

FOREWORD

This wiring diagram has been prepared to provide information on the electrical system of the 1993 TOYOTA MR2.

Applicable models: SW20, 21 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.
1993 MR2 Repair Manual Volume 1 Volume 2 1993 MR2 New Car Features Supplement	 RM285U1 RM285U2 NCF083U

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

Servicing vehicles with an SRS AIRBAG (referred to as the airbag in the remainder of this manual) installed.

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 11 sections:

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

4

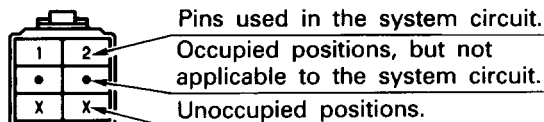


- (A) : System Title
- (B) : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.

Example:  Indicates Relay Block No. 1.

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

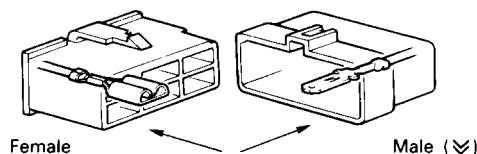
Explanation of pin use.



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

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

Outside numerals are pin numbers.

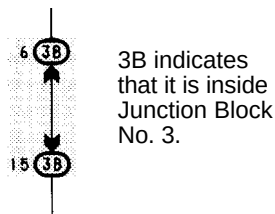


The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

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

Example:



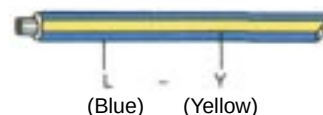
- (J) : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

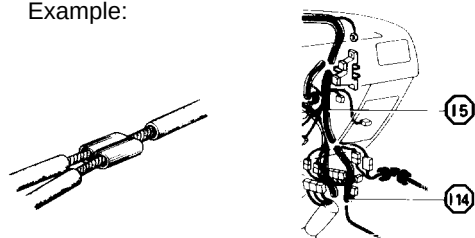
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



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

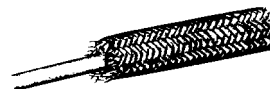
Example:



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

- (L) : Page No.

- (M) : Indicates a shielded cable.



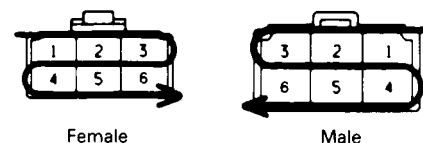
- (N) : Indicates a ground point.

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

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

The numbering system is different for female and male connectors.

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



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

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

P 2 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

P 4 POWER WINDOW MASTER SW

4-GROUND: ALWAYS CONTINUITY

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

WINDOW LOCK SW

OPEN WITH THE WINDOW LOCK SW AT LOCK POSITION



: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
P 2	21	P 4	21	P 6	21
P 3	21	P 5	21		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
I 5	24	COWL WIRE

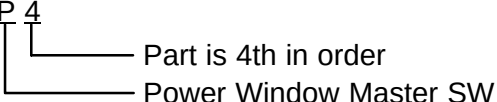
Ⓚ : Explains the system outline.

Ⓡ : Indicates values or explains the function for reference during troubleshooting.

Ⓢ : Indicates the reference page showing the position on the vehicle of the parts in the system circuit.

Example: Part "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.

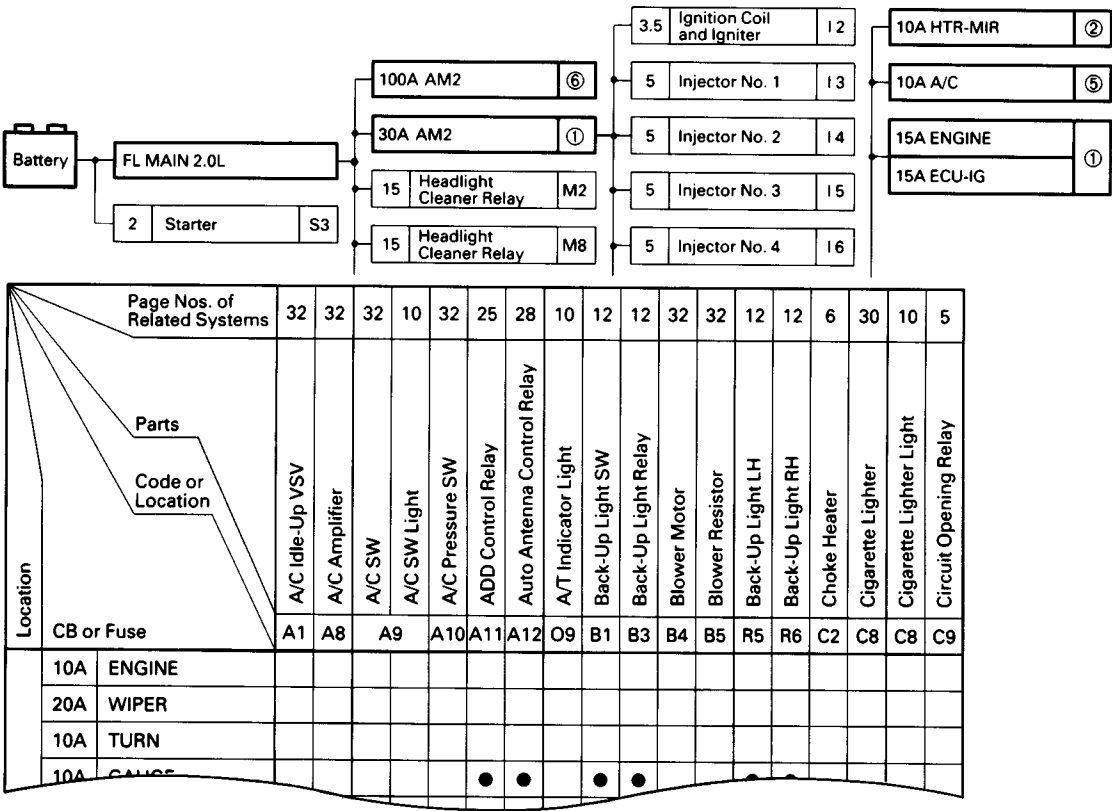
Example: Splice point "I 5" is on the Cowl Wire Harness and is described on page 24 of this manual.

HOW TO USE THIS MANUAL

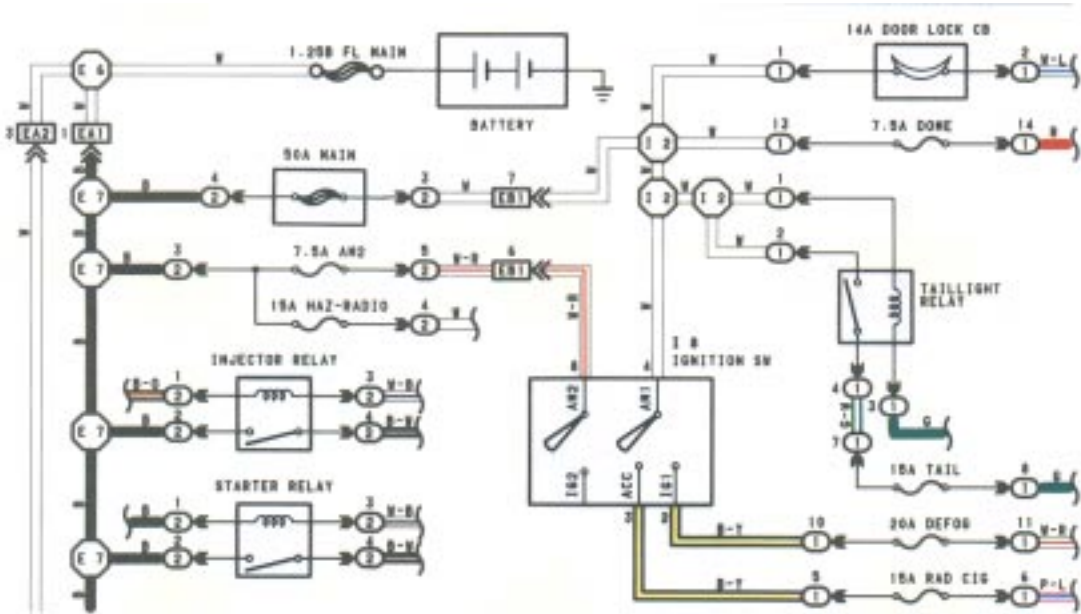
The “Current Flow Chart” section, describes which parts each power source (fuses, fusible links, and circuit breakers) transmits current to. In the Power Source circuit diagram, the conditions when battery power is supplied to each system are explained. Since all System Circuit diagrams start from the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



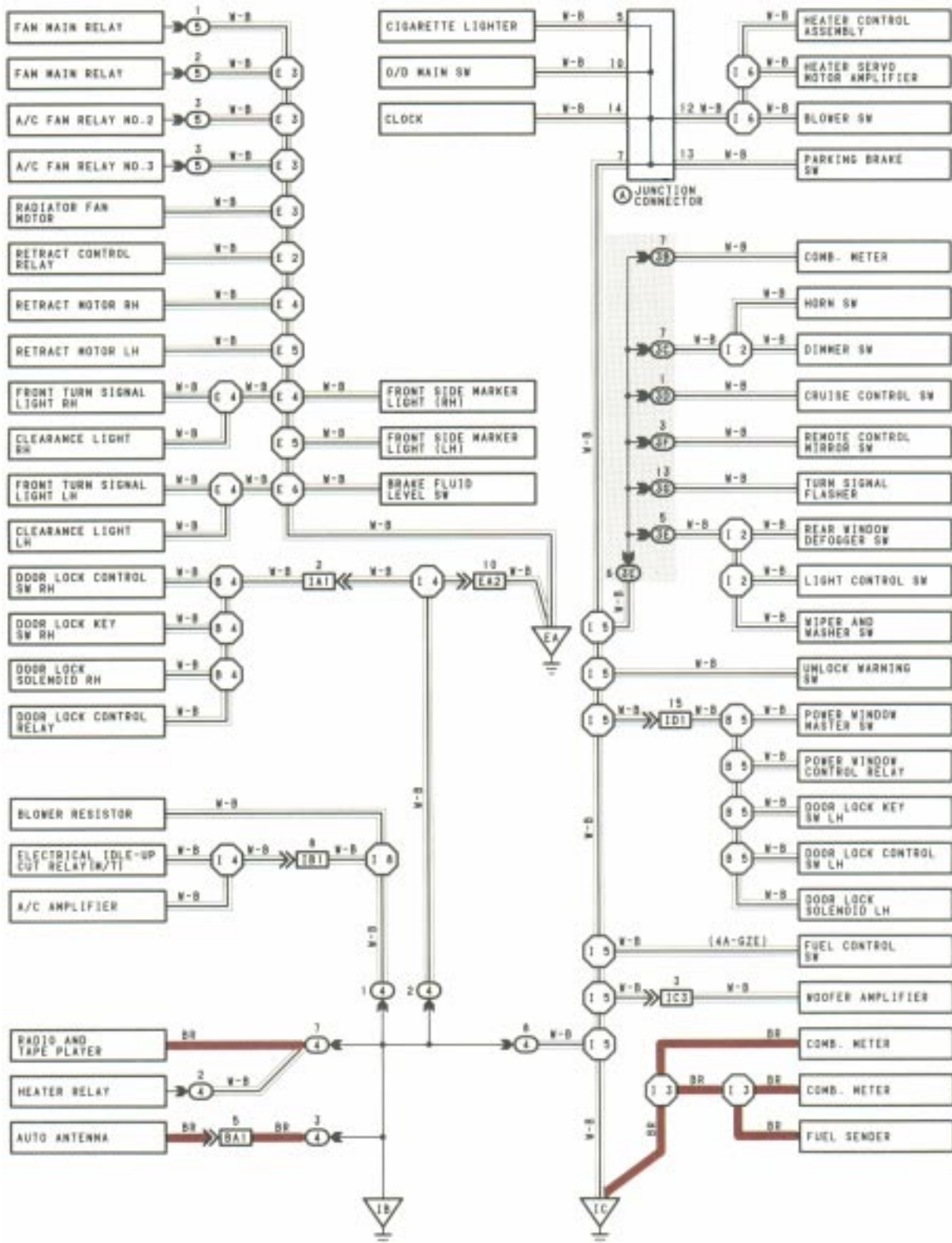
POWER SOURCE



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

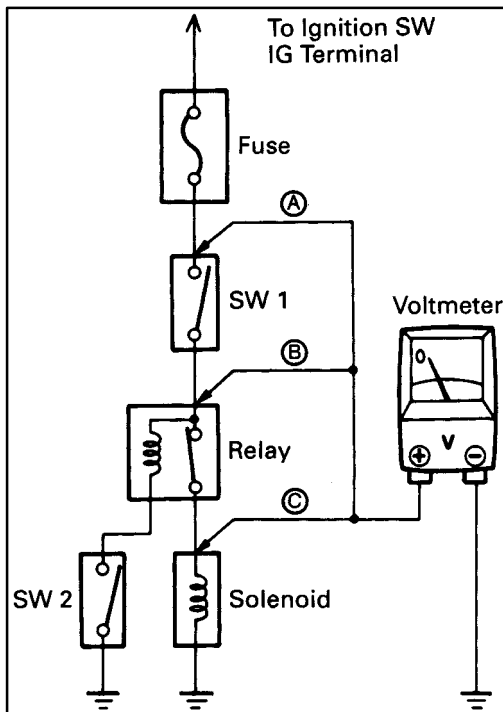
The ground points circuit diagram shows the connections from all major parts to the respective ground points. When troubleshooting a faulty ground point, checking the system circuits which use a common ground may help you identify the problem ground quickly. The relationship between ground points ( ,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

GROUND POINT



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

TROUBLESHOOTING

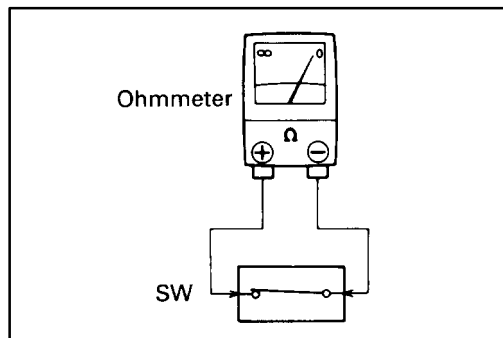


VOLTAGE CHECK

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

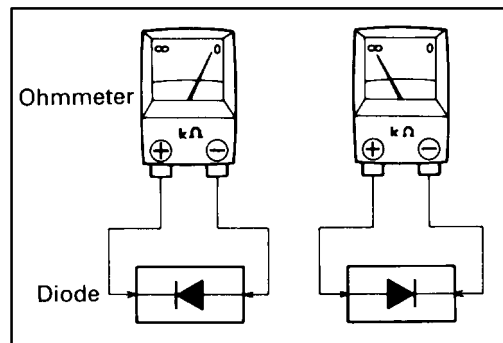
Example:

- Ⓐ – 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

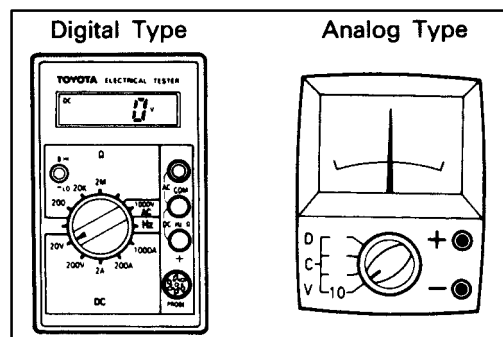
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
- (b) Contact the two leads of an ohmmeter to each of the check points.



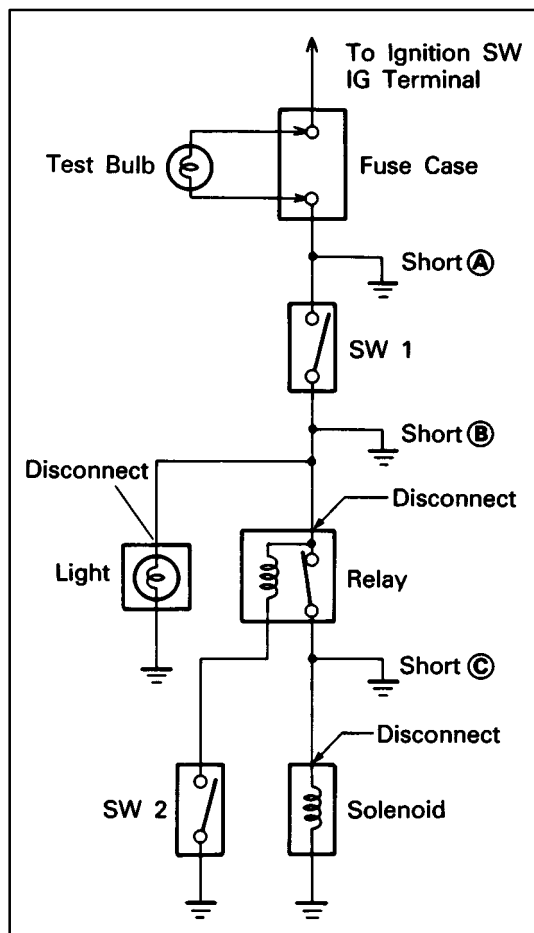
If the circuit has diodes, reverse the two leads and check again.

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



FINDING A SHORT CIRCUIT

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

Example:

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

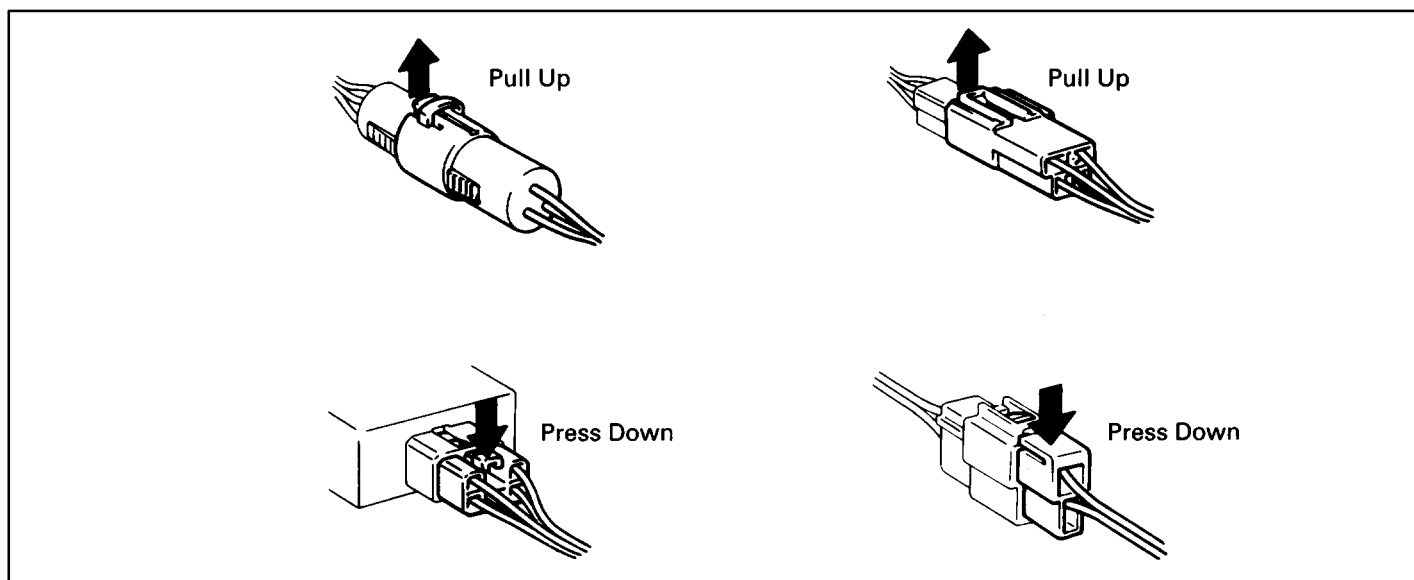
CAUTION:

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

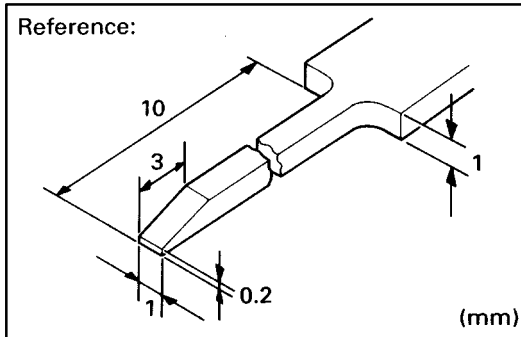
DISCONNECTION OF MALE AND FEMALE CONNECTORS

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.



Reference:



HOW TO REPLACE TERMINAL

(with terminal retainer or secondary locking device)

1. PREPARE THE SPECIAL TOOL

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

2. DISCONNECT CONNECTOR

3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

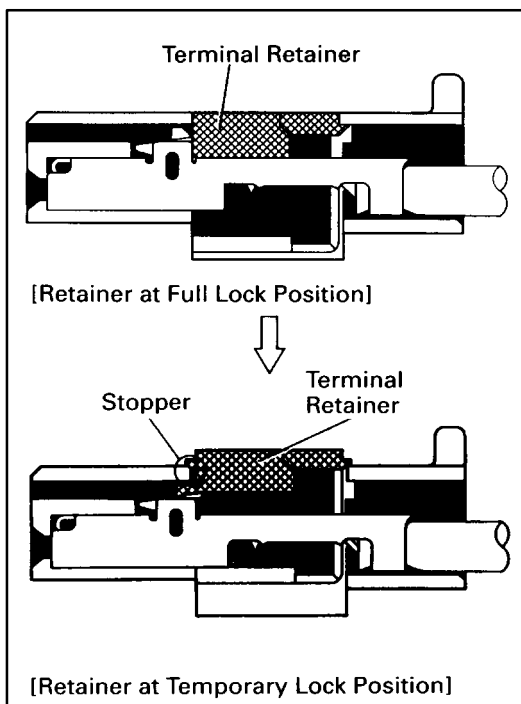
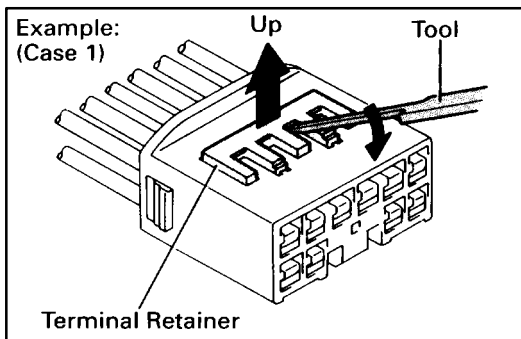
(a) Locking device must be disengaged before the terminal locking clip can be released and the terminal removed from the connector.

(b) Use a special tool or the terminal pick to unlock the secondary locking device or terminal retainer.

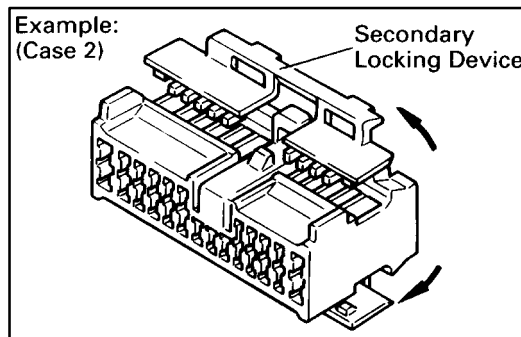
NOTICE:

Do not remove the terminal retainer from connector body.

Example:
(Case 1)



Example:
(Case 2)



Ⓐ For Non-Waterproof Type Connector

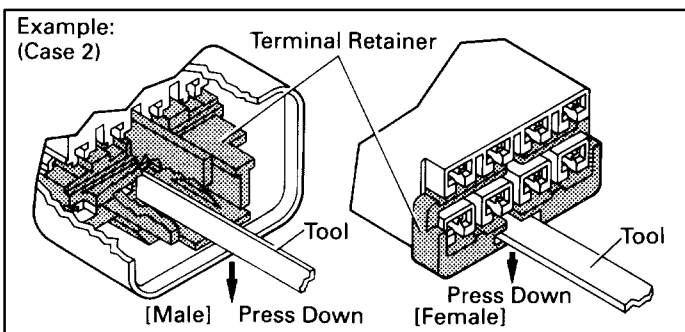
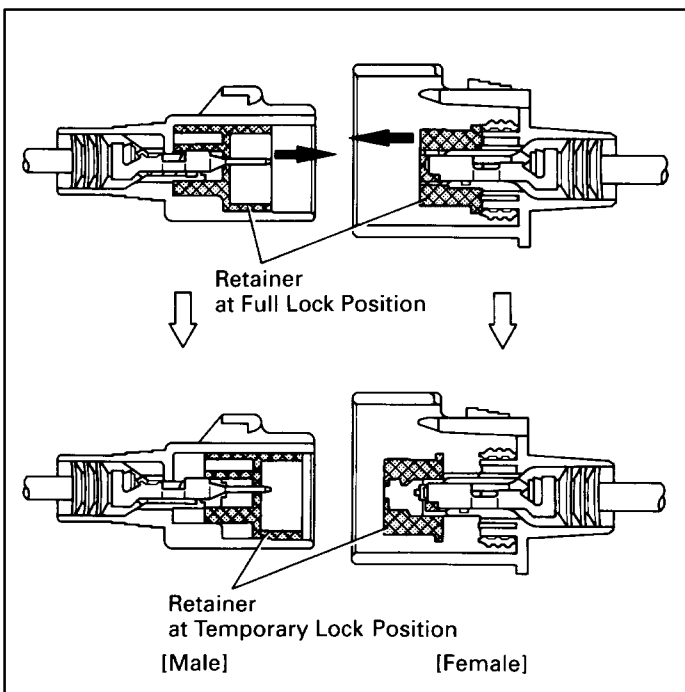
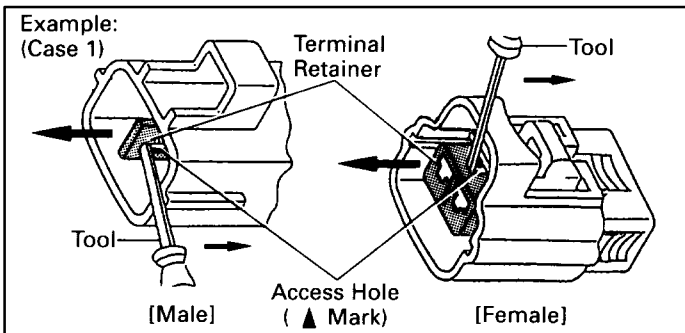
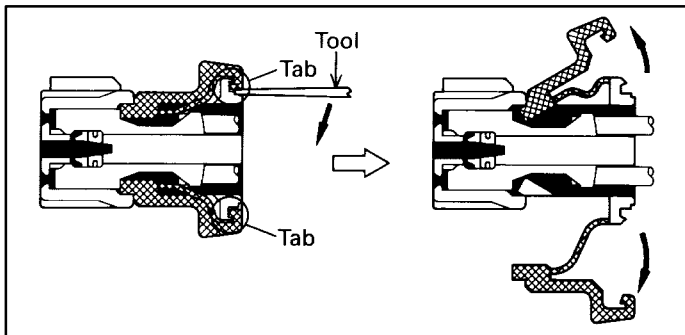
HINT: The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

"Case 1"

Raise the terminal retainer up to the temporary lock position.

"Case 2"

Open the secondary locking device.



② For Waterproof Type Connector

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

Example:

Terminal Retainer: Connector Body

Black or White : Gray

Black or White : Dark Gray

Gray or White : Black

“Case 1”

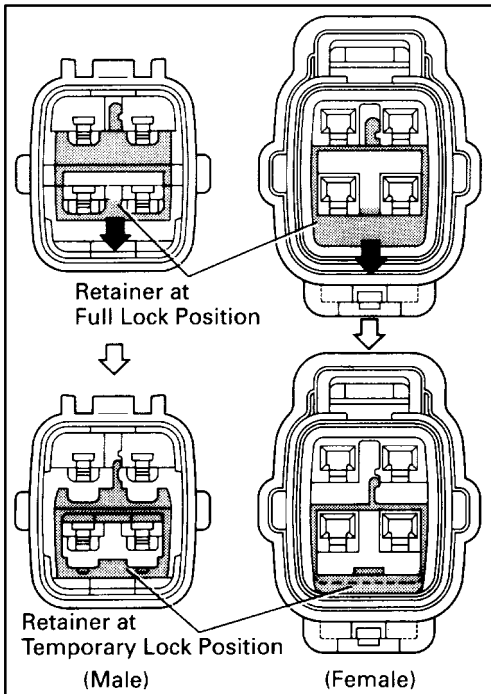
Type where terminal retainer is pulled up to the temporary lock position (Pull Type). Insert the special tool into the terminal retainer access hole (▲ Mark) and pull the terminal retainer up to the temporary lock position.

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

“Case 2”

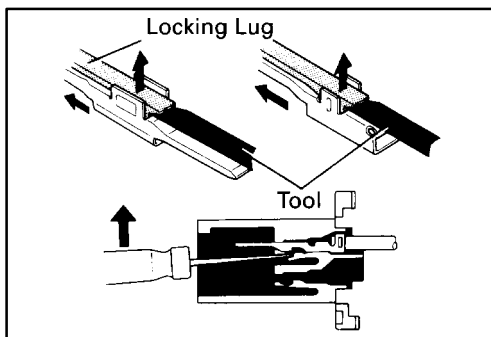
Type which cannot be pulled as far as Power Lock.

TROUBLESHOOTING

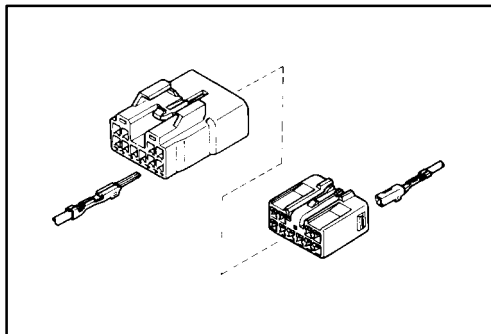


Insert the tool straight into the access hole of terminal retainer as shown.

Push the terminal retainer down to the temporary lock position.



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

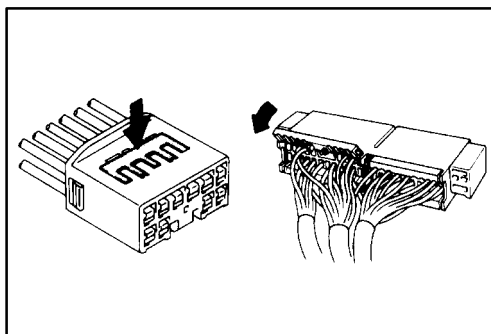


4. INSTALL TERMINAL TO CONNECTOR

- (a) Insert the terminal.

HINT:

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



5. CONNECT CONNECTOR

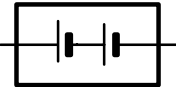
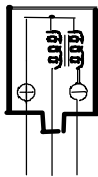
ABBREVIATIONS

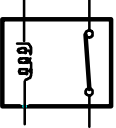
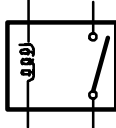
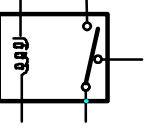
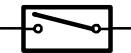
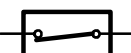
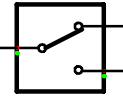
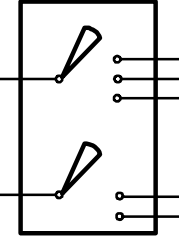
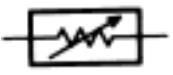
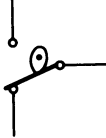
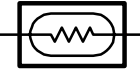
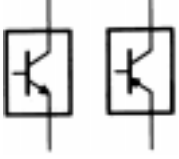
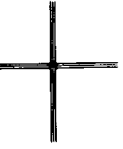
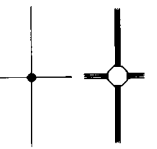
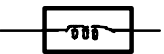
The following abbreviations are used in this manual.

A/C	=	Air Conditioning
A/T	=	Automatic Transmission
ABS	=	Anti-Lock Brake System
ACS	=	Air Conditioning Sensor
AFC	=	Air Flow Sensor
COMB.	=	Combination
DLC	=	Data Link Connector
ECT	=	Electronic Controlled Transmission
ECTS	=	Engine Coolant Temperature Sensor
ECU	=	Electronic Control Unit
EFI	=	Electronic Fuel Injection
EGR	=	Exhaust Gas Recirculation
EGRS	=	EGR Function Sensor
Ex.	=	Except
FL	=	Fusible Link
HO2S	=	Heated Oxygen Sensor
IACV	=	Intake Air Control Valve
IATS	=	Intake Air Temperature Sensor
ISC	=	Idle Speed Control
J/B	=	Junction Block
LH	=	Left-Hand
M/T	=	Manual Transmission
MAP	=	Manifold Absolute Pressure Sensor
MPI	=	Multiport Electronic Fuel Injection
O/D	=	Overdrive
PCM	=	Powertrain Control Module
PNC	=	Park/Neutral Switch
PTCS	=	Powertrain Control Signals
PTIS	=	Powertrain Input Signals
R/B	=	Relay Block
RH	=	Right-Hand
SMPI	=	Sequential Multiport Electronic Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
VSPG	=	Vehicle Speed Pulse Generator
VSS	=	Vehicle Speed Sensor
VSV	=	Vacuum Switching Valve
w/	=	With
w/o	=	Without

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

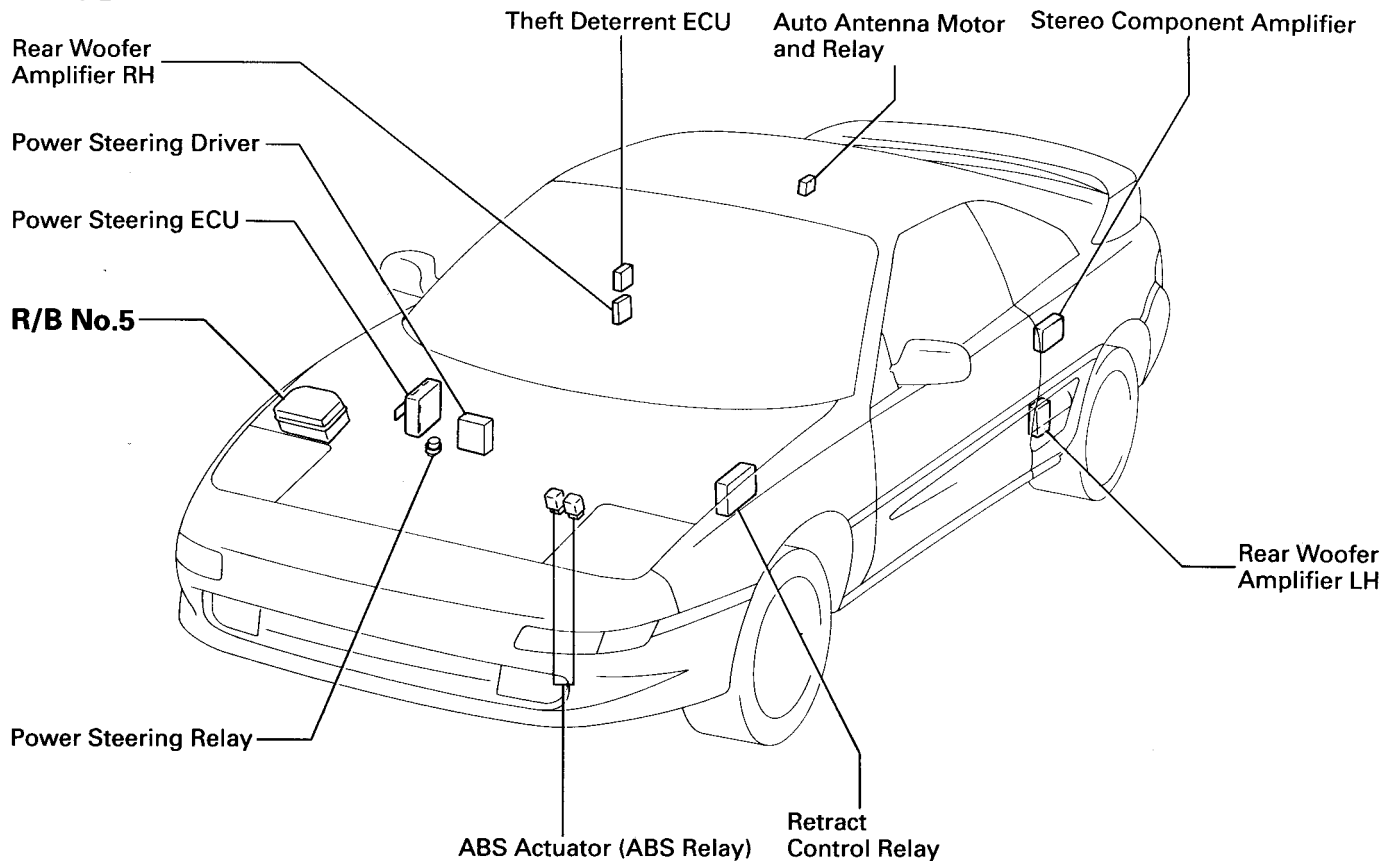
GLOSSARY OF TERMS AND SYMBOLS

 BATTERY Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.	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. 1. SINGLE FILAMENT  2. DOUBLE FILAMENT 
 CAPACITOR (Condenser) A small holding unit for temporary storage of electrical voltage.	
 CIGARETTE LIGHTER An electric resistance heating element.	HORN An electric device which sounds a loud audible signal. 
 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.	IGNITION COIL Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs. 
 DIODE A semiconductor which allows current flow in only one direction.	
 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.	LIGHT Current flow through a filament causes the filament to heat up and emit light. 
 DISTRIBUTOR, IIA Channels high-voltage current from the ignition coil to the individual spark plugs.	LED (LIGHT EMITTING DIODE) Upon current flow, these diodes emit light without producing the heat of a comparable light. 
 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.  FUSIBLE LINK A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit. (for Medium Current Fuse)  (for High Current Fuse or Fusible Link.)	METER, ANALOG Current flow activates a magnetic coil which causes a needle to move, thereby providing a relative display against a background calibration. 
	METER, DIGITAL Current flow activates one or many LED's, LCD's, or fluorescent displays, which provide a relative or digital display. 
 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.	MOTOR A power unit which converts electrical energy into mechanical energy, especially rotary motion. 

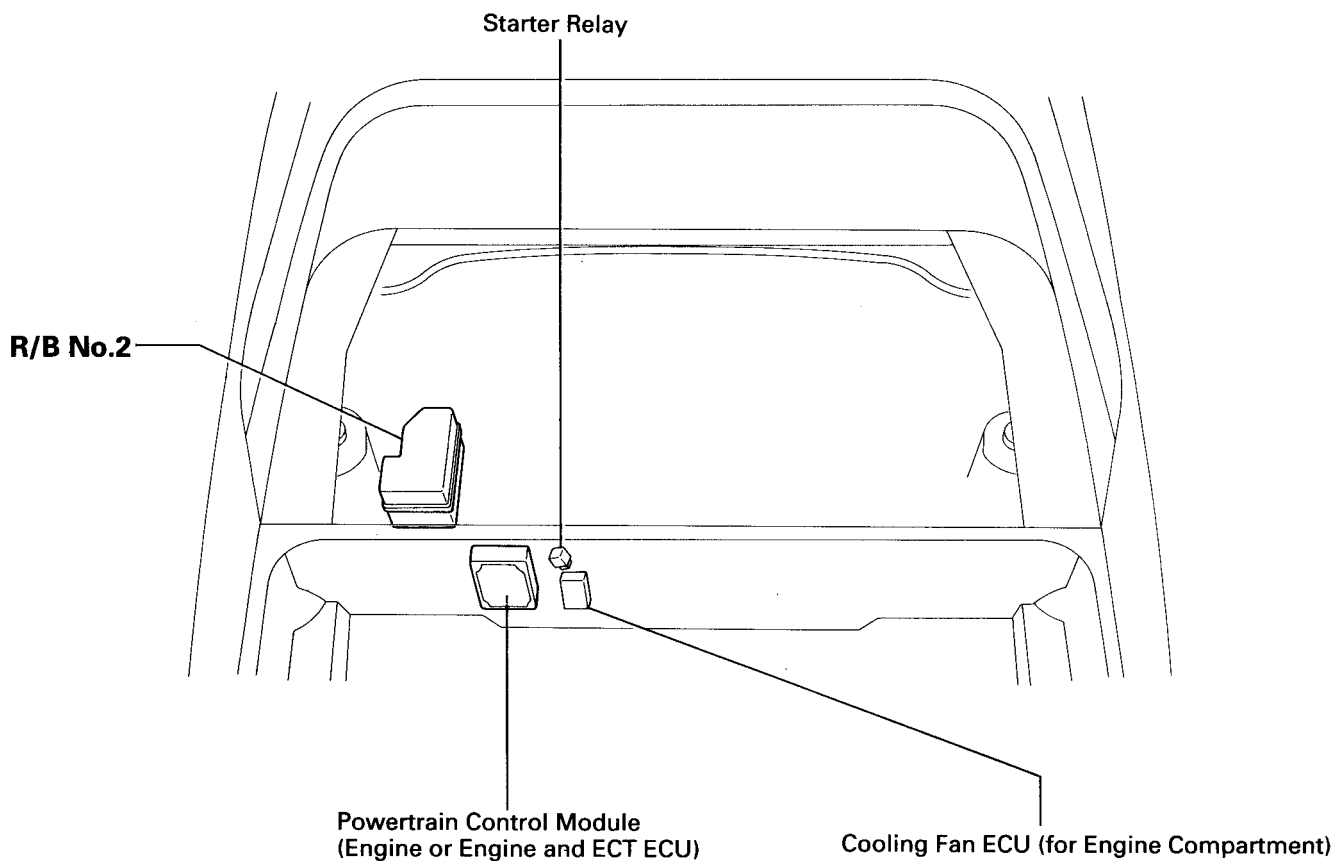
 RELAY 1. NORMALLY CLOSED  2. NORMALLY OPEN Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.	 SPEAKER An electromechanical device which creates sound waves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

RELAY LOCATIONS

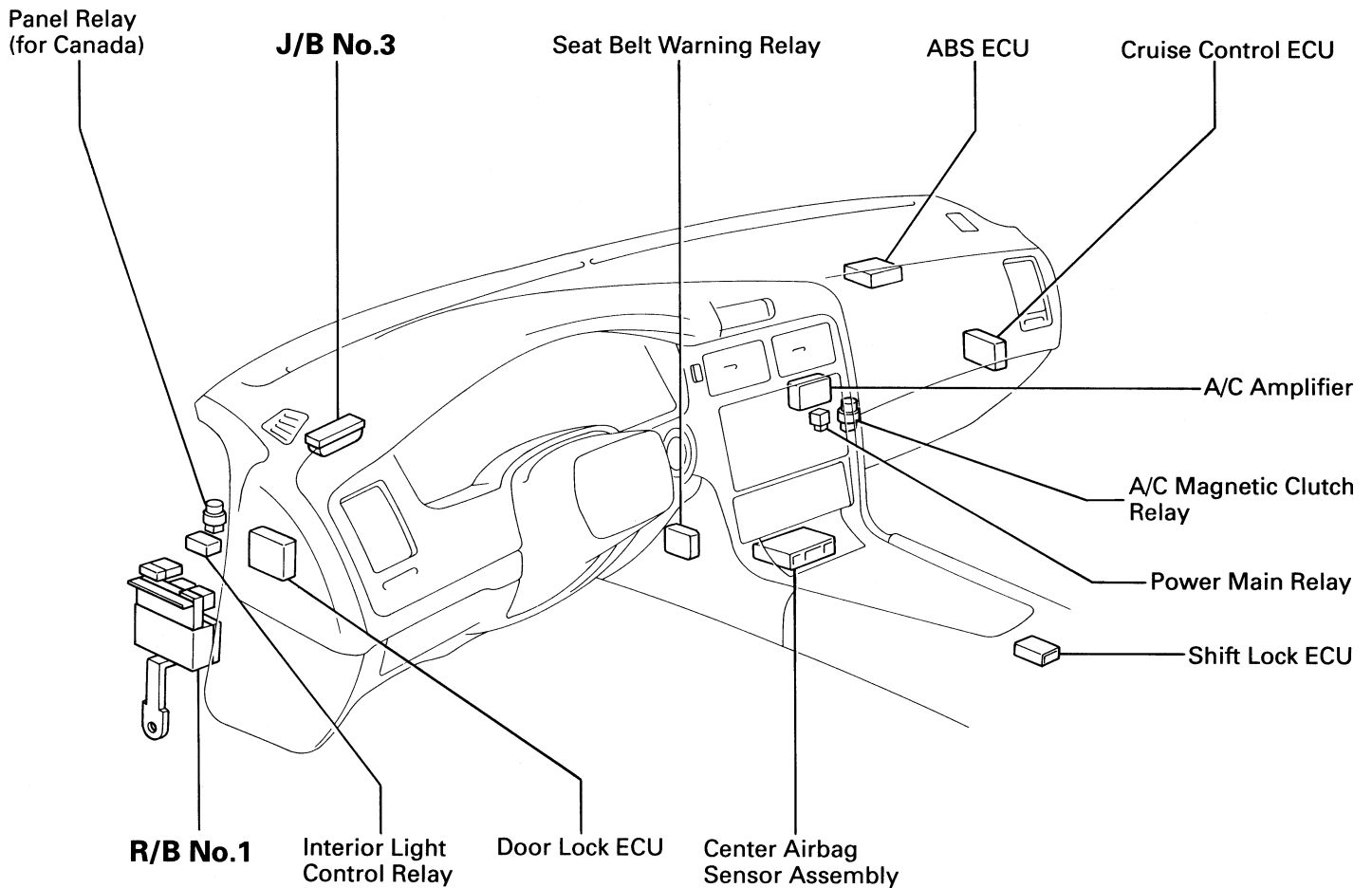
[Body]



[Engine Compartment]



[Instrument Panel]

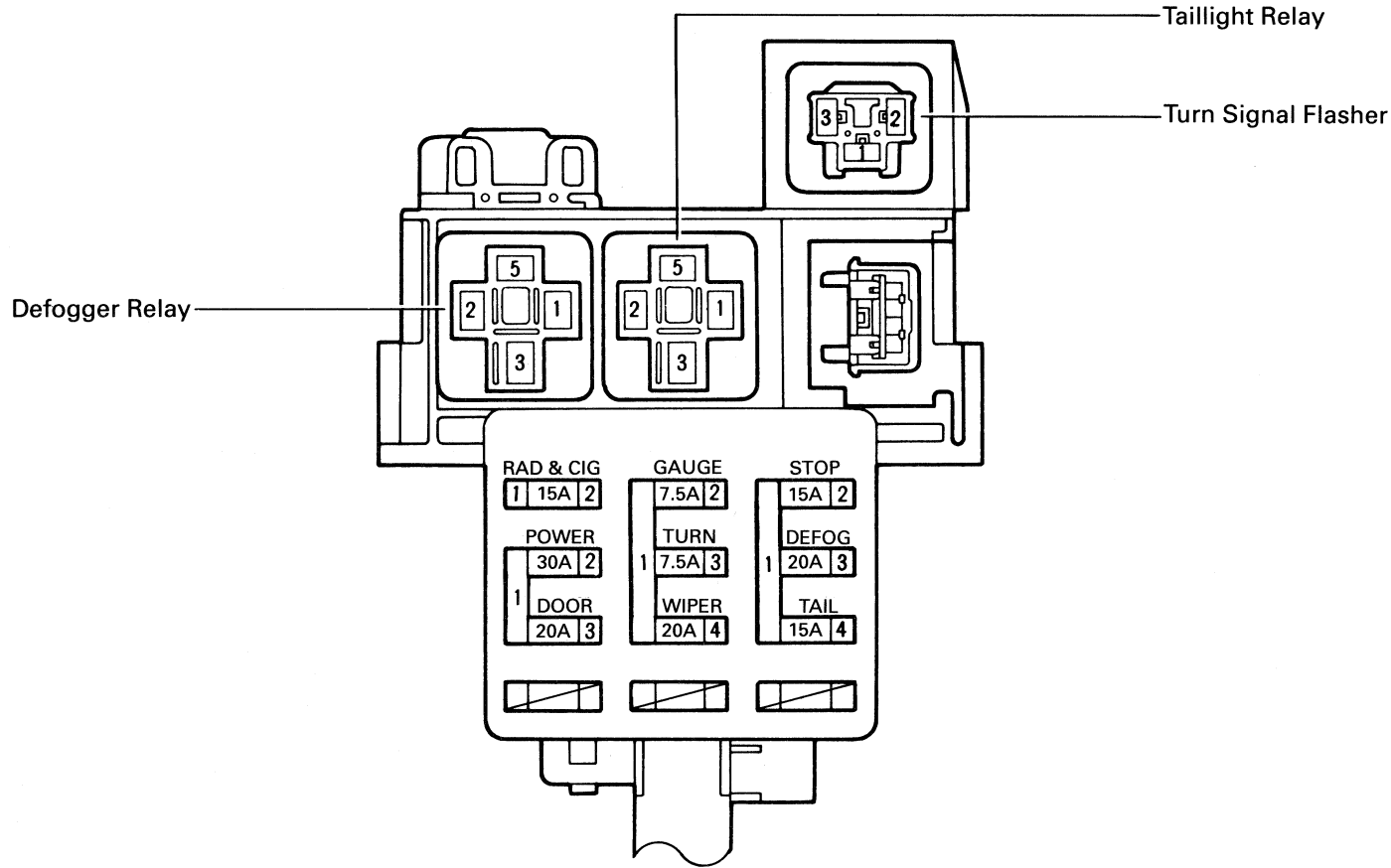


RELAY LOCATIONS

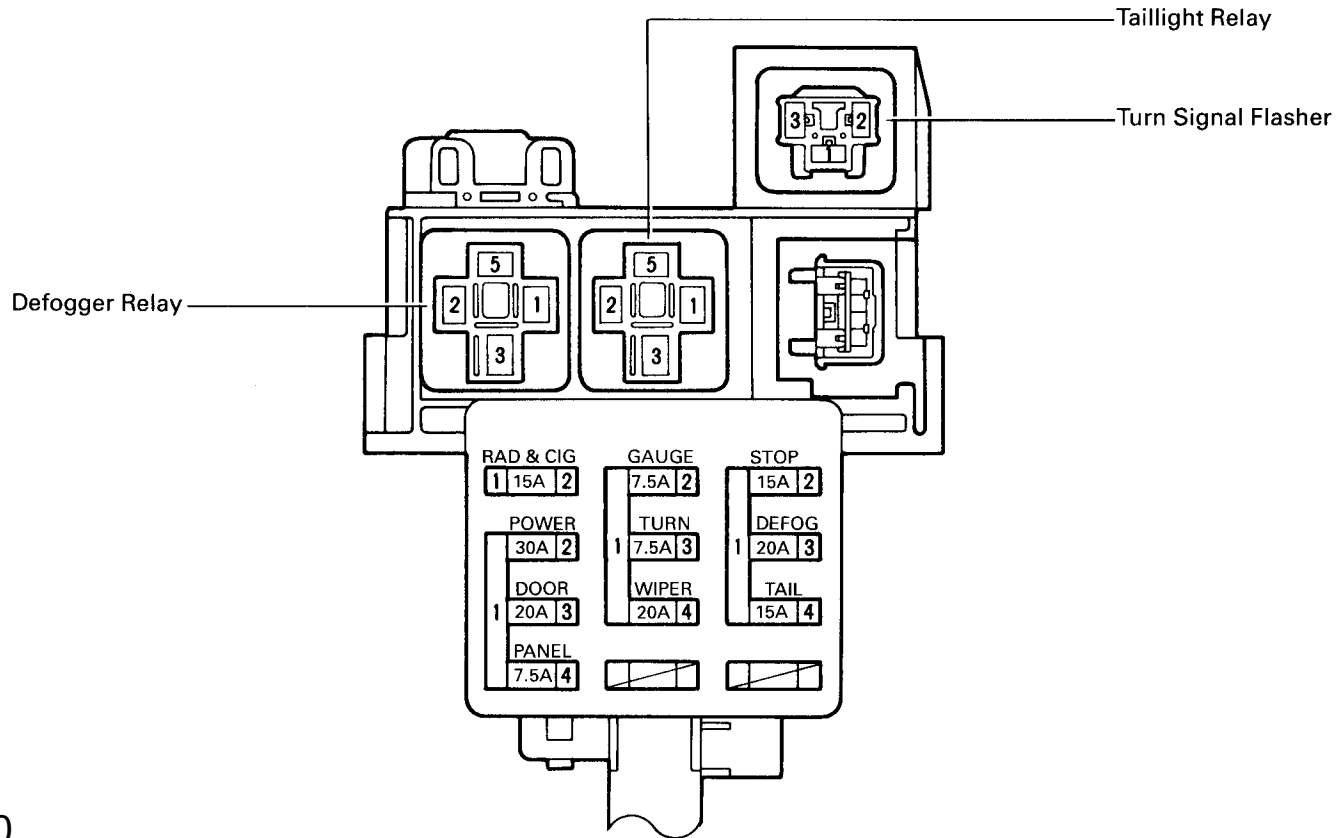
① : R/B No. 1

Left Kick Panel (See Page 19)

(for USA)

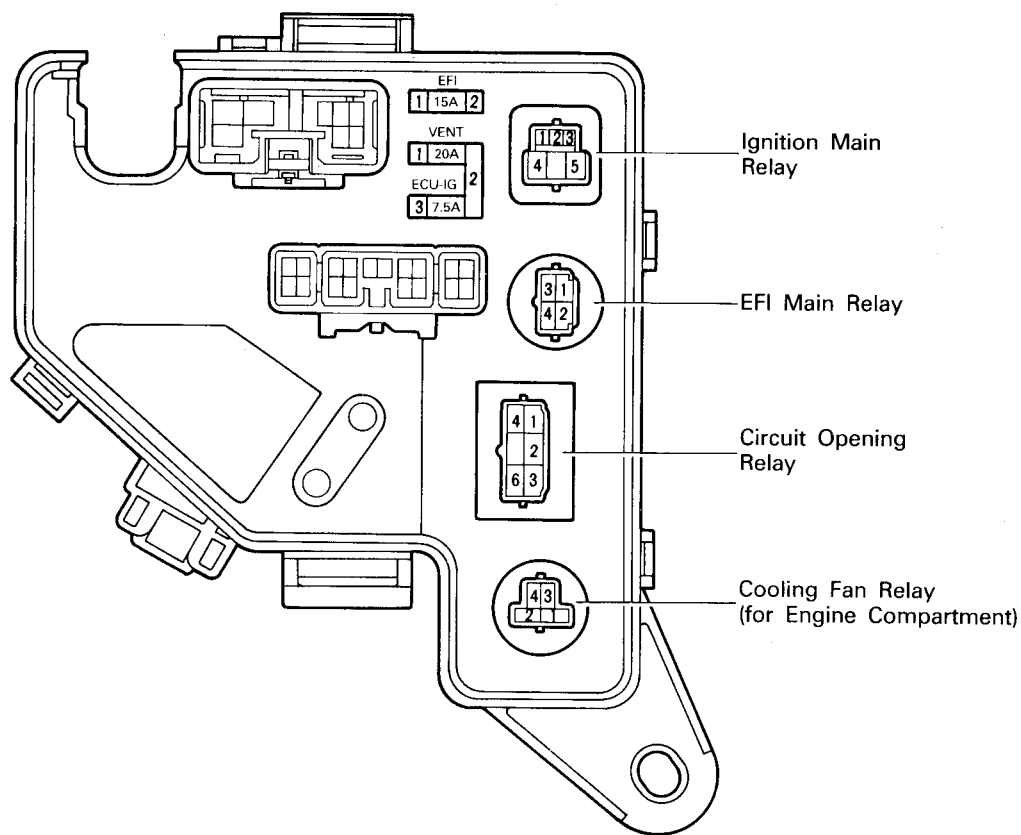


(for Canada)



② : R/B No. 2

Engine Compartment Left (See Page 18)



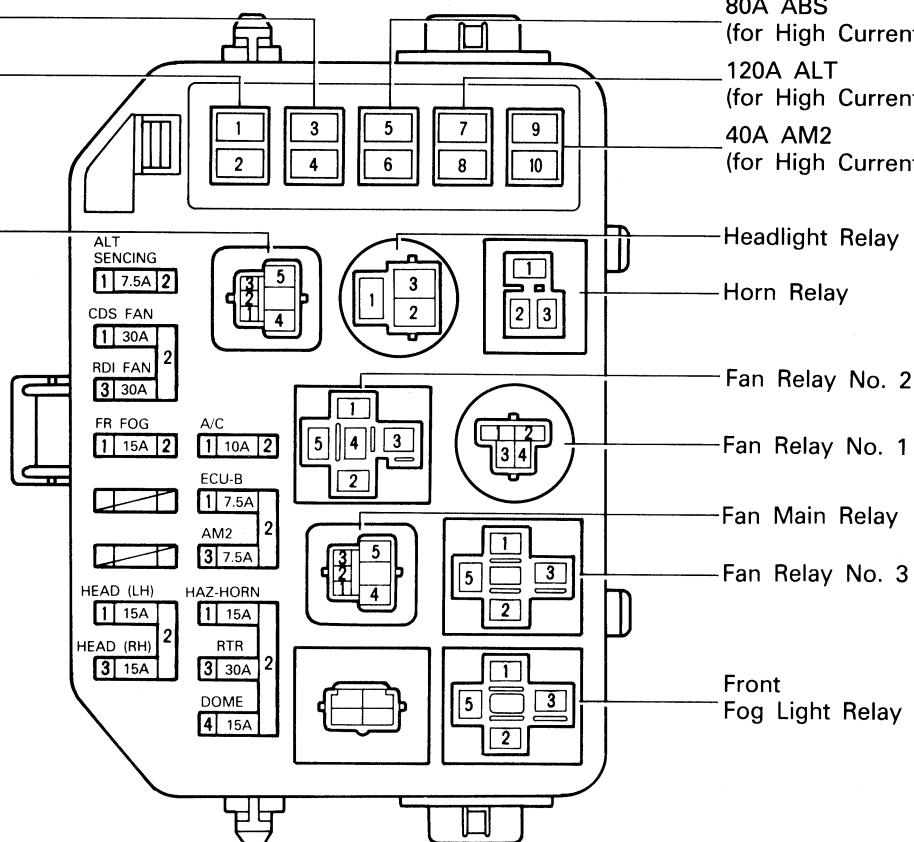
⑤ : R/B No. 5

Front Luggage Compartment Right (See Page 18)

40A HTR
(for High Current)
50A AM1
(for High Current)

80A ABS
(for High Current)
120A ALT
(for High Current)
40A AM2
(for High Current)

Heater Relay

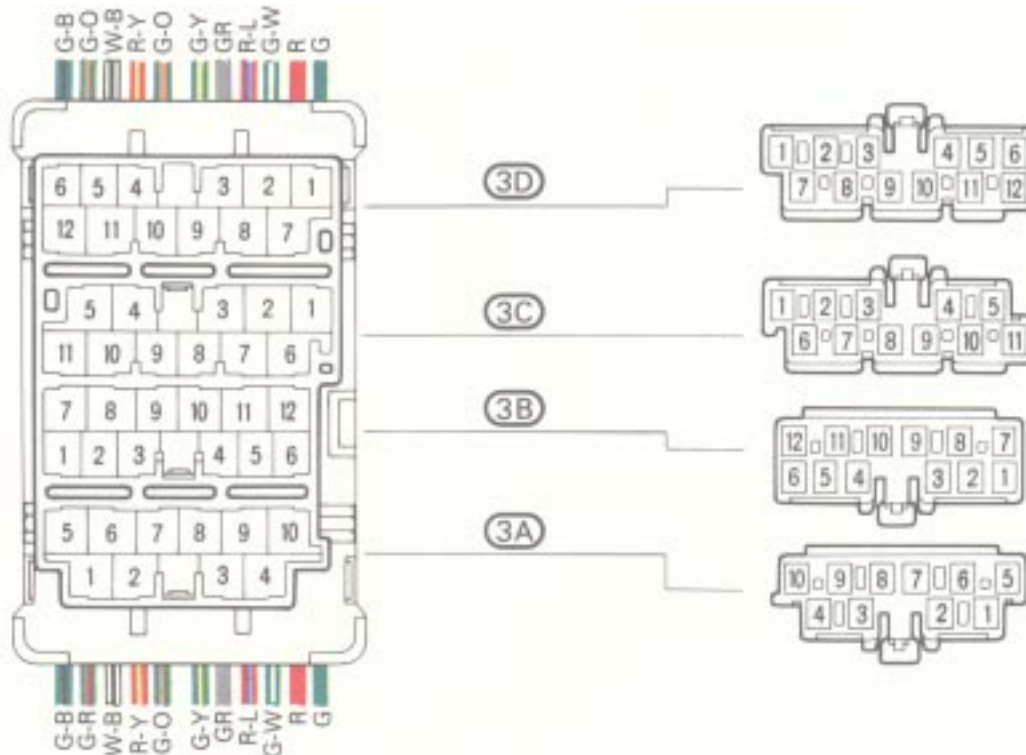


RELAY LOCATIONS

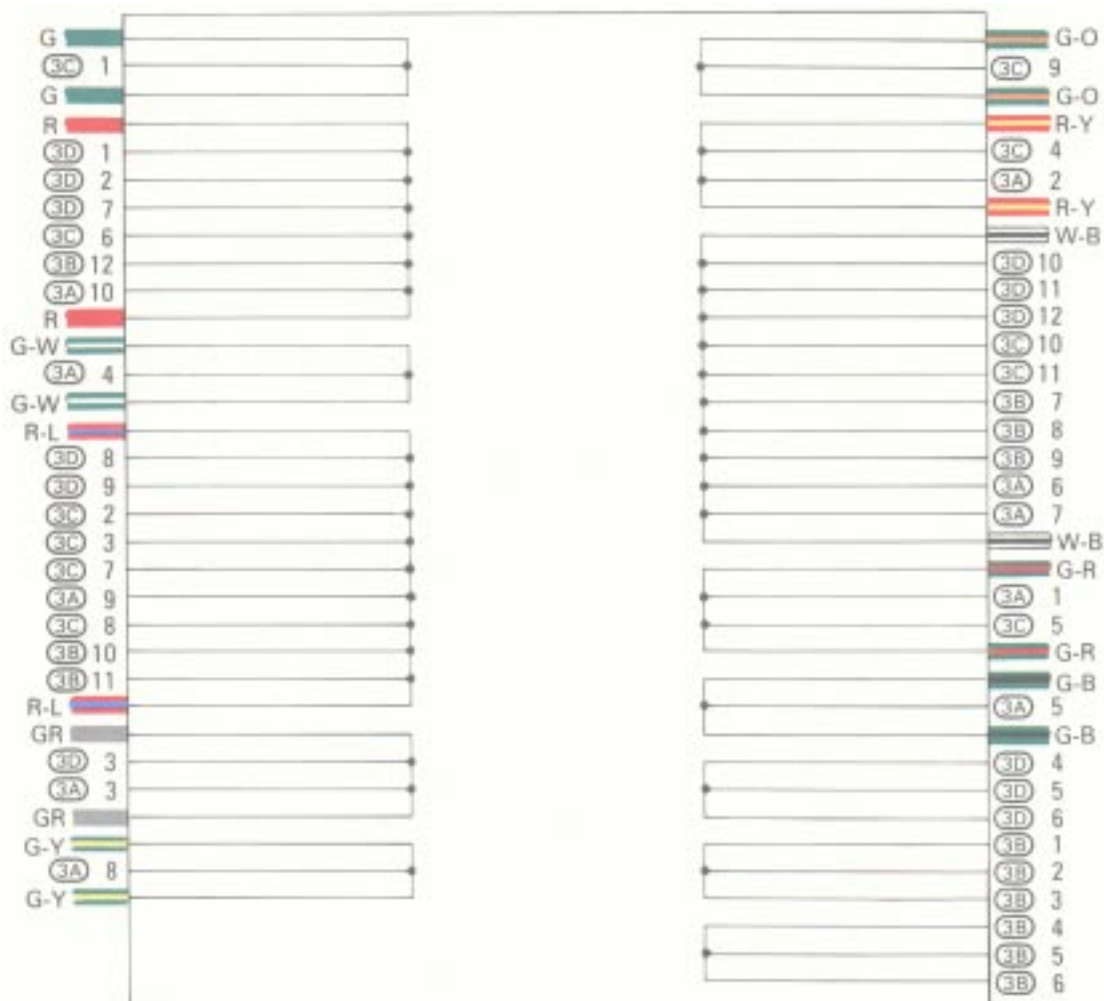
○ : J/B No. 3

Behind Combination Meter

(See Page 19)



