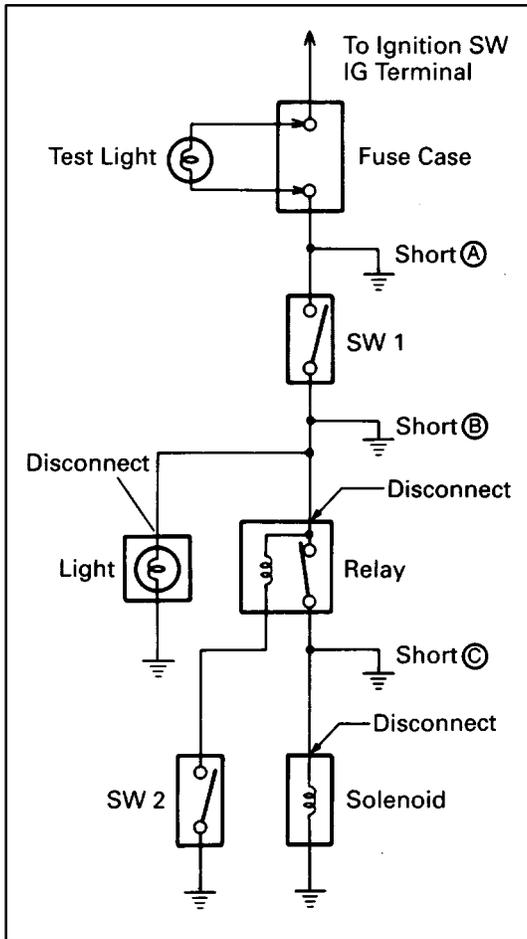
If the circuit has diodes, reverse the two leads and check again.

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



## FINDING A SHORT CIRCUIT

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

Example:

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

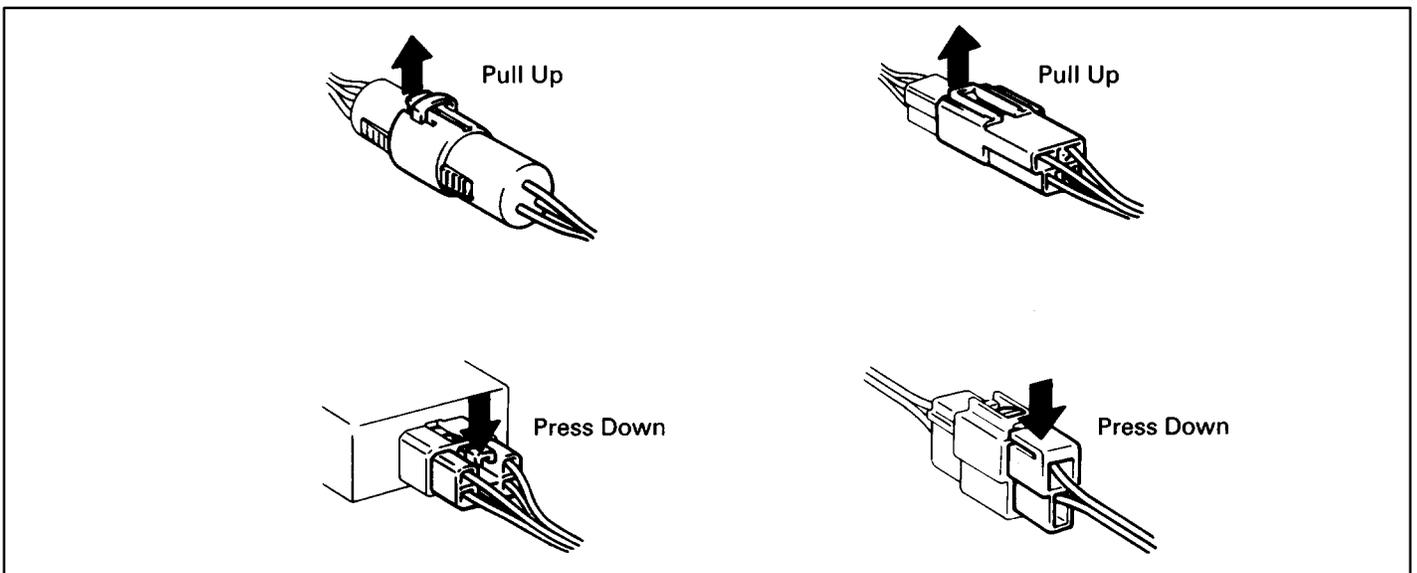
## CAUTION:

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

## DISCONNECTION OF MALE AND FEMALE CONNECTORS

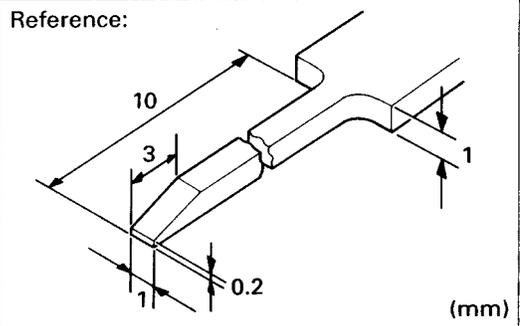
To pull apart the connectors, pull on the connector itself, not the wire harness.

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



## C TROUBLESHOOTING

Reference:



### HOW TO REPLACE TERMINAL

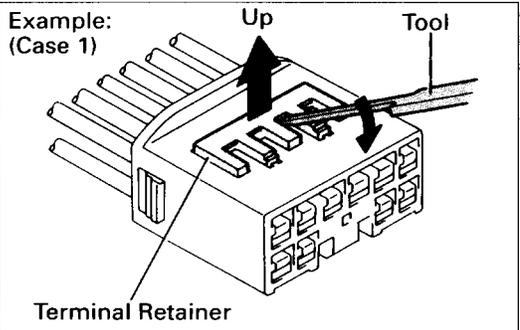
#### (with terminal retainer or secondary locking device)

1. PREPARE THE SPECIAL TOOL  
HINT: To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.
2. DISCONNECT CONNECTOR
3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER
  - (a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.
  - (b) Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

**NOTICE:**

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

Example:  
(Case 1)

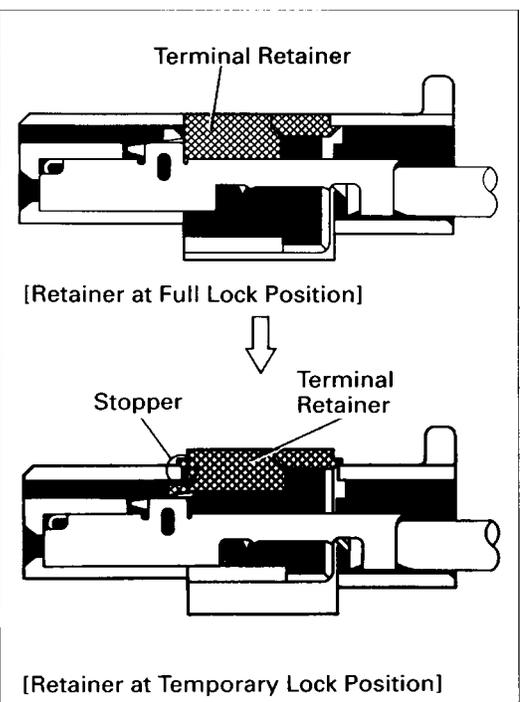


- Ⓐ For Non-Waterproof Type Connector

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”

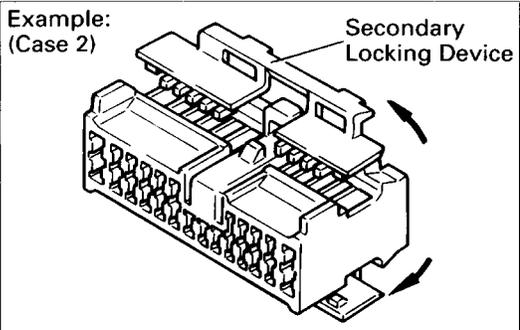
Raise the terminal retainer up to the temporary lock position.

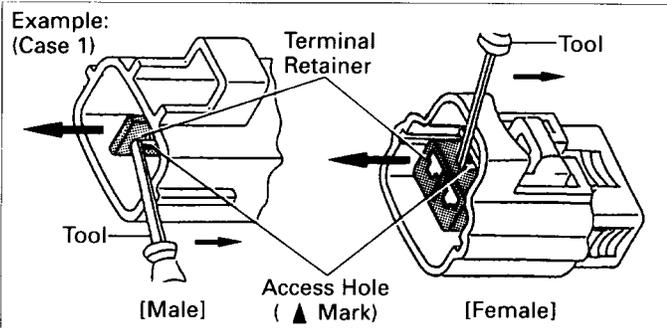
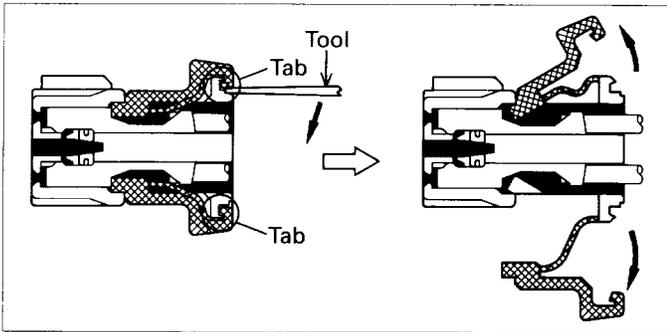


“Case 2”

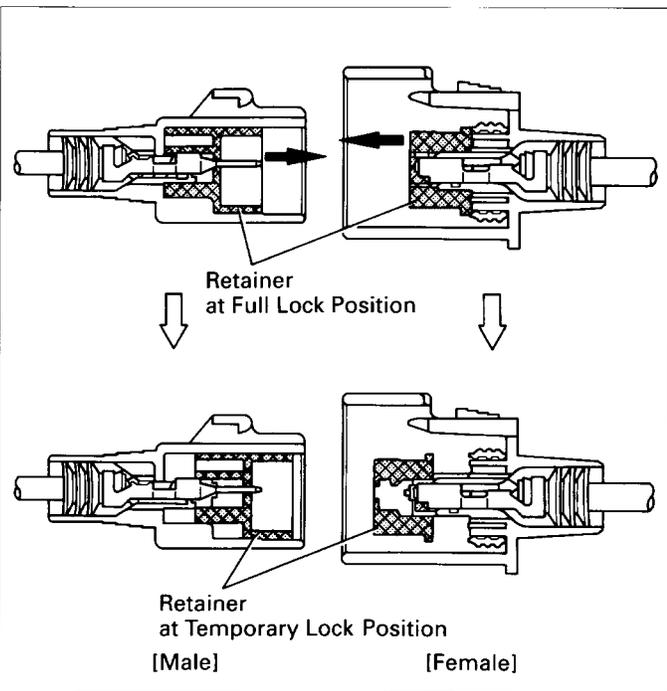
Open the secondary locking device.

Example:  
(Case 2)





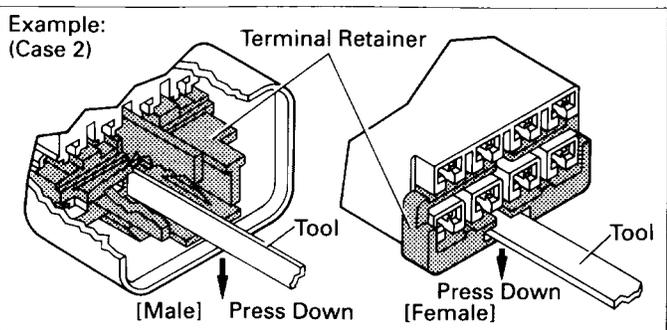
- ② For Waterproof Type Connector
- HINT: Terminal retainer color is different according to connector body.
- Example:
- Terminal Retainer: Connector Body
- Black or White : Gray
- Black or White : Dark Gray
- Gray or White : Black



“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.

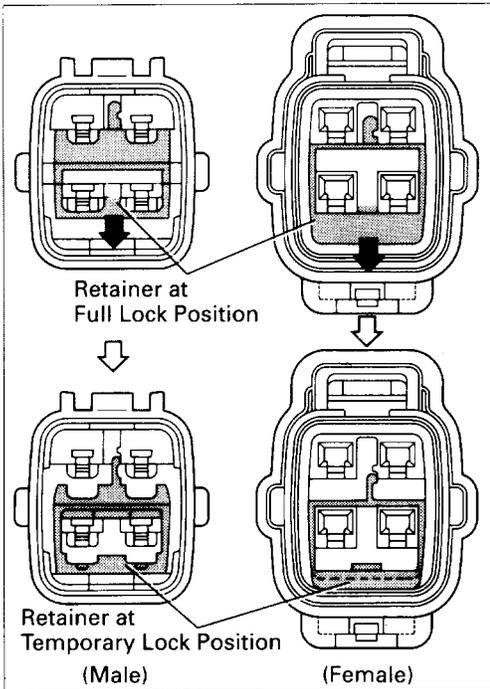
HINT: The needle insertion position varies according to the connector's shape (number of terminals, etc.), so check the position before inserting it.



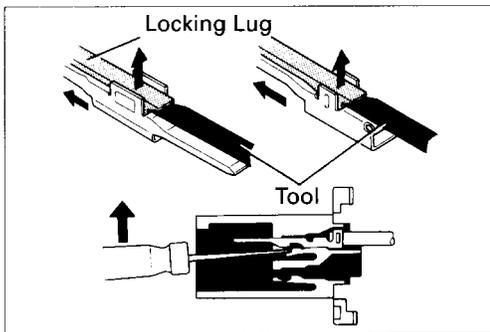
“Case 2”

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

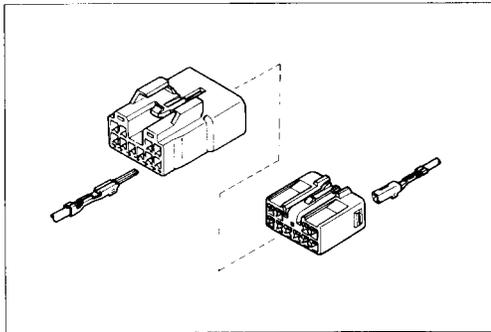
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

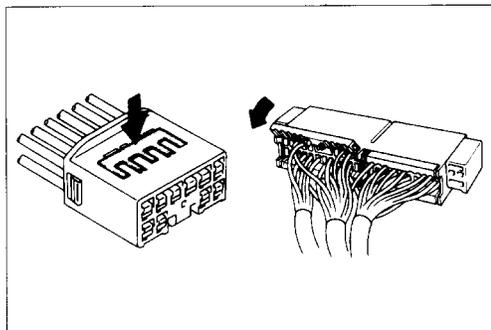


#### 4. INSTALL TERMINAL TO CONNECTOR

(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 into the full lock position.

#### 5. CONNECT CONNECTOR

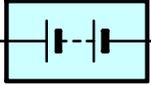
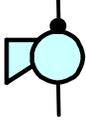
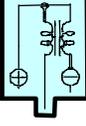
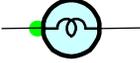
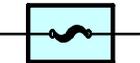
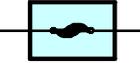
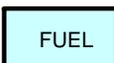
**ABBREVIATIONS**

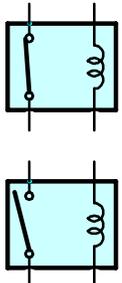
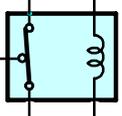
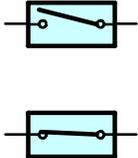
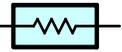
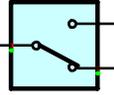
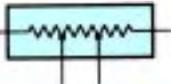
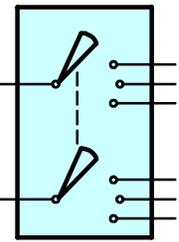
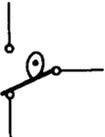
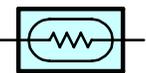
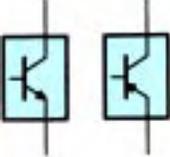
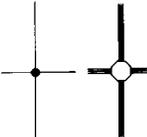
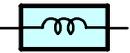
The following abbreviations are used in this manual.

ABS	= Anti-Lock Brake System
A/C	= Air Conditioning
A/T	= Automatic Transmission
CD	= Compact Disc
COMB.	= Combination
DIFF.	= Differential
ECU	= Electronic Control Unit
EGR	= Exhaust Gas Recirculation
ESA	= Electronic Spark Advance
FL	= Fusible Link
LH	= Left-Hand
O/D	= Overdrive
R/B	= Relay Block
RH	= Right-Hand
SFI	= Sequential Multiport Fuel Injection
SRS	= Supplemental Restraint System
SW	= Switch
TEMP.	= Temperature
VSV	= Vacuum Switching Valve
W/	= With
W/O	= Without

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

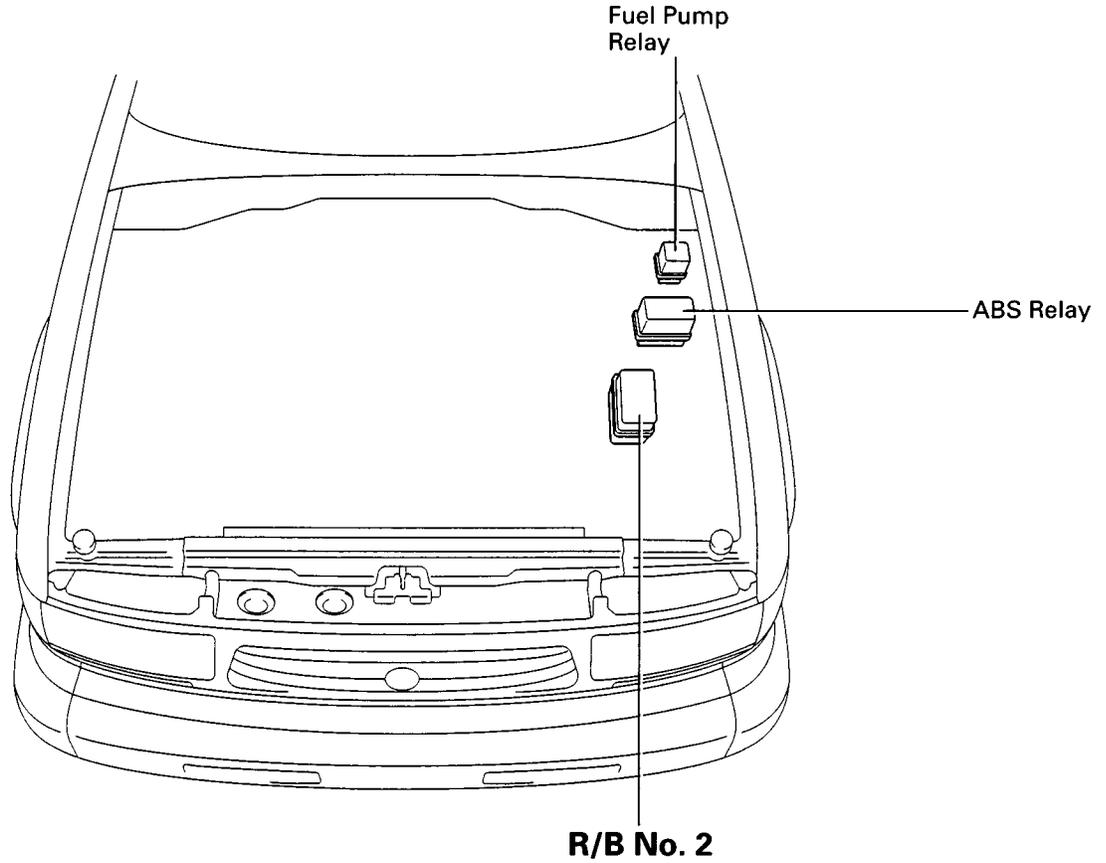
# E GLOSSARY OF TERMS AND SYMBOLS

 <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> Convert 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> A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. The numbers indicate the cross-section surface area of the wires.</p>  (for Medium Current Fuse)  (for High Current Fuse or Fusible Link.)	<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> 

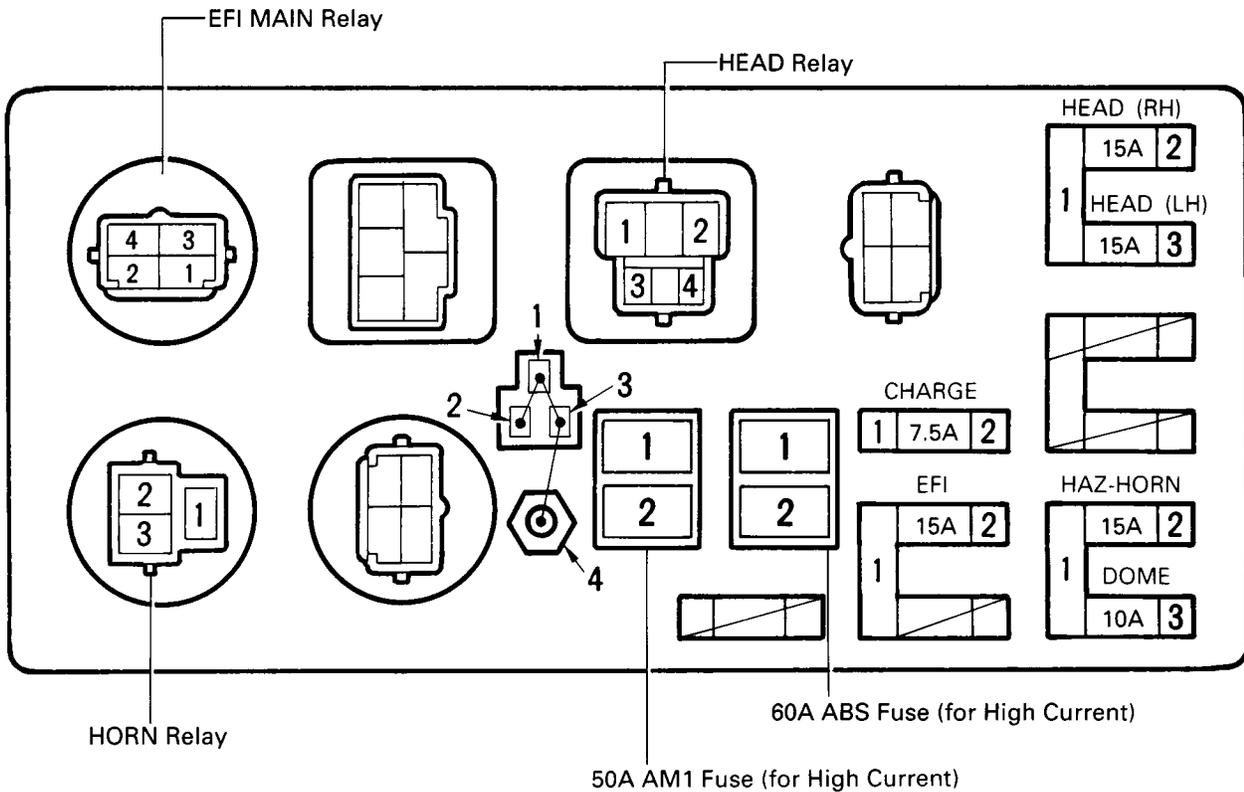
 <p><b>RELAY</b>  <b>1. NORMALLY CLOSED</b>  <b>2. NORMALLY OPEN</b></p>	 <p><b>SPEAKER</b>            An electromechanical device which creates sound waves from current flow.</p>
 <p><b>RELAY, DOUBLE THROW</b>            A relay which passes current through one set of contacts or the other.</p>	<p><b>SWITCH, MANUAL</b></p>  <p><b>1. NORMALLY OPEN</b>  <b>2. NORMALLY CLOSED</b></p> <p>Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.</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>SWITCH, WIPER PARK</b>            Automatically returns wipers to the stop position when the wiper switch is turned off.</p> 
 <p><b>SENSOR (Thermistor)</b>            A resistor which varies its resistance with temperature.</p>	<p><b>TRANSISTOR</b>            A solid state device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base."</p> 
 <p><b>SENSOR, SPEED</b>            Uses magnetic impulses to open and close a switch to create a signal for activation of other components.  <small>(Reed Switch Type)</small></p>	<p><b>WIRES</b></p> <p><b>(1) NOT CONNECTED</b>            Wires are always drawn as straight lines on wiring diagrams. Crossed wires (1) without a black dot at the junction are not joined; crossed wires (2) with a black dot or octagonal (O) mark at the junction as spliced (joined) connections.</p> 
 <p><b>SHORT PIN</b>            Used to provide an unbroken connection within a junction block.</p>	<p><b>(2) SPLICED</b></p> 
 <p><b>SOLENOID</b>            An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p>	

# F RELAY LOCATIONS

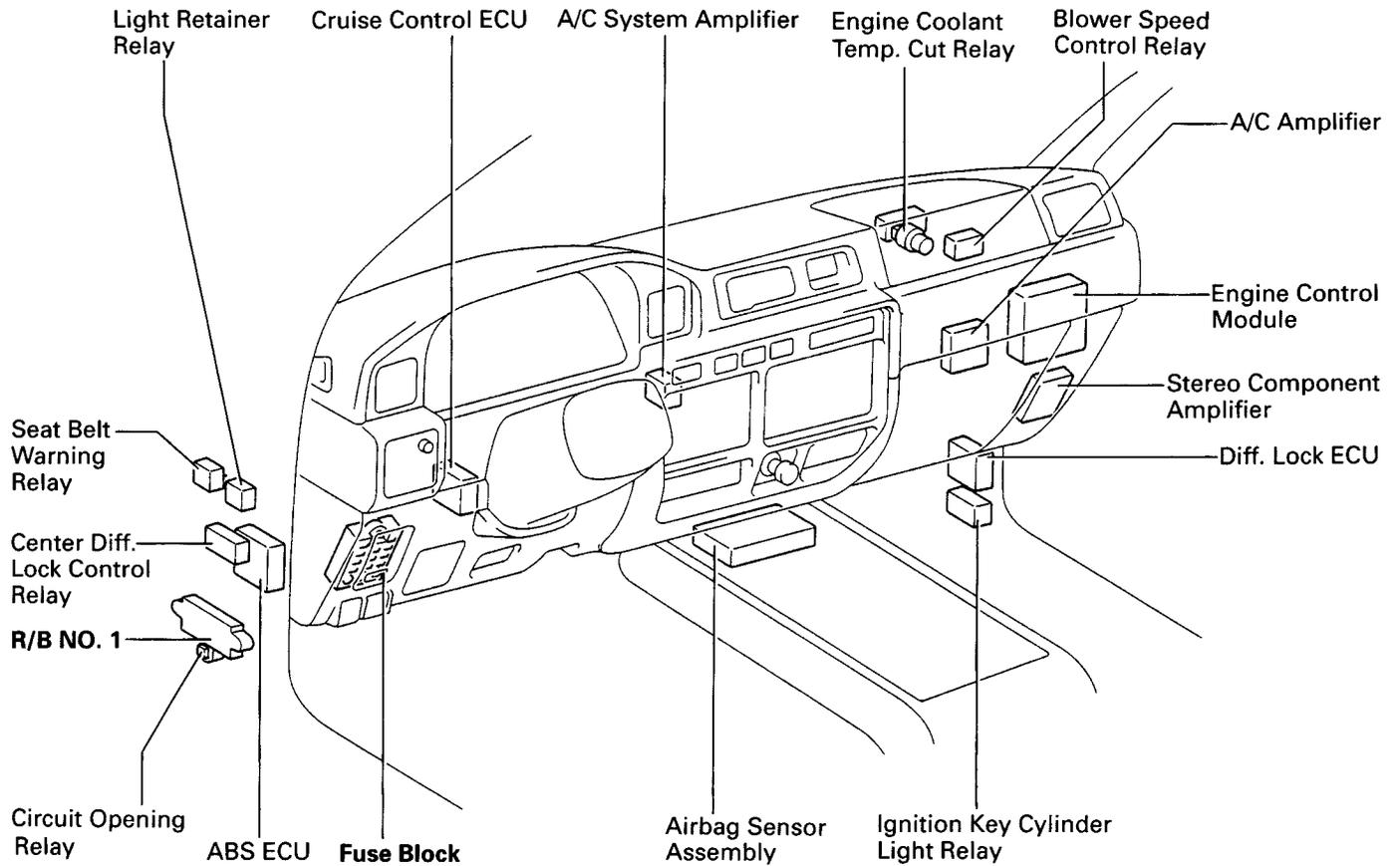
## [Engine Compartment]



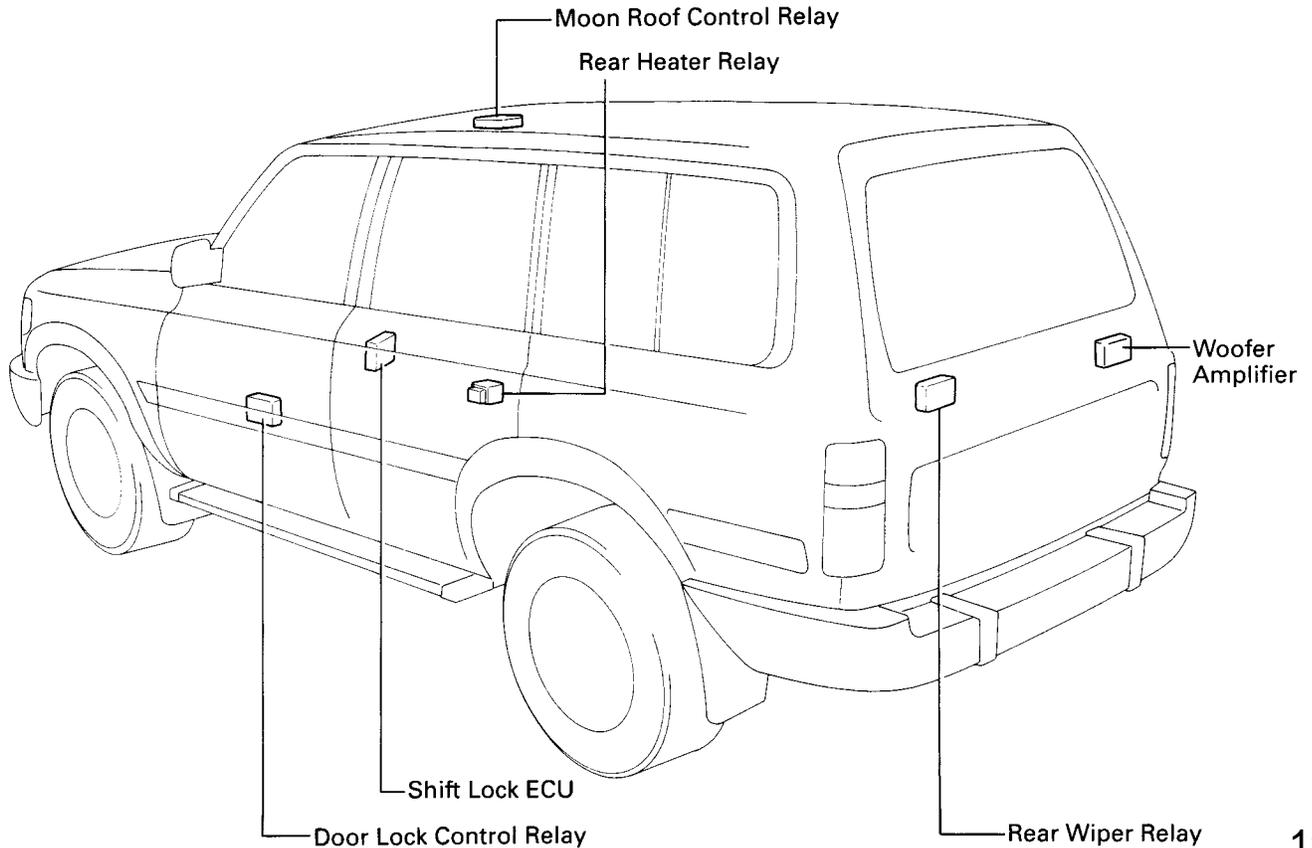
② : R/B No. 2      Front Side of Left Fender



### [Instrument Panel]

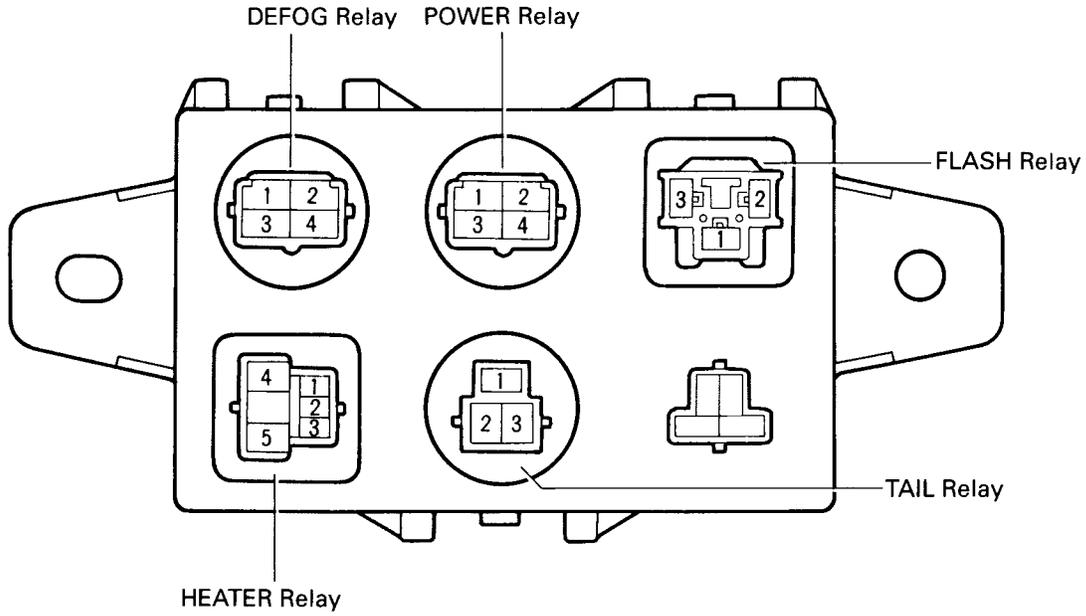


### [Body]

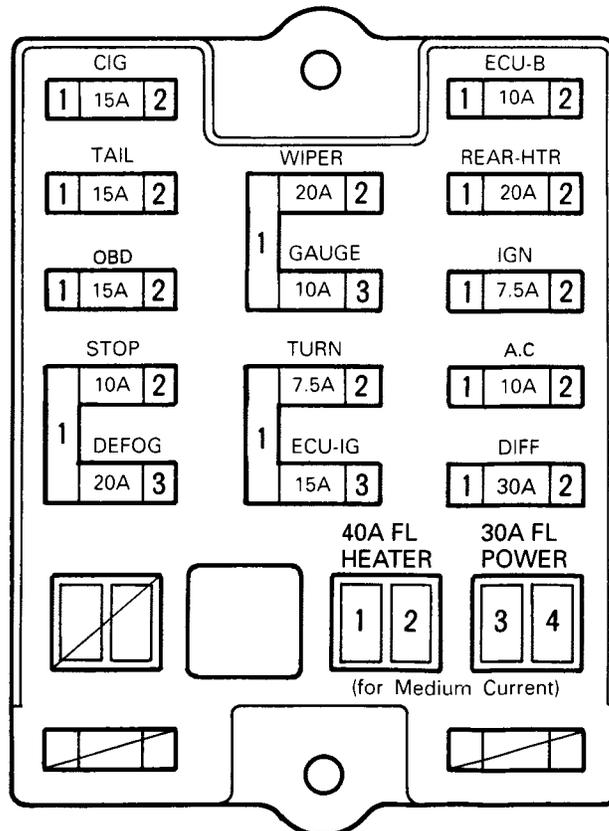


# F RELAY LOCATIONS

① : R/B No. 1 Left Kick Panel (See Page 19)



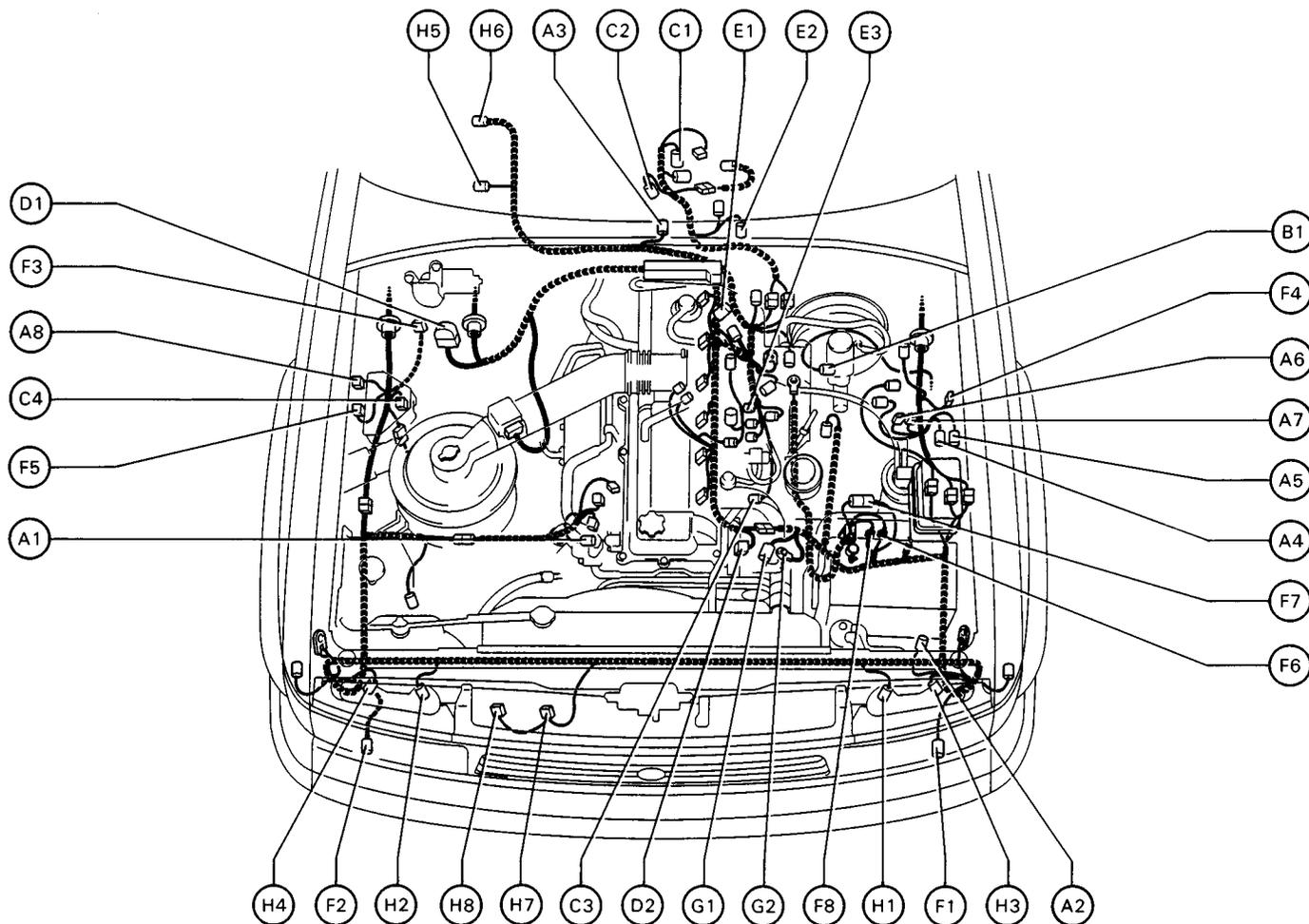
Fuse Block Instrument Panel Left (See Page 19)





## G ELECTRICAL WIRING ROUTING

### Position of Parts in Engine Compartment



- A 1 A/C Magnetic Clutch
- A 2 A/C Dual Pressure SW
- A 3 A/T Fluid Temp. Sensor
- A 4 ABS Actuator
- A 5 ABS Actuator
- A 6 ABS Relay
- A 7 ABS Relay
- A 8 Auto Antenna Motor

- B 1 Brake Fluid Level Warning SW

- C 1 Center Diff. Lock Control Motor
- C 2 Center Diff. Lock Indicator SW
- C 3 Crankshaft Position Sensor
- C 4 Cruise Control Actuator

- D 1 Data Link Connector 1
- D 2 Distributor

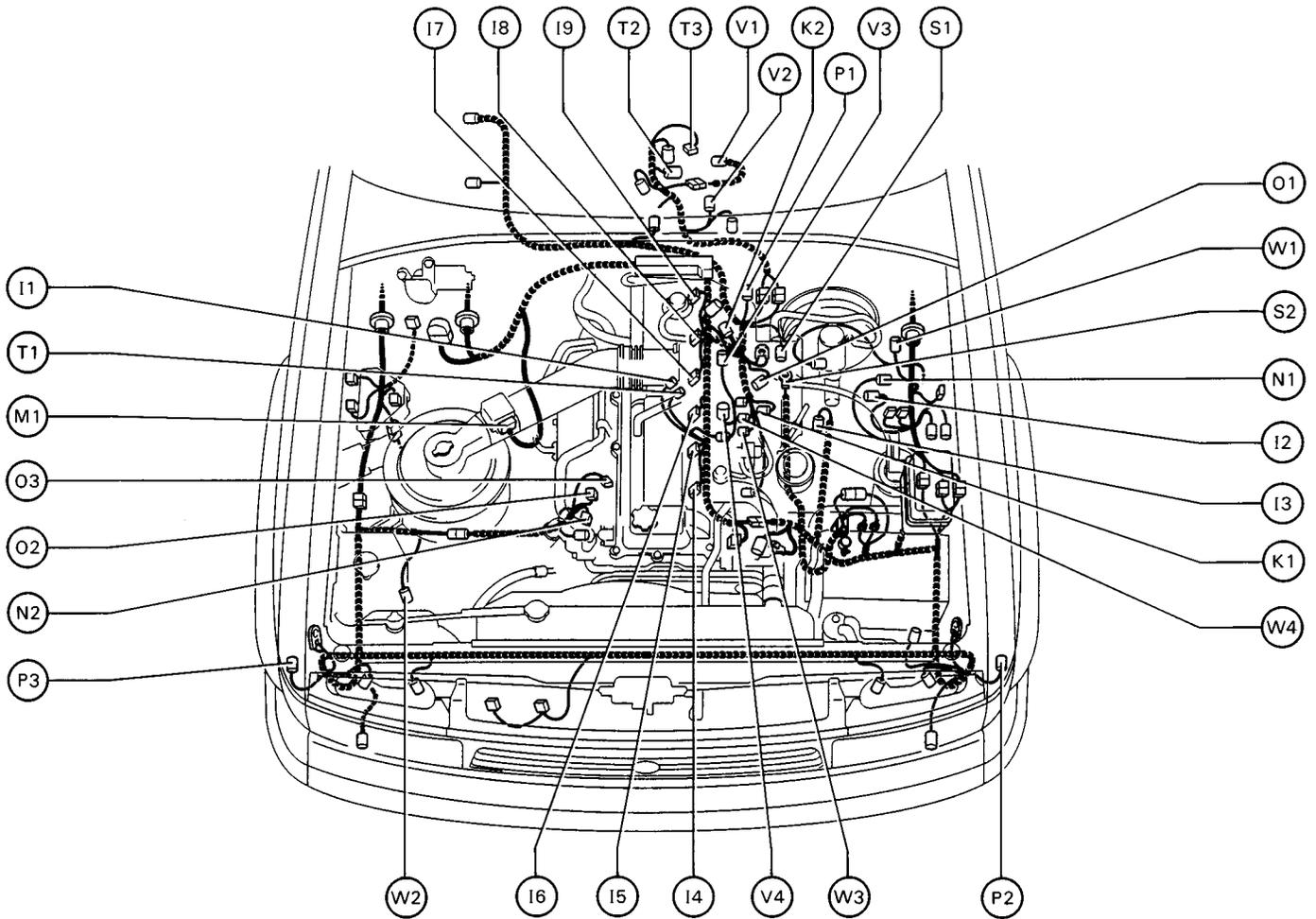
- E 1 EGR Gas Temp. Sensor
- E 2 Electronically Controlled Transmission Solenoid
- E 3 Engine Coolant Temp. Sensor

- F 1 Front Turn Signal Light LH
- F 2 Front Turn Signal Light RH
- F 3 Front Wiper Motor
- F 4 Fuel Pump Relay
- F 5 Fuel Pump Resistor
- F 6 Fusible Link (AM1)
- F 7 Fusible Link (AM2)
- F 8 Fusible Link (Main)

- G 1 Generator
- G 2 Generator

- H 1 Headlight Hi LH
- H 2 Headlight Hi RH
- H 3 Headlight Lo LH
- H 4 Headlight Lo RH
- H 5 Heated Oxygen Sensor (Bank 1 Sensor 1)
- H 6 Heated Oxygen Sensor (Bank 1 Sensor 2)
- H 7 Horn LH
- H 8 Horn RH

**Position of Parts in Engine Compartment**



- I 1 Idle Air Control Valve
- I 2 Igniter
- I 3 Ignition Coil
- I 4 Injector No. 1
- I 5 Injector No. 2
- I 6 Injector No. 3
- I 7 Injector No. 4
- I 8 Injector No. 5
- I 9 Injector No. 6

- K 1 Knock Sensor 1
- K 2 Knock Sensor 2

- M 1 Mass Air Flow

- N 1 Noise Filter (Ignition System)
- N 2 Noise Filter (Oil Pressure Sender)

- O 1 Oil Level Warning SW
- O 2 Oil Pressure Sender
- O 3 Oil Pressure Sender

- P 1 Park/Neutral Position SW
- P 2 Parking Light LH
- P 3 Parking Light RH

- S 1 Starter
- S 2 Starter

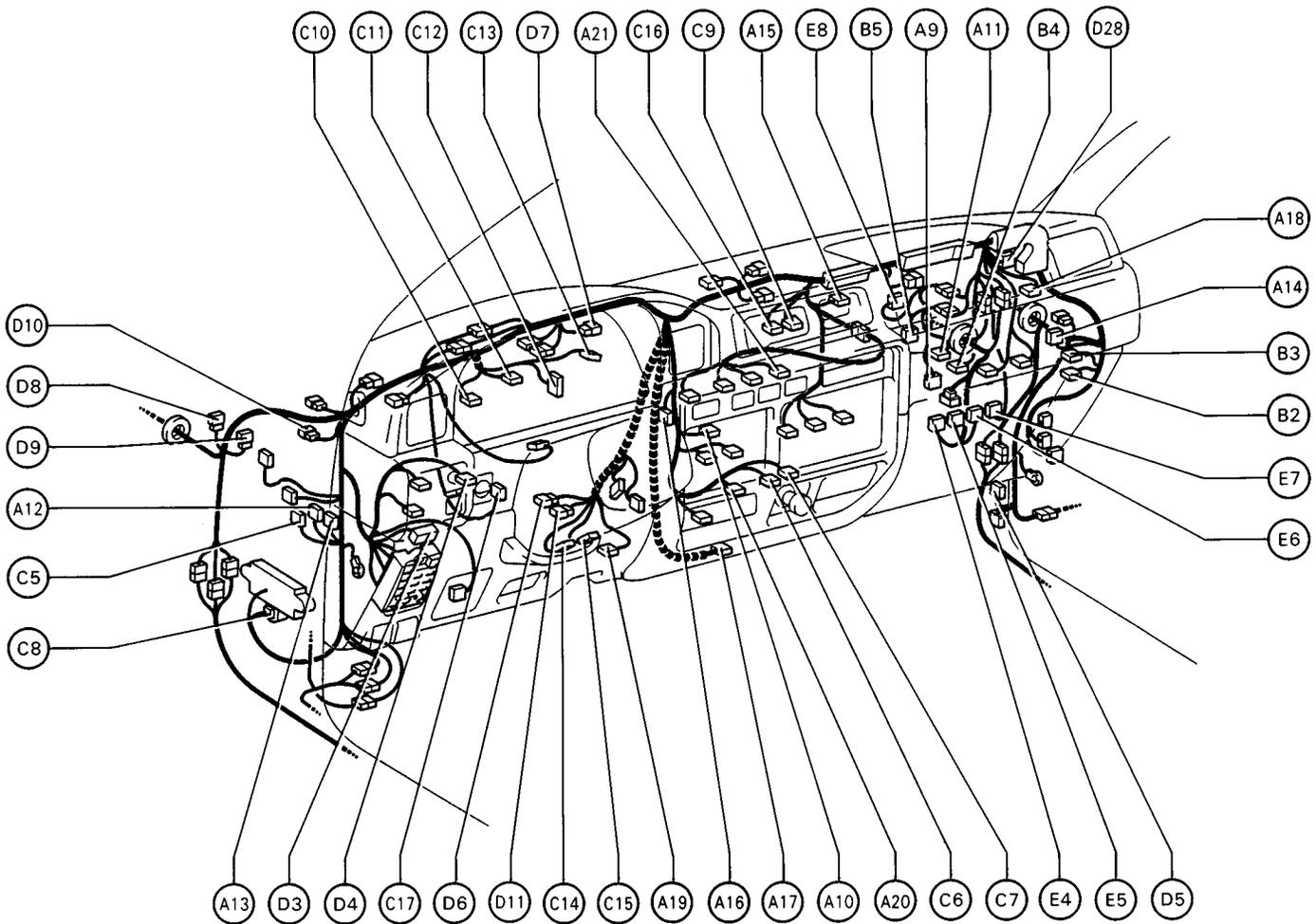
- T 1 Throttle Position Sensor
- T 2 Transfer L4 Position SW
- T 3 Transfer Neutral Position SW

- V 1 Vehicle Speed Sensor (Combination Meter)
- V 2 Vehicle Speed Sensor (Electronically Controlled Transmission)
- V 3 VSV (EGR)
- V 4 VSV (Fuel Pressure Control)

- W 1 Washer Change Valve
- W 2 Washer Motor
- W 3 Water Temp. Sender
- W 4 Water Temp. SW (A/C)

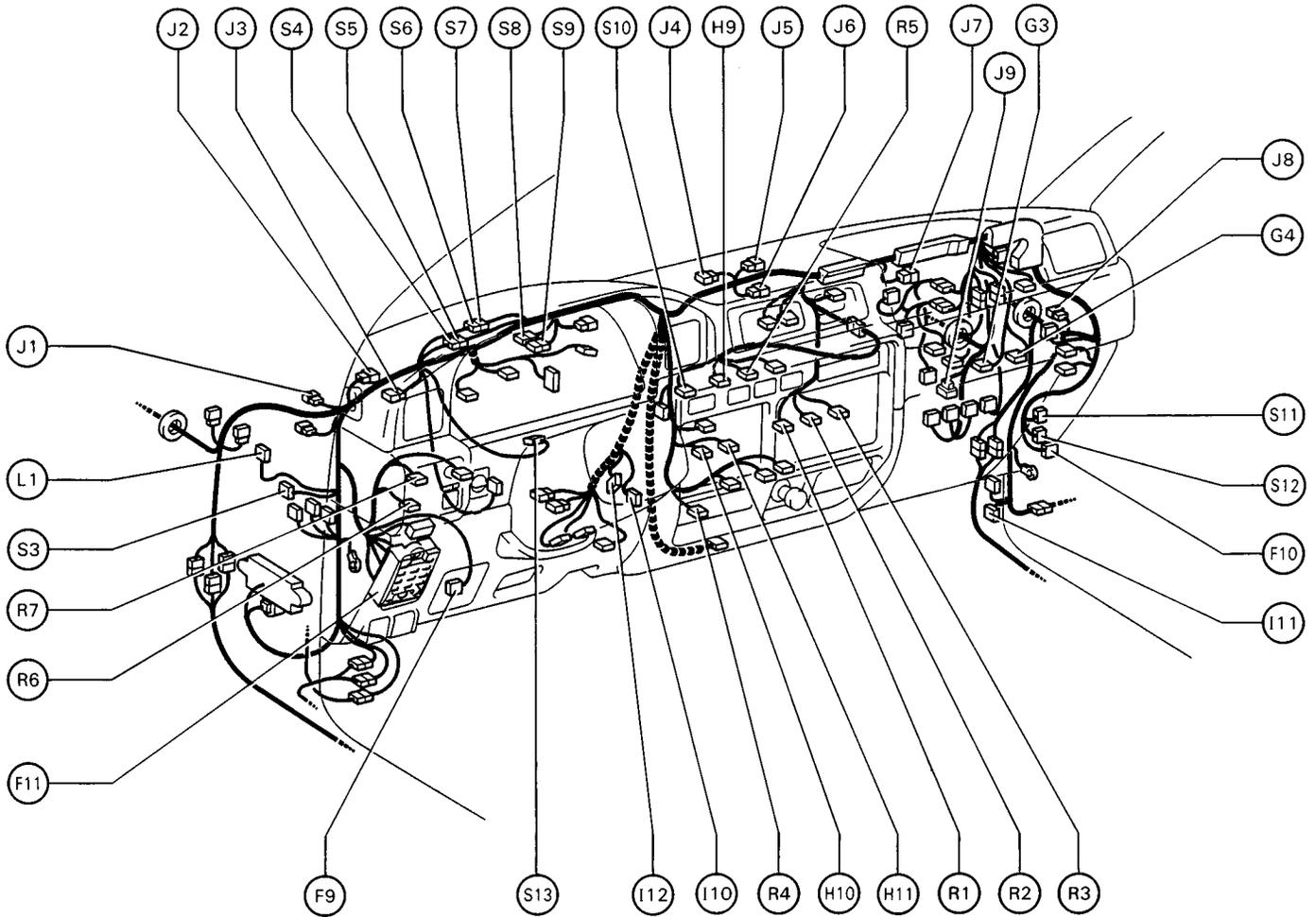
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel



- |      |  |      |                                |
|------|--|------|--------------------------------|
| A 9  | A/C Amplifier                                    | C 11 | Combination Meter              |
| A 10 | A/C System Amplifier                             | C 12 | Combination Meter              |
| A 11 | A/C Thermistor                                   | C 13 | Combination Meter              |
| A 12 | ABS ECU  | C 14 | Combination SW                 |
| A 13 | ABS ECU  | C 15 | Combination SW                 |
| A 14 | Air Inlet Control Servo Motor                    | C 16 | Cooling Fan (Radio and Player) |
| A 15 | Air Mix Control Servo Motor                      | C 17 | Cruise Control ECU             |
| A 16 | Air Vent Mode Control Servo Motor                | D 3  | Data Link Connector 3          |
| A 17 | Airbag Sensor Assembly                           | D 4  | Diff. Lock Control SW          |
| A 18 | Airbag Squib (Front Passenger's Airbag Assembly) | D 5  | Diff. Lock ECU                 |
| A 19 | Airbag Squip (Steering Wheel Pad)                | D 6  | Diode (Front Washer)           |
| A 20 | Ashtray Illumination                             | D 7  | Diode (Headlight)              |
| A 21 | Auto Antenna Control SW                          | D 8  | Diode (Interior Light)         |
| B 2  | Blower Motor (A/C)                               | D 9  | Diode (Interior Light)         |
| B 3  | Blower Motor (Heater)                            | D 10 | Diode (Interior Light)         |
| B 4  | Blower Resistor                                  | D 11 | Diode (Rear Washer)            |
| B 5  | Blower Speed Control Relay                       | D 28 | Diode (Neutral Detection)      |
| C 5  | Center Diff. Lock Control Relay                  | E 4  | Engine Control Module          |
| C 6  | Cigarette Lighter                                | E 5  | Engine Control Module          |
| C 7  | Cigarette Lighter Illumination                   | E 6  | Engine Control Module          |
| C 8  | Circuit Opening Relay                            | E 7  | Engine Control Module          |
| C 9  | Clock  | E 8  | Engine Control Temp. Cut Relay |
| C 10 | Combination Meter                                |      |                                |

**Position of Parts in Instrument Panel**



- F 9 Front Speaker LH
- F 10 Front Speaker RH
- F 11 Fuse Block

- G 3 Glove Box Light
- G 4 Glove Box Light SW

- H 9 Hazard SW
- H 10 Heater Control SW and A/C SW
- H 11 Heater Control SW and A/C SW

- I 10 Ignition Key Cylinder Light
- I 11 Ignition Key Cylinder Light Relay
- I 12 Ignition SW, Unlock Warning SW and Key Interlock Solenoid

- J 1 Junction Connector
- J 2 Junction Connector
- J 3 Junction Connector
- J 4 Junction Connector
- J 5 Junction Connector
- J 6 Junction Connector
- J 7 Junction Connector
- J 8 Junction Connector
- J 9 Junction Connector

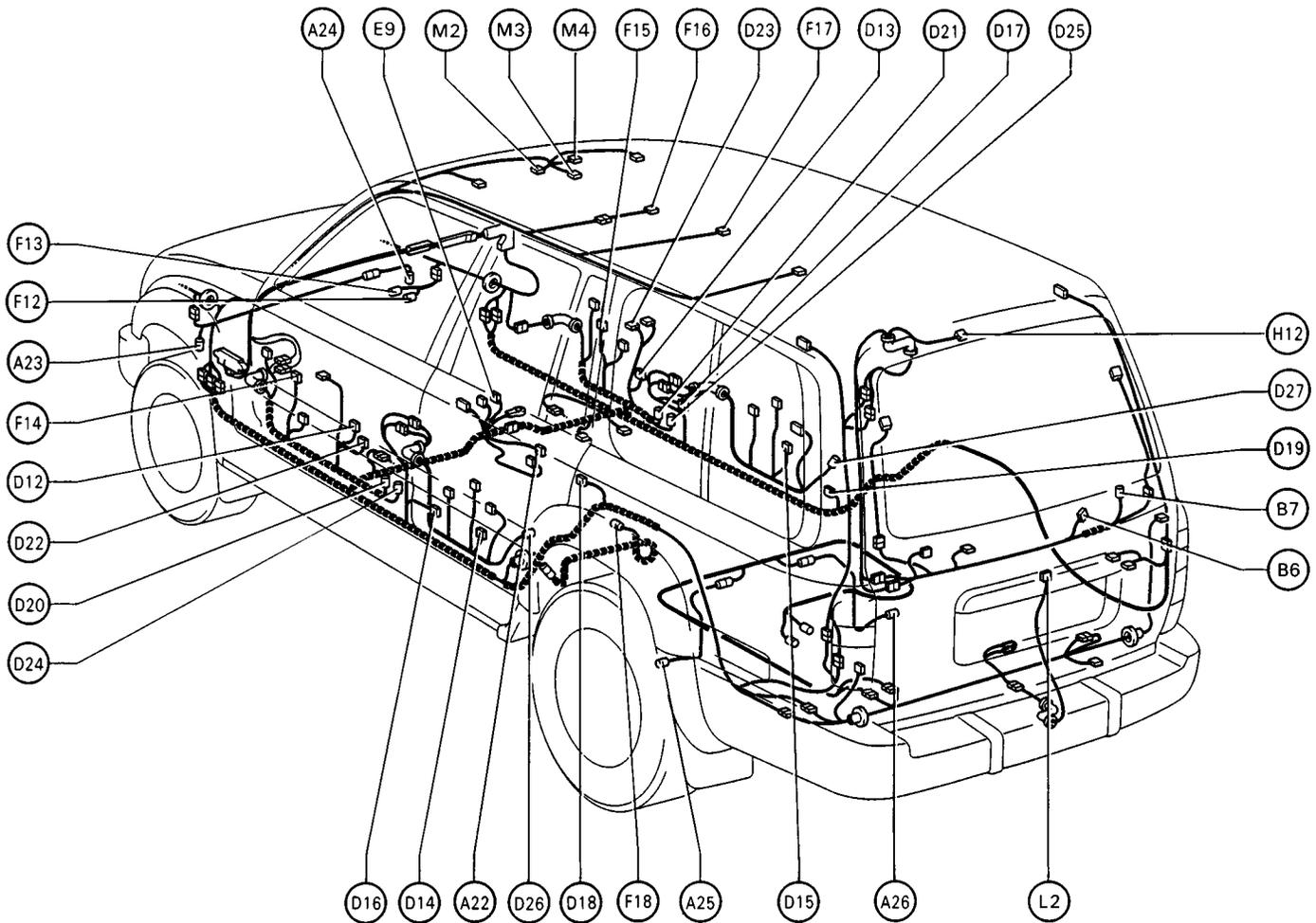
- L 1 Light Retainer Relay

- R 1 Radio and Player
- R 2 Radio and Player
- R 3 Radio and Player
- R 4 Rear Heater SW
- R 5 Rear Window Defogger SW
- R 6 Remote Control Mirror SW
- R 7 Rheostat

- S 3 Seat Belt Warning Relay
- S 4 Short Connector (SRS)
- S 5 Short Connector (SRS)
- S 6 Short Connector (SRS)
- S 7 Short Connector (SRS)
- S 8 Short Connector (A/C)
- S 9 Short Connector (A/C)
- S 10 Short Pin (Center Diff. Lock)
- S 11 Stereo Component Amplifier
- S 12 Stereo Component Amplifier
- S 13 Stop Light SW

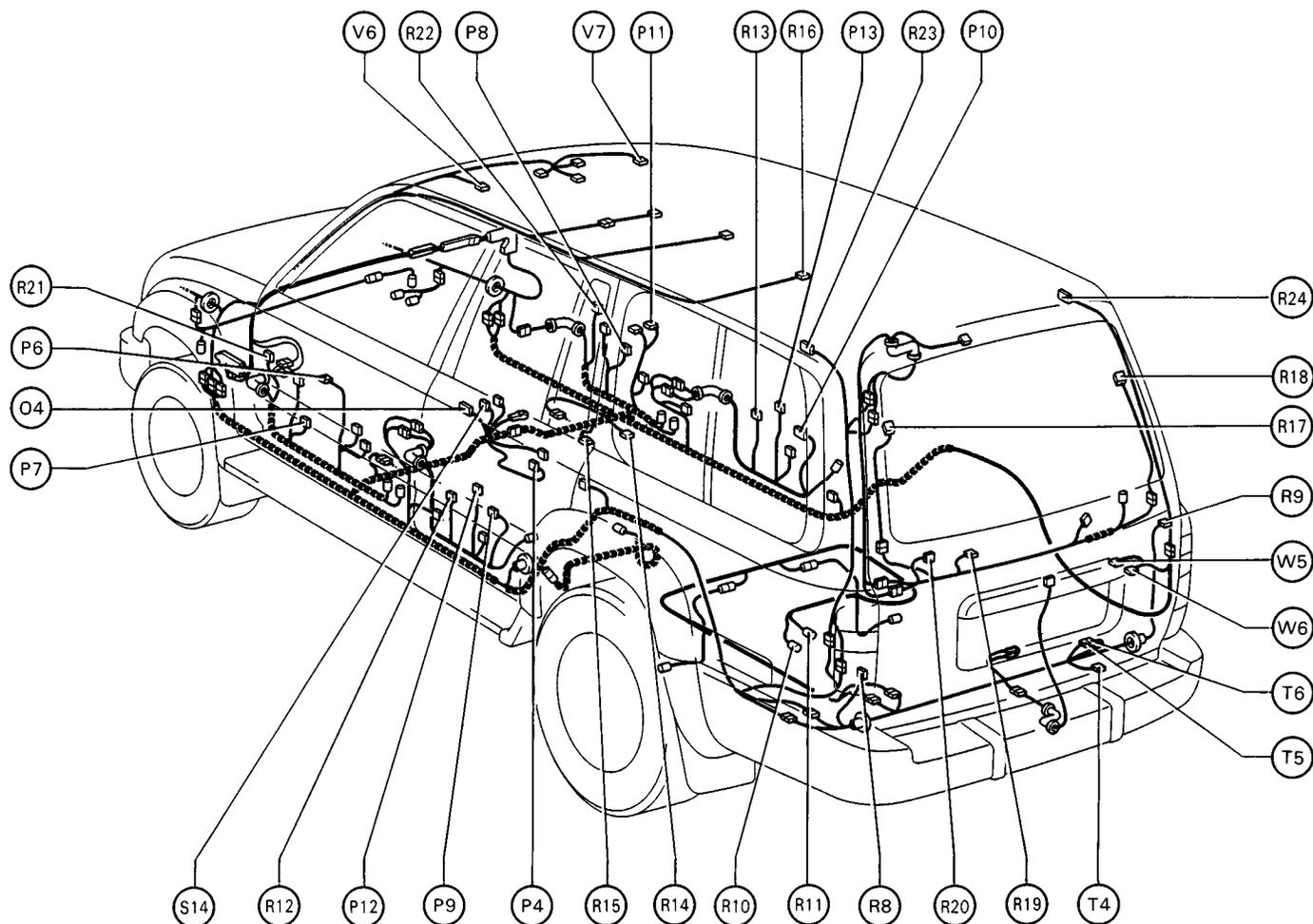
## G ELECTRICAL WIRING ROUTING

### Position of Parts in Body



- |      |                                |      |  |
|------|--------------------------------|------|--|
| A 22 | ABS Deceleration Sensor        | D 24 | Door Lock Motor and Door Unlock Detection SW Front LH    |
| A 23 | ABS Speed Sensor Front LH      | D 25 | Door Lock Motor and Door Unlock Detection SW Front RH    |
| A 24 | ABS Speed Sensor Front RH      | D 26 | Door Lock Motor Rear LH                                  |
| A 25 | ABS Speed Sensor Rear LH       | D 27 | Door Lock Motor Rear RH                                  |
| A 26 | ABS Speed Sensor Rear RH       | E 9  | Electronically Controlled Transmission Pattern Select SW |
| B 6  | Back Door Courtesy SW          | F 12 | Front Diff. Lock Control Motor                           |
| B 7  | Back Door Lock Motor           | F 13 | Front Diff. Lock Position SW                             |
| D 12 | Door Courtesy Light Front LH   | F 14 | Front Door Speaker LH                                    |
| D 13 | Door Courtesy Light Front RH   | F 15 | Front Door Speaker RH                                    |
| D 14 | Door Courtesy Light Rear LH    | F 16 | Front Interior Light (w/ Moon Roof)                      |
| D 15 | Door Courtesy Light Rear RH    | F 17 | Front Interior Light (w/o Moon Roof)                     |
| D 16 | Door Courtesy SW Front LH      | F 18 | Fuel Sender and Pump                                     |
| D 17 | Door Courtesy SW Front RH      | H 12 | High Mounted Stop Light                                  |
| D 18 | Door Courtesy SW Rear LH       | L 2  | License Plate Light                                      |
| D 19 | Door Courtesy SW Rear RH       | M 2  | Moon Roof Control Relay                                  |
| D 20 | Door Key Lock and Unlock SW LH | M 3  | Moon Roof Control SW and Personal Light                  |
| D 21 | Door Key Lock and Unlock SW RH | M 4  | Moon Roof Limit SW and Motor                             |
| D 22 | Door Lock Control Relay        |      |  |
| D 23 | Door Lock Control SW RH        |      |  |

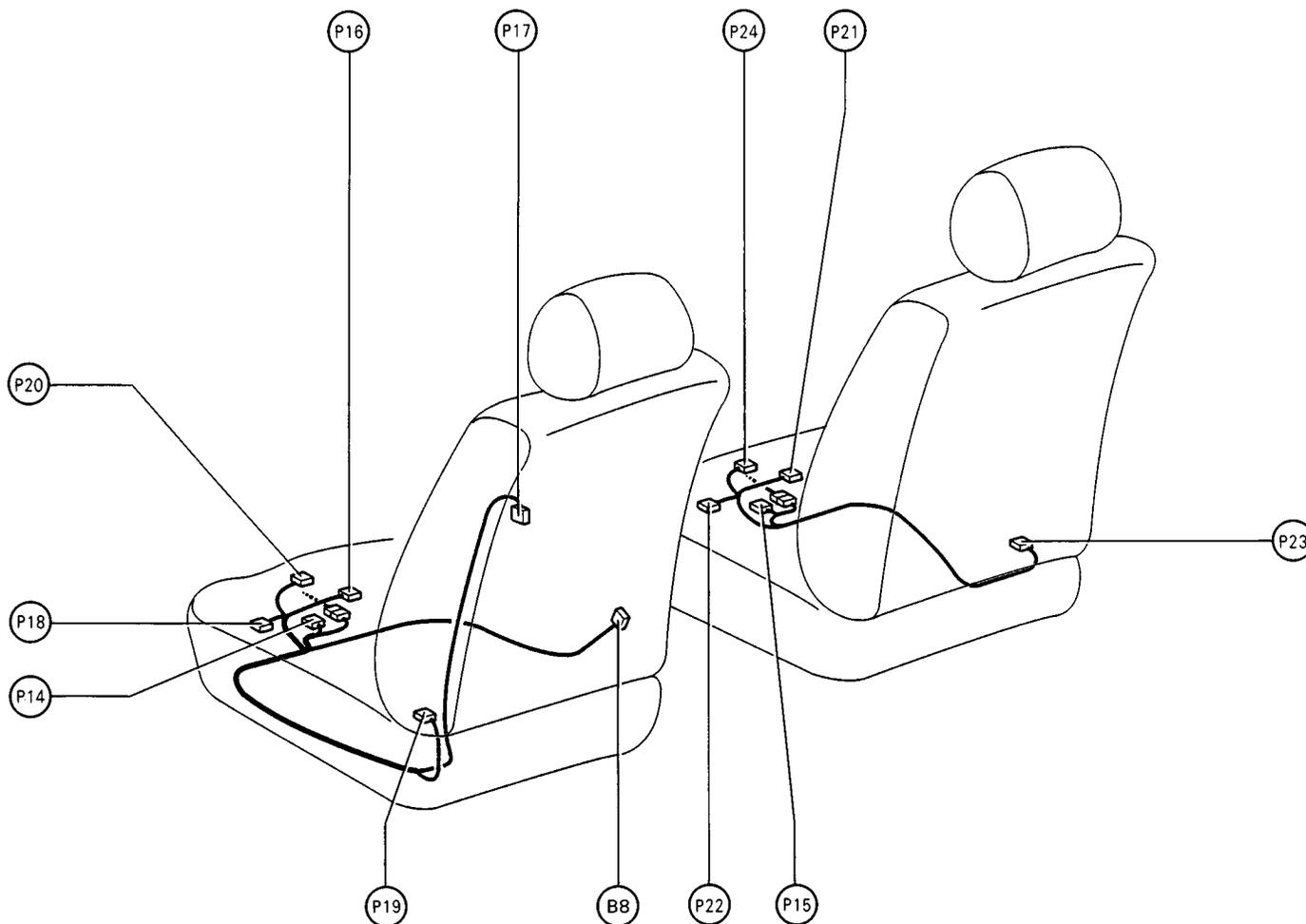
## Position of Parts in Body



O 4	O/D Main SW	R 17	Rear Window Defogger (+)
P 4	Parking Brake SW	R 18	Rear Window Defogger (-)
P 6	Power Window Master SW	R 19	Rear Wiper Motor
P 7	Power Window Motor Front LH	R 20	Rear Wiper Relay
P 8	Power Window Motor Front RH	R 21	Remote Control Mirror LH
P 9	Power Window Motor Rear LH	R 22	Remote Control Mirror RH
P 10	Power Window Motor Rear RH	R 23	Roof Speaker LH
P 11	Power Window SW Front RH	R 24	Roof Speaker RH
P 12	Power Window SW Rear LH	S 14	Shift Lock ECU
P 13	Power Window SW Rear RH	T 4	Trailer Socket (Tail and Stop Light)
R 8	Rear Combination Light LH	T 5	Trailer Socket (Turn Signal Light)
R 9	Rear Combination Light RH	T 6	Trailer Socket (Turn Signal Light)
R 10	Rear Diff. Lock Control Motor	V 6	Vanity Light LH
R 11	Rear Diff. Lock Position SW	V 7	Vanity Light RH
R 12	Rear Door Speaker LH	W 5	Woofer (Speaker)
R 13	Rear Door Speaker RH	W 6	Woofer Amplifier
R 14	Rear Heater		
R 15	Rear Heater Relay		
R 16	Rear Interior Light		

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Seat



B 8 Buckle SW LH

P 14 Power Seat Control SW (Driver's Seat)

P 15 Power Seat Control SW (Passenger's Seat)

P 16 Power Seat Motor (Driver's Seat Front Vertical Control)

P 17 Power Seat Motor (Driver's Seat Lumbar Support Control)

P 18 Power Seat Motor (Driver's Seat Rear Vertical Control)

P 19 Power Seat Motor (Driver's Seat Reclining Control)

P 20 Power Seat Motor (Driver's Seat Slide Control)

P 21 Power Seat Motor (Passenger's Seat Front Vertical Control)

P 22 Power Seat Motor (Passenger's Seat Rear Vertical Control)

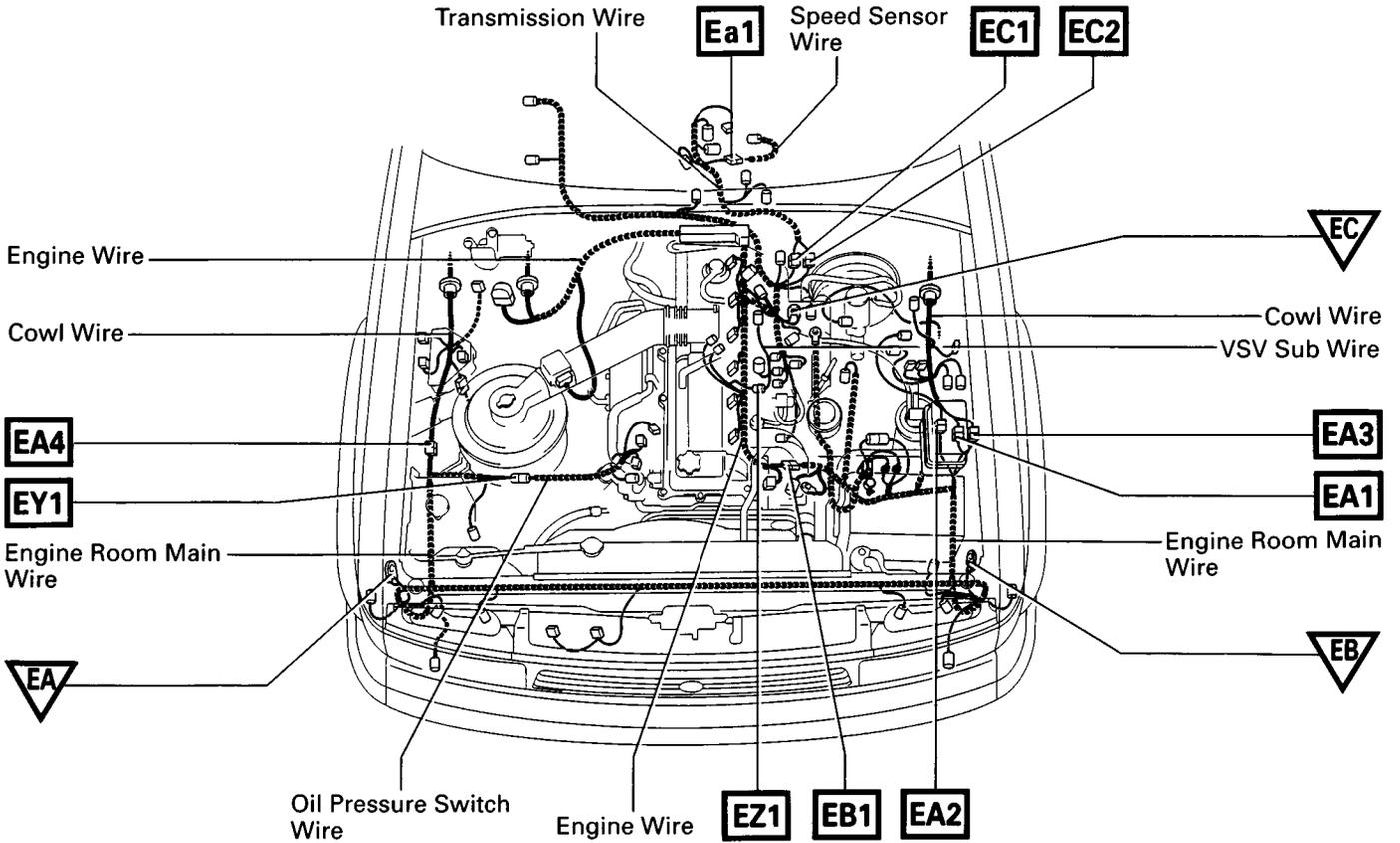
P 23 Power Seat Motor (Passenger's Seat Reclining Control)

P 24 Power Seat Motor (Passenger's Seat Slide Control)

