

FOREWORD

This wiring diagram has been prepared to provide information on the electrical system of the 1990 TOYOTA CELICA All-Trac/4WD.

Applicable models: ST185 Series

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

Manual Name	Pub. No.
<ul style="list-style-type: none">• 1990 Celica Repair Manual	RM149U
<ul style="list-style-type: none">• 1990 Celica All-Trac/4WD Repair Manual Supplement	RM176U
<ul style="list-style-type: none">• 1990 Celica New Car Features	NCF056U

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

TOYOTA MOTOR CORPORATION

NOTICE

This vehicle has an SRS AIRBAG (referred to as the airbag in the remainder of this manual).

When handling airbag components (removal, installation or inspection, etc.), always follow the directions given in the repair manuals listed above to prevent the occurrence of accidents and airbag malfunction.

INTRODUCTION

This manual consists of the following 12 sections:

No.	Section	Description
1	INDEX	Index of the contents of this manual.
2	INTRODUCTION	Brief explanation of each section.
3	HOW TO USE THIS MANUAL	Instructions on how to use this manual.
4	TROUBLE-SHOOTING	Describes the basic inspection procedures for electrical circuits.
5	ABBREVIATIONS	Defines the abbreviations used in this manual.
6	GLOSSARY OF TERMS AND SYMBOLS	Defines the symbols and functions of major parts.
7	RELAY LOCATIONS	Shows position of the Electronic Control Unit, Relays, Relay Block, etc. This section is closely related to the system circuit.
8	ELECTRICAL WIRE ROUTING	Describes position of Parts Connectors, Splice points, Ground points, etc. This section is closely related to the system circuit.
9	POWER SOURCE (Current Flow Chart)	Describes power distribution from the power supply to various electrical loads.
10	INDEX	Index of the system circuits.
11	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.
	GROUND POINTS	Shows ground positions of all parts described in this manual.
12	OVERALL WIRING DIAGRAM	Provides circuit diagrams showing the circuit connections.

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

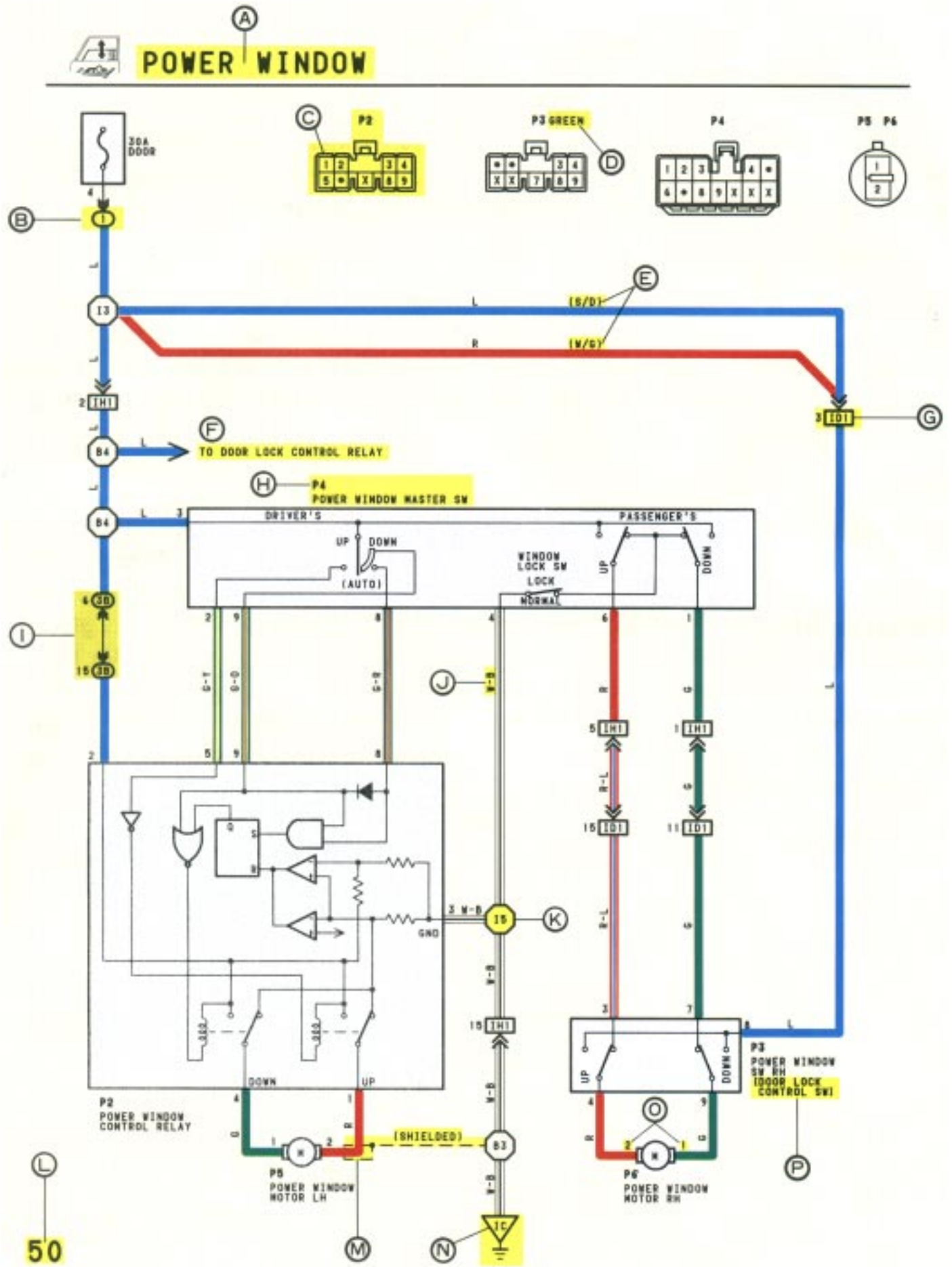
The actual wiring of each system circuit is shown from the point where the power source is received from the battery as far as each ground point. (All circuit diagrams are shown with the switches in the OFF position.)

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 Wire 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 Wiring Diagram at the end of this manual.

HOW TO USE THIS MANUAL

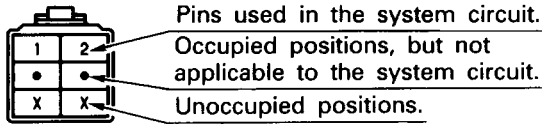


- (A) : System Title
- (B) : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.

Example:  Indicates Relay Block No. 1.

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

Explanation of pin use.

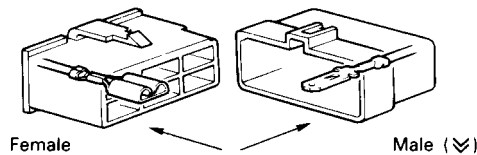


The pins shown are only for the highest grade, or only include those in the specification.

- (D) : Connector Color
Connectors not indicated are milky white in color.
- (E) : () is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.
- (F) : Indicates related system.
- (G) : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↗).

Outside numerals are pin numbers.

- All connectors are shown from the open end, and the lock is on top.

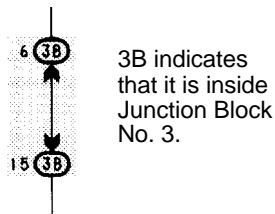


The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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.

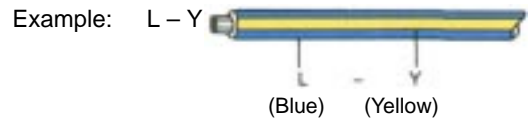
- (H) : Represents a part (all parts are shown in sky blue). The code is the same as the code used in parts location.
- (I) : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts (different junction blocks are shaded differently for further clarification).

Example:



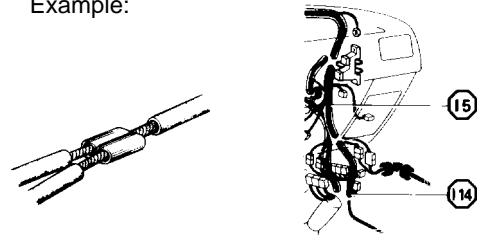
- (J) : Indicates the wiring color.
Wire colors are indicated by an alphabetical code.
 B = Black L = Blue R = Red
 BR = Brown LG = Light Green V = Violet
 G = Green O = Orange W = White
 GR = Gray P = Pink Y = Yellow

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



- (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.

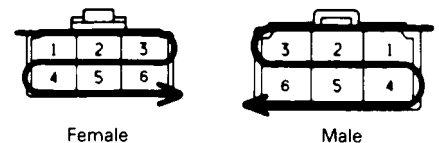
- (L) : Page No.
- (M) : Indicates a sealed wiring harness.



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

- (O) : Indicates the pin number of the connector.
The numbering system is different for female and male connectors.

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



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

HOW TO USE THIS MANUAL



SYSTEM OUTLINE

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

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

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

(FOR THE "MANUAL DOWN" OPERATION, CURRENT FLOWS IN THE REVERSE DIRECTION BECAUSE THE TERMINALS WHERE IT FLOWS 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 FLOWS TERMINAL 9 OF THE POWER WINDOW CONTROL RELAY THROUGH TERMINAL 3 OF THE MASTER SW → TERMINALS 8 AND 9 TO OPERATE THE RELAY. THUS THE CURRENT INSIDE THE POWER WINDOW CONTROL RELAY FLOWS FROM TERMINAL 2 OF THE RELAY → TERMINAL 4 → TERMINAL 1 OF THE POWER WINDOW MOTOR → TERMINAL 2 → TERMINAL 1 OF THE RELAY → TERMINAL 3 → TO GROUND. THE MOTOR CONTINUES THE ROTATION ENABLING TO DESCENT THE WINDOW.

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

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

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

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

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

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

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



SERVICE HINTS

P2 POWER WINDOW CONTROL RELAY

3-GROUND: ALWAYS CONTINUITY

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

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

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

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

P4 POWER WINDOW MASTER SW

4-GROUND: ALWAYS CONTINUITY

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

WINDOW LOCK SW

OPEN WITH WINDOW LOCK SW AT LOCK POSITION



○ : PARTS LOCATION

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



○ : RELAY BLOCKS

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



○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

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



□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

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



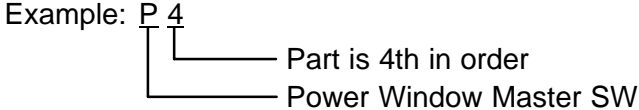
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT

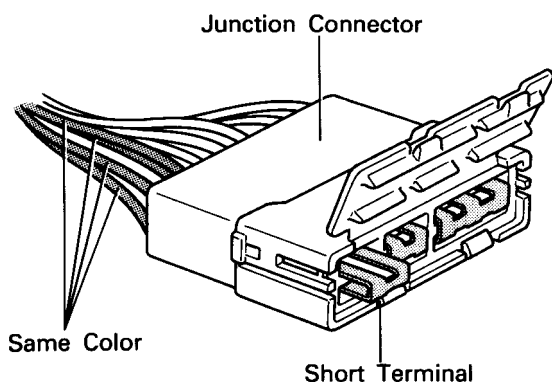


○ : SPLICE POINTS

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

- Ⓚ : Explains the system outline.
- Ⓡ : Indicates values or explains the function for reference during troubleshooting.
- Ⓢ : Indicates the reference page showing the position on the vehicle of the parts in the system circuit.
 Example: Part “P4” (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 that letter.
 Example: P 4

- Ⓣ : Indicates the reference page showing the position on the vehicle of Relay Block Connectors in the system circuit.
 Example: Connector “1” is described on page 16 of this manual and is installed on the left side of the instrument panel.
- Ⓤ : Indicates the reference page showing the position on the vehicle of J/B and Wire Harness in the system circuit.
 Example: Connector “3B” connects the Cowl Wire and J/B No. 3. It is described on page 14 of this manual, and is installed on the instrument panel left side.
- Ⓥ : Indicates the reference page describing the wiring harness and wiring harness connector (the female wiring harness is shown first, followed by the male wiring harness).
 Example: Connector “ID1” connects the front door RH wire (female) and cowl wire (male). It is described on page 26 of this manual, and is installed on the right side kick panel.
- Ⓦ : Indicates the reference page showing the position of the ground points on the vehicle.
 Example: Ground point “IC” is described on page 24 of this manual and is installed on the cowl left side.
- Ⓧ : Indicates the reference page showing the position of the splice points on the vehicle.
 Example: Splice point “I 5” is on the Cowl Wire Harness and is described on page 24 of this manual.

HINT:



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

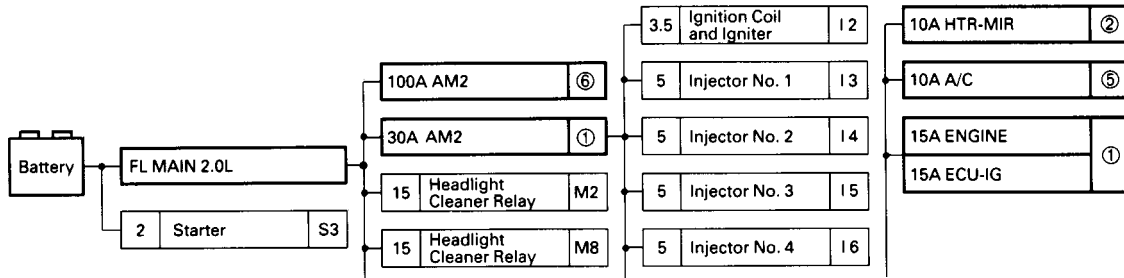
HOW TO USE THIS MANUAL

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.

POWER SOURCE (Current Flow Chart)

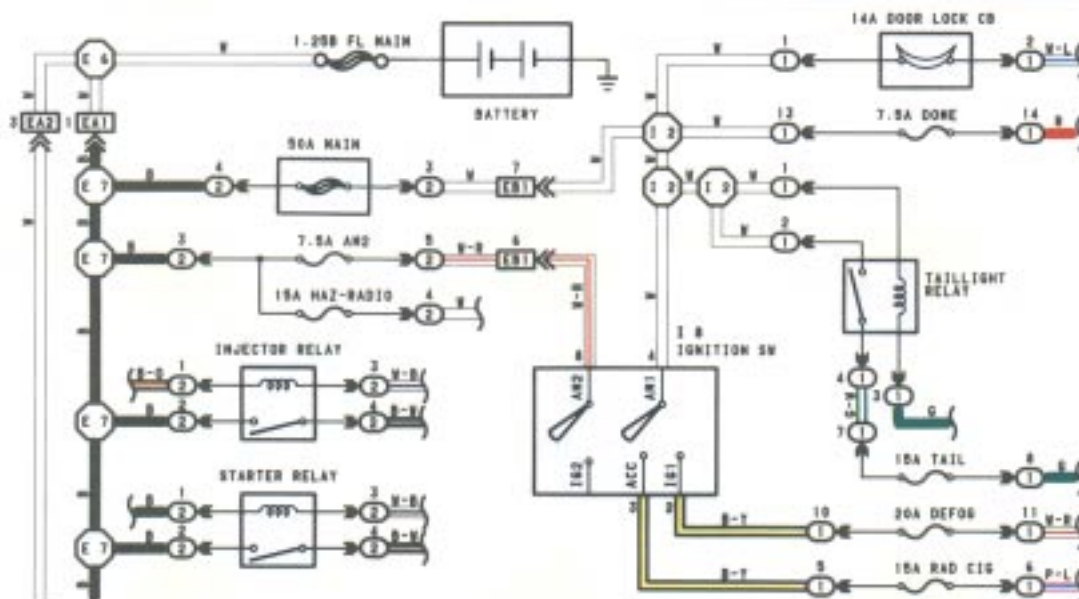
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.

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



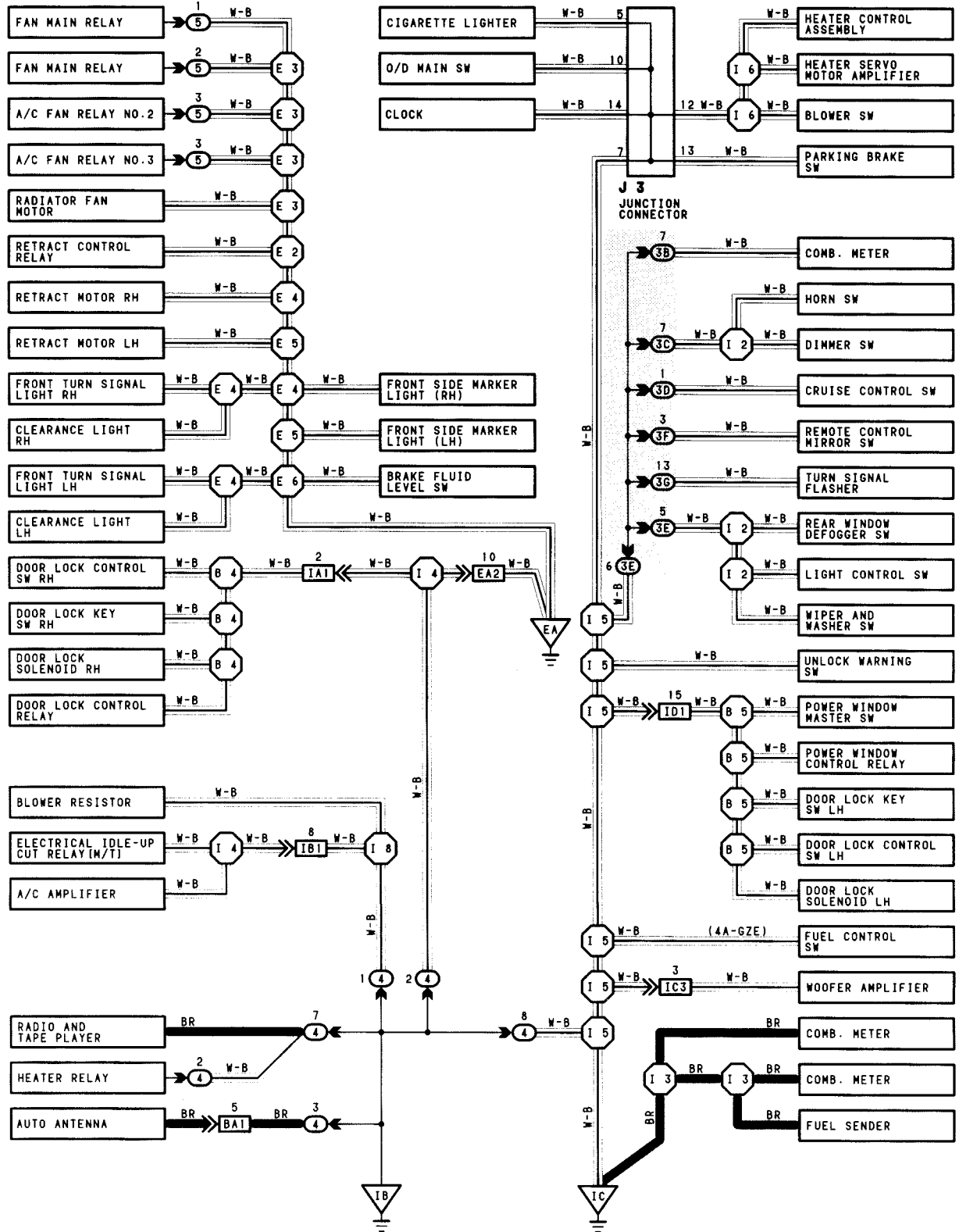
Location	CB or Fuse	Parts	Code or Location	Page Nos. of Related Systems																					
				32	5	3	28	32	32	10	32	25	28	10	12	12	32	32	12	12	6	5	30	10	5
				A/C Idle-Up VSV	Air Flow Meter	Alternator	Auto Antenna Motor	A/C Amplifier	A/C SW	A/C SW Light	A/C Pressure SW	ADD Control Relay	Auto Antenna Control Relay	A/T Indicator Light	Back-Up Light SW	Back-Up Light Relay	Blower Motor	Blower Resistor	Back-Up Light LH	Back-Up Light RH	Choke Heater	Check Connector	Cigarette Lighter	Cigarette Lighter Light	Circuit Opening Relay
	10A ENGINE			●																					
	20A WIPER																								
	10A TURN																								
	10A GAUGE									●	●														

POWER SOURCE

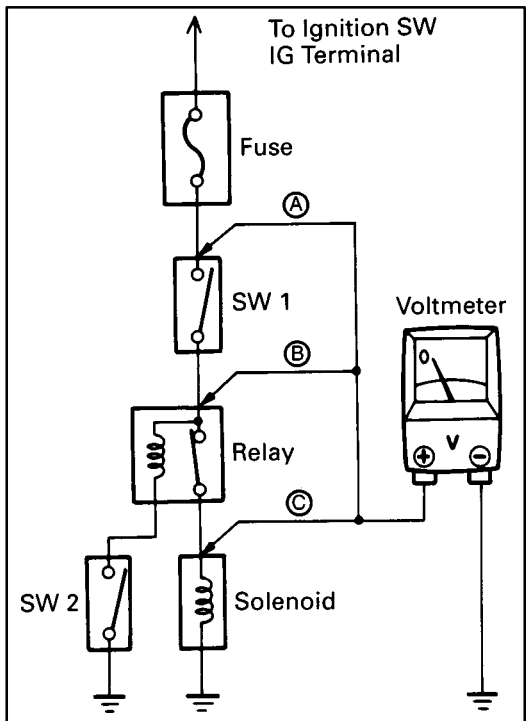


The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points (EA,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

GROUND POINTS



TROUBLESHOOTING



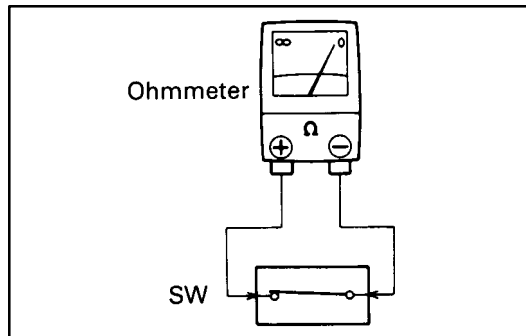
VOLTAGE CHECK

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

Example:

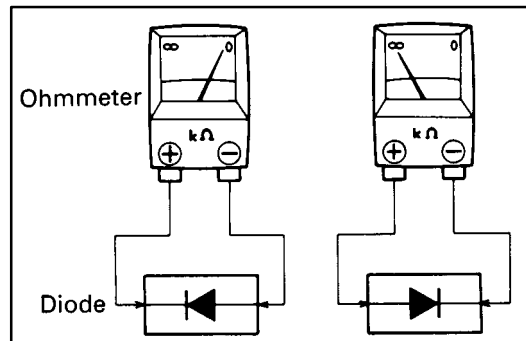
- Ⓐ – Ignition SW on
- Ⓑ – Ignition SW and SW 1 on
- Ⓒ – Ignition SW, SW 1 and Relay on (SW 2 off)

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



CONTINUITY AND RESISTANCE CHECK

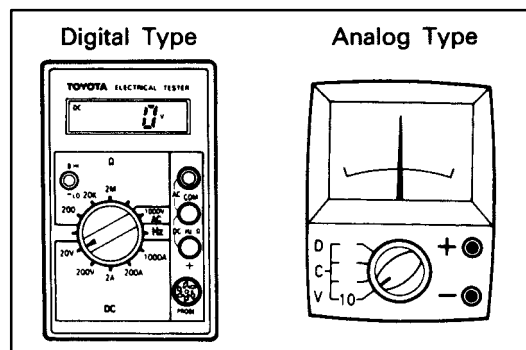
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



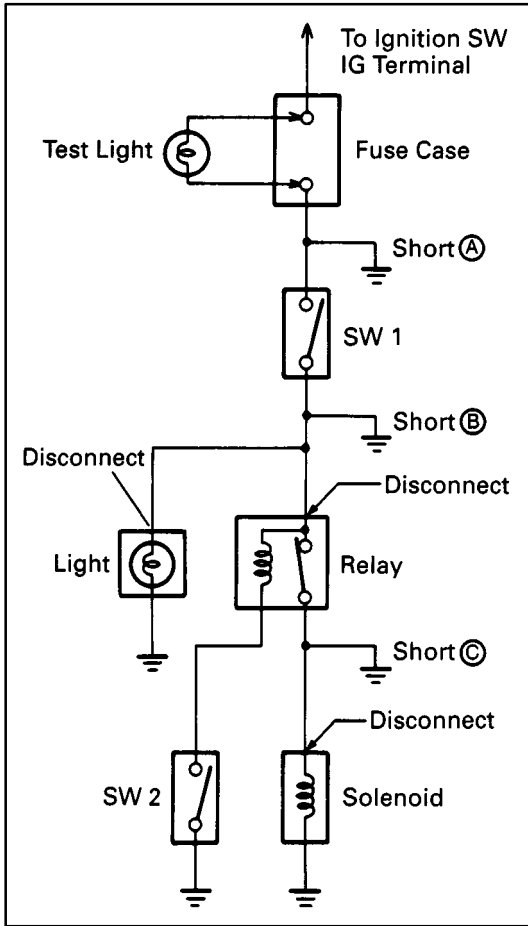
If the circuit has diodes, reverse the two leads and check again.

When contacting the negative lead to the diode positive side and the positive lead to the negative side, there should be continuity.

When contacting the two leads in reverse, there should be no continuity.



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



FINDING A SHORT CIRCUIT

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

Example:

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

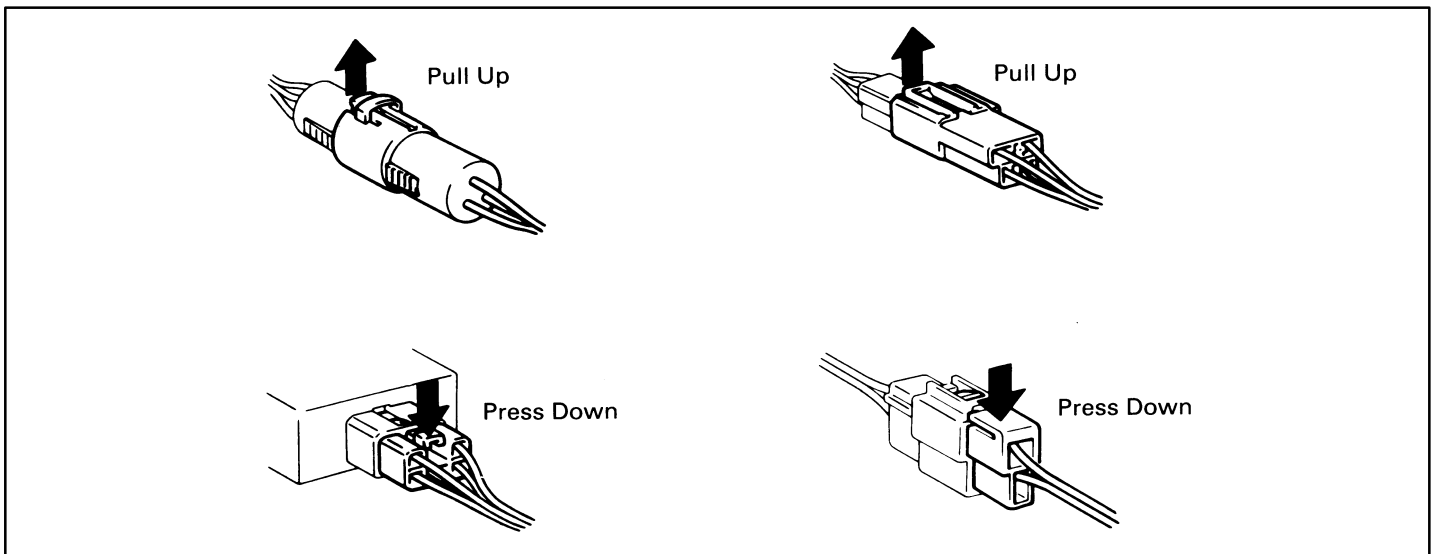
CAUTION:

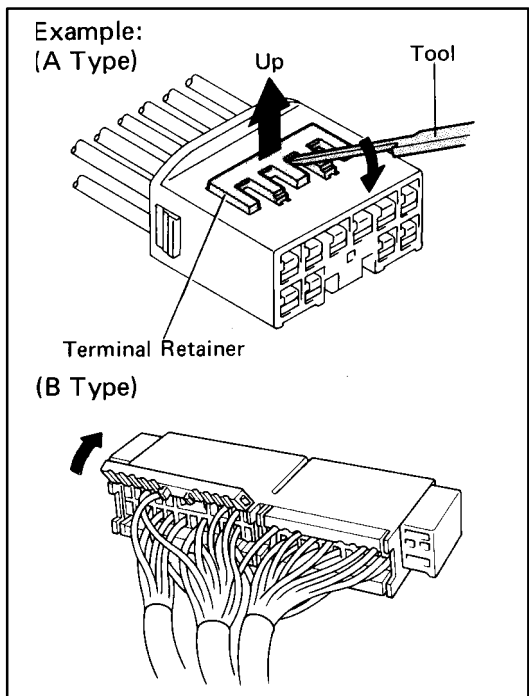
Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

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 REPLACEMENT FOR TERMINAL (with Terminal Retainer Type)

1. DISCONNECT CONNECTOR
2. DISCONNECT TERMINAL FROM CONNECTOR

(a) "for A type"

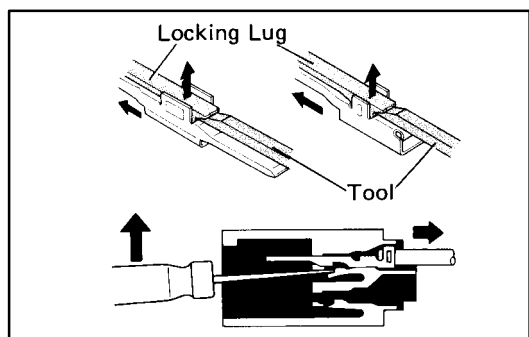
Raise the terminal retainer up to the temporarily lock position.

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

"for B type"

Open the terminal retainer.

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

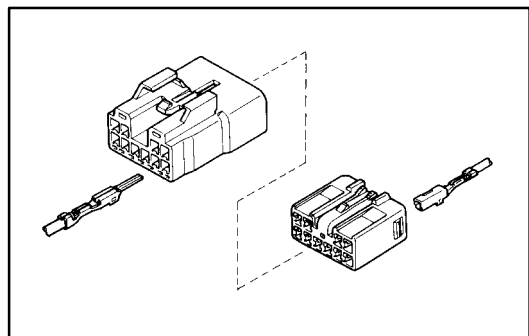


3. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

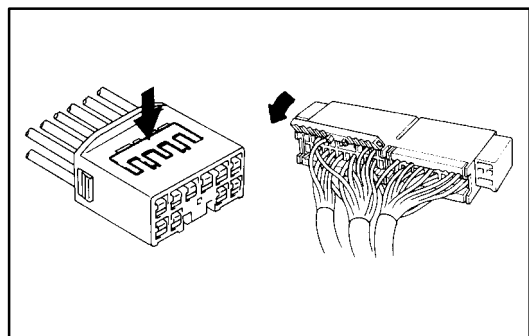
HINT:

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 temporarily lock position.



(b) Push the terminal retainer in as the full lock position.

4. CONNECT CONNECTOR

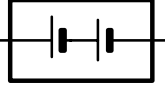




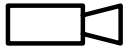
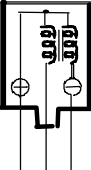









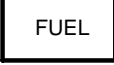




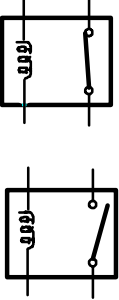

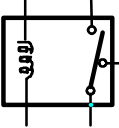

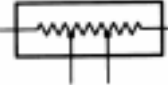
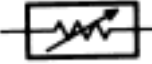



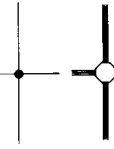

ABBREVIATIONS

The following abbreviations are used in this manual.

A/C	=	Air Conditioner
ABS	=	Anti-Lock Brake System
COMB.	=	Combination
ECU	=	Electronic Control Unit
EFI	=	Electronic Fuel Injection
EGR	=	Exhaust Gas Recirculation
EX.	=	Except
FL	=	Fusible Link
ISC	=	Idle Speed Control
J/B	=	Junction Block
LH	=	Left-Hand
M/T	=	Manual Transmission
R/B	=	Relay Block
RH	=	Right-Hand
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
VSV	=	Vacuum Switching Valve
W/	=	With
W/O	=	Without

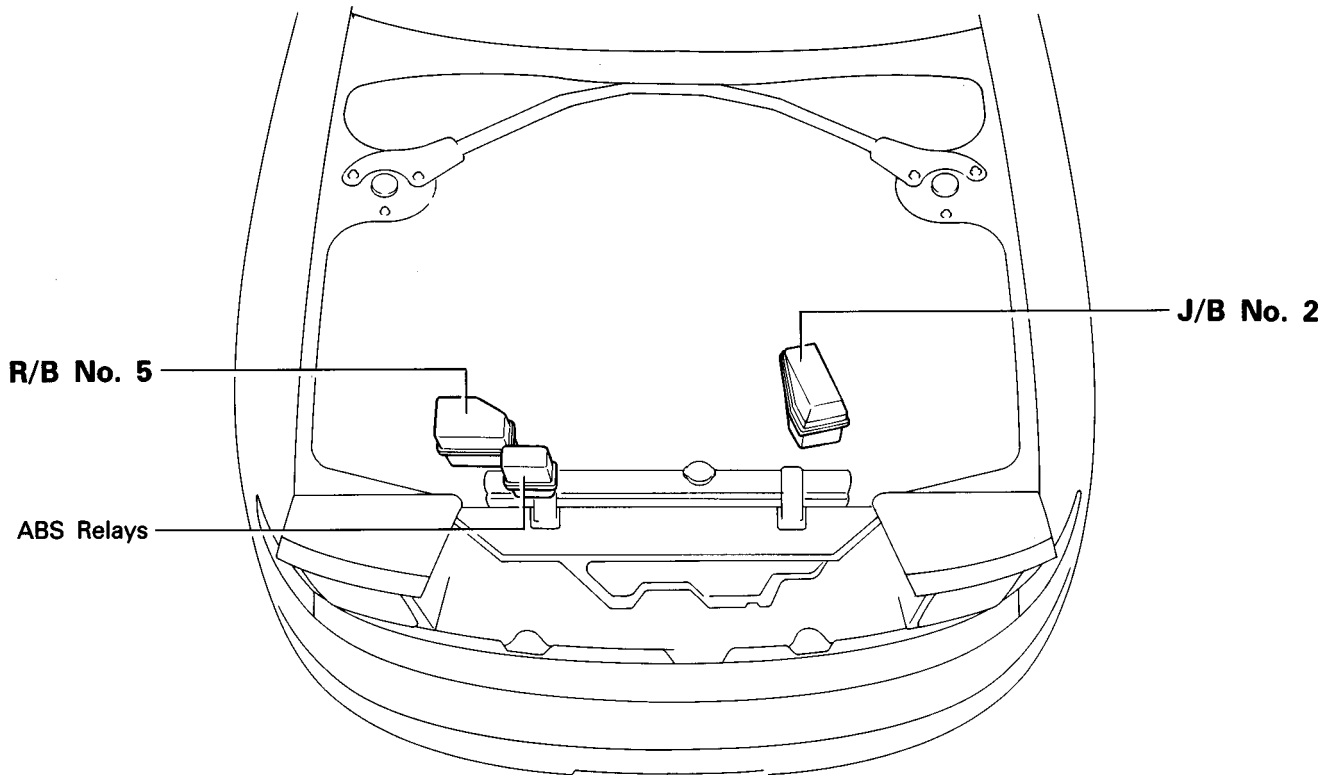
GLOSSARY OF TERMS AND SYMBOLS

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

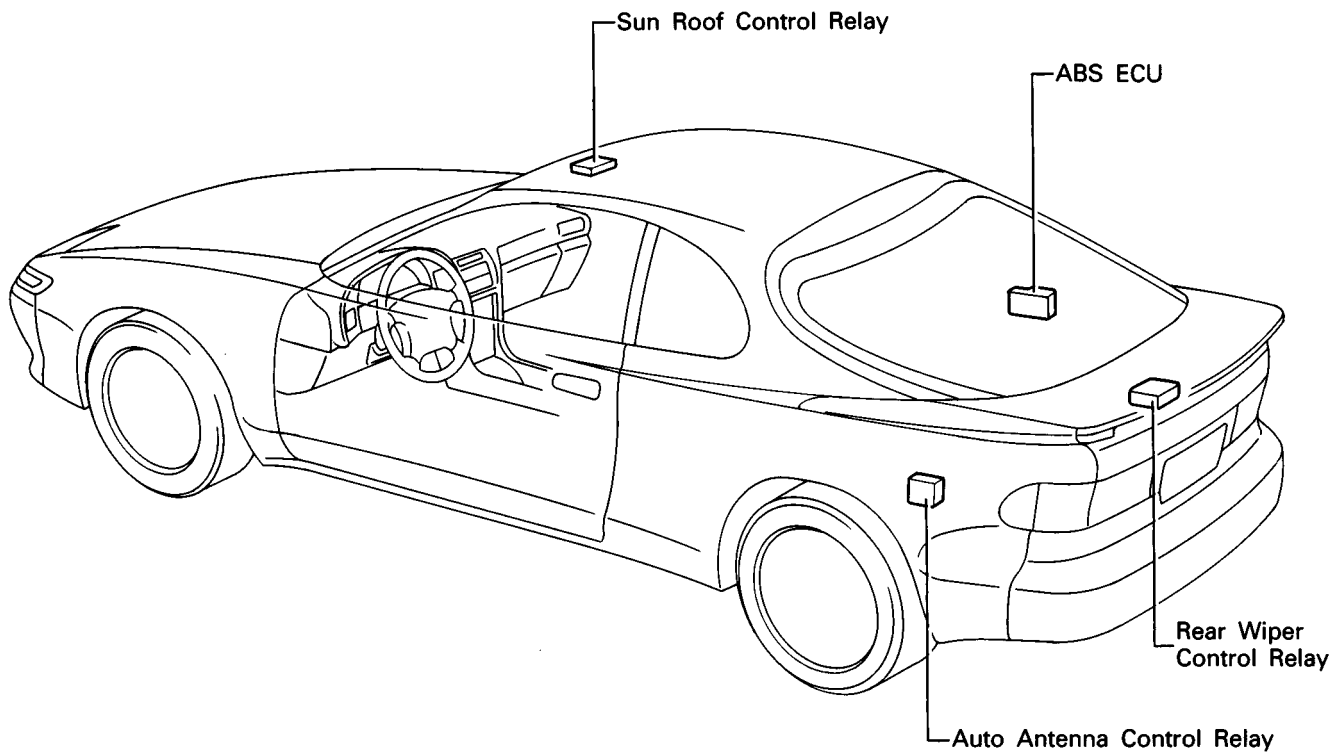
 <p>RELAY</p> <p>1. NORMALLY CLOSED</p> <p>2. NORMALLY OPEN</p> <p>Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p>	 <p>SPEAKER</p> <p>An electromechanical device which creates sound waves from current flow.</p>
 <p>RELAY, DOUBLE THROW</p> <p>A relay which passes current through one set of contacts or the other.</p>	<p>SWITCH, MANUAL</p> <p>1. NORMALLY OPEN</p> <p>2. NORMALLY CLOSED</p> <p>Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.</p>
 <p>RESISTOR</p> <p>An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.</p>	<p>SWITCH, DOUBLE THROW</p> <p>A switch which continuously passes current through one set of contacts or the other.</p>
 <p>RESISTOR, TAPPED</p> <p>A resistor which supplies two or more different non-adjustable resistance values.</p>	<p>SWITCH, IGNITION</p> <p>A key operated switch with several positions which allow various circuits. Particularly the primary ignition circuit, to become operational.</p>
 <p>RESISTOR, VARIABLE or RHEOSTAT</p> <p>A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.</p>	<p>SWITCH, WIPER PARK</p> <p>Automatically returns wipers to the stop position when the wiper switch is turned off.</p>
 <p>SENSOR (Thermistor)</p> <p>A resistor which varies its resistance with temperature.</p>	<p>TRANSISTOR</p> <p>A solidstate device typically used as an electronic relay; stops or passes current depending on the applied voltage at "base."</p>
 <p>SENSOR, ANALOG SPEED</p> <p>Uses magnetic impulses to open and close a switch to create a signal for activation of other components.</p>	<p>WIRES</p> <p>(1) NOT CONNECTED</p> <p>(2) SPLICED</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) with a black dot or octagonal (○) mark at the junction are spliced (joined) connections.</p>
 <p>SHORT PIN</p> <p>Used to provide an unbroken connection within a junction block.</p>	 <p>(2) SPLICED</p>
 <p>SOLENOID</p> <p>An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.</p>	

RELAY LOCATIONS

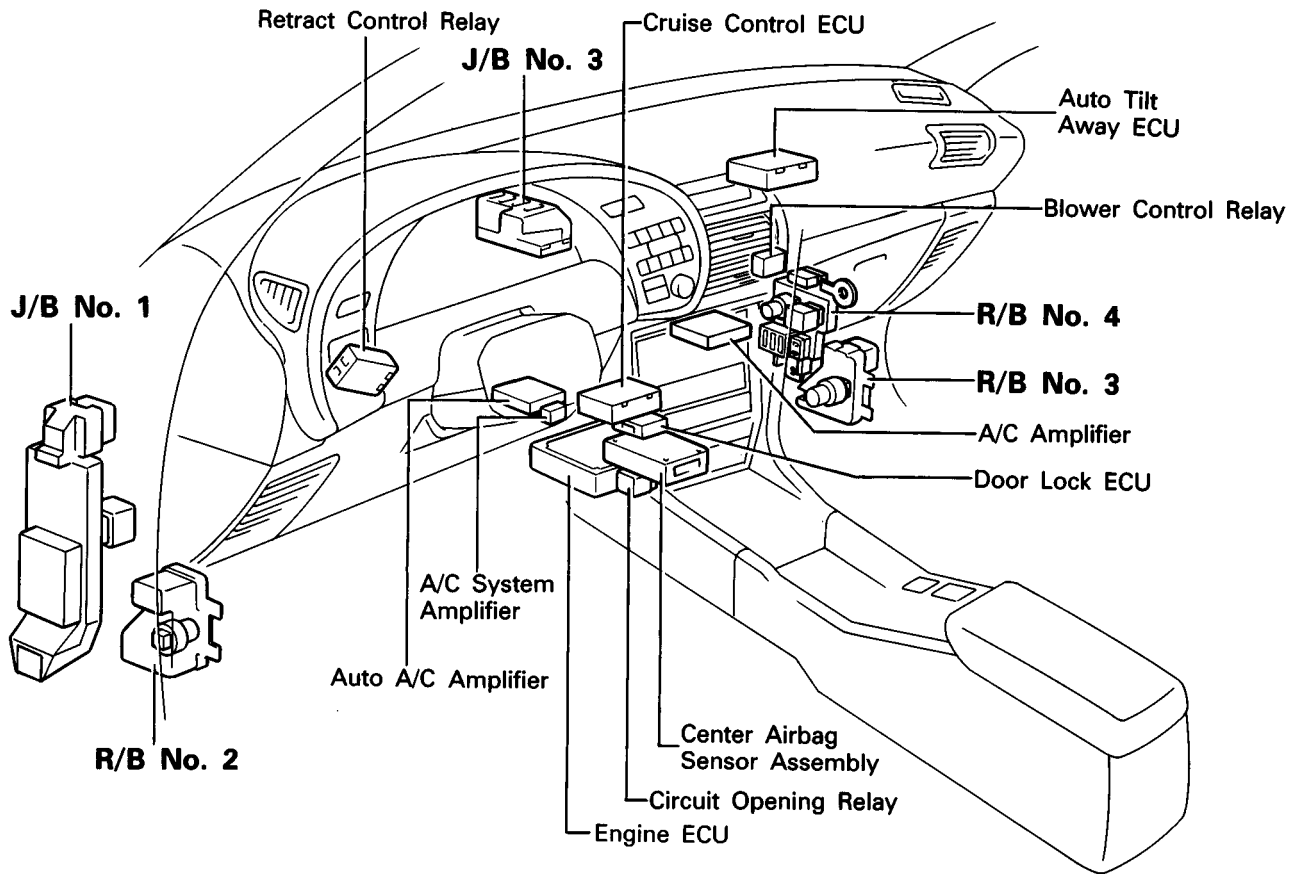
[Engine Compartment]



[Body]

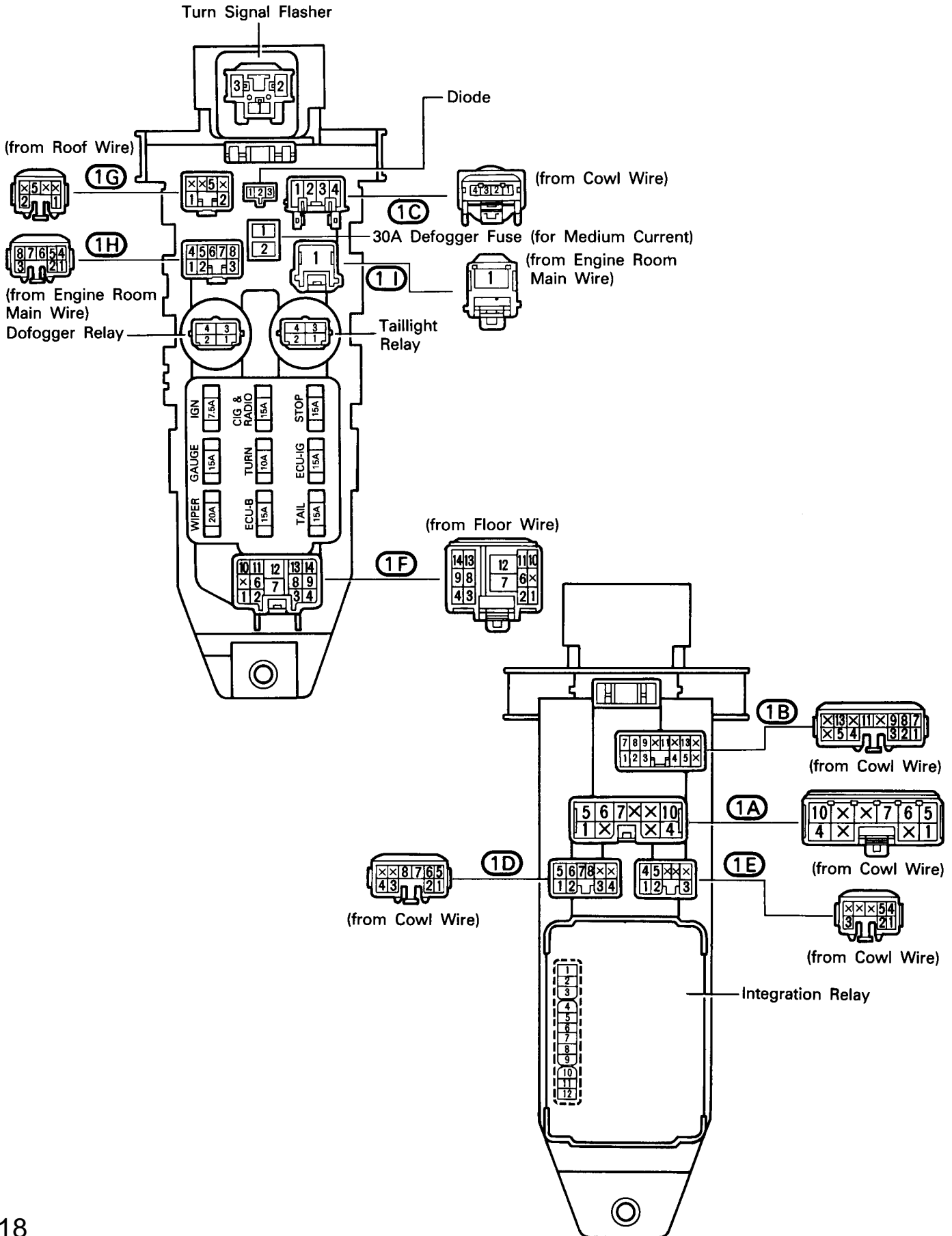


[Instrument Panel]

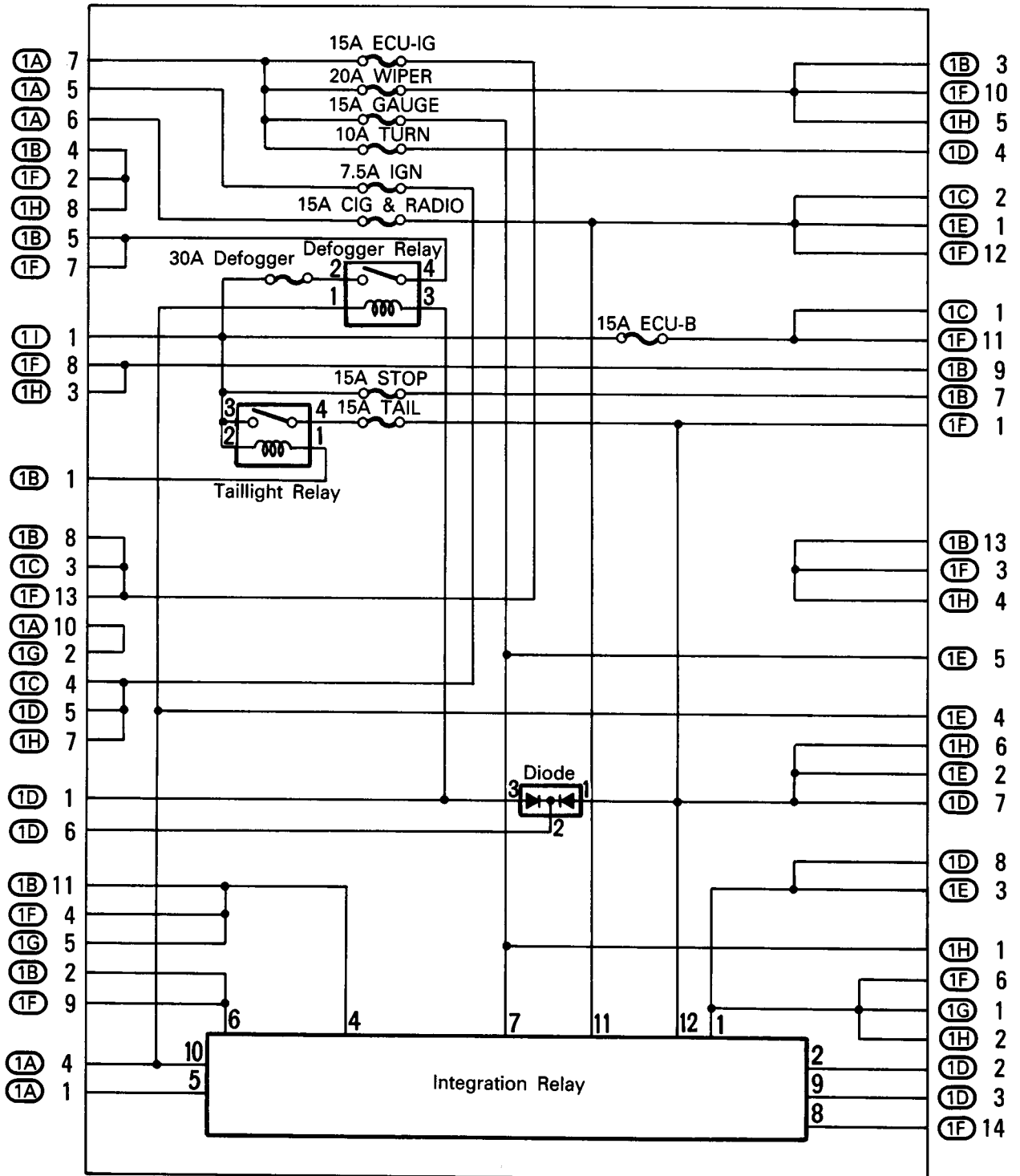


RELAY LOCATIONS

○ : J/B No. 1 Left Kick Panel (See Page 17)

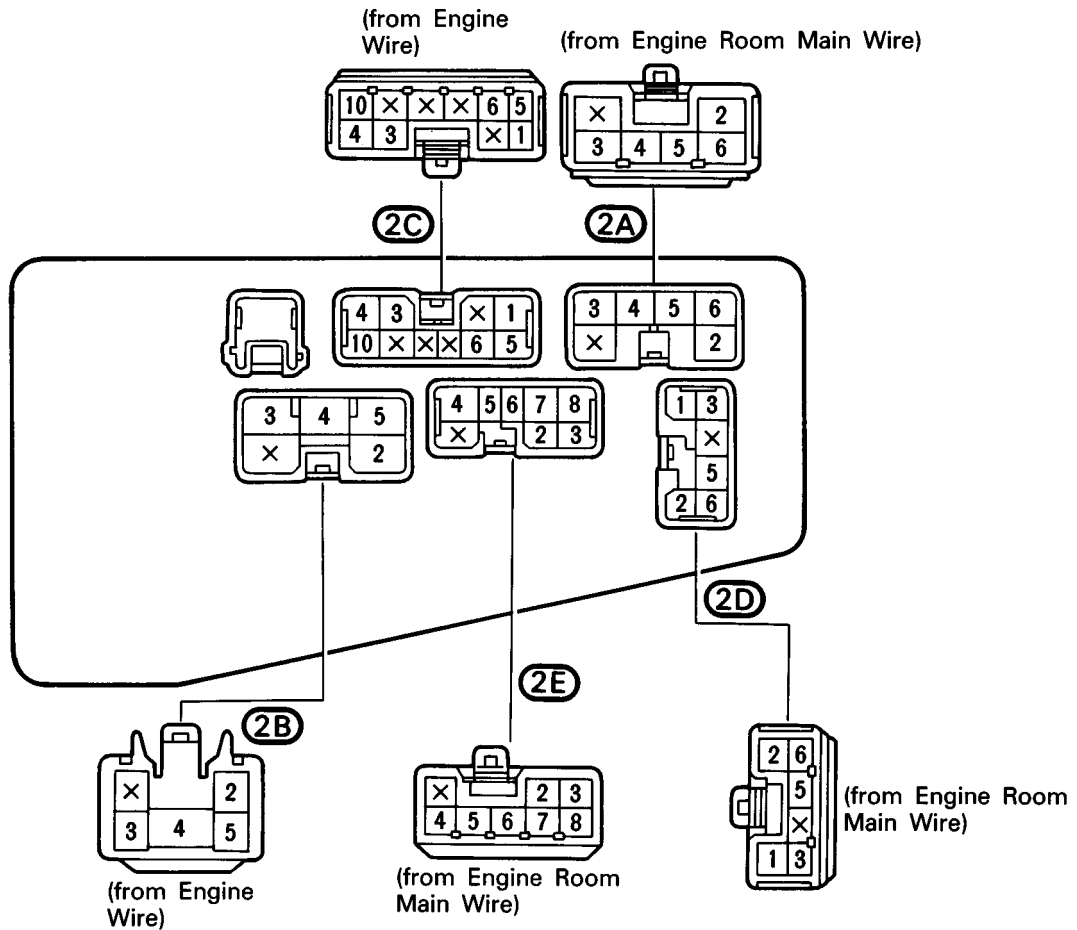
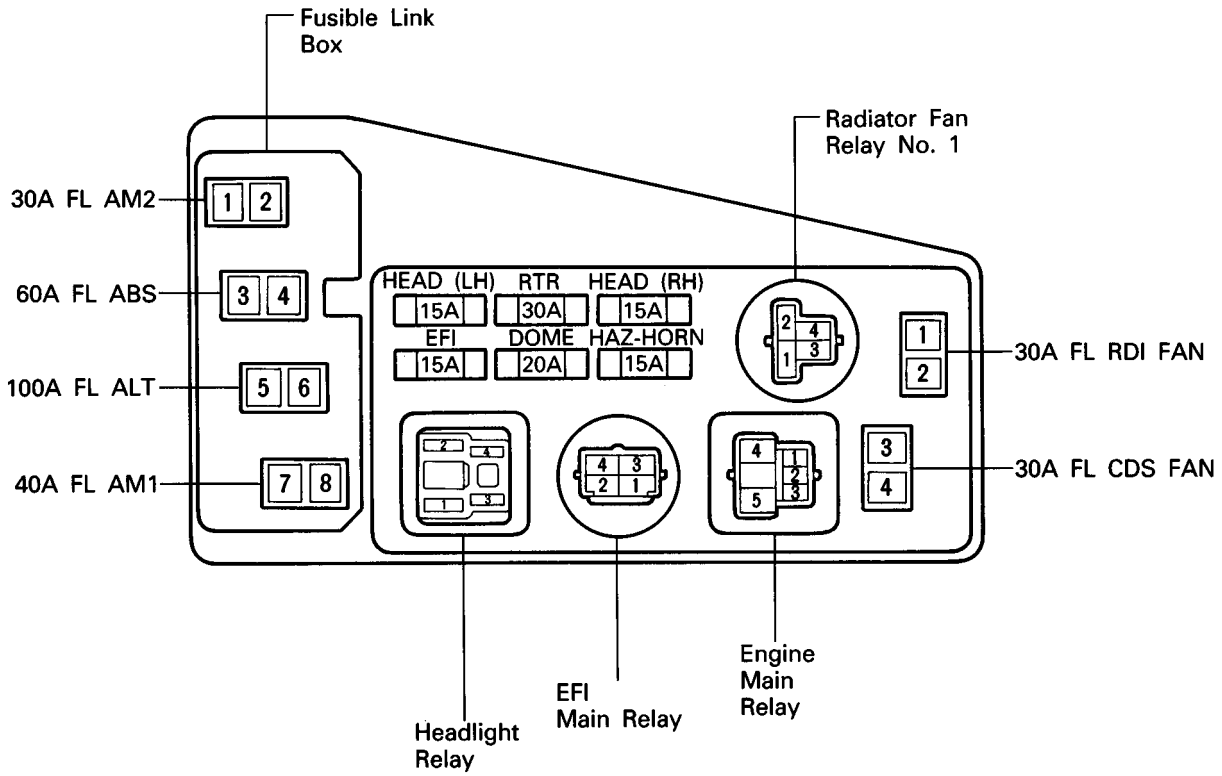


[J/B No. 1 Inner Circuit]

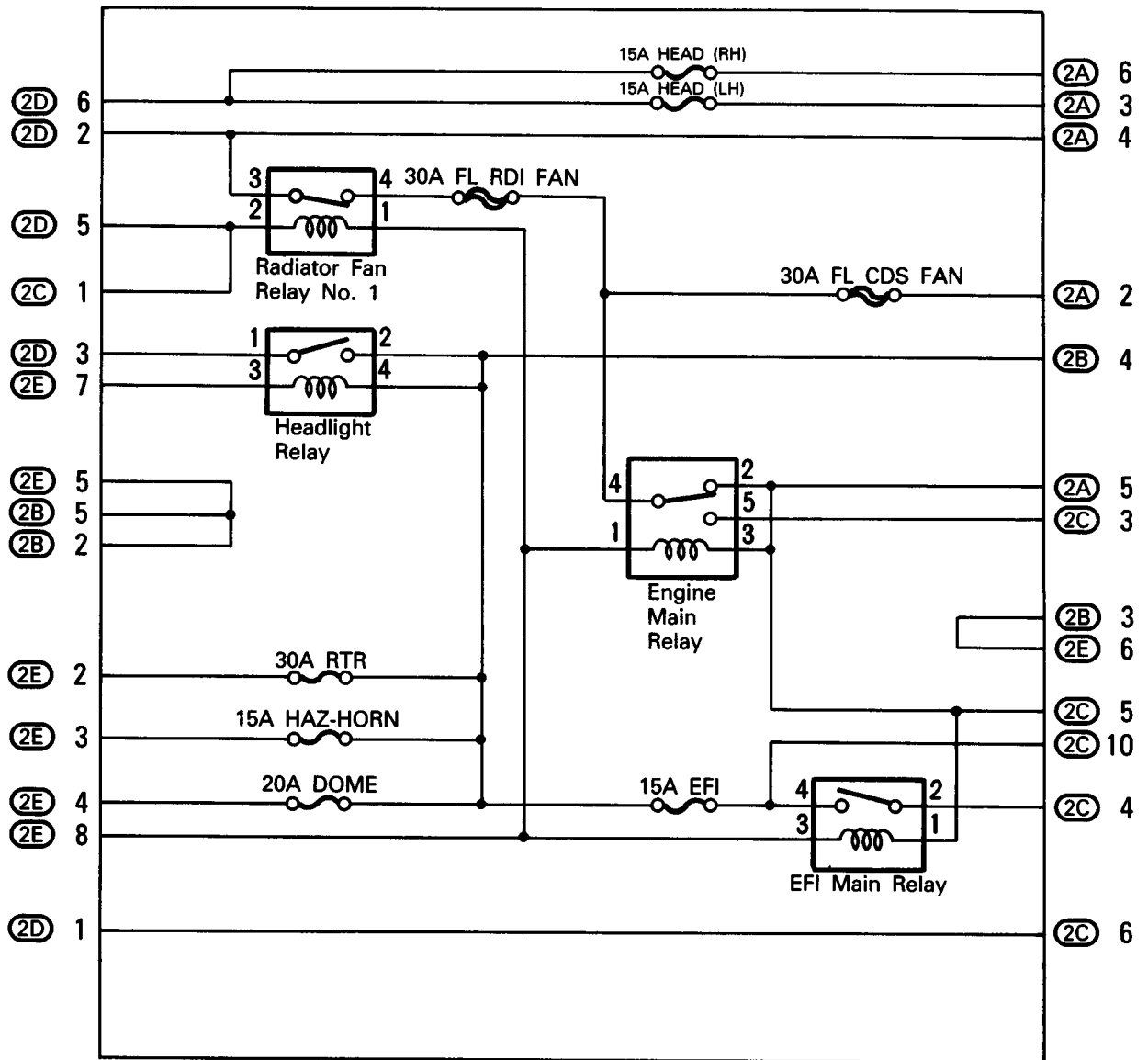


RELAY LOCATIONS

○ : J/B No. 2 Near the Battery (See Page 16)

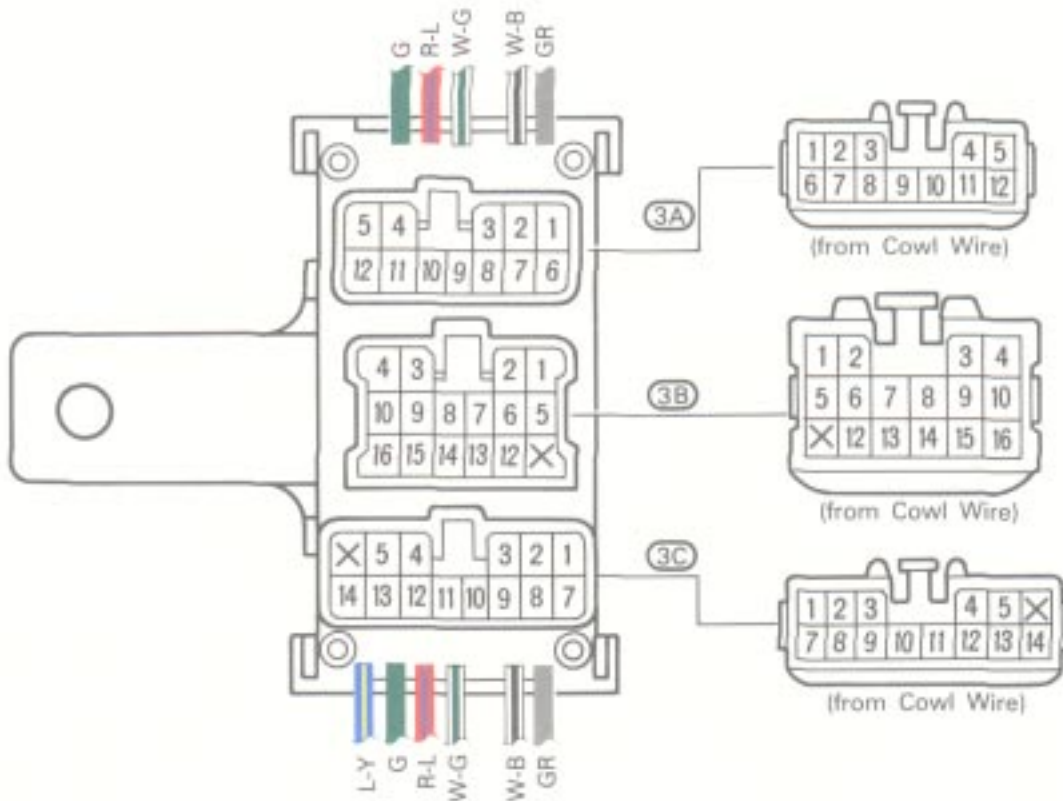


[J/B No. 2 Inner Circuit]