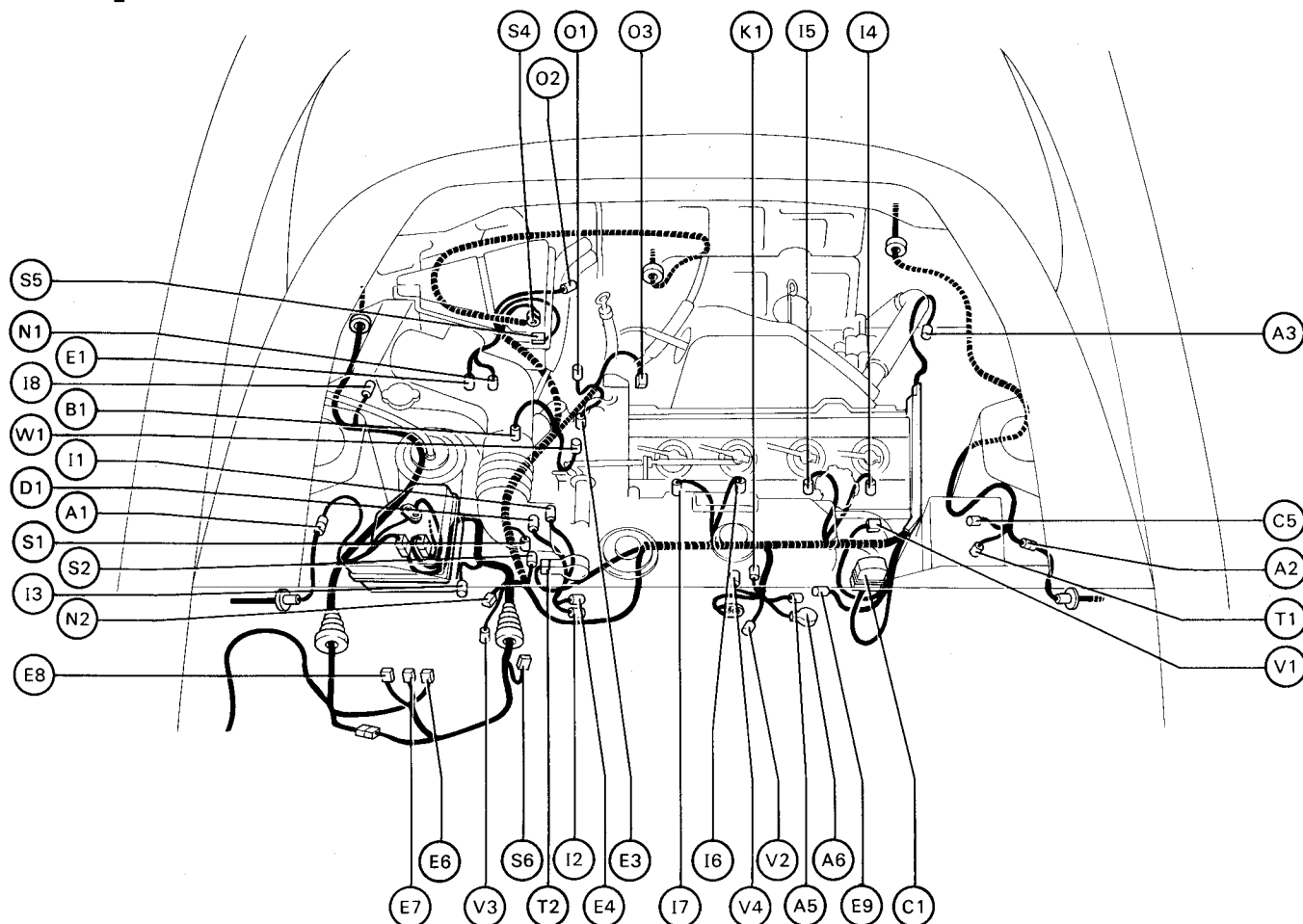
[J/B No. 3 Inner Circuit]



ELECTRICAL WIRING ROUTING

Position of Parts in Engine Compartment

[5S-FE]



- A 1 ABS Speed Sensor Rear LH
- A 2 ABS Speed Sensor Rear RH
- A 3 A/C Magnetic Clutch
- A 4 Air Flow Sensor (Air Flow Meter, 3S-GTE)
- A 5 Alternator
- A 6 Alternator

- B 1 Back-Up Light SW (M/T)

- C 1 Check Connector
- C 2 Cold Start Injector (3S-GTE)
- C 3 Cooling Fan ECU (for Engine Compartment of 3S-GTE)
- C 4 Cooling Fan Motor (for Engine Compartment of 3S-GTE)
- C 5 Cruise Control Actuator

- D 1 Distributor

- E 1 ECT Solenoid (5S-FE)
- E 2 EFI Resistor (3S-GTE)
- E 3 Engine Coolant Temperature Sensor (EFI Water Temp. Sensor)
- E 4 EGR Function Sensor (EGR Gas Temp. Sensor for California) or Short Pin (Ex. California)
- E 5 Engine Compartment Temp. Sensor
- E 6 Powertrain Control Module (Engine and ECT ECU)

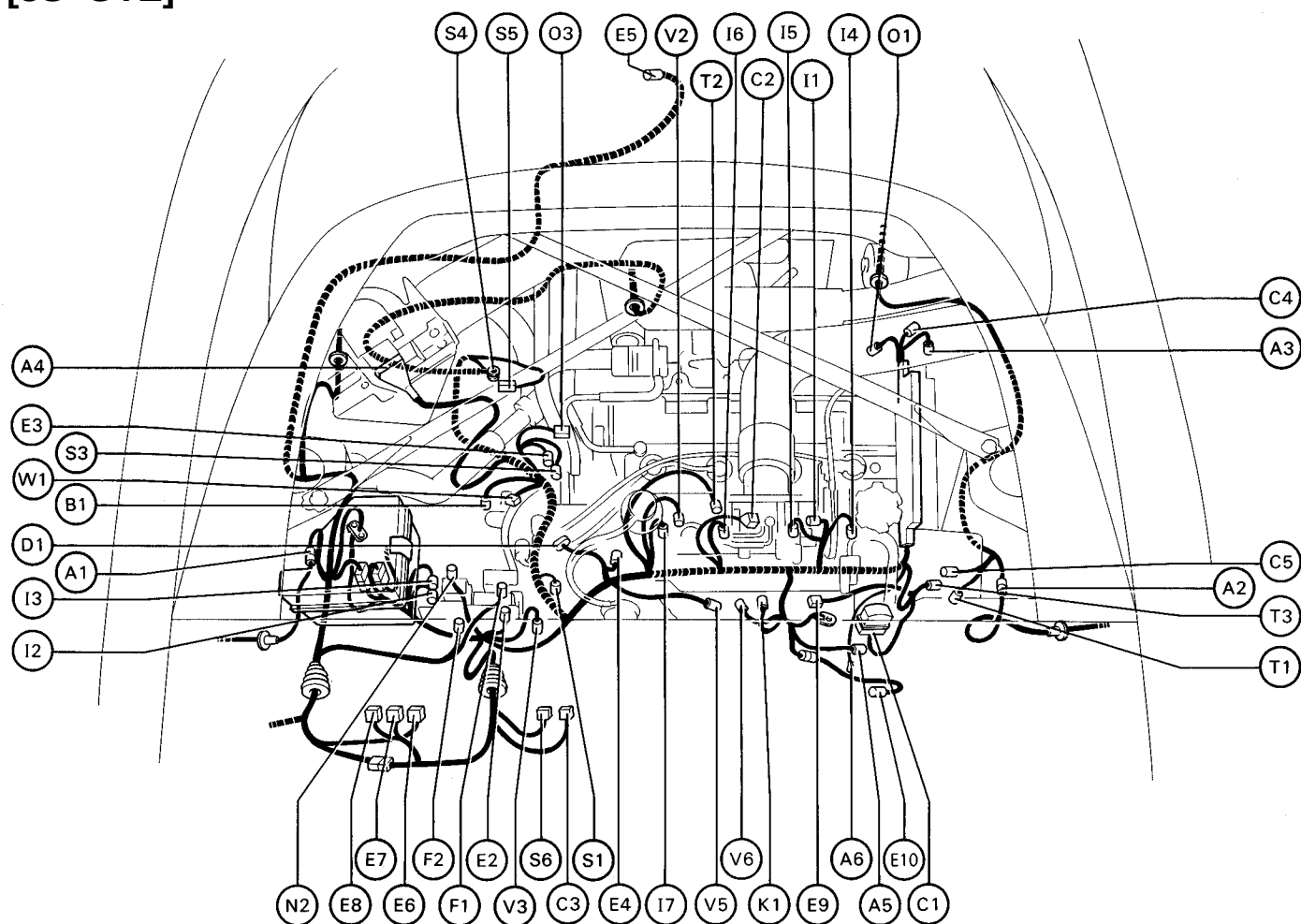
- E 7 Powertrain Control Module (Engine and ECT ECU)
- E 8 Powertrain Control Module (Engine and ECT ECU)
- E 9 Engine Hood Courtesy SW
- E 10 Engine Oil Level Sensor (3S-GTE)

- F 1 Fuel Pump Resistor (3S-GTE)
- F 2 Fuel Pump Relay (3S-GTE)

- I 1 Idle Air Control Valve (ISC Valve)
- I 2 Ignition Coil
- I 3 Igniter
- I 4 Injector No. 1
- I 5 Injector No. 2
- I 6 Injector No. 3
- I 7 Injector No. 4
- I 8 Intake Air Temperature Sensor (In Air Temp. Sensor, 5S-FE)

Position of Parts in Engine Compartment

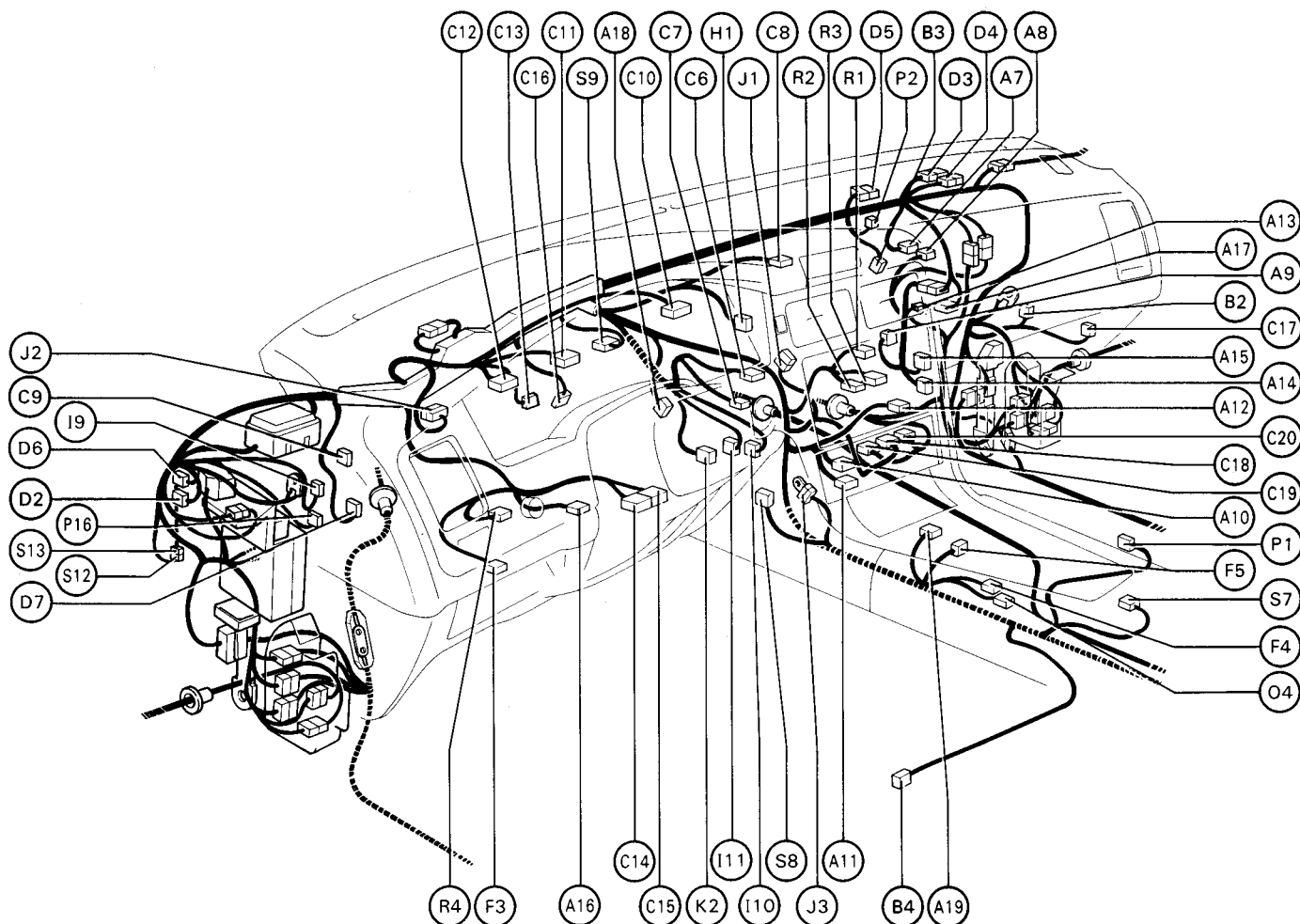
[3S-GTE]



- | | |
|--|--|
| <p>K 1 Knock Sensor</p> <p>N 1 Park/Neutral Switch (Neutral Start SW) and Back-Up Light SW and A/T Indicator SW</p> <p>N 2 Noise Filter (for Ignition System)</p> <p>O 1 Oxygen Sensor (Main of 5S-FE), Heated Oxygen Sensor (Oxygen Sensor, 3S-GTE)</p> <p>O 2 Oxygen Sensor (Sub of 5S-FE)</p> <p>O 3 Oil Pressure SW</p> <p>S 1 Vehicle Speed Pulse Generator (Speed Sensor, for Speed Meter)</p> <p>S 2 Vehicle Speed Sensor (Speed Sensor, for ECT System of 5S-FE)</p> <p>S 3 Start Injector Time SW (3S-GTE)</p> <p>S 4 Starter</p> <p>S 5 Starter</p> <p>S 6 Starter Relay</p> | <p>T 1 Theft Deterrent Horn</p> <p>T 2 Throttle Position Sensor</p> <p>T 3 Turbo Pressure Sensor (3S-GTE)</p> <p>V 1 Manifold Absolute Pressure Sensor (Vacuum Sensor)</p> <p>V 2 VSV (for EGR System)</p> <p>V 3 VSV (for A/C Idle-Up System)</p> <p>V 4 VSV (for Fuel Pressure Up Control System of 5S-FE)</p> <p>V 5 VSV (for Turbo Pressure Control System of 3S-GTE)</p> <p>V 6 VSV (for T-VIS)</p> <p>W 1 Water Temp. Sender</p> |
|--|--|

ELECTRICAL WIRING ROUTING

Position of Parts in Instrument Panel



A 7 ABS ECU
 A 8 ABS ECU
 A 9 A/C Amplifier
 A 10 A/C Control Assembly
 A 11 A/C Control Assembly
 A 12 A/C Control Assembly
 A 13 A/C Dual Pressure SW
 A 14 A/C Thermistor
 A 15 A/C Magnetic Clutch Relay
 A 16 Airbag Squib
 A 17 Air Inlet Servo Motor
 A 18 Air Vent Mode Control Servo Motor
 A 19 Ashtray Illumination

B 2 Blower Motor
 B 3 Blower Resistor
 B 4 Buckle SW

C 6 Cigarette Lighter
 C 7 Cigarette Lighter Illumination
 C 8 Clock
 C 9 Clutch Start SW (M/T)
 C 10 Combination Meter

C 11 Combination Meter
 C 12 Combination Meter
 C 13 Combination Meter (A/T Indicator Light)
 C 14 Combination SW
 C 15 Combination SW
 C 16 Cruise Control Clutch SW
 C 17 Cruise Control ECU
 C 18 Center Airbag Sensor Assembly
 C 19 Center Airbag Sensor Assembly
 C 20 Center Airbag Sensor Assembly

D 2 Diode (for Electrical Idle-Up System)
 D 3 Diode (for A/C System)
 D 4 Diode (for Theft Deterrent System)
 D 5 Diode (for Daytime Running Light System)
 D 6 Diode (for Power Window)
 D 7 Door Lock ECU

F 3 Fog Light SW
 F 4 Fuel Pump
 F 5 Fuel Sender
 H 1 Hazard SW

I 9 Interior Light Control Relay
 I 10 Ignition Key Cylinder Light
 I 11 Ignition SW and Unlock Warning SW

J 1 Junction Connector
 J 2 Junction Connector
 J 3 Junction Connector (for Earth)

K 2 Key Interlock Solenoid

O 4 O/D Main SW

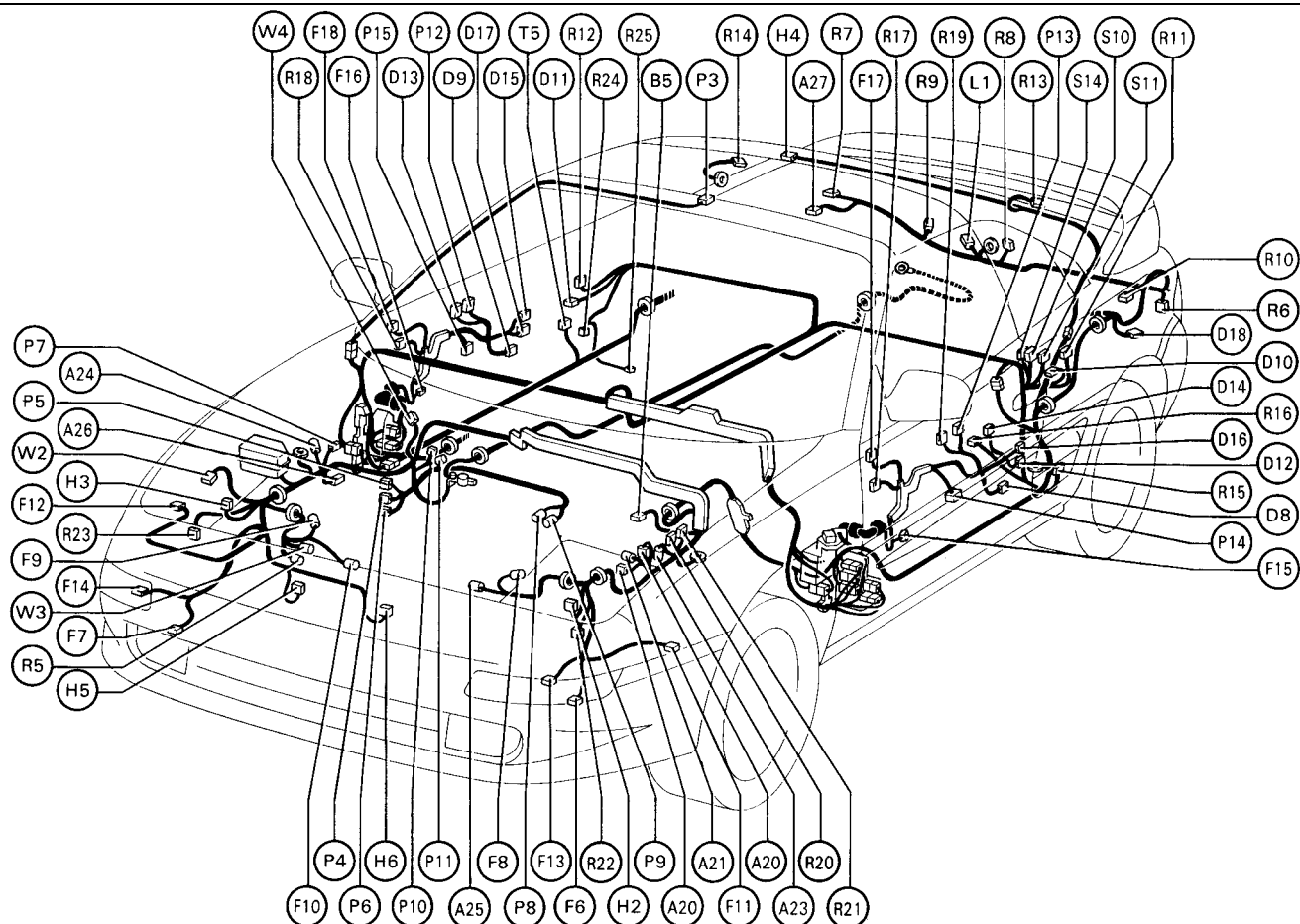
P 1 Parking Brake SW
 P 2 Power Main Relay
 P 16 Panel Relay

R 1 Radio and Player
 R 2 Radio and Player
 R 3 Radio and Player
 R 4 Rheostat

S 7 Shift Lock ECU
 S 8 Seat Belt Warning Relay
 S 9 Stop Light SW or, Stop Light SW and Cruise Control Stop SW
 S 12 Short Connector (for Speed Meter)
 S 13 Short Connector (for Speed Meter)

T 4 Turn Signal Flasher

Position of Parts in Body



A 20	ABS Actuator	F 12	Front Side Marker Light RH	R 5	Radiator Fan Motor
A 21	ABS Actuator	F 13	Front Turn Signal and Clearance Light LH	R 6	Rear Combination Light LH
A 22	ABS Actuator	F 14	Front Turn Signal and Clearance Light RH	R 7	Rear Combination Light RH
A 23	ABS Speed Sensor Front LH	F 15	Front Speaker LH	R 8	Rear Luggage Compartment Door Courtesy SW
A 24	ABS Speed Sensor Front RH	F 16	Front Speaker RH	R 9	Rear Luggage Compartment Key Unlock SW
A 25	A/C Condenser Fan Motor	F 17	Front Tweeter (Speaker) LH	R 10	Rear Luggage Compartment Light
A 26	A/C High Pressure SW or Short Pin (w/o A/C)	F 18	Front Tweeter (Speaker) RH	R 11	Rear Speaker LH
A 27	Auto Antenna Control Relay and Motor	H 2	Headlight LH	R 12	Rear Speaker RH
B 5	Brake Fluid Level SW	H 3	Headlight RH	R 13	Rear Window Defogger (+)
D 8	Door Courtesy Light LH	H 4	High Mount Stop Light	R 14	Rear Window Defogger (-)
D 9	Door Courtesy Light RH	H 5	Horn	R 15	Rear Woofer Amplifier LH
D 10	Door Courtesy SW LH	H 6	Horn	R 16	Rear Woofer Speaker LH
D 11	Door Courtesy SW RH	L 1	License Plate Light	R 17	Remote Control Mirror LH
D 12	Door Key Cylinder Light and Out Side Handle SW	P 3	Personal Light	R 18	Remote Control Mirror RH
D 13	Door Lock Control SW RH	P 4	Power Steering Driver	R 19	Remote Control Mirror SW
D 14	Door Lock Key Lock and Unlock SW LH	P 5	Power Steering Driver	R 20	Retract Control Relay
D 15	Door Lock Key Lock and Unlock SW RH	P 6	Power Steering Driver	R 21	Retract Control Relay
D 16	Door Lock Motor LH	P 7	Power Steering ECU	R 22	Retract Motor LH
D 17	Door Lock Motor RH	P 8	Power Steering Pump with Motor	R 23	Retract Motor RH
D 18	Diode (for Interior System)	P 9	Power Steering Pump with Motor	R 24	Rear Woofer Amplifier RH
F 6	Fog Light LH	P 10	Power Steering Relay	R 25	Rear Woofer Speaker RH
F 7	Fog Light RH	P 11	Power Steering Relay	S 10	Stereo Component Amplifier
F 8	Front Airbag Sensor LH	P 12	Power Window SW RH	S 11	Stereo Component Amplifier
F 9	Front Airbag Sensor RH	P 13	Power Window Master SW and Door Lock Control SW LH	S 14	Stereo Component Amplifier
F 10	Front Luggage Compartment Door Courtesy SW	P 14	Power Window Motor LH	T 5	Theft Deterrent ECU
F 11	Front Side Marker Light LH	P 15	Power Window Motor RH	W 2	Washer Motor
				W 3	Washer Temp. SW (for Radiator Fan)
				W 4	Wiper Motor

ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[5S-FE]

Engine Room Main Wire

Floor Wire

EA4

EB1

EA3

R/B No. 2

EA1

EA

Engine Wire

○ : Location of Splice Points

E14

E12, E13

E4

E3

E10

E1, E2

E9

E7, E8

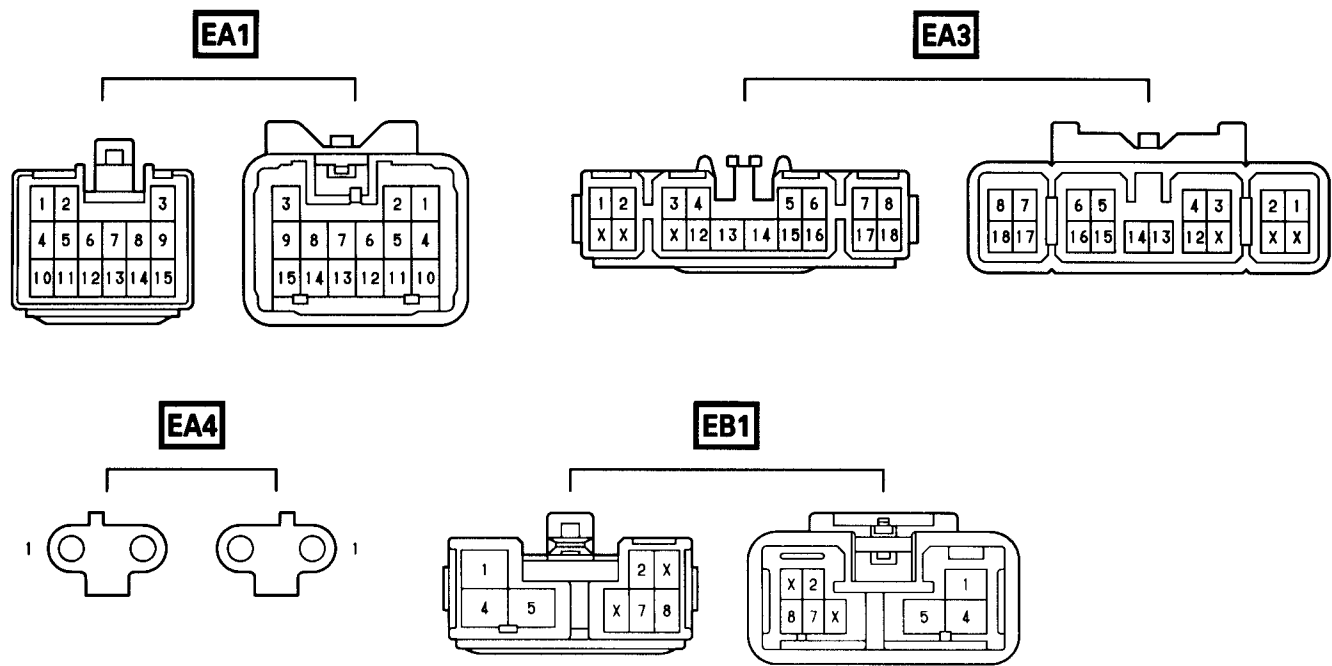
E5, E6

E11

E15

E16

Connector Joining Wire Harness and Wire Harness



CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EA4	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EB1	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)

ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

[3S-GTE]

Engine Room
Main Wire

EA4

EA3

EB1

EC1

Floor Wire

EA

EA1

Engine Wire

Engine No. 4 Wire

○ : Location of Splice Points

E3, E4

E22

E25

E2

E1

E20

E19

E18

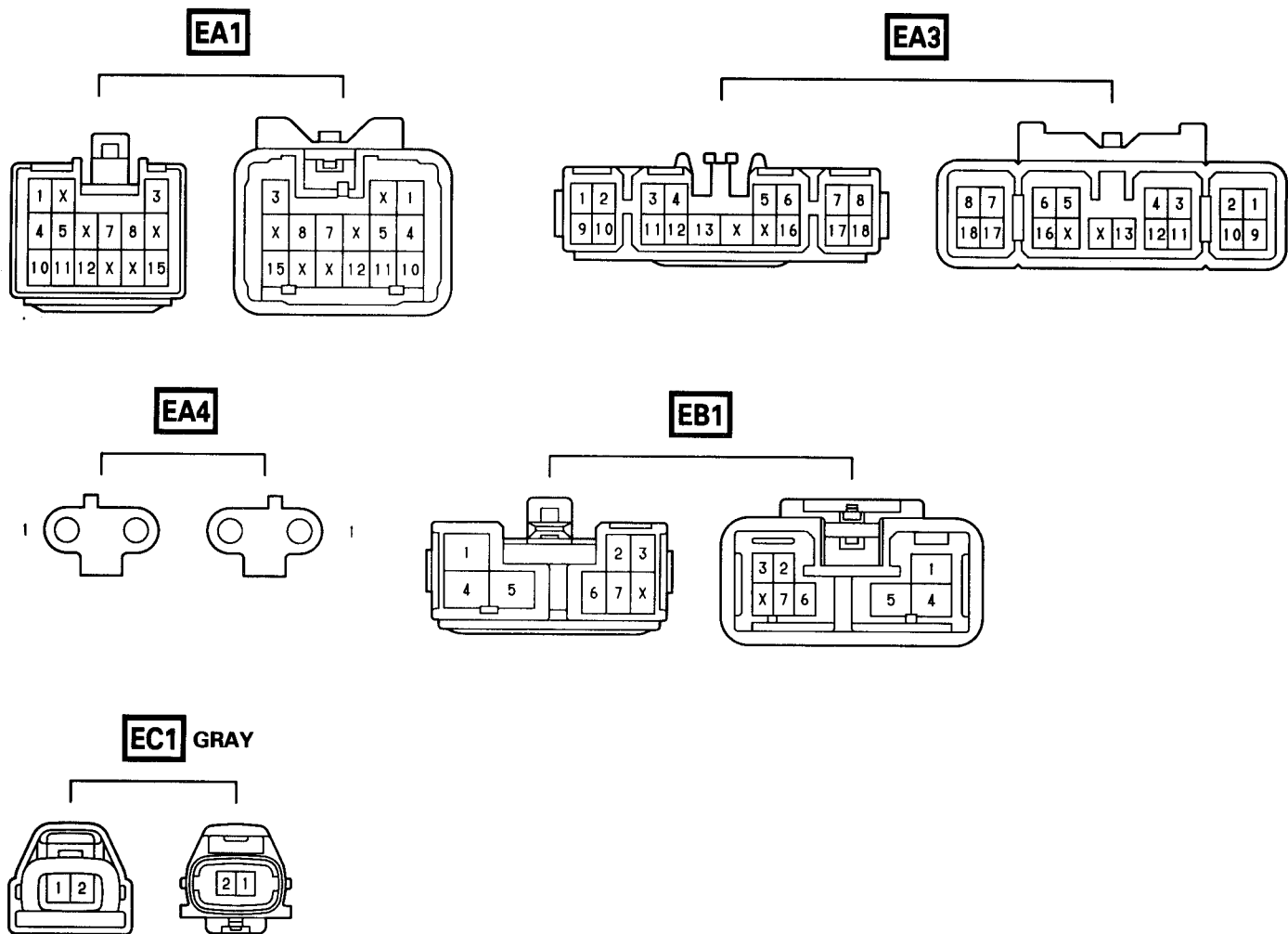
E17

E24

E23

E21

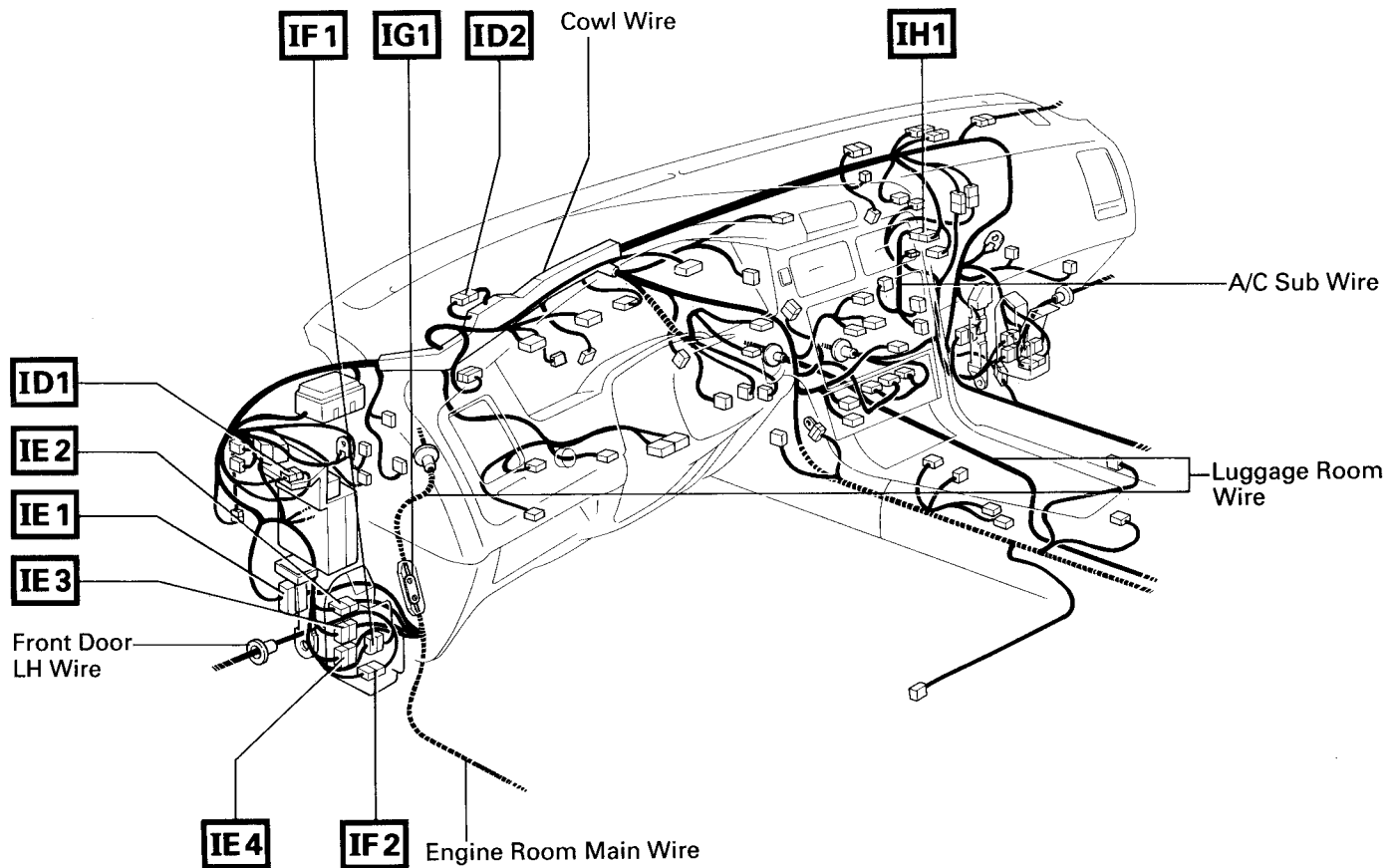
Connector Joining Wire Harness and Wire Harness



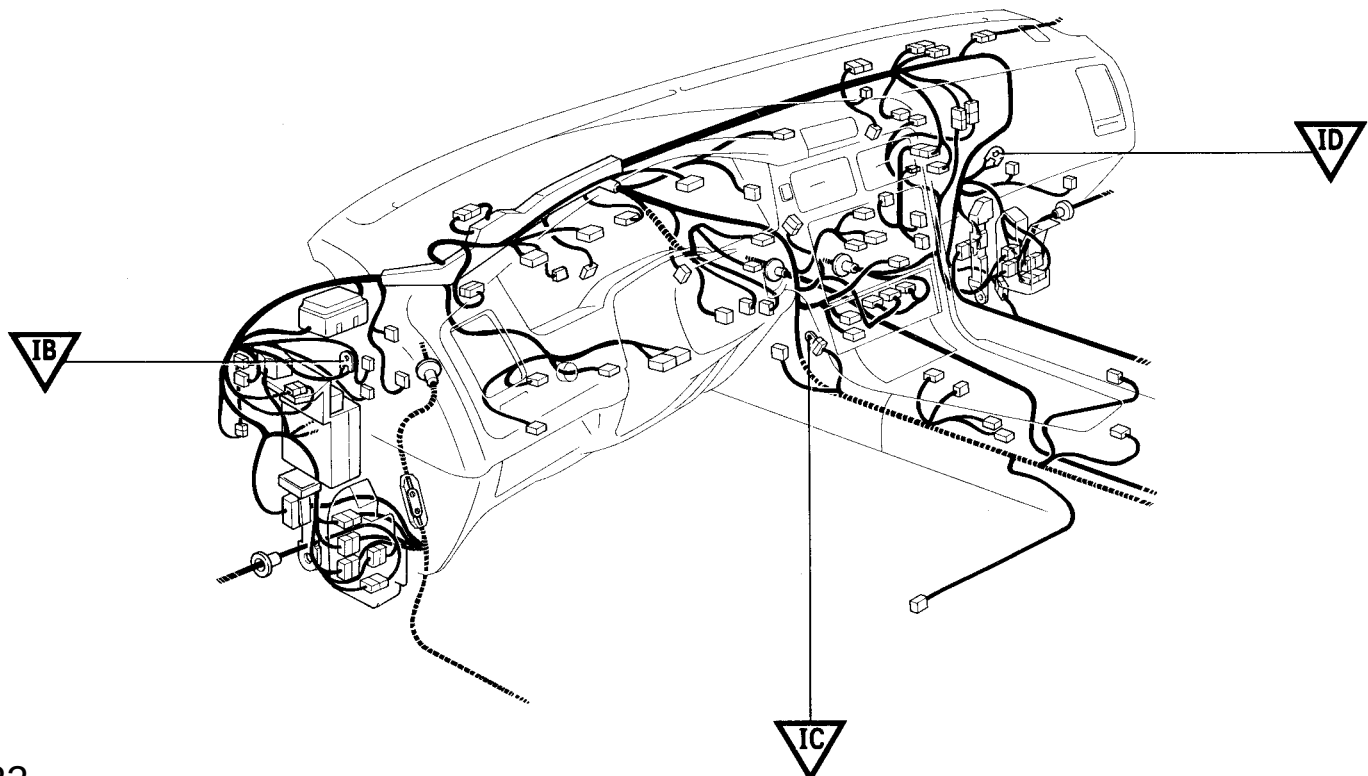
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	EIGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EA4	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EB1	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
EC1	ENGINE WIRE AND ENGINE NO. 4 WIRE (NEAR THE INTAKE MANIFOLD)

ELECTRICAL WIRING ROUTING

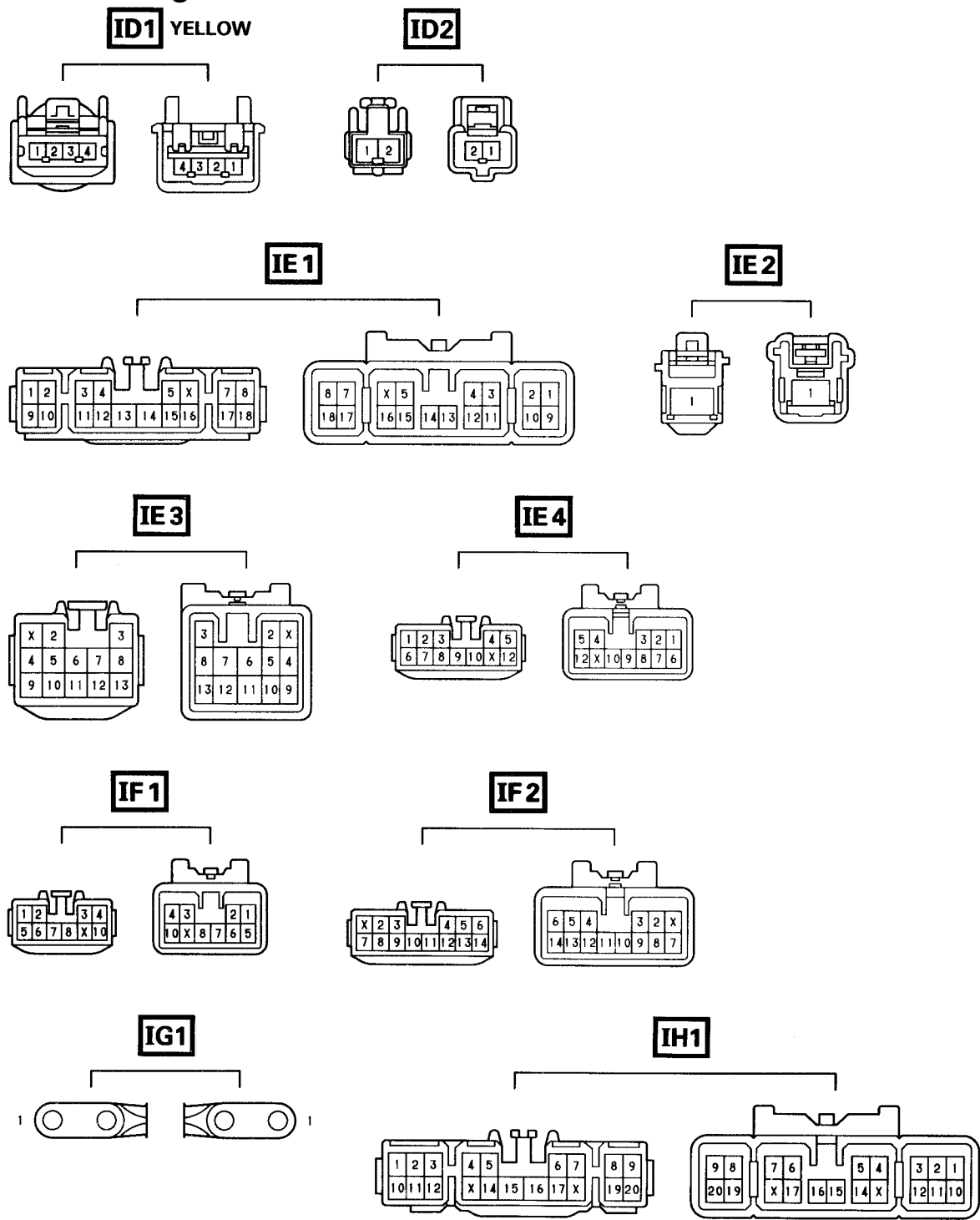
□ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points



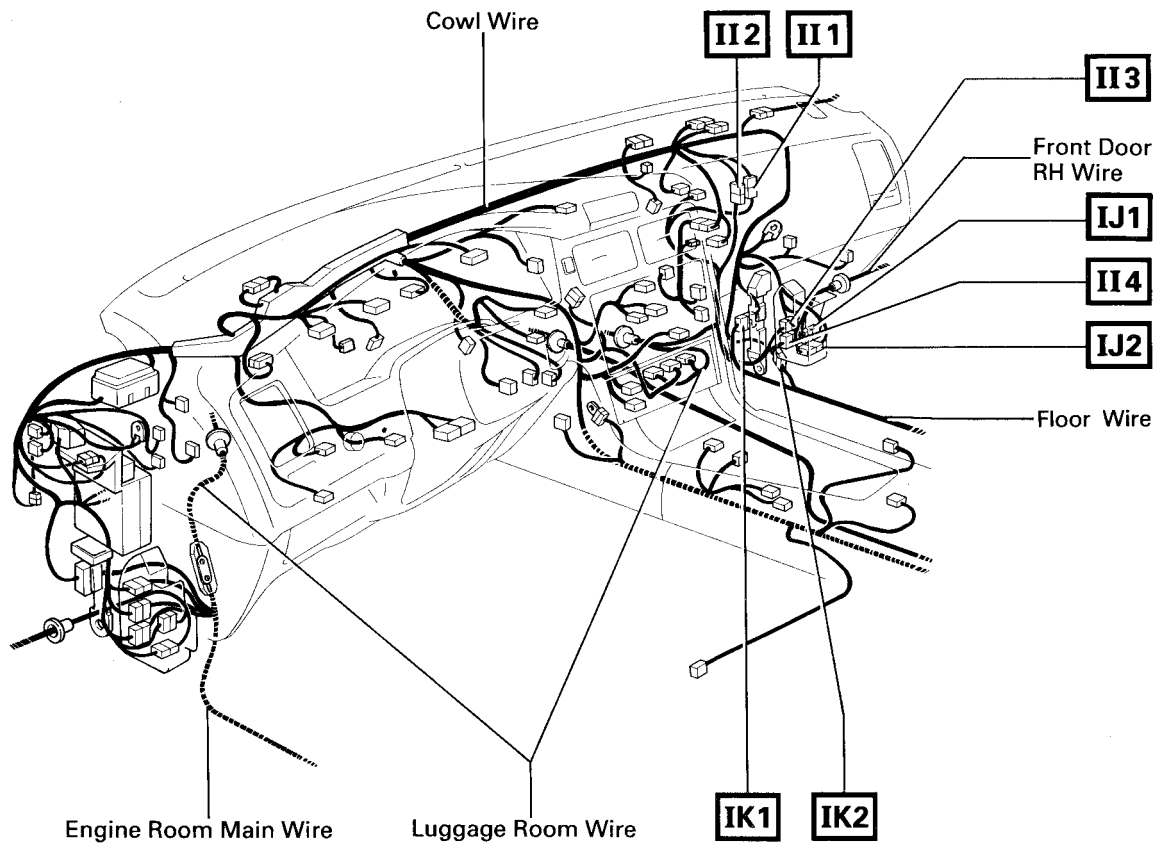
Connector Joining Wire Harness and Wire Harness



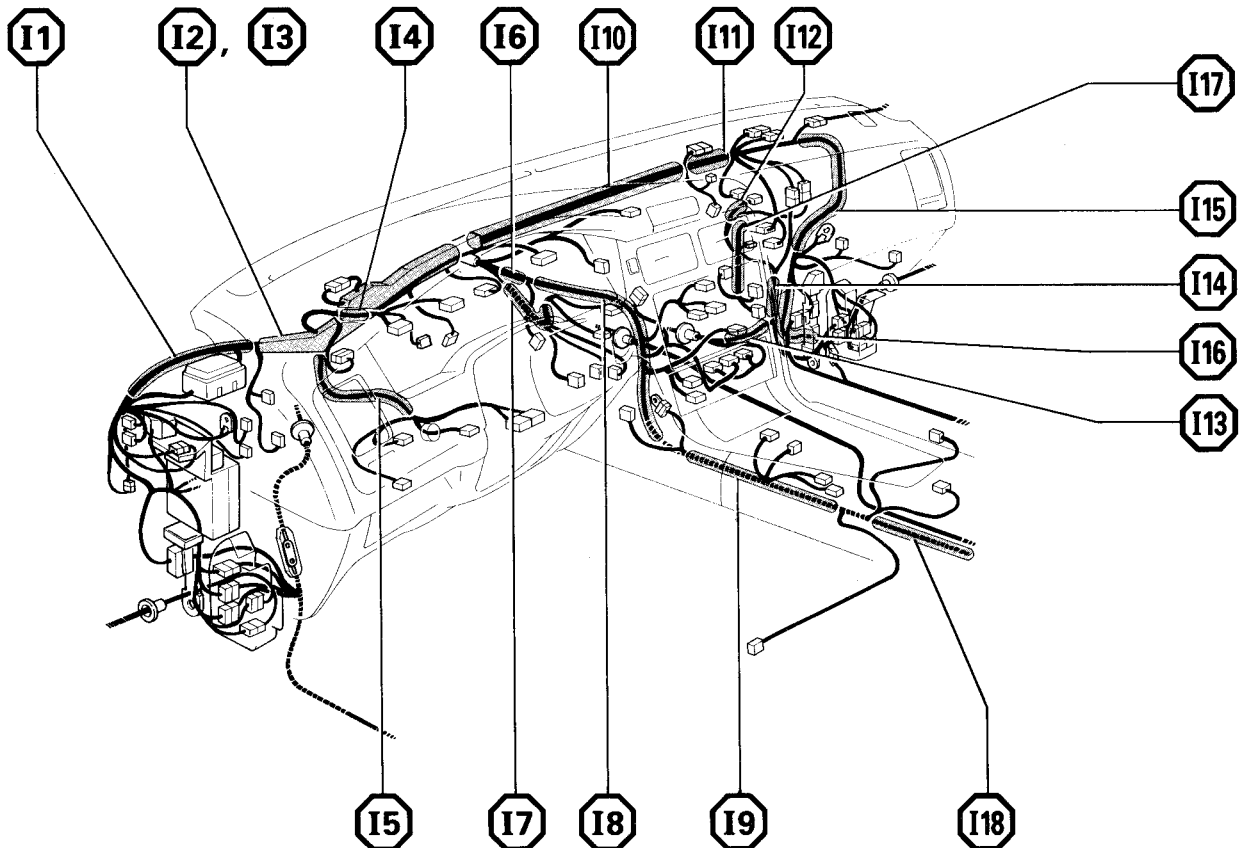
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	COWL WIRE AND COWL WIRE (NEAR THE R/B NO. 1)
ID2	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE1	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2	
IE3	
IE4	
IF1	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IF2	
IG1	LUGGAGE ROOM WIRE AND ENGINE ROOM MAIN WIRE (BEHIND FOOTREST)
IH1	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)

ELECTRICAL WIRING ROUTING

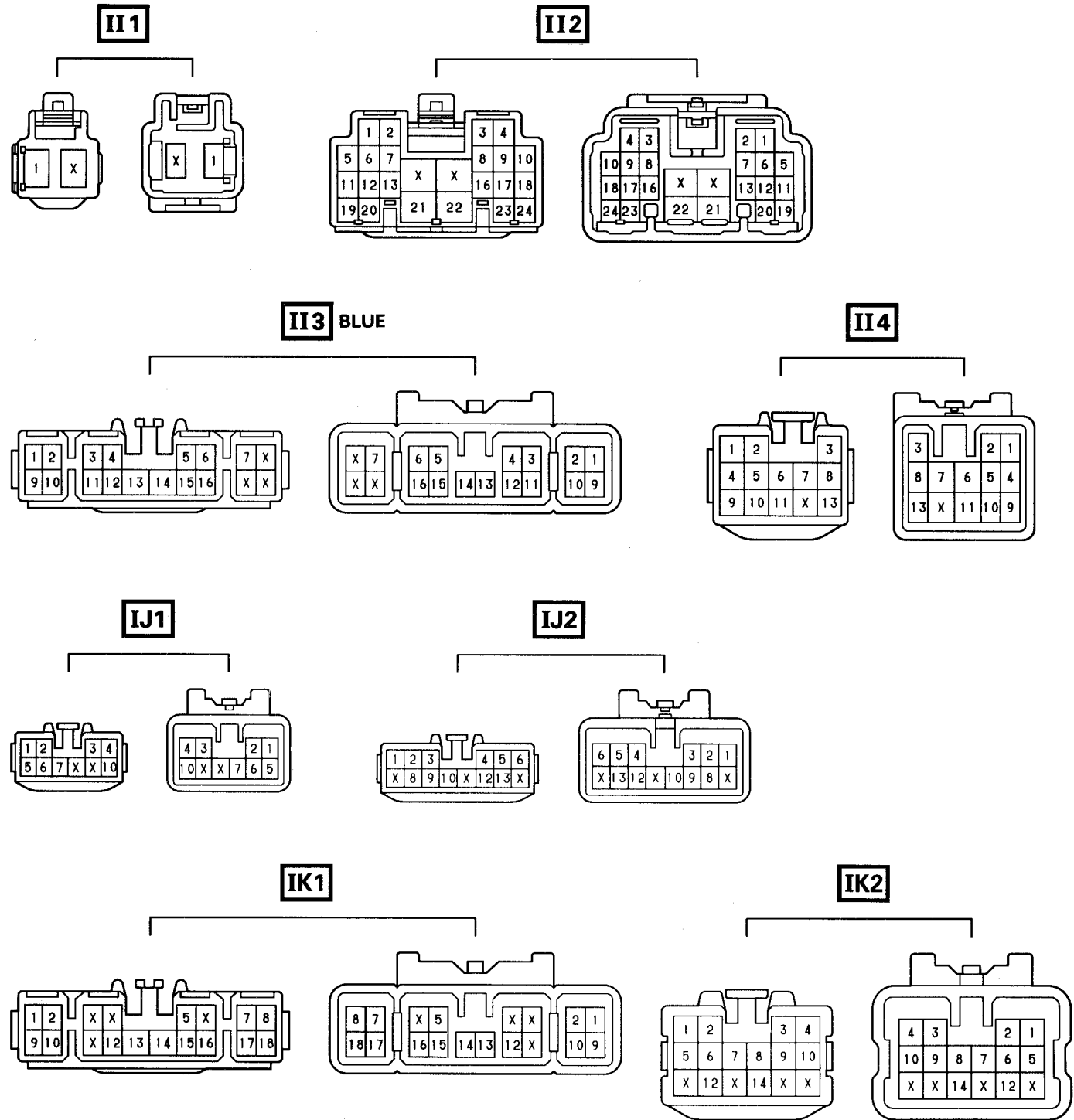
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

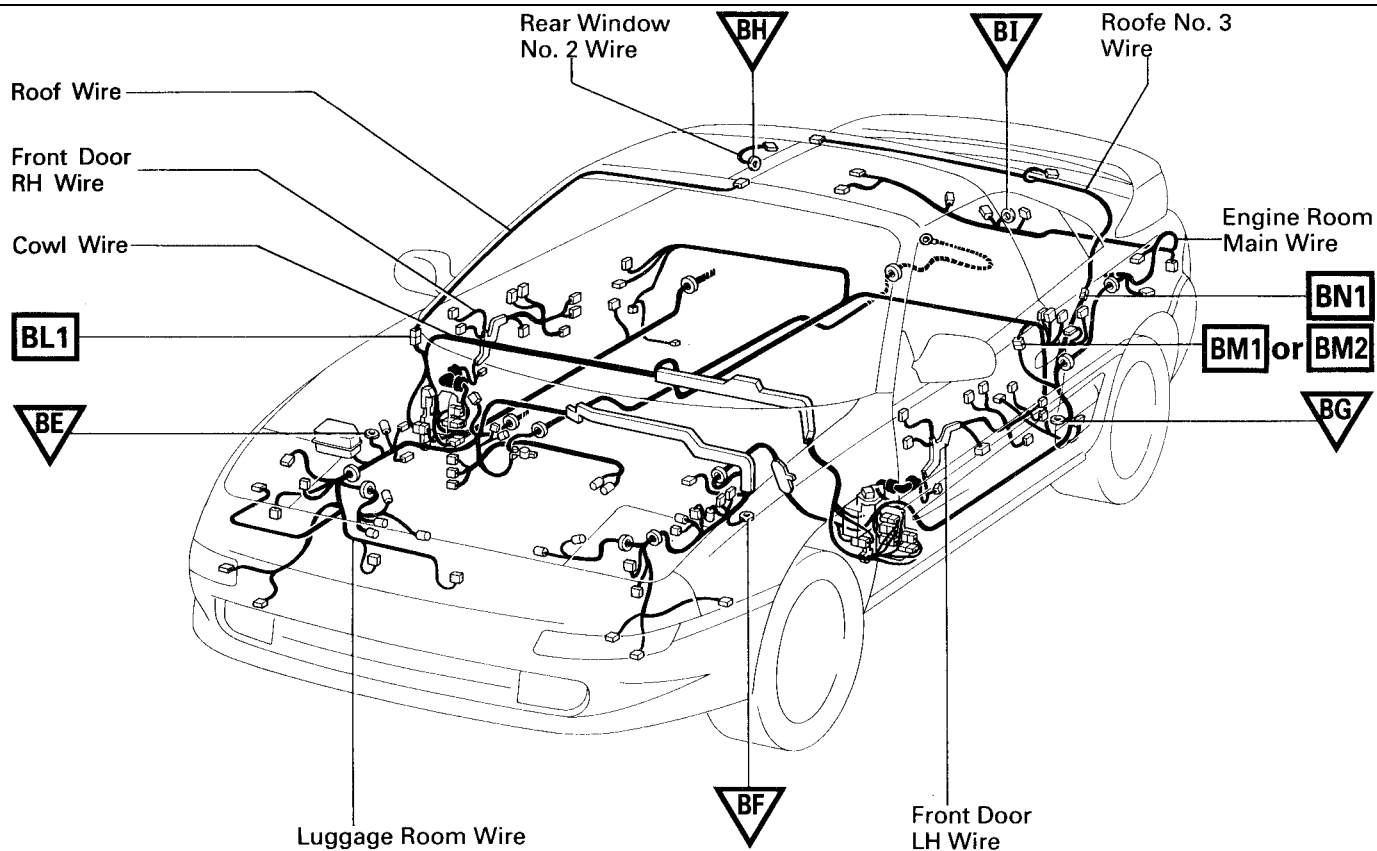


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2	
II3	
II4	
IJ1	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IJ2	
IK1	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK2	

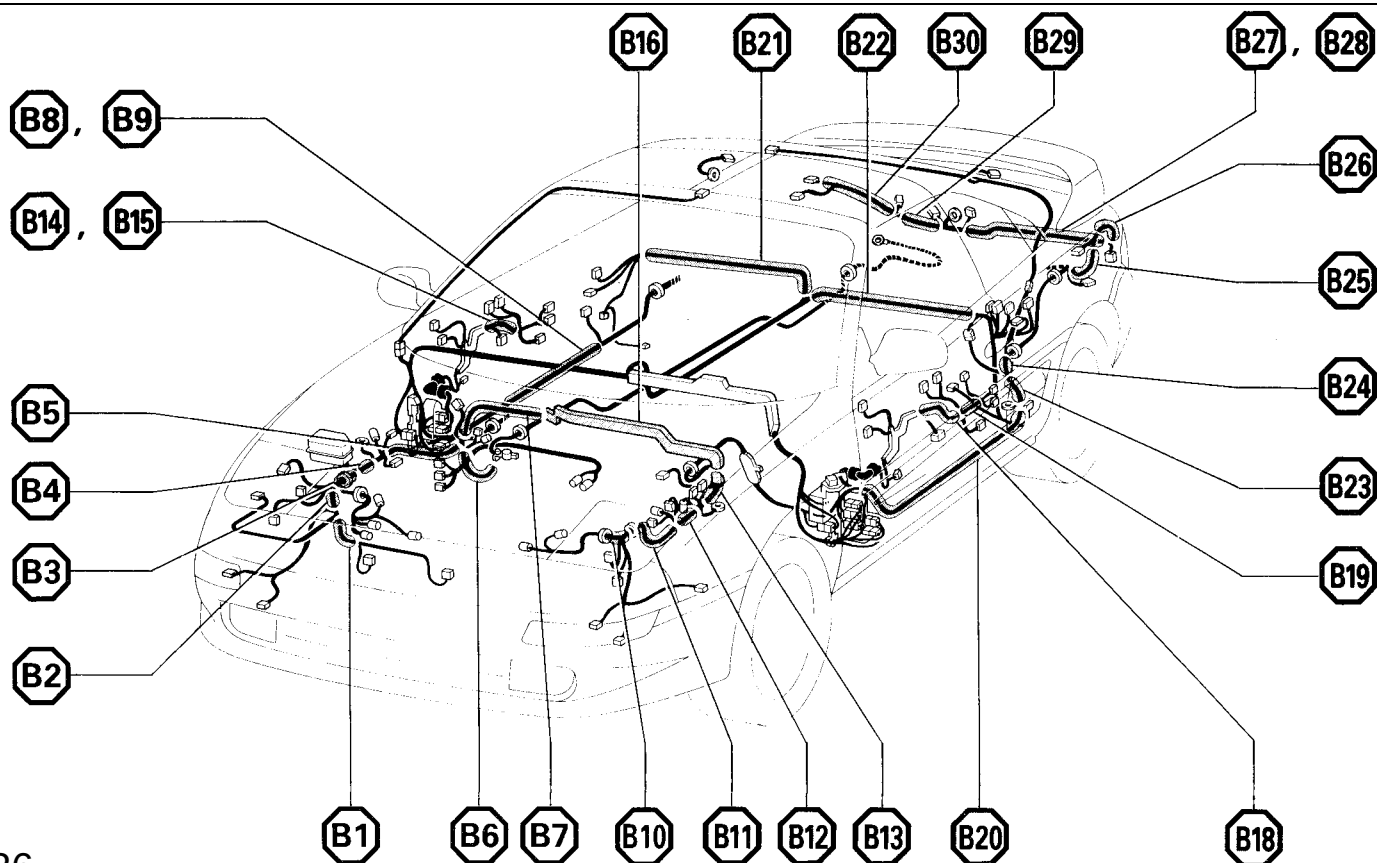
ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

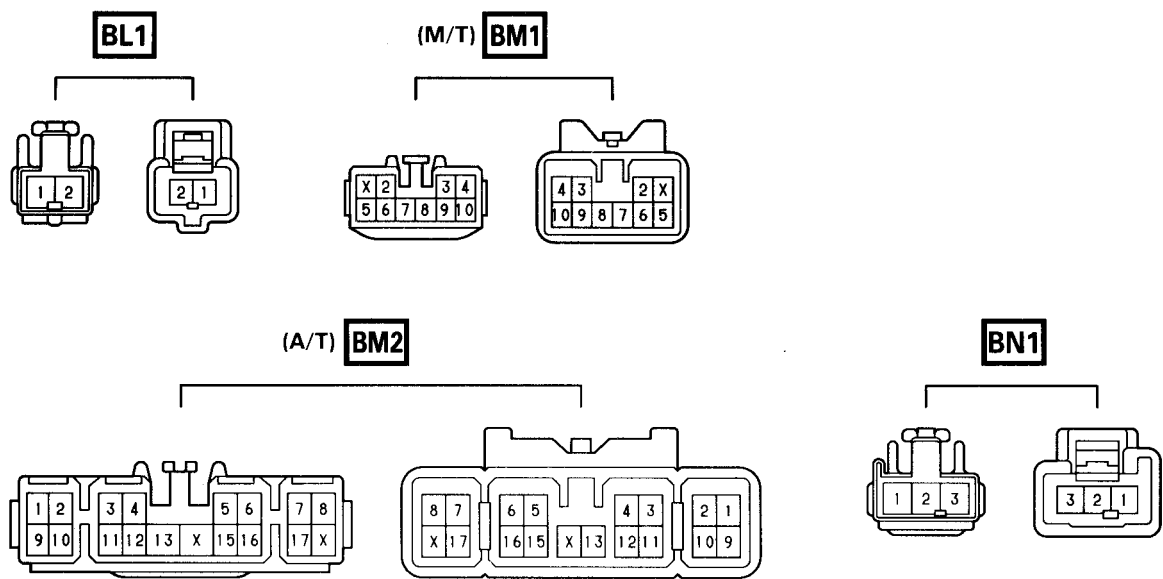
▽ : Location of Ground Points



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

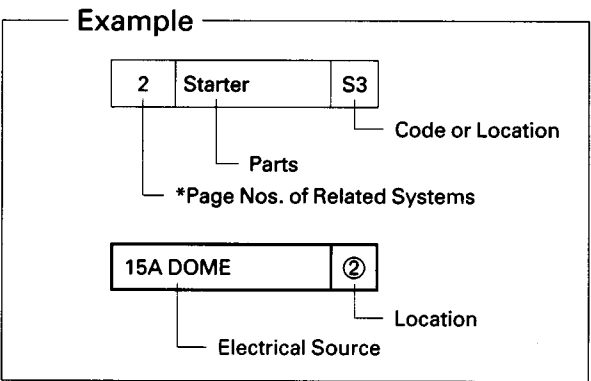
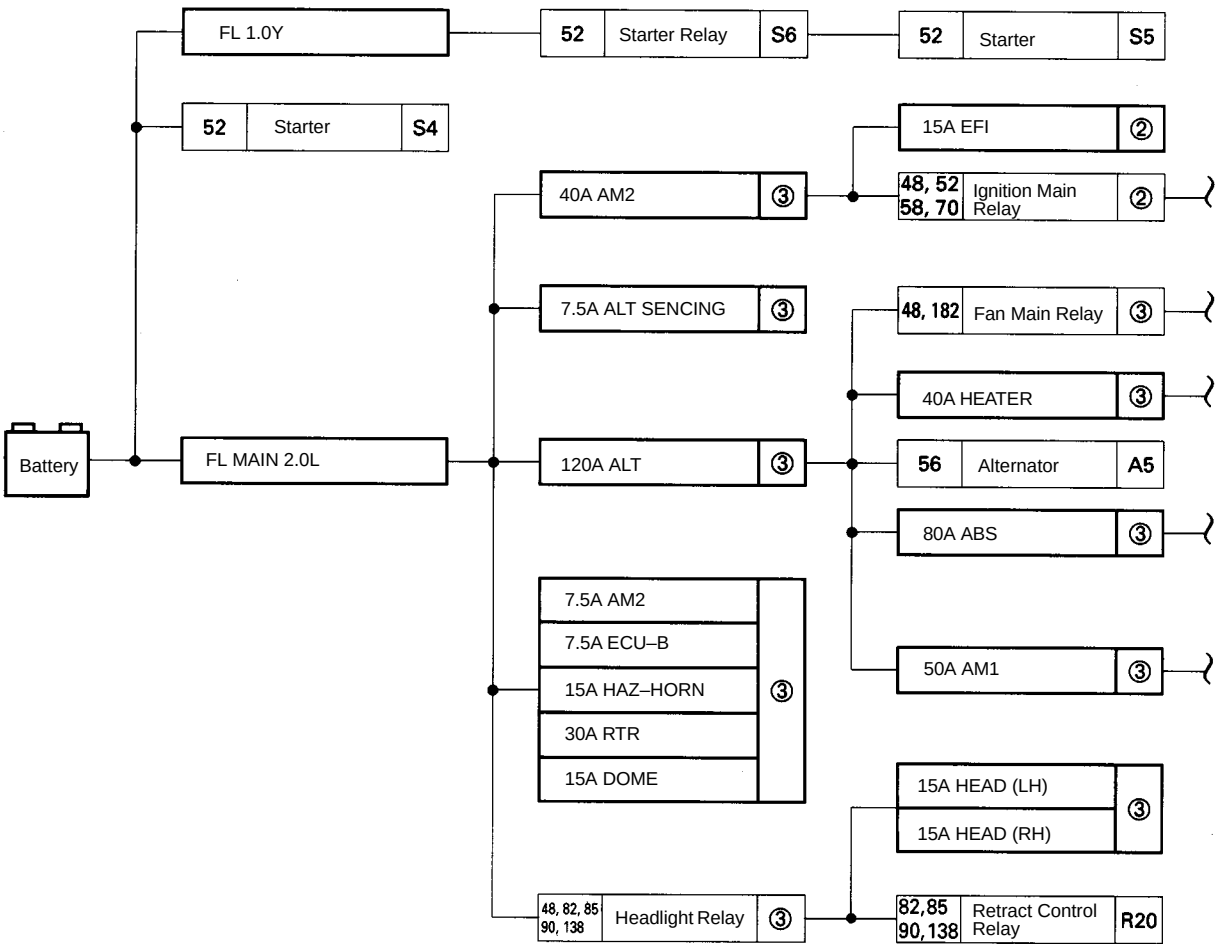


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BL1	ROOF WIRE AND COWL WIRE (UNDER THE RIGHT FRONT PILLAR)
BM1	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2	
BN1	ROOF NO.3 WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

POWER SOURCE (Current Flow Chart)

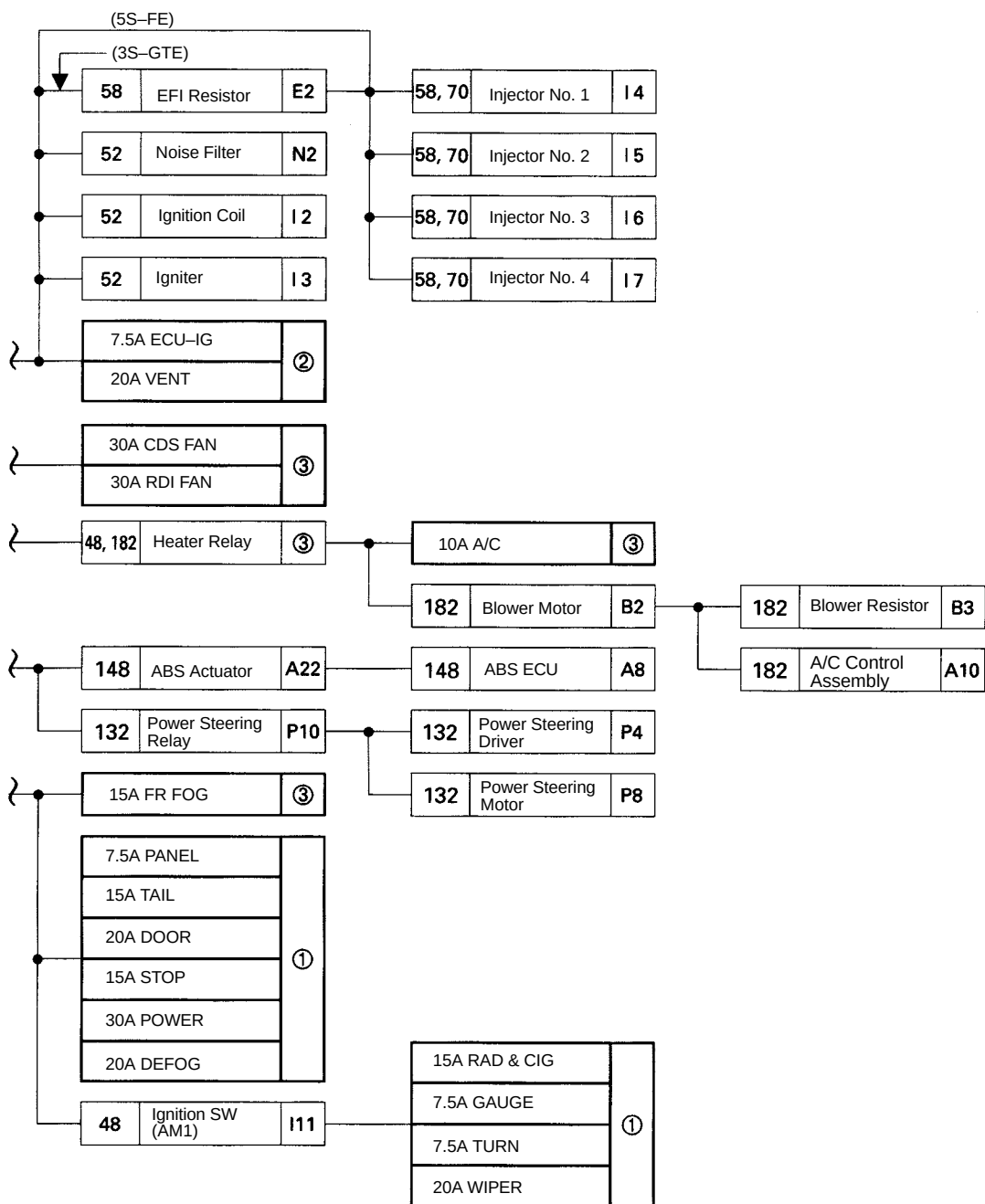
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.