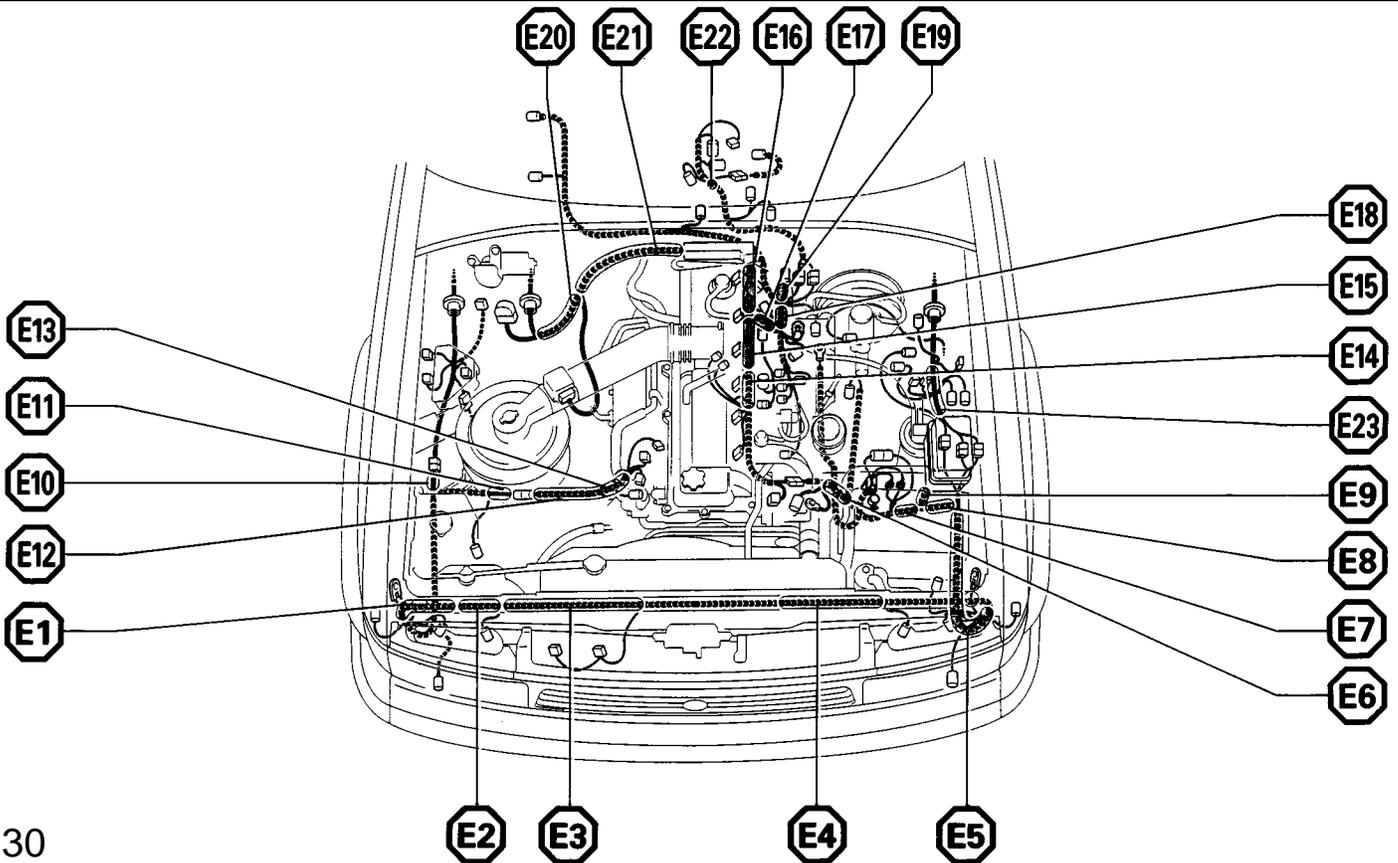


## G ELECTRICAL WIRING ROUTING

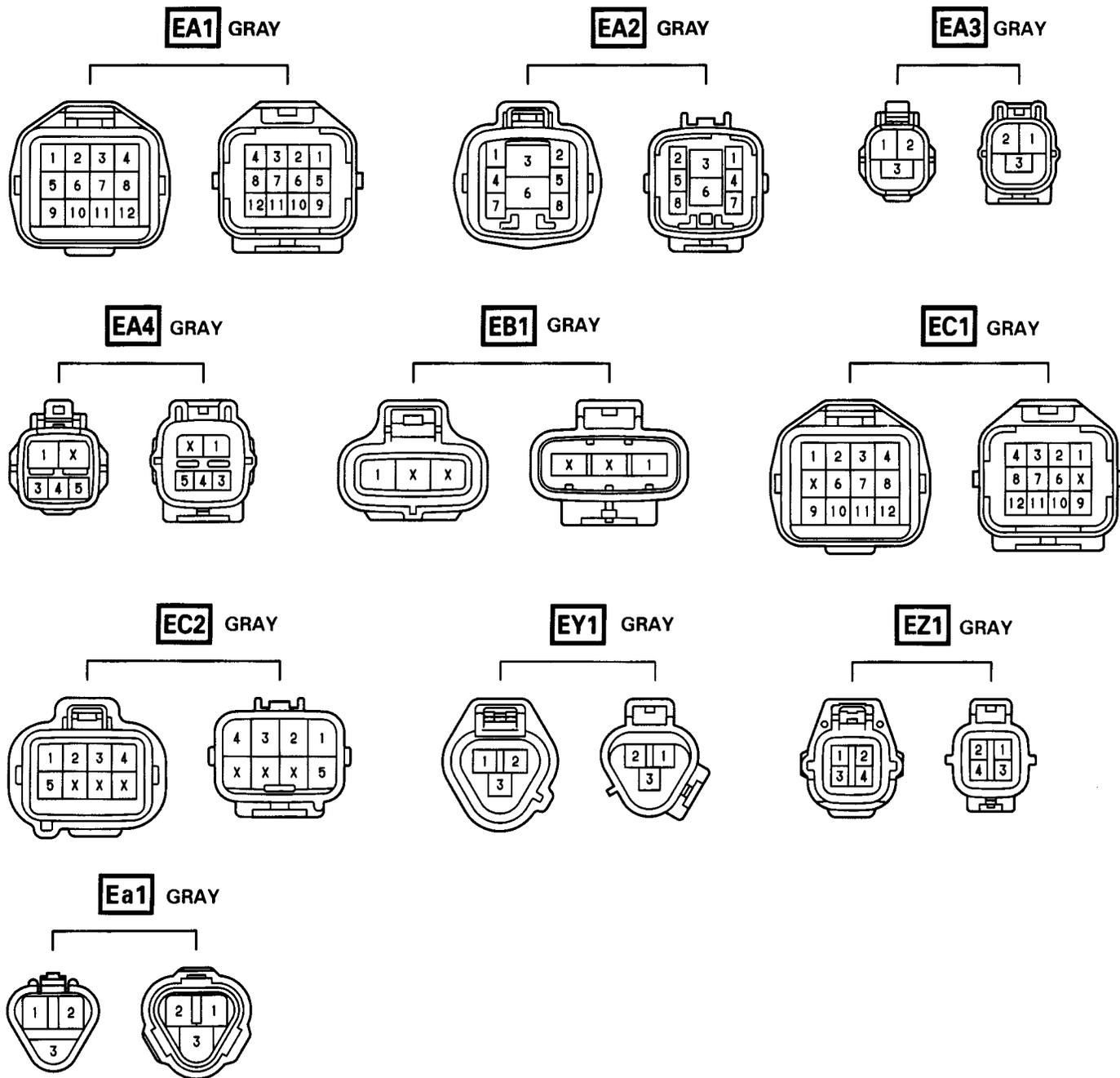
- : Location of Connector Joining Wire Harness and Wire Harness
- ▽ : Location of Ground Points



- : Location of Splice Points



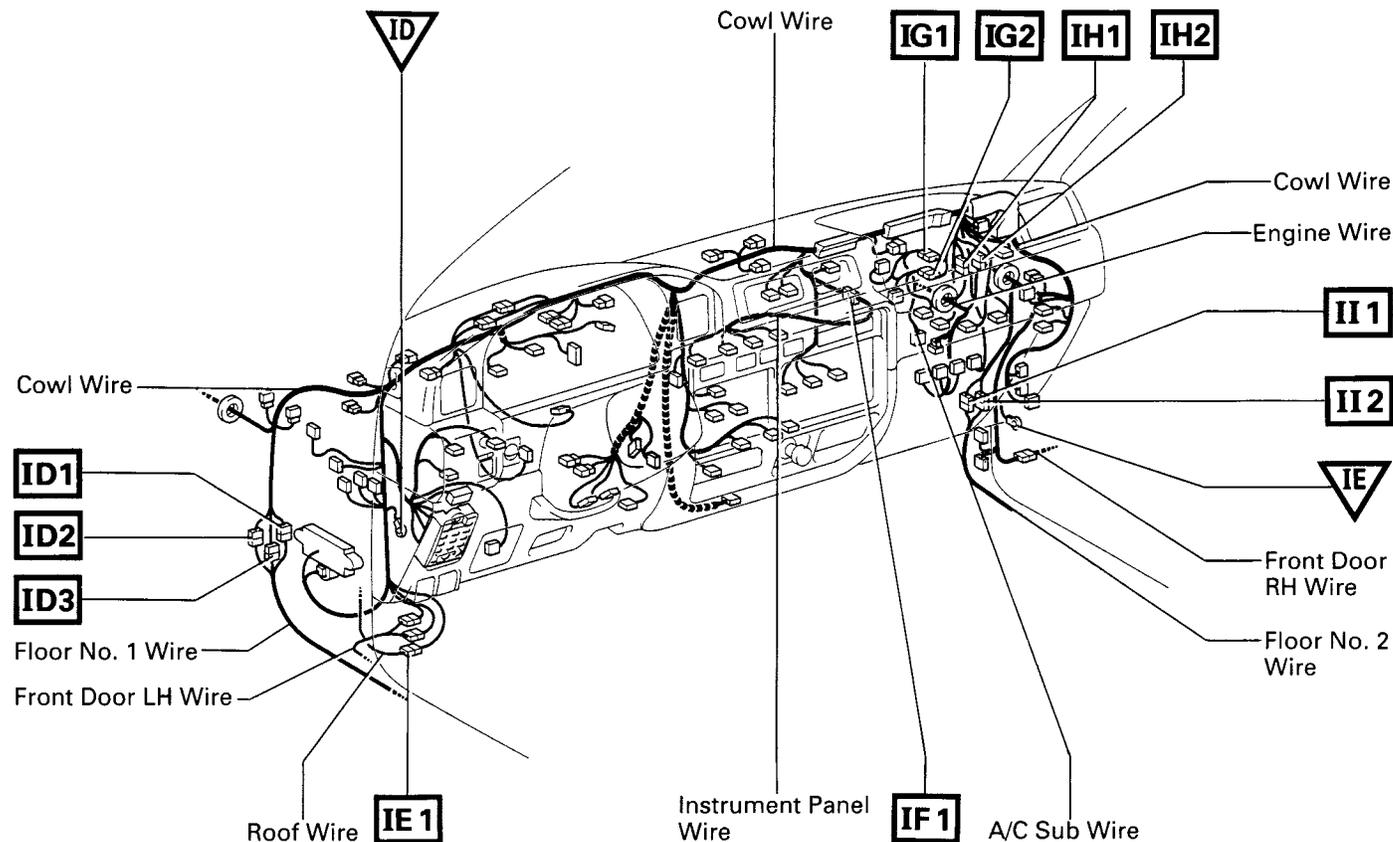
## Connector Joining Wire Harness and Wire Harness



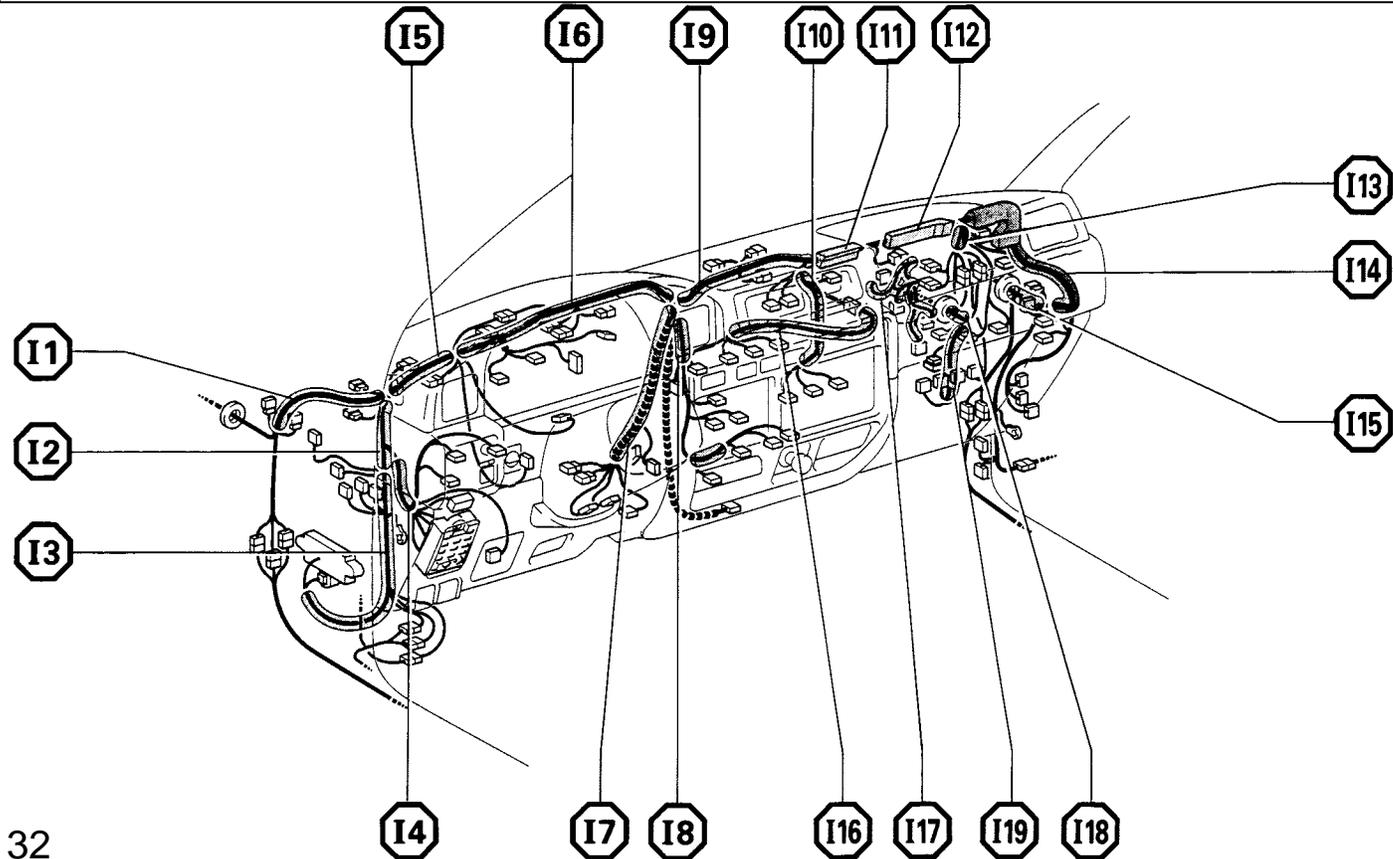
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
EA2	
EA3	
EA4	COWL WIRE AND ENGINE ROOM MAIN WIRE (RIGHT FENDER)
EB1	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE DISTRIBUTOR)
EC1	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
EC2	
EY1	OIL PRESSURE SWITCH WIRE AND ENGINE ROOM MAIN WIRE (NEAR THE AIR CLEANER)
EZ1	ENGINE WIRE AND VSV SUB WIRE (NEAR THE THROTTLE POSITION SENSOR)
Ea1	TRANSMISSION WIRE AND SPEED SENSOR WIRE (NEAR THE TRANSMISSION)

# G ELECTRICAL WIRING ROUTING

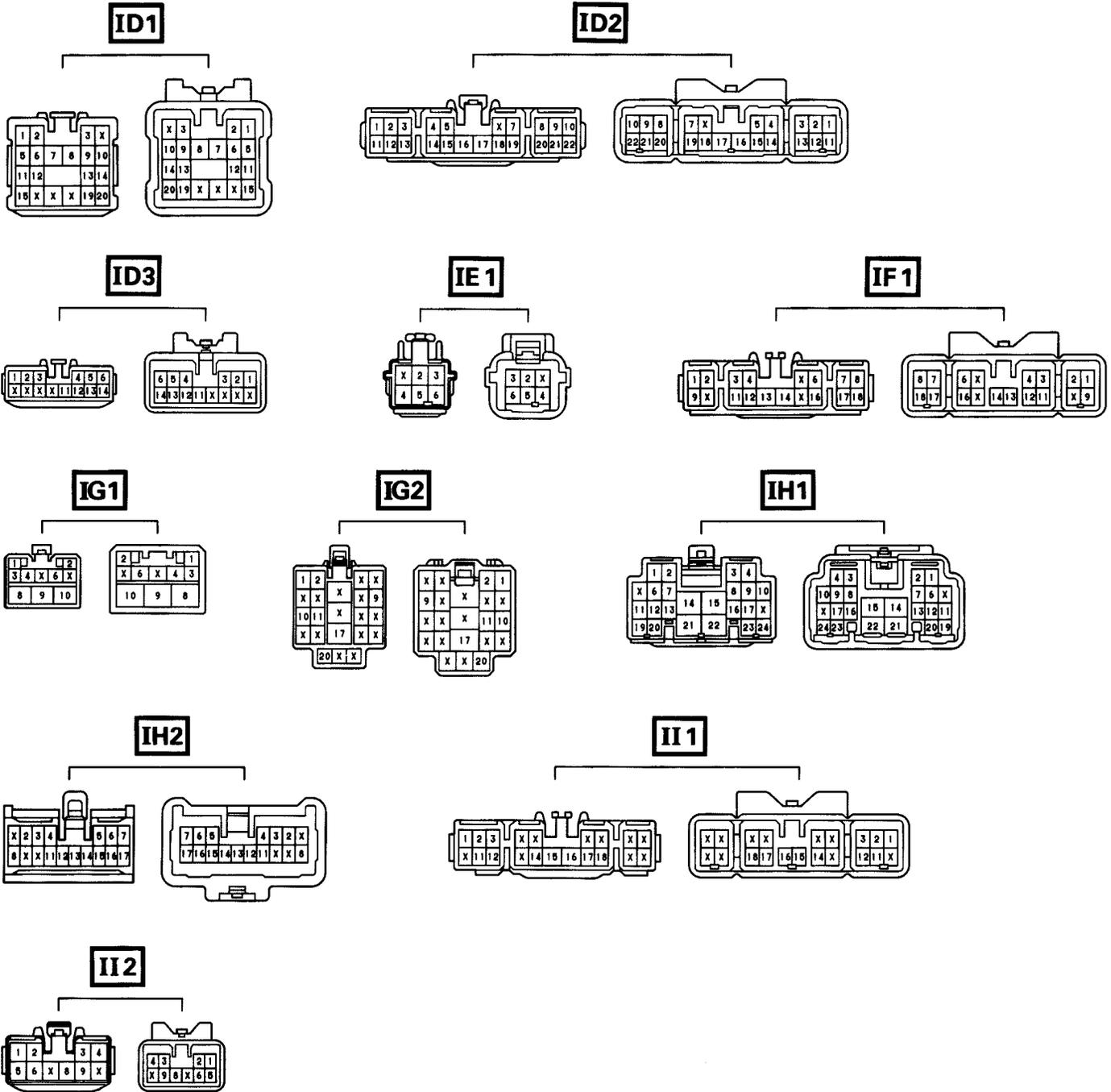
- : Location of Connector Joining Wire Harness and Wire Harness
- ▽ : Location of Ground Points



- : Location of Splice Points



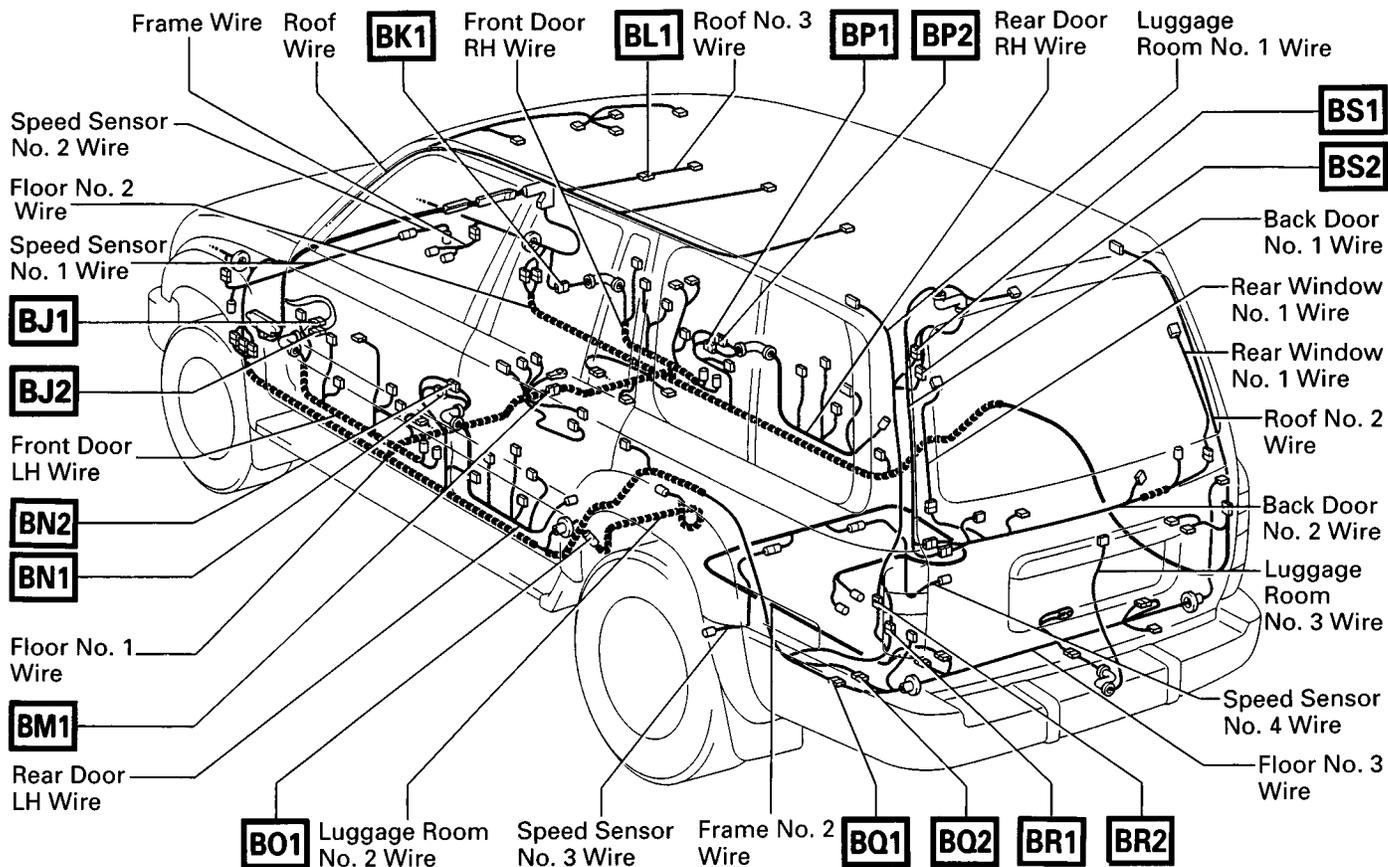
## Connector Joining Wire Harness and Wire Harness



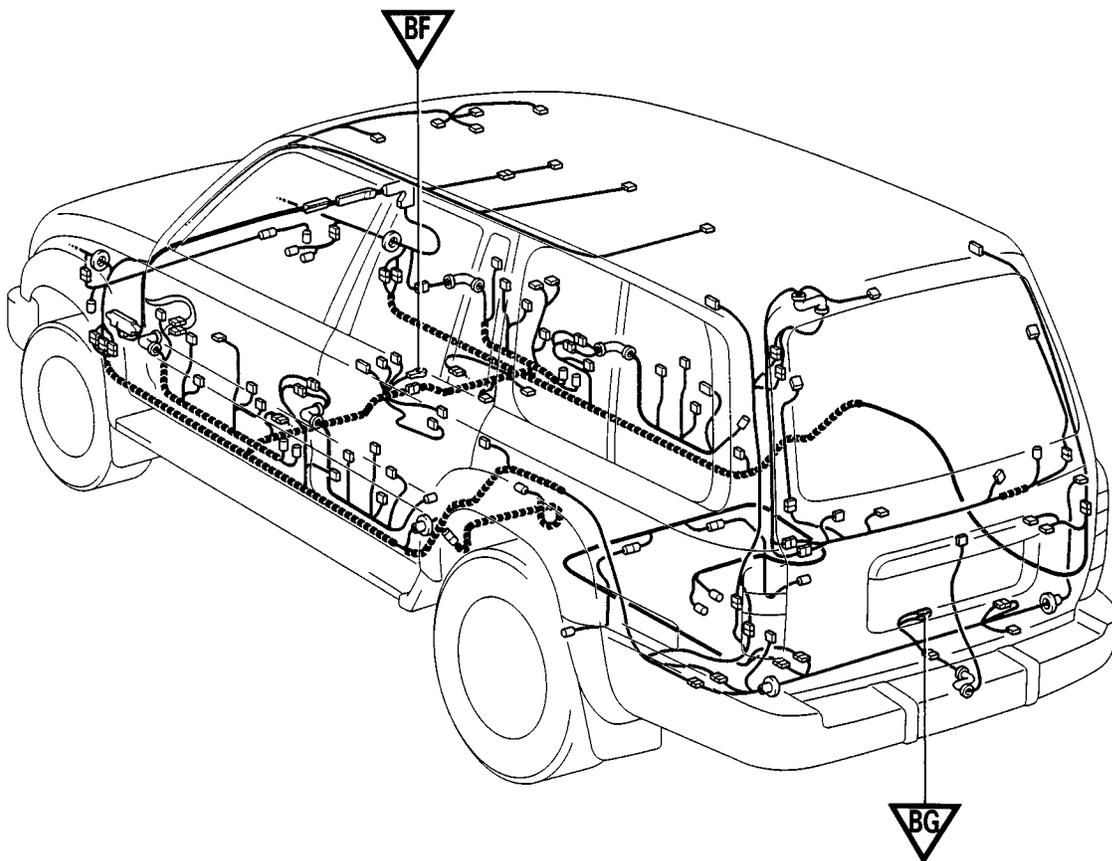
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID2	
ID3	
IE1	ROOF WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)
IG1	COWL WIRE AND A/C SUB WIRE (BEHIND GLOVE BOX)
IG2	
IH1	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2	
II1	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
II2	

# G ELECTRICAL WIRING ROUTING

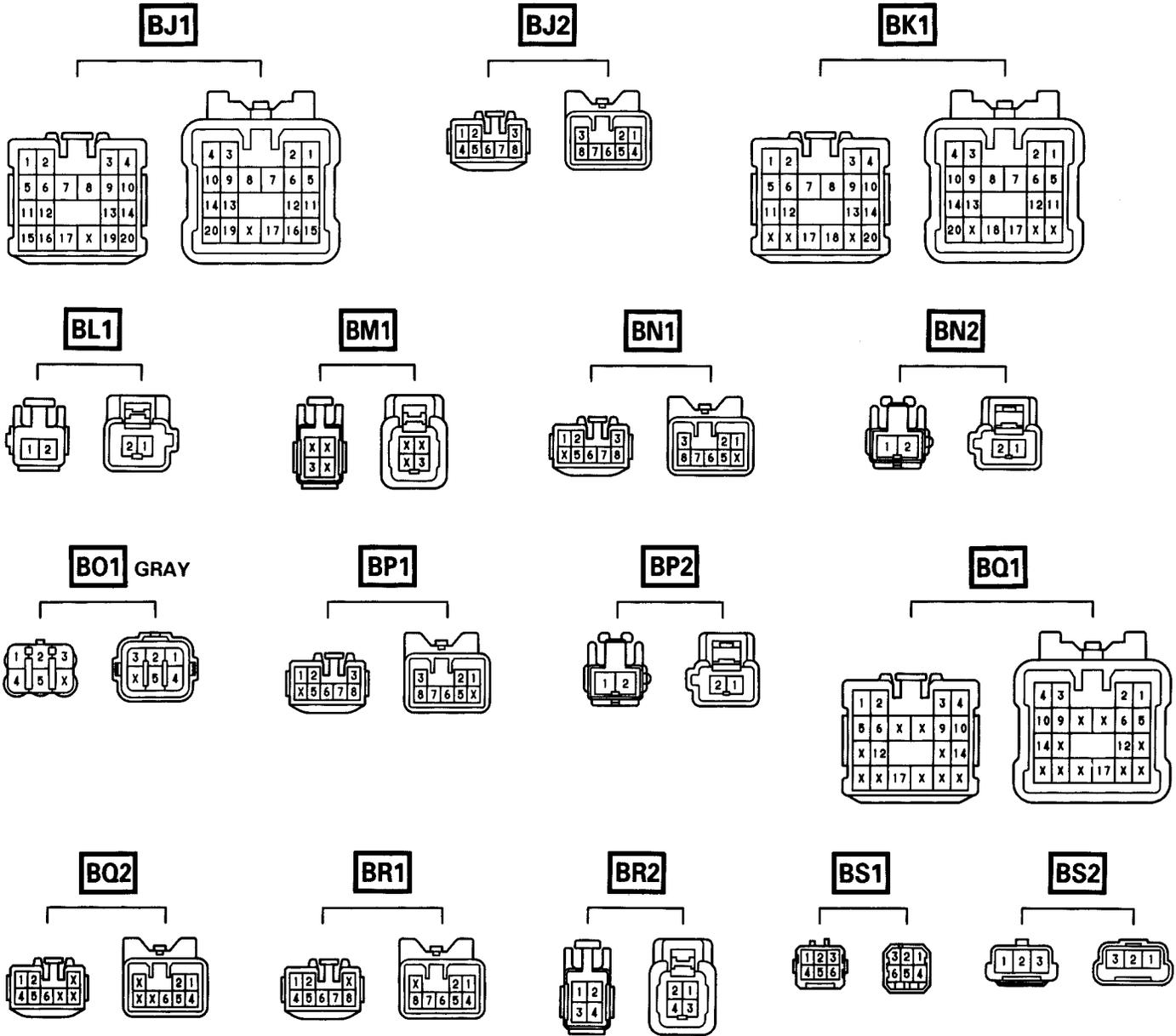
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**▽ : Location of Ground Points**



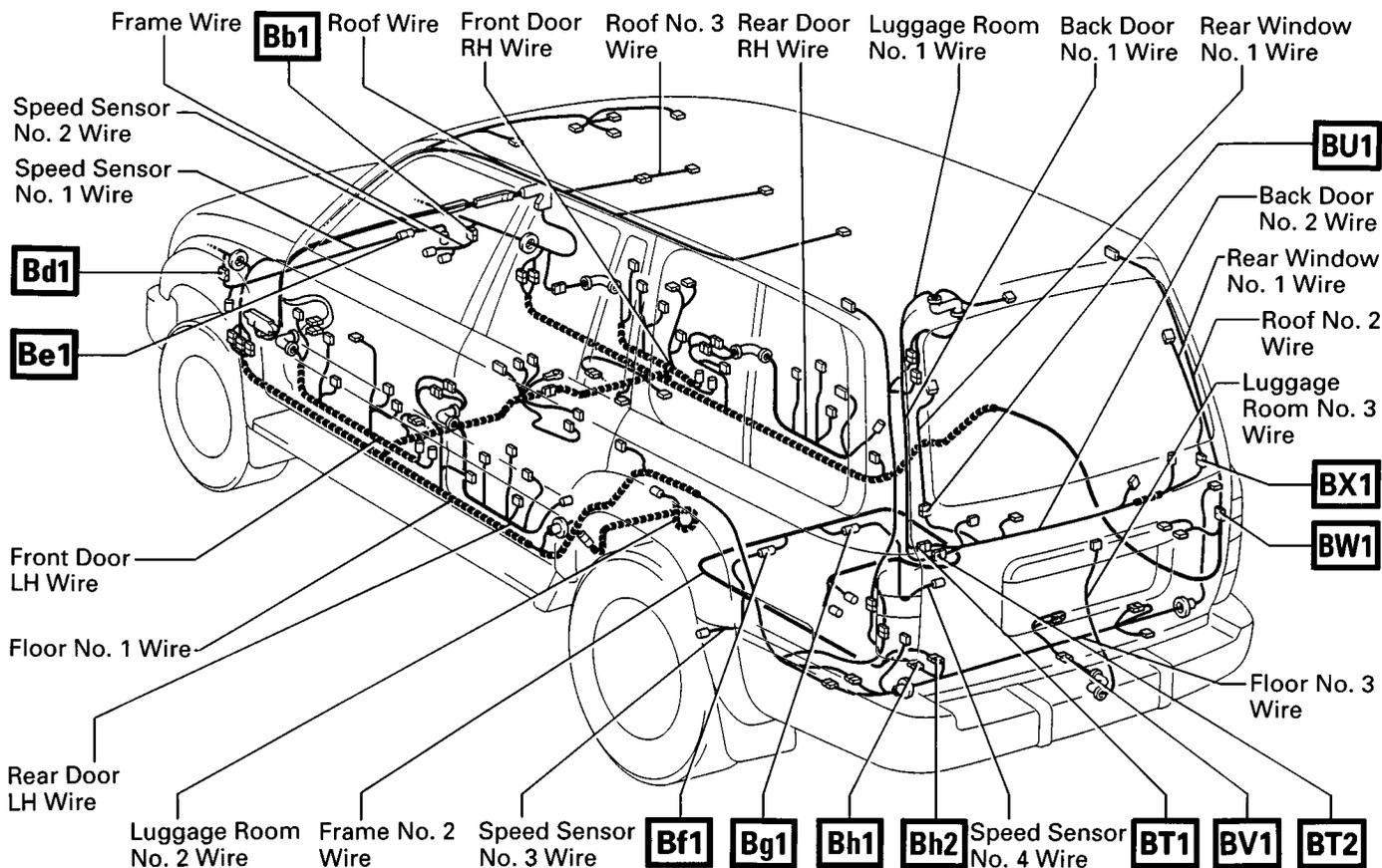
## Connector Joining Wire Harness and Wire Harness



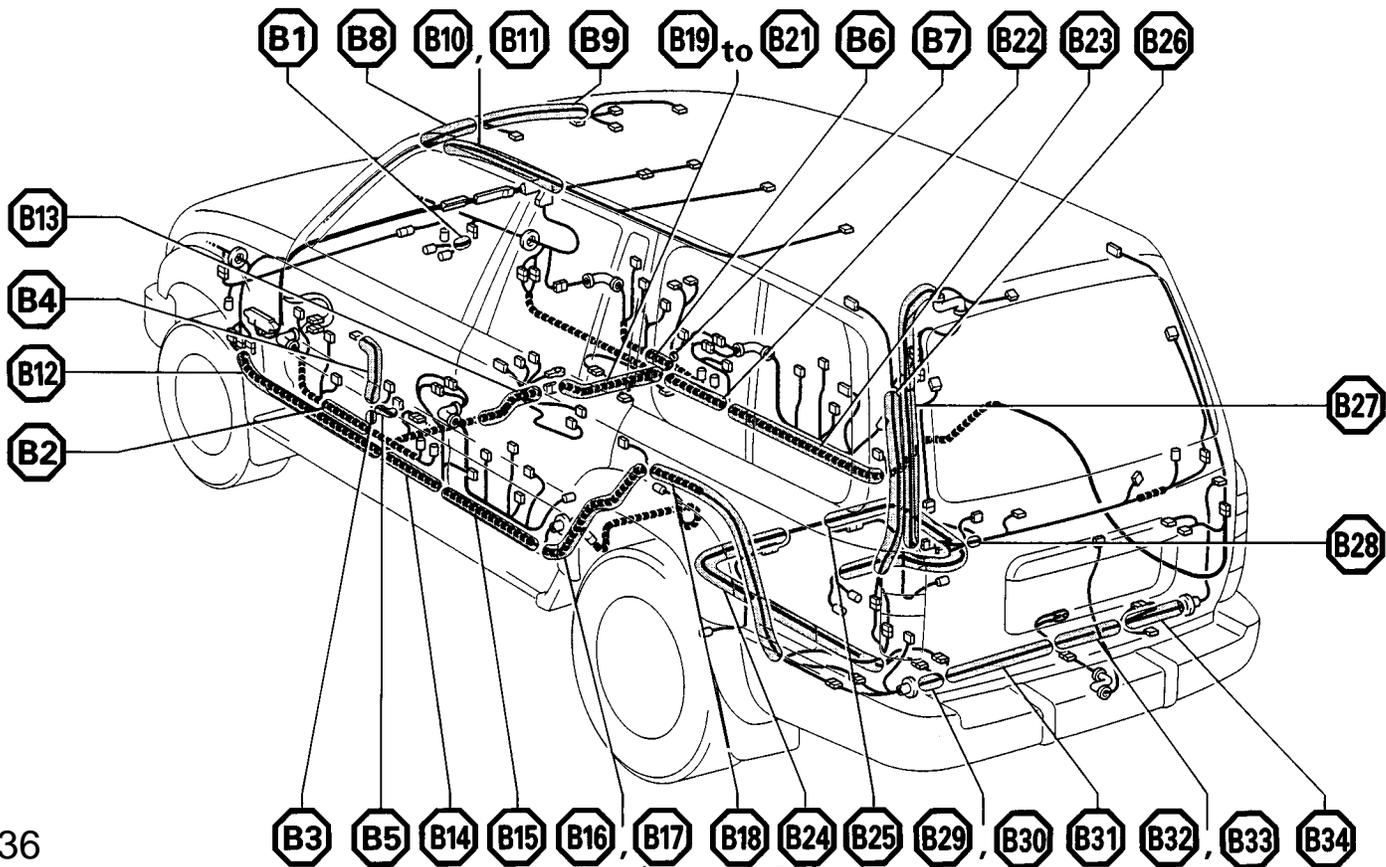
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BJ1	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BJ2	
BK1	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BL1	ROOF WIRE AND ROOF NO. 3 WIRE (ROOF LEFT)
BM1	FLOOR NO. 2 WIRE AND FLOOR NO. 1 WIRE (UNDER THE CENTER CONSOLE)
BN1	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BN2	
BO1	FLOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 2 WIRE (BESIDE THE FUEL TANK)
BP1	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)
BP2	
BQ1	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BQ2	
BR1	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BR2	
BS1	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
BS2	

# G ELECTRICAL WIRING ROUTING

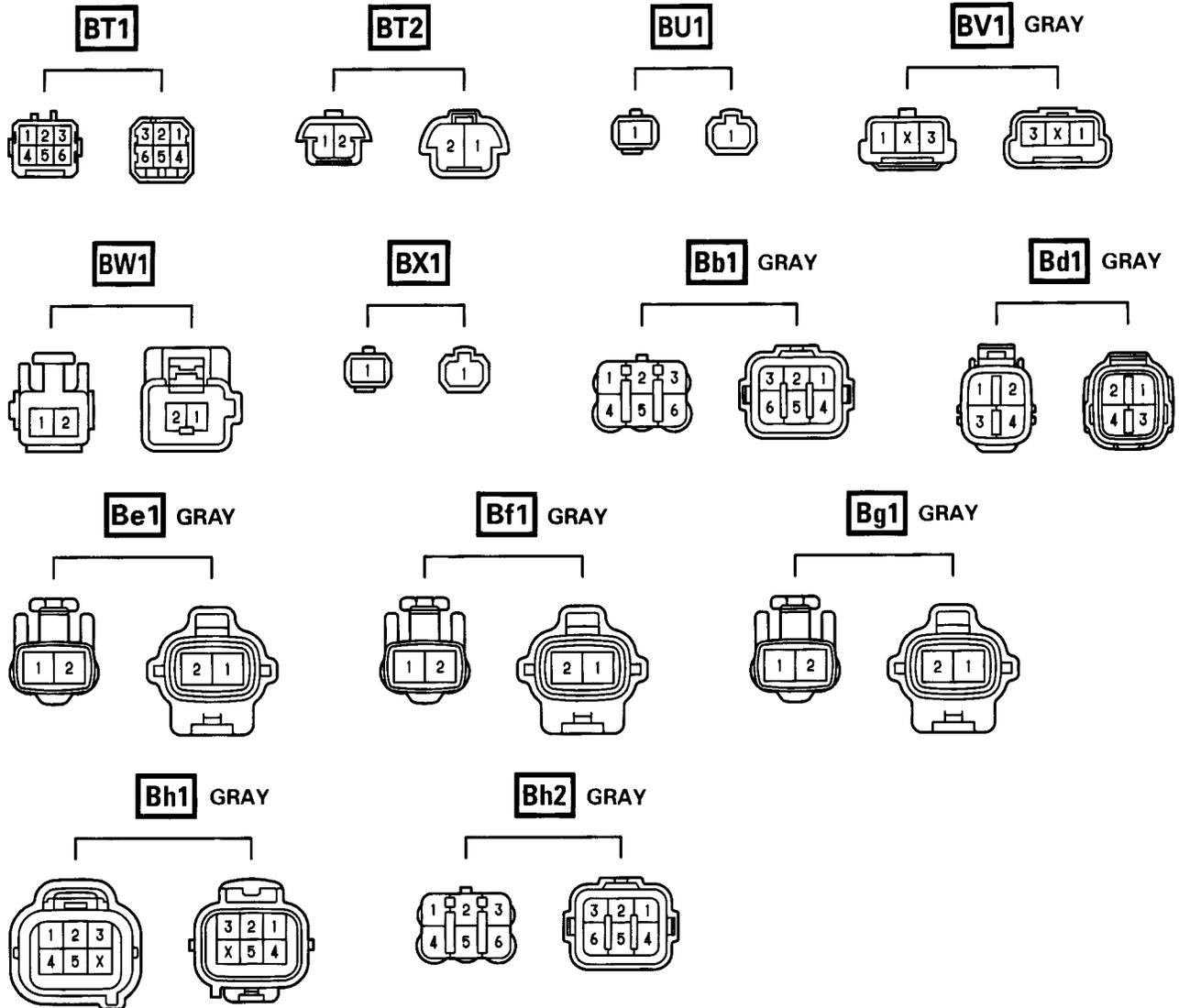
**□** : Location of Connector Joining Wire Harness and Wire Harness



**○** : Location of Splice Points



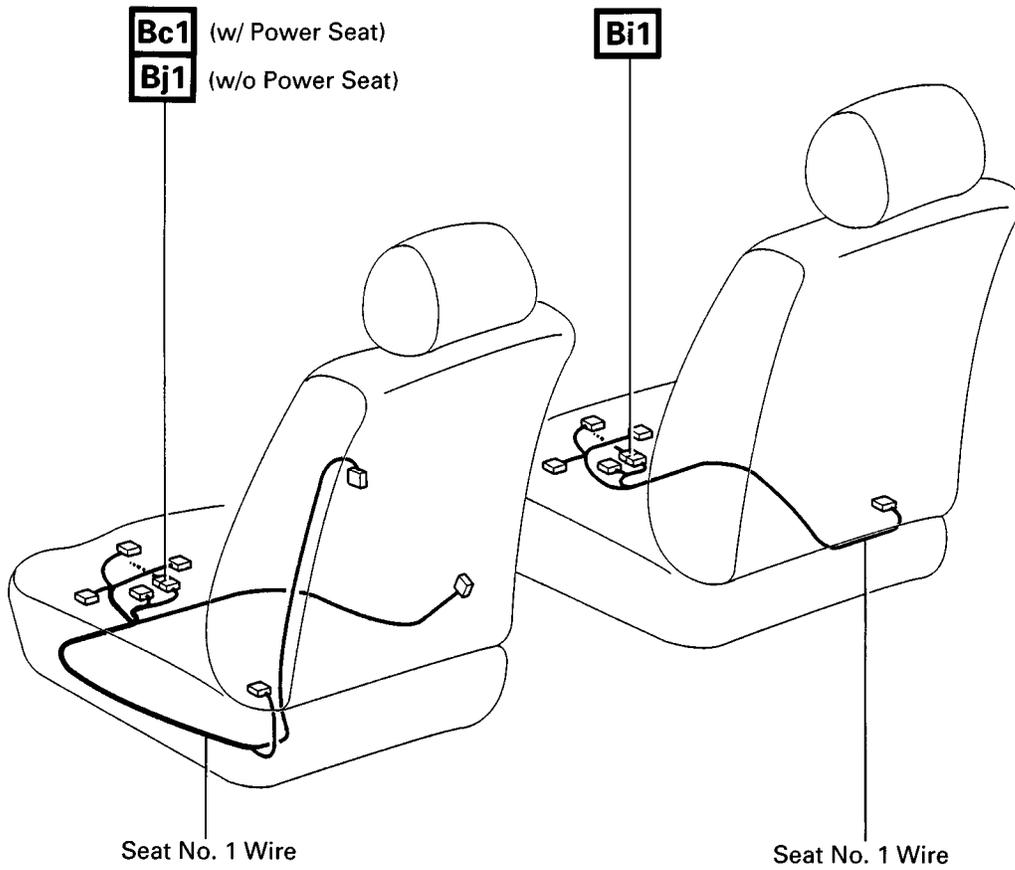
## Connector Joining Wire Harness and Wire Harness



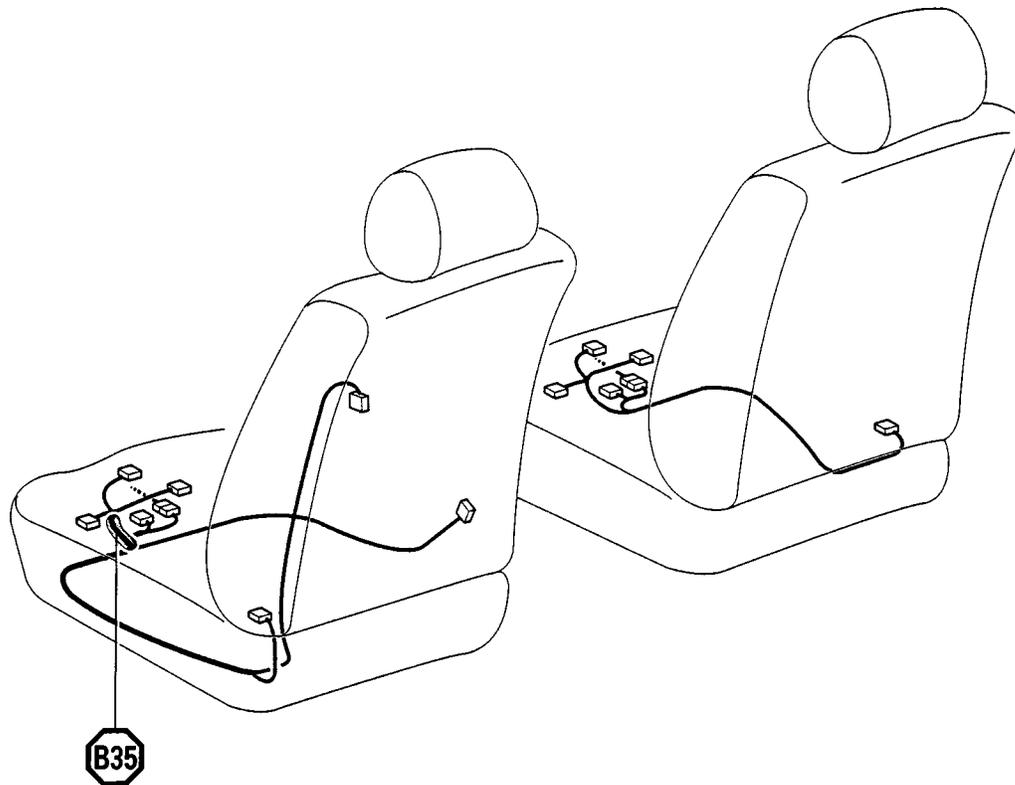
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>BT1</b>	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
<b>BT2</b>	
<b>BU1</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
<b>BV1</b>	LUGGAGE ROOM NO. 3 WIRE AND FLOOR NO. 3 WIRE (UNDER THE LOWER BACK PANEL)
<b>BW1</b>	ROOF NO. 2 WIRE AND FLOOR NO. 2 WIRE (RIGHT QUARTER PANEL INNER)
<b>BX1</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR RIGHT)
<b>Bb1</b>	COWL WIRE AND FRAME WIRE (RIGHT FENDER)
<b>Bd1</b>	COWL WIRE AND SPEED SENSOR NO. 1 WIRE (LEFT KICK PANEL)
<b>Be1</b>	SPEED SENSOR NO. 2 WIRE AND SPEED SENSOR NO. 1 WIRE (FRONT AXLE HOUSING LH)
<b>Bf1</b>	FRAME NO. 2 WIRE AND SPEED SENSOR NO. 3 WIRE (REAR AXLE HOUSING LH)
<b>Bg1</b>	FRAME NO. 2 WIRE AND SPEED SENSOR NO. 4 WIRE (REAR AXLE HOUSING RH)
<b>Bh1</b>	FLOOR NO. 3 WIRE AND FRAME NO. 2 WIRE (LEFT QUARTER PANEL INNER)
<b>Bh2</b>	

## G ELECTRICAL WIRING ROUTING

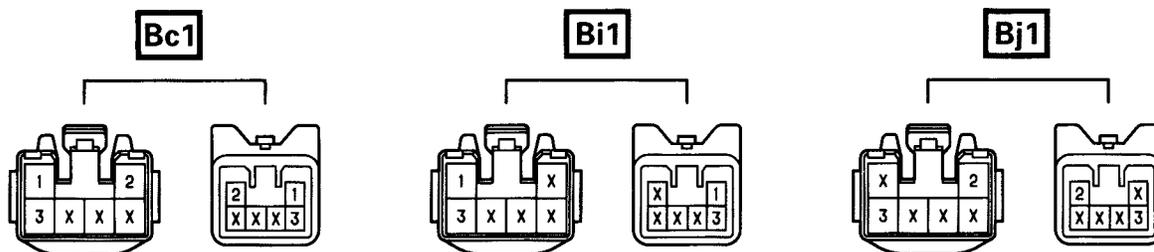
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness

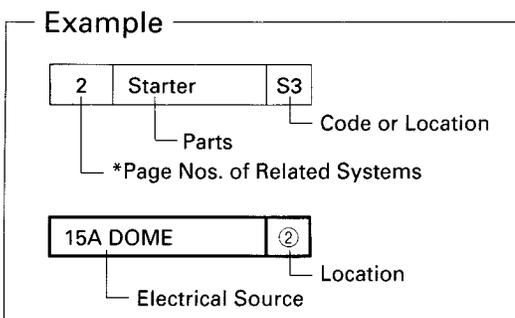
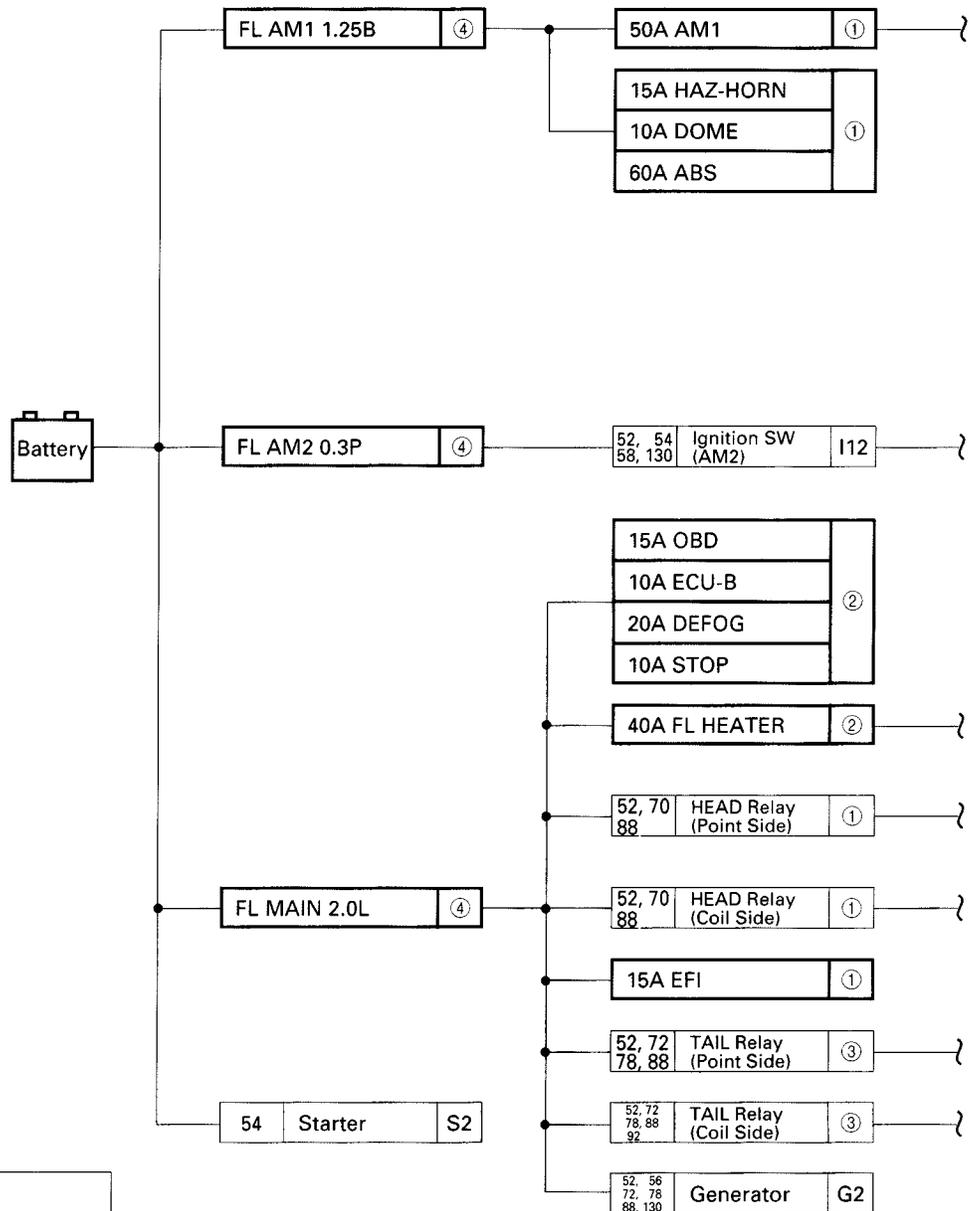


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>Bc1</b>	FLOOR NO. 1 WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)
<b>Bi1</b>	FLOOR NO. 2 WIRE AND SEAT NO. 1 WIRE (UNDER THE PASSENGER'S SEAT)
<b>Bj1</b>	FLOOR NO. 1 WIRE AND SEAT NO. 2 WIRE (UNDER THE DRIVER'S SEAT)

# H 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.

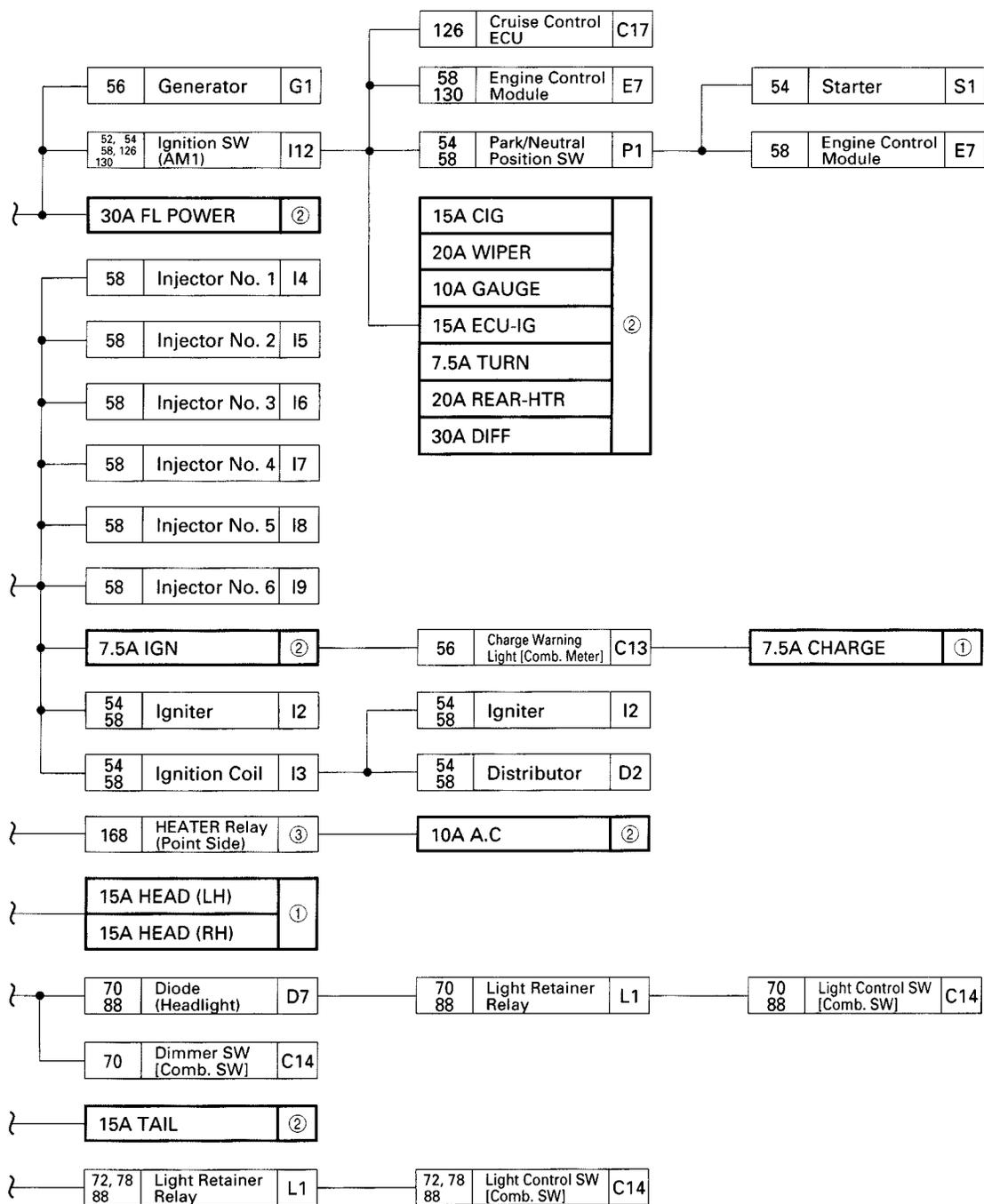
The next page and following pages show the parts to which each electrical source outputs current.



\* These are the page numbers of the first page on which the related system is shown. The part indicated is located somewhere in the system, not necessarily on the page indicated here.

[LOCATION] ① : R/B No. 2 (See page 18)

② : Fuse Block (F11 See page 20)



③ : R/B No. 1 (See page 20)

④ : Fusible Link (F6, F7, F8 See page 22)



140	150	150 152	150	102	78	58	102	121 150 152 162	126	58	140	143	86	78 130 162	78 130 150 162	70	82	70	97	86	91	94	156	126	58 121 143	58	152	
Buckle SW LH	Center Diff. Lock Control Motor	Center Diff. Lock Indicator SW	Center Diff. Lock Control Relay	Cigarette Lighter	Cigarette Lighter Illumination	Circuit Opening Relay	Clock	Combination Meter	Cruise Control Indicator Light [Comb. Meter]	Malfunction Indicator Lamp [Comb. Meter]	Seat Belt Warning Light [Comb. Meter]	SPS Warning Light [Comb. Meter]	Turn Signal Indicator Light LH [Comb. Meter]	Turn Signal Indicator Light RH [Comb. Meter]	Combination Meter	Combination Meter	High Beam Indicator Light [Comb. Meter]	Open Door Warning Light [Comb. Meter]	Dimmer SW [Comb. SW]	Horn SW [Comb. SW]	Turn Signal SW [Comb. SW]	Front Wiper and Washer SW [Comb. SW]	Rear Wiper and Washer SW [Comb. SW]	Cooling Fan (Radio and Player)	Cruise Control ECU	Data Link Connector 1	Data Link Connector 3	Diff. Lock Control SW
B8	C1	C2	C5	C6	C7	C8	C9	C10					C11	C12	C13		C14		C15		C16	C17	D1	D3	D4			
						●							●	●				●	●						●			
				●	●		●						●	●				●	●									
●	●	●	●					●	●	●	●		●	●							●	●		●	●	●		
	●		●			●						●	●											●			●	
												●													●		●	
																											●	





# H POWER SOURCE (Current Flow Chart)

Location	*Page Nos. of Related Systems		58	82	88	72	58	98	82 98	98	162	78 130	76 130 150	72	162	108										
	Parts		Idle Air Control Valve	Ignition Key Cylinder Light	Ignition Key Cylinder Light Relay	Light Retainer Relay	License Plate Light	Mass Air Flow	Moon Roof Control Relay	Moon Roof Control SW and Personal Light	Moon Roof Limit SW and Motor	Noise Filter (Oil Pressure Sender)	Oil Level Warning SW	Oil Pressure Sender	O/D Main SW	Park/Neutral Position SW	Parking Light LH	Parking Light RH	Parking Brake SW	Power Window Master SW	Power Window Motor Front LH	Power Window Motor Front RH	Power Window Motor Rear LH	Power Window Motor Rear RH		
	Code or Location		CB or Fuse		I1	I10	I11	L1	L2	M1	M2	M3	M4	N2	O1	O2	O4	P1	P2	P3	P4	P6	P7	P8	P9	P10
①	7.5A	CHARGE																								
	15A	EFI	●						●																	
	15A	HEAD (LH)																								
	15A	HEAD (RH)																								
	15A	HAZ-HORN																								
	10A	DOME		●	●							●														
②	60A	ABS																								
	15A	CIG																								
	15A	TAIL					●								●		●	●								
	10A	STOP																								
	20A	DEFOG																								
	20A	WIPER																								
	10A	GAUGE											●	●	●	●	●			●						
	7.5A	TURN																								
	15A	ECU-IG					●																			
	20A	REAR-HTR																								
	7.5A	IGN																								
	10A	A.C																								
	30A	DIFF																								
	30A	FL POWER									●	●	●								●	●	●	●	●	●
	40A	FL HEATER																								
10A	ECU-B					●																				
15A	OBD																									

\* These are the page numbers of the first page on which the related system is shown.  
The part indicated is located somewhere in the system, not necessarily on the page indicated here.

[LOCATION] ① : R/B No. 2 (See page 18)  
③ : R/B No. 1 (See page 20)

② : Fuse Block (F11 See page 20)



# H POWER SOURCE (Current Flow Chart)

Location	*Page Nos. of Related Systems		160	82	138	94	104	140	78 156	58, 74 106, 121 126, 130	106	130 150	150	72 74 76	86	162	58	82						
	Parts	Code or Location	Rear Heater	Rear Heater Relay	Rear Interior Light	Rear Window Defogger	Rear Wiper Motor	Rear Wiper Relay	Remote Control Mirror LH	Remote Control Mirror RH	Seat Belt Warning Relay	Stereo Component Amplifier	Stop Light SW	Shift Lock ECU	Transfer L4 Position SW	Transfer Neutral Position SW	Trailer Socket (Tail and Stop Light)	Trailer Socket (Turn Signal Light)	Vehicle Speed Sensor (Combination Meter)	VSV (EGR)	VSV (Fuel Pressure Control)	Vanity Light LH	Vanity Light RH	
	CB or Fuse		R14	R15	R16	R17	R19	R20	R21	R22	S3	S11	S13	S14	T2	T3	T4	T5	V1	V3	V4	V6	V7	
①	7.5A	CHARGE																						
	15A	EFI																		●	●			
	15A	HEAD (LH)																						
	15A	HEAD (RH)																						
	15A	HAZ-HORN																●						
	10A	DOME			●						●	●											●	●
	60A	ABS																						
②	15A	CIG							●	●				●										
	15A	TAIL															●							
	10A	STOP										●	●				●							
	20A	DEFOG				●																		
	20A	WIPER					●	●																
	10A	GAUGE									●				●	●	●		●					
	7.5A	TURN																●						
	15A	ECU-IG												●										
	20A	REAR-HTR	●	●																				
	7.5A	IGN																						
	10A	A.C																						
	30A	DIFF																						
	30A	FL POWER																						
	40A	FL HEATER																						
	10A	ECU-B																						
	15A	OBD																						

\* These are the page numbers of the first page on which the related system is shown.  
The part indicated is located somewhere in the system, not necessarily on the page indicated here.

[LOCATION] ① : R/B No. 2 (See page 18)  
③ : R/B No. 1 (See page 20)

② : Fuse Block (F11 See page 20)



# MEMO

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## I CIRCUITS INDEX

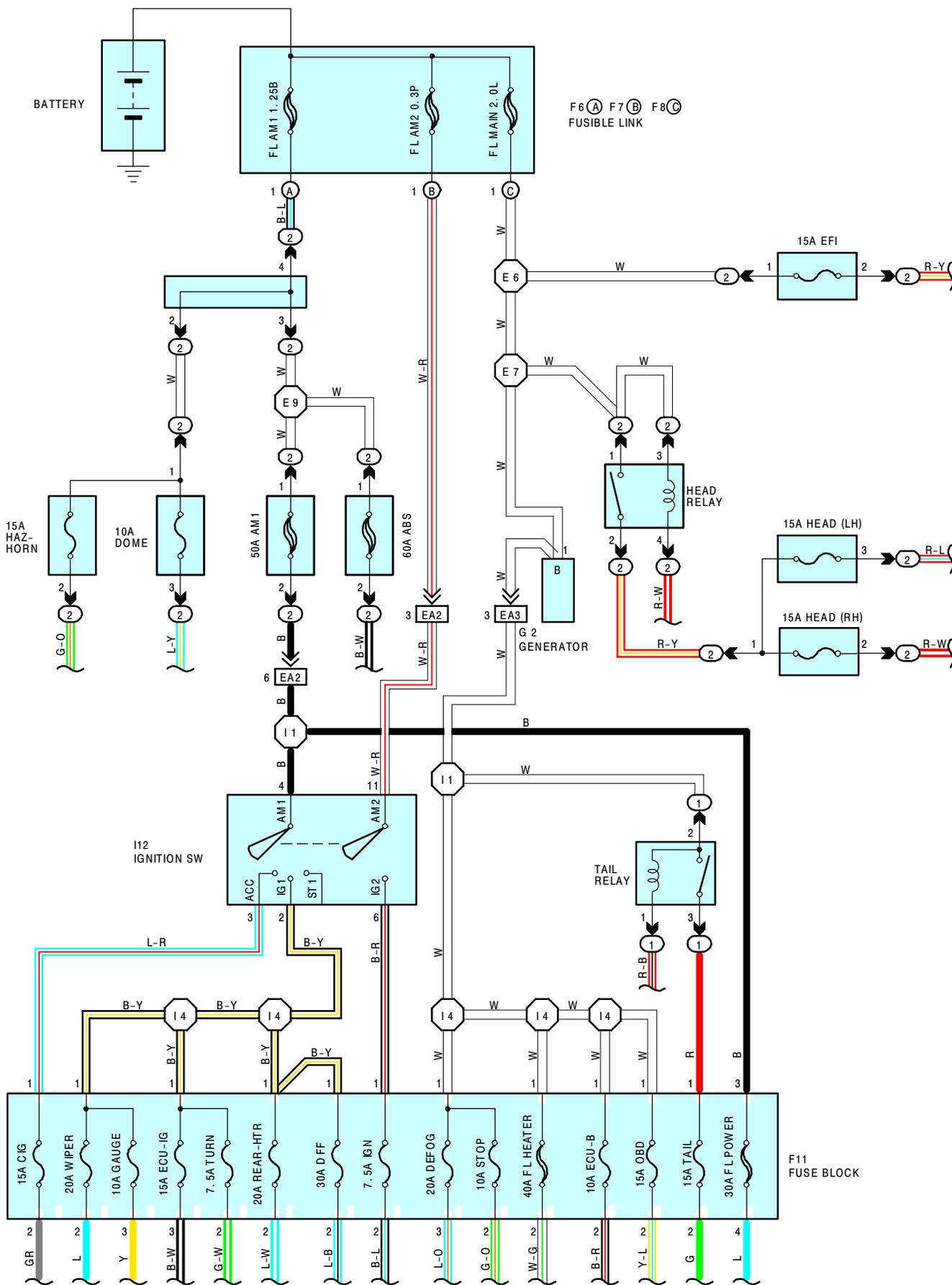
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### PG Circuit

- 52 Power Source
- 54 Starting and Ignition
- 56 Charging
- 58 Engine Control
- 70 Headlight
- 72 Taillight
- 74 Stop Light
- 76 Back-up Light
- 78 Illumination
- 82 Interior Light
- 86 Turn Signal and Hazard Warning Light
- 88 Light Auto Turn Off
- 91 Front Wiper and Washer
- 94 Rear Wiper and Washer
- 97 Horn
- 98 Moon Roof
- 102 Cigarette Lighter and Clock
- 104 Remote Control Mirror
- 106 Shift Lock
- 108 Power Window
- 112 Door Lock Control
- 117 Auto Antenna
- 118 Power Seat
- 121 ABS
- 126 Cruise Control
- 130 Electronically Controlled Transmission and A/T Indicator
- 138 Rear Window Defogger
- 140 Unlock and Seatbelt Warning
- 143 SRS
- 150 Center Differential Lock
- 152 Front/Rear Differential Lock
- 156 Radio and Player
- 160 Rear Heater
- 162 Combination Meter
- 168 Air Conditioning



# POWER SOURCE



**SERVICE HINTS**

**HEAD RELAY**

**(2) 1- (2) 2** : CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION OR THE DIMMER SW AT **FLASH** POSITION  
(WHEN THE LIGHT AUTO TURN OFF SYSTEM DOES NOT OPERATE)

**I12 IGNITION SW**

4-3 : CLOSED WITH THE IGNITION SW AT **ACC** OR **ON** POSITION  
4-2 : CLOSED WITH THE IGNITION SW AT **ON** OR **ST POSITION**  
11-6 : CLOSED WITH THE IGNITION SW AT **ON** OR **ST** POSITION

**TAIL RELAY**

**(1) 2- (1) 3** : CLOSED WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION  
(WHEN THE LIGHT AUTO TURN OFF SYSTEM DOES NOT OPERATE)

**○ : PARTS LOCATION**

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
<b>F 6</b>	A	22	<b>F 8</b>	C	22	<b>G 2</b>	22	
<b>F 7</b>	B	22	<b>F11</b>		25	<b>I12</b>	25	

**○ : RELAY BLOCKS**

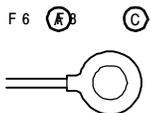
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>1</b>	20	R/B NO. 1 (LEFT KICK PANEL)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

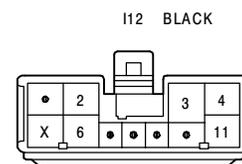
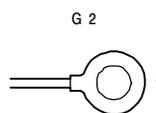
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA2</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
<b>EA3</b>		

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>E 6</b>	30	ENGINE ROOM MAIN WIRE	<b>I 1</b>	32	COWL WIRE
<b>E 7</b>			<b>I 4</b>		
<b>E 9</b>					

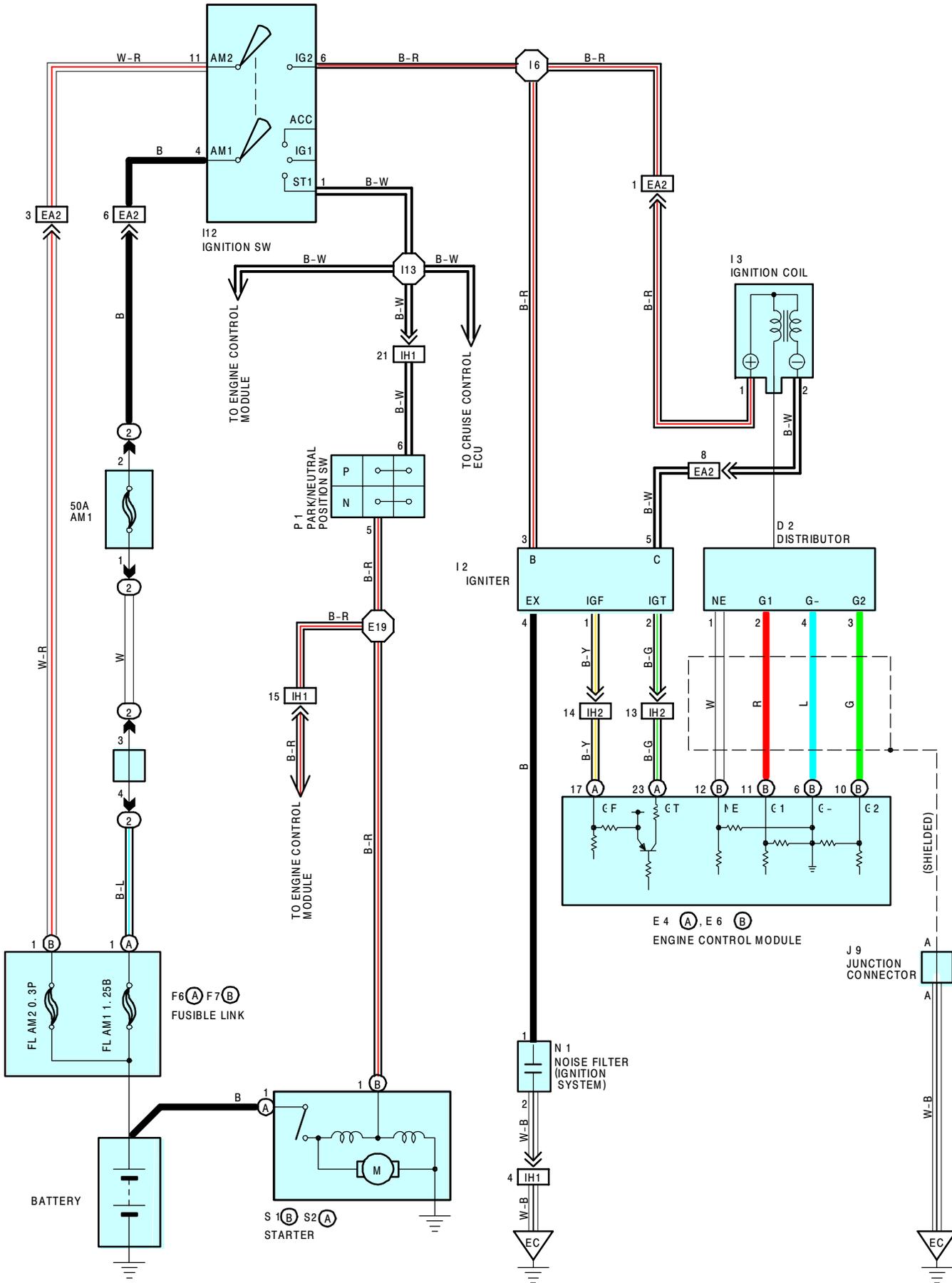


F11  
(SEE PAGE 20)





# STARTING AND IGNITION



**SERVICE HINTS**

**I12 IGNITION SW**

- 4-1 : CLOSED WITH THE IGNITION SW AT **ST** POSITION
- 11-6 : CLOSED WITH THE IGNITION SW AT **ON** OR **ST** POSITION

**S1 (B), S2 (A) STARTER**

POINTS CLOSED WITH THE PARK/NEUTRAL POSITION SW AT **P** OR **N** POSITION AND THE IGNITION SW AT **ST** POSITION

**P1 PARK/NEUTRAL POSITION SW**

- 6-5 : CLOSED WITH THE A/T SHIFT LEVER IN **P** OR **N** POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>D 2</b>	22	<b>I 2</b>	23	<b>P 1</b>	23
<b>E 4</b> A	24	<b>I 3</b>	23	<b>S 1</b> B	23
<b>E 6</b> B	24	<b>I12</b>	25	<b>S 2</b> A	23
<b>F 6</b> A	22	<b>J 9</b>	25		
<b>F 7</b> B	22	<b>N 1</b>	23		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA2</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
<b>IH1</b>	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
<b>1H2</b>		

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>EC</b>	30	AIR INTAKE CHAMBER

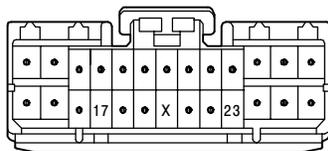
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>E19</b>	30	ENGINE WIRE	<b>I13</b>	32	COWL WIRE
<b>16</b>	32	COWL WIRE			

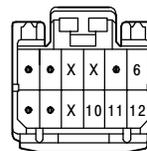
D 2 BLACK



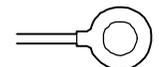
E 4 (A) DARK GRAY



E 6 (B) DARK GRAY



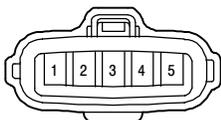
F 6 (A)



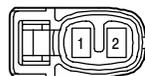
F 7 (B) GRAY



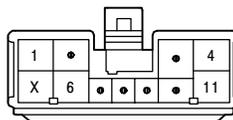
I 2 DARK GRAY



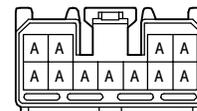
I 3 BLACK



I12 BLACK



J 9

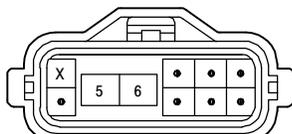


(HINT : SEE PAGE 7)

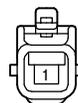
N 1 GRAY



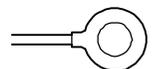
P 1 GRAY



S 1 (B) BLACK

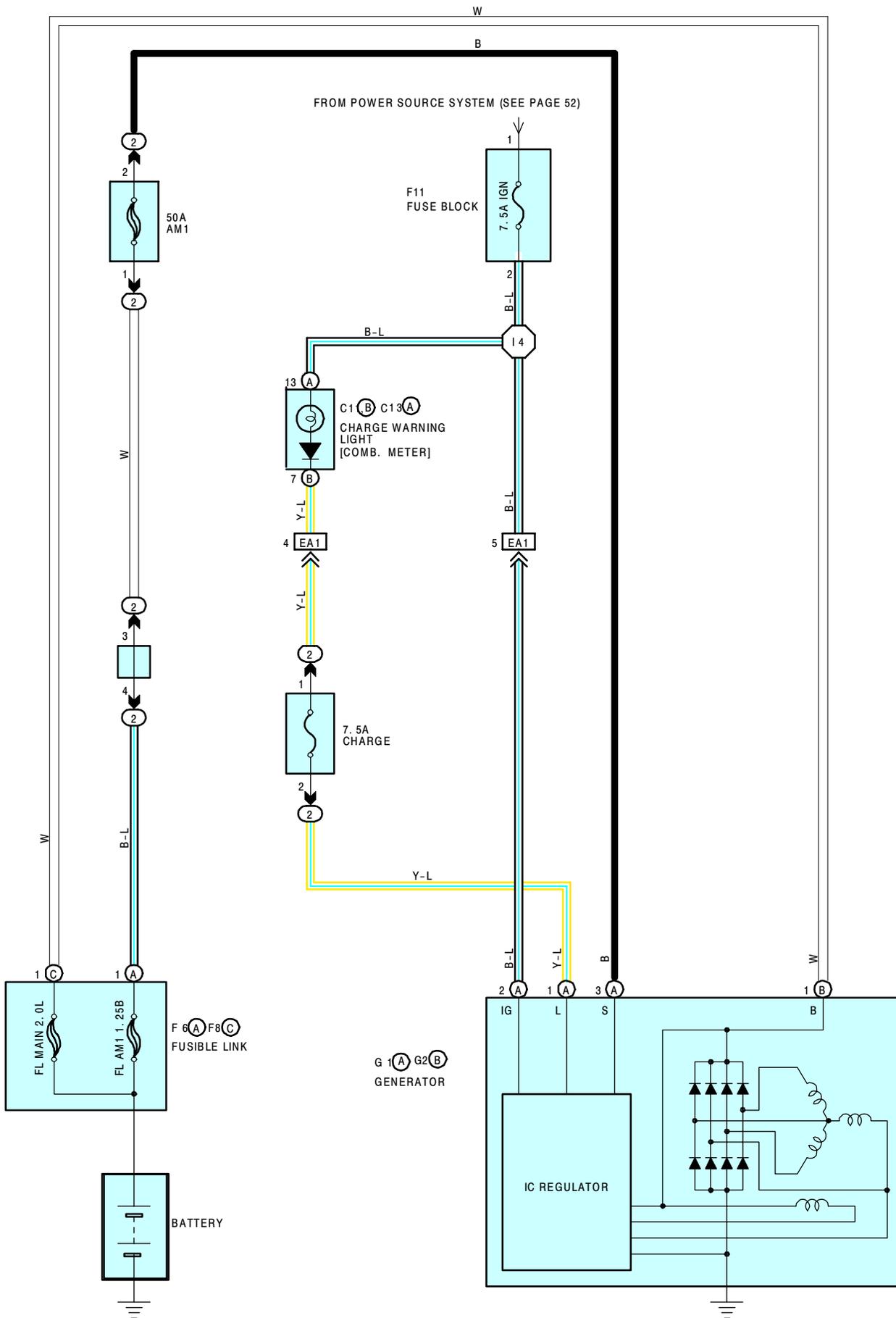


S 2 (A)





# CHARGING



**SERVICE HINTS**

**G 1 (A), G 2 (B) GENERATOR**

- (B)** 1-GROUND : 13.9-15.1 VOLTS WITH THE ENGINE RUNNING AT 2000 RPM AND 25°C (77°F)  
13.5-14.3 VOLTS WITH THE ENGINE RUNNING AT 2000 RPM AND 115°C (239°F)
- (A)** 3-GROUND : 0-4 VOLTS WITH THE IGNITION SW AT ON POSITION AND ENGINE NOT RUNNING

**○ : PARTS LOCATION**

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C11	B	24	F 8	C	22	G 2	B	22
C13	A	24	F11		25			
F 6	A	22	G 1	A	22			

**○ : RELAY BLOCKS**

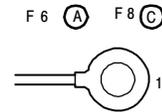
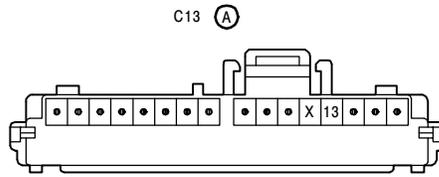
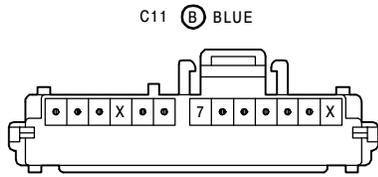
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

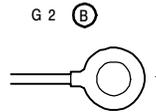
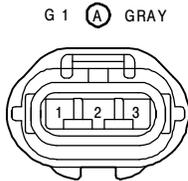
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
14	32	COWL WIRE			



F11  
(SEE PAGE 20)





# ENGINE CONTROL

## 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 CIRCUIT

THE ENGINE COOLANT TEMP. SENSOR DETECTS THE ENGINE COOLANT TEMP. AND HAS A BUILT-IN THERMISTOR WITH A RESISTANCE WHICH VARIES ACCORDING TO THE WATER TEMP. IS INPUT INTO **TERMINAL THW** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

#### (2) INTAKE AIR TEMP. SIGNAL CIRCUIT

THE INTAKE AIR TEMP. SENSOR IS INSTALLED IN THE MASS AIR FLOW AND DETECTS THE INTAKE AIR TEMP. WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL THA** OF THE ENGINE CONTROL MODULE.

