

# 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.

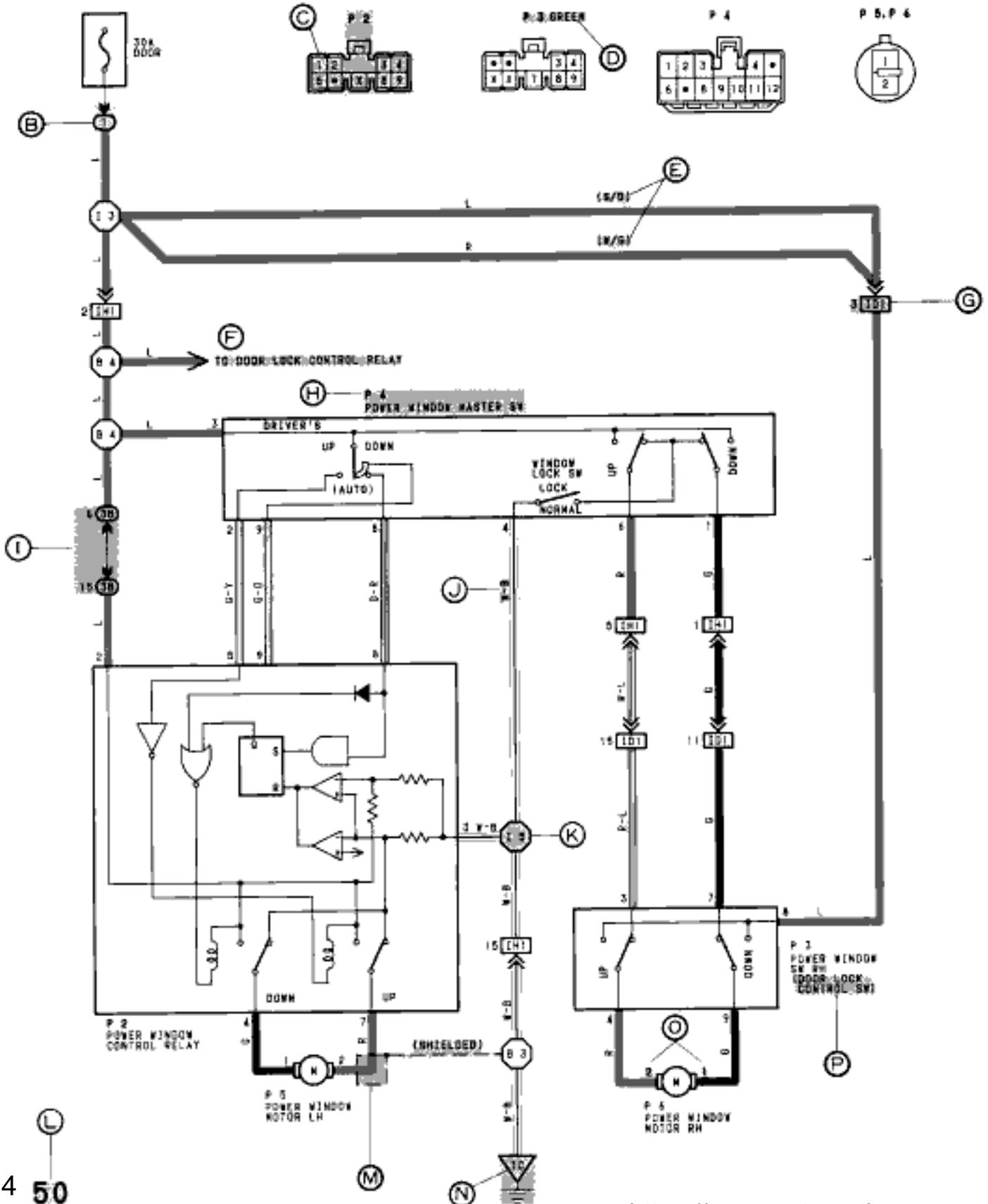
Wiring related to each system is indicated in each system circuit by arrows (from \_\_, to \_\_). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

# 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

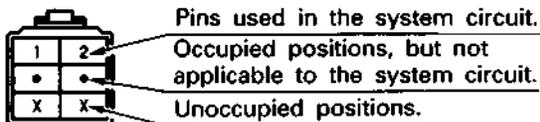


- (A) : System Title
- (B) : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.

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.



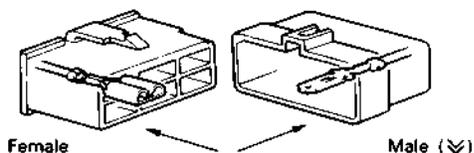
The pins shown are only for the highest grade, or only include those in the specification.

- (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.



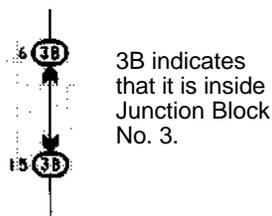
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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:



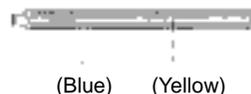
- (J) : Indicates the wiring color.

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

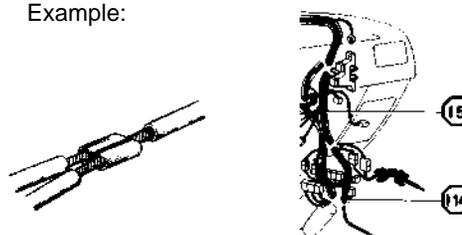
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

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)



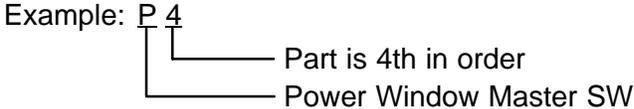
## ▽ : GROUND POINTS

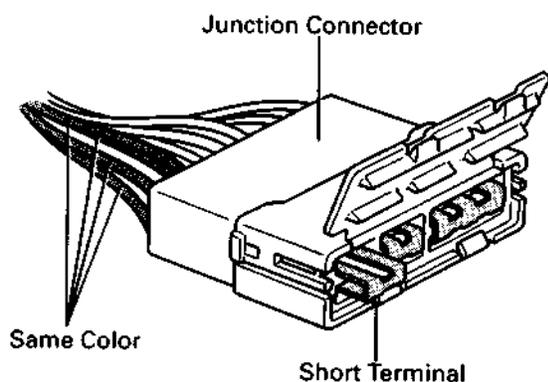
CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT



## ○ : 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.

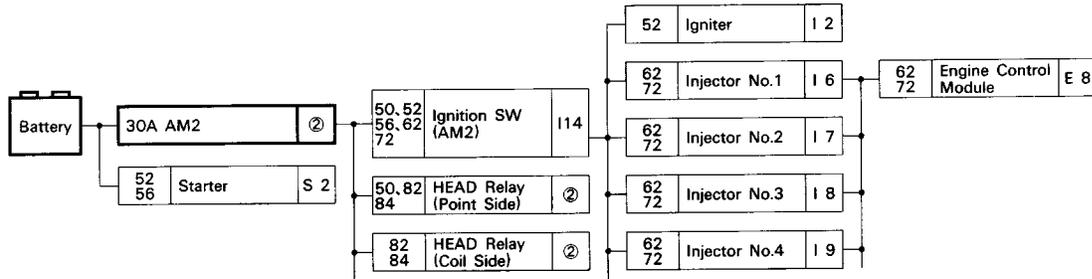
# B HOW TO USE THIS MANUAL

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.

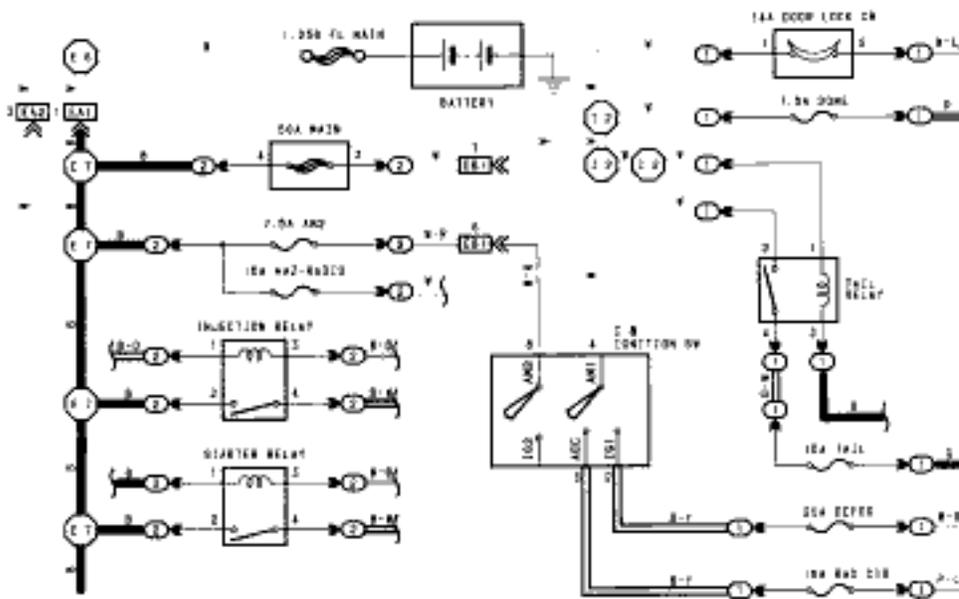
The next page and following pages show the parts to which each electrical source outputs current.



Location	Page Nos. of Related Systems	Parts		Code or Location	
		CB or Fuse	Location	Code or Location	Location
①	15A ECU-B				
	10A GAUGE				
	10A TURN				
	15A ECU-IG				
		ABS Actuator	A 2		
		ABS Relay	A 3		
		ADD Indicator SW	A 4		
		Auto Antenna Motor	A 6		
		ABS Deceleration Sensor	A 8		
		ABS ECU	A 9		
		A/C Amplifier	A 10		
		A/C Dual Pressure SW	A 11		
		A/C SW	A 12		
		ADD Control Relay	A 13		
		Airbag Sensor Assembly	A 14		
		Ashtray Illumination	A 16		
		Auto Antenna Control Relay	A 17		
		Back-Up Light SW	A 19		
		Brake Fluid Level Warning SW	A 20		
		Back-Up Light Relay	B 1		
		Brake Fluid Level Warning SW	B 2		
		Back-Up Light Relay	B 3		
		Cigarette Lighter	C 4		
		Cigarette Lighter Illumination	C 5		
		Circuit Opening Relay	C 6		
		Clock	C 7		



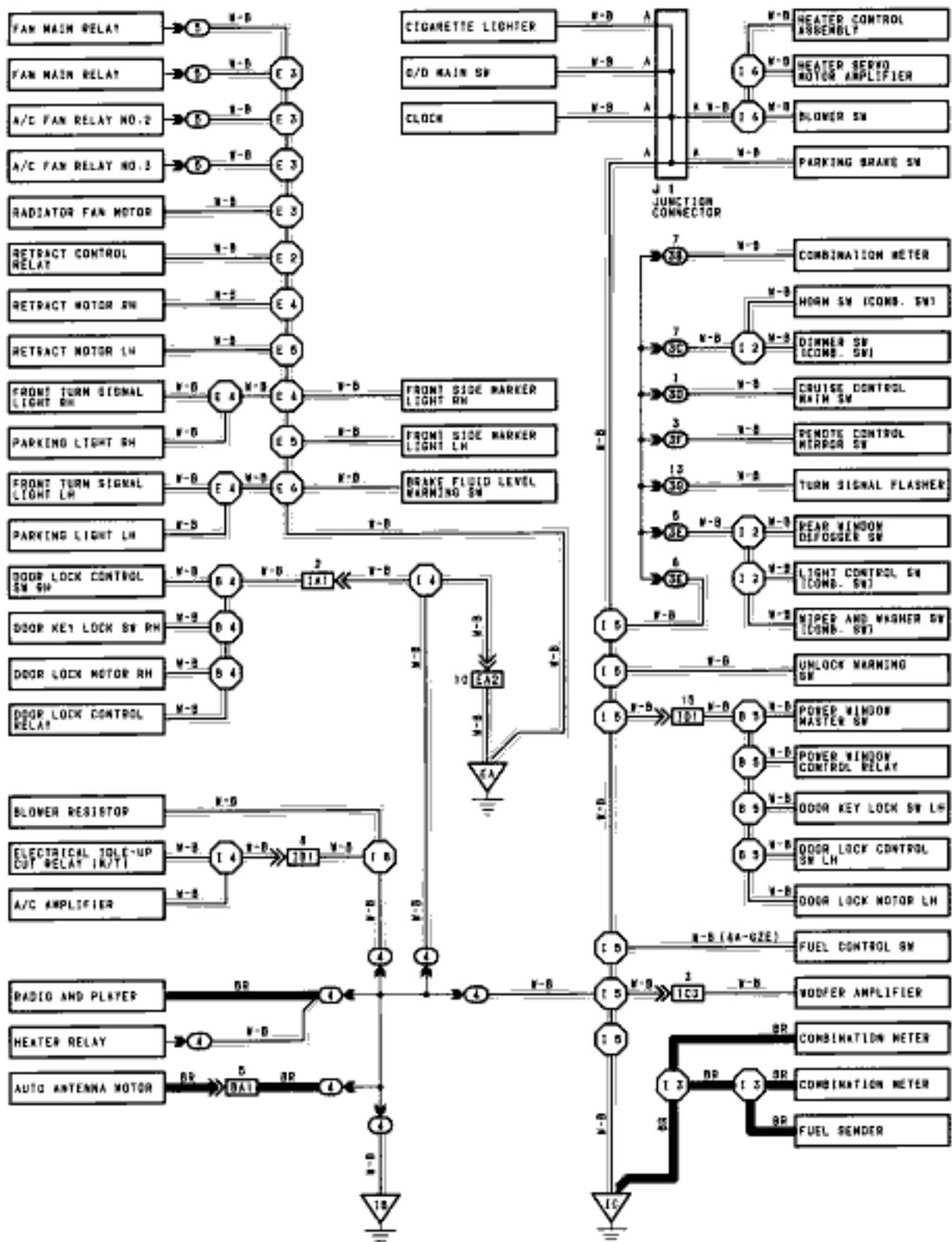
## POWER SOURCE



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

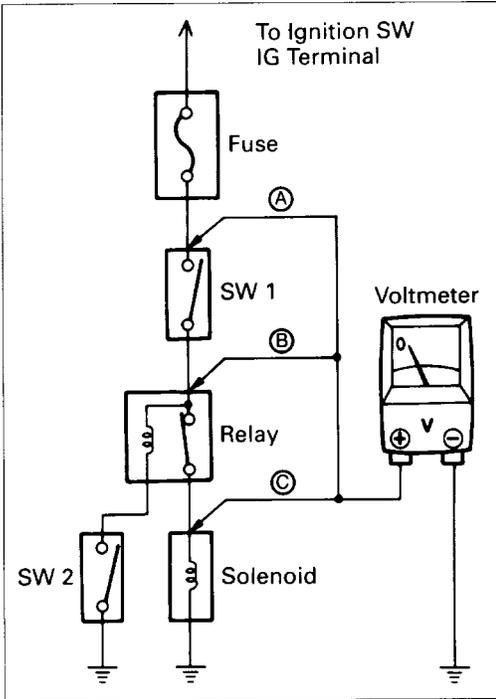
The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points (EA, 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



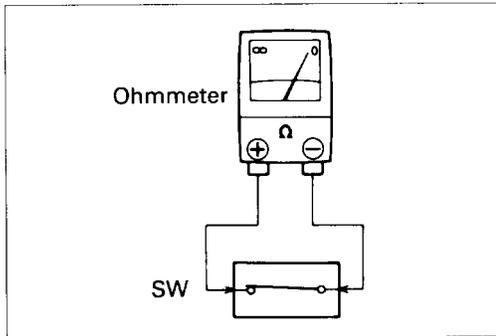
## VOLTAGE CHECK

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

Example:

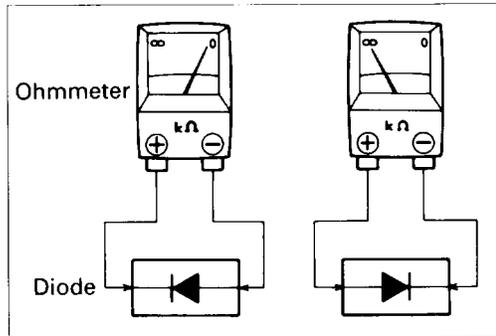
- Ⓐ - Ignition SW on
- Ⓑ - Ignition SW and SW 1 on
- Ⓒ - Ignition SW, SW 1 and Relay on (SW2 off)

- (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

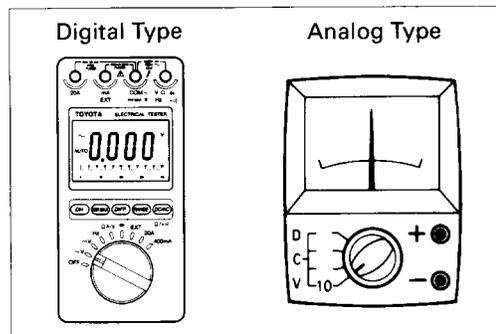
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



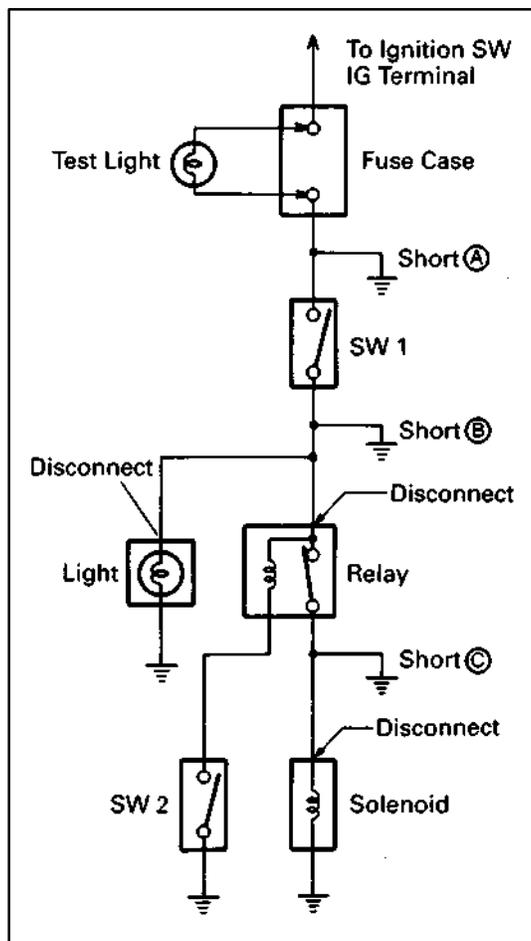
If the circuit has diodes, reverse the two leads and check again.

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

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

Example:

- Ⓐ - 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)
- Disconnect and reconnect the connectors while watching the test light. The short lies between the connector where the test light stays lit and the connector where the light goes out.
  - Find the exact location of the short by lightly shaking the problem wire along the body.

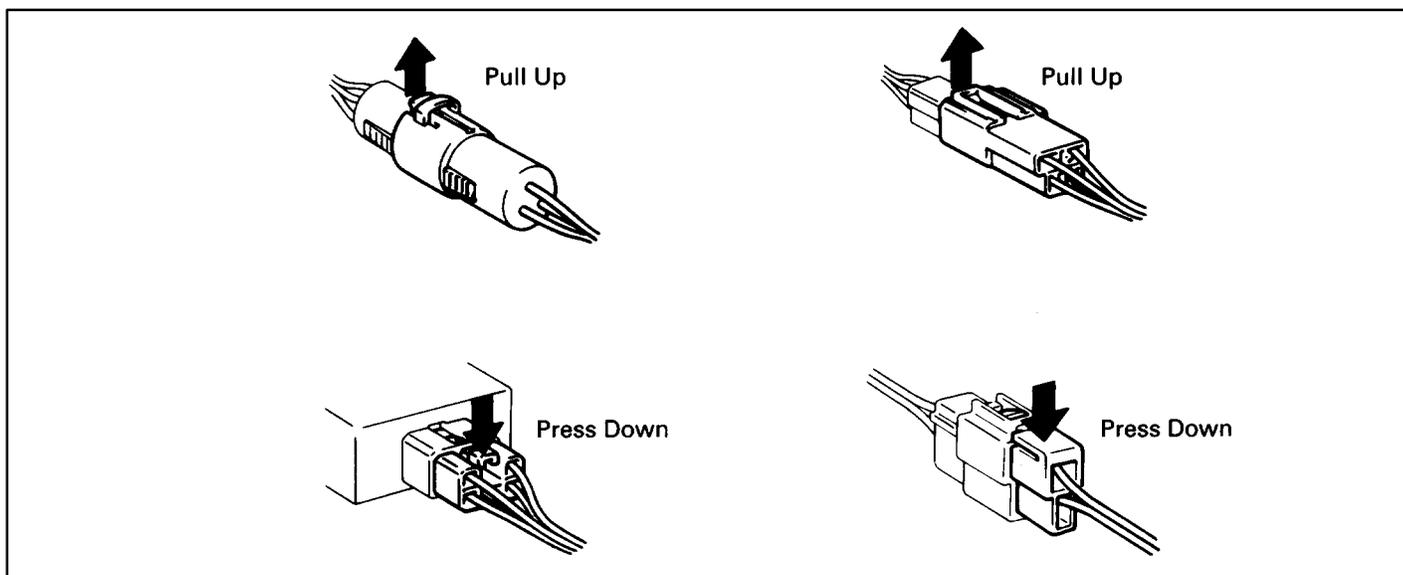
## CAUTION:

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

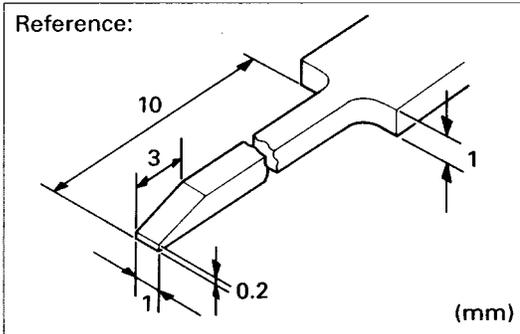
## DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

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



# C TROUBLESHOOTING

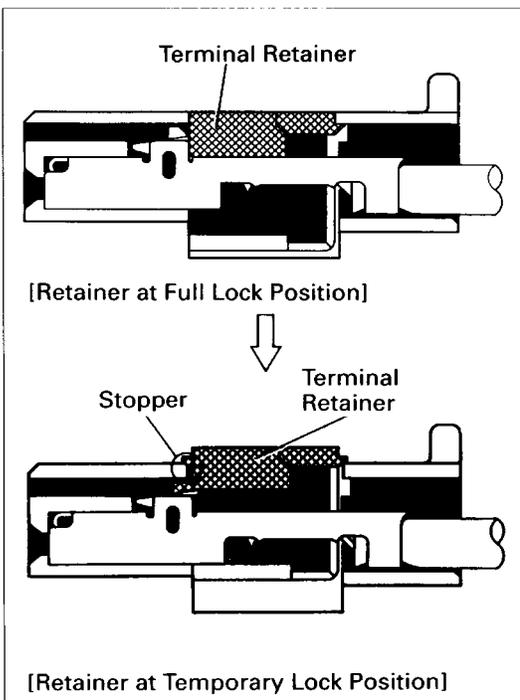
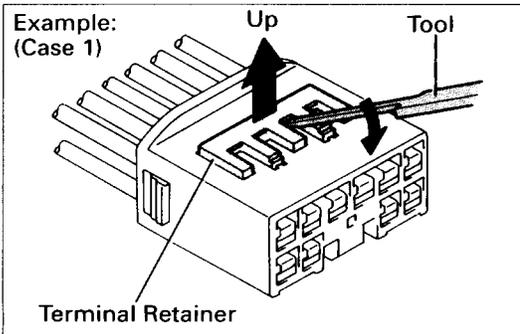


## HOW TO REPLACE TERMINAL (with terminal retainer or secondary locking device)

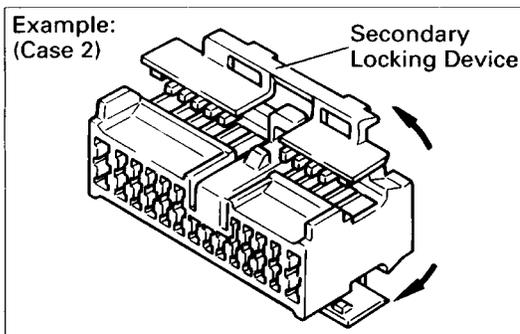
1. PREPARE THE SPECIAL TOOL  
HINT: To remove the terminal from the connector, please construct and use the special tool or like object shown on the left.
2. DISCONNECT CONNECTOR
3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER
  - (a) Locking device must be disengaged before the terminal 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:**

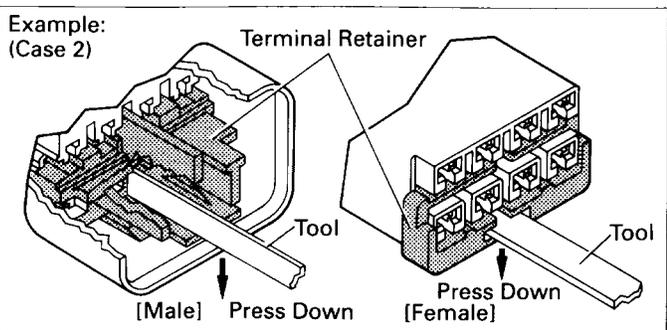
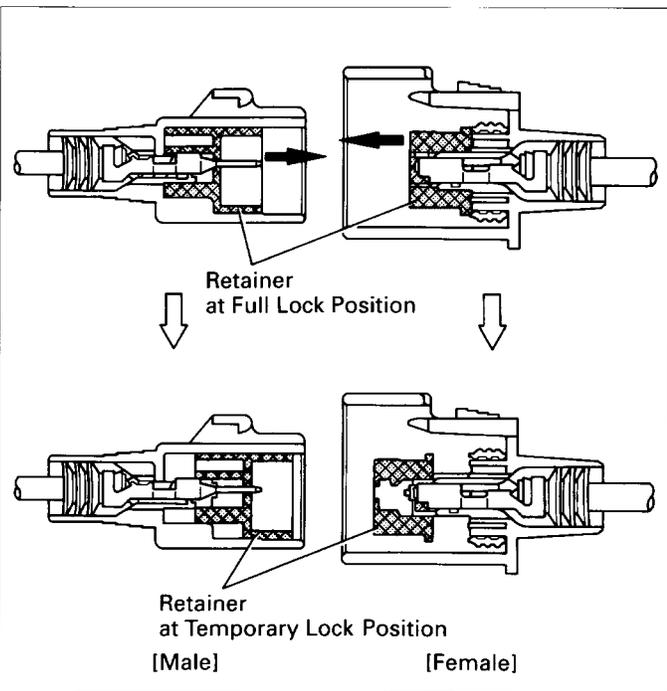
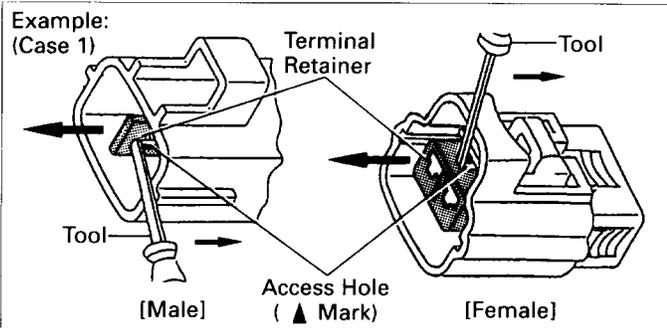
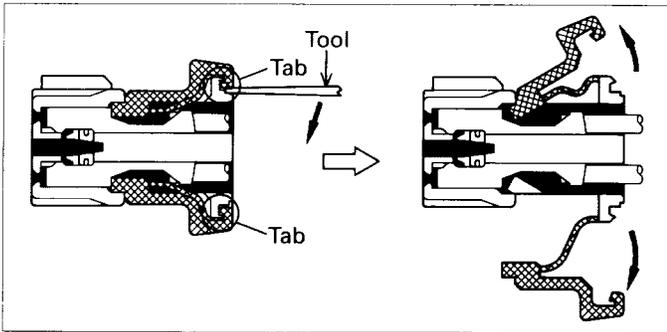
**Do not remove the terminal retainer from connector body.**



- Ⓐ 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.



- ⓑ 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”

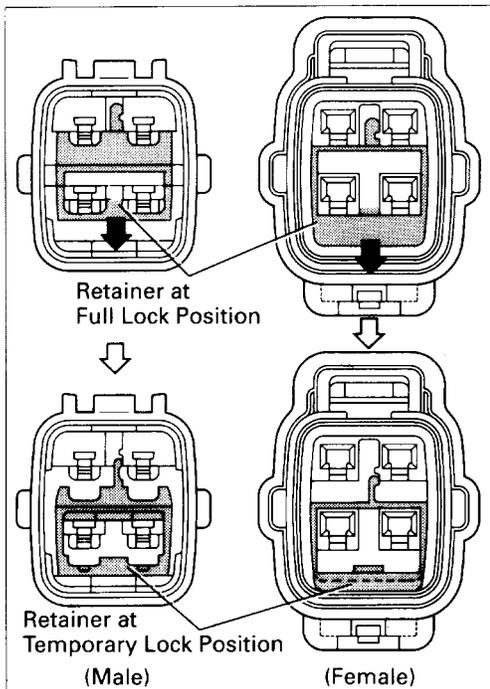
Type where terminal retainer is pulled up to the temporary lock position (Pull Type). Insert the special tool into the terminal retainer access hole (▲ Mark) and pull the terminal retainer up to the temporary lock position.

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

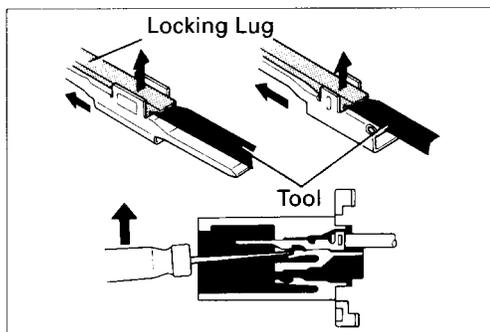
“Case 2”

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

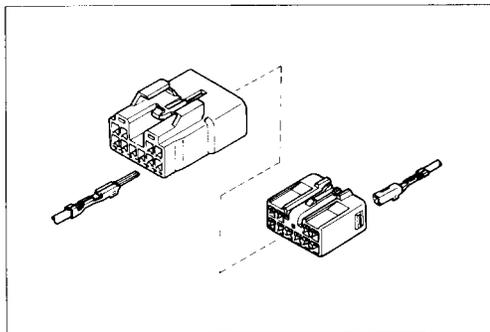
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

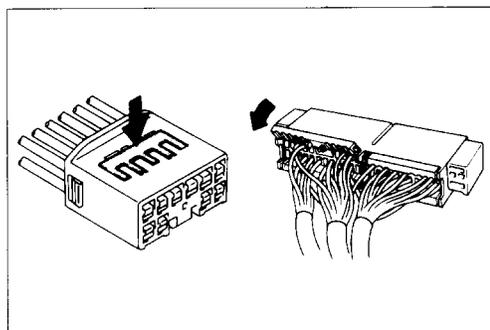


#### 4. INSTALL TERMINAL TO CONNECTOR

(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

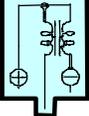
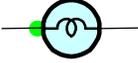
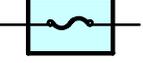
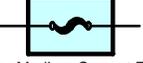
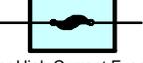
**ABBREVIATIONS**

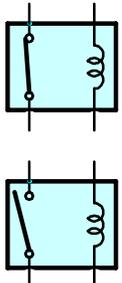
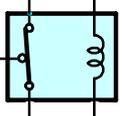
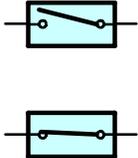
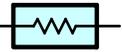
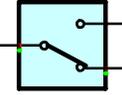
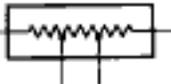
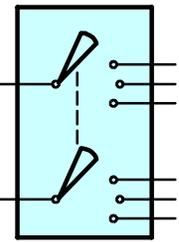
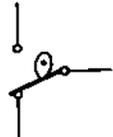
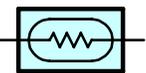
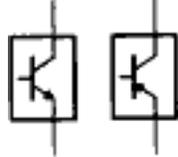
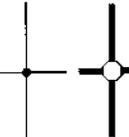
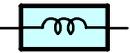
The following abbreviations are used in this manual.

ABS	= Anti-Lock Brake System
A/C	= Air Conditioning
A/T	= Automatic Transaxle
COMB.	= Combination
DIFF.	= Differential
ECU	= Electronic Control Unit
EGR	= Exhaust Gas Recirculation
EVAP	= Evaporative Emission
J/B	= Junction Block
LH	= Left-Hand
M/T	= Manual Transaxle
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
2WD	= Two Wheel Drive
4WD	= Four Wheel Drive

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

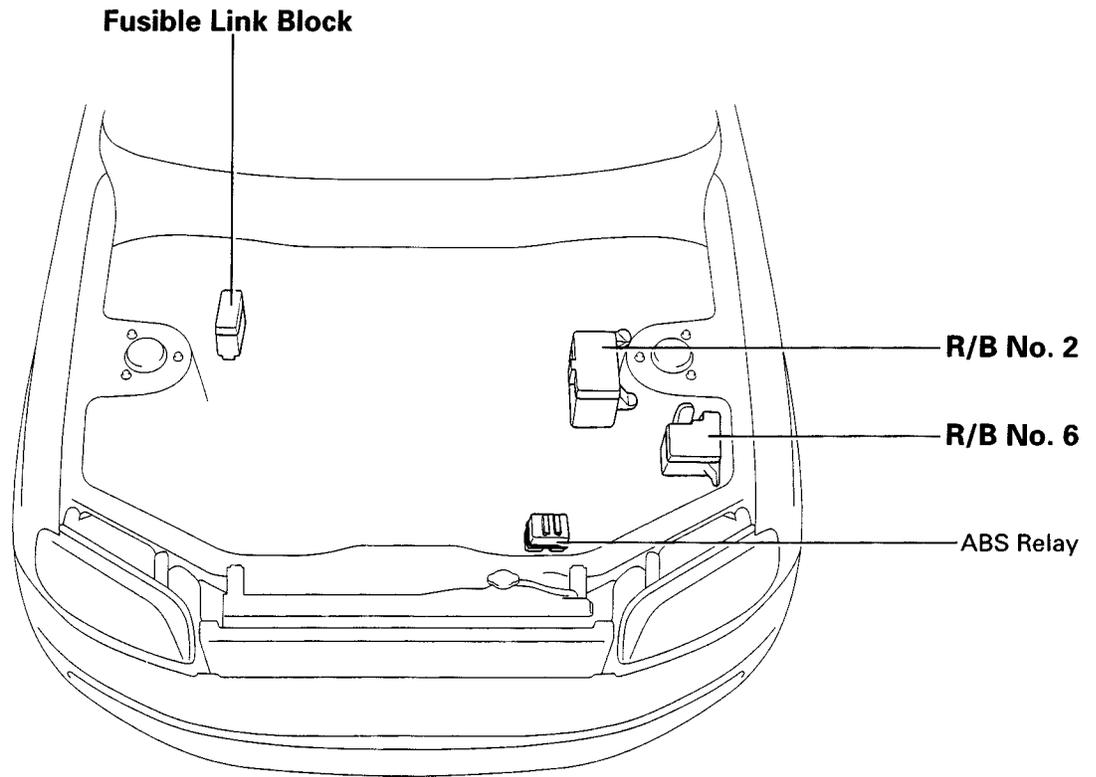
# E GLOSSARY OF TERMS AND SYMBOLS

 <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>  <p>(for Medium Current Fuse)</p>  <p>(for High Current Fuse or Fusible Link.)</p>	<p><b>METER, DIGITAL</b> Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display.</p> 
	<p><b>MOTOR</b> A power unit which converts electrical energy into mechanical energy, especially rotary motion.</p> 

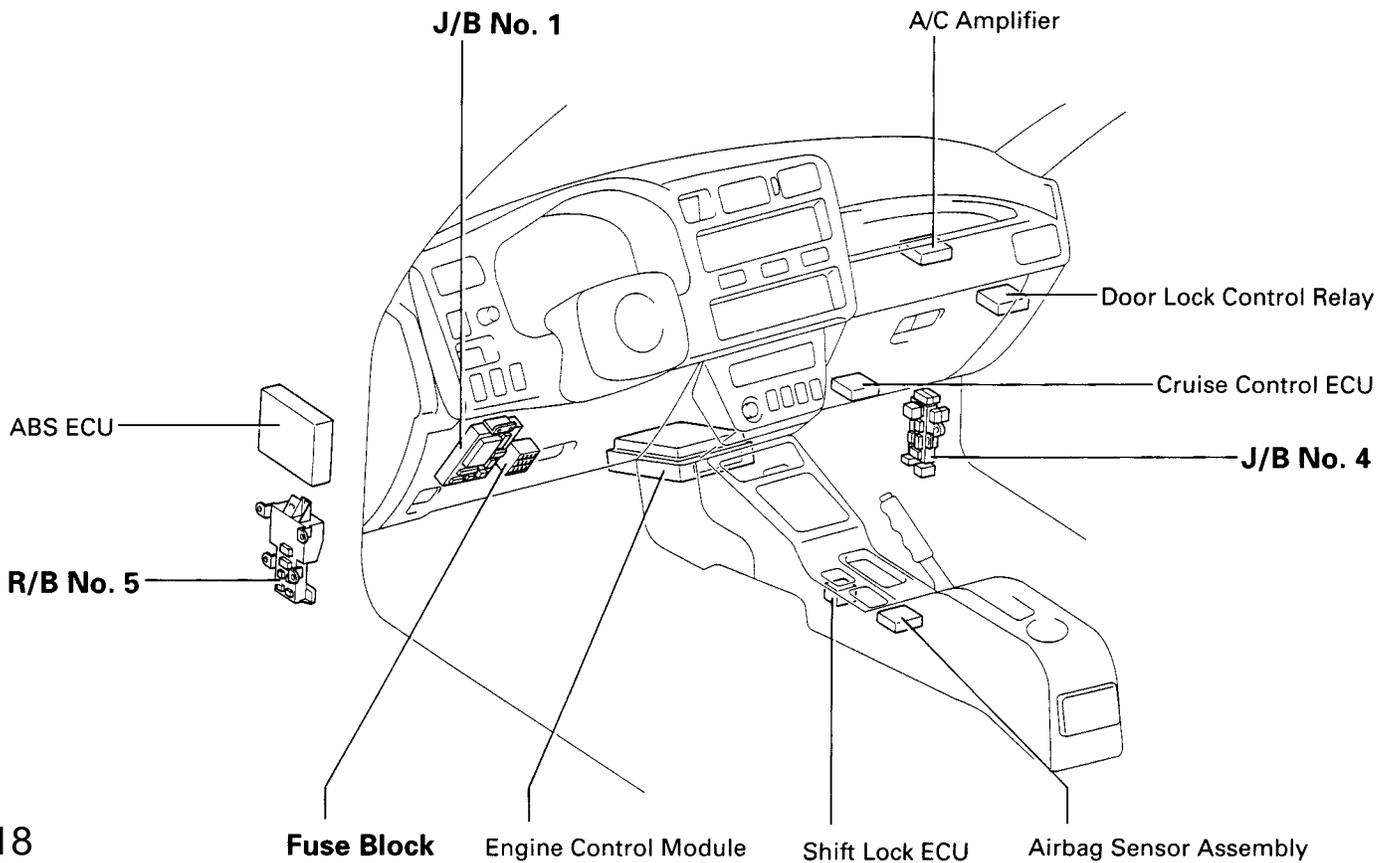
 <p><b>RELAY</b> 1. <b>NORMALLY CLOSED</b> 2. <b>NORMALLY OPEN</b></p>	 <p><b>SPEAKER</b> An electromechanical device which creates sound waves from current flow.</p>
 <p><b>RELAY, DOUBLE THROW</b> A relay which passes current through one set of contacts or the other.</p>	<p><b>SWITCH, MANUAL</b></p>  <p>1. <b>NORMALLY OPEN</b> 2. <b>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>(1) <b>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>(2) <b>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

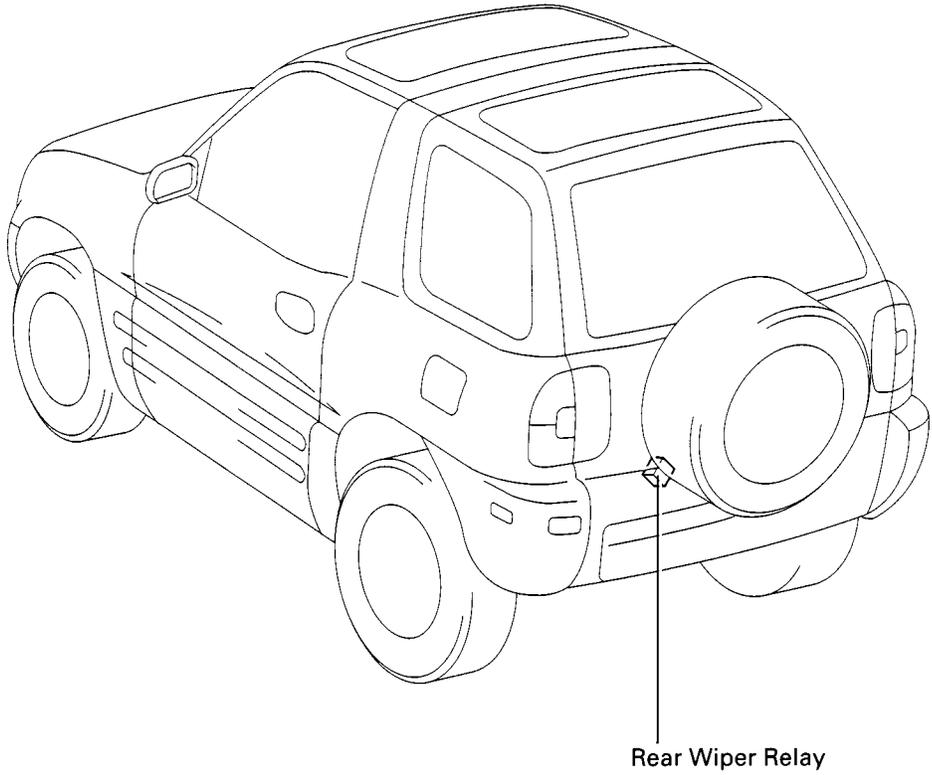
## [Engine Compartment]



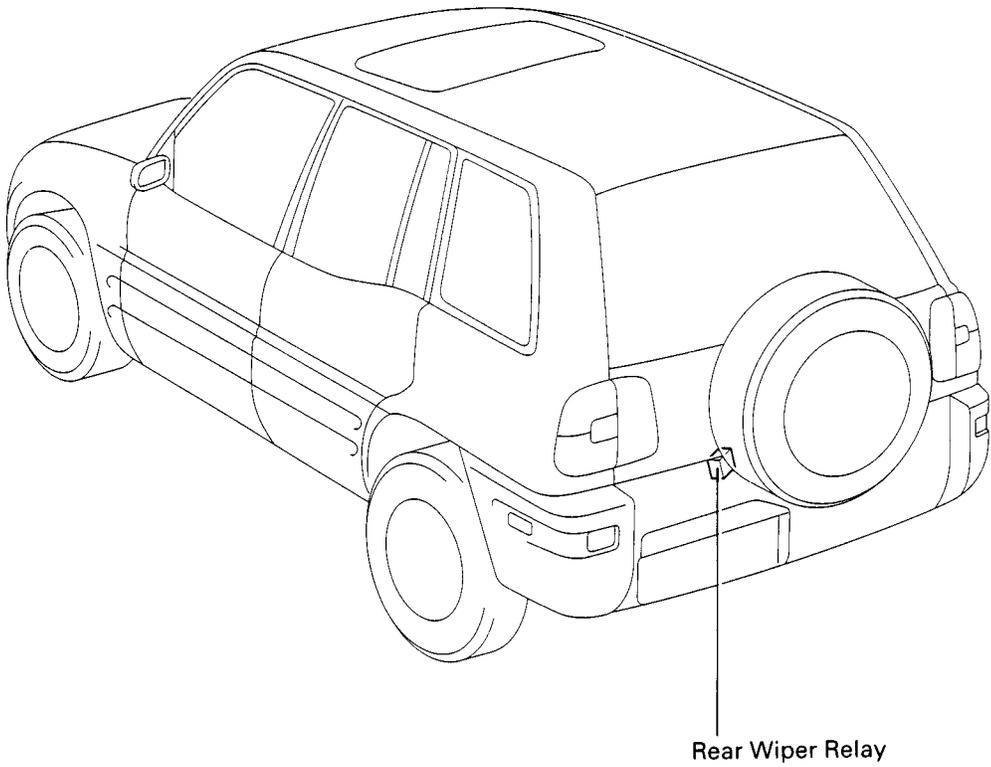
## [Instrument Panel]



[Body: 2-Door]



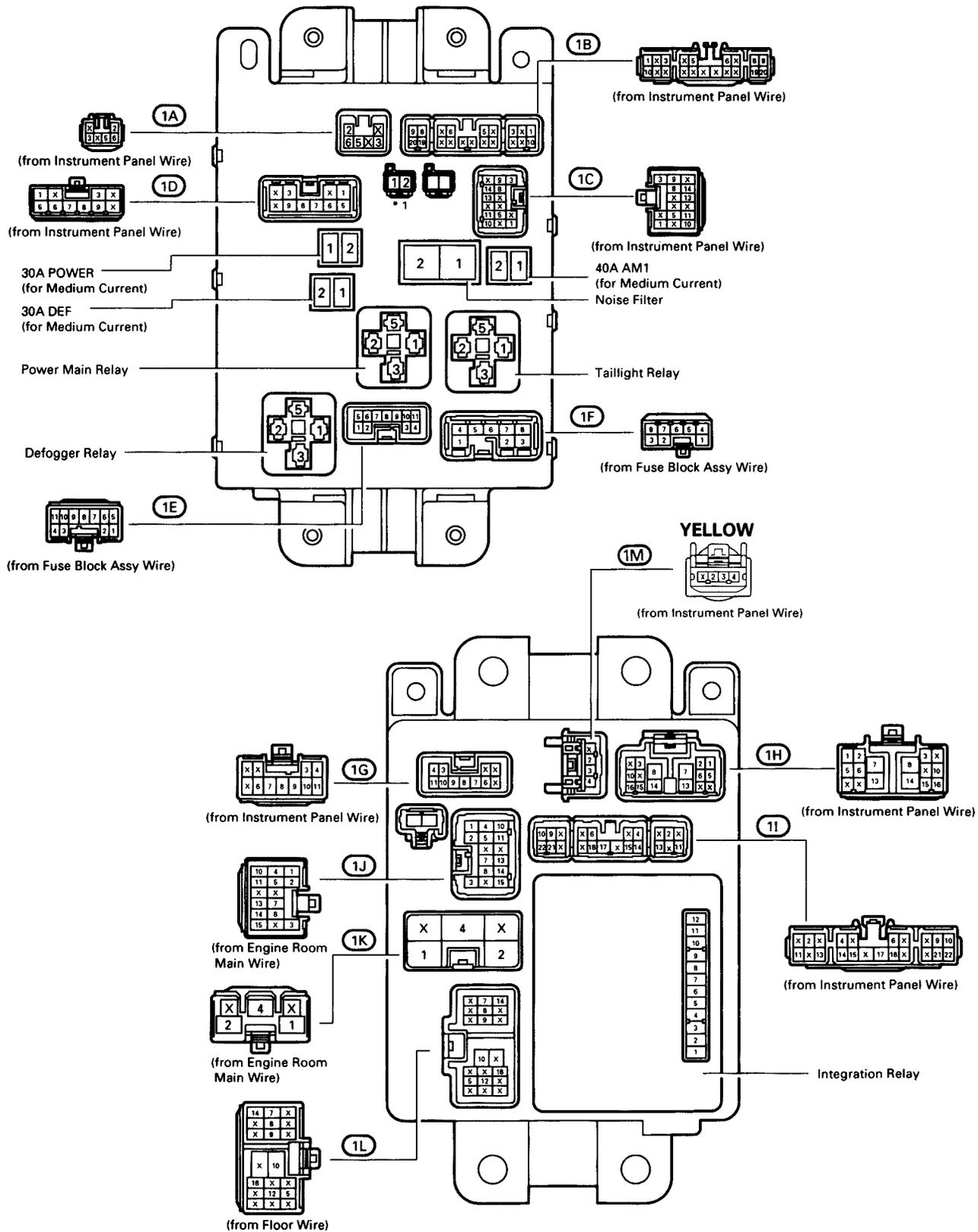
[Body: 4-Door]



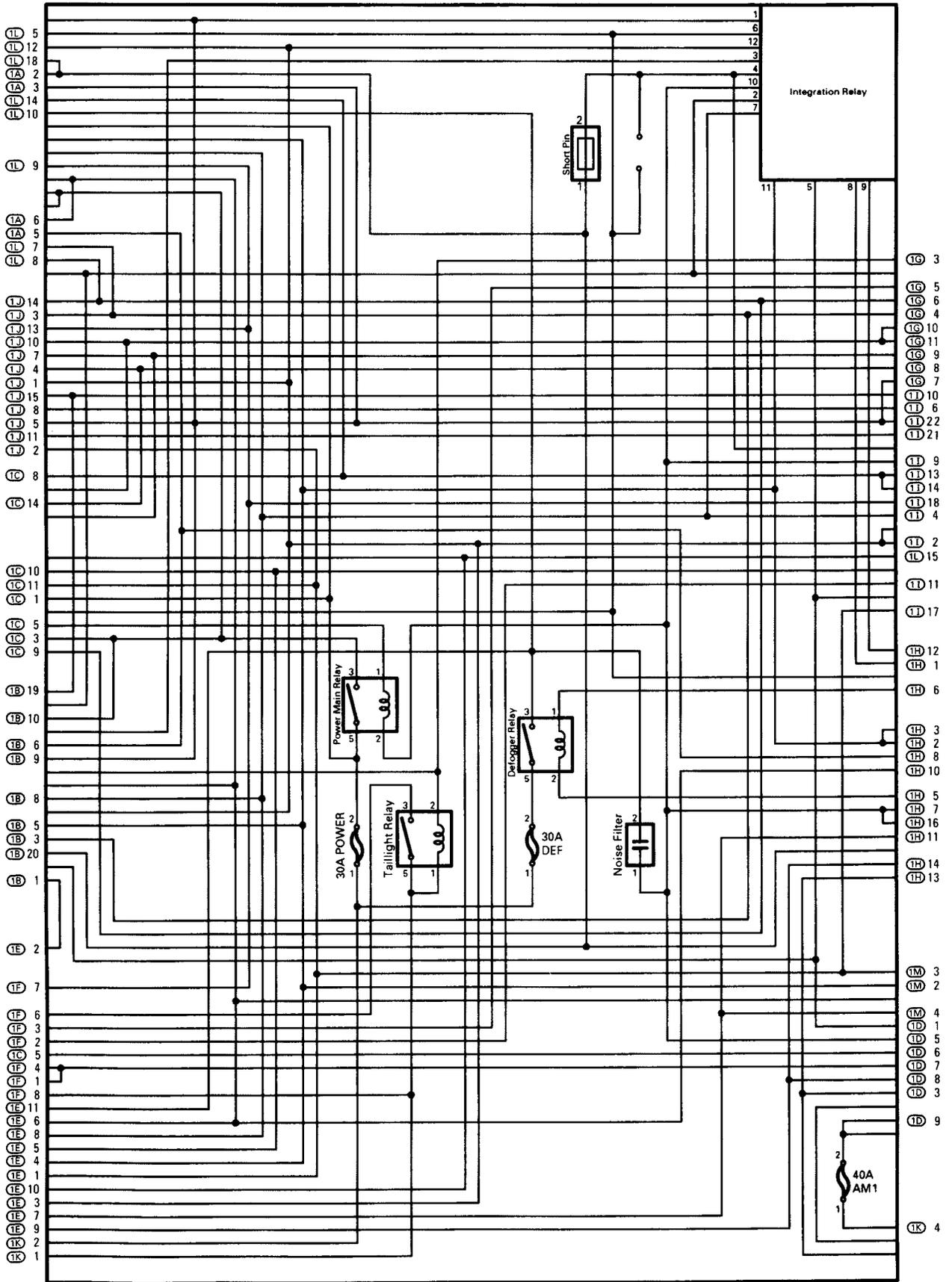
# F RELAY LOCATIONS

○ : J/B No. 1      Lower Finish Panel (See Page 18)

\* 1 : Short Pin



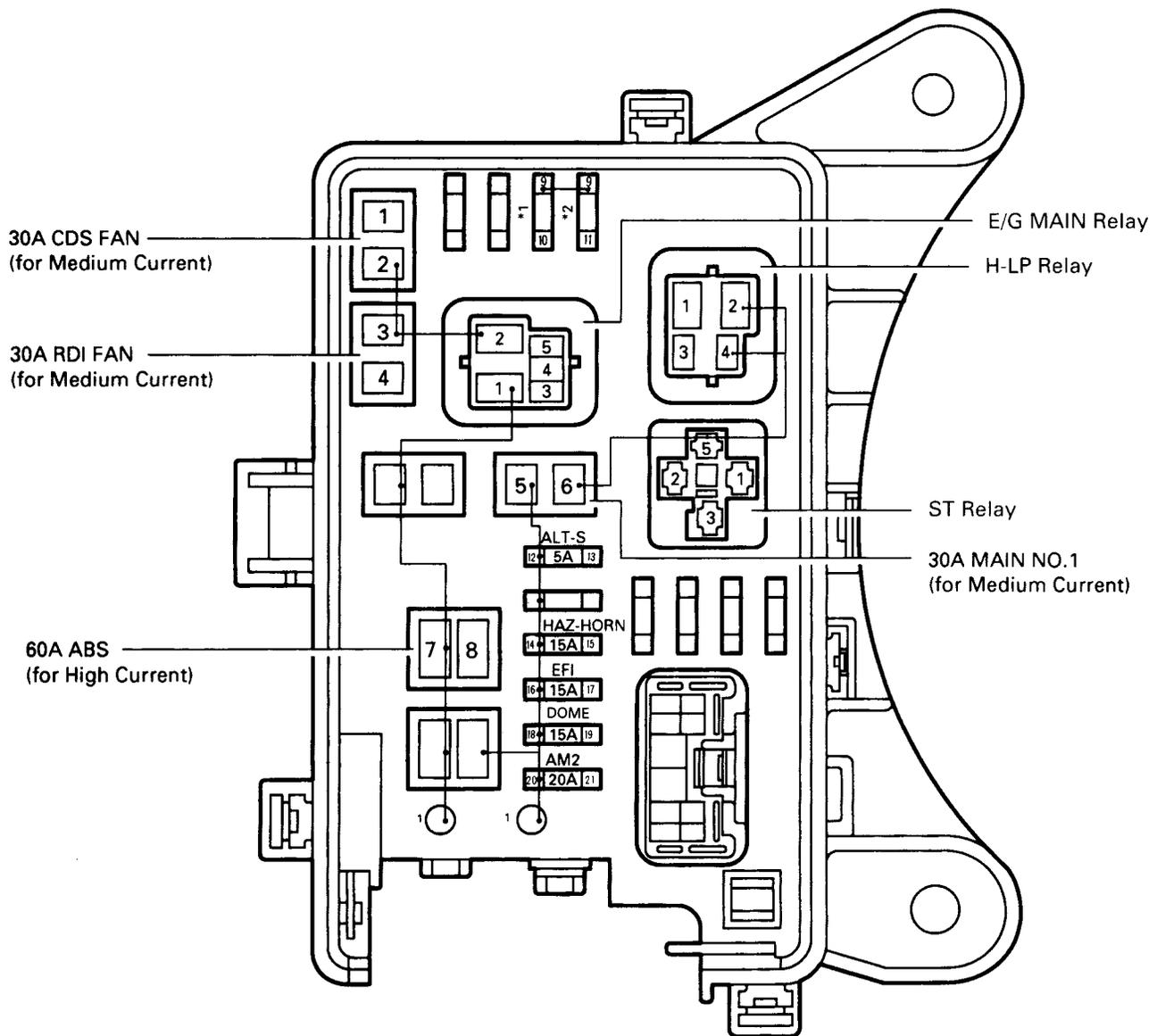
[J/B No. 1 Inner Circuit]