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



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

[LOCATION] (1) : R/B No. 1 (See page20) (2) : R/B No. 2 (See page21) (3) : R/B No. 5 (See page21)



POWER SOURCE (Current Flow Chart)

Location			*Page Nos. of Related Systems		Parts		Code or Location		CB or Fuse		182	56	148	182	97 100 144 182	182					97 100	182	168	108	176	58 70 125	52	80		166	97 100	166
											A/C Magnetic Clutch	Alternator	ABS ECU	A/C Amplifier	A/C Control Assembly		A/C Dual Pressure SW	A/C Magnetic Clutch Relay	Air Inlet Servo Motor	Air Vent Mode Control Servo Motor	Ashtray Illumination	A/C Condenser Fan Motor	Auto Antenna Control Relay and Motor	Back-Up Light SW (M/T)	Brake Fluid Level SW	DLC (Check Connector)	Cold Start Injector	Cooling Fan ECU (for Engine Compartment)	Cooling Fan Motor (for Engine Compartment)	Cigarette Lighter	Cigarette Lighter Illumination	Clock
			A3	A5	A7	A9	A10	A12	A13	A15	A17	A18	A19	A25	A27	B1	B5	C1	C2	C3	C4	C6	C7	C8								
						A3	A5	A7	A9	A10	A12	A13	A15	A17	A18	A19	A25	A27	B1	B5	C1	C2	C3	C4	C6	C7	C8					
①	15A	TAIL					●	●						●									●	●								
	15A	RAD & CIG													●						●		●									
	7.5A	GAUGE			●	●	●				●	●					●															
	7.5A	TURN															●															
	20A	WIPER																														
	20A	DEFOG																														
	15A	STOP			●																											
	20A	DOOR																														
	30A	POWER																														
	7.5A	PANEL					●	●						●								●	●									
②	15A	EFI																●														
	20A	VENT																		●												
	7.5A	ECU-IG		●	●										●	●				●												
③	7.5A	ALT SENCING		●																												
	30A	CDS FAN													●																	
	30A	RDI FAN																														
	15A	FR FOG																														
	15A	HEAD (LH)																														
	15A	HEAD (RH)																														
	10A	A/C	●			●		●	●	●																						
	7.5A	ECU-B			●																											
	7.5A	AM2				●												●														
	15A	HAZ-HORN																														
	30A	RTR																														
	15A	DOME														●							●									

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

[LOCATION] (1) : R/B No. 1 (See page 20) (2) : R/B No. 2 (See page 21) (3) : R/B No. 5 (See page 21)

POWER SOURCE (Current Flow Chart)

Location			*Page Nos. of Related Systems		104				114		52 70 154	52 58 70	52 70	52 70 154	52 58 70	176	58	80 88 97 100	58 70	176	88 90	94		
					Parts				Code or Location															
					CB or Fuse																			
			Door Courtesy Light RH	Door Courtesy SW LH	Door Courtesy SW RH	Door Key Cylinder Light	Door Lock Motor LH	Door Lock Motor RH	PCME (Engine and ECT ECU)	PCME (Engine ECU)	PCME (Engine ECU)	PCME (Engine and ECT ECU)	PCME (Engine ECU)	Engine Oil Level Sensor	Fuel Pump Resistor	Fuel Pump Relay	Fog Light SW	Fuel Pump	Fuel Sender	Fog Light LH	Fog Light RH	Front Side Marker Light LH	Front Side Marker Light RH	Front Clearance Light LH
			D9	D10	D11	D12	D16	D17	E6	E7	E8	E10	F1	F2	F3	F4	F5	F6	F7	F11	F12	F13		
①	15A	TAIL														●					●	●	●	
	15A	RAD & CIG																						
	7.5A	GAUGE										●					●							
	7.5A	TURN																						
	20A	WIPER																						
	20A	DEFOG																						
	15A	STOP							●	●														
	20A	DOOR					●	●																
	30A	POWER																						
	7.5A	PANEL														●								
②	15A	EFI							●	●	●	●	●			●								
	20A	VENT											●	●										
	7.5A	ECU-IG							●			●												
③	7.5A	ALT SENCING																						
	30A	CDS FAN																						
	30A	RDI FAN																						
	15A	FR FOG														●			●	●				
	15A	HEAD (LH)																						
	15A	HEAD (RH)																						
	10A	A/C																						
	7.5A	ECU-B																						
	7.5A	AM2							●	●	●	●	●											
	15A	HAZ-HORN																						
	30A	RTR																						
	15A	DOME	●	●	●	●																		

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

[LOCATION] (1) : R/B No. 1 (See page20) (2) : R/B No. 2 (See page21) (3) : R/B No. 5 (See page21)

POWER SOURCE (Current Flow Chart)

Location			*Page Nos. of Related Systems		110		94	97 100	97 100 174	97 100	182	108	106	109	94	108	106	109	94	104		144	170	136				
					Parts		Code or Location																					
			CB or Fuse		Power Window Motor LH		Power Window Motor RH		Panel Relay	Radio and Player		Rheostat	Radiator Fan Motor	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 Luggage Compartment Door Courtesy SW	Rear Luggage Compartment Light	Rear Window Defogger	Rear Woofer Amplifier LH	Rear Woofer Amplifier RH	Remote Control Mirror LH	Remote Control Mirror RH
					P14	P15	P16	R1																				
①	15A	TAIL					●	●	●						●				●									
	15A	RAD & CIG						●																	●	●		
	7.5A	GAUGE																										
	7.5A	TURN											●				●											
	20A	WIPER																										
	20A	DEFOG																					●					
	15A	STOP												●				●										
	20A	DOOR																										
	30A	POWER	●	●																								
	7.5A	PANEL				●	●	●	●																			
②	15A	EFI																										
	20A	VENT																										
	7.5A	ECU-IG											●				●											
③	7.5A	ALT SENCING																										
	30A	CDS FAN									●																	
	30A	RDI FAN									●																	
	15A	FR FOG																										
	15A	HEAD (LH)																										
	15A	HEAD (RH)																										
	10A	A/C																										
	7.5A	ECU-B																										
	7.5A	AM2																										
	15A	HAZ-HORN																●										
	30A	RTR																										
	15A	DOME												●								●	●		●	●		

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

[LOCATION] (1) : R/B No. 1 (See page 20) (2) : R/B No. 2 (See page 21) (3) : R/B No. 5 (See page 21)

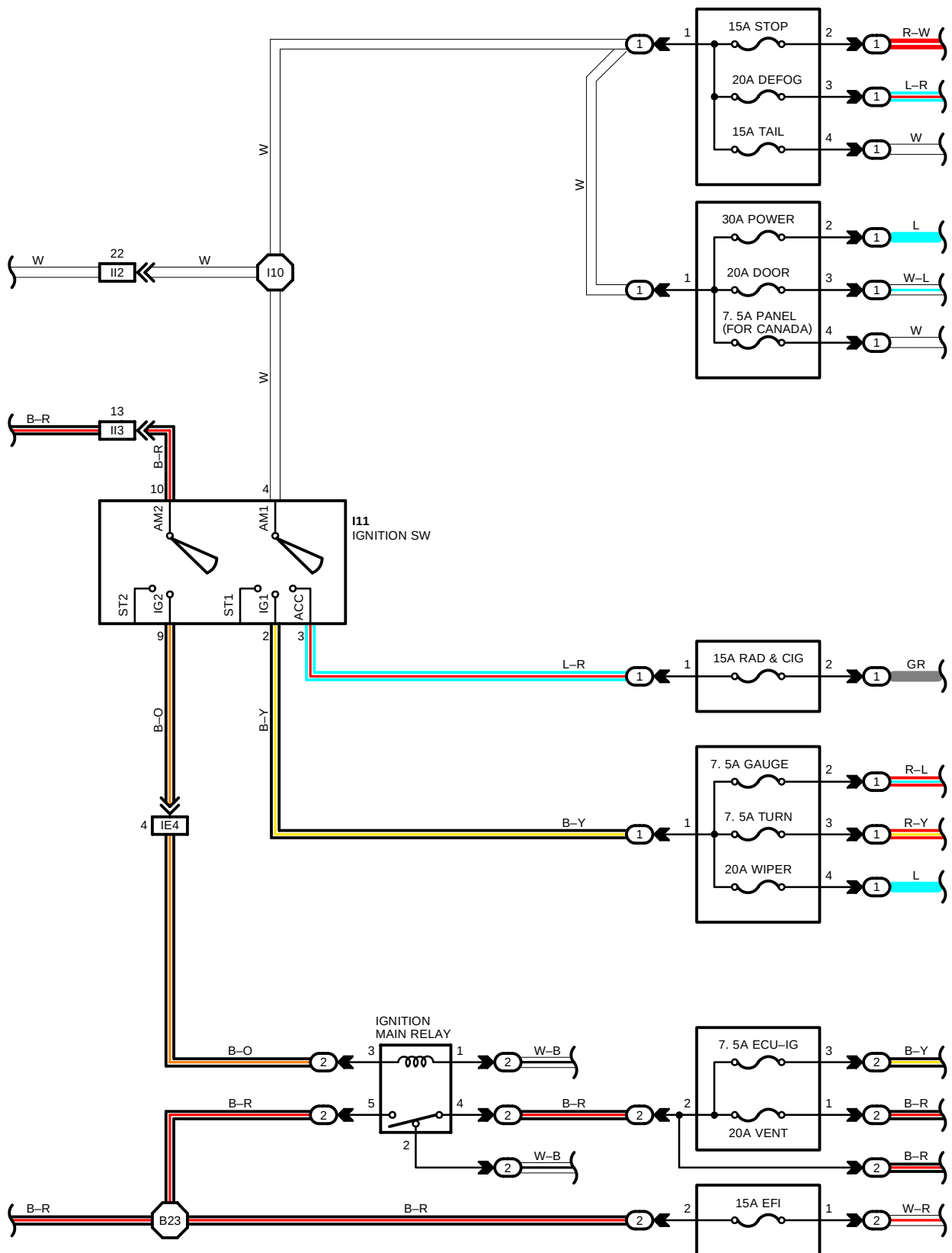
POWER SOURCE (Current Flow Chart)

Location			*Page Nos. of Related Systems		58 70	80	58 70 154	48 58 70	182			82 88 90	182	131 138
					Circuit Opening Relay	Cooling Fan Relay (for Engine Compartment)	EFI Main Relay	Ignition Main Relay	Fan Main Relay	Fan Relay No. 1	Fan Relay No. 2	Fan Relay No. 3	Front Fog Light Relay	Heater Relay
			Parts											
			CB or Fuse		②						③			
①	15A	TAIL												
	15A	RAD & CIG											●	
	7.5A	GAUGE												
	7.5A	TURN												
	20A	WIPER												
	20A	DEFOG												
	15A	STOP												
	20A	DOOR												
	30A	POWER												
	7.5A	PANEL												
②	15A	EFI	●		●									
	20A	VENT		●										
	7.5A	ECU-IG												
③	7.5A	ALT SENCING												
	30A	CDS FAN							●	●				
	30A	RDI FAN							●					
	15A	FR FOG										●		
	15A	HEAD (LH)										●		
	15A	HEAD (RH)										●		
	10A	A/C												
	7.5A	ECU-B												
	7.5A	AM2				●	●	●	●					
	15A	HAZ-HORN												●
	30A	RTR												
	15A	DOME												

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

[LOCATION] (1) : R/B No. 1 (See page20) (2) : R/B No. 2 (See page21) (3) : R/B No. 5 (See page21)





POWER SOURCE

SERVICE HINTS

HEADLIGHT RELAY

2-3: CLOSED WITH LIGHT CONTROL SW AT **HEAD** POSITION OR DIMMER SW AT **FLASH** POSITION

IGNITION MAIN RELAY

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

FAN MAIN RELAY

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

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
I11	26				

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

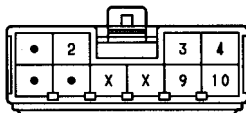
: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE2	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II1	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2		
II3		

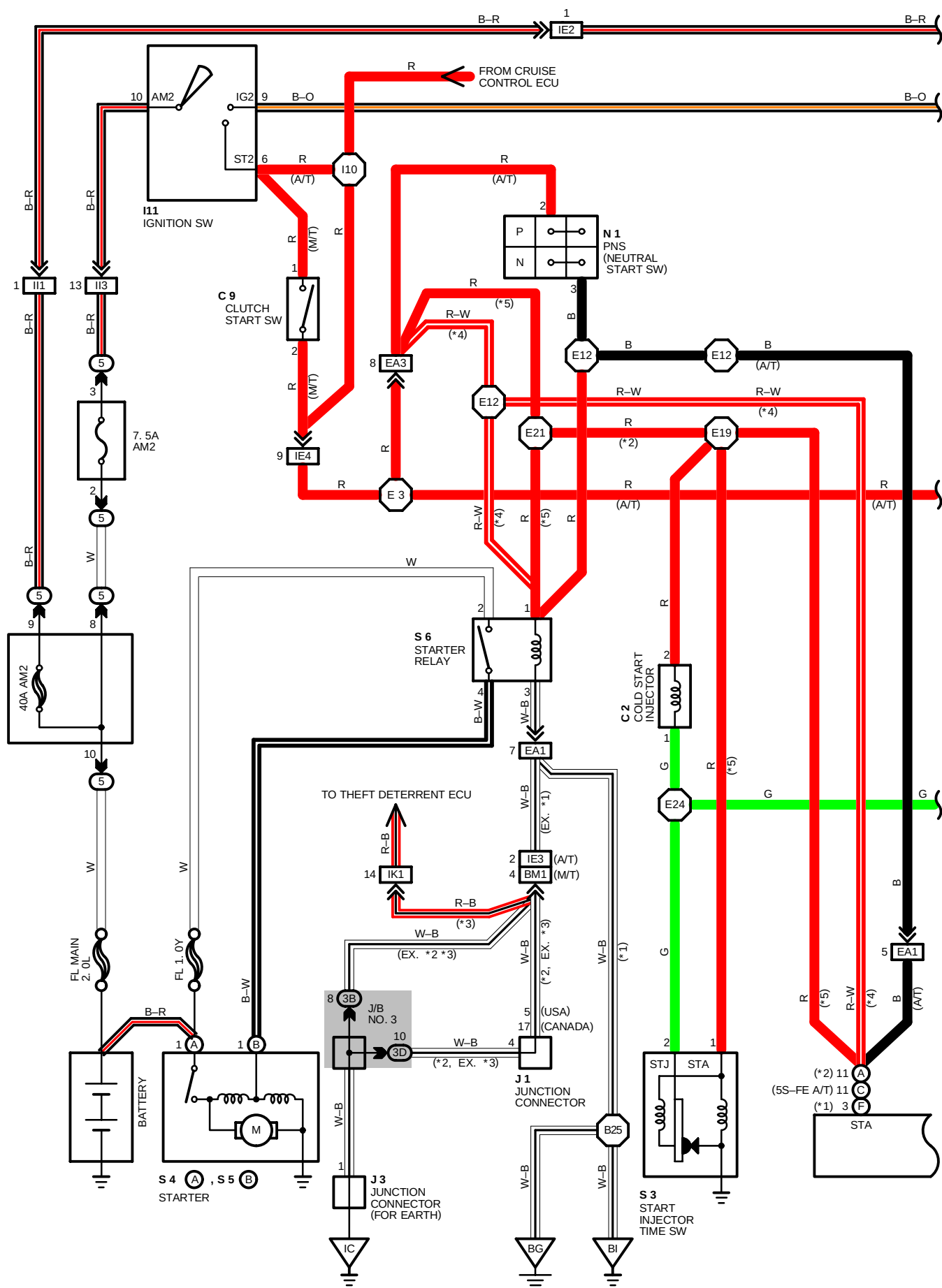
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	34	COWL WIRE	B 6	36	LUGGAGE ROOM WIRE
B 4	36	LUGGAGE ROOM WIRE	B23	36	ENGINE ROOM MAIN WIRE

I11 BLACK

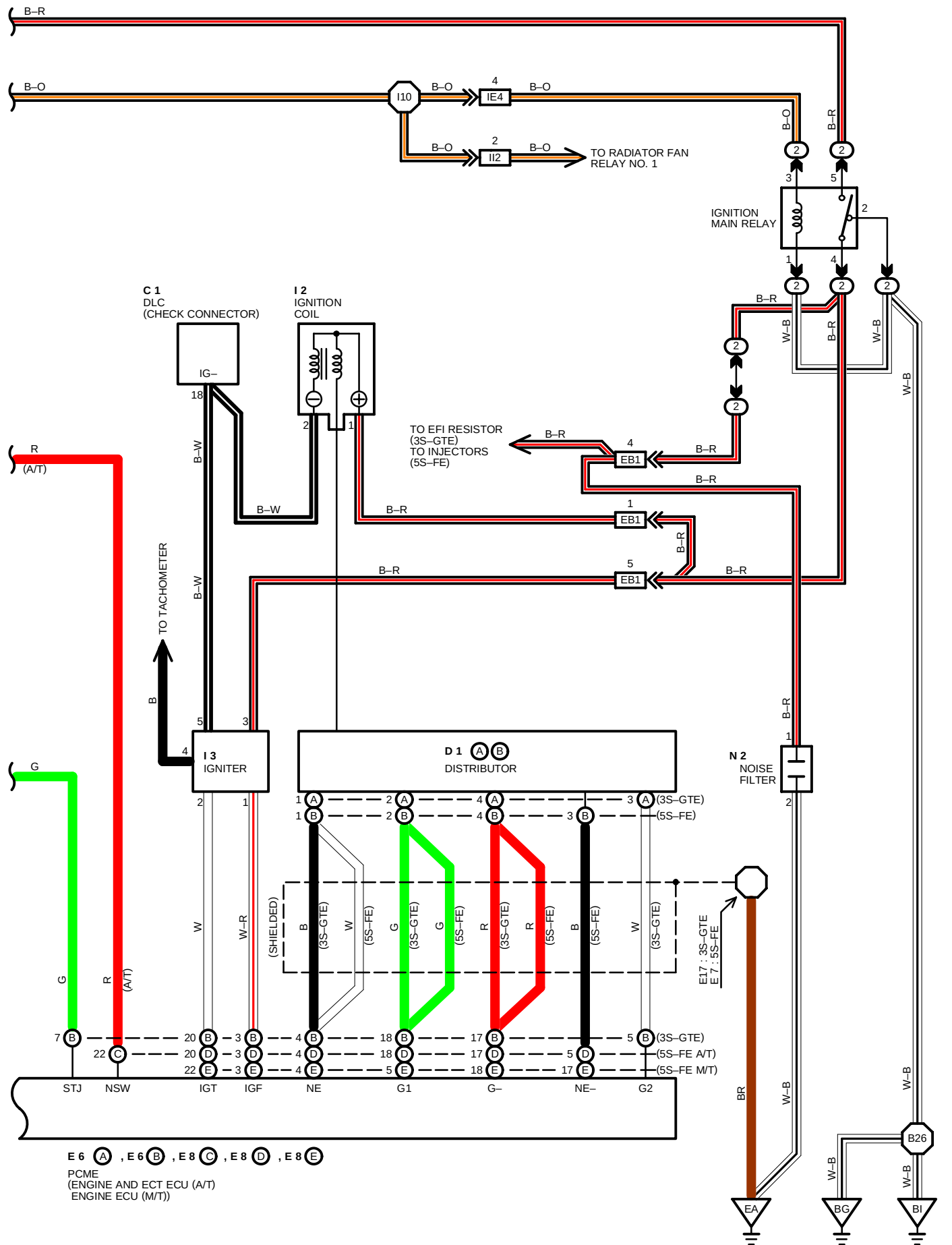


STARTING AND IGNITION



*1 : USA (5S-FE M/T) W/O ABS, AUTO ANTENNA, THEFT DETERRENT AND POWER WINDOW
 *2 : (1) CANADA
 (2) USA (A/T)
 (3) USA (M/T) W/ CRUISE CONTROL, ABS, POWER WINDOW OR WOOFER SPEAKER

*3 : W/ THEFT DETERRENT
 *4 : 5S-FE M/T
 *5 : 3S-GTE



STARTING AND IGNITION

SERVICE HINTS

IGNITION MAIN RELAY

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

I11 IGNITION SW

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

10-6: CLOSED WITH IGNITION SW AT **ST** POSITION

S6 STARTER RELAY

2-4 : CLOSED WITH A/T SHIFT LEVER IN **P** OR **N** POSITION AND IGNITION SW AT **ST** POSITION (A/T)

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

N1 NEUTRAL START SW (A/T)

2-3 : CLOSED WITH A/T SHIFT LEVER IN **P** OR **N** POSITION

C9 CLUTCH START SW (M/T)

1-2 : CLOSED WITH CLUTCH PEDAL FULLY DEPRESSED

C2 COLD START INJECTOR

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	24 (5S-FE), 25 (3S-GTE)	E 8	B 25 (3S-GTE)	J 3	26
C 2	25 (3S-GTE)		D 24 (5S-FE)	N 1	24 (5S-FE)
C 9	26		E 24 (5S-FE)	N 2	24(5S-FE), 25 (3S-GTE)
D 1	A 25 (3S-GTE)	I 2	24 (5S-FE), 21 (3S-GTE)	S 3	25 (3S-GTE)
	B 24 (5S-FE)	I 3	24 (5S-FE), 21 (3S-GTE)	S 4 A	24 (5S-FE), 25 (3S-GTE)
E 6	A 25 (3S-GTE)	I11	26	S 5 B	24 (5S-FE), 25 (3S-GTE)
	C 24 (5S-FE)	J 1	26	S 6	24 (5S-FE), 25 (3S-GTE)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	30 (3S-GTE)	
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	30 (3S-GTE)	
EB1	28 (5S-FE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
	30 (3S-GTE)	
IE2	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
IE4		
II1	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2		
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IK1	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

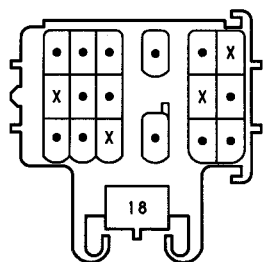
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
	30 (3S-GTE)	
IC	32	INSTRUMENT PANEL BRACE LH
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

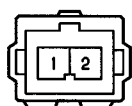
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	28 (5S-FE)	ENGINE ROOM MAIN WIRE	E24	30 (3S-GTE)	ENGINE WIRE
	30 (3S-GTE)		I10	34	COWL WIRE
E 7	28 (5S-FE)	ENGINE WIRE	B25	28 (5S-FE)	ENGINE ROOM MAIN WIRE
E12				30 (3S-GTE)	
E17	30 (3S-GTE)		B26	28 (5S-FE)	
E19				30 (3S-GTE)	
E21					

C 1 DARK GRAY



C 2 BLACK



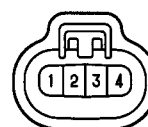
C 9



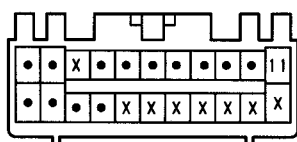
D 1 (A) BLACK



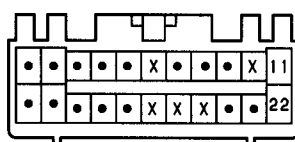
D 1 (B) BLACK



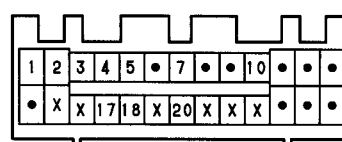
(3S-GTE) E 6 (A) DARK GRAY



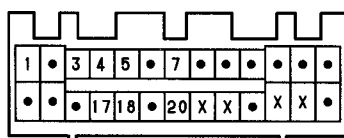
(5S-FE A/T) E 6 (C) DARK GRAY



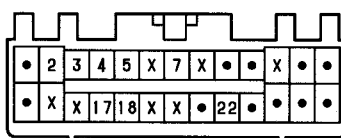
(3S-GTE) E 8 (B) DARK GRAY



(5S-FE A/T) E 8 (D) DARK GRAY



(5S-FE M/T) E 8 (E) DARK GRAY



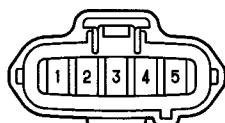
(3S-GTE) I 2 BLACK



(5S-FE) I 2 BLACK



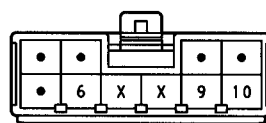
(3S-GTE) I 3 BLACK



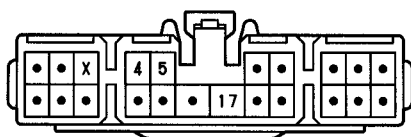
(5S-FE) I 3 BLACK



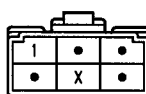
I 11 BLACK



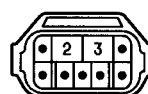
J 1



J 3



N 1 GRAY



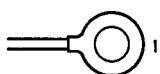
N 2 GRAY



S 3 BLACK



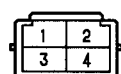
S 4 (A)



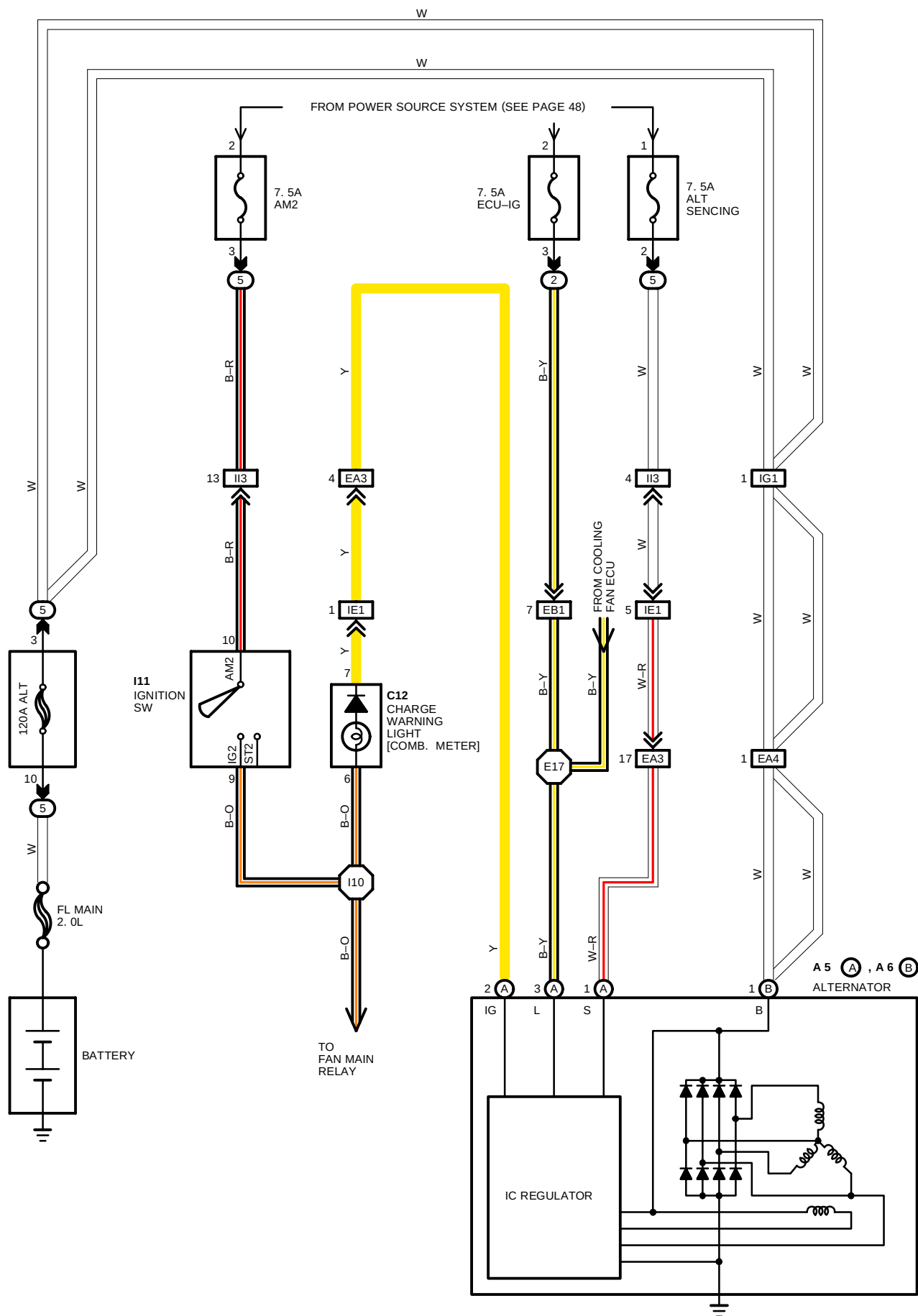
S 5 (B) BROWN



S 6



CHARGING



SERVICE HINTS

A 5(A) (ALTERNATOR)

- (A) 1-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) 2-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
A 5	A	20 (5S-FE), 21 (3S-GTE)	C12	22		
A 6	B	20 (5S-FE), 21 (3S-GTE)	I11	22		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	17	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

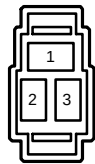
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	24 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	26 (3S-GTE)	
EA4	24 (5S-FE)	
	26 (3S-GTE)	
EB1	24 (5S-FE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
	26 (3S-GTE)	
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	28	LUGGAGE ROOM WIRE AND ENGINE ROOM MAIN WIRE (BEHIND FOOTREST)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E17	26 (3S-GTE)	ENGINE WIRE	I10	30	COWL WIRE

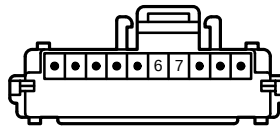
A 5 (A) BLACK



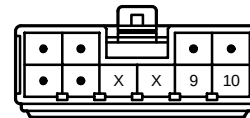
A 6 (B)



C12 GRAY



I11 BLACK



ENGINE CONTROL (3S-GTE)

SYSTEM OUTLINE

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

1. PTIS (INPUT SIGNALS)

(1) WATER TEMP. SIGNAL SYSTEM

THE ECTS (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 PCME (ECU).

(2) INTAKE AIR TEMP. SIGNAL SYSTEM

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

(3) OXYGEN DENSITY SIGNAL SYSTEM

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

(4) CRANKSHAFT POSITION SIGNAL SYSTEM

CRANKSHAFT POSITION AND ENGINE SPEED IS DETECTED BY THE PICK-UP COIL INSTALLED INSIDE THE DISTRIBUTOR. CRANKSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINAL G1** AND **G2** OF THE PCME (ECU), AND ENGINE SPEED SIGNAL IS INPUT TO **TERMINAL NE+**.

(5) THROTTLE POSITION SIGNAL SYSTEM

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

(6) VEHICLE SPEED SIGNAL SYSTEM

THE SPEED METER INSIDE THE COMBINATION METER SENDS A VEHICLE SPEED SIGNAL TO **TERMINAL SPD** OF THE PCME (ECU) AS A CONTROL SIGNAL.

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

THE OPERATING VOLTAGE OF THE A/C MAGNETIC CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO **TERMINAL AC** OF THE PCME (ECU).

(8) BATTERY SIGNAL SYSTEM

VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE PCME (ECU). WHEN THE IGNITION SW IS TURNED TO ON, VOLTAGE FOR PCME (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 PCME (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 PCME (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 PCME (ECU).

(12) ENGINE KNOCK SIGNAL SYSTEM

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

(13) ELECTRICAL LOAD SIGNAL SYSTEM

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

2. CONTROL SYSTEM

* SMPI (EFI, ELECTRONIC FUEL INJECTION) SYSTEM

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

* EI (ESA, ELECTRONIC SPARK ADVANCE) SYSTEM

THE EI (ESA) SYSTEM MONITORS THE ENGINE REVOLUTIONS USING THE SIGNALS (INPUT SIGNALS (1, 2, 4, 5, 6, 9, 11, 12)) INPUT TO THE PCME (ECU) FROM EACH SENSOR. BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE PCME (ECU), THE MOST APPROPRIATE IGNITION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINAL IGT** OF THE PCME (ECU). THIS OUTPUT CONTROLS THE IGNITER TO PRODUCE THE MOST APPROPRIATE IGNITION TIMING FOR THE DRIVING CONDITIONS.

* FUEL PUMP CONTROL SYSTEM

THE PCME (ECU) OPERATION OUTPUTS TO **TERMINAL FPR** AND CONTROLS THE FUEL PUMP RELAY AND THUS CONTROLS THE FUEL PUMP DRIVE SPEED IN RESPONSE TO CONDITIONS.

* HOZS (OXYGEN SENSOR) HEATER CONTROL SYSTEM

THE HOZS (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 HOZS (OXYGEN SENSOR) TO IMPROVE DETECTION PERFORMANCE OF THE SENSOR. THE PCME (ECU) EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 4, 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 ENGINE SPEED AND PROVIDES IDLING STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD, ETC. THE PCME (ECU) EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS 1, 4 TO 9, 13)), OUTPUTS CURRENT TO **TERMINALS RSC AND RSO** AND CONTROLS THE IACV (ISC VALVE).

* EGR CONTROL SYSTEM

WITH THE EGR CONTROL SYSTEM, THE PCME (ECU) EVALUATES THE (INPUT SIGNALS (1, 4, 5, 9)) FROM EACH SENSOR, CURRENT IS OUTPUT TO **TERMINAL EGR** AND OPERATION OF THE VSV (FOR EGR) 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 PCME (ECU) EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (4, 5, 9, 12)), OUTPUTS CURRENT TO **TERMINAL TVIS** 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 PCME (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.

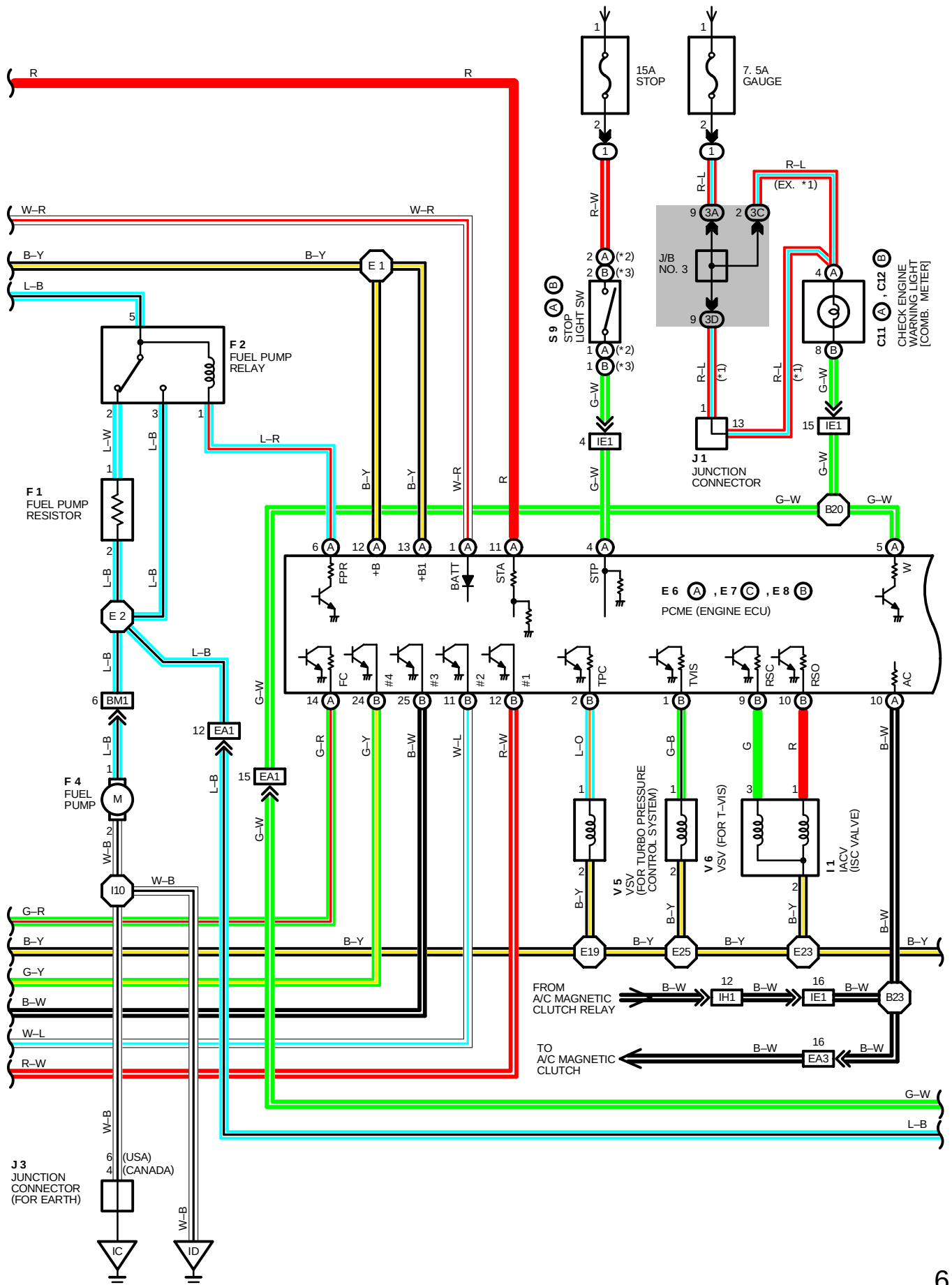
4. FAIL-SAFE SYSTEM

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 PCME (ECU) MEMORY OR ELSE STOPS THE ENGINE.

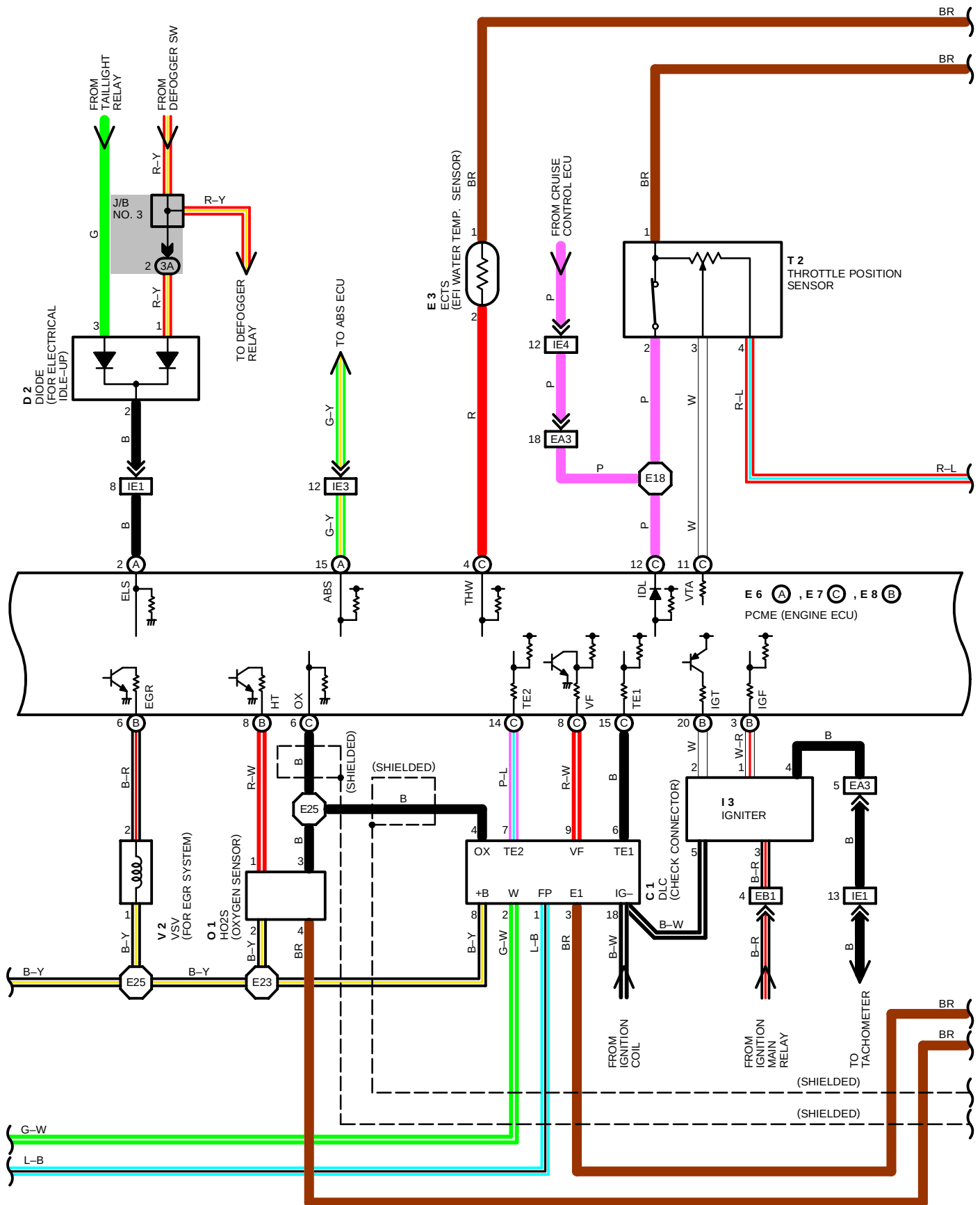
60

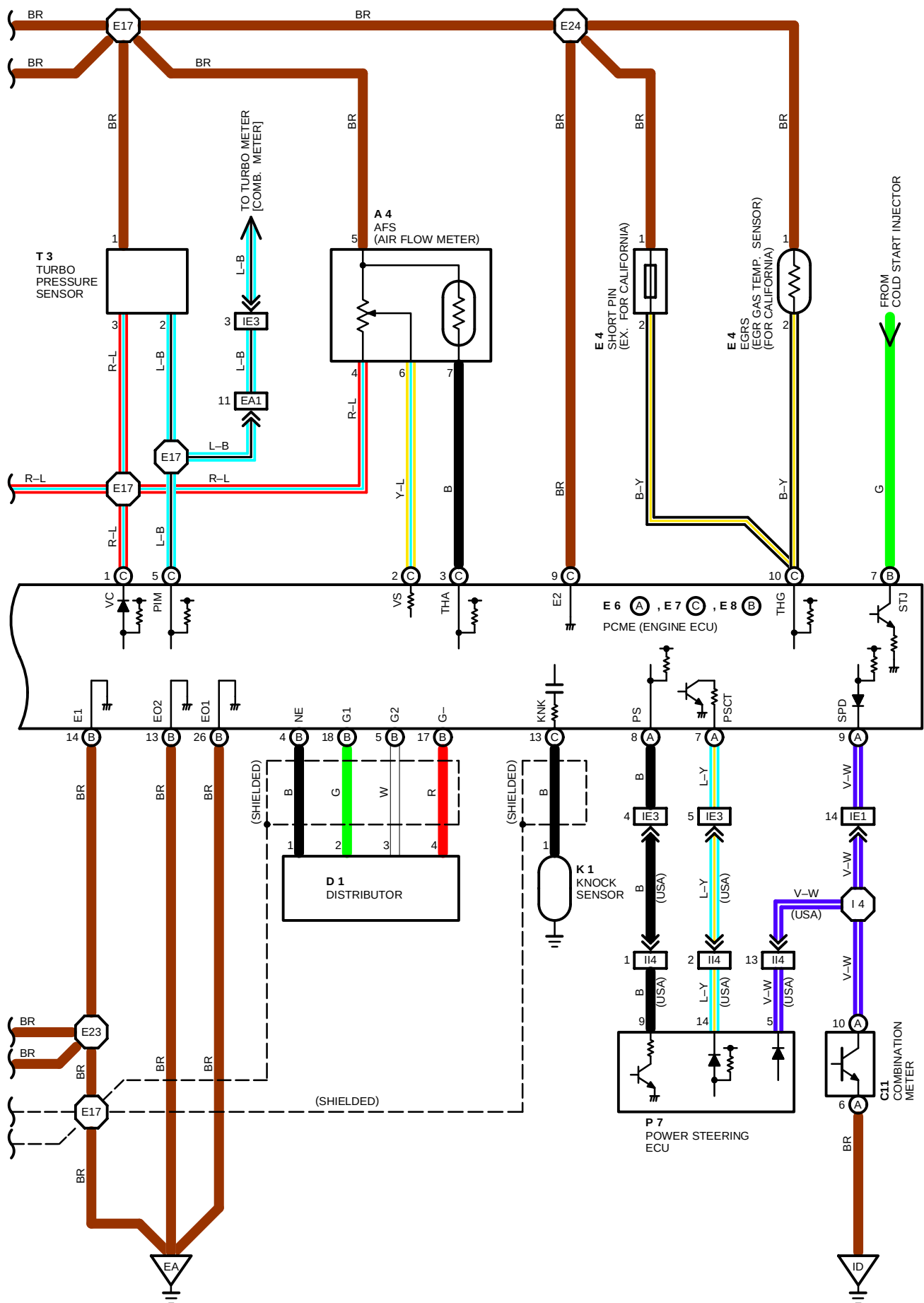


FROM POWER SOURCE SYSTEM (SEE PAGE 48)



ENGINE CONTROL (3S-GTE)





ENGINE CONTROL (3S-GTE)

SERVICE HINTS

EFI MAIN RELAY

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

E 2 EFI RESISTOR

2-1, 3, 4, 6: 4-6 Ω

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

1-2: 2-4 Ω

F10 FUEL PUMP RESISTOR

1-2: APPROX. 0.73 Ω

E 4 EGR GAS TEMP. SENSOR (FOR CALIFORNIA)

1-2: 69.4-88.5 K Ω (50°C, 122°F)
11.89-14.37 K Ω (100°C, 212°F)
2.79-3.59 K Ω (150°C, 302°F)

A15 AIR FLOW METER

5-6: 200-600 Ω (MEASURING PLATE CLOSED)
20-1000 Ω (MEASURING PLATE OPEN)
5-4: 200-400 Ω
5-7: 15 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: 7.22 K Ω (0°C, 32°F)
3.04 K Ω (20°C, 68°F)
1.41 K Ω (40°C, 104°F)
0.73 K Ω (60°C, 140°F)
0.397 K Ω (80°C, 176°F)

T 1 THROTTLE POSITION SENSOR

3-4: 3.9-7.25 K Ω WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0 MM (0 IN.)
2-4: LESS THAN 5.5 K Ω WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0.50 MM (0.020 IN.)
↔ Ω WITH 0.7 MM (0.028 IN.)
3-4: 0.96-1.79 K Ω WITH THROTTLE VALVE FULLY OPEN
1-4: 4.38-8.13 K Ω (25°C, 77°F)

E 4, E 5, E 6 PCME (ENGINE ECU)

VOLTAGE AT PCME (ECU) CONNECTORS

BATT -E1 : 9-14 VOLTS
+B, +B1-E1 : 9-14 VOLTS (IGNITION SW ON)
IDL -E2 : 9-14 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
VTA -E2 : 0.3-0.8 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
VC -E2 : 4.5-5.5 VOLTS (IGNITION SW ON)
VS -E2 : 3.7-4.3 VOLTS (IGNITION SW ON AND MEASURING PLATE FULLY CLOSED)
0.2-0.5 VOLTS OR LESS (IGNITION SW ON AND MEASURING PLATE FULLY OPEN)
2.0-4.0 VOLTS (IDLING)
1.0-2.0 VOLTS (3000RPM)
THA -E2 : 0.5-3.4 VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, (68°F))
THW -E2 : 0.2-1.0 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 : 0.8-1.2 VOLTS (CRANKING OR IDLING)
TVIS -E1 : APPROX 2.0 VOLTS OR LESS WITH IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED (REGULAR GASOLINE)
9-14 VOLTS WITH IGNITION SW ON AND THROTTLE VALVE OPEN (REGULAR GASOLINE)
APPROX 2.0 VOLTS OR LESS IDLING (PREMIUM GASOLINE)
9-14 VOLTS WITH 4200 MIN-1 (PREMIUM GASOLINE)
TE1 -E1 : 9-14 VOLTS WITH IGNITION SW ON AND DLC (CHECK CONNECTOR) TE1-E1 NO CONNECT
APPROX 1.0 VOLTS OR LESS WITH IGNITION SW ON AND DLC (CHECK CONNECTOR) TE1-E1 CONNECT
AC -E1 : 9-14 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 : 9-14 VOLTS (NO TROUBLE (CHECK ENGINE WARNING LIGHT OFF) AND ENGINE RUNNING)

RESISTANCE AT PCME (ECU) CONNECTORS

(DISCONNECT WIRING CONNECTOR FROM ECU)

IDL	-E1	: INFINITY (THROTTLE VALVE OPEN) LESS THAN 2300 Ω (THROTTLE VALVE FULLY CLOSED)
VTA	-E2	: 3500–10000 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)
THA	-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

ENGINE CONTROL (3S-GTE)

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 4	25 (3S-GTE)	E 8	B 25 (3S-GTE)	J 3	26
C 1	25 (3S-GTE)	F 1	25 (3S-GTE)	K 1	25 (3S-GTE)
C 9	26 (3S-GTE)	F 2	25 (3S-GTE)	O 1	25 (3S-GTE)
C11	A 26	F 4	26	P 7	27
C12	B 26	I 1	25 (3S-GTE)	S 9	26
D 1	25 (3S-GTE)	I 3	25 (3S-GTE)	T 2	25 (3S-GTE)
D 2	26	I 4	25 (3S-GTE)	T 3	25 (3S-GTE)
E 2	25 (3S-GTE)	I 5	25 (3S-GTE)	V 2	25 (3S-GTE)
E 3	25 (3S-GTE)	I 6	25 (3S-GTE)	V 5	25 (3S-GTE)
E 4	25 (3S-GTE)	I 7	25 (3S-GTE)	V 6	25 (3S-GTE)
E 6	A 25 (3S-GTE)	I11	26		
E 7	C 25 (3S-GTE)	J 1	26		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30 (3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EB1	30 (3S-GTE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2		
IE3		
IE4		
IH1	32	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II1	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

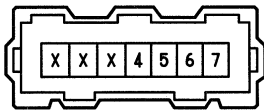
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	30 (3S-GTE)	INTAKE MANIFOLD
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

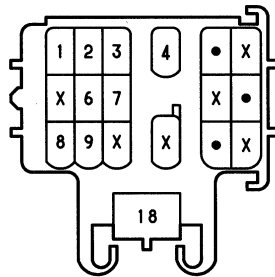
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	30 (3S-GTE)	ENGINE ROOM MAIN WIRE	E24	30 (3S-GTE)	ENGINE WIRE
E 2			E25		
E 3			I 4	34	COWL WIRE
E17	30 (3S-GTE)	ENGINE WIRE	I10		
E18			B20	36	ENGINE ROOM MAIN WIRE
E19			B23		
E23			B26		

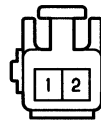
A 4 BLACK



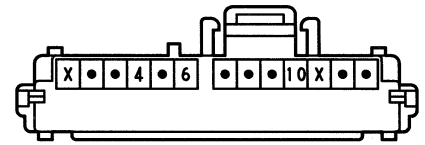
C 1 DARK GRAY



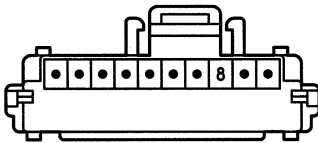
C 9



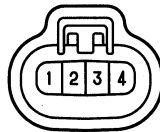
C11 A BLUE



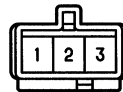
C12 B GRAY



D 1 BLACK



D 2 ORANGE



E 2 DARK GRAY



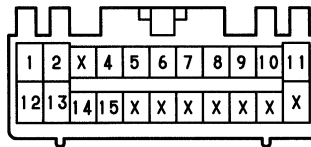
E 3 GREEN



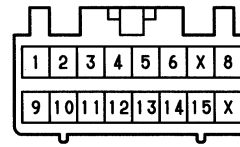
E 4 DARK GRAY



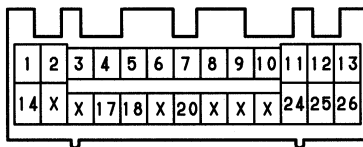
E 6 A DARK GRAY



E 7 C DARK GRAY



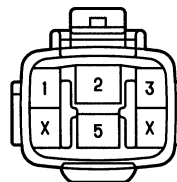
E 8 B DARK GRAY



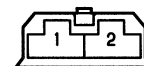
F 1 DARK GRAY



F 2 BLACK



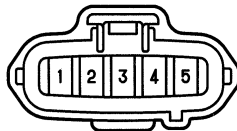
F 4 DARK GRAY



I 1 GRAY



I 3 BLACK



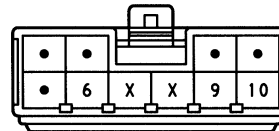
I 4, I 6 BROWN



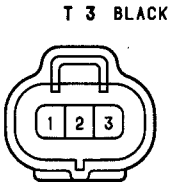
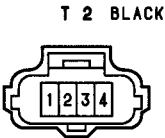
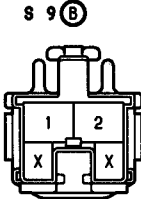
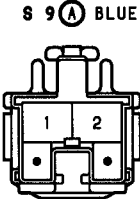
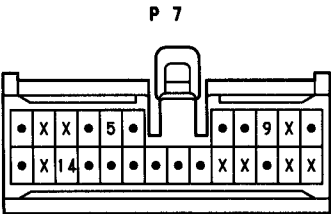
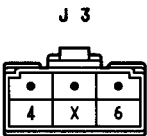
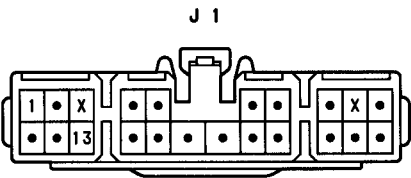
I 5, I 7 GRAY



I11 BLACK



ENGINE CONTROL (3S-GTE)



ENGINE CONTROL (5S-FE)

SYSTEM OUTLINE

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

1. PTIS (INPUT SIGNALS)

(1) WATER TEMP. SIGNAL SYSTEM

THE ECTS (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 PCME (ECU).

(2) INTAKE AIR TEMP. SIGNAL SYSTEM

THE IATS (INTAKE AIR TEMP. SENSOR) IS DETECTS THE INTAKE AIR TEMP., WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL THA** OF THE PCME (ECU).

(3) OXYGEN DENSITY SIGNAL SYSTEM

THE OXYGEN DENSITY IN THE EXHAUST EMISSIONS IS DETECTED AND INPUT AS A CONTROL SIGNAL TO **TERMINAL OX1** AND **OX2** (CALIFORNIA) OF THE PCME (ECU).

(4) CRANKSHAFT POSITION SIGNAL SYSTEM

CRANKSHAFT POSITION AND ENGINE SPEED ARE DETECTED BY THE PICK-UP COIL INSTALLED INSIDE THE DISTRIBUTOR. CRANKSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINAL G+**, OF THE PCME (ECU), AND ENGINE SPEED SIGNAL IS INPUT TO **TERMINAL NE+**.

(5) THROTTLE POSITION SIGNAL SYSTEM

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

(6) VEHICLE SPEED SIGNAL SYSTEM

THE SPEED METER INSIDE THE COMBINATION METER SENDS A VEHICLE SPEED SIGNAL TO **TERMINAL SPD** OF THE PCME (ECU) AS A CONTROL SIGNAL.

(7) NEUTRAL POSITION SIGNAL SYSTEM (A/T)

THE PNS (NEUTRAL START SW) DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL AND PARKING OR NOT, AND INPUTS A CONTROL SIGNAL TO **TERMINAL NSW** OF THE PCME (ECU).

(8) A/C SW SIGNAL SYSTEM

THE A/C AMPLIFIER INPUTS THE A/C OPERATIONS TO **TERMINAL ACA** OF THE PCME (ECU) AS A CONTROL SIGNAL.

(9) BATTERY SIGNAL SYSTEM

VOLTAGE IS CONSTANTLY APPLIED TO **TERMINAL BATT** OF THE PCME (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 PCME (ECU).

(10) INTAKE AIR VOLUME SIGNAL SYSTEM

INTAKE AIR VOLUME IS DETECTED BY THE MAP (VACUUM SENSOR) AND IS INPUT AS A CONTROL SIGNAL TO **TERMINAL PIM** OF THE PCME (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 PCME (ECU).

(12) ELECTRICAL LOAD SIGNAL 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

* MPI (EFI, ELECTRONIC FUEL INJECTION) SYSTEM

THE MPI (EFI) SYSTEM MONITORS THE ENGINE REVOLUTIONS THROUGH THE SIGNALS EACH SENSOR (INPUT SIGNALS (1) TO (12)) INPUTS TO THE PCME (ECU). BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE PCME (ECU), THE MOST APPROPRIATE FUEL INJECTION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINALS #10** AND **#20** OF THE PCME (ECU), CAUSING THE INJECTORS TO OPERATE IT (TO INJECT FUEL). IT IS THIS SYSTEM WHICH, THROUGH THE WORK OF THE PCME (ECU), FINELY CONTROLS FUEL INJECTION IN RESPONSE TO DRIVING CONDITIONS.

DURING ENGINE CRANKING (SIGNAL INPUT TO **TERMINAL STA**) OR FOR APPROX. 2 SECONDS AFTER NE SIGNAL INPUT, PCME (ECU) OPERATION ENERGIZES (POINT CLOSED) THE FUEL PUMP CIRCUIT INSIDE THE CIRCUIT OPENING RELAY, CAUSING THE FUEL PUMP TO OPERATE.

* EI (ESA, ELECTRONIC FUEL ADVANCE)

THE EI (ESA) SYSTEM MONITORS THE ENGINE REVOLUTIONS USING THE SIGNALS (INPUT SIGNALS (1, 4, 5, 10, 11)) INPUT TO THE PCME (ECU) FROM EACH SENSOR. BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE PCME (ECU), THE MOST APPROPRIATE IGNITION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINAL IGT** OF THE PCME ECU. THIS OUTPUT CONTROLS THE IGNITER TO PRODUCE THE MOST APPROPRIATE IGNITION TIMING FOR THE DRIVING CONDITIONS.