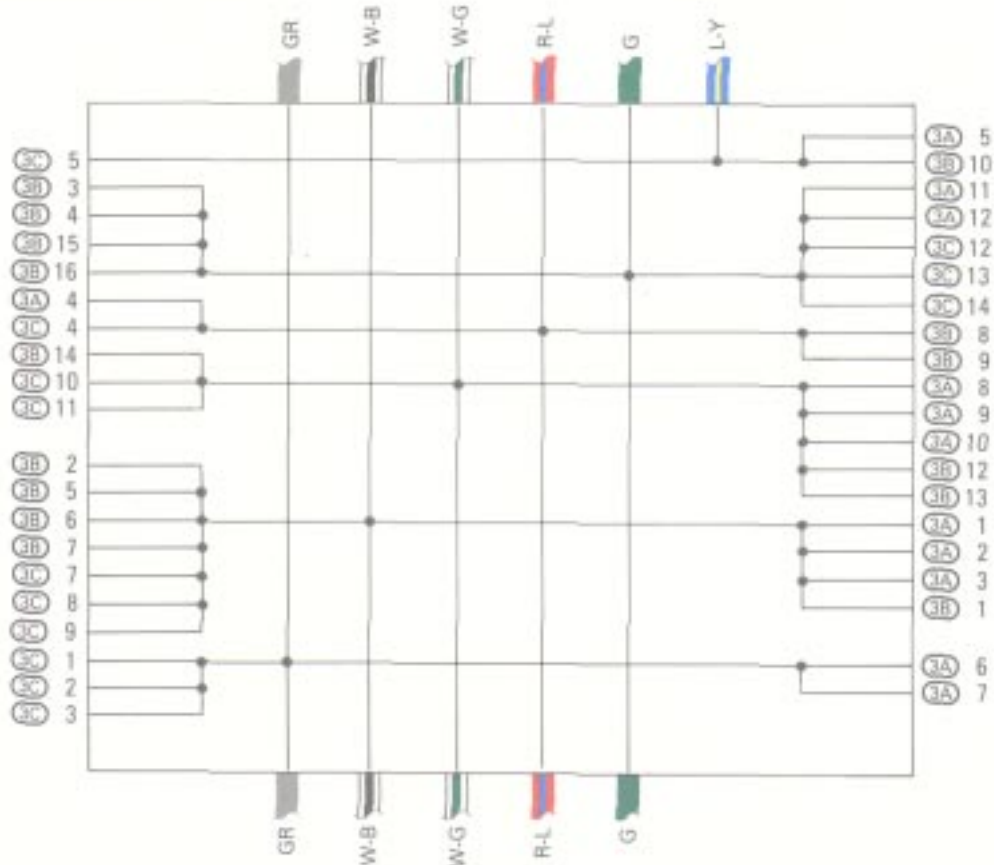


RELAY LOCATIONS

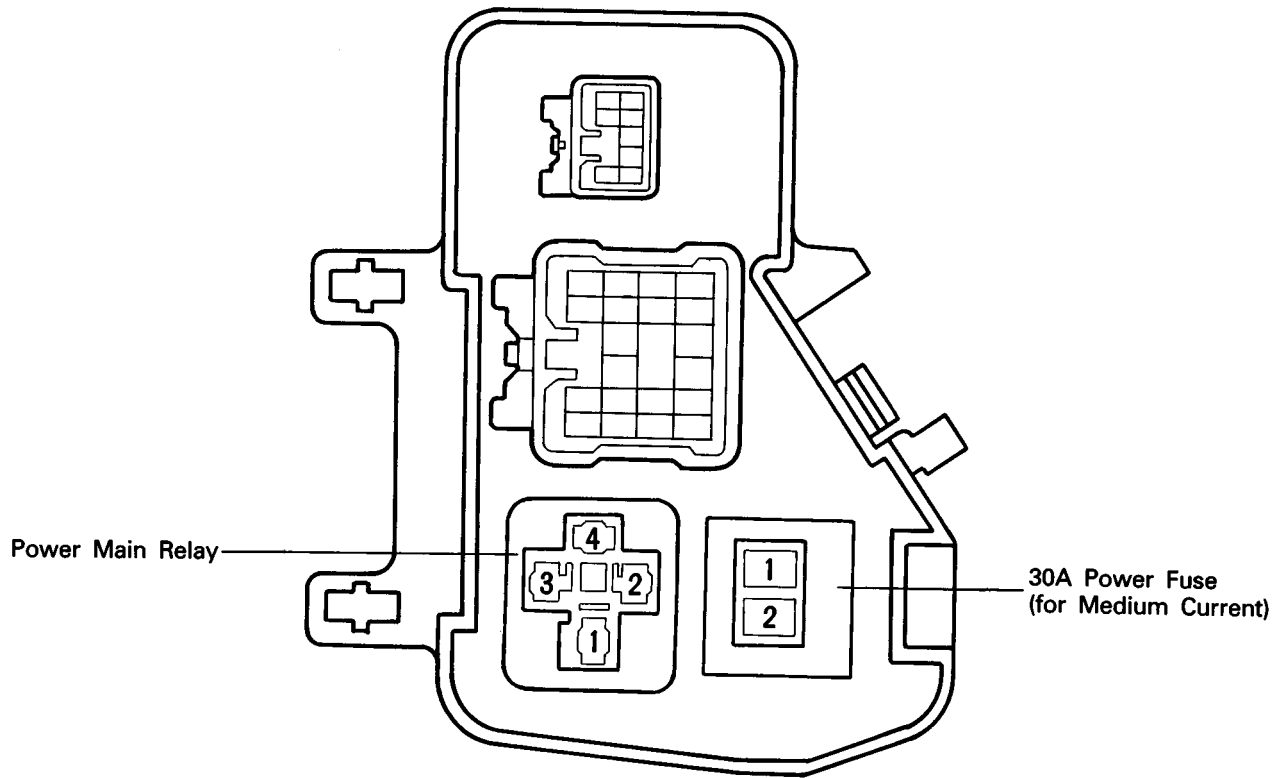
○ : J/B No. 3 Behind Combination Meter (See Page 17)



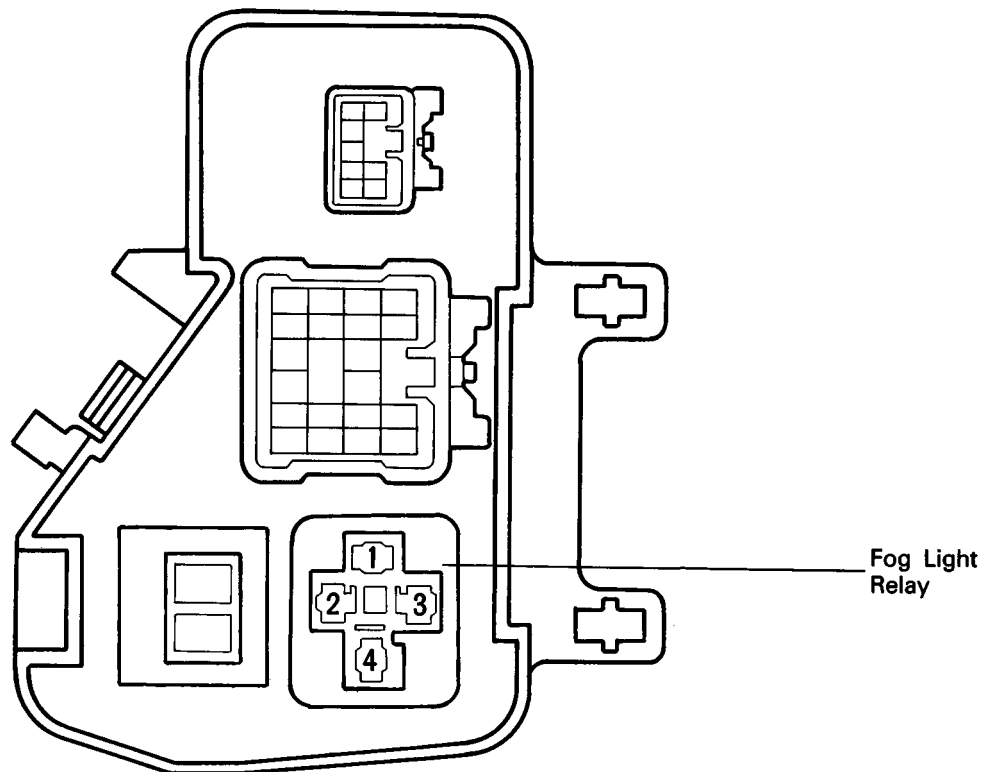
[J/B No. 3 Inner Circuit]



② : R/B No. 2 Left Kick Panel (See Page 17)

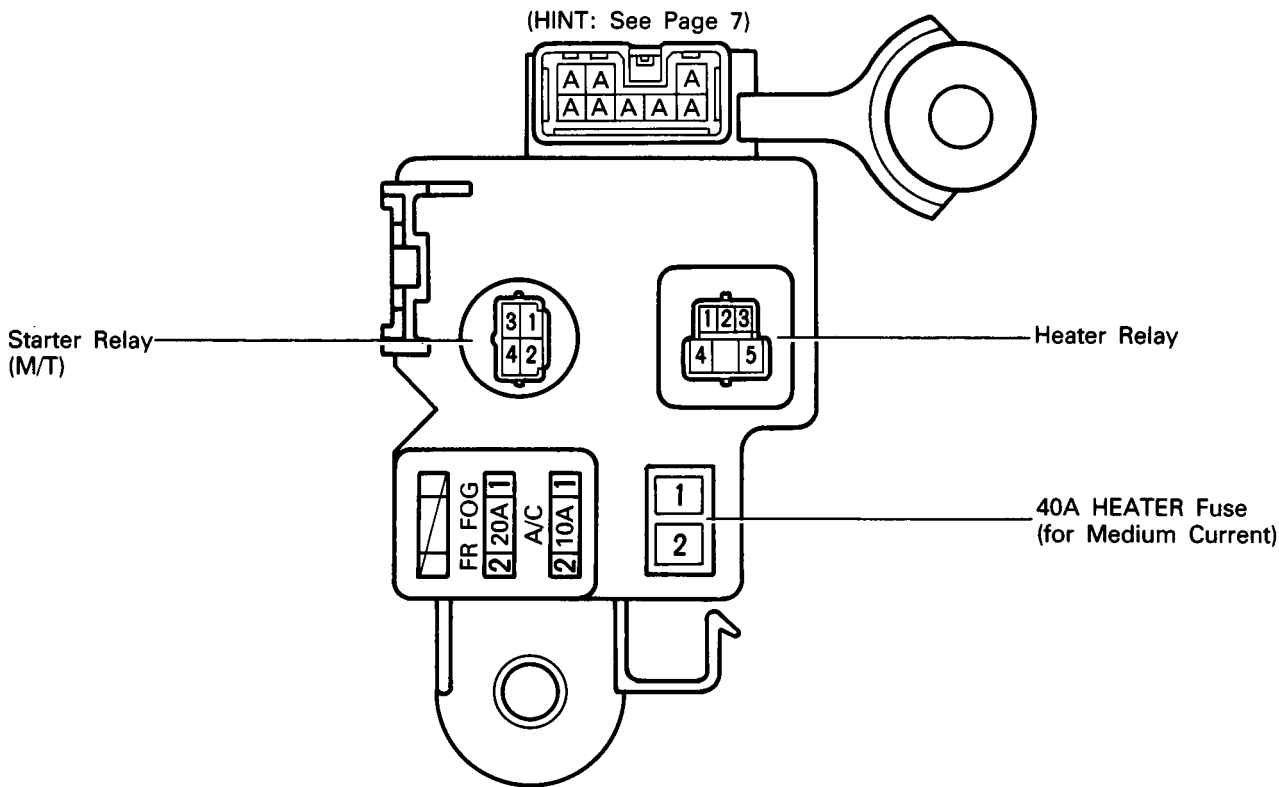


③ : R/B No. 3 Right Kick Panel (See Page 17)

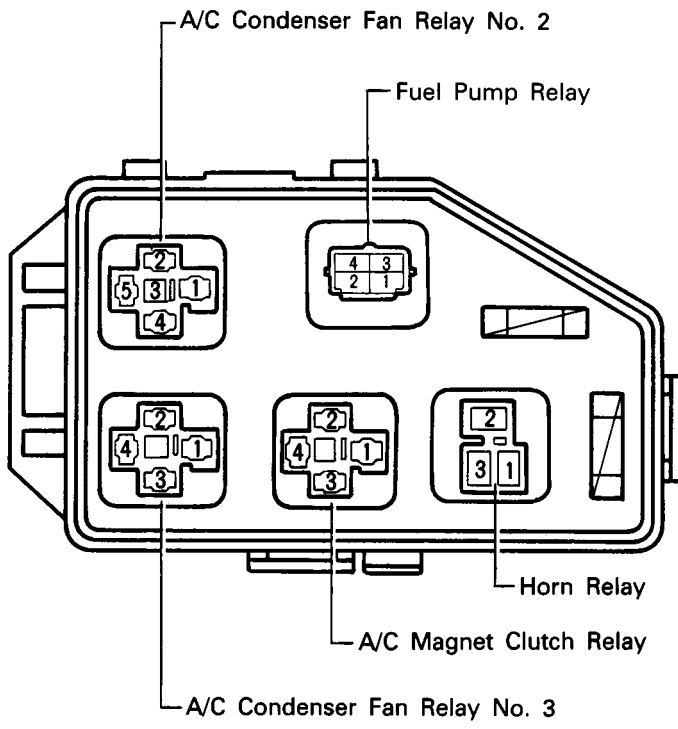


RELAY LOCATIONS

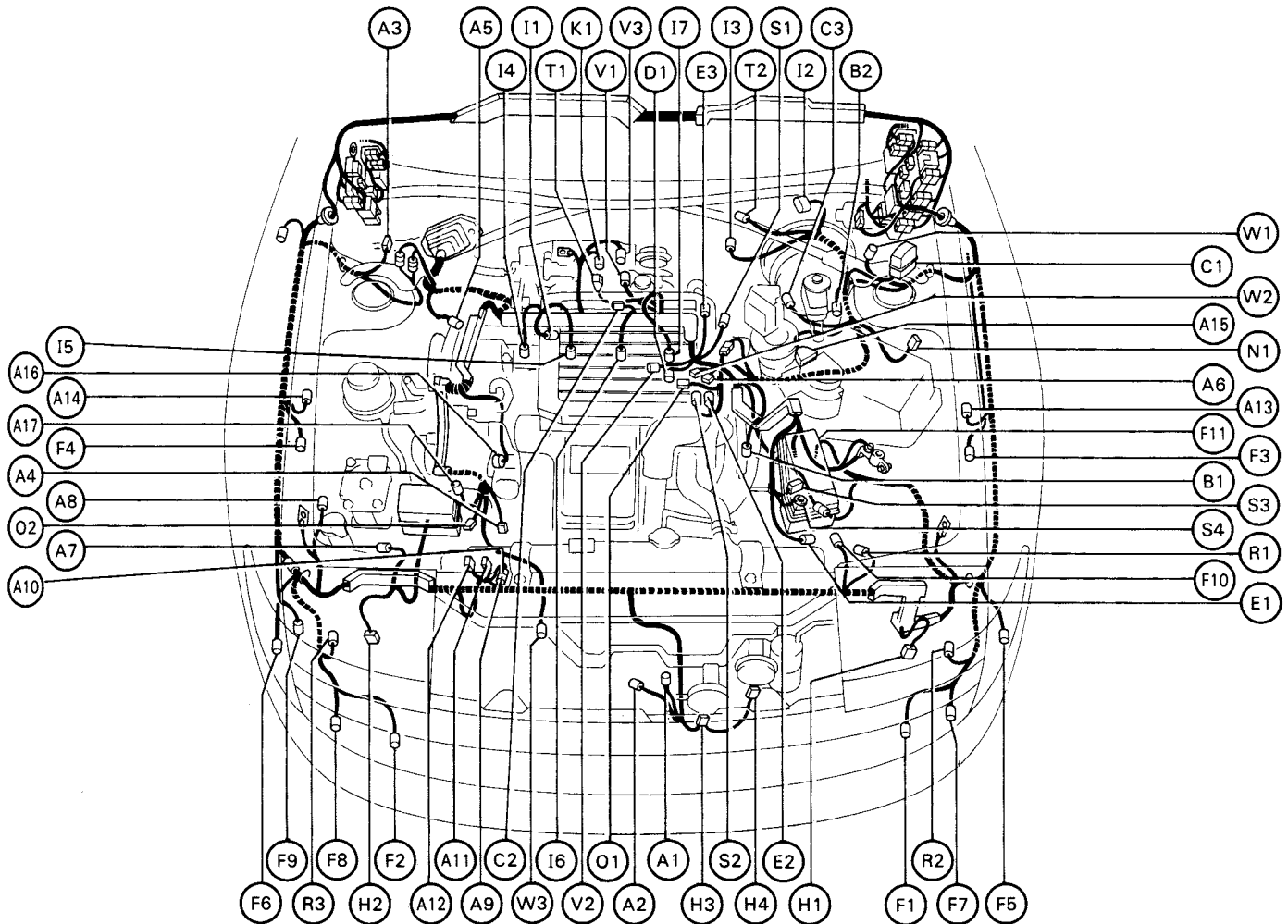
④ : R/B No. 4 | Right Kick Panel (See Page 17)



⑤ : R/B No. 5 | Engine Compartment Front Right (See Page 16)



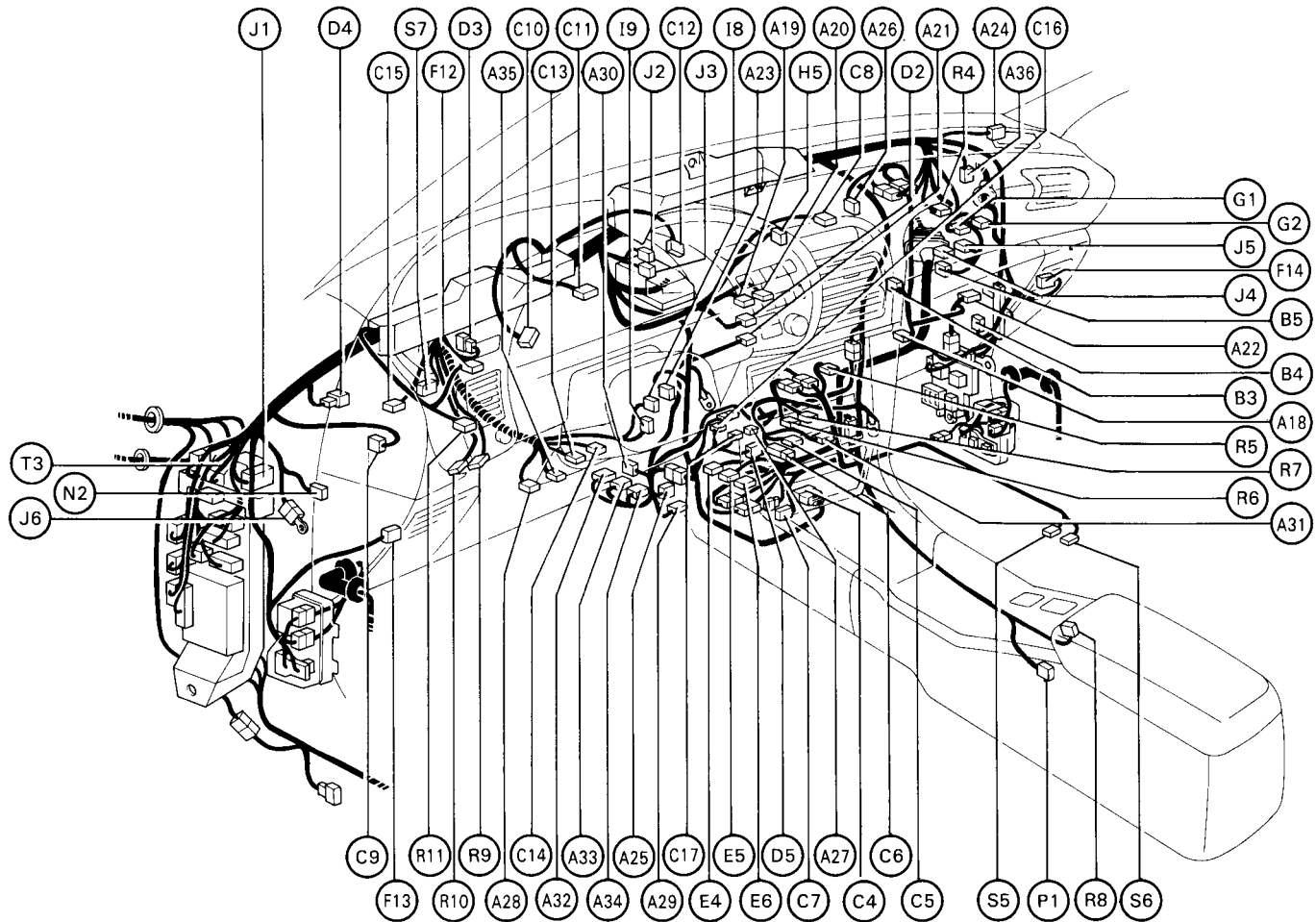
Position of Parts in Engine Compartment



- | | | | | | |
|------|---|------|--|-----|--|
| A 1 | A/C Ambient Temp. Sensor | F 1 | Fog Light LH | N 1 | Noise Filter (for Ignition System) |
| A 2 | A/C Condenser Fan Motor | F 2 | Fog Light RH | O 1 | Oil Pressure SW |
| A 3 | A/C Idle-Up VSV | F 3 | Front Airbag Sensor LH | O 2 | Oxygen Sensor |
| A 4 | A/C Magnet Clutch and Compressor Sensor | F 4 | Front Airbag Sensor RH | R 1 | Radiator Fan Motor |
| A 5 | A/C Pressure SW | F 5 | Front Side Marker Light LH | R 2 | Retract Motor LH |
| A 6 | A/C Water Temp. SW | F 6 | Front Side Marker Light RH | R 3 | Retract Motor RH |
| A 7 | ABS Actuator | F 7 | Front Turn Signal Light and Clearance Light LH | S 1 | Speed Sensor (for Cruise Control System) |
| A 8 | ABS Actuator | F 8 | Front Turn Signal Light and Clearance Light RH | S 2 | Start Injector Time SW |
| A 9 | ABS Check Connector | F 9 | Front Wiper Motor | S 3 | Starter |
| A 10 | ABS Check Connector | F 10 | Fuel Pump Resistor | S 4 | Starter |
| A 11 | ABS Relay | F 11 | Fusible Link Box | T 1 | Throttle Position Sensor |
| A 12 | ABS Relay | H 1 | Headlight LH | T 2 | Turbo Charging Pressure Sensor |
| A 13 | ABS Speed Sensor Front LH | H 2 | Headlight RH | V 1 | VSV (for EGR System) |
| A 14 | ABS Speed Sensor Front RH | H 3 | Horn | V 2 | VSV (for Turbo Charging Pressure) |
| A 15 | Air Flow Meter | H 4 | Horn | V 3 | VSV (for T-VIS) |
| A 16 | Alternator | I 1 | ISC Valve | W 1 | Washer Motor |
| A 17 | Alternator | I 2 | Igniter | W 2 | Water Temp. Sender |
| B 1 | Back-Up Light SW | I 3 | Ignition Coil | W 3 | Water Temp. SW (for Fans control) |
| B 2 | Brake Fluid Level SW | I 4 | Injector No. 1 | | |
| C 1 | Check Connector | I 5 | Injector No. 2 | | |
| C 2 | Cold Start Injector | I 6 | Injector No. 3 | | |
| C 3 | Cruise Control Actuator | I 7 | Injector No. 4 | | |
| D 1 | Distributor | K 1 | Knock Sensor | | |
| E 1 | EFI Resistor | | | | |
| E 2 | EFI Water Temp. Sensor | | | | |
| E 3 | EGR Gas Temp. Sensor (for California) | | | | |

ELECTRICAL WIRING ROUTING

Position of Parts in Instrument Panel



- A 18 A/C Amplifier
- A 19 A/C Control Assembly
- A 20 A/C Control Assembly
- A 21 A/C Control Assembly
- A 22 A/C Power Transistor
- A 23 A/C Room Temp. Sensor
- A 24 A/C Solar Sensor
- A 25 A/C System Amplifier
- A 26 A/C Thermistor
- A 27 A/C Water Temp. Sensor
- A 28 Airbag Squib
- A 29 Air Mix Control Servo Motor
- A 30 Air Vent Mode Control Servo Motor
- A 31 Ashtray
- A 32 Auto A/C Amplifier
- A 33 Auto A/C Amplifier
- A 34 Auto A/C Amplifier
- A 35 Auto Tilt Away Actuator
- A 36 Auto Tilt Away ECU

- B 3 Blower Control Relay
- B 4 Blower Motor
- B 5 Blower Resistor
- C 4 Center Airbag Sensor Assembly
- C 5 Cigarette Lighter
- C 6 Cigarette Lighter Illumination
- C 7 Circuit Opening Relay

- C 8 Clock
- C 9 Clutch Start SW
- C 10 Combination Meter
- C 11 Combination Meter
- C 12 Combination Meter
- C 13 Combination SW
- C 14 Combination SW
- C 15 Cruise Control Clutch SW
- C 16 Cruise Control ECU
- C 17 Cruise Control ECU

- D 2 Defogger SW
- D 3 Diode (for Cruise Control System)
- D 4 Diode (for Key Off)
- D 5 Door Lock ECU

- E 4 Engine ECU
- E 5 Engine ECU
- E 6 Engine ECU

- F 12 Fog Light SW
- F 13 Front Speaker LH
- F 14 Front Speaker RH

- G 1 Glove Box Light
- G 2 Glove Box Light SW

- H 5 Hazard SW

- I 8 Ignition Key Cylinder Light
- I 9 Ignition SW and Unlock Warning SW

- J 1 Junction Connector
- J 2 Junction Connector
- J 3 Junction Connector
- J 4 Junction Connector
- J 5 Junction Connector
- J 6 Junction Connector (for Earth)

- N 2 Noise Filter (for Defogger System)

- P 1 Parking Brake SW

- R 4 RECIRC/FRESH Control Servo Motor

- R 5 Radio and Player (w/ CD Player)

- R 6 Radio and Player (w/o CD Player)

- R 7 Radio and Player (w/o CD Player)

- R 8 Remote Control Mirror SW

- R 9 Retract Control Relay

- R 10 Retract Control Relay (for CANADA)

- R 11 Rheostat

- S 5 Stereo Component Amplifier (w/ CD Player)

- S 6 Stereo Component Amplifier (w/ CD Player)

- S 7 Stop Light and Cruise Control Stop SW

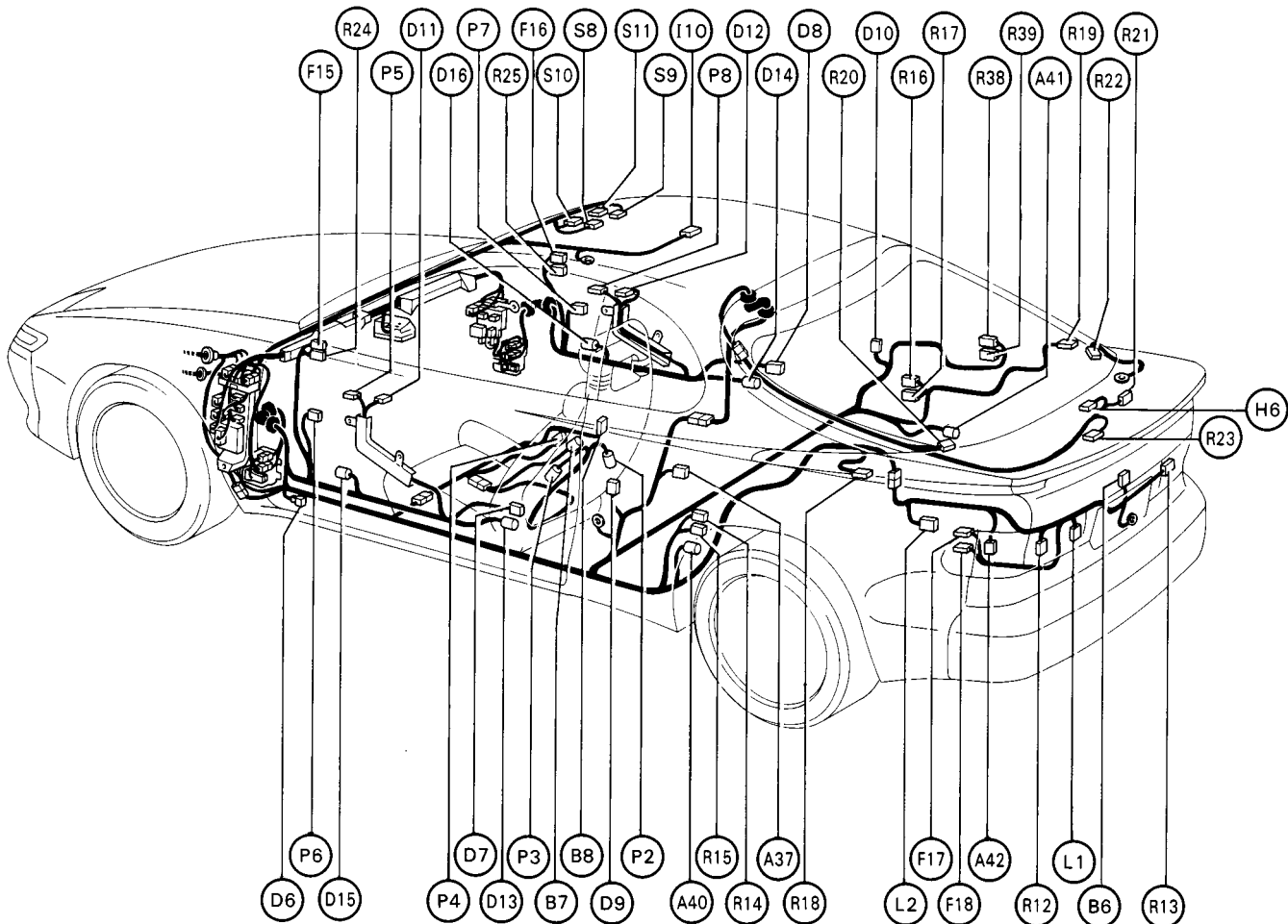
- S 7 Stop Light and Cruise Control Stop SW

- S 7 Stop Light and Cruise Control Stop SW

- S 7 Stop Light and Cruise Control Stop SW

- T 3 Turn Signal Flasher

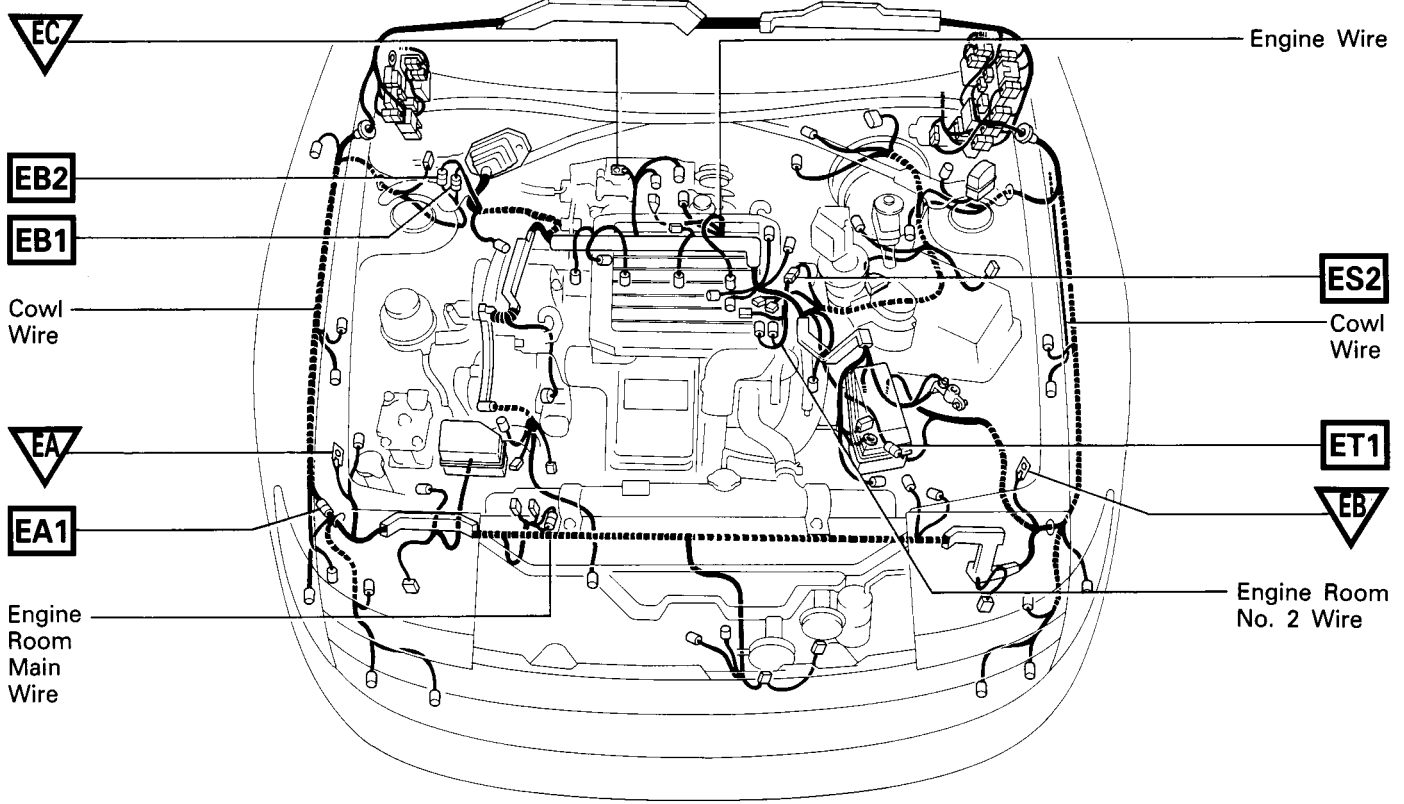
Position of Parts in Body



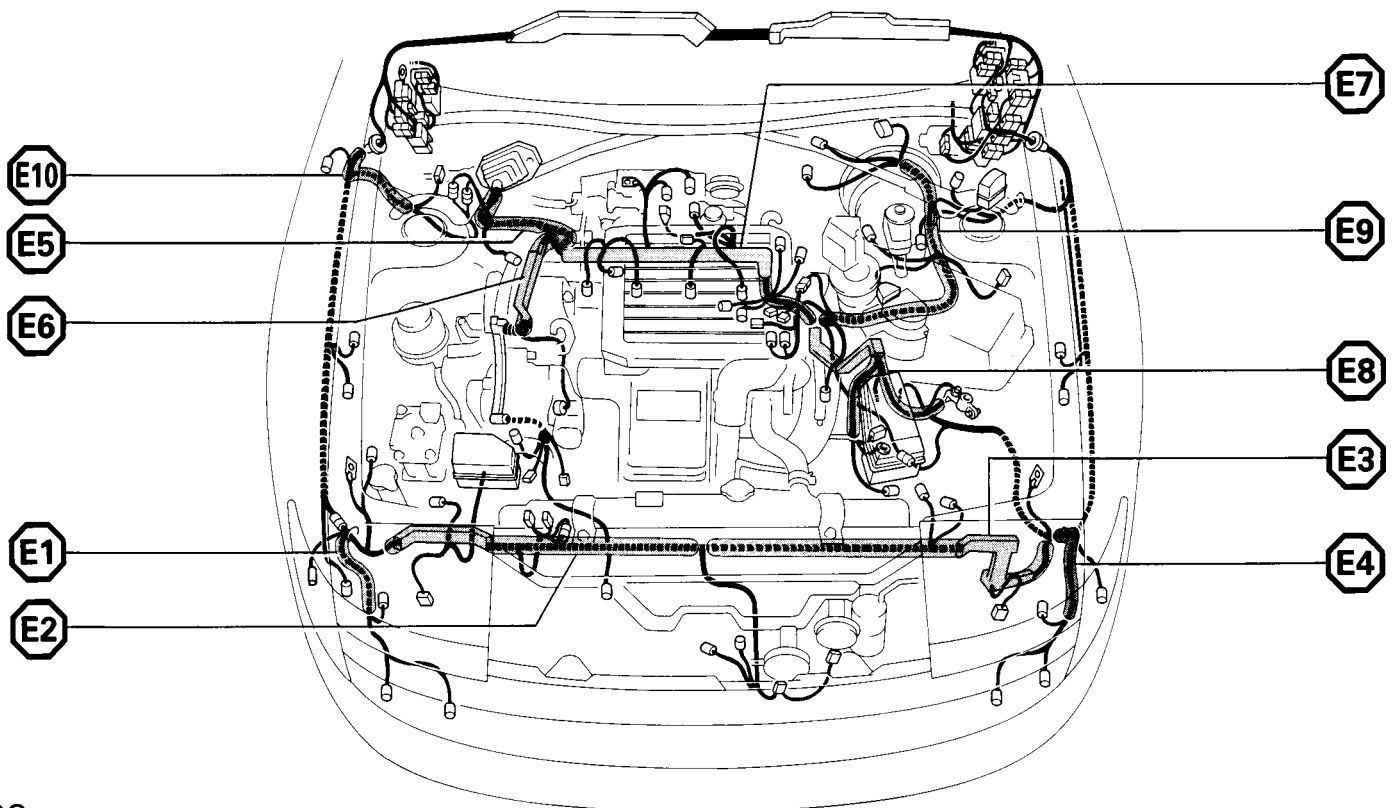
- | | |
|---|---|
| <p>A 37 ABS Deceleration Sensor
 A 38 ABS ECU
 A 39 ABS ECU
 A 40 ABS Speed Sensor Rear LH
 A 41 ABS Speed Sensor Rear RH
 A 42 Auto Antenna Control Relay and Motor</p> <p>B 6 Back Door Courtesy SW
 B 7 Buckle SW (w/ Power Seat)
 B 8 Buckle SW (w/o Power Seat)</p> <p>D 6 Diode (for Interior Light System)
 D 7 Door Courtesy Light LH
 D 8 Door Courtesy Light RH
 D 9 Door Courtesy SW LH
 D 10 Door Courtesy SW RH
 D 11 Door Lock Control SW LH
 D 12 Door Lock Control SW RH
 D 13 Door Lock Motor LH and, Key Lock and Unlock SW LH
 D 14 Door Lock Motor RH and, Key Lock and Unlock SW RH
 D 15 Door Speaker LH
 D 16 Door Speaker RH</p> <p>F 15 Front Tweeter (Speaker) LH
 F 16 Front Tweeter (Speaker) RH
 F 17 Fuel Pump
 F 18 Fuel Sender</p> <p>H 6 High Mount Stop Light</p> | <p>I 10 Interior Light</p> <p>L 1 License Plate Light
 L 2 Luggage Compartment Light</p> <p>P 2 Power Seat Motor (for Lumbar Support)
 P 3 Power Seat Motor (for Side Support)
 P 4 Power Seat SW
 P 5 Power Window Master SW
 P 6 Power Window Motor LH
 P 7 Power Window Motor RH
 P 8 Power Window SW RH</p> <p>R 12 Rear Combination Light LH
 R 13 Rear Combination Light RH
 R 14 Rear Speaker LH
 R 15 Rear Speaker LH
 R 16 Rear Speaker RH
 R 17 Rear Speaker RH
 R 18 Rear Tweeter (Speaker) LH
 R 19 Rear Tweeter (Speaker) RH
 R 20 Rear Window Defogger (+, w/o Diversity Antenna)
 R 21 Rear Window Defogger (+, w/ Diversity Antenna)
 R 22 Rear Window Defogger (-)
 R 23 Rear Wiper Control Relay and Motor
 R 24 Remote Control Mirror LH
 R 25 Remote Control Mirror RH</p> <p>S 8 Sun Roof Control Relay
 S 9 Sun Roof Control SW and Personal Light
 S 10 Sun Roof Limit SW
 S 11 Sun Roof Motor</p> |
|---|---|

ELECTRICAL WIRING ROUTING

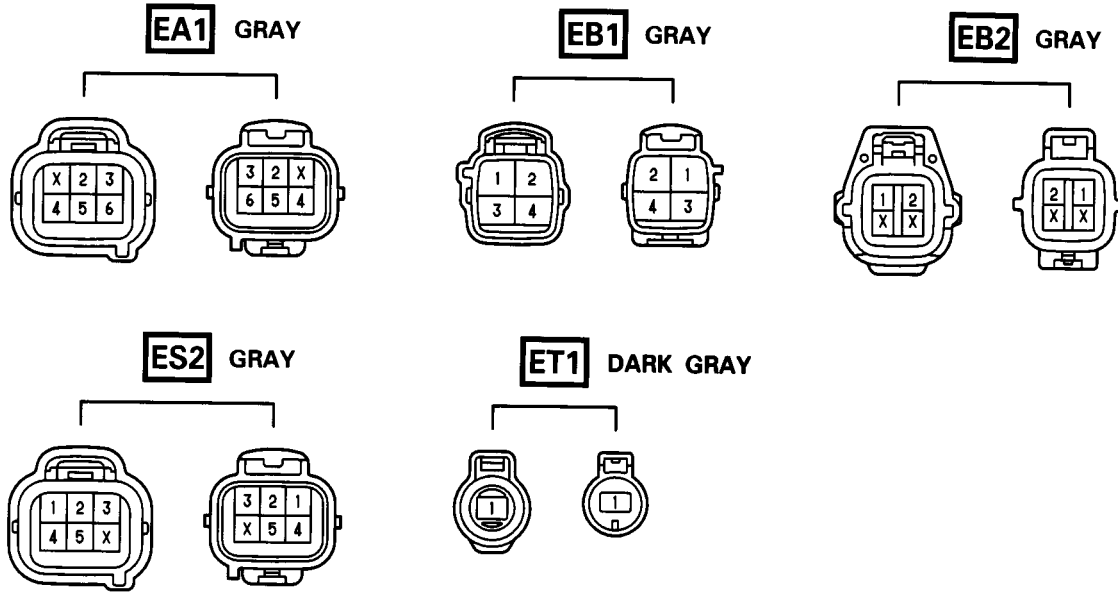
- : Location of Connector Joining Wire Harness and Wire Harness
- ▽ : Location of Ground Points



- : Location of Splice Points



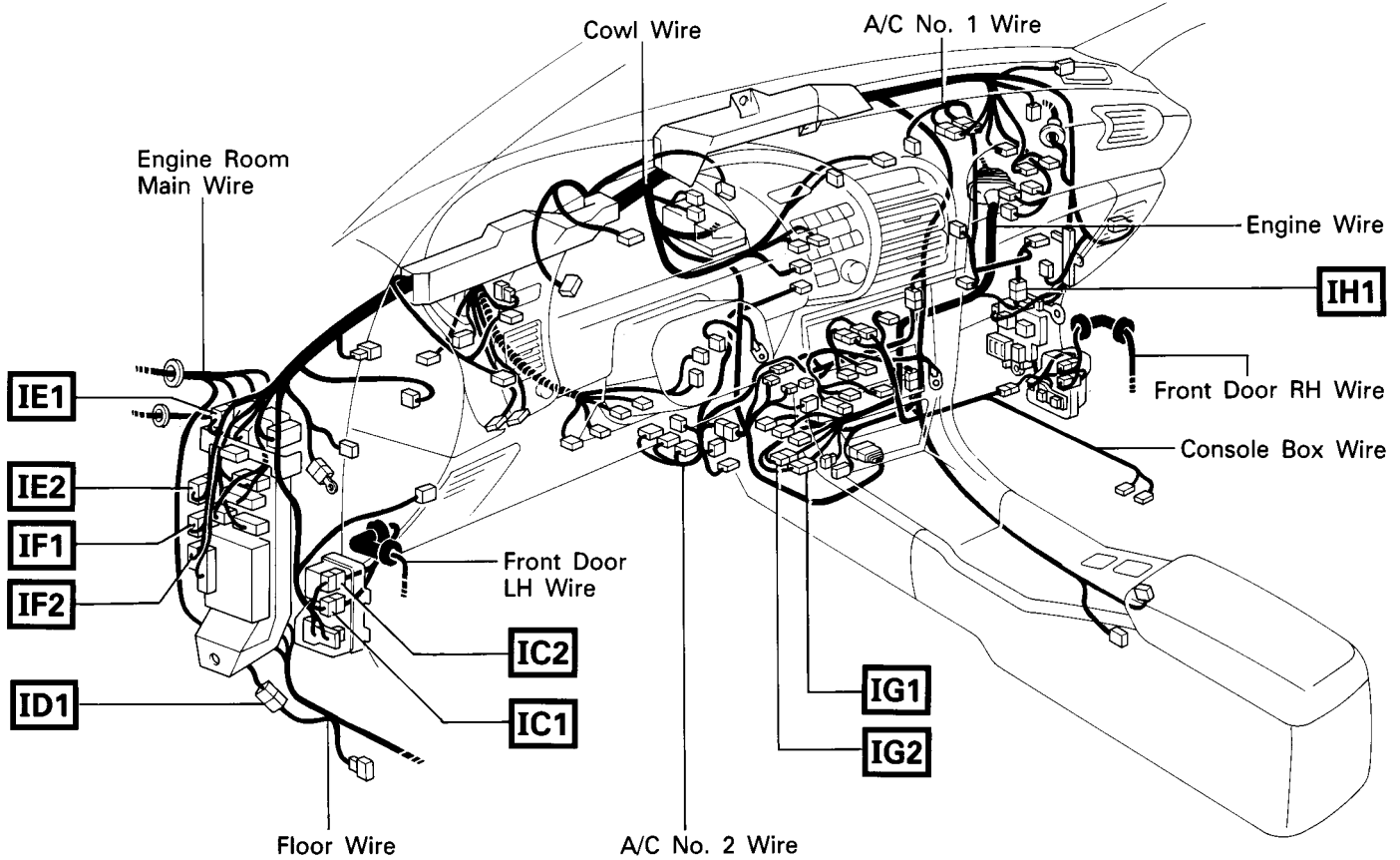
Connector Joining Wire Harness and Wire Harness



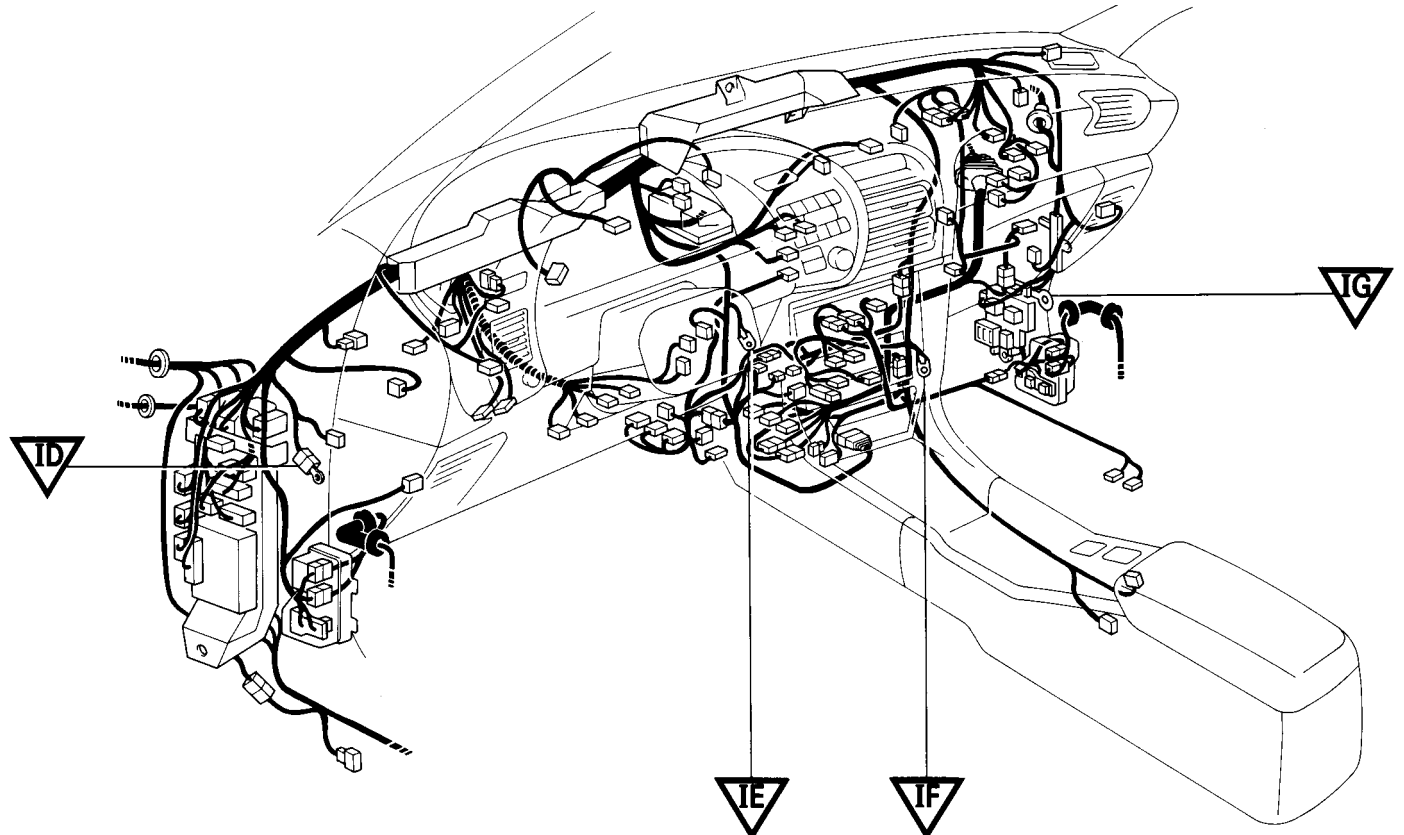
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
EB1	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
EB2	
ES2	ENGINE WIRE AND ENGINE ROOM NO. 2 WIRE (NEAR THE DISTRIBUTOR)
ET1	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE J/B NO. 2)

ELECTRICAL WIRING ROUTING

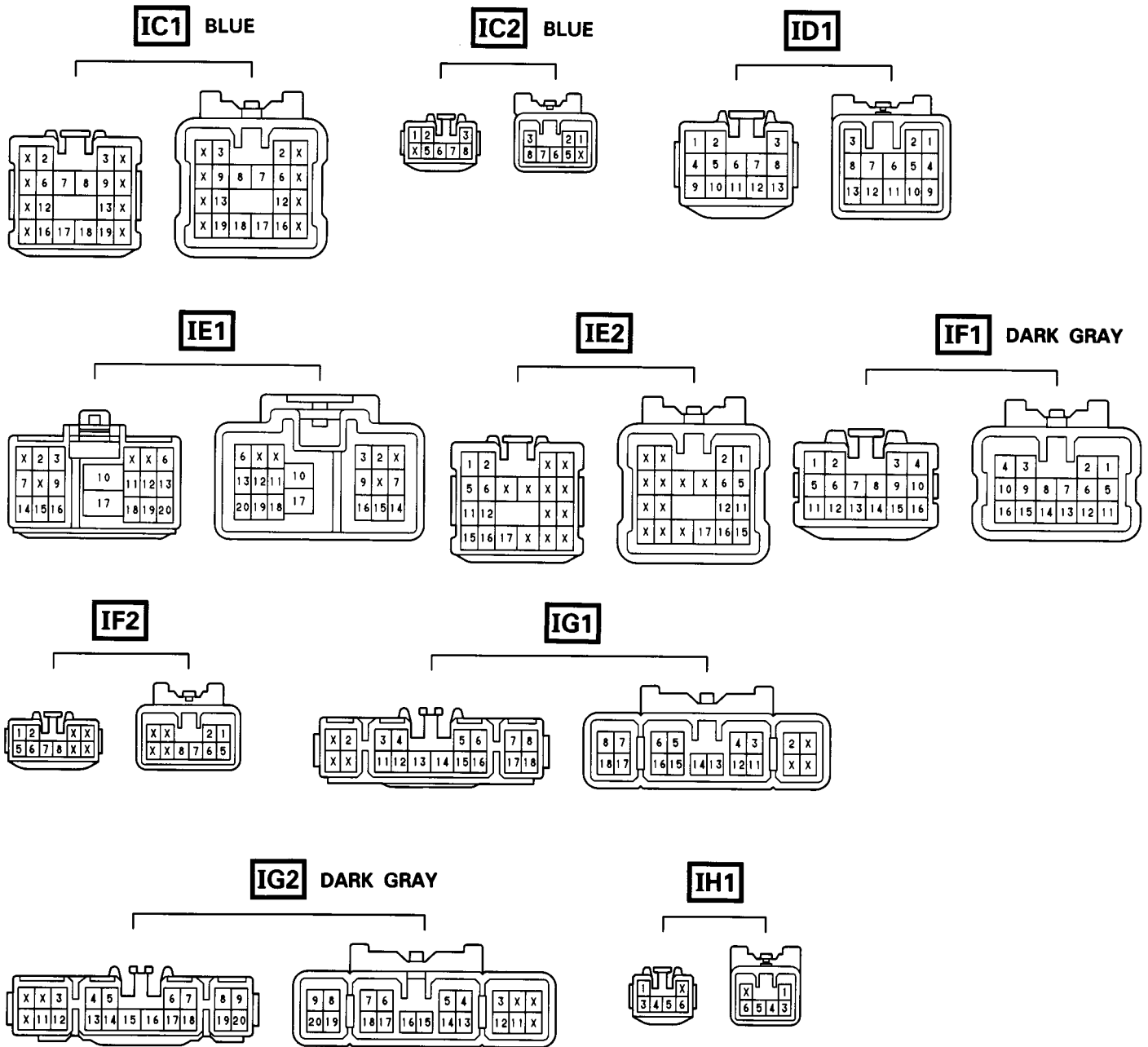
□ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points



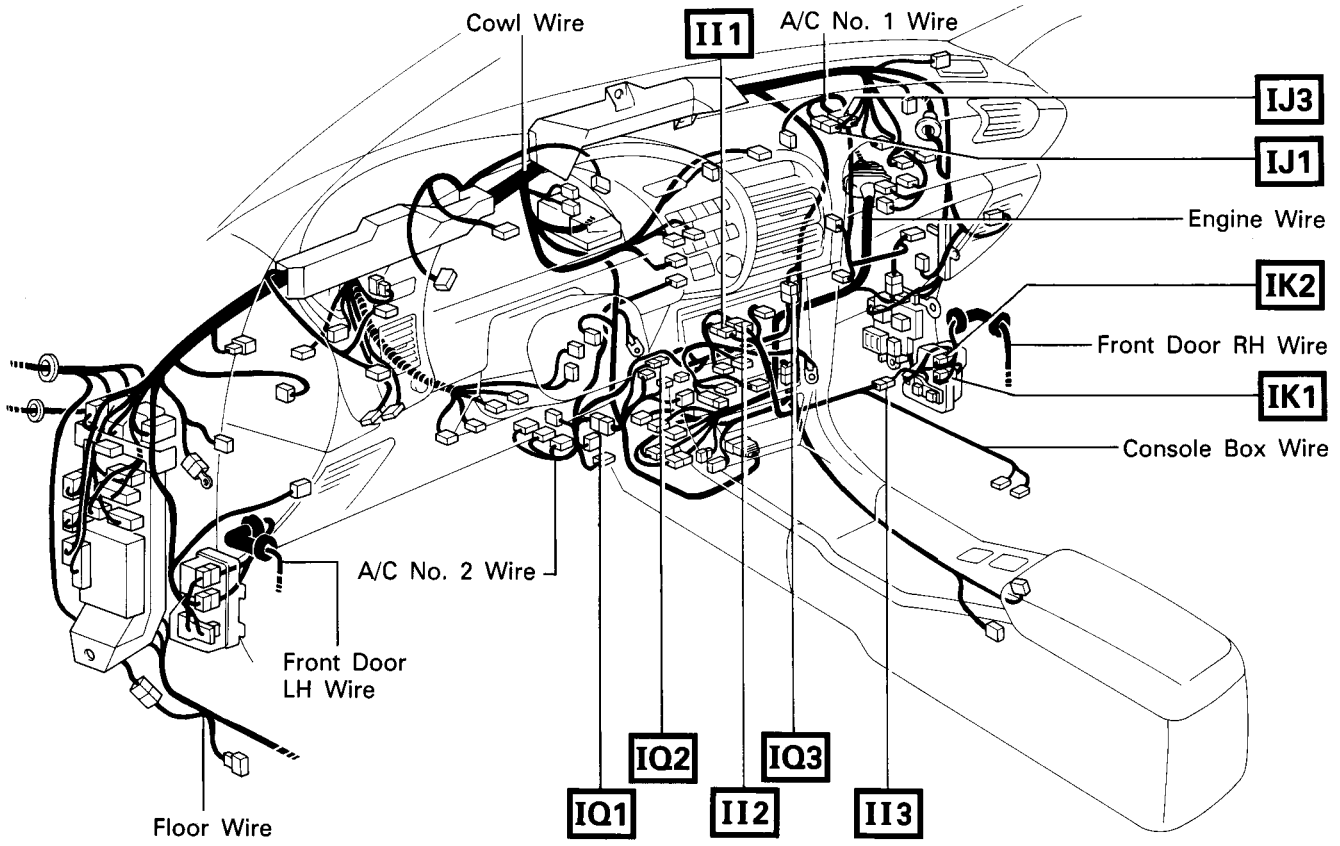
Connector Joining Wire Harness and Wire Harness



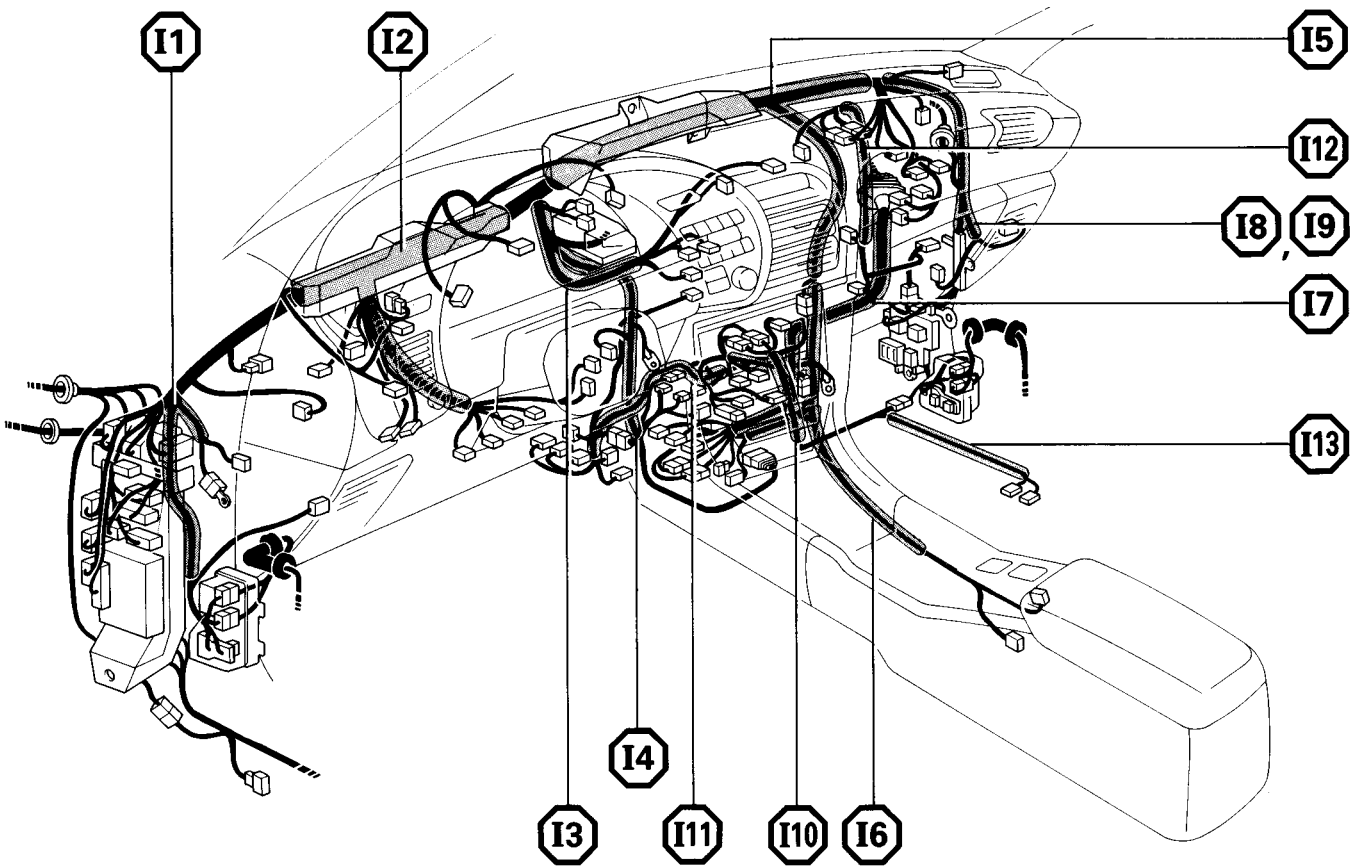
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IC2	
ID1	ENGINE ROOM MAIN WIRE AND FLOOR WIRE (LEFT KICK PANEL)
IE1	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2	
IF1	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IF2	
IG1	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IG2	
IH1	ENGINE WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)

ELECTRICAL WIRING ROUTING

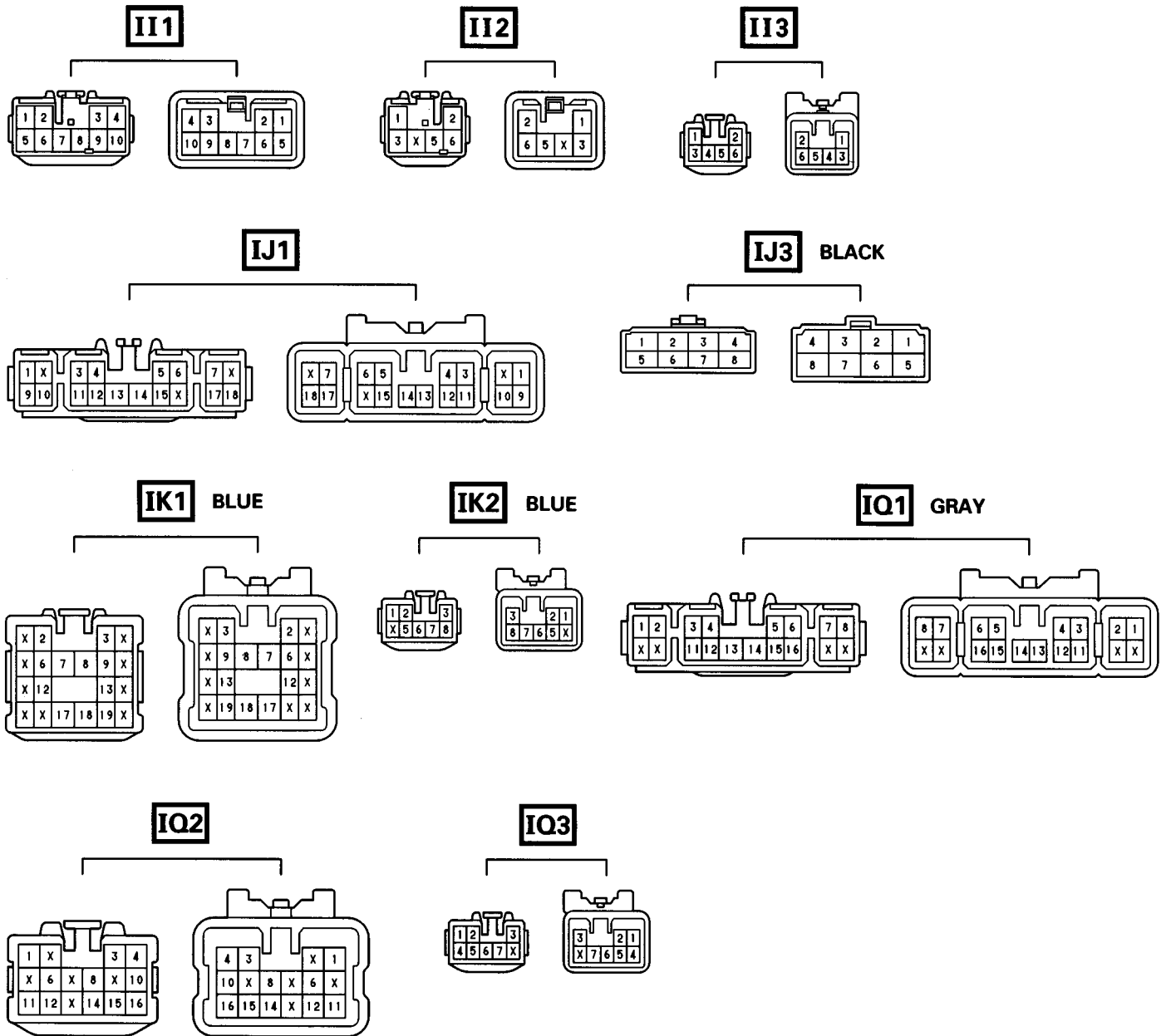
- : Location of Connector Joining Wire Harness and Wire Harness
- ▽ : Location of Ground Points