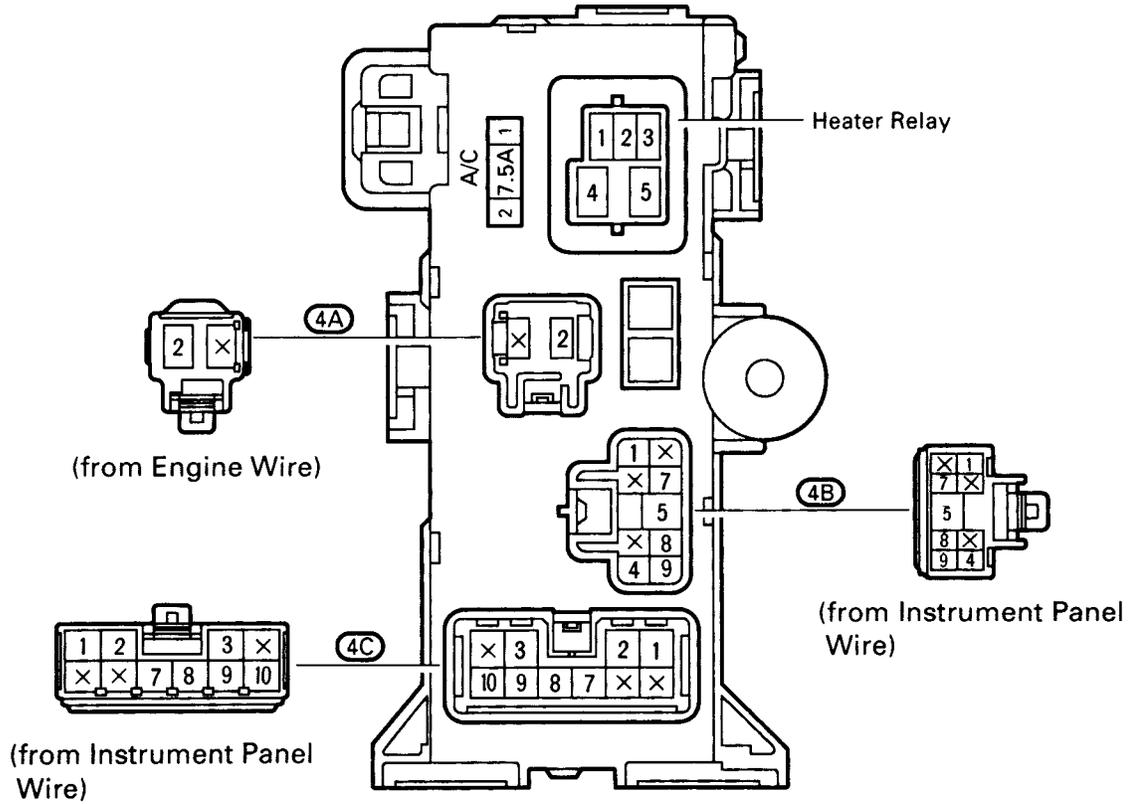
# F RELAY LOCATIONS

② : R/B No. 2	Engine Compartment Left (See Page 18)
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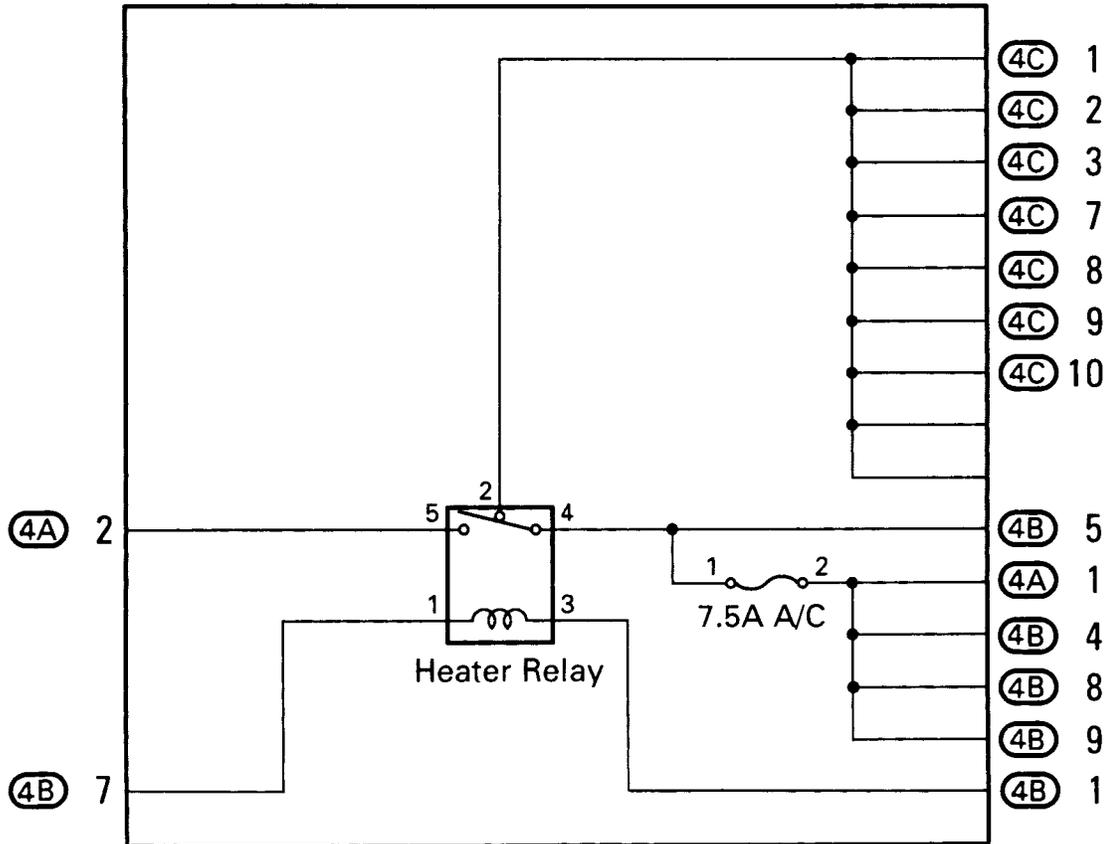
\*1 : 15A H-LP LH  
 \*2 : 15A H-LP RH



**○ : J/B No. 4**      **Right Kick Panel (See Page 18)**



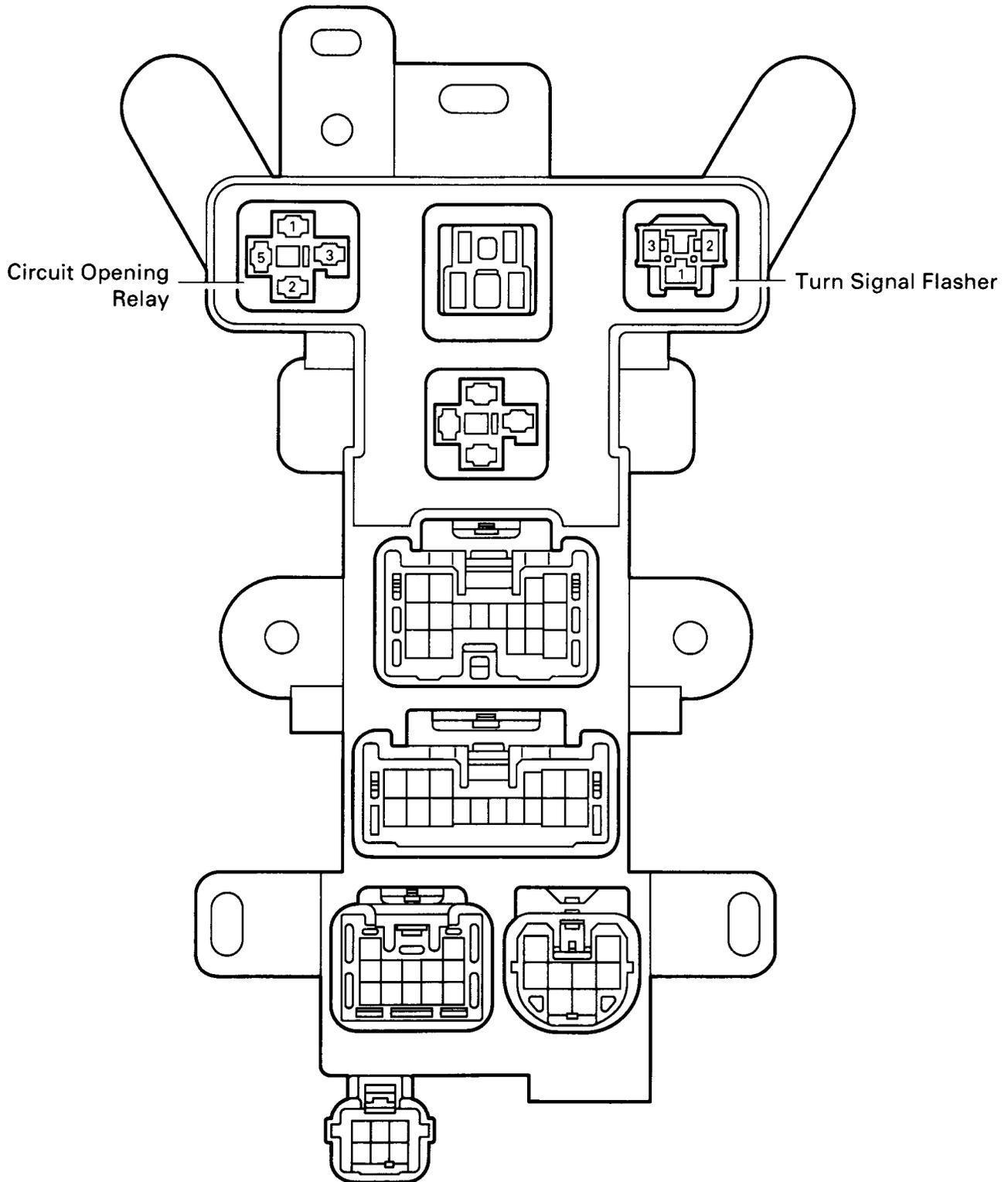
**[J/B No. 4 Inner Circuit]**



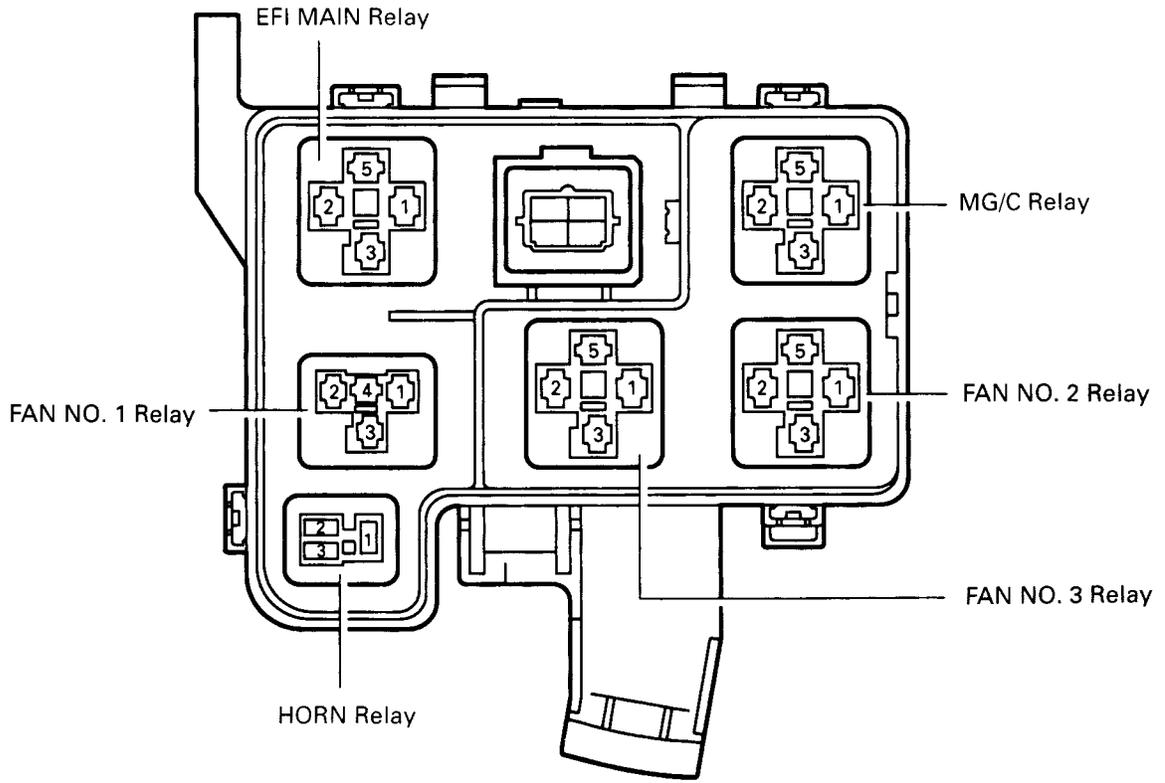
## F RELAY LOCATIONS

⑤ : R/B No. 5

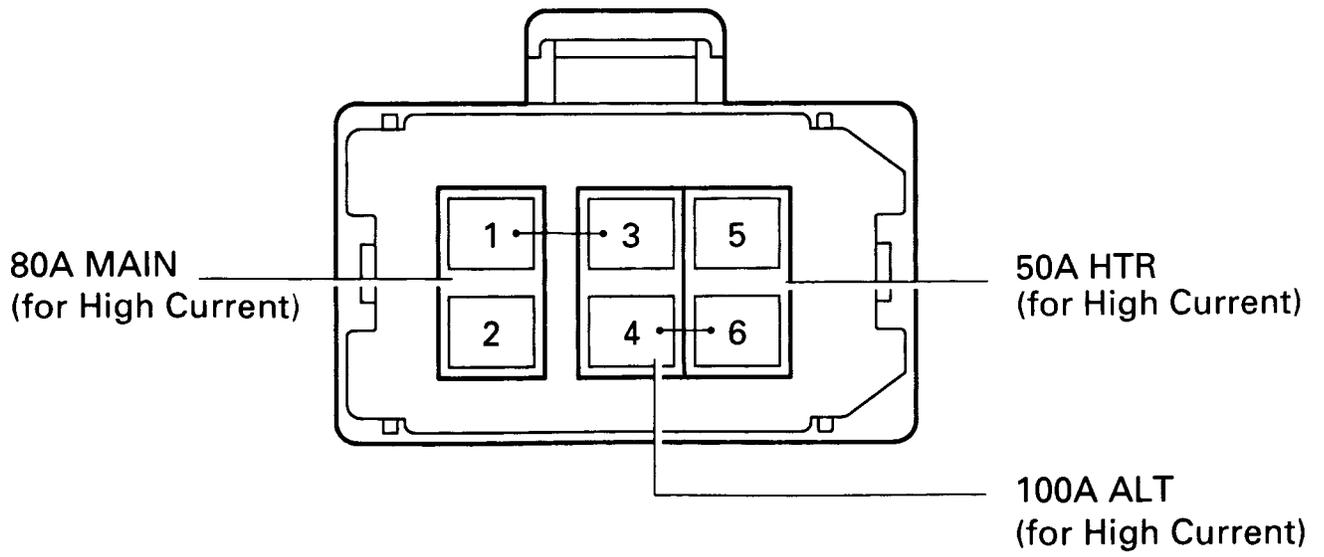
Left Kick Panel (See Page 18)



⑥ : R/B No. 6 Engine Compartment Left (See Page 18)



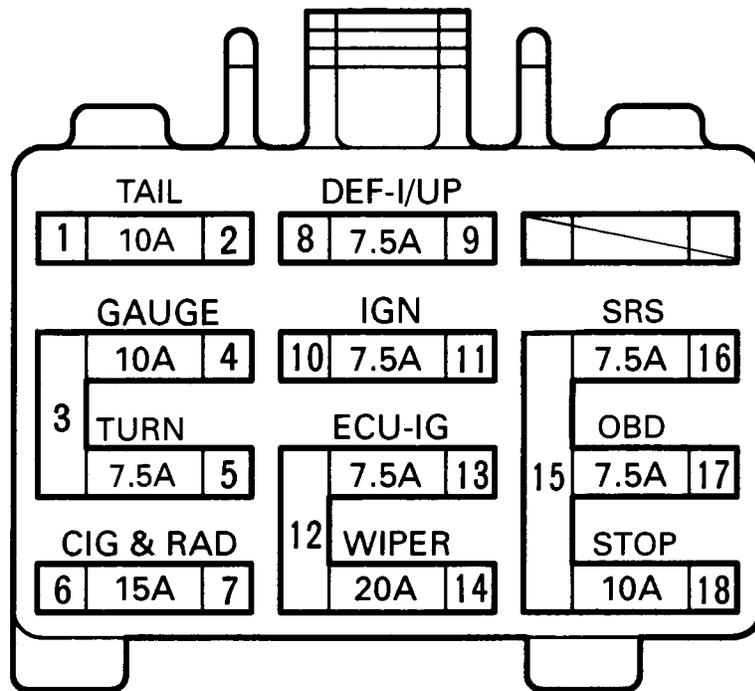
Fusible Link Block Near The Battery (See Page 18)



## F RELAY LOCATIONS

Fuse Block

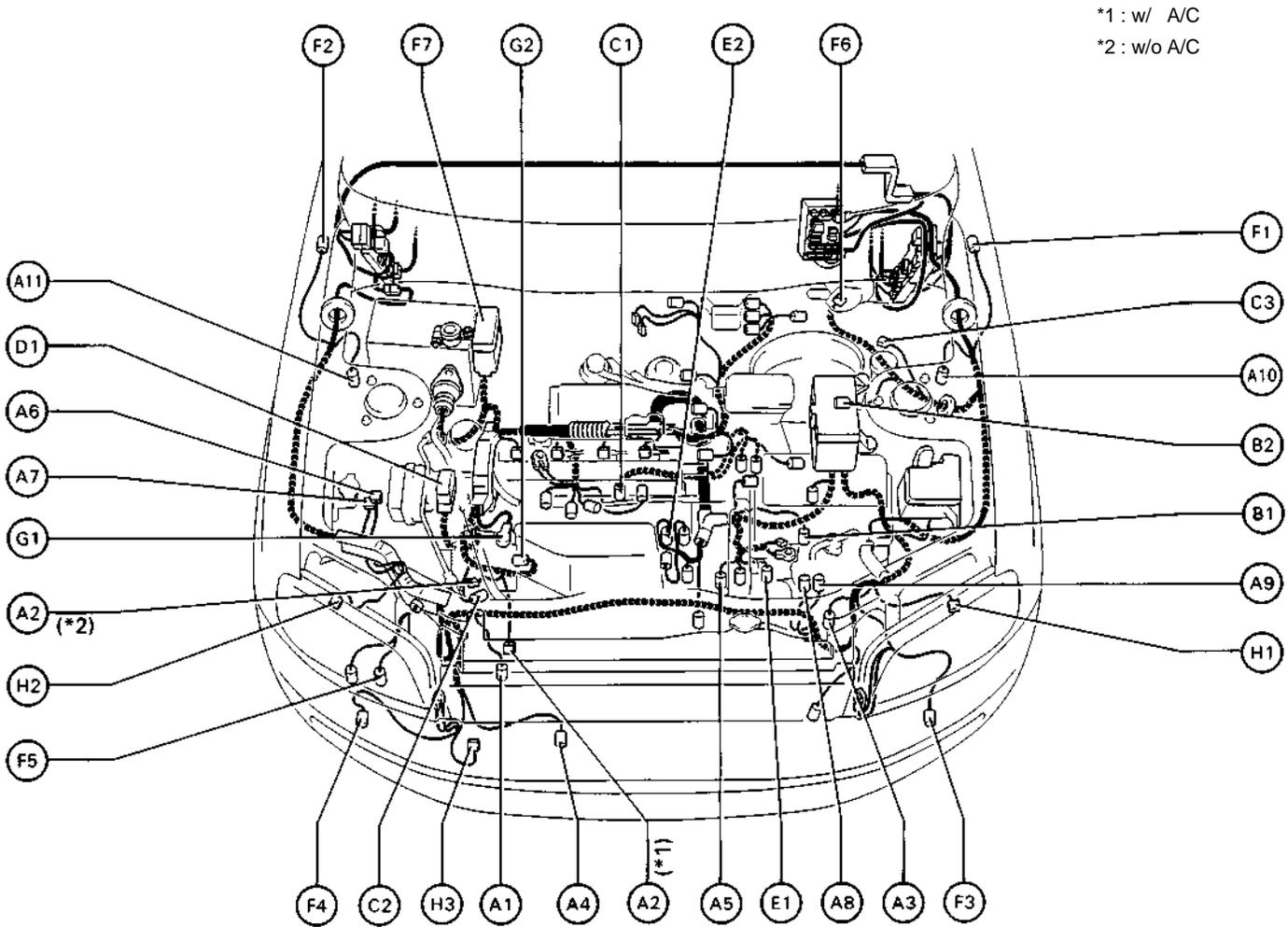
Lower Finish Panel (See Page 18)





# G ELECTRICAL WIRING ROUTING

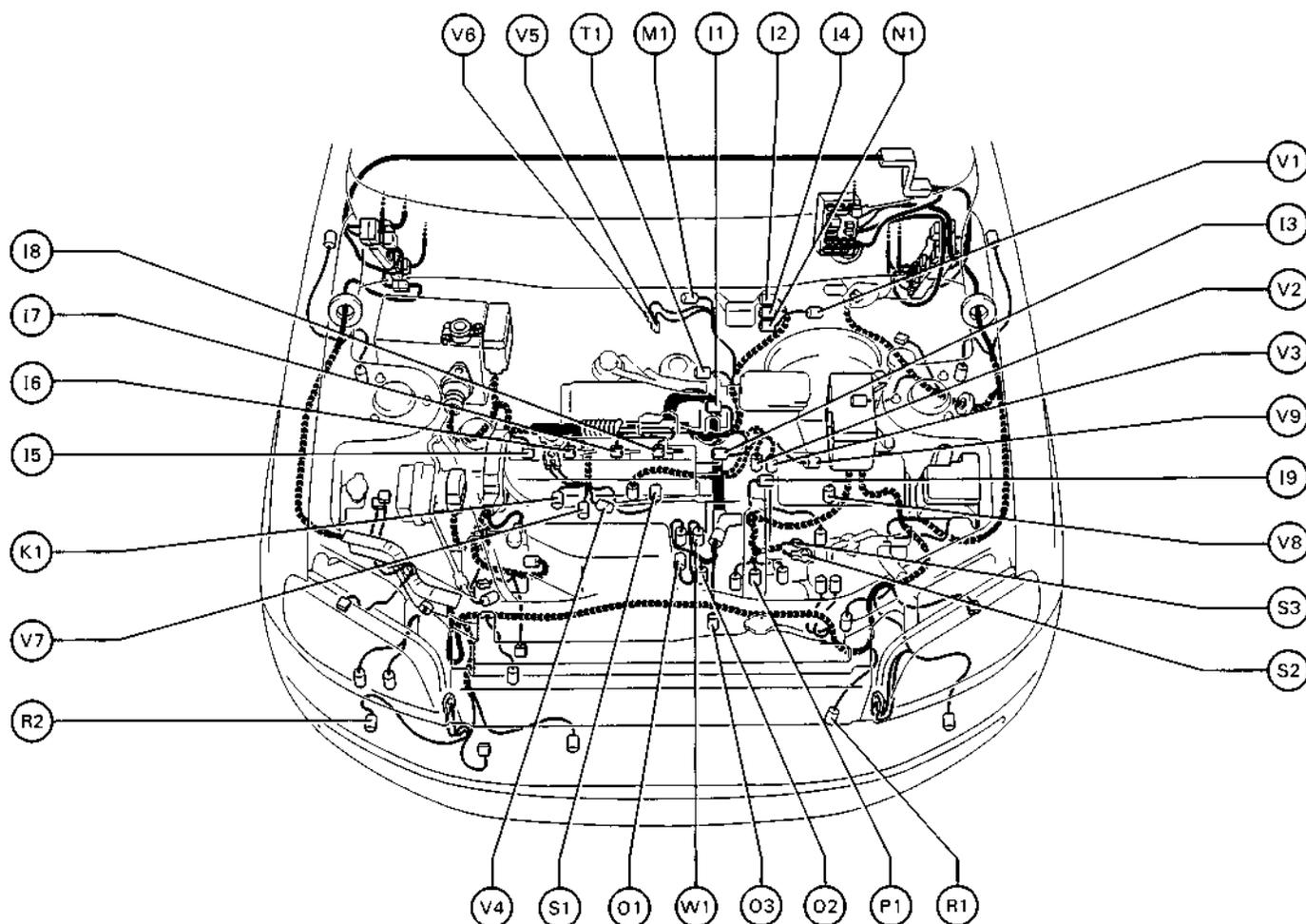
## Position of Parts in Engine Compartment



\*1 : w/ A/C  
\*2 : w/o A/C

- |      |  |     |   |
|------|--|-----|---|
| A 1  | A/C Condenser Fan Motor                                  | E 1 | Electronically Controlled Transmission Solenoid       |
| A 2  | A/C Magnetic Clutch and Lock Sensor                      | E 2 | Engine Coolant Temp. Sensor                           |
| A 3  | A/C Triple Pressure SW (A/C Dual and Single Pressure SW) | F 1 | Front Side Marker Light LH                            |
| A 4  | A/C Water Temp. SW                                       | F 2 | Front Side Marker Light RH                            |
| A 5  | A/T Fluid Temp. SW                                       | F 3 | Front Turn Signal Light LH and Front Parking Light LH |
| A 6  | ABS Actuator   | F 4 | Front Turn Signal Light RH and Front Parking Light RH |
| A 7  | ABS Actuator   | F 5 | Front Washer Motor                                    |
| A 8  | ABS Relay  | F 6 | Front Wiper Motor                                     |
| A 9  | ABS Relay  | F 7 | Fusible Link Block                                    |
| A 10 | ABS Speed Sensor Front LH                                | G 1 | Generator   |
| A 11 | ABS Speed Sensor Front RH                                | G 2 | Generator   |
| B 1  | Back-Up Light SW (M/T)                                   | H 1 | Headlight LH  |
| B 2  | Brake Fluid Level Warning SW                             | H 2 | Headlight RH  |
| C 1  | Center Diff. Lock Warning Buzzer SW                      | H 3 | Horn  |
| C 2  | Crankshaft Position Sensor                               |     |   |
| C 3  | Cruise Control Actuator                                  |     |   |
| D 1  | Data Link Connector 1                                    |     |   |

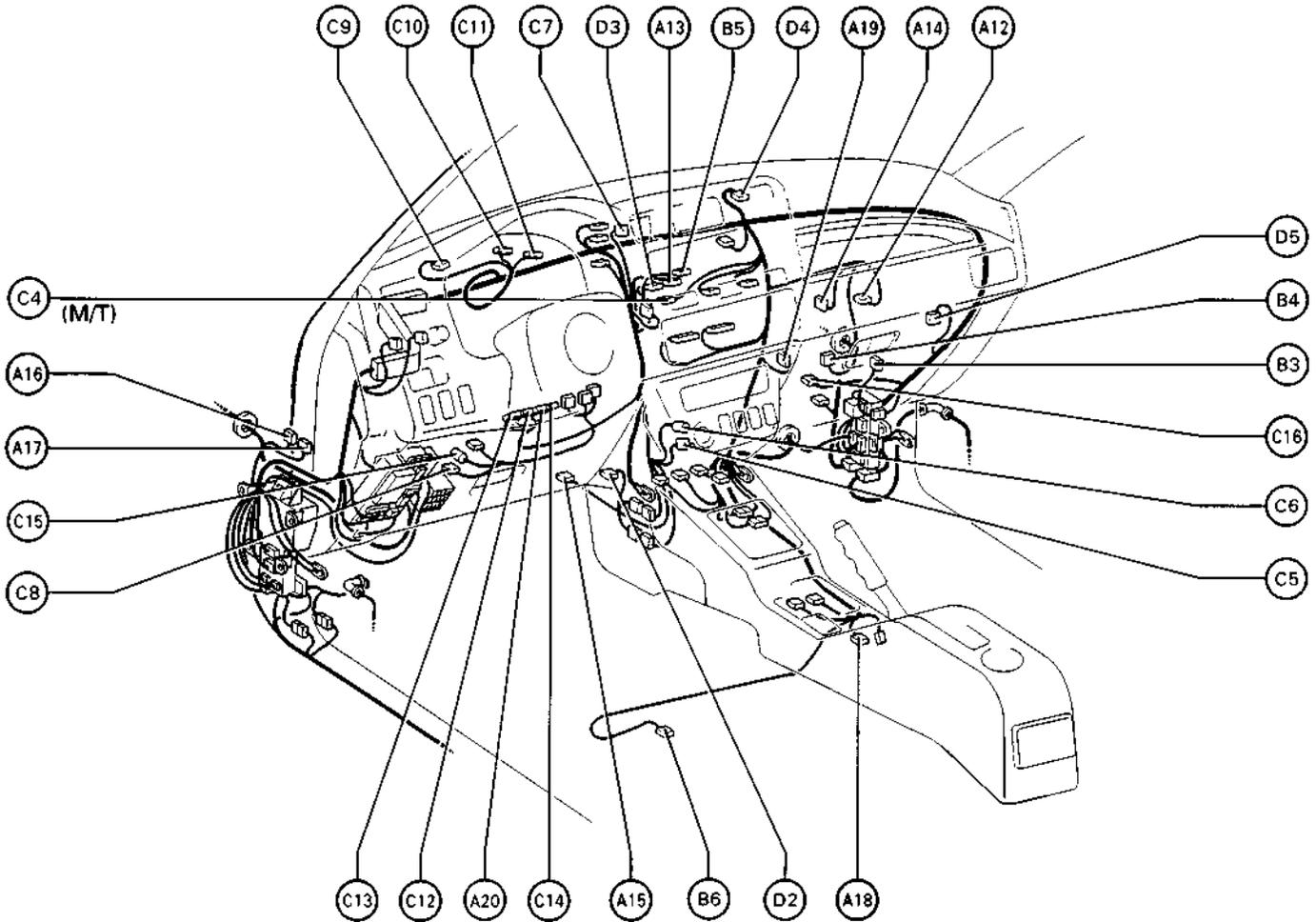
## Position of Parts in Engine Compartment



I 1	Idle Air Control Valve	R 1	Radiator Fan Motor
I 2	Igniter	R 2	Rear Washer Motor
I 3	Ignition Coil and Distributor	S 1	Solenoid Valve SLD
I 4	Ignition Coil and Distributor	S 2	Starter
I 5	Injector No. 1	S 3	Starter
I 6	Injector No. 2	T 1	Throttle Position Sensor
I 7	Injector No. 3	V 1	Vapor Pressure Sensor
I 8	Injector No. 4	V 2	Vehicle Speed Sensor (Combination Meter)
I 9	Intake Air Temp. Sensor	V 3	Vehicle Speed Sensor (Front)
K 1	Knock Sensor	V 4	Vehicle Speed Sensor (Rear)
M 1	Manifold Absolute Pressure Sensor	V 5	VSV (Center Diff. Lock No. 1)
N 1	Noise Filter (Ignition System)	V 6	VSV (Center Diff. Lock No. 2)
O 1	Oil Pressure SW	V 7	VSV (EGR)
O 2	Oxygen Sensor (Bank 1 Sensor 1)	V 8	VSV (EVAP)
O 3	Oxygen Sensor (Bank 1 Sensor 2)	V 9	VSV (Vapor Pressure Sensor)
P 1	Park/Neutral Position SW (A/T)	W 1	Water Temp. Sender

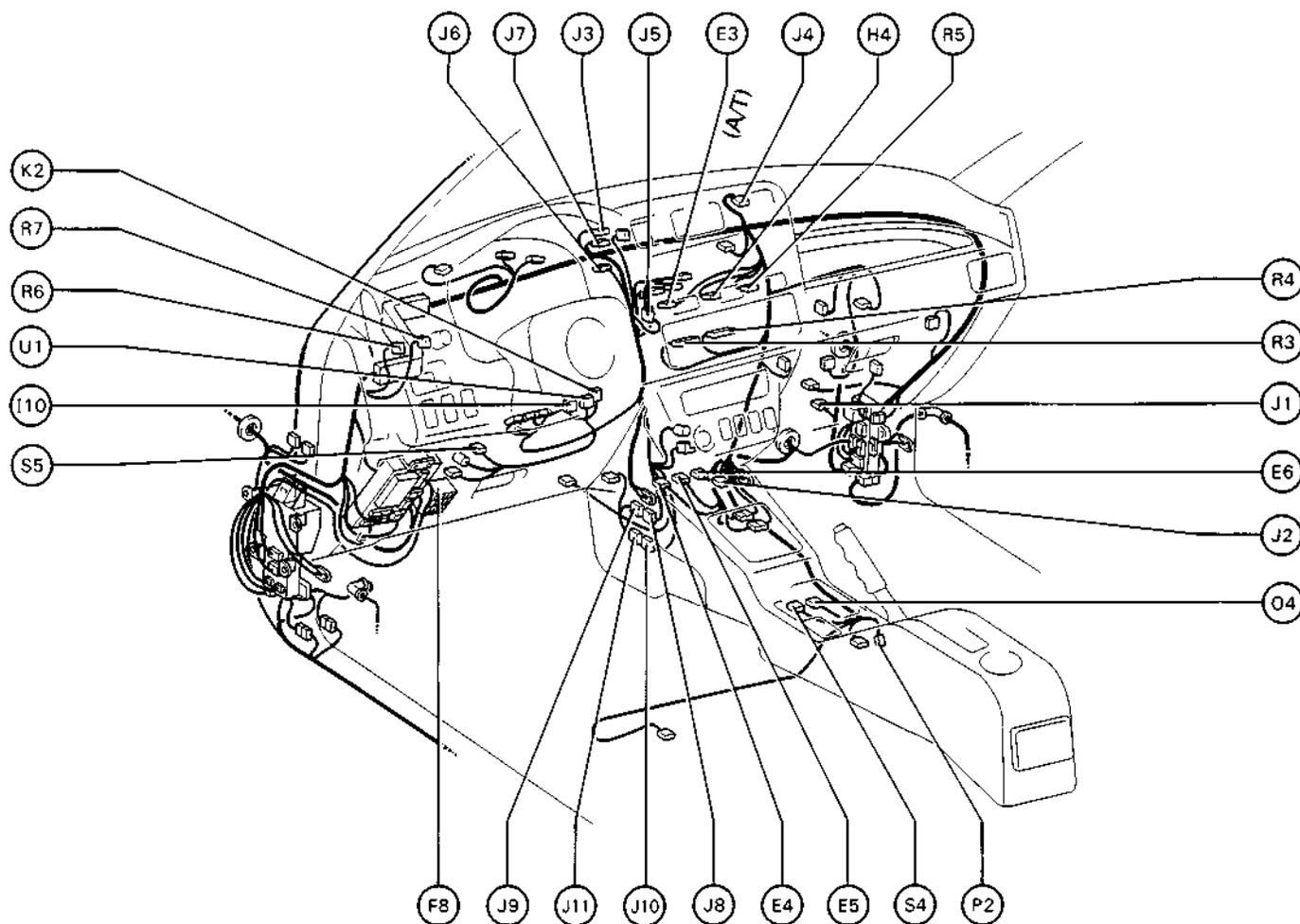
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel



- |      |  |      |                                |
|------|--|------|--------------------------------|
| A 12 | A/C Amplifier                                  | C 6  | Cigarette Lighter Illumination |
| A 13 | A/C Control SW                                 | C 7  | Clock                          |
| A 14 | A/C Thermistor                                 | C 8  | Clutch Start SW                |
| A 15 | ABS Deceleration Sensor                        | C 9  | Combination Meter              |
| A 16 | ABS ECU  | C 10 | Combination Meter              |
| A 17 | ABS ECU  | C 11 | Combination Meter              |
| A 18 | Airbag Sensor Assembly                         | C 12 | Combination SW                 |
| A 19 | Airbag Squib (Front Passenger Airbag Assembly) | C 13 | Combination SW                 |
| A 20 | Airbag Squib (Steering Wheel Pad)              | C 14 | Combination SW                 |
| B 3  | Blower Motor                                   | C 15 | Cruise Control Clutch SW       |
| B 4  | Blower Resistor                                | C 16 | Cruise Control ECU             |
| B 5  | Blower SW                                      | D 2  | Data Link Connector 3          |
| B 6  | Buckle SW LH                                   | D 3  | Defroster Mode SW              |
| C 4  | Center Diff. Lock Control SW                   | D 4  | Diode (Engine Idle-Up)         |
| C 5  | Cigarette Lighter                              | D 5  | Door Lock Control Relay        |

## Position of Parts in Instrument Panel

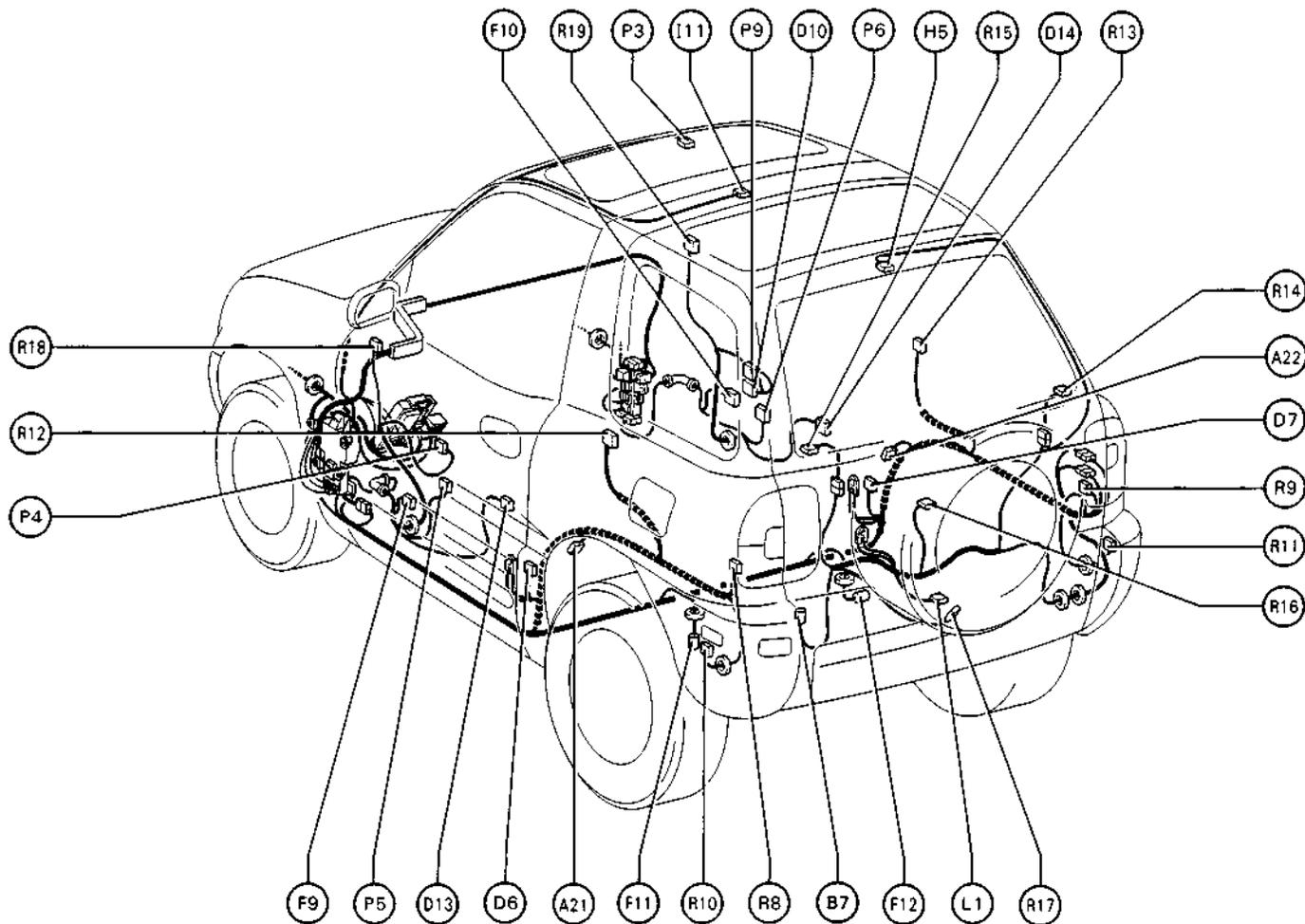


E 3	Electronically Controlled Transmission Pattern Select SW	J 9	Junction Connector
E 4	Engine Control Module	J 10	Junction Connector
E 5	Engine Control Module	J 11	Junction Connector
E 6	Engine Control Module	K 2	Key Interlock Solenoid
F 8	Fuse Block	O 4	O/D Main SW
H 4	Hazard SW	P 2	Parking Brake SW
I 10	Ignition SW	R 3	Radio and Player
J 1	Junction Connector	R 4	Radio and Player
J 2	Junction Connector	R 5	Rear Window Defogger SW
J 3	Junction Connector	R 6	Remote Control Mirror SW
J 4	Junction Connector	R 7	Rheostat
J 5	Junction Connector	S 4	Shift Lock ECU
J 6	Junction Connector	S 5	Stop Light SW
J 7	Junction Connector	U 1	Unlock Warning SW
J 8	Junction Connector		

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body

[2-Door]



A 21 ABS Speed Sensor Rear LH  
A 22 ABS Speed Sensor Rear RH

B 7 Back Door Open Detection SW and Door Lock Motor

D 6 Door Courtesy SW (Driver's Side)  
D 7 Door Courtesy SW (Front Passenger's Side)  
D 10 Door Lock Control SW (Front Passenger's Side)  
D 13 Door Lock Motor, Door Key Lock and Unlock SW (Driver's Side)  
D 14 Door Lock Motor, Door Key Lock and Unlock SW (Front Passenger's Side)

F 9 Front Speaker LH  
F 10 Front Speaker RH  
F 11 Fuel Sender (Main) and Fuel Pump  
F 12 Fuel Sender (Sub)

H 5 High Mounted Stop Light

I 11 Interior Light

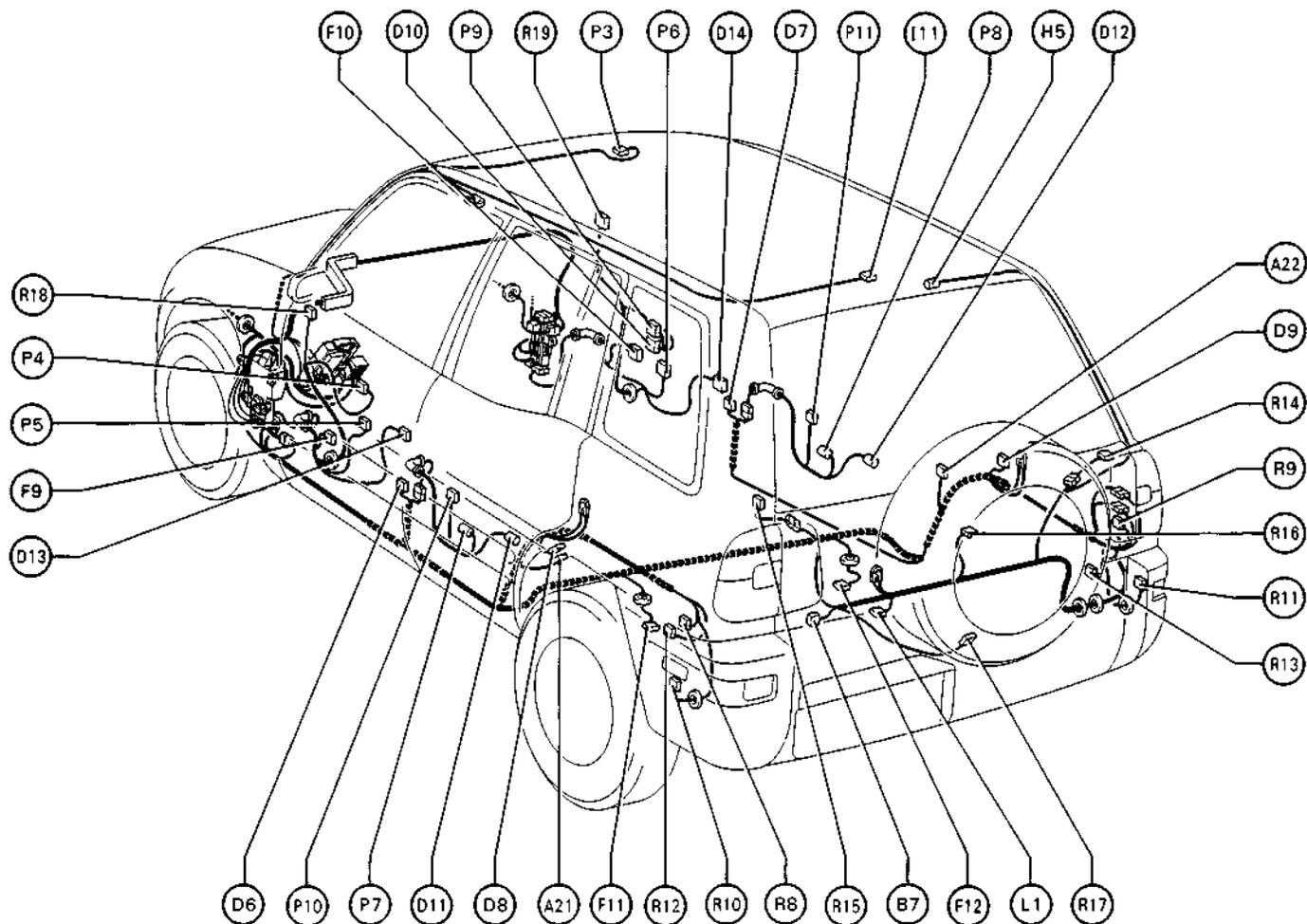
L 1 License Plate Light

P 3 Personal Light  
P 4 Power Window Master SW  
P 5 Power Window Motor (Driver's Side)  
P 6 Power Window Motor (Front Passenger's Side)  
P 9 Power Window SW (Front Passenger's Side)

R 8 Rear Combination Light LH  
R 9 Rear Combination Light RH  
R 10 Rear Side Marker Light LH  
R 11 Rear Side Marker Light RH  
R 12 Rear Speaker LH  
R 13 Rear Speaker RH  
R 14 Rear Window Defogger (+)  
R 15 Rear Window Defogger (-)  
R 16 Rear Wiper Motor  
R 17 Rear Wiper Relay  
R 18 Remote Control Mirror LH  
R 19 Remote Control Mirror RH

## Position of Parts in Body

**[4-Door]**

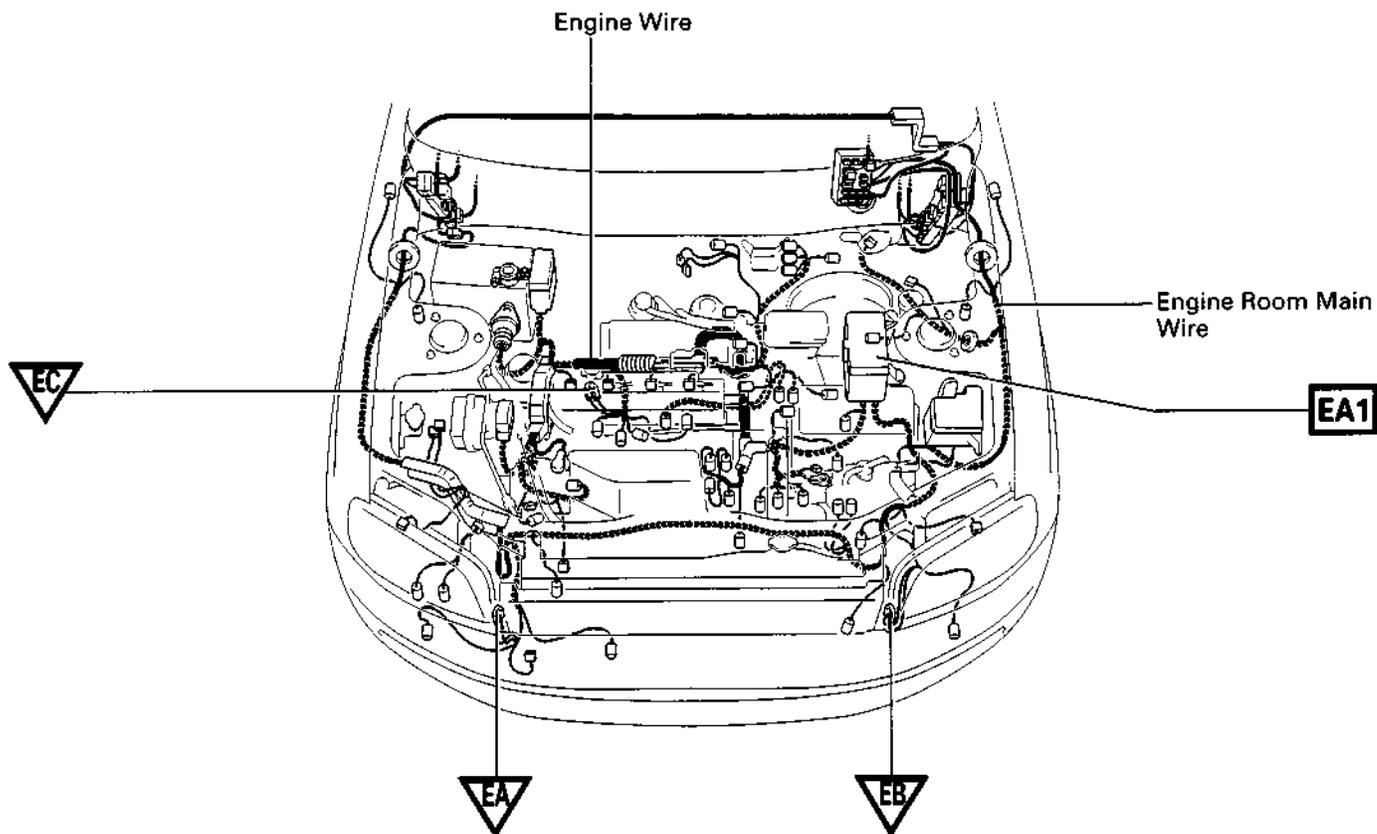


- |  |  |
|--|--|
| <p>A 21 ABS Speed Sensor Rear LH<br/>A 22 ABS Speed Sensor Rear RH</p> <p>B 7 Back Door Open Detection SW and Door Lock Motor</p> <p>D 6 Door Courtesy SW (Driver's Side)<br/>D 7 Door Courtesy SW (Front Passenger's Side)<br/>D 8 Door Courtesy SW (Rear LH)<br/>D 9 Door Courtesy SW (Rear RH)<br/>D 10 Door Lock Control SW (Front Passenger's Side)<br/>D 11 Door Lock Motor (Rear LH)<br/>D 12 Door Lock Motor (Rear RH)<br/>D 13 Door Lock Motor, Door Key Lock and Unlock SW (Driver's Side)<br/>D 14 Door Lock Motor, Door Key Lock and Unlock SW (Front Passenger's Side)</p> <p>F 9 Front Speaker LH<br/>F 10 Front Speaker RH<br/>F 11 Fuel Sender (Main) and Fuel Pump<br/>F 12 Fuel Sender (Sub)</p> <p>H 5 High Mounted Stop Light</p> <p>I 11 Interior Light</p> | <p>L 1 License Plate Light</p> <p>P 3 Personal Light<br/>P 4 Power Window Master SW<br/>P 5 Power Window Motor (Driver's Side)<br/>P 6 Power Window Motor (Front Passenger's Side)<br/>P 7 Power Window Motor (Rear LH)<br/>P 8 Power Window Motor (Rear RH)<br/>P 9 Power Window SW (Front Passenger's Side)<br/>P 10 Power Window SW (Rear LH)<br/>P 11 Power Window SW (Rear RH)</p> <p>R 8 Rear Combination Light LH<br/>R 9 Rear Combination Light RH<br/>R 10 Rear Side Marker Light LH<br/>R 11 Rear Side Marker Light RH<br/>R 12 Rear Speaker LH<br/>R 13 Rear Speaker RH<br/>R 14 Rear Window Defogger (+)<br/>R 15 Rear Window Defogger (-)<br/>R 16 Rear Wiper Motor<br/>R 17 Rear Wiper Relay<br/>R 18 Remote Control Mirror LH<br/>R 19 Remote Control Mirror RH</p> |
|--|--|

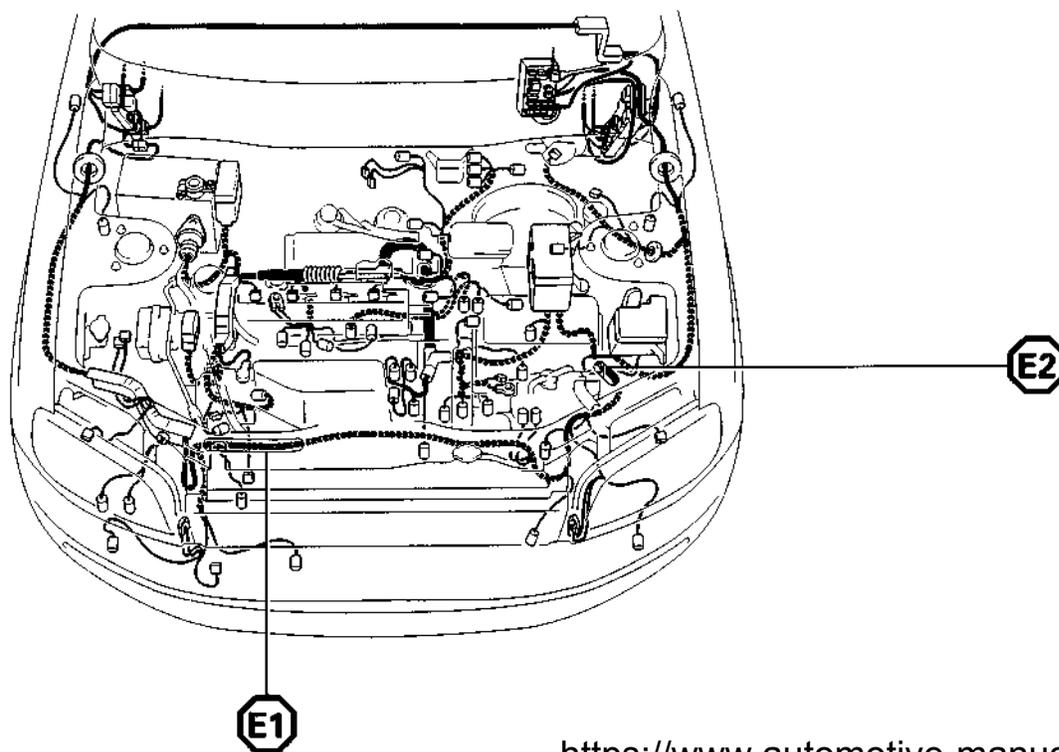
## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

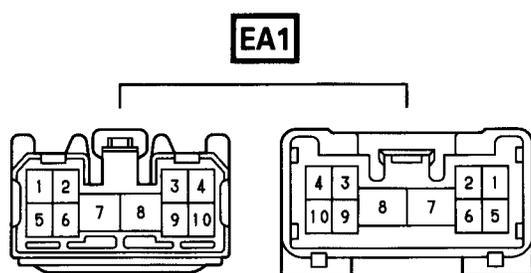
▽ : Location of Ground Points



○ : Location of Splice Points



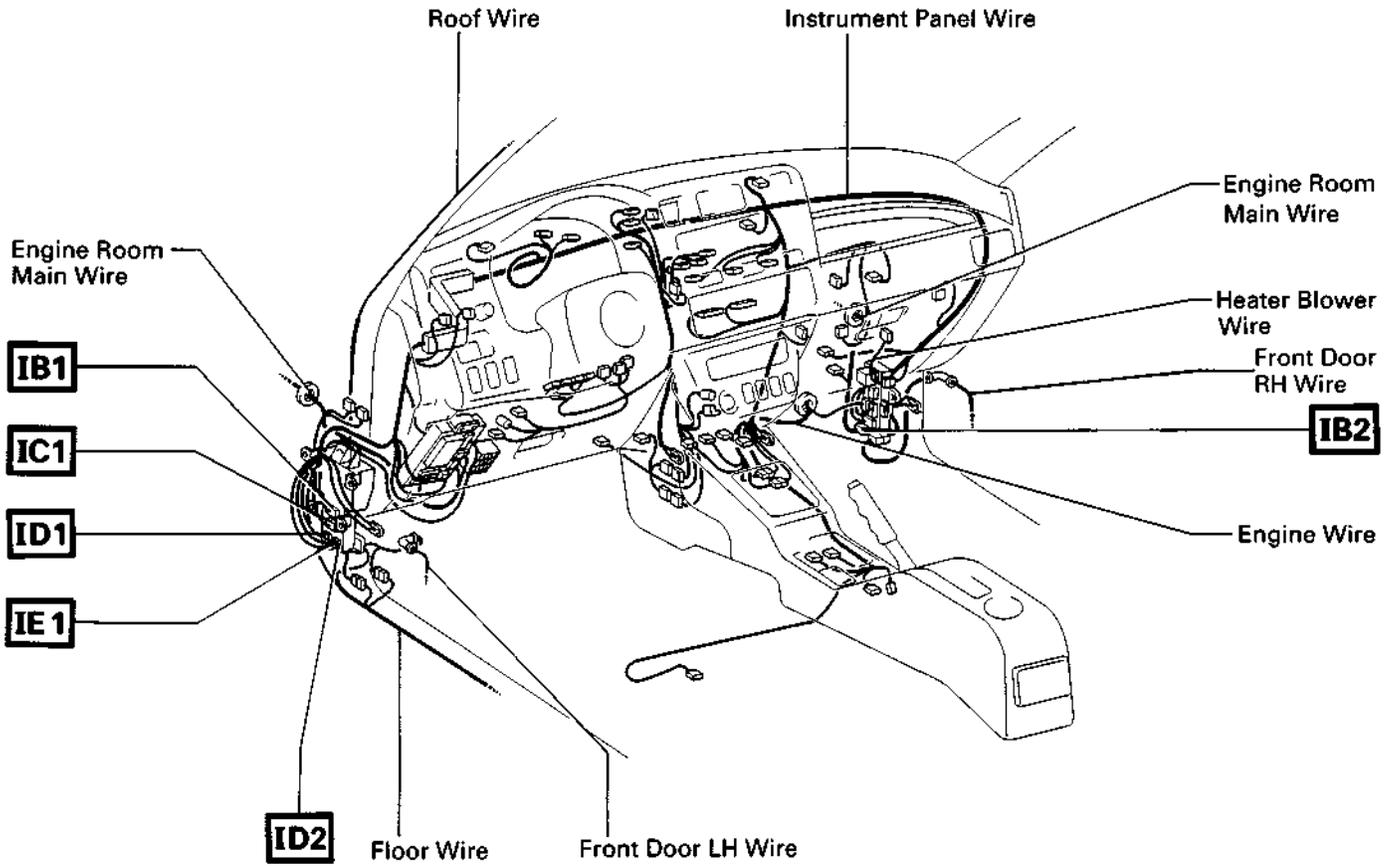
## Connector Joining Wire Harness and Wire Harness



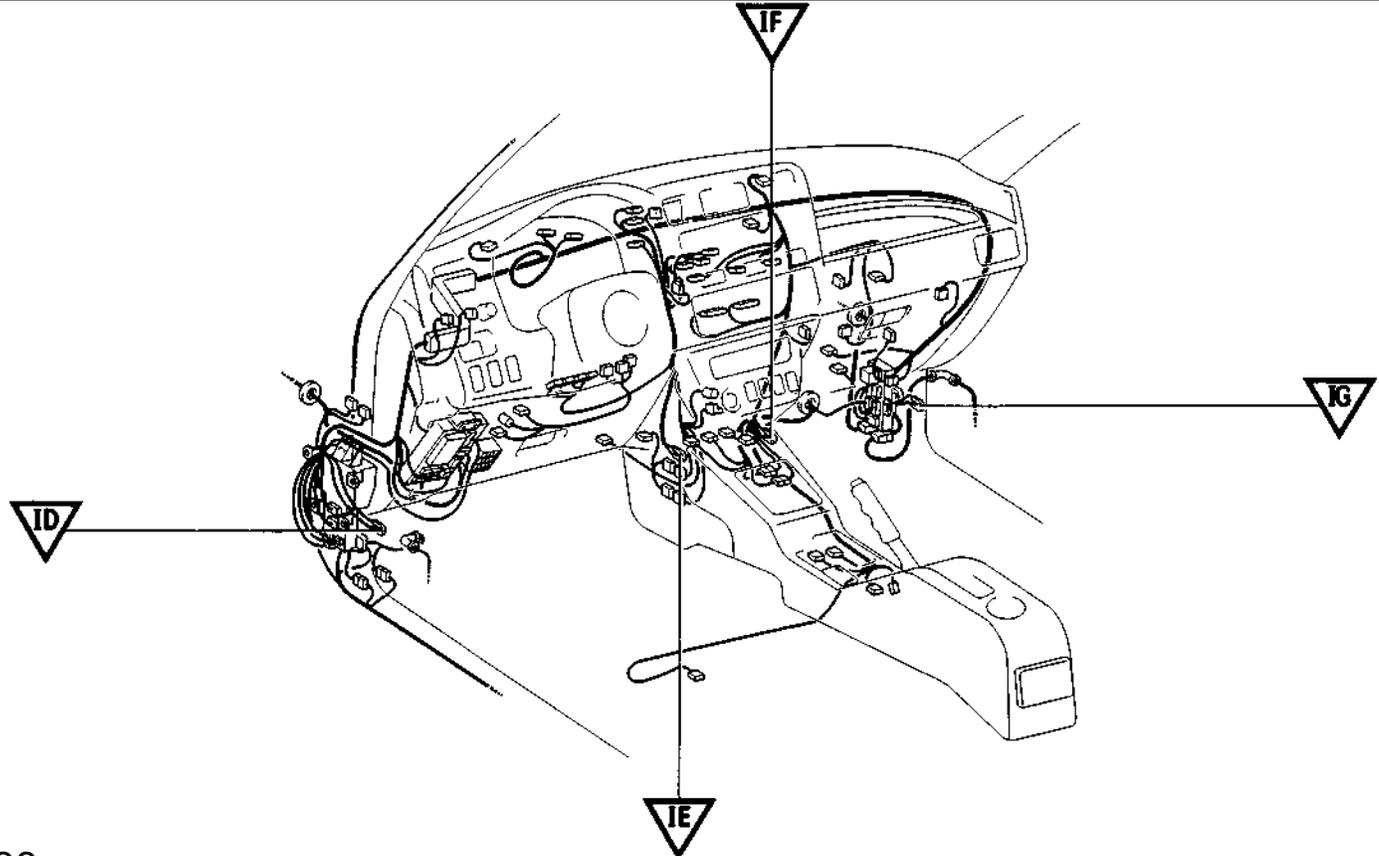
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA1</b>	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)