#### (3) OXYGEN DENSITY SIGNAL CIRCUIT

THE OXYGEN DENSITY IN THE EXHAUST EMISSION IS DETECTED AND INPUT AS A CONTROL SIGNAL FROM THE HEATED OXYGEN SENSOR (BANK 1 SENSOR 1, BANK 1 SENSOR 2) TO **TERMINALS OX1, OX2** OF THE ENGINE CONTROL MODULE.

TO STABILIZE DETECTION PERFORMANCE BY THE HEATED OXYGEN SENSOR IS WARMED.

#### (4) RPM SIGNAL CIRCUIT

CRANKSHAFT POSITION IS DETECTED BY THE CRANKSHAFT POSITION SENSOR AND THE PICK-UP COIL INSTALLED INSIDE THE DISTRIBUTOR. CRANKSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINAL NE2+** OF THE ENGINE CONTROL MODULE, AND ENGINE SPEED IS INPUT TO **TERMINAL NE**.

#### (5) THROTTLE POSITION SIGNAL CIRCUIT

THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE AS A CONTROL SIGNAL WHICH IS INPUT INTO **TERMINAL VTA** OF THE ENGINE CONTROL MODULE. WHEN THE VALVE IS COMPLETELY CLOSED, THE ENGINE IDLING SIGNAL IS INPUT INTO **TERMINAL IDL**.

#### (6) VEHICLE SPEED CIRCUIT

THE VEHICLE SPEED IS DETECTED BY VEHICLE SPEED SENSOR INSTALLED IN THE TRANSMISSION, AND THE SIGNAL IS INPUT TO **TERMINAL SPD** OF THE ENGINE CONTROL MODULE VIA THE COMBINATION METER.

#### (7) NEUTRAL POSITION SIGNAL CIRCUIT

THE PARK/NEUTRAL POSITION SW DETECTS WHETHER THE SHIFT POSITION IS IN "N" AND "P" OR NOT, AND THE SIGNAL IS INPUT INTO **TERMINAL STA** OF THE ENGINE CONTROL MODULE.

#### (8) A/C SW SIGNAL CIRCUIT

THE OPERATING VOLTAGE OF THE A/C MAGNETIC CLUTCH IS DETECTED, AND THE SIGNAL IS INPUT INTO **TERMINAL A/C** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

#### (9) BATTERY SIGNAL CIRCUIT

VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE ENGINE CONTROL MODULE. WITH THE IGNITION SW TURNED ON, THE VOLTAGE FOR ENGINE CONTROL MODULE START-UP POWER SUPPLY IS APPLIED TO **TERMINAL +B** OF THE ENGINE CONTROL MODULE VIA THW EFI MAIN RELAY.

THE CURRENT FLOW THROUGH THE **IGN** FUSE FLOWS TO **TERMINAL IGSW** OF THE ENGINE CONTROL MODULE.

#### (10) INTAKE AIR VOLUME SIGNAL CIRCUIT

INTAKE AIR VOLUME IS DETECTED BY THE MASS AIR FLOW, AND THE SIGNAL IS INPUT TO **TERMINAL VG** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

#### (11) STOP LIGHT SW SIGNAL CIRCUIT

THE STOP LIGHT SW IS USED TO DETECT WHETHER THE VEHICLE IS BRAKING OR NOT, AND THE SIGNAL IS INPUT INTO **TERMINAL STP** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

#### (12) STARTER SIGNAL CIRCUIT

TO CONFIRM WHETHER THE ENGINE IS CRANKING, THE VOLTAGE IS APPLIED TO THE STARTER MOTOR DURING CRANKING IS DETECTED AND THE SIGNAL IS INPUT INTO **TERMINAL NSW** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

#### (13) ENGINE KNOCK SIGNAL CIRCUIT

ENGINE KNOCKING IS DETECTED BY THE KNOCK SENSOR 1 AND 2, AND THE SIGNAL IS INPUT INTO **TERMINALS KNK1** AND **KNK2** AS A CONTROL SIGNAL.

## 2. CONTROL SYSTEM

### \* SFI SYSTEM

THE SFI SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS INPUT FROM EACH SENSOR (INPUT SIGNALS FROM (1) TO (13) ETC.) TO THE ENGINE CONTROL MODULE. THE BEST FUEL INJECTION TIMING IS DECIDED BASED ON THIS DATA AND THE PROGRAM MEMORIZED BY THE ENGINE CONTROL MODULE, AND THE CONTROL SIGNAL IS OUTPUT TO **TERMINALS #10, #20, #30, #40, #50 AND #60** OF THE ENGINE CONTROL MODULE TO OPERATE THE INJECTOR. (INJECT THE FUEL). THE SFI SYSTEM PRODUCES CONTROL OF FUEL INJECTION OPERATION BY THE ENGINE CONTROL MODULE IN RESPONSE TO THE DRIVING CONDITIONS.

### \* ESA SYSTEM

THE ESA SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS INPUT TO THE ENGINE CONTROL MODULE FROM EACH SENSOR (INPUT SIGNALS FROM (1), (2), (4) TO (13) ETC.). THE BEST IGNITION TIMING IS DECIDED ACCORDING TO THIS DATA AND THE MEMORIZED DATA IN THE ENGINE CONTROL MODULE, AND THE CONTROL SIGNAL IS OUTPUT TO **TERMINAL IGT** THIS SIGNAL, WHICH CONTROLS THE IGNITER TO PROVIDE THE BEST IGNITION TIMING FOR THE DRIVING CONDITIONS.

### \* HEATED OXYGEN SENSOR HEATER CONTROL SYSTEM

THE HEATED OXYGEN SENSOR HEATER CONTROL SYSTEM TURNS THE HEATER ON WHEN THE INTAKE AIR VOLUME IS LOW (TEMP. OF EXHAUST EMISSIONS IS LOW), AND WARMS UP THE OXYGEN SENSOR TO IMPROVE DETECTION PERFORMANCE OF THE SENSOR. THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM (1), (2), (4), (9) TO (11) ETC.), AND OUTPUTS CURRENT TO **TERMINALS HT AND HT2** TO CONTROL THE HEATER.

### \* IDLE AIR CONTROL SYSTEM

THE IDLE AIR CONTROL SYSTEM (STEP MOTOR TYPE) INCREASES THE ENGINE SPEED AND PROVIDES IDLING STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD AND SO ON. THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM (1), (4), (5), (8), (9), (11) ETC.) AND OUTPUTS CURRENT TO **TERMINAL ISC1, ISC2, ISC3 AND ISC4** TO CONTROL THE IDLE AIR CONTROL VALVE.

### \* EGR CUT CONTROL SYSTEM

THE EGR CUT CONTROL SYSTEM CONTROLS THE VSV (EGR) BY EVALUATING THE SIGNAL FROM EACH SENSOR (INPUT SIGNALS FROM (1), (5), (9)), AND OUTPUTS CURRENT TO **TERMINAL EGR** OF THE ENGINE CONTROL MODULE.

### \* FUEL PUMP CONTROL SYSTEM

THE ENGINE CONTROL MODULE OPERATION OUTPUTS TO **TERMINAL FPR** AND CONTROLS THE FUEL PUMP RELAY AND THUS CONTROLS THE FUEL PUMP DRIVE SPEED IN RESPONSE TO CONDITIONS.

### \* FUEL PRESSURE CONTROL SYSTEM

THE FUEL PRESSURE UP SYSTEM CAUSES THE VSV (FUEL PRESSURE CONTROL) TO COME ON FOR HIGH TEMP. STARTS AND IMMEDIATELY AFTER STARTING IN ORDER TO INCREASE THE FUEL PRESSURE, IMPROVE STARTABILITY AT HIGH TEMPERATURES AND PROVIDE STABLE IDLING. THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM (1), (2), (5), (11)), OUTPUTS CURRENT TO **TERMINAL FPU** AND CONTROLS THE VSV.

## 3. DIAGNOSIS SYSTEM

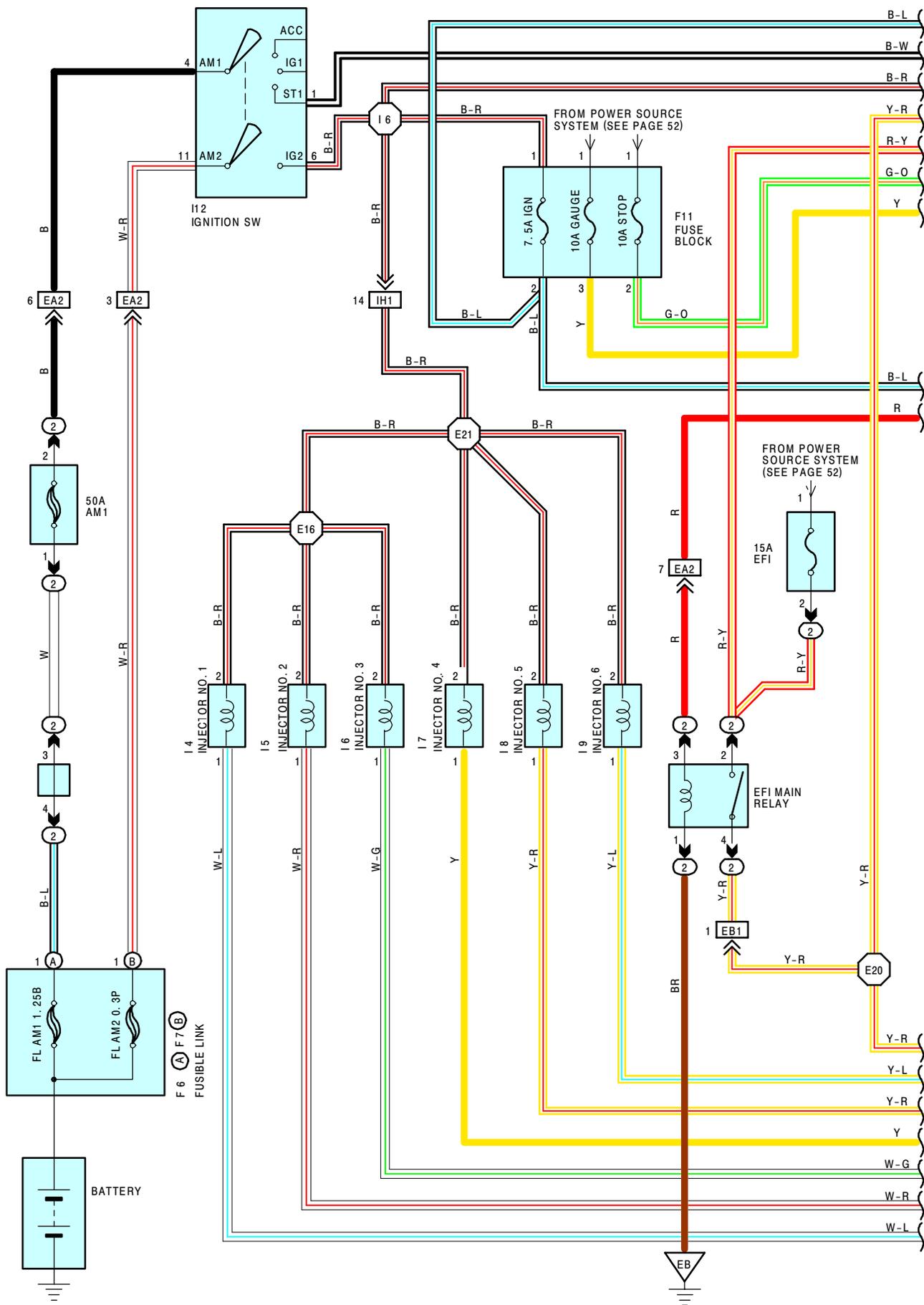
WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTION IN THE ENGINE CONTROL MODULE SIGNAL SYSTEM, THE MALFUNCTIONING SYSTEM IS RECORDED IN THE MEMORY. THE MALFUNCTIONING SYSTEM CAN BE FOUND BY READING THE CODE DISPLAYED BY THE MALFUNCTION INDICATOR LAMP.

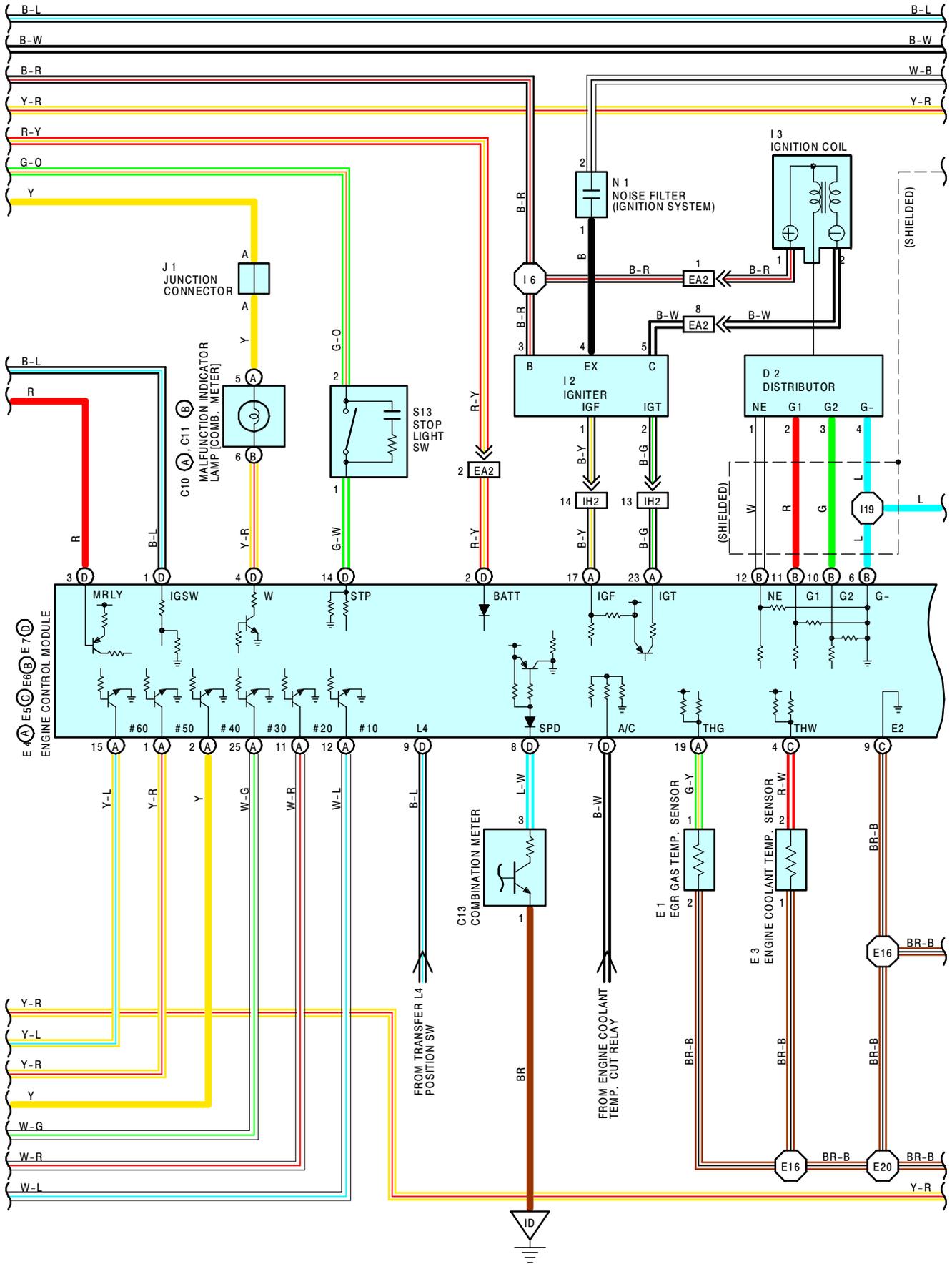
## 4. FAIL -SAFE SYSTEM

WHEN THE MALFUNCTION HAS OCCURRED IN ANY SYSTEM, IF THERE IS A POSSIBILITY OF ENGINE TROUBLE BEING CAUSED BY CONTINUED CONTROL BASED ON THE SIGNALS FROM THAT SYSTEM, THE FAIL-SAFE SYSTEM EITHER CONTROLS THE SYSTEM BY USING DATA (STANDARD VALUES) RECORDED IN THE ENGINE CONTROL MODULE MEMORY OR ELSE STOPS THE ENGINE.



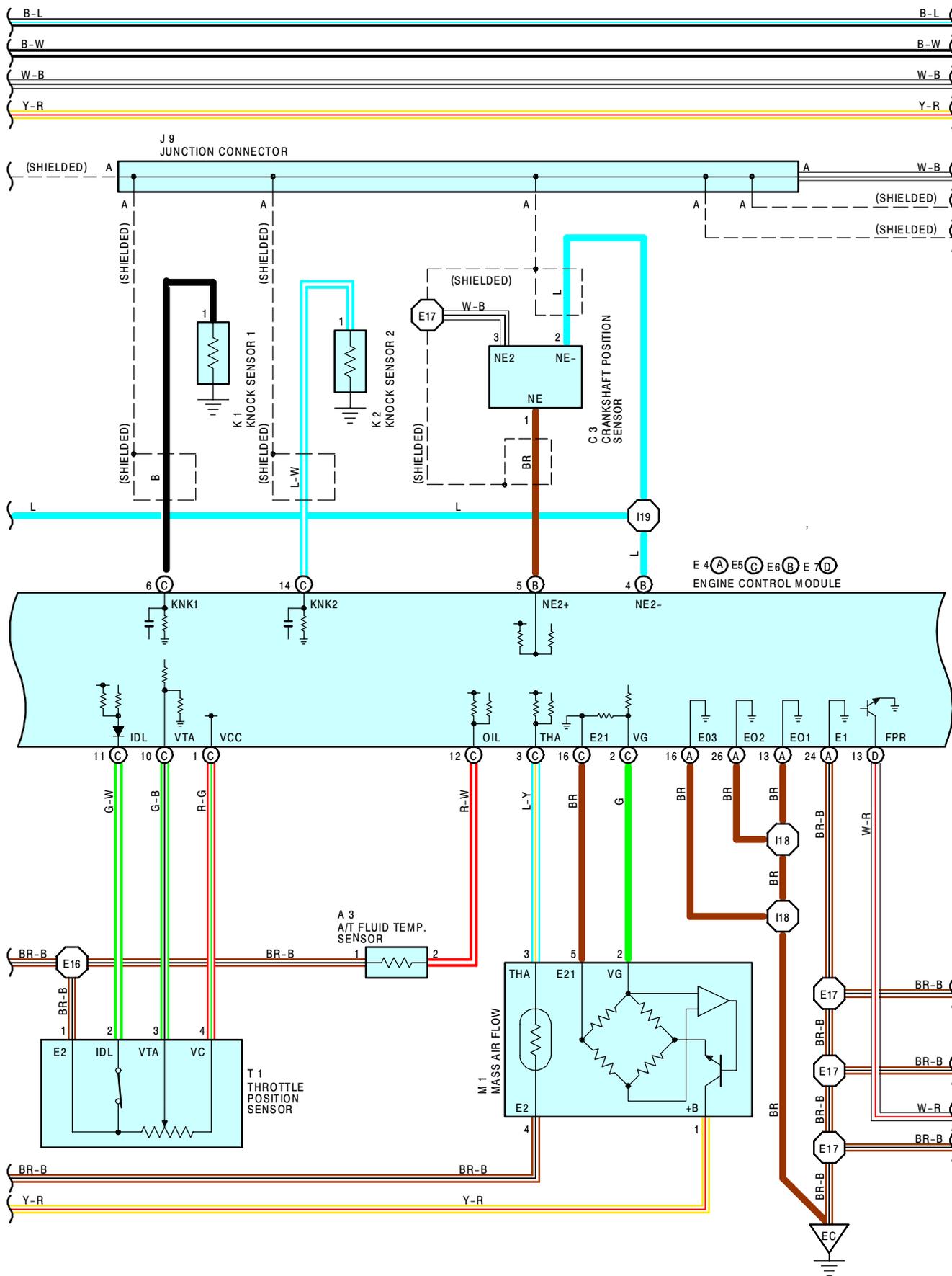
# ENGINE CONTROL

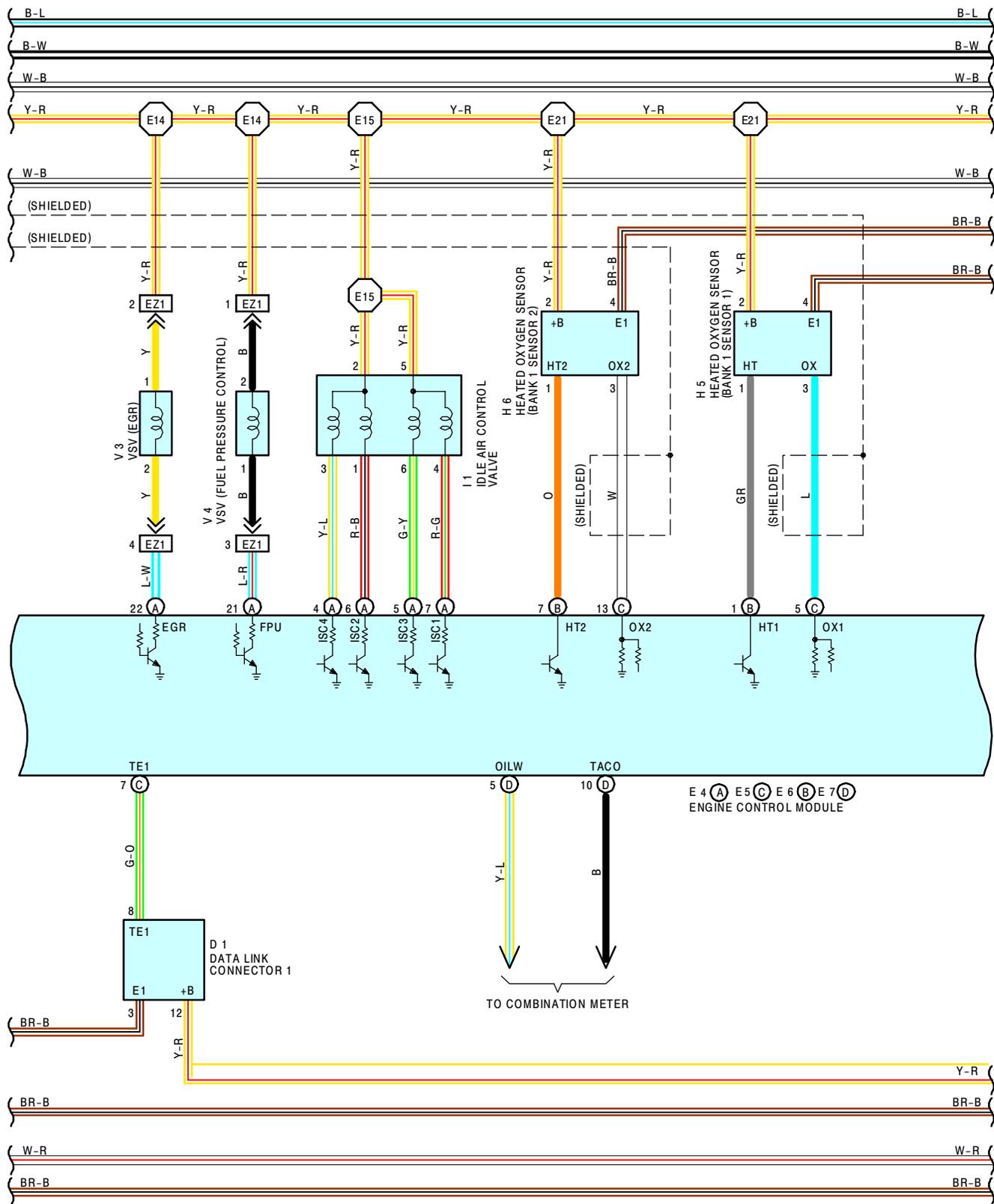






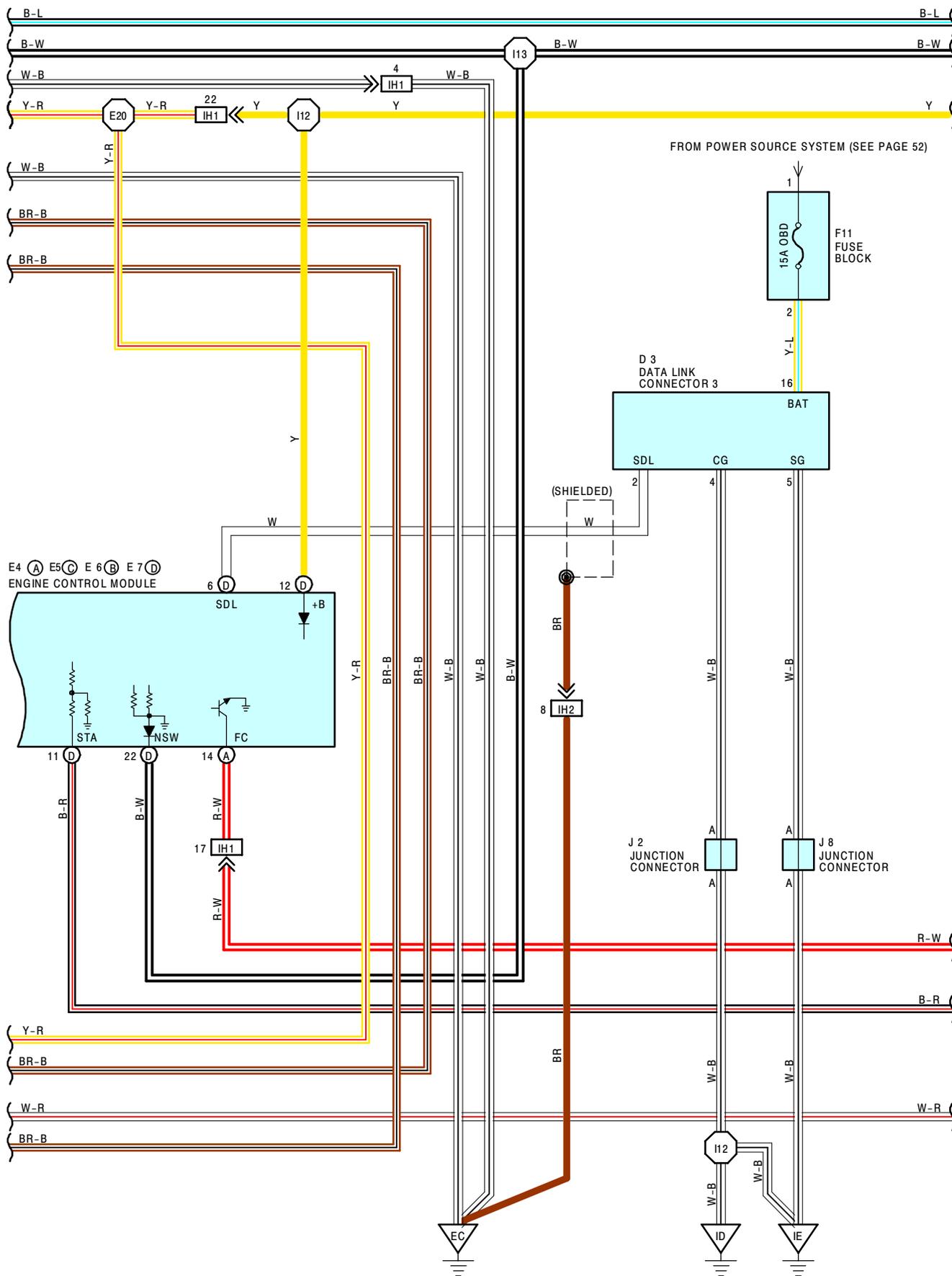
# ENGINE CONTROL

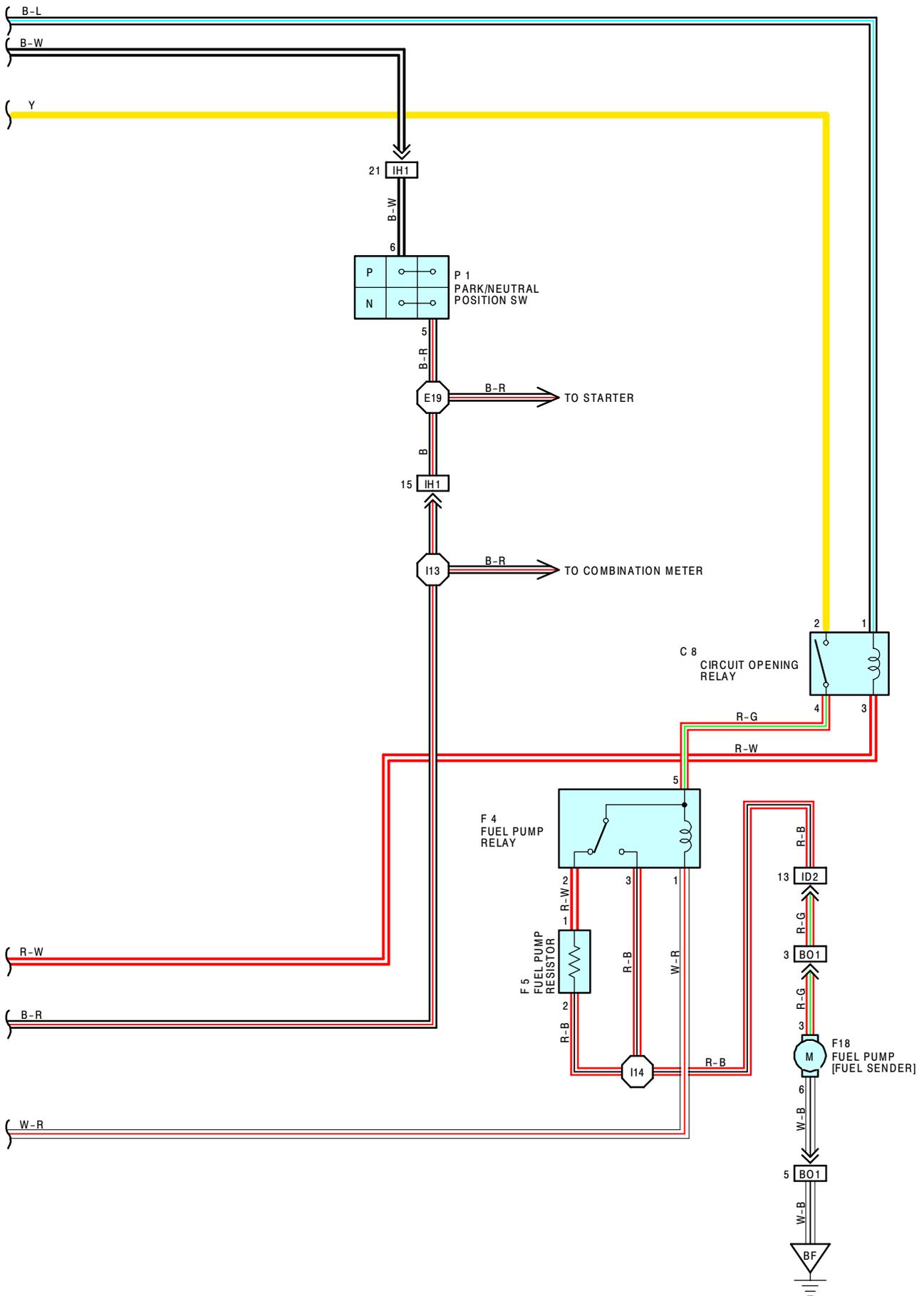






# ENGINE CONTROL







# ENGINE CONTROL

## SERVICE HINTS

### EFI MAIN RELAY

**(2) 2- (2) 4:** CLOSED WITH THE IGNITION SW AT **ON** OR **ST** POSITION

### E 4 **(A)**, E 5 **(C)**, E 6 **(B)**, E 7 **(D)** ENGINE CONTROL MODULE

(VOLTAGE AT THE ENGINE CONTROL MODULE)

BATT -E1 : ALWAYS **9.0-14.0** VOLTS

IGSW, +B, MRLY-E1 : **9.0-14.0** VOLTS WITH THE IGNITION SW ON

VCC -E2 : **4.5-5.5** VOLTS WITH THE IGNITION SW ON

IDL -E2 : **0.3-0** VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED

: **9.0-14.0** VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY OPEN

VTA -E2 : **0.3-0.8** VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED

: **3.2-4.9** VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY OPEN

THA -E2 : **0.5-3.4** VOLTS WITH THE IGNITION SW ON AND INTAKE AIR TEMP. **20°C (68°F)**

THW -E2 : **0.2-1.0** VOLTS WITH THE IGNITION SW ON AND ENGINE COOLANT TEMP. **80°C (176°F)**

STA -E1 : **6.0** VOLTS OR MORE WITH THE CLANKING

IGT -E1 : PULSE GENERATION WITH THE ENGINE IDLING

#10, #20, #30-EO1, EO2 : **9.0-14.0** VOLTS WITH THE IGNITION SW ON

#40, #50, #60-EO1, EO2 : **9.0-14.0** VOLTS WITH THE IGNITION SW ON

IGF -E1 : **2.0** VOLTS OR LESS WITH THE IGNITION SW ON

: PULSE GENERATION WITH THE ENGINE IDLING

G1, G2-G- : PULSE GENERATION WITH THE ENGINE IDLING

NE- G- : PULSE GENERATION WITH THE ENGINE IDLING

KNK1, KNK2-E1 : PULSE GENERATION WITH THE ENGINE IDLING

ISC1, ISC2, ISC3, ISC4-E1 : **9.0-14.0** VOLTS WITH THE IGNITION SW ON

STA -E1 : **9.0-14.0** VOLTS OR LESS WITH THE IGNITION SW ON AND PARK/NEUTRAL POSITION SW AT "P" OR "N" POSITION

: **3.0** VOLTS WITH THE IGNITION SW ON AND PARK/NEUTRAL POSITION SW AT OTHER THAN "P" OR "N" POSITION

SPD -E1 : PULSE GENERATION WITH THE IGNITION SW AND ROTATE DRIVING WHEEL SLOWLY

TE1 -E1 : **9.0-14.0** VOLTS WITH THE IGNITION SW ON AND DATA LINK CONNECTOR 1 TE1-E1 NOT CONNECTED

: **1.5** VOLTS OR LESS WITH THE IGNITION SW ON AND DATA LINK CONNECTOR 1 TE1-E1 CONNECTED

W -E1 : **9.0-14.0** VOLTS WITH THE ENGINE RUNNING AND NO TROUBLE (MALFUNCTION INDICATOR LAMP OFF)

A/C -E1 : **7.5-14.0** VOLTS WITH THE AIR CONDITIONING ON

: **1.5** VOLTS OR LESS WITH THE AIR CONDITIONING OFF

STP -E1 : **7.5-14.0** VOLTS WITH THE STOP LIGHT SW ON (BRAKE PEDAL DEPRESSED)

: **1.5** VOLTS OR LESS WITH THE STOP LIGHT SW OFF

### RESISTANCE AT ENGINE CONTROL MODULE CONNECTORS

(DISCONNECT WIRING CONNECTOR)

IDL -E2 : INFINITY (THROTTLE VALVE FULLY OPEN)

: **2.3 KΩ** OR LESS (THROTTLE VALVE FULLY CLOSED)

VTA -E2 : **2.0-10.2 KΩ** (THROTTLE VALVE FULLY OPEN)

: **0.2-5.7 KΩ** (THROTTLE VALVE FULLY CLOSED)

VCC -E2 : **2.5-5.9 KΩ**

THA -E2 : **2.0-3.0 KΩ** (INTAKE AIR TEMP. **20°C (68°F)**)

THW -E2 : **200-400 Ω** (ENGINE COOLANT TEMP. **80°C (176°F)**)

G1, G2-G- : **185-275 Ω** (COLD (**-10°C (14°F)**) TO **0°C (122°F)**)

: **240-325 Ω** (HOT (**50°C (122°F)**) TO **100°C (212°F)**)

NE -G- : **185-275 Ω** (COLD (**-10°C (14°F)**) TO **0°C (122°F)**)

: **240-325 Ω** (HOT (**50°C (122°F)**) TO **100°C (212°F)**)

ISC1, ISC2, ISC3, ISC4+B : **10-30 Ω**

### I 1 IDLE AIR CONTROL VALVE

5-4, 6 : **10-30 Ω**

2-1, 3 : **10-30 Ω**

### I 4, I 5, I 6, I 7, I 8, I 9 INJECTOR

1-2 : **12-16 Ω**

### H 5, H 6 HEATED OXYGEN SENSOR (BANK 1 SENSOR 1, BANK 1 SENSOR 2)

1-2 : **5.0-6.5 Ω**

### T 1 THROTTLE POSITION SENSOR

1-4 : **2.5-5.9 KΩ**

1-3 : **2.0-10.2 KΩ** WITH THE THROTTLE VALVE FULLY OPEN

: **0.2-5.7 KΩ** WITH THE THROTTLE VALVE FULLY CLOSED

1-2 : INFINITY WITH THE CLEARANCE BETWEEN LEVER AND STOP SCREW **0.75 MM (0.030 IN.)**

: **2.3 KΩ** LESS WITH THE CLEARANCE BETWEEN LEVER AND STOP SCREW **0.50 MM (0.020 IN.)**

### F 18 FUEL PUMP [FUEL SENDER]

3-6 : **0.2-3.0 Ω**

### F 5 FUEL PUMP RESISTOR

1-2 : APPROX. **0.73 Ω**

### E 1 EGR GAS TEMP. SENSOR

1-2 : **69-89 Ω** (**50°C, 122°F**)

: **11-15 Ω** (**100°C, 212°F**)

: **2-4 Ω** (**150°C, 302°F**)

### V 4 VSV (FUEL PRESSURE CONTROL)

1-2 : **37-44 Ω** (**20°C (68°F)**)

**SERVICE HINTS****V 3 VSV (EGR)**

1-2 : 30-34 Ω (20°C, 68°F)

**E 3 ENGINE COOLANT TEMP. SENSOR**

1-2 : 10-20 KΩ (-20 °C, -4°F)

: 4-7 KΩ (0°C, 32°F)

: 2-3 KΩ (20°C, 68°F)

: 0.9-1.3 KΩ (40°C, 104°F)

: 0.4-0.7 KΩ (60°C, 140°F)

: 0.2-0.4 KΩ (80°C, 176°F)

 : **PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 3	22	F 5	22	I12	25
C 3	22	F 6	A 22	J 1	25
C 8	24	F 7	B 22	J 2	25
C10	A 24	F11	25	J 8	25
C11	B 24	F18	26	J 9	25
C13	24	H 5	22	K 1	23
D 1	22	H 6	22	K 2	23
D 2	22	I 1	23	M 1	23
D 3	24	I 2	23	N 1	23
E 1	22	I 3	23	P 1	23
E 3	22	I 4	23	S13	25
E 4	A 24	I 5	23	T 1	23
E 5	C 24	I 6	23	V 3	23
E 6	B 24	I 7	23	V 4	23
E 7	D 24	I 8	23		
F 4	22	I 9	23		

 : **RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

 : **CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
EB1	30	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE DISTRIBUTOR)
EZ1	30	ENGINE WIRE AND VSV SUB WIRE (NEAR THE THROTTLE POSITION SENSOR)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		
BO1	34	FLOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 2 WIRE (BESIDE THE FUEL TANK)

 : **GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	30	FRONT SIDE OF LEFT FENDER
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

 : **SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E14	30	ENGINE WIRE	I 6	32	COWL WIRE
E15			I12		
E16			I13		
E17			I14		
E19			32	ENGINE WIRE	I18
E20					I19
E21					



# ENGINE CONTROL

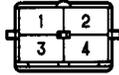
A 3



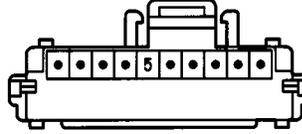
C 3 DARK GRAY



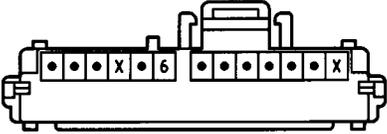
C 8



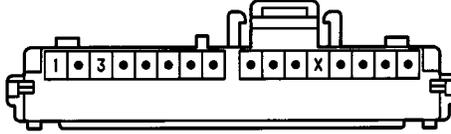
C10 (A) GRAY



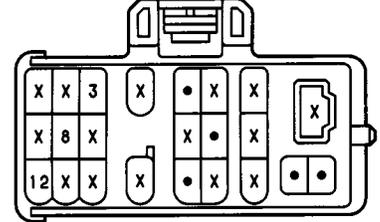
C11 (B) BLUE



C13



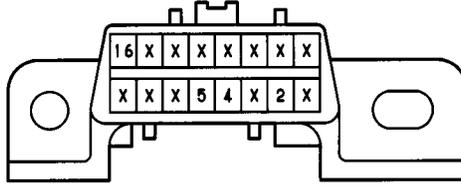
D 1 BLACK



D 2 BLACK



D 3



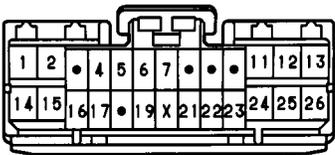
E 1 DARK GRAY



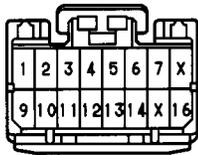
E 3 GREEN



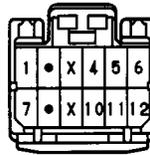
E 4 (A) DARK GRAY



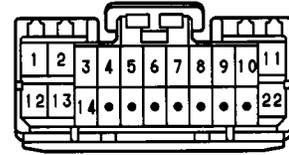
E 5 (C) DARK GRAY



E 6 (B) DARK GRAY



E 7 (D) DARK GRAY



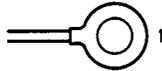
F 4 BLACK



F 5 DARK GRAY



F 6 (A)



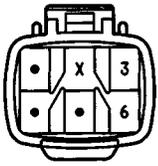
F 7 (B) GRAY



F11

(SEE PAGE 20)

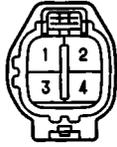
F10 DARK GRAY



H 5 DARK GRAY



H 6 DARK GRAY



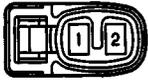
I 1 BLACK



I 2 DARK GRAY



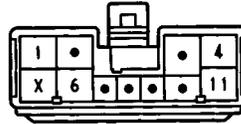
I 3 BLACK



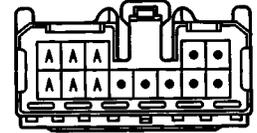
I 4, I 6, I 8 GRAY I 5, I 7, I 9 BROWN



I12 BLACK



J 1



(HINT:SEE PAGE 7)

J 2 BLUE



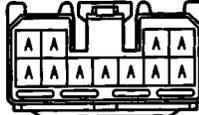
(HINT:SEE PAGE 7)

J 8 BLUE



(HINT:SEE PAGE 7)

J 9



(HINT:SEE PAGE 7)

K 1, K 2 DARK GRAY



M 1 BLACK



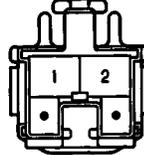
N 1 GRAY



P 1 GRAY



S13 BLACK



T 1 BLACK



V 3 BLUE

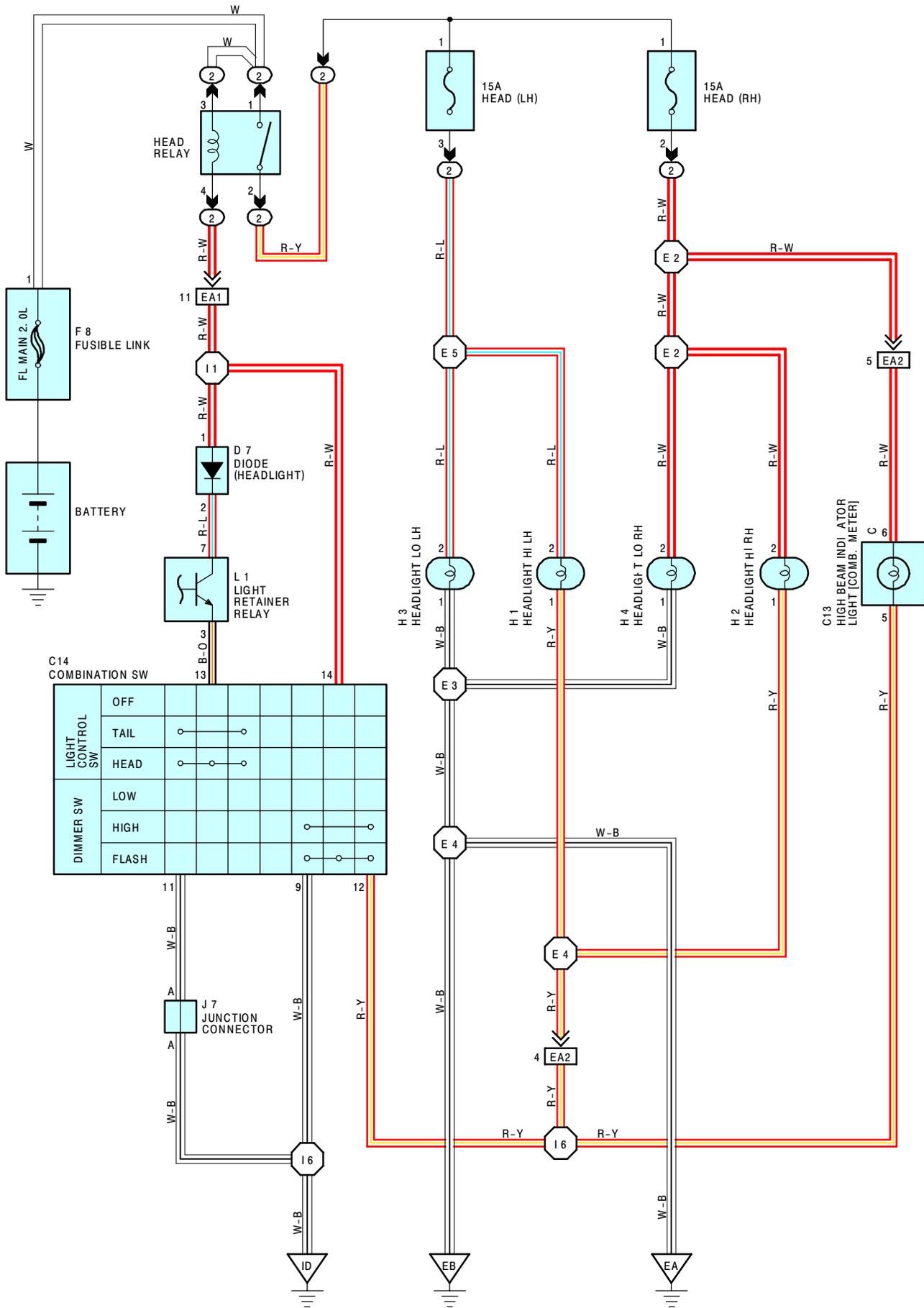


V 4 BROWN





# HEADLIGHT



**SERVICE HINTS**

**HEAD RELAY**

**(2) 1 - (2) 2** : CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION OR THE DIMMER SW AT **FLASH** POSITION  
(WHEN THE LIGHT AUTO TURN OFF SYSTEM DOES NOT OPERATE)

**C14 LIGHT CONTROL SW [COMB. SW]**

13-11 : CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION

**C14 DIMMER SW [COMB. SW]**

14-9 : CLOSED WITH THE DIMMER SW AT **FLASH** POSITION

12-9 : CLOSED WITH THE DIMMER SW AT **HIGH** OR **FLASH** POSITION

 : **PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C13</b>	24	<b>H 1</b>	22	<b>J 7</b>	25
<b>C14</b>	24	<b>H 2</b>	22	<b>L 1</b>	25
<b>D 7</b>	24	<b>H 3</b>	22		
<b>F 8</b>	22	<b>H 4</b>	22		

 : **RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

 : **CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA1</b> <b>EA2</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)

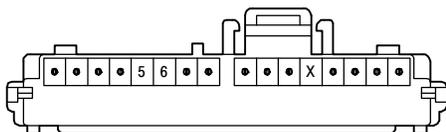
 : **GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>EA</b>	30	FRONT SIDE OF RIGHT FENDER
<b>EB</b>	30	FRONT SIDE OF LEFT FENDER
<b>ID</b>	32	LEFT KICK PANEL

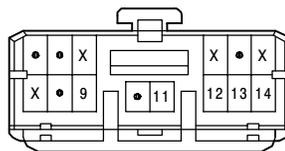
 : **SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>E 2</b>	30	ENGINE ROOM MAIN WIRE	<b>E 5</b>	30	ENGINE ROOM MAIN WIRE
<b>E 3</b>			<b>I 1</b>	32	COWL WIRE
<b>E 4</b>			<b>I 6</b>		

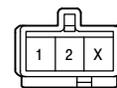
C13



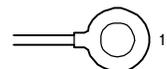
C14 BLACK



D 7 ORANGE



F 8



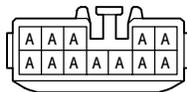
H 1, H 2 BLACK



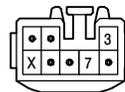
H 3, H 4 BROWN



J 7 BLUE



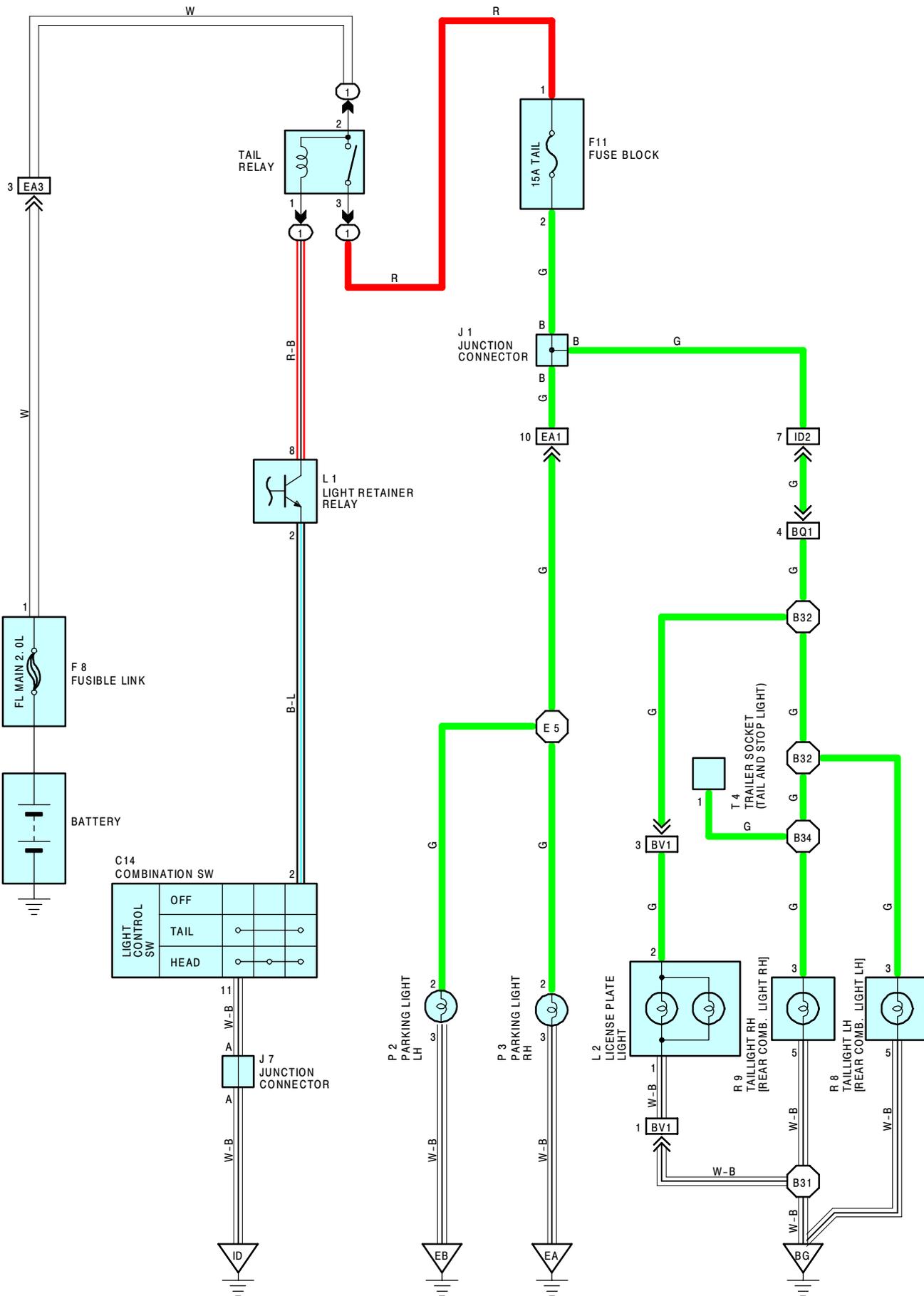
L 1



(HINT : SEE PAGE 7)



# TAILLIGHT

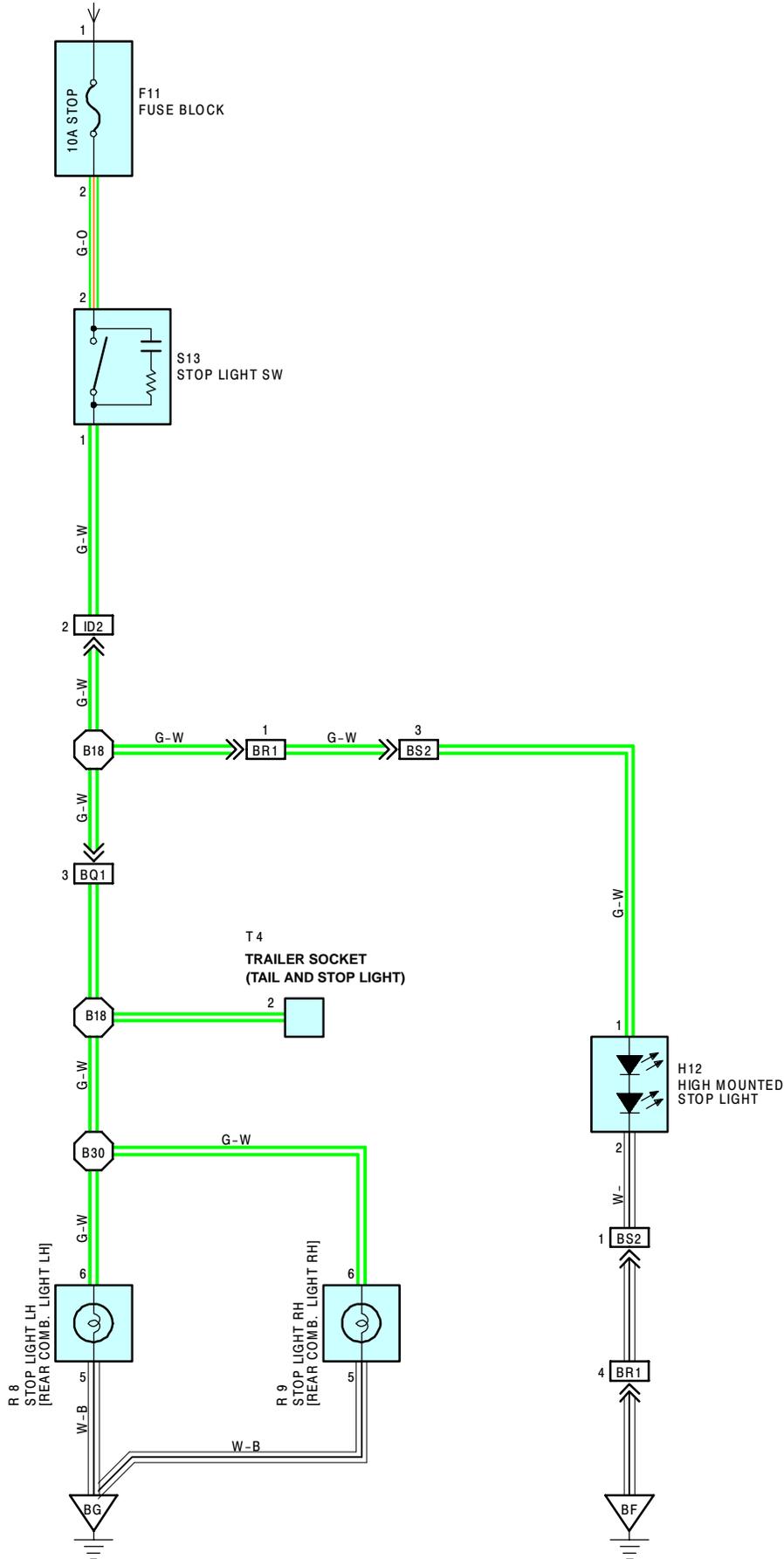






# STOP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



**SERVICE HINTS**

**S13 STOP LIGHT SW**

2-1 : CLOSED WITH THE BRAKE PEDAL DEPRESSED

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	R 8	27	S13	25
H12	26	R 9	27	T 4	27

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE HARNESS (LEFT KICK PANEL)
BQ1	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BR1	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BS2	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
BF	34	UNDER THE CENTER CONSOLE BOX
BG	34	LOWER BACK PANEL CENTER

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B18	36	FLOOR WIRE	B33	36	FLOOR NO. 3 WIRE
B30	36	FLOOR NO. 3 WIRE			

F11

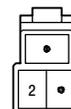
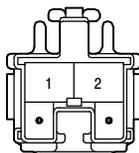
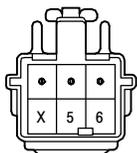
H12

R 8, R 9

S13 BLACK

T 4 BLACK

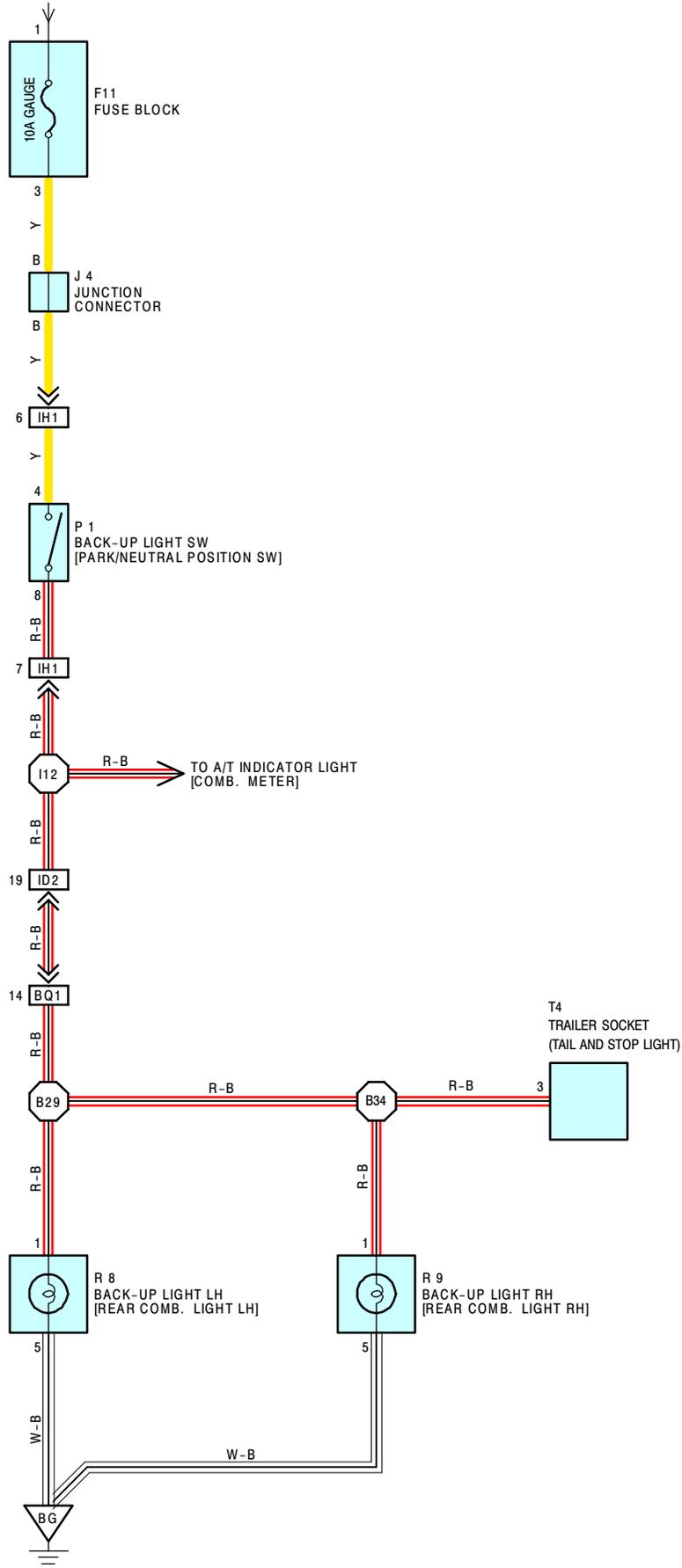
(SEE PAGE 20)





# BACK-UP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



**SERVICE HINTS**

**P 1 BACK-UP LIGHT SW [PARK/NEUTRAL POSITION SW]**  
 4-8 : CLOSED WITH THE SHIFT LEVER IN R POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	P 1	23	R 9	27
J 4	25	R 8	27	T 4	27

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
BQ1	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
BG	34	LOWER BACK PANEL CENTER

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I12	32	COWL WIRE	B34	36	FLOOR NO. 3 WIRE
B29	36	FLOOR NO. 3 WIRE			

F11

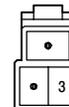
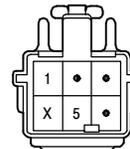
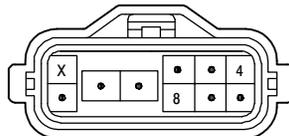
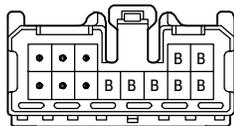
J 4

P 1 GRAY

R 8, R 9

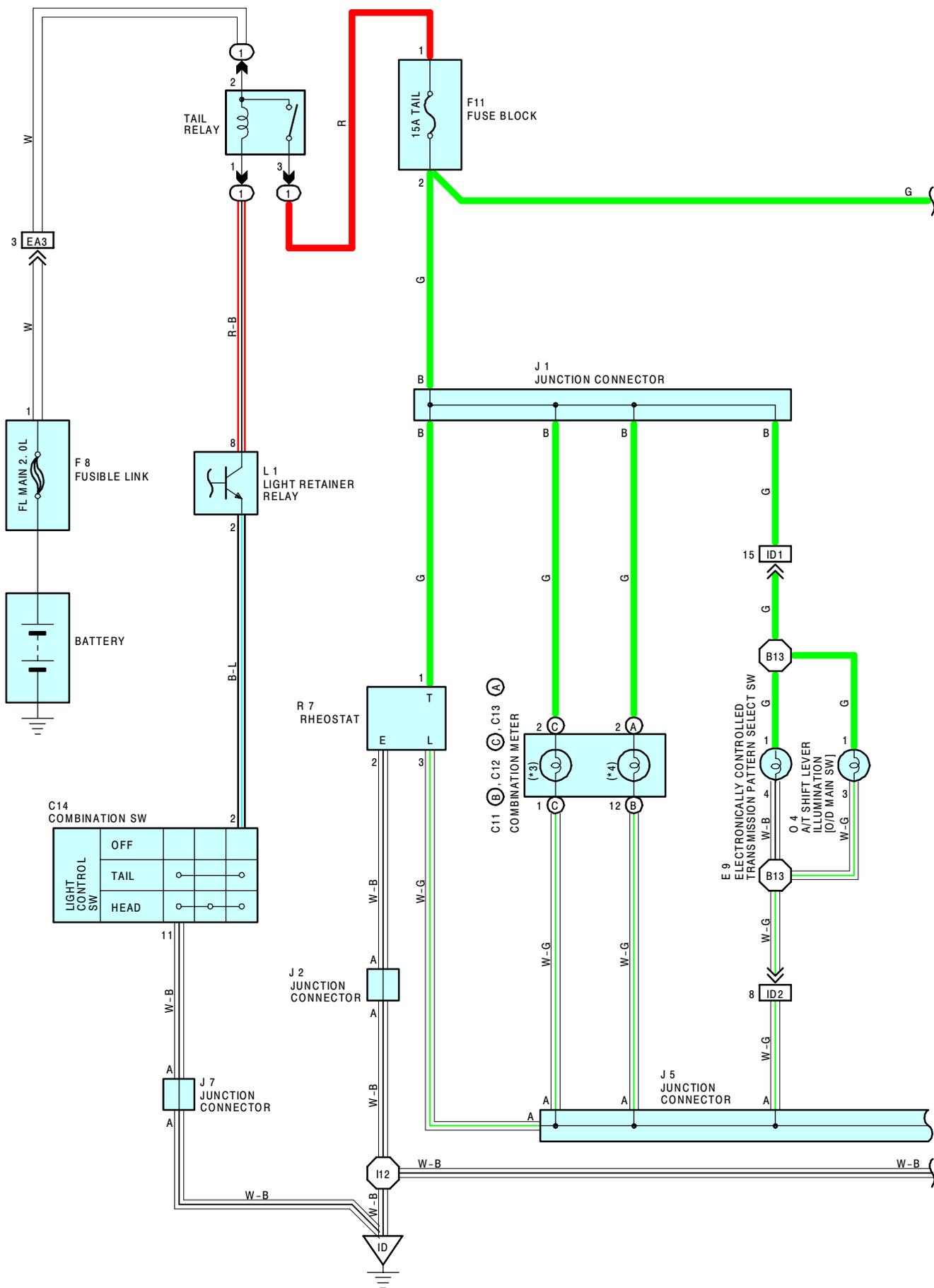
T 4 BLACK

(SEE PAGE 20)

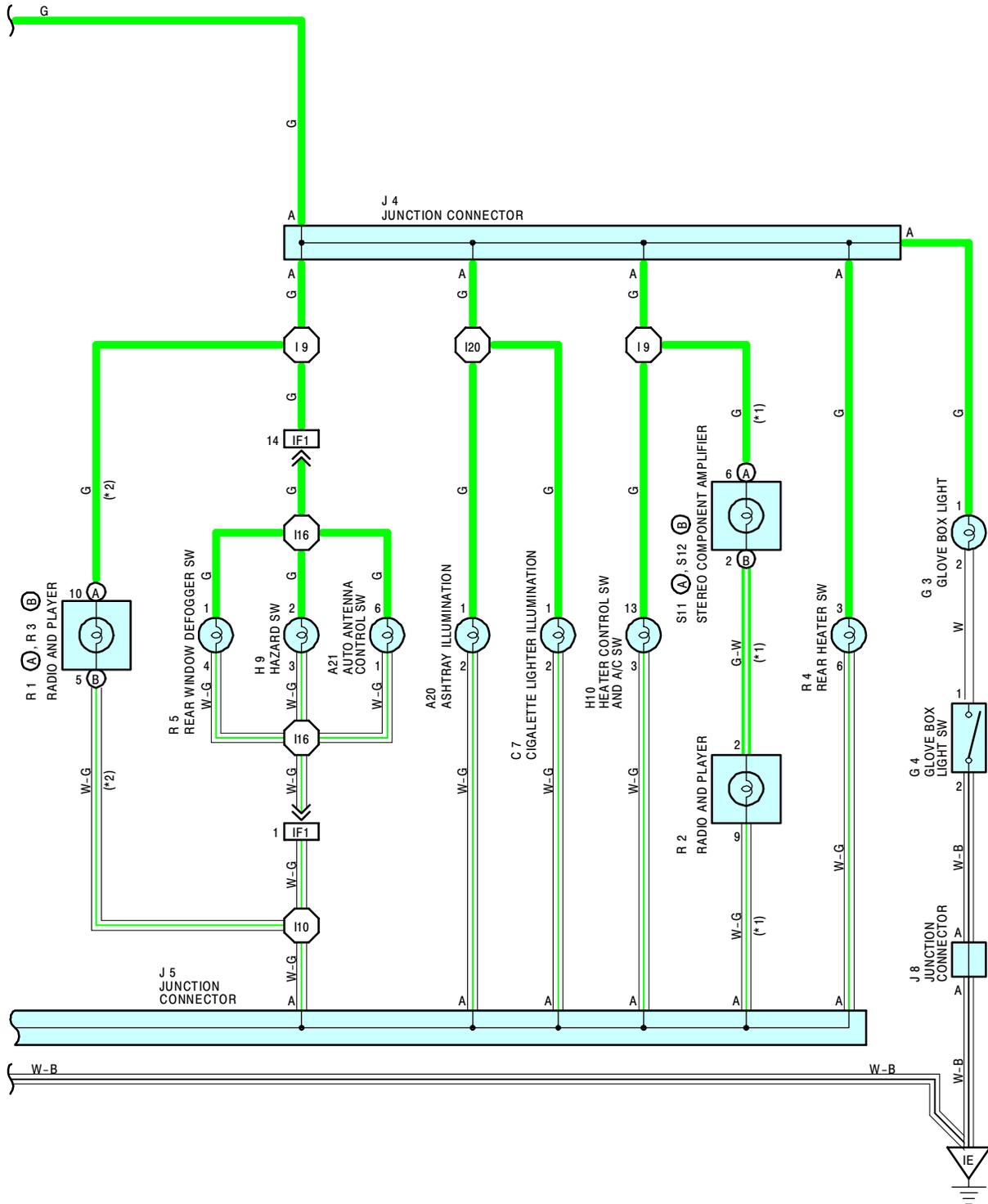




# ILLUMINATION



- \*1 : SEPARATE TYPE AMPLIFIER
- \*2 : BUILT-IN TYPE AMPLIFIER
- \*3 : A/T INDICATOR ILLUMINATION
- \*4 : METER ILLUMINATION





# ILLUMINATION

## SERVICE HINTS

### TAIL RELAY

**(1) 2- (1) 3** : CLOSED WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION  
(WHEN LIGHT AUTO TURN OFF SYSTEM DOES NOT OPERATE)

### R 7 RHEOSTAT

1-2 : APPROX. 12 VOLTS WITH THE RHEOSTAT FULLY TURNED COUNTERWISE AND **0** VOLTS WITH IT FULLY TURNED CLOCKWISE

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A20	24	G 3	25	L 1	25
A21	24	G 4	25	O 4	27
C 7	24	H 9	25	R 1   A	25
C11   B	24	H10	25	R 2	25
C12   C	24	J 1	25	R 3   B	25
C13   A	24	J 2	25	R 4	25
C14	24	J 4	25	R 5	25
E 9	26	J 5	25	R 7	25
F 8	22	J 7	25	S11   A	25
F11	25	J 8	25	S12   B	25

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

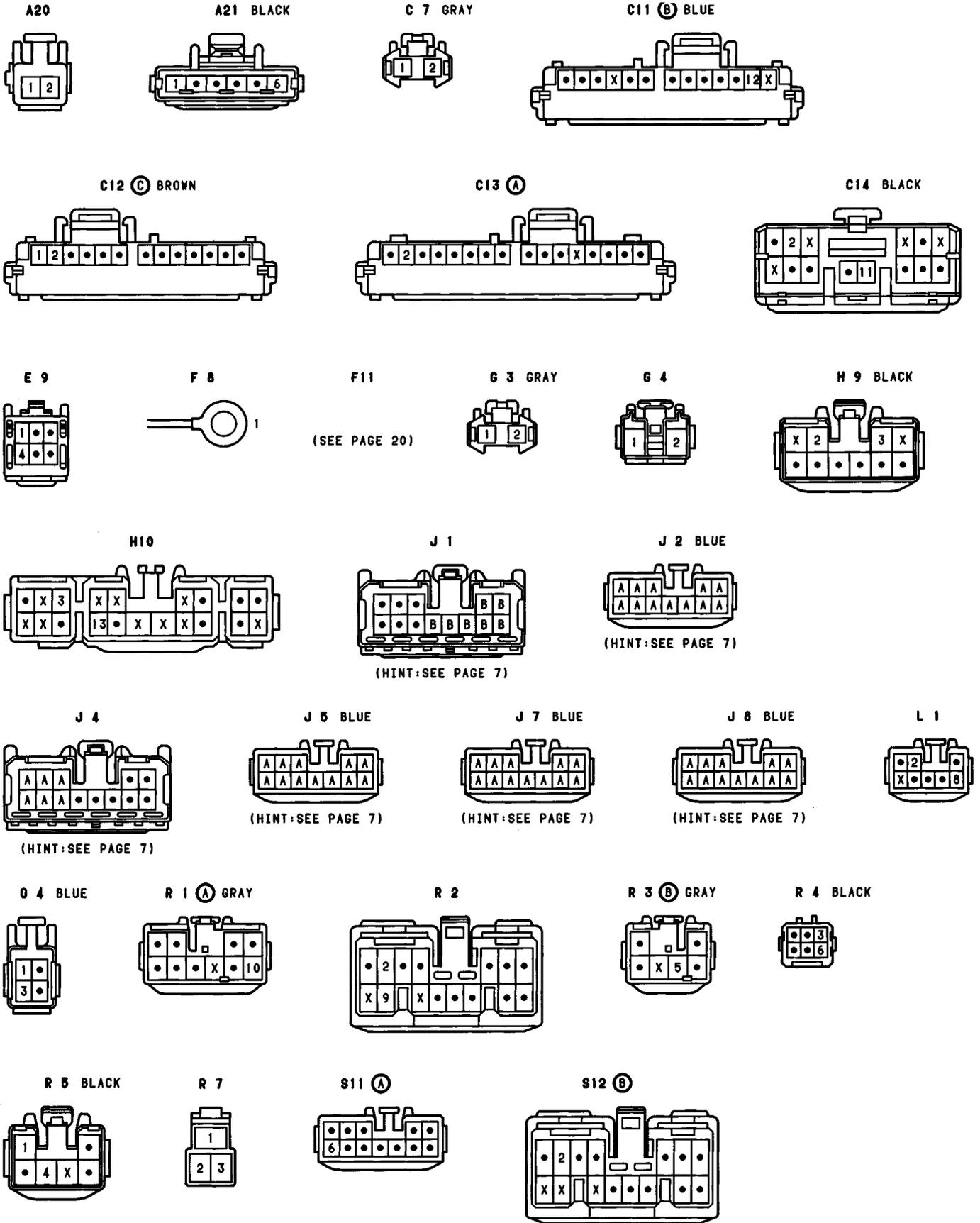
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
ID1	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID2		
IF1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

