FOREWORD

This wiring diagram has been prepared to provide information on the electrical system of the 1991 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.
• 1991 MR2 Repair Manual • 1991 MR2 New Car Features	RM179U NCF062U

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.

1991 TOYOTA MR2
ELECTRICAL WIRING DIAGRAM

A INTRODUCTION

This manual consists of the following 12 sections:

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

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

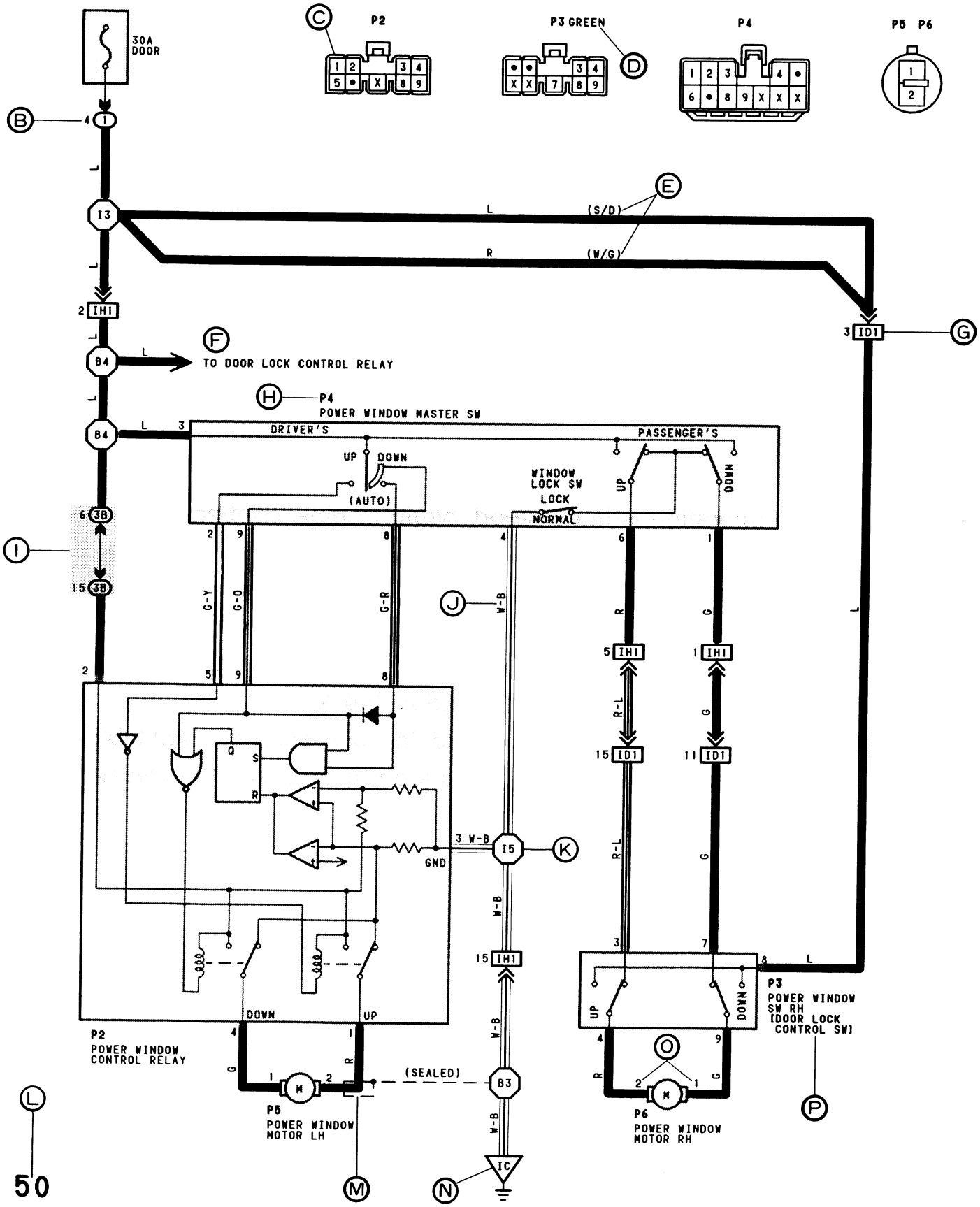
The actual wiring of each system circuit is shown from the point where the power source is received from the battery as far as each ground point. (All circuit diagrams are shown with the switches in the OFF position.

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

When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wire Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground points of each system circuit. Internal wiring for each junction block is also provided for better understanding of connection within a junction block.
Wiring related to each system is indicated in each system circuit by arrows (from___, to___). When overall connections are required, see the Overall Wiring Diagram at the end of this manual.

Ⓐ POWER WINDOW

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



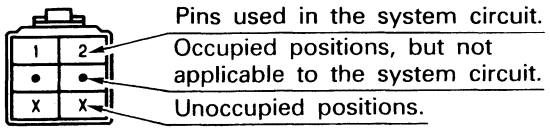
Ⓐ: System Title

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

Example: ① Indicates Relay Block No. 1.

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

Explanation of pin use.



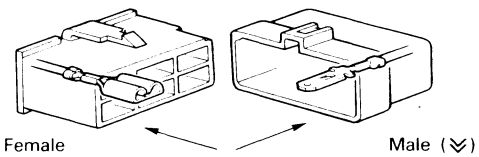
The pins shown are only for the highest grade, or only include those in the specification.

Ⓓ: Connector Color
Connectors not indicated are milky white in color.

Ⓔ: ( ) is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.

Ⓕ: Indicates related system.

Ⓖ: Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (≪). Outside numerals are pin numbers.



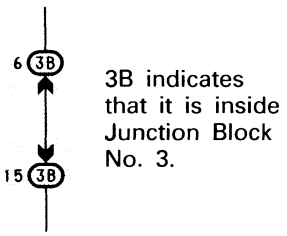
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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.

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

Ⓘ: 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:



3B indicates that it is inside Junction Block No. 3.

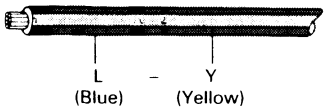
Ⓙ: Indicates the wiring color.

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

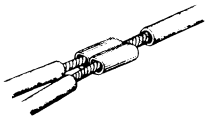
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

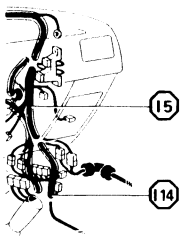
Example: L – Y



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

Example:

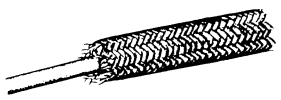




The Location of Splice Point I 5 is indicated by the shaded section.

Ⓛ: Page No.

Ⓜ: Indicates a sealed wiring harness.

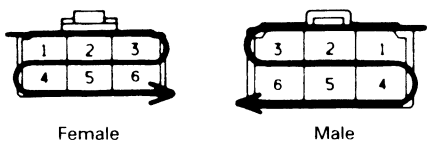


Ⓝ: Indicates a ground point.

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.

Ⓞ: 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



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

Ⓠ

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 6 OF THE POWER WINDOW SW THROUGH THE DOOR FUSE.

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

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

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

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

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

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

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

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

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

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

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

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

Ⓡ

SERVICE HINTS

P2 POWER WINDOW CONTROL RELAY

3-GROUND:ALWAYS CONTINUITY
2-GROUND:APPROX.12VOLTS WITH IGNITION SW AT **ON** POSITION
5-GROUND:APPROX.12VOLTS WITH IGNITION SW AT **ON** POSITION AND MASTER SW AT **UP** POSITION
8-GROUND:APPROX.12VOLTS WITH IGNITION SW AT **ON** POSITION AND MASTER SW AT **AUTO DOWN** POSITION
9-GROUND:APPROX.12VOLTS WITH IGNITION SW AT **ON** POSITION AND MASTER SW AT **DOWN** OR **AUTO DOWN** POSITION

P4 POWER WINDOW MASTER SW

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

WINDOW LOCK SW

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

Ⓢ ○ : PARTS LOCATION

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

Ⓣ ⬭ : RELAY BLOCKS

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

Ⓤ ⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

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

Ⓥ □ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

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

Ⓦ ▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT

Ⓧ ⬡ : SPLICE POINTS

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

Ⓠ: Explains the system outline.

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

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

Example: Part "P4" (Power Window Master SW) is on page 21 of the manual.

* The letter in the code is from the first letter of the part, and the number indicates its order in parts starting with that letter.

Example: P4
- P: Power Window Master SW
- 4: Part is 4th in order

Ⓣ: 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.

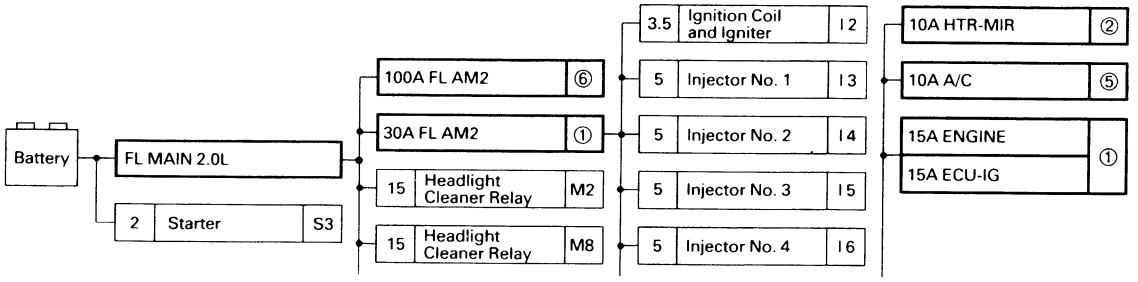
Example: Splice point "I 5" is on the Cowl Wire Harness and is described on page 24 of this manual.

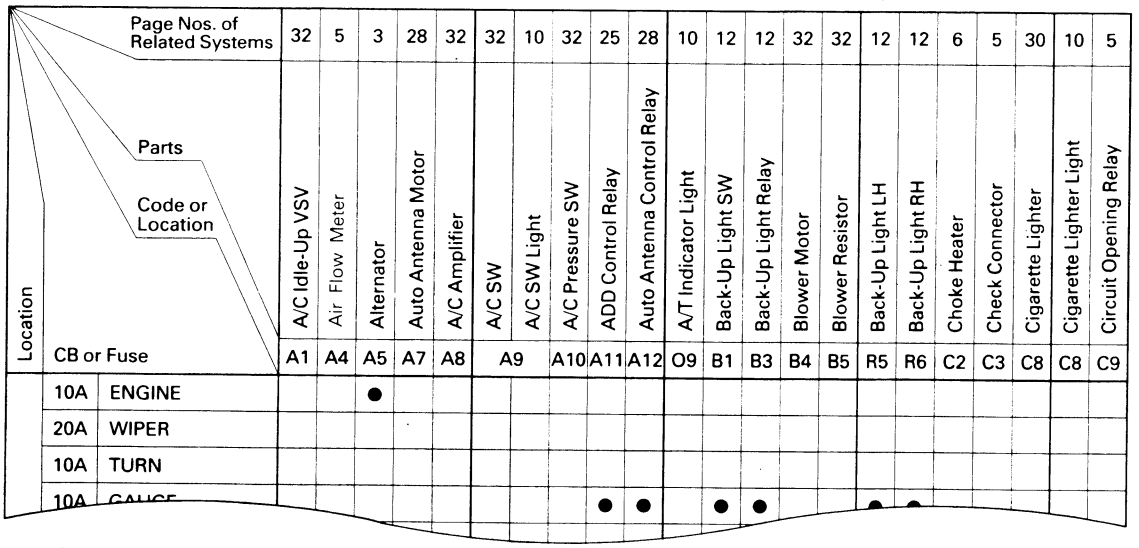
The "Current Flow Chart" section, describes which parts each power source (fuses, fusible links, and circuit breakers) transmits current to. In the Power Source circuit diagram, the conditions when battery power is supplied to each system are explained. Since all System Circuit diagrams start from the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

H POWER SOURCE (Current Flow Chart)

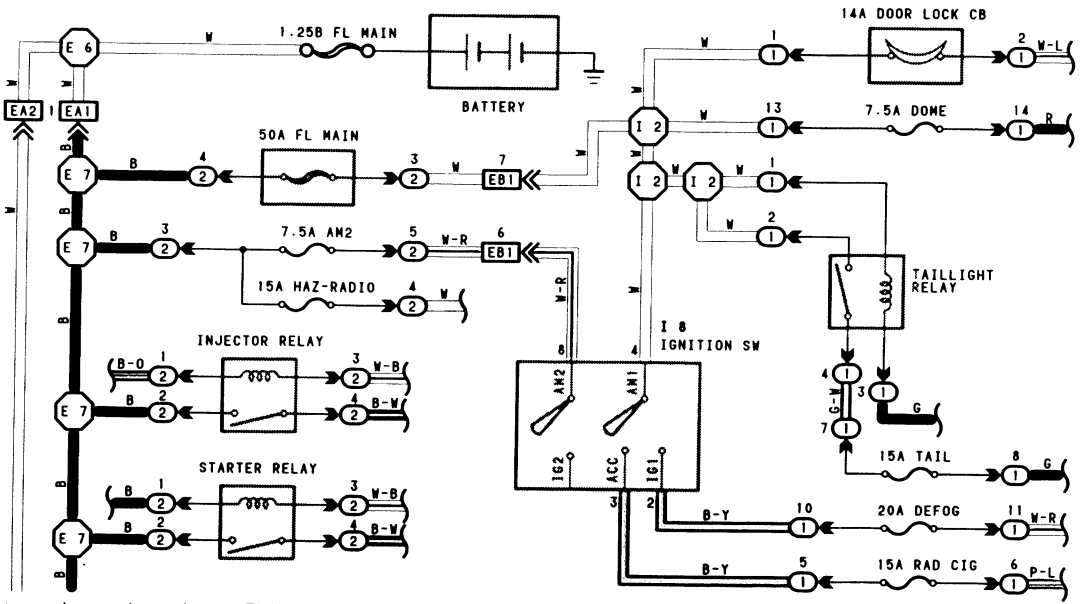
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.

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





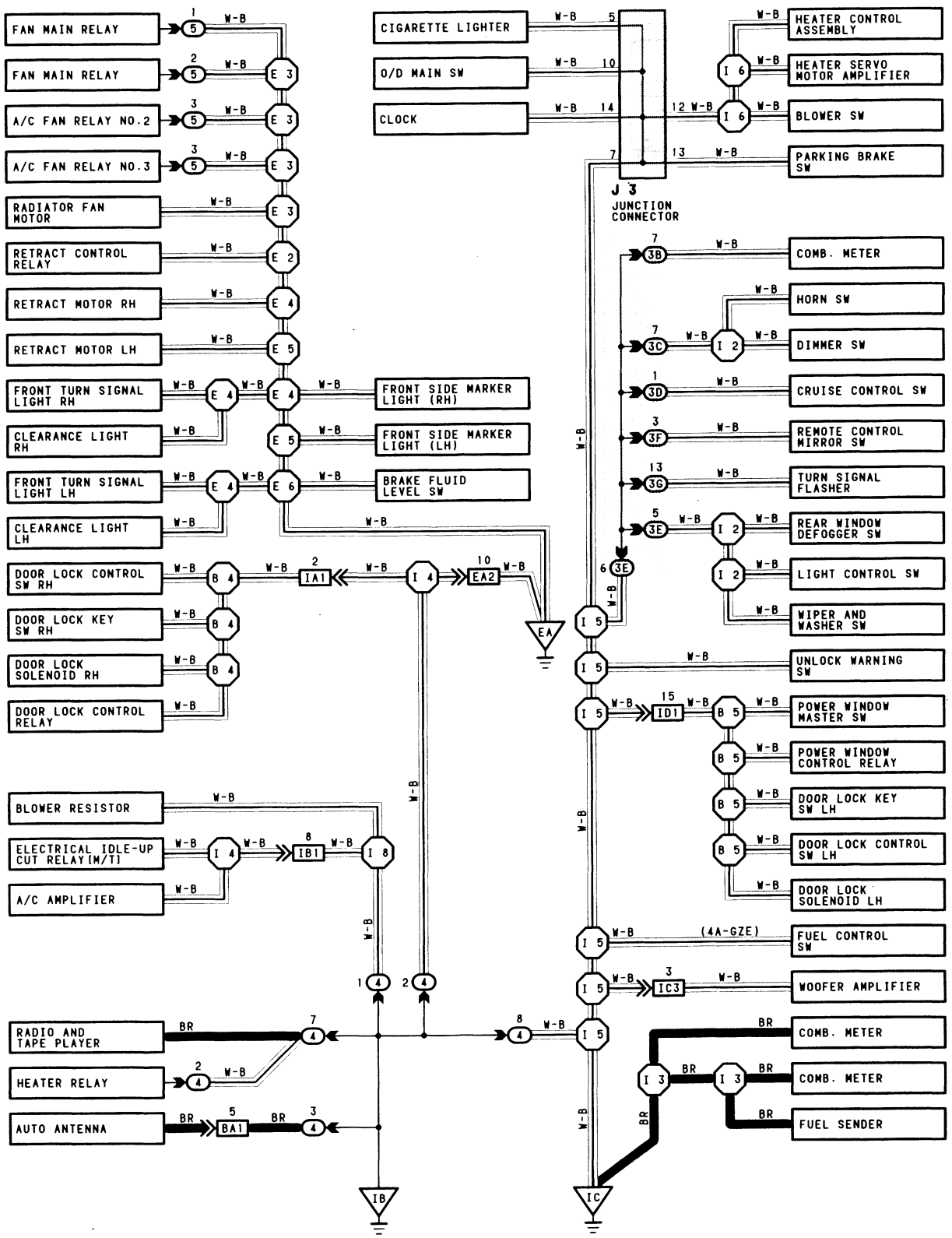
POWER SOURCE



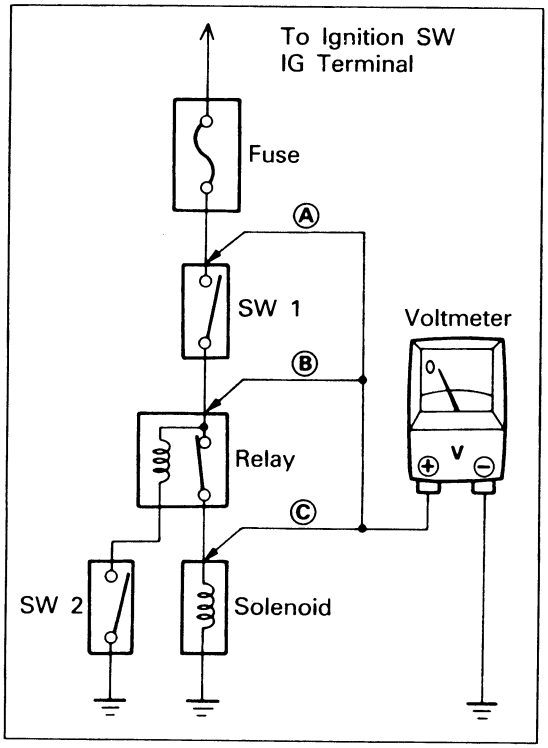
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION.

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

J GROUND POINTS



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

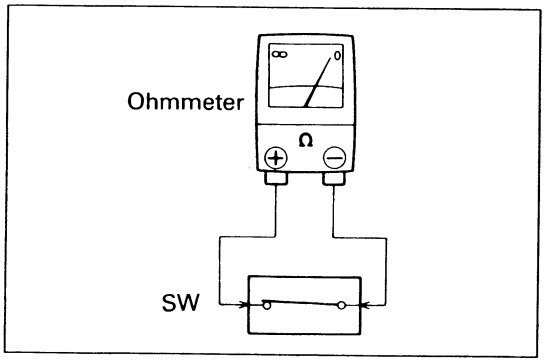


VOLTAGE CHECK

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

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

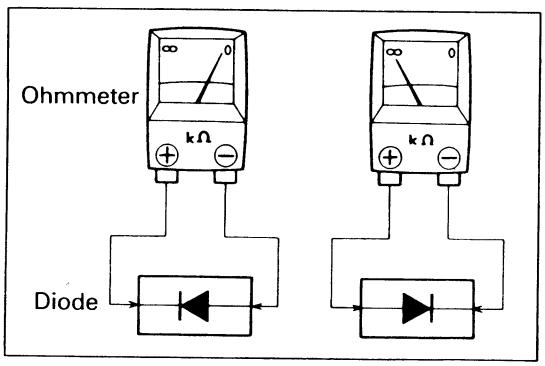
(b) Using a voltmeter, connect the negative lead to a good ground point or negative battery terminal, and the positive lead to the connector or component terminal. This check can be done with a test light instead of a voltmeter.



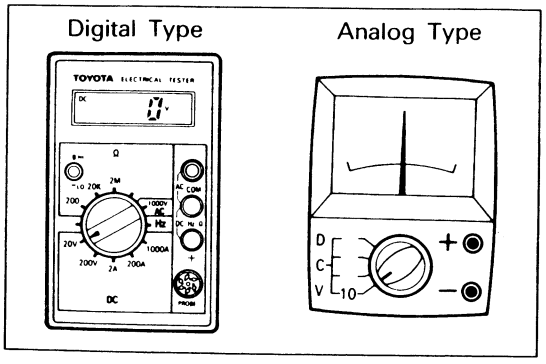
CONTINUITY AND RESISTANCE CHECK

(a) Disconnect the battery terminal or wire so there is no voltage between the check points.

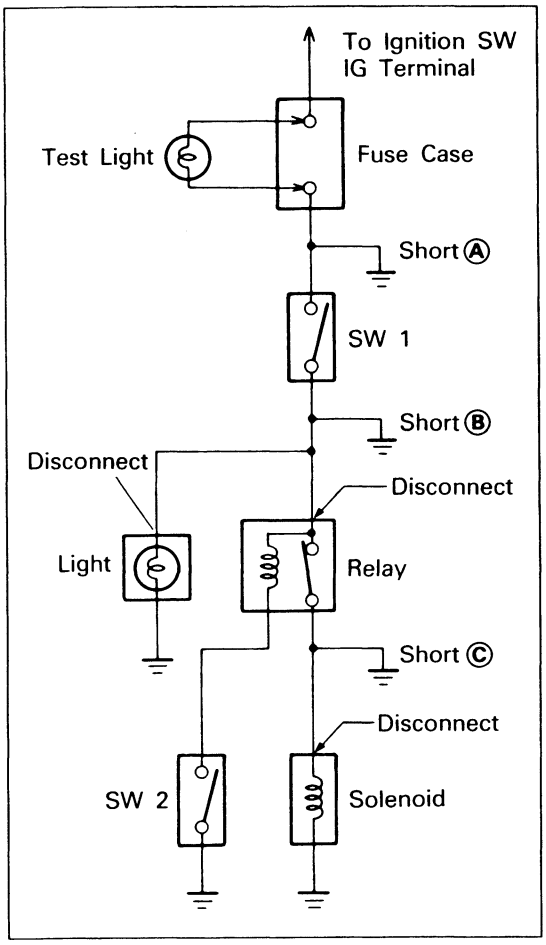
(b) Contact the two leads of an ohmmeter to each of the check points.



If the circuit has diodes, reverse the two leads and check again.
When contacting the negative lead to the diode positive side and the positive lead to the negative side, there should be continuity.
When contacting the two leads in reverse, there should be no continuity.



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



FINDING A SHORT CIRCUIT

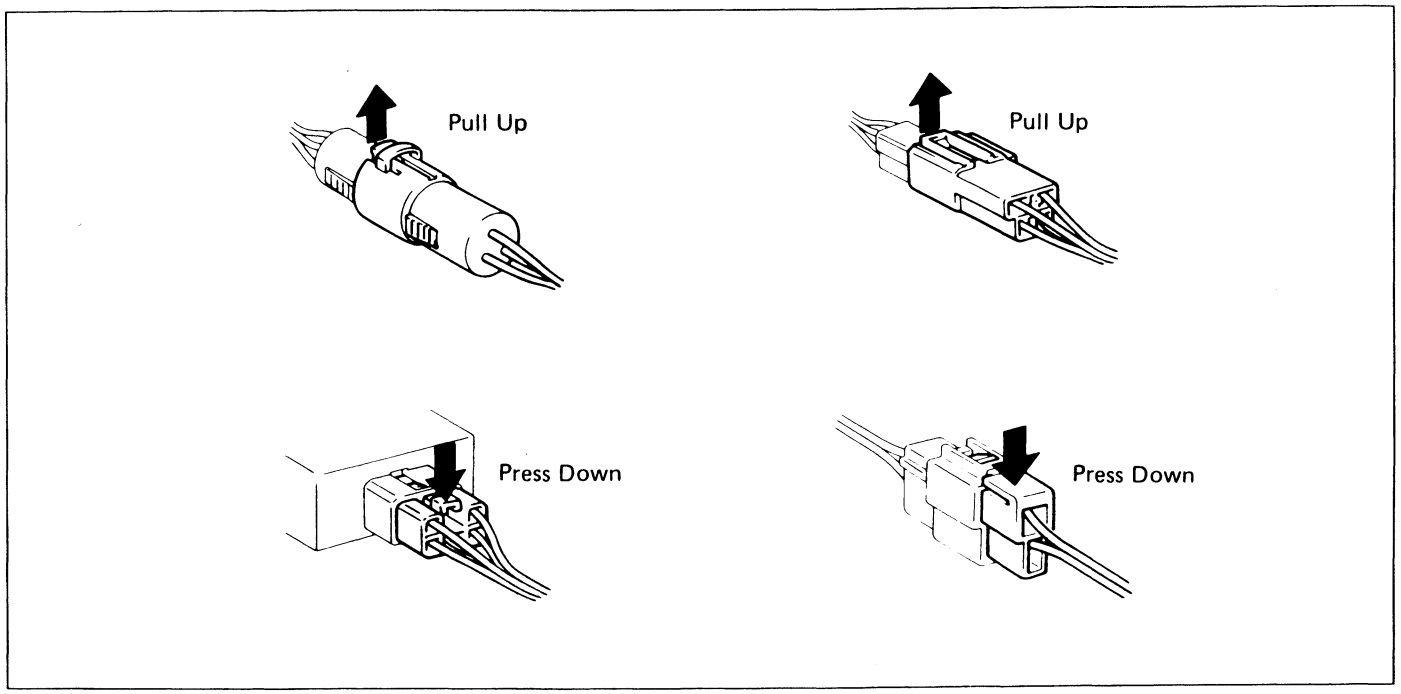
(a) Remove the blown fuse and disconnect all loads of the fuse.
(b) Connect a test light in place of the fuse.
(c) Establish conditions in which the test light comes on.
Example:
Ⓐ – Ignition SW on
Ⓑ – Ignition SW and SW 1 on
Ⓒ – Ignition SW, SW 1 and Relay on (Connect the Relay) and SW 2 off (or Disconnect SW 2)
(d) Disconnect and reconnect the connectors while watching the test light.
The short lies between the connector where the test light stays lit and the connector where the light goes out.
(e) Find the exact location of the short by lightly shaking the problem wire along the body.

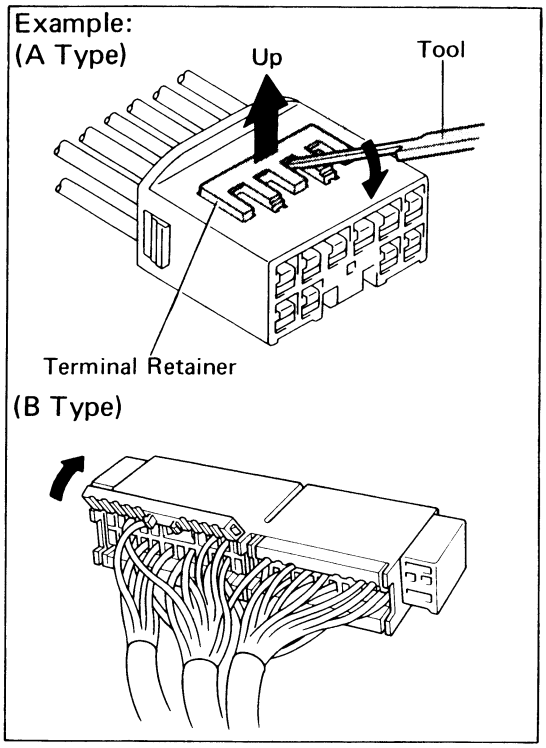
CAUTION:
Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

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





HOW TO REPLACEMENT FOR TERMINAL (with Terminal Retainer Type)

1. DISCONNECT CONNECTOR

2. DISCONNECT TERMINAL FROM CONNECTOR

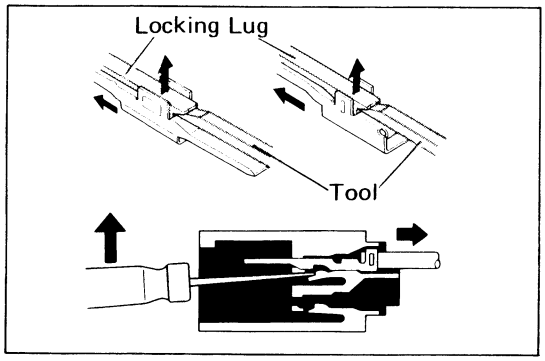
   (a) "for A type"

   Raise the terminal retainer up to the temporally lock position.

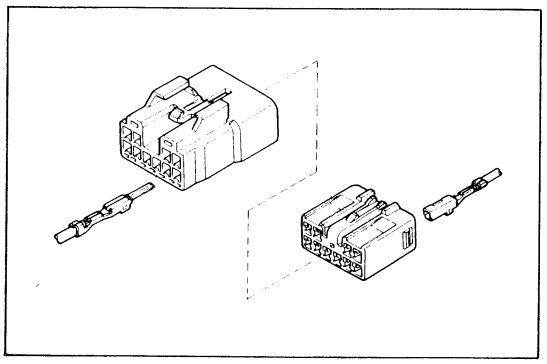
   HINT: The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

   "for B type"

   Open the terminal retainer.

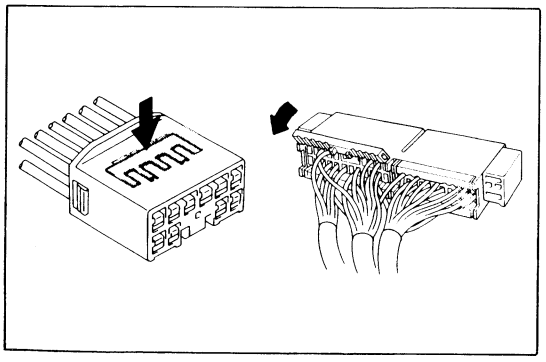


   (b) Release the locking lug from terminal and pull the terminal out from rear.



3. INSTALL TERMINAL TO CONNECTOR
   (a) Insert the terminal.

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



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

4. CONNECT CONNECTOR

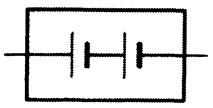
ABBREVIATIONS

The following abbreviations are used in this manual.

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

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

E GLOSSARY OF TERMS AND SYMBOLS



BATTERY
Stores chemical energy and converts it into electrical energy. Provides DC current for the auto's various electrical circuits.

CAPACITOR (Condenser)
A small holding unit for temporary storage of electrical voltage.

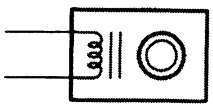
CIGARETTE LIGHTER
An electric resistance heating element.

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.

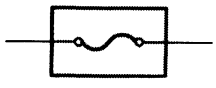
DIODE
A semiconductor which allows current flow in only one direction.

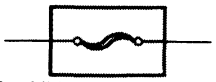
DIODE, ZENER

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.



DISTRIBUTOR, IIA
Channels high-voltage current from the ignition coil to the individual spark plugs.

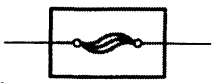




(for Mideum Current Fuse)

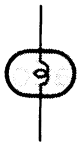
FUSE
A thin metal strip which burns through when too much current flows through it, thereby stopping current flow and protecting a circuit from damage.

FUSIBLE LINK
A heavy-gauge wire placed in high amperage circuits which burns through on overloads, thereby protecting the circuit.



(for High Current Fuse or Fusible Link)

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.

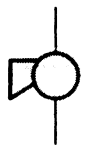


HEADLIGHTS

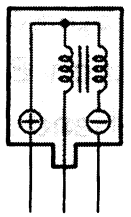
1. SINGLE FILAMENT

2. DOUBLE FILAMENT

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.



HORN
An electric device which sounds a loud audible signal.



IGNITION COIL
Converts low-voltage DC current into high-voltage ignition current for firing the spark plugs.

LIGHT
Current flow through a filament causes the filament to heat up and emit light.

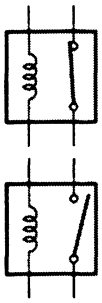
LED (LIGHT EMITTING DIODE)
Upon current flow, these diodes emit light without producing the heat of a comparable light.

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 flourescent displays, which provide a relative or digital display.

MOTOR
A power unit which converts electrical energy into mechanical energy, especially rotary motion.

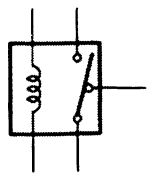
RELAY



1. **NORMALLY CLOSED**
2. **NORMALLY OPEN**

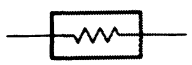
Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.

RELAY, DOUBLE THROW



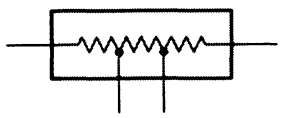
A relay which passes current through one set of contacts or the other.

RESISTOR



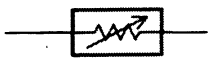
An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.

RESISTOR, TAPPED



A resistor which supplies two or more different non-adjustable resistance values.

RESISTOR, VARIABLE or RHEOSTAT

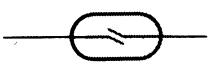


A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.

SENSOR (Thermistor)

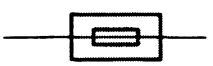
A resistor which varies its resistance with temperature.

SENSOR, ANALOG SPEED



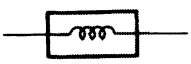
Uses magnetic impulses to open and close a switch to create a signal for activation of other components.

SHORT PIN



Used to provide an unbroken connection within a junction block.

SOLENOID

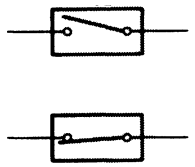


An electromagnetic coil which forms a magnetic field when current flow, to move a plunger, etc.

SPEAKER

An electromechanical device which creates sound waves from current flow.

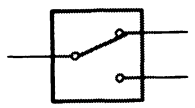
SWITCH, MANUAL



1. **NORMALLY OPEN**
2. **NORMALLY CLOSED**

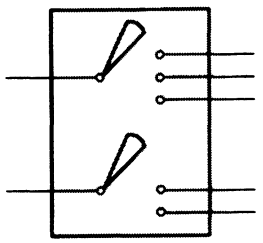
Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.

SWITCH, DOUBLE THROW



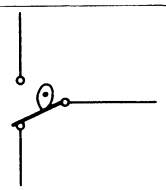
A switch which continuously passes current through one set of contacts or the other.

SWITCH, IGNITION



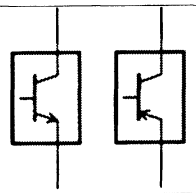
A key operated switch with several positions which allow various circuits. Particularly the primary ignition circuit, to become operational.

SWITCH, WIPER PARK



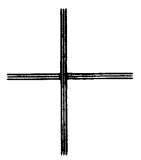
Automatically returns wipers to the stop position when the wiper switch is turned off.

TRANSISTOR

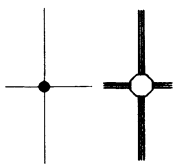


A solidstate device typically used as an electronic relay; stops or passes current depending on the applied voltage at "base".

WIRES



(1) **NOT CONNECTED**

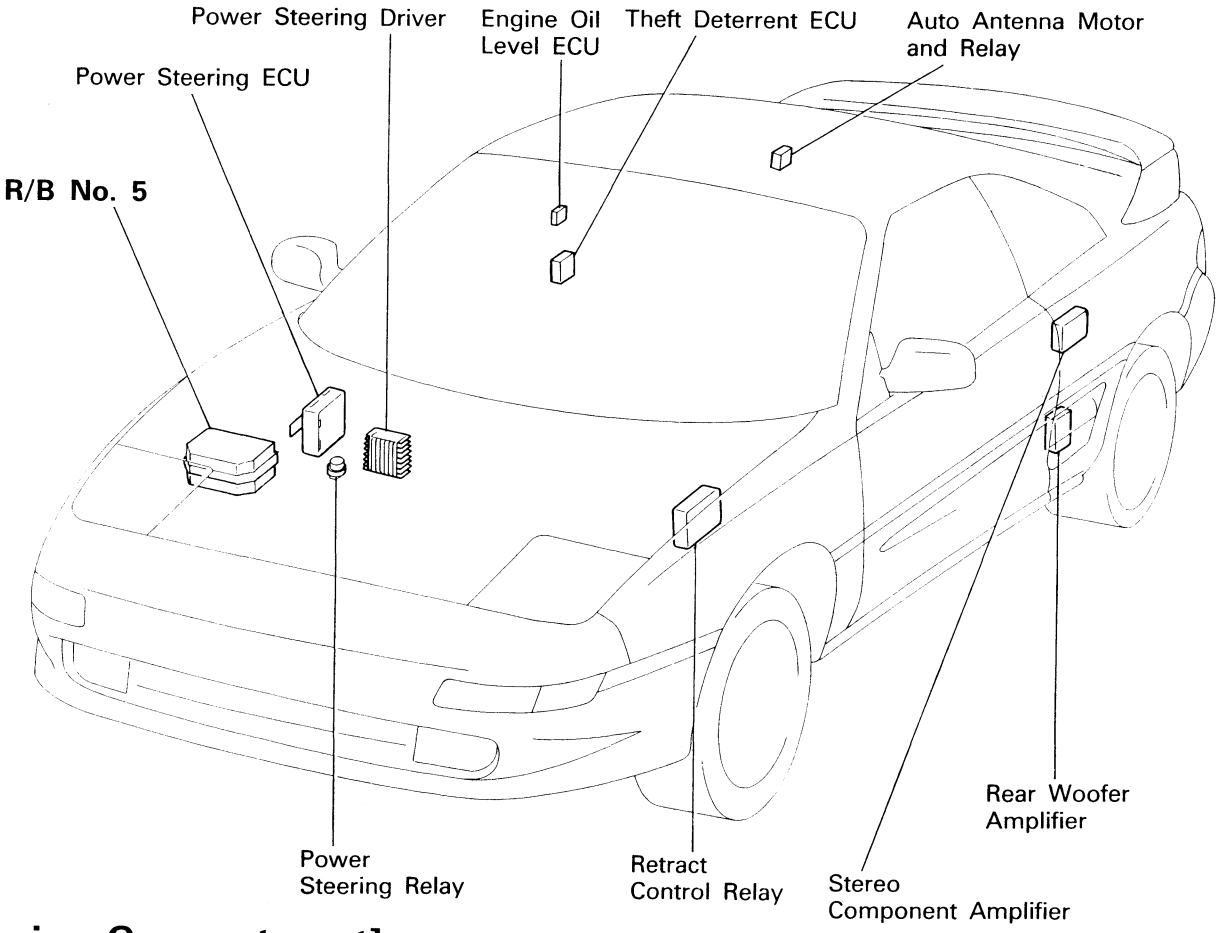


(2) **SPLICED**

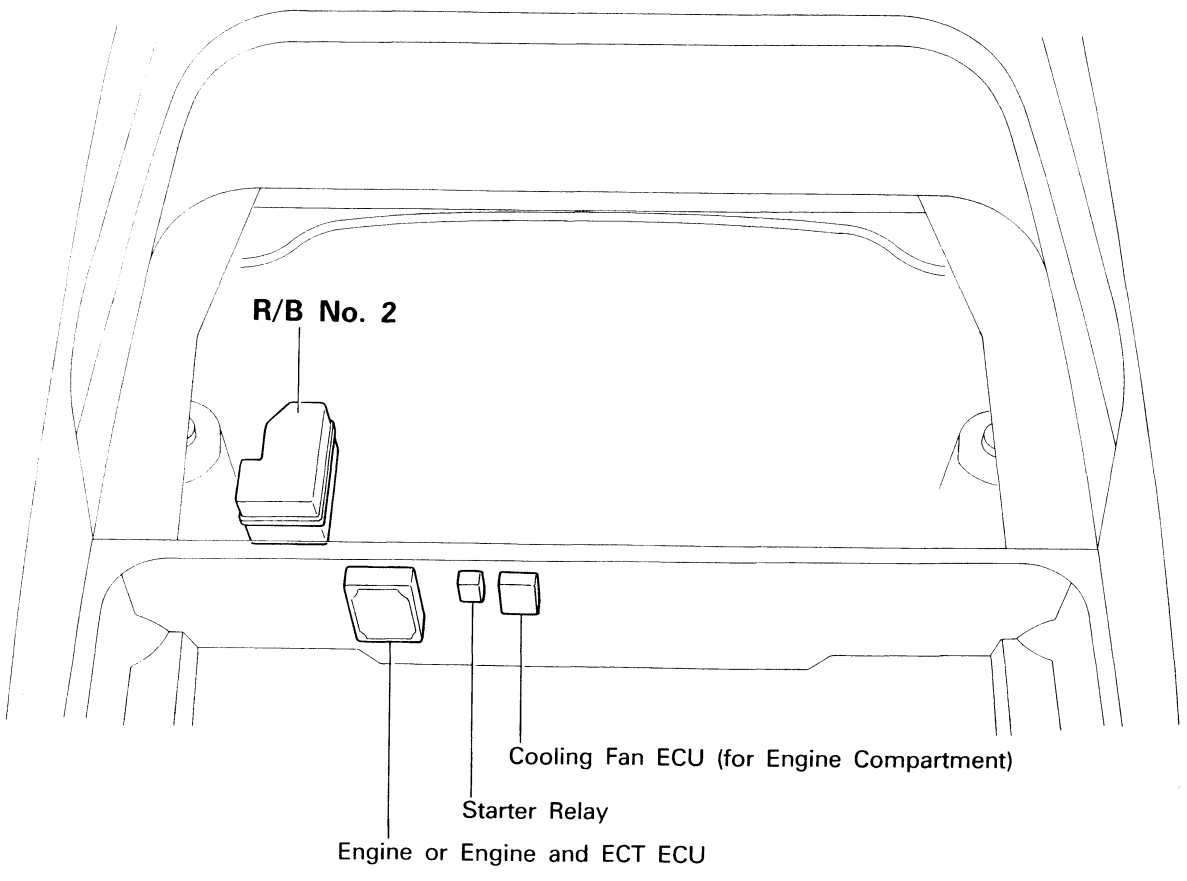
Wires are always drawn as straight lines on wiring diagrams. Crossed wired (1) without a black dot at the junction are not joined; crossed wires (2) with a black dot or octagonal (◯) mark at the junction are spliced (joined) connections.

F RELAY LOCATIONS

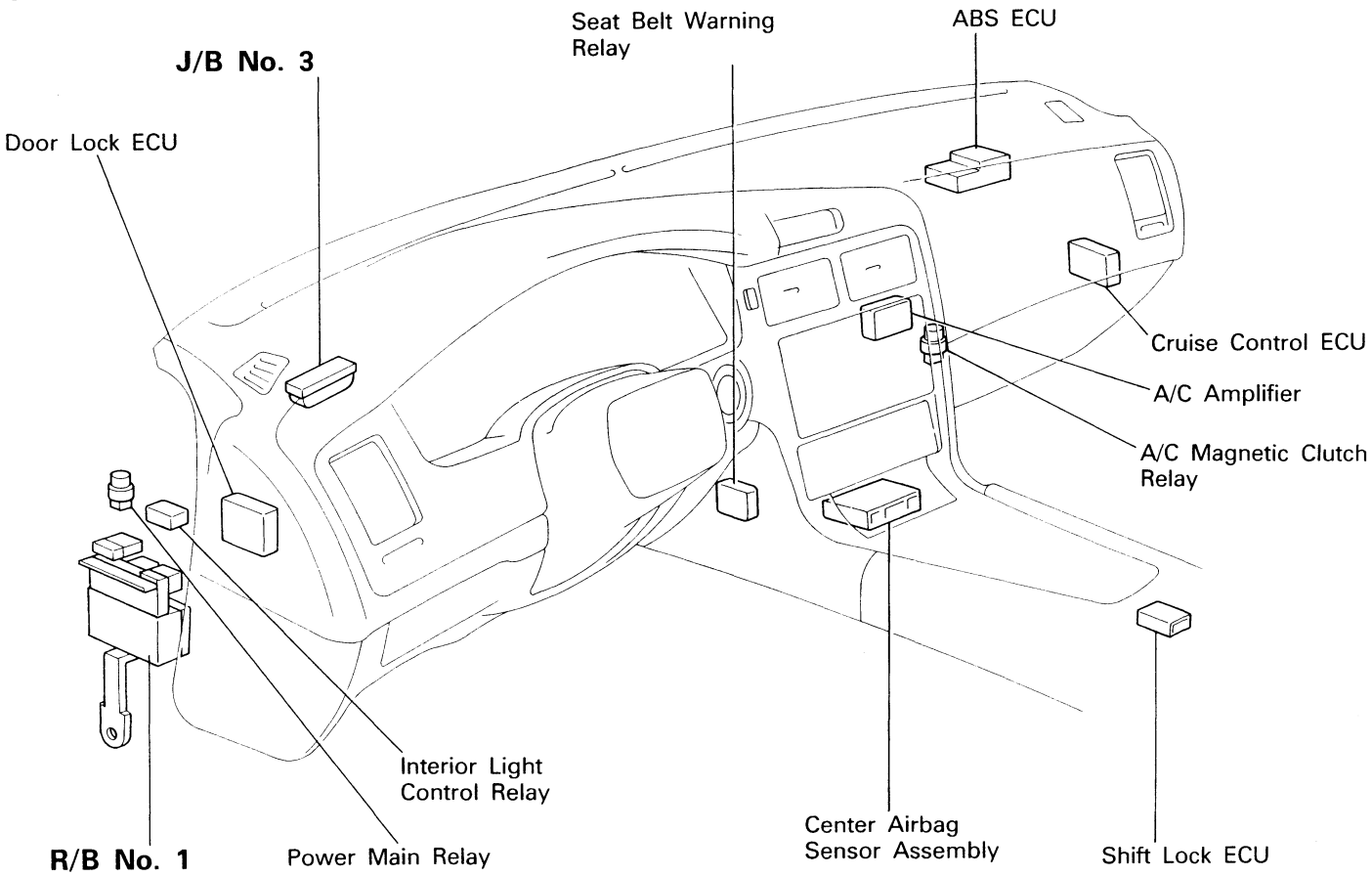
[Body]



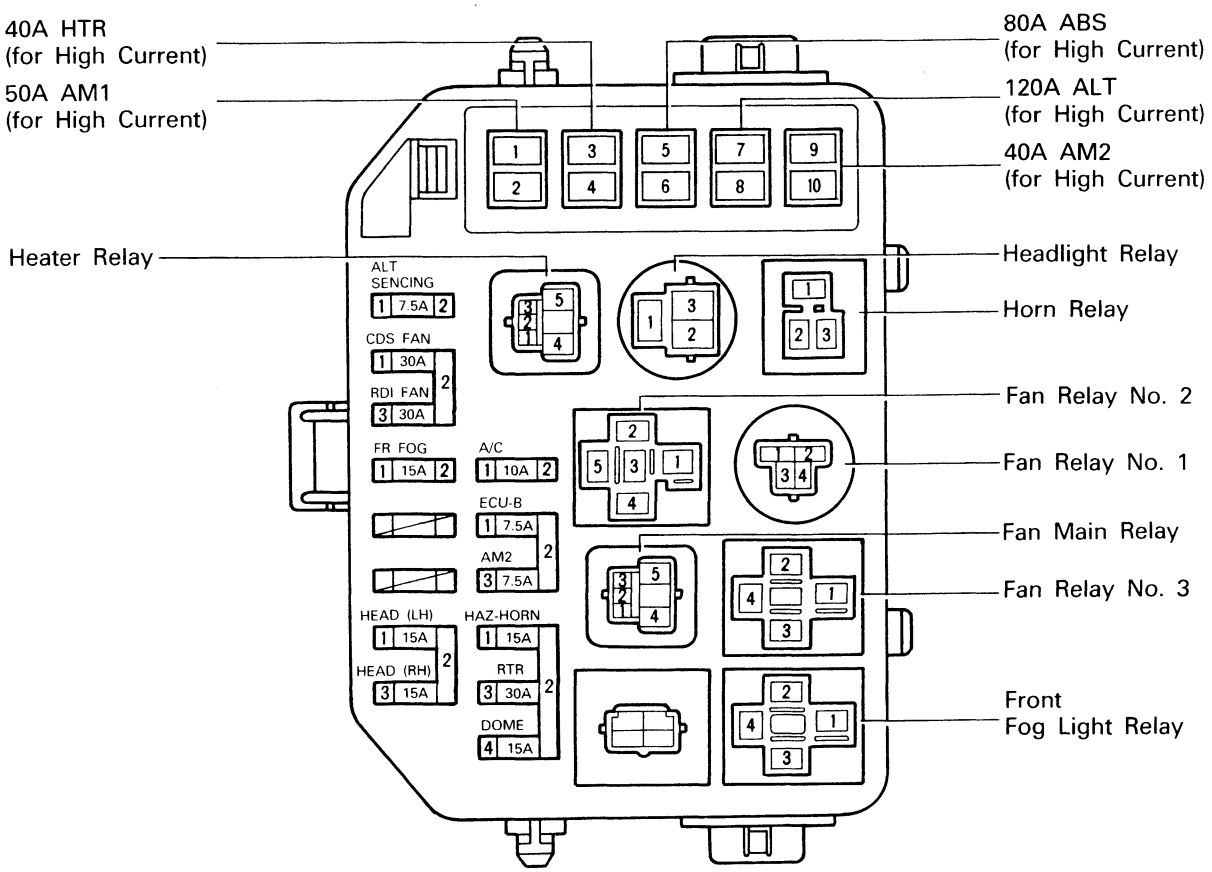
[Engine Compartment]



[Instrument Panel]