# G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

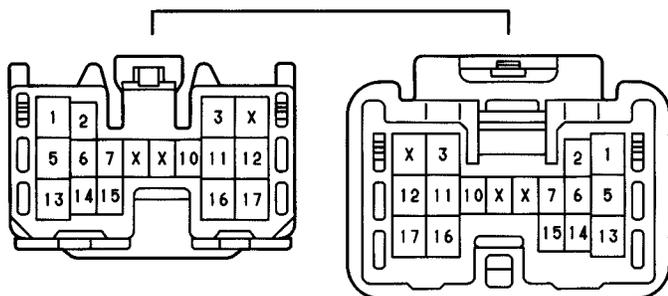


▽ : Location of Ground Points

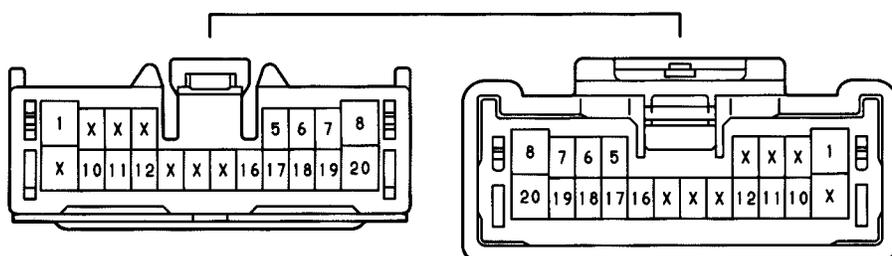


## Connector Joining Wire Harness and Wire Harness

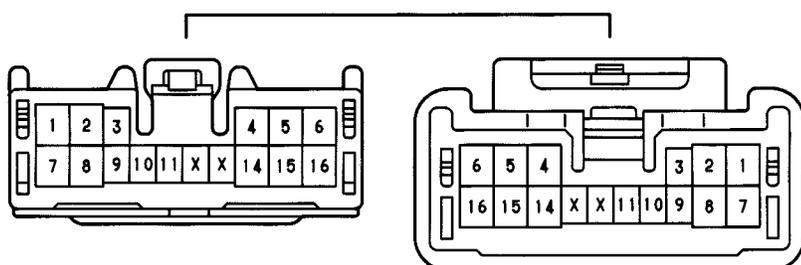
**IB1** DARK GRAY



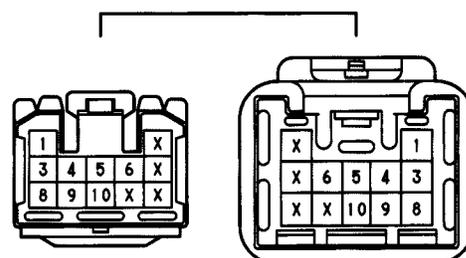
**IB2**



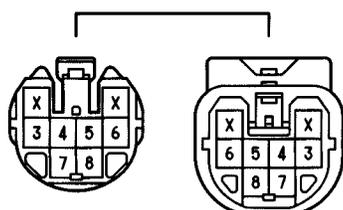
**IC1** BLUE



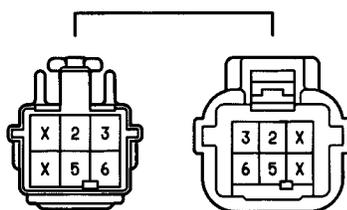
**ID1**



**ID2** ORANGE



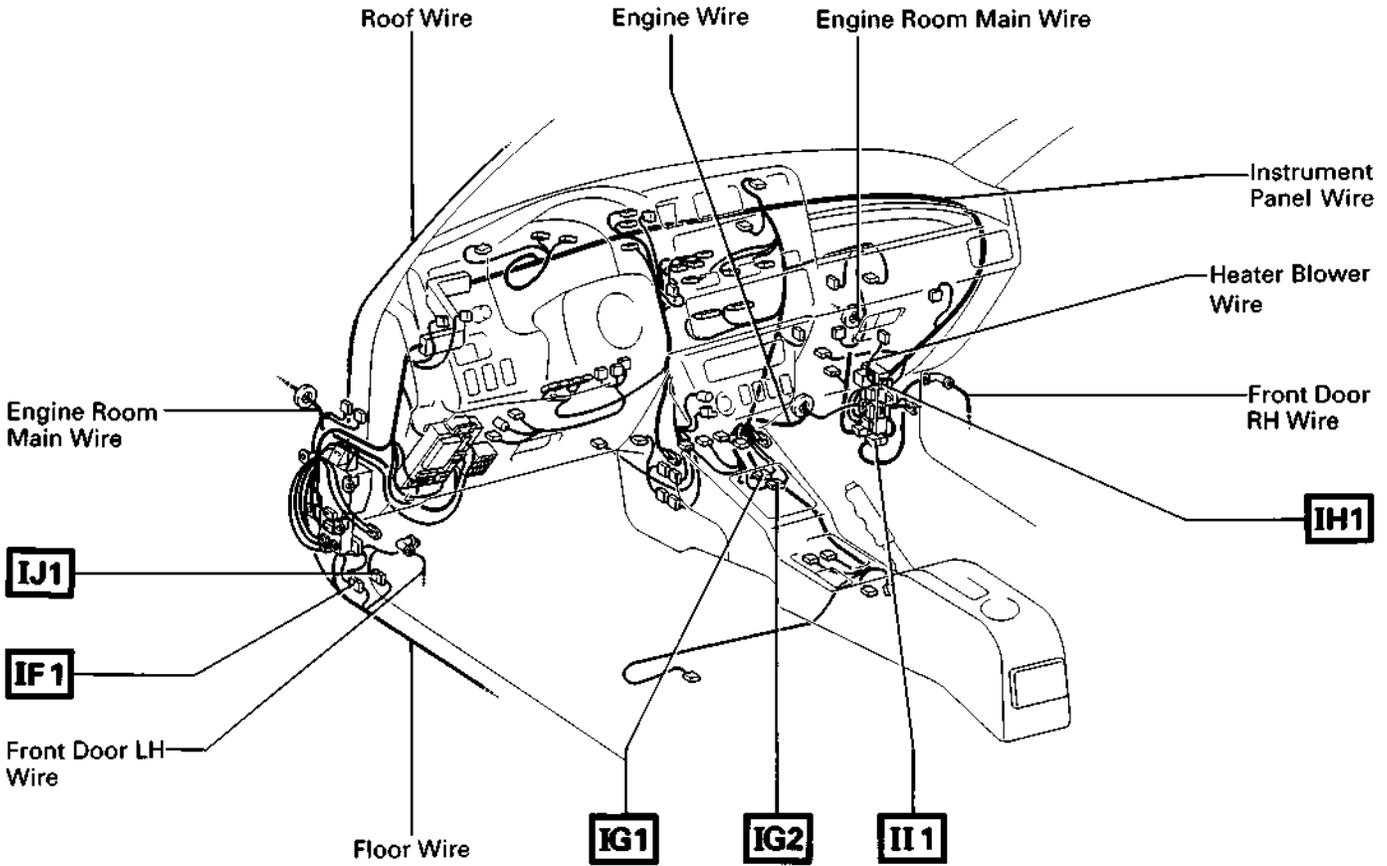
**IE 1** BROWN



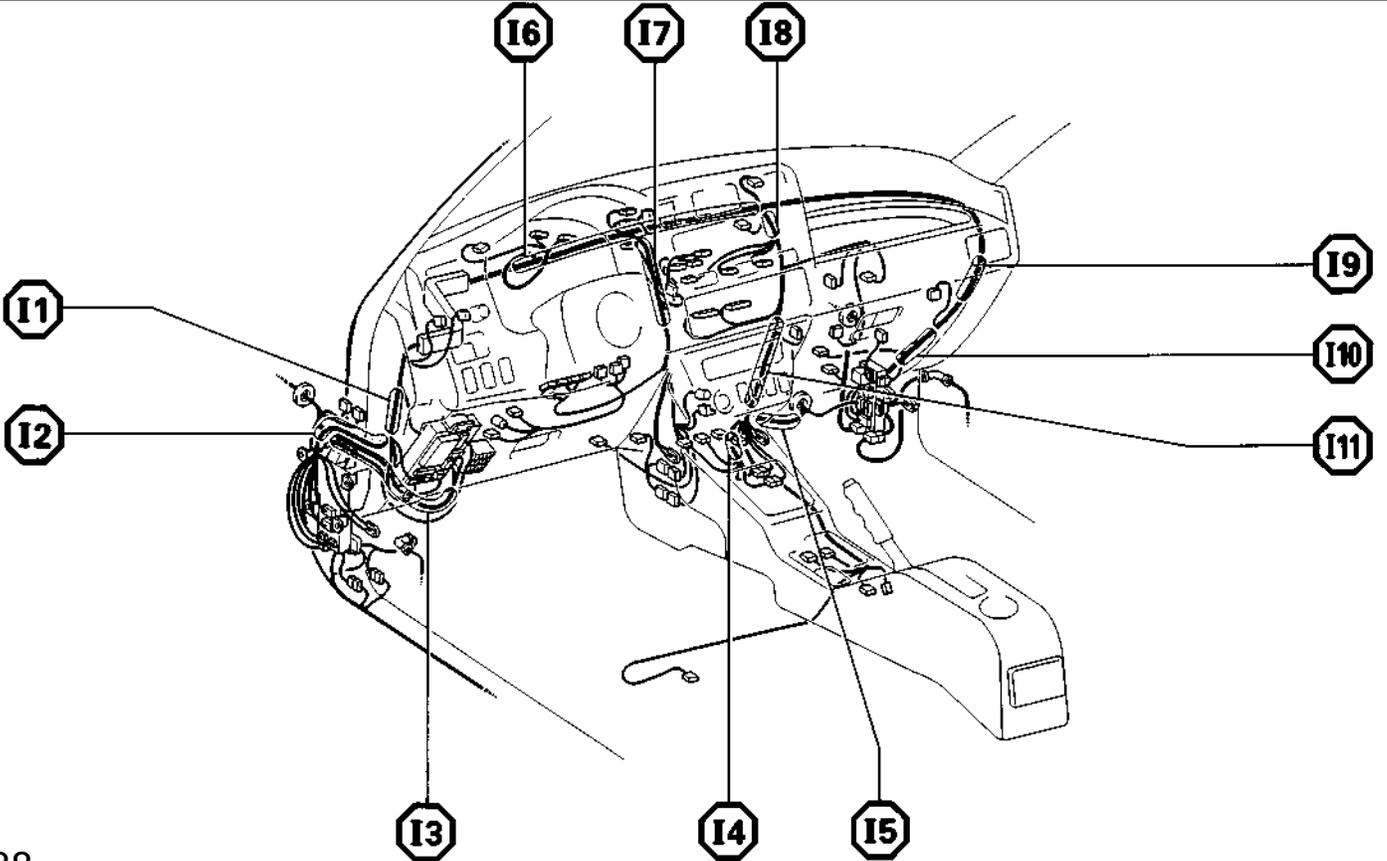
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>IB1</b>	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>IB2</b>	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
<b>IC1</b>	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>ID1</b>	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>ID2</b>	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>IE1</b>	ROOF WIRE AND INSTRUMENT PANEL (LEFT KICK PANEL)

# G ELECTRICAL WIRING ROUTING

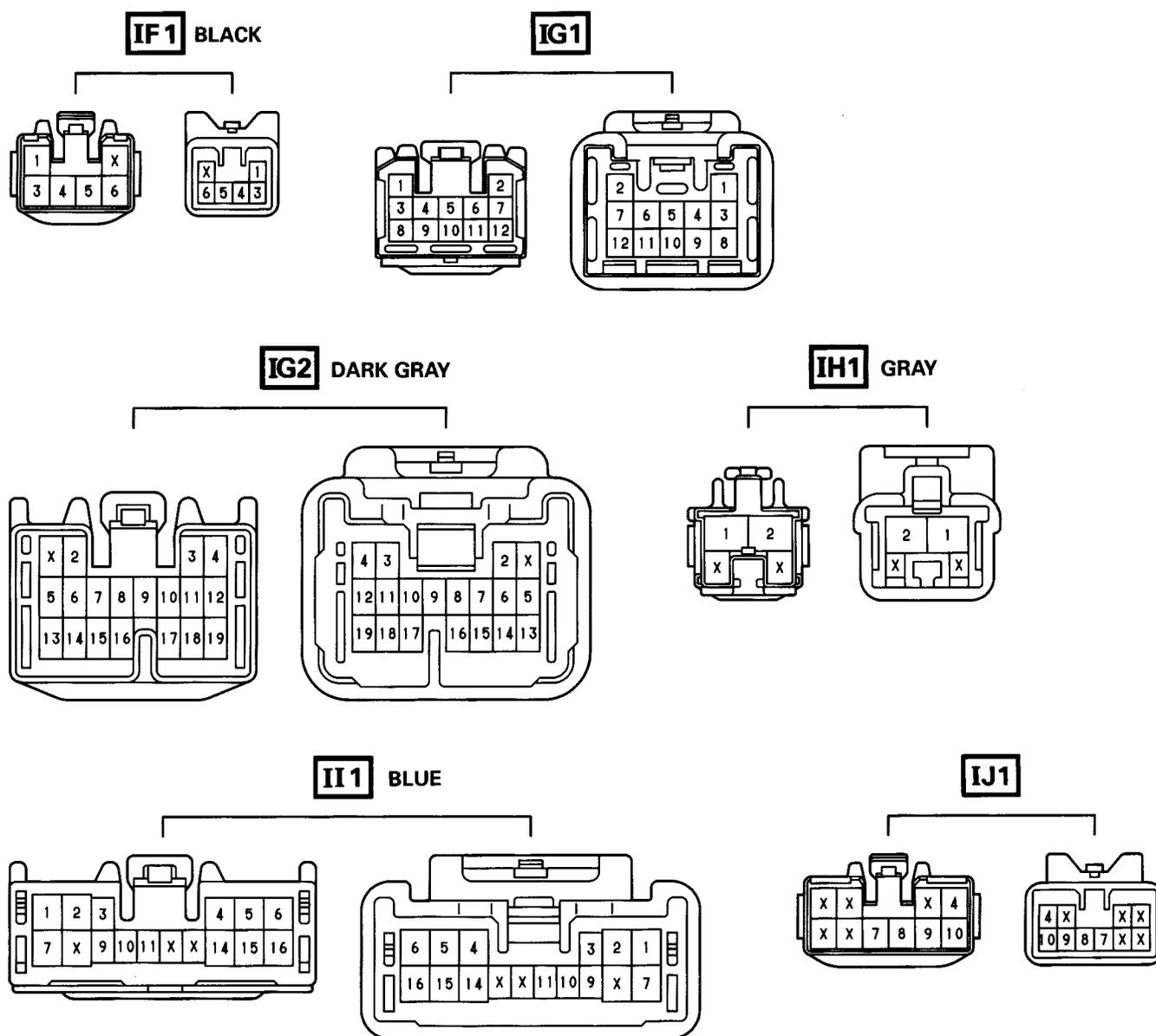
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness

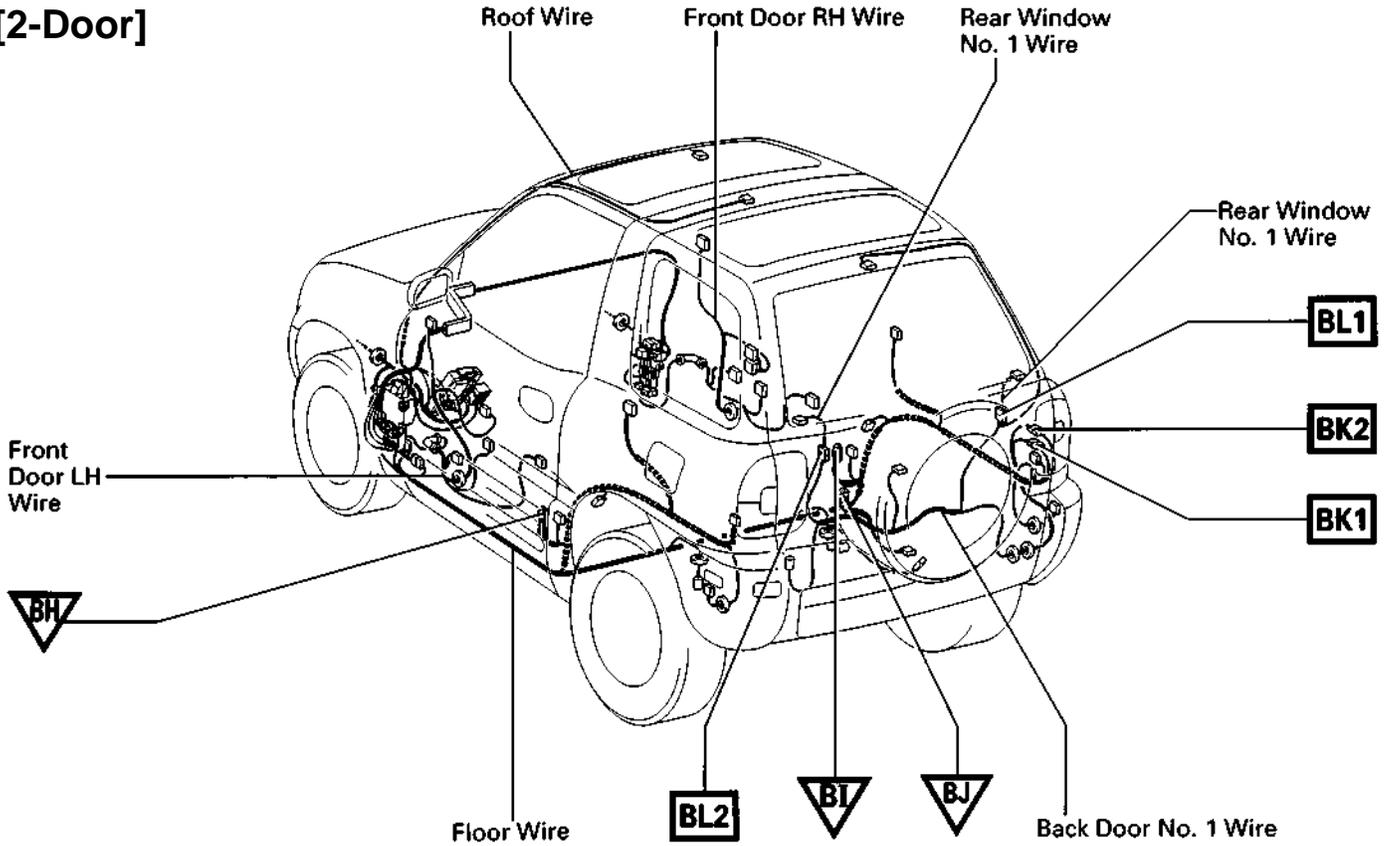


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	ENGINE ROOM MAIN WIRE AND FLOOR WIRE (LEFT KICK PANEL)
IG1	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2	
IH1	HEATER BLOWER WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
II1	FRONT DOOR RH AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IJ1	FRONT DOOR LH AND FLOOR WIRE (LEFT KICK PANEL)

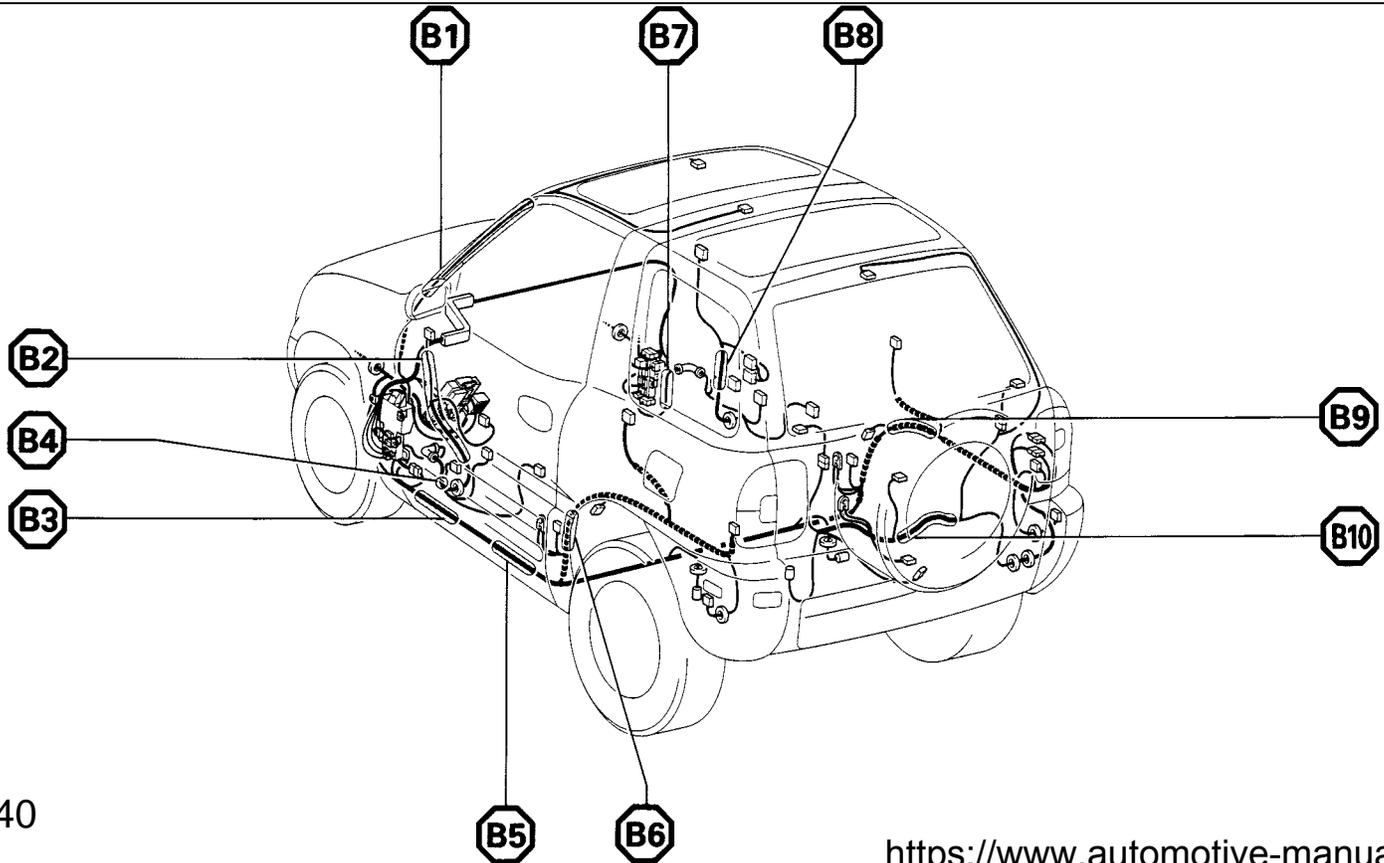
# G ELECTRICAL WIRING ROUTING

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

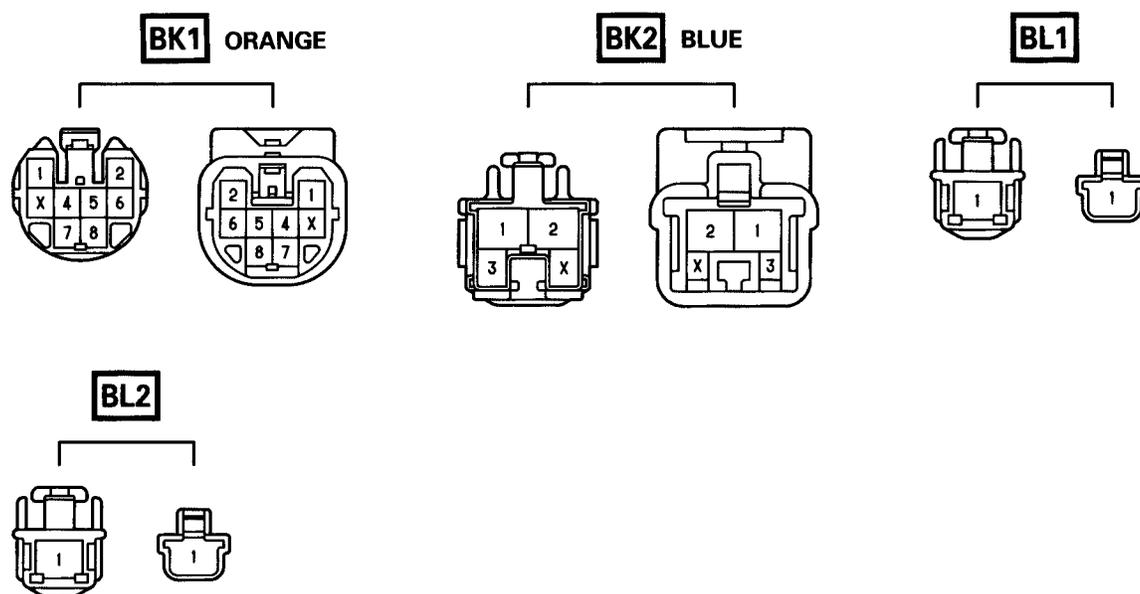
[2-Door]



- : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness

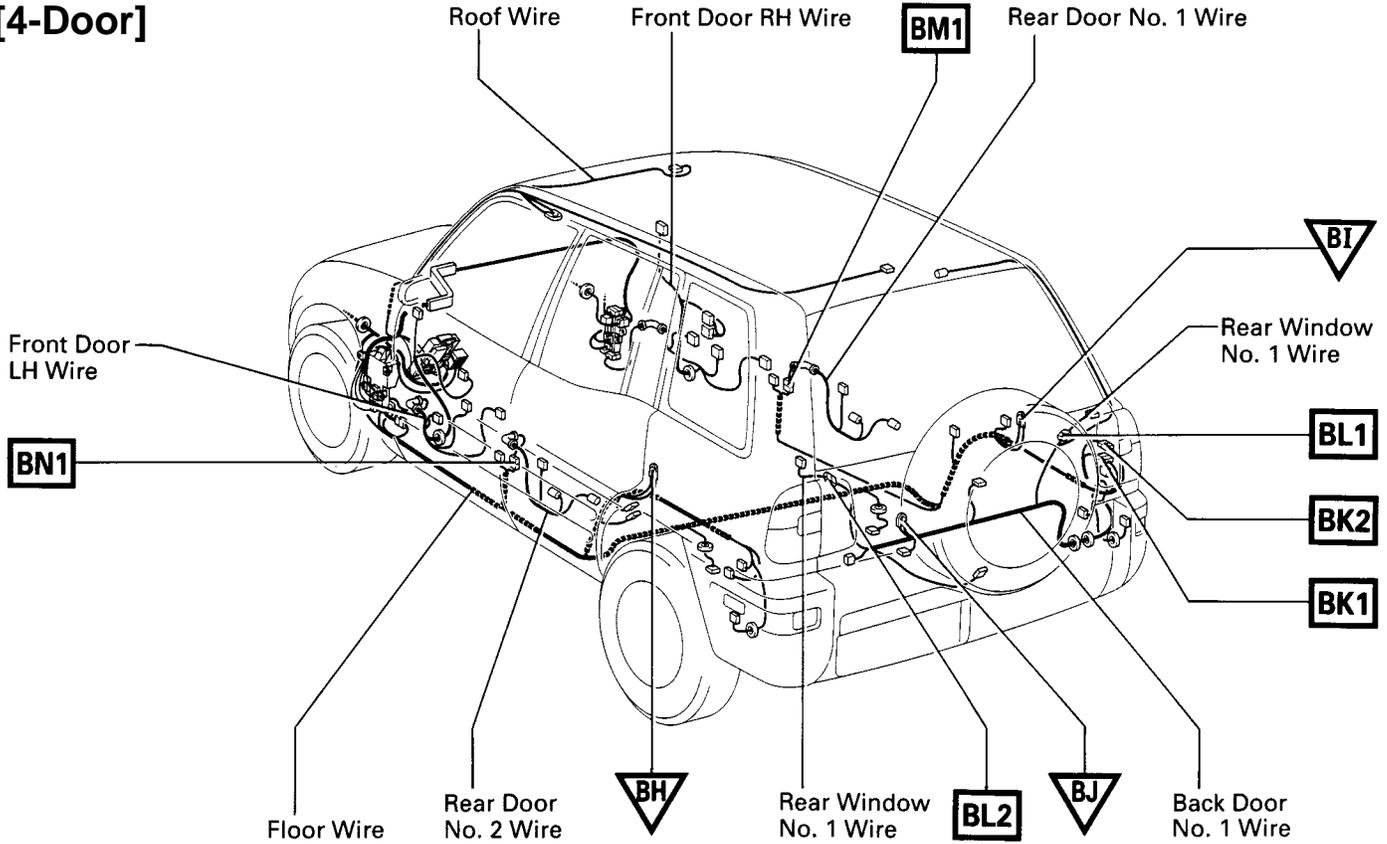


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>BK1</b>	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT RIGHT REAR COMB. LIGHT)
<b>BK2</b>	
<b>BL1</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR RIGHT)
<b>BL2</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR LEFT)

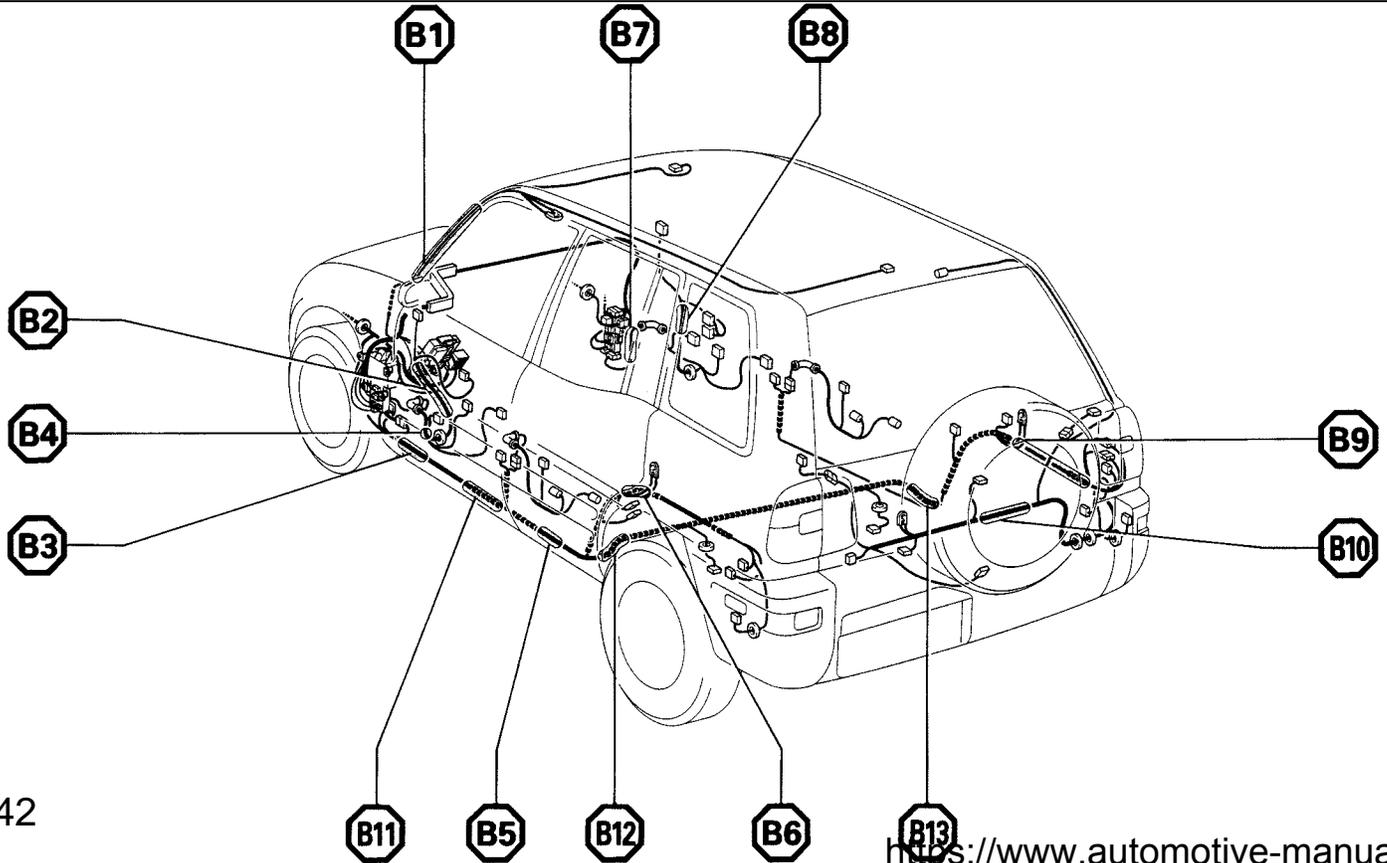
# G ELECTRICAL WIRING ROUTING

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

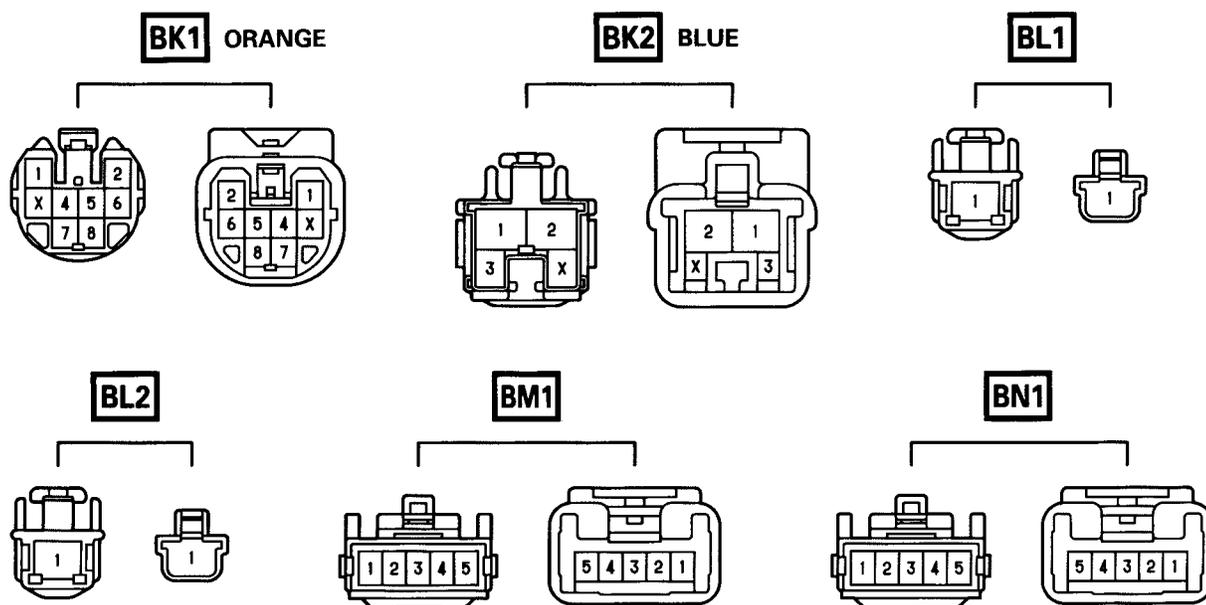
[4-Door]



- : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness

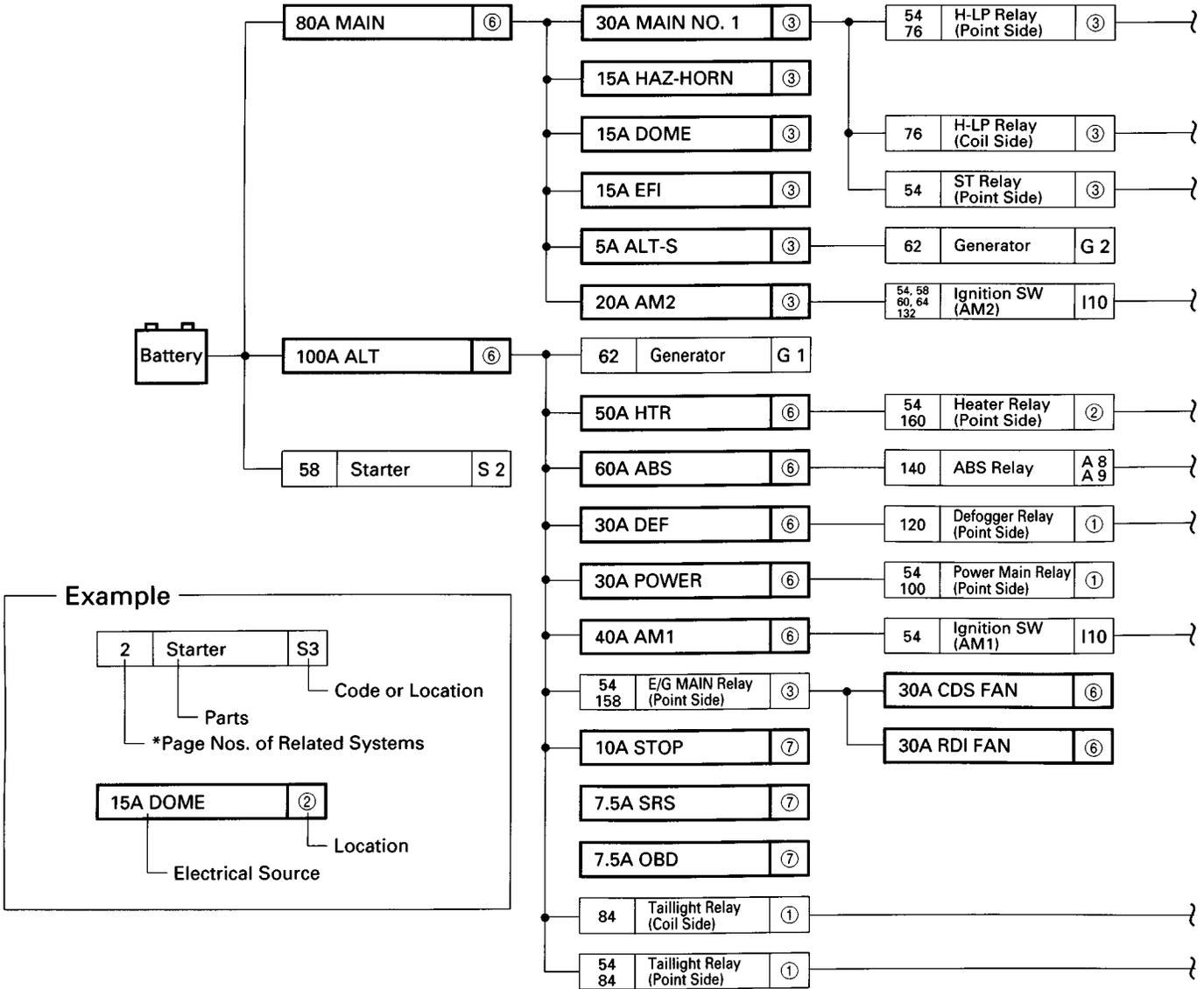


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>BK1</b>	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT RIGHT REAR COMB. LIGHT)
<b>BK2</b>	
<b>BL1</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR RIGHT)
<b>BL2</b>	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR LEFT)
<b>BM1</b>	REAR DOOR NO. 1 WIRE AND FLOOR WIRE (RIGHT CENTER PILLAR)
<b>BN1</b>	REAR DOOR NO. 2 WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)

# 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.

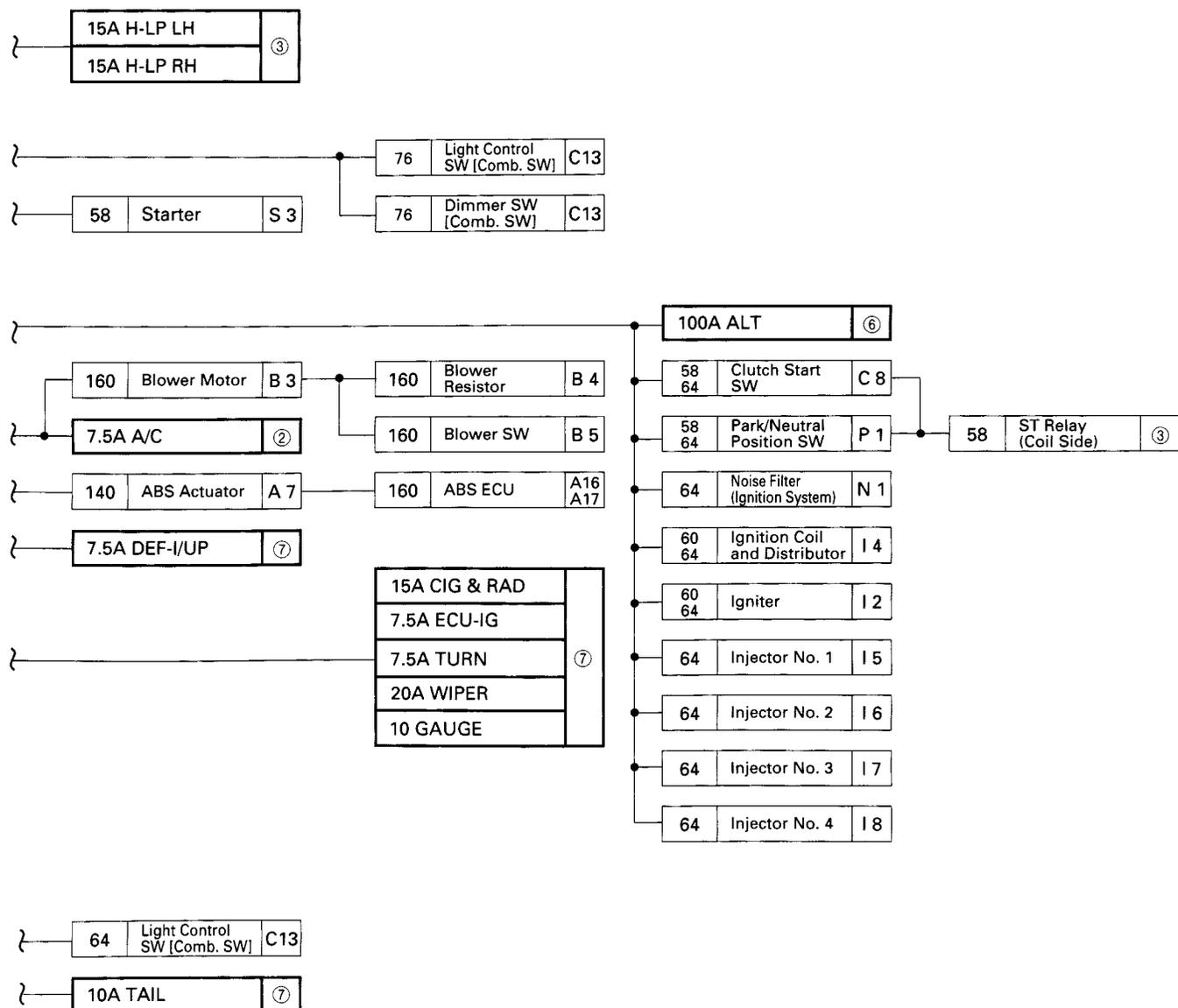
The next page and following pages show the parts to which each electrical source outputs current.



\* 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 : J/B No. 1 (See page 20)  
⑤ : R/B No. 6 (See page 25)

② : J/B No. 4 (See page 23)  
⑥ : Fusible Link Block (F7 on See page 28)



③ : R/B No. 2 (See page 22)  
 ⑦ : Fuse Block (F8 on See page 31)

④ : R/B No. 5 (See page 24)

# H POWER SOURCE (Current Flow Chart)

Location	*Page Nos. of Related Systems		Parts																			
	CB or Fuse		A/C Condenser Fan Motor	A/C Magnetic Clutch and Lock Sensor	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	A/C Water Temp. SW	A/T Fluid Temp. SW	A/C Amplifier	A/C Control SW	ABS ECU	ABS ECU	Airbag Sensor Assembly	Back-Up Light SW (M/T)	Brake Fluid Level Warning SW	Blower Resistor	Blower SW	Back Door Open Detection SW and Door Lock Motor	Center Diff. Lock Warning Buzzer SW	Center Diff. Lock Control SW	Cigarette Lighter	Cigarette Lighter Illumination	Clock
			A 1	A 2	A 3	A 4	A 5	A 12	A 13	A 16	A 17	A 18	B 1	B 2	B 4	B 5	B 7	C 1	C 4	C 5	C 6	C 7
①	30A	POWER															●					
	30A	DEF																				
②	7.5A	A/C		●				●	●													
	5A	ALT-S																				
③	10A	H-LP LH																				
	10A	H-LP RH																				
	15A	DOME									●						●			●		●
	15A	EFI																				
	15A	HAZ-HORN																				
	30A	CDS FAN	●																			
	30A	RDI FAN																				
⑦	7.5A	ECU-IG			●	●				●	●											
	7.5A	TURN																				
	7.5A	DEF-I/UP																				
	7.5A	IGN											●									
	7.5A	SRS											●									
	7.5A	OBD																				
	10A	TAIL														●					●	●
	10A	GAUGE					●			●	●			●	●	●	●		●	●		
	10A	STOP								●	●											
	15A	CIG & RAD											●								●	●
	20A	WIPER																				

\* 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 : J/B No. 1 (See page 20)  
⑤ : R/B No. 6 (See page 25)

② : J/B No. 4 (See page 23)  
⑥ : Fusible Link Block (F7 on See page 28)



# H POWER SOURCE (Current Flow Chart)

Location	*Page Nos. of Related Systems		Parts												Code or Location		CB or Fuse	
	96	96	96	96	96	84 130	64	64	64 130	84	84	81 84	81 84	122	122	64 152	152	
	D10	D11	D12	D13	D14	E 3	E 4	E 5	E 6	F 1	F 2	F 3	F 4	F 5	F 6	F11	F12	
①	30A POWER	●	●	●	●	●												
	30A DEF																	
②	7.5A A/C																	
③	5A ALT-S																	
	10A H-LP LH																	
	10A H-LP RH																	
	15A DOME																	
	15A EFI							●	●	●						●		
	15A HAZ-HORN																	
	30A CDS FAN																	
	30A RDI FAN																	
⑦	7.5A ECU-IG																	
	7.5A TURN											●	●					
	7.5A DEF-I/UP																	
	7.5A IGN								●									
	7.5A SRS																	
	7.5A OBD																	
	10A TAIL					●				●	●	●	●					
	10A GAUGE					●				●	●					●	●	
	10A STOP									●								
	15A CIG & RAD																	
20A WIPER													●	●				

\* 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 : J/B No. 1 (See page 20)  
⑤ : R/B No. 6 (See page 25)

② : J/B No. 4 (See page 23)  
⑥ : Fusible Link Block (F7 on See page 28)



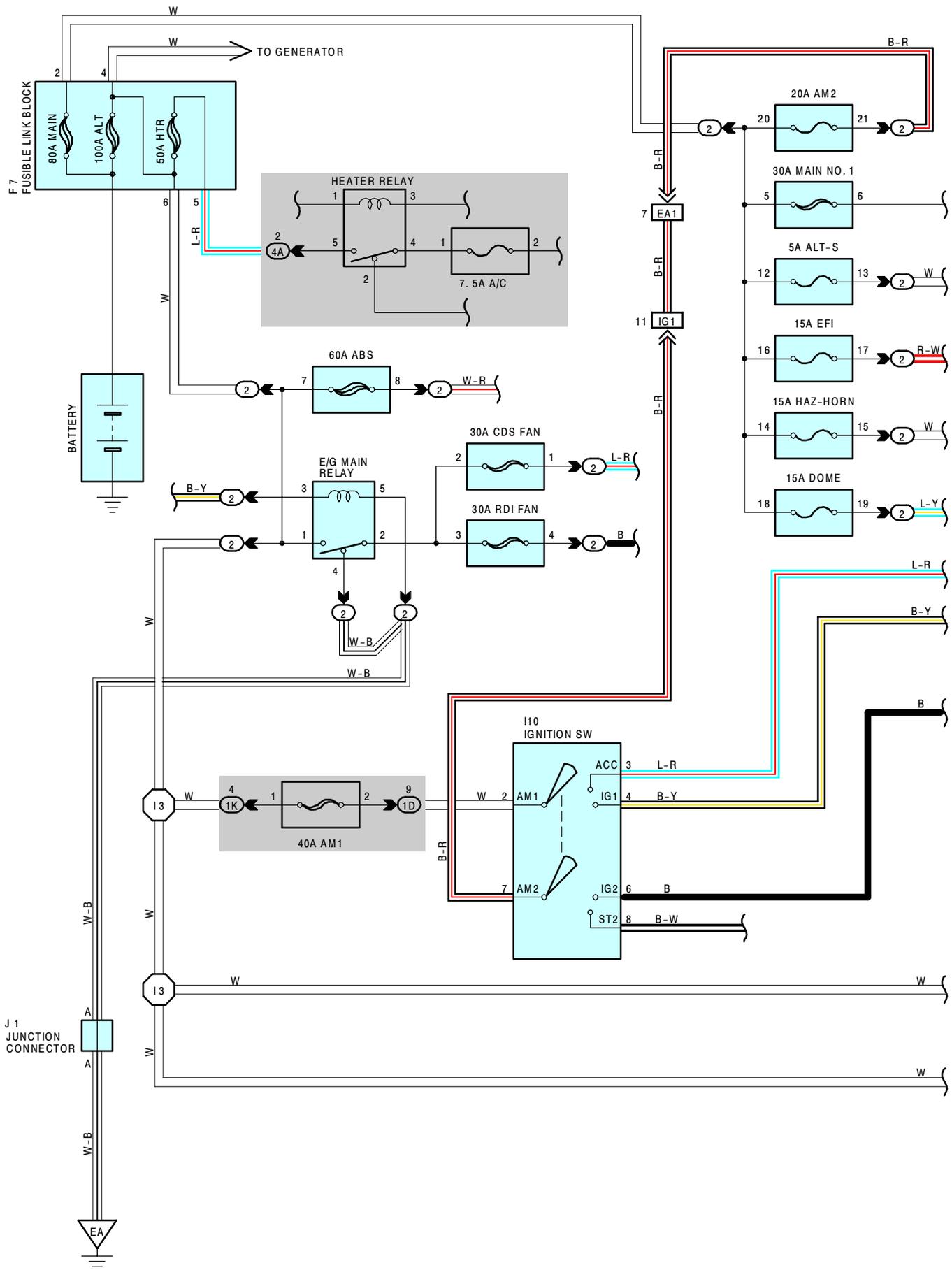








# POWER SOURCE







# POWER SOURCE

## SERVICE HINTS

### (2) H-LP RELAY

(2) 2 - (2) 1 : CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION OR THE DIMMER SW AT **FLASH** POSITION

### TAILLIGHT RELAY

5-3 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

### I10 IGNITION SW

2-3 : CLOSED WITH THE IGNITION KEY AT **ACC** OR **ON** POSITION

2-4 : CLOSED WITH THE IGNITION KEY AT **ON** OR **ST** POSITION

7-6 : CLOSED WITH THE IGNITION KEY AT **ON** OR **ST** POSITION

7-8 : CLOSED WITH THE IGNITION KEY AT **ST** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F 7	28	I10	31		
F 8	31	J 1	31		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1D		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1F		
1K	20	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
4A	22	ENGINE WIRE AND J/B NO. 4 (RIGHT KICK PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO.2)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	38	ENGINE ROOM MAIN WIRE			

F 7

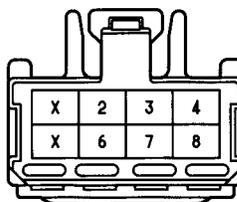
F 8

I10

J 1 BLUE

(SEE PAGE 25)

(SEE PAGE 26)



(HINT:SEE PAGE 7)





## SERVICE HINTS

### I10 IGNITION SW

7-8 : CLOSED WITH IGNITION SW AT **ST** POSITION

### P 1 (A) PARK/NEUTRAL POSITION SW (2WD)

(A) 2 -(A) 3 : CLOSED WITH THE SHIFT LEVER IN **P** OR **N** POSITION

### P 1 (B) PARK/NEUTRAL POSITION SW (4WD)

(B) 5 -(B) 6 : CLOSED WITH THE SHIFT LEVER IN **P** OR **N** POSITION

### (2) ST RELAY

(2) 5 -(2) 3 : CLOSED WITH THE PARK/NEUTRAL POSITION SW AT **P** OR **N** POSITION AND THE IGNITION SW AT **ST** POSITION (A/T)

(2) 5 -(2) 3 : CLOSED WITH THE CLUTCH START SW **ON** AND IGNITION SW AT **ST** POSITION (M/T)

### S 2 (B), S 3 (A) STARTER

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

POINTS CLOSED WITH THE CLUTCH START SW **ON** AND THE IGNITION SW AT **ST** POSITION (M/T)

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 8	30	J 1	31	P 1	B 29
F 7	28	J 5	31	S 2	B 29
I10	31	P 1	A 29	S 3	A 29

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

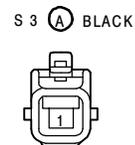
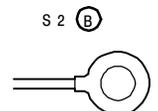
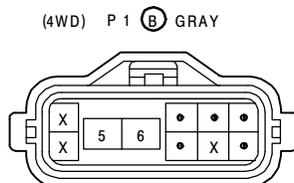
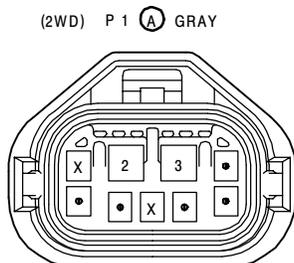
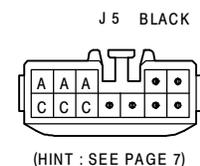
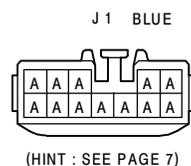
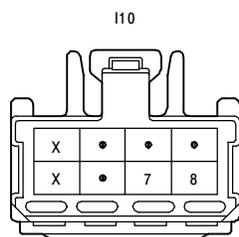
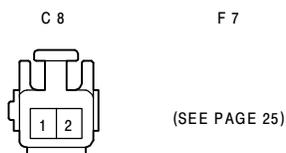
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT

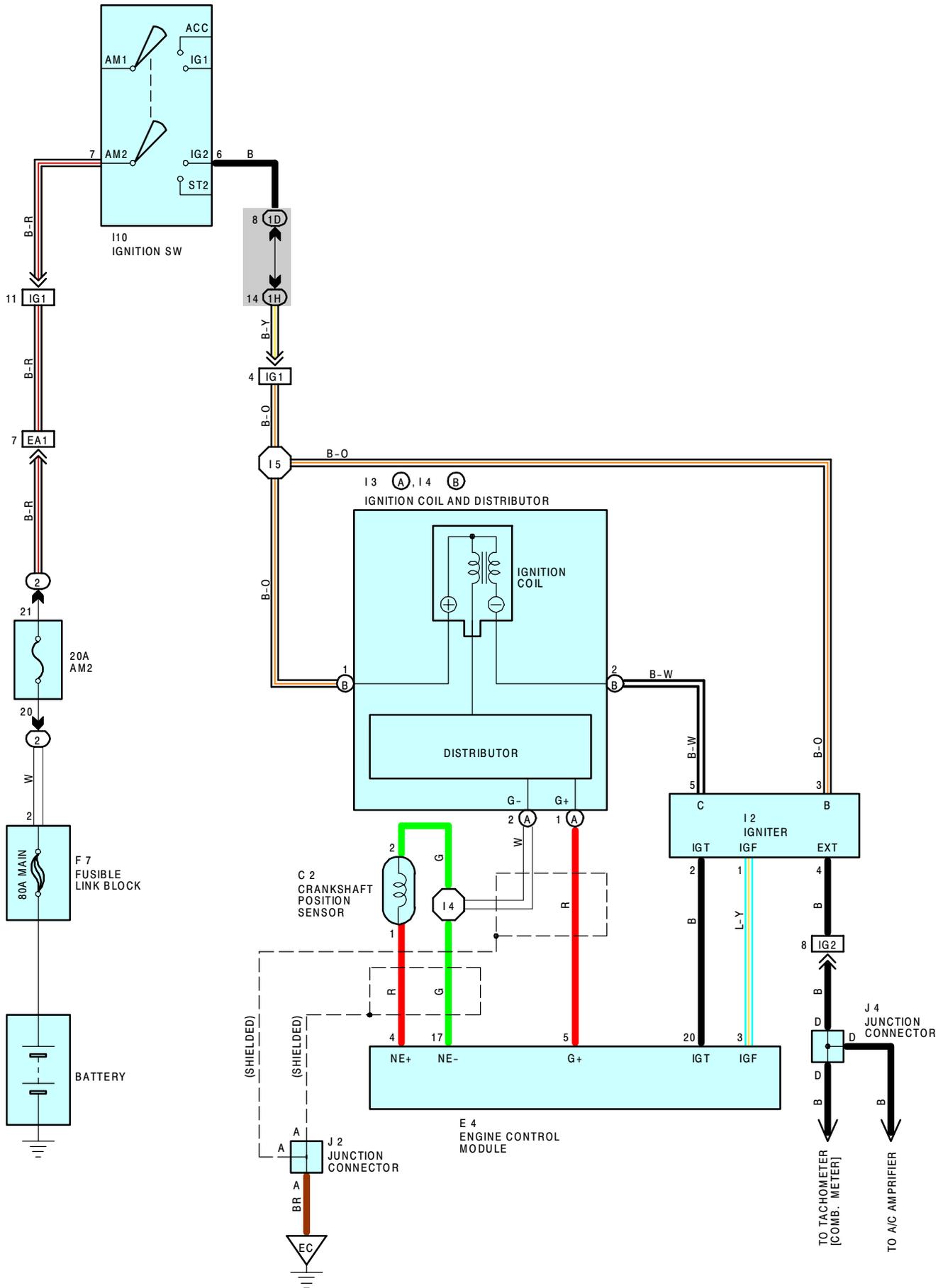
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	38	ENGINE WIRE	I 6	38	INSTRUMENT PANEL WIRE





# IGNITION



## SERVICE HINTS

### 110 IGNITION SW

7-6 : CLOSED WITH THE IGNITION SW AT **ON** OR **ST** POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 2	28	I 2	29	I10	31
E 4	31	I 3	A 29	J 2	31
F 7	28	I 4	B 29	J 4	31

### ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2		

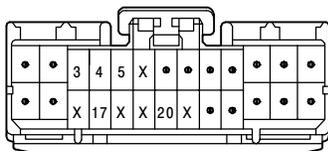
### ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	38	ENGINE WIRE	I 5	38	ENGINE WIRE

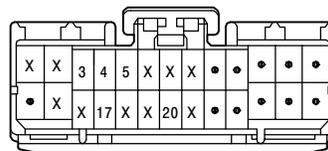
C 2 BLACK



(A/T) E 4 DARK GRAY



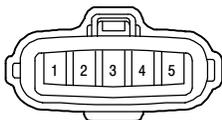
(M/T) E 4 DARK GRAY



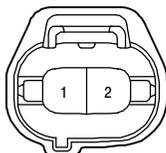
F 7

(SEE PAGE 25)

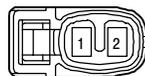
I 2 BLACK



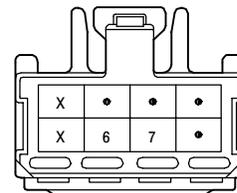
I 3 (A) BLACK



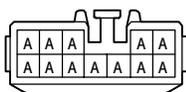
I 4 (B) BLACK



I10

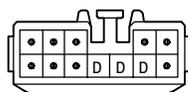


J 2 BLUE



(HINT : SEE PAGE 7)

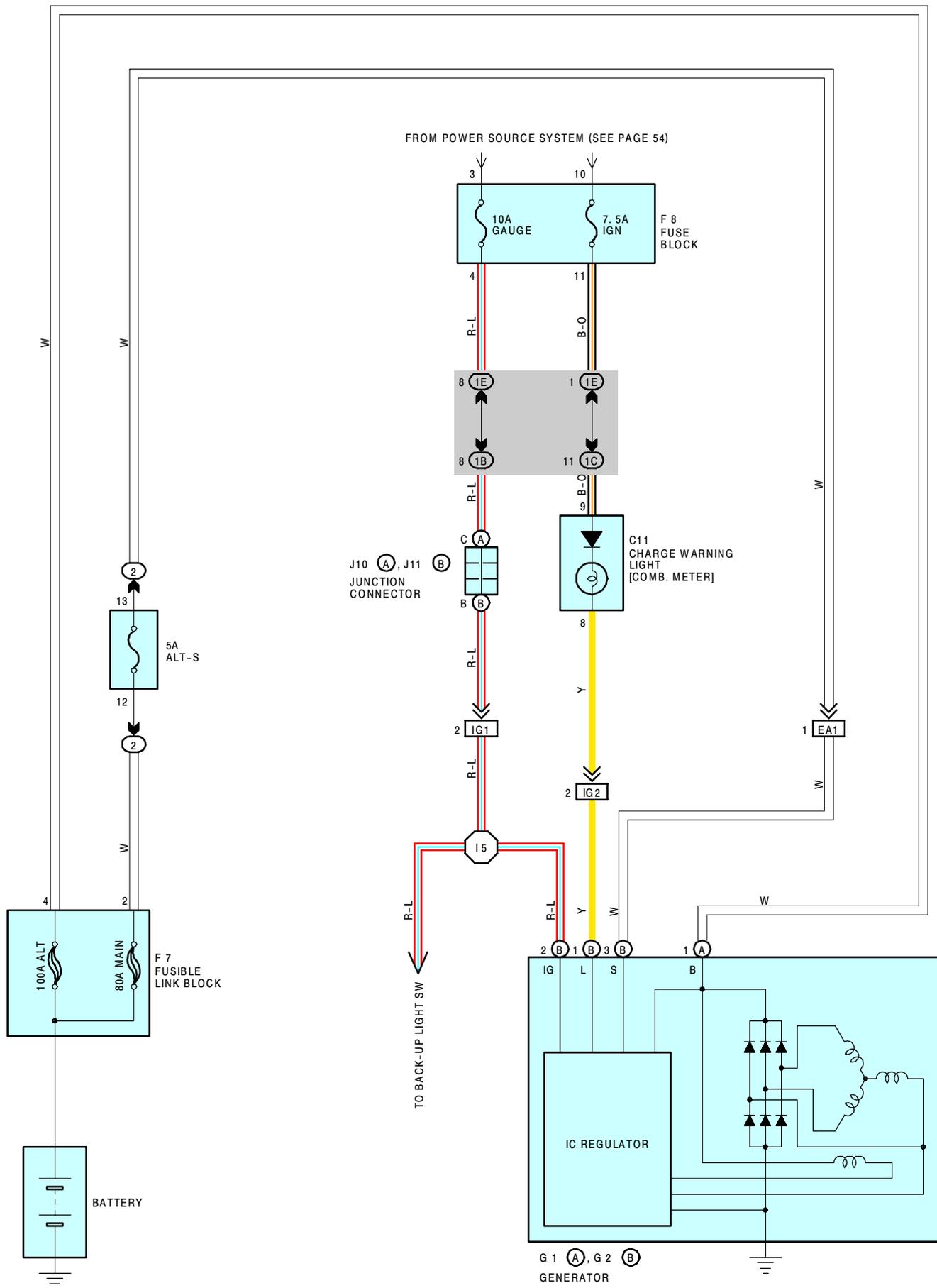
J 4 BLACK



(HINT : SEE PAGE 7)



# CHARGING



## SERVICE HINTS

### G 2 (B) GENERATOR

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

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	30	G 1	A 28	J11	B 31
F 7	28	G 2	B 28		
F 8	31	J10	A 31		

### ○ : RELAY BLOCKS

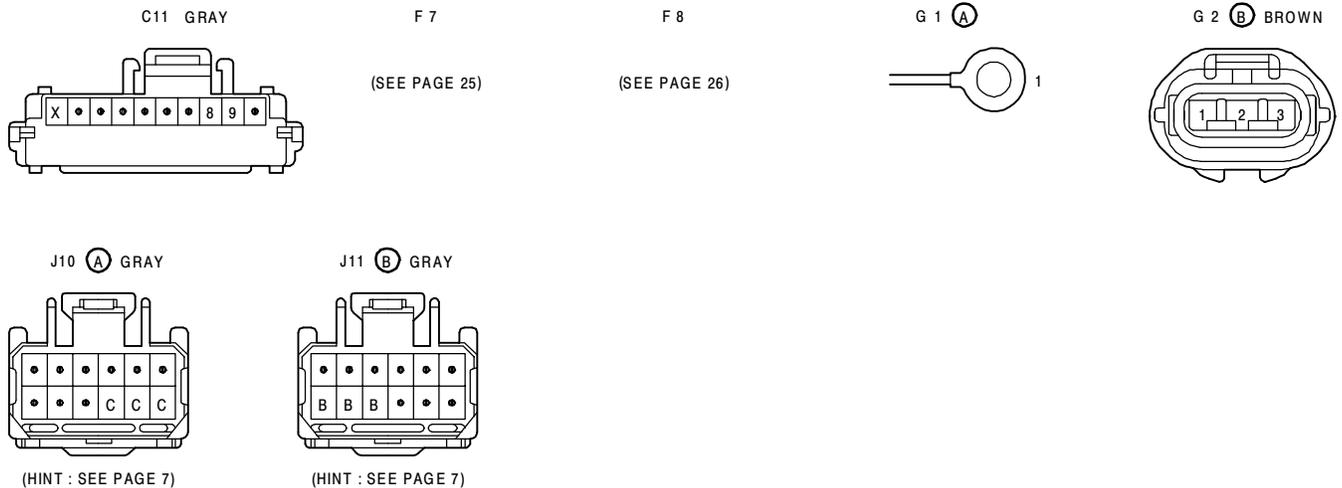
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINIS PANEL)
1C		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL)
IG2		





## SYSTEM OUTLINE

THE ENGINE CONTROL SYSTEM UTILIZES A MICROCOMPUTER AND MAINTAINS OVERALL CONTROL OF THE ENGINE ETC. AN OUTLINE OF ENGINE CONTROL IS GIVEN HERE.