## ○ : SPLICE POINTS

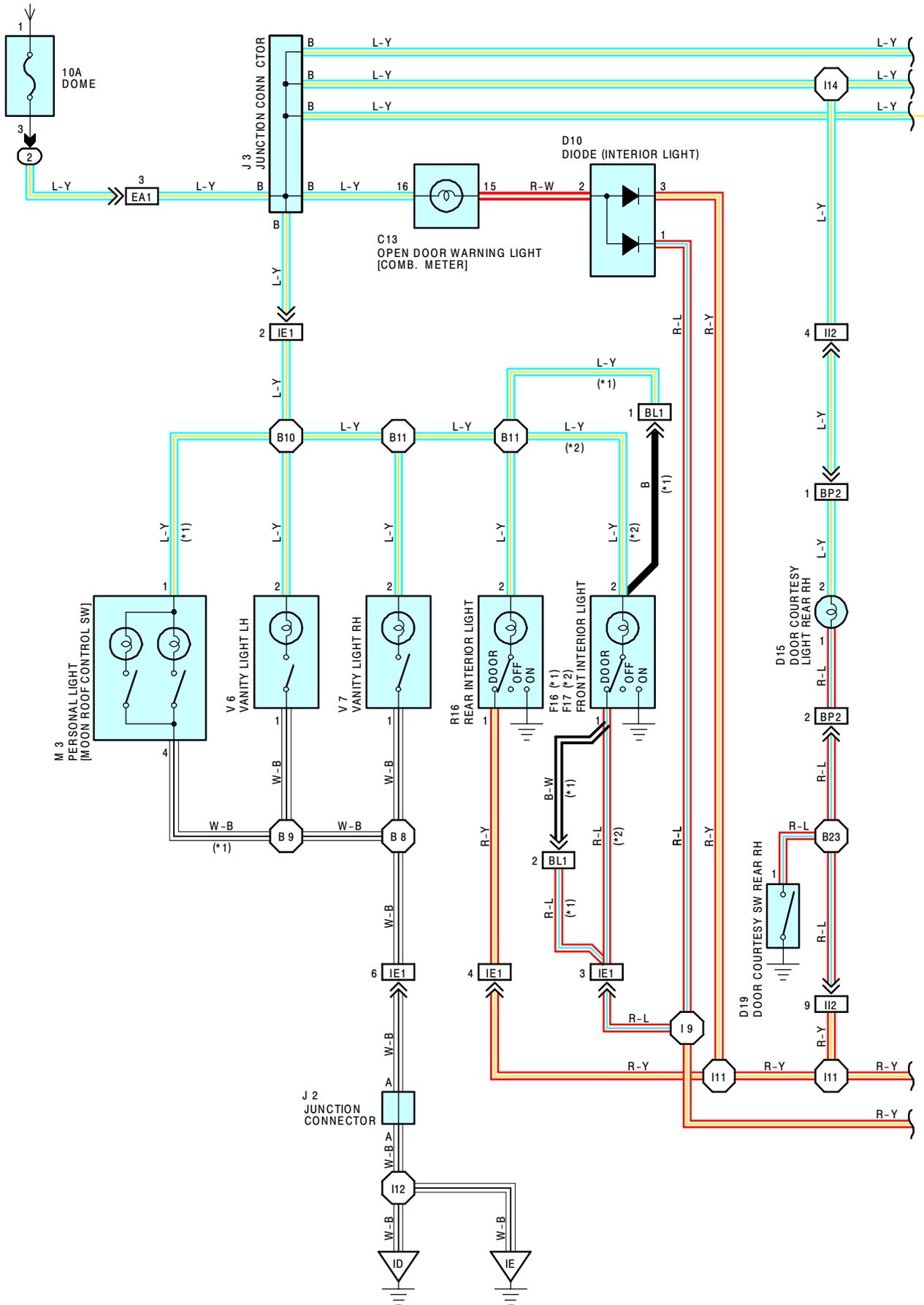
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	32	COWL WIRE	I16	32	INSTRUMENT PANEL WIRE
I10			I20	32	COWL WIRE
I12			B13	36	FLOOR WIRE

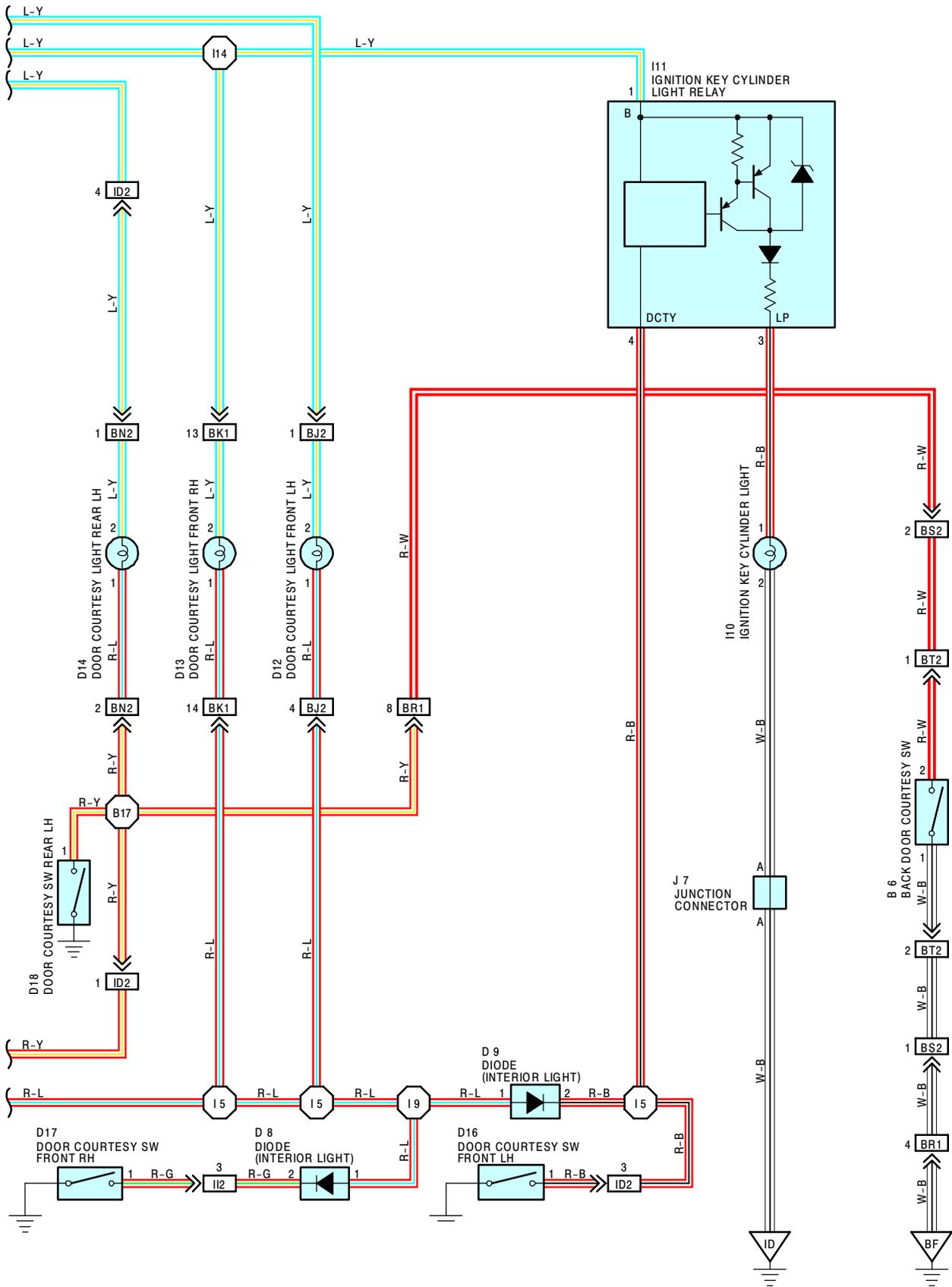




# INTERIOR LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# INTERIOR LIGHT

## SERVICE HINTS

### F16, F17 FRONT INTERIOR LIGHT

2-GROUND : ALWAYS APPROX. 12 VOLTS

2-1 : CLOSED WITH THE INTERIOR LIGHT POSITION SW AT DOOR POSITION

### D16, D17, D18, D19 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1-GROUND : CLOSED WITH EACH OF THE DOOR OPEN

### B 6 BACK DOOR COURTESY SW

2-1 : CLOSED WITH THE BACK DOOR OPEN

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 6	26	D15	26	I11	25
C13	24	D16	26	J 2	25
D 8	24	D17	26	J 3	25
D 9	24	D18	26	J 7	25
D10	24	D19	26	M 3	26
D12	26	F16	26	R16	27
D13	26	F17	26	V 6	27
D14	26	I10	25	V 7	27

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
1E1	32	ROOF WIRE AND COWL WIRE (LEFT KICK PANEL)
I12	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
BJ2	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BL1	34	ROOF WIRE AND ROOF NO. 3 WIRE (ROOF LEFT)
BN2	34	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BP2	34	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)
BR1	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BS2	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
BT2	36	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

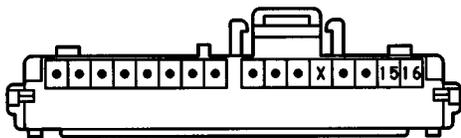
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	32	COWL WIRE	B 9	36	ROOF WIRE
I 9			B10		
I11			B11		
I12			B17	FLOOR WIRE	
I14			B23	FLOOR NO. 2 WIRE	
B 8	36	ROOF WIRE			

B 6



C13



D 8, D 9 GRAY



D10



D12, D13  
D14, D15



D16, D17 BLUE



F16, F17, R16



I10



I11

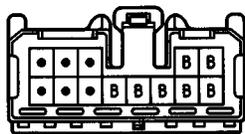


J 2 BLUE



(HINT:SEE PAGE 7)

J 3



(HINT:SEE PAGE 7)

J 7 BLUE



(HINT:SEE PAGE 7)

M 3

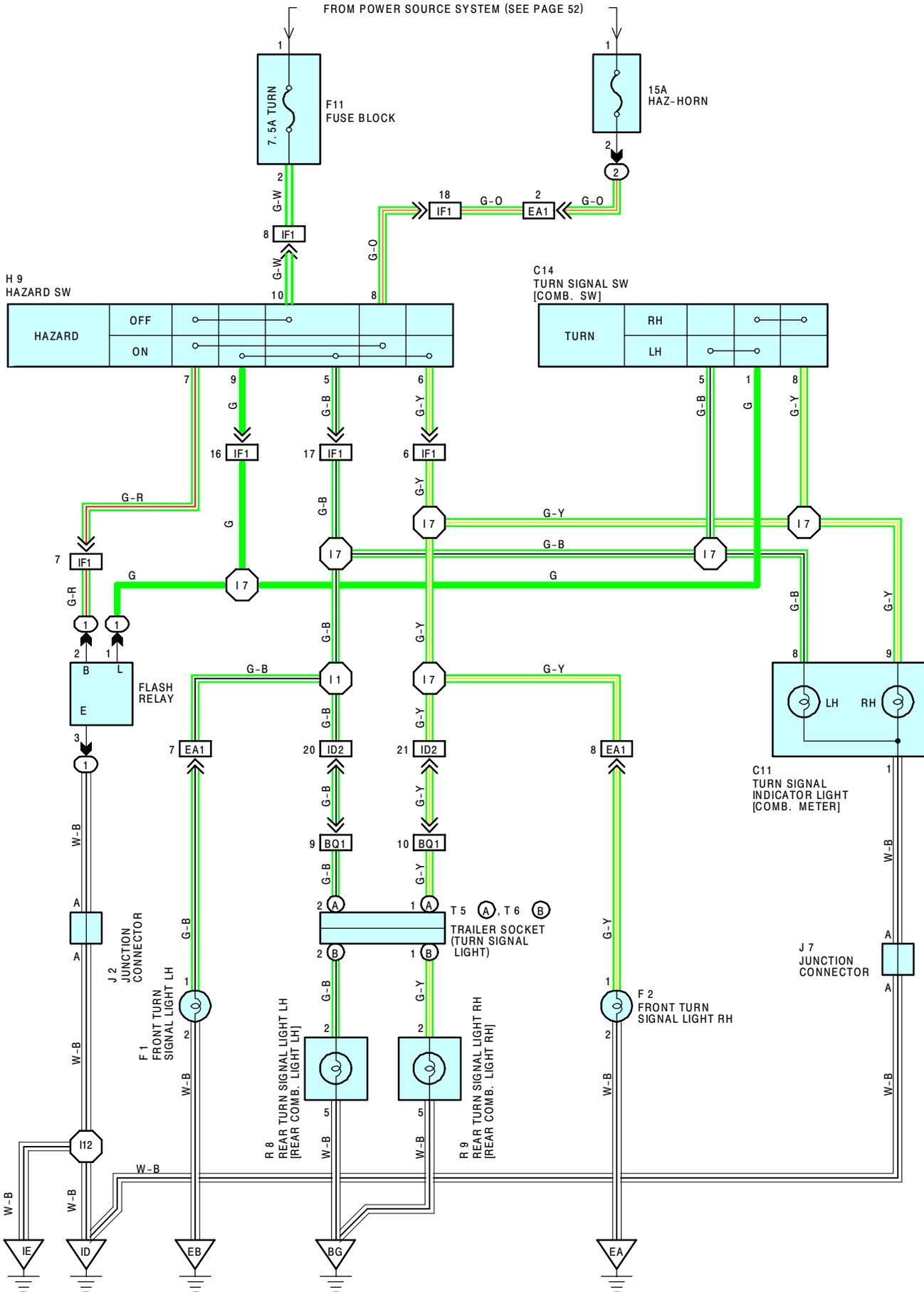


V 6, V 7 BLUE





# TURN SIGNAL AND HAZARD WARNING LIGHT



**SERVICE HINTS**

**FLASH RELAY**

- (1) 2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW ON OR THE HAZARD SW ON
- (1) 1-GROUND : CHANGES FROM 12 TO 0 VOLTS WITH THE IGNITION SW ON AND THE TURN SIGNAL SW LEFT OR RIGHT POSITION, AND WITH THE HAZARD SW ON
- (1) 3-GROUND : ALWAYS CONTINUITY

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	24	F11	25	R 8	27
C14	24	H 9	25	R 9	27
F 1	22	J 2	25	T 5	A 27
F 2	22	J 7	25	T 6	B 27

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
1F1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)
BQ1	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)

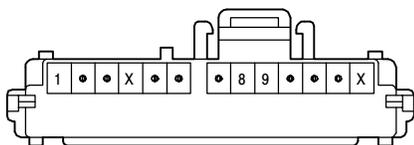
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	30	FRONT SIDE OF RIGHT FENDER
EB	30	FRONT SIDE OF LEFT FENDER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BG	34	LOWER BACK PANEL CENTER

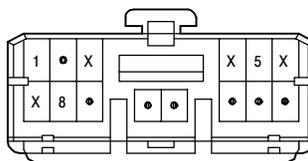
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	32	COWL WIRE	I 2	32	COWL WIRE
I 7					

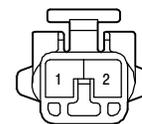
C11 BLUE



C14 BLACK



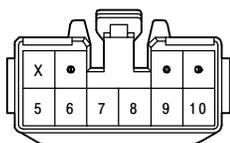
F 1, F 2 GRAY



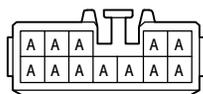
F11

(SEE PAGE 20)

H 9 BLACK

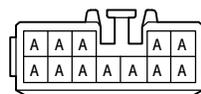


J 2 BLUE



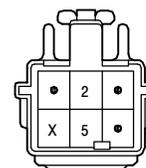
(HINT : SEE PAGE 7)

J 7 BLUE

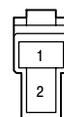


(HINT : SEE PAGE 7)

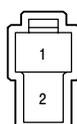
R 8, R 9



T 5 (A) BLACK

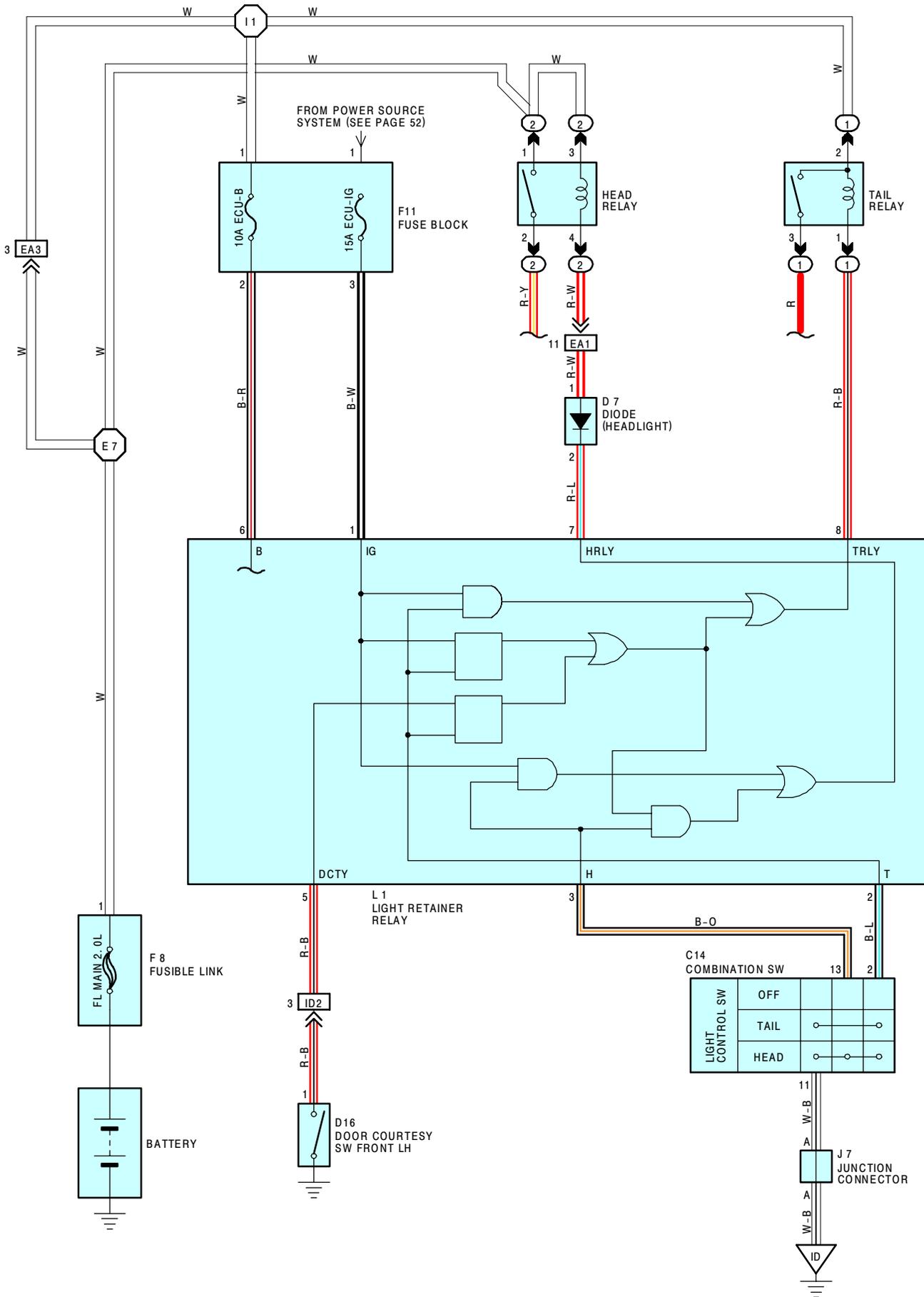


T 6 (B) BLACK





# LIGHT AUTO TURN OFF



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 1** OF THE LIGHT RETAINER RELAY THROUGH **ECU-IG** FUSE.

VOLTAGE IS APPLIED AT ALL TIMES TO **TERMINAL 8** OF THE LIGHT RETAINER RELAY THROUGH THE TAIL RELAY (COIL SIDE), AND TO **TERMINAL 7** OF THE LIGHT RETAINER RELAY THROUGH THE HEAD RELAY (COIL SIDE).

### 1. NORMAL LIGHTING OPERATION

<TURN TAILLIGHT ON>

WITH THE LIGHT CONTROL SW TURNED TO **TAIL** POSITION, A SIGNAL IS INPUT INTO **TERMINAL 2** OF THE LIGHT RETAINER RELAY.

ACCORDING TO THIS SIGNAL, THE CURRENT FLOW TO **TERMINAL 8** OF THE RELAY FLOWS THROUGH **TERMINAL 2** TO **TERMINAL 2** OF THE LIGHT CONTROL SW → **TERMINAL 11** → **GROUND**, CAUSING TAILLIGHTS TO TURN ON.

<TURN HEADLIGHT ON>

WITH THE LIGHT CONTROL SW TURNED TO **HEAD** POSITION, A SIGNAL IS INPUT INTO **TERMINAL 3** OF THE LIGHT RETAINER RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOW TO **TERMINAL 7** OF THE RELAY FLOWS THROUGH **TERMINAL 3** TO **TERMINAL 13** OF THE LIGHT CONTROL SW → **TERMINAL 11** → **GROUND**, CAUSING HEADLIGHTS AND TAILLIGHTS TO TURN ON. THE TAILLIGHT CIRCUIT IS SAME AS ABOVE (SEE <TURN TAILLIGHT ON>).

### 2. LIGHT AUTO TURN OFF OPERATION

WITH THE LIGHTS ON AND THE IGNITION SW TURNED OFF (INPUT SIGNAL GOES TO **TERMINAL 1** OF THE LIGHT RETAINER RELAY), WHEN THE DOOR OF DRIVER'S SIDE IS OPENED (INPUT SIGNAL GOES TO **TERMINAL 5** OF THE LIGHT RETAINER RELAY), THE RELAY OPERATES, AND THE CURRENT IS CUT OFF WHICH FLOWS FROM **TERMINAL 8** OF THE RELAY TO **TERMINAL 2** AND FROM **TERMINAL 7** OF THE RELAY TO **TERMINAL 3**. AS A RESULT, ALL LIGHTS ARE TURNED OFF AUTOMATICALLY.

## SERVICE HINTS

### L 1 LIGHT RETAINER RELAY

1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

6-GROUND : ALWAYS APPROX. 12 VOLTS

5-GROUND : CONTINUITY WITH THE DRIVER'S DOOR OPEN

7-GROUND : ALWAYS APPROX. 12 VOLTS

8-GROUND : ALWAYS APPROX. 12 VOLTS

3-GROUND : CONTINUITY WITH THE LIGHT CONTROL SW AT **HEAD** POSITION

2-GROUND : CONTINUITY WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C14</b>	24	<b>F 8</b>	22	<b>L 1</b>	25
<b>D 7</b>	24	<b>F11</b>	25		
<b>D16</b>	26	<b>J 7</b>	25		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>1</b>	20	R/B NO. 1 (LEFT KICK PANEL)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA1</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
<b>EA3</b>		
<b>1D2</b>	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	32	LEFT KICK PANEL

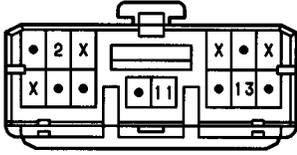
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>E 7</b>	30	ENGINE ROOM MAIN WIRE	<b>I 1</b>	32	COWL WIRE

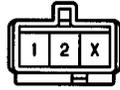


# LIGHT AUTO TURN OFF

C14 BLACK



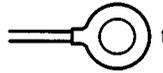
D 7 ORANGE



D16 BLUE



F 8



F11

(SEE PAGE 20)

J 7 BLUE



(HINT:SEE PAGE 7)

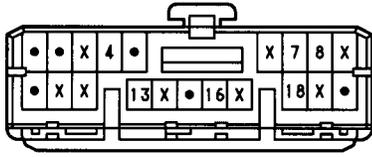
L 1



# FRONT WIPER AND WASHER



C18 BLACK



D 6 GRAY



F 3 GRAY



F11

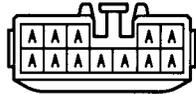
(SEE PAGE 20)

J 7 BLUE



(HINT:SEE PAGE 7)

J 8 BLUE



(HINT:SEE PAGE 7)

W 2 BLACK

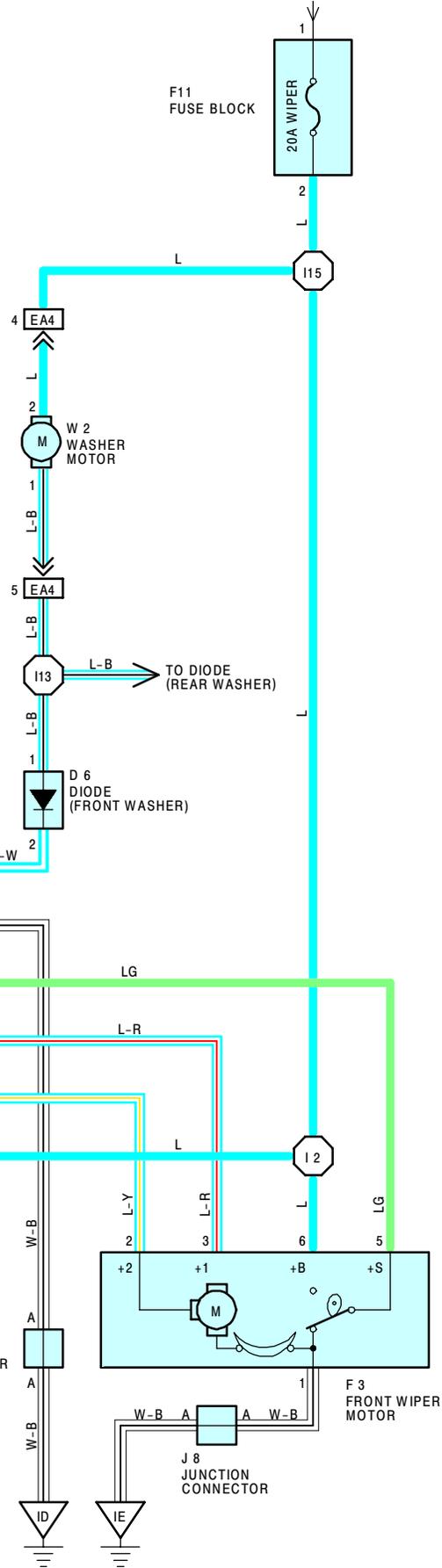
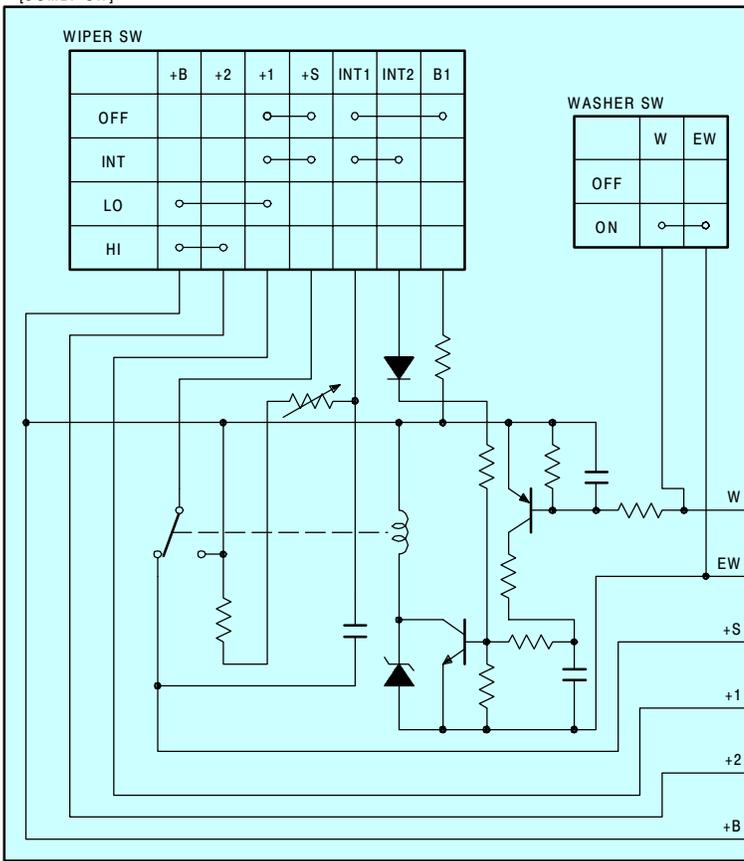




# FRONT WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)

C15  
FRONT WIPER AND WASHER SW  
[COMB. SW]



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW, **TERMINAL 2** OF THE WASHER MOTOR AND **TERMINAL 6** OF THE FRONT WIPER MOTOR FROM THE **WIPER FUSE**.

### 1. LOW SPEED POSITION

WITH THE WIPER SW TURNED TO **LO** POSITION, THE CURRENT FLOWS FROM **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → **TERMINAL 1** → **GROUND**, CAUSING THE WIPER MOTOR TO RUN AT LOW SPEED.

### 2. HIGH SPEED POSITION

WITH THE WIPER SW TURNED TO **HI** POSITION, THE CURRENT FLOWS FROM **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 13** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → **TERMINAL 1** → **GROUND**, CAUSING THE WIPER MOTOR TO RUN AT HIGH SPEED.

### 3. INT POSITION

WITH THE WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS FROM **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 16** → **GROUND**. THIS FLOW OF THE CURRENT OPERATES THE INTERMITTENT CIRCUIT AND THE CURRENT FLOWS FROM **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → **TERMINAL 1** → **GROUND** AND FUNCTIONS.

THE INTERMITTENT OPERATION IS CONTROLLED BY A CONDENSER'S CHARGED AND DISCHARGED FUNCTION INSTALLED IN RELAY.

### 4. WASHER CONTINUOUS OPERATION

WITH THE WASHER SW TURNED TO ON, THE CURRENT FLOWS THROUGH **TERMINAL 2** OF THE WASHER MOTOR TO **TERMINAL 1** → **TERMINAL 8** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 16** → **GROUND**, CAUSING THE WASHER MOTOR TO RUN, AND WINDOW WASHER EMITS A WATER SPRAY. THIS CAUSES A CURRENT TO FLOW TO **TERMINAL 18** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → **TERMINAL 1** → **GROUND**.

WHILE THE WASHER SW IS ON, WINDOW WASHER KEEPS EMITTING SPRAYS AND FRONT WIPER KEEPS FUNCTIONING.

## SERVICE HINTS

### C15 FRONT WIPER AND WASHER SW [COMB. SW]

16-GROUND : ALWAYS CONTINUITY

18-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

7-GROUND : APPROX. 12 VOLTS WITH THE WIPER AND WASHER SW AT **LO** POSITION

: APPROX. 12 VOLTS EVERY APPROX. 1 TO 10 SECONDS INTERMITTENTLY WITH THE WIPER SW AT **INT** POSITION

4-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW ON UNLESS THE WIPER MOTOR AT **STOP** POSITION

13-GROUND : APPROX. 12 VOLTS WITH THE WIPER AND WASHER SW AT **HI** POSITION

### F3 FRONT WIPER MOTOR

5-6 : CLOSED UNLESS THE WIPER MOTOR AT **STOP** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C15</b>	24	<b>F11</b>	25	<b>W 2</b>	23
<b>D 6</b>	24	<b>J 7</b>	25		
<b>F 3</b>	22	<b>J 8</b>	25		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA4</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (RIGHT FENDER)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	32	LEFT KICK PANEL
<b>IE</b>	32	RIGHT KICK PANEL

## ⊗ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 2</b>	32	COWL WIRE	<b>I15</b>	32	COWL WIRE
<b>I13</b>					



## SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWS TO **TERMINAL 2** OF THE WASHER MOTOR, **TERMINAL 1** OF THE WASHER CHANGE VALVE, **TERMINAL 1** OF THE REAR WIPER RELAY AND **TERMINAL 1** OF THE REAR WIPER MOTOR FROM THE WIPER FUSE.

### 1. REAR WIPER NORMAL OPERATION

WITH THE IGNITION SW TURNED ON AND THE REAR WIPER AND WASHER SW TURNED ON, THE CURRENT FROM **TERMINAL 1** OF THE REAR WIPER RELAY FLOWS TO **TERMINAL 6** OF THE RELAY → **TERMINAL 1** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → **GROUND**. THUS, THE RELAY COIL IS ACTIVATED, AND THE CURRENT FROM **TERMINAL 1** OF THE RELAY FLOWS TO **TERMINAL 3** → **TERMINAL 3** OF THE REAR WIPER MOTOR → **TERMINAL 2** → **GROUND**, CAUSING THE MOTOR TO ROTATE TO OPERATE REAR WIPER.

### 2. REAR WIPER INTERMITTENT OPERATION

WITH THE IGNITION SW TURNED ON AND THE REAR WIPER AND WASHER SW TURNED TO **INT** POSITION, THE CURRENT FROM **TERMINAL 1** OF THE REAR WIPER RELAY FLOWS TO **TERMINAL 4** OF THE RELAY → **TERMINAL 10** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → **GROUND**, AS A RESULT, THE RELAY OPERATES FOR APPROX. **6 - 10** SEC., AND THE CURRENT FLOWS FROM **TERMINAL 1** OF THE REAR WIPER RELAY TO **TERMINAL 3** → **TERMINAL 3** OF THE REAR WIPER MOTOR → **TERMINAL 2** → **GROUND**, CAUSING THE MOTOR TO ROTATE TO OPERATE THE REAR WIPER. AT THIS TIME, THE CONTACT IN THE WIPER MOTOR CLOSES, AND THE CURRENT FLOWS FROM **TERMINAL 1** OF THE REAR WIPER MOTOR TO **TERMINAL 4** → **TERMINAL 2** OF THE REAR WIPER RELAY → **TERMINAL 3** → **TERMINAL 3** OF THE REAR WIPER MOTOR → **TERMINAL 2** → **GROUND**.

THUS, THE INTERMITTENT-STOP CURRENT OPERATES, THE CONDENSER IN THE CIRCUIT CHARGES AND THE WIPER CONTINUES TO OPERATE UNTIL REACHING THE **STOP** POSITION. AFTER THE WIPER STOPS, THE CURRENT DOES NOT FLOW TO THE INTERMITTENT-STOP CIRCUIT FROM **TERMINAL 2** OF THE RELAY, BUT THE CONDENSER DISCHARGES THE CURRENT INTO THE INTERMITTENT CIRCUIT AND THE CIRCUIT OPERATES UNTIL THE CONDENSER DISCHARGE ENDS. AS, A RESULT, THIS DISCHARGE INTERVAL BECOMES THE INTERMITTENT TIME.

WHEN THE CURRENT IS DISCHARGED COMPLETELY, THE CURRENT FROM **TERMINAL 1** OF THE RELAY FLOWS TO **TERMINAL 4** → **TERMINAL 10** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → **GROUND**.

THEN, THE CURRENT FROM **TERMINAL 1** OF THE RELAY FLOWS TO **TERMINAL 3** → **TERMINAL 3** OF THE REAR WIPER MOTOR → **TERMINAL 2** → **GROUND**, ROTATING THE MOTOR. ACCORDING TO REPETITION OF THIS PROCESS, INTERMITTENT OPERATION OF THE REAR WIPER OCCURS.

### 3. WASHER OPERATION

WITH THE IGNITION SW TURNED ON AND THE REAR WIPER AND WASHER SW TURNED TO **ON** OR **INT** POSITION, WHEN THE WIPER SW IS PUSHED STRONGLY TOWARD THE **ON** OR **INT** SIDE, THE CURRENT FROM **TERMINAL 2** OF THE WASHER MOTOR FLOWS TO **TERMINAL 1** OF THE MOTOR → **TERMINAL 2** OF THE REAR WIPER SW → **TERMINAL 16** → **GROUND**, SO THAT THE WASHER MOTOR ROTATES AND THE WINDOW WASHER EMITS A WATER SPRAY, ONLY WHILE THE WIPER SW IS PRESSED. AT THE SAME TIME, THE WASHER CHANGE VALVE OPERATES.

WHEN THE CURRENT FLOWS TO THE WASHER CHANGE VALVE, THE WASHER CHANGE VALVE IS ACTIVATED AND WASHER EMITS A WATER SPRAY ON THE REAR WINDOW.

## SERVICE HINTS

### W2 WASHER MOTOR

2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

1-GROUND : CONTINUITY WITH THE WASHER SW TURNED ON

### R20 REAR WIPER RELAY

1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

4-GROUND : CONTINUITY WITH THE REAR WIPER SW AT **INT** POSITION

6-GROUND : CONTINUITY WITH THE REAR WIPER SW AT **ON** POSITION



## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C15</b>	24	<b>J 7</b>	25	<b>W 1</b>	23
<b>D11</b>	24	<b>R19</b>	27	<b>W 2</b>	23
<b>F11</b>	25	<b>R20</b>	27		



## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA4</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (RIGHT FENDER)
<b>ID1</b>	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
<b>BR1</b>	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
<b>BR2</b>		
<b>BS1</b>	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
<b>BS2</b>		
<b>BT1</b>	36	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
<b>BT2</b>		



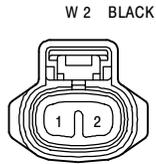
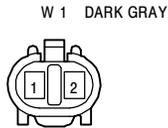
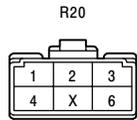
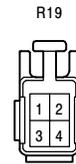
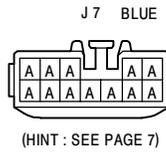
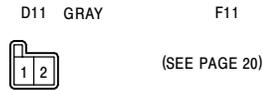
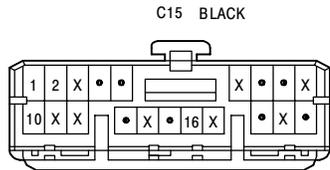
# REAR WIPER AND WASHER

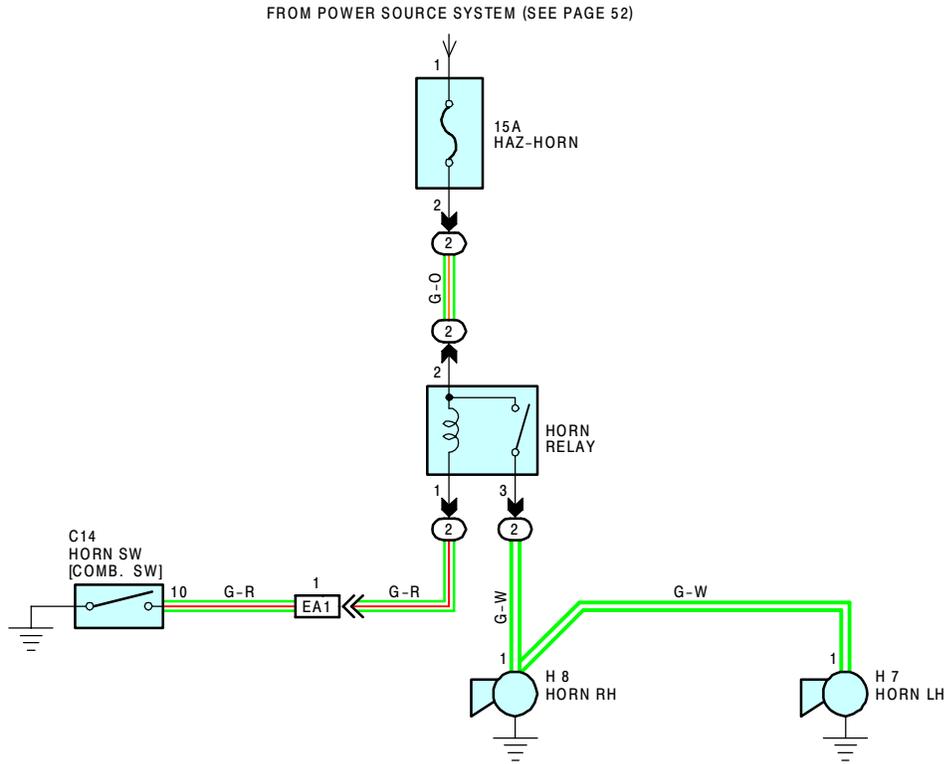
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I2	32	COWL WIRE	I12	32	COWL WIRE
I7			I20		





**SERVICE HINTS**

**HORN RELAY**

**(2) 2- (2) 3** : CLOSED WITH THE HORN SW ON

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	24	H 7	22	H 8	22

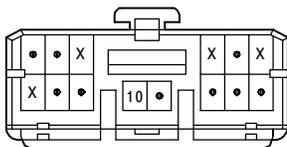
**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)

C14 BLACK



H 7, H 8 BLACK

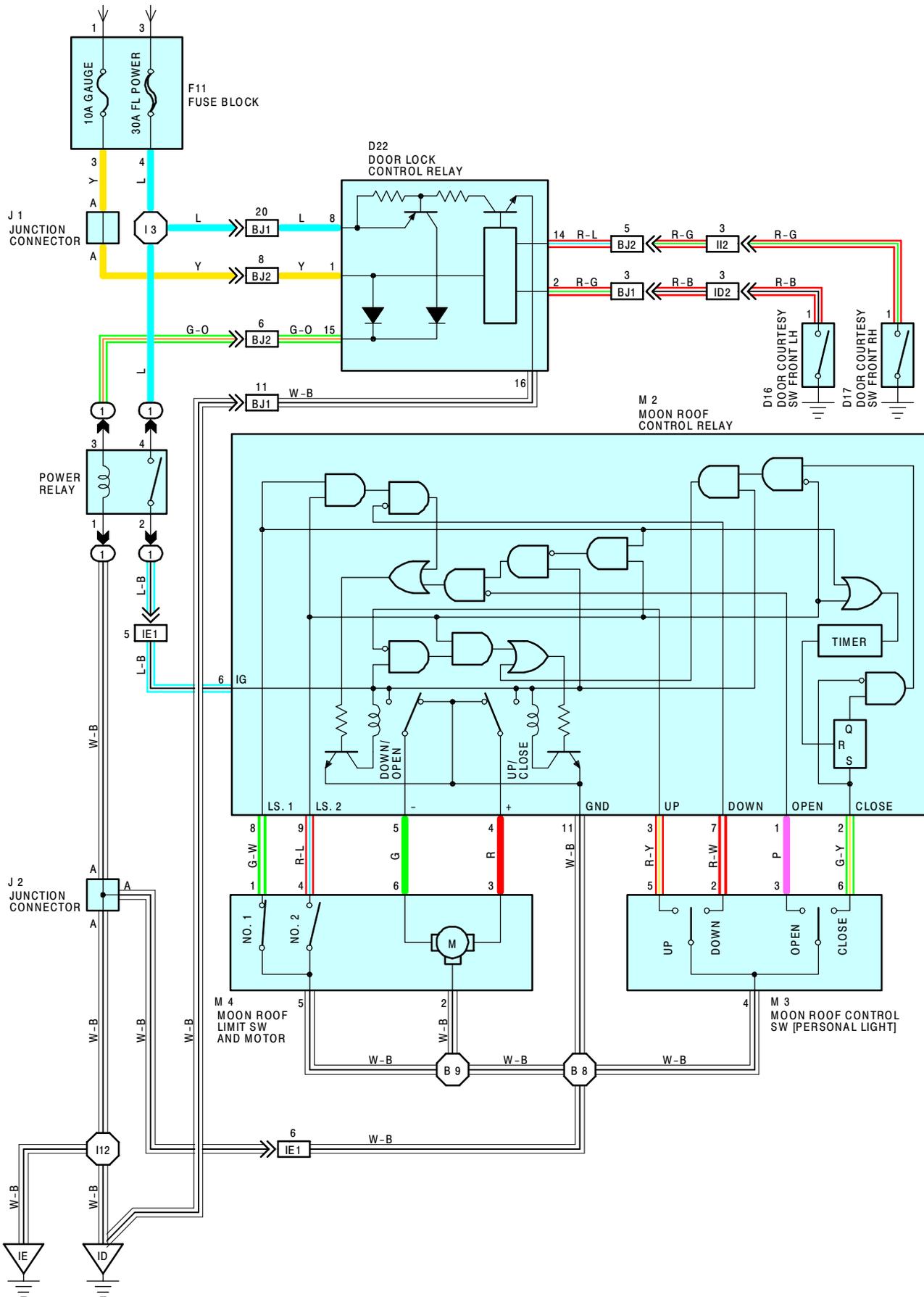




# MOON ROOF

Brought to you by BirfMark

FROM POWER SOURCE SYSTEM (SEE PAGE 52)



## SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH **FL POWER** FUSE TO **TERMINAL 4** OF THE POWER RELAY.

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **TERMINAL 3** OF THE POWER RELAY TO **TERMINAL 1** → **GROUND** THROUGH **GAUGE** FUSE. AS A RESULT, THE POWER RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 4** OF THE POWER RELAY FLOWS FROM **TERMINAL 2** OF THE RELAY TO **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY.

### 1. SLIDE OPEN OPERATION

WHEN THE IGNITION SW IS TURNED ON AND THE MOON ROOF CONTROL SW IS PUSHED TO THE **OPEN** POSITION, A SIGNAL IS INPUT FROM **TERMINAL 3** OF THE MOON ROOF CONTROL SW TO **TERMINAL 1** OF THE MOON ROOF CONTROL RELAY. THE MOON ROOF LIMIT SW NO. 2 IS TURNED ON AT THIS TIME.

WHEN THIS OCCURS, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY FLOWS FROM **TERMINAL 5** → **TERMINAL 6** OF THE MOON ROOF MOTOR → **TERMINAL 3** → **TERMINAL 4** OF THE MOON ROOF CONTROL RELAY → **TERMINAL 11** → **GROUND**, ROTATING THE MOTOR TO OPEN THE MOON ROOF WHILE THE SW IS BEING PUSHED TO **OPEN** POSITION.

### 2. SLIDE OPEN OPERATION

WITH THE IGNITION SW TURNED ON AND THE MOON ROOF COMPLETELY OPEN AND THE MOON ROOF LIMIT SWITCH NO. 1 AND NO. 2 BOTH ARE ON, WHEN THE MOON ROOF CONTROL SW IS PUSHED TO THE **CLOSE** POSITION, A SIGNAL IS INPUT FROM **TERMINAL 6** OF THE MOON ROOF CONTROL SW TO **TERMINAL 2** OF THE MOON ROOF CONTROL RELAY.

WHEN THIS OCCURS, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY FLOWS FROM **TERMINAL 4** → **TERMINAL 3** OF THE MOON ROOF MOTOR → **TERMINAL 6** → **TERMINAL 5** OF THE MOON ROOF CONTROL RELAY → **TERMINAL 11** → **GROUND**, ROTATING THE MOTOR TO CLOSE THE MOON ROOF WHILE THE SW IS BEING PUSHED TO **CLOSE** POSITION.

WHEN THE MOON ROOF LIMIT SW NO. 1 IS TURNED OFF (THE MOON ROOF LIMIT SW NO. 2 IS ON) AND MOON ROOF REACHES **100** MM FROM FULLY **CLOSE** POSITION, SIGNAL IS INPUT FROM **TERMINAL 1** OF THE LIMIT SW NO. 1 TO **TERMINAL 8** OF THE MOON ROOF CONTROL RELAY. THIS SIGNAL ACTIVATES THE RELAY AND STOPS CONTINUITY FROM **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY TO **TERMINAL 11**, AS A RESULT, THE MOON ROOF STOPS AT THIS POSITION.

TO CLOSE THE MOON ROOF COMPLETELY, PUSHING THE MOON ROOF CONTROL SW AGAIN TO THE CLOSE SIDE CAUSES A SIGNAL TO BE INPUT AGAIN TO **TERMINAL 2** OF THE MOON ROOF CONTROL RELAY. THIS ACTIVATES THE RELAY AND THE MOON ROOF WILL CLOSE AS LONG AS THE MOON ROOF CONTROL SW IS BEING PUSHED, ALLOWING THE MOON ROOF TO FULLY CLOSE.

### 3. TILT UP OPERATION

WHEN THE MOON ROOF CONTROL SW IS PUSHED TO **TILT UP** POSITION, WITH THE IGNITION SW TURNED ON AND THE MOON ROOF COMPLETELY CLOSED (MOON ROOF LIMIT SW NO. 2 IS OFF), A SIGNAL IS INPUT FROM **TERMINAL 5** OF THE MOON ROOF CONTROL SW TO **TERMINAL 3** OF THE MOON ROOF CONTROL RELAY. AS A RESULT, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE RELAY FLOWS FROM **TERMINAL 4** OF THE RELAY TO **TERMINAL 3** OF THE MOON ROOF MOTOR → **TERMINAL 6** → **TERMINAL 5** OF THE RELAY → **TERMINAL 11** → **GROUND**, ROTATING THE MOTOR SO THAT TILT UP OPERATION OCCURS AS LONG AS MOON ROOF CONTROL SW IS PUSHED ON THE TILT UP SIDE.

### 4. TILT DOWN OPERATION

WHEN THE MOON ROOF CONTROL SW IS PUSHED TO **TILT DOWN** POSITION, WITH THE IGNITION SW TURNED ON AND THE MOON ROOF TILTED UP (MOON ROOF LIMIT SW NO. 1 AND NO. 2 ARE BOTH OFF), A SIGNAL IS INPUT FROM **TERMINAL 2** OF THE MOON ROOF CONTROL SW TO **TERMINAL 7** OF THE MOON ROOF CONTROL RELAY.

AS A RESULT, THE RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 6** OF THE RELAY FLOWS FROM **TERMINAL 5** OF THE RELAY → **TERMINAL 6** OF THE MOON ROOF MOTOR → **TERMINAL 3** → **TERMINAL 4** OF THE RELAY → **TERMINAL 11** → **GROUND**, ROTATING THE MOTOR SO THAT TILT DOWN OPERATION OCCURS AS LONG AS THE MOON ROOF CONTROL SW IS PUSHED ON THE TILT DOWN SIDE. (DURING TILT DOWN, THE LIMIT SW NO. 1 CHANGES FROM OFF TO ON.)

### 5. TILT UP REMINDER SYSTEM

WHEN THE IGNITION SW IS TURNED ON TO ACC OR OFF, WITH THE MOON ROOF STILL TILTED UP, THE CURRENT DOES NOT FLOW TO **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY.

THIS IS RECEIVED BY THE RELAY AS A SIGNAL THAT THE IGNITION SW IS TURNED OFF. AT THIS TIME, THE MOON ROOF LIMIT SW NO. 1 AND NO. 2 ARE OFF, SO SIGNALS ARE INPUT TO **TERMINAL 8** AND **9** OF THE MOON ROOF CONTROL RELAY THAT THE MOON ROOF IS IN THE TILT OPERATION POSITION. WHEN THESE SIGNALS ARE INPUT TO THE MOON ROOF CONTROL RELAY, THE TIMER BUILT INTO THE RELAY OPERATES.

### 6. KEY OFF MOON ROOF OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE DOOR LOCK CONTROL RELAY OPERATES AND THE CURRENT FLOWS FROM **FL POWER** FUSE TO **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 15** → **TERMINAL 3** OF THE POWER RELAY → **TERMINAL 1** → **GROUND**, AT THIS TIME, FOR ABOUT **60** SECONDS THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM **POWER** FUSE → **TERMINAL 4** OF THE POWER RELAY → **TERMINAL 2** → **TERMINAL 6** OF THE MOON ROOF CONTROL RELAY. AS A RESULT, FOR ABOUT **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, THE FUNCTION OF THIS RELAY MAKES IT POSSIBLE TO OPEN AND CLOSE THE MOON ROOF. ALSO, BY OPENING THE FRONT DOOR (THE DOOR COURTESY SW ON) WITHIN ABOUT **60** SECONDS.

AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO **TERMINAL 2** OR **14** OF THE DOOR LOCK CONTROL RELAY. AS A RESULT, THE RELAY TURNS OFF, AND OPEN AND CLOSE MOVEMENT OF THE MOON ROOF STOPS.



# MOON ROOF

## SERVICE HINTS

### POWER RELAY

**(1) 4- (1) 2** : CLOSED WITH THE IGNITION SW AT **ON** POSITION OR KEY OFF OPERATED

### M 2 MOON ROOF CONTROL RELAY

11-GROUND : ALWAYS CONTINUITY

6-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION OR KEY OFF OPERATED

4-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW ON AND MOON ROOF CONTROL SW AT **CLOSE** OR **UP** POSITION (EXCEPT APPROX. **100** MM (**3.941** IN.) **2** SECOND IN THE BEFORE **CLOSED** POSITION)

5-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW ON AND MOON ROOF CONTROL SW AT **OPEN** OR **DOWN** POSITION

9-GROUND : APPROX. **12** VOLTS → **0** VOLTS WITH FROM OPEN TO CLOSE

**0** VOLTS WITH **UP** OR **DOWN** POSITION

**0** VOLTS → APPROX. **12** VOLTS WITH APPROX. **100** MM (**3.941** IN.) **2** SECOND IN THE BEFORE CLOSED POSITION

8-GROUND : **0** VOLTS → APPROX. **12** VOLTS WITH FROM **UP** TO **DOWN**

### M 3 MOON ROOF CONTROL SW

5-4 : CLOSED WITH THE MOON ROOF CONTROL SW AT **UP** POSITION

6-4 : CLOSED WITH THE MOON ROOF CONTROL SW AT **CLOSE** POSITION

2-4 : CLOSED WITH THE MOON ROOF CONTROL SW AT **DOWN** POSITION

3-4 : CLOSED WITH THE MOON ROOF CONTROL SW AT **OPEN** POSITION

4-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>D16</b>	<a href="#">26</a>	<b>F11</b>	<a href="#">25</a>	<b>M 2</b>	<a href="#">26</a>
<b>D17</b>	<a href="#">26</a>	<b>J 1</b>	<a href="#">25</a>	<b>M 3</b>	<a href="#">26</a>
<b>D22</b>	<a href="#">26</a>	<b>J 2</b>	<a href="#">25</a>	<b>M 4</b>	<a href="#">26</a>

## □ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>1</b>	<a href="#">20</a>	R/B NO. 1 (LEFT KICK PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>ID2</b>	<a href="#">32</a>	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
<b>1E1</b>	<a href="#">32</a>	ROOF WIRE AND COWL WIRE (LEFT KICK PANEL)
<b>II2</b>	<a href="#">32</a>	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
<b>BJ1</b>	<a href="#">34</a>	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
<b>BJ2</b>		

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	<a href="#">32</a>	LEFT KICK PANEL
<b>IE</b>	<a href="#">32</a>	RIGHT KICK PANEL

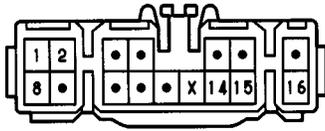
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 3</b>	<a href="#">32</a>	COWL WIRE	<b>B 8</b>	<a href="#">36</a>	ROOF WIRE
<b>I12</b>	<a href="#">32</a>	COWL WIRE	<b>B 9</b>		

D16, D17 BLUE



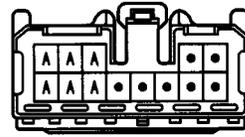
D22 GRAY



F11

(SEE PAGE 20)

J 1



(HINT:SEE PAGE 7)

J 2 BLUE



(HINT:SEE PAGE 7)

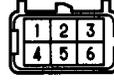
M 2



M 3

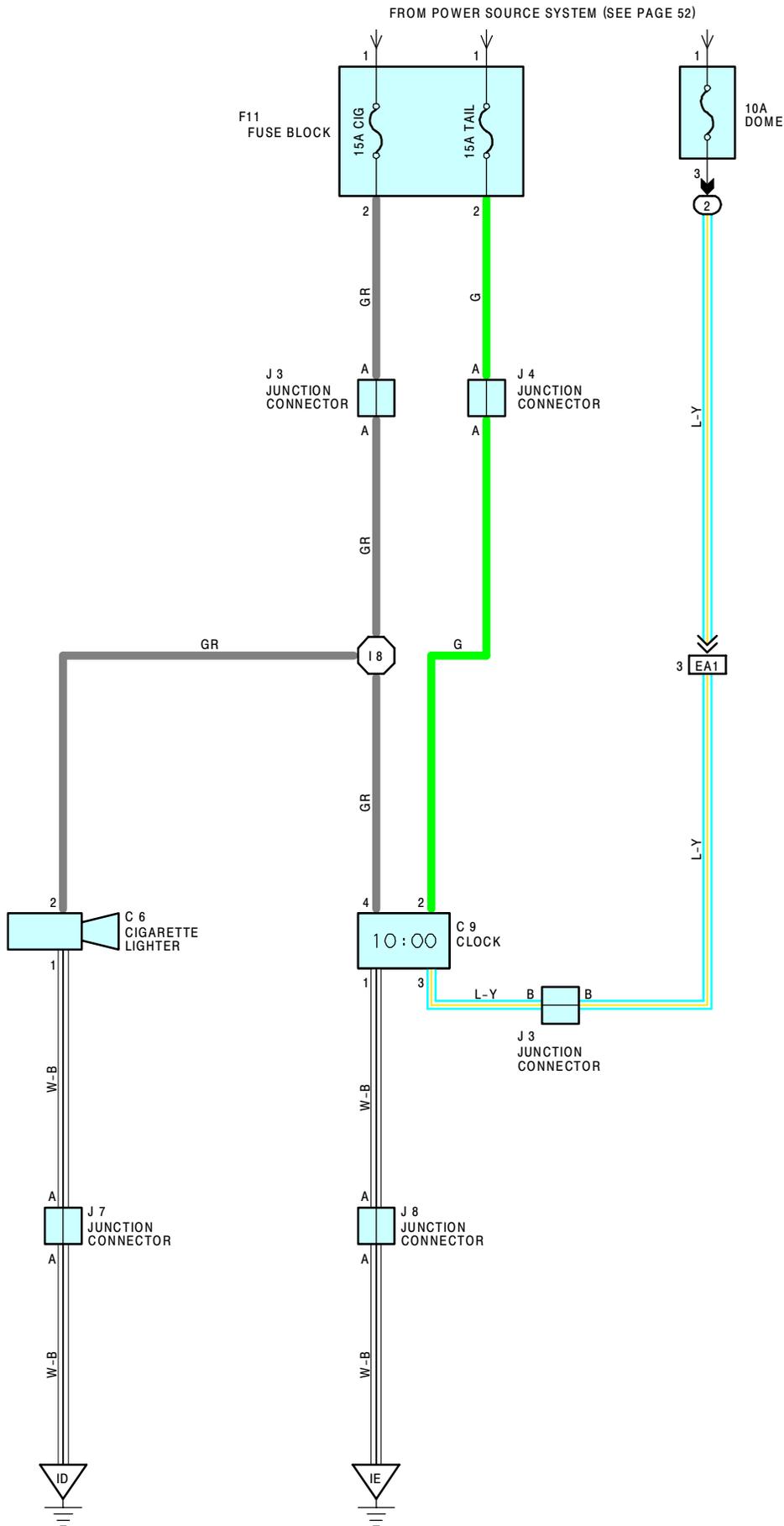


M 4





# CIGARETTE LIGHTER AND CLOCK



**SERVICE HINTS**

**C 6 CIGARETTE LIGHTER**

- 2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC** OR **ON** POSITION
- 1-GROUND : ALWAYS CONTINUITY

**C 9 CLOCK**

- 3-GROUND : ALWAYS APPROX. 12 VOLTS (POWER FOR CLOCK)
- 4-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC** OR **ON** POSITION (POWER FOR INDICATION)
- 2-GROUND : APPROX 12 VOLTS WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION
- 1-GROUND : ALWAYS CONTINUITY

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C 6</b>	24	<b>J 3</b>	25	<b>J 8</b>	25
<b>C 9</b>	24	<b>J 4</b>	25		
<b>F11</b>	25	<b>J 7</b>	25		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF THE LEFT FENDER)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA1</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	32	LEFT KICK PANEL
<b>IE</b>	32	RIGHT KICK PANEL

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 8</b>	32	COWL WIRE			

C 6



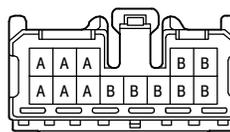
C 9



F11

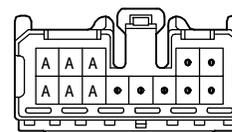
(SEE PAGE 20)

J 3



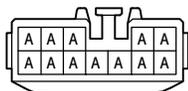
(HINT : SEE PAGE 7)

J 4



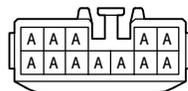
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J 7 BLUE



(HINT : SEE PAGE 7)

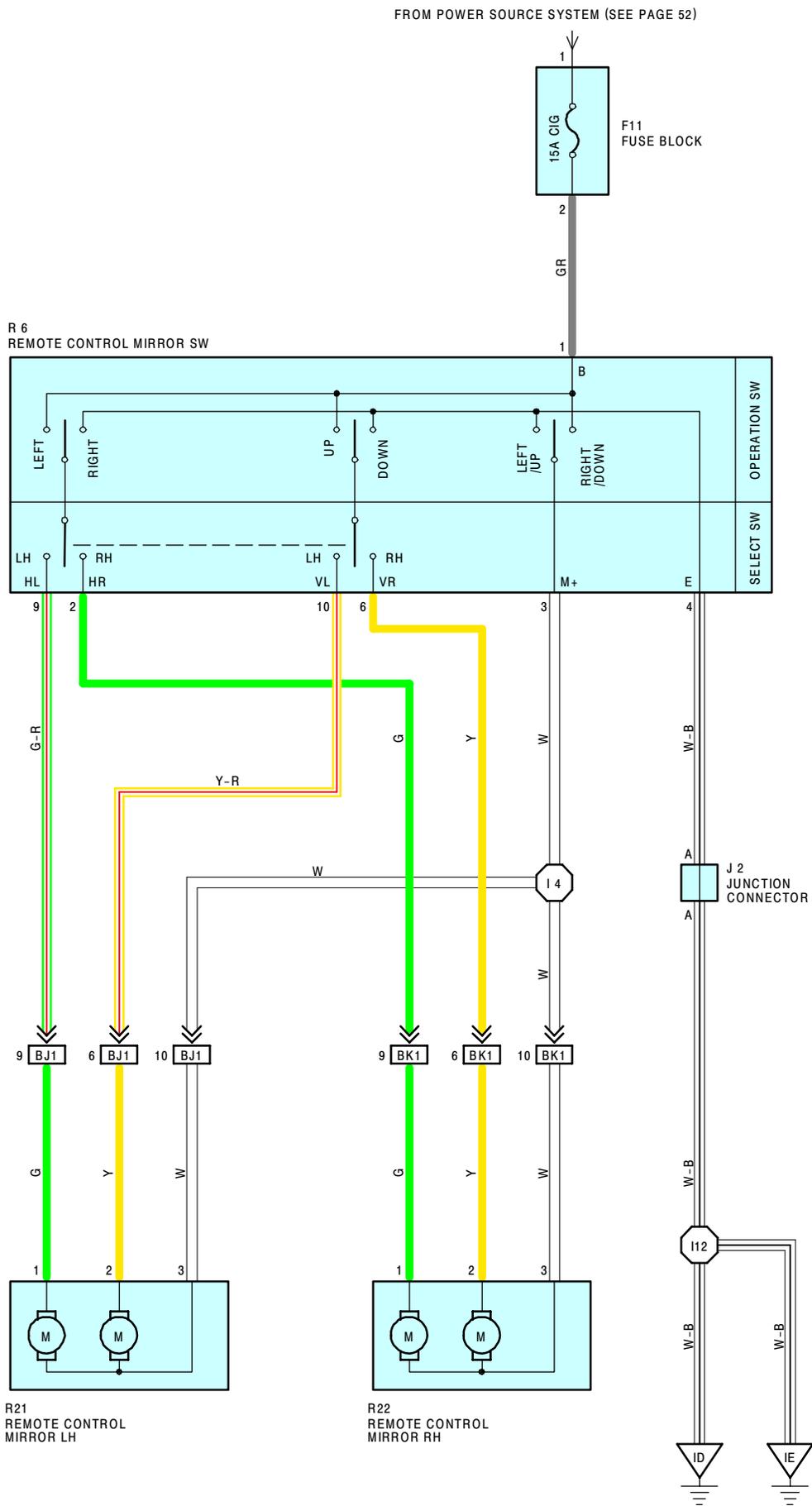
J 8 BLUE



(HINT : SEE PAGE 7)



# REMOTE CONTROL MIRROR



**SERVICE HINTS**

**R 6 REMOTE CONTROL MIRROR SW**

- 1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC ON ON** POSITION
- 3-4 : CONTINUITY WITH THE OPERATION SW AT **UP** OR **LEFT** POSITION
- 9-4 : CONTINUITY WITH THE OPERATION SW AT **RIGHT** POSITION AND THE SELECT SW AT **LH** POSITION
- 10-4 : CONTINUITY WITH THE OPERATION SW AT **DOWN** POSITION AND THE SELECT SW AT **LH** POSITION
- 2-4 : CONTINUITY WITH THE OPERATION SW AT **RIGHT** POSITION AND THE SELECT SW AT **RH** POSITION
- 6-4 : CONTINUITY WITH THE OPERATION SW AT **DOWN** POSITION AND THE SELECT SW AT **RH** POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	R 6	25	R22	27
J 2	25	R21	27		

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BJ1	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

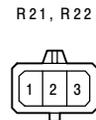
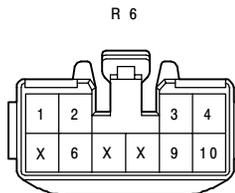
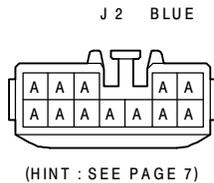
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

**○ : SPLICE POINTS**

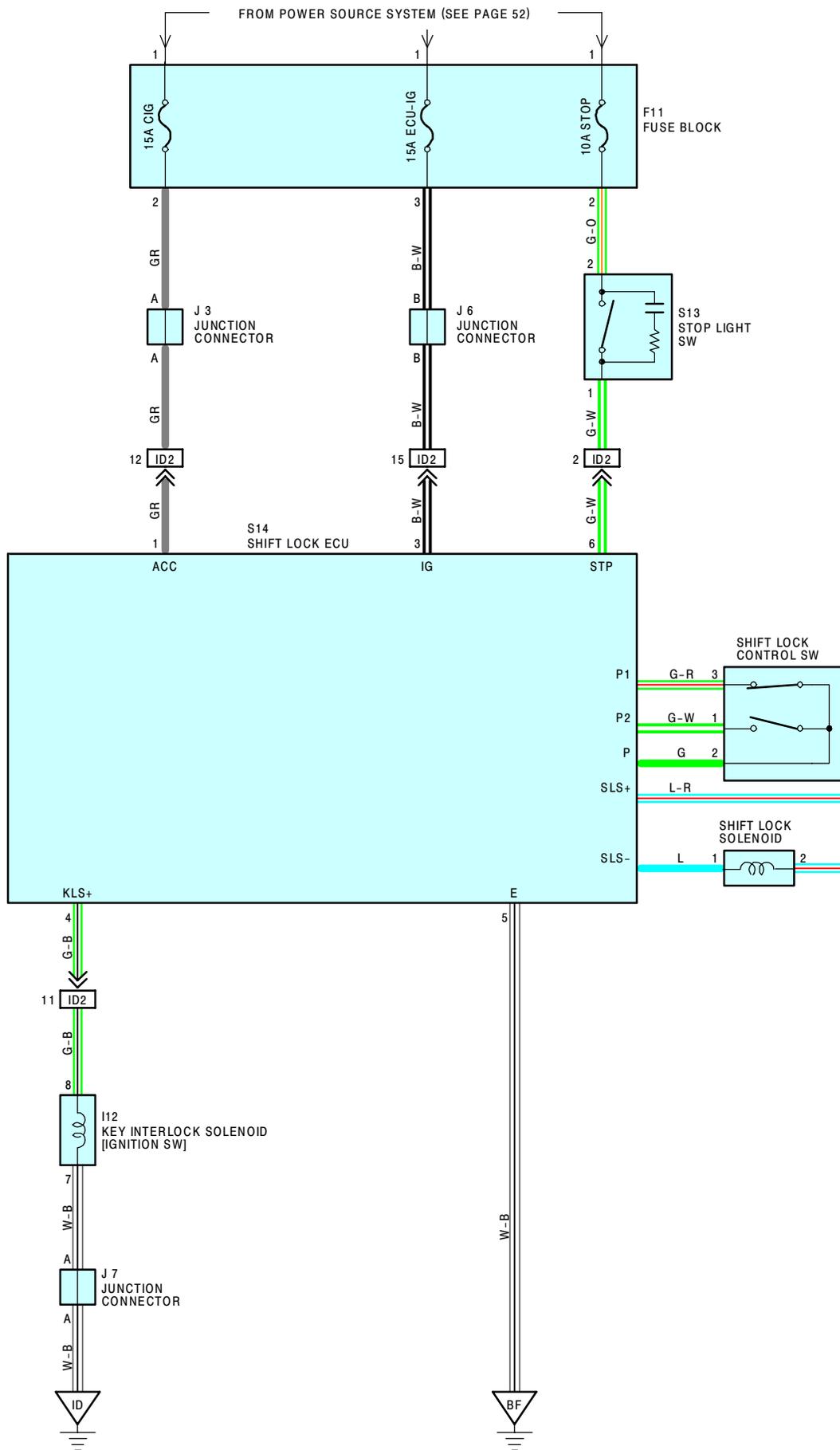
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	32	COWL WIRE	I12	32	COWL WIRE

F11  
(SEE PAGE 20)





# SHIFT LOCK



## SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED TO **ACC** POSITION THE CURRENT FROM THE **CIG** FUSE FLOWS TO **TERMINAL 1** OF THE SHIFT LOCK ECU. AT THE **ON** POSITION, THE CURRENT FROM THE **ECU-IG** FUSE FLOWS TO **TERMINAL 3** OF THE SHIFT LOCK ECU.

### 1. SHIFT LOCK MECHANISM

WITH THE IGNITION SW ON, WHEN A SIGNAL THAT BRAKE PEDAL IS DEPRESSED (THE STOP LIGHT SW ON) AND A SIGNAL THAT SHIFT LEVER IS PUT IN "P" POSITION (CONTINUITY BETWEEN P1 AND P OF THE SHIFT POSITION SW) IS INPUT TO THE SHIFT LOCK ECU. THE SHIFT LOCK ECU OPERATES AND THE CURRENT FLOWS FROM **TERMINAL 3** OF THE SHIFT LOCK ECU → **TERMINAL SLS+** → **TERMINAL 2** OF THE SHIFT LOCK SOLENOID → SOLENOID → **TERMINAL 1** → **TERMINAL SLS-** OF THE SHIFT LOCK ECU → **TERMINAL 5** → **GROUND**. THIS CAUSES THE SHIFT LOCK SOLENOID TO TURN ON (PLATE STOPPER DISENGAGES), AND SHIFT LEVER CAN BE SHIFTED INTO OTHER POSITION THAN THE "P" POSITION.

### 2. KEY INTER LOCK MECHANISM

WITH THE IGNITION SW AT **ON** OR **ACC** POSITION, WHEN SHIFT LEVER IS PUT IN "P" POSITION (NO CONTINUITY BETWEEN P2 AND P OF LOCK CONTROL SW), THE CURRENT FROM **TERMINAL 4** OF THE SHIFT LOCK ECU TO THE KEY INTER LOCK SOLENOID IS CUT OFF. THIS CAUSES THE KEY INTER LOCK SOLENOID TO TURN OFF (LOCK LEVER DISENGAGES FROM LOCK POSITION), AND THE IGNITION KEY CAN BE TURNED FROM **ACC** TO **LOCK** POSITION.

## SERVICE HINTS

### S14 SHIFT LOCK ECU

- 1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC** OR **ON** POSITION
- 3-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION
- 5-GROUND : ALWAYS CONTINUITY
- 6-GROUND : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED (STOP LIGHT SW ON)

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	J 6	25	S14	27
I12	25	J 7	25		
J 3	25	S13	25		

### □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

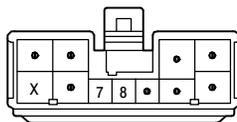
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)

### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

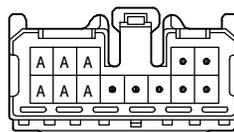
F11

(SEE PAGE 20)



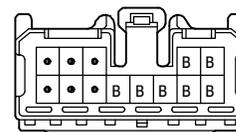
I12 BLACK

J 3



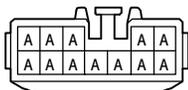
(HINT : SEE PAGE 7)

J 6



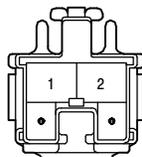
(HINT : SEE PAGE 7)

J 7 BLUE

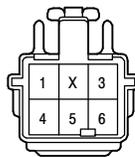


(HINT : SEE PAGE 7)

S13 BLACK

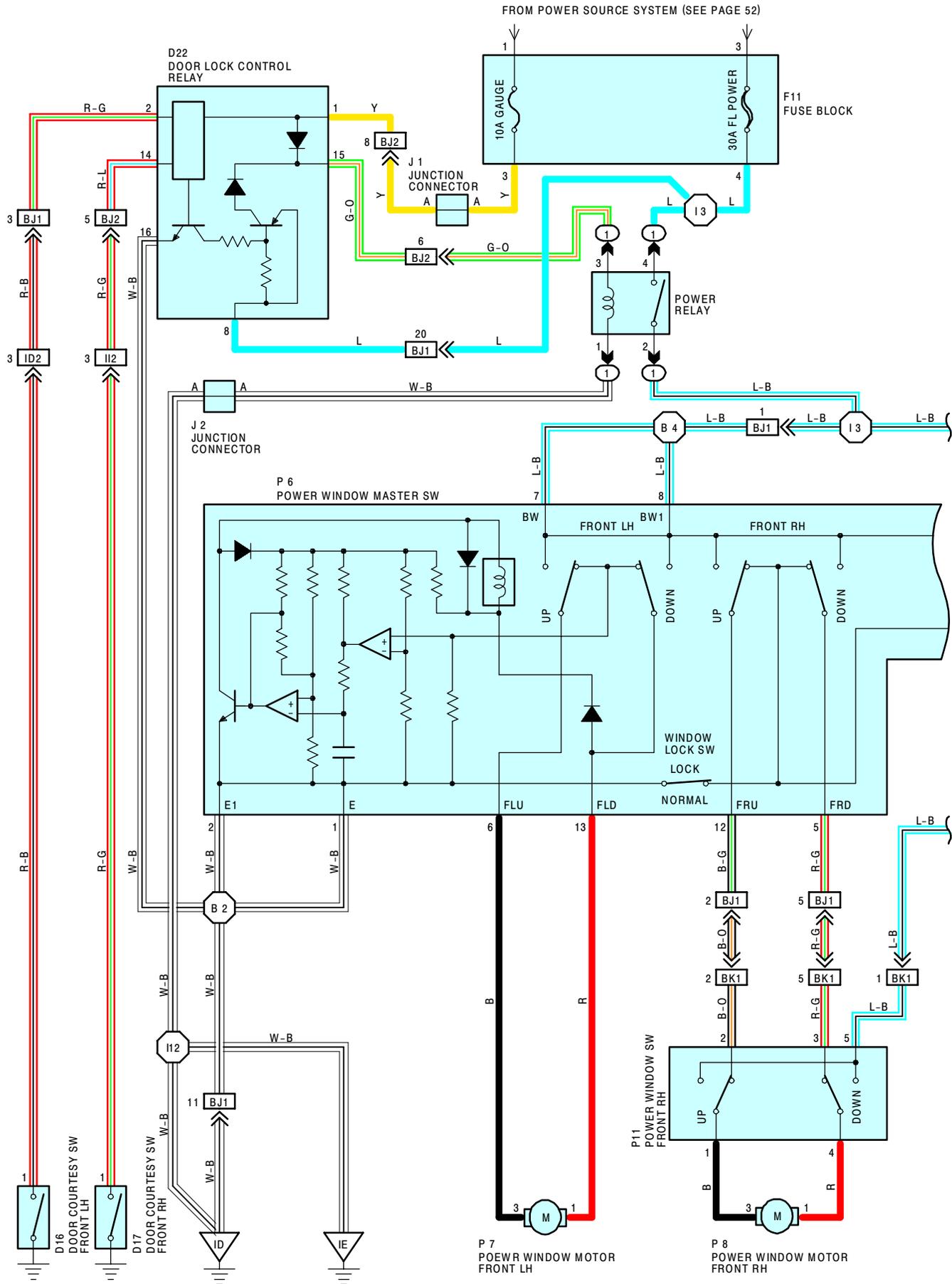


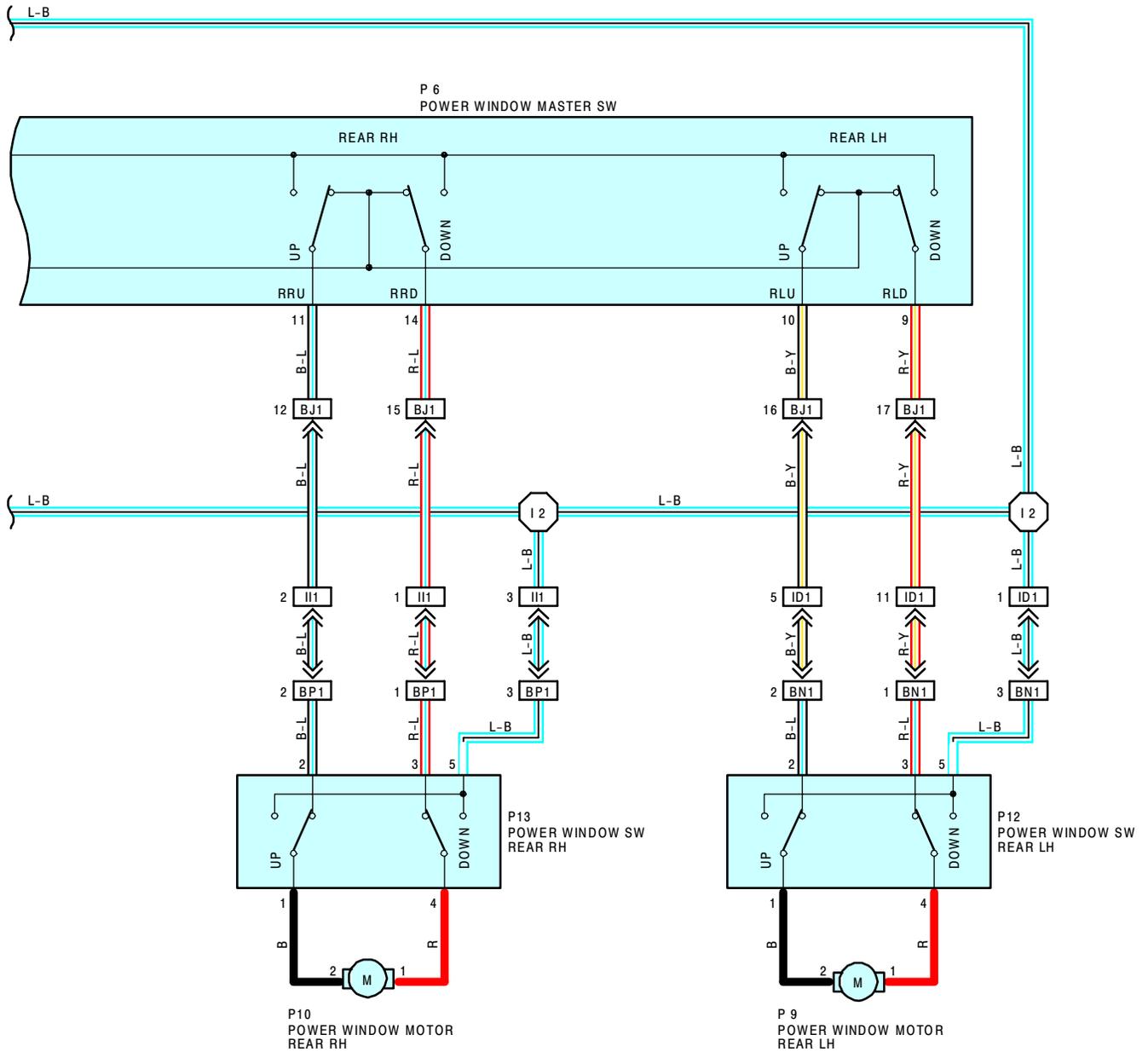
S14





# POWER WINDOW







# POWER WINDOW

## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS THROUGH THE **GAUGE FUSE** TO **TERMINAL 3** OF THE POWER RELAY → **TERMINAL 1** → **GROUND**. THIS ACTIVATES THE RELAY AND THE CURRENT FROM **FL POWER FUSE** FLOWS TO **TERMINAL 4** OF THE POWER RELAY → **TERMINAL 2** → **TERMINALS 7 AND 8** OF THE POWER WINDOW MASTER SW, TO **TERMINAL 5** OF THE POWER WINDOW SW FRONT RH, REAR LH AND REAR RH.

