

## A INTRODUCTION

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.

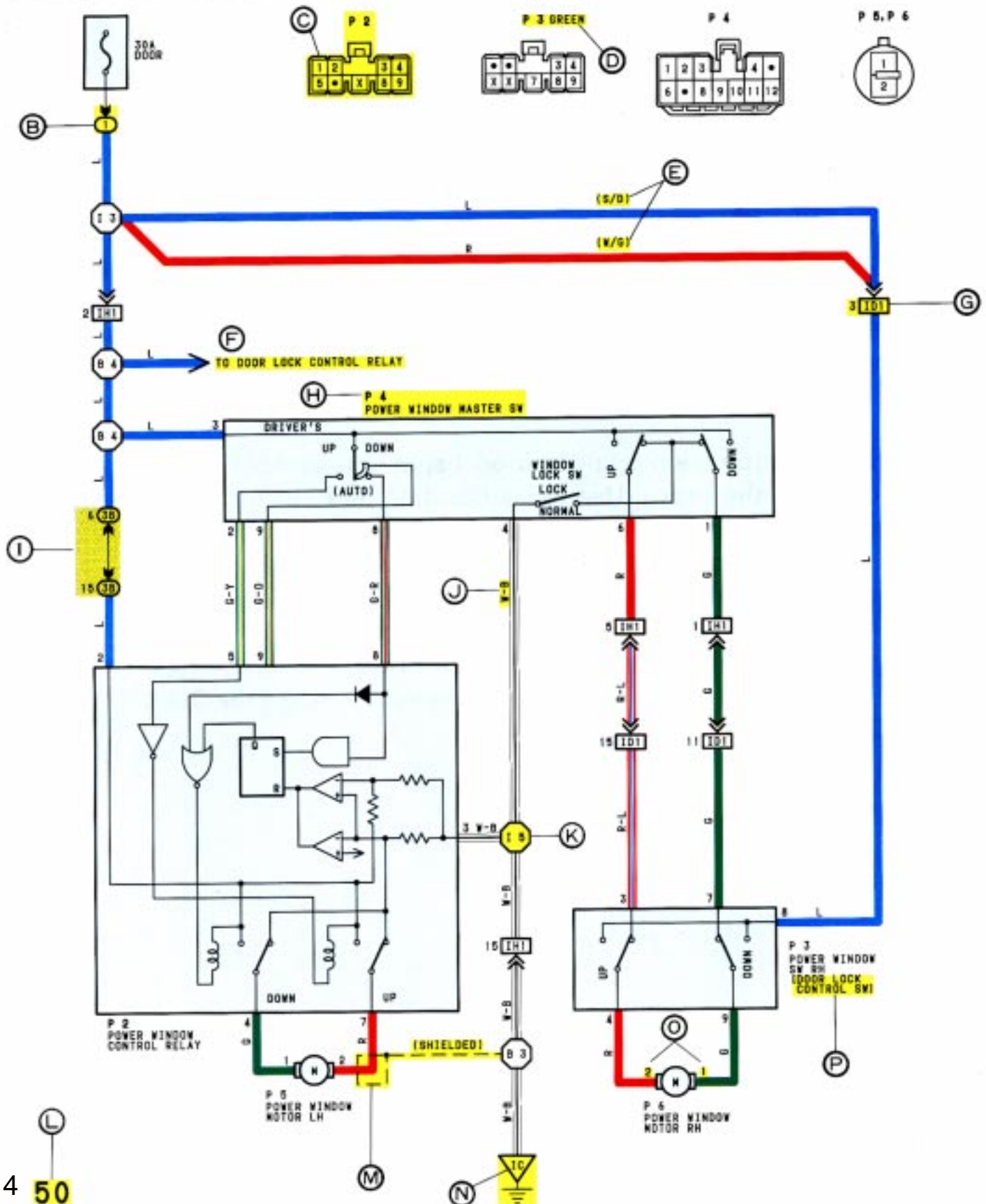
Wiring related to each system is indicated in each system circuit by arrows (from\_\_\_,to\_\_\_). When overall connections are required, see the Overall Electrical Wiring Diagram at the end of this manual.

## B HOW TO USE THIS MANUAL



### POWER WINDOW

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

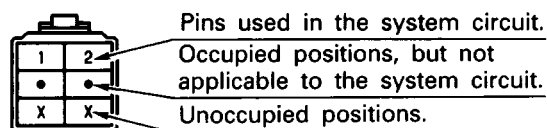


(A) : System Title

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

Example: (1) Indicates Relay Block No. 1.

(C) : Indicates the connector to be connected to a part (the numeral indicates the pin No.)  
Explanation of pin use.



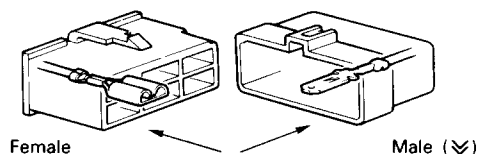
The pins shown are only for the highest grade, or only include those in the specification.

(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 (↗).



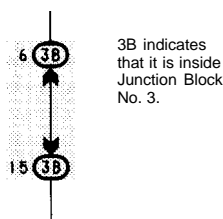
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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:

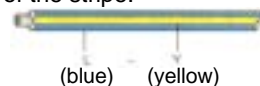


(J) : Indicates the wiring color.  
Wire colors are indicated by an alphabetical code.

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

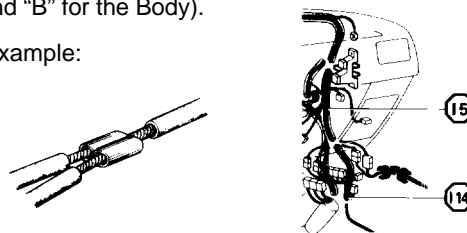
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

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).

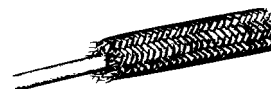
Example:



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

(L) : Page No.

(M) : Indicates a shielded cable.



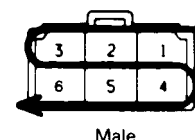
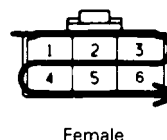
(N) : Indicates a ground point.

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.

lower right

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

Q

## 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** 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.

### 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).

R

## 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

S

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
P2	21	P4	21	P6	21
P3	21	P5	21		

T

## : RELAY BLOCKS

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

U

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
38	14	J/B NO. 3 AND COWL WIRE (INSTRUMENT PANEL LEFT SIDE)

V

## : 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)

W

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT

X

## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I5	24	COWL WIRE			

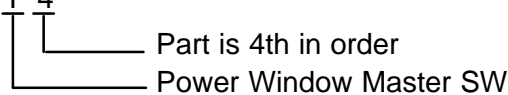
Ⓚ: Explains the system outline.

Ⓡ: Indicates values or explain 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 on 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.

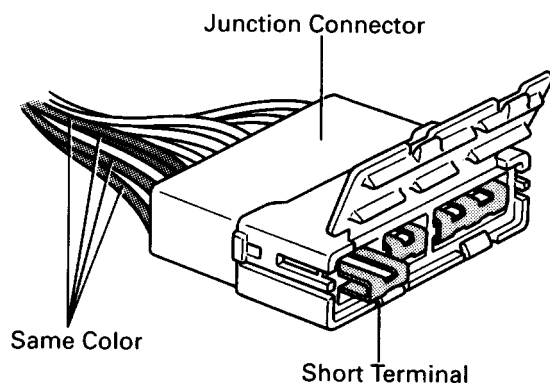
Ⓦ: Indicates the reference page showing the position of the ground points on the vehicle.

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.

#### HINTS:



Junction connector (code: J1 to J19) 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.

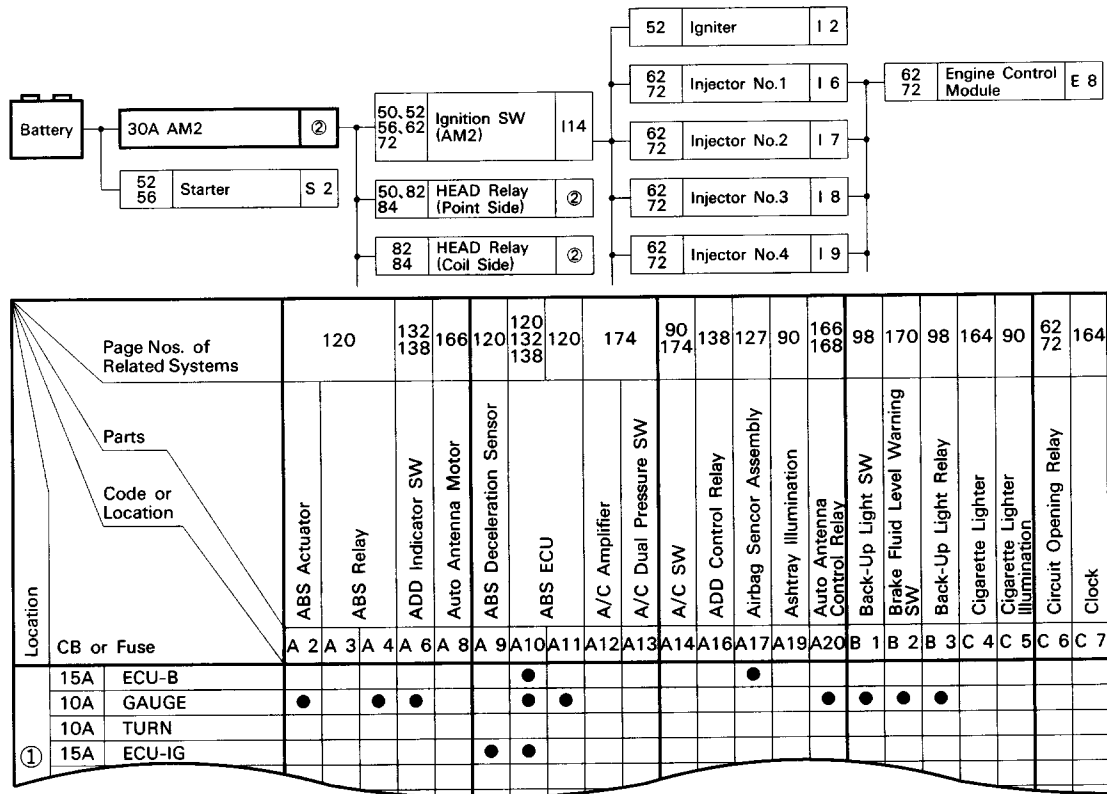
B HOW TO USE THIS MANUAL

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.

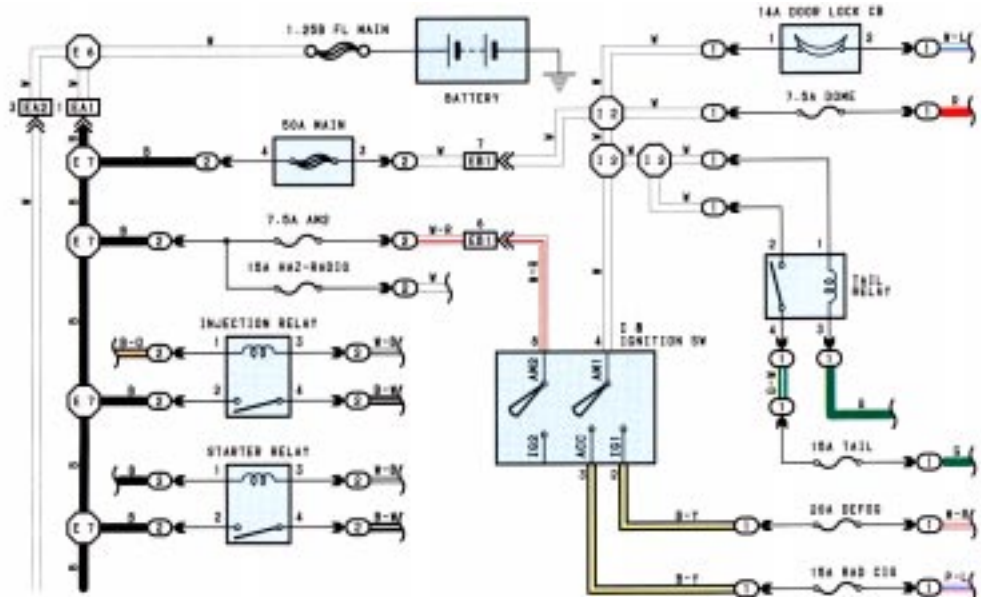
H POWER SOURCE (CURRENT FLOW CHART)

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 shown the parts to which each electrical source outputs current.

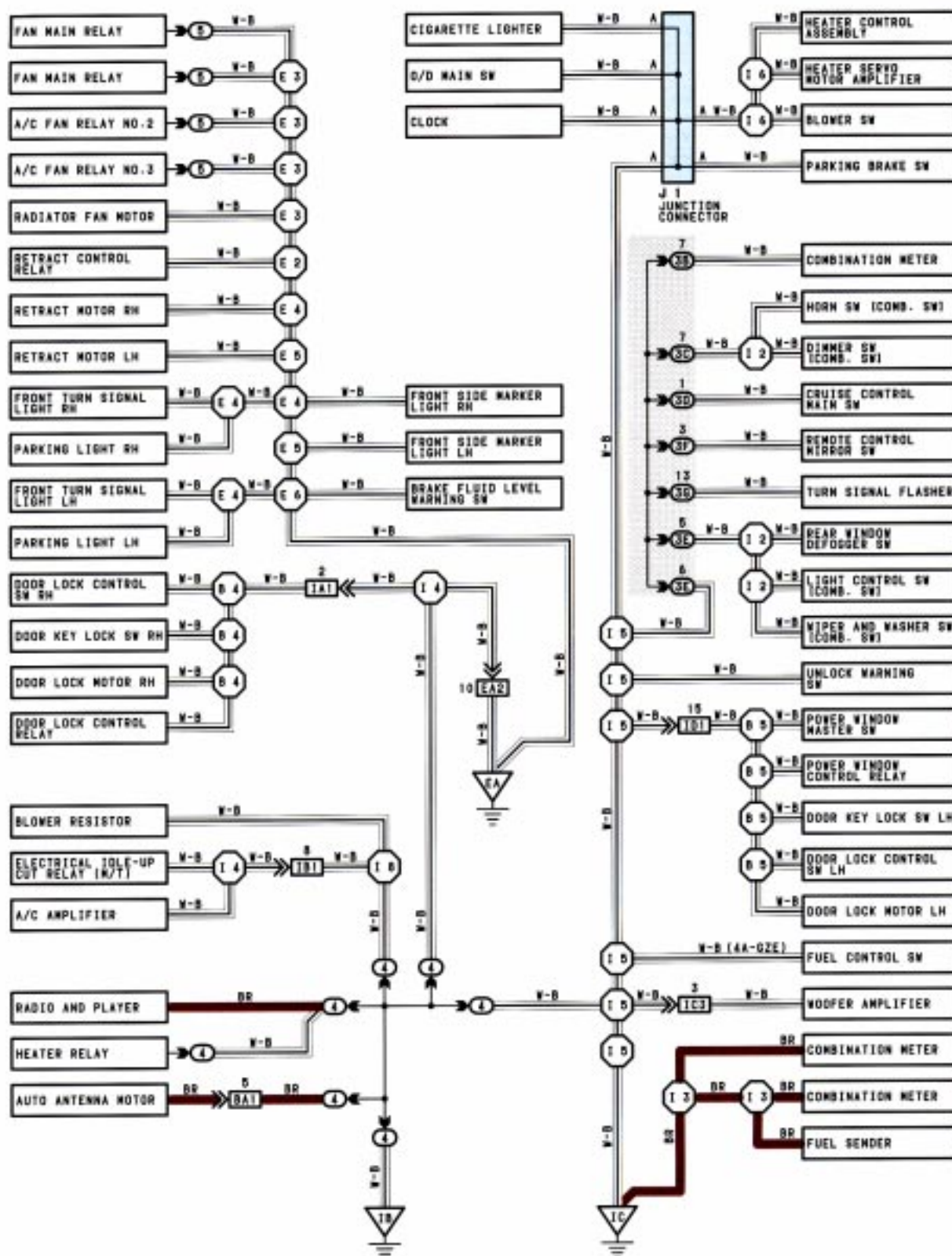


POWER SOURCE



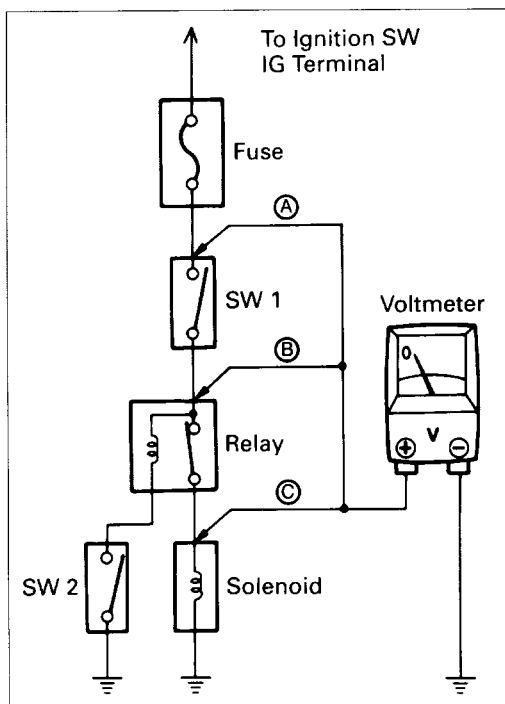
The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points (EA,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



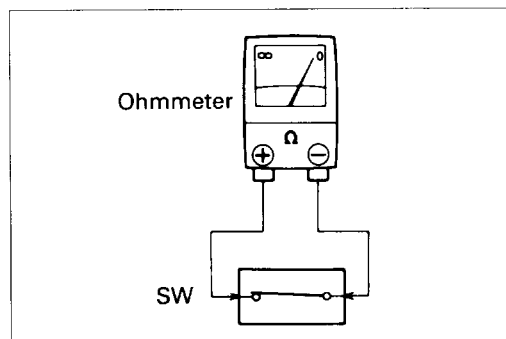
### VOLTAGE CHECK

- Establish conditions in which voltage is check point.

Example:

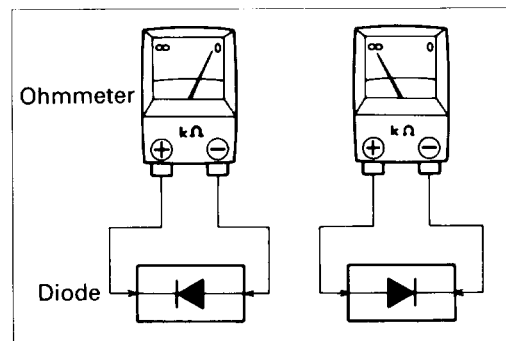
- (A) – Ignition SW on
- (B) – Ignition SW and SW 1 on
- (C) – Ignition SW, SW 1 and Relay on (SW2 off)

- Using a voltmeter, connect the negative lead to a ground point or negative battery terminal, and a 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

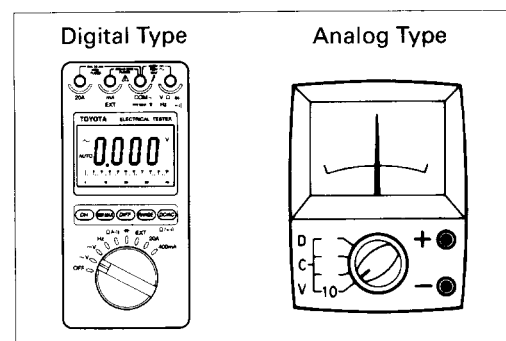
- Disconnect the battery terminal or wire so there is no voltage between the check points.
- Contact the two leads of an ohmmeter to each of the check point.



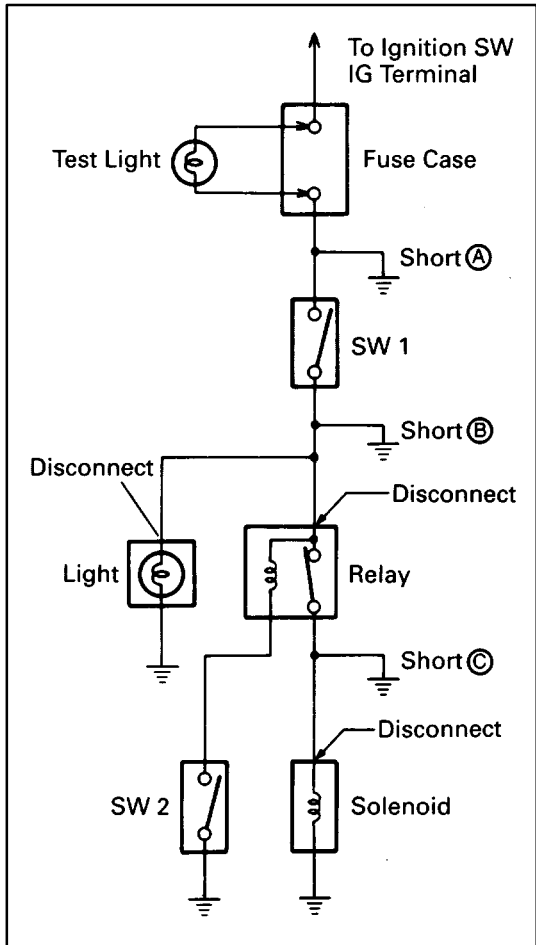
If the circuit has diodes, reverse the two leads and check again.

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.



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



## FINDING A SHORT CIRCUIT

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

Example:

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

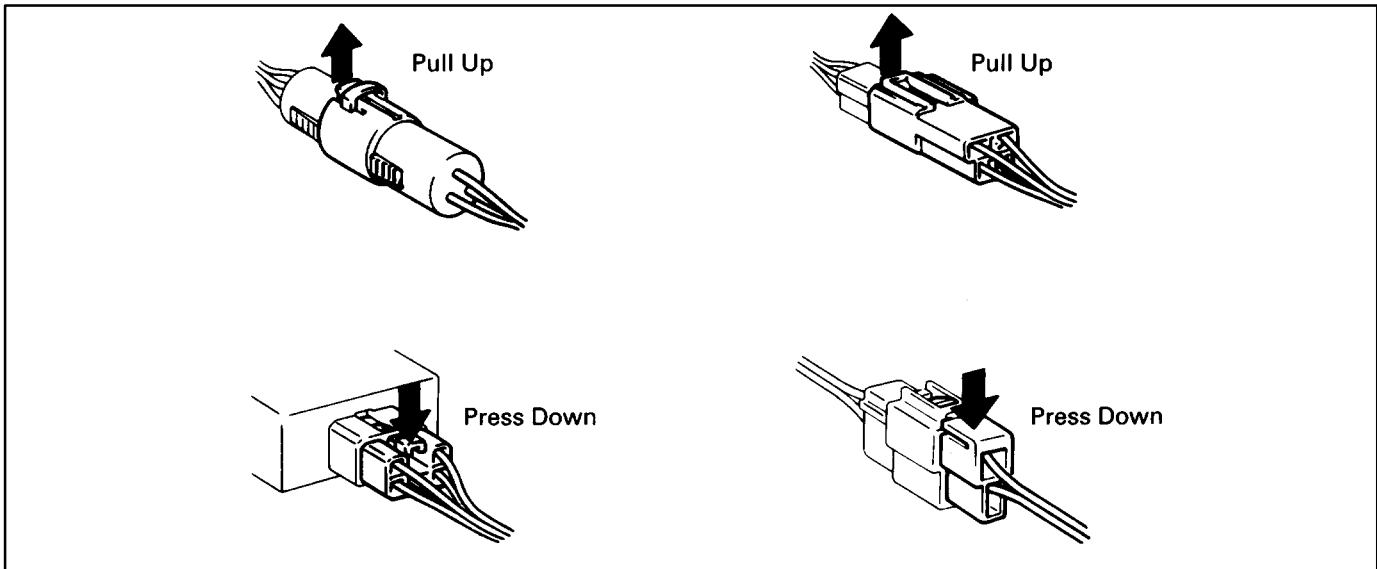
### CAUTION:

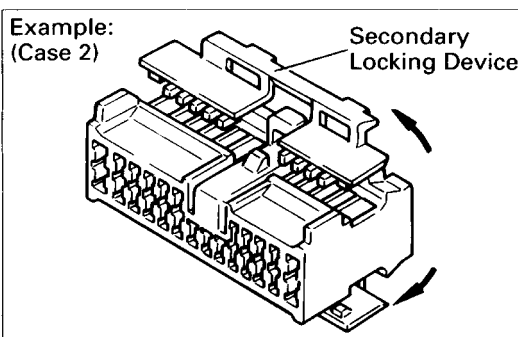
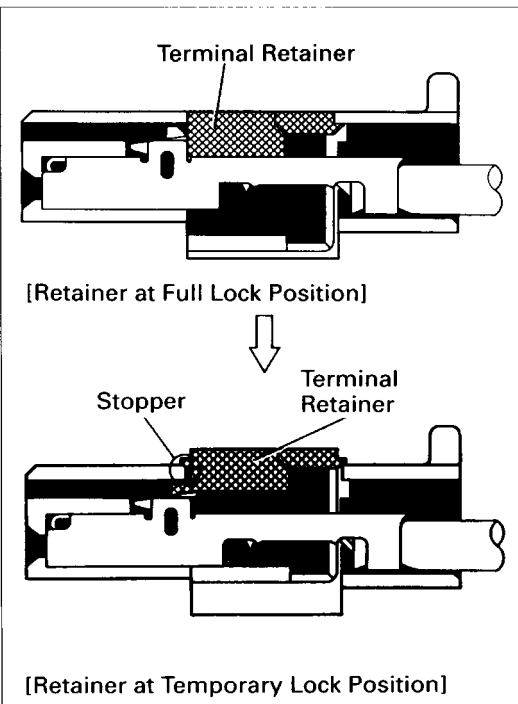
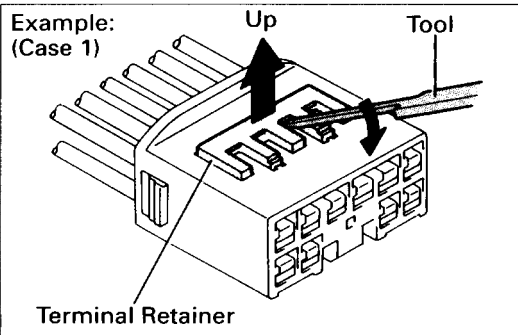
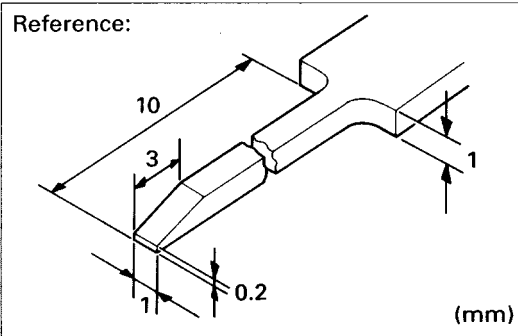
- Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)
- When replacing the internal mechanism (ECU part) of the digital meter, be careful that no part of your body or clothing comes in contact with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

## DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

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





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

#### 1. PREPARE THE SPECIAL TOOL

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

#### 2. DISCONNECT CONNECTOR

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

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

#### NOTICE:

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

#### Ⓐ For Non-Waterproof Type Connector

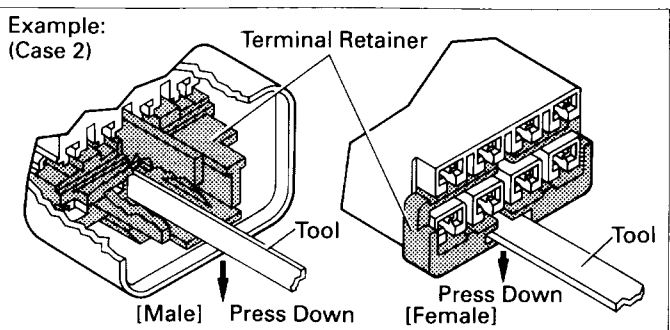
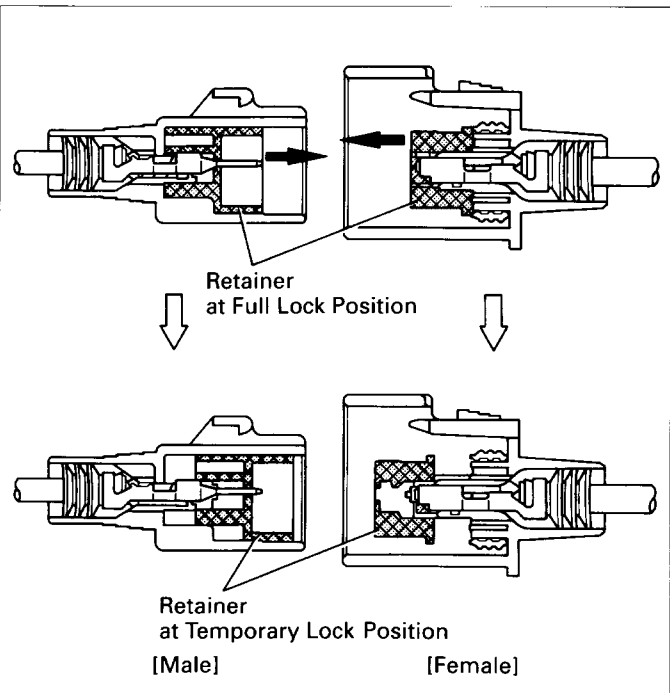
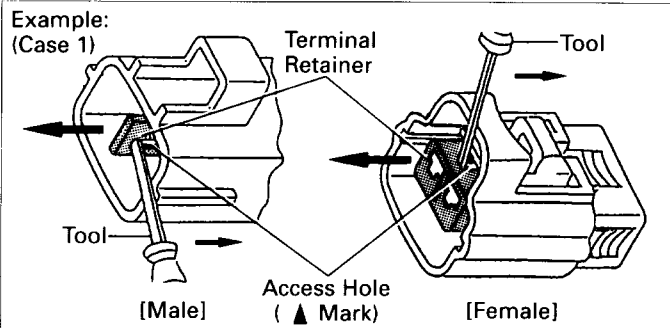
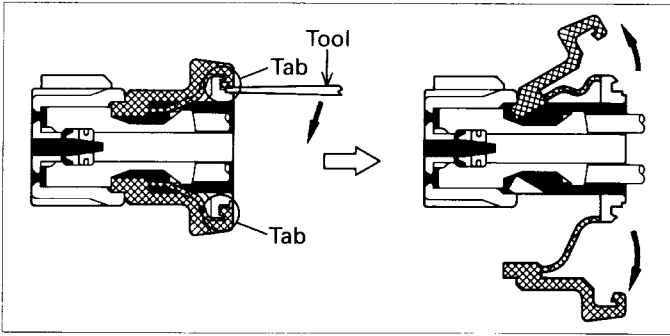
HINT: The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

#### “Case 1”

Raise the terminal retainer up to the temporary lock position.

#### “Case 2”

Open the secondary locking device.



## ② For Waterproof Type Connector

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

Example:

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

### “Case 1”

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

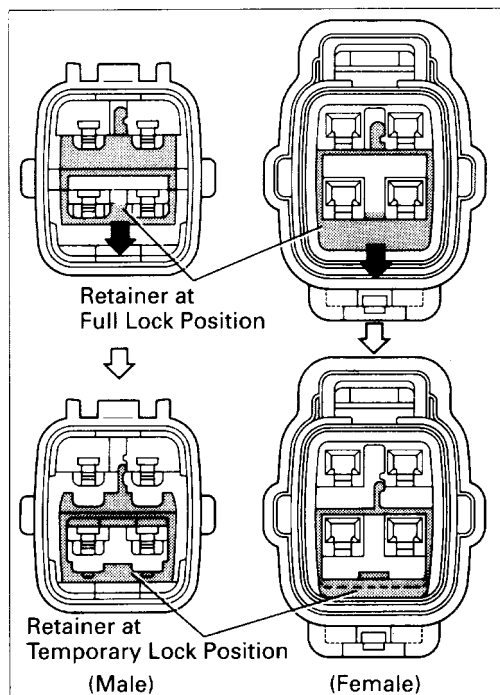
Insert the special tool into the terminal retainer access hole (▲Mark) and pull the terminal retainer up to the temporary lock position.

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

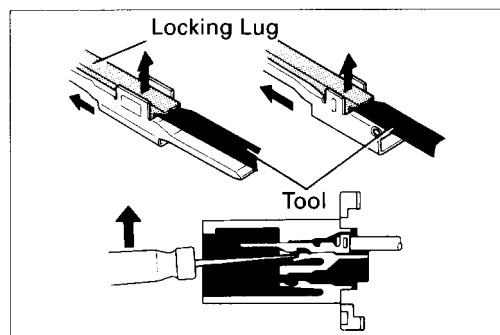
### “Case 2”

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

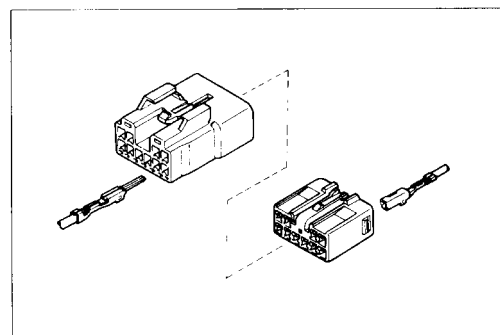
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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



### 4. INSTALL TERMINAL TO CONNECTOR

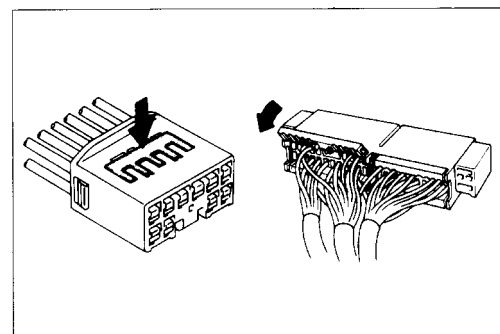
(a) Insert the terminal.

HINT:

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

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

### 5. CONNECT CONNECTOR



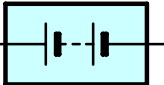





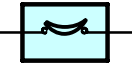


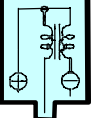






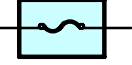
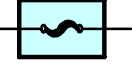
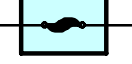
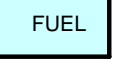

**ABBREVIATIONS**

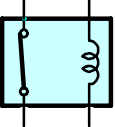
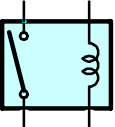

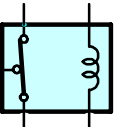

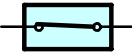

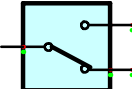
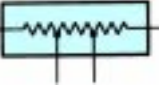
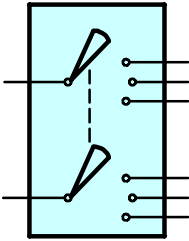
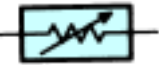
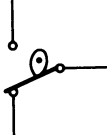
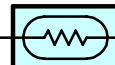
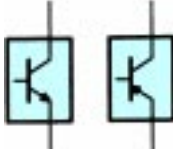


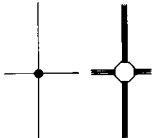

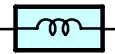
The following abbreviations are used in this manual.

ABS	=	Anti-Lock Brake System
A/C	=	Air Conditioning
ACIS	=	Acoustic Control Induction System
A/T	=	Automatic Transaxle
CD	=	Compact Disc
COMB.	=	Combination
ECU	=	Electronic Control Unit
EGR	=	Exhaust Gas Recirculation
ESA	=	Electronic Spark Advance
EVAP	=	Evaporative Emission
FL	=	Fusible Link
J/B	=	Junction Block
LH	=	Left-Hand
O/D	=	Overdrive
R/B	=	Relay Block
RH	=	Right-Hand
SFI	=	Sequential Multiport Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TRAC	=	Traction Control
VSV	=	Vacuum Switching Valve
w/	=	With
w/o	=	Without

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

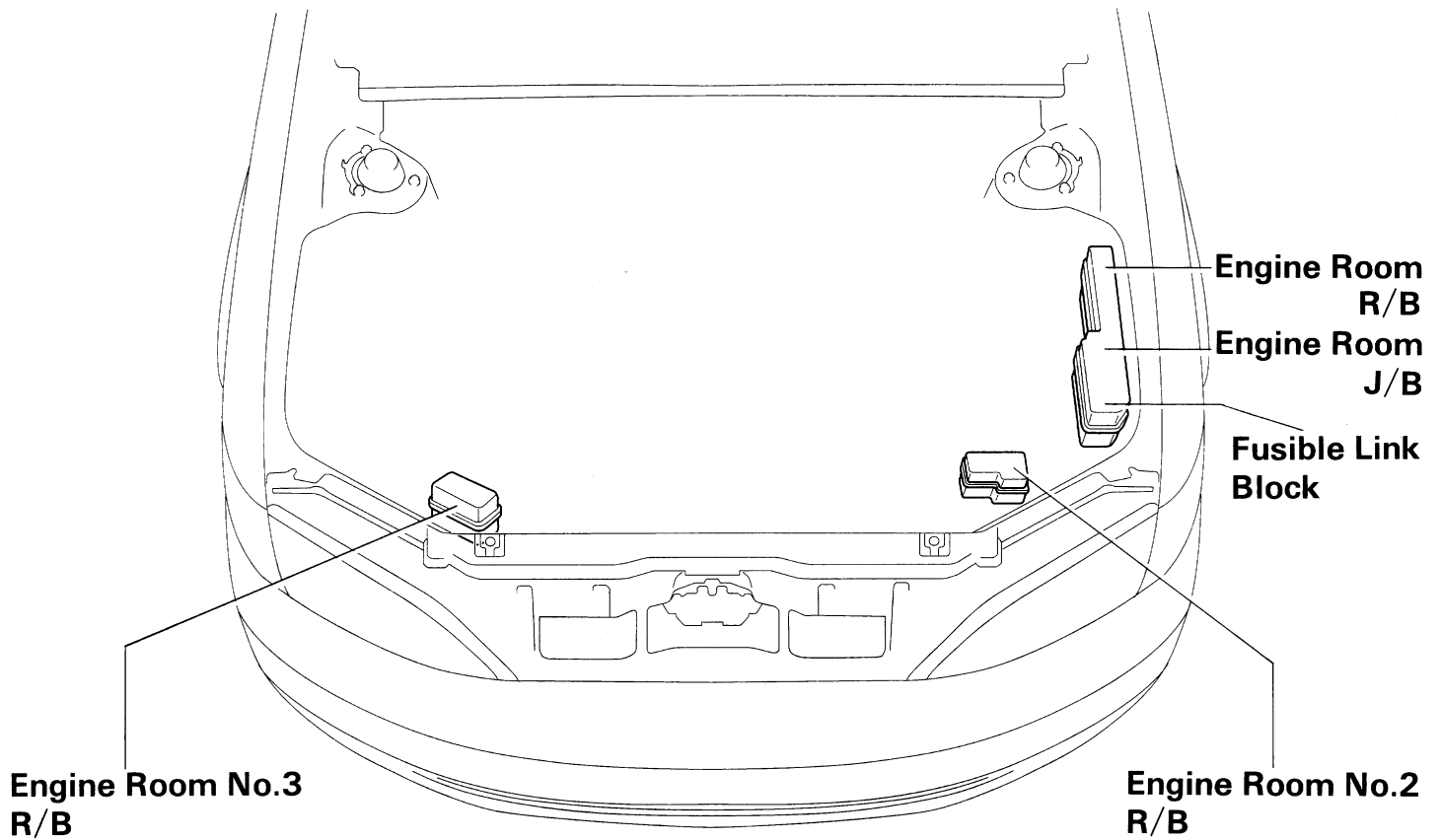
# E GLOSSARY OF TERMS AND SYMBOLS

 <p><b>BATTERY</b> Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.</p>	<p><b>GROUND</b> The point at which wiring attaches to the Body, thereby providing a return path for an electrical circuit; without a ground, current cannot flow.</p> 
 <p><b>CAPACITOR (Condenser)</b> A small holding unit for temporary storage of electrical voltage.</p>	<p><b>HEADLIGHTS</b> Current flow causes a headlight filament to heat up and emit light. A headlight may have either a single (1) filament or a double (2) filament.</p> <p>1. <b>SINGLE FILAMENT</b></p>  <p>2. <b>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> 

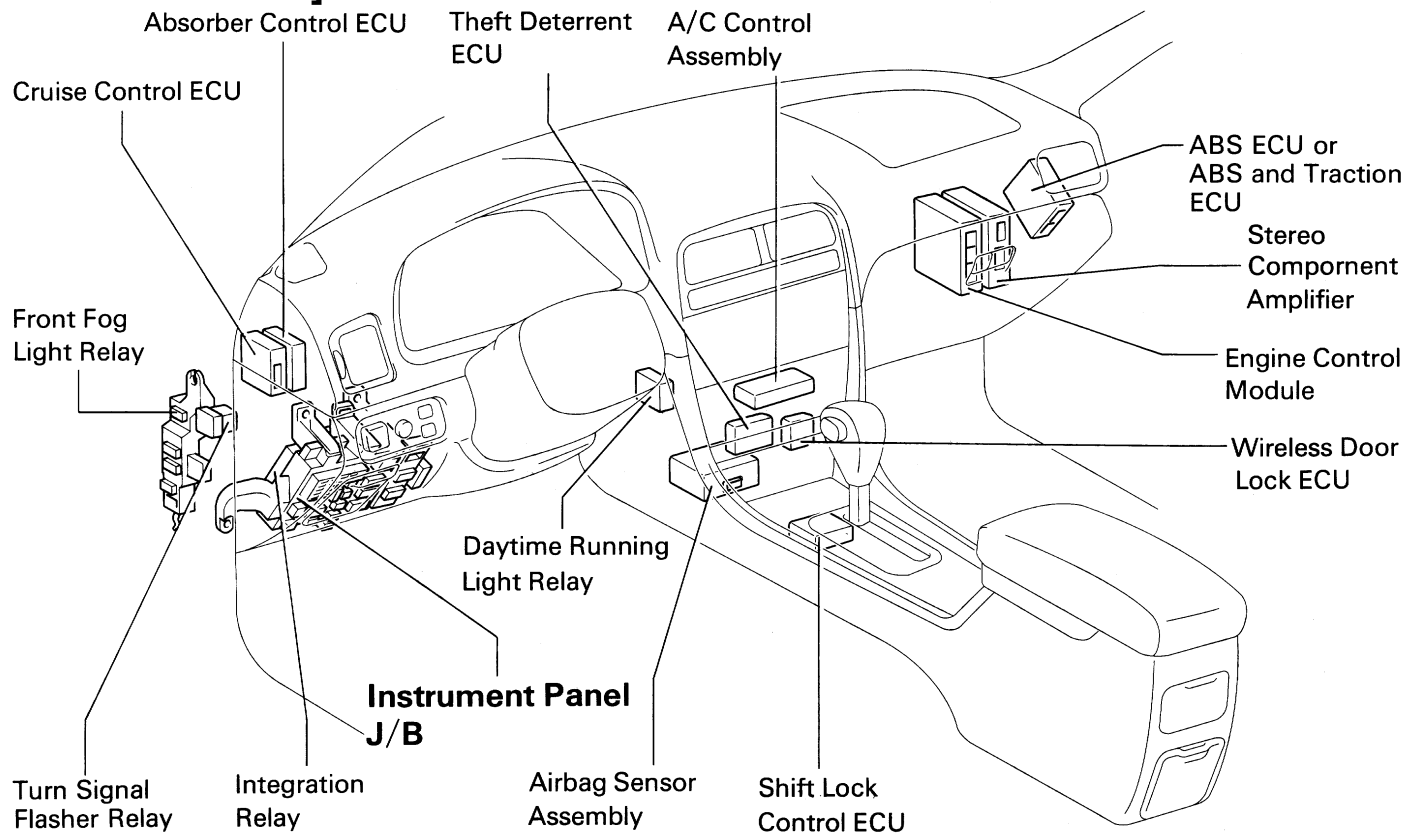
 <p><b>RELAY</b></p> <p>1. <b>NORMALLY CLOSED</b></p>  <p>2. <b>NORMALLY OPEN</b></p> <p>Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p>	 <p><b>SPEAKER</b></p> <p>An electromechanical device which creates sound waves from current flow.</p>
 <p><b>RELAY, DOUBLE THROW</b></p> <p>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></p>  <p>2. <b>NORMALLY CLOSED</b></p>  <p>Open and closes circuits, thereby stopping (1) or allowing (2) current flow.</p>
 <p><b>RESISTOR</b></p> <p>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></p> <p>A switch which continuously passes current through one set of contacts or the other.</p>
 <p><b>RESISTOR, TAPPED</b></p> <p>A resistor which supplies two or more different non adjustable resistance values.</p>	 <p><b>SWITCH, IGNITION</b></p> <p>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></p> <p>A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.</p>	 <p><b>SWITCH, WIPER PARK</b></p> <p>Automatically returns wipers to the stop position when the wiper switch is turned off.</p>
 <p><b>SENSOR (Thermistor)</b></p> <p>A resistor which varies its resistance with temperature.</p>	 <p><b>TRANSISTOR</b></p> <p>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></p> <p>Uses magnetic impulses to open and close a switch to create a signal for activation of other components.</p> <p>(Reed Switch Type)</p>	<p><b>WIRES</b></p> <p>(1) <b>NOT CONNECTED</b></p>  <p>(2) <b>SPLICED</b></p>  <p>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) and a black dot or octagonal (O) mark at the junction as spliced (joined) connections.</p>
 <p><b>SHORT PIN</b></p> <p>Used to provide an unbroken connection within a junction block.</p>	
 <p><b>SOLENOID</b></p> <p>An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p>	

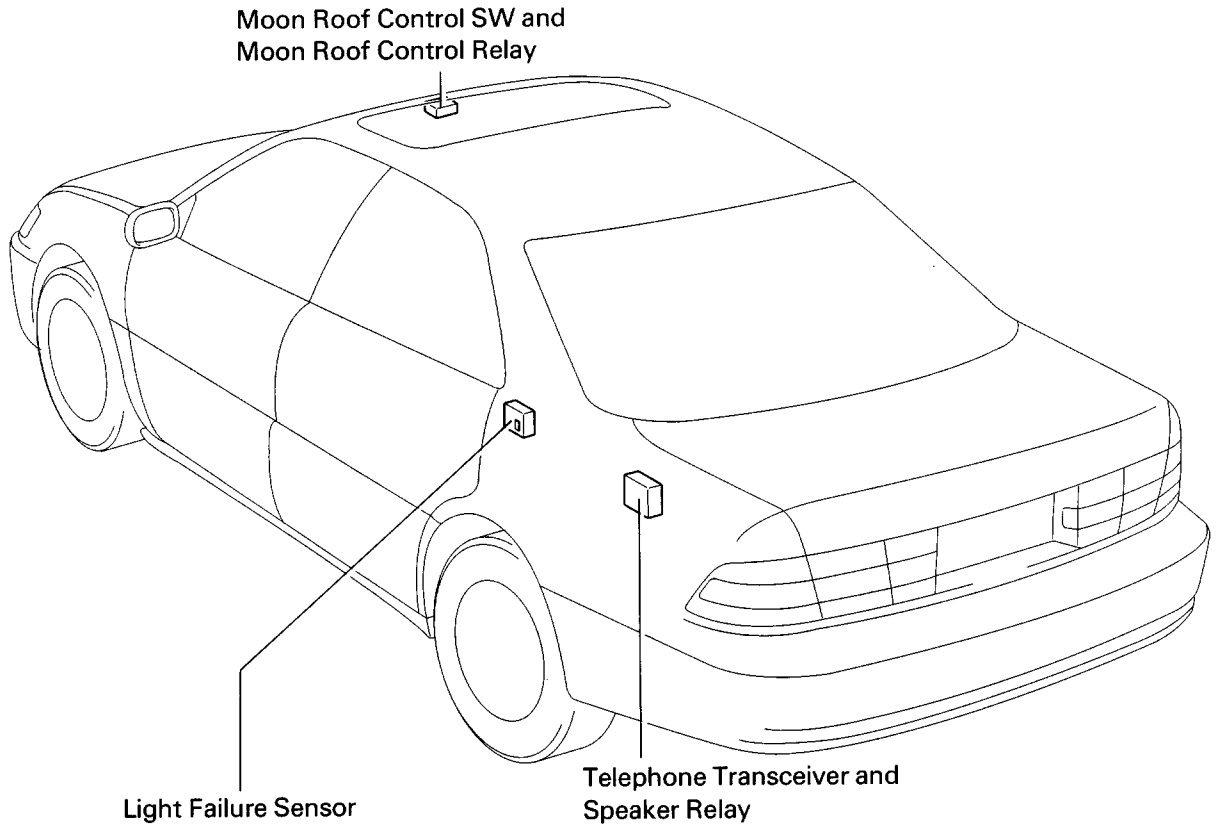
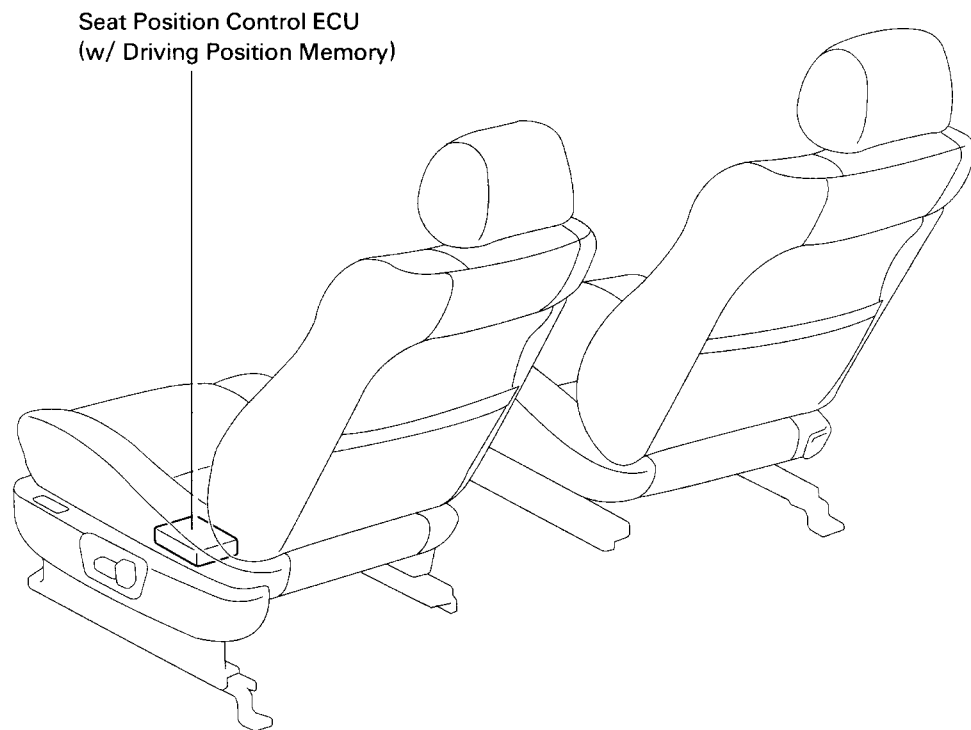
## F RELAY LOCATIONS

### [Engine Compartment]



### [Instrument Panel]

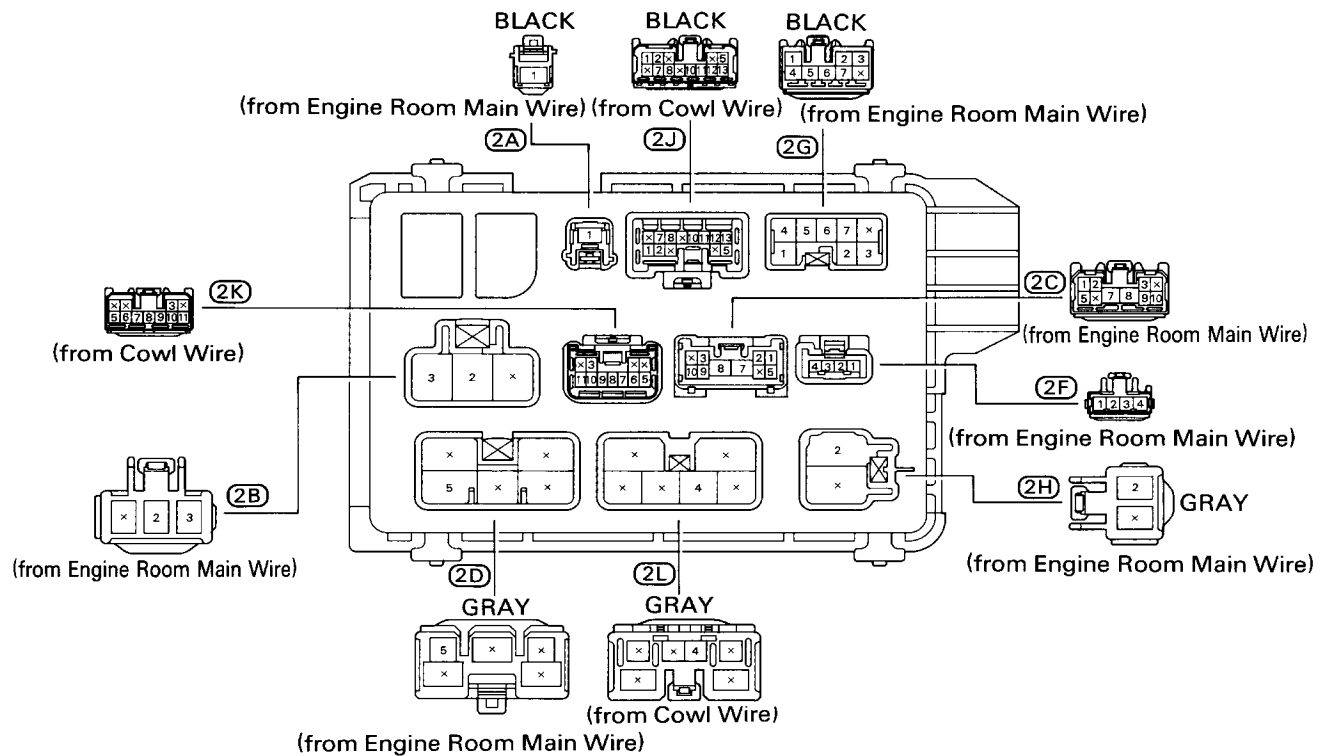
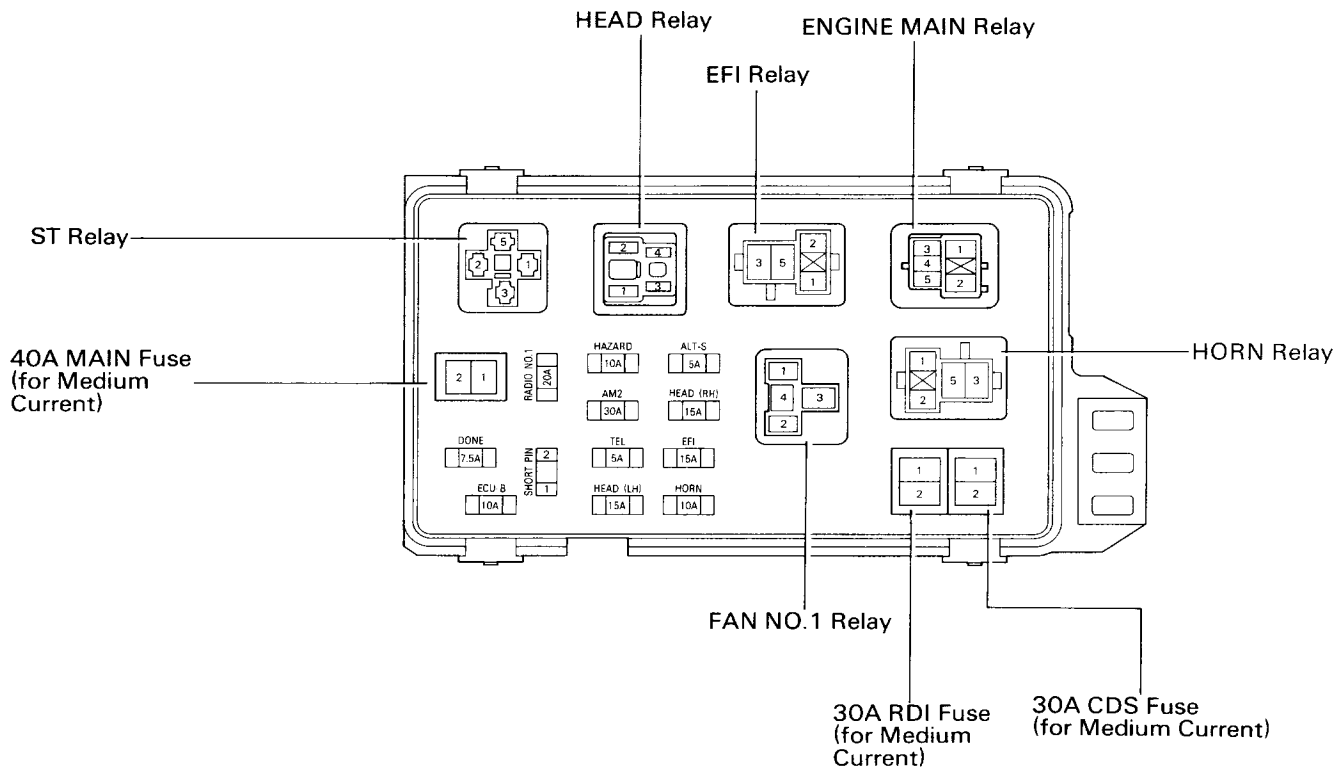


**(Body)****[Seat]**

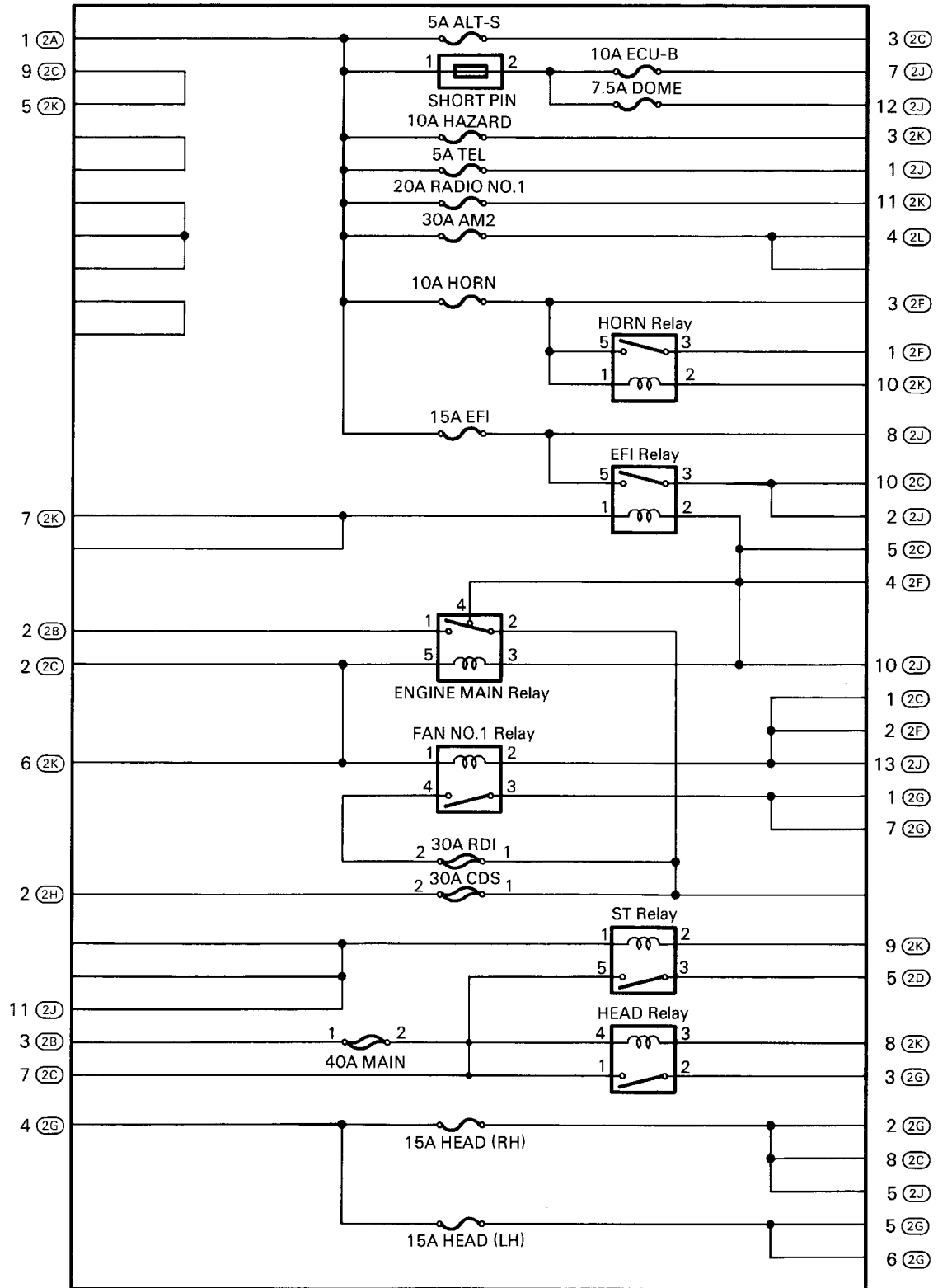
## F RELAY LOCATIONS

○ : Engine Room J/B

Engine Compartment Left (See Page 18)

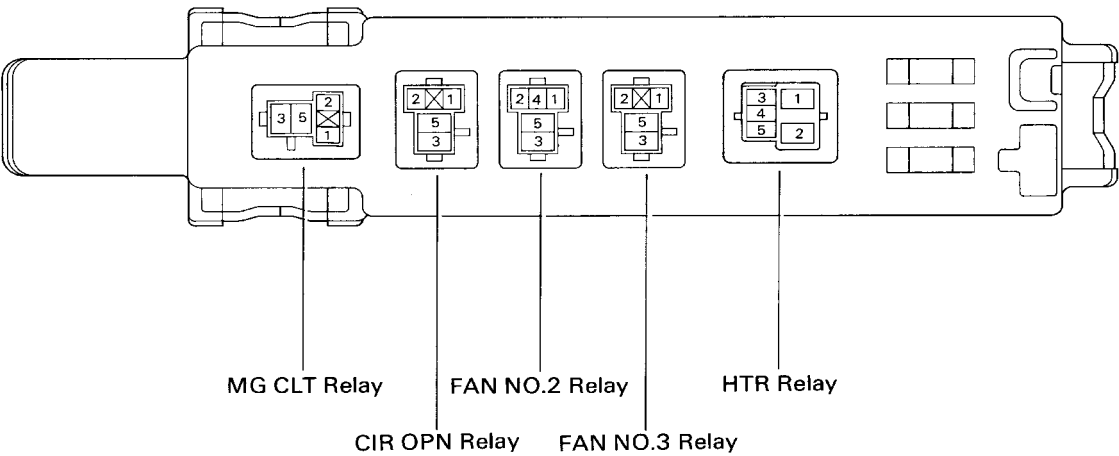


## (Engine Room J/B Inner Circuit)

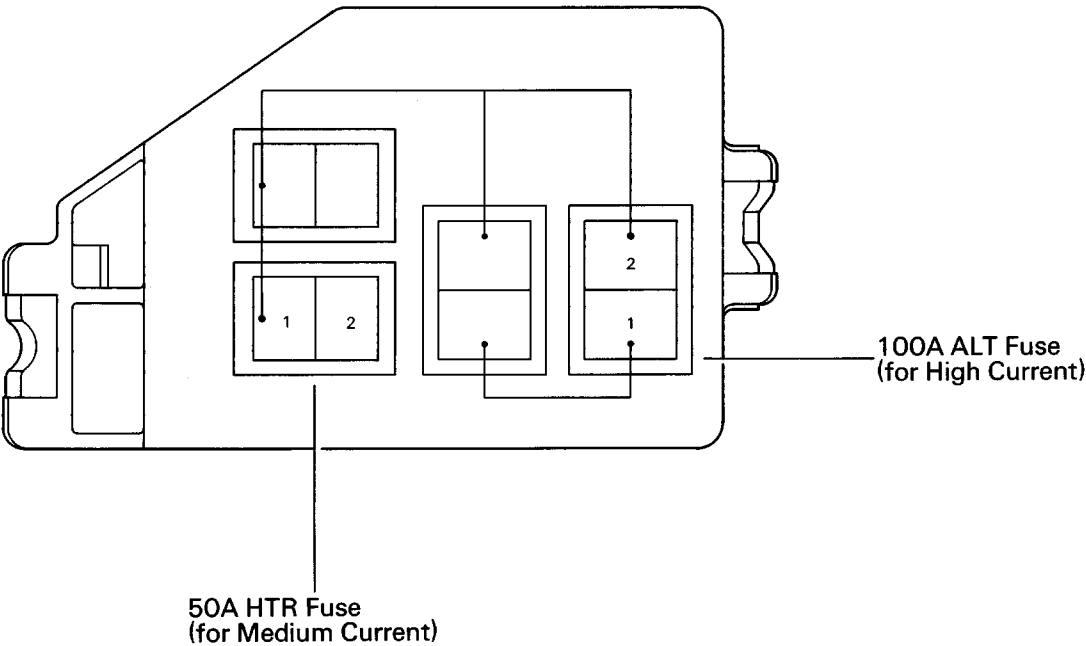


F RELAY LOCATIONS

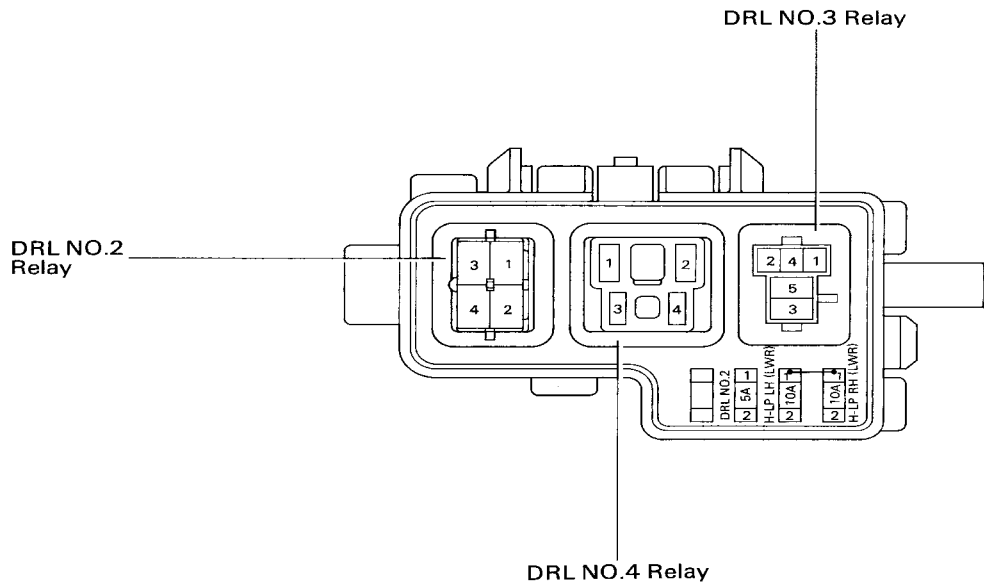
① : Engine Room R/B	Engine Compartment Left (See Page 18)
	(Inside Engine Room J/B)



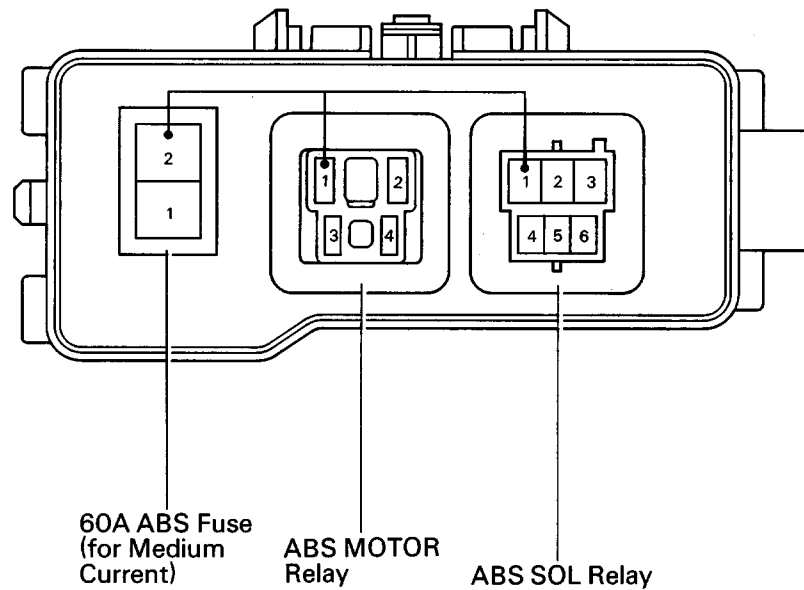
Fusible Link Block	Engine Compartment Left (See Page 18)
	(Inside Engine Room J/B)



**② : Engine Room No. 2 R/B Engine Compartment Left (See Page 18)**  
**(Canada)**

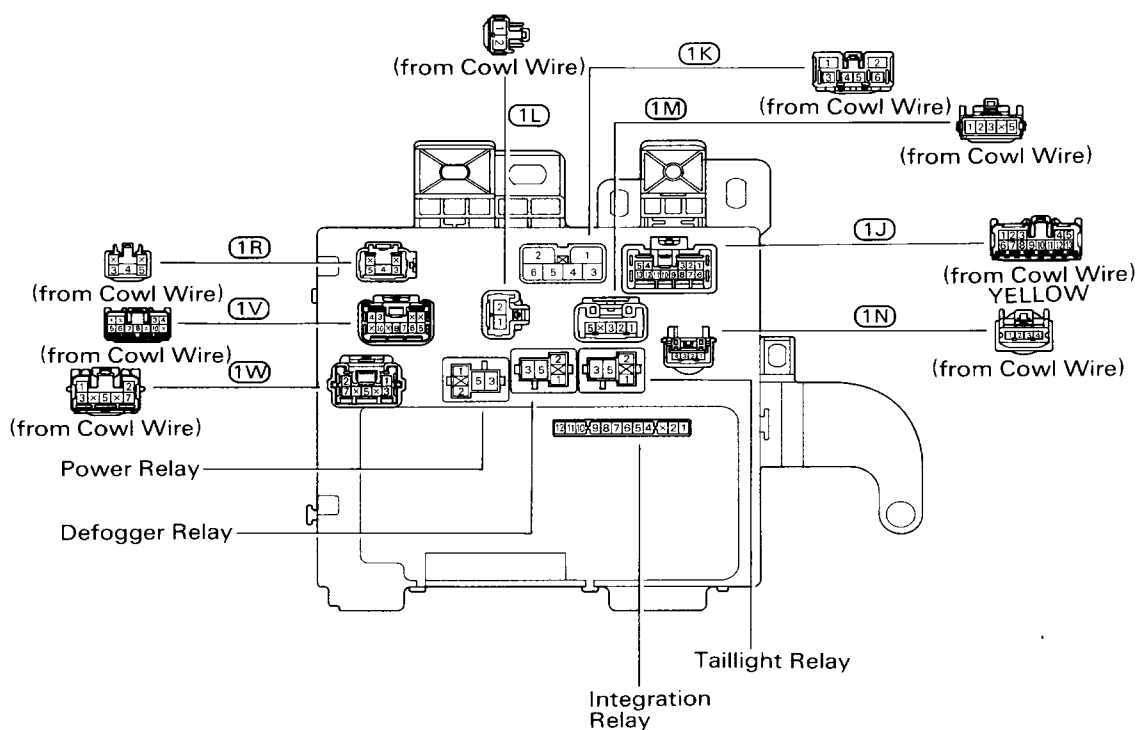
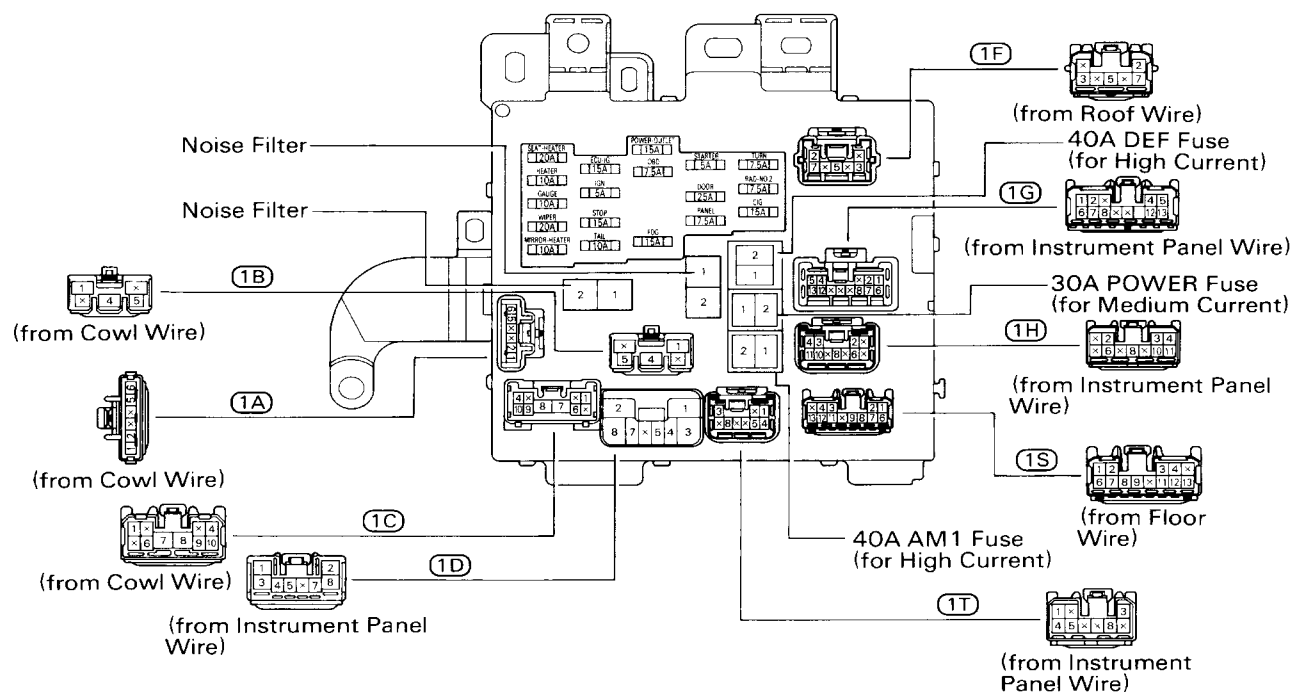


**③ : Engine Room No.3 R/B Radiator Upper Support RH (See Page 18)**



## F RELAY LOCATIONS

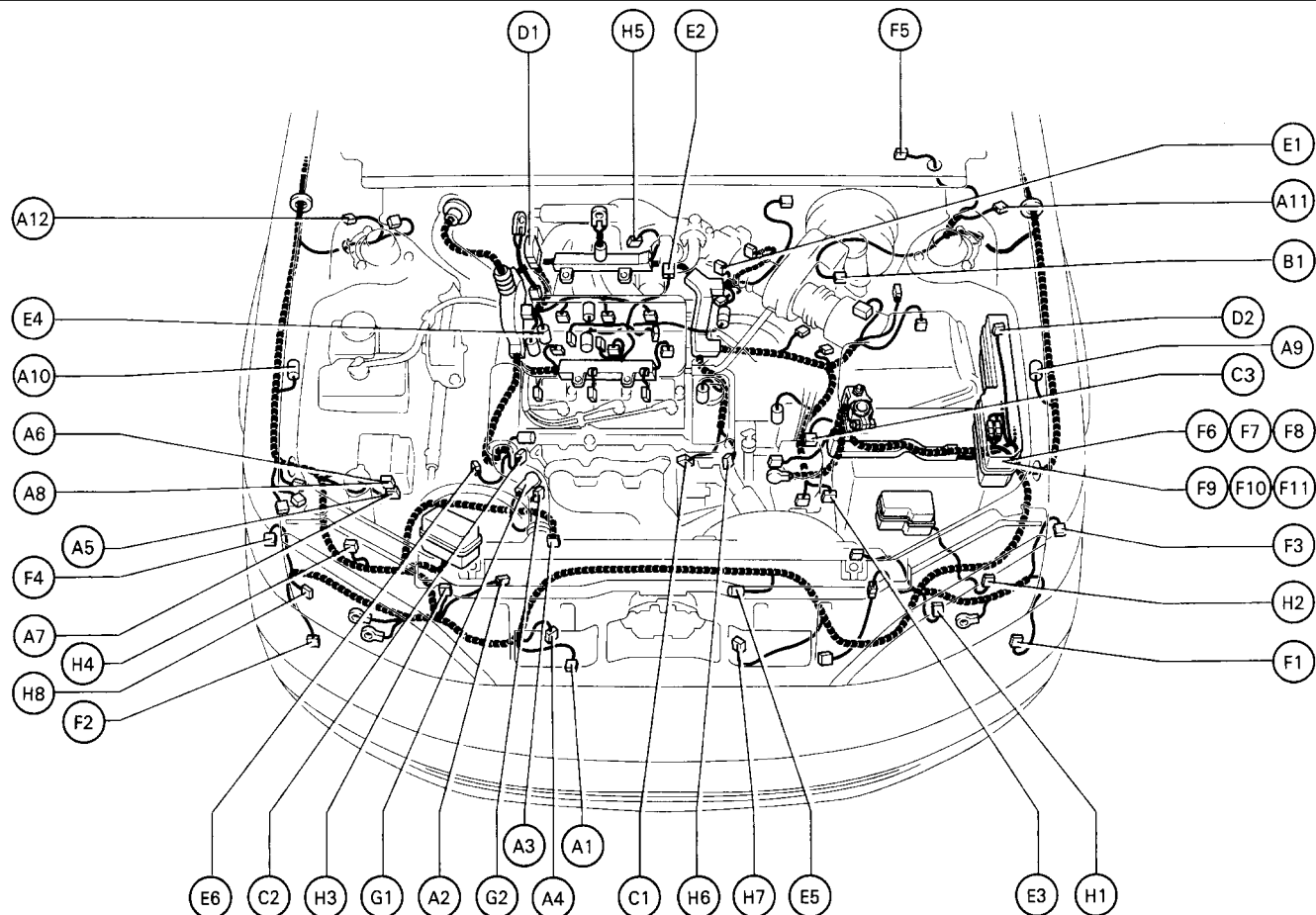
**○ : Instrument Panel J/B    Lower Finish Panel (See Page 18)**





## G ELECTRICAL WIRING ROUTING

### Position of Parts in Engine Compartment



- A 1 Ambient Temp. Sensor
- A 2 A/C Condenser Fan Motor
- A 3 A/C Magnetic Clutch and Lock Sensor
- A 4 A/C Triple Pressure SW (A/C Dual and Single Pressure SW)
- A 5 ABS Actuator
- A 6 ABS Actuator
- A 7 ABS and Traction Actuator
- A 8 ABS and Traction Actuator
- A 9 ABS Speed Sensor Front LH
- A 10 ABS Speed Sensor Front RH
- A 11 Absorber Control Acuator Front LH
- A 12 Absorber Control Acuator Front RH

- B 1 Brake Fluid Level Warning SW

- C 1 Camshaft Position Sensor
- C 2 Crankshaft Position Sensor
- C 3 Cruise Control Actuator

- D 1 Data Link Connector 1
- D 2 Diode (A/C)

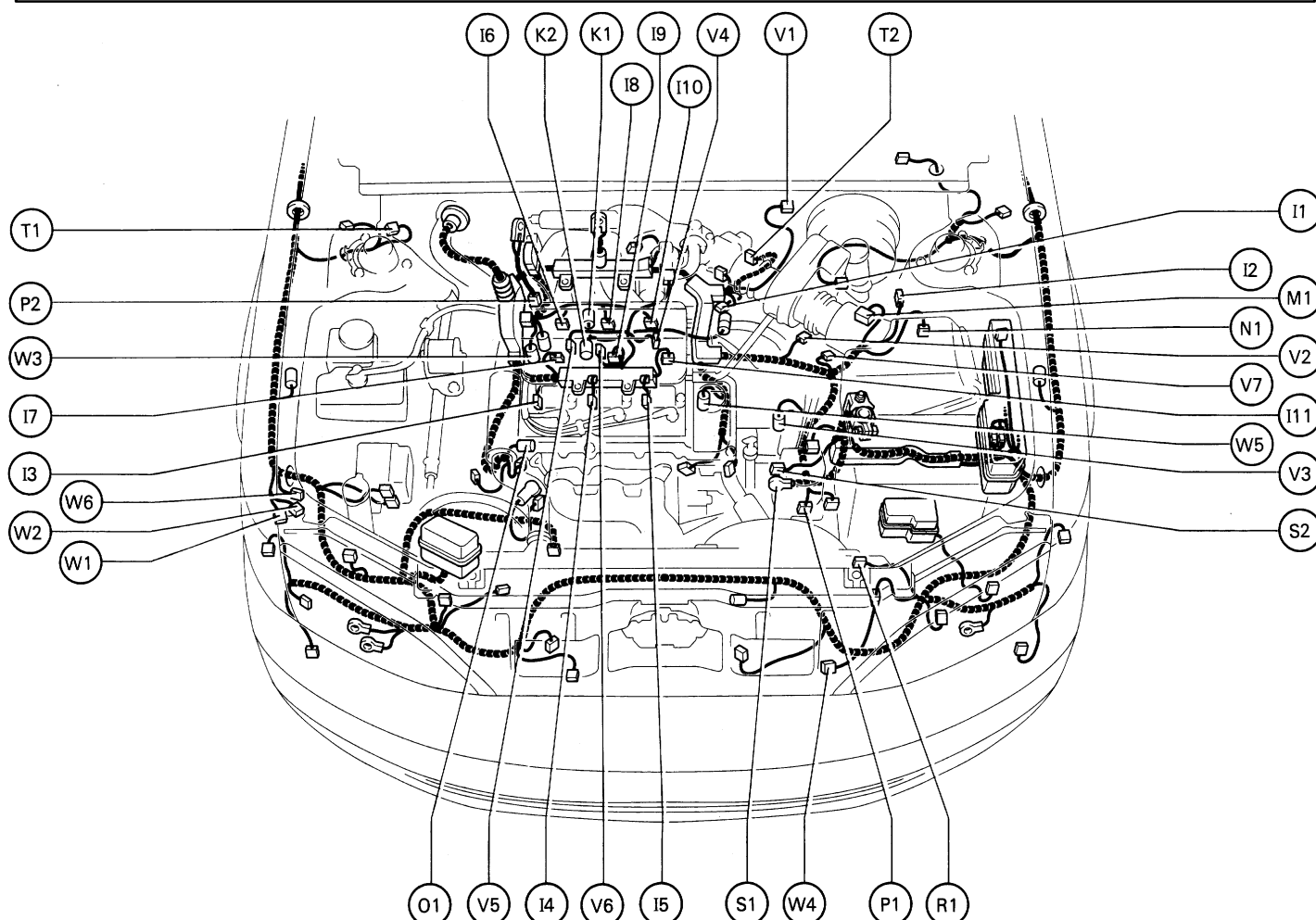
- E 1 EGR Gas Temp. Sensor
- E 2 EGR Valve Position Sensor
- E 3 Electronically Controlled Transmission Solenoid
- E 4 Engine Coolant Temp. Sensor
- E 5 Engine Hood Courtesy SW
- E 6 Engine Oil Level Warning SW

- F 1 Front Fog Light LH
- F 2 Front Fog Light RH
- F 3 Front Turn Signal and Front Parking Light LH
- F 4 Front Turn Signal and Front Parking Light RH
- F 5 Front Wiper Motor
- F 6 Fusible Link Block
- F 7 Fusible Link Block
- F 8 Fusible Link Block
- F 9 Fusible Link Block
- F 10 Fusible Link Block
- F 11 Fusible Link Block

- G 1 Generator
- G 2 Generator

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

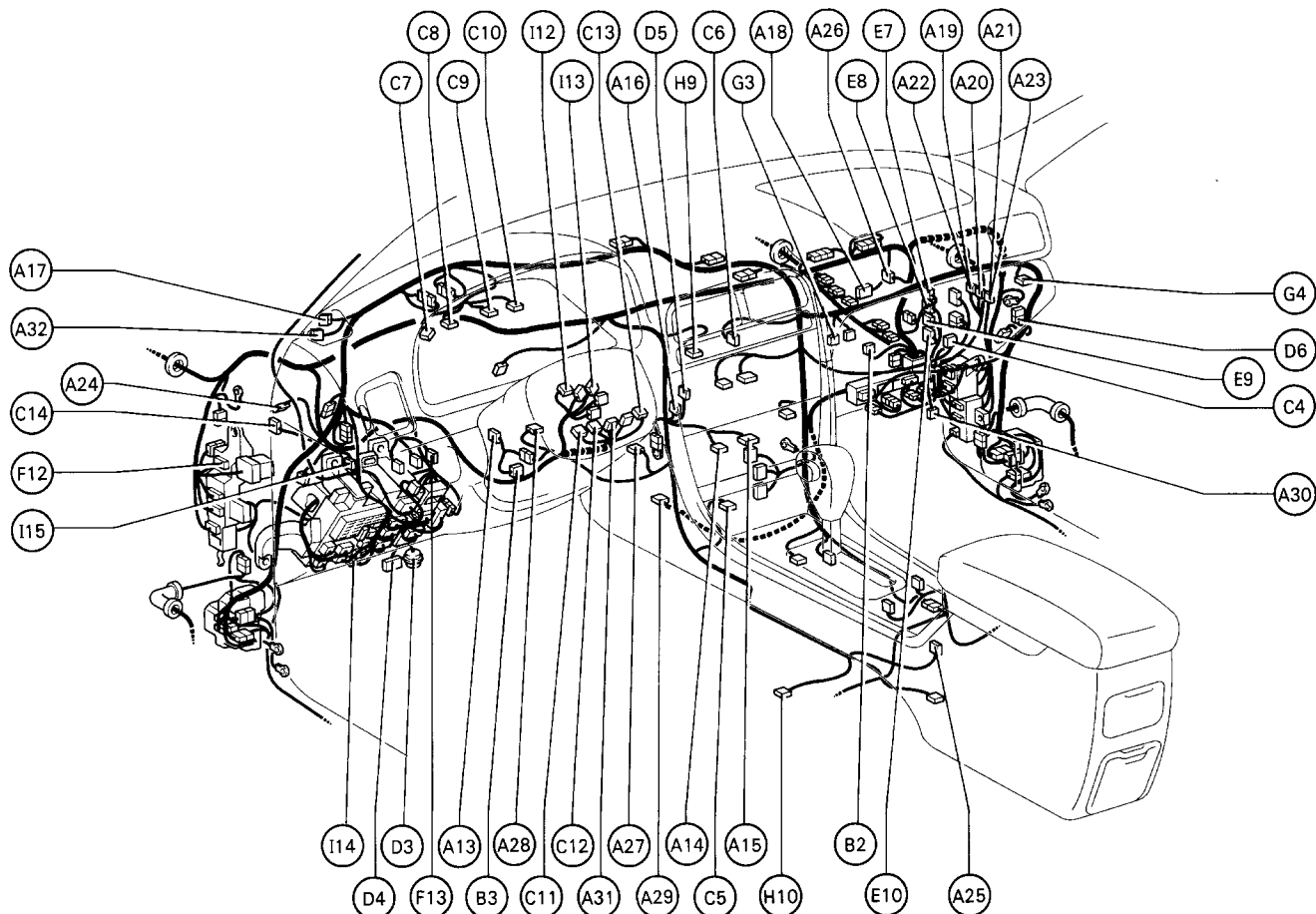
## Position of Parts in Engine Compartment



- |  |   |
|--|---|
| <p>I 1 Idle Air Control Valve</p> <p>I 2 Igniter</p> <p>I 3 Ignition Coil No. 1</p> <p>I 4 Ignition Coil No. 2</p> <p>I 5 Ignition Coil No. 3</p> <p>I 6 Injector No. 1</p> <p>I 7 Injector No. 2</p> <p>I 8 Injector No. 3</p> <p>I 9 Injector No. 4</p> <p>I 10 Injector No. 5</p> <p>I 11 Injector No. 6</p><br><p>K 1 Knock Sensor 1</p> <p>K 2 Knock Sensor 2</p><br><p>M 1 Mass Air Flow Meter</p><br><p>N 1 Noise Filter (Ignition)</p><br><p>O 1 Oil Pressure SW</p><br><p>P 1 Park/Neutral Position SW,A/T Indicator<br/>Light SW and Back-Up Light SW</p> <p>P 2 Power Steering Oil Pressure SW</p><br><p>R 1 Radiator Fan Motor</p> | <p>S 1 Starter</p> <p>S 2 Starter</p><br><p>T 1 Theft Deterrent Horn</p> <p>T 2 Throttle Position Sensor</p><br><p>V 1 Vapor Pressure Sensor</p> <p>V 2 Vehicle Speed Sensor (Combination Meter)</p> <p>V 3 Vehicle Speed Sensor<br/>(Electronically Controlled Transmission)</p> <p>V 4 VSV (EGR)</p> <p>V 5 VSV (EVAP)</p> <p>V 6 VSV (Intake Air Control)</p> <p>V 7 VSV (Vapor Pressure Sensor)</p><br><p>W 1 Water Level Warning SW</p> <p>W 2 Washer Motor</p> <p>W 3 Water Temp. Sender</p> <p>W 4 Water Temp. SW No.1</p> <p>W 5 Water Temp. SW No.2</p> <p>W 6 Wireless Door Lock Buzzer</p> |
|--|---|

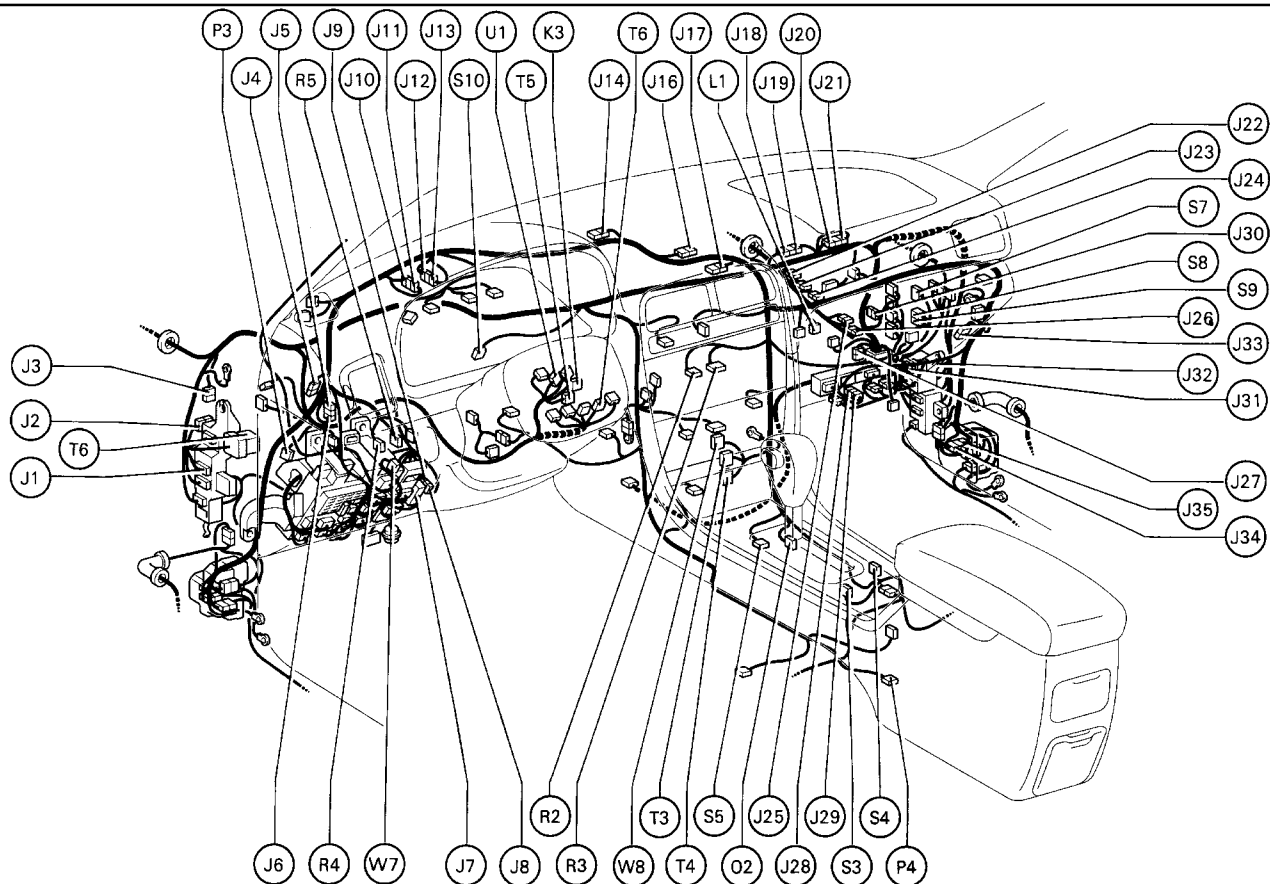
## G ELECTRICAL WIRING ROUTING

### Position of Parts in Instrument Panel



- |      |  |      |   |
|------|--|------|---|
| A 13 | A/C Blower Motor Linear Controller             | C 11 | Combination SW                                  |
| A 14 | A/C Control Assembly                           | C 12 | Combination SW                                  |
| A 15 | A/C Control Assembly                           | C 13 | Combination SW                                  |
| A 16 | A/C Room Temp. Sensor                          | C 14 | Cruise Control ECU                              |
| A 17 | A/C Solar Sensor                               | D 3  | Data Link Connector 2                           |
| A 18 | A/C Thermistor                                 | D 4  | Data Link Connector 3                           |
| A 19 | ABS and Traction ECU                           | D 5  | Daytime Running Light Relay (Main)              |
| A 20 | ABS and Traction ECU                           | D 6  | Diode (Courtesy)                                |
| A 21 | ABS and Traction ECU                           | E 7  | Engine Control Module                           |
| A 22 | ABS ECU  | E 8  | Engine Control Module                           |
| A 23 | ABS ECU  | E 9  | Engine Control Module                           |
| A 24 | Absorber Control ECU                           | E 10 | Engine Control Module                           |
| A 25 | Absorber Control SW                            | F 12 | Front Fog Light Relay                           |
| A 26 | Air Inlet Control Servo Motor                  | F 13 | Fuel Lid and Luggage Compartment Door Opener SW |
| A 27 | Air Mix Control Servo Motor                    | G 3  | Generator Box Light                             |
| A 28 | Air Vent Mode Control Servo Motor              | G 4  | Generator Box Light SW                          |
| A 29 | Airbag Sensor Assembly                         | H 9  | Hazard SW                                       |
| A 30 | Airbag Squib (Front Passenger Airbag Assembly) | H 10 | Heated Oxygen Sensor (Bank 1 Sensor 2)          |
| A 31 | Airbag Squib (Steering Wheel Pad)              | I 12 | Ignition Key Cylinder Light                     |
| A 32 | Automatic Light Control Sensor                 | I 13 | Ignition SW                                     |
| B 2  | Blower Motor                                   | I 14 | Integration Relay                               |
| B 3  | Blower Resistor                                | I 15 | Integration Relay                               |
| C 4  | CD Automatic Changer                           |      |   |
| C 5  | Cigarette Lighter                              |      |   |
| C 6  | Clock  |      |   |
| C 7  | Combination Meter                              |      |   |
| C 8  | Combination Meter                              |      |   |
| C 9  | Combination Meter                              |      |   |
| C 10 | Combination Meter                              |      |   |

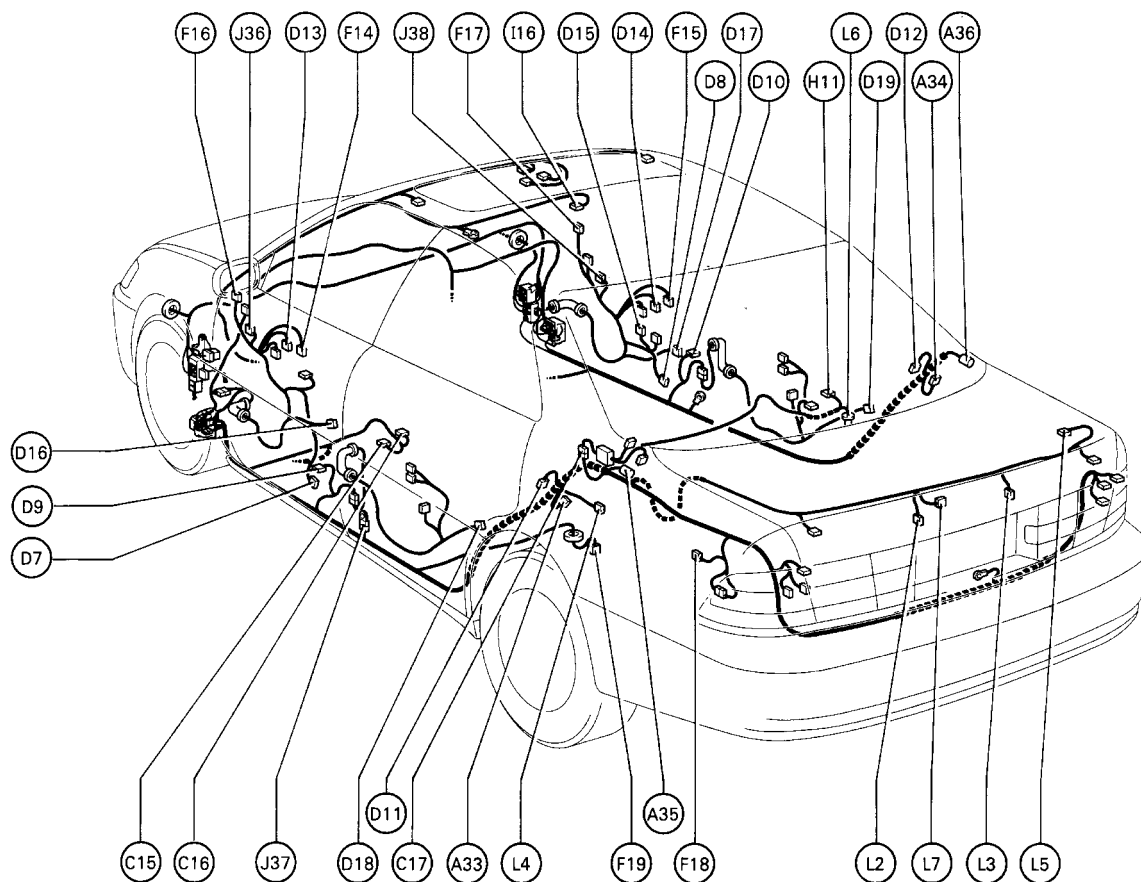
## Position of Parts in Instrument Panel



J 1	Junction Connector	K 3	Key Interlock Solenoid
J 2	Junction Connector	L 1	Luggage Compartment Door Opener Main SW
J 3	Junction Connector	O 2	O/D Main SW and A/T Shift Lever Illumination
J 4	Junction Connector	P 3	Parking Brake SW
J 5	Junction Connector	P 4	Power Outlet
J 6	Junction Connector	R 2	Radio and Player
J 7	Junction Connector	R 3	Radio and Player
J 8	Junction Connector	R 4	Remote Control Mirror SW
J 9	Junction Connector	R 5	Rheostat
J 10	Junction Connector	S 3	Seat Heater SW (Driver's Seat)
J 11	Junction Connector	S 4	Seat Heater SW (Front Passenger's Seat)
J 12	Junction Connector	S 5	Shift Lock Control ECU
J 13	Junction Connector	S 6	Steering Sensor
J 14	Junction Connector	S 7	Stereo Component Amplifier
J 15	Junction Connector	S 8	Stereo Component Amplifier
J 16	Junction Connector	S 9	Stereo Component Amplifier
J 17	Junction Connector	S 10	Stop Light SW
J 18	Junction Connector	T 3	Theft Deterrent ECU
J 19	Junction Connector	T 4	Theft Deterrent ECU
J 20	Junction Connector	T 5	TRAC OFF SW
J 21	Junction Connector	T 6	Turn Signal Flasher Relay
J 22	Junction Connector	U 1	Unlock Warning SW (Ignition Key)
J 23	Junction Connector	W 7	Wireless Door Lock Buzzer Volume SW
J 24	Junction Connector	W 8	Wireless Door Lock ECU
J 25	Junction Connector		
J 26	Junction Connector		
J 27	Junction Connector		
J 28	Junction Connector		
J 29	Junction Connector		
J 30	Junction Connector		
J 31	Junction Connector		
J 32	Junction Connector		
J 33	Junction Connector		
J 34	Junction Connector		
J 35	Junction Connector		

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Body



A 33 ABS Speed Sensor Rear LH  
 A 34 ABS Speed Sensor Rear RH  
 A 35 Absorber Control Actuator Rear LH  
 A 36 Absorber Control Actuator Rear RH

C 15 Cellular Phone (Hand Set)  
 C 16 Cellular Phone (Hand Set)  
 C 17 Choke Coil

D 7 Door Courtesy Light Front LH  
 D 8 Door Courtesy Light Front RH  
 D 9 Door Courtesy SW Front LH  
 D 10 Door Courtesy SW Front RH  
 D 11 Door Courtesy SW Rear LH  
 D 12 Door Courtesy SW Rear RH  
 D 13 Door Key Lock and Unlock SW Front LH  
 D 14 Door Key Lock and Unlock SW Front RH  
 D 15 Door Lock Control SW Front RH  
 D 16 Door Lock Motor and Door Unlock Detection SW Front LH  
 D 17 Door Lock Motor and Door Unlock Detection SW Front RH  
 D 18 Door Lock Motor and Door Unlock Detection SW Rear LH  
 D 19 Door Lock Motor and Door Unlock Detection SW Rear RH

F 14 Front Door Speaker LH  
 F 15 Front Door Speaker RH  
 F 16 Front Tweeter Speaker LH  
 F 17 Front Tweeter Speaker RH  
 F 18 Fuel Lid Opener Motor  
 F 19 Fuel Pump and Fuel Sender