### 1. INPUT SIGNALS

#### (1) ENGINE COOLANT TEMP. SENSOR SIGNAL SYSTEM

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

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

THE INTAKE AIR TEMP. SENSOR DETECTS THE INTAKE AIR TEMP. , WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL THA** OF THE ENGINE CONTROL MODULE.

#### (3) OXYGEN SENSOR SIGNAL SYSTEM

THE OXYGEN SENSOR DETECTS THE OXYGEN DENSITY IN THE EXHAUST EMISSION WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINALS OX1** AND **OX2** OF THE ENGINE CONTROL MODULE.

#### (4) THROTTLE SIGNAL SYSTEM

THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE, WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL VTA** OF THE ENGINE CONTROL MODULE, OR WHEN THE VALVE IS FULLY CLOSED.

#### (5) 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.

#### (6) PARK/NEUTRAL POSITION SW SIGNAL SYSTEM

THE PARK/NEUTRAL POSITION SW DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL OR NOT, AND INPUTS A CONTROL SIGNAL TO **TERMINAL NSW** OF THE ENGINE CONTROL MODULE.

#### (7) A/C SW SIGNAL SYSTEM

THE OPERATING VOLTAGE OF THE A/C MAGNETIC CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO **TERMINAL ACI** OF THE ENGINE CONTROL MODULE.

#### (8) BATTERY SIGNAL SYSTEM

VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE ENGINE CONTROL MODULE. WHEN THE IGNITION SW IS TURNED TO ON, VOLTAGE FOR THE ENGINE CONTROL MODULE OPERATION IS APPLIED VIA THE EFI MAIN RELAY TO **TERMINAL +B** OF THE ENGINE CONTROL MODULE.

#### (9) INTAKE AIR VOLUME SIGNAL SYSTEM

INTAKE AIR VOLUME IS DETECTED BY THE MANIFOLD ABSOLUTE PRESSURE SENSOR AND IS INPUT AS A CONTROL SIGNAL TO **TERMINAL PIN** OF THE ENGINE CONTROL MODULE.

#### (10) STARTER SIGNAL SYSTEM

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

#### (11) ELECTRICAL LOAD SIGNAL SYSTEM

THE SIGNAL WHEN SYSTEMS SUCH AS THE REAR WINDOW DEFOGGER, HEADLIGHT, ETC. WHICH CAUSE A HIGH ELECTRICAL BURDEN ARE ON IS INPUT TO **TERMINAL ELS** AS A CONTROL SIGNAL.

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## 2. CONTROL SYSTEM

### \* SFI

THE SFI SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT FROM EACH SENSOR (INPUT SIGNALS (1) TO (11)). THE BEST FUEL INJECTION VOLUME 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, AND #40** 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.

### \* IDLE SPEED CONTROL SYSTEM

THE IDLE SPEED CONTROL SYSTEM INCREASES THE RPM AND PROVIDES IDLING STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD, ETC. THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1 TO 5, 11)), OUTPUTS CURRENT TO **TERMINAL ISCO** AND **ISCC**, AND CONTROLS THE IDLE AIR CONTROL VALVE.

### \* A/C CUT CONTROL SYSTEM

WHEN THE VEHICLE SUDDENLY ACCELERATES FROM LOW ENGINE SPEED, THIS SYSTEM CUTS OFF AIR CONDITIONING OPERATION FOR A FIXED PERIOD OF TIME IN RESPONSE TO THE SPEED SENSOR, THROTTLE VALVE OPENING ANGLE AND INTAKE MANIFOLD PRESSURE IN ORDER TO MAINTAIN ACCELERATION PERFORMANCE.

THE ENGINE CONTROL MODULE RECEIVES INPUT SIGNALS (4, 5 AND 9), AND INPUTS SIGNALS TO **TERMINAL ACT**.

## 3. DIAGNOSIS SYSTEM

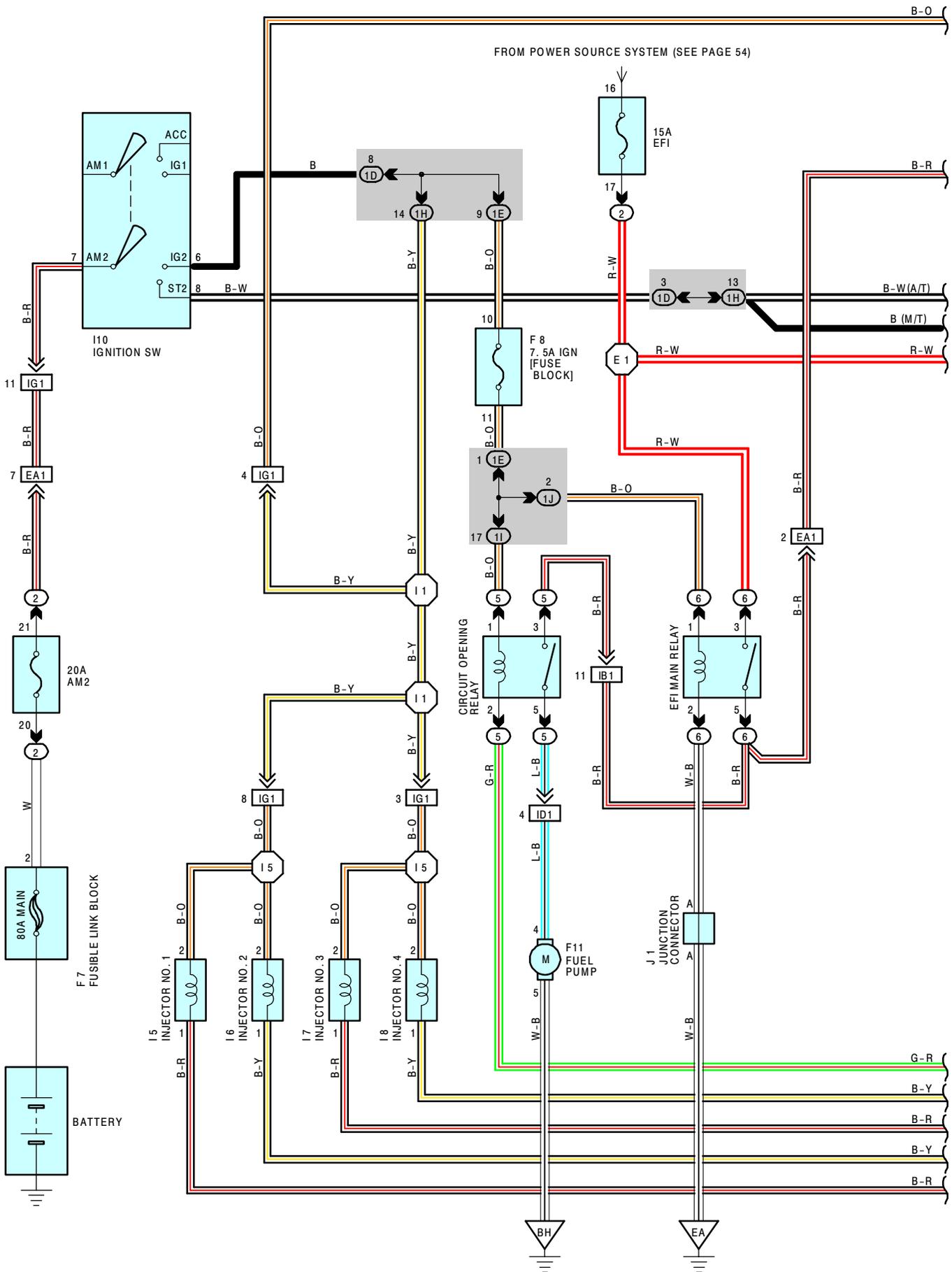
WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTION IN THE ENGINE CONTROL MODULE SIGNAL SYSTEM, THE MALFUNCTIONING SYSTEM IS RECORDED IN THE MEMORY. THE MALFUNCTIONING SYSTEM CAN THEN BE FOUND BY READING THE DISPLAY (CODE) OF THE MALFUNCTION INDICATOR LAMP.

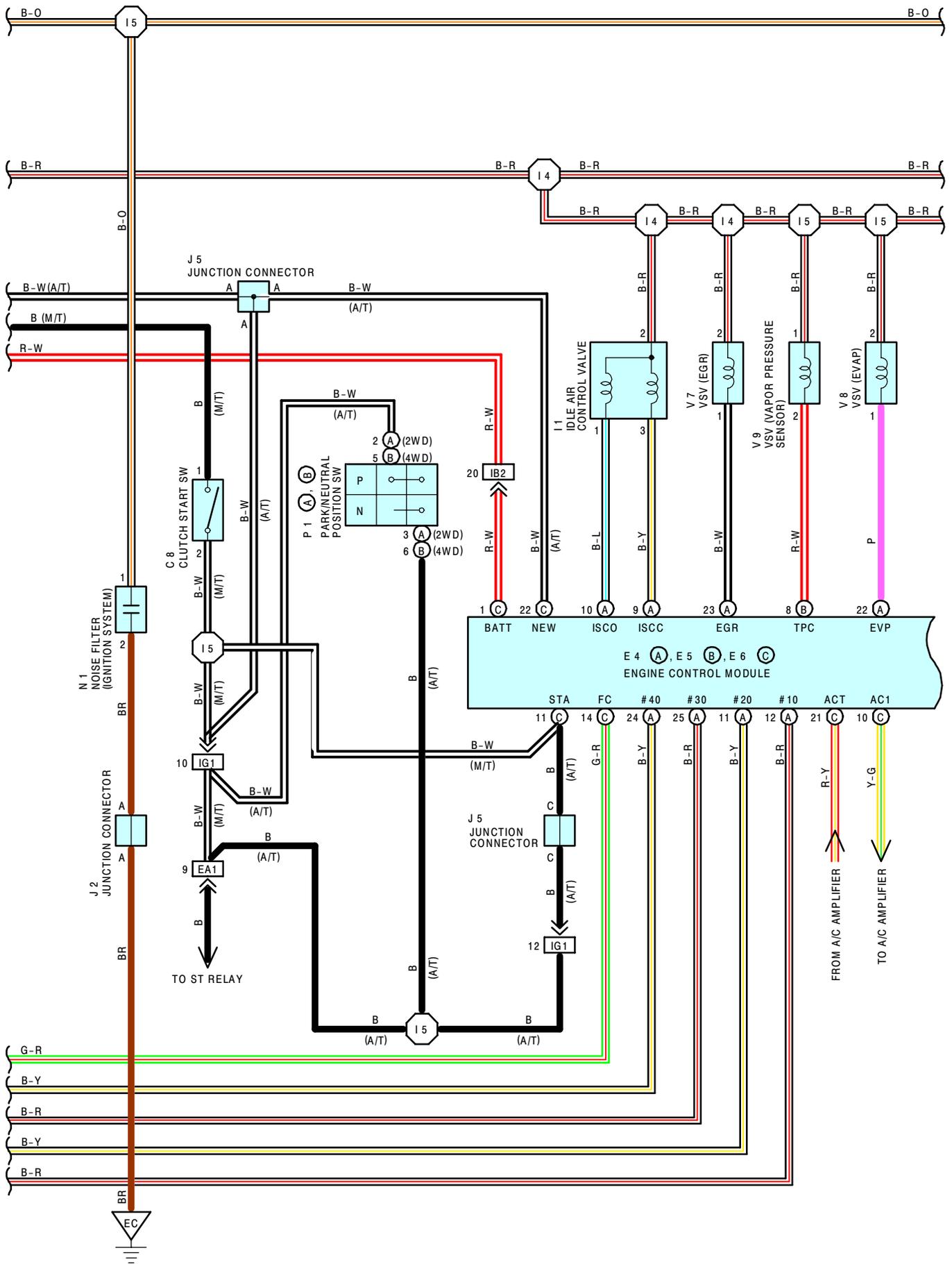
## 4. FAIL-SAFE SYSTEM

WHEN A MALFUNCTION OCCURS ON ANY SYSTEM, IF THERE IS A POSSIBILITY OF ENGINE TROUBLE BEING CAUSED BY CONTINUED CONTROL BASED IN 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.



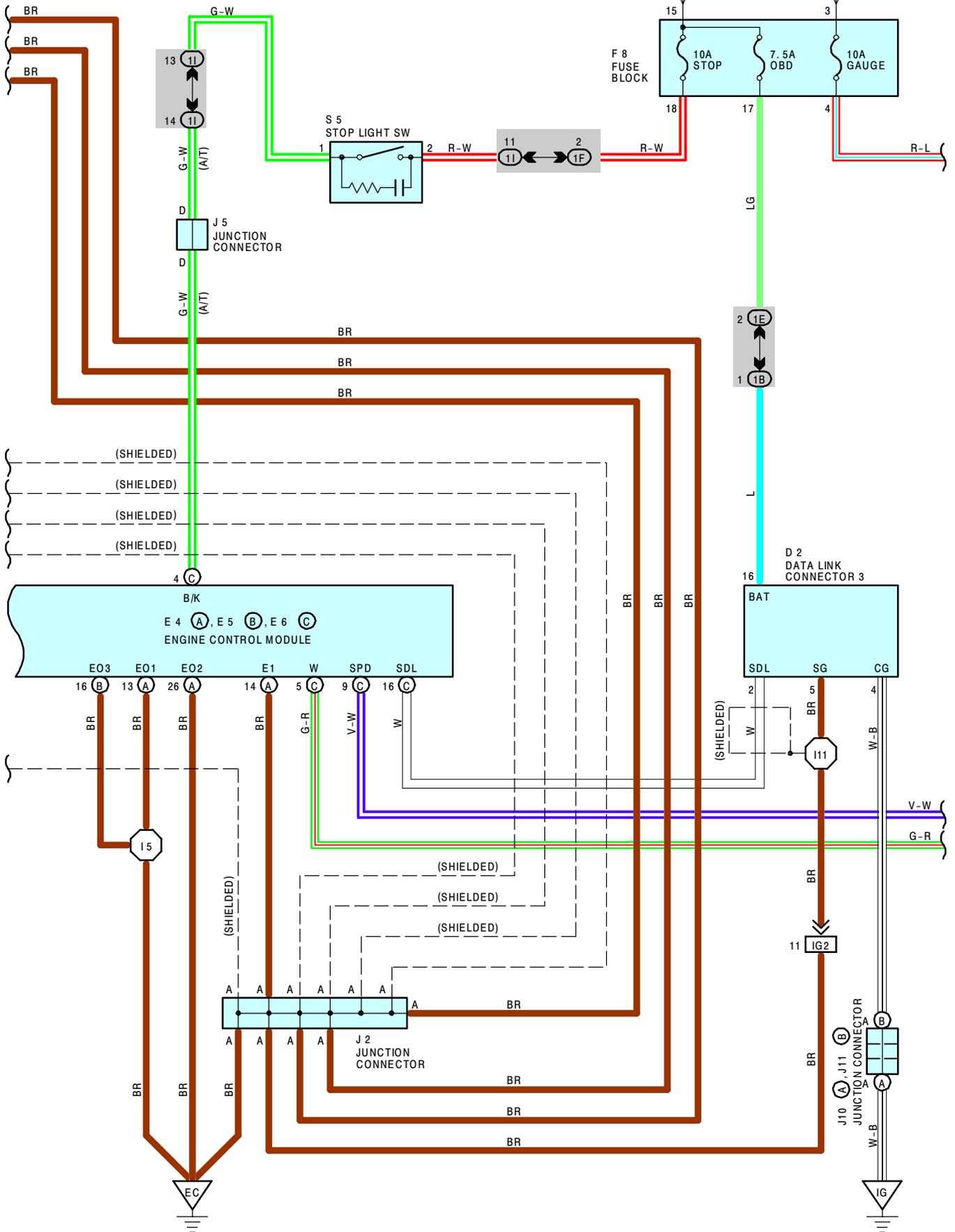
# ENGINE CONTROL







FROM POWER SOURCE SYSTEM (SEE PAGE 54)





## SERVICE HINTS

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

BATT -E1	:	ALWAYS 9.0-14.0 VOLTS
+B -E1	:	9.0-14.0 VOLTS (IGNITION SW AT ON POSITION)
VC -E2	:	4.5-5.5 VOLTS (IGNITION SW AT ON POSITION)
VTA -E2	:	0.3-0.8 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED) 3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
PIM -E2	:	3.3-3.9 VOLTS (IGNITION SW AT ON POSITION)
#10,#20, #30, #40-E01, E02	:	9.0-14.0 VOLTS (IGNITION SW AT ON POSITION)
THA -E2	:	0.5-3.4 VOLTS (IGNITION SW ON AND THE INTAKE AIR TEMP 20°C, 68°F)
THW -E2	:	0.2-1.0 VOLTS (IGNITION SW ON AND THE COOLANT TEMP 80°C, 176°F)
STA -E1	:	6.0-14.0 VOLTS (ENGINE CRANKING)
IGT -E1	:	0.8-1.2 VOLTS (ENGINE CRANKING OR IDLING)
W -E1	:	9.0-14.0 VOLTS (NO TROUBLE AND ENGINE RUNNING)
ACT -E1	:	4.5-5.5 VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
AC1 -E1	:	0-3.0 VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
ISCO, ISCC-E1	:	9.0-14.0 VOLTS (IGNITION SW AT ON POSITION)
TE1 -E1	:	9.0-14.0 VOLTS (IGNITION SW ON AND DATA LINK CONNECTOR 1 TE1-E1 NOT CONNECTED) 0-3.0 VOLTS (IGNITION SW ON AND DATA LINK CONNECTOR 1 TE1-E1 CONNECTED)
NSW -E1	:	0-3.0 VOLTS (IGNITION SW ON AND PARK/NEUTRAL POSITION SW P OR N RANGE) 9.0-14.0 VOLTS (IGNITION SW ON AND PARK/NEUTRAL POSITION SW EXCEPT POSITION P AND N RANGE)

### RESISTANCE OF ENGINE CONTROL MODULE WIRING CONNECTOR

(DISCONNECT WIRING CONNECTOR)

VTA -E2	:	3.3-10.0 KΩ (THROTTLE VALVE FULLY OPEN) 0.2-0.8 KΩ (THROTTLE VALVE FULLY CLOSED)
VC -E2	:	3.0-7.0 KΩ
THA -E2	:	2.0-3.0 KΩ (INTAKE AIR TEMP 20°C, 68°F)
THW -E2	:	0.2-0.4 KΩ (COOLANT TEMP 80°C, 176°F)
G+ -G-	:	0.17-0.21 KΩ
ISCO, ISCC+B	:	19.3-22.3 Ω

### (5) CIRCUIT OPENING RELAY

(5) 3 - (5) 5 : CLOSED WITH THE IGNITION SW ON OR ST POSITION

### (6) EFI MAIN RELAY

(6) 3 - (6) 5 : CLOSED WITH THE IGNITION SW ON OR ST POSITION

### E 2 ENGINE COOLANT TEMP. SENSOR

1-2	:	14.6-17.8 KΩ (-20°C, -4°F) 5.88 KΩ (0°C, 32°F) 2.21-2.69 KΩ (20°C, 68°F) 1.14 KΩ (40°C, 104°F) 0.584 KΩ (60°C, 140°F) 0.29-0.354 KΩ (80°C, 176°F)
-----	---	--

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

1-2 : APPROX. 13.8 Ω

### T 1 THROTTLE POSITION SENSOR

3-1	:	0.2-5.7 KΩ WITH CLEARANCE BETWEEN LEVER AND THE STOP SCREW 0 MM (0 IN.)
3-1	:	2.0-10.2 KΩ WITH THROTTLE VALVE FULLY OPEN
2-1	:	LESS THAN 2.3 KΩ WITH CLEARANCE BETWEEN THE LEVER AND THE STOP SCREW 0.5 MM (0.02 IN.) WITH CLEARANCE BETWEEN LEVER AND THE STOP SCREW 0.7 MM (0.028 IN.)



# ENGINE CONTROL

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 2	28	I 2	29	K 1	29
C 8	30	I 3	A 29	M 1	29
C 9	30	I 4	B 29	N 1	29
D 1	28	I 5	29	O 2	29
D 2	30	I 6	29	O 3	29
D 4	30	I 7	29	P 1	A 29
E 2	28	I 8	29		B 29
E 4	A 31	I 9	29	S 5	31
E 5	B 31	I 10	31	T 1	29
E 6	C 31	J 1	31	V 1	29
F 7	28	J 2	31	V 2	29
F 8	31	J 5	31	V 7	29
F11	32 (2-DOOR), 33 (4-DOOR)	J10	A 31	V 8	29
I 1	29	J11	B 31	V 9	29

## : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	24	R/B NO. 5 (LEFT KICK PANEL)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1 B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1 D		
1 E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1 F		
1 H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1 I		
1 J		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2		

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EC	34	INTAKE MANIFOLD
IG	36	RIGHT KICK PANEL
BH	38 (2-DOOR)	UNDER THE CENTER PILLAR LH
	40 (4-DOOR)	

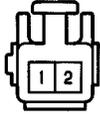
## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	I 5	38	ENGINE WIRE
I 1	38	INSTRUMENT PANEL WIRE	I11	38	INSTRUMENT PANEL WIRE
I 4	38	ENGINE WIRE			

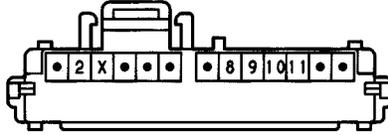
C 2 BLACK



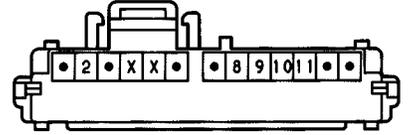
C 8



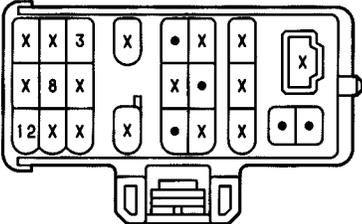
(A/T) C 9 BROWN



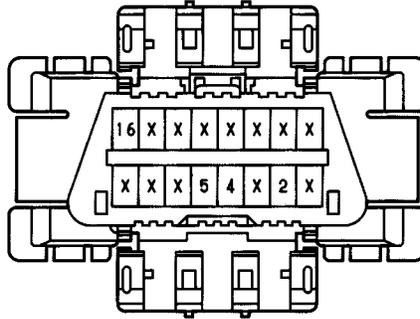
(M/T) C 9 BROWN



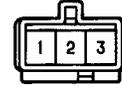
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D 2



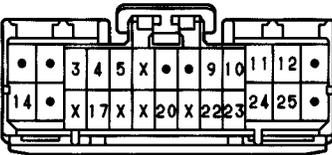
D 4 ORANGE



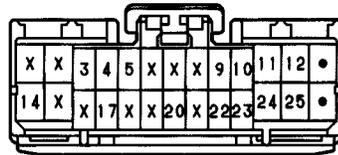
E 2 GREEN



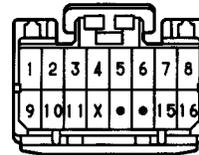
(A/T) E 4 (A) DARK GRAY



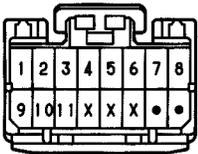
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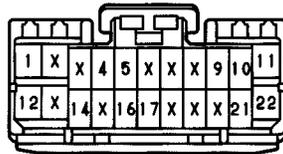
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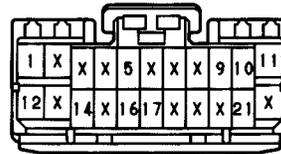
(M/T) E 5 (B) DARK GRAY



(A/T) E 6 (C) DARK GRAY



(M/T) E 6 (C) DARK GRAY



F 7

(SEE PAGE 25)

F 8

(SEE PAGE 26)

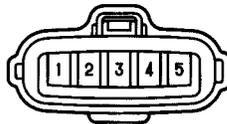
F11 DARK GRAY



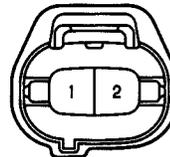
I 1 GRAY



I 2 BLACK



I 3 (A) BLACK



I 4 (B) BLACK



I 5 BROWN



I 6 DARK GRAY



I 7 BROWN



I 8 DARK GRAY



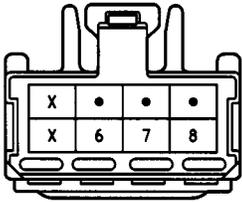
I 9 BLACK





# ENGINE CONTROL

I10



J 1 BLUE



(HINT:SEE PAGE 7)

J 2 BLUE



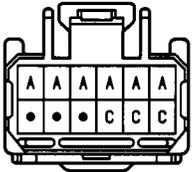
(HINT:SEE PAGE 7)

J 5 BLUE



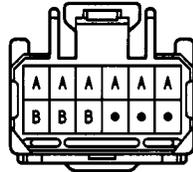
(HINT:SEE PAGE 7)

J10 (A) GRAY



(HINT:SEE PAGE 7)

J11 (B) GRAY



(HINT:SEE PAGE 7)

K 1 DARK GRAY



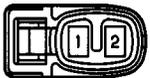
M 1 BLACK



N 1 GRAY



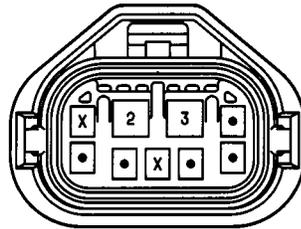
O 2 DARK GRAY



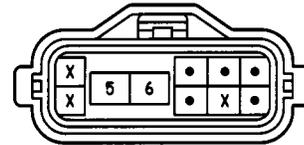
O 3 DARK GRAY



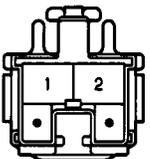
(2WD) P 1 (A) GRAY



(4WD) P 1 (B) GRAY



S 5 BROWN



T 1 BLACK



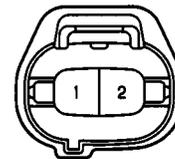
V 1 BLACK



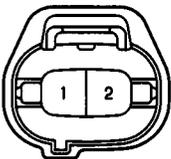
V 2 BLACK



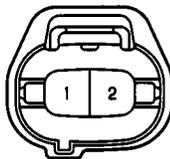
V 7 BROWN



V 8 BLACK



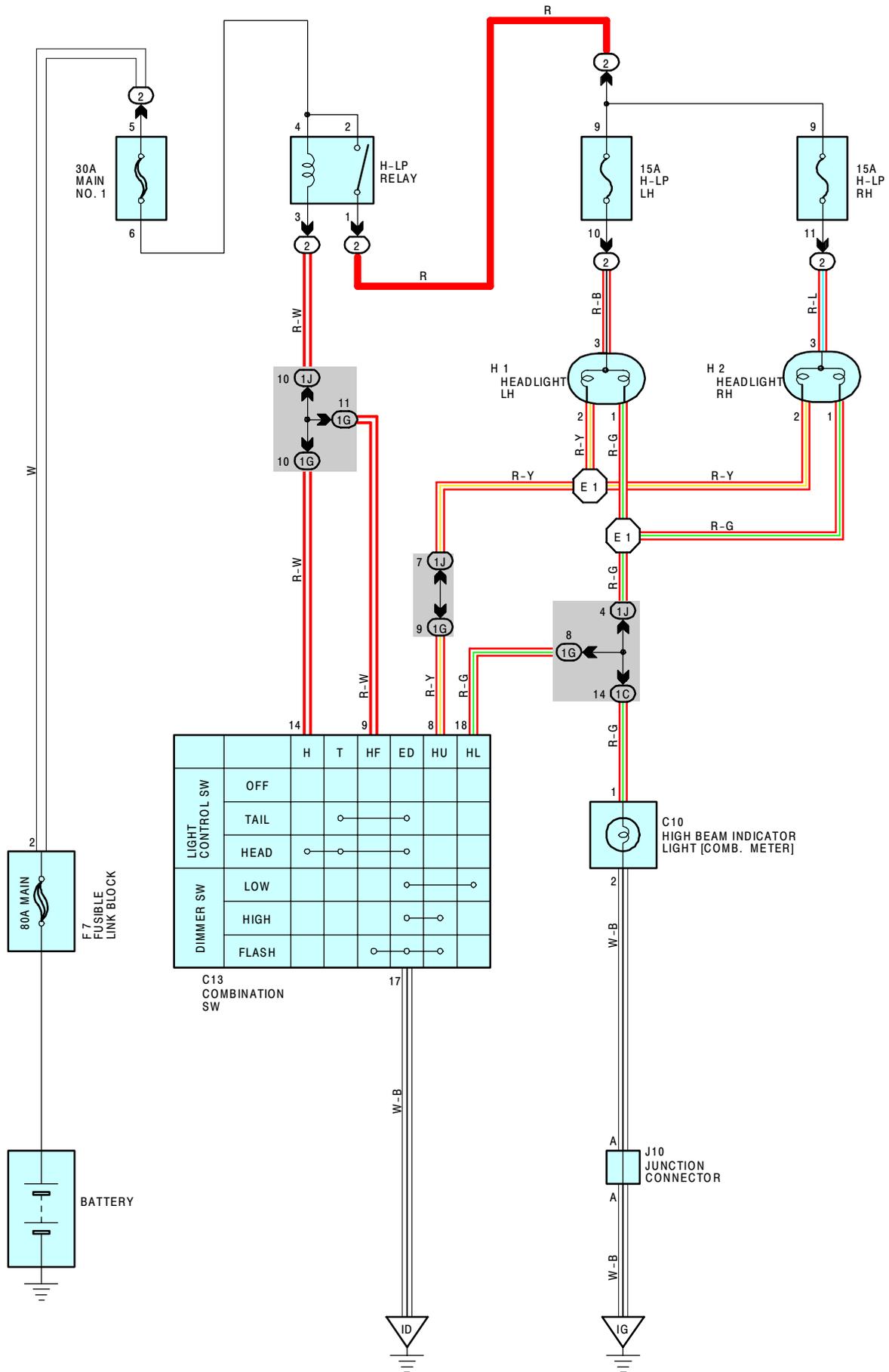
V 9 BLUE







# HEADLIGHT



		H	T	HF	ED	HU	HL
LIGHT CONTROL SW	OFF						
	TAIL		○	○			
	HEAD	○	○	○			
DIMMER SW	LOW				○	○	
	HIGH				○	○	
	FLASH			○	○	○	

C13 COMBINATION SW

C10 HIGH BEAM INDICATOR LIGHT (COMB. METER)

J10 JUNCTION CONNECTOR

## SERVICE HINTS

### (2) H-LP RELAY

(2) 2 - (2) 1 : CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION OR DIMMER SW AT **FLASH** POSITION

### C13 LIGHT CONTROL SW [COMB. SW]

14-17 : CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION

### C13 DIMMER SW [COMB. SW]

8-17 : CLOSED WITH DIMMER SW **HIGH** OR **FLASH** POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C10	30	F 7	28	H 2	28
C13	30	H 1	28	J10	31

### ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1G		
1J		

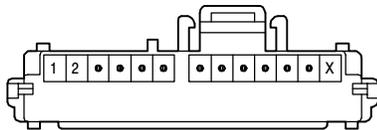
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	36	LEFT KICK PANEL
IG	36	RIGHT KICK PANEL

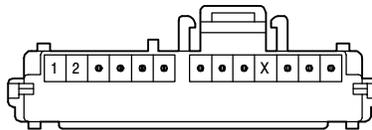
### ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE			

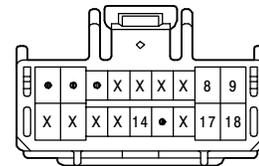
(A/T) C10 BLUE



(M/T) C10 BLUE

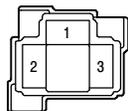


C13

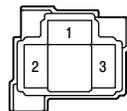


F 7

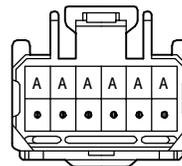
(SEE PAGE 25)



H 1 BLACK



H 2 BLACK



J10 GRAY

(HINT : SEE PAGE 7)



## SERVICE HINTS

### INTEGRATION RELAY

- 1-GROUND : ALWAYS APPROX. 12 VOLTS
- 6-GROUND : CONTINUITY WITH THE DRIVER'S SIDE DOOR OPEN
- 10-GROUND : ALWAYS CONTINUITY

### D 6, D 7, D 8, D 9 DOOR COURTESY SW (DRIVER'S SIDE), (FRONT PASSENGER'S SIDE), (REAR LH, RH)

- 1-GROUND : CLOSED WITH THE DOOR OPEN

### B 7 BACK DOOR OPEN DETECTION SW

- 2-GROUND : CLOSED WITH THE BACK DOOR OPEN

### : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>B 7</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>	<b>D 7</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>	<b>J 4</b>	<a href="#">31</a>
<b>C10</b> A	<a href="#">30</a>	<b>D 8</b>	<a href="#">33 (4-DOOR)</a>	<b>P 3</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>
<b>C11</b> B	<a href="#">30</a>	<b>D 9</b>	<a href="#">33 (4-DOOR)</a>		
<b>D 6</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>	<b>I11</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>		

### : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	<a href="#">23</a>	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1A</b>	<a href="#">20</a>	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1B</b>		
<b>1H</b>		
<b>1J</b>		
<b>1L</b>	<a href="#">20</a>	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

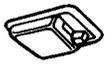
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>ID1</b>	<a href="#">36</a>	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>IE1</b>	<a href="#">36</a>	ROOF WIRE AND INSTRUMENT PANEL (LEFT KICK PANEL)
<b>BK2</b>	<a href="#">40 (2-DOOR)</a>	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
	<a href="#">42 (4-DOOR)</a>	

### : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	<a href="#">36</a>	LEFT KICK PANEL
<b>IG</b>	<a href="#">36</a>	RIGHT KICK PANEL
<b>BI</b>	<a href="#">38 (2-DOOR)</a>	UNDER THE CENTER PILLAR RH
	<a href="#">40 (4-DOOR)</a>	
<b>BJ</b>	<a href="#">38 (2-DOOR)</a>	BACK DOOR LEFT
	<a href="#">40 (4-DOOR)</a>	

### : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>B 1</b>	<a href="#">40 (2-DOOR)</a>	ROOF WIRE	<b>B10</b>	<a href="#">40 (2-DOOR)</a>	BACK DOOR NO. 1 WIRE
	<a href="#">42 (4-DOOR)</a>			<a href="#">42 (4-DOOR)</a>	
<b>B 9</b>	<a href="#">42 (4-DOOR)</a>	FLOOR WIRE	<b>B12</b>	<a href="#">42 (4-DOOR)</a>	FLOOR WIRE

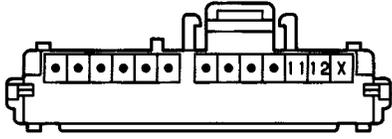


# INTERIOR LIGHT

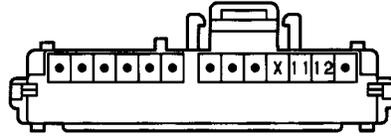
B 7 GRAY



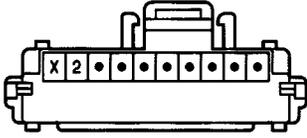
(A/T) C10 (A) BLUE



(N/T) C10 (A) BLUE



C11 (B) GRAY



D 6



D 7



D 8



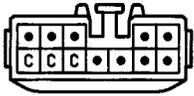
D 9



I 11

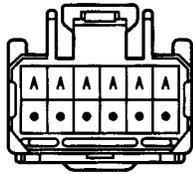


J 4 BLACK



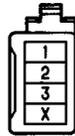
(HINT:SEE PAGE 7)

J10 GRAY



(HINT:SEE PAGE 7)

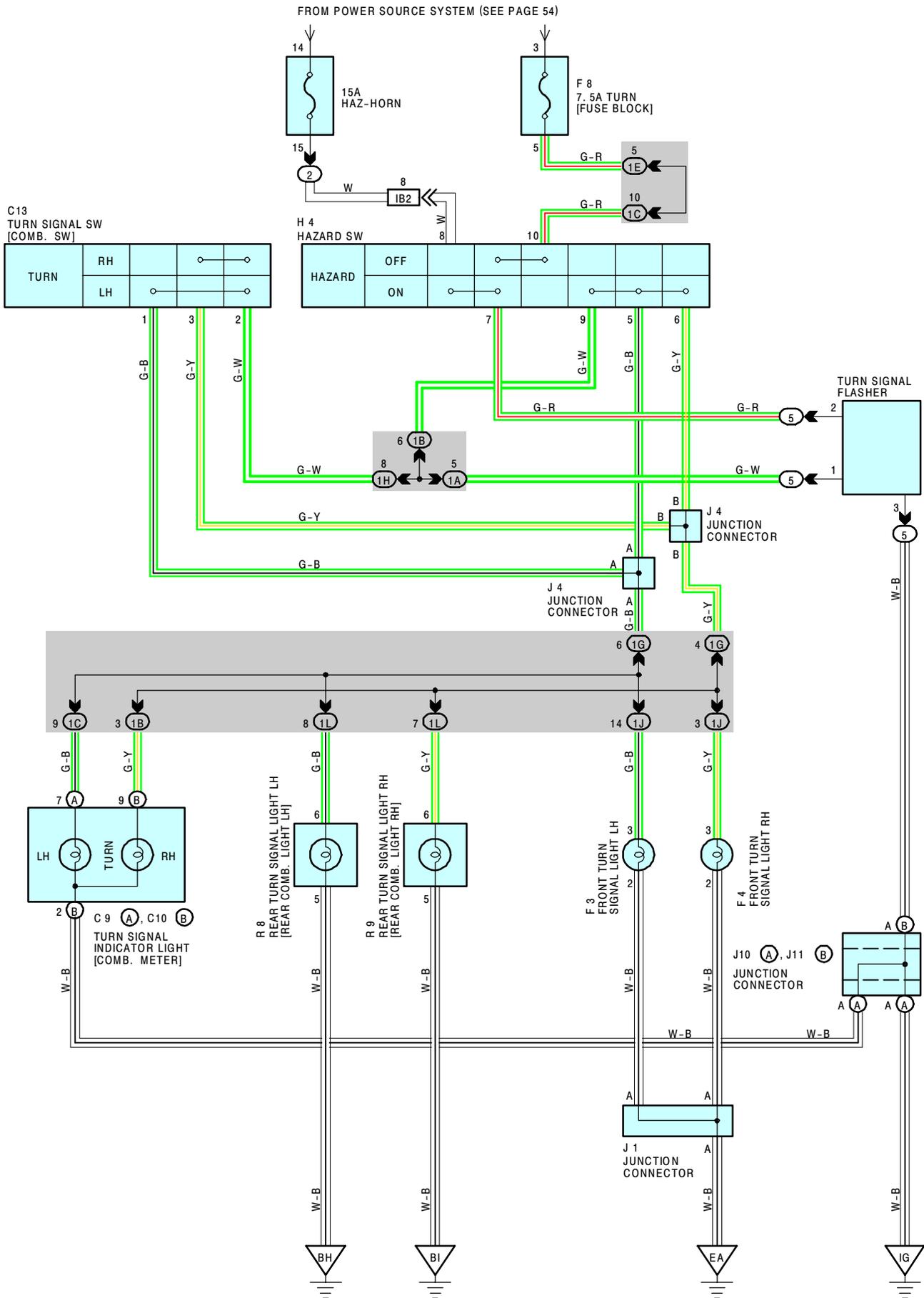
P 3







# TURN SIGNAL AND HAZARD WARNING LIGHT



## SERVICE HINTS

### (5) TURN SIGNAL FLASHER

- (5) 2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW ON OR THE HAZARD SW ON  
(5) 1-GROUND : CHANGES FROM 12 TO 0 VOLTS WITH THE IGNITION SW ON AND THE TURN SIGNAL SW LEFT OR RIGHT, OR WITH THE HAZARD SW ON  
(5) 3-GROUND : ALWAYS CONTINUITY

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	A 30	F 8	31	J 11	B 31
C10	B 30	H 4	31	R 8	32 (2-DOOR), 33 (4-DOOR)
C13	30	J 1	31	R 9	32 (2-DOOR), 33 (4-DOOR)
F 3	28	J 4	31		
F 4	28	J10	A 31		

### ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	24	R/B NO. 5 (LEFT KICK PANEL)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1B		
1C		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1G	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		
1J		
1L	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

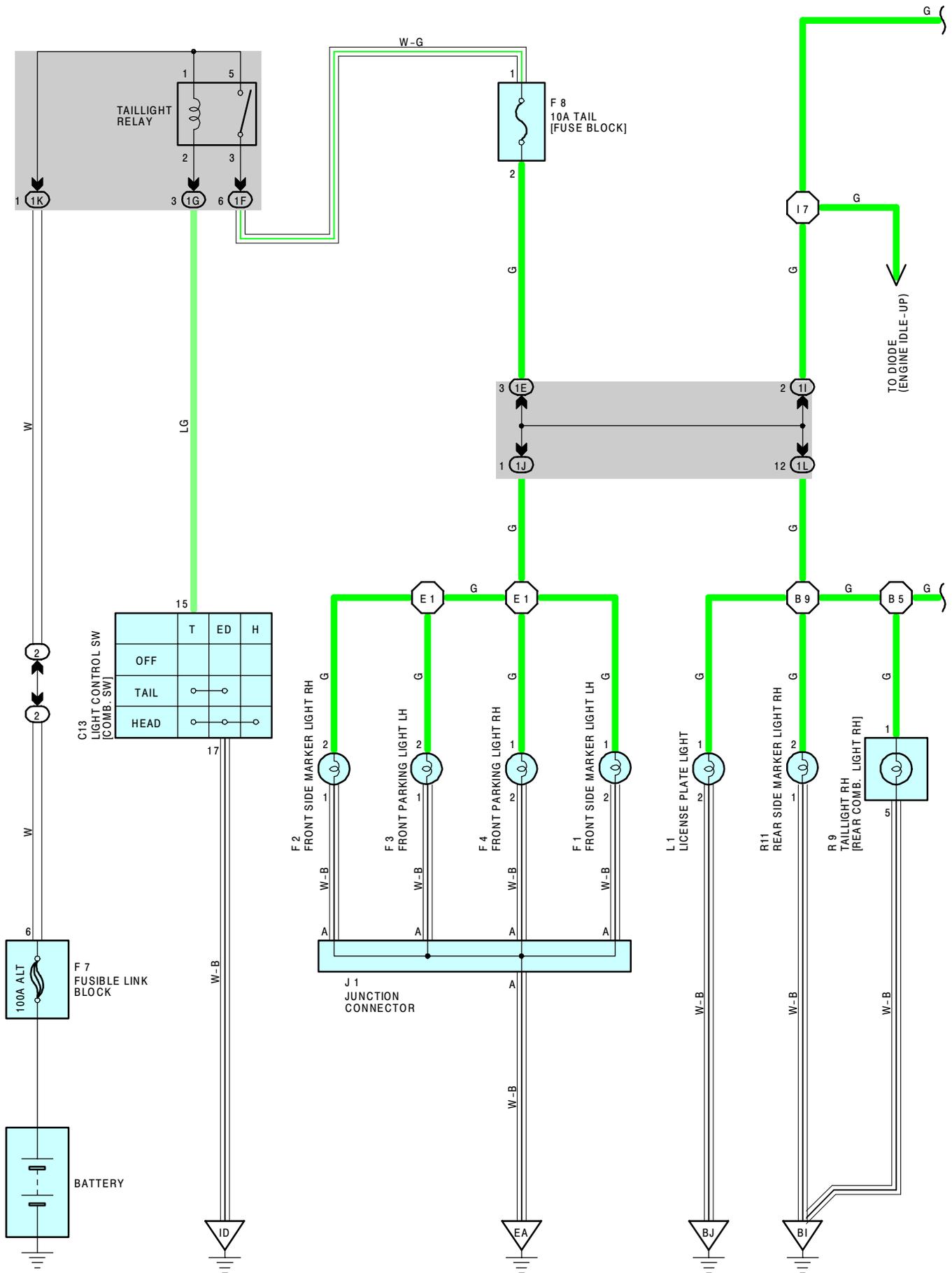
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

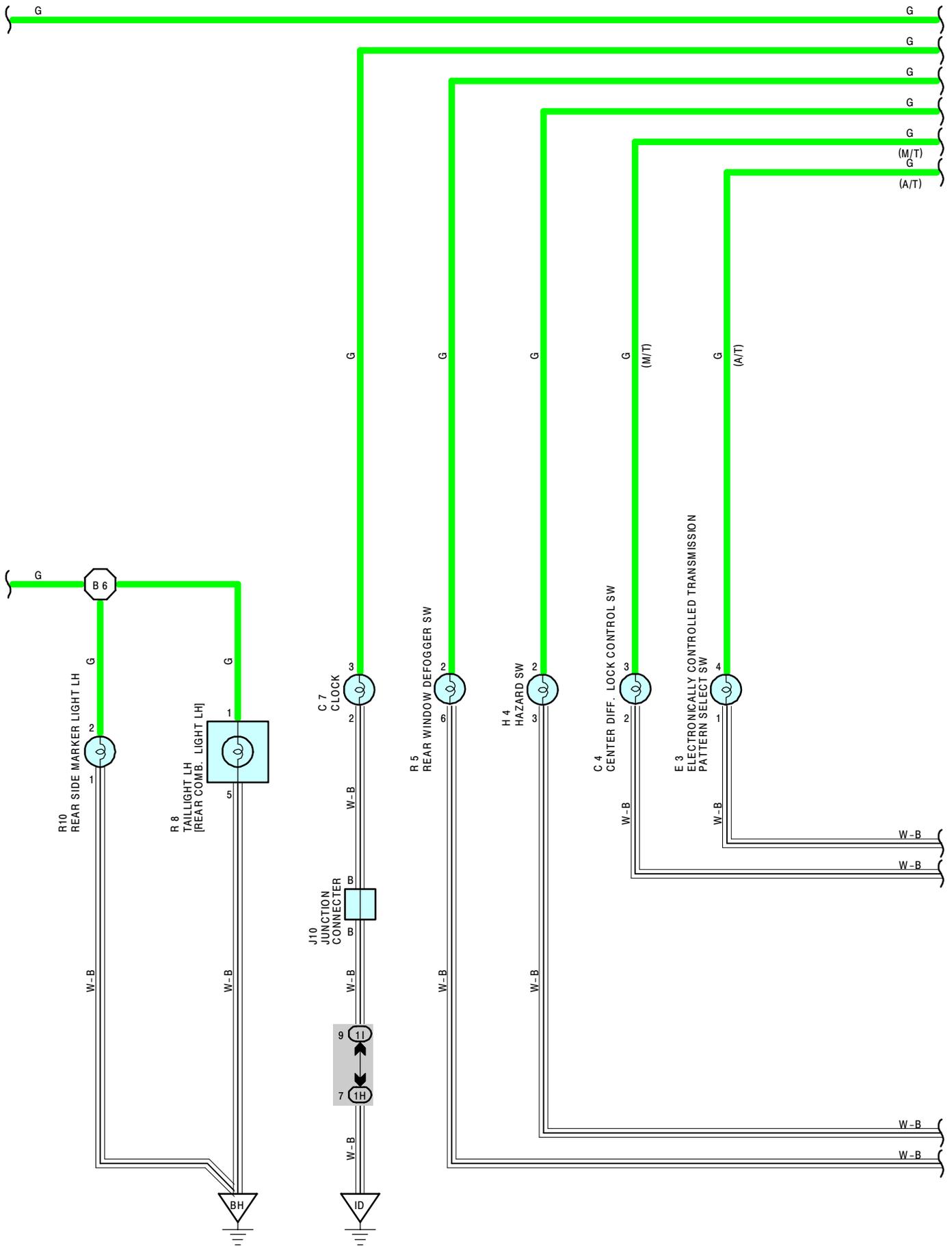
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
IG	36	RIGHT KICK PANEL
BH	38 (2-DOOR) 40 (4-DOOR)	UNDER THE CENTER PILLAR LH
BI	38 (2-DOOR) 40 (4-DOOR)	UNDER THE CENTER PILLAR RH



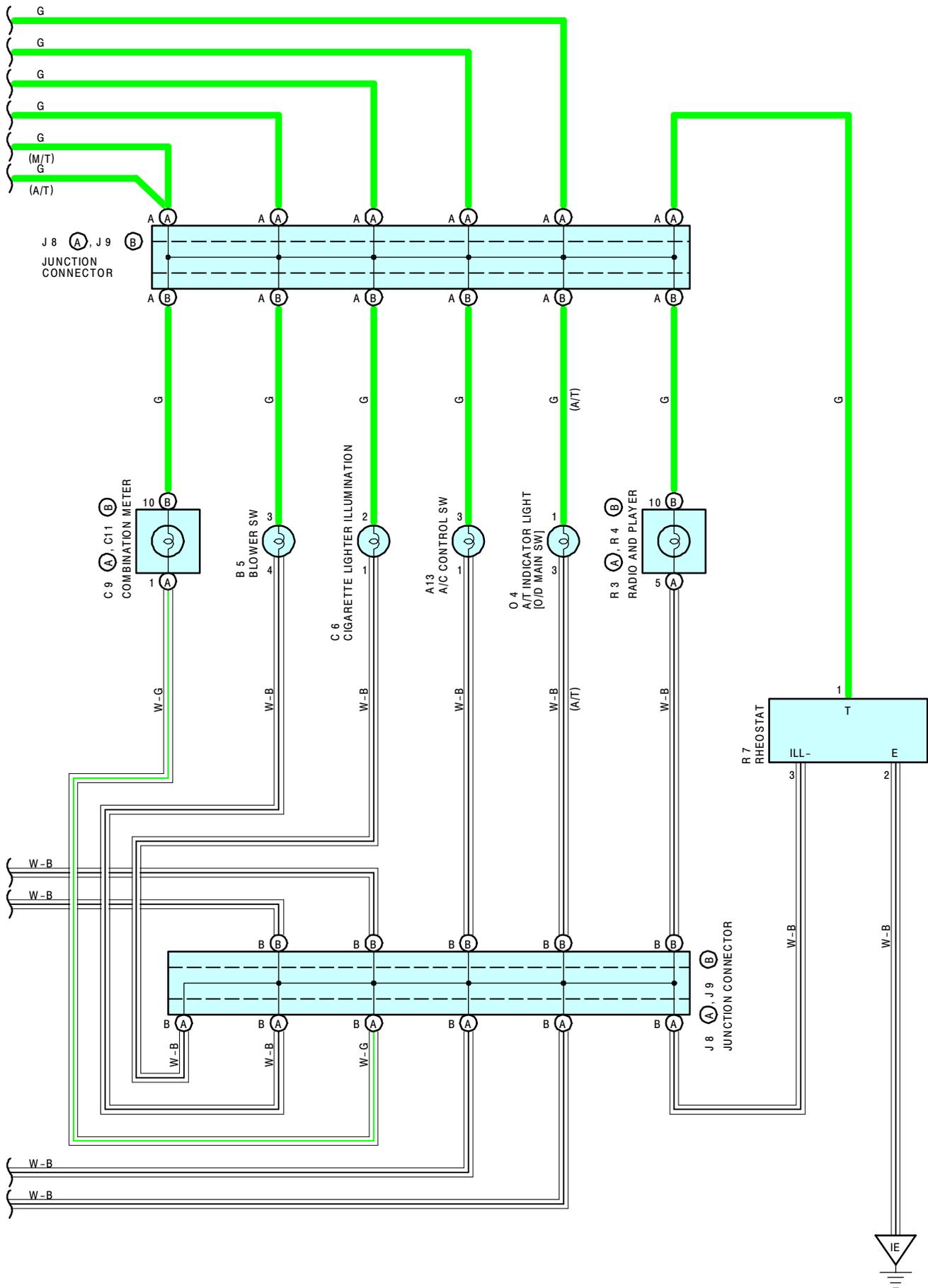
# TAILLIGHT AND ILLUMINATION







# TAILLIGHT AND ILLUMINATION



## SERVICE HINTS

### TAILLIGHT RELAY

5-3 : CLOSED WITH THE LIGHT CONTROL SW AT TAIL OR HEAD POSITION

### C13 LIGHT CONTROL SW [COMB. SW]

15-17 : CLOSED WITH THE LIGHT CONTROL SW AT TAIL OR HEAD POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A13	30	F 2	28	L 1	32 (2-DOOR), 33 (4-DOOR)
B 5	30	F 3	28	O 4	31
C 4	30	F 4	28	R 3	A 31
C 6	30	F 7	28	R 4	B 31
C 7	30	F 8	31	R 5	31
C 9	A 30	H 4	31	R 7	31
C11	C 30	J 1	31	R 8	32 (2-DOOR), 33 (4-DOOR)
C13	30	J 8	A 31	R 9	32 (2-DOOR), 33 (4-DOOR)
E 3	31	J 9	B 31	R10	32 (2-DOOR), 33 (4-DOOR)
F 1	28	J10	31	R11	32 (2-DOOR), 33 (4-DOOR)