### 1. MANUAL UP OPERATION (DRIVER'S SIDE)

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW (MANUAL SW) AT **UP** POSITION, THE CURRENT FLOWS TO **TERMINALS 7 AND 8** OF THE POWER WINDOW MASTER SW → **TERMINAL 6** → **TERMINAL 3** OF THE POWER WINDOW MOTOR FRONT LH → **TERMINAL 1** → **TERMINAL 13** OF THE POWER WINDOW MASTER SW → **TERMINALS 2 AND 1** → **GROUND**, CAUSING THE POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE POWER WINDOW MASTER SW IS BEING PULLED.

IN DOWN OPERATION, THE CURRENT FLOW TO **TERMINALS 7 AND 8** OF THE POWER WINDOW MASTER SW → **TERMINAL 13** → **TERMINAL 1** OF THE POWER WINDOW MOTOR FRONT LH → **TERMINAL 3** → **TERMINAL 6** OF THE POWER WINDOW MASTER SW → **TERMINALS 2 AND 1** → **GROUND**. ACCORDING TO THE FLOW, THE MOTOR ROTATES IN THE DOWN DIRECTION, LOWERING THE WINDOW.

### 2. AUTO DOWN OPERATION (DRIVER'S SIDE)

WITH THE IGNITION SW ON AND WITH THE AUTO DOWN SW OF THE POWER WINDOW MASTER SW IN **DOWN** POSITION, THE CURRENT FLOWS TO **TERMINAL 7 AND 8** OF THE POWER WINDOW MASTER SW → **TERMINAL 13** → **TERMINAL 1** OF THE POWER WINDOW MOTOR FRONT LH → **TERMINAL 3** → **TERMINAL 6** OF THE POWER WINDOW MASTER SW → **TERMINALS 1 AND 2** → **GROUND**, CAUSING THE MOTOR TO ROTATE TOWARDS THE DOWN SIDE.

THEN THE SOLENOID IN THE POWER WINDOW MASTER SW IS ACTIVATED AND IT LOCKS THE AUTO SW BEING PUSHED, CAUSING THE MOTOR TO CONTINUE TO ROTATE IN AUTO DOWN OPERATION.

WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT BETWEEN **TERMINAL 6** OF THE POWER WINDOW MASTER SW AND **TERMINALS 1 AND 2** INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, AUTO DOWN SW TURNS OFF, AND THE CURRENT FROM **TERMINALS 7 AND 8** OF THE POWER WINDOW MASTER SW TO **TERMINAL 13** IS CUT OFF, STOPPING THE MOTOR SO THAT AUTO STOP OCCURS.

### 3. STOPPING OF AUTO DOWN AT DRIVER'S WINDOW

WHEN THE MANUAL SW (DRIVER'S) IS PUSHED TO THE UP SIDE DURING AUTO DOWN OPERATION, A GROUND CIRCUIT OPENS IN THE POWER WINDOW MASTER SW AND THE CURRENT DOES NOT FLOW FROM **TERMINAL 6** OF THE POWER WINDOW MASTER SW TO **GROUND**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE MANUAL SW IS PUSHED CONTINUOUSLY, THE MOTOR ROTATES IN THE UP DIRECTION IN MANUAL UP OPERATION.

### 4. MANUAL OPERATION BY POWER WINDOW SW (PASSENGER'S SIDE)

WITH THE POWER WINDOW SW (PASSENGER'S) PULLED TO THE UP SIDE, THE CURRENT FROM **TERMINAL 5** OF THE POWER WINDOW SW FRONT RH FLOWS TO **TERMINAL 1** OF THE POWER WINDOW SW → **TERMINAL 3** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE POWER WINDOW SW → **TERMINAL 3** → **TERMINAL 5** OF THE POWER WINDOW MASTER SW → **TERMINALS 1 AND 2** → **GROUND**, CAUSING THE POWER WINDOW MOTOR FRONT RH (PASSENGER'S) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** TO **TERMINAL 3**, AND THE MOTOR ROTATES IN REVERSE.

WHEN THE WINDOW LOCK SW IS PUSHED OUT TO THE NORMAL SIDE, THE GROUND CIRCUIT TO THE PASSENGER'S WINDOW BECOMES OPEN.

AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF THE PASSENGER'S WINDOW IS TRIED, THE CURRENT FROM **TERMINALS 1 AND 2** OF THE POWER WINDOW MASTER SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE PASSENGER'S WINDOW CANNOT BE OPERATED AND WINDOW LOCK OCCURS.

FURTHERMORE REAR LH, RH WINDOW OPERATE THE SAME AS THE ABOVE OPERATION.

### 5. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE DOOR LOCK CONTROL RELAY OPERATES AND KEEPS THE CURRENT FLOW FROM **FL POWER FUSE** TO **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 15** → **TERMINAL 3** OF THE POWER RELAY → **TERMINAL 1** → **GROUND** FOR ABOUT **60** SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM **FL POWER FUSE** TO **TERMINAL 4** OF THE POWER RELAY → **TERMINAL 2** → **TERMINAL 7 AND 8** OF THE POWER WINDOW MASTER SW, TO **TERMINAL 5** OF THE POWER WINDOW SW FRONT RH. AS A RESULT, FOR ABOUT **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, IT IS POSSIBLE TO RAISE AND LOWER THE WINDOW BY THE FUNCTIONING OF THIS RELAY. ALSO, BY OPENING THE FRONT DOOR (THE DOOR COURTESY SW ON) WITHIN ABOUT **60** SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO **TERMINAL 2 OR 14** OF DOOR LOCK CONTROL RELAY. AS A RESULT, THE RELAY TURNS OFF, AND UP AND DOWN MOVEMENT OF THE WINDOW STOPS.

**SERVICE HINTS**

**P 6 POWER WINDOW MASTER SW**

- 7, 8-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION OR KEY OFF OPERATED
- 1, 2-GROUND : ALWAYS CONTINUITY
- 6-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW **ON** AND MASTER SW (DRIVER'S WINDOW) AT **UP** POSITION
- 13-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW **ON** AND MASTER SW (DRIVER'S WINDOW) AT **DOWN** OR **AUTO DOWN** POSITION

**WINDOW LOCK SW**

OPEN WITH THE WINDOW LOCK SW AT **LOCK** POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D16	26	J 2	25	P10	27
D17	26	P 6	27	P11	27
D22	26	P 7	27	P12	27
F11	25	P 8	27	P13	27
J 1	25	P 9	27		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID2		
II1	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
II2		
BJ1	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BJ2		
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BN1	34	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BP1	34	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

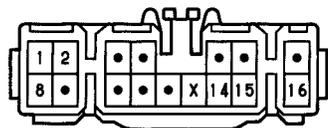
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	32	COWL WIRE	B 2	36	FRONT DOOR LH WIRE
I 3			B 4		
I12					

D16, D17 BLUE



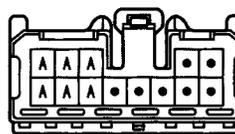
D22 GRAY



F11

(SEE PAGE 20)

J 1



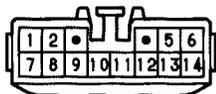
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J 2 BLUE



(HINT:SEE PAGE 7)

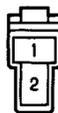
P 6



P 7, P 8



P 9, P10



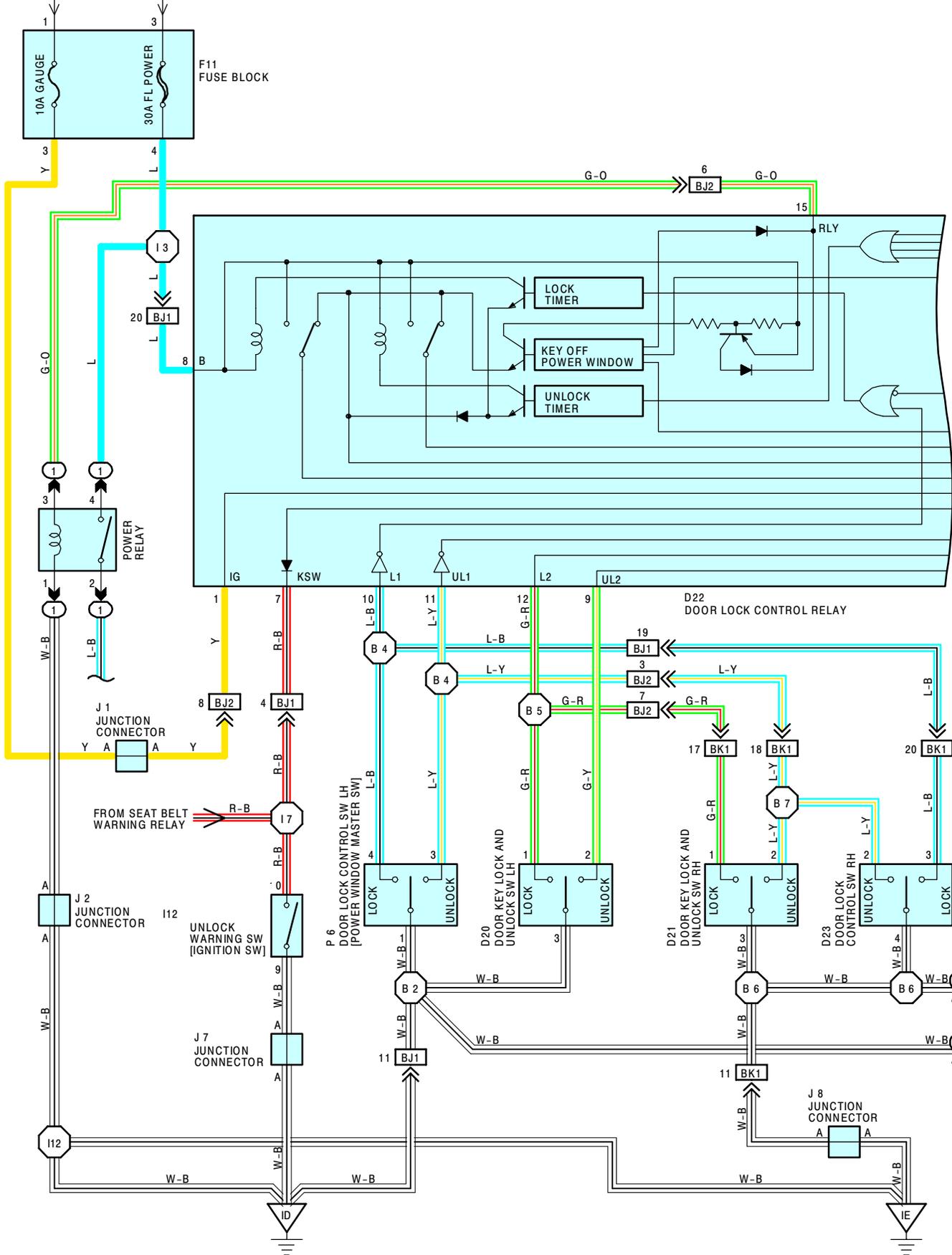
P11, P12, P13

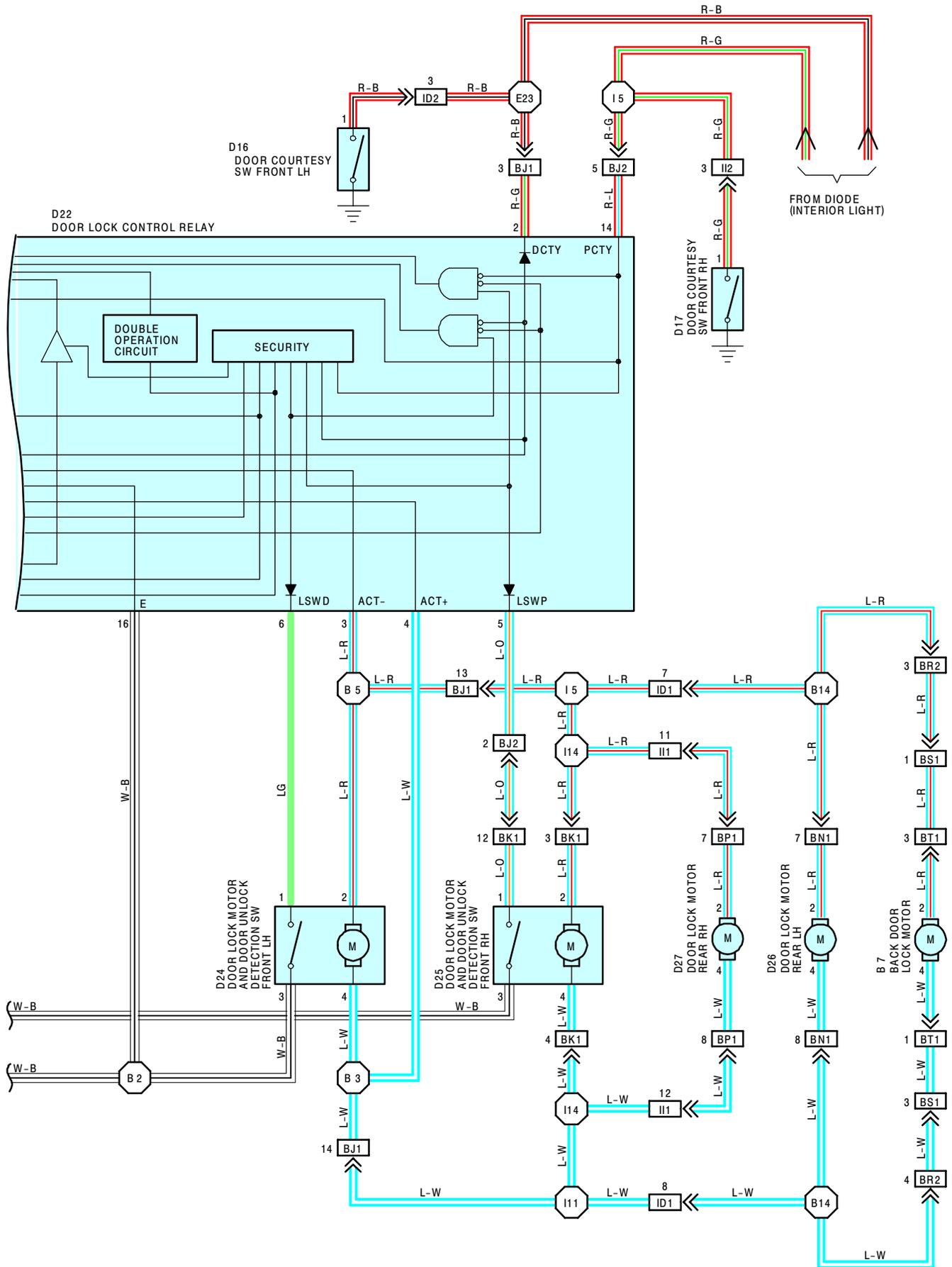




# DOOR LOCK CONTROL

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# DOOR LOCK CONTROL

## SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY THROUGH **FL POWER FUSE**.

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 1** OF THE DOOR LOCK CONTROL RELAY THROUGH **GAUGE FUSE**.

### 1. MANUAL LOCK OPERATION

TO CHANGE THE DOOR LOCK CONTROL SW OR KEY LOCK AND UNLOCK SW TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINALS 10** OR **12** OF THE DOOR LOCK CONTROL RELAY, CAUSING THE RELAY TO FUNCTION. THE CURRENT FLOWS FROM **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY TO **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK MOTORS → **TERMINAL 2** → **TERMINAL 3** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING DOORS TO LOCK.

### 2. MANUAL UNLOCK OPERATION

TO CHANGE THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINALS 9** OR **11** OF THE DOOR LOCK CONTROL RELAY, CAUSING THE RELAY TO FUNCTION. THE CURRENT FLOWS FROM **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 3** → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING DOORS TO UNLOCK.

### 3. DOUBLE OPERATION UNLOCK OPERATION

WHEN THE DOOR KEY LOCK AND UNLOCK SW (DRIVER'S) IS TURNED TO THE UNLOCK SIDE, ONLY THE DRIVER'S DOOR IS MECHANICALLY UNLOCKED. TURNING THE DOOR KEY LOCK AND UNLOCK SW (DRIVER'S) TO THE UNLOCK SIDE CAUSES A SIGNAL TO BE INPUT TO **TERMINAL 9** OF THE DOOR LOCK CONTROL RELAY, AND IF THE SIGNAL IS INPUT AGAIN WITHIN **3** SECONDS BY TURNING THE SWITCH TO THE UNLOCK SIDE AGAIN, THE CURRENT FLOWS FROM **TERMINAL 3** OF THE DOOR LOCK CONTROL RELAY TO **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING THE DOOR LOCK MOTOR TO OPERATE TO UNLOCK THE DOORS.

### 4. IGNITION KEY REMINDER OPERATION

\* OPERATING DOOR LOCK KNOB (OPERATION OF DOOR LOCK MOTORS)

WITH THE IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN EITHER FRONT DOOR IS OPENED AND LOCKED USING DOOR LOCK KNOB (DOOR LOCK MOTOR), THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED SOON BY THE FUNCTION OF THE DOOR LOCK CONTROL RELAY. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 3** → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING ALL THE DOORS TO UNLOCK.

\* OPERATING DOOR LOCK CONTROL SW OR DOOR KEY LOCK SW

WITH THE IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN EITHER FRONT DOOR IS OPENED AND LOCKED USING DOOR LOCK CONTROL SW OR KEY SW, THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCK SOON BY THE FUNCTION OF SW CONTAINED IN MOTORS, WHICH THE SIGNAL IS INPUT TO **TERMINAL 6** (DRIVER'S) OR **5** (PASSENGER'S) OF THE DOOR LOCK CONTROL RELAY. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY TO **TERMINAL 3** → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING ALL THE DOORS TO UNLOCK.

\* IN CASE OF KEY LESS LOCK

WITH THE IGNITION KEY IN THE CYLINDER (UNLOCK WARNING SW ON), WHEN THE UNLOCK FUNCTION IS DISTURBED MORE THAN **0.2** SECOND, FOR EXAMPLE PUSHING THE DOOR LOCK KNOB ETC., THE DOOR HOLDS ON LOCK CONDITION. AFTER CLOSING THE DOOR, THE DOOR COURTESY SW INPUTS THE SIGNAL INTO **TERMINAL 2** OR **14** OF THE DOOR LOCK CONTROL RELAY. BY THIS INPUT SIGNAL, THE ECU WORKS AND THE CURRENT FLOWS FROM **TERMINAL 8** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 3** → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 4** → **TERMINAL 4** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 16** → **GROUND**, CAUSING ALL THE DOORS TO UNLOCK.

**SERVICE HINTS****D22 DOOR LOCK CONTROL RELAY**

- 16-GROUND : ALWAYS CONTINUITY  
 2-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN  
 8-GROUND : ALWAYS APPROX. 12 VOLTS  
 3-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION  
 \* DOOR LOCK CONTROL SW UNLOCKED  
 \* DOOR LOCK CONTROL SW LOCKED WITH THE IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN (IGNITION KEY REMINDER FUNCTION)  
 \* DOOR LOCK KNOB LOCKED WITH THE IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN (IGNITION KEY REMINDER FUNCTION)  
 \* UNLOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY  
 4-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION  
 \* DOOR LOCK CONTROL SW LOCKED  
 \* LOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY  
 10-GROUND : 0 VOLTS WITH THE DOOR LOCK CONTROL SW LOCKED  
 14-GROUND : CONTINUITY WITH THE PASSENGER'S DOOR OPEN  
 6-GROUND : CONTINUITY WITH THE DRIVER'S DOOR LOCK KNOB UNLOCKED  
 5-GROUND : CONTINUITY WITH THE PASSENGER'S DOOR LOCK KNOB UNLOCKED  
 11-GROUND : 0 VOLTS WITH THE DOOR LOCK CONTROL SW UNLOCKED, PASSENGER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY  
 1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION  
 9-GROUND : 0 VOLTS WITH THE DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY  
 12-GROUND : 0 VOLTS WITH THE DRIVER'S, PASSENGER'S DOOR LOCK CYLINDER LOCKED WITH KEY

**I12 UNLOCK WARNING SW [IGNITION SW]**

- 10-9 : CLOSED WITH THE IGNITION KEY IN CYLINDER

**D20, D21 DOOR KEY LOCK AND UNLOCK SW LH, RH**

- 2-3 : CLOSED WITH THE DOOR LOCK CYLINDER UNLOCKED WITH KEY  
 1-3 : CLOSED WITH THE DOOR LOCK CYLINDER LOCKED WITH KEY

**D16, D17 DOOR COURTESY SW FRONT LH, RH**

- 1-GROUND : CLOSED WITH THE FRONT DOOR OPEN

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 7	26	D23	26	I12	25
D16	26	D24	26	J 1	25
D17	26	D25	26	J 2	25
D20	26	D26	26	J 7	25
D21	26	D27	26	J 8	25
D22	26	F11	25	P 6	27

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID2		
II1	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
II2		
BJ1	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BJ2		
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BN1	34	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BP1	34	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)
BR2	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BS1	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
BT1	36	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL



# DOOR LOCK CONTROL

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E23	30	COWL WIRE	B 2	36	FRONT DOOR LH WIRE
I 3	32		B 3		
I 5			B 4		
I 7			B 5		
I11			B 6		
I12	B 7				
I14			B14	36	FLOOR WIRE

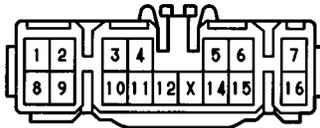
B 7



D16, D17 BLUE D20, D21



D22 GRAY



D23



D24, D25



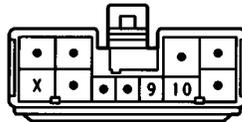
D26, D27



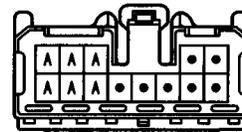
F 11

(SEE PAGE 20)

I12 BLACK



J 1



(HINT:SEE PAGE 7)

J 2 BLUE



(HINT:SEE PAGE 7)

J 7 BLUE



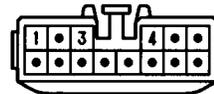
(HINT SEE PAGE 7)

J 8 BLUE



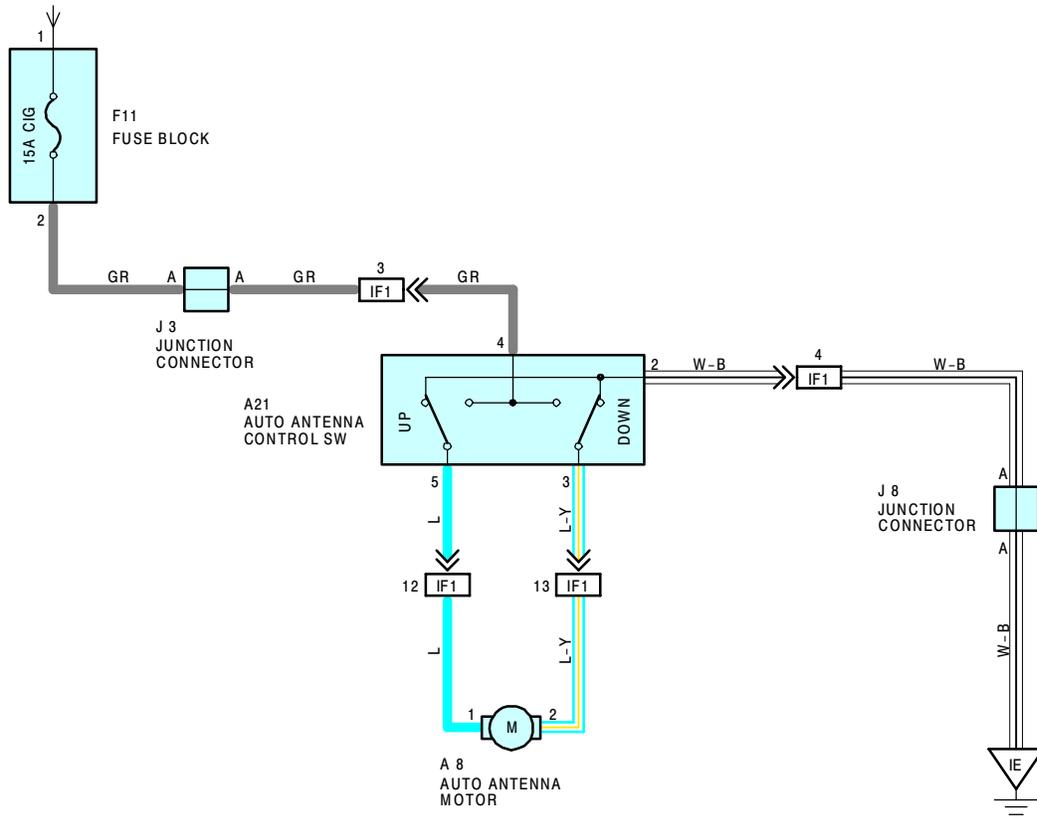
(HINT:SEE PAGE 7)

P 6





FROM POWER SOURCE SYSTEM (SEE PAGE 52)



### SERVICE HINTS

#### A21 AUTO ANTENNA SW

- 4-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ACC OR ON POSITION
- 2-GROUND : ALWAYS CONTINUITY

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 8	22	F11	25	J 8	25
A21	24	J 3	25		

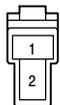
### □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)

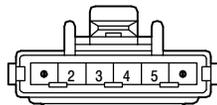
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	32	RIGHT KICK PANEL

A 8 GRAY



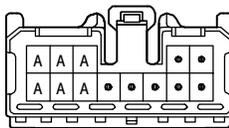
A21 BLACK



F11

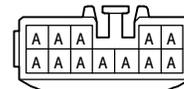
(SEE PAGE 20)

J 3



(HINT : SEE PAGE 7)

J 8 BLUE

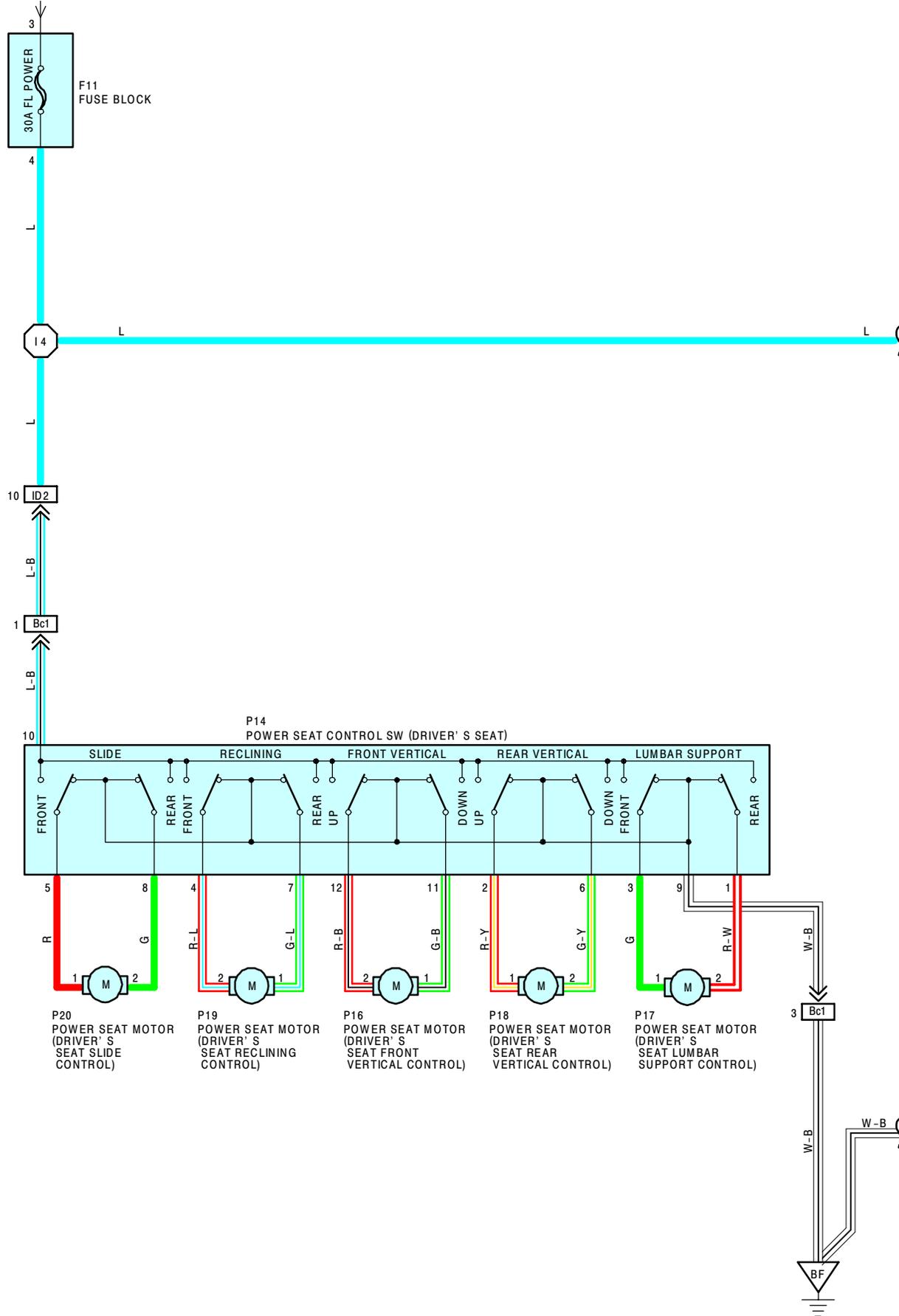


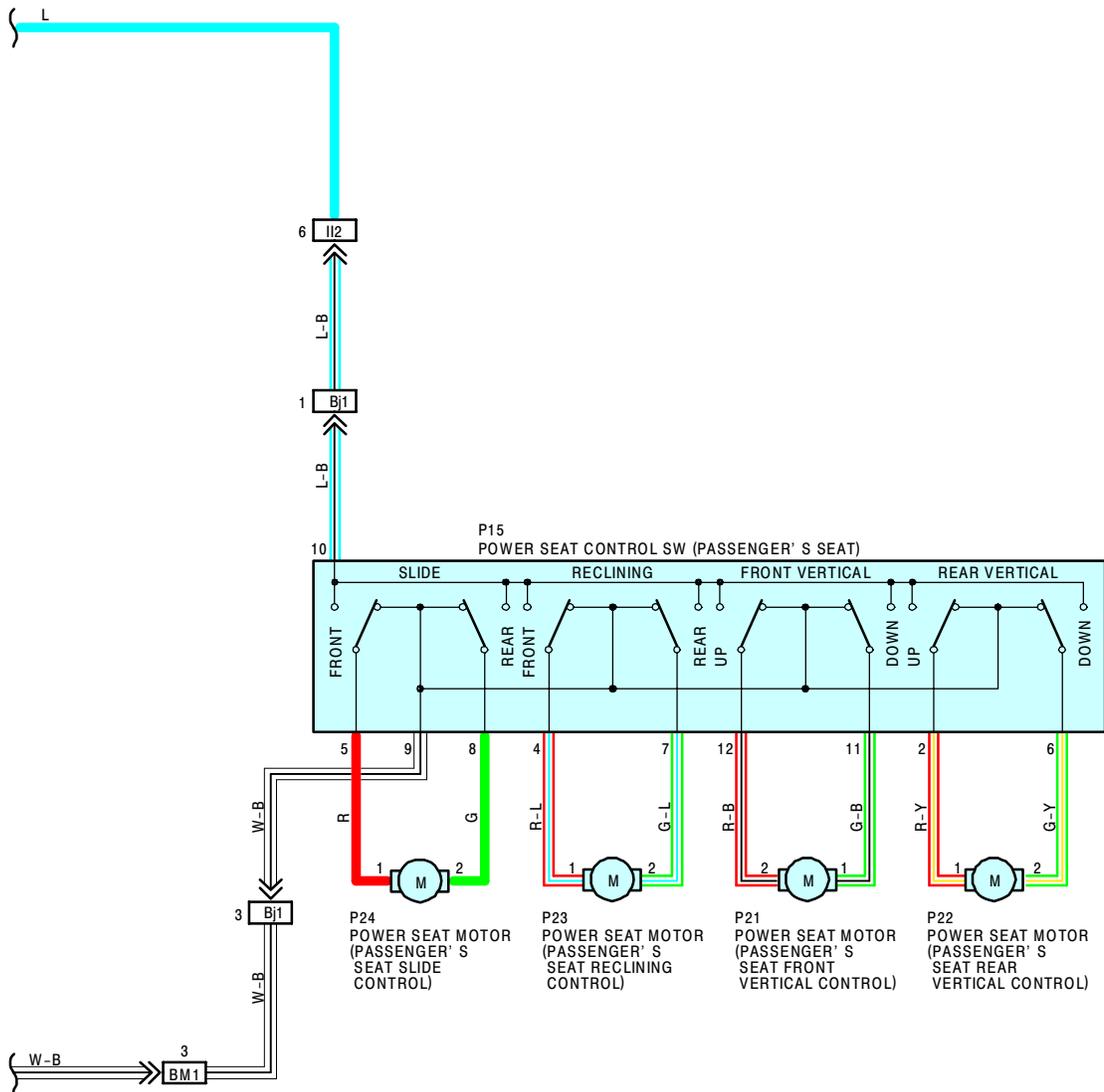
(HIT : SEE PAGE 7)



# POWER SEAT

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# POWER SEAT

## SERVICE HINTS

### P14 POWER SEAT CONTROL SW (DRIVER'S SEAT)

- 10-5 : CLOSED WITH THE DRIVER'S SEAT AT FRONT SLIDE OPERATION
- 10-8 : CLOSED WITH THE DRIVER'S SEAT AT REAR SLIDE OPERATION
- 10-4 : CLOSED WITH THE DRIVER'S SEAT AT FRONT RECLINING OPERATION
- 10-7 : CLOSED WITH THE DRIVER'S SEAT AT REAR RECLINING OPERATION
- 10-12 : CLOSED WITH THE DRIVER'S SEAT AT FRONT VERTICAL UP OPERATION
- 10-11 : CLOSED WITH THE DRIVER'S SEAT AT FRONT VERTICAL DOWN OPERATION
- 10-2 : CLOSED WITH THE DRIVER'S SEAT AT REAR VERTICAL UP OPERATION
- 10-6 : CLOSED WITH THE DRIVER'S SEAT AT REAR VERTICAL DOWN OPERATION
- 10-3 : CLOSED WITH THE DRIVER'S SEAT AT LUMBAR SUPPORT FRONT OPERATION
- 10-1 : CLOSED WITH THE DRIVER'S SEAT AT LUMBAR SUPPORT REAR OPERATION

9-GROUND : ALWAYS CONTINUITY

### P15 POWER SEAT CONTROL SW (PASSENGER'S SEAT)

- 10-5 : CLOSED WITH THE PASSENGER'S SEAT AT FRONT SLIDE OPERATION
- 10-8 : CLOSED WITH THE PASSENGER'S SEAT AT REAR SLIDE OPERATION
- 10-4 : CLOSED WITH THE PASSENGER'S SEAT AT FRONT RECLINING OPERATION
- 10-7 : CLOSED WITH THE PASSENGER'S SEAT AT REAR RECLINING OPERATION
- 10-12 : CLOSED WITH THE PASSENGER'S SEAT AT FRONT VERTICAL UP OPERATION
- 10-11 : CLOSED WITH THE PASSENGER'S SEAT AT FRONT VERTICAL DOWN OPERATION
- 10-2 : CLOSED WITH THE PASSENGER'S SEAT AT REAR VERTICAL UP OPERATION
- 10-6 : CLOSED WITH THE PASSENGER'S SEAT AT REAR VERTICAL DOWN OPERATION

9-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	P17	28	P21	28
P14	28	P18	28	P22	28
P15	28	P19	28	P23	28
P16	28	P20	28	P24	28

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
II2	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
BM1	34	FLOOR NO. 2 WIRE AND FLOOR NO. 1 WIRE (UNDER THE CENTER CONSOLE)
Bc1	38	FLOOR NO. 1 WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)
BI1	38	FLOOR NO. 2 WIRE AND SEAT NO. 1 WIRE (UNDER THE PASSENGER'S SEAT)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BF	34	UNDER THE CENTER CONSOLE BOX

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I4	32	COWL WIRE			

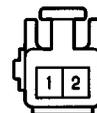
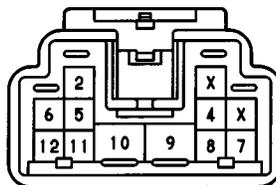
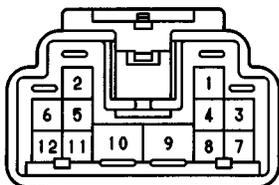
F11

P14

P15

P16, P21 BLUE

(SEE PAGE 20)



P17

P18, P22 ORANGE

P19, P20  
P23, P24





A 4 (A) BLACK



A 5 (B) GRAY



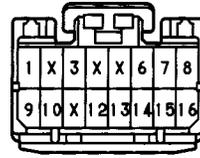
A 6 (A) GRAY



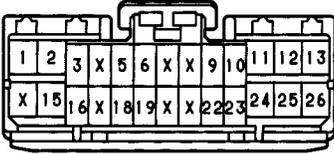
A 7 (B) GRAY



A12 (A) DARK GRAY



A13 (B) DARK GRAY



A22 GRAY



A23, A24



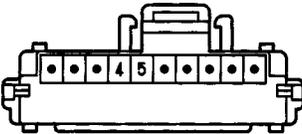
A25, A26



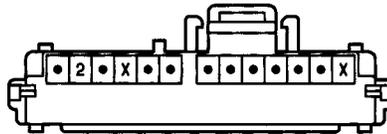
B 1 GRAY



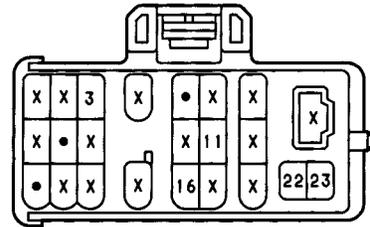
C10 (A) GRAY



C11 (B) BLUE



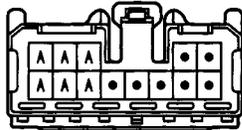
D 1 BLACK



F11

(SEE PAGE 20)

J 1



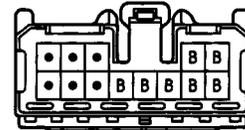
(HINT:SEE PAGE 7)

J 2 BLUE



(HINT:SEE PAGE 7)

J 6

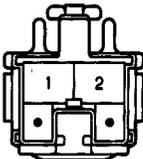


(HINT:SEE PAGE 7)

P 4



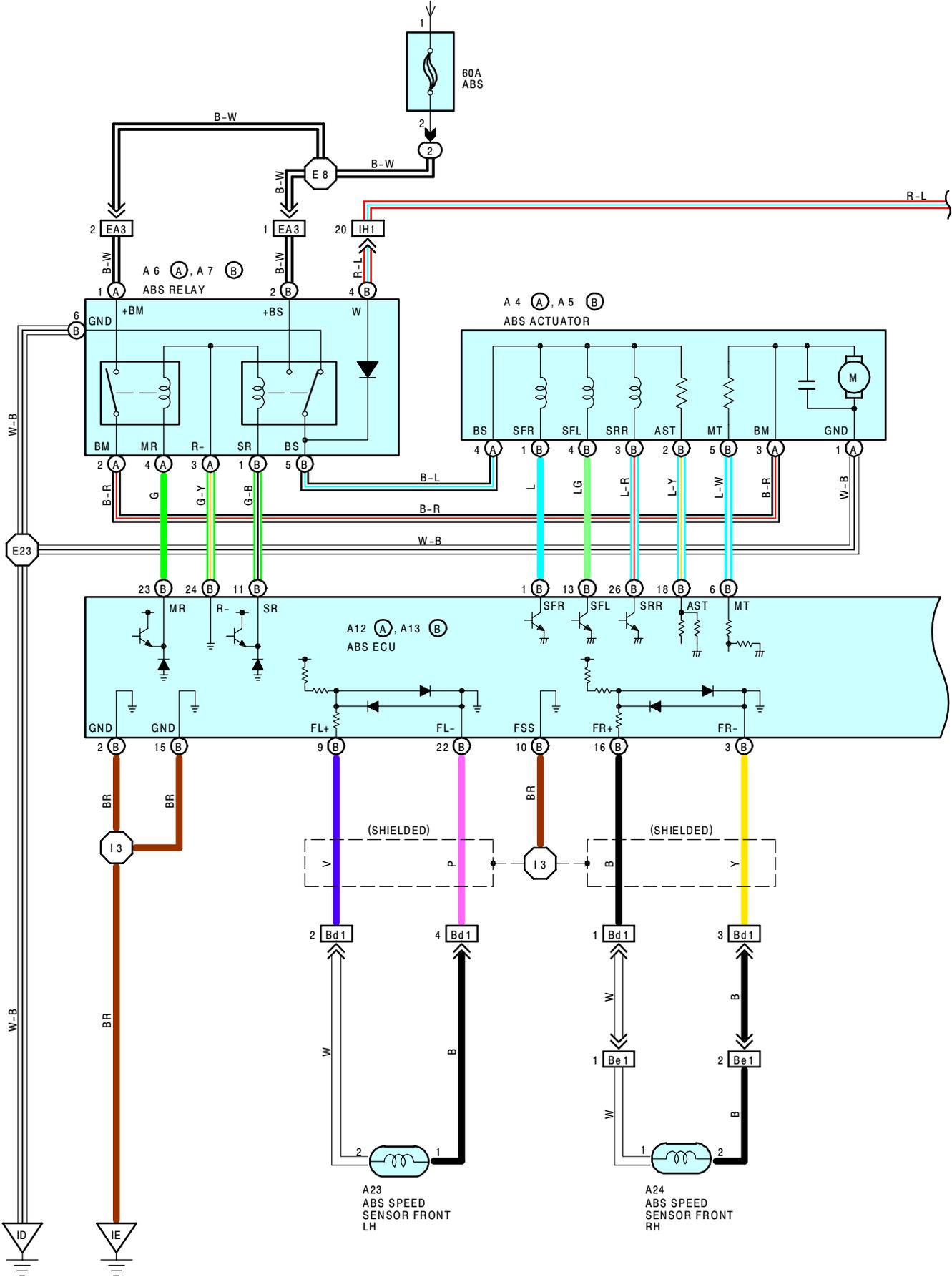
S13 BLACK

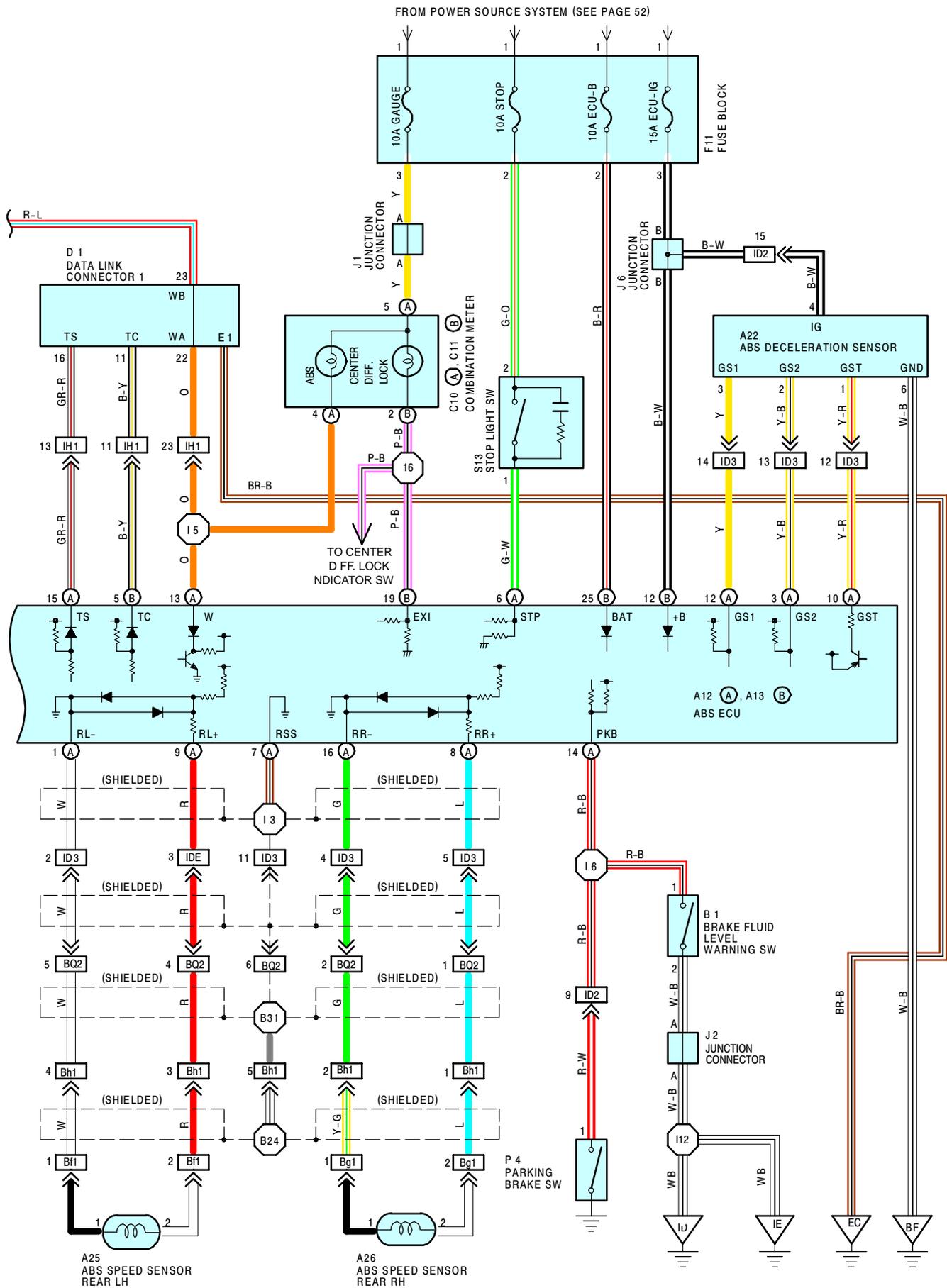




# ABS

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# ABS

## 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 SIGNAL

(1) SPEED SENSOR SIGNAL

THE TOP SPEED OF THE WHEELS IS DETECTED AND INPUT TO **TERMINALS FL+, FR+, RL+ AND RR+** OF THE ABS ECU.

(2) STOP LIGHT SW SIGNAL

A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ABS ECU WHEN BRAKE PEDAL IS DEPRESSED.

(3) PARKING BRAKE SW SIGNAL

A SIGNAL IS INPUT TO **TERMINAL PKB** OF THE ABS ECU WHEN THE PARKING BRAKE SW IS ON.

(4) DECELERATION SENSOR SIGNAL

THE DEGREE OF VEHICLE DECELERATION IS DETECTED AND INPUT TO **TERMINAL GS1, GS2 AND GST** OF THE ABS ECU.

(5) TRANSFER CONTROL SIGNAL

WHILE THE TRANSFER SHIFT LEVER IS IN **L4** POSITION, THE CENTER DIFF. LOCK INDICATOR SW DETECTS A SIGNAL OF CENTER DIFF. LOCK AND THE SIGNAL IS INPUT TO **TERMINAL EXI** OF THE ABS ECU.

### 2. SYSTEM OPERATION

(TRANSFER L4 POSITION)

WHEN THE TRANSFER SHIFT LEVER IS MOVED TO **L4** POSITION, THE CENTER DIFF. IS LOCKED, THEN THE ABS IS NOT IN OPERATION AND THE ABS WARNING LIGHT IS LIGHTED UP.

(TRANSFER EXCEPT L4 POSITION)

DURING SUDDEN BRAKING, THE ABS ECU WHICH HAS SIGNALS INPUT FROM EACH SENSOR, CONTROLS THE CURRENT TO THE SOLENOID INSIDE THE ACTUATOR, AND CAUSES 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, PREVENTING LOCKING OF THE VEHICLE WHEELS. IF THE ECU JUDGES THAT THE HYDRAULIC PRESSURE ACTING ON THE WHEEL CYLINDER IS INSUFFICIENT, THE CURRENT ACTING ON THE SOLENOID IS CONTROLLED AND THE HYDRAULIC PRESSURE IS INCREASED. HOLDING OF THE HYDRAULIC PRESSURE IS ALSO CONTROLLED BY THE ECU, BY THE SAME METHOD AS ABOVE. BY REPEATED PRESSURE, REDUCTION, HOLDING AND INCREASED ARE REPEATED TO MAINTAIN VEHICLE STABILITY AND IMPROVE STEERABILITY DURING SUDDEN BRAKING.

## SERVICE HINTS

### A12 (A), A13 (B) ABS ECU

(CONNECTOR THE ECU CONNECTOR)

**(A) 15-GROUND** : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE DATA LINK CONNECTOR 1 **TS-E1** NOT CONNECTED

**(B) 5-GROUND** : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE DATA LINK CONNECTOR 1 **TC-E1** NOT CONNECTED

**(B) 1-GROUND** :

**(B) 6-GROUND** :

**(B) 18-GROUND** :

**(B) 26-GROUND** :

**(B) 13-GROUND** :

APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND THE ABS WARNING LIGHT GOES OFF

**(B) 2-GROUND** : ALWAYS CONTINUITY

**(B) 15-GROUND** : ALWAYS CONTINUITY

**(B) 12-GROUND** : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

**(A) 6-GROUND** : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED

**(B) 25-GROUND** : ALWAYS APPROX. 12 VOLTS

**(A) 14-GROUND** : APPROX. 12 VOLTS WITH THE ENGINE RUNNING AND PARKING BRAKE LEVER RELEASED OR BRAKE FLUID LEVEL WARNING SW ON

(DISCONNECT THE ECU CONNECTOR)

**(B) 1-(B) 18** : APPROX. 6 Ω

**(B) 13-(B) 18** : APPROX. 6 Ω

**(B) 26-(B) 18** : APPROX. 6 Ω

**(B) 9-(B) 22** : 0.9-1.8 KΩ

**(B) 16-(B) 3** : 0.9-1.8 KΩ

**(B) 11-(B) 24** : 60-100 Ω

**(B) 23-(B) 24** : 50-80 Ω

**(A) 1-(A) 9** : 0.5-1.6 KΩ

**(A) 16-(A) 8** : 0.5-1.6 KΩ

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 4	A	22	A23	26	D 1	22		
A 5	B	22	A24	26	F11	25		
A 6	A	22	A25	26	J 1	25		
A 7	B	22	A26	26	J 2	25		
A12	A	24	B 1		J 6	25		
A13	B	24	C10	A	P 4	27		
A22		26	C11	B	S13	25		

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID3		
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
BQ2	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
Bd1	36	COWL WIRE AND SPEED CONTROL SENSOR NO. 1 WIRE (LEFT KICK PANEL)
Be1	36	SPEED SENSOR NO. 2 WIRE AND SPEED SENSOR NO. 1 WIRE (FRONT AXLE HOUSING LH)
Bf1	36	FRAME NO. 2 WIRE AND SPEED SENSOR NO. 3 WIRE (REAR AXLE HOUSING LH)
Bg1	36	FRAME NO. 2 WIRE AND SPEED SENSOR NO. 4 WIRE (REAR AXLE HOUSING RH)
Bh1	36	FLOOR NO. 3 WIRE AND FRAME NO. 2 WIRE (LEFT QUARTER PANEL INNER)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 8	30	ENGINE ROOM MAIN WIRE	I 6	32	COWL WIRE
E23	30	COWL WIRE	I12		
I 3	32		B24	36	FLAME NO. 2 WIRE
I 5			B31	36	FLOOR NO. 3 WIRE



# CRUISE CONTROL

## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS THROUGH **GAUGE** FUSE TO **TERMINAL 5** OF THE CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH **ECU-IG** FUSE FLOWS TO **TERMINAL 14** OF THE CRUISE CONTROL ECU.

WHEN THE IGNITION SW IS ON AND THE CRUISE CONTROL MAIN SW IS TURNED ON, A SIGNAL IS INPUT FROM **TERMINAL 15** OF THE CRUISE CONTROL MAIN SW TO **TERMINAL 4** OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT TO **TERMINAL 14** OF THE CRUISE CONTROL ECU FLOWS TO **TERMINAL 13** OF THE CRUISE CONTROL ECU → **GROUND**, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT FROM THE **GAUGE** FUSE FLOWS TO **TERMINAL 5** OF THE CRUISE CONTROL INDICATOR LIGHT → **TERMINAL 9** → **TERMINAL 5** OF THE CRUISE CONTROL ECU → **TERMINAL 13** → **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP TO INDICATE THAT THE CRUISE CONTROL IS READY FOR OPERATION.

### 1. SET OPERATION

WHEN THE CRUISE CONTROL MAIN SW IS TURNED ON AND THE SET SW IS PUSHED WITH THE VEHICLE SPEED WITHIN THE SET LIMIT (APPROX. 36 KM/H, 22 MPH TO 200 KM/H, 124 MPH), A SIGNAL IS INPUT TO **TERMINAL 18** OF THE CRUISE CONTROL ECU AND THE VEHICLE SPEED AT THE TIME THE SET SW IS RELEASED IS MEMORIZED IN THE ECU AS THE SET SPEED.

### 2. SET SPEED CONTROL

DURING CRUISE CONTROL DRIVING, THE CRUISE CONTROL ECU COMPARES THE SET SPEED MEMORIZED IN THE CRUISE CONTROL ECU WITH THE ACTUAL VEHICLE SPEED INPUT INTO **TERMINAL 20** OF THE CRUISE CONTROL ECU FROM THE COMBINATION METER, AND CONTROLS THE CRUISE CONTROL ACTUATOR TO MAINTAIN THE SET SPEED.

WHEN THE ACTUAL SPEED IS LOWER THAN THE SET SPEED, THE ECU CAUSES THE CURRENT TO THE CRUISE CONTROL ACTUATOR TO FLOW FROM **TERMINAL 12** OF THE CRUISE CONTROL ECU → **TERMINAL 6** OF THE CRUISE CONTROL ACTUATOR → **TERMINAL 7** → **TERMINAL 11** OF THE CRUISE CONTROL ECU. AS A RESULT, THE MOTOR IN THE CRUISE CONTROL ACTUATOR IS ROTATED TO OPEN THE THROTTLE VALVE, AND THE THROTTLE CABLE IS PULLED TO INCREASE THE VEHICLE SPEED. WHEN THE ACTUAL DRIVING SPEED IS HIGHER THAN THE SET SPEED, THE CURRENT TO CRUISE CONTROL ACTUATOR FLOWS FROM **TERMINAL 11** OF THE CRUISE CONTROL ECU → **TERMINAL 7** OF THE CRUISE CONTROL ACTUATOR → **TERMINAL 6** → **TERMINAL 12** OF THE CRUISE CONTROL ECU.

THIS CAUSES THE MOTOR IN THE CRUISE CONTROL ACTUATOR TO ROTATE TO CLOSE THE THROTTLE VALVE AND RETURN THE THROTTLE CABLE TO DECREASE THE VEHICLE SPEED.

### 3. COAST CONTROL

DURING CRUISE CONTROL DRIVING, WHILE THE COAST SW IS ON, THE CRUISE CONTROL ACTUATOR RETURNS THE THROTTLE CABLE TO CLOSE THE THROTTLE VALVE AND DECREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE COAST SWITCH IS TURNED OFF IS MEMORIZED, AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

### 4. ACCEL CONTROL

DURING CRUISE CONTROL DRIVING, WHILE THE ACCEL SW IS TURNED ON, THE CRUISE CONTROL ACTUATOR PULLS THE THROTTLE CABLE TO OPEN THE THROTTLE VALVE AND INCREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE ACCEL SW IS TURNED OFF IS MEMORIZED, AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

### 5. RESUME CONTROL

UNLESS THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT (APPROX. 40 KM/H, 25 MPH) AFTER CANCELING THE SET SPEED BY THE CANCEL SW, PUSHING THE RESUME SW WILL CAUSE THE VEHICLE TO RESUME THE SPEED SET BEFORE CANCELLATION.

### 6. MANUAL CANCEL MECHANISM

IF ANY OF THE FOLLOWING OPERATIONS OCCURS DURING CRUISE CONTROL OPERATION, THE MAGNETIC CLUTCH OF THE ACTUATOR MOTOR TURNS OFF, THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE, AND THE CRUISE CONTROL IS RELEASED.

- \* PLACING THE IGNITION SW AT **ST** POSITION. "SIGNAL INPUT TO **TERMINAL 2** OF THE CRUISE CONTROL ECU"
- \* DEPRESSING BRAKE PEDAL (STOP LIGHT SW ON). "SIGNAL INPUT TO **TERMINAL 16** OF THE CRUISE CONTROL ECU"
- \* PUSH THE CANCEL SW (CANCEL SW ON). "SIGNAL INPUT TO **TERMINAL 18** OF THE CRUISE CONTROL ECU"
- \* PUSH THE MAIN SWITCH (MAIN SW OFF) "SIGNAL INPUT TO **TERMINAL 4** OF THE CRUISE CONTROL ECU"

## 7. AUTO CANCEL FUNCTION

A) IF ANY OF THE FOLLOWING OPERATING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, THE CURRENT FLOW TO MAGNETIC CLUTCH IS STOPPED, AND THE CRUISE CONTROL IS RELEASED. (MAIN SW TURNS OFF).

WHEN THIS OCCURS, THE IGNITION SW MUST BE TURNED OFF ONCE BEFORE THE MAIN SWITCH WILL TURN ON.

- \* OVER CURRENT TO TRANSISTER DRIVING MOTOR AND/OR MAGNETIC CLUTCH.
- \* WHEN CURRENT CONTINUED TO FLOW TO THE MOTOR INSIDE THE ACTUATOR IN THE THROTTLE VALVE "OPEN" DIRECTION.
- \* OPEN CIRCUIT IN MAGNETIC CLUTCH.
- \* MOMENTARY INTERRUPTION OF VEHICLE SPEED SIGNAL.
- \* SHORT CIRCUIT IN CRUISE CONTROL SW.
- \* MOTOR DOES NOT OPERATE DESPITE THE MOTOR DRIVE SIGNAL BEING OUTPUT.

B) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, AND THE CRUISE CONTROL IS RELEASED. (THE POWER OF MAGNETIC CLUTCH IS CUT OFF UNTIL THE SET SW IS "ON" AGAIN.)

- \* WHEN THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT, APPROX. **40 KM/H (25 MPH)**
- \* WHEN THE VEHICLE SPEED FALLS MORE THAN **16 KM/H (10 MPH)** BELOW THE SET SPEED, E.G. ON AN UPWARD SLOPE.
- \* WHEN POWER TO THE CRUISE CONTROL SYSTEM IS MOMENTARILY CUT OFF.

## 8. AUTOMATIC TRANSMISSION CONTROL FUNCTION

\* IN OVERDRIVE, IF THE VEHICLE SPEED BECOMES LOWER THAN THE OVERDRIVE CUT SPEED (SET SPEED MINUS APPROX. **4 KM/H, 2.5 MPH**) DURING CRUISE CONTROL OPERATION, SUCH AS DRIVING UP A HILL, THE OVERDRIVE IS RELEASED AND THE POWER INCREASED TO PREVENT A REDUCTION IN VEHICLE SPEED.

\* AFTER RELEASING THE OVERDRIVE, VEHICLE SPEED BECOMES HIGHER THAN THE OVERDRIVE RETURN SPEED (SET SPEED MINUS APPROX. **2 KM/H, 1.2 MPH**), THE ECU JUDGES BY THE SIGNALS FROM POTENTIONMETER OF THE ACTUATOR THAT THE UPWARD SLOPE HAS FINISHED, AND OVERDRIVE IS RESUMED AFTER APPROXIMATELY **6 SECONDS**.

\* DURING CRUISE CONTROL DRIVING, THE CRUISE CONTROL OPERATION SIGNAL IS OUTPUT FROM THE CRUISE CONTROL ECU TO THE ENGINE CONTROL MODULE ECU UPON RECEIVING THIS SIGNAL, SO THE ENGINE CONTROL MODULE ECU CHANGES THE SHIFT PATTERN TO NORMAL.

TO MAINTAIN SMOOTH CRUISE CONTROL OPERATION (ON A DOWNWARD SLOPE, ETC.), LOCK-UP RELEASE OF THE TRANSMISSION WHEN THE IDLING POINT OF THE THROTTLE POSITION IS "ON" IS FORBIDDEN.

## SERVICE HINTS

### C4 CRUISE CONTROL ACTUATOR

1-3 : APPROX. **2 K $\Omega$**

5-4 : APPROX. **38.5  $\Omega$**

### C17 CRUISE CONTROL ECU

14-GROUND : APPROX. **12 VOLTS** WITH THE IGNITION SW AT **ON** POSITION

15-GROUND : ALWAYS APPROX. **12 VOLTS**

20-GROUND : **4 PULSE** WITH **1 ROTATION** OF ROTOR SHAFT

18-GROUND : APPROX. **418  $\Omega$**  WITH THE CANCEL SW ON IN THE CONTROL SW

APPROX. **68  $\Omega$**  WITH THE RES/ACC SW ON IN THE CONTROL SW

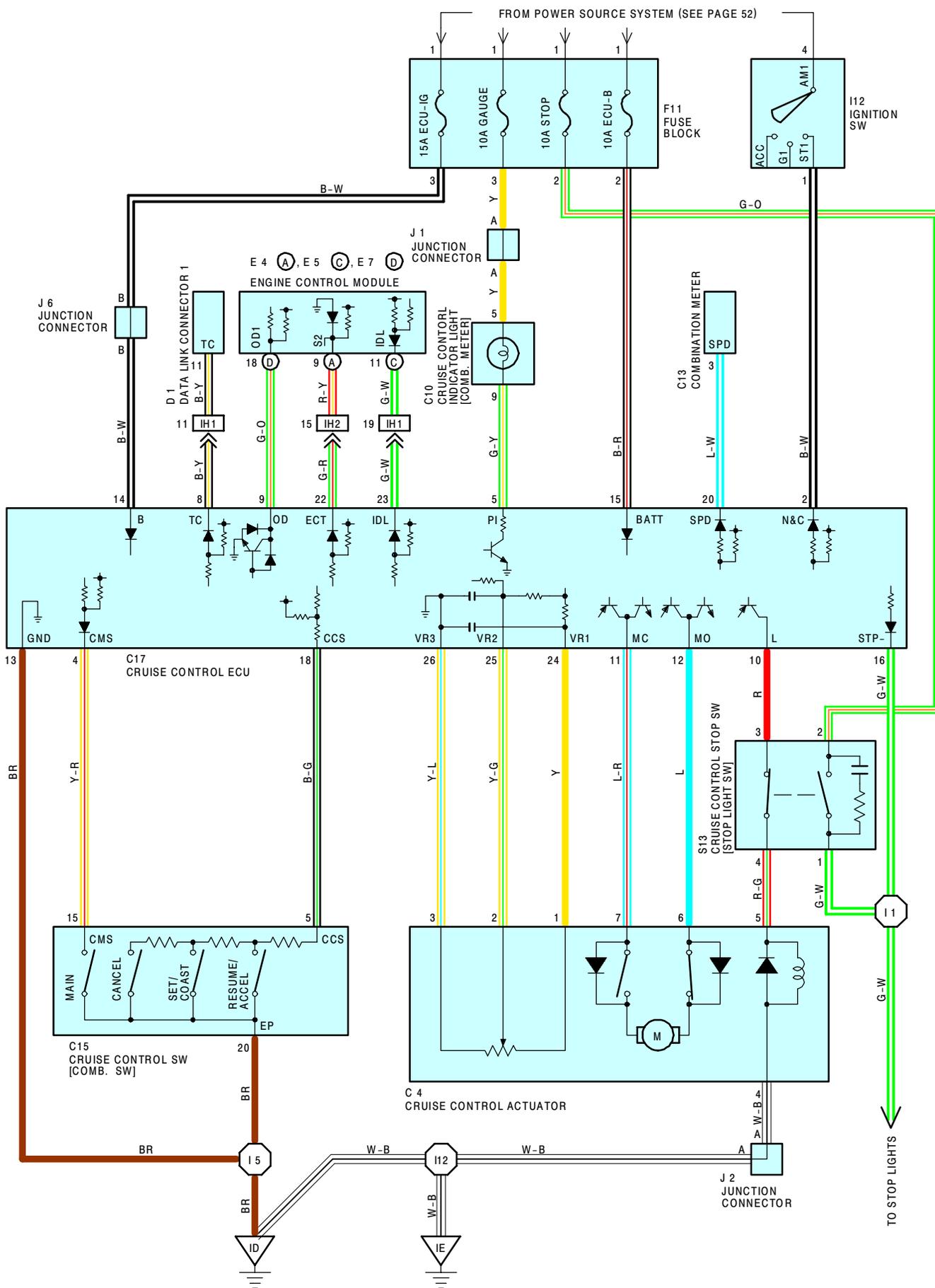
APPROX. **198  $\Omega$**  WITH THE SET/COAST SW ON IN THE CONTROL SW

4-GROUND : CONTINUITY WITH THE MAIN SW ON IN THE CONTROL SW

13-GROUND : ALWAYS CONTINUITY



# CRUISE CONTROL



**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 4	22	D 1	22	I12	25
C10	24	E 4	A	J 1	25
C13	24	E 5	C	J 2	25
C15	24	E 7	D	J 6	25
C17	24	F11	25	S13	25

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		

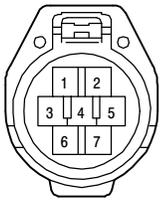
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

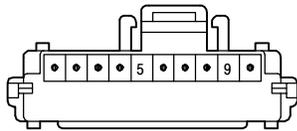
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	32	COWL WIRE	I12	32	COWL WIRE
I 5					

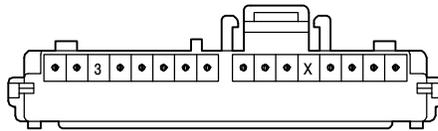
C 4 GRAY



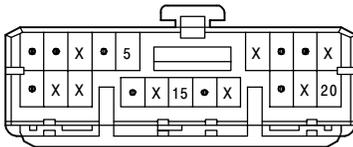
C10 GRAY



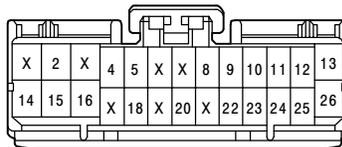
C13



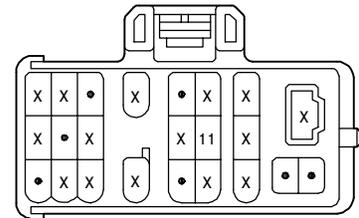
C15 BLACK



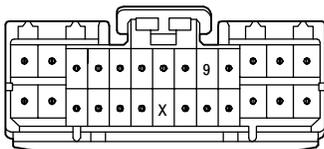
C17 GRAY



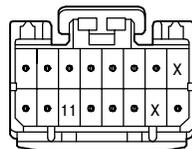
D 1 BLACK



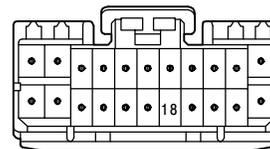
E 4 (A) DARK GRAY



E 5 (C) DARK GRAY



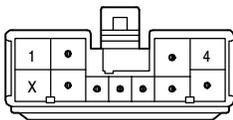
E 7 (D) DARK GRAY



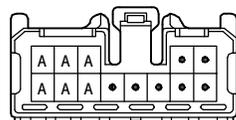
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(SEE PAGE 20)

I12 BLACK

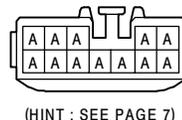


J 1



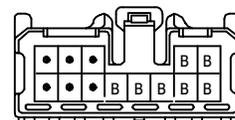
(HINT : SEE PAGE 7)

J 2 BLUE



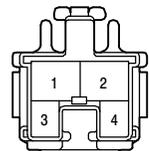
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J 6



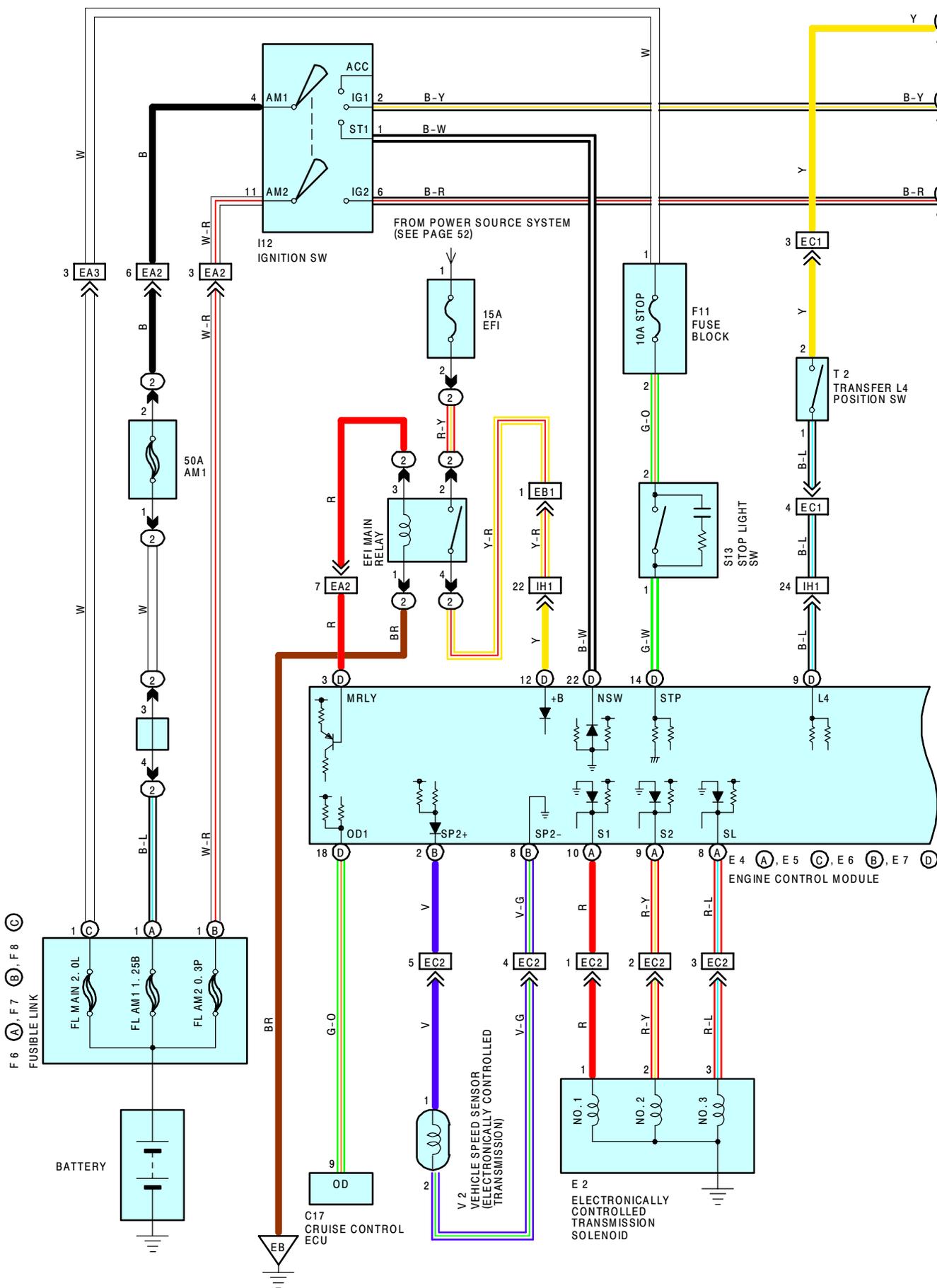
(HINT : SEE PAGE 7)

S13 BLACK

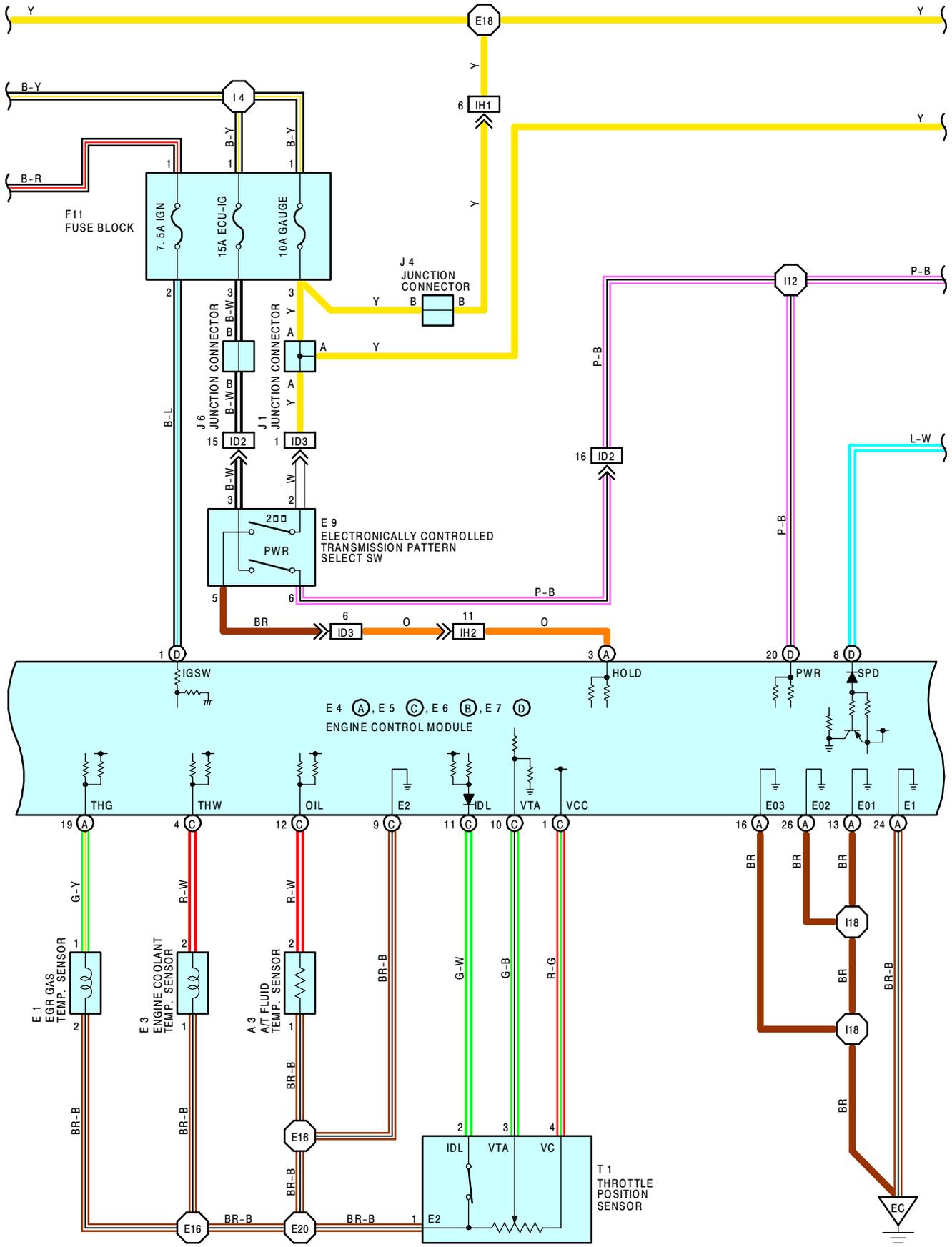




# ELECTRONICALLY CONTROLLED TRANSMISSION



# AND A/T INDICATOR





# AND A/T INDICATOR

## SYSTEM OUTLINE

PREVIOUS AUTOMATIC TRANSMISSION 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 GOVERNOR PRESSURE AND LOCK-UP PRESSURE THROUGH THE SOLENOID VALVE. THE ENGINE CONTROL MODULE OF THE SOLENOID VALVE BASED ON THE INPUT SIGNALS FROM EACH SENSOR MAKES SMOOTH DRIVING POSSIBLE BY SHIFT SELECTION FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS AT THAT TIME.