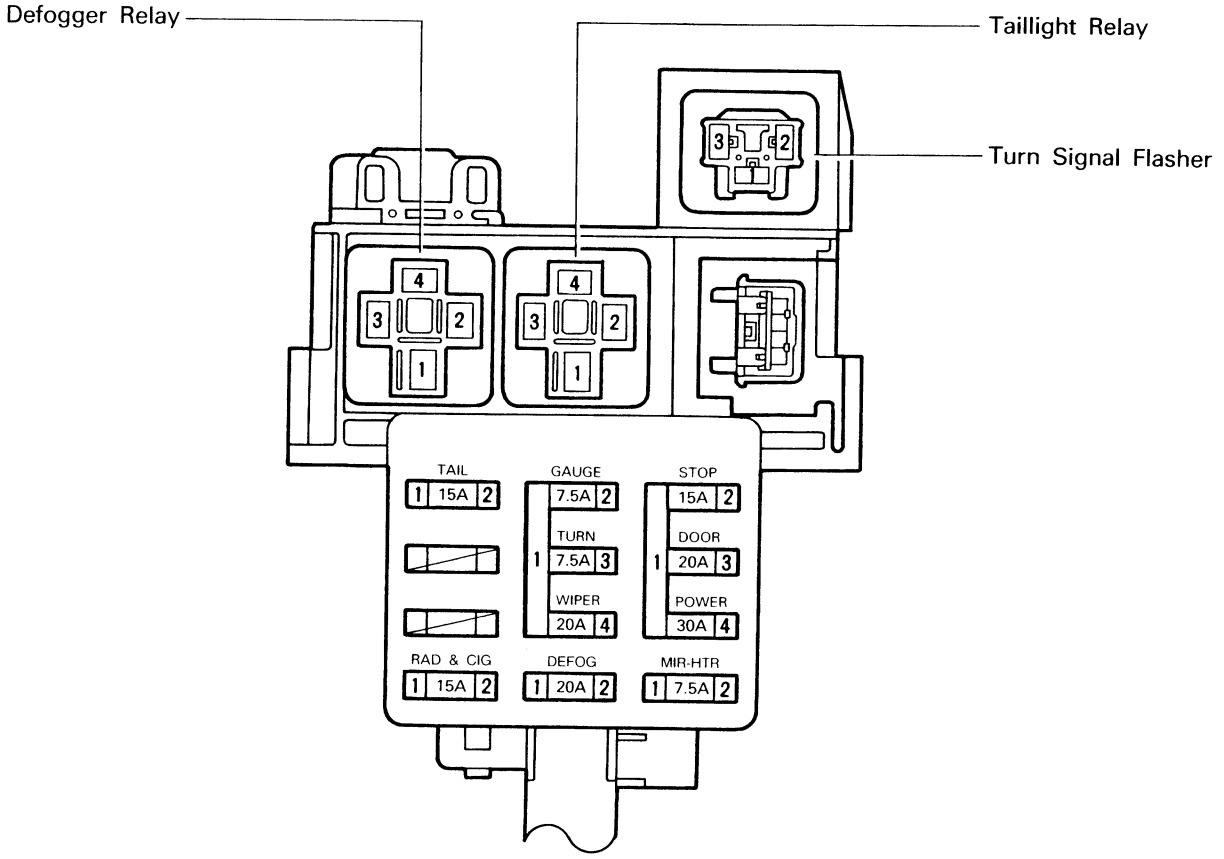


⑤ : R/B No. 5 | **Front Luggage Compartment Right (See Page 16)**

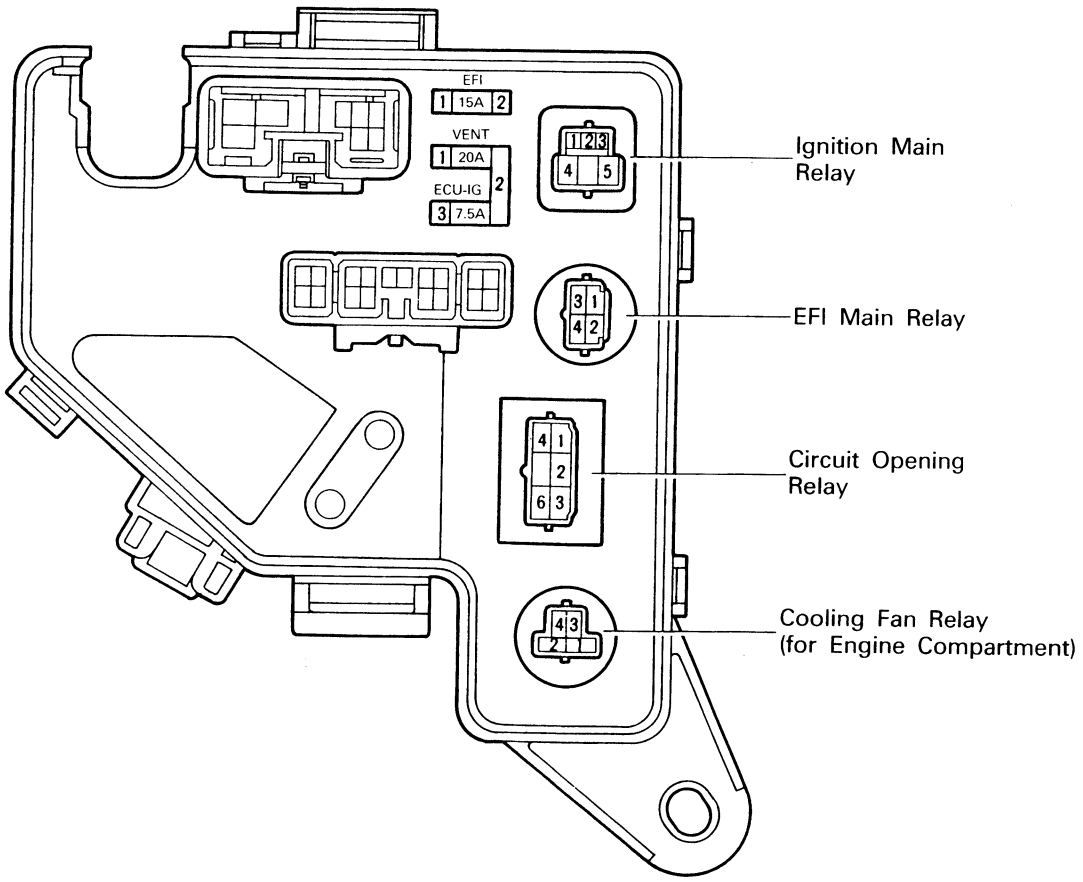


F RELAY LOCATIONS

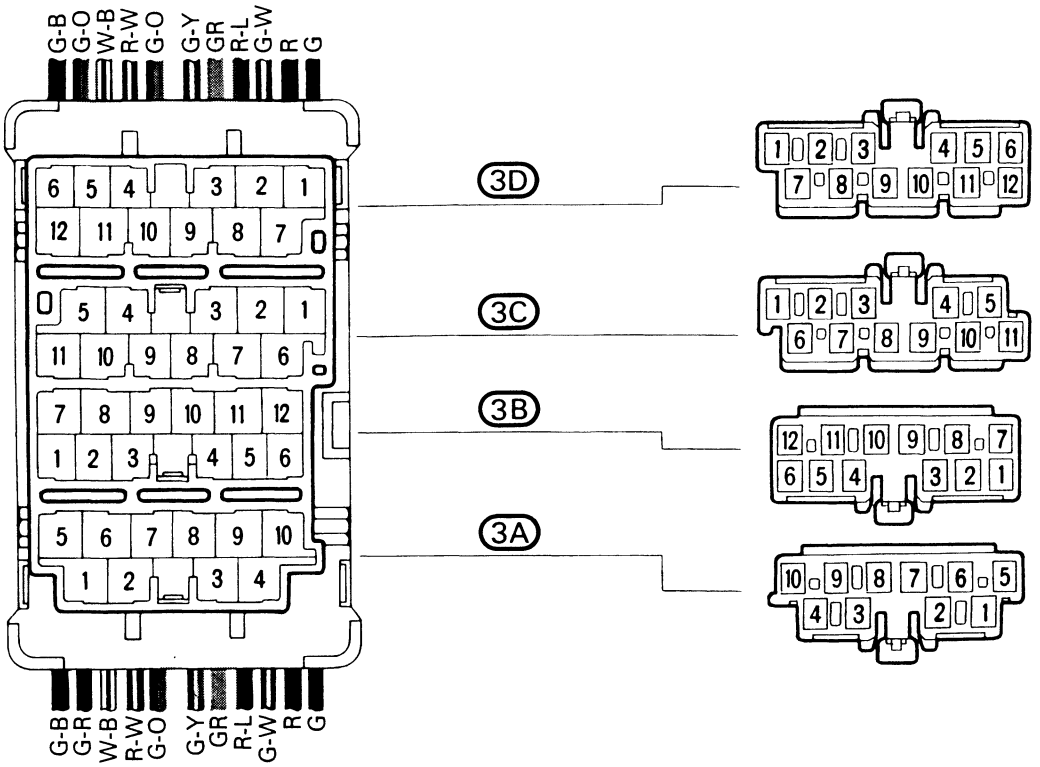
① : R/B No. 1 | Left Kick Panel (See page 17)



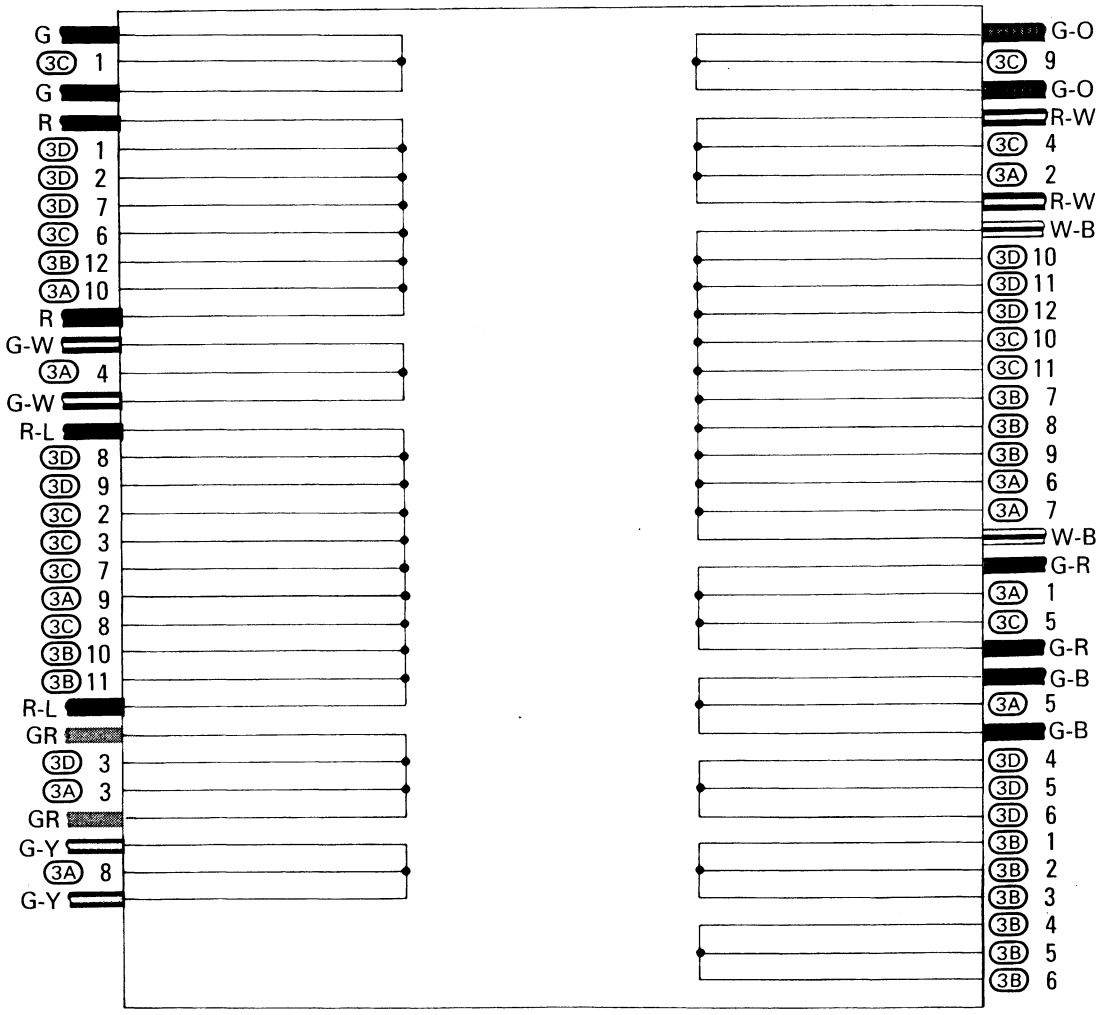
② : R/B No. 2 | Engine Compartment Left (See Page 16)



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

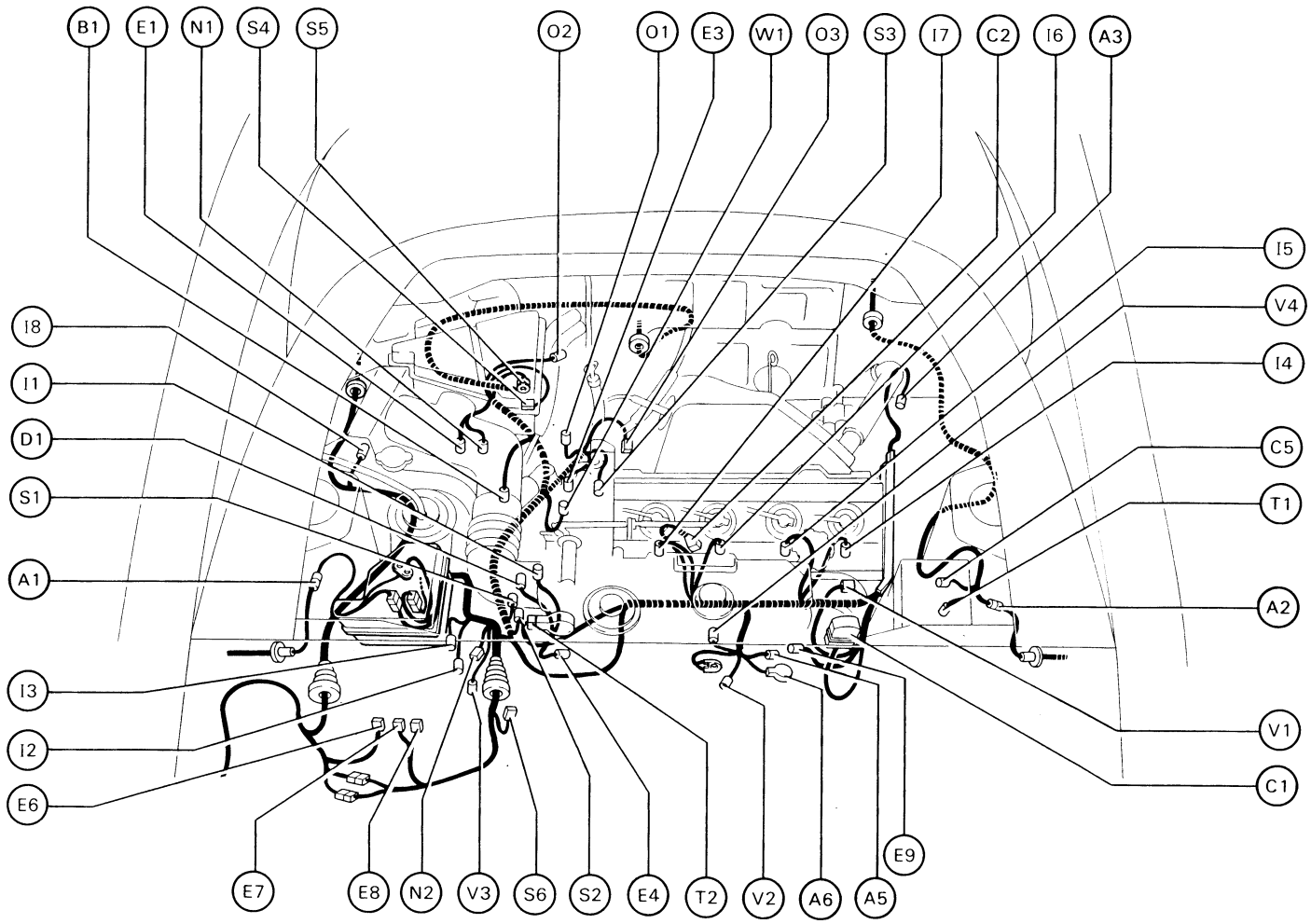


[J/B No. 3 Inner Circuit]



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 Meter (3S-GTE)
A 5, A 6 } Alternator

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

C 1 Check Connector
C 2 Cold Start Injector
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

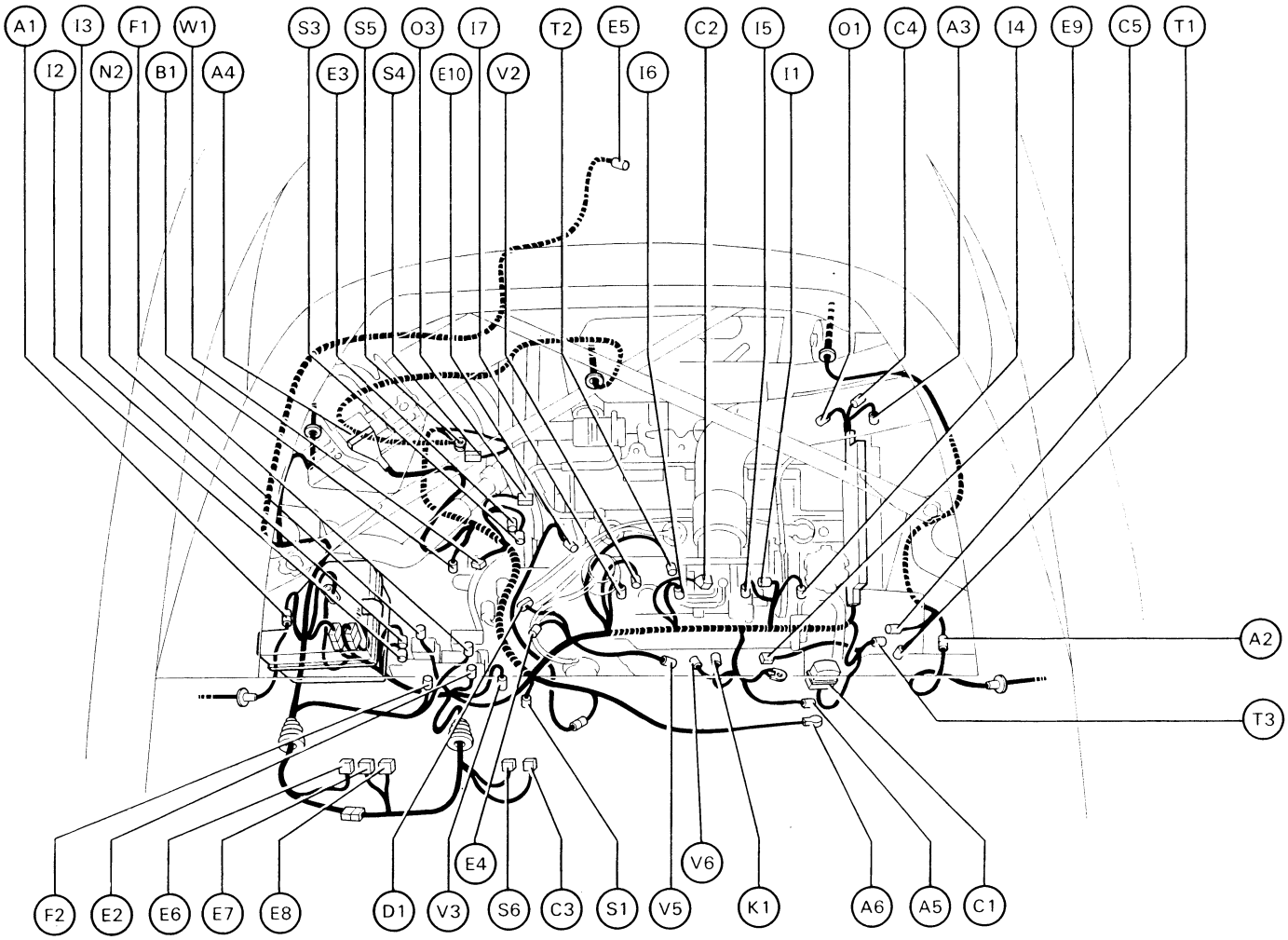
E 1 ECT Solenoid (5S-FE)
E 2 EFI Resistor (3S-GTE)
E 3 EFI Water Temp. Sensor
E 4 EGR Gas Temp. Sensor (for California) or Short Pin (Ex. for California)
E 5 Engine Compartment Temp. Sensor (for Cooling Fan of 3S-GTE)
E 6, E 7, E 8 } Engine or Engine and ECT ECU
E 9 Engine Hood Courtesy SW
E 10 Engine Oil Level Sensor (3S-GTE)

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

I 1 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 In Air Temp. Sensor (5S-FE)

Position of Parts in Engine Compartment

[3S-GTE]



K 1 Knock Sensor (3S-GTE)

N 1 Neutral Start SW and Back-Up Light SW (A/T of 5S-FE)
N 2 Noise Filter (for Ignition System)

O 1 Oxygen Sensor (Main)
O 2 Oxygen Sensor (Sub of 5S-FE)
O 3 Oil Pressure SW

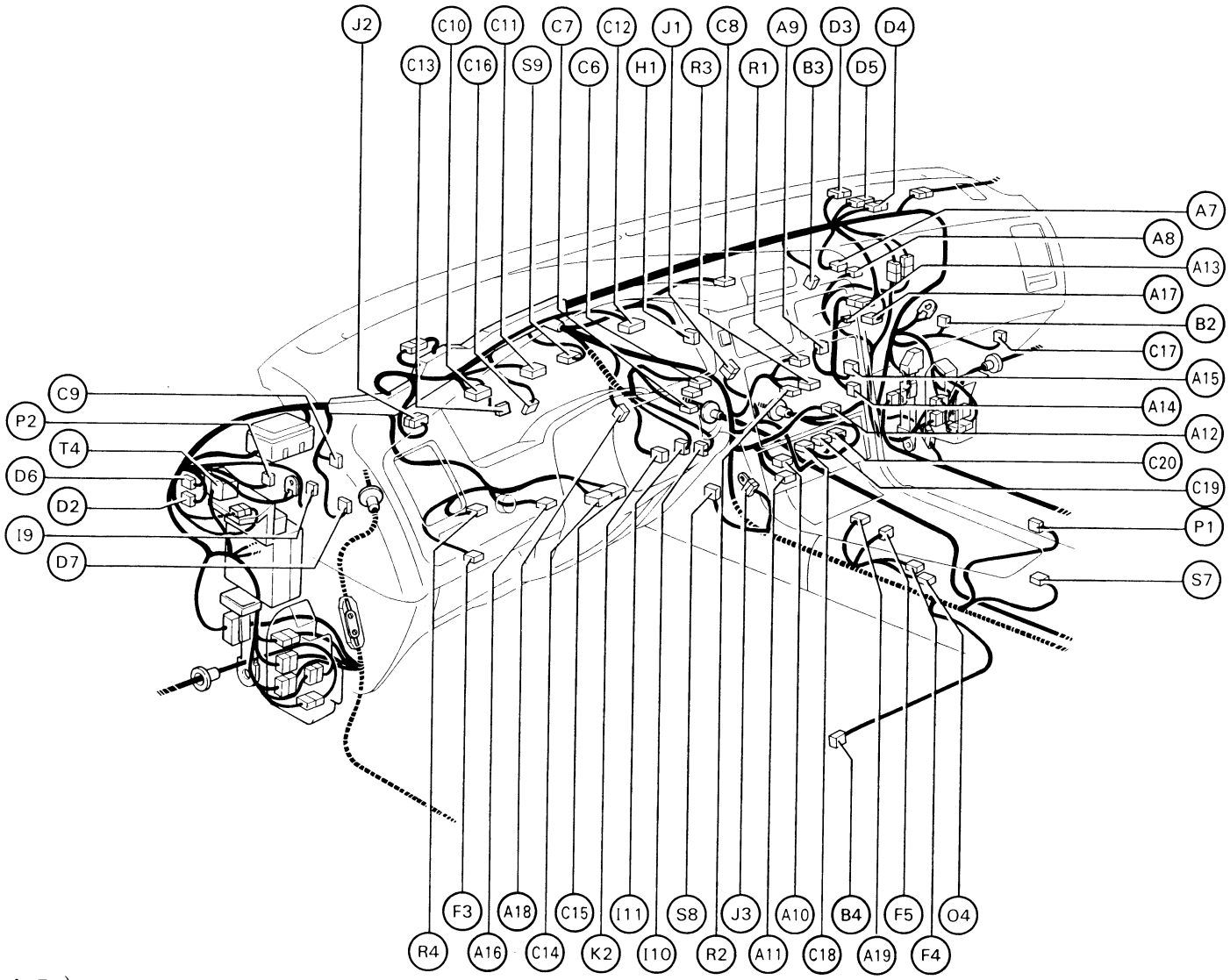
S 1 Speed Sensor (for Cruise Control System)
S 2 Speed Sensor (for ECT System of 5S-FE)
S 3 Start-Injector Time SW
S 4, S 5 Starter
S 6 Starter Relay

T 1 Theft Deterrent Horn
T 2 Throttle Position Sensor
T 3 Turbo Pressure Sensor (3S-GTE)

V 1 Vacuum Sensor (5S-FE)
V 2 VSV (for EGR System)
V 3 VSV (for A/C Idle-Up System)
V 4 VSV (for Fuel Pressure Up Control System)
V 5 VSV (for Turbo Pressure Control System)
V 6 VSV (for T-VIS)

W 1 Water Temp. Sender

Position of Parts in Instrument Panel



A 7 } ABS ECU
A 8 }
A 9 A/C Amplifier
A10 }
A11 } A/C Control Assembly
A12 }
A13 A/C Dual Pressure SW
A14 A/C Thermistor
A15 A/C Magnetic Clutch Relay
A16 Airbag Squib
A17 Air Inlet Servo Motor
A18 Air Vent Mode Control Servo Motor
A19 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)
C10 }
C11 } Combination Meter
C12 }
C13 Combination Meter (A/T Indicator Light)
C14 } Combination SW
C15 }
C16 Cruise Control Clutch SW
C17 Cruise Control ECU
C18 }
C19 } Center Airbag Sensor Assembly
C20 }

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 Interior 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 }
J 3 Junction Connector (for Earth)

K 2 Key Inter Lock Solenoid

O 4 O/D Main SW

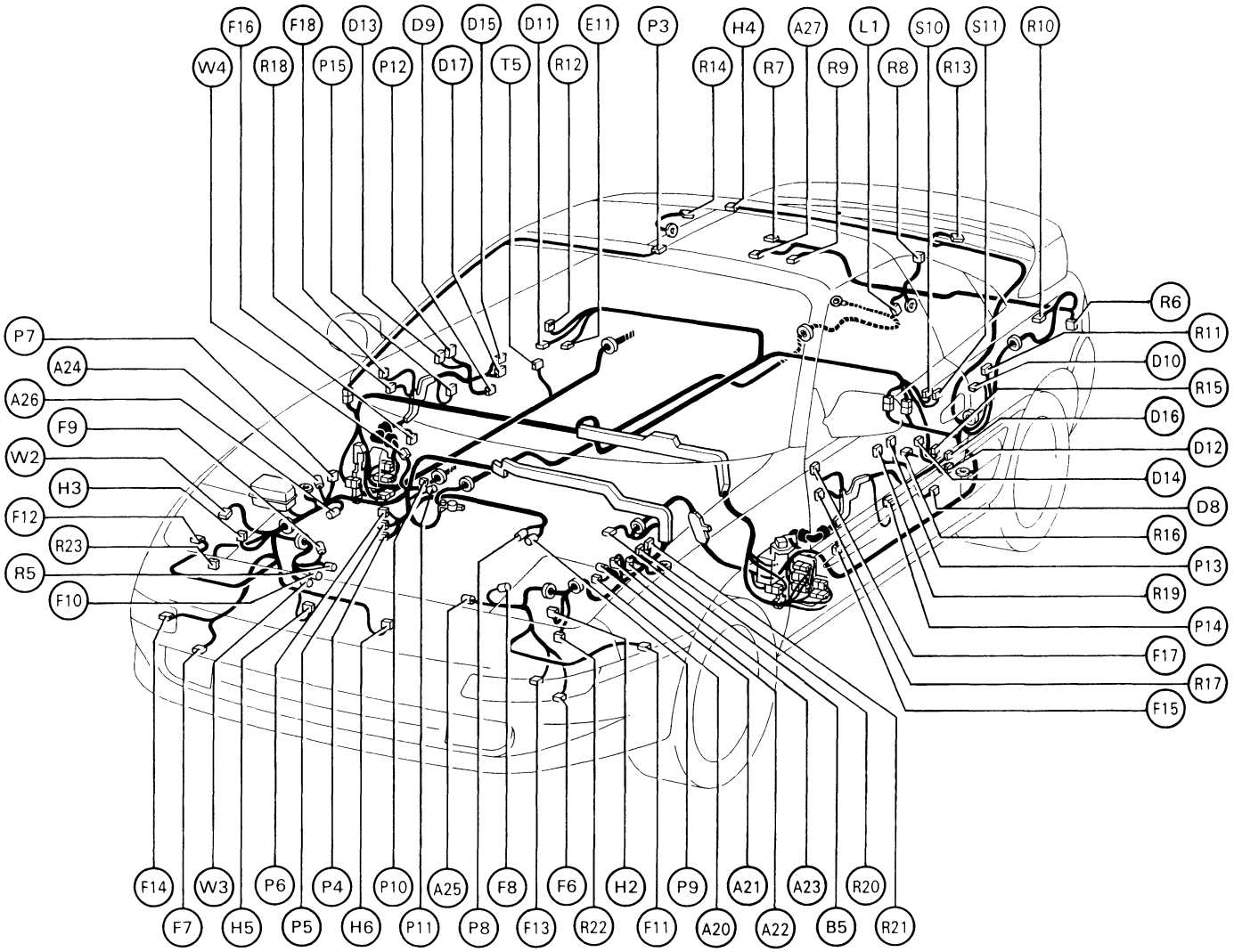
P 1 Parking Brake SW
P 2 Power Main Relay

R 1 Radio and Player (w/ CD Player)
R 2 } Radio and Player
R 3 } (w/o CD 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

T 4 Turn Signal Flasher

Position of Parts in Body



A 20 } ABS Actuator
A 21 }
A 22 }
A 23 ABS Speed Sensor Front LH
A 24 ABS Speed Sensor Front RH
A 25 A/C Condenser Fan Motor
A 26 A/C High Pressure SW or Short Pin (w/o A/C)
A 27 Auto Antenna Control Relay and Motor

B 5 Brake Fluid Level SW

D 8 Door Courtesy Light LH
D 9 Door Courtesy Light RH
D 10 Door Courtesy SW LH
D 11 Door Courtesy SW RH
D 12 Door Key Cylinder Light and Out Side Handle SW
D 13 Door Lock Control SW RH
D 14 Door Lock Key Lock and Unlock SW LH
D 15 Door Lock Key Lock and Unlock SW RH
D 16 Door Lock Motor LH
D 17 Door Lock Motor RH

E 11 Engine Oil Level ECU

F 6 Fog Light LH
F 7 Fog Light RH
F 8 Front Airbag Sensor LH
F 9 Front Airbag Sensor RH
F 10 Front Luggage Compartment Door Courtesy SW
F 11 Front Side Marker Light LH
F 12 Front Side Marker Light RH
F 13 Front Turn Signal and Clearance Light LH
F 14 Front Turn Signal and Clearance Light RH
F 15 Front Speaker LH
F 16 Front Speaker RH
F 17 Front Tweeter (Speaker) LH
F 18 Front Tweeter (Speaker) RH

H 2 Headlight LH
H 3 Headlight RH
H 4 High Mount Stop Light
H 5 } Horn
H 6 }

L 1 Licence Plate Light

P 3 Personal Light
P 4 }
P 5 } Power Steering Driver
P 6 }
P 7 Power Steering ECU
P 8 }
P 9 } Power Steering Pump with Motor
P 10 }
P 11 } Power Steering Relay
P 12 Power Window SW RH
P 13 Power Window Master SW and Door Lock Control SW LH
P 14 Power Window Motor LH
P 15 Power Window Motor RH

R 5 Radiator Fan Motor
R 6 Rear Combination Light LH
R 7 Rear Combination Light RH
R 8 Rear Luggage Compartment Door Courtesy SW
R 9 Rear Luggage Compartment Key Unlock SW
R 10 Rear Luggage Compartment Light
R 11 Rear Speaker LH
R 12 Rear Speaker RH
R 13 Rear Window Defogger +
R 14 Rear Window Defogger −
R 15 Rear Woofer Amplifier
R 16 Rear Woofer Speaker
R 17 Remote Control Mirror LH
R 18 Remote Control Mirror RH
R 19 Remote Control Mirror SW
R 20 } Retract Control Relay
R 21 }
R 22 Retract Motor LH
R 23 Retract Motor RH

S 10 } Stereo Component Amplifier
S 11 }

T 5 Theft Deterrent ECU

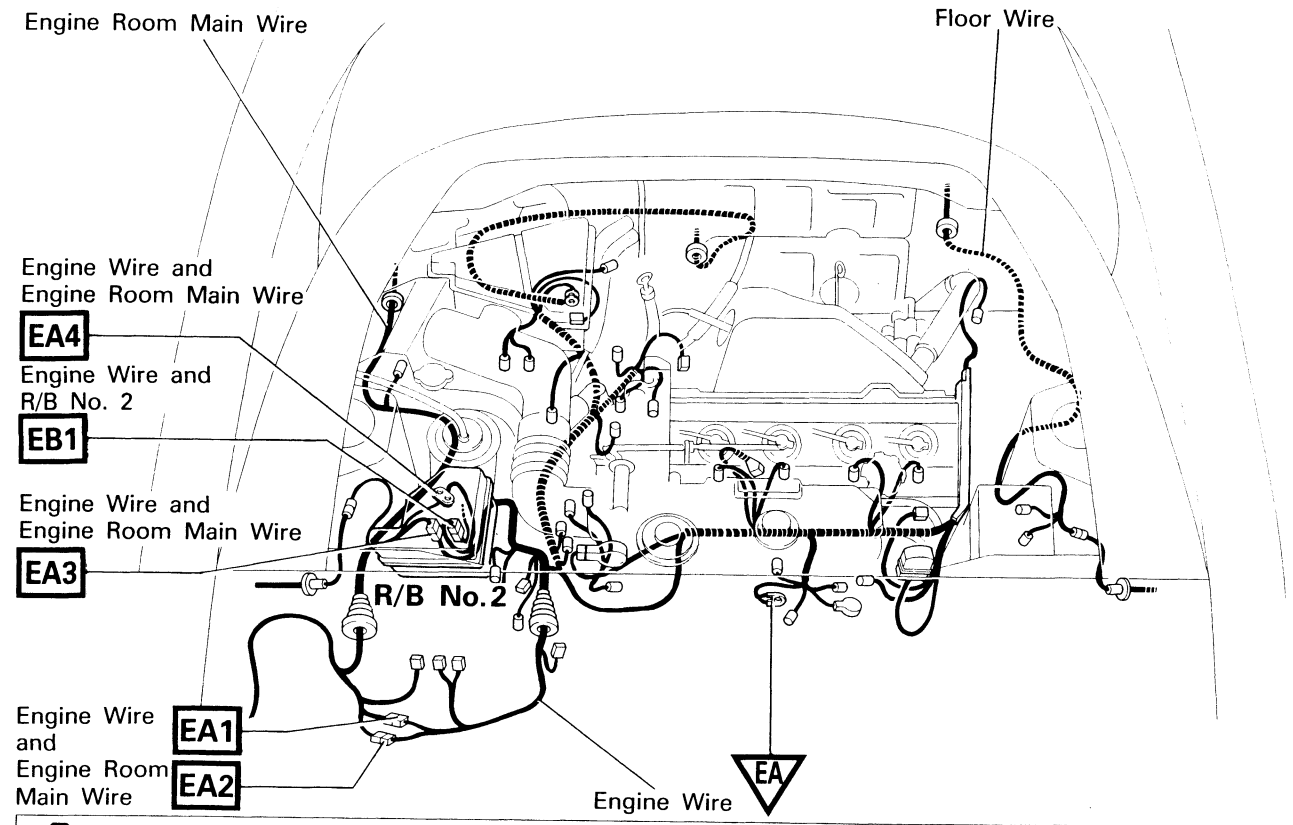
W 2 Washer Motor
W 3 Water Temp. SW (for Radiator Fan)
W 4 Wiper Motor

G ELECTRICAL WIRING ROUTING

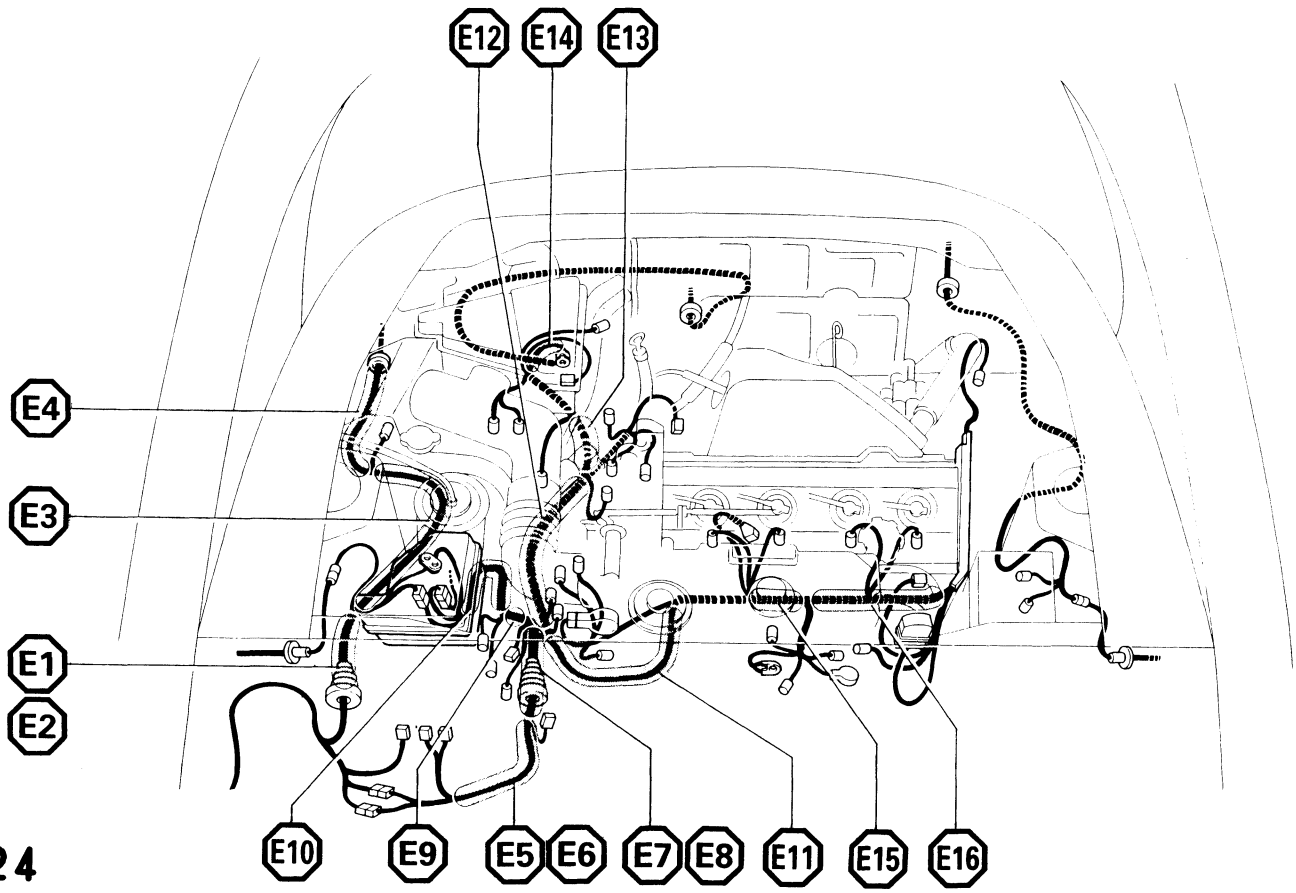
□ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

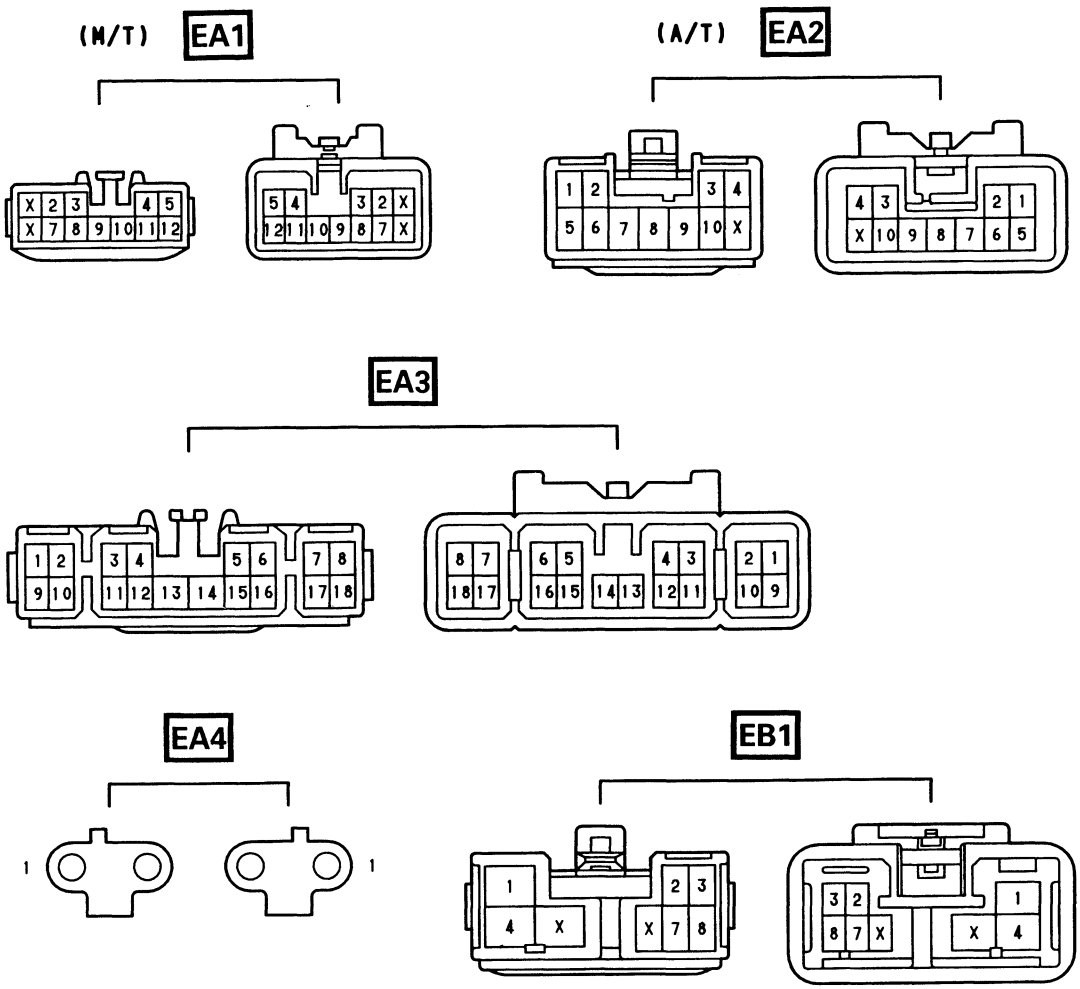
[5S-FE]



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness



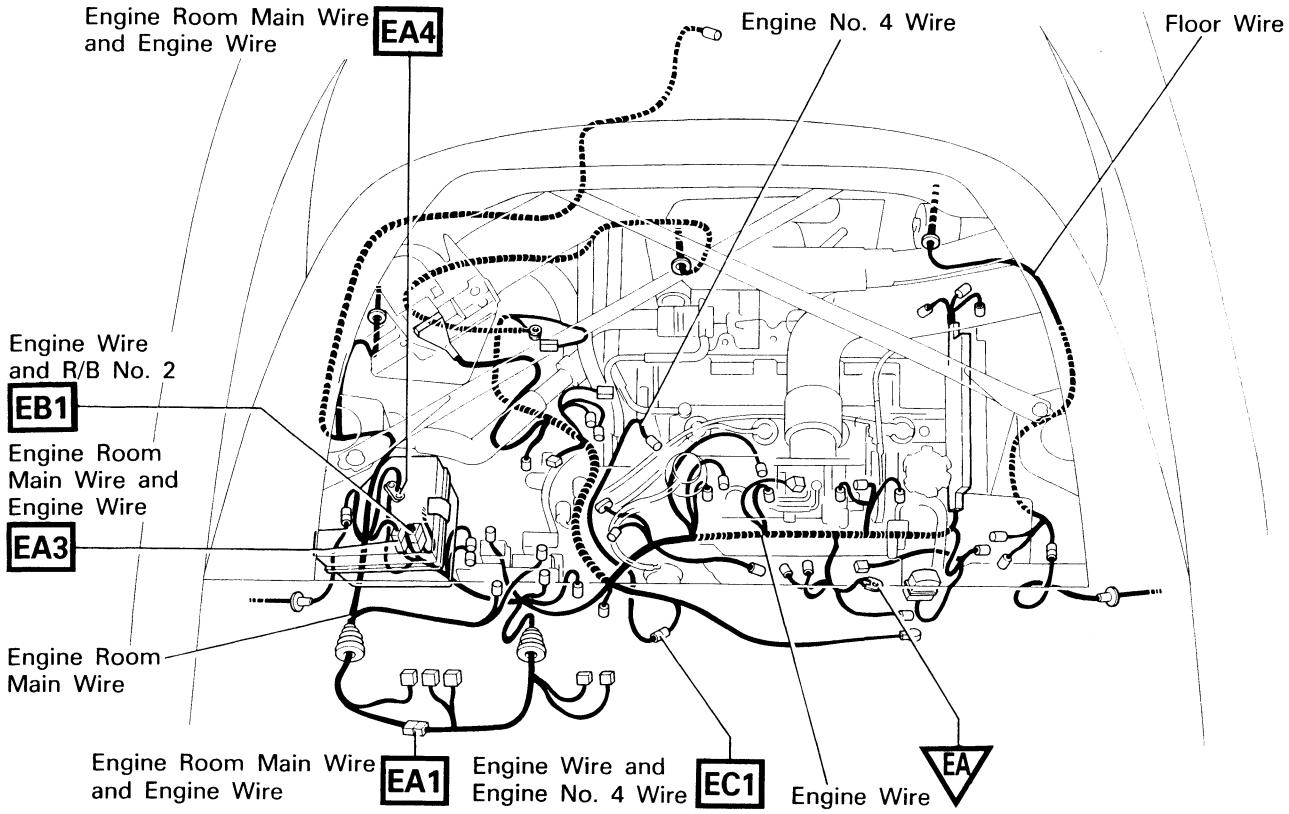
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA2	
EA3	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EA4	
EB1	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)

G ELECTRICAL WIRING ROUTING

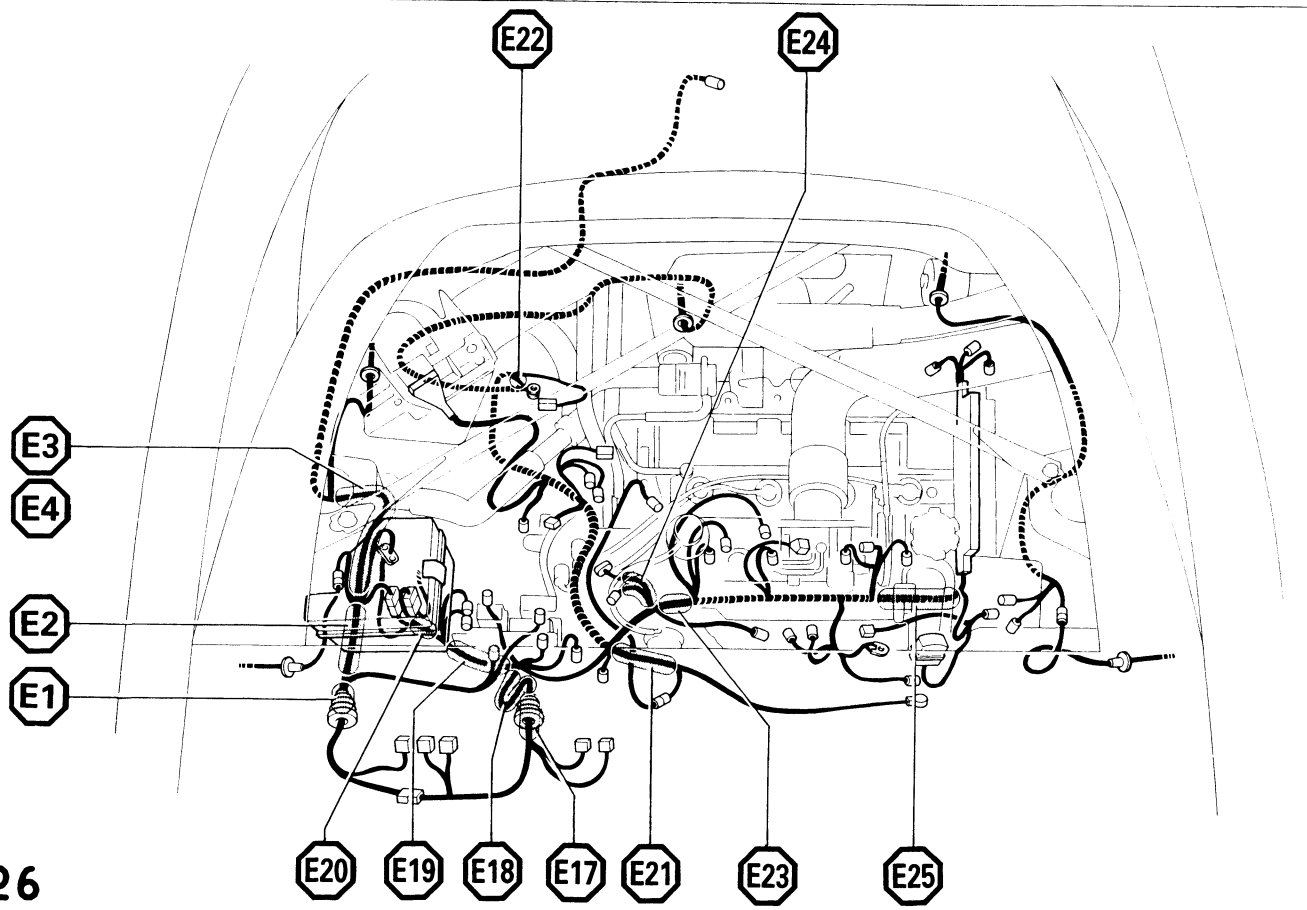
▭ : Location of Connector Joining Wire Harness and Wire Harness