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1F		
1G	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		
1I		
1J		
1K	20	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1L	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
ID	36	LEFT KICK PANEL
IE	36	INSTRUMENT PANEL BRACE LH
BH	38 (2-DOOR)	UNDER THE CENTER PILLAR LH
	40 (4-DOOR)	
BI	38 (2-DOOR)	UNDER THE CENTER PILLAR RH
	40 (4-DOOR)	
BJ	38 (2-DOOR)	BACK DOOR LEFT
	40 (4-DOOR)	

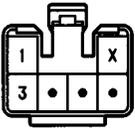
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	B 6	40 (2-DOOR)	FLOOR WIRE
I 7	38	INSTRUMENT PANEL WIRE		42 (4-DOOR)	
B 6	40 (2-DOOR)	FLOOR WIRE	B 9	40 (2-DOOR)	FLOOR WIRE
	42 (4-DOOR)			42 (4-DOOR)	

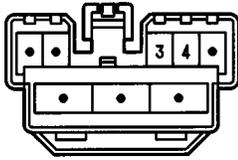


# TAILLIGHT AND ILLUMINATION

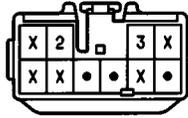
A13 BLACK



B 5



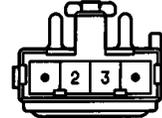
C 4 BLACK



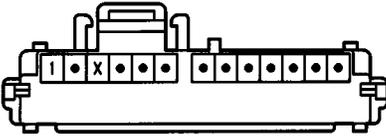
C 6



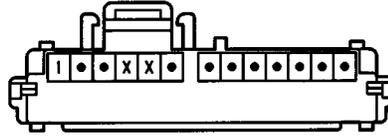
C 7 BLACK



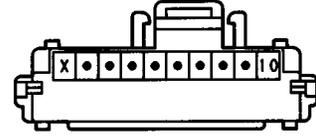
(A/T) C 9 Ⓐ BROWN



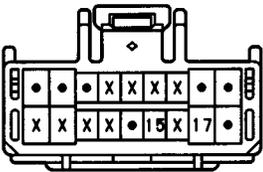
(M/T) C 9 Ⓐ BROWN



C11 Ⓑ GRAY



C13



E 3 BLACK



F 1 BROWN



F 2 BROWN



F 3 GRAY



F 4 GRAY



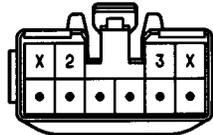
F 7

(SEE PAGE 25)

F 8

(SEE PAGE 26)

H 4 BLACK



J 1 BLUE



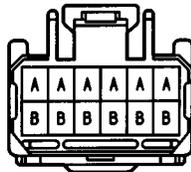
(HINT:SEE PAGE 7)

J 8 Ⓐ BLUE



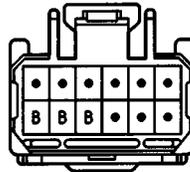
(HINT:SEE PAGE 7)

J 9 Ⓑ BLUE



(HINT:SEE PAGE 7)

J10 GRAY

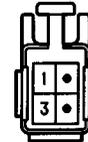


(HINT:SEE PAGE 7)

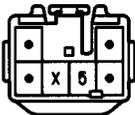
L 1 GRAY



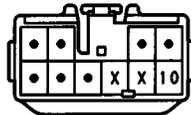
O 4 BLUE



R 3 Ⓐ



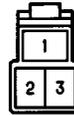
R 4 Ⓑ



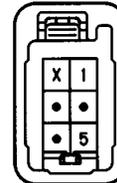
R 5 BLACK



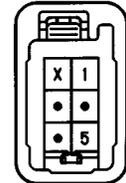
R 7



R 8



R 9



R10 GRAY



R11 GRAY

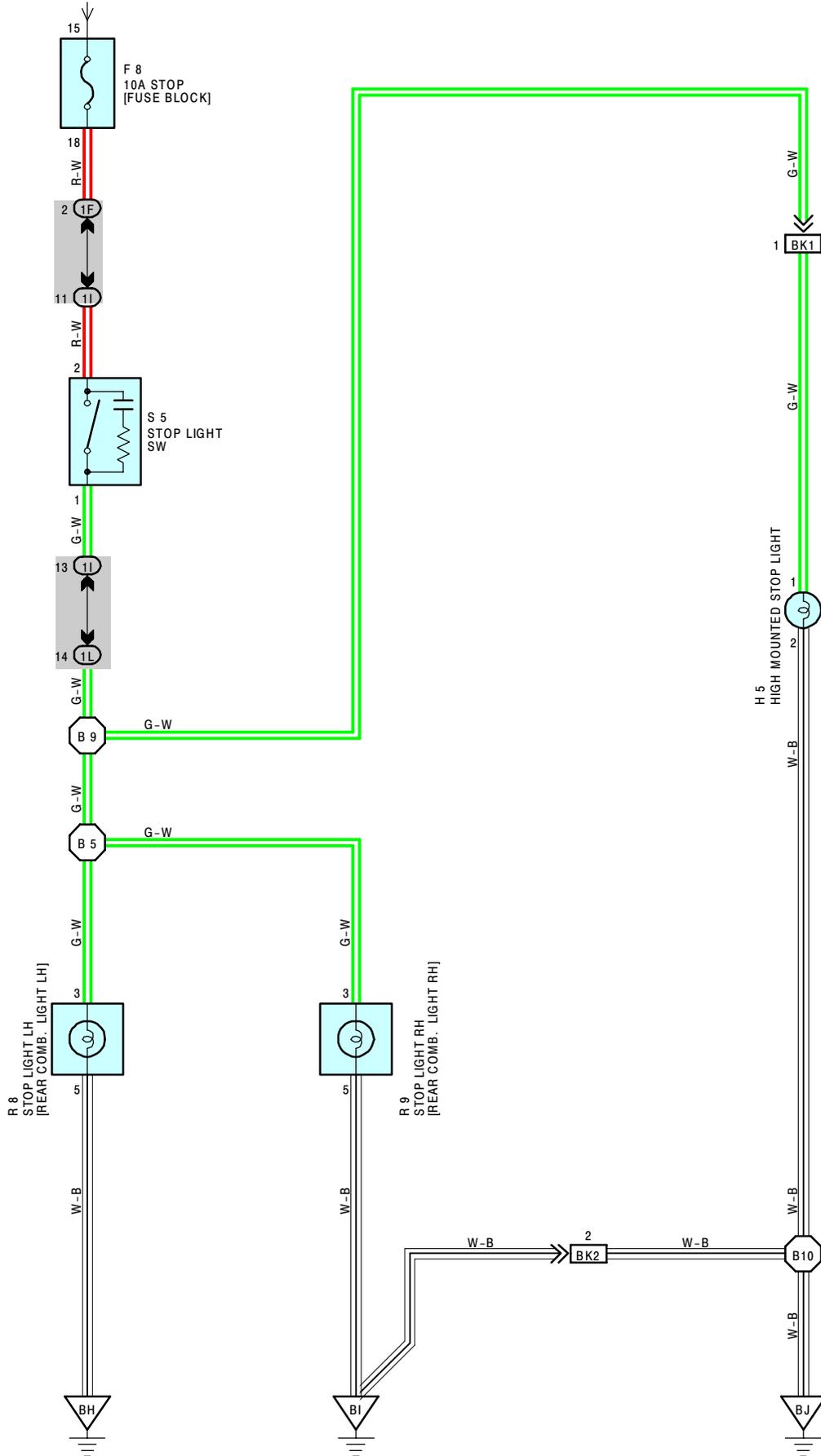






# STOP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 54)



## SERVICE HINTS

### S5 STOP LIGHT SW

2-1 : CLOSED WITH BRAKE PEDAL DEPRESSED

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F 8	31	R 8	32 (2-DOOR), 33 (4-DOOR)		
H 5	32 (2-DOOR), 33 (4-DOOR)	R 9	32 (2-DOOR), 33 (4-DOOR)		

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1F	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1L	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BK1	40 (2-DOOR)	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
	42 (4-DOOR)	
BK2	40 (2-DOOR)	
	42 (4-DOOR)	

### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BH	38 (2-DOOR)	UNDER THE CENTER PILLAR LH
	40 (4-DOOR)	
BI	38 (2-DOOR)	UNDER THE CENTER PILLAR RH
	40 (4-DOOR)	
BJ	38 (2-DOOR)	BACK DOOR LEFT
	40 (4-DOOR)	

### ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 5	40 (2-DOOR)	FLOOR WIRE	B 9	42 (4-DOOR)	FLOOR WIRE
	42 (4-DOOR)		B10	40 (2-DOOR)	BACK DOOR NO. 1 WIRE
B 9	40 (2-DOOR)				

F 8

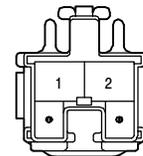
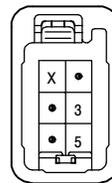
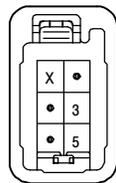
H 5 GRAY

R 8

R 9

S 5 BROWN

(SEE PAGE 26)





## SERVICE HINTS

### B 1 (C) BACK-UP LIGHT SW (M/T)

(C) 2 - (C) 1 : CLOSED WITH SHIFT LEVER AT R POSITION

### P 1 (A), (B) BACK-UP LIGHT SW [PARK NEUTRAL POSITION SW] (A/T)

(A) 2 - (A) 8 : CLOSED WITH SHIFT LEVER AT R POSITION

(B) 6 - (A) 5 : CLOSED WITH SHIFT LEVER AT R POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	C 28	J11	B 31	R 8	32 (2-DOOR), 33 (4-DOOR)
F 8	31	P 1	A 29	R 9	32 (2-DOOR), 33 (4-DOOR)
J10	A 31		B 29		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

## ▽ : GROUND POINTS

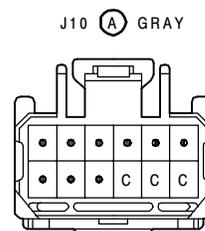
CODE	SEE PAGE	GROUND POINTS LOCATION
BH	38 (2-DOOR)	UNDER THE CENTER PILLAR LH
	40 (4-DOOR)	
BI	38 (2-DOOR)	UNDER THE CENTER PILLAR RH
	40 (4-DOOR)	

## ○ : SPLICE POINTS

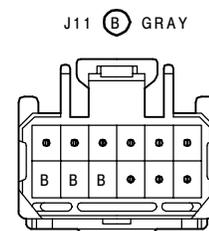
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 5	40 (2-DOOR)	FLOOR WIRE	B 5	42 (4-DOOR)	FLOOR WIRE



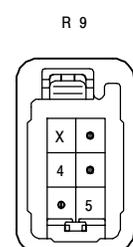
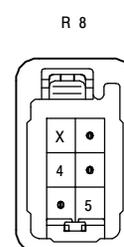
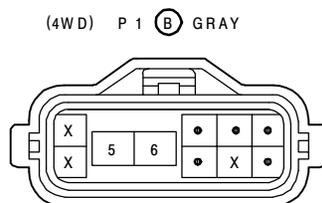
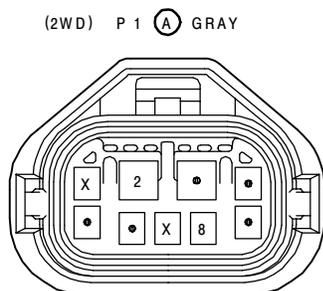
(SEE PAGE 26)



(HINT : SEE PAGE 7)

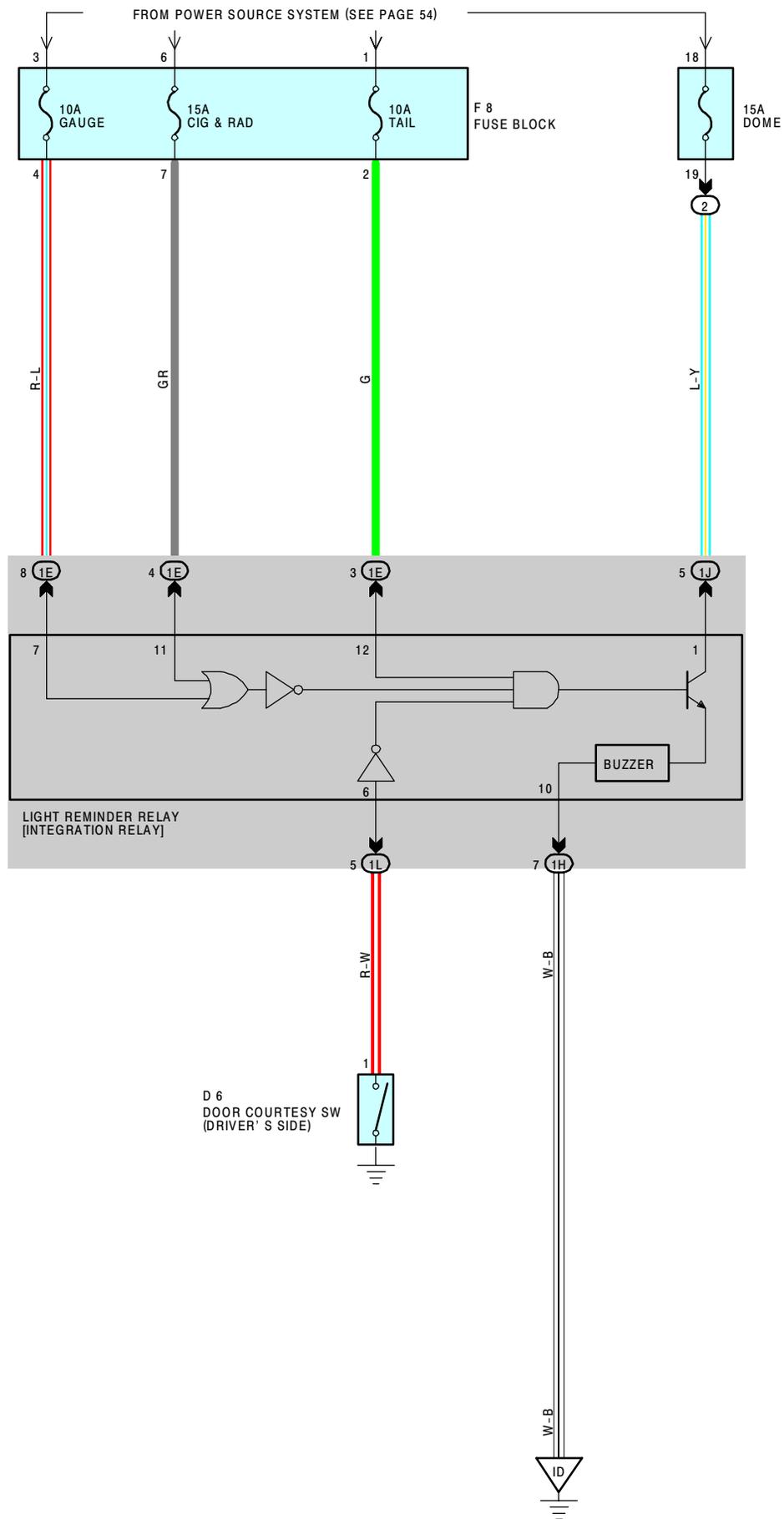


(HINT : SEE PAGE 7)





# LIGHT REMINDER BUZZER



## SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 1** OF THE LIGHT REMINDER RELAY THROUGH THE **DOM**E FUSE.

WITH THE IGNITION SW IN **ACC** POSITION, CURRENT FLOWS TO **TERMINAL 11** OF THE LIGHT REMINDER RELAY THROUGH THE **CIG & RAD** FUSE. WHEN THE IGNITION SW IS TURNED TO **ON** POSITION, CURRENT FLOWS TO **TERMINAL 7** OF THE LIGHT REMINDER RELAY THROUGH THE **GAUGE** FUSE. WHEN THE LIGHT CONTROL SW IS TURNED TO **TAIL** OR **HEAD** POSITION, CURRENT IS APPLIED TO **TERMINAL 12** OF THE LIGHT REMINDER RELAY THROUGH THE **TAIL** FUSE.

### LIGHT REMINDER SYSTEM

WHEN THE LIGHT CONTROL SW IN **TAIL** OR **HEAD** POSITION, THE IGNITION SW IS TURNED TO **OFF** FROM **ON** POSITION, AND THE DRIVER'S DOOR IS OPENED (DOOR COURTESY SW ON), THE CURRENT FLOW TO **TERMINAL 11** AND **7** OF THE LIGHT REMINDER RELAY STOPS. AS A RESULT, THE RELAY IS ACTIVATED AND CURRENT FLOWS TO **TERMINAL 1** OF THE RELAY → **TERMINAL 10** → TO **GROUND**, SOUNDING THE LIGHT REMINDER BUZZER.

## SERVICE HINTS

### LIGHT REMINDER RELAY [INTERGRATION RELAY]

- 7-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
- 11-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
- 12-GROUND : APPROX. 12 VOLTS WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION
- 6-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN
- 1-GROUND : ALWAYS APPROX. 12 VOLTS
- 10-GROUND : ALWAYS CONTINUITY

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>D 6</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>	<b>F 8</b>	<a href="#">31</a>		

### ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	<a href="#">23</a>	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1D</b>	<a href="#">20</a>	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1E</b>	<a href="#">20</a>	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1H</b>	<a href="#">20</a>	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1J</b>		
<b>1L</b>	<a href="#">20</a>	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

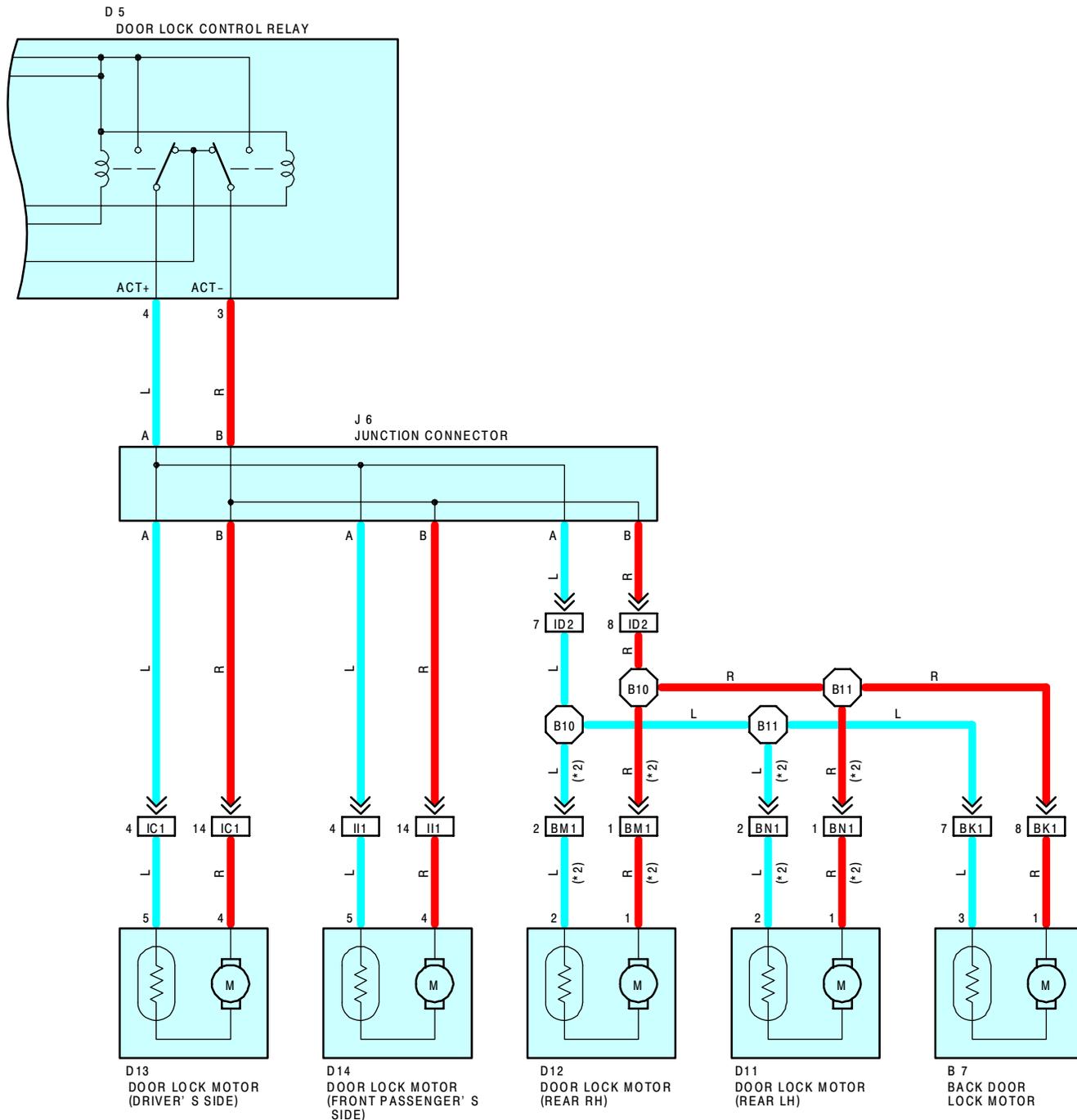
D 6

F 8



(SEE PAGE 26)







# DOOR LOCK CONTROL

## SYSTEM OUTLINE

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

### 1. MANUAL LOCK OPERATION

WHEN THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW ARE PUSHED TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINAL 10** OF THE DOOR LOCK CONTROL RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 4** → **TERMINAL 5** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 2** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 3** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 4** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 1** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 1** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 3** OF THE RELAY → **TERMINAL 16** → **GROUND** AND THE DOOR LOCK MOTOR CAUSES THE DOOR TO LOCK.

### 2. MANUAL UNLOCK OPERATION

WHEN THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW ARE PUSHED TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINAL 11** OF THE DOOR LOCK CONTROL RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE RELAY → **TERMINAL 3** → **TERMINAL 4** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 1** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 1** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 5** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 2** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 3** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → **GROUND** AND DOOR LOCK MOTOR CAUSES DOOR TO UNLOCK.

### 3. DOUBLE OPERATION UNLOCK OPERATION

WHEN THE DOOR KEY LOCK AND UNLOCK SW (DRIVER'S SIDE) IS TURNED TO THE UNLOCK SIDE, ONLY THE DRIVER'S DOOR IS MECHANICALLY UNLOCKED. TURNING THE DOOR KEY LOCK AND UNLOCK SW (DRIVER'S SIDE) TO THE UNLOCK SIDE CAUSES A SIGNAL TO BE INPUT TO **TERMINAL 9** OF THE RELAY, AND IF THE SIGNAL IS INPUT AGAIN WITHIN **3** SECONDS BY TURNING THE SW TO THE UNLOCK SIDE AGAIN, CURRENT FLOWS FROM **TERMINAL 3** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 4** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 1** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 1** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 5** OF THE FRONT DOOR LOCK MOTORS, **TERMINAL 2** OF THE REAR DOOR LOCK MOTORS, **TERMINAL 3** OF THE BACK DOOR LOCK MOTOR → **TERMINAL 4** OF THE RELAY → **TERMINAL 16** → **GROUND**, CAUSING THE DOOR LOCK MOTORS TO OPERATE AND UNLOCK THE DOORS.

## SERVICE HINTS

### D 5 DOOR LOCK CONTROL RELAY

16-GROUND : ALWAYS CONTINUITY

3-GROUND : APPROX. **12** VOLTS **0.2** SECONDS WITH FOLLOWING OPERATION

\* DOOR LOCK CONTROL SW UNLOCKED

\* UNLOCKING THE DRIVER'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 DOOR CYLINDER WITH KEY

10-GROUND : **0** VOLTS WITH DOOR LOCK CONTROL SW LOCKED

**0** VOLTS WITH DRIVER'S DOOR LOCK CYLINDER LOCKED WITH KEY

11-GROUND : **0** VOLTS WITH DOOR LOCK CONTROL SW UNLOCKED AND DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY

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

**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>B 7</b>	32 (2-DOOR), 33 (4-DOOR)	<b>D11</b>	33 (4-DOOR)	<b>D14</b>	32 (2-DOOR) 33 (4-DOOR)
<b>D 5</b>	30	<b>D12</b>	33 (4-DOOR)	<b>J 6</b>	31
<b>D10</b>	32 (2-DOOR), 33 (4-DOOR)	<b>D13</b>	32 (2-DOOR), 33 (4-DOOR)	<b>P 4</b>	32 (2-DOOR) 33 (4-DOOR)

**○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR**

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1C</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>IC1</b>	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>ID2</b>	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>II1</b>	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
<b>BK1</b>	40 (2-DOOR) 42 (4-DOOR)	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
<b>BM1</b>	42 (4-DOOR)	REAR DOOR NO. 1 WIRE AND FLOOR WIRE (RIGHT CENTER PILLAR)
<b>BN1</b>	42 (4-DOOR)	REAR DOOR NO. 2 WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	38	LEFT KICK PANEL

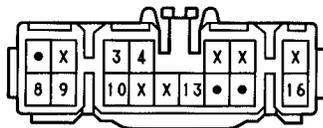
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>I 9</b>	38	INSTRUMENT PANEL WIRE	<b>B 7</b>	42 (4-DOOR)	FRONT DOOR RH WIRE
<b>B 2</b>	40 (2-DOOR) 42 (4-DOOR)	FRONT DOOR LH WIRE	<b>B 8</b>	40 (2-DOOR) 42 (4-DOOR)	
<b>B 4</b>	40 (2-DOOR) 42 (4-DOOR)		FRONT DOOR RH WIRE	<b>B10</b>	40 (4-DOOR)
<b>B 7</b>	40 (2-DOOR)			<b>B11</b>	42 (4-DOOR)

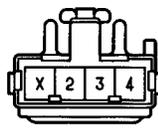
**B 7 GRAY**



**D 5 ORANGE**



**D10**



**D11 GRAY**



**D12 GRAY**



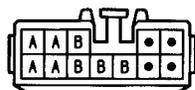
**D13 GRAY**



**D14 GRAY**

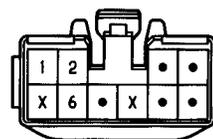


**J 6 GRAY**

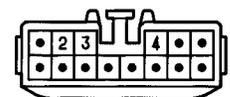


(HINT:SEE PAGE 7)

**(2-DOOR) P 4 Ⓐ**

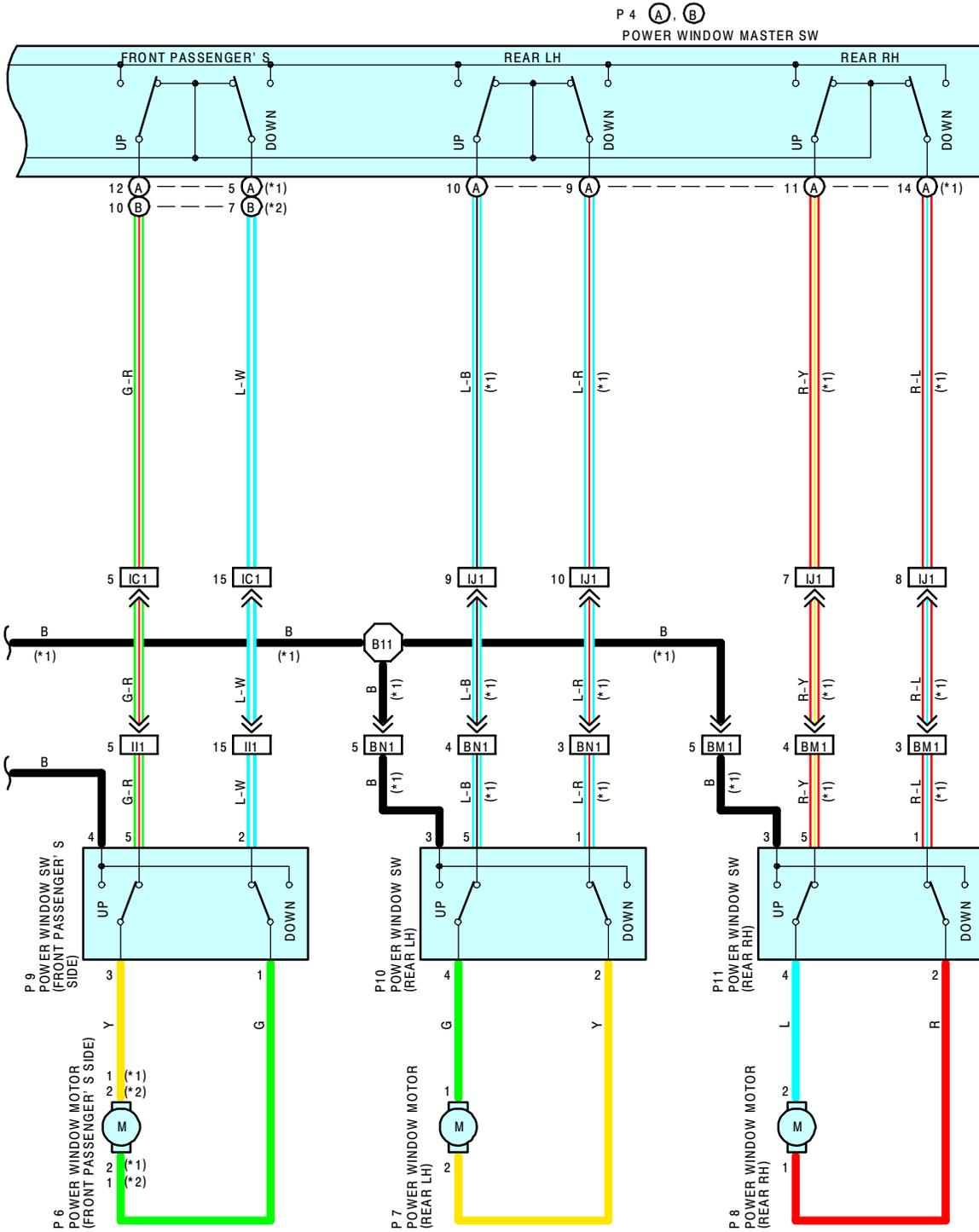


**(4-DOOR) P 4 Ⓑ**





\*1: 4-DOOR  
 \*2: 2-DOOR





# POWER WINDOW

## SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH THE **GAUGE FUSE** → **TERMINAL 1** OF THE DOOR LOCK CONTROL RELAY → **TERMINAL 15** → **TERMINAL 1** OF THE POWER MAIN RELAY → **TERMINAL 2** → **GROUND**. THIS ACTIVATES THE RELAY, AND THE CURRENT FROM **POWER FUSE** FLOWS THROUGH **TERMINAL 5** OF THE RELAY TO **TERMINAL 3** → **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE POWER WINDOW MASTER SW → **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) OF THE MASTER SW → **GROUND**.

### 1. MANUAL OPERATION (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND THE POWER WINDOW MASTER SW (MANUAL SW) AT **UP** POSITION, THE CURRENT THROUGH **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 3** (2-DOOR), **6** (4-DOOR) OF THE MASTER SW → **TERMINAL 1** (2-DOOR), **2** (4-DOOR) OF THE POWER WINDOW MOTOR → **TERMINAL 2** (2-DOOR), **1** (4-DOOR) → **TERMINAL 4** (2-DOOR), **13** (4-DOOR) OF THE MASTER SW → **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) → **GROUND**, ROTATING THE POWER WINDOW MOTOR IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE POWER WINDOW MASTER SW (MANUAL SW) IS PUSHED. IN DOWN OPERATION, THE CURRENT THROUGH **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 4** (2-DOOR), **13** (4-DOOR) OF THE MASTER SW → **TERMINAL 2** (2-DOOR), **1** (4-DOOR) OF THE POWER WINDOW MOTOR → **TERMINAL 1** (2-DOOR), **2** (4-DOOR) → **TERMINAL 3** (2-DOOR), **6** (4-DOOR) → **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) → **GROUND**, ROTATING THE MOTOR IN THE DOWN DIRECTION.

### 2. AUTO DOWN OPERATION

WITH THE IGNITION SW ON AND THE AUTO SW OF THE POWER WINDOW MASTER SW IN **DOWN** POSITION, THE CURRENT THROUGH **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE MASTER SW FLOWS TO **TERMINAL 4** (2-DOOR), **13** (4-DOOR) OF THE MASTER SW → **TERMINAL 2** (2-DOOR), **1** (4-DOOR) OF THE POWER WINDOW MOTOR → **TERMINAL 1** (2-DOOR), **2** (4-DOOR) → **TERMINAL 3** (2-DOOR), **6** (4-DOOR) OF THE MASTER SW → **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) → **GROUND**, CAUSING THE MOTOR TO ROTATE IN DOWN DIRECTION. THEN THE SOLENOID IN THE MASTER SW IS ACTIVATED AND IT LOCKS THE AUTO SW BEING PUSHED, KEEPING THE MOTOR ON ROTATING IN AUTO DOWN OPERATION. WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT BETWEEN **TERMINAL 3** (2-DOOR), **6** (4-DOOR) OF THE MASTER SW AND **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) OF THE MASTER SW INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, THE AUTO SW IS TURNED OFF, AND THE CURRENT FROM **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE MASTER SW TO **TERMINAL 4** (2-DOOR), **13** (4-DOOR) 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 MASTER SW AND CURRENT FROM **TERMINAL 3** (2-DOOR), **6** (4-DOOR) OF THE MASTER SW TO **GROUND** IS CUT OFF, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE MASTER SW IS PUSHED CONTINUOUSLY, THE MOTOR ROTATES IN THE UP DIRECTION IN MANUAL UP OPERATION.

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

WHEN POWER WINDOW CONTROL SW (PASSENGER'S) IS PUSHED TO THE UP SIDE, THE CURRENT THROUGH **TERMINAL 4** OF THE POWER WINDOW SW FLOWS TO **TERMINAL 3** OF THE SW → **TERMINAL 2** (2-DOOR), **1** (4-DOOR) OF THE POWER WINDOW MOTOR → **TERMINAL 1** (2-DOOR), **2** (4-DOOR) → **TERMINAL 1** OF THE POWER WINDOW SW → **TERMINAL 2** → **TERMINAL 7** (2-DOOR), **5** (4-DOOR) OF THE MASTER SW → **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) → **GROUND**, CAUSING THE POWER WINDOW MOTOR (PASSENGER'S) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW CONTROL SW IS PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** (2-DOOR), **2** (4-DOOR) TO **TERMINAL 2** (2-DOOR), **1** (4-DOOR), AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED TO THE LOCK 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 **TERMINAL 6** (2-DOOR), **1 OR 2** (4-DOOR) OF THE POWER WINDOW MASTER SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE PASSENGER'S WINDOW CAN NOT BE OPERATED AND WINDOW LOCK OCCURS. FURTHERMORE REAR LH RH WINDOW OPERATES THE SAME AS THE ABOVE CIRCUIT.

### 5. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE DOOR LOCK CONTROL RELAY OPERATES AND CURRENT FLOWS FROM **POWER FUSE** TO **TERMINAL 8** OF THE RELAY → **TERMINAL 15** → **TERMINAL 1** OF POWER MAIN RELAY → **TERMINAL 2** → **GROUND** FOR ABOUT **60** SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM **POWER FUSE** → **TERMINAL 5** OF THE POWER MAIN RELAY → **TERMINAL 3** → **TERMINAL 9** (2-DOOR), **7 OR 8** (4-DOOR) OF THE POWER WINDOW MASTER SW AND THROUGH **TERMINAL 3** OF THE POWER MAIN RELAY TO **TERMINAL 3 OR 4** OF THE POWER WINDOW SW. AS A RESULT, FOR ABOUT **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF, THE FUNCTIONING OF THIS RELAY MAKES IT POSSIBLE TO RAISE AND LOWER THE POWER WINDOW. ALSO, BY OPENING THE FRONT DOOR (DOOR OPEN DETECTION SW ON) WITHIN ABOUT **60** SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO DOOR LOCK CONTROL RELAY. AS A RESULT, THE RELAY TURNS OFF, AND UP AND DOWN MOVEMENT OF THE POWER WINDOW STOPS.

## SERVICE HINTS

### P 9 POWER WINDOW SW (FRONT PASSENGER'S SIDE)

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

### P 4 (A) POWER WINDOW MASTER SW (4-DOOR)

(A) 7, 8-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

(A) 1, 2-GROUND : ALWAYS CONTINUITY

(A) 6-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND MASTER SW AT **UP** POSITION

(A) 13-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND MASTER SW AT **DOWN** OR **AUTO DOWN** POSITION

### P 4 (B) POWER WINDOW MASTER SW (2-DOOR)

(B) 9-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

(B) 6-GROUND : ALWAYS CONTINUITY

(B) 3-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND MASTER SW AT **UP** POSITION

(B) 4-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND MASTER SW AT **DOWN** OR **AUTO DOWN** POSITION

### WINDOW LOCK SW

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

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 5	30	P 4	A 33 (4-DOOR)	P 8	33 (4-DOOR)
D 7	32 (2-DOOR), 33 (4-DOOR)	P 5	32 (2-DOOR), 33 (4-DOOR)	P 9	32 (2-DOOR), 33 (4-DOOR)
F 8	31	P 6	32 (2-DOOR), 33 (4-DOOR)	P 10	32 (2-DOOR), 33 (4-DOOR)
P 4	B 32 (2-DOOR)	P 7	33 (4-DOOR)		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1C		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1L	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
4C	22	INSTRUMENT PANEL WIRE AND J/B NO. 4 (RIGHT KICK PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
II1	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IJ1	38	FRONT DOOR LH WIRE AND FLOOR WIRE (LEFT KICK PANEL)
BM1	42 (4-DOOR)	REAR DOOR NO. 1 WIRE AND FLOOR WIRE (RIGHT CENTER PILLAR)
BN1	42 (4-DOOR)	REAR DOOR NO. 2 WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	36	LEFT KICK PANEL
IG	36	RIGHT KICK PANEL

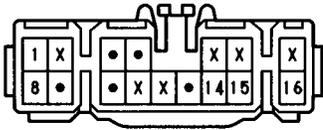
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	38	INSTRUMENT PANEL WIRE	B11	42 (4-DOOR)	FLOOR WIRE
B 2	42 (4-DOOR)	FRONT DOOR LH WIRE			



# POWER WINDOW

D 5 ORANGE



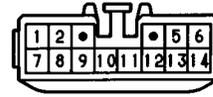
D 7



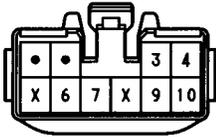
F 8

(SEE PAGE 26)

(4-DOOR) P 4 (A)



(2-DOOR) P 4 (B)



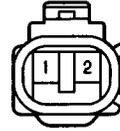
P 5 GRAY



P 6 GRAY



P 7 GRAY



P 8 GRAY



P 9



P10



P11

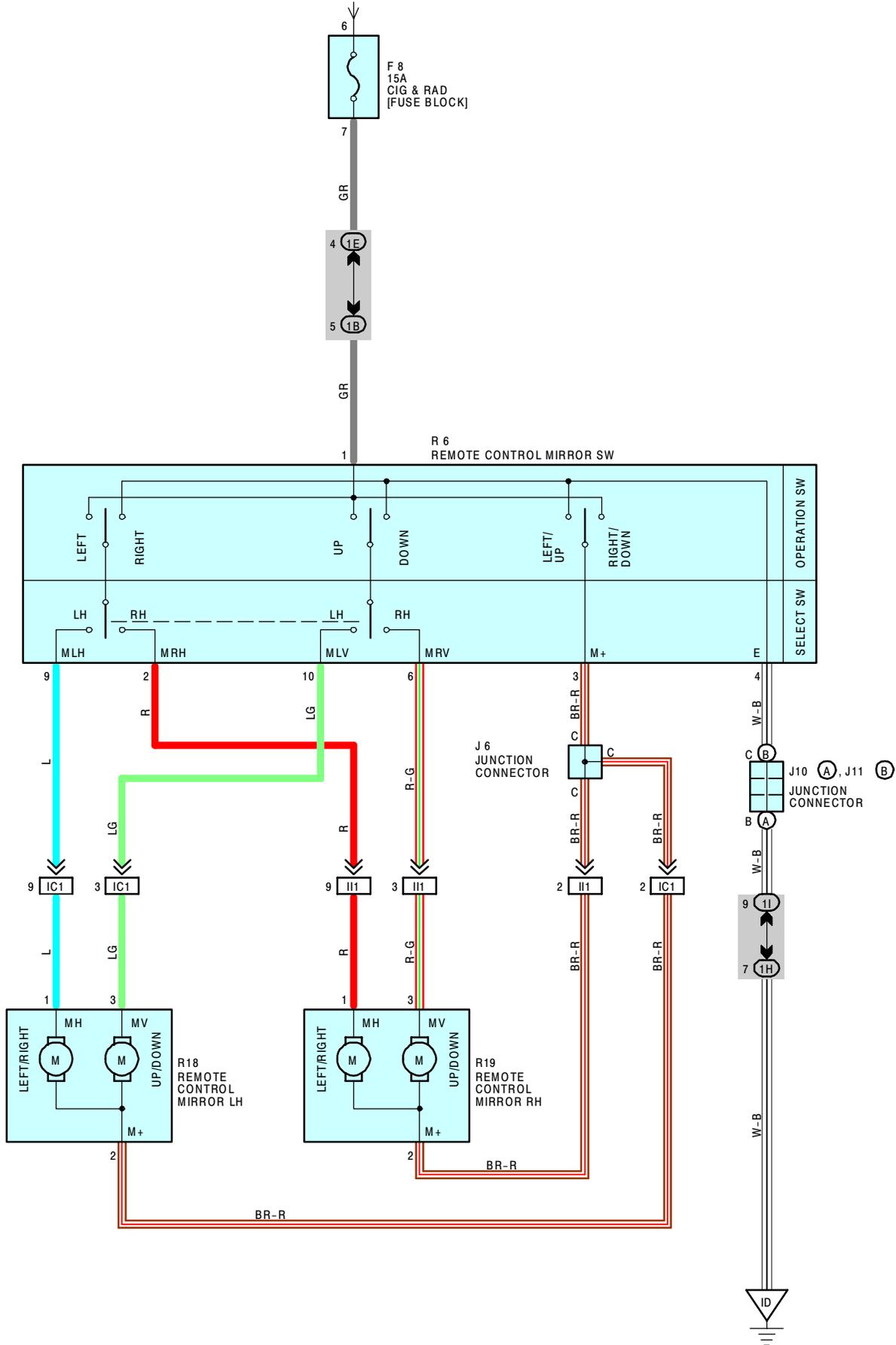






# REMOTE CONTROL MIRROR

FROM POWER SOURCE SYSTEM (SEE PAGE 54)



## SERVICE HINTS

### R 6 REMOTE CONTROL MIRROR SW

- 1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
- 3-4 : CONTINUITY WITH OPERATION SW AT **UP** OR **LEFT** POSITION
- 1-3 : CONTINUITY WITH OPERATION SW AT **DOWN** OR **RIGHT** POSITION
- 4-GROUND : ALWAYS CONTINUITY

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F 8	31	J11	B 31	R19	32 (2-DOOR), 33 (4-DOOR)
J 6	31	R 6	31		
J10	A 31	R18	32 (2-DOOR), 33 (4-DOOR)		

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I		

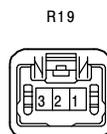
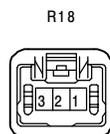
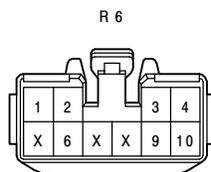
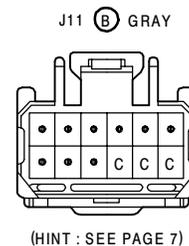
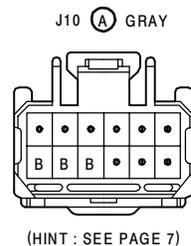
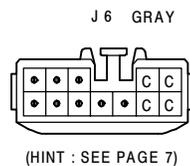
### □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
II1	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	36	LEFT KICK PANEL

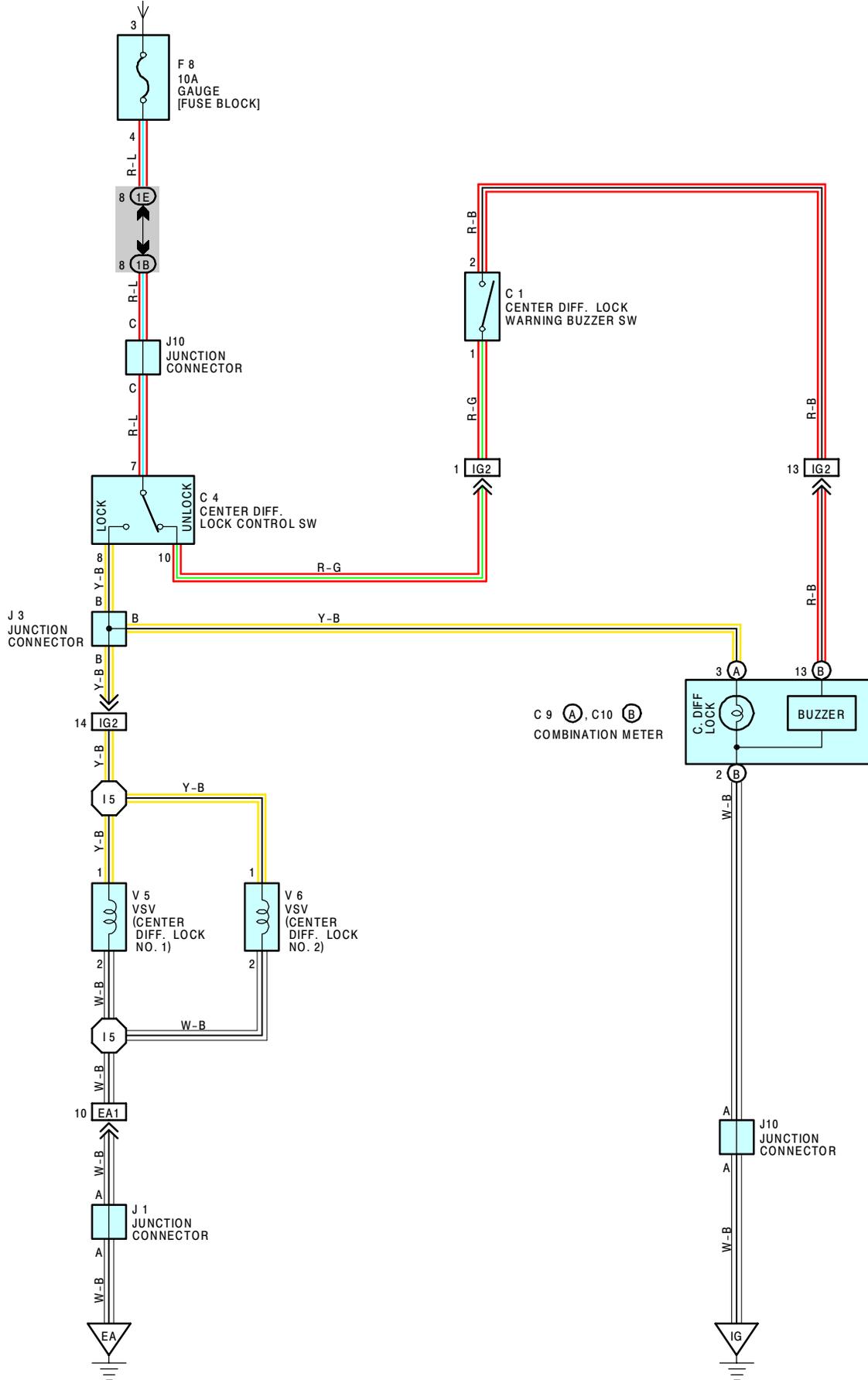
F 8  
(SEE PAGE 26)





# CENTER DIFF. LOCK (4WD M/T)

FROM POWER SOURCE SYSTEM (SEE PAGE 54)



## SERVICE HINTS

### C 4 CENTER DIFF. LOCK CONTROL SW

- 7- 8 : CONTINUITY WITH CENTER DIFF. LOCK CONTROL SW AT **LOCK** POSITION  
 7-10 : CONTINUITY WITH CENTER DIFF. LOCK CONTROL SW AT **UNLOCK** POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	28	F 8	31	V 5	29
C 4	30	J 1	31	V 6	29
C 9	A 30	J 3	31		
C10	B 30	J10	31		

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

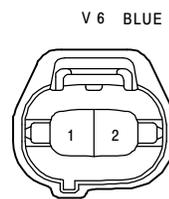
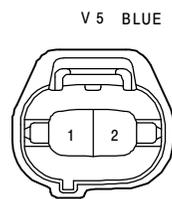
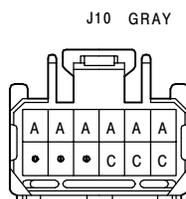
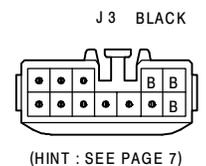
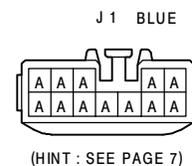
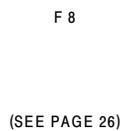
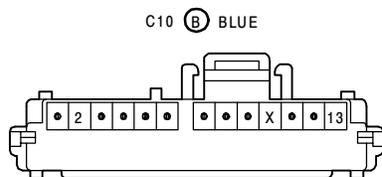
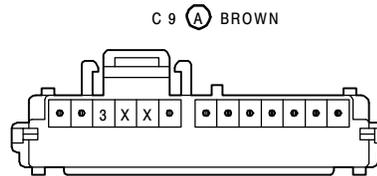
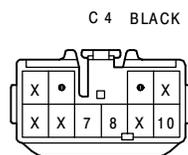
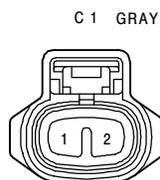
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IG2	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
IG	36	RIGHT KICK PANEL

### ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
15	38	ENGINE WIRE			





## SERVICE HINTS

### C 5 CIGARETTE LIGHTER

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

### C 7 CLOCK

- 1-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 : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 5	30	F 8	31	J10	A 31
C 7	30	J 3	31	J11	B 31

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I		
1J		

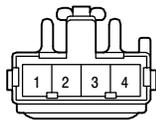
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	36	LEFT KICK PANEL
IG	36	RIGHT KICK PANEL

C 5



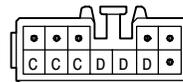
C 7



F 8

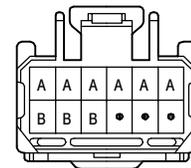
(SEE PAGE 26)

J 3 BLACK



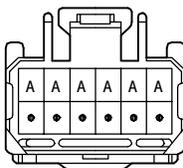
(HINT : SEE PAGE 7)

J10 (A) GRAY



(HINT : SEE PAGE 7)

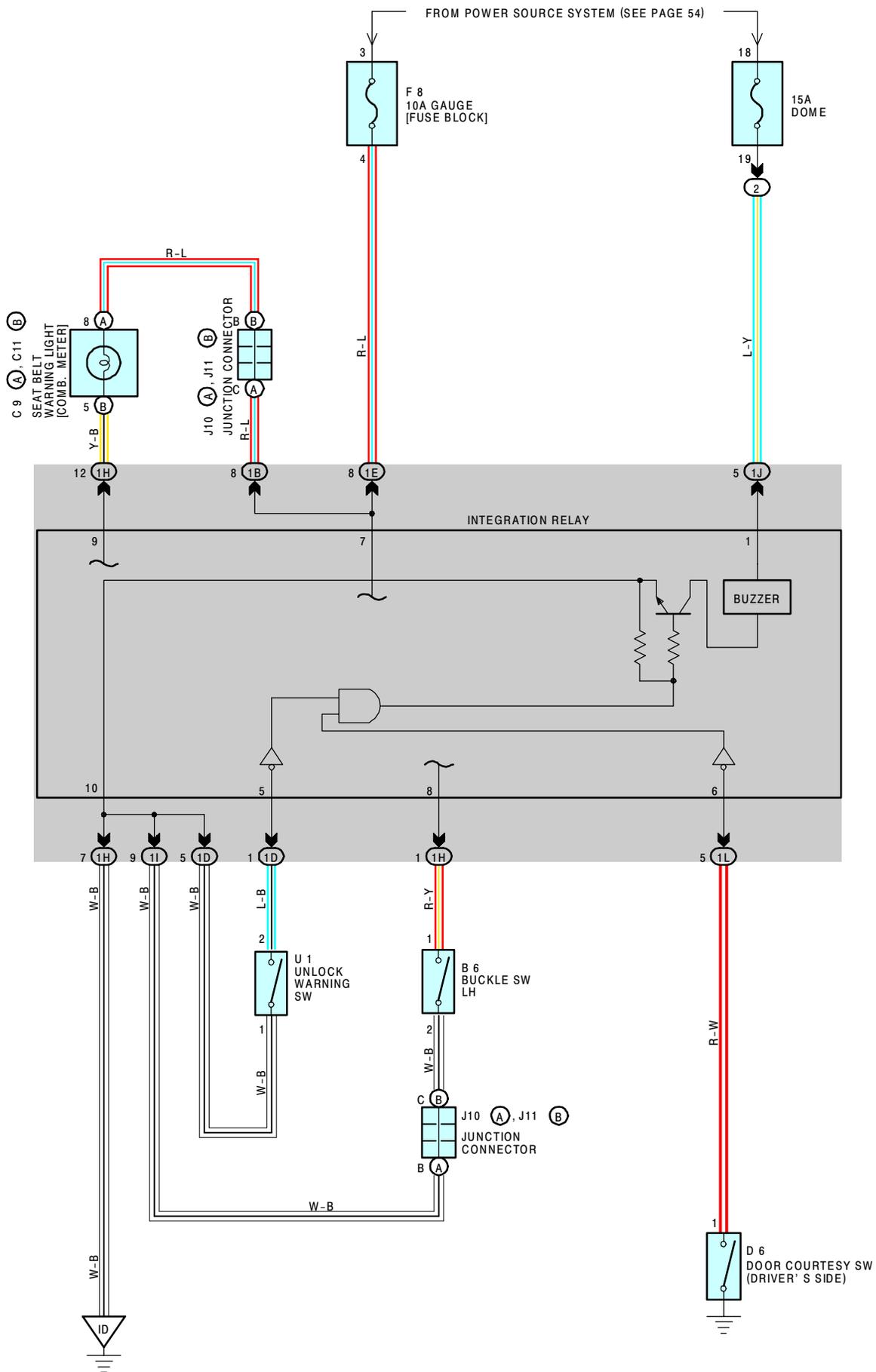
J11 (B) GRAY



(HINT : SEE PAGE 7)



# UNLOCK AND SEAT BELT WARNING



## SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 1** OF THE INTEGRATION RELAY THROUGH THE **DOM**E FUSE.

### 1. SEAT BELT WARNING SYSTEM

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE **GAUGE** FUSE TO **TERMINAL 7** OF THE INTEGRATION RELAY. AT THE SAME TIME, CURRENT FLOWS TO **TERMINAL 9** OF THE RELAY FROM THE **GAUGE** FUSE THROUGH THE SEAT BELT WARNING LIGHT. THIS CURRENT ACTIVATES THE INTEGRATION RELAY AND THE CURRENT FLOWING THROUGH THE WARNING LIGHT FLOWS FROM **TERMINAL 9** OF THE RELAY → **TERMINAL 10** → **GROUND**, CAUSING THE WARNING LIGHT TO LIGHT UP. A BUCKLE SW OFF SIGNAL IS INPUT TO **TERMINAL 8** OF THE RELAY, THE CURRENT FLOWING TO **TERMINAL 7** OF THE RELAY FLOWS FROM **TERMINAL 10** → **GROUND** AND THE SEAT BELT WARNING BUZZER SOUNDS FOR APPROX. **4-8** SECONDS. HOWEVER, IF THE SEAT BELT IS PUT ON DURING THIS PERIOD (WHILE THE BUZZER IS SOUNDING), SIGNAL INPUT TO **TERMINAL 8** OF RELAY STOPS AND THE CURRENT FLOW FROM **TERMINAL 7** OF THE RELAY → **TERMINAL 10** → **GROUND** IS CUT, CAUSING THE BUZZER TO STOP.

### 2. UNLOCK WARNING SYSTEM

WITH THE IGNITION KEY INSERTED IN THE KEY CYLINDER (UNLOCK SW ON), THE IGNITION SW STILL OFF AND DRIVER'S DOOR OPEN (DOOR COURTESY SW ON), WHEN A SIGNAL IS INPUT TO **TERMINAL 6** OF THE RELAY, THE INTEGRATION RELAY OPERATES, CURRENT FLOWS FROM **TERMINAL 7** OF THE RELAY → **TERMINAL 10** → **GROUND** AND UNLOCK WARNING BUZZER SOUNDS.