### 1. GEAR SHIFT OPERATION

DURING DRIVING, THE ENGINE CONTROL MODULE SELECTS THE SHIFT FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS, BASED ON INPUT SIGNALS FROM THE ENGINE COOLANT TEMP. SENSOR TO **TERMINAL THW** OF THE ENGINE CONTROL MODULE, AND ALSO THE INPUT SIGNALS TO **TERMINAL SP2+** OF THE ENGINE CONTROL MODULE FROM THE VEHICLE SPEED SENSOR DEVOTED TO THE ELECTRONICALLY CONTROLLED TRANSMISSION. THE CURRENT IS THEN OUTPUT TO THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOIDS. WHEN SHIFTING TO 1ST SPEED, THE CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE TO **TERMINAL 1** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUITY TO THE NO. 1 SOLENOID CAUSES THE SHIFT. FOR 2ND SPEED, THE CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE TO **TERMINAL 1** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOIDS → **GROUND** AND FROM **TERMINAL S2** OF THE ENGINE CONTROL MODULE TO **TERMINAL 2** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUITY TO NO. 1 AND NO. 2, SOLENOIDS CAUSES THE SHIFT. FOR 3RD SPEED, THERE IS NO CONTINUITY TO NO. 1 SOLENOID, ONLY TO NO. 2, CAUSING THE SHIFT. SHIFTING INTO 4TH SPEED (OVERDRIVE) TAKES PLACE WHEN THERE IS NO CONTINUITY TO EITHER NO. 1 OR NO. 2 SOLENOID.

### 2. LOCK-UP OPERATION

WHEN THE ENGINE CONTROL MODULE JUDGES FROM EACH SIGNAL THAT LOCK-UP OPERATION CONDITIONS HAVE BEEN MET, THE CURRENT FLOWS FROM **TERMINAL SL** OF THE ENGINE CONTROL MODULE TO **TERMINAL 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, CAUSING CONTINUITY TO THE LOCK-UP SOLENOID AND 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 CONTROL MODULE, AND THE ENGINE CONTROL MODULE OPERATES AND CONTINUITY TO THE LOCK-UP SOLENOID IS CUT.

### 4. OVERDRIVE CIRCUIT

#### \* O/D MAIN SW ON

WHEN THE O/D MAIN SW IS TURNED ON (SW POINT IS OPEN), A SIGNAL IS INPUT TO **TERMINAL OD2** OF THE ENGINE CONTROL MODULE, AND ENGINE CONTROL MODULE OPERATION CAUSES GEAR SHIFT WHEN THE CONDITIONS FOR OVERDRIVE ARE MET.

#### \* O/D MAIN SW OFF

WHEN THE O/D MAIN SW IS TURNED OFF (SW POINT IS CLOSED), THE CURRENT FROM THE O/D OFF INDICATOR LIGHT FLOWS THROUGH THE O/D MAIN SW TO **GROUND**, CAUSING THE INDICATOR LIGHT TO LIGHT UP. AT THE SAME TIME, A SIGNAL IS INPUT TO **TERMINAL OD2** OF THE ENGINE CONTROL MODULE, AND THE ENGINE CONTROL MODULE OPERATION PREVENTS SHIFT INTO OVERDRIVE.

### 5. ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW CIRCUIT

IF THE ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW IS CHANGED FROM NORMAL TO POWER, THE CURRENT THROUGH THE POWER INDICATOR FLOWS TO **GROUND**, AND FLOWS TO **TERMINAL PWR** OF THE ENGINE CONTROL MODULE, THE ENGINE CONTROL MODULE OPERATES, AND SHIFT UP AND SHIFT DOWN OCCUR AT HIGHER VEHICLE SPEEDS THAN WHEN THE SW IS IN NORMAL POSITION.

### 6. TRANSFER SHIFT OPERATION

WHEN THE TRANSFER SHIFT LEVER IS MOVED TO **L4** POSITION, A SIGNAL FROM TRANSFER **L4** POSITION SW IS INPUT TO THE **TERMINAL L4** OF THE ENGINE CONTROL MODULE, THEN SHIFT TO **L4** OCCURS.



# ELECTRONICALLY CONTROLLED TRANSMISSION

## SERVICE HINTS

### E 4 (A), E 5 (C), E 6 (B), E 7 (D) ENGINE CONTROL MODULE

STP	-GND	: 7.5- 14.0 VOLTS WITH BRAKE PEDAL IS DEPRESSED 0- 1.5 VOLTS WITH THE BRAKE PEDAL IS RELEASED
TFN	-GRD	: 0- 3.0 VOLTS WITH THE TRANSFER POSITION AT N POSITION 9.0- 14.0 VOLTS WITH THE TRANSFER POSITION AT EXCEPT N POSITION
OD2	-GRD	: 0- 3.0 VOLTS WITH THE O/D MAIN SW TURNED ON 9.0- 14.0 VOLTS WITH THE O/D MAIN SW TURNED OFF
OD1	-GND	: 9.0- 14.0 VOLTS WITH THE IGNITION SW ON
SP2+	-SP2-	: PULSE GENERATION WITH VEHICLE MOVING
SPD	-GND	: PULSE GENERATION WITH VEHICLE MOVING
IDL	-GND	: 0- 3.0 VOLTS WITH THE THROTTLE VALVE FULLY CLOSED 9.0- 14.0 VOLTS WITH THE THROTTLE VALVE FULLY OPEN
VTA	-GND	: 3.5- 4.5 VOLTS WITH THE THROTTLE VALVE FULLY CLOSED 2.5- 3.5 VOLTS WITH THE THROTTLE VALVE FULLY OPEN
2	-GND	: 7.5- 14.0 VOLTS WITH THE SHIFT LEVER AT 2 POSITION 0- 1.5 VOLTS WITH THE SHIFT LEVER AT EXCEPT 2 POSITION
L	-GND	: 7.5- 14.0 VOLTS WITH THE SHIFT LEVER AT L POSITION 0- 1.5 VOLTS WITH THE SHIFT LEVER AT EXCEPT L POSITION
R	-GND	: 7.5- 14.0 VOLTS WITH THE SHIFT LEVER AT R POSITION 0- 1.5 VOLTS WITH THE SHIFT LEVER AT EXCEPT R POSITION
PWR	-GND	: 7.5- 14.0 VOLTS WITH THE PATTERN SELECT SW AT PWR POSITION 0- 1.5 VOLTS WITH THE PATTERN SELECT SW AT NORMAL POSITION
L4	-GND	: 7.5- 14.0 VOLTS WITH THE TRANSFER POSITION AT L4 POSITION 0- 1.5 VOLTS WITH THE TRANSFER POSITION AT EXCEPT L4 POSITION

### E 2 ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID

1, 2, 3-GROUND : 11- 15  $\Omega$

### E 9 ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW

3-6 : CLOSED WITH THE ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW AT PWR POSITION

### O 4 O/D MAIN SW

2-4 : OPEN WITH THE O/D MAIN SW AT ON POSITION  
CLOSED WITH THE O/D MAIN SW AT OFF POSITION

# AND A/T INDICATOR

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 3	22	E 7	D 24	J 7	25
C12	B 24	E 9 26		O 4	27
C13	A 24	F 6	A 22	P 1	23
C17	24	F 7	B 22	S13	25
E 1	22	F 8	C 22	T 1	23
E 2	22	F11 25		T 2	23
E 3	22	I12	25	V 2	23
E 4	A 24	J 1	25		
E 5	C 24	J 4	25		
E 6	B 24	J 6	25		

## : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
EA3		
EB1	30	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE DISTRIBUTOR)
EC1	30	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
EC2		
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
ID3		
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	30	FRONT SIDE OF LEFT FENDER
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E16	30	ENGINE WIRE	I 9	32	COWL WIRE
E18			I11		
E20			I12		
I 4	32	COWL WIRE	I18	32	ENGINE WIRE
I 6					

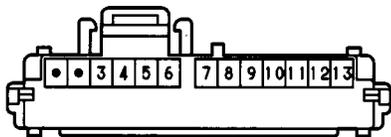


# ELECTRONICALLY CONTROLLED TRANSMISSION

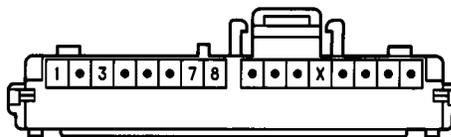
A 3



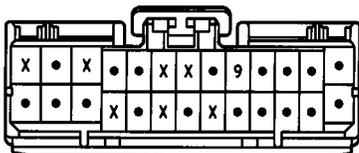
C12 B BROWN



C13 A



C17 GRAY



E 1 DARK GRAY



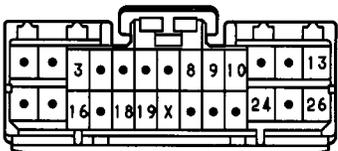
E 2 BLACK



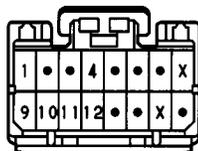
E 3 GREEN



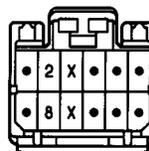
E 4 A DARK GRAY



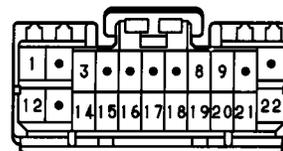
E 5 C DARK GRAY



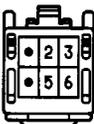
E 6 B DARK GRAY



E 7 D DARK GRAY



E 9



F 6 A, F 8 C



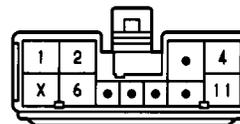
F 7 B GRAY



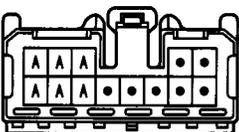
F11

(SEE PAGE 20)

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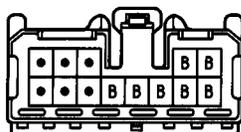


J 1



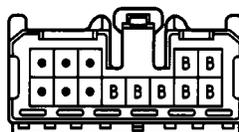
(HINT:SEE PAGE 7)

J 4



(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

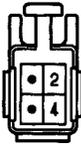
# AND A/T INDICATOR

J 7 BLUE

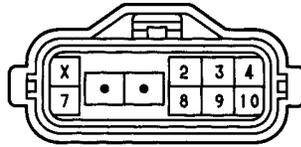


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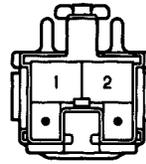
O 4 BLUE



P 1 GRAY



S13 BLACK



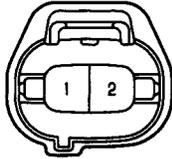
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T 2 GRAY

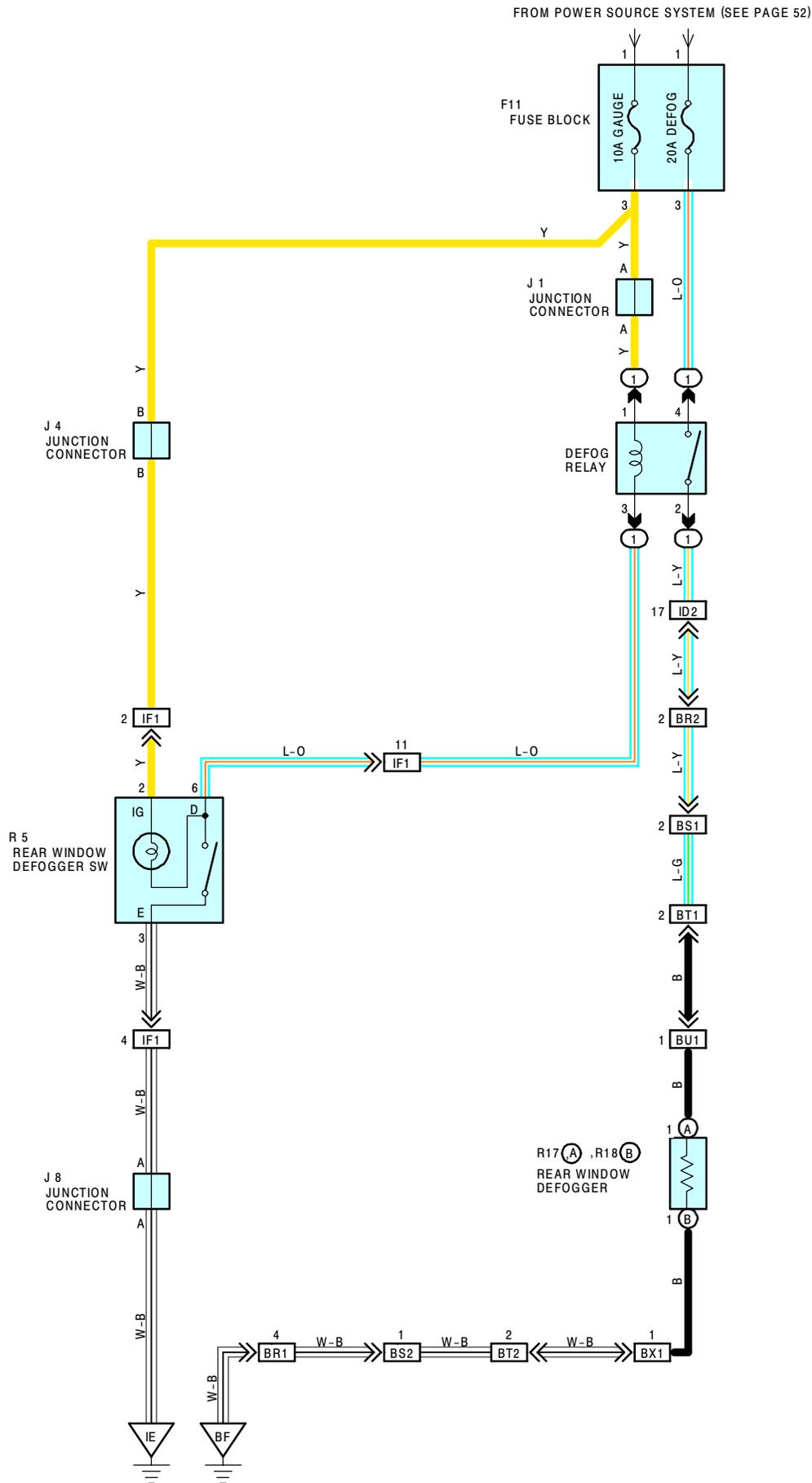


V 2 BLACK





# REAR WINDOW DEFOGGER



**SERVICE HINTS**

**DEFOG RELAY**

**(1) 4 - (1) 2** : CLOSED WITH THE IGNITION SW ON AND THE REAR WINDOW DEFOGGER SW ON

**R 5 REAR WINDOW DEFOGGER SW**

2, 6-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
F11	25	J 8	25	R18	B 27
J1	25	R 5	25		
J4	25	R17	A 27		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)

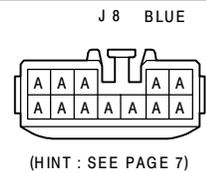
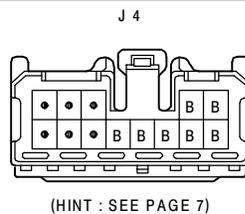
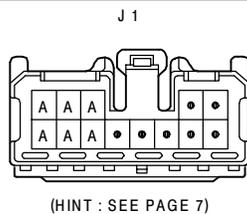
**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
IF1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)
BR1	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BR2		
BS1	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
BS2		
BT1	36	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
BT2		
BU1	36	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
BX1	36	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR RIGHT)

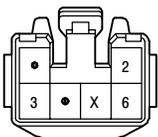
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

F11  
(SEE PAGE 20)



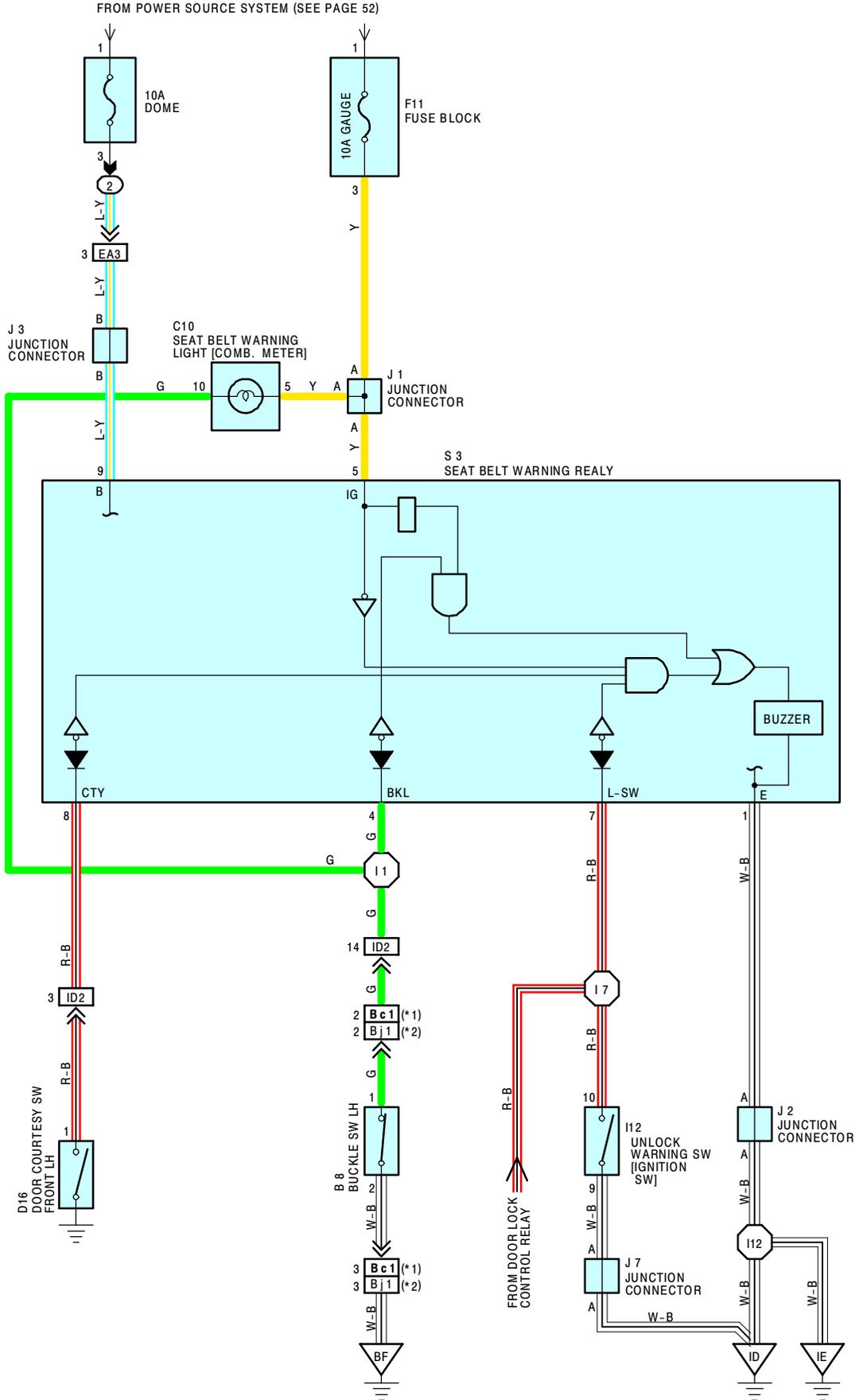
R 5 BLACK    R17 (A), R18 (B) BLACK





# UNLOCK AND SEAT BELT WARNING

\*1: W/ POWER SEAT  
\*2: W/O POWER SEAT



**SYSTEM OUTLINE**

WHEN THE IGNITION SW IS TURNED TO ON, THE CURRENT FLOWS FROM THE **GAUGE** FUSE, THROUGH **TERMINAL 5** OF THE SEAT BELT WARNING RELAY AND **TERMINAL 5** OF THE SEAT BELT WARNING LIGHT, TO **TERMINAL 1** OF THE BUCKLE SW LH. IF SEAT BELT IS NOT FASTENED AT THIS TIME (THE BUCKLE SW IS ON), THE CURRENT FLOWS FROM **TERMINAL 1** OF THE BUCKLE SW LH TO **TERMINAL 2** TO **GROUND**, LIGHTING UP THE SEAT BELT WARNING LIGHT. SIMULTANEOUSLY, A SIGNAL FROM THE BUCKLE SW LH IS INPUT TO **TERMINAL 4** OF THE SEAT BELT WARNING RELAY, AND THE CURRENT TO **TERMINAL 5** OF THE RELAY FLOWS THROUGH **TERMINAL 1** OF THE SEAT BELT WARNING RELAY TO **GROUND**, ACTIVATING THE SEAT BELT WARNING RELAY AND SOUNDING SEAT BELT WARNING BUZZER FOR 4 TO 8 SECONDS. IF THE SEAT BELT IS FASTENED (THE BUCKLE SW LH IS OFF) WHILE THE BUZZER SOUNDS, THE RELAY GROUND IS CUT, THE BUZZER STOP AND THE SEAT BELT WARNING LIGHT GOES OFF.

**UNLOCK WARNING SYSTEM**

WHEN THE IGNITION SW IS TURNED TO OFF AND THE DRIVER'S DOOR IS OPENED (THE DOOR COURTESY SW IS ON) WHILE THE KEY IS STILL INSERTED IN THE KEY CYLINDER (THE UNLOCK WARNING SW IS ON), A SIGNAL IS INPUT TO **TERMINAL 8** OF THE SEAT BELT WARNING RELAY, ACTIVATING THE SEAT BELT WARNING RELAY. THIS CAUSES CURRENT FROM THE **DOM**E FUSE TO FLOW TO **TERMINAL 9** OF THE SEAT BELT WARNING RELAY → **TERMINAL 1** → **GROUND**, SOUNDING UNLOCK WARNING BUZZER.

**SERVICE HINTS****B 8 BUCKLE SW LH**

1-2 : OPEN WITH THE DRIVER'S SEAT BELT IN USE

**D16 DOOR COURTESY SW FRONT LH**

1-GROUND : CLOSED WITH THE DRIVER'S DOOR OPEN

**S 3 SEAT BELT WARNING RELAY**

1-GROUND : ALWAYS CONTINUITY

4-GROUND : CONTINUITY UNLESS DRIVER'S SEAT BELT IN USE

5-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

7-GROUND : CONTINUITY WITH THE IGNITION KEY IN CYLINDER

8-GROUND : CONTINUITY WITH THE DRIVER'S DOOR OPEN

9-GROUND : ALWAYS APPROX. 12 VOLTS

**I12 UNLOCK WARNING SW [IGNITION SW]**

10-9 : CLOSED WITH THE IGNITION KEY IN CYLINDER

 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>B 8</b>	26	<b>I12</b>	25	<b>J 7</b>	25
<b>C10</b>	24	<b>J 1</b>	25	<b>S 3</b>	25
<b>D16</b>	26	<b>J 2</b>	25		
<b>F11</b>	25	<b>J 3</b>	25		

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA3</b>	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
<b>ID2</b>	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
<b>Bc1</b>	38	FLOOR NO. 1 WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)
<b>BJ1</b>	38	FLOOR NO. 1 WIRE AND SEAT NO. 2 WIRE (UNDER THE DRIVER'S SEAT)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	32	LEFT KICK PANEL
<b>IE</b>	32	RIGHT KICK PANEL
<b>BF</b>	34	UNDER THE CENTER CONSOLE BOX

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 1</b>	32	COWL WIRE	<b>I12</b>	32	COWL WIRE
<b>I 7</b>	32	COWL WIRE			

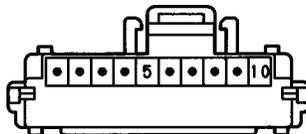


# UNLOCK AND SEAT BELT WARNING

(W/O POWER SEAT) B 8 BLACK (W/ POWER SEAT) B 8 BLACK

C10 GRAY

D16 BLUE



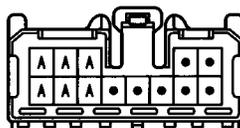
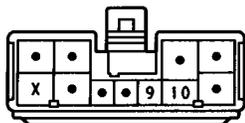
F11

I12 BLACK

J 1

J 2 BLUE

(SEE PAGE 20)



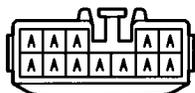
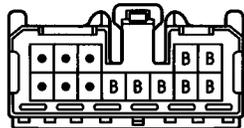
(HINT:SEE PAGE 7)

(HINT:SEE PAGE 7)

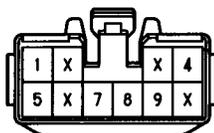
J 3

J 7 BLUE

S 3 BLUE



(HINT:SEE PAGE 7)



(HINT:SEE PAGE 7)



**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.

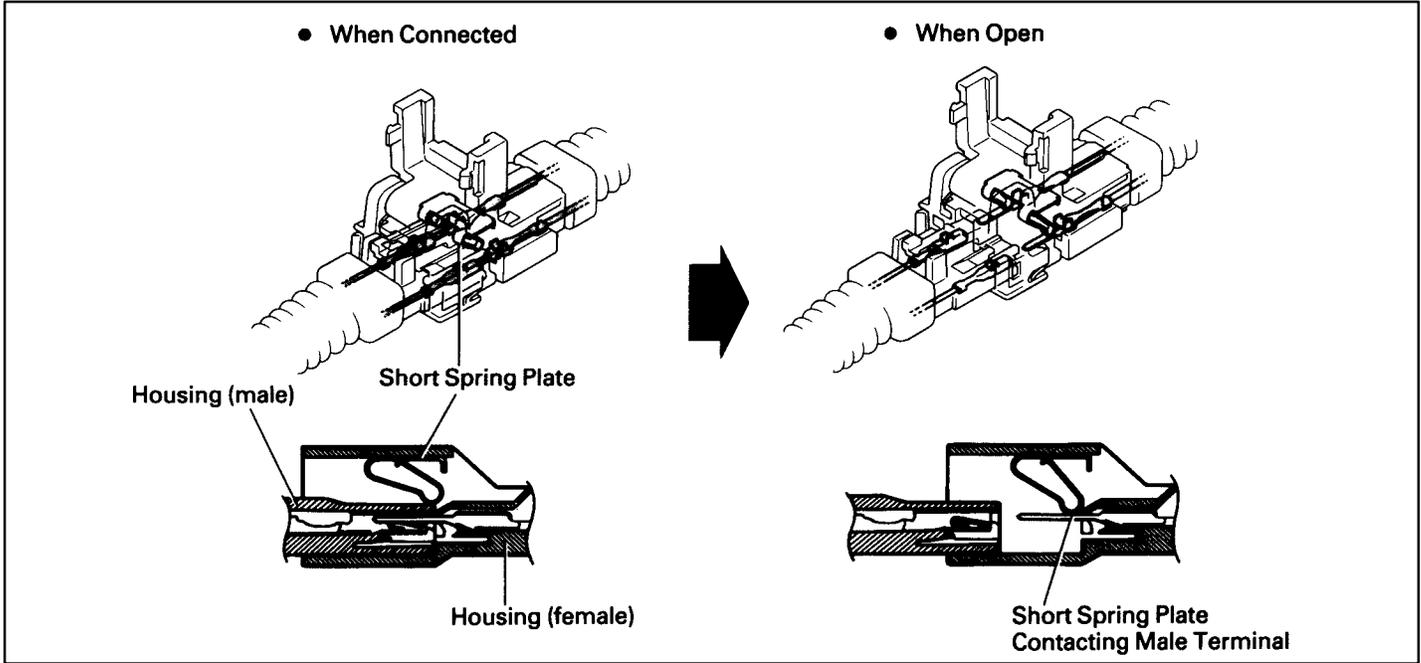
- Malfunction symptoms of the supplemental restraint system are difficult to confirm, so the diagnostic trouble codes become the most important source of information when troubleshooting.  
When troubleshooting the supplemental restraint system, always inspect the diagnostic trouble codes before disconnecting the battery.
- Work must be started after 90 seconds from the time the Ignition SW is set to the “LOCK” position and the negative (-) terminal cable is disconnected from the battery.  
(The supplemental restraint system is equipped with a back-up power source so that if work is started within 90 seconds of disconnecting the negative (-) terminal cable of the battery, the SRS may be activated).  
When the negative (-) terminal cable is disconnected from the battery, memory of the clock and audio systems will be cancelled. So before starting work, make a record of the contents memorized by each memory system. When work is finished, reset the clock and audio system as before and adjust the clock.  
To avoid erasing the memory of each memory system, never use a back-up power supply from outside the vehicle.
- When removing the steering wheel pad or handling a new steering wheel pad, keep the pad upper surface facing upward. Also, lock the lock lever of the twin lock type connector at the rear of the pad and take care not to damage the connector.  
(Storing the pad with its metallic surface up may lead to a serious accident if the SRS inflates for some reason.)
- Always store a removed or new front passenger airbag assembly with the airbag door facing up. Storing the airbag assembly with the airbag door facing down could cause a serious accident if the airbag inflates.
- Store the steering wheel pad where the ambient temperature remains below 93°C (200°F), without high humidity and away from electrical noise.
- Never use SRS parts from another vehicle. When replacing SRS parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly airbag sensor assembly or front airbag sensors.
- Before repairing the body, remove the airbag sensors if during repair shocks are likely to be applied to the sensors due to vibration of the body or direct tapping with tools or other parts.
- Do not reuse a steering wheel pad or front airbag sensors.  
After evaluating whether the airbag sensor assembly is damaged or not, decide whether or not to reuse it. (See the Repair Manual for the method for evaluating the airbag sensor assembly.)
- When troubleshooting the supplemental restraint system, use a high-impedance (Min. 10KΩ/V) tester.
- The wire harness of the supplemental restraint system is integrated with the cowl wire harness assembly. The vehicle wiring harness exclusively for the airbag system is distinguished by corrugated yellow tubing, as are the connectors.
- Do not measure the resistance of the airbag squibs.  
(It is possible this will deploy the airbag and is very dangerous.)
- If the wire harness used in the supplemental restraint system is damaged, replace the whole wire harness assembly.  
When the connector to the front airbag sensors can be replaced alone (when there is no damage to the wire harness), use the repair wire specially designed for the purpose.  
(Refer to the Repair Manual for the applicable Model year for details of the replacement method.)
- INFORMATION LABELS (NOTICES) are attached to the periphery of the SRS components. Follow the instructions on the notices.



The supplemental restraint system has connectors which possess the functions described below:

1. SRS ACTIVATION PREVENTION MECHANISM

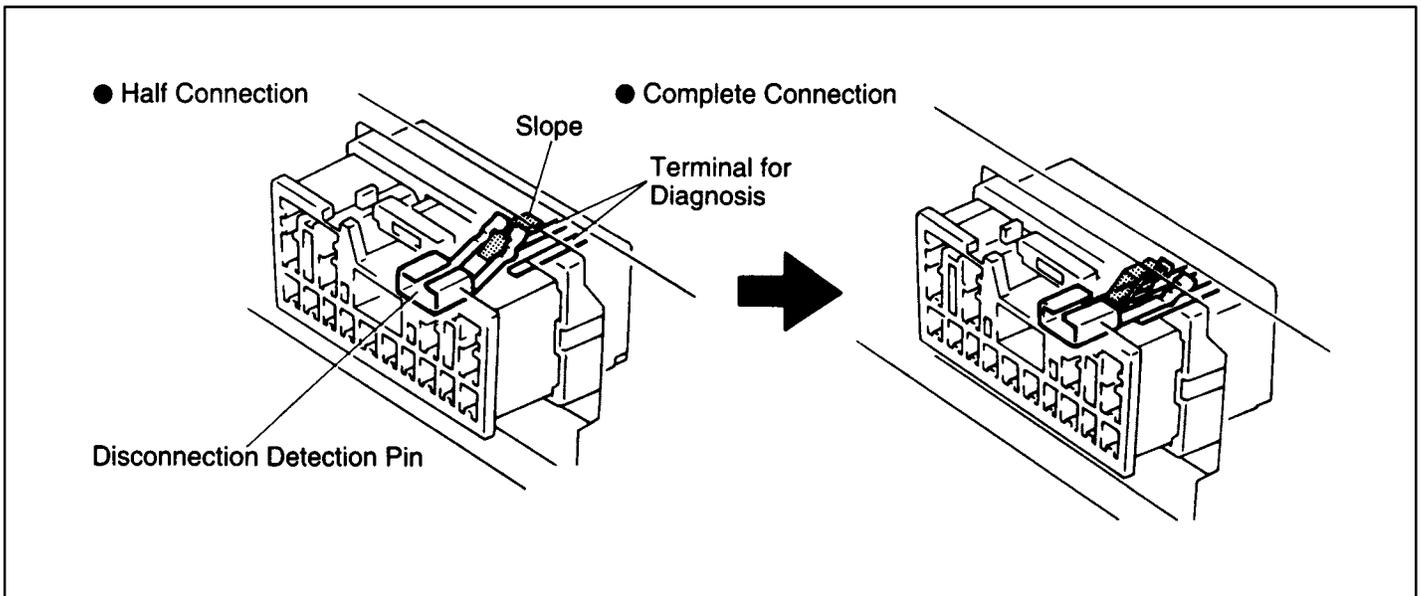
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.



2. ELECTRICAL CONNECTION CHECK MECHANISM

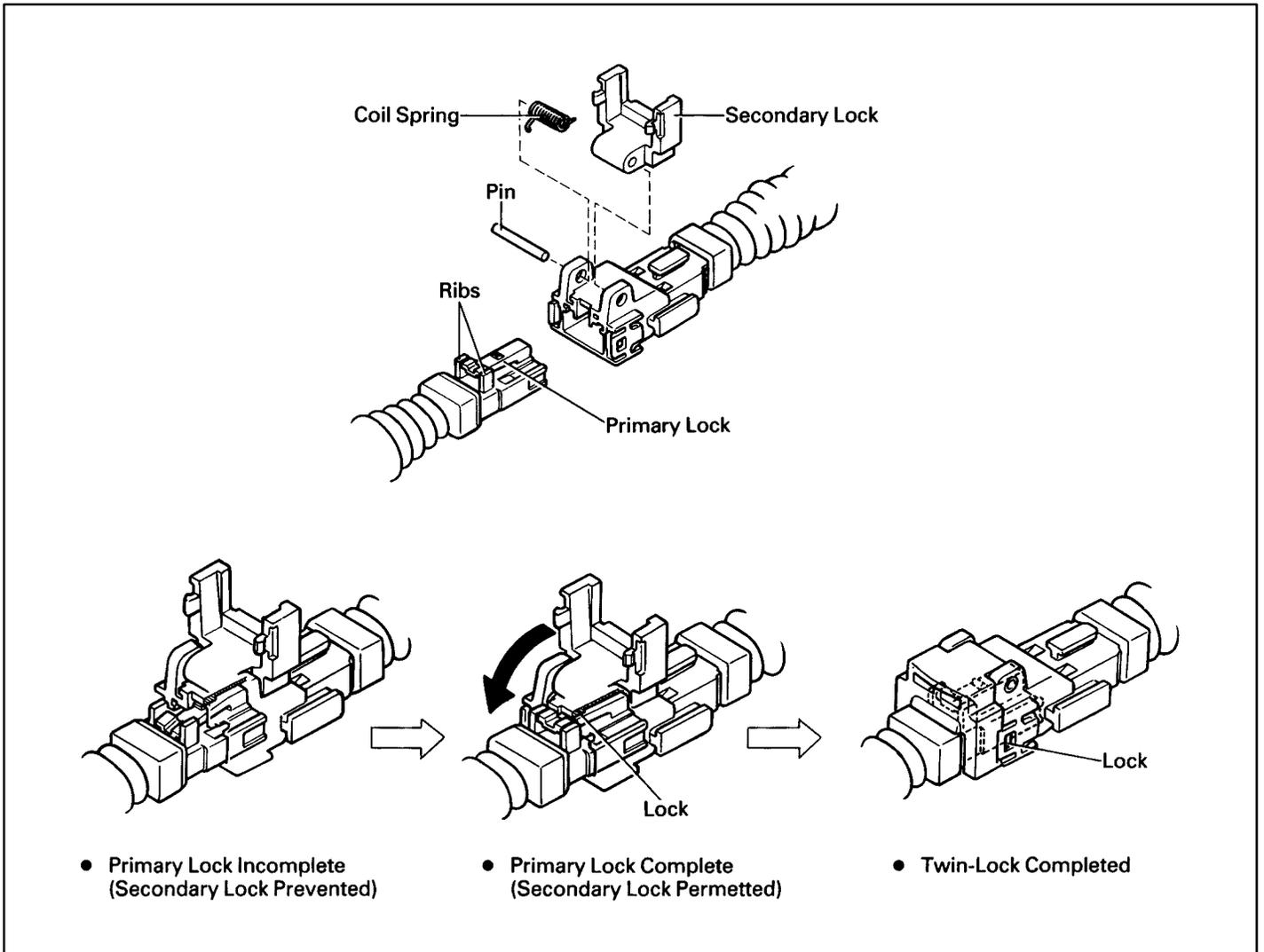
This mechanism is designed to electrically check if connectors are connected properly and completely.

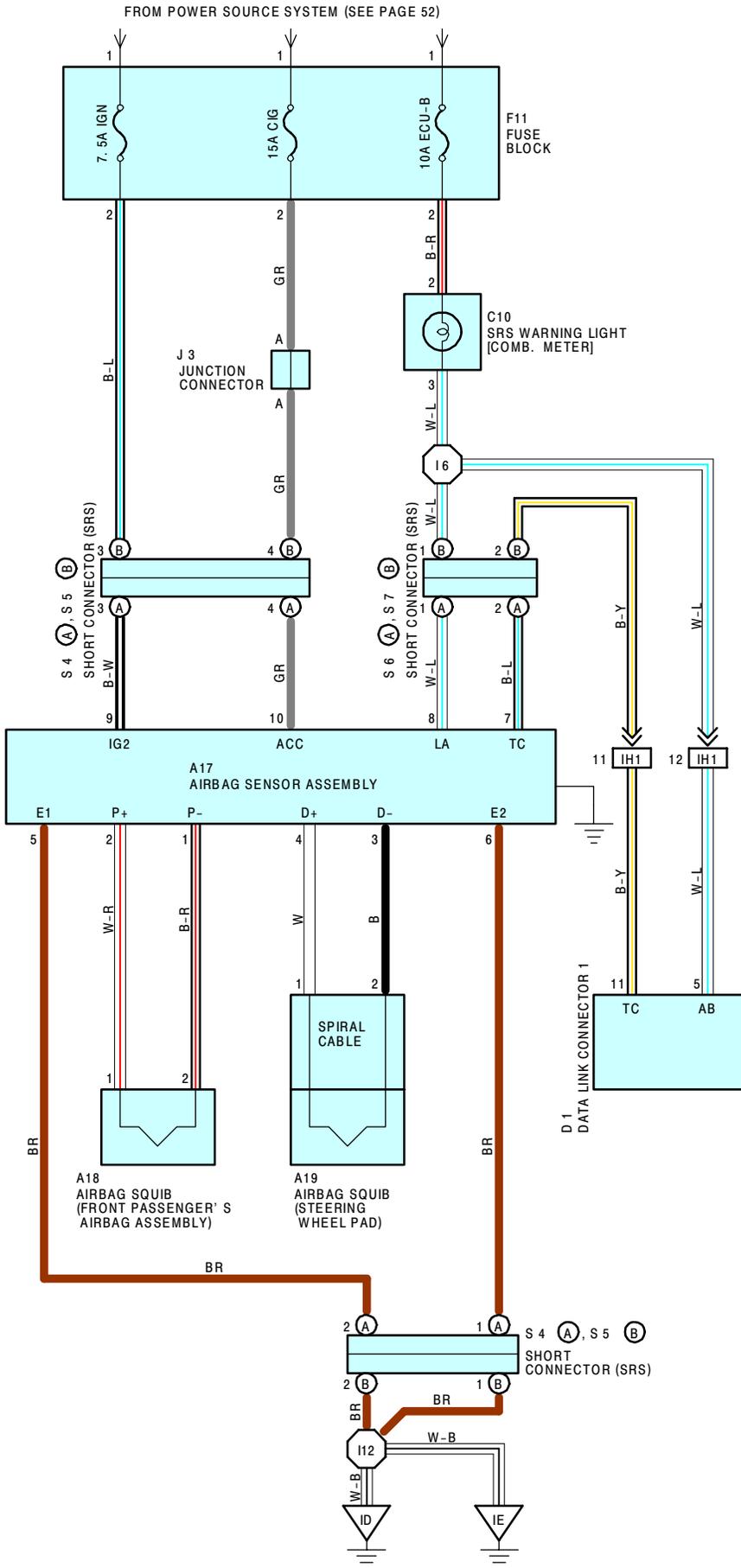
The electrical connection check mechanism is designed so that the connection detection pin connects with the diagnosis terminals when the connector housing lock is in the locked condition.



### 3. CONNECTOR TWIN-LOCK MECHANISM

With this mechanism connectors (male and female connectors) are locked by two locking devices to increase connection reliability. If the primary lock is incomplete, ribs interfere and prevent the secondary lock.





**SYSTEM OUTLINE**

THE SRS IS A DRIVER AND PASSENGER PROTECTION DEVICE WHICH HAS A SUPPLEMENTAL ROLE TO THE SEAT BELTS.

WHEN THE IGNITION SW IS TURNED TO ACC OR ON. THE CURRENT FROM THE **CIG** FUSE FLOWS TO **TERMINAL 10** OF THE AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE **IGN** FUSE FLOWS TO **TERMINAL 9** OF THE ASSEMBLY.

IF AN ACCIDENT OCCURS WHILE DRIVING, DECELERATION CAUSED BY A FRONTAL IMPACT IS DETECTED BY THE SENSOR IN THE AIRBAG SENSOR ASSEMBLY, AND WHEN THE FRONTAL IMPACT EXCEEDS A SET LEVEL (WHEN THE SAFING SENSOR BUILT INTO THE AIRBAG SENSOR ASSEMBLY IS ON, THE FLOOR SENSOR BUILT INTO THE AIRBAG SENSOR ASSEMBLY IS ON AND THE AIRBAG SENSOR ASSEMBLY IS ON), THE CURRENT FROM THE **CIG** OR THE **IGN** FUSE FLOWS THROUGH THE AIRBAG SENSOR ASSEMBLY TO **TERMINALS 4** AND **2** OF THE AIRBAG SENSOR ASSEMBLY TO **TERMINAL 1** OF THE AIRBAG SQUIB → **TERMINAL 2** → **TERMINALS 3** AND **1** OF THE AIRBAG SENSOR ASSEMBLY → THE FLOOR SENSOR BUILT INTO THE AIRBAG SENSOR ASSEMBLY → **TERMINAL 5**, **TERMINAL 6** OR **BODY GROUND** → **GROUND**.

WHEN THE SAFING SENSOR BUILT INTO THE AIRBAG SENSOR ASSEMBLY IS ON, AND FLOOR SENSOR BUILT INTO THE AIRBAG SENSOR ASSEMBLY IS ON, ONE OF THE ABOVE-MENTIONED CIRCUITS IS ACTIVATED SO THAT THE CURRENT FLOWS TO THE AIRBAG SQUIBS, CAUSING IT TO OPERATE.

THE AIRBAG STORED INSIDE THE STEERING WHEEL PAD IS INSTANTANEOUSLY EXPANDED TO SOFTEN THE SHOCK TO A DRIVER. SIMULTANEOUSLY, THE AIRBAG STORED INSIDE THE PASSENGER'S INSTRUMENT PANEL IS INSTANTANEOUSLY EXPANDED TO SOFTEN THE SHOCK TO A PASSENGER.

 **: PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>A17</b>	24	<b>D 1</b>	22	<b>S 5</b>	B 25
<b>A18</b>	24	<b>F11</b>	25	<b>S 6</b>	A 25
<b>A19</b>	24	<b>J 3</b>	25	<b>S 7</b>	B 25
<b>C10</b>	24	<b>S 4</b>	A 25		

 **: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>IH1</b>	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)

 **: GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	32	LEFT KICK PANEL
<b>IE</b>	32	RIGHT KICK PANEL

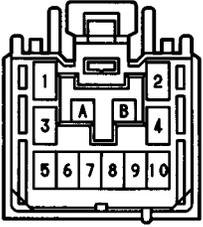
 **: SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 6</b>	32	COWL WIRE			

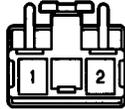


# SRS

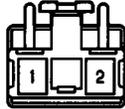
A17 YELLOW



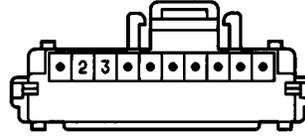
A18 YELLOW



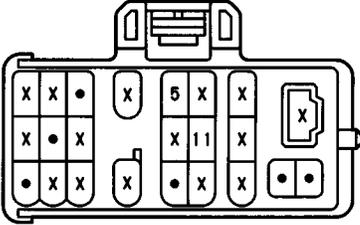
A19 YELLOW



C10 GRAY



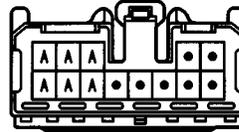
D 1 BLACK



F11

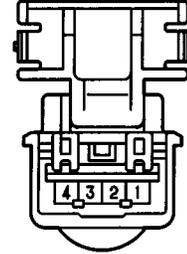
(SEE PAGE 20)

J 3

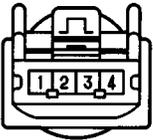


(HINT:SEE PAGE 7)

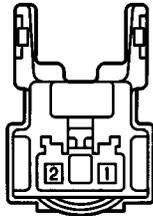
S 4 (A) YELLOW



S 5 (B) YELLOW



S 6 (A) YELLOW



S 7 (B) YELLOW



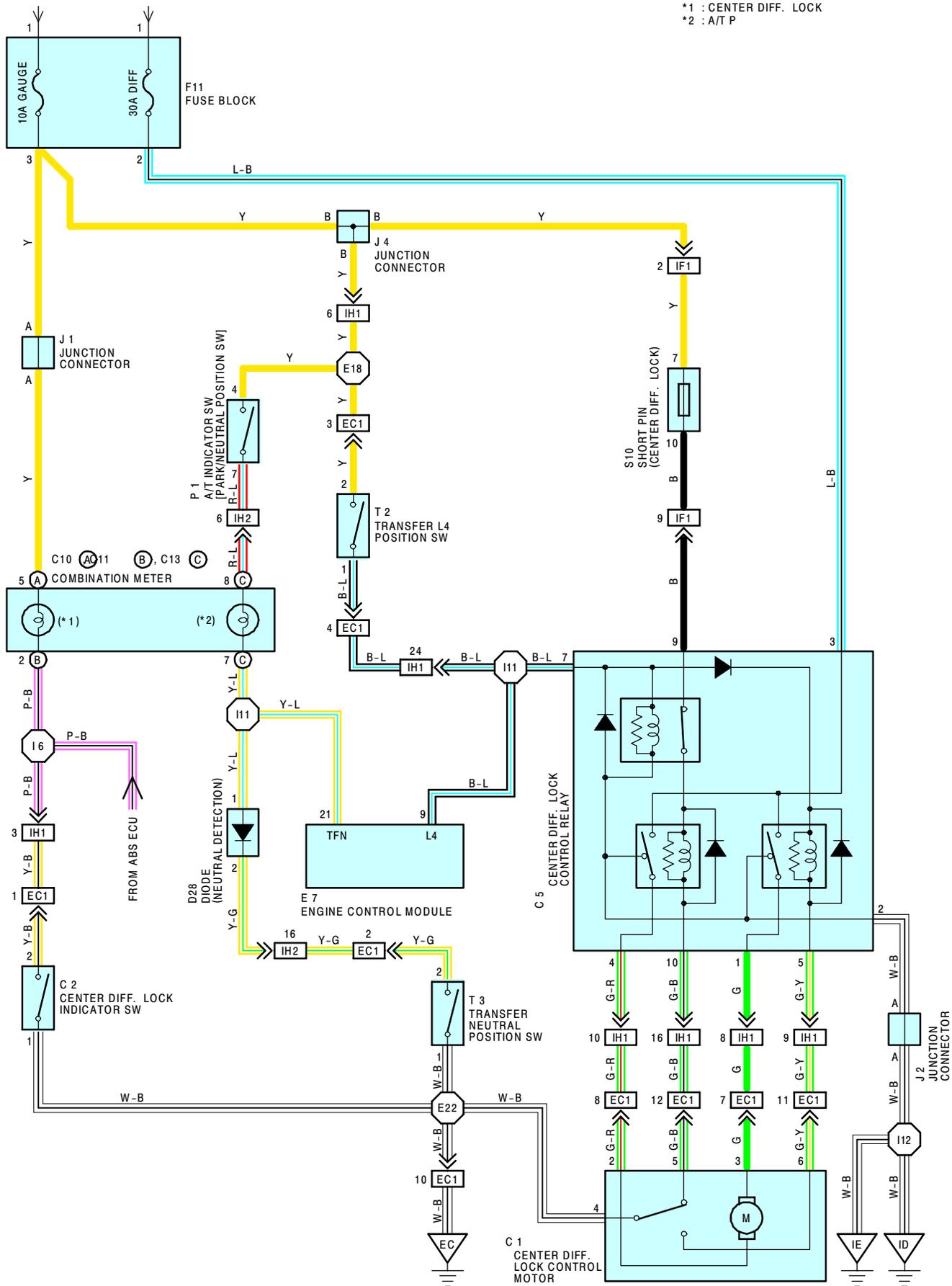




# CENTER DIFFERENTIAL LOCK

FROM POWER SOURCE SYSTEM (SEE PAGE 52)

\*1 : CENTER DIFF. LOCK  
\*2 : A/T P



**SERVICE HINTS**

**C5 CENTER DIFF. LOCK CONTROL RELAY**

3-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

2-GROUND : ALWAYS CONTINUITY

7-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION AND FOUR-WHEEL DRIVE CONTROL LEVER AT **L4** POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	22	D28	24	P 1	23
C 2	22	E 7	24	S10	25
C 5	24	F11	25	T 2	23
C10	A 24	J 1	25	T 3	23
C11	B 24	J 2	25		
C13	C 24	J 4	25		

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

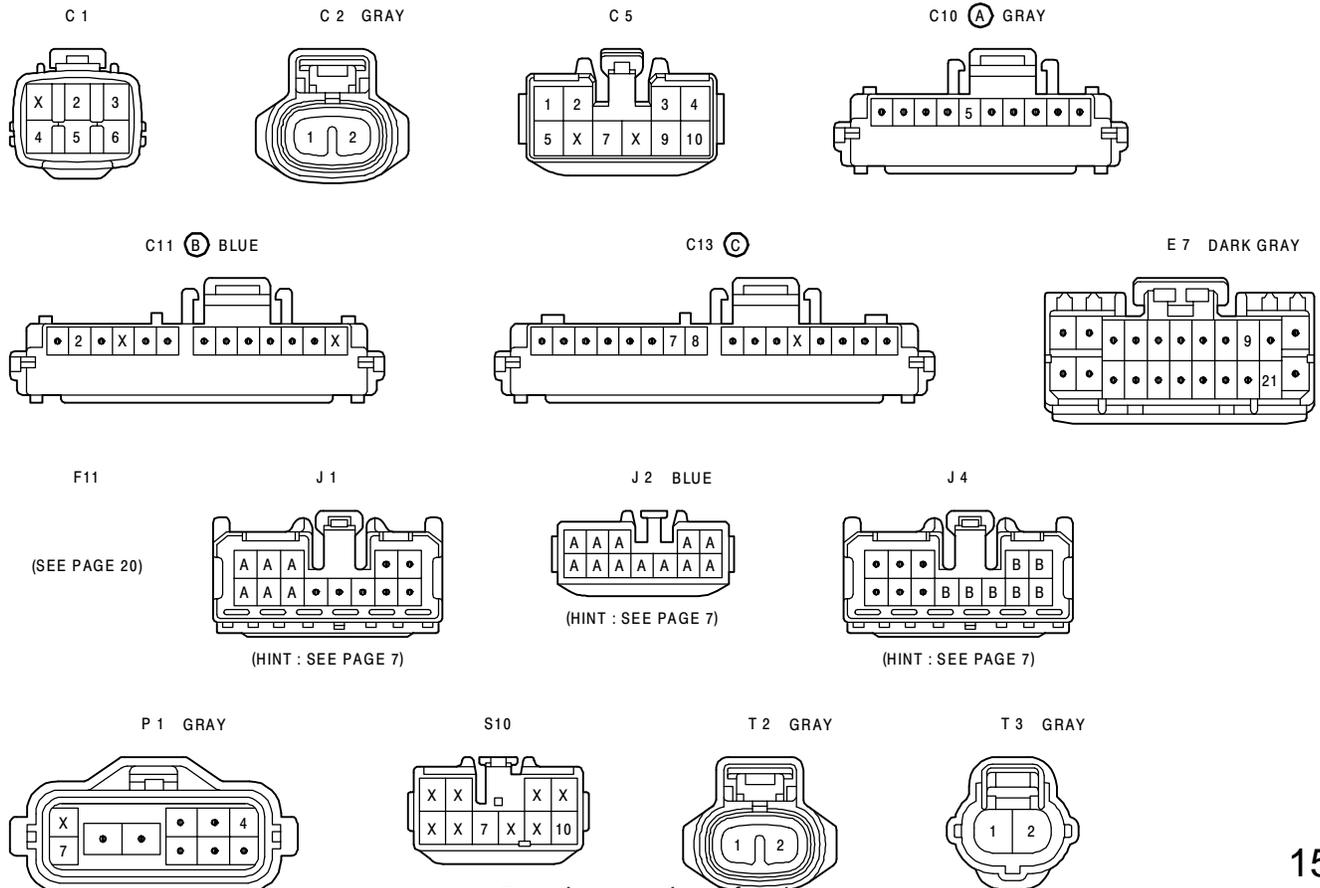
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EC1	30	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
IF1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

**○ : SPLICE POINTS**

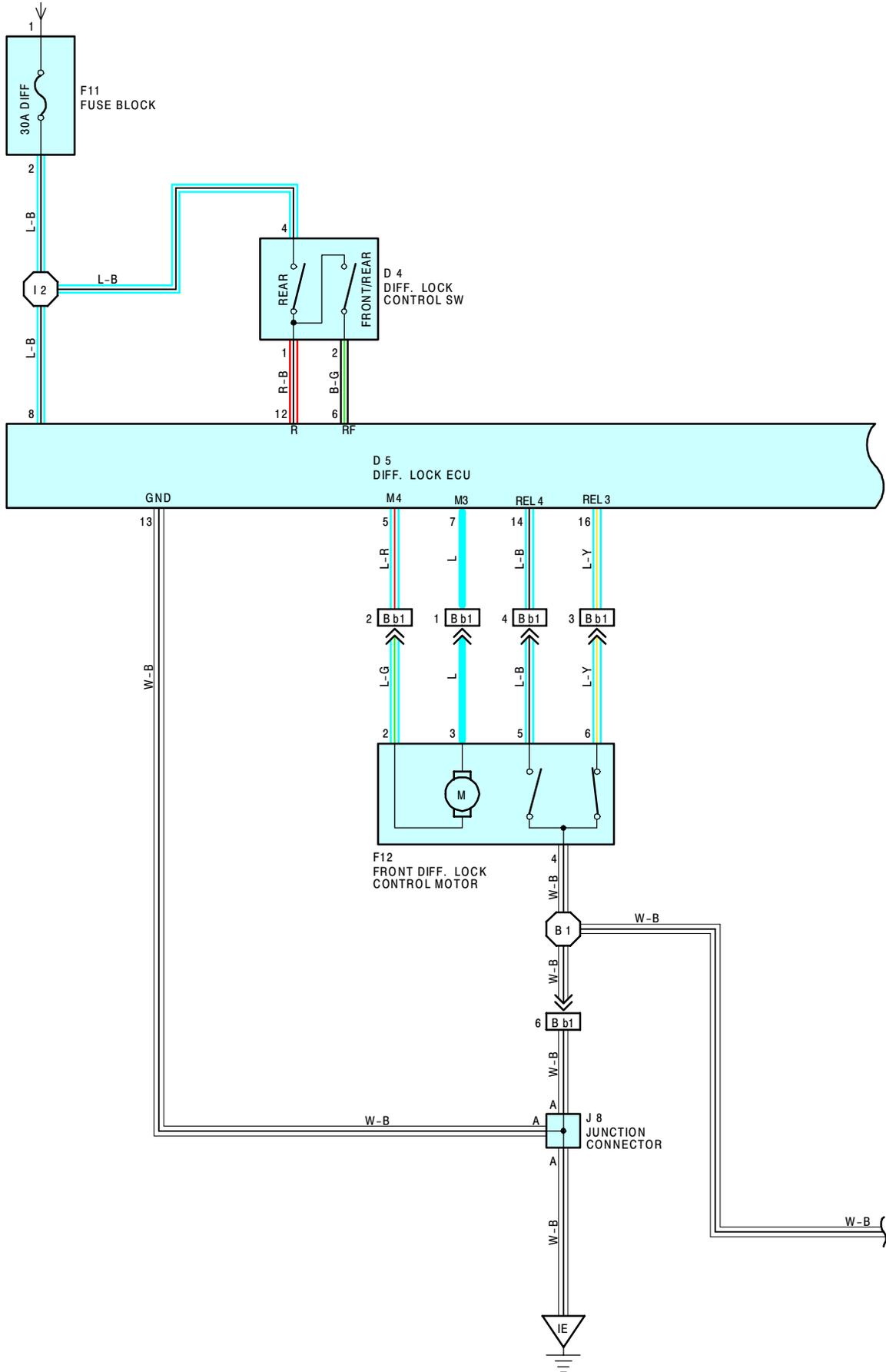
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E18	30	ENGINE WIRE	I11	32	COWL WIRE
E22	30	TRANSMISSION WIRE	I12		
I 6	32	COWL WIRE			





# FRONT/REAR DIFFERENTIAL LOCK

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# FRONT/REAR DIFFERENTIAL LOCK

## SYSTEM OUTLINE

THIS SYSTEM FREES OR LOCKS THE FRONT AND REAR DIFFERENTIALS ACCORDING TO THE POSITION OF THE DIFF. LOCK CONTROL SW. THE DIFFERENTIAL WILL LOCK ONLY WHEN THE CENTER DIFF. LOCK INDICATOR SW IS ON AND THE VEHICLE SPEED IS AT 8 KM/H (5 MPH) OR LESS.

WHEN THE CENTER DIFF. LOCK INDICATOR SW IS OFF, DIFFERENTIAL LOCK DOES NOT OCCUR EVEN IF THE DIFF. LOCK CONTROL SW IS IN RR POSITION OR FR•RR POSITION.

WHEN THE DIFF. LOCK CONTROL SW IS SWITCHED FROM OFF POSITION TO RR POSITION, THE CURRENT FLOW TO **TERMINAL 12** OF THE DIFF. LOCK ECU. IF THE LIMIT SW ON THE LOCK SIDE INSIDE THE REAR DIFF. LOCK CONTROL MOTOR IS ON AT THIS TIME, UNTIL THE LIMIT SW IS TURNED OFF, THE CURRENT FLOWS FROM THE **DIFF FUSE** TO **TERMINAL 8** OF THE DIFF. LOCK ECU → **TERMINAL 3** → **TERMINAL 3** OF THE REAR DIFF. LOCK CONTROL MOTOR → **TERMINAL 2** → **TERMINAL 1** OF THE DIFF. LOCK ECU → **TERMINAL 13** → **GROUND**. THIS DRIVES THE REAR DIFF. LOCK CONTROL MOTOR AND LOCKS THE REAR DIFFERENTIAL. WHEN THE REAR DIFFERENTIAL LOCKS, THE REAR DIFF. LOCK POSITION SW TURNS ON, LIGHTING UP THE REAR DIFF. LOCK INDICATOR LIGHT IN THE COMBINATION METER.

WHEN THE DIFF. LOCK CONTROL SW IS SWITCHED FROM RR POSITION TO FR•RR POSITION, THE CURRENT FLOWS TO **TERMINAL 6** OF THE DIFF. LOCK ECU. IF THE LIMIT SW ON THE LOCK SIDE INSIDE THE FRONT DIFF. LOCK CONTROL MOTOR IS ON AT THIS TIME, UNTIL THE LIMIT SW IS TURNED OFF, THE CURRENT FLOWS FROM THE **DIFF FUSE** TO **TERMINAL 8** OF THE DIFF. LOCK ECU → **TERMINAL 7** → **TERMINAL 3** OF THE FRONT DIFF. LOCK CONTROL MOTOR → **TERMINAL 2** → **TERMINAL 5** OF THE DIFF. LOCK ECU → **TERMINAL 13** → **GROUND**. THIS DRIVES THE FRONT DIFF. LOCK CONTROL MOTOR AND LOCKS THE FRONT DIFFERENTIAL. WHEN THE FRONT DIFFERENTIAL LOCKS, THE FRONT DIFF. LOCK POSITION SW TURNS ON, LIGHTING UP THE FRONT DIFF. LOCK INDICATOR LIGHT IN THE COMBINATION METER.

WHEN THE DIFF. LOCK CONTROL SW IS SWITCHED FROM FR•RR POSITION TO RR POSITION, THE CURRENT TO **TERMINAL 6** OF THE DIFF. LOCK ECU IS CUT OFF. IF THE LIMIT SW ON THE FREE SIDE INSIDE THE FRONT DIFF. LOCK CONTROL MOTOR IS ON AT THIS TIME, UNTIL THE LIMIT SW IS TURNED OFF, THE CURRENT FLOWS FROM THE **DIFF FUSE** TO **TERMINAL 8** OF THE DIFF. LOCK ECU → **TERMINAL 5** → **TERMINAL 2** OF THE FRONT DIFF. LOCK CONTROL MOTOR → **TERMINAL 3** → **TERMINAL 7** OF THE DIFF. LOCK ECU → **TERMINAL 13** → **GROUND**. THIS DRIVES THE FRONT DIFF. LOCK CONTROL MOTOR AND FREE THE FRONT DIFFERENTIAL. THIS CAUSES THE FRONT DIFF. LOCK POSITION SW AND THE FRONT DIFF. LOCK INDICATOR LIGHT INSIDE THE COMBINATION METER TO TURN OFF.

WHEN THE DIFF. LOCK CONTROL SW IS SWITCHED FROM RR POSITION TO OFF POSITION, CURRENT TO **TERMINAL 12** OF THE DIFF. LOCK ECU IS CUT OFF. IF THE LIMIT SW ON THE FREE SIDE INSIDE THE REAR DIFF. LOCK CONTROL MOTOR IS ON, UNTIL THE LIMIT SW IS TURNED OFF, THE CURRENT FLOW FROM THE **DIFF FUSE** TO **TERMINAL 8** OF THE DIFF. LOCK ECU → **TERMINAL 1** → **TERMINAL 2** OF THE REAR DIFF. LOCK CONTROL MOTOR → **TERMINAL 3** → **TERMINAL 3** OF THE DIFF. LOCK ECU → **TERMINAL 13** → **GROUND**. THIS DRIVES THE REAR DIFF. LOCK CONTROL MOTOR AND FREES THE REAR DIFFERENTIAL. WHEN THE REAR DIFFERENTIAL IS FREE, THE REAR DIFF. LOCK POSITION SW AND THE REAR DIFF. LOCK INDICATOR LIGHT IN THE COMBINATION METER ARE TURNED OFF.

THE DIFF. LOCK INDICATOR LIGHT FLASHES WHEN:

- \* THE DIFF. LOCK CONTROL SW IS SWITCHED TO RR POSITION OR FR•RR POSITION DURING DIFFERENTIAL LOCK PROHIBITION CONDITIONS (VEHICLE SPEED ABOVE 8 KM/H (5 MPH) OR CENTER DIFF. LOCK INDICATOR SW OFF).
- \* THE DIFF. LOCK POSITION SW IS TURNED OFF DURING OPERATION OF THE DIFF. LOCK CONTROL MOTOR.