* ISC (IDLE SPEED CONTROL) SYSTEM

THE ISC SYSTEM INCREASES ENGINE SPEED AND PROVIDES IDLING STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD, ETC. THE PCME (ECU) EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 4 TO 8, 11, 12)), OUTPUTS CURRENT TO **TERMINALS ISCO** AND **ISCC**, AND CONTROLS THE ISC VALVE.

* EGR CONTROL SYSTEM

THE EGR CUT CONTROL SYSTEM CONTROLS THE VSV (FOR EGR) BY EVALUATING THE SIGNALS FROM EACH SENSOR INPUT TO THE PCME (ECU) (INPUT SIGNALS (1, 4, 10)) AND BY SENDING OUTPUT TO **TERMINAL EGR** OF THE PCME (ECU).

* A/C CUT CONTROL SYSTEM

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

THE PCME (ECU) RECEIVES INPUT SIGNALS (5, 6), AND OUTPUTS SIGNALS TO **TERMINAL ACT**.

* FUEL PRESSURE CONTROL SYSTEM

THE FUEL PRESSURE UP SYSTEM CAUSES THE VSV (FOR FUEL PRESSURE UP) TO COME ON FOR HIGH TEMP. STARTS IN ORDER TO INCREASE THE FUEL PRESSURE, IMPROVE STARTABILITY AT HIGH TEMPERATURES AND PROVIDE STABLE IDLING.

THE PCME (ECU) EVALUATES THE INPUT SIGNALS FROM EACH SENSOR (1, 2, 5, 11), OUTPUT CURRENT TO **TERMINAL FPU** AND CONTROLS THE VSV.

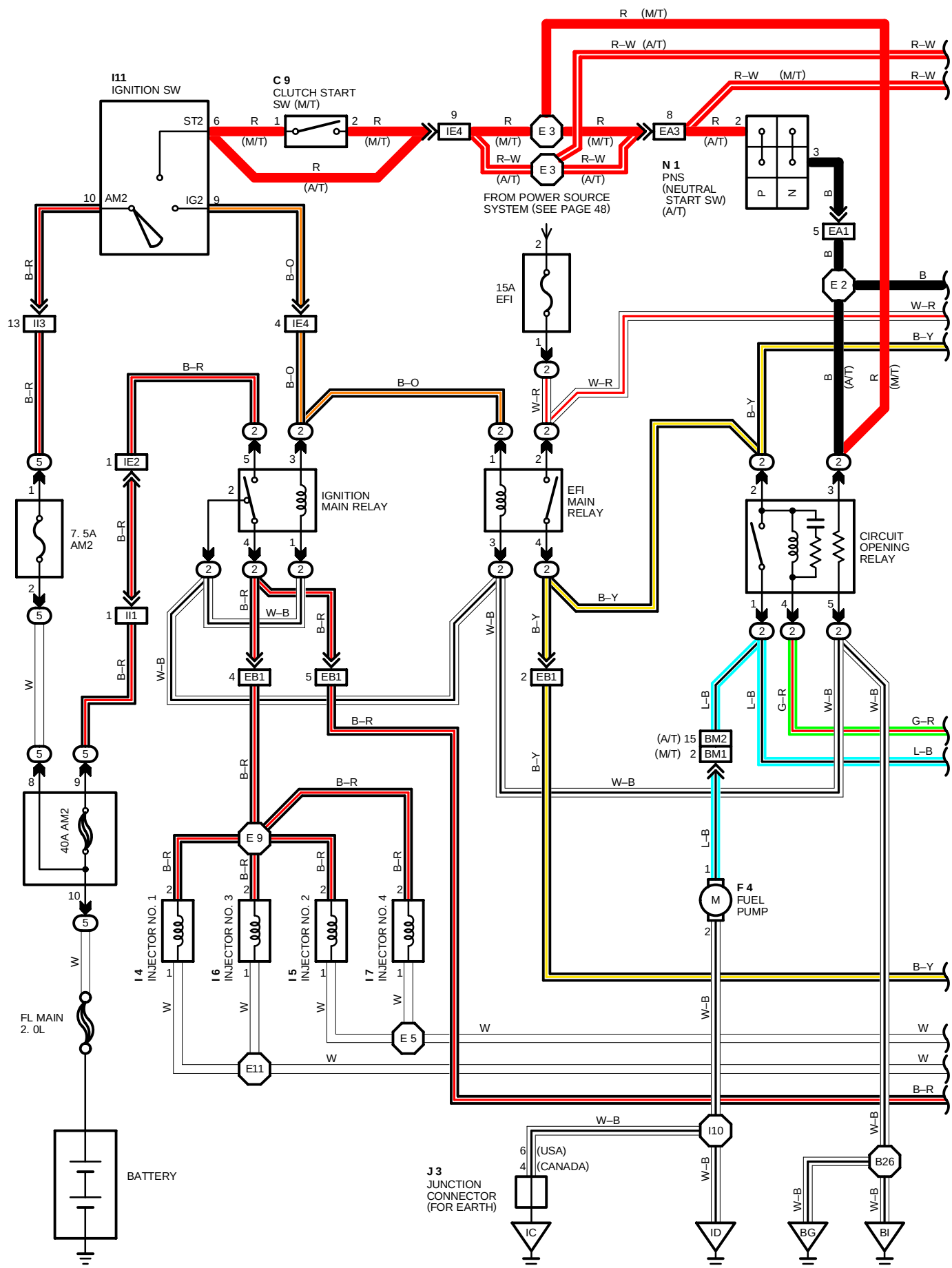
3. DIAGNOSIS SYSTEM

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

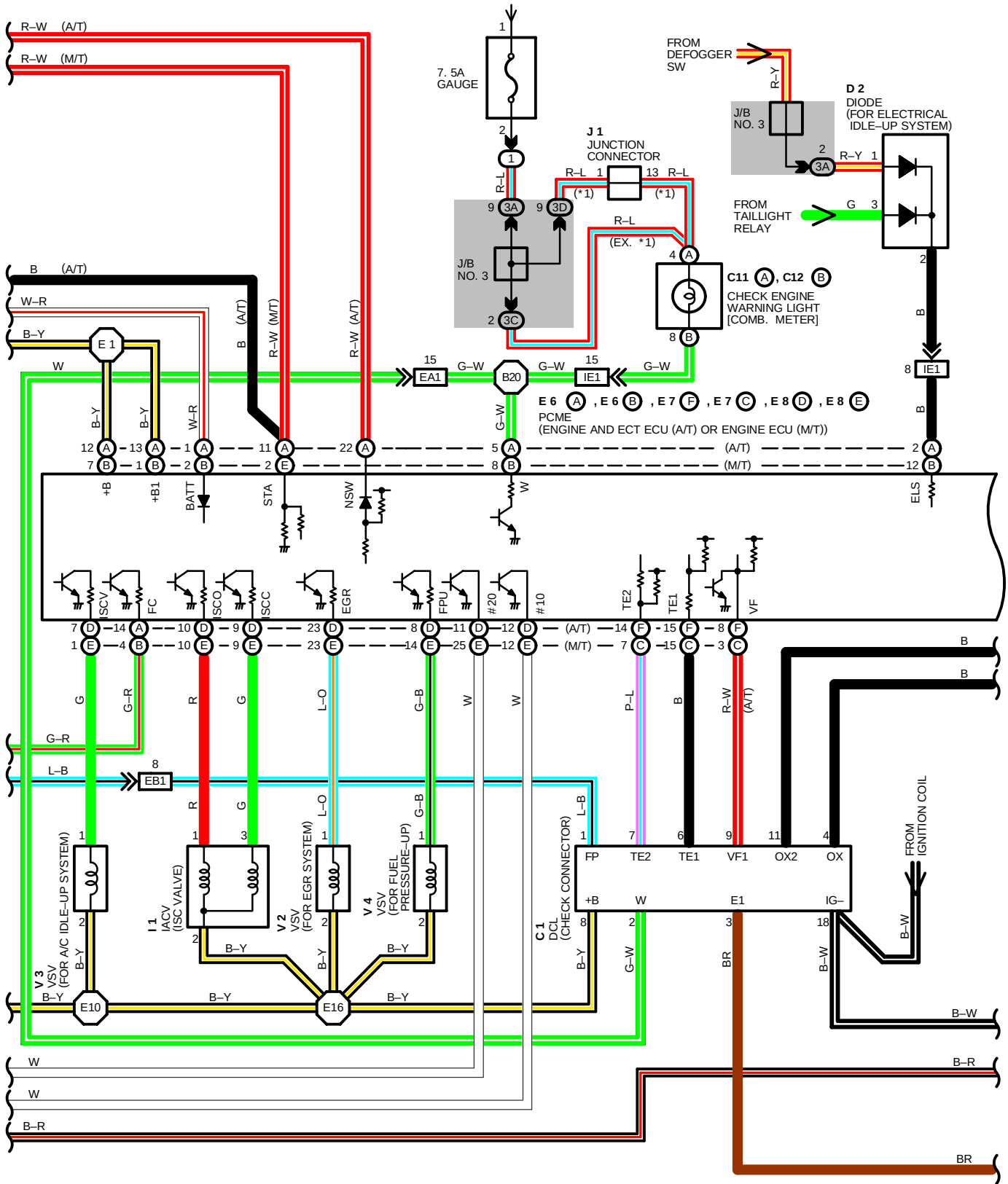
4. FAIL-SAFE SYSTEM

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 PCME (ECU) MEMORY OR ELSE STOPS THE ENGINE.

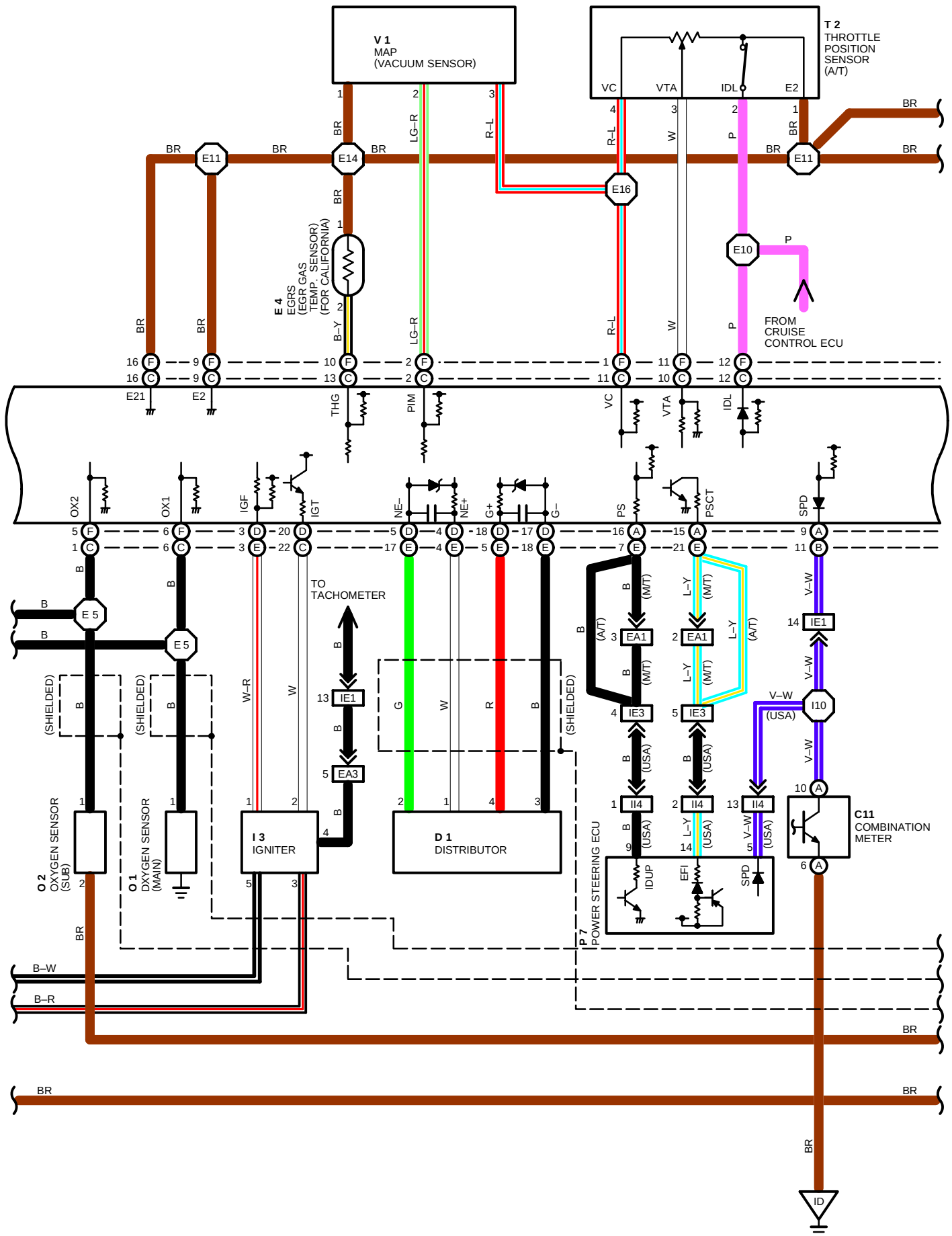
ENGINE CONTROL (5S-FE)

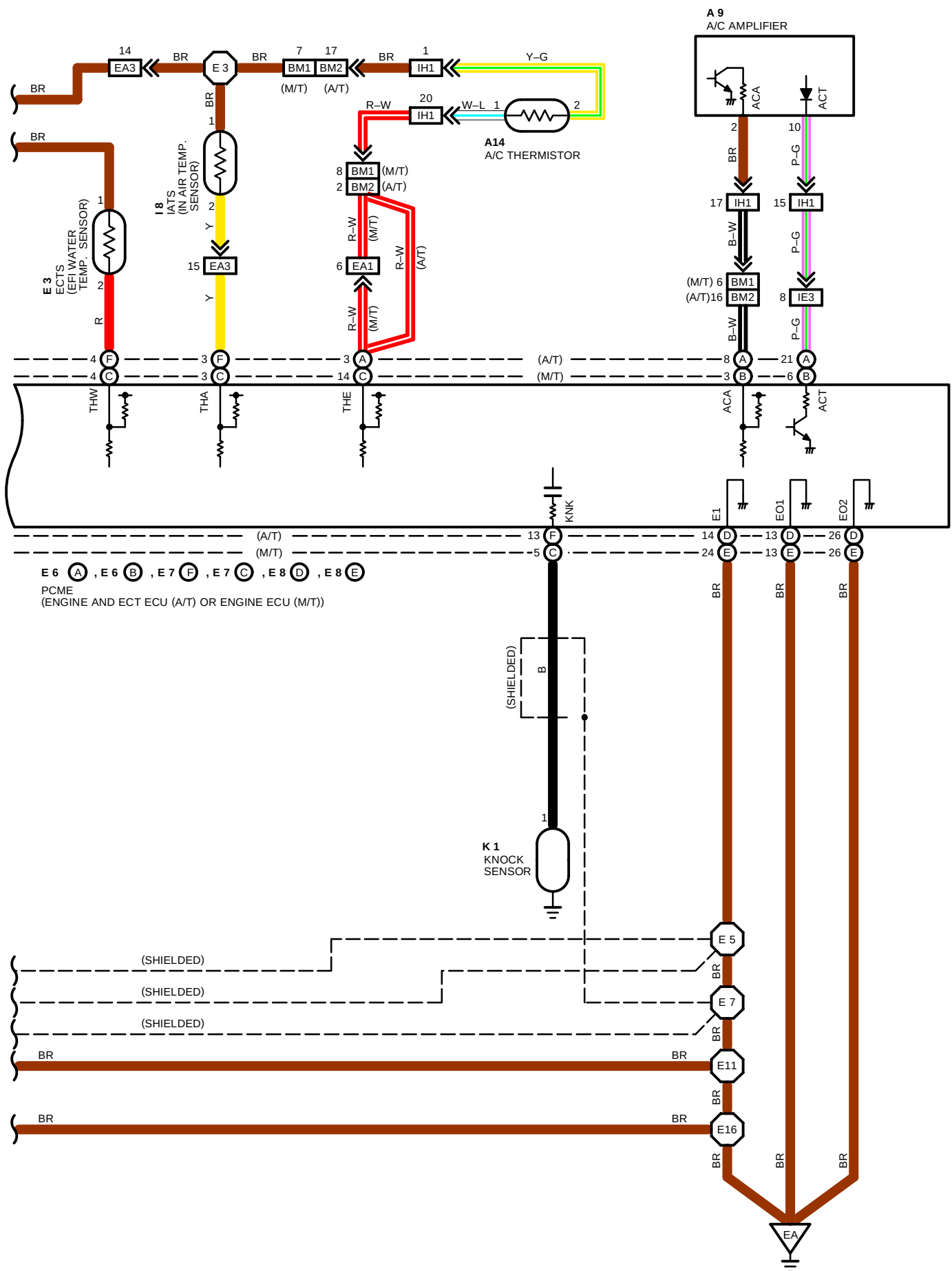


FROM POWER SOURCE SYSTEM (SEE PAGE 48)



ENGINE CONTROL (5S-FE)





ENGINE CONTROL (5S-FE)

SERVICE HINTS

E 6, E 7, E 8 PCME (ENGINE ECU (M/T) OR ENGINE AND ECT ECU (A/T))

VOLTAGE AT PCME (ECU) WIRING CONNECTORS

BATT -E1 : ALWAYS 9.0-14.0 VOLTS
+B -E1 : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)
+B1 -E1 : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)
IDL -E2 : 9.0-14.0 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
VC -E2 : 4.5-5.5 VOLTS (IGNITION SW AT **ON** POSITION)
VTA -E2 : 0.3-0.8 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
 : 3.2-4.9 VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
PIM -E2 : 3.3-3.9 VOLTS (IGNITION SW AT **ON** POSITION)
#10, #20 - E01, E02 : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)
THA -E2 : 0.5-3.4 VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, 68°F)
THW -E2 : 0.2-1.0 VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C, 176°F)
STA -E1 : 6.0-14.0 VOLTS (ENGINE CRANKING)
IGT -E1 : 0.8-1.2 VOLTS (ENGINE CRANKING OR IDLING)
W -E1 : 9.0-14.0 VOLTS (NO TROUBLE AND ENGINE RUNNING)
ACT -E1 : 4.5-5.5 VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
ACA -E1 : 0-3.0 VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
ISCC, ISCO-E1 : 9.0-14.0 VOLTS (IGNITION SW AT **ON** POSITION)
TE1 -E1 : 9.0-14.0 VOLTS (IGNITION SW ON AND DLC (CHECK CONNECTOR) **TE1-E1** NOT CONNECTED)
 : 0-3.0 VOLTS (IGNITION SW ON AND DLC (CHECK CONNECTOR) **TE1-E1** CONNECTED)
NSW -E1 : 0-3.0 VOLTS (IGNITION SW ON AND PNS (NEUTRAL START SW) POSITION **P** OR **N** RANGE)
 : 9.0-14.0 VOLTS (IGNITION SW ON AND PNS (NEUTRAL START SW) EX. POSITION **P** OR **N** RANGE)

RESISTANCE AT PCME (ECU) WIRING CONNECTORS

(DISCONNECT WIRING CONNECTOR)

IDL -E2 : INFINITY (THROTTLE VALVE OPEN)
 : 2.3 KK OR LESS (THROTTLE VALVE FULLY CLOSED)
VTA -E2 : 3.3-10.0 KK (THROTTLE VALVE FULLY OPEN)
 : 0.2-0.8 KK (THROTTLE VALVE FULLY CLOSED)
VC -E2 : 3.0-7.0 KK
THA -E2 : 2.0-3.0 KK (INTAKE AIR TEMP. 20°C, 68°F)
THW -E2 : 0.2-0.4 KK (COOLANT TEMP. 80°C, 176°F)
G+ - G- : 0.17-0.21 KK
ISCC, ISCO-+B, +B1: 19.3-22.3 K

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 9		26	E 7	C	24 (5S-FE)	J 1		26
A14		26		F	24 (5S-FE)	J 3		26
C 1		24 (5S-FE)	E 8	D	24 (5S-FE)	K 1		24 (5S-FE)
C 9		26		E	24 (5S-FE)	N 1		24 (5S-FE)
C10	C	26	F 4		26	O 1		24 (5S-FE)
C11	A	26	I 1		24 (5S-FE)	O 2		24 (5S-FE)
C12	B	26	I 3		24 (5S-FE)	P 7		27
D 1		24 (5S-FE)	I 4		24 (5S-FE)	T 2	A	24 (5S-FE)
D 2		26	I 5		24 (5S-FE)		B	24 (5S-FE)
E 3		24 (5S-FE)	I 6		24 (5S-FE)	V 1		24 (5S-FE)
E 4		24 (5S-FE)	I 7		24 (5S-FE)	V 2		24 (5S-FE)
E 6	A	24 (5S-FE)	I 8		24 (5S-FE)	V 3		24 (5S-FE)
	B	24 (5S-FE)	I11		26	V 4		24 (5S-FE)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EB1	28 (5S-FE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2		
IE3		
IE4		
IH1	32	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II1	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2	36	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

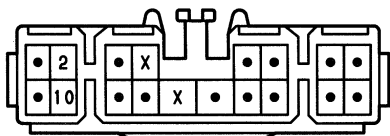
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28 (5S-FE)	ENGINE ROOM MAIN WIRE	E11	28 (5S-FE)	ENGINE WIRE
E 2			E14		
E 3			E15		
E 5	28 (5S-FE)	ENGINE WIRE	E16	34	COWL WIRE
E 7			I10		
E 9			B20	36	ENGINE ROOM MAIN WIRE
E10			B26		

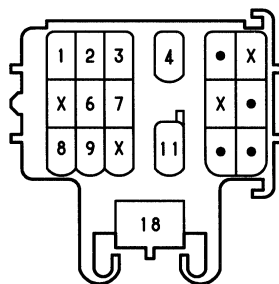
A 9 BLACK



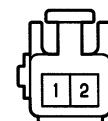
A14



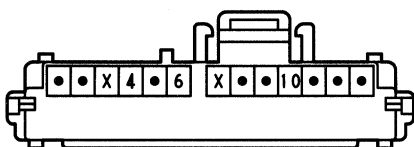
C 1 DARK GRAY



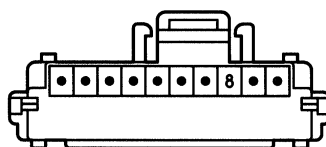
C 9



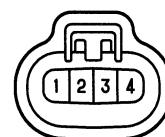
C11 (A) BLUE



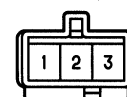
C12 (B) GRAY



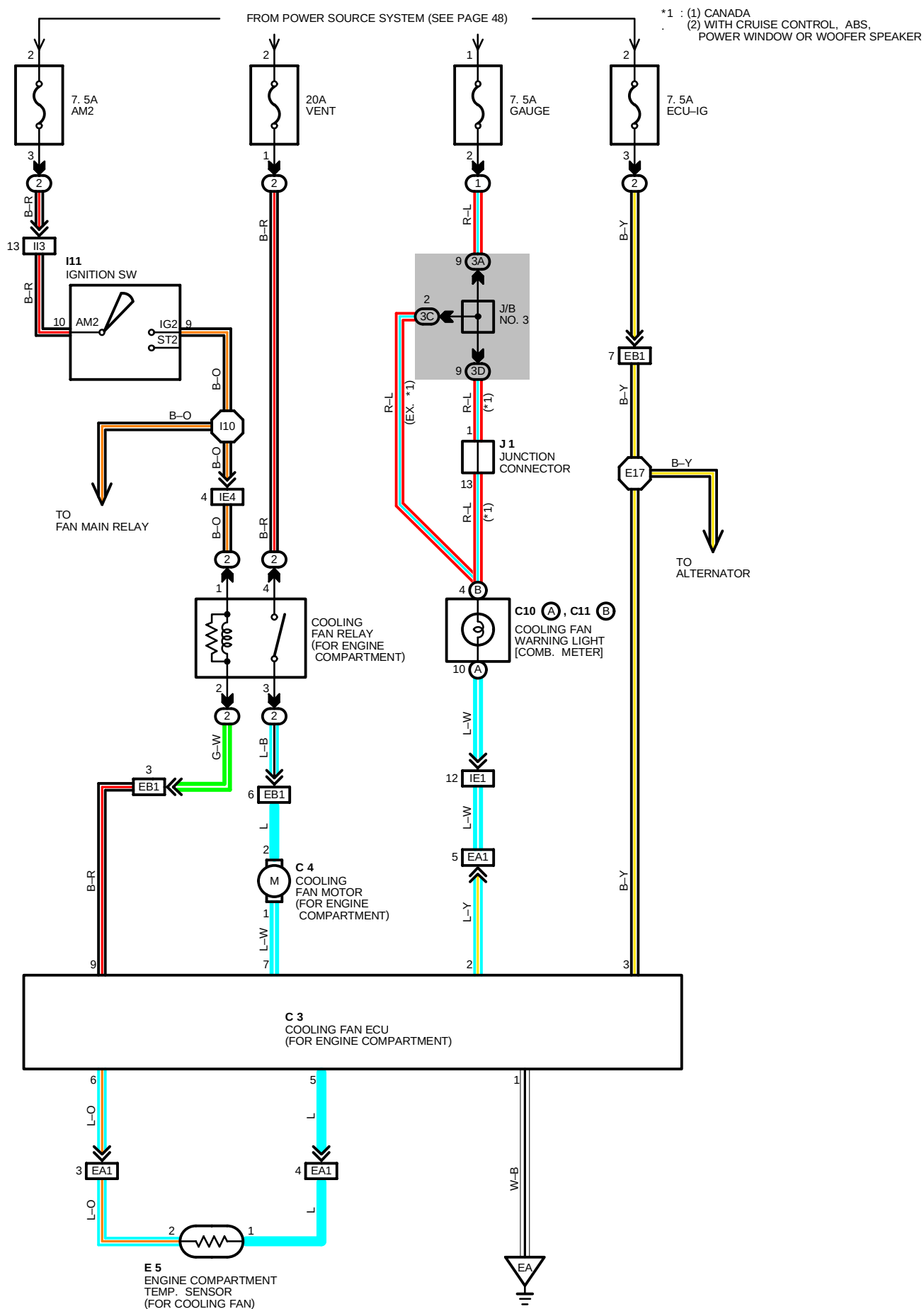
D 1 BLACK



D 2 ORANGE



ENGINE COMPARTMENT COOLING FAN (3S-GTE)



SERVICE HINTS

COOLING FAN RELAY

- 1-GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** OR **ST** POSITION
 3-4 : OPEN WITH IGNITION SW AT **ON** OR **ST** POSITION AND ENGINE COMPARTMENT TEMP. BELOW **55°C (131°F)**

C 3 COOLING FAN ECU

- 1-GROUND: ALWAYS CONTINUITY
 3-1 : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
 9-1 : **0** VOLTS WITH IGNITION SW AT **ON** OR **ST** POSITION AND ENGINE COMPARTMENT TEMP. MORE THAN **70°C (158°F)**

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 3	25 (3S-GTE)	C11 B	26	J 1	26
C 4	25 (3S-GTE)	E 5	25 (3S-GTE)		
C10 A	26	I11	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30 (3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EB1	30 (3S-GTE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II3	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	30 (3S-GTE)	INTAKE MANIFOLD

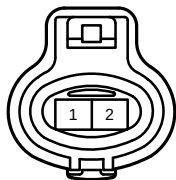
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E17	30 (3S-GTE)	ENGINE WIRE	I10	34	COWL WIRE

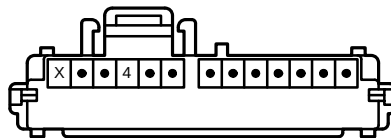
C 3 GRAY



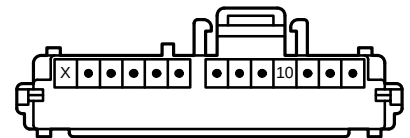
C 4 GRAY



C10 (A) BROWN



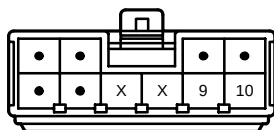
C11 (B) BLUE



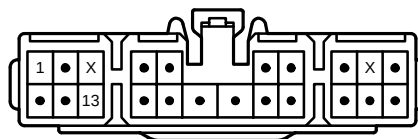
E 5 BLACK



I11 BLACK



J 1



*1 : CANADA
USA (A/T)
USA (M/T) WITH CRUISE CONTROL, ABS,
POWER WINDOW OR WOOFER SPEAKER



SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL (A) 4** (CANADA), **(F) 4** (USA) OF THE RETRACT CONTROL RELAY THROUGH **ECU-IG** FUSE.

VOLTAGE IS APPLIED AT ALL TIMES TO **TERMINAL (A) 2** (CANADA), **(F) 2** (USA) OF THE RETRACT CONTROL RELAY. THROUGH THE TAILLIGHT RELAY COIL, AND TO **TERMINAL (A) 10** (CANADA), **(F) 10** (USA) THROUGH THE HEADLIGHT RELAY COIL.

1. NORMAL LIGHTING OPERATION

<TURN TAILLIGHT ON>

WITH LIGHT CONTROL SW TURNED TO **TAILLIGHT** POSITION, A SIGNAL IS INPUT INTO **TERMINAL (A) 13** (CANADA), **(F) 13** (USA) OF THE RETRACT CONTROL RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOWING TO **TERMINAL (A) 2** (CANADA), **(F) 2** (USA) OF THE RELAY FLOWS FROM **TERMINAL (A) 18** (CANADA), **(F) 18** (USA) → TO **GROUND** AND TAILLIGHT RELAY CAUSES TAILLIGHT TO TURN ON.

<TURN HEADLIGHT ON>

WITH LIGHT CONTROL SW TURNED TO **HEADLIGHT** POSITION, A SIGNAL IS INPUT INTO **TERMINALS (A) 13** (CANADA), **(F) 13** (USA) AND **(A) 14** (CANADA), **(F) 14** (USA) OF THE RETRACT CONTROL RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOWING TO **TERMINAL (A) 10** (CANADA), **(F) 10** (USA) OF THE RELAY FLOWS TO **TERMINAL (A) 18** (CANADA), **(F) 18** (USA) → TO **GROUND** IN THE HEADLIGHT CIRCUIT, AND CAUSES TAILLIGHT AND HEADLIGHT RELAY TO TURN THE LIGHT ON. THE TAILLIGHT CIRCUIT IS SAME AS ABOVE.

2. LIGHT AUTO TURN OFF OPERATION

WITH LIGHTS ON AND IGNITION SW TURNED OFF (INPUT SIGNAL GOES TO **TERMINAL (A) 4** (CANADA), **(F) 4** (USA) OF THE RELAY), WHEN DOOR ON DRIVER'S SIDE IS OPENED (INPUT SIGNAL GOES TO **TERMINAL (A) 15** (CANADA), **(F) 15** (USA) OF THE RELAY), THE RELAY OPERATES AND THE CURRENT IS CUT OFF WHICH FLOWS FROM **TERMINAL (A) 2** (CANADA), **(F) 2** (USA) OF THE RELAY TO **TERMINAL (A) 18** (CANADA), **(F) 18** (USA) IN TAILLIGHT CIRCUIT AND FROM **TERMINAL (A) 10** (CANADA), **(F) 10** (USA) TO **TERMINAL (A) 18** (CANADA), **(F) 18** (USA) IN THE HEADLIGHT CIRCUIT.

AS A RESULT, ALL LIGHTS ARE TURNED OFF AUTOMATICALLY.

SERVICE HINTS

R20 (A) LIGHT RETAINER RELAY [RETRACT CONTROL RELAY] (USA)

- (A) 4-GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
- (A) 2-GROUND : ALWAYS APPROX. **12** VOLTS
- (A)10-GROUND : ALWAYS APPROX. **12** VOLTS
- (A)15-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN
- (A)18-GROUND : ALWAYS CONTINUITY
- (A)13-GROUND : CONTINUITY WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION
- (A)14-GROUND : CONTINUITY WITH LIGHT CONTROL SW AT **HEAD** POSITION
- (A)17-GROUND : APPROX. **12** VOLTS WITH LIGHT CONTROL SW AT **HEAD** POSITION, DIMMER SW AT **LOW** POSITION AND FOG LIGHT SW ON

R20 (C), R21(B) LIGHT RETAINER RELAY [RETRACT CONTROL RELAY] (CANADA)

- (C) 4-GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
- (C) 2-GROUND : ALWAYS APPROX. **12** VOLTS
- (C)10-GROUND : ALWAYS APPROX. **12** VOLTS
- (C)15-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN
- (C)18-GROUND : ALWAYS CONTINUITY
- (C)13-GROUND : CONTINUITY WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION
- (C)14-GROUND : CONTINUITY WITH LIGHT CONTROL SW AT **HEAD** POSITION
- (B) 1-GROUND : CONTINUITY WITH FOG LIGHT SW ON
- (B) 2-GROUND : ALWAYS APPROX. **12** VOLTS

LIGHT AUTO TURN OFF

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C15	26	J 3	26	R21	B 27
D10	27	R20	A 27		
F 3	26		C 27		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

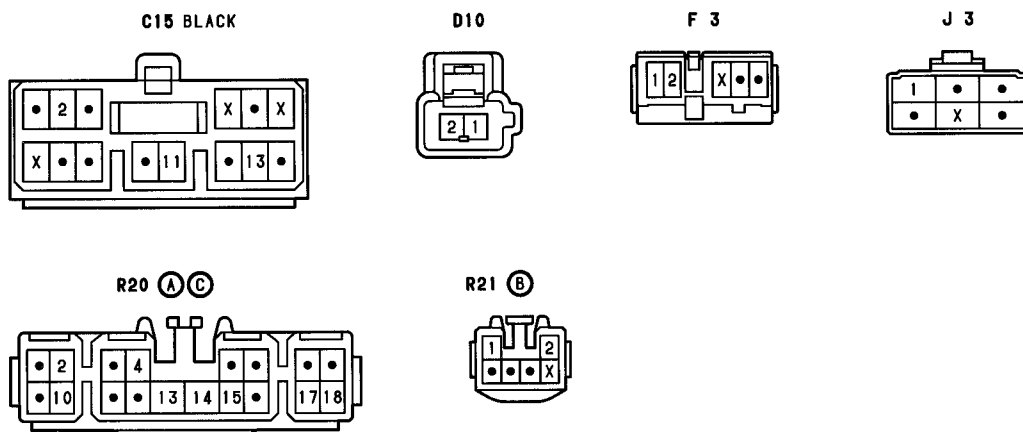
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	34	FRONT LEFT FENDER

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 3	36	LUGGAGE ROOM WIRE	B11	36	LUGGAGE ROOM WIRE



SERVICE HINTS

HEADLIGHT RELAY

(5) 2– (5) 3: 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	B 26	H 2	27	R22	27
C12	A 26	H 3	27	R23	27
C14	B 26	J 3	26		
C15	A 26	R20	27		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

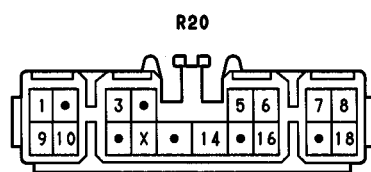
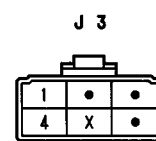
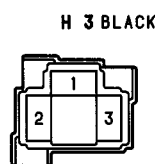
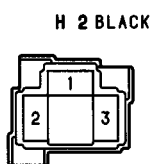
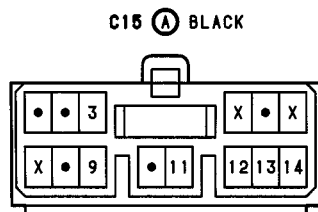
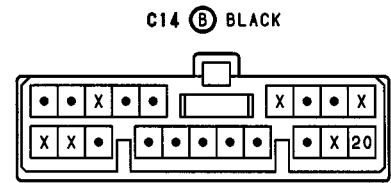
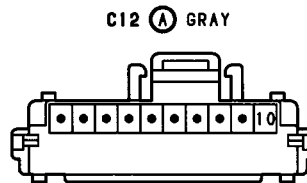
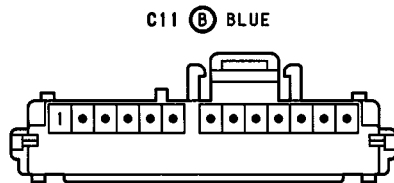
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER

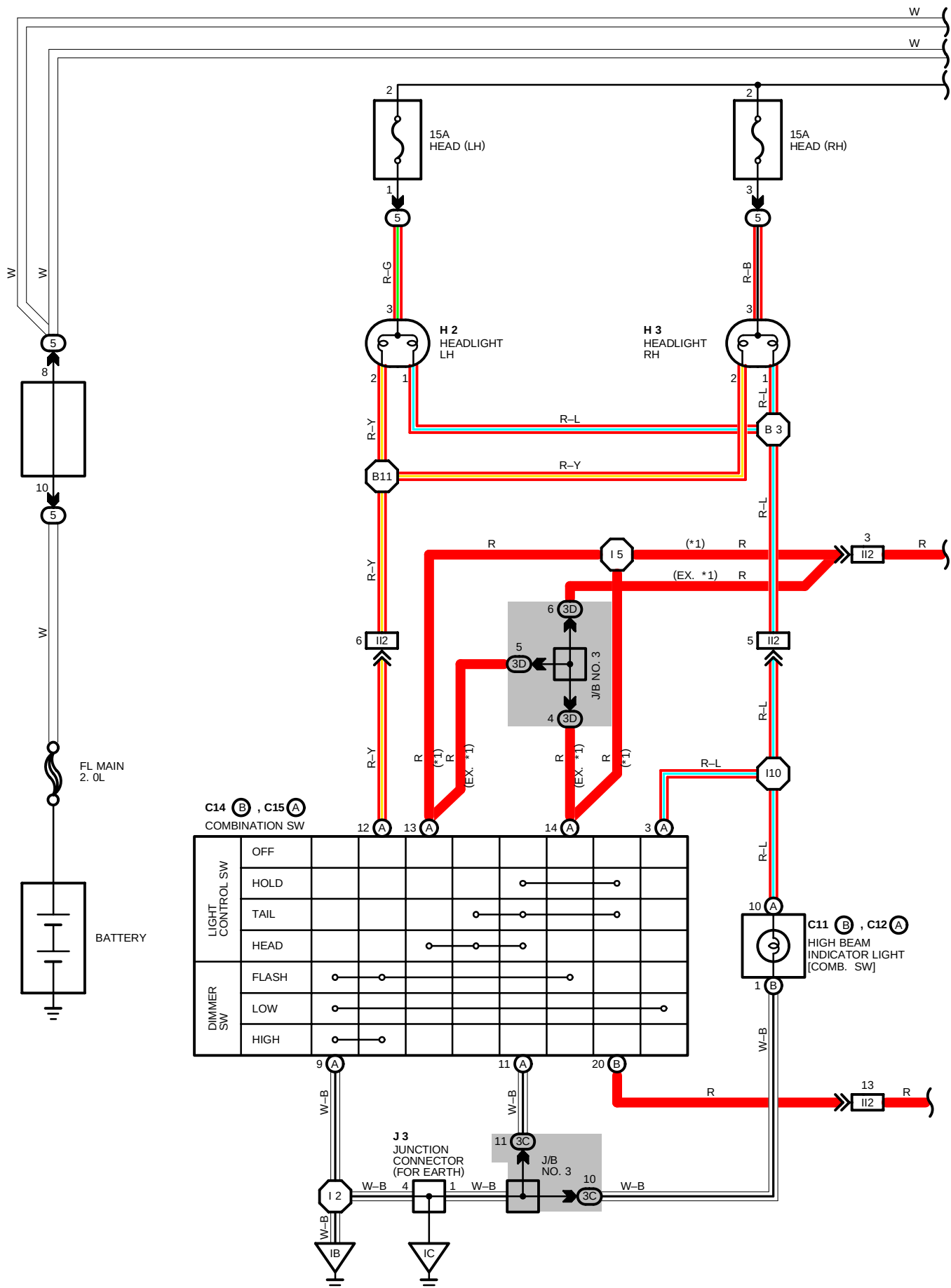
○ : SPLICE POINTS

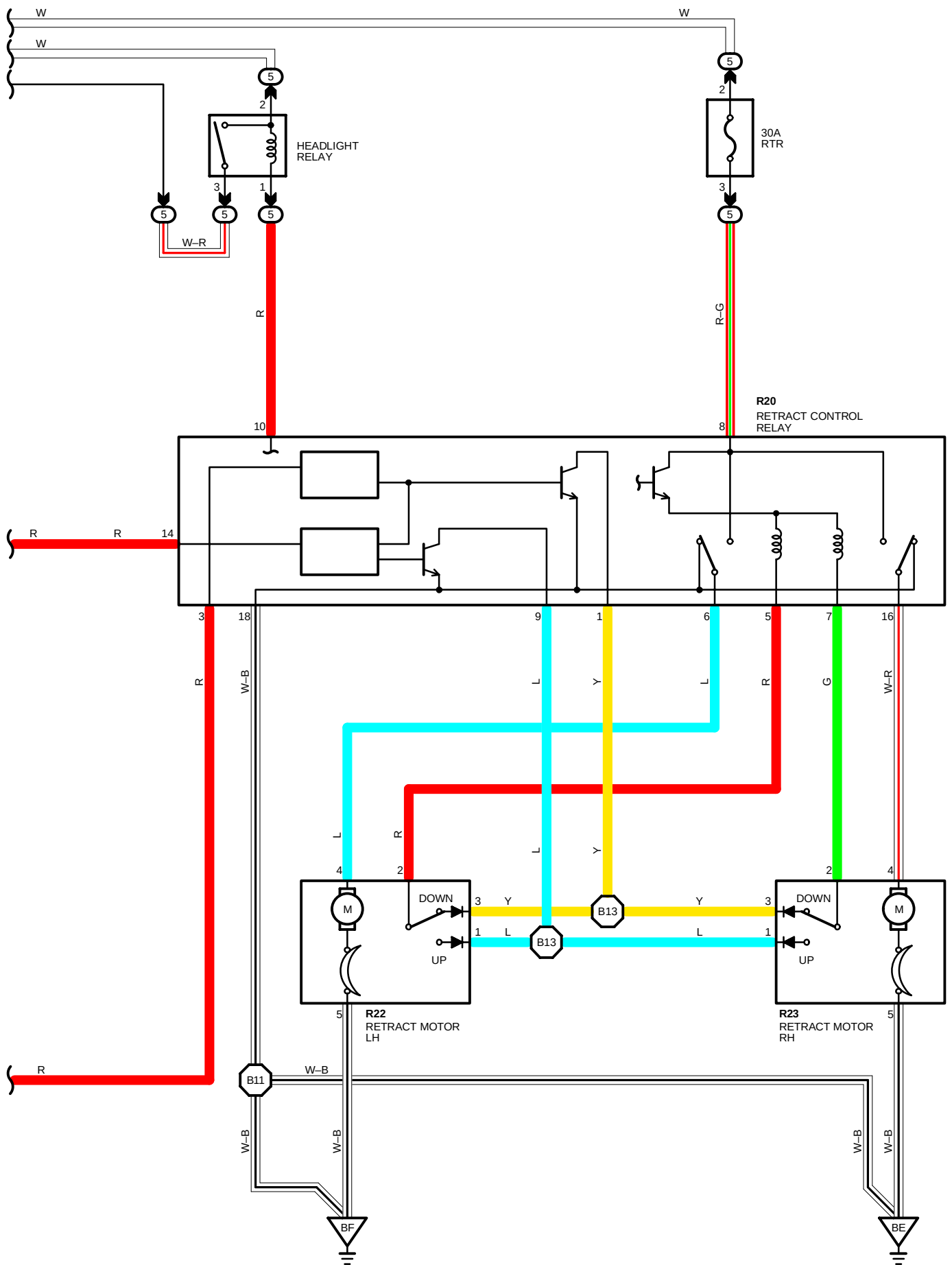
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I2	34	COWL WIRE	B 3	36	LUGGAGE ROOM WIRE
I5			B11		
I10			B13		



HEADLIGHT (FOR USA)

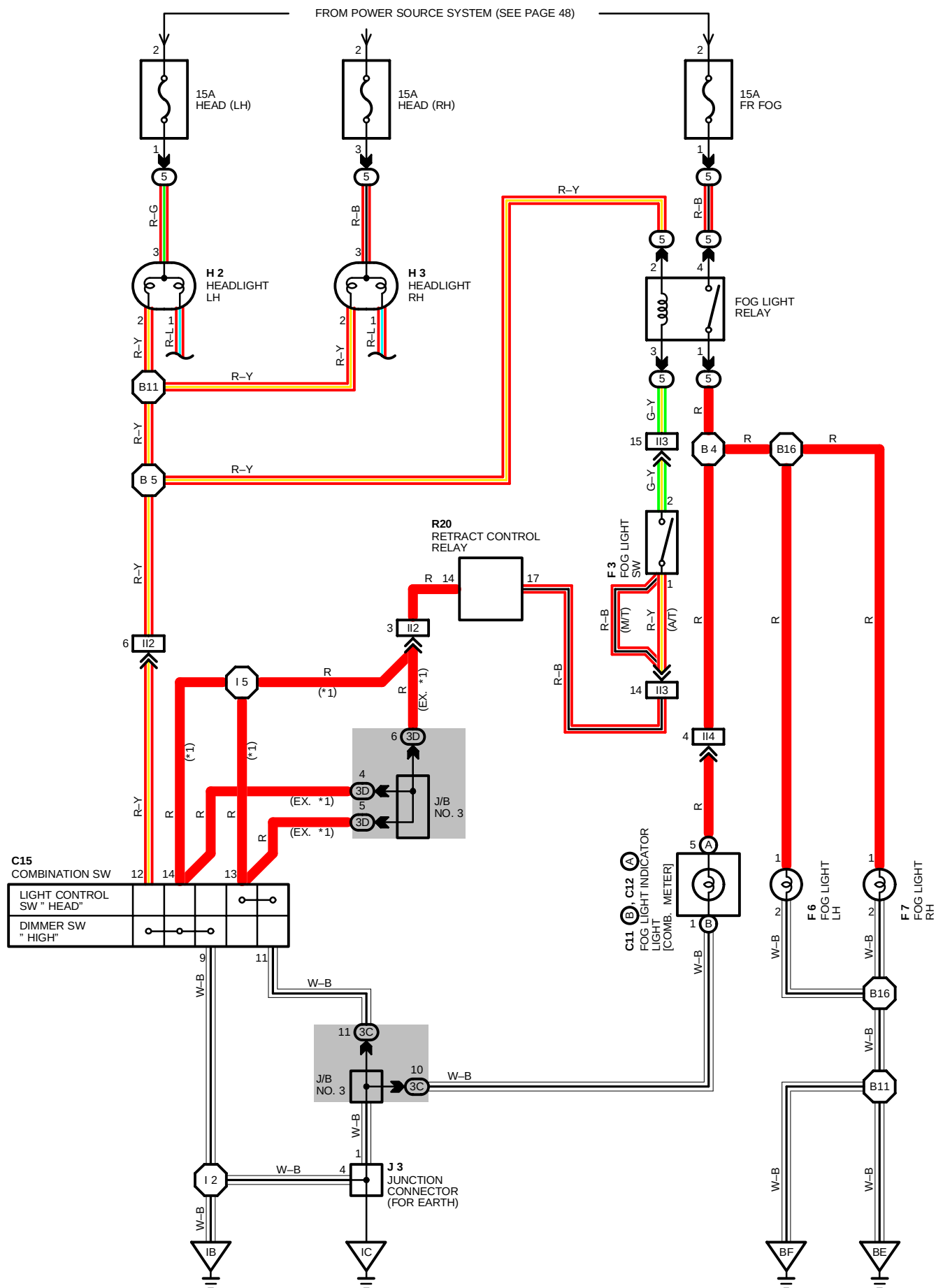
*1 : (1) A/T
(2) WITH CRUISE CONTROL, ABS, POWER WINDOW OR
WOOFER SPEAKER





FOG LIGHT (FOR USA)

*1 : (1) A/T
(2) WITH CRUISE CONTROL, ABS POWER WINDOW OR
WOOFER SPEAKER



SERVICE HINTS

C15 COMBINATION SW

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

FOG LIGHT RELAY

(5) 4- (5) 3 : 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
C15	26	F 7	27	J 3	26
F 3	26	H 2	27	R20	27
F 6	27	H 3	27		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		

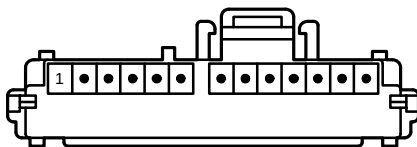
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER

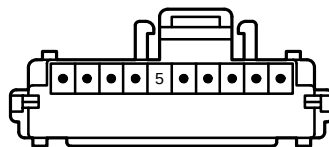
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I2	34	COWL WIRE	B 5	36	LUGGAGE ROOM WIRE
I5			B11		
B 4	36	LUGGAGE ROOM WIRE	B16		

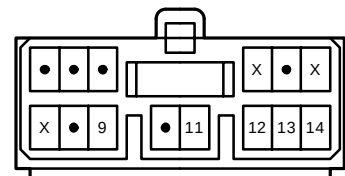
C11 (B) BLUE



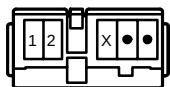
C12 (A) GRAY



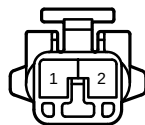
C15 BLACK



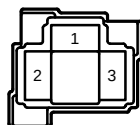
F 3



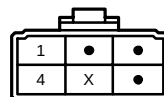
F 6, F 7 BLACK



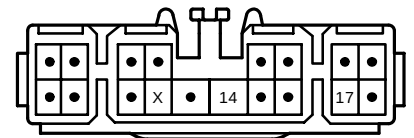
H 2, H 3 BLACK



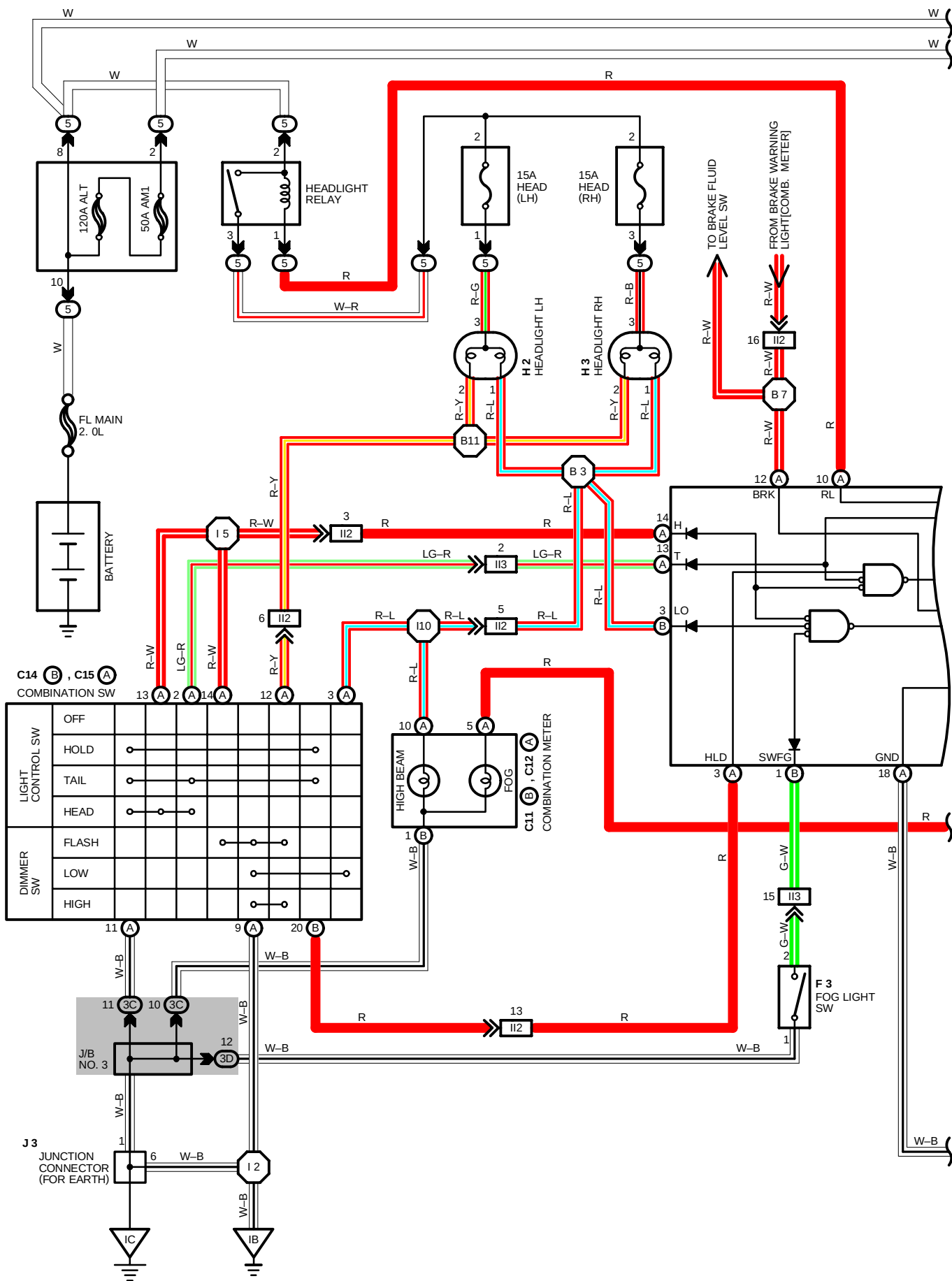
J 3



R20



HEADLIGHT AND FOG LIGHT (FOR CANADA)





HEADLIGHT AND FOG LIGHT (FOR CANADA)

SYSTEM OUTLINE

CURRENT FROM THE BATTERY FLOWS CONTINUOUSLY FROM FL 2.0L → ALT FUSE → AM1 FUSE → TALLIGHT RELAY (COIL SIDE) → **TERMINAL RT** OF THE RETRACT CONTROL RELAY, FL 2.0L → ALT FUSE → AM1 FUSE → FOGLIGHT RELAY (COIL SIDE) → **TERMINAL RDRL** OF RETRACT CONTROL RELAY.

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWING THROUGH THE GAUGE FUSE TO **TERMINAL IG** 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 "L"** OF THE RETRACT CONTROL RELAY.

IF THE PARKING BRAKE LEVER IS PULLED UP (PARKING BRAKE SW ON) AT THIS TIME, THE RELAY IS NOT ENERGIZED, SO THE DAYTIME RUNNING LIGHTS SYSTEM DOSE NOT OPERATE.

IF THE PARKING BRAKE LEVER IS THEN RELEASED (PARKING BRAKE SW OFF), THE SIGNAL IS INPUT TO **TERMINAL 'PKB'** OF THE RELAY.

THIS ACTIVATES THE RELAY AND CURRENT FROM ALT FUSE FLOWS TO TAILLIGHT RELAY (POINT SIDE) → TAIL FUSE → TAIL, LICENCE AND FRONT CLEARANCE LIGHTS, ETC. → **GROUND**.

ALSO, CURRENT FROM ALT FUSE FLOWS TO FOG FUSE → FOG LIGHT RELAY (POINT SIDE) → FOG LIGHTS → **GROUND**, SO BOTH TAIL AND FOG LIGHTS LIGHT UP. THIS IS HOW THE DAYTIME RUNNING LIGHTS SYSTEM OPERATES AND TAIL, FOG LIGHT HAVE LIGHTED UP, THE TAIL AND FOG LIGHT REMAIN ON EVEN IF THE PARKING BRAKE LEVER IS PULLED UP (PARKING BRAKE SW ON).

EVEN IF THE ENGINE STALLS WITH THE IGNITION SW ON AND THERE IS NO VOLTAGE FROM **TERMINAL 'L'** OF ALTERNATOR, THE TAIL AND FOG LIGHTS REMAIN ON.

IF THE IGNITION SW IS THEN TURNED OFF, THE TAIL AND FOG LIGHTS ARE TURNED OFF.