## SERVICE HINTS

### B 6 BUCKLE SW LH

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

### D 6 DOOR COURTESY SW (DRIVER'S SIDE)

1-GROUND : CLOSED WITH LH DOOR OPEN

### U 1 UNLOCK WARNING SW

10-9 : CLOSED WITH IGNITION KEY IN CYLINDER

### INTEGRATION RELAY

10-GROUND : ALWAYS CONTINUITY

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

5-GROUND : CONTINUITY WITH IGNITION KEY IN CYLINDER

8-GROUND : CONTINUITY WITH THE DRIVER'S SEAT BELT IN USE

9-GROUND : 0 VOLTS WITH THE IGNITION SW ON AND THE BUCKLE SW LH OFF

1-GROUND : ALWAYS APPROX. 12 VOLTS

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>B 6</b>	<a href="#">30</a>	<b>D 6</b>	<a href="#">32 (2-DOOR)</a> , <a href="#">33 (4-DOOR)</a>	<b>J11</b>   <b>B</b>	<a href="#">31</a>
<b>C 9</b>   <b>A</b>	<a href="#">30</a>	<b>F 8</b>	<a href="#">31</a>	<b>U 1</b>	<a href="#">31</a>
<b>C11</b>   <b>B</b>	<a href="#">30</a>	<b>J10</b>   <b>A</b>	<a href="#">31</a>		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
<b>2</b>	<a href="#">23</a>	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1B</b>	<a href="#">20</a>	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1D</b>		
<b>1E</b>	<a href="#">20</a>	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1H</b>	<a href="#">20</a>	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1I</b>		
<b>1J</b>		
<b>1L</b>	<a href="#">20</a>	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

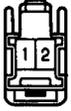
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>ID</b>	<a href="#">36</a>	LEFT KICK PANEL

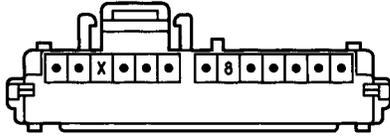


# UNLOCK AND SEAT BELT WARNING

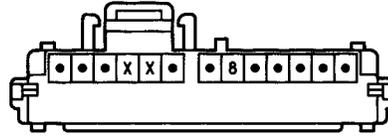
B 6 GRAY



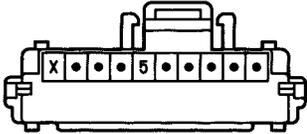
(A/T) C 9 (A) BROWN



(M/T) C 9 (A) BROWN



C11 (B) GRAY



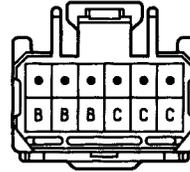
D 6



F 8

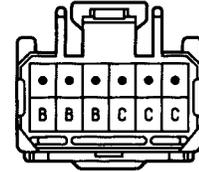
(SEE PAGE 26)

J10 (A) GRAY



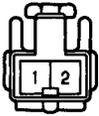
(HINT:SEE PAGE 7)

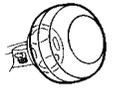
J11 (B) GRAY



(HINT:SEE PAGE 7)

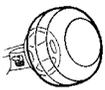
U 1 BLACK





**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.

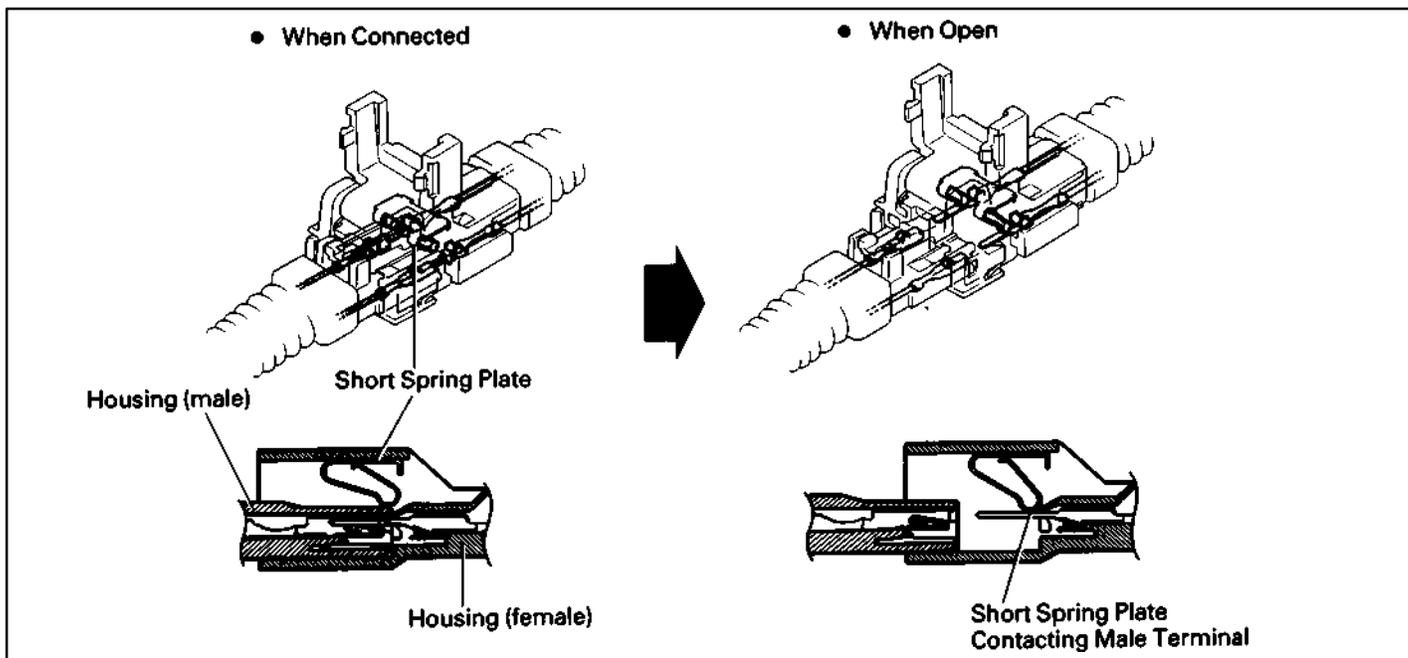
- Malfunction symptoms of the supplemental restraint system are difficult to confirm, so the diagnostic trouble codes become the most important source of information when troubleshooting.  
When troubleshooting the supplemental restraint system, always inspect the diagnostic trouble codes before disconnecting the battery.
- Work must be started after 90 seconds from the time the ignition SW is turned 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, the memory of the clock and audio systems will be canceled. 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 parts, replace them with new parts.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, airbag sensor assembly.
- Before repairing the body, remove the airbag sensor 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 center airbag sensor assembly is damaged or not, decide whether or not to reuse it. (See the Repair Manual for the method for evaluating the center 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 instrument panel 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.
- 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

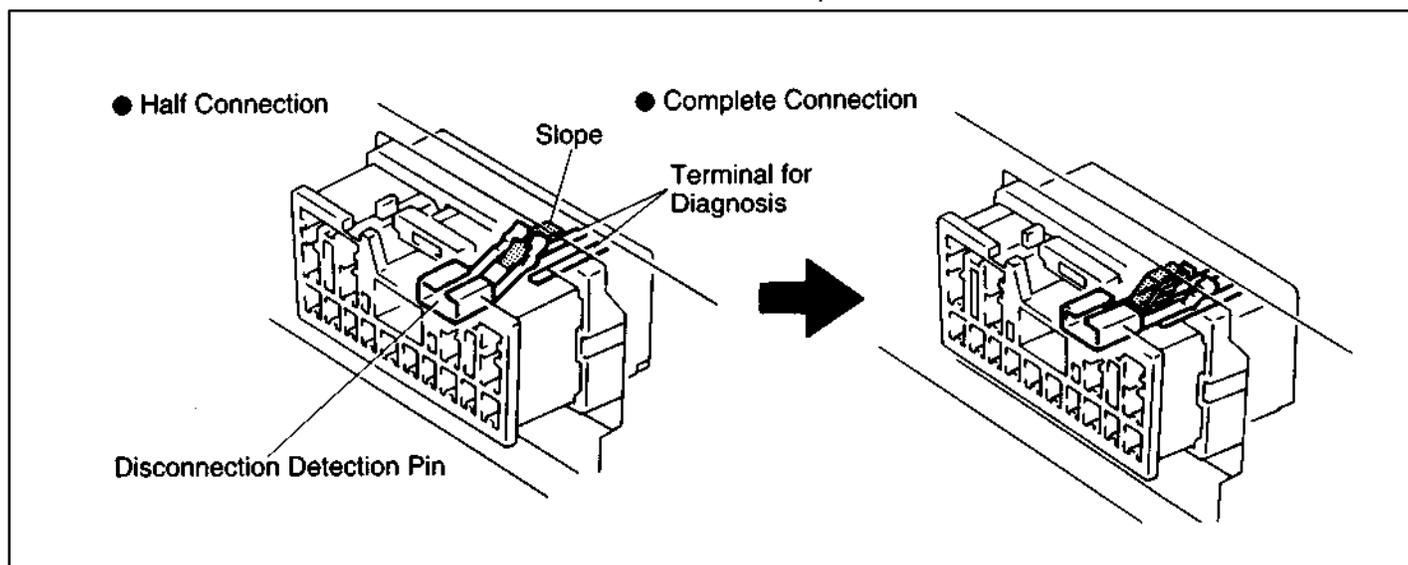
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.



2. ELECTRICAL CONNECTION CHECK MECHANISM

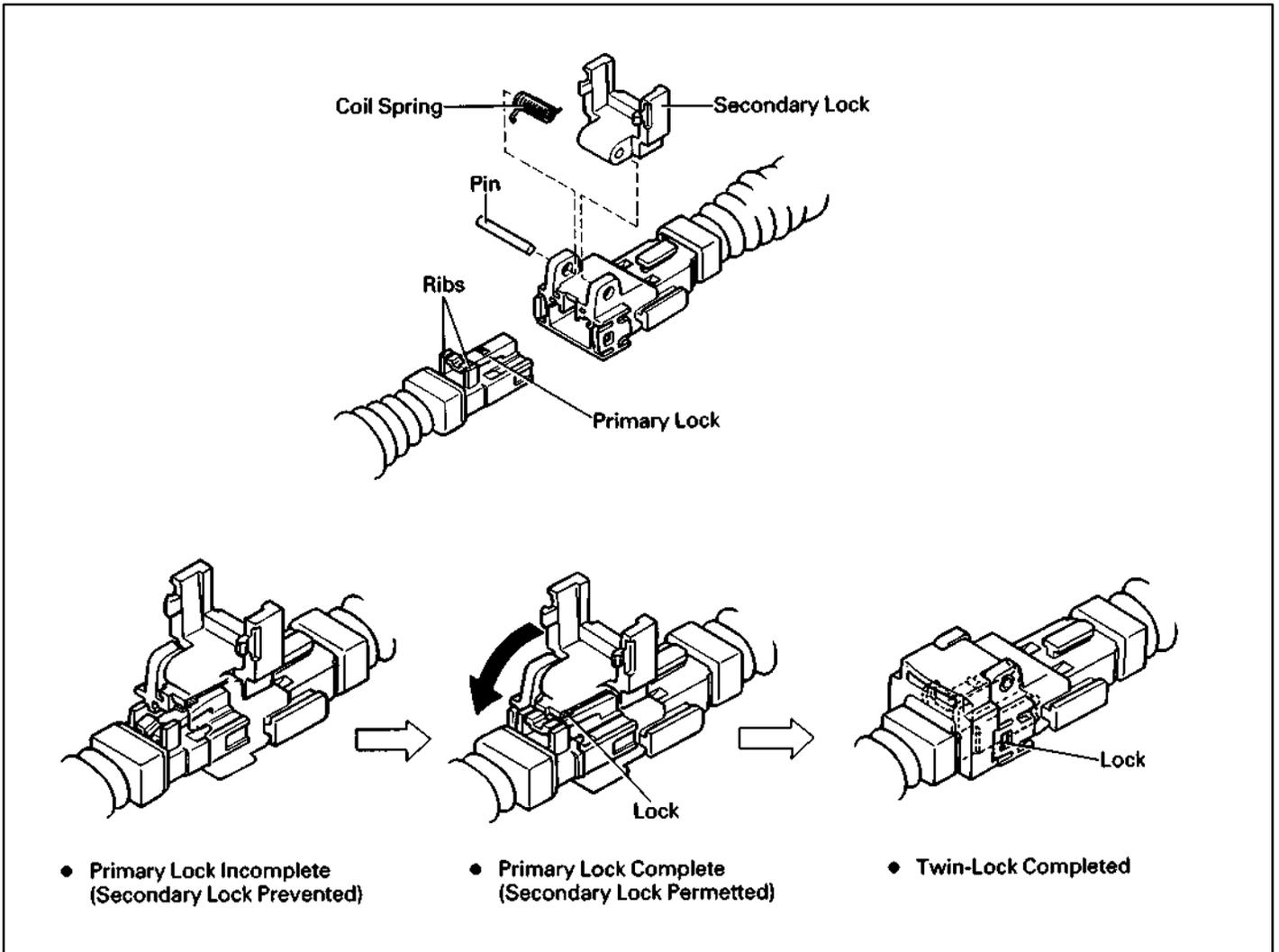
This mechanism is designed to electrically check if connectors are connected correctly and completely.

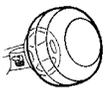
The electrical connection check mechanism is designed so that the disconnection detection pin connects with the diagnosis terminals when the connector housing lock is in the locked position.



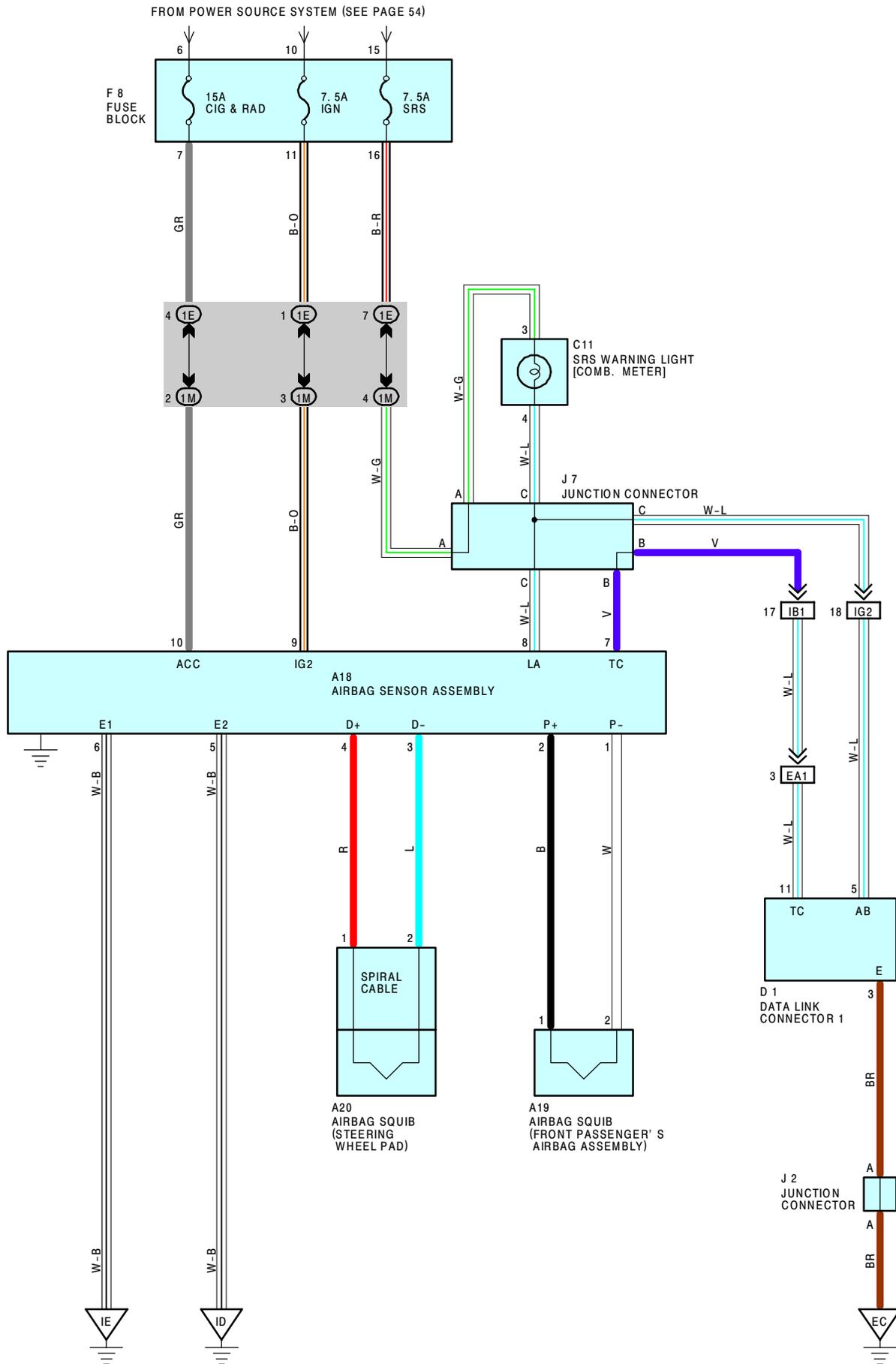
### 3. CONNECTOR TWIN-LOCK MECHANISM

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.





# SRS



## 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, CURRENT FROM THE **CIG & RAD** FUSE FLOWS TO **TERMINAL 10** OF THE AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE **IGN** FUSE TO **TERMINAL 9**.

IF AN ACCIDENT OCCURS WHILE DRIVING, WHEN THE FRONTAL IMPACT EXCEEDS A SET LEVEL, CURRENT FROM THE **CIG & RAD** OR **IGN** FUSE FLOWS TO **TERMINALS 4** AND **2** OF THE AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → **TERMINAL 2** → **TERMINALS 3** AND **1** OF THE AIRBAG SENSOR ASSEMBLY → **TERMINAL 5** OR **TERMINAL 6** OR **BODY GROUND** → **GROUND**, SO THAT CURRENT FLOWS TO THE AIRBAG SQUIBS AND CAUSES IT TO OPERATE.

THE AIRBAG STORED INSIDE THE STEERING WHEEL PAD IS INSTANTANEOUSLY EXPANDED TO SOFTEN THE SHOCK TO THE DRIVER.

THE AIRBAG STORED INSIDE THE PASSENGER'S INSTRUMENT PANEL IS INSTANTANEOUSLY EXPANDED TO SOFTEN THE SHOCK TO THE PASSENGER.

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>A18</b>	30	<b>C11</b>	30	<b>J 2</b>	31
<b>A19</b>	30	<b>D 1</b>	28	<b>J 7</b>	31
<b>A20</b>	30	<b>F 8</b>	31		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

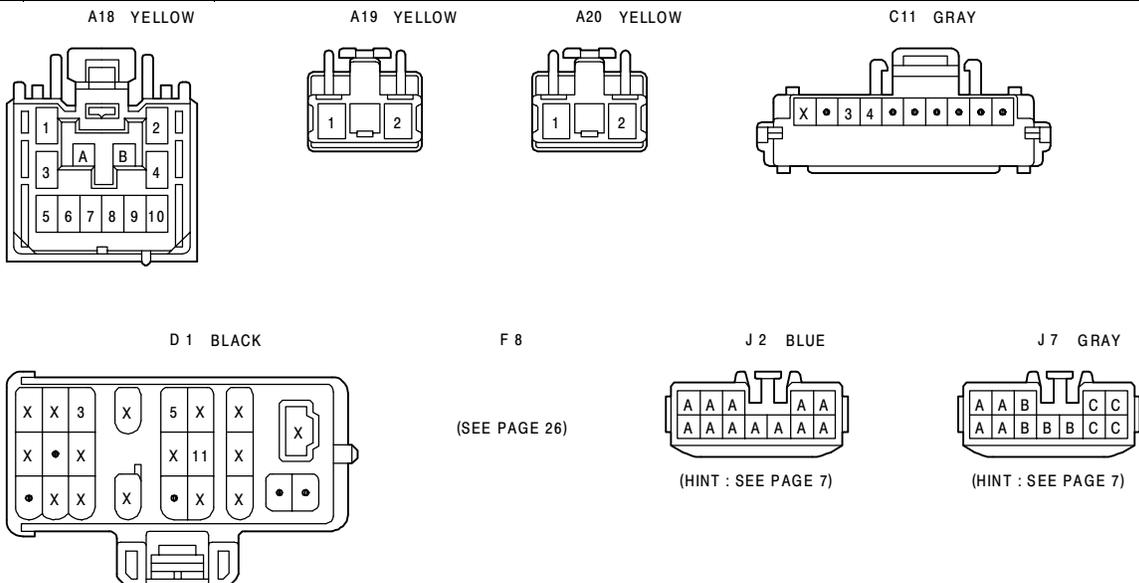
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>IE</b>	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>IM</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>EA1</b>	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
<b>IB1</b>	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>IG2</b>	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

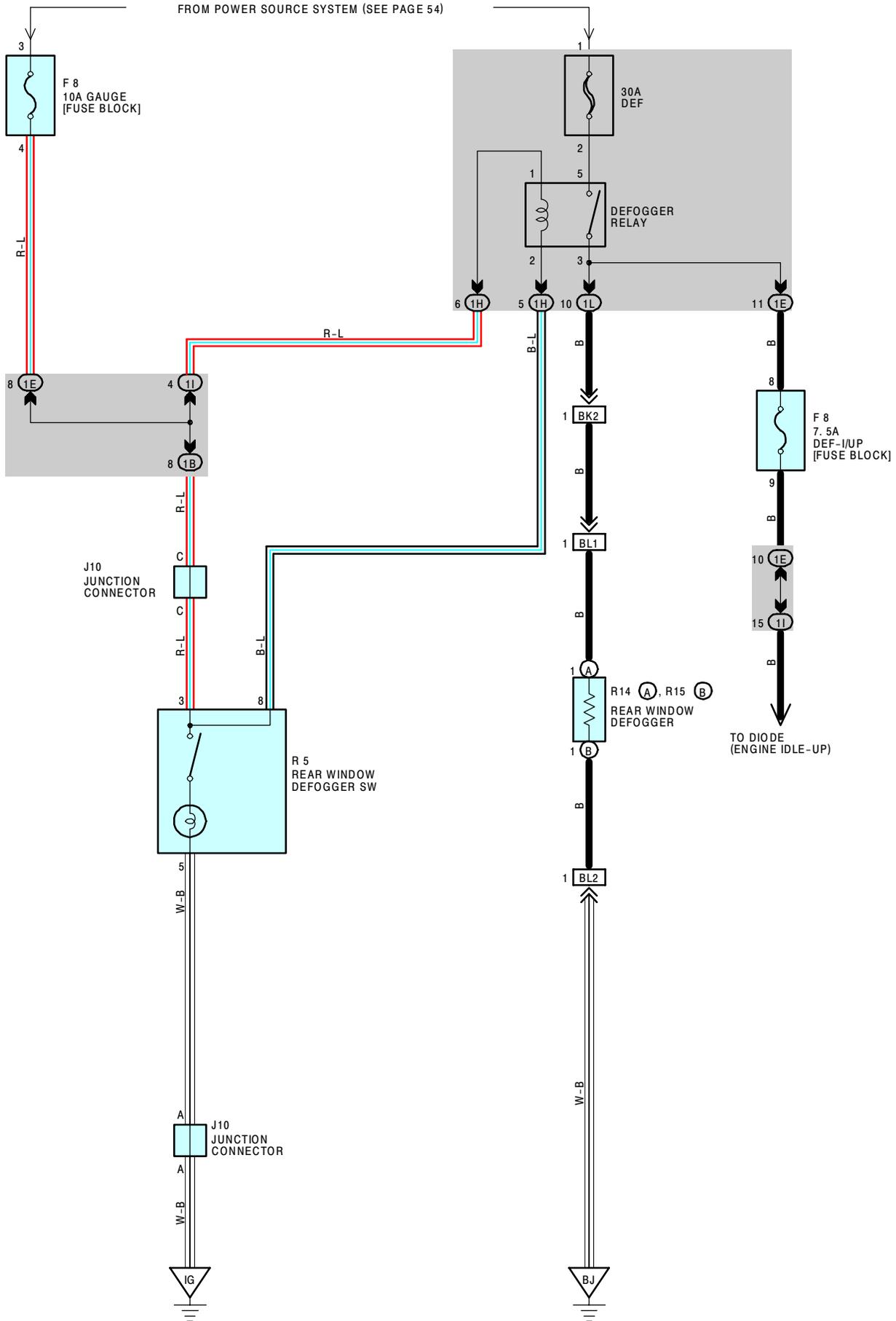
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>EC</b>	34	INTAKE MANIFOLD
<b>ID</b>	36	LEFT KICK PANEL
<b>IE</b>	36	INSTRUMENT PANEL BRACE LH





# REAR WINDOW DEFOGGER



## SERVICE HINTS

### R 5 REAR WINDOW DEFOGGER SW

3-GROUND ; APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION  
 8-5 : CLOSED WITH REAR WINDOW DEFOGGER SW AT **ON** POSITION  
 5-GROUND : ALWAYS CONTINUITY

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>F 8</b>	31	<b>R 5</b>	31	<b>R15</b>	<b>B</b> 32 (2-DOOR), 33 (4-DOOR)
<b>J10</b>	31	<b>R14</b>	A 32 (2-DOOR), 33 (4-DOOR)		

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1B</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1E</b>	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1H</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1I</b>		
<b>1L</b>	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>BK2</b>	40 (2-DOOR)	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
	42 (4-DOOR)	
<b>BL1</b>	40 (2-DOOR)	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR RIGHT)
	42 (4-DOOR)	
<b>BL2</b>	40-(2-DOOR)	REAR WINDOW NO. 1 WIRE AND BACK DOOR NO. 1 WIRE (BACK DOOR LEFT)
	42 (4-DOOR)	

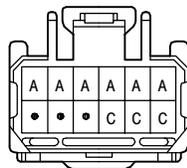
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>IG</b>	36	RIGHT KICK PANEL
<b>BJ</b>	38 (2-DOOR)	BACK DOOR LEFT
	40 (4-DOOR)	

F 8

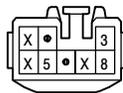
(SEE PAGE 26)

J10 GRAY

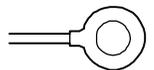


(HINT : SEE PAGE 7)

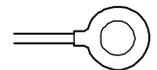
R 5 BLACK



R14 (A)



R15 (B)

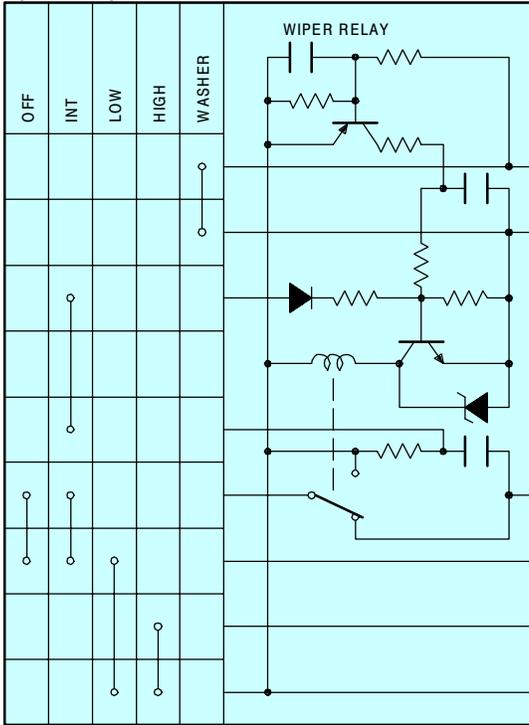




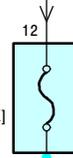
# FRONT WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 54)

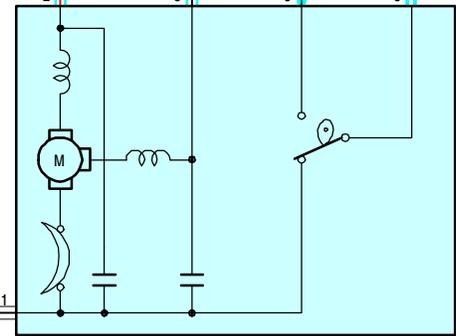
C14  
FRONT WIPER AND WASHER SW  
[COMB. SW]



F 8  
20A WIPER  
[FUSE BLOCK]



F 5  
FRONT WASHER  
MOTOR



F 6  
FRONT WIPER  
MOTOR



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW, **TERMINAL 2** OF THE FRONT WASHER MOTOR AND **TERMINAL 6** OF THE FRONT WIPER MOTOR THROUGH THE **WIPER FUSE**.

### 1. LOW SPEED POSITION

WITH WIPER SW TURNED TO **LOW** POSITION, THE CURRENT FLOWS FROM **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → WIPER MOTOR → **TERMINAL 1** → TO **GROUND** AND CAUSES THE FRONT WIPER MOTOR TO RUN AT LOW SPEED.

### 2. HIGH SPEED POSITION

WITH WIPER SW TURNED TO **HIGH** POSITION, THE CURRENT FLOWS FROM **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 8** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → WIPER MOTOR → **TERMINAL 1** → TO **GROUND** AND CAUSES THE FRONT WIPER MOTOR TO RUN AT HIGH SPEED.

### 3. INT POSITION

WITH WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS FROM **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 2** → TO **GROUND**. THIS FLOW OF CURRENT OPERATES THE INTERMITTENT CIRCUIT AND THE CURRENT FLOWS FROM **TERMINAL 17** OF THE WIPER AND FRONT WASHER SW → **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → WIPER MOTOR → **TERMINAL 1** → TO **GROUND** AND OPERATES THE WIPER.

THE INTERMITTENT OPERATION IS CONTROLLED BY A CONDENSER'S CHARGED AND DISCHARGED FUNCTION INSTALLED IN THE RELAY AND THE INTERMITTENT TIME IS CONTROLLED BY A TIME CONTROL SW TO CHANGE THE CHARGING TIME OF THE CONDENSER.

### 4. WASHER CONTINUOUS OPERATION (W/ INT CONTROL)

WITH WASHER SW TURNED TO ON, THE CURRENT FLOWS FROM **TERMINAL 2** OF THE FRONT WASHER MOTOR → **TERMINAL 1** → **TERMINAL 11** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 2** → TO **GROUND** AND CAUSES TO THE FRONT WASHER MOTOR TO RUN. AND THE WINDOW WASHER EMITS A WATER SPRAY. THIS CAUSES THE CURRENT TO FLOW TO WASHER CONTINUOUS OPERATION CIRCUIT IN **TERMINAL 17** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 3** OF THE FRONT WIPER MOTOR → WIPER MOTOR → **TERMINAL 1** → TO **GROUND** AND OPERATES THE WIPER.

## SERVICE HINTS

### C14 FRONT WIPER AND WASHER SW [COMB. SW]

2-GROUND : ALWAYS CONTINUITY

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

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

: APPROX. 12 VOLTS 2 TO 12 SECONDS INTERMITTENTLY WITH THE WIPER AND WASHER SW AT **INT** POSITION

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

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

### F6 FRONT WIPER MOTOR

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



# FRONT WIPER AND WASHER

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	30	F 6	28	J10	31
F 5	28	F 8	31		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1F	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1J		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)

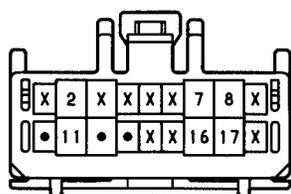
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
IG	36	RIGHT KICK PANEL

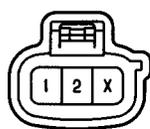
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE			

C13 BLACK



F 5 BLACK



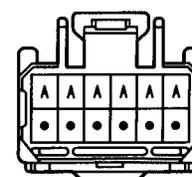
F 6 GRAY



F 8

(SEE PAGE 26)

J10 GRAY

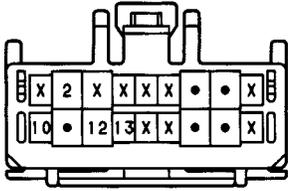


(HINT:SEE PAGE 7)

# REAR WIPER AND WASHER



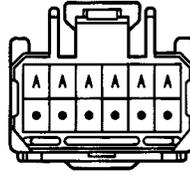
C14 BLACK



F 8

(SEE PAGE 26)

J10 GRAY

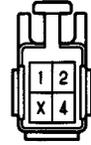


(HINT:SEE PAGE 7)

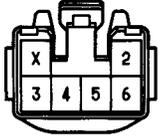
R 2 BLACK



R16



R17





## SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS TO **TERMINAL 2** OF THE REAR WASHER MOTOR, **TERMINAL 3** OF THE REAR WIPER RELAY AND **TERMINAL 1** OF THE REAR WIPER MOTOR THROUGH THE **WIPER FUSE**.

### 1. REAR WIPER NORMAL OPERATION

WITH THE IGNITION SW TURNED ON AND REAR WIPER AND WASHER SW TURNED ON, THE CURRENT FLOWING TO **TERMINAL 3** OF THE REAR WIPER RELAY FLOWS TO **TERMINAL 6** OF THE RELAY → **TERMINAL 10** OF THE REAR WIPER AND WASHER SW → **TERMINAL 2** → TO **GROUND**. THUS, THE RELAY COIL IS ACTIVATED AND THE CURRENT TO **TERMINAL 3** OF THE RELAY FLOWS TO **TERMINAL 4** → **TERMINAL 4** OF THE REAR WIPER MOTOR → MOTOR → TO **GROUND** AND CAUSES THE MOTOR TO OPERATE THE WIPER.

### 2. REAR WIPER INTERMITTENT OPERATION

WHEN THE IGNITION SW IS ON AND THE REAR WIPER AND WASHER SW IS TURNED TO **INT** POSITION, CURRENT FLOWING TO **TERMINAL 3** OF THE REAR WIPER RELAY FLOWS TO **TERMINAL 2** OF THE RELAY → **TERMINAL 13** OF THE REAR WIPER AND WASHER SW → **TERMINAL 2** → **GROUND**.

THIS CAUSES THE MOTOR TO OPERATE (THE POINT CHANGES) AND THE INTERMITTENT CIRCUIT OF THE RELAY OPERATES. INTERMITTENT OPERATION OF THE CIRCUIT IS CONTROLLED BY THE CHARGING AND DISCHARGING OF THE CONDENSER INSTALLED INSIDE THE RELAY.

### 3. WASHER OPERATION

WITH THE IGNITION SW TURNED ON AND THE REAR WIPER AND WASHER SW TURNED TO **ON** POSITION, WHEN THE WIPER SW IS TURNED FURTHER, THE CURRENT FLOWING TO **TERMINAL 2** OF THE REAR WASHER MOTOR FLOWS TO **TERMINAL 1** OF THE MOTOR → **TERMINAL 12** OF THE REAR WIPER AND WASHER SW → **TERMINAL 2** → TO **GROUND** SO THAT THE WASHER MOTOR ROTATES AND THE WINDOW WASHER EJECTS THE SPRAY, ONLY WHILE THE SWITCH IS FULLY TURNED.

WHEN THE WIPER SW IS OFF AND THEN TURNED TO WASHER ON (WIPER OFF SIDE), ONLY THE WASHER OPERATES.

## SERVICE HINTS

### R 2 REAR WASHER MOTOR

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

1-GROUND : CONTINUITY WITH WASHER SW TURNED ON

### R15 REAR WIPER RELAY

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

2-GROUND : CONTINUITY WITH REAR WIPER SW **INT** POSITION

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

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>C14</b>	30	<b>J10</b>	29	<b>R16</b>	32 (2-DOOR), 33 (4-DOOR)
<b>F 8</b>	31	<b>R 2</b>	29	<b>R17</b>	32 (2-DOOR), 33 (4-DOOR)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1F</b>	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1I</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1J</b>		
<b>1L</b>	20	FLOOR WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
<b>ID1</b>	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
<b>BK1</b>	40 (2-DOOR)	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
	42 (4-DOOR)	

## ▽ : GROUND POINTS

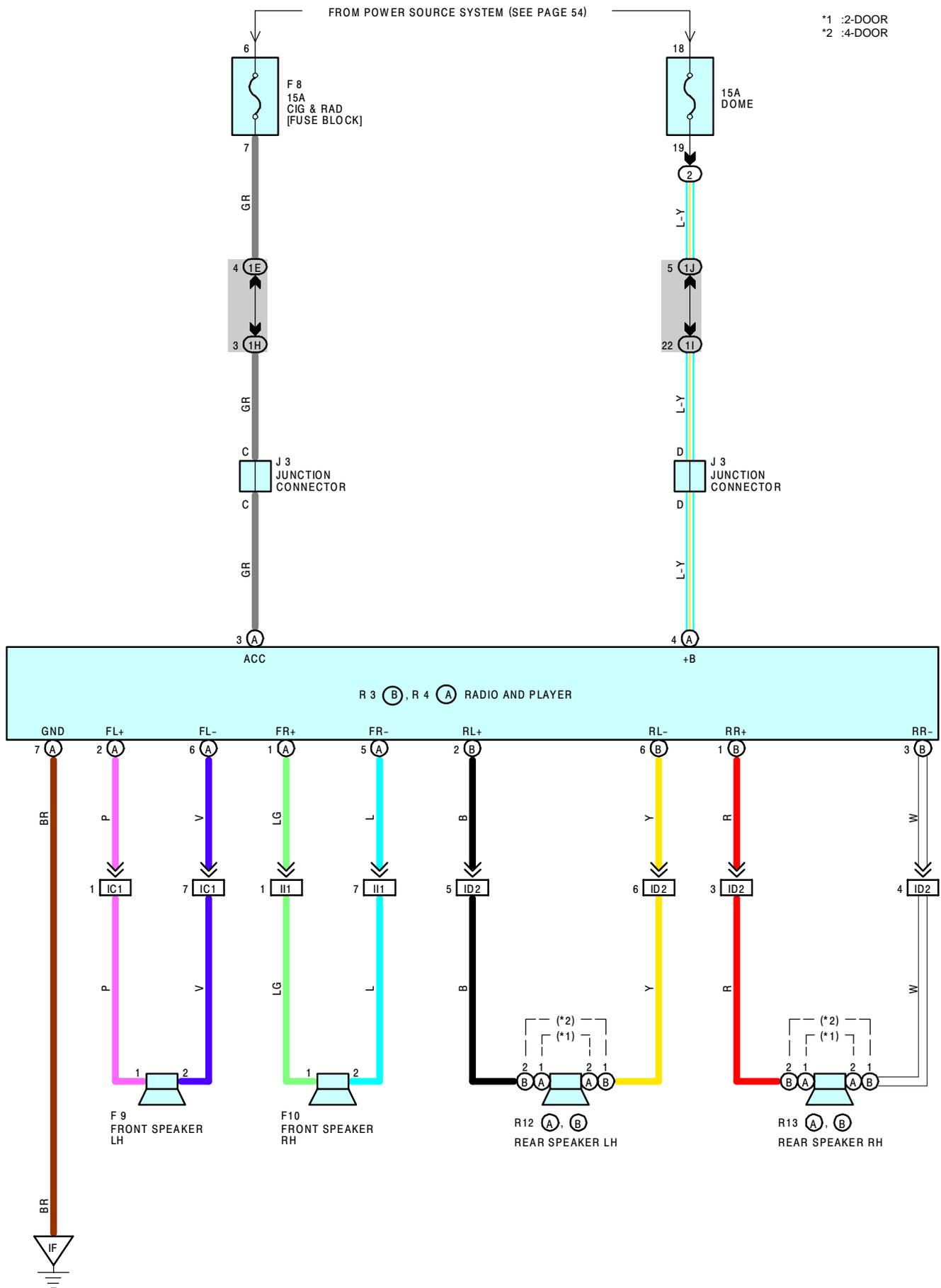
CODE	SEE PAGE	GROUND POINTS LOCATION
<b>IG</b>	36	RIGHT KICK PANEL

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
<b>E 1</b>	34	ENGINE ROOM MAIN WIRE	<b>B10</b>	42 (4-DOOR)	BACK DOOR NO. 1 WIRE
<b>B10</b>	40 (2-DOOR)	BACK DOOR NO. 1 WIRE			



# RADIO AND PLAYER



## SERVICE HINTS

### R 4 (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

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F 8	31	R 3	B 31	R13	A 32 (2-DOOR)
F 9	32 (2-DOOR), 33 (4-DOOR)	R 4	A 31		B 33 (4-DOOR)
F10	32 (2-DOOR), 33 (4-DOOR)	R12	A 32 (2-DOOR)		
J 3	31		B 33 (4-DOOR)		

### ○ : RELAY BLOCKS

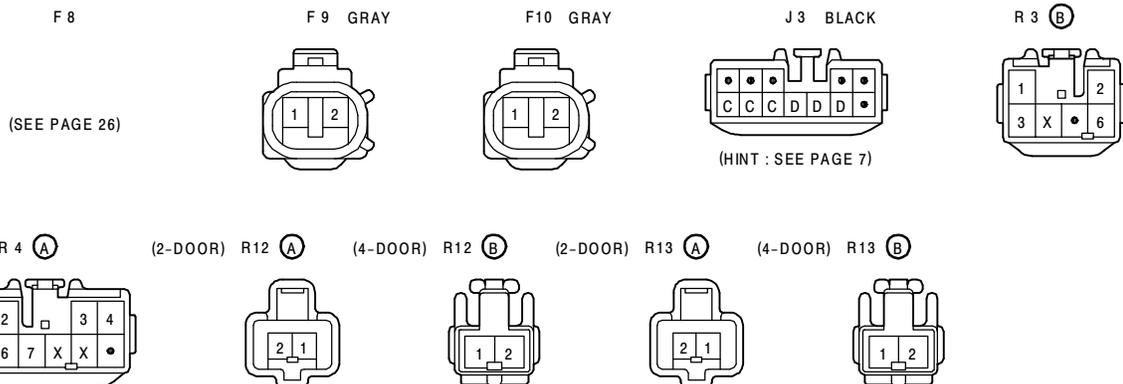
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I		
1J		

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
ID2	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
II1	38	FRONT DOOR RH AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)



## SYSTEM OUTLINE

THIS SYSTEM ELECTRONICALLY CONTROLS THE GEAR SHIFT TIMING, LOCK-UP TIMING, THE CLUTCH AND BRAKE HYDRAULIC PRESSURE, AND THE ENGINE TORQUE DURING SHIFTING TO ACHIEVE OPTIMUM SHIFT FEELING.

IN ACCORDING TO THE VEHICLE DRIVING CONDITIONS AND ENGINE OPERATING CONDITIONS AS DETECTED BY VARIOUS SENSORS.

**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 SPD** OF THE ENGINE CONTROL MODULE FROM THE SPEEDOMETER DEVOTED TO THE ELECTRONICALLY CONTROLLED TRANSMISSION. CURRENT IS THEN OUTPUT TO THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID. WHEN SHIFTING TO 1ST SPEED, CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE → **TERMINAL (A) 3** (2WD) OR **(B) 3** (4WD) OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUES TO THE NO. 1 SOLENOID CAUSES THE SHIFT.

FOR 2ND SPEED, CURRENT FLOWS FROM **TERMINAL S1** OF THE ENGINE CONTROL MODULE → **TERMINAL 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND FROM **TERMINAL S2** OF THE ENGINE CONTROL MODULE → **TERMINAL (A) 1** (2WD) OR **(B) 6** (4WD) OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUES TO SOLENOIDS NO. 1 AND NO. 2 CAUSES THE SHIFT.

FOR 3RD SPEED, THERE IS NO CONTINUOUS TO NO. 1 SOLENOID, ONLY TO NO. 2 CAUSING THE SHIFT.

SHIFTING INTO 4TH SPEED (OVERDRIVE) TAKES PLACE WHEN THERE IS NO CONTINUOUS 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, CURRENT FLOWS FROM **TERMINAL SL** OF THE ENGINE CONTROL MODULE → **TERMINAL (A) 2** (2WD) OR **(B) 5** (4WD) OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, CONTINUES 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 B/K** OF THE ENGINE CONTROL MODULE, THE ENGINE CONTROL MODULE OPERATES AND CURRENT 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 FLOWING THROUGH 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 ENGINE CONTROL MODULE OPERATION PREVENTS SHIFT INTO OVERDRIVE.

## 5. CENTER DIFFERENTIAL CLUTCH CONTROL (4WD)

THE CENTER DIFFERENTIAL CLUTCH CONTROL USES A LINEAR SOLENOID TYPE VALVE (SOLENOID VALVE SLD) TO CONTROL THE CENTER DIFFERENTIAL CLUTCH. BY CONTROLLING THE FLUID PRESSURE, THE LIMITED SLIP DIFFERENTIAL EFFECT OF THE CENTER DIFFERENTIAL CAN ALWAYS BE MAINTAINED AT THE OPTIMUM FOR THE CURRENT DRIVING CONDITIONS TO INCREASE ROAD-HOLDING ABILITY.

SOLENOID VALVE SLD OPENS AND CLOSSES IN RESPONSE TO SIGNALS FROM THE ENGINE CONTROL MODULE. THUS THE SOLENOID MODULATOR VALVE MAINTAINS A CONSTANT FLUID PRESSURE FOR OPERATION OF THE CENTER DIFFERENTIAL CLUTCH CONTROL VALVE AND CENTER DIFFERENTIAL CLUTCH.

### \* NORMAL DRIVING

SOLENOID VALVE SLD OPENS AND CLOSSES IN RESPONSE TO THE THROTTLE OPENING ANGLE TO CONTROL THE FLUID PRESSURE OPERATING ON THE CENTER DIFFERENTIAL CLUTCH. WHEN THE VEHICLE TAKES OFF IN FIRST GEAR WITH A LARGE THROTTLE OPENING ANGLE, THE FLUID PRESSURE IS KEPT HIGH. SO EVEN IF THE VEHICLE TAKES OFF SUDDENLY OR THE ROAD SURFACE IS SLIPPERY, SMOOTH, RELIABLE ACCELERATION IS POSSIBLE.

### \* SLIPPING

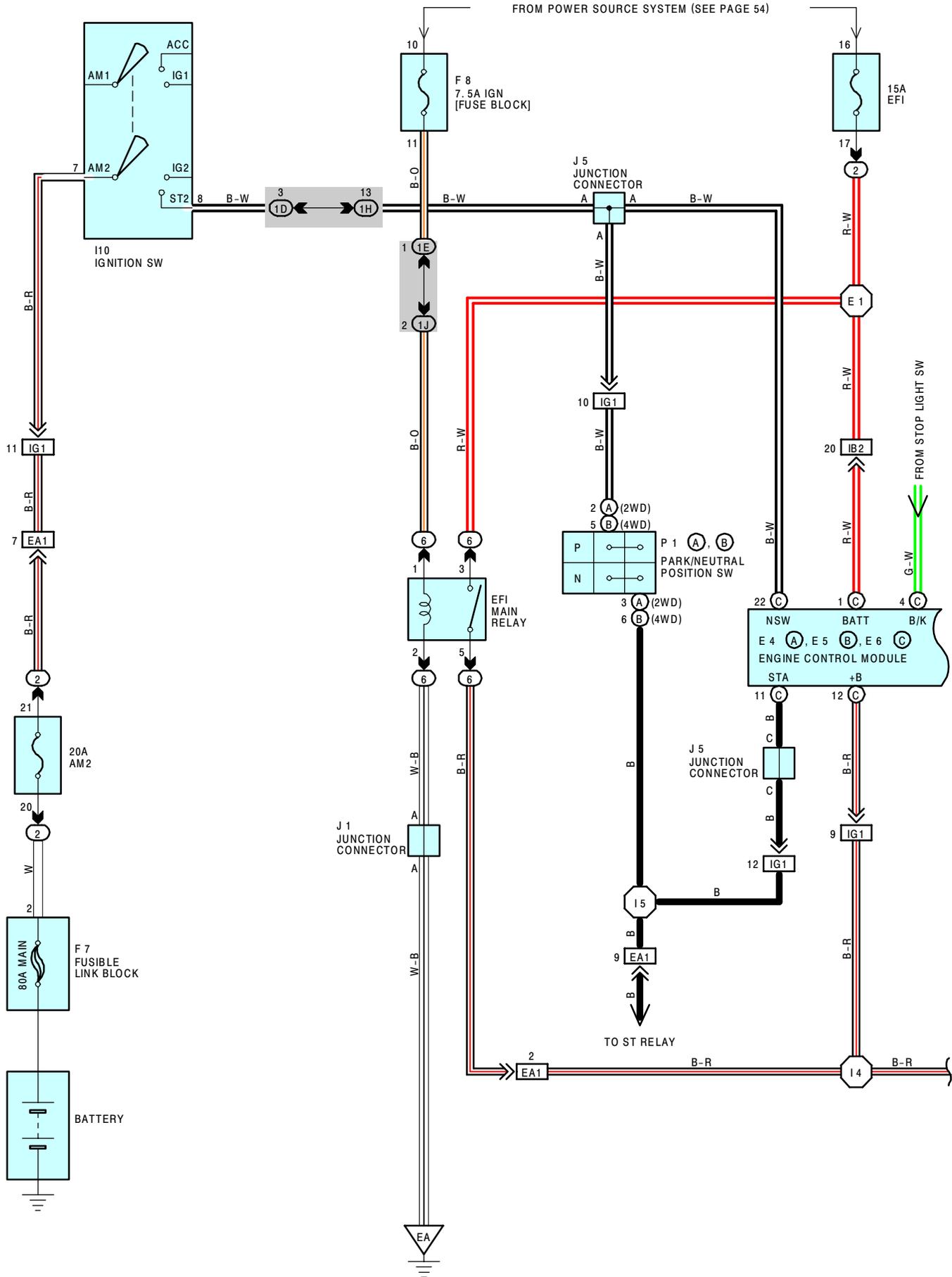
WHEN A LARGE DIFFERENCE OCCURS BETWEEN THE FRONT WHEEL SPEED AND REAR WHEEL SPEED AT LOW SPEEDS, SOLENOID VALVE SLD IS FULLY CLOSED TO APPLY HIGH FLUID PRESSURE TO THE CENTER DIFFERENTIAL CLUTCH AND PROVIDE A LARGE LIMITED SLIP DIFFERENTIAL EFFECT.

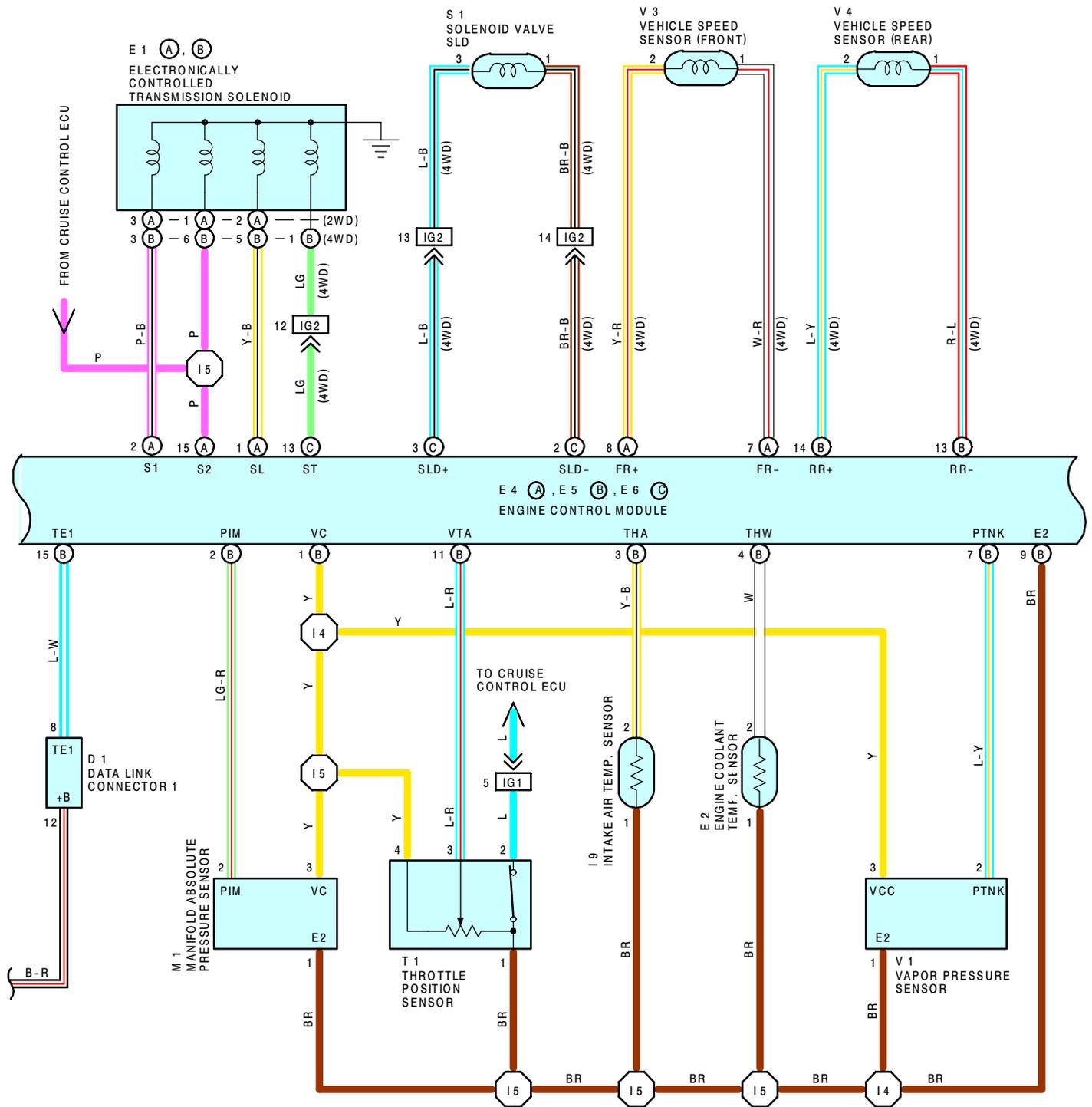
### \* WIDE CORNERING

WHEN DIFFERENCES ARISE BETWEEN THE FRONT WHEEL SPEED AND REAR WHEEL SPEED DUE TO DIFFERENCES IN THE TURNING RADIUS DURING CORNERING AT LOW SPEEDS, SOLENOID VALVE SLD IS FULLY OPEN TO APPLY A WEAK LIMITED SLIP DIFFERENTIAL EFFECT AND PERMIT SMOOTH CORNERING.

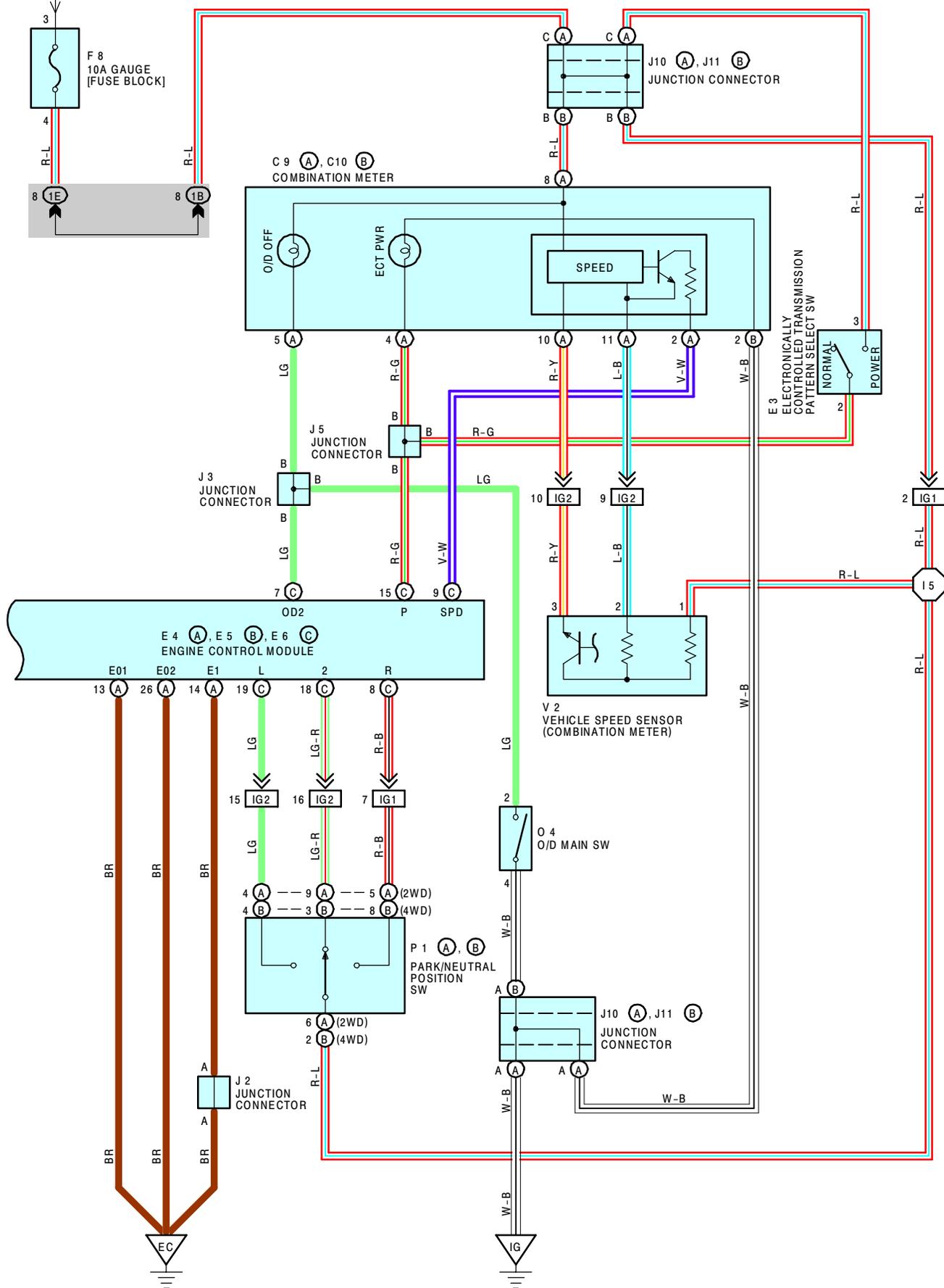
## 6. ELECTRONICALLY CONTROLLED TRANSMISSION PATTERN SELECT SW

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





FROM POWER SOURCE SYSTEM (SEE PAGE 54)



## SERVICE HINTS

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

BATT	-E1	: 9.0-14.0 VOLTS (ALWAYS)
+B	-E1	: 9.0-14.0 VOLTS (IGNITION SW ON)
VTA	-E2	: 3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
PIM	-E2	: 3.3-3.9 VOLTS (IGNITION SW AT ON POSITION)
VC	-E2	: 4.5-5.5 VOLTS (IGNITION SW ON)
SPD	-E2	: 4.5-5.5 VOLTS (IGNITION SW AT ON POSITION)
THW	-E2	: 0.2-1.0 VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C (176°F))
B/K	-E1	: 9.0-14.0 VOLTS (BRAKE PEDAL DEPRESS)
S1, S2	-E1	: 9.0-14.0 VOLTS WITH THE IGNITION SW ON (ENGINE RUNNING)
OD2	-E1	: 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
2-E1		: 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-E1		: 7.5-14.0 VOLTS WITH THE SHIFT LEVER AT L POSITION
		: 0.1.5 VOLTS WITH THE SHIFT LEVER AT EXCEPT L POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	A 30	F 7	28	M 1	29
C 10	B 30	F 8	31	O 4	31
	D 1 28	I 9	29	P 1	A 29
E 1	A 28	I 10	31		B 29
	B 28	J 1	31	S 1	29
E 2	28	J 2	31	T 1	29
E 3	31	J 3	31	V 1	29
E 4	A 31	J 5	31	V 2	29
E 5	B 31	J 10	A 31	V 3	29
E 6	C 31	J 11	B 31	V 4	29

### ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1D		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1J		

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2		

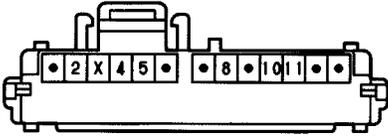
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EC	34	INTAKE MANIFOLD
IG	36	RIGHT KICK PANEL

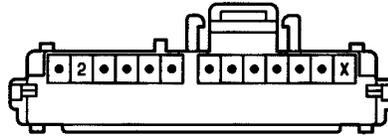
### ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	I 5	38	ENGINE WIRE
I 4	38	ENGINE WIRE			

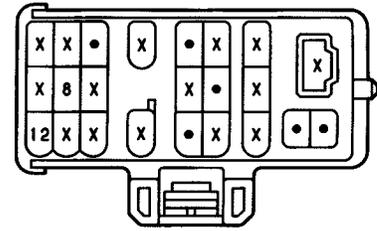
C 9 **(A)** BROWN



C10 **(B)** BLUE



D 1 BLACK



(2WD) E 1 **(A)** GRAY



(4WD) E 1 **(B)** GRAY



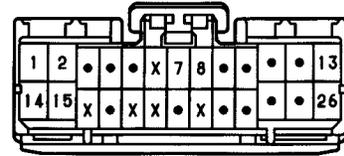
E 2 GREEN



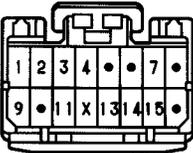
E 3 BLACK



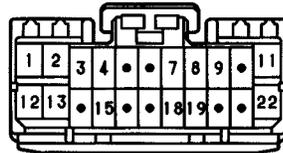
E 4 **(A)** DARK GRAY



E 5 **(B)** DARK GRAY



E 6 **(C)** DARK GRAY



F 7

(SEE PAGE 25)

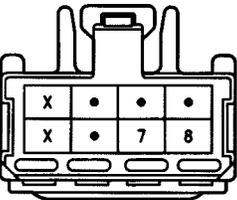
F 8

(SEE PAGE 26)

I 9 BLACK



I10



J 1 BLUE



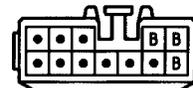
(HINT:SEE PAGE 7)

J 2 BLUE



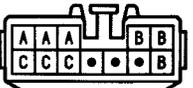
(HINT:SEE PAGE 7)

J 3 BLACK



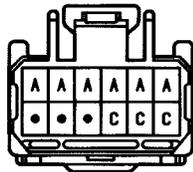
(HINT:SEE PAGE 7)

J 5 BLUE



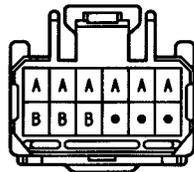
(HINT:SEE PAGE 7)

J10 **(A)** GRAY



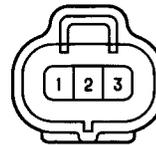
(HINT:SEE PAGE 7)

J11 **(B)** GRAY



(HINT:SEE PAGE 7)

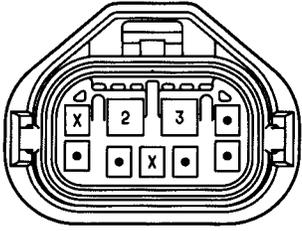
M 1 BLACK



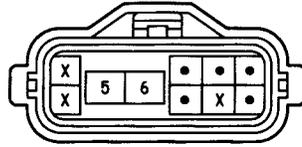
O 4 BLUE



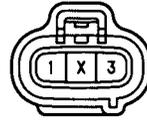
(2WD) P 1 (A) GRAY



(4WD) P 1 (B) GRAY



S 1 GRAY



T 1 BLACK



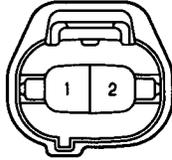
V 1 BLACK



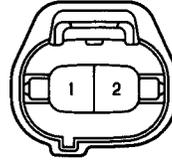
V 2 BLACK



V 3 BLACK



V 4 BLACK





## SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED TO **ACC** POSITION THE CURRENT FROM THE **CIG & RAD** FUSE FLOWS TO **TERMINAL 5** OF THE SHIFT LOCK ECU, IN THE ON POSITION, THE CURRENT FROM THE **ECU-IG** FUSE FLOWS TO **TERMINAL 1** OF THE ECU.