- : Location of Splice Points



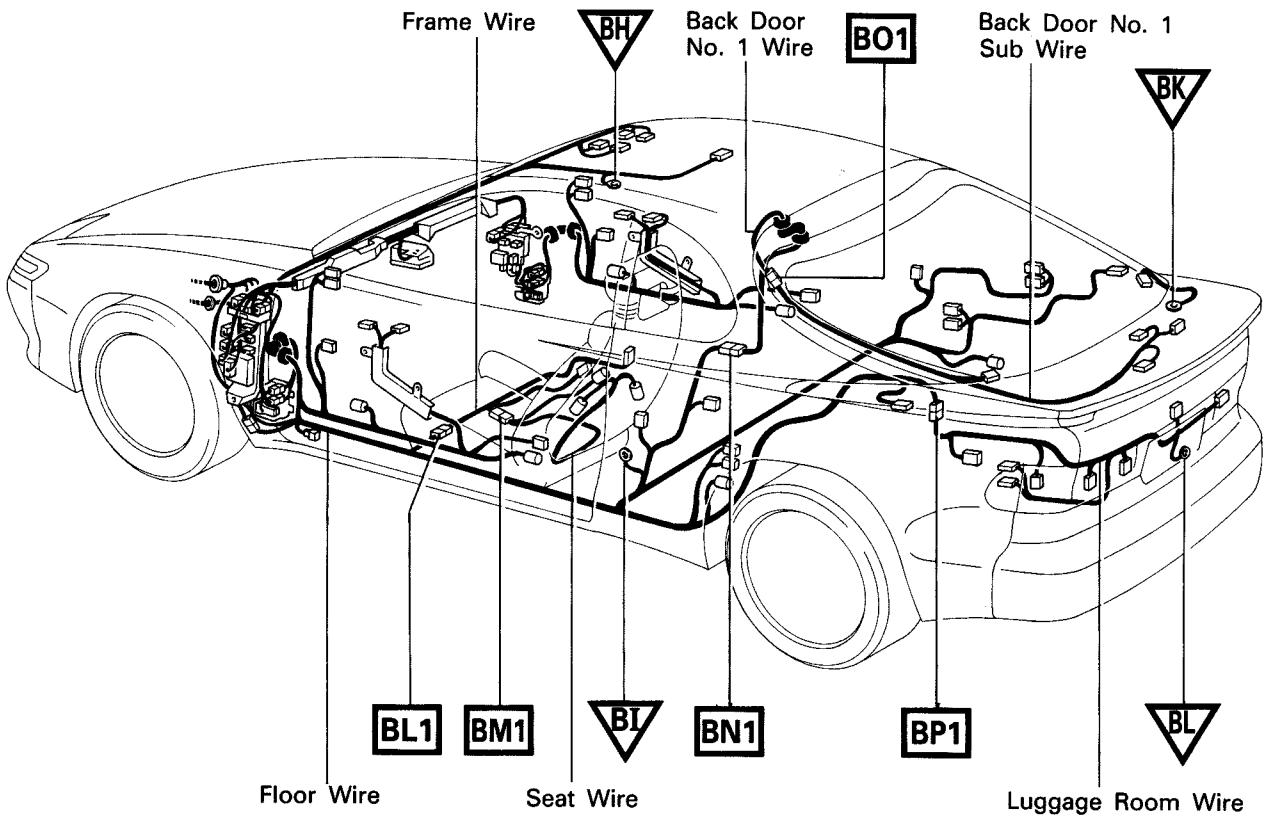
Connector Joining Wire Harness and Wire Harness



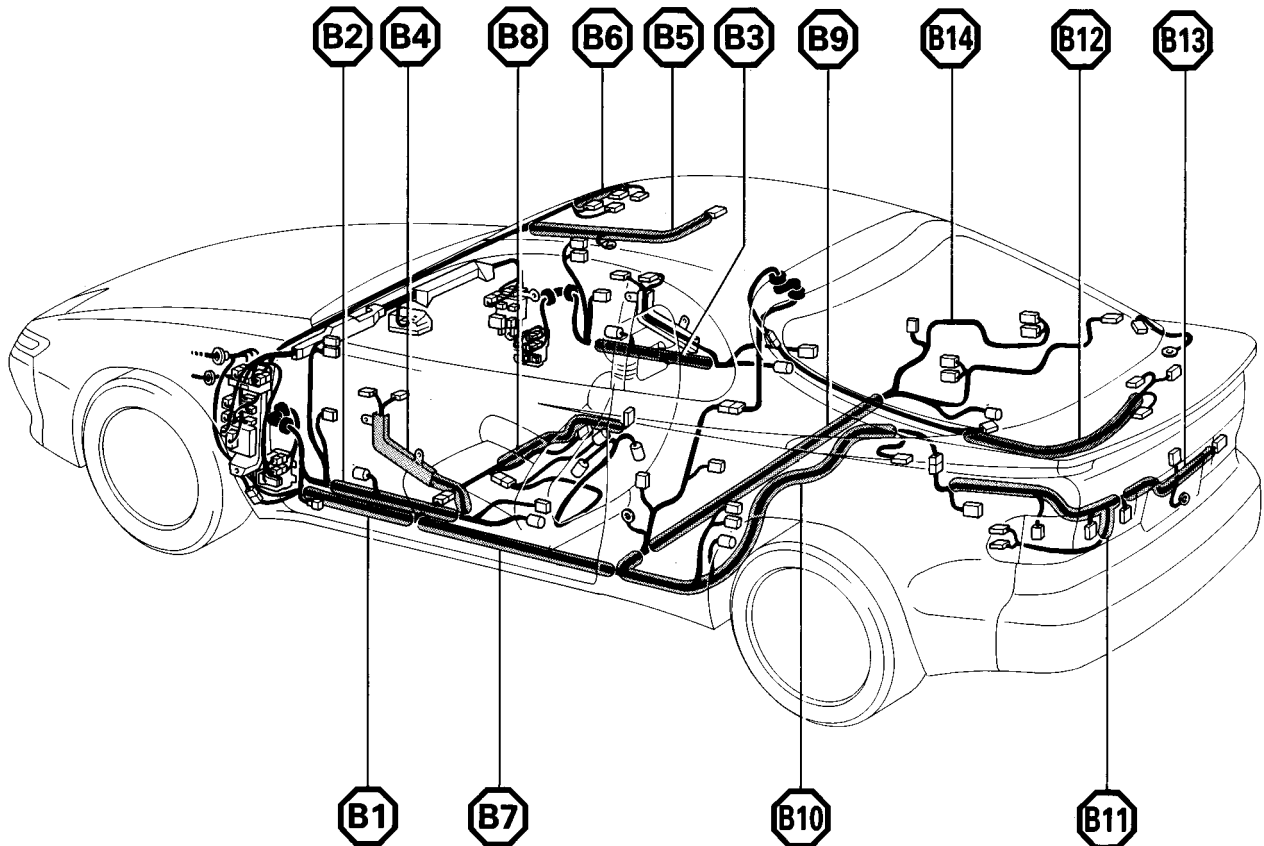
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	COWL WIRE AND CONSOLE BOX WIRE (INSTRUMENT PANEL CENTER)
II2	
II3	
IJ1	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ3	
IK1	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK2	
IQ1	COWL WIRE AND A/C NO. 2 WIRE (BESIDE HEATER UNIT)
IQ2	
IQ3	

ELECTRICAL WIRING ROUTING

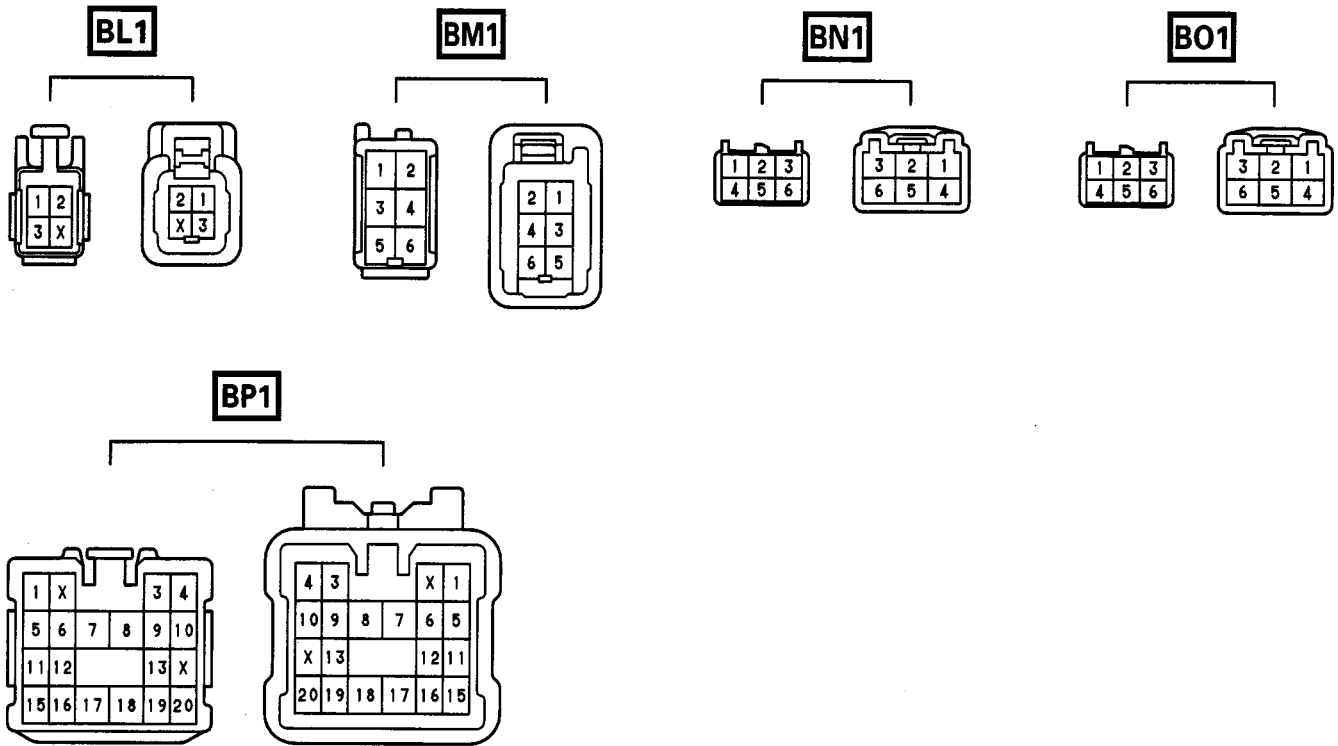
- : Location of Connector Joining Wire Harness and Wire Harness
- ▽ : Location of Ground Points



- : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

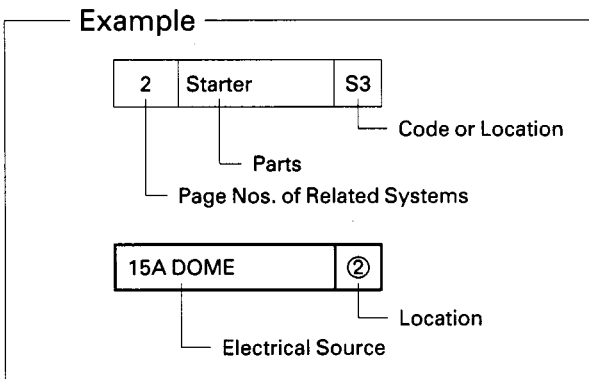
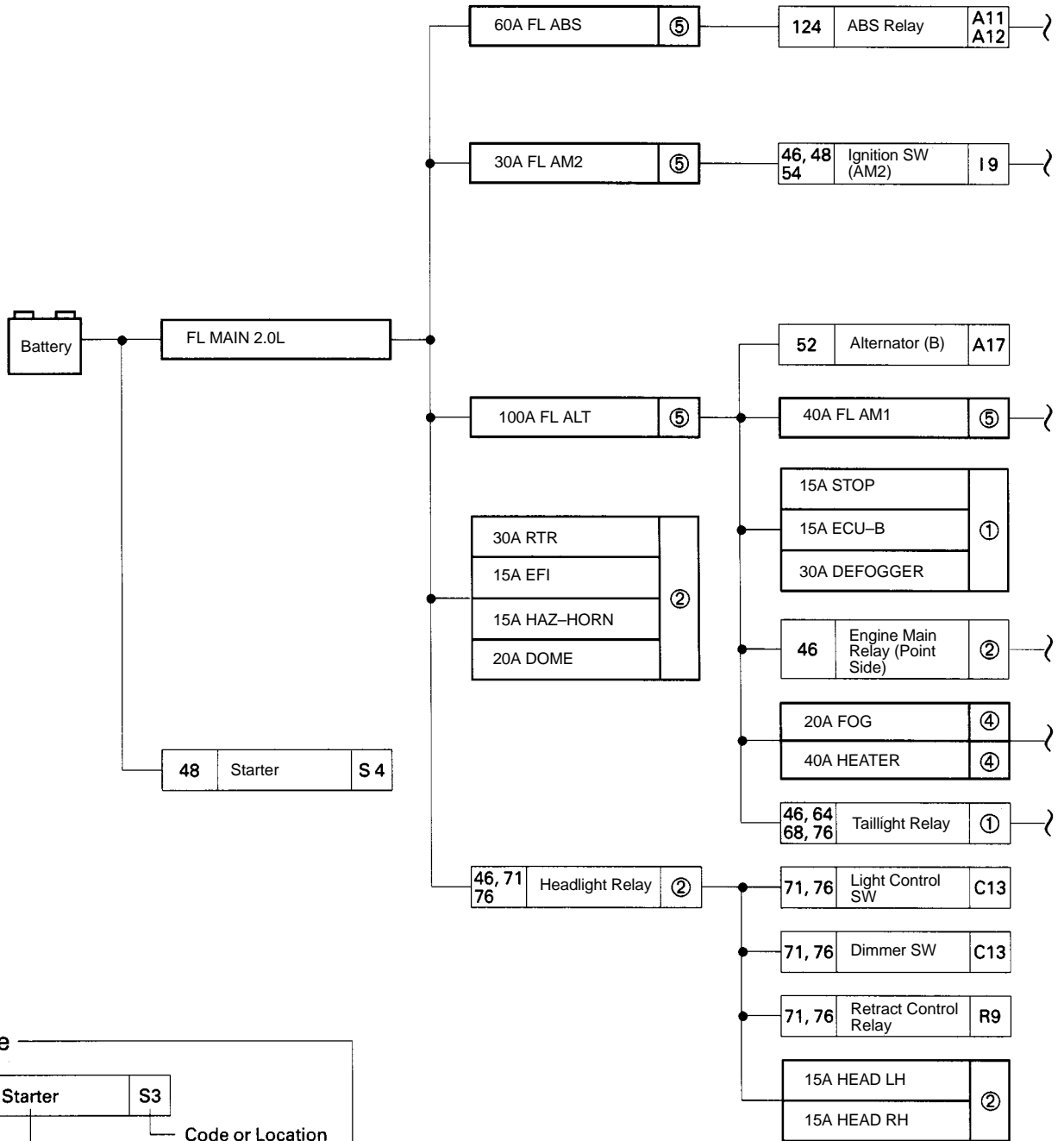


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BL1	FLOOR WIRE AND FRAME WIRE (LEFT SIDE OF FRONT FLOOR PANEL)
BM1	FRAME WIRE AND SEAT WIRE (UNDER THE DRIVER'S SEAT)
BN1	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (LET SIDE OF PACKAGE TRAY TRIM)
BO1	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 1 SUB WIRE (BACK DOOR UPPER LEFT)
BP1	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

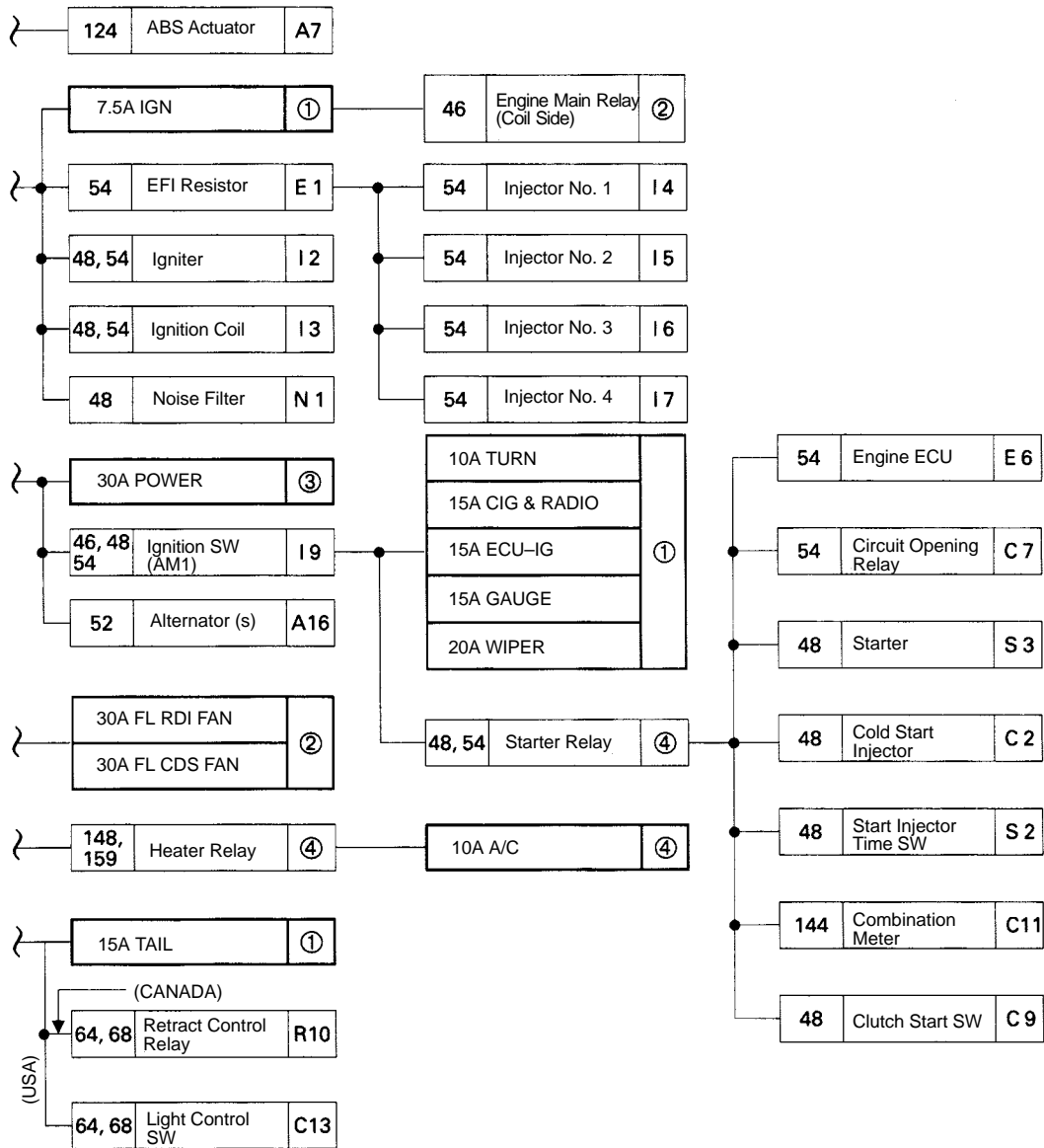
POWER SOURCE (Current Flow Chart)

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

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



[LOCATION] (1) : J/B No. 1 (See page 18) (2) : J/B No. 2 (See page 20) (3) : R/B No. 2 (See page 23)



(4) : R/B No. 4 (See page 24)

(7) : Fusible Link Box (F11 See page 25)

POWER SOURCE (Current Flow Chart)

Location		Page Nos. of Related Systems		148 159		124		52		148		159		64 148		64 159		148		148 159		64		148		116		124	
		Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location	Parts	Code or Location
CB or Fuse		A2	A3	A4	A5	A7	A11	A17	A18	A19	A20	A19	A20	A22	A25	A30	A31	A32	A34	A36	A37	A39							
①	30A	DEFOGGER																											
	20A	WIPER																											
	15A	GAUGE		●	●	●	●	●		●	●	●		●	●		●	●		●	●	●							●
	7.5A	IGN				●				●																			
	15A	ECU-B																											●
	10A	TURN																											
	15A	CIG & RADIO																											
	15A	TAIL										●		●															
	15A	ECU-IG									●																	●	●
	15A	STOP																											●
②	15A	HEAD LH																											
	15A	HEAD RH																											
	30A	RTR																											
	15A	EFI																											
	20A	DOME																											●
	15A	HAZ-HORN																											
	30A	FL RDI FAN																											
30A	FL CDS FAN	●																											
③	30A	POWER																											●
④	20A	FOG																											
	10A	A/C										●		●															
	40A	HEATER													●												●		

[LOCATION] (1) : J/B No. 1 (See page 18) (2) : J/B No. 2 (See page 20) (3) R/B No. 2 (See page 23)

136	82	148	148 159	86	54 129	129	135	64	54	135	129 144	124	54	144	118	71	103	84	52 144	64 144	86 144	71 74 76	115	84	100	98	118		
A42	B1	B3	B4	B5	B6	C1	C4	C5	C6	C7	C8	C10	C11				C12			C13			C14		C16				
	●												●	●	●	●											●		
		●					●					●								●							●	●	
							●											●											
	●						●																						
	●						●																						
		●																											
		●																											
		●																											

(4) : R/B No. 4 (See page 24)

POWER SOURCE (Current Flow Chart)

Location	Page Nos. of Related Systems	Parts	Code or Location	CB or Fuse	118	64 106	90 108	90 93	86				93	54	54 148 159	76	68	68 84	100	54	64 74					
					Cruise Control ECU	Defogger SW	Diode (for Key Off)	Door Lock ECU	Diode (for Interior System)	Door Courtesy Light LH	Door Courtesy Light RH	Door Courtesy SW LH	Door Courtesy SW RH	Door Lock Motor LH	Door Lock Motor RH	Engine ECU	Fog Light LH	Fog Light RH	Front Side Marker Light LH	Front Side Marker Light RH	Front Turn Signal Light and Clearance Light LH	Front Turn Signal Light and Clearance Light RH	Front Wiper Motor	Fuel Pump Resistor	Fog Light SW	
					C17	D2	D4	D5	D6	D7	D8	D9	D10	D13	D14	E5	E6	F1	F2	F5	F6	F7	F8	F9	F10	F12
①	30A	DEFOGGER																								
	20A	WIPER																						●		
	15A	GAUGE	●	●	●	●										●										
	7.5A	IGN																								
	15A	ECU-B																								
	10A	TURN																				●	●			
	15A	CIG & RADIO																								
	15A	TAIL		●													●			●	●	●	●			●
	15A	ECU-IG																								
	15A	STOP															●									
②	15A	HEAD LH																							●	
	15A	HEAD RH																							●	
	30A	RTR																								
	15A	EFI														●	●								●	
	20A	DOME					●	●	●	●	●															
	15A	HAZ-HORN																				●	●			
	30A	FL RDI FAN																								
30A	FL CDS FAN																									
③	30A	POWER				●								●	●											
④	20A	FOG																●	●							
	10A	A/C																								
	40A	HEATER																								

[LOCATION] (1) : J/B No. 1 (See page 18) (2) : J/B No. 2 (See page 20) (3) R/B No. 2 (See page 23)

54	64		71 74 76	115		64 84	80	54	86		86 138 142	54 80 144	52 84 144	76 118	90 108 148	94 112 159	148 159	68	86	106	54	108				90		
Fuel Pump	Glove Box Light		Headlight LH	Headlight RH		Horn LH	Horn RH	Hazard SW	High Mount Stop Light	ISC Valve	Ignition Key Cylinder Light	Interior Light		Junction Connector				Licence Plate Light	Luggage Compartment Light	Noise Filter (for Defogger)	Oxygen Sensor	Power Seat Motor (for Lumber Support)	Power Seat Motor (for Side Support)	Power Seat SW	Power Window Master SW	Power Window Motor LH	Power Window Motor RH	
F17	G1	G2	H1	H2	H3	H4	H5	H6	I1	I8	I10	J1	J2	J3	J4	J5	L1	L2	N2	O2	P2	P3	P4	P5	P6	P7		
	●	●	●	●			●	●	●				●	●	●			●	●	●								

(4) : R/B No. 4 (See page 24)

POWER SOURCE (Current Flow Chart)

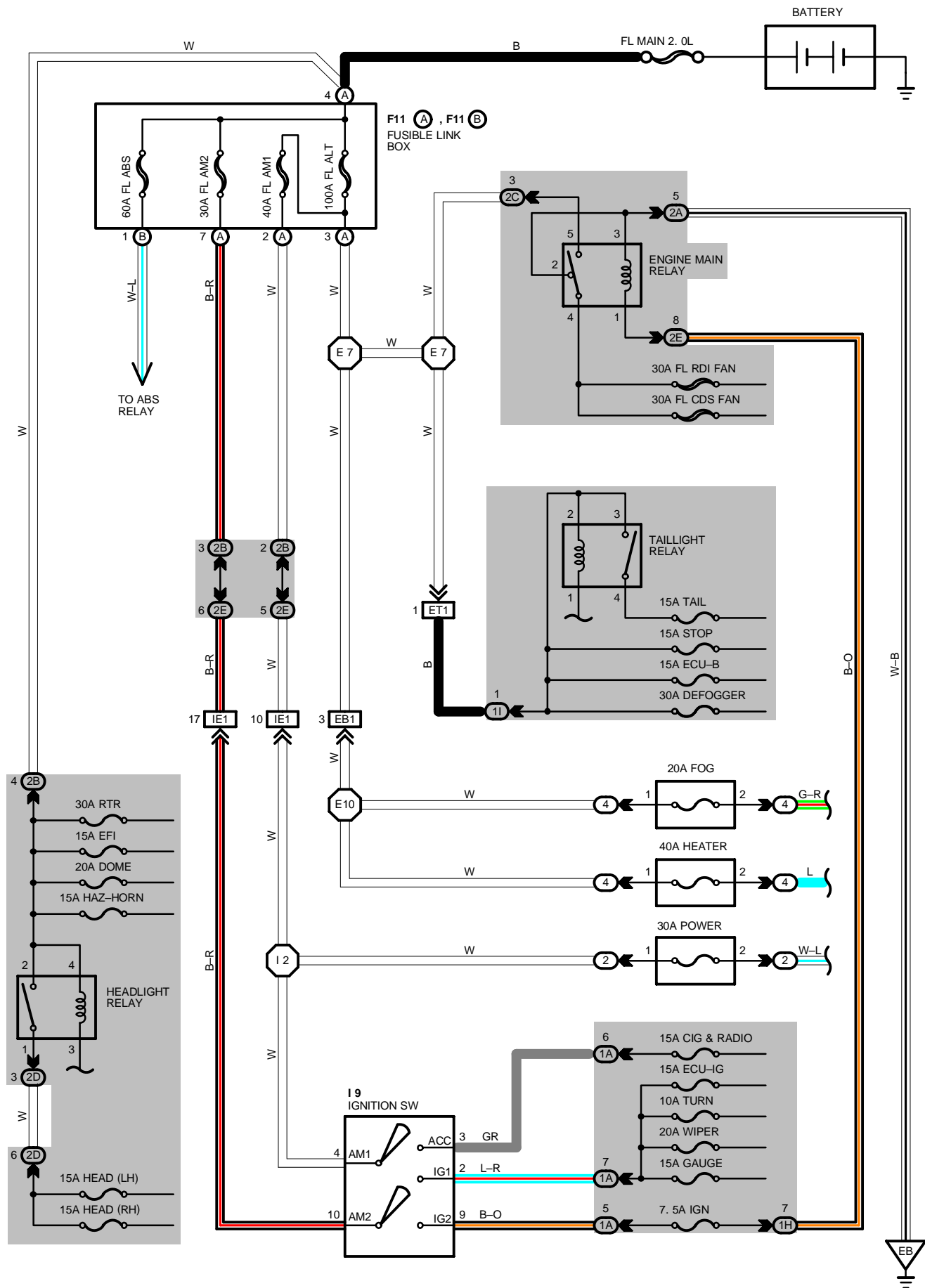
Location		Page Nos. of Related Systems		Parts		Code or Location		CB or Fuse															
		90	148 159	71	148 159	64	64 136 142	110	71 76	76	64	82	84	80	68	82	84	80	68	106	98		
		Power Window SW RH	Radiator Fan Motor	Retract Motor LH	Retract Motor RH	RECIRC/FRESH Control Servo Motor	Radio and Player (w/ CD Player)	Radio and Player (w/o CD Player)	Remote Control Mirror SW	Retract Control Relay	Retract Control Relay (for CANADA)	Rheostat	Back-Up Light LH [Rear Comb. Light LH]	Rear Turn Signal Light LH [Rear Comb. Light LH]	Stop Light LH [Rear Comb. Light LH]	Tail and Rear Side Marker Light LH [Rear Comb. Light LH]	Back-Up Light RH [Rear Comb. Light RH]	Rear Turn Signal Light RH [Rear Comb. Light RH]	Stop Light RH [Rear Comb. Light RH]	Tail and Rear Side Marker Light RH [Rear Comb. Light RH]	Rear Window Defogger	Rear Wiper Control Relay and Motor	
		P8	R1	R2	R3	R4	R5	R6	R8	R9	R10	R11	R12			R13			R20	R21	R23		
①	30A	DEFOGGER																			●	●	
	20A	WIPER																					●
	15A	GAUGE					●						●				●						
	7.5A	IGN																					
	15A	ECU-B																					
	10A	TURN												●				●					
	15A	CIG & RADIO						●	●														
	15A	TAIL					●	●					●				●				●		
	15A	ECU-IG										●											
	15A	STOP													●					●			
②	15A	HEAD LH									●												
	15A	HEAD RH									●												
	30A	RTR			●	●				●													
	15A	EFI																					
	20A	DOME						●															
	15A	HAZ-HORN												●				●					
	30A	FL RDI FAN		●																			
	30A	FL CDS FAN		●																			
③	30A	POWER	●																				
④	20A	FOG									●												
	10A	A/C																					
	40A	HEATER																					

[LOCATION] (1) : J/B No. 1 (See page 18) (2) : J/B No. 2 (See page 20) (6) R/B No. 2 (See page 23)

	110	118	136 138	138	54 80 118 124	112	86 112	112	112	84	54			98 100	148 159	106	54	86 88 103	54	148 159	90 108 112	148 159	74 76	148 159			54	115						
	Remote Control Mirror LH	Remote Control Mirror RH	Speed Sensor (for Cruise Control System)		Stereo Component Amplifier (w/ CD Player)	Stop Light SW	Sun Roof Control Relay	Sun Roof Control SW and Personal Light		Sun Roof Limit SW	Sun Roof Motor	Turn Signal Flasher	VSV (for EGR System)		VSV (for Turbo Charging Pressure)	VSV (for T-VIS)	Washer Motor	Water Temp. SW (for Fans Control)	Defogger Relay	Diode	Integration Relay	EFI Main Relay	Radiator Fan Relay No. 1		Power Main Relay	Heater Relay	Fog Light Relay	A/C Condenser Fan Relay No. 2	A/C Condenser Fan Relay No. 3	A/C Magnet Clutch Relay	Fuel Pump Control Relay	Horn Relay		
	R24	R25	S1	S5	S6	S7	S8	S9	S10	S11	T3	V1	V2	V3	W1	W2	①		②		③	④	⑥	⑦										

(4) : R/B No. 4 (See page 24) (6) : R/B No. 3 (See page 23) (7) R/B No. 5 (See page 24)

POWER SOURCE



SERVICE HINTS

TAILLIGHT RELAY

3-4 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

ENGINE MAIN RELAY

4-5 : CLOSED WITH IGNITION SW AT **ON** OR **ST** POSITION

HEADLIGHT RELAY

4-5 : CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION OR DIMMER SW AT **FLASH** POSITION

I9 IGNITION SW

4-3 : CLOSED WITH IGNITION KEY AT **ACC** OR **ON** POSITION

9-10 : CLOSED WITH IGNITION KEY AT **ON** OR **ST** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F11	A	25	F11	B	25
				I9	26

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (LEFT KICK PANEL)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1I		
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2B	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C		
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
ET1	28	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE J/B NO. 2)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER

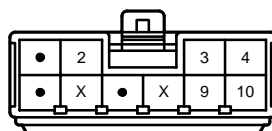
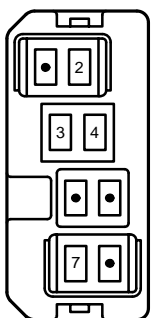
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E7	28	ENGINE WIRE	I2	32	COWL WIRE
E10	28	COWL WIRE			

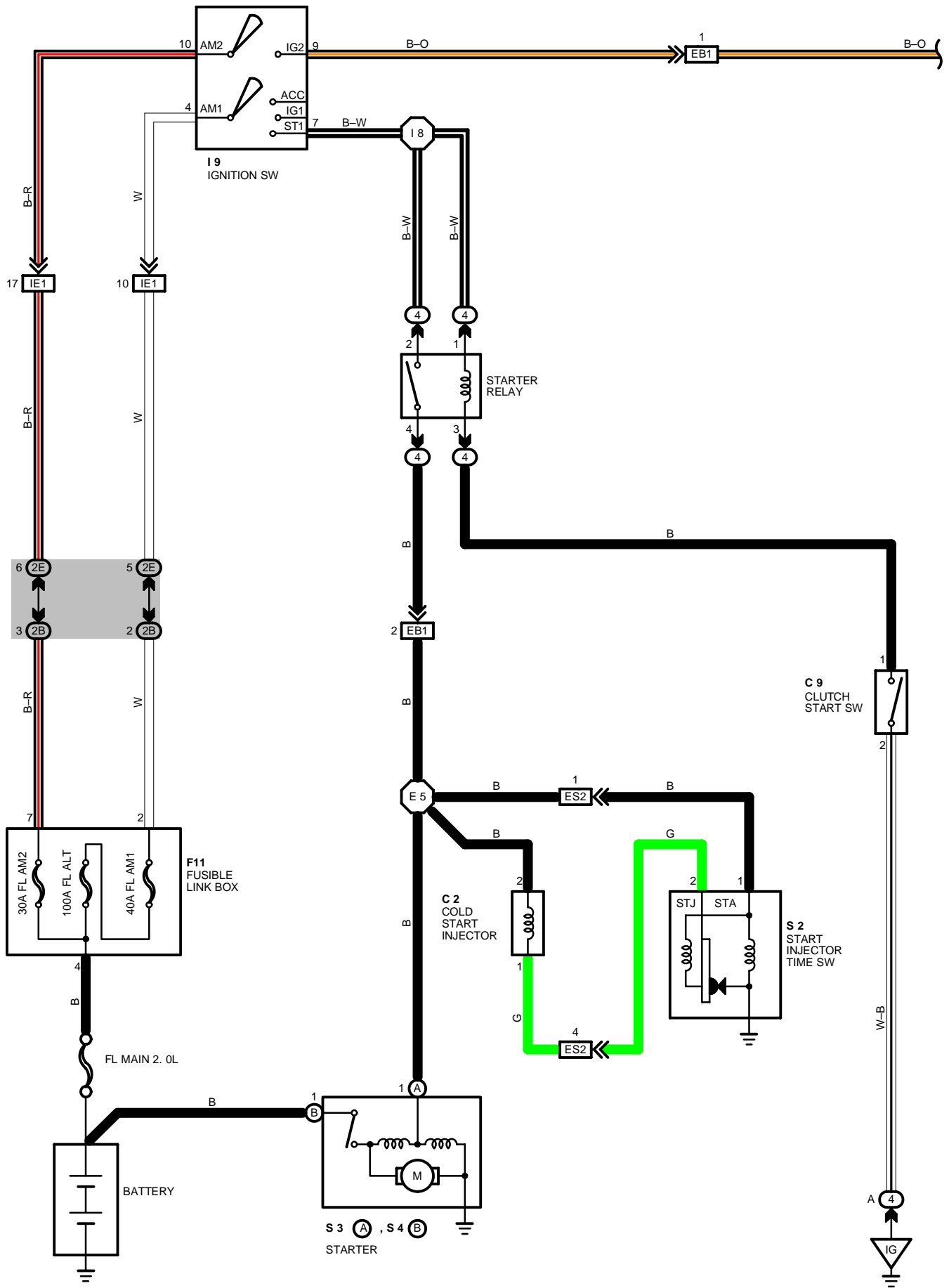
F11 (A) BLACK

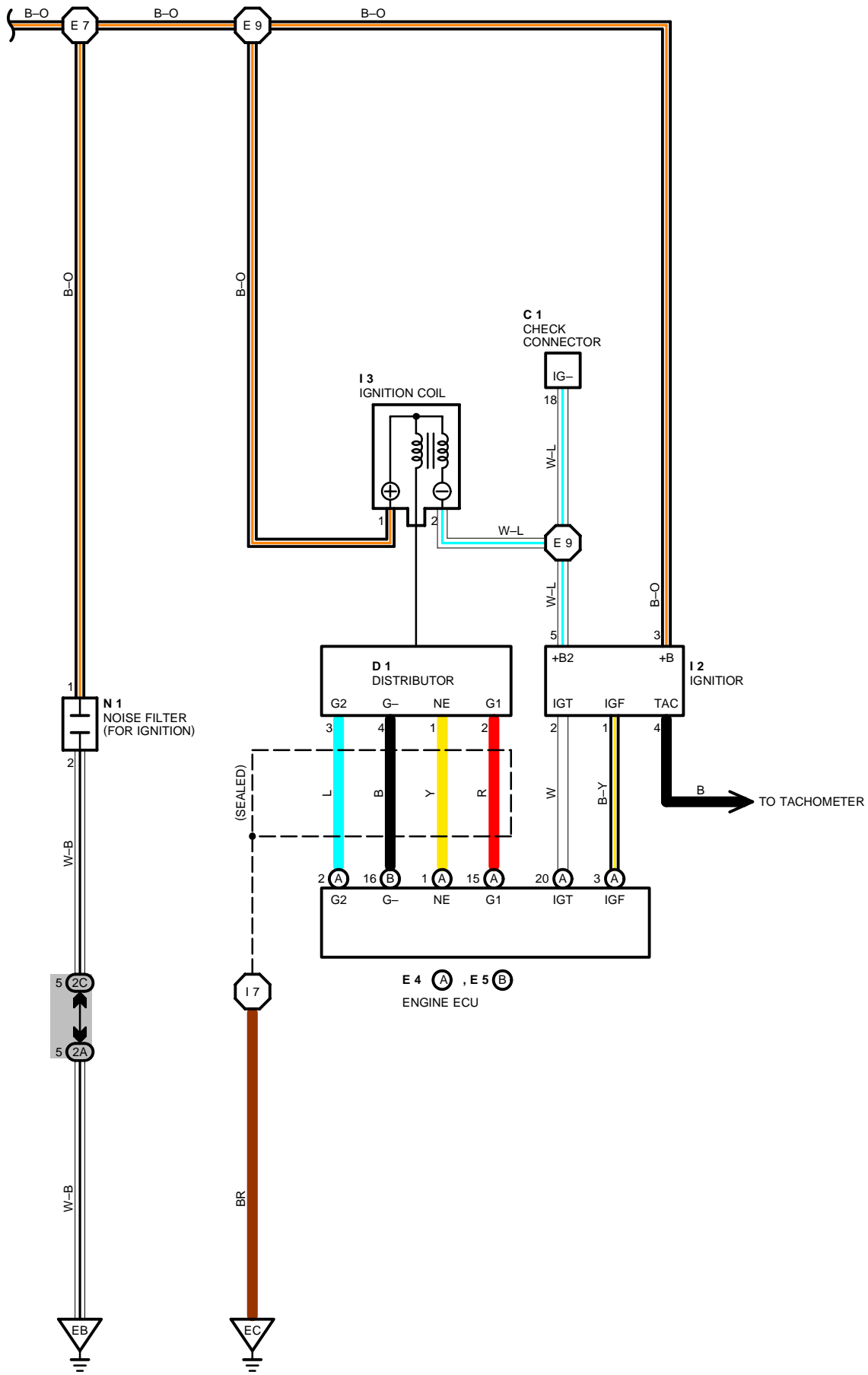
F11 (B) BLACK

I9 BLACK



STARTING AND IGNITION





STARTING AND IGNITION

SERVICE HINTS

STARTER

POINTS CLOSED WITH CLUTCH START SW ON AND IGNITION SW AT **ST** POSITION

STARTER RELAY

(4) 2-(4) 4 : CLOSED WITH CLUTCH START SW ON AND IGNITION SW AT **ST** POSITION

C 2 COLD START INJECTOR

1-2 : APPROX. 12 VOLTS WHILE START INJECTOR TIME SW IS CLOSED AND STARTER CRANKING

C 9 CLUTCH START SW

1-2 : CLOSED WITH CLUTCH PEDAL FULLY DEPRESSED

I 9 IGNITION SW

4-7 : CLOSED WITH IGNITION SW AT **ST** POSITION

9-10 : CLOSED WITH IGNITION SW AT **ON** OR **ST** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	25	E 5	B 26	N 1	25
C 2	25	F11	25	S 2	25
C 9	26	I 2	25	S 3	A 25
D 1	25	I 3	25	S 4	B 25
E 4	A 26	I 9	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO.2 (NEAR THE BATTERY)
2B	20	ENGINE WIRE AND J/B NO.2 (NEAR THE BATTERY)
2C		
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO.2 (NEAR THE BATTERY)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
ES2	28	ENGINE WIRE AND ENGINE ROOM NO. 2 WIRE (NEAR THE DISTRIBUTOR)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

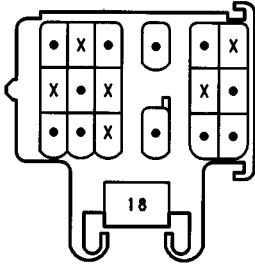
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER
EC	28	INTAKE MANIFOLD
IG	30	R/B NO. 4 SET BOLT

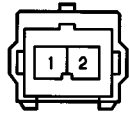
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 5	28	ENGINE WIRE	I 7	32	ENGINE WIRE
E 7			I 8	32	COWL WIRE
E 9					

C 1 DARK GRAY



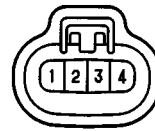
C 2 BLACK



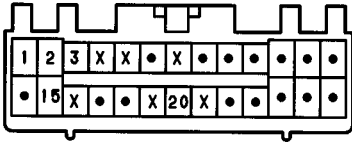
C 9



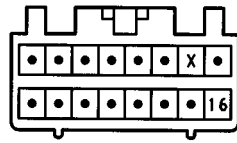
D 1 BLACK



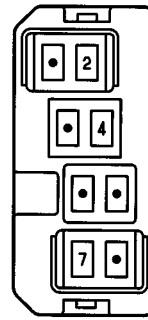
E 4 (A) DARK GRAY



E 5 (B) DARK GRAY



F 11 BLACK



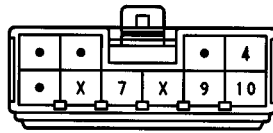
I 2 BLACK



I 3 BLACK



I 9 BLACK



N 1 GRAY



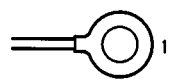
S 2 BROWN



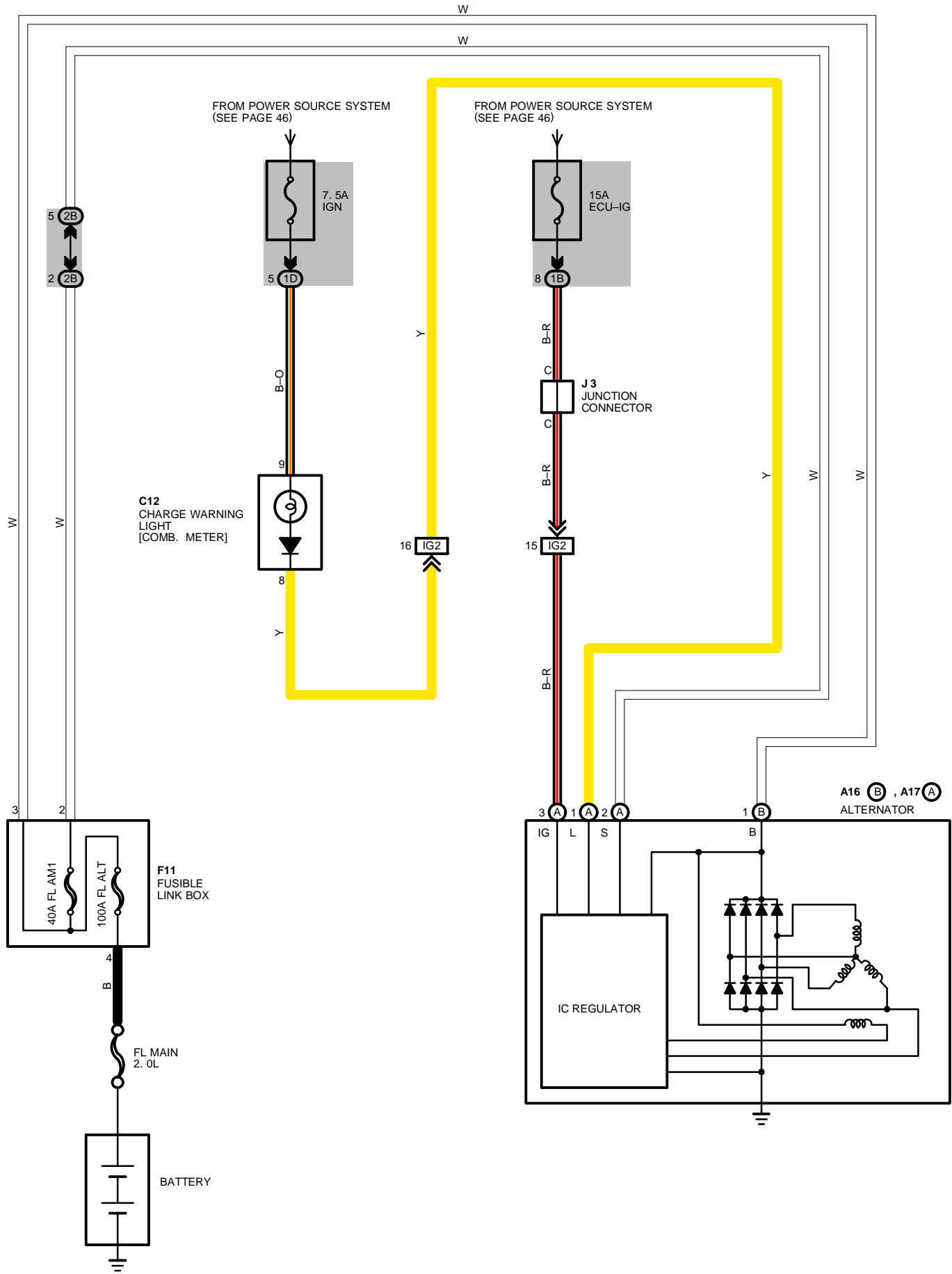
S 3 (A) BLACK



S 4 (B)



CHARGING



SERVICE HINTS

A17(A) ALTERNATOR

- (A) 2-GROUND: 13.9–15.1 VOLTS WITH ENGINE RUNNING AT 2000 RPM AND 25°C (77°F)
 13.5–14.3 VOLTS WITH ENGINE RUNNING AT 2000 RPM AND 115°C (239°F)
 (A) 1-GROUND: 0–4 VOLTS WITH IGNITION SW AT ON POSITION AND ENGINE NOT RUNNING

○ : PARTS LOCATION

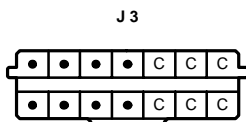
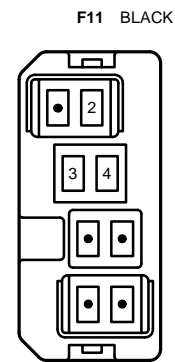
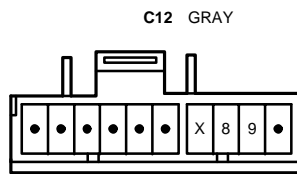
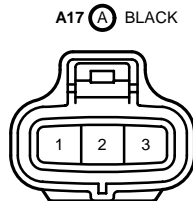
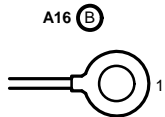
CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A16	B	25	C12	26	J 3	26
A17	A	25	F11	25		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1D		
2B	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG2	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)



(HINT : SEE PAGE 7)

ENGINE CONTROL

SYSTEM OUTLINE

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

1. INPUT SIGNALS

(1) WATER TEMP. SIGNAL SYSTEM

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

(2) INTAKE AIR TEMP. SIGNAL SYSTEM

THE INTAKE AIR TEMP. SENSOR IS INSTALLED INSIDE THE AIR FLOW METER AND DETECTS THE INTAKE AIR TEMP. WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL THA** OF THE ECU.

(3) OXYGEN SENSOR SIGNAL SYSTEM

THE OXYGEN DENSITY IN THE EXHAUST EMISSIONS IS DETECTED AND INPUT AS A CONTROL SIGNAL TO **TERMINAL OX1** OF THE ECU. TO MAINTAIN STABLE DETECTION PERFORMANCE BY THE OXYGEN SENSOR, A HEATER IS USED FOR WARMING THE SENSOR. THE HEATER IS ALSO CONTROLLED BY THE ECU (HT).

(4) RPM SIGNAL SYSTEM

CRANKSHAFT POSITION IS DETECTED BY THE PICK-UP COIL INSTALLED INSIDE THE DISTRIBUTOR. CRANKSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINALS G1** AND **G2** OF THE ECU, AND RPM IS INPUT TO **TERMINAL NE**.

(5) THROTTLE SIGNAL SYSTEM

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

(6) VEHICLE SPEED SIGNAL SYSTEM

THE SPEED SENSOR, INSTALLED INSIDE THE COMBINATION METER, DETECTS THE VEHICLE SPEED AND INPUTS A CONTROL SIGNAL TO **TERMINAL SPD** OF THE ECU.

(7) A/C SW SIGNAL SYSTEM

THE OPERATING VOLTAGE OF THE A/C MAGNET CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO **TERMINAL A/C 1** OF THE ECU.

(8) BATTERY SIGNAL SYSTEM

VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE ECU. WHEN THE IGNITION SW IS TURNED TO ON, VOLTAGE FOR ECU OPERATION IS APPLIED VIA THE EFI MAIN RELAY TO **TERMINALS +B** AND **B1** OF THE ECU.

(9) INTAKE AIR VOLUME SIGNAL SYSTEM

INTAKE AIR VOLUME IS DETECTED BY THE POTENTIOMETER INSTALLED INSIDE THE AIR FLOW METER AND IS INPUT AS A CONTROL SIGNAL TO **TERMINAL VS** OF THE ECU.

(10) STOP LIGHT SW SIGNAL SYSTEM

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

(11) STA SIGNAL SYSTEM

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

(12) ENGINE KNOCK CONTROL SYSTEM

ENGINE KNOCKING IS DETECTED BY THE KNOCK SENSOR AND INPUT AS A CONTROL SIGNAL TO **TERMINAL KNK** OF THE ECU.

(13) ELECTRICAL IDLE-UP SYSTEM

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

2. CONTROL SYSTEM

* EFI (ELECTRONIC FUEL INJECTION) SYSTEM

THE EFI SYSTEM MONITORS THE ENGINE REVOLUTIONS THROUGH THE SIGNALS EACH SENSOR (INPUT SIGNALS (1) TO (12)) INPUTS TO THE ECU. BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE ECU. THE MOST APPROPRIATE FUEL INJECTION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINALS #1, #2, #3** AND **#4** OF THE ECU. CAUSING THE INJECTORS TO OPERATE (TO INJECT FUEL). IT IS THIS SYSTEM WHICH, THROUGH THE WORK OF THE ECU. FINELY CONTROLS FUEL INJECTION IN RESPONSE TO DRIVING CONDITIONS.

* ESA (ELECTRONIC SPARK ADVANCE) SYSTEM

THE ESA SYSTEM MONITORS THE ENGINE REVOLUTIONS USING THE SIGNALS (INPUT SIGNALS (1, 3, 4, 6, 7, 9, 11)) INPUT TO THE ECU FROM EACH SENSOR. BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE ECU. THE MOST APPROPRIATE IGNITION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINAL IGT** OF THE ECU. THIS OUTPUT CONTROLS THE IGNITER TO PRODUCE THE MOST APPROPRIATE IGNITION TIMING FOR THE DRIVING CONDITIONS.

* FUEL PUMP CONTROL SYSTEM

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

* OXYGEN SENSOR HEATER CONTROL SYSTEM

THE OXYGEN SENSOR HEATER CONTROL SYSTEM TURNS THE HEATER TO ON WHEN THE INTAKE AIR VOLUME IS LOW (TEMP. OF EXHAUST EMISSIONS LOW). AND WARMS UP THE OXYGEN SENSOR TO IMPROVE DETECTION PERFORMANCE OF THE SENSOR. THE ECU EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 6, 8, 9, 11)), CURRENT IS OUTPUT TO **TERMINAL HT** AND CONTROLS THE HEATER.

* ISC (IDLE SPEED CONTROL) SYSTEM

THE ISC SYSTEM (ROTARY SOLENOID TYPE) INCREASES THE RPM AND PROVIDES IDLING STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD, ETC. THE ECU EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 4 TO 8, 11, 13)), OUTPUTS CURRENT TO **TERMINALS RSC** AND **RSO** AND CONTROLS THE ISC VALVE.

* EGR CONTROL SYSTEM

WITH THE EGR CONTROL SYSTEM, THE ECU EVALUATES THE (INPUT SIGNALS (1, 4, 10)), FROM EACH SENSOR, CURRENT IS OUTPUT TO **TERMINAL EGR** AND OPERATION OF THE EGR VALVE IS CONTROLLED.

* INTAKE AIR CONTROL SYSTEM

IN THE INTAKE AIR CONTROL SYSTEM, EACH CYLINDER IN THE INTAKE MANIFOLD IS DIVIDED INTO TWO PARTS, WITH AN INTAKE AIR CONTROL VALVE INSTALLED IN THE PASSAGE ON ONE SIDE. THE OPENING AND CLOSING OF THE VALVE PROVIDES THE MOST APPROPRIATE INTAKE AIR FLOW AND, AS WELL AS PREVENTING PERFORMANCE LOSS AT LOW SPEEDS, ALSO IMPROVES FUEL ECONOMY. THE ECU EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 4, 5)), OUTPUTS CURRENT TO **TERMINAL T-VIS** CONTROLS THE VSV (FOR T-VIS) AND, CARRIES OUT OPENING AND CLOSING OF THE VALVE.

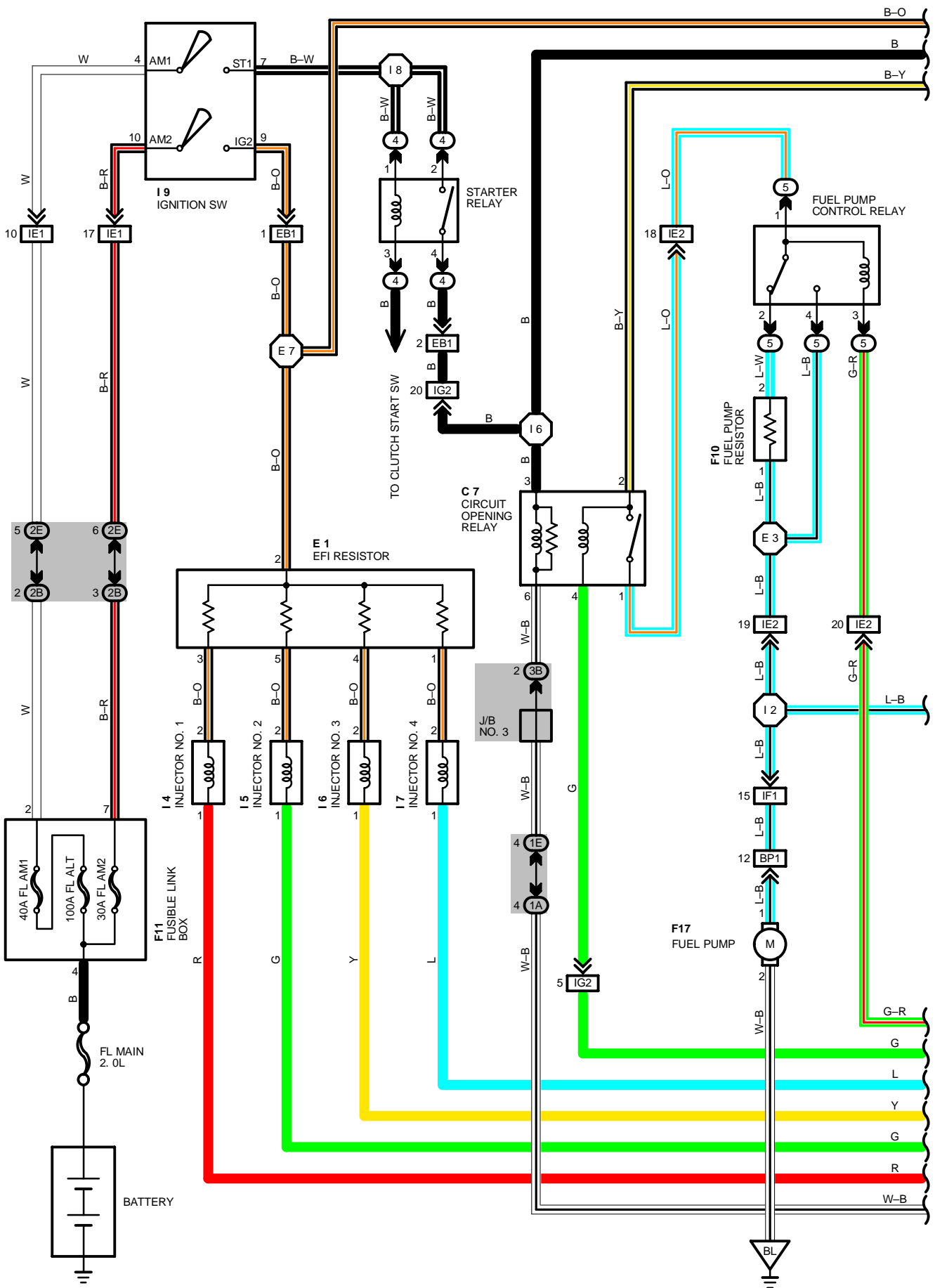
3. DIAGNOSIS SYSTEM

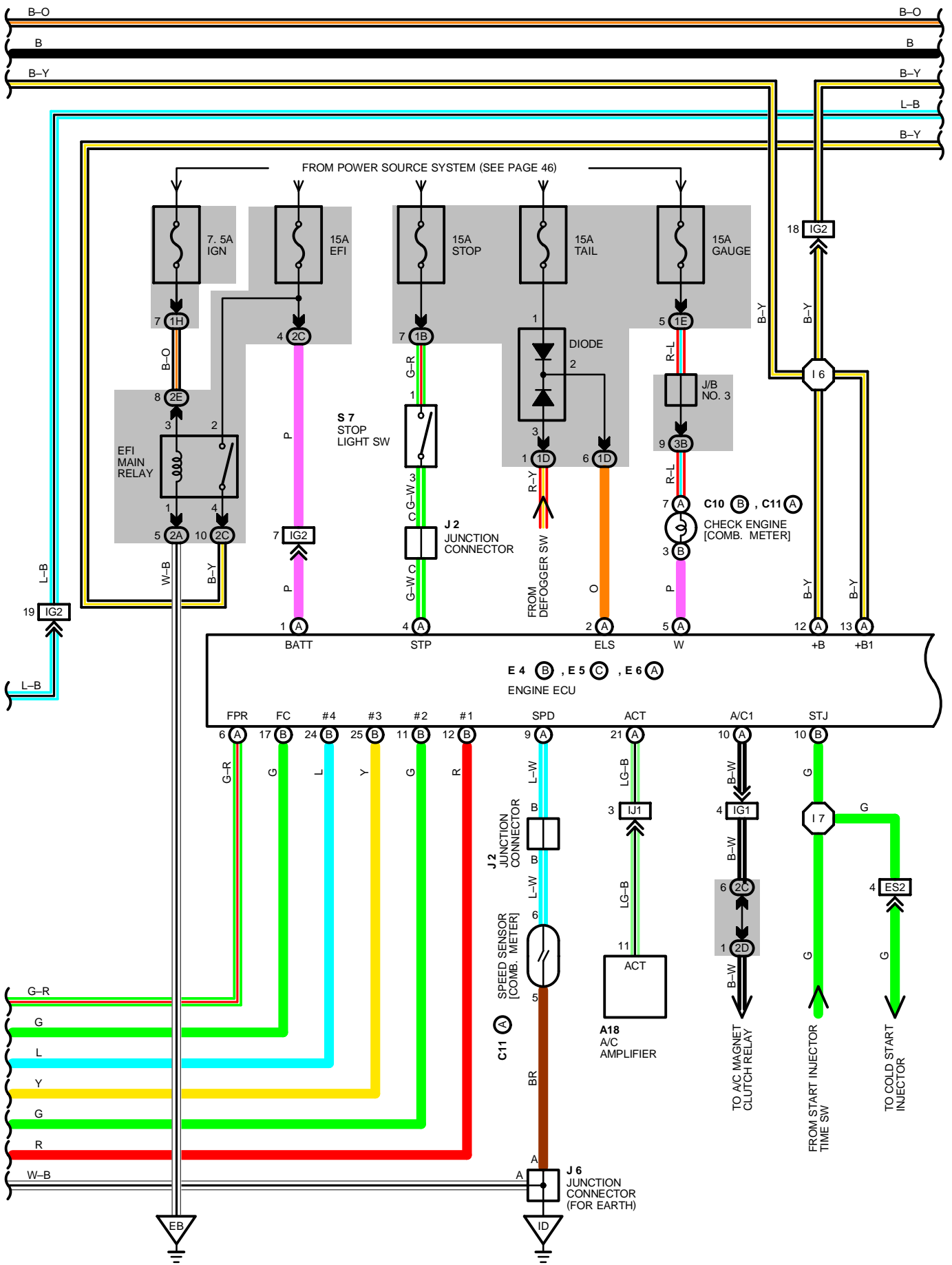
WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTION IN THE ECU SIGNAL SYSTEM, THE MALFUNCTIONING SYSTEM IS RECORDED IN THE MEMORY. THE MALFUNCTIONING SYSTEM CAN THEN BE FOUND BY READING THE DISPLAY (CODE) OF THE CHECK ENGINE WARNING LIGHT.

4. FAIL-SAFE SYSTEM

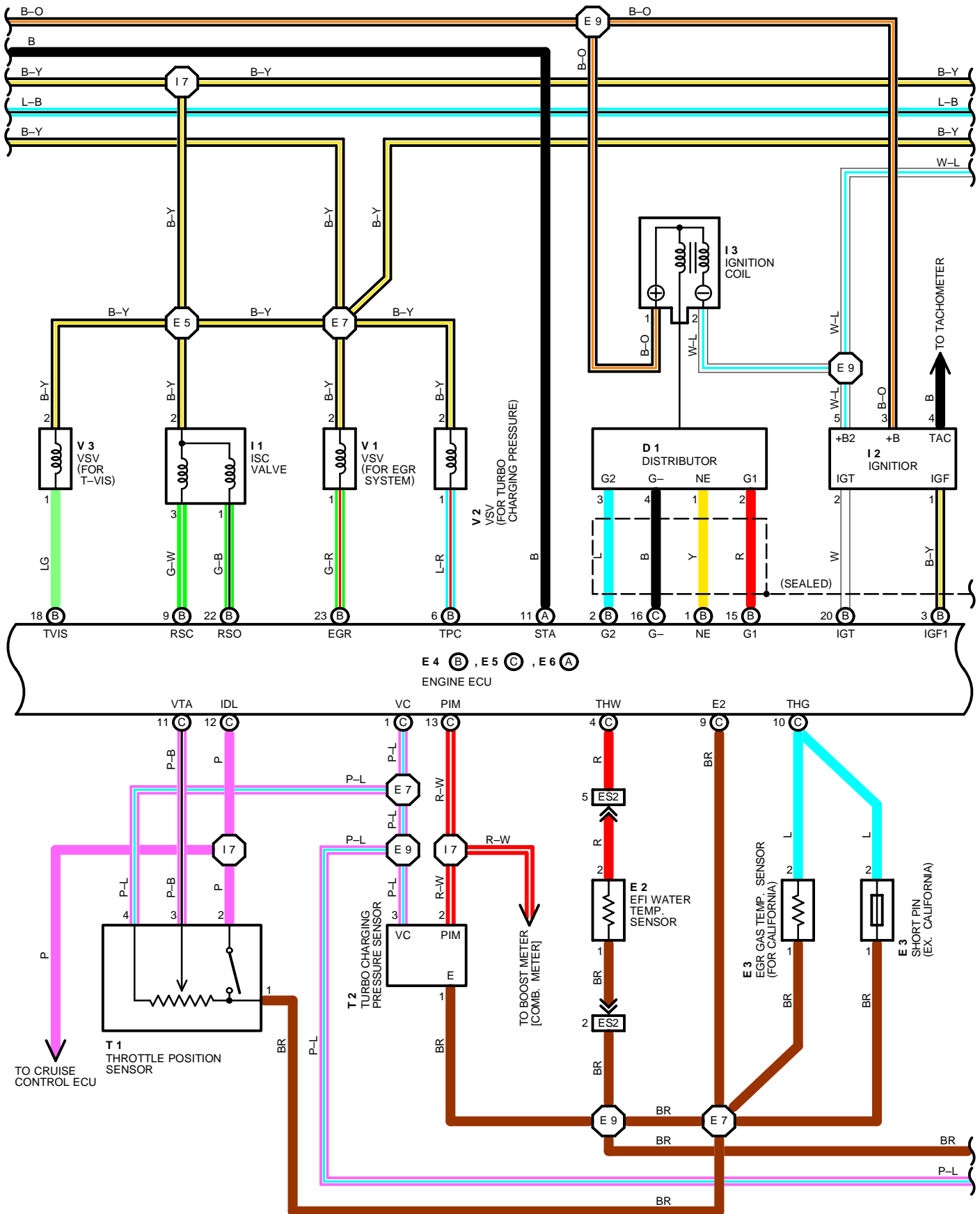
WHEN A MALFUNCTION OCCURS IN ANY SYSTEM, IF THERE IS A POSSIBILITY OF ENGINE TROUBLE BEING CAUSED BY CONTINUED CONTROL BASED ON THE SIGNALS FROM THAT SYSTEM. THE FAIL-SAFE SYSTEM EITHER CONTROLS THE SYSTEM BY USING DATA (STANDARD VALUES) RECORDED IN THE ECU MEMORY OR ELSE STOPS THE ENGINE.