▽ : Location of Ground Points

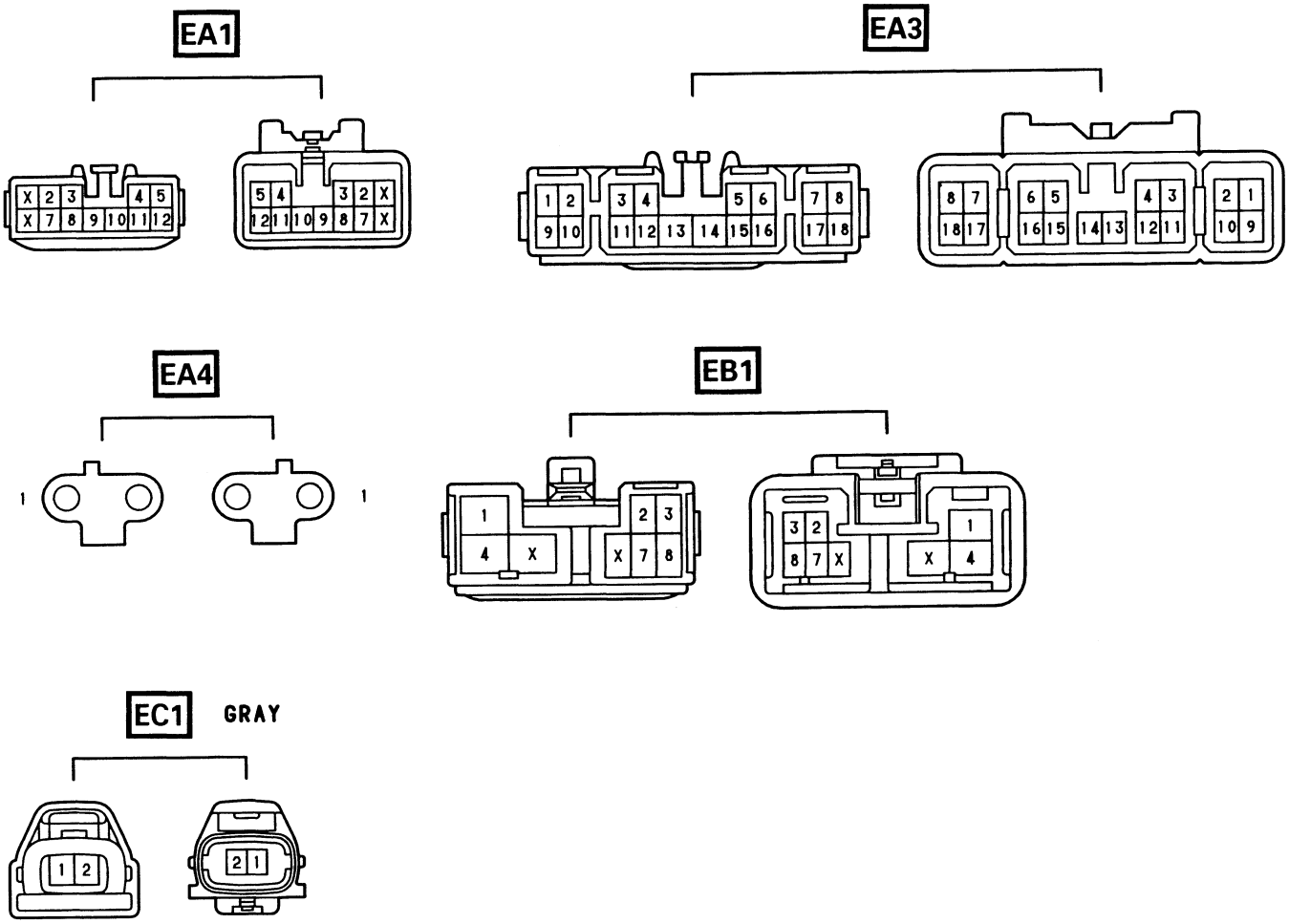
[3S-GTE]



○ : Location of Splice Points

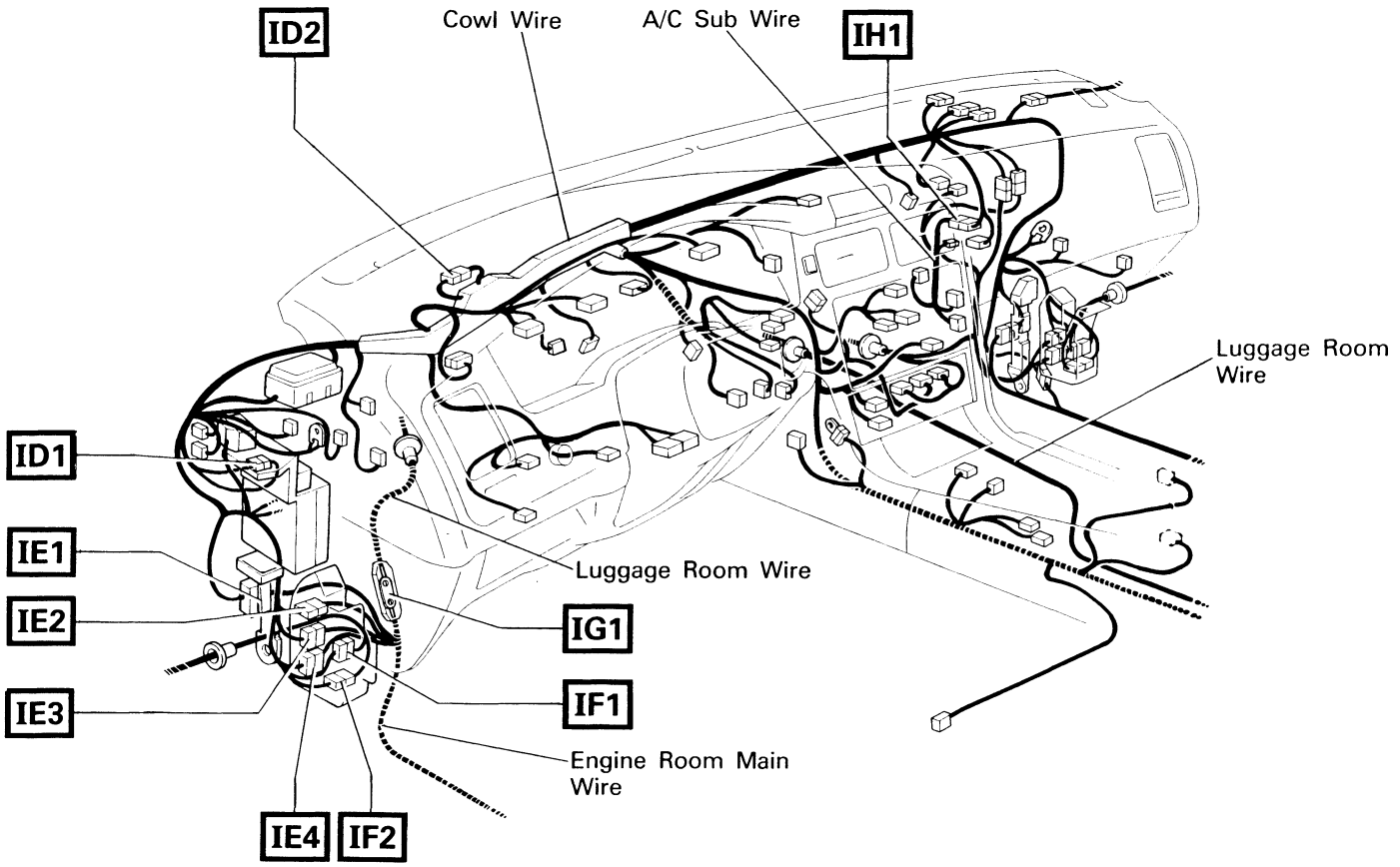


Connector Joining Wire Harness and Wire Harness

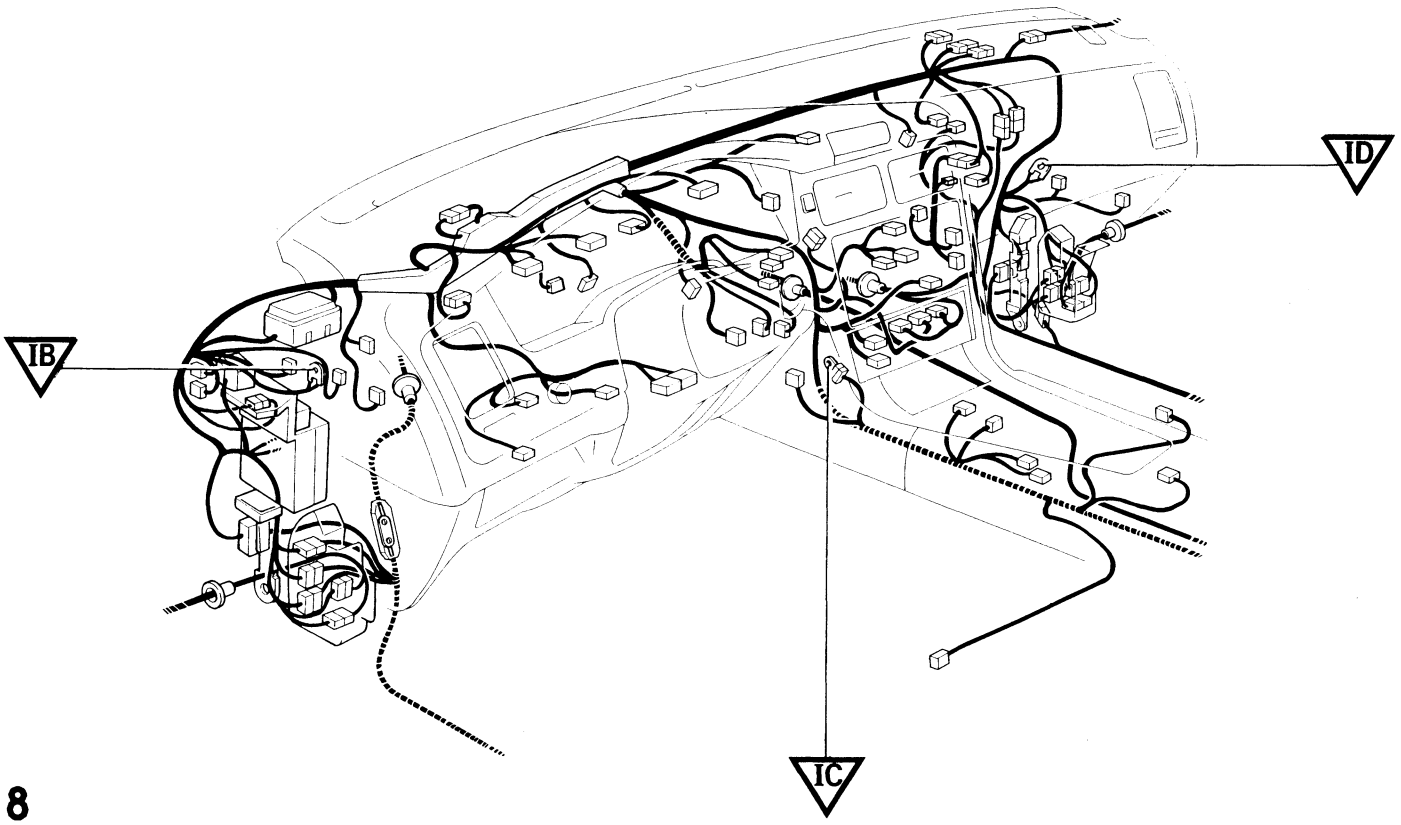


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EA4	
EB1	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
EC1	ENGINE NO.4 WIRE AND ENGINE WIRE (NEAR THE INTAKE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

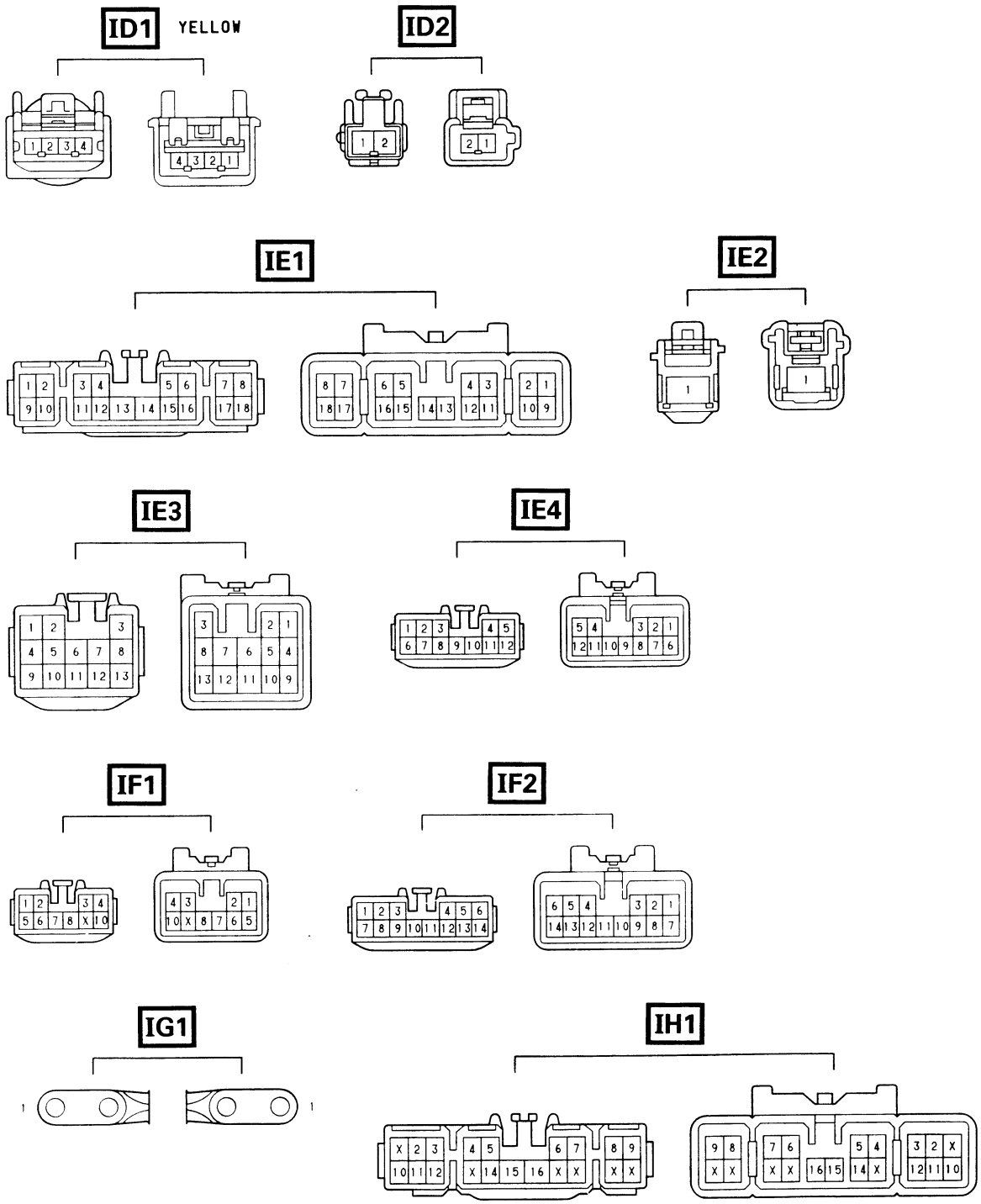
□ : Location of Connector Joining Wire Harness and Wire Harness



▽ : Location of Ground Points

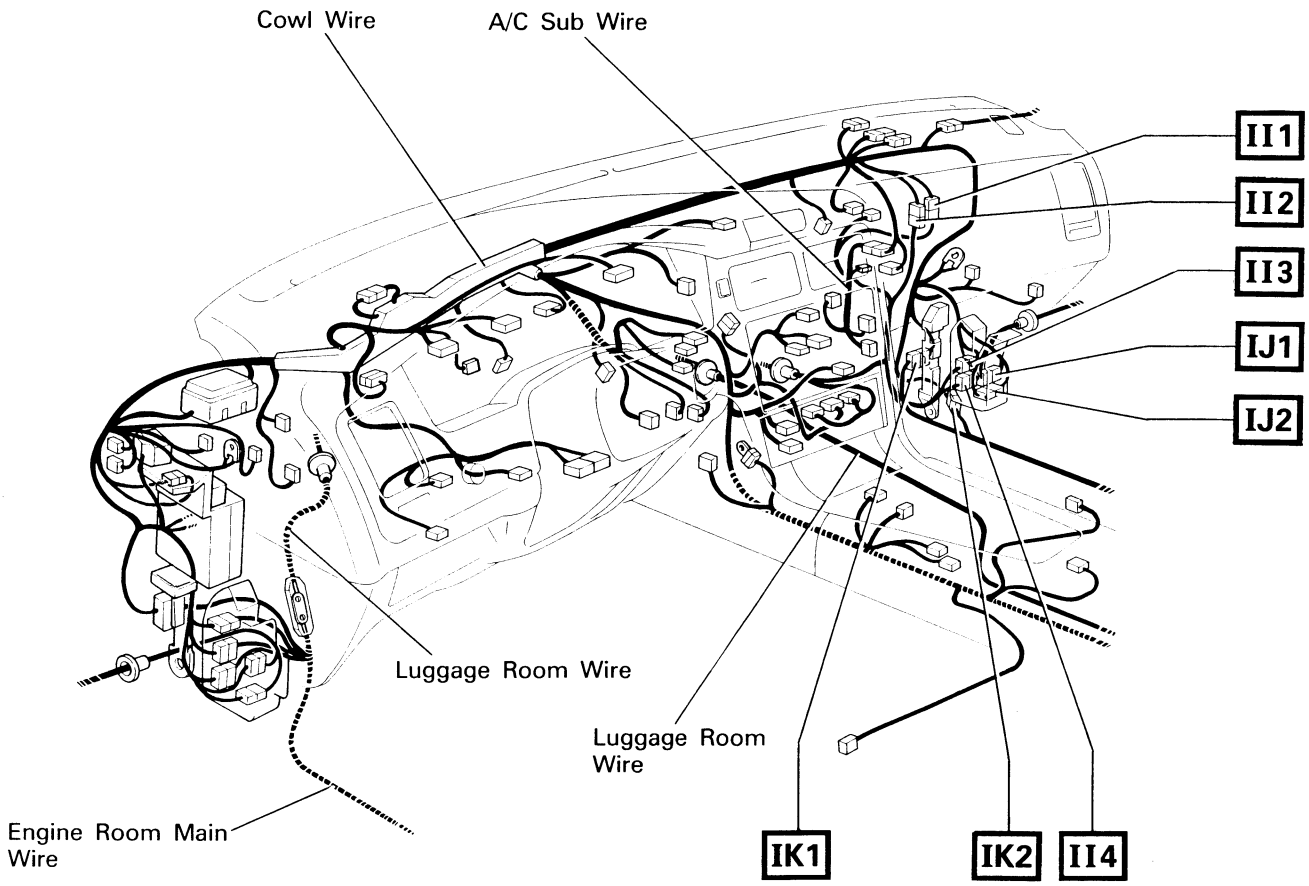


Connector Joining Wire Harness and Wire Harness

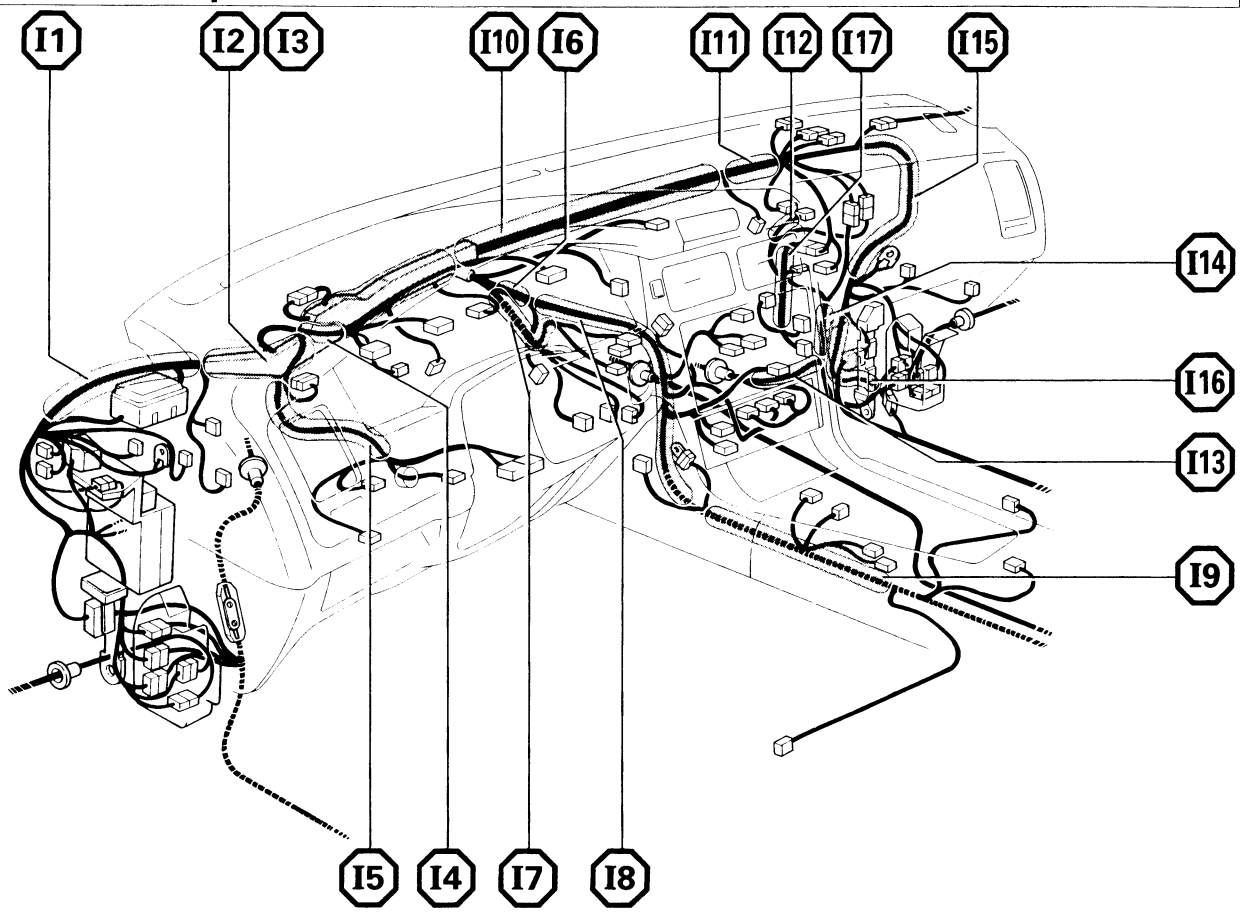


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	COWL WIRE AND COWL WIRE (NEAR THE R/B NO.1)
ID2	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE1	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2	
IE3	
IE4	
IF1	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	FRONT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

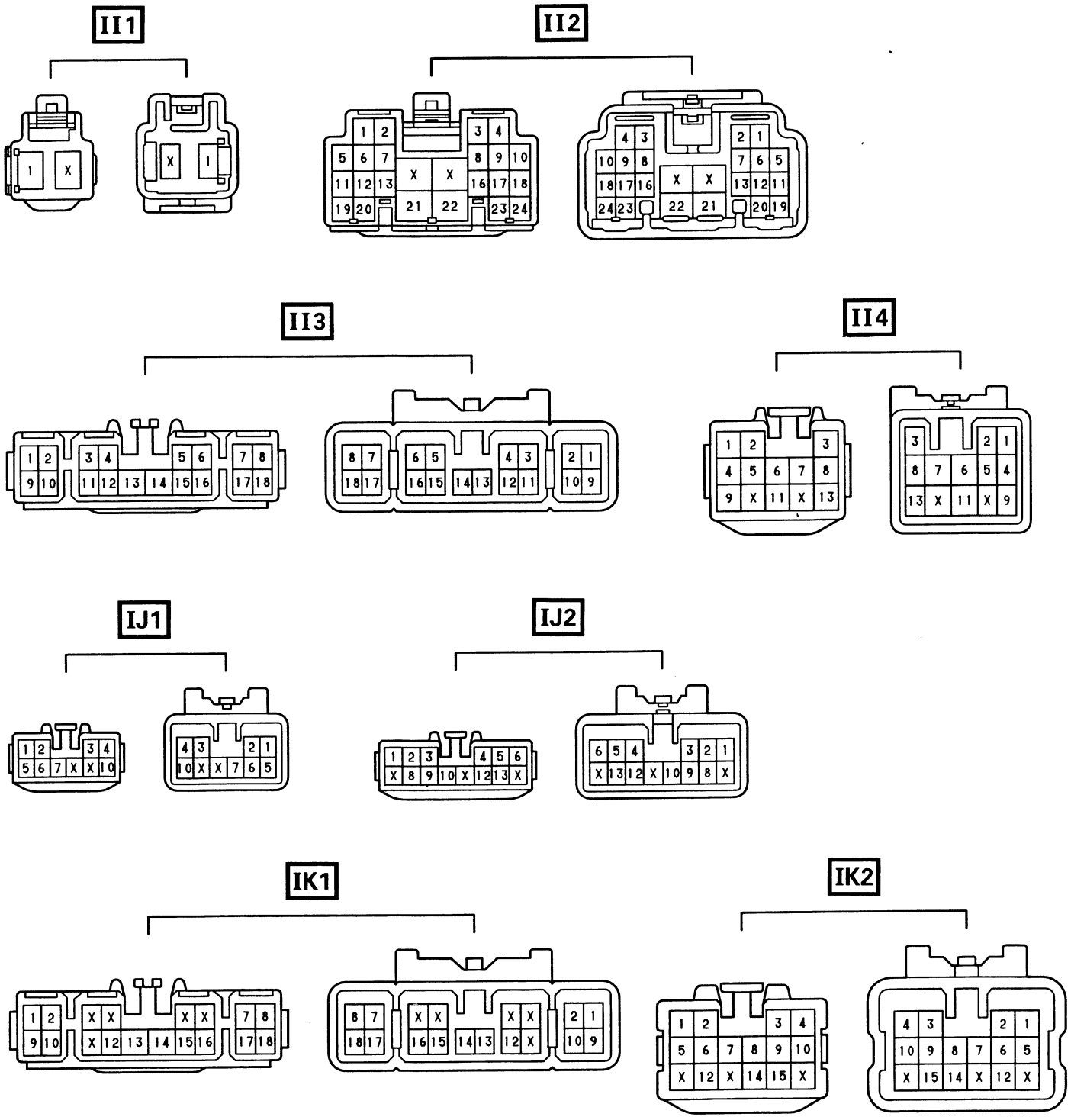
□ : Location of Connector Joining Wire Harness and Wire Harness



○ : Location of Splice Points



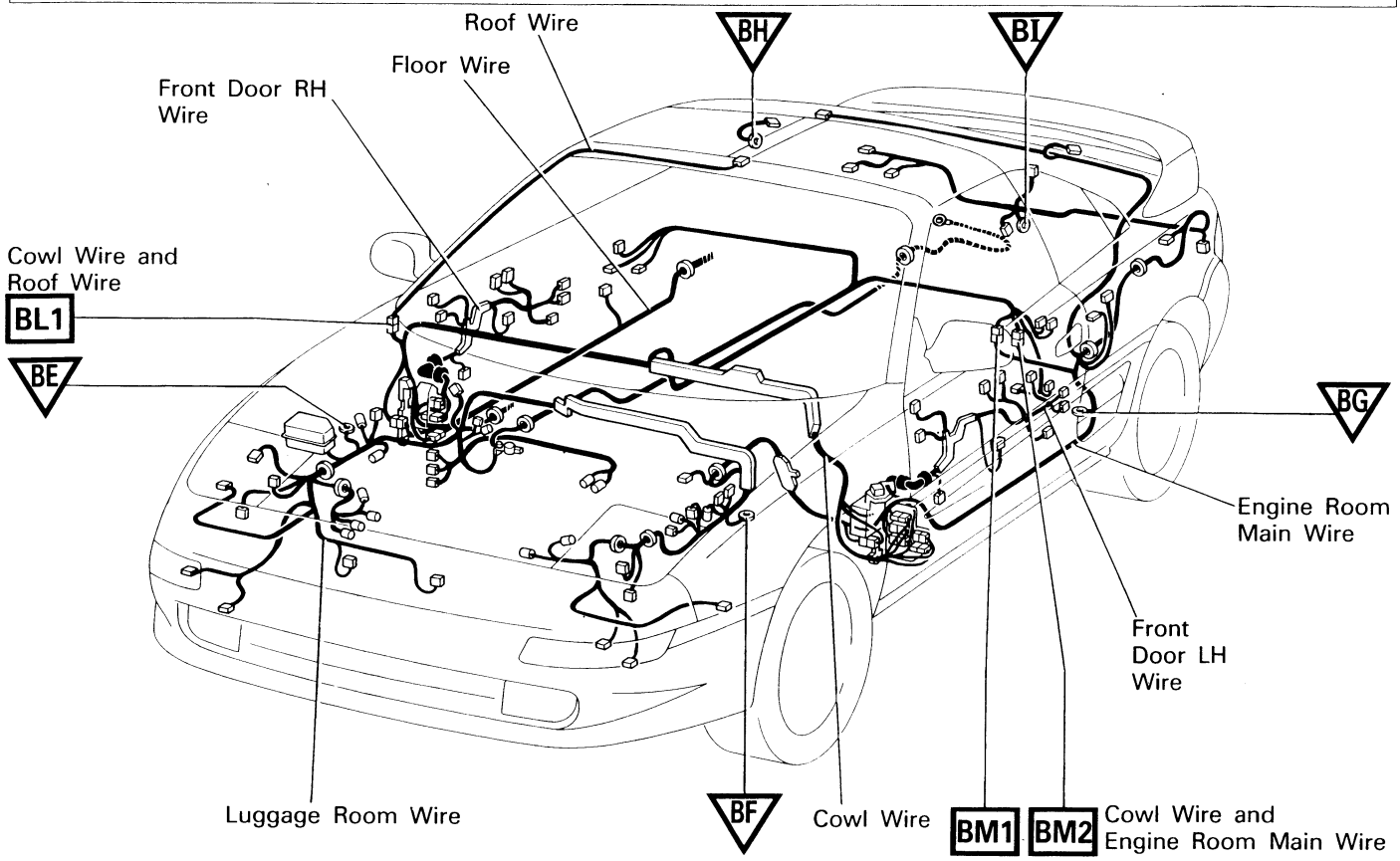
Connector Joining Wire Harness and Wire Harness



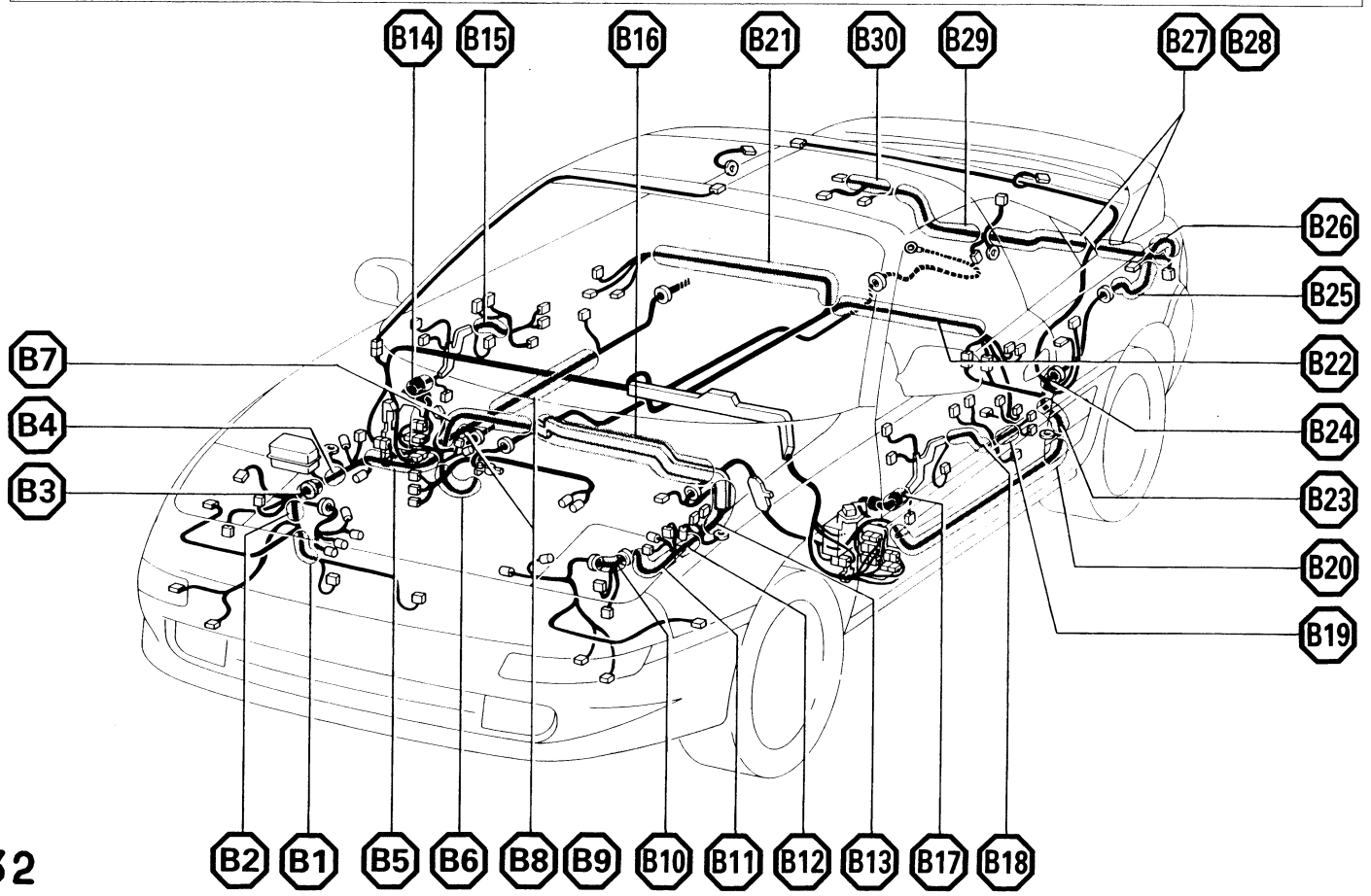
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2	
II3	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4	
IJ1	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IJ2	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK1	FLOOR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

□ : Location of Connector Joining Wire Harness and Wire Harness

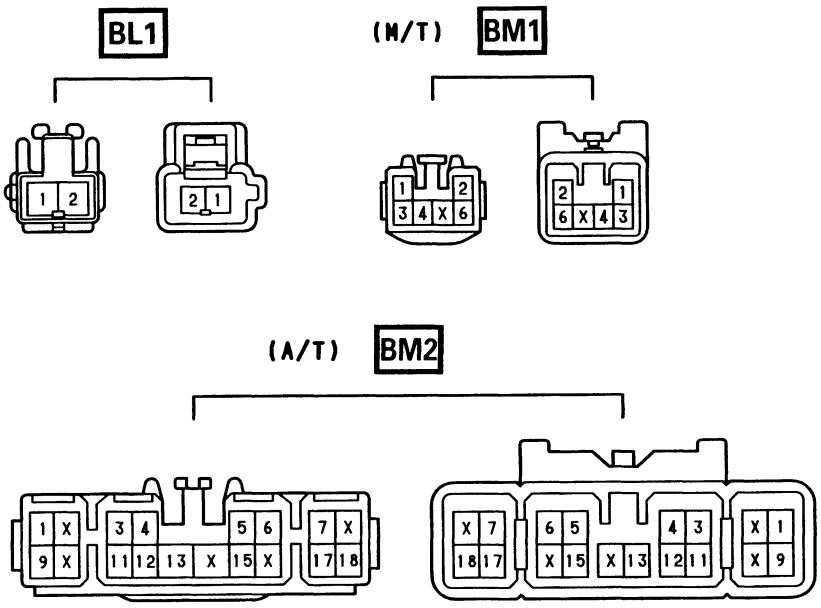
▽ : Location of Ground Points



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

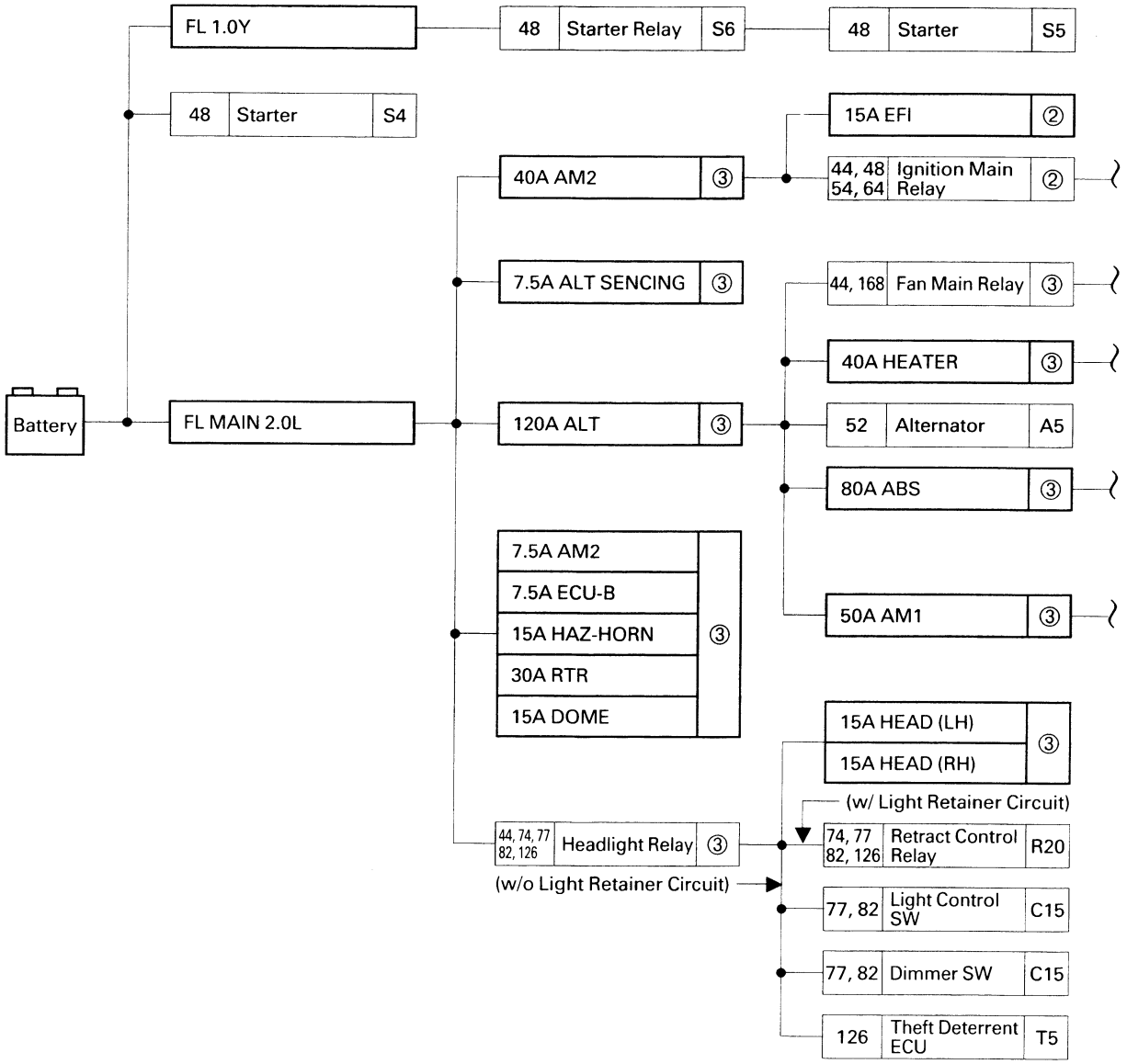


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BL1	ROOF WIRE AND COWL WIRE (UNDER THE RIGHT FRONT PILLAR)
BM1	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

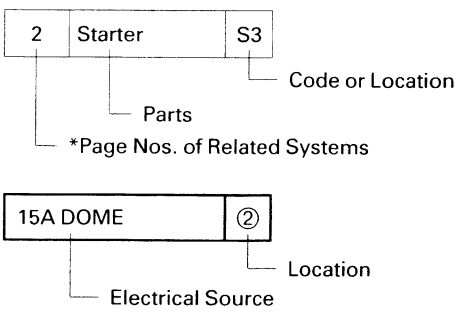
H POWER SOURCE (Current Flow Chart)

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

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

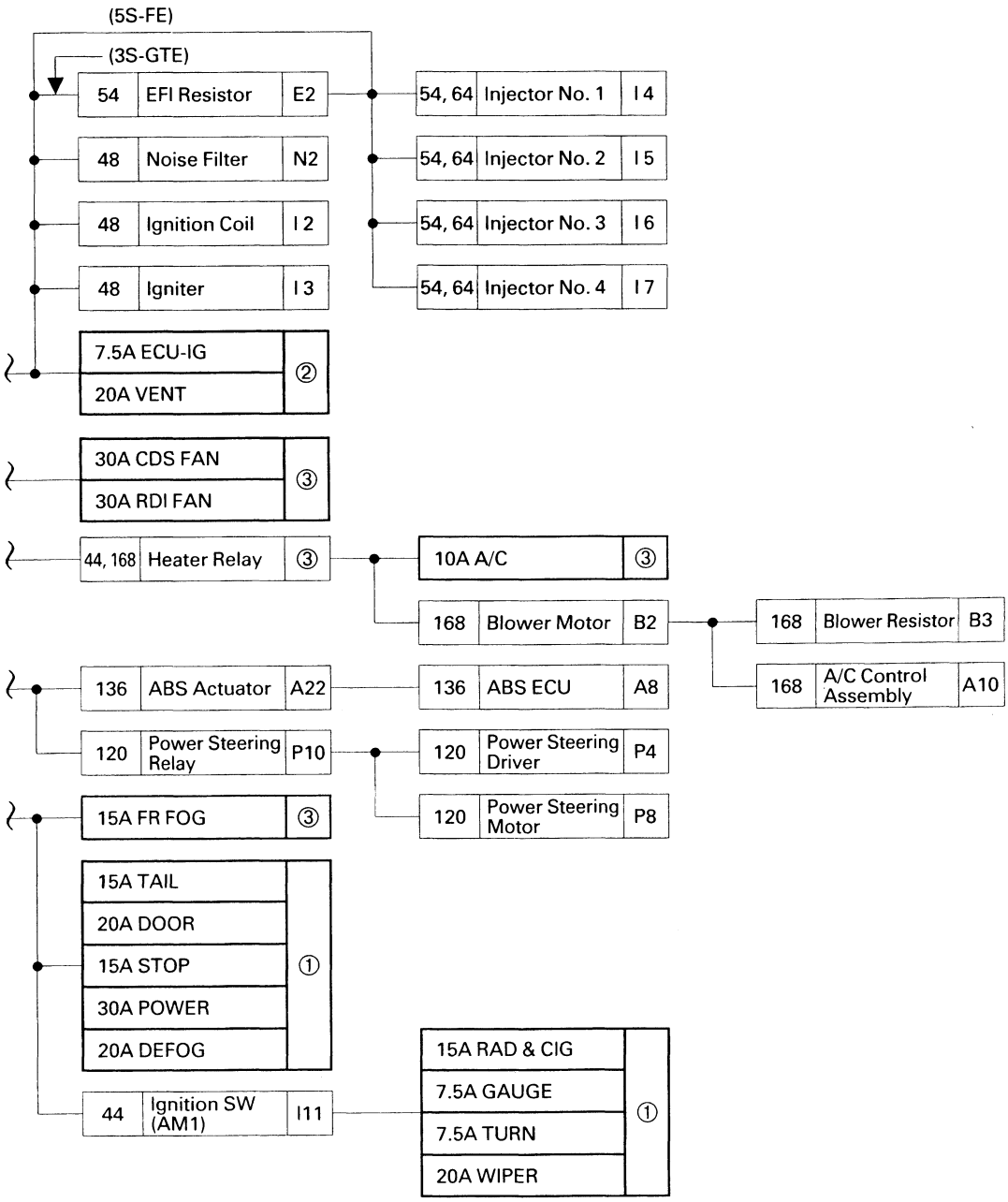


Example



* 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 18) ② : R/B No. 2 (See page 18) ③ : R/B No. 5 (See page 17)


(5S-FE)
(3S-GTE)
54 EFI Resistor E2
48 Noise Filter N2
48 Ignition Coil I2
48 Igniter I3
54, 64 Injector No. 1 I4
54, 64 Injector No. 2 I5
54, 64 Injector No. 3 I6
54, 64 Injector No. 4 I7
7.5A ECU-IG
20A VENT
②
30A CDS FAN
30A RDI FAN
③
44, 168 Heater Relay ③
10A A/C ③
168 Blower Motor B2
168 Blower Resistor B3
168 A/C Control Assembly A10
136 ABS Actuator A22
136 ABS ECU A8
120 Power Steering Relay P10
120 Power Steering Driver P4
120 Power Steering Motor P8
15A FR FOG ③
15A TAIL
20A DOOR
15A STOP
30A POWER
20A DEFOG
①
44 Ignition SW (AM1) I11
15A RAD & CIG
7.5A GAUGE
7.5A TURN
20A WIPER
①

H POWER SOURCE (Current Flow Chart)

Location		CB or Fuse	* Page Nos. of Related Systems	168	52	136		168	89 168	132 168	89 168	168			89	136	168	154	96	162	54 64 113	48	72
		Parts		A/C Magnet Clutch	Alternator	ABS ECU		A/C Amplifier	A/C Control Assembly			A/C Dual Pressure SW	A/C Magnet Clutch Relay	Air Inlet Servo Motor	Air Vent Mode Control Servo Motor	Ashtray Illumination	ABS Actuator	A/C Condenser Fan Motor	A/C High Pressure SW or Short Pin (w/o A/C)	Auto Antenna Control Relay and Motor	Back-Up Light SW (M/T)	Brake Fluid Level SW	Check Connector	Cold Start Injector	Cooling Fan ECU (for Engine Compartment)
		Code or Location		A3	A5	A7	A8	A9	A10	A11	A12	A13	A15	A17	A18	A19	A21	A25	A26	A27	B1	B5	C1	C2	C3
①	15A	TAIL							●		●					●									
	15A	RAD & CIG																		●					
	7.5A	GAUGE				●	●	●	●	●				●	●		●					●			●
	7.5A	TURN																							
	20A	WIPER																							
	20A	DEFOG																							
	15A	STOP				●																			
	20A	DOOR																							
	30A	POWER																							
	7.5A	MIR-HTR																							
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.
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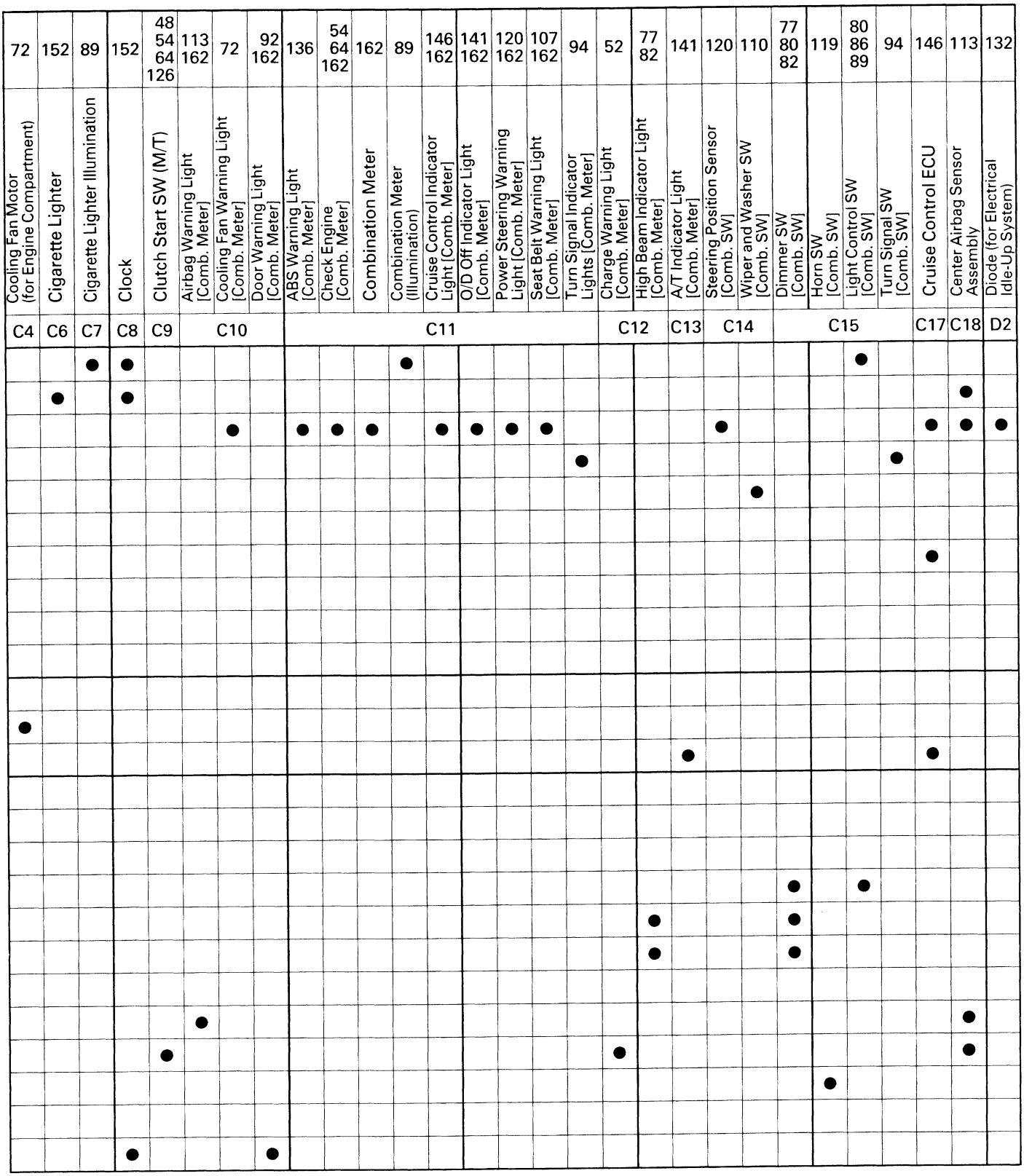
72
Cooling Fan Motor (for Engine Compartment)
C4
152
Cigarette Lighter
C6
89
Cigarette Lighter Illumination
C7
152
Clock
C8
48 54 64 126
Clutch Start SW (M/T)
C9
113 162
Airbag Warning Light [Comb. Meter]
72
Cooling Fan Warning Light [Comb. Meter]
92 162
Door Warning Light [Comb. Meter]
C10
136
ABS Warning Light [Comb. Meter]
54 64 162
Check Engine [Comb. Meter]
162
Combination Meter
89
Combination Meter (Illumination)
146 162
Cruise Control Indicator Light [Comb. Meter]
141 162
O/D Off Indicator Light [Comb. Meter]
120 162
Power Steering Warning Light [Comb. Meter]
107 162
Seat Belt Warning Light [Comb. Meter]
94
Turn Signal Indicator Lights [Comb. Meter]
C11
52
Charge Warning Light [Comb. Meter]
C12
77 82
High Beam Indicator Light [Comb. Meter]
141
A/T Indicator Light [Comb. Meter]
C13
120
Steering Position Sensor [Comb. SW]
110
Wiper and Washer SW [Comb. SW]
C14
77 80 82
Dimmer SW [Comb. SW]
119
Horn SW [Comb. SW]
80 86 89
Light Control SW [Comb. SW]
94
Turn Signal SW [Comb. SW]
C15
146
Cruise Control ECU
C17
113
Center Airbag Sensor Assembly
C18
132
Diode (for Electrical Idle-Up System)
D2