### 1. SHIFT LOCK MECHANISM

WITH THE IGNITION SW ON, WHEN A SIGNAL THAT THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) AND A SIGNAL THAT THE SHIFT LEVER IS PUT IN "P" POSITION (CONTINUITY BETWEEN P1 AND P OF THE SHIFT LOCK CONTROL SW) IS INPUT TO THE ECU, THE ECU OPERATES AND CURRENT FLOWS FROM **TERMINAL 1** OF THE ECU → **TERMINAL SLS+** OF THE SHIFT LOCK SOLENOID → SOLENOID → **TERMINAL SLS-** → **TERMINAL 4** OF THE ECU → **GROUND**. THIS CAUSES THE SHIFT LOCK SOLENOID TO TURN ON (PLATE STOPPER DISENGAGES) AND THE SHIFT LEVER CAN SHIFT INTO POSITION OTHER THAN THE "P".

### 2. KEY INTERLOCK MECHANISM

WITH THE IGNITION SW **ON** OR **ACC** POSITION, WHEN THE SHIFT LEVER IS PUT IN "P" POSITION (NO CONTINUITY BETWEEN P2 AND P OF SHIFT LOCK CONTROL SW), THE CURRENT FLOWING FROM **TERMINAL 6** OF THE ECU → THE KEY INTERLOCK SOLENOID IS CUT OFF. THIS CAUSES THE KEY INTERLOCK SOLENOID TO TURN OFF (LOCK LEVER DISENGAGES FROM **LOCK** POSITION) AND THE IGNITION KEY CAN BE TURNED FROM **ACC** TO **LOCK** POSITION.

## SERVICE HINTS

### S 4 SHIFT LOCK ECU

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

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

4-GROUND : ALWAYS CONTINUITY

2-GROUND : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED

### S 5 STOP LIGHT SW

2-1 : CLOSED WITH THE BRAKE PEDAL DEPRESSED

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
<b>F 8</b>	31	<b>S 4</b>	31		
<b>K 2</b>	31	<b>S 5</b>	31		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
<b>1C</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1E</b>	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1F</b>		
<b>1H</b>	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
<b>1I</b>		
<b>4C</b>	22	INSTRUMENT PANEL WIRE AND J/B NO. 4 (RIGHT KICK PANEL)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
<b>IG</b>	36	RIGHT KICK PANEL

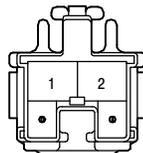
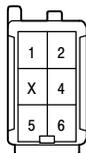
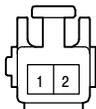
F 8

K 2

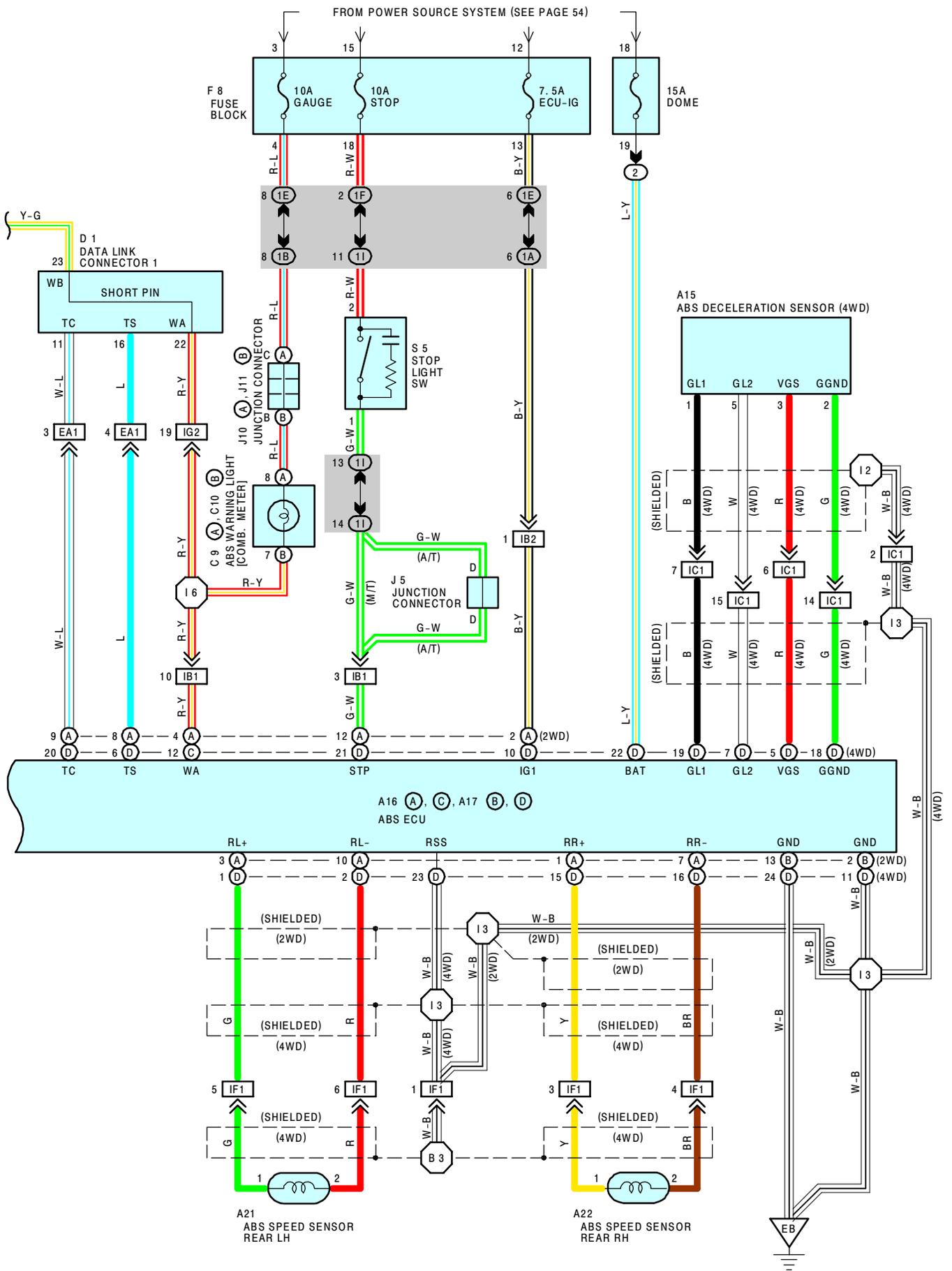
S 4

S 5 BROWN

(SEE PAGE 26)









## SYSTEM OUTLINE

THIS SYSTEM CONTROLS THE RESPECTIVE BRAKE FLUID PRESSURES ACTING ON THE DISC BRAKE CYLINDERS OF THE RIGHT FRONT WHEEL, LEFT FRONT WHEEL AND REAR WHEELS WHEN THE BRAKES ARE APPLIED IN A PANIC STOP SO THAT THE WHEELS DO NOT LOCK. THIS RESULTS IN IMPROVED DIRECTIONAL STABILITY AND STEERABILITY DURING PANIC BRAKING.

### 1. INPUT SIGNALS

#### (1) SPEED SENSOR SIGNAL

THE SPEED OF THE WHEELS IS DETECTED AND INPUT TO **TERMINALS 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 OPERATED.

#### (3) PARKING BRAKE SW SIGNAL (4 WD)

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

#### (4) DECELERATION SENSOR SIGNAL (4 WD)

LONGITUDINAL ACCELERATION IS DETECTED AND A SIGNAL IS INPUT TO THE ABS ECU.

### 2. SYSTEM OPERATION

DURING SUDDEN BRAKING THE ABS ECU, WHICH HAS SIGNALS INPUT FROM EACH SENSOR, CONTROLS THE CURRENT FLOWING TO THE SOLENOID INSIDE THE ACTUATOR AND LETS THE HYDRAULIC PRESSURE ACTING ON EACH WHEEL CYLINDER ESCAPE TO THE RESERVOIR. THE PUMP INSIDE THE ACTUATOR IS ALSO OPERATING AT THIS TIME AND IT RETURNS THE BRAKE FLUID FROM THE RESERVOIR TO THE MASTER CYLINDER, THUS PREVENTING LOCKING OF THE VEHICLE WHEELS.

IF THE ECU JUDGES THAT THE HYDRAULIC PRESSURE ACTING ON THE WHEEL CYLINDER IS INSUFFICIENT, THE CURRENT 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 INCREASE ARE REPEATED TO MAINTAIN VEHICLE STABILITY AND TO IMPROVE STEERABILITY DURING SUDDEN BRAKING.

## SERVICE HINTS

### A 8 (A), A 9 (B) ABS RELAY

(A) 1, (B) 2-GROUND : ALWAYS APPROX. 12 VOLTS

(B) 6-GROUND : ALWAYS CONTINUITY

### A10, A11 ABS SPEED SENSOR FRONT LH, RH

1-2 : APPROX. 0.92-1.22 KΩ (20°C, 68°F)

### A12, A13 ABS SPEED SENSOR REAR LH, RH

1-2 : APPROX. 0.92-1.22 KΩ (20°C, 68°F)

### A16 (A), (C), A17 (B), (D) ABS ECU

(CONNECT THE ECU CONNECTORS)

(A) 8, (D) 6-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION AND DATA LINK CONNECTOR 1 **TS-E1** NOT CONNECTED

(A) 9, (D) 20-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION AND DATA LINK CONNECTOR 1 **TC-E1** NOT CONNECTED

(B) 4, (C) 1- GROUND, (B) 1, (C) 2-GROUND : }  
(B) 5, (C) 9-GROUND, (B) 12, (C) 10-GROUND : } APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION  
(B) 11, (D) 12-GROUND, (B) 10, (D) 13-GROUND : } AND ABS WARNING LIGHT GOES OFF  
(B) 22, (D) 25-GROUND, (B) 21, (D) 26-GROUND : }

(B) 2, (D) 11-GROUND : } ALWAYS CONTINUITY  
(B) 13, (D) 24-GROUND : }

(A) 2, (D) 10-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

(A) 12, (D) 21-GROUND : APPROX. 12 VOLTS WITH BRAKE PEDAL DEPRESSED

(D) 22-GROUND : ALWAYS APPROX. 12 VOLTS

### A21, A22 ABS SPEED SENSOR REAR LH, RH

1-2 : APPROX. 0.8-1.2 KΩ (20°C, 68°F)

### P 2 PARKING BRAKE SW

1-GROUND : CLOSED WITH PARKING BRAKE LEVER PULLED UP

### S 5 STOP LIGHT SW

2-1 : CLOSED WITH BRAKE PEDAL DEPRESSED

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 6	B	28	A17	B	30	F 8	31	
A 7	A	28		D	30	J 1	31	
A 8	A	28	A21		32 (2-DOOR), 33 (4-DOOR)	J 5		31
A 9	B	28	A22		32 (2-DOOR), 33 (4-DOOR)	J10	A	31
A10		28	B 2		28	J11	B	31
A11		28	C 9	A	30	P 2		31
A15		30	C10	B	30	S 5		31
A16	A	30	D 1		28			
	C	30	F 7		28			

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1B		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1F		
1I	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1J		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IC1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	38	ENGINE ROOM MAIN WIRE AND FLOOR WIRE (LEFT KICK PANEL)
IG2	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EB	34	RADIATOR LEFT

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	I 6	38	INSTRUMENT PANEL WIRE
E 2	34	ENGINE WIRE	B 3	40 (2-DOOR)	FLOOR WIRE
I 3	38	ENGINE ROOM MAIN WIRE		42 (4-DOOR)	

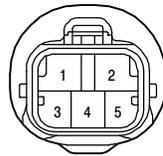


# ABS

A 6 (B) BLACK(2WD)  
GRAY (4WD)



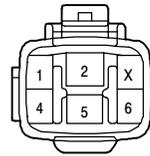
A 7 (A) BLACK(2WD)  
GRAY (4WD)



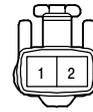
A 8 (A) GRAY



A 9 (B) GRAY



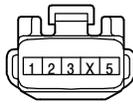
A10 GRAY



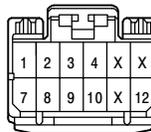
A11 GRAY



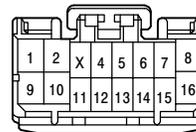
A15



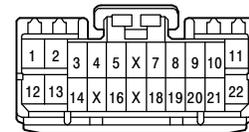
(2WD) A16 (A)



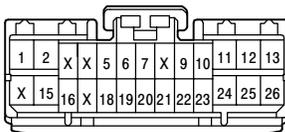
(4WD) A16 (C)



(2WD) A17 (B)



(4WD) A17 (D)



A21 GRAY



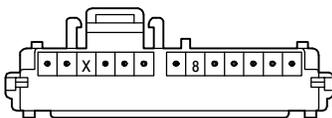
A22 GRAY



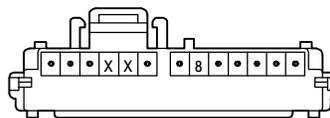
B 2 GRAY



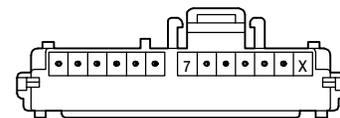
(A/T) C 9 (A) BROWN



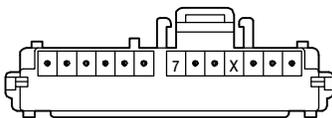
(M/T) C 9 (A) BROWN



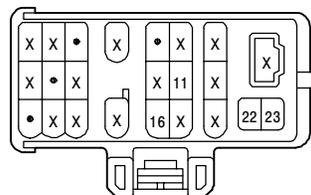
(A/T) C10 (B) BLUE



(M/T) C10 (B) BLUE



D 1 BLACK



F 7

(SEE PAGE 25)

F 8

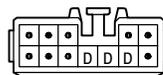
(SEE PAGE 26)

J 1 BLUE



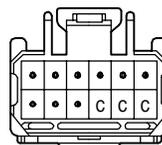
(HINT : SEE PAGE 7)

J 5 BLUE



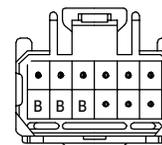
(HINT : SEE PAGE 7)

J10 (A) GRAY



(HINT : SEE PAGE 7)

J11 (B) GRAY

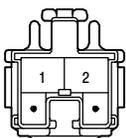


(HINT : SEE PAGE 7)

P 2 BLACK

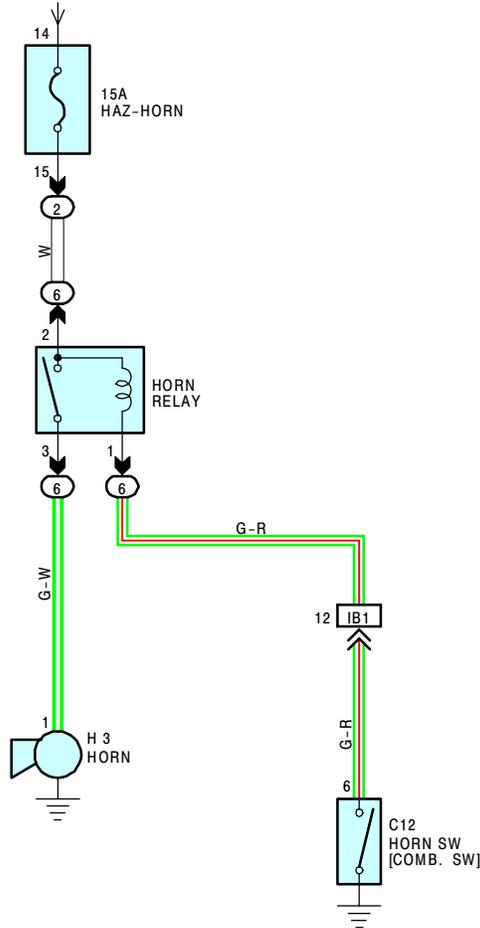


S 5 BROWN





FROM POWER SOURCE SYSTEM (SEE PAGE 54)



### SERVICE HINTS

#### HORN RELAY

**(6) 2 - (6) 3** : CLOSED WITH HORN SW ON

#### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C12	30	H 3	28		

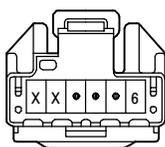
#### □ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)

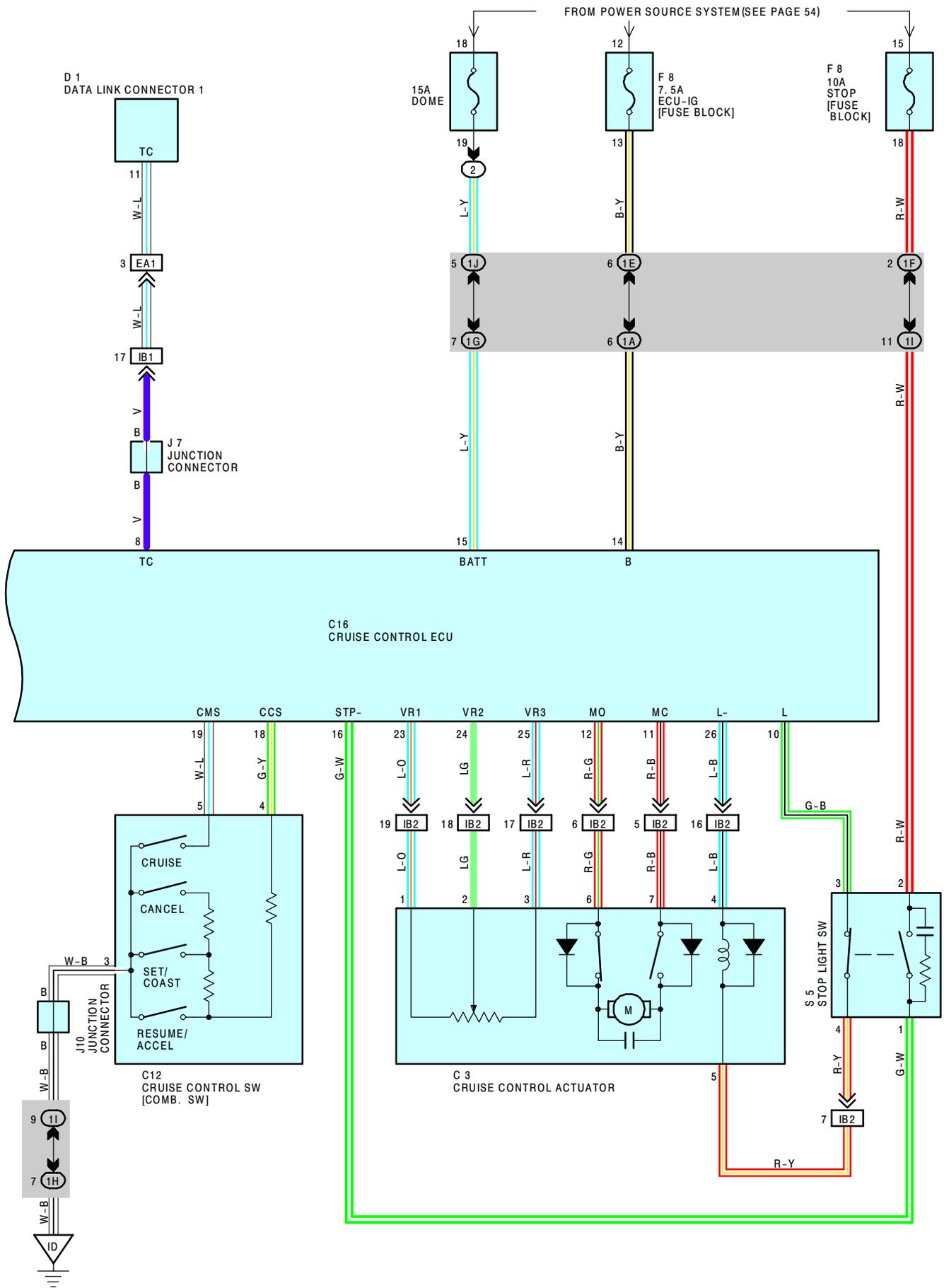
C12 BLACK



H 3 BLACK









## SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH THE **STOP** FUSE TO **TERMINAL 2** OF THE STOP LIGHT **SW**, AND ALSO THROUGH THE **DOME** FUSE TO **TERMINAL 15** OF THE CRUISE CONTROL ECU.

WITH THE IGNITION SW TURNED TO ON, CURRENT FLOWS THROUGH THE **GAUGE** FUSE TO **TERMINAL 8** OF THE COMBINATION METER AND THE CURRENT THROUGH THE **DOME** FUSE FLOWS TO **TERMINAL 15** 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 5** OF THE CRUISE CONTROL SW TO **TERMINAL 19** OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT FLOWS FROM THE **ECU-IG** FUSE TO **TERMINAL 14** OF THE CRUISE CONTROL ECU 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 THROUGH THE **GAUGE** FUSE FLOWS TO **TERMINAL 8** OF THE CRUISE CONTROL INDICATOR LIGHT → **TERMINAL 6** → **TERMINAL 7** OF THE CRUISE CONTROL ECU → **TERMINAL 13** → **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP, INDICATING 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. **40 KM/H, 25 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 ECU COMPARES THE SET SPEED MEMORIZED IN THE ECU WITH THE ACTUAL VEHICLE SPEED INPUT INTO **TERMINAL 20** OF THE CRUISE CONTROL ECU FROM THE SPEED SENSOR, 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 THE CRUISE CONTROL ACTUATOR FLOWS FROM **TERMINAL 11** OF THE 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 THE 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 SW 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 TURNS OFF AND THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE AND THE CRUISE CONTROL IS RELEASED.

- \* PLACING THE SHIFT LEVER EXCEPT "D" POSITION (PARK/NEUTRAL POSITION SW EXCEPT "D" POSITION). "SIGNAL IS NOT INPUT TO **TERMINAL 2** OF THE ECU"
- \* DEPRESSING THE BRAKE PEDAL (STOP LIGHT SW ON). "SIGNAL INPUT TO **TERMINAL 16** OF THE ECU"
- \* PUSHING THE CANCEL SW (CANCEL SW ON). "SIGNAL INPUT TO **TERMINAL 18** OF THE ECU"

## 7. AUTO CANCEL FUNCTION

A) IF ANY OF THE FOLLOWING OPERATING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, CURRENT FLOW TO THE 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 SW WILL TURN ON.

- \* WHEN CURRENT CONTINUED TO FLOW TO THE MOTOR INSIDE THE ACTUATOR IN THE THROTTLE VALVE "OPEN" DIRECTION.
- \* THE MOTOR DOES NOT OPERATE DESPITE THE MOTOR DRIVE SIGNAL BEING OUTPUT.

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

WHEN THIS OCCURS, THE CANCEL STATE IS CLEARED AS THE MAIN SW WILL TURN ON AGAIN.

- \* OVER CURRENT TO TRANSISTOR DRIVING THE MOTOR AND/OR THE MAGNETIC CLUTCH.
- \* OPEN CIRCUIT IN THE MAGNETIC CLUTCH.
- \* MOMENTARY INTERRUPTION OF VEHICLE SPEED SIGNAL.
- \* SHORT CIRCUIT IN THE CRUISE CONTROL SW.
- \* WHEN THE VEHICLE SPEED FALLS MORE THAN **16 KM/H (10 MPH)** BELOW THE SET SPEED, E.G. ON AN UPWARD SLOPE.

C) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED AND THE CRUISE CONTROL IS RELEASED. (THE POWER TO THE 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 POWER TO THE CRUISE CONTROL SYSTEM IS MOMENTARILY CUT OFF.

D) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE CRUISE CONTROL IS RELEASED.

- \* OPEN THE CIRCUIT FOR **TERMINAL 2** OF THE STOP LIGHT SW.

## 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**) AND THE ECU JUDGES BY THE SIGNALS FROM THE ACTUATOR'S POTENTIOMETER THAT THE UPWARD SLOPE HAS FINISHED, THE OVERDRIVE IS RESUMED AFTER APPROXIMATELY **2 SECONDS**.

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

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

## SERVICE HINTS

### C3 CRUISE CONTROL ACTUATOR

- 1-3 : APPROX. **2 K $\Omega$**
- 5-4 : APPROX. **38  $\Omega$**

### C12 CRUISE CONTROL SW [COMB. SW]

- 5-3 : CONTINUITY WITH THE CRUISE MAIN SW ON
- 4-3 : APPROX. **418  $\Omega$**  WITH THE CANCEL SW ON  
APPROX. **68  $\Omega$**  WITH THE SET/COAST SW ON  
APPROX. **198  $\Omega$**  WITH THE RESUME/ACCEL SW ON

### C16 CRUISE CONTROL ECU

- 14-GROUND : APPROX. **12 VOLTS** WITH THE IGNITION SW AT **ON** POSITION
- 15-GROUND : ALWAYS APPROX. **12 VOLTS**
- 20-GROUND : **4 PULSES** WITH **1 ROTATION** OF THE ROTOR SHAFT
- 18-GROUND : APPROX. **418  $\Omega$**  WITH THE CANCEL SW ON IN THE CONTROL SW  
APPROX. **198  $\Omega$**  WITH THE SET/COAST SW ON IN THE CONTROL SW  
APPROX. **68  $\Omega$**  WITH THE RESUME/ACCEL SW ON IN THE CONTROL SW
- 13-GROUND : ALWAYS CONTINUITY



# CRUISE CONTROL

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 3	28	E 4	A 31	P 1	A 29
C 9	30	E 6	B 31		B 29
C12	30	F 8 31		S 5	31
C15	30	J 7 31		V 2	29
C16	30	J10	A 31		
D 1	28	J11	B 31		

## : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1B		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1F		
1G	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		
1I		
1J		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2		

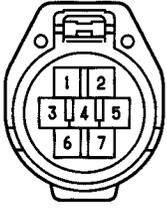
## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	36	LEFT KICK PANEL
IG	36	RIGHT KICK PANEL

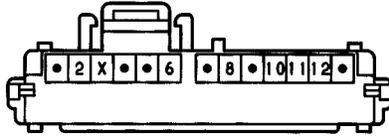
## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	38	ENGINE WIRE	I 8	38	INSTRUMENT PANEL WIRE
I 7	38	INSTRUMENT PANEL WIRE	I11	38	INSTRUMENT PANEL WIRE

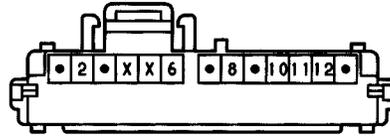
C 3 GRAY



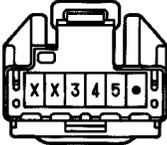
(A/T) C 9 BROWN



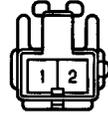
(M/T) C 9 BROWN



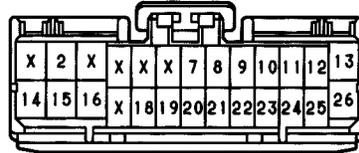
C12 BLACK



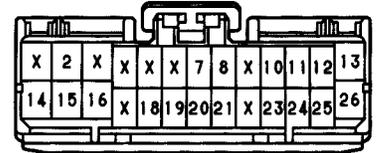
C15



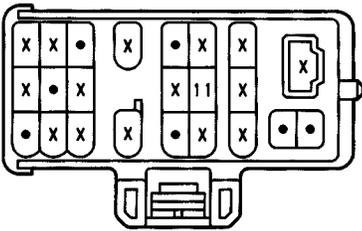
(A/T) C16 GREEN



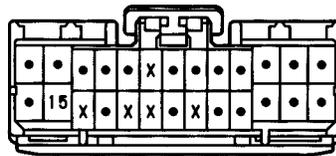
(M/T) C16 GREEN



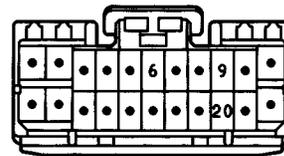
D 1 BLACK



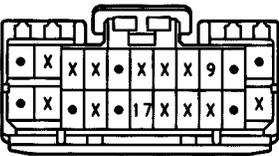
E 4 (A) DARK GRAY



(A/T) E 6 (B) DARK GRAY



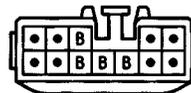
(M/T) E 6 (B) DARK GRAY



F 8

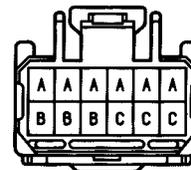
(SEE PAGE 26)

J 7 GRAY



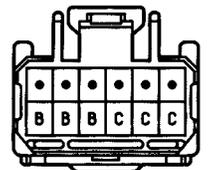
(HINT:SEE PAGE 7)

J10 (A) GRAY



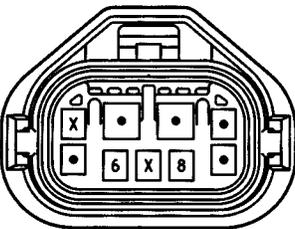
(HINT:SEE PAGE 7)

J11 (B) GRAY

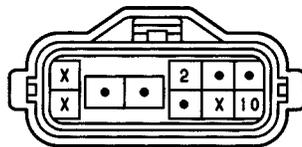


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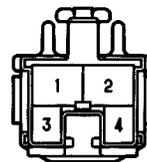
(2WD) P 1 (A) GRAY



(4WD) P 1 (B) GRAY



S 5 BROWN



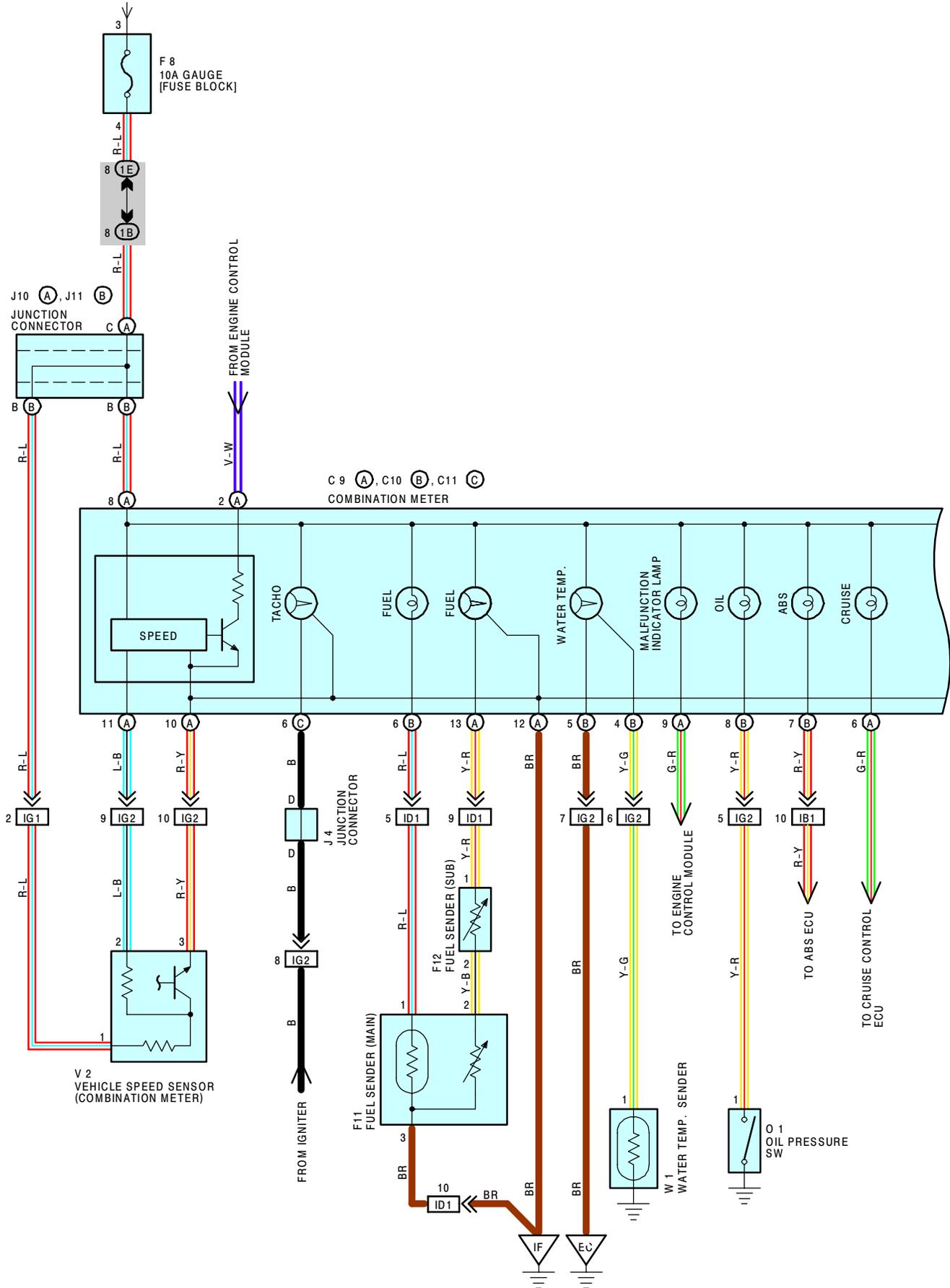
V 2 BLACK

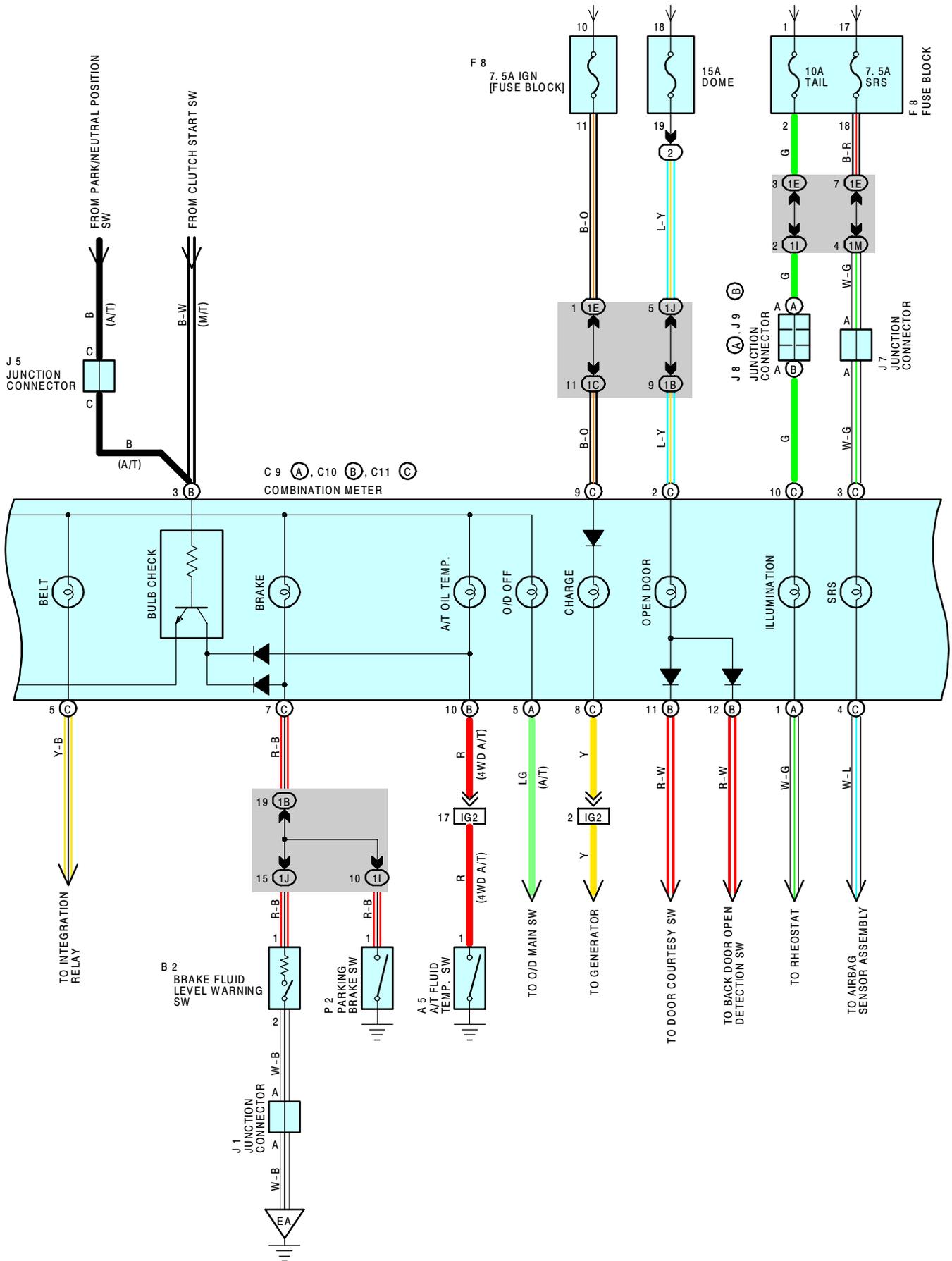




# COMBINATION METER

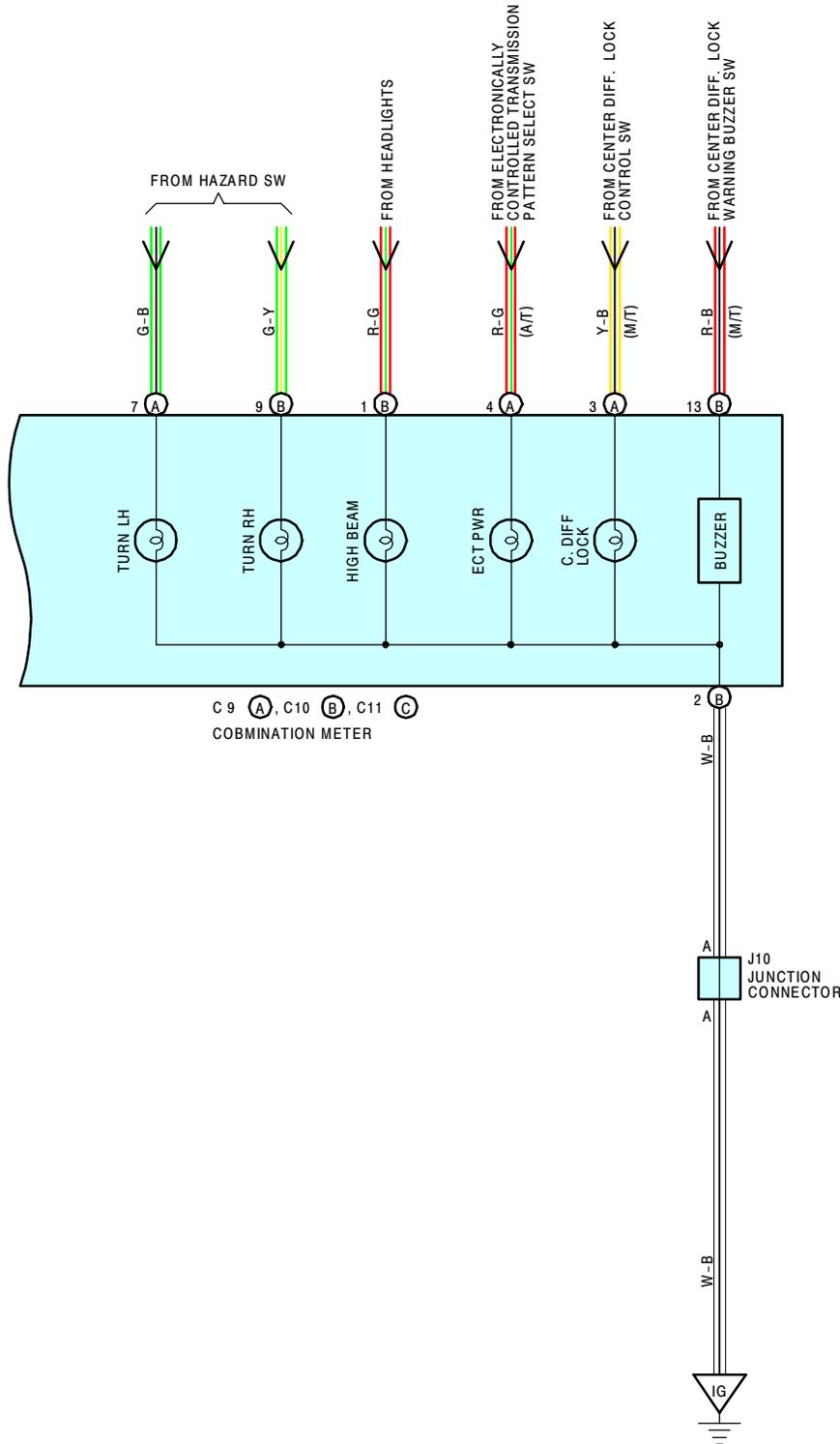
FROM POWER SOURCE SYSTEM (SEE PAGE 54)







# COMBINATION METER



## SERVICE HINTS

### B 2 BRAKE FLUID LEVEL WARNING SW

1-2 : CLOSED WITH THE FLOAT DOWN

### P 2 PARKING BRAKE SW

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

### O 1 OIL PRESSURE SW

1-GROUND : CLOSED WITH THE OIL PRESSURE ABOVE APPROX. 20 KPA (2.8 PSI, 0.2 KG/CM<sup>2</sup>)

### W 1 WATER TEMP. SENDER

1-GROUND : APPROX. 160-240 Ω (50°C, 122°F)

APPROX. 17.1-21.2 Ω (120°C, 288°F)

### F11 FUEL SENDER (MAIN)

2-3 : APPROX. 3 Ω AT FUEL FULL

APPROX. 110 Ω AT FUEL EMPTY

### C 9 (A), C10 (B), C11 (C) COMBINATION METER

(A) 8, (C) 9-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION

(A) 12, (B) 2, (B) 5-GROUND : ALWAYS CONTINUITY

(C) 2-GROUND : ALWAYS APPROX. 12 VOLTS

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 5	28	F12	32 (2-DOOR), 33 (4-DOOR)	J10	A 31
B 2	28	J 1	31	J11	B 31
C 9	A 30	J 4	31	O 1	29
C10	B 30	J 5	31	P 2	31
C11	C 30	J 7	31	V 2	29
F 8	31	J 8	A 31	W 1	29
F 11	32 (2-DOOR), 33 (4-DOOR)	J 9	B 31		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1C		
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1G	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1I		
1J		
1M		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IB1	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
ID1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IG2		

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EC	34	INTAKE MANIFOLD
IF	36	INSTRUMENT PANEL BRACE RH
IG	36	RIGHT KICK PANEL



# COMBINATION METER

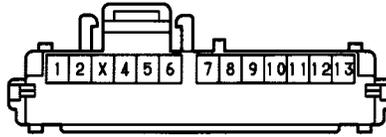
A 5 BLACK



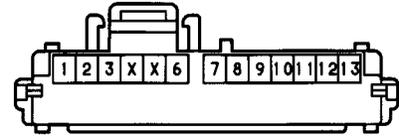
B 2 GRAY



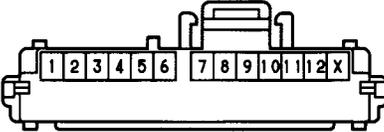
(A/T) C 9 (A) BROWN



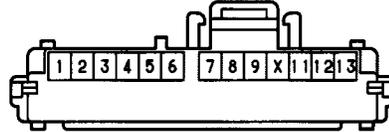
(N/T) C 9 (A) BROWN



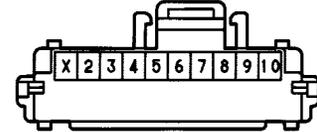
(A/T) C10 (B) BLUE



(N/T) C10 (B) BLUE



C11 (C) GRAY



F 8

(SEE PAGE 26)

F11 DARK GRAY



F12 GRAY



J 1 BLUE



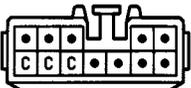
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J 4 BLACK



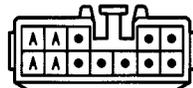
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J 5 BLUE



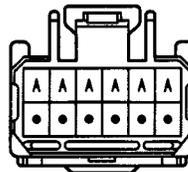
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J 7 GRAY



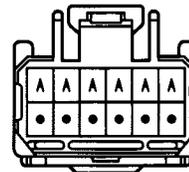
(HINT:SEE PAGE 7)

J 8 (A) BLUE



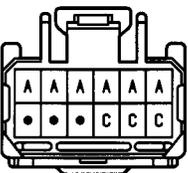
(HINT:SEE PAGE 7)

J 9 (B) BLUE



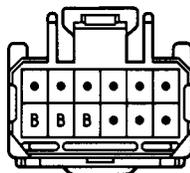
(HINT:SEE PAGE 7)

J10 (A) GRAY



(HINT:SEE PAGE 7)

J11 (B) GRAY



(HINT:SEE PAGE 7)

O 1 GRAY



P 2 BLACK



V 2 BLACK



W 1 GRAY



# RADIATOR FAN AND CONDENSER FAN



A 1 BLACK



A 3 BLACK



A 4



F 7

(SEE PAGE 25)

F 8

(SEE PAGE 26)

J 1 BLUE



(HINT:SEE PAGE 7)

R 1 GRAY





## SYSTEM OUTLINE

### FAN MOTOR OPERATION

WHEN THE IGNITION SW IS TURNED ON, CURRENT FROM THE **ECU-IG** FUSE FLOWS TO THE FAN NO. 1 RELAY (COIL SIDE) AND THE FAN NO. 2 RELAY (COIL SIDE) → **TERMINAL 2** OF THE A/C SINGLE PRESSURE SW → **TERMINAL 3** → **TERMINAL 2** OF THE A/C WATER TEMP. SW → **TERMINAL 1** → **GROUND**, AND THE FAN NO. 1 RELAY AND THE FAN NO. 2 RELAY ARE TURNED ON.

AT THE SAME TIME THAT THIS CURRENT FLOWS, CURRENT FROM THE **ECU-IG** FUSE FLOWS TO THE E/G MAIN RELAY (COIL SIDE) → **GROUND**, AND THE E/G MAIN RELAY IS TURNED ON. AS A RESULT, CURRENT FROM THE **ALT** FUSE FLOWS TO THE **CDS FAN FUSE** AND **RFI FAN FUSE**.

#### \* LOW SPEED OPERATION

WHEN THE IGNITION SW IS TURNED ON AND THE A/C IS ACTIVATED, CURRENT FLOWS FROM THE MG/C RELAY (POINT SIDE) → THE FAN NO. 3 RELAY (COIL SIDE) → **GROUND**, AND THE FAN NO. 3 RELAY IS TURNED ON. AS A RESULT, CURRENT FROM THE **CDS FAN FUSE** FLOWS TO **TERMINAL 2** OF THE A/C CONDENSER FAN MOTOR → **TERMINAL 1** → THE FAN NO. 2 RELAY (POINT SIDE) → THE FAN NO. 3 RELAY (POINT SIDE) → **TERMINAL 2** OF THE RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, AND BOTH OF THE FAN MOTORS, WITH THE RESULT THAT THE FANS ARE ACTIVATED AT LOW SPEED.

IF THE ENGINE COOLANT TEMPERATURE IS APPROX. **90°C (194°F)** OR LESS, AND THE REFRIGERANT PRESSURE IS APPROX. **15.5 KG/CM<sup>2</sup> (1323 KPA, 191.7 PSI)** OR LESS, BOTH THE A/C WATER TEMP. SW AND THE A/C SINGLE PRESSURE SW ARE CLOSED, SO THAT THE FAN NO. 1 RELAY AND THE FAN NO. 2 RELAY ARE TURNED ON. AS A RESULT, BOTH OF THE FAN MOTOR OPERATE AT LOW SPEED.

#### \* HIGH SPEED OPERATION

WHEN, DURING A/C OPERATION, THE REFRIGERANT PRESSURE BECOMES HIGHER THAN ORDINARY LEVEL (APPROX. **15.5 KG/CM<sup>2</sup> (1323 PSI, 191.7 KPA)**), THE A/C SINGLE PRESSURE SW IS TURNED OFF. AS A RESULT, THE FAN NO. 1 RELAY AND THE FAN NO. 2 RELAY ARE TURNED OFF, AND THE CURRENT FLOWS FROM THE **RFI FAN FUSE** TO FAN NO. 1 RELAY (POINT SIDE) → **TERMINAL 2** OF THE RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, AND CURRENT FROM THE **CDS FAN FUSE** FLOWS TO **TERMINAL 2** OF THE A/C CONDENSER FAN MOTOR → **TERMINAL 1** → THE FAN NO. 2 RELAY (POINT SIDE) → **GROUND**, AND TO BOTH OF THE FAN MOTORS IN PARALLEL, THUS CAUSING THE FAN MOTORS TO OPERATE AT HIGH SPEED.

NOTE THAT, BECAUSE THE CURRENT FLOWS IN THE SAME MANNER EVEN IF THE COOLANT TEMPERATURE IS APPROX. **90°C (194°F)** OR HIGHER, THE FAN MOTORS STILL OPERATE AT HIGH SPEED.

## SERVICE HINTS

### A 3 A/C SINGLE PRESSURE SW

2-3 : OPEN ABOVE APPROX. **15.5 KG/CM<sup>2</sup> (191.7 PSI, 1323 KPA)**  
CLOSE BELOW APPROX. **12.5 KG/CM<sup>2</sup> (142 PSI, 980 KPA)**

### A 4 A/C WATER TEMP. SW

1-2 : OPEN ABOVE APPROX. **90°C (194°F)**  
CLOSED BELOW APPROX. **83°C (181.4°F)**

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 1	28	F 7	28	R 1	29
A 3	28	F 8	31		
A 4	28	J 1	31		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	20	INSTRUMENT PANEL WIRE AND J/B NO.1 (LOWER FINISH PANEL)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

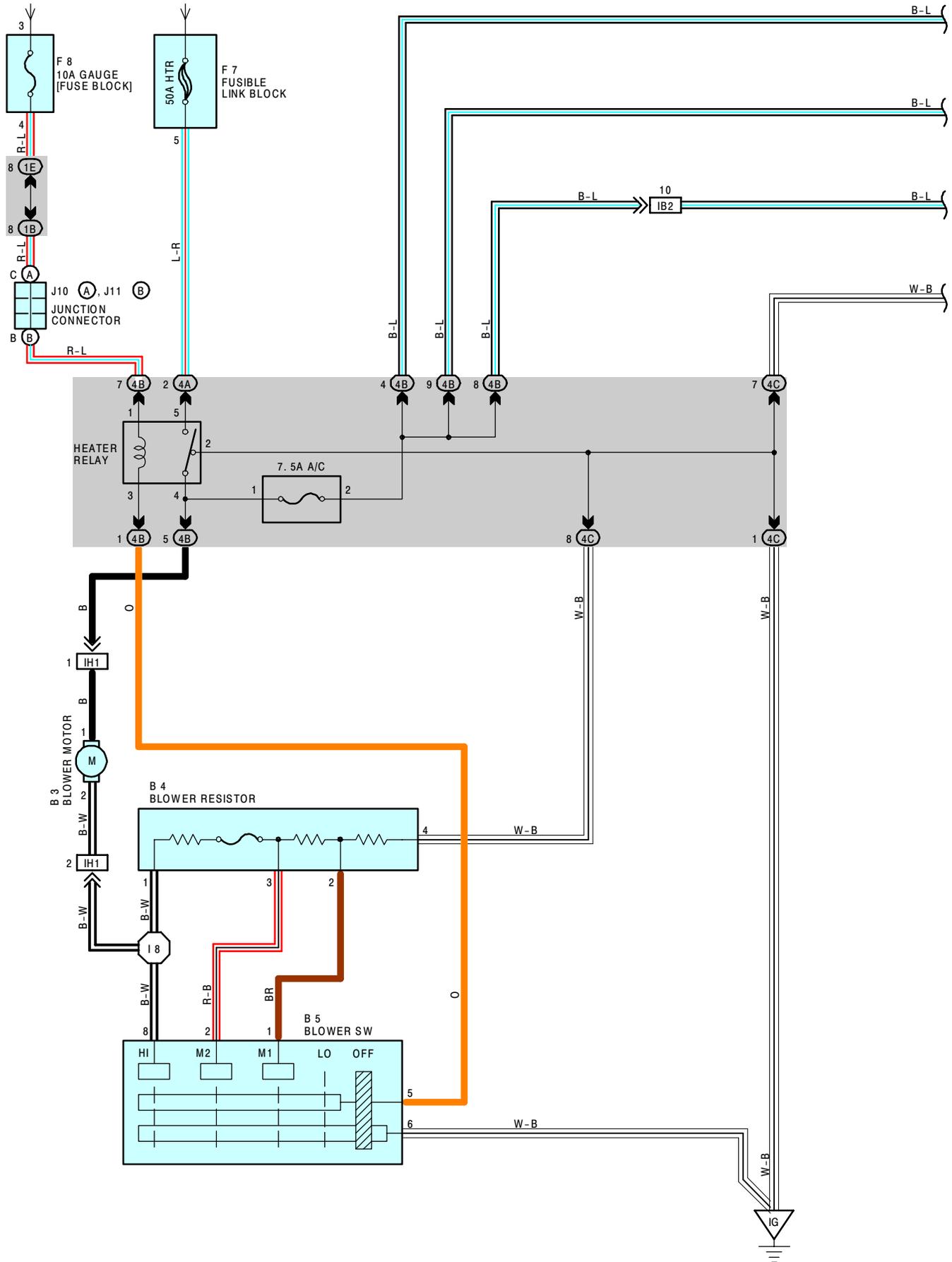
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EB	34	RADIATOR LEFT



# AIR CONDITIONING

FROM POWER SOURCE SYSTEM (SEE PAGE 54)







# AIR CONDITIONING

## SYSTEM OUTLINE

### HEATER BLOWER MOTOR OPERATION

CURRENT IS APPLIED AT ALL TIMES THROUGH THE **HTR FUSE** TO **TERMINAL 5** OF THE HEATER RELAY.

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH THE **GAUGE FUSE** TO **TERMINAL 1** OF THE HEATER RELAY → THE COIL → **TERMINAL 3** → **TERMINAL 5** OF THE BLOWER SW.

#### \* LOW SPEED OPERATION

WHEN THE BLOWER SW IS MOVED TO **LO** POSITION, THE CURRENT FLOWS TO **TERMINAL 5** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**, CAUSING THE HEATER RELAY TO SWITCH ON. THIS CAUSES THE CURRENT TO FLOW FROM THE **HTR FUSE** → **TERMINAL 5** OF THE HEATER RELAY → **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTOR → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 4** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT LOW SPEED.

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

WHEN THE BLOWER SW IS MOVED TO **M1** POSITION, THE CURRENT FLOWING TO **TERMINAL 5** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**, TURNS THE HEATER RELAY ON. THIS CAUSES THE CURRENT TO FLOW FROM THE **HTR FUSE** → **TERMINAL 5** OF THE HEATER RELAY → **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTOR → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL 1** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**. THIS TIME, THE BLOWER RESISTANCE OF THE BLOWER RESISTOR IS LESS THAN AT LOW SPEED, SO THE BLOWER MOTOR ROTATES AT MEDIUM LOW SPEED.

WHEN THE BLOWER SW IS MOVED TO **M2** POSITION, CURRENT FLOWING THROUGH THE MOTOR FLOWS FROM **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL 2** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**. THIS TIME, RESISTANCE OF THE BLOWER RESISTOR IS LESS THAN AT **M1** POSITION, SO THE BLOWER MOTOR ROTATES AT MEDIUM HIGH SPEED.