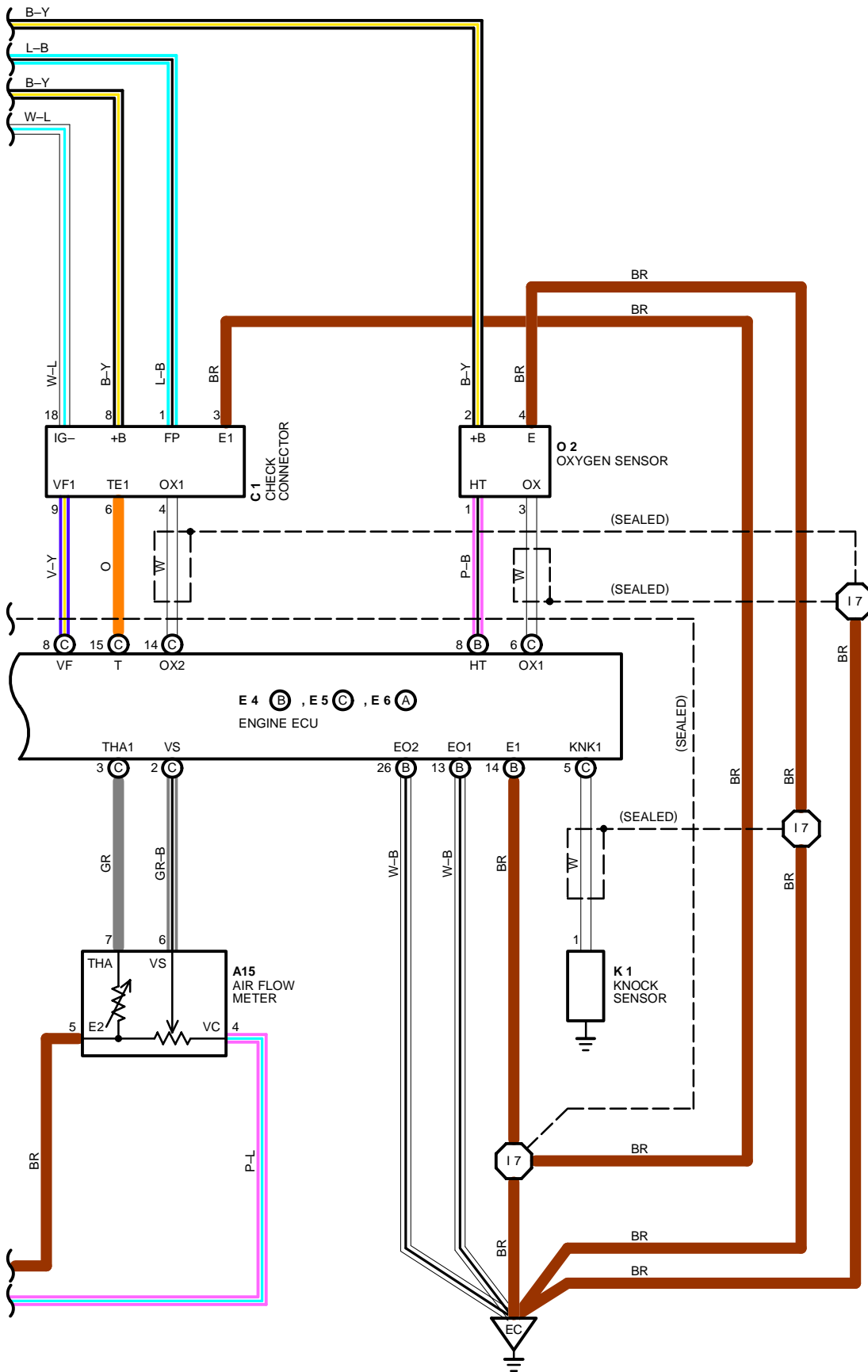
ENGINE CONTROL





ENGINE CONTROL





ENGINE CONTROL

SERVICE HINTS

EFI MAIN RELAY

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

E 1 EFI RESISTOR

2-1, 3, 4, 5 : 5-7 Ω

I 4, I 5, I 6, I 7 INJECTOR

1-2 : 2-4 Ω

F10 FUEL PUMP RESISTOR

1-2: APPROX. 73 Ω

A15 AIR FLOW METER

1-2 : CLOSED WITH STARTER RUNNING OR MEASURING PLATE OPEN

5-6 : 200-600 Ω (MEASURING PLATE CLOSED)

20-1000 Ω (MEASURING PLATE OPEN)

5-4 : 200-400 Ω

5-7 : 10-20 K Ω (-20°C, -4°F)

4-7 K Ω (0°C, 32°F)

2-3 K Ω (20°C, 68°F)

0.9-1.3 K Ω (40°C, 104°F)

0.4-0.7 K Ω (60°C, 140°F)

E 2 EFI WATER TEMP. SENSOR

1-2: 10-20 K Ω (-20°C, -4°F)

4-7 K Ω (0°C, 32°F)

2-7 K Ω (20°C, 68°F)

0.9-1.3 K Ω (40°C, 104°F)

0.4-0.7 K Ω (60°C, 140°F)

0.2-0.4 K Ω (80°C, 176°F)

T 1 THROTTLE POSITION SENSOR

2-4: 0.2-0.8 K Ω WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0 MM (0 IN)

3-4: LESS THAN 2.3 K Ω WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0.50 MM (0.020 IN)

∞ Ω WITH 0.7 MM (0.028 IN.)

2-4: 3.3-10 K Ω WITH THROTTLE VALVE FULLY OPEN

1-4: 3-8 K Ω

E 4, E 5, E 6 ENGINE ECU

VOLTAGE AT ECU CONNECTORS

BATT-E1 : 10-14 VOLTS

+B, +B1-E1 : 10-14 VOLTS (IGNITION SW ON)

IDL-E2 : 4-6 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)

VTA-E2 : 0.1-1.0 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)

3-6 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)

VC-E2 : 4-6 VOLTS (IGNITION SW ON)

VS-E2 : 4-6 VOLTS (IGNITION SW ON AND MEASURING PLATE FULLY CLOSED)

1.0 VOLTS OR LESS (IGNITION SW ON AND MEASURING PLATE FULLY OPEN)

2.0-4.0 VOLTS (IDLING)

1.0-2.0 VOLTS (3000 RPM)

THA1-E2 : 1.0-3.0 VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, (68°F))

THW-E2 : 0.1-1.0 VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C, (176°F))

STA-E1 : 6-14 VOLTS (CRANKING)

#1, #2, #3, #4 - E01, E02 : 10-14 VOLTS (IGNITION SW ON)

IGT-E1 : 0.7-1.0 VOLTS (CRANKING OR IDLING)

TVIS-E1 : 2.0 VOLTS OR LESS WITH IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED

10-14 VOLTS WITH IGNITION SW ON AND THROTTLE VALVE OPEN

2.0 VOLTS OR LESS IDLING

10-14 VOLTS WITH 4200 RPM OR MORE

T-E1 : 10-14 VOLTS WITH IGNITION SW ON AND CHECK CONNECTOR T-E1 NO CONNECT

0.5 VOLTS OR LESS WITH IGNITION SW ON AND CHECK CONNECTOR T-E1 CONNECT

A/C1-E1 : 8-14 VOLTS WITH IGNITION SW ON A/C SWITCH ON

RSO, RSC -E1 : 9-14 VOLTS (IGNITION SW ON)

PIM-E2 : 2.5-4.5 VOLTS (IGNITION SW ON)

W-E1 : 10-14 VOLTS (NO TROUBLE (CHECK ENGINE WARNING LIGHT OFF) AND ENGINE RUNNING)

RESISTANCE AT ECU CONNECTORS

(DISCONNECT WIRING CONNECTOR FROM ECU)

IDL-E1 : INFINITY (THROTTLE VALVE OPEN)
LESS THAN 2300 Ω (THROTTLE VALVE FULLY CLOSED)

VTA-E2 : 3300-10000 Ω (THROTTLE VALVE OPEN)

200-800 Ω (THROTTLE VALVE FULLY CLOSED)

VS-E2 : 200-600 Ω (MEASURING PLATE FULLY CLOSED)

20-1200 Ω (MEASURING PLATE FULLY OPEN)

THA1-E2 : 2000-3000 Ω (INTAKE AIR TEMP. 20°C, 68°F)

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

G1, G2-G- : 140-180 Ω

NE-G- : 180-220 Ω

RSC, RSO→B, +B1 : 17.7-23.9 Ω

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A15		25	E 6	A	26	J 2	26	
A18		26	F10		25	J 6	26	
C 1		25	F11		25	K 1	25	
C 7		26	F17		27	O 2	25	
C10	B	26	I 1		25	S 7	26	
C11	A	26	I 2		25	T 1	25	
D 1		25	I 3		25	T 2	25	
E 1		25	I 4		25	V 1	25	
E 2		25	I 5		25	V 2	25	
E 3		25	I 6		25	V 3	25	
E 4	B	26	I 7		25			
E 5	C	26	I 9		26			

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1D		
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2B	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C		
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
ES2	28	ENGINE WIRE AND ENGINE ROOM NO. 2 WIRE (NEAR THE DISTRIBUTOR)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2		
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IG2		
IJ1	32	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

 : GROUND POINTS

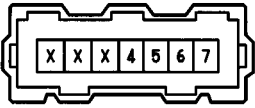
CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER
EC	28	INTAKE MANIFOLD
ID	30	LEFT KICK PANEL
BL	34	BACK PANEL CENTER

 : SPLICE POINTS

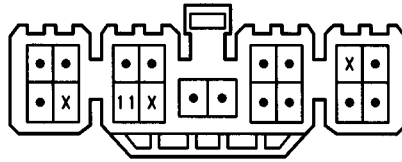
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	28	ENGINE ROOM MAIN WIRE	I 2	32	COWL WIRE
E 5			I 6		
E 7			I 7	32	ENGINE WIRE
E 9			I 8	32	COWL WIRE

ENGINE CONTROL

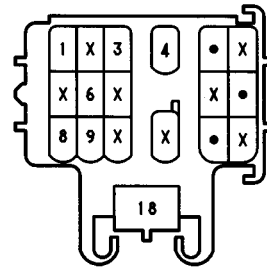
A16 BLACK



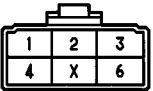
A18



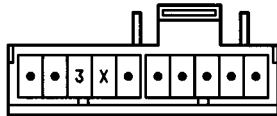
C 1 DARK GRAY



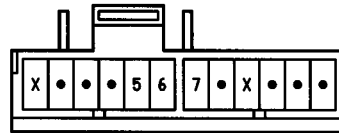
C 7 DARK GRAY



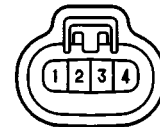
C10 (B) BROWN



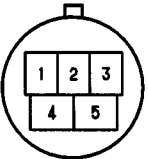
C11 (A)



D 1 BLACK



E 1 DARK GRAY



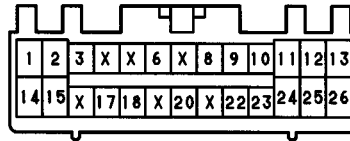
E 2 DARK GREEN



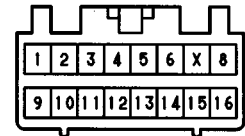
E 3 DARK GRAY



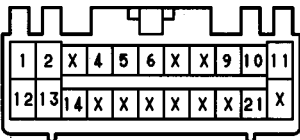
E 4 (B) DARK GRAY



E 5 (C) DARK GRAY



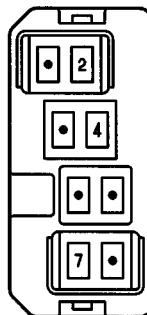
E 6 (A) DARK GRAY



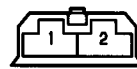
F10 DARK GRAY



F11 BLACK



F17 DARK GRAY



I 1 BLACK



I 2 BLACK



I 3 BLACK



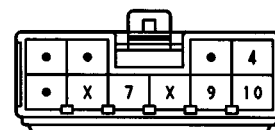
I 4, I 6 BROWN



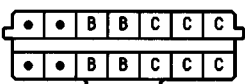
I 5, I 7 GRAY



I 9 BLACK

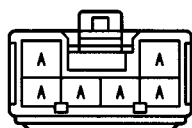


J 2



(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

K 1 DARK GRAY



O 2 DARK GRAY



S 7



T 1 BLACK



T 2 BLACK



V 1 BROWN



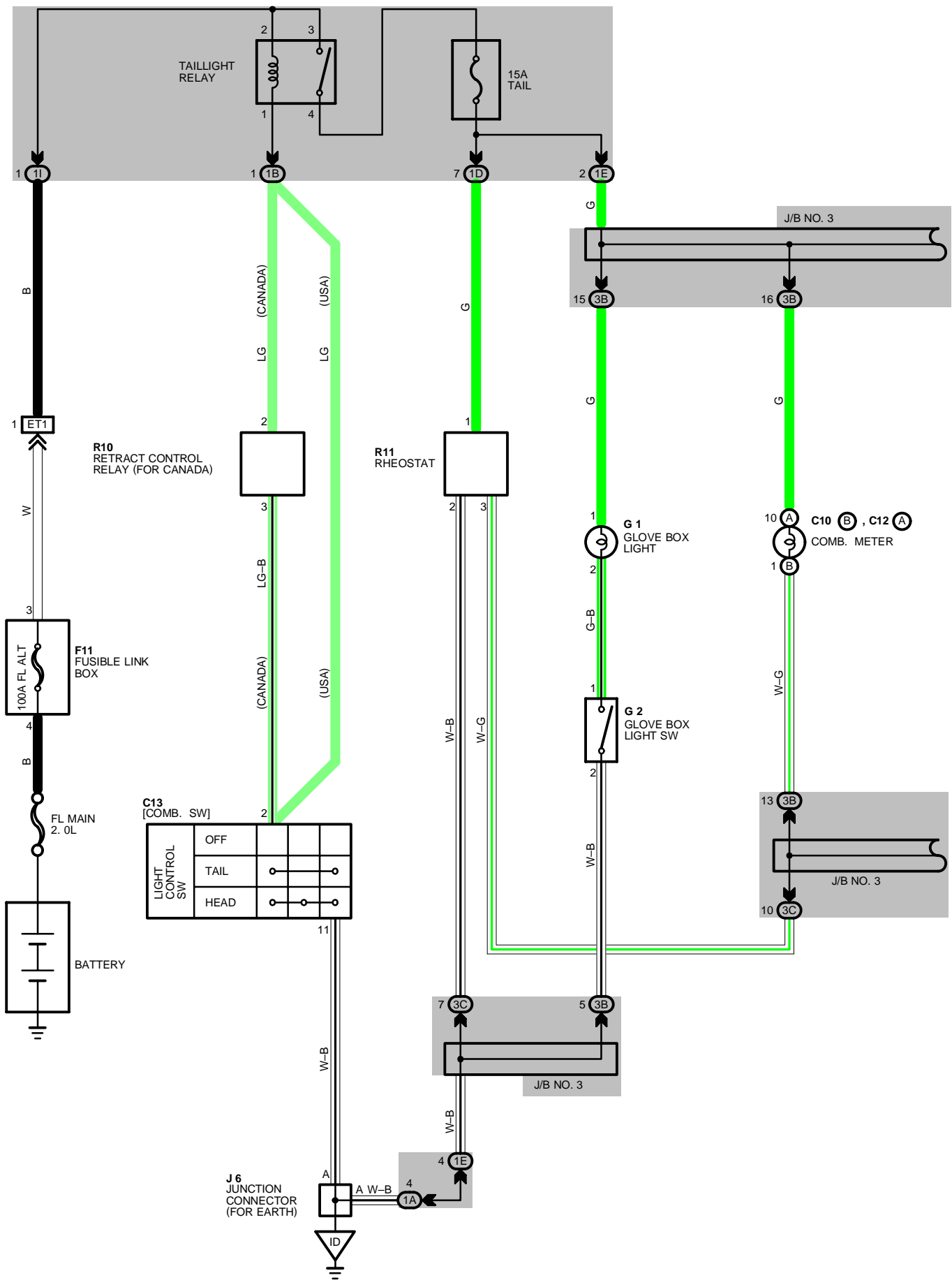
V 2 BLUE

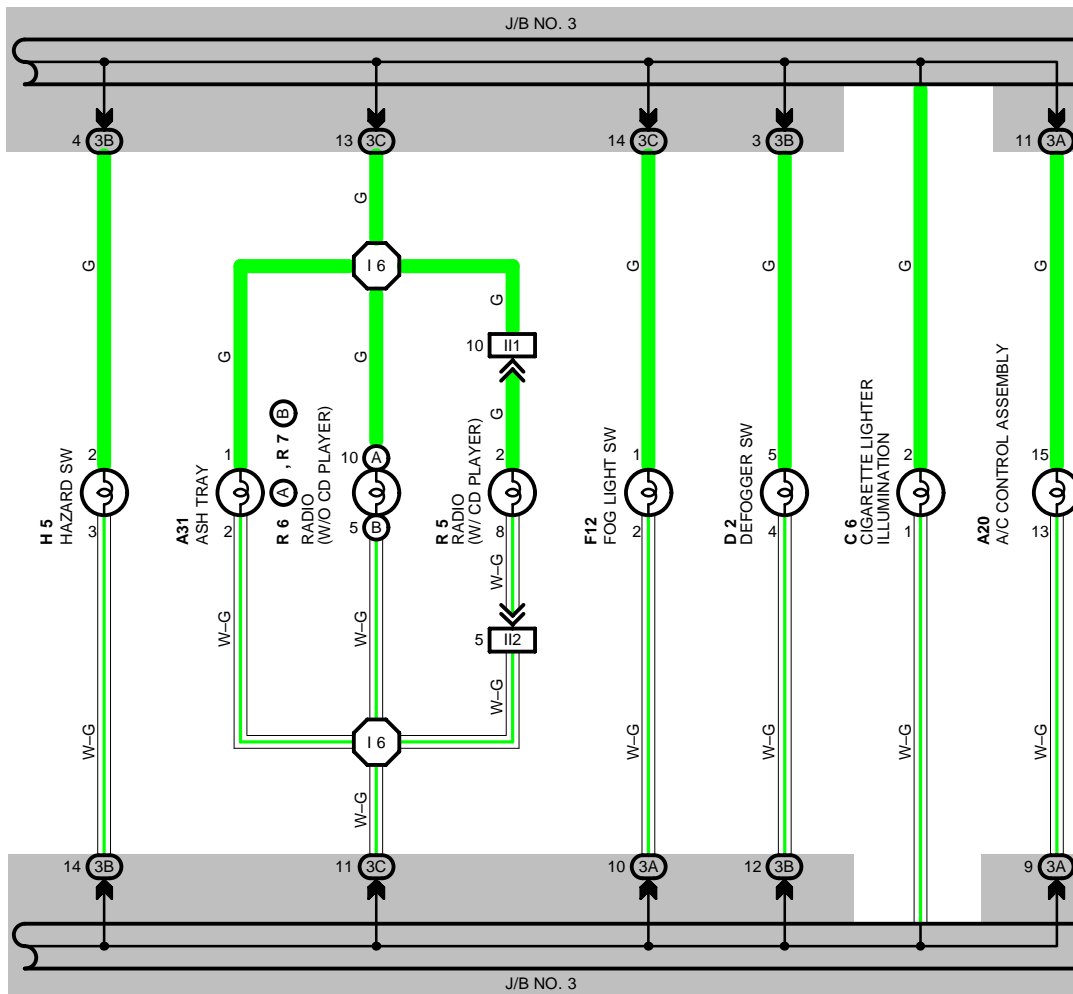


V 3 BROWN



ILLUMINATION





ILLUMINATION

SERVICE HINTS

TAILLIGHT RELAY

3-4 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION (WHEN LIGHT AUTO TURN OFF SYSTEM IS OFF)

R 8 RHEOSTAT

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A20	26	D 2	26	J 6	26
A31	26	F11	25	R 5	26
C 6	26	F12	26	R 6	A 26
C10	B 26	G 1	26	R 7	B 26
C12	A 26	G 2	26	R10	26
C13	26	H 5	26	R11	26

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1D		
1E		
1I	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

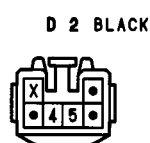
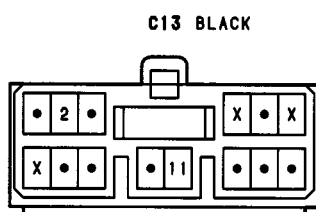
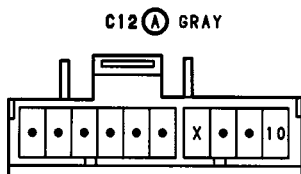
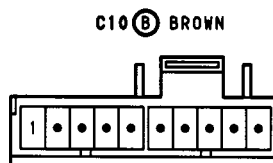
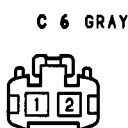
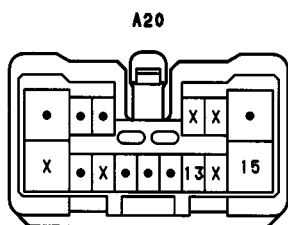
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ET1	28	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE J/B NO. 2)
II1	32	COWL WIRE AND CONSOLE BOX WIRE (INSTRUMENT PANEL CENTER)
II2		

▽ : GROUND POINTS

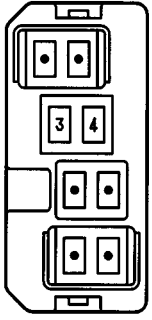
CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 6	32	COWL WIRE			



F11 BLACK



F12 BLACK



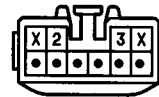
G 1 GRAY



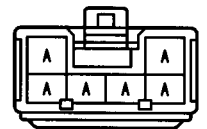
G 2



H 5 BLACK

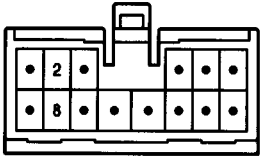


J 6



(HINT:SEE PAGE 7)

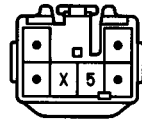
R 5



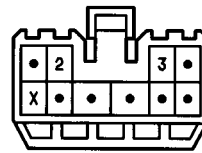
R 6 (A)



R 7 (B)



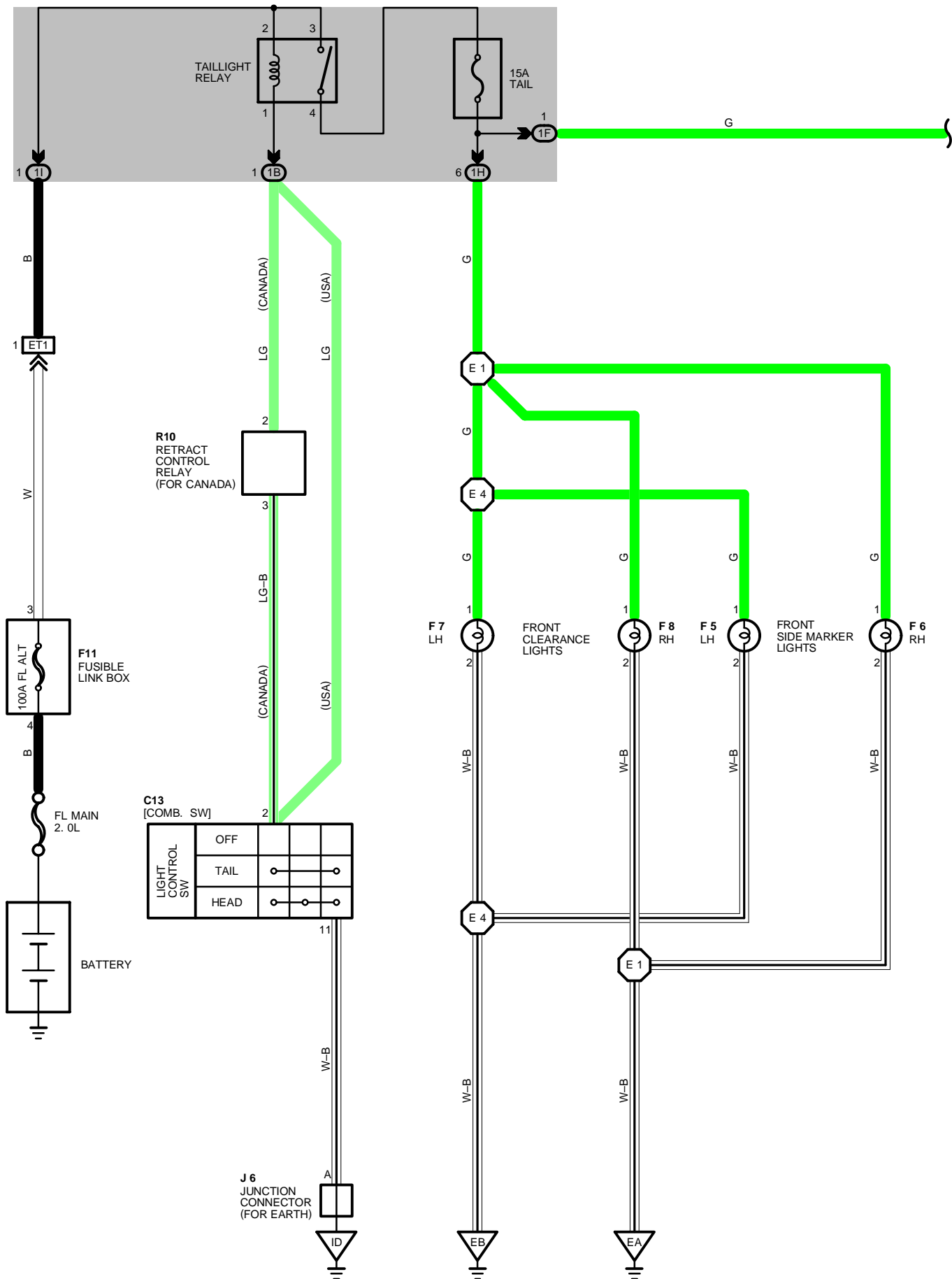
R10

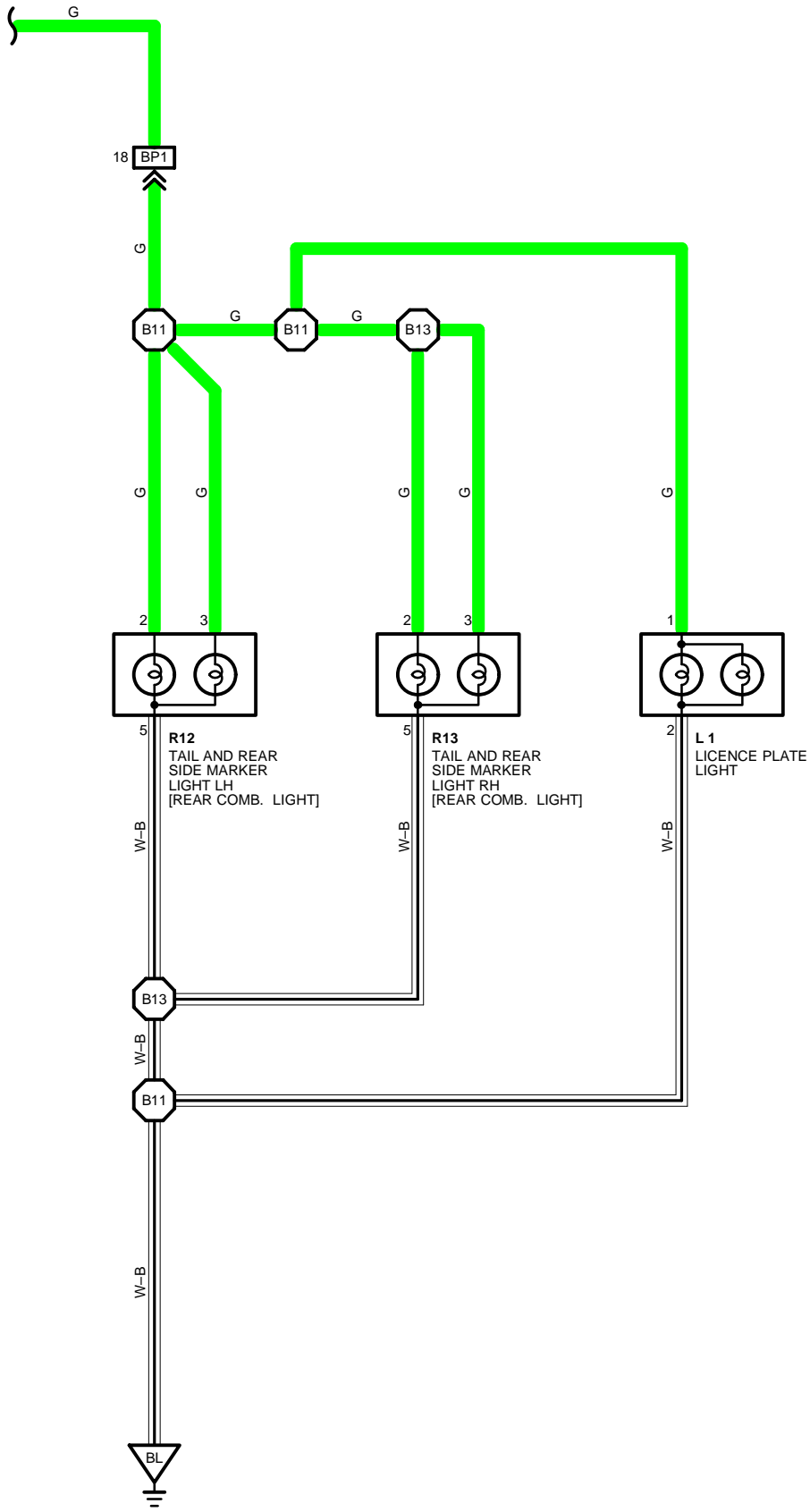


R11



TAILLIGHT





TAILLIGHT

SERVICE HINTS

TAILLIGHT RELAY

3-4 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C13	26	F 8	25	R10	26
F 5	25	F11	25	R12	27
F 6	25	J 6	26	R13	27
F 7	25	L 1	27		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1F	18	FLOOR WIRE AND J/B NO.1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1I		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ET1	28	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE J/B NO. 2)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

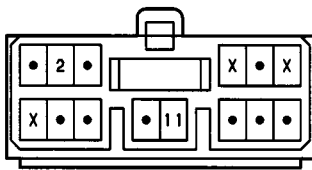
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL
BL	34	BACK PANEL CENTER

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28	ENGINE ROOM MAIN WIRE	B11	34	LUGGAGE ROOM WIRE
E 4			B13		

C13 BLACK



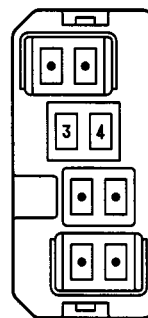
F 5, F 6



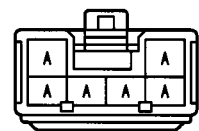
F 7, F 8 GRAY



F11 BLACK



J 6

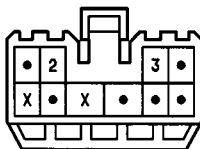


(HINT:SEE PAGE 7)

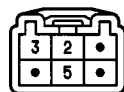
L 1



R10



R12, R13



SERVICE HINTS

HEADLIGHT RELAY

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	26	H 1	25	R 3	25
C13	A 26	H 2	25	R 9	26
C14	B 26	J 6	26		
F11	25	R 2	25		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2B	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

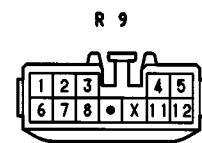
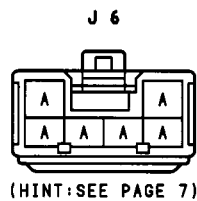
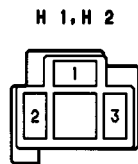
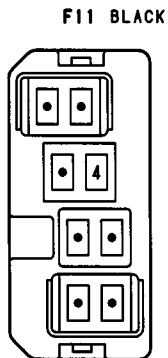
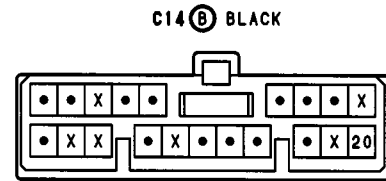
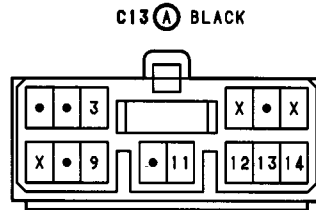
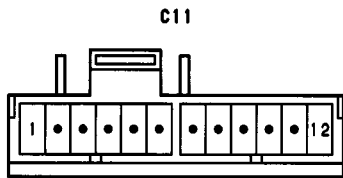
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

▽ : GROUND POINTS

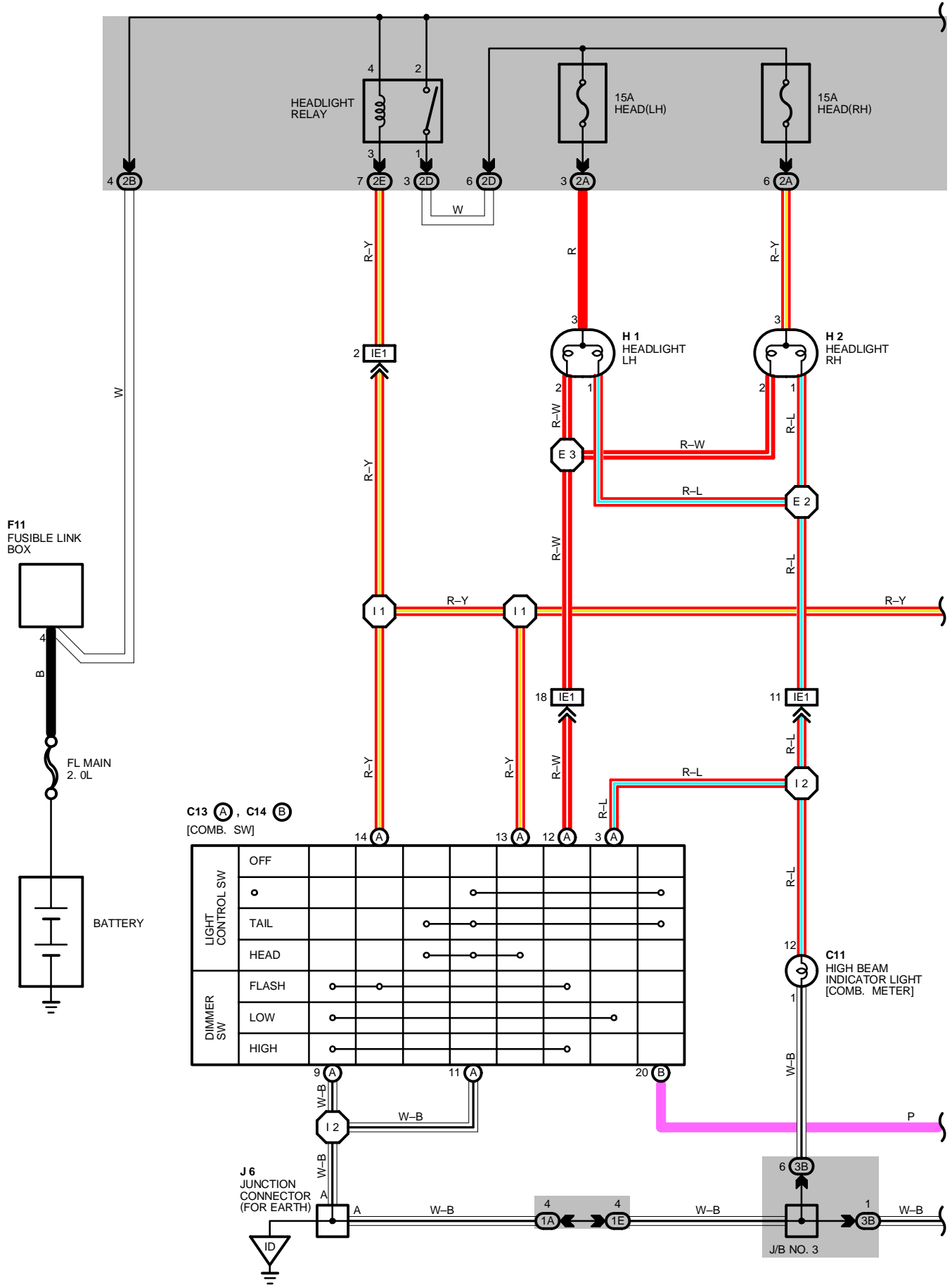
CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL

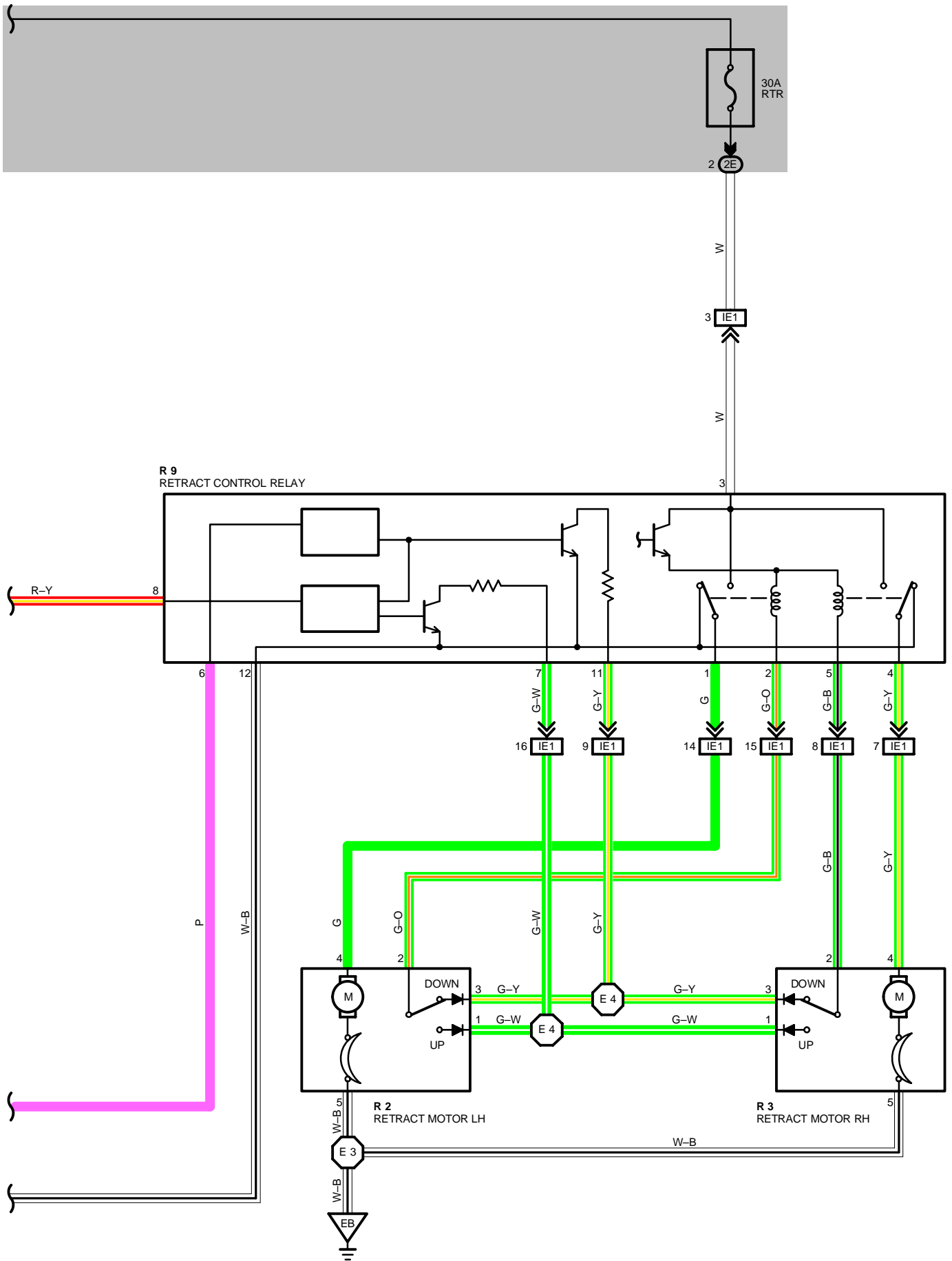
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	28	ENGINE ROOM MAIN WIRE	I 1	32	COWL WIRE
E 3			I 2		
E 4					

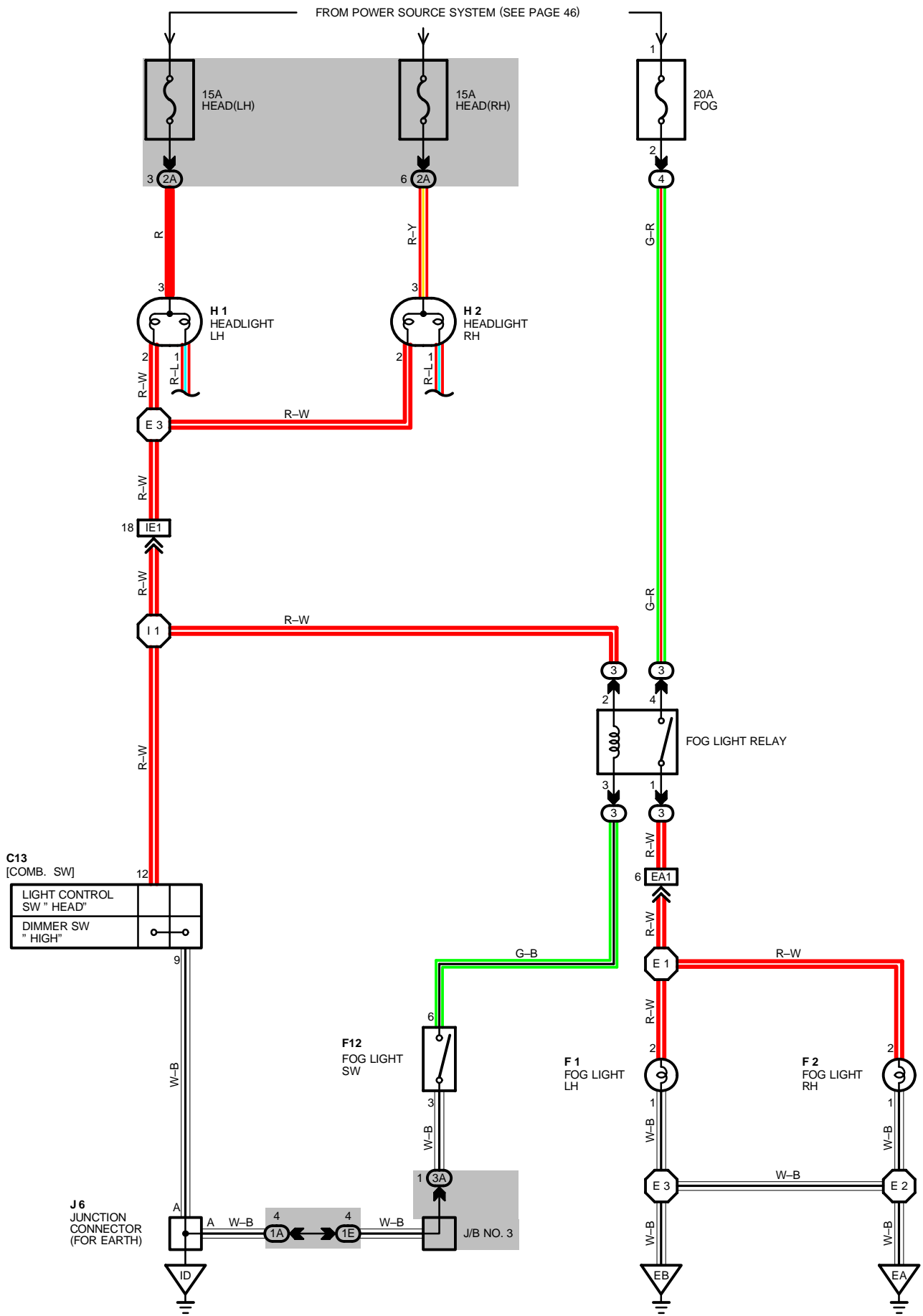


HEADLIGHT (USA)





FOG LIGHT (USA)



SERVICE HINTS

FOG LIGHT RELAY

(3) 1-(3) 4 : CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION, DIMMER SW AT **LOW** POSITION AND FOG LIGHT SW ON

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C13	26	F12	26	J 6	26
F 1	25	H 1	25		
F 2	25	H 2	25		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
3	23	R/B NO. 3 (RIGHT KICK PANEL)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

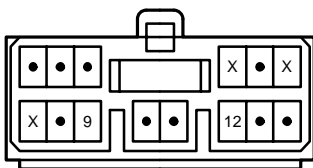
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28	ENGINE ROOM MAIN WIRE	E 3	28	ENGINE ROOM MAIN WIRE
E 2			I 1	32	COWL WIRE

C13 BLACK



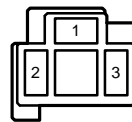
F 1, F 2



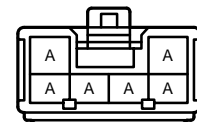
F12 BLACK



H 1, H 2 BROWN

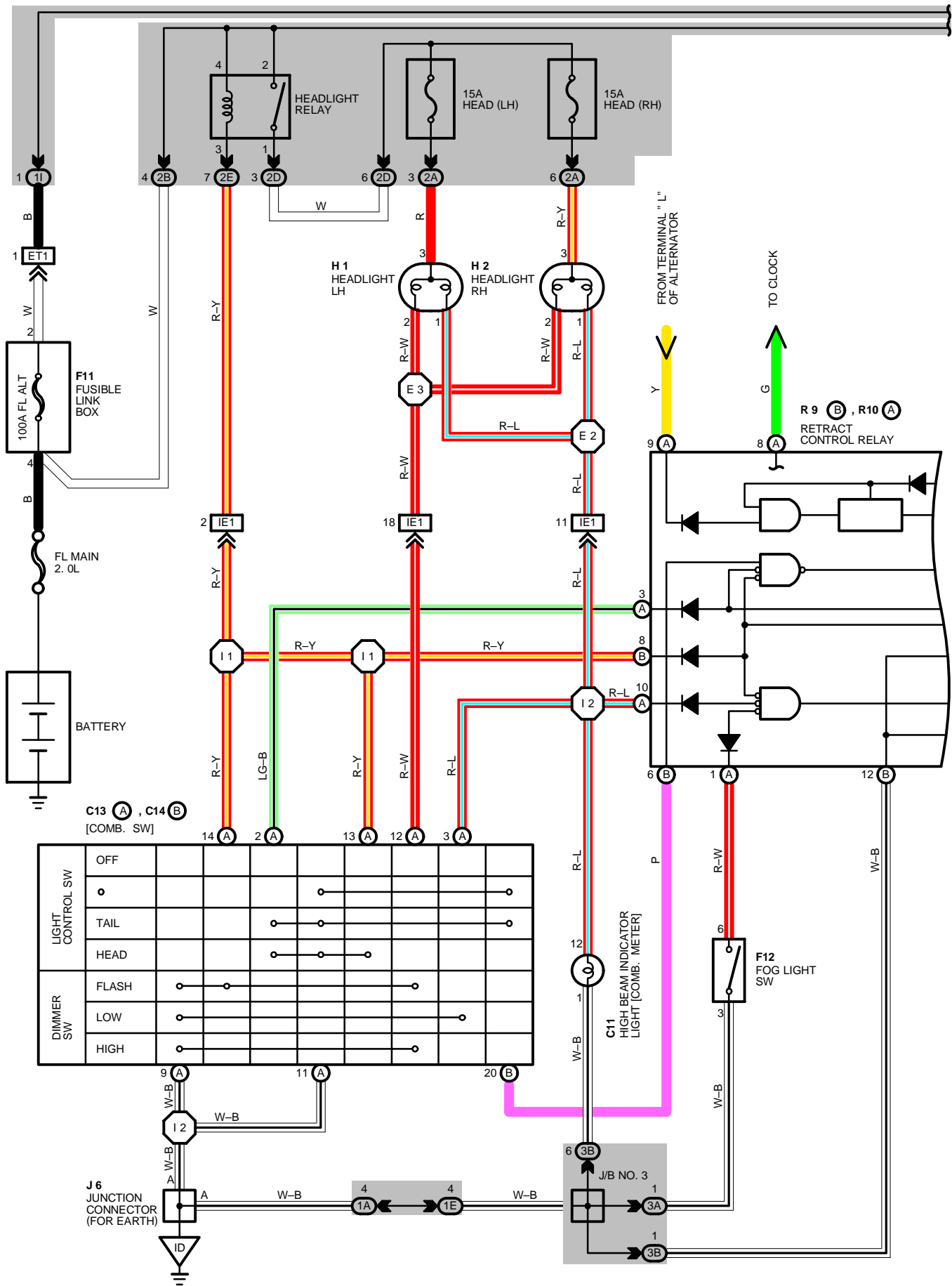


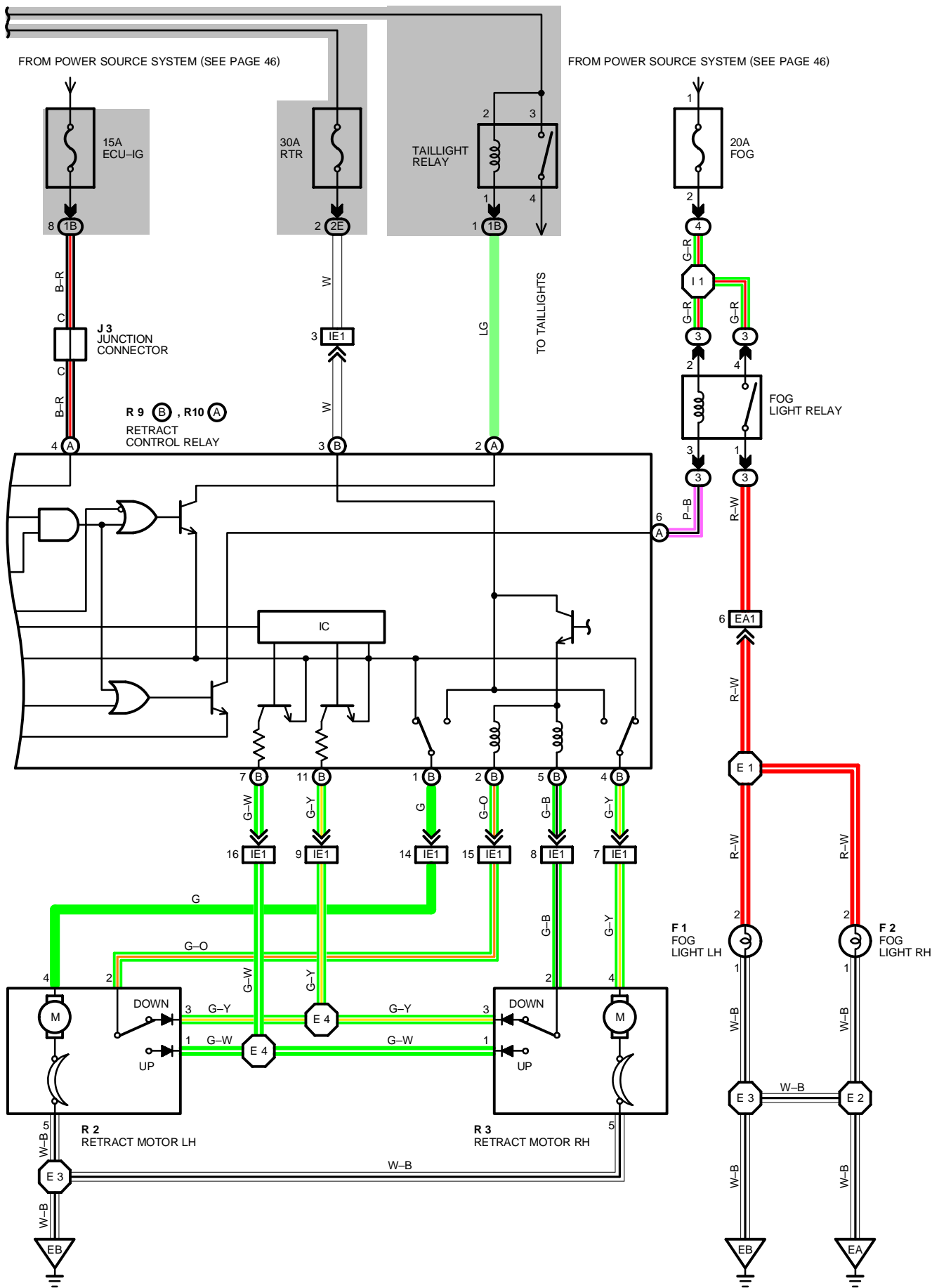
J 6



(HINT : SEE PAGE 7)

FOG LIGHT AND HEADLIGHT (CANADA)





FOG LIGHT AND HEADLIGHT (CANADA)

SYSTEM OUTLINE

CURRENT FROM THE BATTERY FLOWS CONTINUOUSLY FROM FL 2.0L → FL ALT → TAILLIGHT RELAY (COIL SIDE) → **TERMINAL (A) 2** OF RETRACT CONTROL RELAY, FL 2.0L → HEADLIGHT RELAY (COIL SIDE) → **TERMINAL (B) 8** OF RETRACT CONTROL RELAY.

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWING THROUGH THE ECU-IG FUSE FLOWS TO **TERMINAL (A) 4** OF THE RETRACT CONTROL RELAY.

DAYTIME RUNNING LIGHT OPERATION

WHEN THE ENGINE IS STARTED, VOLTAGE IS GENERATED AT **TERMINAL L** OF THE ALTERNATOR AND VOLTAGE IS APPLIED TO **TERMINAL (A) 9** OF THE RETRACT CONTROL RELAY, CAUSING THE RETRACT CONTROL RELAY TO OPERATE SO THAT THE TAILLIGHT RELAY AND FOG LIGHT RELAY TURN ON. THIS CAUSES CURRENT TO FLOW FROM THE TAILLIGHT RELAY (POINT SIDE) → TAIL FUSE → EACH TAILLIGHT, AND FOG LIGHT RELAY (POINT SIDE) → FOG LIGHTS.

ACCORDINGLY, EVEN WHEN THE LIGHT CONTROL SW IS IN **OFF** POSITION, EACH OF THE LIGHTS JUST MENTIONED LIGHTS UP.

THIS SYSTEM CONTINUES TO OPERATE UNTIL THE IGNITION SW IS TURNED OFF.

SERVICE HINTS

R 9(B), R10(A) RETRACT CONTROL RELAY

(A) 2, (B) 3, (B) 8-GROUND: ALWAYS APPROX. 12 VOLTS

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

(B) 6-GROUND : NO CONTINUITY WITH LIGHT CONTROL SW AT **OFF** OR **HEAD** POSITION
CONTINUITY WITH LIGHT CONTROL SW AT **HOLD** OR **TAIL** POSITION

(A) 3-GROUND : NO CONTINUITY WITH LIGHT CONTROL SW AT **OFF** OR **HOLD** POSITION
CONTINUITY WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

(B) 8-GROUND : NO CONTINUITY WITH LIGHT CONTROL SW AT **OFF, HOLD** OR **TAIL** POSITION
CONTINUITY WITH LIGHT CONTROL SW AT **HEAD** POSITION OR DIMMER SW AT **FLASH** POSITION

(B)12-GROUND : ALWAYS CONTINUITY

(B) 2, (B) 5-(B)11 : NO CONTINUITY WITH RETRACT MOTOR AT **LOWERMOST** POSITION
CONTINUITY WITH RETRACT MOTOR AT **ANY** POSITION EXCEPT **LOWERMOST** POSITION

(B) 2, (B) 5-(B) 7 : NO CONTINUITY WITH RETRACT MOTOR AT **UPPERMOST** POSITION
CONTINUITY WITH RETRACT MOTOR AT **ANY** POSITION EXCEPT **UPPERMOST** POSITION

R 2, R 3 RETRACT MOTOR

2-3 : OPEN WITH RETRACT MOTOR AT **LOWERMOST** POSITION

2-1 : OPEN WITH RETRACT MOTOR AT **UPPERMOST** POSITION

C13 (A) DIMMER SW [COMB. SW]

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

FOG LIGHT RELAY

1-4 : CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION, DIMMER SW AT **LOW** POSITION AND FOG LIGHT SW ON
CLOSED WITH ENGINE RUNNING

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	26	F11	25	J 6	26
C13 A	26	F12	26	R 2	25
C14 B	26	H 1	25	R 3	25
F 1	25	H 2	25	R 9 B	26
F 2	25	J 3	26	R10 A	26

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
3	23	R/B NO. 3 (RIGHT KICK PANEL)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1E		
1I	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2B	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3A	22	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)
3B		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

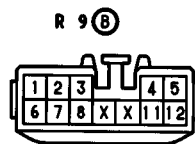
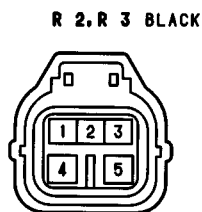
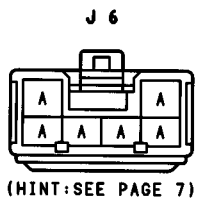
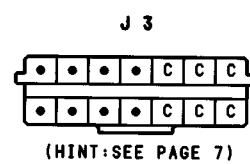
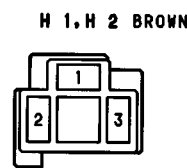
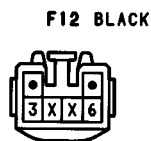
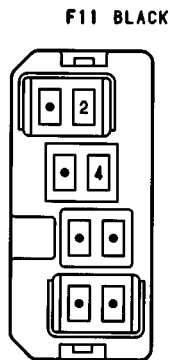
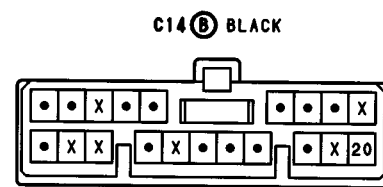
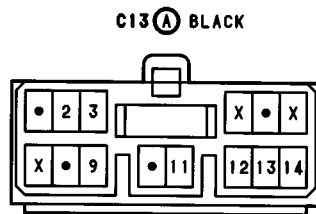
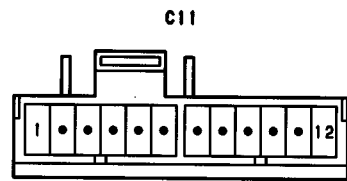
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
ET1	28	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (NEAR THE J/B NO. 2)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL

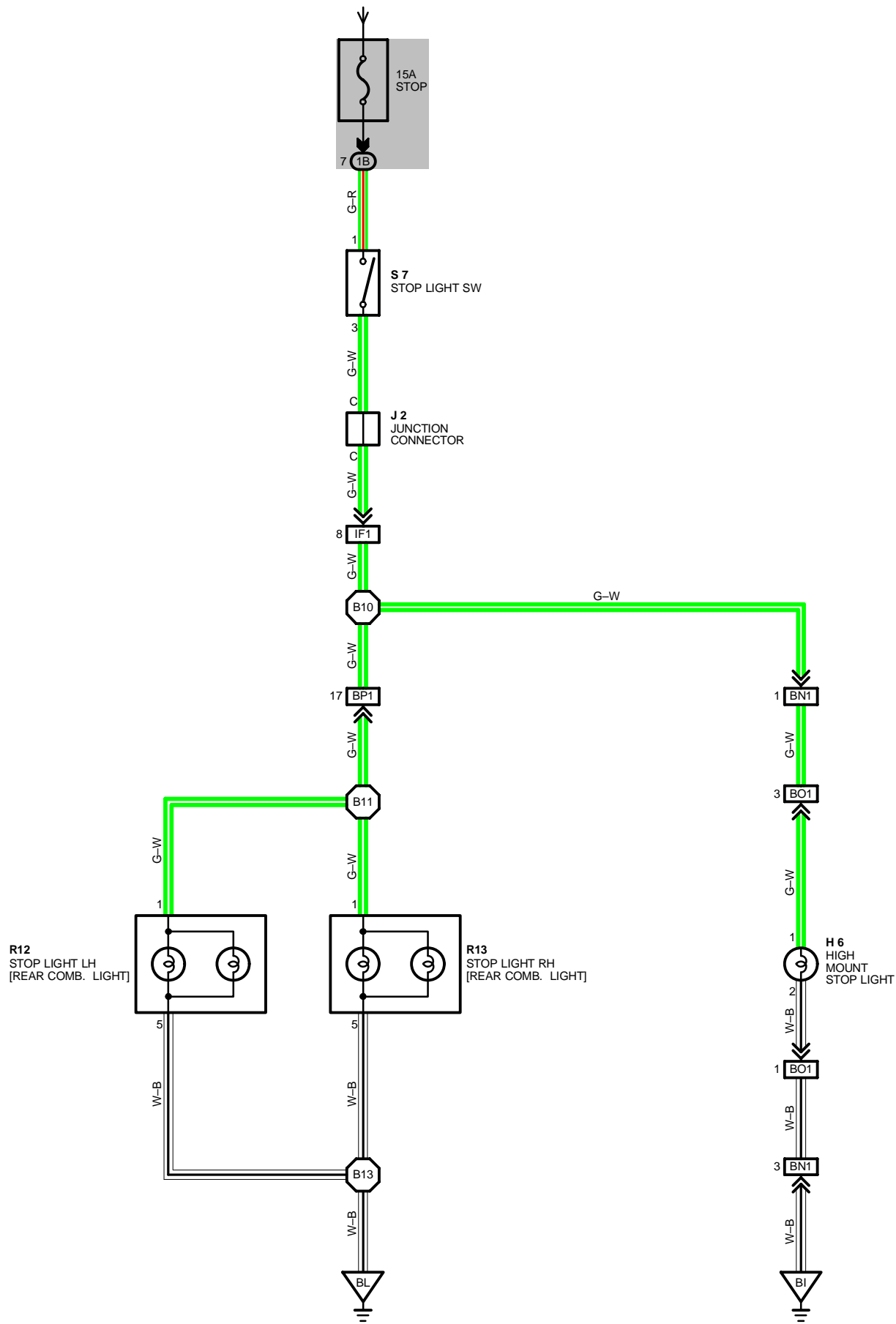
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28	ENGINE ROOM MAIN WIRE	E 4	28	ENGINE ROOM MAIN WIRE
E 2			I 1	32	COWL WIRE
E 3			I 2		



STOP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SERVICE HINTS

S7 STOP LIGHT SW

1-3: CLOSED WITH BRAKE PEDAL DEPRESSED

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
H 6	27	R12	27	S 7	26
J 2	26	R13	27		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
BN1	34	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (LEFT SIDE OF PACKAGE TRAY TRIM)
BO1	34	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 1 SUB WIRE (BACK DOOR UPPER LEFT)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BI	34	UNDER THE LEFT CENTER PILLAR
BL	34	BACK PANEL CENTER

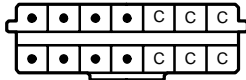
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B10	34	FLOOR WIRE	B13	34	LUGGAGE ROOM WIRE
B11	34	LUGGAGE ROOM WIRE			

H 6

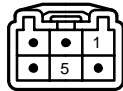


J 2



(HINT : SEE PAGE 7)

R12, R13

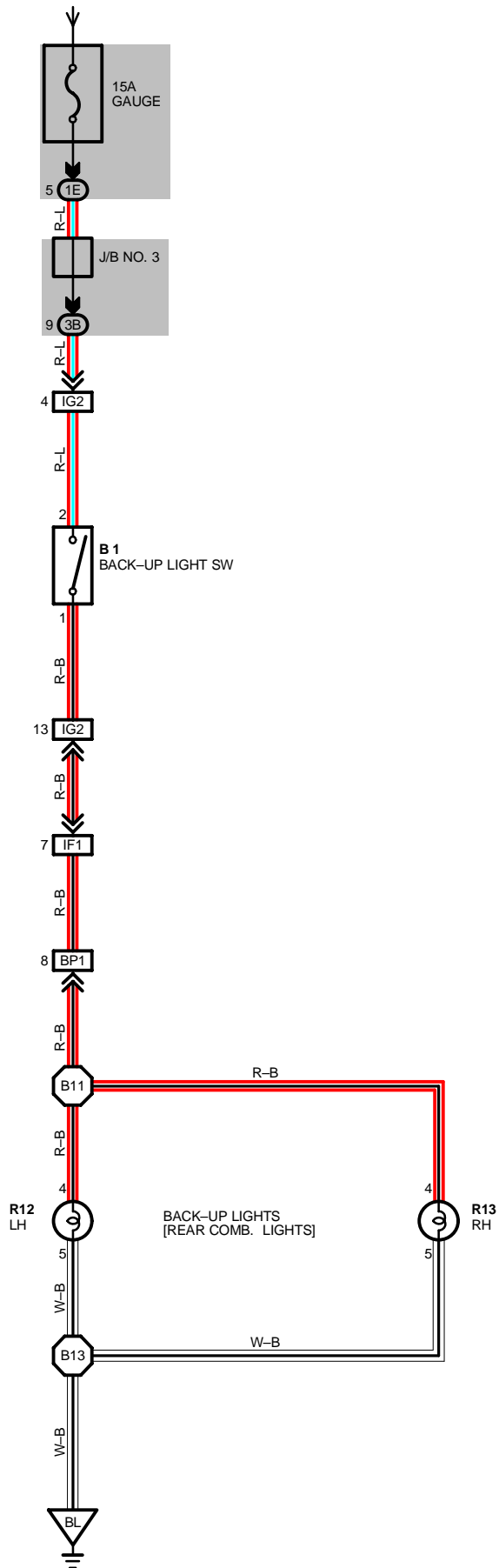


S 7



BACK-UP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SERVICE HINTS

B 1 BACK-UP LIGHT SW

1-2 : CLOSED WITH SHIFT LEVER IN R POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	25	R12	27	R13	27