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

SERVICE HINTS

R20, R21 RETRACT CONTROL RELAY

RT, PB, RL-GROUND: ALWAYS APPROX. 12VOLTS

IG-GROUND: 0 VOLTS WITH IGNITION SW AT **LOCK** OR **ACC** POSITION

12VOLTS WITH IGNITION SW ON

HLD-GROUND: NO CONTINUITY WITH LIGHT CONTROL SW AT **OFF** OR **HEAD** POSITION

CONTINUITY WITH LIGHT CONTROL SW AT **HOLD** OR **TAIL** POSITION

T-GROUND: NO CONTINUITY WITH LIGHT CONTROL SW AT **OFF** OR **HOLD** POSITION

CONTINUITY WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION

H-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

GND-GROUND: ALWAYS CONTINUITY

LSL-SDWN, LSR-SDWN: NO CONTINUITY WITH RETRACT MOTOR AT **LOWERMOST** POSITION

CONTINUITY WITH RETRACT MOTOR AT ANY POSITION EXCEPT **LOWERMOST** POSITION

LSR-SUP, LSL-SUP: NO CONTINUITY WITH RETRACT MOTOR AT **UPPERMOST** POSITION

CONTINUITY WITH RETRACT MOTOR AT ANY POSITION EXCEPT **UPPERMOST** POSITION

PKB-GROUND: CONTINUITY WITH PARKING BRAKE LEVER PULLED UP (PARKING BRAKE SW ON)

R22, R23 RETRACT MOTOR

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

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

LIGHT AUTO TURN OFF OPERATION

PLEASE REFER TO THE LIGHT AUTO TURN OFF SYSTEM (SEE PAGE 74)

C15 DIMMER SW [COMB. SW]

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



: PARTS LOCATION

CODE			SEE PAGE			CODE			SEE PAGE			CODE			SEE PAGE		
C11	B	26				F 6	27					P 1		26			
C12	A	26				F 7	27					R20	A	27			
C14	B	26				H 2	27					R21	B	27			
C15	A	26				H 3	27					R22		27			
F 3		26				J 3	26					R23		27			



: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)



: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		



: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		



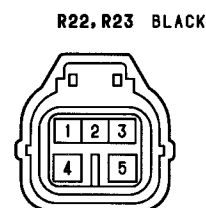
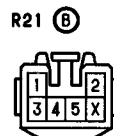
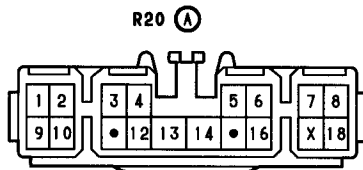
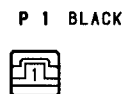
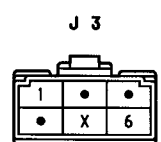
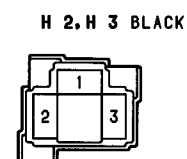
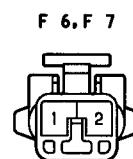
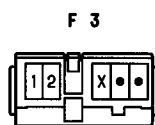
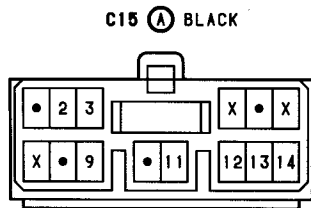
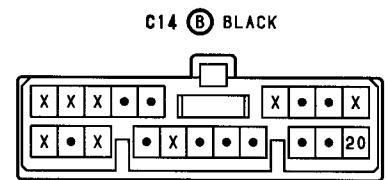
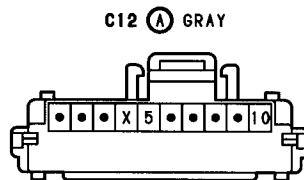
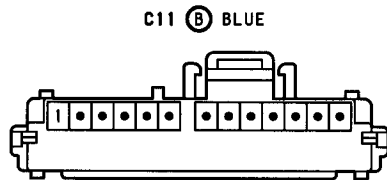
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER

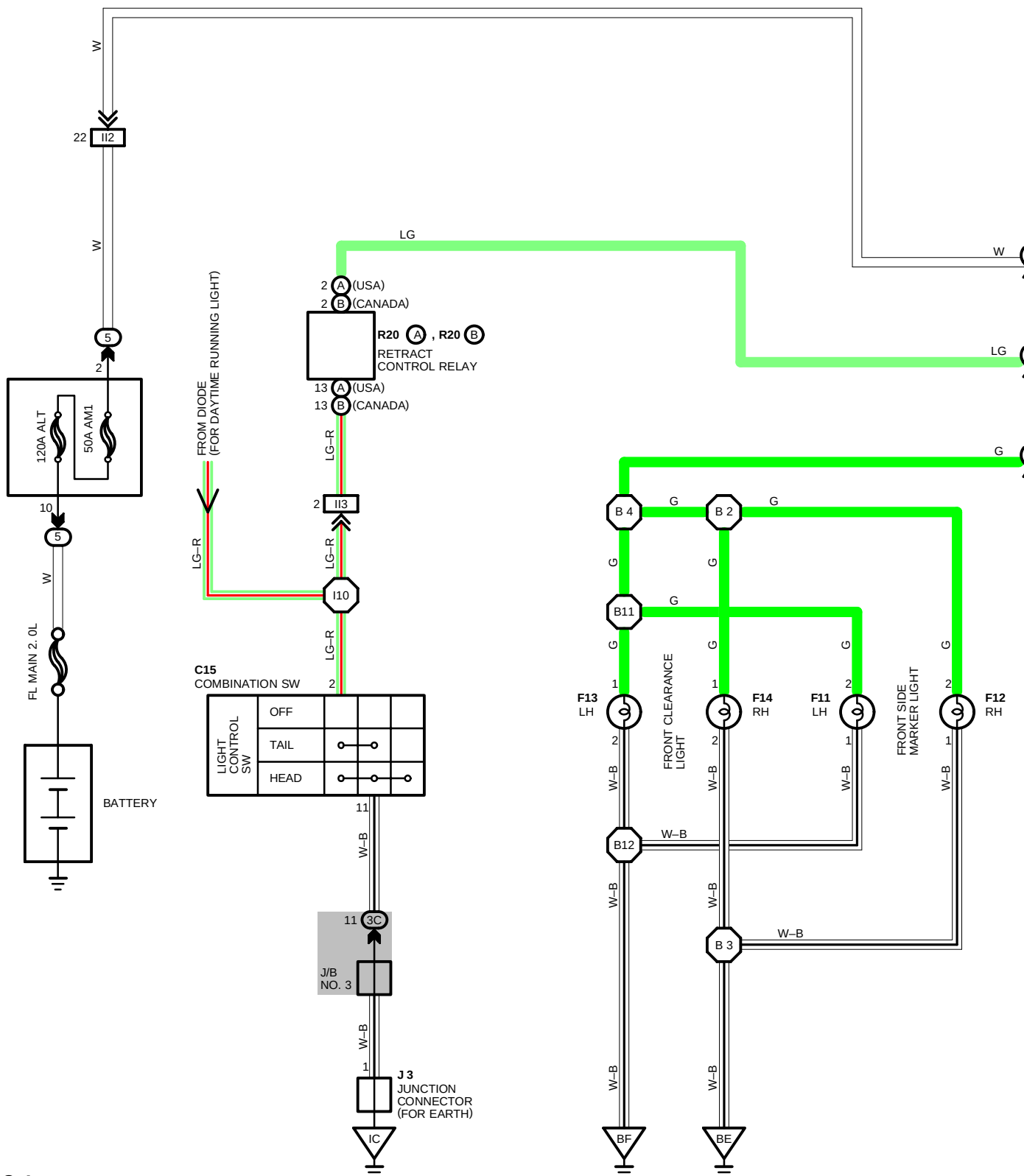


: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I2	34	COWL WIRE	B4	36	LUGGAGE ROOM WIRE
I4			B7		
I5			B11		
II0			B13		
B3	36	LUGGAGE ROOM WIRE	B16		



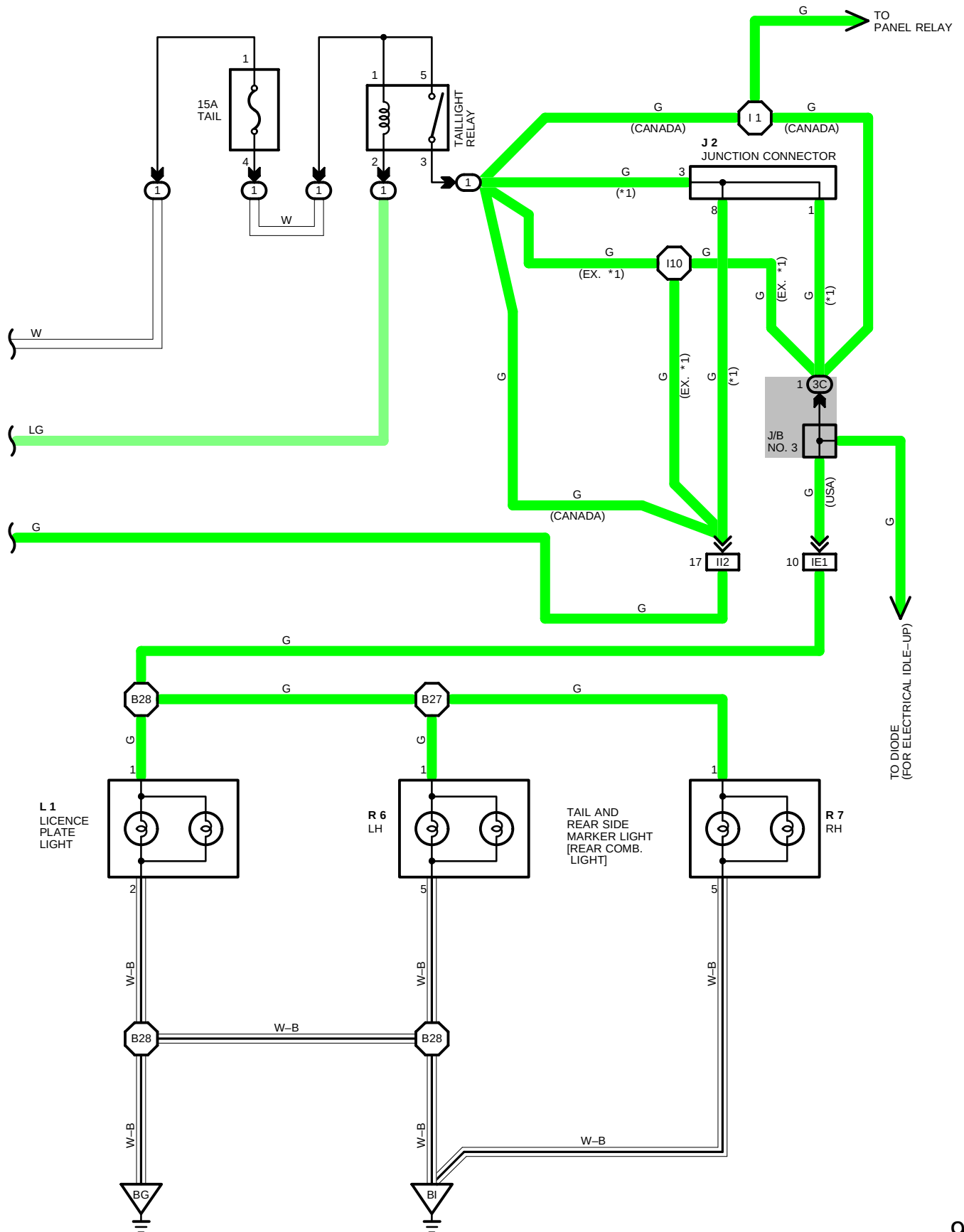
TAILLIGHT



SERVICE HINTS

TAILLIGHT RELAY

(1) 5- (1) 3 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION



TAILLIGHT

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C15	26	F14	27	R 6	27
F11	27	J 2	26	R 7	27
F12	27	J 3	26	R20	A 27
F13	27	L 1	27		B 27

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3C	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

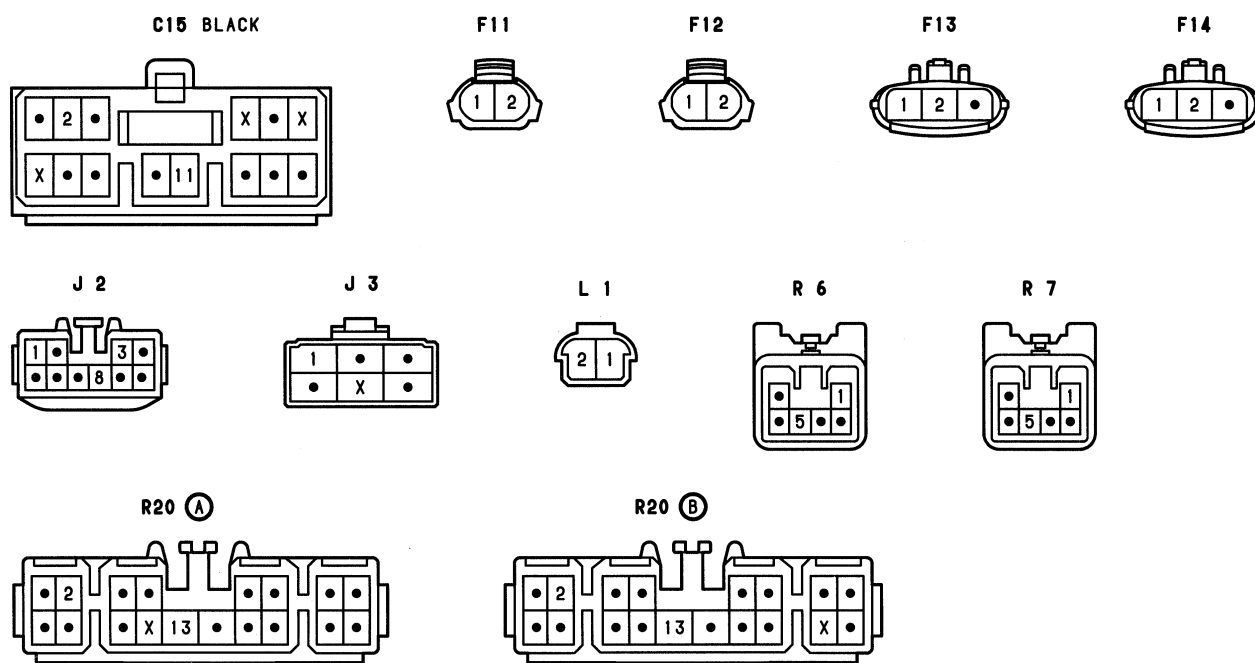
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	34	COWL WIRE	B11	36	LUGGAGE ROOM WIRE
I10			B12		
B 2	36	LUGGAGE ROOM WIRE	B27	36	ENGINE ROOM MAIN WIRE
B 3			B28		
B 4					



○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A10	B 26	H 1	26	R 3	C 26
A12	A 26	J 1	26	R 4	26
A19	26	J 2	26	R20	27
C 7	26	J 3	26	S11	A 27
C11	26	O 4	26	S14	B 27
C15	26	R 1	A 26		
F 3	26	R 2	B 26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3B	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

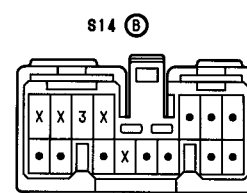
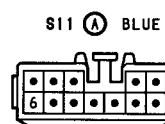
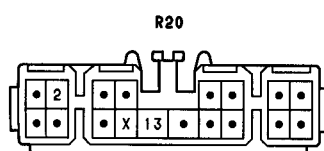
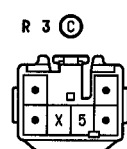
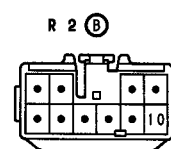
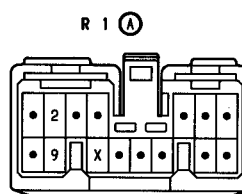
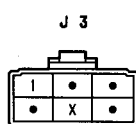
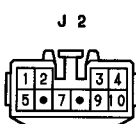
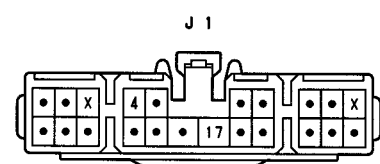
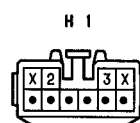
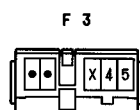
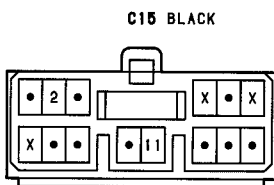
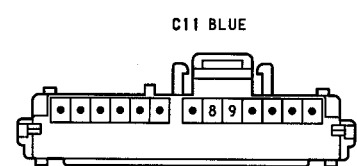
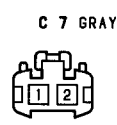
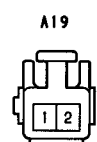
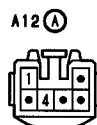
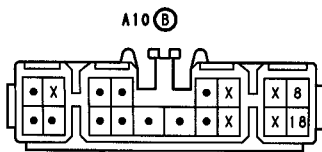
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

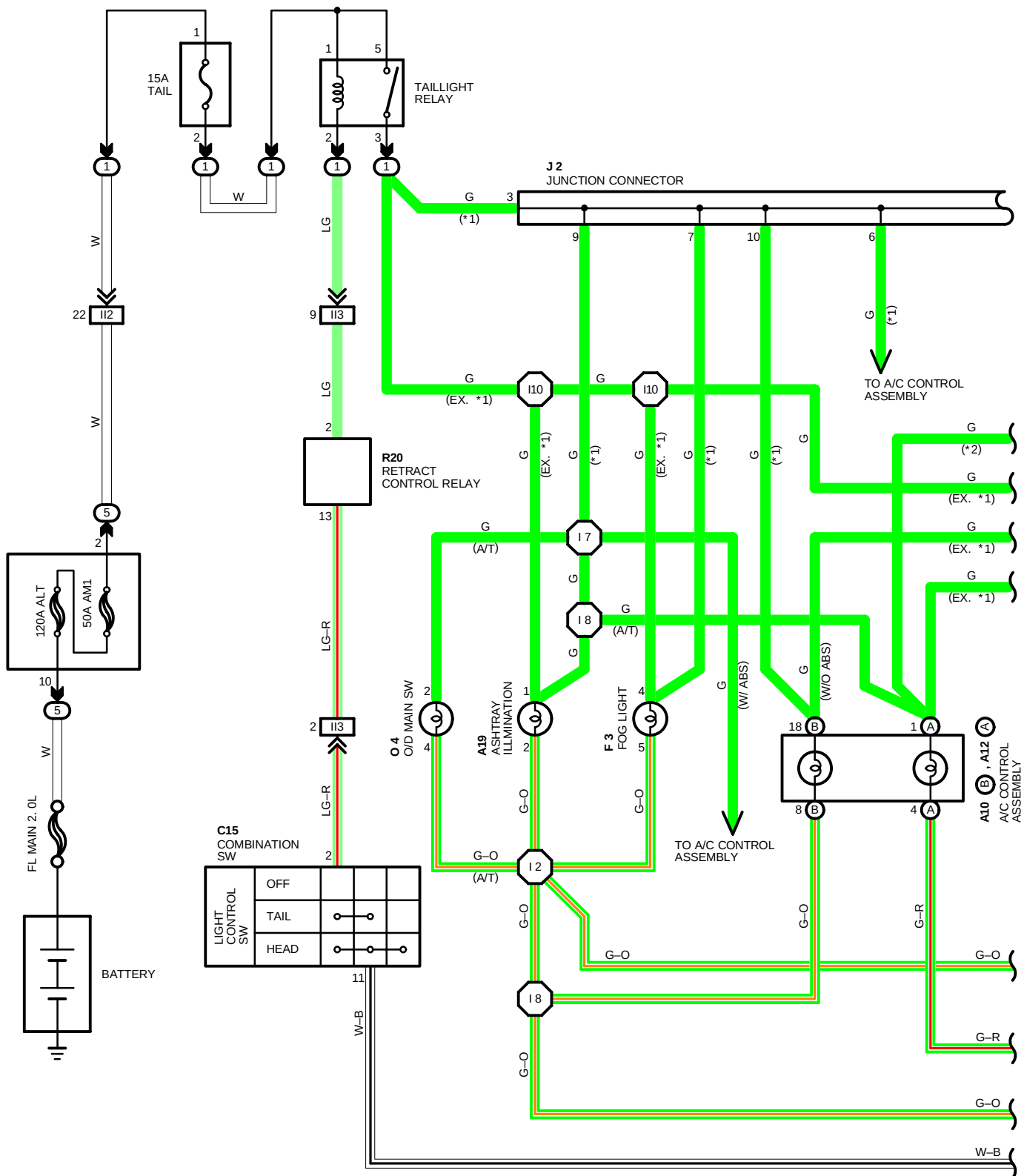
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	34	COWL WIRE	I 7	34	COWL WIRE
I 3			I 8		
I 4			I10		
I 5					





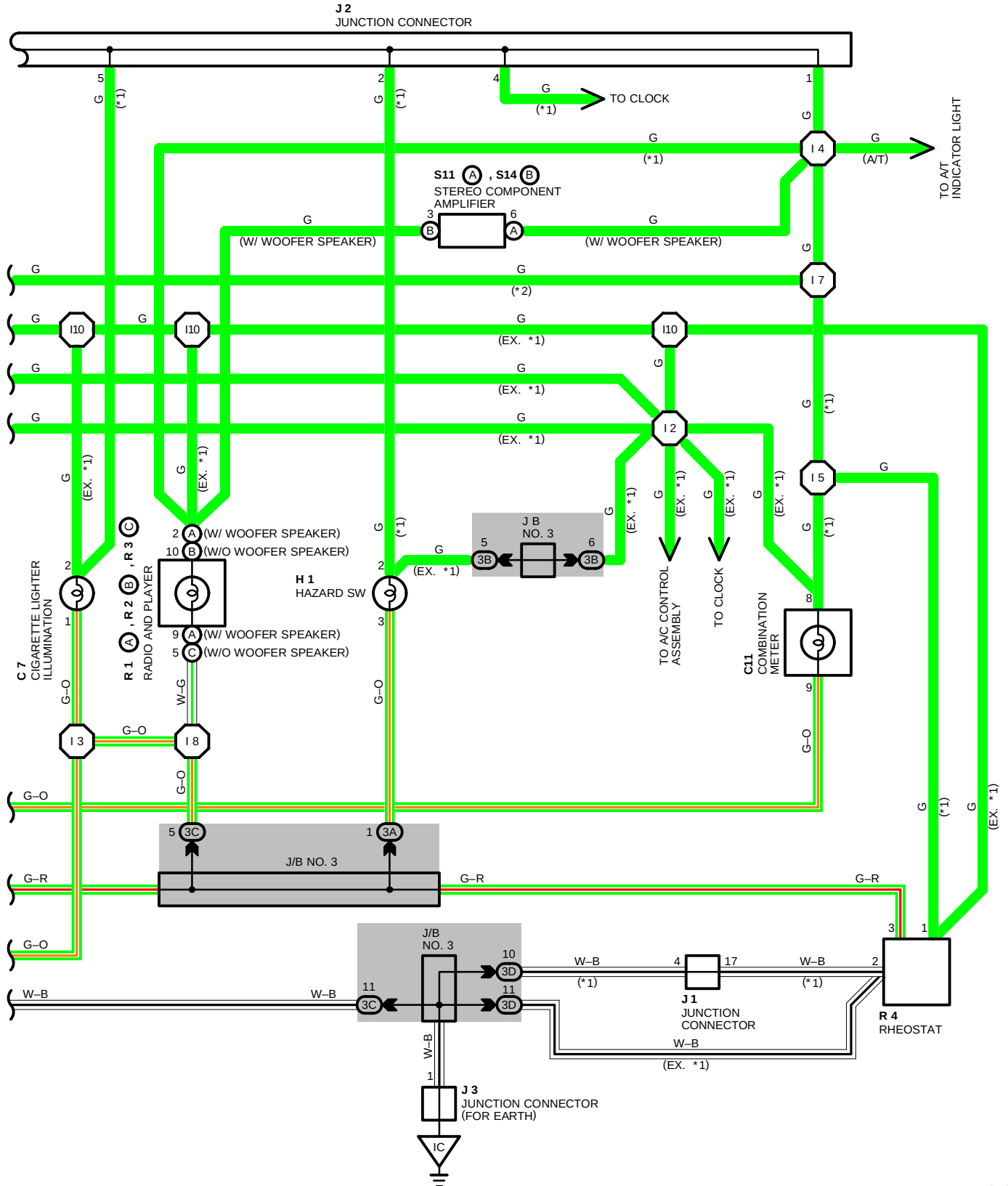
SERVICE HINTS

TAILLIGHT RELAY

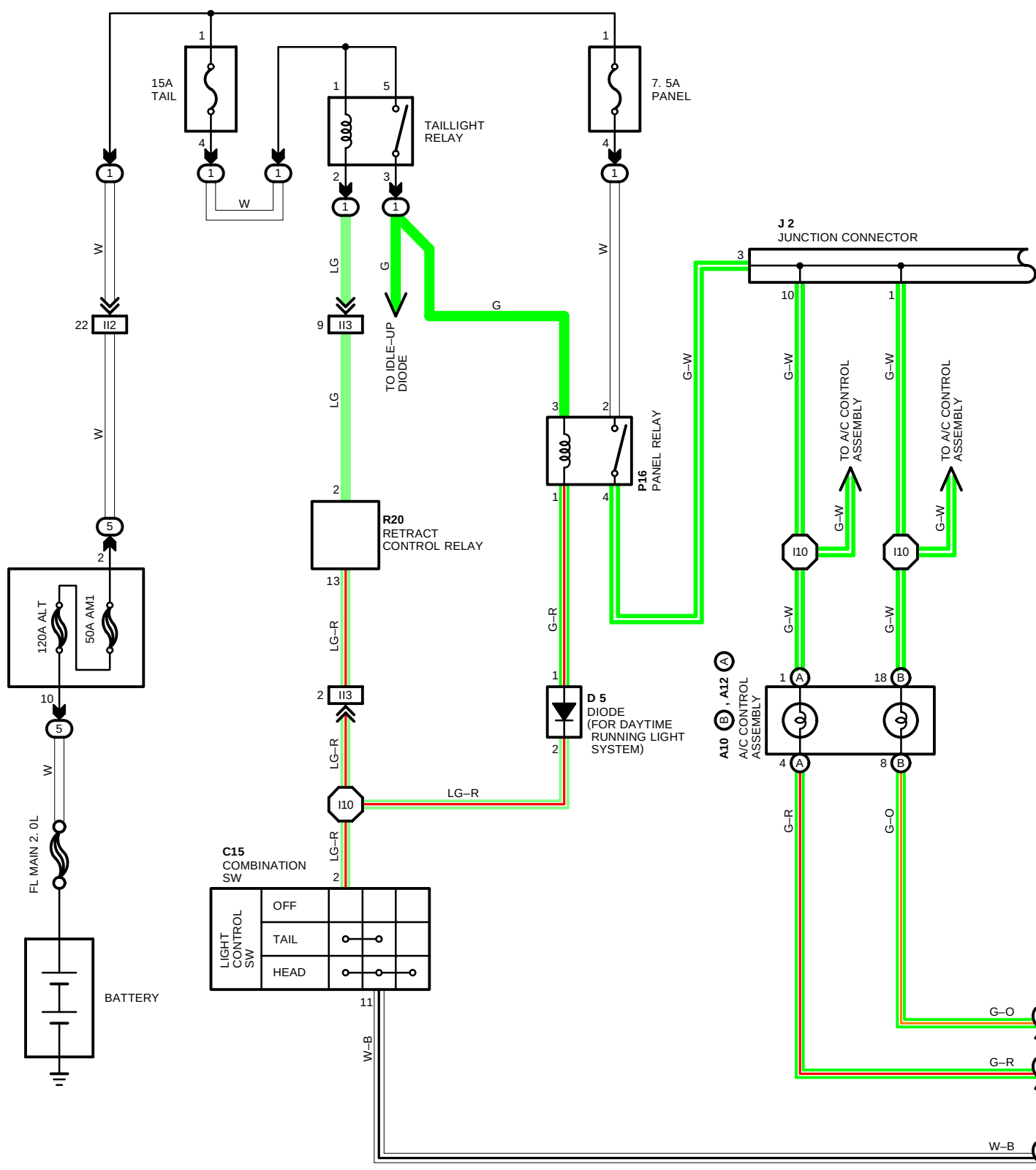
(1) 5- (1) 3 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION (WHEN LIGHT AUTO TURN OFF SYSTEM IS OFF)

R 4 RHEOSTAT

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



ILLUMINATION (FOR CANADA)



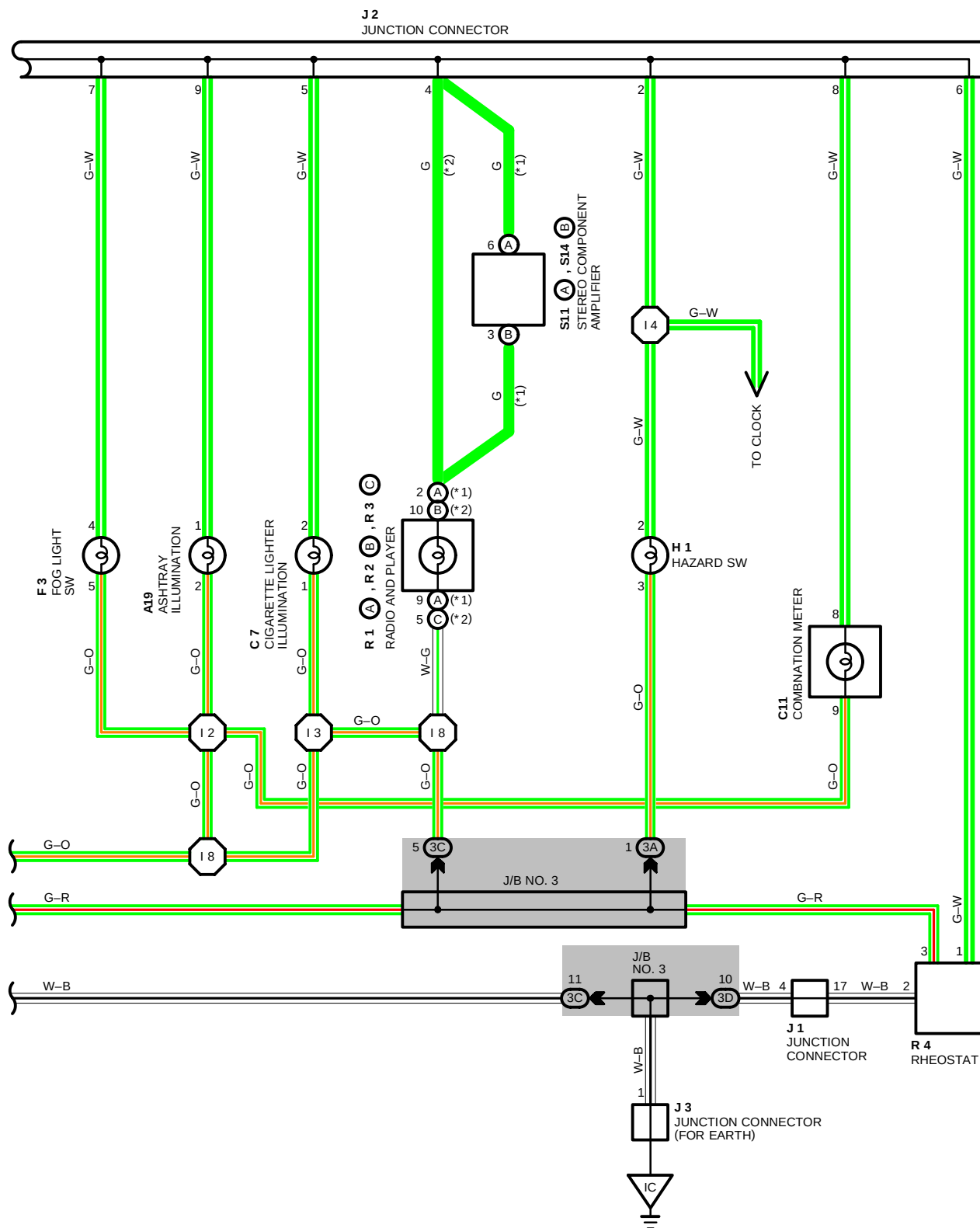
SERVICE HINTS

TAILLIGHT RELAY

(1) 5- (1) 3 : CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION (WHEN LIGHT AUTO TURN OFF SYSTEM IS OFF)

R 4 RHEOSTAT

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



ILLUMINATION (FOR CANADA)

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A10	B 26	F 3	26	R 2	B 26
A12	A 26	H 1	26	R 3	C 26
A19	26	J 1	26	R 4	26
C 7	26	J 2	26	R20	27
C11	26	J 3	26	S11	A 27
C15	26	P16	26	S14	B 27
D 5	26	R 1	A 26		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

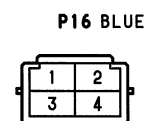
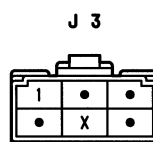
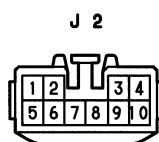
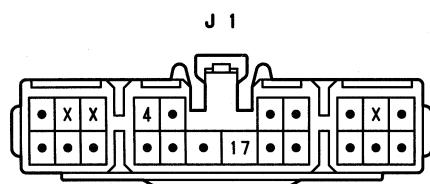
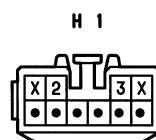
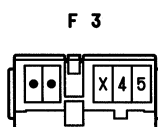
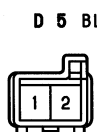
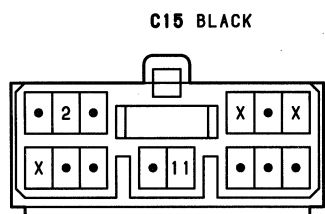
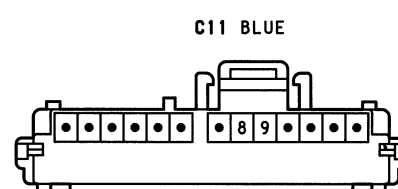
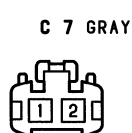
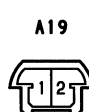
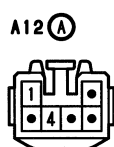
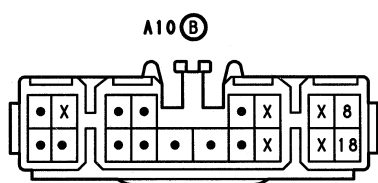
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

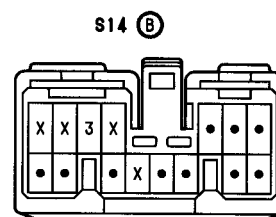
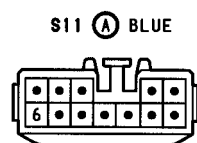
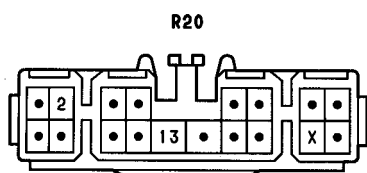
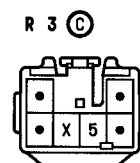
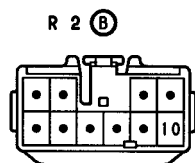
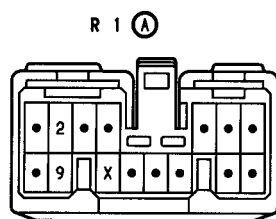
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	34	COWL WIRE	I 8	34	COWL WIRE
I 3			I10		

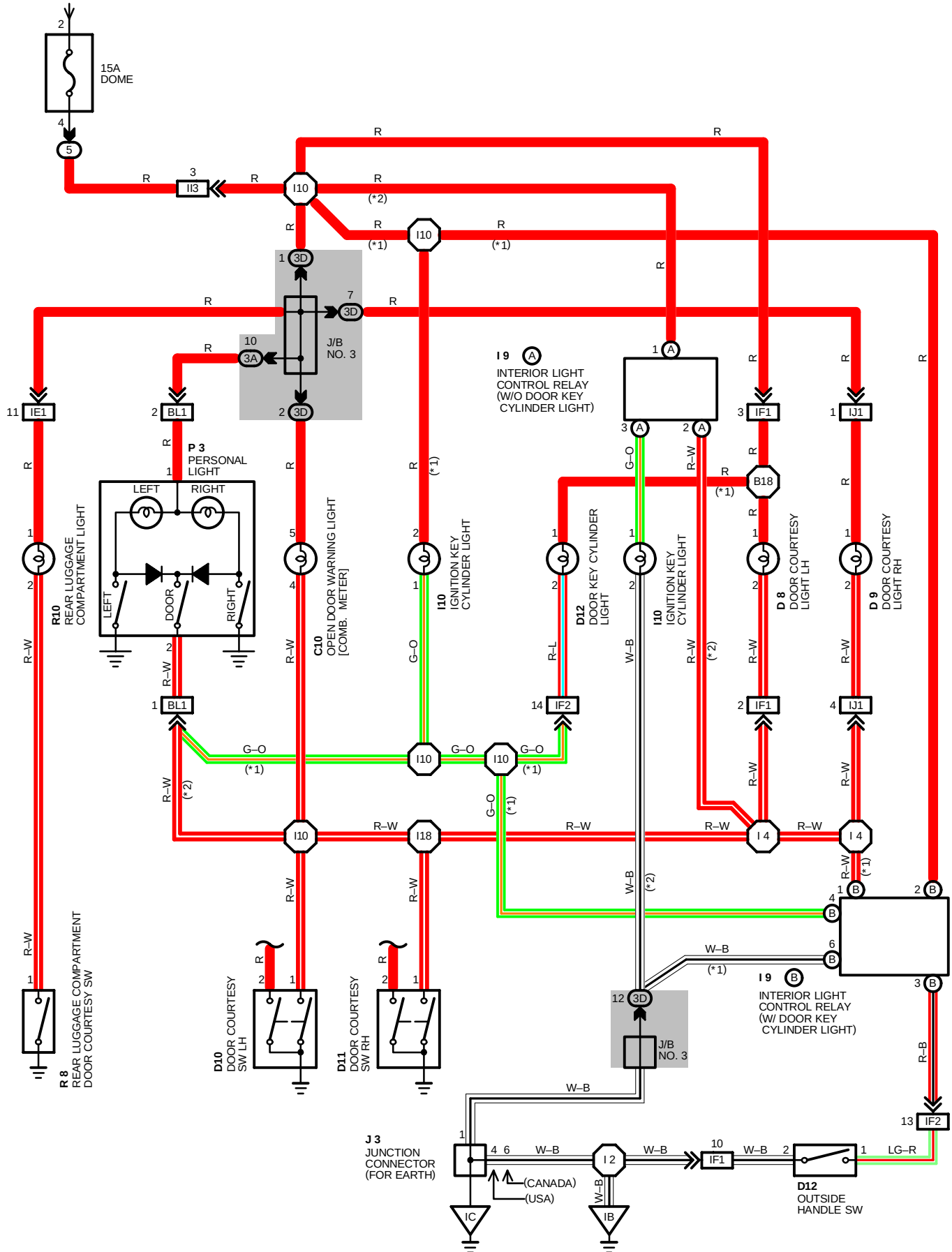




INTERIOR LIGHT

*1 : W/ DOOR KEY CYLINDER LIGHT
*2 : W/O DOOR KEY CYLINDER LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 48)



SERVICE HINTS

D10 DOOR COURTESY SW LH

1-GROUND : CLOSED WITH DRIVER'S DOOR OPEN

D11 DOOR COURTESY SW RH

1-GROUND : CLOSED WITH PASSENGER'S DOOR OPEN

R 8 REAR LUGGAGE COMPARTMENT DOOR COURTESY SW

1-GROUND : CLOSED WITH REAR LUGGAGE COMPARTMENT DOOR OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C10	26	D12	27	P 3	27
D 8	27	I 9	A 26	R 8	27
D 9	27		B 26	R10	27
D10	27	I10	26		
D11	27	J 3	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

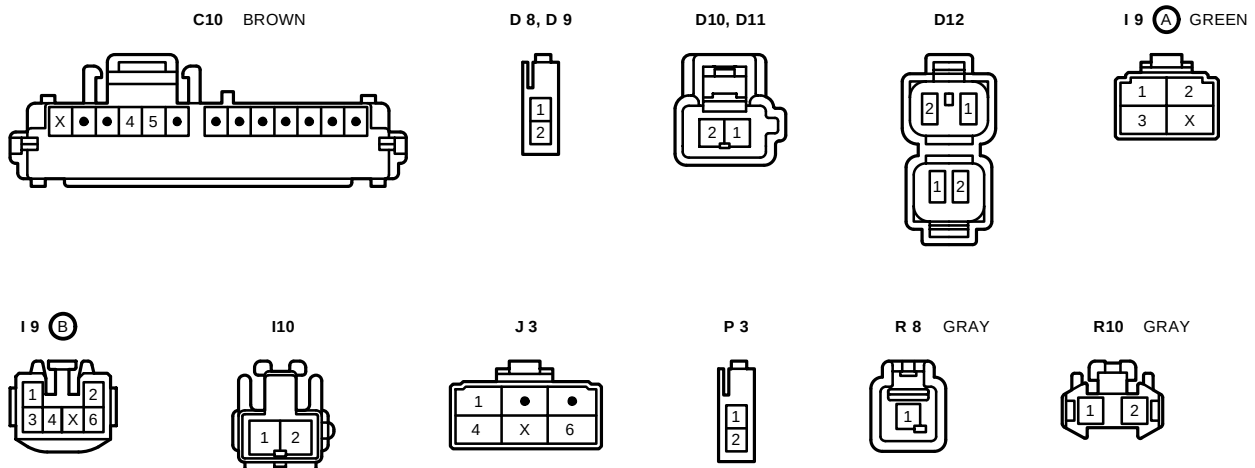
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	32	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
I13	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
BL1	36	ROOF WIRE AND COWL WIRE (UNDER THE RIGHT FRONT PILLAR)

▽ : GROUND POINTS

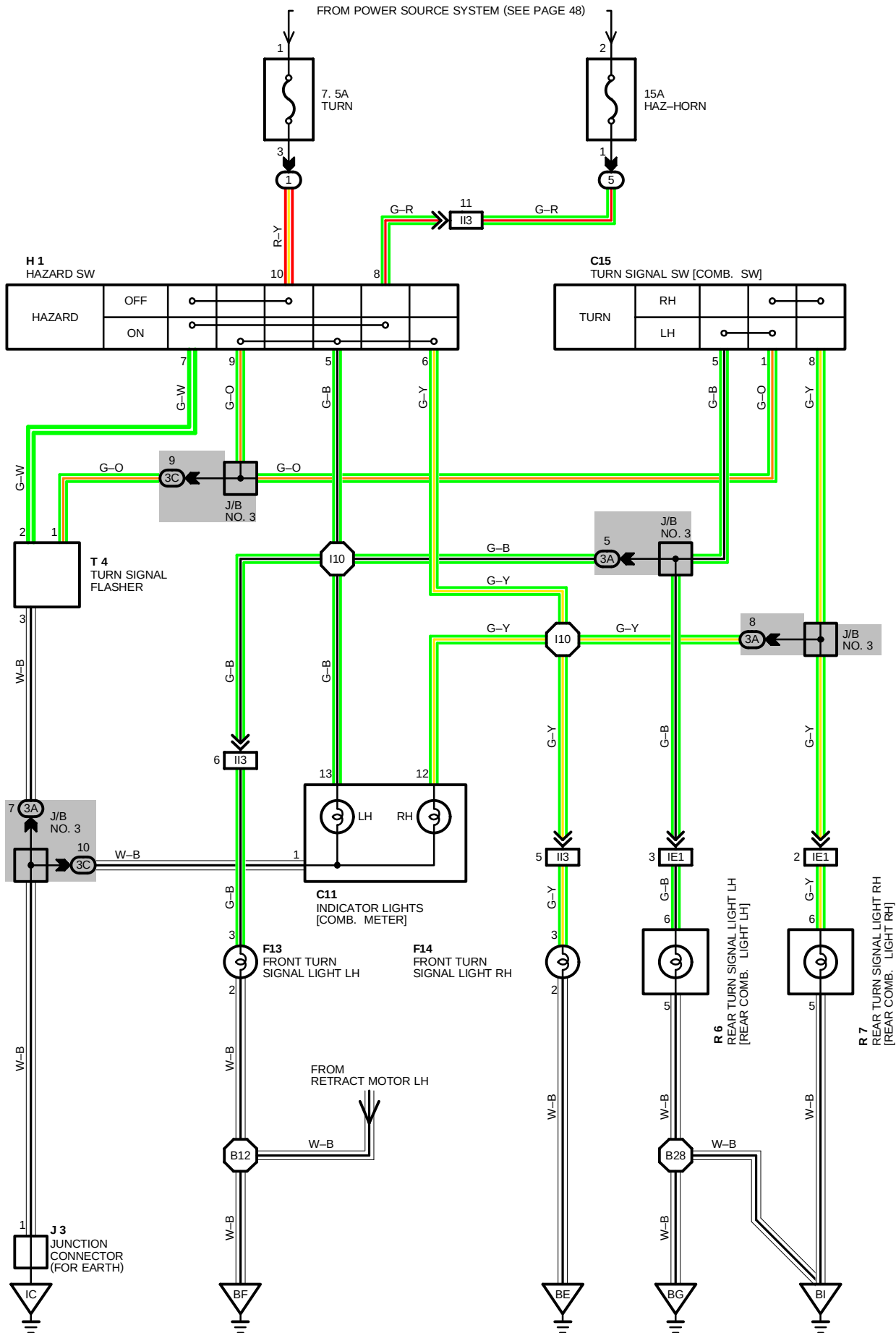
CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	34	COWL WIRE	I18	34	COWL WIRE
I 4			B18	36	FRONT DOOR LH WIRE
I10					



TURN SIGNAL AND HAZARD WARNING LIGHT



SERVICE HINTS

T 4 TURN SIGNAL FLASHER

2-GROUND : APPROX. 12 VOLTS WITH IGNITION SW ON OR THE 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	F14	27	R 6	27
C15	26	H 1	26	R 7	27
F13	27	J 3	26	T 4	26

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

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

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

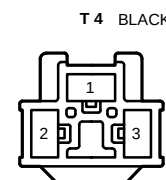
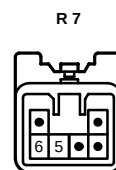
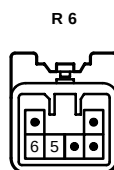
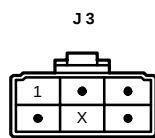
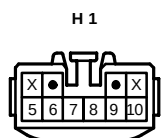
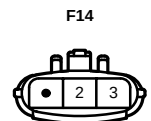
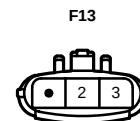
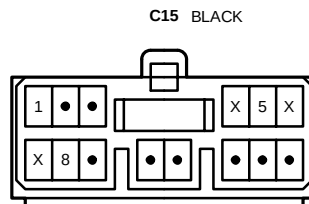
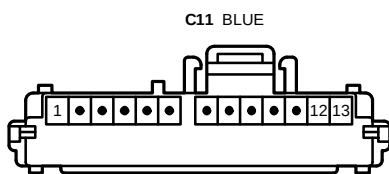
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

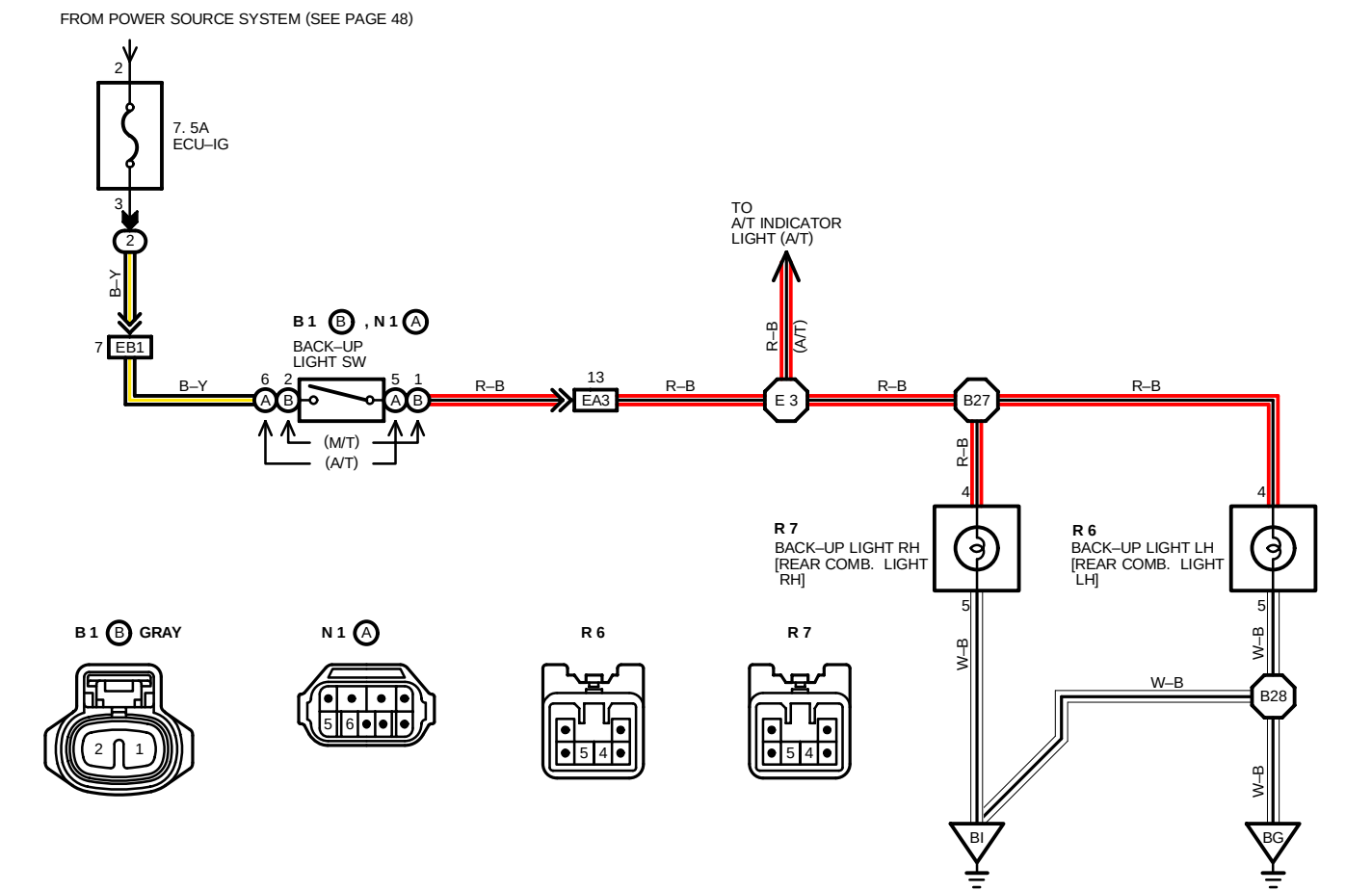
CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	34	COWL WIRE	B28	36	ENGINE ROOM MAIN WIRE
B12	36	LUGGAGE ROOM WIRE			



BACK-UP LIGHT



SERVICE HINTS

B 1(B), N 1(A) BACK-UP LIGHT SW
(A) 6-5, (B) 2-1 : CLOSED WITH SHIFT LEVER IN R POSITION

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	B 24 (5S-FE) , 25 (3S-GTE)	R 6	27		
N 1	A 24 (5S-FE)	R 7	27		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	20	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EB1	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)

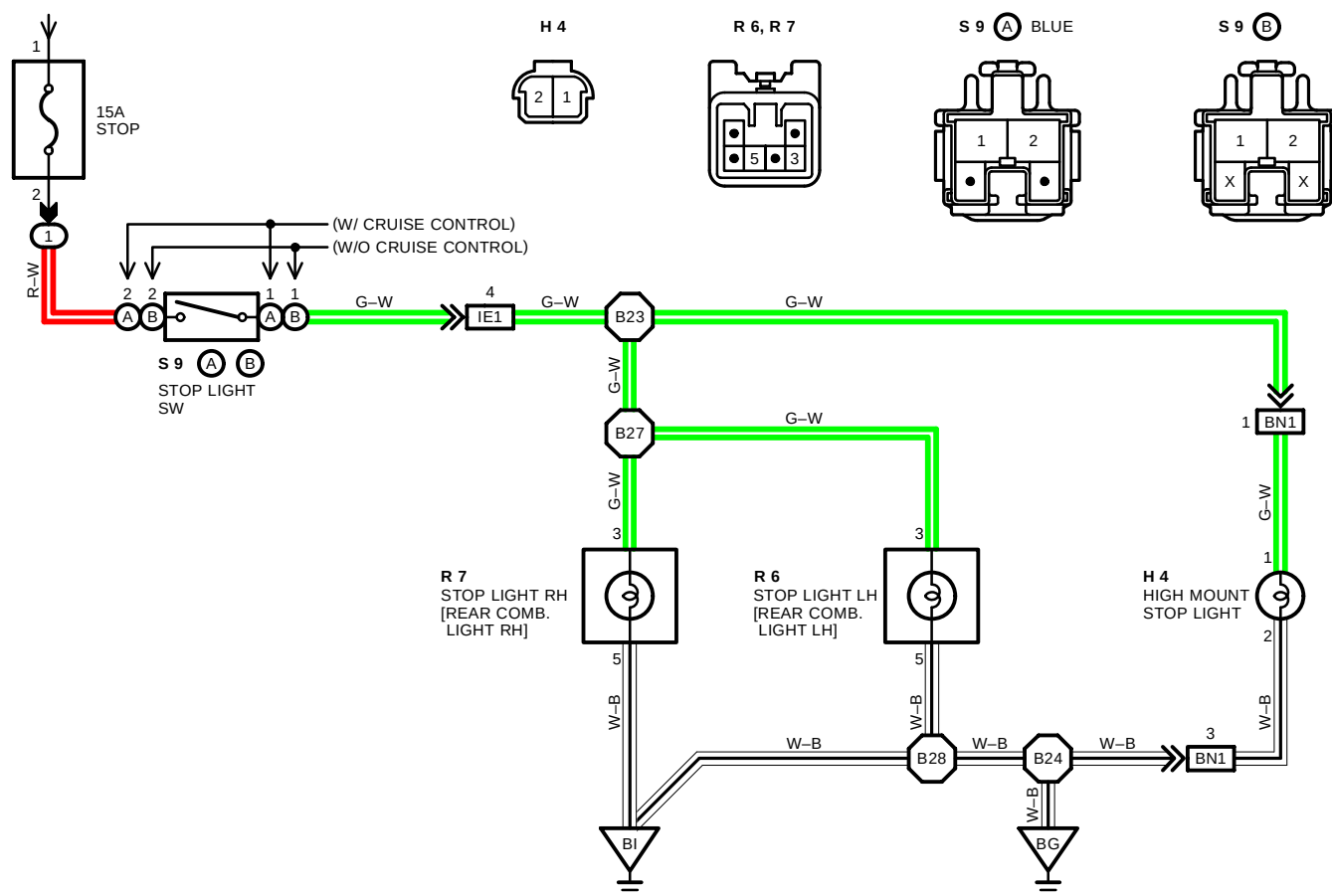
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	28 (5S-FE) 30 (3S-GTE)	ENGINE ROOM MAIN WIRE	B27 B28	32	ENGINE ROOM MAIN WIRE

FROM POWER SOURCE SYSTEM (SEE PAGE 48)



SERVICE HINTS

S 9 STOP LIGHT SW

- (A) 1 - (A) 3 : CLOSED WITH BRAKE PEDAL DEPRESSED (W/ CRUISE CONTROL)
- (B) 1 - (B) 2 : CLOSED WITH BRAKE PEDAL DEPRESSED (W/O CRUISE CONTROL)

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
H 4	27	R 7	27	S 9	B
R 6	27	S 9	A		26

: RELAY BLOCKS

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

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
BN1	36	ROOF NO.3 WIRE AND ENGINE ROOM MAIN WIRE

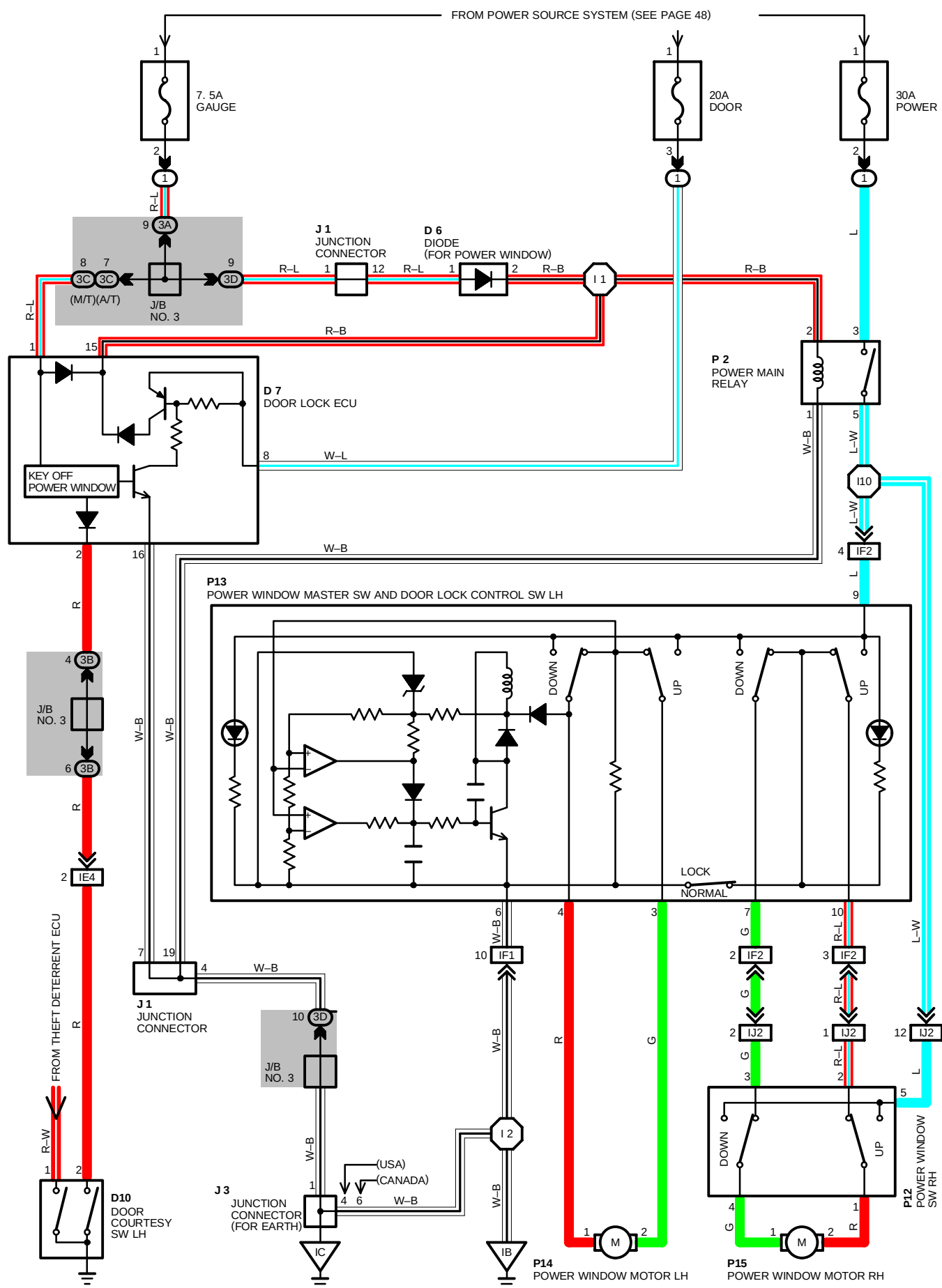
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B23	36	ENGINE ROOM MAIN WIRE	B27	36	ENGINE ROOM MAIN WIRE
B24			B28		

POWER WINDOW



SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 2** OF THE POWER MAIN RELAY THROUGH THE **POWER FUSE**. WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE **GAUGE FUSE** TO **TERMINAL 3** OF THE POWER MAIN RELAY → **TERMINAL 1** → **GROUND**. THIS ACTIVATES THE RELAY AND CURRENT FLOWING TO **TERMINAL 4** OF THE POWER MAIN RELAY → **TERMINAL 9** OF THE POWER WINDOW MASTER SW AND **TERMINAL 5** OF THE POWER WINDOW SW RH (PASSENGER'S).

1. MANUAL OPERATION (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND THE POWER WINDOW MASTER SW IN **UP** POSITION, THE CURRENT FLOWING TO **TERMINAL 9** OF THE POWER WINDOW MASTER SW FLOWS TO **TERMINAL 3** OF THE MASTER SW → **TERMINAL 2** OF THE POWER WINDOW MOTOR LH (DRIVER'S) → MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE MASTER SW → **TERMINAL 6** → **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 9** OF THE POWER WINDOW MASTER SW TO **TERMINAL 4** OF THE MASTER SW CAUSES THE FLOW OF CURRENT FROM **TERMINAL 1** OF THE MOTOR → MOTOR → **TERMINAL 2** → **TERMINAL 3** OF THE MASTER SW → **TERMINAL 6** → **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 9** OF THE MASTER SW FLOWS TO **TERMINAL 4** OF THE MASTER SW → **TERMINAL 1** OF THE POWER WINDOW MOTOR → MOTOR → **TERMINAL 2** → **TERMINAL 3** OF THE MASTER SW → **TERMINAL 6** → **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 3** OF THE MASTER SW AND **TERMINAL 6** INCREASES. AS A RESULT, THE SOLENOID STOPS OPERATING, THE DRIVER'S SW TURNS OFF AND FLOW FROM **TERMINAL 9** OF THE MASTER SW TO **TERMINAL 4** 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 PULLED TO THE **UP** SIDE DURING AUTO DOWN OPERATION, A GROUND CIRCUIT OPENS IN THE MASTER SW AND CURRENT DOES NOT FLOW FROM **TERMINAL 3** OF THE MASTER SW → TO **TERMINAL 6**, SO THE MOTOR STOPS, CAUSING AUTO DOWN OPERATION TO STOP. IF THE DRIVER'S SW IS PUSHED CONTINUOUSLY, THE MOTOR ROTATES IN THE UPWARD DIRECTION IN MANUAL UP OPERATION.

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

WITH POWER WINDOW SW (PASSENGER'S) PULLED TO THE **UP** SIDE, CURRENT FLOWING FROM **TERMINAL 5** OF THE POWER WINDOW SW FLOWS TO **TERMINAL 1** OF THE POWER WINDOW SW → **TERMINAL 2** OF THE WINDOW MOTOR → MOTOR → **TERMINAL 1** → **TERMINAL 4** OF THE POWER WINDOW SW → **TERMINAL 3** → **TERMINAL 7** OF THE MASTER SW → **TERMINAL 6** → **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 PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FLOW **TERMINAL 1** → MOTOR → **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 9** 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 LOCK ECU OPERATES AND CURRENT FLOWS FROM **POWER FUSE** → **TERMINAL 8** OF THE DOOR LOCK ECU → **TERMINAL 15** → **TERMINAL 3** OF THE POWER MAIN RELAY → **TERMINAL 1** → TO **GROUND** FOR ABOUT 60 SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM **POWER FUSE** → **TERMINAL 2** OF THE POWER MAIN RELAY → **TERMINAL 4** → **TERMINAL 9** OF THE POWER WINDOW MASTER SW AND **TERMINAL 5** 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 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 THE DOOR LOCK ECU. AS A RESULT, THE ECU TURNS OFF AND UP AND DOWN MOVEMENT OF THE WINDOW STOPS.

POWER WINDOW

SERVICE HINTS

D7 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 DRIVER'S DOOR OPEN
- 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** SECOND PERIOD, VOLTAGE WILL DROP TO **0** VOLTS

D10 DOOR COURTESY SW LH

- 2-GROUND: CONTINUITY WITH DRIVER'S DOOR OPEN

P12 POWER WINDOW SW RH

- 5-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** SECOND PERIOD, VOLTAGE WILL DROP TO **0** VOLTS

P13 POWER WINDOW MASTER SW AND DOOR LOCK CONTROL SW LH

- 6-GROUND: ALWAYS CONTINUITY
- 9-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** SECOND PERIOD, VOLTAGE WILL DROP TO **0** VOLTS
- 3-GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION AND DRIVER'S SW AT **UP** POSITION
- 4-GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION AND DRIVER'S 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 6	26	J 3	26	P14	27
D 7	26	P 2	26	P15	27
D10	27	P12	27		
J 1	26	P13	27		

: RELAY BLOCKS

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

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE4	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	32	COWL AND WIRE FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	32	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ2	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH

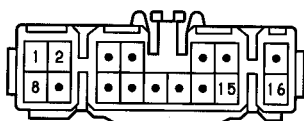
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	34	COWL WIRE	I10	34	COWL WIRE
I 2					

D 6 BLACK



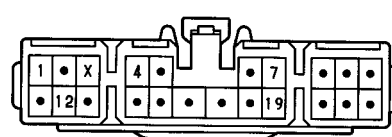
D 7 ORANGE



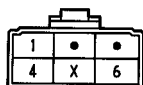
D10



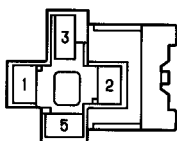
J 1



J 3



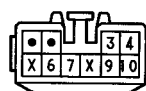
P 2



P12



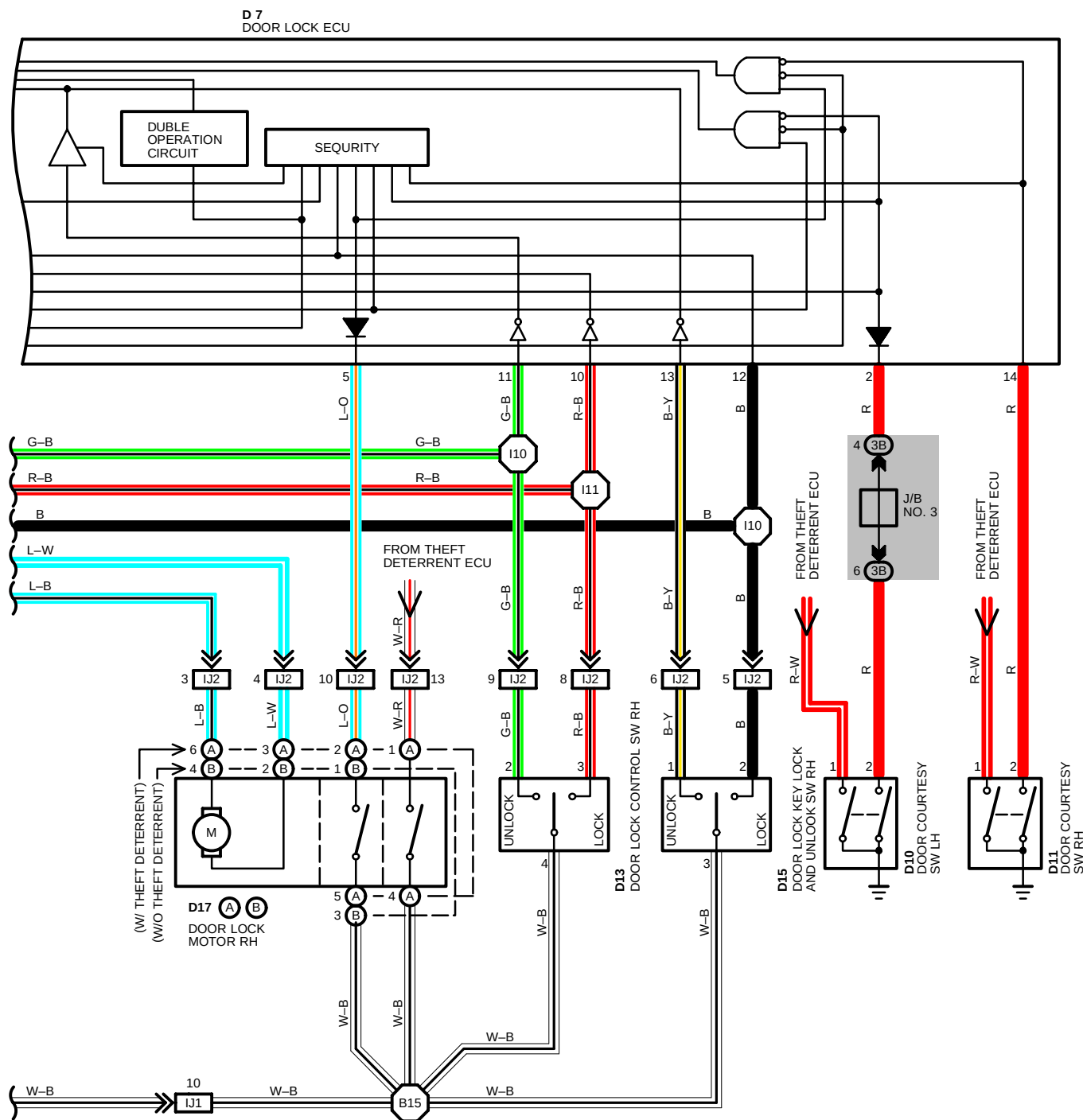
P13



P14, P15







DOOR LOCK

SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 8** OF THE DOOR LOCK ECU THROUGH THE **DOOR FUSE**.

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO **TERMINAL 1** OF THE DOOR LOCK ECU AND **TERMINAL 1** OF DIODE → **TERMINAL 2** → **TERMINAL 15** OF DOOR LOCK ECU.

1. MANUAL LOCK OPERATION

TO CHANGE DOOR LOCK SW AND KEY SW TO **LOCK** POSITION, A LOCK SIGNAL IS INPUT TO **TERMINALS 10, 12** OF THE DOOR LOCK ECU AND CAUSES THE ECU TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 4** → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** OF THE DOOR LOCK MOTORS → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** → **TERMINAL 3** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK MOTORS CAUSES THE DOOR LOCK.