#### \* HIGH SPEED OPERATION

WHEN THE BLOWER SW IS MOVED TO **HI** POSITION, THE CURRENT FLOWS TO **TERMINAL 5** OF THE BLOWER SW → **TERMINAL 6** → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT TO FLOW FROM THE **HTR FUSE** TO **TERMINAL 5** OF THE HEATER RELAY → **TERMINAL 4** → **TERMINAL 1** OF THE BLOWER MOTOR → **TERMINAL 2** → **TERMINAL 8** OF THE BLOWER SW → **TERMINAL 6** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

## SERVICE HINTS

### A 3 A/C DUAL PRESSURE SW

1-4 : OPEN WITH THE PRESSURE LESS THAN **2.0 KG/CM<sup>2</sup> (30 PSI, 206 KPA)** OR ABOVE **32 KG/CM<sup>2</sup> (384 PSI, 2648 KPA)**

### A12 A/C AMPLIFIER

12-5 : CONTINUITY WITH THE A/C CONTROL SW ON AND THE IGNITION SW AT **ON** POSITION

13-GROUND : ALWAYS CONTINUITY

5-GROUND : ALWAYS CONTINUITY

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

### A14 A/C THERMISTOR

1-2 : APPROX. **2341 ± 234 Ω** AT **15°C (59°F)**

### B 4 BLOWER RESISTOR

1-3 : APPROX. **0.4 Ω**

1-2 : APPROX. **1.1 Ω**

1-4 : APPROX. **2.8 Ω**

### B 5 BLOWER SW

5-6 : CONTINUITY WITH THE BLOWER SW AT **LO, M1, M2** OR **HI** POSITION

1-6 : CONTINUITY WITH THE BLOWER SW AT **M1** POSITION

2-6 : CONTINUITY WITH THE BLOWER SW AT **M2** POSITION

8-6 : CONTINUITY WITH THE BLOWER SW AT **HI** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 2	28	B 4	30	I 2	29
A 3	28	B 5	30	J 3	31
A12	30	D 3	30	J 4	31
A13	30	E 6	31	J10	A 31
A14	30	F 7	28	J11	B 31
B 3	30	F 8	31		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

**○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR**

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1E	20	FUSE BLOCK ASSY WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
4A	22	ENGINE WIRE AND J/B NO. 4 (RIGHT KICK PANEL)
4B	22	INSTRUMENT PANEL WIRE AND J/B NO. 4 (RIGHT KICK PANEL)
4C		

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

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IB2	36	ENGINE ROOM MAIN WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IG2	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
IH1	38	HEATER BLOWER WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

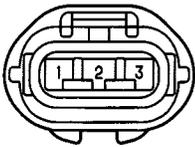
**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	36	RIGHT KICK PANEL

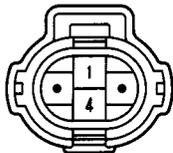
**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	I 8	38	INSTRUMENT PANEL WIRE
I 7	38	INSTRUMENT PANEL WIRE			

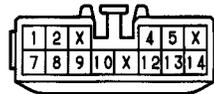
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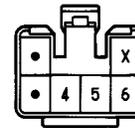
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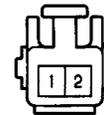
A 12



A 13 BLACK



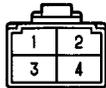
A 14



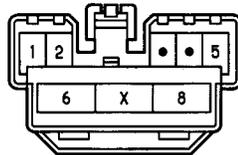
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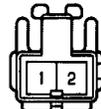
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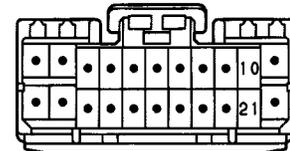
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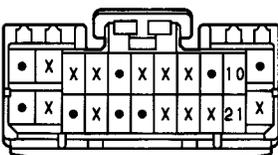
D 3



(A/T) E 6 DARK GRAY



(M/T) E 6 DARK GRAY



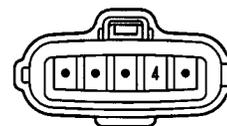
F 7

(SEE PAGE 25)

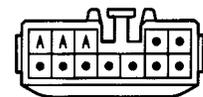
F 8

(SEE PAGE 26)

I 2 BLACK

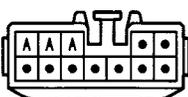


J 3 BLACK



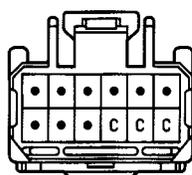
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J 4 BLACK



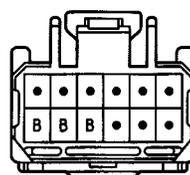
(HINT:SEE PAGE 7)

J10 (A) GRAY



(HINT:SEE PAGE 7)

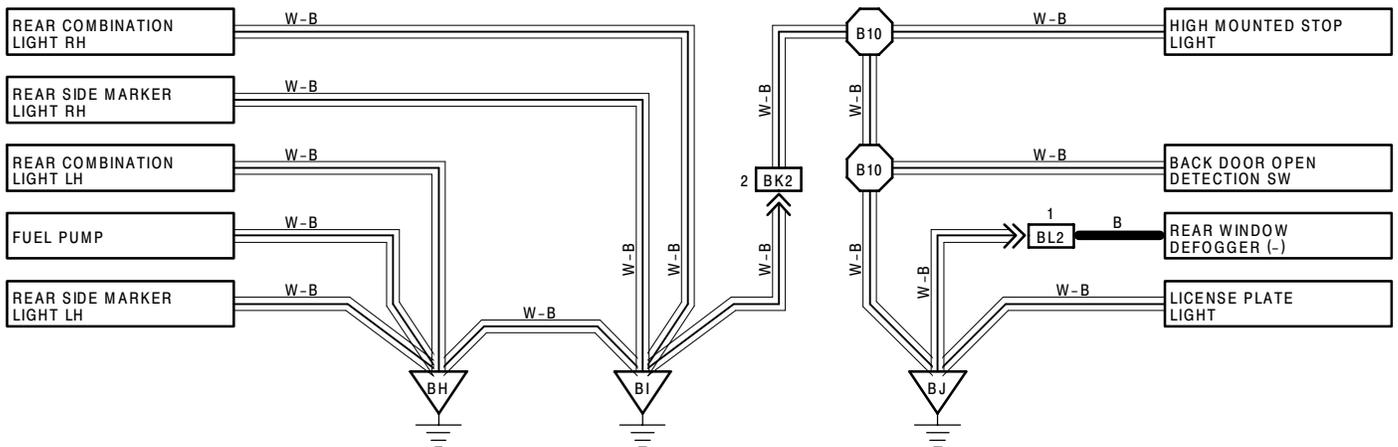
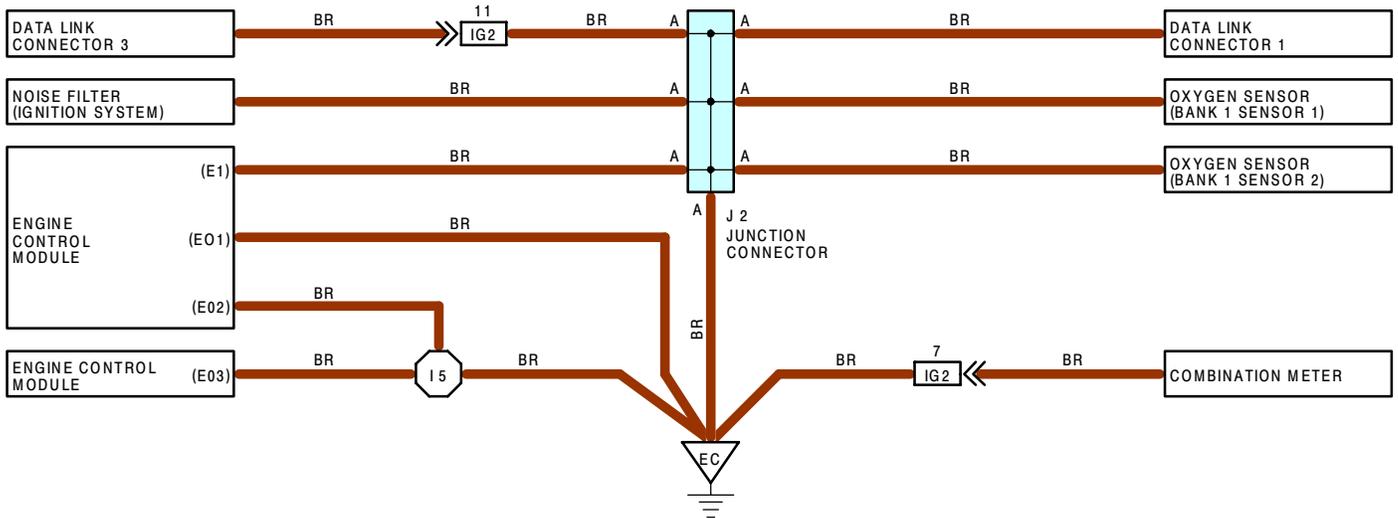
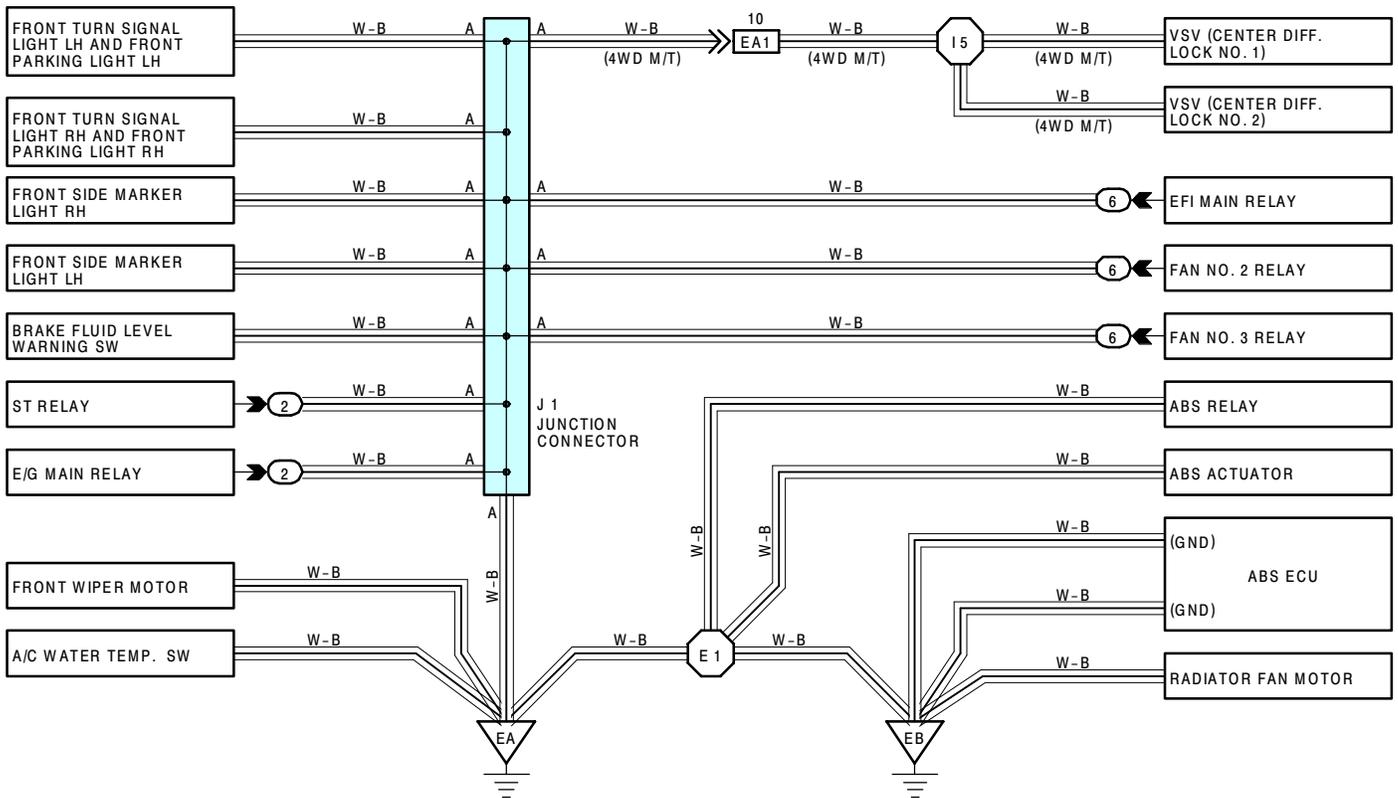
J11 (B) GRAY

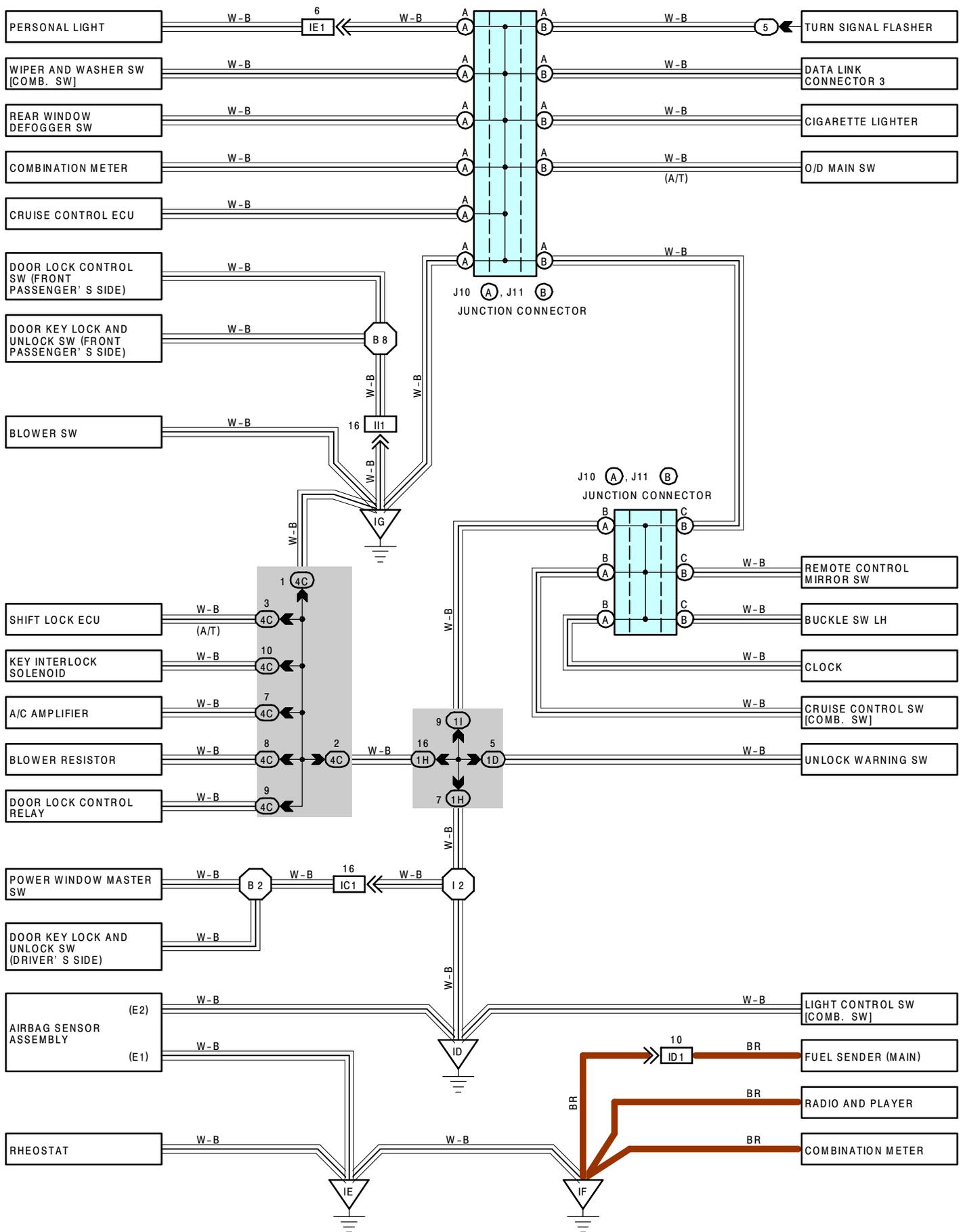


(HINT:SEE PAGE 7)



# GROUND POINT







## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 1	31	J10	A	31	
J 2	31	J11	B	31	

## : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	24	R/B NO. 5 (LEFT KICK PANEL)
6	25	R/B NO. 6 (ENGINE COMPARTMENT LEFT)

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	20	INSTRUMENT PANEL WIRE AND J/B NO. 1 (LOWER FINISH PANEL)
1H		
1I		
4C	22	INSTRUMENT PANEL WIRE AND J/B NO. 4 (RIGHT KICK PANEL)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE OF R/B NO. 2)
IC1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
ID1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE1	36	ROOF WIRE AND INSTRUMENT PANEL (LEFT KICK PANEL)
IG2	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE INSTRUMENT PANEL CENTER)
II1	38	FRONT DOOR RH AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BK2	40 (2-DOOR)	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (BESIDE RIGHT REAR COMB. LIGHT)
	42 (4-DOOR)	
BL2	40 (2-DOOR)	REAR WINDOW NO.1 WIRE AND BACK DOOR NO.1 WIRE (BACK DOOR LEFT)
	42 (4-DOOR)	

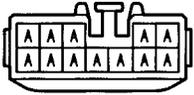
## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RADIATOR RIGHT
EB	34	RADIATOR LEFT
EC	34	INTAKE MANIFOLD
ID	36	LEFT KICK PANEL
IE	36	INSTRUMENT PANEL BRACE LH
IF	36	INSTRUMENT PANEL BRACE RH
IG	36	RIGHT KICK PANEL
BH	38 (2-DOOR)	UNDER THE CENTER PILLAR LH
	40 (4-DOOR)	
BI	38 (2-DOOR)	UNDER THE CENTER PILLAR RH
	40 (4-DOOR)	
BJ	38 (2-DOOR)	BACK DOOR LEFT
	40 (4-DOOR)	

## : SPLICE POINTS

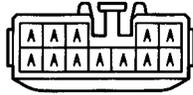
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE	B 2	42 (4-DOOR)	FRONT DOOR LH WIRE
I 2	38	INSTRUMENT PANEL WIRE	B 8	40 (2-DOOR)	FRONT DOOR RH WIRE
I 5	38	ENGINE WIRE		42 (4-DOOR)	
B 2	40 (2-DOOR)	FRONT DOOR LH WIRE			

J 1 BLUE



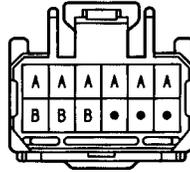
(HINT:SEE PAGE 7)

J 2 BLUE



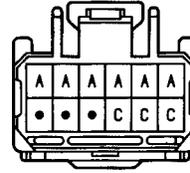
(HINT:SEE PAGE 7)

J10 (A) GRAY



(HINT:SEE PAGE 7)

J11 (B) GRAY

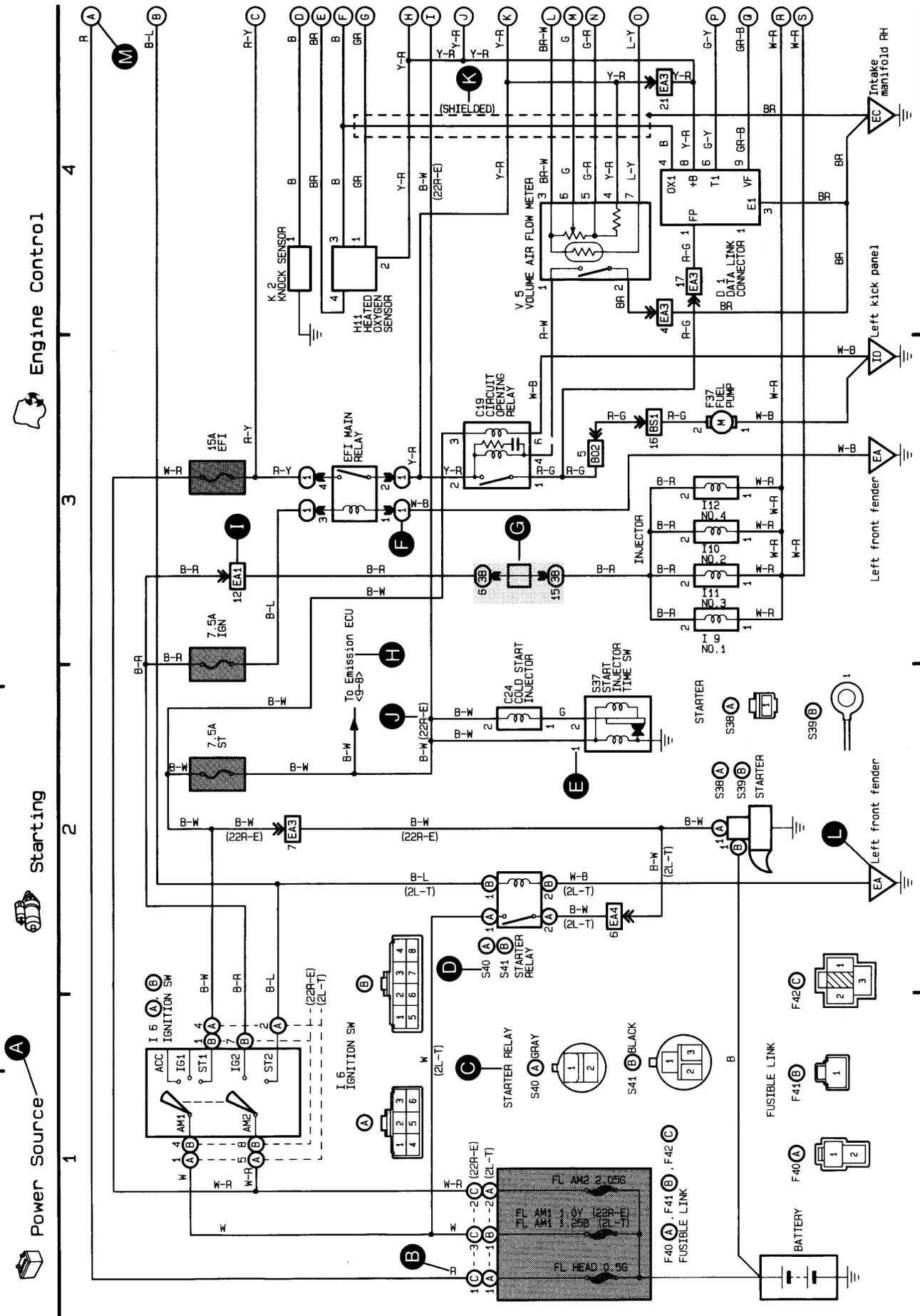


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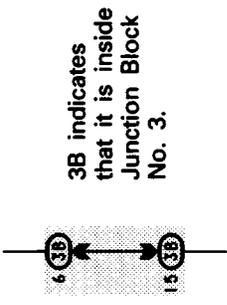
# K OVERALL ELECTRICAL WIRING DIAGRAM

\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the wiring diagram section.

108 HOW TO READ THIS SECTION

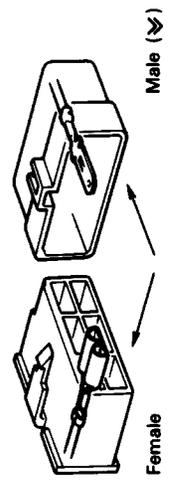


**G:** Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts (different junction blocks are shaded differently for further clarification).



Example:

**H:** Indicates related system.  
**I:** Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↗).



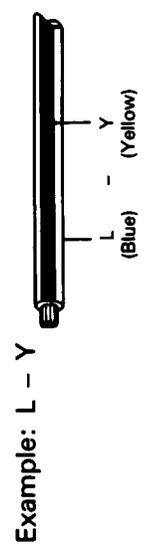
**J:** ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.  
**K:** Indicates a shielded cable.



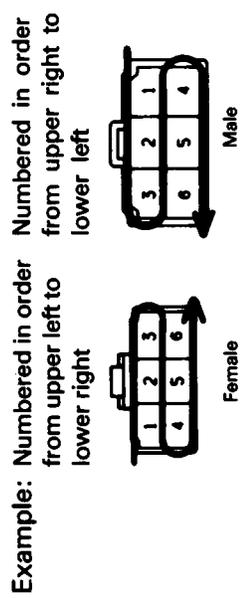
**L:** Indicates and located on ground point.  
**M:** The same code occurring on the next page indicates that the wire harness is continuous.

**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.



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

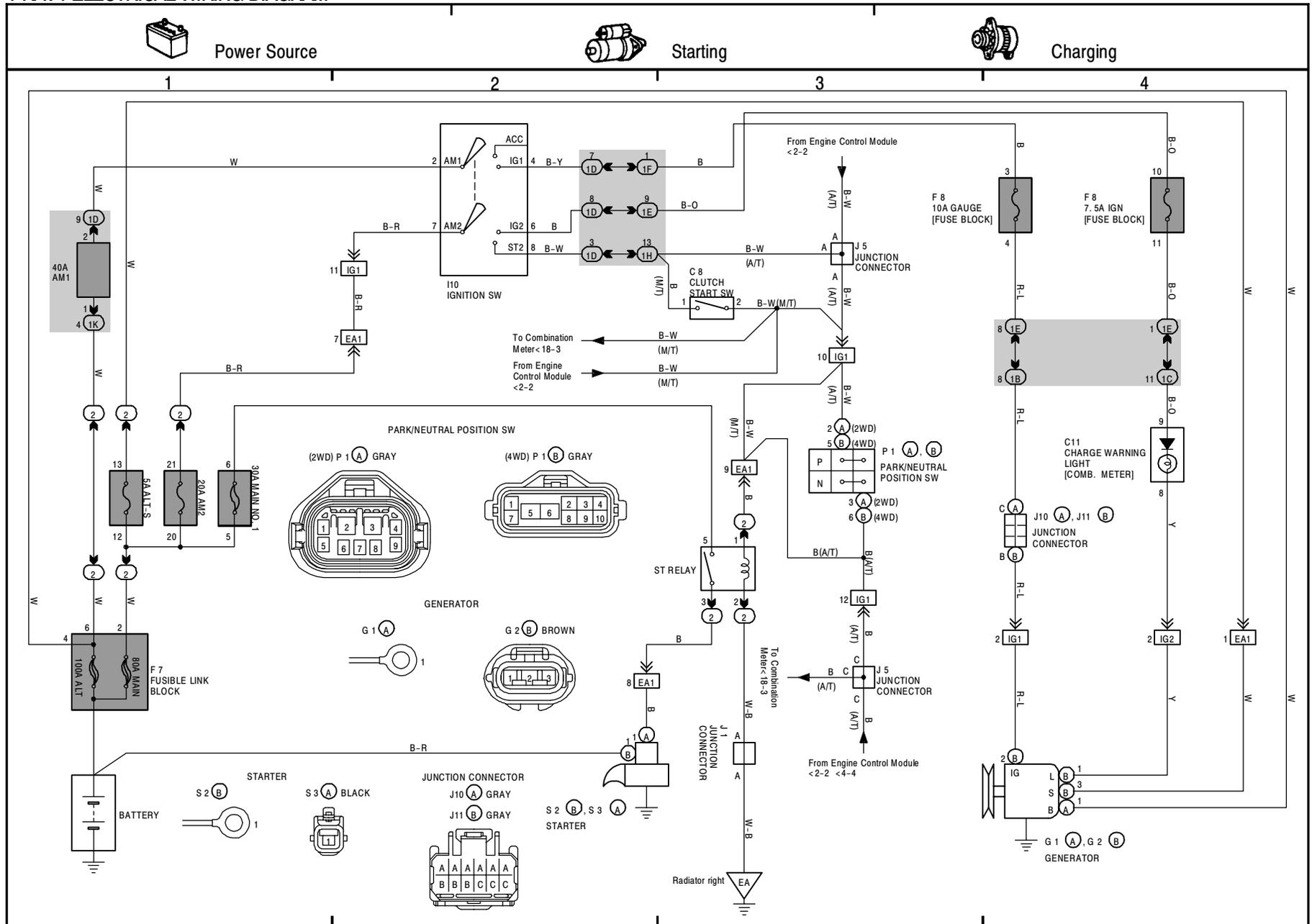
**F:** Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.  
 Example: **1** Indicates Relay Block No. 1.

## SYSTEM INDEX

1996 Model (Location No. 1 to 20)

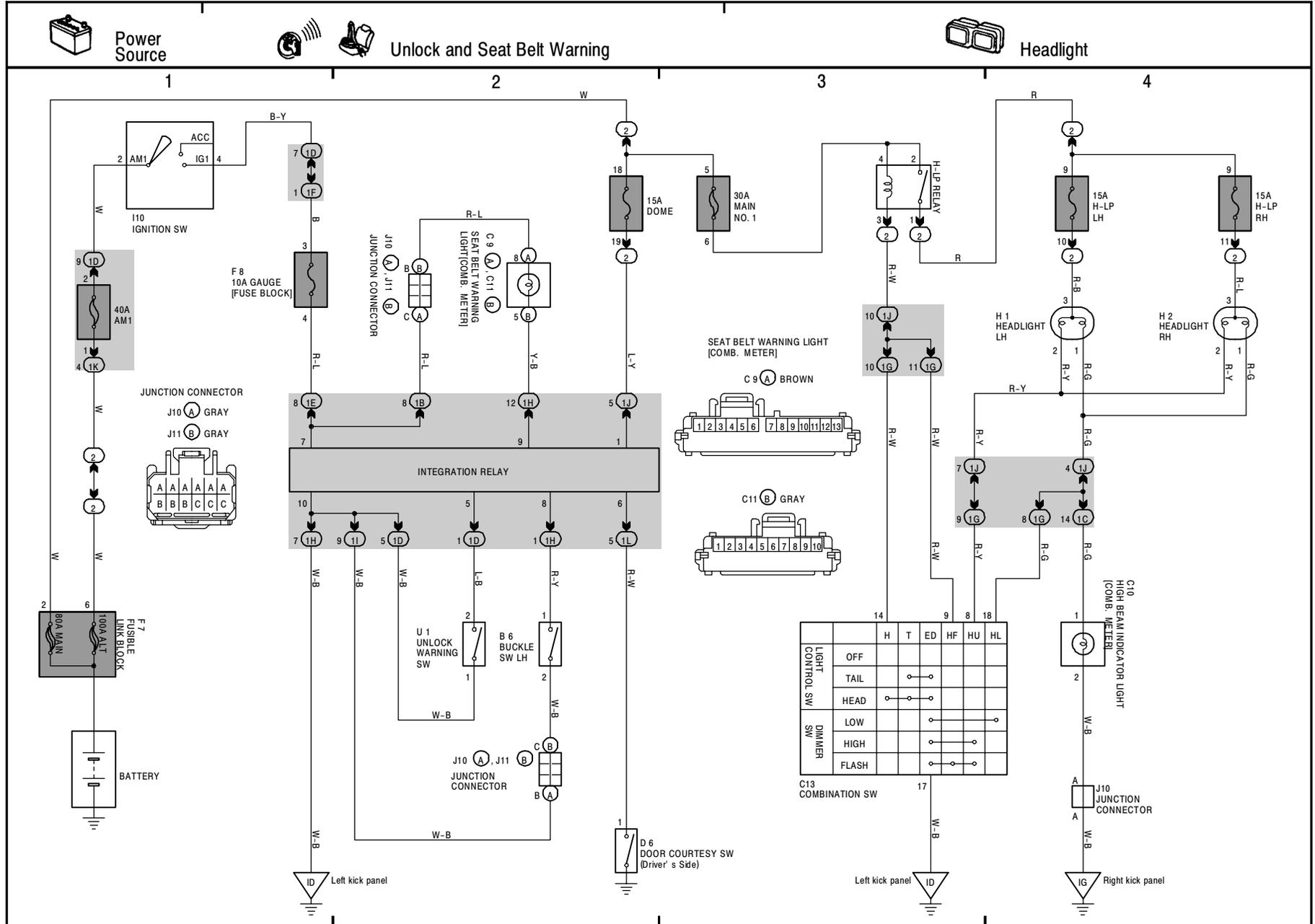
SYSTEMS	LOCATION	SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS	 17-2	Horn	 16-4	Starting	 1-2
Air Conditioning	 20-2	Ignition	 5-3	Stop Light	 9-3
Back-Up Light	 9-2	Interior Light	 6-2	Taillight and Illumination	 8-2
Center Diff. Lock (4WD M/T)	 11-4	Light Reminder Buzzer	 6-4	Turn Signal and Hazard Warning Light	 7-2
Charging	 1-4	Power Source	 1~20-1	Unlock and Seat Belt Warning	 7-1
Cigarette Lighter and Clock	 5-2	Power Window	 14-2		
Combination Meter	 18-2	Radiator Fan and Condenser Fan	 19-2		
Cruise Control	 13-2	Radio and Player	 15-3		
Door Lock Control	 10-2	Rear Window Defogger	 12-3		
Electronically Controlled Transmission	 4-2	Rear Wiper and Washer	 16-3		
Engine Control	 2-2	Remote Control Mirror	 12-2		
Headlight	 3-3	Shift Lock	 15-2		
Front Wiper and Washer	 16-2	SRS	 11-2		

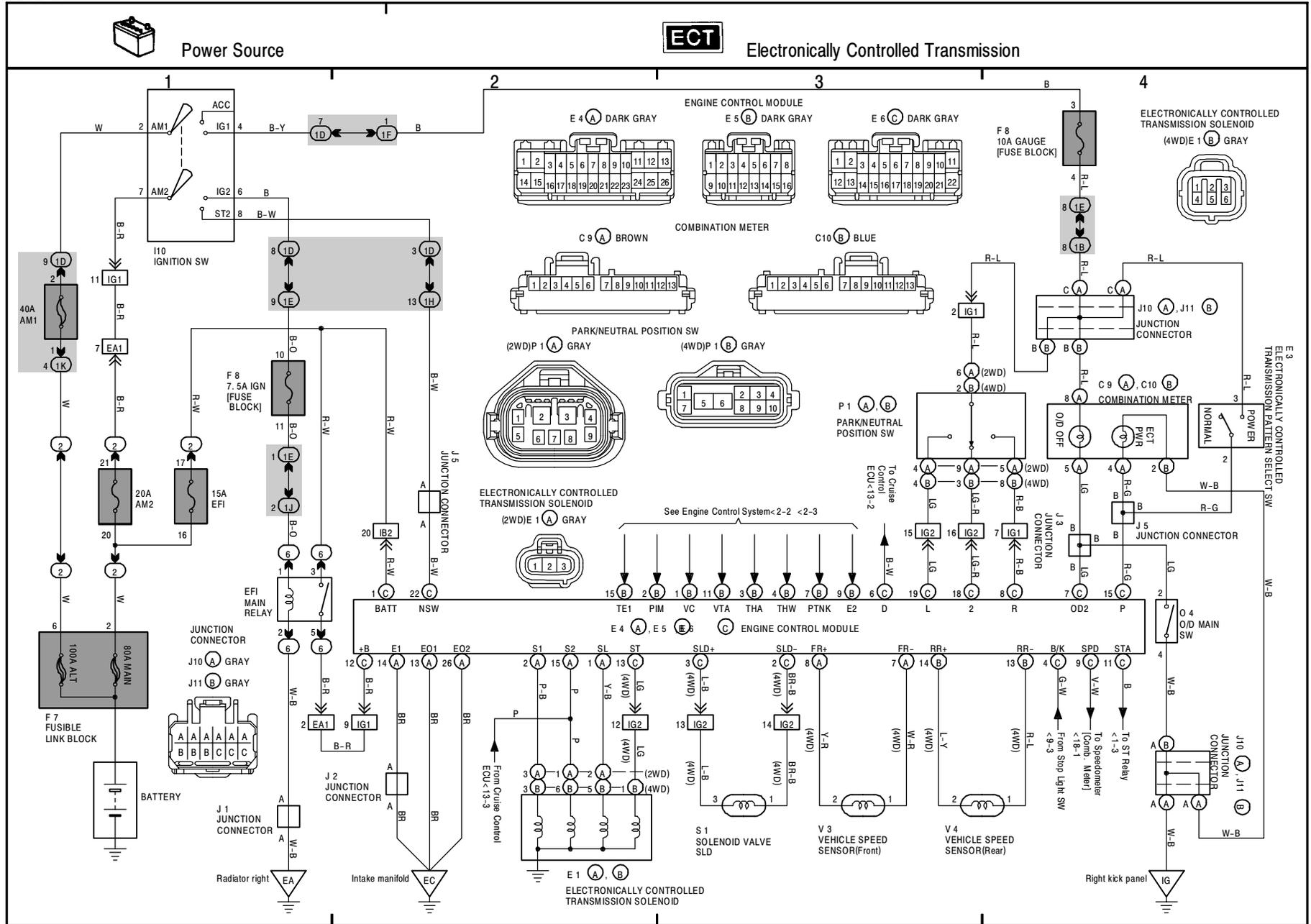
# 1 RAV4 ELECTRICAL WIRING DIAGRAM



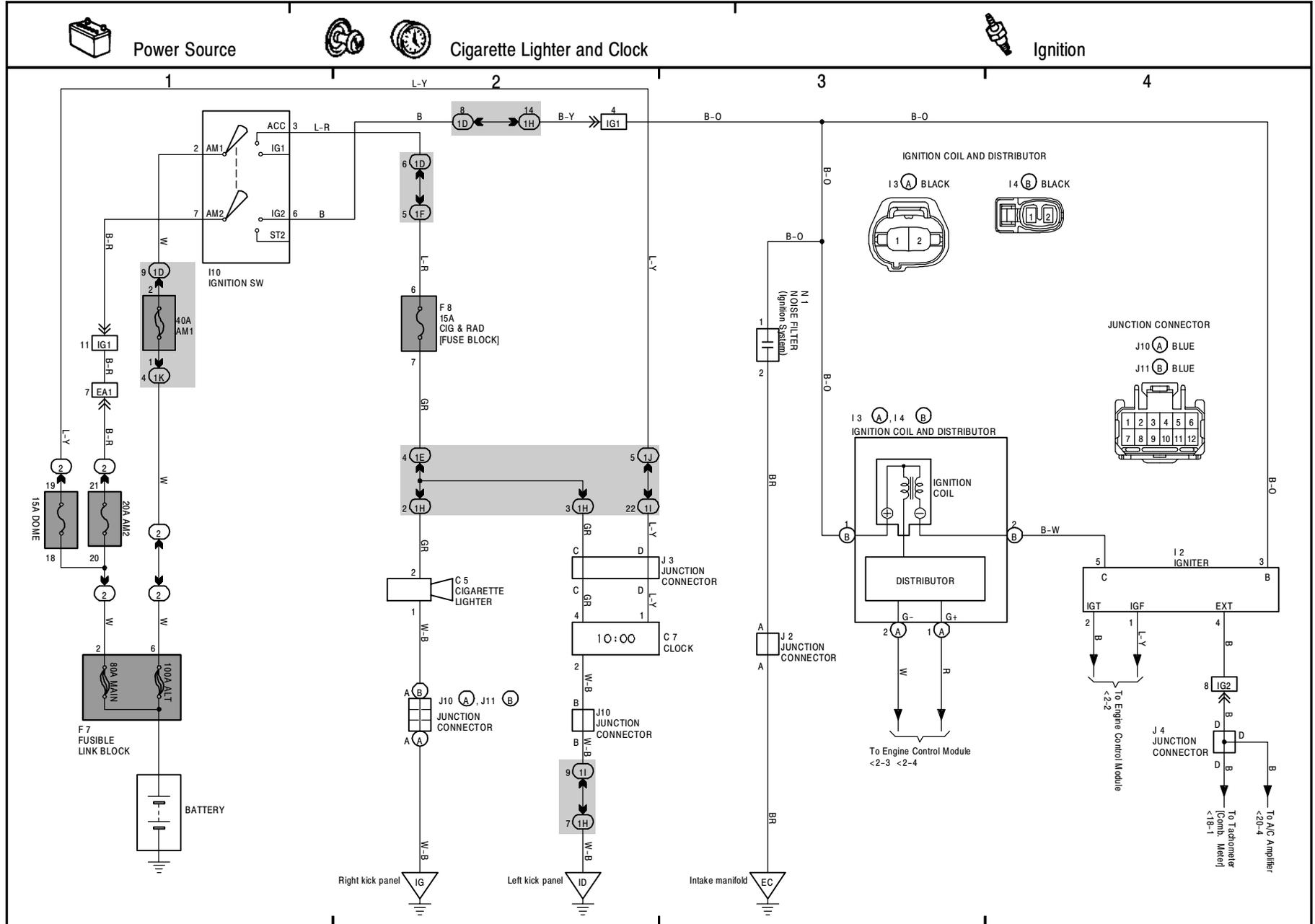


### 3 RAV4



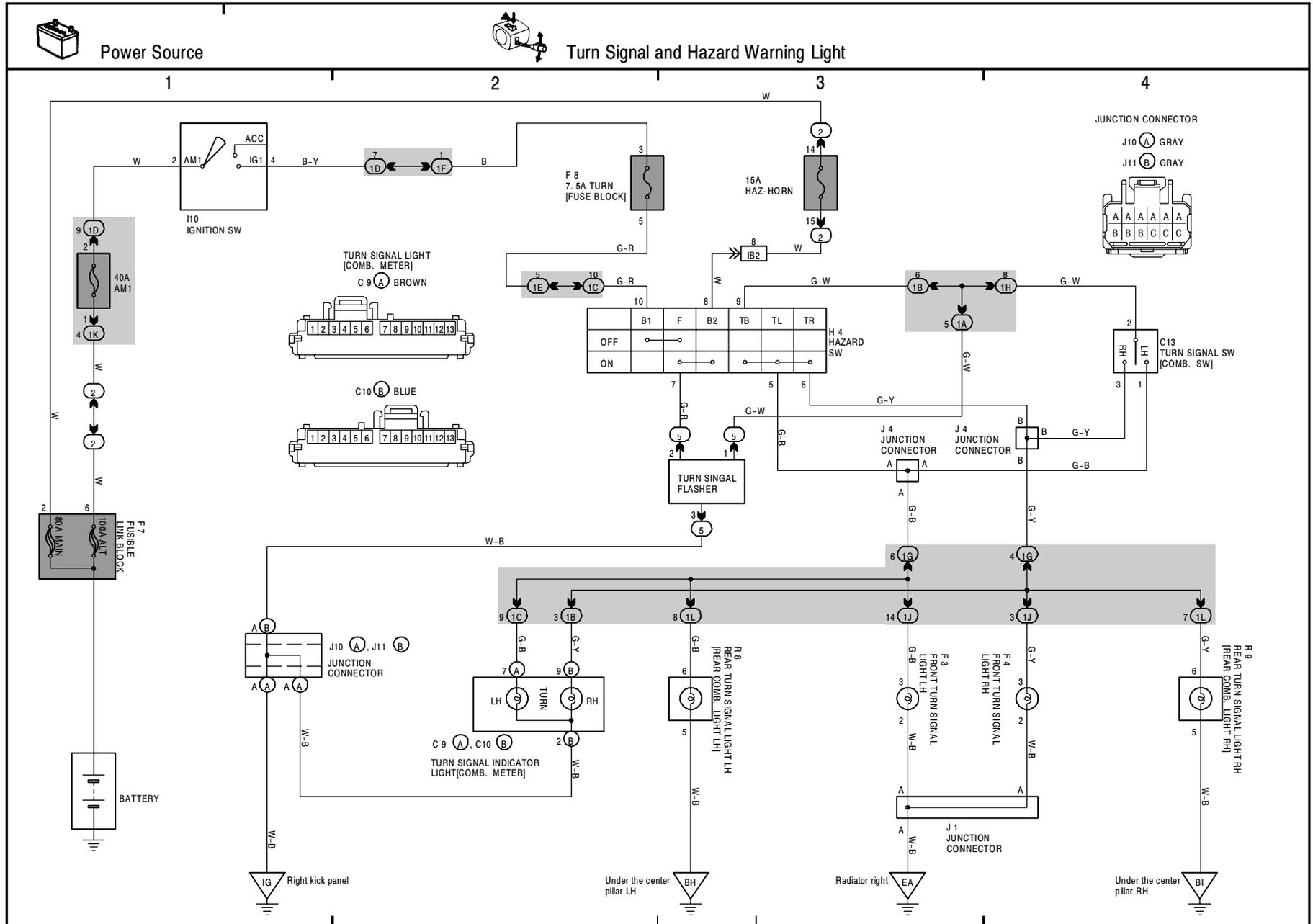


5 RAV4



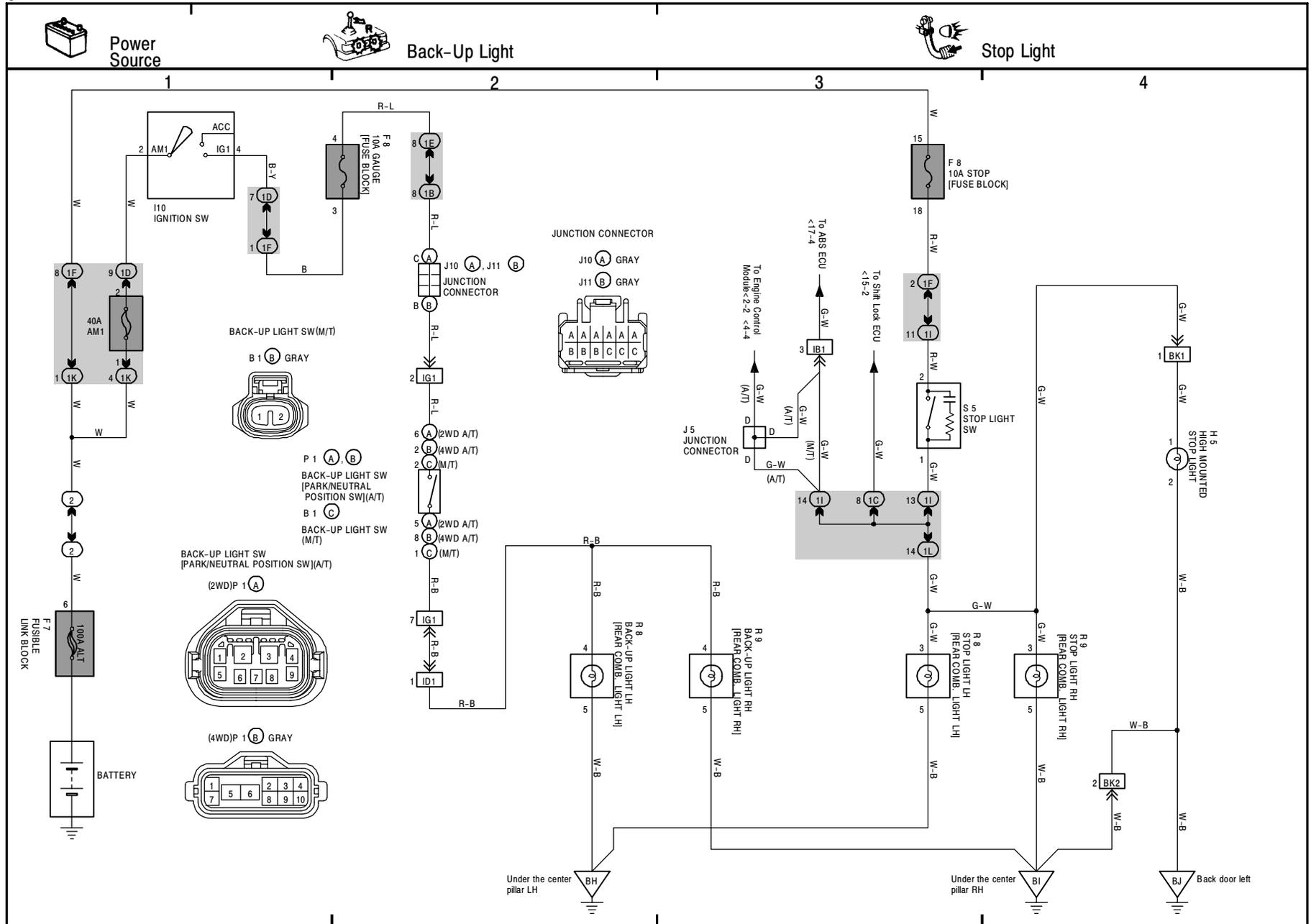


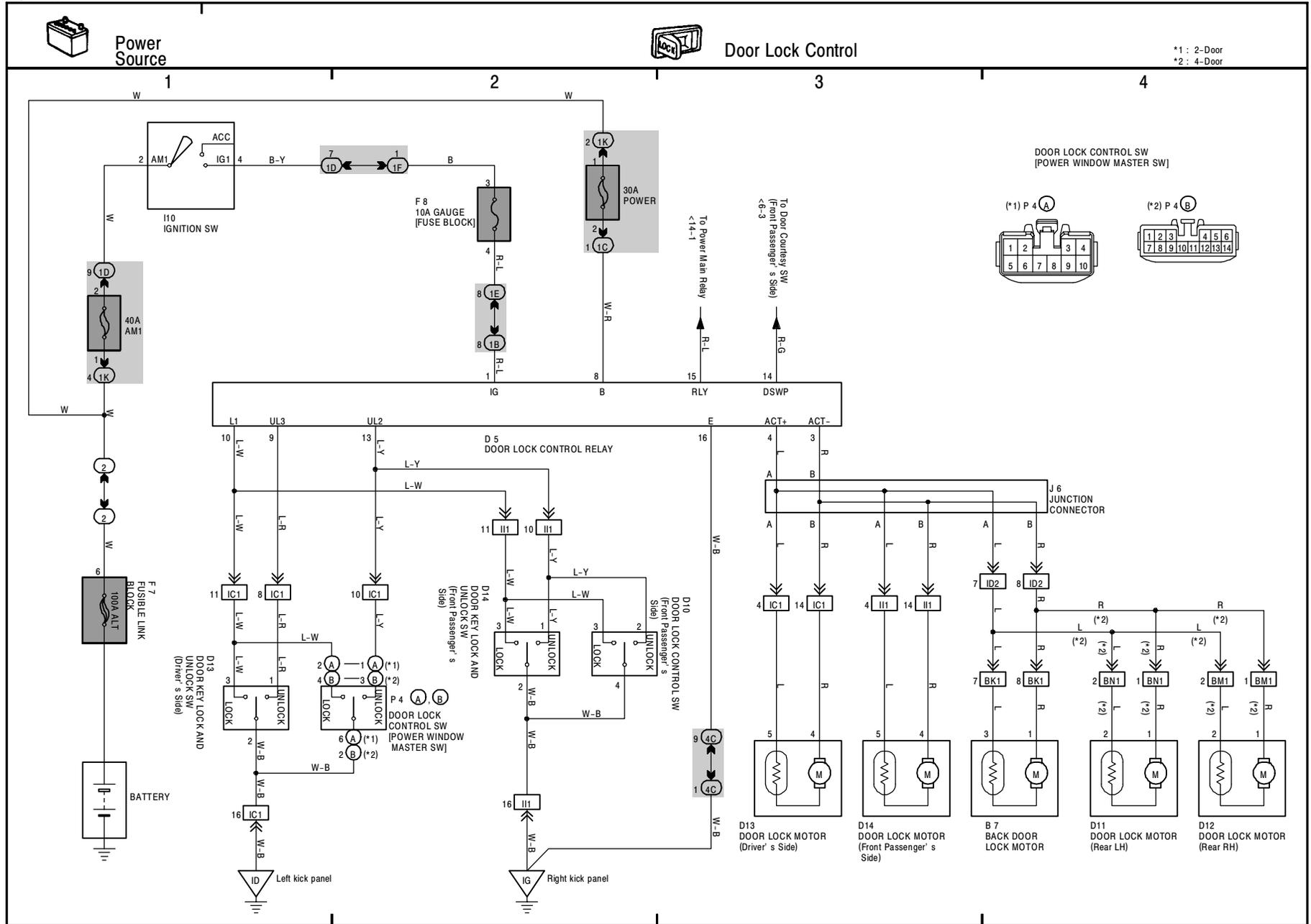
7 RAV4

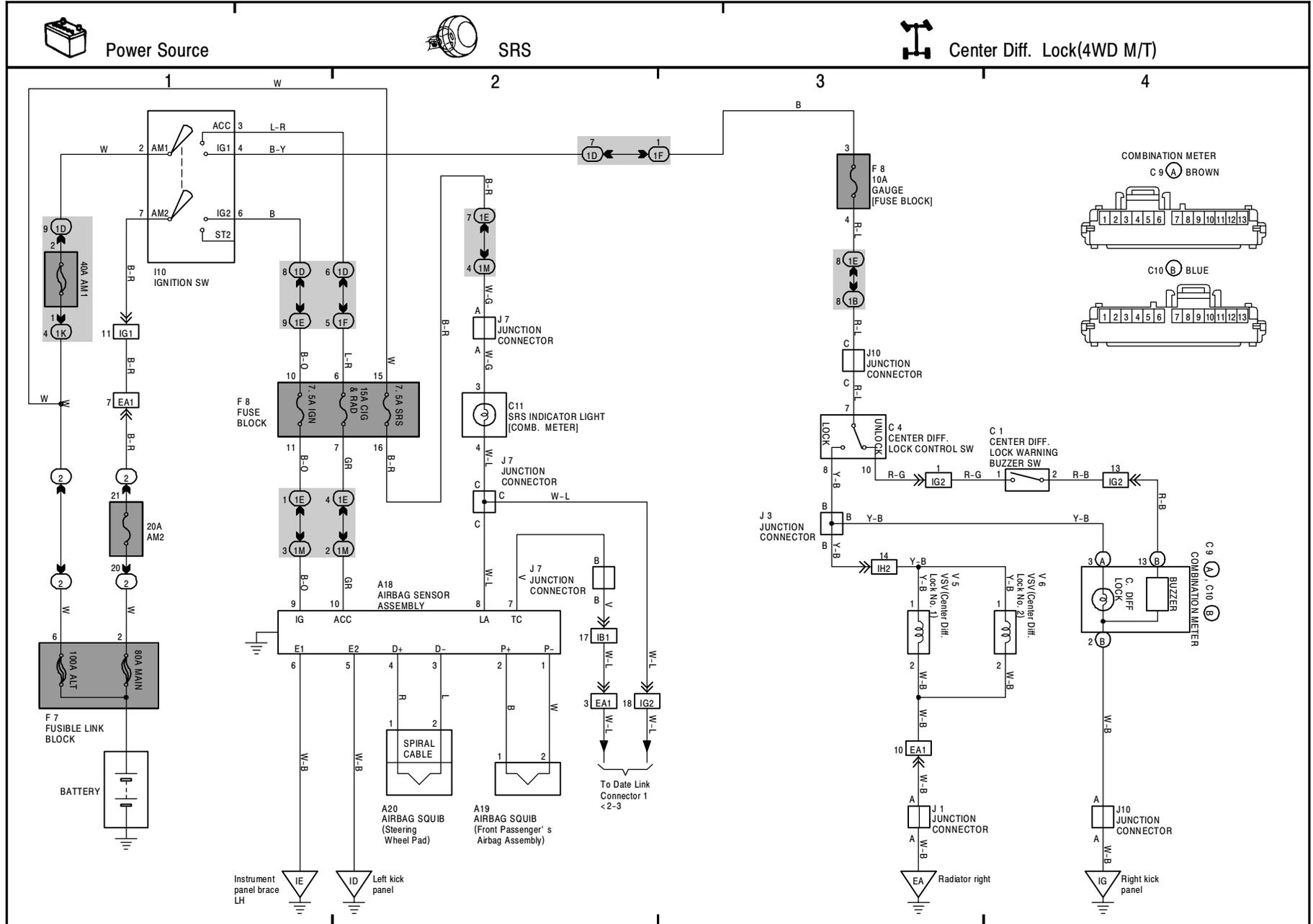


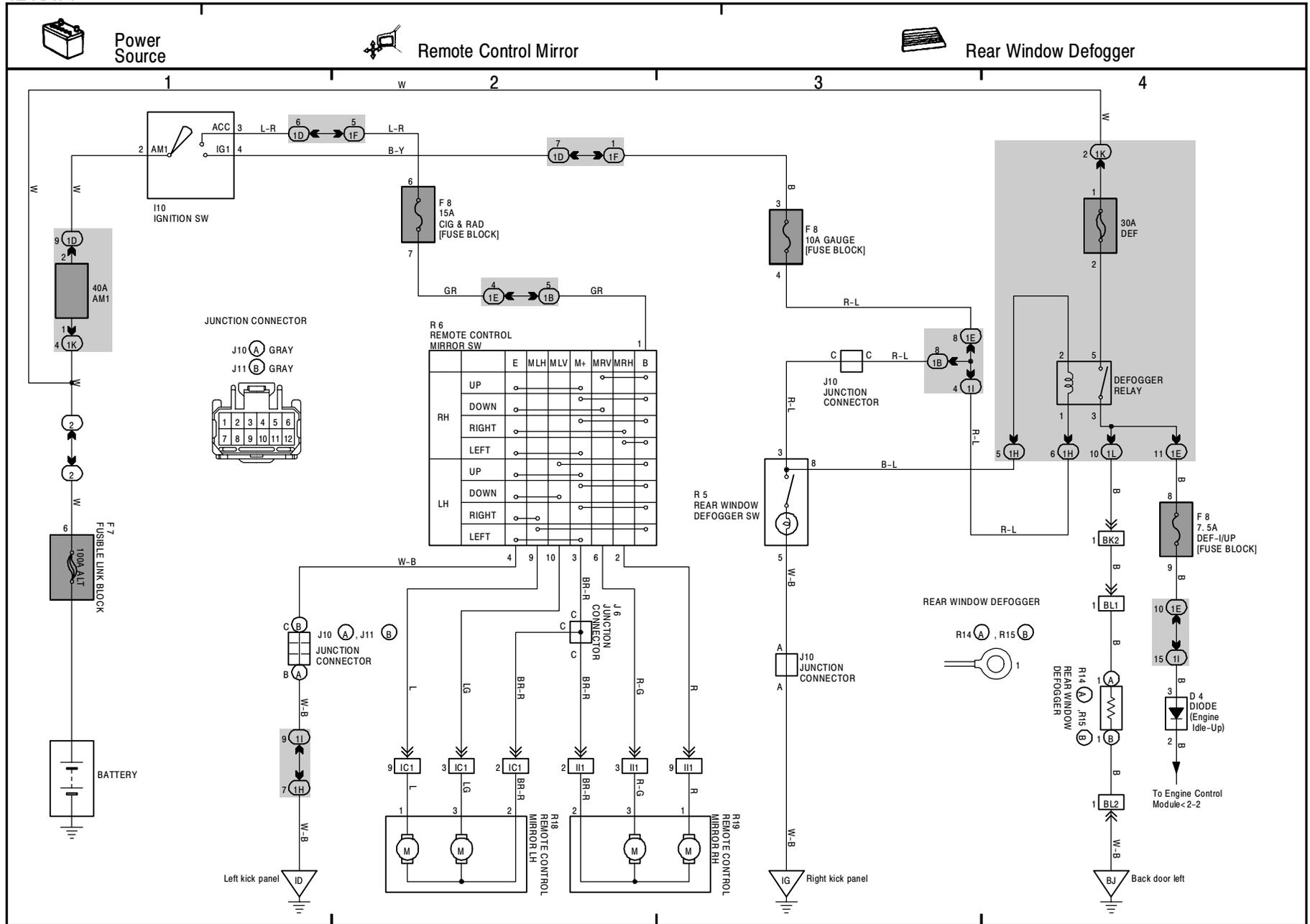


9 RAV4













15 RAV4