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG2	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

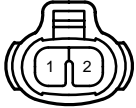
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BL	34	BACK PANEL CENTER

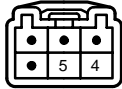
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B11	34	LUGGAGE ROOM WIRE	B13	34	LUGGAGE ROOM WIRE

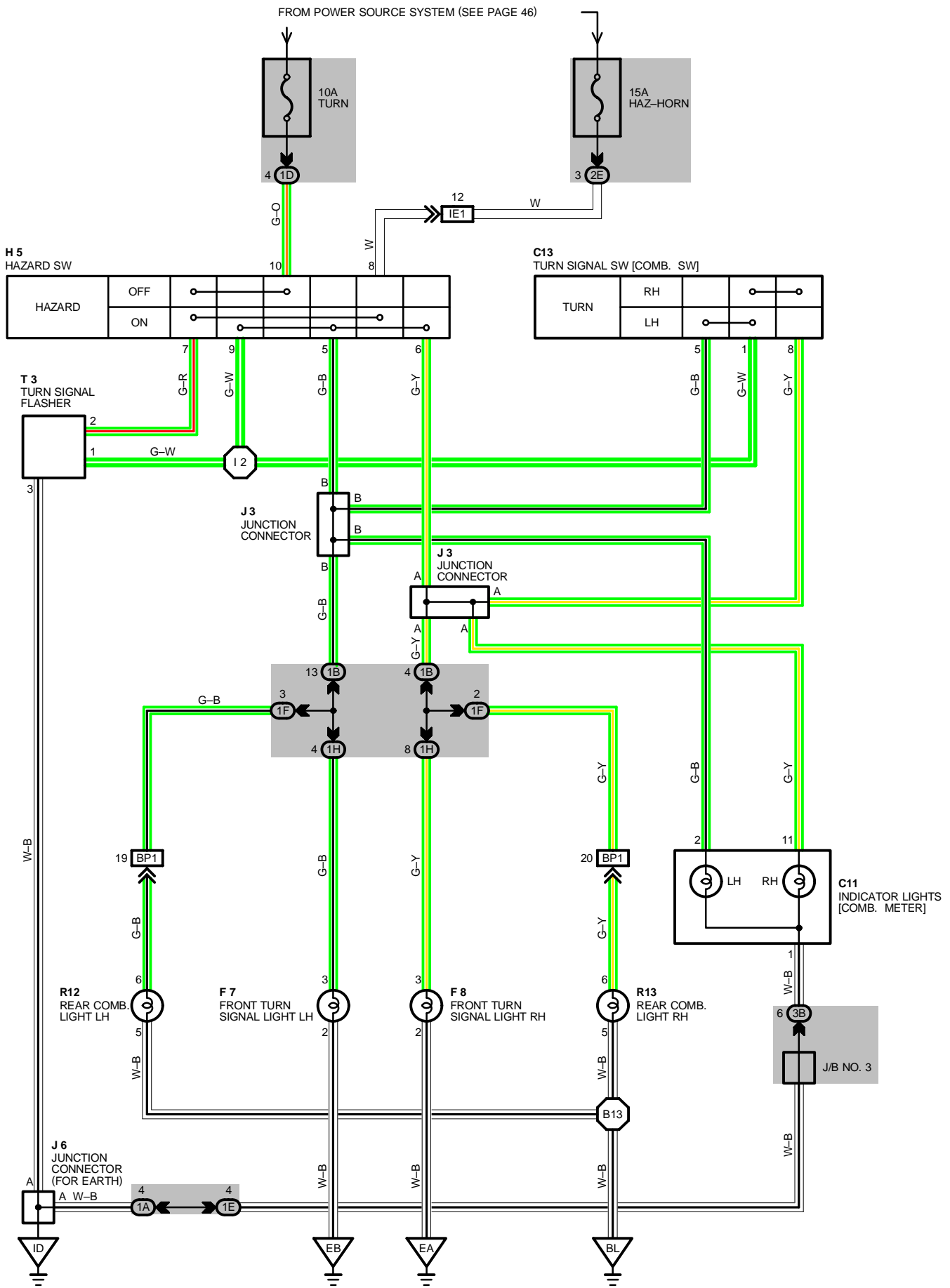
B 1 GRAY



R12, R13



TURN SIGNAL AND HAZARD WARNING LIGHT



SERVICE HINTS

T 3 TURN SIGNAL FLASHER

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

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

3-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C11	26	H 5	26	R13	27
C13	26	J 3	26	T 3	26
F 7	25	J 6	26		
F 8	25	R12	27		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1D		
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO.2 (NEAR THE BATTERY)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

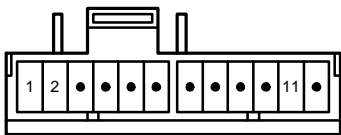
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL
BL	34	BACK PANEL CENTER

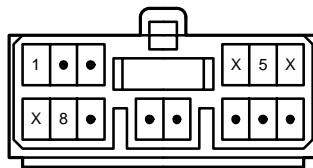
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	32	COWL WIRE	B13	34	LUGGAGE ROOM WIRE

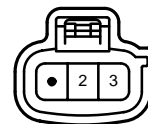
C11



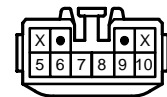
C13 BLACK



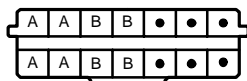
F 7, F 8 BLACK



H 5 BLACK

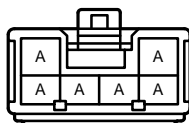


J 3



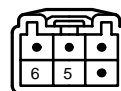
(HINT : SEE PAGE 7)

J 6

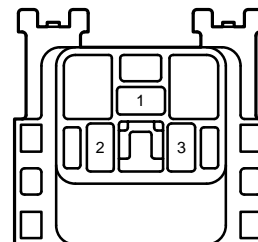


(HINT : SEE PAGE 7)

R12, R13

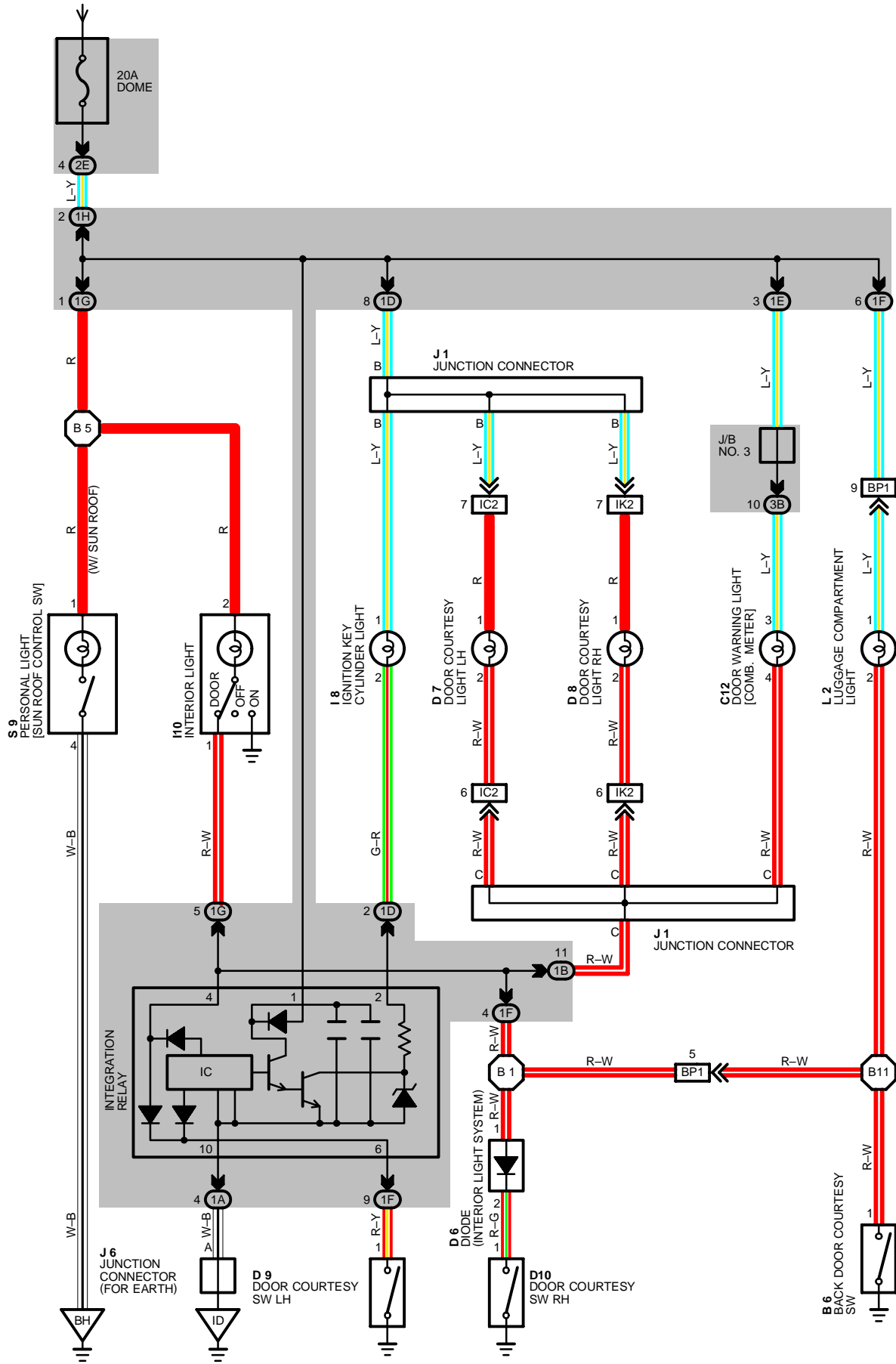


T 3



INTERIOR LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SERVICE HINTS

INTEGRATION RELAY

(1B)11-GROUND : APPROX. 12 VOLTS WITH DOOR CLOSED
0 VOLTS WITH EACH DOOR OPEN

D 9, D10 DOOR COURTESY SW

1-GROUND : CLOSED WITH DOOR OPEN

B 6 BACK DOOR COURTESY SW

1-GROUND : CLOSED WITH BACK DOOR OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 6	27	D 9	27	J 6	26
C12	26	D10	27	L 2	27
D 6	27	I 8	26	S 9	27
D 7	27	I10	27		
D 8	27	J 1	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1D		
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1G	18	ROOF WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC2	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IK2	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
BH	34	ROOF LEFT

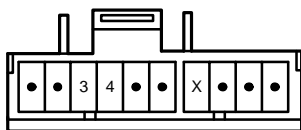
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	34	FLOOR WIRE	B11	34	LUGGAGE ROOM WIRE
B 5	34	ROOF WIRE			

B 6 GRAY



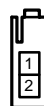
C12 GRAY



D 6



D 7, D 8



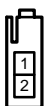
D 9, D10



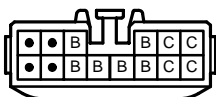
I 8



I10

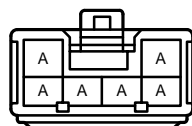


J 1



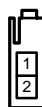
(HINT : SEE PAGE 7)

J 6



(HINT : SEE PAGE 7)

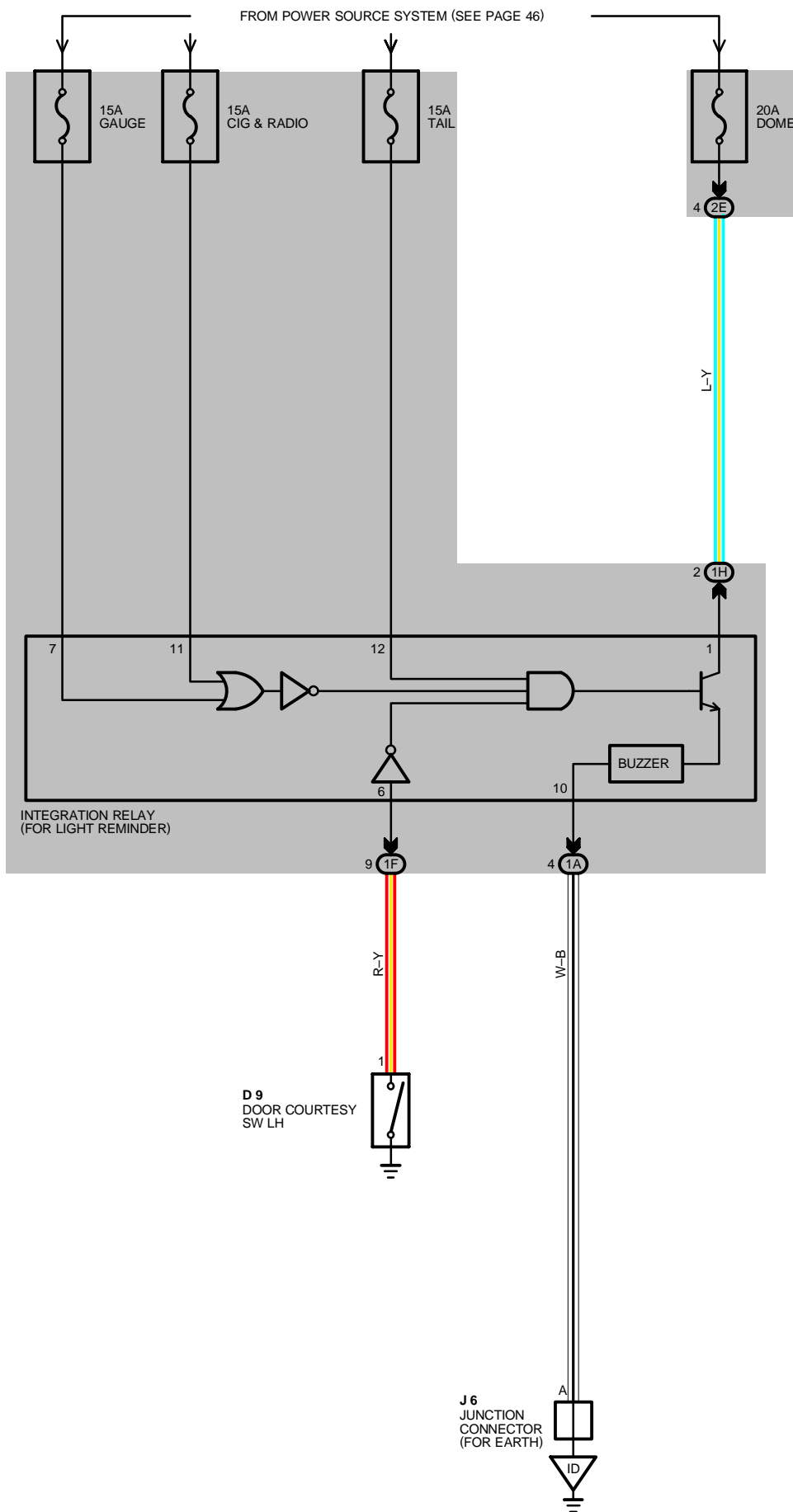
L 2



S 9



LIGHT REMINDER BUZZER



SYSTEM OUTLINE

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

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

LIGHT REMINDER SYSTEM

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

SERVICE HINTS

LIGHT REMINDER RELAY

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 9	27	J 6	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)

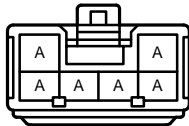
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL

D 9

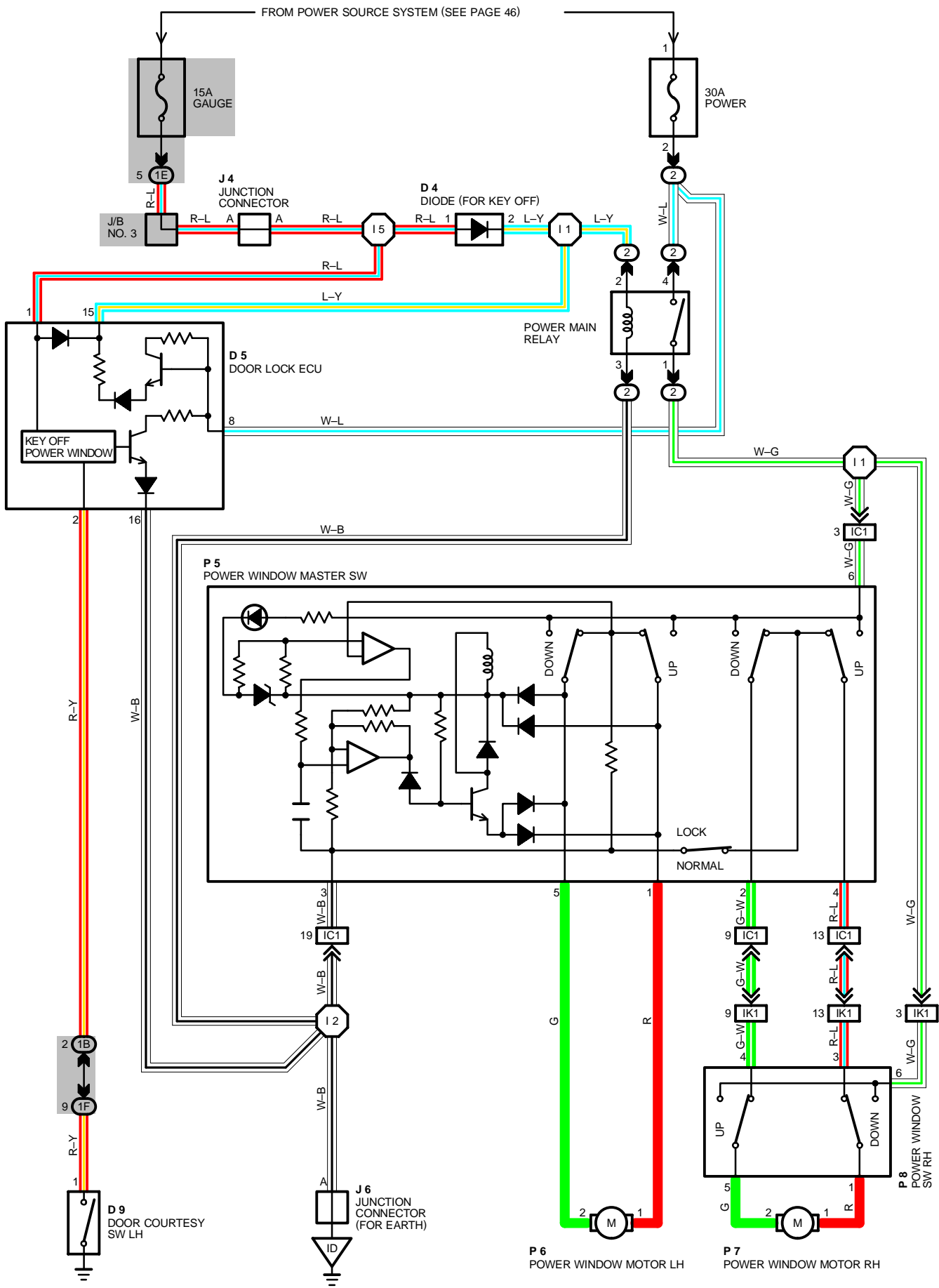


J 6



(HINT : SEE PAGE 7)

POWER WINDOW



SYSTEM OUTLINE

CURRENT ALWAYS FLOWS **TERMINAL 4** OF THE POWER MAIN RELAY THROUGH THE POWER FUSE. WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO **TERMINAL 2** OF THE POWER MAIN RELAY → **TERMINAL 3** → TO **GROUND**. THIS ACTIVATES THE RELAY AND CURRENT FLOWING TO **TERMINAL 1** OF THE POWER MAIN RELAY → TO **TERMINAL 6** OF THE POWER WINDOW MASTER SW AND **TERMINAL 5** OF THE POWER WINDOW SW RH (PASSENGER'S).

1. MANUAL UP OPERATION (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW IN **UP** POSITION, THE CURRENT FLOWING TO **TERMINAL 6** OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 5** OF THE MASTER SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR LH (DRIVER'S) → MOTOR → **TERMINAL 1** → **TERMINAL 1** OF THE MASTER SW → **TERMINAL 3** → 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 6** OF THE POWER WINDOW MASTER SW TO **TERMINAL 1** OF THE MASTER SW CAUSES THE FLOW OF CURRENT FROM **TERMINAL 1** OF THE MOTOR → MOTOR → **TERMINAL 2** → **TERMINAL 5** OF THE MASTER SW → **TERMINAL 3** → 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

WITH THE IGNITION SW ON AND WITH THE DRIVER'S SW OF THE POWER WINDOW MASTER SW IN **DOWN** POSITION, CURRENT FLOWING TO **TERMINAL 6** OF THE MASTER SW FLOWS TO **TERMINAL 1** OF THE MASTER SW → **TERMINAL 1** OF THE POWER WINDOW MOTOR → MOTOR → **TERMINAL 2** → **TERMINAL 5** OF THE MASTER SW → **TERMINAL 3** → TO **GROUND**, CAUSING THE MOTOR TO ROTATE TOWARDS THE DOWN SIDE. THEN THE SOLENOID IN THE MASTER SW IS ACTIVATED AND IT LOCKS THE DRIVER'S SW BEING PUSHED, CAUSING THE MOTOR TO CONTINUE TO ROTATE IN AUTO DOWN OPERATION.

WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT FLOW BETWEEN **TERMINAL 5** OF THE MASTER SW AND **TERMINAL 3** INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, THE DRIVER'S SW TURNS OFF AND FLOW FROM **TERMINAL 6** OF THE MASTER SW TO **TERMINAL 1** IS CUT OFF, STOPPING THE MOTOR SO THAT AUTO STOP OCCURS.

3. STOPPING OF AUTO DOWN AT DRIVER'S WINDOW

WHEN THE DRIVER'S SW IS PUSHED TO THE UP SIDE DURING AUTO DOWN OPERATION, A GROUND CIRCUIT OPENS IN THE MASTER SW AND CURRENT DOES NOT FLOW FROM **TERMINAL 5** OF THE MASTER SW → TO **TERMINAL 3**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE DRIVER'S SW IS PUSHED CONTINUOUSLY, THE MOTOR ROTATES IN THE UP DIRECTION IN MANUAL UP OPERATION.

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

WITH POWER WINDOW SW (PASSENGER'S) PUSHED TO THE UP SIDE, CURRENT FLOWING FROM **TERMINAL 6** OF THE POWER WINDOW SW FLOWS TO **TERMINAL 5** OF THE POWER WINDOW SW → **TERMINAL 2** OF THE WINDOW MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 1** OF THE POWER WINDOW SW → **TERMINAL 3** → **TERMINAL 4** OF THE MASTER SW → **TERMINAL 3** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR (PASSENGER'S) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS PUSHED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FLOW **TERMINAL 1** → MOTOR → TO **TERMINAL 2**, AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED TO THE LOCK SIDE, THE GROUND CIRCUIT TO THE PASSENGER'S WINDOW BECOMES OPEN.

AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF THE PASSENGER'S WINDOW IS TRIED, THE CURRENT FROM **TERMINAL 6** 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.

5. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE DOOR CONTROL RELAY OPERATES AND CURRENT FLOWS FROM POWER FUSE → **TERMINAL 8** OF THE DOOR LOCK ECU → **TERMINAL 15** → **TERMINAL 2** OF THE POWER MAIN RELAY → **TERMINAL 3** → TO **GROUND** FOR ABOUT **60** SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM POWER FUSE → **TERMINAL 4** OF THE POWER MAIN RELAY → **TERMINAL 1** → **TERMINAL 6** OF THE POWER WINDOW MASTER SW AND **TERMINAL 1** OF THE POWER MAIN RELAY → TO **TERMINAL 6** OF POWER WINDOW SW RH (PASSENGER'S). AS A RESULT, FOR ABOUT **60** SECONDS AFTER THE IGNITION SW IS TURNED OFF. IT IS POSSIBLE TO RAISE AND LOWER THE POWER WINDOW BY THE FUNCTIONING OF THIS RELAY. ALSO, BY OPENING THE DOOR (DOOR COURTESY SW ON) WITHIN ABOUT **60** SECONDS AFTER TURNING THE IGNITION SW TO OFF. A SIGNAL IS INPUT TO **TERMINAL 2** OF DOOR LOCK ECU. AS A RESULT, THE ECU TURNS OFF AND UP AND DOWN OF THE MOVEMENT OF THE WINDOWS STOPS.

POWER WINDOW

SERVICE HINTS

D 5 DOOR LOCK ECU

8-GROUND : ALWAYS APPROX. 12 VOLTS

16-GROUND: ALWAYS CONTINUITY

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

2-GROUND : CONTINUITY WITH DOOR OPENED

15-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON AND STAYS AT 12 VOLTS FOR 60 SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60 SECONDS PERIOD, VOLTAGE WILL DROP TO 0 VOLTS

D 9 DOOR COURTESY SW

1-GROUND: CONTINUITY WITH DOOR OPEN

P 8 POWER WINDOW SW (PASSENGER'S)

6-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON AND STAYS AT 12 VOLTS FOR 60 SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60 SECONDS PERIOD, VOLTAGE WILL DROP TO 0 VOLTS

P 5 POWER WINDOW MASTER SW

3-GROUND : ALWAYS CONTINUITY

6-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND STAYS AT 12 VOLTS FOR 60 SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60 SECONDS PERIOD, VOLTAGE WILL DROP TO 0 VOLTS

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

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

WINDOW LOCK SW

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 4	26	J 4	26	P 6	27
D 5	26	J 6	26	P 7	27
D 9	27	P 5	27	P 8	27

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IK1	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL

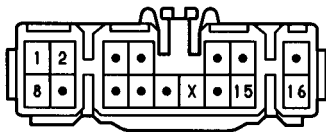
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	32	COWL WIRE	I 5	32	COWL WIRE
I 2					

D 4 BLACK



D 5 GRAY



D 9

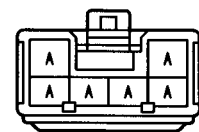


J 4



(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

P 5



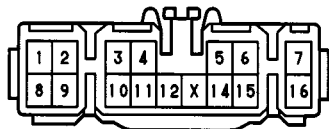
P 6, P 7



P 8



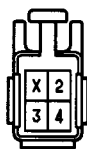
D 5 GRAY



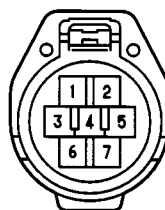
D 9, D10



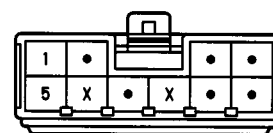
D11, D12



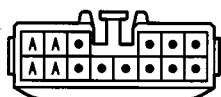
D13, D14 GRAY



I 9 BLACK



J 1



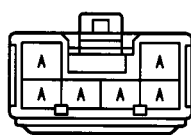
(HINT:SEE PAGE 7)

J 4



(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

DOOR LOCK

SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 8** OF THE DOOR LOCK ECU AND **TERMINAL 4** OF THE POWER MAIN RELAY THROUGH POWER FUSE.

1. MANUAL LOCK OPERATION

TO CHANGE DOOR LOCK SW AND KEY SW TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINAL 10, 12** OF THE DOOR LOCK ECU AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 4** → **TERMINAL 7** OF THE DOOR LOCK MOTOR → **TERMINAL 5** → **TERMINAL 3** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK SOLENOID CAUSES THE DOOR TO LOCK.

2. MANUAL UNLOCK OPERATION

TO CHANGE DOOR LOCK CONTROL SW AND KEY SW RH TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINAL 11** OF THE DOOR LOCK ECU AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK SOLENOID CAUSES DOOR TO UNLOCK.

3. DOUBLE OPERATION UNLOCK OPERATION

WHEN THE DOOR LOCK KEY SW (DRIVER'S) IS TURNED TO THE UNLOCK SIDE, ONLY THE DRIVER'S DOOR IS MECHANICALLY UNLOCKED. TURNING THE DOOR LOCK KEY SW (DRIVER'S) TO THE UNLOCK SIDE CAUSES A SIGNAL TO BE INPUT TO **TERMINAL 9** OF THE ECU, AND IF THE SIGNAL IS INPUT AGAIN WITHIN **3** SECONDS BY TURNING THE SWITCH TO THE UNLOCK SIDE AGAIN, CURRENT FLOWS **TERMINAL 3** → **TERMINAL 5** OF DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → **GROUND**, CAUSING THE DOOR LOCK MOTOR TO OPERATE AND UNLOCK THE PASSENGER'S DOOR.

4. IGNITION KEY REMINDER OPERATION

* OPERATING DOOR LOCK KNOB (IN DOOR LOCK SOLENOIDS OPERATION)

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 ECU. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

* OPERATING DOOR LOCK CONTROL SW OR DOOR LOCK KEY 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 UNLOCK BY THE FUNCTION OF SW CONTAINED IN SOLENOIDS, WHICH THE SIGNAL IS INPUT TO **TERMINAL 6** (DRIVER'S) OR **5** (PASSENGER'S) OF THE ECU. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT IN ECU FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOOR TO UNLOCK.

* IN CASE OF KEY LESS 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 2** OR **14** OF THE ECU. BY THIS INPUT SIGNAL, THE RELAY WORKS AND CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL 5** OF THE DOOR LOCK MOTOR → **TERMINAL 7** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

SERVICE HINTS

D 5 DOOR LOCK ECU

16-GROUND : ALWAYS CONTINUITY

2-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN

8-GROUND : ALWAYS APPROX. 12 VOLTS

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

*DOOR LOCK CONTROL SW UNLOCKED

*DOOR LOCK CONTROL SW LOCKED WITH 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

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

*DOOR LOCK CONTROL SW LOCKED

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

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

14-GROUND : CONTINUITY WITH PASSENGER'S DOOR OPEN

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

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

11-GROUND : 0 VOLTS WITH DOOR LOCK CONTROL SW UNLOCKED, PASSENGER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY

1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
 9-GROUND : 0 VOLTS WITH DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY
 15-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
 12-GROUND : 0 VOLTS WITH DRIVER'S, PASSENGER'S DOOR LOCK CYLINDER LOCKED WITH KEY

I9 UNLOCK WARNING SW

1-5 : CLOSED WITH IGNITION KEY IN CYLINDER

D13, D14 KEY LOCK AND UNLOCK SW

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

2-3 : CLOSED WITH DOOR LOCK CYLINDER LOCKED WITH KEY

D9, D10 DOOR COURTESY SW

1-GROUND : CLOSED WITH DOOR OPEN

 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D5	26	D12	27	J1	26
D9	27	D13	27	J4	26
D10	27	D14	27	J6	26
D11	27	I9	26		

 : RELAY BLOCKS

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

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IK1	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

 : GROUND POINTS

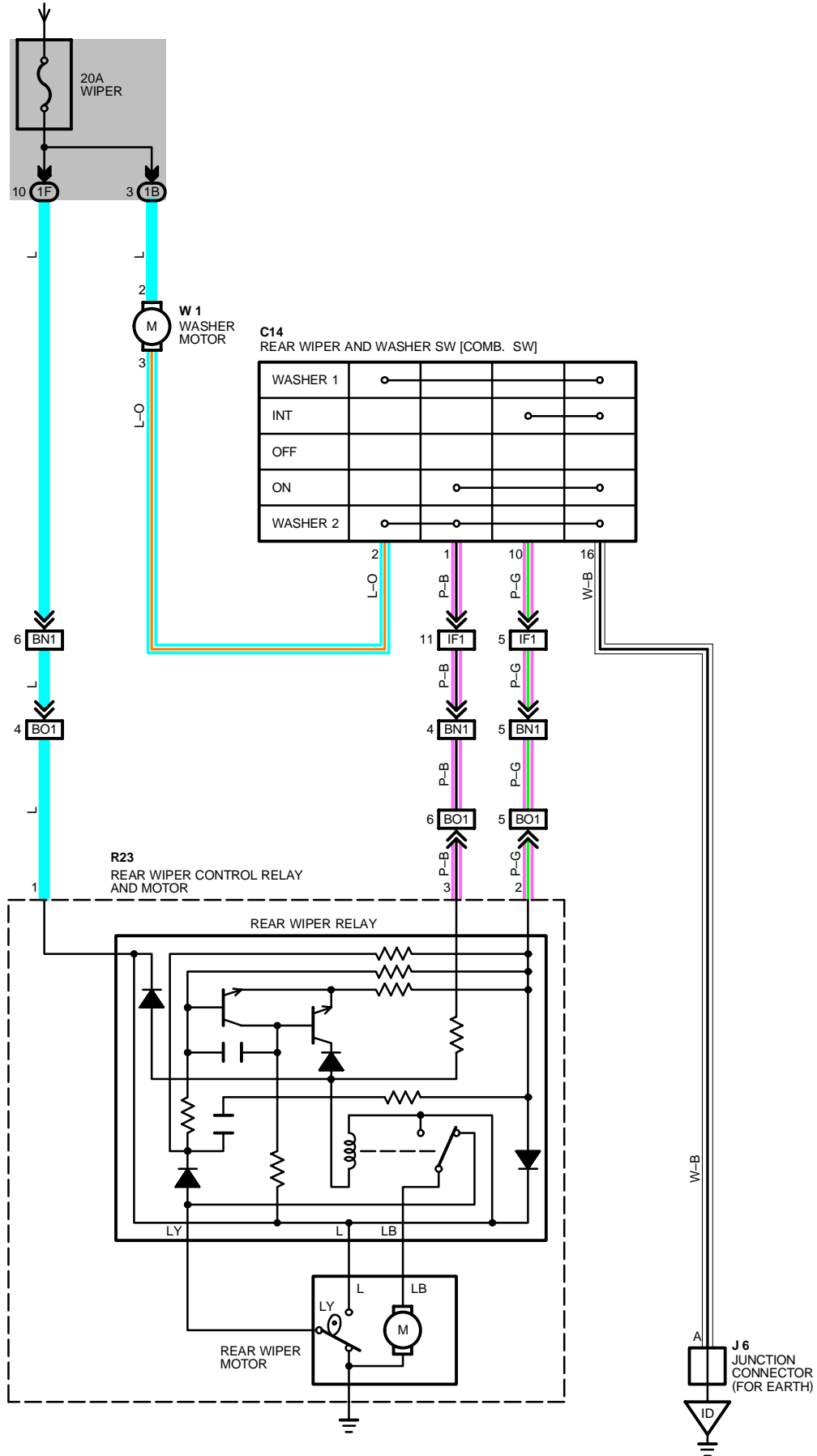
CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
IG	30	R/B NO. 4 SET BOLT

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I1	32	COWL WIRE	B2	34	FRONT DOOR LH WIRE
I2			B3	34	FRONT DOOR RH WIRE
I4					

REAR WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SYSTEM OUTLINE

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

1. REAR WIPER NORMAL OPERATION

WITH THE IGNITION SW TURNED ON AND REAR WIPER AND WASHER SW TURNED ON, THE CURRENT FLOWING TO **TERMINAL 1** OF THE REAR WIPER RELAY FLOWS TO **TERMINAL 3** OF THE RELAY → **TERMINAL 1** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → TO **GROUND**. THUS, THE RELAY COIL IS ACTIVATED AND THE CURRENT TO **TERMINAL 1** OF THE RELAY FLOWS TO **TERMINAL 1B** → **TERMINAL 1B** OF THE REAR WIPER MOTOR → MOTOR → TO **GROUND** AND CAUSES THE MOTOR TO OPERATE THE WIPER.

2. REAR WIPER INTERMITTENT OPERATION

WHEN THE IGNITION SW IS ON AND THE REAR WIPER AND WASHER SW IS TURNED TO **INT** POSITION, CURRENT FLOWING TO **TERMINAL 1** OF THE REAR WIPER MOTOR AND RELAY FLOWS TO **TERMINAL 2** OF THE RELAY → **TERMINAL 10** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → **GROUND**.

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

3. WASHER OPERATION

WITH THE IGNITION SW TURNED ON AND THE REAR WIPER AND WASHER SW TURNED TO **ON** POSITION, WHEN THE WIPER SW IS TURNED FURTHER, THE CURRENT FLOWING TO **TERMINAL 2** OF THE REAR WASHER MOTOR FLOWS TO **TERMINAL 3** OF THE MOTOR → **TERMINAL 2** OF THE REAR WIPER AND WASHER SW → **TERMINAL 16** → TO **GROUND** SO THAT THE WASHER MOTOR ROTATES AND THE WINDOW WASHER EJECTS THE SPRAY, ONLY WHILE THE SWITCH IS FULLY TURNED.

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

SERVICE HINTS

W 1 WASHER MOTOR

- 2-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
- 3-GROUND : CONTINUITY WITH WASHER SW TURNED ON

R23 REAR WIPER CONTROL RELAY AND MOTOR

- 1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
- 2-GROUND : CONTINUITY WITH REAR WIPER SW AT **INT** POSITION
- 3-GROUND : CONTINUITY WITH REAR WIPER SW AT **ON** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	26	R23	27		
J 6	26	W 1	25		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

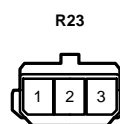
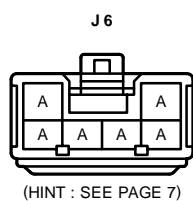
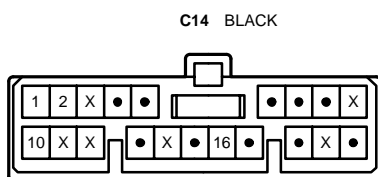
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
BN1	34	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (LEFT SIDE OF PACKAGE TRAY TRIM)
BO1	34	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 1 SUB WIRE (BACK DOOR UPPER LEFT)

▽ : GROUND POINTS

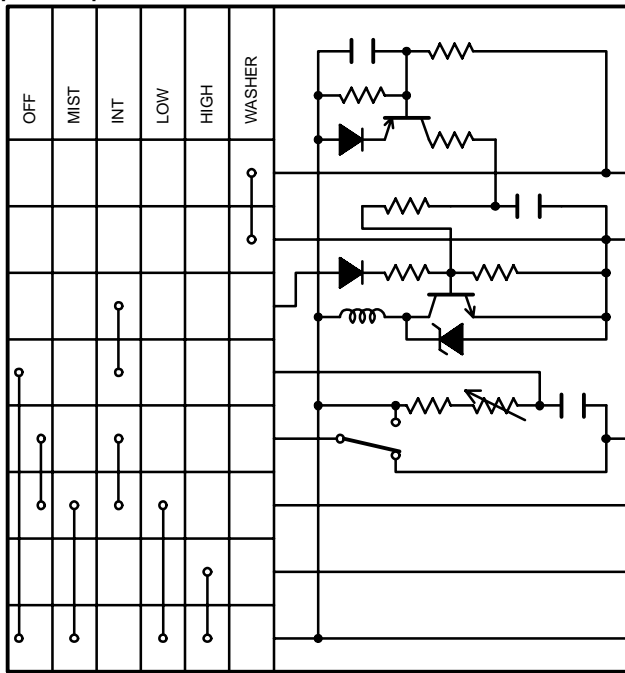
CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL



FRONT WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 46)

C14
FRONT WIPER AND WASHER SW (W/ WIPER RELAY)
[COMB. SW]



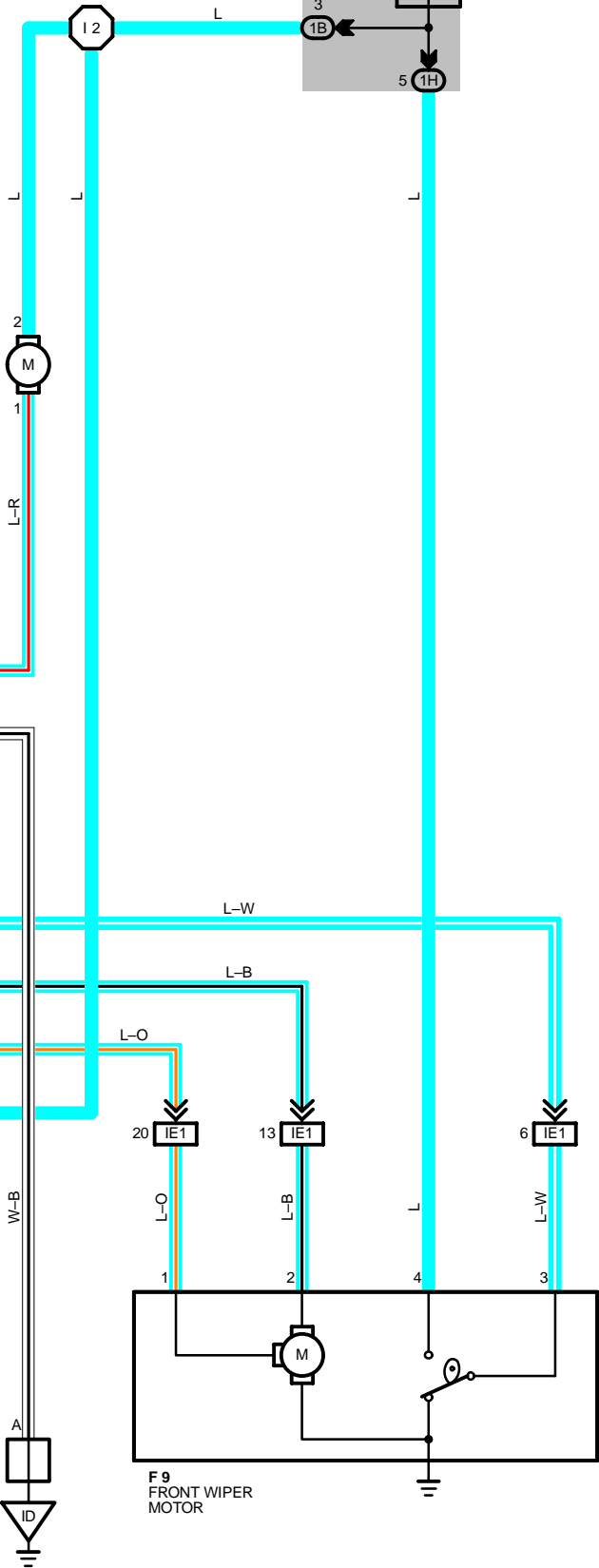
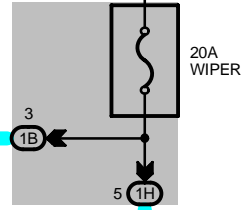
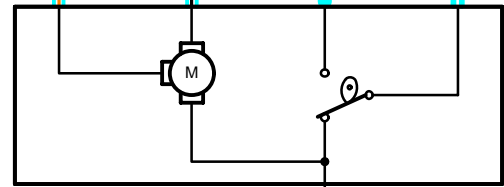
W 1
WASHER
MOTOR

2
1
L-R

J 6
JUNCTION
CONNECTOR
(FOR EARTH)



F 9
FRONT WIPER
MOTOR



SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL 18** OF THE WIPER AND WASHER SW, **TERMINAL 2** OF THE WASHER MOTOR AND **TERMINAL 4** OF THE FRONT WIPER MOTOR THROUGH THE WIPER FUSE.

1. LOW SPEED POSITION

WITH WIPER SW TURNED TO **LOW** POSITION, THE CURRENT FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO **GROUND** AND CAUSES TO THE WIPER MOTOR TO RUN AT LOW SPEED.

2. HIGH SPEED POSITION

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

3. INT POSITION (W/ INT SW)

WITH WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 16** → TO **GROUND**. THIS FLOW OF CURRENT OPERATES THE INTERMITTENT CIRCUIT AND THE CURRENT FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO GROUND AND FUNCTIONS.

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

4. MIST POSITION (W/ MIST SW)

WITH WIPER SW TURNED TO **MIST** POSITION, THE CURRENT FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO GROUND AND CAUSES TO THE WIPER MOTOR TO RUN AT LOW SPEED.

5. WASHER CONTINUOUS OPERATION (W/ INT CONTROL)

WITH WASHER SW TURNED TO ON, THE CURRENT FLOWS FROM **TERMINAL 2** OF THE WASHER MOTOR → **TERMINAL 1** → **TERMINAL 8** OF THE WIPER AND WASHER SW → **TERMINAL 16** → TO GROUND AND CAUSES TO THE WASHER MOTOR TO RUN. AND WINDOW WASHER IS JET. THIS CAUSES THE CURRENT TO FLOW WASHER CONTINUOUS OPERATION CIRCUIT (W/ INT SW) IN **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO **GROUND** AND FUNCTION.

SERVICE HINTS

C14 FRONT WIPER AND WASHER SW (W/ WIPER RELAY)

16-GROUND: ALWAYS CONTINUITY

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

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

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

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

13-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON AND AFTER WIPER SW OFF UNTIL WIPER MOTOR STOPS

F9 FRONT WIPER MOTOR

3-4 : CLOSED UNLESS WIPER MOTOR AT **STOP** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	26	J6	26		
F9	25	W1	25		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

▽ : GROUND POINTS

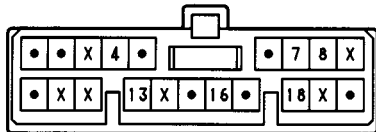
CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL

FRONT WIPER AND WASHER

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
12	32	COWL WIRE			

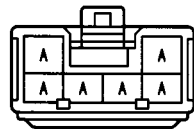
C14 BLACK



F 9 GRAY

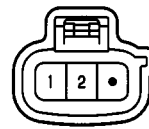


J 6



(HINT:SEE PAGE 7)

W 1 GRAY

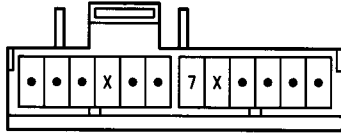


UNLOCK AND SEAT BELT WARNING

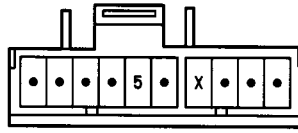
B 7, B 8



C11 (A)



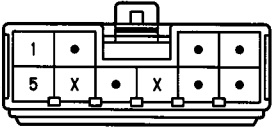
C12 (B) GRAY



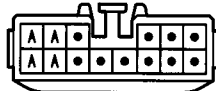
D 9



I 9 BLACK

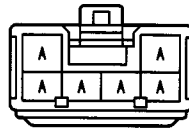


J 1



(HINT: SEE PAGE 7)

J 6



(HINT: SEE PAGE 7)

SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 1** OF THE SEAT BELT WARNING RELAY [INTEGRATION RELAY] THROUGH DOME FUSE.

1. SEAT BELT WARNING SYSTEM

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE GAUGE FUSE TO **TERMINAL 7** OF THE SEAT BELT WARNING 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 SEAT BELT WARNING 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 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 THE SEAT BELT IS PUT ON (BUCKLE SW ON) DURING THIS PERIOD (WHILE THE BUZZER IS SOUNDING), SIGNAL INPUT TO **TERMINAL 8** OF RELAY STOPS AND THE CURRENT FLOW FROM **TERMINAL 1** OF THE RELAY → **TERMINAL 10** → **GROUND** IS CUT, CAUSING THE BUZZER TO STOP.

2. UNLOCK WARNING SYSTEM

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

SERVICE HINTS

I9 UNLOCK WARNING SW

1-5 : CLOSED WITH IGNITION KEY IN CYLINDER

SEAT BELT WARNING RELAY [INTEGRATION RELAY]

10-GROUND : ALWAYS CONTINUITY

6-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN

5-GROUND : CONTINUITY WITH IGNITION KEY IN CYLINDER

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

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

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

D9 DOOR COURTESY SW

1-GROUND : CLOSED WITH DRIVER'S DOOR OPEN

B7, B8, BUCKLE SW

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 7	27	C12 B	26	J 1	26
B 8	27	D 9	27	J 6	26
C11 A	26	I 9	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1D		
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

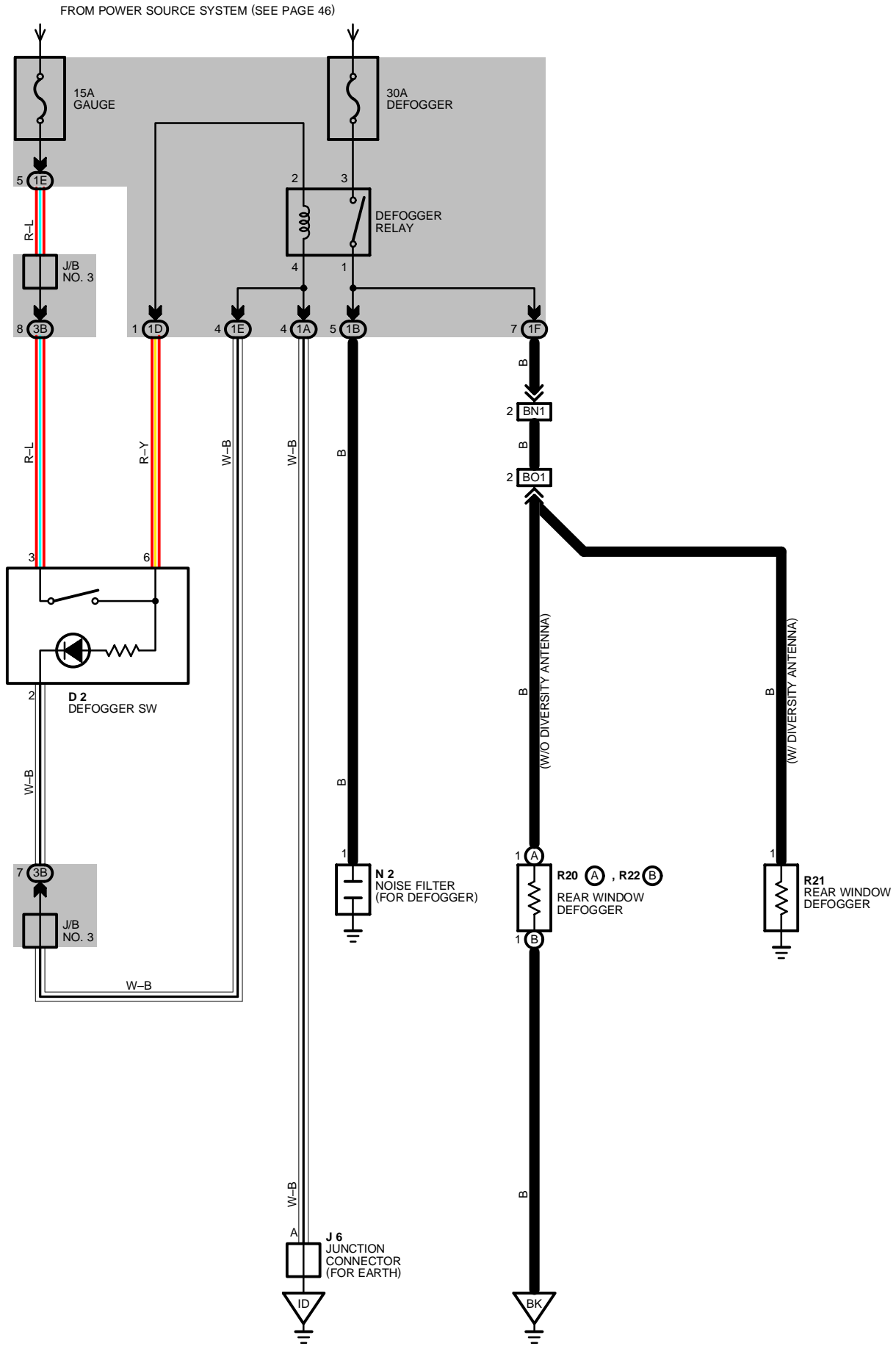
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BL1	34	FLOOR WIRE AND FRAME WIRE (LEFT SIDE OF FRONT FLOOR PANEL)
BM1	34	FRAME WIRE AND SEAT WIRE (UNDER THE DRIVER'S SEAT)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
BI	34	UNDER THE LEFT CENTER PILLAR

REAR WINDOW DEFOGGER



SERVICE HINTS

DEFOGGER RELAY

1-3 : CLOSED WITH IGNITION SW ON AND DEFOGGER SW ON

D2 DEFOGGER SW

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

2-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 2	26	N 2	26	R 21	27
J 6	26	R 20	A 27	R 22	B 27

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1D		
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BN1	34	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (LEFT SIDE OF PACKAGE TRAY TRIM)
BO1	34	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 1 SUB WIRE (BACK DOOR UPPER LEFT)

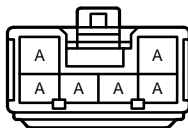
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
BK	34	BACK DOOR RIGHT

D 2 BLACK



J 6



(HINT : SEE PAGE 7)

N 2



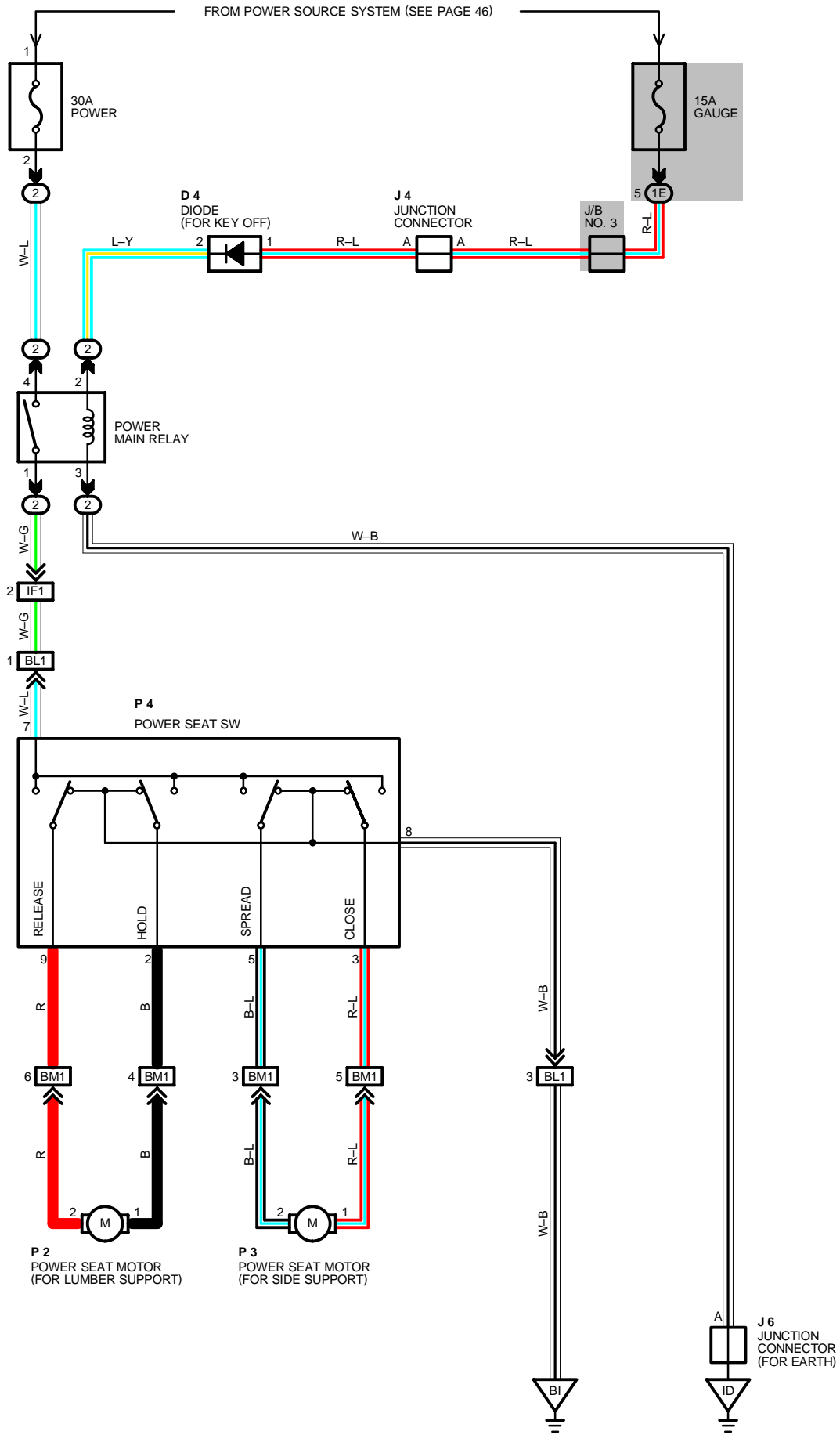
R 20 (A), R 22 (B) BLACK



R 21



POWER SEAT



SERVICE HINTS

POWER MAIN RELAY

(2) 1-(2) 4 : CLOSED WITH IGNITION SW AT **ON** POSITION

P 4 POWER SEAT SW

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

8- GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 4	26	J 6	26	P 3	27
J 4	26	P 2	27	P 4	27

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
BL1	34	FLOOR WIRE AND FRAME WIRE (LEFT SIDE OF FRONT FLOOR PANEL)
BM1	34	FRAME WIRE AND SEAT WIRE (UNDER THE DRIVER'S SEAT)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
BI	34	UNDER THE LEFT CENTER PILLAR

D 4 BLACK

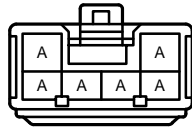


J 4



(HINT : SEE PAGE 7)

J 6



(HINT : SEE PAGE 7)

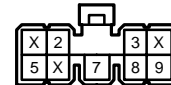
P 2



P 3 BLUE

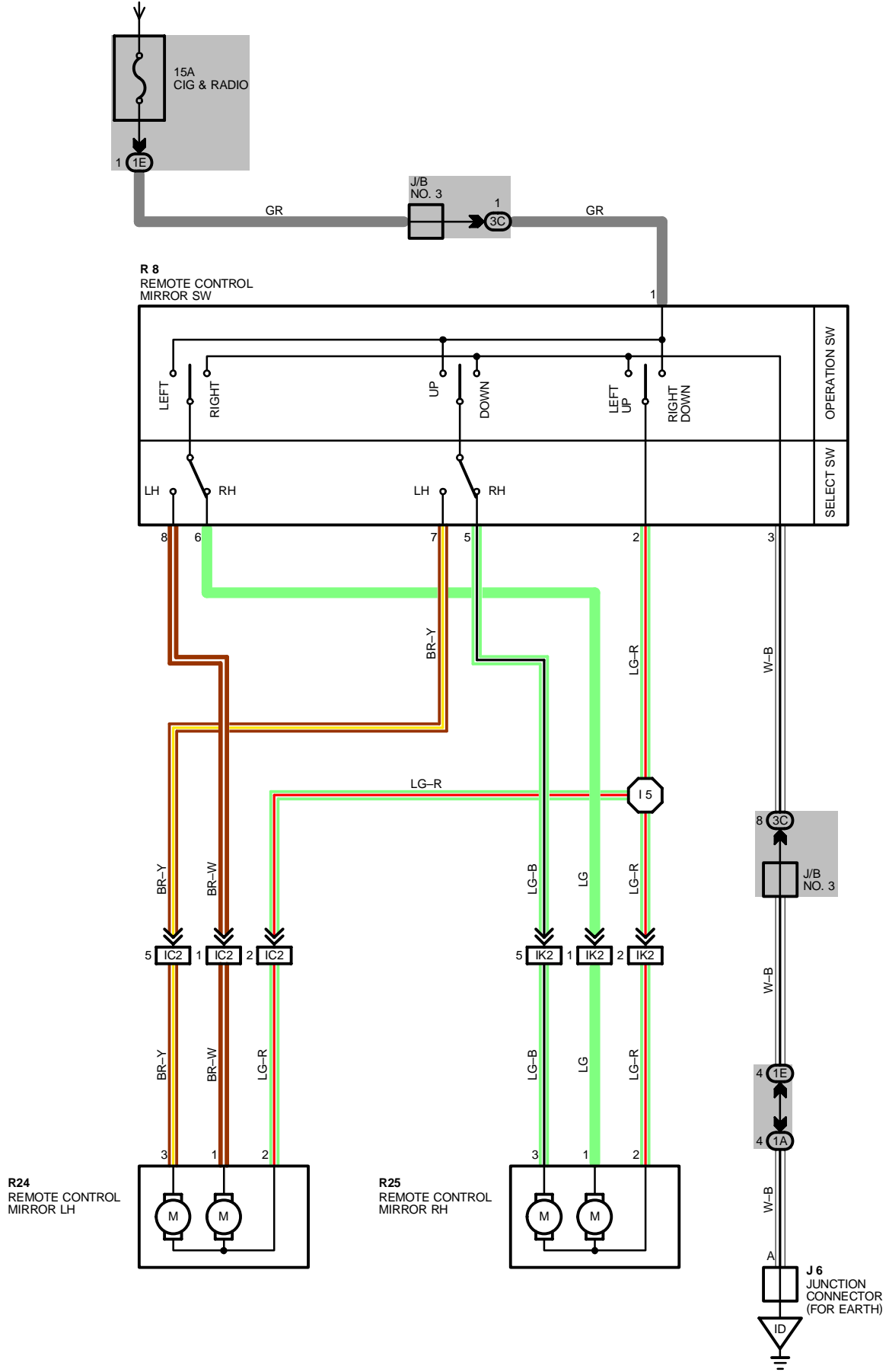


P 4



REMOTE CONTROL MIRROR

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SERVICE HINTS

R 8 REMOTE CONTROL MIRROR SW

- 1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
- 2-3 : CONTINUITY WITH OPERATION SW AT **UP** OR **LEFT** POSITION
- 1-2 : CONTINUITY WITH OPERATION SW AT **DOWN** OR **RIGHT** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 6	26	R24	27		
R 8	26	R25	27		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC2	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IK2	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

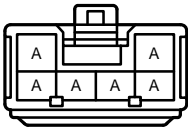
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL

○ : SPLICE POINTS

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

J 6



(HINT : SEE PAGE 7)

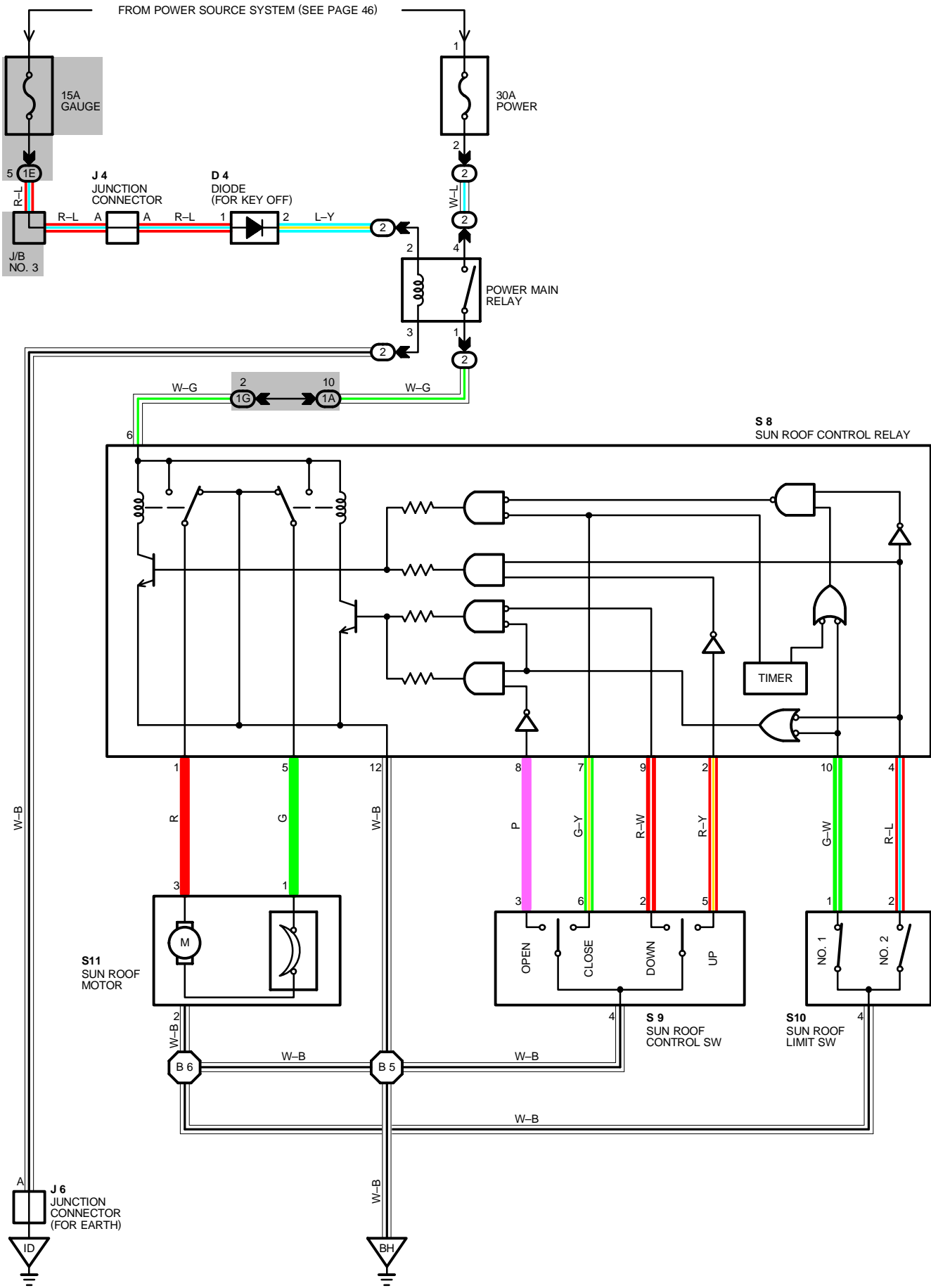
R 8



R24, R25



SUN ROOF



SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 4** OF THE POWER MAIN RELAY THROUGH THE POWER FUSE, WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO **TERMINAL 2** OF THE POWER MAIN RELAY. THIS ACTIVATES THE RELAY AND CURRENT FLOWING TO **TERMINAL 4** OF THE POWER MAIN RELAY FLOWS TO **TERMINAL 1** OF THE POWER MAIN RELAY → TO **TERMINAL 6** OF THE SUN ROOF CONTROL RELAY.