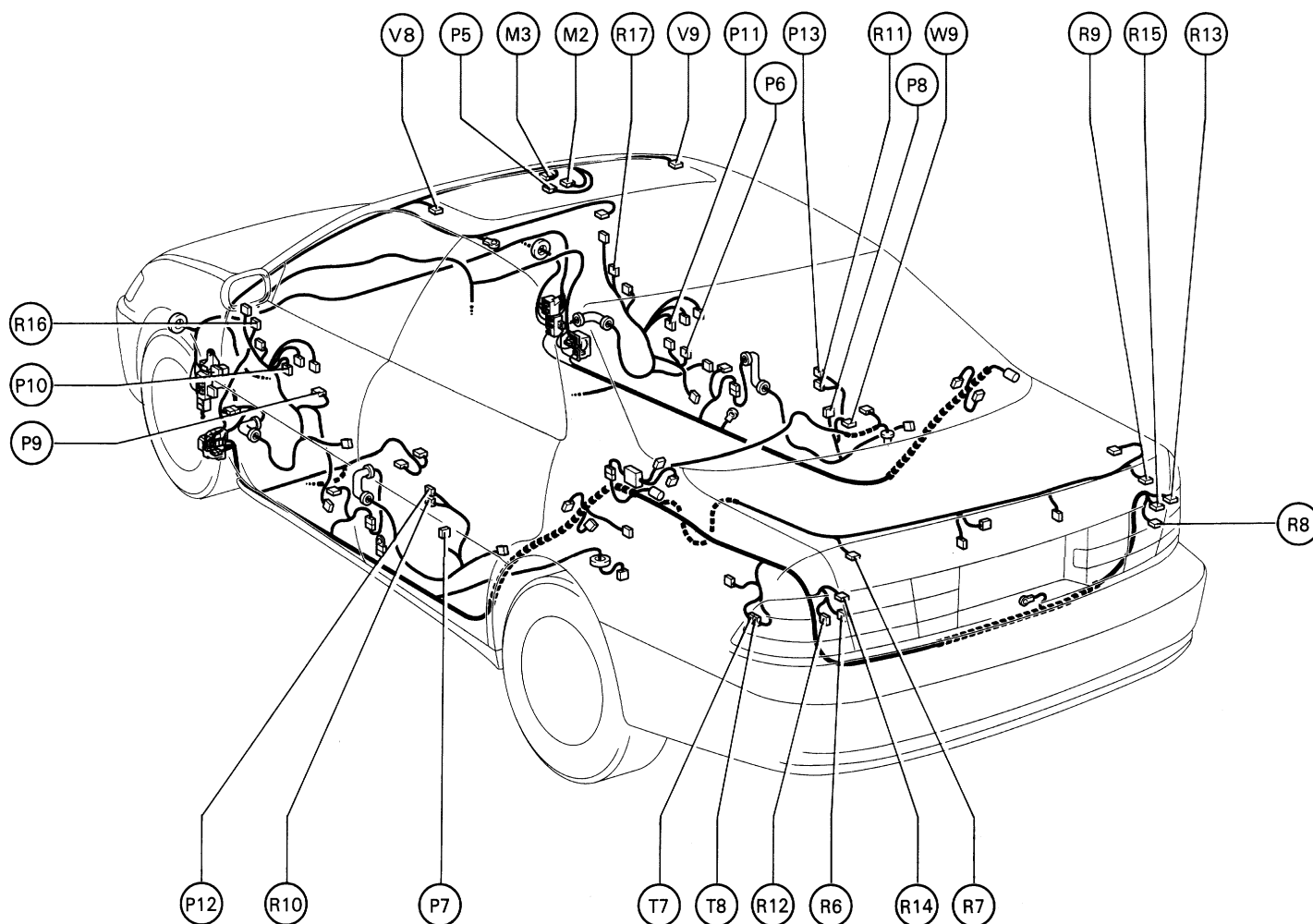
H 11 High Mounted Stop Light

I 16 Interior Light

J 36 Junction Connector  
 J 37 Junction Connector  
 J 38 Junction Connector

L 2 License Plate Light LH  
 L 3 License Plate Light RH  
 L 4 Light Failure Sensor  
 L 5 Luggage Compartment Key Unlock SW  
 L 6 Luggage Compartment Light  
 L 7 Luggage Compartment Light SW and Luggage Compartment Door Opener Motor

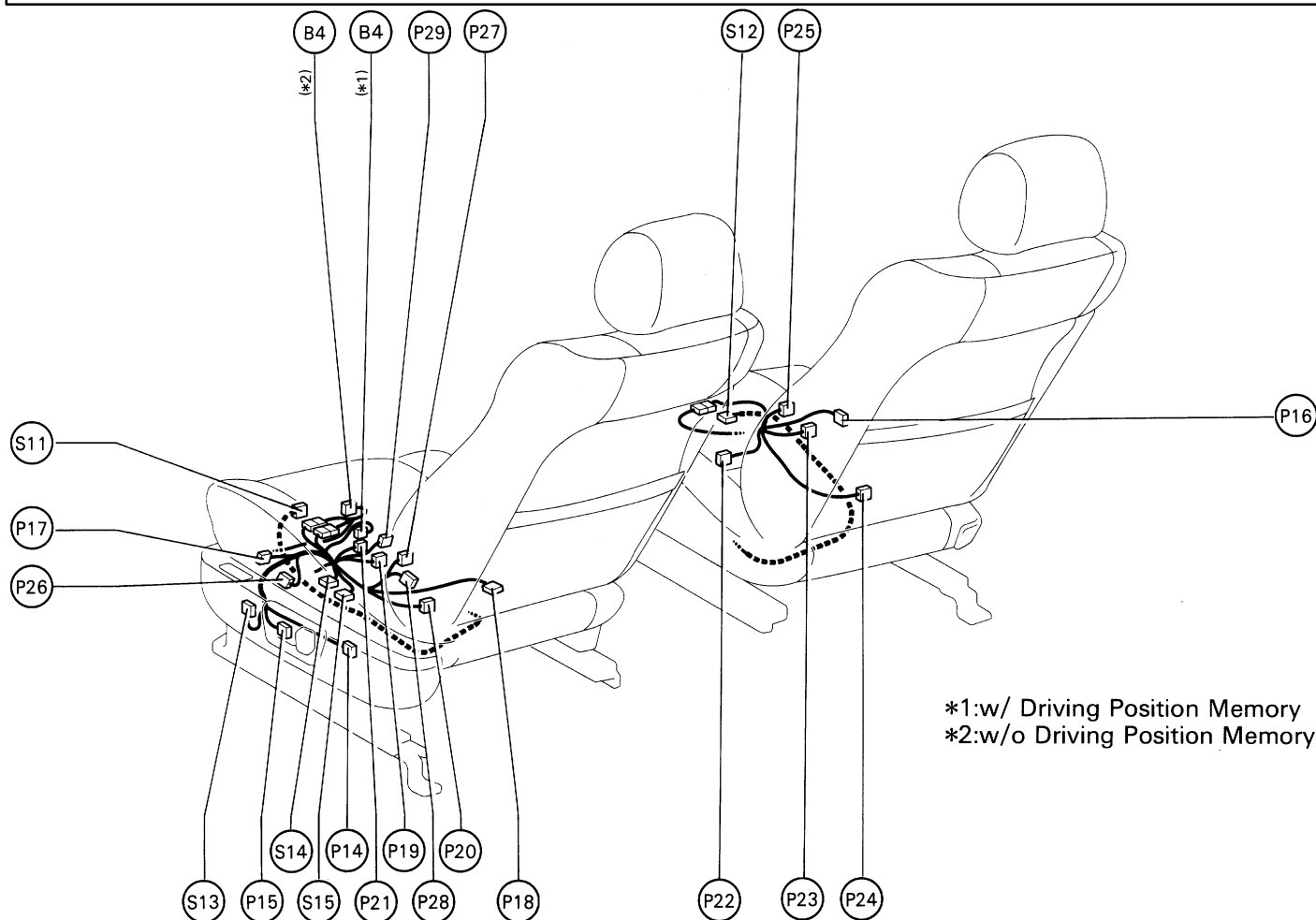
## Position of Parts in Body



- |      |  |      |  |
|------|--|------|--|
| M 2  | Moon Roof Control SW and Moon Roof Control Relay         | R 10 | Rear Door Speaker LH                       |
| M 3  | Moon Roof Moon and Limit SW                              | R 11 | Rear Door Speaker RH                       |
| P 5  | Personal Light   | R 12 | Rear Side Marker Light LH                  |
| P 5  | Personal Light   | R 13 | Rear Side Marker Light RH                  |
| P 6  | Power Window Control SW Front RH                         | R 14 | Rear Turn Signal Light LH                  |
| P 7  | Power Window Control SW Rear LH                          | R 15 | Rear Turn Signal Light RH                  |
| P 8  | Power Window Control SW Rear RH                          | R 16 | Remote Control Mirror and Mirror Heater LH |
| P 9  | Power Window Master SW and Door Lock Control SW Front LH | R 17 | Remote Control Mirror and Mirror Heater RH |
| P 10 | Power Window Motor Front LH                              | T 7  | Telephone Transceiver and Speaker Relay    |
| P 11 | Power Window Motor Front RH                              | T 8  | Telephone Transceiver and Speaker Relay    |
| P 12 | Power Window Motor Rear LH                               | V 8  | Vanity Light LH                            |
| P 13 | Power Window Motor Rear RH                               | V 9  | Vanity Light RH                            |
| R 6  | Rear Combination Light LH                                | W 9  | Woofer Speaker                             |
| R 7  | Rear Combination Light LH                                |      |  |
| R 8  | Rear Combination Light RH                                |      |  |
| R 9  | Rear Combination Light RH                                |      |  |

## G ELECTRICAL WIRING ROUTING

### Position of Parts in Seat

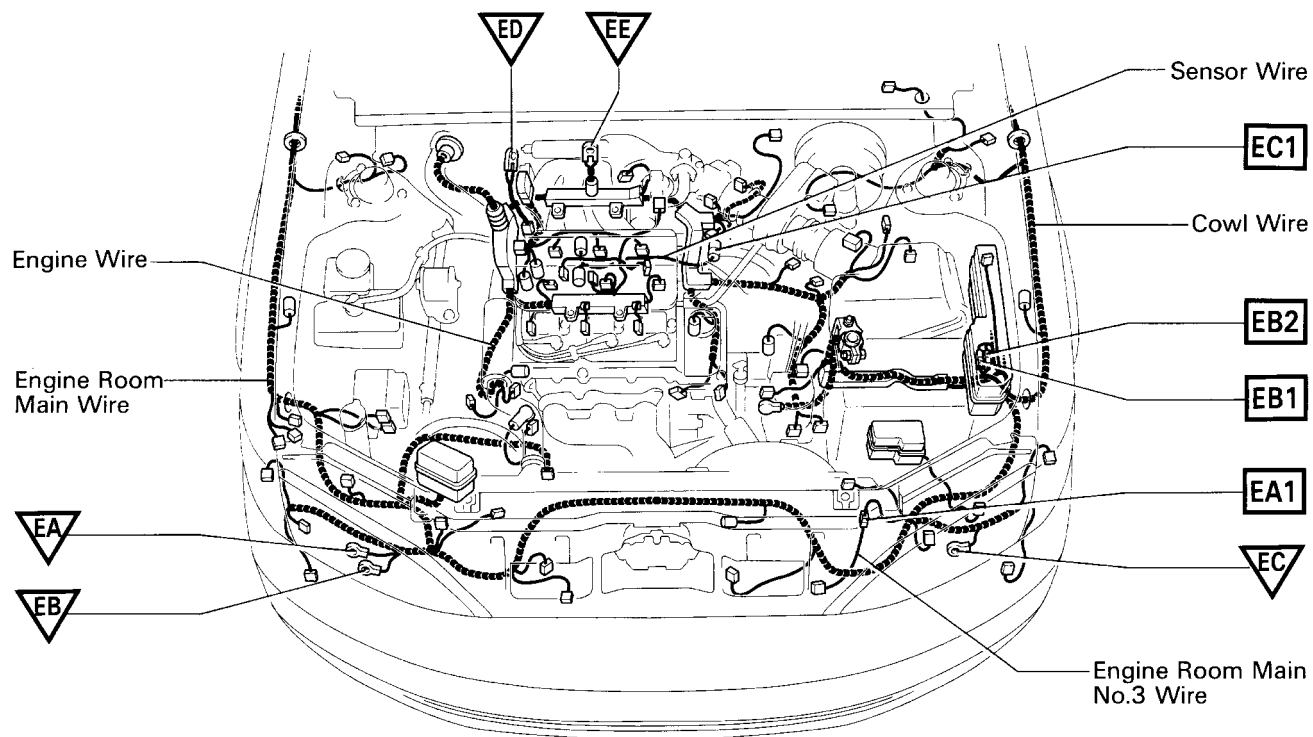


\*1:w/ Driving Position Memory  
\*2:w/o Driving Position Memory

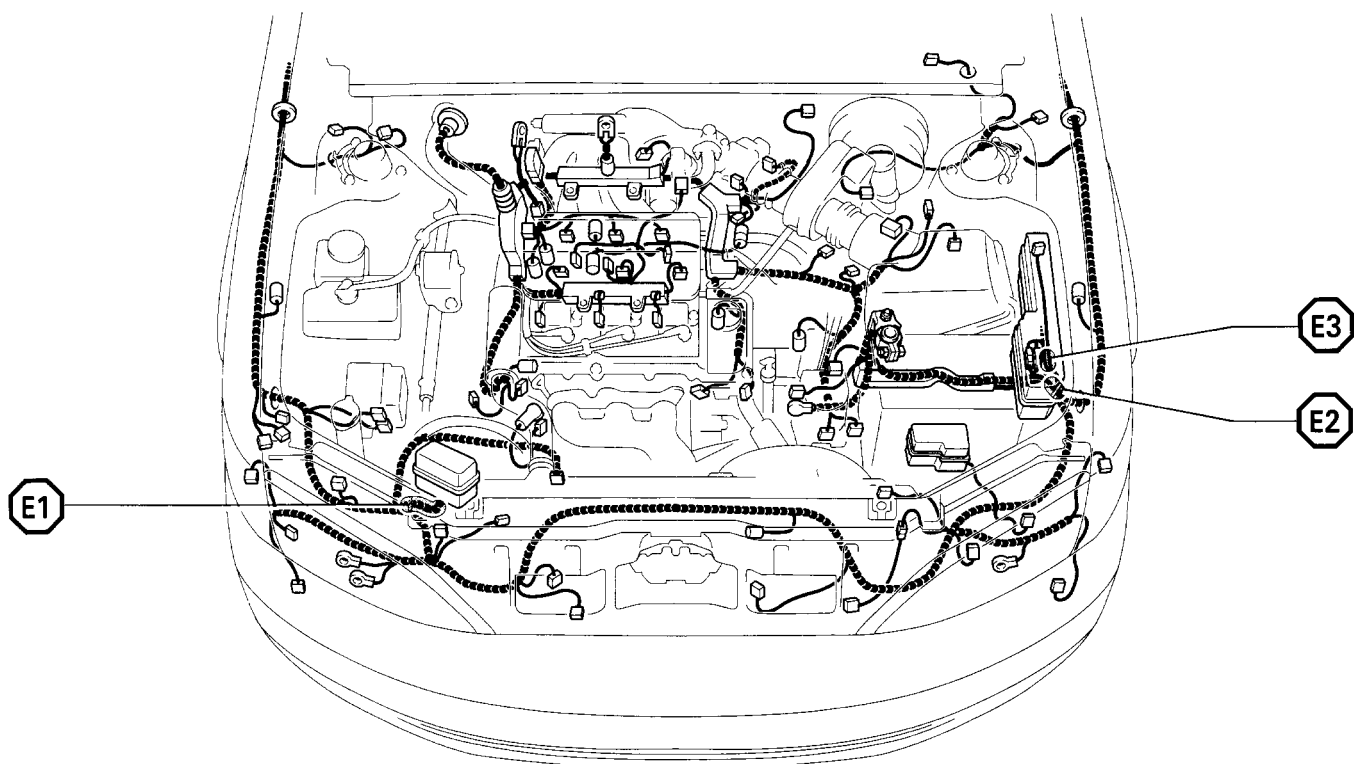
B 4	Buckle SW	P 26	Power Seat Position Sensor (Driver's Seat Front Vertical Control)
P 14	Power Seat Control SW (Driver's Seat Lumbar Support Control)	P 27	Power Seat Position Sensor (Driver's Seat Rear Vertical Control)
P 15	Power Seat Control SW (Driver's Seat )	P 28	Power Seat Position Sensor (Driver's Seat Reclining Control)
P 16	Power Seat Control SW (Front Passenger's Seat))	P 29	Power Seat Position Sensor (Driver's Seat Slide Control)
P 17	Power Seat Motor (Driver's Seat Front Vertical Control)	S 11	Seat Heater (Driver's Seat)
P 18	Power Seat Motor (Driver's Seat Lumbar Support Control)	S 12	Seat Heater (Front Passenger's Seat)
P 19	Power Seat Motor (Driver's Seat Rear Vertical Control)	S 13	Seat Memory SW
P 20	Power Seat Motor (Driver's Seat Reclining Control)	S 14	Seat Position Control ECU
P 21	Power Seat Motor (Driver's Seat Slide Control)	S 15	Seat Position Control ECU
P 22	Power Seat Motor (Front Passenger's Seat Front Vertical Control)		
P 23	Power Seat Motor (Front Passenger's Seat Rear Vertical Control)		
P 24	Power Seat Motor (Front Passenger's Seat Reclining Control)		
P 25	Power Seat Motor (Front Passenger's Seat Slide Control)		

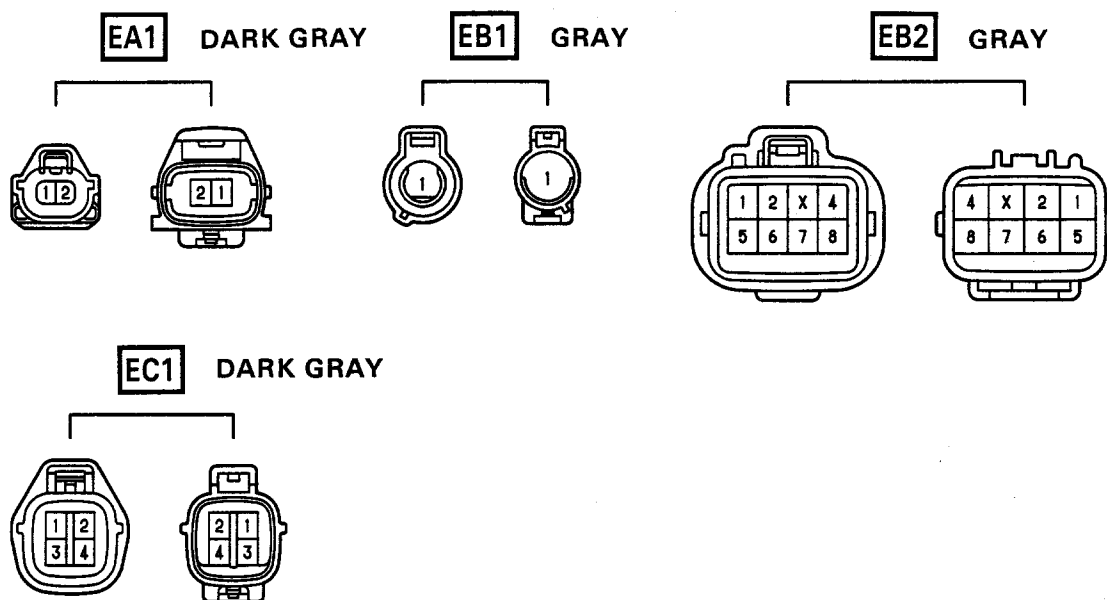
## G ELECTRICAL WIRING ROUTING

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



- : Location of Splice Points

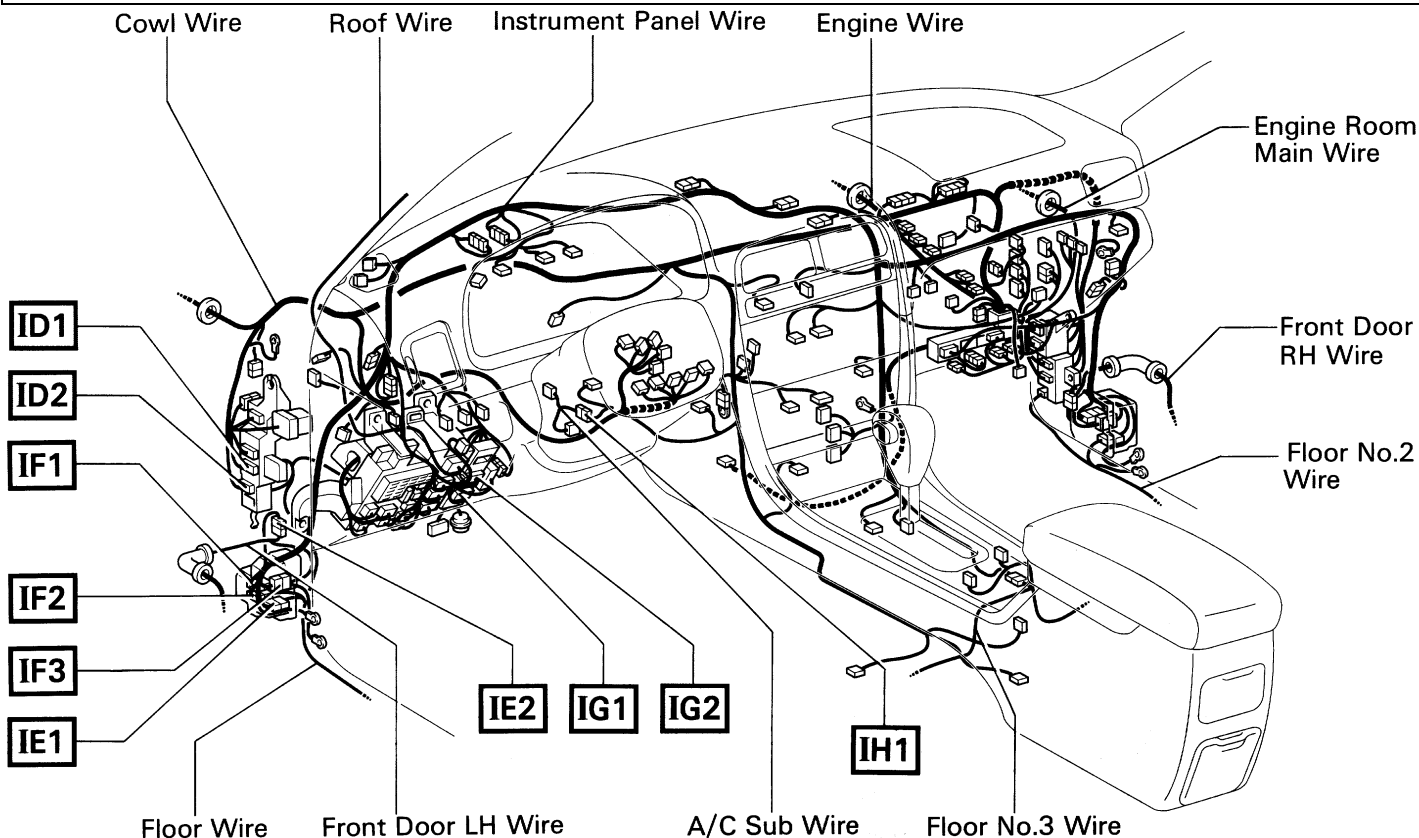




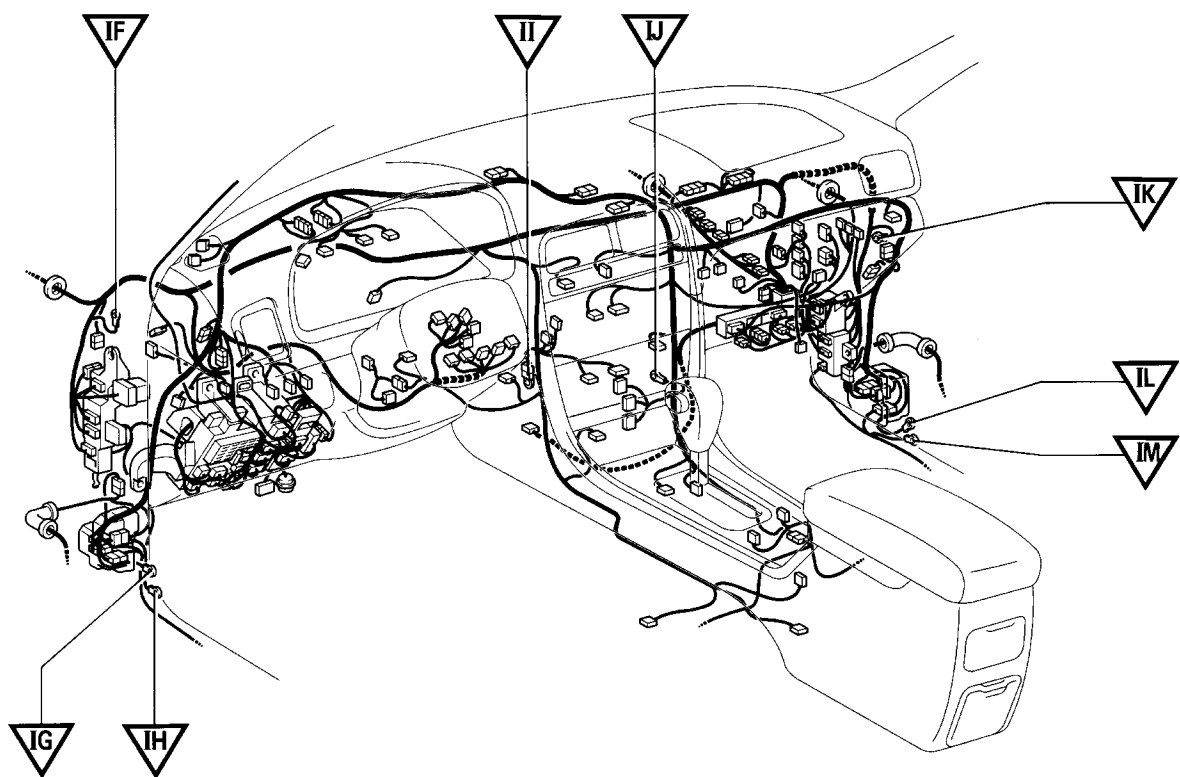
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO. 3 WIRE (BEHIND HEADLIGHT LH)
EB1	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)
EB2	
EC1	ENGINE WIRE AND SENSOR WIRE (LEFT BANK OF THE CYLINDER HEAD)

## G ELECTRICAL WIRING ROUTING

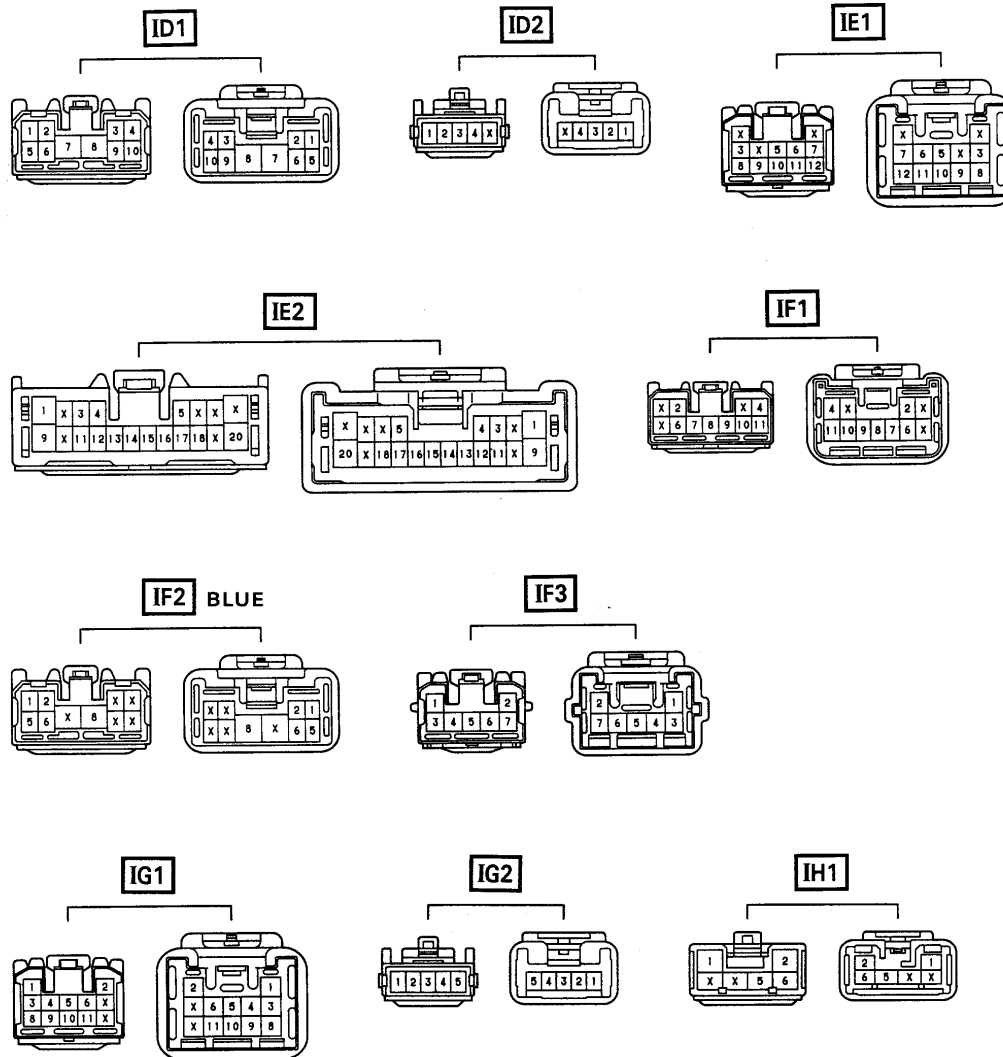
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**▽ : Location of Ground Points**



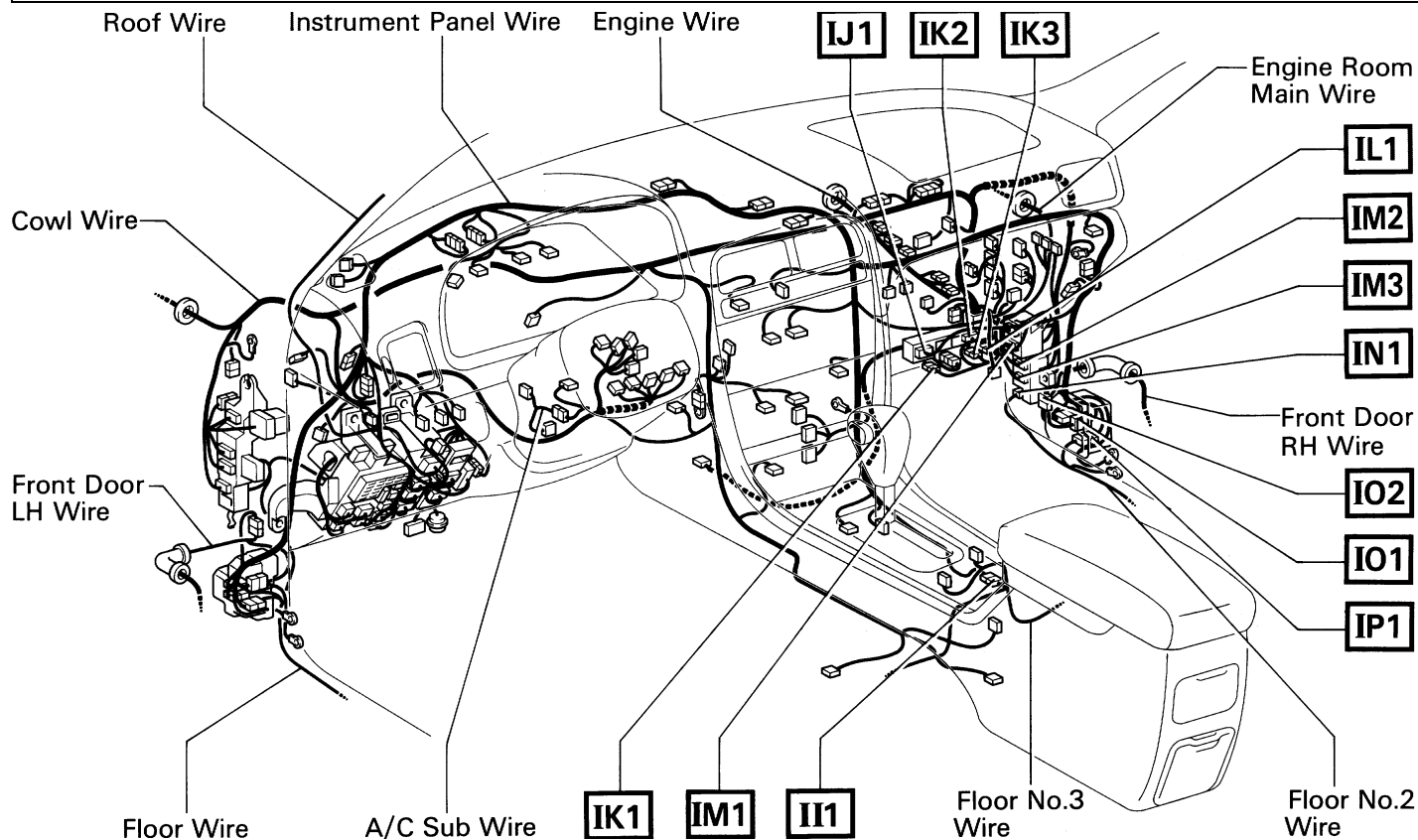
## Connector Joining Wire Harness and Wire Harness



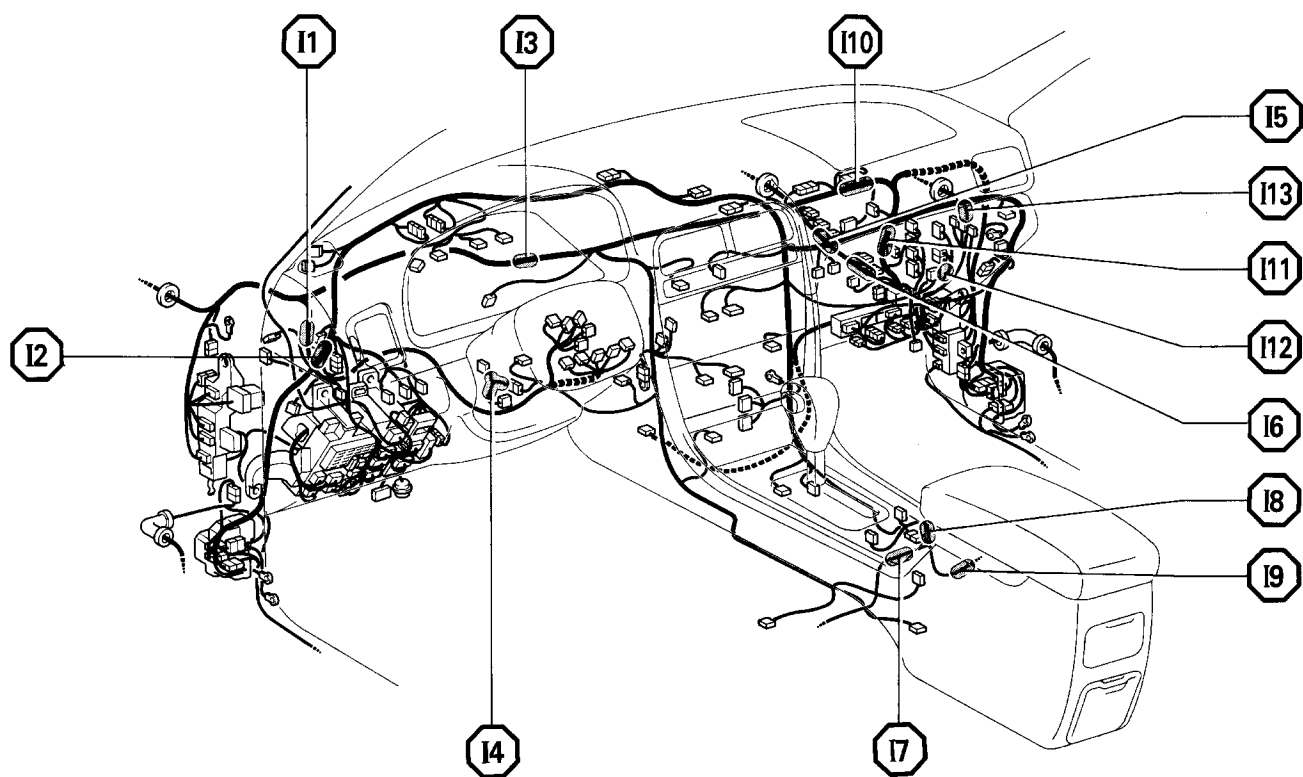
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
ID2	
IE1	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2	
IF1	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF2	
IF3	
IG1	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IG2	
IH1	COWL WIRE AND A/C SUB WIRE (BEHIND RADIO AND PLAYER)

## G ELECTRICAL WIRING ROUTING

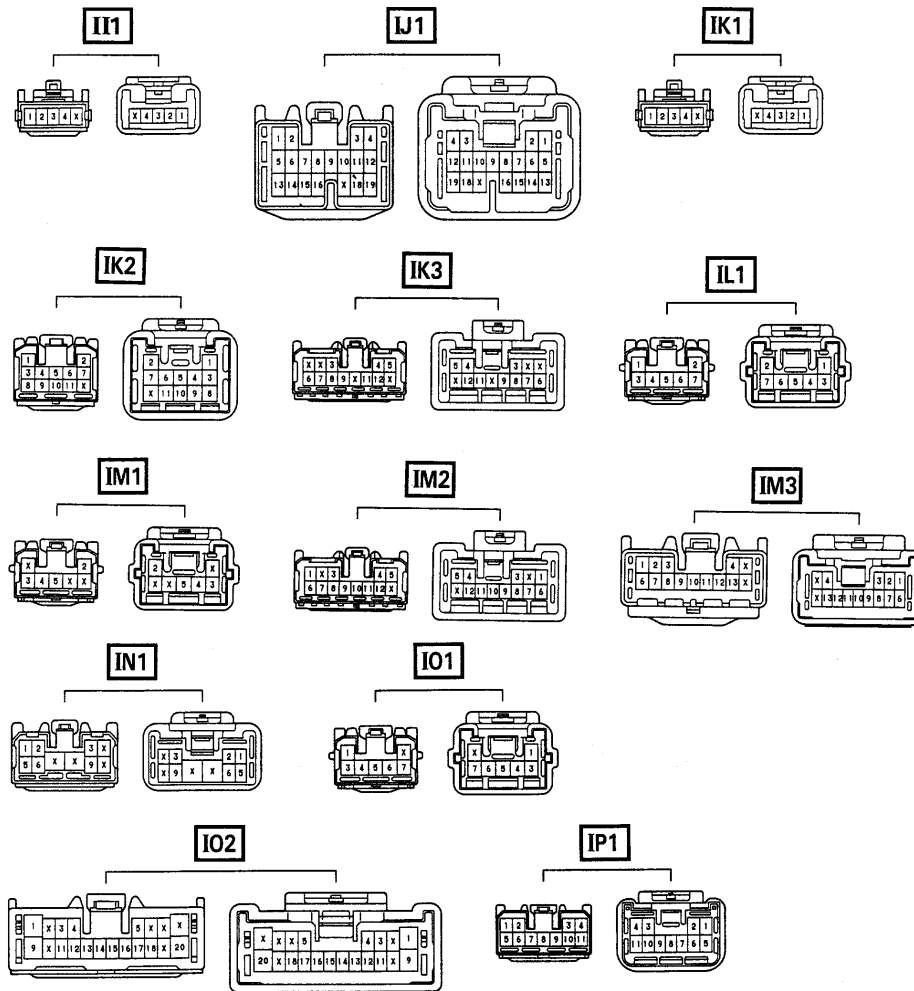
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**○ : Location of Splice Points**



## Connector Joining Wire Harness and Wire Harness

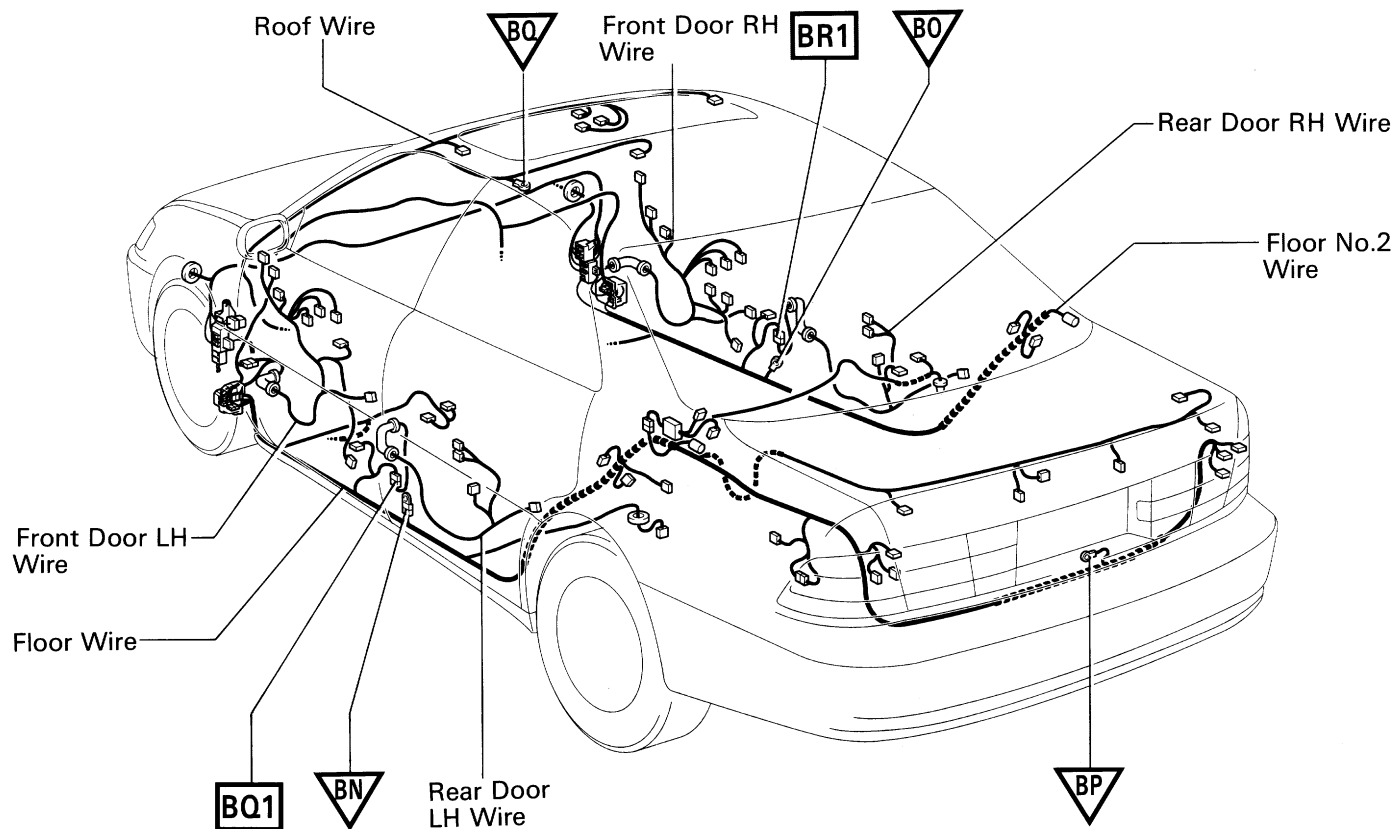


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)
IJ1	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK1	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2	
IK3	
IL1	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)
IM1	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IM2	
IM3	
IN1	FLOOR NO. 2 WIRE AND COWL WIRE (RIGHT KICK PANEL)
IO1	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IO2	
IP1	

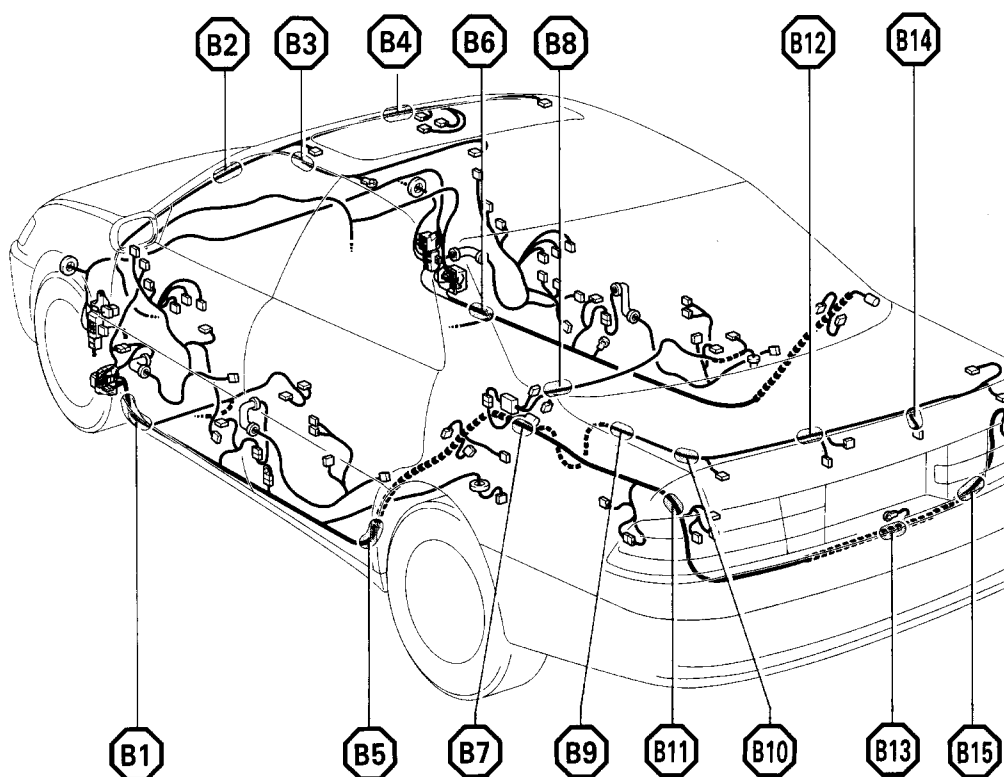
## G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

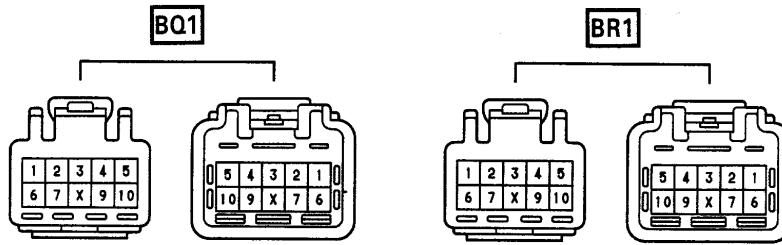
▽ : Location of Ground Points



○ : Location of Splice Points



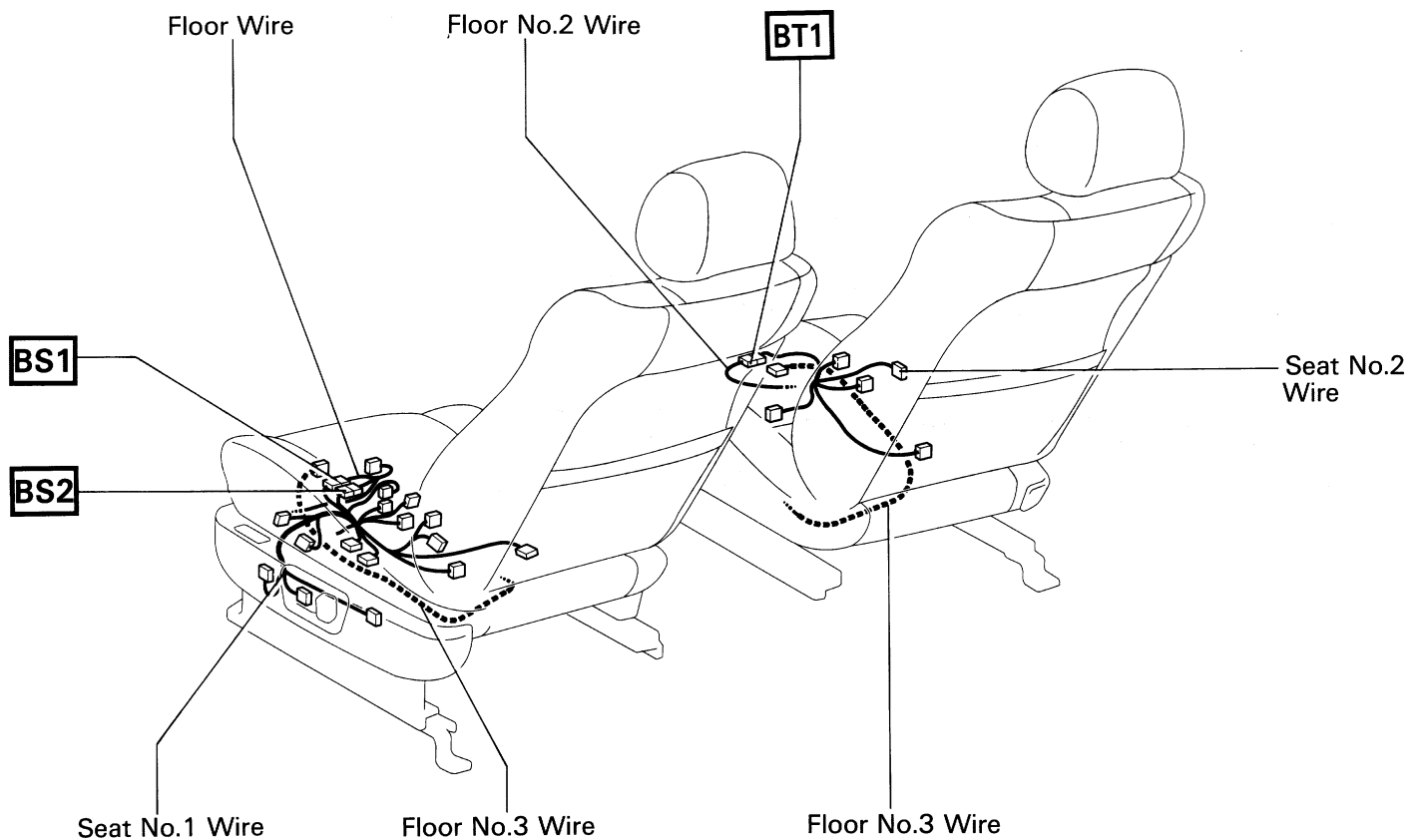
## Connector Joining Wire Harness and Wire Harness



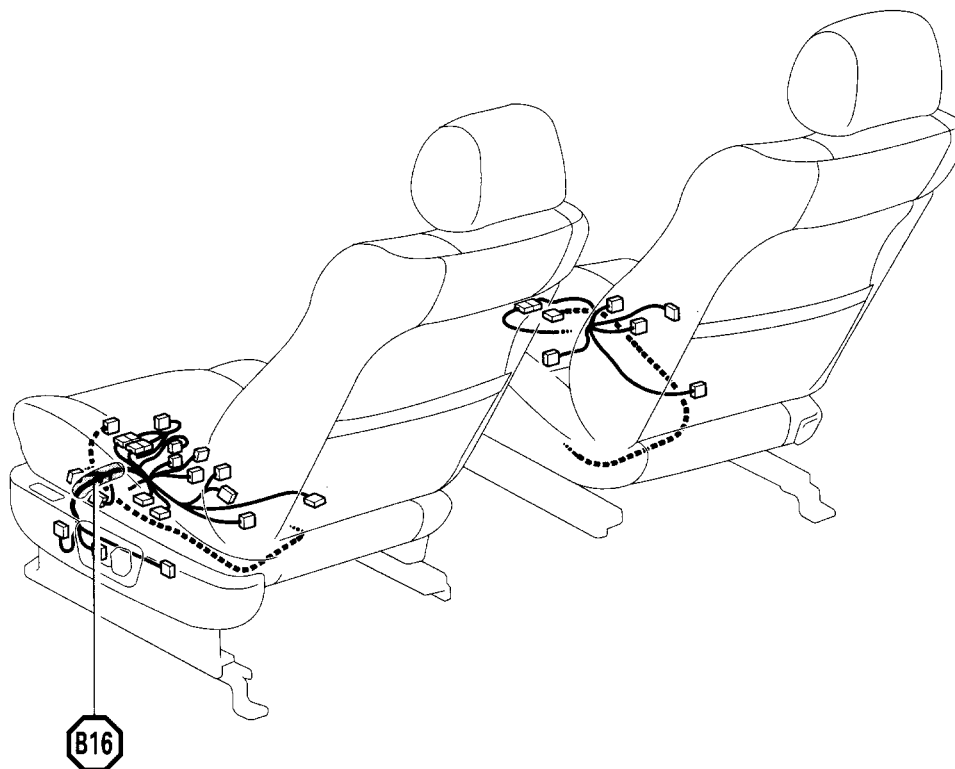
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BQ1	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

## G ELECTRICAL WIRING ROUTING

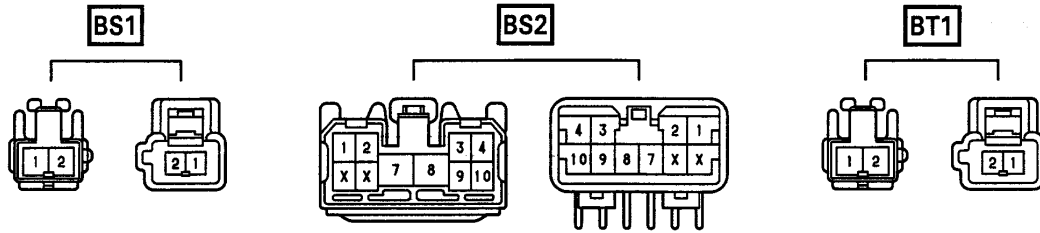
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**○ : Location of Splice Point**

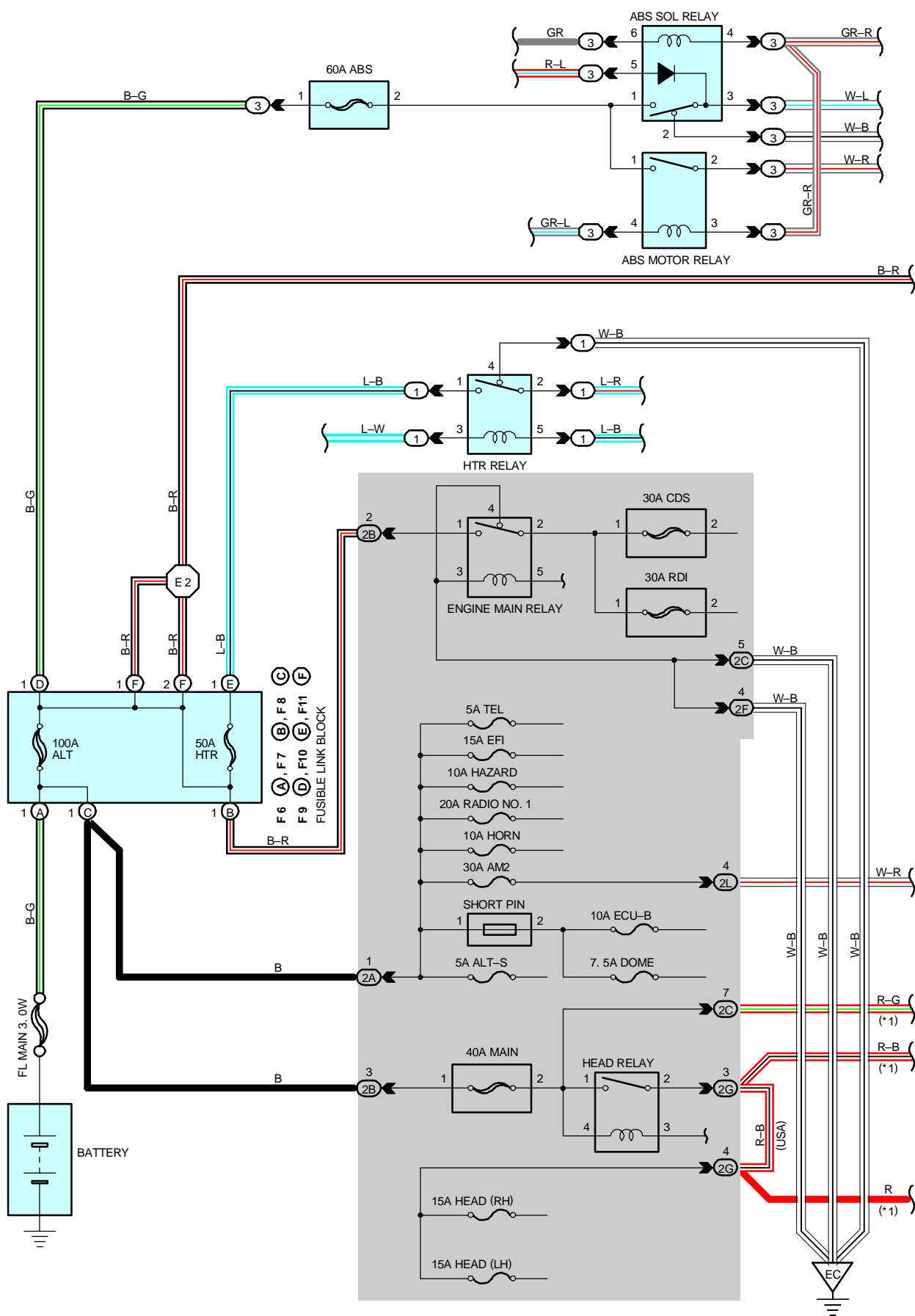


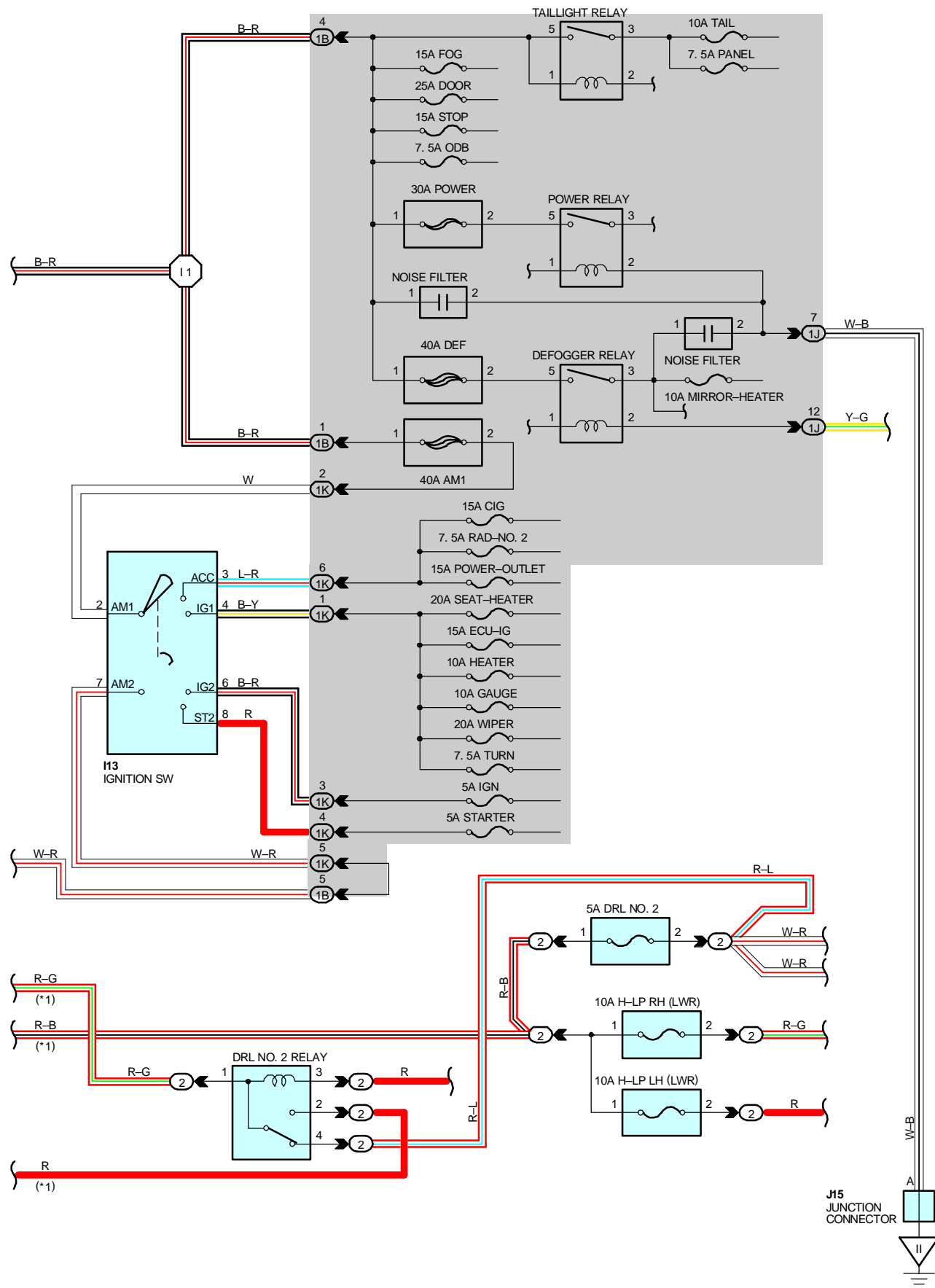
## Connector Joining Wire Harness and Wire Harness



CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BS1	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BS2	
BT1	FLOOR NO.2 WIRE AND SEAT NO. 2 WIRE (UNDER THE FRONT PASSENGER'S SEAT)

# POWER SOURCE





# POWER SOURCE

## SERVICE HINTS

### TAILLIGHT RELAY

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

### HEAD RELAY(USA)

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

### HEAD RELAY(CANADA)

1-2: CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION OR THE DIMMER SW AT **FLASH** POSITION  
CLOSED WITH THE ENGINE RUNNING AND THE PARKING BRAKE PEDAL RELEASED (PARKING BRAKE SW OFF)

### I13 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 6	A 26	F 9	D 26	I13	28
F 7	B 26	F10	E 26	J15	29
F 8	C 26	F11	F 26		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)
2	23	ENGINE ROOM NO.2 R/B (ENGINE COMPARTMENT LEFT)
3	23	ENGINE ROOM NO.3 R/B (RADIATION UPPER SUPPORT RH)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1K		
2A	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2B		
2C		
2F		
2G		
2L	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

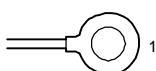
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATION SIDE SUPPORT
II	36	INSTRUMENT PANEL BRACE LH

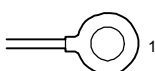
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE	I 1	38	COWL WIRE

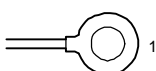
F 6 (A)



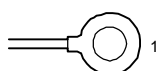
F 7 (B)



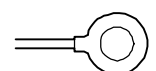
F 8 (C)



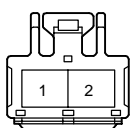
F 9 (D)



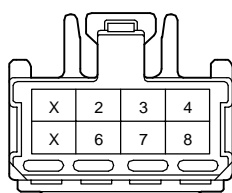
F10 (E)



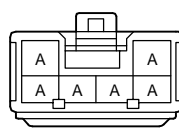
F11 (F)



I13



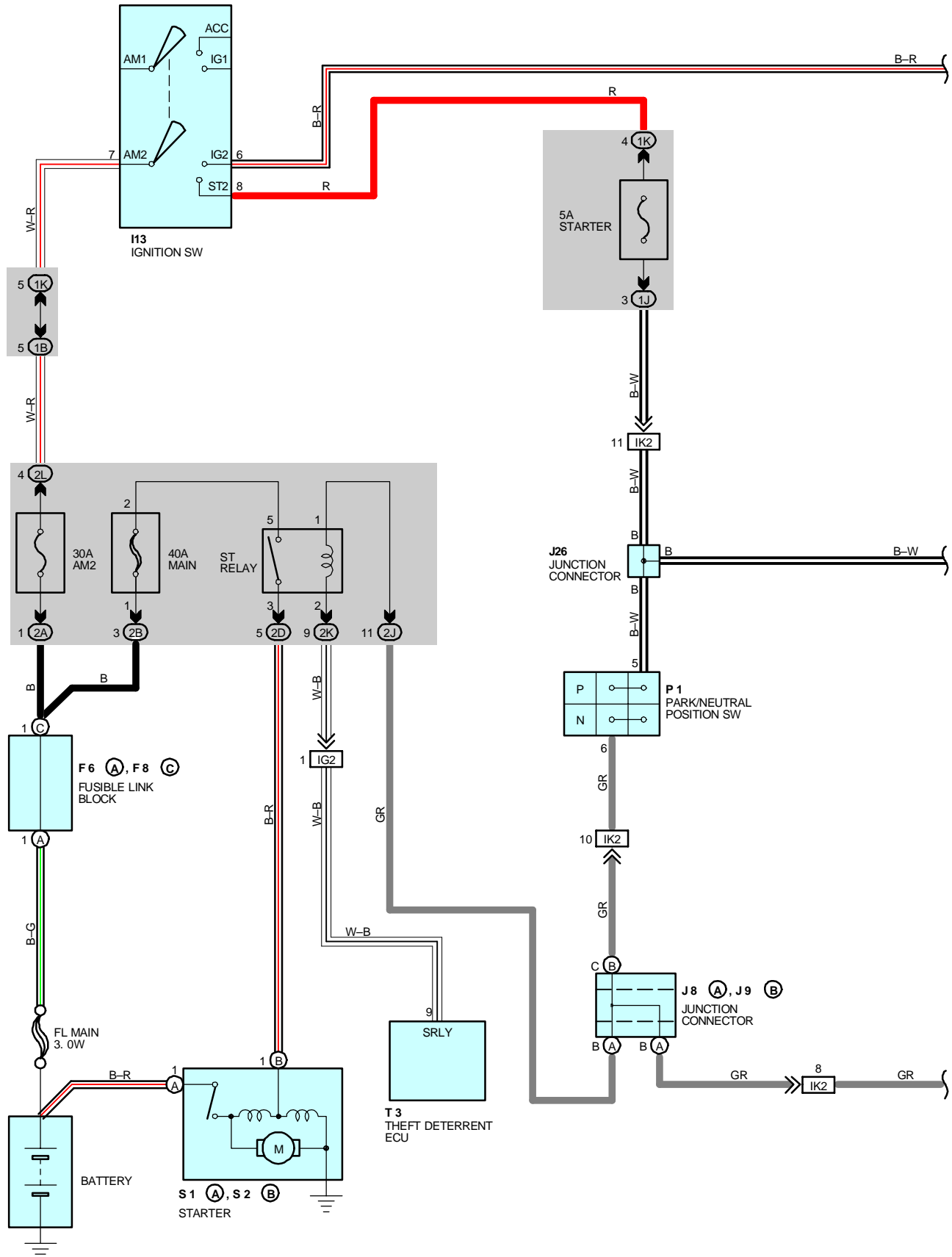
J15

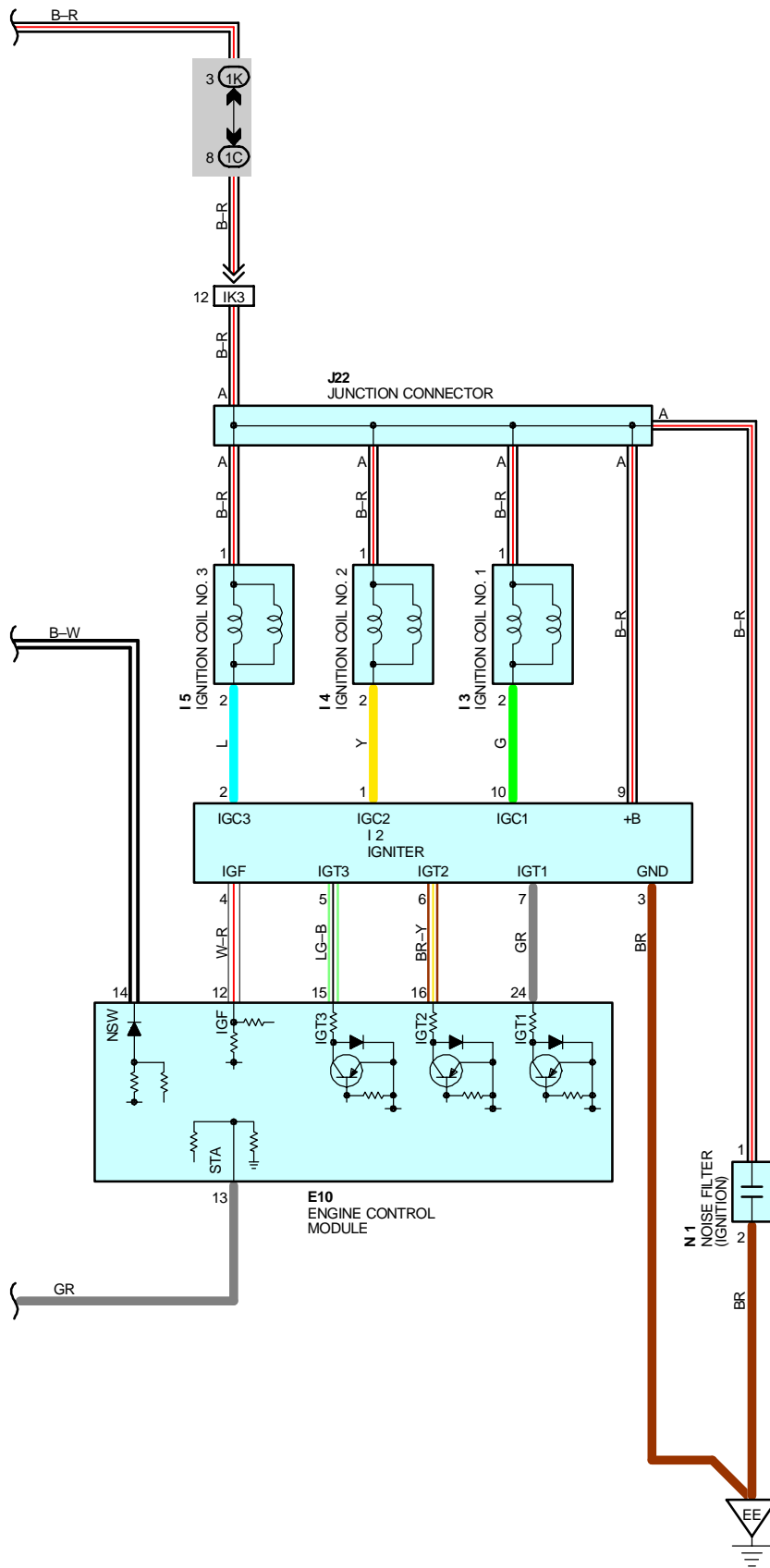


(HINT : SEE PAGE 7)



# STARTING AND IGNITION





# STARTING AND INGNITION

## SERVICE HINTS

### I13 IGNITION SW

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

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

### S1 , S2 STARTER

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

### P1 PARK/NEUTRAL POSITION SW

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

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
E10	<a href="#">28</a>	I 5	<a href="#">27</a>	N 1	<a href="#">27</a>
F 6	A <a href="#">26</a>	I13	<a href="#">28</a>	P 1	<a href="#">27</a>
F 8	C <a href="#">26</a>	J 8	A <a href="#">29</a>	S 1	A <a href="#">27</a>
I 2	<a href="#">27</a>	J 9	B <a href="#">29</a>	S 2	B <a href="#">27</a>
I 3	<a href="#">27</a>	J22	<a href="#">29</a>	T 3	<a href="#">29</a>
I 4	<a href="#">27</a>	J26	<a href="#">29</a>		

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

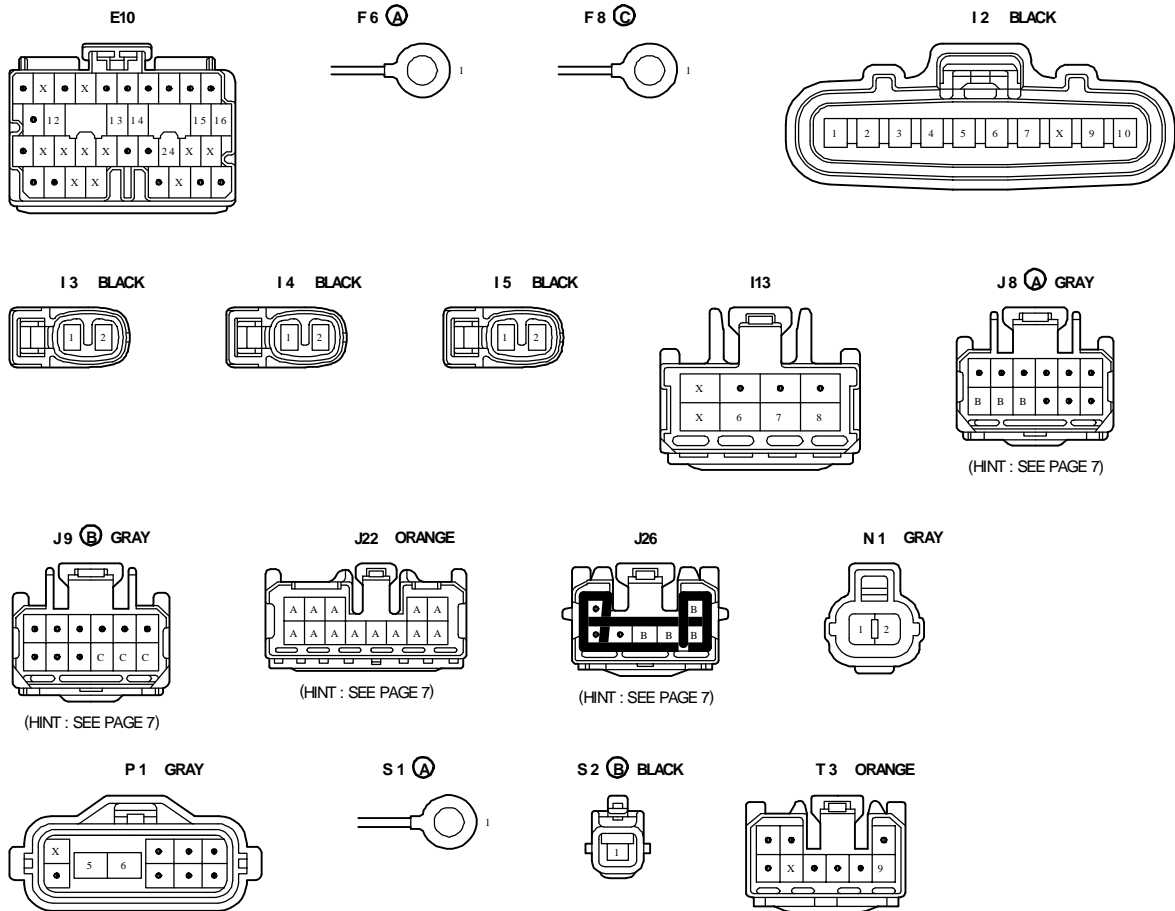
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1J		
1K		
2A	<a href="#">20</a>	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2B		
2D		
2J	<a href="#">20</a>	COWL WIRE AND ENIGNE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		
2L		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG2	<a href="#">36</a>	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IK2	<a href="#">38</a>	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3		

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EE	<a href="#">34</a>	REAR SIDE OF SURGE TANK





## 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)

13.5-14.3 VOLTS WITH THE ENGINE RUNNING AT 2000 RPM AND 115°C (239°F)

(B) 2-GROUND : 0-4 VOLTS WITH THE IGNITION SW AT ON POSITION AND ENGINE NOT RUNNING

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 7	A 28	F 9	D 26	I13	28
C 8	B 28	F11	F 26	J18	A 29
F 6	A 26	G 1	A 26	J19	B 29
F 8	C 26	G 2	B 26		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1K		
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2C		
2L	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

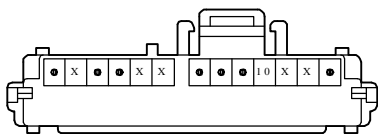
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB2	34	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)
IG2	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IN2	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

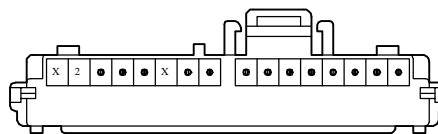
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE			

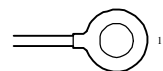
C 7 (A) BLUE



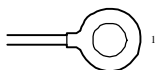
C 8 (B)



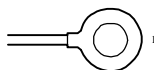
F 6 (A)



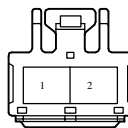
F 8 (C)



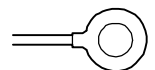
F 9 (D)



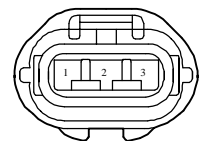
F11 (F)



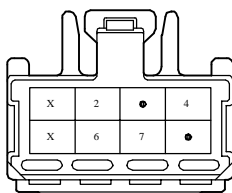
G 1 (A)



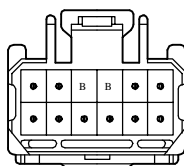
G 2 (B) BLACK



I13

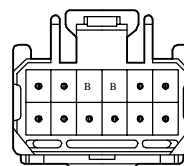


J18 (A) BLACK



(HINT : SEE PAGE 7)

J19 (B) BLACK



(HINT : SEE PAGE 7)

# ENGINE CONTROL

## SYSTEM OUTLINE

THIS SYSTEM UTILIZES AN ENGINE CONTROL MODULE AND MAINTAINS OVERALL CONTROL OF THE ENGINE, TRANSMISSION AND SO ON. AN OUTLINE OF THE ENGINE CONTROL IS EXPLAINED HERE.

### 1. INPUT SIGNALS

- ( 1) ENGINE COOLANT TEMP. SIGNAL CIRCUIT  
THE ENGINE COOLANT TEMP. SENSOR DETECTS THE ENGINE COOLANT TEMP. AND HAS A BUILT-IN THERMISTOR WITH A RESISTANCE WHICH VARIES ACCORDING TO THE WATER TEMP. IS INPUT INTO **TERMINAL THW** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.
- ( 2) INTAKE AIR TEMP. SIGNAL CIRCUIT  
THE INTAKE AIR TEMP. SENSOR IS INSTALLED IN THE MASS AIR FLOW METER AND DETECTS THE INTAKE AIR TEMP., WHICH IS INPUT AS A CONTROL SIGNAL INTO **TERMINAL THA** OF THE ENGINE CONTROL MODULE.
- ( 3) OXYGEN SENSOR SIGNAL SYSTEM  
THE OXYGEN DENSITY IN THE EXHAUST GASES IS DETECTED AND INPUT AS A CONTROL SIGNAL INTO **TERMINALS OXL1, OXR1 AND OXS** OF THE ENGINE CONTROL MODULE TO MAINTAIN STABLE DETECTION PERFORMANCE BY THE HEATED OXYGEN SENSOR, A HEATER IS USED FOR WARMING THE SENSOR. THE HEATER IS ALSO CONTROLLED BY THE ENGINE CONTROL MODULE (**HTL, HTR AND HTS**).
- ( 4) RPM SIGNAL SYSTEM  
CAMSHAFT POSITION AND CRANKSHAFT POSITION ARE DETECTED BY THE CAMSHAFT POSITION SENSOR AND CRANKSHAFT POSITION SENSOR. THE CAMSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINAL G22+** OF THE ENGINE CONTROL MODULE, AND THE ENGINE RPM IS INPUT INTO **TERMINAL NE+**.
- ( 5) THROTTLE SIGNAL CIRCUIT  
THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE AS A CONTROL SIGNAL, WHICH IS INPUT INTO **TERMINAL VTA1** OF THE ENGINE CONTROL MODULE.
- ( 6) VEHICLE SPEED SIGNAL SYSTEM  
THE VEHICLE SPEED SENSOR, INSTALLED INSIDE THE TRANSMISSION, DETECTS THE VEHICLE SPEED AND INPUTS A CONTROL SIGNAL INTO **TERMINAL SPD** OF THE ENGINE CONTROL MODULE.
- ( 7) PARK/NEUTRAL POSITION SW SIGNAL SYSTEM  
THE PARK/NEUTRAL POSITION SW DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL, PARKING OR NOT, AND INPUTS A CONTROL SIGNAL INTO **TERMINAL STA** OF THE ENGINE CONTROL MODULE
- ( 8) A/C SW SIGNAL SYSTEM  
THE A/C CONTROL ASSEMBLY INPUTS THE A/C OPERATIONS INTO **TERMINAL A/C** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.
- ( 9) BATTERY SIGNAL CIRCUIT  
VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE ENGINE CONTROL MODULE. WHEN THE IGNITION SW IS TURNED ON, VOLTAGE FOR THE ENGINE CONTROL MODULE OPERATION IS APPLIED TO **TERMINAL +B** OF THE ENGINE CONTROL MODULE VIA THE EFI RELAY.
- (10) INTAKE AIR VOLUME SIGNAL CIRCUIT  
INTAKE AIR VOLUME IS DETECTED BY THE MASS AIR FLOW METER AND A SIGNAL IS INPUT INTO **TERMINAL VG** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.
- (11) NSW SIGNAL CIRCUIT  
TO CONFIRM WHETHER THE ENGINE IS CRANKING, THE VOLTAGE APPLIED TO THE STARTER MOTOR DURING CRANKING IS DETECTED AND THE SIGNAL IS INPUT INTO **TERMINAL NSW** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.
- (12) ENGINE KNOCK SIGNAL CIRCUIT  
ENGINE KNOCKING IS DETECTED BY THE KNOCK SENSOR 1 AND 2, THEN THE SIGNALS ARE INPUT INTO **TERMINALS KNKR AND KNKL** OF THE ENGINE CONTROL MODULE AS A CONTROL SIGNAL.

## 2. CONTROL SYSTEM

- SFI (SEQUENTIAL MULTIPOINT FUEL INJECTION) SYSTEM

THE SFI SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT FROM EACH SENSOR (INPUT SIGNALS (1) TO (12)). 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, #40, #50, AND #60** OF THE ENGINE CONTROL MODULE TO OPERATE THE INJECTOR (INJECT THE FUEL). THE SFI SYSTEM PRODUCES CONTROL OF FUEL INJECTION OPERATION BY THE ENGINE CONTROL MODULE IN RESPONSE TO THE DRIVING CONDITIONS.

- ESA (ELECTRONIC SPARK ADVANCE) SYSTEM

THE ESA SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT TO THE ENGINE CONTROL MODULE FROM EACH SENSOR (INPUT SIGNALS FROM 1, 3, 4, 12). THE BEST IGNITION TIMING IS DECIDED ACCORDING TO THIS DATA AND THE MEMORIZED DATA IN THE ENGINE CONTROL MODULE AND THE CONTROL SIGNAL IS OUTPUT TO **TERMINALS IGT1, IGT2 AND IGT3**. THIS SIGNAL CONTROLS THE IGNITER TO PROVIDE THE BEST IGNITION TIMING FOR THE DRIVING CONDITIONS.

- HEATED OXYGEN SENSOR HEATER CONTROL SYSTEM

THE HEATED OXYGEN SENSOR HEATER CONTROL SYSTEM TURNS THE HEATER ON WHEN THE INTAKE AIR VOLUME IS LOW (TEMP. OF EXHAUST EMISSIONS IS LOW), AND WARMS UP THE HEATED OXYGEN SENSOR TO IMPROVE DETECTION PERFORMANCE OF THE SENSOR. THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM 1, 4, 9, 10), CURRENT IS OUTPUT TO **TERMINALS HTL, HTR AND HTS**, CONTROLLING THE HEATER.

- IDLE AIR CONTROL SYSTEM

THE IDLE AIR CONTROL SYSTEM (ROTARY SOLENOID TYPE) INCREASES THE RPM AND PROVIDES IDLE STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD, AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD AND SO ON, THE ENGINE CONTROL MODULE EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM 1, 4, 5, 8, 9), CURRENT IS OUTPUT TO **TERMINALS RSO AND RSC** TO CONTROL IDLE AIR CONTROL VALVE.

- EGR CONTROL SYSTEM

THE EGR CONTROL SYSTEM DETECTS THE SIGNAL FROM EACH SENSOR (INPUT SIGNALS FROM 1, 4, 9, 10), AND OUTPUTS CURRENT TO **TERMINAL EGR** TO CONTROL THE VSV (EGR). THE EGR VALVE POSITION SENSOR IS MOUNTED ON THE EGR VALVE. THIS SENSOR CONVERTS THE EGR VALVE OPENING HEIGHT INTO A VOLTAGE AND SENDS IT TO THE ENGINE CONTROL MODULE AS THE EGR VALVE POSITION SIGNAL.

- ACIS (ACOUSTIC CONTROL INDUCTION SYSTEM)

ACIS INCLUDES A VALVE IN THE BULKHEAD SEPARATING THE SURGE TANK INTO TWO PARTS. THIS VALVE IS OPENED AND CLOSED IN ACCORDANCE WITH THE DRIVING CONDITIONS TO CONTROL THE INTAKE MANIFOLD LENGTH IN TWO STAGES FOR INCREASED ENGINE OUTPUT IN ALL RANGES FROM LOW TO HIGH SPEEDS. THE ENGINE CONTROL MODULE JUDGES THE ENGINE SPEED BY THE SIGNALS ((4), (5)) FROM EACH SENSOR AND OUTPUTS SIGNALS TO THE **TERMINAL ACIS** TO CONTROL THE VSV (INTAKE AIR CONTROL).

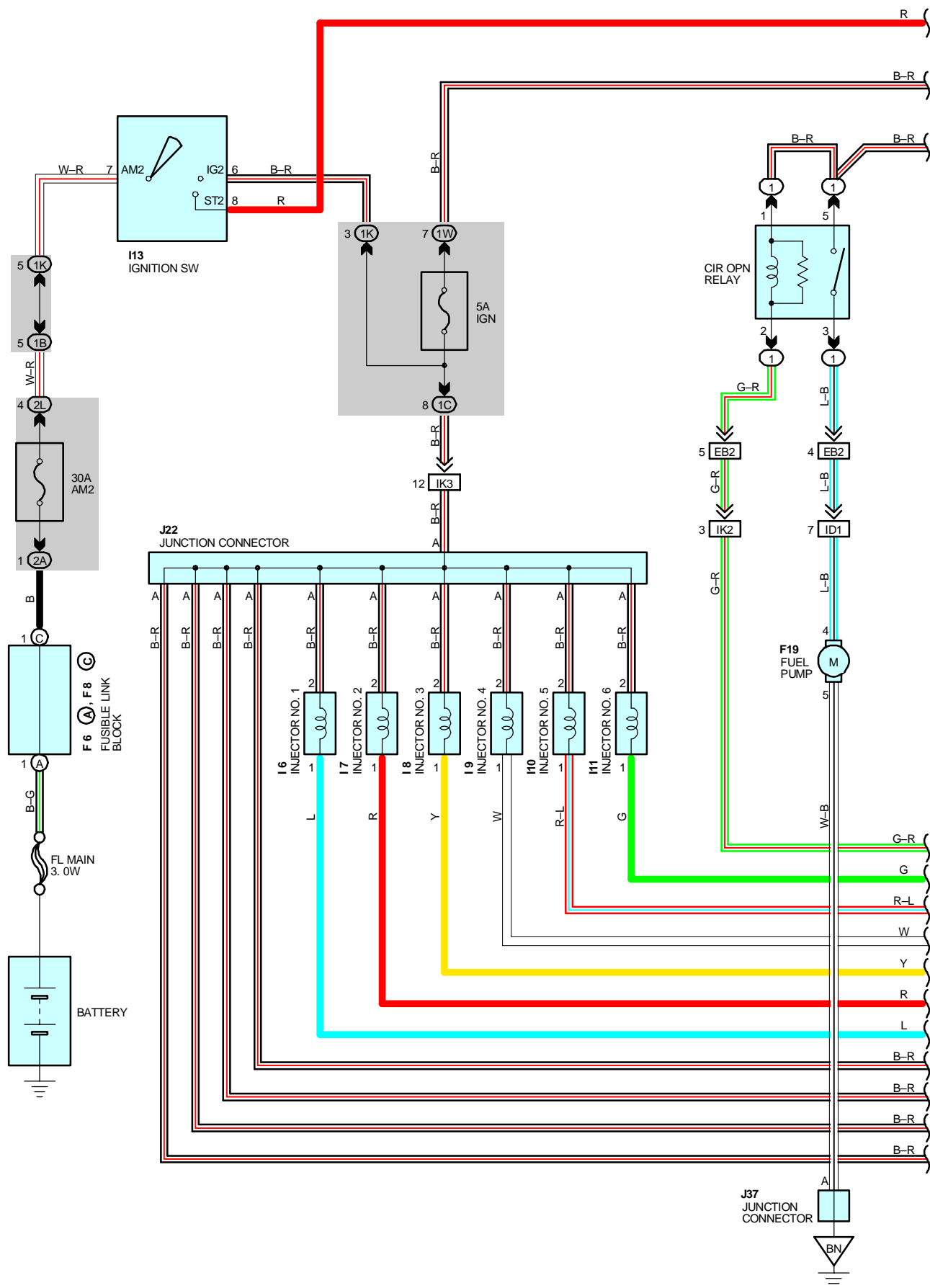
## 3. DIAGNOSIS SYSTEM

WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTION IN THE ENGINE CONTROL MODULE SIGNAL SYSTEM, THE MALFUNCTIONING SYSTEM IS RECORDED IN THE MEMORY.