H POWER SOURCE (Current Flow Chart)

Location	CB or Fuse		* Page Nos. of Related Systems	168	98 102		92					102		48 64 141	48 64 54	48 64	48 64 141	48 64 54	162		54		74 80 89	54 64	162
			Parts	Diode (for A/C System)	Diode (for Power Window)	Door Lock ECU	Door Courtesy Light LH	Door Courtesy Light RH	Door Courtesy SW LH	Door Courtesy SW RH	Door Key Cylinder Light	Door Lock Motor LH	Door Lock Motor RH	Engine and ECT ECU	Engine ECU	Engine ECU	Engine and ECT ECU	Engine ECU	Engine Oil Level Sensor	Engine Oil Level ECU	Fuel Pump Resistor	Fuel Pump Relay	Fog Light SW	Fuel Pump	Fuel Sender
			Code or Location	D3	D6	D7	D8	D9	D10	D11	D12	D16	D17	E6		E7	E8		E10	E11	F1	F2	F3	F4	F5
①	15A	TAIL																					●		
	15A	RAD & CIG																							
	7.5A	GAUGE			●	●								●	●				●	●					●
	7.5A	TURN																							
	20A	WIPER																							
	20A	DEFOG																							
	15A	STOP												●	●										
	20A	DOOR				●						●	●												
	30A	POWER																							
	7.5A	MIR-HTR																							
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					●	●	●	●	●														

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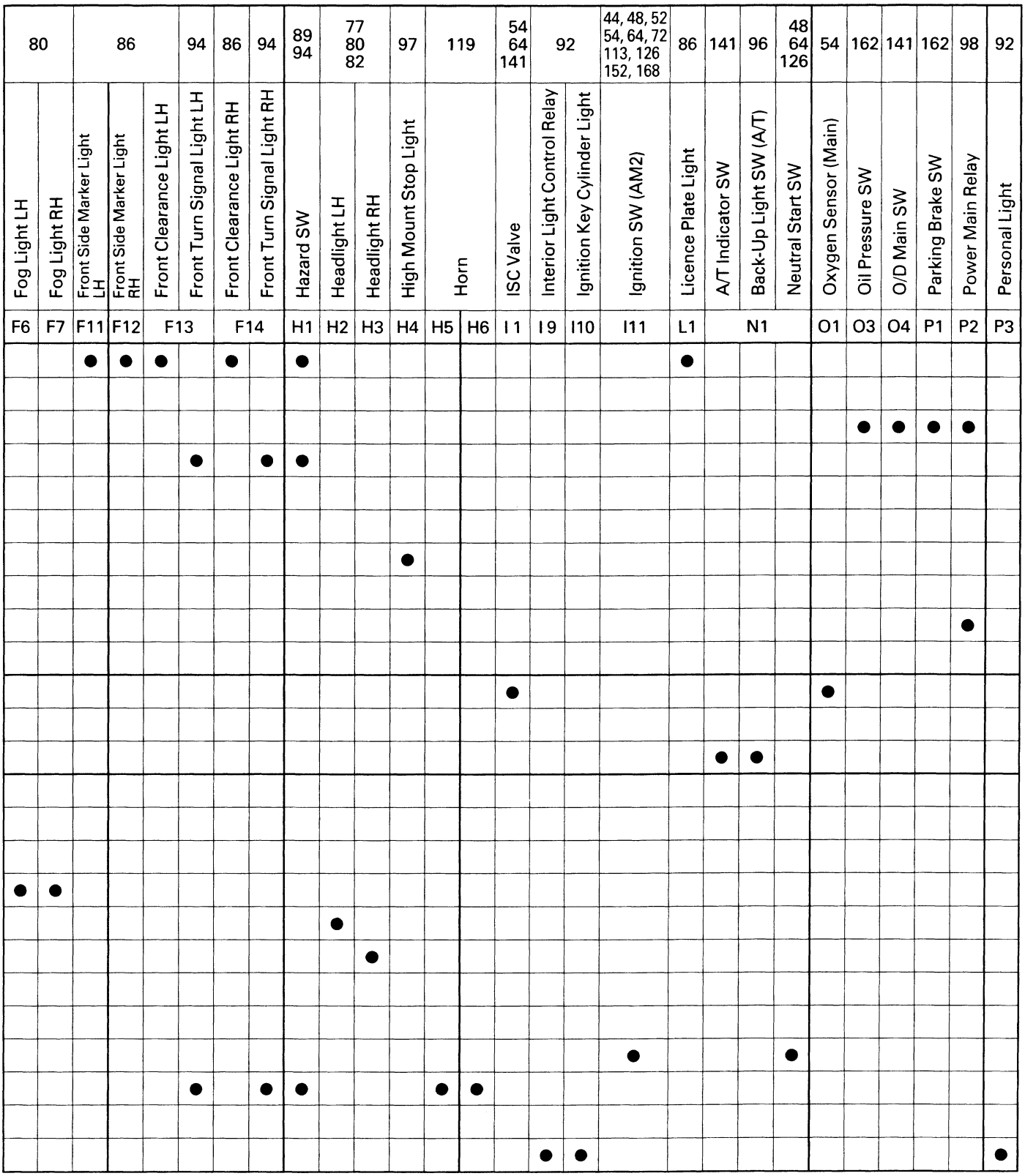
[LOCATION] ① : R/B No. 1 (See page 18) ② : R/B No. 2 (See page 18) ③ : R/B No. 5 (See page 17)


80
86
94
86
94
89
94
77
80
82
97
119
54
64
141
92
44, 48, 52
54, 64, 72
113, 126
152, 168
86
141
96
48
64
126
54
162
141
162
98
92
Fog Light LH
Fog Light RH
Front Side Marker Light LH
Front Side Marker Light RH
Front Clearance Light LH
Front Turn Signal Light LH
Front Clearance Light RH
Front Turn Signal Light RH
Hazard SW
Headlight LH
Headlight RH
High Mount Stop Light
Horn
ISC Valve
Interior Light Control Relay
Ignition Key Cylinder Light
Ignition SW (AM2)
Licence Plate Light
A/T Indicator SW
Back-Up Light SW (A/T)
Neutral Start SW
Oxygen Sensor (Main)
Oil Pressure SW
O/D Main SW
Parking Brake SW
Power Main Relay
Personal Light
F6
F7
F11
F12
F13
F14
H1
H2
H3
H4
H5
H6
I 1
I 9
I10
I11
L1
N1
O1
O3
O4
P1
P2
P3

H POWER SOURCE (Current Flow Chart)

Location			* Page Nos. of Related Systems	120	120	98	98	98	98	89	89 160	89	168	96	94	97	86	96	94	97	86	92	92	132	156 160
			Parts	Power Steering Driver	Power Steering ECU	Power Window SW RH	Power Window Master SW and Door Lock Control SW	Power Window Motor LH	Power Window Motor RH	Radio and Player (w/ CD Player)	Radio and Player (w/o CD 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
			Code or Location																						
			CB or Fuse	P6	P7	P12	P13	P14	P15	R1	R2	R4	R5	R6				R7				R8	R10	R13	R15
①	15A	TAIL								●	●	●					●				●				
	15A	RAD & CIG									●														
	7.5A	GAUGE	●	●																					
	7.5A	TURN													●				●						
	20A	WIPER																							
	20A	DEFOG																						●	
	15A	STOP														●				●					
	20A	DOOR																							
	30A	POWER				●	●	●	●																
	7.5A	MIR-HTR																							
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									●											●	●		●

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[LOCATION] ① : R/B No. 1 (See page 18) ② : R/B No. 2 (See page 18) ③ : R/B No. 5 (See page 17)

124			74, 77, 80 82, 86, 89 126	82 89 86	77 82		146	48	48 126	134	107	54, 64, 97 134, 136 141, 146	156		126	94	126	54 64	168	64	54		162	110	168	110
Remote Control Mirror LH	Remote Control Mirror RH	Remote Control Mirror SW	Retract Control Relay	Retract Control Relay (Canada)	Retract Motor LH	Retract Motor RH	Speed Sensor (for Cruise Control System)	Start Injector Time SW	Starter Relay	Shift Lock ECU	Seat Belt Warning Relay	Stop Light SW	Stereo Component Amplifier		Theft Deterrent Horn	Turn Signal Flasher	Theft Deterrent ECU	VSV (for EGR System)	VSV (for A/C Idle-Up System)	VSV (for Fuel Pressure Up Control System)	VSV (for Turbo Pressure Control System)	VSV (for T-VIS)	Water Temp. Sender	Washer Motor	Water Temp. Sensor (for Radiator Fan)	Wiper Motor
R17	R18	R19	R20	R21	R22	R23	S1	S3	S6	S7	S8	S9	S10	S11	T1	T4	T5	V2	V3	V4	V5	V6	W1	W2	W3	W4
			●	●										●			●									
●	●	●								●							●									
			●	●							●												●			
																●										
																								●		●
										●		●														
							●			●								●		●	●					
																			●							
			●	●																						
			●																							
			●																							
																			●							
								●	●						●	●	●								●	
			●		●	●																				
											●		●				●									

H POWER SOURCE (Current Flow Chart)

Location	CB or Fuse		* Page Nos. of Related Systems	132	44, 74, 82 86, 89, 126 152	54 64	72	54 64 141	44 54 64	168				74 80 82	168	119 126
			Parts	Defogger Relay	Taillight Relay	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	Horn Relay
			Code or Location	①		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	MIR-HTR														
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														

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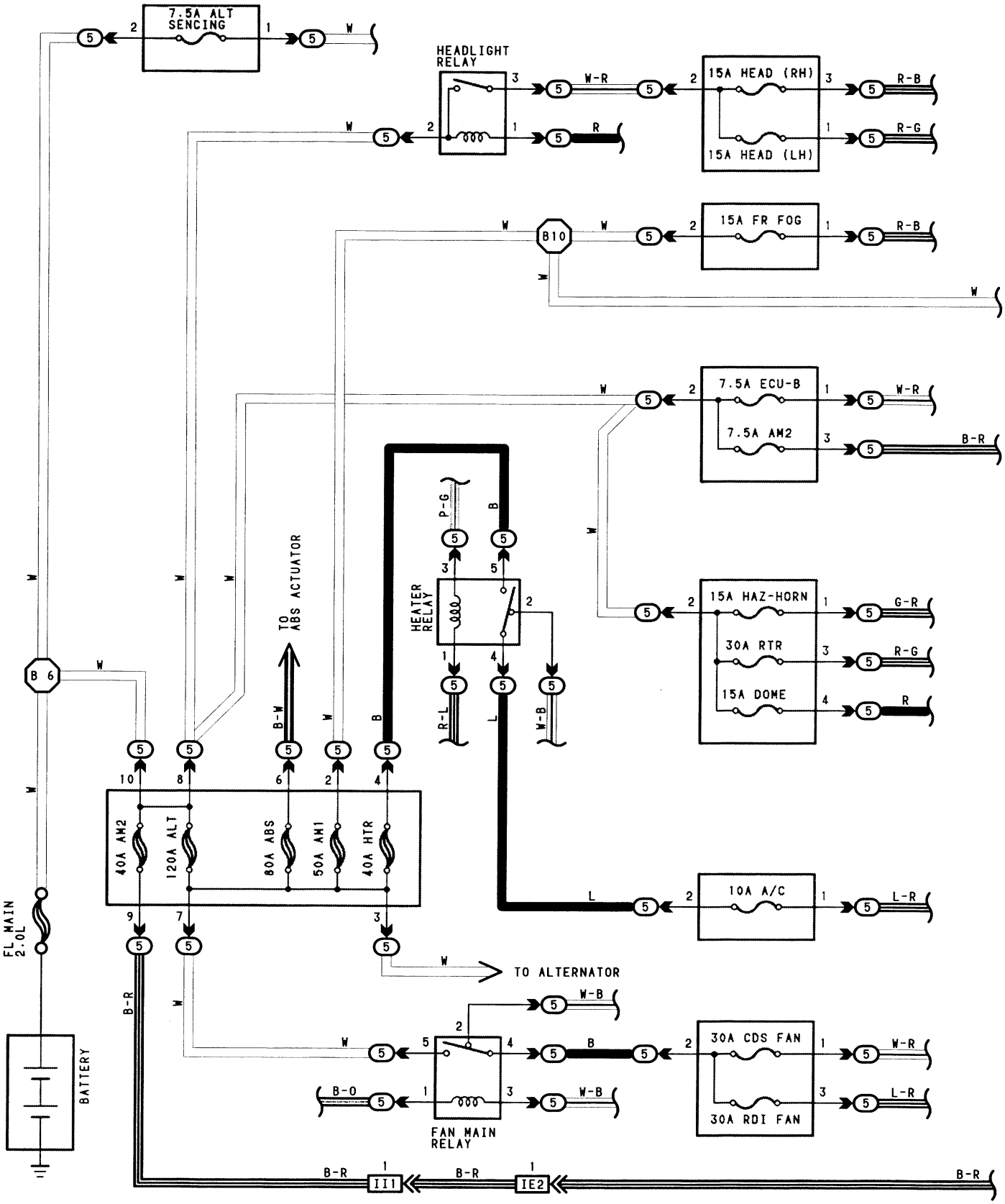
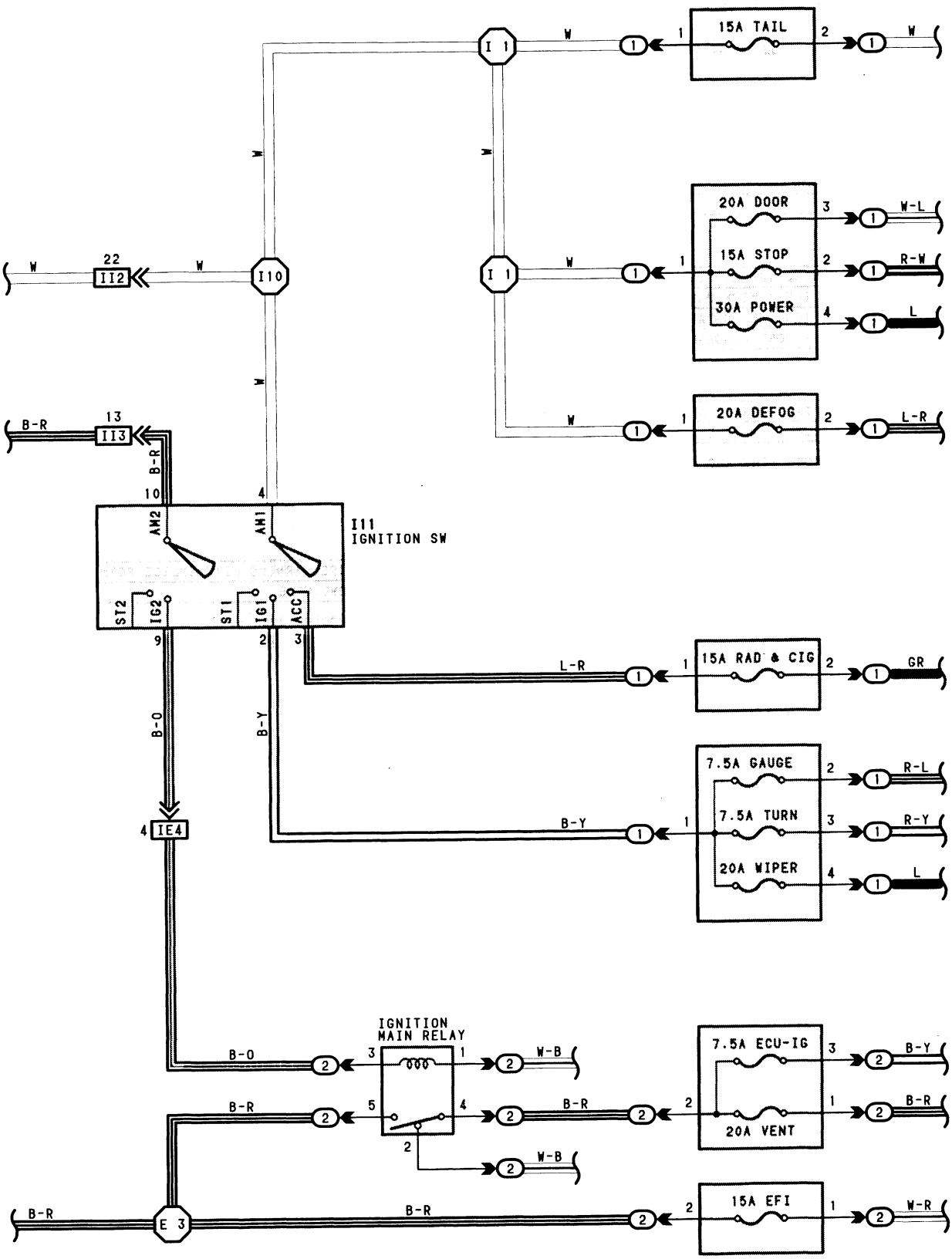
1991 TOYOTA MR2
ELECTRICAL WIRING DIAGRAM
SYSTEM CIRCUITS


7.5A ALT SENCING
HEADLIGHT RELAY
15A HEAD (RH)
15A HEAD (LH)
15A FR FOG
B10
7.5A ECU-B
7.5A AM2
15A HAZ-HORN
30A RTR
15A DOME
10A A/C
HEATER RELAY
TO ABS ACTUATOR
B 6
40A AM2
120A ALT
80A ABS
50A AM1
40A HTR
FL MAIN 2.0L
BATTERY
TO ALTERNATOR
FAN MAIN RELAY
30A CDS FAN
30A RDI FAN
III
IE2


15A TAIL
20A DOOR
15A STOP
30A POWER
20A DEFOG
15A RAD & CIG
7.5A GAUGE
7.5A TURN
20A WIPER
7.5A ECU-IG
20A VENT
15A EFI
IGNITION MAIN RELAY
I11 IGNITION SW
I10
I11
I12
I13
IE4
E 3
W
W-L
R-W
L
L-R
GR
R-L
R-Y
B-R
B-Y
B-O
W-B

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	22				

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	R/B NO.5 (FRONT LUGGAGE COMPARTMENT RIGHT)

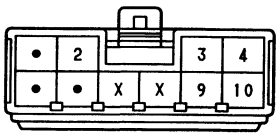
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

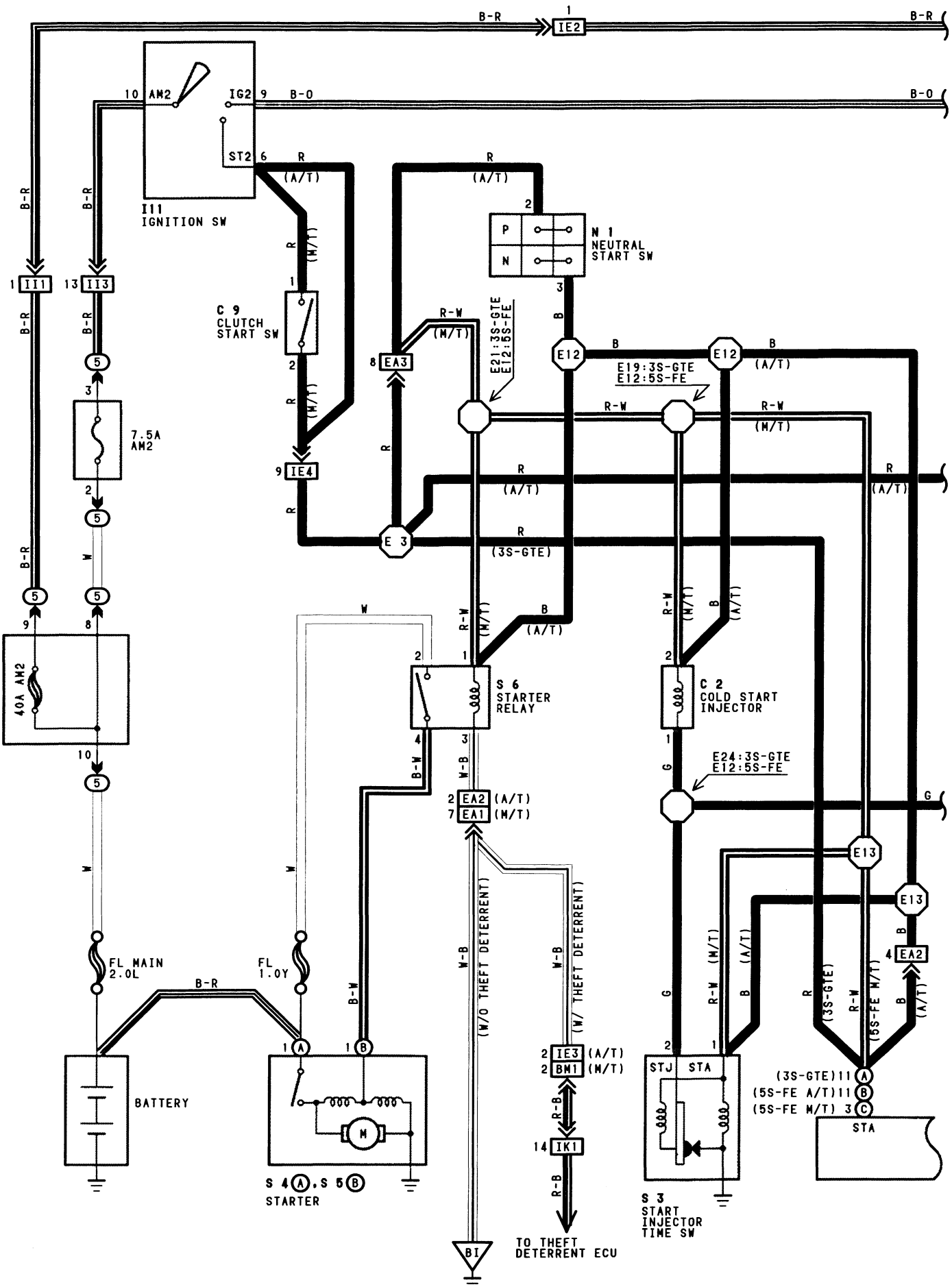
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE4	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II1	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2		
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

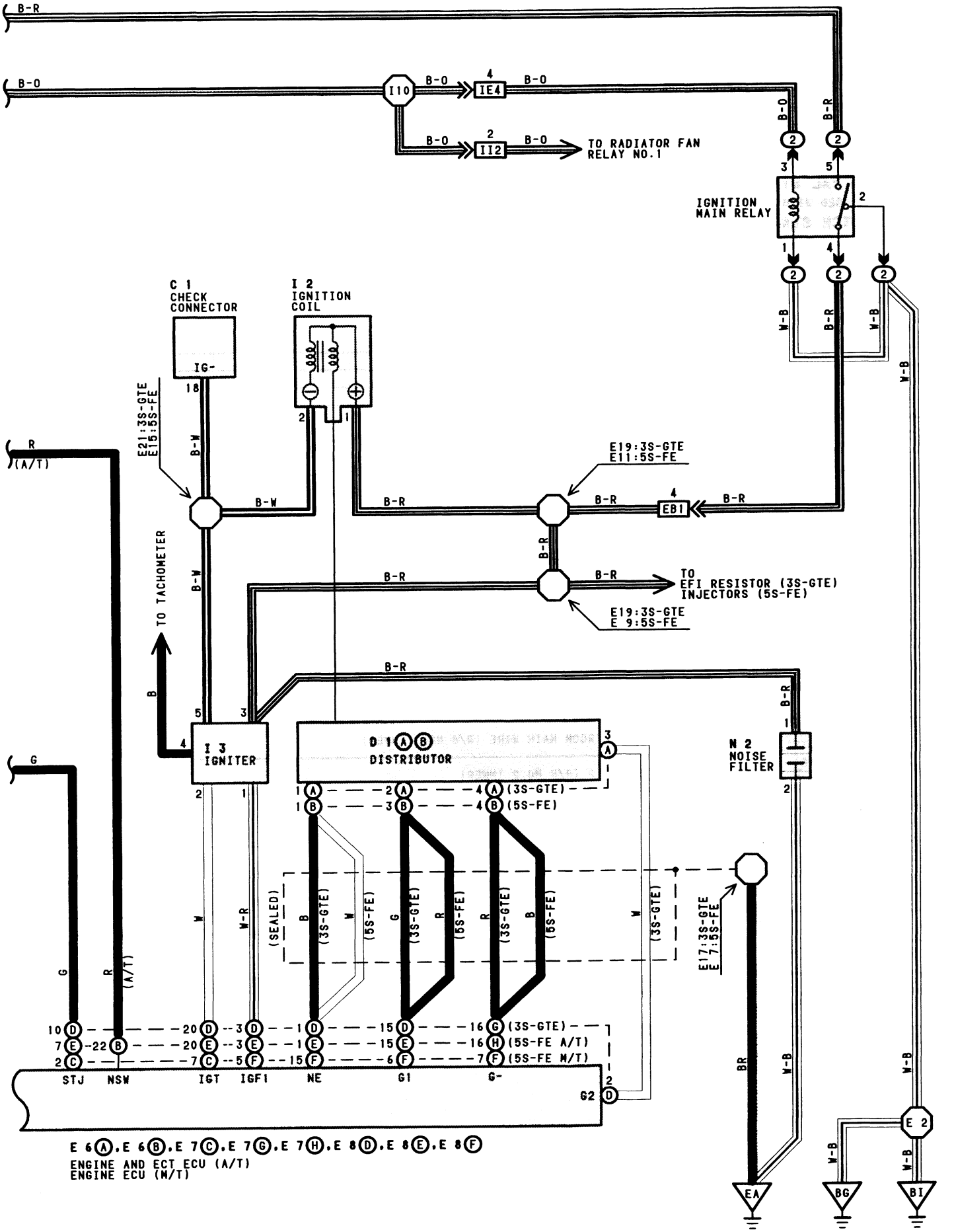
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	24(5S-FE)	ENGINE ROOM MAIN WIRE	I10	30	COWL WIRE
	26(3S-GTE)		B 6	32	LUGGAGE ROOM WIRE
I 1	30	COWL WIRE	B10		

I11 BLACK




B-R
1
IE2
B-R
10 AM2
IG2 9 B-O
B-O
ST2 6 R (A/T)
I11
IGNITION SW
R (M/T)
R (A/T)
2
P
N
N 1
NEUTRAL START SW
3
B
C 9
CLUTCH START SW
R-W (M/T)
E21:3S-GTE
E12:5S-FE
8 EA3
E12
B
E19:3S-GTE
E12:5S-FE
B (A/T)
R-W
R-W (M/T)
9 IE4
R
R (A/T)
E 3
R (3S-GTE)
1 II1
13 II3
B-R
5
3
7.5A AM2
2
W
9
8
40A AM2
10
W
FL MAIN 2.0L
FL 1.0Y
B-R
B-W
BATTERY
S 4 A , S 5 B
STARTER
S 6
STARTER RELAY
W-B
B-W
2 EA2 (A/T)
7 EA1 (M/T)
(W/O THEFT DETERRENT)
(W/ THEFT DETERRENT)
2 IE3 (A/T)
2 BM1 (M/T)
R-B
14 IK1
TO THEFT DETERRENT ECU
BI
C 2
COLD START INJECTOR
E24:3S-GTE
E12:5S-FE
G
E13
STJ
STA
S 3
START INJECTOR TIME SW
(3S-GTE) 11 A
(5S-FE A/T) 11 B
(5S-FE M/T) 3 C
4 EA2
(3S-GTE)
(5S-FE M/T)
STA


B-R
B-O
I10
IE4
TO RADIATOR FAN RELAY NO.1
IGNITION MAIN RELAY
C 1 CHECK CONNECTOR
I 2 IGNITION COIL
E21:3S-GTE E15:5S-FE
E19:3S-GTE E11:5S-FE
EB1
TO TACHOMETER
TO EFI RESISTOR (3S-GTE) INJECTORS (5S-FE)
E19:3S-GTE E 9:5S-FE
I 3 IGNITER
D 1 DISTRIBUTOR
N 2 NOISE FILTER
(SEALED)
E17:3S-GTE E 7:5S-FE
(3S-GTE)
(5S-FE)
(5S-FE A/T)
(5S-FE M/T)
STJ
NSW
IGT
IGF1
NE
G1
G-
G2
EA
BG
BI
E 2
E 6 A, E 6 B, E 7 C, E 7 G, E 7 H, E 8 D, E 8 E, E 8 F
ENGINE AND ECT ECU (A/T)
ENGINE ECU (M/T)

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

S 6 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)

N 1 NEUTRAL START SW (A/T)

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

C 9 CLUTCH START SW (M/T)

1-2:CLOSED WITH CLUTCH PEDAL FULLY DEPRESSED

C 2 COLD START INJECTOR

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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C 1		20(5S-FE),21(3S-GTE)	E 7	G	21(3S-GTE)	N 1		20(5S-FE)
C 2		20(5S-FE),21(3S-GTE)		H	20(5S-FE)	N 2		20(5S-FE),21(3S-GTE)
C 9		22	E 8	D	21(3S-GTE)	S 3		20(5S-FE),21(3S-GTE)
D 1	A	21(3S-GTE)		E	20(5S-FE)	S 4	A	20(5S-FE),21(3S-GTE)
	B	20(5S-FE)		F	20(5S-FE)	S 5	B	20(5S-FE),21(3S-GTE)
E 6	A	21(3S-GTE)	I 2		20(5S-FE),21(3S-GTE)	S 6		20(5S-FE),21(3S-GTE)
	B	20(5S-FE)	I 3		20(5S-FE),21(3S-GTE)			
E 7	C	20(5S-FE)	I11		22			

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	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)
EA1	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	26(3S-GTE)	
EA2	24(5S-FE)	
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
	26(3S-GTE)	
EB1	24(5S-FE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
	26(3S-GTE)	
IE2	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
IE4		
II1	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II2		
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IK1	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

▽ : GROUND POINTS

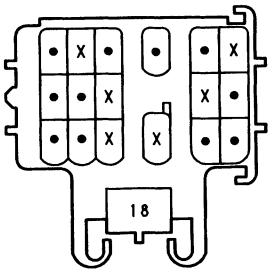
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
	26(3S-GTE)	
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

: SPLICE POINTS

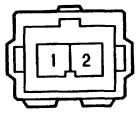
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	24(5S-FE)	ENGINE ROOM MAIN WIRE
	26(3S-GTE)	
E 3	24(5S-FE)	
	26(3S-GTE)	
E 7	24(5S-FE)	ENGINE WIRE
E 9		
E11		
E12		

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E13	24(5S-FE)	ENGINE WIRE
E15		
E17	26(3S-GTE)	
E19		
E21		
E24		
I10	30	COWL WIRE

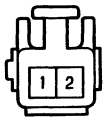
C 1 DARK GRAY



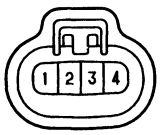
C 2 BLACK



C 9

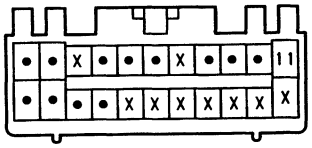


D 1 Ⓐ BLACK

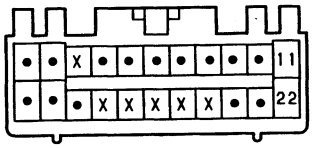


D 1 Ⓑ BLACK

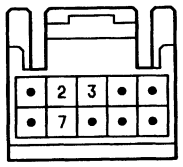
E 6 Ⓐ DARK GRAY



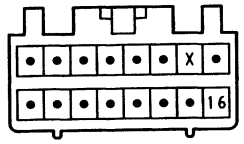
E 6 Ⓑ DARK GRAY



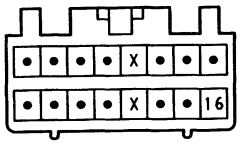
E 7 Ⓒ DARK GRAY



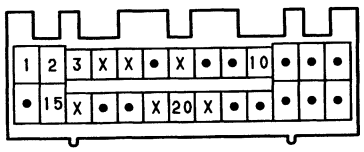
E 7 Ⓖ DARK GRAY



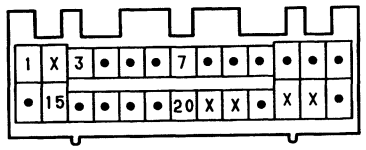
E 7 Ⓗ DARK GRAY



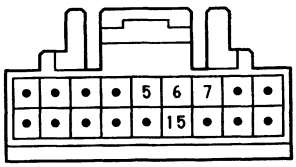
E 8 Ⓓ DARK GRAY



E 8 Ⓔ DARK GRAY



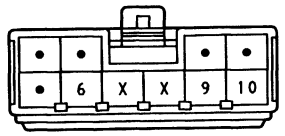
E 8 Ⓕ DARK GRAY



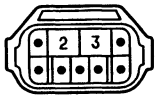
I 2 BLACK

I 3 BLACK

I11 BLACK



N 1 GRAY

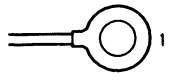


N 2 GRAY

(3S-GTE) S 3 BLACK

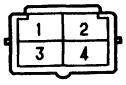
(5S-FE) S 3 GRAY

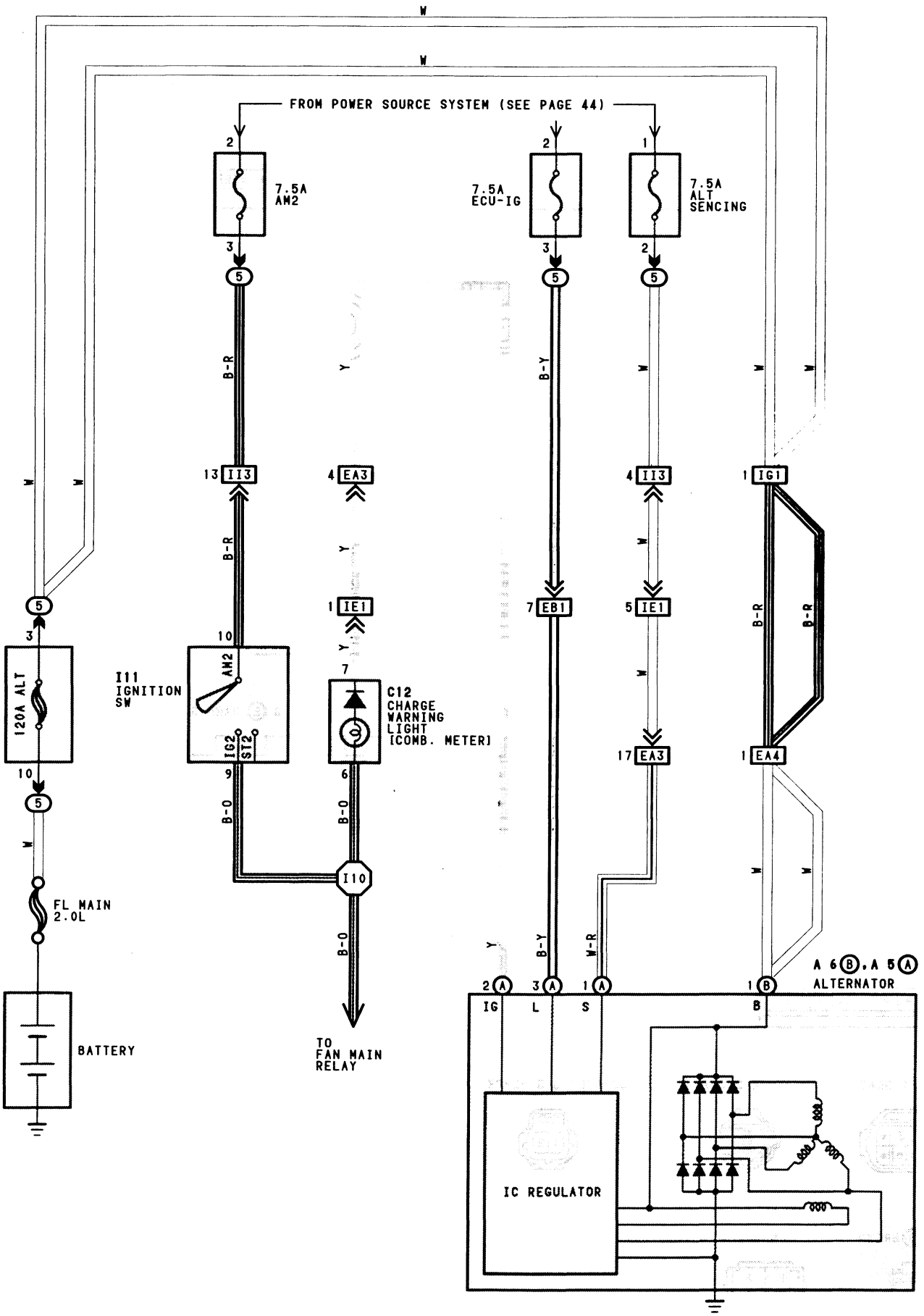
S 4 Ⓐ



S 5 Ⓑ BROWN

S 6




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A AM2
7.5A ECU-IG
7.5A ALT SENCING
120A ALT
FL MAIN 2.0L
BATTERY
I11 IGNITION SW
C12 CHARGE WARNING LIGHT (COMB. METER)
I10
TO FAN MAIN RELAY
IC REGULATOR
A 6 B, A 5 A ALTERNATOR
IG
L
S
B

SERVICE HINTS

A 5 Ⓐ **ALTERNATOR**

Ⓐ 1-GROUND: 13.9-15.1VOLTS WITH ENGINE RUNNING AT 2000 RPM AND 25°C(77°F)
13.5-14.3VOLTS WITH ENGINE RUNNING AT 2000 RPM AND 115°C(239°F)

Ⓐ 2-GROUND: 0-4VOLTS WITH IGNITION SW AT ON POSITION AND ENGINE NOT RUNNING

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 5	B	20(5S-FE), 21(3S-GTE)	C12	22		
A 6	A	20(5S-FE), 21(3S-GTE)	I11	22		

⬭ : RELAY BLOCKS

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

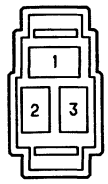
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

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

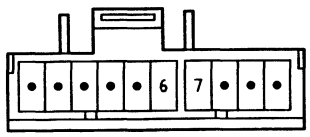
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	30	COWL WIRE			

A 5 Ⓐ BLACK

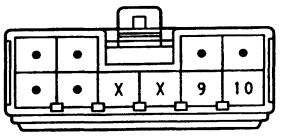


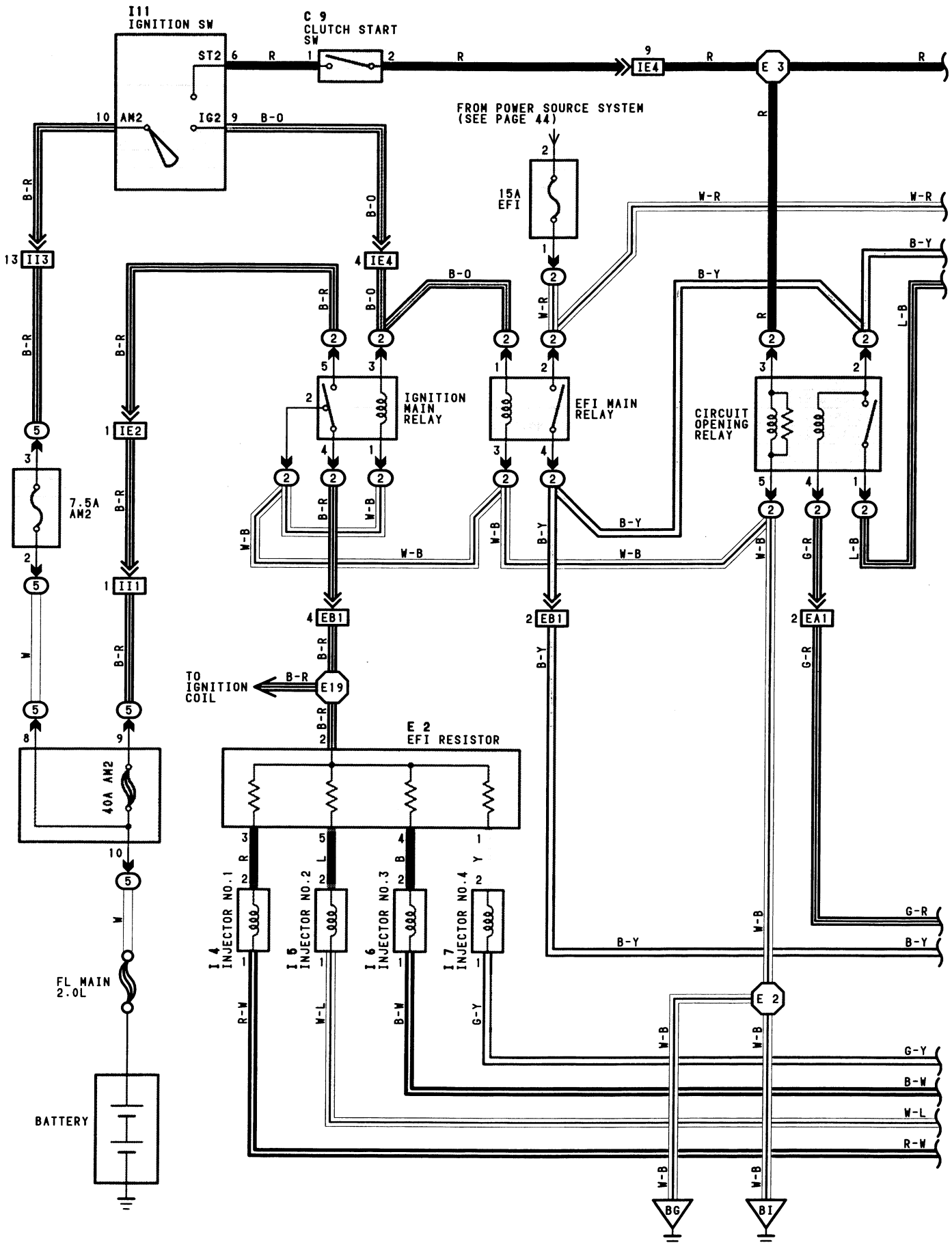
A 6 Ⓑ

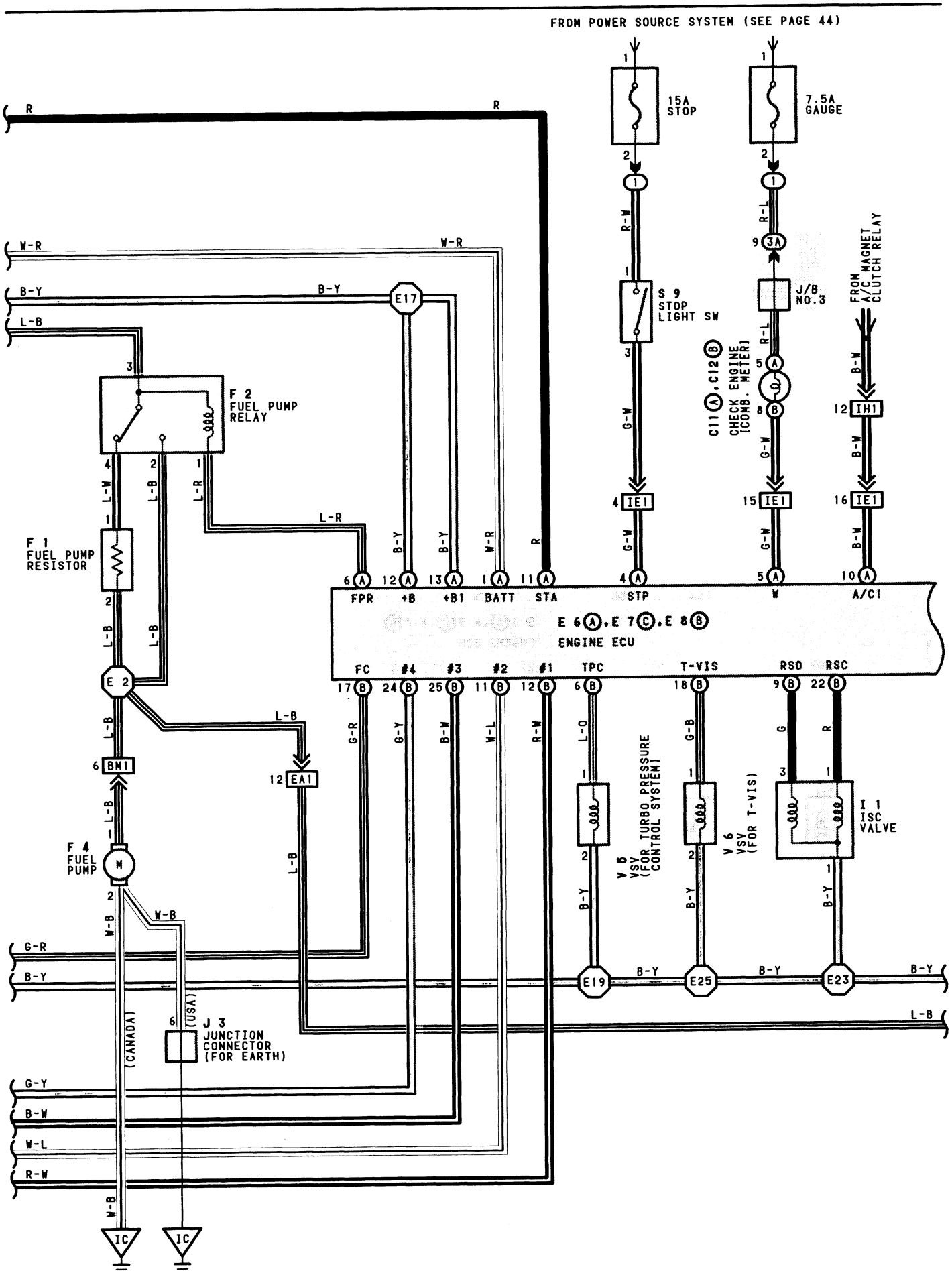
C12 GRAY

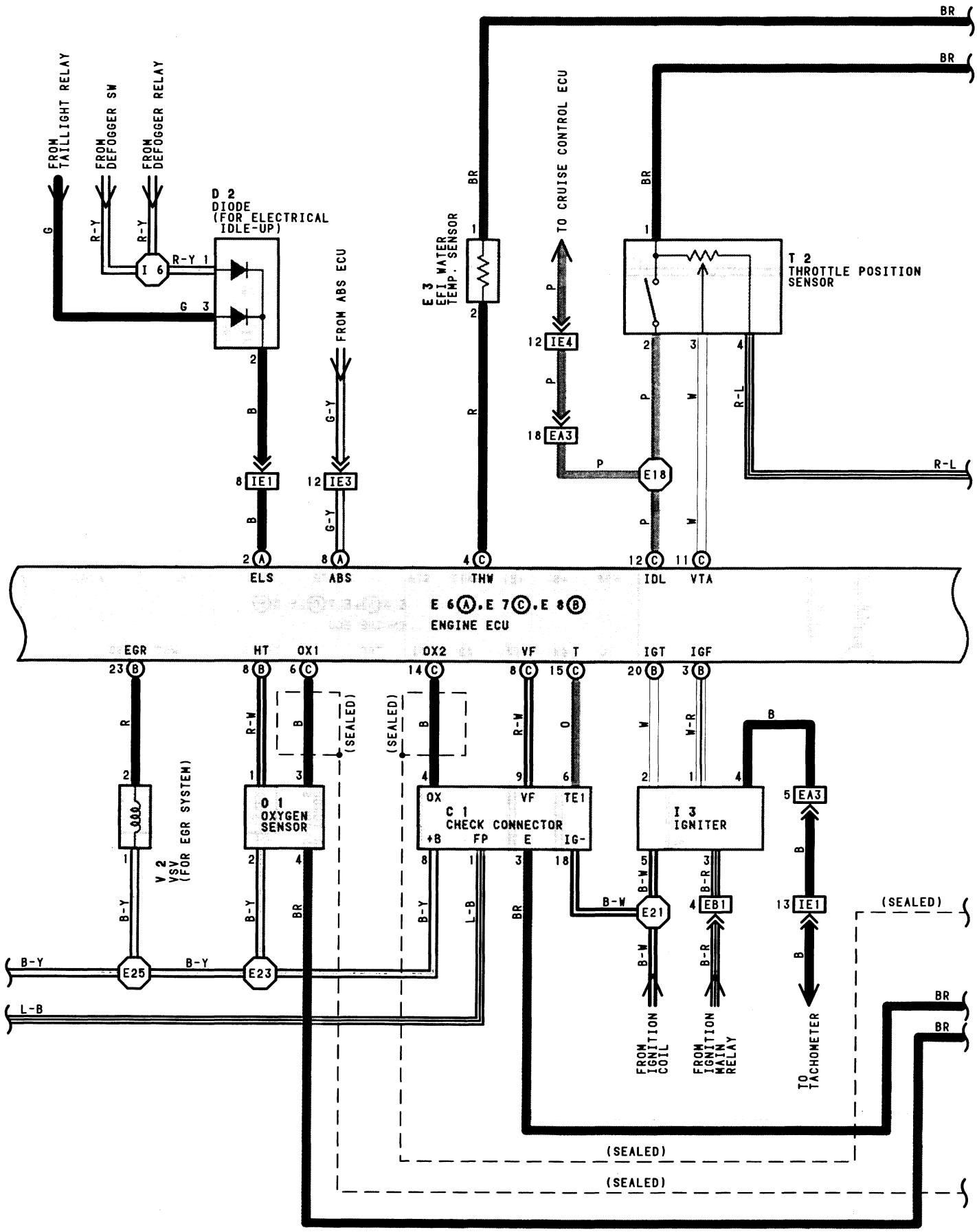


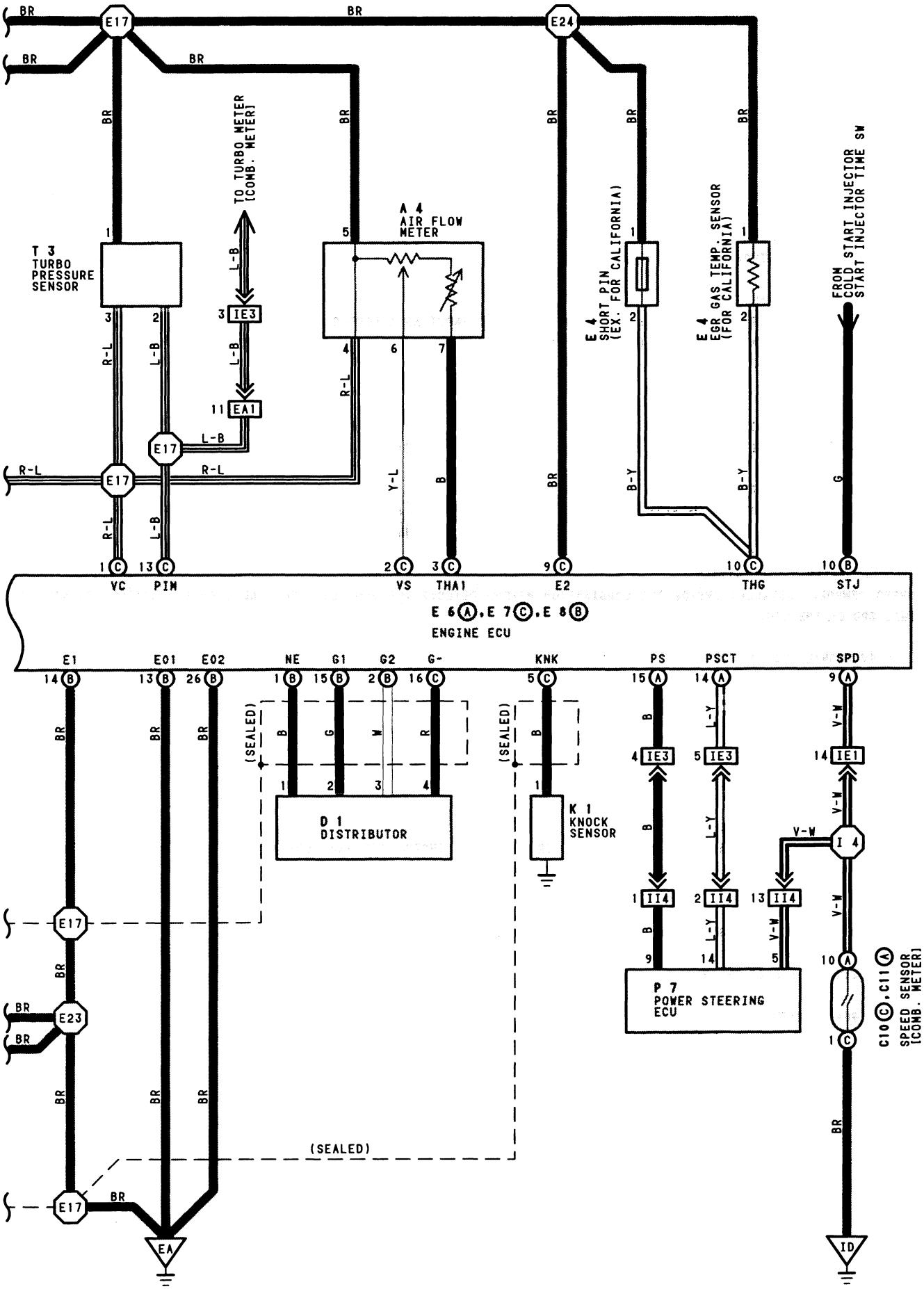
I11 GRAY




I11
IGNITION SW
C 9
CLUTCH START SW
ST2
AM2
IG2
B-O
R
IE4
E 3
FROM POWER SOURCE SYSTEM
(SEE PAGE 44)
15A
EFI
W-R
B-Y
L-B
II3
IE2
II1
7.5A
AM2
40A AM2
IGNITION
MAIN
RELAY
EFI MAIN
RELAY
CIRCUIT
OPENING
RELAY
B-R
W-B
G-R
EB1
EA1
E19
TO
IGNITION
COIL
E 2
EFI RESISTOR
I 4
INJECTOR NO.1
I 5
INJECTOR NO.2
I 6
INJECTOR NO.3
I 7
INJECTOR NO.4
R-W
W-L
B-W
G-Y
FL MAIN
2.0L
BATTERY
BG
BI


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A STOP
7.5A GAUGE
S 9 STOP LIGHT SW
J/B NO.3
FROM MAGNET A/C CLUTCH RELAY
C11 A, C12 B CHECK ENGINE (COMB. METER)
F 2 FUEL PUMP RELAY
F 1 FUEL PUMP RESISTOR
F 4 FUEL PUMP
E 2
BM1
EA1
E17
E 6 A, E 7 C, E 8 B ENGINE ECU
FPR
+B
+B1
BATT
STA
STP
W
A/C1
FC
#4
#3
#2
#1
TPC
T-VIS
RSO
RSC
V 5 VSV (FOR TURBO PRESSURE CONTROL SYSTEM)
V 6 VSV (FOR T-VIS)
I 1 ISC VALVE
E19
E25
E23
J 3 JUNCTION CONNECTOR (FOR EARTH)
(CANADA)
(USA)
IC
IC


FROM TAILLIGHT RELAY
FROM DEFOGGER SW
FROM DEFOGGER RELAY
D 2 DIODE (FOR ELECTRICAL IDLE-UP)
I 6
FROM ABS ECU
E 3 EFI WATER TEMP. SENSOR
TO CRUISE CONTROL ECU
T 2 THROTTLE POSITION SENSOR
IE1
IE3
IE4
EA3
E18
ELS
ABS
THW
IDL
VTA
E 6 (A), E 7 (C), E 8 (B)
ENGINE ECU
EGR
HT
OX1
OX2
VF
T
IGT
IGF
V 2 VSV (FOR EGR SYSTEM)
O 1 OXYGEN SENSOR
C 1 CHECK CONNECTOR
OX
VF
TE1
+B
FP
E
IG-
I 3 IGNITER
E25
E23
E21
EB1
IE1
(SEALED)
FROM IGNITION COIL
FROM IGNITION MAIN RELAY
TO TACHOMETER


BR
E17
BR
E24
BR
BR
BR
TO TURBO METER (COMB. METER)
BR
A 4
AIR FLOW METER
BR
BR
BR
T 3
TURBO PRESSURE SENSOR
L-B
3 IE3
L-B
11 EA1
L-B
E17
R-L
E17
R-L
R-L
L-B
R-L
Y-L
B
BR
E 4
SHORT PIN (EX. FOR CALIFORNIA)
B-Y
E 4
EGR GAS TEMP. SENSOR (FOR CALIFORNIA)
B-Y
FROM COLD START INJECTOR START INJECTOR TIME SW
G
1 C VC
13 C PIM
2 C VS
3 C THA1
9 C E2
10 C THG
10 B STJ
E 6 A , E 7 C , E 8 B
ENGINE ECU
E1
E01
E02
NE
G1
G2
G-
KNK
PS
PSCT
SPD
14 B
13 B
26 B
1 B
15 B
2 B
16 C
5 C
15 A
14 A
9 A
BR
BR
BR
(SEALED)
B
G
W
R
1
2
3
4
D 1
DISTRIBUTOR
(SEALED)
B
1
K 1
KNOCK SENSOR
B
L-Y
V-W
4 IE3
5 IE3
14 IE1
B
L-Y
V-W
I 4
E17
BR
BR
E23
BR
1 II4
2 II4
13 II4
V-W
BR
BR
BR
BR
9
14
5
P 7
POWER STEERING ECU
10 A
1 C
C10 C , C11 A
SPEED SENSOR (COMB. METER)
(SEALED)
E17
BR
BR
EA
ID

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. INPUT SIGNALS

(1) WATER TEMP. SIGNAL SYSTEM

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

(2) INTAKE AIR TEMP. SIGNAL SYSTEM

THE INTAKE AIR TEMP. SENSOR IS INSTALLED INSIDE THE AIR FLOW METER AND DETECTS THE INTAKE AIR TEMP., WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL THA1** OF THE ECU.