2. MANUAL UNLOCK OPERATION

TO CHANGE DOOR LOCK CONTROL SW AND KEY SW TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINALS 11, 13** OF THE DOOR LOCK ECU, AND CAUSES THE ECU TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** OF THE DOOR LOCK MOTORS → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND DOOR LOCK MOTORS 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 FROM **TERMINAL 3** OF THE ECU → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** OF DOOR LOCK MOTORS → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** → **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 MOTORS 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 THE ECU. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** OF THE DOOR LOCK MOTORS → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** → **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 MOTORS, 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 THE ECU FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** OF THE DOOR LOCK MOTORS → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS 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 INPUTS SIGNAL, THE ECU WORKS AND CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL (A)2 (LH), (A)3 (RH) (W/ THEFT DETERRENT), (B)2 (W/O THEFT DETERRENT)** OF THE DOOR LOCK MOTORS → **TERMINAL (A)5 (LH), (A)6 (RH) (W/ THEFT DETERRENT), (B)4 (W/O THEFT DETERRENT)** → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

SERVICE HINTS

D6 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 FOR 0.2 SECONDS WITH FOLLOWING OPERATIONS:
 * 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 A KEY
 4-GROUND: APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION:
 * DOOR LOCK CONTROL SW IS LOCKED
 * LOCKING THE DRIVER'S PASSENGER'S DOOR CYLINDER WITH KEY
 10-GROUND: CONTINUITY 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: CONTINUITY WITH DOOR LOCK CONTROL SW UNLOCKED
 13-GROUND: CONTINUITY WITH PASSENGER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY
 7-GROUND: CONTINUITY WITH IGNITION KEY IN THE KEY CYLINDER
 1-GROUND: APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION
 9-GROUND: CONTINUITY WITH DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY
 15-GROUND: APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION AND STAYS AT 12 VOLTS FOR 60 SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60 SECOND PERIOD, VOLTAGE WILL DROP TO 0 VOLTS
 12-GROUND: CONTINUITY WITH DRIVER'S, PASSENGER'S DOOR LOCK CYLINDER LOCKED WITH KEY

I11 UNLOCK WARNING SW

- 1-5: CLOSED WITH IGNITION KEY IN CYLINDER

D14, D15 KEY LOCK AND UNLOCK SW

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

D10, D11 DOOR COURTESY SW

- 2-GROUND: CLOSED WITH DOOR OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 6	26	D14	27	D17	B 27
D 7	26	D15	27	I11	26
D10	27	D16	A 27	J 1	26
D11	27		B 27	J 3	26
D13	27	D17	A 27	P13	27

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	32	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IJ2	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL

DOOR LOCK

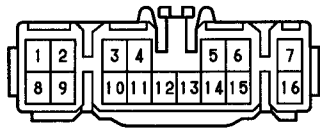
 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	34	COWL WIRE	B15	36	FRONT DOOR RH WIRE
I 2			B18	36	FRONT DOOR LH WIRE
I10			B19		
I11					

D 6 BLACK



D 7



D10, D11



D13



D14, D15 GRAY



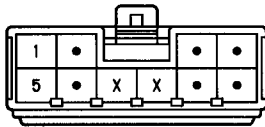
D16 Ⓐ, D17 Ⓐ



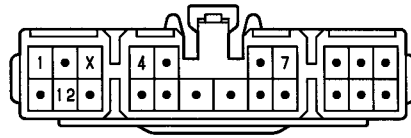
D16 Ⓑ, D17 Ⓑ



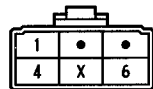
I11 BLACK



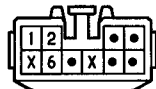
J 1



J 3



P13



UNLOCK AND SEAT BELT WARNING

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 4	26	D10	27	J 3	26
C10	26	I11	26	S 8	26
C11	26	J 1	26		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

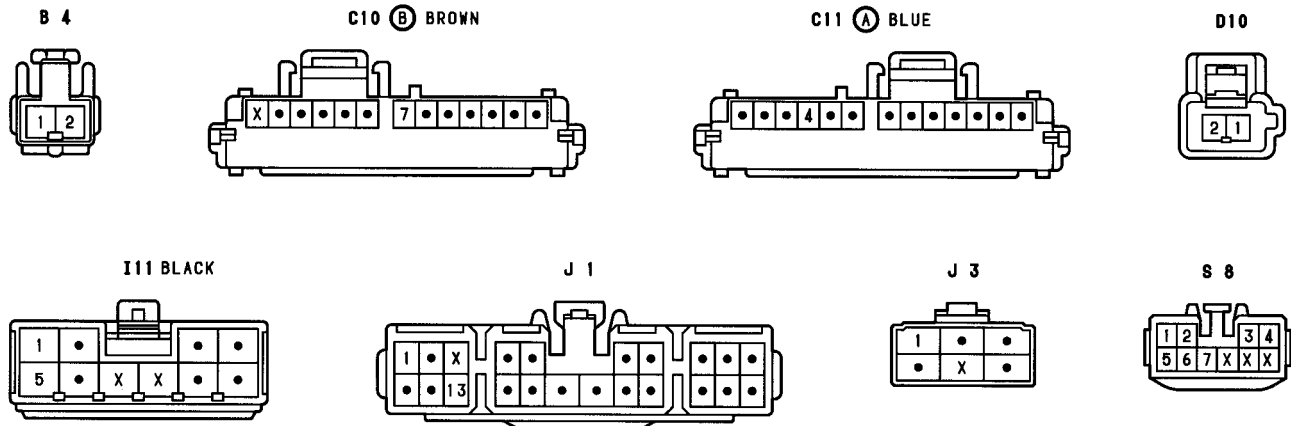
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I13	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

: GROUND POINTS

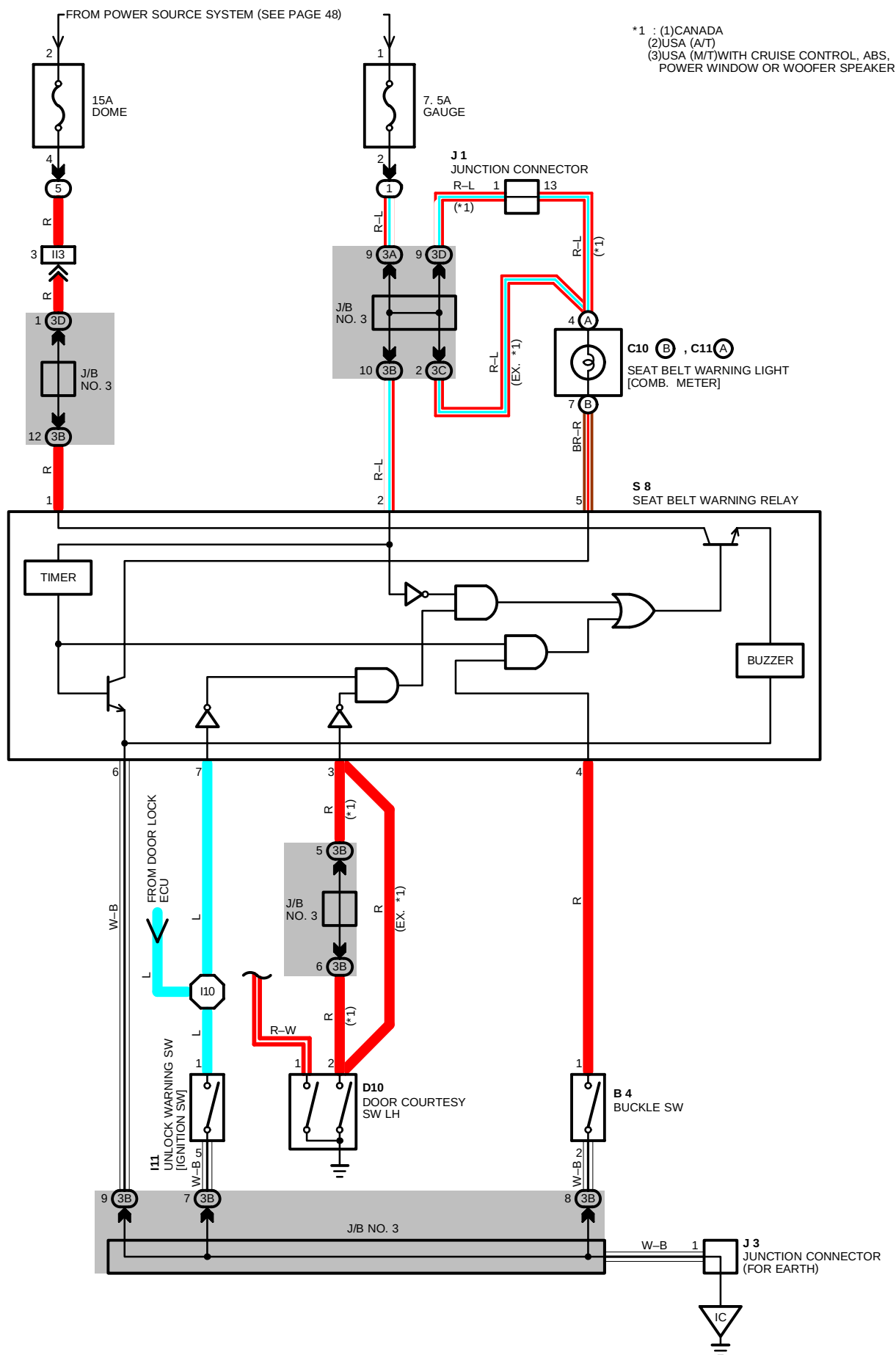
CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	34	COWL WIRE			



UNLOCK AND SEAT BELT WARNING



SYSTEM OUTLINE

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

1. SEAT BELT WARNING SYSTEM

WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS FROM THE **GAUGE FUSE** TO **TERMINAL 2** OF THE SEAT BELT WARNING RELAY. AT THE SAME TIME, CURRENT FLOWS TO **TERMINAL 5** 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 5** OF THE RELAY → **TERMINAL 6** → **GROUND**, CAUSING THE WARNING LIGHT TO LIGHT UP. AT THE SAME TIME AS THE WARNING LIGHT LIGHTS UP, A BUCKLE SW OFF SIGNAL IS INPUT TO **TERMINAL 4** OF THE RELAY, THE CURRENT FLOWING TO **TERMINAL 1** OF THE RELAY FLOWS FROM **TERMINAL 6** → **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 4** OF RELAY STOPS AND THE CURRENT FLOW FROM **TERMINAL 1** OF THE RELAY → **TERMINAL 6** → **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 3** OF THE RELAY, THE SEAT BELT WARNING RELAY OPERATES, CURRENT FLOWS FROM **TERMINAL 1** OF THE RELAY → **TERMINAL 6** → **GROUND**, AND THE UNLOCK WARNING BUZZER SOUNDS.

SERVICE HINTS

I11 UNLOCK WARNING SW [IGNITION SW]

1-5 : CLOSED WITH IGNITION KEY IN CYLINDER

S 8 SEAT BELT WARNING RELAY

6-GROUND : ALWAYS CONTINUITY

3-GROUND : CONTINUITY WITH DRIVER'S DOOR OPEN

7-GROUND : CONTINUITY WITH IGNITION KEY IN CYLINDER

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

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

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

D10 DOOR COURTESY SW

2-GROUND : CLOSED WITH DRIVER'S DOOR OPEN

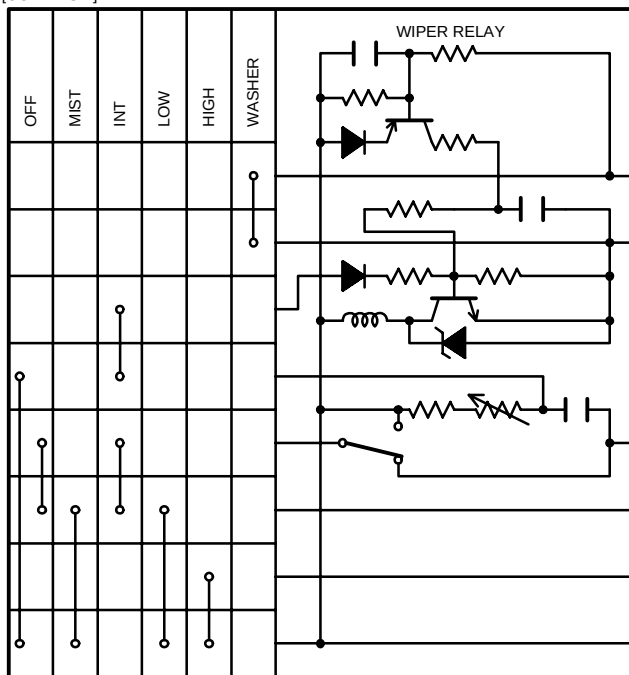
B 4 BUCKLE SW

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

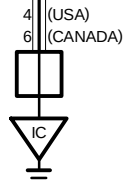
WIPER AND WASHER

FROM POWER SOURCE SYSTEM (SEE PAGE 48)

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



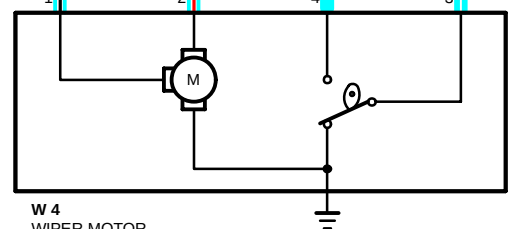
J3
JUNCTION CONNECTOR
(FOR EARTH)



W 2
WASHER
MOTOR



W 4
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 WIPER MOTOR THROUGH THE **WIPER FUSE**.

1. LOW SPEED POSITION

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

3. INT POSITION

WITH WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS FROM **TERMINAL 15** 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 WIPER MOTOR → WIPER MOTOR → TO **GROUND** AND FUNCTIONS.

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

4. MIST POSITION

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 WIPER MOTOR → WIPER MOTOR → TO **GROUND** AND CAUSES TO THE WIPER MOTOR TO RUN AT LOW SPEED.

5. WASHER CONTINUITY OPERATION

WITH WASHER SW TURNED ON, THE CURRENT FLOWS FROM **TERMINAL 2** OF THE WIPER AND WASHER SW → **TERMINAL 1** → **TERMINAL 8** OF THE WIPER AND WASHER SW → **TERMINAL 15** → 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 IN **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE WIPER MOTOR → WIPER MOTOR → TO **GROUND** AND FUNCTIONS.

SERVICE HINTS

C14 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 IS AT **STOP** POSITION
- 13-GROUND : APPROX. **12** VOLTS WITH WIPER AND WASHER SW AT **HIGH** POSITION

W 4 WIPER MOTOR

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	26	W 2	27		
J 3	26	W 4	27		

○ : RELAY BLOCKS

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

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

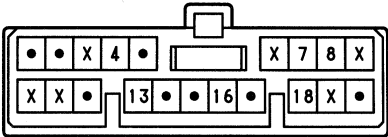
CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH

WIPER AND WASHER

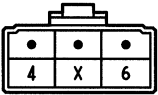
 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	34	COWL WIRE	I13	34	LUGGAGE ROOM WIRE
I 5					

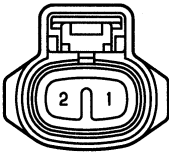
C14 BLACK



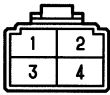
J 3



W 2 BLACK



W 4 GRAY



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.

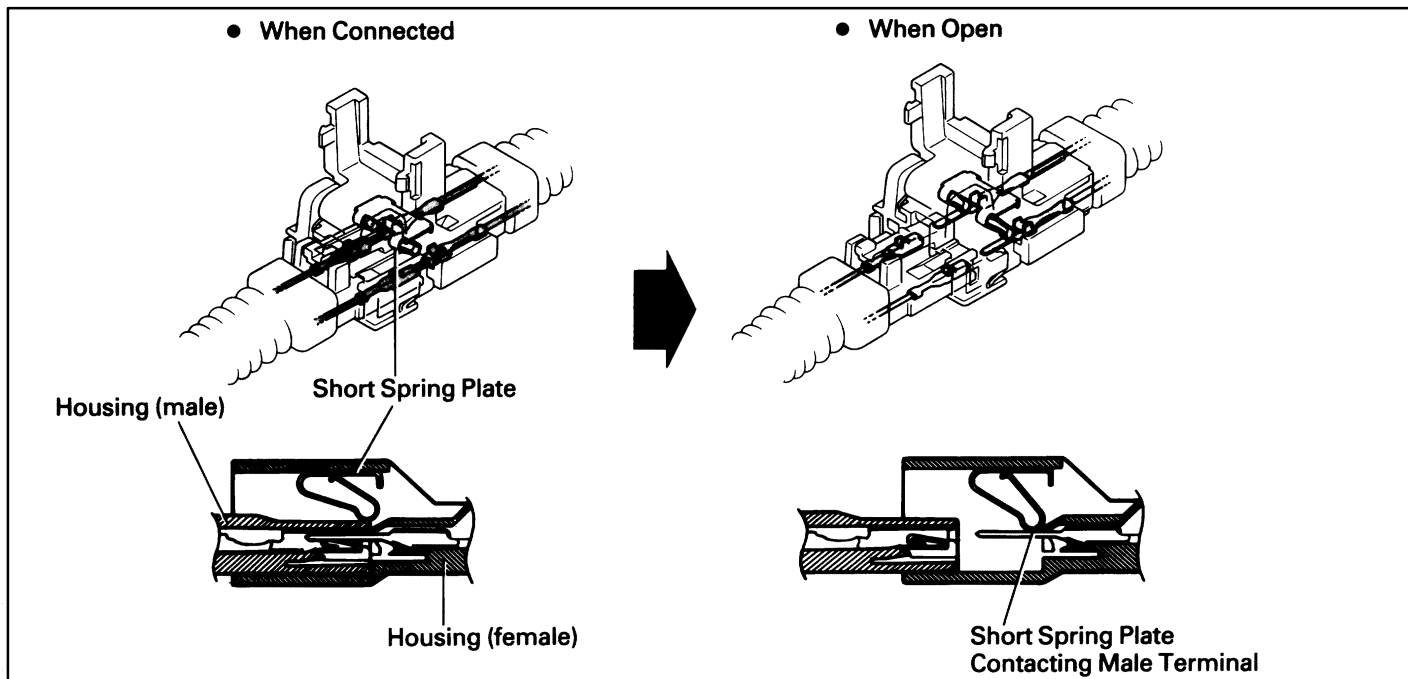
- ▼ Malfunction symptoms of the airbag system are difficult to confirm, so the diagnostic trouble codes become the most important source of information when troubleshooting.
When troubleshooting the airbag system, always inspect the diagnostic trouble codes before disconnecting the battery.
- ▼ Work must be started after 30 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 30 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 canceled. 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 SRS 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 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

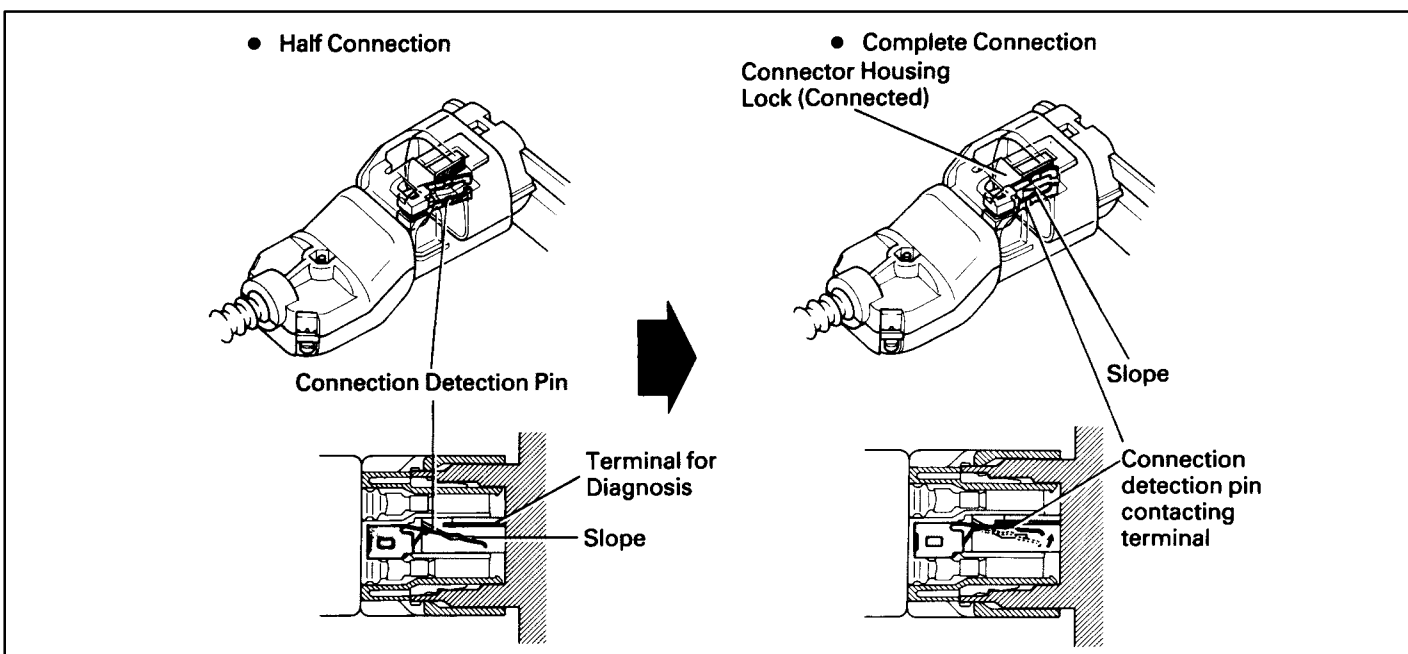
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.



2. ELECTRICAL CONNECTION CHECK MECHANISM

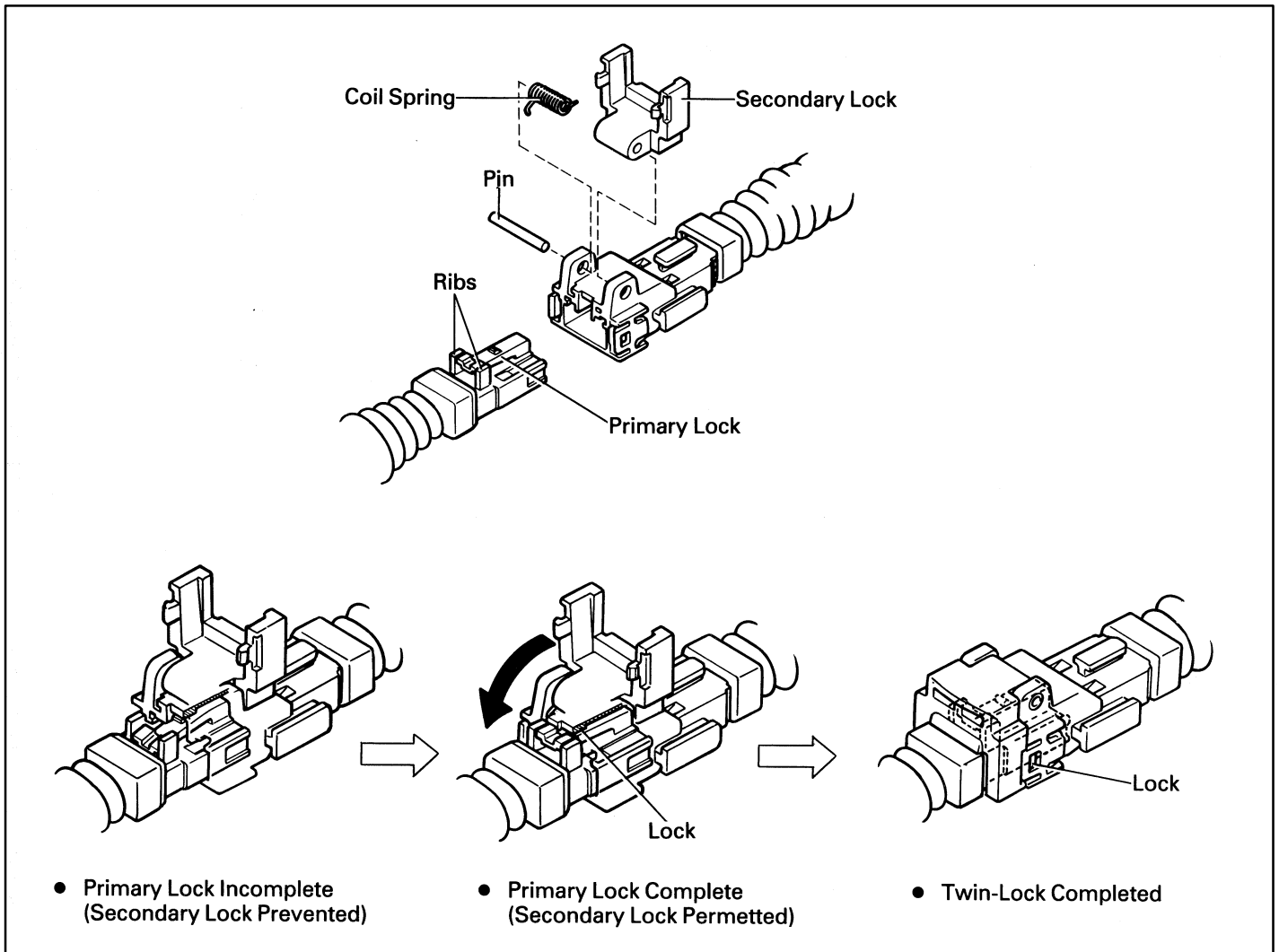
This mechanism is designed to electrically check if connectors are connected correctly and completely.

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.

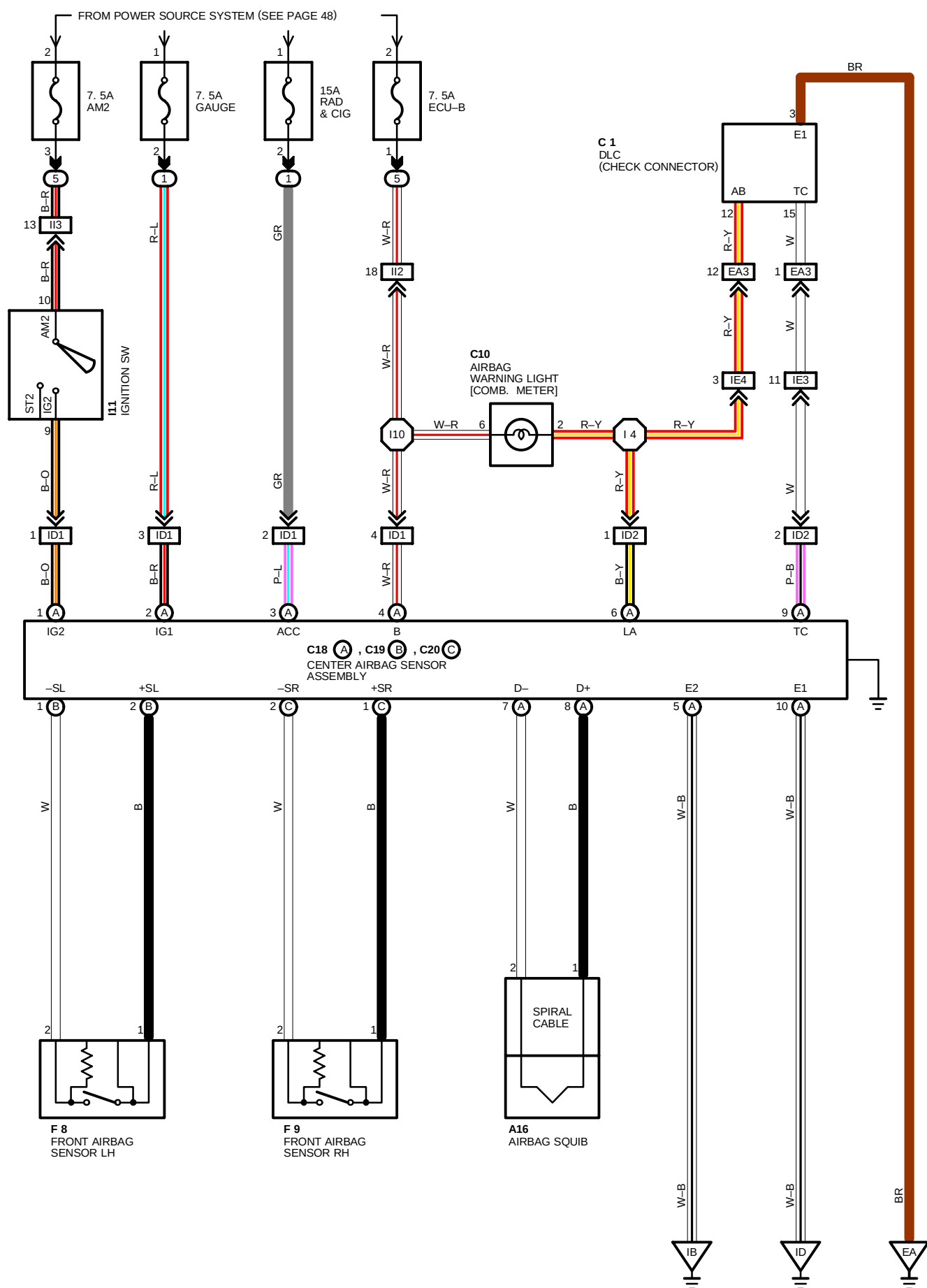


3. CONNECTOR TWIN-LOCK MECHANISM

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 (A) 4** OF THE CENTER AIRBAG SENSOR ASSEMBLY. WHEN THE IGNITION SW IS TURNED TO ACC OR ON, CURRENT FROM THE **RAD & CIG** FUSE FLOWS TO **TERMINAL (A) 3** OF THE CENTER AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE **GAUGE** FUSE FLOW TO **TERMINAL (A) 1**. AND THE CURRENT FROM THE AM1 FUSE TO **TERMINAL (A) 2**.

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 **RAD & CIG, GAUGE OR AM1** FUSE FLOW TO **TERMINAL (A) 8** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINALS (A) 7** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL (A) 5, TERMINAL (A) 10 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 **RAD & CIG, GAUGE OR AM1** FUSE FLOWS TO **TERMINALS (A) 8** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINALS (A) 7** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL (C) 1 OR (B) 2** → **TERMINAL 1** OF FRONT AIRBAG SENSOR → **TERMINAL 2** → **TERMINAL (C) 2 OR (B) 1** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL (A) 5, TERMINAL (A) 10 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
A16	26	C18	A 26	F 8	27
C 1	24(5S-FE) , 25 (3S-GTE)	C19	B 26	F 9	27
C10	26	C20	C 26	I11	26

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (INSIDE R/B NO. 2)
ID1	32	COWL WIRE AND COWL WIRE (NEAR R/B NO. 1)
ID2	32	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE3	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3		

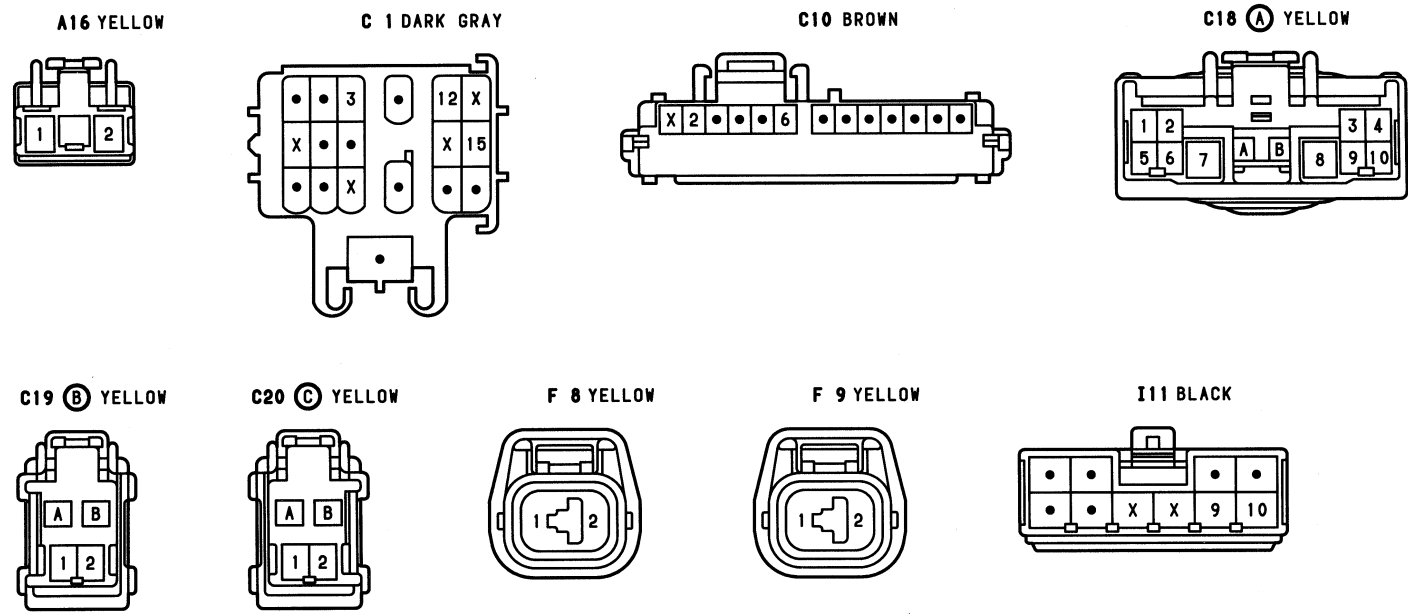
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE) 30 (3S-GTE)	INTAKE MANIFOLD
IB	32	LEFT KICK PANEL
ID	32	RIGHT KICK PANEL

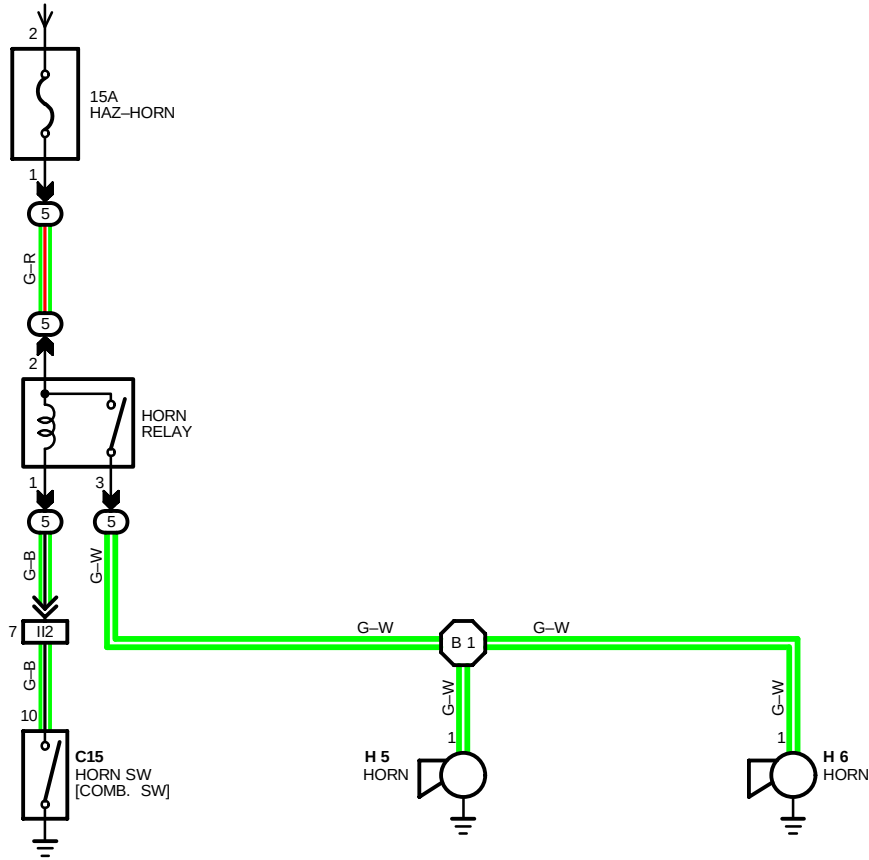
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	34	COWL WIRE	I10	34	COWL WIRE

SRS AIRBAG



FROM POWER SOURCE SYSTEM (SEE PAGE 48)



SERVICE HINTS

HORN RELAY
(5) 2- (5)3 : CLOSED WITH HORN SW ON

 : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C15	26	H 5	27	H 6	27

 : RELAY BLOCKS

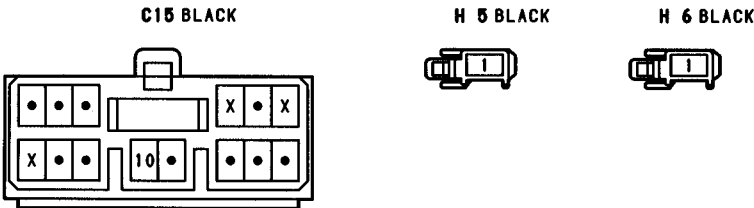
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

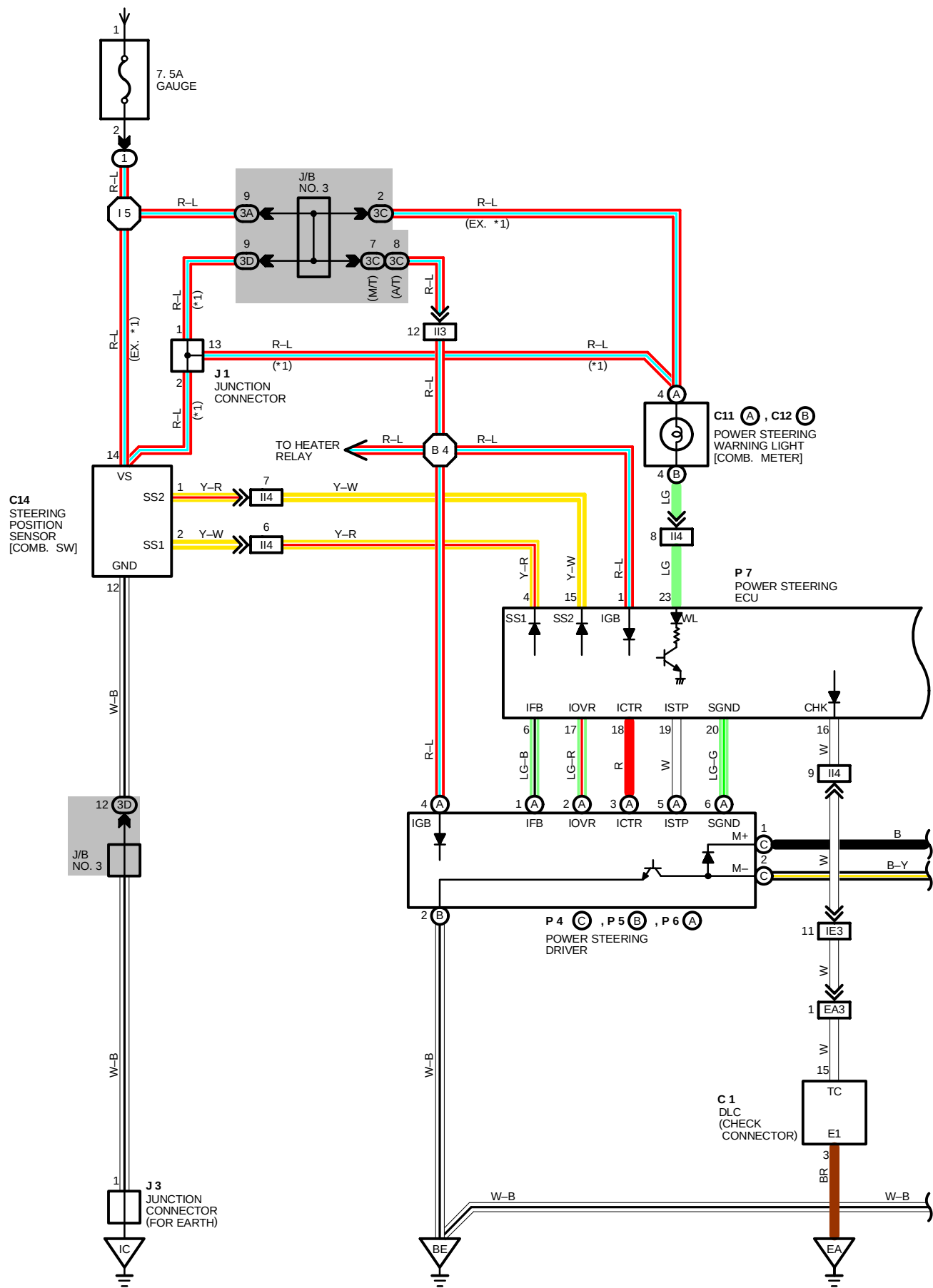
 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	36	LUGGAGE ROOM WIRE			



EHPS (ELECTRO HYDRAULIC POWER STEERING)

FROM POWER SOURCE SYSTEM (SEE PAGE 48)





EHPS (ELECTRO HYDRAULIC POWER STEERING)

SYSTEM OUTLINE

THE EHPS (ELECTRO HYDRAULIC POWER STEERING) SYSTEM FUNCTIONS TO CHANGE THE FORCE REQUIRED FOR STEERING MANEUVERS, AND THEREBY PROVIDE THE IDEAL STEERING FEELING FOR AT VEHICLE SPEEDS AND STEERING CONDITIONS. THIS IS DONE BY THE POWER STEERING ECU CONTROLLING THE HYDRAULIC PRESSURE ACTING UPON THE HYDRAULIC REACTION CHAMBER (LOCATED IN THE GEAR BOX CONTROL UNIT) BY REGULATING THE POWER STEERING MOTOR'S SPEED (AND HENCE THE AMOUNT OF FLUID FLOW).

EHPS OPERATION

WHEN THE IGNITION SWITCHED ON, STARTING CURRENT FLOWS FROM THE **GAUGE** FUSE TO **TERMINAL IGB** OF THE POWER STEERING ELECTRONIC CONTROL UNIT, **TERMINAL VS** OF THE STEERING POSITION SENSOR, AND **TERMINAL (A) 4** OF THE POWER STEERING DRIVER.

THE VEHICLE SPEED IS DETECTED AT THE SPEED SENSOR, AND SIGNALS ARE INPUT AS CONTROL SIGNALS TO **TERMINAL SPD** OF THE POWER STEERING ELECTRONIC CONTROL UNIT AND TO **TERMINALS SS1** AND **SS2** OF THE POWER STEERING ELECTRONIC CONTROL UNIT.

WHEN THE ENGINE IS STARTED, SIGNALS ARE INPUT TO **TERMINAL EFI** OF THE POWER STEERING ELECTRONIC CONTROL UNIT FROM THE ENGINE OF **TERMINAL PSCT** OF THE ENGINE AND ECT ECU. AS A RESULT, THE CURRENT APPLIED TO **TERMINAL IGB** OF THE POWER STEERING ECU FROM THE **GAUGE** FUSE FLOWS FROM **TERMINAL MRLY** OF THE POWER STEERING ECU → **TERMINAL (B) 1** OF THE POWER STEERING RELAY → **TERMINAL (B) 2** → **GROUND**, AND THE POWER STEERING RELAY IS SWITCHED ON. AS A RESULT, THE CURRENT APPLIED TO **TERMINAL (A) 1** OF THE POWER STEERING RELAY FROM THE **ABS** FUSE FLOWS FROM **TERMINAL (A) 2** OF THE POWER STEERING RELAY → **TERMINAL (B) 1** OF THE POWER STEERING DRIVER AND TO **TERMINAL (A) 1** OF THE POWER STEERING MOTOR.

IF THE VEHICLE SPEED IS LOW, THE SPEED OF THE POWER STEERING MOTOR IS INCREASED BY INCREASING THE VOLTAGE OF THE CURRENT THAT FLOWS FROM **TERMINAL (A) 1** OF THE POWER STEERING MOTOR TO **TERMINAL (A) 2** OF THE POWER STEERING MOTOR → **TERMINAL (B) 2** OF THE POWER STEERING DRIVER → **TERMINAL (C) 2** → **GROUND**, WITH THE RESULT THAT THE VOLUME OF FLOW OF THE POWER STEERING FLUID BECOMES GREATER, THUS PROVIDING A LIGHT STEERING FEELING.

WHEN THE VEHICLE SPEED IS HIGH, THE SPEED OF THE POWER STEERING MOTOR DECREASES AS A RESULT OF THE REDUCED VOLTAGE APPLIED TO THE POWER STEERING MOTOR, AND THUS THE VOLUME OF FLOW OF THE POWER STEERING FLUID IS REDUCED, SO THE STEERING FEELING IS MORE RESISTANT.

SERVICE HINTS

P 2 POWER STEERING ECU

- 1-GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON
- 12-GROUND : ALWAYS CONTINUITY
- 5-GROUND : **1** PULSE EACH **40** CM (DRIVER VEHICLE SLOWLY)

C14 STEERING POSITION SENSOR [COMB. SW]

- 14-GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON
- 12-GROUND : ALWAYS CONTINUITY

P 1 POWER STEERING DRIVER

- (A)4-GROUND : APPROX. **12** VOLTS WITH IGNITION SW ON
- (B)2-GROUND : ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	24 (5S-FE), 25 (3S-GTE)	E 6	24 (5S-FE)	P 7	27
C11	A 26	E 8	D 24	P 8	A 27
C12	B 26	J 3	26	P 9	B 27
C14	26	P 4	C 27	P10	B 27
E 6	A 25 (3S-GTE)	P 5	B 27	P11	A 27
E 6	B 24 (5S-FE)	P 6	A 27		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	21	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	30 (3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	30 (3S-GTE)	
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		

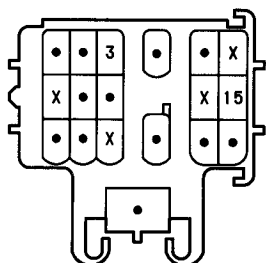
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
	30 (3S-GTE)	
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER

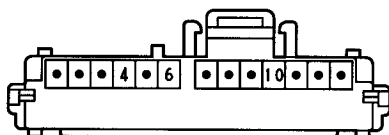
 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I5	34	COWL WIRE	B6	36	LUGGAGE ROOM WIRE
II10			B7		
B4	36	LUGGAGE ROOM WIRE			

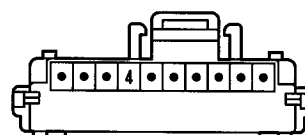
C 1 DARK GRAY



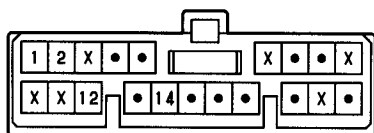
C11 (A) BLUE



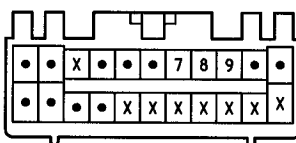
C12 (B) GRAY



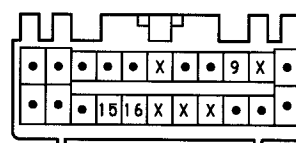
C14 BLACK



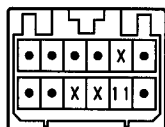
E 6 (A) DARK GRAY



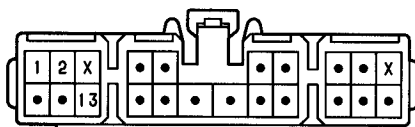
E 6 (B) DARK GRAY



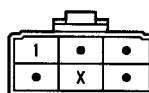
E 6 (C) DARK GRAY



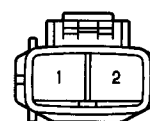
J 1



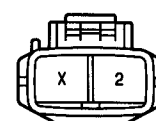
J 3



P 4 (C), P10 (B) GRAY



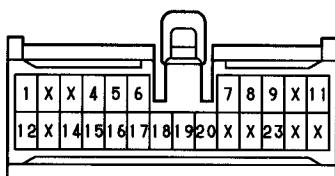
P 5 (B) GRAY



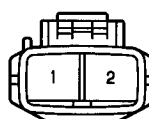
P 6 (A)



P 7



P 8 (A) GRAY



P 9 (B) GRAY



P11 (A) GRAY



*1 : (1) CANADA
(2) USA (A/T)
(3) USA (M/T) WITH CRUISE CONTROL, ABS,
POWER WINDOW OR WOOFER SPEAKER

15A RAD & CIG

1

2

GR

11

GR (*1)

3

3A

J/B NO. 3

3D

GR (*1)

8

22

J1 JUNCTION CONNECTOR

GR (*1)

8

IF1

GR

10

R19 REMOTE CONTROL MIRROR SW

LEFT

RIGHT

UP

DOWN

LEFT/UP

RIGHT/DOWN

OPERATION SW

LH

RH

LH

RH

SELECT SW

3

4

L

R

LG

2

5

LG

R-G

BR-R

8

7

W-B

FROM POWER WINDOW MAIN SW

B19

W-B

W-B

10

IF1

W-B

W-B

12

W-B

J3 JUNCTION CONNECTOR (FOR EARTH)

(USA)4

(CANADA)6

IB

IC

1

3

2

R18 REMOTE CONTROL MIRROR RH

LEFT/RIGHT

M

M

UP/DOWN

1

3

2

L

LG

BR-R

7

IF1

6

IF1

5

IF1

7

IJ1

6

IJ1

5

IJ1

1

3

2

LEFT/RIGHT

M

M

UP/DOWN

1

3

2

L

LG

BR-R

7

IF1

6

IF1

5

IF1

7

IJ1

6

IJ1

5

IJ1

1

3

2

LEFT/RIGHT

M

M

UP/DOWN

SERVICE HINTS

R19 REMOTE CONTROL MIRROR SW

- 10-GROUND : APPROX. 12 VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
 8-7 : CONTINUITY WITH OPERATION SW AT **UP** OR **LEFT** POSITION
 10-8 : CONTINUITY WITH OPERATION SW AT **DOWN** OR **RIGHT** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 1	26	R17	27	R19	27
J 3	26	R18	27		

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

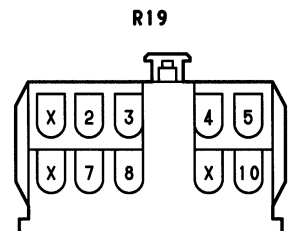
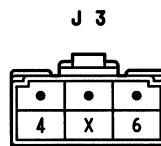
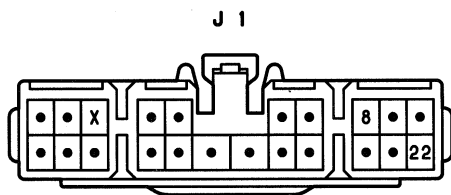
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

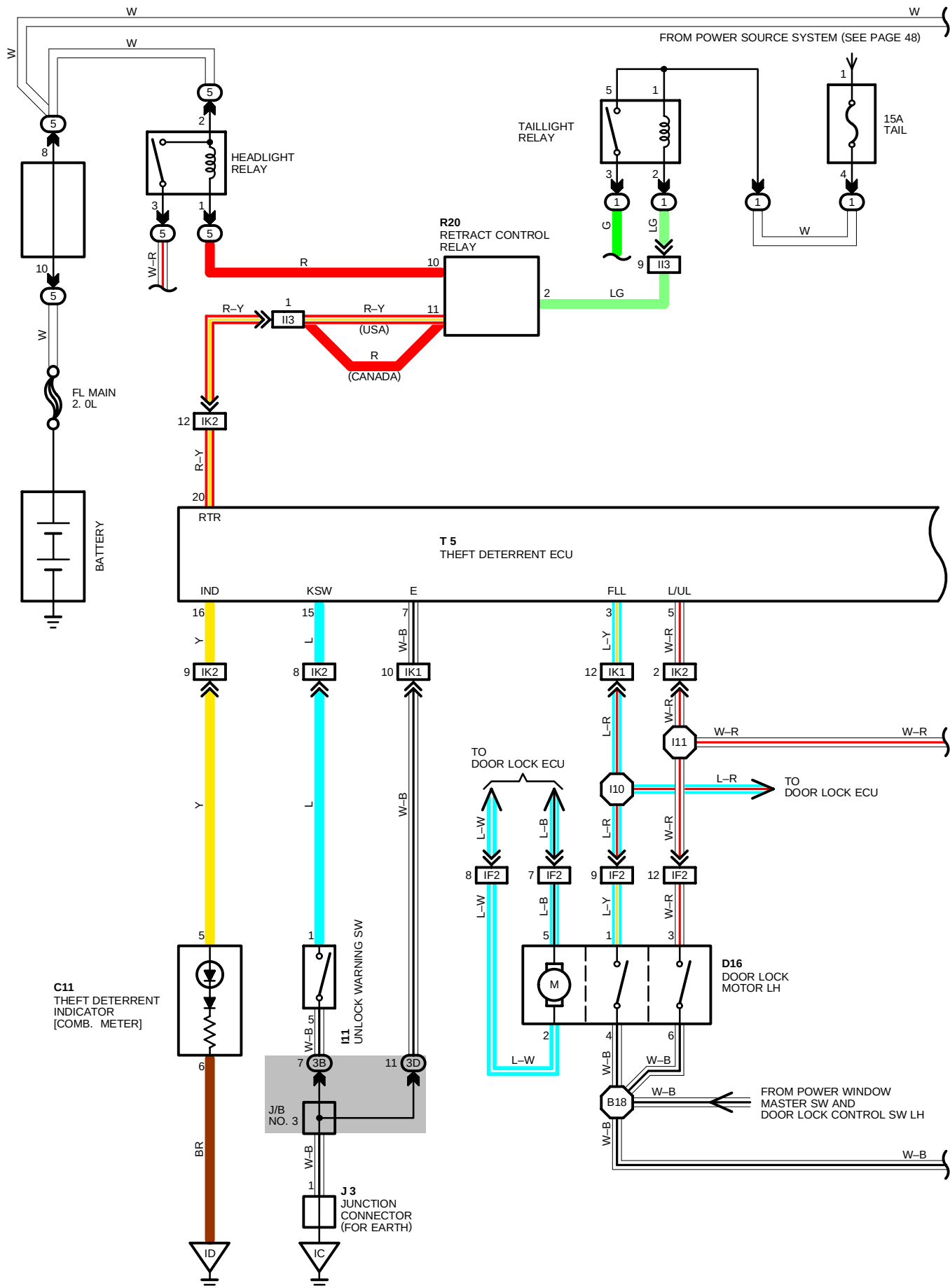
CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	34	COWL WIRE	B19	36	FRONT DOOR LH WIRE
B18	36	FRONT DOOR RH WIRE			



THEFT DETERRENT





140



SERVICE HINTS

T5 THEFT DETERRENT ECU

- 13-GROUND: 0 VOLTS WITH ENGINE HOOD OR FRONT OR REAR LUGGAGE COMPARTMENT DOOR OPEN
: APPROX. 12 VOLTS WITH ENGINE HOOD OR FRONT OR REAR LUGGAGE COMPARTMENT DOOR OPEN
- 16-GROUND: APPROX. 12 VOLTS WITHIN 30 SECONDS WITH SYSTEM ON
- 10-GROUND: 0 VOLTS WITH LH OR RH DOOR UNLOCKED WITH KEY
APPROX. 12 VOLTS WITH LH OR RH DOOR EXCEPT UNLOCKED WITH KEY
- 6-GROUND : 12 VOLTS WITH IGNITION SW AT ACC OR ON POSITION
0 VOLTS WITH IGNITION SW OFF
- 7-GROUND : ALWAYS CONTINUITY
- 14-GROUND: 0 VOLTS WITH LH OR RH DOOR OPEN
APPROX. 12 VOLTS WITH LH OR RH DOOR CLOSED
- 5-GROUND : 0 VOLTS WITH LH OR RH DOOR LOCK LEVER PULLED
APPROX. 12 VOLTS WITH LH OR RH DOOR LOCK LEVER PULLED
- 1-GROUND : 0 VOLTS WITH REAR LUGGAGE COMPARTMENT DOOR UNLOCKED WITH THE KEY
12 VOLTS WITH REAR LUGGAGE COMPARTMENT DOOR LOCKED WITH THE KEY
- 11-GROUND: 0 VOLTS WITH LH OR RH DOOR LOCKED WITH THE KEY
APPROX. 12 VOLTS WITH LH OR RH DOOR EXCEPT LOCKED WITH THE KEY
- 18-GROUND: APPROX. 12 VOLTS WITH SYSTEM ON AND IGNITION SW ST POSITION
0 VOLTS WITH SYSTEM OPERATED
- 17-GROUND: ALWAYS APPROX. 12 VOLTS

D10, D11 DOOR COURTESY SW

- 1-GROUND : CLOSED WITH LH OR RH DOOR OPEN

D14, D15 DOOR LOCK KEY LOCK AND UNLOCK SW

- 1-3 : CLOSED WITH KEY CYLINDER UNLOCKED WITH KEY
2-3 : CLOSED WITH KEY CYLINDER LOCKED WITH KEY

D16, D17 DOOR LOCK MOTOR

- 3-6 : CLOSED WITH DOOR LOCK LEVER PULLED

E 9 ENGINE HOOD COURTESY SW

- 1-2 : CLOSED WITH ENGINE HOOD OPEN

R 8 REAR LUGGAGE COMPARTMENT DOOR COURTESY SW

- 1-GROUND : CLOSED WITH REAR LUGGAGE COMPARTMENT DOOR OPEN

R 9 REAR LUGGAGE COMPARTMENT KEY UNLOCK SW

- 1-2 : CLOSED WITH REAR LUGGAGE COMPARTMENT DOOR UNLOCKED WITH THE KEY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	26	D17	27	N 1	24
C11	26	D18	27	R 8	27
D 4	26	E 9	24 (5S-FE), 25 (3S-GTE)	R 9	27
D10	27	F10	27	R20	27
D11	27	I11	26	S 6	24 (5S-FE), 25 (3S-GTE)
D14	27	J 1	A 26	T 1	24 (5S-FE), 25 (3S-GTE)
D15	27		B 26	T 5	27
D16	27	J 3	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3D		

THEFT DETERRENT

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	30 (3S-GTE)	
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	30 (3S-GTE)	
IE3	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	32	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IJ2	34	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK1	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK2		
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
	30 (3S-GTE)	
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BE	36	FRONT RIGHT FENDER
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

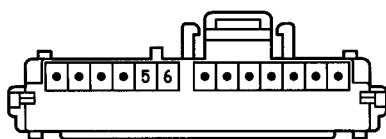
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28	ENGINE ROOM MAIN WIRE	B15	36	FRONT DOOR RH WIRE
I 2	34	COWL WIRE	B18	36	FRONT DOOR LH WIRE
I10			B19		
I11			B27	ENGINE ROOM MAIN WIRE	
I16			B28		
I18					

C 9



C11 BLUE



D 4, D18 BLACK



D10, D11



D14, D15 GRAY



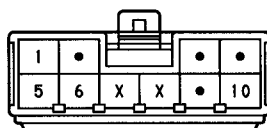
D16, D17



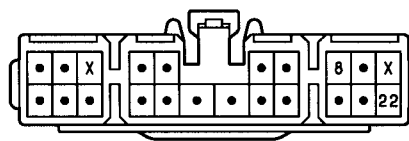
E 9, F10 BLACK



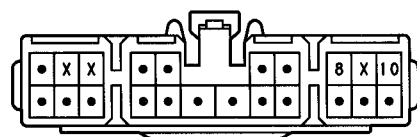
I11 BLACK



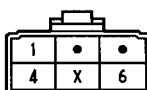
J 1 A



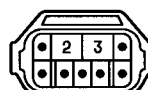
J 1 B



J 3



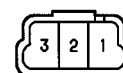
N 1 GRAY



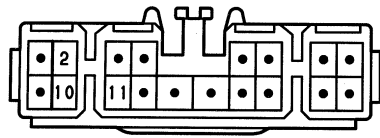
R 8 GRAY



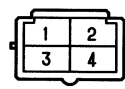
R 9



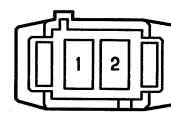
R20



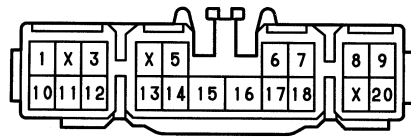
S 6



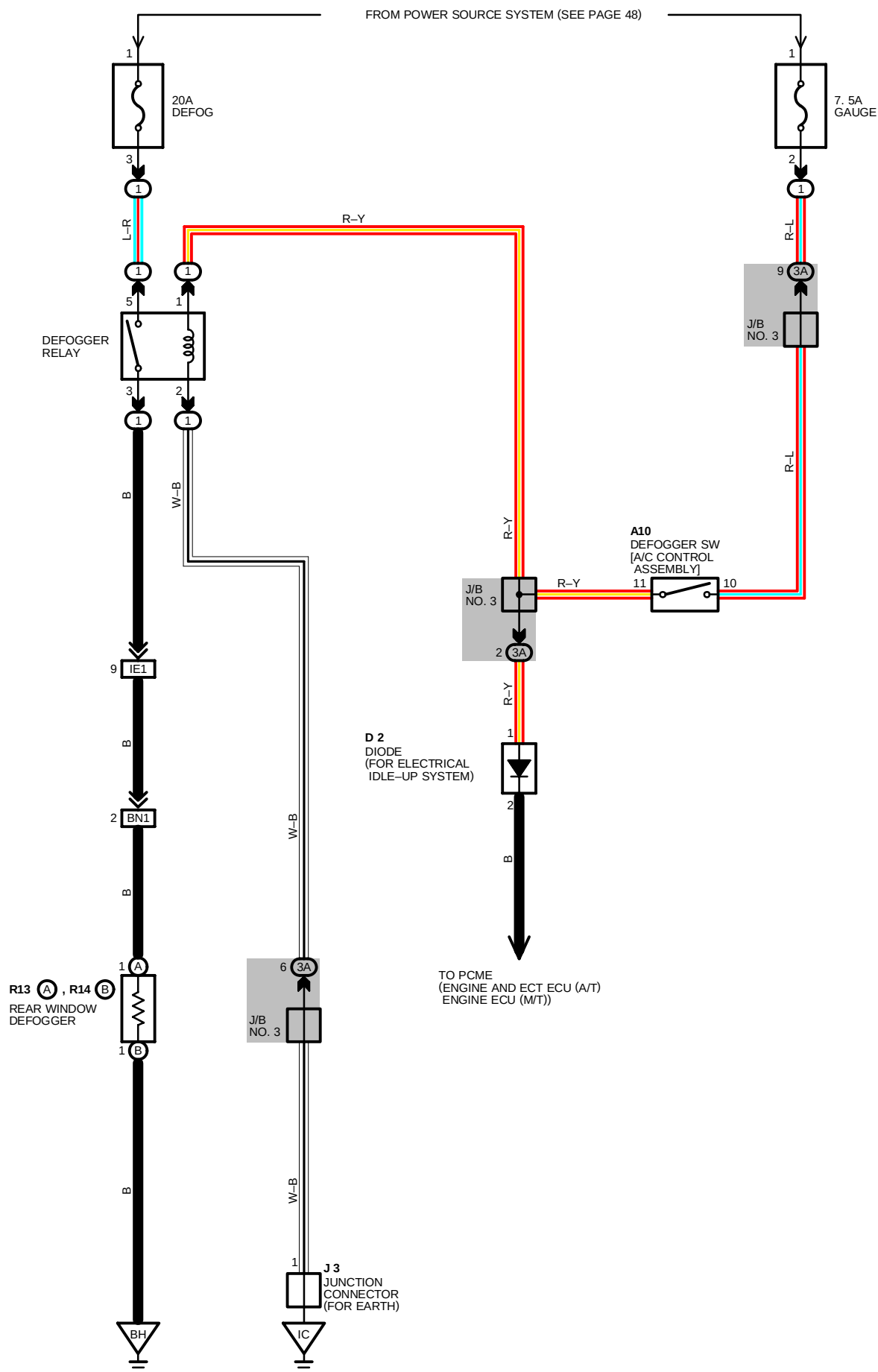
T 1 BLACK



T 5



REAR WINDOW DEFOGGER



SERVICE HINTS

DEFOGGER RELAY

4-1 : CLOSED WITH IGNITION SW ON AND DEFOGGER SW ON

A10 DEFOGGER SW [A/C CONTROL ASSEMBLY]

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

10-11 : CLOSED WITH DEFOGGER SW ON

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A10	26	J 3	26	R14	B 27
D 2	26	R13	A 27		

○ : RELAY BLOCKS

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

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

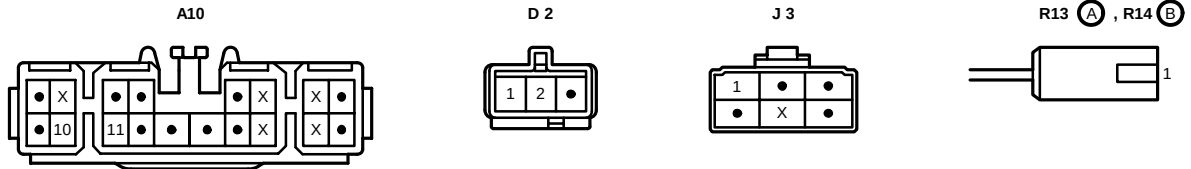
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

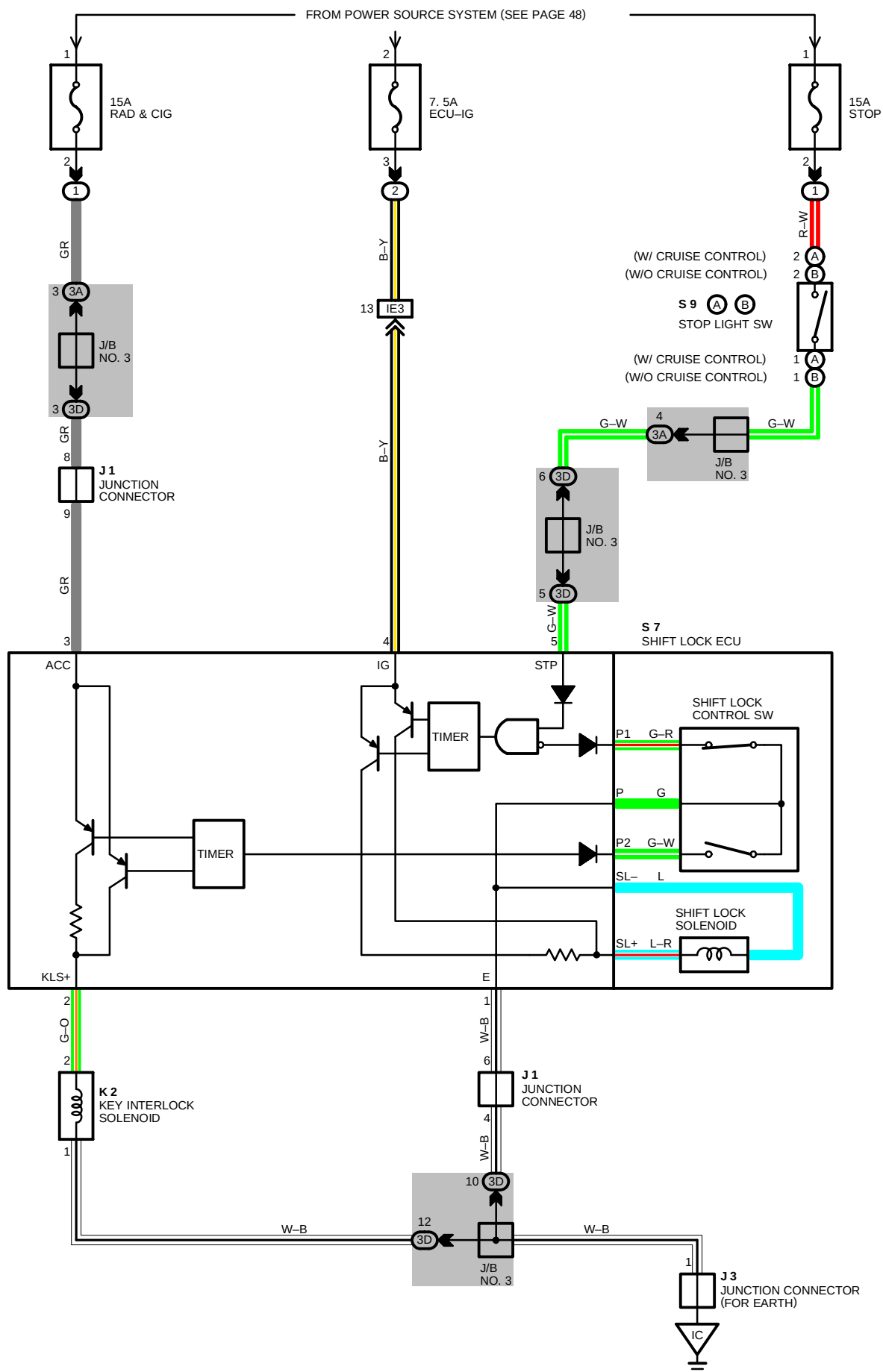
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
BN1	36	ROOF NO.3 WIRE AND ENGINE ROOM MAIN WIRE

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH
BH	36	UNDER THE RIGHT REAR PILLAR



SHIFT LOCK



SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED TO **ACC** POSITION THE CURRENT FROM THE **CIG RADIO** AND **CIG** FUSE FLOWS TO **TERMINAL 3** OF THE SHIFT LOCK ECU. IN THE **ON** POSITION, THE CURRENT FROM THE **ECU-IG** FUSE FLOWS TO **TERMINAL 4** OF THE ECU.