## 4. FAIL-SAFE SYSTEM

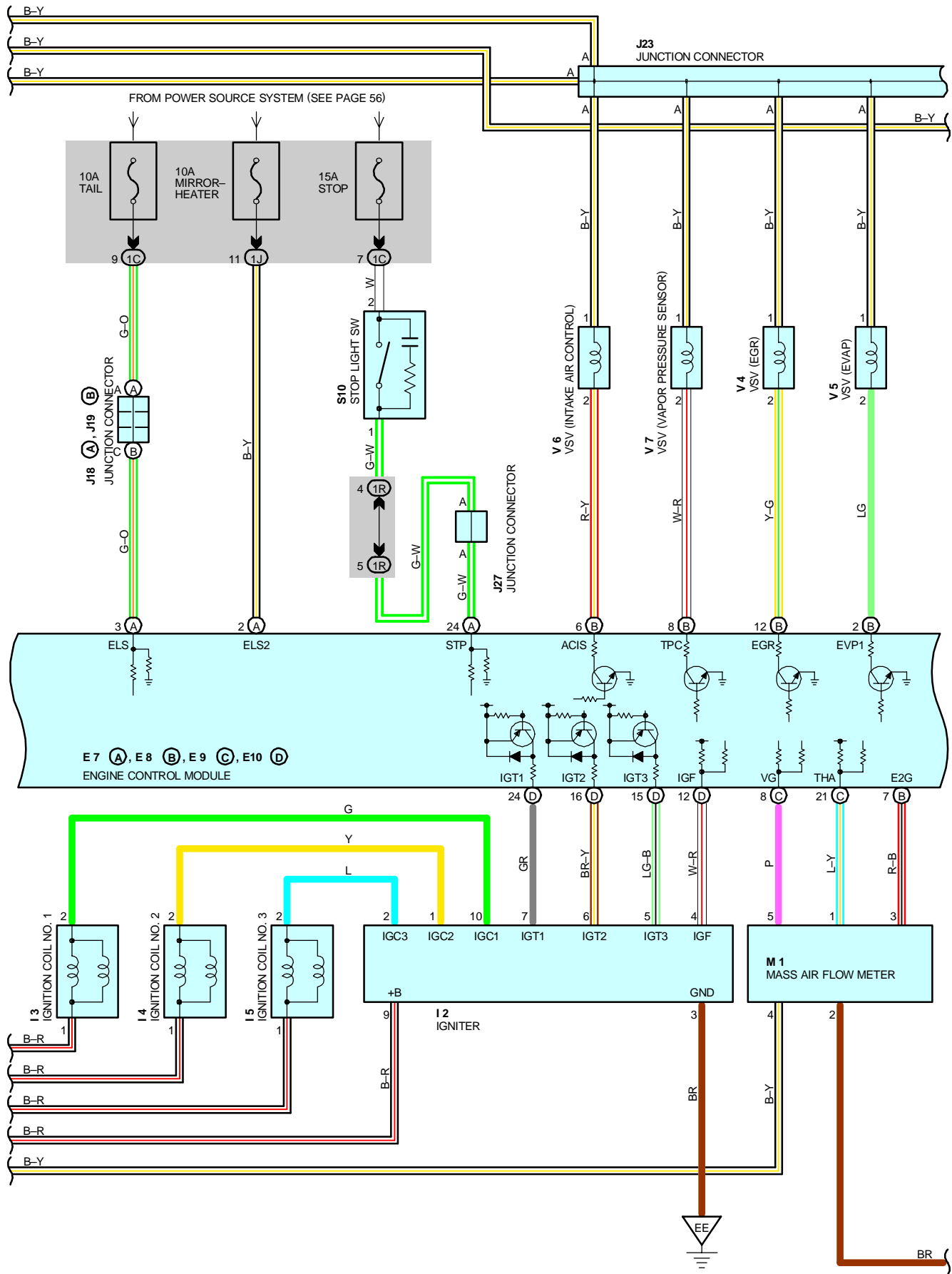
WHEN A MALFUNCTION OCCURS IN ANY SYSTEMS, IF THERE IS A POSSIBILITY OF ENGINE TROUBLE BEING CAUSED BY CONTINUED CONTROL BASED ON THE SIGNALS FROM THAT SYSTEM, THE FAIL-SAFE SYSTEM EITHER CONTROLS THE SYSTEM BY USING DATA (STANDARD VALUES) RECORDED IN THE ENGINE CONTROL MODULE MEMORY OR ELSE STOPS THE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

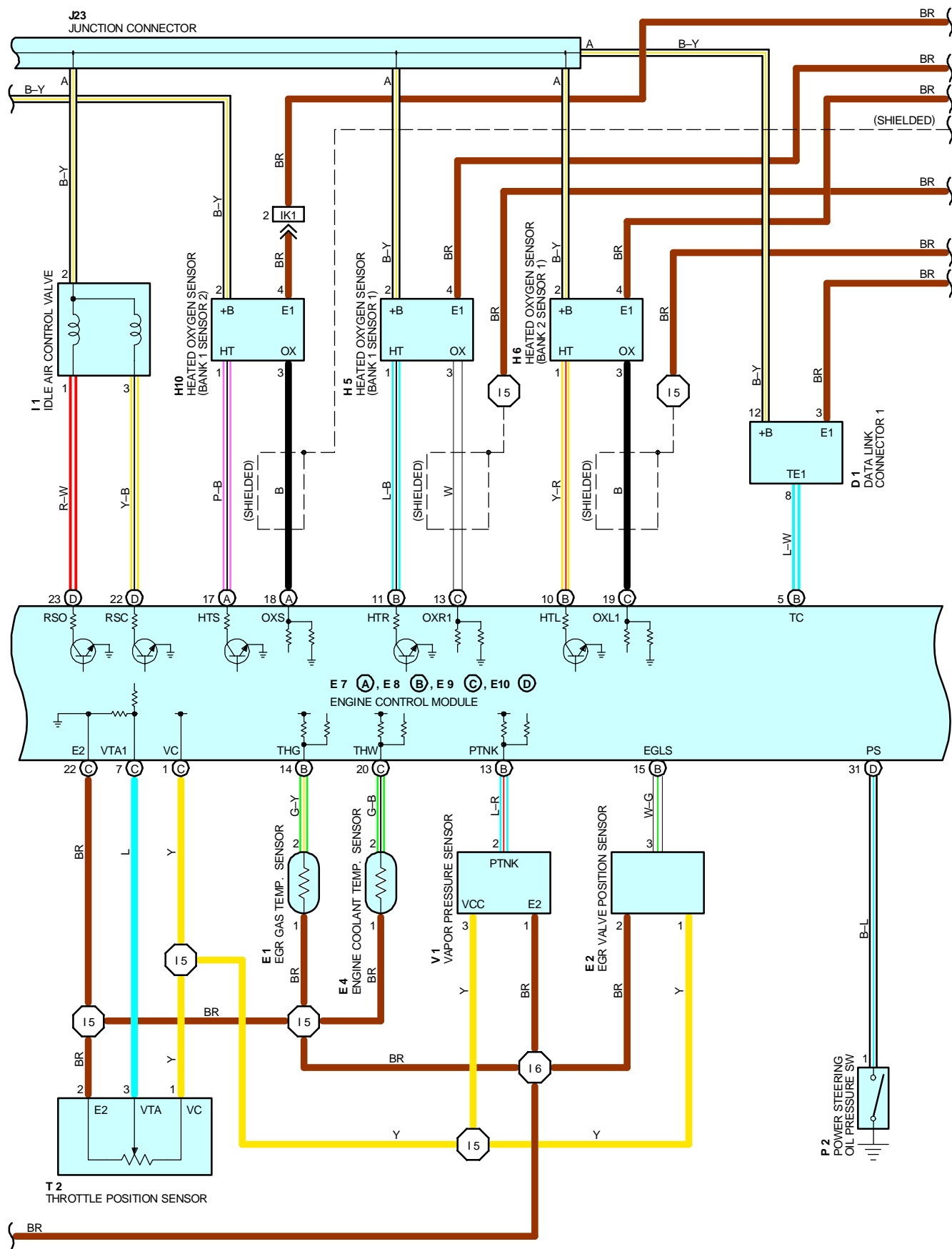
# ENGINE CONTROL



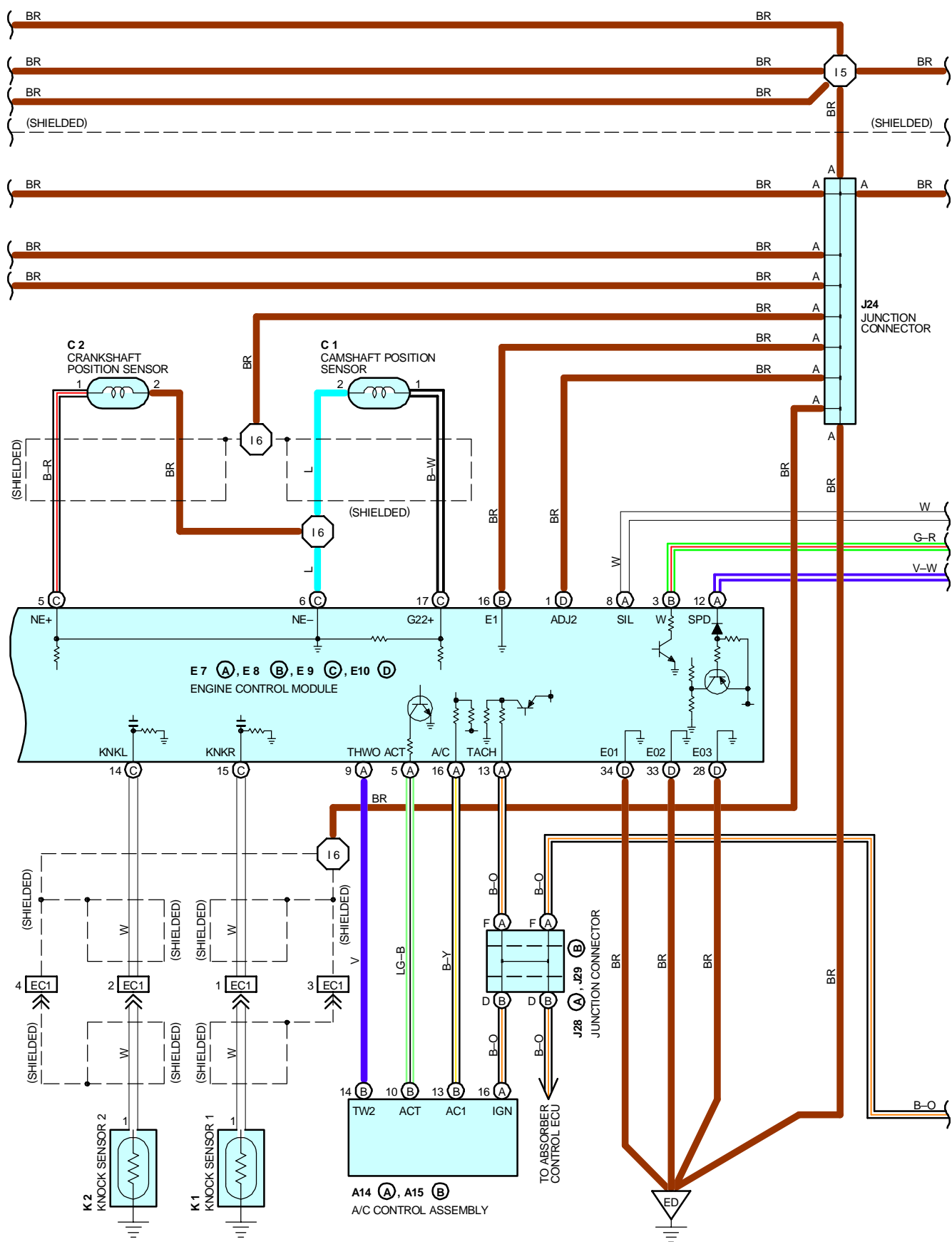


# ENGINE CONTROL





# ENGINE CONTROL





# ENGINE CONTROL

## SERVICE HINTS

### CIR OPN RELAY

①5-①3 : CLOSED WITH THE STARTER RUNNING

### EFI RELAY

5-3 : CLOSED WITH THE IGNITION SW AT **ON** OR **ST** POSITION

### E 4 ENGINE COOLANT TEMP. SENSOR

1-2 : 10.0 -20.0 KΩ (-20°C, -4°F)  
4.0 - 7.0 KΩ ( 0°C, 32°F)  
2.0 - 3.0 KΩ ( 20°C, 68°F)  
0.9 - 1.3 KΩ ( 40°C, 104°F)  
0.4 - 0.7 KΩ ( 60°C, 140°F)  
0.2 - 0.4 KΩ ( 80°C, 176°F)

### E7Ⓐ, E8Ⓑ, E9Ⓒ, E10Ⓓ ENGINE CONTROL MODULE

VOLTAGE AT ENGINE CONTROL MODULE WIRING CONNECTOR

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

+B-E1 : 9.0-14.0 VOLTS (IGNITION SW TO **ON** POSITION)

VC-E2 : ALWAYS 4.5-5.5 VOLTS (IGNITION SW AT **ON** POSITION)

**VTA1-E2** : 0.3-0.8 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)

3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)

**VG-E2G** : 1.1-1.5 VOLTS (ENGINE IDLING AND A/C SW OFF)

**THA-E2** : 0.5-3.4 VOLTS (ENGINE IDLING AND INTAKE AIR TEMP. 20°C, 68°F)

**THW-E2** : 0.2-1.0 VOLTS (ENGINE IDLING AND COOLANT TEMP. 80°C, 176°F)

**IGF-E1** : 4.5-5.5 VOLTS (IGNITION SW AT **ON** POSITION)

PULSE GENERATION (ENGINE IDLING)

**G22+-NE** : PULSE GENERATION (ENGINE IDLING)

**NE+-NE** : PULSE GENERATION (ENGINE IDLING)

**SIL-E1** : PULSE GENERATION (DURING TRANSMISSION)

**TACH-E1** : PULSE GENERATION (ENGINE IDLING)

**STA-E1** : 6.0 VOLTS OR MORE (ENGINE CRANKING)

**THG-E2** : 4.5-5.5 VOLTS (IGNITION SW AT **ON** POSITION)

**EGR-E01** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

**FC-E1** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

0-3.0 VOLTS (ENGINE IDLING)

**SPD-E1** : PULSE GENERATION (IGNITION SW ON AND ROTATE DRIVING WHEEL SLOWLY)

**W-E1** : BELOW 3.0 VOLTS (IGNITION SW AT **ON** POSITION)

**A/C-E1** : BELOW 2.0 VOLTS (ENGINE IDLING AND A/C SW ON)

9.0-14.0 VOLTS (A/C SW OFF)

**ACT-E1** : 9.0-14.0 VOLTS (ENGINE IDLING AND A/C SW ON)

BELOW 2.0 VOLTS (A/C SW OFF)

**ACIS-E01** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

**NSW-E1** : 9.0-14.0 VOLTS (IGNITION SW ON AND OTHER SHIFT POSITION IN **P** OR **N** POSITION)

0-3.0 VOLTS (IGNITION SW ON AND SHIFT POSITION IN **P** OR **N** POSITION)

**EVP-E01** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

**TC-E1** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

**STP-E1** : 7.5-14.0 VOLTS (IGNITION SW ON AND BRAKE PEDAL DEPRESSED)

0-1.5 VOLTS (IGNITION SW ON AND BRAKE PEDAL DEPRESSED)

**CF-E1** : 9.0-14.0 VOLTS (COOLING FAN IS OPERATING ON HIGH SPEED)

0-2.0 VOLTS (COOLING FAN IS OPERATING ON LOW SPEED OR OFF)

**TPC-E1** : 9.0-14.0 VOLTS (IGNITION SW ON AND DISCONNECT THE VACUUM HOSE FROM THE VAPOR PRESSURE SENSOR)

**PTNK-E1** : 3.0-3.6 VOLTS (IGNITION SW AT **ON** POSITION)

1.3-2.1 VOLTS (IGNITION SW ON AND APPLY VACUUM 2.0 KPA)

**RSC,RSO-E1** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

**KNKL,KNKR-E1** : PULSE GENERATION (ENGINE IDLING)

**HTS, HTL, HTR-E03** : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

0-3.0 VOLTS (ENGINE IDLING)

**OXS, OXL1, OXR1-E1** : PULSE GENERATION (MAINTAIN ENGINE SPEED AT 2500 RPM FOR TWO MINUTES AFTER WARMING UP)

**IGT1, IGT2, IGT3-E1**:PULSE GENERATION (ENGINE IDLING)

**#10, #20, #30, #40, #50, #60-E01**:9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)

:PULSE GENERATION (ENGINE IDLING)

### I 6, I 7, I 8, I 9, I 10, I 11 INJECTOR

2-1 : APPROX. 13.8 Ω

### T 2 THROTTLE POSITION SENSOR

2-1 : 3.75 KΩ

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A14	A	28	H10		28	J23		29
A15	B	28	I 1		27	J24		29
C 1		26	I 2		27	J25		29
C 2		26	I 3		27	J26		29
C 7	A	28	I 4		27	J27		29
C 9	C	28	I 5		27	J28	A	29
C10	D	28	I 6		27	J29	B	29
D 1		26	I 7		27	J37		30
D 4		28	I 8		27	K 1		27
E 1		26	I 9		27	K 2		27
E 2		26	I10		27	M 1		27
E 4		26	I11		27	P 1		27
E 7	A	28	I13		28	P 2		27
E 8	B	28	J 4		29	S10		29
E 9	C	28	J 8	A	29	T 2		27
E10	D	28	J 9	B	29	V 1		27
F 6	A	26	J15		29	V 2		27
F 8	C	26	J17		29	V 4		27
F19		30	J18	A	29	V 5		27
H 5		26	J19	B	29	V 6		27
H 6		26	J22		29	V 7		27

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1K		
1R		
1W		
2A	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2C		
2F		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		
2L		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB2	34	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)
EC1	34	ENGINE WIRE AND SENSOR WIRE (LEFT BANK OF THE CYLINDER HEAD)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	<a href="#">36</a>	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK1	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2		
IK3		
IL1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)

## ENGINE CONTROL



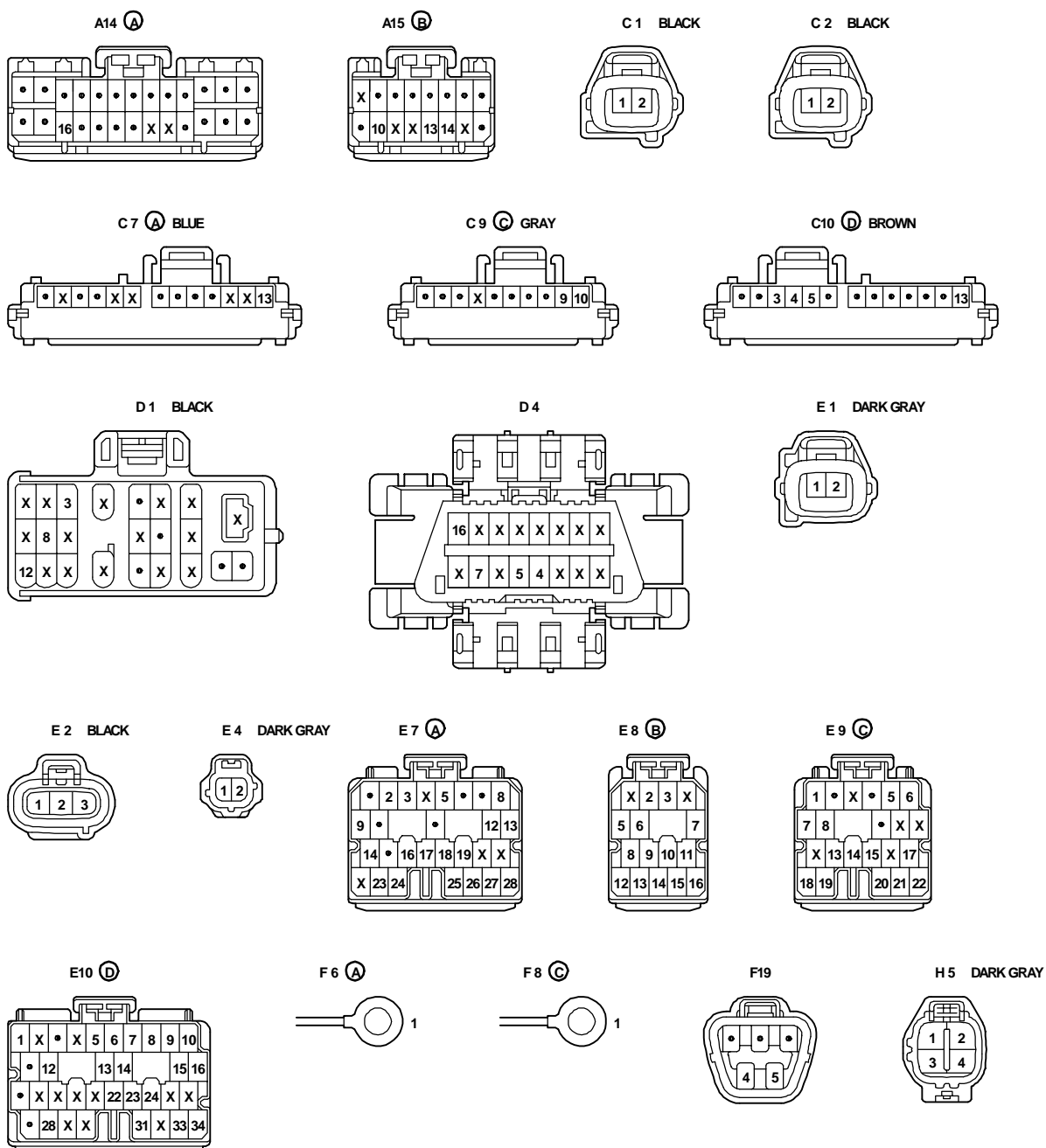
**: GROUND POINTS**

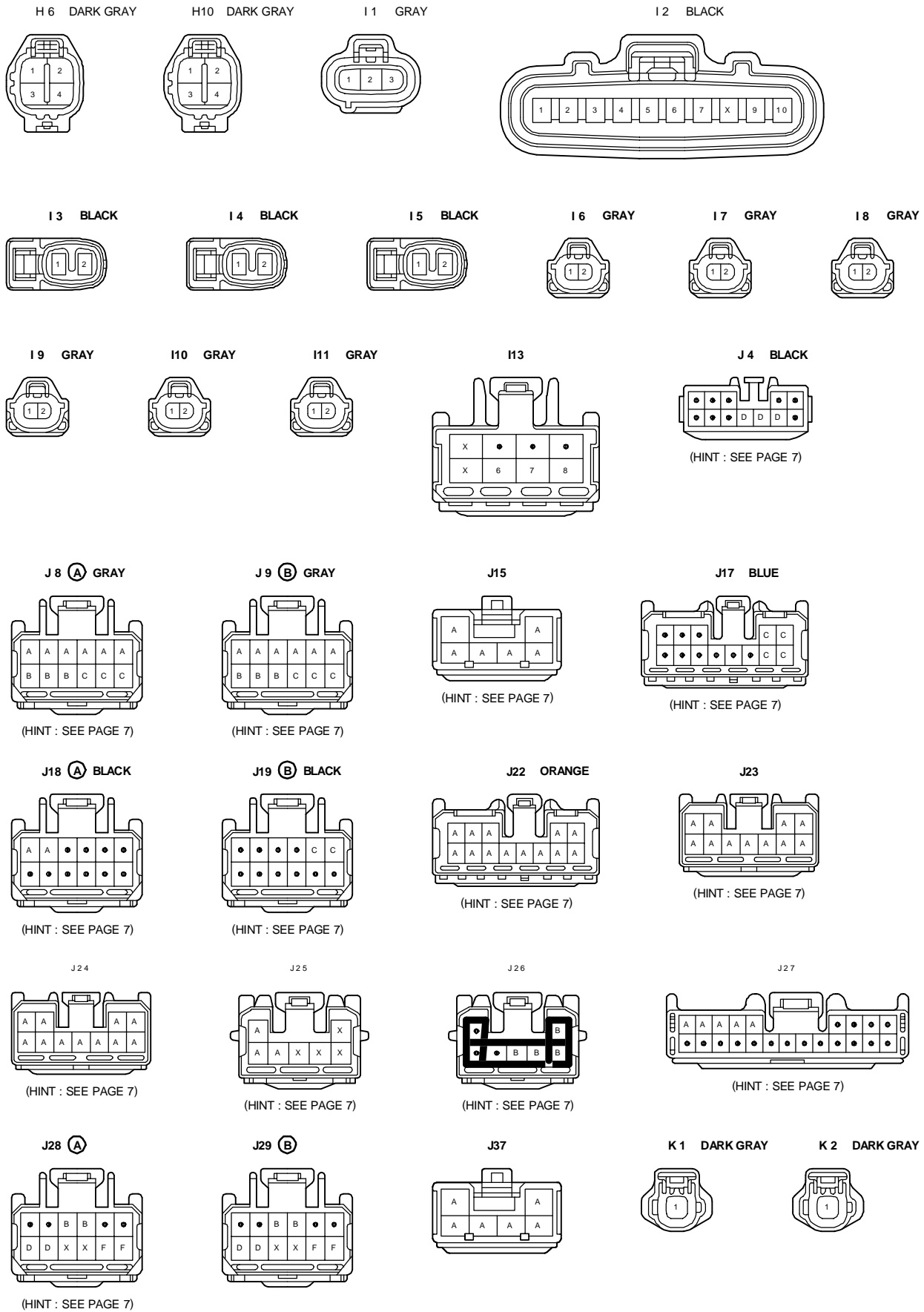
CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT
ED	34	SURGE TANK RH
EE	34	REAR SIDE OF SURGE TANK
II	36	INSTRUMENT PANEL BRACE LH
IJ	36	INSTRUMENT PANEL BRACE RH
BN	40	UNDER THE LEFT CENTER PILLAR

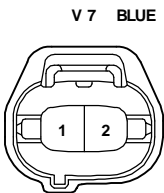
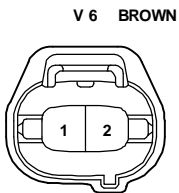
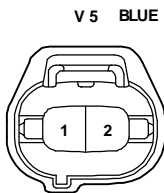
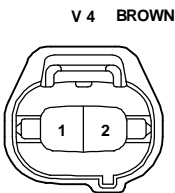
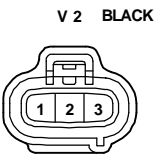
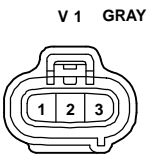
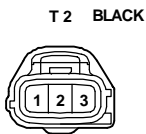
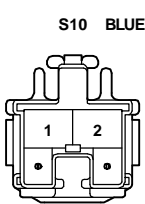
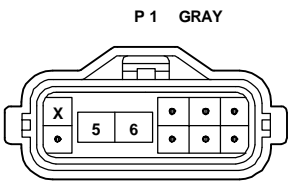
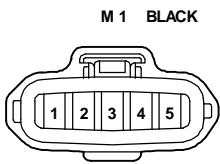


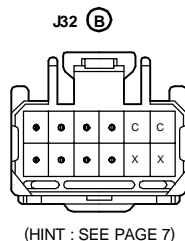
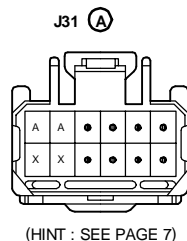
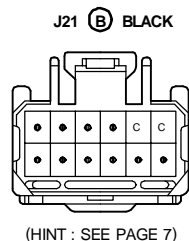
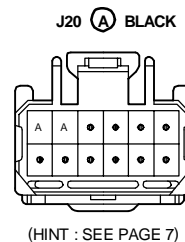
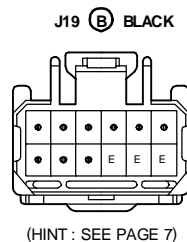
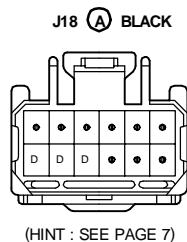
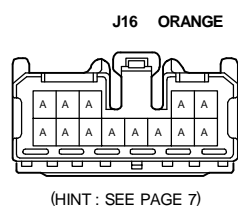
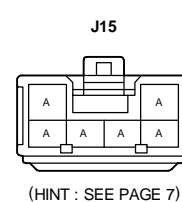
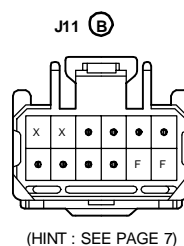
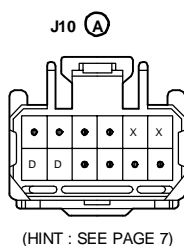
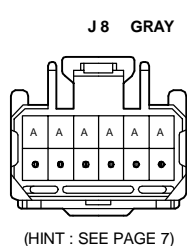
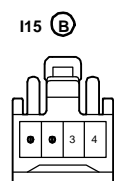
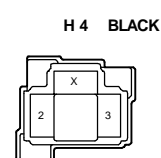
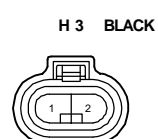
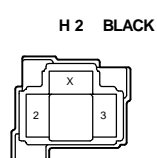
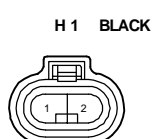
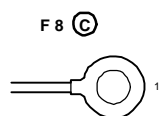
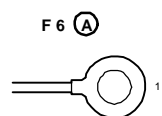
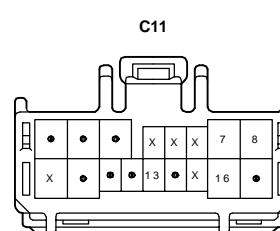
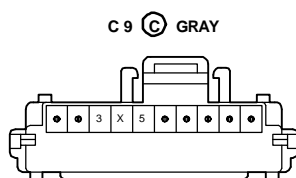
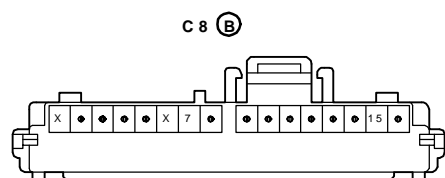
## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
15	38	ENGINE WIRE	111	38	INSTRUMENT PANEL WIRE
16					

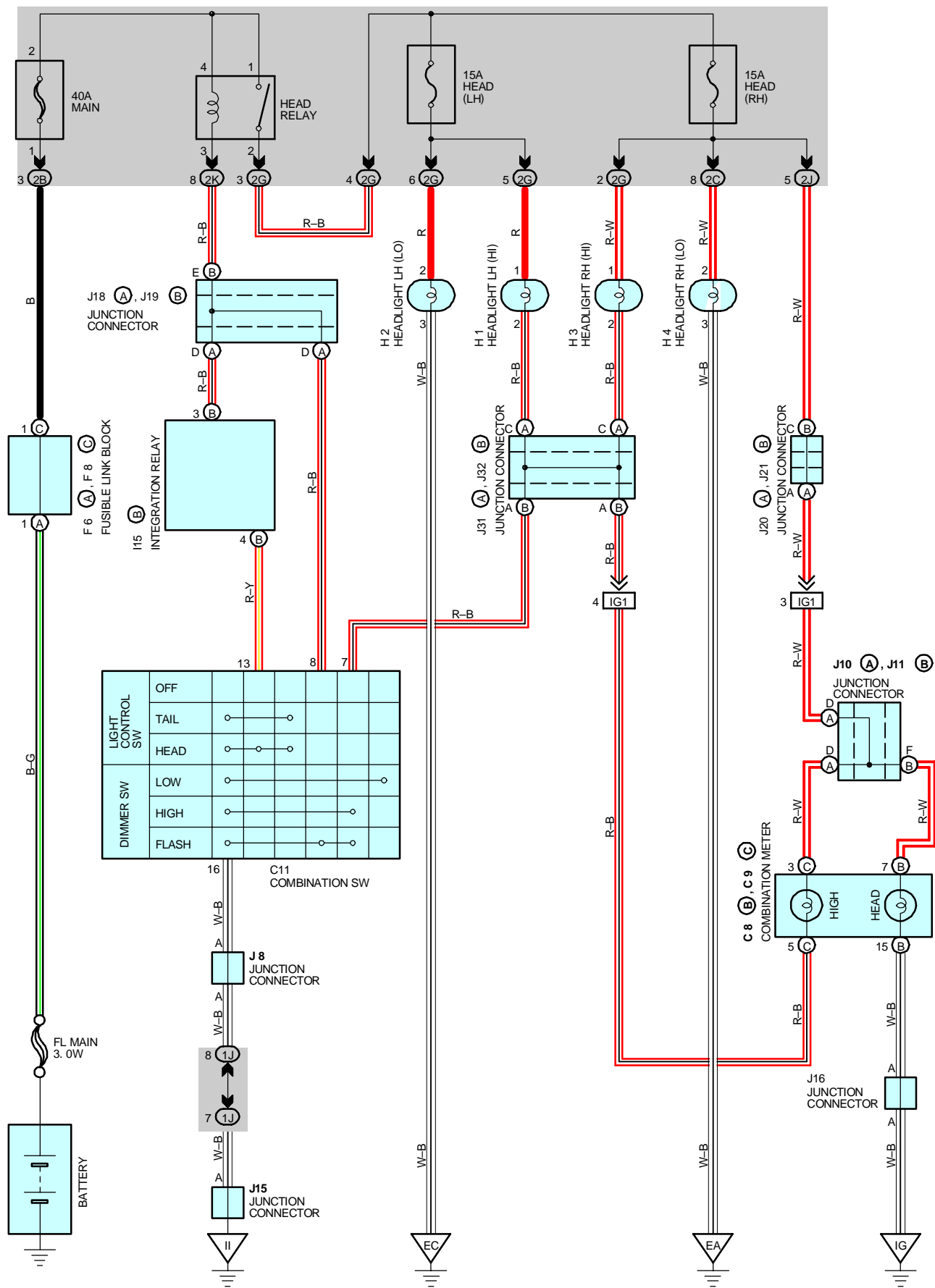








# HEADLIGHT (USA)



## SERVICE HINTS

### HEAD RELAY

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

### LIGHT AUTO TURN OFF OPERATION

PLEASE REFER TO THE LIGHT AUTO TURN OFF SYSTEM (SEE PAGE 115)

## ○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C 8	B	28	H 3	26		J16	29	
C 9	C	28	H 4	26		J18	A	29
C11		28	I15	B	28	J19	B	29
F 6	A	26	J 8	29		J20	A	29
F 8	C	26	J10	A	29	J21	B	29
H 1		26	J11	B	29	J31	A	29
H 2		26	J15	29		J32	B	29

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2C		
2G		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

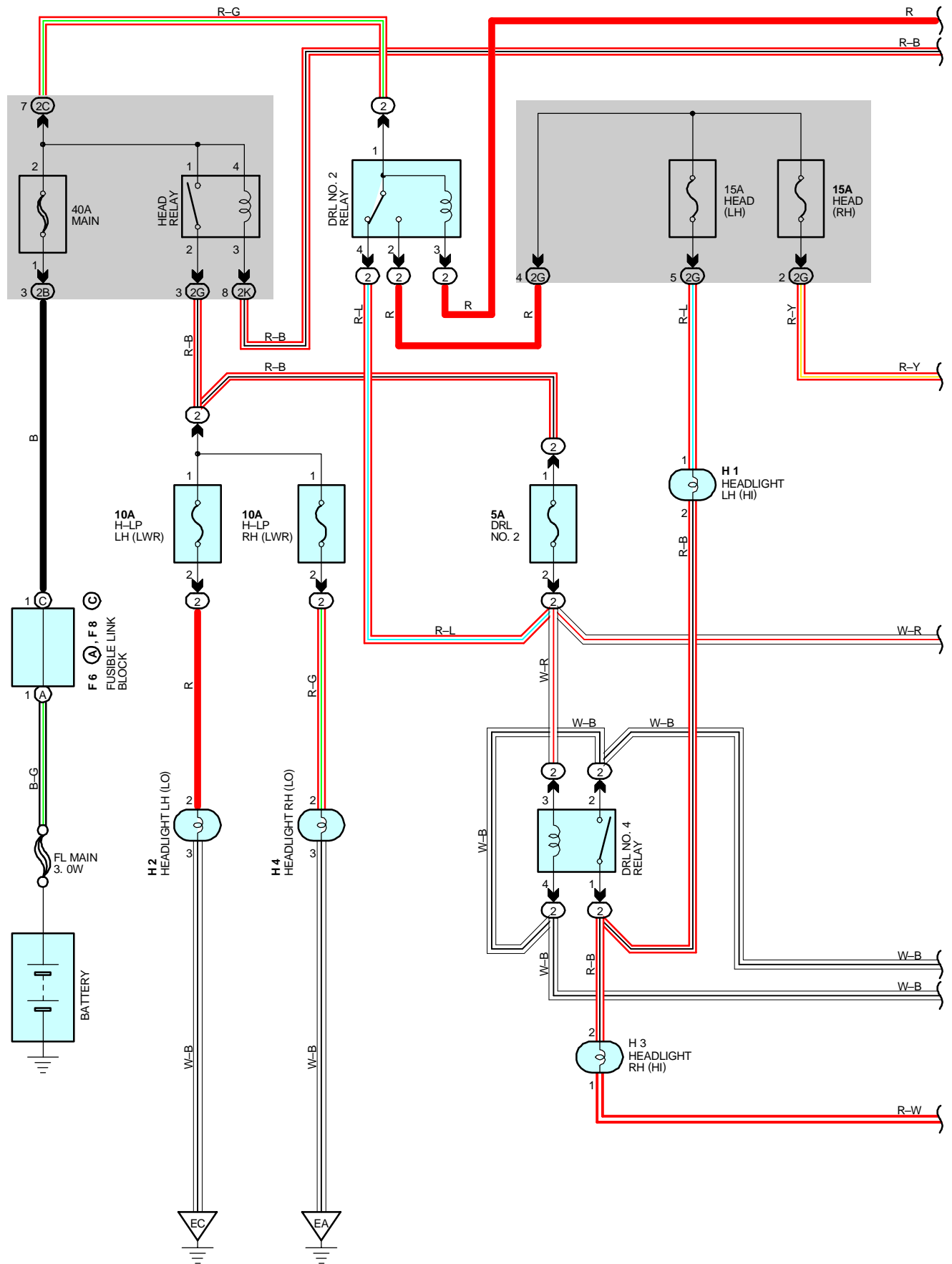
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

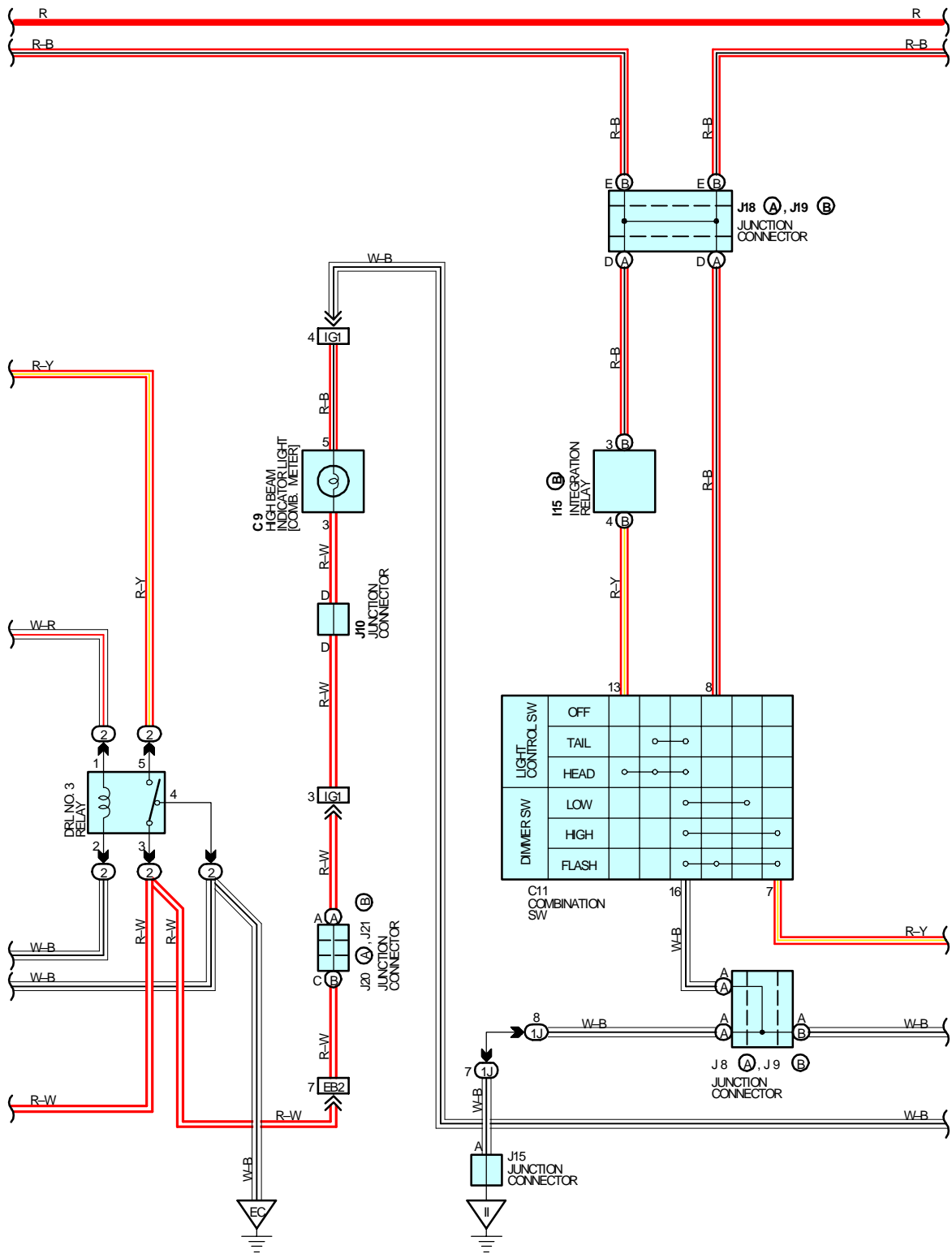
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)

## ▽ : GROUND POINTS

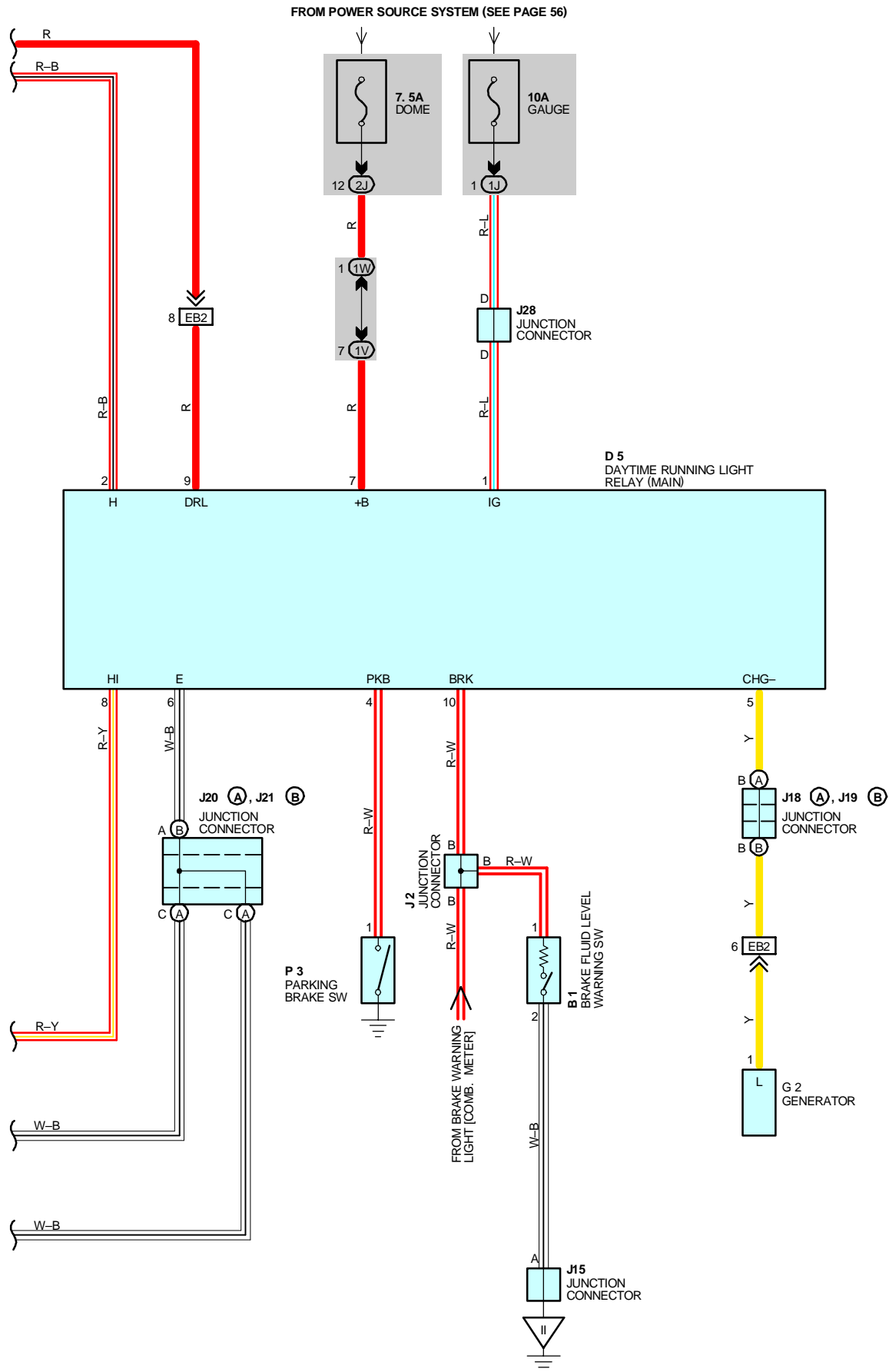
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EC	34	LEFT RADIATOR SIDE SUPPORT
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH

# HEADLIGHT(CANADA)





# HEADLIGHT(CANADA)



## SYSTEM OUTLINE

CURRENT FROM THE BATTERY IS ALWAYS FLOWING FROM THE FL MAIN → **MAIN FUSE** → HEAD RELAY (COIL SIDE) → **TERMINAL 2** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN) AND **TERMINAL 8** OF THE DIMMER SW, HEAD RELAY (COIL SIDE) → **TERMINAL 3** OF THE INTEGRATION RELAY → **TERMINAL 4** → **TERMINAL 13** OF THE LIGHT CONTROL SW, FL MAIN → **MAIN FUSE** → DRL NO.2 RELAY (COIL SIDE) → **TERMINAL 9** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN).

### 1. DAYTIME RUNNING LIGHT OPERATION

WHEN THE ENGINE IS STARTED, VOLTAGE GENERATED AT **TERMINAL 'L'** OF THE GENERATOR IS APPLIED TO **TERMINAL 5** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN).

IF THE PARKING BRAKE PEDAL IS DEPRESSED (PARKING BRAKE SW ON) AT THIS TIME, THE RELAY IS NOT ENERGIZED, SO THE DAYTIME RUNNING LIGHT SYSTEM DOES NOT OPERATE. IF THE PARKING PEDAL LEVER IS RELEASED (PARKING BRAKE SW OFF), THE SIGNAL IS INPUT TO **TERMINAL 4** OF THE RELAY. THIS ACTIVATES THE RELAY AND CURRENT FROM **MAIN FUSE** FLOWS TO DRL NO. 2 RELAY (POINT SIDE) → **HEAD (LH) FUSE** → **TERMINAL 1** OF THE HEADLIGHT LH (LH) → **TERMINAL 2** → **TERMINAL 2** OF THE HEADLIGHT RH (HI) → **TERMINAL 1** → **TERMINAL 3** OF THE DRL NO.3 RELAY → **TERMINAL 4** → TO **GROUND**, CAUSING THE HEADLIGHTS TO LIGHT UP DIMMER THAN NORMAL BRIGHTNESS.

THIS IS HOW THE DAYTIME RUNNING LIGHT SYSTEM OPERATES ONCE THE DAYTIME RUNNING LIGHT SYSTEM OPERATES AND THE HEADLIGHTS HAVE LIGHT UP, THE HEADLIGHTS REMAIN ON EVEN IF THE PARKING BRAKE PEDAL IS DEPRESSED (PARKING BRAKE SW ON).

EVEN IF THE ENGINE STALLS WITH THE IGNITION SW ON AND THERE IS NO VOLTAGE FROM **TERMINAL 'L'** OF THE GENERATOR, THE HEADLIGHTS REMAIN ON. IF THE IGNITION SW IS THEN TURNED OFF, HEADLIGHT ARE TURNED OFF.

IF THE ENGINE IS STARTED WHILE THE PARKING BRAKE PEDAL IS RELEASED (PARKING BRAKE SW OFF), THE DAYTIME RUNNING LIGHT SYSTEM OPERATES AND THE HEADLIGHTS LIGHT UP AS THE ENGINE STARTS.

### 2. HEADLIGHT OPERATION

#### • WHEN THE LIGHT CONTROL SW AT THE **HEAD** POSITION

WHEN THE LIGHT CONTROL SW IS SET TO **HEAD** POSITION, THE CURRENT FLOWING TO THE HEAD RELAY (COIL SIDE) FLOWS TO **TERMINAL B 3** OF THE INTEGRATION RELAY → **TERMINAL 4** → **TERMINAL 13** OF THE LIGHT CONTROL SW → **TERMINAL 16** → **GROUND**, TURNING THE HEAD RELAY ON.

THIS CAUSES THE CURRENT FLOWING TO THE HEAD RELAY (POINT SIDE) → **DRL NO. 2 FUSE** → DRL NO.3 RELAY (COIL SIDE) AND DRL NO.4 RELAY (COIL SIDE) → **GROUND**, TURNING THE DRL NO.3 AND NO.4 RELAY ON. ALSO, CURRENT FROM THE HEAD RELAY (POINT SIDE) TO **HEAD (LWR) FUSES** → **TERMINAL 2** OF THE HEADLIGHT (LO) → **TERMINAL 3** → **GROUND**, SO THE HEADLIGHTS (LO SIDE) LIGHT UP.

#### • DIMMER SW AT **FLASH** POSITION

WHEN THE DIMMER SW IS SET TO **FLASH** POSITION, CURRENT FLOWS FROM HEAD RELAY (COIL SIDE) → **TERMINAL 8** OF THE DIMMER SW → **TERMINAL 16** → **GROUND**, TURNING THE HEAD RELAY ON. AT THE SAME TIME, SIGNALS ARE OUTPUT FROM **TERMINAL 7** AND **TERMINAL 8** OF THE DIMMER SW TO **TERMINAL 8** AND **TERMINAL 2** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN), ACTIVATING THE DAYTIME RUNNING LIGHT RELAY (MAIN) AND ALSO THE DRL NO.2 RELAY. WHEN THE HEAD RELAY AND DAYTIME RUNNING LIGHT RELAY (MAIN) ARE ACTIVATED, THE HEADLIGHTS (LO AND HI) THEN LIGHT UP.

#### • DIMMER SW AT **HIGH** POSITION

WHEN THE LIGHT CONTROL SW IS SET TO **HEAD** POSITION, A SIGNAL IS OUTPUT FROM **TERMINAL 13** OF THE LIGHT CONTROL SW → **TERMINAL 4** OF THE INTEGRATION RELAY → **TERMINAL 3** → **TERMINAL 2** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN). WHEN DIMMER SW IS SET TO **HIGH** POSITION, A SIGNAL IS OUTPUT FROM **TERMINAL 7** OF THE DIMMER SW TO **TERMINAL 8** OF THE DAYTIME RUNNING LIGHT RELAY (MAIN). THESE SIGNALS ACTIVATE DRL NO.2 RELAY, SO CURRENT FLOWS FROM DRL NO.2 RELAY (POINT SIDE) → **HEAD (LH) FUSE** → **TERMINAL 1** OF THE HEADLIGHT LH (HI) → **TERMINAL 2** → DRL NO.4 RELAY (POINT SIDE) → **GROUND**, AND CURRENT ALSO SIMULTANEOUSLY FLOWS FROM **HEAD (RH) FUSE** → DRL NO.3 RELAY (POINT SIDE) → **TERMINAL 1** OF THE HEADLIGHT RH (HI) → **TERMINAL 2** → DRL NO.4 RELAY (POINT SIDE), CAUSING THE HEADLIGHTS (HI SIDE) TO LIGHT UP.

## SERVICE HINTS

### D 5 DAYTIME RUNNING LIGHT RELAY (MAIN)

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

7-GROUND : ALWAYS APPROX. 12 VOLTS

4-GROUND : CONTINUITY WITH THE PARKING BRAKE PEDAL DEPRESSED (PARKING BRAKE SW ON)

5-GROUND : ALWAYS CONTINUITY

# HEADLIGHT(CANADA)

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	<a href="#">26</a>	H 2	<a href="#">26</a>	J15	<a href="#">29</a>
C 9	<a href="#">28</a>	H 3	<a href="#">26</a>	J18	<a href="#">29</a>
C11	<a href="#">28</a>	H 4	<a href="#">26</a>	J19	<a href="#">29</a>
D 5	<a href="#">28</a>	I15	<a href="#">28</a>	J20	<a href="#">29</a>
F 6	<a href="#">26</a>	J 2	<a href="#">29</a>	J21	<a href="#">29</a>
F 8	<a href="#">26</a>	J 8	<a href="#">29</a>	J28	<a href="#">29</a>
G 2	<a href="#">26</a>	J 9	<a href="#">29</a>	P 3	<a href="#">29</a>
H 1	<a href="#">26</a>	J10	<a href="#">29</a>		

## : RELAY BLOCKS

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

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
IJ	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		
1W		
2B	<a href="#">20</a>	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2C		
2G		
2J	<a href="#">20</a>	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB2	<a href="#">34</a>	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)
IG1	<a href="#">36</a>	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)

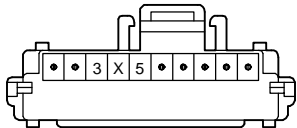
## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	<a href="#">34</a>	RIGHT RADIATOR SIDE SUPPORT
EC	<a href="#">34</a>	LEFT RADIATOR SIDE SUPPORT
II	<a href="#">36</a>	INSTRUMENT PANEL BRACE LH

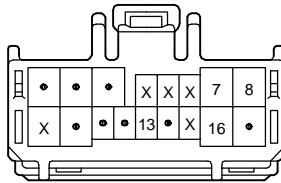
B 1 GRAY



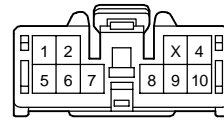
C 9 GRAY



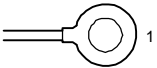
C11



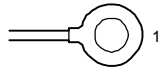
D 5 GRAY



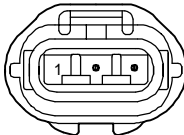
F 6 (A)



F 8 (C)



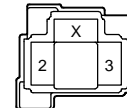
G 2 BLACK



H 1 BLACK



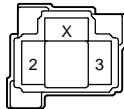
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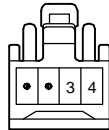
H 3 BLACK



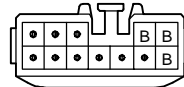
H 4 BLACK



I15 (B)

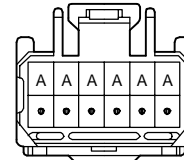


J 2 BLACK



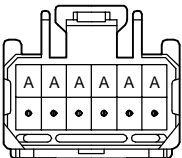
(HINT : SEE PAGE 7)

J 8 (A) GRAY



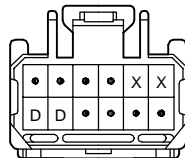
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J 9 (B) GRAY



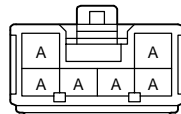
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J10



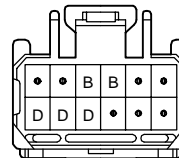
(HINT : SEE PAGE 7)

J15



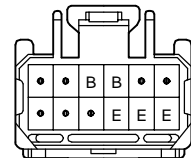
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J18 (A) BLACK



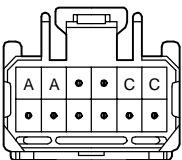
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J19 (B) BLACK



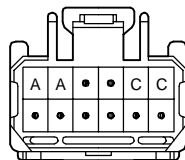
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J20 (A) BLACK



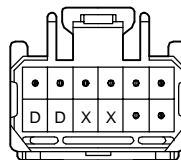
(HINT : SEE PAGE 7)

J21 (B) BLACK



(HINT : SEE PAGE 7)

J28

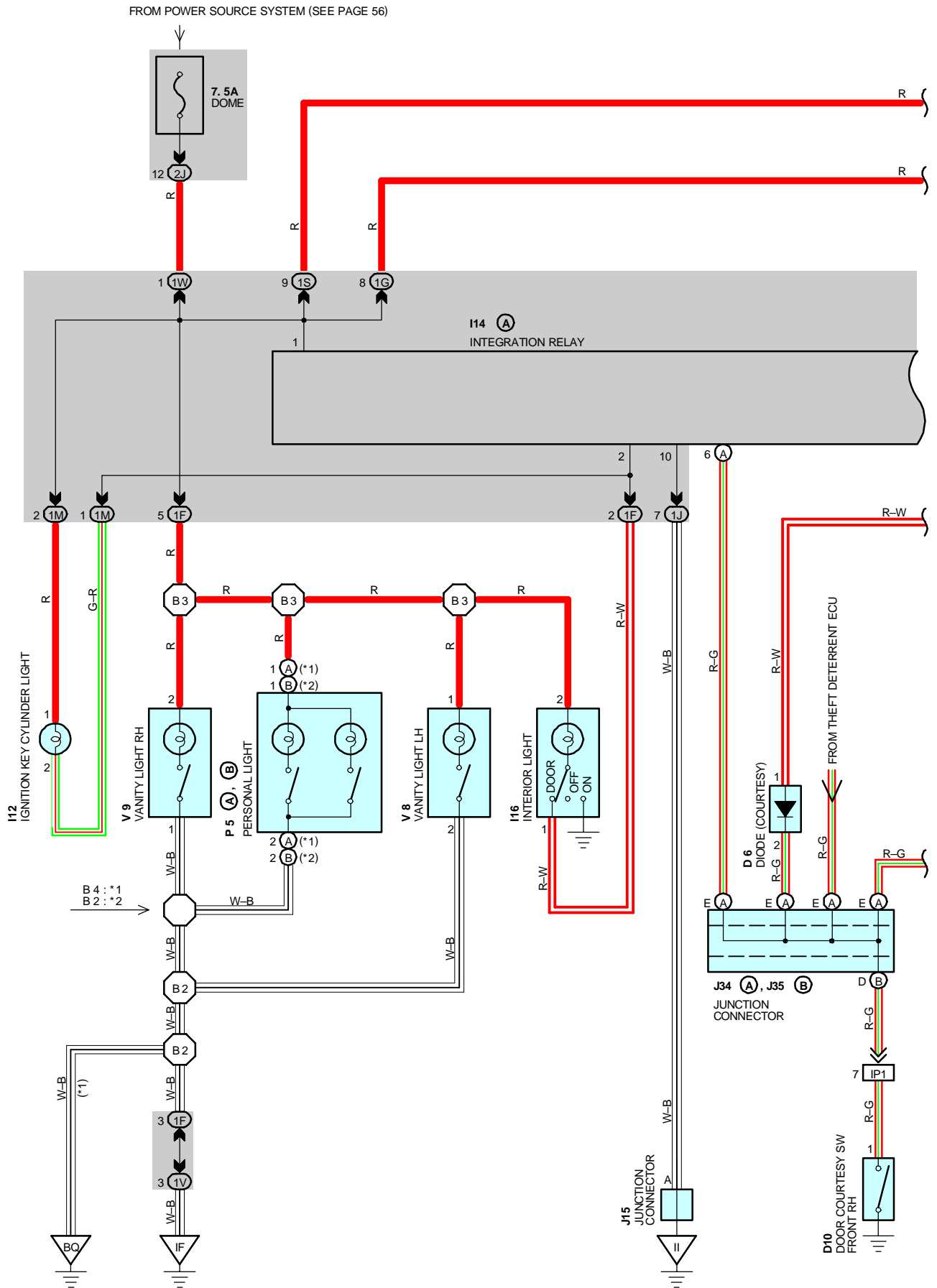


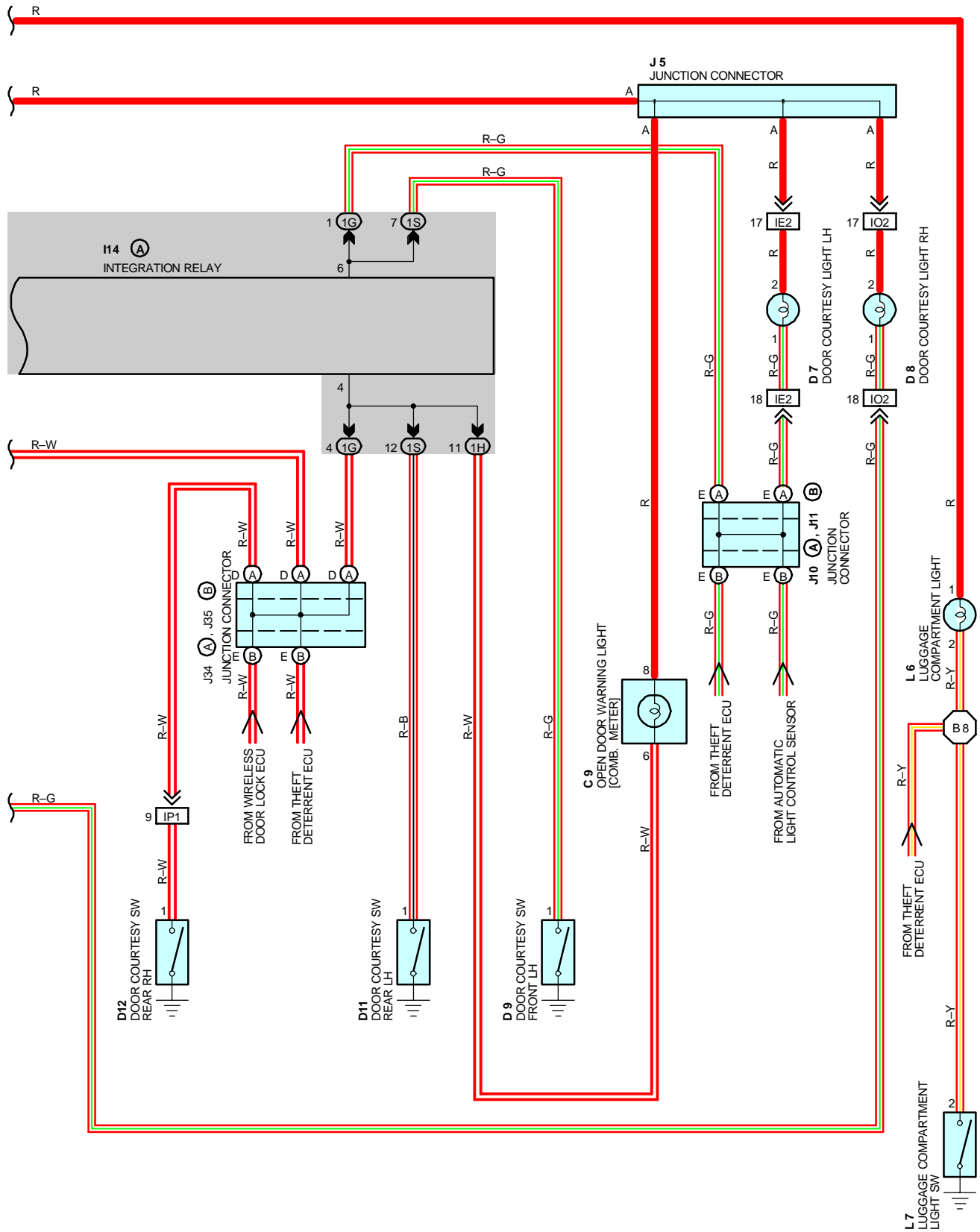
(HINT : SEE PAGE 7)

P 3



# INTERIOR LIGHT





# INTERIOR LIGHT

## SERVICE HINTS

### INTEGRATION RELAY

1-GROUND : ALWAYS APPROX. 12 VOLTS

4-GROUND : CONTINUITY WITH EACH DOOR (FRONT RH, REAR LH AND RH) OPEN

6-GROUND : CONTINUITY WITH THE FRONT LH DOOR OPEN

### D 9, D10, D11, D12 DOORCOURTESY SW FRONT LH, RH, REAR, LH, RH

1-GROUND : CLOSED WITH THE DOOR OPEN

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	<a href="#">28</a>	I12	<a href="#">28</a>	J35	B <a href="#">29</a>
D 6	<a href="#">28</a>	I14	A <a href="#">28</a>	L 6	<a href="#">30</a>
D 7	<a href="#">30</a>	I16	<a href="#">30</a>	L 7	<a href="#">30</a>
D 8	<a href="#">30</a>	J 5	<a href="#">29</a>	P 5	A <a href="#">31</a>
D 9	<a href="#">30</a>	J10	A <a href="#">29</a>		B <a href="#">31</a>
D10	<a href="#">30</a>	J11	B <a href="#">29</a>	V 8	<a href="#">31</a>
D11	<a href="#">30</a>	J15	<a href="#">29</a>	V9	<a href="#">31</a>
D12	<a href="#">30</a>	J34	A <a href="#">29</a>		

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
IF	<a href="#">24</a>	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
IG	<a href="#">24</a>	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
IJ	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1M		
1S	<a href="#">24</a>	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2J	<a href="#">20</a>	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

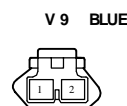
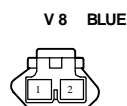
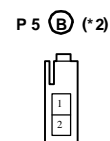
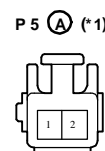
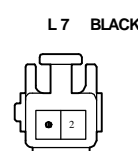
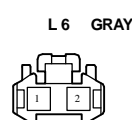
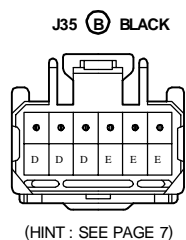
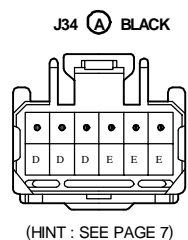
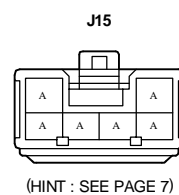
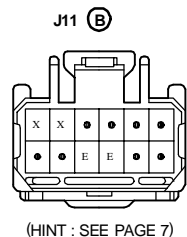
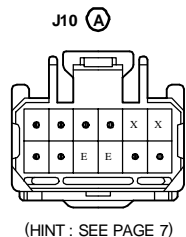
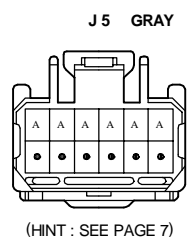
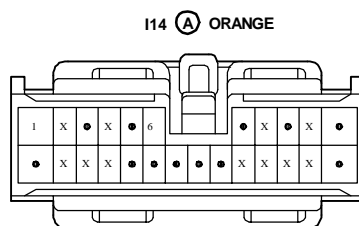
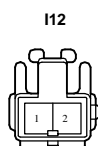
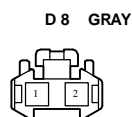
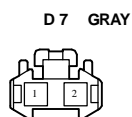
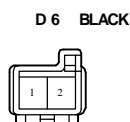
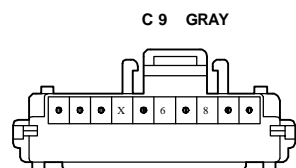
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE2	<a href="#">36</a>	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO2	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IP1	38	FLOOR NO. 2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

## : GROUND POINTS

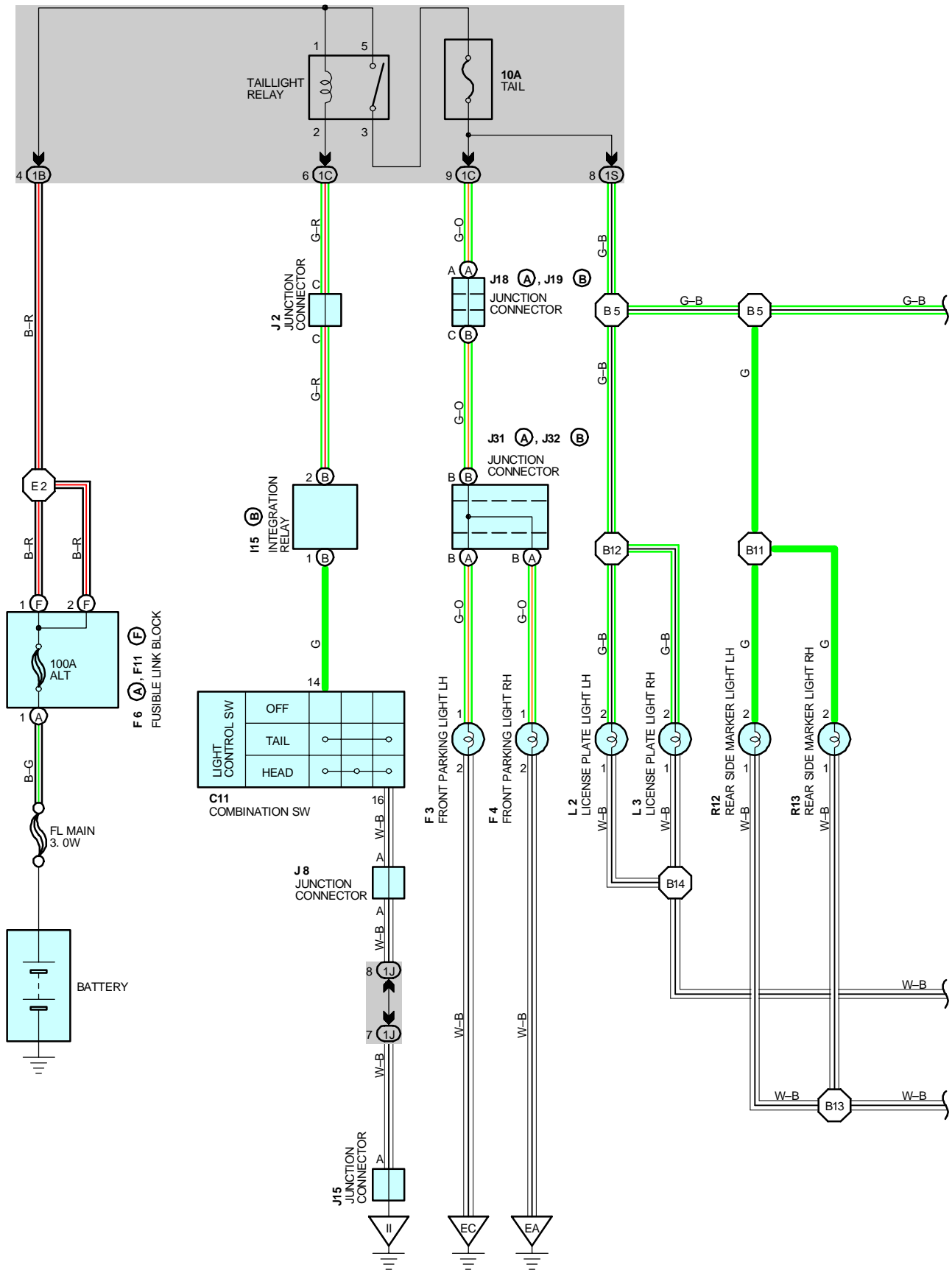
CODE	SEE PAGE	GROUND POINTS LOCATION
IF	<a href="#">36</a>	COWL SIDE PANEL LH
II	<a href="#">36</a>	INSTRUMENT PANEL BRACE LH
BQ	40	ROOF LEFT

## : SPLICE POINTS

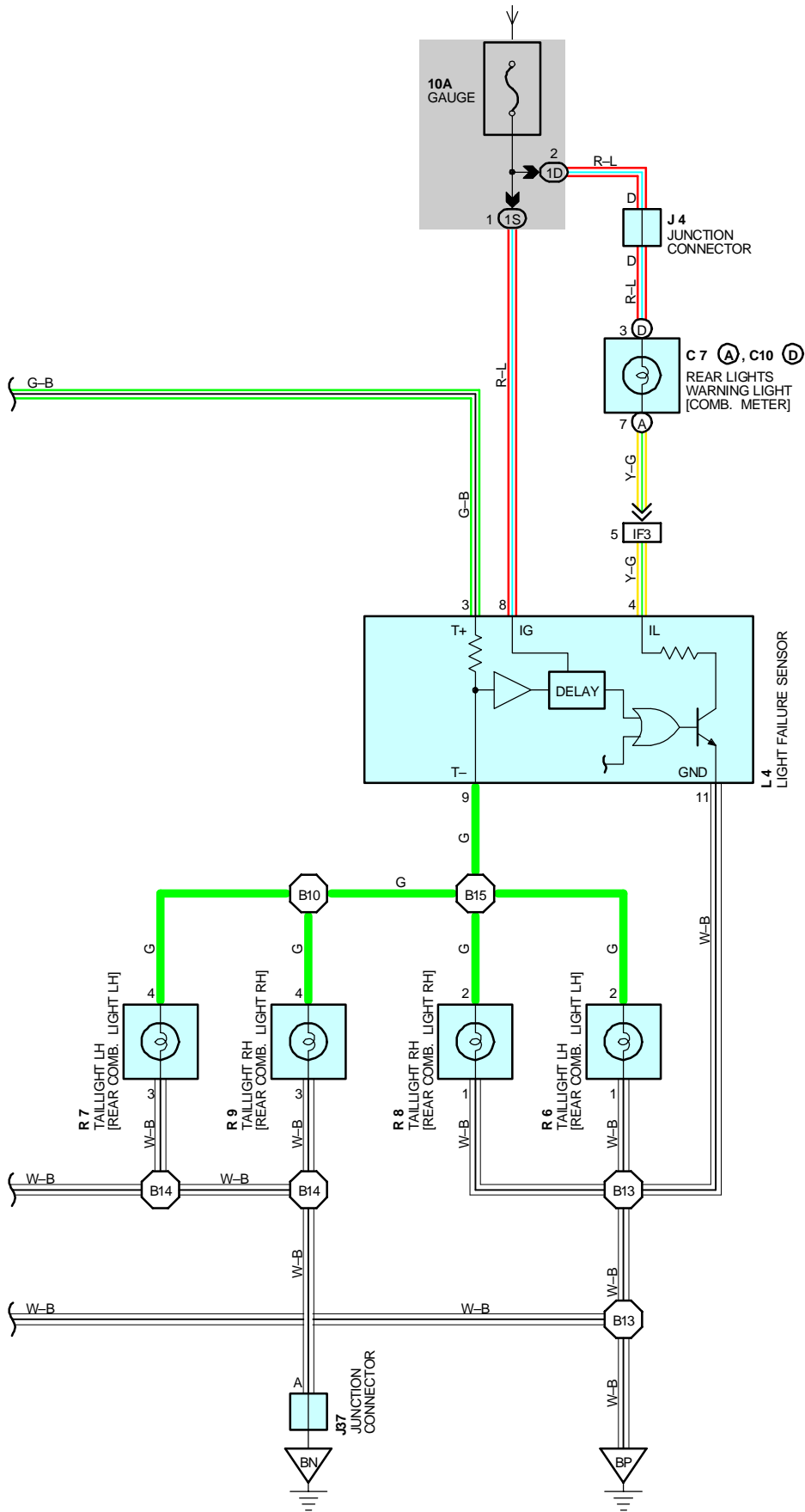
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 2	40	ROOF WIRE	B 4	40	FLOOR WIRE
B 3			B 8	40	ROOF WIRE



# TAILLIGHT



FROM POWER SOURCE SYSTEM (SEE PAGE 56)



# TAILLIGHT

## SYSTEM OUTLINE

WHEN THE LIGHT CONTROL SW IS TURNED TO **TAIL** OR **HEAD** POSITION, THE CURRENT FLOWS TO **TERMINAL 3** OF THE LIGHT FAILURE SENSOR THROUGH THE **TAIL** FUSE.  
WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWS FROM THE **GAUGE** FUSE TO **TERMINAL 8** OF THE LIGHT FAILURE SENSOR, AND ALSO FLOWS THROUGH THE REAR LIGHT WARNING LIGHT TO **TERMINAL 4** OF THE LIGHT FAILURE SENSOR.

### TAILLIGHT DISCONNECTION WARNING

WITH THE IGNITION SW ON AND THE LIGHT CONTROL SW TURNED TO **TAIL** OR **HEAD** POSITION, IF THE TAILLIGHT CIRCUIT IS OPEN, THE LIGHT FAILURE SENSOR DETECTS THE FAILURE BY THE CHANGE IN CURRENT FLOWING FROM **TERMINAL 3** OF THE LIGHT FAILURE SENSOR TO **TERMINAL 9** AND THE WARNING CIRCUIT OF THE LIGHT FAILURE SENSOR IS ACTIVATED.  
AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 4** OF THE LIGHT FAILURE SENSOR → **TERMINAL 11** → **GROUND** AND TURNS THE REAR LIGHTS WARNING LIGHT ON, WHICH REMAINS ON UNTIL THE LIGHT CONTROL SW IS TURNED OFF.

## SERVICE HINTS

### TAILLIGHT RELAY

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

### L4 LIGHT FAILURE SENSOR

4,8-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION

3-GROUND : APPROX. **12** VOLTS WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

11-GROUND : ALWAYS CONTINUITY



### : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE	SEE PAGE
C 7	A	28	J 4		29	L 3	30
C10	D	28	J 8		29	L 4	30
C11		28	J15		29	R 6	31
F 3		26	J18	A	29	R 7	31
F 4		26	J19	B	29	R 8	31
F 6	A	26	J31	A	29	R 9	31
F11	F	26	J32	B	29	R12	31
I15	B	28	J37		30	R13	31
J 2		29	L 2		30		



### : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)



### : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF3	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)



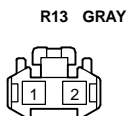
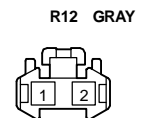
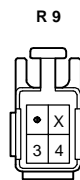
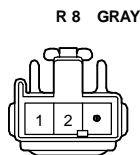
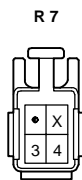
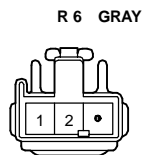
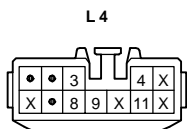
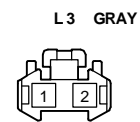
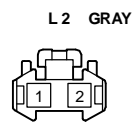
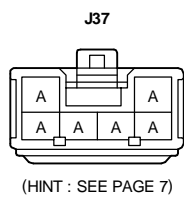
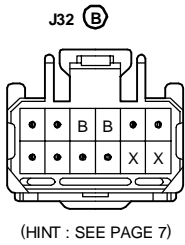
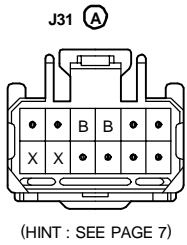
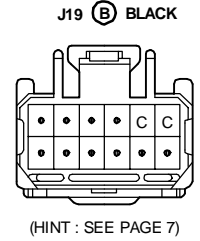
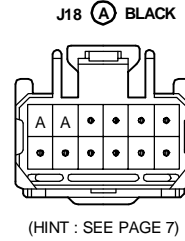
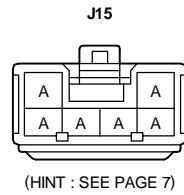
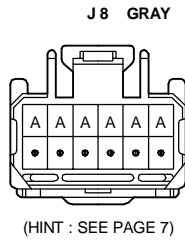
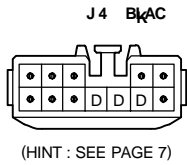
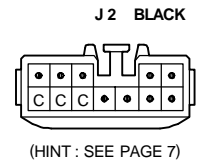
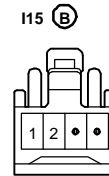
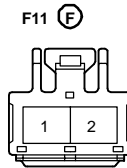
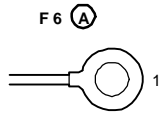
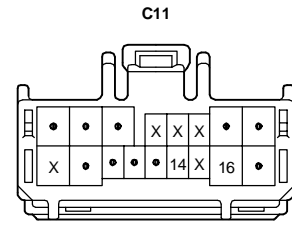
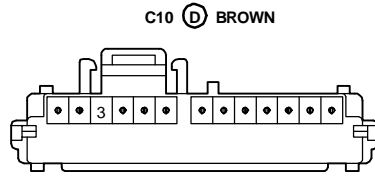
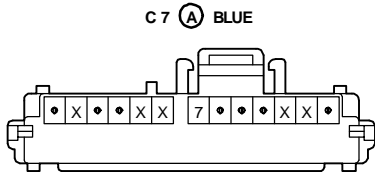
### : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EC	34	LEFT RADIATOR SIDE SUPPORT
II	36	INSTRUMENT PANEL BRACE LH
BN	40	UNDER THE LEFT CENTER PILLAR
BP	40	BACK PANEL CENTER

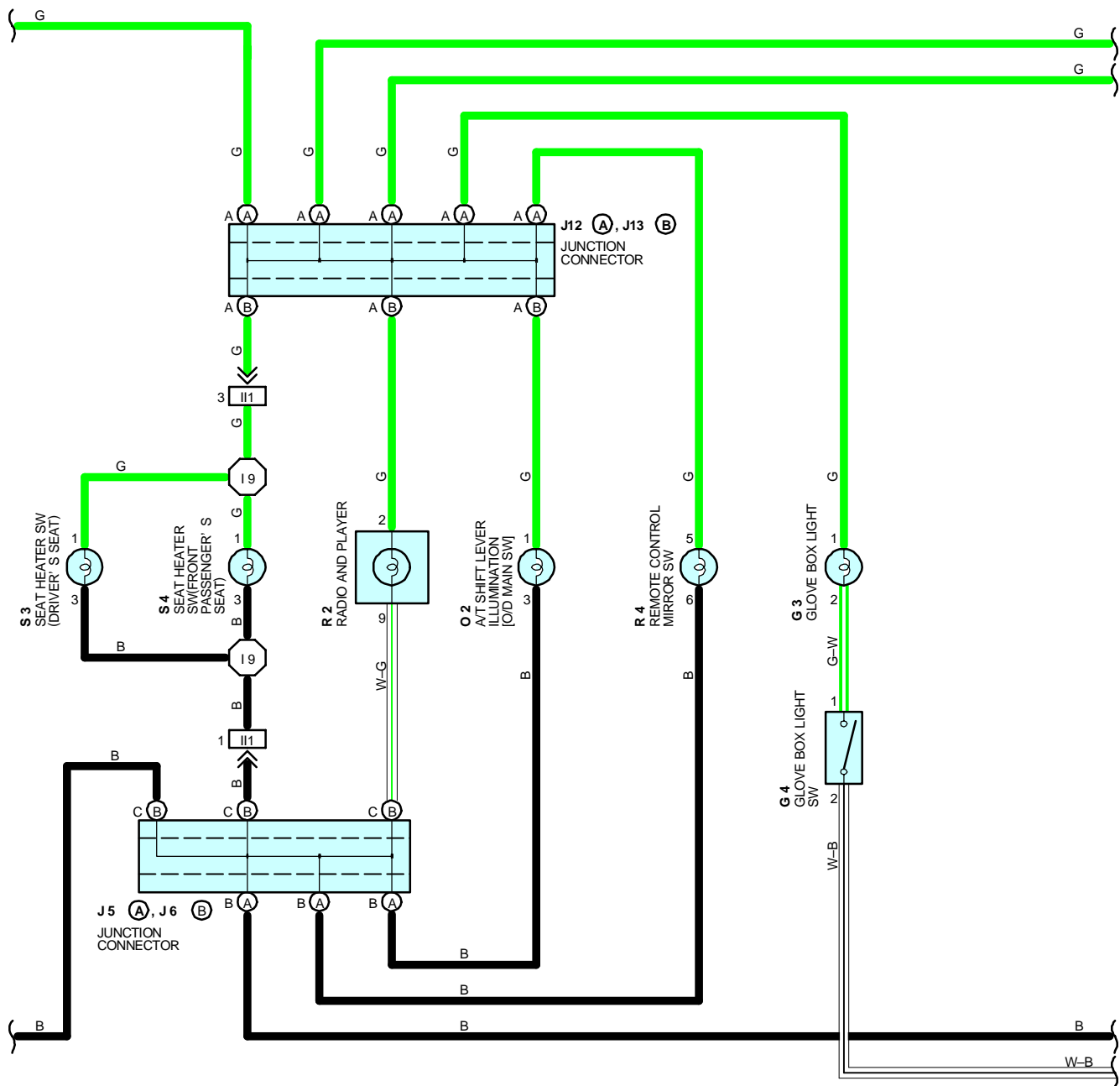


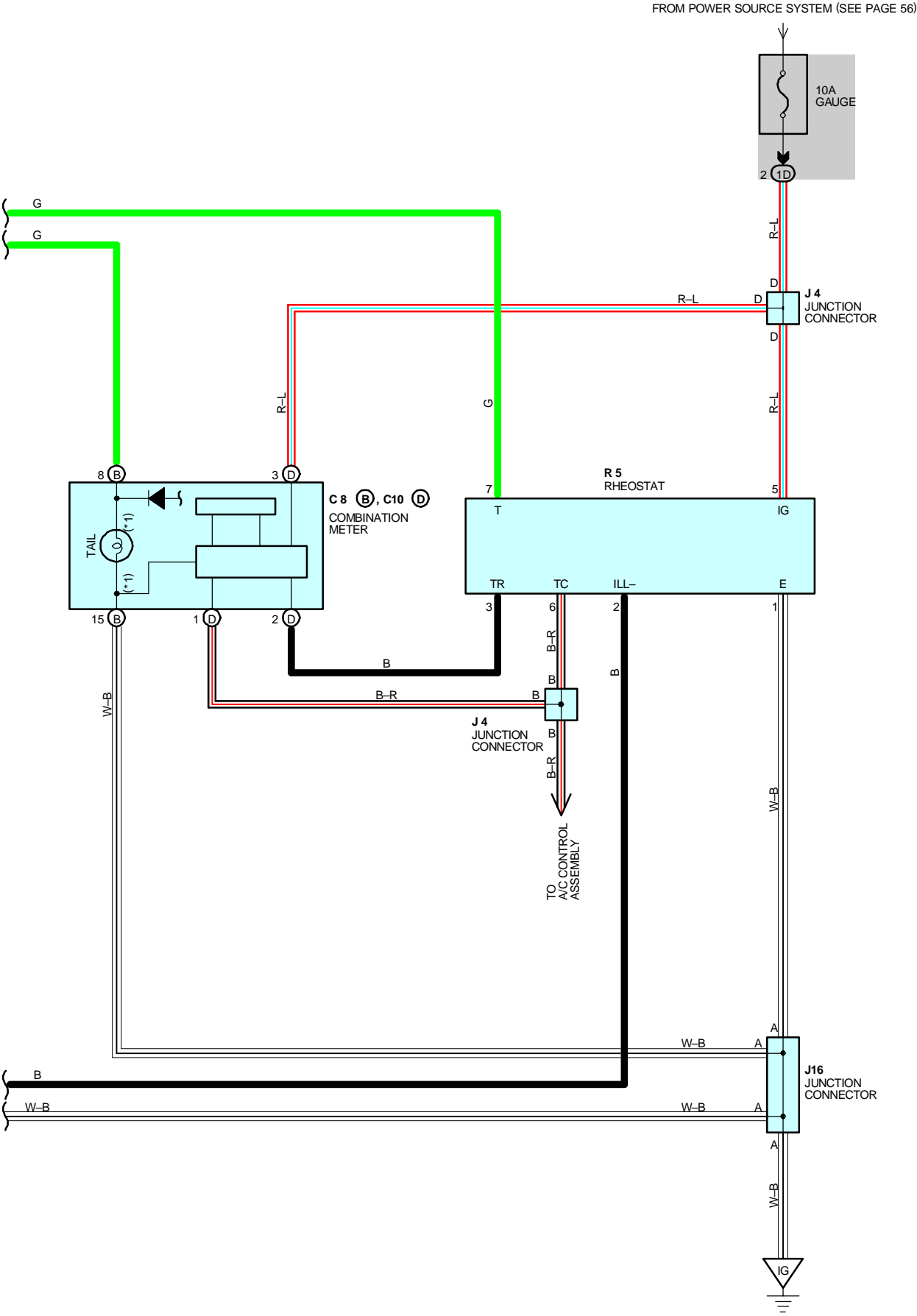
### : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE	B12	40	FLOOR WIRE
B10	40	FLOOR WIRE	B13		
B11			B14		









**SERVICE HINTS****TAILIGHT RELAY**

5-3 : CLOSED WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION (WHEN THE LIGHT AUTO TURN OFF SYSTEM IS OFF)

**C11 COMBINATION SW**

14-16:CLOSED WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

 : **PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A14	<a href="#">28</a>	I15   B	<a href="#">28</a>	J19   B	<a href="#">29</a>
A25	<a href="#">28</a>	J 2	<a href="#">29</a>	J20   A	<a href="#">29</a>
C 5	<a href="#">28</a>	J 4	<a href="#">29</a>	J21   B	<a href="#">29</a>
C 8   B	<a href="#">28</a>	J 5   A	<a href="#">29</a>	O 2	<a href="#">29</a>
C10   D	<a href="#">28</a>	J 6   B	<a href="#">29</a>	R 2	<a href="#">29</a>
C11	<a href="#">28</a>	J 8	<a href="#">29</a>	R 4	<a href="#">29</a>
F 6   A	<a href="#">26</a>	J12   A	<a href="#">29</a>	R 5	<a href="#">29</a>
F11   F	<a href="#">26</a>	J13   B	<a href="#">29</a>	S 3	<a href="#">29</a>
G 3	<a href="#">28</a>	J15	<a href="#">29</a>	S 4	<a href="#">29</a>
G 4	<a href="#">28</a>	J16	<a href="#">29</a>		
H 9	<a href="#">28</a>	J18   A	<a href="#">29</a>		

 : **JUNCTION BLOCK AND WIRE HARNESS CONNECTOR**

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	<a href="#">24</a>	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		

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

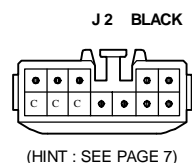
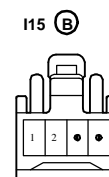
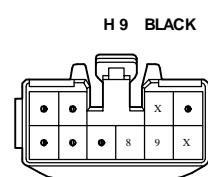
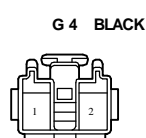
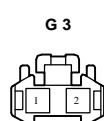
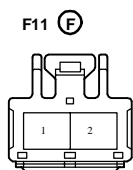
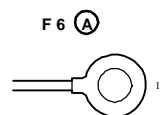
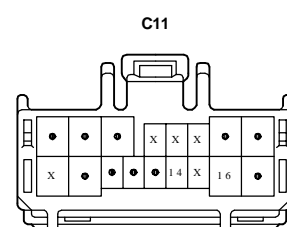
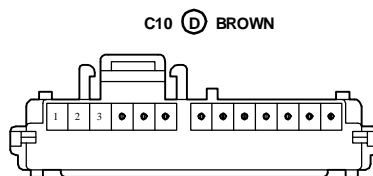
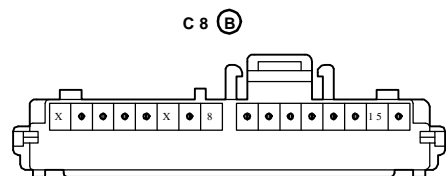
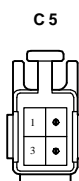
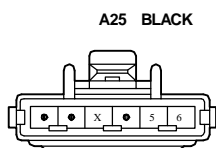
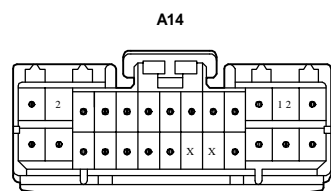
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	<a href="#">38</a>	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)

 : **GROUND POINTS**

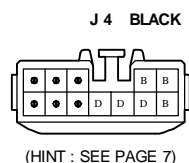
CODE	SEE PAGE	GROUND POINTS LOCATION
IG	<a href="#">36</a>	LEFT KICK PANEL
II	<a href="#">36</a>	INSTRUMENT PANEL BRACE LH

 : **SPLICE POINTS**

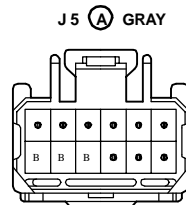
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	<a href="#">34</a>	COWL WIRE	I 9	<a href="#">38</a>	FLOOR NO. 3 WIRE



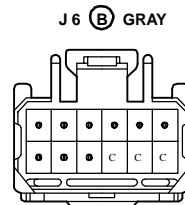
(HINT : SEE PAGE 7)



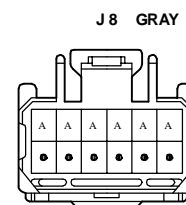
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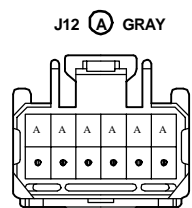
(HINT : SEE PAGE 7)



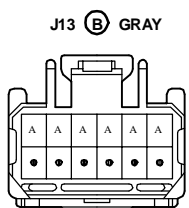
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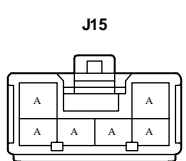
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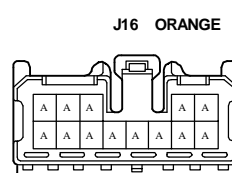
(HINT : SEE PAGE 7)



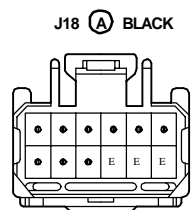
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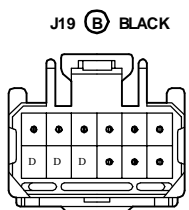
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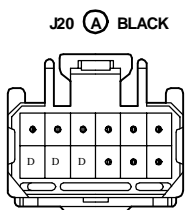
(HINT : SEE PAGE 7)



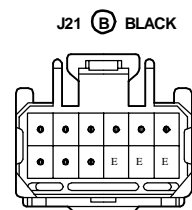
(HINT : SEE PAGE 7)



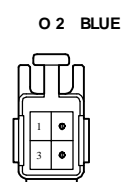
(HINT : SEE PAGE 7)



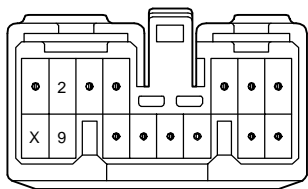
(HINT : SEE PAGE 7)



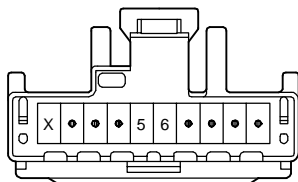
(HINT : SEE PAGE 7)



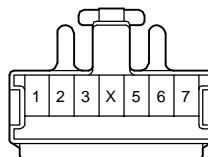
R 2



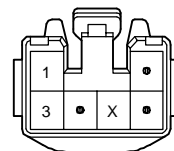
R 4 BLACK



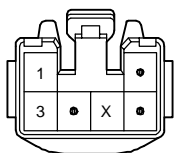
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S 3 BLACK

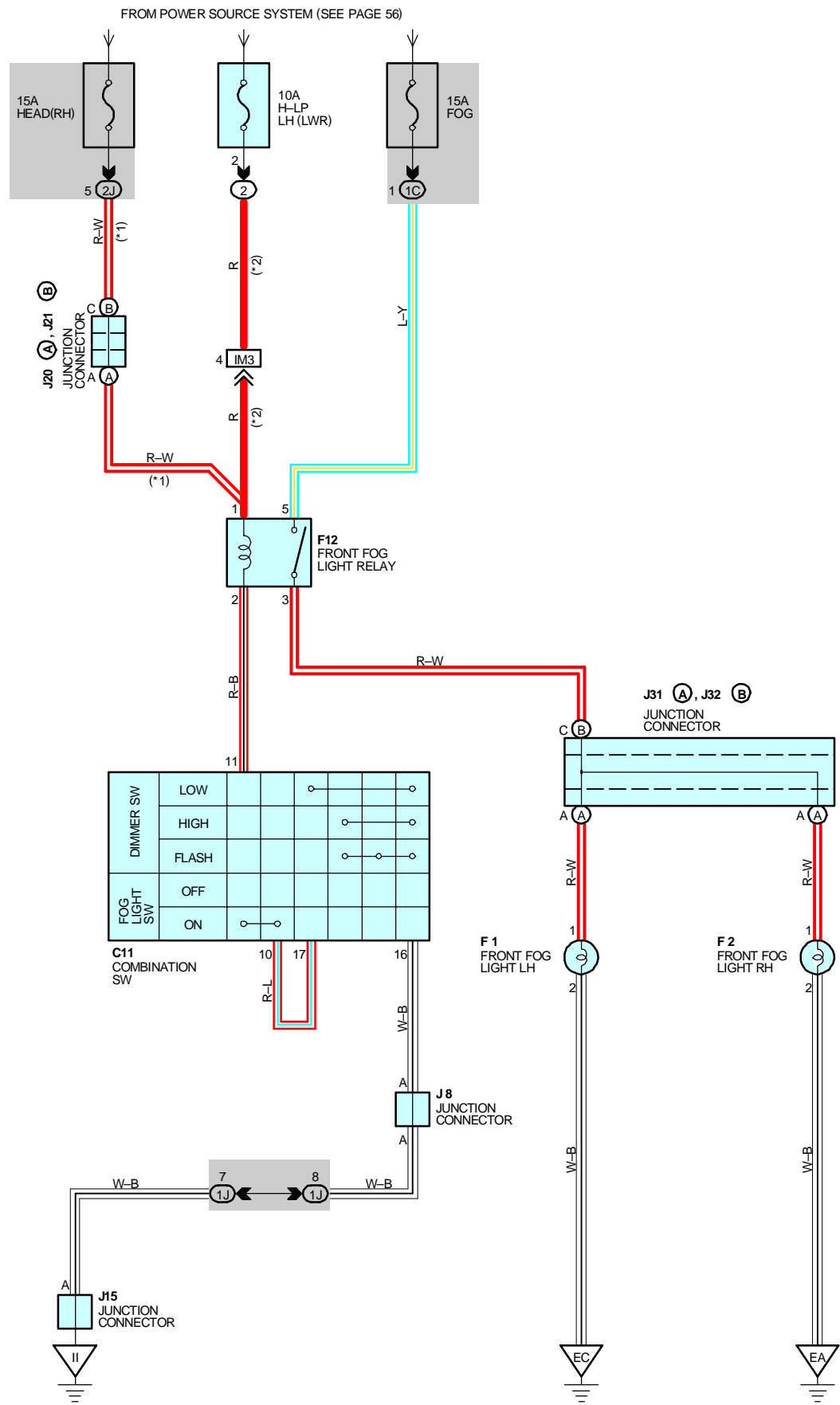


S 4 BLUE



# FRONT FOG LIGHT

\* 1 : USA  
\* 2 : CANADA



## SERVICE HINTS

### F12 FRONT FOG LIGHT RELAY

3-5 : CLOSED WITH THE LIGHT CONTROL SW AT **HEAD** POSITION, DIMMER SW AT **LOW** POSITION AND FRONT FOG LIGHT SW ON

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	28	J 8	29	J31	A 29
F 1	26	J15	29	J32	B 29
F 2	26	J20	A 29		
F12	26	J21	B 29		

## ○ : RELAY BLOCKS

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

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

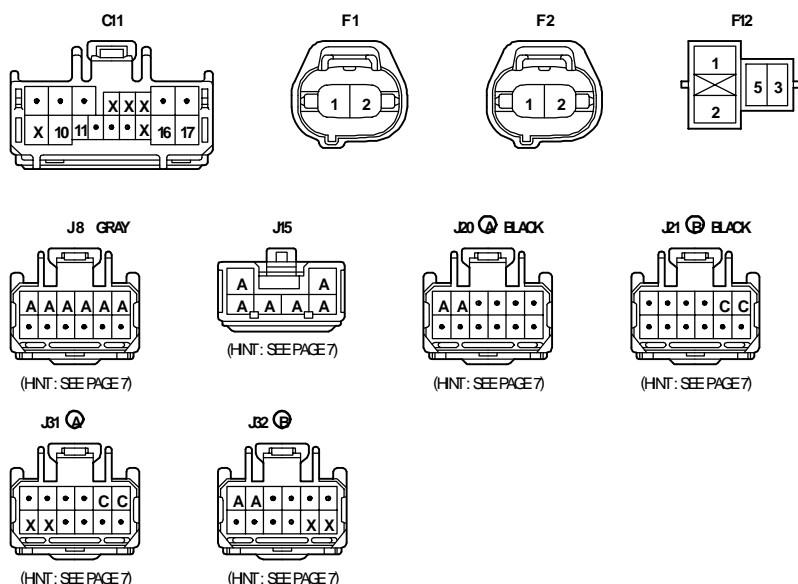
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMAPRTMENT LEFT)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

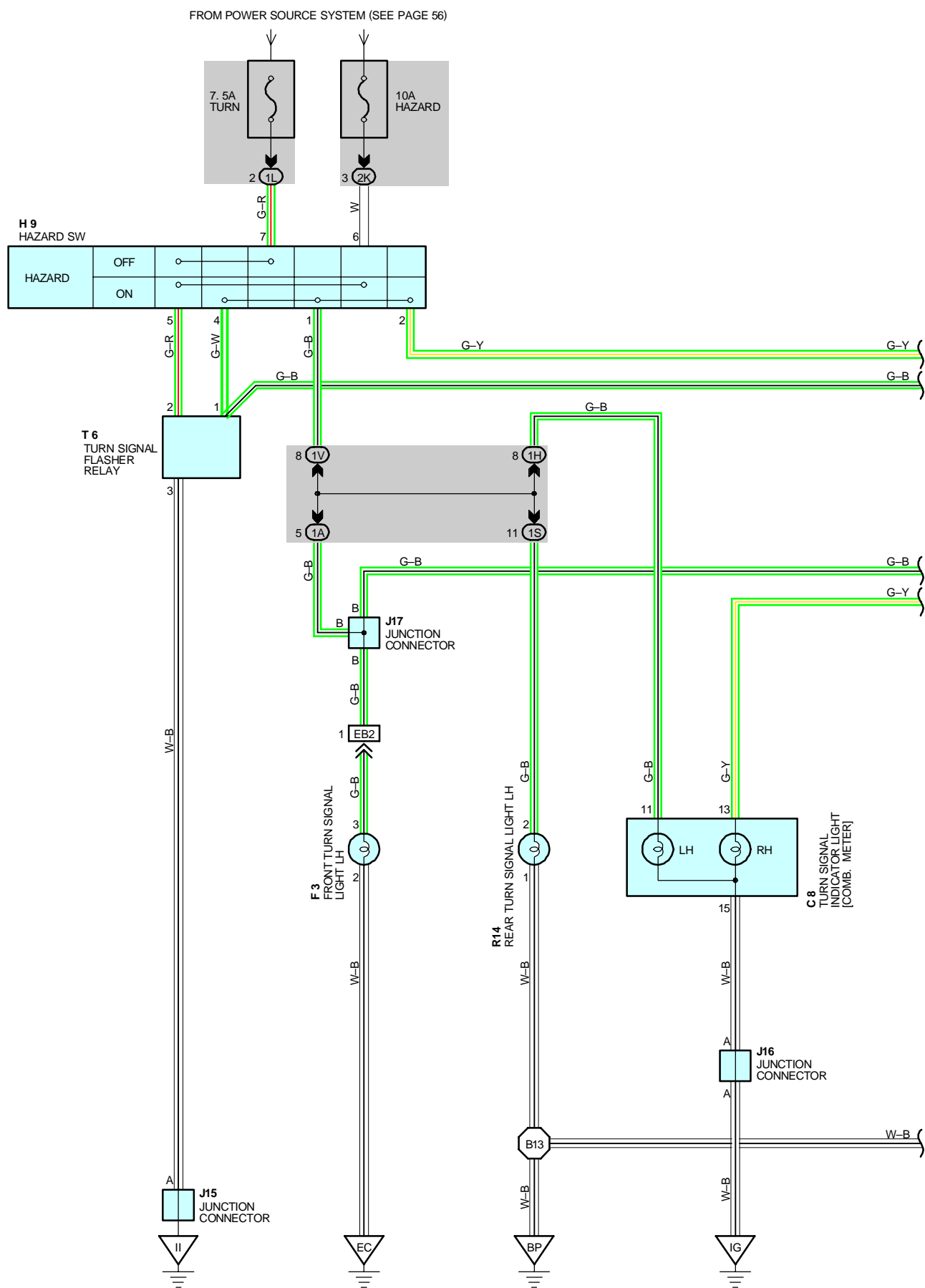
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IN3	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

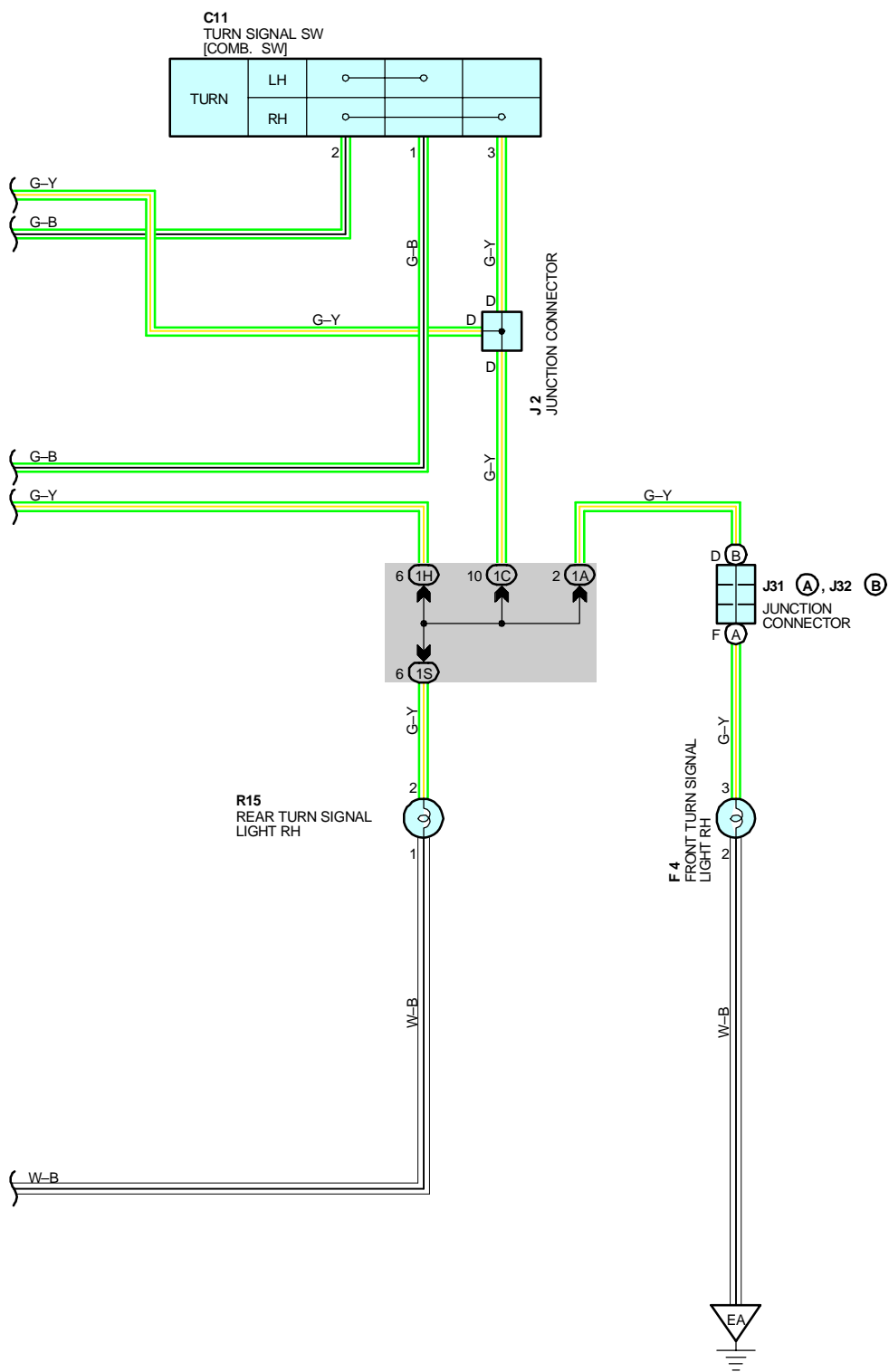
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EC	34	LEFT RADIATOR SIDE SUPPORT
II	36	INSTRUMENT PANEL BRACE LH



# TURN SIGNAL AND HAZARD WARNING LIGHT





# TURN SIGNAL AND HAZARD WARNING LIGHT

## SERVICE HINTS

### T 6 TURN SIGNAL FLASHER RELAY

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

1-GROUND : CHANGES FROM APPROX. 12 TO 0 VOLTS WITH THE IGNITION SW ON AND THE TURN SIGNAL SW LEFT OR RIGHT, OR THE HAZARD SW ON.

3-GROUND : ALWAYS CONTINUITY

## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 8	28	J 2	29	J32   B	29
C11	28	J15	29	R14	31
F 3	26	J16	29	R15	31
F 4	26	J17	29	T 6	29
H 9	28	J31   A	29		

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1H	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1L	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2K	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

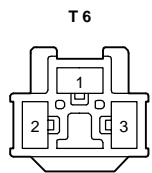
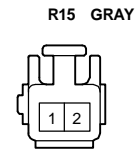
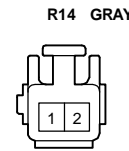
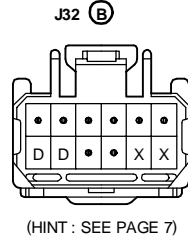
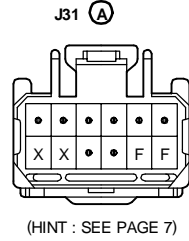
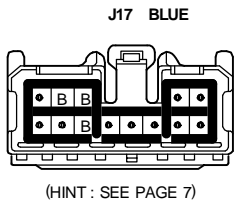
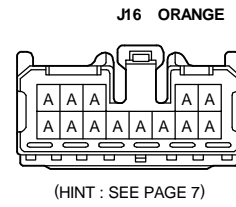
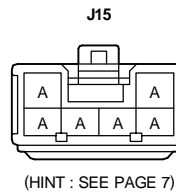
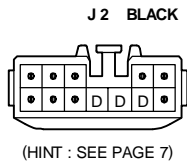
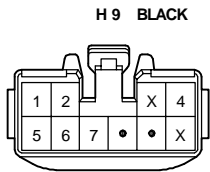
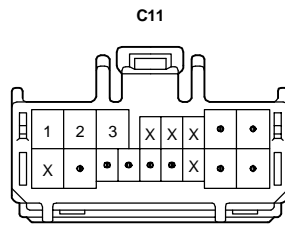
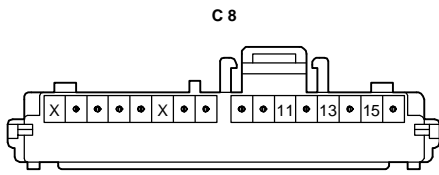
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB2	34	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EC	34	LEFT RADIATOR SIDE SUPPORT
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH
BP	40	BACK PANEL CENTER

## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B13	40	FLOOR WIRE			





## SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH A **STOP** FUSE TO **TERMINAL 2** OF THE STOP LIGHT SW. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE **GAUGE** FUSE TO **TERMINAL 8** OF THE LIGHT FAILURE SENSOR, AND ALSO FLOWS THROUGH THE REAR LIGHTS WARNING LIGHT TO **TERMINAL 4** OF THE LIGHT FAILURE SENSOR.

### STOP LIGHT DISCONNECTION WARNING

WHEN THE IGNITION SW IS TURNED ON AND THE BRAKE PEDAL IS PRESSED (STOP LIGHT SW ON), IF THE STOP LIGHT CIRCUIT IS OPEN, THE CURRENT FLOWING FROM **TERMINAL 7** OF THE LIGHT FAILURE SENSOR TO **TERMINALS 1, 2** CHANGES, SO THE LIGHT FAILURE SENSOR DETECTS THE DISCONNECTION AND THE WARNING CIRCUIT OF THE LIGHT FAILURE SENSOR IS ACTIVATED. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 4** OF THE LIGHT FAILURE SENSOR → **TERMINAL 11** → **GROUND** AND TURNS THE REAR LIGHT WARNING LIGHT ON. BY PRESSING THE BRAKE PEDAL, THE CURRENT FLOWING TO **TERMINAL 8** OF THE LIGHT FAILURE SENSOR KEEPS THE WARNING CIRCUIT ON AND THE WARNING LIGHT ON UNTIL THE IGNITION SW IS TURNED OFF.