(3) OXYGEN SENSOR SIGNAL SYSTEM

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

(4) RPM SIGNAL SYSTEM

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

(5) THROTTLE SIGNAL SYSTEM

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

(6) VEHICLE SPEED SIGNAL SYSTEM

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

(7) A/C SW SIGNAL SYSTEM

THE OPERATING VOLTAGE OF THE A/C MAGNET CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO **TERMINAL A/C1** OF THE ECU.

(8) BATTERY SIGNAL SYSTEM

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

(9) INTAKE AIR VOLUME SIGNAL SYSTEM

INTAKE AIR VOLUME IS DETECTED BY THE POTENTIOMETER INSTALLED INSIDE THE AIR FLOW METER AND IS INPUT AS A CONTROL SIGNAL TO **TERMINAL VS** OF THE ECU. INSIDE THE AIR FLOW METER THERE IS ALSO A SW FOR FUEL PUMP OPERATION, AND WHEN THE MEASURING PLATE OPENS (AIR INTAKE OCCURS), THIS SW TURNS ON AND CURRENT FLOWS TO THE FUEL PUMP TO OPERATE IT.

(10) STOP LIGHT SW SIGNAL SYSTEM

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

(11) STA SIGNAL SYSTEM

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

(12) ENGINE KNOCK SIGNAL SYSTEM

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

2. CONTROL SYSTEM

• EFI (ELECTRONIC FUEL INJECTION) SYSTEM

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

• ESA (ELECTRONIC SPARK ADVANCE) SYSTEM

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

• FUEL PUMP CONTROL SYSTEM

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

• OXYGEN SENSOR HEATER CONTROL SYSTEM

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

•ISC (IDLE SPEED CONTROL) SYSTEM

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

• EGR CONTROL SYSTEM

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

• INTAKE AIR CONTROL SYSTEM

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

3. DIAGNOSIS SYSTEM

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

4. FAIL-SAFE SYSTEM

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

SERVICE HINTS

EFI MAIN RELAY

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

E 1 EFI RESISTOR

2-1,3,4,5:4-8Ω

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

1-2:2-4Ω

F10 FUEL PUMP RESISTOR

1-2:APPROX. 0.8Ω

E 4 EGR GAS TEMP. SENSOR (FOR CALIFORNIA)

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

A15 AIR FLOW METER

5-6:200-600Ω (MEASURING PLATE CLOSED)
20-1000Ω (MEASURING PLATE OPEN)
5-4:200-400Ω
5-7:15KΩ (-20°C, 4°F)
4-7KΩ (0°C,32°F)
2-3KΩ (20°C,68°F)
0.9-1.3KΩ (40°C,104°F)
0.4-0.7KΩ (60°C,140°F)

E 2 EFI WATER TEMP. SENSOR

1-2:5.88KΩ (0°C,32°F)
2.2-2.7KΩ (20°C,68°F)
1.14KΩ (40°C,104°F)
0.584KΩ (60°C,140°F)
0.29-0.35KΩ (80°C,176°F)

T 1 THROTTLE POSITION SENSOR

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

E 4,E 5,E 6 ENGINE ECU

VOLTAGE AT ECU CONNECTORS

BATT - E1:10-14VOLTS
+B,+B1 - E1:10-14VOLTS(IGNITION SW ON)
IDL - E2:4.5-5.5VOLTS(IGNITION SW ON AND THROTTLE VALVE OPEN)
VTA - E2:1.0VOLTS OR LESS(IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
3.0-5.0VOLTS(IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
VC - E2:4.5-5.5VOLTS(IGNITION SW ON)
VS - E2:3.7-4.3VOLTS(IGNITION SW ON AND MEASURING PLATE FULLY CLOSED)
0.2-0.5VOLTS OR LESS(IGNITION SW ON AND MEASURING PLATE FULLY OPEN)
1.6-4.1VOLTS(IDLING)
0.5-2.5VOLTS(3000RPM)
THA1 - E2:1.0-3.0VOLTS(IGNITION SW ON AND INTAKE AIR TEMP. 20°C(68°F))
THW - E2:0.1-1.0VOLTS(IGNITION SW ON AND COOLANT TEMP. 80°C(176°F))
STA - E1:6-14VOLTS(CRANKING)
#1,#2,#3,#4 - E01,E02:10-14VOLTS(IGNITION SW ON)
IGT - E1:0.8-1.2VOLTS(CRANKING OR IDLING)
TVIS - E1:APPROX. 2.0VOLTS OR LESS WITH IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED } (REGULAR GASOLINE)
10-14VOLTS WITH IGNITION SW ON AND THROTTLE VALVE OPEN
APPROX. 2.0VOLTS OR LESS IDLING } (PREMIUM GASOLINE)
10-14VOLTS WITH 4200RPM OR MORE
T - E1:10-14VOLTS WITH IGNITION SW ON AND CHECK CONNECTOR T-E1 NO CONNECT
APPROX. 1.0VOLTS OR LESS WITH IGNITION SW ON AND CHECK CONNECTOR T-E1 CONNECT
A/C1 - E1:8-14VOLTS WITH IGNITION SW ON A/C SWITCH ON
RSO,RSC - E1:9-14VOLTS(IGNITION SW ON)
PIM - E2:2.5-4.5VOLTS(IGNITION SW ON)
W - E1:10-14VOLTS(NO TROUBLE (CHECK ENGINE WARNING LIGHT OFF) AND ENGINE RUNNING)

RESISTANCE AT ECU CONNECTORS
(DISCONNECT WIRING CONNECTOR FROM ECU)

IDL - E1:INFINITY(THROTTLE VALVE OPEN)
LESS THAN 2300Ω(THROTTLE VALVE FULLY CLOSED)
VTA - E2:3500-10000Ω(THROTTLE VALVE OPEN)
200-800Ω(THROTTLE VALVE FULLY CLOSED)
VS - E2:200-600Ω(MEASURING PLATE FULLY CLOSED)
20-1200Ω(MEASURING PLATE FULLY OPEN)
THA1 - E2:2000-3000Ω(INTAKE AIR TEMP. 20°C,68°F)
THW - E2:200-400Ω(COOLANT TEMP. 80°C,176°F)
G1,G2 - G-:140-180Ω
NE - G-:180-220Ω
RSC,RSO - +B,+B1:17.7-23.9Ω

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 4	21(3S-GTE)	E 7 C	21(3S-GTE)	J 3	22
C 1	21(3S-GTE)	E 8 B	21(3S-GTE)	K 1	21(3S-GTE)
C 9	22(3S-GTE)	F 1	21(3S-GTE)	O 1	21(3S-GTE)
C10 C	22	F 2	21(3S-GTE)	P 7	23
C11 A	22	F 4	22	S 9	22
C12 B	22	I 1	21(3S-GTE)	T 2	21(3S-GTE)
D 1	21(3S-GTE)	I 3	21(3S-GTE)	T 3	21(3S-GTE)
D 2	22	I 4	21(3S-GTE)	V 2	21(3S-GTE)
E 2	21(3S-GTE)	I 5	21(3S-GTE)	V 5	21(3S-GTE)
E 3	21(3S-GTE)	I 6	21(3S-GTE)	V 6	21(3S-GTE)
E 4	21(3S-GTE)	I 7	21(3S-GTE)		
E 6 A	21(3S-GTE)	I11	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	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	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	26(3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	26(3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EB1	26(3S-GTE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2		
IE3		
IE4		
IH1	28	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II1	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
BM1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

▽ : GROUND POINTS

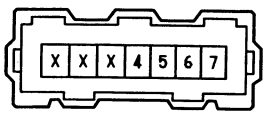
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	26(3S-GTE)	INTAKE MANIFOLD
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

ENGINE CONTROL (3S-GTE)

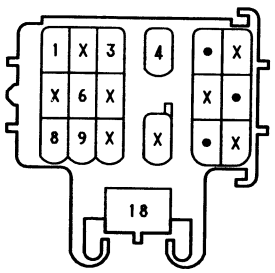
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	26(3S-GTE)	ENGINE ROOM MAIN WIRE	E23	26(3S-GTE)	ENGINE WIRE
E 3			E24		
E17	26(3S-GTE)	ENGINE WIRE	E25		
E18			I 4	30	COWL WIRE
E19			I 6		
E21					

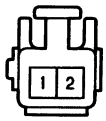
A 4 BLACK



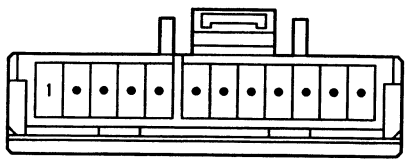
C 1 DARK GRAY



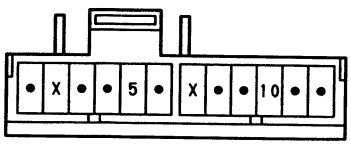
C 9



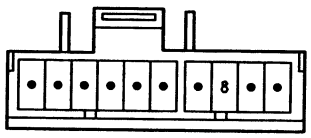
C10 Ⓒ BLUE



C11 Ⓐ

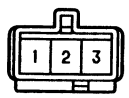


C12 Ⓑ GRAY

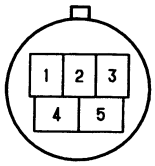


D 1 BLACK

D 2 ORANGE



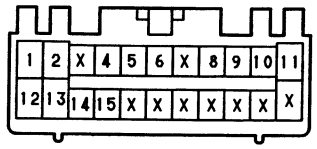
E 2 DARK GRAY



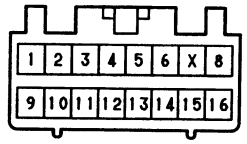
E 3 GREEN

E 4 DARK GRAY

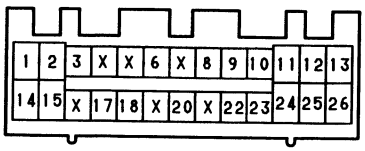
E 6 Ⓐ DARK GRAY



E 7 Ⓒ DARK GRAY

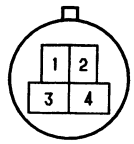


E 8 Ⓑ DARK GRAY

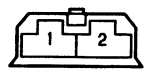


F 1 DARK GRAY

F 2 DARK GRAY

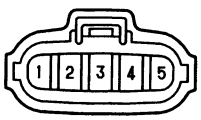


F 4 DARK GRAY



I 1 GRAY

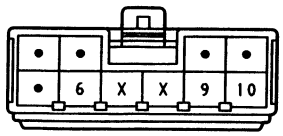
I 3 BLACK



I 4, I 6 BROWN

I 5, I 7 GRAY

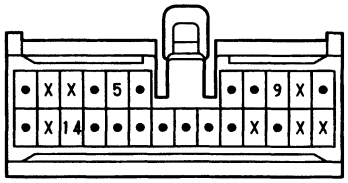
I11 BLACK



K 1 DARK GRAY

O 1 DARK GRAY

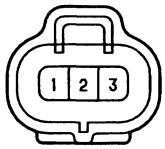
P 7



S 9

T 2 BLACK

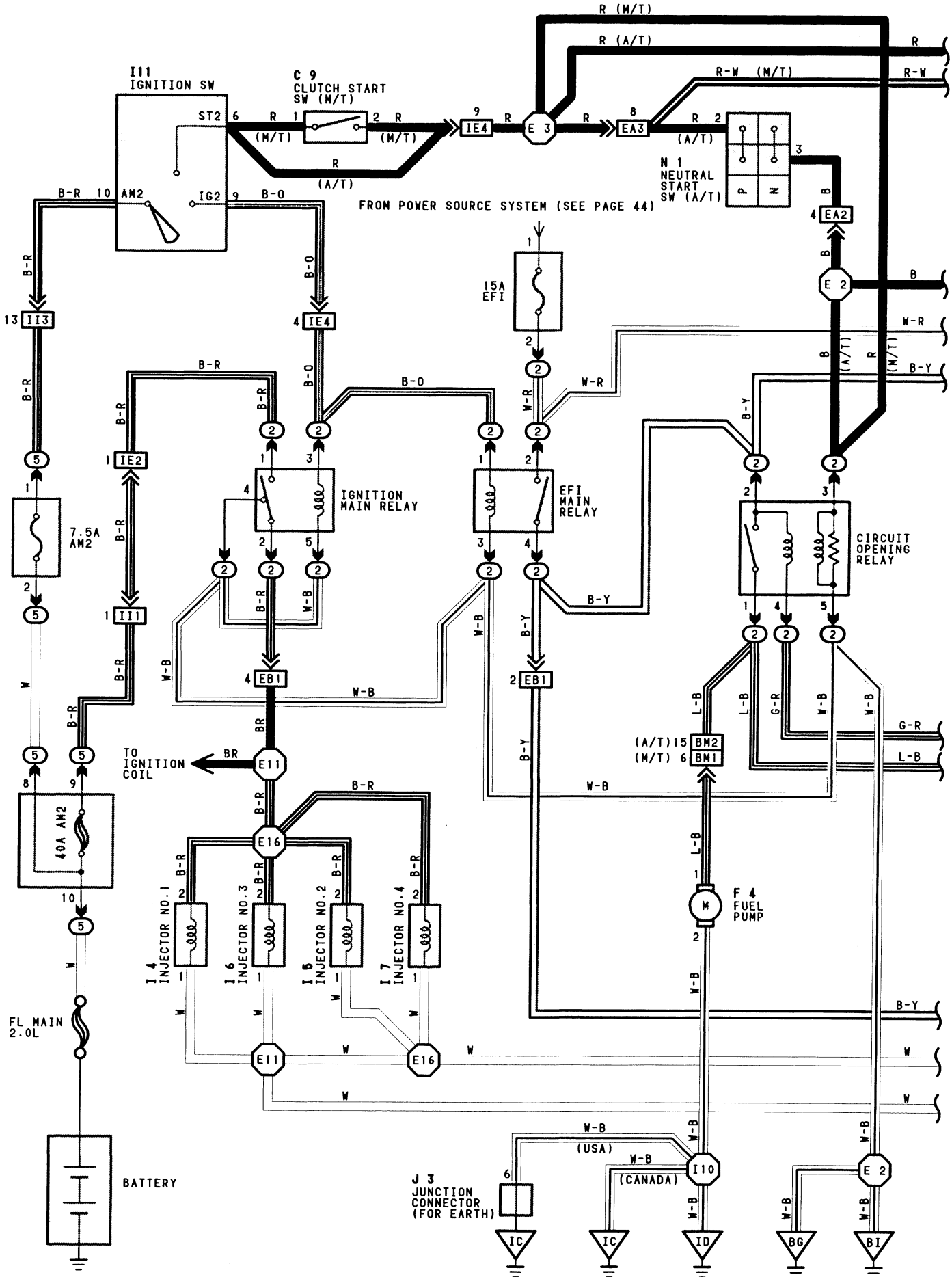
T 3 BLACK

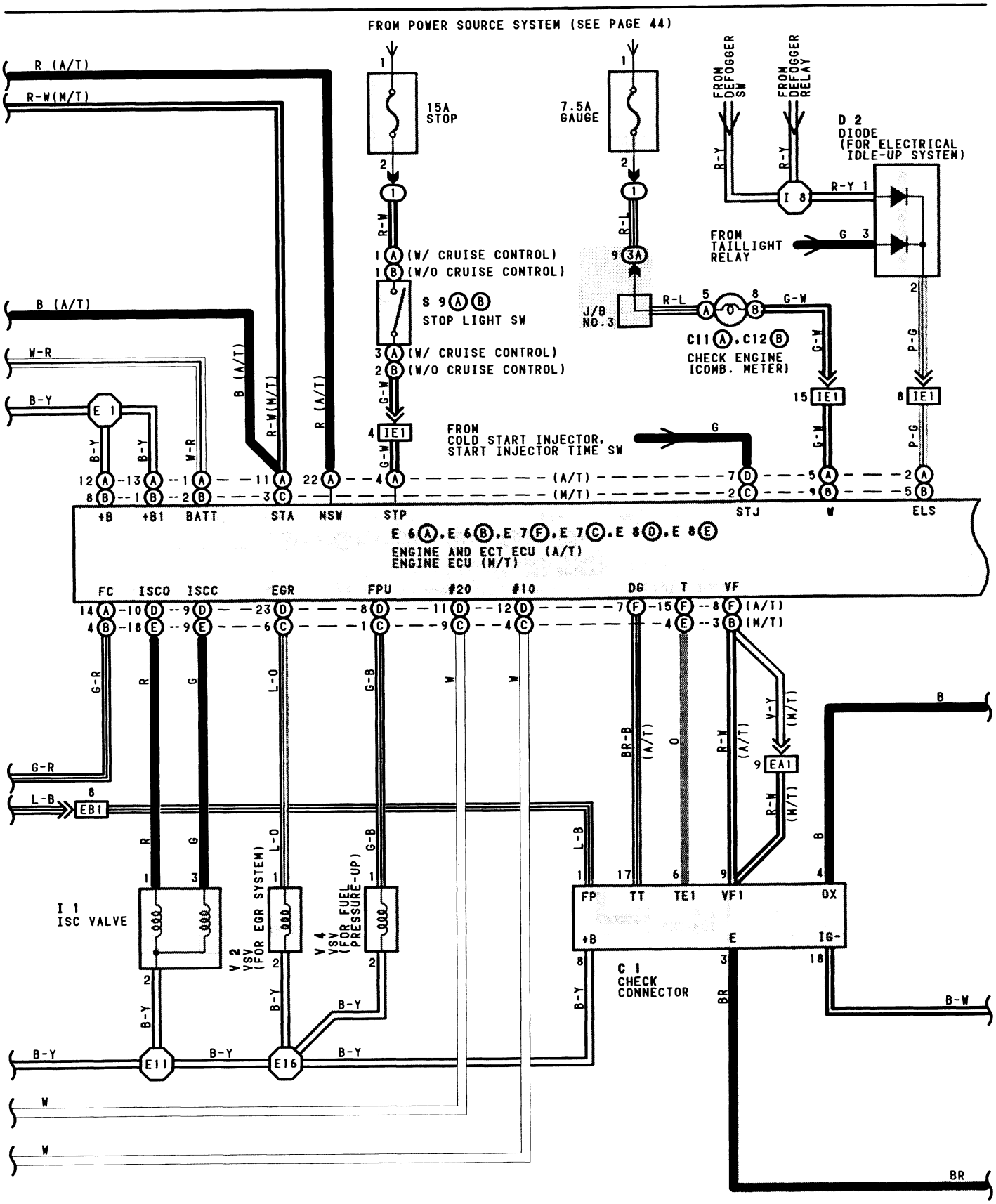


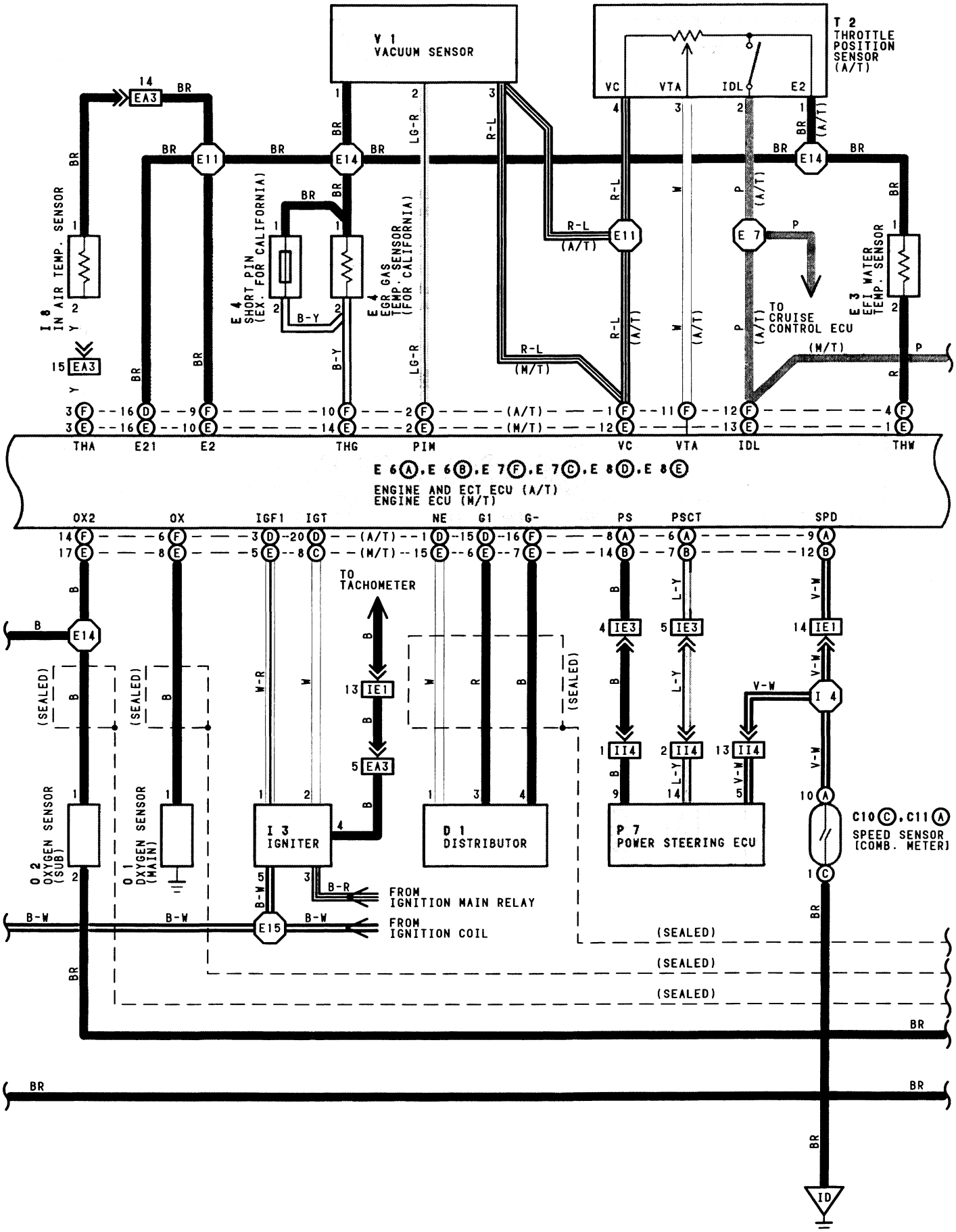
V 2 BROWN

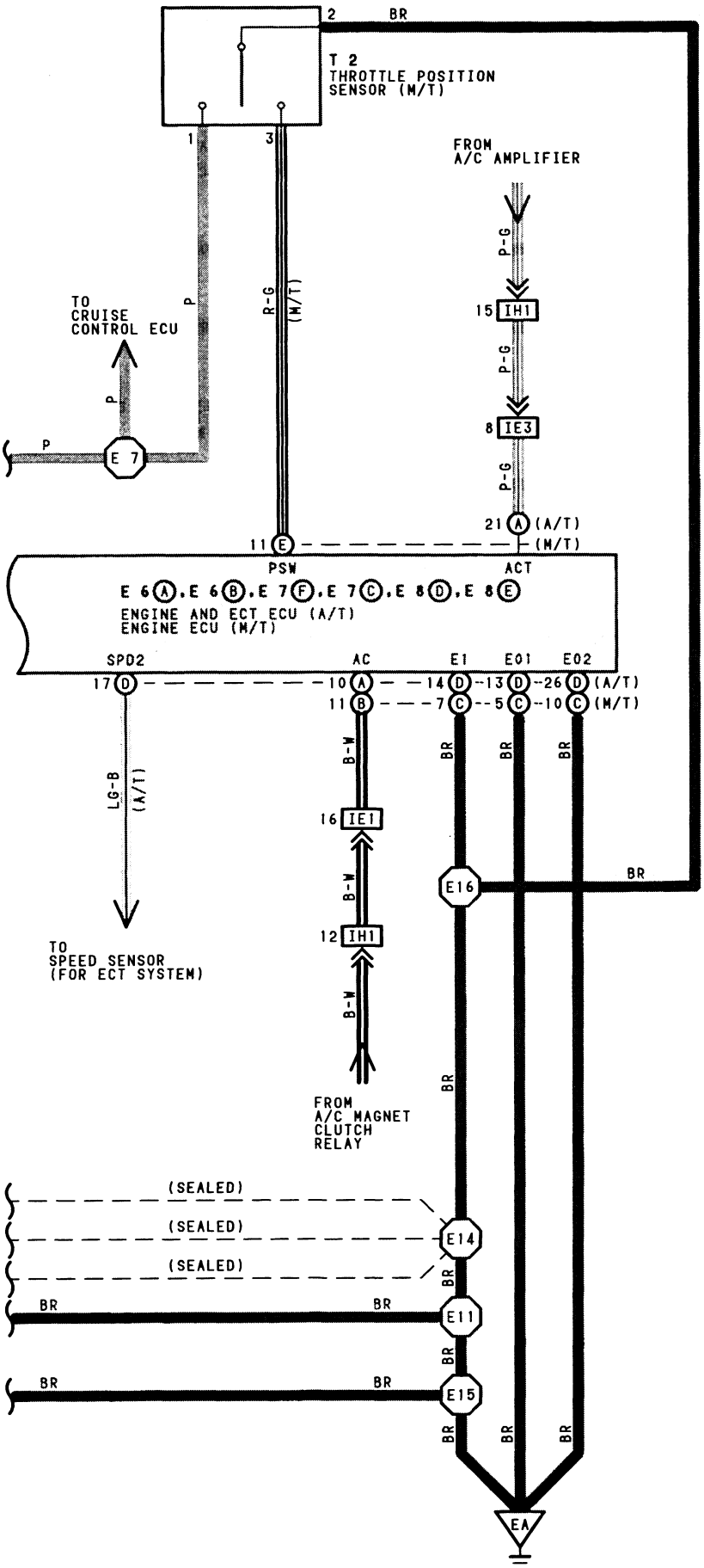
V 5 BLUE

V 6 BROWN


I11
IGNITION SW
C 9
CLUTCH START
SW (M/T)
ST2
IG2
AM2
B-R
B-O
R (M/T)
R (A/T)
R
R-W (M/T)
R-W
IE4
E 3
EA3
EA2
E 2
N 1
NEUTRAL
START
SW (A/T)
FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A
EFI
II3
IE2
II1
7.5A
AM2
IGNITION
MAIN RELAY
EFI
MAIN
RELAY
CIRCUIT
OPENING
RELAY
EB1
E11
E16
TO
IGNITION
COIL
BR
40A AM2
I 4
INJECTOR NO.1
I 6
INJECTOR NO.3
I 5
INJECTOR NO.2
I 7
INJECTOR NO.4
F 4
FUEL
PUMP
BM2
BM1
(A/T)15
(M/T) 6
L-B
G-R
W-B
B-Y
W
FL MAIN
2.0L
BATTERY
J 3
JUNCTION
CONNECTOR
(FOR EARTH)
(USA)
(CANADA)
I10
IC
ID
BG
BI


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
R (A/T)
R-W(M/T)
15A STOP
7.5A GAUGE
FROM DEFOGGER SW
FROM DEFOGGER RELAY
D 2 DIODE (FOR ELECTRICAL IDLE-UP SYSTEM)
FROM TAILLIGHT RELAY
(W/ CRUISE CONTROL)
(W/O CRUISE CONTROL)
S 9 STOP LIGHT SW
J/B NO.3
C11 C12 CHECK ENGINE (COMB. METER)
B (A/T)
W-R
B-Y
E 1
FROM COLD START INJECTOR, START INJECTOR TIME SW
(A/T)
(M/T)
+B
+B1
BATT
STA
NSW
STP
STJ
W
ELS
E 6 E 6 E 7 E 7 E 8 E 8
ENGINE AND ECT ECU (A/T)
ENGINE ECU (M/T)
FC
ISCO
ISCC
EGR
FPU
#20
#10
DG
T
VF
I 1 ISC VALVE
V 2 VSV (FOR EGR SYSTEM)
V 4 VSV (FOR FUEL PRESSURE-UP)
EB1
EA1
E11
E16
FP
TT
TE1
VF1
OX
+B
E
IG-
C 1 CHECK CONNECTOR
B-W
BR


V 1
VACUUM SENSOR
T 2
THROTTLE POSITION SENSOR (A/T)
VC
VTA
IDL
E2
I 8
IN AIR TEMP. SENSOR
E 4
SHORT PIN (EX. FOR CALIFORNIA)
E 4
EGR GAS TEMP. SENSOR (FOR CALIFORNIA)
E 3
EFI WATER TEMP. SENSOR
TO CRUISE CONTROL ECU
THA
E21
E2
THG
PIM
VC
VTA
IDL
THW
E 6 A , E 6 B , E 7 F , E 7 C , E 8 D , E 8 E
ENGINE AND ECT ECU (A/T)
ENGINE ECU (M/T)
OX2
OX
IGF1
IGT
NE
G1
G-
PS
PSCT
SPD
TO TACHOMETER
O 2
OXYGEN SENSOR (SUB)
O 1
OXYGEN SENSOR (MAIN)
I 3
IGNITER
D 1
DISTRIBUTOR
P 7
POWER STEERING ECU
C10 C , C11 A
SPEED SENSOR (COMB. METER)
FROM IGNITION MAIN RELAY
FROM IGNITION COIL
(SEALED)
ID


2 BR
T 2
THROTTLE POSITION
SENSOR (M/T)
1
3
FROM
A/C AMPLIFIER
P-G
15 IH1
P-G
8 IE3
P-G
21 A (A/T)
(M/T)
TO
CRUISE
CONTROL ECU
P
R-G (M/T)
P
P
E 7
11 E
PSW
ACT
E 6 A, E 6 B, E 7 F, E 7 C, E 8 D, E 8 E
ENGINE AND ECT ECU (A/T)
ENGINE ECU (M/T)
SPD2
AC
E1
E01
E02
17 D
10 A
11 B
14 D
7 C
13 D
5 C
26 D
10 C
(A/T)
(M/T)
B-W
LG-B (A/T)
16 IE1
B-W
12 IH1
B-W
BR
E16
BR
TO
SPEED SENSOR
(FOR ECT SYSTEM)
FROM
A/C MAGNET
CLUTCH
RELAY
(SEALED)
(SEALED)
(SEALED)
E14
BR
BR
BR
E11
BR
BR
BR
E15
BR
BR
BR
EA

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. INPUT SIGNALS

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

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

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

(4) RPM SIGNAL SYSTEM
CRANKSHAFT POSITION AND ENGINE RPM ARE DETECTED BY THE PICK-UP COIL INSTALLED INSIDE THE DISTRIBUTOR. CRANKSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO **TERMINAL G1**, OF THE ECU, AND RPM IS INPUT TO **TERMINAL NE**.

(5) THROTTLE SIGNAL SYSTEM
THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE, WHICH IS INPUT AS A CONTROL SIGNAL TO **TERMINAL VTA** (A/T) OR **PSW** (M/T) OF THE ECU, OR WHEN THE VALVE IS FULLY CLOSED, TO **TERMINAL IDL**

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

(7) NEUTRAL START SW SIGNAL SYSTEM (A/T)
THE NEUTRAL START SW DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL OR NOT, AND INPUTS A CONTROL SIGNAL TO **TERMINAL NSW** OF THE ECU.

(8) A/C SW SIGNAL SYSTEM
THE OPERATING VOLTAGE OF THE A/C MAGNET CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO **TERMINAL A/C** OF THE ECU.

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

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

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

(12) 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

• EFI (ELECTRONIC FUEL INJECTION) SYSTEM
THE EFI SYSTEM MONITORS THE ENGINE REVOLUTIONS THROUGH THE SIGNALS EACH SENSOR (INPUT SIGNALS (1) TO (12)) INPUTS TO THE ECU. BASED ON THIS DATA AND THE PROGRAM MEMORIZED IN THE ECU, THE MOST APPROPRIATE FUEL INJECTION TIMING IS DECIDED AND CURRENT IS OUTPUT TO **TERMINALS #10** AND **#20** OF THE ECU, CAUSING THE INJECTORS TO OPERATE IT (TO INJECT FUEL). IT IS THIS SYSTEM WHICH, THROUGH THE WORK OF THE ECU, FINELY CONTROLS FUEL INJECTION IN RESPONSE TO DRIVING CONDITIONS.
DURING ENGINE CRANKING (SIGNAL INPUT TO **TERMINAL STA**) OR FOR APPLOX. 2 SECONDS AFTER NE SIGNAL INPUT, ECU OPERATION ENERGIZES (POINT CLOSED) THE FUEL PUMP CIRCUIT INSIDE THE CIRCUIT OPENING RELAY, CAUSING THE FUEL PUMP TO OPERATE.

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

• ISC (IDLE SPEED CONTROL) SYSTEM
THE ISC SYSTEM (ROTARY SOLENOID TYPE) INCREASES THE RPM AND PROVIDES IDLING STABILTY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD, ETC. THE ECU EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1, 4 TO 8, 11, 12)), OUTPUTS CURRENT TO **TERMINAL 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 ECU (INPUT SIGNALS (1,5,6,9)) AND BY SENDING OUTPUT TO **TERMINAL EGR** OF THE 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 ECU RECEIVES INPUT SIGNALS (5, 6), AND OUTPUTS SIGNALS TO **TERMINAL ACT**.

• OVERDRIVE CONTROL SYSTEM
THE ECU CONTROLS THE O/D SOLENOID OF THE AUTOMATIC TRANSAXLE IN RESPONSE TO SIGNALS FROM EACH SENSOR (INPUT SIGNALS (1,4,5,6, AND 10)) IN ORDER TO MAINTAIN DRIVABILITY AND ACCELERATION PERFORMANCE.
THE ECU OUTPUTS A SIGNAL FROM **TERMINAL O/D** TO CONTROL THE O/D SOLENOID.

• FUEL PUMP CONTROL SYSTEM
COMPUTER OPERATION OUTPUTS TO **TERMINAL FC** AND CONTROLS THE FUEL PUMP CONTROL RELAY AND THUS CONTROLS THE FUEL PUMP DRIVE SPEED IN REPONSE TO CONDITIONS.

• 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 ECU EVALUATES THE INPUT SIGNALS FROM EACH SENSOR (1,2,10,11), OUTPUT CURRENT TO **TERMINAL FPU** AND CONTROLS THE VSV.

3. DIAGNOSIS SYSTEM
WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTIONING IN THE 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 ECU MENORY OR ELSE STOPS THE ENGINE.

SERVICE HINTS

E 6,E 7,E 8 ENGINE ECU

VOLTAGE AT ECU WIRING CONNECTORS

BATT-E1:ALWAYS 10.0-14.0VOLTS
+B-E1:10.0-14.0VOLTS (IGNITION SW AT **ON** POSITION)
+B1-E1:10.0-14.0VOLTS (IGNITION SW AT **ON** POSITION)
IDL-E2: 8.0-14.0VOLTS (IGNITION SW ON AND THROTTLE VALVE OPEN)
VC-E2: 4.5- 5.5VOLTS (IGNITION SW AT **ON** POSITION)
PIM-E2: 3.3- 3.9VOLTS (IGNITION SW AT **ON** POSITION, ATMOSFHERIC PRESSURE)
#10,#20-E01,E02:10.0-14.0VOLTS (IGNITION SW AT **ON** POSITION)
THA-E2: 1.7- 3.1VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, 68°F)
THW-E2: 0.3- 0.8VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C, 176°F)
STA-E1: 6.0-14.0VOLTS (ENGINE CRANKING)
IGT-E1: 0.8- 1.2VOLTS (ENGINE CRANKING OR IDLING)
W-E1: 8.0-14.0VOLTS (NO TROUBLE AND ENGINE RUNNING)
A/C-E1: 8.0-14.0VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
ACT-E1: 4.5- 5.5VOLTS (IGNITION SW ON AND AIR CONDITIONING ON)
T-E1:10.0-14.0VOLTS (IGNITION SW ON AND CHECK CONNECTOR TE1-E1 NOT CONNECTED)
1.0VOLTS OR LESS (IGNITION SW ON AND CHECK CONNECTOR TE1-E1 CONNECTED)
NSW-E1:0-2VOLTS WITH NEUTRAL START SW AT "P" OR "N" RANGE
6-14VOLTS WITH NEUTRAL START SW AT EXCEPT "P" OR "N" RANGE
B/K-E1:10-14VOLTS WITH STOP LIGHT SW ON (BRAKE PEDAL DEPRESSED)
ISCC:8-14VOLTS WITH IGNITION SW AT **ON** POSITION
ISCO:8-14VOLTS WITH IGNITION SW AT **ON** POSITION

RESISTANCE AT ECU WIRING CONNECTORS

(DISCONNECT WIRING CONNECTOR)
IDL-E1:INFINITY (THROTTLE VALVE OPEN)
2.3KΩ (A/T), 0Ω (M/T) OR LESS (THROTTLE VALVE FULLY CLOSED)
PSW-E1: 0Ω (M/T) (THROTTLE VALVE FULLY OPEN)
INFINITY (M/T) (THROTTLE VALVE FULLY CLOSED)
VC-E2: 3.0- 7.0KΩ
THA-E2: 2.0- 3.0KΩ (INTAKE AIR TEMP. 20°C, 68°F)
THW-E2: 0.2- 0.4KΩ (COOLANT TEMP. 80°C, 176°F)
G1,NE-G-:0.17-0.21KΩ
ISCC,ISCO-+B,+B1:19.3-22.3Ω

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C 1		20(5S-FE)	E 7	F	20(5S-FE)	J 3		22
C 9		22	E 8	D	20(5S-FE)	N 1		20(5S-FE)
C10	C	22		E	20(5S-FE)	O 1		20(5S-FE)
C11	A	22	F 4		22	O 2		20(5S-FE)
C12	B	22	I 1		20(5S-FE)	P 7		23
D 1		20(5S-FE)	I 3		20(5S-FE)	S 9	A	22
D 2		22	I 4		20(5S-FE)		B	22
E 3		20(5S-FE)	I 5		20(5S-FE)	T 2	A	20(5S-FE)
E 4		20(5S-FE)	I 6		20(5S-FE)		B	20(5S-FE)
E 6	A	20(5S-FE)	I 7		20(5S-FE)	V 1		20(5S-FE)
	B	20(5S-FE)	I 8		20(5S-FE)	V 2		20(5S-FE)
E 7	C	20(5S-FE)	I11		22	V 4		20(5S-FE)

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	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	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA2		
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EB1	24(5S-FE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE2		
IE3		
IE4		
IH1	28	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II1	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
BM1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)
BM2	32	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

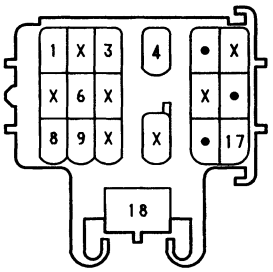
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

⯃ : SPLICE POINTS

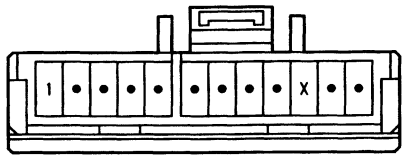
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	24(5S-FE)	ENGINE ROOM MAIN WIRE	E14	24(5S-FE)	ENGINE WIRE
E 2			E15		
E 3			E16		
E 7	24(5S-FE)	ENGINE WIRE	I 8	30	COWL WIRE
E11			I10		

C 1 DARK GRAY

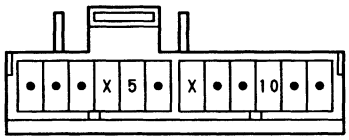


C 9

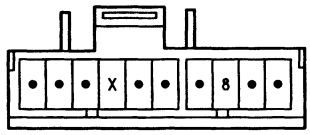
C10 Ⓒ BLUE



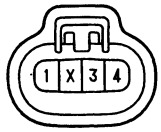
C11 Ⓐ



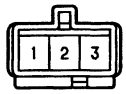
C12 Ⓑ GRAY



D 1 BLACK



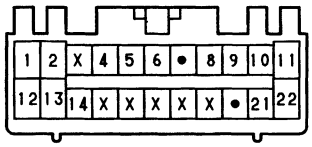
D 2 ORANGE



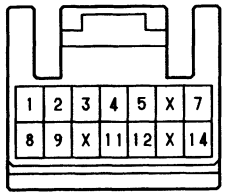
E 3 GRAY

E 4 DARK GRAY

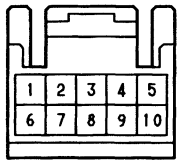
E 6 Ⓐ DARK GRAY



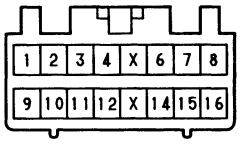
E 6 Ⓑ DARK GRAY



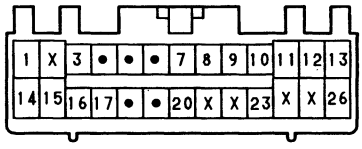
E 7 Ⓒ DARK GRAY



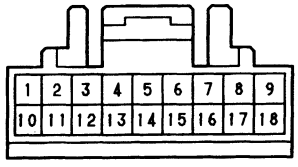
E 7 Ⓕ DARK GRAY



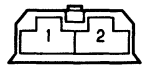
E 8 Ⓓ DARK GRAY



E 8 Ⓔ DARK GRAY



F 4 DARK GRAY



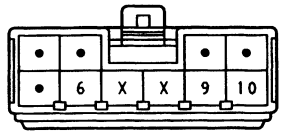
I 1 GRAY

I 3 BLACK

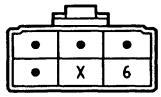
I 4, I 5, I 6, I 7 GRAY

I 8 DARK GRAY

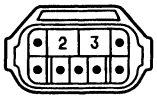
I11 BLACK



J 3



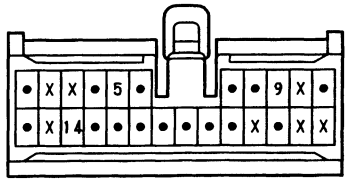
N 1 GRAY



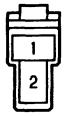
O 1 DARK GRAY

O 2 DARK GRAY

P 7

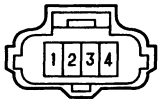


S 9 Ⓐ BLACK

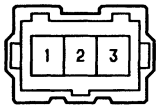


S 9 Ⓑ

T 2 Ⓐ BLACK



T 2 Ⓑ BLACK

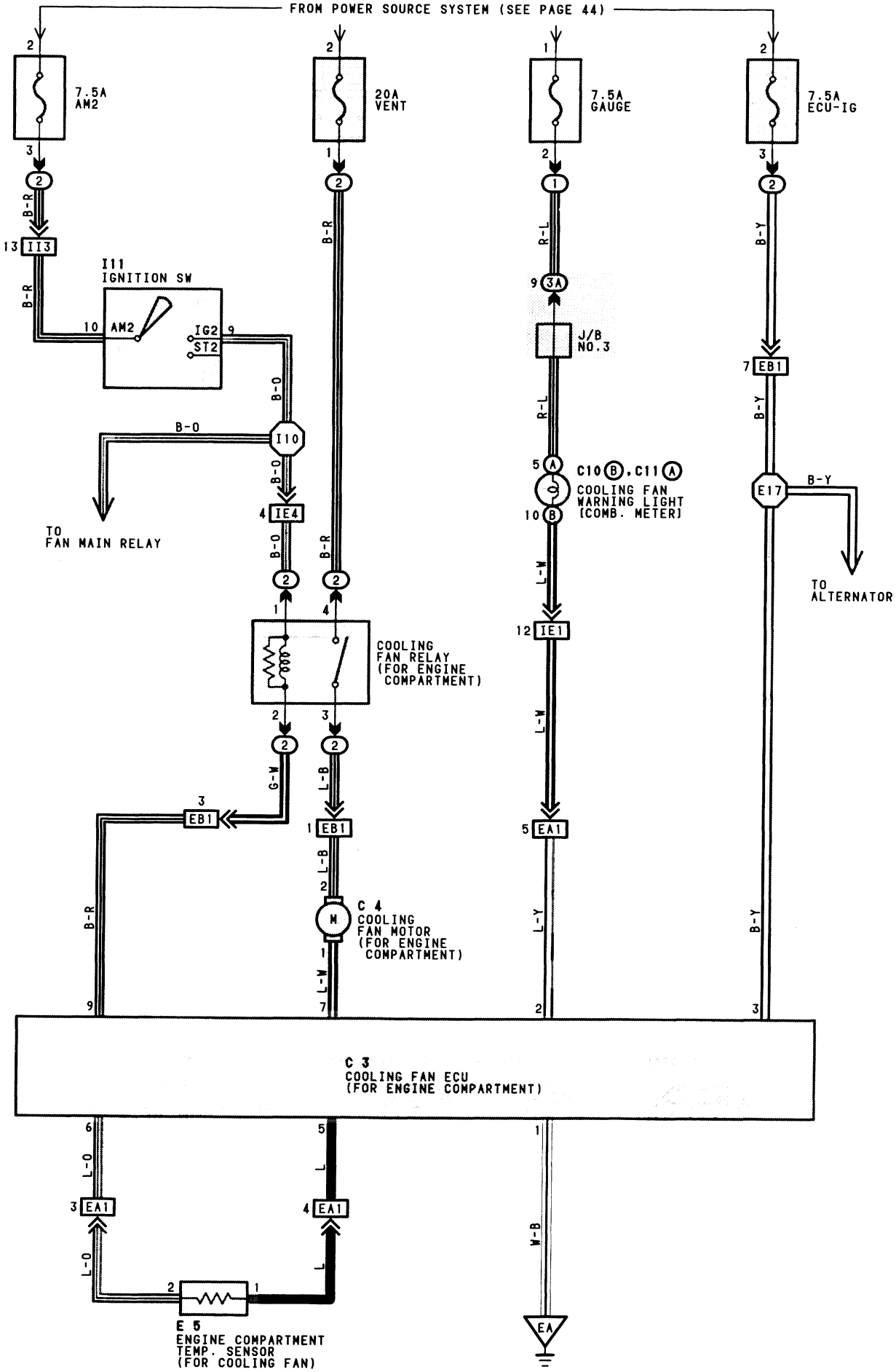


V 1 BLACK

V 2 BLUE

V 4 BROWN

ENGINE COMPARTMENT COOLING FAN(3S-GTE)