1. SHIFT LOCK MECHANISM

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

2. KEY INTERLOCK MECHANISM

WITH THE IGNITION SW IN **ON** OR **ACC** POSITION, WHEN THE SHIFT LEVER IS PUT IN "P" RANGE (NO CONTINUITY BETWEEN P2 AND P OF LOCK CONTROL SW), THE CURRENT FLOWING FROM **TERMINAL 2** OF THE ECU → KEY INTERLOCK SOLENOID IS CUT OFF. THIS CAUSES THE KEY INTERLOCK SOLENOID TO TURN OFF (LOCK LEVER DISENGAGES FROM LOCK POSITION) AND THE IGNITION KEY CAN BE TURNED FROM **ACC** TO **LOCK** POSITION. IF THE IGNITION IS LEFT IN **ACC** OR **ON** POSITION WITH THE SHIFT LEVER IN OTHER THAN "P" RANGE, THEN AFTER APPROX. ONE HOUR THE ECU OPERATES TO RELEASE THE LOCK.

SERVICE HINTS

S7 SHIFT LOCK ECU

- 3-GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
- 4-GROUND : APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION
- 1-GROUND : ALWAYS CONTINUITY
- 5-GROUND : APPROX. **12** VOLTS WITH BRAKE PEDAL DEPRESSED

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 1	26	K 2	26	S 9	A 26
J 3	26	S 7	26		B 26

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

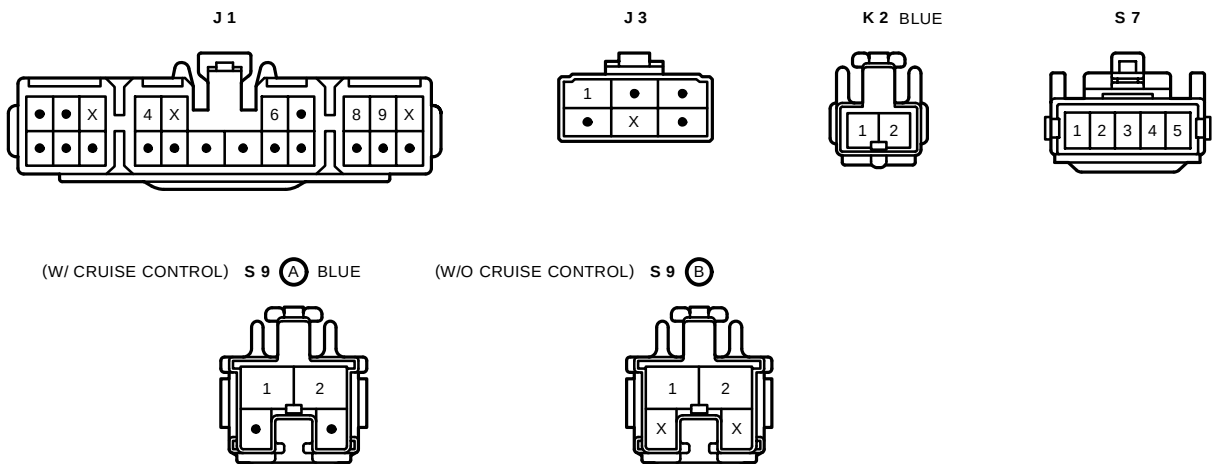
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

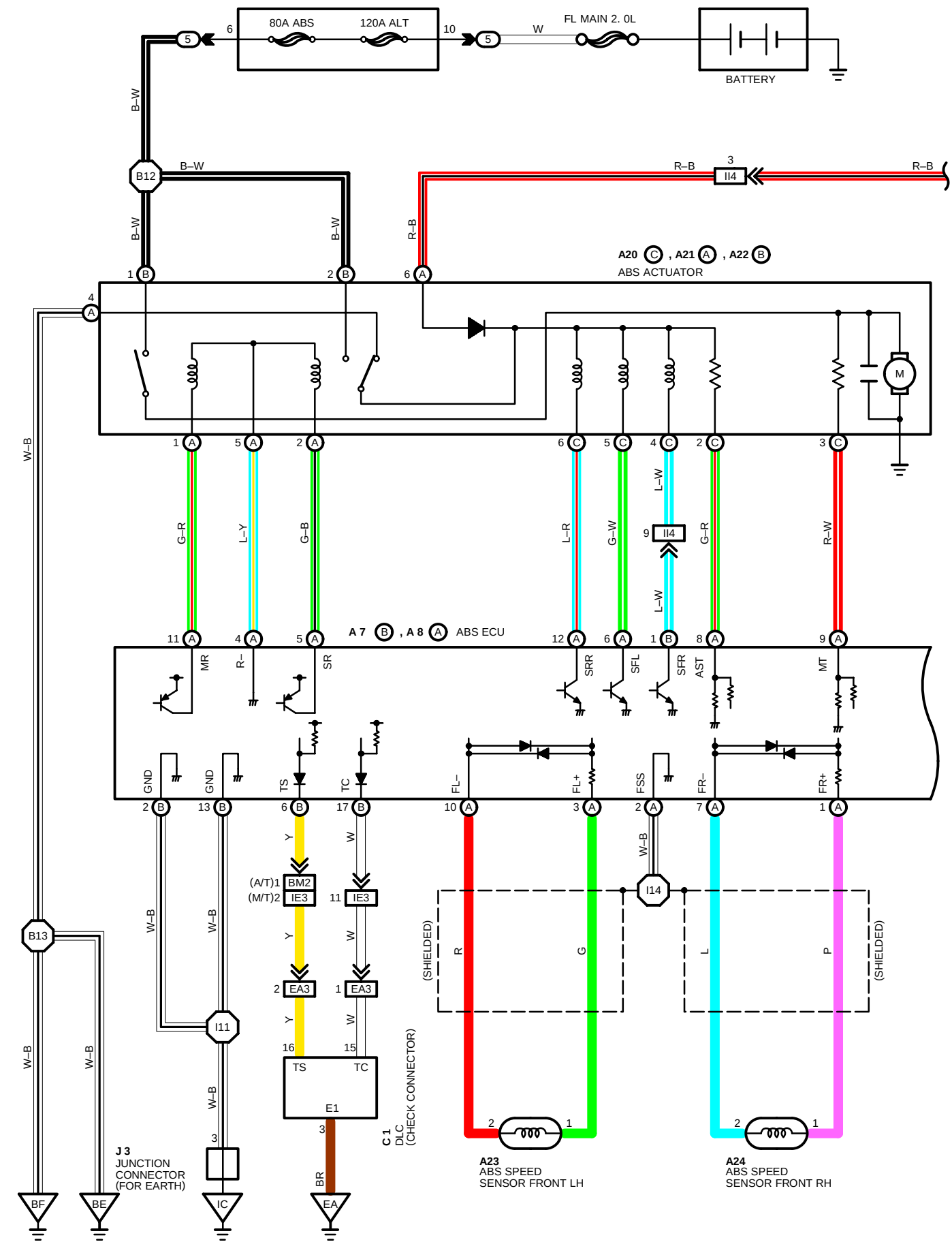
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE3	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH



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 THE 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.

2. SYSTEM OPERATION

DURING SUDDEN BRAKING THE ABS ECU, WHICH HAS SIGNALS INPUT FROM EACH SENSOR, CONTROLS THE CURRENT FLOWING TO THE SOLENOID INSIDE THE ACTUATOR AND LETS THE HYDRAULIC PRESSURE ACTING ON EACH WHEEL CYLINDER ESCAPE TO THE RESERVOIR.

THE PUMP INSIDE THE ACTUATOR IS ALSO OPERATING AT THIS TIME AND IT RETURNS THE BRAKE FLUID FROM THE RESERVOIR TO THE MASTER CYLINDER, THUS PREVENTING LOCKING OF THE VEHICLE WHEELS.

IF THE ECU JUDGES THAT THE HYDRAULIC PRESSURE ACTING ON THE WHEEL CYLINDER IS INSUFFICIENT, THE CURRENT ACTING ON THE SOLENOID IS CONTROLLED AND THE HYDRAULIC PRESSURE IS INCREASED. HOLDING OF THE HYDRAULIC PRESSURE IS ALSO CONTROLLED BY THE ECU IN THE SAME METHOD AS ABOVE. BY REPEATED PRESSURE REDUCTION, HOLDING AND INCREASE ARE REPEATED TO MAINTAIN VEHICLE STABILITY AND TO IMPROVE STEERABILITY DURING SUDDEN BRAKING.

SERVICE HINTS

A7(B), A 8(A) ABS ECU

(CONNECT THE ECU CONNECTOR)

(B) 6—GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION AND CHECK CONNECTOR **TS-E1** NOT CONNECTED

(B)10—GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION AND CHECK CONNECTOR **TS-E1** NOT CONNECTED

(B) 1—GROUND, **(A) 6**—GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION, ABS WARNING LIGHT GOES OFF

(A) 8—GROUND, **(A)12**—GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION, ABS WARNING LIGHT GOES OFF

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

(B) 2—GROUND: ALWAYS CONTINUITY

(B)13—GROUND: ALWAYS CONTINUITY

(B)11—GROUND: APPROX. **12** VOLTS WITH IGNITION SW AT **ON** POSITION

(B) 7—GROUND: APPROX. **12** VOLTS WITH BRAKE PEDAL DEPRESSED

(B)22—GROUND: ALWAYS APPROX. **12** VOLTS

(B)16—GROUND: APPROX. **12** VOLTS WITH ENGINE RUNNING AND PARKING BRAKE LEVER RELEASED

(DISCONNECT THE ECU CONNECTOR)

(B) 1 — **(A) 8** : APPROX. **6** K

(A) 6 — **(A) 8** : APPROX. **6** K

(A) 8 — **(A)12**: APPROX. **6** K

(A) 7 — **(A) 1** : APPROX. **0.8 – 1.3** K

(A) 3 — **(A)10** : APPROX. **0.8 – 1.3** K

(A) 4 — **(A) 5** : APPROX. **60 – 100** K

(A) 4 — **(A)11** : APPROX. **50 – 80** K

(B) 3 — **(B)14** : APPROX. **1.1 – 1.5** KK

(B)19 — **(B)20** : APPROX. **1.1 – 1.5** KK

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 1	24 (5S-FE), 25 (3S-GTE)	A22	B 27	C12	B 26
A 2	24 (5S-FE), 25 (3S-GTE)	A23	27	J 1	26
A 7	B 26	A24	27	J 3	26
A 8	A 26	B 5	27	P 1	26
A20	C 27	C1	24 (5S-FE), 25 (3S-GTE)	S 9	A 26
A21	A 27	C11	A 26	S 9	B 26

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
IE3	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II4	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IK1	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM2	36	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

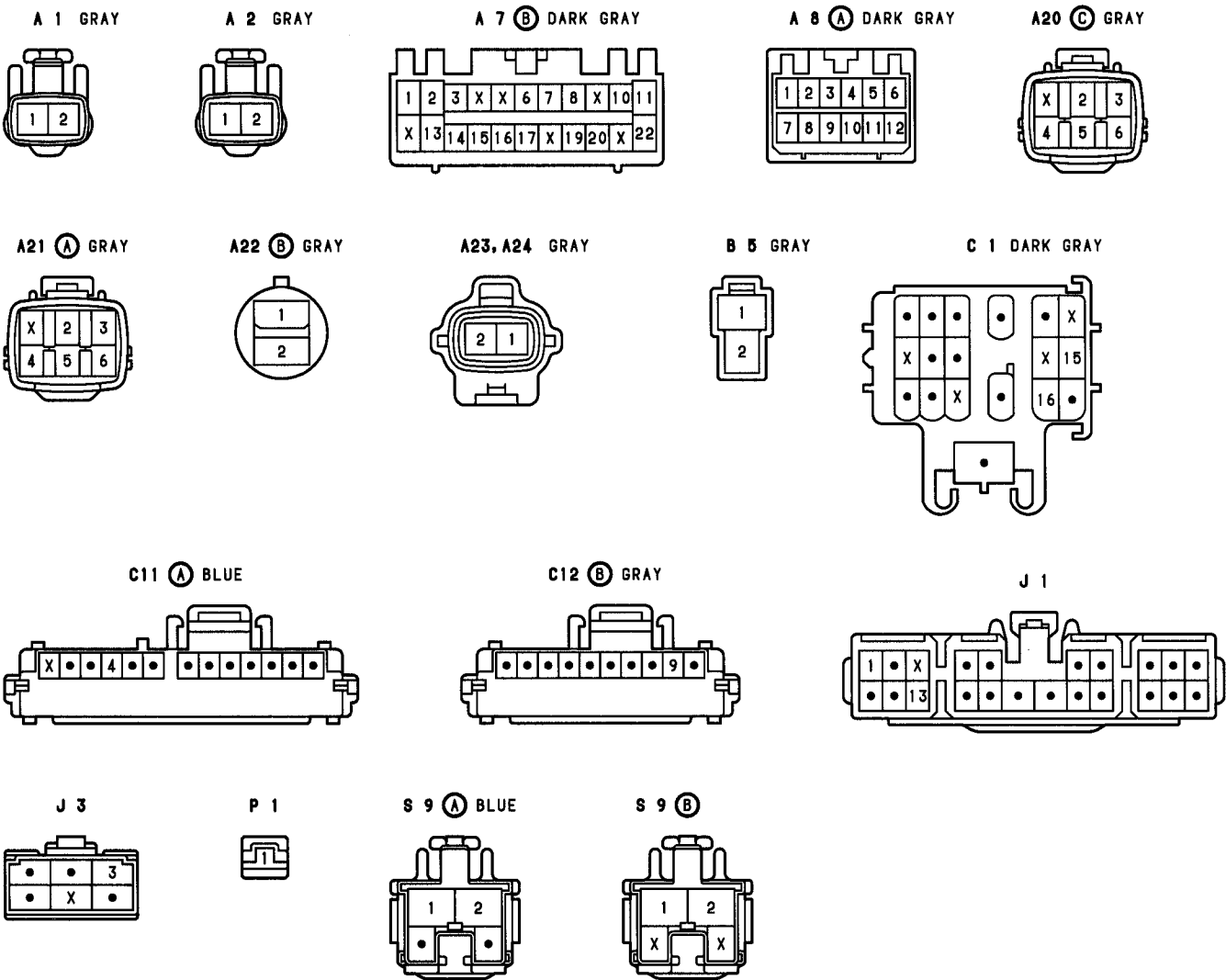
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE) 30 (3VZ-FE)	INTAKE MANIFOLD
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER

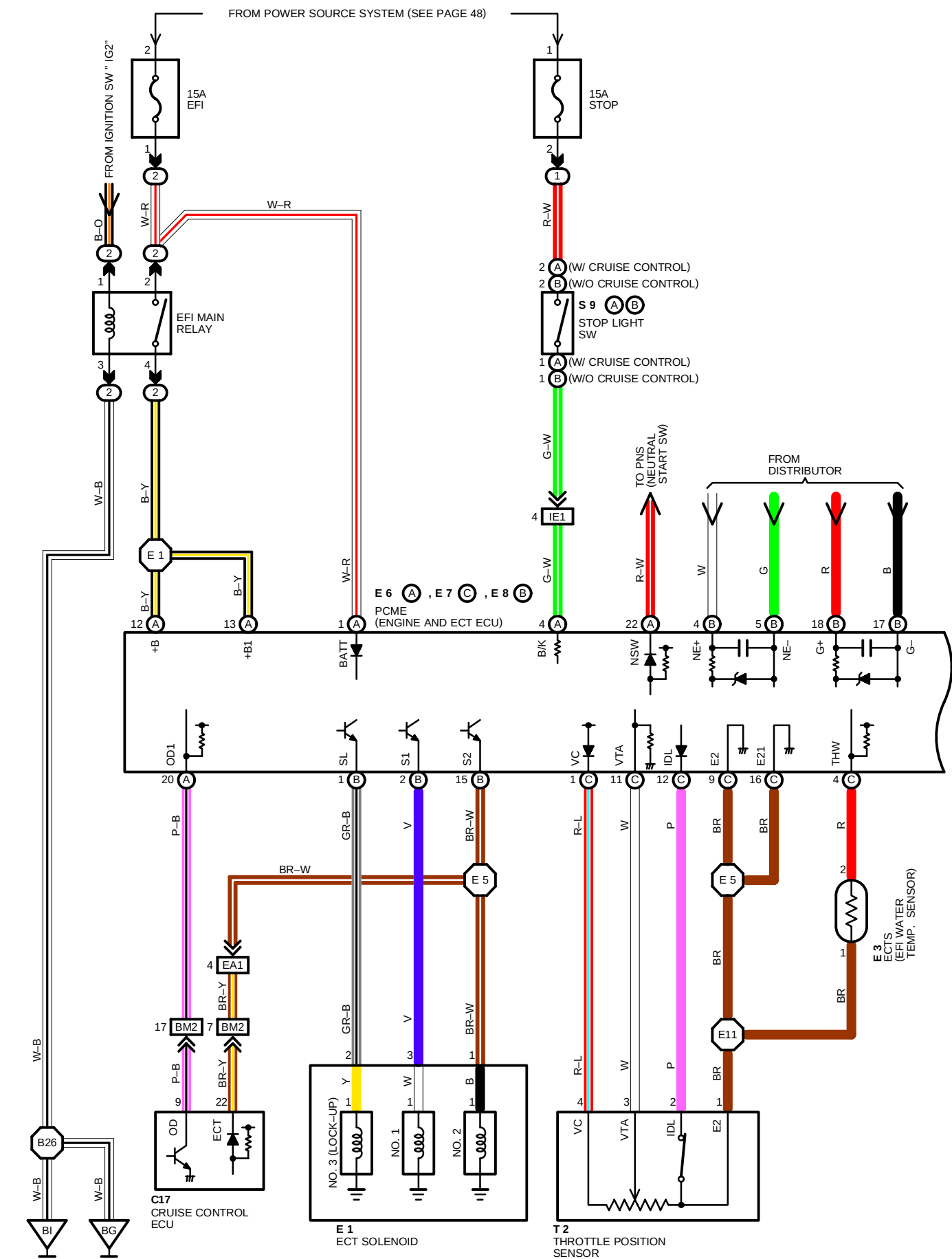
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	34	COWL WIRE	B11	36	LUGGAGE ROOM WIRE
II1			B12		
II4			B13		

ABS (ANTI-LOCK BRAKE SYSTEM)



ECT AND A/T INDICATOR



ECT AND A/T INDICATOR

SYSTEM OUTLINE

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

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

1. GEAR SHIFT OPERATION

DURING DRIVING, THE PCME (ENGINE AND ECT ECU) SELECTS THE SHIFT FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS, BASED ON INPUT SIGNALS FROM THE ECTS (EFI WATER TEMP. SENSOR) TO **TERMINAL THW** OF THE PCME (ENGINE AND ECT ECU), AND ALSO THE INPUT SIGNALS TO **TERMINAL SP2** OF THE PCME (ENGINE AND ECT ECU) FROM THE SPEED SENSOR DEVOTED TO THE ECT. CURRENT IS THEN OUTPUT TO THE ECT SOLENOIDS. WHEN SHIFTING TO 1ST SPEED, CURRENT FLOWS FROM **TERMINAL S1** OF THE PCME (ENGINE AND ECT ECU) → **TERMINAL 3** OF THE ECT SOLENOIDS → **GROUND**, AND CONTINUITY FLOW TO NO.1 SOLENOID CAUSES THE SHIFT.

FOR 2ND SPEED, CURRENT FLOWS FROM **TERMINAL S1** OF THE PCME (ENGINE AND ECT ECU) → **TERMINAL 3** OF THE ECT SOLENOIDS → **GROUND**, AND FROM **TERMINAL S2** OF THE PCME (ENGINE AND ECT ECU) → **TERMINAL 1** OF THE ECT SOLENOIDS → **GROUND**, AND CONTINUITY TO SOLENOIDS NO. 1 AND NO. 2 CAUSE THE SHIFT.

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

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

2. LOCK-UP OPERATION

WHEN THE PCME (ENGINE AND ECT ECU) JUDGES FROM EACH SIGNAL THAT LOCK-UP OPERATION CONDITIONS HAVE BEEN MET, CURRENT FLOWS FROM **TERMINAL SL** OF THE PCME (ENGINE AND ECT ECU) → **TERMINAL 2** OF THE ECT SOLENOIDS → **GROUND**, CAUSING A CONTINUITY TO THE TCC (LOCK-UP SOLENOID) AND CAUSING LOCK-UP OPERATION.

3. STOP LIGHT SW CIRCUIT

IF THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) WHEN DRIVING IN LOCK-UP CONDITION, A SIGNAL IS INPUT TO **TERMINAL B/K** OF THE PCME (ENGINE AND ECT ECU), THE PCME (ENGINE AND ECT ECU) OPERATES AND CONTINUITY TO THE TCC (LOCK-UP SOLENOID) IS CUT.

4. OVERDRIVE CIRCUIT

* O/D MAIN SW ON

WHEN THE O/D MAIN SW IS TURNED ON (O/D OFF INDICATOR LIGHT TURNS OFF), A SIGNAL IS INPUT TO **TERMINAL OD2** OF THE PCME (ENGINE AND ECT ECU) AND PCME (ENGINE AND ECT ECU) OPERATION CAUSES GEAR SHIFT WHEN THE CONDITIONS FOR OVERDRIVE ARE MET.

* O/D MAIN SW OFF

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

SERVICE HINTS

E 6(A), E 7(C), E 8(B) PCME (ENGINE AND ECT ECU)

- (A) 4- (B)14 : 10-14 VOLTS (BRAKE PEDAL IS DEPRESSED)
1 VOLTS OR LESS (BRAKE PEDAL IS RELEASED)
- (C) 4- (C) 9 : 0.3-0.8 VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C (176°F))
- (C)12- (C) 9 : 8-14 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
- (C)11- (C) 9 : 0.8-1.2 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
3.2-4.2 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
- (C) 1- (C) 9 : 4.5-5.5 VOLTS (IGNITION SW ON)
- (A)20- (B)14 : 10-14 VOLTS (IGNITION SW ON)
- (A) 7- (B)14 : 10-14 VOLTS (IGNITION SW ON AND O/D MAIN SW TURNED ON)
1 VOLTS OR LESS (IGNITION SW ON AND O/D MAIN SW TURNED OFF)
- (A) 9- (B)14 : 1 VOLTS OR LESS (IGNITION SW ON, CRUISE CONTROL SW OFF AND STARTING STILL)
0 ↔ 10-14 VOLTS REPEAT (IGNITION SW ON, CRUISE CONTROL SW OFF AND VEHICLE MOVING)
- (B)16- (B)14 : 1 VOLTS OR LESS (IGNITION SW ON AND STARTING STILL)
0 ↔ 4.5-5.5 VOLTS REPEAT (IGNITION SW ON AND VEHICLE MOVING)
- (A)22- (B)14 : 6.0-14 VOLTS (IGNITION SW ON AND PNS (NEUTRAL START SW) P OR N POSITION)
0-2.0 VOLTS (IGNITION SW ON AND EX. PNS (NEUTRAL START SW) P OR N POSITION)
- (B) 6- (B)14 : 10-14 VOLTS (IGNITION SW ON AND PNS (NEUTRAL START SW) 2 POSITION)
1 VOLTS OR LESS (IGNITION SW ON AND EX. PNS (NEUTRAL START SW) 2 POSITION)
- (B)19- (B)14 : 10-14 VOLTS (IGNITION SW ON AND PNS (NEUTRAL START SW) L POSITION)
1 VOLTS OR LESS (IGNITION SW ON AND EX. PNS (NEUTRAL START SW) L POSITION)
- (A)12- (A)13- (B)14 : 10-14 VOLTS (IGNITION SW ON)
- (A) 1- (B)14 : 10-14 VOLTS (ALL CONDITIONS)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	24 (5S-FE)	E 3	24 (5S-FE)	N 1	24 (5S-FE)
C10	B 26	E 6	A 24 (5S-FE)	O 4	26 (5S-FE)
C11	A 26	E 7	C 24 (5S-FE)	S 2	24 (5S-FE)
C13	26 (5S-FE)	E 8	B 24 (5S-FE)	S 9	A 26
C17	26	J 1	26		B 26
E 1	24 (5S-FE)	J 3	26	T 2	24 (5S-FE)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
EB1	28 (5S-FE)	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
BM2	36	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

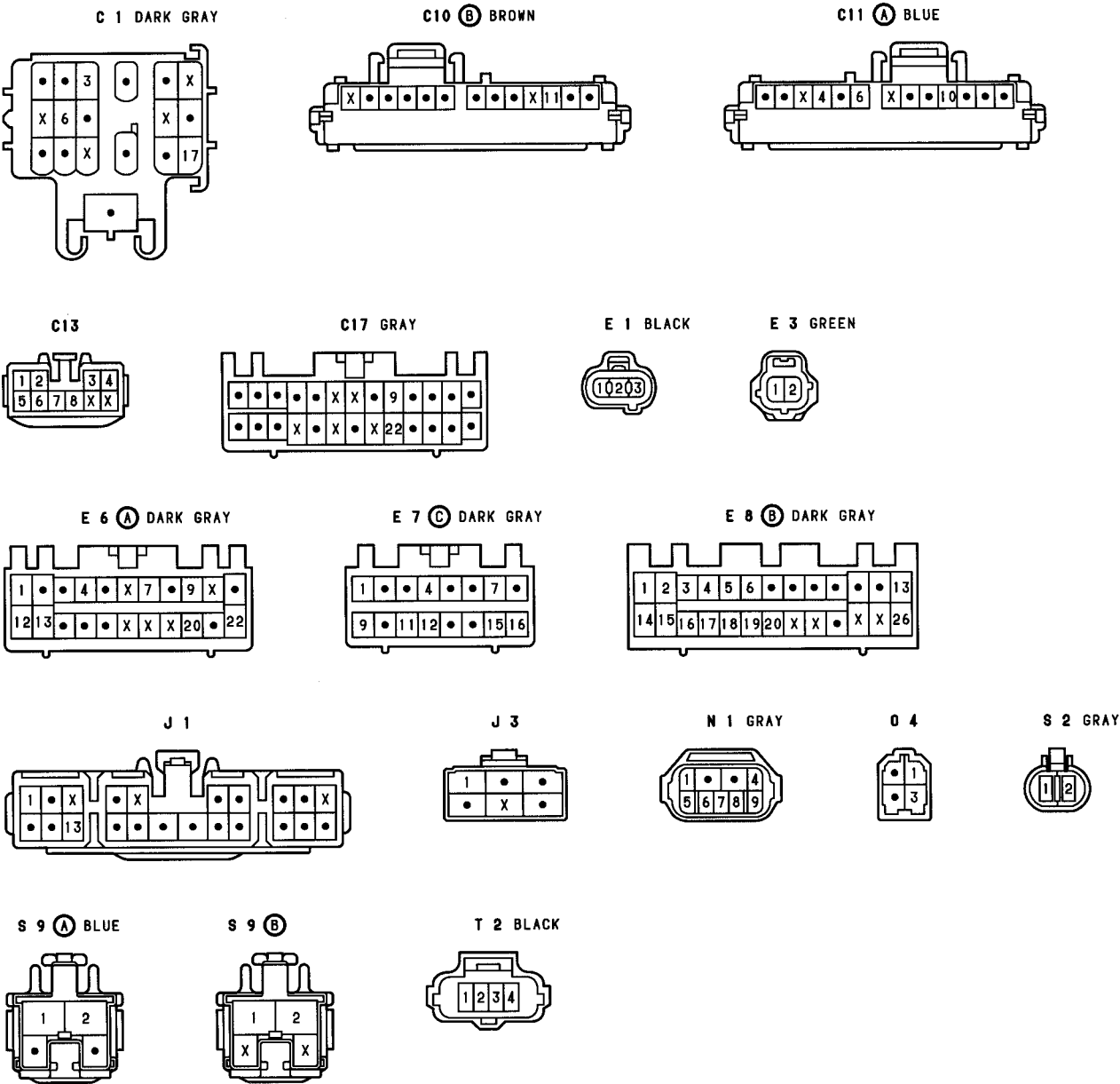
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	28 (5S-FE)	ENGINE ROOM MAIN WIRE	E16	28 (5S-FE)	ENGINE WIRE
E 3			I 3	34	COWL WIRE
E 5			I 4		
E11	28 (5S-FE)	ENGINE WIRE	B26	36	ENGINE ROOM MAIN WIRE

ECT AND A/T INDICATOR



CRUISE CONTROL

SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH **STOP** FUSE TO **TERMINAL 1** OF THE CRUISE CONTROL ECU AND **TERMINAL 2** OF STOP LIGHT SWITCH.

WITH THE IGNITION SWITCH TURNED ON, THE CURRENT FLOWS THROUGH THE **GAUGE** FUSE TO **TERMINAL (A)4** OF THE CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH **ECU-IG** FUSE FLOWS TO **TERMINAL 14** OF THE CRUISE CONTROL ECU.

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 4** OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT TO **TERMINAL 14** OF THE CRUISE CONTROL ECU FLOWS TO **TERMINAL 13** OF THE CRUISE CONTROL ECU → **GROUND**, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT THROUGH THE **GAUGE** FUSE FLOWS FROM **TERMINAL (A)4** OF THE CRUISE CONTROL INDICATOR LIGHT → **TERMINAL (B)11** → **TERMINAL 5** OF THE CRUISE CONTROL ECU → **TERMINAL 13** → **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP, INDICATING THAT 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. **40 KM/H, 25 MPH** TO **200 KM/H, 124 MPH**), A SIGNAL IS INPUT TO **TERMINAL 4** 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 20** OF THE CRUISE CONTROL ECU FROM THE COMBINATION METER, AND CONTROLS THE CRUISE CONTROL ACTUATOR TO MAINTAIN THE SET SPEED.

WHEN THE ACTUAL SPEED IS LOWER THAN THE SET SPEED, THE ECU CAUSES THE CURRENT TO THE CRUISE CONTROL ACTUATOR TO FLOW FROM **TERMINAL 12** → **TERMINAL 6** OF THE CRUISE CONTROL ACTUATOR → **TERMINAL 7** → **TERMINAL 11** 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 11** OF ECU → **TERMINAL 7** OF CRUISE CONTROL ACTUATOR → **TERMINAL 6** → **TERMINAL 12** 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 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**), AFTER CANCELING THE 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 THE FOLLOWING OPERATIONS OCCURS DURING CRUISE CONTROL OPERATION, THE MAGNETIC CLUTCH OF THE ACTUATOR TURNS OFF AND THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE AND THE CRUISE CONTROL IS RELEASED.

- * DEPRESSING THE CLUTCH PEDAL (CRUISE CONTROL CLUTCH SWITCH ON). "THE SIGNAL IS INPUT TO **TERMINAL 2** OF THE ECU" (M/T) SHIFT LEVER AT "N" RANGE (NEUTRAL START SWITCH ON). "SIGNAL INPUT TO **TERMINAL 2** OF THE ECU" (A/T)
- * DEPRESSING THE BRAKE PEDAL (STOP LIGHT SWITCH ON). "SIGNAL INPUT TO **TERMINAL 1** OF ECU"
- * PULLED UP THE PARKING BRAKE LEVER (PARKING BRAKE SWITCH ON). "SIGNAL INPUT TO **TERMINAL 3** OF THE ECU"
- * PUSH THE CANCEL SWITCH (CANCEL SWITCH ON). "SIGNAL INPUT TO **TERMINAL 18**."

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 THE 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 TRANSISTOR DRIVING MOTOR AND/OR MAGNETIC CLUTCH.
- * WHEN THE CURRENT CONTINUES TO FLOW TO THE MOTOR IN SIDE THE ACTUATOR, IN THE THROTTLE VALVE "OPEN" DIRECTION
- * OPEN CIRCUIT IN 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 OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED AND THE CRUISE CONTROL IS RELEASED. (THE POWER OF MAGNETIC CLUTCH IS CUT OFF UNTIL THE SET SWITCH IS "ON" AGAIN.)

- * WHEN THE VEHICLE SPEED FAILS BELOW THE MINIMUM LIMIT, APPROX. **40KM/H (25MPH)**
- * WHEN THE VEHICLE SPEED FALLS MORE THAN **16KM/H (10MPH)** 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.

- * OPEN CIRCUIT FOR **TERMINAL 16** OF CRUISE CONTROL ECU.

SERVICE HINTS

C 5 CRUISE CONTROL ACTUATOR

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

C14 CRUISE CONTROL SW [COMB. SW]

- 15-19 : CONTINUITY WITH MAIN SW ON
- 5-19 : APPROX. **418 K** WITH CANCEL SW ON
APPROX. **68 K** WITH RESUME/ACCEL SW ON
APPROX. **198 K** WITH SET/COAST SW ON

C17 CRUISE CONTROL ECU

- 14-GROUND: APPROX. **12 VOLTS** WITH IGNITION SW AT **ON** POSITION
- 1-GROUND : ALWAYS APPROX. **12 VOLTS**
- 3-GROUND : CONTINUITY WITH PARKING BRAKE LEVER PULLED UP (ONE OF THE CANCEL SW) OR BRAKE FLUID LEVEL SW ON
- 20-GROUND: PULSE EACH **40 CM** (DRIVER VEHICLE SLOWLY)
- 18-GROUND: APPROX. **418 K** WITH CANCEL SW ON IN CONTROL SW
APPROX. **68 K** WITH RES/ACC SW ON IN CONTROL SW
APPROX. **198 K** WITH SET/COAST SW ON IN CONTROL SW
- 13-GROUND: ALWAYS CONTINUITY
- 2-GROUND : CONTINUITY WITH CLUTCH PEDAL DEPRESSED (M/T)
CONTINUITY WITH SHIFT LEVER AT "P" OR "N" RANGE (A/T)
- 4-GROUND : CONTINUITY WITH CRUISE CONTROL MAIN SW ON

CRUISE CONTROL

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	24 (5S-FE), 25 (3S-GTE)	C17	26	J 3	26
C 5	24 (5S-FE), 25 (3S-GTE)	E 6	D 24 (5S-FE)	P 1	26
C10	B 26	E 7	A 25 (3S-GTE)	S 1	24
C11	A 26		C 24 (5S-FE)	S 9	26
C14	26	E 8	B 24 (5S-FE)		
C16	26 (3S-GTE M/T)	J 1	26		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

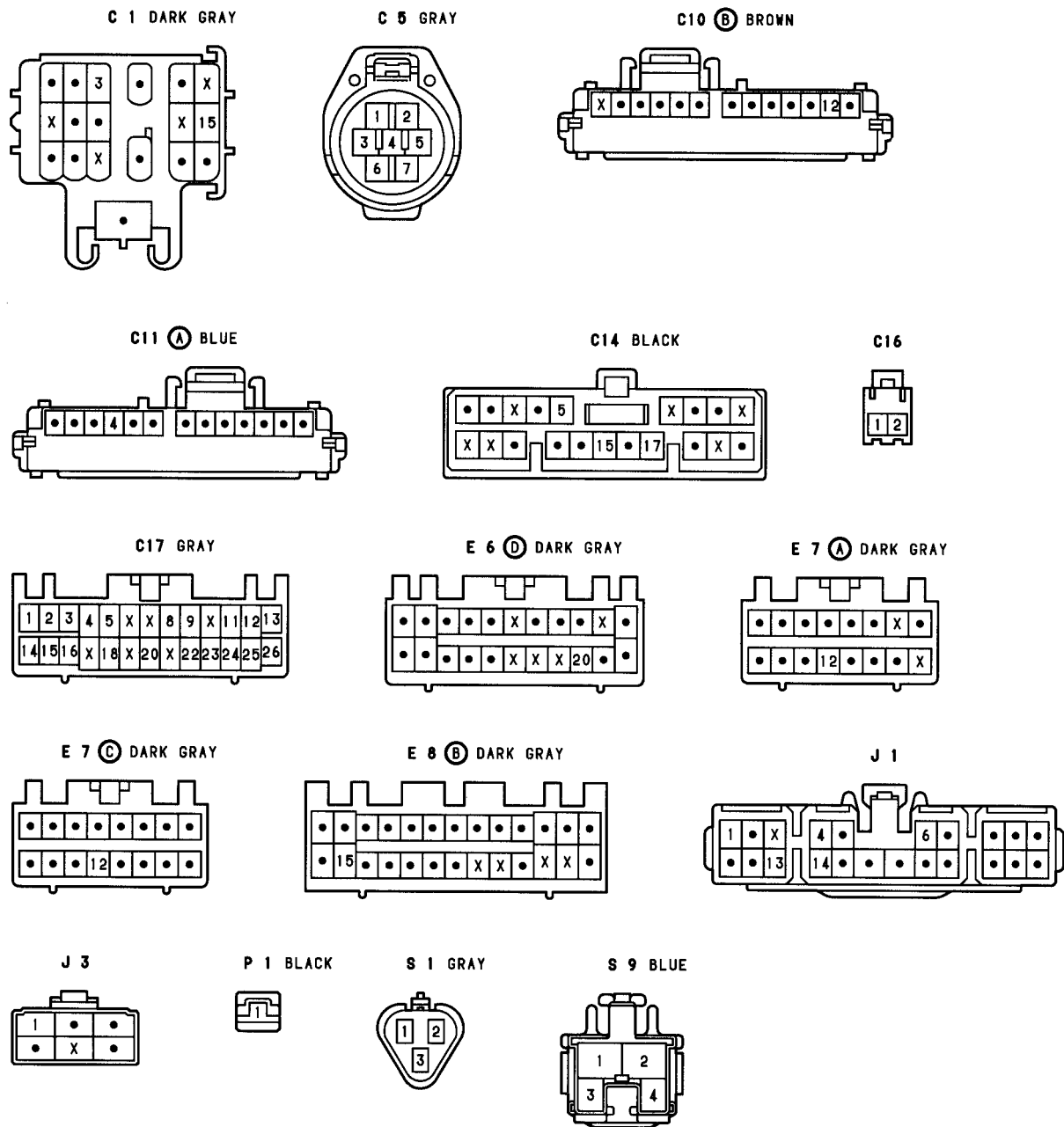
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
IE4		
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK1	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM2	36	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

: GROUND POINTS

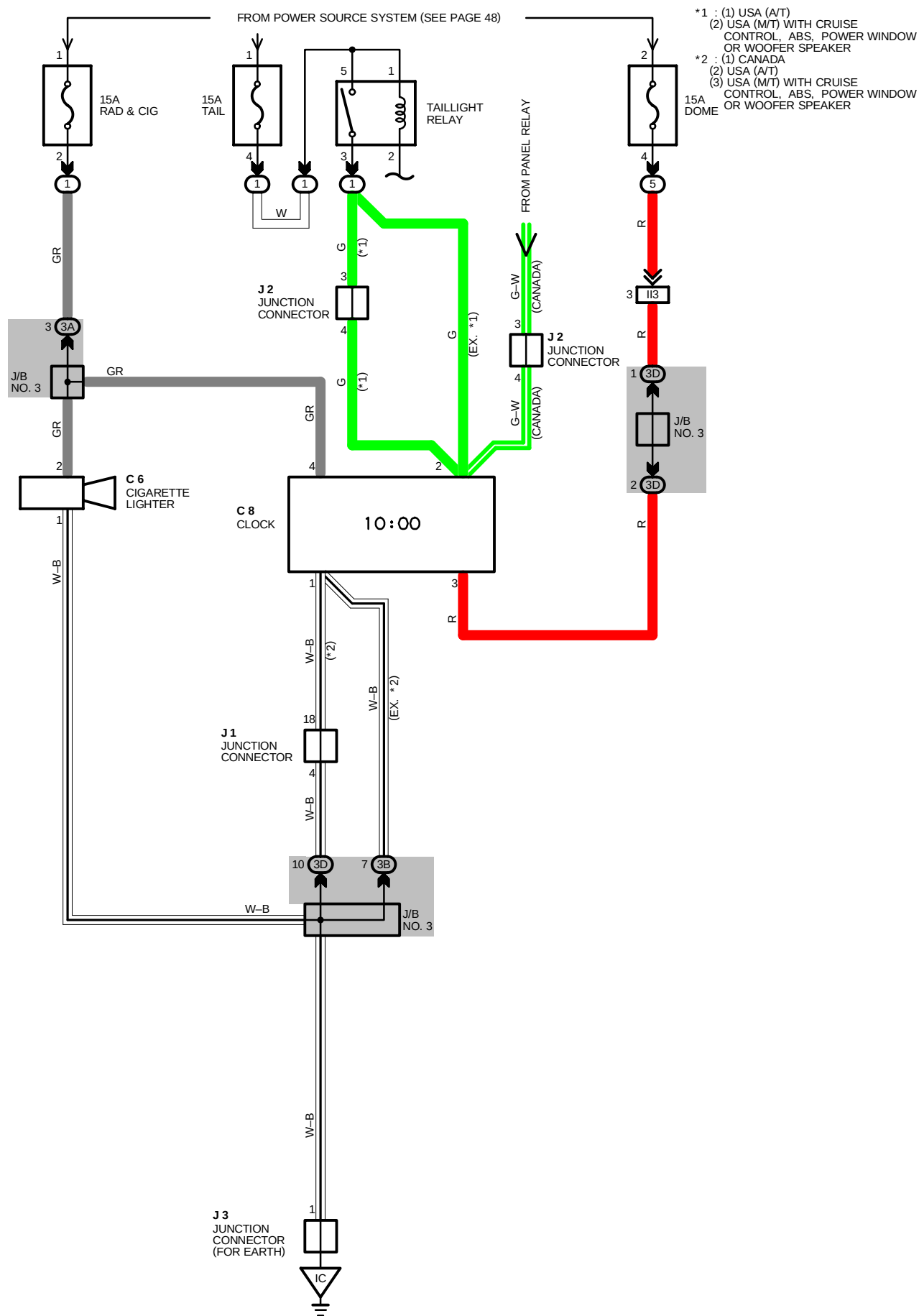
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE) 30 (3S-GTE)	INTAKE MANIFOLD
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 5	28 (5S-FE)	ENGINE WIRE	I 5	34	COWL WIRE
E10	30 (3S-GTE)		I 9		
E18	28 (5S-FE)		I10		



CIGARETTE LIGHTER AND CLOCK



SERVICE HINTS

C 6 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 6	26	J 1	26	J 3	26
C 8	26	J 2	26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II3	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH

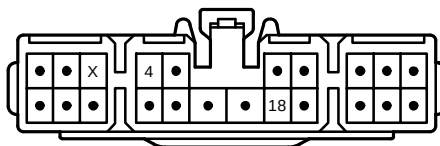
C 6



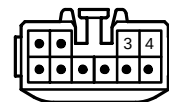
C 8



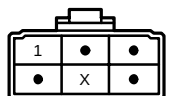
J 1



J 2



J 3



*1 : (1) CANADA
(2) USA (A/T)
(3) USA (M/T) WITH CRUISE CONTROL, ABS,
POWER WINDOW OR WOOFER SPEAKER



SERVICE HINTS

A27(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
A27	27	R 1	A 26		
J 1	26	R 2	B 26		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

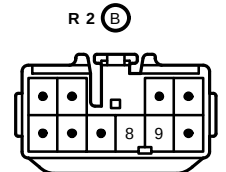
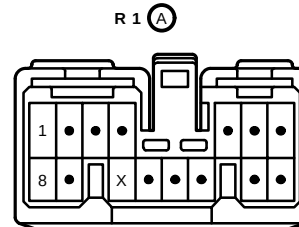
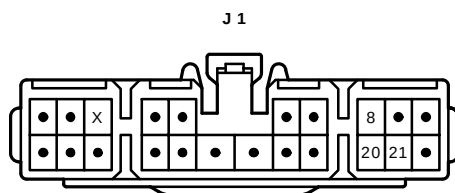
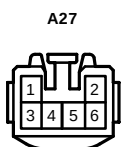
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

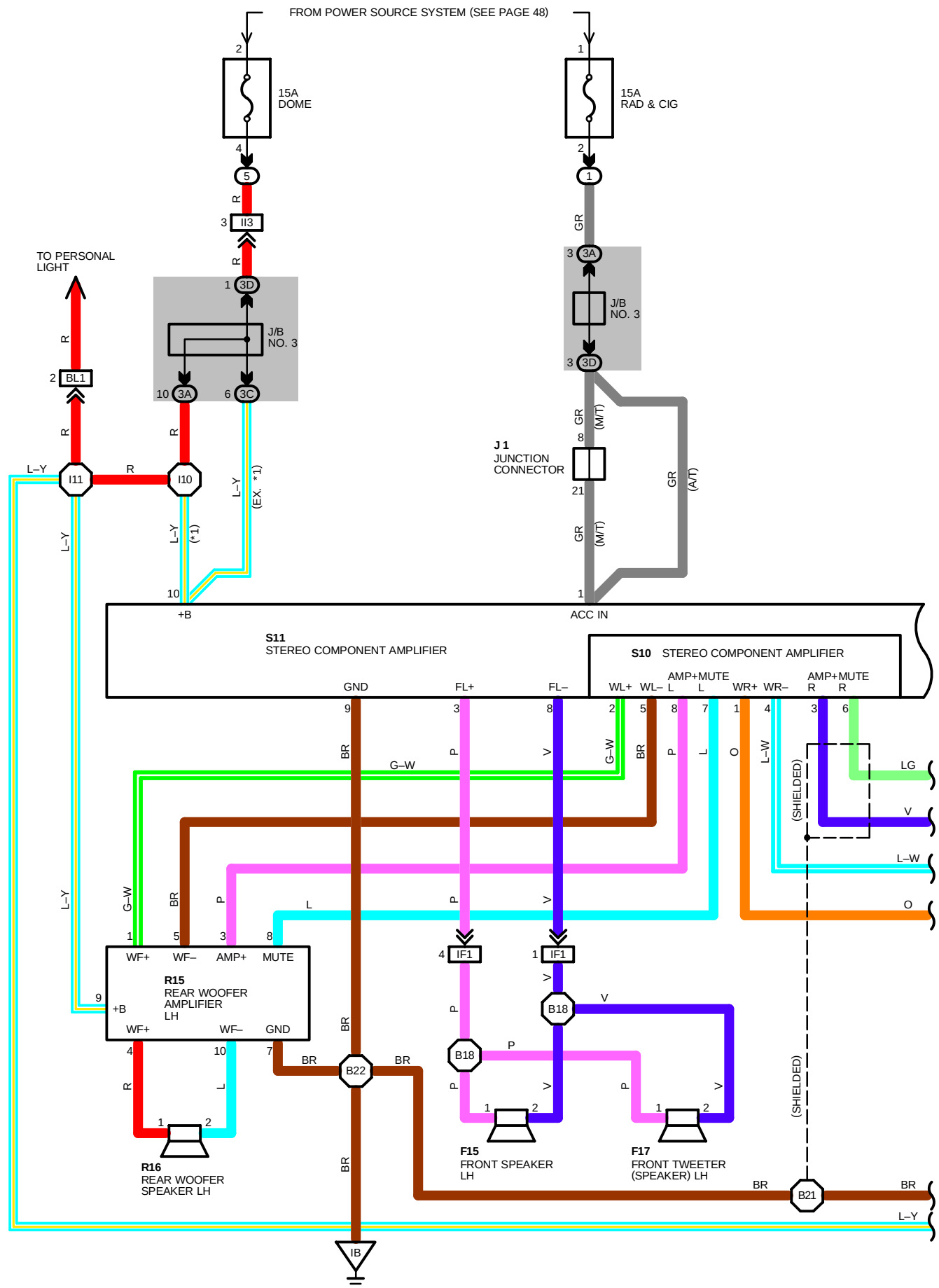
CODE	SEE PAGE	GROUND POINTS LOCATION
BI	36	BACK PANEL CENTER
BG	36	UNDER THE LEFT CENTER PILLAR

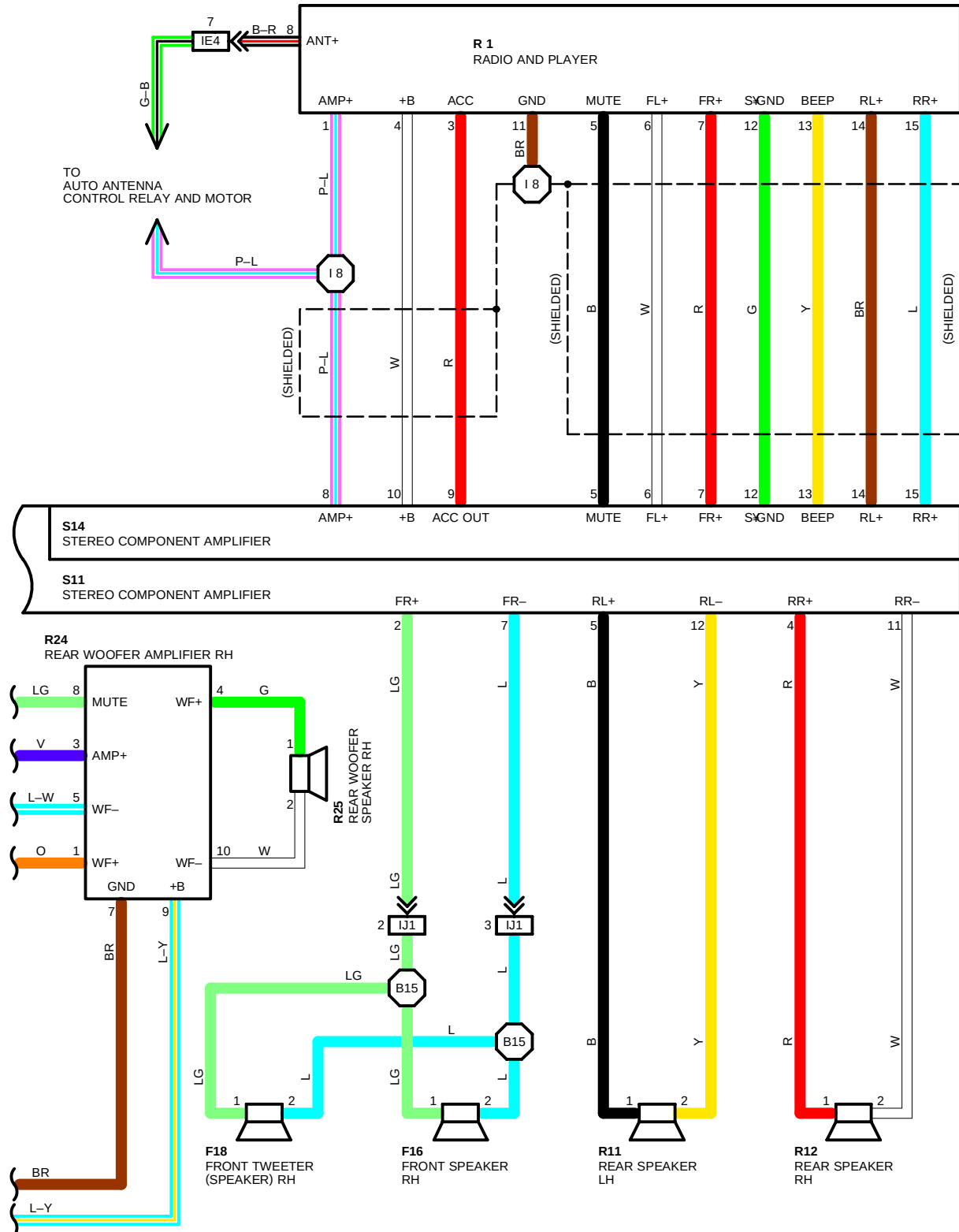
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 8	34	COWL WIRE	B28	36	ENGINE ROOM MAIN WIRE



RADIO AND PLAYER (w/ WOOFER SPEAKER)





RADIO AND PLAYER (w/ WOOFER SPEAKER)

SERVICE HINTS

S11 STEREO COMPONENT AMPLIFIER

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

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F15	27	R 1	26	R24	27
F16	27	R11	27	R25	27
F18	27	R12	27	S10	27
F18	27	R15	27	S11	27
J 1	26	R16	27	S14	27

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE4	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
I13	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL

: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 8	34	COWL WIRE	B18	36	FRONT DOOR RH WIRE
I10			B21	36	COWL WIRE
I11			B22		
B15	36	FRONT DOOR LH WIRE			

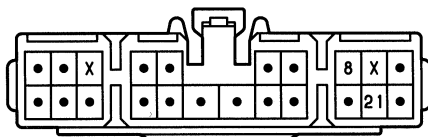
F15, F16 GRAY



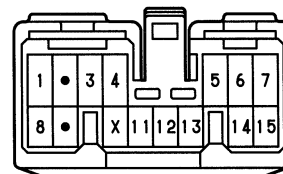
F17, F18



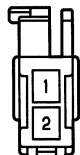
J 1



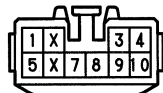
R 1



R11, R12, R16, R25



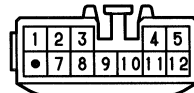
R15, R24



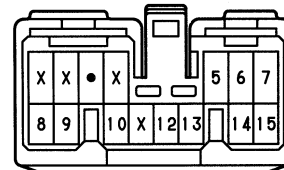
S10 ORANGE



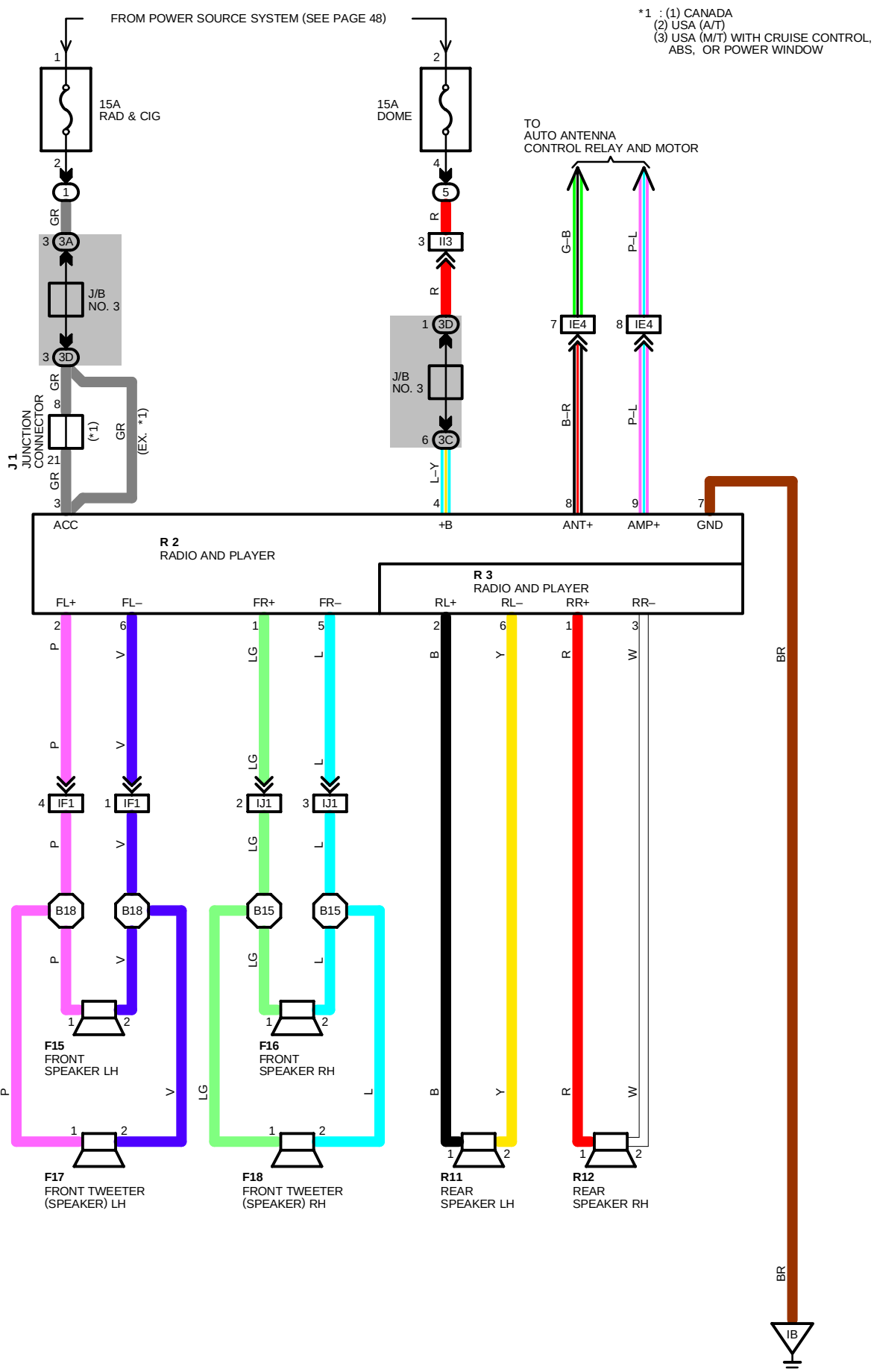
S11 BLUE



S14



RADIO AND PLAYER (w/o WOOFER SPEAKER)



SERVICE HINTS

R 2 RADIO AND PLAYER

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F15	27	F18	27	R 3	26
F16	27	J 1	26	R11	27
F17	27	R 2	26	R12	27

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE4	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	32	LEFT KICK PANEL

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B15	36	FRONT DOOR RH WIRE	B18	36	FRONT DOOR RH WIRE