## SERVICE HINTS

### S10 STOP LIGHT SW

2-1 : CLOSED WITH THE BRAKE PEDAL DEPRESSED

### L 4 LIGHT FAILURE SENSOR

1, 2, 7-GROUND : APPROX. 12 VOLTS WITH THE STOP LIGHT SW ON

4, 8-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION

11-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 7	A 28	J 4	29	R 6	31
C10	D 28	J37	30	R 8	31
H11	30	L 4	30	S10	29

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF3	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)

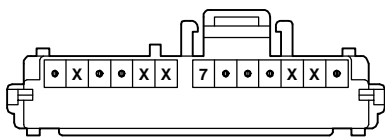
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BN	40	UNDER THE LEFT CENTER PILLAR
BP	40	BACK PANEL CENTER

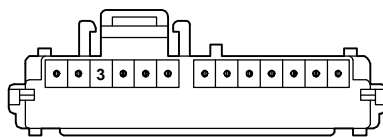
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 7	40	FLOOR WIRE	B13	40	FLOOR WIRE

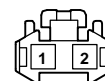
C 7 (A) BLUE



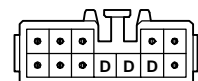
C10 (D) BROWN



H11

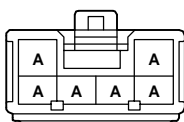


J 4 BLACK

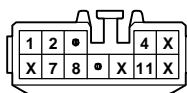


(HINT : SEE PAGE 7)

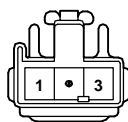
J37



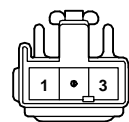
L 4



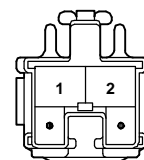
R 6 GRAY

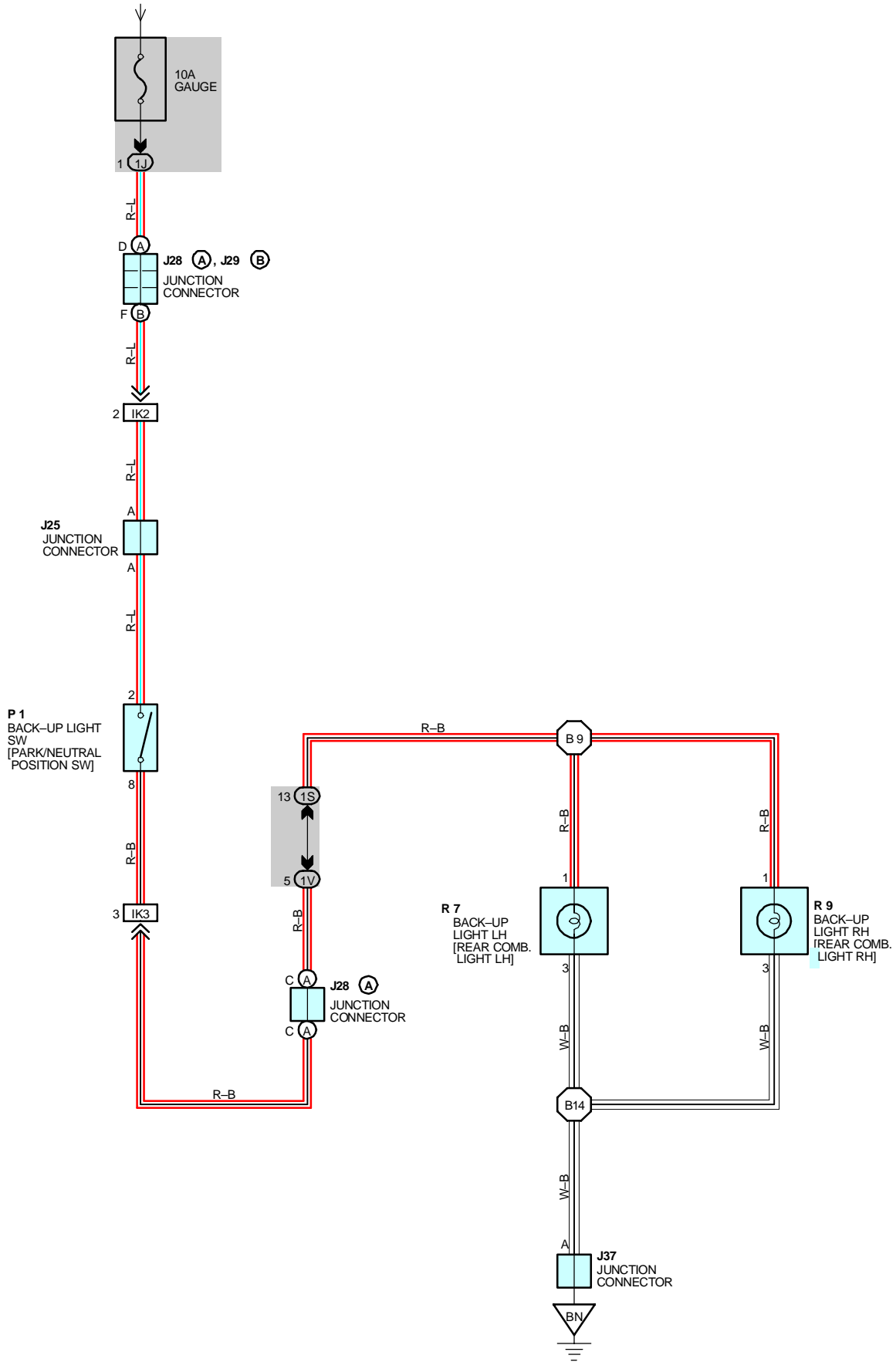


R 8 GRAY



S10 BLUE





## SERVICE HINTS

### P 1 BACK-UP LIGHT SW (PARK/NEUTRAL POSITION SW)

2-8 : CLOSED WITH THE SHIFT LEVER IN R POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J25	29	J37	30	R 9	31
J28	A	P 1	27		
J29	B	R 7	31		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
IJ	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IK2	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3		

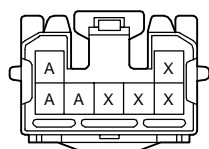
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BN	40	UNDER THE LEFT CENTER PILLAR

## ○ : SPLICE POINTS

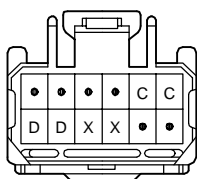
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 9	40	FLOOR WIRE	B 14	40	FLOOR WIRE

J25



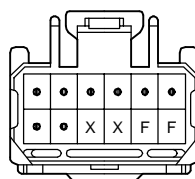
(HINT : SEE PAGE 7)

J28 (A)



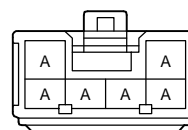
(HINT : SEE PAGE 7)

J29 (B)



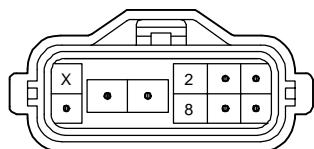
(HINT : SEE PAGE 7)

J37

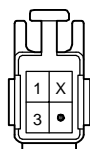


(HINT : SEE PAGE 7)

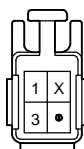
P 1 GRAY



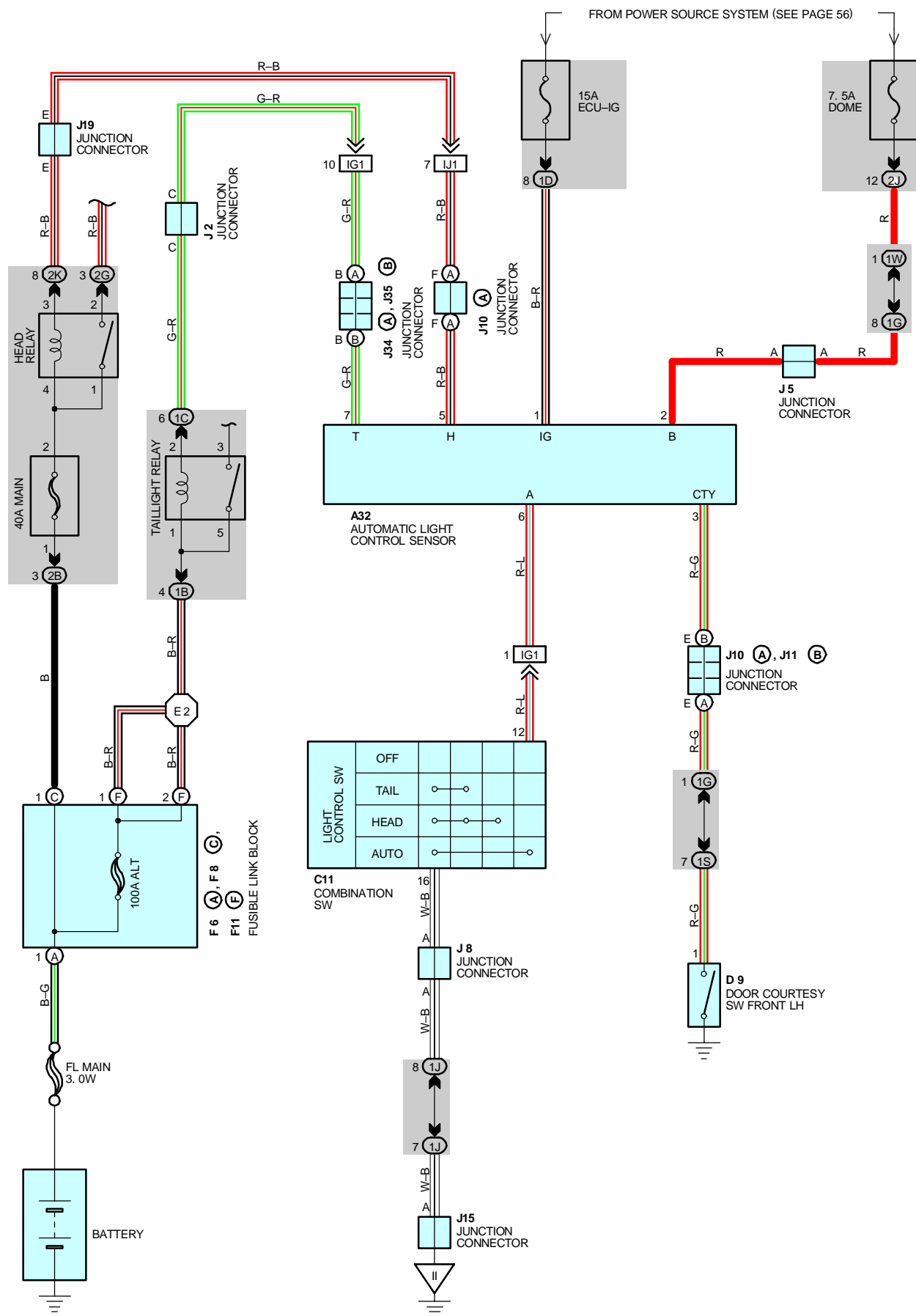
R 7



R 9



# AUTOMATIC LIGHT CONTROL



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS FROM THE **ECU-IG** FUSE TO **TERMINAL 1** OF THE AUTOMATIC LIGHT CONTROL SENSOR. VOLTAGE IS APPLIED AT ALL TIMES TO **TERMINAL 2** OF THE AUTOMATIC LIGHT CONTROL SENSOR THROUGH THE **DOM**E FUSE, AND TO **TERMINAL 7** OF THE AUTOMATIC LIGHT CONTROL SENSOR THROUGH THE TAILLIGHT RELAY (COIL SIDE), AND TO **TERMINAL 5** OF THE AUTOMATIC LIGHT CONTROL SENSOR THROUGH THE HEAD RELAY (COIL SIDE).

### AUTOMATIC LIGHT CONTROL

WHEN THE LIGHT CONTROL SW IS AT AUTO POSITION, IF THE AUTOMATIC LIGHT CONTROL SENSOR DETECTS A DECREASE IN THE AMBIENT LIGHT (TO BETWEEN APPROX. **90** AND APPROX. **475** LUX), THE AUTOMATIC LIGHT CONTROL SENSOR IS ACTIVATED. ABOUT **5** SECONDS AFTER IT IS ACTIVATED, CURRENT FLOWS FROM **TERMINAL 6** OF THE SENSOR TO **TERMINAL 12** OF THE LIGHT CONTROL SW → **TERMINAL 16** → **GROUND**, LIGHTING UP THE HEADLIGHT AND TAILLIGHT.

IF THE AMBIENT LIGHT DROPS BELOW APPROX. **90** LUX, THE AUTOMATIC LIGHT CONTROL SENSOR IS ACTIVATED AND ABOUT **3** SECONDS LATER, CURRENT FLOWS FROM **TERMINAL 6** OF THE SENSOR TO **TERMINAL 12** OF THE LIGHT CONTROL SW → **TERMINAL 16** → **GROUND**, LIGHTING UP THE HEADLIGHT AND TAILLIGHT.

WHEN THE LIGHT CONTROL SW IS AT **AUTO** POSITION AND ACTIVATION OF THE AUTOMATIC LIGHT CONTROL SENSOR HAS TURNED ON THE HEADLIGHTS AND TAILLIGHTS, IF THE AUTOMATIC LIGHT CONTROL SENSOR DETECTS THE AMBIENT LIGHT ABOVE APPROX. **1000** LUX, THE SENSOR IS TURNED OFF AFTER ABOUT **5** SECONDS. SO THE CURRENT FROM **TERMINAL 6** OF THE SENSOR TO **TERMINAL 12** OF THE LIGHT CONTROL SW IS CUT OFF, AND THE HEADLIGHTS AND TAILLIGHTS TURN OFF.

## SERVICE HINTS

### A32 AUTOMATIC LIGHT CONTROL SENSOR

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

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

6-GROUND : CONTINUITY WITH THE LIGHT CONTROL SW AT **AUTO** POSITION

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

### C11 COMBINATION SW

12-16 : CLOSED WITH THE LIGHT CONTROL SW AT **AUTO** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A32	<a href="#">28</a>	F11 F	<a href="#">26</a>	J11 B	<a href="#">29</a>
C11	<a href="#">28</a>	J 2	<a href="#">29</a>	J15	<a href="#">29</a>
D 9	<a href="#">30</a>	J 5	<a href="#">29</a>	J19	<a href="#">29</a>
F 6 A	<a href="#">26</a>	J 8	<a href="#">29</a>	J34 A	<a href="#">29</a>
F 8 C	<a href="#">26</a>	J10 A	<a href="#">29</a>	J35 B	<a href="#">29</a>

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	<a href="#">24</a>	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	<a href="#">24</a>	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	<a href="#">20</a>	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2G		
2J	<a href="#">20</a>	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG1	<a href="#">36</a>	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IJ1	<a href="#">38</a>	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)

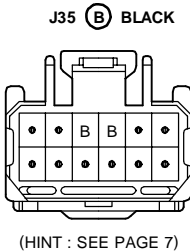
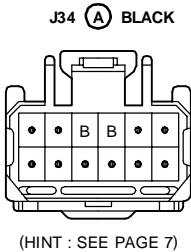
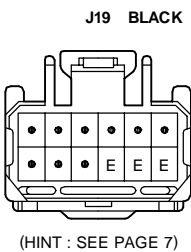
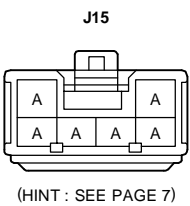
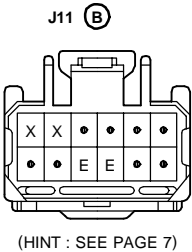
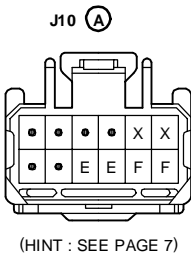
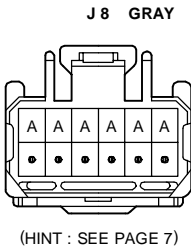
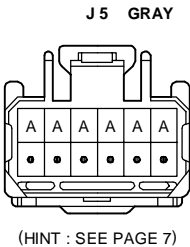
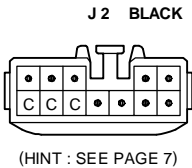
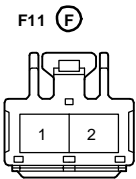
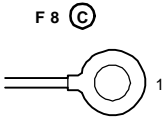
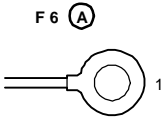
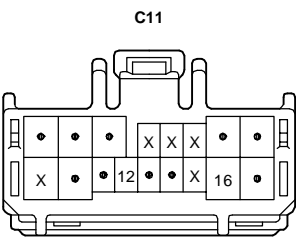
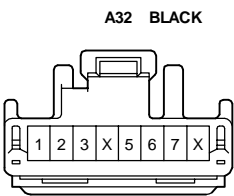
## ▽ : GROUND POINTS

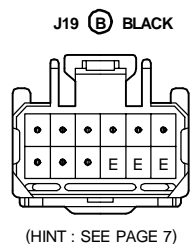
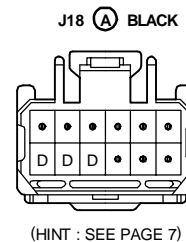
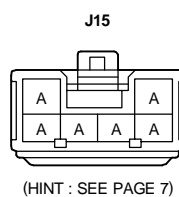
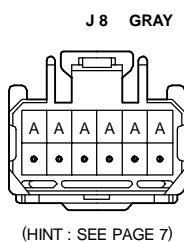
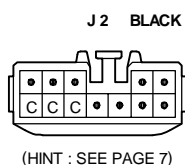
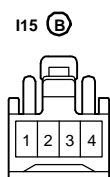
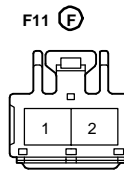
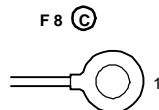
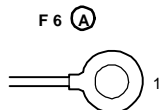
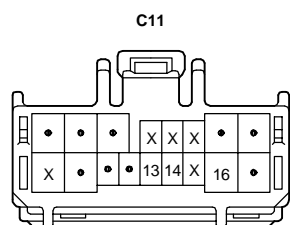
CODE	SEE PAGE	GROUND POINTS LOCATION
II	<a href="#">36</a>	INSTRUMENT PANEL BRACE LH

# AUTOMATIC LIGHT CONTROL

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE			





\_\_\_\_\_



## SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 7** OF THE INTEGRATION RELAY THROUGH **GAUGE FUSE**. VOLTAGE IS APPLIED AT ALL TIMES TO **TERMINAL B②** OF THE INTEGRATION RELAY THROUGH THE TAILLIGHT RELAY (COIL SIDE), AND TO **TERMINAL B③** THROUGH THE HEAD RELAY (COIL SIDE).

### 1. NORMAL LIGHTING OPERATION

(TURN TAILLIGHT ON).

WITH THE LIGHT CONTROL SW TURNED TO **TAIL** POSITION, A SIGNAL IS INPUT INTO **TERMINAL B①** OF THE INTEGRATION RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOWING TO **TERMINAL B②** OF THE RELAY FLOWS FROM **TERMINAL B①** → **TERMINAL 14** OF THE LIGHT CONTROL SW → **TERMINAL 16** → TO **GROUND** AND TAILLIGHT RELAY CAUSES TAILLIGHT TO TURN ON.

(TURN HEADLIGHT ON)

WITH THE LIGHT CONTROL SW TURNED TO **HEAD** POSITION, THE SIGNALS ARE INPUT INTO **TERMINALS B①** AND **B④** OF THE INTEGRATION RELAY. ACCORDING TO THESE SIGNALS, THE CURRENT FLOWING TO **TERMINAL B③** OF THE RELAY FLOWS TO **TERMINAL B④** → **TERMINAL 13** OF THE LIGHT CONTROL SW → **TERMINAL 16** → TO **GROUND** IN THE HEADLIGHT CIRCUIT, AND CAUSES TAILLIGHT AND HEAD RELAY TO TURN THE LIGHT ON. THE TAILLIGHT CIRCUIT IS SAME AS ABOVE.

### 2. LIGHT AUTO TURN OFF OPERATION

WITH THE LIGHTS ON AND THE IGNITION SW TURNED OFF (INPUT SIGNAL GOES TO **TERMINAL 7** OF THE RELAY), WHEN DOOR ON FRONT LH SIDE IS OPENED (INPUT SIGNAL GOES TO **TERMINAL 6** OF THE RELAY), THE RELAY OPERATES AND THE CURRENT IS CUT OFF WHICH FLOWS FROM **TERMINAL B②** OF THE RELAY TO **TERMINAL B①** IN TAILLIGHT CIRCUIT AND FROM **TERMINAL B③** TO **TERMINAL B④** IN HEADLIGHT CIRCUIT. AS A RESULT, ALL LIGHTS ARE TURNED OFF AUTOMATICALLY.

## SERVICE HINTS

### I13 ⑧ INTEGRATION RELAY

- ⑧ 3-GROUND : APPROX. **12** VOLTS WITH THE LIGHT CONTROL SW AT **OFF** OR **TAIL** POSITION
- ⑧ 2-GROUND : APPROX. **12** VOLTS WITH THE LIGHT CONTROL SW AT **OFF** POSITION
- ⑧ 4-GROUND : CONTINUITY WITH THE LIGHT CONTROL SW AT **HEAD** POSITION
- ⑧ 1-GROUND : CONTINUITY WITH THE LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION
- 6-GROUND : CONTINUITY WITH THE FRONT LH DOOR OPEN
- 7-GROUND : APPROX. **12** VOLTS WITH THE IGNITION SW AT **ON** POSITION
- 1-GROUND : ALWAYS APPROX. **12** VOLTS
- 10-GROUND : ALWAYS CONTINUITY

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C11		28	F11	F	26	J15		29
D 9		30	I15	B	28	J18	A	29
F 6	A	26	J 2		29	J19	B	29
F 8	C	26	J 8		29			

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1J		
1S	24	FLOOR WIIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

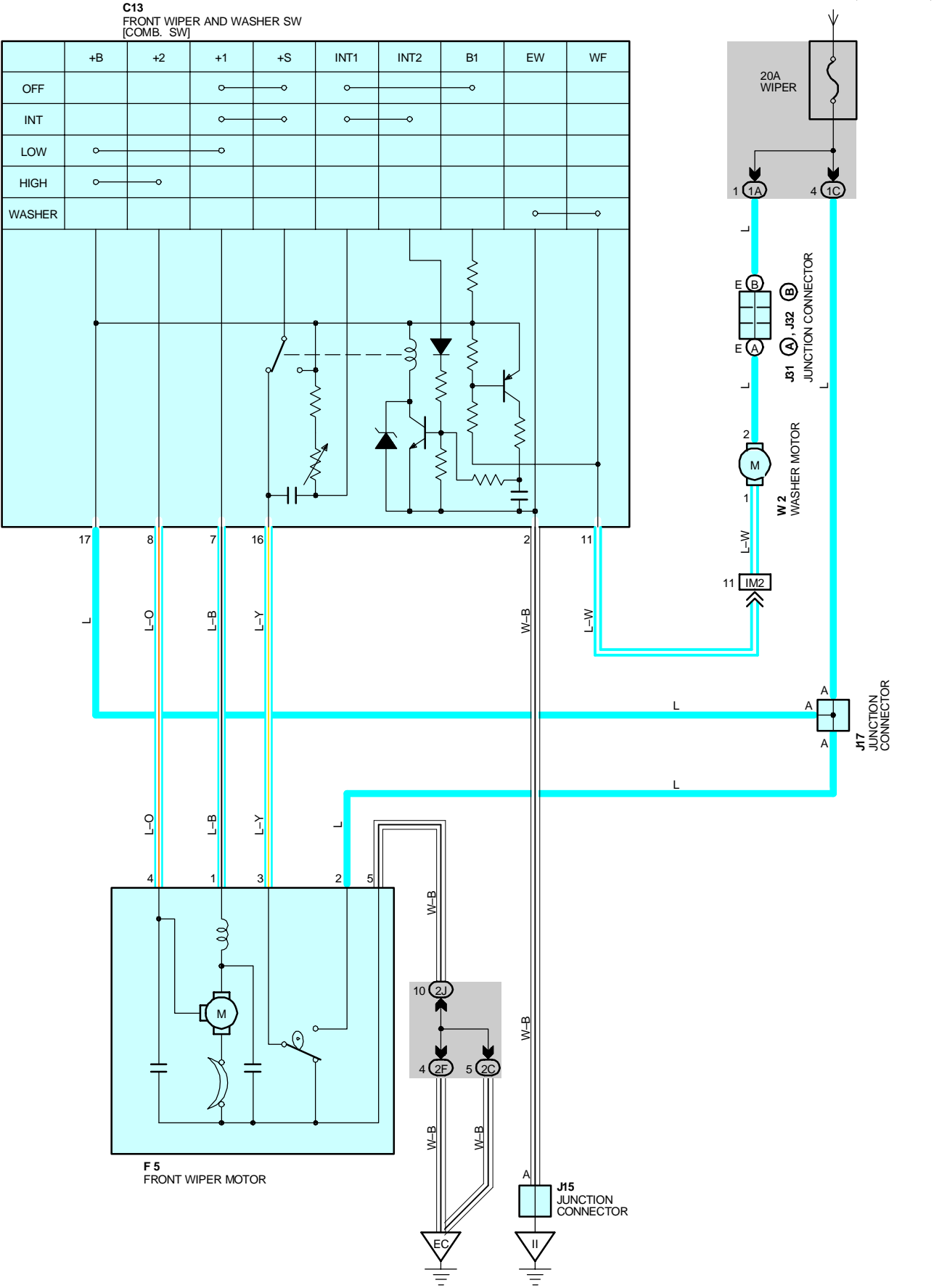
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
II	36	INSTRUMENT PANEL BRACE LH

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE			

WIPER AND WASHER



## SYSTEM OUTLINE

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

### 1. LOW SPEED POSITION

WITH THE WIPER SW TURNED TO **LOW** POSITION, THE CURRENT FLOWS THROUGH **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 7** → **TERMINAL 1** OF THE FRONT WIPER MOTOR → **TERMINAL 5** → **GROUND** AND CAUSES THE WIPER MOTOR TO RUN AT LOW SPEED.

### 2. HIGH SPEED POSITION

WITH THE WIPER SW TURNED TO **HIGH** POSITION, THE CURRENT FLOWS THROUGH **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 8** → **TERMINAL 4** OF THE FRONT WIPER MOTOR → **TERMINAL 5** → **GROUND** AND CAUSES THE WIPER MOTOR TO RUN AT HIGH SPEED.

### 3. INT POSITION

WITH THE WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS THROUGH **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 2** → **GROUND**. THIS FLOW OF CURRENT OPERATES THE INTERMITTENT CIRCUIT AND CURRENT FLOWS THROUGH **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW TO **TERMINAL 7** → **TERMINAL 1** OF THE FRONT WIPER MOTOR → **TERMINAL 5** → **GROUND** AND THE WIPER FUNCTIONS.

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 CHARGE THE CHARGING TIME OF CONDENSOR.

### 4. WASHER CONTINUOUS OPERATION

WITH THE WIPER SW TURNED TO ON, THE CURRENT FLOWS THROUGH **TERMINAL 2** OF THE WASHER MOTOR TO **TERMINAL 1** → **TERMINAL 11** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 2** → **GROUND** AND CAUSES THE WASHER MOTOR TO RUN AND THE WINDOW WASHER TO JET. THIS CAUSES THE CURRENT TO FLOW TO WASHER CONTINUOUS OPERATION CIRCUIT IN **TERMINAL 17** OF THE FRONT WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 1** OF THE FRONT WIPER MOTOR → **TERMINAL 5** → **GROUND** AND THE WIPER FUNCTIONS.

## SERVICE HINTS

### C13 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 FRONT WIPER AND WASHER SW AT **LOW** POSITION

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

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

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

### F 5 FRONT WIPER MOTOR

2-3 : CLOSED UNLESS THE FRONT WIPER MOTOR AT **STOP** POSITION

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C13	28	J17	29	W 2	27
F 5	26	J31	A 29		
J15	29	J32	B 29		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
2C	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2F		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

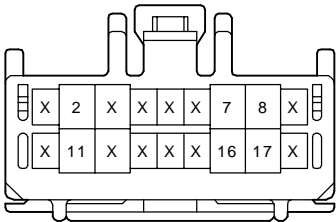
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IM2	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

## ▽ : GROUND POINTS

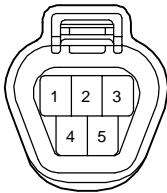
CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT
II	36	INSTRUMENT PANEL BRACE LH

# WIPER AND WASHER

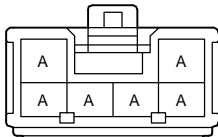
C13 BLACK



F 5 GRAY

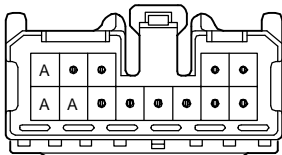


J15



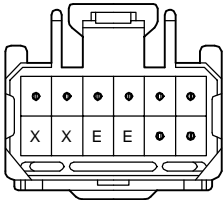
(HINT : SEE PAGE 7)

J17 BLUE



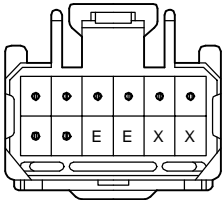
(HINT : SEE PAGE 7)

J31 (A)



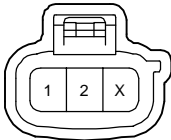
(HINT : SEE PAGE 7)

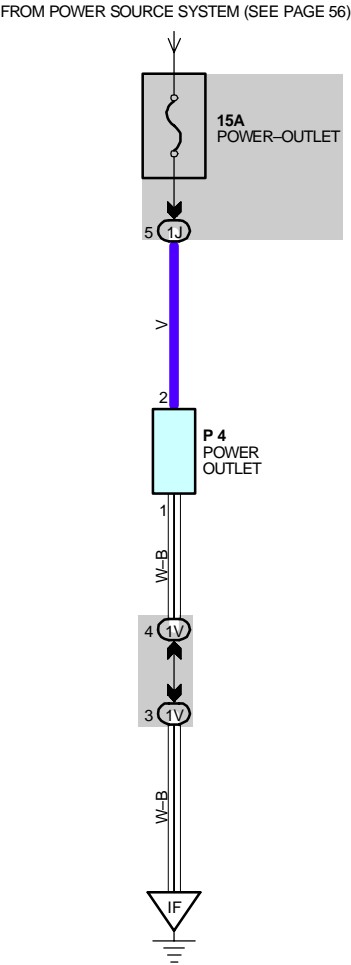
J32 (B)



(HINT : SEE PAGE 7)

W 2 BLACK





SERVICE HINTS

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

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
P 4	29				

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

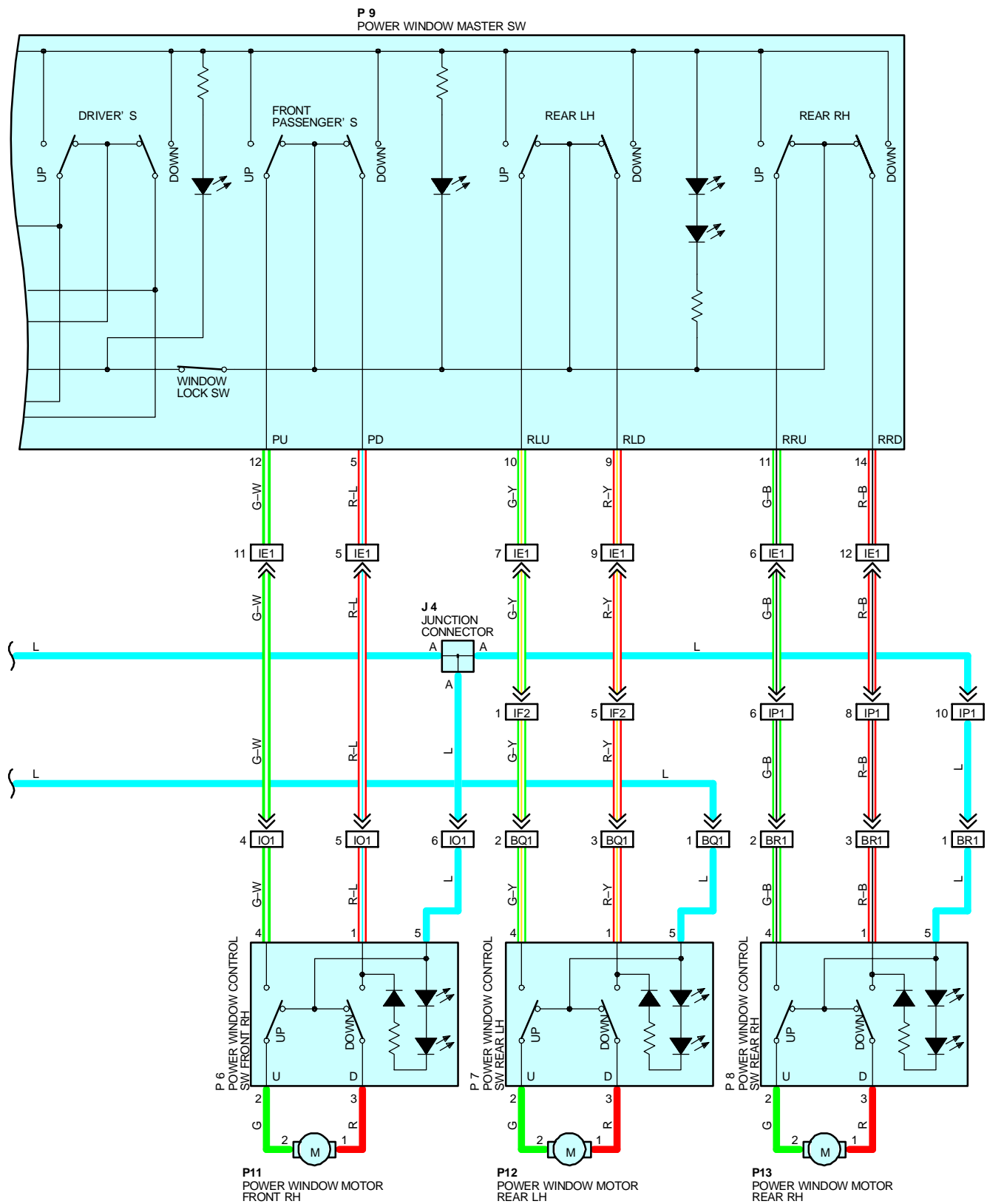
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH







## SYSTEM OUTLINE

WHEN THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE **GAUGE FUSE** → **TERMINAL 7** OF INTEGRATION RELAY → **TERMINAL ④3** → **TERMINAL 1** OF THE POWER RELAY → **TERMINAL 2** → TO **GROUND**. THIS ACTIVATES THE RELAY AND THE CURRENT FLOWING TO **TERMINAL 5** OF THE RELAY FROM **POWER FUSE** FLOWS TO **TERMINAL 3** OF THE RELAY → **TERMINAL 7** OF THE POWER WINDOW MASTER SW, **TERMINAL 5** OF THE POWER WINDOW CONTROL SW.

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

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW (FRONT LH) IN **UP** POSITION, THE CURRENT FLOWING TO **TERMINAL 7** OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 6** OF THE MASTER SW → **TERMINAL 1** OF THE POWER WINDOW MOTOR → **TERMINAL 2** → **TERMINAL 13** OF THE MASTER SW → **TERMINAL 1** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE SW IS BEING PUSHED. IN DOWN OPERATION, THE FLOW OF CURRENT FROM → **TERMINAL 7** OF THE POWER WINDOW MASTER SW TO **TERMINAL 13** OF THE MASTER SW CAUSES THE FLOW OF CURRENT FROM **TERMINAL 2** OF THE MOTOR → **TERMINAL 1** → **TERMINAL 6** OF THE MASTER SW → **TERMINAL 1** → TO **GROUND**. FLOWING IN THE OPPOSITE DIRECTION TO MANUAL UP OPERATION AND CAUSING THE MOTOR TO ROTATE IN REVERSE, LOWERING THE WINDOW.

### 2. AUTO DOWN OPERATION

WHEN THE FRONT LH WINDOW CONTROL SW IN THE POWER WINDOW MASTER SW IS PUSHED STRONGLY ON THE DOWN SIDE, CURRENT FLOWS FROM **TERMINAL 7** OF THE MASTER SW → **TERMINAL 13** → **TERMINAL 2** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 6** OF THE MASTER SW → **TERMINAL 1** → TO **GROUND**. BECAUSE THE HOLD CIRCUIT INSIDE THE MASTER SW KEEPS THE RELAY ON THE DOWN SIDE ACTIVATED, THE POWER WINDOW MOTOR CONTINUES OPERATING EVEN IF THE POWER WINDOW MASTER SW IS RELEASED. WHEN THE DRIVER'S WINDOW IS FULLY LOWERED, THE HOLD CIRCUIT TURNS OFF AND THE RELAY ON THE DOWN SIDE TURNS OFF, SO AUTO DOWN OPERATION STOPS.

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

WHEN THE MANUAL SW (FRONT LH) IS PULLED TO THE UP SIDE DURING AUTO DOWN OPERATION, A GROUND CIRCUIT OPENS IN THE MASTER SW AND CURRENT DOES NOT FLOW FROM **TERMINAL 6** OF THE MASTER SW → TO **TERMINAL 1**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE MASTER SW IS PULLED CONTINUOUS, THE MOTOR ROTATES IN THE UP DIRECTION IN MANUAL UP OPERATION.

### 4. MANUAL OPERATION BY POWER WINDOW SW (FRONT RH WINDOW)

WITH THE POWER WINDOW CONTROL SW (FRONT RH) PULLED TO THE UP SIDE, CURRENT FLOWING FROM **TERMINAL 5** OF THE POWER WINDOW CONTROL SW FLOWS TO **TERMINAL 2** OF THE POWER WINDOW CONTROL SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR → **TERMINAL 1** → **TERMINAL 3** OF THE POWER WINDOW CONTROL SW → **TERMINAL 1** → **TERMINAL 5** OF THE MASTER SW → **TERMINAL 1** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR (FRONT RH) 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 FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 2** TO **TERMINAL 1**, 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 1** 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 OPERATE THE SAME AS THE ABOVE CIRCUIT.

### 5. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, INTEGRATION RELAY OPERATES AND CURRENT FLOWS FROM **DOOR FUSE** TO **TERMINAL ④13** OF THE RELAY → **TERMINAL ④3** → **TERMINAL 1** OF POWER RELAY → **TERMINAL 2** → TO **GROUND** FOR ABOUT **43** SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM **POWER FUSE** → **TERMINAL 5** OF THE POWER RELAY → **TERMINAL 3** → **TERMINAL 7** OF THE POWER WINDOW MASTER SW AND **TERMINAL 3** OF THE POWER RELAY → TO **TERMINAL 5** OF THE POWER WINDOW CONTROL SW. AS A RESULT, FOR ABOUT **43** 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 **43** SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO **TERMINALS ④6 OR 6** OF INTEGRATION RELAY. AS A RESULT, THE RELAY TURNS OFF AND UP AND DOWN MOVEMENT OF THE POWER WINDOW STOPS.

## SERVICE HINTS

### P 9 POWER WINDOW MASTER SW

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

1-GROUND : ALWAYS CONTINUITY

6-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW ON AND MASTER SW (FRONT LH WINDOW) UP

13-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW ON AND MASTER SW (FRONT LH WINDOW) 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 9	30	J35 B	29	P10	31
D10	30	J36	30	P11	31
I14 A	28	P 6	31	P12	31
J 4	29	P 7	31	P13	31
J15	29	P 8	31		
J34 A	29	P 9	31		

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

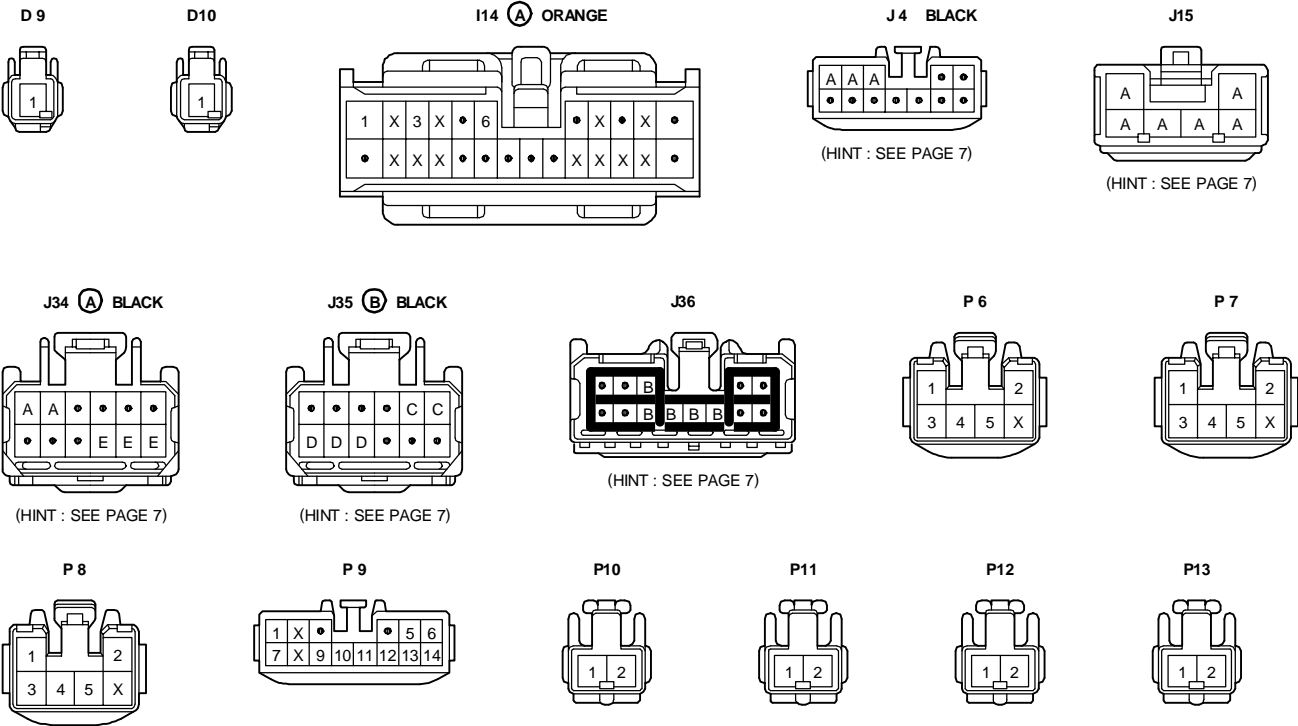
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2		
IF2	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO1	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IP1	38	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO.2 WIRE (RIGHT CENTER PILLAR)

## : GROUND POINTS

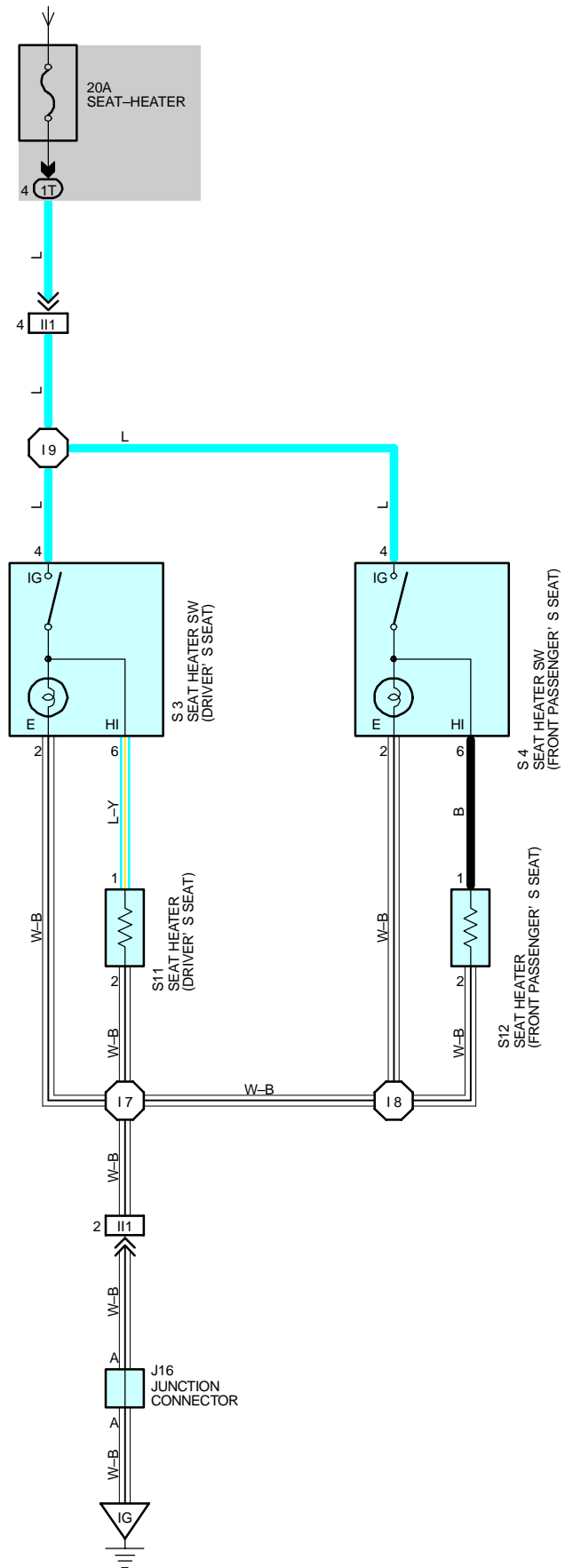
CODE	SEE PAGE	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH
II	36	INSTRUMENT PANEL BRACE LH





# SEAT HEATER

FROM POWER SOURCE SYSTEM (SEE PAGE 56)



## SERVICE HINTS

### S 3, S 4 SEAT HEATER SW

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

2-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J16	29	S 4	29	S12	32
S 3	29	S11	32		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
IT	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	38	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)

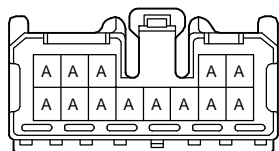
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	36	LEFT KICK PANEL

## ○ : SPLICE POINTS

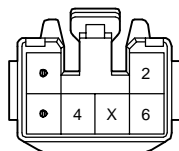
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 7	38	FLOOR NO.3 WIRE	I 9	38	FLOOR NO.3 WIRE
I 8					

J16 ORANGE

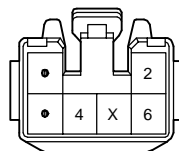


(HINT : SEE PAGE 7)

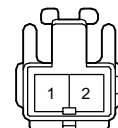
S 3 BLACK



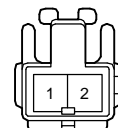
S 4 BLUE



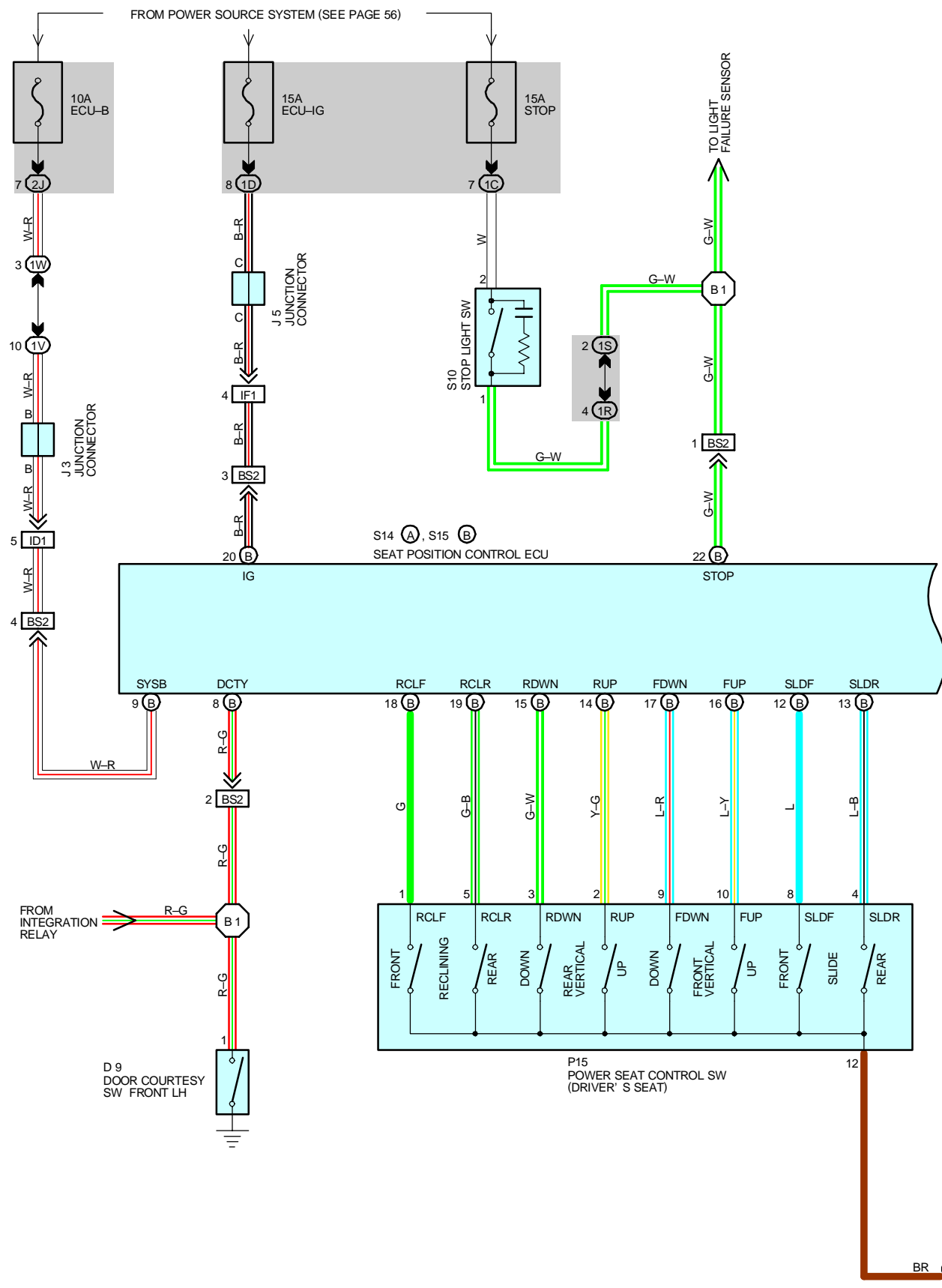
S11



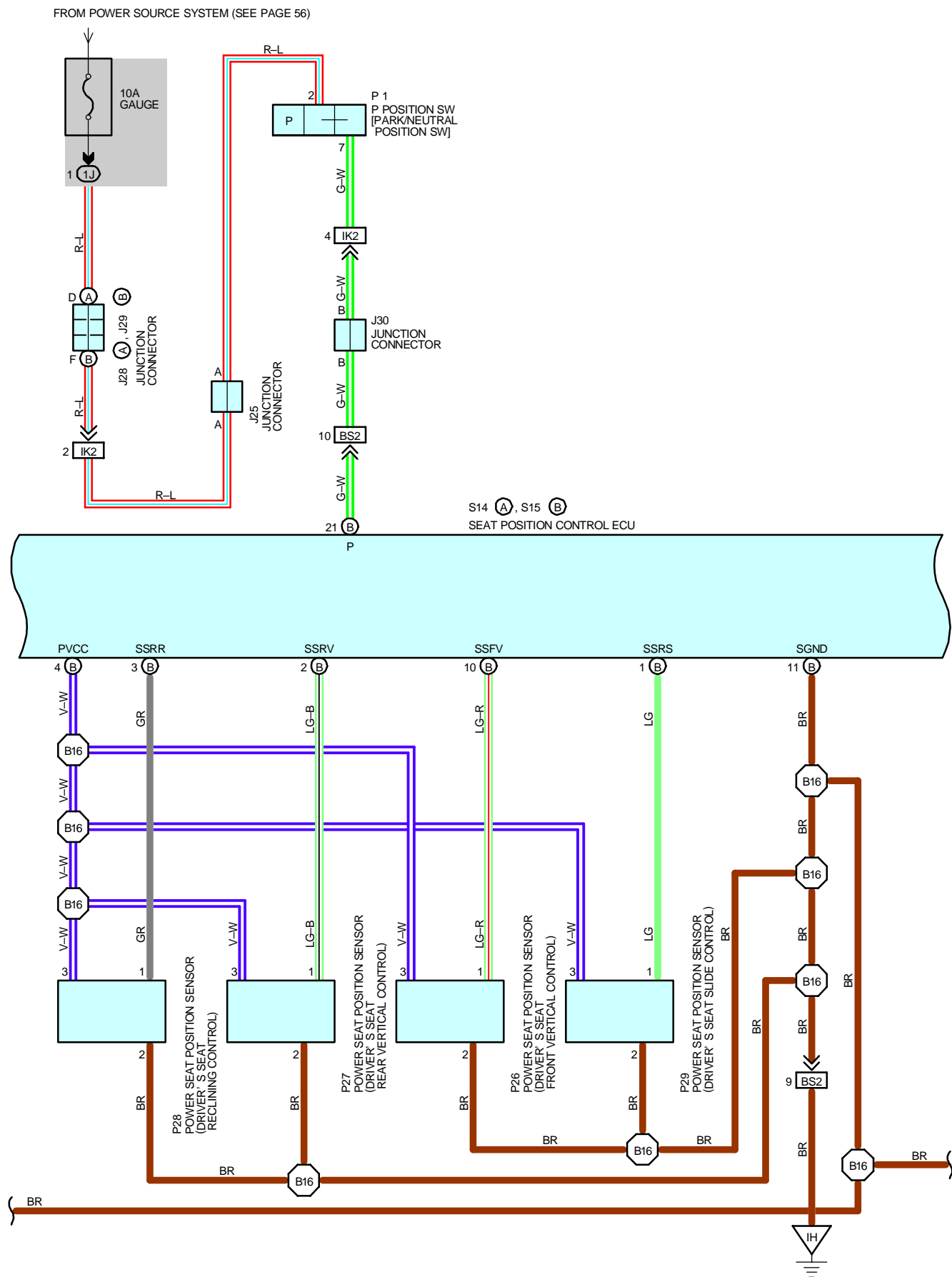
S12 BLUE



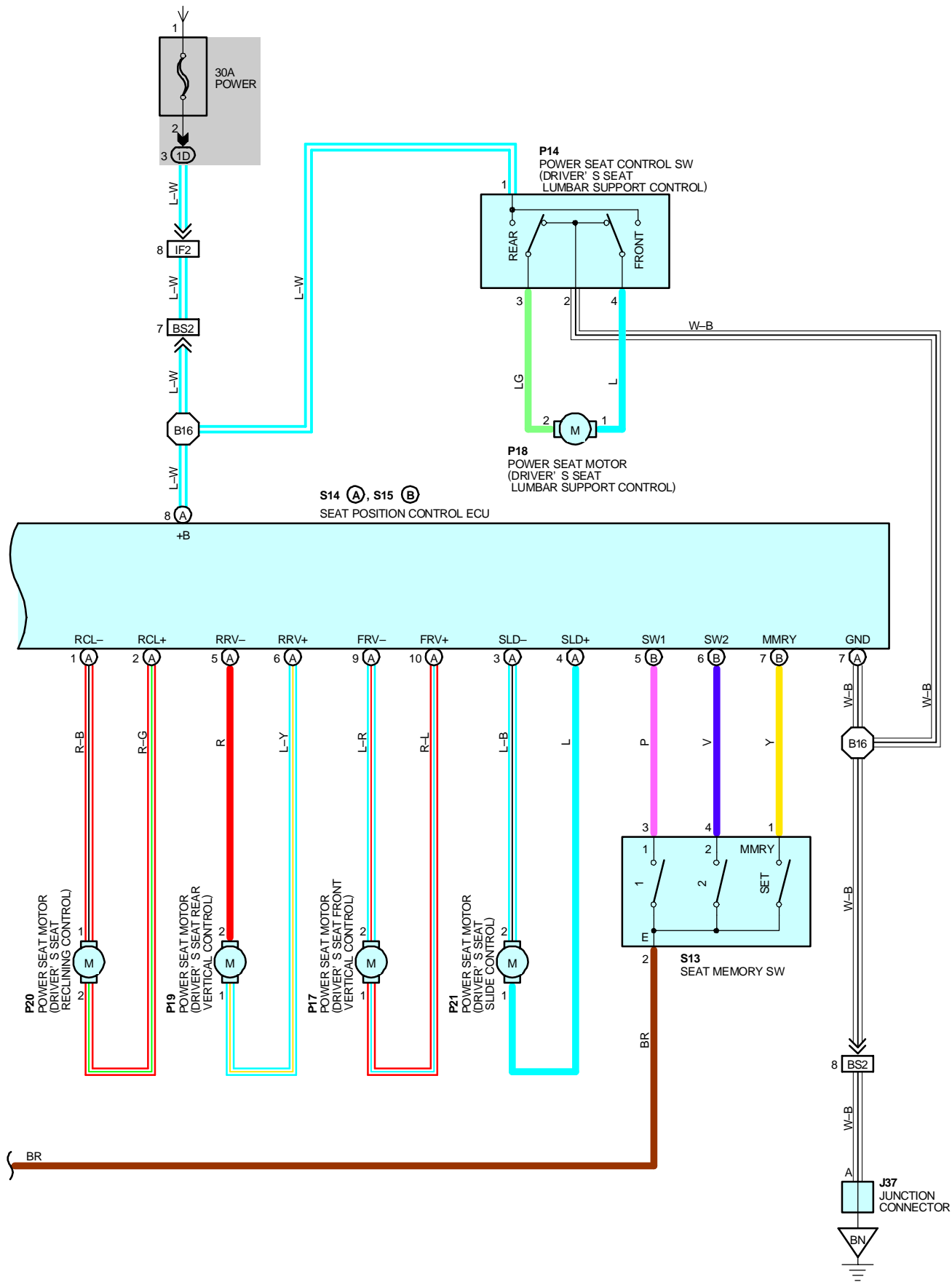
# POWER SEAT



# (DRIVER'S SEAT w/ DRIVING POSITION MEMORY)



FROM POWER SOURCE SYSTEM (SEE PAGE 56)



## (DRIVER'S SEAT w/ DRIVING POSITION MEMORY)

### SYSTEM OUTLINE

CURRENT IS ALWAYS APPLIED FROM **ECU-B** FUSE TO **TERMINAL SYSB** OF THE SEAT POSITION CONTROL ECU, FROM **POWER** FUSE TO **TERMINAL +B** OF THE SEAT POSITION CONTROL ECU, AND FROM **STOP** FUSE TO **TERMINAL 2** OF THE STOP LIGHT SW.

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS FROM **ECU-IG** FUSE TO **TERMINAL IG** OF THE SEAT POSITION CONTROL ECU AND FROM THE **GAUGE** FUSE TO **TERMINAL 2** OF THE P POSITION SW.

#### POWER SEAT OPERATION (DRIVER'S SEAT)

CURRENT IS ALWAYS APPLIED TO **TERMINAL SYSB** AND **TERMINAL +B** OF THE SEAT POSITION CONTROL ECU SO THAT SEAT POSITION CONTROL ECU IS ALWAYS READY TO OPERATE.

WHEN THE POWER SEAT CONTROL SW IS PUSHED TO THE "FRONT SLIDE POSITION" SIDE, A SIGNAL IS INPUT INTO **TERMINAL SLDF** OF THE SEAT POSITION CONTROL ECU, THE ECU OPERATES AND THE CURRENT TO **TERMINAL +B** OF THE SEAT POSITION CONTROL ECU FLOWS FROM **TERMINAL SLD+** OF THE SEAT POSITION CONTROL ECU → **TERMINAL 1** OF THE POWER SEAT MOTOR (DRIVER'S SEAT SLIDE CONTROL) → **TERMINAL 2** → **TERMINAL SLD-** OF THE SEAT POSITION CONTROL ECU → **TERMINAL GND** → **GROUND**, ROTATING THE POWER SEAT MOTOR SO THAT THE SEAT SLIDES FORWARD WHILE THE POWER SEAT CONTROL SW IS BEING PRESSED.

TO SLIDE THE DRIVER'S SEAT TO THE REAR, PUSHING THE POWER SEAT CONTROL SW TO THE "REAR SIDE POSITION" SIDE, INPUTS A SIGNAL TO **TERMINAL SLDR** OF THE SEAT POSITION CONTROL ECU. THIS CAUSES THE CURRENT FLOWING FROM THE ECU TO THE MOTOR TO FLOW FROM **TERMINAL SLD-** OF THE SEAT POSITION CONTROL ECU → **TERMINAL 2** OF THE POWER SEAT MOTOR (DRIVER'S SEAT SLIDE CONTROL) → **TERMINAL 1** → **TERMINAL SLD+** OF THE SEAT POSITION CONTROL ECU, FLOWING THE REVERSE TO FRONT SLIDE OPERATION AND CAUSING THE MOTOR TO ROTATE IN REVERSE, SO THAT THE DRIVER'S SEAT MOVES TO THE REAR.

THE MOVEMENT TO OTHER POSITIONS OCCURS SIMILARLY, SO ONLY THE FLOW OF CURRENT TO EACH MOTOR IS SHOWN:

#### FRONT VERTICAL CONTROL 'UP' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL FRV+** → **TERMINAL 1** OF THE POWER SEAT MOTOR (DRIVER'S SEAT FRONT VERTICAL CONTROL) → **TERMINAL 2** → **TERMINAL FRV-** OF THE ECU → **TERMINAL GND** → **GROUND**.

#### FRONT VERTICAL CONTROL 'DOWN' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL FRV-** → **TERMINAL 2** OF THE POWER SEAT MOTOR (DRIVER'S SEAT FRONT VERTICAL CONTROL) → **TERMINAL 1** → **TERMINAL FRV+** OF THE ECU → **TERMINAL GND** → **GROUND**.

#### REAR VERTICAL CONTROL 'UP' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL RRV+** → **TERMINAL 1** OF THE POWER SEAT MOTOR (DRIVER'S SEAT REAR VERTICAL CONTROL) → **TERMINAL 2** → **TERMINAL RRV-** OF THE ECU → **TERMINAL GND** → **GROUND**.

#### REAR VERTICAL CONTROL 'DOWN' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL RRV-** → **TERMINAL 2** OF THE POWER SEAT MOTOR (DRIVER'S SEAT REAR VERTICAL CONTROL) → **TERMINAL 1** → **TERMINAL RRV+** OF THE ECU → **TERMINAL GND** → **GROUND**.

#### RECLINING CONTROL OF 'FRONT' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL RCL+** → **TERMINAL 2** OF THE POWER SEAT MOTOR (DRIVER'S SEAT RECLINING CONTROL) → **TERMINAL 1** → **TERMINAL RCL-** OF THE ECU → **TERMINAL GND** → **GROUND**.

#### RECLINING CONTROL OF 'REAR' OPERATION

**TERMINAL +B** OF THE SEAT POSITION CONTROL ECU → **TERMINAL RCL-** → **TERMINAL 1** OF THE POWER SEAT MOTOR (DRIVER'S SEAT RECLINING CONTROL) → **TERMINAL 2** → **TERMINAL RCL+** OF THE ECU → **TERMINAL GND** → **GROUND**.

THE NUMBER OF TURNS OF EACH MOTOR (AMOUNT OF MOVEMENT OF EACH PART OF THE SEAT) IS DETECTED BY THE POSITION SENSORS AND INPUT TO THE ECU, MAKING IT POSSIBLE TO PERFORM MEMORY AND RETURN FUNCTIONS FOR THE SEAT POSITION USING THE SEAT MEMORY SWITCH.

# POWER SEAT

## SERVICE HINTS

### P1 P POSITION SW (PARK/NEUTRAL POSITION SW)

2-7 : CLOSED WITH SHIFT LEVER AT "P" POSITION

### S14 (A) S15 (B) SEAT POSITION CONTROL ECU

- (B) 22-GROUND : APPROX. 12 VOLTS WITH STOP LIGHT SW ON
- (A) 8-GROUND : ALWAYS APPROX. 12 VOLTS
- (B) 21-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** OR **ST** POSITION AND SHIFT LEVER AT "P" POSITION
- (A) 4-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT FRONT SLIDE OPERATION
- (A) 3-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT REAR SLIDE OPERATION
- (A) 10-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT FRONT VERTICAL UP OPERATION
- (A) 9-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT FRONT VERTICAL DOWN OPERATION
- (A) 6-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT REAR VERTICAL UP OPERATION
- (A) 5-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT REAR VERTICAL DOWN OPERATION
- (A) 2-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT FRONT RECLINING OPERATION
- (A) 1-GROUND : APPROX. 12 VOLTS WITH DRIVER'S SEAT AT REAR RECLINING OPERATION
- (B) 11-GROUND : ALWAYS CONTINUITY
- (B) 9-GROUND : ALWAYS APPROX. 12 VOLTS
- (B) 7-GROUND : ALWAYS CONTINUITY

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

- 1-12 : CLOSED WITH DRIVER'S SEAT AT FRONT RECLINING OPERATION
- 5-12 : CLOSED WITH DRIVER'S SEAT AT REAR RECLINING OPERATION
- 8-12 : CLOSED WITH DRIVER'S SEAT AT FRONT SLIDE OPERATION
- 4-12 : CLOSED WITH DRIVER'S SEAT AT REAR SLIDE OPERATION
- 10-12 : CLOSED WITH DRIVER'S SEAT AT FRONT VERTICAL UP OPERATION
- 9-12 : CLOSED WITH DRIVER'S SEAT AT FRONT VERTICAL DOWN OPERATION
- 2-12 : CLOSED WITH DRIVER'S SEAT AT REAR VERTICAL UP OPERATION
- 3-12 : CLOSED WITH DRIVER'S SEAT AT REAR VERTICAL DOWN OPERATION

### S10 STOP LIGHT SW

2-1 : CLOSED WITH BRAKE PEDAL DEPRESSED

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 9	30	P 1	27	P26	32
J 3	29	P14	32	P27	32
J 5	29	P15	32	P28	32
J25	29	P17	32	P29	32
J28	A 29	P18	32	S10	29
J29	B 29	P19	32	S13	32
J30	29	P20	32	S14	A 32
J37	30	P21	32	S15	B 32



## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)



## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF2		FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IK2	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
BS2	42	FLOOR WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)



## : GROUND POINTS

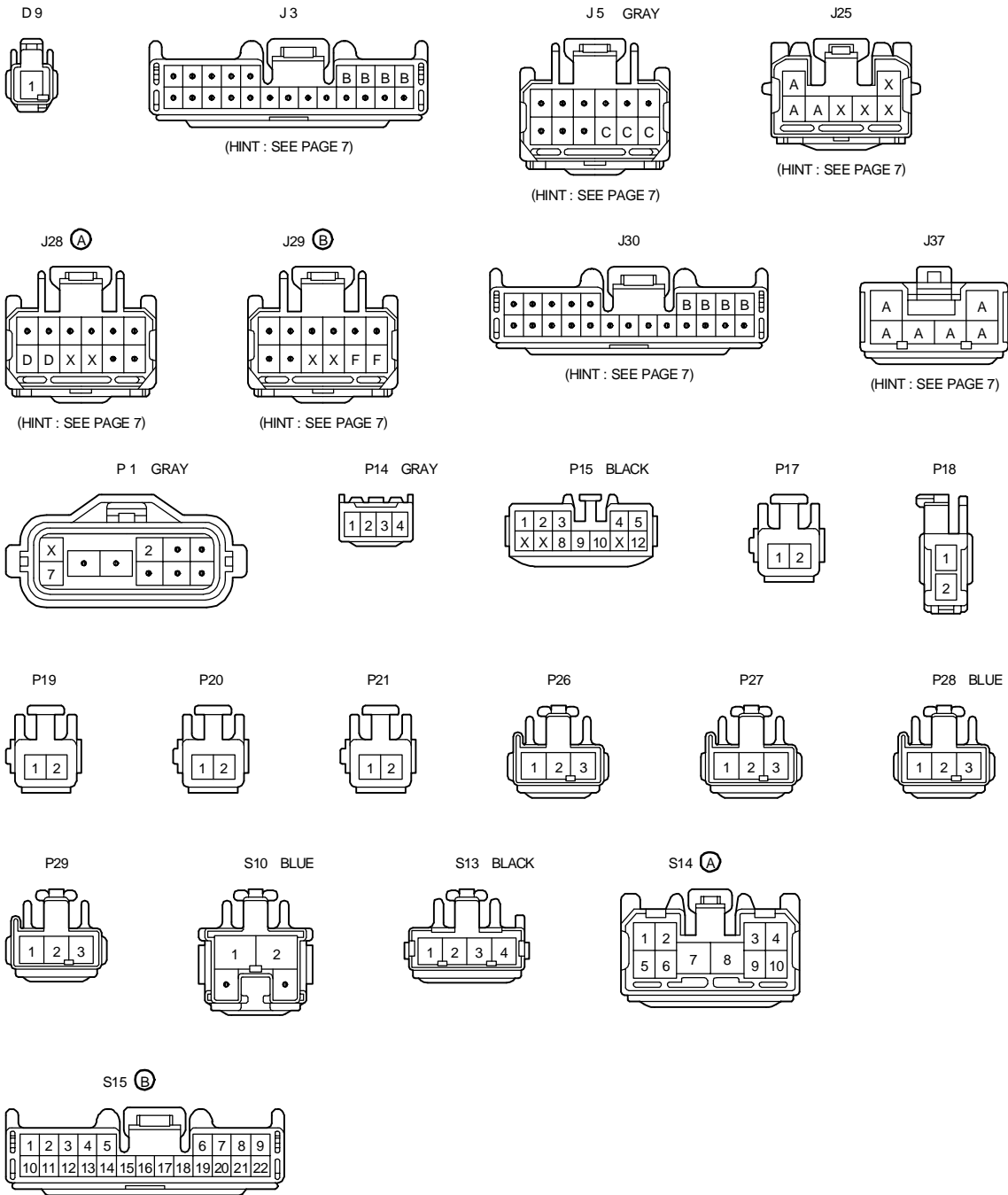
CODE	SEE PAGE	GROUND POINTS LOCATION
IH	36	LEFT KICK PANEL
BN	40	UNDER THE LEFT CENTER PILLAR

# (DRIVER'S SEAT w/ DRIVING POSITION MEMORY)

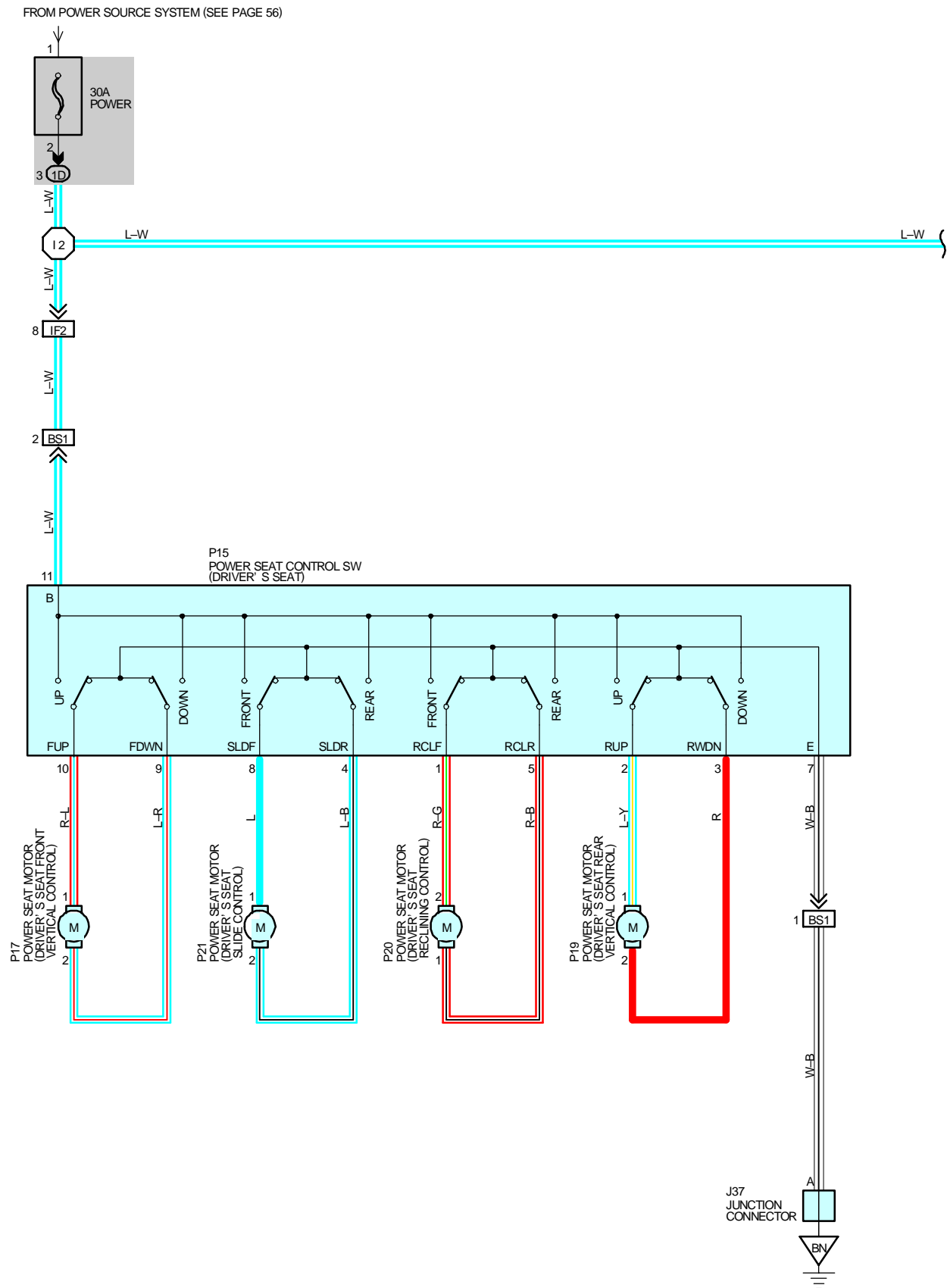


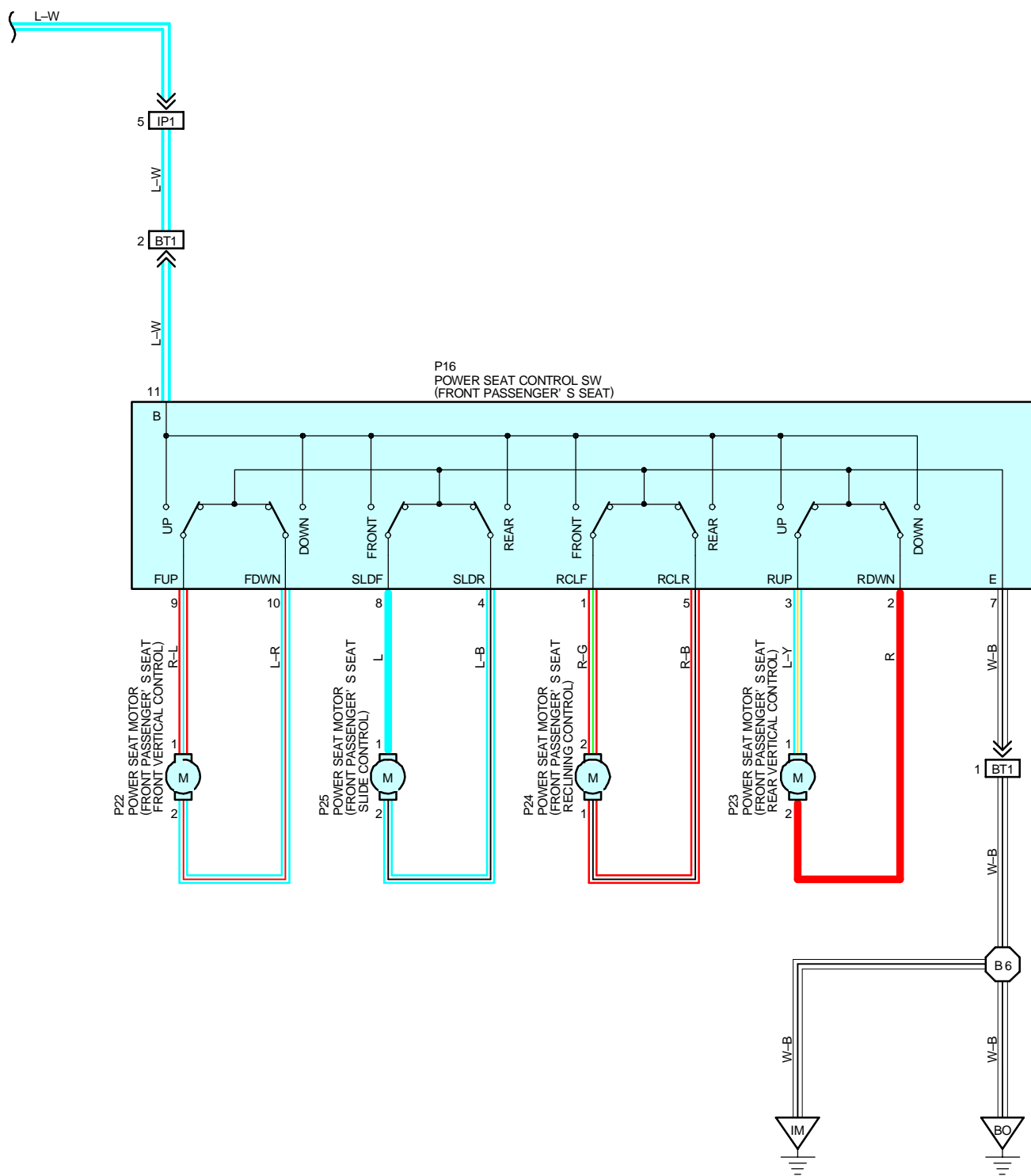
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	40	FLOOR WIRE	B16	42	SEAT NO. 1 WIRE



# POWER SEAT (DRIVER'S SEAT w/o DRIVING POSITION MEMORY), (FRONT PASSENGER'S SEAT)





# POWER SEAT (DRIVER'S SEAT w/o DRIVING POSITION MEMORY), (FRONT PASSENGER'S SEAT)

## SERVICE HINTS

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

11-GROUND : ALWAYS APPROX 12 VOLTS

7-GROUND : ALWAYS CONTINUITY

### P16 POWER SEAT CONTROL SW (FRONT PASSENGER'S SEAT)

11-GROUND : ALWAYS APPROX 12 VOLTS

7-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J37	30	P19	32	P23	32
P15	32	P20	32	P24	32
P16	32	P21	32	P25	32
P17	32	P22	32		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF2	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IP1	38	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BS1	42	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BT1	42	FLOOR NO.2 WIRE AND SEAT NO.2 WIRE (UNDER THE FRONT PASSENGER'S SEAT)

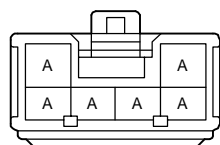
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IN	36	RIGHT KICK PANEL
BN	40	UNDER THE LEFT CENTER PILLAR
BO	40	UNDER THE RIGHT CENTER PILLAR

## ○ : SPLICE POINTS

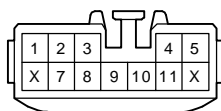
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	38	INSTRUMENT PANEL WIRE	B 6	40	FLOOR NO.2 WIRE

J37

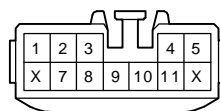


(HINT : SEE PAGE 7)

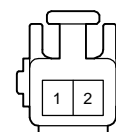
P15 GRAY



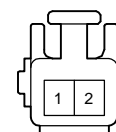
P16 BLACK



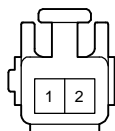
P17



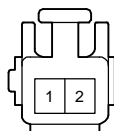
P19



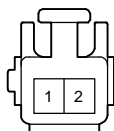
P20



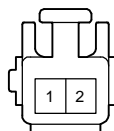
P21



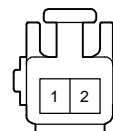
P22



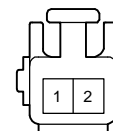
P23



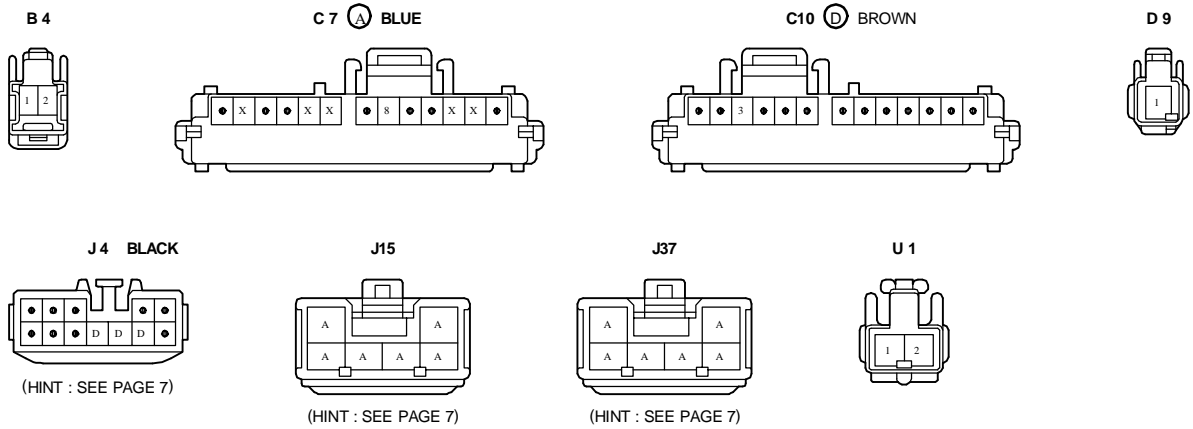
P24



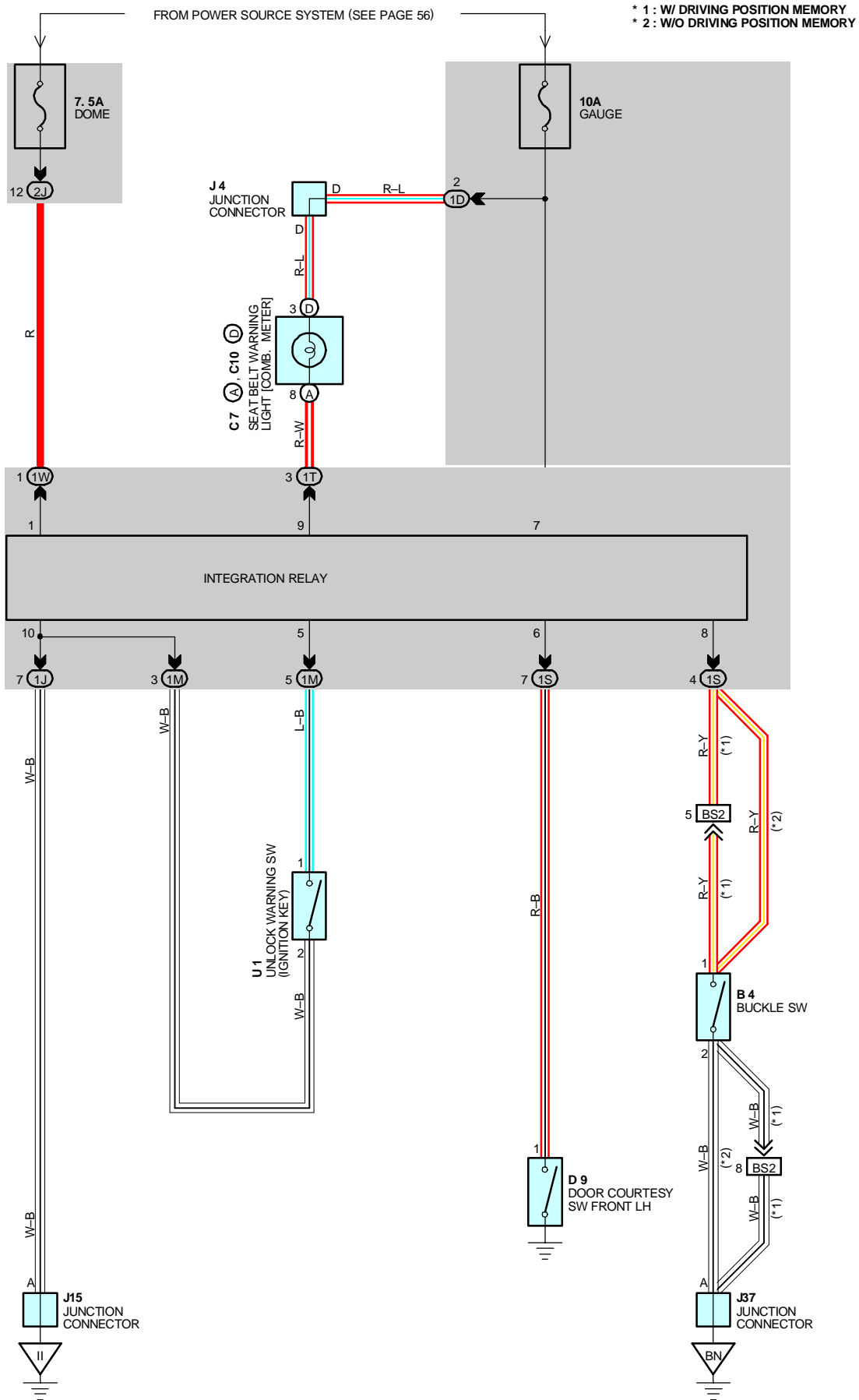
P25



# UNLOCK AND SEAT BELT WARNING



# UNLOCK AND SEAT BELT WARNING



## SYSTEM OUTLINE

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

### 1. SEAT BELT WARNING SYSTEM

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE **GAUGE FUSE** TO THE **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, FOR APPROX. **4-8 SECONDS**, CURRENT FLOWING THROUGH THE WARNING LIGHT FLOWS FROM **TERMINAL 9** OF THE RELAY → **TERMINAL 10** → **GROUND**, CAUSING THE WARNING LIGHT TO LIGHT UP. AT THE SAME TIME AS THE WARNING LIGHT LIGHTS UP, A BUCKLE SW OFF SIGNAL IS INPUT TO **TERMINAL 8** OF THE RELAY, THE CURRENT FLOWING TO **TERMINAL 1** OF THE RELAY FLOWS FROM **TERMINAL 10** → **GROUND** AND THE SEAT BELT WARNING BUZZER SOUNDS FOR APPROX. **4-8 SECONDS**. HOWEVER, IF SEAT BELT IS PUT ON DURING THIS PERIOD (WHILE THE BUZZER IS SOUNDING), SIGNAL INPUT TO **TERMINAL 8** OF THE RELAY STOPS AND THE CURRENT FLOW FROM **TERMINAL 1** OF THE RELAY → **TERMINAL 10** → **GROUND** IS CUT, CAUSING THE BUZZER TO STOP.

### 2. KEY REMINDER SYSTEM

WITH THE IGNITION KEY INSERTED IN THE KEY CYLINDER (UNLOCK WARNING SW ON), THE IGNITION SW STILL OFF AND DOOR OPEN (DOOR COURTESY SW ON), WHEN A SIGNAL IS INPUT **TERMINAL 5** AND **6** OF THE RELAY, THE INTEGRATION RELAY OPERATES, CURRENT FLOWS FROM **TERMINAL 1** OF THE RELAY → **TERMINAL 10** → **GROUND** AND THE KEY REMINDER BUZZER SOUNDS.

## SERVICE HINTS

### B 4 BUCKLE SW

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

### D 9 DOOR COURTESY SW FRONT LH

1-GROUND : CLOSED WITH THE FRONT LH DOOR OPEN

### INTEGRATION RELAY

10-GROUND : ALWAYS CONTINUITY

6-GROUND : CONTINUITY WITH THE FRONT LH DOOR OPEN

5-GROUND : CONTINUITY WITH THE IGNITION KEY IN CYLINDER

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

9-GROUND : **0 VOLTS** FOR **4-8 SECONDS** WITH THE IGNITION SW ON AND **12 VOLTS 4-8 SECONDS** AFTER IGNITION SW ON

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

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

### U 1 UNLOCK WARNING SW (IGNITION KEY)

1-2 : CLOSED WITH THE IGNITION KEY CYLINDER



## : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 4	32	D 9	30	J 37	30
C 7	A 28	J 4	29	U 1	29
C 10	D 28	J 15	29		



## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1N		
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)



## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BS2	42	FLOOR WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)

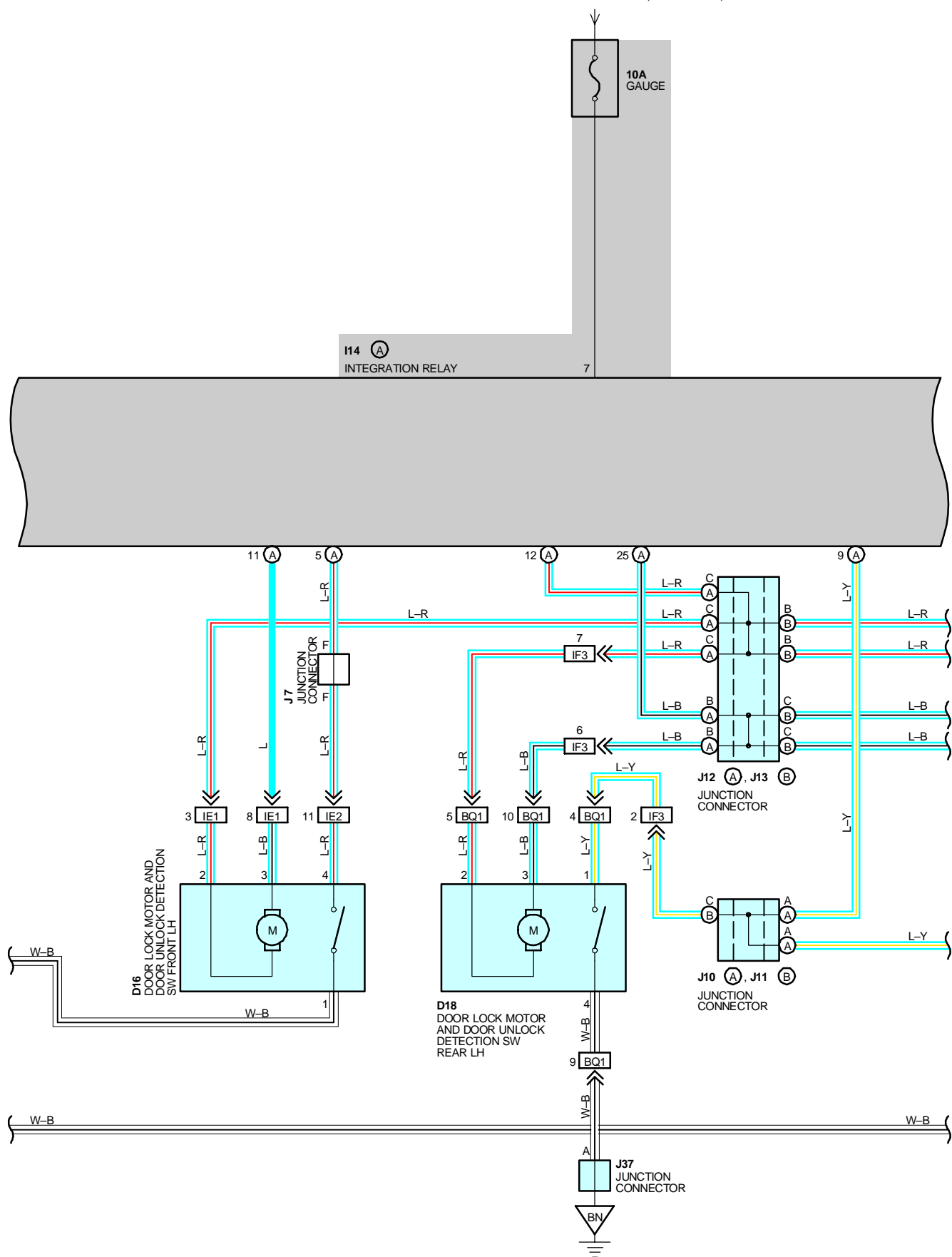


## : GROUND POINTS

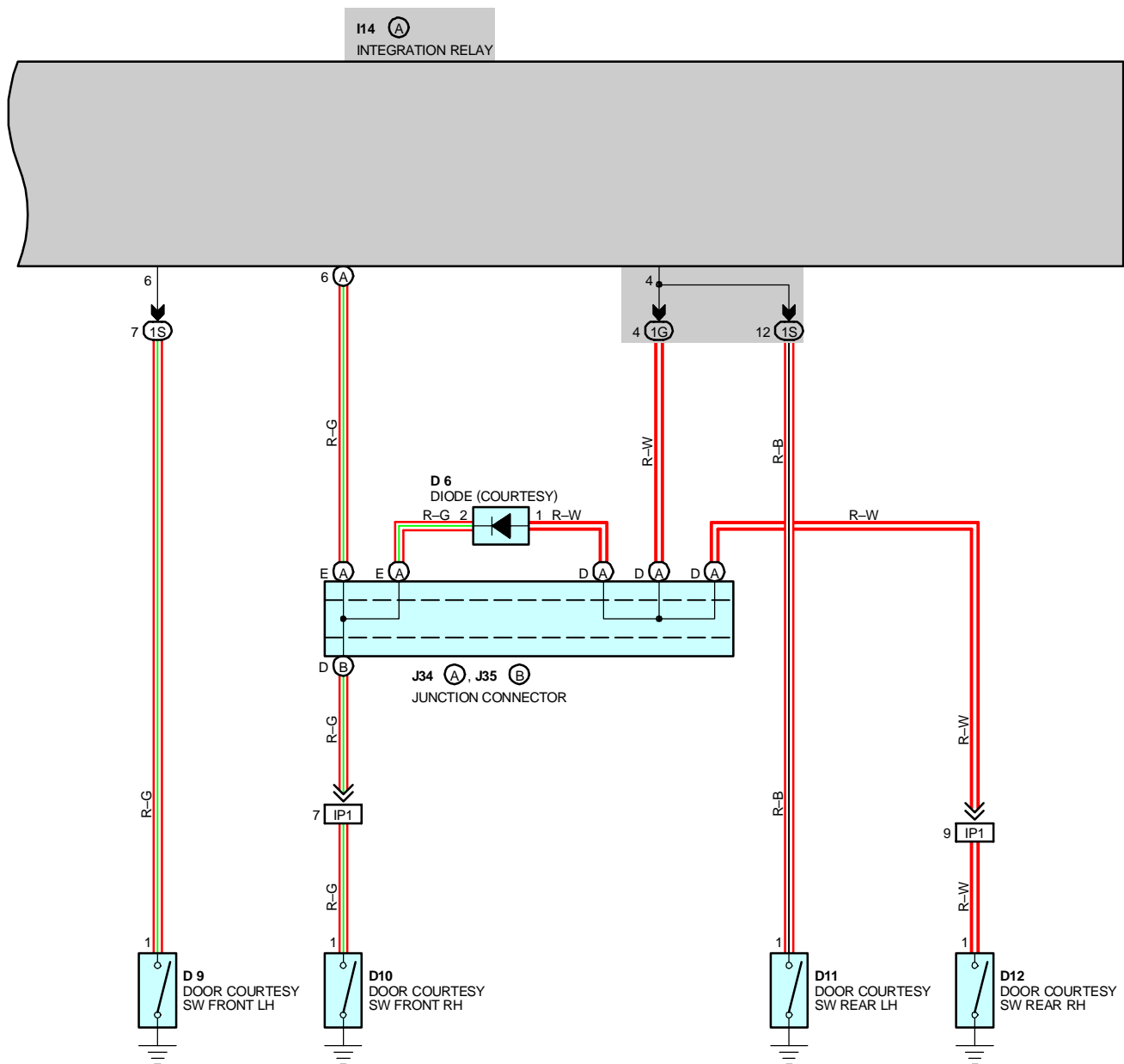
CODE	SEE PAGE	GROUND POINTS LOCATION
II	36	INSTRUMENT PANEL BRACE LH
BN	40	UNDER THE LEFT CENTER PILLAR



FROM POWER SOURCE SYSTEM (SEE PAGE 56)







# DOOR LOCK CONTROL

## SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL A1** OF THE INTEGRATION RELAY THROUGH THE **DOOR FUSE**.

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWING THROUGH THE **GAUGE FUSE** FLOWS TO **TERMINAL 7** OF THE INTEGRATION RELAY → **TERMINAL A3** → THE POWER RELAY (COIL SIDE) → **GROUND**. AS A RESULT, THE CURRENT FLOWING THROUGH THE PWR FUSE FLOWS TO THE POWER RELAY (POINT SIDE) → **TERMINAL 7** OF THE DOOR LOCK CONTROL SW LH → **TERMINAL 1** → **GROUND**, CAUSING THE INDICATOR LIGHT TO LIGHT UP.

### 1. MANUAL LOCK OPERATION

WHEN THE LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW ARE PUSHED TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINAL A16** OR **A18** OF THE INTEGRATION RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL A1** OF THE RELAY → **TERMINAL A12** → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL A25** OF THE RELAY → **TERMINAL 10** → **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 A17** OR **A19** OR **A20** OF THE INTEGRATION RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL A1** OF THE RELAY → **TERMINAL A25** → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL A12** OF THE RELAY → **TERMINAL 10** → **GROUND** AND THE DOOR LOCK MOTOR CAUSES THE DOOR TO LOCK.

### 3. DOUBLE OPERATION UNLOCK OPERATION

WHEN THE DOOR KEY LOCK AND UNLOCK SW LH IS TURNED TO THE UNLOCK SIDE, ONLY THE DRIVER'S DOOR IS MECHANICALLY UNLOCKED. TURNING THE DOOR KEY LOCK AND UNLOCK SW LH TO THE UNLOCK SIDE CAUSES A SIGNAL TO BE INPUT TO **TERMINAL A19** 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 A25** OF THE INTEGRATION RELAY → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL A12** OF THE RELAY → **TERMINAL 10** → **GROUND**, CAUSING THE DOOR LOCK MOTORS TO OPERATE AND UNLOCK THE DOORS.