1. SLIDE OPEN OPERATION

WHEN THE IGNITION SW IS ON AND THE SUN ROOF SW PUSHED TO THE OPEN SIDE, A SIGNAL IS INPUT TO **TERMINAL 8** OF THE SUN ROOF CONTROL RELAY. WHEN THIS OCCURS ACTIVATING THE RELAY SO THAT CURRENT FLOWS FROM **TERMINAL 6** OF THE RELAY → **TERMINAL 5** → **TERMINAL 1** OF THE SUN ROOF MOTOR → MOTOR → **TERMINAL 3** → **TERMINAL 1** OF THE RELAY → **TERMINAL 12** → **GROUND**, THE MOTOR ROTATES TO THE OPEN SIDE AND THE SUN ROOF SLIDES OPEN AS LONG AS THE SUN ROOF CONTROL SW IS PUSHED TO THE OPEN SIDE.

WHEN THE SUN ROOF IS OPENED COMPLETELY, EVEN IF THE SUN ROOF SW IS PUSHED CONTINUOUSLY, THE CURRENT TO THE SUN ROOF MOTOR INCREASES.

IN THIS CASE, THE CIRCUIT BREAKER BUILT INTO THE MOTOR OPENS AND CUTS OUT THE CURRENT TO THE MOTOR, PREVENTING THE MOTOR FROM BURNING OUT.

2. SLIDE CLOSE OPERATION

WHEN THE IGNITION SW IS ON AND THE SUN ROOF CONTROL SW IS PUSHED TO THE CLOSE SIDE, A SIGNAL IS INPUT TO **TERMINAL 7** OF THE SUN ROOF CONTROL RELAY. THIS ACTIVATES THE RELAY AND THE CURRENT FLOWING TO **TERMINAL 6** FLOWS TO **TERMINAL 1** → **TERMINAL 3** OF THE SUN ROOF MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 5** OF THE RELAY → **TERMINAL 12** → **GROUND**. THIS CAUSES THE MOTOR TO ROTATE TO THE CLOSE SIDE AND SLIDE CLOSE OPERATION CONTINUES AS LONG AS THE SUN ROOF CONTROL SW IS PUSHED TO THE CLOSE SIDE.

100 MM BEFORE THE FULLY **CLOSED** POSITION THE SUN ROOF LIMIT NO. 1 SW TURN OFF. THIS SIGNAL IS INPUT INTO THE RELAY, SO THE RELAY STOPS OPERATION. THUS CURRENT DOES NOT FLOW TO THE SUN ROOF MOTOR AND THE SUN ROOF AUTOMATICALLY STOPS.

IF THE SUN ROOF SW IS THEN PUSH AGAIN, THE TIMER INSTALLED IN THE SUN ROOF CONTROL TURNS ON AND THE RELAY OPERATES FOR **0.65** SEC. TO RE-OPERATE THE MOTOR SO THAT THE SUN ROOF LIMIT SW NO. 1 TURNS ON (SUN ROOF LIMIT SW NO. 2 TURNS OFF). AS A RESULT, AS LONG AS THE SUN ROOF SW IS PUSHED, SLIDE CLOSE OPERATION OCCURS AND THE SUN ROOF IS ABLE TO FULLY CLOSE.

3. TILT UP OPERATION

WHEN THE SUN ROOF CONTROL SW IS PUSHED TO **TILT UP** POSITION, WITH THE IGNITION SW TURNED ON AND THE SLIDE ROOF COMPLETELY CLOSED A SIGNAL IS INPUT TO **TERMINAL 2** OF THE SUN ROOF CONTROL RELAY AND SUN ROOF LIMIT SW NO. 2 IS TURNED OFF (SUN ROOF LIMIT SW NO. 1 TURNS ON) SIMULTANEOUSLY, CAUSING THE SUN ROOF CONTROL RELAY TO OPERATE. AS A RESULT, THE RELAY IS ACTIVATED AND CURRENT FLOWS FROM **TERMINAL 6** OF THE RELAY → **TERMINAL 1** → **TERMINAL 3** OF THE SUN ROOF MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 5** OF THE RELAY → **TERMINAL 12** → **GROUND**, ROTATING THE MOTOR FOR TILT UP OPERATION.

4. TILT DOWN OPERATION

WHEN THE SUN ROOF CONTROL SW IS PUSHED TO THE **TILT DOWN** POSITION, WITH THE IGNITION SW TURNED ON AND THE SLIDE ROOF TILTED UP, A SIGNAL IS INPUT TO **TERMINAL 9** OF THE SUN ROOF CONTROL RELAY SIGNALS THAT SUN ROOF LIMIT SW NO. 1 AND NO. 2 ARE OFF ARE INPUT SEPARATELY TO **TERMINAL 10** AND **TERMINAL 4**.

AS A RESULT, RELAY ACTIVATES AND THE CURRENT FLOWS FROM **TERMINAL 6** OF THE RELAY → **TERMINAL 5** → **TERMINAL 1** OF THE SUN ROOF MOTOR → MOTOR → **TERMINAL 3** → **TERMINAL 1** OF THE RELAY → **TERMINAL 12** → **GROUND**, ROTATING THE MOTOR FOR TILT DOWN OPERATION.

SERVICE HINTS

S 8 SUN ROOF CONTROL RELAY

12-GROUND : ALWAYS CONTINUITY

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

1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND SUN ROOF SW **CLOSED** OR **UP** POSITION

5-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON AND SUN ROOF SW **OPEN** OR **DOWN** POSITION

(DISCONNECT WIRING CONNECTOR FROM ECU)

8-GROUND : CONTINUITY WITH SUN ROOF SW AT **OPEN** POSITION

7-GROUND : CONTINUITY WITH SUN ROOF SW AT **CLOSE** POSITION

9-GROUND : CONTINUITY WITH SUN ROOF SW AT **DOWN** POSITION

2-GROUND : CONTINUITY WITH SUN ROOF SW AT **UP** POSITION

SUN ROOF

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 4	26	S 8	27	S11	27
J 4	26	S 9	27		
J 6	26	S10	27		

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1G	18	ROOF WIRE AND J/B NO. 1 (LEFT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
BH	34	ROOF LEFT

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 5	34	ROOF WIRE	B 6	34	ROOF WIRE

D 4 BLACK

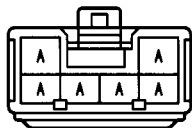


J 4



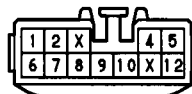
(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

S 8



S 9



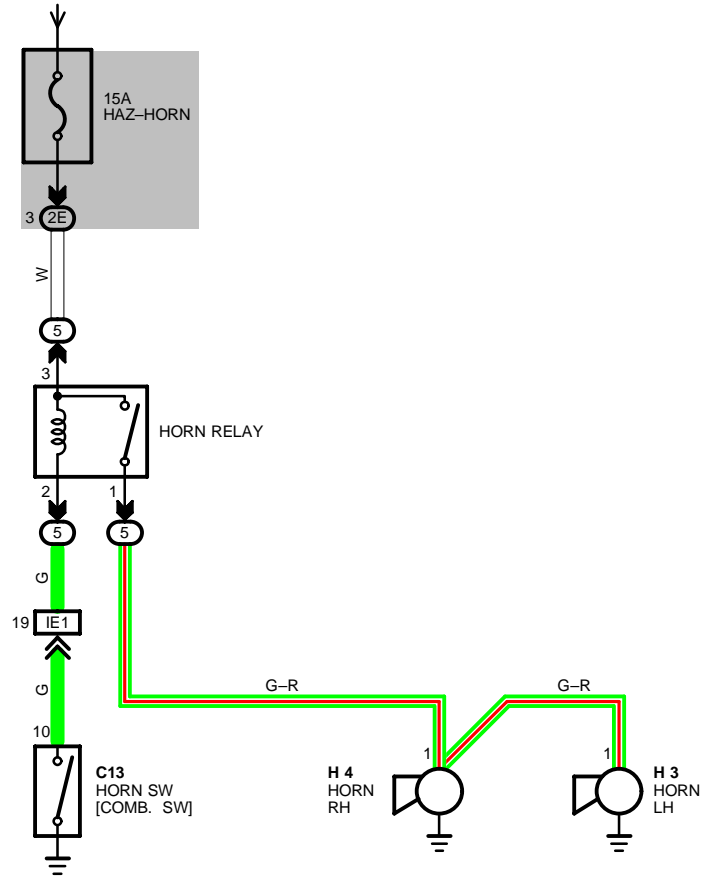
S10



S11



FROM POWER SOURCE SYSTEM (SEE PAGE 46)



SERVICE HINTS

HORN RELAY

(5) 3- (5) 1 : CLOSED WITH HORN SW ON

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C13	26	H 3	25	H 4	25

□ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

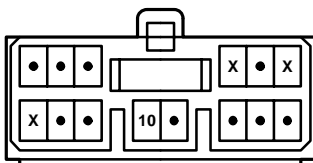
○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO.2 (NEAR THE BATTERY)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

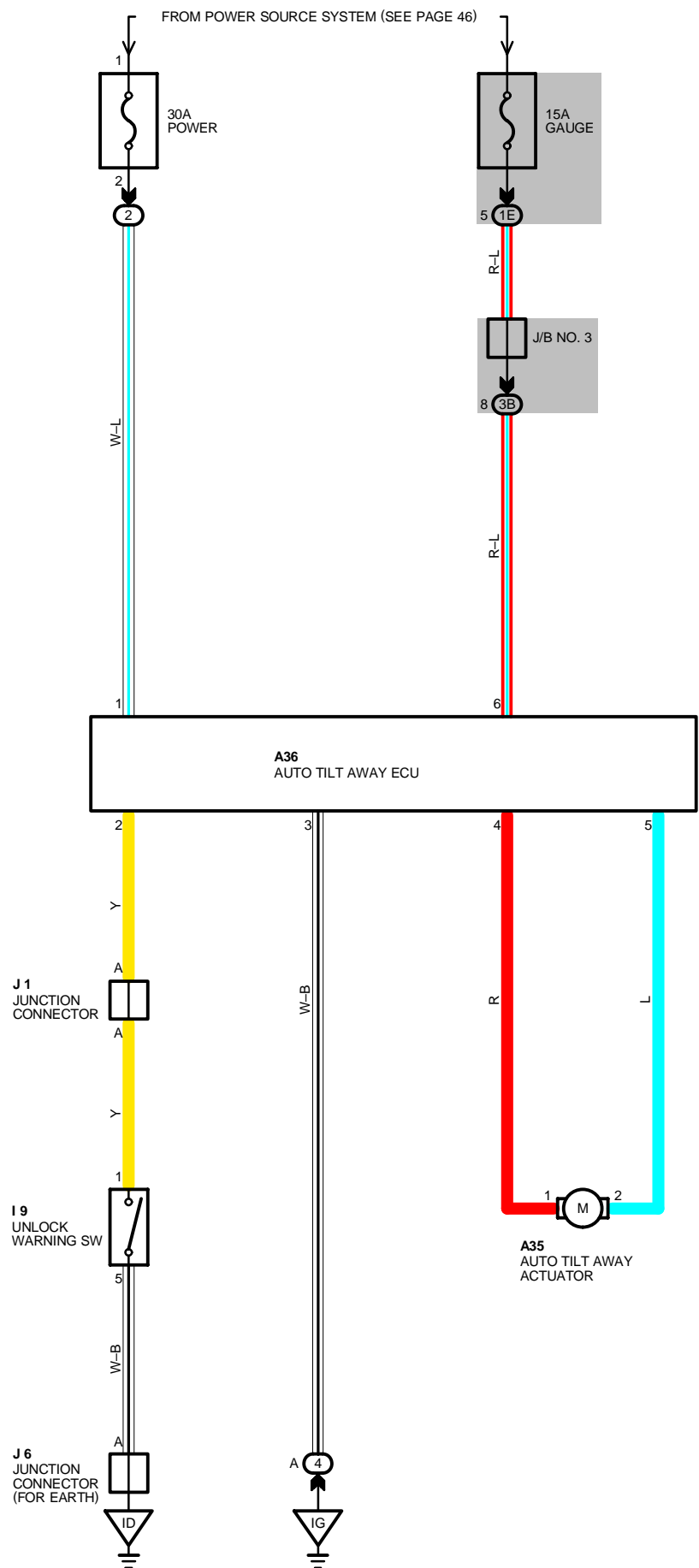
C13 BLACK



H 3, H 4 BLACK



AUTO TILT AWAY STEERING



SYSTEM OUTLINE

THIS SYSTEM ALLOWS EASIER ENTRY AND EXIT BY THE DRIVER BY MOVING THE STEERING POSITION TO THE **UPPER** POSITION WHEN THE IGNITION KEY IS REMOVED.

CURRENT ALWAYS FLOWS FROM THE POWER FUSE TO **TERMINAL 1** OF AUTO TILT AWAY ECU. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE GAUGE FUSE AS FAR AS **TERMINAL 6**.

1. TILT-UP OPERATION

WHEN IGNITION KEY IS REMOVED FROM THE IGNITION KEY CYLINDER (UNLOCK WARNING SW OFF), A WARNING SW OFF SIGNAL IS INPUT TO **TERMINAL 2** OF THE AUTO TILT AWAY ECU. AS A RESULT, THE AUTO TILT AWAY OPERATES AND CURRENT FLOWS FROM **TERMINAL 4** OF THE AUTO TILT AWAY ECU → **TERMINAL 1** OF THE AUTO TILT AWAY ACTUATOR → ACTUATOR → **TERMINAL 2** → **TERMINAL 5** OF THE AUTO TILT AWAY ECU, CAUSING THE ACTUATOR TO ROTATE AND RELEASE THE LOCK MECHANISM LOCKED AT THE **MEMORY** POSITION (THE POSITION SELECTED USING THE TILT ADJUSTMENT LEVER). THE STEERING WHEEL THE MOVES FROM THE **MEMORY** POSITION TO THE **UPPER** POSITION USING SPRING FORCE, THEN MECHANICAL LOCK OCCURS.

2. TILT RETURN OPERATION

WHEN THE IGNITION KEY IS INSERTED INTO THE IGNITION KEY CYLINDER (UNLOCK WARNING SW ON), A WARNING SW ON SIGNAL IS INPUT TO **TERMINAL 2** OF THE AUTO TILT AWAY ECU. AS A RESULT, THE AUTO TILT AWAY ECU OPERATES AND CURRENT FLOWS FROM **TERMINAL 5** OF THE AUTO TILT AWAY ECU → **TERMINAL 2** OF THE AUTO TILT AWAY ACTUATOR → ACTUATOR → **TERMINAL 1** → **TERMINAL 4** OF THE AUTO TILT AWAY ECU, CAUSING THE ACTUATOR TO ROTATE AND RELEASE THE LOCK MECHANISM LOCKED AT THE **UPPER** POSITION. THE STEERING WHEEL CAN THEN BE RETURNED BY HAND TO THE **MEMORY** POSITION, WHERE MECHANICAL LOCK OCCURS.

SERVICE HINTS

A36 AUTO TILT AWAY ECU

- 1-GROUND : ALWAYS APPROX. 12 VOLTS
- 6-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
- 5-GROUND : CONTINUITY WITH IGNITION KEY IN CYLINDER
- 3-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A35	26	I 9	26	J 6	26
A36	26	J 1	26		

○ : RELAY BLOCKS

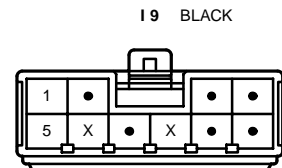
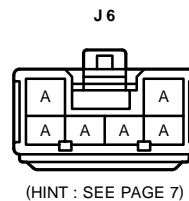
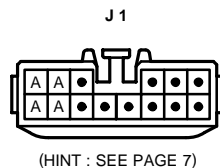
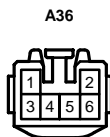
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (LEFT KICK PANEL)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

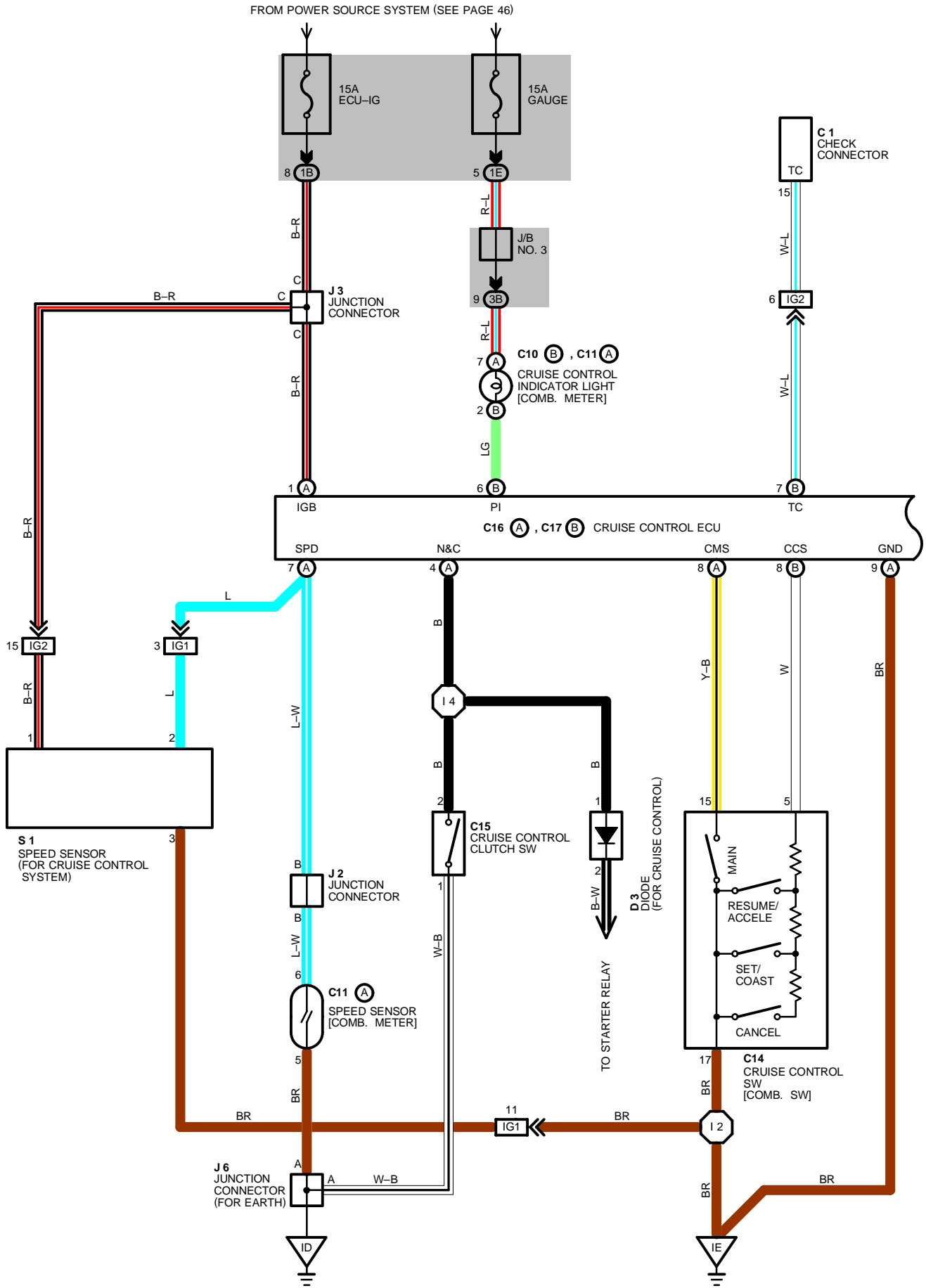
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
3B	22	COWL WIRE J/B NO. 3 (BEHIND COMBINATION METER)

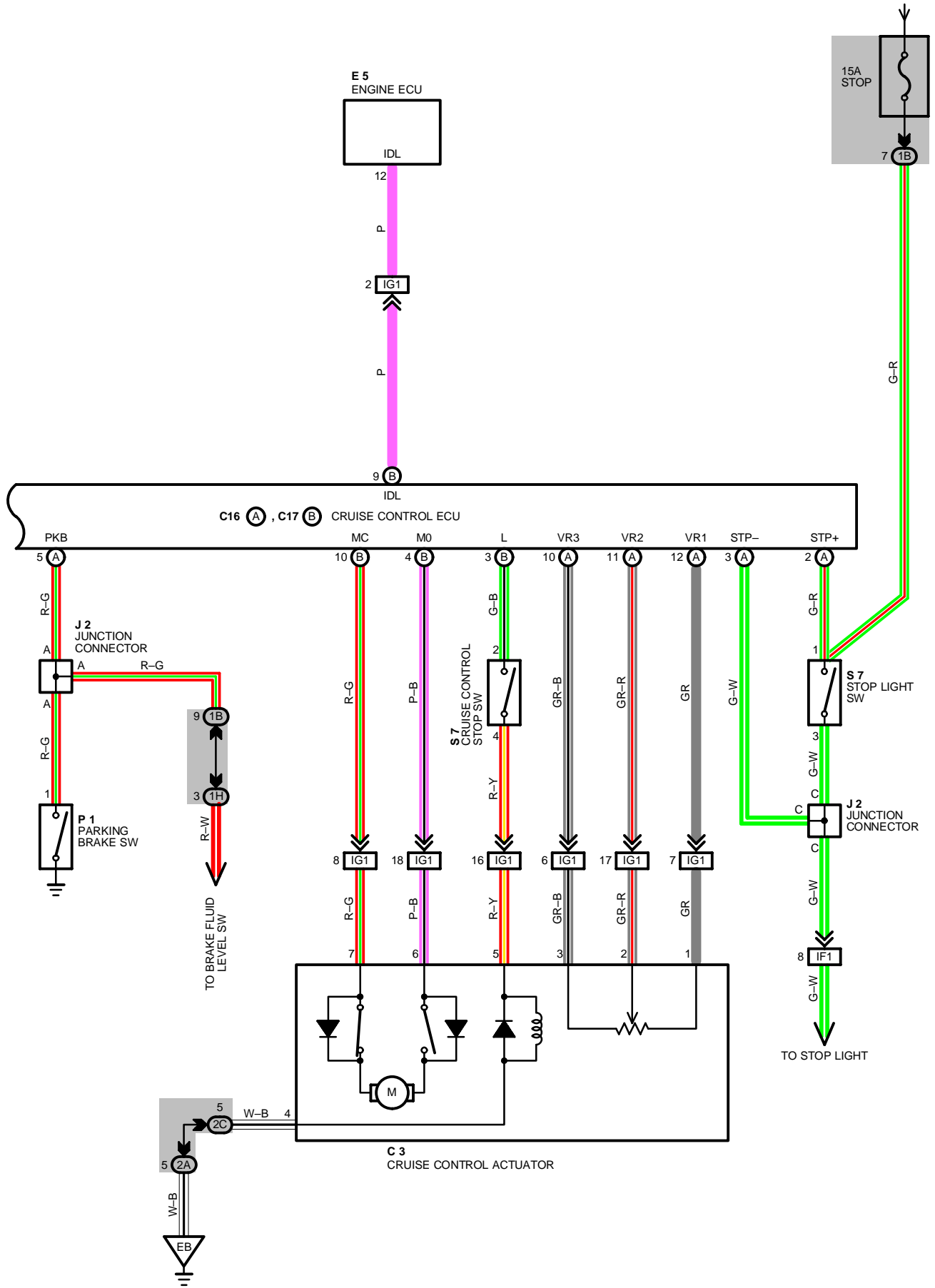
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL
IG	30	R/B NO. 4 SET BOLT



CRUISE CONTROL





CRUISE CONTROL

SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH STOP FUSE TO **TERMINAL (A) 2** OF THE CONTROL ECU AND **TERMINAL 1** OF STOP LIGHT SWITCH, AND ALSO THROUGH THE DOME FUSE TO **TERMINAL (A) 6** OF CRUISE CONTROL ECU.

WITH THE IGNITION SWITCH TURNED TO ON, THE CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL (A) 7** OF CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH ECU-IG FUSE FLOWS TO **TERMINAL (A) 1** OF CRUISE CONTROL ECU AND **TERMINAL 1** OF CRUISE CONTROL SPEED SENSOR.

WHEN THE IGNITION SWITCH IS ON AND THE CRUISE CONTROL MAIN SWITCH IS TURNED ON, A SIGNAL IS INPUT FROM **TERMINAL 15** OF CRUISE CONTROL MAIN SWITCH TO **TERMINAL (A) 8** OF CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT TO **TERMINAL (A) 1** OF CRUISE CONTROL ECU TO **TERMINAL (A) 9** OF CRUISE CONTROL ECU → **GROUND**, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT THROUGH THE GAUGE FUSE FLOWS FROM **TERMINAL (A) 7** OF CRUISE CONTROL INDICATOR LIGHT → **TERMINAL (B) 2** → **TERMINAL (B) 6** OF CRUISE CONTROL ECU → **TERMINAL (A) 9** → TO **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 SWITCH IS TURNED ON AND THE SET SWITCH IS PUSHED WITH THE VEHICLE SPEED WITHIN THE SET LIMIT (APPROX. **36 KM/H, 22 MPH** TO **200 KM/H, 124 MPH**), A SIGNAL IS INPUT TO **TERMINAL (B) 8** OF THE CRUISE CONTROL ECU AND THE VEHICLE SPEED AT THE TIME THE SET SWITCH 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 (A) 7** OF THE CRUISE CONTROL ECU FROM THE SPEED SENSOR, AND CONTROLS THE CRUISE CONTROL ACTUATOR TO MAINTAIN THE SET SPEED.

WHEN THE ACTUAL SPEED IS LOWER THAN THE SET SPEED, THE ECU CAUSES THE CURRENT TO THE CRUISE CONTROL ACTUATOR TO FLOW FROM **TERMINAL (B) 4** → **TERMINAL 6** OF CRUISE CONTROL ACTUATOR → **TERMINAL 7** → **TERMINAL (B) 10** OF CRUISE CONTROL ECU. AS A RESULT, THE MOTOR IN THE CRUISE CONTROL ACTUATOR IS ROTATED TO OPEN THE THROTTLE VALVE AND THE THROTTLE CABLE IS PULLED TO INCREASE THE VEHICLE SPEED. WHEN THE ACTUAL DRIVING SPEED IS HIGHER THAN THE SET SPEED, THE CURRENT TO CRUISE CONTROL ACTUATOR FLOWS FROM **TERMINAL (B) 10** OF ECU → **TERMINAL 7** OF CRUISE CONTROL ACTUATOR → **TERMINAL 6** → **TERMINAL (B) 4** OF 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 SWITCH 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 SWITCH 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 SWITCH 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 SWITCH, PUSHING THE RESUME SWITCH 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 SAFETY MAGNET CLUTCH OF THE ACTIVATOR MOTOR TURNS OFF AND THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE AND THE CRUISE CONTROL IS RELEASED.

- * DEPRESSING THE CLUTCH PEDAL (CRUISE CONTROL CLUTCH SWITCH ON). "SIGNAL INPUT TO **TERMINAL (A) 4** OF ECU"
- * DEPRESSING THE BRAKE PEDAL (STOP LIGHT SWITCH ON). "SIGNAL INPUT TO **TERMINAL (A) 2** OF ECU"
- * DEPRESSING THE PARKING BRAKE PEDAL (PARKING BRAKE SWITCH ON). "SIGNAL INPUT TO **TERMINAL (A) 5** OF ECU"
- * PUSH THE CANCEL SWITCH (CANCEL SWITCH ON). "SIGNAL INPUT TO **TERMINAL (B) 8**"

7. AUTO CANCEL FUNCTION

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

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

- * OVER CURRENT TO TRANSISTER DRIVING MOTOR AND/OR SAFETY MAGNETIC CLUTCH.
- * CURRENT TO CONTROL THE THROTTLE VALVE IN MOTOR BECOMES ALWAYS "ON".
- * OPEN CIRCUIT IN SAFETY MAGNETIC CLUTCH.
- * MOMENTARY INTERRUPTION OF VEHICLE SPEED SIGNAL.
- * THE RESUME SWITCH IS ALREADY ON WHEN THE MAIN SWITCH IS TURNED ON.
- * SHORT CIRCUIT IN CRUISE CONTROL SWITCH.
- * MOTOR DOES NOT OPERATE DESPITE THE MOTOR DRIVE SIGNAL BEING OUTPUT.

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

- * WHEN THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT, APPROX. **36 KM/H (22 MPH)**.
- * WHEN THE VEHICLE SPEED FALLS MORE THAN **16 KM/H (10 MPH)** BELOW THE SET SPEED, E.G. ON AN UPWARD SLOPE.
- * WHEN POWER TO THE CRUISE CONTROL SYSTEM IS MOMENTARILY CUT OFF.

C) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE CRUISE CONTROL IS RELEASED. BUT IN THIS CASE, THE SET SPEED IS NOT ERASED. IF THE VEHICLE SPEED IS MORE THAN THE MINIMUM SPEED LIMIT (APPROX. **36 KM/H 22 MPH**), CRUISE CONTROL OPERATION IS POSSIBLE USING "SET" OR "RESUME" ON THE CONTROL SWITCH.

- * OPEN CIRCUIT FOR **TERMINAL (A) 3** OF CRUISE CONTROL ECU AND **TERMINAL 3** OF STOP LIGHT SWITCH.

SERVICE HINTS

C 3 CRUISE CONTROL ACTUATOR

- 1-3 : APPROX. **2 K Ω**
- 5-4 : APPROX. **38.5 Ω**

C14 CRUISE CONTROL SW [COMB. SW]

- 15-17 : CONTINUITY WITH MAIN SW ON
- 5-17 : APPROX. **413 Ω** WITH CANCEL SW ON
APPROX. **68 Ω** WITH RESUME/ACCEL SW ON
APPROX. **198 Ω** WITH SET/COAST SW ON

C16(A), C17(B) CRUISE CONTROL ECU

- (A) 1-GROUND : APPROX. **12 VOLTS** WITH IGNITION SW AT **ON** POSITION
- (A)2, 6-GROUND : ALWAYS APPROX. **12 VOLTS**
- (A) 5-GROUND : CONTINUITY WITH PARKING BRAKE LEVER PULLED UP (ONE OF THE CANCEL SW) OR BRAKE LEVEL WARNING SW ON
- (A) 7-GROUND : **1 PULSE** EACH **40 CM** (DRIVE VEHICLE SLOWLY)
- (B) 8-GROUND : APPROX. **419 Ω** WITH CANCEL SW ON IN CONTROL SW
APPROX. **68 Ω** WITH RES/ACC SW ON IN CONTROL SW
APPROX. **198 Ω** WITH SET/COAST SW ON IN CONTROL SW
- (A) 9-GROUND : ALWAYS CONTINUITY

CRUISE CONTROL

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	25	C16	A 26	J 6	26
C 3	25	C17	B 26	P 1	26
C10	B 26	D 3	26	S 1	25
C11	A 26	E 5	26	S 7	26
C14	26	J 2	26		
C15	26	J 3	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO.1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3B	22	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

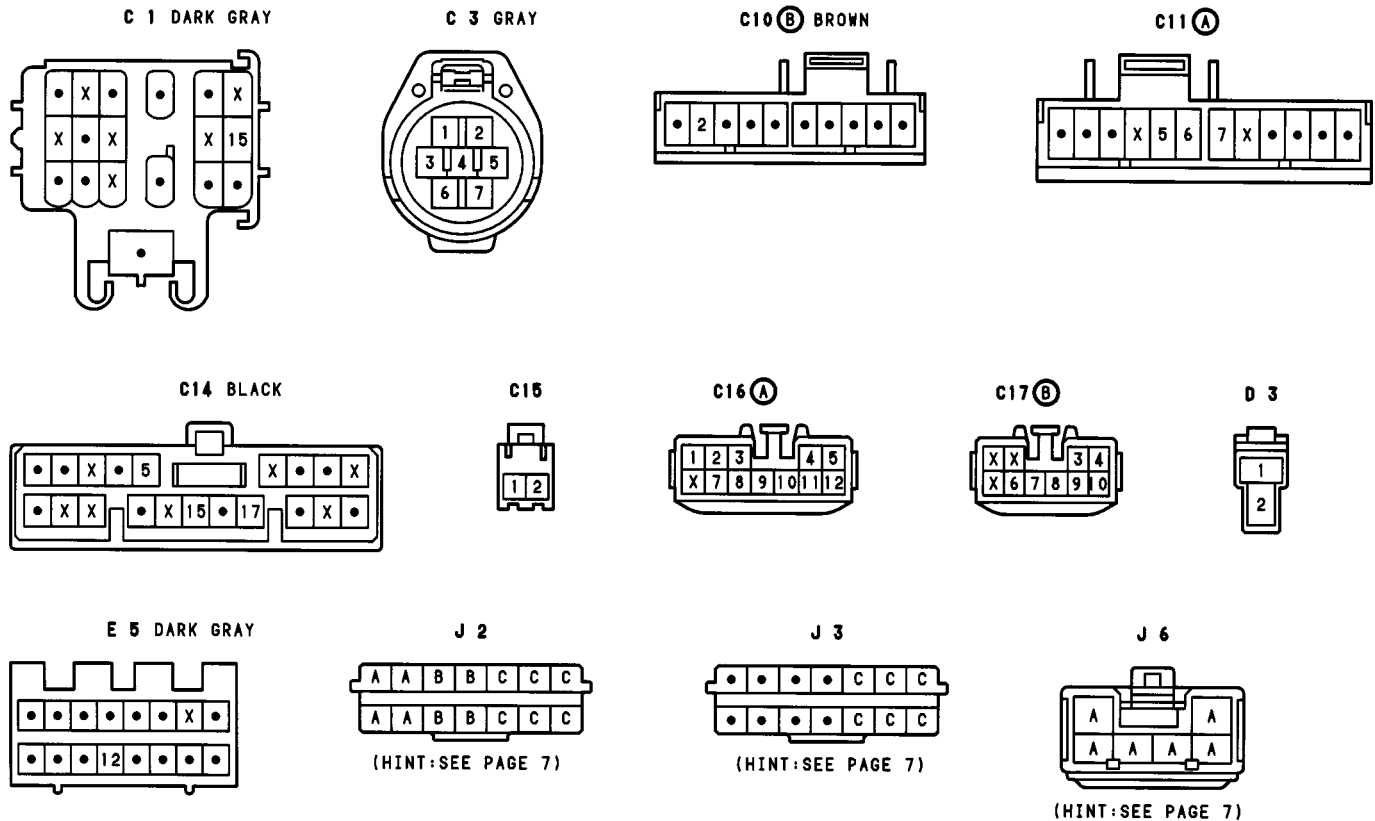
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IG2		

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL
IE	30	INSTRUMENT PANEL BRACE LH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	32	COWL WIRE	I 4	32	COWL WIRE



P 1 BLACK



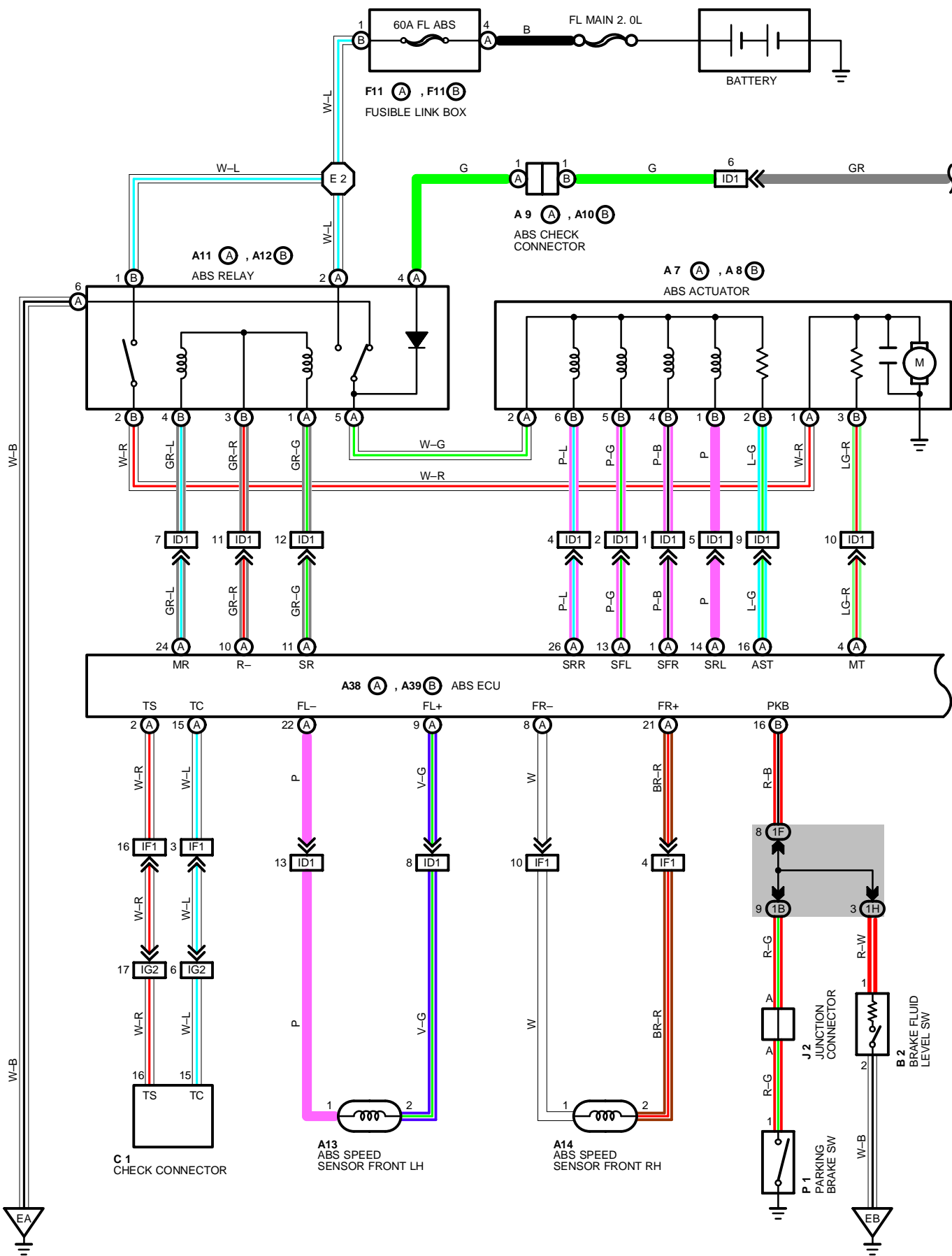
S 1 GRAY

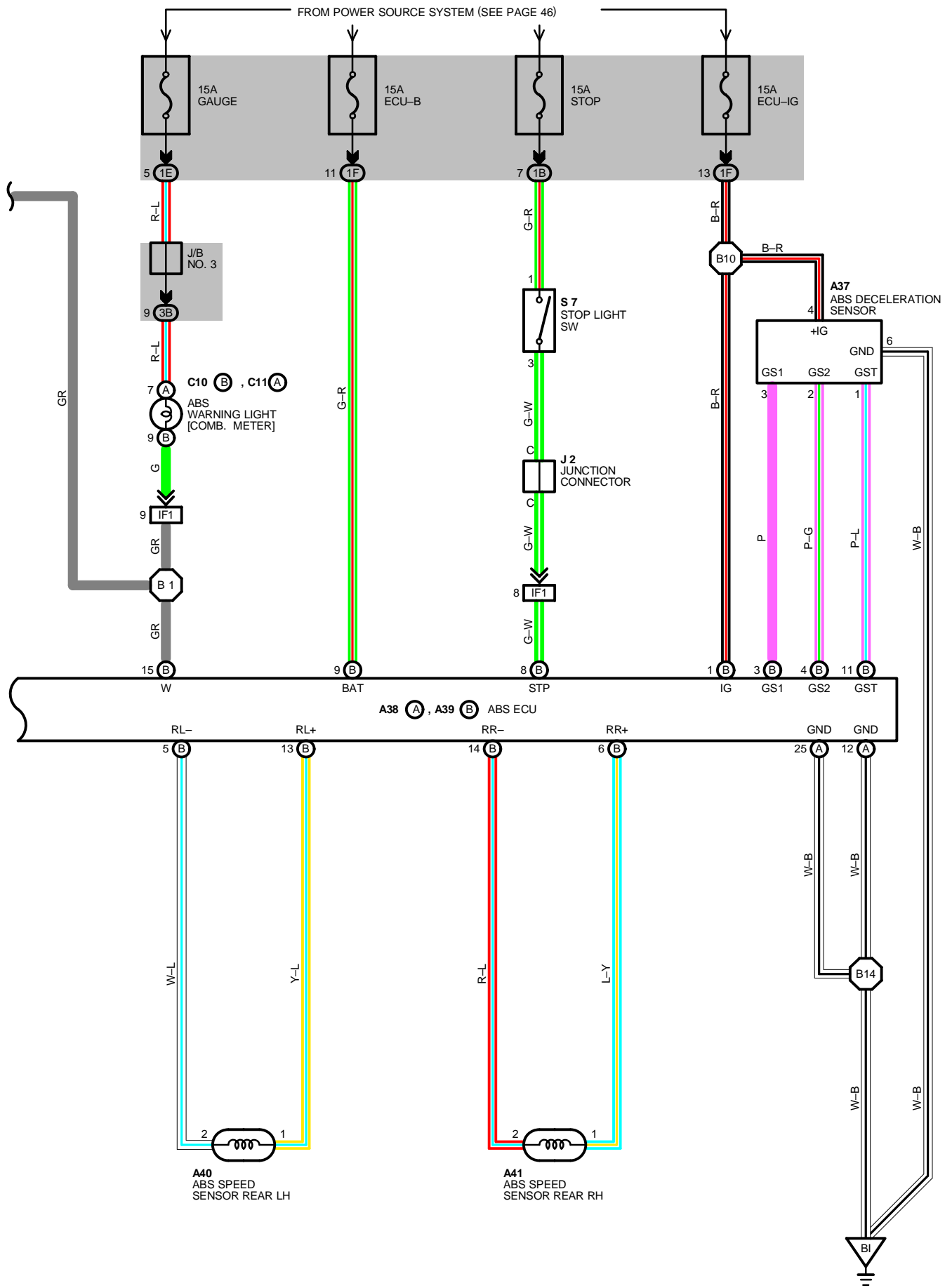


S 7



ABS (ANTI-LOCK BRAKE SYSTEM)





ABS (ANTI-LOCK BRAKE SYSTEM)

SYSTEM OUTLINE

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

1. INPUT SIGNALS

- (1) SPEED SENSOR SIGNAL
THE SPEED OF THE WHEELS IS DETECTED AND INPUT TO **TERMINALS FL+, FR+, RL+ AND RR+** OF THE ABS ECU.
- (2) STOP LIGHT SW SIGNAL
A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ABS ECU WHEN BRAKE PEDAL IS OPERATED.
- (3) PARKING BRAKE SW SIGNAL
A SIGNAL IS INPUT TO **TERMINAL PKB** OF THE ABS ECU WHEN THE PARKING BRAKE IS OPERATED.
- (4) DECELERATION SENSOR SIGNAL
THE DEGREE OF VEHICLE DECELERATION IS DETECTED AND INPUT TO THE ABS ECU.

2. SYSTEM OPERATION

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

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

SERVICE HINTS

A38(A), A39(B) ABS ECU

(CONNECT THE ECU CONNECTOR)

(A) 2-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION AND CHECK CONNECTOR TS-E1 NOT CONNECTED

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

(A)11-GROUND, (A) 13-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION ABS WARNING LIGHT GOES OFF

(A)14-GROUND, (A) 16-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION ABS WARNING LIGHT GOES OFF

(A)26-GROUND, (B) 15-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION ABS WARNING LIGHT GOES OFF

(A)12-GROUND : ALWAYS CONTINUITY

(A)25-GROUND : ALWAYS CONTINUITY

(B) 1-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION

(B) 8-GROUND : APPROX. 12 VOLTS WITH BRAKE PEDAL DEPRESSED

(B) 9-GROUND : ALWAYS APPROX. 12 VOLTS

(B)16-GROUND : APPROX. 12 VOLTS WITH ENGINE RUNNING AND PARKING BRAKE LEVER RETURNED

(DISCONNECT THE ECU CONNECTOR)

(A) 1- (A)16 : APPROX. 6 Ω

(A)13- (A)16 : APPROX. 6 Ω

(A)14- (A)16 : APPROX. 6 Ω

(A)16- (A)26 : APPROX. 6 Ω

(A) 8- (A)21 : APPROX. 0.8-1.3 Ω

(A) 9- (A)22 : APPROX. 0.8-1.3 Ω

(A)10- (A)11 : APPROX. 60-100 Ω

(A)10- (A)24 : APPROX. 50-80 Ω

(B) 5-(B)13 : APPROX. 1.1-1.5 KΩ

(B) 6-(B)14 : APPROX. 1.1-1.5 KΩ

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 7	A	25	A37		27	C11	A	26
A 8	B	25	A38	A	27	F11	A	25
A 9	A	25	A39	B	27		B	25
A10	B	25	A40		27	J 2		26
A11	A	25	A41		27	P 1		26
A12	B	25	B 2		25	S 7		26
A13		25	C 1		25			
A14		25	C10	B	26			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	30	ENGINE ROOM MAIN WIRE AND FLOOR WIRE (LEFT KICK PANEL)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG2	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
BI	34	UNDER THE LEFT CENTER PILLAR

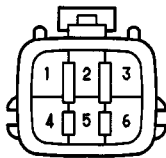
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	28	ENGINE ROOM MAIN WIRE	B11	34	LUGGAGE ROOM WIRE
B 1	34	FLOOR WIRE	B14	34	FLOOR WIRE

A 7 (A) GRAY



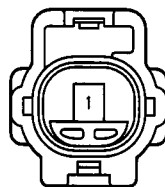
A 8 (B) GRAY



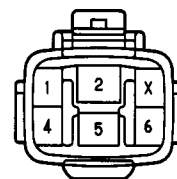
A 9 (A) DARK GRAY



A10 (B) DARK GRAY



A11 (A) GRAY



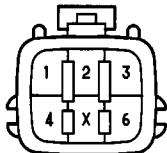
A12 (B) GRAY



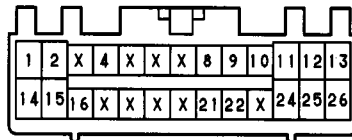
A13, A14 GRAY



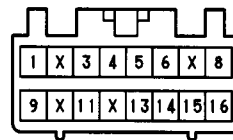
A37 GRAY



A38 (A)



A39 (B) DARK GRAY



A40, A41 GRAY

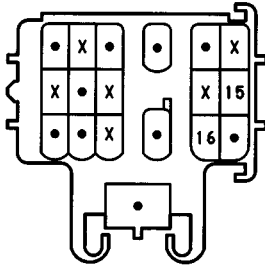


ABS (ANTI-LOCK BRAKE SYSTEM)

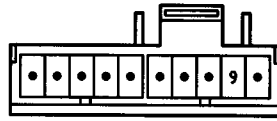
B 2 GRAY



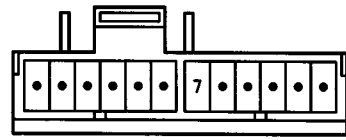
C 1 DARK GRAY



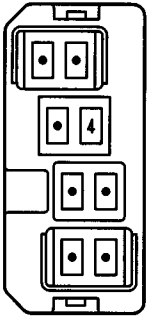
C10 (B) BROWN



C11 (A)



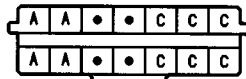
F11 (A) BLACK



F11 (B) BLACK



J 2

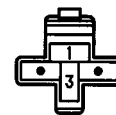


(HINT:SEE PAGE 7)

P 1 BLACK



S 7



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

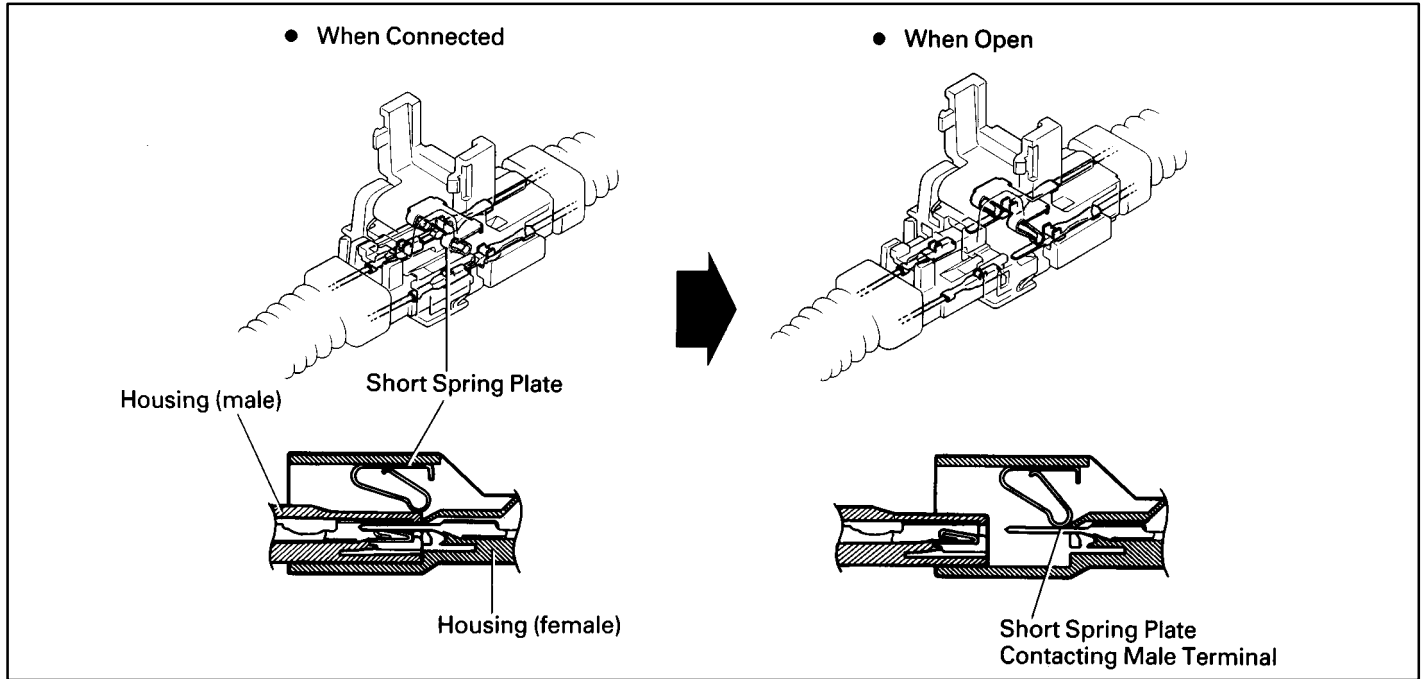
- Malfunction symptoms of the airbag system are difficult to confirm, so the diagnostic codes become the most important source of information when troubleshooting.
When troubleshooting the airbag system, always inspect the diagnostic codes before disconnecting the battery.
- Work must be started after 20 seconds or longer from the time the Ignition SW is set to the “LOCK” position and the negative (–) terminal cable is disconnected from the battery.
(The airbag system is equipped with a back-up power source so that if work is started within 20 seconds of disconnecting the negative (–) terminal cable of the battery, the airbag may be deployed.)
When the negative (–) terminal cable is disconnected from the battery, memory of the clock and audio systems will be cancelled. So before starting work, make a record of the contents memorized by each memory system. Then when work is finished, reset the clock and audio system as before.
When the vehicle has tilt and telescopic steering, power seat, outside rear view mirror and power shoulder belt anchorage, which are all equipped with memory function, it is not possible to make a record of the memory contents. So when the operation is finished, it will be necessary to explain this fact to the customer, and request the customer to adjust the features and reset the memory.
To avoid erasing the memory of each memory system, never use a back-up power supply from outside the vehicle.
- When removing the steering wheel pad or handling a new steering wheel pad, keep the pad upper surface facing upward. Also, lock the lock lever of the twin lock type connector at the rear of the pad and take care not to damage the connector.
(Storing the pad with its metallic surface up may lead to a serious accident if the airbag inflates for some reason.)
- Store the steering wheel pad where the ambient temperature remains below 93°C (200°F), without high humidity and away from electrical noise.
- Never use airbag parts from another vehicle. When replacing airbag parts, replace them with new parts.
- Never disassemble or repair the steering wheel pad, center airbag sensor assembly or front airbag sensors.
- Before repairing the body, remove the airbag sensors if during repair shocks are likely to be applied to the sensors due to vibration of the body or direct tapping with tools or other parts.
- Do not reuse a steering wheel pad or front airbag sensors.
After evaluating whether the center airbag sensor assembly is damaged or not, decide whether or not to reuse it. (See the Repair Manual for the method for evaluating the center airbag sensor assembly.)
- When troubleshooting the airbag system, use a high-impedance (Min. 10kΩ/V) tester.
- The wire harness of the airbag system is combined with the cowl wiring harness assembly.
The vehicle wiring harness exclusively for the airbag system is distinguished by corrugated yellow tubing, as are the connectors.
- Do not measure the resistance of the airbag squib.
(It is possible this will deploy the airbag and is very dangerous.)
- If the wire harness used in the airbag system is damaged, replace the whole wire harness assembly.
When the connector to the airbag front sensors can be repaired alone (when there is no damage to the wire harness), use the repair wire specially designed for the purpose.
(Refer to the Repair Manual for the applicable Model year for details of the replacement method.)
- INFORMATION LABELS (NOTICES) are attached to the periphery of the airbag components. Follow the instructions on the notices.

SRS AIRBAG

The airbag system has connectors which possess the functions described below:

1. AIRBAG ACTIVATION PREVENTION MECHANISM

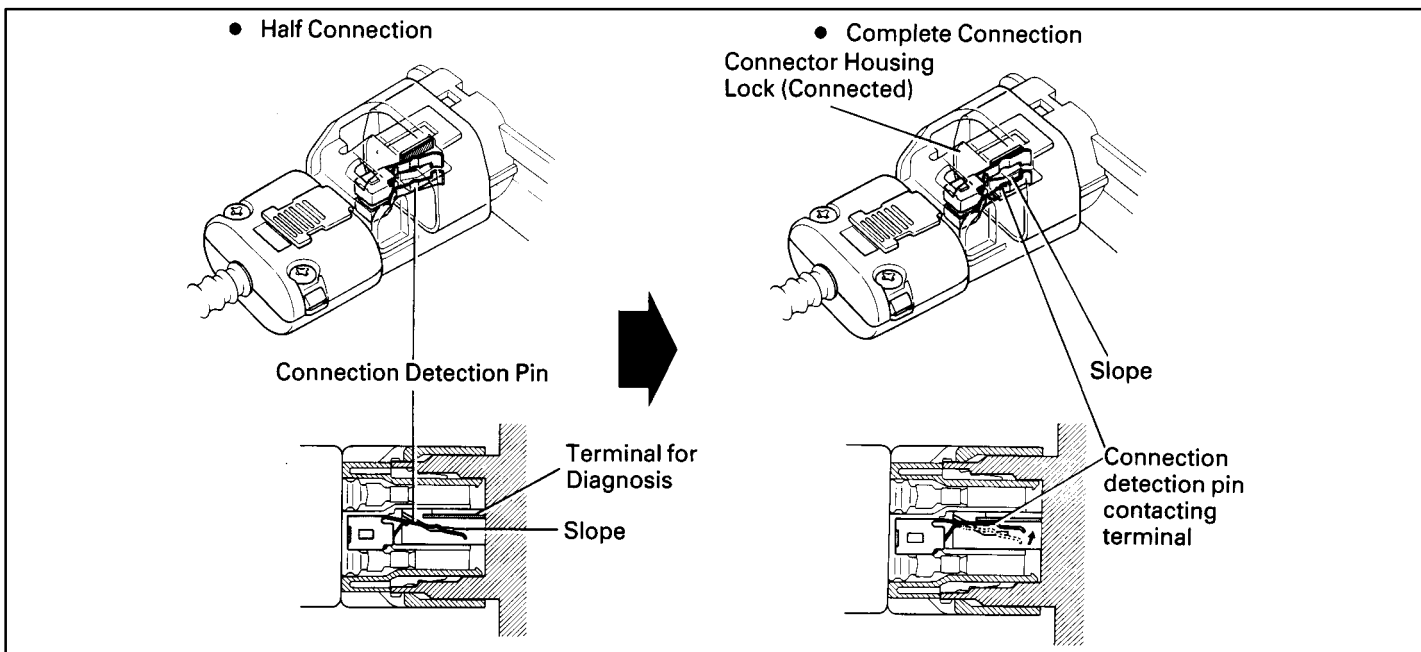
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.



2. ELECTRICAL CONNECTION CHECK MECHANISM

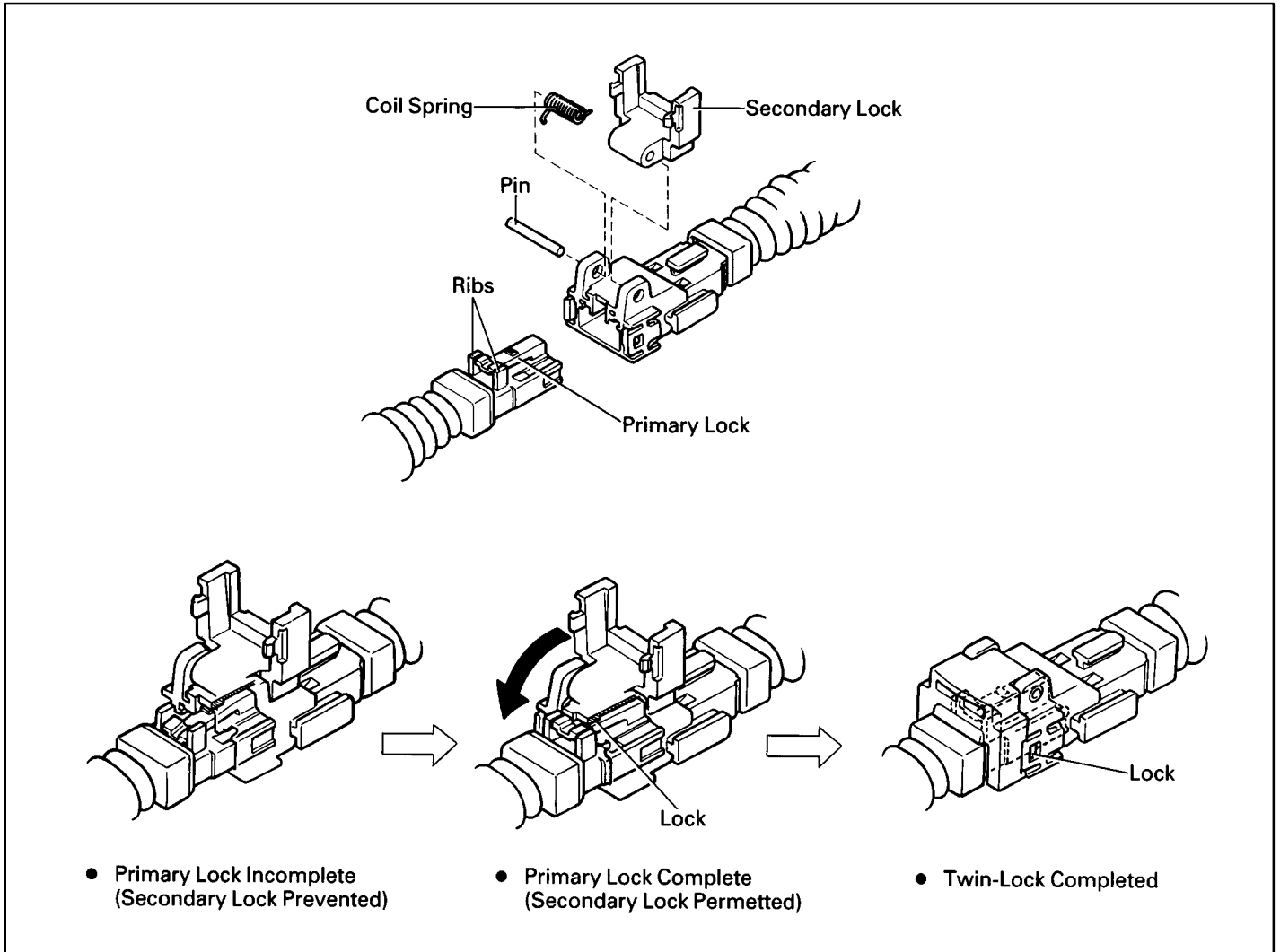
This mechanism is designed to electrically check if connectors are connected correctly and completely.

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.

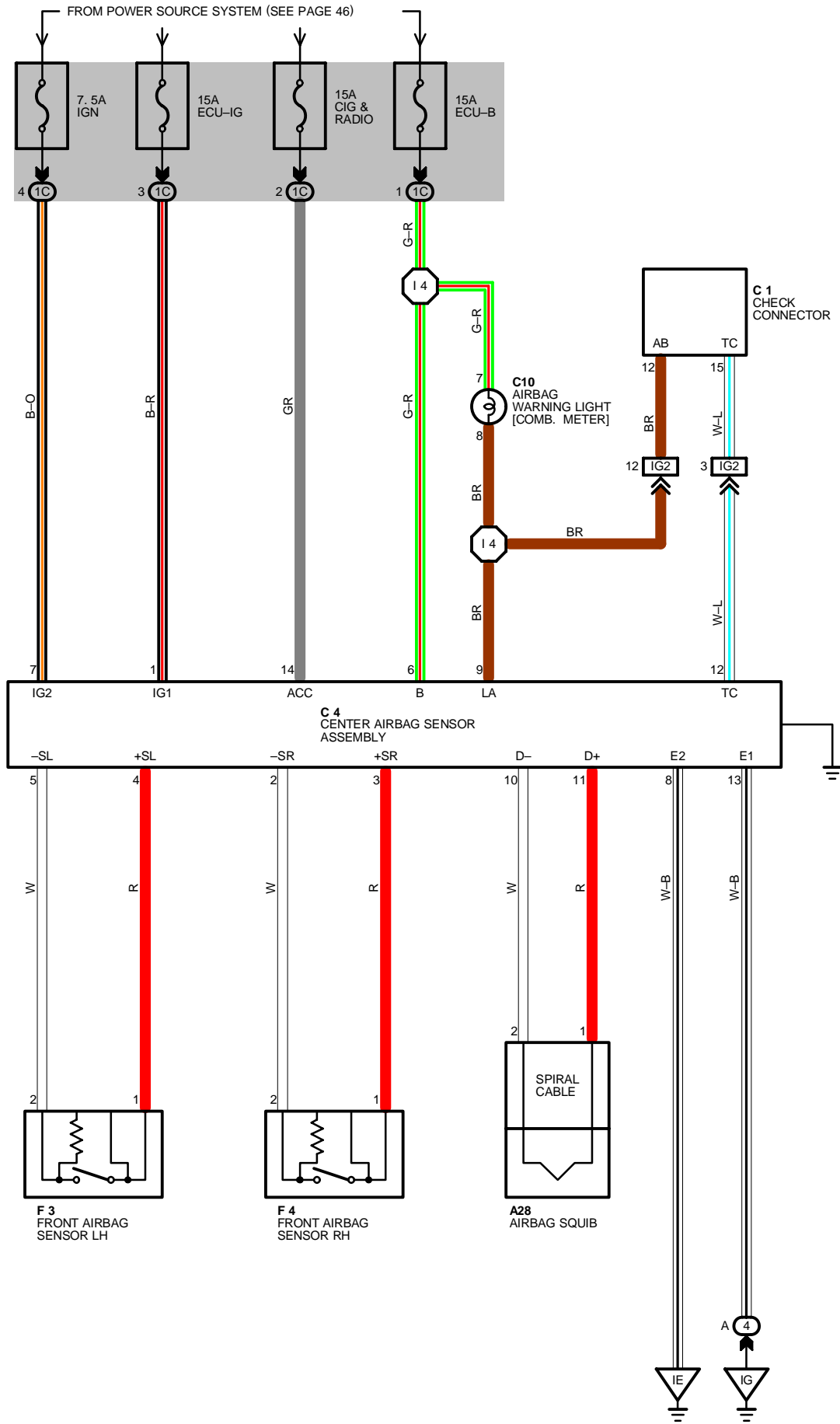


3. CONNECTOR TWIN-LOCK MECHANISM

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.



SRS AIRBAG



SYSTEM OUTLINE

THE SRS (SUPPLEMENTAL RESTRAINT SYSTEM) AIRBAG IS A DRIVER PROTECTION DEVICE WHICH HAS A SUPPLEMENTAL ROLE TO THE SEAT BELTS.