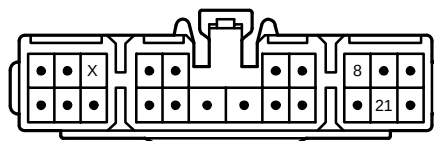
F15, F16 GRAY



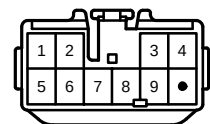
F17, F18



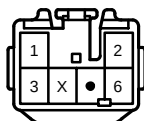
J 1



R 2



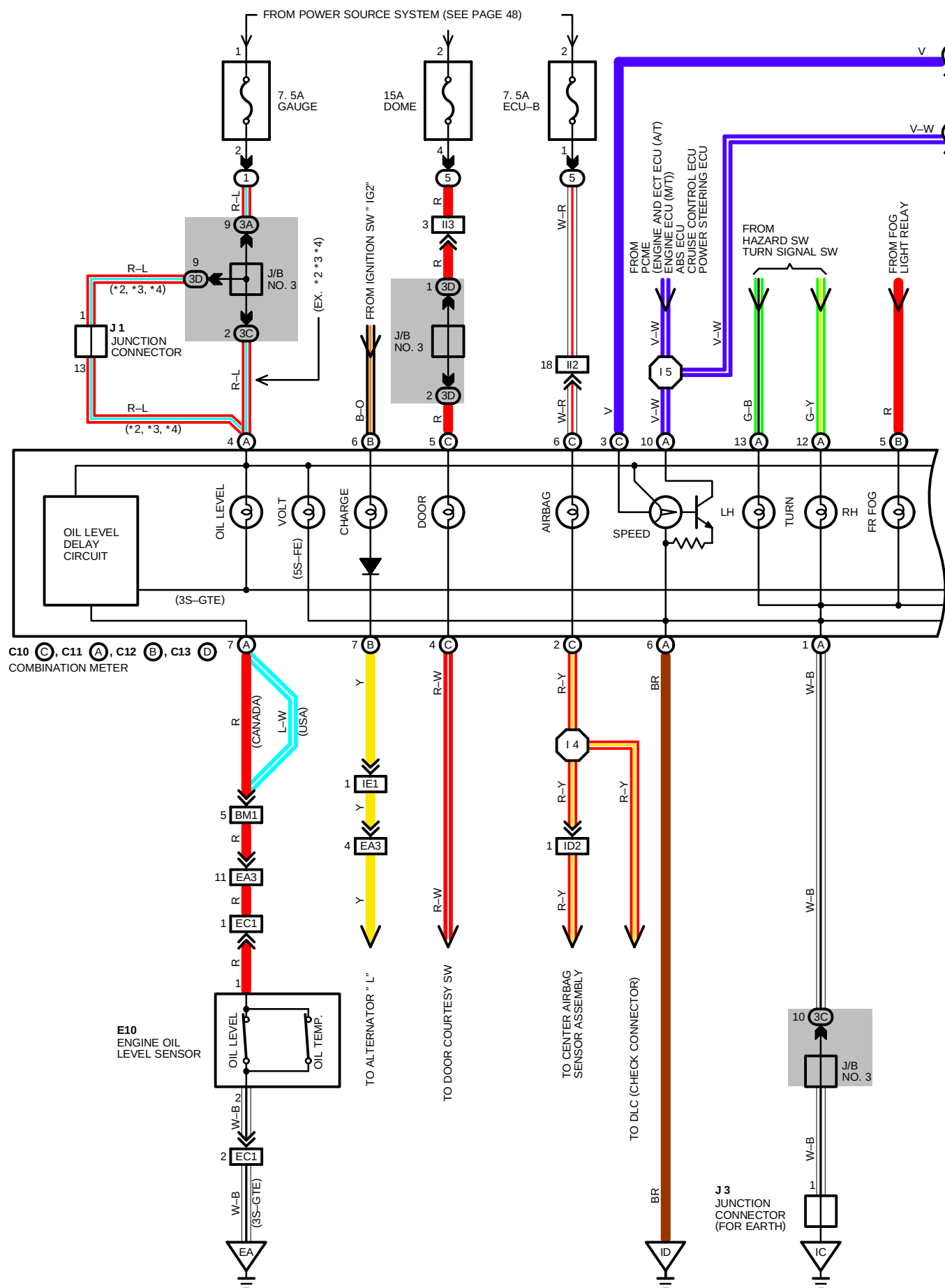
R 3



R11, R12

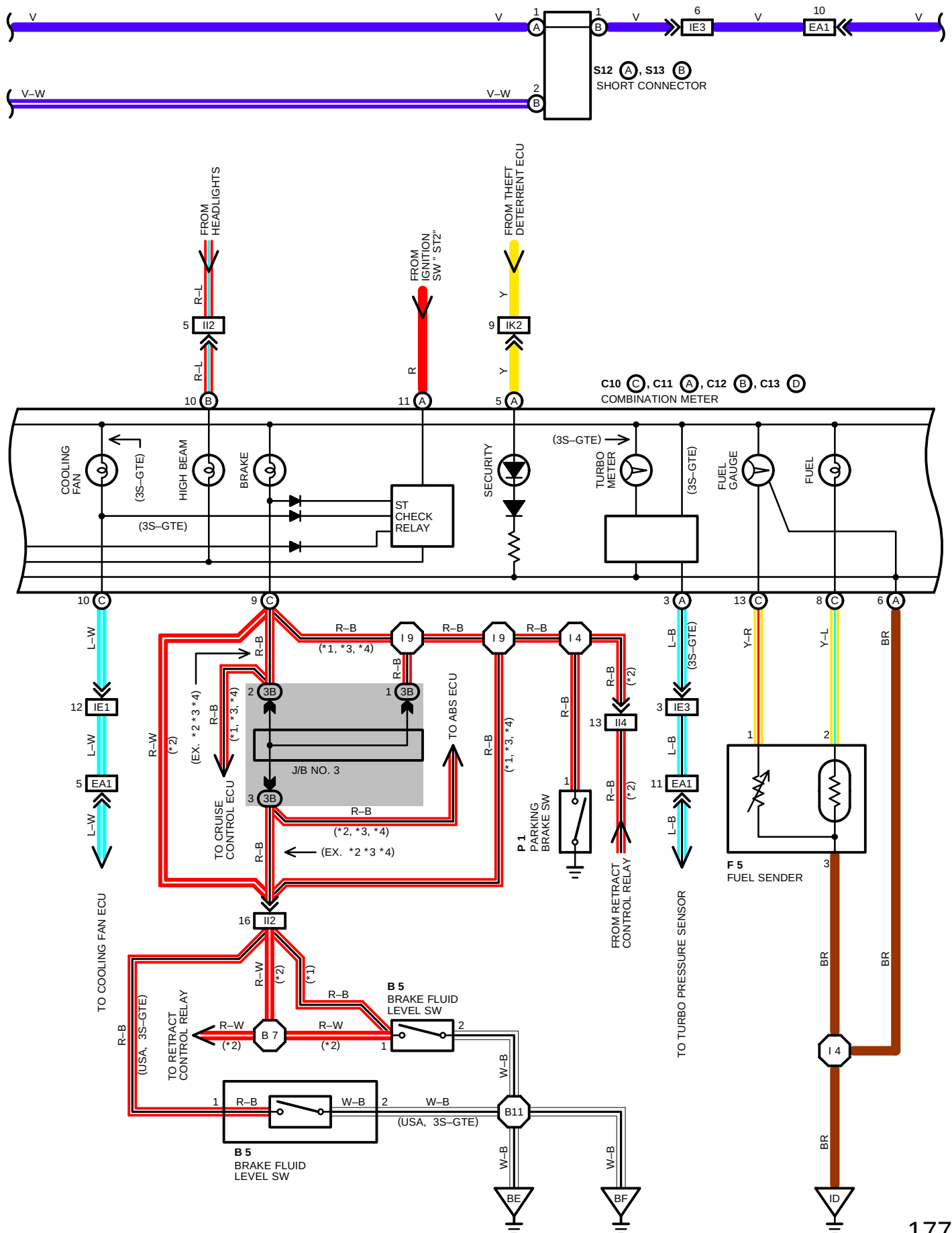


COMBINATION METER



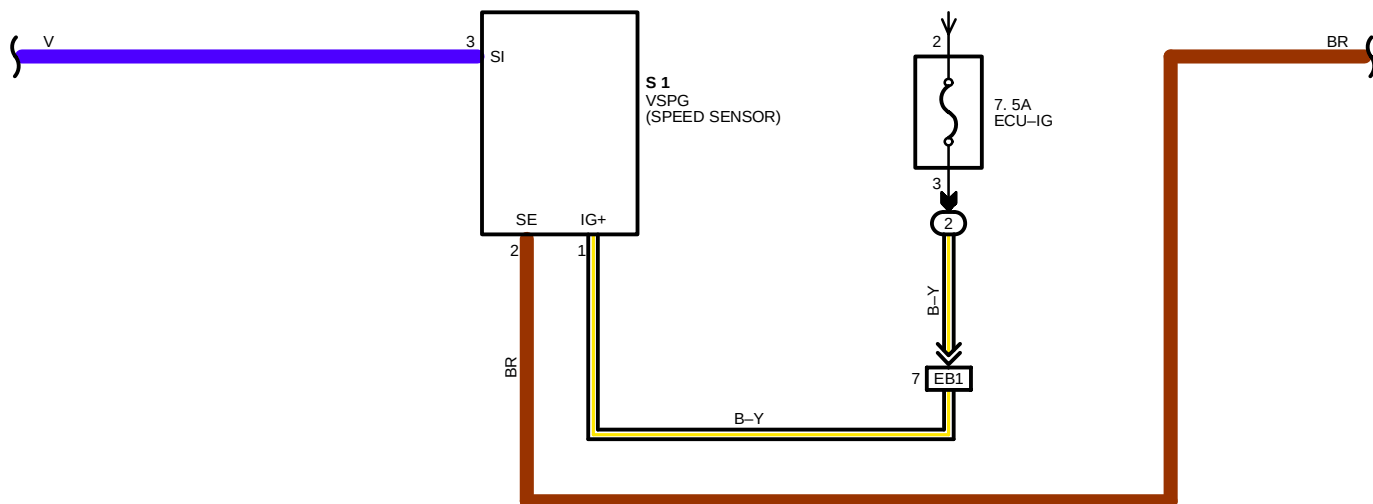
*1 : USA
*2 : CANADA
*3 : AT

*4 : WITH ABS, CRUISE CONTROL POWER WINDOW OR WOOFER SPEAKER



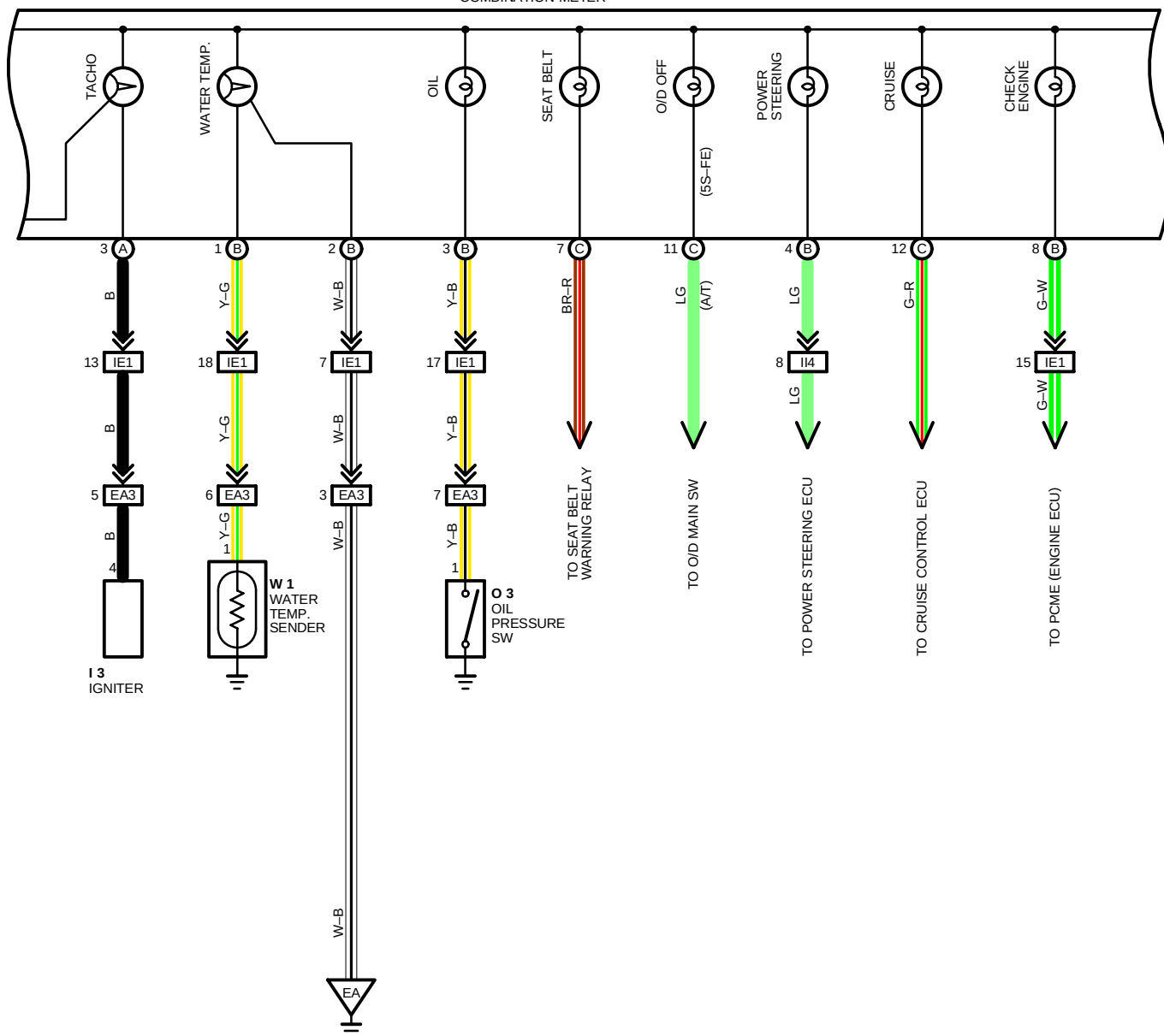
COMBINATION METER

FROM POWER SOURCE SYSTEM (SEE PAGE 48)



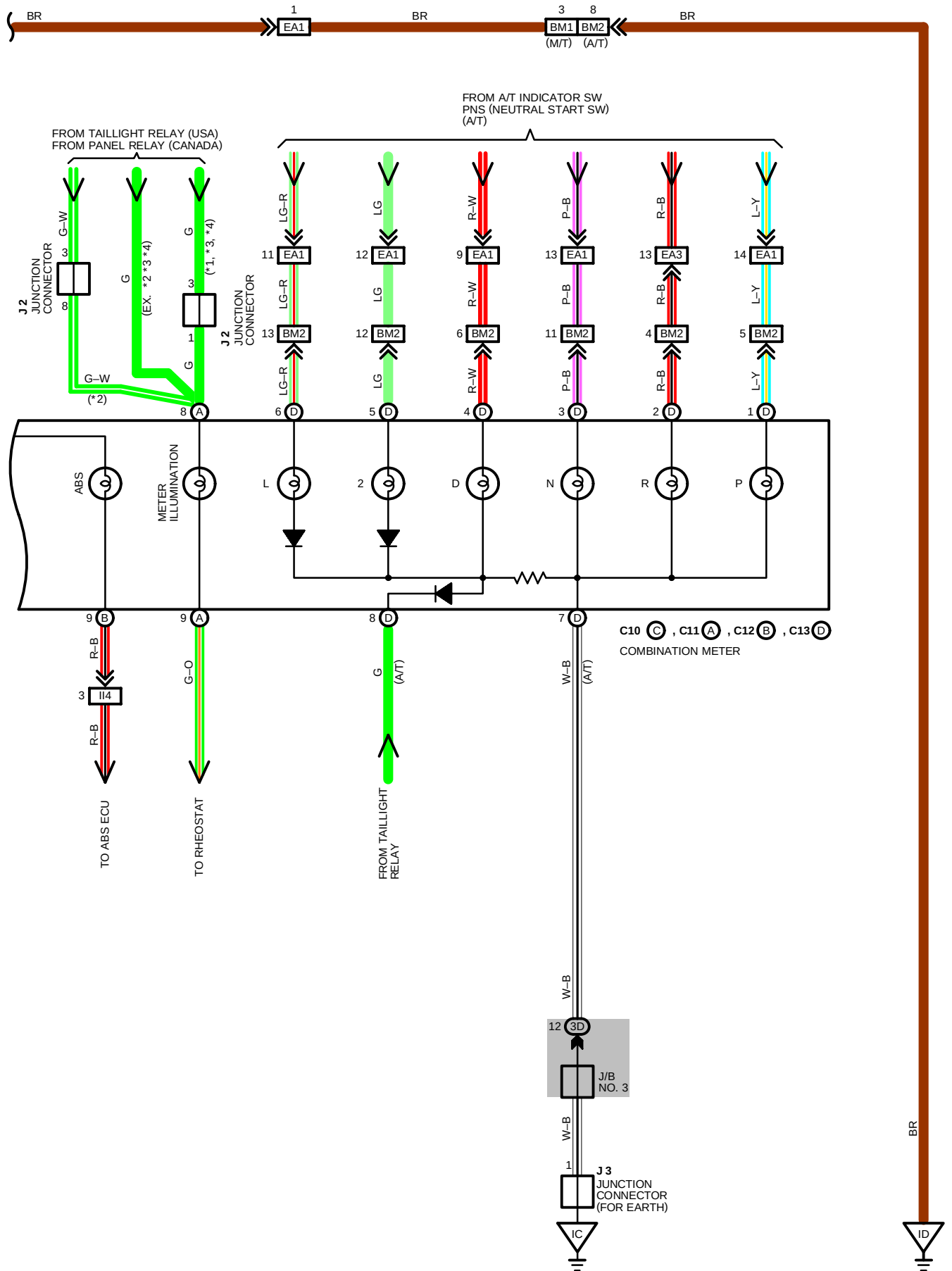
C10 (C), C11 (A), C12 (B), C13 (D)

COMBINATION METER



*1 : USA
 *2 : CANADA
 *3 : A/T

*4 : WITH ABS, CRUISE CONTROL POWER WINDOW OR WOOFER SPEAKER



COMBINATION METER

SERVICE HINTS

B 5 BRAKE FLUID LEVEL SW

1-2 : CLOSED WITH FLOAT DOWN

C10(C), C11(A), C12(B) COMBINATION METER

(C)6, (C) 5-GROUND : ALWAYS APPROX. 12 VOLTS

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

(A)1, (B)2, (A) 6-GROUND : ALWAYS CONTINUITY

C13 (D) COMBINATION METER (5S-FE A/T)

(D) 1-GROUND : ALWAYS CONTINUITY

O 3 OIL PRESSURE SW

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

P 1 PARKING BRAKE SW

1-GROUND : CLOSED WITH PARKING BRAKE LEVER PULLED UP

W 1 WATER TEMP. SENDER

1-GROUND : APPROX. 198.5 K AT 50°C (122°F)

: APPROX. 29.7 K AT 105°C (221°F)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 5	27	I 3	24 (5S-FE)	P 1	26
C10 C	26		25 (3S-GTE)	S 1	24 (5S-FE), 25 (3S-GTE)
C11 A	26	J 1	26	S12 A	26
C12 B	26	J 2	26	S13 B	26
C13 D	26 (5S-FE)	J 3	26	W 1	24 (5S-FE), 25 (3S-GTE)
E10	25 (3S-GTE)	O 3	24 (5S-FE)		
F 5	26		25 (3S-GTE)		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		
3D		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	30 (3S-GTE)	
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	30 (3S-GTE)	
EB1	28	ENGINE WIRE AND R/B NO. 2 (R/B NO. 2 INNER)
EC1	30 (3S-GTE)	
ID2	32	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
IK2	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	36	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)
BM2		



: GROUND POINTS

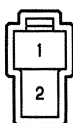
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
	30 (3S-GTE)	
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER



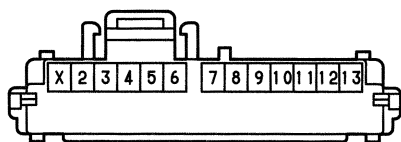
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I4	34	COWL WIRE	B7	36	LUGGAGE ROOM WIRE
I5			B11		
I9					

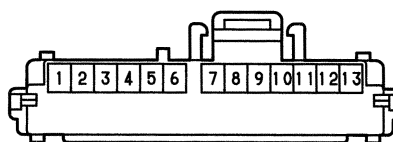
B 5 GRAY



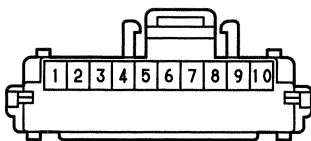
C10 C BROWN



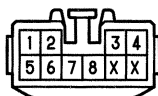
C11 A BLUE



C12 B GRAY



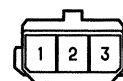
C13 D



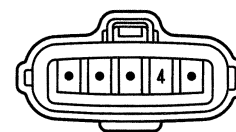
E10 GRAY



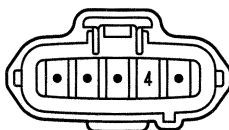
F 5



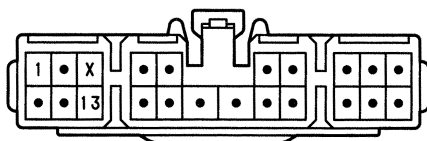
(5S-FE) I 3 BLACK



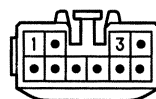
(3S-GTE) I 3 BLACK



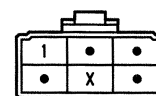
J 1



J 2



J 3



O 3 BLACK



P 1 BLACK



S 1 BLACK



S12 A



S13 B



W 1 BLUE



RADIATOR FAN AND AIR CONDITIONER

SYSTEM OUTLINE

1. COOLING FAN OPERATION

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FROM **AM2** FUSE FLOWS TO **TERMINAL 1** OF FAN MAIN RELAY → **TERMINAL 3** → **GROUND**, CAUSING THE FAN MAIN RELAY OF EACH FAN TO TURN ON.

AT THAT TIME, THE CURRENT FROM **AM2** FUSE FLOWS TO FAN RELAY NO. 1 AND NO. 2, AND FLOWS FROM **TERMINAL 2** OF FAN RELAY NO. 1 AND NO. 2 → **TERMINAL 1** → **TERMINAL 2** OF A/C HIGH SINGLE PRESSURE SW → **TERMINAL 1** → **TERMINAL 8** OF A/C AMPLIFIER. AT THE SAME TIME, THE CURRENT FROM **GAUGE** FUSE FLOWS TO **TERMINAL 7** OF A/C AMPLIFIER → **TERMINAL 1** → **TERMINAL 1** OF FAN RELAY NO. 3 → **TERMINAL 2** → **GROUND**, CAUSING THE FAN RELAY NO. 3 TO TURN ON.

* OPERATION AT LOW SPEED

WHEN THE IGNITION SW IS TURNED ON, THE FAN MAIN RELAY AND FAN RELAY NO. 1, NO. 2 AND NO. 3 TURN ON, THE CURRENT FLOWS FROM **ALT** FUSE FLOWS TO **TERMINAL 5** OF FAN MAIN RELAY → **TERMINAL 4** → **CDS FAN** FUSE → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 3** OF FAN RELAY NO. 2 → **TERMINAL 5** → **TERMINAL 5** OF FAN RELAY NO. 3 → **TERMINAL 3** → **TERMINAL 2** OF RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, FLOWING TO EACH FAN MOTOR IN SERIES, CAUSING THE 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 1402 KPA 14.3 KG/CM² 203 PSI), THE A/C SINGLE PRESSURE SW TURNS OFF.

AS A RESULT, FAN RELAY NO. 1 AND NO. 2 TURNS OFF AND THE CURRENT FLOWS FROM **ALT** FUSE TO **TERMINAL 5** OF FAN MAIN RELAY → **TERMINAL 4** → **CDS FAN** FUSE → **TERMINAL 2** OF A/C CONDENSER FAN MOTOR → **TERMINAL 1** → **TERMINAL 3** OF FAN RELAY NO. 2 → **TERMINAL 4** → **GROUND**, AT THE SAME TIME FROM **TERMINAL 4** OF FAN MAIN RELAY TO **RDI FAN** FUSE → **TERMINAL 4** OF FAN RELAY NO. 1 → **TERMINAL 3** → **TERMINAL 2** OF RADIATOR FAN MOTOR → **TERMINAL 1** → **GROUND**, FLOWING TO EACH FAN MOTOR IN PARALLEL CAUSING THE FAN TO ROTATE AT HIGH SPEED.

NOTE THAT, EVEN IF THE ENGINE COOLANT TEMPERATURE RISES ABOVE 90°C (194°F), THE WATER TEMP. SW (FOR RADIATOR FAN) TURNS OFF A SIGNAL IS SENT TO **TERMINAL 9** OF A/C AMPLIFIER. BECAUSE CURRENT FLOW FROM **TERMINAL 8** OF A/C AMPLIFIER TO **TERMINAL 6** IS SHUT OFF, THE CIRCUIT BETWEEN THE A/C SINGLE PRESSURE SW AND GROUND IS DEACTIVATED, SO THE SAME OPERATION CONTINUES.

2. HEATER BLOWER MOTOR OPERATION

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

WHEN THE IGNITION SW IS TURNED TO ON, CURRENT FLOWS THROUGH **GAUGE** FUSE TO **TERMINAL 1** OF HEATER RELAY → **TERMINAL 3** → **TERMINAL 10** OF AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 11** → **TERMINAL (A) 4** AND **(A) 5** OF A/C CONTROL ASSEMBLY.

* LOW SPEED OPERATION

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **LOW** POSITION, THE CURRENT FLOWS TO **TERMINAL (A) 4** AND **(A) 5** OF A/C CONTROL ASSEMBLY → **TERMINAL (A) 6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

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

* HIGH SPEED OPERATION

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **HI** POSITION, THE CURRENT FLOWS TO **TERMINAL (A) 4** AND **(A) 5** OF A/C CONTROL ASSEMBLY → **TERMINAL (A) 6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT FLOWING FROM THE **HTR** FUSE TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 2** → **TERMINAL (A) 3** OF A/C CONTROL ASSEMBLY → **TERMINAL (A) 6** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

* MEDIUM SPEED OPERATION (OPERATION AT M1, M2)

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M1** POSITION, THE CURRENT FLOWS TO **TERMINAL (A) 4** AND **(A) 5** OF A/C CONTROL ASSEMBLY → **TERMINAL (A) 6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.

THIS CAUSES THE CURRENT FLOWING FROM THE **HTR** FUSE TO **TERMINAL 5** OF THE HEATER RELAY TO FLOW TO **TERMINAL 4** OF HEATER RELAY → **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 2** → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL (A) 1** OF A/C CONTROL ASSEMBLY → **TERMINAL (A) 6** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT MEDIUM LOW SPEED.

WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO **M2** POSITION, CURRENT FLOWS FROM **TERMINAL 5** OF HEATER RELAY → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL (A) 2** OF BLOWER SW (A/C CONTROL ASSEMBLY) → **TERMINAL (A) 6** → **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 AIR INLET SERVO MOTOR

- * SWITCHING FROM FRESH TO RECIRC

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS FROM **GAUGE** FUSE TO **TERMINAL 1** OF AIR INLET SERVO MOTOR.

WHEN THE RECIRC/FRESH SW IS SWITCHED TO THE RECIRC SIDE, THE CURRENT FLOWS FROM **TERMINAL 4** OF AIR INLET SERVO MOTOR → **TERMINAL 3** → **TERMINAL (C) 1** OF A/C CONTROL ASSEMBLY → **TERMINAL (C) 15** → **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 4** OF AIR INLET SERVO MOTOR → **TERMINAL 1** → **TERMINAL (C) 9** OF A/C CONTROL ASSEMBLY → **TERMINAL (C) 15** → **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 6** OF AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 7** → **GROUND**, AND THE DAMPER MOVES TO THE POSITION OF THE MODE SELECTION SW OF THE CONTROL ASSEMBLY SW.

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 5** OF AIR VENT MODE CONTROL SERVO MOTOR TO **TERMINAL (C) 14** OF A/C CONTROL ASSEMBLY → **TERMINAL (C) 15** → **GROUND**.

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

FOOT/DEF POSITION: THE CURRENT FLOWS FROM **TERMINAL 4** OF SERVO MOTOR TO **TERMINAL (C) 5** OF A/C CONTROL ASSEMBLY.

FOOT POSITION: THE CURRENT FLOWS FROM **TERMINAL 3** OF SERVO MOTOR TO **TERMINAL (C) 4** OF A/C CONTROL ASSEMBLY.

BI-LEVEL POSITION: THE CURRENT FLOWS FROM **TERMINAL 2** OF SERVO MOTOR TO **TERMINAL (C) 13** OF CONTROL ASSEMBLY.

5. AIR CONDITIONER OPERATION

THE A/C AMPLIFIER RECEIVES VARIOUS SIGNALS, THE ENGINE SPEED SIGNAL FROM THE IGNITER, OUTLET TEMPERATURE SIGNAL FROM THE A/C THERMISTOR AND CURRENT TEMPERATURE FROM THE WATER TEMP. SW, ETC.

WHEN THE ENGINE IS STARTED AND THE A/C SW (A/C CONTROL ASSEMBLY) IS TURNED ON, THE CURRENT FLOWS FROM **A/C** FUSE TO **TERMINAL (B) 5** OF A/C CONTROL ASSEMBLY → **TERMINAL (B) 6** → **TERMINAL 11** OF A/C AMPLIFIER.

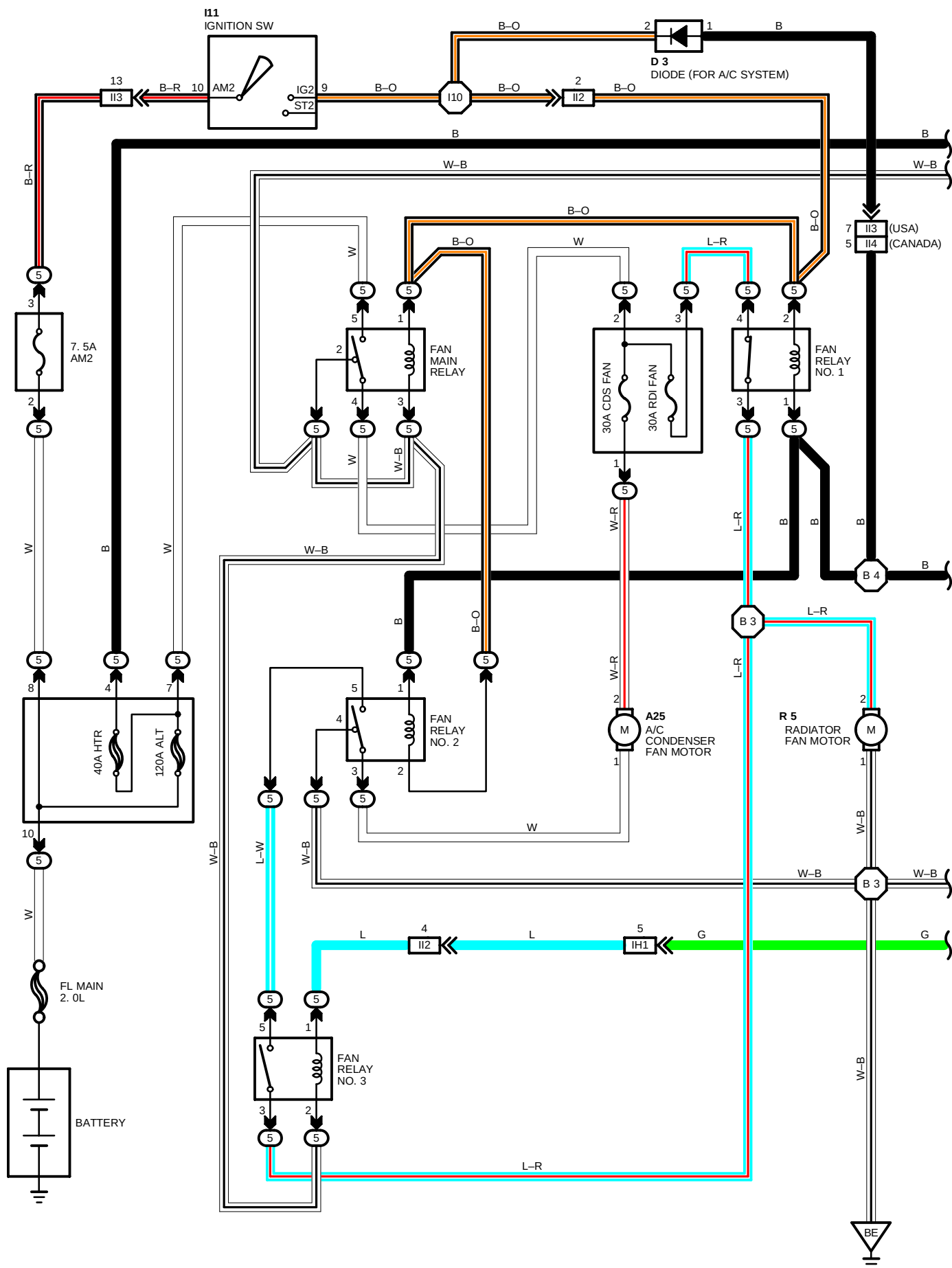
AT THIS TIME, THE A/C AMPLIFIER IS ACTIVATED AND CURRENT APPLIED FROM **A/C** FUSE TO **TERMINAL 1** OF A/C MAGNETIC CLUTCH RELAY FLOWS FROM **TERMINAL 3** OF A/C MAGNETIC CLUTCH RELAY → **TERMINAL 15** OF A/C AMPLIFIER → **TERMINAL 6** → **GROUND**. THIS CAUSES THE A/C MAGNETIC CLUTCH RELAY TO TURN ON, SO CURRENT APPLIED TO **TERMINAL 2** OF A/C MAGNETIC CLUTCH RELAY FLOWS FROM **TERMINAL 4** OF A/C MAGNETIC CLUTCH RELAY → **TERMINAL 1** OF A/C MAGNETIC CLUTCH → **GROUND**, CAUSING THE A/C COMPRESSOR TO OPERATE.

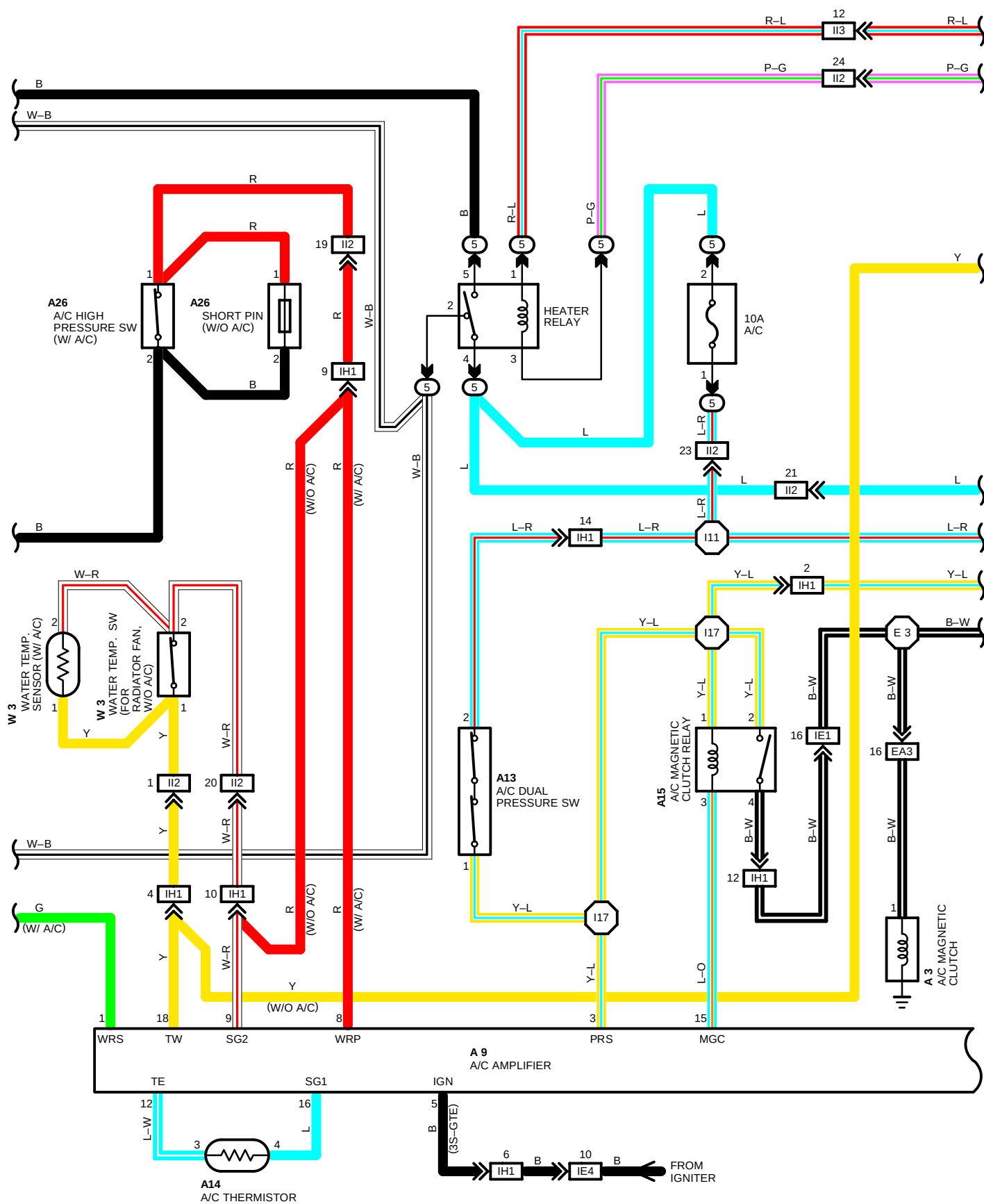
WITH THE ACTIVATION OF A/C AMPLIFIER, CURRENT APPLIED FROM **A/C** FUSE TO **TERMINAL 2** OF VSV (FOR A/C IDLE-UP) FLOWS FROM **TERMINAL 1** OF VSV (FOR A/C IDLE-UP) → **TERMINAL 14** OF A/C AMPLIFIER → **TERMINAL 6** → **GROUND**, AND TURNS ON THE VSV TO AVOID LOWERING THE ENGINE SPEED DURING AIR CONDITIONER OPERATION.

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

- * THE ENGINE SPEED DECREASES. (3S-GTE)
- * COOLANT TEMP. SIGNAL IS HIGH.
- * A SIGNAL THAT THE TEMPERATURE AT THE AIR OUTLET IS LOW.
- * A SIGNAL THAT THE REFRIGERANT PRESSURE IS ABNORMALLY HIGH OR LOW.

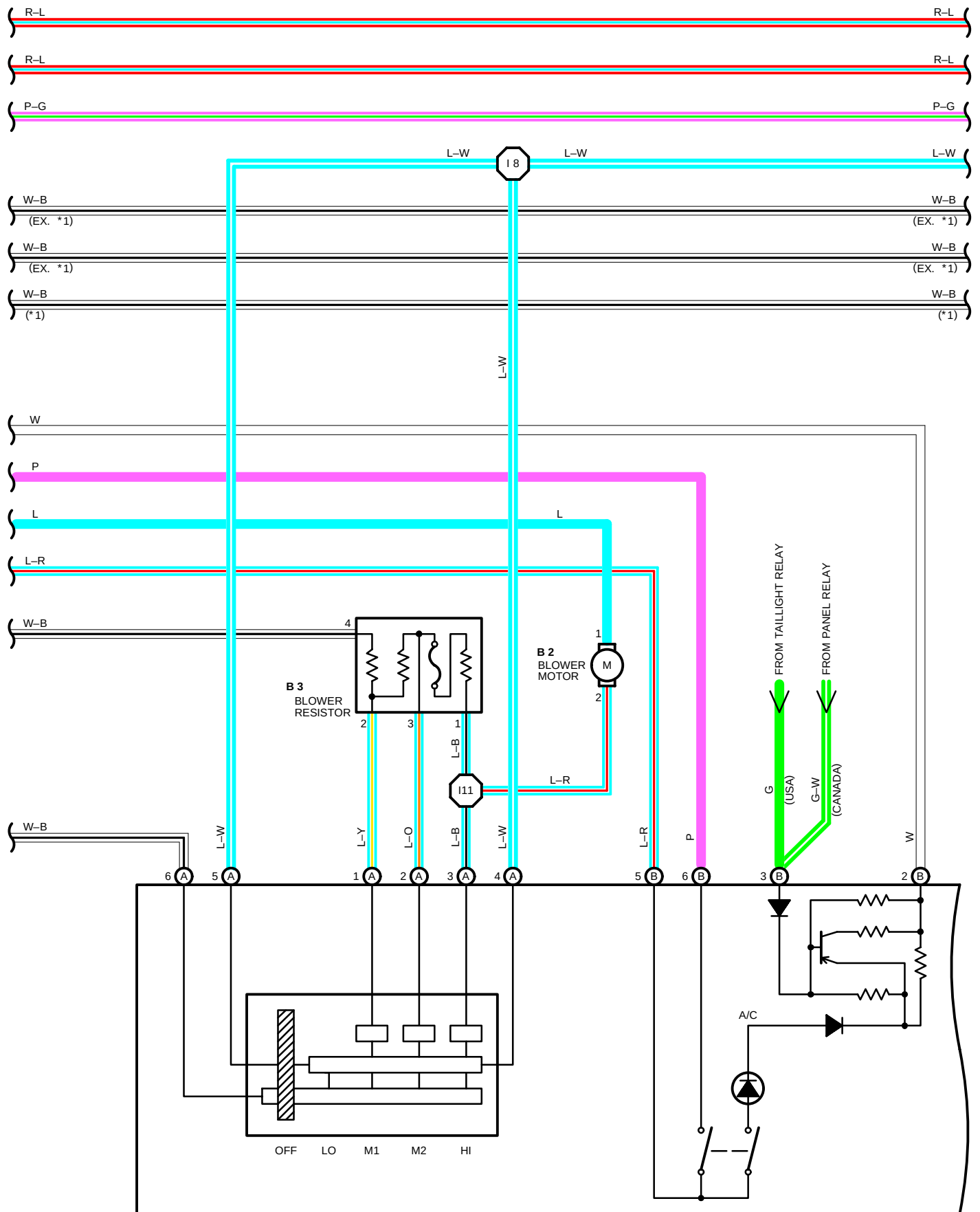
RADIATOR FAN AND AIR CONDITIONER





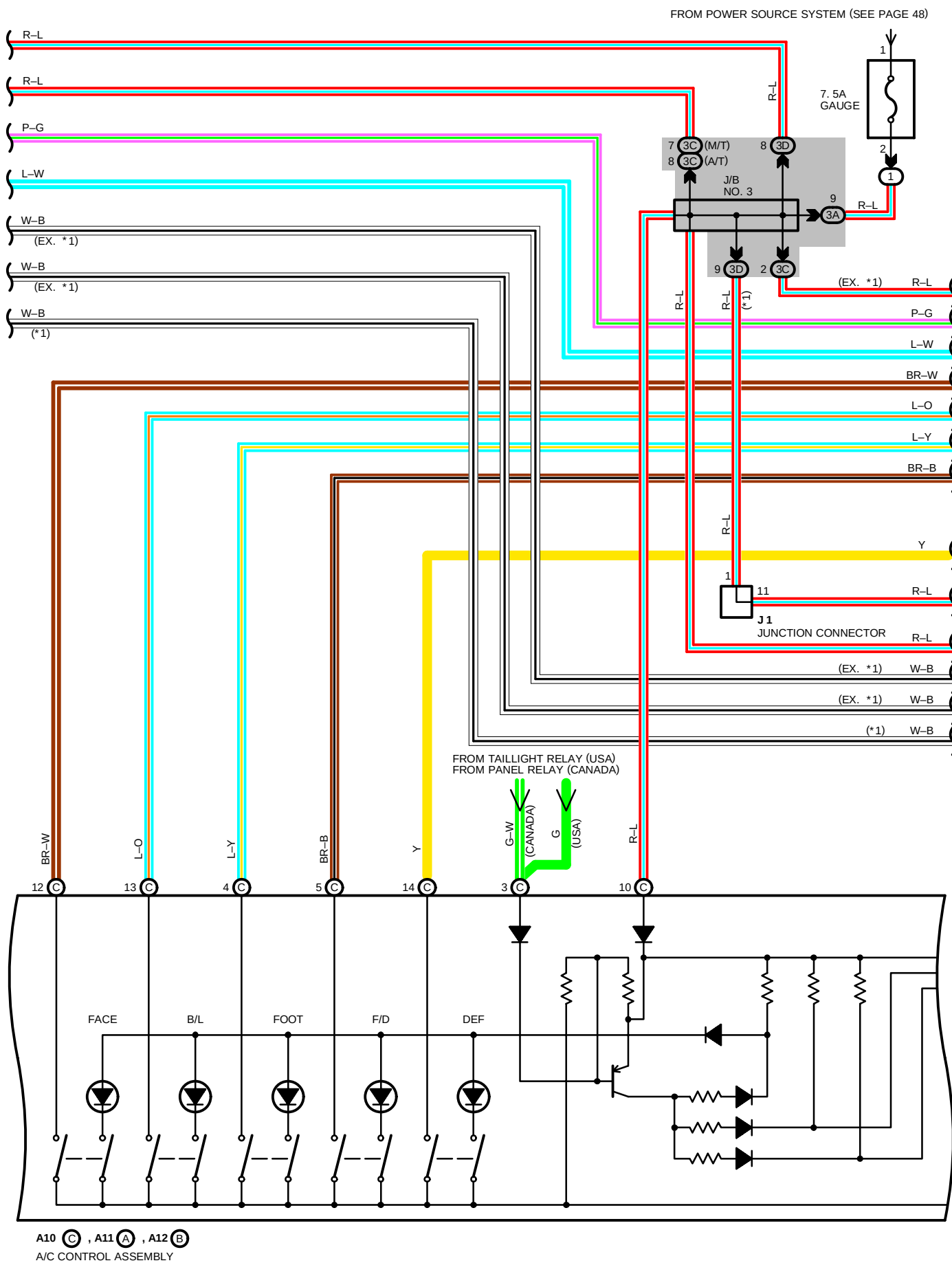
The diagram illustrates the A/C system wiring for a 1990-1991 Honda Civic EX. It shows the A/C amplifier (A9) connected to the PCM (E6) and various relays and switches. The A/C amplifier is connected to the PCM via a 3-pin connector (E6). The PCM is connected to the A/C amplifier via a 3-pin connector (E6). The A/C amplifier is connected to the A/C system components via a 3-pin connector (E6). The A/C system components include the A/C compressor, A/C condenser, A/C evaporator, and A/C expansion valve. The A/C system is connected to the A/C amplifier via a 3-pin connector (E6). The A/C amplifier is connected to the A/C system components via a 3-pin connector (E6). The A/C system components include the A/C compressor, A/C condenser, A/C evaporator, and A/C expansion valve. The A/C system is connected to the A/C amplifier via a 3-pin connector (E6). The A/C amplifier is connected to the A/C system components via a 3-pin connector (E6).

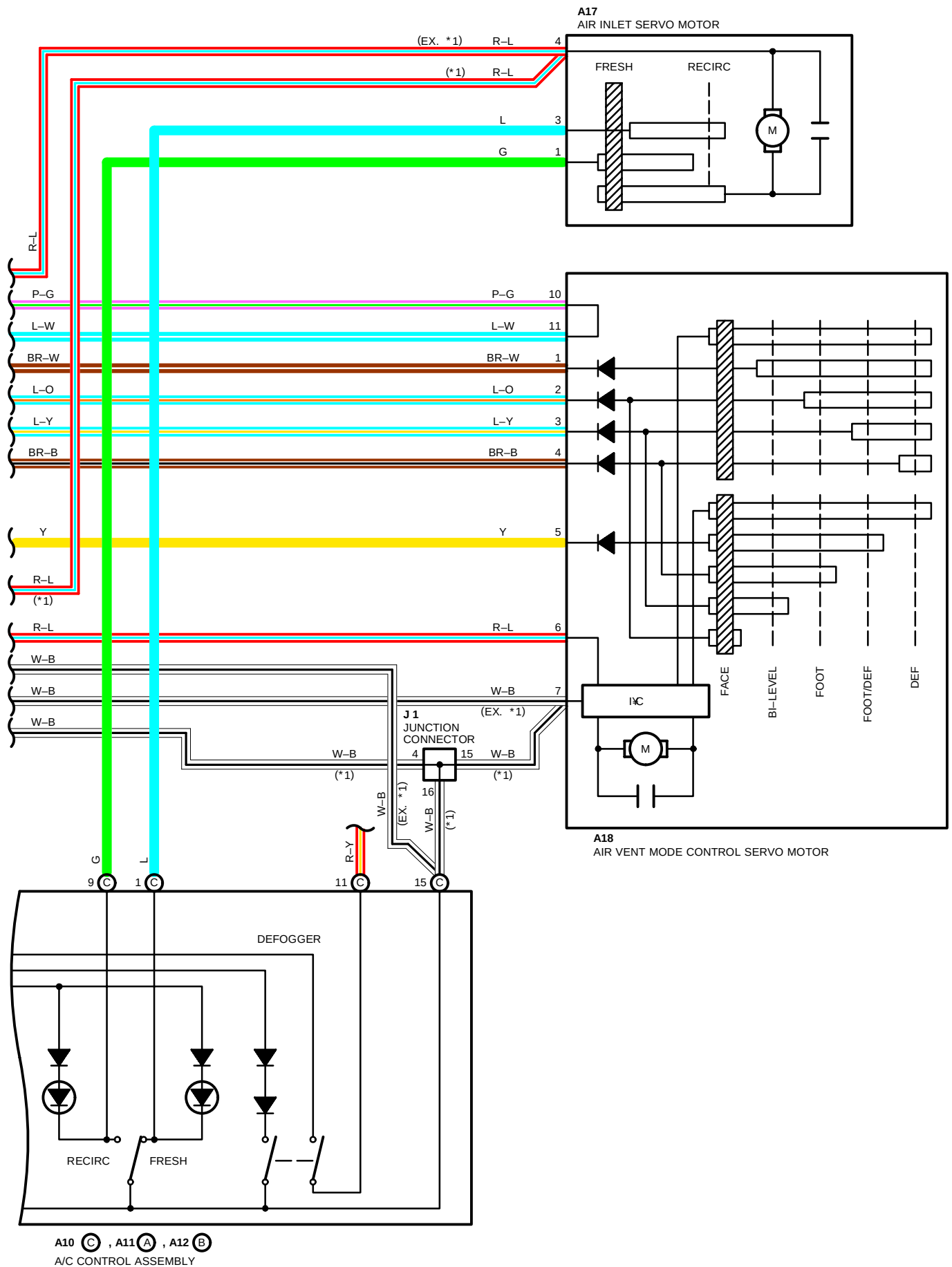
*1 : (1) CANADA
 (2) USA (A/T)
 (3) USA (M/T) WITH CRUISE CONTROL, ABS, POWER WINDOW OR WOOFER SPEAKER



A10 (C) , A11 (A) , A12 (B)
 A/C CONTROL ASSEMBLY

RADIATOR FAN AND AIR CONDITIONER





RADIATOR FAN AND AIR CONDITIONER

SERVICE HINTS

A14 A/C THERMISTOR

3-4 : APPROX. **4852 K** AT **0°C (32°F)**
 APPROX. **2341 K** AT **15°C (59°F)**
 APPROX. **1500 K** AT **25°C (77°F)**

A13 A/C DUAL PRESSURE SW

1-2 : OPEN WITH PRESSURE LESS THAN **206 KPA (30 PSI, 2.1 KG/CM²)** OR ABOVE **2648 KPA (384 PSI, 27 KG/CM²)**

W3 WATER TEMP. SW (FOR RADIATOR FAN)

1-2 : OPEN ABOVE APPROX. **90°C (194°F)**
 CLOSED BELOW APPROX. **83°C (184.4°F)**

B3 BLOWER RESISTOR

1-3 : APPROX. **0.45 K**
 3-2 : APPROX. **0.78 K**
 2-4 : APPROX. **0.91 K**

A9 A/C AMPLIFIER

7-GROUND : APPROX. **12 VOLTS** WITH THE IGNITION SW ON
 6-GROUND : ALWAYS CONTINUITY
 18-9 : CONTINUITY WITH WATER TEMP. SW CLOSED [BELOW APPROX. **83°C (181.4°F)**]
 5-GROUND : APPROX. **12 VOLTS** WITH ENGINE RUNNING
 11-GROUND : APPROX. **12 VOLTS** WITH IGNITION SW ON AND A/C SW (A/C CONTROL ASSEMBLY) ON

A17 AIR INLET SERVO MOTOR

4-3 : CLOSED WITH AIR INLET DAMPER AT **RECIRC** POSITION
 4-1 : CLOSED WITH AIR INLET DAMPER AT **FRESH** POSITION

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 3	24 (5S-FE) , 25 (3S-GTE)	A17	26	E 6	24 (5S-FE)
A 9	26	A18	26		24 (5S-FE)
A10 C	26	A25	27	I11	26
A11 A	26	A26	27	J 1	26
A12 B	26	B 2	26	J 3	26
A13	26	B 3	26	R 5	27
A14	26	D 3	26	V 3	24 (5S-FE) , 25 (3S-GTE)
A15	26	E 6 A	25 (3S-GTE)	W 3	27

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT LEFT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	28 (5S-FE) 30 (3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IH1	32	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	34	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2		ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	32	INSTRUMENT PANEL BRACE LH
BE	36	FRONT RIGHT FENDER
BG	36	UNDER THE LEFT CENTER PILLAR
BI	36	BACK PANEL CENTER



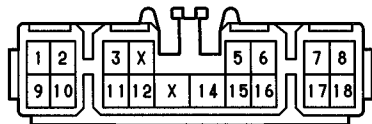
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	28 (5S-FE)	ENGINE ROOM MAIN WIRE	I11	34	COWL WIRE
	30 (3S-GTE)		I17	34	A/C SUB WIRE
I 6	34	COWL WIRE	B 3	36	LUGGAGE ROOM WIRE
I 8			B 4		
I10			B23	36	ENGINE ROOM MAIN WIRE

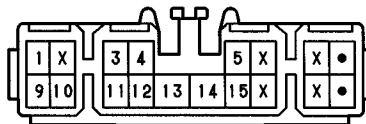
A 3 GRAY



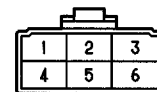
A 9 BLACK



A10 C



A11 A



A12 B



A13 BLUE



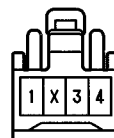
A14



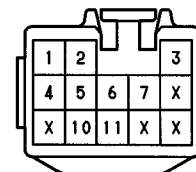
A15



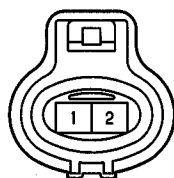
A17



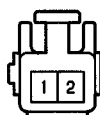
A18



A25 GRAY



A26



B 2 BLACK



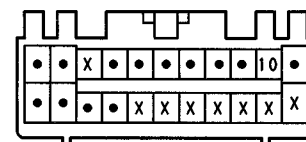
B 3 BLACK



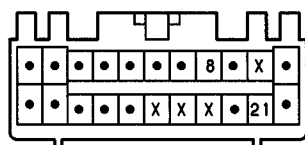
D 3 BLACK



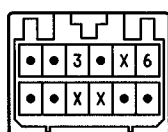
E 6 A DARK GRAY



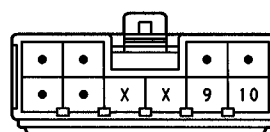
E 6 B DARK GRAY



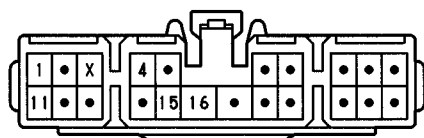
E 6 C DARK GRAY



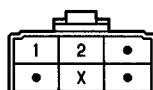
I11 BLACK



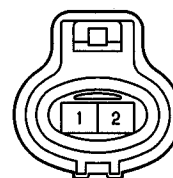
J 1



J 3



R 5 GRAY

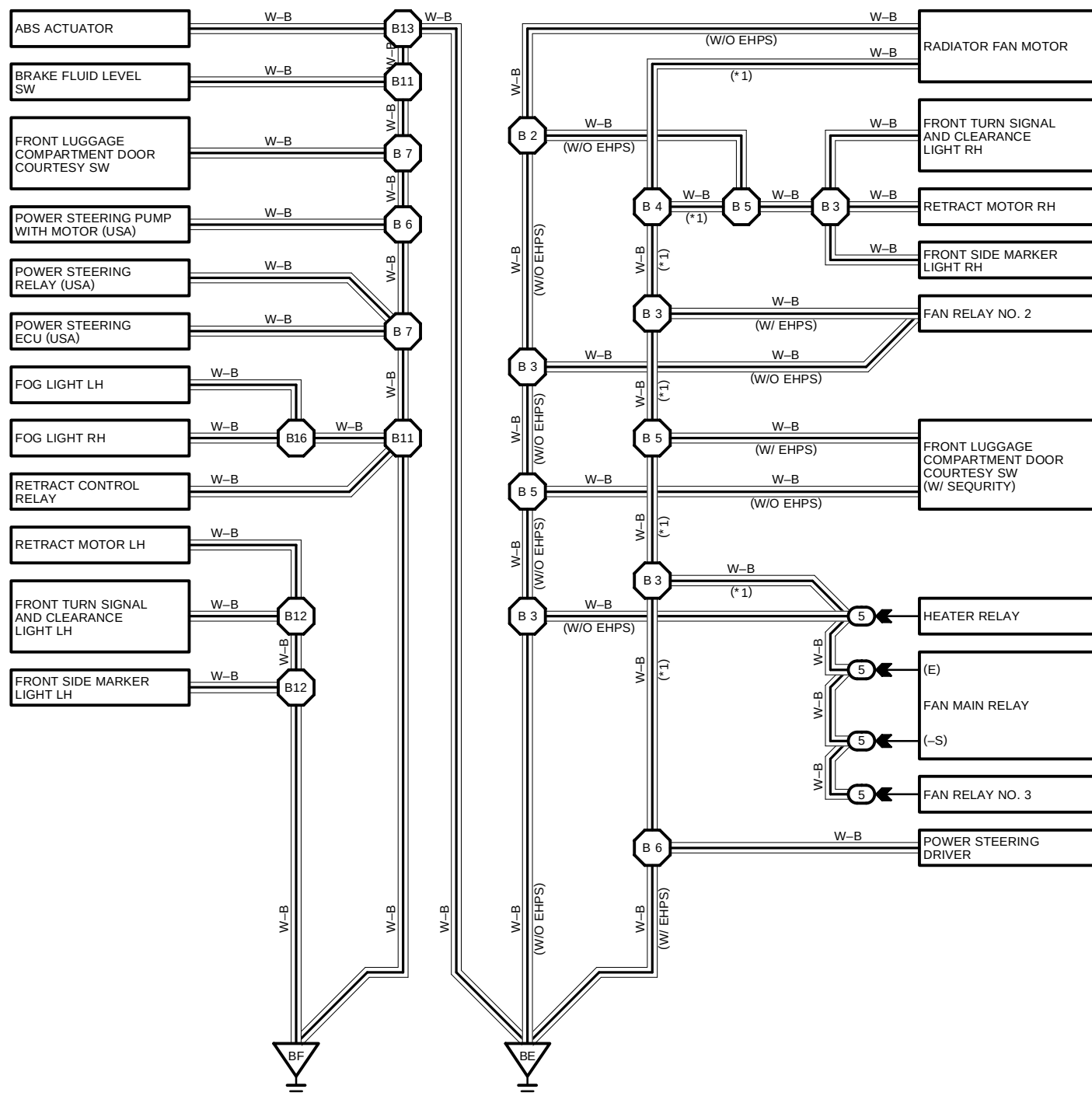


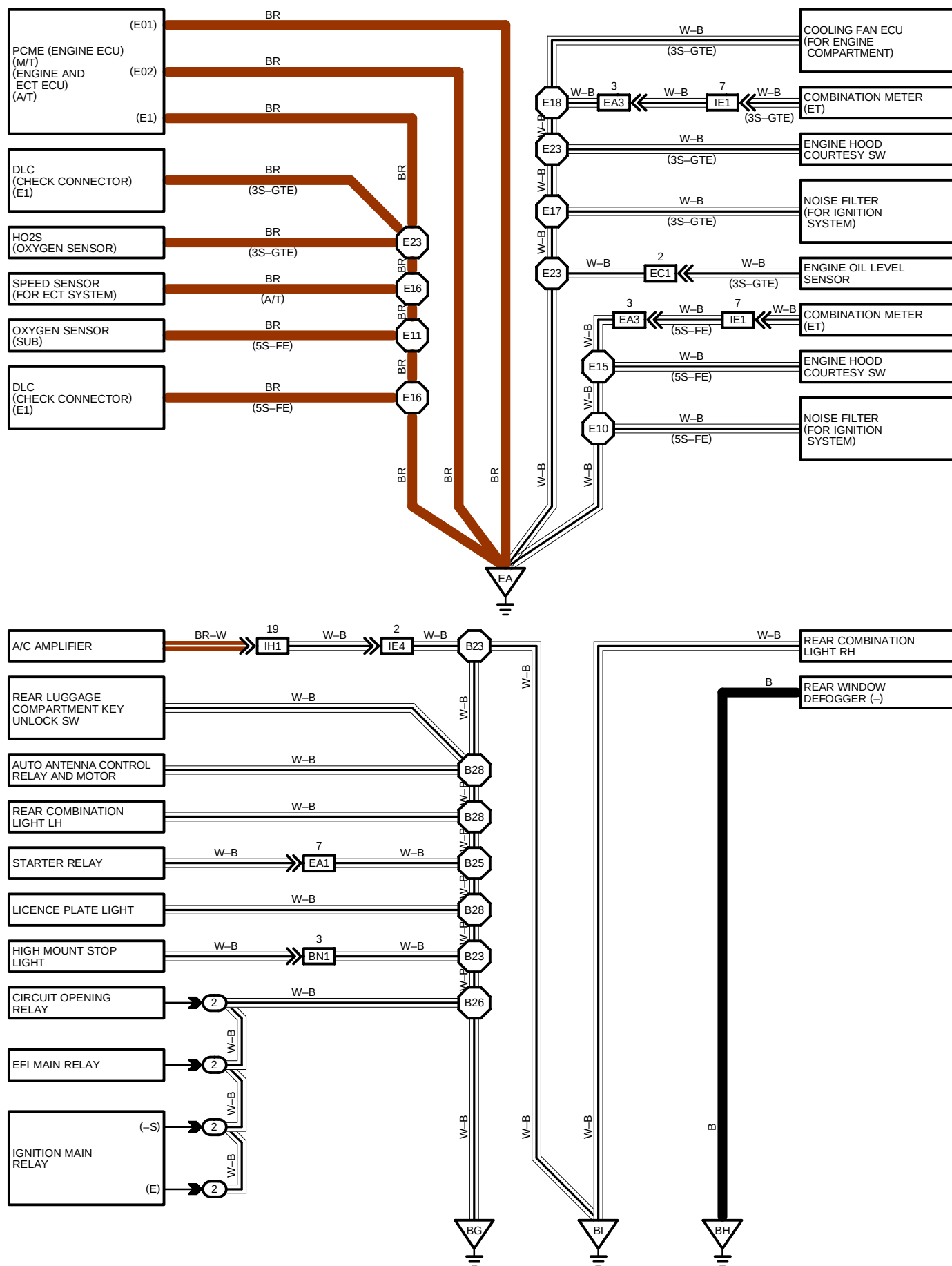
V 3 BLACK



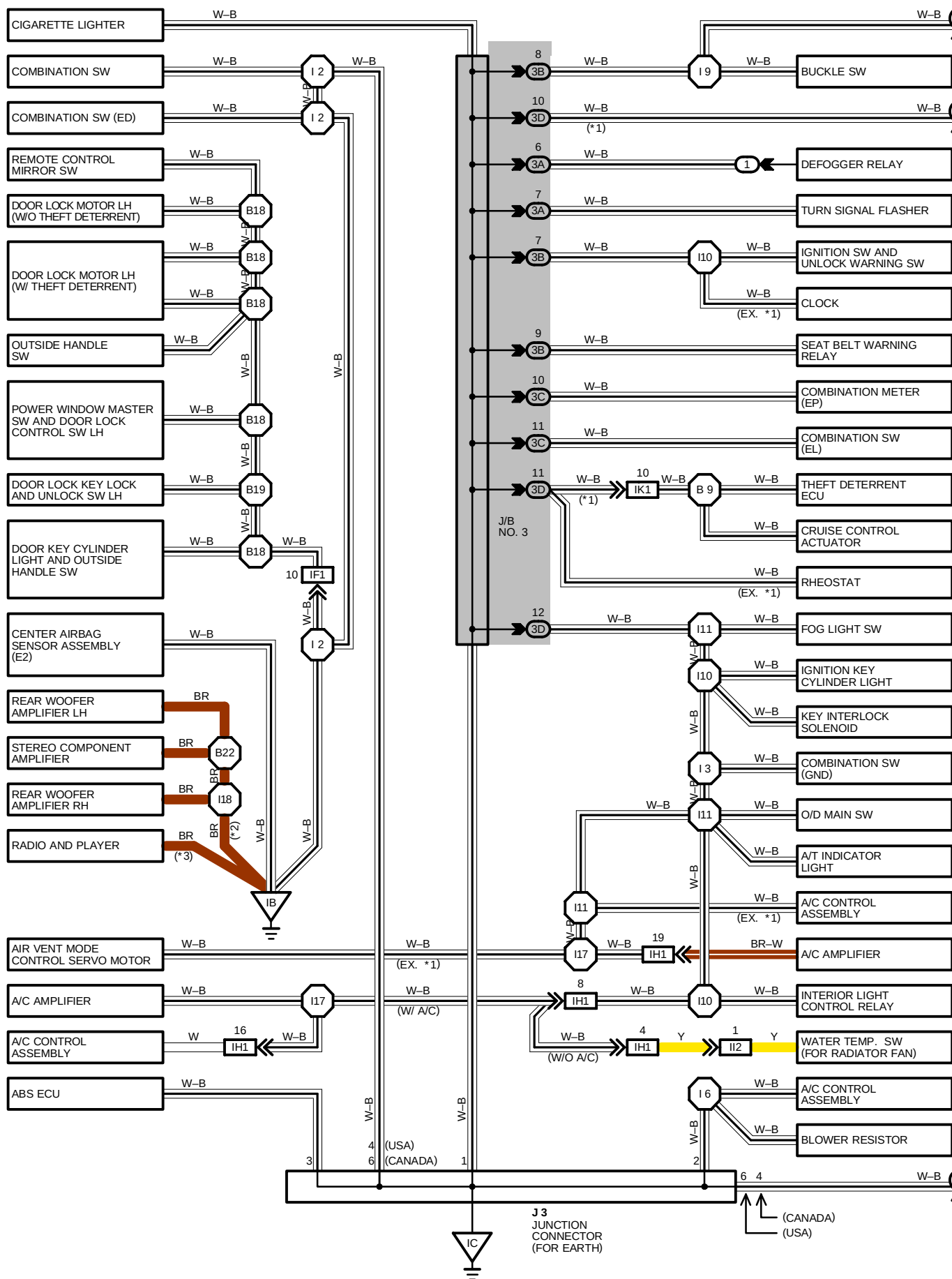
W 3 GRAY







GROUND POINT



*2 : W/ WOOFER SPEAKER
*3 : W/O WOOFER SPEAKER



GROUND POINT

: PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 1	26	J 3	26		

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	20	R/B NO. 1 (LEFT KICK PANEL)
2	21	R/B NO. 2 (ENGINE COMPARTMENT LEFT)
5	21	R/B NO. 5 (FRONT LUGGAGE COMPARTMENT RIGHT)

: JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	22	COWL WIRE AND J/B NO. 3 (BEHIND COMBINATION METER)
3B		
3C		
3D		

: CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	30 (3S-GTE)	
EA3	28 (5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO. 2 INNER)
	30 (3S-GTE)	
EC1	28 (3S-GTE)	ENGINE NO. 4 WIRE AND ENGINE WIRE (NEAR THE INTAKE MANIFOLD)
IE1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
IF1	32	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IH1	32	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II2	34	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
IJ1	34	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IK1	34	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	36	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2		
BN1	36	ROOF NO.3 WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

: GROUND POINTS

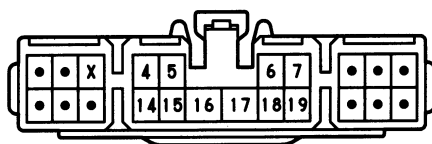
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	28 (5S-FE)	INTAKE MANIFOLD
	30 (3S-GTE)	
IB	32	LEFT KICK PANEL
IC	32	INSTRUMENT PANEL BRACE LH
ID	32	RIGHT KICK PANEL
BE	36	FRONT RIGHT FENDER
BF	36	FRONT LEFT FENDER
BG	36	UNDER THE LEFT CENTER PILLAR
BH	36	UNDER THE RIGHT REAR PILLAR
BI	36	BACK PANEL CENTER



: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 7	28 (5S-FE)	ENGINE WIRE	B 2	36	LUGGAGE ROOM WIRE
E10			B 3		
E11			B 4		
E15			B 5		
E16			B 6		
E17	30 (3S-GTE)	ENGINE WIRE	B 7	36	FLOOR WIRE
E18			B 9		
E21			B11		
E23			B12		
I 2			B13		
I 3	34	COWL WIRE	B15	36	FRONT DOOR RH WIRE
I 4			B16	36	LUGGAGE ROOM WIRE
I 5			B18	36	FRONT DOOR LH WIRE
I 6			B19		
I 8			B22	36	COWL WIRE
I 9			B23	36	ENGINE ROOM MAIN WIRE
I10			B25		
I11			B26		
I17	34	A/C SUB WIRE	B27		
I18	34	COWL WIRE	B28		

J 1



J 3