### 4. IGNITION KEY REMINDER OPERATION

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

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK KNOB (DOOR LOCK MOTOR), THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED SOON BY THE FUNCTION OF RELAY. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL A1** OF THE INTEGRATION RELAY → **TERMINAL A25** → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL 2** OF THE DOOR LOCK MOTOR → **TERMINAL A12** OF THE RELAY → **TERMINAL 10** → **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

\* OPERATING THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK CONTROL SW OR KEY SW, THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED BY THE FUNCTION OF SW CONTAINED IN MOTORS, WHICH THE SIGNAL IS INPUT TO **TERMINAL A5** (FRONT LH) OR **A8** (FRONT RH) OR **A9** (REAR LH, RH) OF THE RELAY. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT IN ECU FLOWS FROM **TERMINAL A1** OF THE RELAY → **TERMINAL A25** → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL A12** OF THE RELAY → **TERMINAL 10** → **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

\* IN CASE OF KEYLESS LOCK

WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE UNLOCK FUNCTION IS DISTURBED MORE THAN 0.2 SECONDS, FOR EXAMPLE PUSHING THE DOOR LOCK KNOB ETC., THE DOOR HOLDS ON LOCK CONDITION. CLOSING THE DOOR AFTER, DOOR COURTESY SW INPUTS THE SIGNAL INTO **TERMINAL 4** OR **6** OR **A6** OF THE INTEGRATION RELAY. BY THIS INPUT SIGNAL, THE ECU WORKS AND CURRENT FLOWS FROM **TERMINAL A1** OF THE RELAY → **TERMINAL A25** → **TERMINAL 3** OF THE DOOR LOCK MOTORS → **TERMINAL 2** OF THE DOOR LOCK MOTORS → **TERMINAL A12** OF THE RELAY → **TERMINAL 10** → **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

## SERVICE HINTS

### I14<sup>Ⓐ</sup> INTEGRATION RELAY

10-GROUND : ALWAYS CONTINUITY

6-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN

Ⓐ 1-GROUND : ALWAYS APPROX. 12 VOLTS

Ⓐ 25-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION

\* DOOR LOCK CONTROL SW UNLOCKED

\* DOOR LOCK CONTROL SW LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN  
(IGNITION KEY REMINDER FUNCTION)

\* DOOR LOCK KNOB LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN  
(IGNITION KEY REMINDER FUNCTION)

\* UNLOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY

Ⓐ 2-GROUND : APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION

\* DOOR LOCK CONTROL SW LOCKED

\* LOCKING THE DRIVER'S, PASSENGER'S DOOR CYLINDER WITH KEY

Ⓐ 6-GROUND : 0 VOLTS WITH DOOR LOCK CONTROL SW LOCKED

Ⓐ 6-GROUND : CONTINUITY WITH FRONT PASSENGER'S DOOR OPEN

Ⓐ 5-GROUND : CONTINUITY WITH DRIVER'S DOOR LOCK KNOB UNLOCKED

7-GROUND : CONTINUITY WITH FRONT PASSENGER'S DOOR LOCK KNOB UNLOCKED

Ⓐ 7-GROUND : 0 VOLTS WITH DOOR LOCK CONTROL SW UNLOCKED

Ⓐ 20-GROUND : 0 VOLTS WITH PASSENGER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY

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

Ⓐ 9-GROUND : 0 VOLTS WITH DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY

Ⓐ 8-GROUND : 0 VOLTS WITH DRIVER'S, PASSENGER'S DOOR LOCK CYLINDER LOCKED WITH KEY

Ⓐ 9-GROUND : CONTINUITY WITH REAR PASSENGER'S DOOR LOCK KNOB UNLOCKED

4-GROUND : CONTINUITY WITH REAR PASSENGER'S DOOR OPEN

### D 9, D10, D11, D12 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1-GROUND : CLOSED WITH EACH DOOR OPEN

### D13 DOOR KEY LOCK AND UNLOCK SW FRONT LH

2-1 : CLOSED WITH DOOR LOCK CYLINDER LOCKED WITH KEY

3-1 : CLOSED WITH DOOR LOCK CYLINDER UNLOCKED WITH KEY

### D14 DOOR KEY LOCK AND UNLOCK SW FRONT RH

2-1 : CLOSED WITH DOOR LOCK CYLINDER LOCKED WITH KEY

3-1 : CLOSED WITH DOOR LOCK CYLINDER UNLOCKED WITH KEY

### D16, D17, D18, D19 DOOR LOCK MOTOR AND DOOR UNLOCK DETECTION SW FRONT LH, RH, REAR LH, RH

1-4 : CLOSED WITH UNLOCK POSITION

### U 1 UNLOCK WARNING SW (IGNITION KEY)

1-2 : CLOSED WITH IGNITION KEY IN CYLINDER

# DOOR LOCK CONTROL

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	See Page	Code	See Page
D 6	28	D18	30	J15	29
D 9	30	D19	30	J33	29
D10	30	I14	A 28	J34	A 29
D11	30	J 5	A 29	J35	B 29
D12	30	J 6	B 29	J36	30
D13	30	J 7	29	J37	30
D14	30	J10	A 29	J38	30
D15	30	J11	B 29	P 9	31
D16	30	J12	A 29	U 1	29
D17	30	J13	B 29		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2		
IF3	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO1	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IO2		
IP1	38	FLOOR NO. 2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

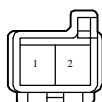
## ▽ : GROUND POINTS

Code	See Page	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH
II	36	INSTRUMENT PANEL BRACE LH
IL	36	RIGHT KICK PANEL
IN		
BN	40	UNDER THE LEFT CENTER PILLAR
BO	40	UNDER THE RIGHT CENTER PILLAR

## ○ : SPLICE POINTS

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B 6	40	FLOOR NO. 2 WIRE			

D 6 BLACK



D 9



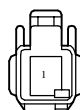
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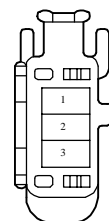
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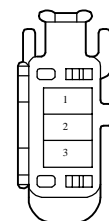
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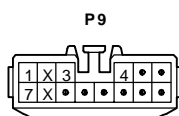
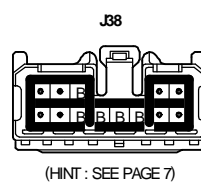
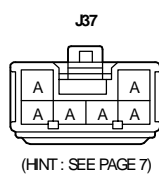
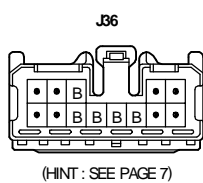
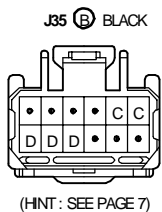
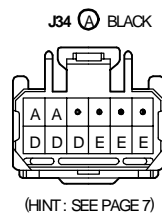
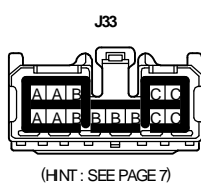
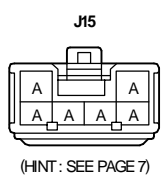
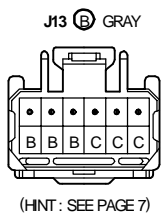
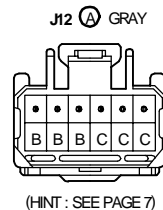
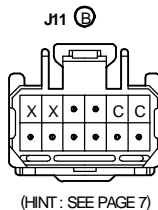
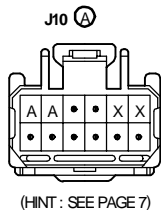
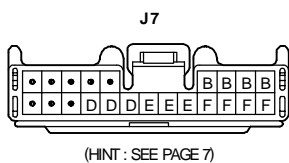
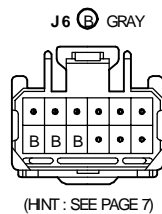
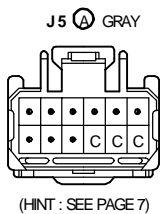
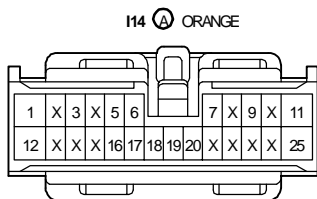
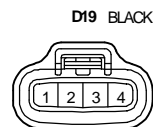
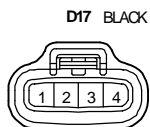
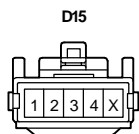


D13

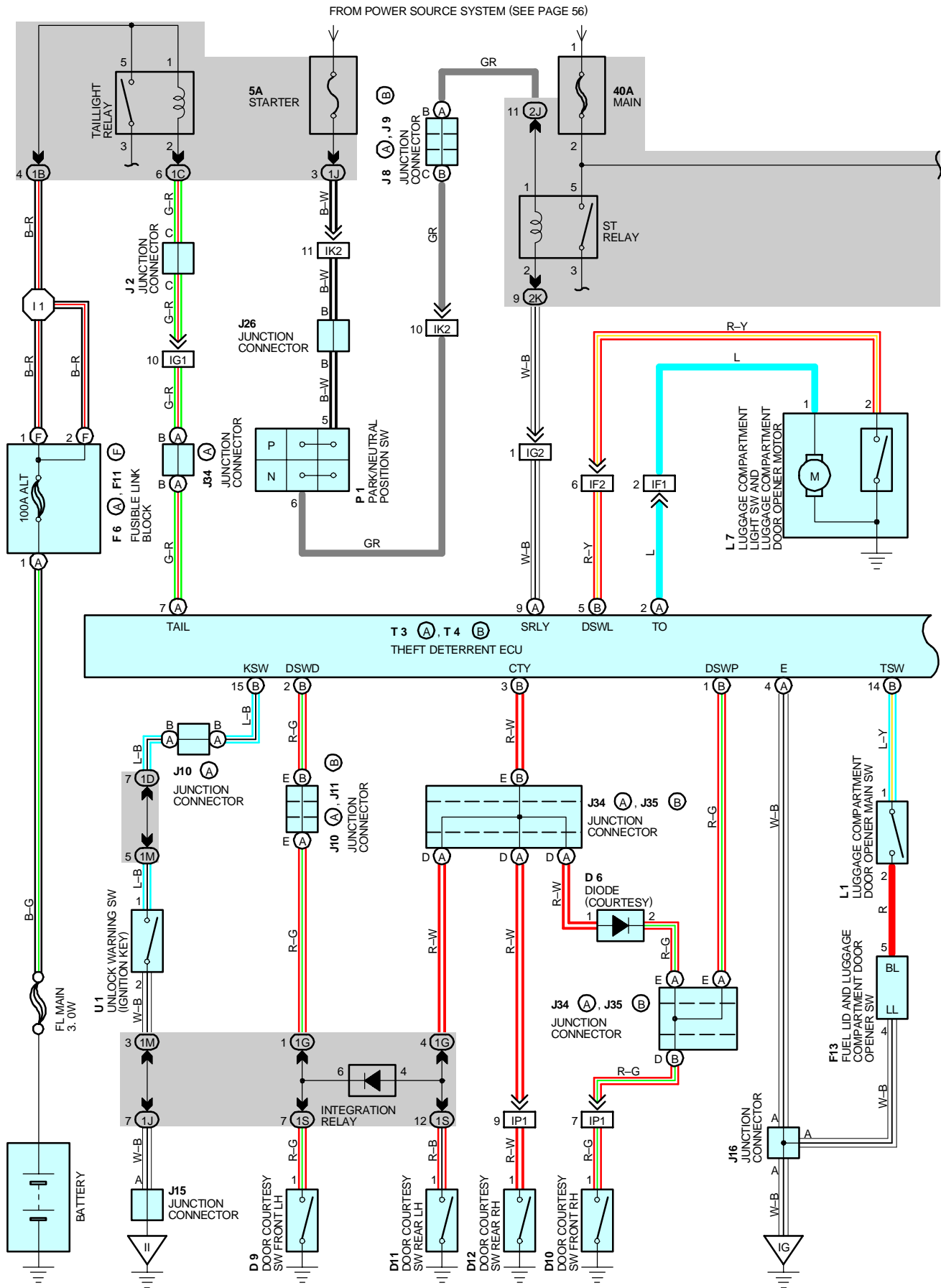


D14





# THEFT DETERRENT





# THEFT DETERRENT

## SERVICE HINTS

### D13, D14 DOOR KEY LOCK AND UNLOCK SW FRONT LH, RH

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

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

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

1-4 : CLOSED WITH UNLOCK POSITION

### E 5 ENGINE HOOD COURTESY SW

1-2 : CLOSED WITH THE ENGINE HOOD OPEN

### U 1 UNLOCK WARNING SW (IGNITION KEY)

1-2 : CLOSED WITH THE IGNITION KEY IN CYLINDER

### L 5 LUGGAGE COMPARTMENT DOOR KEY UNLOCK SW

1-2 : CLOSED WITH THE LUGGAGE COMPARTMENT DOOR LOCK CYLINDER UNLOCK WITH KEY

### L 7 LUGGAGE COMPARTMENT LIGHT SW

2-GROUND : CLOSED WITH THE LUGGAGE COMPARTMENT DOOR OPEN

### T 3 Ⓐ , T 4 Ⓑ THEFT DETERRENT ECU

Ⓐ 9-GROUND : APPROX. 12 VOLTS WITH THE SHIFT LEVER IN **N** OR **P** POSITION AND THE IGNITION SW AT **ST** POSITION

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

Ⓑ 15-GROUND : CONTINUITY WITH THE IGNITION KEY IN CYLINDER

Ⓑ 17-GROUND : CONTINUITY WITH THE FRONT RH DOOR TO **UNLOCK** POSITION

Ⓑ 11-GROUND : ALWAYS APPROX. 12 VOLTS

Ⓑ 7-GROUND : CONTINUITY WITH THE DOOR KEY LOCK AND UNLOCK SW FRONT LH TO **UNLOCK** POSITION

Ⓑ 16-GROUND : CONTINUITY WITH THE FRONT LH DOOR TO **UNLOCK** POSITION

Ⓑ 1-GROUND : CONTINUITY WITH THE FRONT RH DOOR OPENED

Ⓑ 2-GROUND : CONTINUITY WITH THE FRONT LH DOOR OPENED

Ⓑ 6-GROUND : CONTINUITY WITH THE DOOR KEY LOCK AND UNLOCK SW TO **LOCK** POSITION

Ⓐ 4-GROUND : ALWAYS CONTINUITY

Ⓑ 8-GROUND : CONTINUITY WITH THE DOOR KEY LOCK AND UNLOCK SW FRONT RH TO **UNLOCK** POSITION

Ⓐ 1-GROUND : ALWAYS APPROX. 12 VOLTS

Ⓑ 9-GROUND : CONTINUITY WITH THE LUGGAGE COMPARTMENT DOOR LOCK CYLINDER UNLOCK WITH KEY

Ⓑ 3-GROUND : CONTINUITY WITH EACH DOOR OPEN

Ⓑ 4-GROUND : CONTINUITY WITH THE ENGINE HOOD OPEN

Ⓑ 5-GROUND : CONTINUITY WITH THE LUGGAGE COMPARTMENT DOOR OPEN

Ⓑ 13-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC** OR **ON** POSITION

Ⓑ 18-GROUND : CONTINUITY WITH THE REAR DOOR TO **UNLOCK** POSITION

## ⊙ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A14	28	F11   F	26	J33	29
D 6	28	F13	28	J34   A	29
D 9	30	J 2	29	J35   B	29
D10	30	J 5   A	29	J36	30
D11	30	J 6   B	29	J37	30
D12	30	J 7	29	J38	30
D13	30	J 8   A	29	L 1	29
D14	30	J 9   B	29	L 5	30
D16	30	J10   A	29	L 7	30
D17	30	J11   B	29	P 1	27
D18	30	J15	29	T 1	27
D19	30	J16	29	T 3   A	29
E 5	26	J19	29	T 4   B	29
F 6   A	26	J26	29	U 1	29

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2F	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

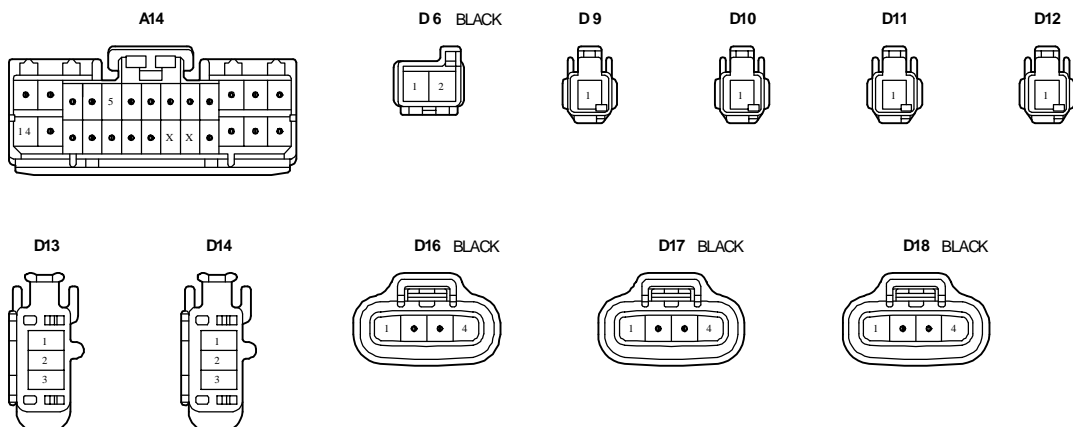
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE2	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF2		
IF3		
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IG2		
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2	38	ENGINE WIRE AND COWLWIRE (UNDER THE GLOVE BOX)
IH1	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IO2	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IP1	38	FLOOR NO. 2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

 : GROUND POINTS

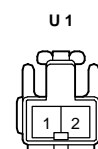
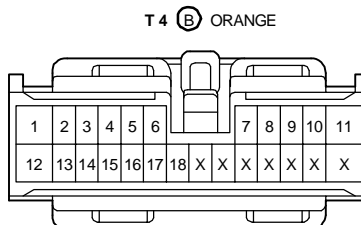
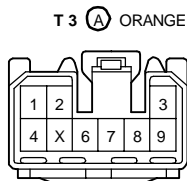
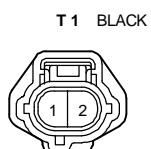
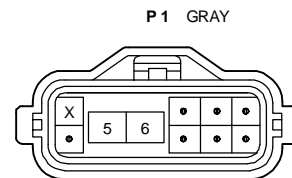
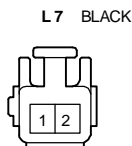
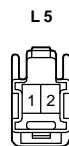
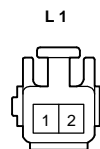
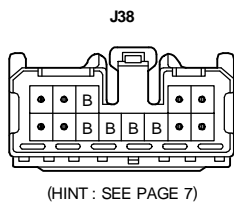
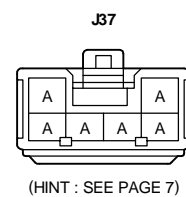
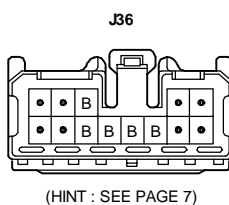
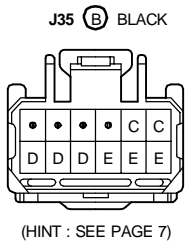
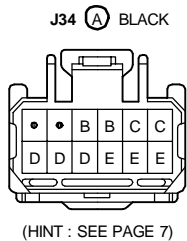
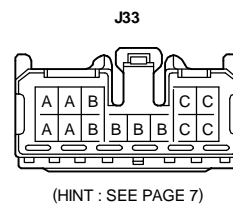
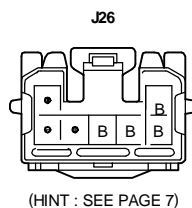
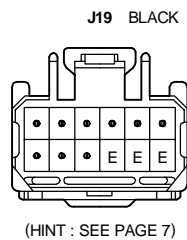
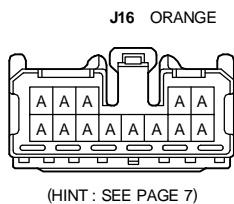
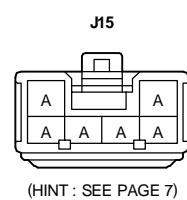
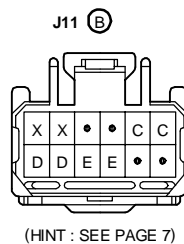
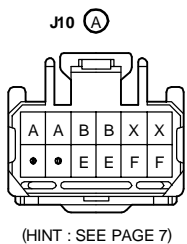
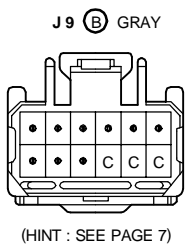
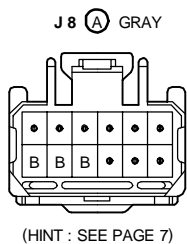
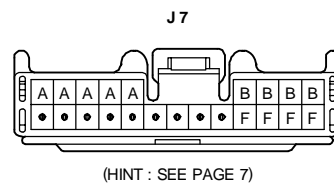
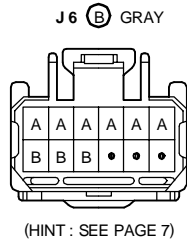
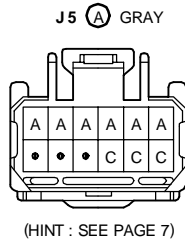
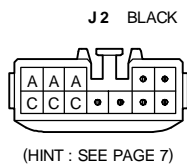
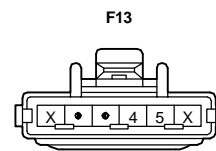
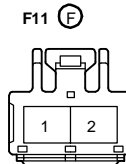
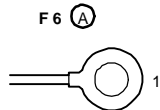
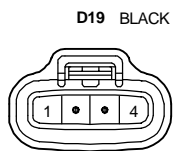
CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT
IF	36	COWL SIDE PANEL LH
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH
IL	36	RIGHT KICK PANEL
IM		
IN	40	UNDER THE LEFT CENTER PILLAR
BN	40	UNDER THE RIGHT CENTER PILLAR
BO	40	BACK PANEL CENTER

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE	B 6	40	FLOOR NO. 2 WIRE

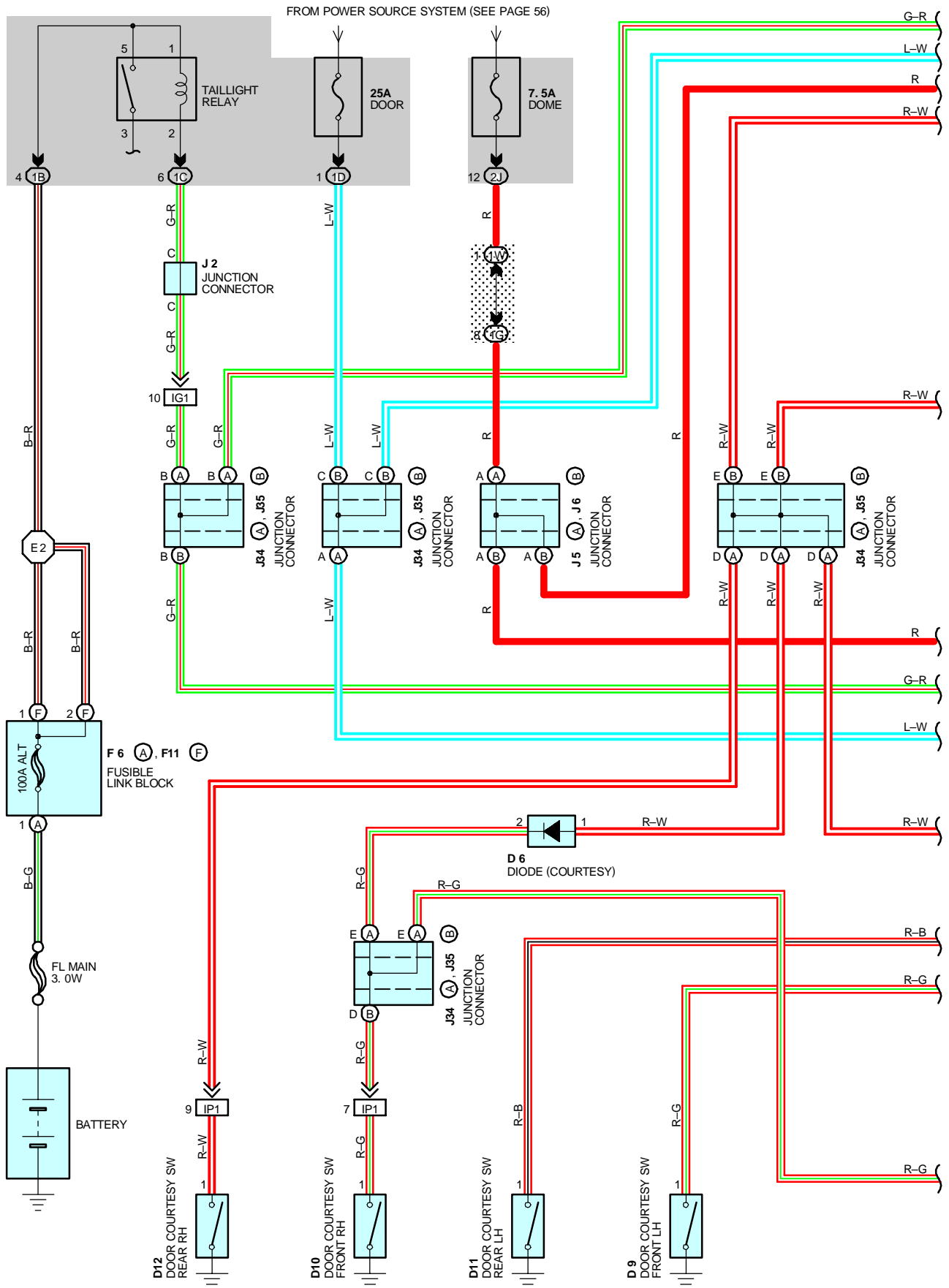


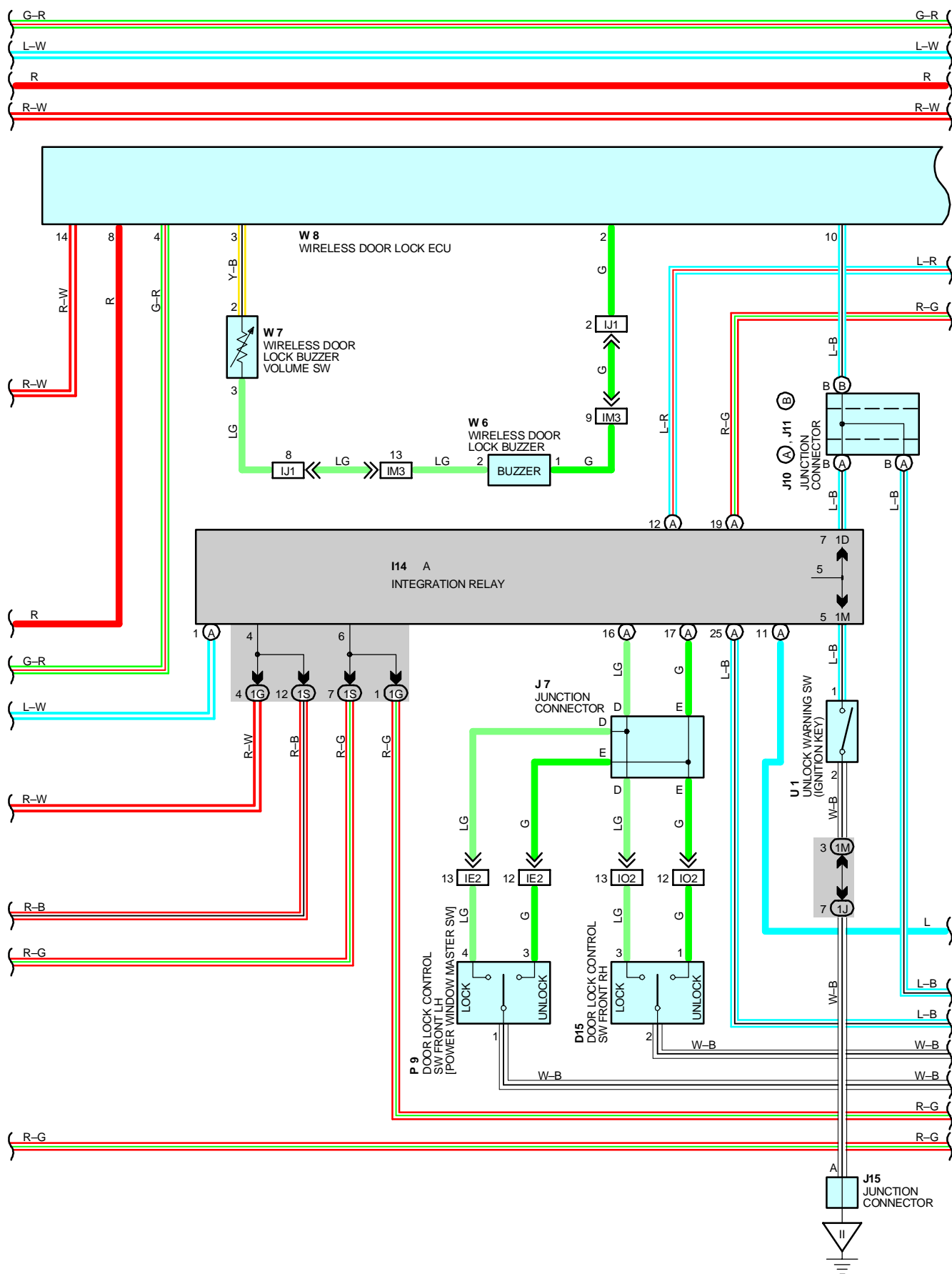
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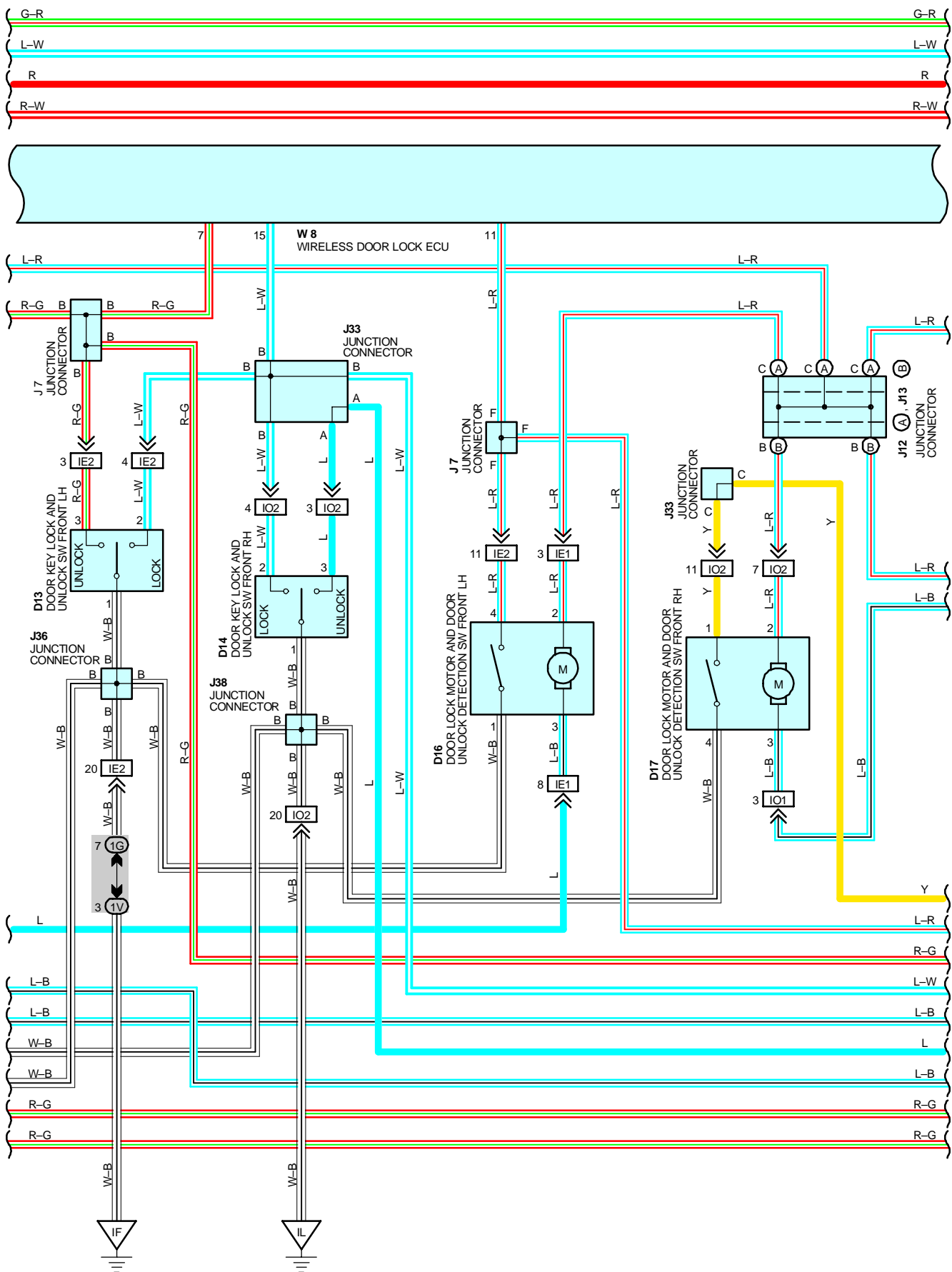


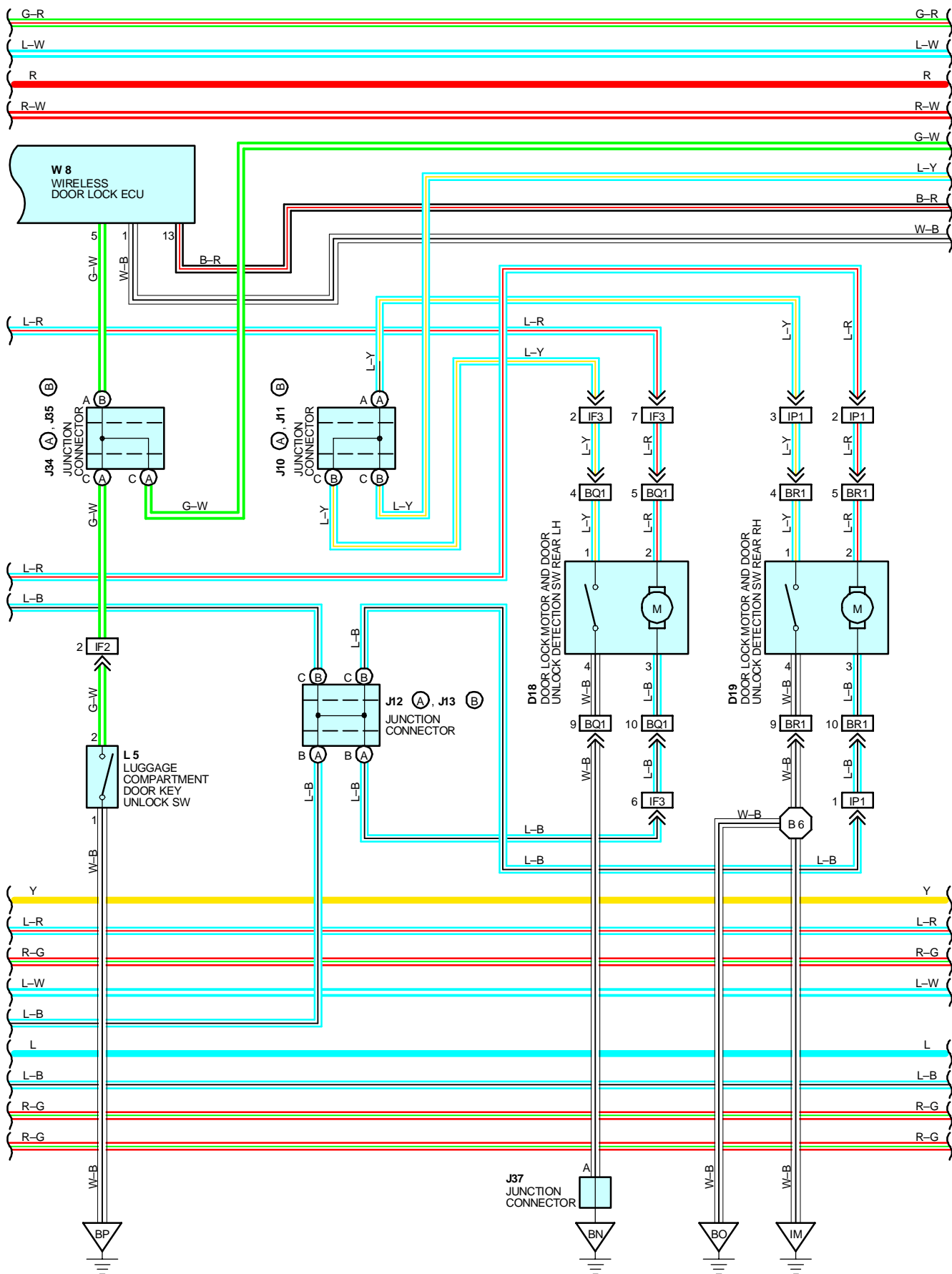


# WIRELESS DOOR LOCK CONTROL

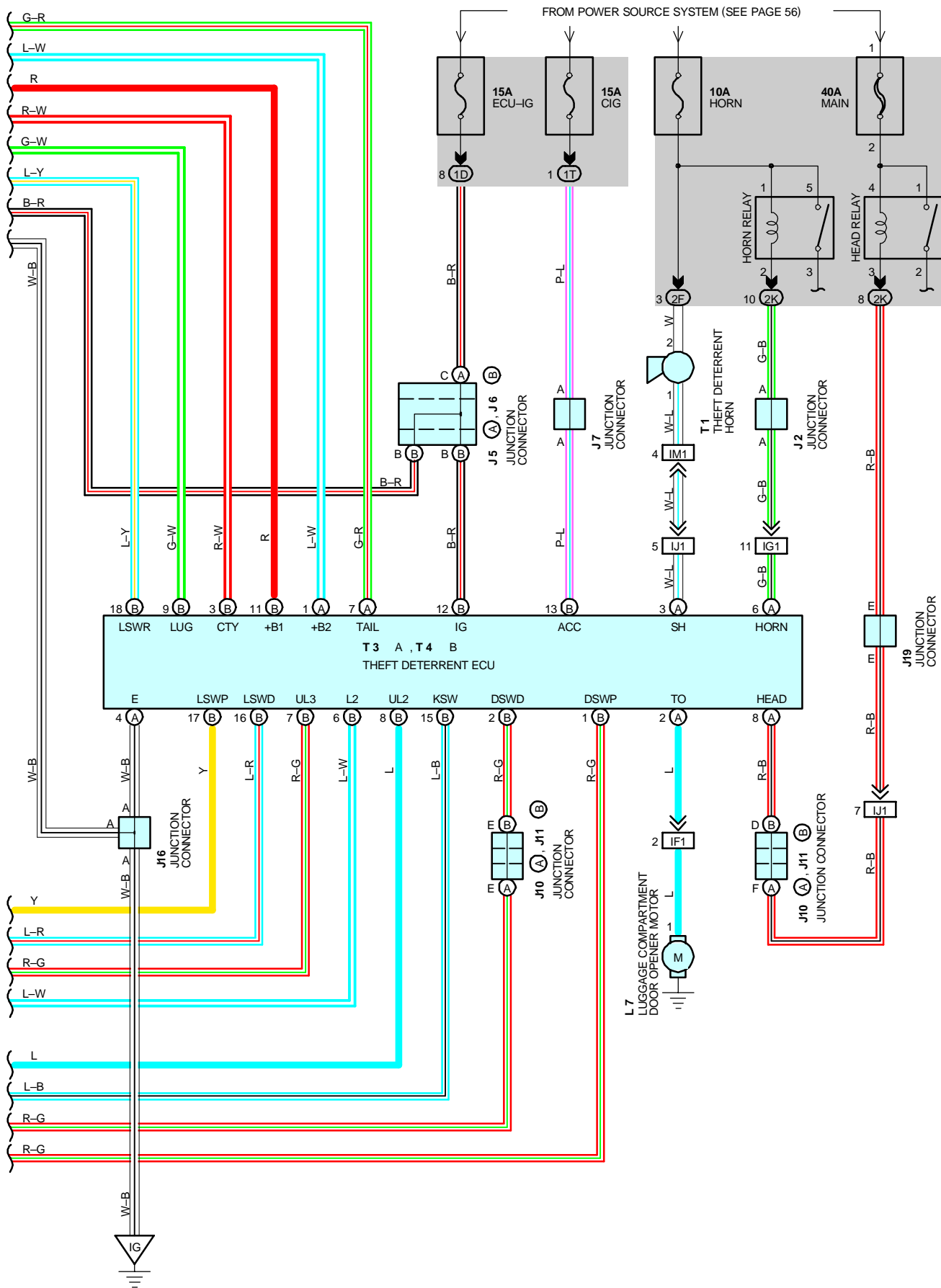








# WIRELESS DOOR LOCK CONTROL



## SYSTEM OUTLINE

DOOR LOCK CONTROL (LOCK AND UNLOCK) AND LUGGAGE COMPARTMENT DOOR CONTROL (LUGGAGE COMPARTMENT DOOR OPEN) IS PERFORMED BY REMOTE CONTROL, WITHOUT THE IGNITION KEY INSERTED IN THE DOOR KEY CYLINDER, USING LOW-POWER ELECTRICAL WAVE EMITTED BY A TRANSMITTER.

### 1. WIRELESS DOOR LOCK OR UNLOCK NORMAL OPERATION

WITH THE IGNITION KEY NOT INSERTED INTO THE IGNITION KEY CYLINDER (UNLOCK WARNING SW OFF) AND ALL THE DOORS COMPLETELY CLOSED, WHEN THE LOCK BUTTON (TRANSMITTER) IS PUSHED, THE WIRELESS DOOR LOCK CONTROL ECU RECEIVES THE ELECTRICAL WAVES FROM THE TRANSMITTER, CAUSING IT TO OPERATE.

AS A RESULT, THE ECU JUDGES WHETHER THE DOOR IS LOCKED OR UNLOCKED BASED ON THE SIGNAL FROM THE DOOR LOCK MOTOR AND DOOR UNLOCK DETECTION SW, AND SENDS A SIGNAL TO THE THEFT DETERRENT AND DOOR LOCK CONTROL ECU TO SWITCH THE CONDITION FROM LOCK TO UNLOCK OR VICE VERSA, CAUSING THE DOOR LOCK MOTOR TO OPERATE.

### 2. WIRELESS LUGGAGE COMPARTMENT DOOR OPEN NORMAL OPERATION

WITH THE IGNITION KEY NOT INSERTED INTO THE IGNITION KEY CYLINDER (UNLOCK WARNING SW OFF), WHEN THE LUGGAGE COMPARTMENT DOOR OPENER BUTTON (TRANSMITTER) IS PUSHED, THE WIRELESS DOOR LOCK CONTROL ECU RECEIVES THE ELECTRICAL WAVES FROM THE TRANSMITTER, CAUSING IT TO OPERATE.

AS A RESULT, A SIGNAL FROM THE LUGGAGE COMPARTMENT DOOR UNLOCK SW IS SENT TO THE THEFT DETERRENT ECU, CAUSING THE LUGGAGE COMPARTMENT DOOR OPENER MOTOR TO OPERATE.

### 3. WIRELESS DOOR UNLOCK OPERATION

PUSHING THE UNLOCK BUTTON (TRANSMITTER) ONCE, DRIVER'S DOOR IS UNLOCKED. FURTHERMORE, PUSHING THE BUTTON AGAIN WITHIN 3 SECONDS, THE OTHER DOORS ARE UNLOCKED.

### 4. AUTOMATIC LOCK OPERATION

WITH THE IGNITION KEY NOT INSERTED INTO THE IGNITION KEY CYLINDER (UNLOCK WARNING SW OFF) AND ALL THE DOORS COMPLETELY CLOSED, AFTER PUSHING THE BUTTON (TRANSMITTER) TO UNLOCK ALL THE DOORS, IF A DOOR IS NOT OPENED WITHIN 30 SECONDS, ALL THE DOORS WILL BE AUTOMATICALLY RELOCKED.

### 5. WIRELESS CONTROL STOP FUNCTION

IF A DOOR IS OPEN (DOOR COURTESY SW ON), A SIGNAL IS INPUT FROM THE DOOR COURTESY SW TO THE WIRELESS DOOR LOCK CONTROL ECU, STOPPING WIRELESS DOOR LOCK AND WIRELESS LUGGAGE COMPARTMENT DOOR OPEN.

IF THE IGNITION KEY IS IN THE IGNITION KEY CYLINDER (UNLOCK WARNING SW ON), THE UNLOCK WARNING SW INPUTS A SIGNAL TO THE WIRELESS DOOR LOCK CONTROL ECU, STOPPING WIRELESS DOOR LOCK OR UNLOCK AND WIRELESS LUGGAGE COMPARTMENT DOOR OPEN.

### 6. DOOR LOCK MOTOR PROTECTIVE FUNCTION

IF THE DOOR LOCK OR UNLOCK CONDITION DOES NOT CHANGE AFTER WIRELESS DOOR LOCK OR UNLOCK OPERATION, 2 SECONDS LATER, THE DOOR LOCK ECU SENDS CURRENT THREE TIMES TO THE DOOR LOCK MOTOR. IF THE DOOR LOCK CONDITION STILL HAS NOT CHANGED AS A RESULT, THE WIRELESS DOOR LOCK ECU STOPS RECEPTION AND STOPS DOOR LOCK AND UNLOCK FUNCTION.

### 7. VISUAL CONFIRMATION OF LOCK OR UNLOCK FUNCTION

IF ALL DOORS INDICATE THEY ARE LOCKED AFTER THE LOCK COMMAND, TAILLIGHTS AND PARKING LIGHTS WILL FLASH ONCE. IF ANY DOOR INDICATES IT IS OPEN AFTER THE LOCK COMMAND, TAILLIGHTS AND PARKING LIGHTS WILL FLASH TWICE.

## SERVICE HINTS

### D 9, D10, D11, D12 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH

1-GROUND : CLOSED WITH THE DOOR OPEN

### U 1 UNLOCK WARNING SW (IGNITION KEY)

2-1 : CLOSED WITH THE IGNITION KEY IN THE CYLINDER

### W 8 WIRELESS DOOR LOCK CONTROL ECU

8-GROUND : ALWAYS APPROX. 12 VOLTS

1-GROUND : ALWAYS CONTINUITY

14-GROUND : CONTINUITY WITH EACH OF THE DOOR OPEN

10-GROUND : CONTINUITY WITH THE IGNITION KEY IN THE CYLINDER

# WIRELESS DOOR LOCK CONTROL

## : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
D 6		28	I14	A	28	J35	B	29
D 9		30	J 2		29	J36		30
D10		30	J 5	A	29	J37		30
D11		30	J 6	B	29	J38		30
D12		30	J 7		29	L 5		30
D13		30	J10	A	29	L 7		30
D14		30	J11	B	29	P 9		31
D15		30	J12	A	29	T 1		27
D16		30	J13	B	29	T 3	A	29
D17		30	J15		29	T 4	B	29
D18		30	J16		29	U 1		29
D19		30	J19		29	W 6		27
F 6	A	26	J33		29	W 7		29
F11	F	26	J34	A	29	W 8		29

## : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1N		
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2F	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

## : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2		
IF1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF2		
IF3		
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IM1	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IN1		
IO1	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IO2		
IP1	38	FLOOR NO. 2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH
IL	36	RIGHT KICK PANEL
IM		
BN	40	UNDER THE LEFT CENTER PILLAR
BO	40	UNDER THE RIGHT CENTER PILLAR
BP	40	BACK PANEL CENTER

## : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	34	COWL WIRE	B 6	40	FLOOR NO. 2 WIRE

D 6 BLACK



D 9



D 10



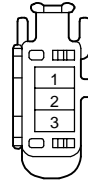
D 11



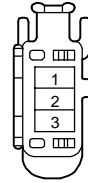
D 12



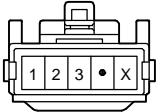
D 13



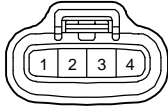
D 14



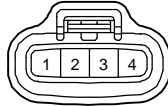
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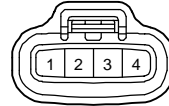
D 16 BLACK



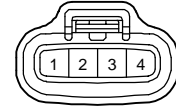
D 17 BLACK



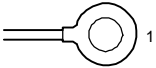
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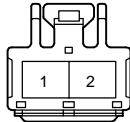
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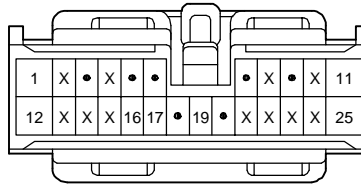
F 6 (A)



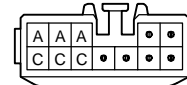
F 11 (F)



I 14 (A) ORANGE

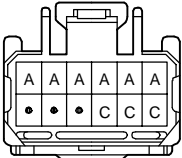


J 2 BLACK



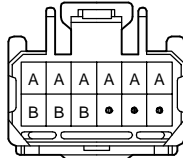
(HINT : SEE PAGE 7)

J 5 (A) GRAY



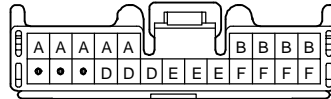
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J 6 (B) GRAY



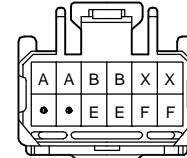
(HINT : SEE PAGE 7)

J 7



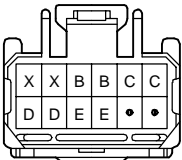
(HINT : SEE PAGE 7)

J 10 (A)



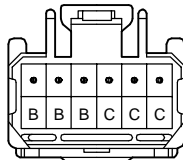
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J 11 (B)



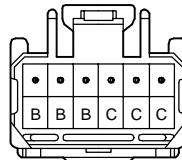
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J 12 (A) GRAY



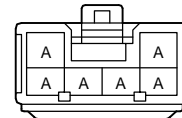
(HINT : SEE PAGE 7)

J 13 (B) GRAY



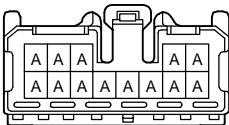
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J 15



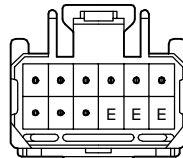
(HINT : SEE PAGE 7)

J 16 ORANGE



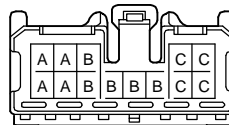
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J 19 BLACK



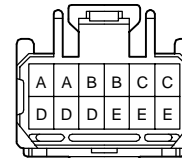
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J 33



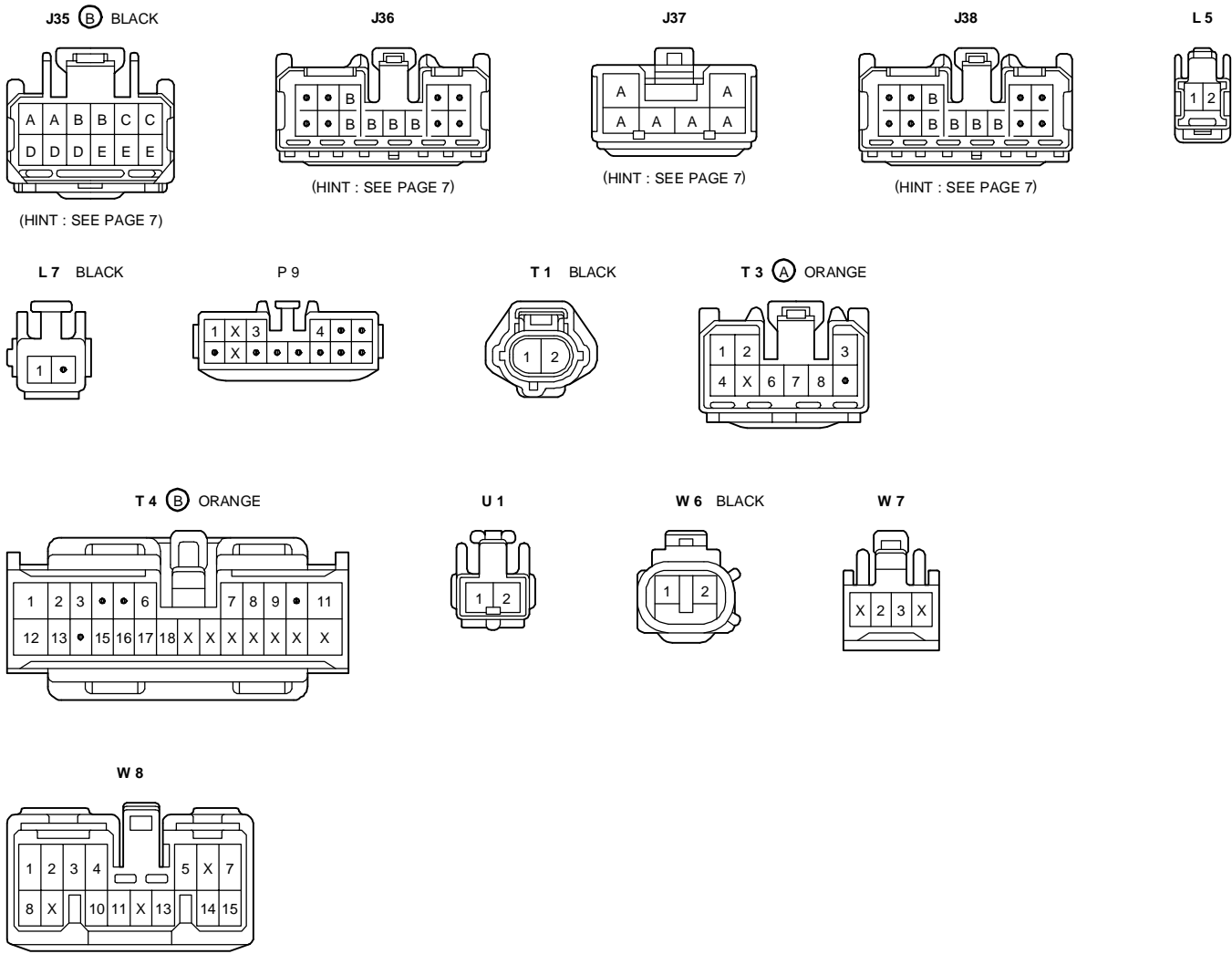
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J 34 (A) BLACK



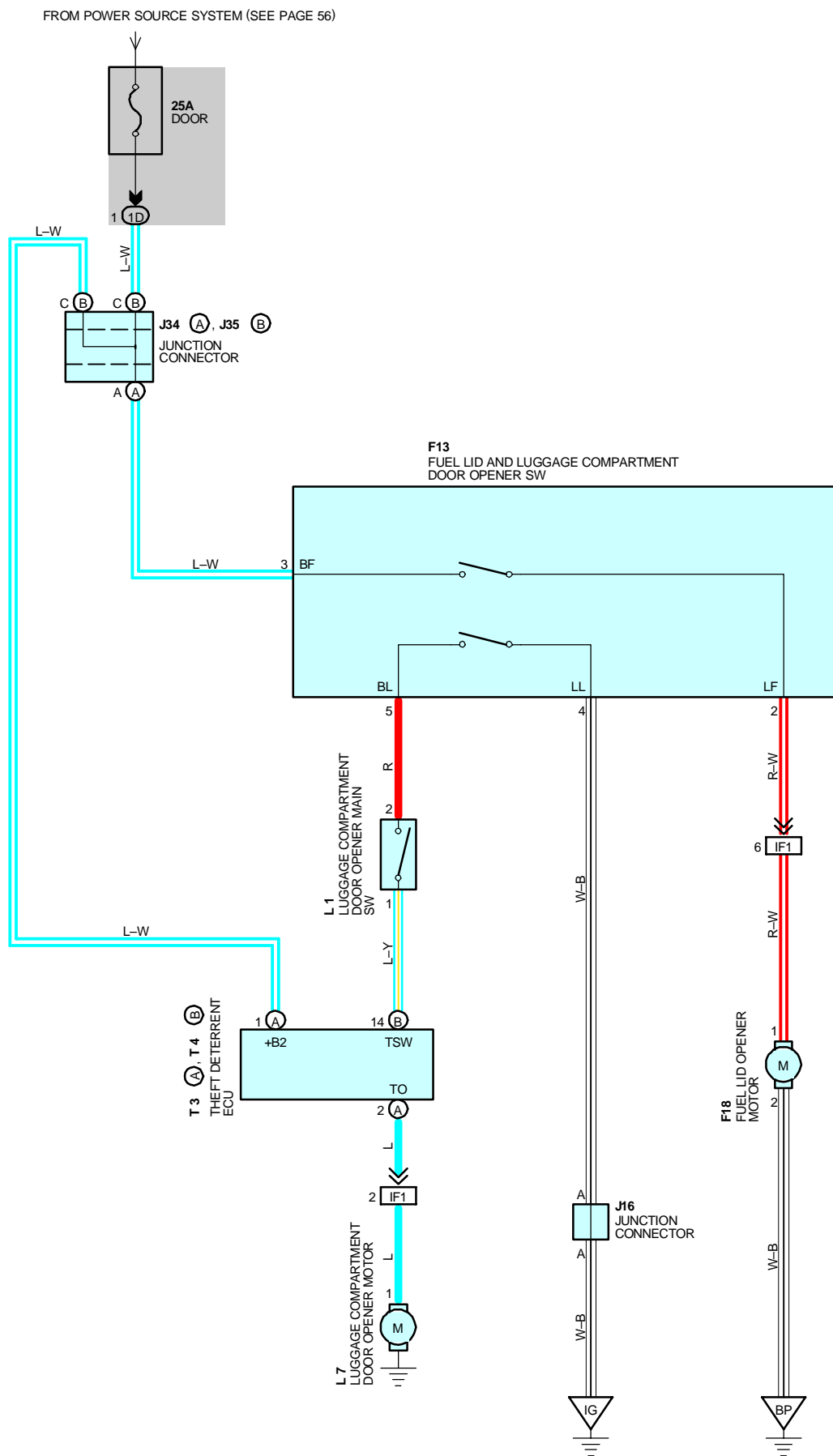
(HINT : SEE PAGE 7)

# WIRELESS DOOR LOCK CONTROL





# FUEL LID AND LUGGAGE COMPARTMENT DOOR OPENER



## SERVICE HINTS

### F13 FUEL LID AND LUGGAGE COMPARTMENT DOOR OPENER SW

3-2 : CLOSED WITH FUEL LID OPENER SW ON

#### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F13	28	J34	A 29	L 7	30
F18	30	J35	B 29	T 3	A 29
J16	29	L 1	29	T 4	B 29

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

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

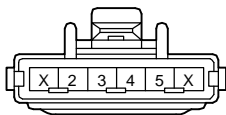
#### □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)

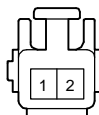
#### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	36	LEFT KICK PANEL
BP	40	BACK PANEL CENTER

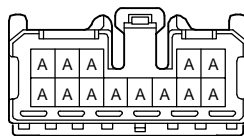
F13



F18 GRAY

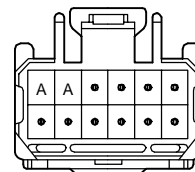


J16 ORANGE



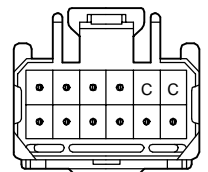
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J34 (A) BLACK



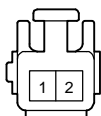
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J35 (B) BLACK

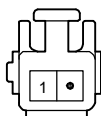


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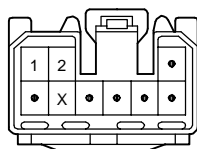
L 1



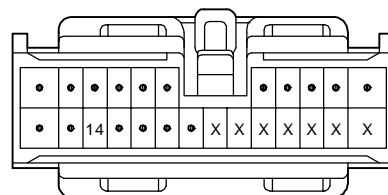
L 7 BLACK



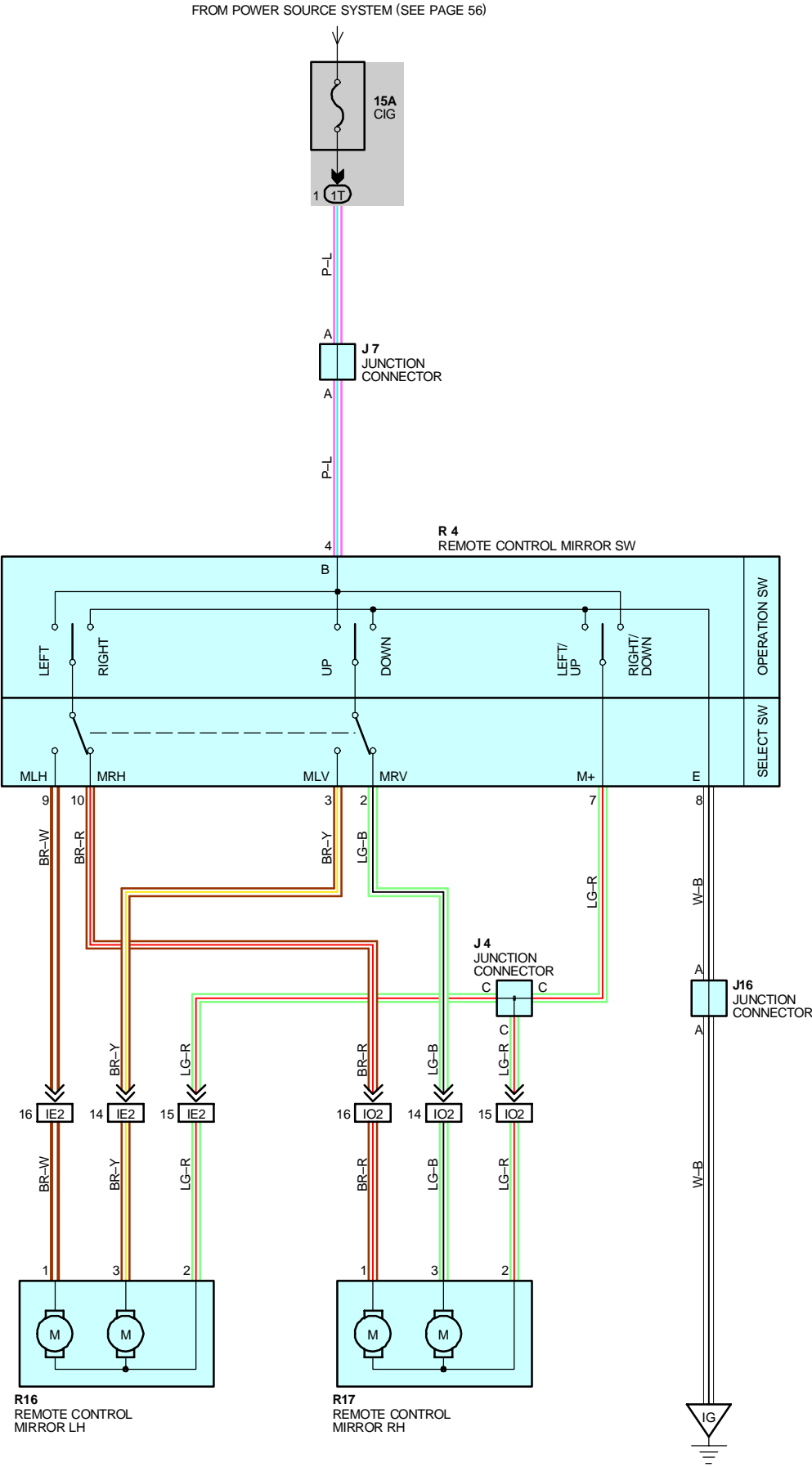
T 3 (A) ORANGE



T 4 (B) ORANGE



# REMOTE CONTROL MIRROR



## SERVICE HINTS

### R 4 REMOTE CONTROL MIRROR SW

- 4-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION  
 7-8 : CONTINUITY WITH THE OPERATION SW AT **UP** OR **LEFT** POSITION  
 4-7 ; CONTINUITY WITH THE OPERATION SW AT **DOWN** OR **RIGHT** POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 4	29	J16	29	R16	31
J 7	29	R 4	29	R17	31

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

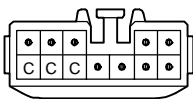
### □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE2	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO2	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

### ▽ : GROUND POINTS

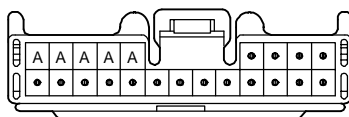
CODE	SEE PAGE	GROUND POINTS LOCATION
IG	36	LEFT KICK PANEL

J 4 BLACK



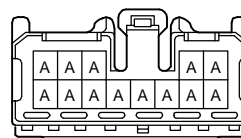
(HINT : SEE PAGE 7)

J 7



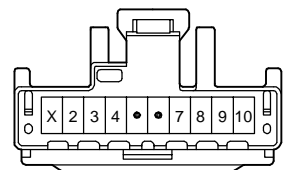
(HINT : SEE PAGE 7)

J16 ORANGE

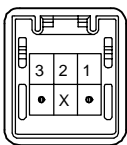


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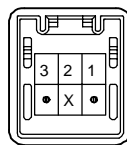
R 4 BLACK



R16

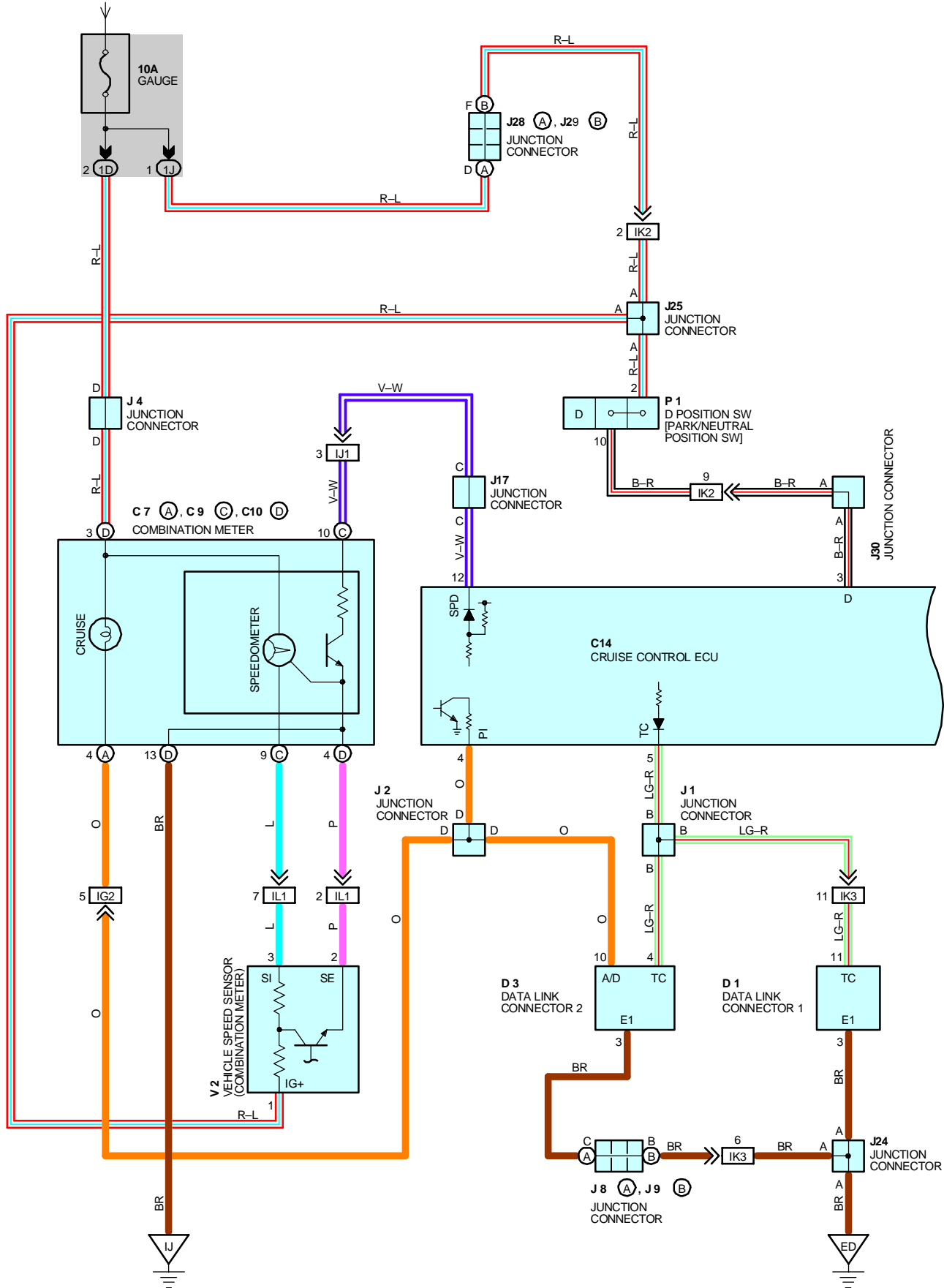


R17

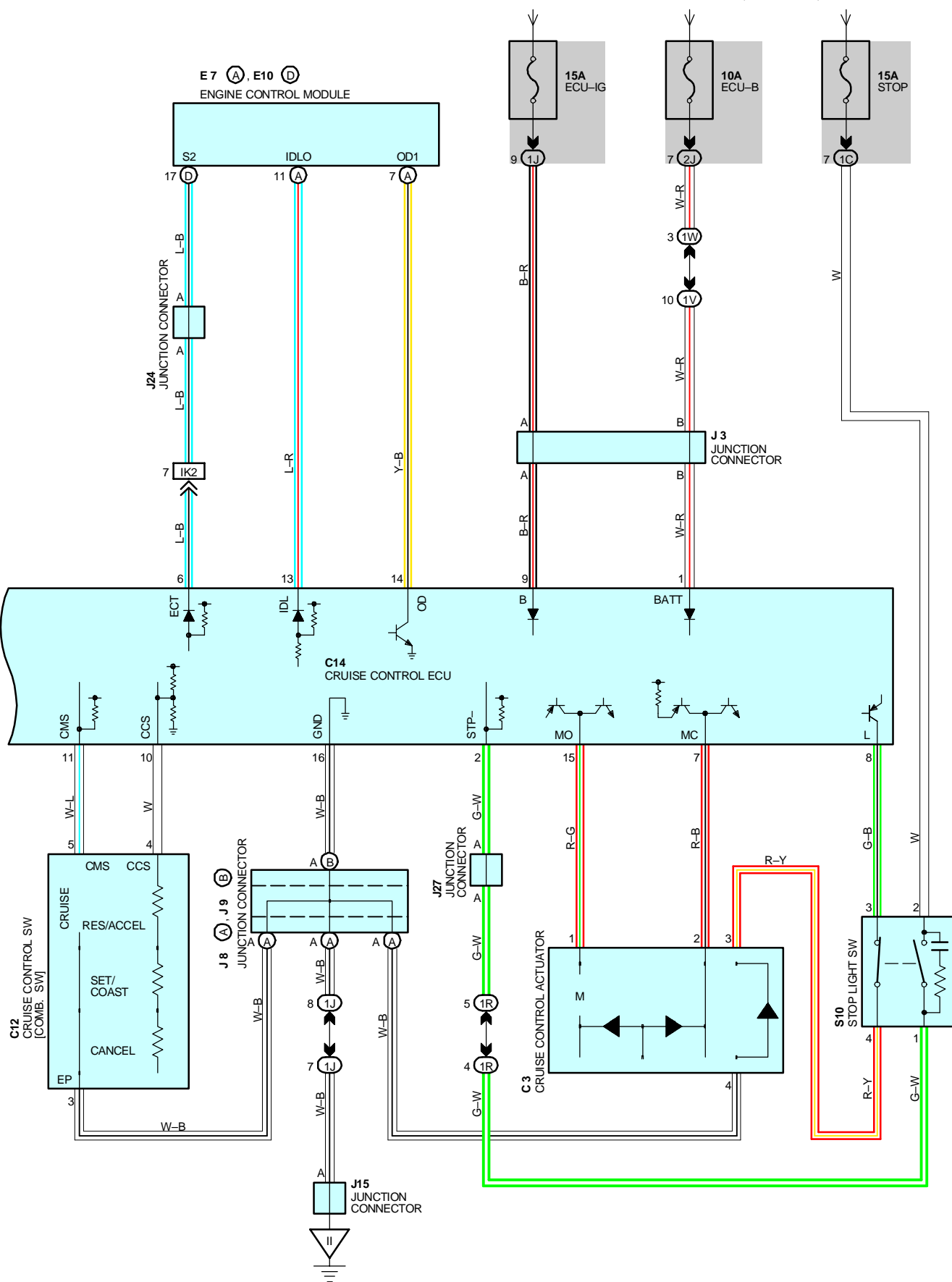


# CRUISE CONTROL

FROM POWER SOURCE SYSTEM (SEE PAGE 56)



FROM POWER SOURCE SYSTEM (SEE PAGE 56)



# CRUISE CONTROL

## SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH THE STOP FUSE TO **TERMINAL 2** OF THE STOP LIGHT SW, AND ALSO THROUGH THE **ECU-B** FUSE TO **TERMINAL 1** OF THE CRUISE CONTROL ECU.

WITH THE IGNITION SW TURNED TO ON, CURRENT FLOWS THROUGH THE **GAUGE** FUSE TO **TERMINAL ③** OF THE COMBINATION METER AND THE CURRENT THROUGH THE **ECU-IG** FUSE FLOWS TO **TERMINAL 9** OF THE CRUISE CONTROL ECU. WHEN THE IGNITION SW IS ON AND THE CRUISE CONTROL MAIN SWITCH IS TURNED ON, A SIGNAL IS INPUT FROM **TERMINAL 5** OF THE CRUISE CONTROL SW TO **TERMINAL 11** OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT FLOWS FROM THE **ECU-IG** FUSE TO **TERMINAL 9** OF THE CRUISE CONTROL ECU → **TERMINAL 16** → **GROUND**, AND THE CRUISE CONTROL IS READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT THROUGH THE **GAUGE** FUSE FLOWS TO **TERMINAL ③** OF THE CRUISE CONTROL INDICATOR LIGHT → **TERMINAL ④** → **TERMINAL 4** OF THE CRUISE CONTROL ECU → **TERMINAL 16** → **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 10** 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 12** OF THE CRUISE CONTROL ECU FROM THE SPEEDOMETER, 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 15** OF THE CRUISE CONTROL ECU → **TERMINAL 1** OF THE CRUISE CONTROL ACTUATOR **TERMINAL 2** → **TERMINAL 7** 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 7** OF THE ECU → **TERMINAL 2** OF THE CRUISE CONTROL ACTUATOR → **TERMINAL 1** → **TERMINAL 15** 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 SWITCH IS TURNED OFF IS MEMORIZED AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

### 4. ACCEL CONTROL

DURING CRUISE CONTROL DRIVING, WHILE THE ACCEL SW IS TURNED ON, THE CRUISE CONTROL ACTUATOR PULLS THE THROTTLE CABLE TO OPEN THE THROTTLE VALVE AND INCREASE THE DRIVING SPEED.

THE VEHICLE SPEED WHEN THE ACCEL SW IS TURNED OFF IS MEMORIZED AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

### 5. RESUME CONTROL

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

### 6. MANUAL CANCEL MECHANISM

IF ANY OF THE FOLLOWING OPERATIONS OCCURS DURING CRUISE CONTROL OPERATION, THE MAGNETIC CLUTCH OF THE ACTUATOR 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 3** OF THE ECU"
- \* DEPRESSING THE BRAKE PEDAL (STOP LIGHT SW ON). "SIGNAL INPUT TO **TERMINAL 2** OF THE ECU"
- \* PULL THE CANCEL SWITCH (CANCEL SW ON). "SIGNAL INPUT TO **TERMINAL 10** OF THE ECU"
- \* PUSHING THE MAIN SWITCH (MAIN SW OFF). "SIGNAL INPUT TO **TERMINAL 11** OF THE ECU"

## SYSTEM OUTLINE

### 7. AUTO CANCEL FUNCTION

A) IF ANY OF THE FOLLOWING OPERATING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, THE CURRENT FLOW TO 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, THE 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 APROX, **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

### C 3 CRUISE CONTROL ACTUATOR

3-4 : APPROX. **38 Ω**

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

5-3 : CONTINUITY WITH THE MAIN SW ON

4-3 : APPROX. **418 Ω** WITH THE CANCEL SW ON  
APPROX. **68 Ω** WITH THE RES/ACCEL SW ON  
APPROX. **198 Ω** WITH THE SET/COAST SW ON

### C14 CRUISE CONTROL ECU

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

1-GROUND : ALWAYS APPROX **12 VOLTS**

12-GROUND : **4 PLUSES** WITH 1 ROTATION OF THE ROTOR SHAFT

10-GROUND : APPROX. **418 Ω** WITH THE CANCEL SW ON IN THE CONTROL SW  
APPROX. **198 Ω** WITH THE SET/COAST SW ON IN THE CONTROL SW  
APPROX. **68 Ω** WITH THE RES/ACCEL SW ON IN THE CONTROL SW

16-GROUND : ALWAYS CONTINUITY

# CRUISE CONTROL

## ○ : PARTS LOCATION

CODE		SEE PAGE		CODE		SEE PAGE		CODE		SEE PAGE	
C 3		26		E10	D	28		J24		29	
C 7	A	28		J 1		29		J25		29	
C 9	C	28		J 2		29		J27		29	
C10	D	28		J 3		29		J28	A	29	
C12		28		J 4		29		J29	B	29	
C14		28		J 8	A	29		J30		29	
D 1		26		J 9	B	29		P 1		27	
D 3		28		J15		29		S10		29	
E 7	A	28		J17		29		V 2		27	

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		
1V		
1W		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG2	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3		
IL1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)

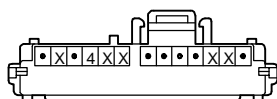
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ED	34	SURGE TANK RH
II	36	INSTRUMENT PANEL BRACE LH
IJ	36	INSTRUMENT PANEL BRACE RH

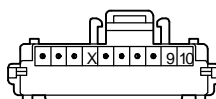
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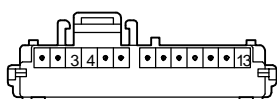
C7 ② BLUE



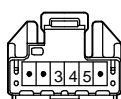
C9 ② GRAY



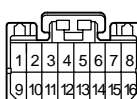
C10 ② BROWN



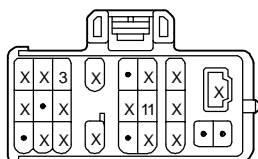
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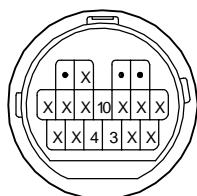
C14



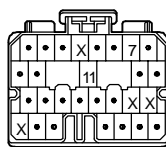
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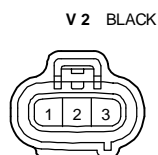
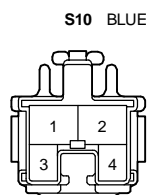
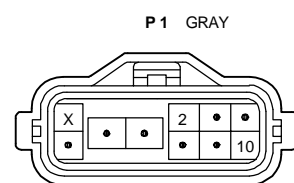
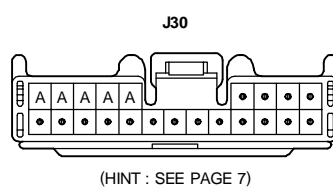
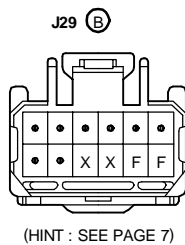
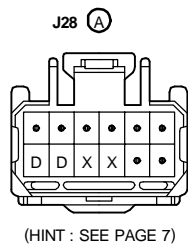
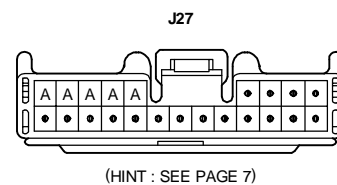
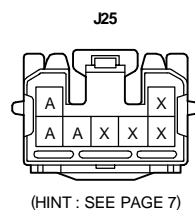
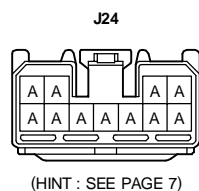
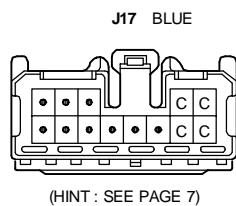
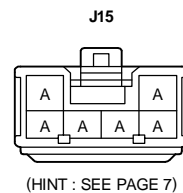
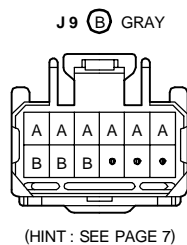
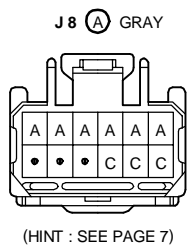
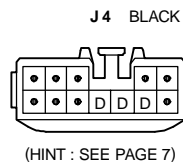
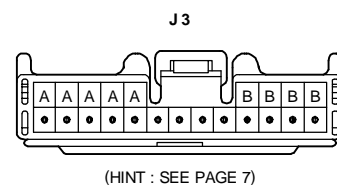
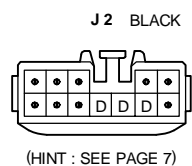
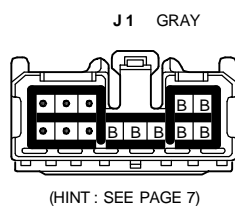
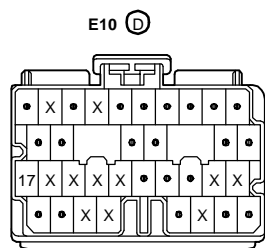


D3 DARKGRAY



E7 ②

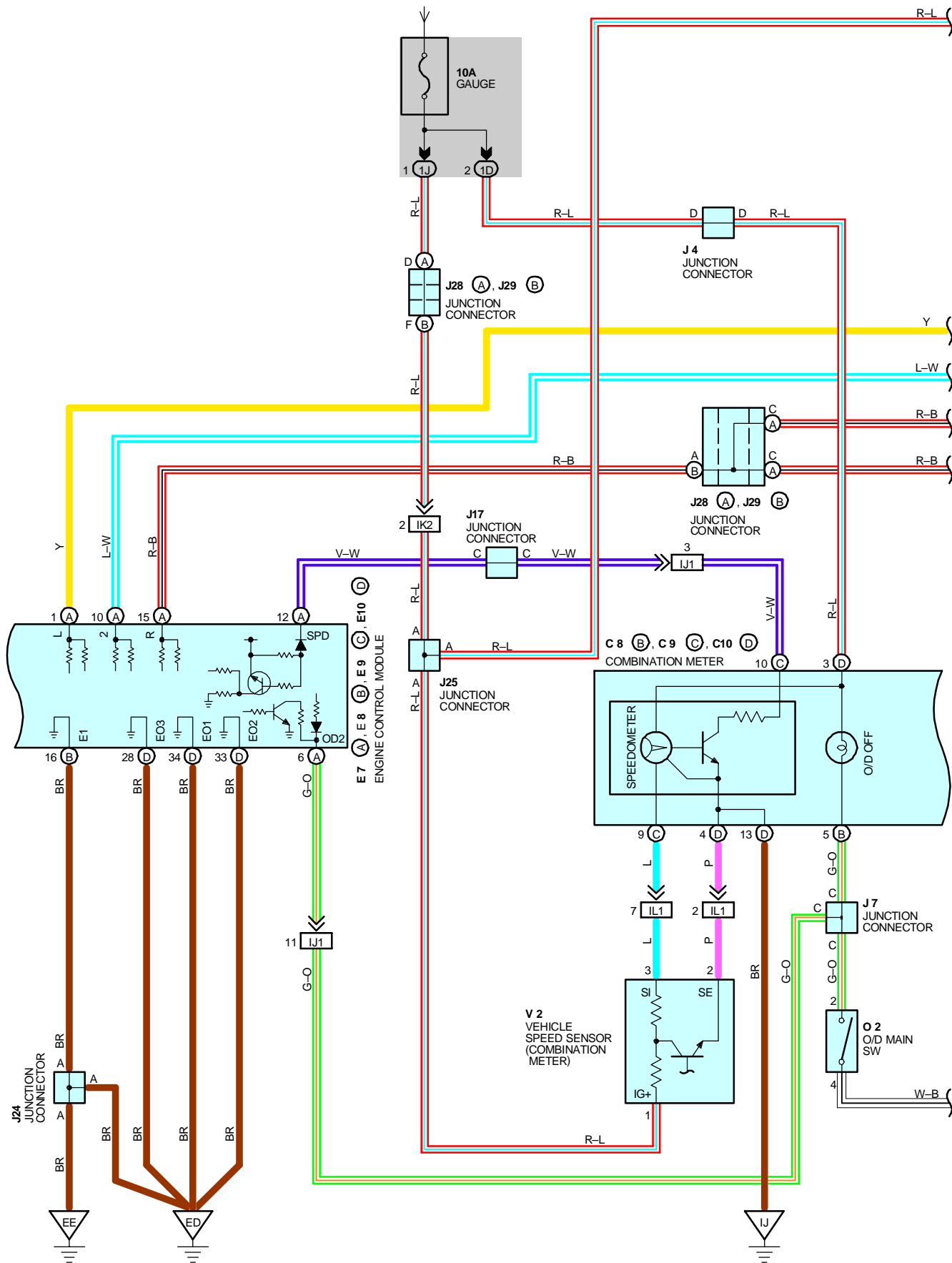




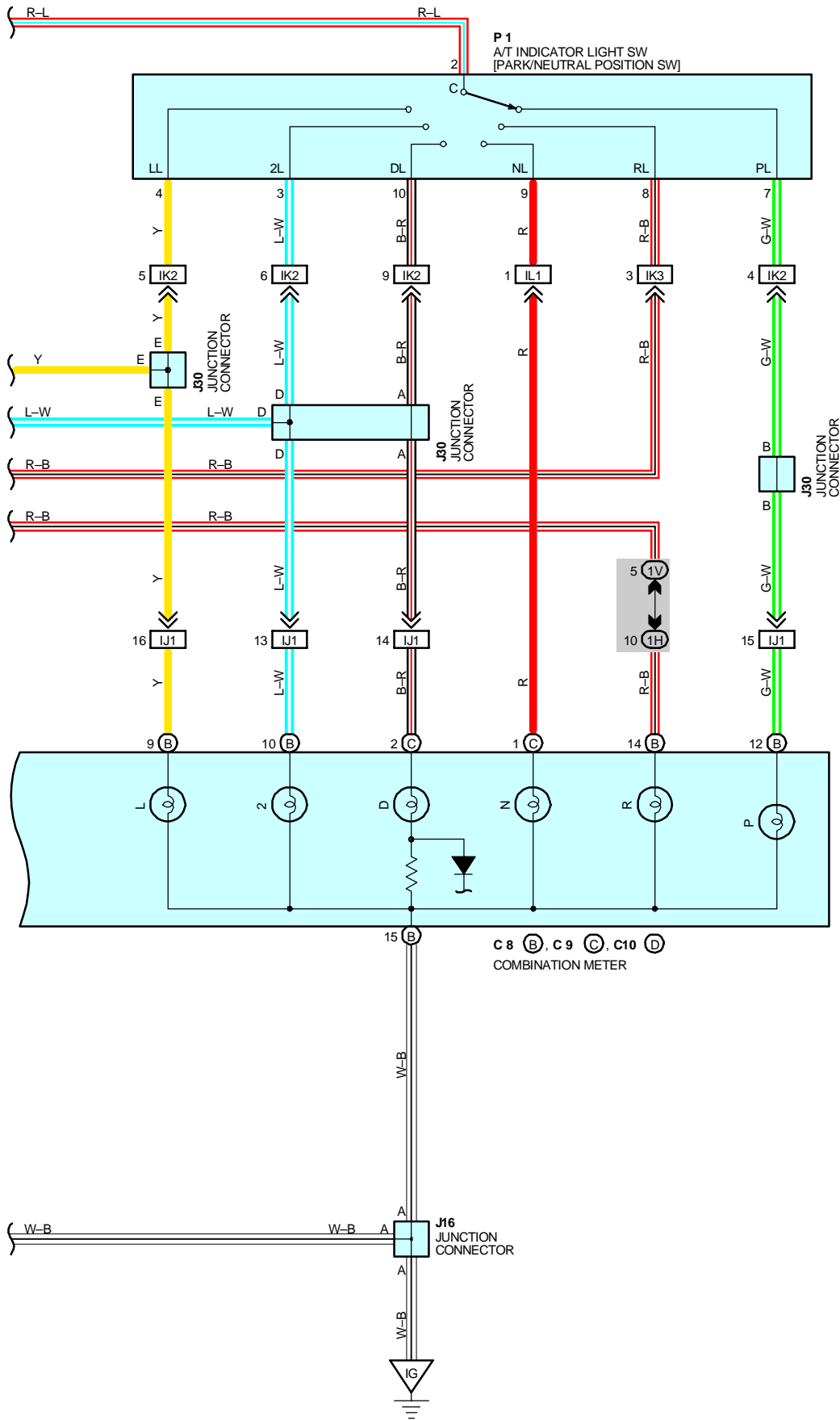


# AND A/T INDICATOR

FROM POWER SOURCE SYSTEM (SEE PAGE 56)



# ELECTRONICALLY CONTROLLED TRANSMISSION



# AND A/T INDICATOR

## SYSTEM OUTLINE

PREVIOUS AUTOMATIC TRANSAXLE HAVE SELECTED EACH GEAR SHIFT USING THE MECHANICALLY CONTROLLED THROTTLE HYDRAULIC PRESSURE, GOVERNOR HYDRAULIC PRESSURE AND LOCK-UP HYDRAULIC PRESSURE. THE ELECTRONICALLY CONTROLLED TRANSMISSION HOWEVER, ELECTRICALLY CONTROLS THE LINE PRESSURE AND LOCK-UP PRESSURE ETC., THROUGH THE SOLENOID VALVE. ENGINE CONTROL MODULE CONTROL OF THE SOLENOID VALVE BASED ON THE INPUT SIGNAL FROM EACH SENSOR MAKES SMOOTH DRIVING POSSIBLE BY SHIFT SELECTION FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS AT THAT TIME.

### 1. GEAR SHIFT OPERATION

DURING DRIVING, THE ENGINE CONTROL MODULE SELECTS THE SHIFT FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS, BASED ON INPUT SIGNALS FROM THE ENGINE COOLANT TEMP. SENSOR TO **TERMINAL THW** OF THE ENGINE CONTROL MODULE, AND ALSO THE INPUT SIGNALS TO **TERMINAL NC2+** OF THE ENGINE CONTROL MODULE FROM THE VEHICLE SPEED SENSOR 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 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUITY TO THE NO. 1 SOLENOID CAUSES THE SHIFT.

FOR THE 2ND SPEED, CURRENT FLOWS FROM **TERMINAL S** OF THE ENGINE CONTROL MODULE → **TERMINAL 3** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND FROM **TERMINAL S2** OF THE ENGINE CONTROL MODULE → **TERMINAL 6** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, AND CONTINUITY TO SOLENOID NO. 1 AND NO. 2 CAUSES THE SHIFT.

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

SHIFTING INTO 4TH SPEED (OVERDRIVE) TAKES PLACE WHEN THERE IS NO CONTINUITY TO EITHER NO. 1 OR NO. 2 SOLENOID.

### 2. LOCK-UP OPERATION

WHEN THE ENGINE CONTROL MODULE JUDGES FROM EACH SIGNAL THAT LOCK-UP OPERATION CONDITIONS HAVE BEEN MET, CURRENT FLOWS FROM **TERMINAL SL** OF THE ENGINE CONTROL MODULE → **TERMINAL 2** OF THE ELECTRONICALLY CONTROLLED TRANSMISSION SOLENOID → **GROUND**, CAUSING CONTINUITY TO THE LOCK-UP SOLENOID AND CAUSING LOCK-UP OPERATION.

### 3. STOP LIGHT SW CIRCUIT

IF THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) WHEN DRIVING IN LOCK-UP CONDITION, A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ENGINE CONTROL MODULE, THE ENGINE CONTROL MODULE OPERATES AND CONTINUITY TO THE LOCK-UP SOLENOID IS CUT.

### 4. OVERDRIVE CIRCUIT

#### \* OVERDRIVE ON

WHEN THE O/D MAIN SW IS TURNED ON (O/D OFF INDICATOR LIGHT TURNS OFF), 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.

#### \* OVERDRIVE OFF

WHEN THE O/D MAIN SW IS TURNED TO OFF (O/D OFF INDICATOR LIGHT TURNS ON), 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.

# ELECTRONICALLY CONTROLLED TRANSMISSION

## SERVICE HINTS

### E 7 Ⓐ, E 8 Ⓑ, E 9 Ⓒ, E10 Ⓓ ENGINE CONTROL MODULE

- S1, S2-E1 : 9.0-14.0 VOLTS WITH THE SOLENOID ON  
 0-1.5 VOLTS WITH SOLENOID OFF  
 L-E1 : 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND SHIFT LEVER AT L POSITION  
 2-E1 : 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND SHIFT LEVER AT 2 POSITION  
 R-E1 : 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND SHIFT LEVER AT R POSITION  
 STP-E1 : 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND BRAKE PEDAL DEPRESSED  
 THW-E2 : 0.2-1.0 VOLTS WITH THE ENGINE COOLANT TEMP. 60°C (140°F) -120°C (248°F)  
 VTA1-E2 : 0.3-0.8 VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED  
 3.2-4.9 VOLTS WITH THE IGNITION SW ON AND THROTTLE VALVE FULLY OPENED  
 VC-E2 : 4.5-5.5 VOLTS WITH THE IGNITION SW AT ON POSITION  
 OD1-E1 : 4.5-5.5 VOLTS WITH THE IGNITION SW AT ON POSITION  
 OD2-E1 : 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND O/D MAIN SW TURNED OFF  
 0-3.0 VOLTS WITH THE IGNITION SW ON AND O/D MAIN SW TURNED ON  
 +B-E1 : 9.0-14.0 VOLTS WITH THE IGNITION SW AT ON POSITION

### 0 2 O/D MAIN SW

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

## ⊙ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 8	B 28	E10	D 28	J28	A 29
C 9	C 28	J 4	29	J29	B 29
C10	D 28	J 7	29	J30	29
C14	28	J16	29	O 2	29
E 3	26	J17	29	P 1	27
E 4	26	J24	29	S10	29
E 7	A 28	J25	29	T 2	27
E 8	B 28	J26	29	V 2	27
E 9	C 28	J27	29	V 3	27

## ⊙ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J		
1R		
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2C		
2F		
2J	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3		
IL1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)

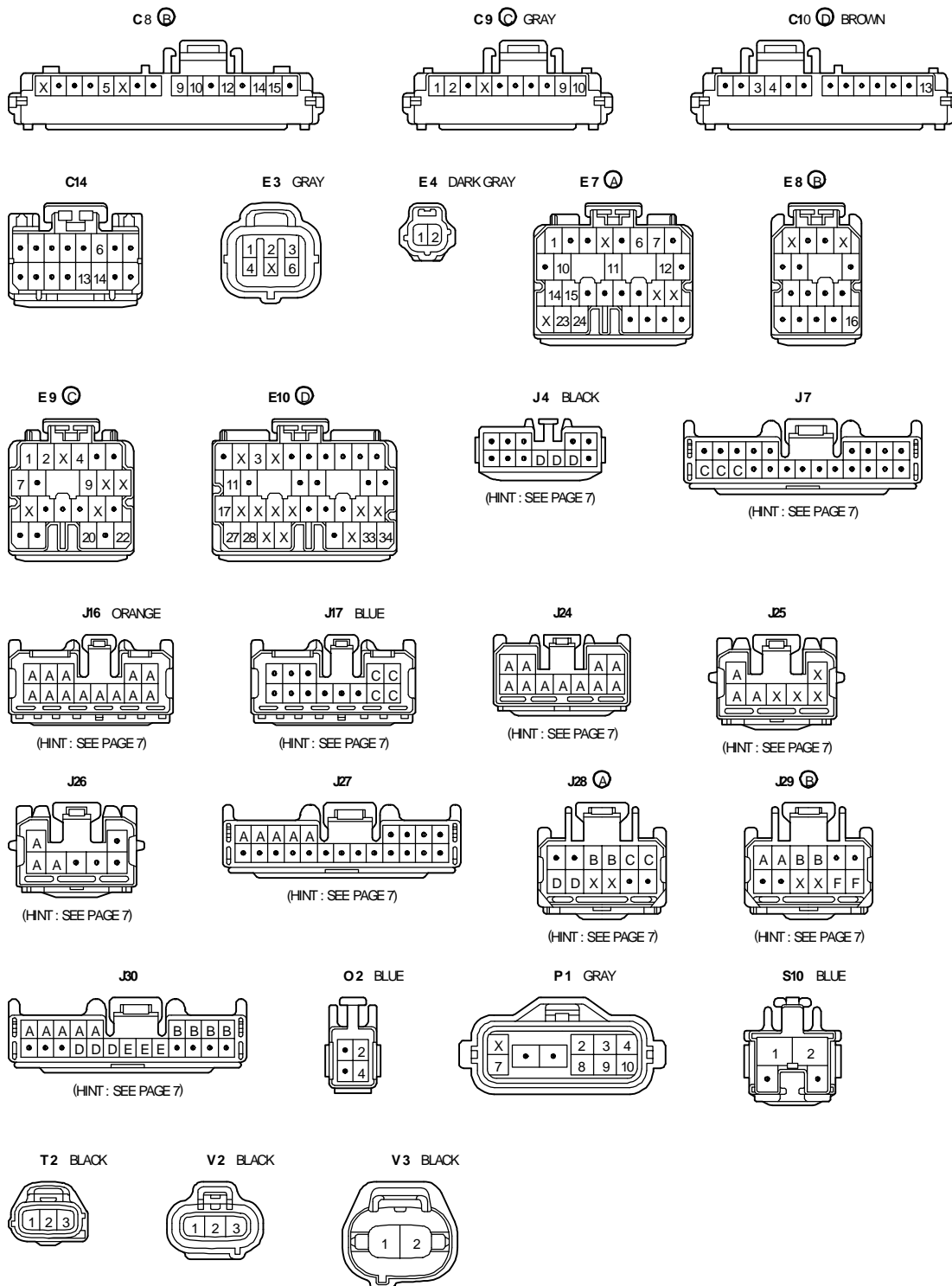
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT
ED	34	SURGE TANK RH
EE	34	REAR SIDE OF SURGE TANK
IG	36	LEFT KICK PANEL
IJ	36	INSTRUMENT PANEL BRACE RH

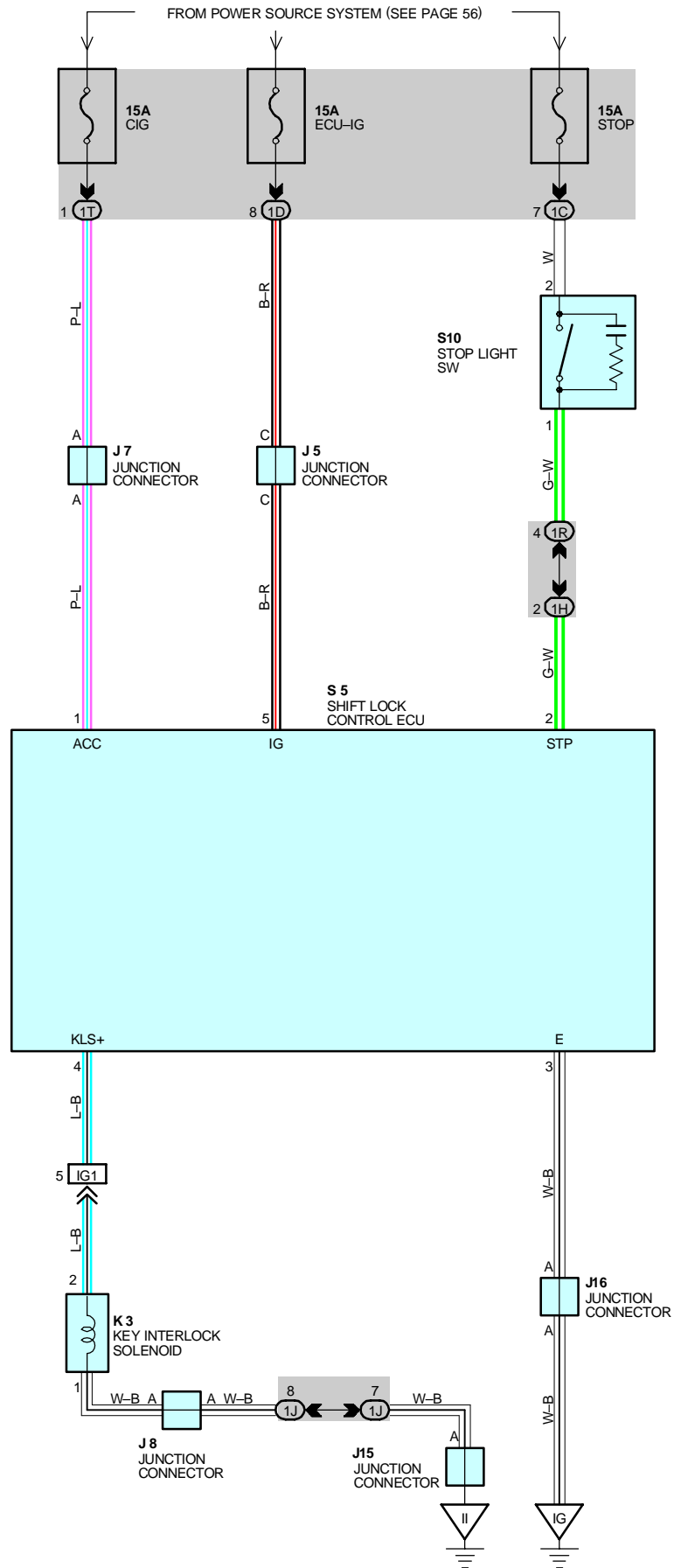
## ⊙ : SPLICE POINTS

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

# AND A/T INDICATOR



# SHIFT LOCK



## SERVICE HINTS

### S 5 SHIFT LOCK CONTROL ECU

- 1-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ACC** OR **ON** POSITION
- 5-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION
- 3-GROUND : ALWAYS CONTINUITY
- 2-GROUND : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED
- 4-GROUND : **0** VOLTS WITH THE IGNITION SW AT **ACC** POSITION AND THE SHIFT LEVER POSITION IN **P** POSITION  
**6-12** VOLTS WITH THE IGNITION SW AT **ACC** POSITION AND THE SHIFT LEVER POSITION IN EXCEPT **P** POSITION

### ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 5	29	J15	29	S 5	29
J 7	29	J16	29	S10	29
J 8	29	K 3	29		

### ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

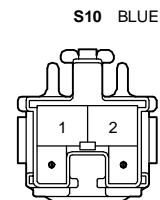
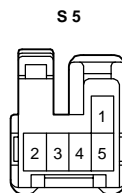
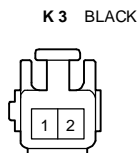
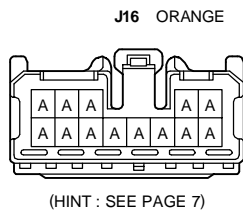
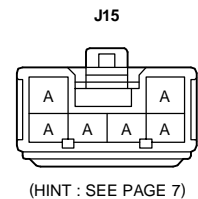
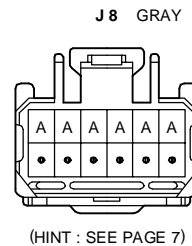
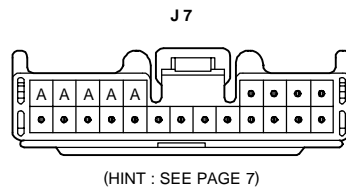
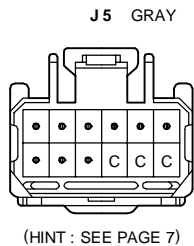
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

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

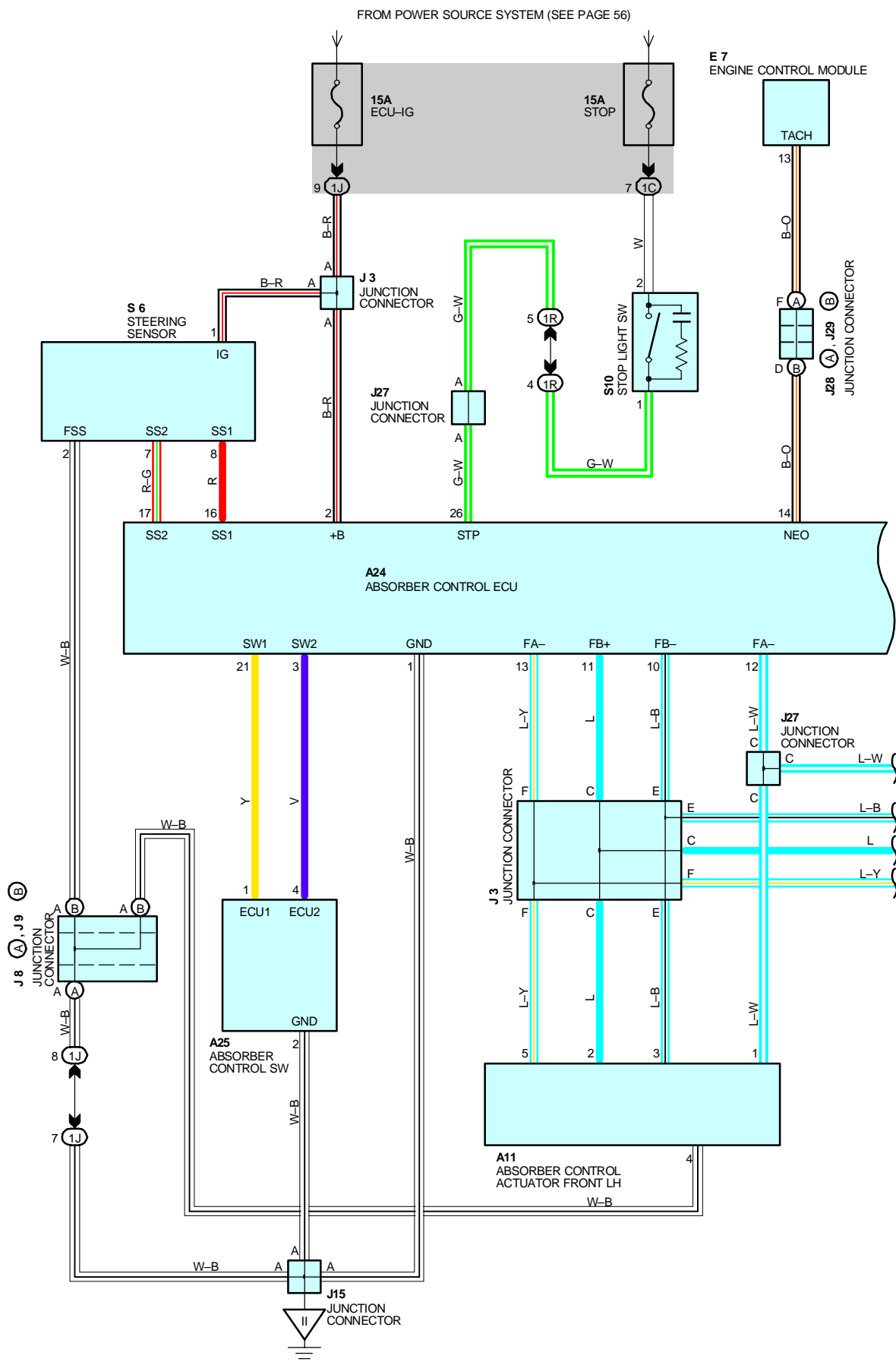
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)

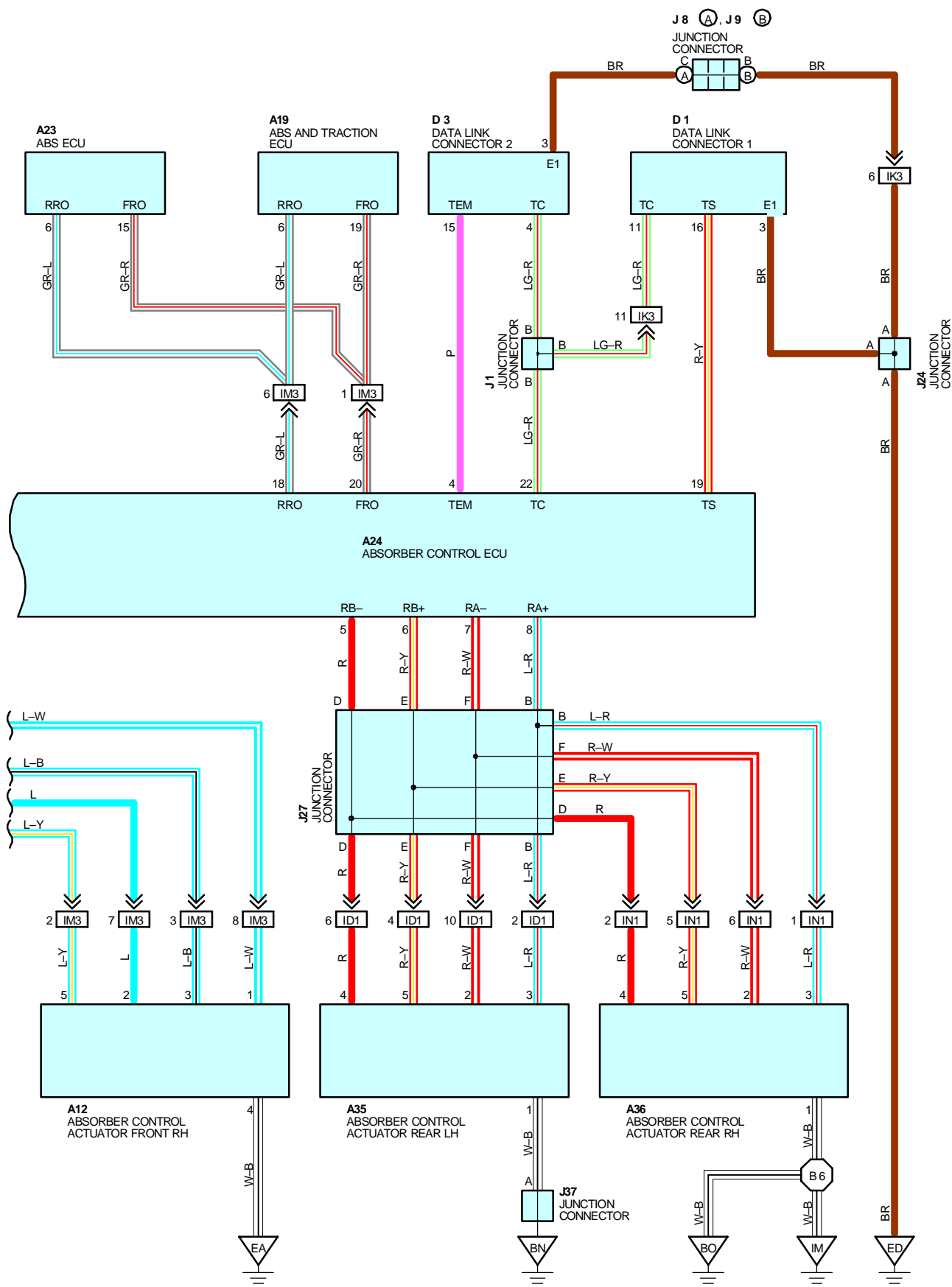
### ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH



# ELECTRIC MODULATED SUSPENSION





# ELECTRONIC MODULATED SUSPENSION

## SYSTEM OUTLINE

ELECTRIC MODULATED SUSPENSION SYSTEM IS THE DAMPING FORCE CONTROL SYSTEM USING SEVERAL SIGNALS WHICH RESTRAINS THE VEHICLE MOVEMENT (SUCH AS ROLLING, DRIVING, AND SQUAD) BY A DRIVER'S OPERATION TOGETHER WITH RESTRAINING AND ABSORBING THE VEHICLE MOVEMENT CHANGE AND VIBRATION AGAINST THE UNEVENNESS OF THE ROAD.

### (1) STEERING SENSOR SIGNAL

TO INPUT THE ROTATION ANGLE OF THE STEERING WHEEL INTO THE **TERMINALS SS1** AND **SS2** OF THE ABSORBER CONTROL ECU.