SERVICE HINTS

COOLING FAN RELAY

1-GROUND: APPROX. 12VOLTS 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. 12VOLTS WITH IGNITION SW AT **ON** POSITION
9-1 : 0VOLTS 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	21(3S-GTE)	C10	B	22	E 5	21(3S-GTE)
C 4	21(3S-GTE)	C11	A	22	I11	22

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	24(3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EB1	24(3S-GTE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II3	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

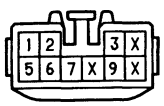
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(3S-GTE)	INTAKE MANIFOLD

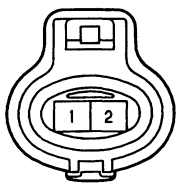
⬡ : SPLICE POINTS

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

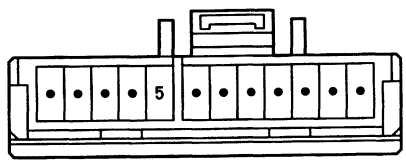
C 3 GRAY



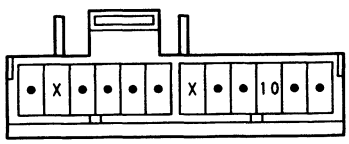
C 4



C10 Ⓐ BLUE

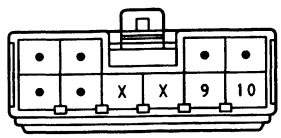


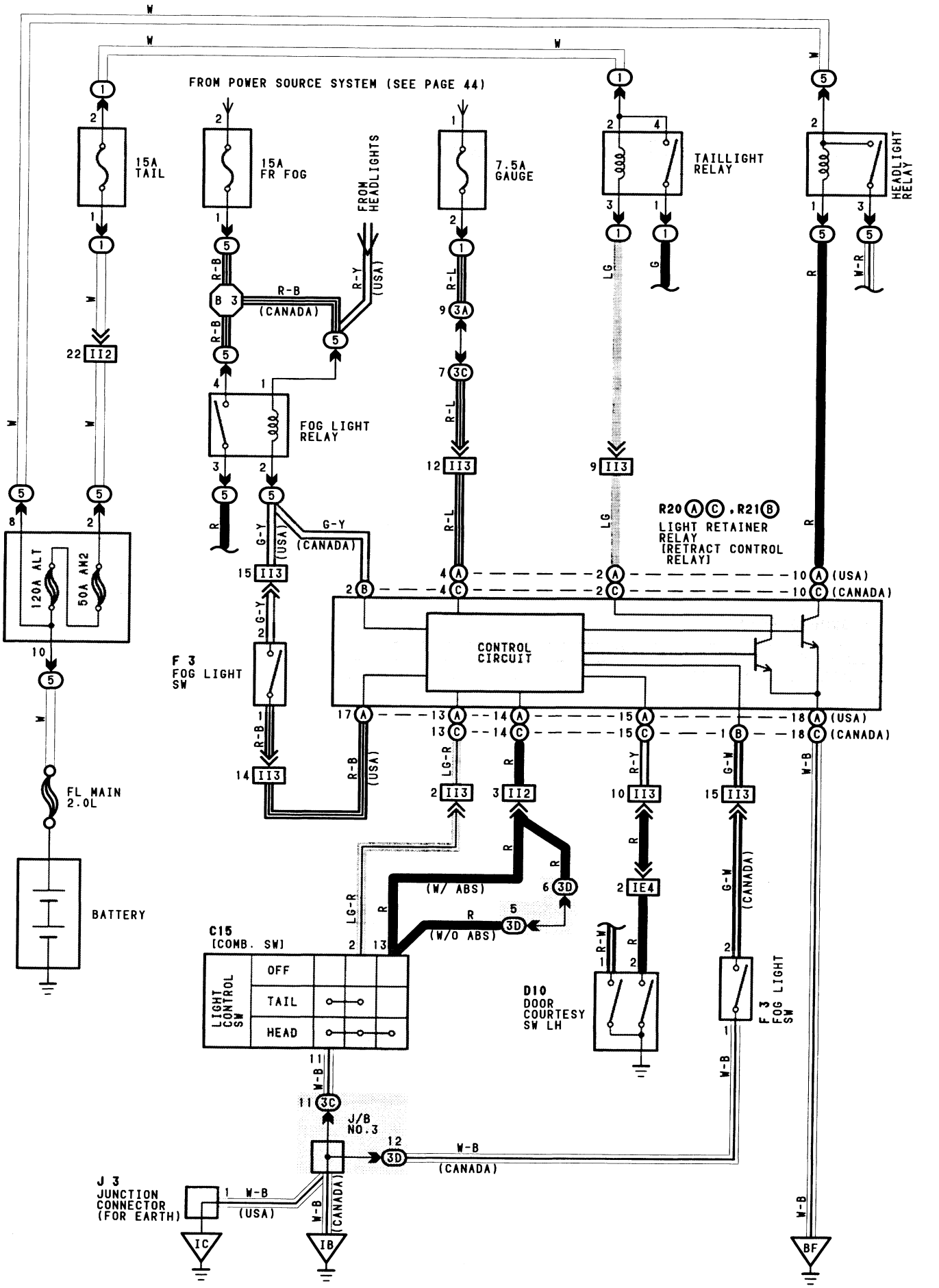
C11 Ⓑ



E 5 BLACK

I11 BLACK




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A TAIL
15A FR FOG
FROM HEADLIGHTS
7.5A GAUGE
TAILLIGHT RELAY
HEADLIGHT RELAY
FOG LIGHT RELAY
R20 A C , R21 B
LIGHT RETAINER RELAY (RETRACT CONTROL RELAY)
CONTROL CIRCUIT
F 3 FOG LIGHT SW
120A ALT
50A AM2
FL MAIN 2.0L
BATTERY
C15 (COMB. SW)
LIGHT CONTROL SW
OFF
TAIL
HEAD
D10 DOOR COURTESY SW LH
F 3 FOG LIGHT SW
J/B NO.3
J 3 JUNCTION CONNECTOR (FOR EARTH)
(USA)
(CANADA)
(W/ ABS)
(W/O ABS)

SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS TO **TERMINAL** Ⓐ **4** (USA), Ⓒ **4** (CANADA) OF THE RETRACT CONTROL REALY THROUGH GAUGE FUSE.
VOLTAGE IS APPLIED AT ALL TIMES TO **TERMINAL** Ⓐ **2** (USA), Ⓒ 2 (CANADA) OF THE RETRACT CONTROL REALY. THROUGH THE TAILLIGHT RELAY COIL, AND TO **TERMINAL** Ⓐ **10** (USA), Ⓒ **10** (CANADA) 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** Ⓐ **13** (USA), Ⓒ **13** (CANADA) OF THE RETRACT CONTROL RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOWING TO **TERMINAL** Ⓐ **2** (USA), Ⓒ **2** (CANADA) OF THE RELAY FLOWS FROM **TERMINAL** Ⓐ **18** (USA), Ⓒ **18** (CANADA) → 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** Ⓐ **13** (USA), Ⓒ **13** (CANADA) AND Ⓐ **14** (USA), Ⓒ **14** (CANADA) OF THE RETRACT CONTROL RELAY. ACCORDING TO THIS SIGNAL, THE CURRENT FLOWING TO **TERMINAL** Ⓐ **10** (USA), Ⓒ **10** (CANADA) OF THE RELAY FLOWS TO **TERMINAL** Ⓐ **18** (USA), Ⓒ **18** (CANADA) → 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** Ⓐ **4** (USA), Ⓒ **4** (CANADA) OF THE RELAY), WHEN DOOR ON DRIVER'S SIDE IS OPENED (INPUT SIGNAL GOES TO **TERMINAL** Ⓐ **15** (USA), Ⓒ **15** (CANADA) OF THE RELAY), THE RELAY OPERATES AND THE CURRENT IS CUT OFF WHICH FLOWS FROM **TERMINAL** Ⓐ **2** (USA), Ⓒ **2** (CANADA) OF THE RELAY TO **TERMINAL** Ⓐ **18** (USA), Ⓒ **18** (CANADA) IN TAILLIGHT CIRCUIT AND FROM **TERMINAL** Ⓐ **10** (USA), Ⓒ **10** (CANADA) TO **TERMINAL** Ⓐ **18** (USA), Ⓒ **18** (CANADA) IN HEADLIGHT CIRCUIT.
AS A RESULT, ALL LIGHTS ARE TURNED OFF AUTOMATICSLLY.

SERVICE HINTS

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

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

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

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

LIGHT AUTO TURN OFF

: PARTS LOCATION

CODE	SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C15	22	J 3		22	R21	B	23
D10	23	R20	A	23			
F 3	22		C	23			

: RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

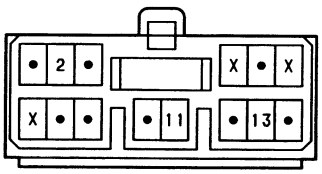
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BF	32	FRONT LEFT FENDER

: SPLICE POINTS

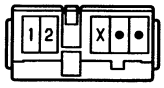
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 3	32	LUGGAGE ROOM WIRE			

C15 BLACK

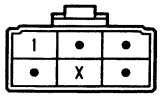


D10

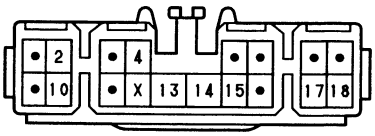
F 3



J 3



R20 Ⓐ Ⓒ



R21 Ⓑ

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	22	H 2		23	R20	B	23
C12	A	22	H 3		23	R22		23
C14	B	22	J 3		22	R23		23
C15	A	22	R20	A	23			

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	17	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 3D	19	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)
I12	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

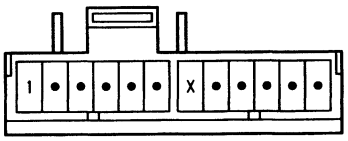
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER

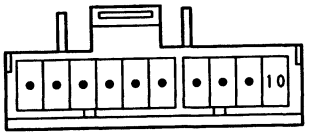
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5 I10	30	COWL WIRE	B 5 B13	32	LUGGAGE ROOM WIRE

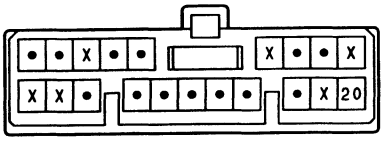
C11 (B)



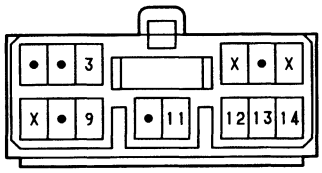
C12 (A) GRAY



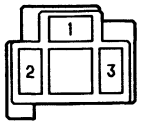
C14 (B) BLACK



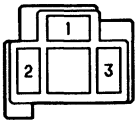
C15 (A) BLACK



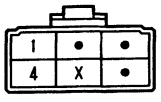
H 2



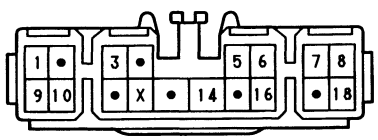
H 3



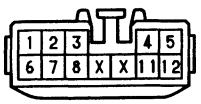
J 3



R20 (A)



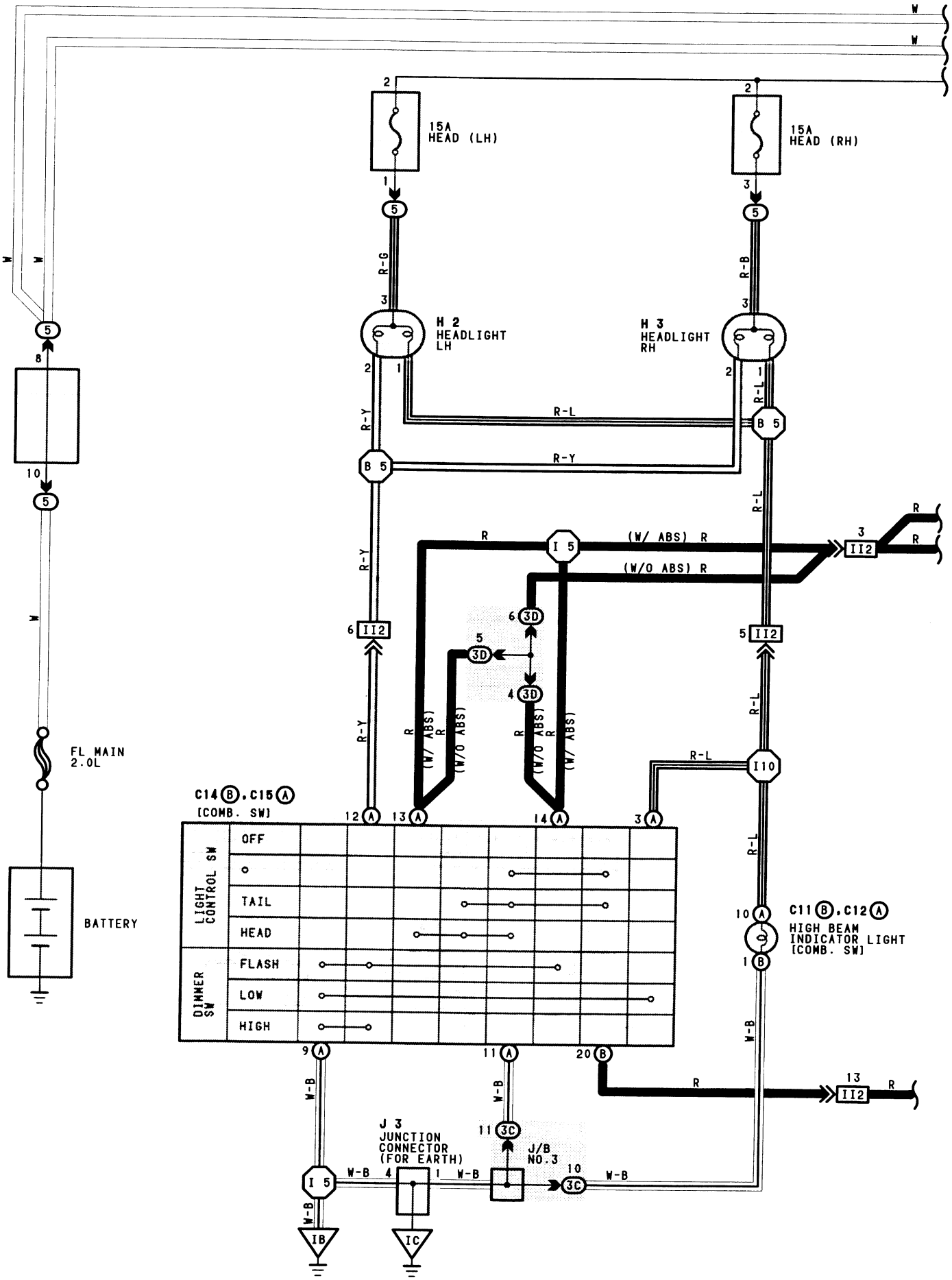
R20 (B)

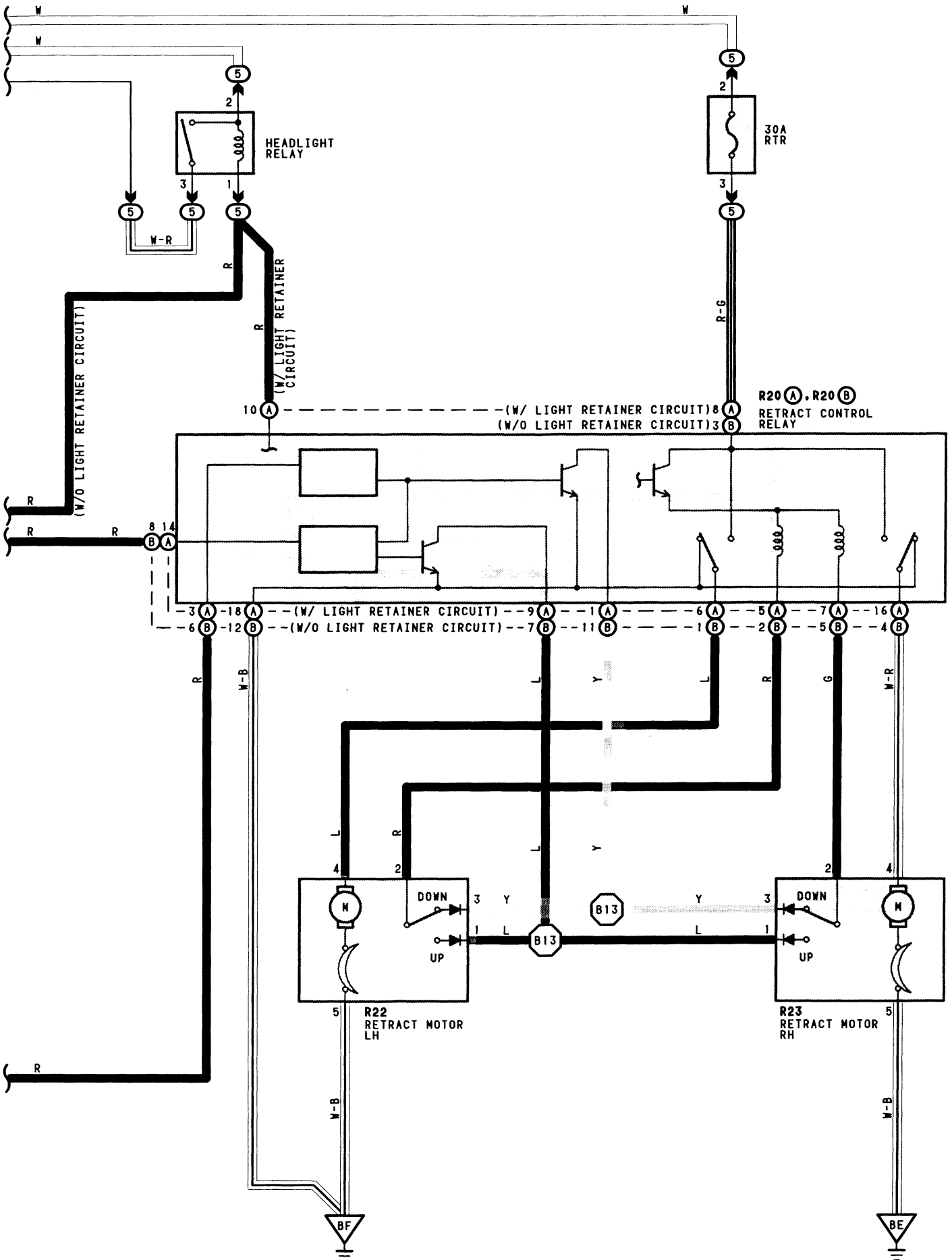


R22 BLACK

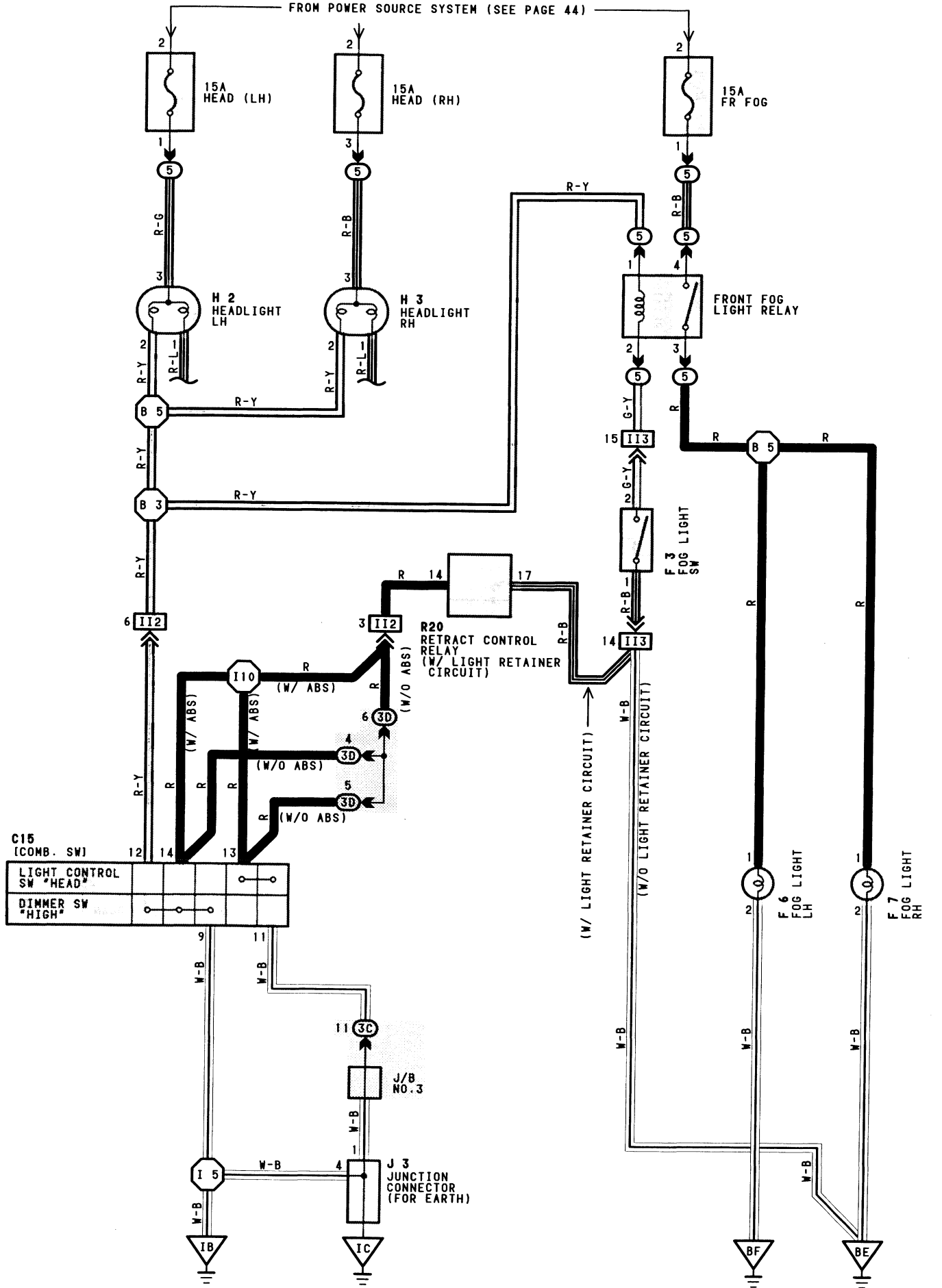
R23 BLACK

HEADLIGHT(FOR USA)




HEADLIGHT RELAY
30A RTR
W-R
R
(W/O LIGHT RETAINER CIRCUIT)
(W/ LIGHT RETAINER CIRCUIT)
R-G
R20 A , R20 B
RETRACT CONTROL RELAY
(W/ LIGHT RETAINER CIRCUIT)
(W/O LIGHT RETAINER CIRCUIT)
W-B
L
Y
G
DOWN
UP
M
B13
R22
RETRACT MOTOR LH
R23
RETRACT MOTOR RH
BF
BE

FOG LIGHT(FOR USA)



SERVICE HINTS

C15 **DIMMER SW [COMB. 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	22	F 7	23	J 3	22
F 3	22	H 2	23	R20	23
F 6	23	H 3	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	17	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 3D	19	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)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

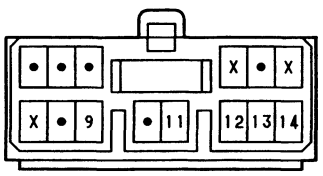
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER

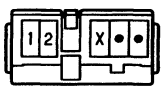
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5 I10	30	COWL WIRE	B 3 B 5	32	LUGGAGE ROOM WIRE

C15 BLACK

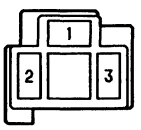


F 3

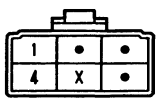


F 6, F 7

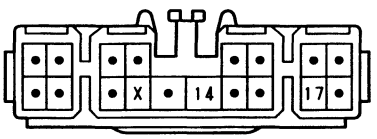
H 2, H 3



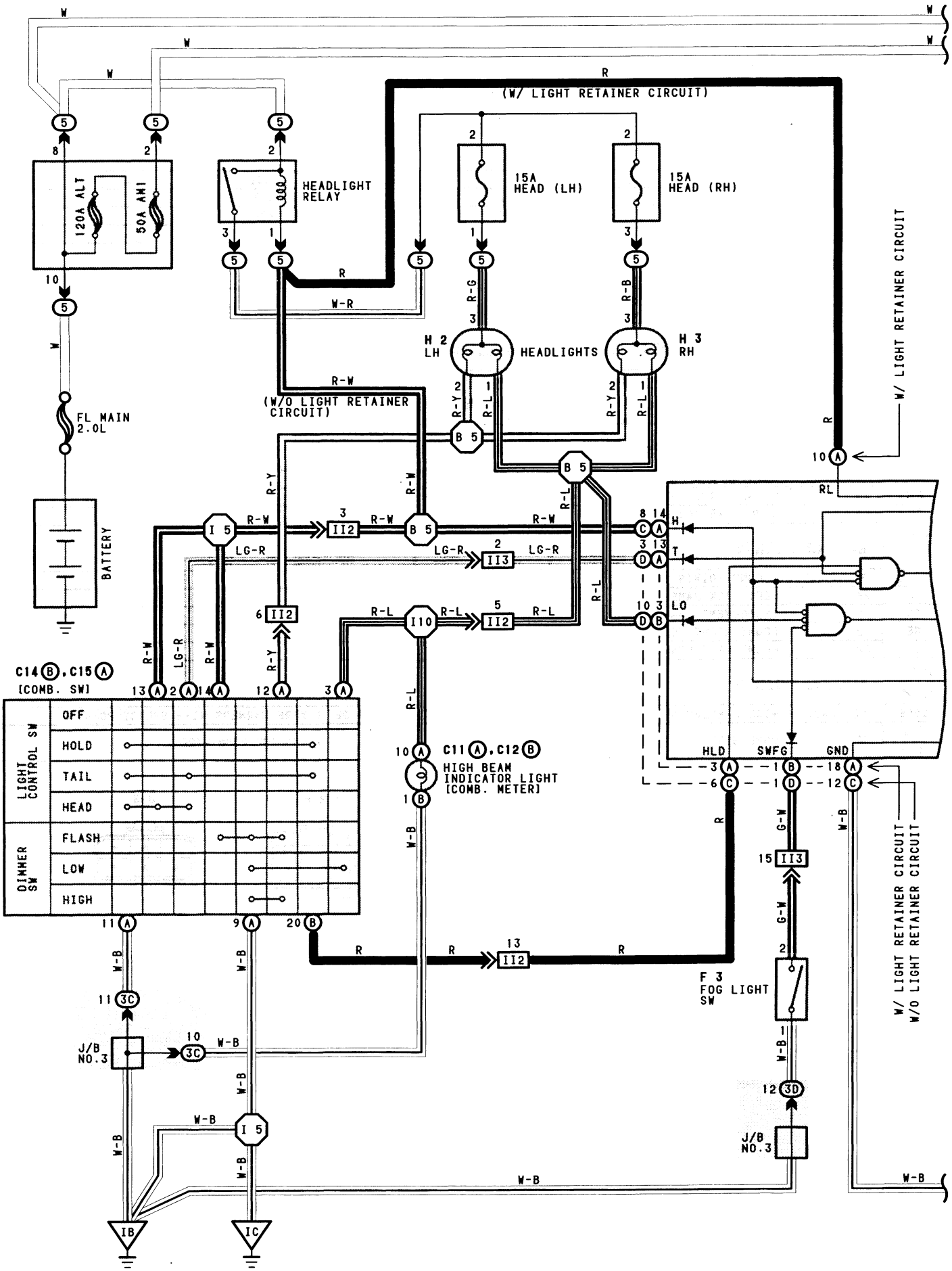
J 3

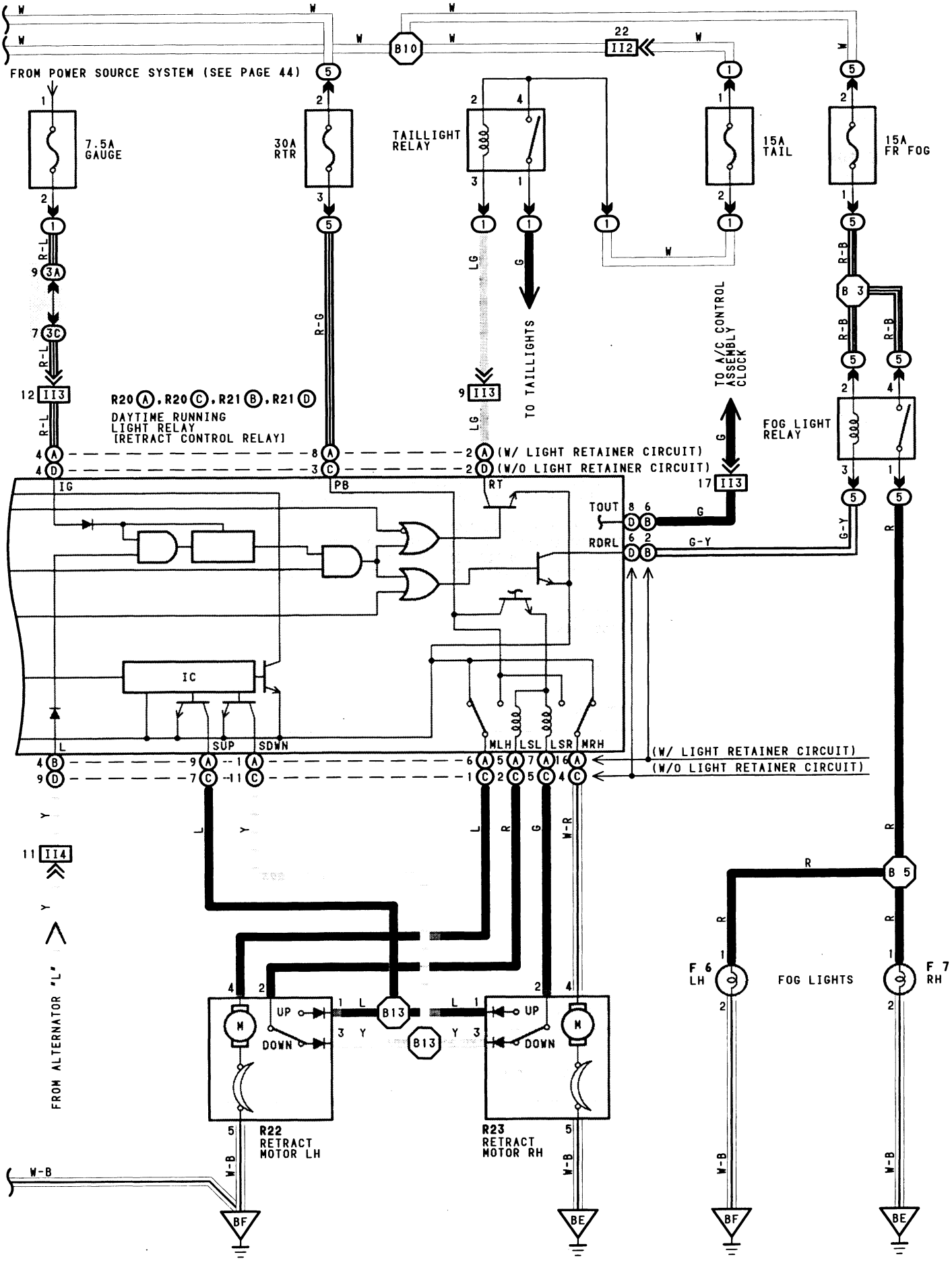


R20



HEADLIGHT AND FOG LIGHT(FOR CANADA)




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A GAUGE
30A RTR
TAILLIGHT RELAY
15A TAIL
15A FR FOG
TO A/C CONTROL ASSEMBLY CLOCK
TO TAILLIGHTS
FOG LIGHT RELAY
R20 A, R20 C, R21 B, R21 D
DAYTIME RUNNING LIGHT RELAY (RETRACT CONTROL RELAY)
(W/ LIGHT RETAINER CIRCUIT)
(W/O LIGHT RETAINER CIRCUIT)
IG
PB
RT
TOUT
RDRL
IC
SUP
SDWN
MLH
LSL
LSR
MRH
FROM ALTERNATOR "L"
UP
DOWN
R22 RETRACT MOTOR LH
R23 RETRACT MOTOR RH
FOG LIGHTS
F 6 LH
F 7 RH
BF
BE

HEADLIGHT AND FOG LIGHT(FOR CANADA)

SYSTEM OUTLINE

CURRENT FROM THE BATTERY FLOWS CONTINUOUSLY FROM FL 2.0L → ALT FUSE → AM1 FUSE → TAILLIGHT 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 FLOWS 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, CAUSING THE RETRACT CONTROL RELAY TO OPERATE SO THAT THE TAILLIGHT RELAY AND FOG LIGHT RELAY TURN ON. THIS CAUSES CURRENT TO FLOW FROM THE TAIL FUSE → TAILLIGHT REALY (POINT SIDE) → EACH TAILLIGHT, AND FOG LIGHT RELAY (POINT SIDE) → FOG LIGHTS.

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

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

SERVICE HINTS

R20, R21 RETRACT CONTROL RELAY

RT, PB, RL-GROUND: ALWAYS APPROX. 12VOLTS
IG-GROUND: 0VOLTS 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

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 REFFER 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	A	22	F 6		23	R20	C	23
C12	B	22	F 7		23	R21	B	23
C14	B	22	H 2		23		D	23
C15	A	22	H 3		23	R22		23
F 3		22	R20	A	23	R23		23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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)
I12	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
I13	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
I14		

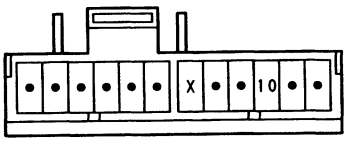
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER

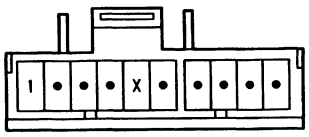
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	30	COWL WIRE	B 5	32	LUGGAGE ROOM WIRE
I10			B10		
B 3	32	LUGGAGE ROOM WIRE	B13		

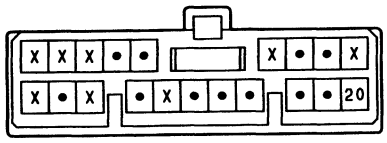
C11 (A)



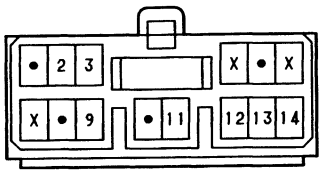
C12 (B) GRAY



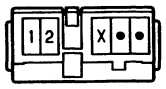
C14 (B) BLACK



C15 (A) BLACK

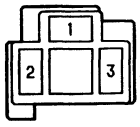


F 3

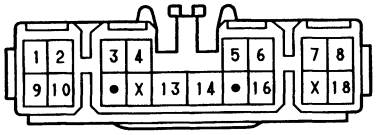


F 6, F 7

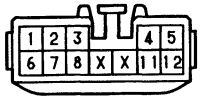
H 2, H 3



R20 (A)

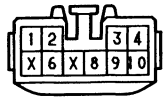


R20 (C)

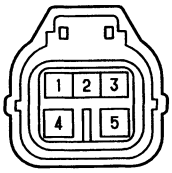


R21 (B)

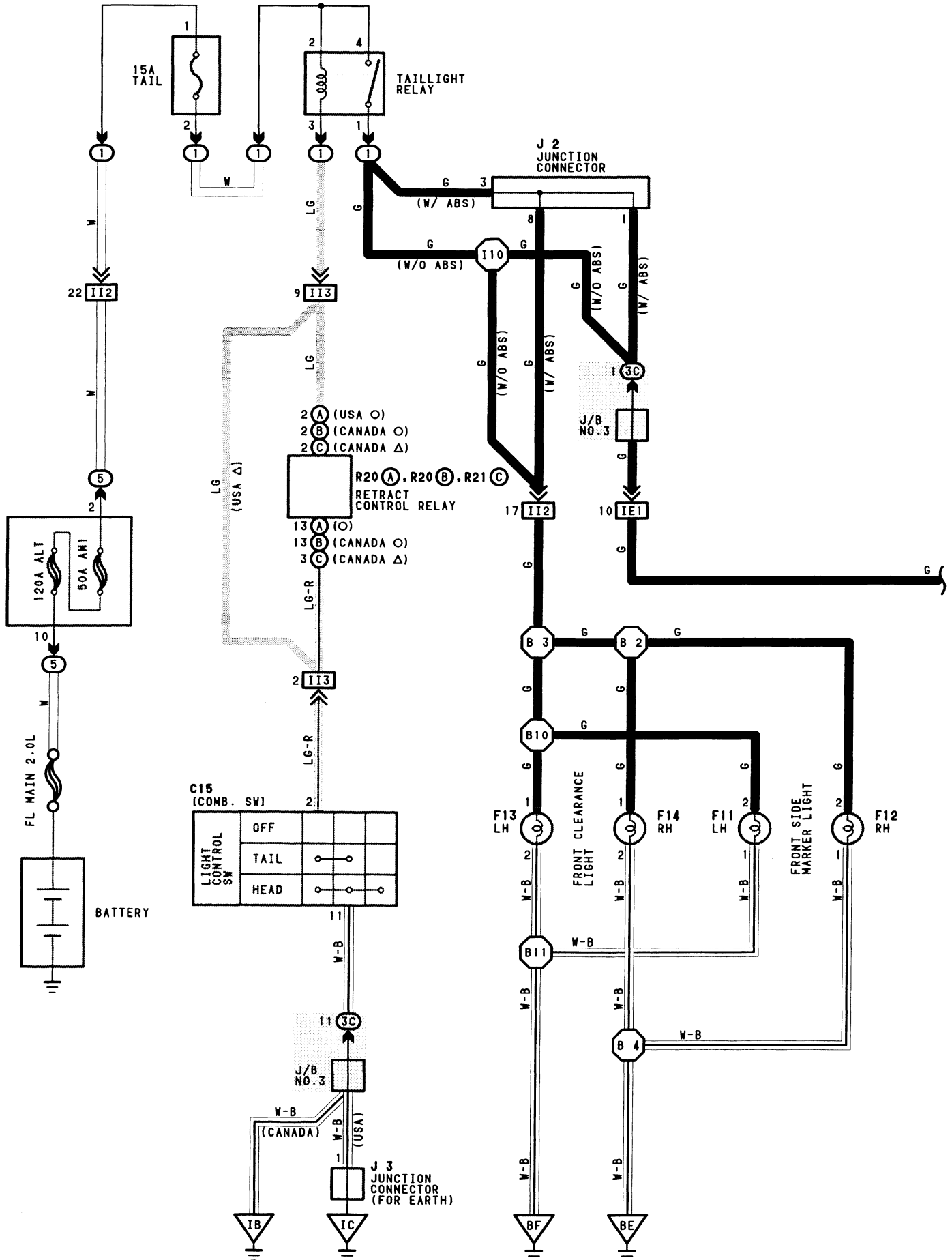
R21 (D)



R22, R23 BLACK



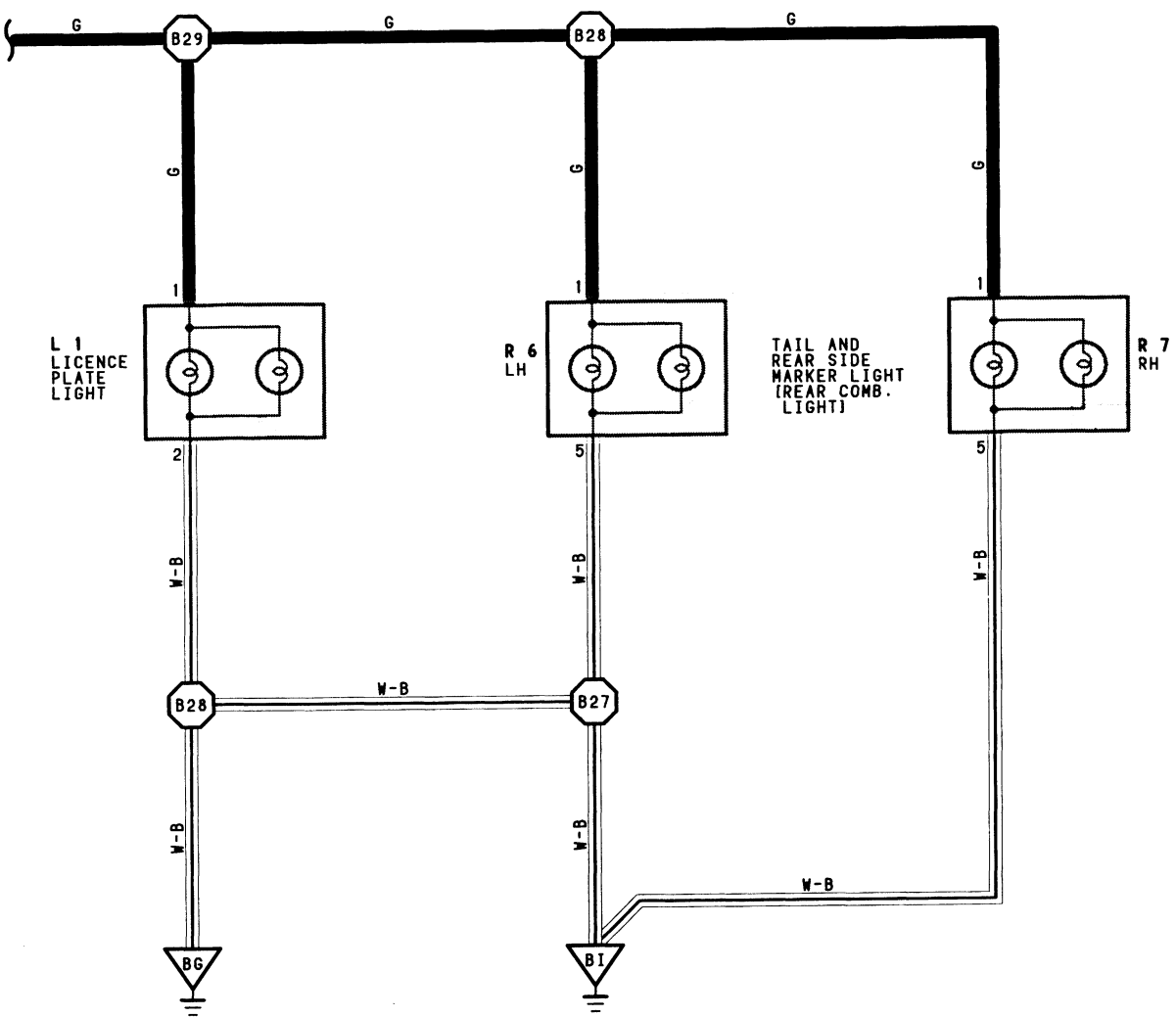
○ (W/ LIGHT RETAINER CIRCUIT)
△ (W/O LIGHT RETAINER CIRCUIT)



SERVICE HINTS

TAILLIGHT RELAY

① 4- ① 1:CLOSED WITH LIGHT CONTROL SW AT TAIL OR HEAD POSITION



TAILLIGHT

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE		SEE PAGE
C15	22	J 2	22	R20	A	23
F11	23	J 3	22		B	23
F12	23	L 1	23	R21	C	23
F13	23	R 6	23			
F14	23	R 7	23			

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

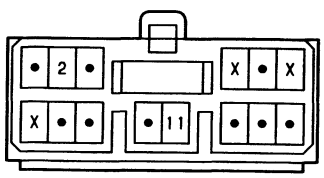
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	30	COWL WIRE	B11	32	LUGGAGE ROOM WIRE
B 2	32	LUGGAGE ROOM WIRE	B27	32	ENGINE ROOM MAIN WIRE
B 3			B28		
B 4			B29		
B10					

C15 BLACK



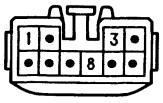
F11

F12

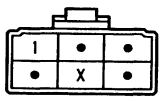
F13

F14

J 2

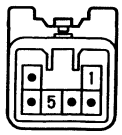


J 3

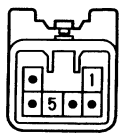


L 1

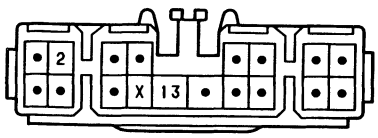
R 6



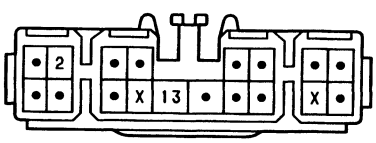
R 7



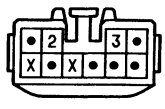
R20 Ⓐ



R20 Ⓑ



R21 Ⓒ



○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A10 B	22	F 3	22	R 2 B	22
A12 A	22	H 1	22	R 3 C	22
A19	22	J 1	22	R 4	22
C 7	22	J 2	22	R20 A	23
C11	22	J 3	22	R21 B	23
C15	22	R 1 A	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

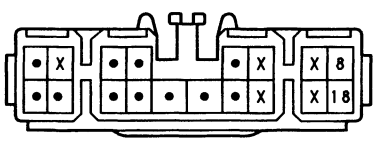
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH

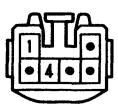
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 2	30	COWL WIRE	I10	30	COWL WIRE
I 7			I11		
I 9					