## SERVICE HINTS

### D 4 DIFF. LOCK CONTROL SW

- 4-1 : CLOSED WITH THE DIFF. LOCK CONTROL SW AT "RR" POSITION OR "FR•RR" POSITION
- 4-2 : CLOSED WITH THE DIFF. LOCK SW AT "FR•RR" POSITION

### D 5 DIFF. LOCK ECU

(DISCONNECTED WIRING CONNECTOR FROM ECU)

- 13-GROUND : ALWAYS CONTINUITY
- 4-GROUND : PULSE GENERATION WITH VEHICLE MOVING
- 8-GROUND : 9-14 VOLTS WITH THE IGNITION SW ON
- 2-GROUND : ABOUT 0 VOLTS WITH THE REAR DIFF. LOCK INDICATOR LIGHT ON  
: 9-14 VOLTS WITH THE REAR DIFF. LOCK INDICATOR LIGHT OFF
- 9-GROUND : ABOUT 0 VOLTS WITH THE FRONT DIFF. LOCK INDICATOR LIGHT ON  
: 9-14 VOLTS WITH THE FRONT DIFF. LOCK INDICATOR LIGHT OFF
- 15-GROUND : ABOUT 0 VOLTS WITH THE CENTER DIFF. LOCK INDICATOR LIGHT ON  
: 9-14 VOLTS WITH THE CENTER DIFF. LOCK INDICATOR LIGHT OFF

### F12, R10 FRONT, REAR DIFF. LOCK CONTROL MOTOR

- 2-3 : 0.3-100 Ω

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C 2</b>	22	<b>D 5</b>	24	<b>J 8</b>	25
<b>C10</b>	A 24	<b>F11</b>	25	<b>R10</b>	27
<b>C11</b>	B 24	<b>F12</b>	26	<b>R11</b>	27
<b>C13</b>	C 24	<b>F13</b>	26		
<b>D 4</b>	24	<b>J 1</b>	25		

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EC1</b>	30	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
<b>ID1</b>	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
<b>IH1</b>	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
<b>BQ1</b>	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
<b>Bb1</b>	36	COWL WIRE AND FRAME WIRE (RIGHT FENDER)
<b>Bh2</b>	36	FLOOR NO. 3 WIRE AND FRAME NO. 2 WIRE (LEFT QUARTER PANEL INNER)

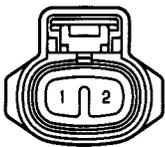
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>EC</b>	30	AIR INTAKE CHAMBER
<b>ID</b>	32	LEFT KICK PANEL
<b>IE</b>	32	RIGHT KICK PANEL
<b>BG</b>	34	LOWER BACK PANEL CENTER

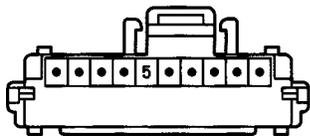
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 2</b>	32	COWL WIRE	<b>I14</b>	32	COWL WIRE
<b>I 5</b>			<b>B 1</b>	36	FRAME WIRE
<b>I 6</b>			<b>B25</b>	36	FLAME NO. 2 WIRE

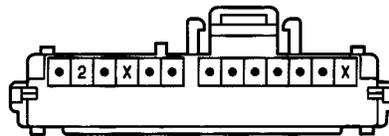
**C 2, F13, R11** GRAY



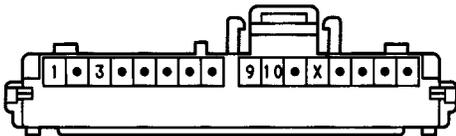
**C10** **A** GRAY



**C11** **B** BLUE



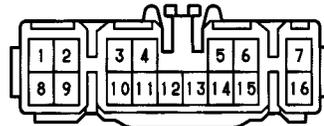
**C13** **C**



**D 4**



**D 5** GRAY



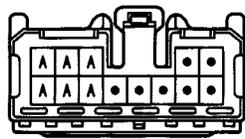
**F11**

(SEE PAGE 20)

**F12, R10**



**J 1**



(HINT:SEE PAGE 7)

**J 8** BLUE

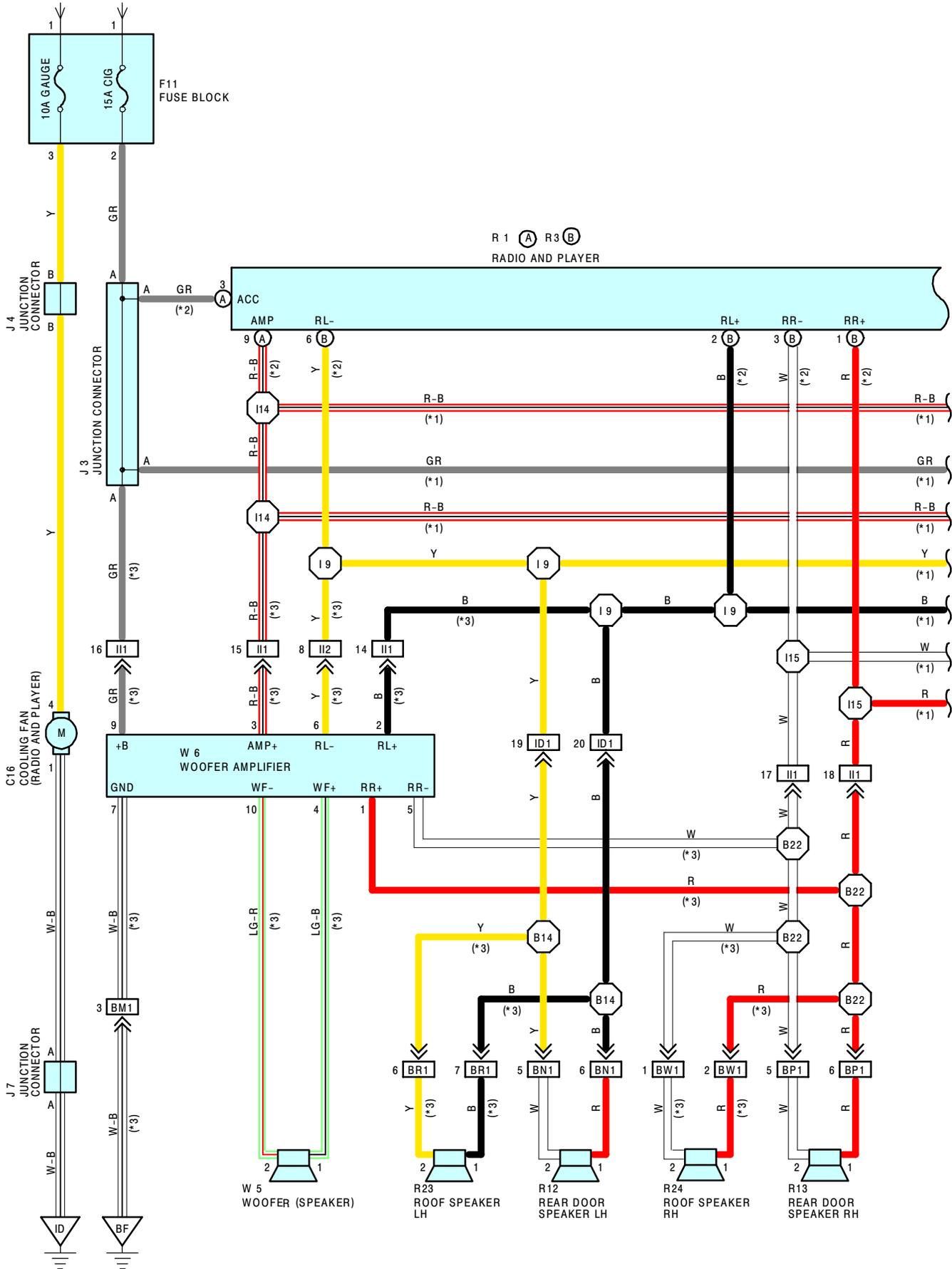


(HINT:SEE PAGE 7)



# RADIO AND PLAYER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)







# RADIO AND PLAYER

## SERVICE HINTS

### R 1 (A) RADIO AND PLAYER

- (A) 4-GROUND : ALWAYS APPROX. 12 VOLTS
- (A) 3-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ACC OR ON POSITION
- (A) 7-GROUND : ALWAYS CONTINUITY

### S11 (A) STEREO COMPONENT AMPLIFIER

- (A) 1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ACC OR ON POSITION
- (A) 10-GROUND : ALWAYS APPROX. 12 VOLTS
- (A) 9-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE		
C16	24	J 4	25	R23	27		
F 9	25	J 7	25	R24	27		
F10	25	R 1	A	25	S11	A	25
F11	25	R 2	25	S12	B	25	
F14	26	R 3	B	25	W 5	27	
F15	26	R12	27	W 6	27		
J 3	25	R13	27				

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
ID1	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
II1	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
II2		
BJ1	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	34	FLOOR NO. 2 WIRE AND FLOOR NO. 1 WIRE (UNDER THE CENTER CONSOLE)
BN1	34	REAR DOOR LH WIRE AND FLOOR NO. 1 WIRE (LEFT CENTER PILLAR)
BP1	34	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)
BR1	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BW1	36	ROOF NO. 2 WIRE AND FLOOR NO. 2 WIRE (RIGHT QUARTER PANEL INNER)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	32	COWL WIRE	I15	32	COWL WIRE
I10			B14	36	FLOOR WIRE
I14			B22	36	FLOOR NO. 2 WIRE

C16



F 9, F10



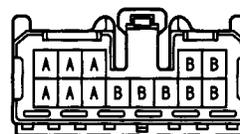
F11

(SEE PAGE 20)

F14, F15

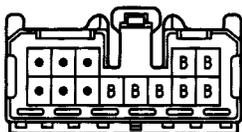


J 3



(HINT:SEE PAGE 7)

J 4



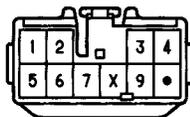
(HINT:SEE PAGE 7)

J 7 BLUE

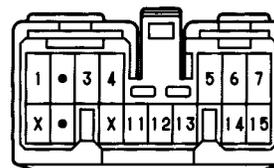


(HINT:SEE PAGE 7)

R 1 (A) GRAY



R 2



R 3 (B) GRAY



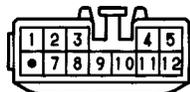
R12, R13



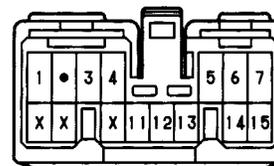
R23, R24



S11 (A)



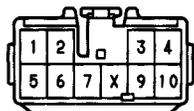
S12 (B)



W 5

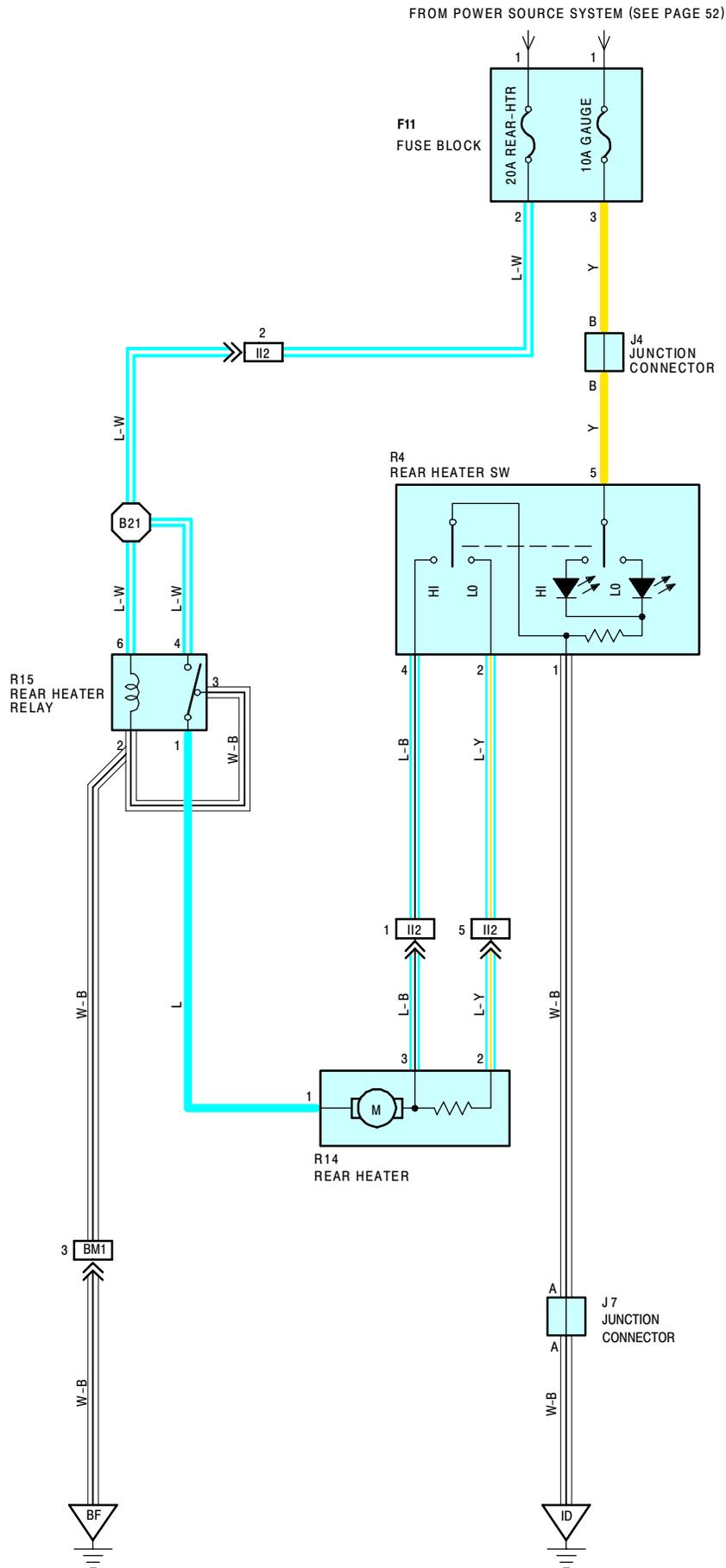


W 6





# REAR HEATER



**SERVICE HINTS**

**R 4 REAR HEATER SW**

- 2-1 : CLOSED WITH THE IGNITION SW AT ON AND REAR HEATER SW AT **LO** POSITION
- 4-1 : CLOSED WITH THE IGNITION SW AT ON AND REAR HEATER SW AT **HI** POSITION

**R15 REAR HEATER RELAY**

- 4-1 : CLOSED WITH THE IGNITION SW AT **ON** POSITION

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	25	J 7	25	R14	27
J 4	25	R 4	25	R15	27

**□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS**

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	32	COWL WIRE AND FLOOR NO. 2 WIRE (RIGHT KICK PANEL)
BM1	34	FLOOR NO. 2 WIRE AND FLOOR NO. 1 WIRE (UNDER THE CENTER CONSOLE)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	32	LEFT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

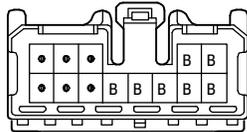
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B21	36	FLOOR NO. 2 WIRE			

F11

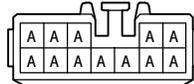
(SEE PAGE 20)

J 4



(HINT : SEE PAGE 7)

J 7 BLUE

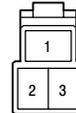


(HINT : SEE PAGE 7)

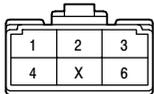
R 4 BLACK



R14



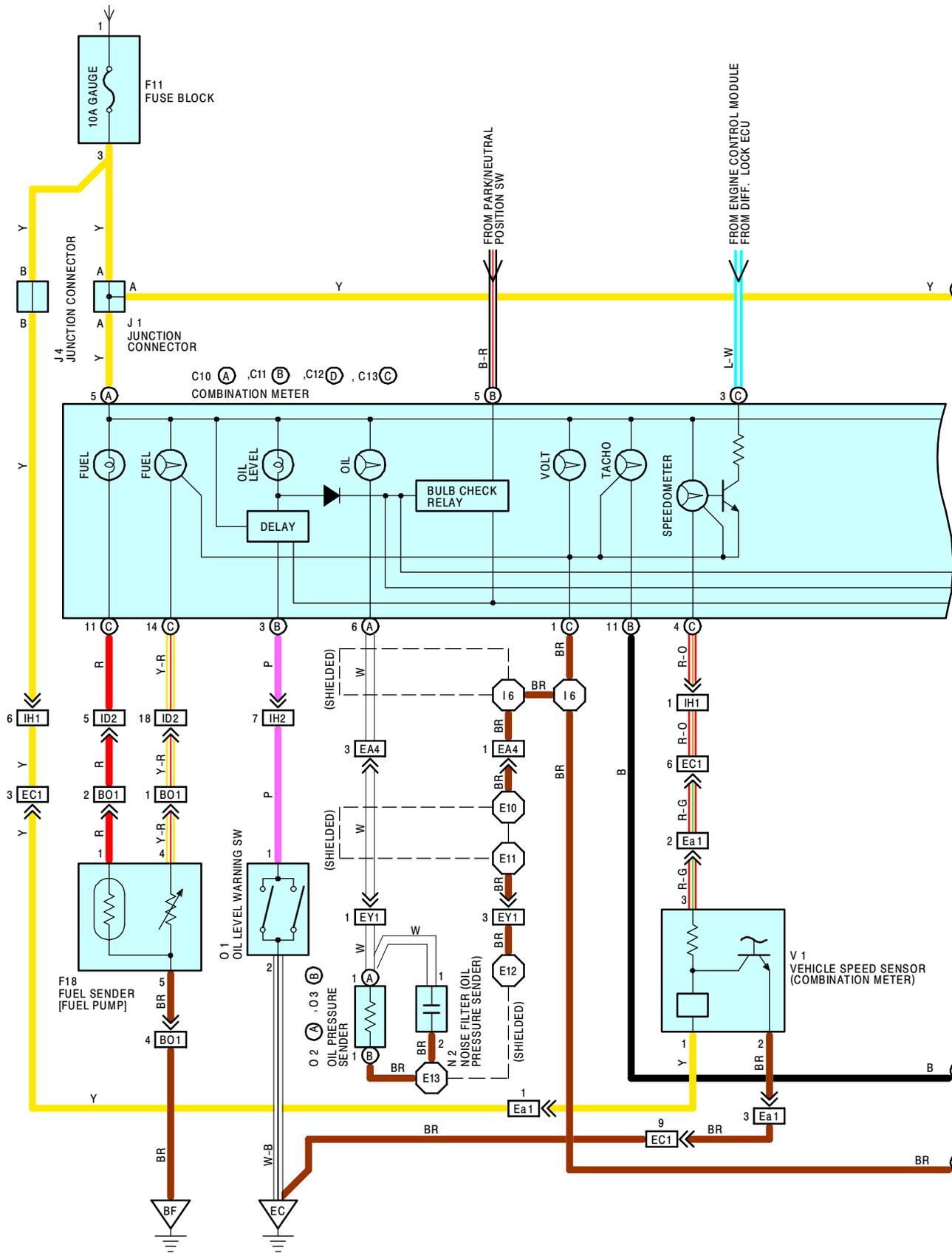
R15



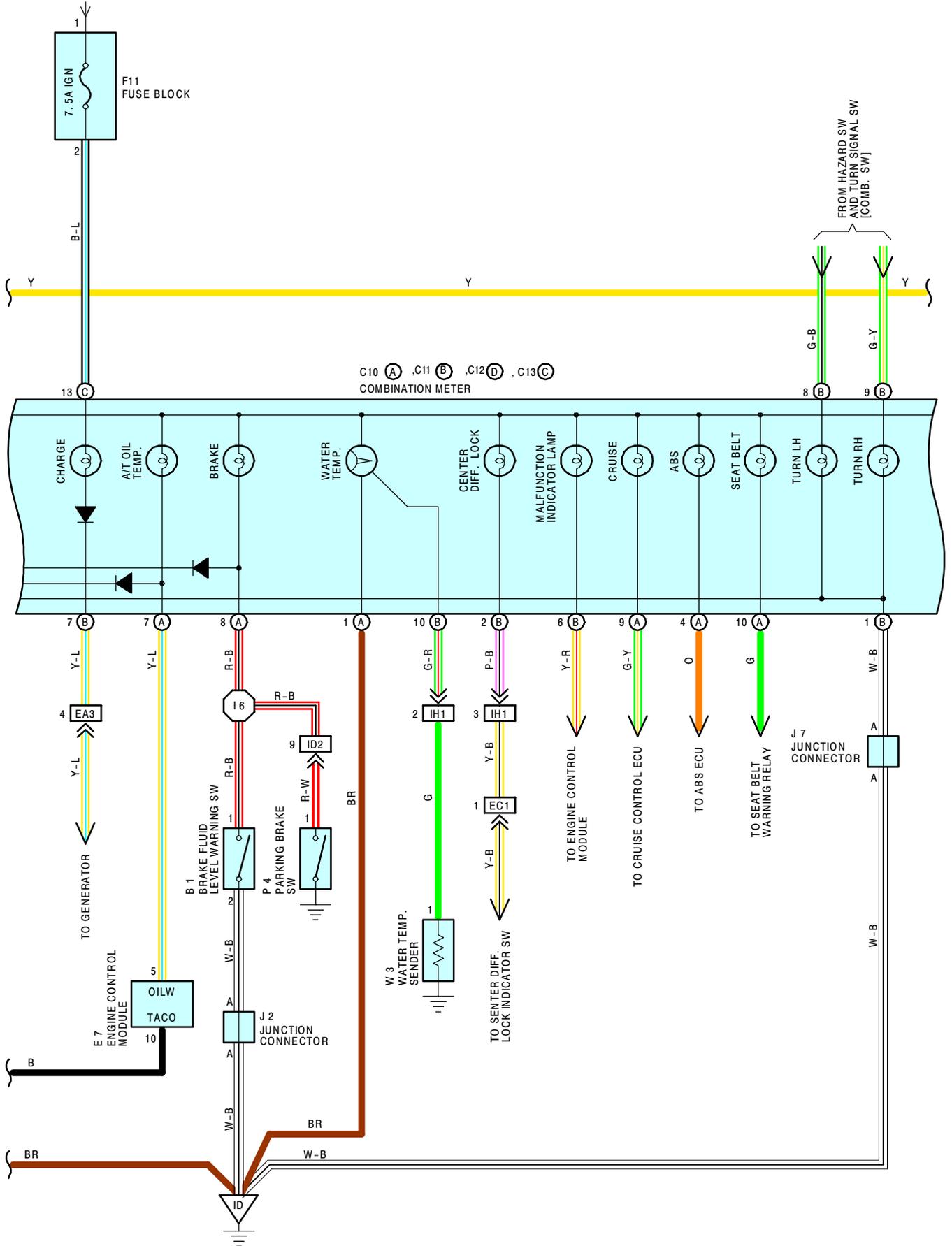


# COMBINATION METER

FROM POWER SOURCE SYSTEM (SEE PAGE 52)

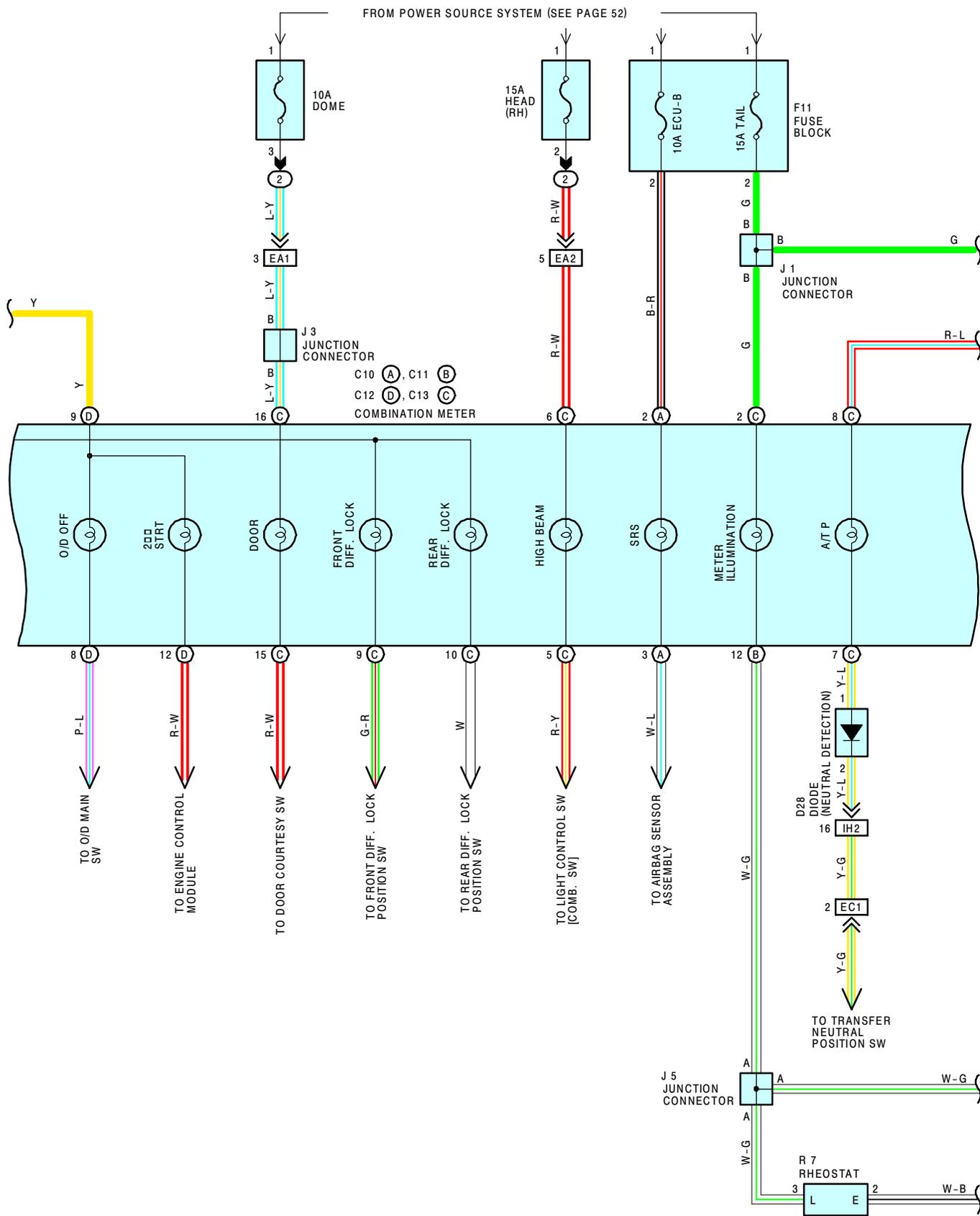


FROM POWER SOURCE SYSTEM (SEE PAGE 52)





# COMBINATION METER







# COMBINATION METER

## SERVICE HINTS

### B 1 BRAKE FLUID LEVEL WARNING SW

1-2 : CLOSED WITH THE FLOAT DOWN

### C10 (A), C11 (B), C12 (D), C13 (C) COMBINATION METER

(C) 16-GROUND : ALWAYS APPROX. 12 VOLTS

(A) 5, (C) 13-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION

(A) 1, (B) 1, (C) 1, (D) 6-GROUND : ALWAYS CONTINUITY

### P 4 PARKING BRAKE SW

1-GROUND : CLOSED WITH THE PARKING BRAKE LEVER PULLED UP

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	22	F18	26	O 1	23
C10	A 24	J 1	25	O 2	A 23
C11	B 24	J 2	25	O 3	B 23
C12	D 24	J 3	25	P 4	27
C13	C 24	J 4	25	R 7	25
D28	24	J 5	25	V 1	23
E 7	24	J 7	25	W 3	23
F11	25	N 2	23		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO. 2 (FRONT SIDE OF LEFT FENDER)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
EA2		
EA3		
EA4	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (RIGHT FENDER)
EC1	30	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
EY1	30	OIL PRESSURE SWITCH WIRE AND ENGINE ROOM MAIN WIRE (NEAR THE AIR CLEANER)
Ea1	30	TRANSMISSION WIRE AND SPEED SENSOR WIRE (NEAR THE TRANSMISSION)
ID2	32	COWL WIRE AND FLOOR NO. 1 WIRE (LEFT KICK PANEL)
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		
BO1	34	FLOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 2 WIRE (BESIDE THE FUEL TANK)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX

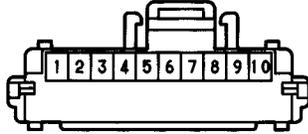
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E10	30	ENGINE ROOM MAIN WIRE	E13	30	OIL PRESSURE SWITCH WIRE
E11			I 6	32	COWL WIRE
E12	30	OIL PRESSURE SWITCH WIRE			

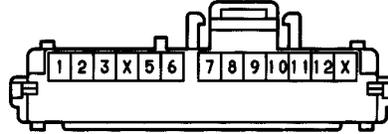
B 1 GRAY



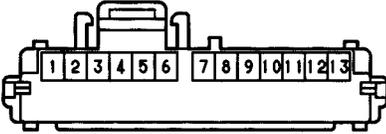
C10 A GRAY



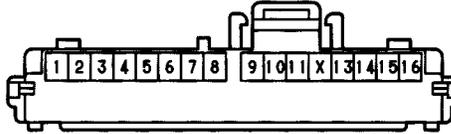
C11 B BLUE



C12 D BROWN



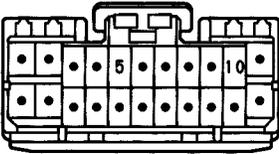
C13 C



D28 BLACK



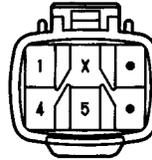
E 7 DARK GRAY



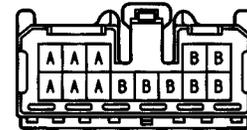
F11

(SEE PAGE 18)

F18 DARK GRAY



J 1 BLUE



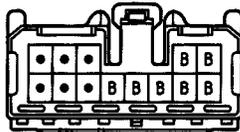
(HINT:SEE PAGE 7)

J 2 BLUE



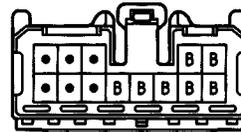
(HINT:SEE PAGE 7)

J 3



(HINT:SEE PAGE 7)

J 4



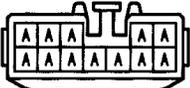
(HINT:SEE PAGE 7)

J 5 BLUE



(HINT:SEE PAGE 7)

J 7 BLUE



(HINT:SEE PAGE 7)

N 2 BLACK



O 1 DARK GRAY



O 2 A BLACK



O 3 B GRAY



P 4



R 7



V 1 BLACK



W 3 GRAY





# AIR CONDITIONING

## SYSTEM OUTLINE

### 1. HEATER BLOWER MOTOR OPERATION

THE CURRENT FLOWS CONSTANTLY FROM THE **FL HEATER FUSE** TO **TERMINAL 5** OF THE HEATER RELAY. WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWS THROUGH **GAUGE FUSE** TO **TERMINAL 5** OF THE BLOWER SPEED CONTROL RELAY, AND TO **TERMINAL 3** OF THE HEATER RELAY → **TERMINAL 1** → **TERMINAL (A) 1** OF THE HEATER CONTROL SW.

#### \* LOW SPEED OPERATION

WHEN THE BLOWER SW (HEATER CONTROL SW) IS SET TO **LO** POSITION, THE CURRENT TO **TERMINAL (A) 1** OF THE HEATER CONTROL SW FLOWS TO **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE HEATER RELAY ON. AS A RESULT, THE CURRENT TO **TERMINAL 5** OF THE HEATER RELAY FLOWS TO **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTORS → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 4** → **GROUND**, CAUSING THE BLOWER MOTORS TO OPERATE AT LOW SPEED.

#### \* HIGH SPEED OPERATION

WHEN THE BLOWER SW (HEATER CONTROL SW) IS SET TO **HI** POSITION, THE CURRENT TO **TERMINAL (A) 1** OF THE HEATER CONTROL SW FLOWS TO **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE HEATER RELAY. AS A RESULT, THE CURRENT TO **TERMINAL 5** OF THE BLOWER SPEED CONTROL RELAY FLOWS TO **TERMINAL 7** → **TERMINAL (B) 13** OF THE HEATER CONTROL SW → **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE BLOWER SPEED CONTROL RELAY. THIS CAUSES THE CURRENT TO FLOW FROM **TERMINAL 5** OF THE HEATER RELAY TO **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTORS → **TERMINAL 2** → **TERMINAL 4** OF THE BLOWER SPEED CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTORS TO OPERATE AT HIGH SPEED.

#### \* MEDIUM SPEED OPERATION (OPERATION AT M1, M2)

WHEN THE BLOWER SW (HEATER CONTROL SW) IS SET TO **M1** POSITION, THE CURRENT TO **TERMINAL (A) 1** OF THE HEATER CONTROL SW FLOWS TO **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE HEATER RELAY. AS A RESULT, THE CURRENT FROM **TERMINAL 5** OF THE BLOWER SPEED CONTROL RELAY TO **TERMINAL 6** → **TERMINAL (B) 9** OF THE HEATER CONTROL SW → **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE BLOWER SPEED CONTROL RELAY. THIS CAUSES THE CURRENT FROM **TERMINAL 5** OF THE HEATER RELAY TO **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTORS → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER SPEED CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTORS TO OPERATE AT MEDIUM LOW SPEED. WHEN THE BLOWER SW (HEATER CONTROL SW) IS SET TO **M2** POSITION, THE CURRENT TO **TERMINAL (A) 1** OF THE HEATER CONTROL SW FLOWS TO **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE HEATER RELAY. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 5** OF THE BLOWER SPEED CONTROL RELAY TO **TERMINAL 8** → **TERMINAL (B) 10** OF THE HEATER CONTROL SW → **TERMINAL (B) 16** → **GROUND**, ACTIVATING THE BLOWER SPEED CONTROL RELAY. THIS CAUSES THE CURRENT TO FLOW FROM **TERMINAL 5** OF THE HEATER RELAY TO **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTORS → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL 2** OF THE BLOWER SPEED CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTOR TO OPERATE AT MEDIUM HI SPEED. THE CURRENT TO THE BLOWER MOTORS AT THIS TIME IS STRONGER THAN IT WAS FOR THE **M1** POSITION, SO THE BLOWER MOTORS OPERATES FASTER FOR **M2** THAN IT DOES FOR **M1**.

### 2. OPERATION AIR INLET CONTROL SERVO MOTOR

(SWITCHING FROM FRESH TO RECIRC)

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **GAUGE FUSE** TO **TERMINAL 1** OF THE AIR INLET CONTROL SERVO MOTOR. WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE FRESH SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF THE AIR INLET CONTROL SERVO MOTOR TO **TERMINAL 3** → **TERMINAL (A) 18** OF THE HEATER CONTROL SW → **TERMINAL (B) 16** → **GROUND**, THIS CAUSES THE MOTOR TO ROTATE AND THE DAMPER TO MOVE TO THE RECIRC SIDE. WHEN IT IS IN THE RECIRC POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR, AND THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH THE IGNITION SW ON, WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE RECIRC SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF THE AIR INLET CONTROL SERVO MOTOR TO **TERMINAL 2** → **TERMINAL (A) 19** OF THE HEATER CONTROL SW → **TERMINAL (B) 16** → **GROUND**, THIS CAUSES THE MOTOR TO ROTATE AND DAMPER TO MOVE TO THE FRESH SIDE. WHEN IT IS IN THE **FRESH** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR, AND THE DAMPER STOPS AT THAT POSITION.

### 3. OPERATION OF AIR VENT MODE CONTROL SERVO MOTOR

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **GAUGE** FUSE TO **TERMINAL 5** OF THE AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 6** → **GROUND**, AND THE DAMPER MOVES TO THE POSITION OF THE MODE SELECTION SW ON THE CONTROL SW WHICH IS ON. WHEN THE FOOT SW OF THE HEATER CONTROL SW IS TURNED ON WITH THE **DEF** POSITION, A SIGNAL IS INPUT FROM **TERMINAL 7** OF THE AIR VENT MODE CONTROL SERVO MOTOR TO **TERMINAL (B) 4** OF THE HEATER CONTROL SW. AS A RESULT, THE SERVO MOTOR OPERATES UNTIL THE DAMPER REACHES TO **DEF** POSITION. WHEN THIS OCCURS, THE SIGNAL TO THE HEATER CONTROL SW IS SHUT OFF AND ROTATION OF THE MOTOR STOPS. SWITCHING TO OTHER MOVEMENT IS CONTROLLED BY THE SERVO MOTOR ACCORDING TO THE FOLLOWING SIGNALS:

1. **FACE** POSITION, A SIGNAL INPUT FROM **TERMINAL 1** OF THE SERVO MOTOR TO **TERMINAL (B) 14** OF THE HEATER CONTROL SW.
2. **BI-LEVEL** POSITION, A SIGNAL INPUT FROM **TERMINAL 2** OF THE SERVO MOTOR TO **TERMINAL (A) 12** OF THE HEATER CONTROL SW.
3. **FOOT** POSITION, A SIGNAL INPUT FROM **TERMINAL 3** OF THE SERVO MOTOR TO **TERMINAL (A) 7** OF THE HEATER CONTROL SW.
4. **FOOT/DEF** POSITION, A SIGNAL INPUT FROM **TERMINAL 4** OF THE SERVO MOTOR TO **TERMINAL (B) 11** OF THE HEATER CONTROL SW.

### 4. AIR MIX CONTROL SERVO MOTOR

VOLTAGE IS APPLIED TO **TERMINALS 11** AND **12** OF THE A/C SYSTEM AMPLIFIER FROM THE TEMPERATURE CONTROL LEVER INSIDE THE HEATER CONTROL SW AND FROM THE POTENTIOMETER INSIDE THE AIR MIX CONTROL SERVO MOTOR. THIS VOLTAGE IS KEPT AT A FIXED LEVEL BY THE A/C SYSTEM AMPLIFIER. WHEN THE TEMPERATURE CONTROL LEVER OF THE HEATER CONTROL SW IS MOVED TO 'COOL', THE VOLTAGE APPLIED TO **TERMINAL 12** OF THE A/C SYSTEM AMPLIFIER FROM **TERMINAL (B) 3** OF THE HEATER CONTROL SW CHANGES. AT THIS TIME, THE A/C SYSTEM AMPLIFIER COMPARES THE VOLTAGE FROM **TERMINAL 2** OF THE AIR MIX CONTROL SERVO MOTOR WITH THE VOLTAGE APPLIED TO **TERMINAL 11** OF THE A/C SYSTEM AMPLIFIER. THIS ACTIVATES THE A/C SYSTEM AMPLIFIER, SO THE CURRENT FLOWS FROM **TERMINAL 6** OF THE AMPLIFIER TO **TERMINAL 5** OF THE AIR MIX CONTROL SERVO MOTOR → **TERMINAL 4** → **TERMINAL 1** OF THE A/C SYSTEM AMPLIFIER, AND THE AIR MIX CONTROL SERVO MOTOR CHANGES TO THE 'COOL' SIDE. THEN WHEN THE VOLTAGE FROM THE POTENTIOMETER INSIDE THE SERVO MOTOR EQUALS THE VOLTAGE FROM THE TEMPERATURE CONTROL LEVER INSIDE THE HEATER CONTROL SW, THE A/C SYSTEM AMPLIFIER CUTS OFF POWER TO THE MOTOR. WHEN THE TEMPERATURE CONTROL LEVER IS MOVED TO THE 'HOT' SIDE, THE A/C SYSTEM AMPLIFIER OPERATES THE SAME AS FOR 'COOL' OPERATION, SO THE CURRENT FLOWS FROM **TERMINAL 1** OF THE A/C SYSTEM AMPLIFIER TO **TERMINAL 4** OF THE AIR MIX CONTROL SERVO MOTOR → **TERMINAL 5** → **TERMINAL 6** OF THE A/C SYSTEM AMPLIFIER, CHANGING THE MOTOR TO THE 'HOT' SIDE. WHEN THE VOLTAGE OF THE POTENTIOMETER AND VOLTAGE OF THE TEMPERATURE CONTROL LEVEL ARE THE SAME, POWER TO THE MOTOR IS CUT OFF.

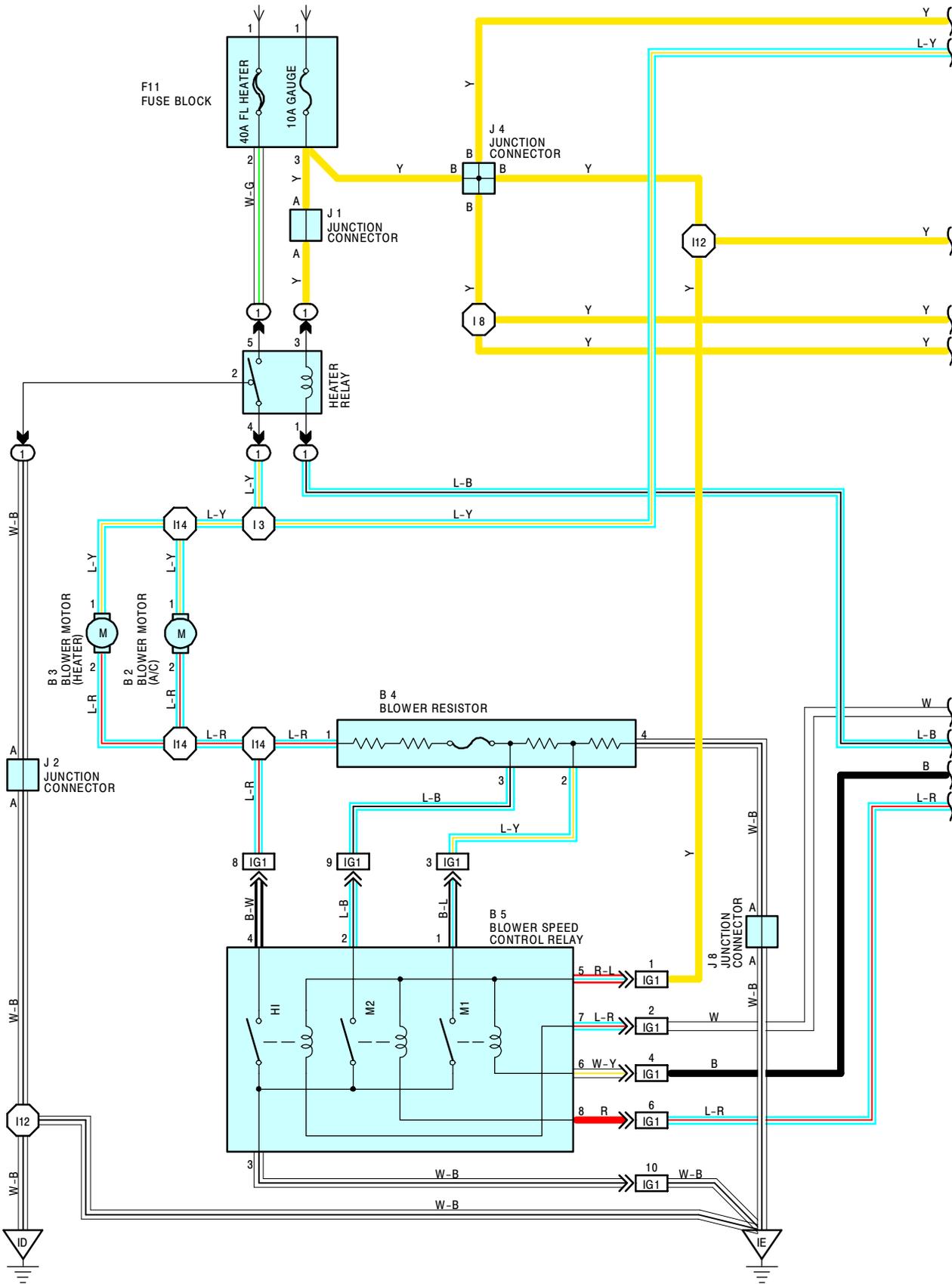
### 5. AIR CONDITIONING OPERATION

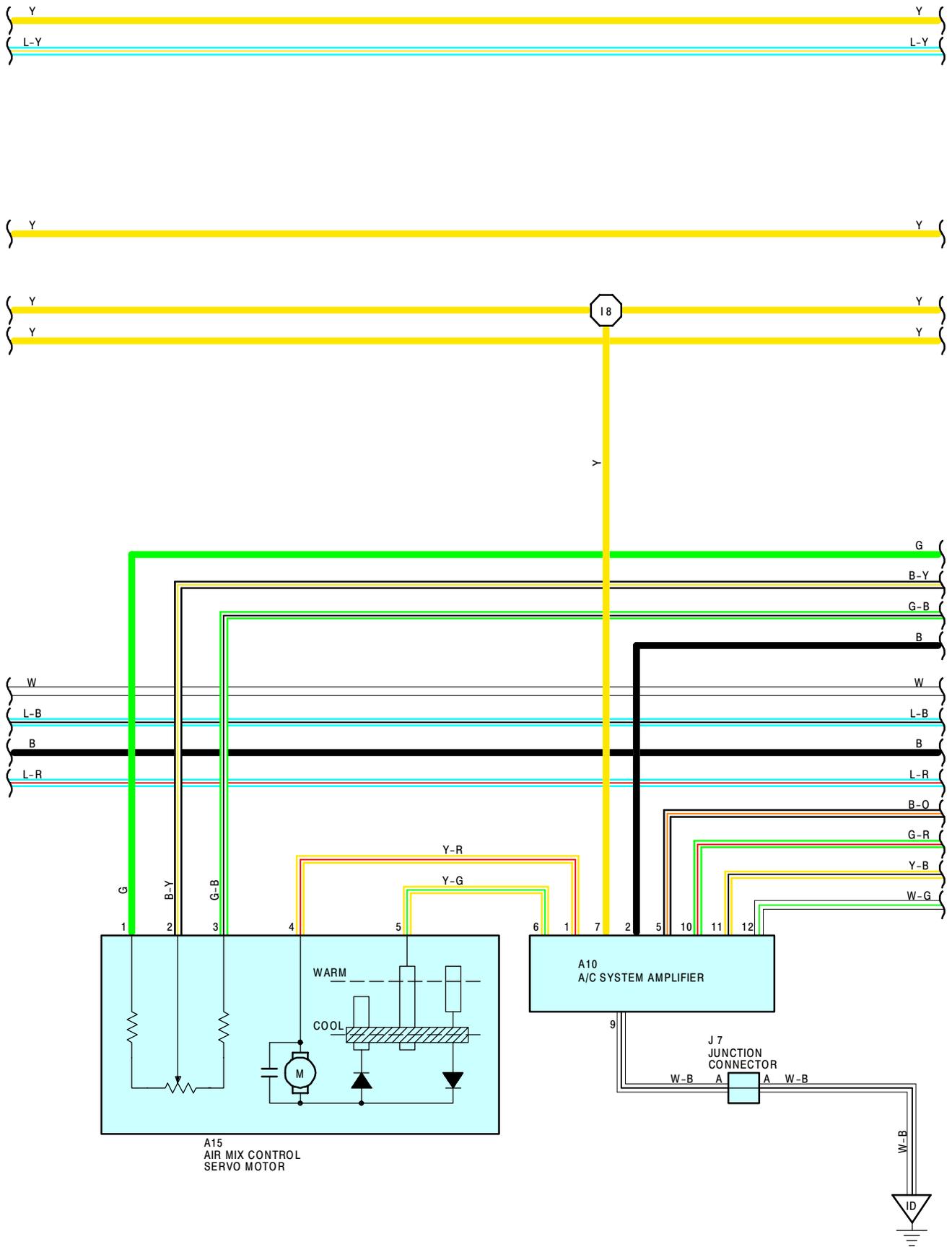
WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FROM THE **GAUGE** FUSE FLOWS THROUGH THE THE A/C DUAL PRESSURE SW TO **TERMINAL 3** OF THE A/C AMPLIFIER. IF THE HEATER CONTROL SW IS THEN TURNED ON, THE CURRENT FLOWS FROM THE **FL HEATER** FUSE THROUGH THE **A.C.** FUSE TO **TERMINAL (B) 17** OF THE HEATER CONTROL SW. WHEN THE A/C IS TURNED ON, THE CURRENT FLOWS FROM **TERMINAL (B) 17** OF THE HEATER CONTROL SW TO **TERMINAL (B) 6** → **TERMINAL 2** OF THE A/C AMPLIFIER, ACTIVATING THE A/C AMPLIFIER. THE CURRENT THEN FLOWS FROM **TERMINAL 7** OF THE A/C AMPLIFIER TO **TERMINAL 4** OF THE ENGINE COOLANT TEMP. RELAY → **TERMINAL 3** → **TERMINAL 1** OF A/C MAGNETIC CLUTCH → **GROUND**. THIS CAUSES THE COMPRESSOR TO START. WHEN THE ENGINE COOLANT TEMPERATURE IS APPROX. **108°C (226°F)**, THE WATER TEMP. SW (A/C) IS TURNED ON AND THE A/C CUT RELAY IS ACTIVATED. THIS TURNS THE COMPRESSOR OFF AND STOPS THE AIR CONDITIONING. THE AIR CONDITIONING ALSO TURNS OFF, IF A SIGNAL IS INPUT TO THE A/C AMPLIFIER THAT THE AIR OUTLET TEMPERATURE IS LOW (BELOW APPROX. **3°C**) OR THE REFRIGERANT PRESSURE IS ABNORMALLY LOW.



# AIR CONDITIONING

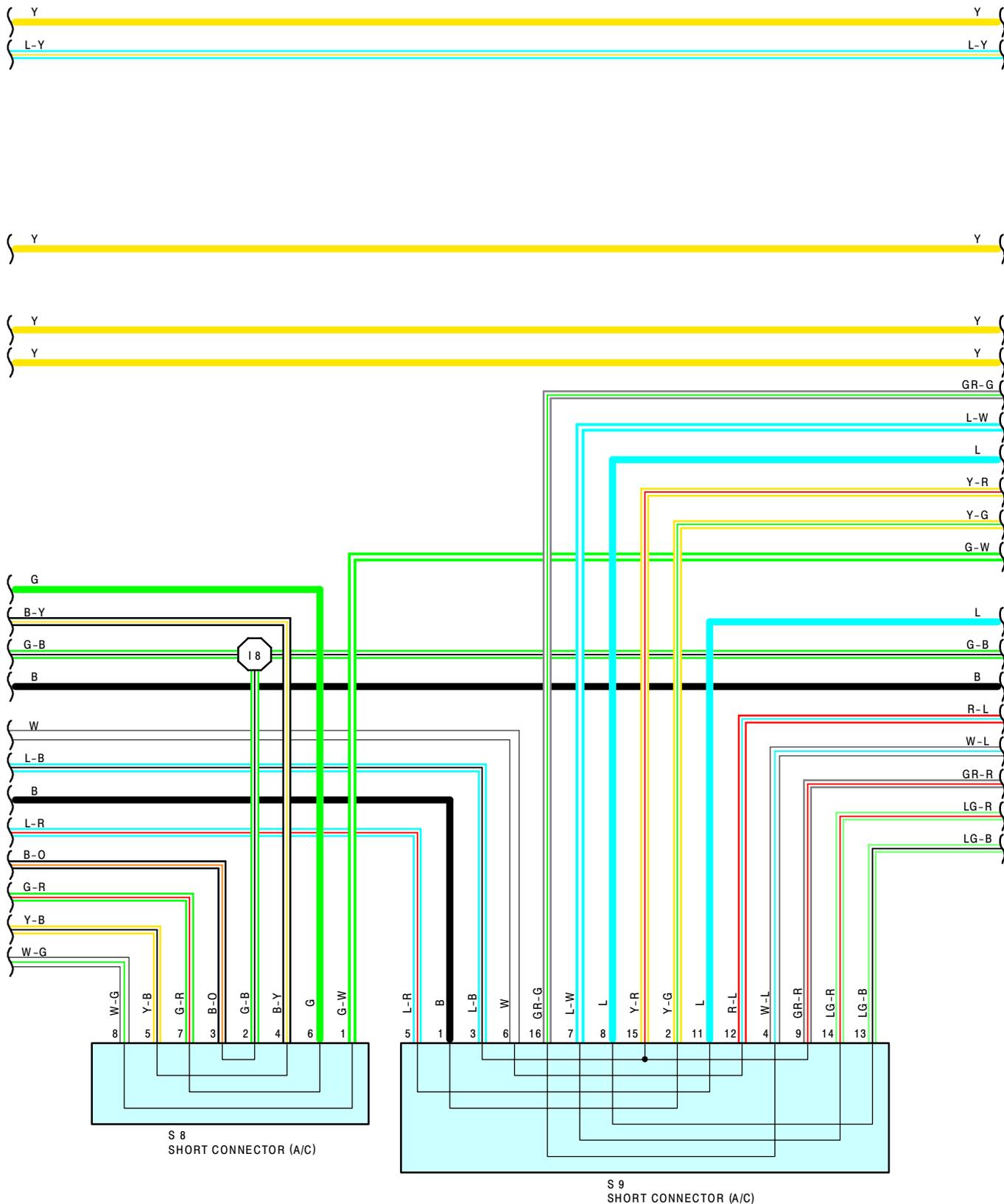
FROM POWER SOURCE SYSTEM (SEE PAGE 52)

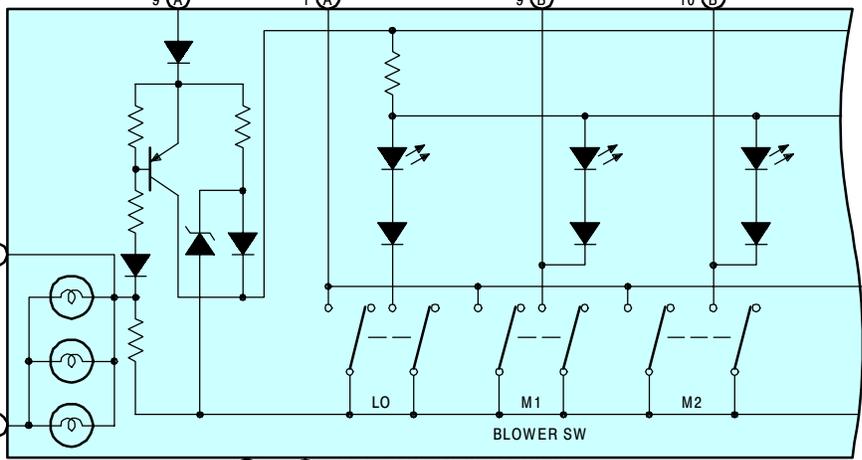
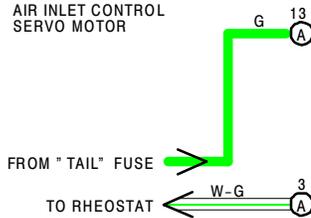
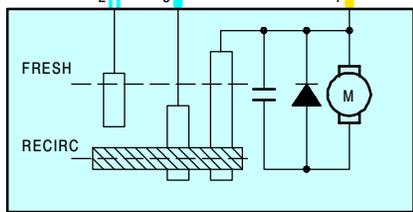
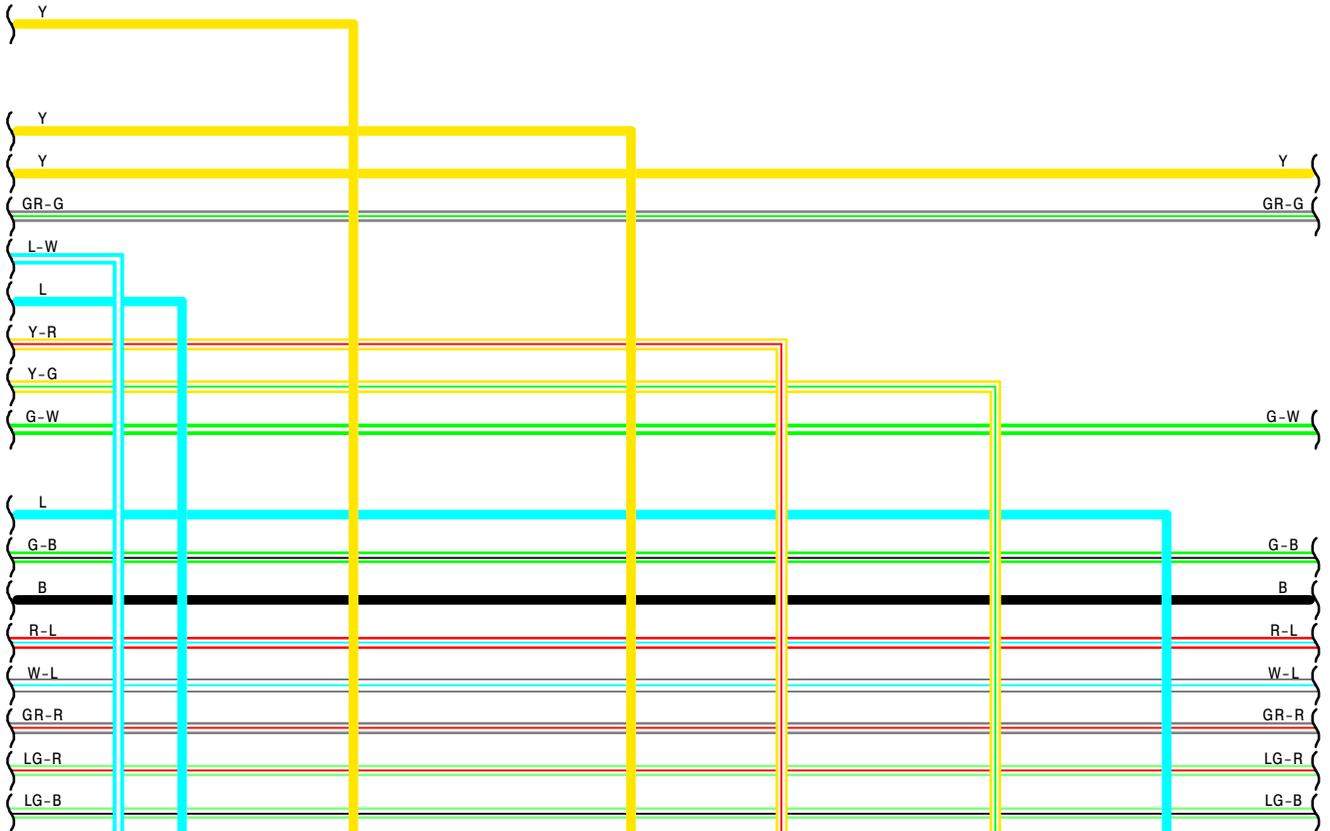






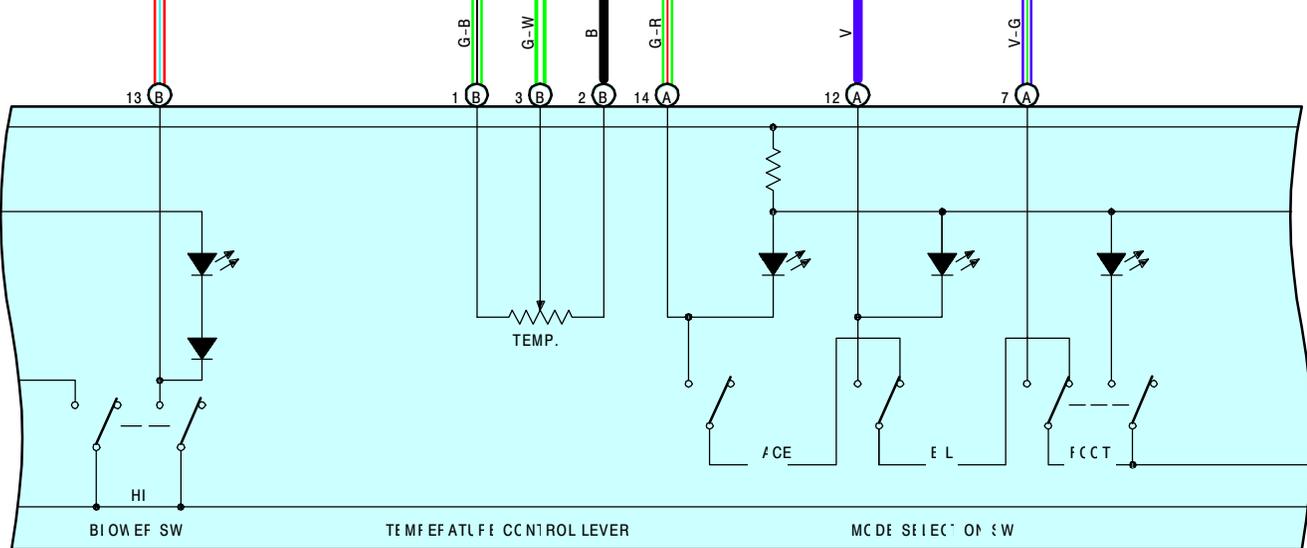
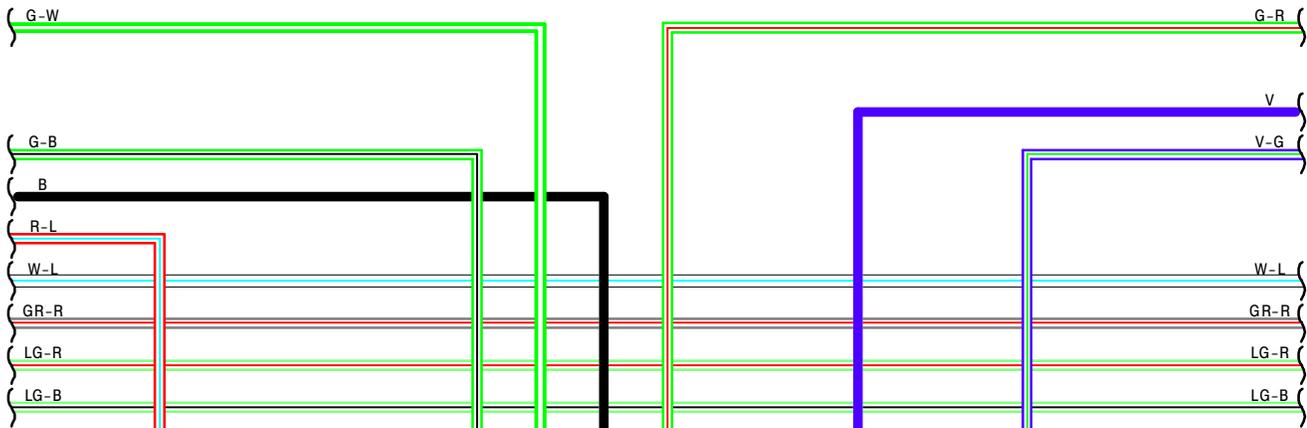
# AIR CONDITIONING



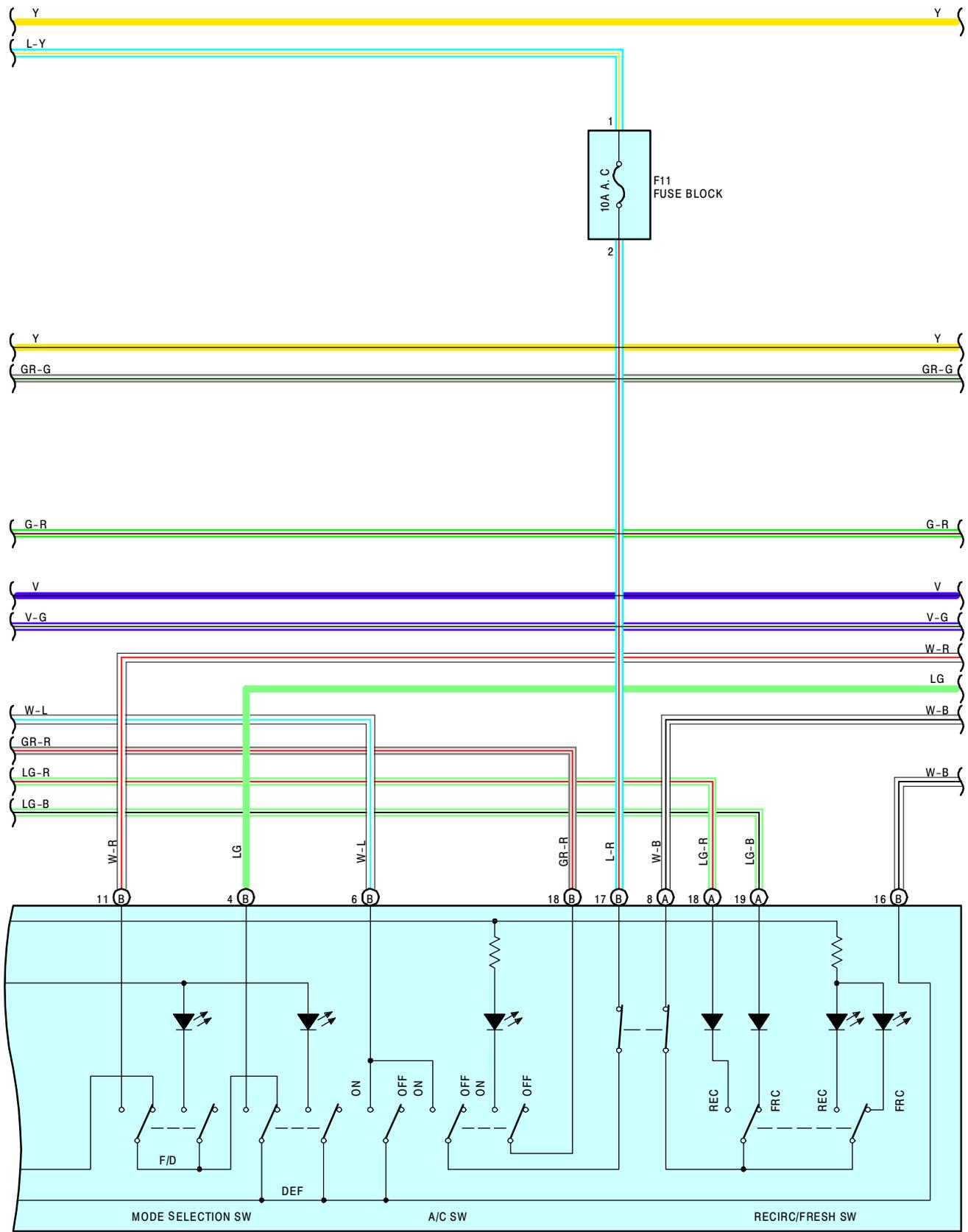




# AIR CONDITIONING



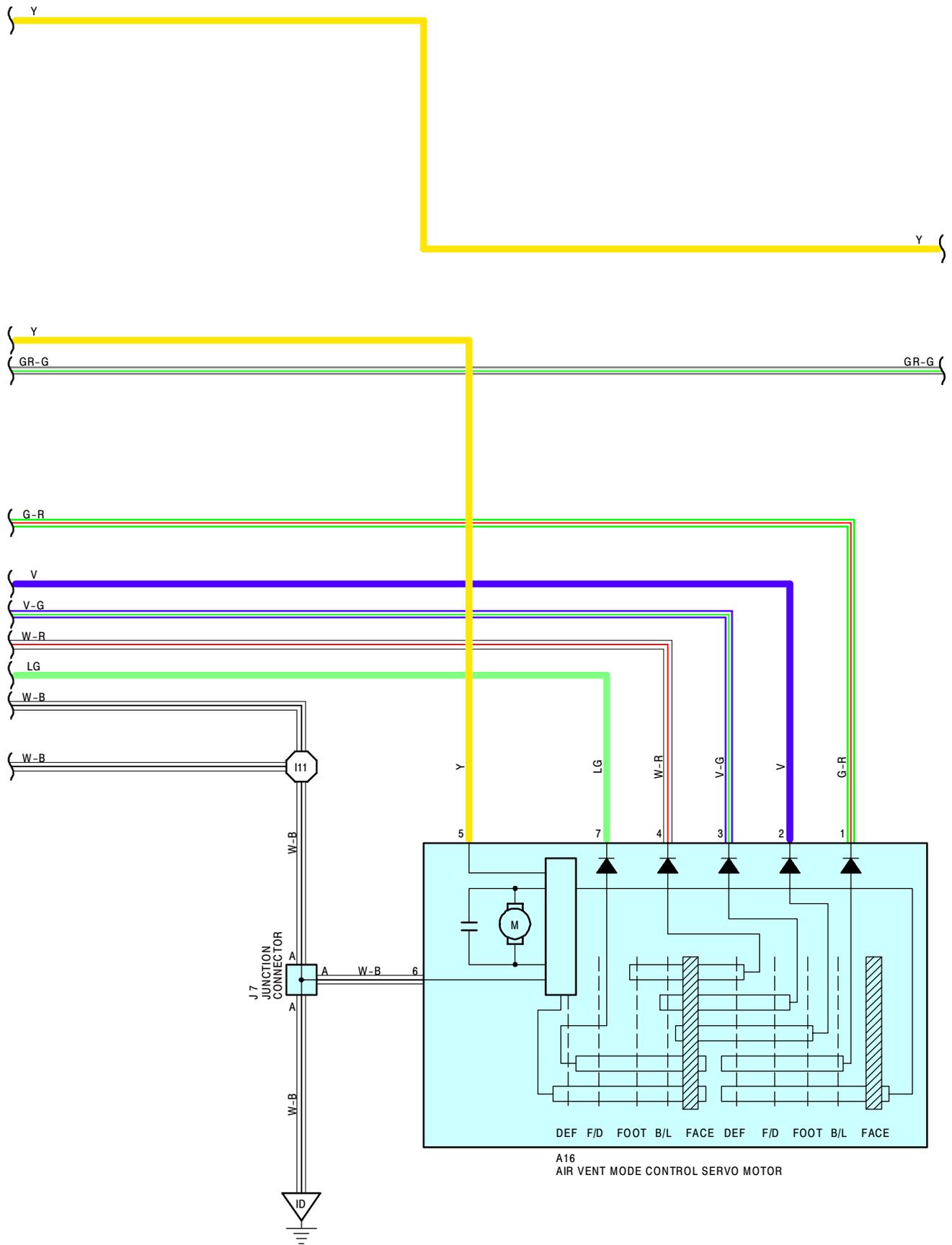
H10(A) H11(B)  
HEATER CONTROL SW AND A/C SW

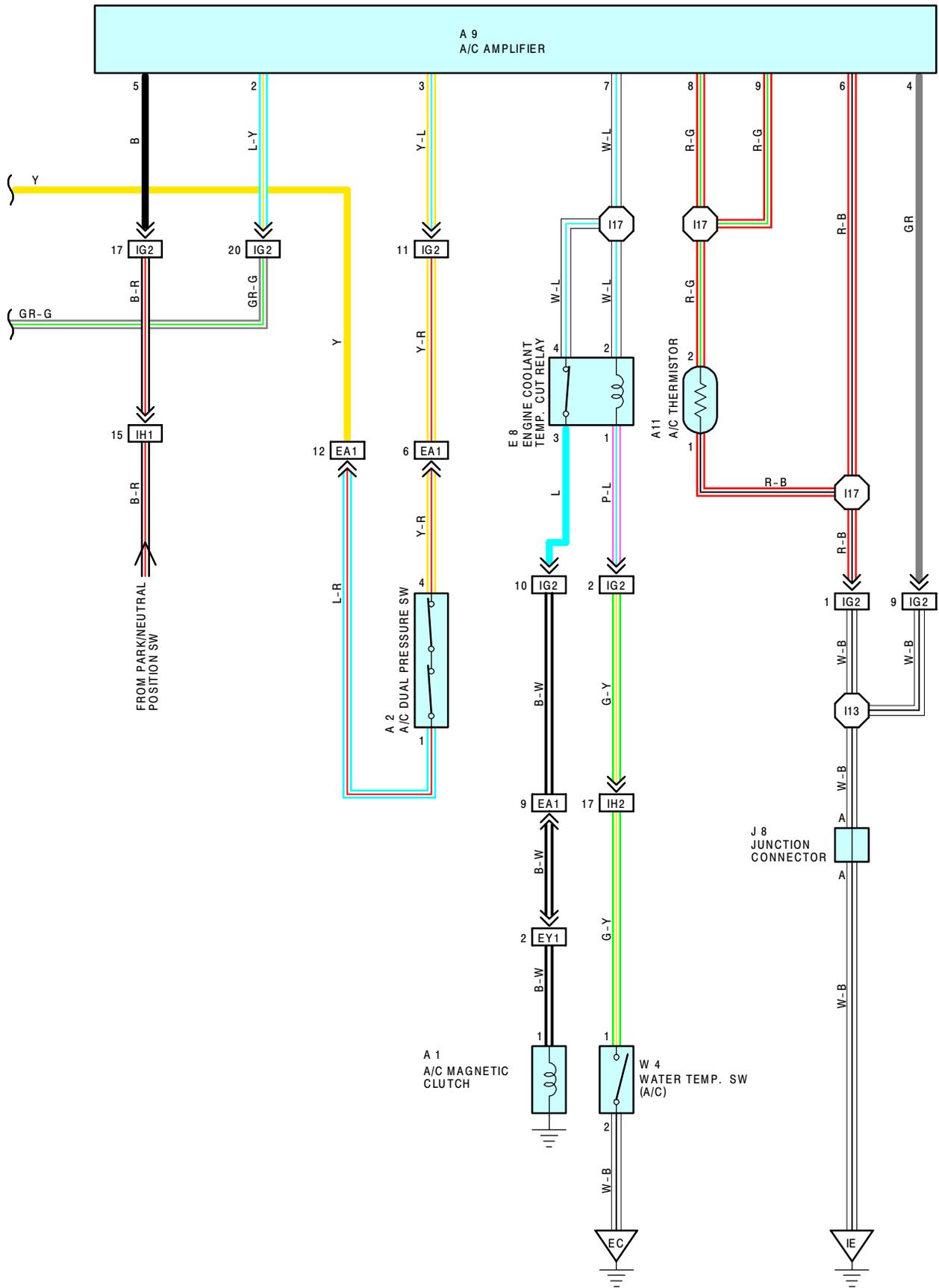


H 10 (A) H 11 (B)  
HEATER CONTROL SW AND A/C SW



# AIR CONDITIONING







# AIR CONDITIONING

## SERVICE HINTS

### A 1 A/C MAGNETIC CLUTCH

1-GROUND : APPROX. **3.8 Ω**

### A 2 A/C DUAL PRESSURE SW

1-4 : OPEN WITH THE REFRIGERANT PRESSURE AT LESS THAN APPROX. **2.1 KG/CM<sup>2</sup> (30 PSI, 206 KPA)**  
OR MORE THAN APPROX. **27 KG/CM<sup>2</sup> (38 PSI, 2684 KPA)**

### A11 A/C THERMISTOR

2-1 : APPROX. **1.5 KΩ 25°C (77°F)**

### B 4 BLOWER RESISTOR

1-4 : **2.0 Ω**1-2 : **0.88 Ω**1-3 : **0.32 Ω**

### H10 (A), H11 (B) HEATER CONTROL SW AND A/C SW

**(A) 1 (A)** 9-GROUND : APPROX. **12 VOLTS** WITH THE IGNITION SW AT **ON** POSITION**(A) 1-GROUND** : APPROX. **12 VOLTS** WITH THE HEATER CONTROL SW AT **LOW** POSITION**(B) 9-GROUND** : APPROX. **12 VOLTS** WITH THE HEATER CONTROL SW AT **MEDIUM LOW** POSITION**(B) 10-GROUND** : APPROX. **12 VOLTS** WITH THE HEATER CONTROL SW AT **MEDIUM HIGH** POSITION**(B) 13-GROUND** : APPROX. **12 VOLTS** WITH THE HEATER CONTROL SW AT **HIGH** POSITION**(A) 18-GROUND** : APPROX. **12 VOLTS** WITH THE RECIRC SW AT **ON** POSITION**(A) 19-GROUND** : APPROX. **12 VOLTS** WITH THE FRESH SW AT **ON** POSITION**(A) 14-GROUND** : APPROX. **12 VOLTS** WITH THE FACE SW AT **ON** POSITION**(A) 12-GROUND** : APPROX. **12 VOLTS** WITH THE B/L SW AT **ON** POSITION**(A) 7-GROUND** : APPROX. **12 VOLTS** WITH THE FOOT SW AT **ON** POSITION**(B) 4-GROUND** : APPROX. **12 VOLTS** WITH THE DEF SW AT **ON** POSITION**(B) 11-GROUND** : APPROX. **12 VOLTS** WITH THE FOOT/DEF SW AT **ON** POSITION**(A) 1, (B) 18-GROUND** : APPROX. **12 VOLTS** WITH THE A/C SW AT **ON** POSITION**(A) 8, (B) 16-GROUND** : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 1	22	B 2	24	J 1	25
A 2	22	B 3	24	J 2	25
A 9	24	B 4	24	J 4	25
A10	24	B 5	24	J 7	25
A11	24	E 8	24	J 8	25
A14	24	F11	25	S 8	25
A15	24	H10	A 25	S 9	25
A16	24	H11	B 25	W 4	23

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (LEFT FENDER)
EY1	30	OIL PRESSURE SWITCH WIRE AND ENGINE ROOM MAIN WIRE (NEAR THE AIR CLEANER)
IG1	32	COWL WIRE AND A/C SUB WIRE (BEHIND GLOVE BOX)
IG2		
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
IH2		

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	32	COWL WIRE	I13	32	COWL WIRE
I 8			I14		
I11			I17	32	A/C SUB WIRE
I12					

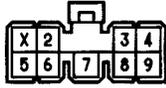
A 1 GRAY



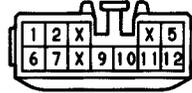
A 2 BLACK



A 9



A10



A11



A14



A15



A16



B 2



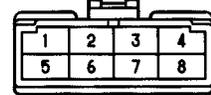
B 3 BLACK



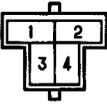
B 4 BLACK



B 5 BLACK



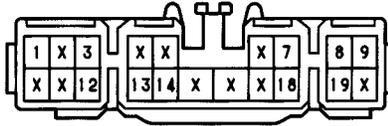
E 8 BLACK



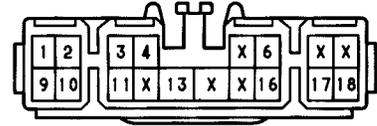
F11

(SEE PAGE 20)

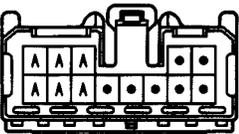
H10 (A)



H11 (B) BLUE



J 1



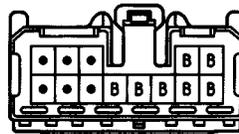
(HINT:SEE PAGE 7)

J 2 BLUE



(HINT:SEE PAGE 7)

J 4



(HINT:SEE PAGE 7)

J 7 BLUE



(HINT:SEE PAGE 7)

J 8 BLUE

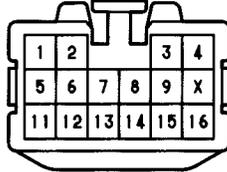


(HINT:SEE PAGE 7)

S 8



S 9

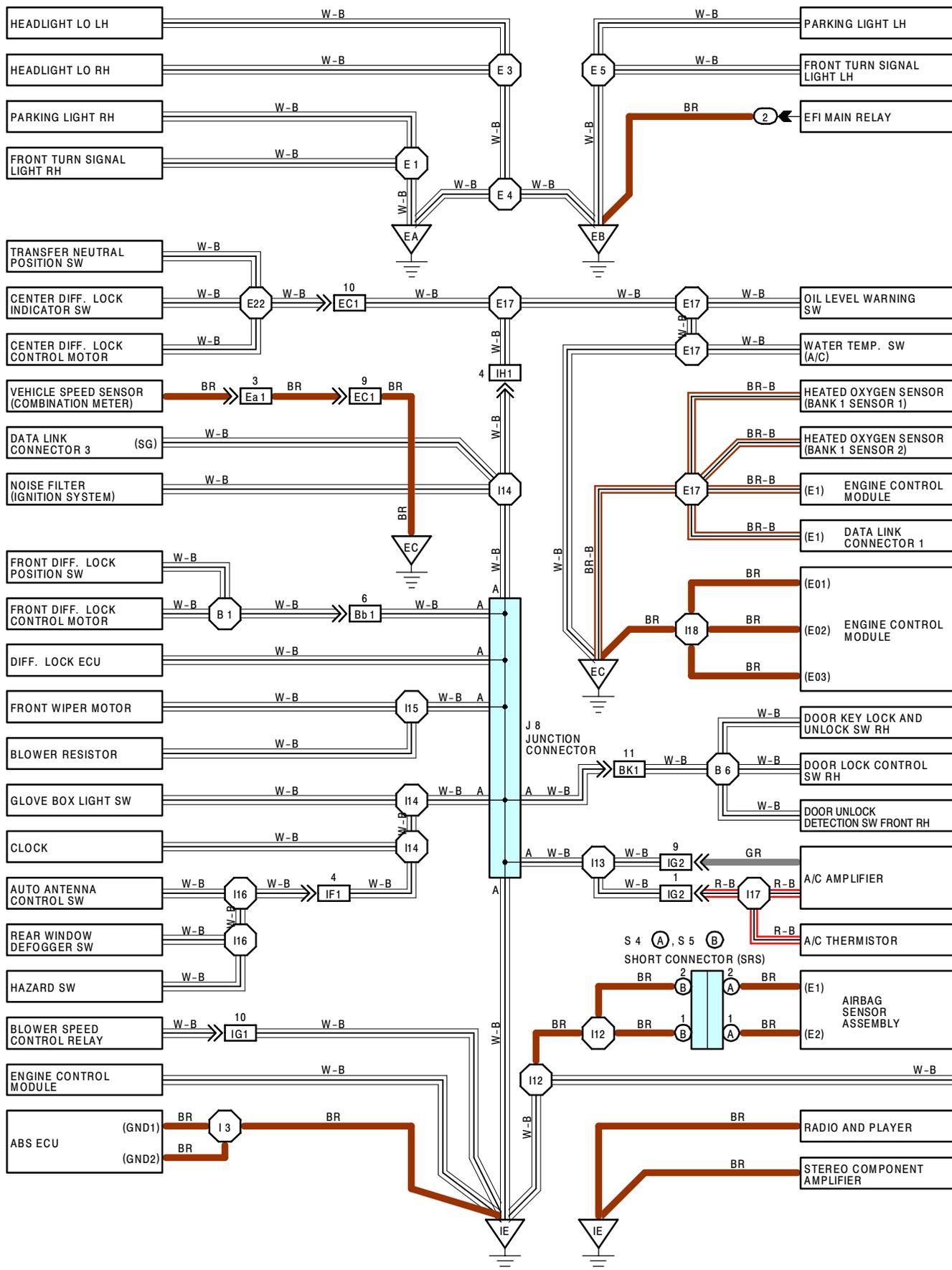


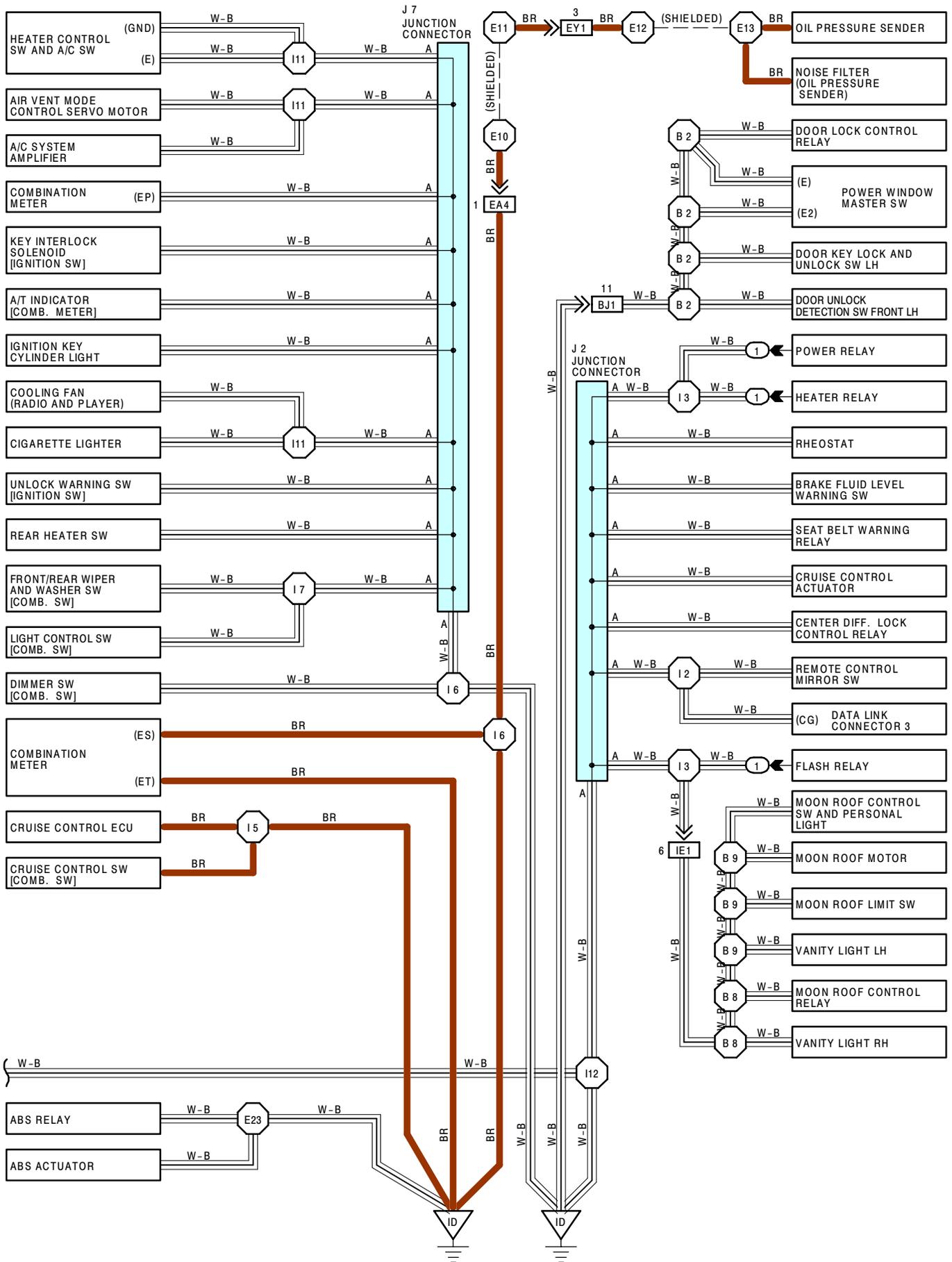
W 4 GRAY



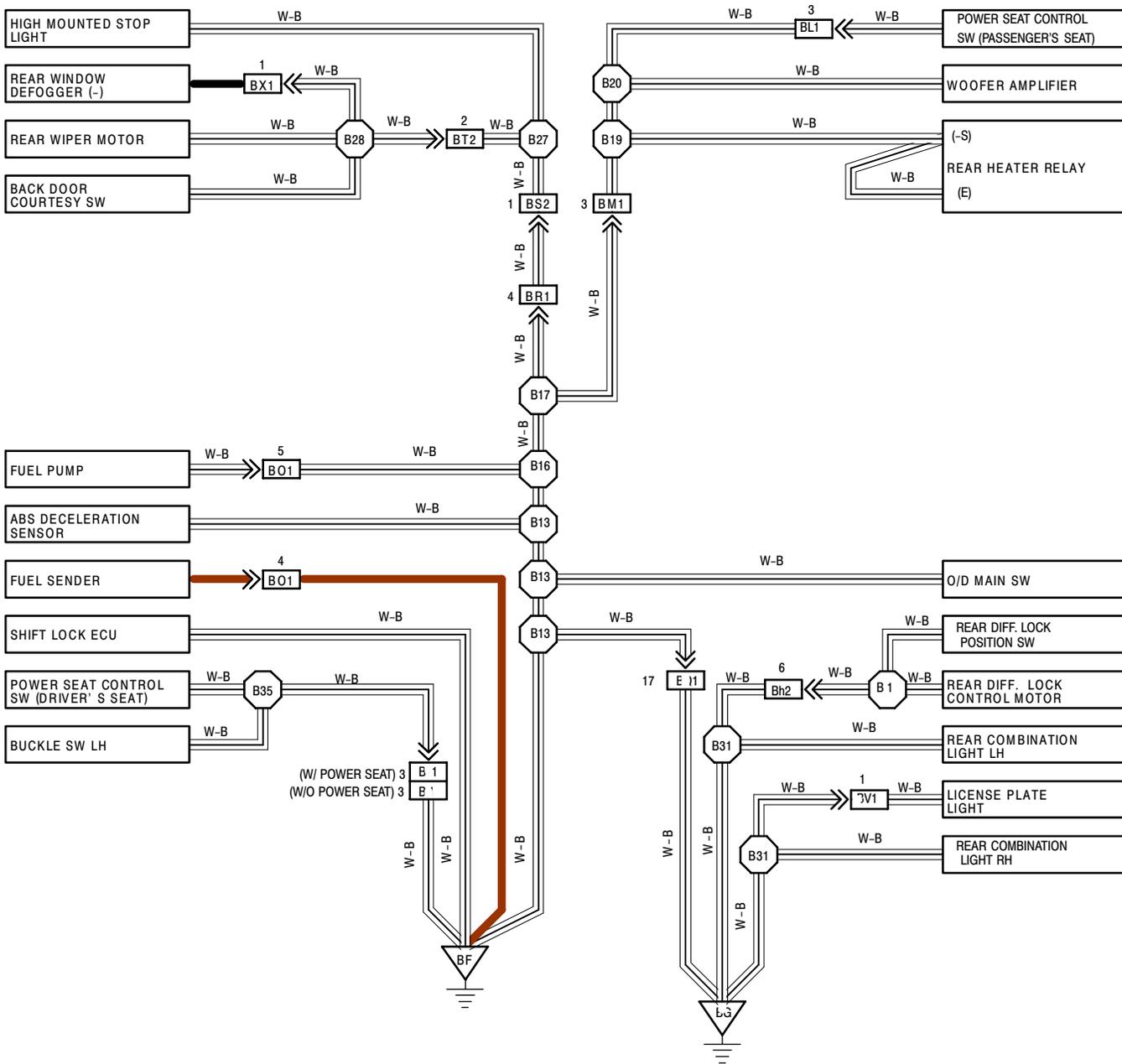


# GROUND POINT

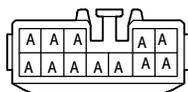




# J GROUND POINT

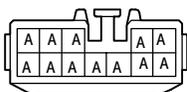


J2 BLUE



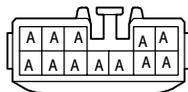
(HINT: SEE PAGE 7)

J7 BLUE



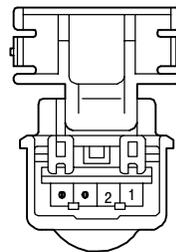
(HINT: SEE PAGE 7)

J8 BLUE

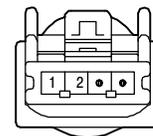


(HINT: SEE PAGE 7)

S4 (A) YELLOW



S5 (B) YELLOW



 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 2	25	J 8	25	S 5	B 25
J 7	25	S 4	A 25		

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	18	R/B NO. 2 (FRONT SIDE OF THE FENDER)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA4	30	COWL WIRE AND ENGINE ROOM MAIN WIRE (RIGHT FENDER)
EC1	30	ENGINE WIRE AND TRANSMISSION WIRE (NEAR THE STARTER)
EY1	30	OIL PRESSURE SWITCH WIRE AND ENGINE ROOM MAIN WIRE (NEAR THE AIR CLEANER)
Ea1	30	TRANSMISSION WIRE AND SPEED SENSOR WIRE (NEAR THE TRANSMISSION)
IE1	32	ROOF WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	32	COWL WIRE AND INSTRUMENT PANEL WIRE (INSTRUMENT PANEL CENTER)
IG1	32	COWL WIRE AND A/C SUB WIRE (BEHIND GLOVE BOX)
IG2		
IH1	32	ENGINE WIRE AND COWL WIRE (BEHIND GLOVE BOX)
BJ1	34	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
BK1	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	34	FLOOR NO. 2 WIRE AND FLOOR NO. 1 WIRE (UNDER THE CENTER CONSOLE)
BO1	34	FLOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 2 WIRE (BESIDE THE FUEL TANK)
BQ1	34	FLOOR NO. 3 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BR1	34	LUGGAGE ROOM NO. 1 WIRE AND FLOOR NO. 1 WIRE (LEFT QUARTER PANEL INNER)
BS2	34	BACK DOOR NO. 1 WIRE AND LUGGAGE ROOM NO. 1 WIRE (LEFT REAR SIDE OF ROOF)
BT2	36	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR LEFT)
BV1	36	LUGGAGE ROOM NO. 3 WIRE AND FLOOR NO. 3 WIRE (UNDER THE LOWER BACK PANEL)
BX1	36	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 2 WIRE (BACK DOOR RIGHT)
Bb1	36	COWL WIRE AND FRAME WIRE (RIGHT FENDER)
Bc1	38	FLOOR NO. 1 WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)
Bh2	36	FLOOR NO. 3 WIRE AND FRAME NO. 2 WIRE (LEFT QUARTER PANEL INNER)
BJ1	38	FLOOR NO. 2 WIRE AND SEAT NO. 1 WIRE (UNDER THE PASSENGER'S SEAT)

 : GROUND POINTS

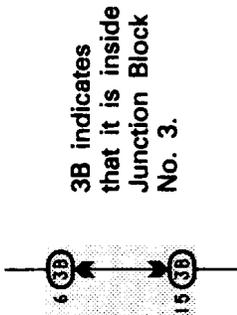
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	30	FRONT SIDE OF RIGHT FENDER
EB	30	FRONT SIDE OF LEFT FENDER
EC	30	AIR INTAKE CHAMBER
ID	32	LEFT KICK PANEL
IE	32	RIGHT KICK PANEL
BF	34	UNDER THE CENTER CONSOLE BOX
BG	34	LOWER BACK PANEL CENTER

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	30	ENGINE ROOM MAIN WIRE	I14	32	COWL WIRE
E 3					
E 4					
E 5					
E10					
E11					
E12	30	OIL PRESSURE SWITCH WIRE	B 1	36	FRAME WIRE
E13					
E17					
E22	30	TRANSMISSION WIRE	B 2	36	FRONT DOOR LH WIRE
E23					
I 2	32	COWL WIRE	B 6	36	FRONT DOOR RH WIRE
I 3					
I 5					
I 6					
I 7					
I11					
I12					
I13					
			B 8	36	ROOF WIRE
			B 9		
			B13	36	FLOOR WIRE
			B16		
			B17		
			B19	36	FLOOR NO. 2 WIRE
			B20		
			B27	36	BACK DOOR NO. 1 WIRE
			B28	36	BACK DOOR NO. 2 WIRE
			B31	36	FLOOR NO. 3 WIRE
			B35	38	SEAT NO. 1 WIRE

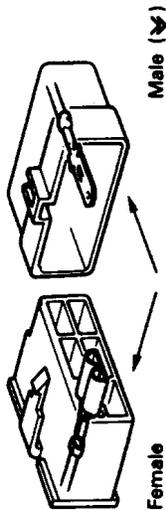


**G:** Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts (different junction blocks are shaded differently for further clarification).