### (2) SPEED SENSOR SIGNAL

TO DETECT THE VEHICLE SPEED AT ABS SPEED SENSOR FRONT LH, RH, REAR LH, RH AND INPUT TO THE **TERMINALS FRO** AND **RRO** OF THE ABSORBER CONTROL ECU FROM ABS ECU OR ABS AND TRACTION ECU.

### (3) STOP LIGHT SW SIGNAL

TO DETECT THE SIGNAL OF THE BRAKE IN OPERATION AND INPUT IT INTO THE **TERMINAL STP** OF THE ABSORBER CONTROL ECU.

### (4) ENGINE ROTATION SIGNAL

TO DETECT THE ENGINE SPEED AND INPUT IT INTO THE **TERMINAL NEO** OF THE ABSORBER CONTROL ECU.

### (5) ABSORBER CONTROL SW SIGNAL

TO DETECT THE SWITCH CONDITION AND INPUT IT INTO THE **TERMINALS SW1** AND **SW2** OF THE ABSORBER CONTROL ECU.

## SERVICE HINTS

### A24 ABSORBER CONTROL ECU

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

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

1-GROUND : ALWAYS CONTINUITY

### S 6 STEERING SENSOR

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

2-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	See Page	Code	See Page
A11	26	D 1	26	J24	29
A12	26	D 3	28	J27	29
A19	28	E27	28	J28	A 29
A23	28	J 1	29	J29	B 29
A24	28	J 3	29	J37	30
A25	28	J 8	A 29	S 6	29
A35	30	J 9	B 29	S10	29
A36	30	J15	29		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

Code	See Page	Junction Block and Wire Harness (Connector Location)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1R		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

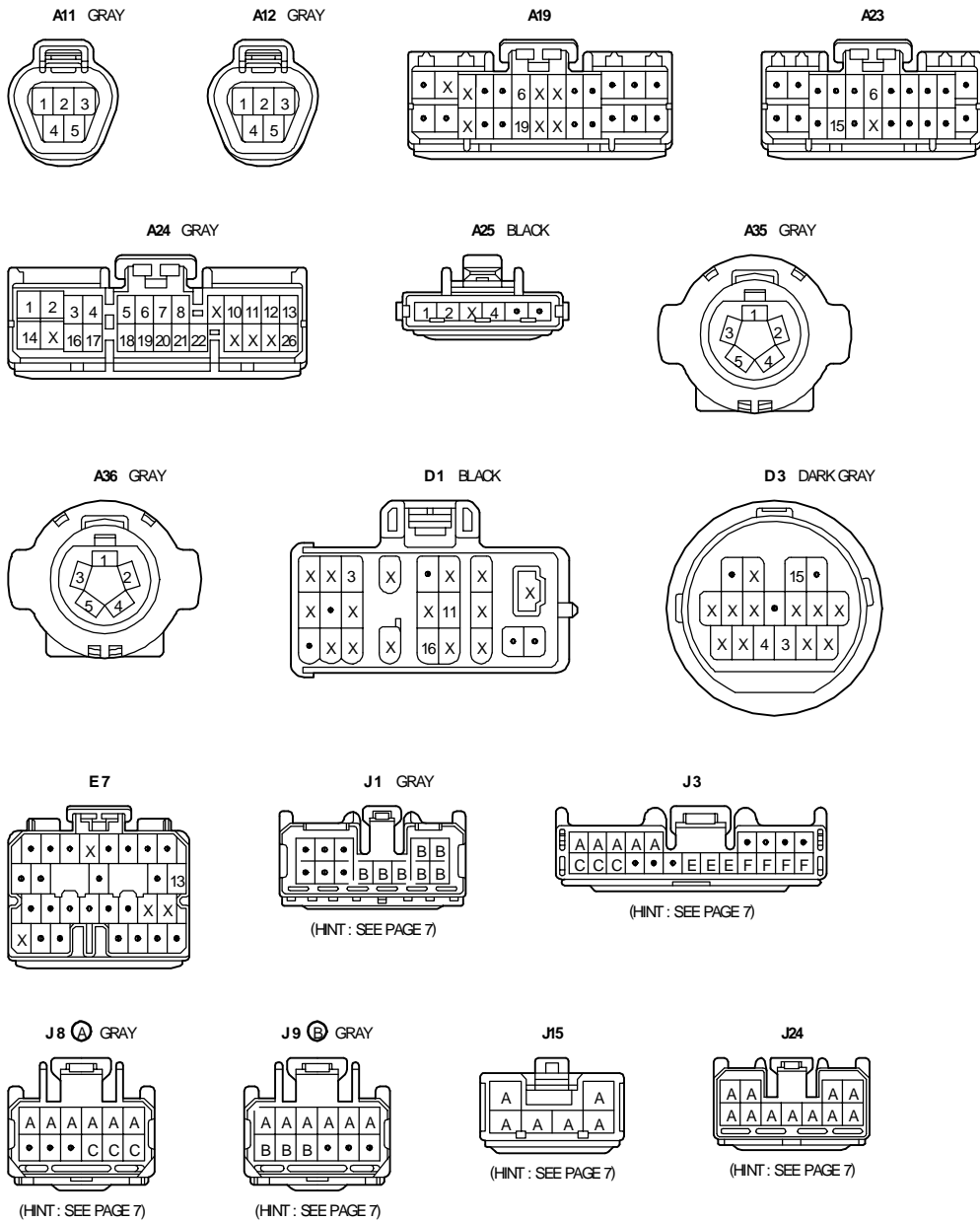
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IK3	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IM3	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IN1	38	FLOOR NO. 2 WIRE AND COWL WIRE (RIGHT KICK PANEL)

## ▽ : GROUND POINTS

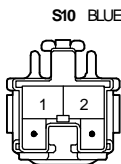
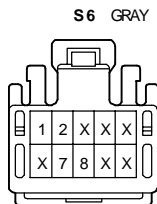
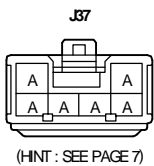
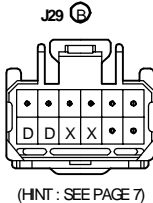
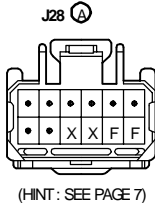
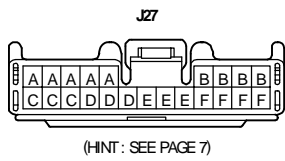
Code	See Page	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
ED	34	SURGE TANK RH
II	36	INSTRUMENT PANEL BRACE LH
IM	36	RIGHT KICK PANEL
BN	40	UNDER THE LEFT CENTER PILLAR
BO	40	UNDER THE RIGHT CENTER PILLAR

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 6	40	FLOOR NO. 2 WIRE			



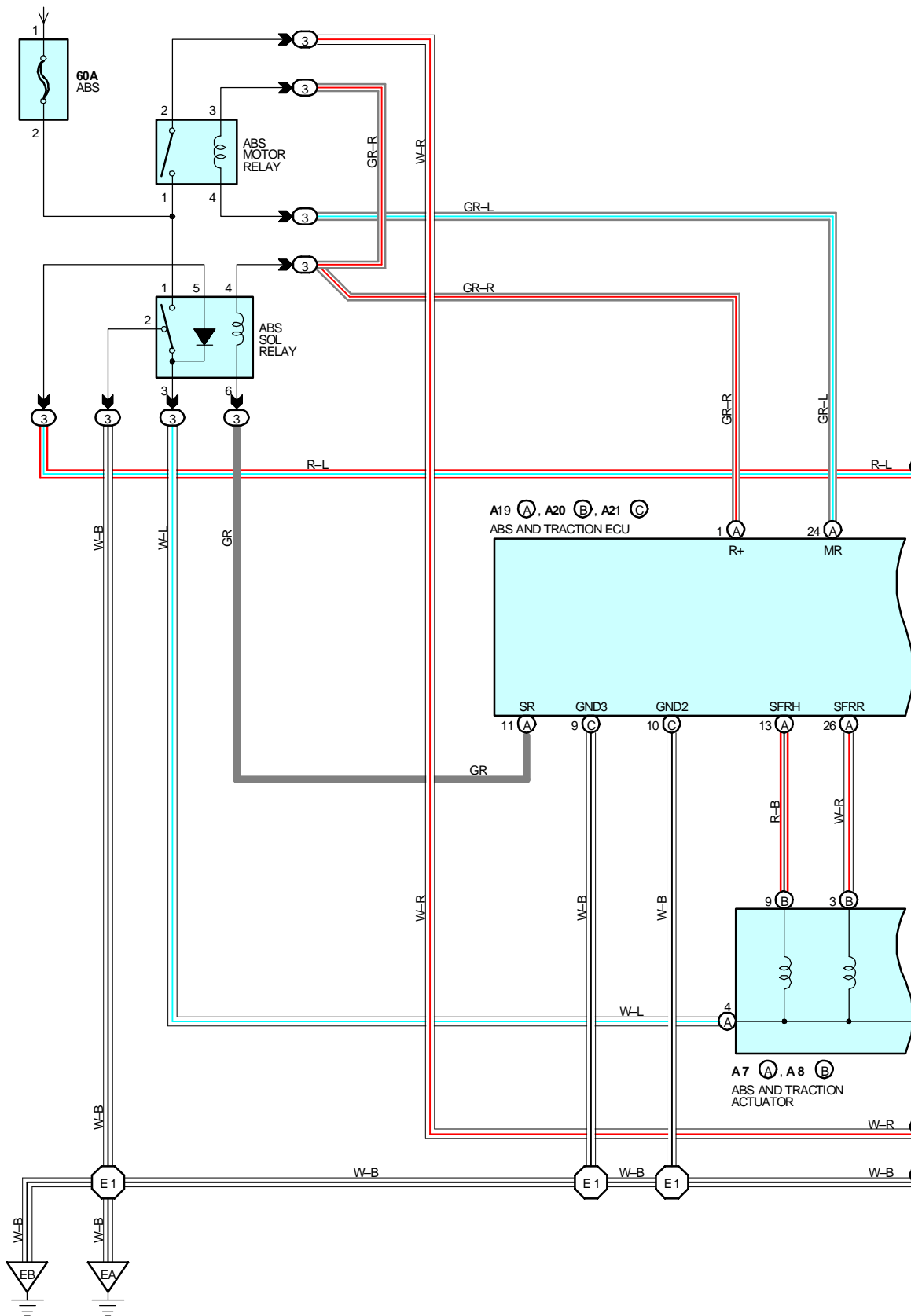
# ELECTRIC MODULATED SUSPENSION

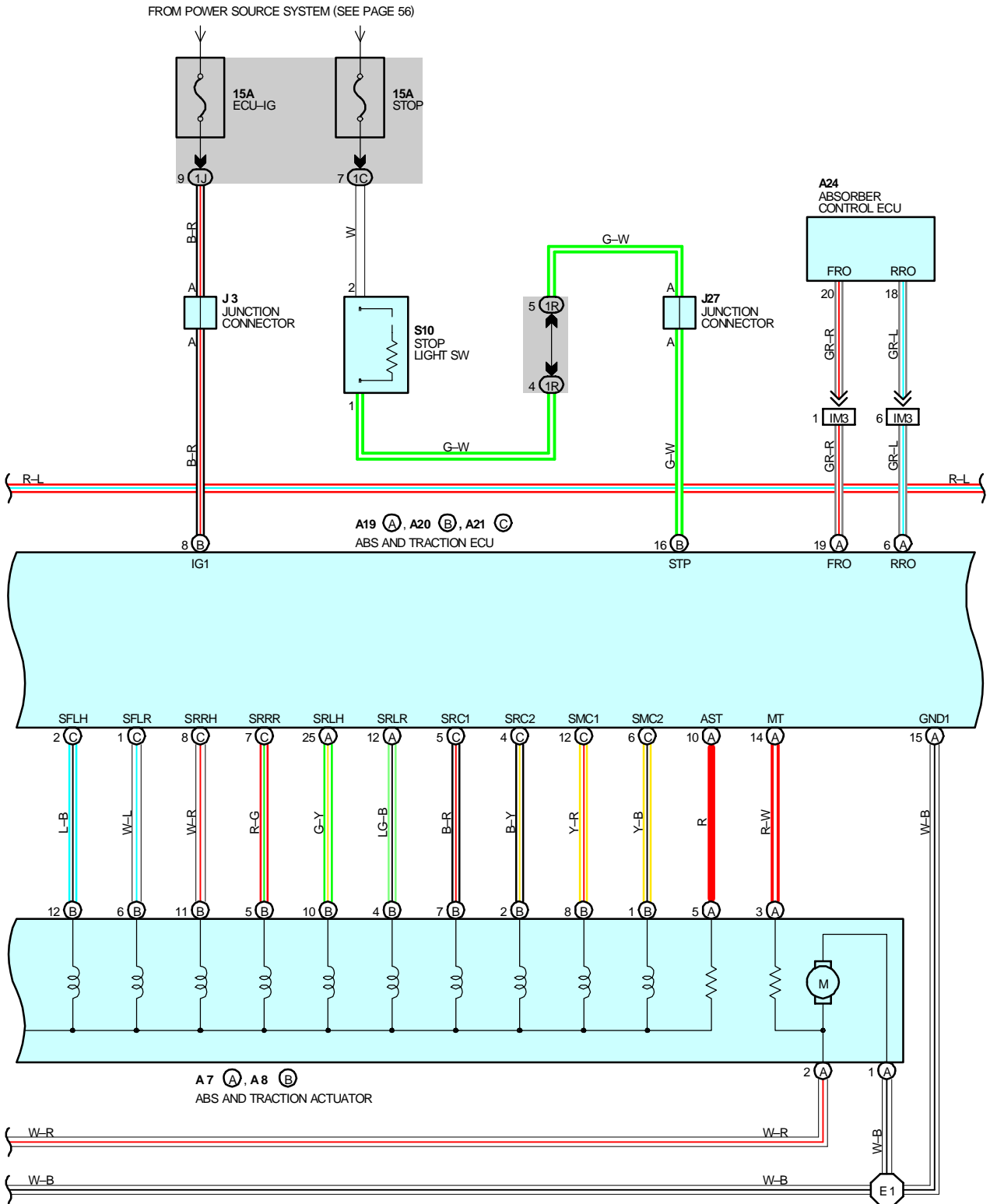




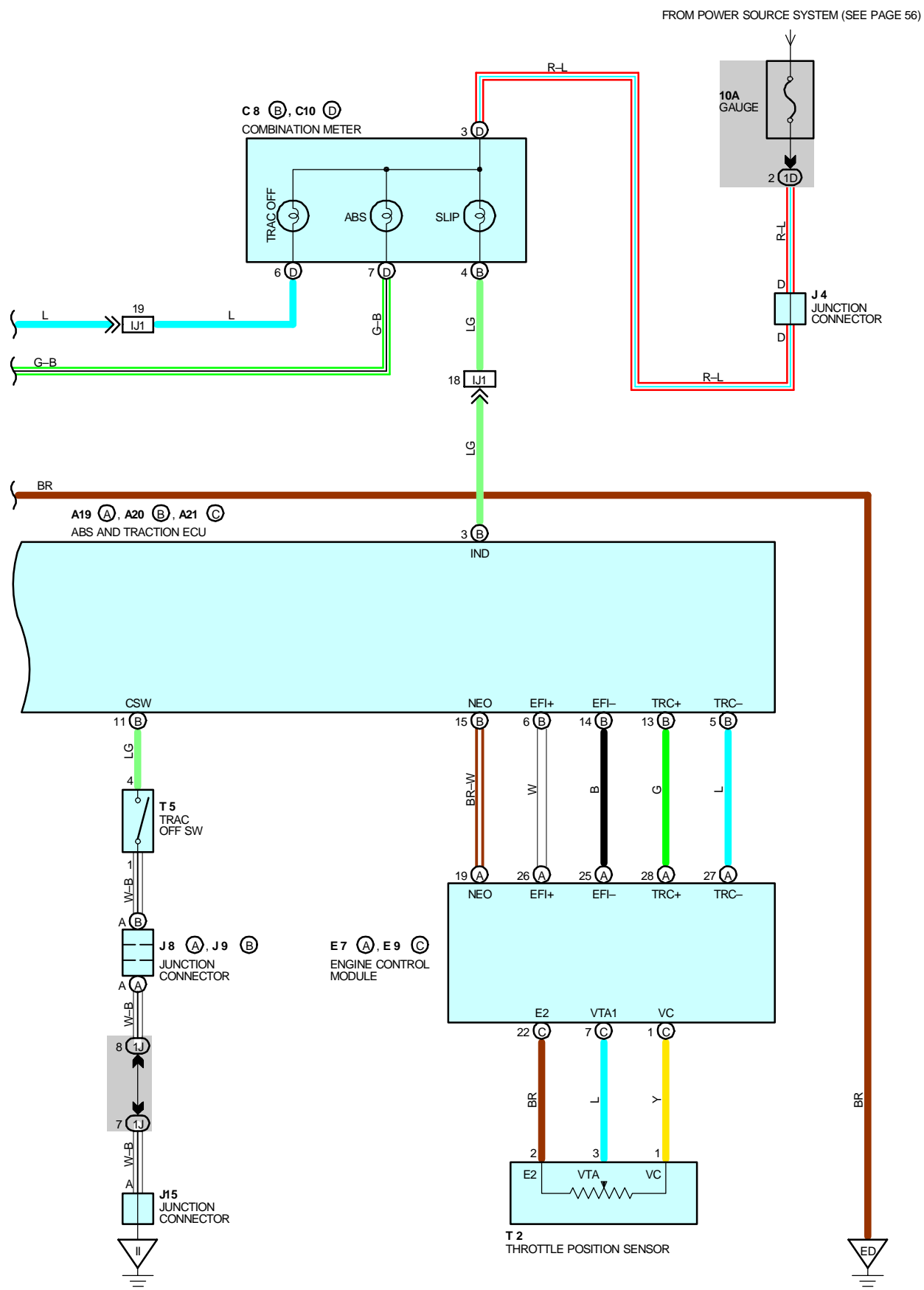
# ABS AND TRACTION CONTROL

FROM POWER SOURCE SYSTEM (SEE PAGE 56)









# ABS AND TRACTION CONTROL

## SYSTEM OUTLINE

(ABS)

ABS IS A BRAKE SYSTEM DESIGNED FOR THE PURPOSE TO IMPROVE THE OPERATING ABILITY SECURING THE STABILITY OF THE VEHICLE BY PREVENTING THE LOCKING-UP OF THE VEHICLE CONTROLLING THE WHEEL CYLINDER PRESSURE OF ALL THE FOUR WHEELS AT THE TIME OF SUDDEN 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 AND TRACTION ECU.
- (2) STOP LIGHT SW SIGNAL  
A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ABS AND TRACTION ECU WHEN BRAKE PEDAL IS DEPRESSED.

### 2. SYSTEM OPERATION

WHEN THE WHEELS ARE TO BE LOCKED-UP, THE SOLENOID INSIDE THE ACTUATOR WILL BE CONTROLLED BY THE SIGNAL FROM THE ABS AND TRACTION ECU AND THE BRAKE FLUID IN THE WHEEL CYLINDER WILL FLOW THROUGH THE RESERVOIR AND REDUCE THE HYDRAULIC PRESSURE.

WHILE THE ABS IS IN OPERATION, AS THE ABS AND TRACTION ECU IS ALWAYS OUTPUTTING THE OPERATION SIGNAL TO THE PUMP INSIDE THE ACTUATOR, BRAKE FLUID STORED INSIDE THE RESERVOIR WILL BE SUCTIONED UP BY THE PUMP INSIDE THE ACTUATOR AND RETURNED TO THE MASTER CYLINDER.

WHEN THE HYDRAULIC PRESSURE OF THE WHEEL CYLINDER IS DECOMPRESSED OR INCREASED UNTIL THE NECESSARY HYDRAULIC PRESSURE, THE SOLENOID INSIDE THE ACTUATOR IS CONTROLLED BY THE CONTROL SIGNAL FROM THE ABS AND TRACTION ECU AND AS A RESULT, HYDRAULIC PRESSURE OF THE WHEEL CYLINDER WILL BE CLOSED AT BOTH ROUTES OF THE MASTER CYLINDER AND RESERVOIR SIDES AND THE HYDRAULIC PRESSURE OF THE WHEEL CYLINDER WILL BECOME TO BE IN THE HOLDING CONDITION.

IF THE INCREASE OF HYDRAULIC PRESSURE VOLUME OF THE WHEEL CYLINDER BECOMES NECESSARY, WITH THE CONTROL SIGNAL FROM THE ABS AND TRACTION ECU, THE SOLENOID INSIDE THE ACTUATOR WILL BE CONTROLLED AND BECOME THE SAME CONDITION AS USUAL AND THE BRAKE FLUID OF THE MASTER CYLINDER WILL BE SENT TO THE WHEEL CYLINDER AND WILL INCREASE THE HYDRAULIC PRESSURE OF THE WHEEL CYLINDER. AT THIS TIME, IN THE CASE THAT THE BRAKE FLUID STAYS LEFT IN THE RESERVOIR, IT WILL BE SUCTIONED UP BY THE PUMP INSIDE THE ACTUATOR AND WILL BE SENT TO THE WHEEL CYLINDER.

ALSO, INCREASING SPEED OF THE HYDRAULIC PRESSURE IS CONTROLLED BY OUTPUTTING THE INCREASING AND THE SAID HOLDING ONE AFTER ANOTHER.

(TRACTION CONTROL)

TRACTION CONTROL SYSTEM IS DESIGNED TO PERFORM THE ENGINE OUTPUT CONTROL BY THE FUEL CUT AND HYDRAULIC PRESSURE CONTROL OF DRIVING WHEEL BRAKE AND CONTROL THE SPINNING OF THE DRIVING WHEELS. BY DOING THIS, IT IMPROVES STARTING ACCELERATION AND OPERATING ABILITY OF THE VEHICLE SECURING THE DRIVING ABILITY IN ACCORDANCE WITH THE ROAD SURFACE CONDITION.

### 3. TRACTION CONTROL OPERATION

ESTIMATING THE VEHICLE SPEED FROM THE REAR WHEEL SPEED, COMPARING IT WITH THE FRONT, DRIVING WHEEL SPEED AND JUDGING THE GRIP CONDITION OF THE DRIVING WHEELS. FROM THE ESTIMATED VEHICLE SPEED, TARGET SPEED OF THE DRIVING SPEED WILL BE SET. WHEN THE FRONT, DRIVING WHEEL SPEED EXCEEDS THE CONTROL STARTING SPEED, IT JUDGES THAT THE TIRE SLIP IS OCCURRED AND PERFORMS THE FUEL CUT CYLINDER NUMBER CONTROL AND BRAKE CONTROL AND THEN ADJUST TO MAKE THE FRONT WHEEL SPEED BECOME THE TRACTION CONTROL TARGET SPEED. CONTROLLING OF THE TRACTION CONTROL WILL BE COMPLETED WHEN THE VEHICLE MOVE ONTO THE ROAD WHERE THE DRIVING WHEELS WILL NOT HAVE A TIRE SLIP OR WHEN THE DRIVER DECELERATE.

## SERVICE HINTS

### A19 ④, A20 ④, A21 ④ ABS AND TRACTION ECU

IG1 – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION
R+ – SR	: 9–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND ABS WARNING LIGHT OFF
R+ – MR	: 0–1 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION
WA – GND	: 0–2 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND ABS WARNING LIGHT ON
	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND ABS WARNING LIGHT OFF
STP – GND	: 0–1.5 VOLTS WITH STOP LIGHT SW OFF
	: 8–14 VOLTS WITH STOP LIGHT SW ON
D/G – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND ABS WARNING LIGHT ON
MT – GND	: 0–1.5 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION
NEO – GND	: PULES GENERATION WITH IDLING
IND – GND	: 0–2 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND SLIP INDICATOR LIGHT ON
	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND SLIP INDICATOR LIGHT OFF
WT – GND	: 0–2 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND TRAC OFF INDICATOR LIGHT ON
	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND TRAC OFF INDICATOR LIGHT OFF
CSW – GND	: 0–2 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND TRAC OFF SW PUSHED
	: 8–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND TRAC OFF SW RELEASED
TC, TS – GND	: 8–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION
TRC+, TRC– – GND	: PULES GENERATION WITH TRACTION CONTROL ACTIVE
EFI+, ERI– – GND	: PULES GENERATION WITH IGNITION SW AT <b>ON</b> POSITION
SRLH, SRLH, AST – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND WARNING LIGHT OFF
SFLH, SRRR, SRRH – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND WARNING LIGHT OFF
SFRR, SFRH, SFLR – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND WARNING LIGHT OFF
SRC1, SRC2, SMC1, SMC2 – GND	: 10–14 VOLTS WITH IGNITION SW AT <b>ON</b> POSITION AND TRAC OFF INDICATOR LIGHT OFF

### S10 STOP LIGHT SW

2–1 : CLOSED WITH BRAKE PEDAL DEPRESSED

### A 9, A10, A34, A35 ABS SPEED SENSOR FRONT LH, RH, REAR LH, RH

1–2 : 1.5–1.7 K $\Omega$  (20°C 68°F)

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 7	A	26	C 8	B	28
A 8	B	26	C10	D	28
A 9		26	D 1		26
A10		26	D 3		28
A19	A	28	E 7	A	28
A20	B	28	E 9	C	28
A21	C	28	J 1		29
A24		28	J 3		29
A33		30	J 4		29
A34		30	J 8	A	29
			J 9	B	29
			J15		29
			J24		29
			J27		29
			J28	A	29
			J29	B	29
			J30		29
			S10		29
			T 2		27
			T 5		29

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
3	23	ENGINE ROOM NO.3 R/B (RADIATOR UPPER SUPPORT RH)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		

# ABS AND TRACTION CONTROL

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

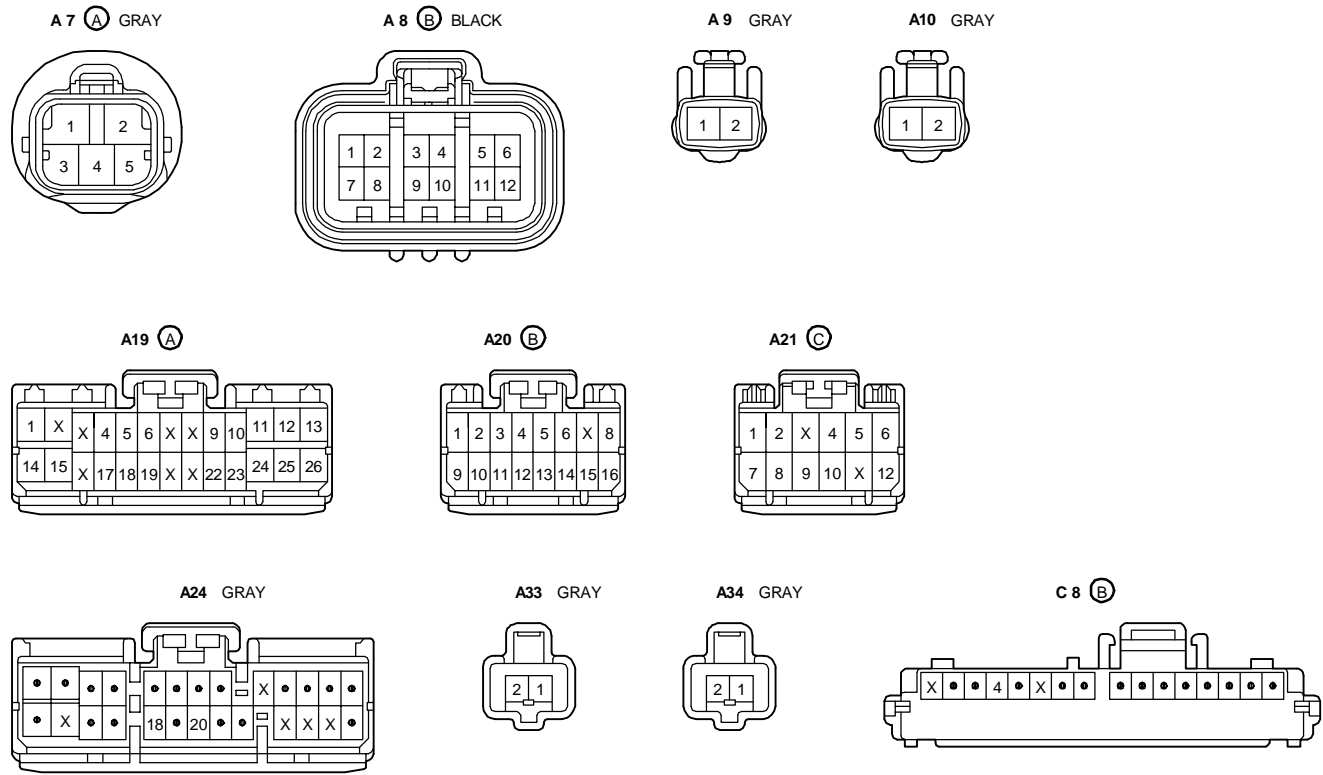
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND COWL (LEFT KICK PANEL)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IH1	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IM2		
IM3		
IN1	38	FLOOR NO. 2 WIRE AND COWL WIRE (RIGHT KICK PANEL)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EB		
ED	34	SURGE TANK RH
II	36	INSTRUMENT PANEL BRACE LH

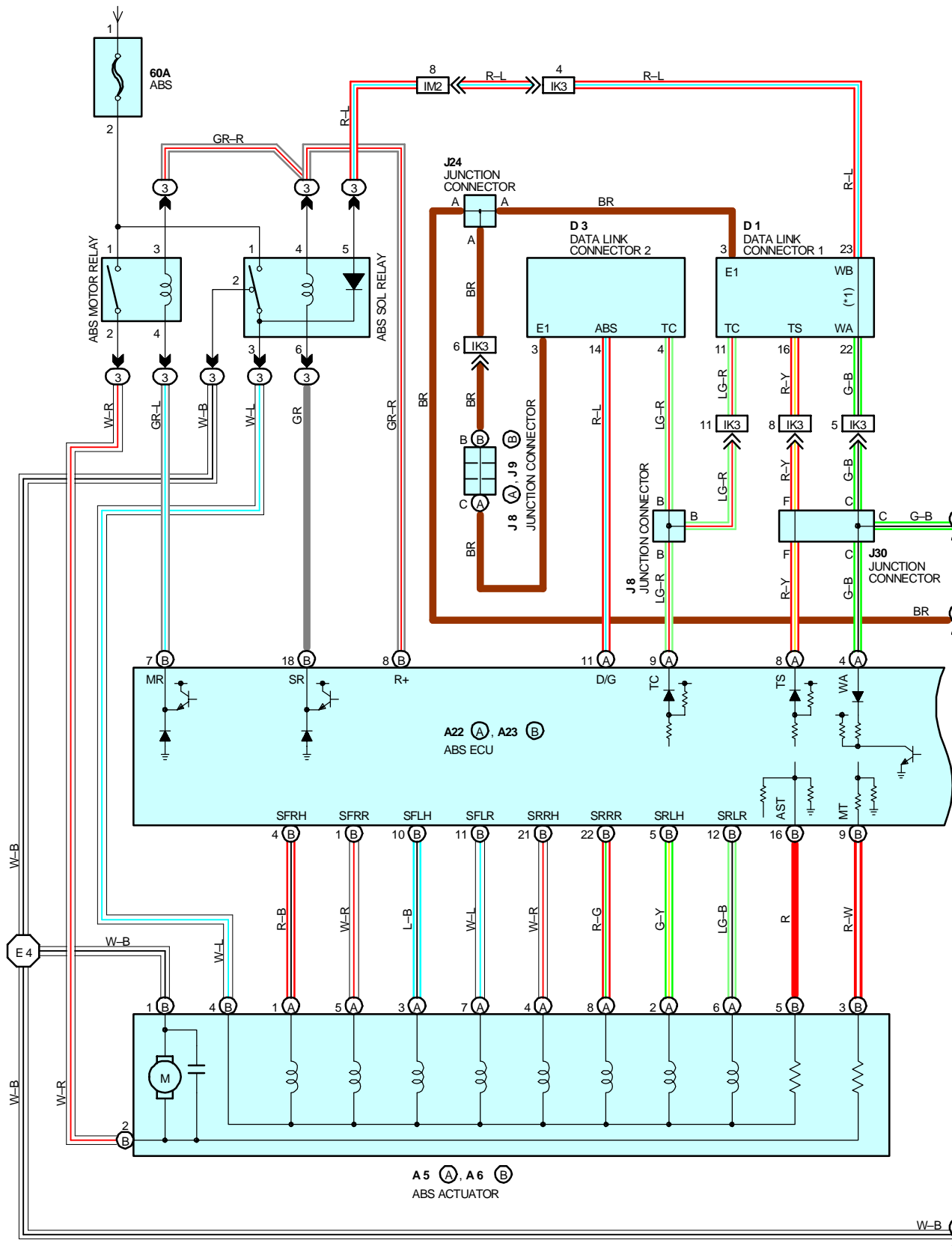
 : SPLICE POINTS

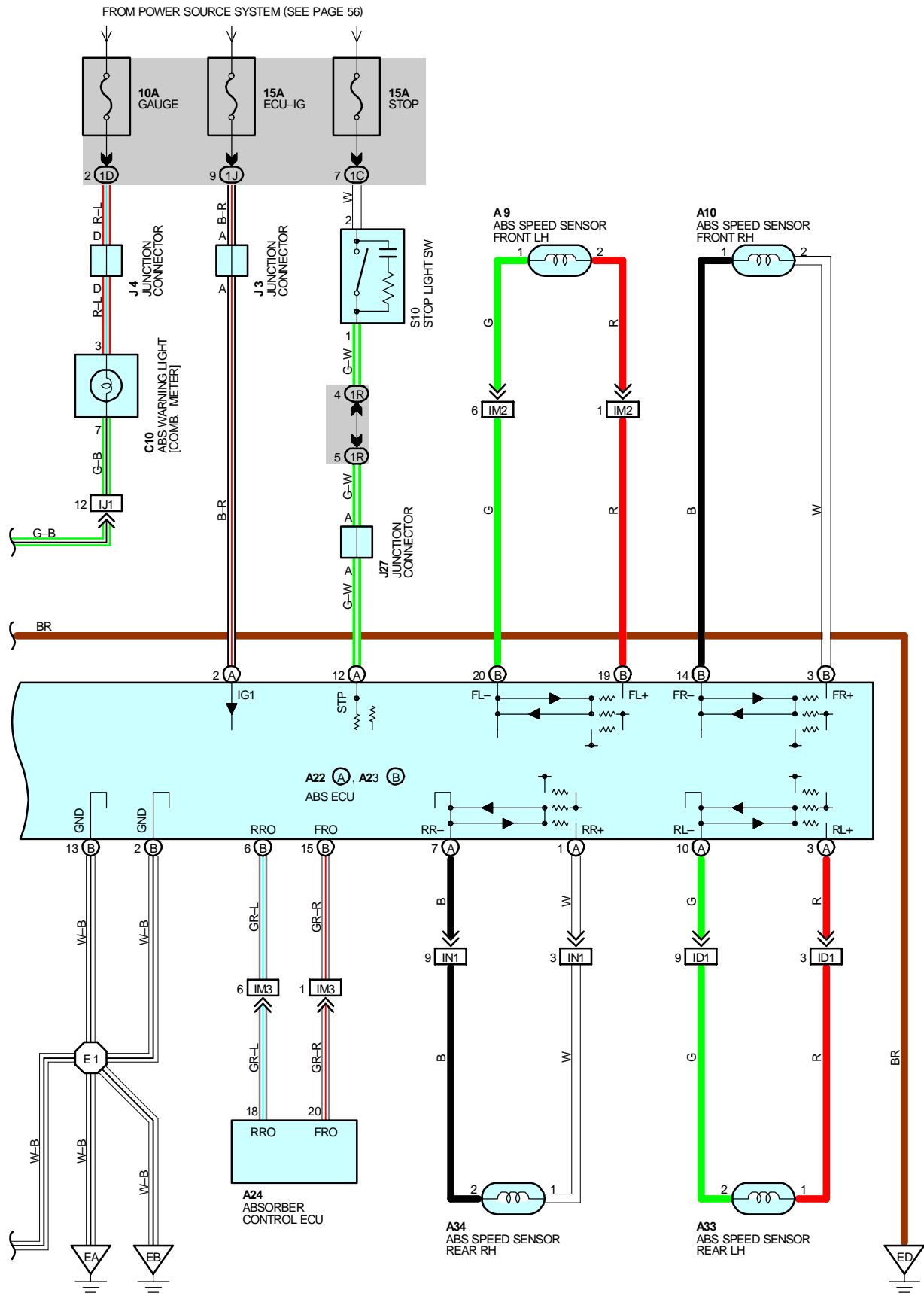
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	34	ENGINE ROOM MAIN WIRE			





FROM POWER SOURCE SYSTEM (SEE PAGE 56)





## 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.

### 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. PRESSURE REDUCTION, HOLDING AND INCREASE ARE REPEATED TO MAINTAIN VEHICLE STABILITY AND TO IMPROVE STEERABILITY DURING SUDDEN BRAKING.

## SERVICE HINTS

### A22 ①, A23 ② ABS ECU

(CONNECT THE ECU CONNECTOR)

- ② 2-GROUND : ALWAYS CONTINUITY
- ② 13-GROUND : ALWAYS CONTINUITY
- ① 2-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION
- ① 12-GROUND : APPROX. 12 VOLTS WITH THE BRAKE PEDAL DEPRESSED

### A 6 ③ ABS ACTUATOR

1-GROUND : ALWAYS CONTINUITY

### S10 STOP LIGHT SW

2-1 : CLOSED WITH THE BRAKE PEDAL DEPRESSED

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 5	A 26	A33	30	J 8	A 29
A 6	B 26	A34	30	J 9	B 29
A 9	26	C10	28	J24	29
A10	26	D 1	26	J27	29
A22	A 28	D 3	28	J30	29
A23	B 28	J 3	29	S10	29
A24	28	J 4	29		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
3	23	ENGINE ROOM NO. 3 R/B (RADIATOR UPPER SUPPORT RH)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

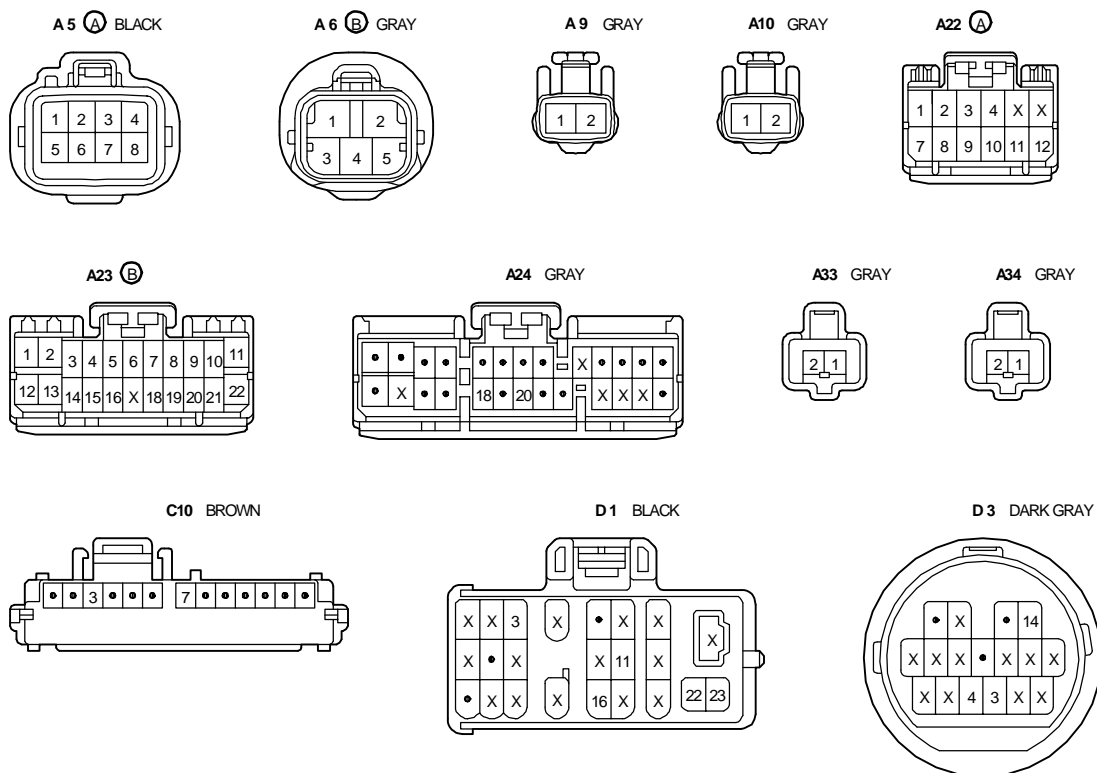
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IM2	38	RIGHT RADIATOR SIDE SUPPORT
IM3		ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IN1	38	FLOOR NO. 2 WIRE AND COWL WIRE (RIGHT KICK PANEL)

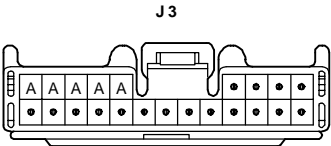
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EB		
ED	34	SURGE TANK RH

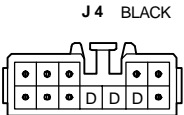
 : SPLICE POINTS

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

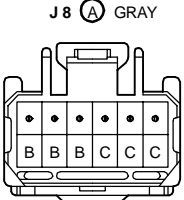




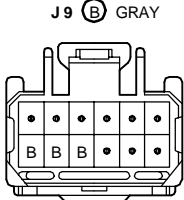
(HINT : SEE PAGE 7)



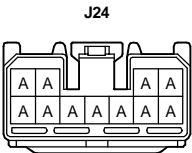
(HINT : SEE PAGE 7)



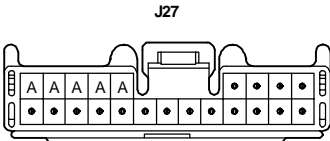
(HINT : SEE PAGE 7)



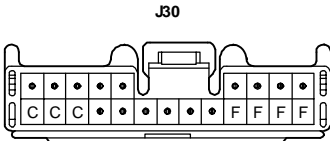
(HINT : SEE PAGE 7)



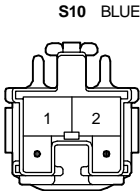
(HINT : SEE PAGE 7)



(HINT : SEE PAGE 7)



(HINT : SEE PAGE 7)



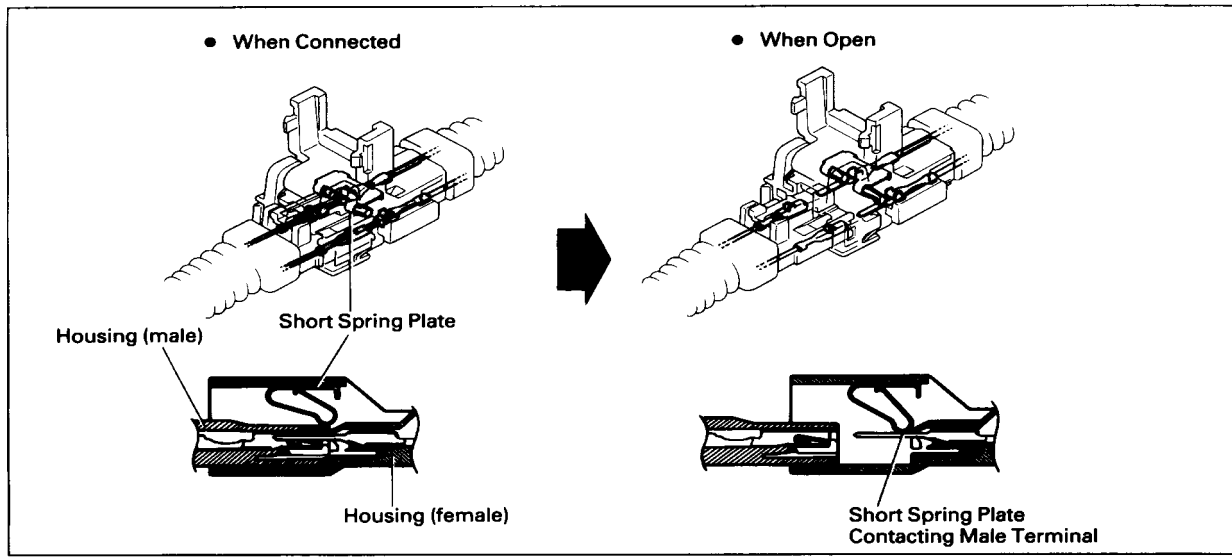
**NOTICE:** When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual for the applicable model year.

- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started after 90 seconds from when the ignition switch is turned to the “LOCK” position and the negative (–) terminal cable is disconnected from the battery.**  
**(The SRS is equipped with a back-up power source so that if work is started within 90 seconds of disconnecting the negative (–) terminal cable of the battery, the SRS may be deployed.)**  
When the negative (–) terminal cable is disconnected from the battery, the memory of the clock and audio system will be canceled. So before starting work, make a record of the contents memorized by the audio memory system. When work is finished, reset the audio systems 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.
- Even in cases of a minor collision where the SRS does not deploy, the steering wheel pad, front passenger airbag assembly, and airbag sensor assembly should be inspected.
- Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.
- Never disassemble and repair the steering wheel pad, front passenger airbag assembly, or airbag sensor assembly in order to reuse it.
- If the steering wheel pad, front passenger airbag assembly or airbag sensor assembly has been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace them with new ones.
- Do not expose the steering wheel pad, front passenger airbag assembly, or airbag sensor assembly directly to hot air or flames.
- Use a volt/ohmmeter with a high impedance (10 k $\Omega$ /V minimum) for troubleshooting the system's electrical circuits.
- Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- After work on the SRS is completed, check the SRS warning light.
- If the vehicle is equipped with a mobile communication system, refer to the precaution in the IN section of the Repair Manual.

The SRS has connectors which possess the functions described below:

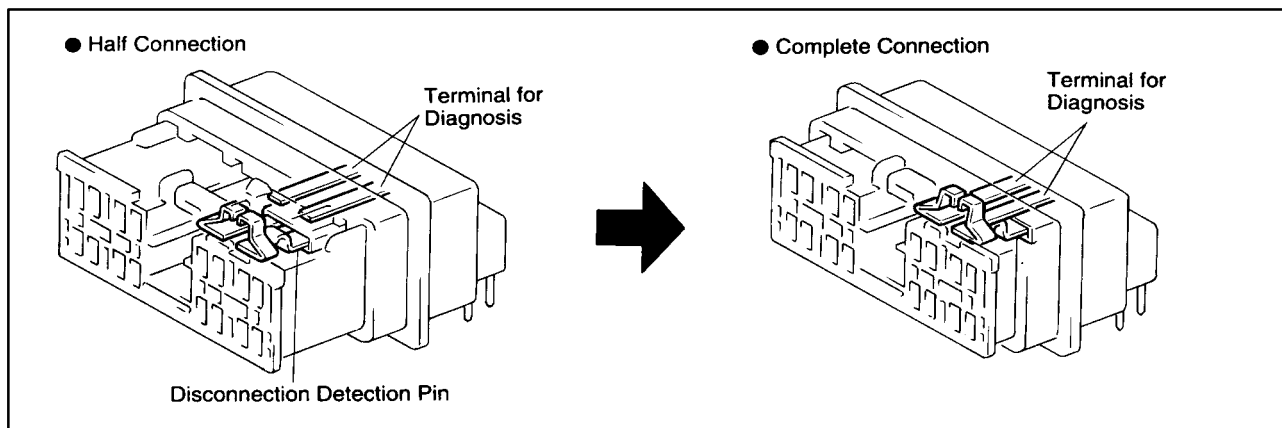
## 1. SRS ACTIVATION PREVENTION MECHANISM

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.



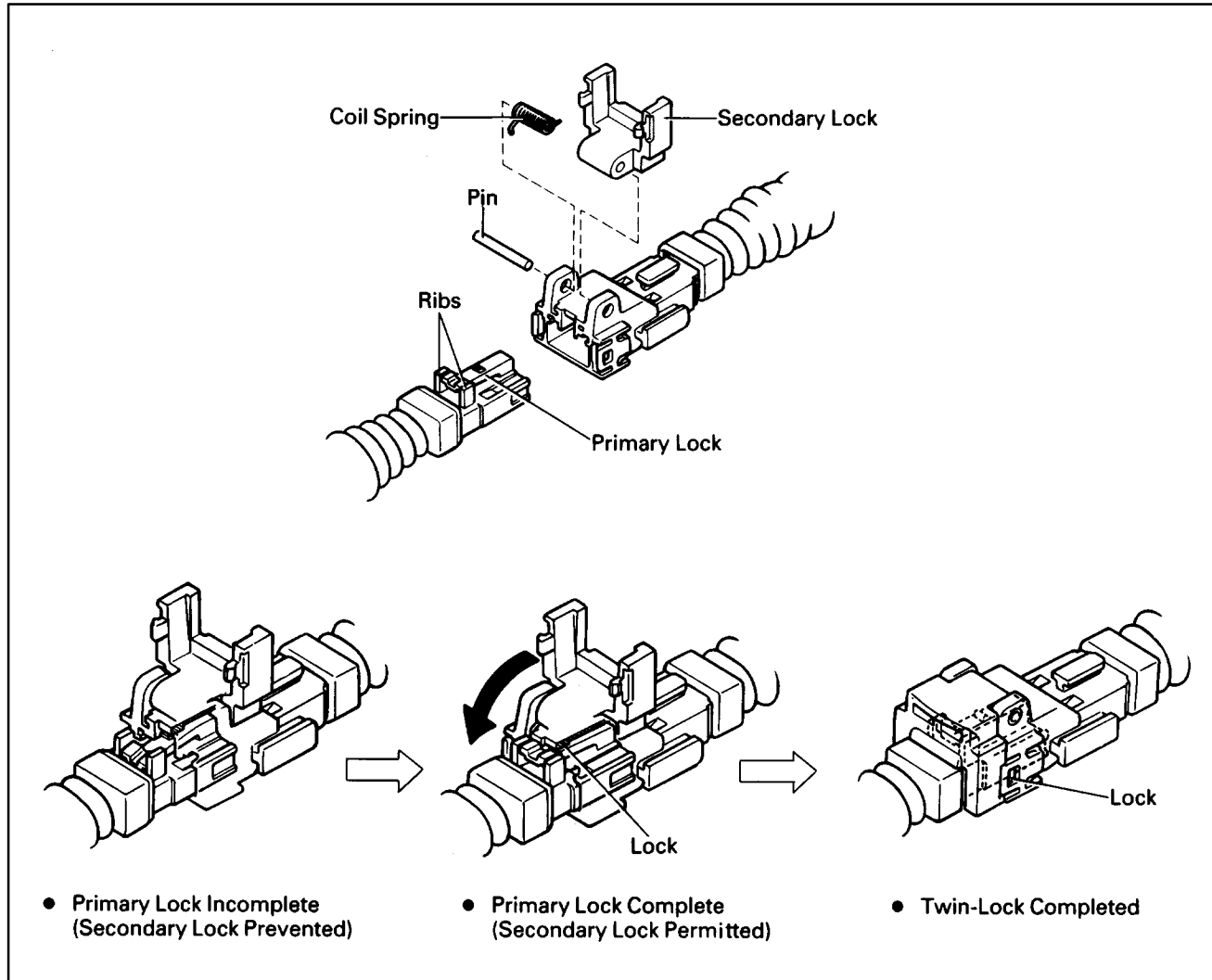
## 2. ELECTRICAL CONNECTION CHECK MECHANISM

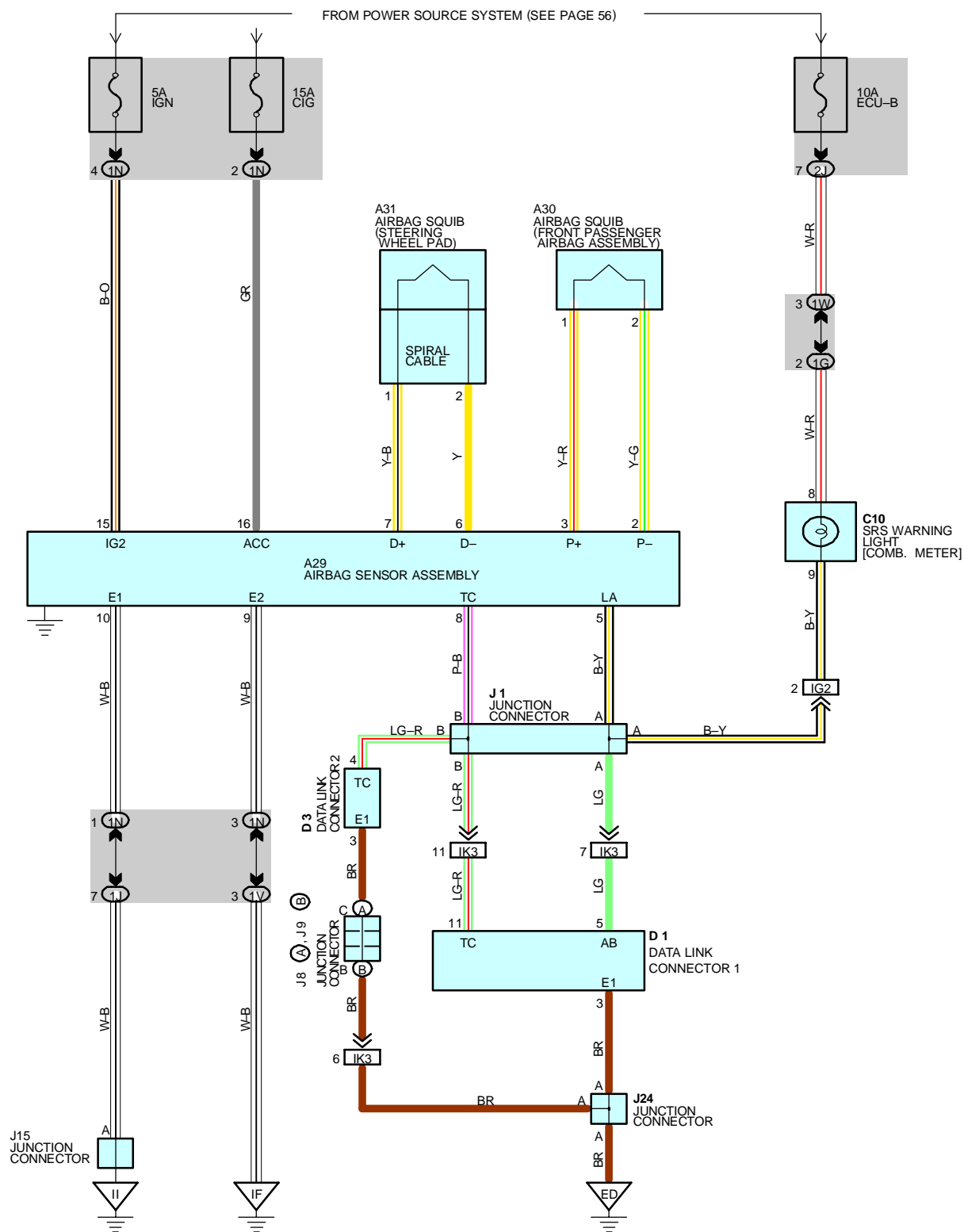
This mechanism is designed to electrically check if connectors are connected correctly and completely. The electrical connection check mechanism is designed so that the connection detection pin connects with the diagnosis terminals when the connector housing lock is in the locked condition.



### 3. CONNECTOR TWIN-LOCK MECHANISM

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





## SYSTEM OUTLINE

THE SRS IS A DRIVER AND PASSENGER PROTECTION DEVICE WHICH HAS A SUPPLEMENTAL ROLE TO THE SEAT BELTS. WHEN THE IGNITION SW IS TURNED TO ACC OR ON, CURRENT FROM THE **CIG** FUSE FLOWS TO **TERMINAL 16** OF THE AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE **IGN** FUSE TO **TERMINAL 15**. IF AN ACCIDENT OCCURS WHILE DRIVING, WHEN THE FRONTAL IMPACT EXCEEDS A SET LEVEL, CURRENT FROM THE **CIG** OR **IGN** FUSE FLOWS TO **TERMINALS 7 AND 3** OF THE AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIBS → **TERMINAL 2** → **TERMINAL 6** AND **2** OF THE AIRBAG SENSOR ASSEMBLY → **TERMINAL 9** OR **TERMINAL 10** OR **BODY GROUND** → **GROUND**, SO THAT THE 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
A29	28	D 1	26	J 9 B	29
A30	28	D 3	28	J15	29
A31	28	J 1	29	J24	29
C10	28	J 8 A	29		

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1G	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1N		
1V		
1W		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

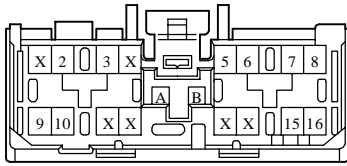
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG2	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IK3	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)

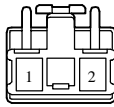
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ED	34	SURGE TANK RH
IF	36	COWL SIDE PANEL LH
II	36	INSTRUMENT PANEL BRACE LH

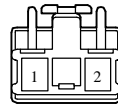
A29 YELLOW



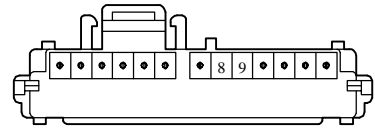
A30 YELLOW



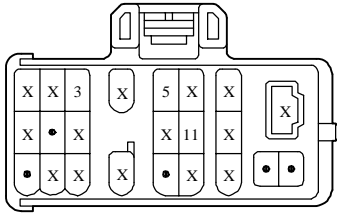
A31 YELLOW



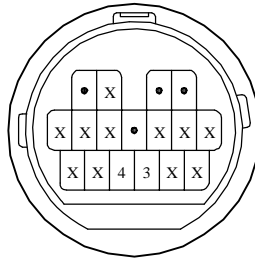
C10 BROWN



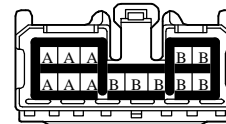
D1 BLACK



D3 DARK GRAY

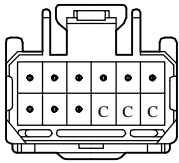


J1 GRAY



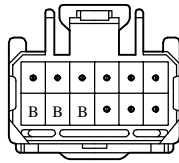
(HINT : SEE PAGE 7)

J8 (A) GRAY



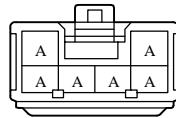
(HINT : SEE PAGE 7)

J9 (B) GRAY



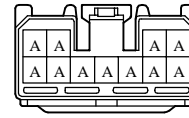
(HINT : SEE PAGE 7)

J15



(HINT : SEE PAGE 7)

J24



(HINT : SEE PAGE 7)

## SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH THE **POWER** FUSE TO **TERMINAL 5** OF THE POWER RELAY. WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS THROUGH THE **GAUGE** FUSE → **TERMINAL 7** OF THE INTEGRATION RELAY → **TERMINAL ④ 3** → **TERMINAL 1** OF THE POWER RELAY → **TERMINAL 2** → **GROUND**. AS A RESULT, POWER RELAY IS ACTIVATED AND THE CURRENT TO **TERMINAL 5** OF THE POWER RELAY FLOWS FROM **TERMINAL 3** OF THE POWER RELAY TO **TERMINAL 4** OF THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY.

**1. SLIDE OPEN OPERATION**

WHEN TURNING THE SLIDE OPEN SW "ON" WITH THE ROOF CLOSED, THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY WILL MAKE THE MOTOR ROTATE TO THE "OPEN" DIRECTION UNTIL THEY BECOME ANY OF THE FOLLOWING CONDITIONS SUCH AS THE TERMINAL IG BECOMES "OFF" OR ANY OF THE SWS IS TURNED "ON" OR THE TIME LIMIT (ABOUT 20 SECONDS) IS UP OR THE CURRENT GOES UP THE UPPER LIMIT (ABOUT 17 AMPERE).

**2. SLIDE CLOSE OPERATION**

WHEN TURNING THE SLIDE CLOSE SW (TILT UP) "ON" WITH THE ROOF OPEN, THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY WILL MAKE THE MOTOR ROTATE TO THE "CLOSE" DIRECTION UNTIL THEY BECOME HALF POSITION (LS1 SW TURNS FROM "ON" TO "OFF"). UNDER THE CONDITION WITH THE ROOF HALF CLOSED, WHEN TURNING THE SLIDE CLOSE SW (TILT UP) "ON" AGAIN, THEY WILL MAKE THE MOTOR ROTATE UNTIL THE ROOF IS COMPLETELY CLOSED.

**3. TILT UP OPERATION**

WITH THE ROOF CLOSED, WHEN THE TILT UP SWITCH IS PUSHED ON, THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY DRIVES THE MOTOR IN DIRECTION OF UP (LS1 SW OFF, LS2 SW OFF).

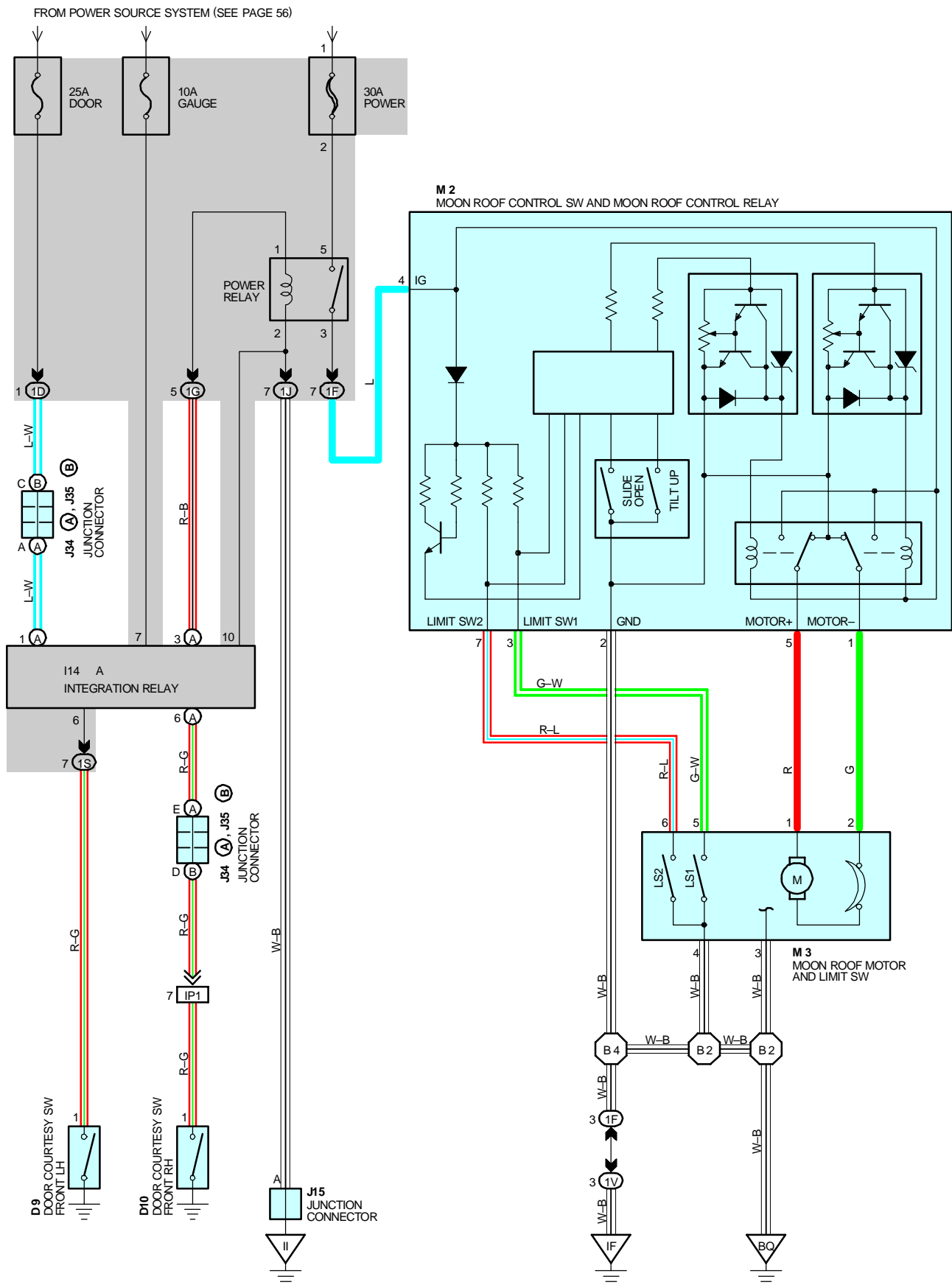
**4. TILT DOWN OPERATION**

WHEN THE ROOF UP, WHEN THE TILT DOWN SWITCH (SLIDE OPEN) IS PUSHED ON, THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY DRIVES THE MOTOR IN DIRECTION OF DOWN, AND THE MOTOR STOPS AT FULLY DOWN POSITION (LS1 SW OFF TO ON).

**5. KEY OFF MOON ROOF OPERATION**

WITH THE IGNITION SW TURNED FROM ON TO OFF, INTEGRATION RELAY OPERATES AND CURRENT FLOWS FROM THE **DOOR** FUSE TO **TERMINAL ① 1** OF THE RELAY → **TERMINAL ④ 3** → **TERMINAL 1** OF THE POWER RELAY → **TERMINAL 2** → **GROUND** FOR ABOUT 43 SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM THE **POWER** FUSE TO **TERMINAL 5** OF THE POWER RELAY → **TERMINAL 3** → **TERMINAL 4** OF THE MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY. AS A RESULT, FOR ABOUT 43 SECONDS AFTER THE IGNITION SW IS TURNED OFF, THE FUNCTIONING OF THIS RELAY MAKES IT POSSIBLE TO OPEN AND CLOSE THE MOON ROOF. ALSO, BY OPENING THE FRONT DOOR (DOOR COURTESY SW ON) WITHIN ABOUT 43 SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO **TERMINALS 6** OR **④ 6** OF THE INTEGRATION RELAY. AS A RESULT, THE RELAY TURNS OFF AND OPEN OPEN CLOSE MOVEMENT OF THE MOON ROOF STOPS.

# MOON ROOF



## SERVICE HINTS

### POWER RELAY

5-3 : CLOSED WITH THE IGNITION SW AT ON POSITION

### M 2 MOON ROOF CONTROL SW AND MOON ROOF CONTROL RELAY

2-GROUND : ALWAYS CONTINUITY

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

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 9	30	J15	29	M 2	31
D10	30	J34	A 29	M 3	31
I14	A 28	J35	B 29		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1F	24	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	24	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IP1	38	FLOOR NO. 2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH
II	36	INSTRUMENT PANEL BRACE LH
BQ	40	ROOF LEFT

## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 2	40	ROOF WIRE	B 4	40	ROOF WIRE

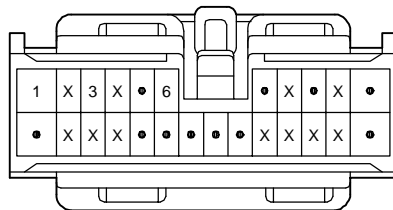
D 9



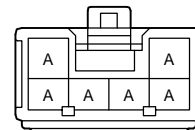
D10



I14 (A) ORANGE

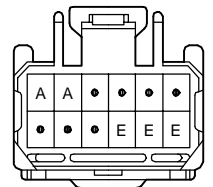


J15



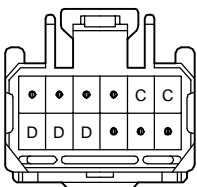
(HINT : SEE PAGE 7)

J34 (A) BLACK



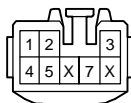
(HINT : SEE PAGE 7)

J35 (B) BLACK

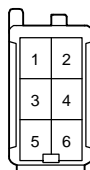


(HINT : SEE PAGE 7)

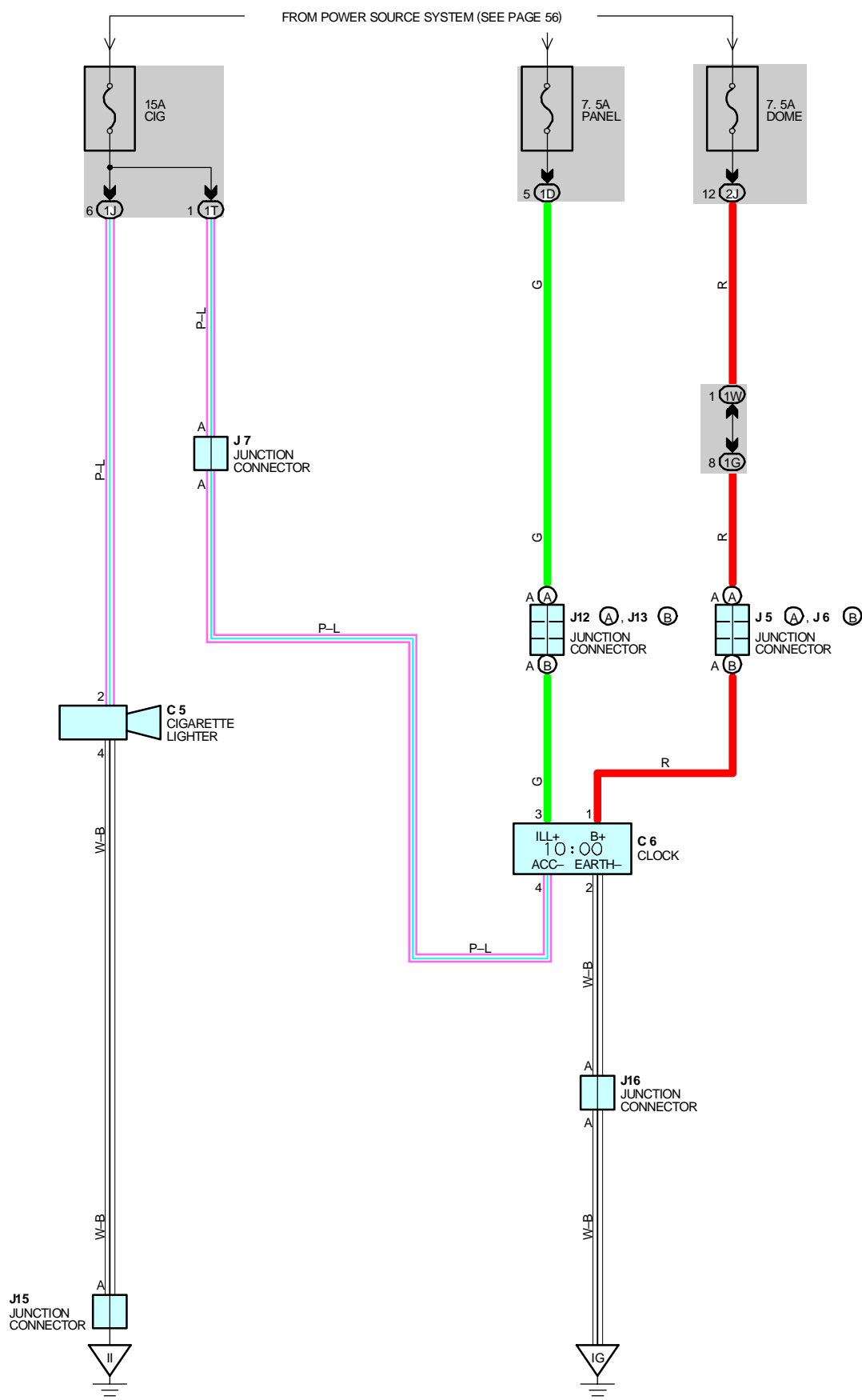
M 2



M 3



# CIGARETTE LIGHTER AND CLOCK



## SERVICE HINTS

### C 5 CIGARETTE LIGHTER

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

### C 6 CLOCK

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

## ○ : PARTS LOCATION

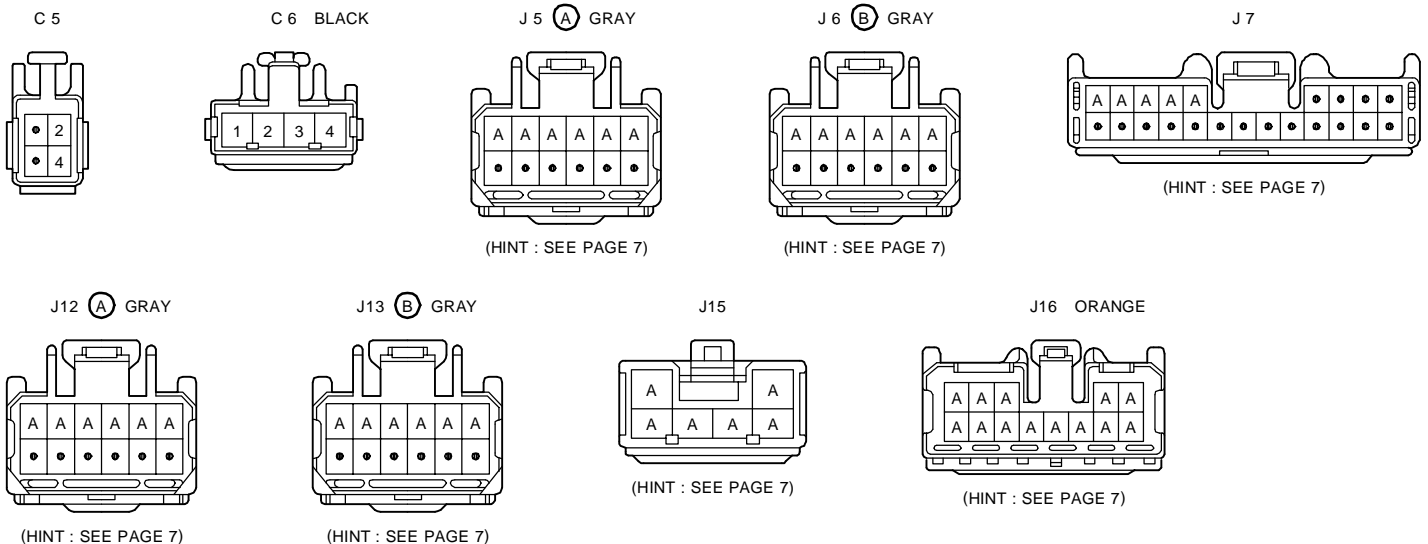
CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 5	<a href="#">28</a>	J 6 B	<a href="#">29</a>	J13 B	<a href="#">29</a>
C 6	<a href="#">28</a>	J7	<a href="#">29</a>	J15	<a href="#">29</a>
J 5 A	<a href="#">29</a>	J12 A	<a href="#">29</a>	J16	<a href="#">29</a>

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

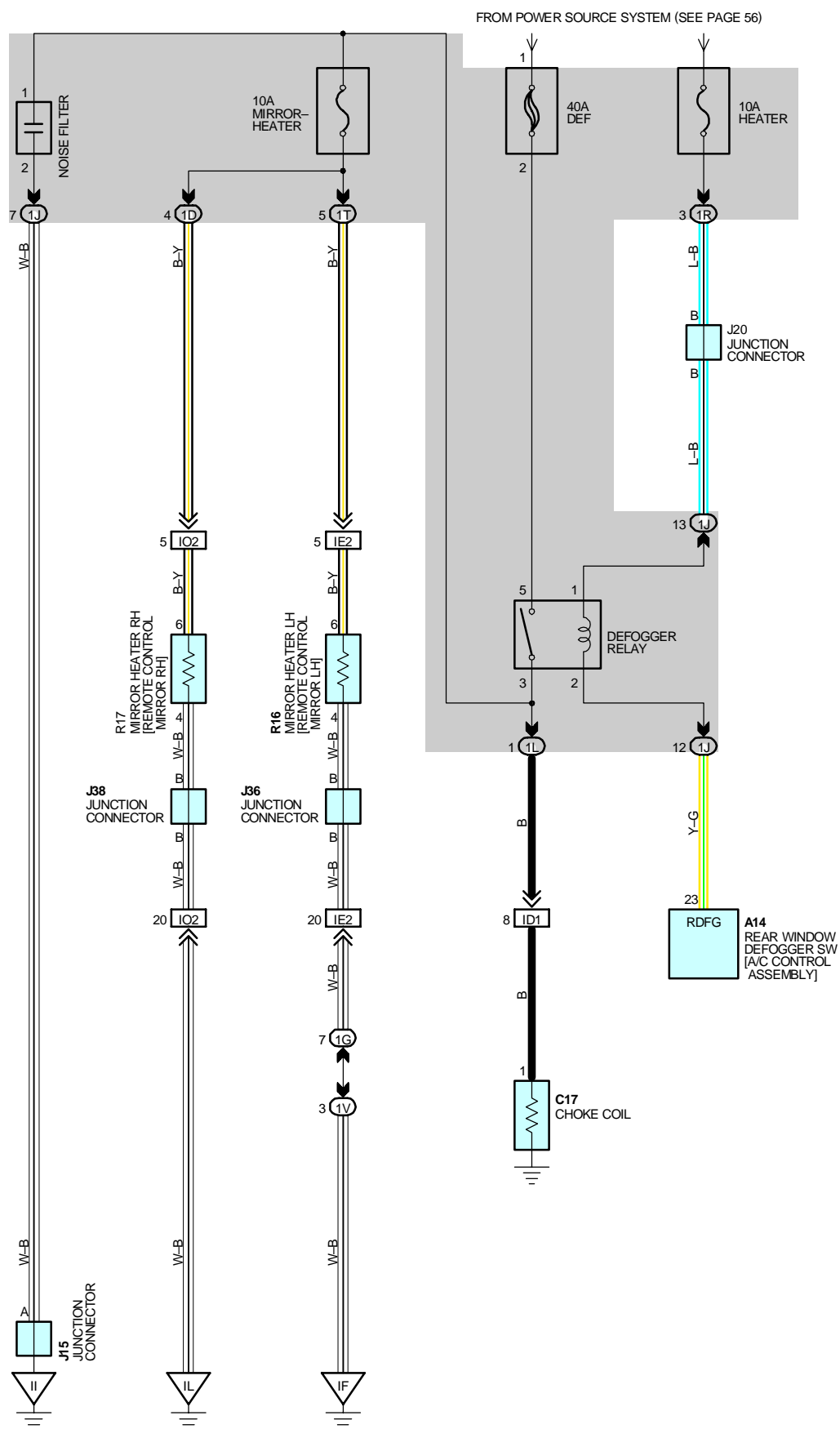
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D		INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	<a href="#">24</a>	
1J	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	<a href="#">24</a>	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	<a href="#">25</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	<a href="#">20</a>	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	<a href="#">36</a>	LEFT KICK PANEL
II	<a href="#">36</a>	INSTRUMENT PANEL BRACE LH



## REAR WINDOW DEFOGGER AND MIRROR HEATER



## SERVICE HINTS

### DEFOGGER RELAY

5-3 : CLOSED WITH THE IGNITION SW AT **ON** POSITION AND THE REAR WINDOW DEFOGGER SW [A/C CONTROL ASSEMBLY] ON

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A14	28	J20	29	R16	31
C17	30	J36	30	R17	31
J15	29	J38	30		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1L		
1R		
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

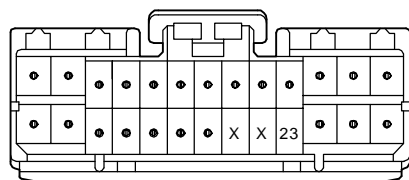
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2	36	FLOOR DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO2	38	FLOOR DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

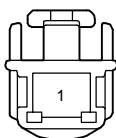
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	36	COWL SIDE PANEL LH
II	36	INSTRUMENT PANEL BRACE LH
IL	36	RIGHT KICK PANEL

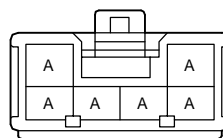
A14



C17

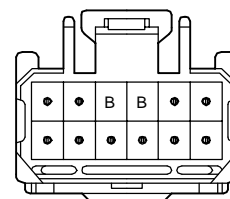


J15



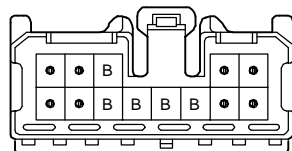
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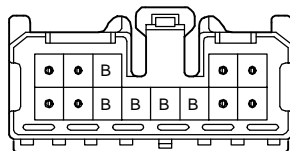
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J36



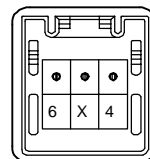
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J38

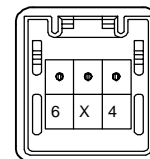


(HINT : SEE PAGE 7)

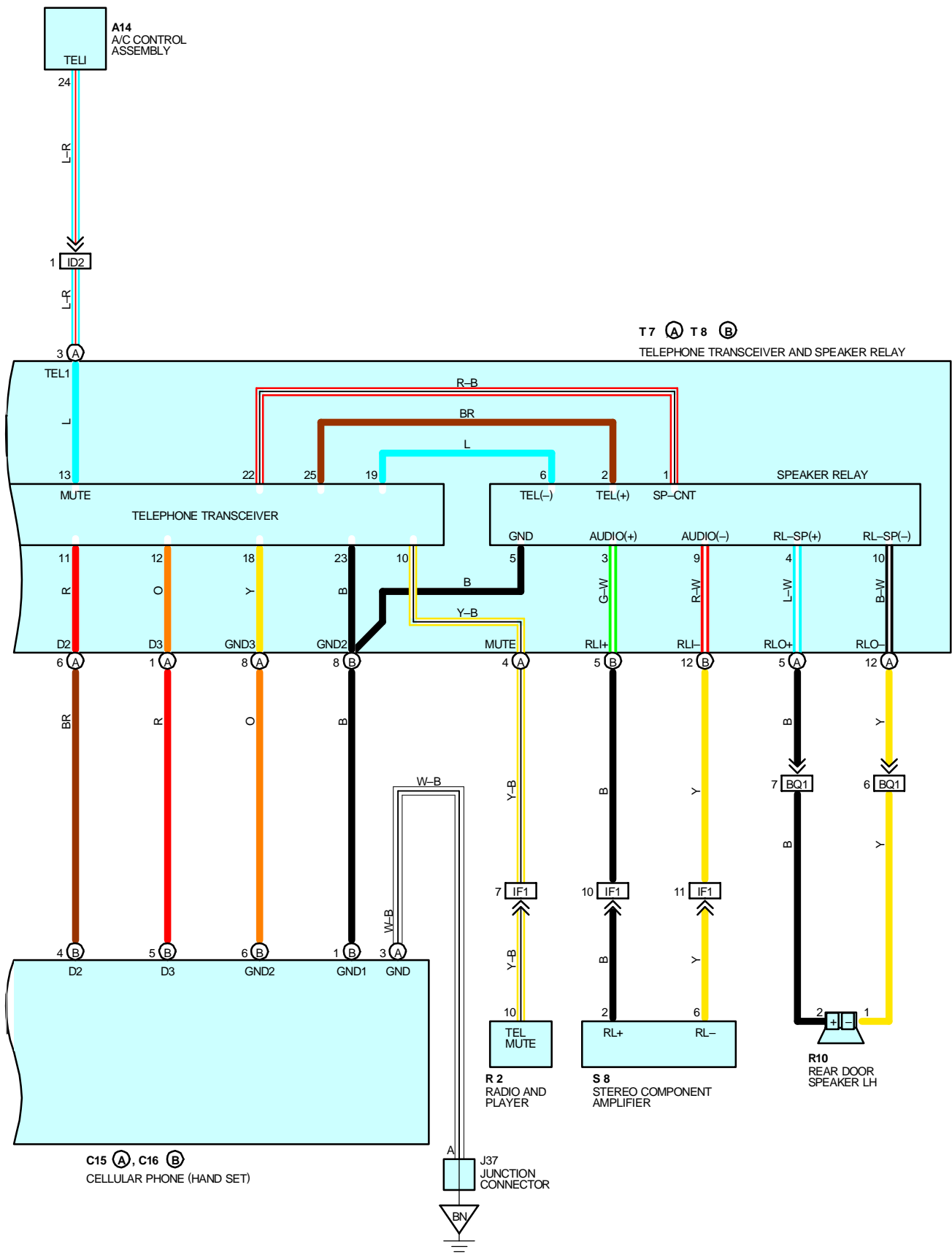
R16



R17







# CELLULAR MOBILE TELEPHONE

## SERVICE HINTS

### T 8 ㊦ TELEPHONE TRANSCEIVER AND SPEAKER RELAY

- ㊦ 9-GROUND : ALWAYS APPROX. 12 VOLTS
- ㊦ 10-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT **ON** POSITION
- ㊦ 11-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A14	28	J5	29	S 8	29
C12	28	J37	30	T 7	A 31
C15	A 30	R2	29	T 8	B 31
C16	B 30	R10	31		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT J/B (LOWER FINISH PANEL)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

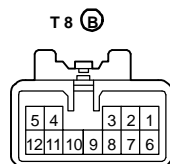
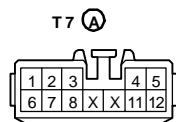
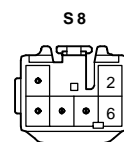
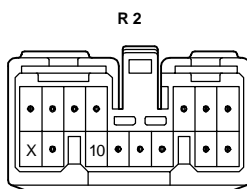
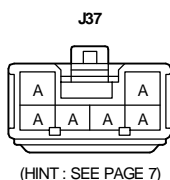
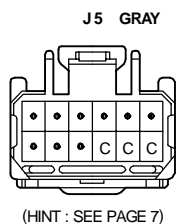
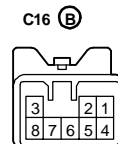
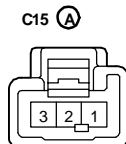
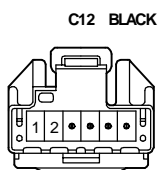
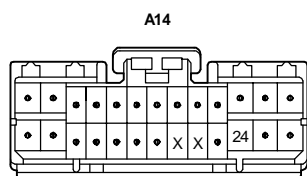
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID2	36	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BN	40	UNDER THE LEFT CENTER PILLAR

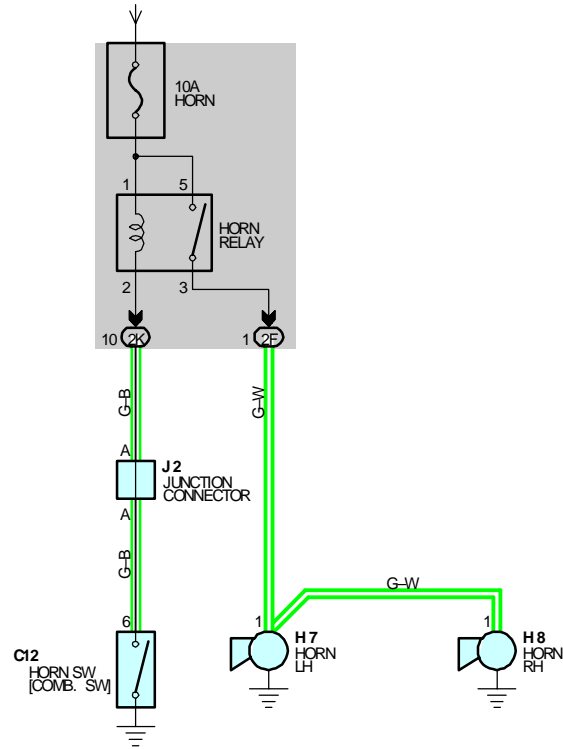
## ○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	40	FLOOR WIRE			



# HORN

FROM POWER SOURCE SYSTEM (SEE PAGE 56)



## SERVICE HINTS

### HORN RELAY

5-3 : CLOSED WITH THE HORN SW ON

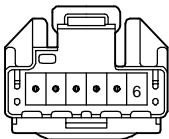
## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C12	28	H8	26		
H7	26	J2	29		

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
2F	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

C12 BLACK



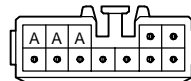
H7 BLACK



H8 BLACK

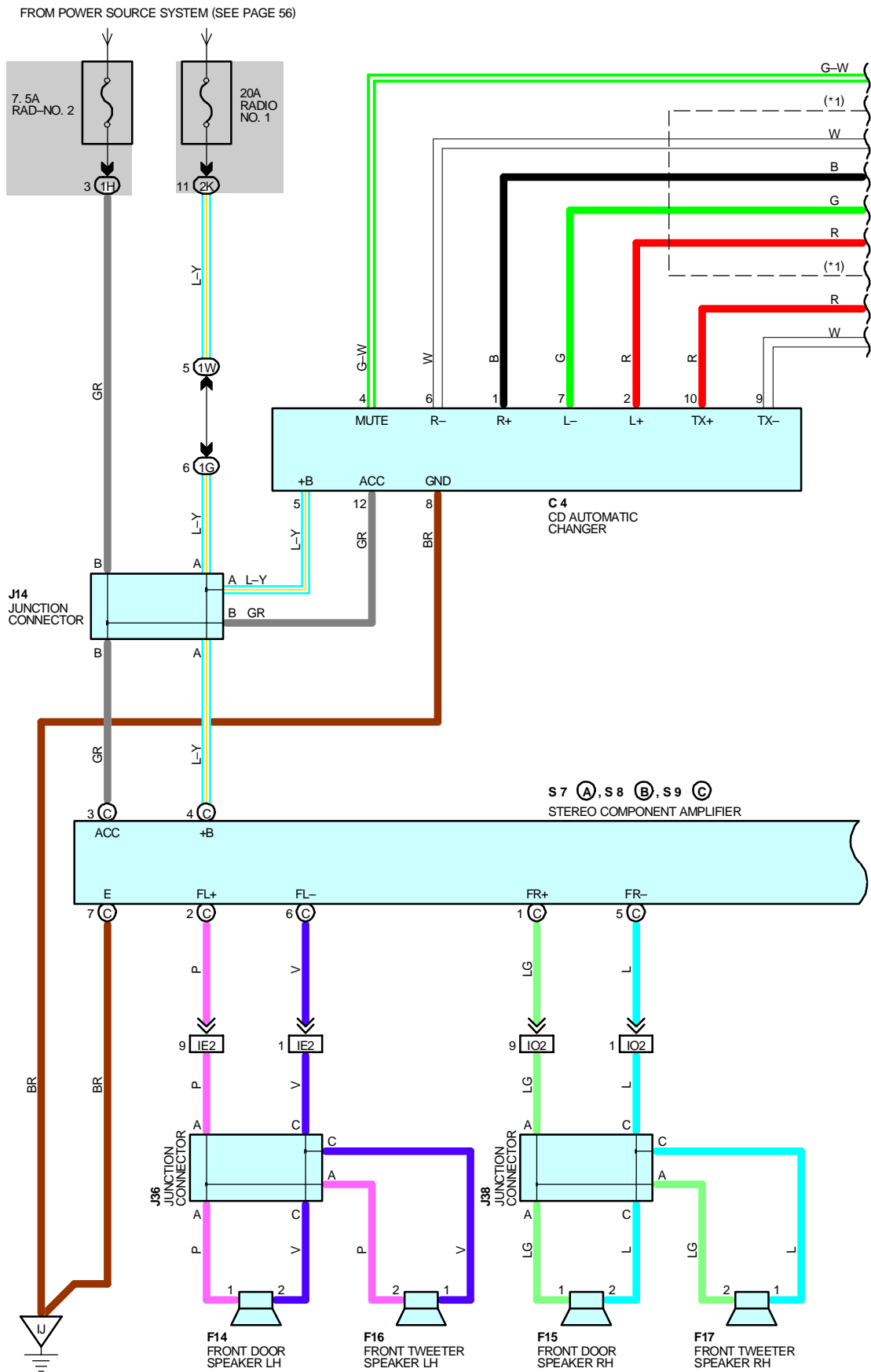


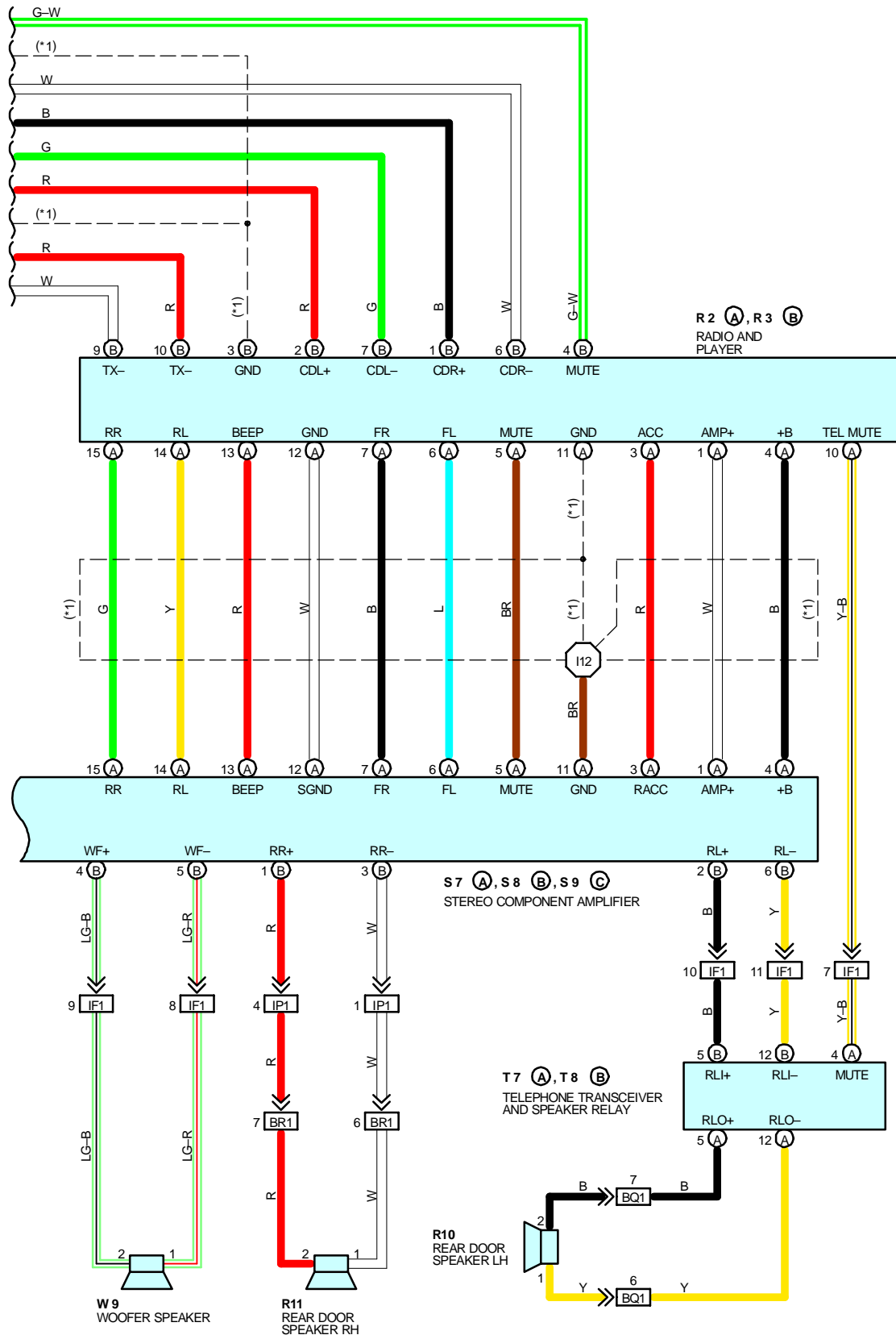
J2 BLACK



(HINT : SEE PAGE 7)

# RADIO AND PLAYER





# RADIO AND PLAYER

## SERVICE HINTS

### S 9 © STEREO COMPONENT AMPLIFIER

© 7-GROUND : ALWAYS CONTINUITY

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

© 4-GROUND : ALWAYS APPROX. 12 VOLTS

### C 4 CD AUTOMATIC CHANGER

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

5-GROUND : ALWAYS APPROX. 12 VOLTS

8-GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 4	<a href="#">28</a>	J36	<a href="#">30</a>	S 7	A <a href="#">29</a>
F14	<a href="#">30</a>	J38	<a href="#">30</a>	S 8	B <a href="#">29</a>
F15	<a href="#">30</a>	R 2	A <a href="#">29</a>	S 9	C <a href="#">29</a>
F16	<a href="#">30</a>	R 3	B <a href="#">29</a>	T 7	A <a href="#">31</a>
F17	<a href="#">30</a>	R10	<a href="#">31</a>	T 8	B <a href="#">31</a>
J14	<a href="#">29</a>	R11	<a href="#">31</a>	W 9	<a href="#">31</a>

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1G	<a href="#">24</a>	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1W	<a href="#">24</a>	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2K	<a href="#">30</a>	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

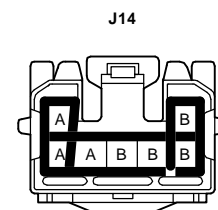
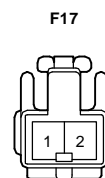
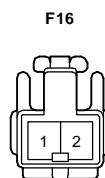
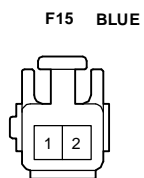
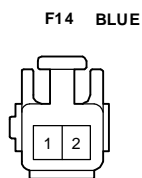
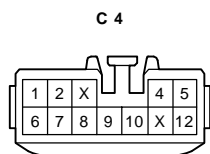
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE2	<a href="#">36</a>	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	<a href="#">36</a>	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IO2	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IP1	38	FLOOR WIRE NO. 2 AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)

## ▽ : GROUND POINTS

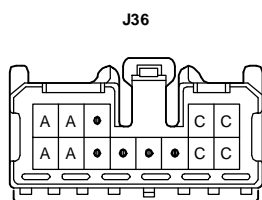
CODE	SEE PAGE	GROUND POINTS LOCATION
IJ	<a href="#">36</a>	INSTRUMENT PANEL BRACE RH

## ○ : SPLICE POINTS

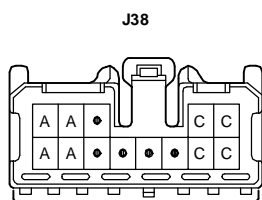
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I12	38	INSTRUMENT PANEL WIRE			



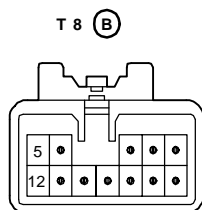
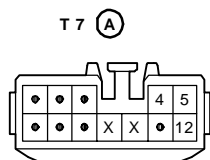
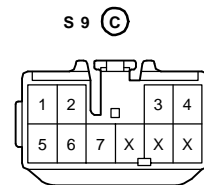
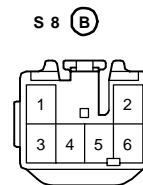
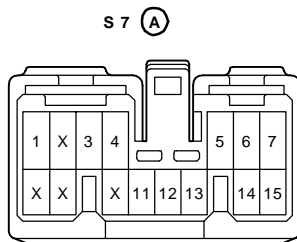
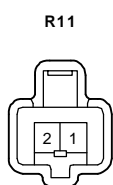
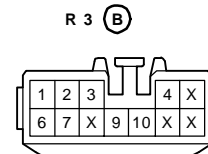
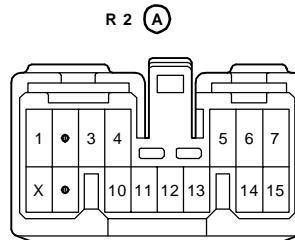
(HINT : SEE PAGE 7)



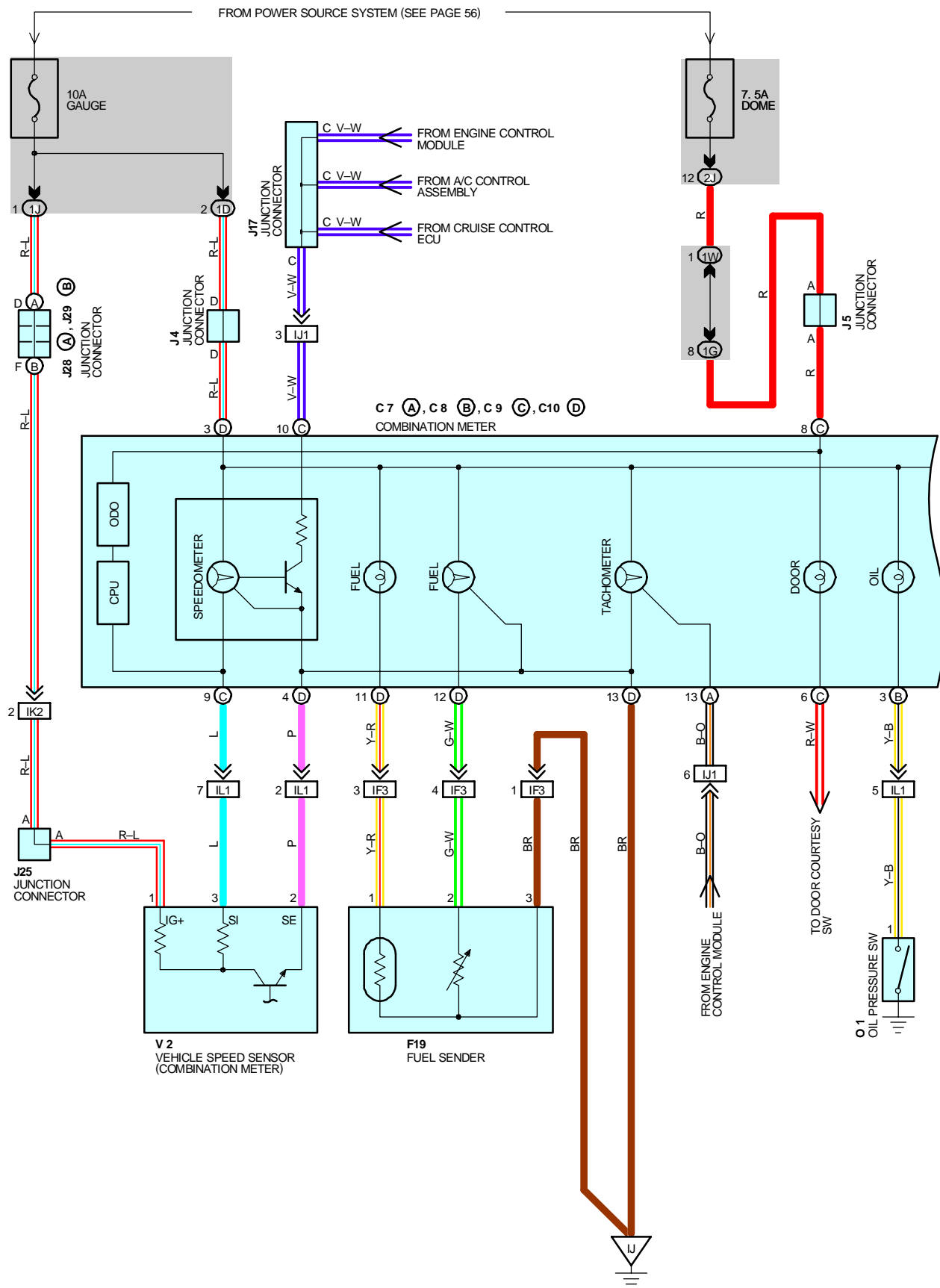
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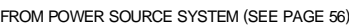


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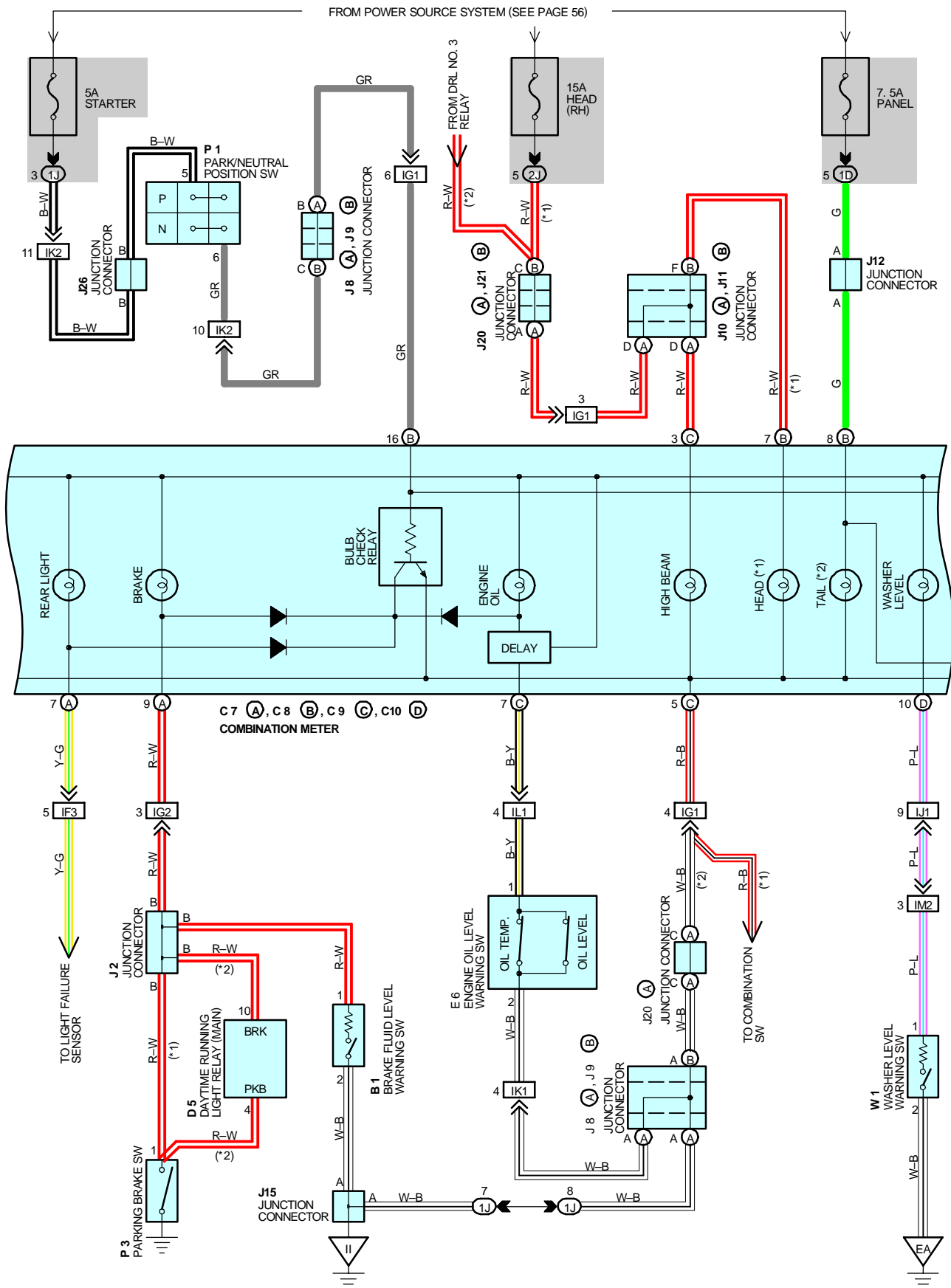


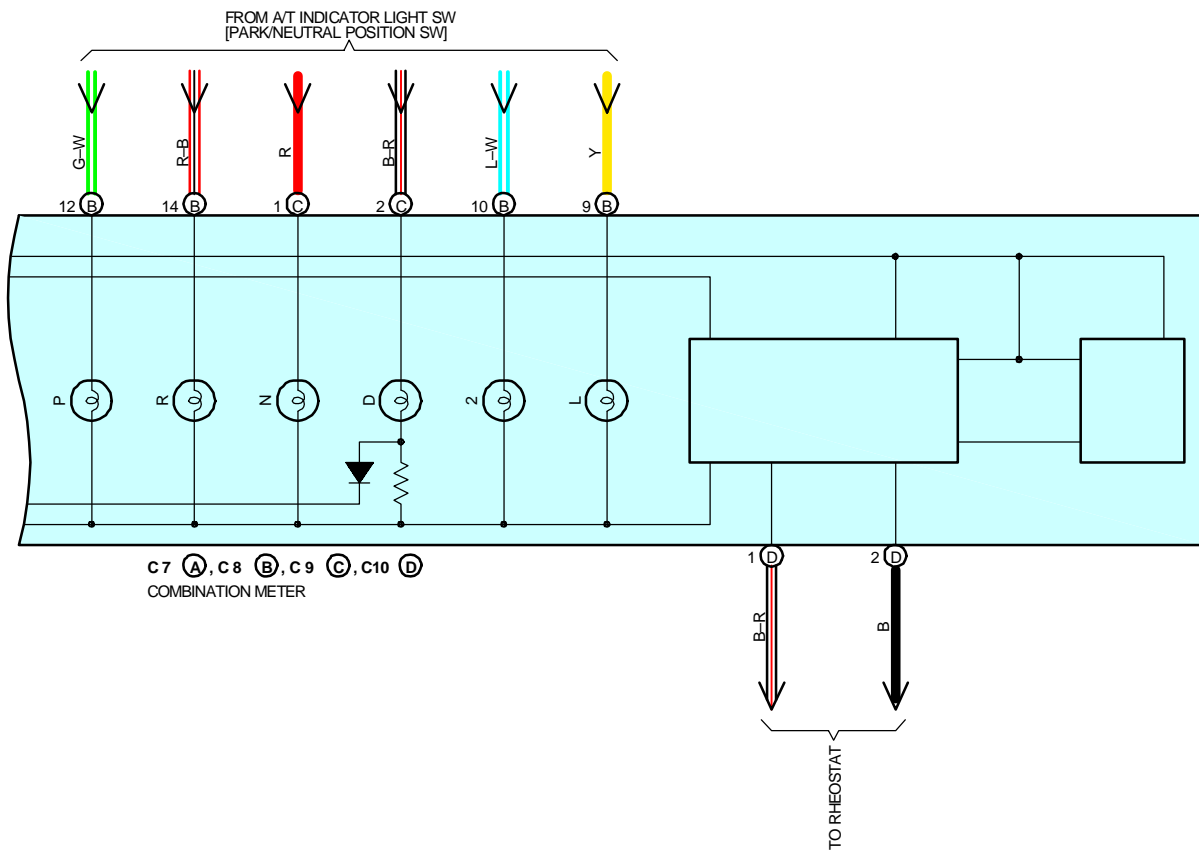
# COMBINATION METER





# COMBINATION METER





# COMBINATION METER

## SERVICE HINTS

### B 1 BRAKE FLUID LEVEL WARNING SW

1-2 : CLOSED WITH THE FLOAT DOWN

### P 3 PARKING BRAKE SW

1-GROUND : CLOSED WITH THE PARKING BRAKE PEDAL DEPRESSED

### O 1 OIL PRESSURE SW

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

### W 3 WATER TEMP. SENDER

1-GROUND : APPROX. 226 Ω (50° C, 122° F)  
APPROX. 25 Ω (115° C, 239° F)

### E 6 ENGINE OIL LEVEL WARNING SW

1-2 : CLOSED WITH THE FLOAT UP AND THE ENGINE OIL TEMP. AT BELOW APPROX. 55° C (131° F)  
OPEN WITH THE FLOAT

### F19 FUEL SENDER

2-3 : APPROX. 3 Ω AT FUEL FULL  
APPROX. 110 Ω AT FUEL EMPTY

### C 7 ④, C 8 ⑤, C 9 ⑥, C 10 ⑦ COMBINATION METER

- ④ 3-GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION
- ⑤ 13-GROUND : ALWAYS CONTINUITY
- ④ 1-GROUND : ALWAYS CONTINUITY
- ⑥ 8-GROUND : ALWAYS APPROX. 12 VOLTS
- ⑤ 15-GROUND : ALWAYS CONTINUITY
- ⑥ 5-GROUND : ALWAYS CONTINUITY
- ⑦ 8-GROUND : ALWAYS APPROX. 12 VOLTS

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	26	J 7	29	J25	29
C 7	A 28	J 8	A 29	J26	29
C 8	B 28	J 9	B 29	J28	A 29
C 9	C 28	J10	A 29	J29	B 29
C10	D 28	J11	B 29	O 1	27
D 5	28	J12	29	O 2	29
E 6	26	J15	29	P 1	27
F19	30	J16	29	P 3	29
J 2	29	J17	29	V 2	27
J 4	29	J20	A 29	W 1	27
J 5	29	J21	B 29	W 3	27

## □ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	24	INSTRUMENT PANEL WIRE AND INSTRUMENT J/B (LOWER FINISH PANEL)
1W	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)

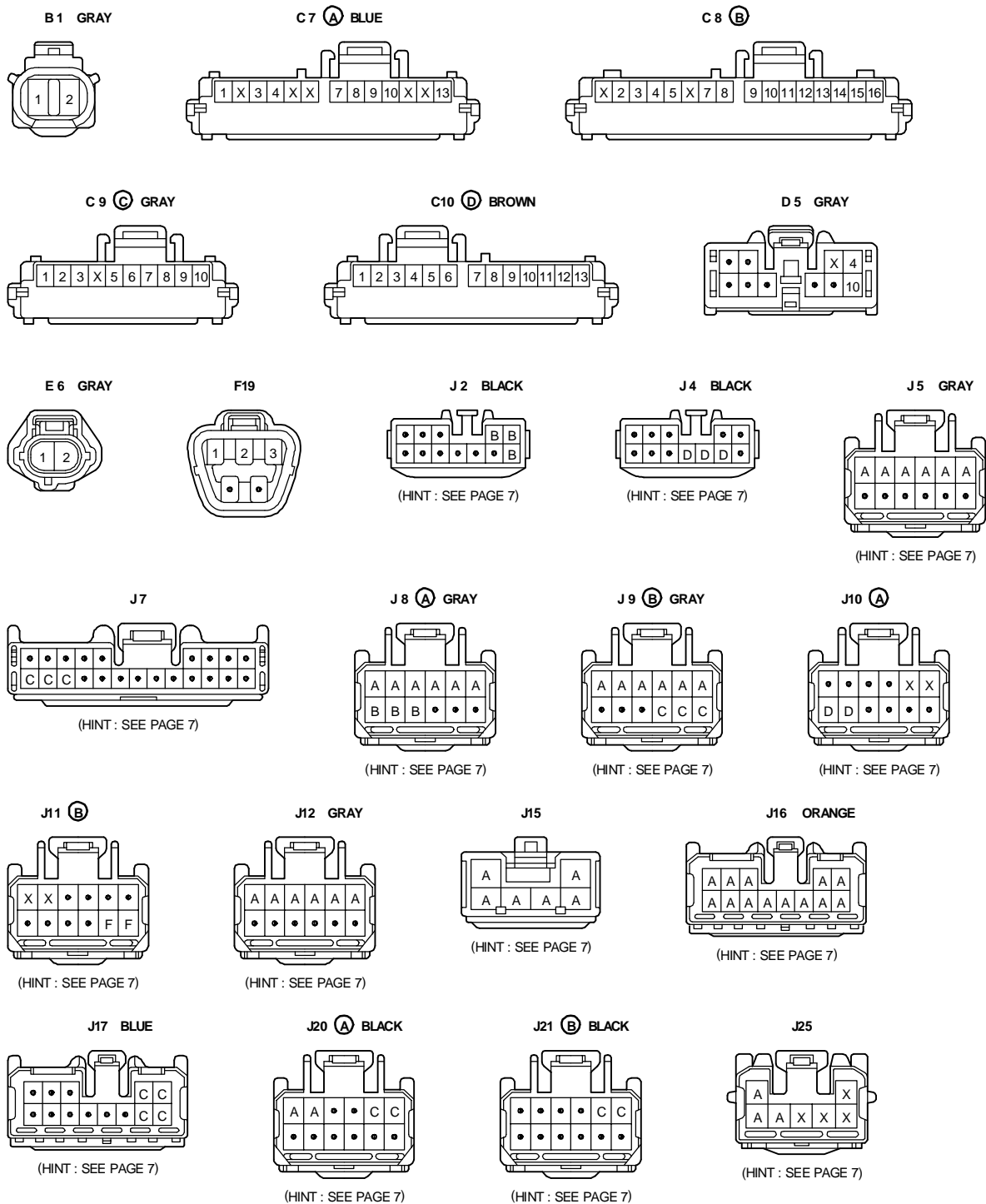
## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF3	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IG2		
IJ1	38	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK1	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK2	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IL1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)
IM2	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)



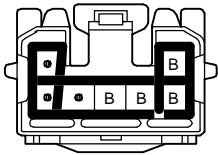
## : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EE	34	REAR SIDE OF SURGE TANK
IG	36	LEFT KICK PANEL
II	36	INSTRUMENT PANEL BRACE LH
IJ	36	INSTRUMENT PANEL BRACE RH



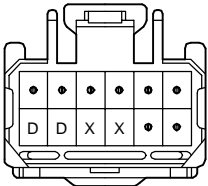
# COMBINATION METER

J26



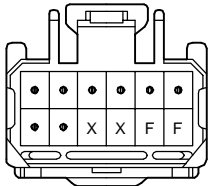
(HINT : SEE PAGE 7)

J28 (A)



(HINT : SEE PAGE 7)

J29 (B)

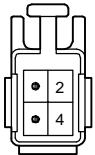


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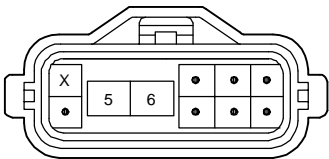
O 1 GRAY



O 2 BLUE



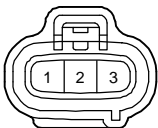
P 1 GRAY



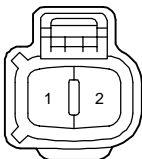
P 3



V 2 BLACK



W 1 BLACK



W 3 GRAY



# RADIATOR FAN AND CONDENSER FAN

## SYSTEM OUTLINE

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

### 1. LOW SPEED OPERATION

ONLY WHEN THE A/C SYSTEM IS ACTIVATED OR THE WATER TEMP. SW NO. 2 IS TURNED ON, THE A/C CONDENSER FAN MOTOR AND THE RADIATOR FAN MOTOR ROTATES AT LOW SPEED.