A10 Ⓑ



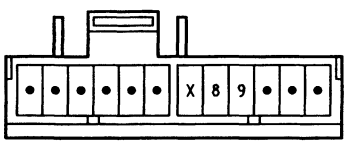
A12 Ⓐ



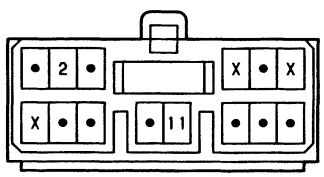
A19

C 7 GRAY

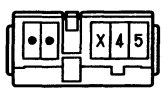
C11



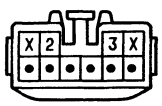
C15 BLACK



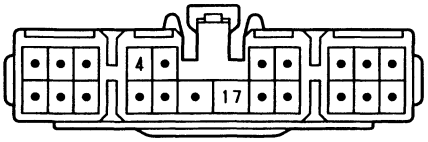
F 3



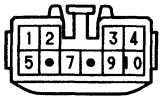
H 1



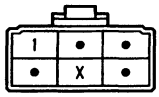
J 1



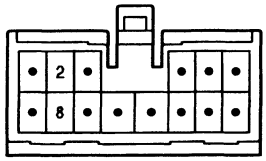
J 2



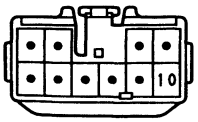
J 3



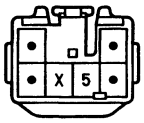
R 1 Ⓐ WHITE



R 2 Ⓑ WHITE

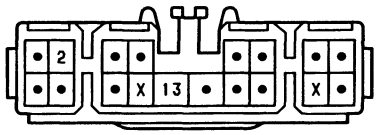


R 3 Ⓒ WHITE

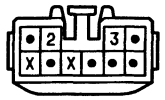


R 4

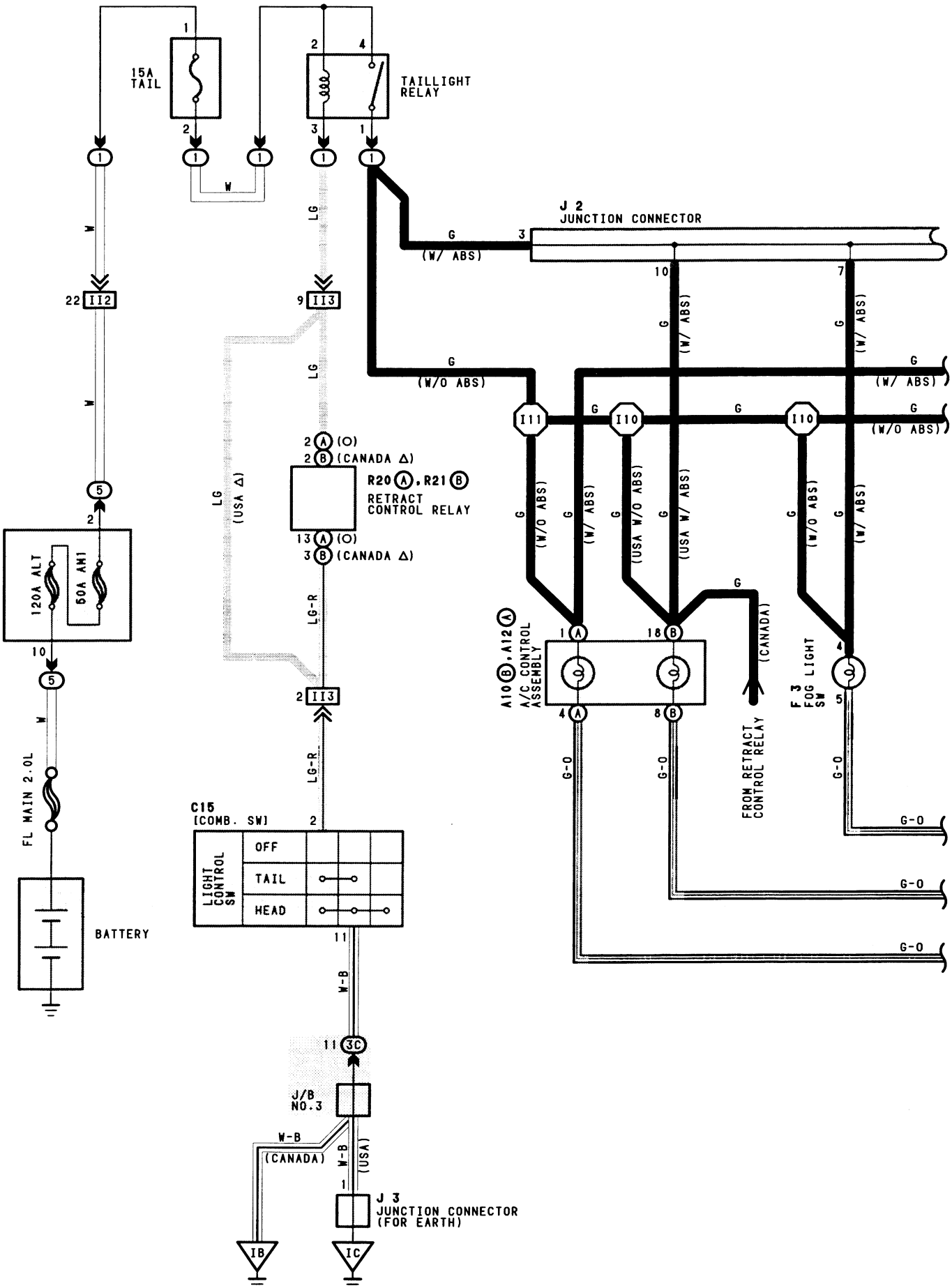
R20 Ⓐ



R21 Ⓑ



○ W/ LIGHT RETAINER CIRCUIT
△ W/O LIGHT RETAINER CIRCUIT



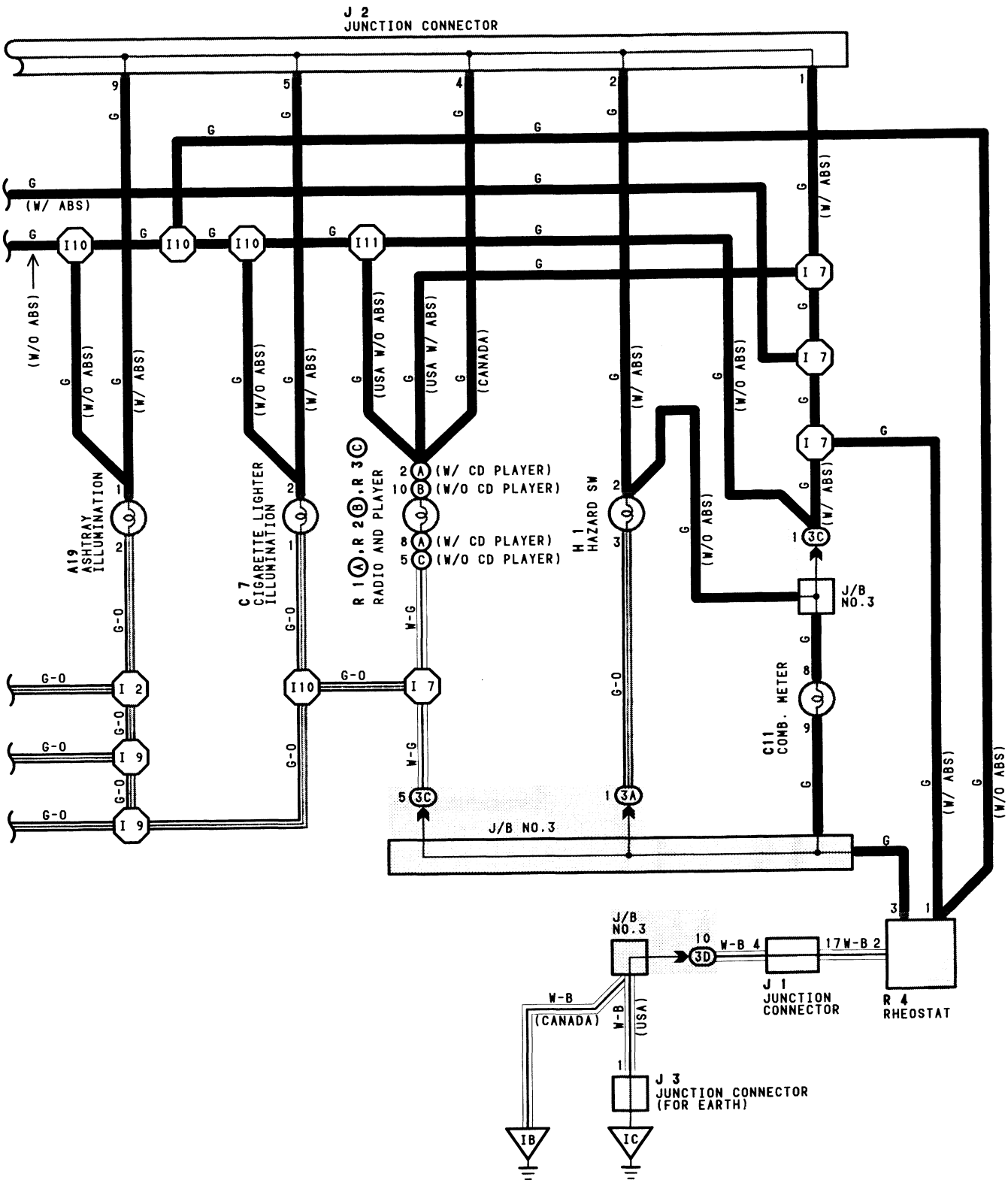
SERVICE HINTS

TAILLIGHT RELAY

(1) 4- (1) 1:CLOSED WITH LIGHT CONTROL SW AT **TAIL** OR **HEAD** POSITION (WHEN LIGHT AUTO TURN OFF SYSTEM IS OFF)

R 4 RHEOSTAT

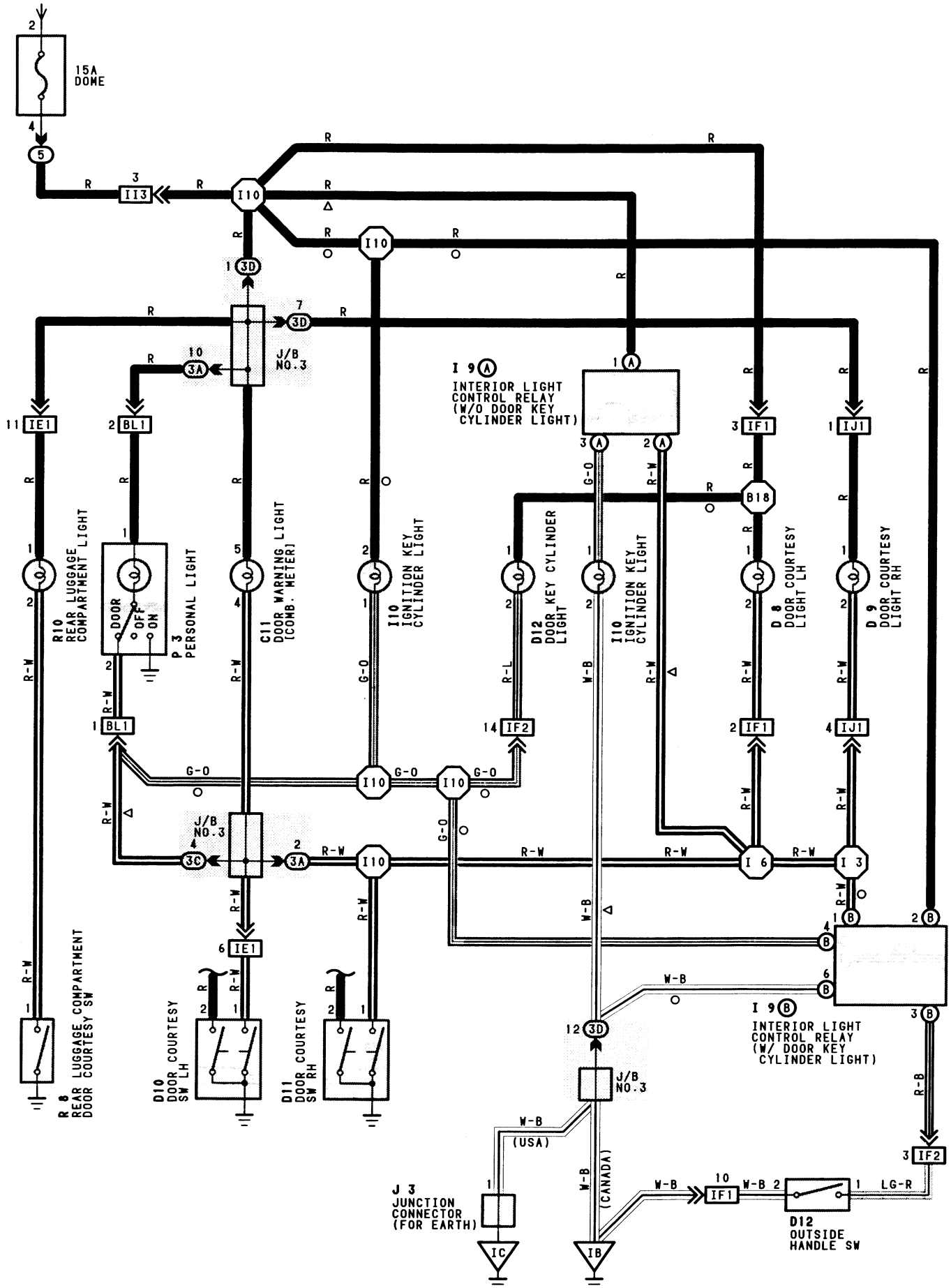
1-2:APPROX. **12**VOLTS WITH RHEOSTAT FULLY TURNED COUNTERCLOCKWISE AND **0**VOLTS WITH FULLY TURNED CLOCKWISE



INTERIOR LIGHT

○ W/ DOOR KEY CYLINDER LIGHT
△ W/O DOOR KEY CYLINDER LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 44)



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
C11	22	D11	23	J 3	22
D 8	23	D12	23	P 3	23
D 9	23	I 9	22	R 8	23
D10	23	I10	22	R10	23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
5	17	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	19	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)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	28	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
BL1	32	ROOF WIRE AND COWL WIRE (UNDER THE RIGHT FRONT PILLAR)

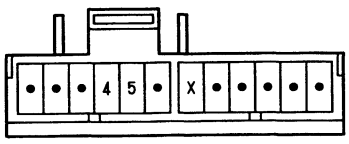
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH

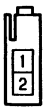
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	30	COWL WIRE	I10	30	COWL WIRE
I 6			B18	32	FRONT DOOR LH WIRE

C11

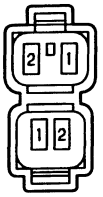


D 8, D 9

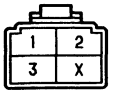


D10, D11

D12

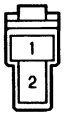


I 9 Ⓐ GREEN

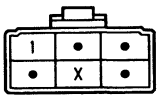


I 9 Ⓑ

I10



J 3

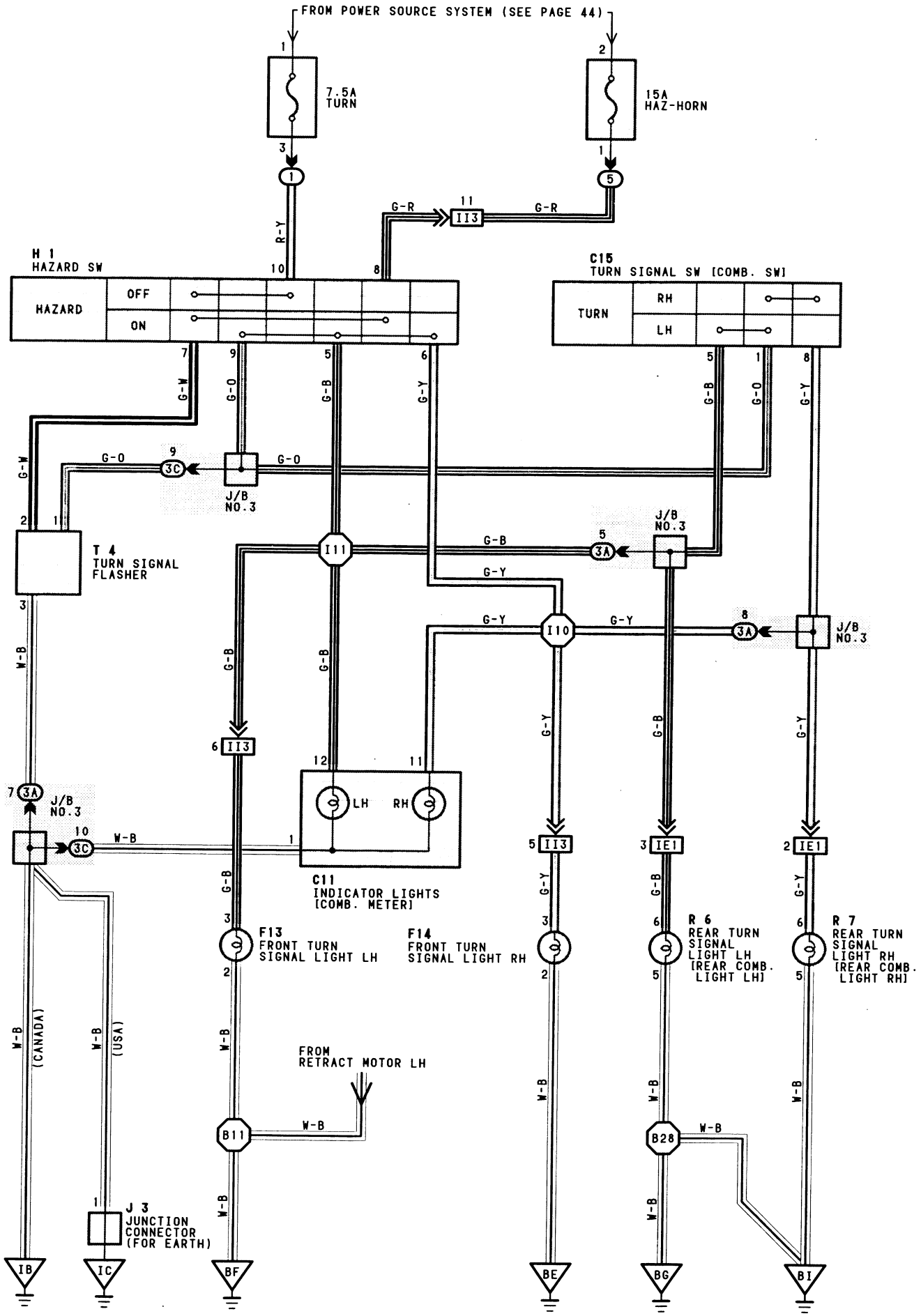


P 3

R 8 GRAY

R10 GRAY

TURN SIGNAL AND HAZARD WARNING LIGHT



SERVICE HINTS

T 4 TURN SIGNAL FLASHER

2-GROUND:APPROX. 12VOLTS WITH IGNITION SW ON OR HAZARD SW ON
1-GROUND:CHANGES FROM 12 TO 0VOLTS 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	22	F14	23	R 6	23
C15	22	H 1	22	R 7	23
F13	23	J 3	22	T 4	22

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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 3C	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

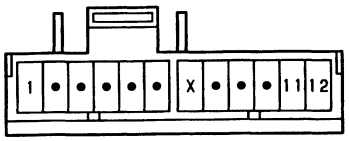
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

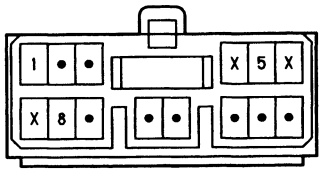
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10 I11	30	COWL WIRE	B11	32	LUGGAGE ROOM WIRE
			B28	32	ENGINE ROOM MAIN WIRE

C11



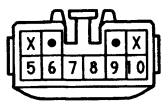
C15 BLACK



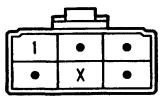
F13

F14

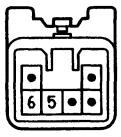
H 1



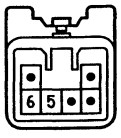
J 3



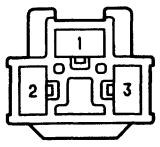
R 6



R 7

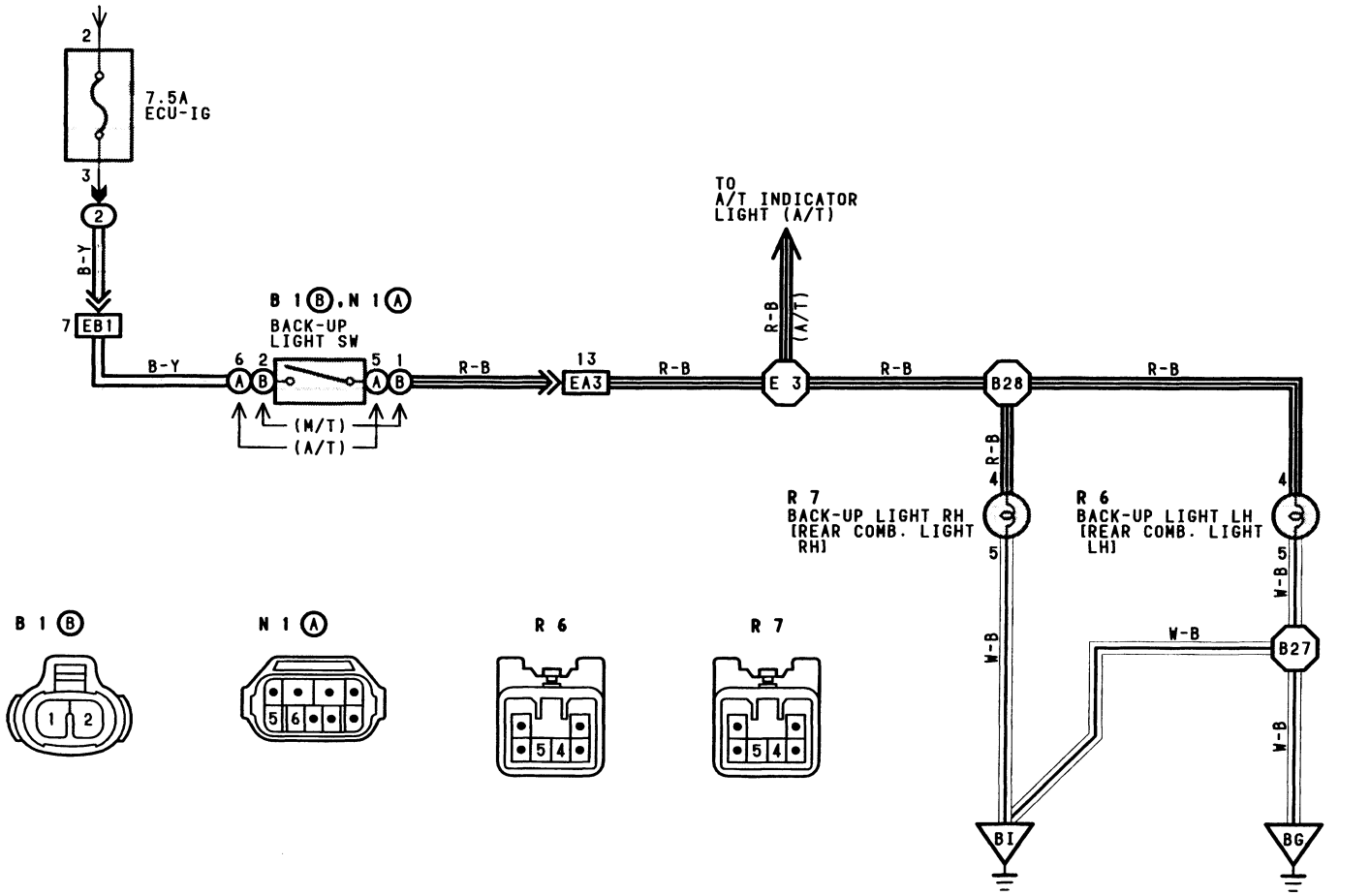


T 4 BLACK



BACK-UP LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 44)



SERVICE HINTS

B 1 Ⓑ , N 1 Ⓐ **BACK-UP LIGHT SW**

Ⓐ 6-5, Ⓑ 2-1 : CLOSED WITH SHIFT LEVER IN R POSITION

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 1	B	20(5S-FE), 21(3S-GTE)	R 6	23		
N 1	A	20(5S-FE)	R 7	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

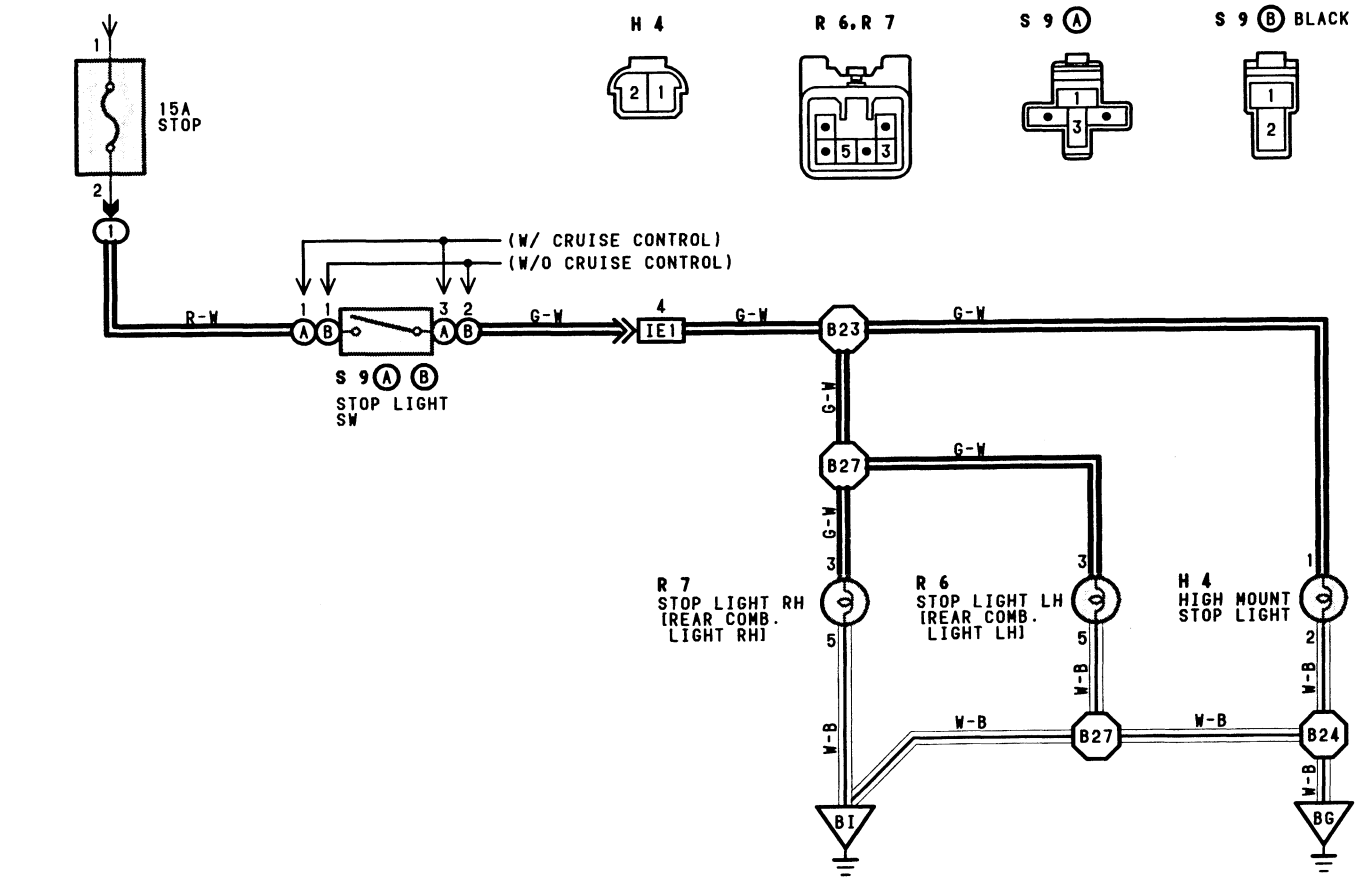
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA3	24(5S-FE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (R/B NO.2 INNER)
	26(3S-GTE)	
EB1	24(5S-FE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
	26(3S-GTE)	

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	24(5S-FE)	ENGINE ROOM MAIN WIRE	B27	32	ENGINE ROOM MAIN WIRE
	26(3S-GTE)		B28		



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	23	R 7	23	S 9 (B)	22
R 6	23	S 9 (A)	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

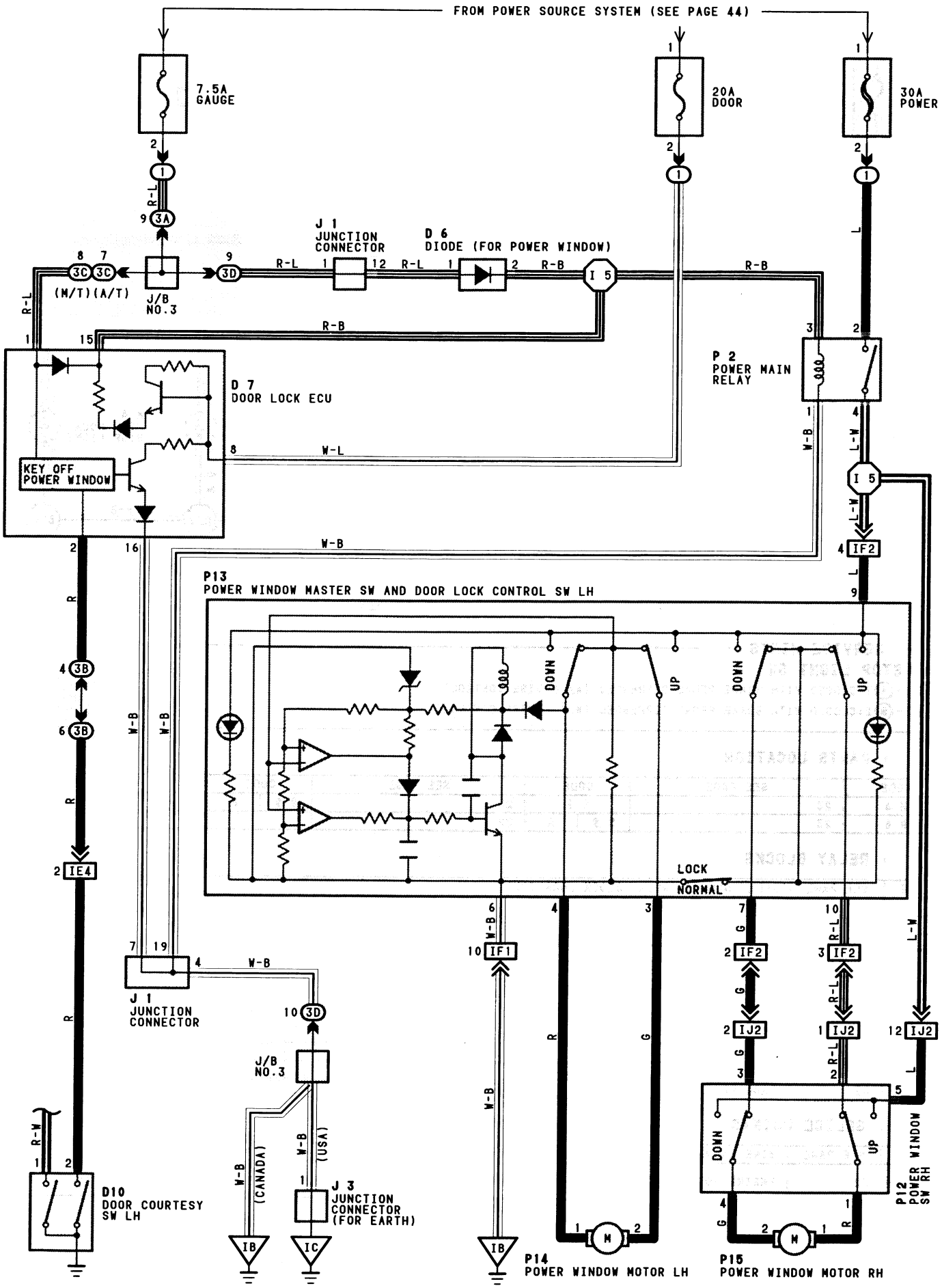
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B23	32	ENGINE ROOM MAIN WIRE	B27	32	ENGINE ROOM MAIN WIRE
B24					


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A GAUGE
20A DOOR
30A POWER
J 1 JUNCTION CONNECTOR
D 6 DIODE (FOR POWER WINDOW)
(M/T)(A/T)
J/B NO.3
D 7 DOOR LOCK ECU
KEY OFF POWER WINDOW
P 2 POWER MAIN RELAY
P13 POWER WINDOW MASTER SW AND DOOR LOCK CONTROL SW LH
DOWN
UP
LOCK
NORMAL
J 1 JUNCTION CONNECTOR
J/B NO.3
(CANADA)
(USA)
J 3 JUNCTION CONNECTOR (FOR EARTH)
D10 DOOR COURTESY SW LH
P14 POWER WINDOW MOTOR LH
P15 POWER WINDOW MOTOR RH
P12 POWER WINDOW SW RH

SYSTEM OUTLINE

CURRENT ALWAYS FLOWS **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** → TO **GROUND**. THIS ACTIVATES THE RELAY AND CURRENT FLOWING TO **TERMINAL 4** OF THE POWER MAIN RELAY → TO **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 WITH 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** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE SW IS BEING PUSHED. IN DOWN OPERATION, THE FLOW OF CURRENT FROM **TERMINAL 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** → TO **GROUND**, FLOWING IN THE OPPOSITE DIRECTION TO MANUAL UP OPERATION AND CAUSING THE MOTOR TO ROTATE IN REVERSE, LOWERING THE WINDOW.

2. AUTO DOWN OPERATION

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

WHEN THE WINDOW HAS COMPLETELY DESCENDED, THE CURRENT FLOW BETWEEN **TERMINAL 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 UP 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 2** → **TERMINAL 10** OF THE MASTER SW → **TERMINAL 6** → TO **GROUND** AND CAUSES THE POWER WINDOW MOTOR (PASSENGER'S) TO ROTATE IN THE UP DIRECTION. UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM **TERMINAL 1** → MOTOR → TO **TERMINAL 2**, AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED TO THE LOCK SIDE, THE GROUND CIRCUIT TO THE PASSENGER'S WINDOW BECOMES OPEN.

AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF THE PASSENGER'S WINDOW IS TRIED, THE CURRENT FROM **TERMINAL 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 THE FUNCTIONING OF THIS RELAY. ALSO, BY OPENING THE DOOR (DOOR COURTESY SW ON) WITHIN ABOUT **60** SECONDS AFTER TURNING THE IGNITION SW TO OFF. A SIGNAL IS INPUT TO **TERMINAL 2** OF DOOR LOCK ECU. AS A RESULT, THE ECU TURNS OFF AND UP AND DOWN OF THE MOVEMENT OF THE WINDOW STOPS.

SERVICE HINTS

D 7 DOOR LOCK ECU

8-GROUND: ALWAYS APPROX. 12VOLTS
16-GROUND: ALWAYS CONTINUITY
1-GROUND: APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION
2-GROUND: CONTINUITY WITH DRIVER'S DOOR OPENED
15-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON AND STAYS AT 12VOLTS FOR 60SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60SECONDS PERIOD, VOLTAGE WILL DROP TO 0VOLTS

D10 DOOR COURTESY SW

2-GROUND: CONTINUITY WITH DRIVER'S DOOR OPEN

P12 POWER WINDOW SW RH

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

P13 POWER WINDOW MASTER SW AND DOOR LOCK CONTROL SW LH

6-GROUND: ALWAYS CONTINUITY
9-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON AND STAYS AT 12VOLTS FOR 60SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60SECONDS PERIOD, VOLTAGE WILL DROP TO 0VOLTS
3-GROUND: APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION AND DRIVER'S SW AT UP POSITION
4-GROUND: APPROX. 12VOLTS 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	22	J 3	22	P14	23
D 7	22	P 2	22	P15	23
D10	23	P12	23		
J 1	22	P13	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	28	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ2	30	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

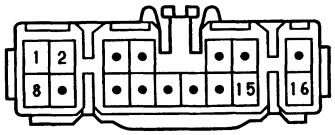
CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH

⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	30	COWL WIRE			

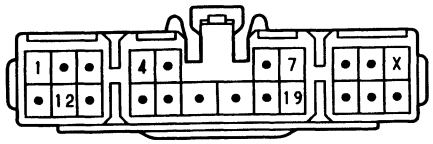
D 6 BLACK

D 7

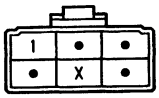


D10

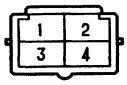
J 1



J 3

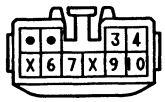


P 2

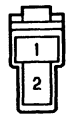


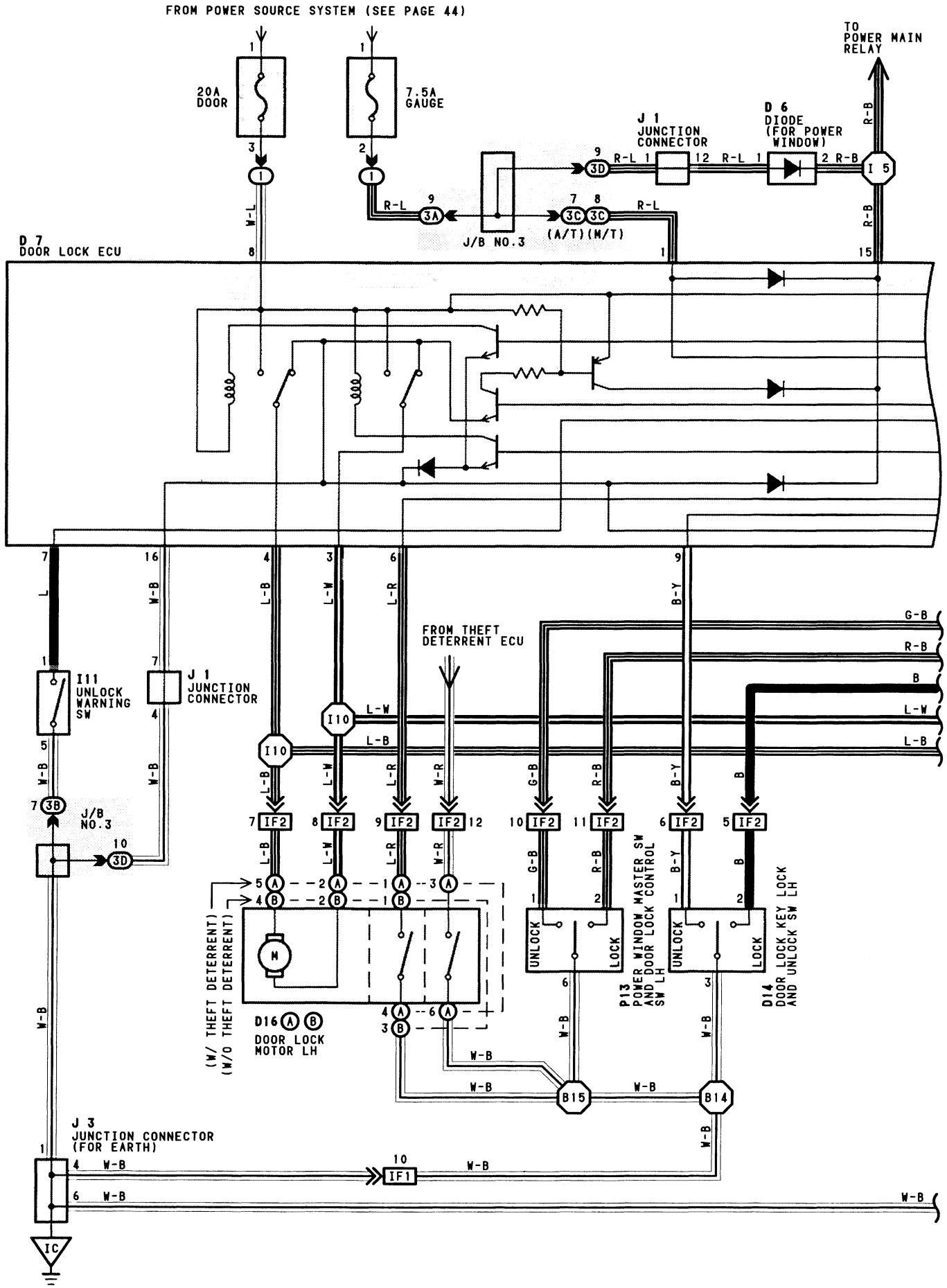
P12

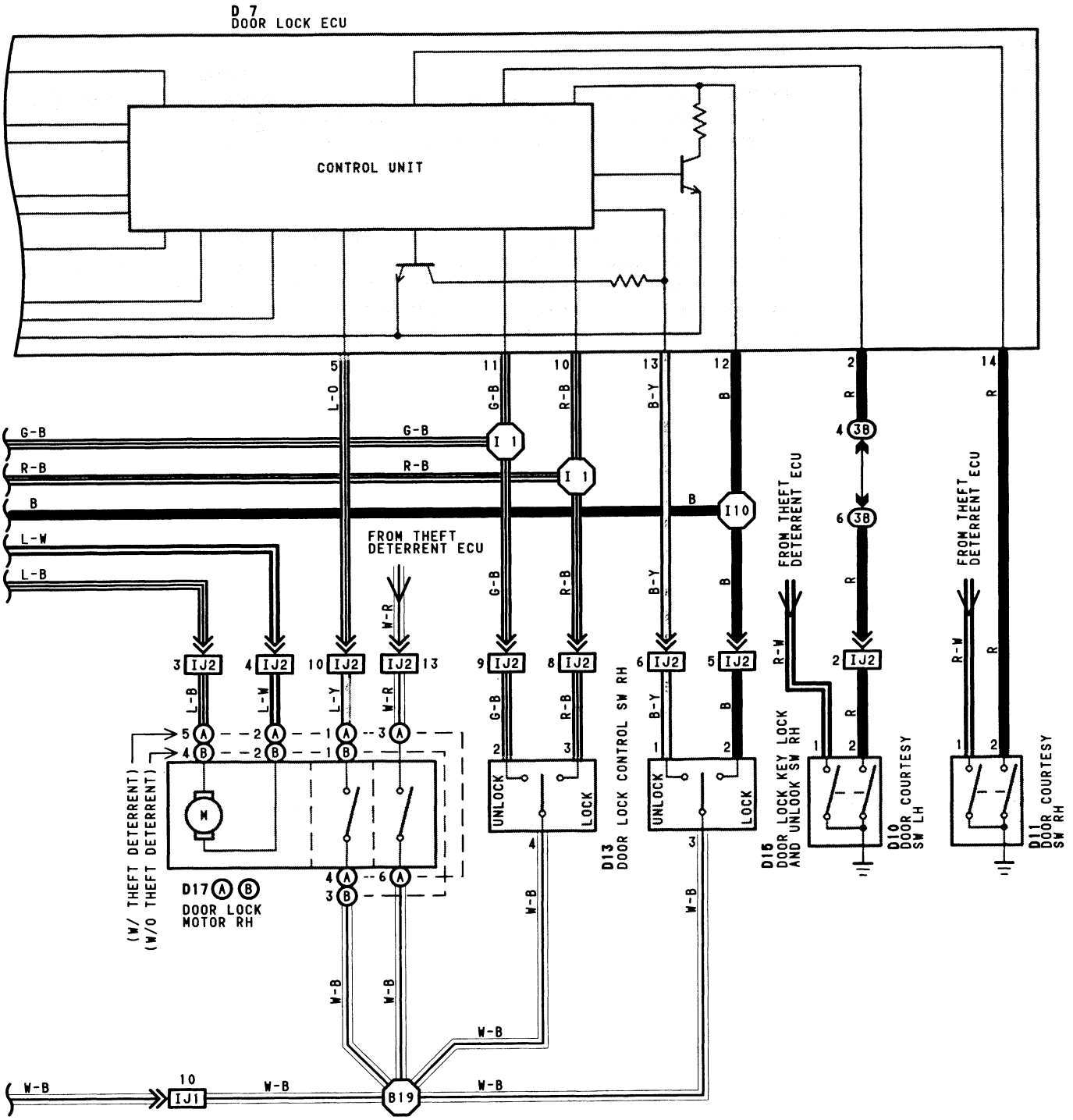
P13



P14, P15




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
20A DOOR
7.5A GAUGE
TO POWER MAIN RELAY
J 1 JUNCTION CONNECTOR
D 6 DIODE (FOR POWER WINDOW)
J/B NO.3
(A/T)(M/T)
D 7 DOOR LOCK ECU
I11 UNLOCK WARNING SW
J 1 JUNCTION CONNECTOR
FROM THEFT DETERRENT ECU
J/B NO.3
(W/ THEFT DETERRENT)
(W/O THEFT DETERRENT)
D16 DOOR LOCK MOTOR LH
P13 POWER WINDOW MASTER SW AND DOOR LOCK CONTROL SW LH
D14 DOOR LOCK KEY LOCK AND UNLOCK SW LH
J 3 JUNCTION CONNECTOR (FOR EARTH)
UNLOCK
LOCK


D 7
DOOR LOCK ECU
CONTROL UNIT
G-B
R-B
B
L-W
L-B
L-O
W-R
B-Y
R-W
R
FROM THEFT DETERRENT ECU
I 1
I10
IJ2
IJ1
B19
UNLOCK
LOCK
M
(W/ THEFT DETERRENT)
(W/O THEFT DETERRENT)
D17 DOOR LOCK MOTOR RH
D13 DOOR LOCK CONTROL SW RH
D15 DOOR LOCK KEY LOCK AND UNLOOK SW RH
D10 DOOR COURTESY SW LH
D11 DOOR COURTESY SW RH
W-B

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 **TERMINAL 10, 12** OF THE DOOR LOCK ECU AND CAUSES THE ECU TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 4** → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **4** (W/O THEFT DETERRNET) OF THE DOOR LOCK MOTORS → **TERMINAL** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **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 CAHNGE DOOR LOCK CONTROL SW AND KEY SW TO **UNLOCK** POSITION, AN UNLOCK SIGNAL IS INPUT TO **TERMINAL 11, 13** OF THE DOOR LOCK ECU AND CAUSES THE ECU TO FUNCTION. CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **2** (W/O THEFT DETERRENT) OF THE DOOR LOCK MOTORS → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **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 **TERMINAL 3** OF THE ECU → **TERMINAL** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **2** (W/O THEFT DETERRENT) OF DOOR LOCK MOTORS → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **4** (W/O THEFT DETERRENT) → **TERMINAL 4** OF ECU → **TERMINAL 16** → **GROUND**, CAUSING THE DOOR LOCK MOTORS 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 OPEND AND LOCKED USING DOOR LOCK KNOB (DOOR LOCK MOTOR), THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED SOON BY THE FUNCTION OF ECU. AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **2** (W/O THEFT DETERRENT) OF THE DOOR LOCK MOTORS → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **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 DOORS ARE 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 ECU FLOWS FROM **TERMINAL 8** OF THE ECU → **TERMINAL 3** → **TERMINAL** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **2** (W/O THEFT DETERRENT) OF THE DOOR LOCK MOTORS → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **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** Ⓐ **2** (W/ THEFT DETERRENT), Ⓑ **2** (W/O THEFT DETERRENT) OF THE DOOR LOCK MOTORS → **TERMINAL** Ⓐ **5** (W/ THEFT DETERRENT), Ⓑ **4** (W/O THEFT DETERRENT) → **TERMINAL 4** OF THE ECU → **TERMINAL 16** → TO **GROUND** AND CAUSES ALL THE DOORS TO UNLOCK.

SERVICE HINTS

D 6 DOOR LOCK ECU

16-GROUND:ALWAYS CONTINUITY
2-GROUND:CONTINUITY WITH DRIVER'S DOOR OPEN
8-GROUND:ALWAYS APPROX. 12VOLTS
3-GROUND:APPROX. 12VOLTS 0.2SECONDS WITH FLOWING OPERATION
•DOOR LOCK CONTROL SW UNLOCKED
•DOOR LOCK CONTROL SW LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN
(IGNITION KEY REMINDER FUNCTION)
•DOOR LOCK KNOB LOCKED WITH IGNITION KEY IN CYLINDER AND DRIVER'S DOOR OPEN
(IGNITION KEY REMINDER FUNCTION)
•UNLOCKING THE DRIVER'S PASSENGER'S DOOR CYLINDER WITH KEY
4-GROUND:APPROX. 12VOLTS 0.2SECONDS WITH FLOWING OPERATION
•DOOR LOCK CONTROL SW 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 KEY CYLINDER
1-GROUND:APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION
9-GROUND:CONTINUITY WITH DRIVER'S DOOR LOCK CYLINDER UNLOCKED WITH KEY
15-GROUND:APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION AND STAYS AT 12VOLTS FOR 60SECONDS AFTER THE IGNITION SW IS TURNED OFF, BUT IF A DOOR IS OPENED IN THIS 60SECONDS PERIOD, VOLTAGE WILL DROP TO 0VOLTS
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	22	D14		23	D17	B	23
D 7	22	D15		23	I11		22
D10	23	D16	A	23	J 1		22
D11	23		B	23	J 3		22
D13	23	D17	A	23	P13		23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	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	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	28	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IJ2	30	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	28	INSTRUMENT PANEL BRACE LH

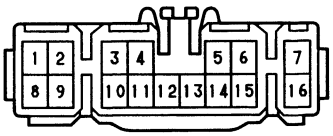
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	30	COWL WIRE	B15	32	FRONT DOOR RH WIRE
I10			B19	32	FRONT DOOR LH WIRE
B14	32	FRONT DOOR RH WIRE			

DOOR LOCK

D 6 BLACK

D 7

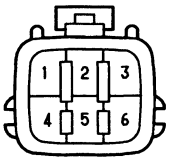


D10, D11

D13

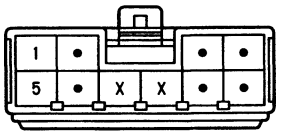
D14, D15 GRAY

D16Ⓐ, D17Ⓐ

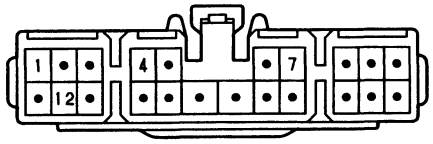


D16Ⓑ, D17Ⓑ

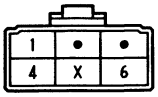
I11 BLACK



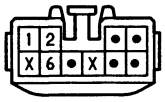
J 1



J 3

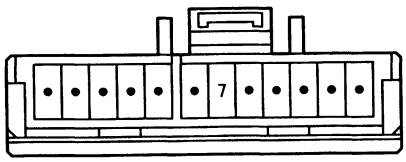


P13

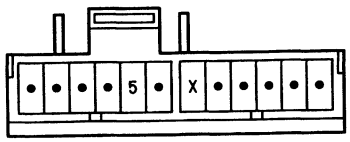


B 4

C10 (B) BLUE

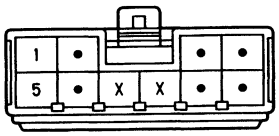


C11 (A)

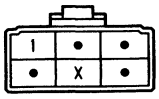


D10

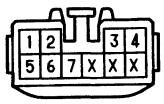
I11 BLACK



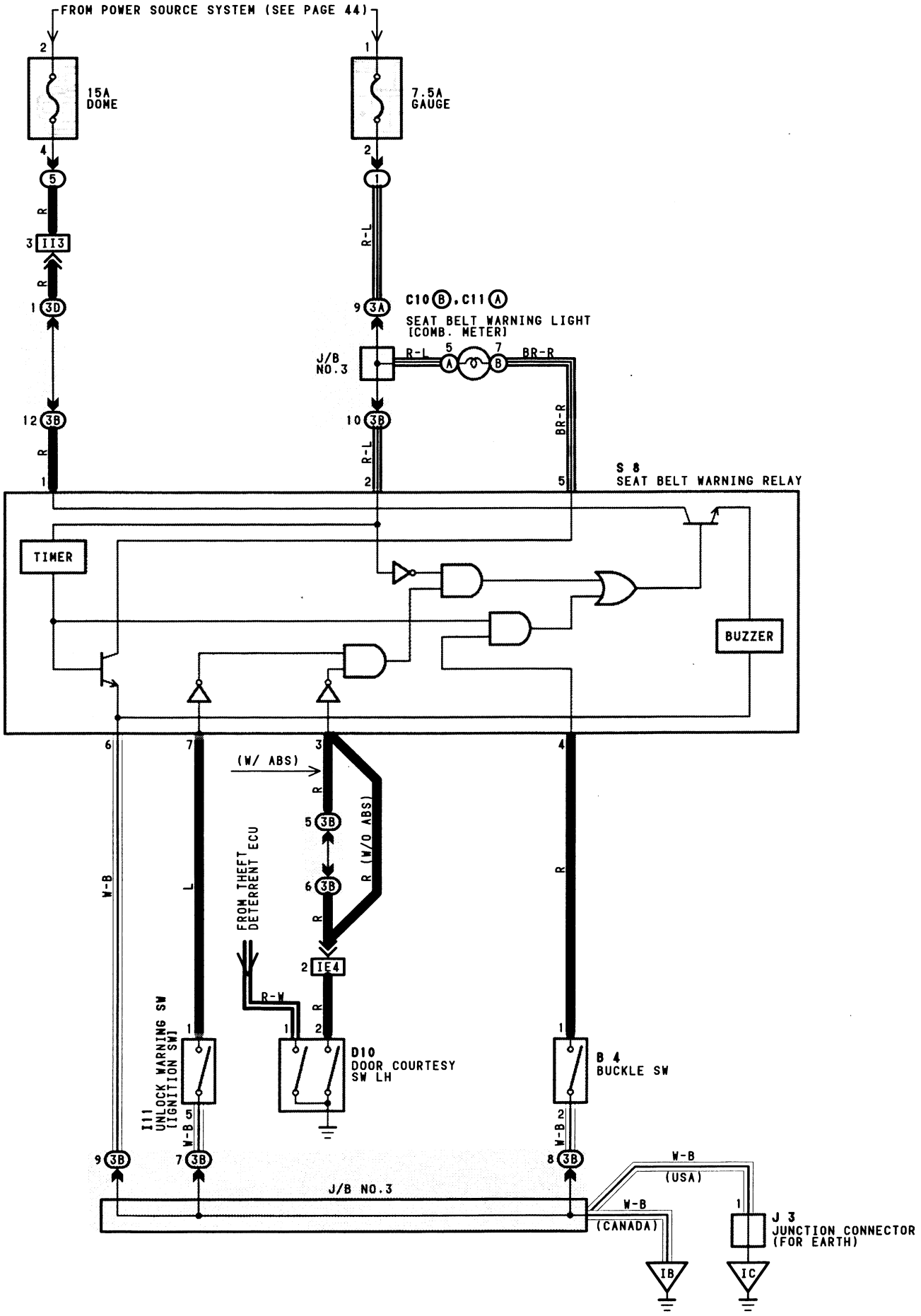
J 3



S 8



UNLOCK AND SEAT BELT WARNING



SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO **TERMINAL 1** OF THE SEAT BELT WARNING RELAY THRUGH 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 WATNING LIGHT. THIS CURRENT ACTIVATES THE SEAT BELT WATNING 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 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 → **TRMINAL 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:0VOLTS FOR **4-8** SECONDS WITH IGNITION SW ON AND APPROX. 12VOLTS **4-8** SECONDS AFTER IGNITION SW ON
1-GROUND:ALWAYS APPROX. 12VOLTS

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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 4		22	D10	23	S 8	22
C10	B	22	I11	22		
C11	A	22	J 3	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	R/B NO.5 (FRONT LUGGAGE COMPARTMENT RIGHT)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

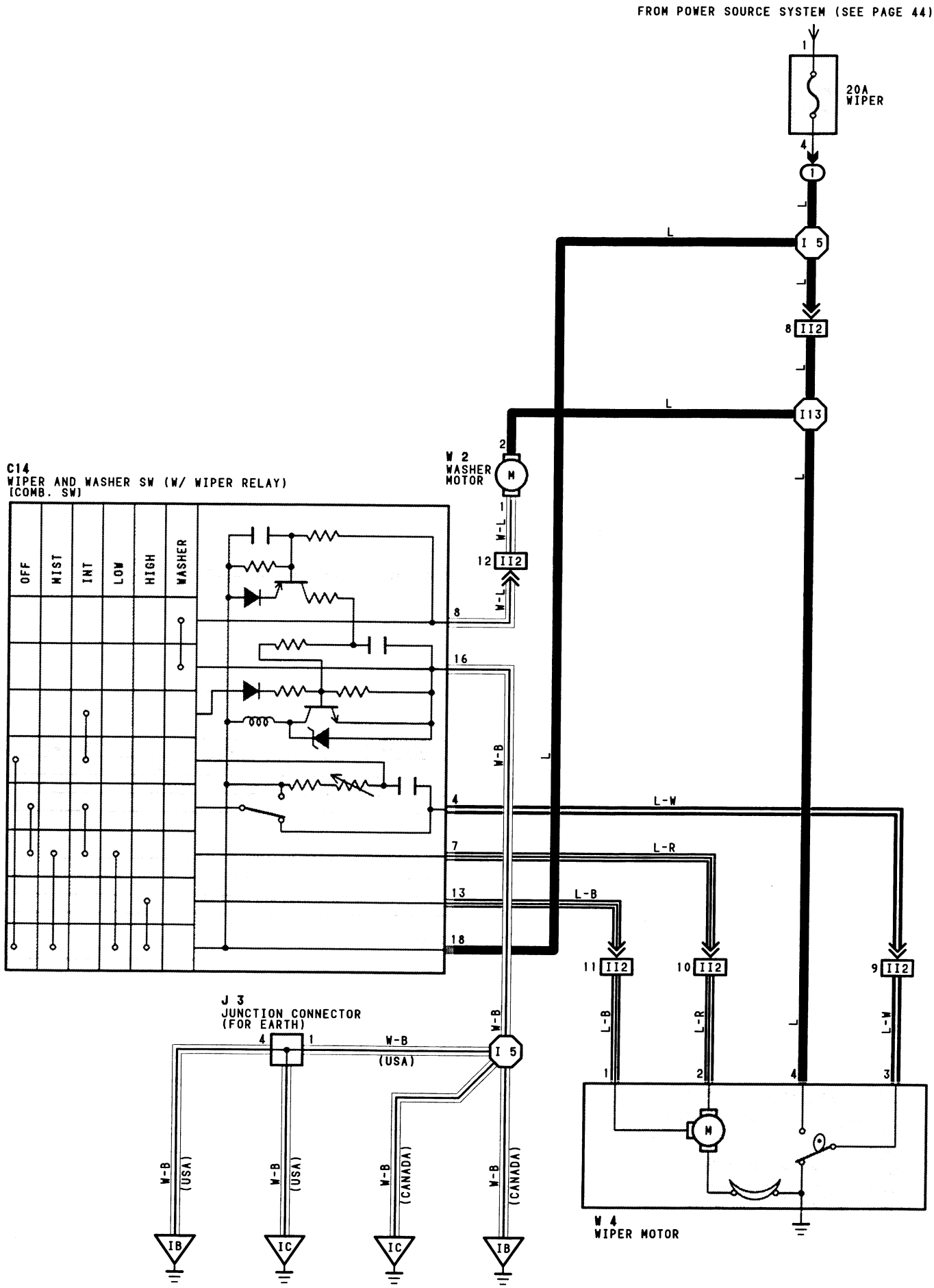
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)
3B		
3D		

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE4	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II3	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
20A WIPER
C14
WIPER AND WASHER SW (W/ WIPER RELAY) (COMB. SW)
OFF
MIST
INT
LOW
HIGH
WASHER
W 2
WASHER MOTOR
J 3
JUNCTION CONNECTOR (FOR EARTH)
W 4
WIPER MOTOR
I 5
II2
I13
IB
IC
W-B
W-L
L
L-W
L-R
L-B
(USA)
(CANADA)

SYSTEM OUTLINE

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

1. LOW SPEED POSITION

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

2. HIGH SPEED POSITION

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

3. INT POSITION (W/ INT SW)

WITH WIPER SW TURNED TO **INT** POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 15** → TO **GROUND**. THIS FLOWS OF CURRENT OPERATES THE INTERMITTENT CIRCUIT AND THE CURRENT FLOWS FROM **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO **GROUND** AND FUNCTIONS.
THE INTERMITTENT OPERATION IS CONTROLLED BY A CONDENSER'S CHARGED AND DISCHARGED FUNCTION INSTALLED IN RELAY AND INTERMITTENT TIME IS CONTROLLED BY A TIME CONTROL SW TO CHARGE THE CHARGING TIME OF THE CONDENSER.