Example:

**H:** Indicates related system.  
**I:** Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↘). Outside numerals are pin numbers.



**J:** ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.  
**K:** Indicates a shielded cable.

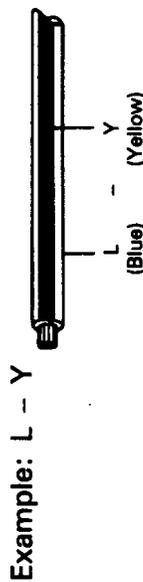


**L:** Indicates and located on ground point.  
**M:** The same code occurring on the next page indicates that the wire harness is continuous.

**A:** System Title  
**B:** Indicates the wiring color.

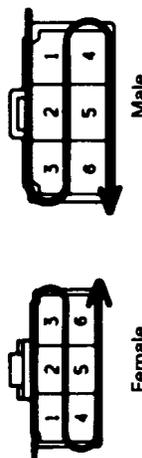
Wire colors are indicated by an alphabetical code.  
 B = Black L = Blue R = Red  
 BR = Brown LG = Light Green V = Violet  
 G = Green O = Orange W = White  
 GR = Gray P = Pink Y = Yellow

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



**C:** Indicates the connector to be connected to a part (the numeral indicates the pin No.)  
**D:** The position of the parts is the same as shown in the wiring diagram and wire routing.  
**E:** 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



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

**F:** 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.

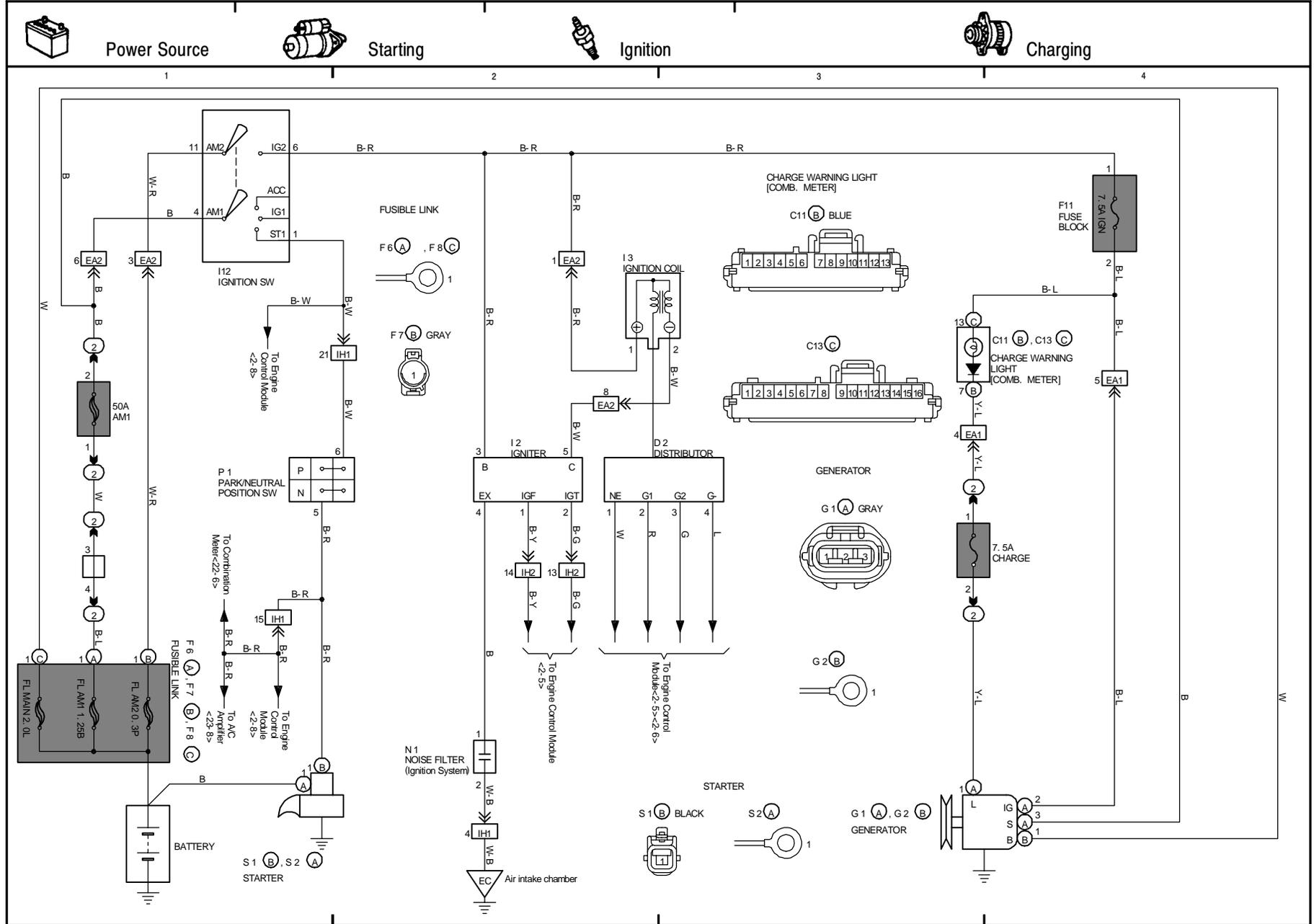
# K OVERALL ELECTRICAL WIRING DIAGRAM

1997 Model (Location No. 1 to 23)

## SYSTEM INDEX

SYSTEMS	LOCATION	SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS	10-3 	Front/Rear Differential Lock	21-3 	Rear Heater	16-2 
Auto Antenna	17-4 	Front Wiper and Washer	8-2 	Rear Wiper and Washer	8-3 
Air Conditioning	23-3 	Headlight	3-4 	Rear Window Defogger	18-2 
Back-Up Light	9-8 	Horn	15-4 	Remote Control Mirror	18-3 
Center Differential Lock	20-3 	Ignition	1-2 	Shift Lock	3-2 
Charging	1-3 	Illumination	5-3 	SRS	4-3 
Cigarette Lighter	16-3 	Interior Light	6-3 	Starting	1-1 
Clock	16-4 	Light Auto Turn Off	3-3 	Stop Light	17-3 
Combination Meter	22-3 	Moon Roof	15-2 	Taillight	4-2 
Cruise Control	11-3 	Power Seat	12-3 	Turn Signal and Hazard Warning Light	7-3 
Door Lock Control	14-3 	Power Source	1~23-1 	Unlock and Seat Belt Warning	17-2 
Electronically Controlled Transmission and A/T Indicator	9-3  	Power Window	13-3 		
Engine Control	2-3 	Radio and Player	19-3 		

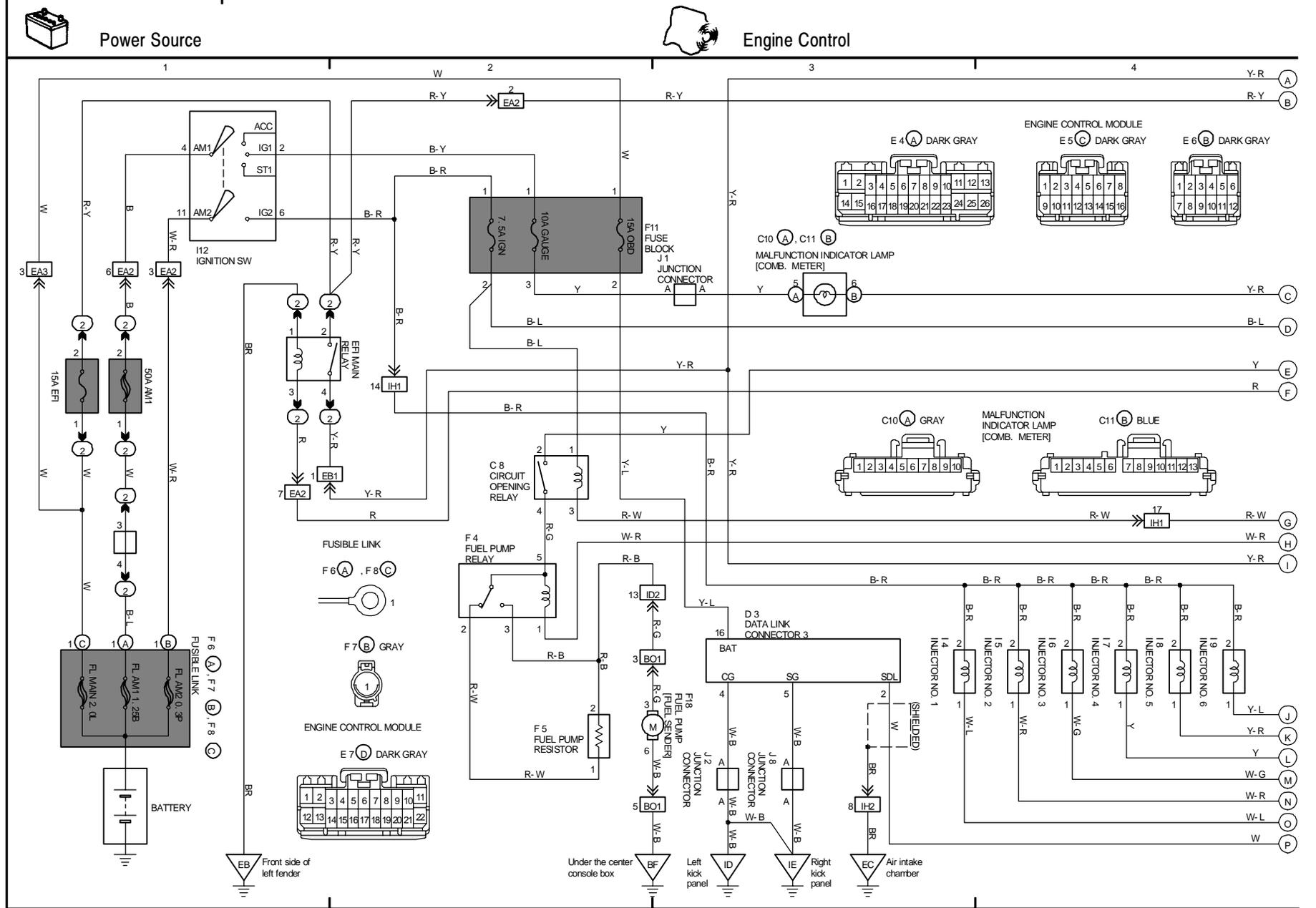
# 1 LAND CRUISER STATION WAGON ELECTRICAL WIRING DIAGRAM



K

# 2 LAND CRUISER STATION WAGON

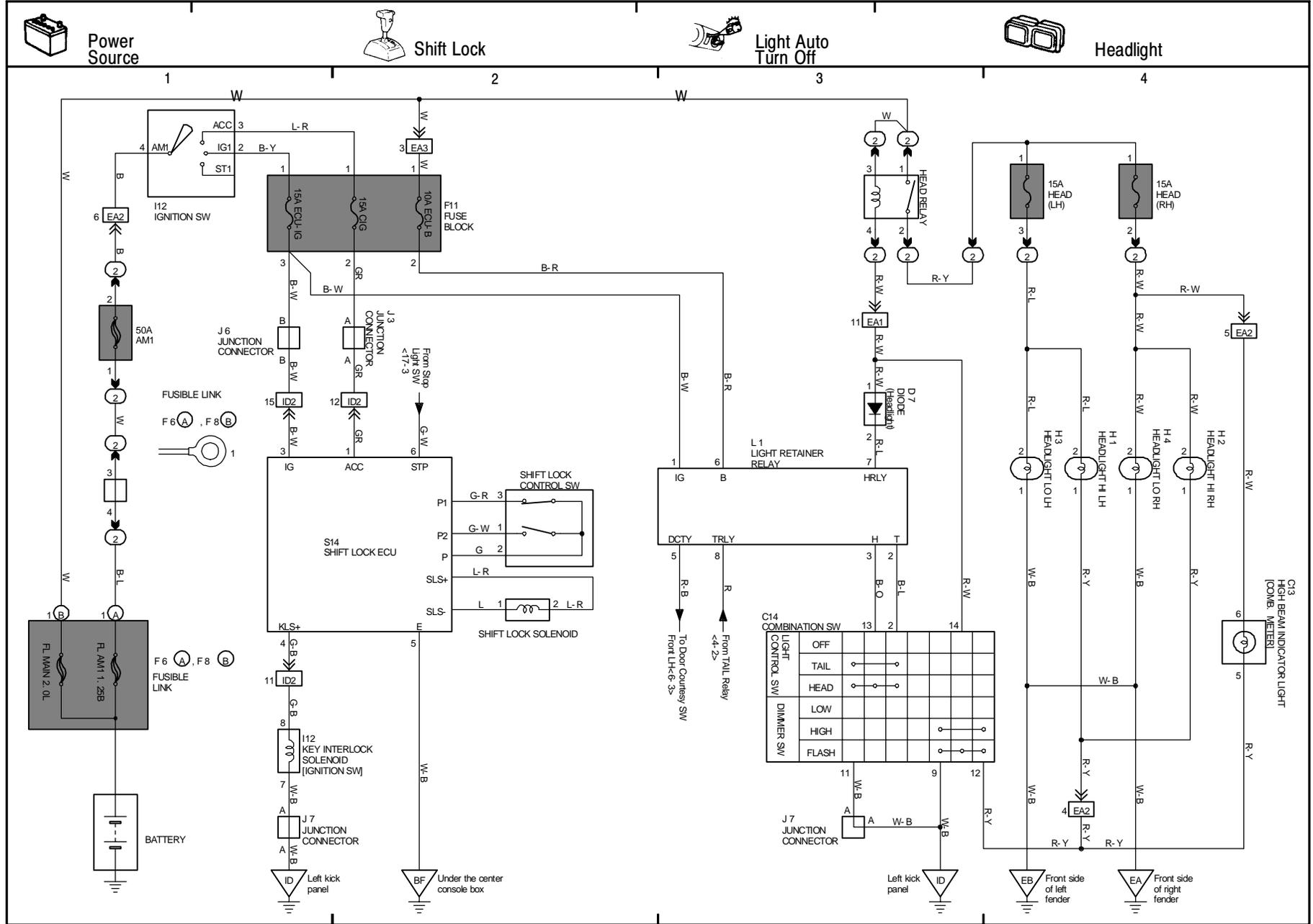
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**K OVERALL ELECTRICAL WIRING DIAGRAM**

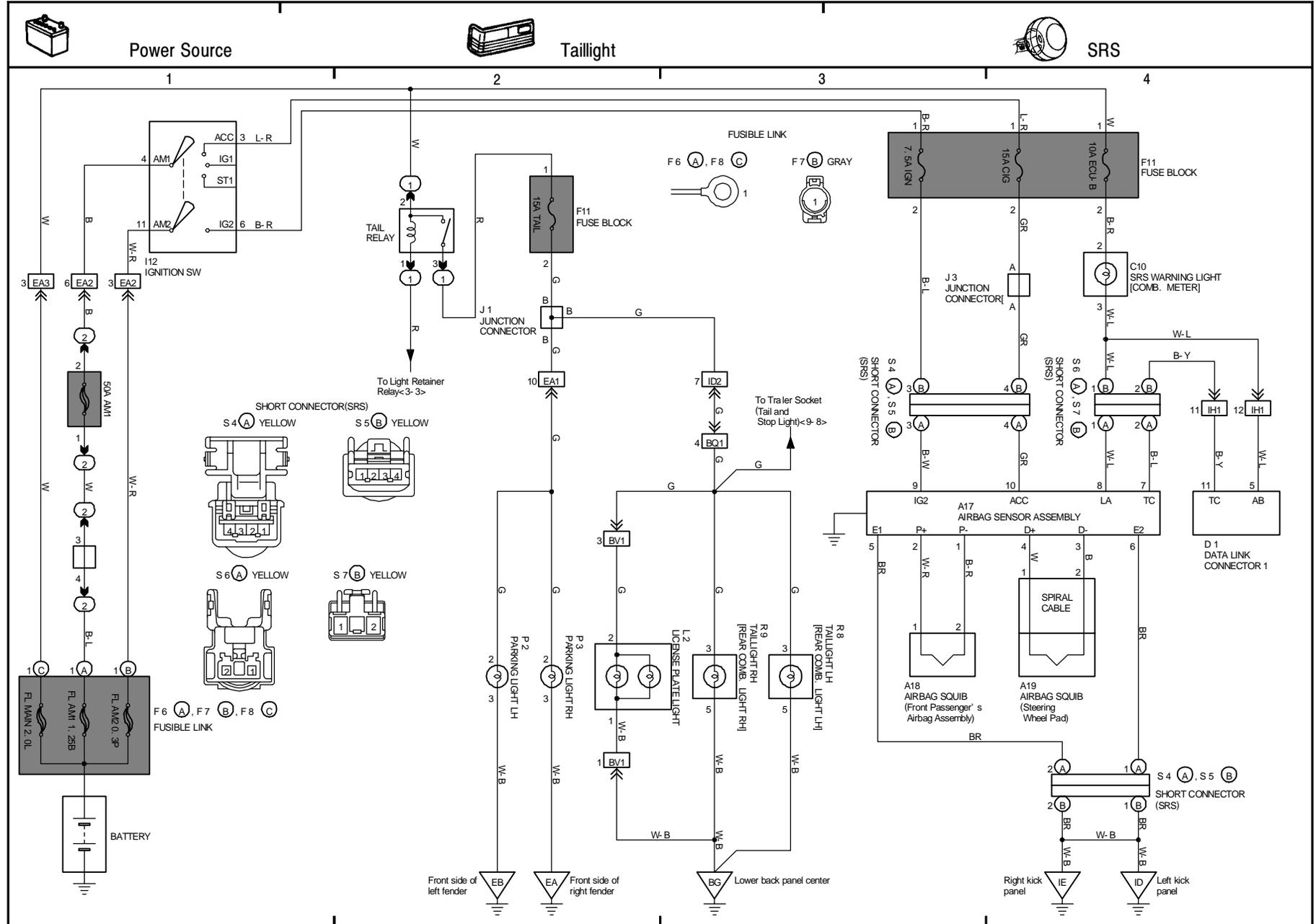


### 3 LAND CRUISER STATION WAGON



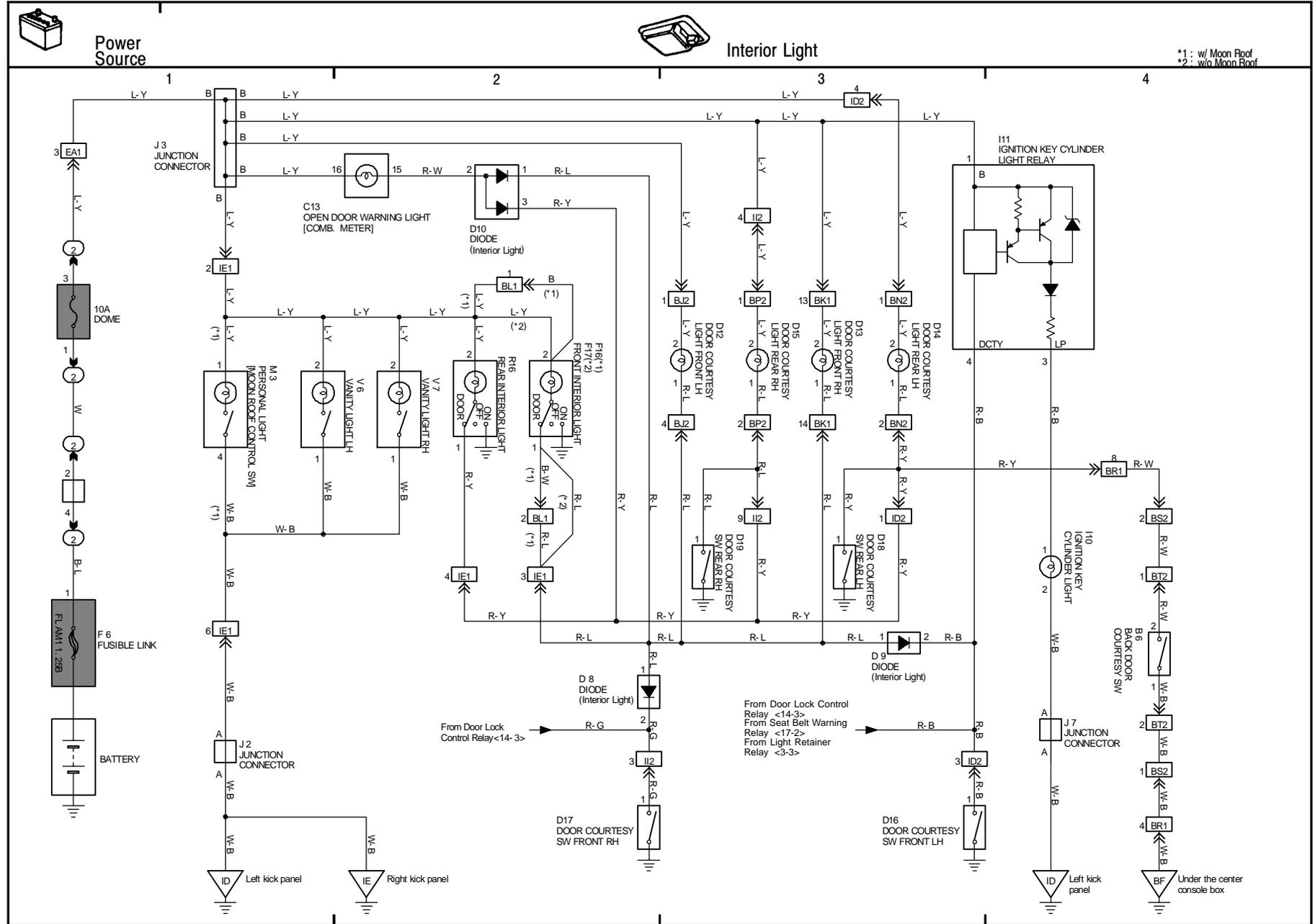
**K OVERALL ELECTRICAL WIRING DIAGRAM**

### 4 LAND CRUISER STATION WAGON

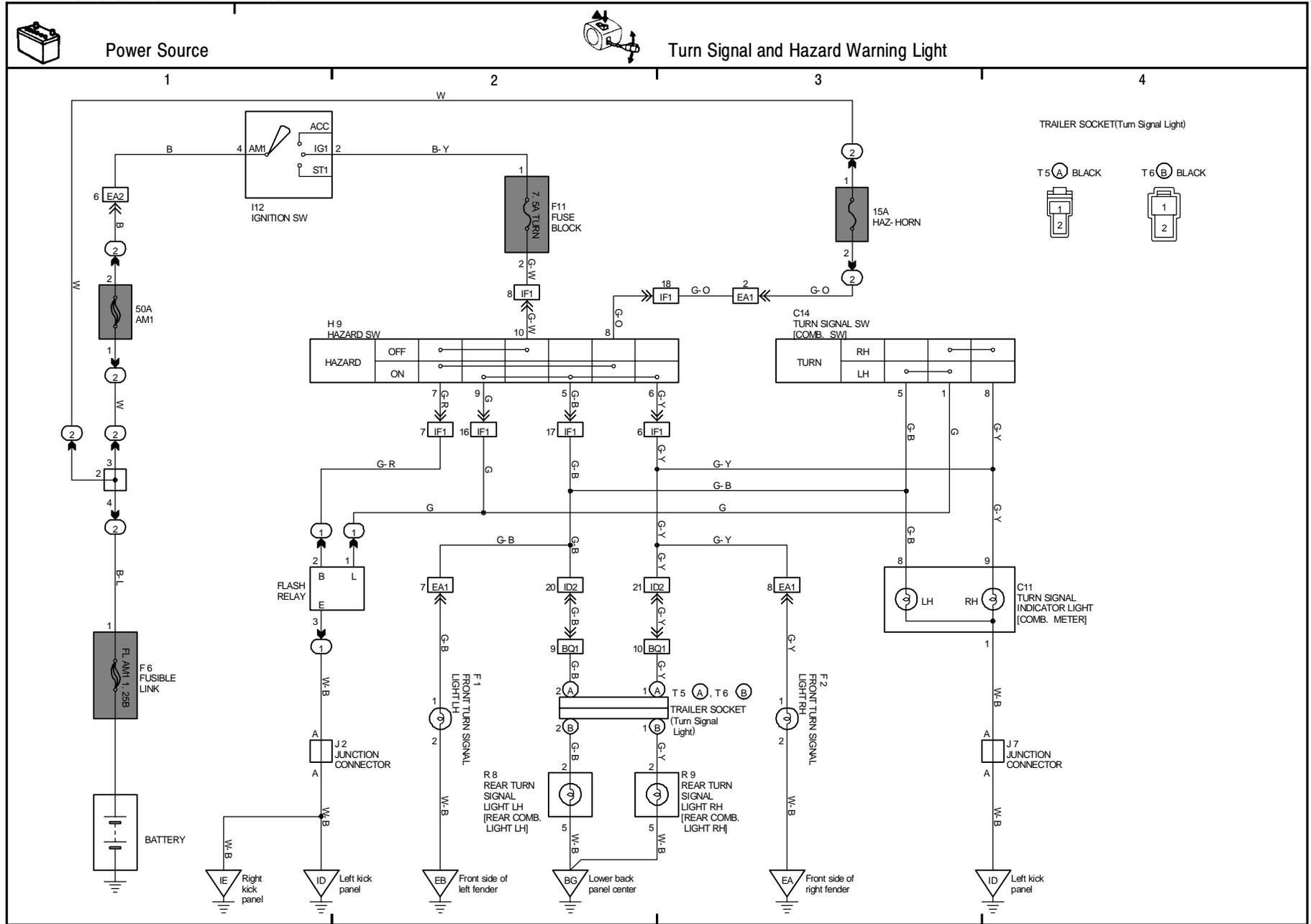




# 6 LAND CRUISER STATION WAGON



7 LAND CRUISER STATION WAGON

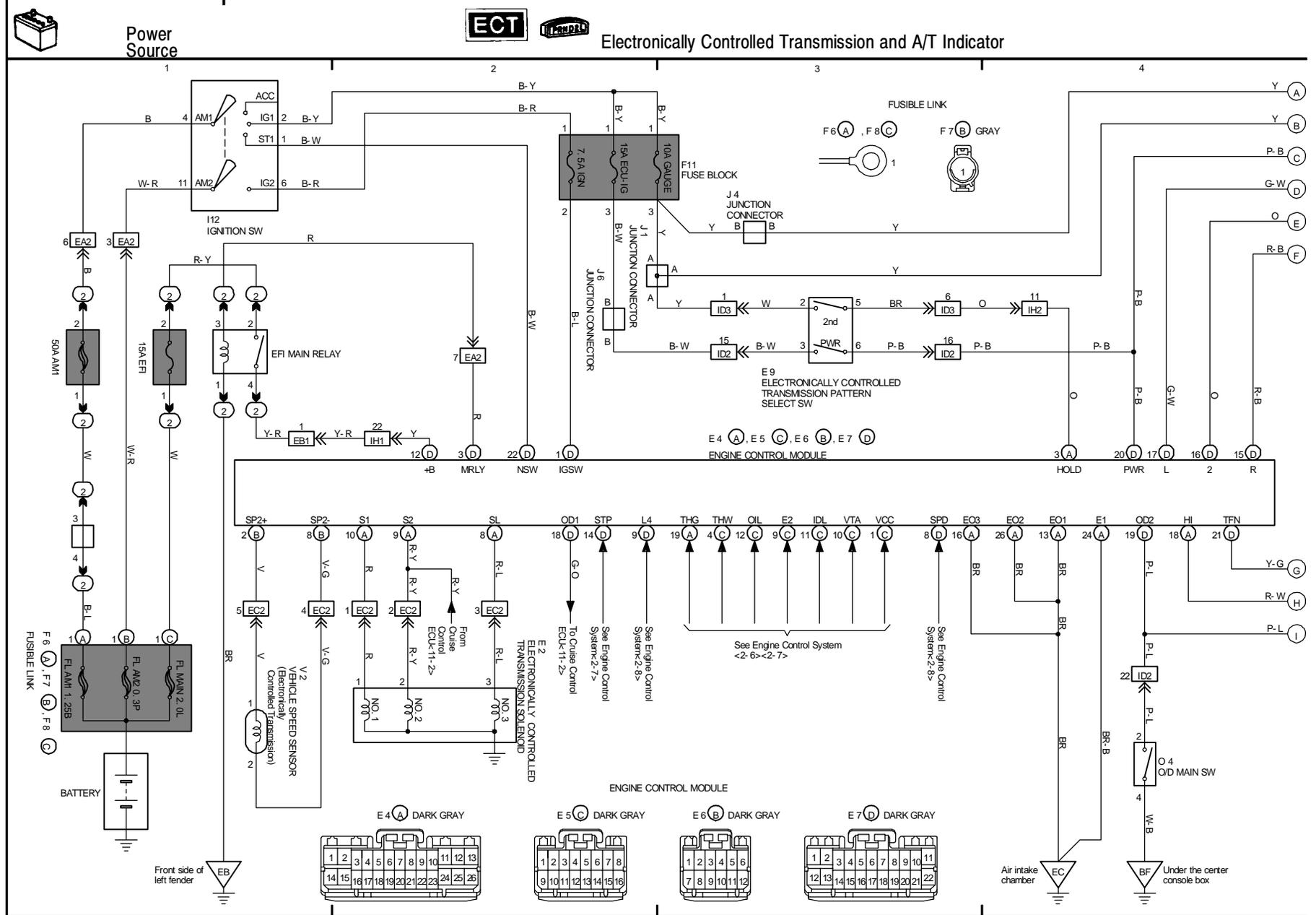


K OVERALL ELECTRICAL WIRING DIAGRAM



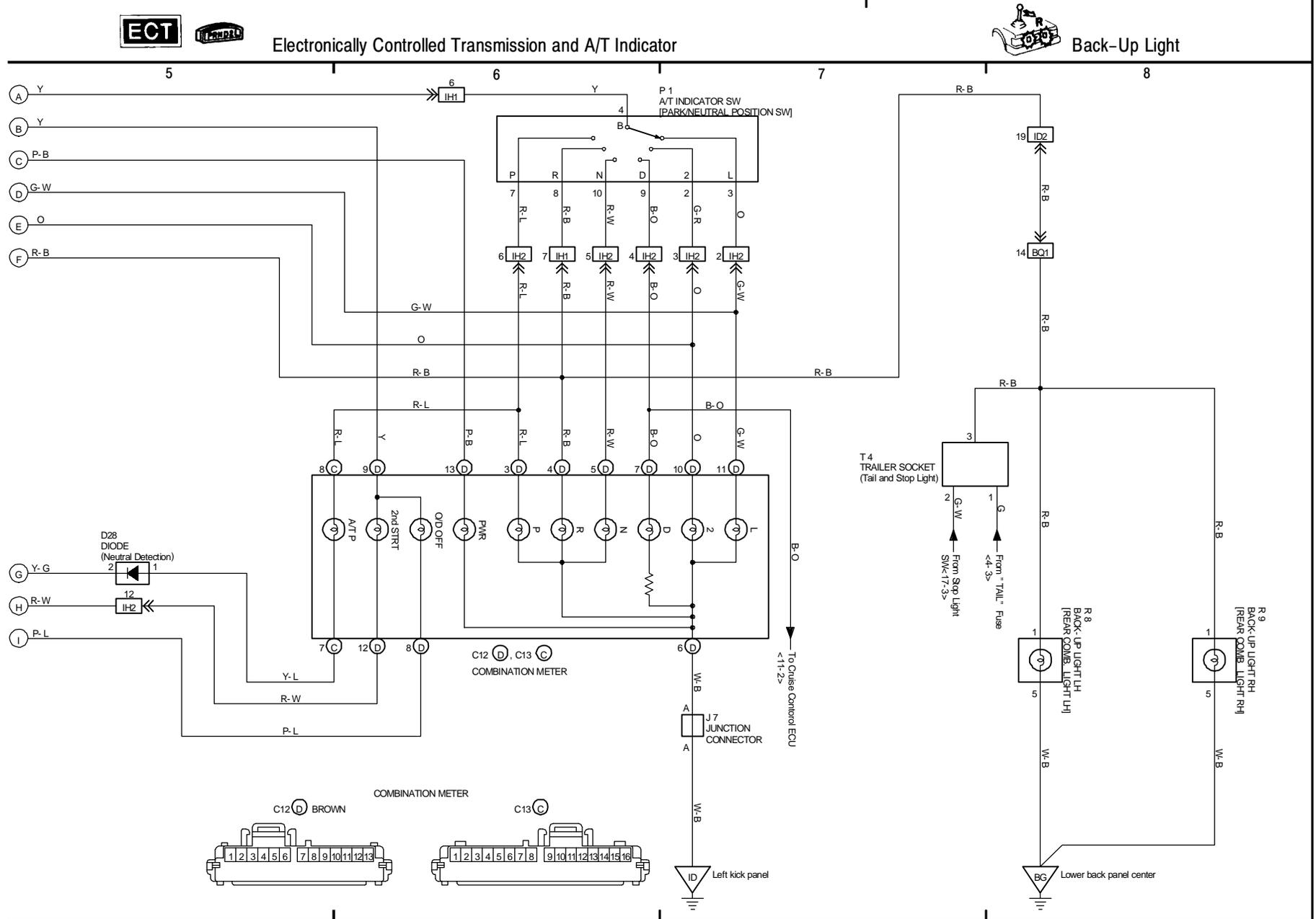
9 LAND CRUISER STATION WAGON

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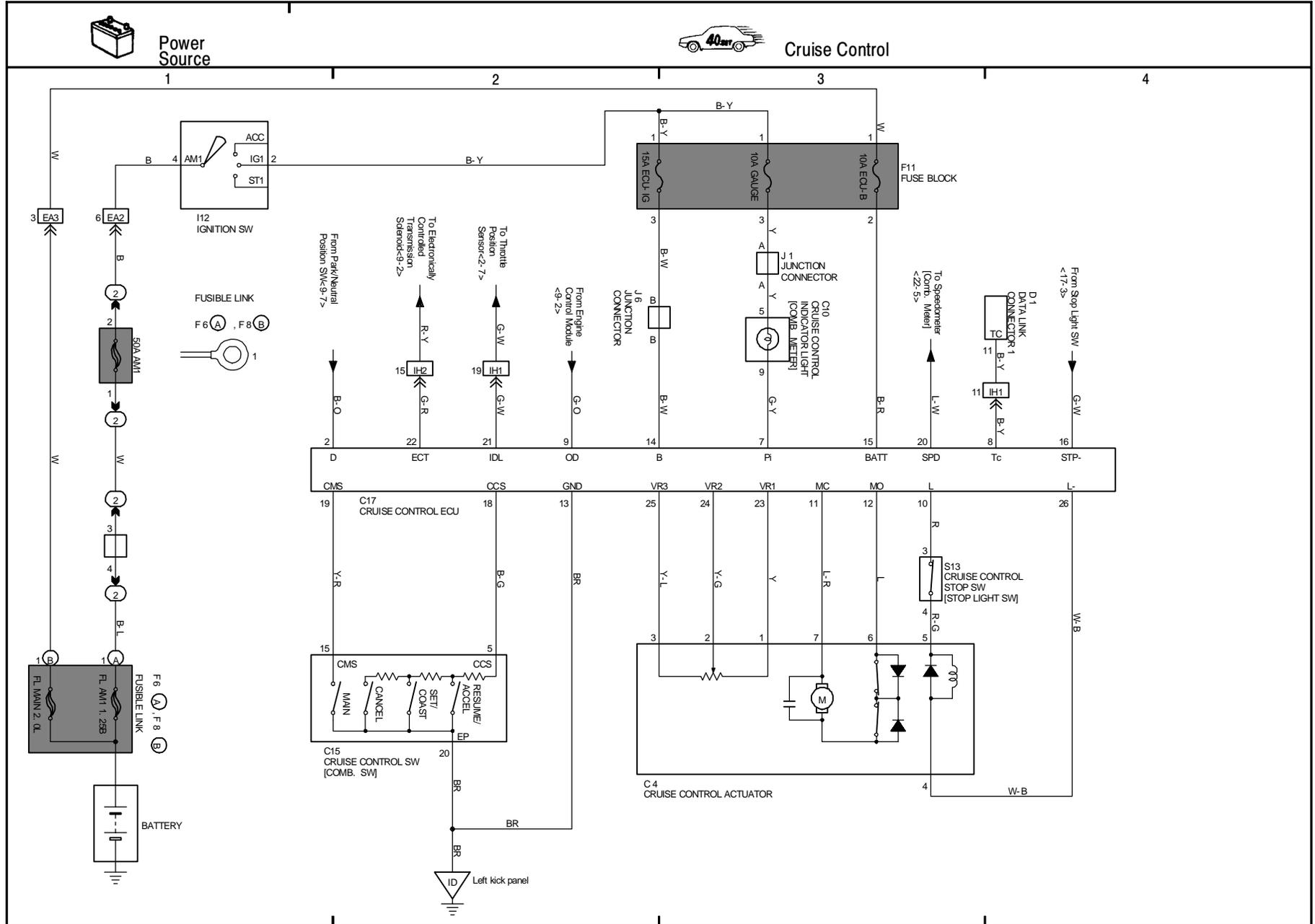
K OVERALL ELECTRICAL WIRING DIAGRAM

9 LAND CRUISER STATION WAGON(Cont' d)



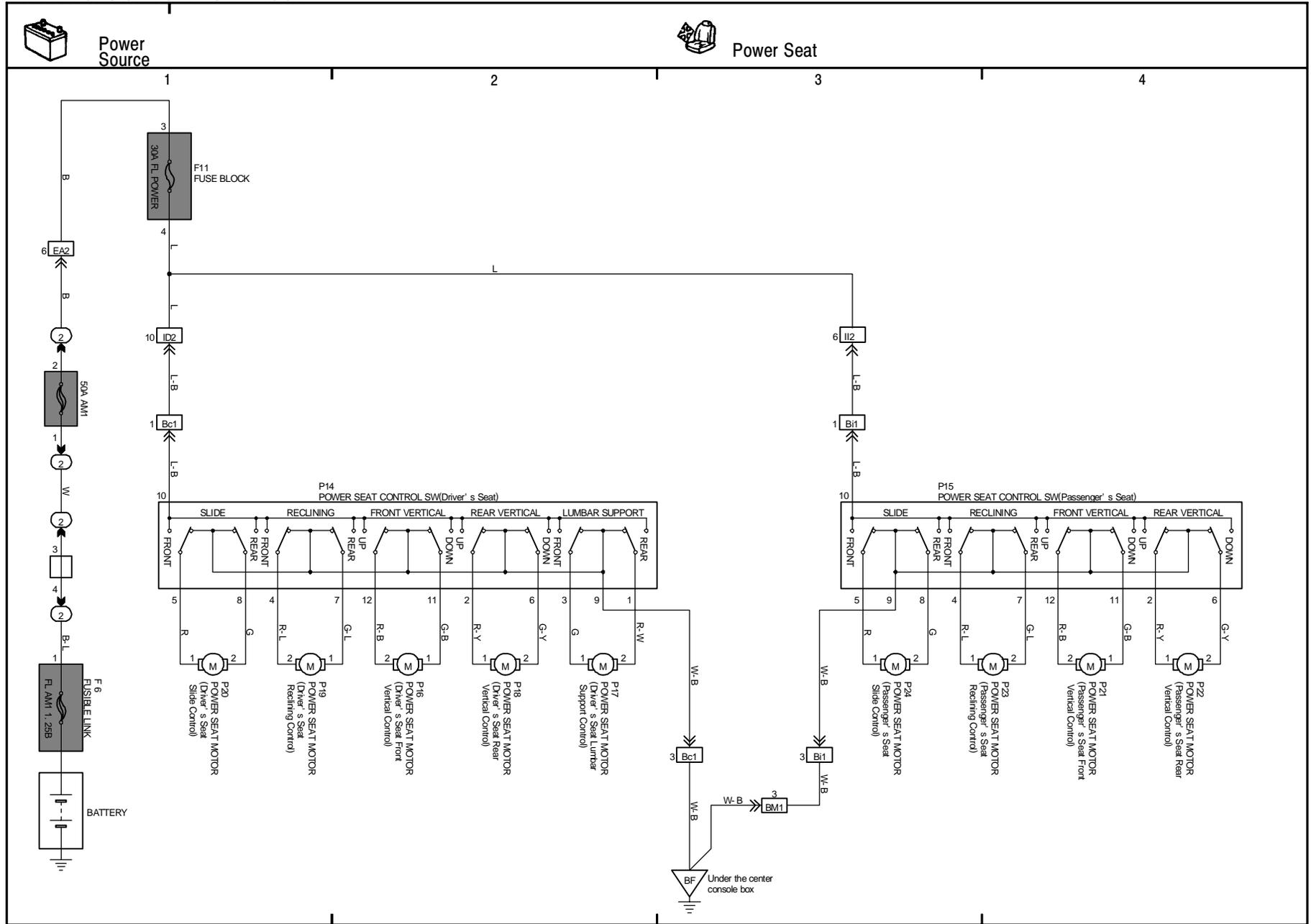


# 11 LAND CRUISER STATION WAGON



K

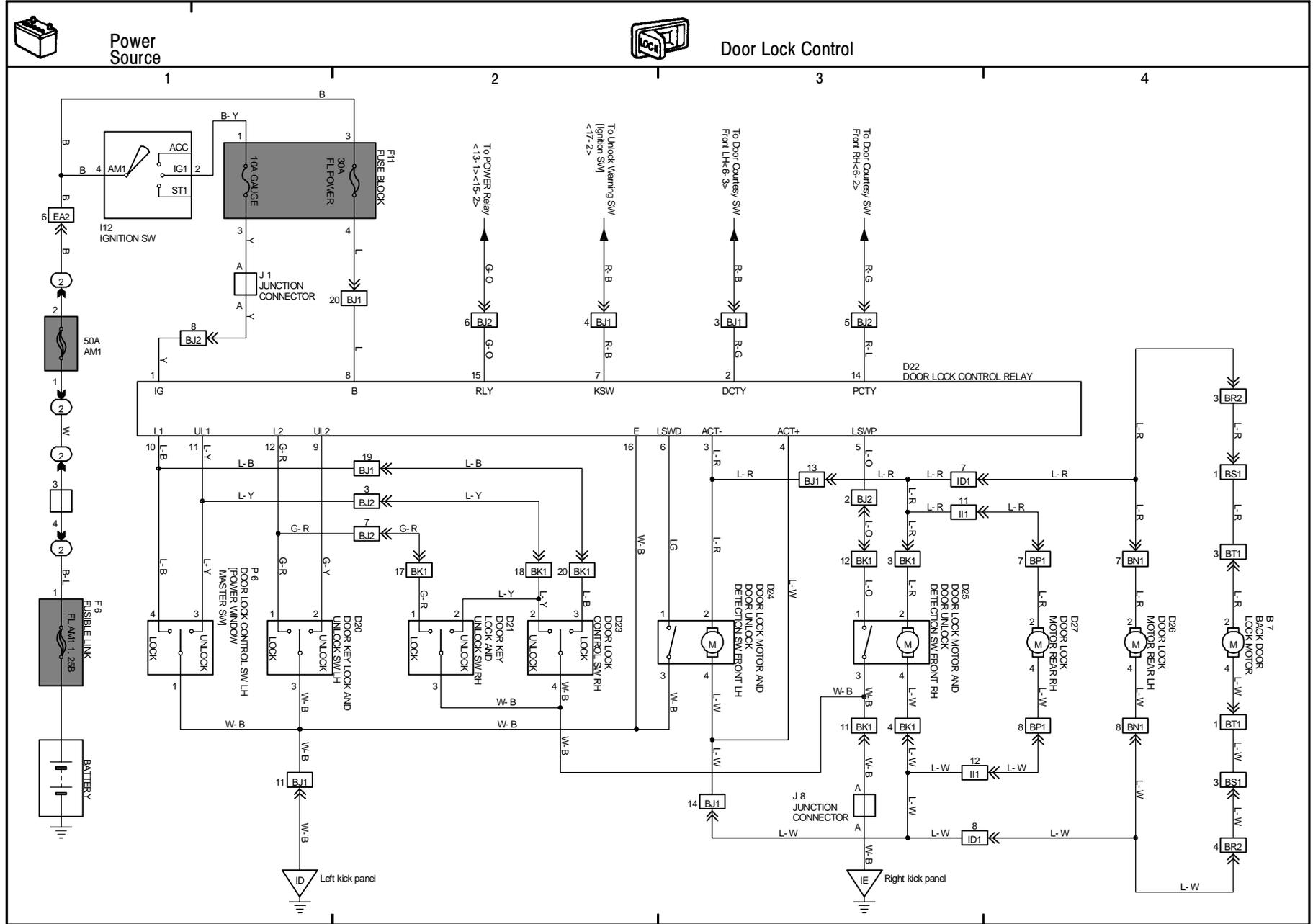
# 12 LAND CRUISER STATION WAGON



# K OVERALL ELECTRICAL WIRING DIAGRAM

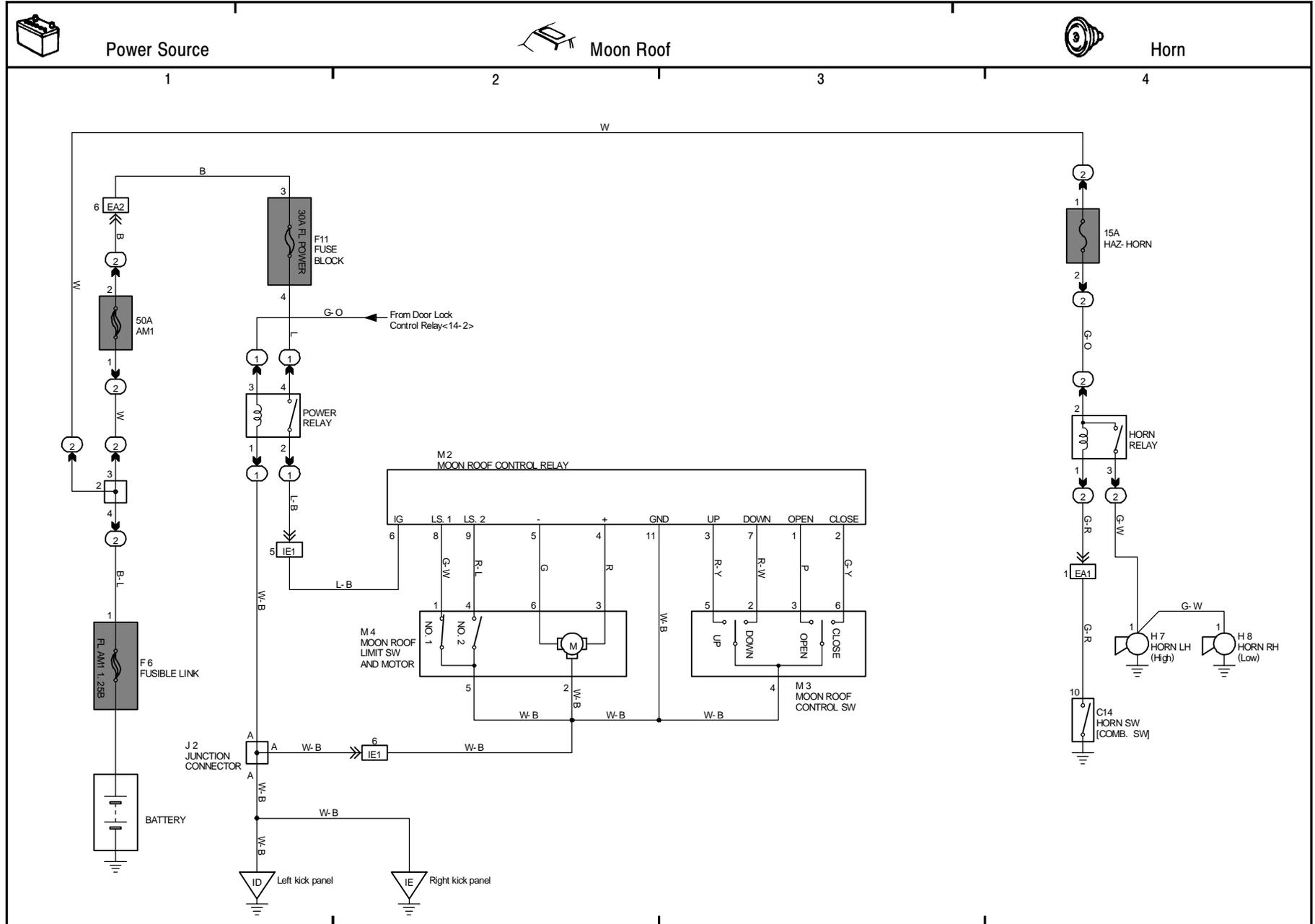


# 14 LAND CRUISER STATION WAGON

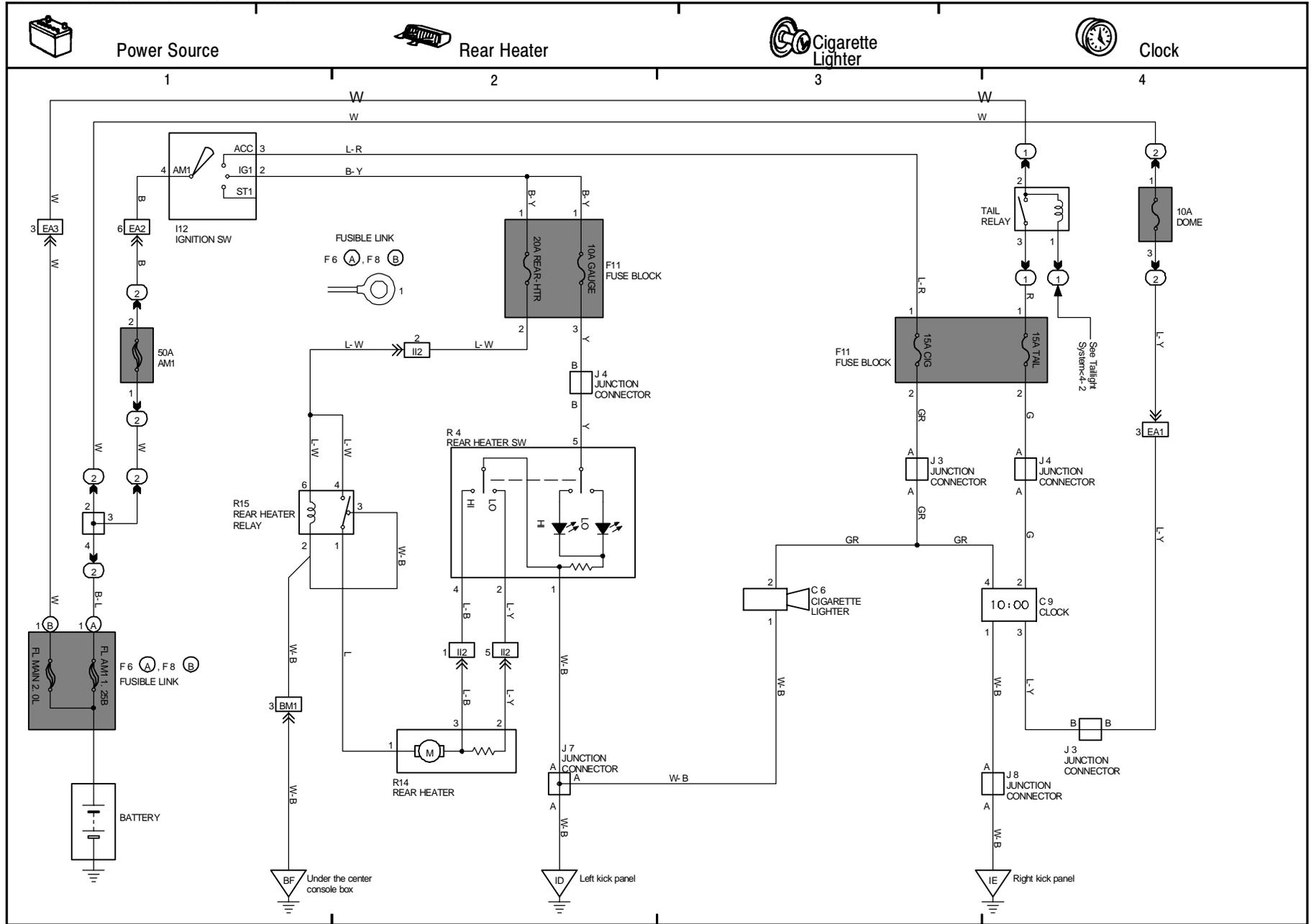


**K OVERALL ELECTRICAL WIRING DIAGRAM**

15 LAND CRUISER STATION WAGON

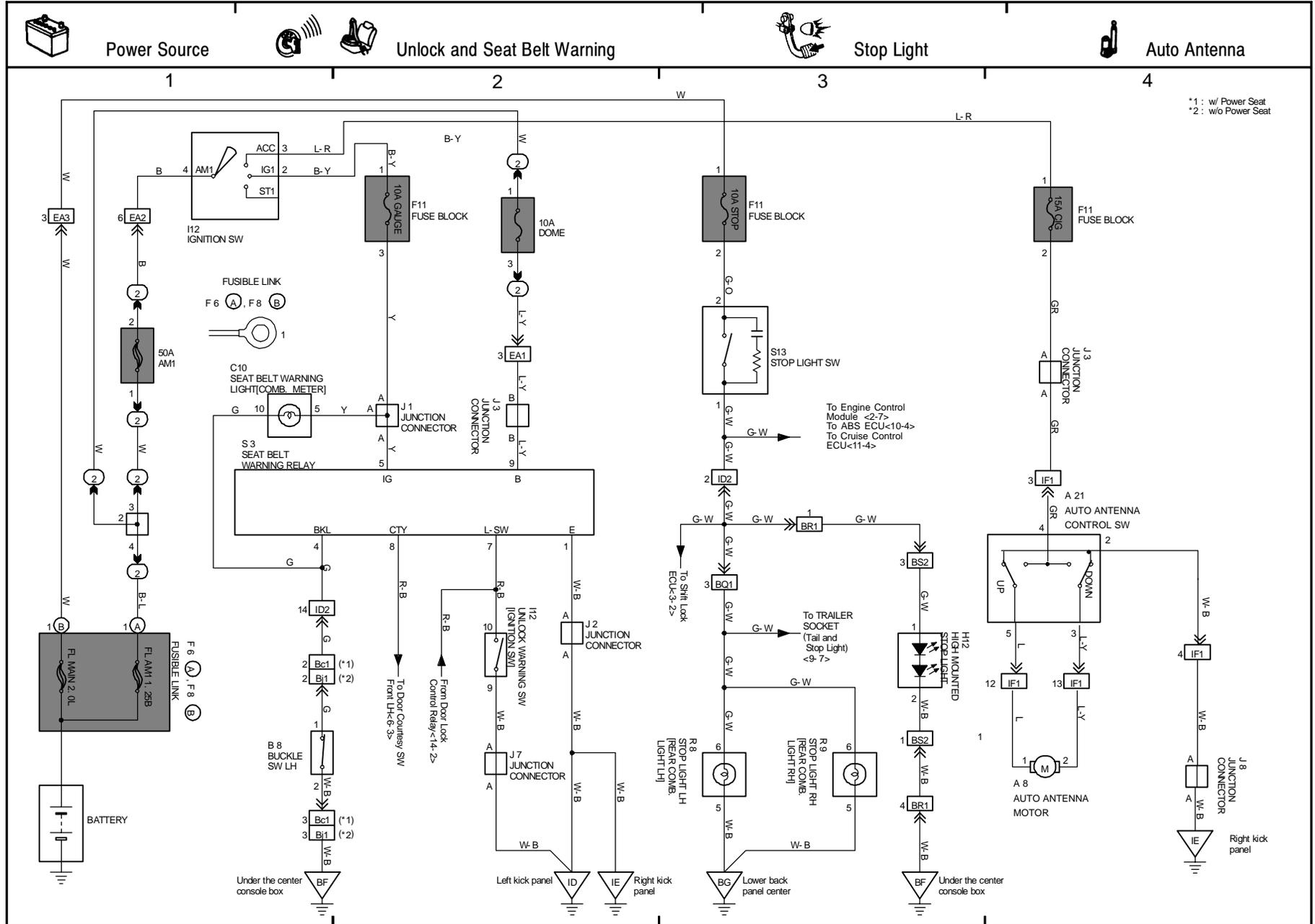


16 LAND CRUISER STATION WAGON

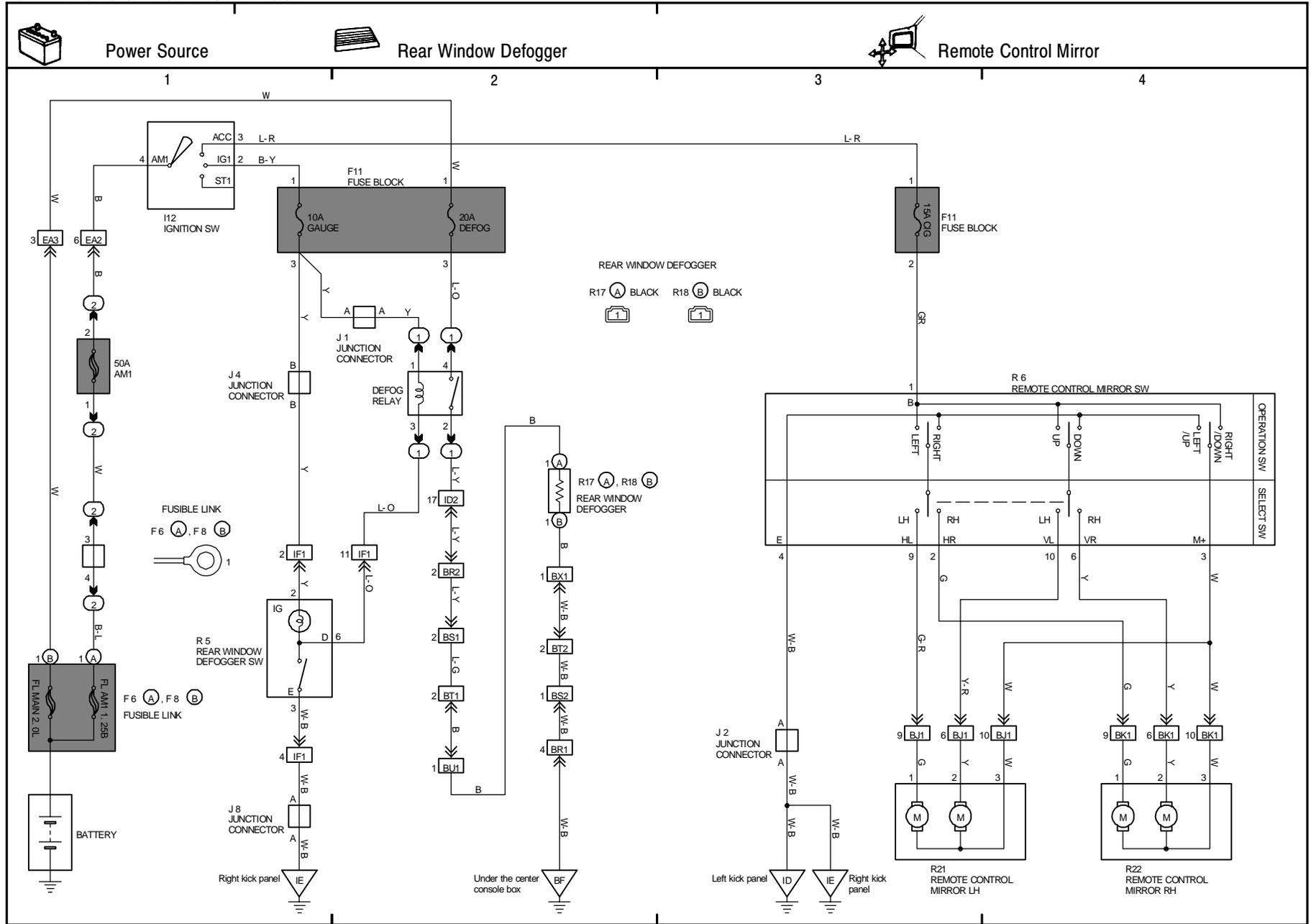


K OVERALL ELECTRICAL WIRING DIAGRAM

# 17 LAND CRUISER STATION WAGON

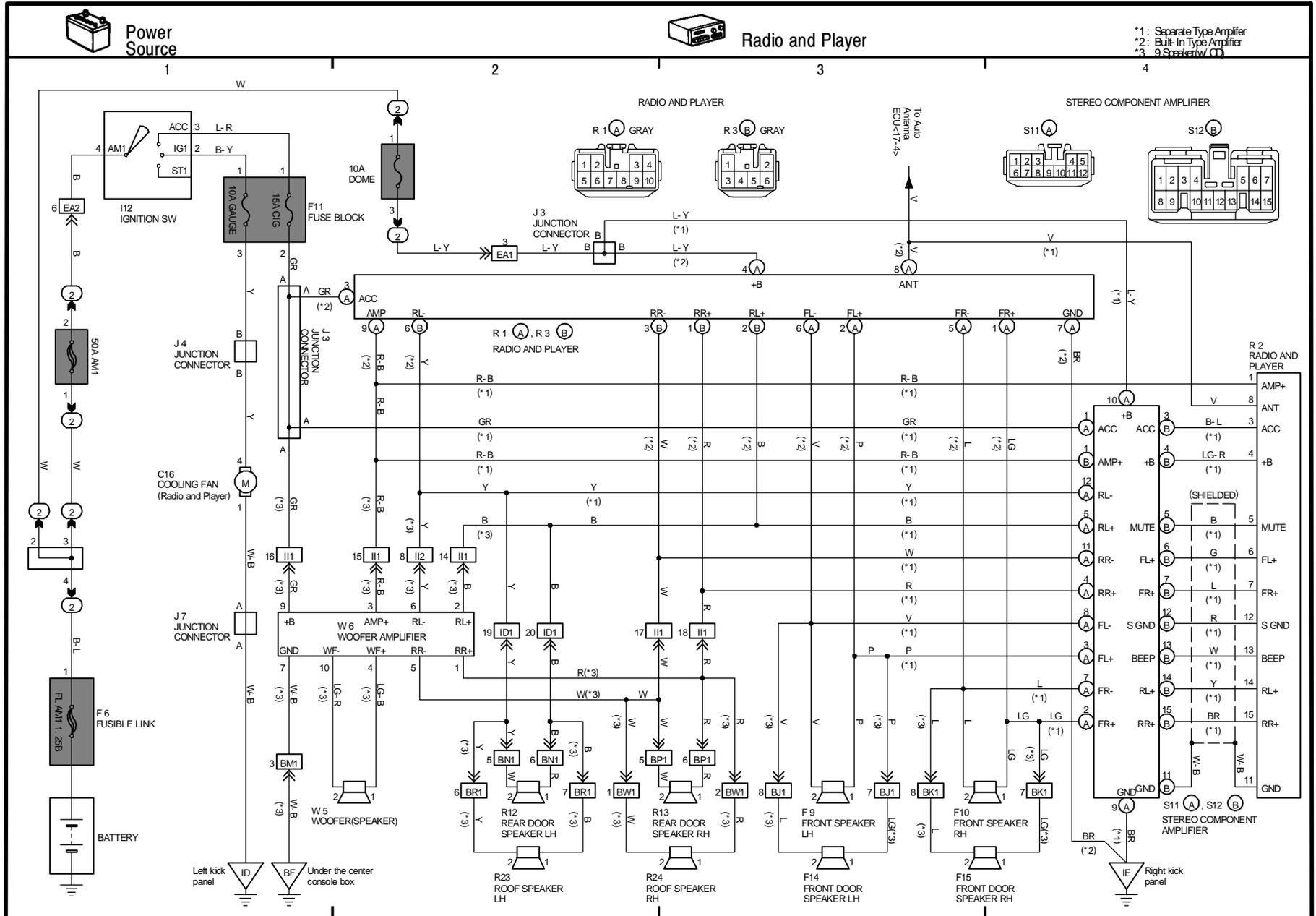


# 18 LAND CRUISER STATION WAGON



**K OVERALL ELECTRICAL WIRING DIAGRAM**

# 19 LAND CRUISER STATION WAGON





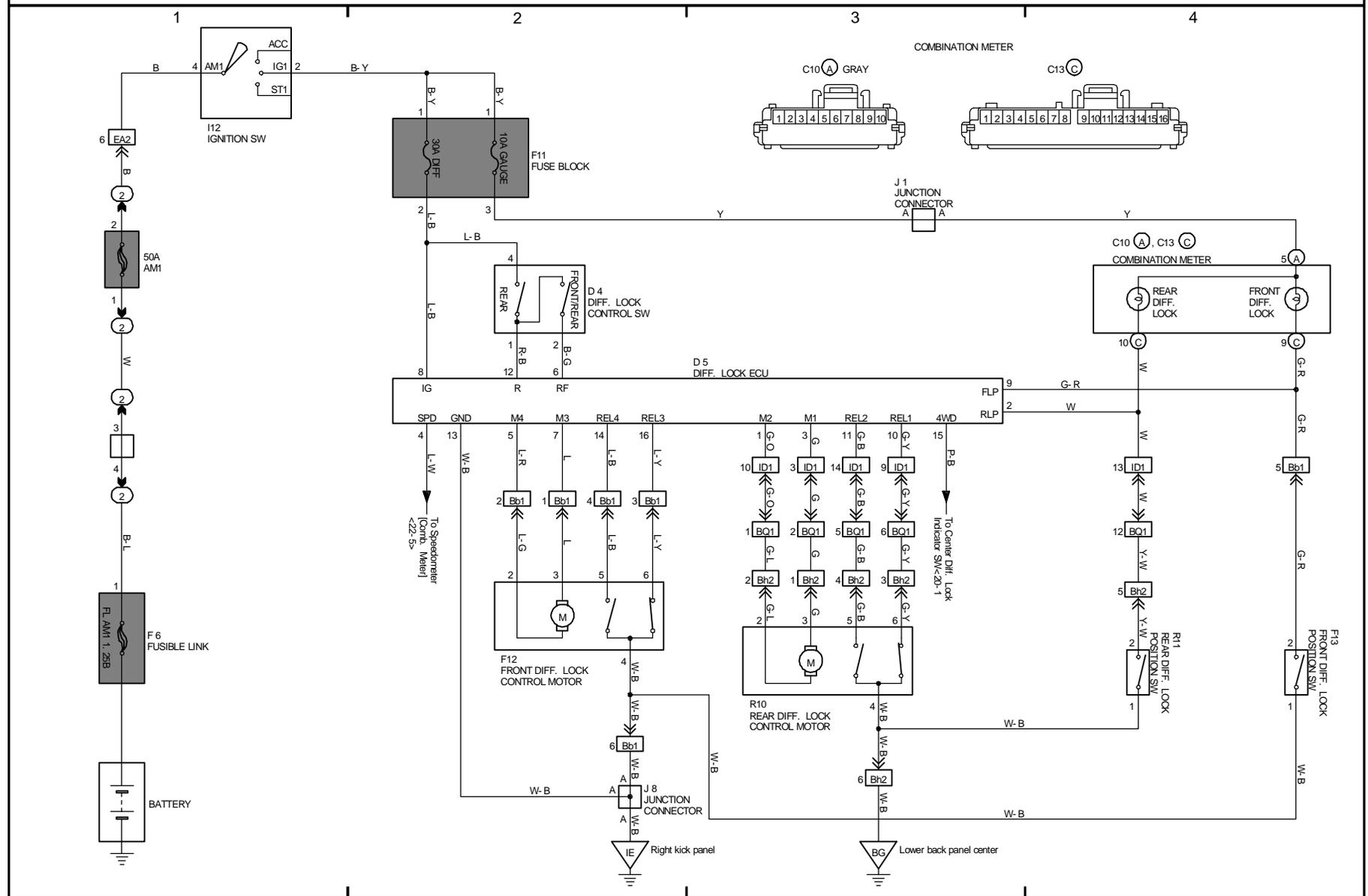
# 21 LAND CRUISER STATION WAGON



Power Source



Front/Rear Differential Lock

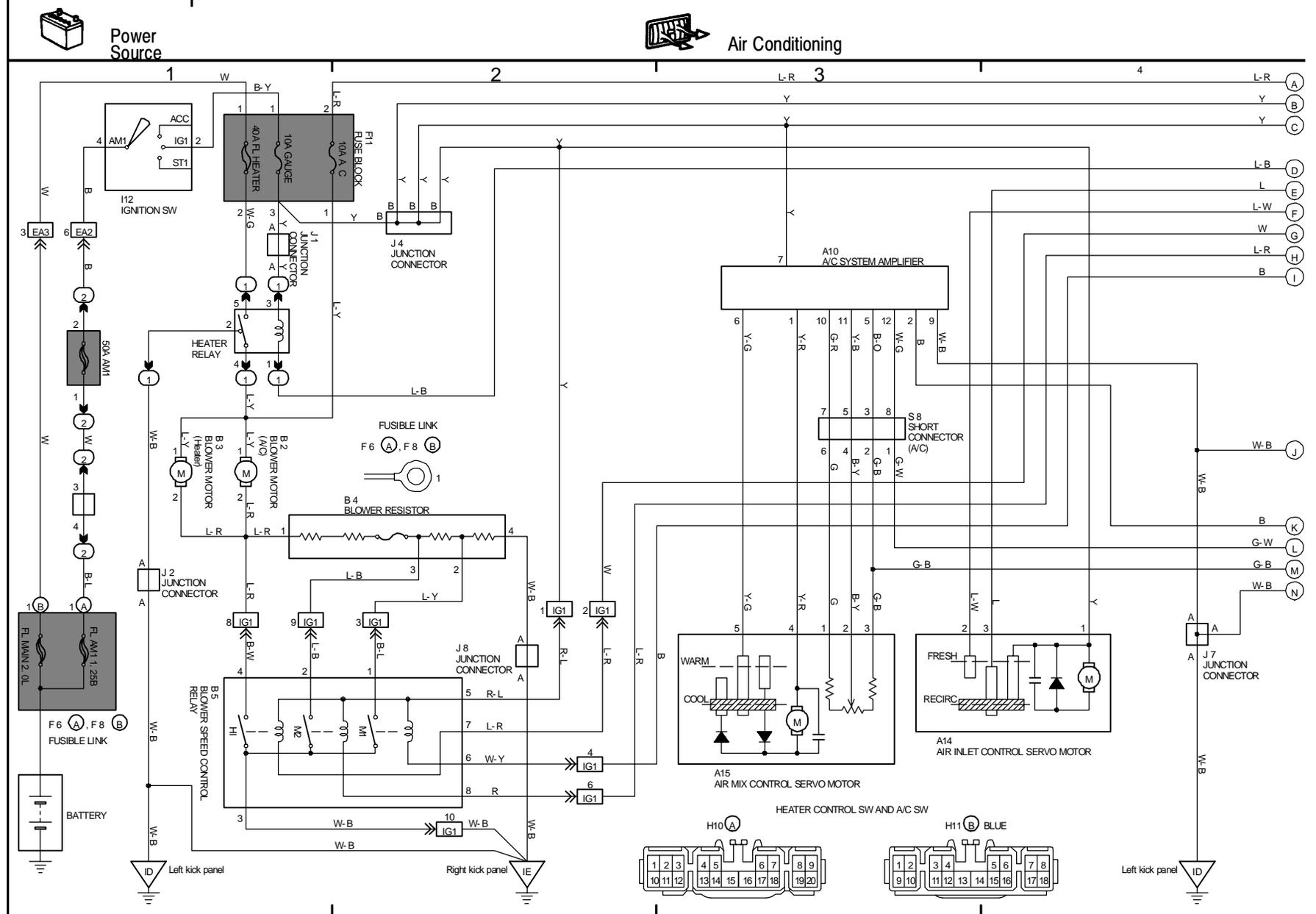






23 LAND CRUISER STATION WAGON

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K OVERALL ELECTRICAL WIRING DIAGRAM

23 LAND CRUISER STATION WAGON(Cont' d)



Air Conditioning