WHEN THE A/C SYSTEM IS ACTIVATED, THE CURRENT FROM ECU-IG FUSE FLOWS TO THE FAN NO. 3 RELAY (COIL SIDE) → **TERMINAL 1** OF THE DIODE (A/C) → **TERMINAL 2** → **TERMINAL 2** OF THE A/C CONTROL ASSEMBLY, CAUSING THE FAN NO. 3 RELAY TO TURN ON. AS A RESULT, THE CURRENT THROUGH THE CDS FUSE FLOWS TO **TERMINAL 2** OF THE A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 3** OF THE FAN NO. 2 RELAY → **TERMINAL 5** → **TERMINAL 5** OF THE FAN NO. 3 RELAY → **TERMINAL 3** → **TERMINAL 2** OF THE RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**. AS THIS FLOWING IN SERIES FOR THE MOTORS, THE MOTORS ROTATE AT LOW SPEED.

WHEN THE WATER TEMP. SW NO. 2 IS TURNED ON, THE CURRENT FROM **ECU-IG** FUSE FLOWS TO THE FAN NO. 3 RELAY (COIL SIDE) → **TERMINAL 1** OF THE WATER TEMP. SW NO. 2 → **GROUND**, CAUSING THE FAN NO. 3 RELAY TO TURN ON. AS A RESULT, THE CURRENT THROUGH THE CDS FUSE FLOWS THE SAME ROUTE AS ABOVE, ROTATING THE MOTORS AT LOW SPEED.

### 2. HIGH SPEED OPERATION

ONLY WHEN THE A/C SINGLE PRESSURE SW IS TURNED OFF OR THE WATER TEMP. SW NO. 1 IS TURNED OFF, THE A/C CONDENSER FAN MOTOR AND THE RADIATOR FAN MOTOR ROTATE AT HIGH SPEED.

WHEN THE A/C SINGLE PRESSURE SW IS TURNED OFF, THE CURRENT FROM THE **RDI** FUSE FLOWS TO THE FAN NO. 1 RELAY (POINT SIDE) → **TERMINAL 2** OF THE RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**. AT THE SAME TIME, THE CURRENT FROM THE **CDS** FUSE FLOWS TO **TERMINAL 2** OF THE A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 3** OF THE FAN NO. 2 RELAY → **TERMINAL 4** → **GROUND**.

AS THE CURRENT FLOWING IN PARALLEL FOR THE MOTORS AS ABOVE, THE MOTORS ROTATE AT HIGH SPEED.

## SERVICE HINTS

### A 4 A/C SINGLE PRESSURE SW

- 3-2 : OPEN ABOVE APPROX. **15.5 KG/CM<sup>2</sup> (220 PSI, 1520 KPA)**  
CLOSE BELOW APPROX. **12.5 KG/CM<sup>2</sup> (142 PSI, 980 KPA)**

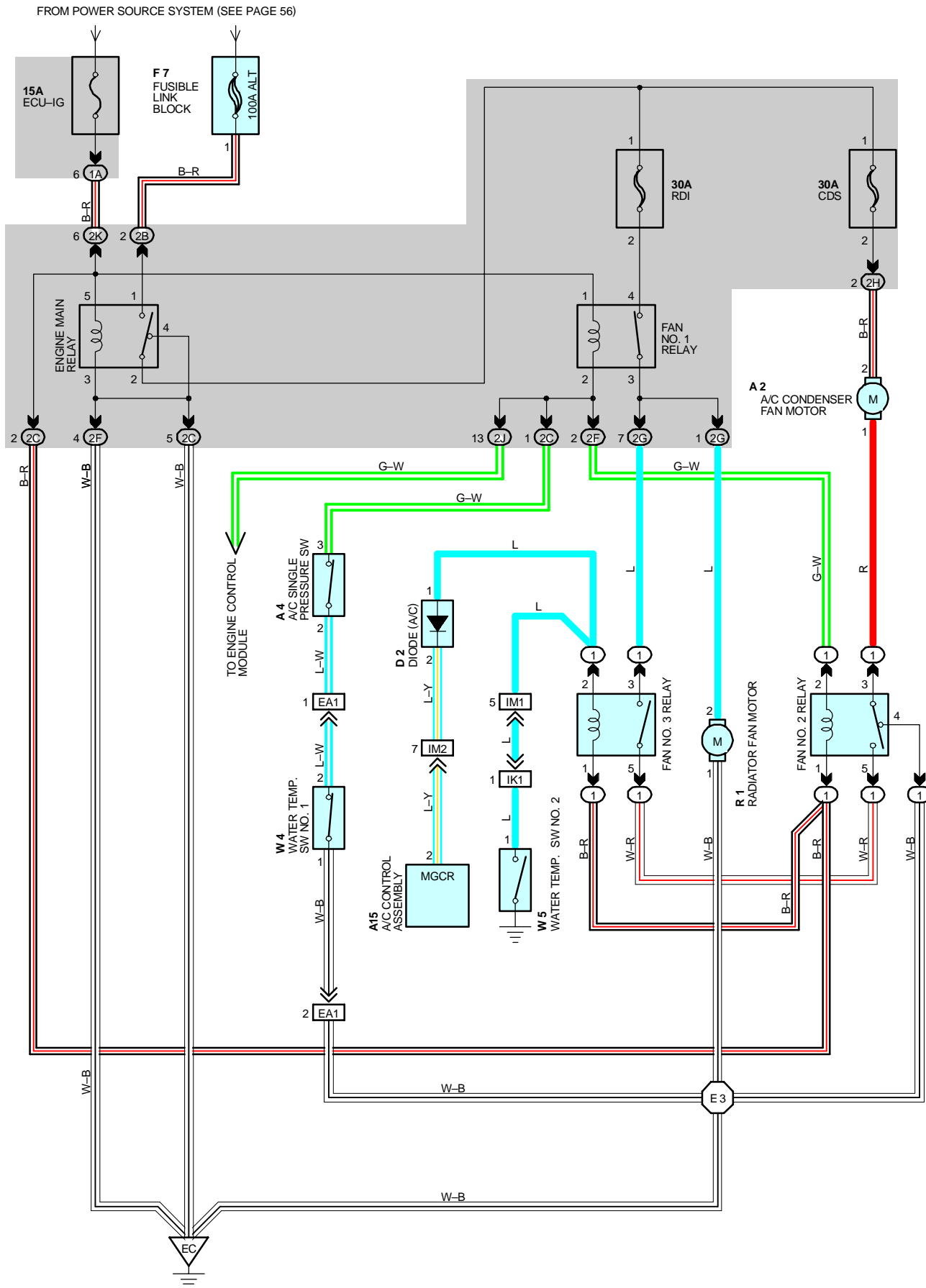
### W 4 WATER TEMP. SW NO. 1

- 2-1 : OPEN ABOVE APPROX. **95°C (203°F)**

### W 5 WATER TEMP. SW NO. 2

- 1-GROUND : CLOSE ABOVE APPROX. **90°C (198°F)**

# RADIATOR FAN AND CONDENSER FAN



**○ : PARTS LOCATION**

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 2	26	D 2	26	W 4	27
A 4	26	F 7	26	W 5	27
A15	28	R 1	27		

**○ : RELAY BLOCKS**

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)

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

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2C		
2F		
2G		
2H		
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

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

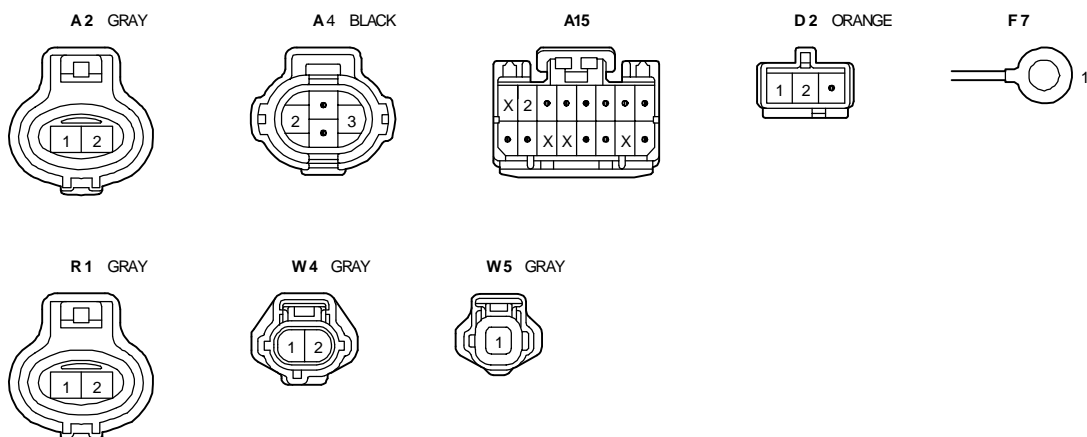
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO. 3 WIRE (BEHIND HEADLIGHT LH)
IK1	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IM1	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IM2		

**▽ : GROUND POINTS**

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT

**○ : SPLICE POINTS**

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	34	ENGINE ROOM MAIN WIRE			



# AUTOMATIC AIR CONDITIONING

## SYSTEM OUTLINE

### 1. HEATER BLOWER MOTOR OPERATION

CURRENT IS APPLIED AT ALL TIMES THROUGH **HTR** FUSE TO **TERMINAL 1** OF THE HTR RELAY. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH THE **HEATER** FUSE TO **TERMINAL 5** OF THE HTR RELAY → **TERMINAL 3** → **TERMINAL HR** OF THE A/C CONTROL ASSEMBLY. AT THE SAME TIME, CURRENT ALSO FLOWS FROM **HEATER** FUSE TO **TERMINAL IG+** OF THE A/C CONTROL ASSEMBLY.

#### \* LOW SPEED OPERATION

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS PUSHED TO **LOW SPEED** POSITION, THE CURRENT TO **TERMINAL HR** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL GND** OF THE A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HTR RELAY ON. AS A RESULT, THE CURRENT TO **TERMINAL 1** OF THE HTR RELAY FLOWS TO **TERMINAL 2** OF THE RELAY → **TERMINAL 2** OF THE BLOWER MOTOR **TERMINAL 1** → **TERMINAL 1** OF THE BLOWER RESISTOR → **TERMINAL 2** → **GROUND** AND CAUSES THE BLOWER MOTOR TO ROTATE AT LOW SPEED.

#### \* HIGH SPEED OPERATION

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS PUSHED TO **HIGH SPEED** POSITION, THE CURRENT TO **TERMINAL HR** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL GND** OF THE A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HTR RELAY ON. AS A RESULT, THE CURRENT TO **TERMINAL 1** OF THE HTR RELAY FLOWS TO **TERMINAL 2** → **TERMINAL 2** OF THE BLOWER MOTOR **TERMINAL 1** → **TERMINAL 4** OF THE A/C BLOWER MOTOR LINEAR CONTROLLER → **TERMINAL 2** → **TERMINAL BLW** OF THE A/C CONTROL ASSEMBLY (WHICH IS ACTIVATED WHEN THE BLOWER SW IS PUSHED TO HIGH SPEED POSITION) → **TERMINAL GND** → **GROUND** WITHOUT PASSING THROUGH THE BLOWER RESISTOR, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

### 2. AIR INLET CONTROL SERVO MOTOR OPERATION

(SWITCHING FROM FRESH TO RECIRC)

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM HEATER FUSE TO **TERMINAL IG+** OF THE A/C CONTROL ASSEMBLY → **TERMINAL AIR** → **TERMINAL 7** OF THE AIR INLET CONTROL SERVO MOTOR **TERMINAL 6** → **TERMINAL AIF** OF THE A/C CONTROL ASSEMBLY → **TERMINAL GND** → **GROUND**. THE MOTOR ROTATES AND THE DAMPER MOVES TO THE **RECIRC** SIDE. WHEN THE DAMPER OPERATES WITH THE A/C SW AT **RECIRC** POSITION, THE DAMPER POSITION SIGNAL IS INPUT FROM **TERMINAL 5** OF THE SERVO MOTOR TO **TERMINAL TPI** OF THE ECU (BUILT INTO THE A/C CONTROL ASSEMBLY). AS A RESULT, CURRENT TO THE SERVO MOTOR CIRCUIT IS CUT OFF BY THE ECU, SO THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH THE IGNITION SW TURNED ON, WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE FRESH SIDE, THE CURRENT FLOWS FROM **TERMINAL IG+** OF THE A/C CONTROL ASSEMBLY → **TERMINAL AIF** → **TERMINAL 6** OF THE AIR INLET CONTROL SERVO MOTOR → **TERMINAL 7** → **TERMINAL AIR** OF THE A/C CONTROL ASSEMBLY **TERMINAL GND** → **GROUND**, THE MOTOR ROTATES AND THE DAMPER STOPS AT THAT POSITION.

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

WHEN THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **HEATER FUSE** TO **TERMINAL IG+** OF THE A/C CONTROL ASSEMBLY.

(SWITCHING FROM DEF TO FACE)

THE CURRENT FLOWS FROM **TERMINAL FACE** OF THE A/C CONTROL ASSEMBLY → **TERMINAL 4** OF THE AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 8** → **TERMINAL DEF** OF THE A/C CONTROL ASSEMBLY → **TERMINAL GND** → **GROUND**. THE MOTOR ROTATES AND THE DAMPER MOVES TO THE FACE SIDE. WHEN THE DAMPER OPERATES WITH THE A/C SW AT FACE POSITION, THE DAMPER POSITION SIGNAL IS INPUT FROM **TERMINAL 8** OF THE SERVO MOTOR TO THE **TERMINAL DEF** OF THE ECU (BUILT INTO THE A/C CONTROL ASSEMBLY). AS A RESULT, CURRENT TO THE SERVO MOTOR CIRCUIT IS CUT OFF BY THE ECU, SO THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM FACE TO DEF)

THE CURRENT FLOWS FROM **TERMINAL DEF** OF THE A/C CONTROL ASSEMBLY → **TERMINAL 8** OF THE AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 4** → **TERMINAL FACE** OF THE A/C CONTROL ASSEMBLY → **TERMINAL GND** → **GROUND**, THE MOTOR ROTATES AND THE DAMPER STOPS AT THAT POSITION.

### 4. AIR MIX CONTROL SERVO MOTOR OPERATION

WHEN THE TEMPERATURE CONTROL SW (A/C CONTROL ASSEMBLY) IS TURNED TO THE "COOL" SIDE THE CURRENT FLOWS FROM **TERMINAL AMC** OF THE A/C CONTROL ASSEMBLY → **TERMINAL 1** OF THE AIR MIX CONTROL SERVO MOTOR → **MOTOR** → **TERMINAL 2** → **TERMINAL AMH** OF THE A/C CONTROL ASSEMBLY → **GROUND** AND THE MOTOR ROTATES. THE DAMPER OPENING ANGLE AT THIS TIME IS INPUT FROM **TERMINAL 3** OF THE SERVO MOTOR TO **TERMINAL TP** OF THE A/C CONTROL ASSEMBLY. THIS IS USED TO DETERMINE THE **DAMPER STOP** POSITION AND MAINTAIN THE SET TEMPERATURE.

WHEN THE TEMPERATURE CONTROL SW (A/C CONTROL ASSEMBLY) IS TURNED TO THE "HOT" SIDE, THE CURRENT FLOWS FROM **TERMINAL AMH** OF THE A/C CONTROL ASSEMBLY → **TERMINAL 2** OF THE AIR MIX CONTROL SERVO MOTOR → **MOTOR** → **TERMINAL 1** → **TERMINAL AMC** OF THE A/C CONTROL ASSEMBLY, ROTATING THE MOTOR IN REVERSE AND SWITCHING THE DAMPER FROM "COOL" TO "HOT" SIDE.

### 5. AIR CONDITIONING OPERATION

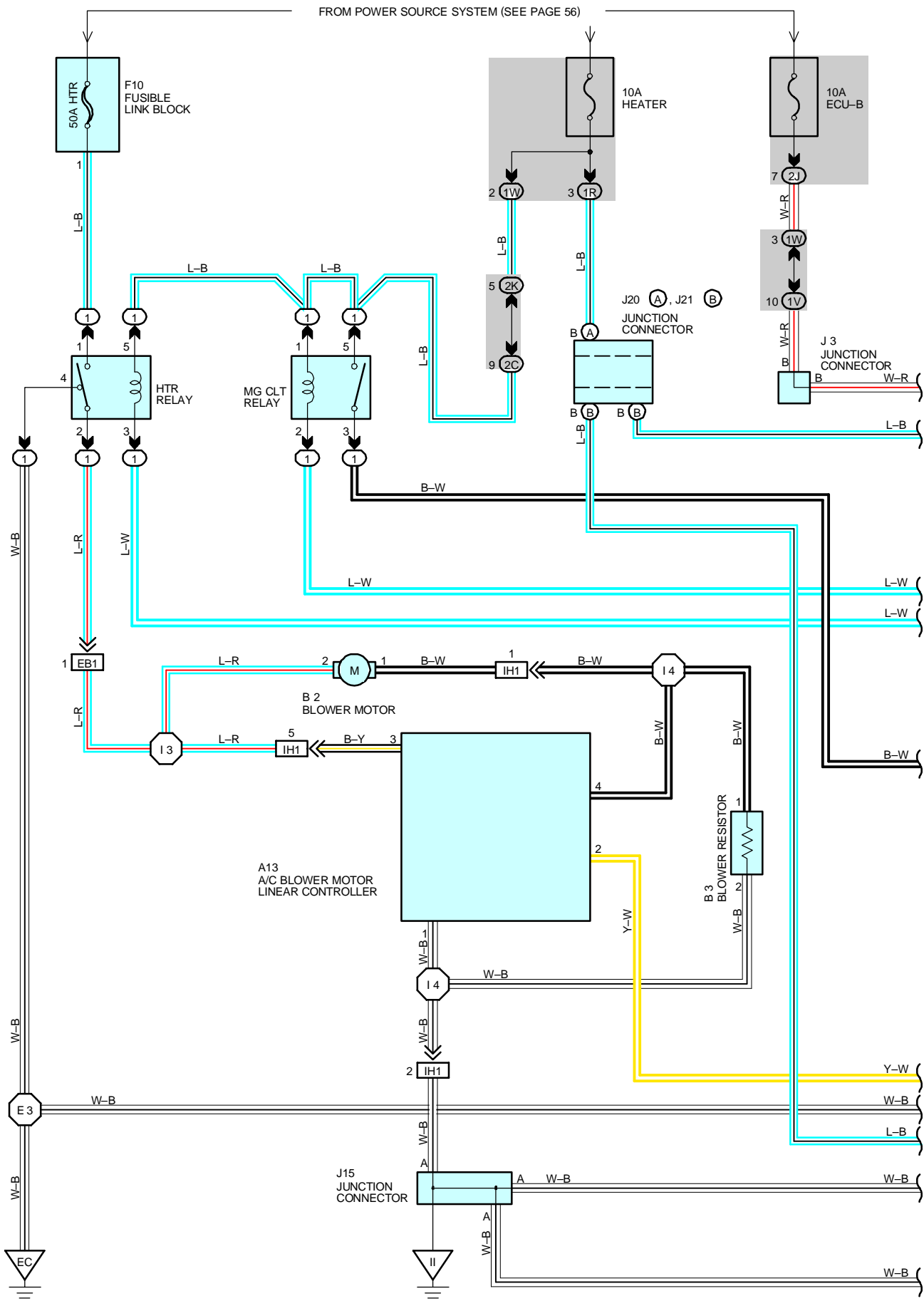
THE A/C CONTROL ASSEMBLY RECEIVES VARIOUS SIGNALS, I.E., THE ENGINE RPM FROM THE ENGINE CONTROL MODULE, OUTSIDE AIR TEMPERATURE SIGNAL FROM THE A/C AMBIENT TEMP. SENSOR, COOLANT TEMPERATURE FROM THE ENGINE CONTROL MODULE AND THE LOCK SIGNAL FROM THE A/C COMPRESSOR, ETC. WHEN THE ENGINE IS STARTED AND THE A/C SW (A/C CONTROL ASSEMBLY) IS ON, A SIGNAL IS INPUT TO THE ECU. (BUILT IN THE A/C CONTROL ASSEMBLY).

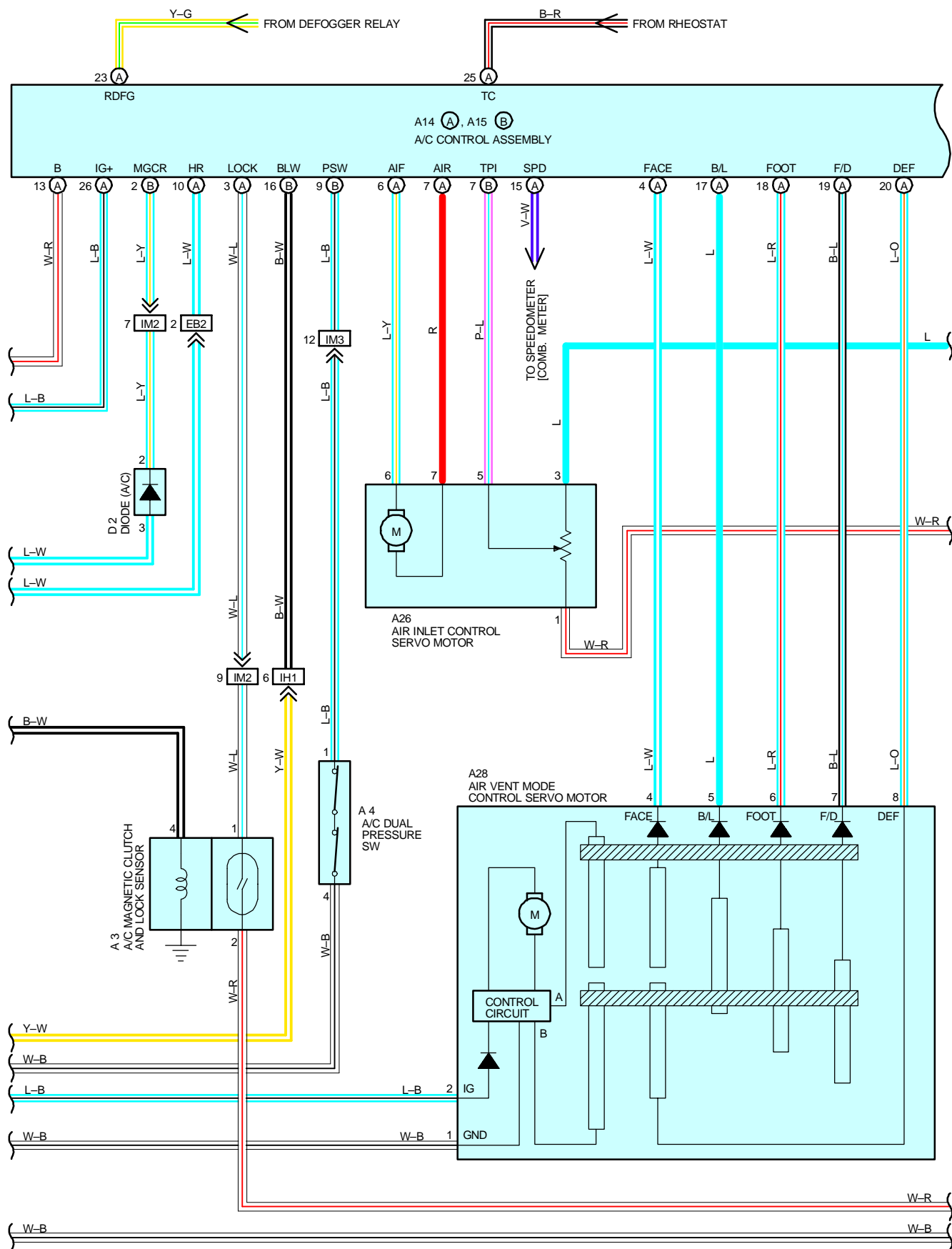
AS A RESULT, THE GROUND CIRCUIT IN A/C CONTROL ASSEMBLY IS CLOSED AND CURRENT FLOWS FROM **HEATER FUSE** TO **TERMINAL 1** OF THE MG CLT RELAY → **TERMINAL 2** → **TERMINAL MGCR** OF THE A/C CONTROL ASSEMBLY → **TERMINAL GND** → **GROUND**, TURNING THE MG CLT RELAY ON, SO THAT THE MAGNETIC CLUTCH IS ON AND THE A/C COMPRESSOR OPERATES.

AT THE SAME TIME, THE ENGINE CONTROL MODULE DETECTS THE MAGNETIC CLUTCH IS ON AND THE A/C COMPRESSOR OPERATES. IF THE A/C CONTROL ASSEMBLY DETECTS THE FOLLOWING CONDITIONS, IT STOPS THE AIR CONDITIONING:

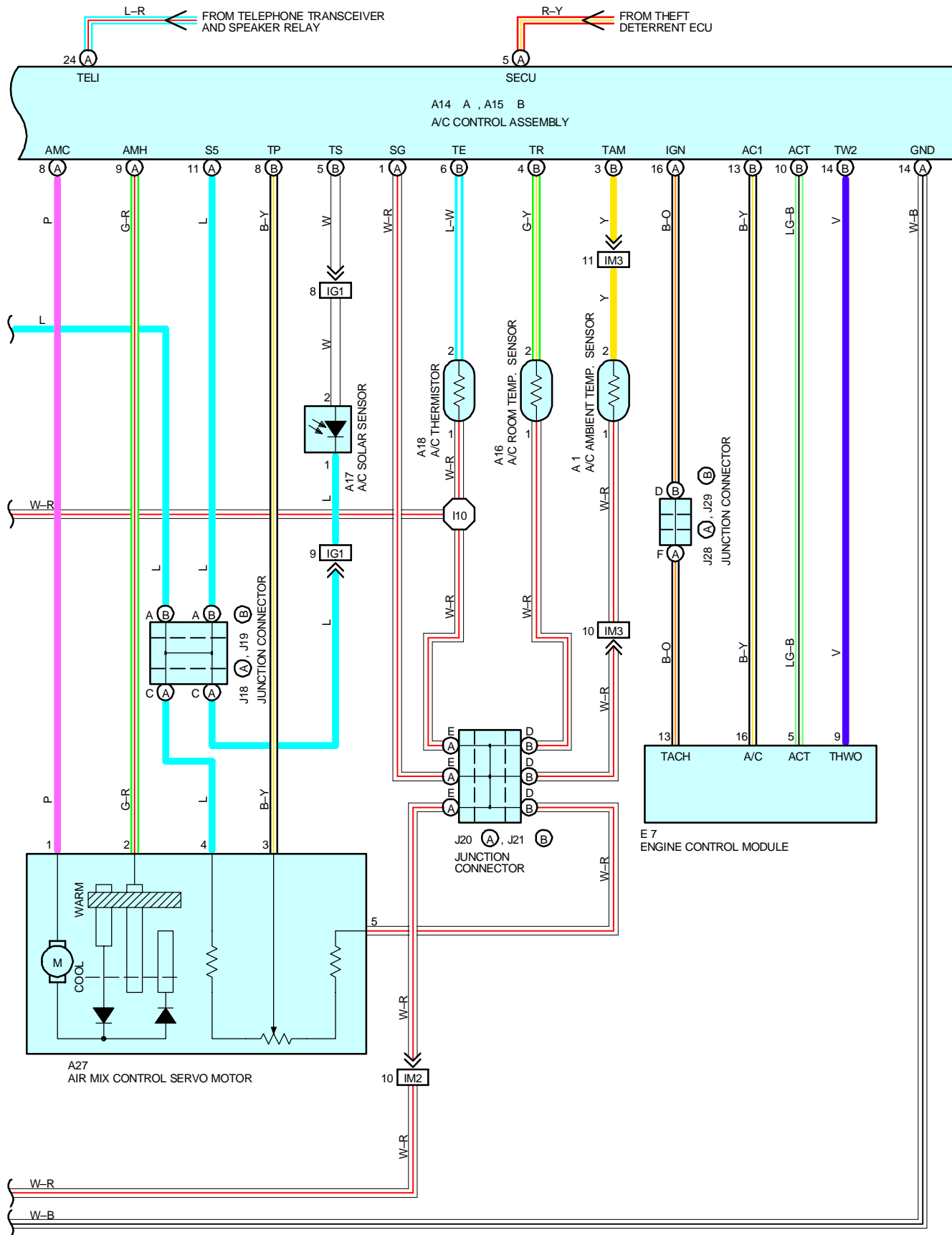
- EVAPORATOR OUTLET AIR IS TOO LOW.
- THERE IS A MARKED DIFFERENCE BETWEEN THE COMPRESSOR SPEED AND THE ENGINE SPEED.
- THE REFRIGERANT PRESSURE IS ABNORMALLY HIGH OR ABNORMALLY LOW.
- THE ENGINE SPEED IS TOO LOW.
- RAPID ACCELERATION OCCURS.

# AUTOMATIC AIR CONDITIONING





# AUTOMATIC AIR CONDITIONING



## SERVICE HINTS

### A4 A/C DUAL PRESSURE SW

4-1 : OPEN ABOVE APPROX. 15.5 KG/CM<sup>2</sup> (30 PSI, 206 KPA) OR 32 KG/CM<sup>2</sup> (455 PSI, 3138 KPA)

### A3 A/C MAGNETIC CLUTCH

4-GROUND : APPROX. 3.7Ω

### A14 (A), A15 (B) A/C CONTROL ASSEMBLY

B-GROUND : ALWAYS APPROX. 12 VOLTS

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

HR - GROUND : APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND DO NOT TURN THE BLOWER MOTOR  
BELOW 1 VOLT WITH THE IGNITION SW AT ON POSITION AND TURN THE BLOWER MOTOR

PSW - GROUND : BELOW 1 VOLT WITH THE IGNITION SW ON

AC1 - GROUND : BELOW 1 VOLT AT START THE ENGINE, OPERATE THE COMPRESSOR

**+OR MORE** VOLTS AT START THE ENGINE. DO NOT OPERATE THE COMPRESSOR

BLW - GROUND : BELOW 1.5 VOLTS WITH THE IGNITION SW ON AND TURN THE BLOWER MOTOR

S5-SG : 4-6 VOLTS WITH THE IGNITION SW ON

SG - GROUND : ALWAYS CONTINUITY

AMH-AMC : 1.3-1.9 VOLTS WITH THE IGNITION SW OFF

AIF - GROUND : APPROX. 12 VOLTS WITH THE FRESH SW ON

AIR - GROUND : APPROX. 12 VOLTS WITH THE RECIRC SW ON

FACE - GROUND : APPROX. 12 VOLTS WITH THE FACE SW ON

DEF - GROUND : APPROX. 12 VOLTS WITH THE DEF SW ON

GND - GROUND : ALWAYS CONTINUITY

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A1	26	A26	28	J15	29
A3	26	A27	28	J18	A 29
A4	26	A28	28	J19	B 29
A13	28	B2	28	J20	A 29
A14	A 28	B3	28	J21	B 29
A15	B 28	D2	26	J28	A 29
A16	28	E7	28	J29	B 29
A17	28	F10	26		
A18	28	J3	29		

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1R	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		
1W		
2C	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2J	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2K		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

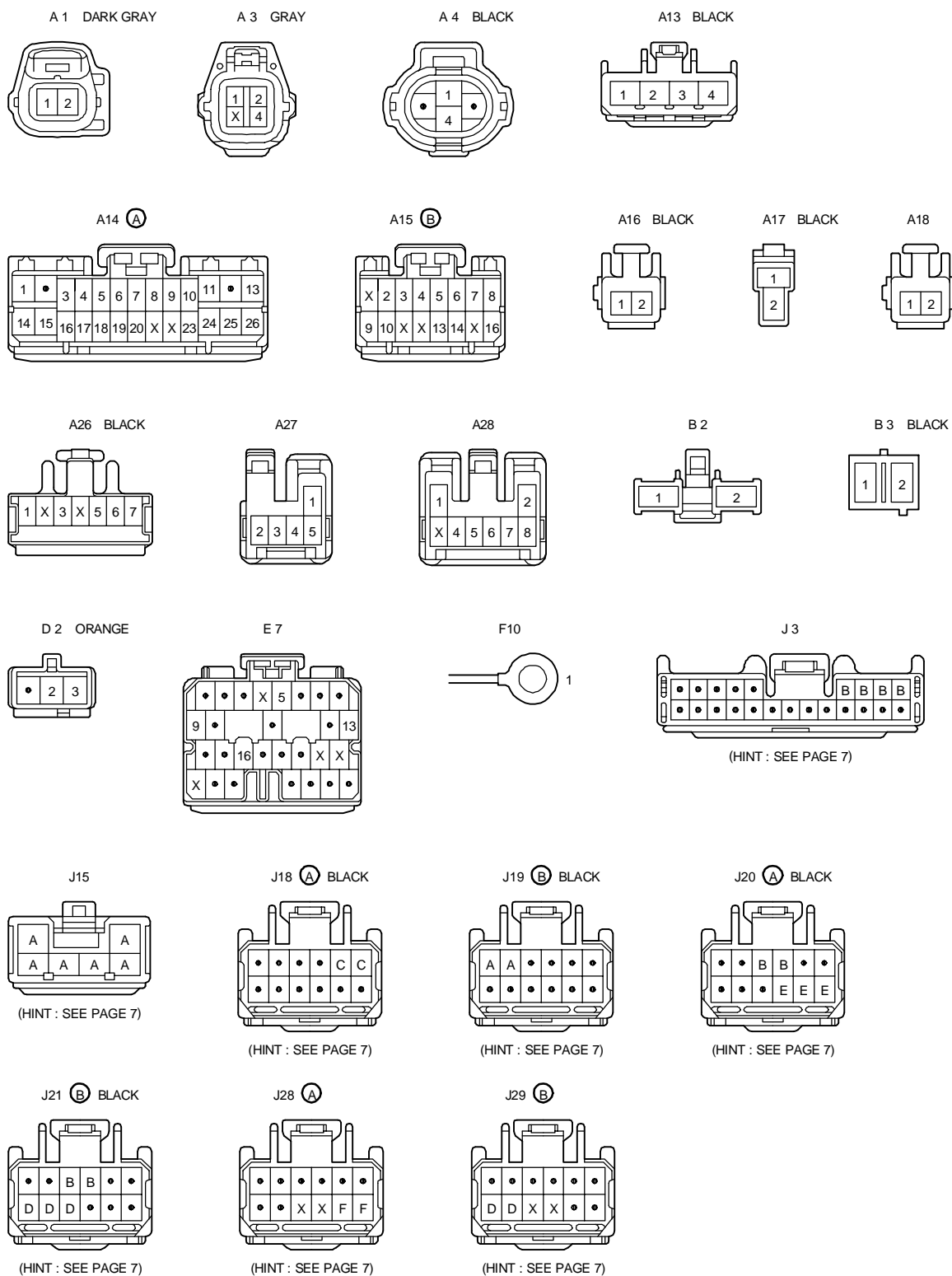
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	34	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B)
EB2		
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IH1	36	COWL WIRE AND A/C SUB WIRE (BEHIND RADIO AND PLAYER)
IM2	38	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IM3		

## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	34	LEFT RADIATOR SIDE SUPPORT
II	36	INSTRUMENT PANEL BRACE LH

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E3	34	ENGINE ROOM MAIN WIRE	I4	38	A/C SUB WIRE
I3	38	COWL WIRE	I10	38	COWL WIRE

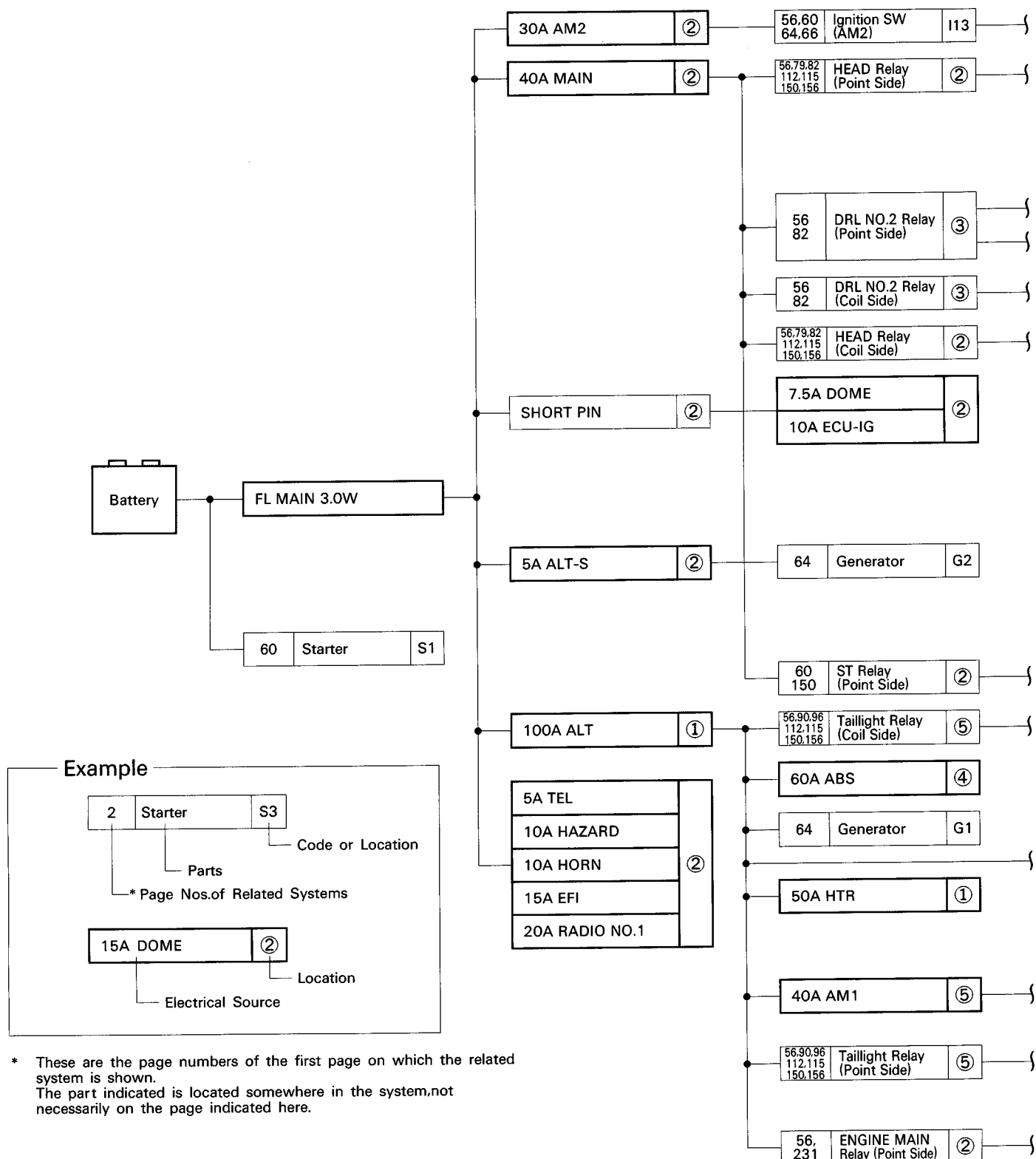




## H POWER SOURCE (Current Flow Chart)

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.

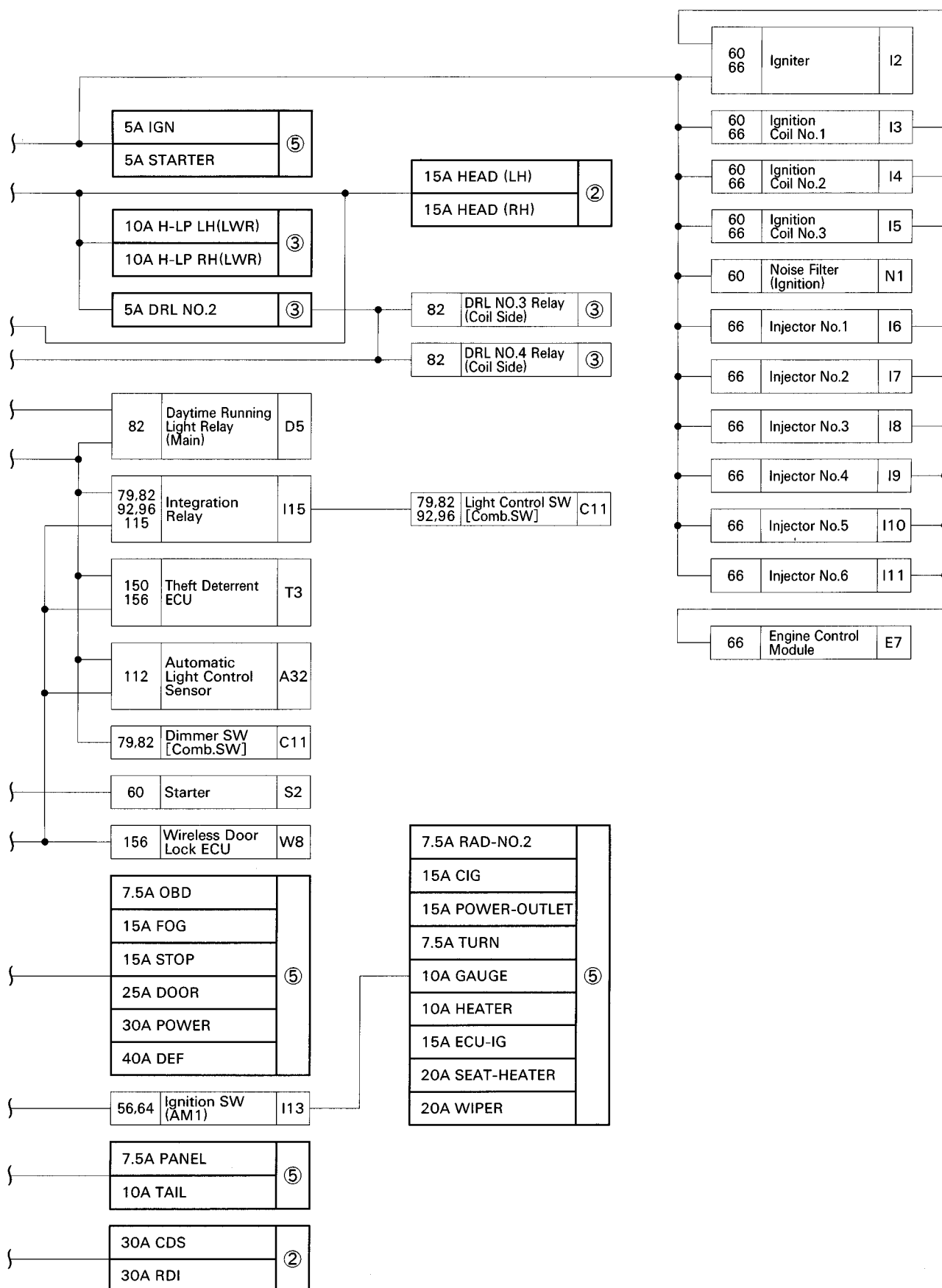
The next page and following pages show the parts to which each electrical source outputs current.



\* 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: Fusible Link Block (See Page 22) ②: Engine Room J/B (See Page 20)

⑤: Instrument Panel J/B (See Page 24)



③:Engine Room No.2 R/B (See Page 23) ④:Engine Room No.3 R/B (See Page 23)

# H POWER SOURCE (Current Flow Chart)

<div> <div>* Page Nos.of Related Systems</div> <div>Parts</div> <div>Code or Location</div> <div>CB or Fuse</div> </div>			231	234	231	198	190	234	66 96 214 234	231 234	190	190	190	198	198	184	96	234	203	112	224	234	234	220
			A/C Condenser Fan Motor	A/C Magnetic Clutch and Lock Sensor	A/C Single Pressure SW	ABS Actuator	ABS and Traction Actuator	A/C Blower Motor Linear Controller	A/C Control Assembly	A/C Control Assembly	ABS and Traction ECU	ABS and Traction ECU	ABS and Traction ECU	ABS ECU	ABS ECU	Absorber Control ECU	Absorber Control SW	Air Vent Mode Control Servo Motor	Airbag Sensor Assembly	Automatic Light Control Sensor	Brake Fluid Level Warning SW	Blower Motor	Blower Resistor	CD Automatic Changer
			A2	A3	A4	A6	A7	A13	A14	A15	A19	A20	A21	A22	A23	A24	A25	A28	A29	A32	B1	B2	B3	C4
①	50A	HTR						●														●	●	
	5A	TEL																						
	7.5A	DOME																		●				
	10A	ECU-B							●										●					
	10A	HAZARD																						
	10A	HORN																						
②	15A	EFI																						
	15A	HEAD(LH)																						
	15A	HEAD(RH)																						
	20A	RADIO NO.1																						●
	30A	CDS	●																					
	30A	RDI																						
③	10A	H-LP LH(LWR)																						
	10A	H-LP RH(LWR)																						
④	60A	ABS				●	●				●		●		●				●					
	5A	IGN																	●					
	5A	STARTER																						
	7.5A	OBD							●								●							
	7.5A	PANEL																						●
	7.5A	RAD-NO.2																						
	7.5A	TURN																						
	10A	GAUGE				●	●		●		●	●	●	●	●						●			
	10A	HEATER		●					●	●								●						
	10A	MIRROR-HEATER																						
⑤	10A	TAIL																						
	15A	CIG																	●					
	15A	ECU-IG			●					●		●		●		●				●				
	15A	FOG																						
	15A	POWER-OUTLET																						
	15A	STOP										●		●		●								
	25A	DOOR																						
	20A	SEAT-HEATER																						
	20A	WIPER																						
	30A	POWER																						
	40A	DEF																						

\* These are the page numbers of the first page on which the related system is shown.  
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[LOCATION] ①:Fusible Link Block(See page 22) ②:Engine Room J/B(See page 20)

⑤:Instrument Panel J/B(See Page 24) ⑥:Engine Room R/B(See page 22)



# H POWER SOURCE (Current Flow Chart)

<div> <div>*Page Nos.of Related Systems</div> <div>Parts</div> <div>Code or Location</div> <div>CB or Fuse</div> </div>			88	88	88	88	224	60 66	66	66	66 76	102	102	92 104	92 104	118	102	166	166	66 224	64	96	96
			Door Courtesy SW Front LH	Door Courtesy SW Front RH	Door Courtesy SW Rear LH	Door Courtesy SW Rear RH	Engine Oil Level Warning SW	Engine Control Module	Engine Control Module	Engine Control Module	Engine Control Module	Front Fog Light LH	Front Fog Light RH	Front Turn Signal and Front Parking Light LH	Front Turn Signal and Front Parking Light RH	Front Wiper Motor	Front Fog Light Relay	Fuel Lid and Luggage Compartment Door Opener SW	Fuel Lid Opener Solenoid	Fuel Pump and Fuel Sender	Generator	Glove Box Light	Glove Box Light SW
			D9	D10	D11	D12	E6	E7	E8	E9	E10	F1	F2	F3	F4	F5	F12	F13	F18	F19	G2	G3	G4
①	50A	HTR																					
②	5A	TEL																					
	7.5A	DOME	●	●	●	●																	
	10A	ECU-B																					
	10A	HAZARD												●	●								
	10A	HORN																					
	15A	EFI						●	●	●	●								●				
	15A	HEAD(LH)																					
	15A	HEAD(RH)															●						
	20A	RADIO NO.1																					
	30A	CDS																					
	30A	RDI																					
③	10A	H-LP LH(LWR)															●						
	10A	H-LP RH(LWR)																					
④	60A	ABS																					
⑤	5A	IGN						●													●		
	5A	STARTER																					
	7.5A	OBD																					
	7.5A	PANEL																				●	●
	7.5A	RAD-NO.2																					
	7.5A	TURN												●	●								
	10A	GAUGE					●			●	●								●	●			
	10A	HEATER																					
	10A	MIRROR-HEATER									●												
	10A	TAIL									●			●	●								
	15A	CIG																					
	15A	ECU-IG																					
	15A	FOG										●	●				●						
	15A	POWER-OUTLET																					
	15A	STOP									●												
	25A	DOOR																●	●				
	20A	SEAT-HEATER																					
	20A	WIPER														●							
	30A	POWER																					
	40A	DEF																					

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[LOCATION] ①:Fusible Link Block(See page 22) ②:Engine Room J/B(See page 20)

48 ⑤:Instrument Panel J/B(See Page 24) ⑥:Engine Room R/B(See page 22)



# H POWER SOURCE (Current Flow Chart)

			*Page Nos.of Related Systems	121	88	122	122	122	122 142	122	122	122	122	130	136	136	136	130	136	136	136	136	136	136	136
			Parts	Power Outlet	Personal Light	Power Window Control SW Front RH	Power Window Control SW Rear LH	Power Window Control SW Rear RH	Power Window Master SW and Door Lock Control SW Front LH	Power Window Motor Front LH	Power Window Motor Front RH	Power Window Motor Rear LH	Power Window Motor Rear RH	Power Seat Control SW (Driver's Seat Lumber Support Control)	Power Seat Control SW (Driver's Seat)	Power Seat Control SW (Front Passenger's Seat)	Power Seat Motor (Driver's Seat Front Vertical Control)	Power Seat Motor (Driver's Seat Lumber Support Control)	Power Seat Motor (Driver's Seat Rear Vertical Control)	Power Seat Motor (Driver's Seat Reclining Control)	Power Seat Motor (Driver's Seat Slide Control)	Power Seat Motor (Front Passenger's Seat Front Vertical Control)	Power Seat Motor (Front Passenger's Seat Rear Vertical Control)	Power Seat Motor (Front Passenger's Seat Reclining Control)	
																									Code or Location
			CB or Fuse	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	
①	50A	HTR																							
②	5A	TEL																							
	7.5A	DOME		●																					
	10A	ECU-B																							
	10A	HAZARD																							
	10A	HORN																							
	15A	EFI																							
	15A	HEAD(LH)																							
	15A	HEAD(RH)																							
	20A	RADIO NO.1																							
	30A	CDS																							
	30A	RDI																							
③	10A	H-LP LH(LWR)																							
	10A	H-LP RH(LWR)																							
④	60A	ABS																							
⑤	5A	IGN																							
	5A	STARTER																							
	7.5A	OBD																							
	7.5A	PANEL																							
	7.5A	RAD-NO.2																							
	7.5A	TURN																							
	10A	GAUGE																							
	10A	HEATER																							
	10A	MIRROR-HEATER																							
	10A	TAIL																							
	15A	CIG																							
	15A	ECU-IG																							
	15A	FOG																							
	15A	POWER-OUTLET	●																						
	15A	STOP																							
	25A	DOOR																							
	20A	SEAT-HEATER																							
	20A	WIPER																							
	30A	POWER			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	40A	DEF																							

\* These are the page numbers of the first page on which the related system is shown.  
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[LOCATION] ①:Fusible Link Block(See page 22) ②:Engine Room J/B(See page 20)

50 ⑤:Instrument Panel J/B(See Page 24) ⑥:Engine Room R/B(See page 22)



# H POWER SOURCE (Current Flow Chart)

*Page Nos.of Related Systems			130	150 156	60 150 156 166	150 156	104	216	66 170 176 224	66	66	66	66	88	88	224	118	224	231	231	156	66 176	66 176	231
Parts			Seat Position Control ECU	Theft Deterrent Horn	Theft Deterrent ECU	Theft Deterrent ECU	Turn Signal Flasher Relay	Telephone Transceiver and Speaker Relay	Vehicle Speed Sensor (Combination Meter)	VSV (EGR)	VSV (EVAP)	VSV (Intake Air Control)	VSV (Vapor Pressure Sensor)	Vanity Light LH	Vanity Light RH	Washer Level Warning SW	Washer Motor	Water Temp. Sender	Water Temp. SW No.1	Water Temp. SW No.2	Wireless Door Lock ECU	EFI Relay (Coil Side)	EFI Relay (Point Side)	ENGINE MAIN Relay (Coil Side)
Code or Location			S15	T1	T3	T4	T6	T8	V2	V4	V5	V6	V7	V8	V9	W1	W2	W3	W4	W5	W8	②		
CB or Fuse			S15	T1	T3	T4	T6	T8	V2	V4	V5	V6	V7	V8	V9	W1	W2	W3	W4	W5	W8	②		
①	50A	HTR																						
	5A	TEL						●																
	7.5A	DOME				●								●	●						●			
	10A	ECU-B	●																					
	10A	HAZARD					●																	
	10A	HORN		●	●																			
②	15A	EFI								●	●	●	●										●	
	15A	HEAD(LH)																						
	15A	HEAD(RH)																						
	20A	RADIO NO.1																						
	30A	CDS																						
	30A	RDI																						
③	10A	H-LP LH(LWR)																						
	10A	H-LP RH(LWR)																						
④	60A	ABS																						
	5A	IGN																				●		
	5A	STARTER			●																			
	7.5A	OBD																						
	7.5A	PANEL																						
	7.5A	RAD-NO.2																						
	7.5A	TURN					●																	
	10A	GAUGE	●						●								●		●					
	10A	HEATER																						
	10A	MIRROR-HEATER																						
⑤	10A	TAIL																						
	15A	CIG				●																		
	15A	ECU-IG	●			●		●											●	●	●			●
	15A	FOG																						
	15A	POWER-OUTLET																						
	15A	STOP	●																					
	25A	DOOR			●																			
	20A	SEAT-HEATER																						
	20A	WIPER															●							
	30A	POWER																						
	40A	DEF																						

\* 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:Fusible Link Block(See page 22) ②:Engine Room J/B(See page 20)

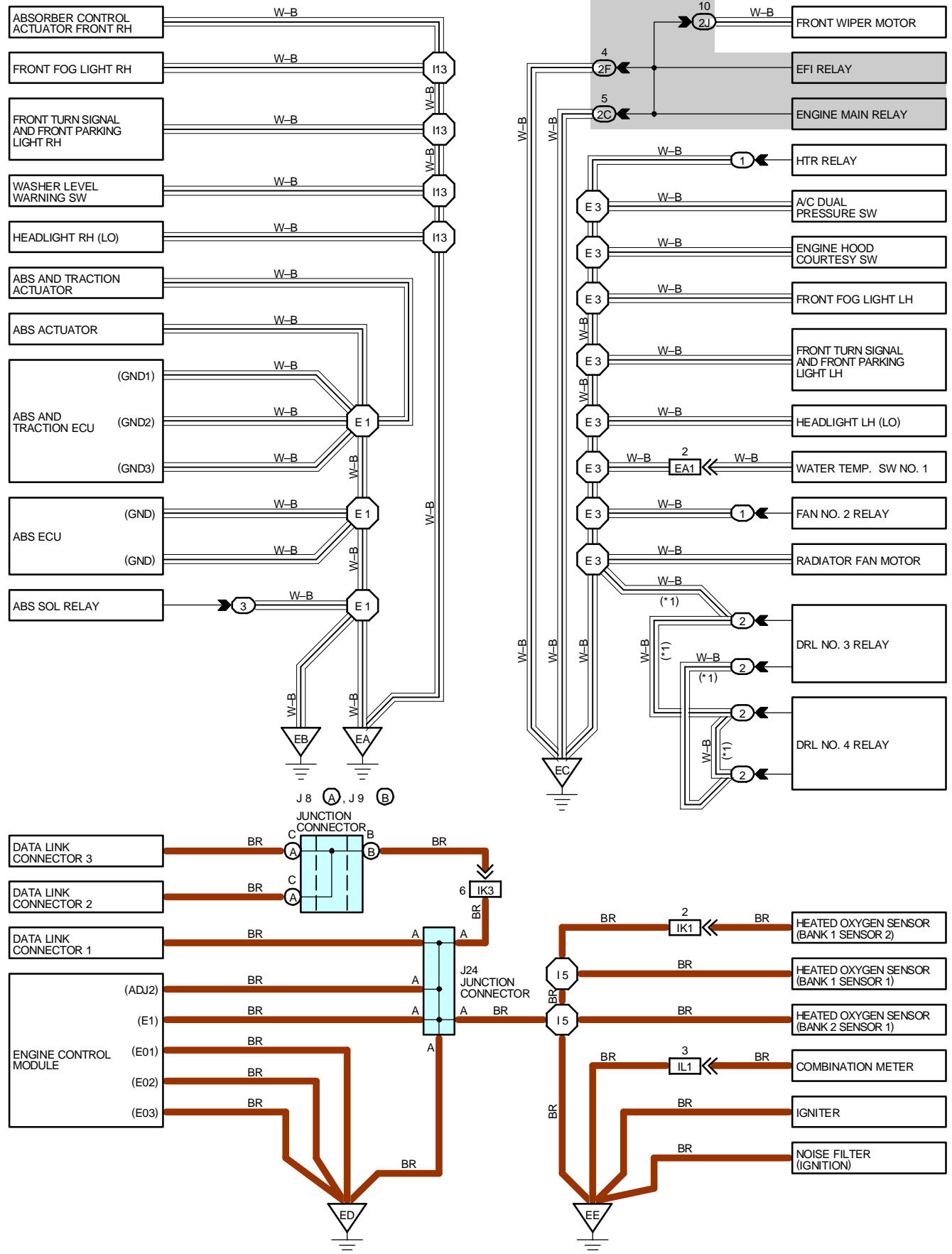
52 ⑤:Instrument Panel J/B(See Page 24) ⑥:Engine Room R/B(See page 22)

[illegible]

③:Engine Room No.2 R/B (See page 23) ④:Engine Room No.3 R/B (See page 23)

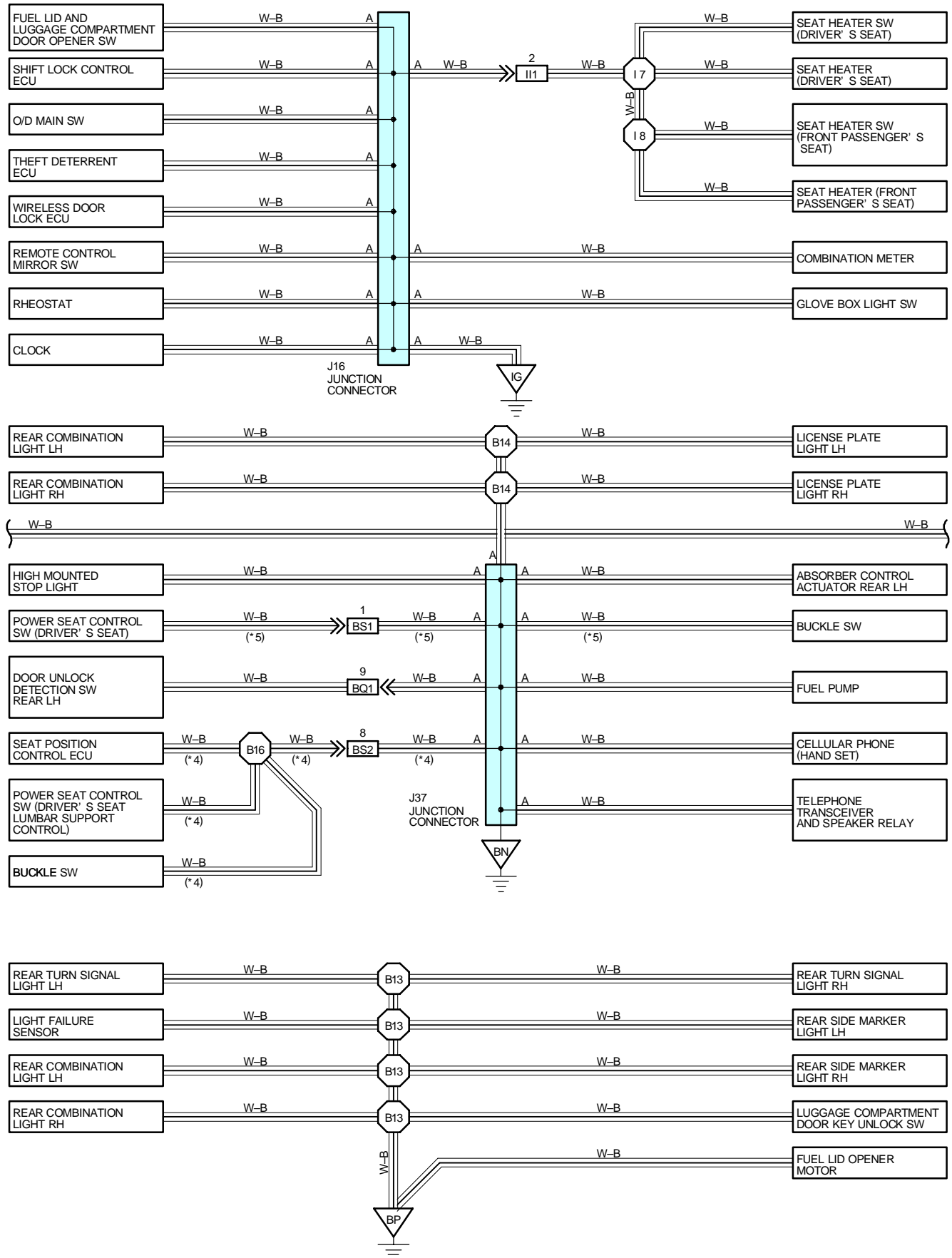


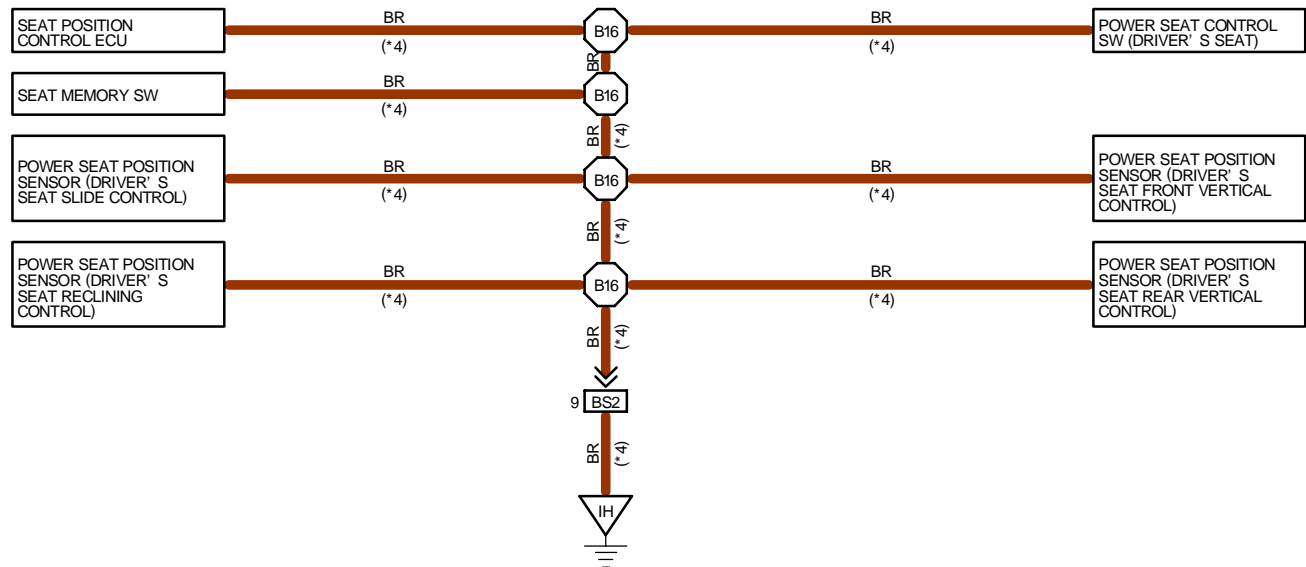
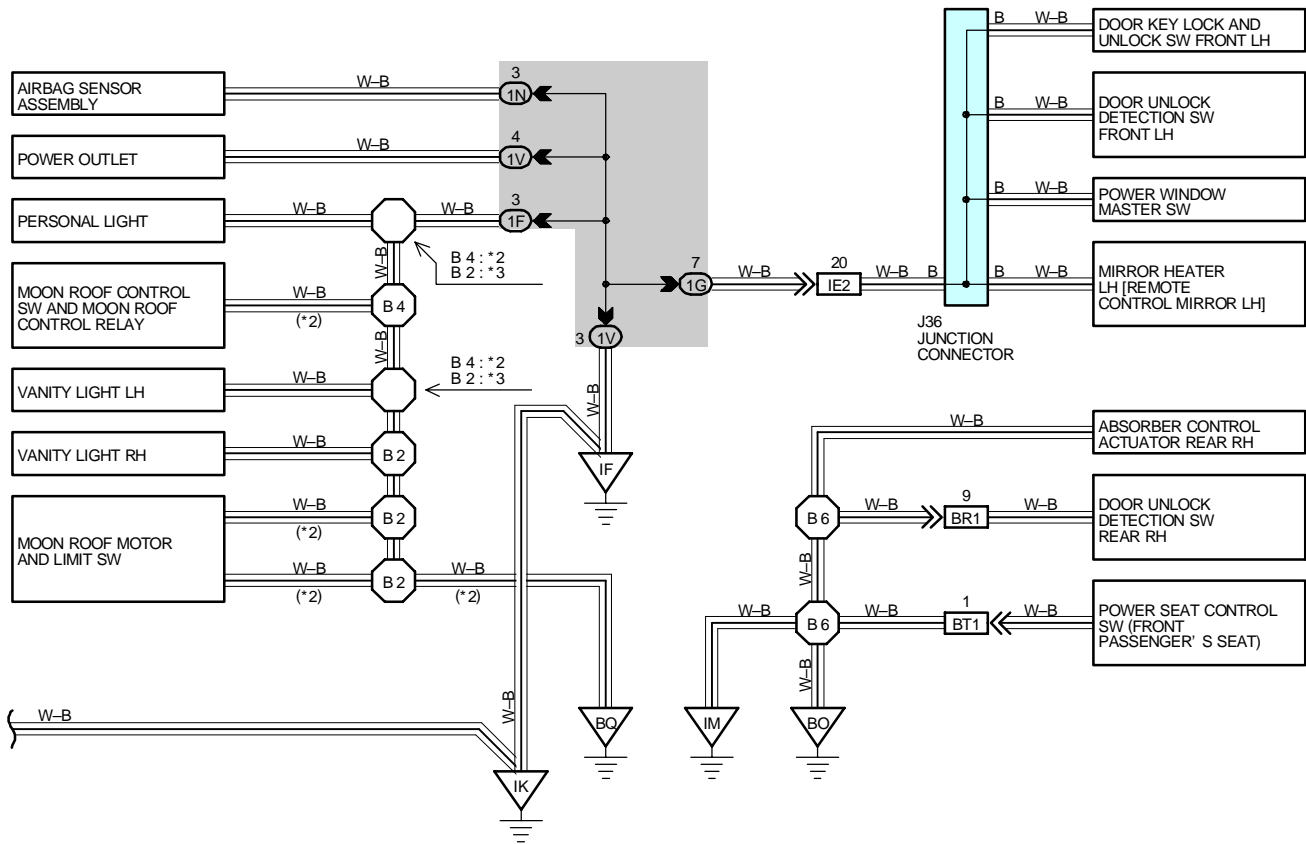
# J GROUND POINT





# J GROUND POINT





# J GROUND POINT

## ○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J8	A	29	J20	A	29
J9	B	29	J21	B	29
J15	29	J24	29	J37	30
J16	29	J36	30	J38	30

## ○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	22	ENGINE ROOM R/B (ENGINE COMPARTMENT LEFT)
2	23	ENGINE ROOM NO. 2 R/B (ENGINE COMPARTMENT LEFT)
3	23	ENGINE ROOM NO. 3 R/B (RADIATOR UPPER SUPPORT RH)

## ○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1F	24	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	24	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	24	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1M		
1N		
1V		
2C	20	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2F	20	COWL WIRE AND ENGINE ROOM J/B (ENGINE COMPARTMENT LEFT)
2J		

## □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	34	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO. 3 WIRE (BEHIND HEADLIGHT LH)
IE2	36	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF3	36	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG1	36	INSTRUMENT PANEL WIRE AND COWL WIRE (RIGHT SIDE OF INSTRUMENT PANEL J/B)
IH1	36	COWL WIRE AND A/C SUB WIRE (BEHIND RADIO AND PLAYER)
II1	38	FLOOR NO. 3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)
IK1	38	ENGINE WIRE AND COWL WIRE (UNDER THE GLOVE BOX)
IK3		
IL1	38	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE GLOVE BOX)
IO2	38	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BQ1	40	REAR DOOR LH WIRE AND FLOOR WIRE (LEFT CENTER PILLAR)
BR1	40	REAR DOOR RH WIRE AND FLOOR NO. 2 WIRE (RIGHT CENTER PILLAR)
BS1	42	FLOOR WIRE AND SEAT NO. 1 WIRE (UNDER THE DRIVER'S SEAT)
BS2		
BT1	42	FLOOR NO. 2 WIRE AND SEAT NO. 2 WIRE (UNDER THE FRONT PASSENGER'S SEAT)

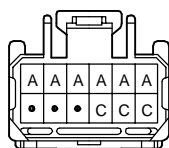
## ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	34	RIGHT RADIATOR SIDE SUPPORT
EB		
EC		LEFT RADIATOR SIDE SUPPORT
ED	34	SURGE TANK RH
EE	34	REAR SIDE OF SURGE TANK
IF	36	COWL SIDE PANEL LH
IG	36	LEFT KICK PANEL
IH		
II		
IJ	36	INSTRUMENT PANEL BRACE LH
IK	36	INSTRUMENT PANEL BRACE RH
IL	36	COWL SIDE PANEL RH
IM		
IN		RIGHT KICK PANEL
BN	40	UNDER THE LEFT CENTER PILLAR
BO	40	UNDER THE RIGHT CENTER PILLAR
BP	40	BACK PANEL CENTER
BQ	40	ROOF LEFT

 : SPLICE POINTS

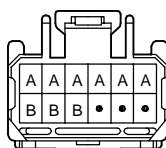
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E1	34	ENGINE ROOM MAIN WIRE	I13	38	ENGINE ROOM MAIN WIRE
E3			B2	40	ROOF WIRE
I4	38	A/C SUB WIRE	B6		FLOOR NO. 2 WIRE
I5		ENGINE WIRE	B13		FLOOR WIRE
I7		FLOOR NO. 3 WIRE	B14		
I8			B16	42	SEAT NO. 1 WIRE

J 8 (A) GRAY



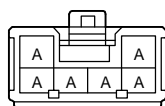
(HINT : SEE PAGE 7)

J 9 (B) GRAY



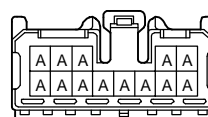
(HINT : SEE PAGE 7)

J15



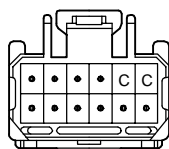
(HINT : SEE PAGE 7)

J16 ORANGE



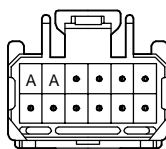
(HINT : SEE PAGE 7)

J20 (A) BLACK



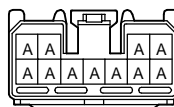
(HINT : SEE PAGE 7)

J21 (B) BLACK



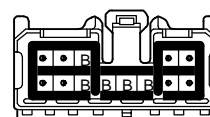
(HINT : SEE PAGE 7)

J24



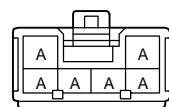
(HINT : SEE PAGE 7)

J36



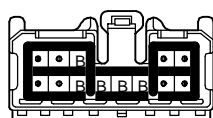
(HINT : SEE PAGE 7)

J37



(HINT : SEE PAGE 7)

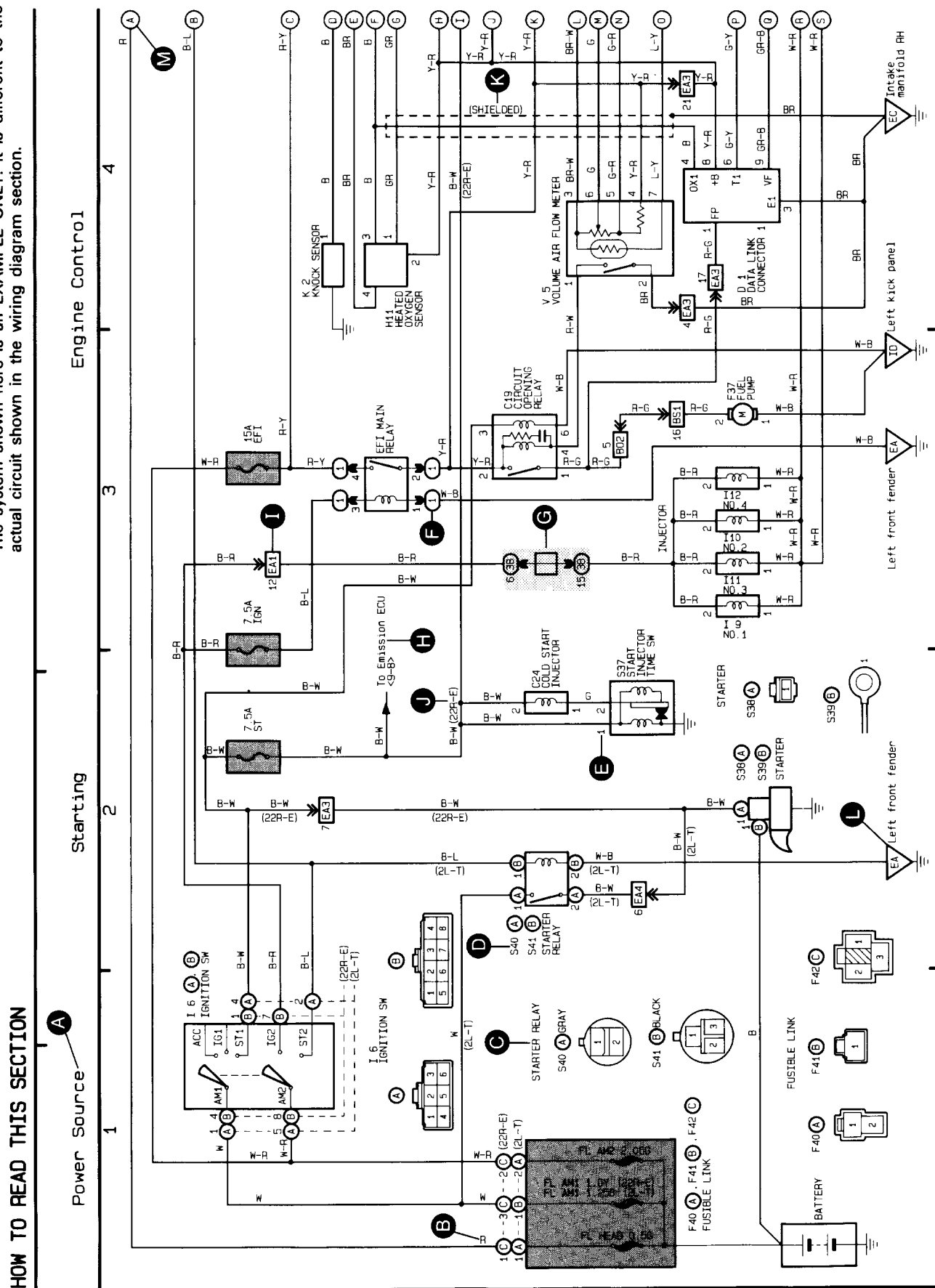
J38



(HINT : SEE PAGE 7)

## 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.



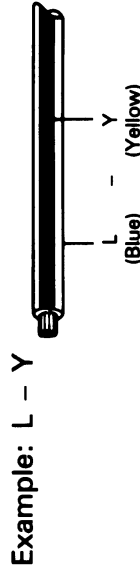
**A:** System Title

**B:** Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

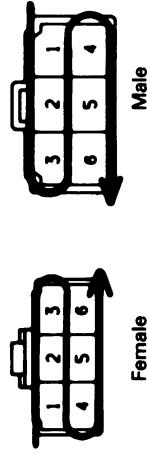


**C:** Indicates the connector to be connected to a part (the numeral indicates the pin No.)

**D:** The position of the parts is the same as shown in the wiring diagram and wire routing.

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

Example: Numbered in order from upper left to lower right

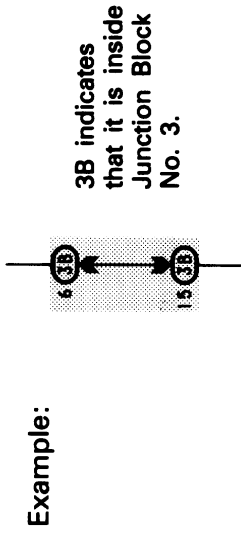


The numbering system for the overall wiring diagram is the same as above.

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

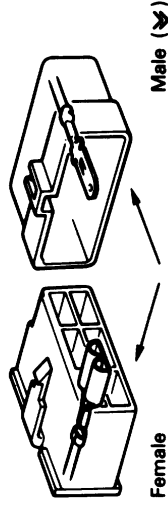
Example: ① Indicates Relay Block No. 1.