CURRENT FLOWS CONSTANTLY TO **TERMINAL 6** OF THE CENTER AIRBAG SENSOR ASSEMBLY. WHEN THE IGNITION SW IS TURNED TO ACC OR ON, CURRENT FROM THE CIG & RAD FUSE FLOW TO **TERMINAL 14** OF THE CENTER AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE ECU-IG FUSE FLOW TO **TERMINAL 1**. AND THE CURRENT FROM THE IGN FUSE TO **TERMINAL 7**.

IF AN ACCIDENT OCCURS WHILE DRIVING, DECELERATION CAUSED BY A FRONTAL IMPACT IS DETECTED BY EACH SENSOR AND SWITCH, AND WHEN THE FRONTAL IMPACT EXCEEDS A SET LEVEL (WHEN THE MERCURY SW BUILT INTO THE CENTER AIRBAG SENSOR ASSEMBLY IS ON AND THE CENTER AIRBAG SENSOR IS ON, FRONT AIRBAG SENSORS ARE OFF), CURRENT FROM THE CIG & RAD, ECU-IG OR IGN FUSE FLOWS TO **TERMINAL 11** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINAL 10** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 8, TERMINAL 13 OR BODY GROUND** → **GROUND**.

WHEN THE MERCURY SW BUILT INTO THE CENTER AIRBAG SENSOR ASSEMBLY IS ON AND THE FRONT AIRBAG SENSOR LH OR RH IS ON, CENTER AIRBAG SENSOR IS OFF CURRENT FROM THE CIG & RAD, ECU-IG OR IGN FUSE FLOWS TO **TERMINAL 11** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINAL 10** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 3 OR 4** → **TERMINAL 1** OF FRONT AIRBAG SENSOR → **TERMINAL 2** → **TERMINAL 2 OR 5** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 8, TERMINAL 13 OR BODY GROUND** → **GROUND**.

WHEN THE MERCURY SW BUILT INTO THE CENTER AIRBAG SENSOR ASSEMBLY IS ON, AND THE FRONT AIRBAG SENSOR LH OR RH IS ON AND CENTER AIRBAG SENSOR IS ON ONE OF THE ABOVE-MENTIONED CIRCUITS IS ACTIVATED SO THAT CURRENT FLOWS TO THE AIRBAG SQUIB AND CAUSES IT TO OPERATE. THE BAG STORED INSIDE THE STEERING WHEEL PAD IS INSTANTANEOUSLY EXPANDED TO SOFTEN THE SHOCK TO THE DRIVER.

THE REASON WHY THERE ARE MULTIPLE POWER SOURCES AND GROUND POINTS IS SO THAT IN THE EVENT THAT ONE OR TWO OF THE POWER SOURCES AND GROUND POINTS DO NOT WORK FOR SOME REASON, THE REMAINING POWER SOURCE AND GROUND POINT WILL BE AVAILABLE TO COMPENSATE.

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A28	26	C 4	26	F 3	25
C 1	25	C10	26	F 4	25

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG2	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)

: GROUND POINTS

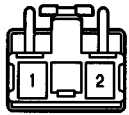
CODE	SEE PAGE	GROUND POINTS LOCATION
IE	30	INSTRUMENT PANEL BRACE LH
IG	30	R/B NO. 4 SET BOLT

: SPLICE POINTS

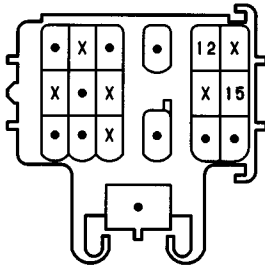
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	32	COWL WIRE			

SRS AIRBAG

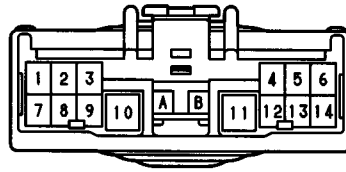
A28 YELLOW



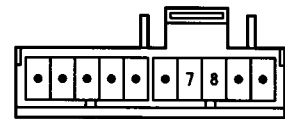
C 1 DARK GRAY



C 4 YELLOW



C10 BROWN



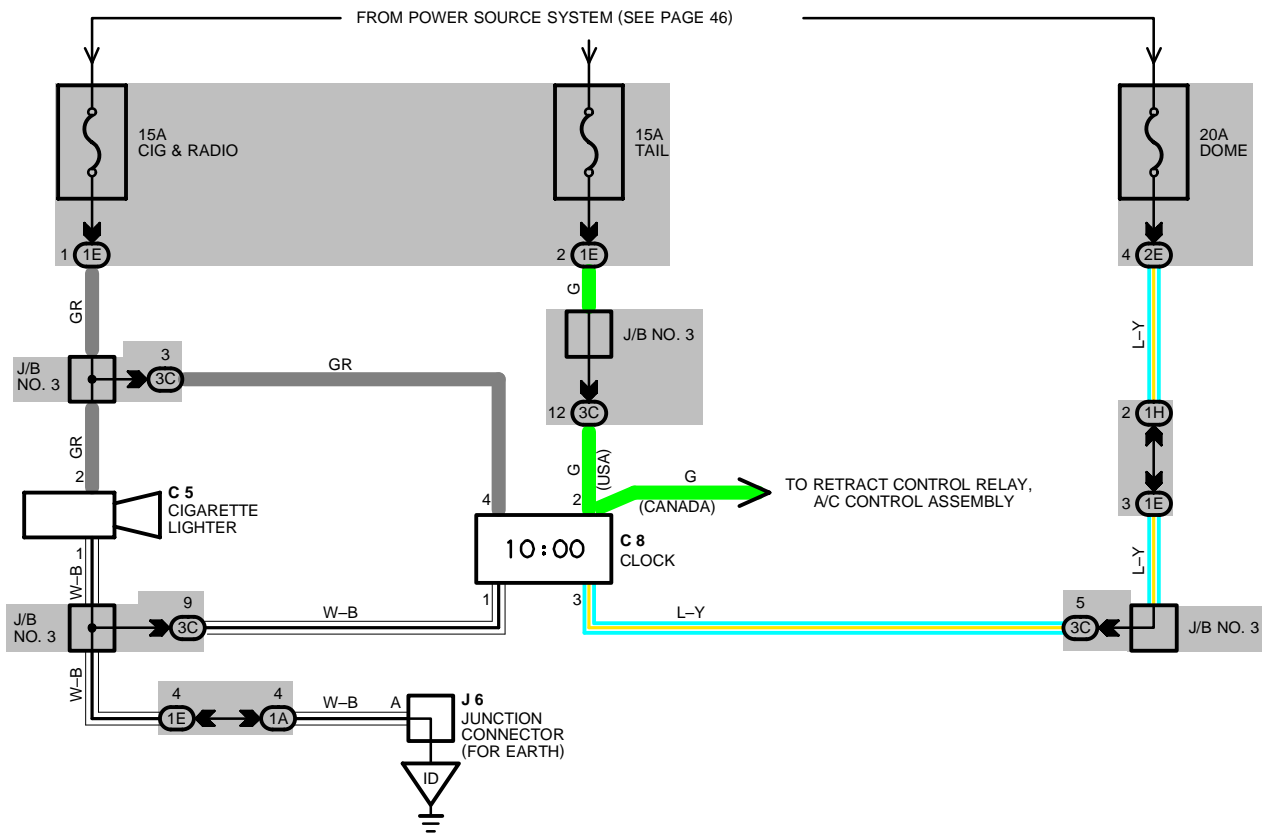
F 3, F 4 YELLOW



*1

*1: WITH ELECTRICAL CONNECTION CHECK MECHANISM (SEE PAGE 130)

CIGARETTE LIGHTER AND CLOCK



SERVICE HINTS

C 5 CIGARETTE LIGHTER

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

C 8 CLOCK

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

○ : PARTS LOCATION

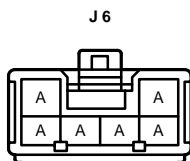
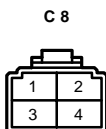
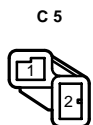
CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 5	26	C 8	26	J 6	26

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

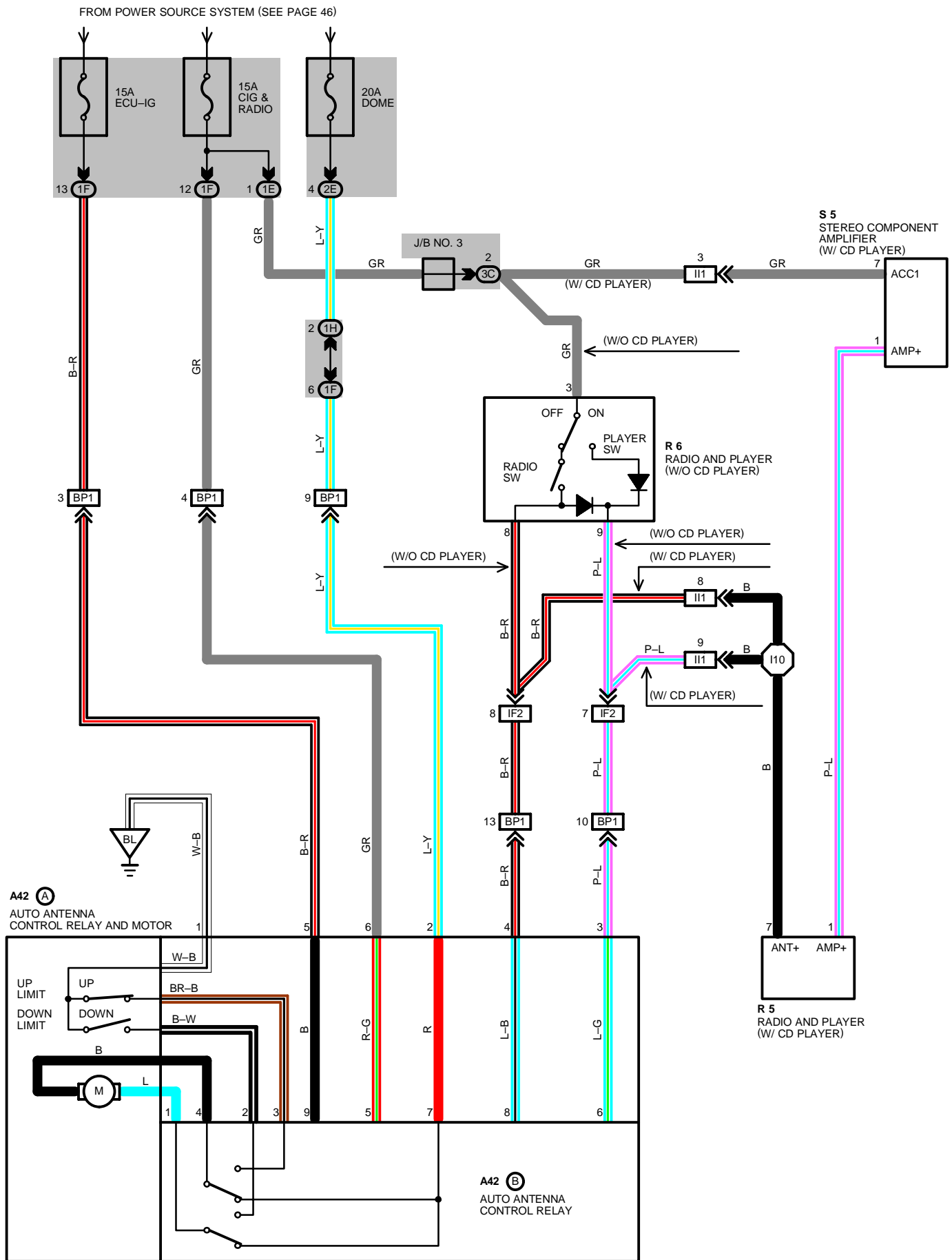
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
ID	30	LEFT KICK PANEL



(HINT : SEE PAGE 7)

AUTO ANTENNA



SERVICE HINTS

A42(B) AUTO ANTENNA CONTROL RELAY

- 9-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ON** POSITION
- 5-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
- 7-GROUND : ALWAYS APPROX. 12 VOLTS
- 8-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION AND RADIO SW ON
- 3-GROUND : CONTINUITY (UPPER LIMIT SW ON) UNLESS ANTENNA AT **UP** STOP
- 2-GROUND : CONTINUITY (DOWN LIMIT SW ON) UNLESS ANTENNA AT **DOWN** STOP
- 4-3 : CLOSED WITH IGNITION SW AT **ACC** OR **ON** POSITION AND RADIO SW ON AND PLAYER SW OFF UNTIL ANTENNA AT **UPPERMOST** POSITION
- 1-2 : CLOSED WITH IGNITION SW AT **ACC** OR **ON** POSITION AND RADIO SW OFF AND PLAYER SW OFF UNTIL ANTENNA AT **LOWERMOST** POSITION
- 1-2 : CLOSED WITH IGNITION SW OFF UNTIL ANTENNA AT **LOWERMOST** POSITION

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A42	A	27	R 5	26	S 5	26
	B	27	R 6	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1E	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1F	18	FLOOR WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF2	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
II1	32	COWL WIRE AND CONSOLE BOX WIRE (INSTRUMENT PANEL CENTER)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BL	34	BACK PANEL CENTER

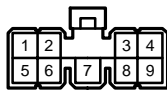
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	32	CONSOLE BOX WIRE			

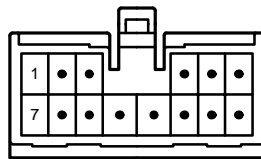
A42 (A)



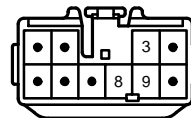
A42 (B)



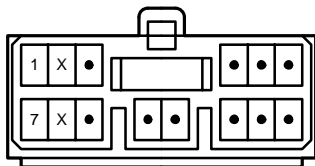
R 5



R 6

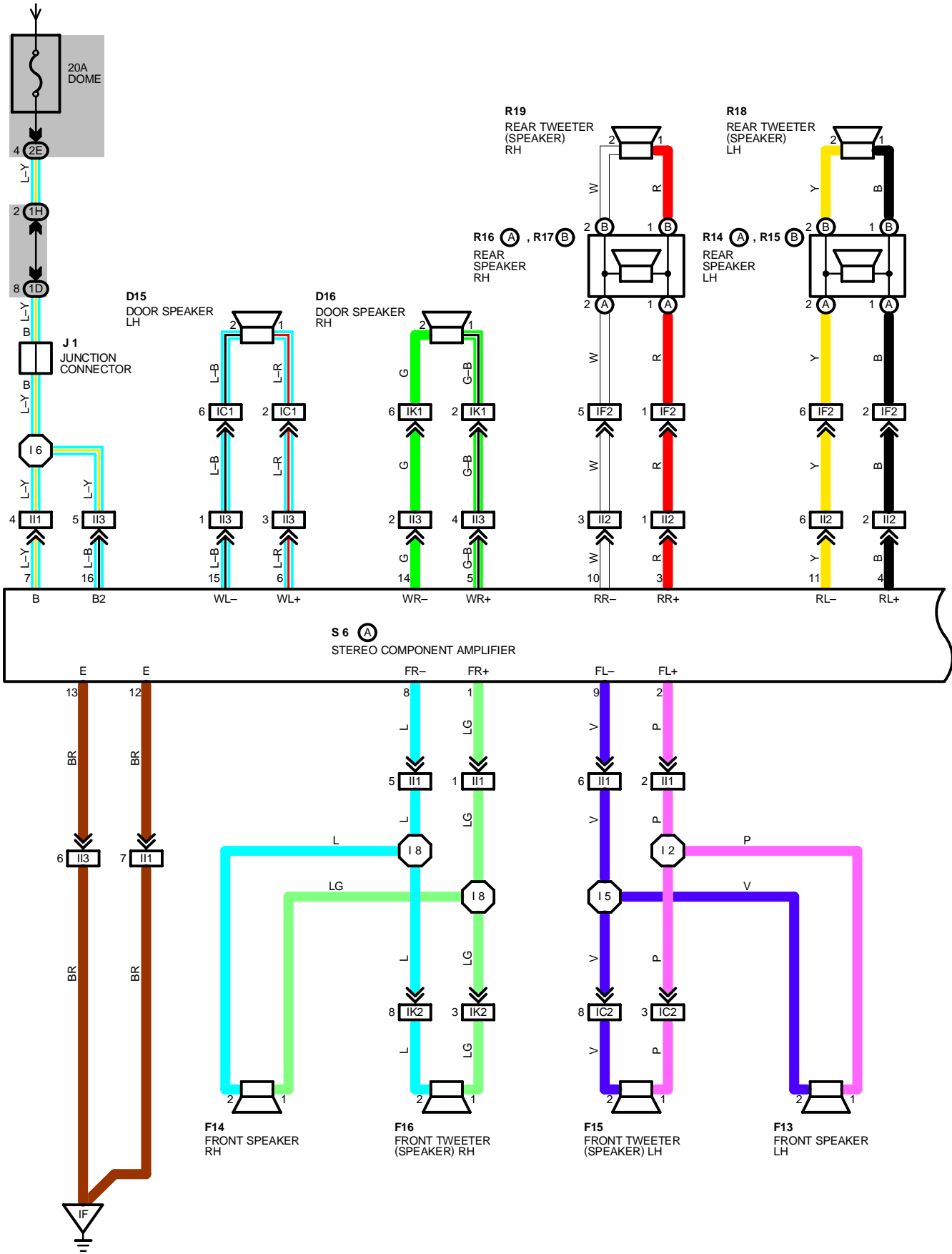


S 5

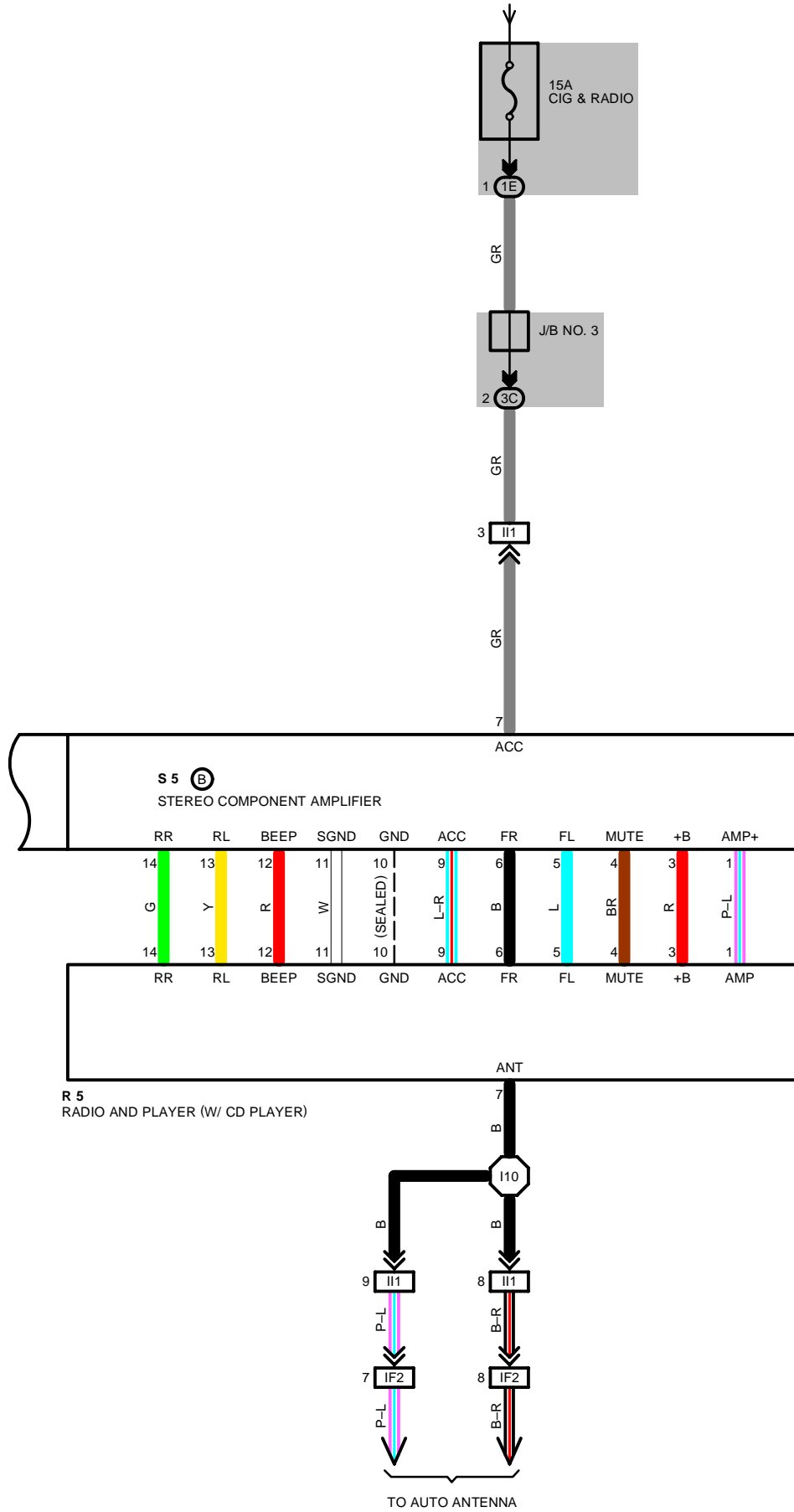


RADIO AND PLAYER (w/ CD PLAYER)

FROM POWER SOURCE SYSTEM (SEE PAGE 46)



FROM POWER SOURCE SYSTEM (SEE PAGE 46)



RADIO AND PLAYER (w/ CD PLAYER)

SERVICE HINTS

S 5 (B), S 6 (A) POWER AMPLIFIER

(A) 7, (A)16-GROUND : ALWAYS APPROX. 12 VOLTS

(B) 7-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT ON OR ACC POSITION

(A)12, (A)13-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE		
D15	27	J 1	26	R18	27		
D16	27	R 5	26	R19	27		
F13	26	R14	A	27	S 5	B	26
F14	26	R15	A	27	S 6	A	26
F15	27	R16	B	27			
F16	27	R17	B	27			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO.1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO.2 (NEAR THE BATTERY)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IC2		
IF2	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
II1	32	COWL WIRE AND CONSOLE BOX WIRE (INSTRUMENT PANEL CENTER)
II2		
II3	32	COWL WIRE AND CONSOLE BOX WIRE (RIGHT KICK PANEL)
IK1	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK2		

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	30	INSTRUMENT PANEL BRACE RH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	32	COWL WIRE	I 8	32	COWL WIRE
I 5			I 10	32	CONSOLE BOX WIRE
I 6					

D15, D16



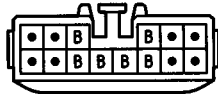
F13, F14



F15, F16

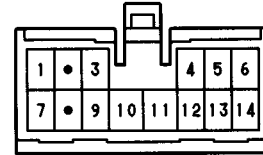


J 1



(HINT: SEE PAGE 7)

R 5



R14 (A), R16 (B)



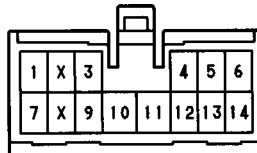
R15 (A), R17 (B)



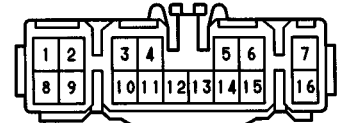
R18, R19



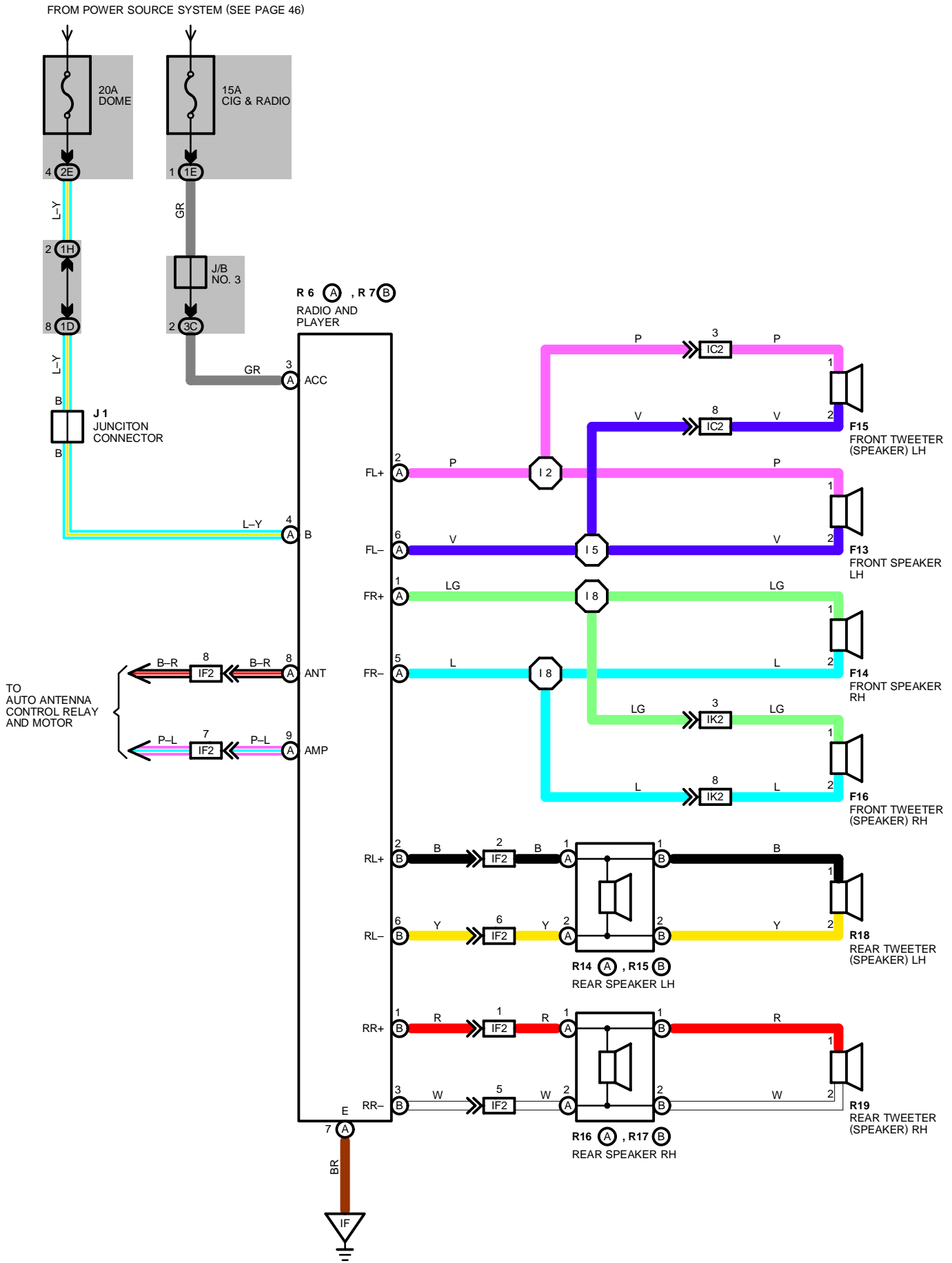
S 5 (B)



S 6 (A)



RADIO AND PLAYER (w/o CD PLAYER)



SERVICE HINTS

R 6(A), R 7(B) RADIO AND PLAYER

(A) 4-GROUND : ALWAYS APPROX. 12 VOLTS

(A) 3-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT ON OR ACC POSITION

(A) 7-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE		
F13	26	R 6	A	26	R17	B	27
F14	26	R 7	B	26	R18		27
F15	27	R14	A	27	R19		27
F16	27	R15	B	27			
J 1	26	R16	A	27			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC2	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IF2	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IK2	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

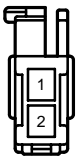
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	30	INSTRUMENT PANEL BRACE RH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	32	COWL WIRE	I 8	32	COWL WIRE

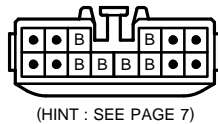
F13, F14



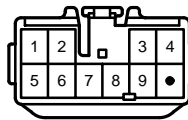
F15, F16



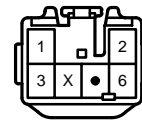
J 1



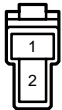
R 6 (A)



R 7 (B)



R14 (A), R16 (A)



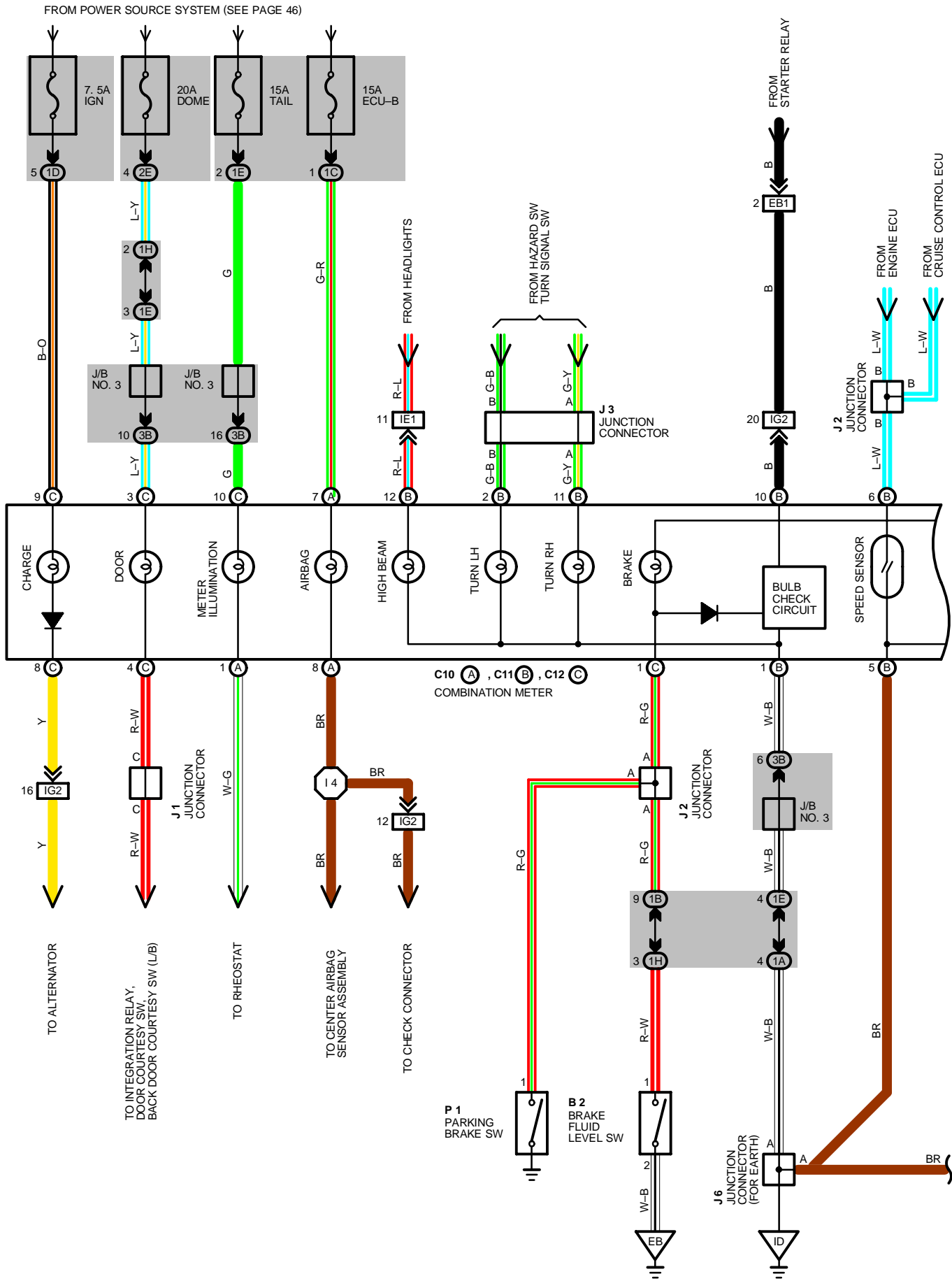
R15 (B), R17 (B)



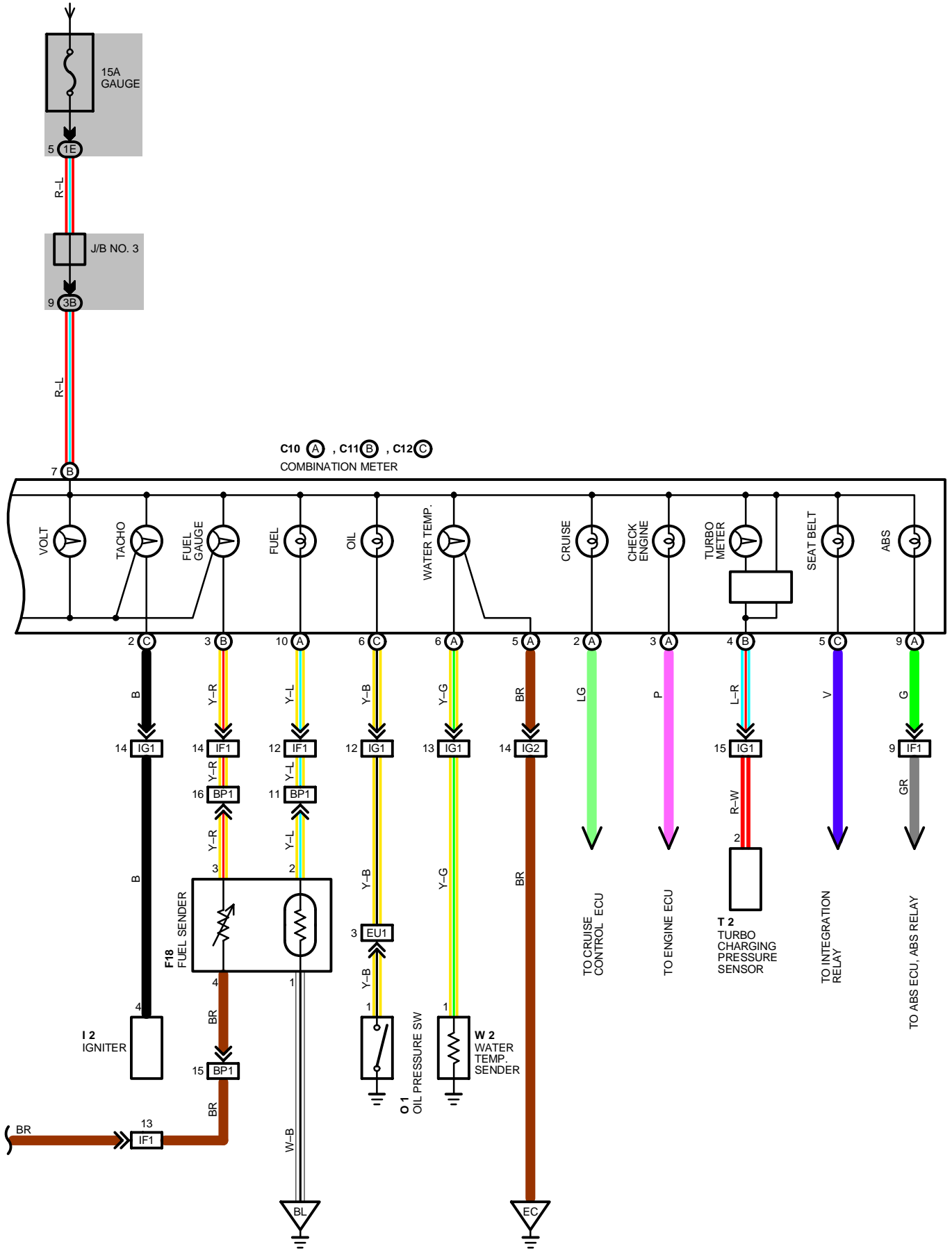
R18, R19



COMBINATION METER



FROM POWER SOURCE SYSTEM (SEE PAGE 46)



COMBINATION METER

SERVICE HINTS

B 2 BRAKE FLUID LEVEL SW

1-2 : CLOSED WITH FLOAT DOWN

C13(A), C14(B), C15(C) COMBINATION METER

(A) 7, (C) 3-GROUND : ALWAYS APPROX. 12 VOLTS

(B) 7, (C) 9-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION

(A) 5, (B) 1, (B) 5-GROUND : ALWAYS CONTINUITY

F18 FUEL SENDER

3-4 : APPROX. 3 Ω WITH FUEL FULL

APPROX. 110.0 Ω WITH FUEL EMPTY

O 1 OIL PRESSURE SW

1-GROUND : CLOSED WITH OIL PRESSURE BELOW 0.2 KG/CM² (2.84 SPI, 19.61 KPA)

P 1 PARKING BRAKE SW

1-GROUND : CLOSED WITH PARKING BRAKE LEVER PULLED UP

W 2 WATER TEMP. SENDER

1-GROUND : APPROX. 226 Ω AT 50 °C (122 °F)

APPROX. 26.4 Ω AT 115 °C (239 °F)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 2	25	I 2	25	O 1	25
C10 A	26	J 1	26	P 1	26
C11 B	26	J 2	26	T 2	25
C12 C	26	J 3	26	W 2	25
F18	27	J 6	26		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1B		
1C		
1D		
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2E	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
IE1	30	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IG2		
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	28	FRONT LEFT FENDER
EC	28	INTAKE MANIFOLD
ID	30	LEFT KICK PANEL
BL	34	BACK PANEL CENTER

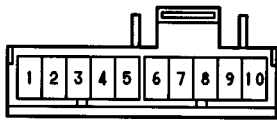
○ : SPLICE POINTS

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

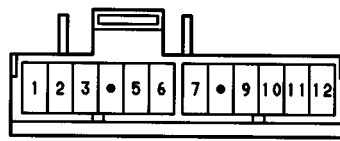
B 2 GRAY



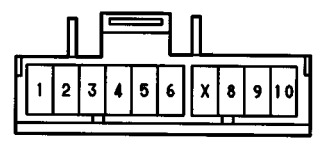
C10 (A) BROWN



C11 (B)



C12 (C) GRAY



F18 DARK GRAY



I 2 BLACK

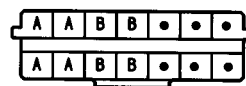


J 1



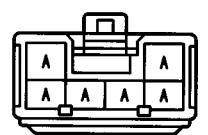
(HINT:SEE PAGE 7)

J 2, J 3



(HINT:SEE PAGE 7)

J 6



(HINT:SEE PAGE 7)

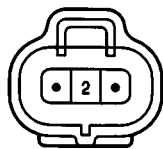
O 1 BLACK



P 1 BLACK



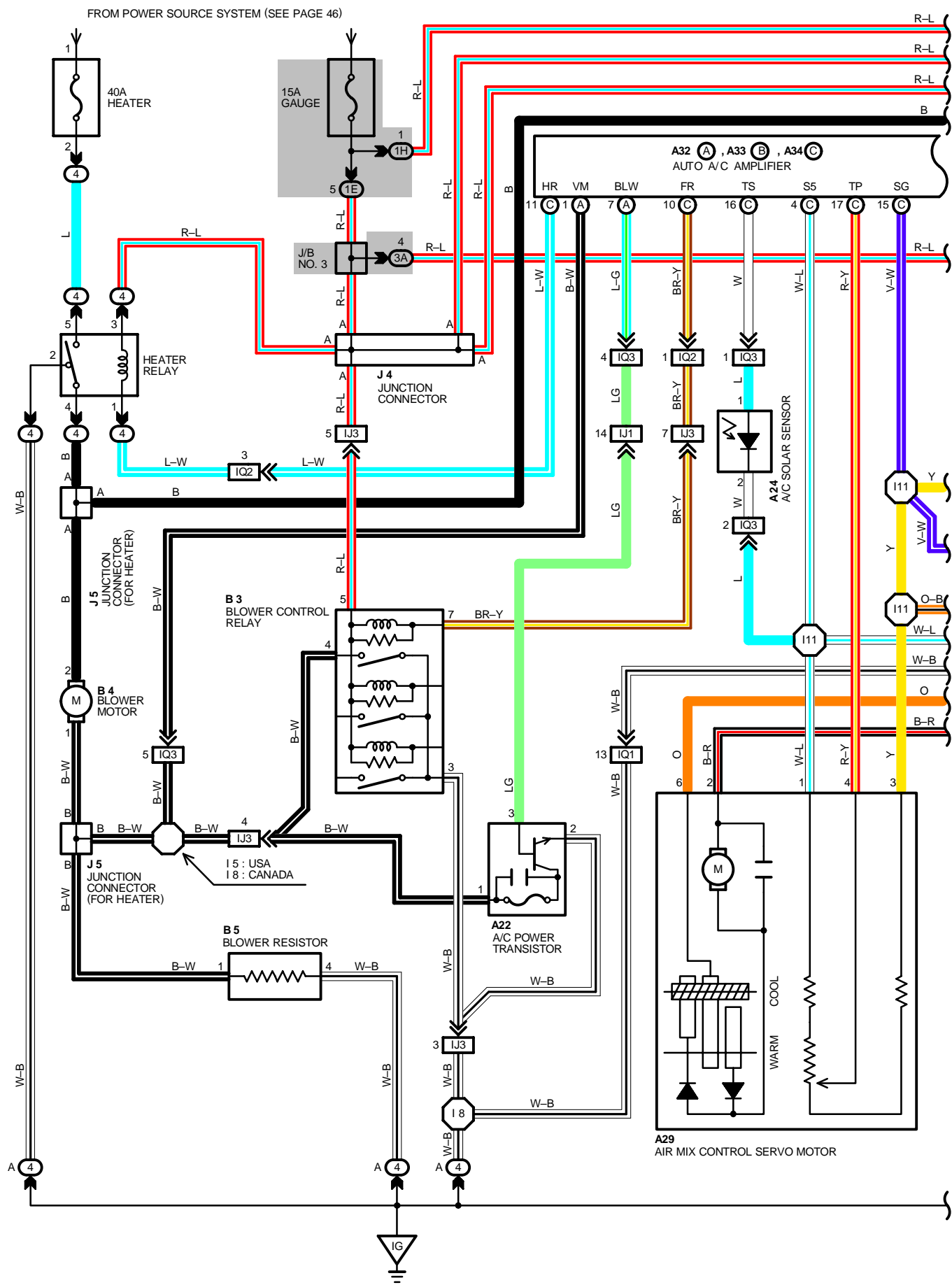
T 2 BLACK

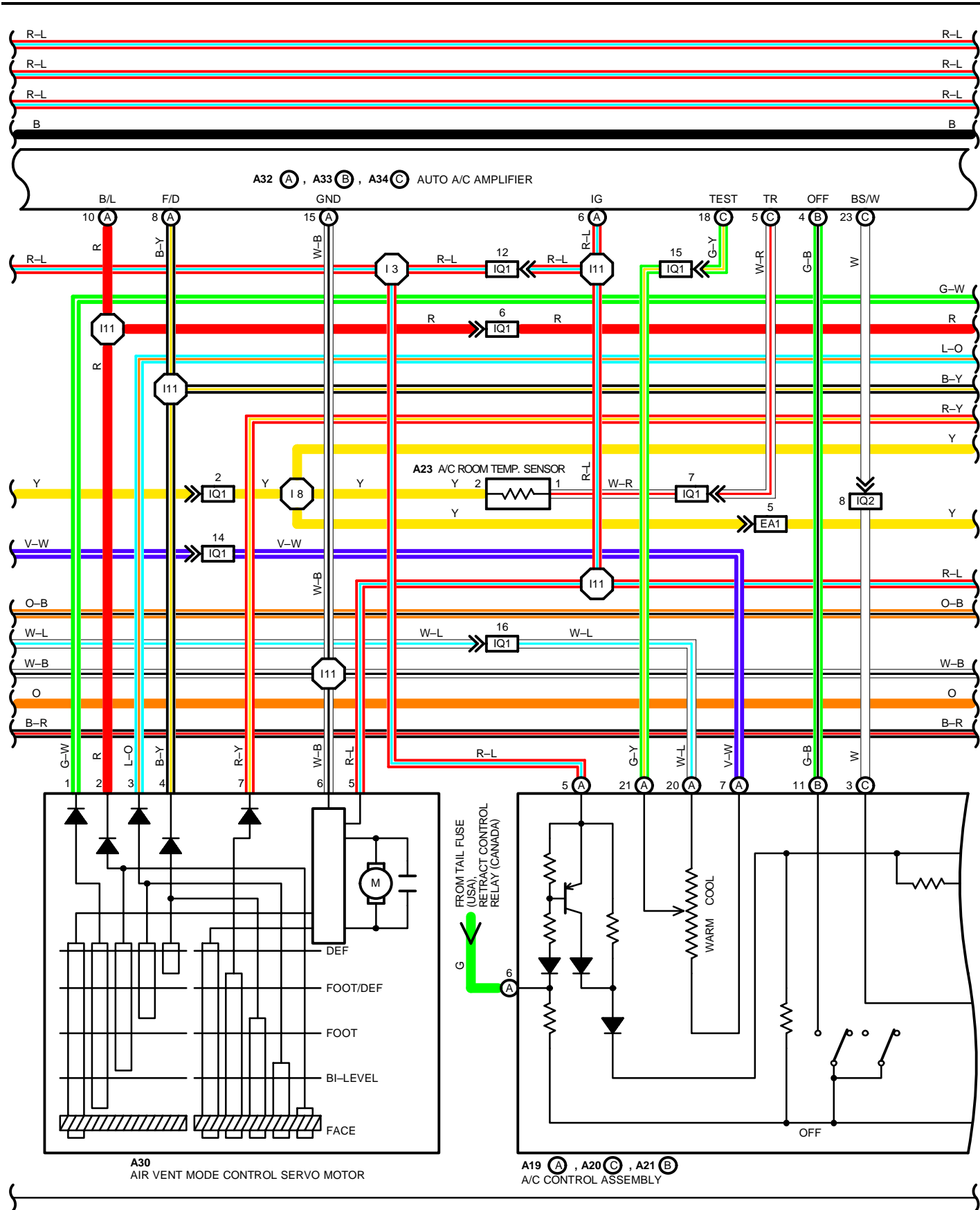


W 2 GRAY

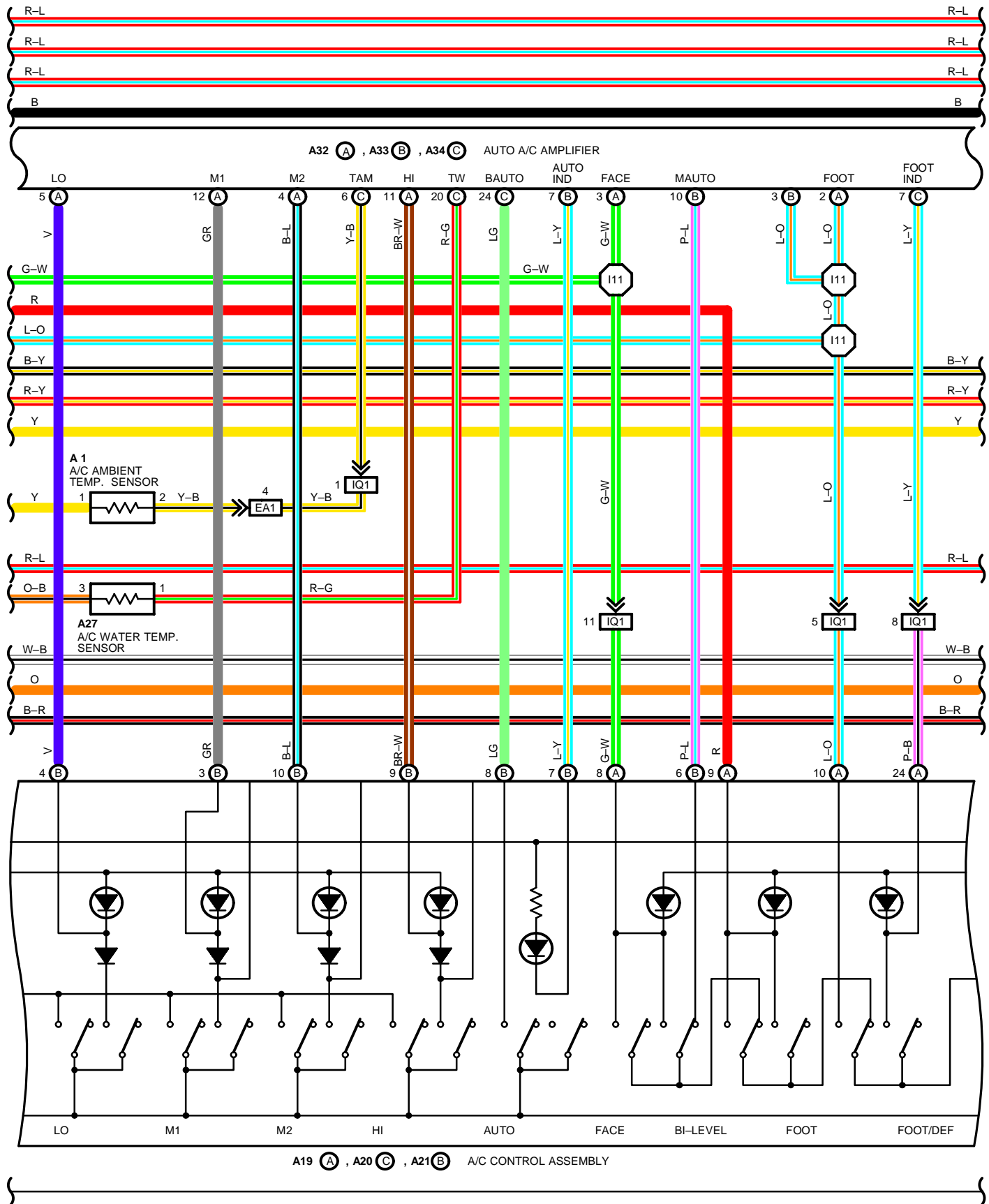


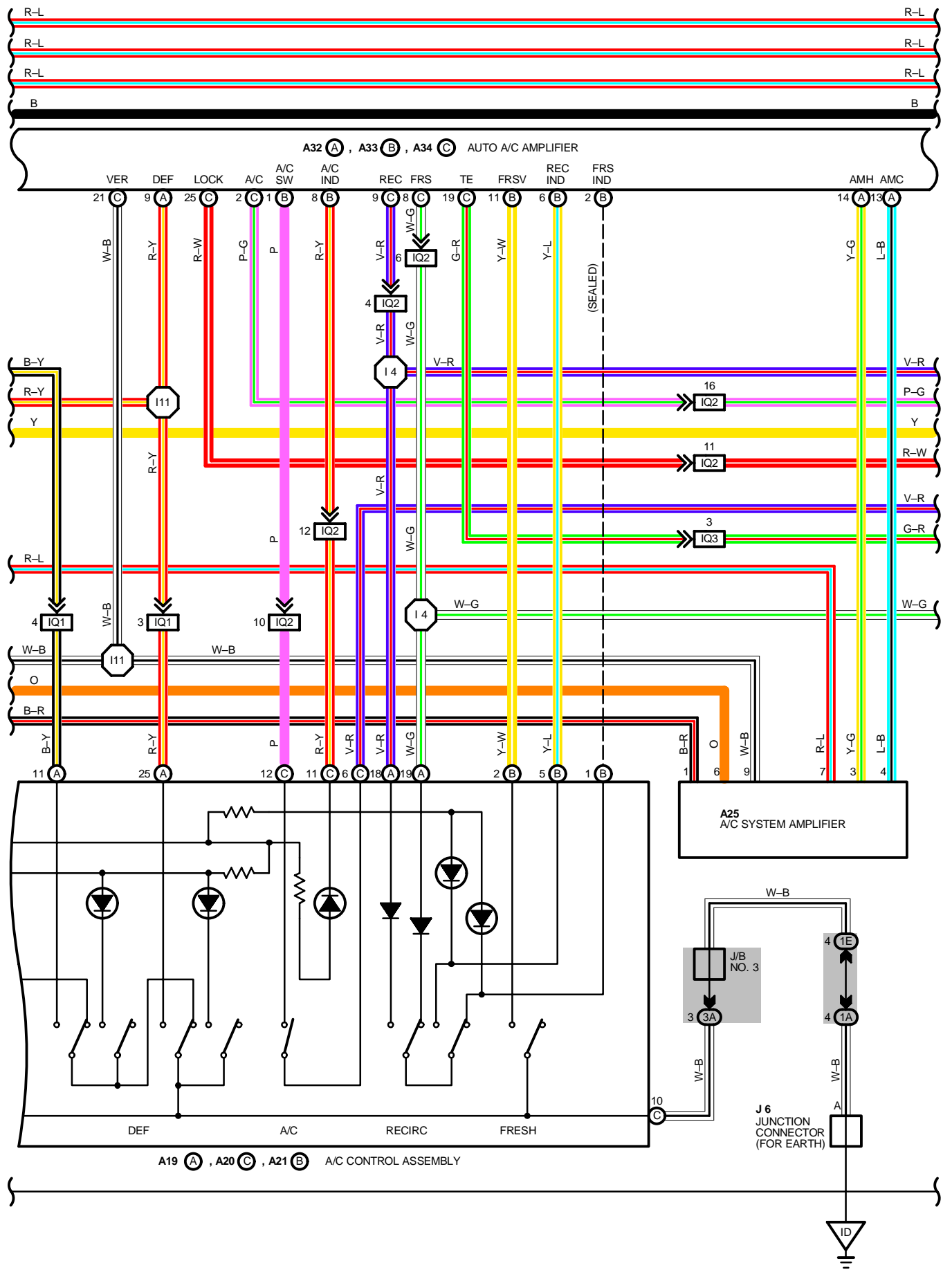
RADIATOR FAN AND AIR CONDITIONER (AUTOMATIC AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)



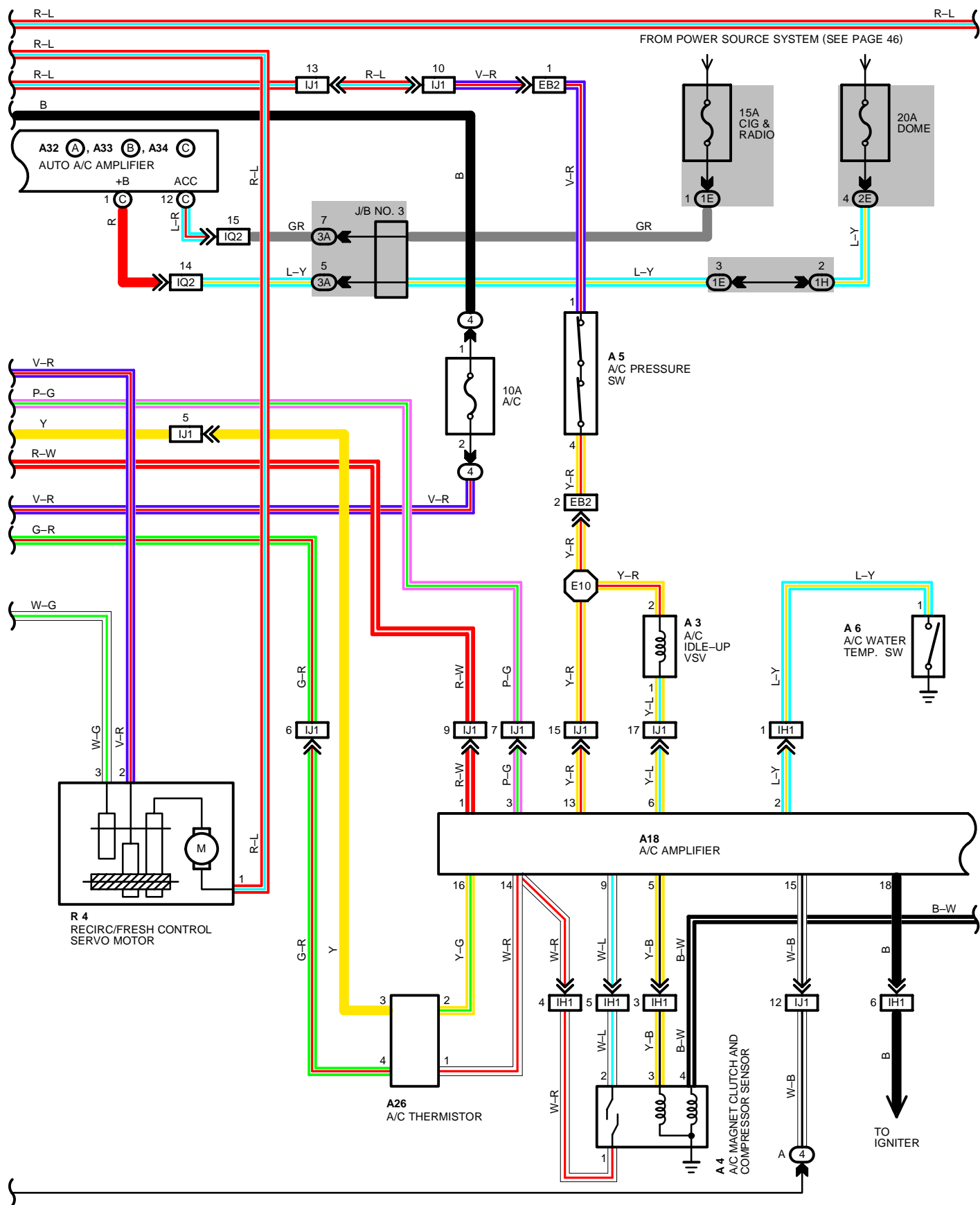


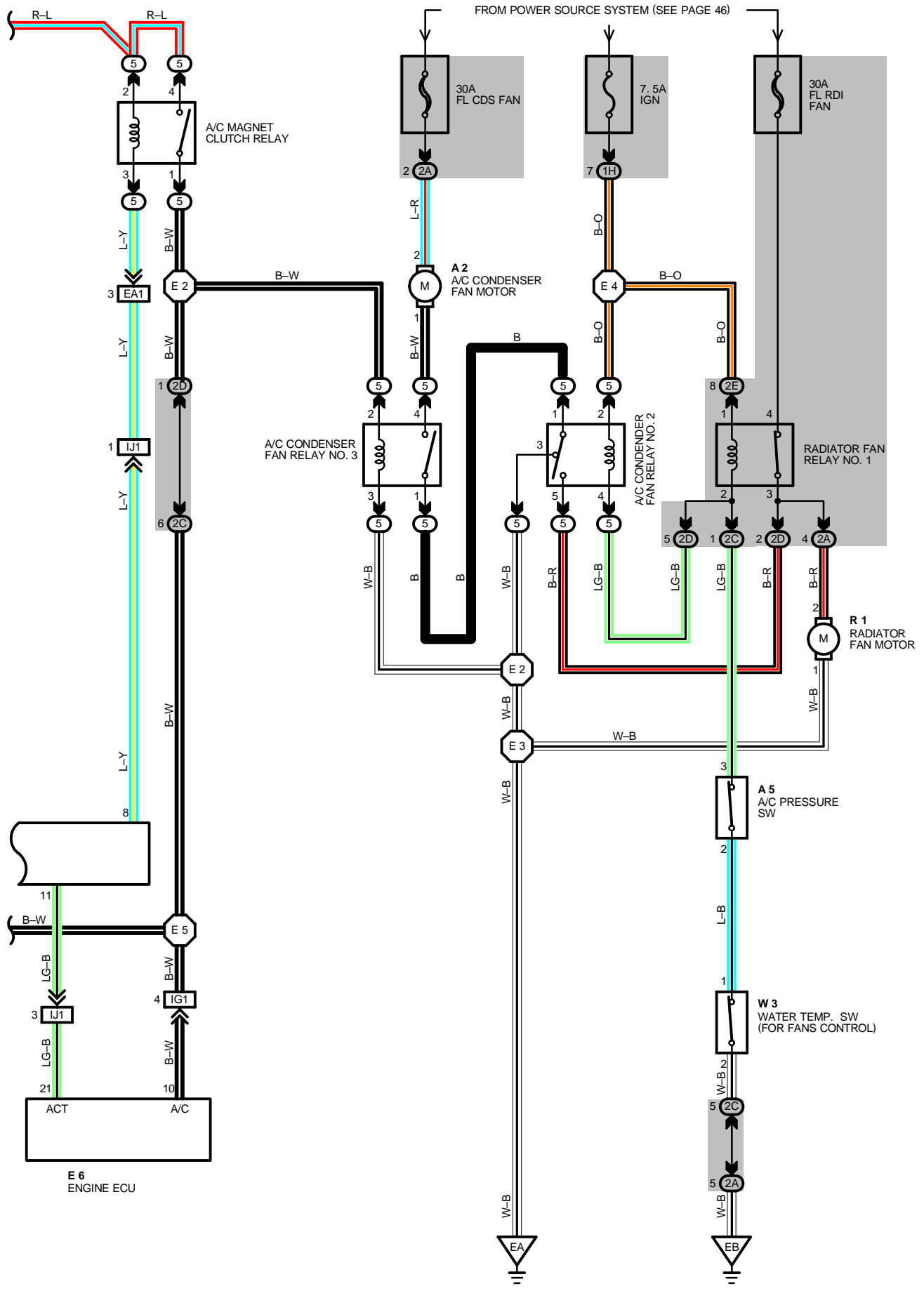
RADIATOR FAN AND AIR CONDITIONER (AUTOMATIC AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)





RADIATOR FAN AND AIR CONDITIONER (AUTOMATIC AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)





SYSTEM OUTLINE**1. COOLING FAN OPERATION**

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FROM IGN FUSE FLOWS TO **TERMINAL 3** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 4** → **TERMINAL 3** OF THE A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, FROM **TERMINAL 2** OF A/C FAN RELAY NO. 2 → **TERMINAL 4** → **TERMINAL 3** OF A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, CAUSING RELAY NO. 1 AND RELAY NO. 2 OF EACH FAN TO TURN ON.

*** OPERATION AT LOW SPEED**

WHEN THE A/C SW (A/C CONTROL ASSEMBLY) IS TURNED ON AND THE AIR CONDITIONER OPERATES, THE CURRENT FLOWS FROM GAUGE FUSE FLOWS TO **TERMINAL 2** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 3** → **TERMINAL 8** OF A/C AMPLIFIER CAUSING A/C MAGNET CLUTCH RELAY TO TURN ON.

AT THAT TIME, THE CURRENT FROM GAUGE FUSE FLOWS TO **TERMINAL 4** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 1** → **TERMINAL 4** OF A/C MAGNET CLUTCH → **GROUND**, AND FROM **TERMINAL 1** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 2** OF A/C FAN RELAY NO. 3 → **TERMINAL 3** → **GROUND**.

AS A RESULT, A/C MAGNET CLUTCH AND A/C FAN RELAY NO. 3 TURN ON AND THE CURRENT FLOWS FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** → **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 5** → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **GROUND**, FLOWING TO EACH FAN MOTOR IN SERIES, CAUSING THE COOLING FAN TO ROTATE AT LOW SPEED.

*** OPERATION AT HIGH SPEED**

DURING A/C OPERATION, WHEN THE PRESSURE OF A/C COMPRESSOR BECOMES HIGHER THAN NORMAL PRESSURE (MORE THAN 14.3 KG/CM² 1401 KPA, 203 PSI), THE A/C PRESSURE SW TURNS OFF.

AS A RESULT, FAN RELAY NO. 1 AND NO. 2 TURNS OFF AND THE CURRENT FLOWS FROM FL RDI FAN → **TERMINAL 1** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 2** → **TERMINAL 2** OF RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, AND FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** → **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 3** **GROUND**, FLOWING TO EACH FAN MOTOR IN PARALLEL CAUSING THE COOLING FAN TO ROTATE AT HIGH SPEED. WHEN THE ENGINE COOLANT TEMPERATURE BECOMES MORE THAN ABOUT 90°C (194° F), THE WATER TEMP. SW TURNS OFF AND THE SAME OPERATION AS ABOVE IS PERFORMED.

2. HEATER BLOWER MOTOR OPERATION (PUSH TYPE BLOWER CONTROL SW (W/ AUTO A/C))

CURRENT IS APPLIED AT ALL TIMES THROUGH THE HEATER FUSE TO **TERMINAL 5** OF HEATER RELAY. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL 3** OF HEATER RELAY → **TERMINAL 1** → **TERMINAL HR** OF A/C AUTO AMPLIFIER. AT THE SAME TIME, CURRENT ALSO FLOWS FROM GAUGE FUSE TO **TERMINAL 5** OF A/C BLOWER CONTROL RELAY → **TERMINAL 7** → **TERMINAL FR** OF A/C AUTO AMPLIFIER.

*** LOW SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **LOW** POSITION, SIGNALS ARE INPUT FROM **TERMINAL C3** OF THE A/C CONTROL ASSEMBLY, **TERMINAL BSW** OF THE A/C AUTO AMPLIFIER AND **TERMINAL B4** OF THE A/C AUTO AMPLIFIER AND **TERMINAL B4** OF THE A/C CONTROL ASSEMBLY TO **TERMINAL 10** OF THE A/C AUTO AMPLIFIER, CAUSING THE A/C AUTO AMPLIFIER TO OPERATE.

CURRENT FLOWING TO **TERMINAL HR** OF A/C AUTO AMPLIFIER FLOWS TO **TERMINAL GND** OF A/C AUTO AMPLIFIER → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 2** OF BLOWER MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 4** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT LOW SPEED.

*** HIGH SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **HI** POSITION, SIGNALS ARE INPUT FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY, **TERMINAL BSW** OF A/C AUTO AMPLIFIER AND **TERMINAL B9** OF A/C CONTROL ASSEMBLY TO **TERMINAL HI** OF A/C AUTO AMPLIFIER, CAUSING THE A/C AUTO AMPLIFIER TO OPERATE.

CURRENT TO **TERMINAL HR** OF THE AUTO AMPLIFIER THEN FLOWS TO **TERMINAL GND** OF A/C AUTO AMPLIFIER → **GROUND**, TURNING THE HEATER RELAY ON.