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



**H:** Indicates 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.

# K OVERALL ELECTRICAL WIRING DIAGRAM

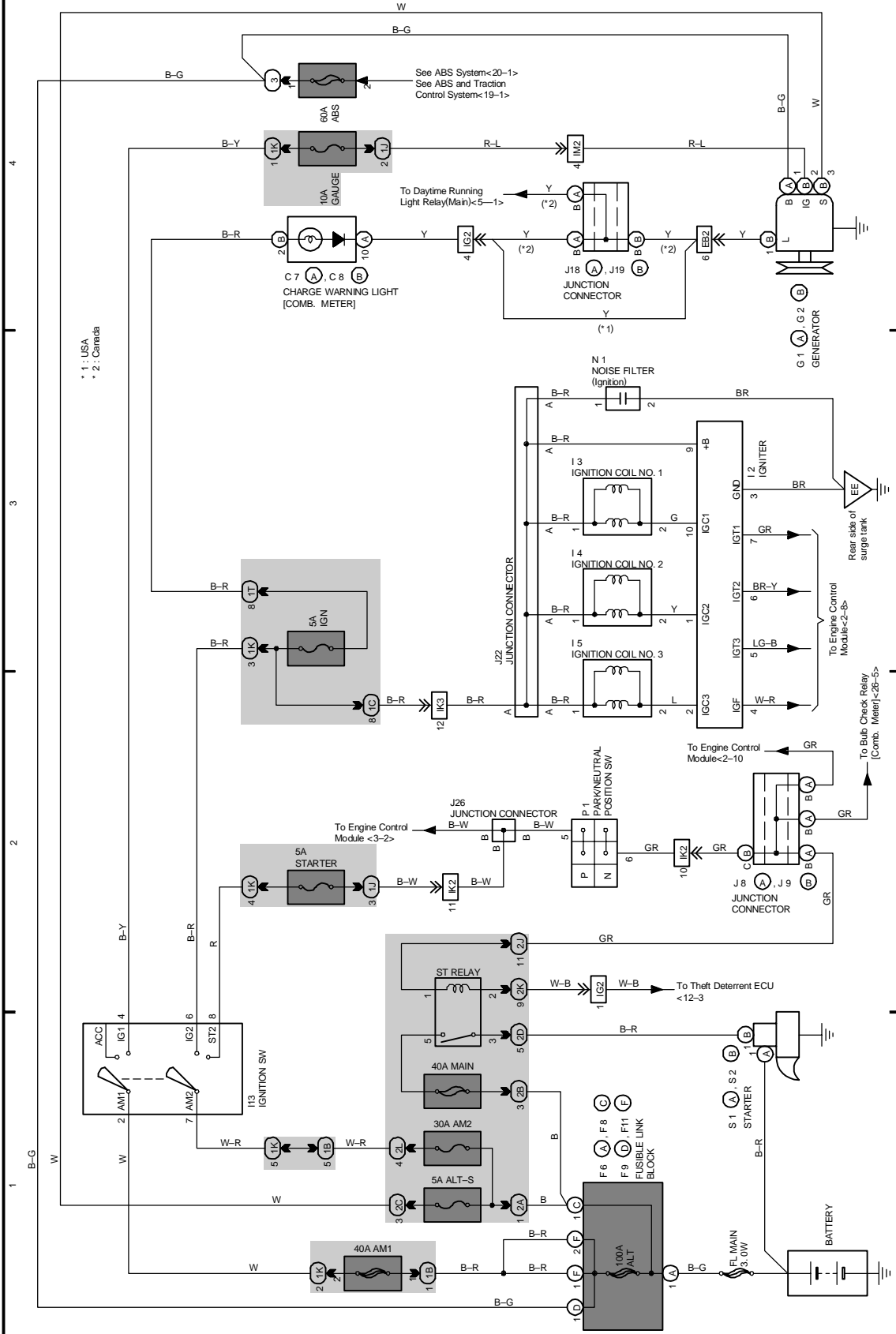
## SYSTEM INDEX

(Location No.1 to 27)

SYSTEMS	LOCATION	SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS	20-3	Fuel Lid and Luggage Compartment Door Opener	10-3	Remote Control Mirror	17-3
ABS and Traction Control	19-3	Headlight	4-2 (USA) 5-3 (Canada)	Seat Heater	16-4
Automatic Air Conditioning	27-3	Horn	14-4	Shift Lock	24-4
Automatic Light Control	10-2	Ignition	1-3	SRS	23-2
Back-Up Light	9-4	Illumination	7-3	Starting	1-2
Cellular Mobile Telephone	24-2	Interior Light	8-3	Stop Light	6-4
Charging	1-4	Light Auto Turn Off	10-3	Taillight	6-2
Cigarette Lighter and Clock	23-4	Moon Roof	14-2	Theft Deterrent System	12-3
Combination Meter	26-3	Power Outlet	23-3 15-2 (Driver's Seat w/ Driving Position Memory)	Turn Signal and Hazard Warning Light	9-2
Cruise Control	21-3	Power Seat	16-1 (Driver's Seat w/o Driving Position Memory) 16-3 (Front Passenger's Seat)	Unlock and Seat Belt Warning	14-3
Door Lock Control	11-3	Power Source	1~27-1	Wiper and Washer	17-2
Electric Modulated Suspension	22-3	Power Window	13-3	Wireless Door Lock Control	11-7
Electronically Controlled Transmission and A/T Indicator	3-2	Radiator Fan and Condenser Fan	18-3		
Engine Control	2-3	Radio and Player	25-3		
Front Fog Light	4-4	Rear Window Defogger and Mirror Heater	18-2		

## 1 ES300 ELECTRICAL WIRING DIAGRAM

Power Source      Starting      Ignition      Charging

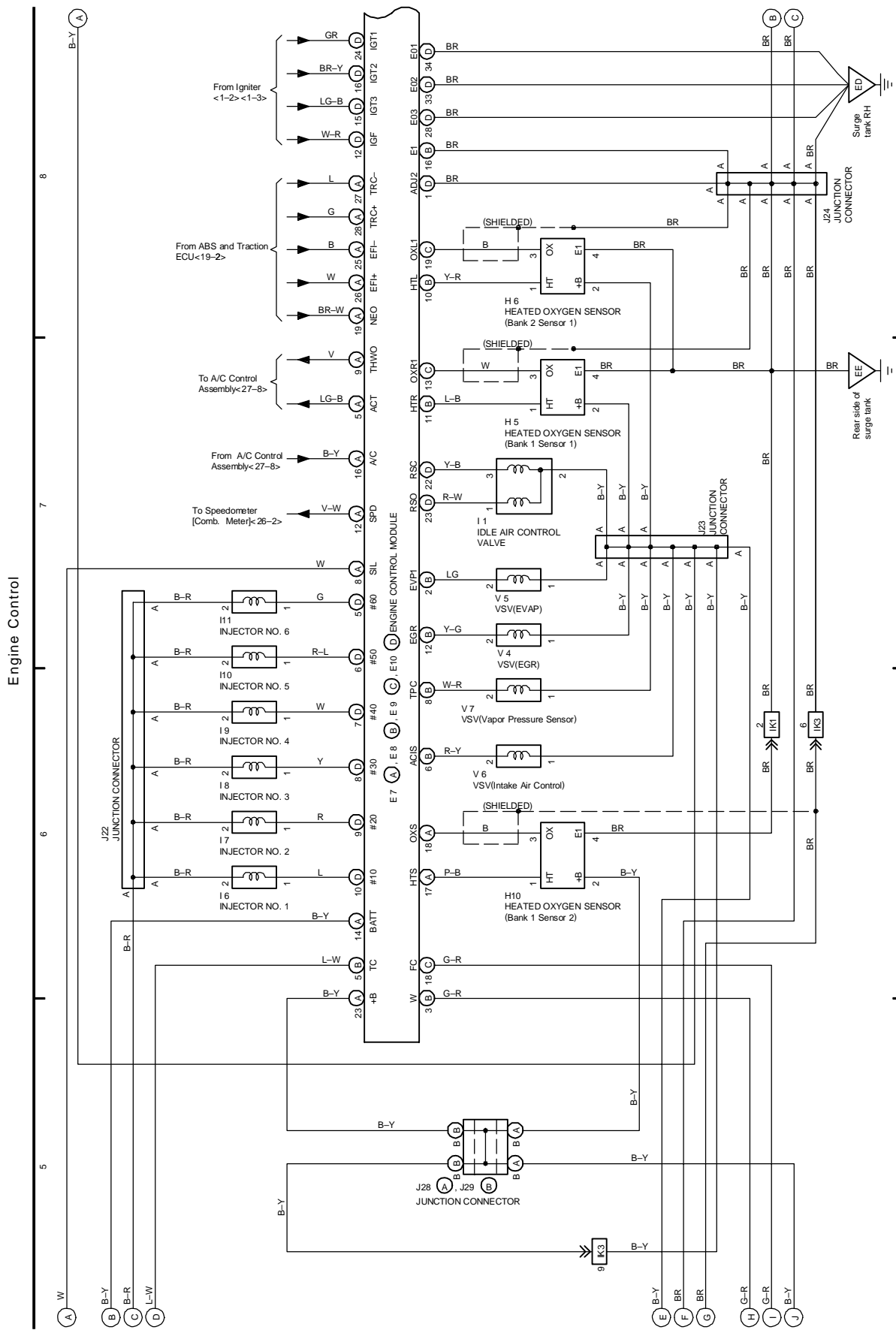


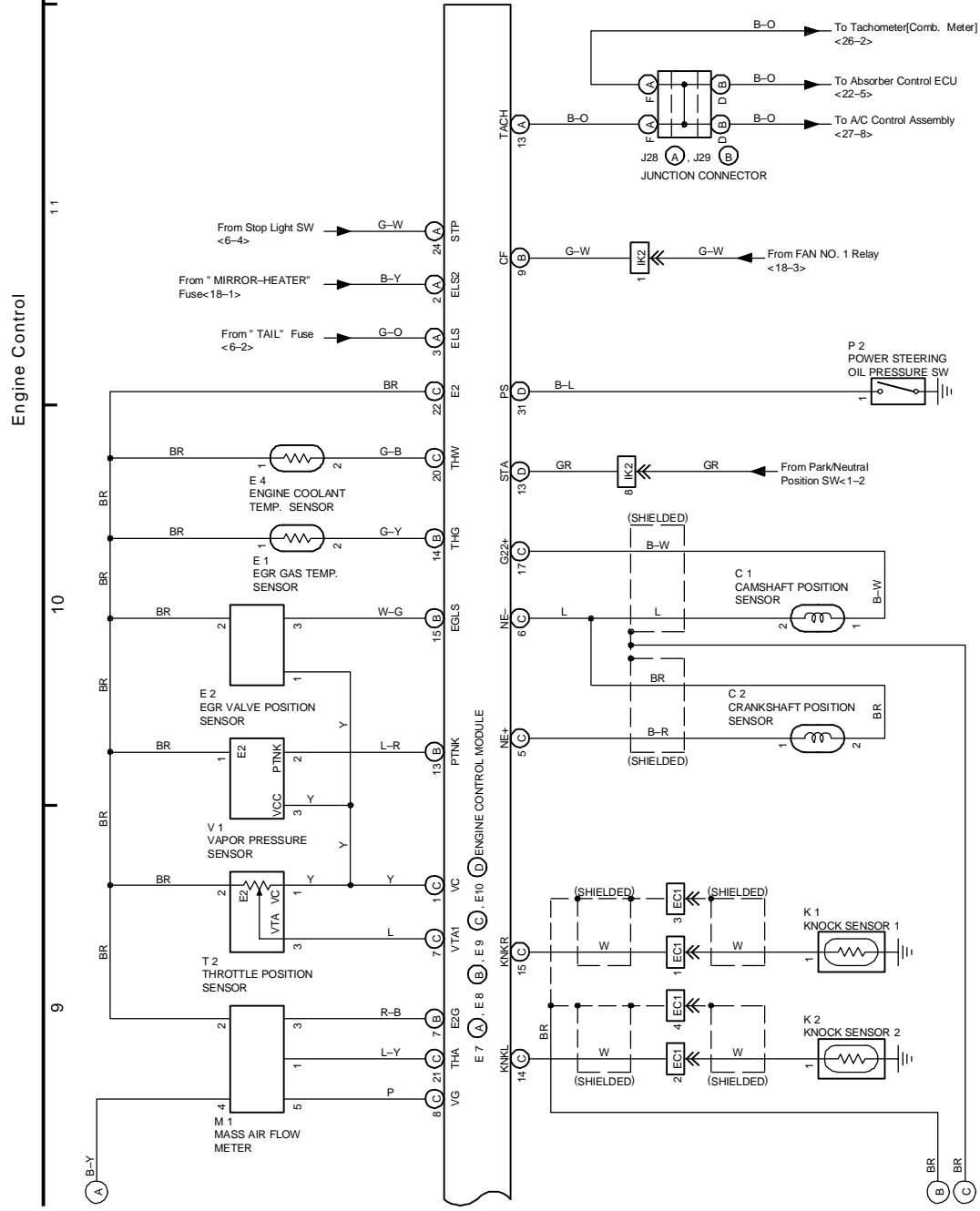


## K OVERALL ELECTRICAL WIRING DIAGRAM

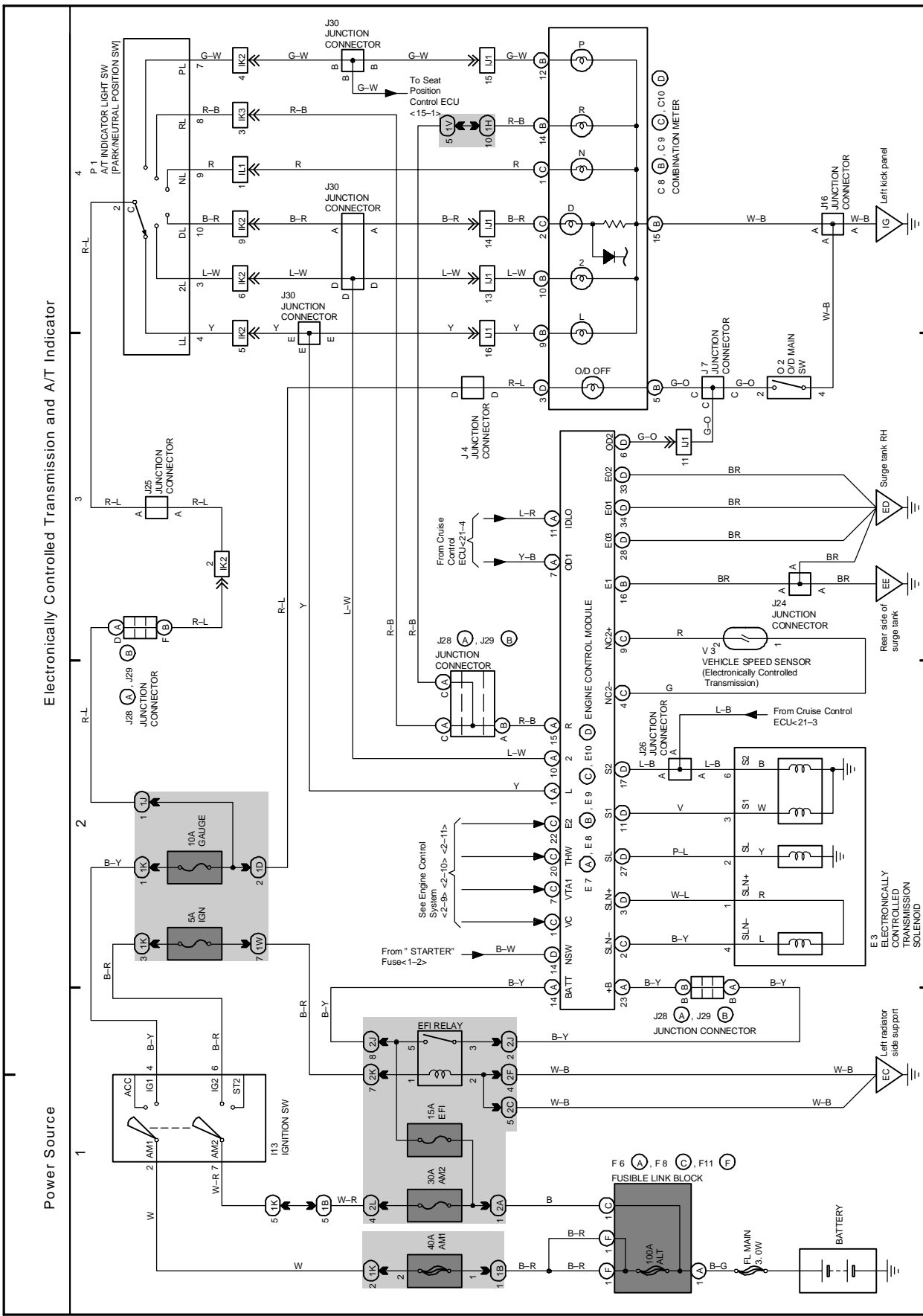
2 ES300(Cont' d)

( Cont. next page )

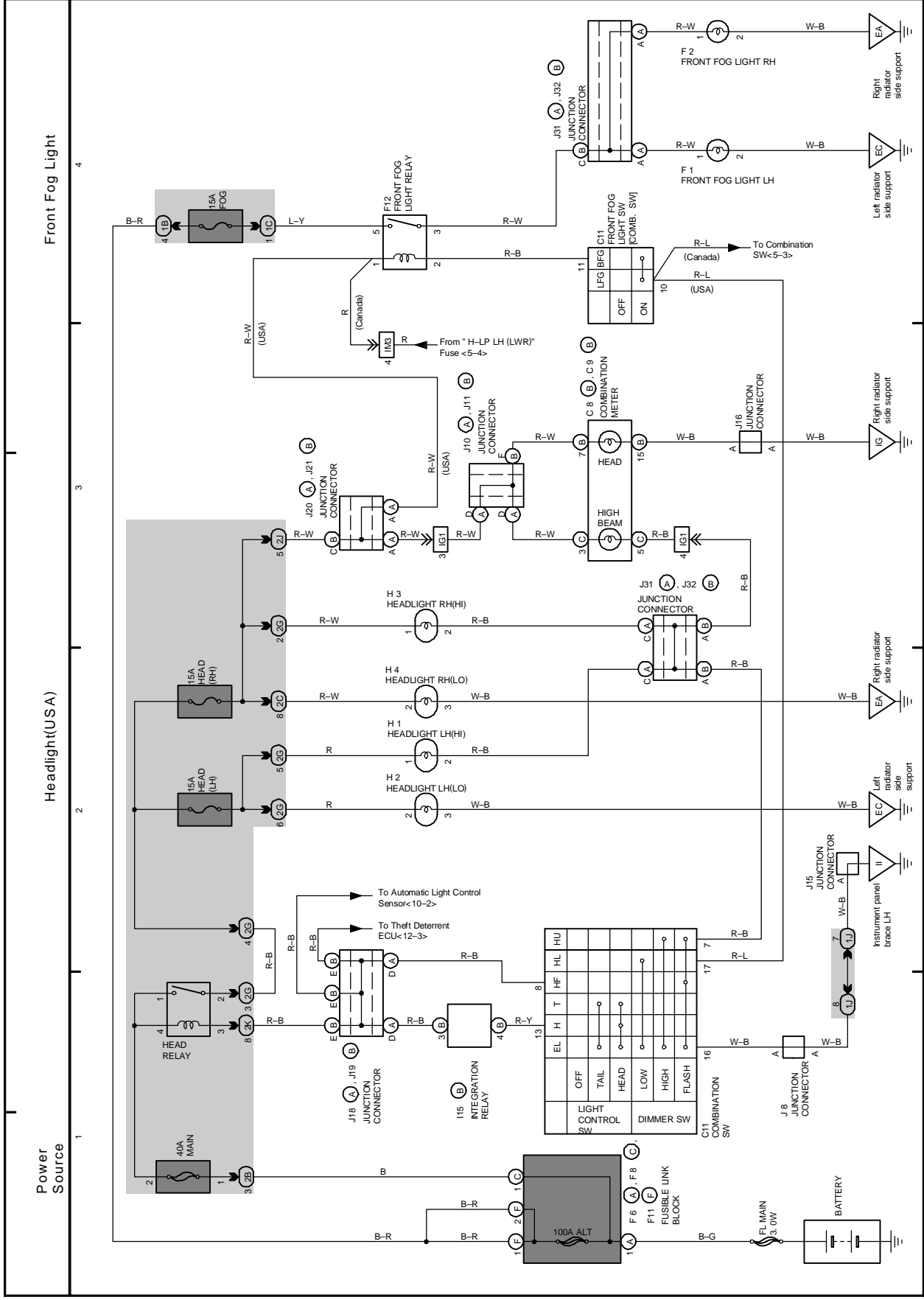




## K OVERALL ELECTRICAL WIRING DIAGRAM

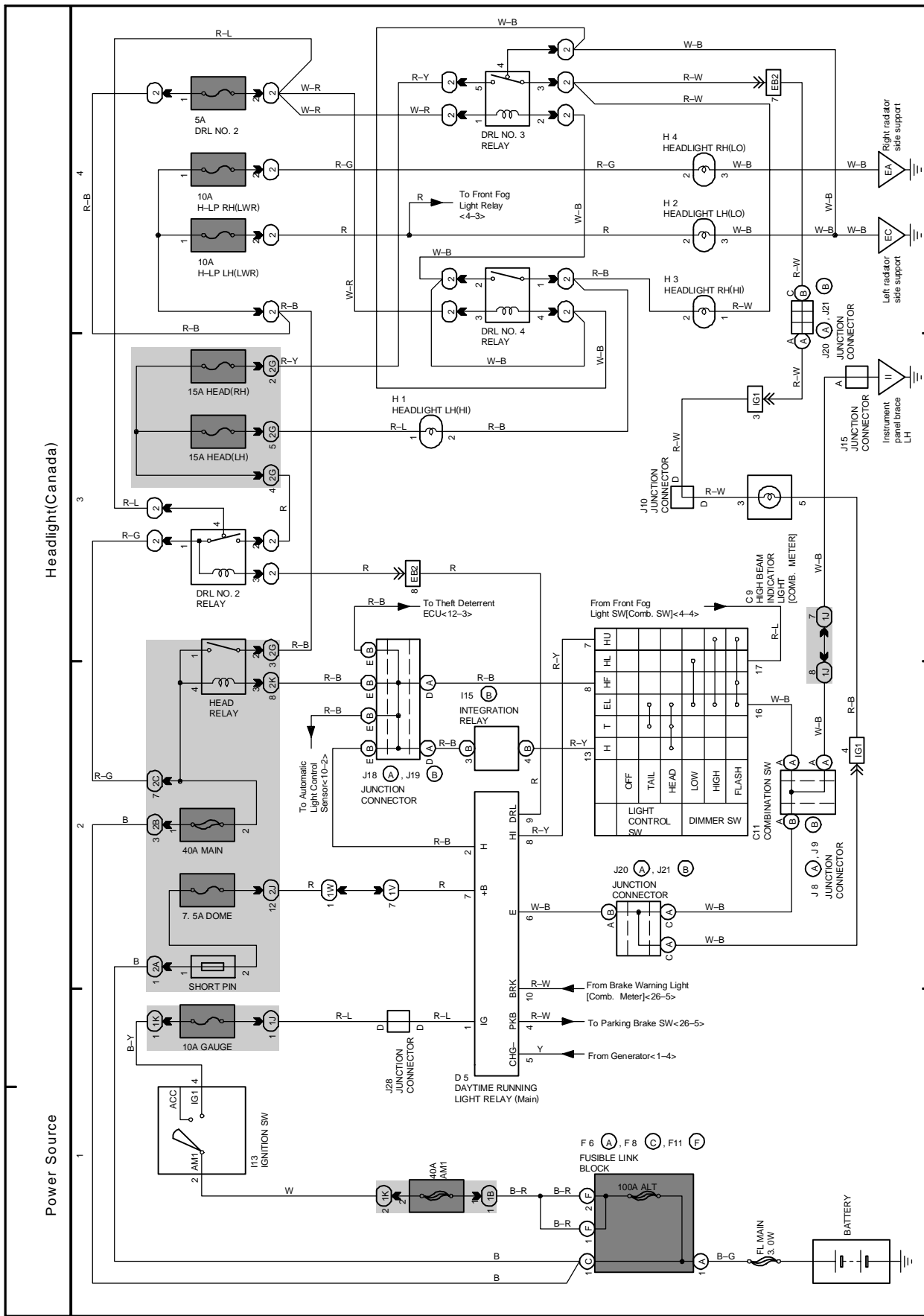


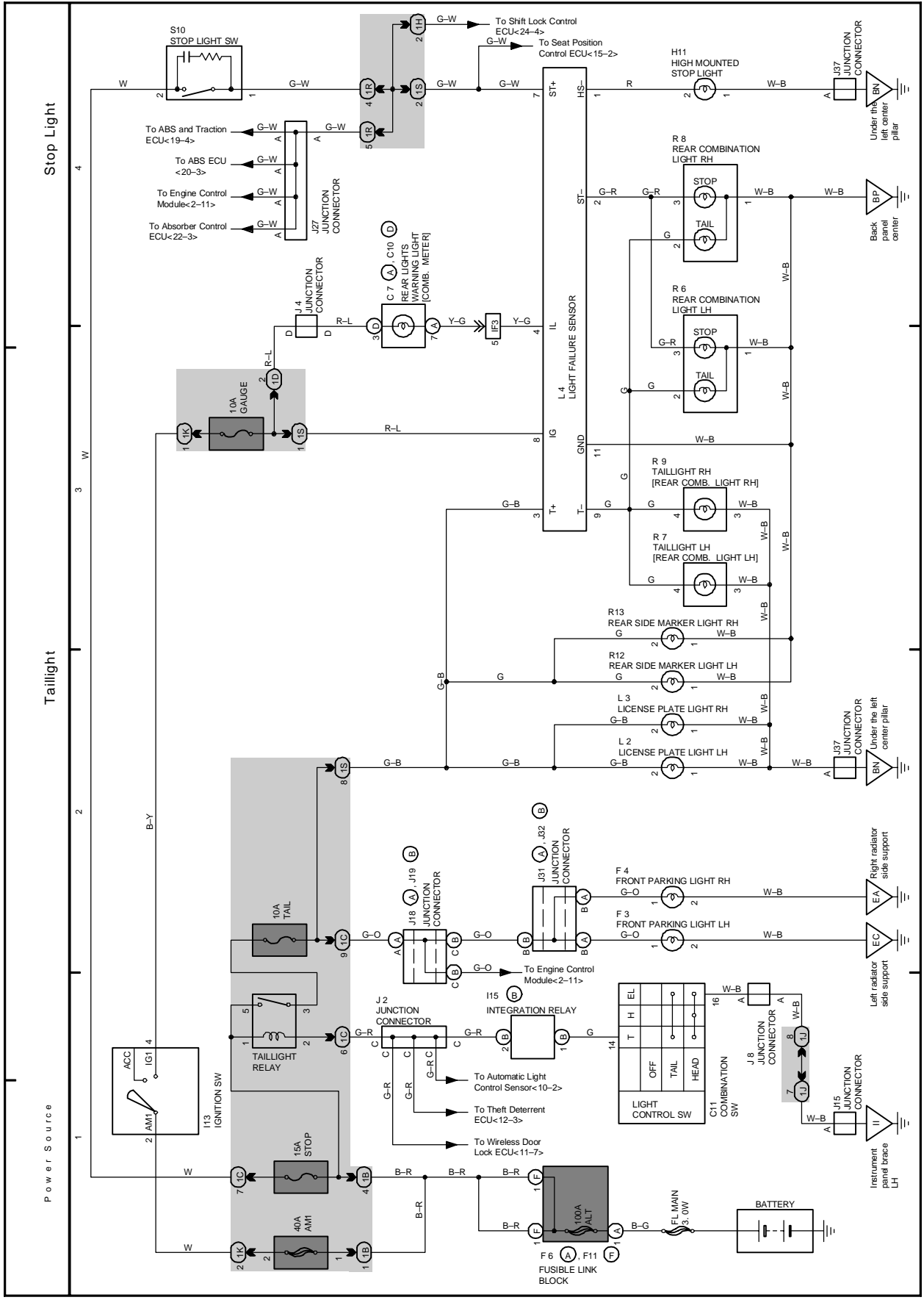
4 ES300



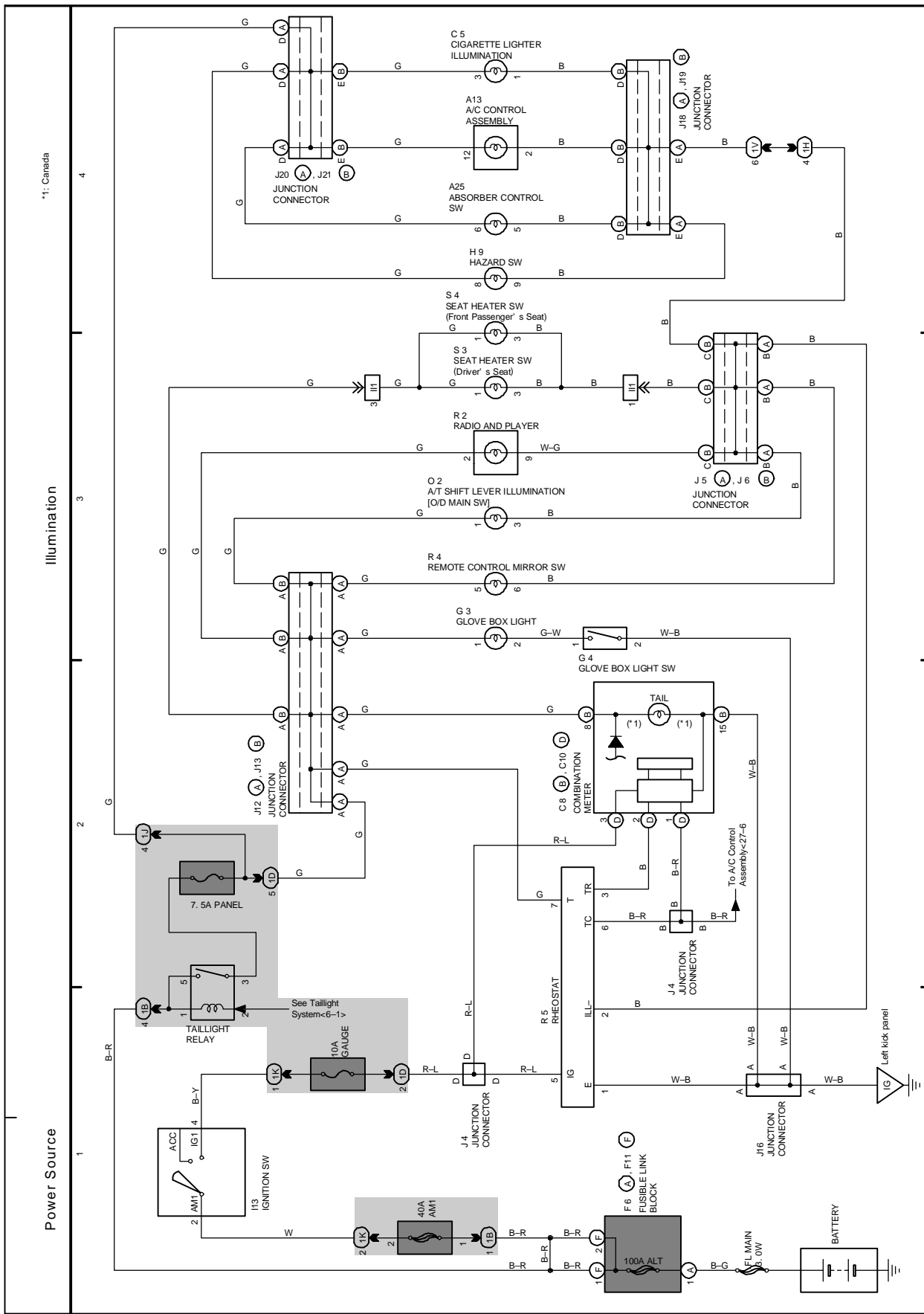
# K OVERALL ELECTRICAL WIRING DIAGRAM

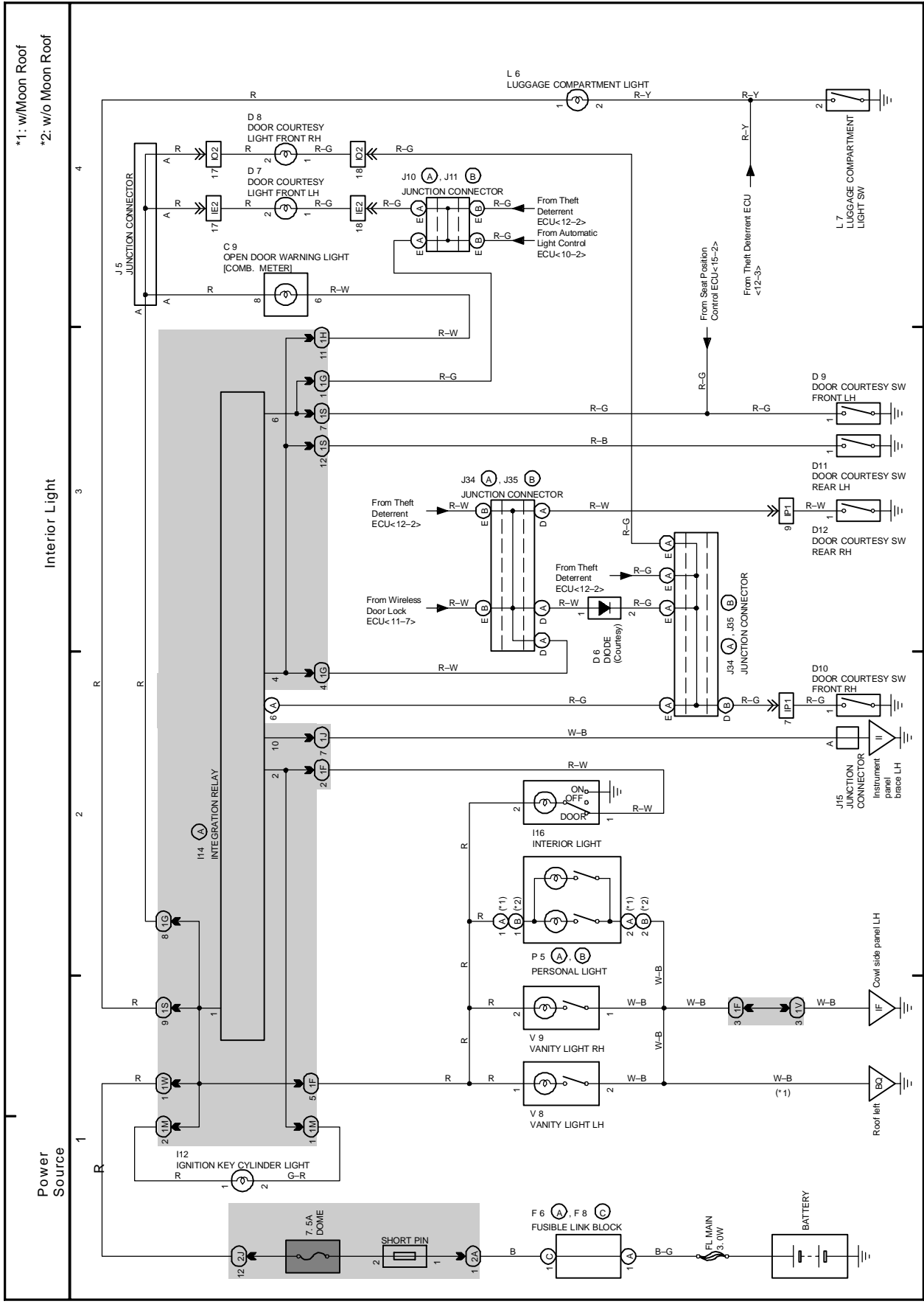
5 ES300



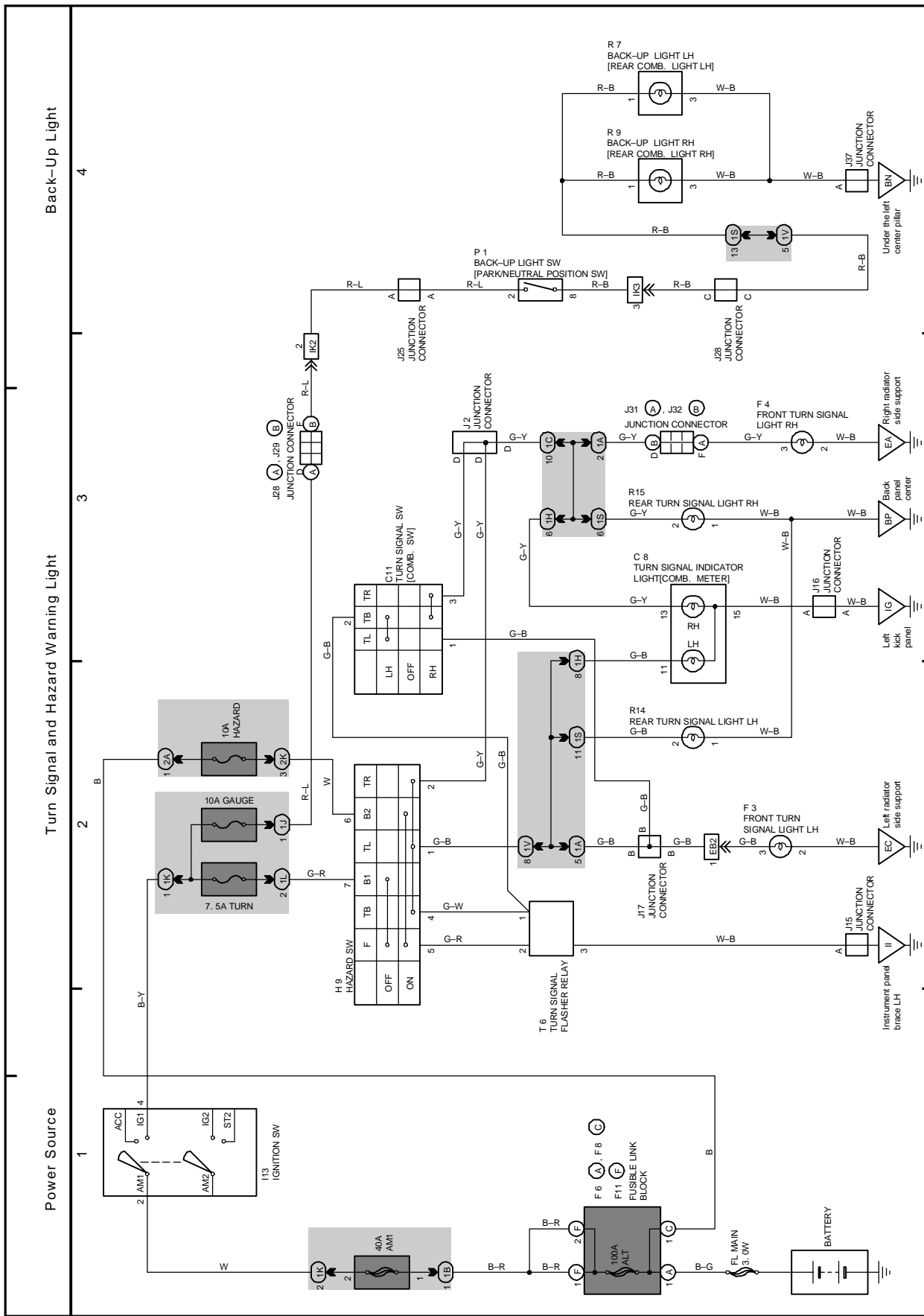


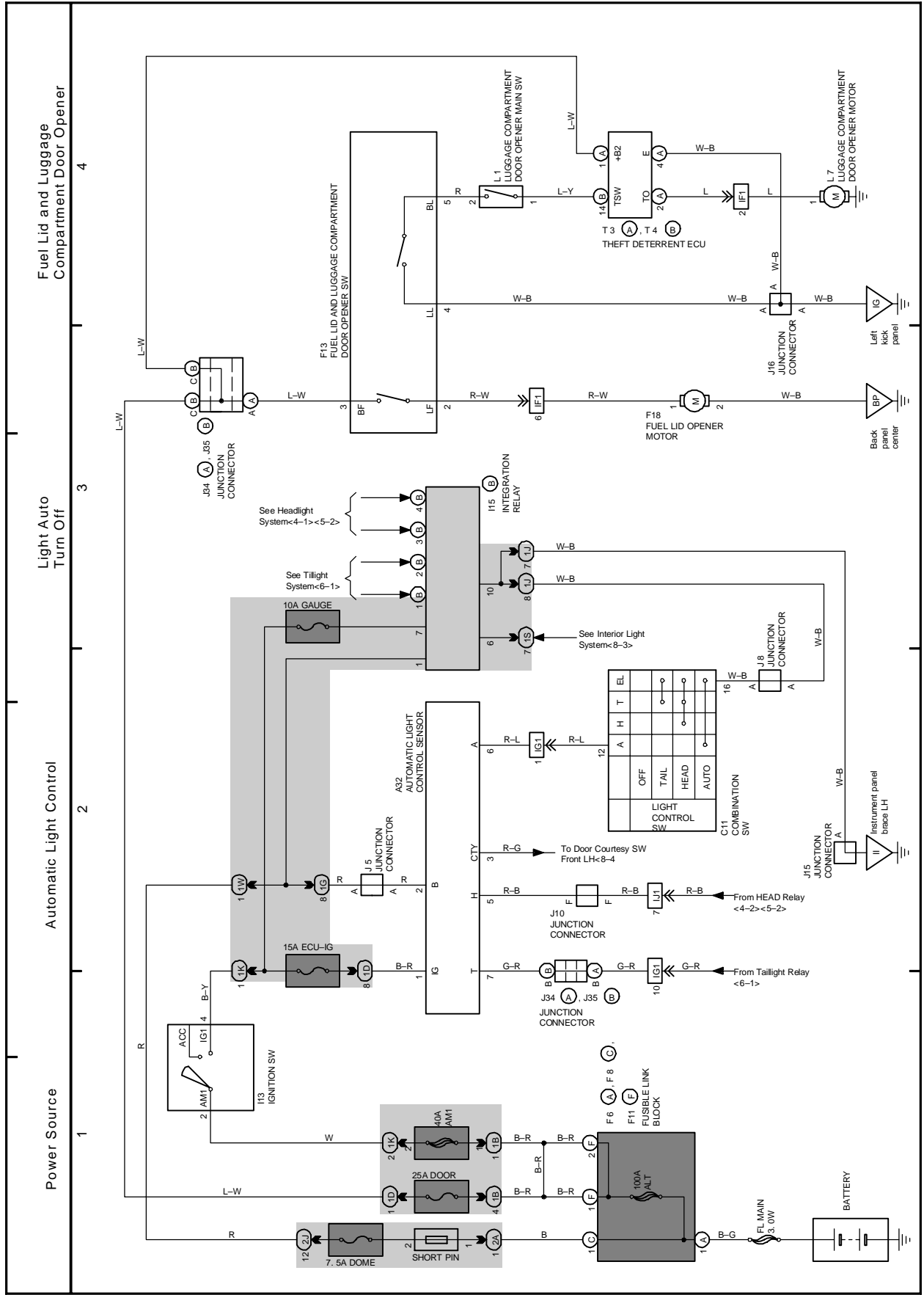
## K OVERALL ELECTRICAL WIRING DIAGRAM





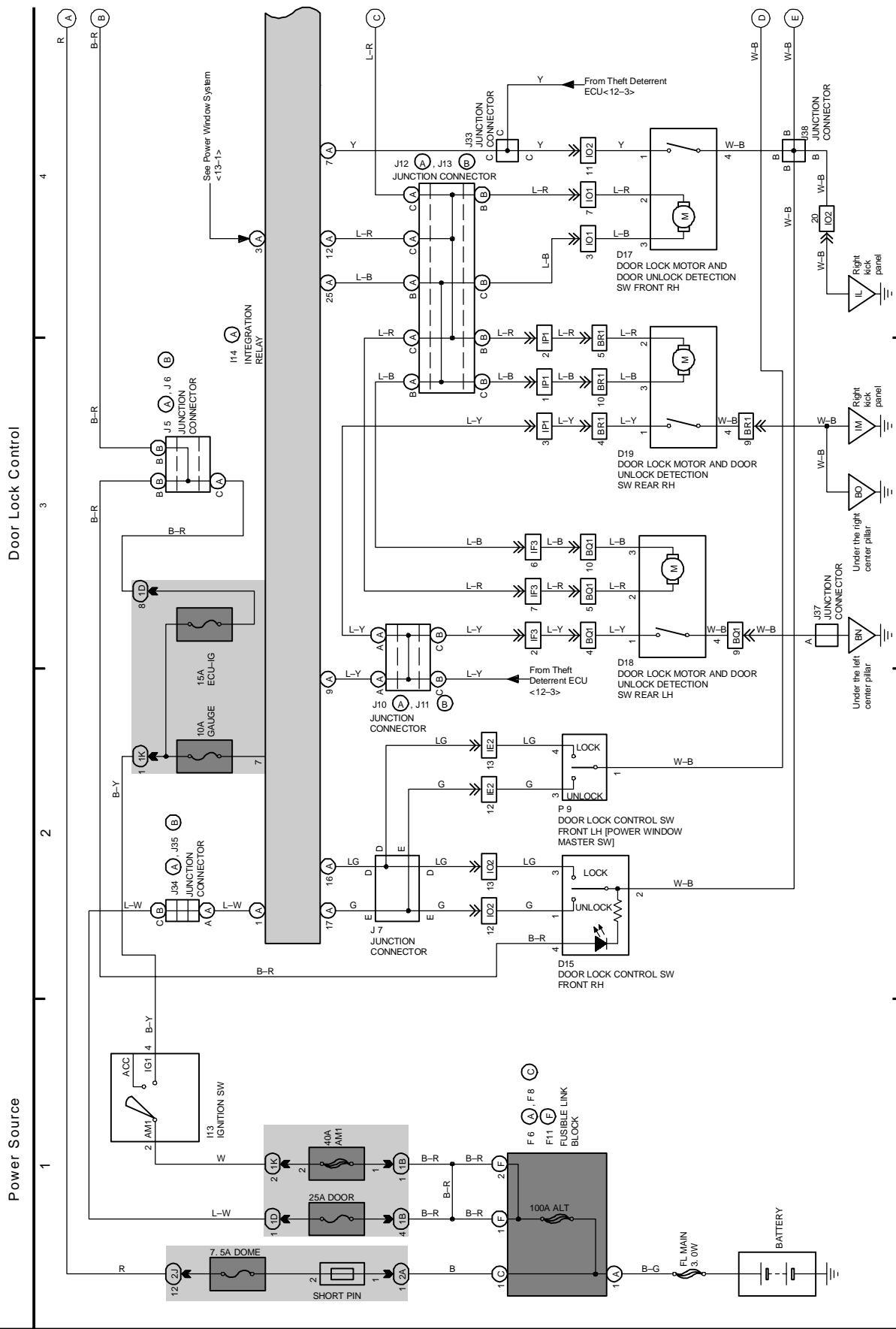
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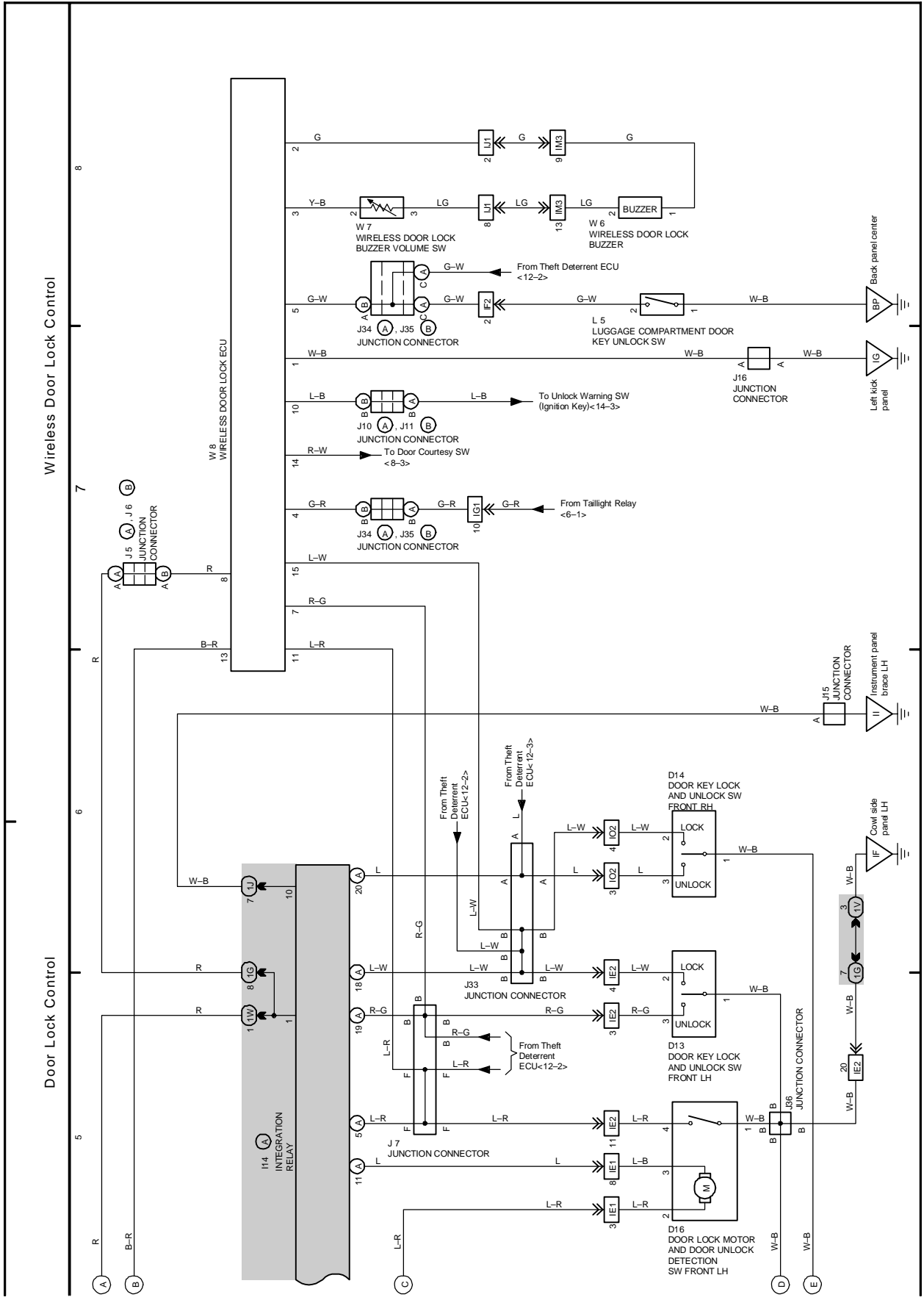




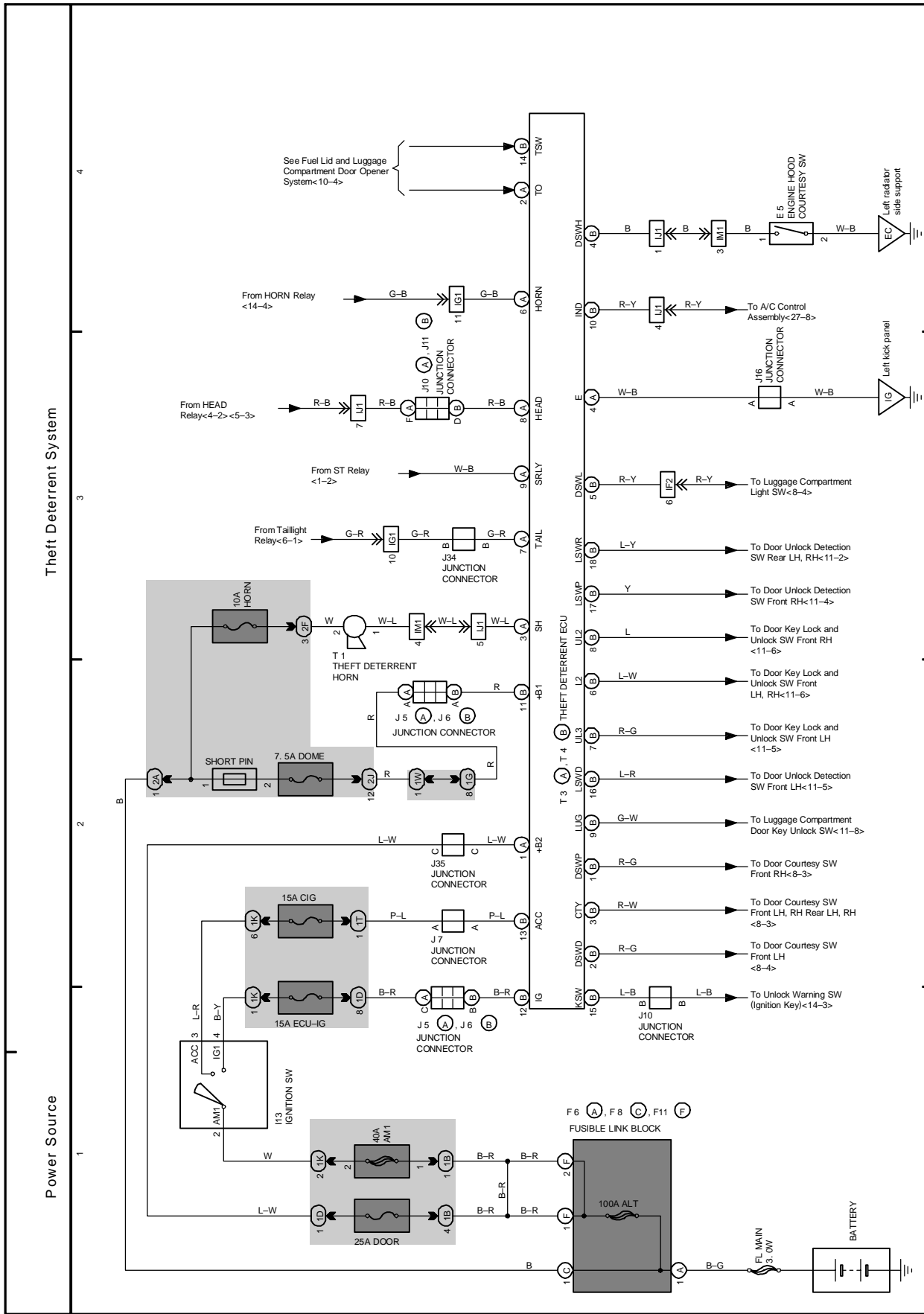
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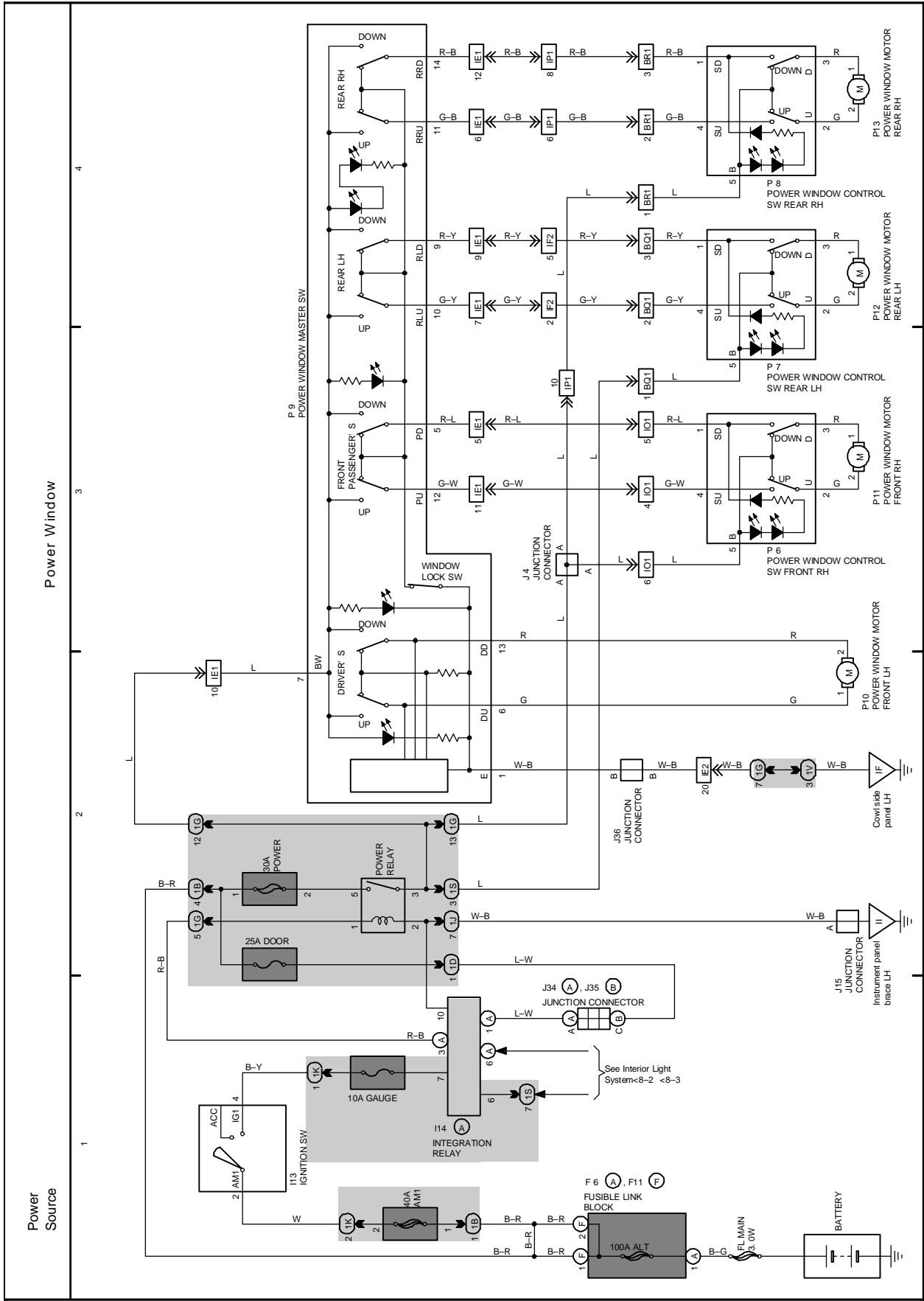
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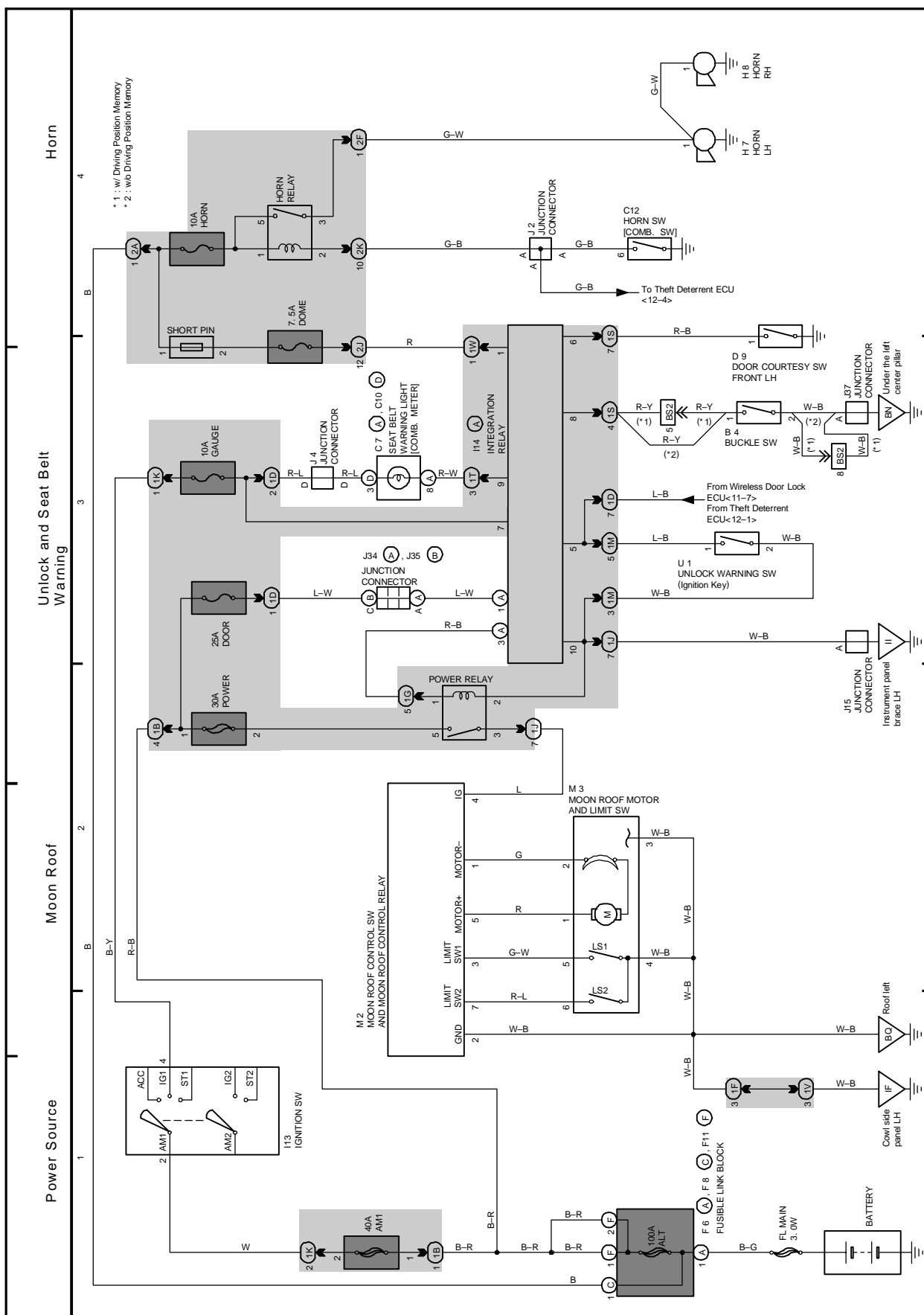
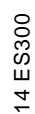


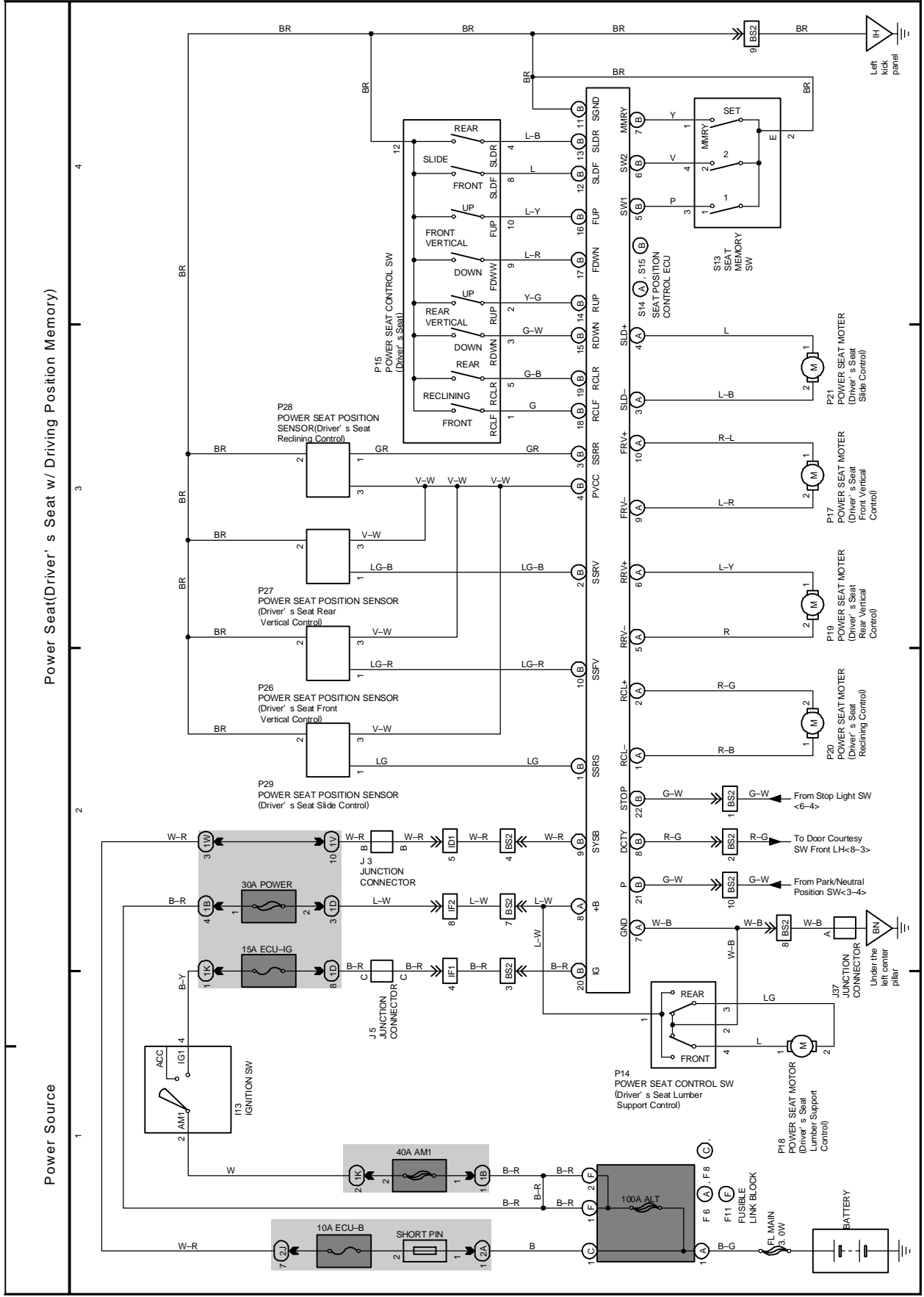
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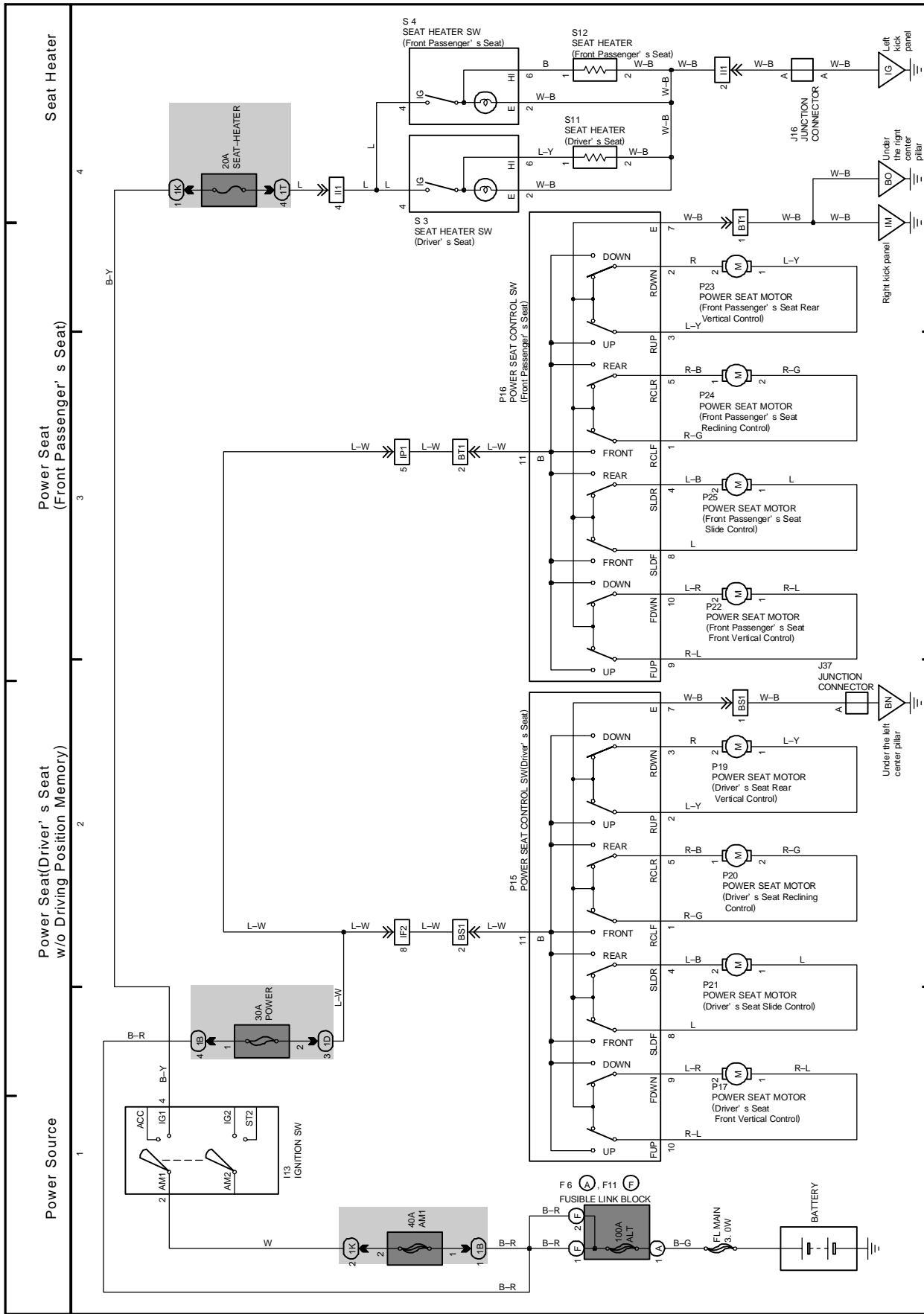


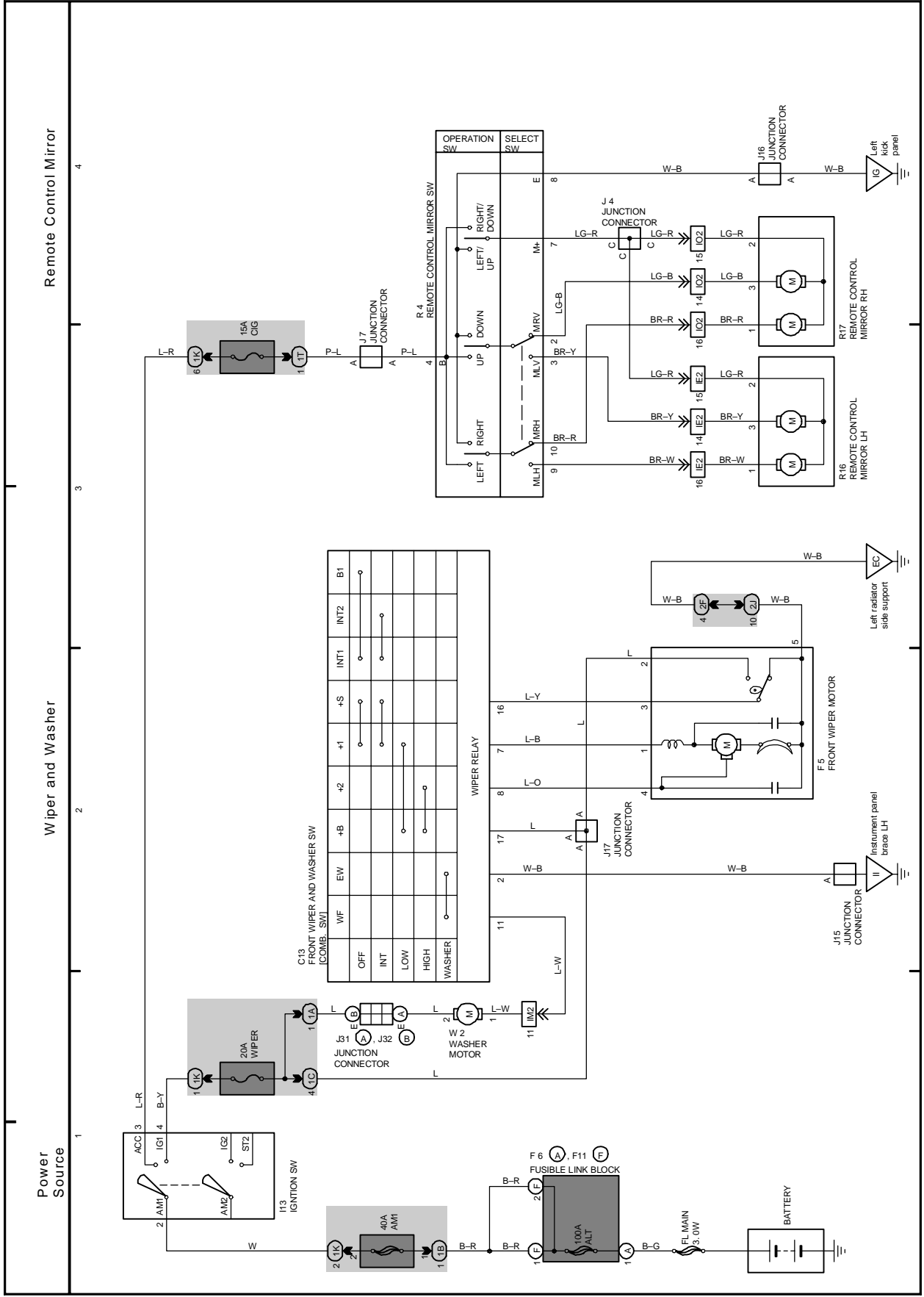
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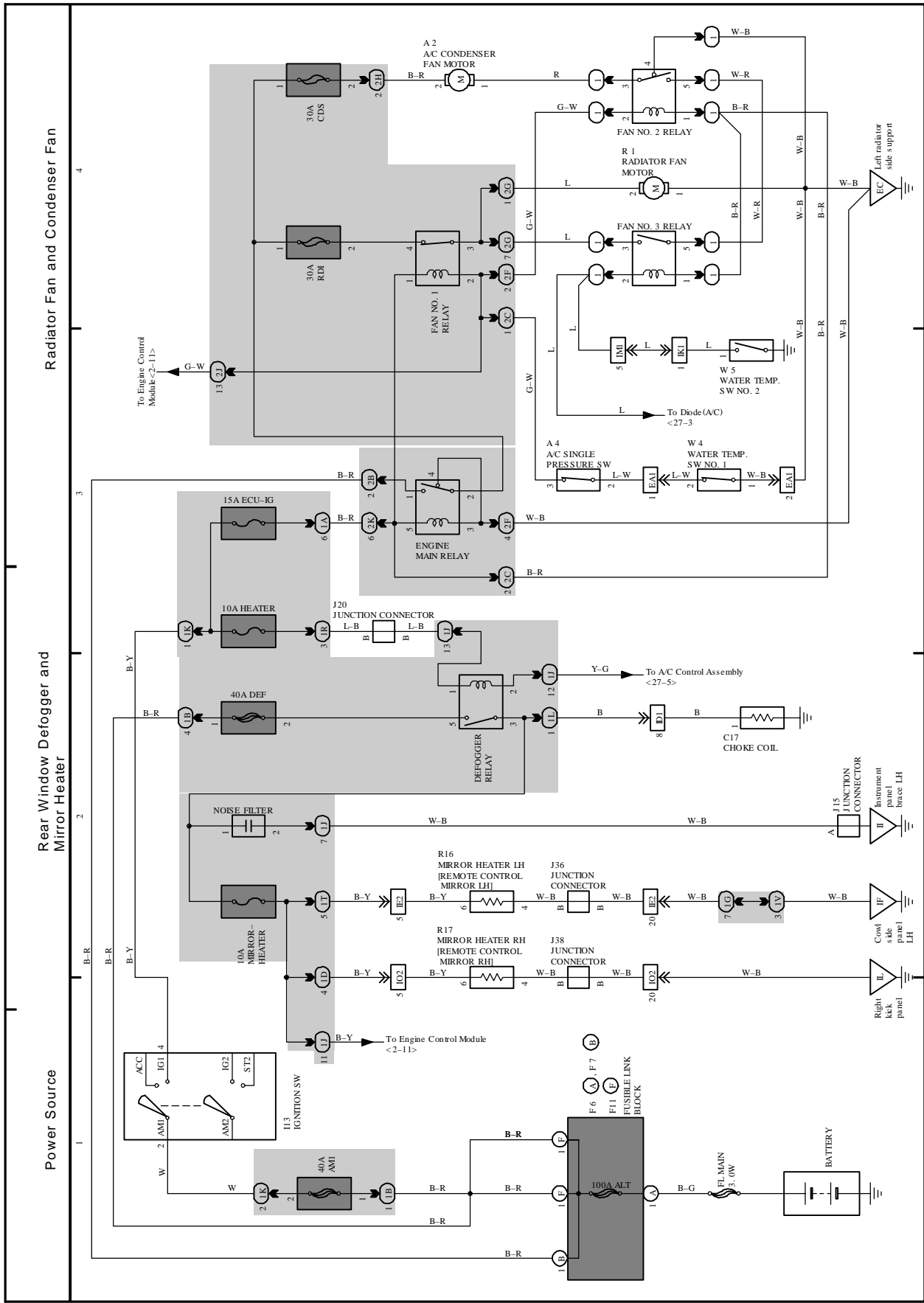
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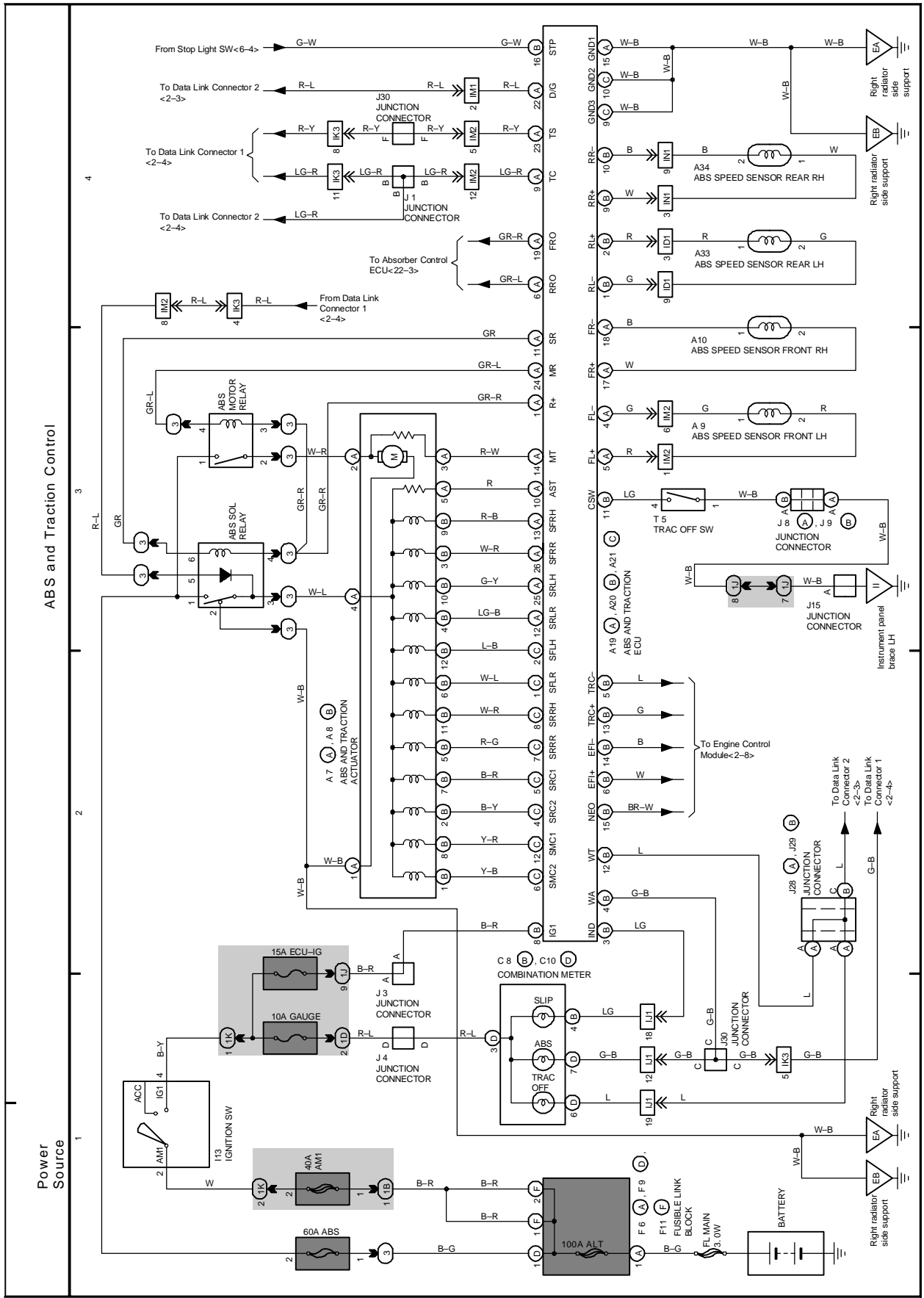




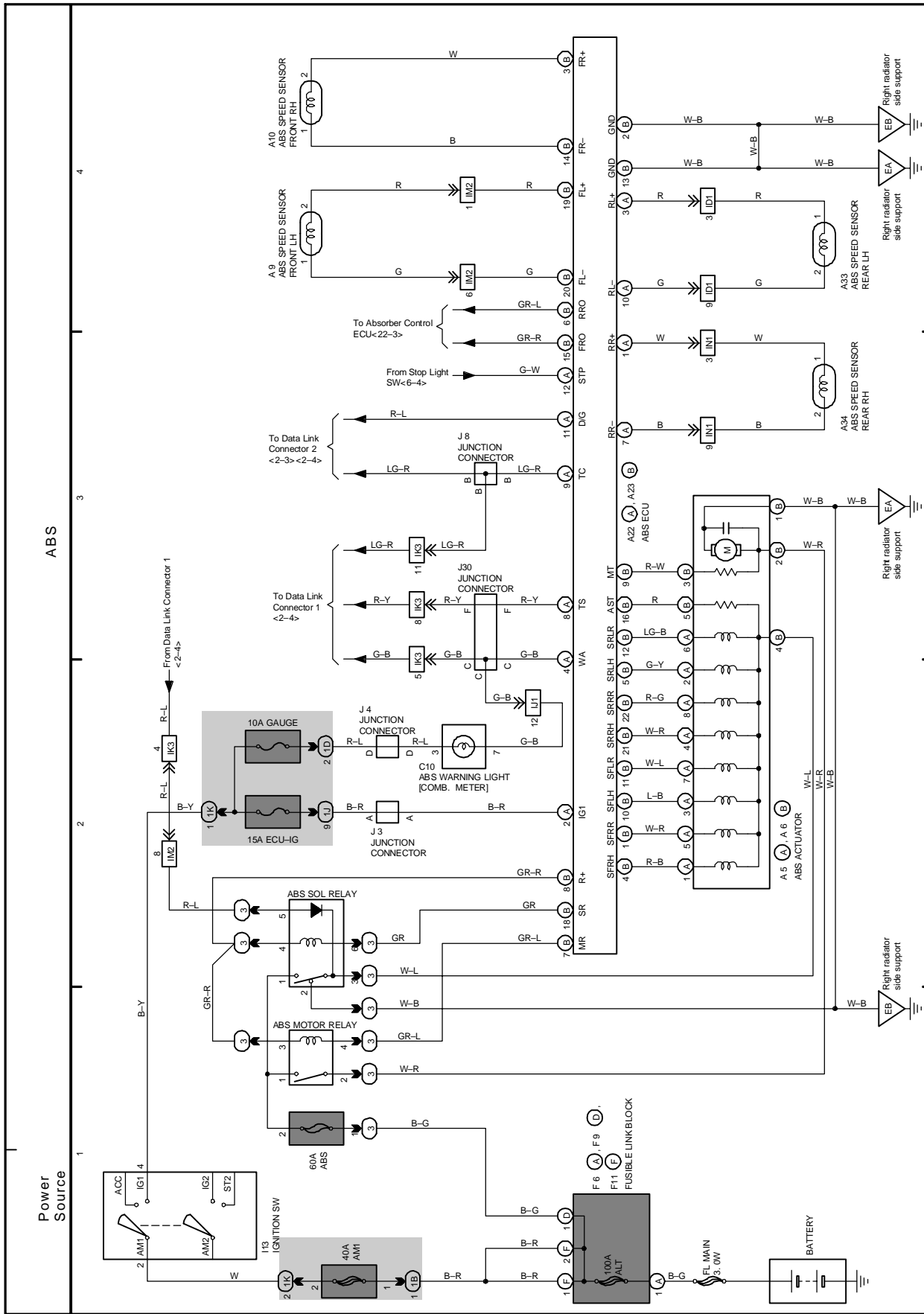
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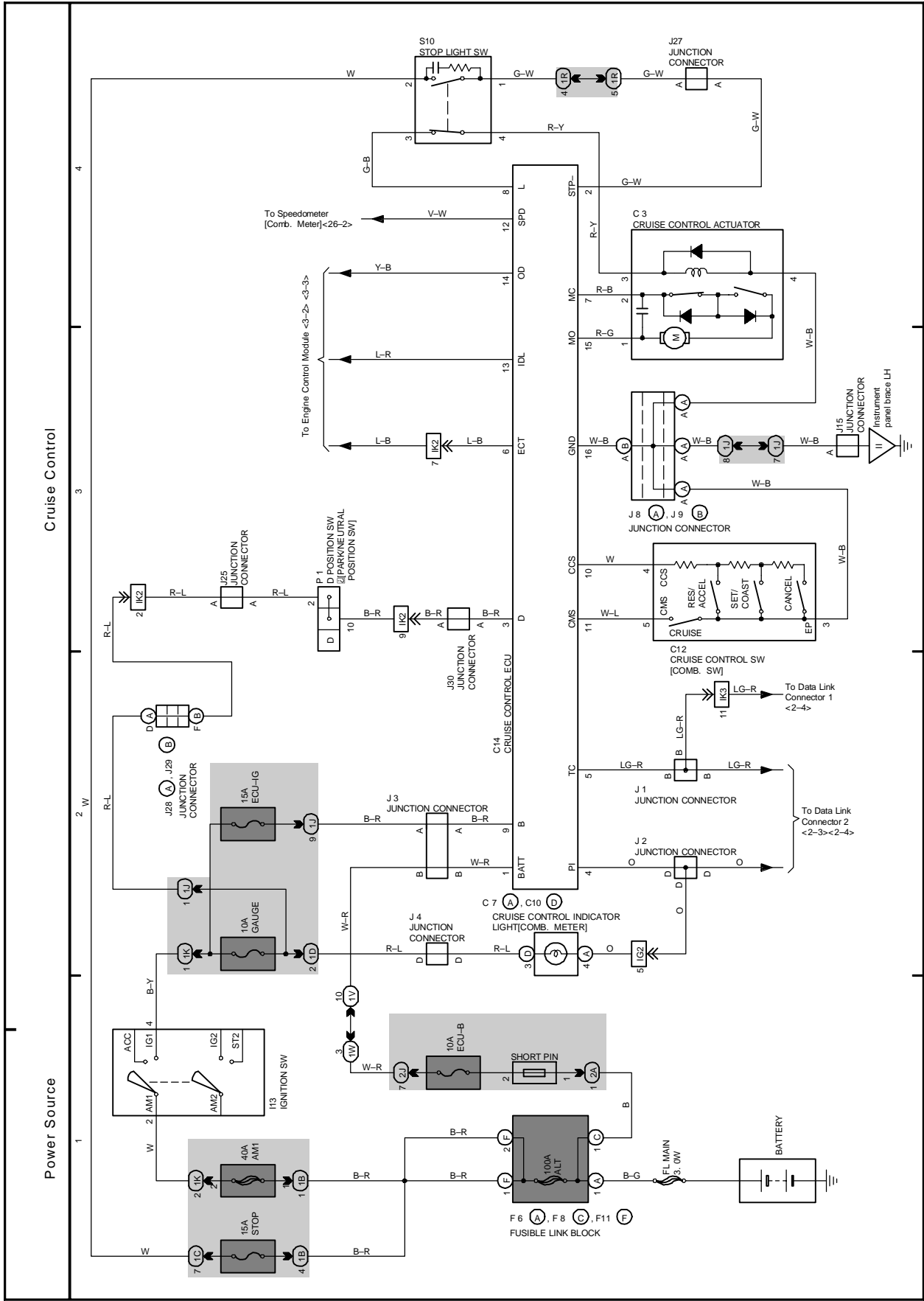
18 ES300



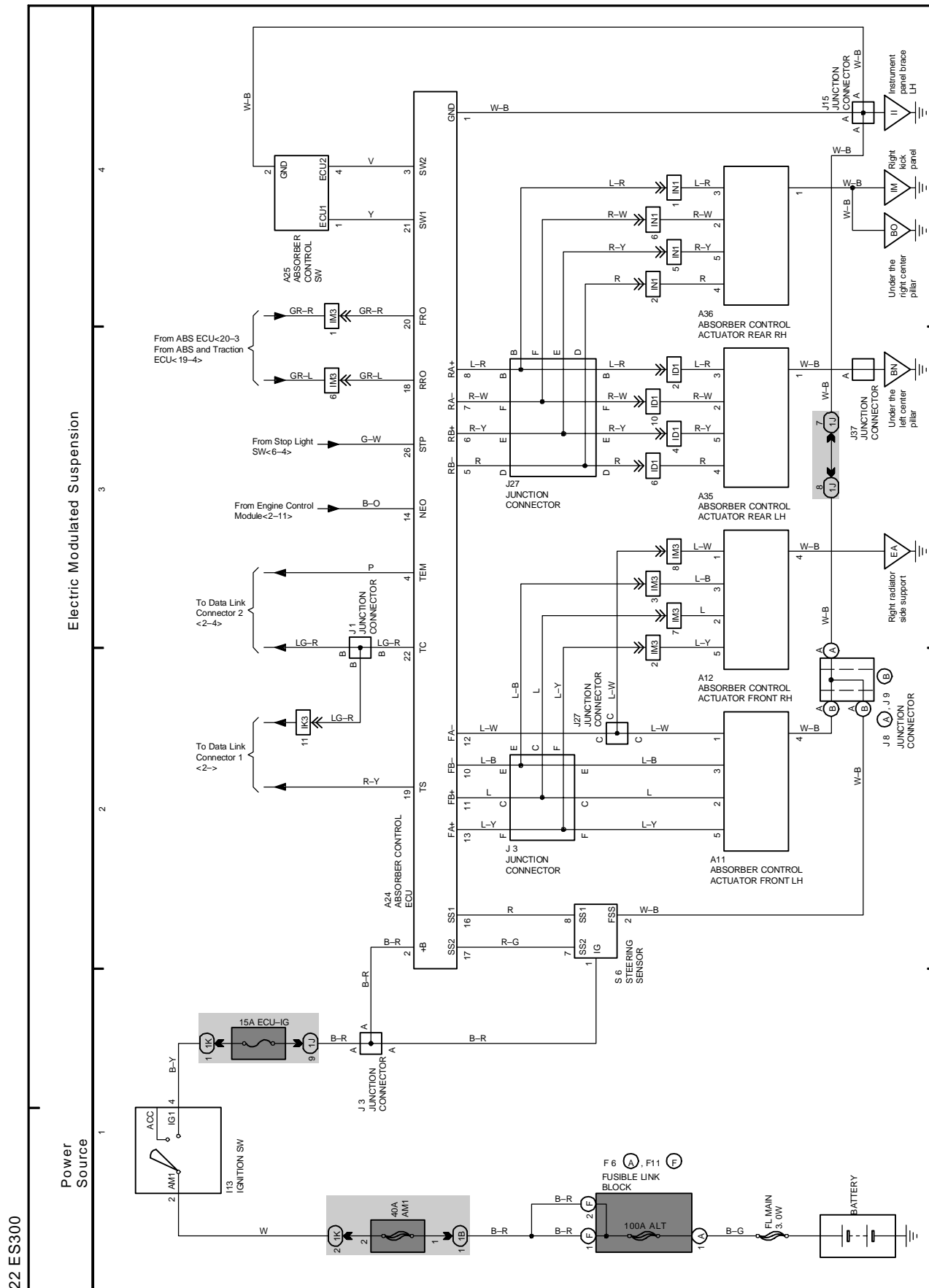


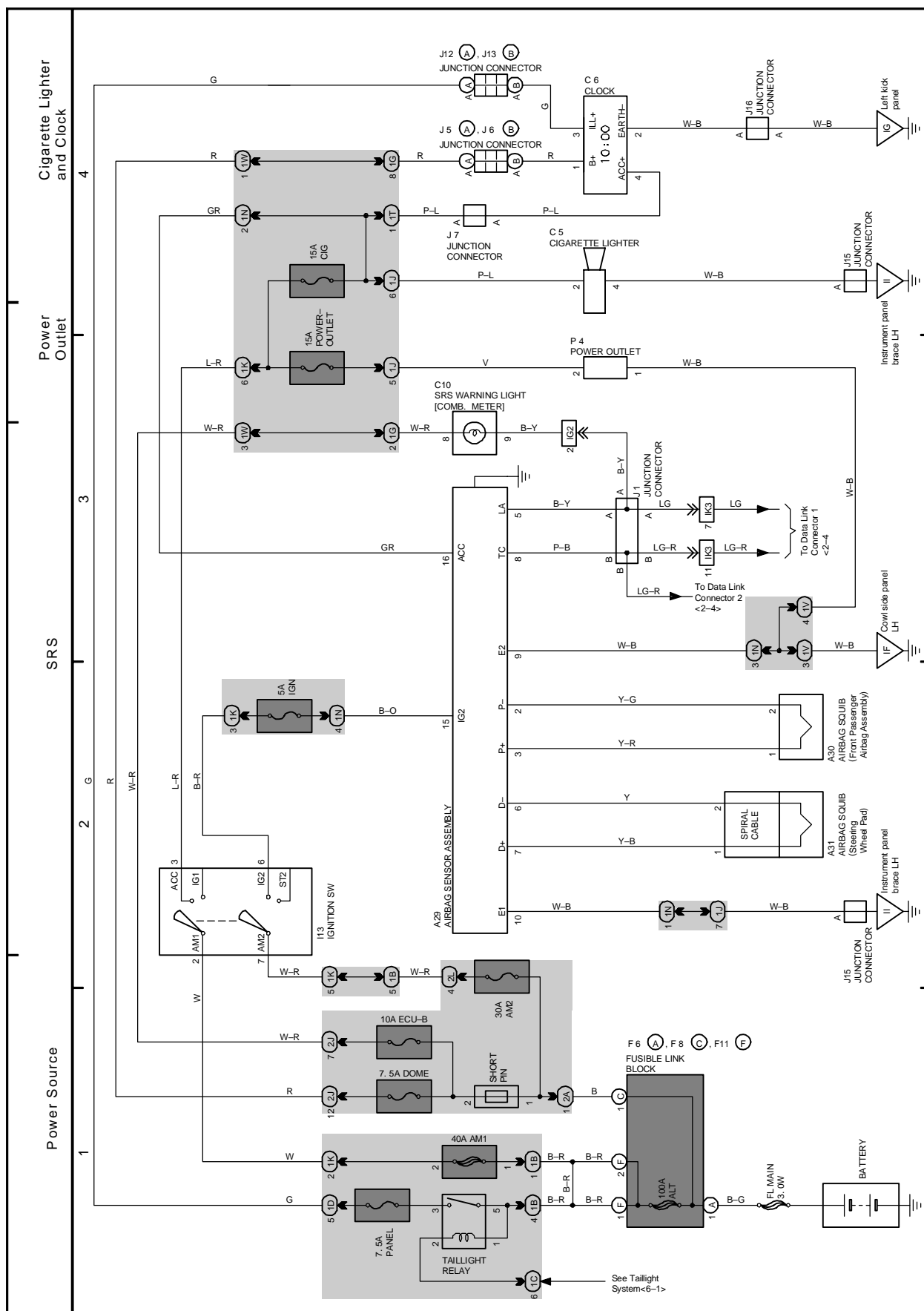
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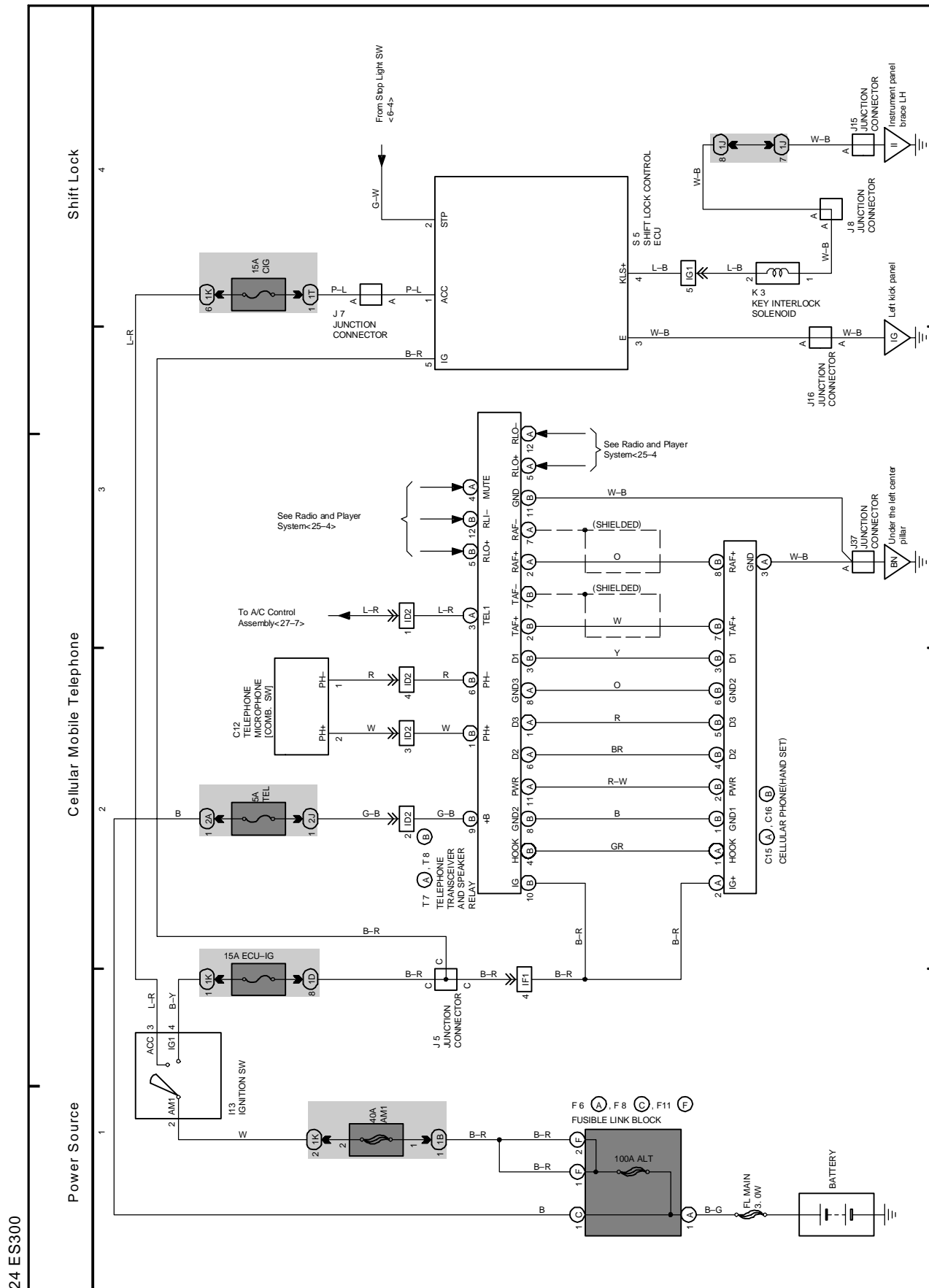


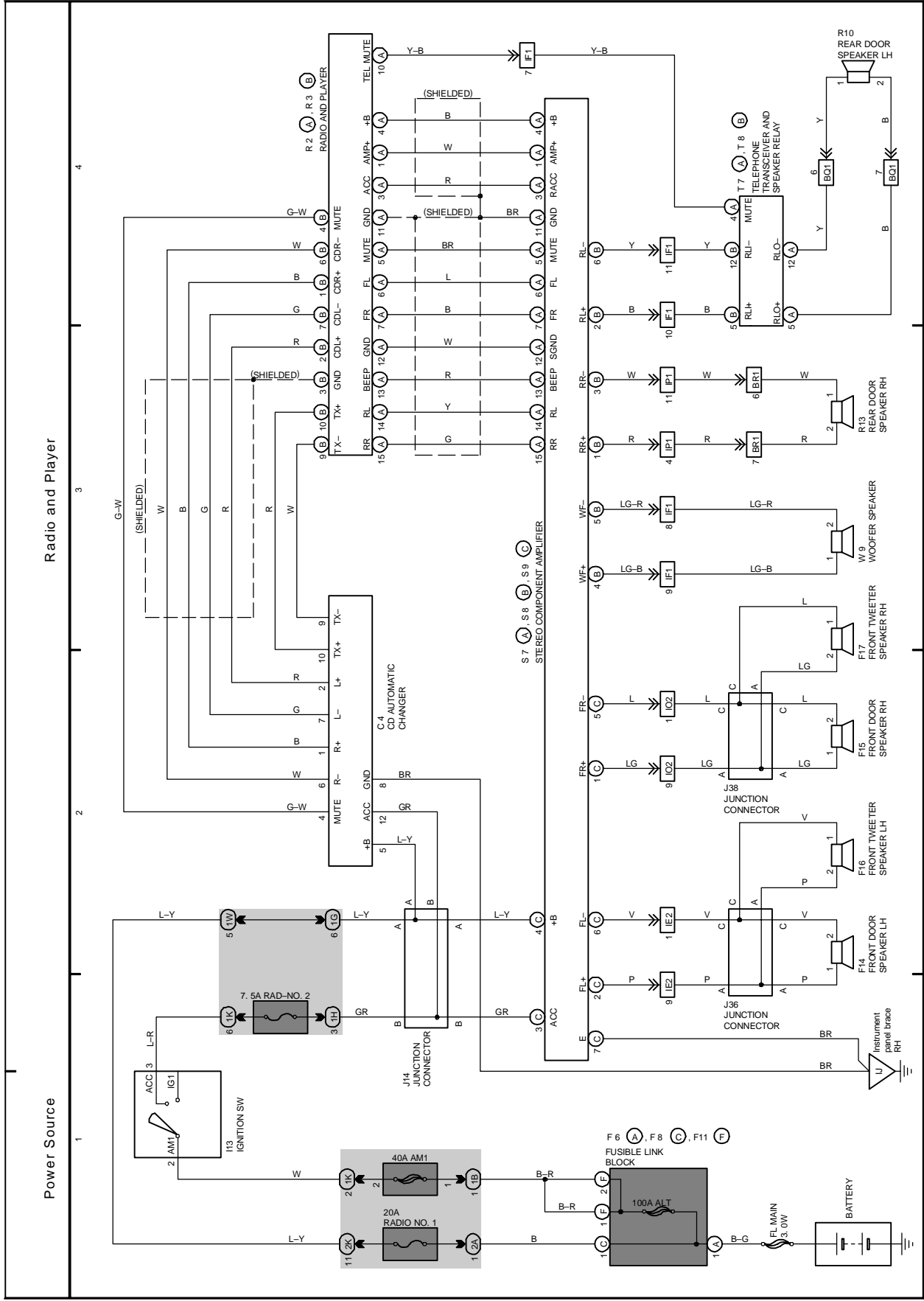
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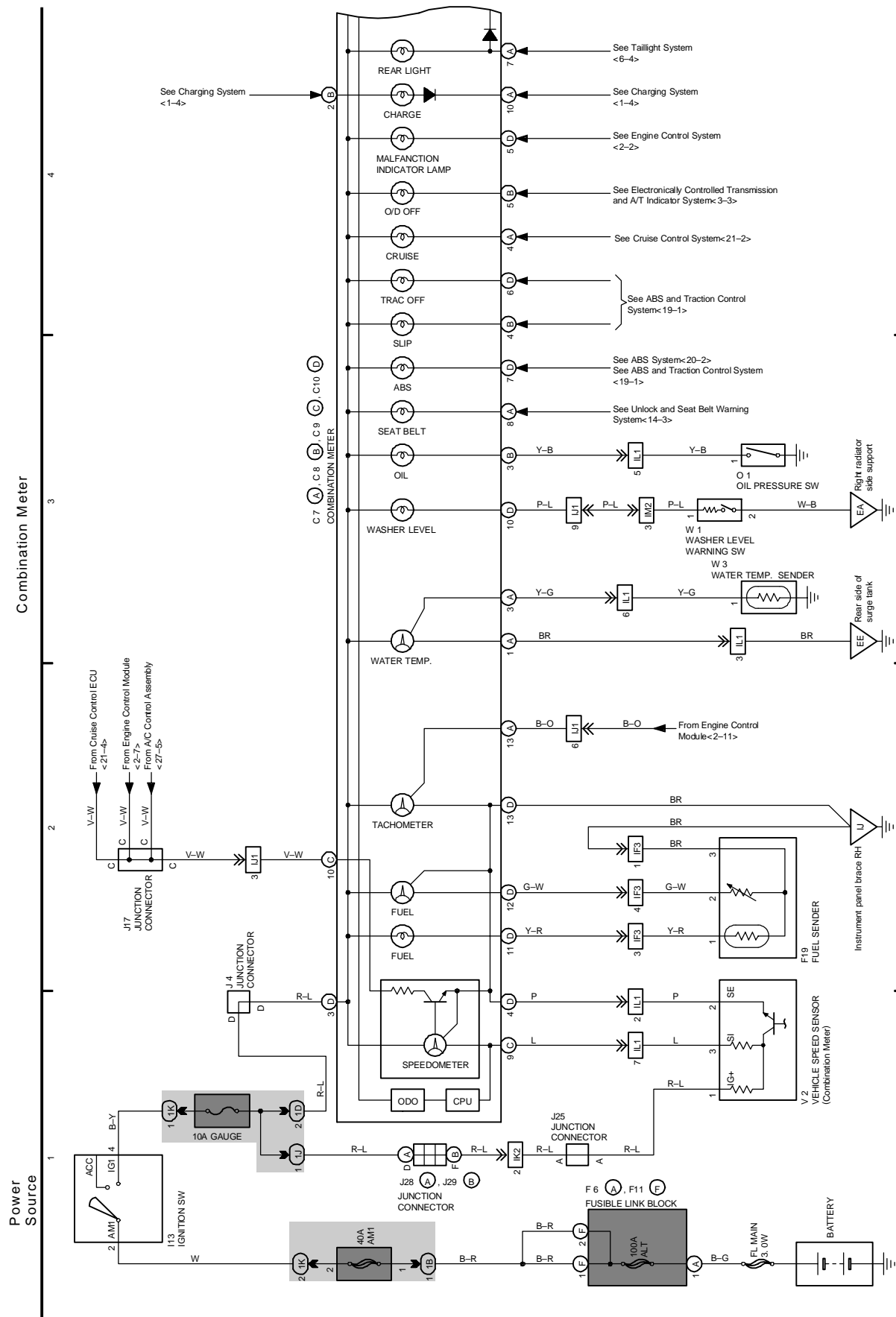
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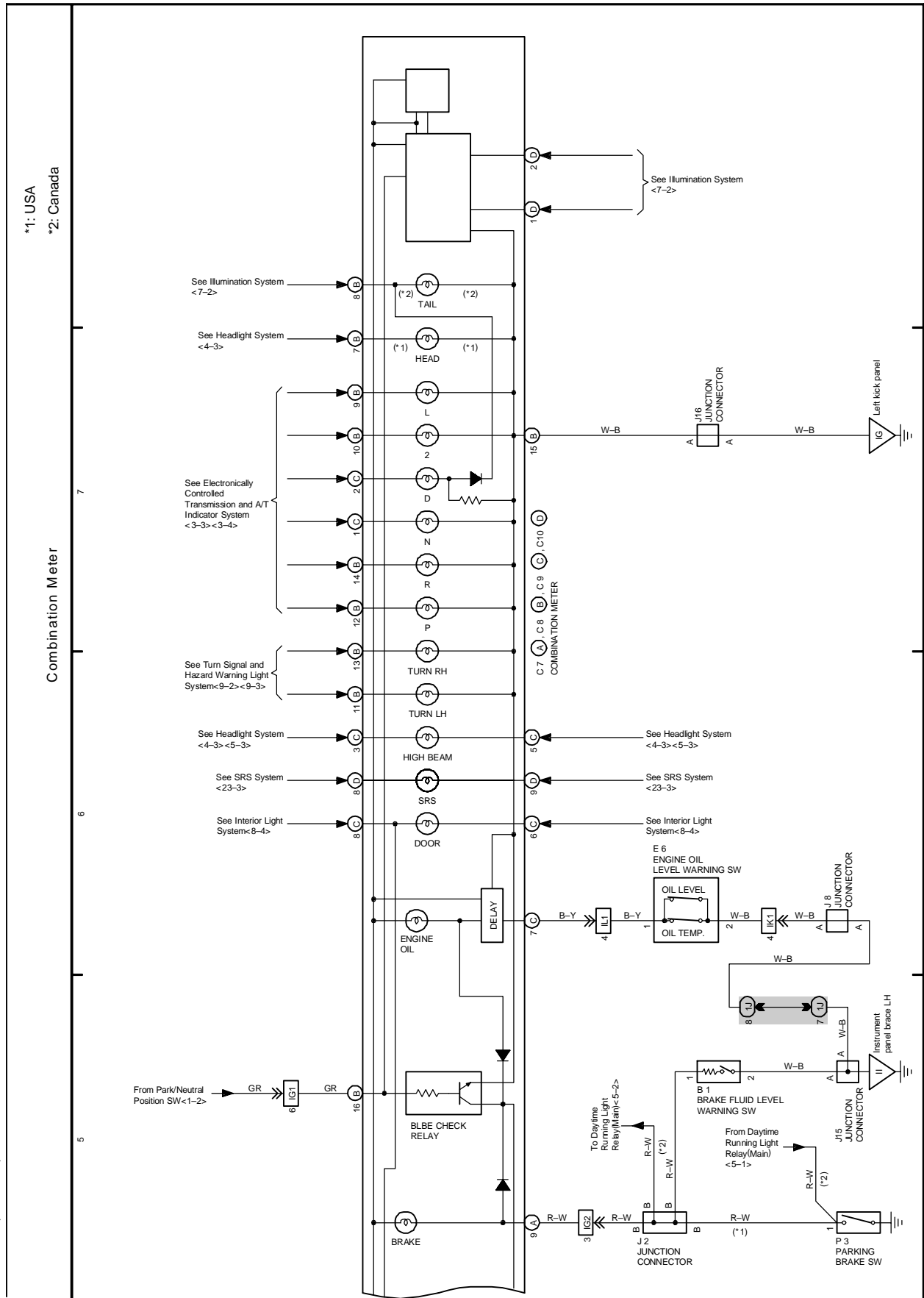




## K OVERALL ELECTRICAL WIRING DIAGRAM

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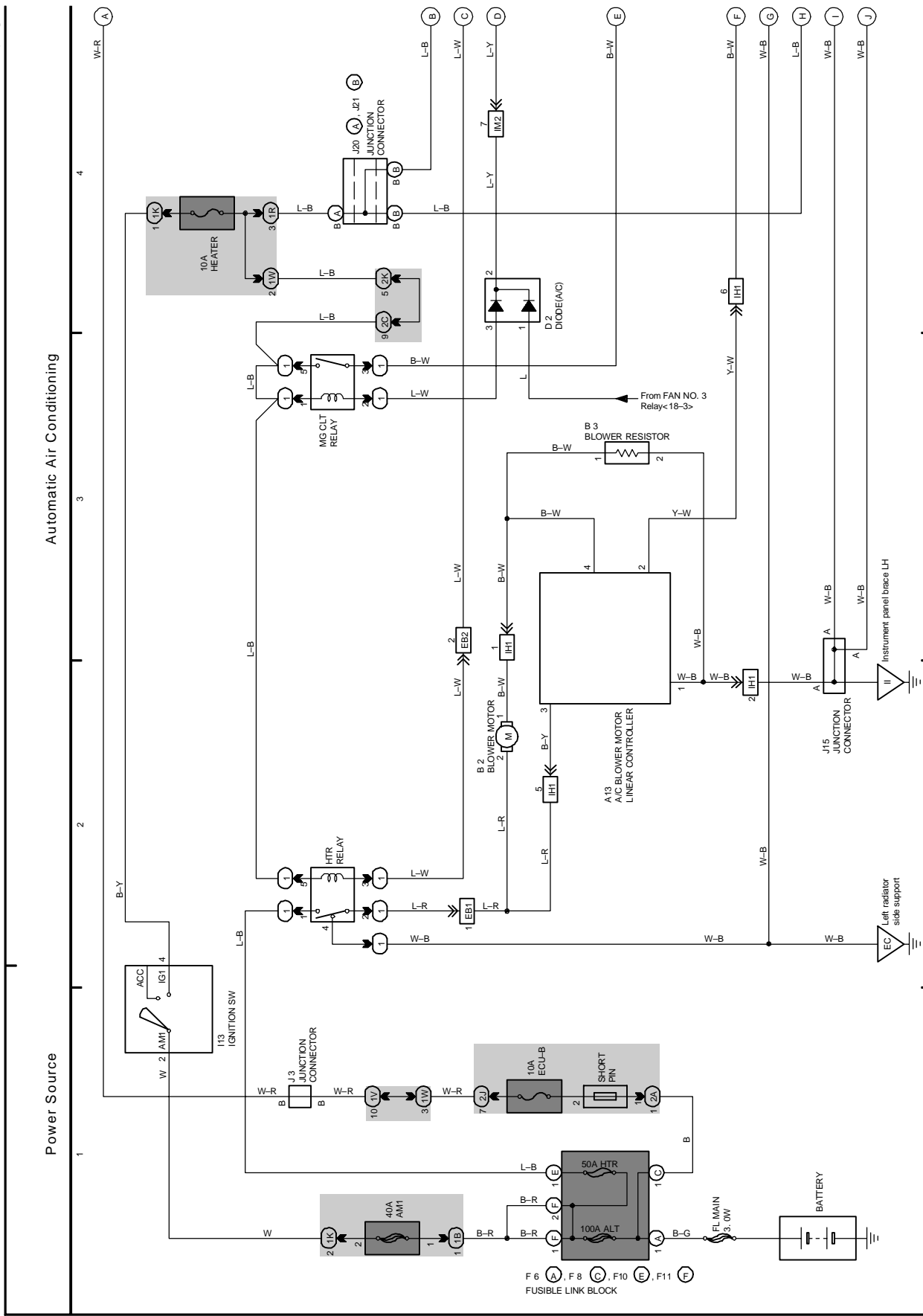




# K OVERALL ELECTRICAL WIRING DIAGRAM

27 ES300

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## Automatic Air Conditioning