AT THE SAME TIME, CURRENT FLOWING TO **TERMINAL 5** OF THE A/C RELAY BOX FLOWS TO **TERMINAL 7** OF A/C RELAY BOX → **TERMINAL FR** OF A/C AUTO AMPLIFIER → **TERMINAL GND** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

* MEDIUM SPEED OPERATION (OPERATION AT MANUAL M1, M2)

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M1** POSITION, A SIGNAL IS INPUT FROM **TERMINAL B3** OF A/C CONTROL ASSEMBLY TO **TERMINAL M1** OF A/C AUTO AMPLIFIER

THIS CAUSES TO CURRENT FLOWING TO **TERMINAL HR** OF THE A/C AUTO AMPLIFIER TO FLOW TO **TERMINAL GND** OF A/C AUTO AMPLIFIER → **GROUND** AND TURNS THE HEATER RELAY ON. SIMULTANEOUSLY, CURRENT FLOWING FROM **TERMINAL BLW** OF A/C AUTO AMPLIFIER TO **TERMINAL 3** OF A/C POWER TRANSISTOR → **TERMINAL 2** → **GROUND** CAUSES CURRENT FLOWING TO THE BLOWER MOTOR TO FLOW TO **TERMINAL 5** OF HEATER RELAY → **TERMINAL 4** → **TERMINAL 2** OF BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 1** OF POWER TRANSISTOR → **TERMINAL 2** → **GROUND**, CAUSING TO BLOWER MOTOR ROTATE AT MEDIUM LOW SPEED.

IF THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M2** POSITION, THE CURRENT FLOW FROM **TERMINAL BLW** OF THE A/C AUTO AMPLIFIER TO **TERMINAL 1** OF THE POWER TRANSISTOR BECOMES GREATER THAN FOR M1 AND CURRENT FLOWS MORE EASILY BETWEEN **TERMINAL 1** AND **TERMINAL 2** OF THE POWER TRANSISTOR, SO THE BLOWER MOTOR ROTATES AT MEDIUM HIGH SPEED.

* AUTO FUNCTION

WHEN THE AUTO SW (A/C CONTROL ASSEMBLY) IS SELECTED, THE CURRENT FLOW IS THE SAME FOR **MED** POSITION, BUT THE A/C AUTO AMPLIFIER DECIDES THE APPROPRIATE AIR FLOW VOLUME ACCORDING TO THE SET TEMPERATURE AND TO INPUT SIGNALS FROM EACH SENSOR. BY CONTROLLING THE CURRENT FLOW FROM **TERMINAL BLW** OF THE A/C AUTO AMPLIFIER TO **TERMINAL 3** OF POWER TRANSISTOR → **TERMINAL 2** → **GROUND**, THE A/C AUTO AMPLIFIER CONTROLS THE BLOWER MOTOR STEPLESSLY.

3. OPERATION OF RECIRC/FRESH CONTROL SERVO MOTOR

(SWITCHING FROM FRESH TO RECIRC)

WITH IGNITION SW TURNED ON. THE CURRENT FLOWS FROM GAUGE FUSE TO **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR. WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE RECIRC SIDE, TO CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 2** → **TERMINAL A18** OF A/C CONTROL ASSEMBLY → **TERMINAL B5** → **TERMINAL REC IND** OF A/C AUTO AMPLIFIER → **TERMINAL GND** → **GROUND**, THE MOTOR ROTATES AND THE DAMPER MOVES TO THE RECIRC SIDE.

WHEN IT IS IN THE **RECIRC** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH IGNITION SW ON, WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE FRESH SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 3** → **TERMINAL A19** OF A/C CONTROL ASSEMBLY → **TERMINAL B1** → **TERMINAL FRS IND** OF AUTO A/C AMPLIFIER → **TERMINAL GND** → **GROUND**, THE MOTOR ROTATES AND THE DAMPER MOVES TO THE FRESH SIDE. WHEN IT IS IN THE **FRESH** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

4. OPERATION OF AIR VENT MODE CONTROL SERVO MOTOR

WITH IGNITION SW TURNED ON, THE CURRENT FLOWS FROM GAUGE FUSE TO **TERMINAL 5** OF AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 6** → **GROUND**, AND THE DAMPER MOVES TO THE POSITION OF THE MODE SELECTION SW OF THE CONTROL ASSEMBLY SWITCH IS ON.

WHEN THE MODE SELECTION SW OF A/C CONTROL ASSEMBLY IS MOVED TO **DEF** POSITION WITH THE DAMPER IN THE **FACE** POSITION, THE CURRENT FLOWS FROM **TERMINAL 7** OF AIR VENT MODE CONTROL SERVO MOTOR TO **TERMINAL A25** OF A/C CONTROL ASSEMBLY → **TERMINAL C10** → **GROUND**.

AS A RESULT, THE SERVO MOTOR OPERATES UNTIL THE DAMPER REACHES **DEF** POSITION.

WHEN THIS OCCURS THE CURRENT TO THE A/C CONTROL ASSEMBLY IS SHUT OFF AND ROTATION OF THE MOTOR STOPS. SWITCHING TO OTHER MODES IS CONTROLLED BY THE SERVO MOTOR ACCORDING THE FOLLOWING CURRENT:

1. **FOOT/DEF** POSITION : THE CURRENT FLOWS FROM **TERMINAL 4** OF SERVO MOTOR TO **TERMINAL A11** OF A/C CONTROL ASSEMBLY.
2. **FOOT** POSITION : THE CURRENT FLOWS FROM **TERMINAL 3** OF SERVO MOTOR TO **TERMINAL A10** OF A/C CONTROL ASSEMBLY.
3. **BI-LEVEL** POSITION : THE CURRENT FLOWS FROM **TERMINAL 2** OF SERVO MOTOR TO **TERMINAL A9** OF A/C CONTROL ASSEMBLY.

5. OPERATION OF AIR MIX CONTROL SERVO MOTOR

WHEN THE TEMPERATURE CONTROL VOLUME IS TURNED TO THE COOL SIDE, A SIGNAL IS INPUT TO **TERMINAL TEST** OF A/C AUTO AMPLIFIER FROM **TERMINAL A21** OF A/C CONTROL ASSEMBLY.

AS A RESULT, A SIGNAL IS OUTPUT FROM **TERMINAL AMH** OF A/C AUTO AMPLIFIER TO **TERMINAL 3** OF A/C SYSTEM AMPLIFIER AND THE CURRENT FLOWING TO **TERMINAL 7** OF A/C SYSTEM AMPLIFIER FROM THE GAUGE FUSE FLOWS FROM **TERMINAL 1** OF A/C SYSTEM AMPLIFIER → **TERMINAL 2** OF AIR MIX CONTROL SERVO MOTOR → **TERMINAL 6** → IF A/C SYSTEM AMPLIFIER → **TERMINAL 9** → **GROUND**. CAUSING THE AIR MIX CONTROL SERVO MOTOR TO ROTATE.

AT THIS TIME IS INPUT THE DAMPER OPENING ANGLE FROM **TERMINAL 4** OF SERVO MOTOR TO **TERMINAL TP** OF A/C AUTO AMPLIFIER THIS IS USED TO DETERMINE THE DAMPER **STOP** POSITION AND MAINTAIN THE SET TEMPERATURE.

WHEN THE TEMPERATURE CONTROL VOLUME IS TURNED TO THE WARM SIDE, IN A/C SYSTEM AMPLIFIER THE CURRENT FLOWS FROM SERVO MOTOR → **TERMINAL 6** OF A/C SYSTEM AMPLIFIER → **TERMINAL 6** OF AIR MIX CONTROL SERVO MOTOR → MOTOR → **TERMINAL 2** → **TERMINAL 1** OF A/C SYSTEM AMPLIFIER → **TERMINAL 9** → **GROUND**, ROTATING THE MOTOR IN REVERSE AND SWITCHING THE DAMPER FROM COOL TO WARM SIDE.

SYSTEM OUTLINE

6. AIR CONDITIONER OPERATION

THE A/C AMPLIFIER RECEIVES VARIOUS SIGNALS, THE ENGINE RPM SIGNAL FROM THE IGNITER, OUTLET TEMPERATURE SIGNAL FROM THE A/C THERMISTOR, COOLANT TEMPERATURE FROM THE WATER TEMP. SENSOR, 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 TURNED ON, A SIGNAL IS INPUT TO **TERMINAL A/C SW** OF A/C AUTO AMPLIFIER FROM **TERMINAL C12** OF A/C CONTROL ASSEMBLY. WHEN THIS HAPPENS, A SIGNAL IS OUTPUT FROM **TERMINAL A/C** OF A/C AUTO AMPLIFIER TO **TERMINAL 3** OF A/C AMPLIFIER.

AS A RESULT, THE CURRENT FLOWING FROM **TERMINAL 3** OF A/C MAGNET CLUTCH RELAY TO **TERMINAL 8** OF A/C AMPLIFIER FLOWS FROM **TERMINAL 15** OF A/C AMPLIFIER TO **GROUND** AND TURNS IN THE MAGNET CLUTCH RELAY.

BECAUSE THE MAGNET CLUTCH IS ON, THE A/C COMPRESSOR OPERATES, CAUSING THE CURRENT FLOWING FROM A/C IDLE-UP VSV TO **TERMINAL 6** OF A/C AMPLIFIER TO FLOW TO **TERMINAL 15** OF A/C AMPLIFIER → **GROUND**, AND TURNS ON THE VSV TO AVOID LOWERING THE ENGINE RPM DURING AIR CONDITIONER OPERATION.

WHEN ANY OF THE FOLLOWING SIGNALS ARE INPUT TO THE A/C AMPLIFIER, THE AMPLIFIER OPERATES TO TURN OFF THE AIR CONDITIONER:

- * ENGINE HIGH RPM SIGNAL
- * COOLANT HIGH TEMP. SIGNAL IS HIGH.
- * A SIGNAL THAT THE TEMPERATURE AT THE AIR OUTLET IS LOW.
- * A SIGNAL THAT THERE IS A LARGE DIFFERENCE BETWEEN ENGINE RPM AND COMPRESSOR RPM
- * A SIGNAL THAT THE REFRIGERANT PRESSURE IS ABNORMALLY HIGH OR LOW.

SERVICE HINTS

A 4 A/C MAGNET CLUTCH

4-GROUND : APPROX. 3.7 Ω

A 5 A/C PRESSURE SW

3-2 : OPEN ABOVE APPROX. 13.5 KG/CM² (192 PSI, 1323 KPA)
CLOSED BELOW APPROX. 10 KG/CM² (142 PSI, 980 KPA)

1-4 : OPEN WITH PRESSURE LESS THAN 2.1 KG/CM² (30 PSI, 206 KPA) OR ABOVE 27 KG/CM² (384 PSI, 2648 KPA)

A18 A/C AMPLIFIER

8-15 : CONTINUITY WITH A/C SW (A/C CONTROL ASSEMBLY) ON AND IGNITION SW **ON** POSITION

14-15 : ALWAYS CONTINUITY

14-GROUND: ALWAYS CONTINUITY

15-GROUND: ALWAYS CONTINUITY

13-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON

A23 A/C ROOM TEMP. SENSOR

1-2 : APPROX. 1.7 KΩ AT 25°C (77°F)

A26 A/C THERMISTOR

1-2, 3-4 : APPROX. 4852 Ω AT 0°C (32°F)
APPROX. 2341 Ω AT 15°C (39°F)
APPROX. 1500 Ω AT 25°C (77°F)

A29 AIR MIX CONTROL SERVO MOTOR

2-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **WARM** TO **COOL** POSITION

6-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **COOL** TO **WARM** POSITION

1-3 : ALWAYS APPROX. 6 KΩ

A32(A), A33(B) A34(C) AUTO A/C AMPLIFIER

B-GROUND : APPROX. 12 VOLTS

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

HR-GROUND : CONTINUITY WITH BLOWER SW (A/C CONTROL ASSEMBLY) ON OR AUTO SW ON

S5-GROUND : APPROX. 5 VOLTS WITH IGNITION SW ON

SG-GROUND : ALWAYS CONTINUITY

REC-GROUND: APPROX. 12 VOLTS WITH A/C CONTROL ASSEMBLY AT **RECIRC** POSITION

FRS-GROUND: APPROX. 12 VOLTS WITH A/C CONTROL ASSEMBLY AT **FRESH** POSITION

GND-GROUND: ALWAYS CONTINUITY

B 3 BLOWER CONTROL RELAY

3-4 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **ON** POSITION

B 5 BLOWER RESISTOR

1-4 : APPROX. 2.4 Ω

W 3 WATER TEMP. SW (FOR FANS CONTROL)

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

 : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 1		25	A23		26	B 4		26
A 2		25	A24		26	B 5		26
A 3		25	A25		26	E 6		26
A 4		25	A26		26	J 4		26
A 5		25	A27		26	J 5		26
A 6		25	A29		26	J 6		26
A18		26	A30		26	R 1		25
A19	A	26	A32	A	26	R 4		26
A20	C	26	A33	B	26	W 3		25
A21	B	26	A34	C	26			
A22		26	B 3		26			

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
EB2	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IH1	30	ENGINE WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ1	32	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ3		
IQ1	32	COWL WIRE AND A/C NO. 2 WIRE (BESIDE HEATER UNIT)
IQ2		
IQ3		

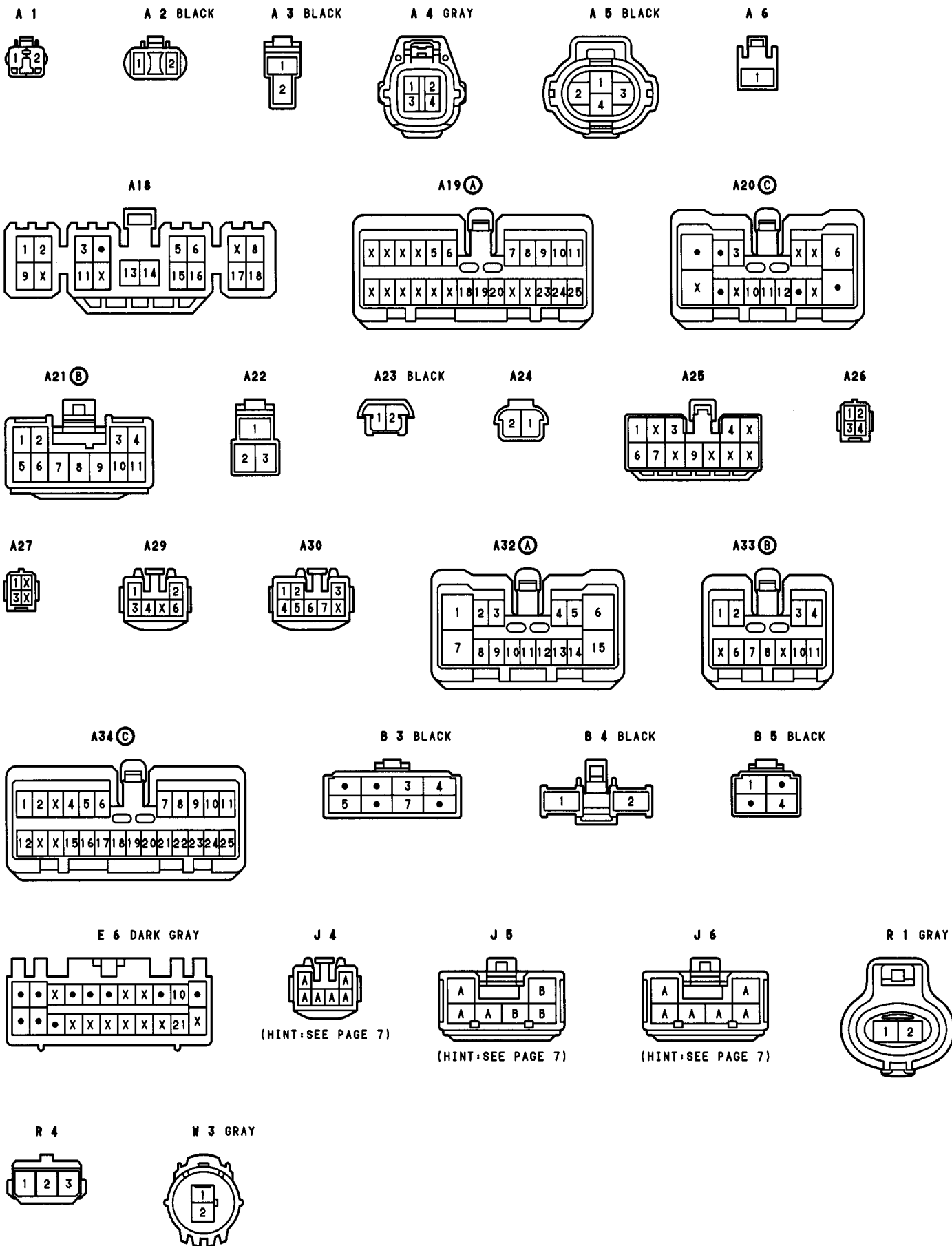
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL
IG	30	R/B NO. 4 SET BOLT

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	28	ENGINE ROOM MAIN WIRE	I 3	32	COWL WIRE
E 3			I 4		
E 4			I 5		
E 5	28	ENGINE WIRE	I 8	32	A/C NO. 2 WIRE
E10	28	COWL WIRE	I11		

RADIATOR FAN AND AIR CONDITIONER (AUTOMATIC AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)



RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 2	25	A25	26	J 4	26
A 3	25	A26	26	J 5	26
A 4	25	A29	26	J 6	26
A 5	25	A30	26	R 1	25
A 6	25	B 3	26	R 4	26
A18	26	B 4	26	W 3	25
A19	A 26	B 5	26		
A20	B 26	E 6	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
4	24	R/B NO. 4 (RIGHT KICK PANEL)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
1H	18	ENGINE ROOM MAIN WIRE AND J/B NO. 1 (LEFT KICK PANEL)
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2D	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2E		
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28	COWL WIRE AND ENGINE ROOM MAIN WIRE (FRONT SIDE OF RIGHT FRONT FENDER)
EB2	28	ENGINE WIRE AND COWL WIRE (REAR SIDE OF RIGHT FRONT FENDER)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IH1	30	ENGINE WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ1	32	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IQ1	32	COWL WIRE AND A/C NO. 2 WIRE (BESIDE HEATER UNIT)
IQ2		

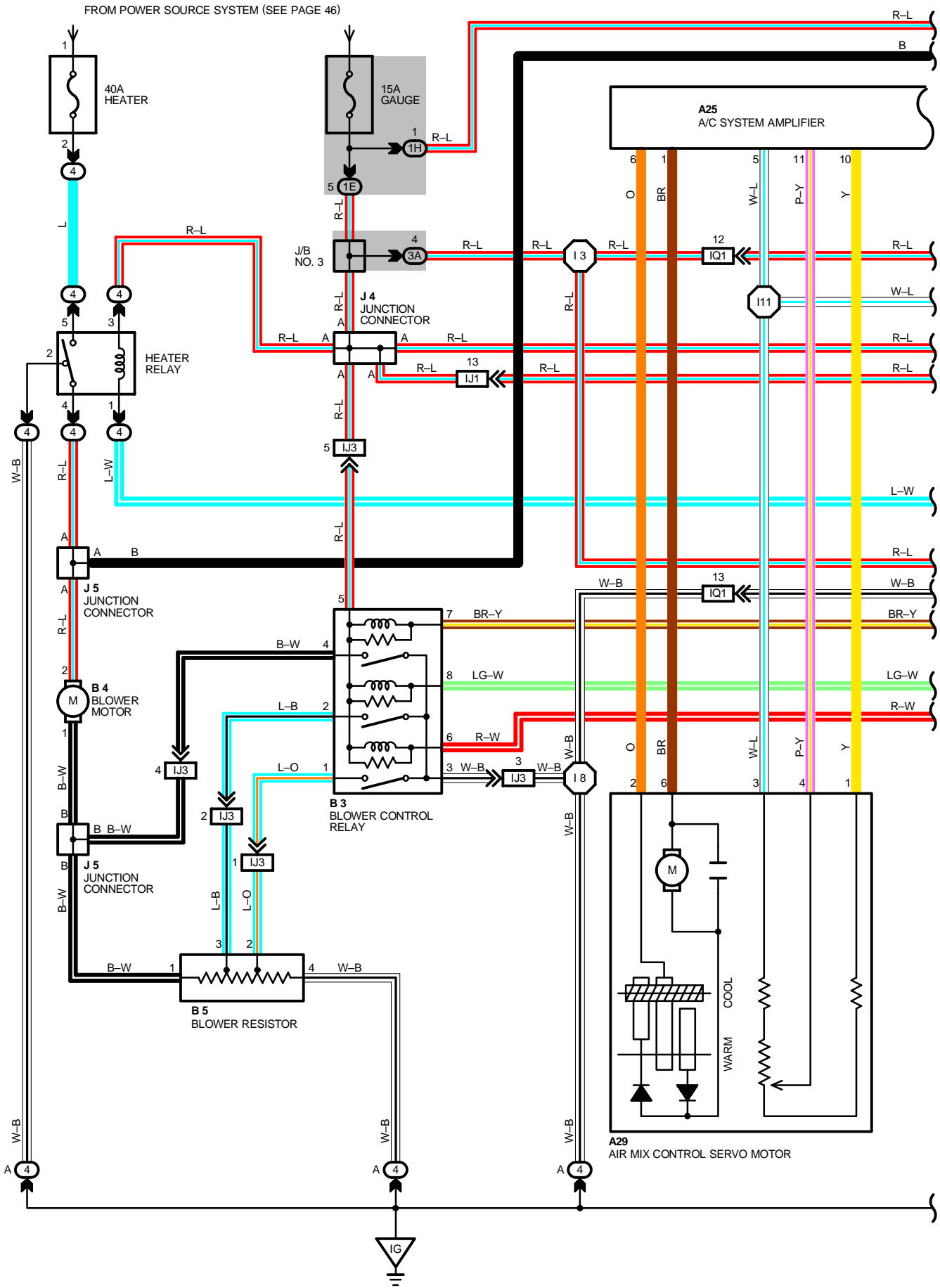
▽ : GROUND POINTS

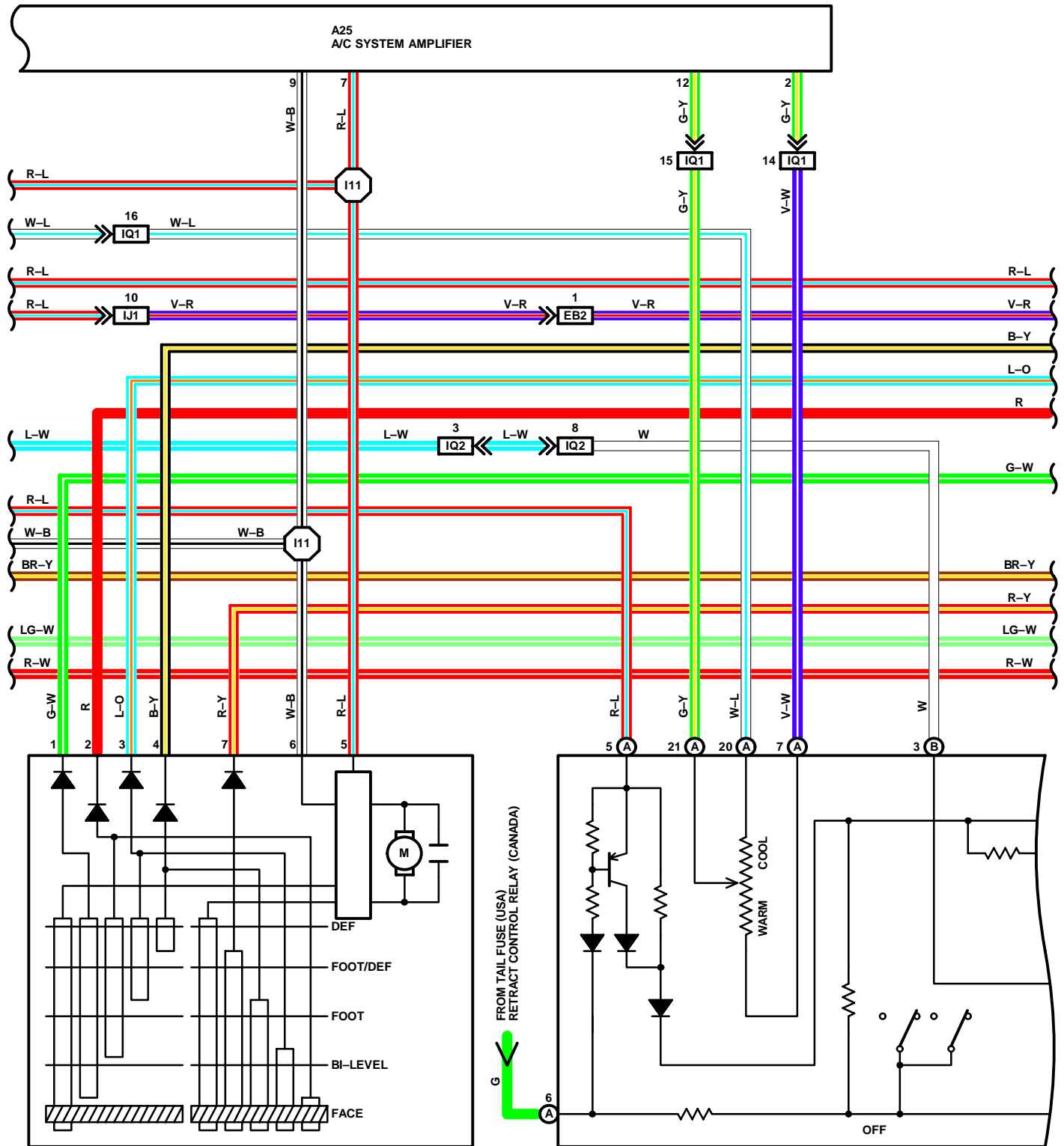
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
ID	30	LEFT KICK PANEL
IG	30	R/B NO. 4 SET BOLT

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	28	ENGINE ROOM MAIN WIRE	E10	28	COWL WIRE
E 3			I 3	32	
E 4			I 8	32	
E 5	28	ENGINE WIRE	I11	32	A/C NO. 2 WIRE

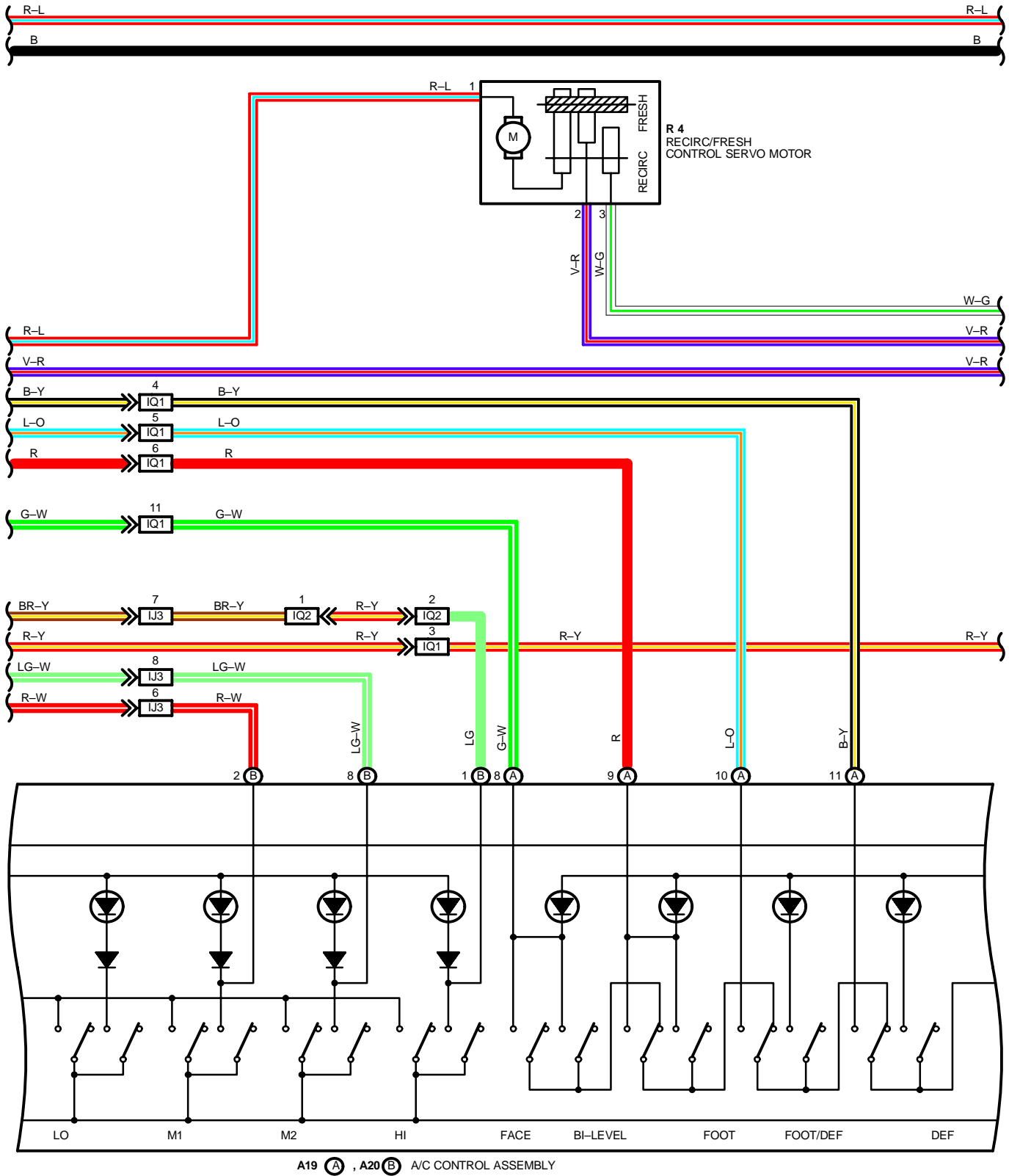
RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)



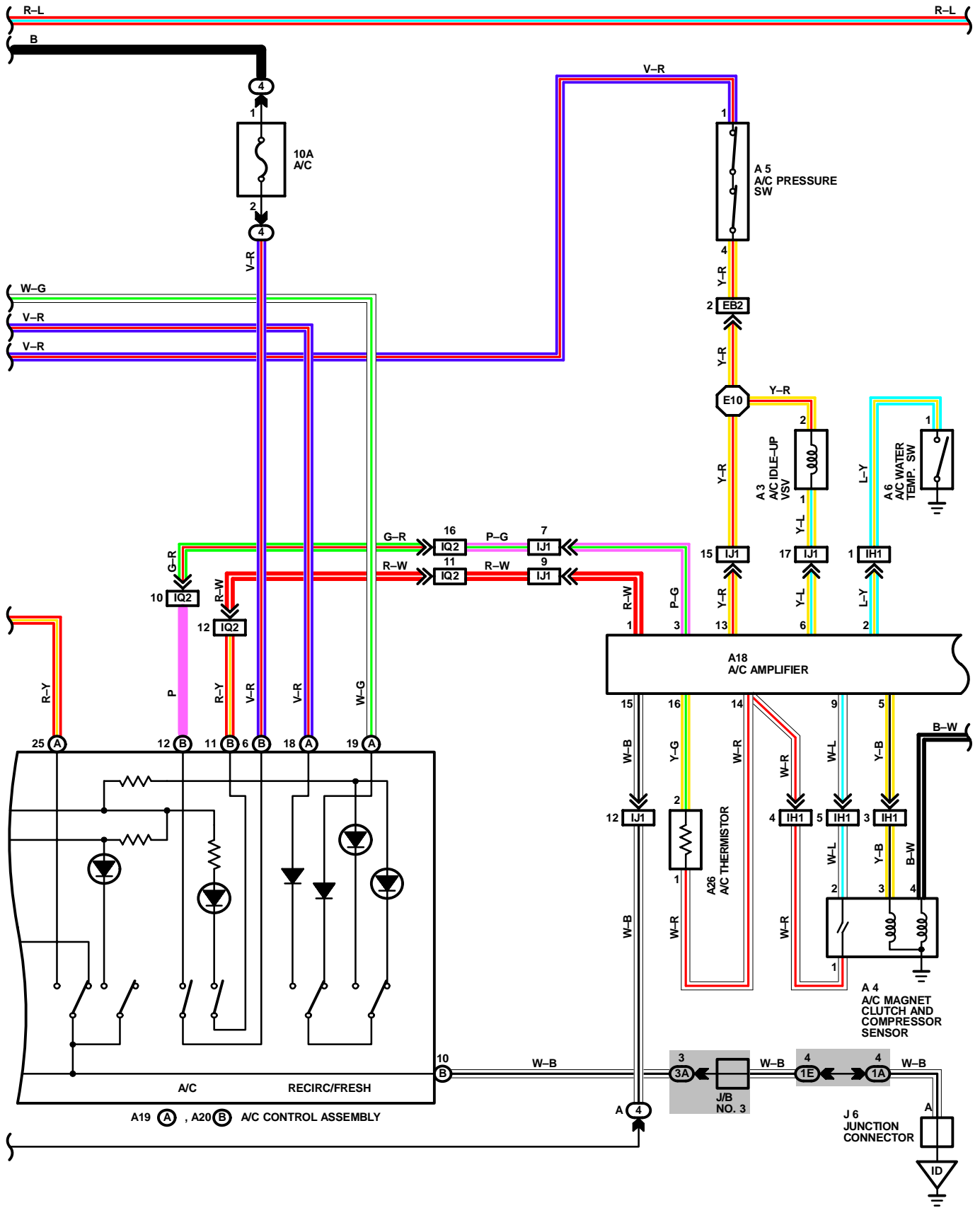


FROM TAIL FUSE (USA)
RETRACT CONTROL RELAY (CANADA)

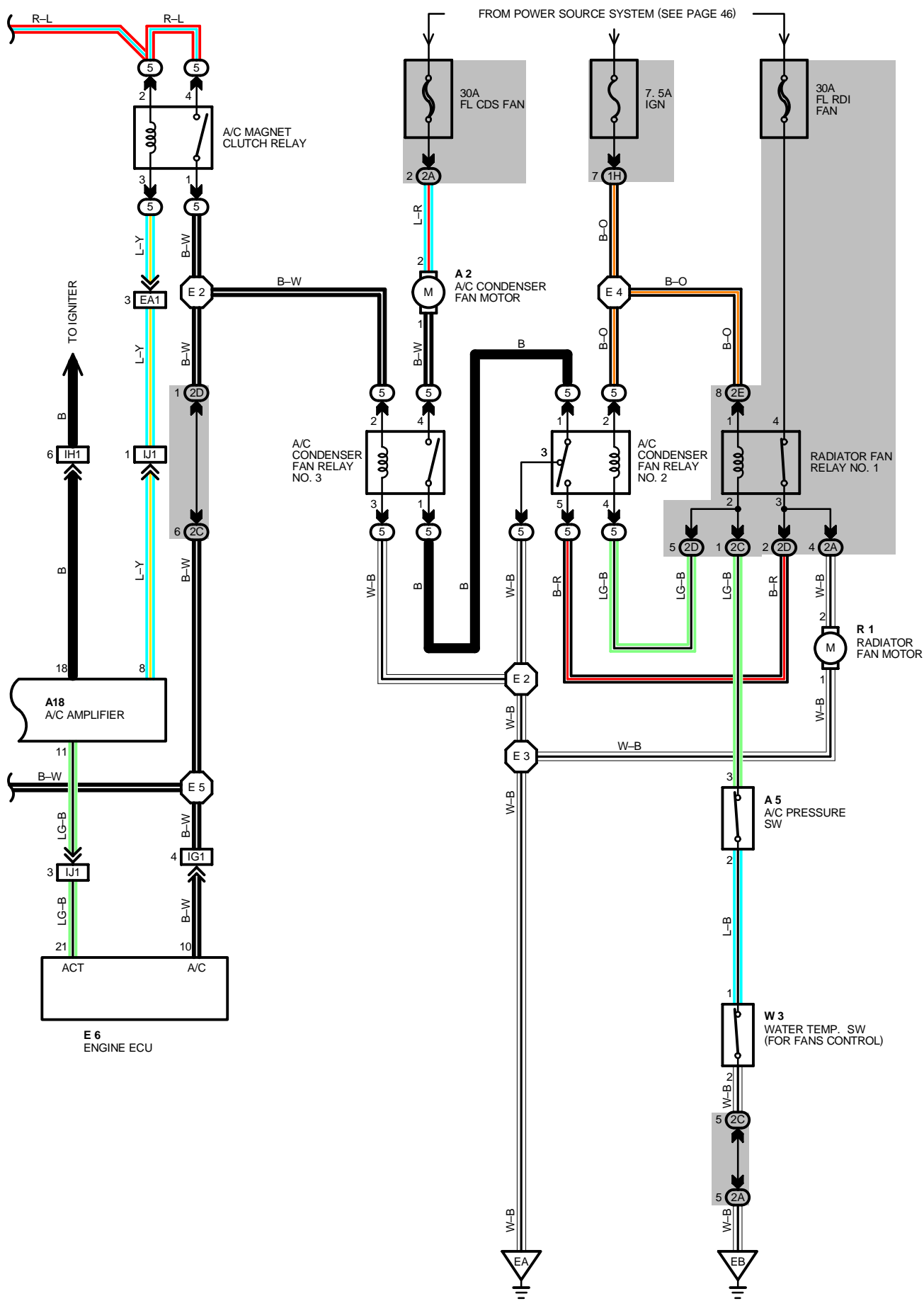
RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)



A19 (A) , A20 (B) A/C CONTROL ASSEMBLY



RADIATOR FAN AND AIR CONDITIONER (MANUAL AIR CONDITIONER, FOR PUSH TYPE OF BLOWER CONTROL SW)



A 2 BLACK



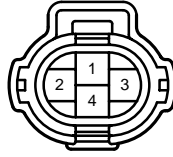
A 3 BLACK



A 4 GRAY



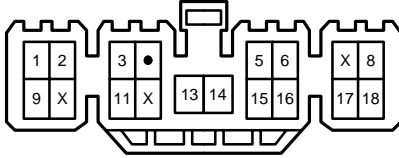
A 5 BLACK



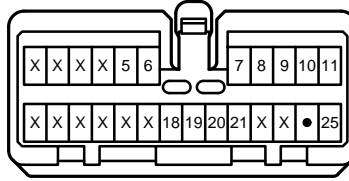
A 6



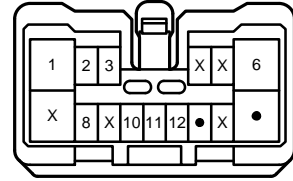
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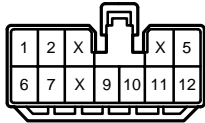
A19 (A)



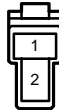
A20 (B)



A25



A26



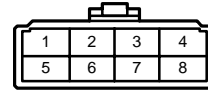
A29



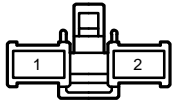
A30



B 3 BLACK



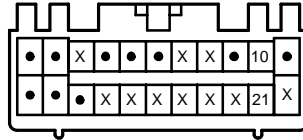
B 4 BLACK



B 5 BLACK



E 6 DARK GRAY

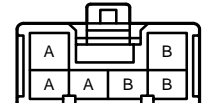


J 4



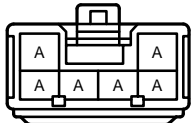
(HINT : SEE PAGE 7)

J 5



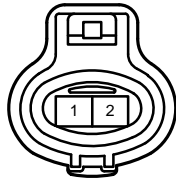
(HINT : SEE PAGE 7)

J 6

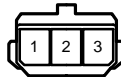


(HINT : SEE PAGE 7)

R 1 GRAY



R 4



W 3 GRAY



SYSTEM OUTLINE

1. COOLING FAN OPERATION

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FROM IGN FUSE FLOWS TO **TERMINAL 3** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 4** → **TERMINAL 3** OF THE A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, FROM **TERMINAL 2** OF A/C FAN RELAY NO. 2 → **TERMINAL 4** → **TERMINAL 3** OF A/C PRESSURE SW → **TERMINAL 2** → **TERMINAL 1** OF WATER TEMP. SW (FOR FANS CONTROL) → **TERMINAL 2** (5S-FE) → **GROUND**, CAUSING RELAY NO. 1 AND RELAY NO. 2 OF EACH FAN TO TURN ON.

*** OPERATION AT LOW SPEED**

WHEN THE A/C SW (A/C CONTROL ASSEMBLY) IS TURNED ON AND THE AIR CONDITIONER OPERATES, THE CURRENT FLOWS FROM GAUGE FUSE FLOWS TO **TERMINAL 2** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 3** → **TERMINAL 8** OF A/C AMPLIFIER CAUSING A/C MAGNET CLUTCH RELAY TO TURN ON.

AT THAT TIME, THE CURRENT FROM GAUGE FUSE FLOWS TO **TERMINAL 4** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 1** → **TERMINAL 4** OF A/C MAGNET CLUTCH → **GROUND**, AND FROM **TERMINAL 1** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 2** OF A/C FAN RELAY NO. 3 → **TERMINAL 3** → **GROUND**.

AS A RESULT, A/C MAGNET CLUTCH AND A/C FAN RELAY NO. 3 TURNS ON AND THE CURRENT FLOWS FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** → **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 5** → **TERMINAL 2** OF A/C CONDENSOR FAN MOTOR → **TERMINAL 1** → **GROUND**, FLOWING TO EACH FAN MOTOR IN SERIES, CAUSING THE COOLING FAN TO ROTATE AT LOW SPEED.

*** OPERATION AT HIGH SPEED**

DURING A/C OPERATION, WHEN THE PRESSURE OF A/C COMPRESSOR BECOMES HIGHER THAN NORMAL PRESSURE (MORE THAN **14.3 KG/CM² 1401 KPA, 203 PSI**), THE A/C PRESSURE SW TURNS OFF.

AS A RESULT, FAN RELAY NO. 1 AND NO. 2 TURNS OFF AND THE CURRENT FLOWS FROM FL RDI FAN → **TERMINAL 1** OF RADIATOR FAN RELAY NO. 1 → **TERMINAL 2** → **TERMINAL 2** OF RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, AND FROM FL CDS FAN → **TERMINAL 2** OF A/C CONDENSOR FAN MOTOR → **TERMINAL 1** → **TERMINAL 4** OF A/C FAN RELAY NO. 3 → **TERMINAL 1** **TERMINAL 1** OF A/C FAN RELAY NO. 2 → **TERMINAL 3** → **GROUND**, FLOWING TO EACH FAN MOTOR IN PARALLEL CAUSING THE → COOLING FAN TO ROTATE AT HIGH SPEED. WHEN THE ENGINE COOLANT TEMPERATURE BECOMES MORE THAN ABOUT **90°C (194°F)**, THE WATER TEMP. SW TURNS OFF AND THE SAME OPERATION AS ABOVE IS PERFORMED.

2. HEATER BLOWER MOTOR OPERATION PUSH TYPE BLOWER CONTROL SW (W/O AUTO A/C)

CURRENT IS APPLIED AT ALL TIMES THROUGH THE HEATER FUSE TO **TERMINAL 5** OF HEATER RELAY. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL 3** OF HEATER RELAY → **TERMINAL 1** → **TERMINAL C3** OF A/C CONTROL ASSEMBLY.

AT THE SAME TIME, CURRENT ALSO FLOWS FROM GAUGE FUSE TO **TERMINAL 5** OF A/C BLOWER CONTROL RELAY → **TERMINAL 7** → **TERMINAL C1** OF A/C CONTROL ASSEMBLY, FROM **TERMINAL 5** OF BLOWER CONTROL RELAY → **TERMINAL 8** → **TERMINAL C8** OF A/C CONTROL ASSEMBLY, AND ALSO FROM **TERMINAL 5** OF BLOWER CONTROL ASSEMBLY.

*** LOW SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **LOW** POSITION, THE CURRENT FLOWING TO **TERMINAL C3** OF A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 4** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT LOW SPEED.

*** HIGH SPEED OPERATION (OPERATION AT MANUAL)**

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **HI** POSITION, CURRENT FLOWS FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY → **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

AS A RESULT, THE CURRENT FLOWING TO **TERMINAL C1** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND**, TURNING THE A/C BLOWER CONTROL RELAY ON.

THIS CASE IS THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF RELAY → **TERMINAL 2** OF BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 4** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

* MEDIUM SPEED OPERATION (OPERATION AT MANUAL M1, M2)

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M1** POSITION, CURRENT FLOWS FROM **TERMINAL C3** OF A/C CONTROL ASSEMBLY TO **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

AS A RESULT, THE CURRENT FLOWING TO **TERMINAL C2** OF THE A/C CONTROL ASSEMBLY FLOWS TO **TERMINAL C10** OF THE A/C CONTROL ASSEMBLY → **GROUND**, TURNING THE BLOWER CONTROL RELAY ON SO THAT THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 5** OF THE HEATER RELAY FLOWS TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 2** OF BLOWER MOTOR → **TERMINAL 1** → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL 7** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT MEDIUM SPEED.

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M2** POSITION, CURRENT FLOWS FROM **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL 2** OF BLOWER CONTROL RELAY → **TERMINAL 3** → **GROUND**. THIS CURRENT FLOW FROM BLOWER MOTOR TO GROUND IS GREATER THAN AT **M1** POSITION, SO THE BLOWER MOTOR ROTATES AT MEDIUM HIGH SPEED.

3. OPERATION OF RECIRC/FRESH CONTROL SERVO MOTOR

(SWITCHING FROM FRESH TO RECIRC)

WITH IGNITION SW TURNED ON, THE CURRENT FLOWS FROM GAUGE FUSE TO **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR. WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE RECIRC SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 2** → **TERMINAL A18** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL C10** → **GROUND**. THE MOTOR ROTATES AND THE DAMPER MOVES TO THE RECIRC SIDE.

WHEN IT IS IN THE **RECIRC** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH IGNITION SW ON, WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE FRESH SIDE, THE CURRENT FLOWS FROM **TERMINAL 1** OF RECIRC/FRESH CONTROL SERVO MOTOR → **TERMINAL 3** → **TERMINAL C10** OF A/C CONTROL ASSEMBLY → **GROUND**, THE MOTOR ROTATES AND THE DAMPER MOVES TO THE FRESH SIDE. WHEN IT IS IN THE **FRESH** POSITION, THE CURRENT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS AT THAT POSITION.

SERVICE HINTS

A 4 A/C MAGNET CLUTCH

4-GROUND : APPROX. 3.7 Ω

A 5 A/C PRESSURE SW

3-2 : OPEN ABOVE APPROX. 13.5 KG/CM² (192 PSI, 1323 KPA)

CLOSED BELOW APPROX. 10 KG/CM² (142 PSI, 980 KPA)

1-4 : OPEN WITH PRESSURE LESS THAN 2.1 KG/CM² (30 PSI, 206 KPA) OR ABOVE 27 KG/CM² (384 PSI, 2648 KPA)

A18 A/C AMPLIFIER

8-15 : CONTINUITY WITH A/C SW (A/C CONTROL ASSEMBLY) ON AND IGNITION SW **ON** POSITION

14-15 : ALWAYS CONTINUITY

14-GROUND: ALWAYS CONTINUITY

15-GROUND: ALWAYS CONTINUITY

13-GROUND: APPROX. 12 VOLTS WITH IGNITION SW ON

A26 A/C THERMISTOR

1-2 : APPROX. 4852 Ω AT 0°C (32°F)

APPROX. 2341 Ω AT 15°C (59°F)

APPROX. 1500 Ω AT 25°C (77°F)

A29 AIR MIX CONTROL SERVO MOTOR

2-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **WARM TO COOL** POSITION

6-GROUND : APPROX. 12 VOLTS WITH TEMPERATURE CONTROL VOLUME AT **COOL TO WARM** POSITION

1-3 : ALWAYS APPROX. 6 KΩ

B 3 BLOWER CONTROL RELAY

3-4 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **HI** POSITION

1-3 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **M1** POSITION

2-3 : CLOSED WITH BLOWER SW (A/C CONTROL ASSEMBLY) AT **M2** POSITION

B 5 BLOWER RESISTOR

1-3 : APPROX. 0.48 Ω

3-2 : APPROX. 0.94 Ω

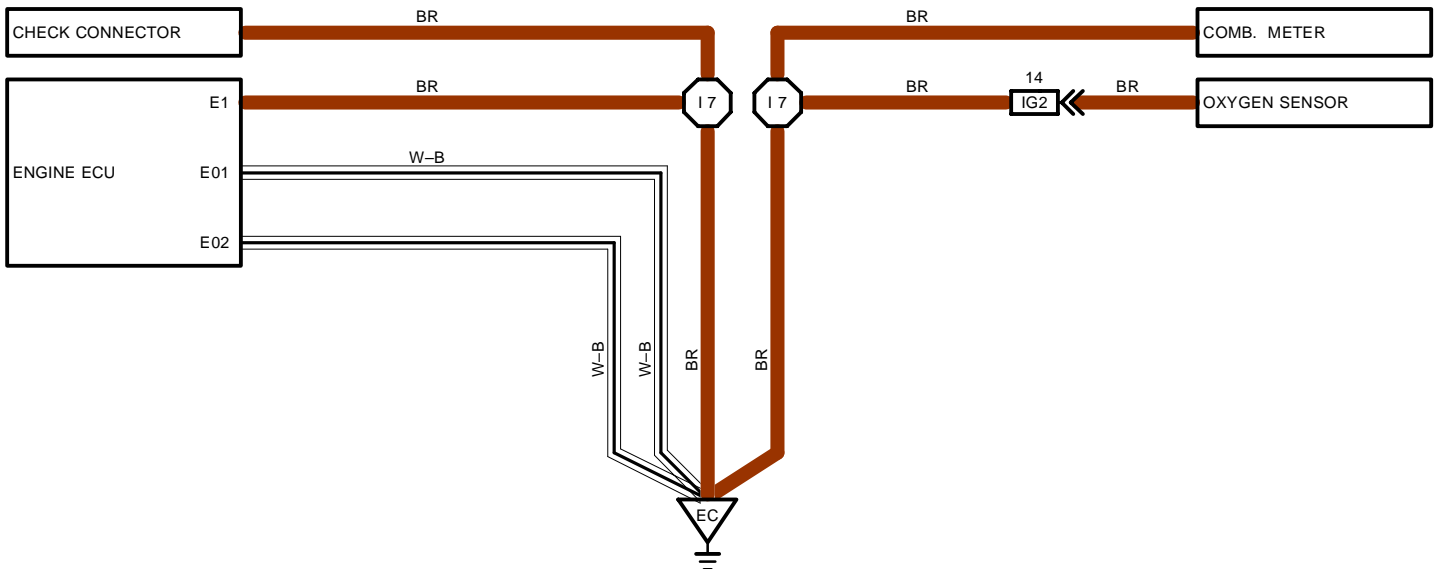
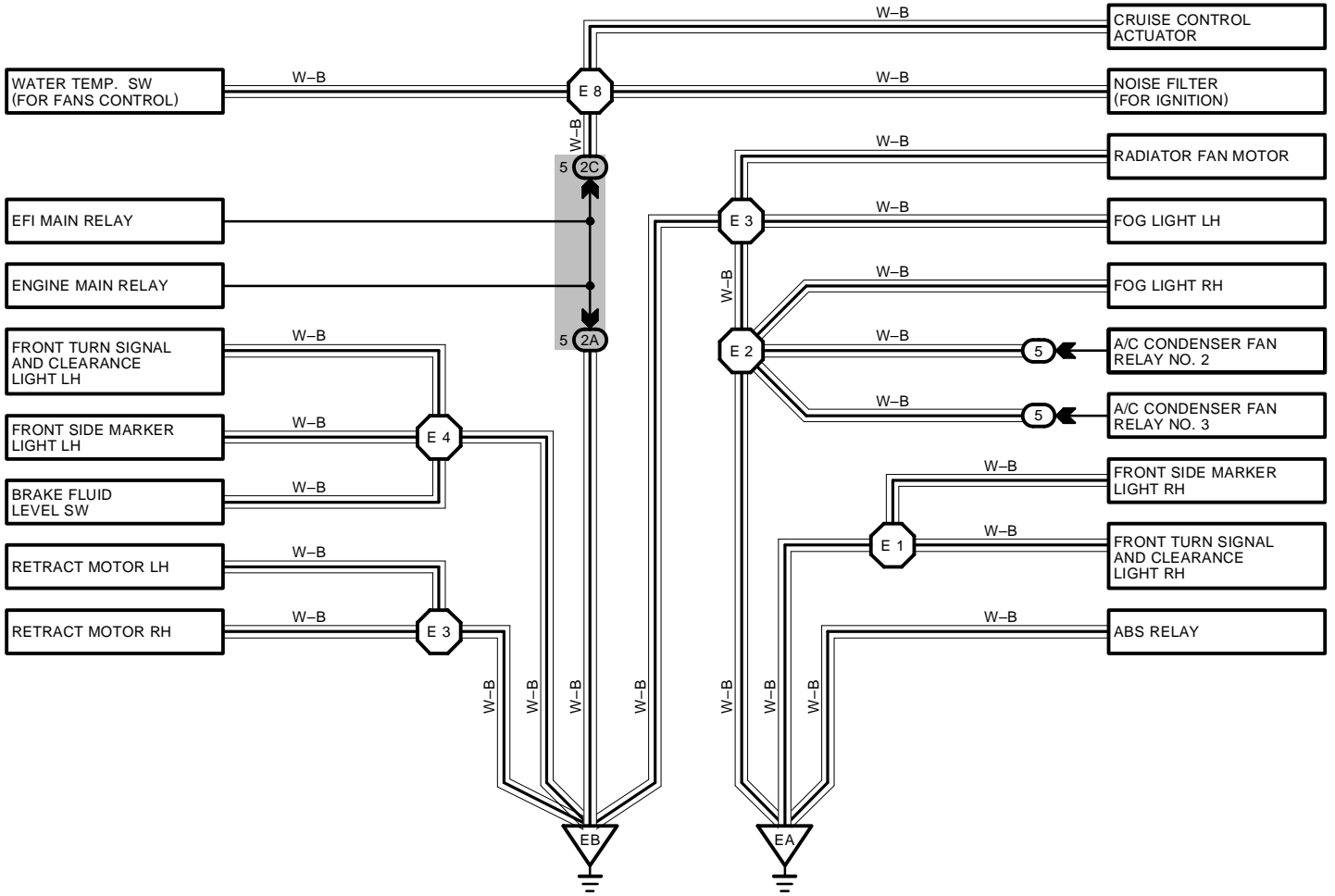
2-4 : APPROX. 0.91 Ω

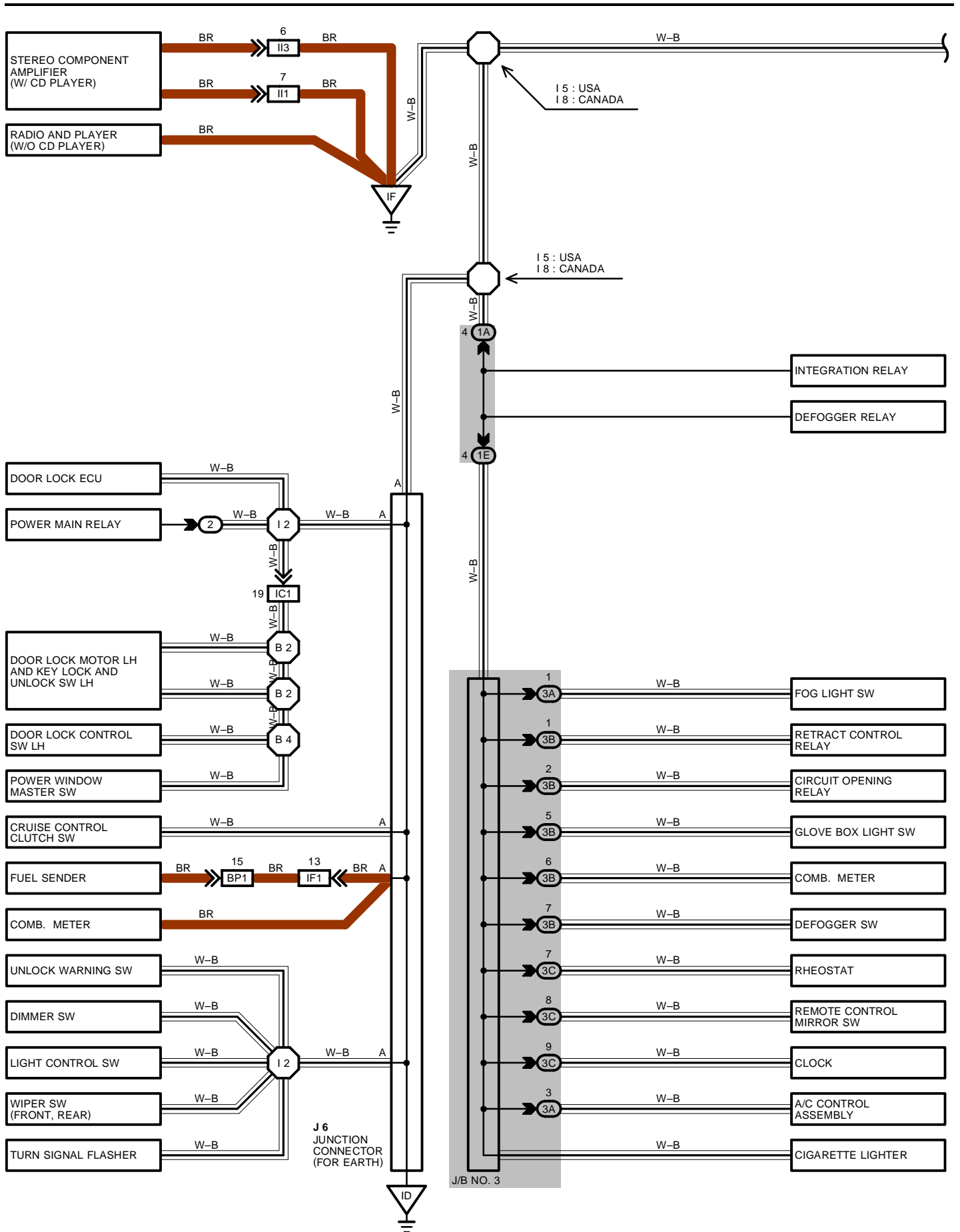
W 3 WATER TEMP. SW (FOR FANS CONTROL)

1-2 : OPEN ABOVE APPROX. 90°C (194°F)

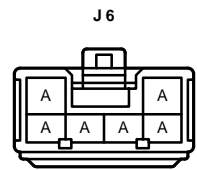
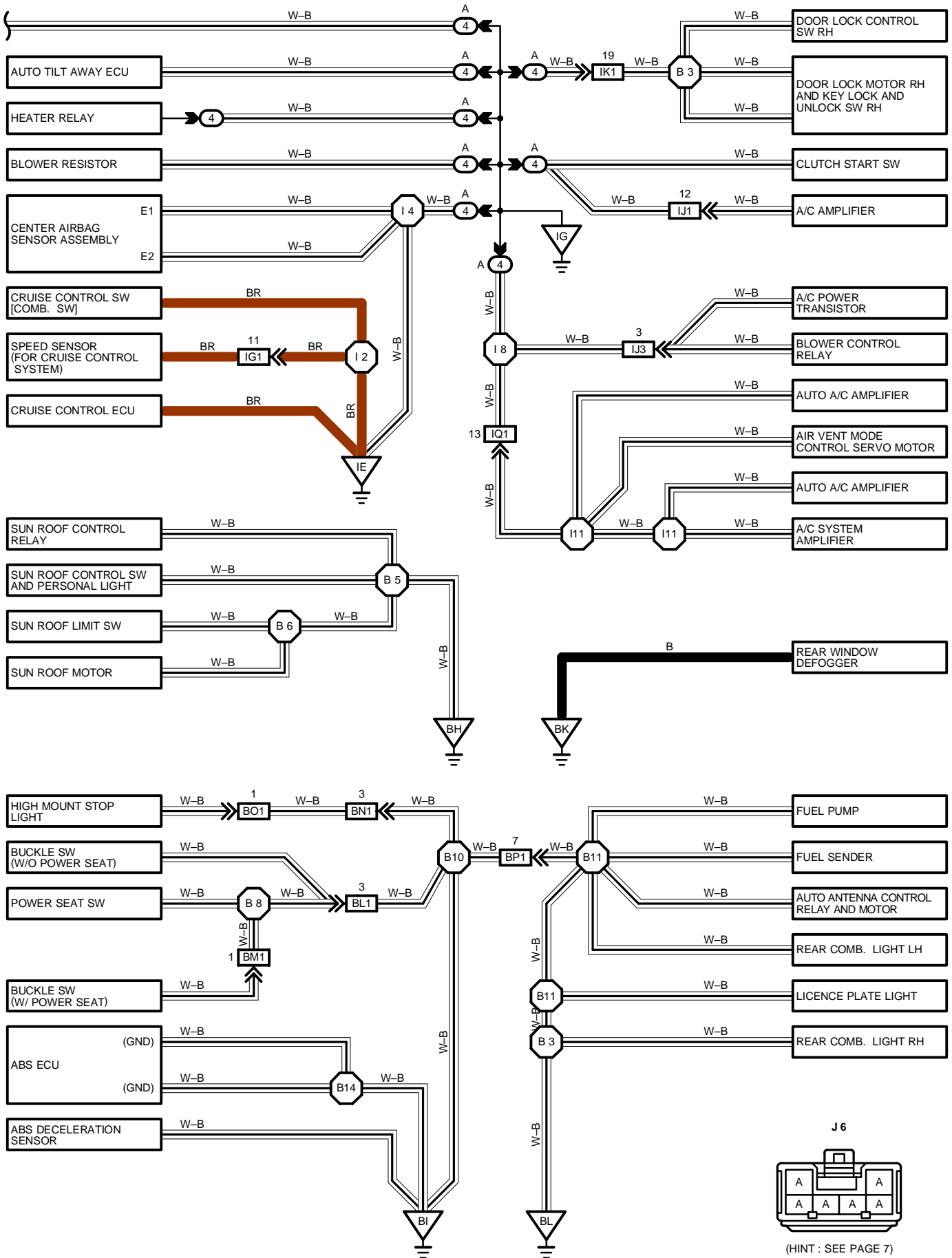
CLOSED BELOW APPROX. 83°C (181.4°F)

GROUND POINT





GROUND POINT



(HINT : SEE PAGE 7)

 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 6	26				

 : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	23	R/B NO. 2 (LEFT KICK PANEL)
4	24	R/B NO. 4 (RIGHT KICK PANEL)
5	24	R/B NO. 5 (ENGINE COMPARTMENT FRONT RIGHT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	18	COWL WIRE AND J/B NO. 1 (LEFT KICK PANEL)
1E		
2A	20	ENGINE ROOM MAIN WIRE AND J/B NO. 2 (NEAR THE BATTERY)
2C	20	ENGINE WIRE AND J/B NO. 2 (NEAR THE BATTERY)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IC1	30	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	30	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	30	ENGINE WIRE AND COWL WIRE (UNDER THE ENGINE ECU)
IG2		
II1	32	COWL WIRE AND CONSOLE BOX WIRE (INSTRUMENT PANEL CENTER)
II3	32	COWL WIRE AND CONSOLE BOX WIRE (RIGHT KICK PANEL)
IJ1	32	COWL WIRE AND A/C NO. 1 WIRE (BEHIND THE GLOVE BOX)
IJ3		
IK1	32	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IQ1	32	COWL WIRE AND A/C NO. 2 WIRE (BESIDE HEATER UNIT)
BL1	34	FLOOR WIRE AND FRAME WIRE (LEFT SIDE OF FRONT FLOOR PANEL)
BM1	34	FRAME WIRE AND SEAT WIRE (UNDER THE DRIVER'S SEAT)
BN1	34	BACK DOOR NO. 1 WIRE AND FLOOR WIRE (LEFT SIDE OF PACKAGE TRAY TRIM)
BO1	34	BACK DOOR NO. 1 WIRE AND BACK DOOR NO. 1 SUB WIRE (BACK DOOR UPPER LEFT)
BP1	34	FLOOR WIRE AND LUGGAGE ROOM WIRE (LEFT QUARTER PANEL CENTER)

 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28	FRONT RIGHT FENDER
EB	28	FRONT LEFT FENDER
EC	28	INTAKE MANIFOLD
ID	30	LEFT KICK PANEL
IE	30	INSTRUMENT PANEL BRACE LH
IF	30	INSTRUMENT PANEL BRACE RH
IG	30	R/B NO. 4 SET BOLT
BH	34	ROOF LEFT
BI	34	UNDER THE LEFT CENTER PILLAR
BK	34	BACK DOOR RIGHT
BL	34	BACK PANEL CENTER

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28	ENGINE ROOM MAIN WIRE	I11	32	A/C NO. 2 WIRE
E 2			B 2	34	FRONT DOOR LH WIRE
E 3			B 3	34	FRONT DOOR RH WIRE
E 4			B 4	34	FRONT DOOR LH WIRE
E 8	28	ENGINE WIRE	B 5	34	ROOF WIRE
I 2			B 6		
I 4	32	COWL WIRE	B 8	34	FRAME WIRE
I 5			B10	34	FLOOR WIRE
I 7	32	ENGINE WIRE	B11	34	LUGGAGE ROOM WIRE
I 8	32	COWL WIRE	B14	34	FLOOR WIRE