4. MIST POSITION (W/ MIST SW)

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

5. WASHER CONTINUOUS OPERATION (W/ INT CONTROL)

WITH WASHER SW TURNED TO ON, THE CURRENT FLOWS FROM **TERMINAL 2** OF THE WAHSER MOTOR → **TERMINAL 1** → **TERMINAL 8** OF THE WIPER AND WASHER SW → **TERMINAL 15** → TO **GROUND** AND CASES TO THE WASHER MOTOR TO RUN, AND WINDOW WASHER IS JET. THIS CAUSES THE CURRENT TO FLOW WASHER CONTINUOUS OPERATION CIRCUIT(W/INT SW) IN **TERMINAL 18** OF THE WIPER AND WASHER SW → **TERMINAL 7** → **TERMINAL 2** OF THE FRONT WIPER MOTOR → FRONT WIPER MOTOR → TO **GROUND** AND FUNCTION.

SERVICE HINTS

C14 WIPER AND WASHER SW (W/ WIPER RELAY)

16-GROUND:ALWAYS CONTINUITY
18-GROUND:APPROX. 12VOLTS WITH IGNITION SW AT **ON** POSITION
7-GROUND:APPROX. 12VOLTS WITH WIPER AND WASHER SW AT **LOW** POSITION
APPROX. 12VOLTS EVERY APPROX. 1 TO 10SECONDS INTERMITTENTLY WITH WIPER SW AT **INT** POSITION
4-GROUND:APPROX. 12VOLTS WITH IGNITION SW ON UNLESS WIPER MOTOR AT **STOP** POSITION
13-GROUND:APPROX. 12VOLTS WITH WIPER AND WASHER SW AT **HIGH** POSITION

W 4 WIPER MOTOR

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	22	W 2	23		
J 3	22	W 4	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	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	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

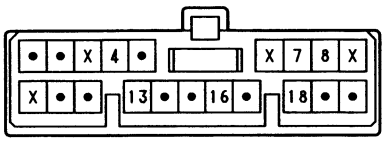
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH

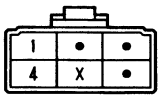
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 5	30	COWL WIRE	I13	30	LUGGAGE ROOM WIRE

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 codes become the most important source of information when troubleshooting.
  When troubleshooting the airbag system, always inspect the diagnostic codes before disconnecting the battery.

- Work must be started after 20 seconds or longer from the time the Ignition SW is set to the "LOCK" position and the negative (−) terminal cable is disconnected from the battery.
  (The airbag system is equipped with a back-up power source so that if work is started within 20 seconds of disconnecting the negative (−) terminal cable of the battery, the airbag may be deployed.)
  When the negative (−) terminal cable is disconnected from the battery, memory of the clock and audio systems will be cancelled. So before starting work, make a record of the contents memorized by each memory system. Then when work is finished, reset the clock and audio system as before.
  To avoid erasing the memory of each memory system, never use a back-up power supply from outside the vehicle.

- When removing the steering wheel pad or handling a new steering wheel pad, keep the pad upper surface facing upward. Also, lock the lock lever of the twin lock type connector at the rear of the pad and take care not to damage the connector.
  (Storing the pad with its metallic surface up may lead to a serious accident if the airbag inflates for some reason.)

- Store the steering wheel pad where the ambient temperature remains below 93°C (200°F), without high humidity and away from electrical noise.

- Never use airbag parts from another vehicle. When replacing airbag parts, replace them with new parts.

- Never disassemble or repair the steering wheel pad, center airbag sensor assembly or front airbag sensors.

- Before repairing the body, remove the airbag sensors if during repair shocks are likely to be applied to the sensors due to vibration of the body or direct tapping with tools or other parts.

- Do not reuse a steering wheel pad or front airbag sensors.
  After evaluating whether the center airbag sensor assembly is damaged or not, decide whether or not to reuse it. (See the Repair Manual for the method for evaluating the center airbag sensor assembly.)

- When troubleshooting the airbag system, use a high-impedance (Min. 10kΩ/V) tester.

- The wire harness of the airbag system is combined with the cowl wiring harness assembly.
  The vehicle wiring harness exclusively for the airbag system is distinguished by corrugated yellow tubing, as are the connectors.

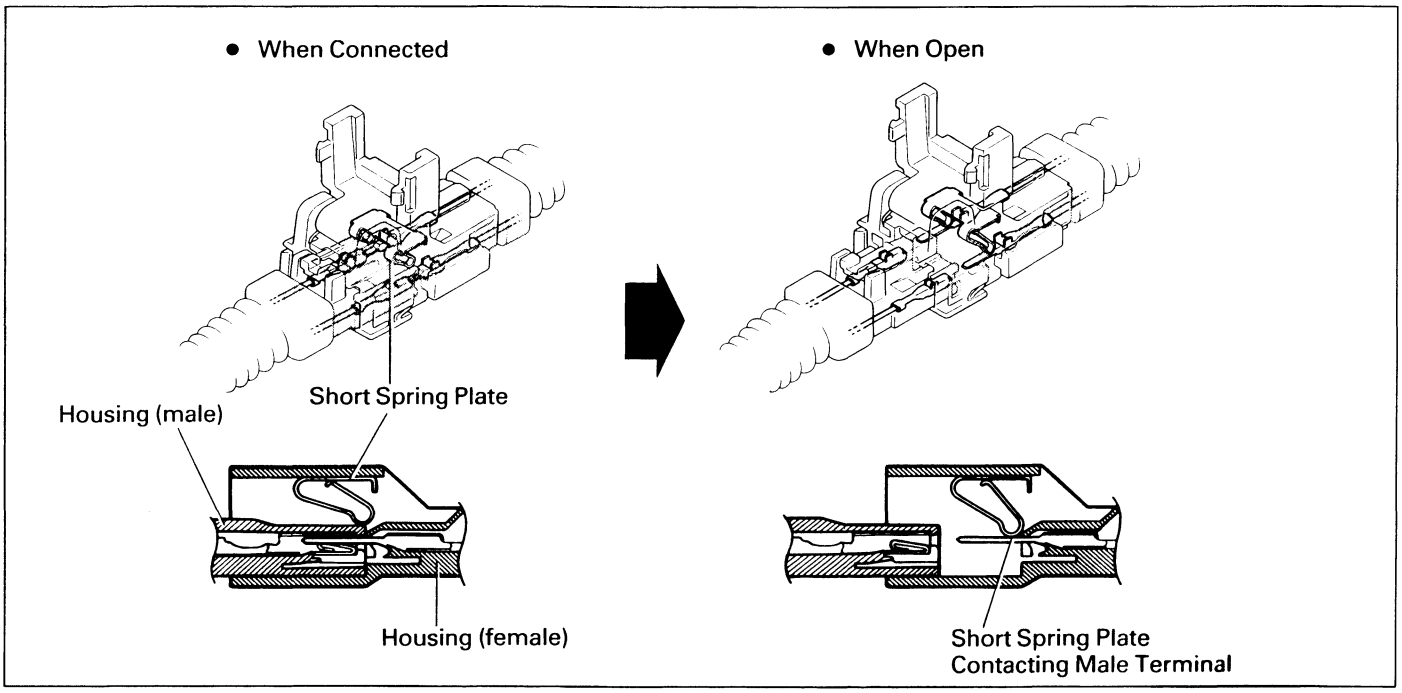
- Do not measure the resistance of the airbag squib.
  (It is possible this will deploy the airbag and is very dangerous.)

- If the wire harness used in the airbag system is damaged, replace the whole wire harness assembly.
  When the connector to the airbag front sensors can be repaired alone (when there is no damage to the wire harness), use the repair wire specially designed for the purpose.
  (Refer to the Repair Manual for the applicable Model year for details of the replacement method.)

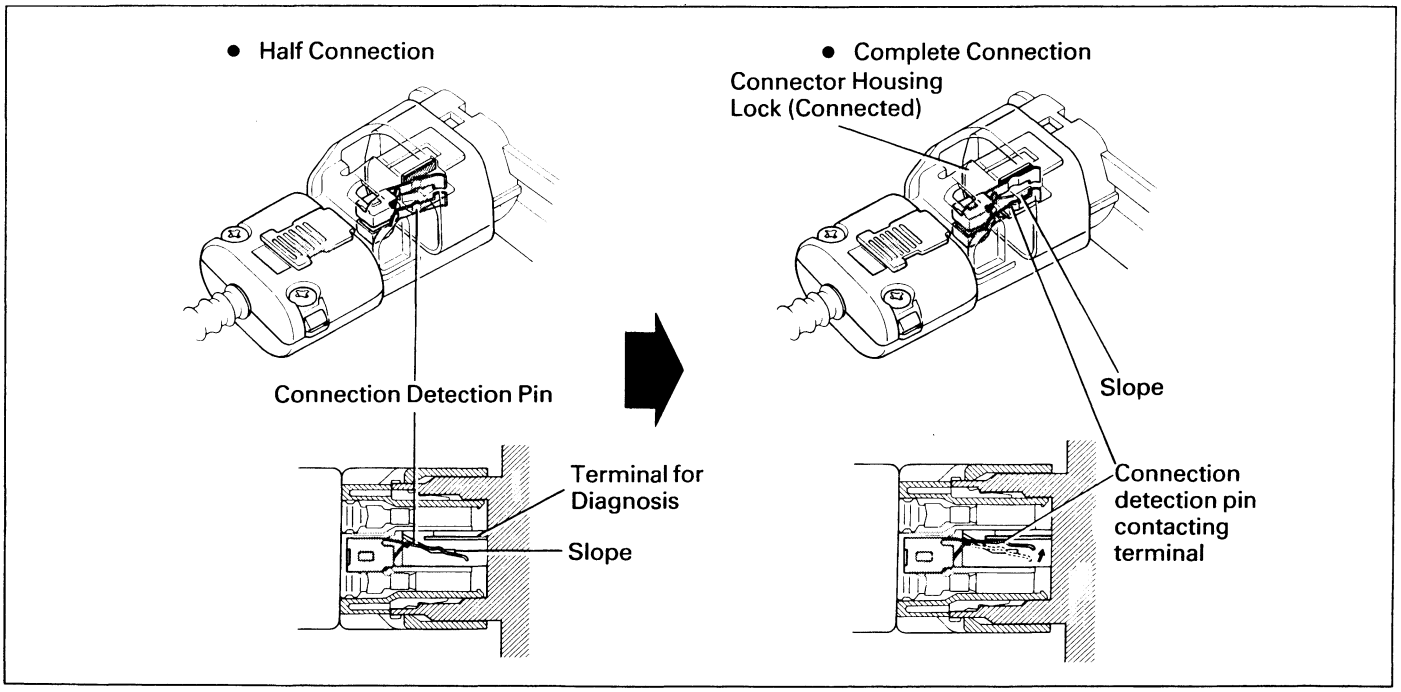
- INFORMATION LABELS (NOTICES) are attached to the periphery of the airbag components. Follow the instructions on the notices.

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

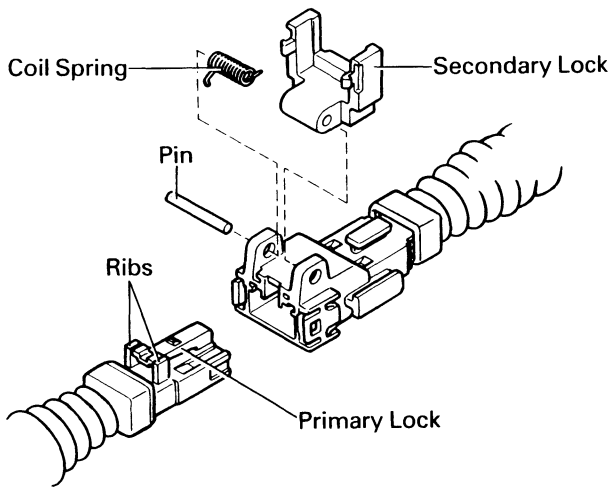
1. AIRBAG ACTIVATION PREVENTION MECHANISM
Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.

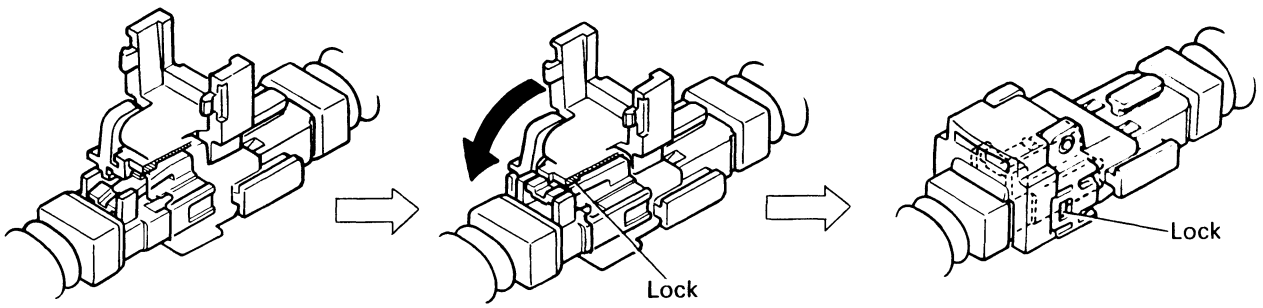


2. ELECTRICAL CONNECTION CHECK MECHANISM
This mechanism is designed to electrically check if connectors are connected correctly and completely.
The electrical connection check mechanism is designed so that the connection detection pin connects with the diagnosis terminals when the connector housing lock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

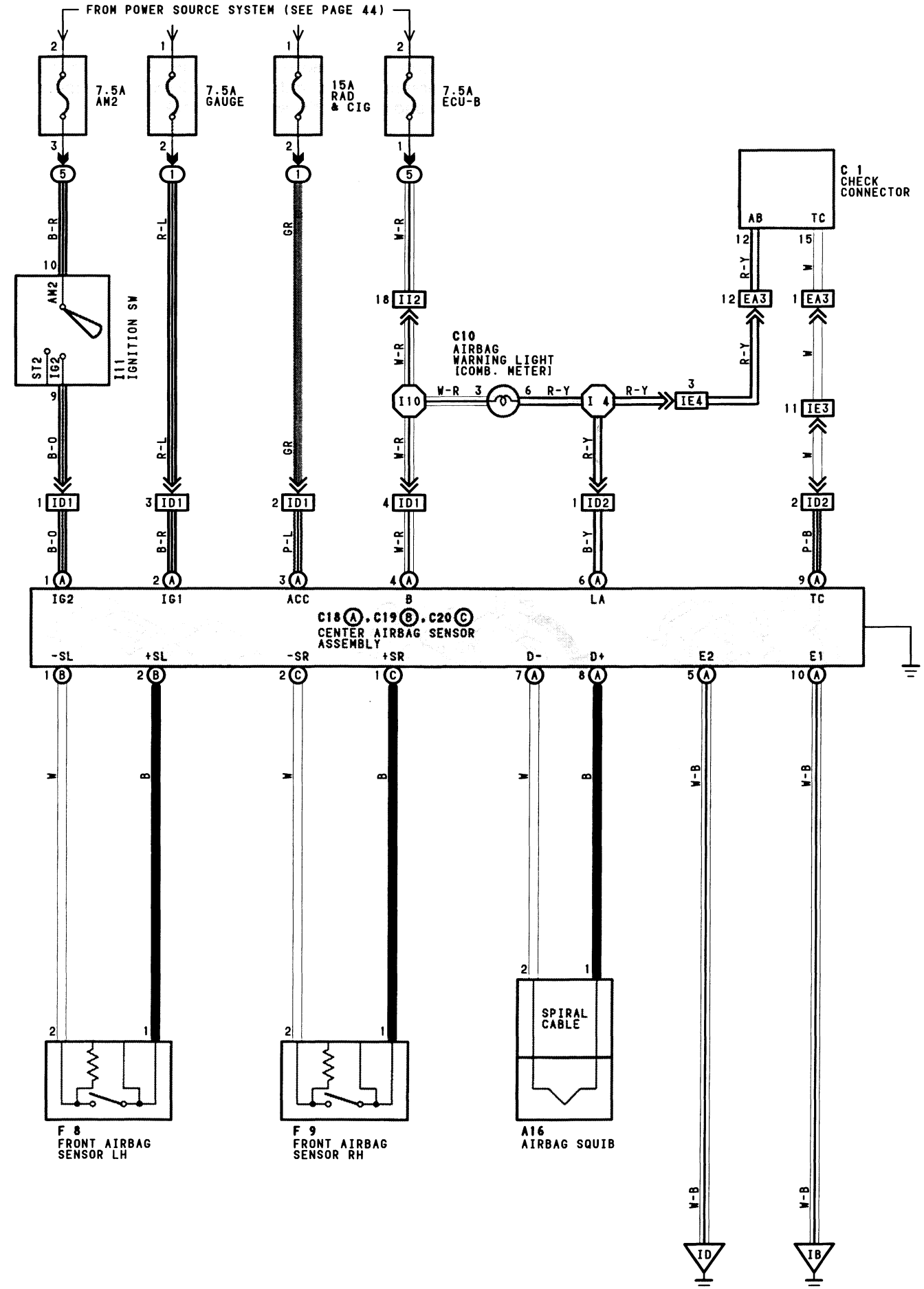


3. CONNECTOR TWIN-LOCK MECHANISM
With this mechanism connectors (male and female connectors) are locked by two locking devices to increase connection reliability. If the primary lock is incomplete, ribs interfere and prevent the secondary lock.





- Primary Lock Incomplete (Secondary Lock Prevented)
- Primary Lock Complete (Secondary Lock Permetted)
- Twin-Lock Completed


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A AM2
7.5A GAUGE
15A RAD & CIG
7.5A ECU-B
I11 IGNITION SW
AM2
ST2
IG2
C10 AIRBAG WARNING LIGHT (COMB. METER)
C 1 CHECK CONNECTOR
AB
TC
C18 A, C19 B, C20 C CENTER AIRBAG SENSOR ASSEMBLY
IG2
IG1
ACC
B
LA
TC
-SL
+SL
-SR
+SR
D-
D+
E2
E1
SPIRAL CABLE
F 8 FRONT AIRBAG SENSOR LH
F 9 FRONT AIRBAG SENSOR RH
A16 AIRBAG SQUIB

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** Ⓐ **4** OF THE CENTER AIRBAG SENSOR ASSEMBLY. WHEN THE IGNITION SW IS TURNED TO ACC OR ON, CURRENT FROM THE RAD & CIG FUSE FLOW TO **TERMINAL** Ⓐ **3** OF THE CENTER AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE GAUGE FUSE FLOW TO **TERMINAL** Ⓐ **1**, AND THE CURRENT FROM THE AM1 FUSE TO **TERMINAL** Ⓐ **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 FLOWS TO **TERMINAL** Ⓐ **8** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINAL** Ⓐ **7** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL** Ⓐ **5**, **TERMINAL** Ⓐ **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 **TERMINAL** Ⓐ **8** OF THE CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL 1** OF THE AIRBAG SQUIB → SQUIB → **TERMINAL 2** → **TERMINAL** Ⓐ **7** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL** Ⓒ **1** OR Ⓑ **2** → **TERMINAL 1** OF FRONT AIRBAG SENSOR → **TERMINAL 2** → **TERMINAL** Ⓒ **2** OR Ⓑ **1** OF CENTER AIRBAG SENSOR ASSEMBLY → **TERMINAL** Ⓐ **5**, **TERMINAL** Ⓐ **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	22	C18	A	22	F 8	23
C 1	20(5S-FE), 21(3S-GTE)	C19	B	22	F 9	23
C10	22	C20	C	22	I11	22

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
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) 26(3S-GTE)	ENGINE ROOM MAIN WIRE AND ENGINE WIRE (R/B NO.2 INNER)
ID1	28	COWL WIRE AND COWL WIRE (NEAR THE R/B NO.1)
ID2	28	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE3 IE4	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

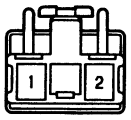
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
ID	28	RIGHT KICK PANEL

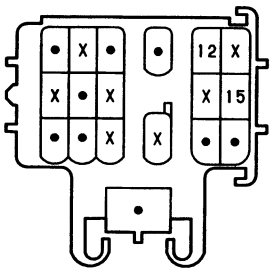
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	30	COWL WIRE	I10	30	COWL WIRE

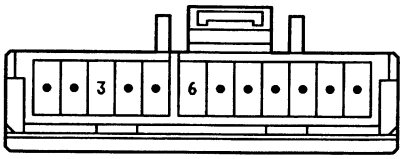
A16 YELLOW



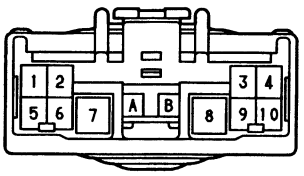
C 1 DARK GRAY



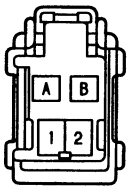
C10 BLUE



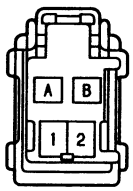
C18 (A) YELLOW



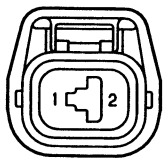
C19 (B) YELLOW



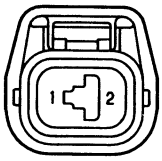
C20 (C) YELLOW



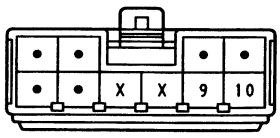
F 8 YELLOW



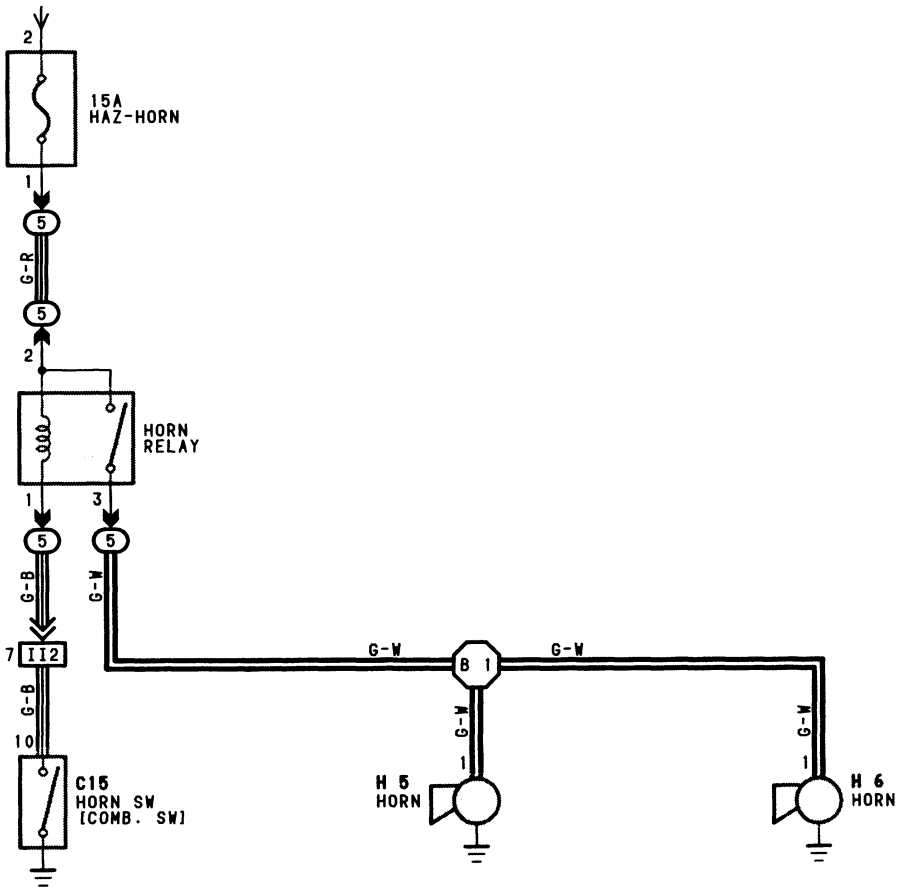
F 9 YELLOW



I11 BLACK



FROM POWER SOURCE SYSTEM (SEE PAGE 44)



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	22	H 5	23	H 6	23

⬭ : RELAY BLOCKS

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

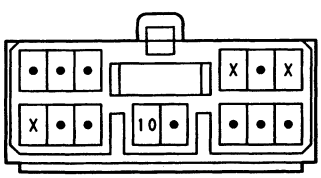
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I12	30	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	32	LUGGAGE ROOM WIRE			

C15 BLACK

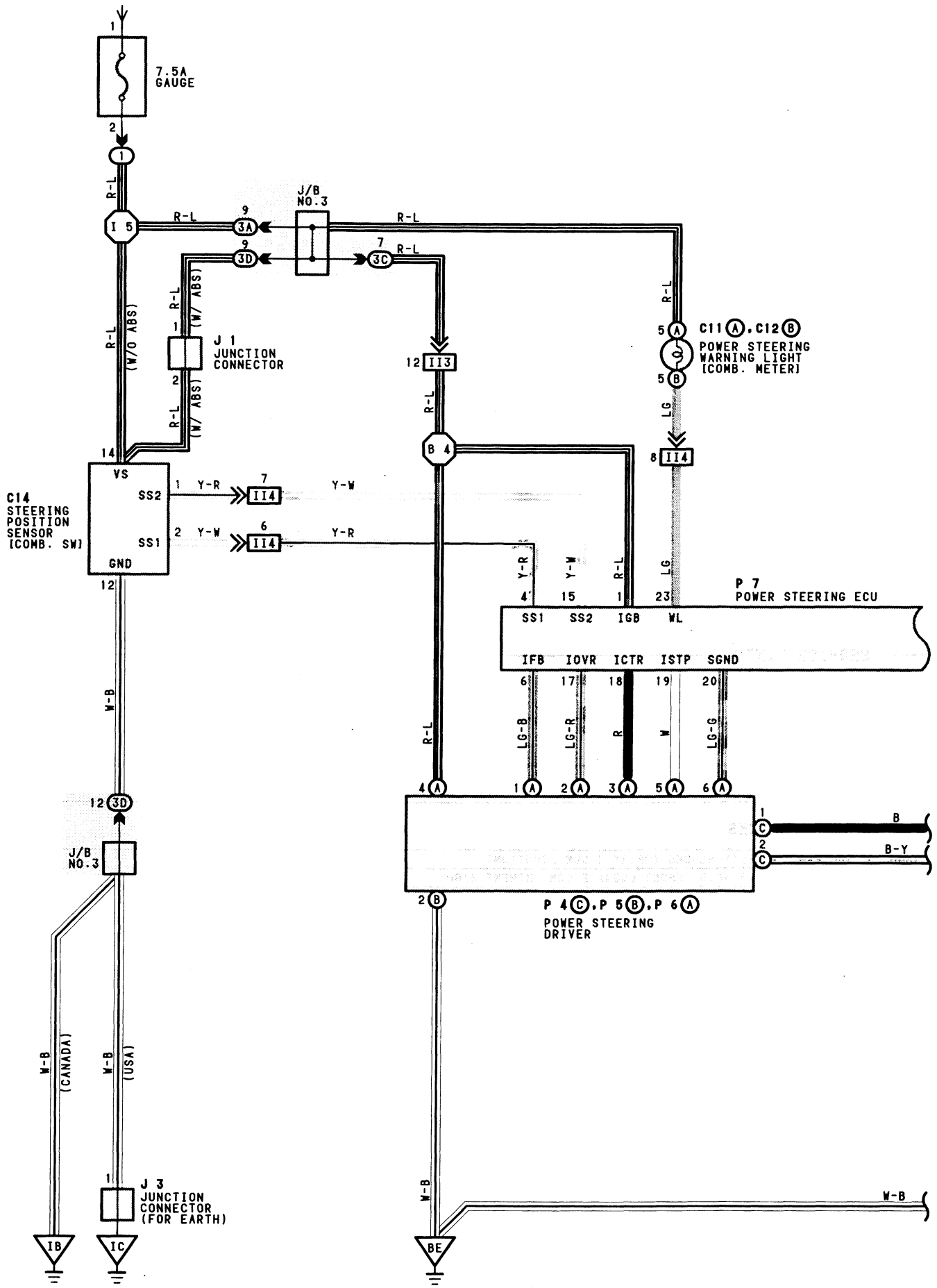


H 5 BLACK

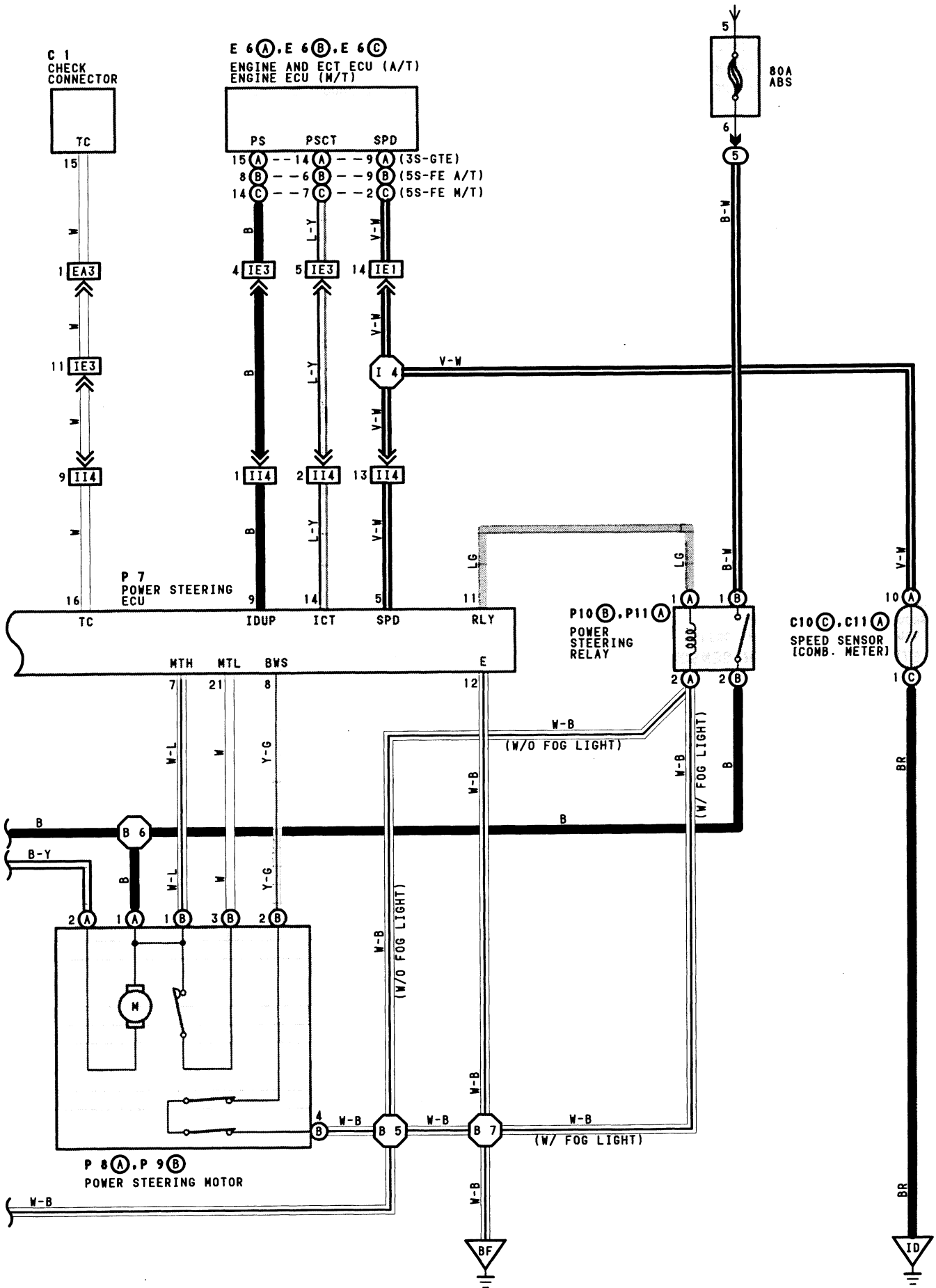
H 6 BLACK

EHPS(ELECTRO HYDRAULIC POWER STEERING)

FROM POWER SOURCE SYSTEM (SEE PAGE 44)



FROM POWER SOURCE SYSTEM (SEE PAGE 44)



EHPS(ELECTRO HYDRAULIC POWER STEERING)

SYSTEM OUTLINE

THE EHPS (ELECTRO-HYDRAULIC POWER STEERING) SYSTEM FUNCTIONS TO CHANGE FORCE REQUIRED FOR STEERING MANEUVERS, AND THEREBY PROVIDE THE IDEAL STEERING FEELING FOR AU 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** Ⓐ **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 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** Ⓑ **1** OF THE POWER STEERING RELAY → **TERMINAL** Ⓑ **2** → **GROUND**, AND THE POWER STEERING RELAY IS SWITCHED ON. AS A RESULT, THE CURRENT APPLIED TO **TERMINAL** Ⓐ **1** OF THE POWER STEERING RELAY FROM THE ABS FUSE FLOWS FROM **TERMINAL** Ⓐ **2** OF THE POWER STEERING RELAY → **TERMINAL** Ⓑ **1** OF THE POWER STEERING DRIVER AND TO **TERMINAL** Ⓐ **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** Ⓐ **1** OF THE POWER STEERING MOTOR TO **TERMINAL** Ⓐ **2** OF THE POWER STEERING MOTOR → **TERMINAL** Ⓑ **2** OF THE POWER STEERING DRIVER → **TERMINAL** Ⓒ **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. 12VOLTS WITH IGNITION SW ON
12-GROUND:ALWAYS CONINUITY
5-GROUND:1PULSE EACH 40CM (DRIVER VEHICLE SLOWLY)

C14 STEERING POSITION SENSOR [COMB. SW]

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

P 1 POWER STEERING DRIVER

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

○ : PARTS LOCATION

CODE		SEE PAGE
C 1		20(5S-FE),21(3S-GTE)
C10	C	22
C11	A	22
C12	B	22
C14		22
E 6	A	21(3S-GTE)

CODE		SEE PAGE
E 6	B	20(5S-FE)
	C	20(5S-FE)
J 3		22
P 4	C	23
P 5	B	23
P 6	A	23

CODE		SEE PAGE
P 7		23
P 8	A	23
P 9	B	23
P10	B	23
P11	A	23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	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	24(5S-FE) 26(3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
IE1 IE3	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II3 II4	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

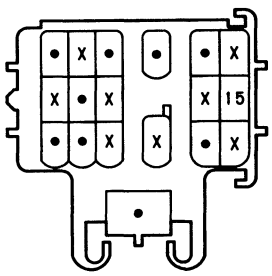
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER

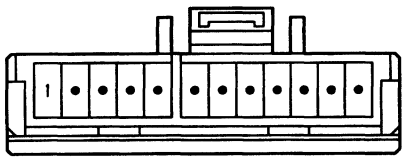
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4 I 5	30	COWL WIRE	B 5 B 6	32	LUGGAGE ROOM WIRE
B 4	32	LUGGAGE ROOM WIRE	B 7		

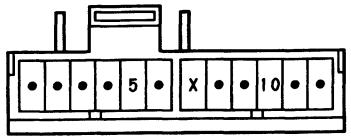
C 1 DARK GRAY



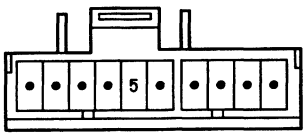
C10 Ⓒ BLUE



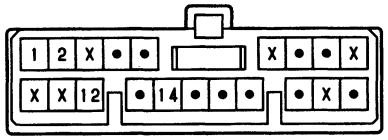
C11 Ⓐ



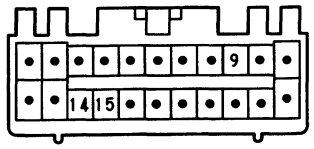
C12 Ⓑ GRAY



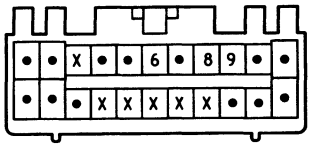
C14 BLACK



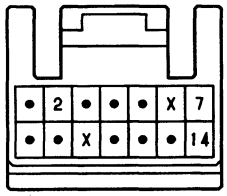
E 6 Ⓐ DARK GRAY



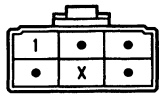
E 6 Ⓑ DARK GRAY



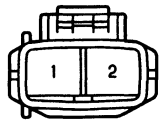
E 6 Ⓒ DARK GRAY



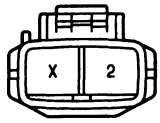
J 3



P 4Ⓒ, P10Ⓑ GRAY

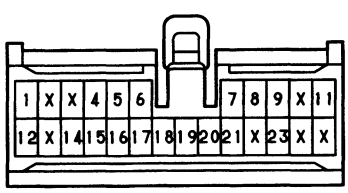


P 5 Ⓑ GRAY



P 6 Ⓐ

P 7

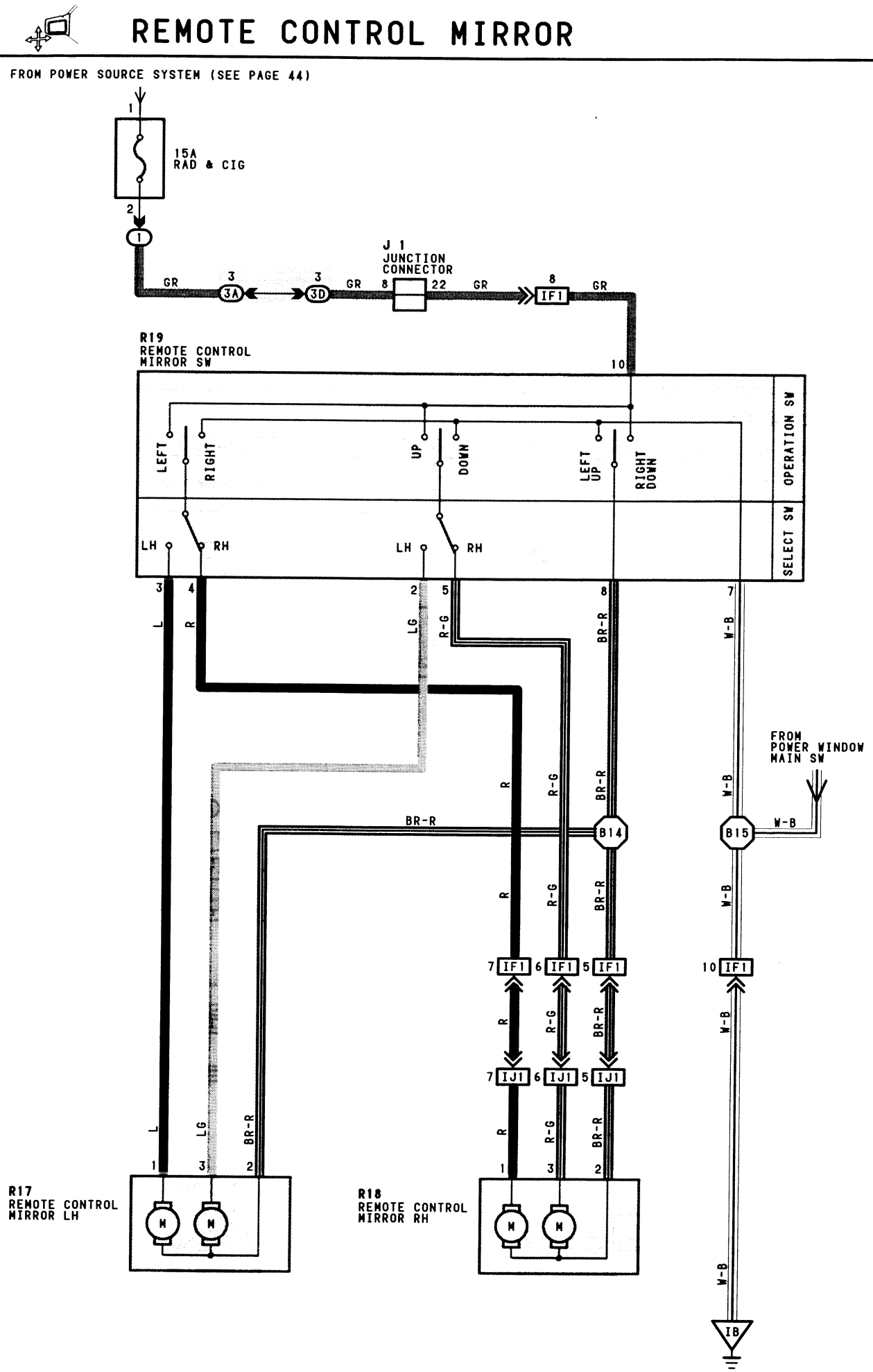


P 8 Ⓐ GRAY

P 9 Ⓑ GRAY

P11 Ⓐ GRAY

REMOTE CONTROL MIRROR



SERVICE HINTS

R19 REMOTE CONTROL MIRROR SW

10-GROUND:APPROX. 12VOLTS 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	22	R18	23		
R17	23	R19	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	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	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

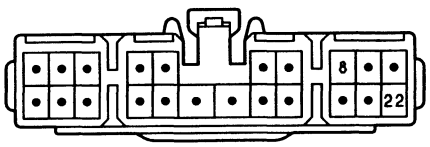
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL

⯃ : SPLICE POINTS

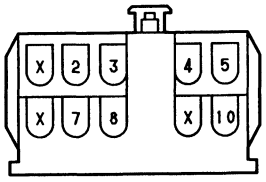
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B14	32	FRONT DOOR RH WIRE	B15	32	FRONT DOOR RH WIRE

J 1



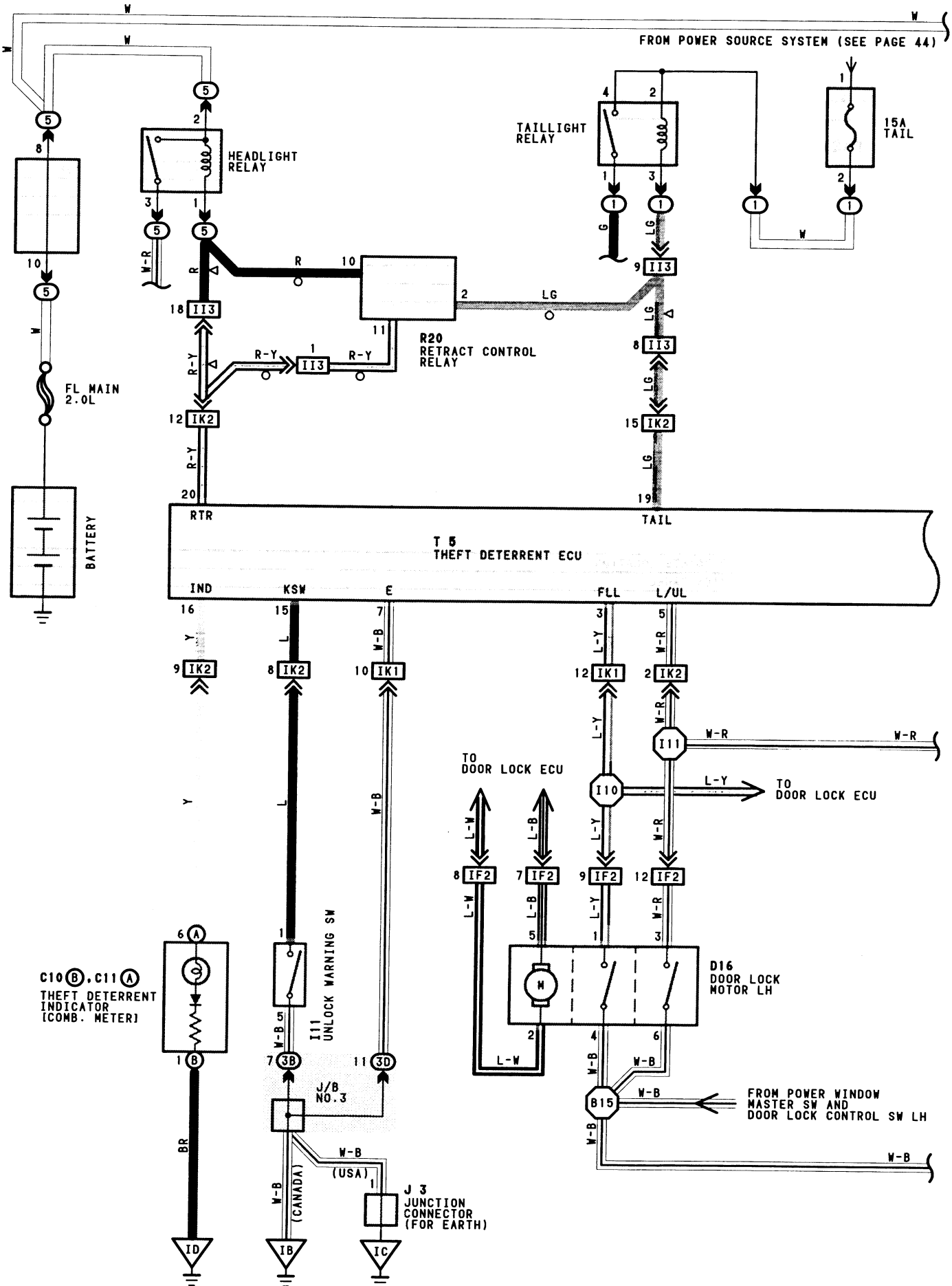
R17, R18

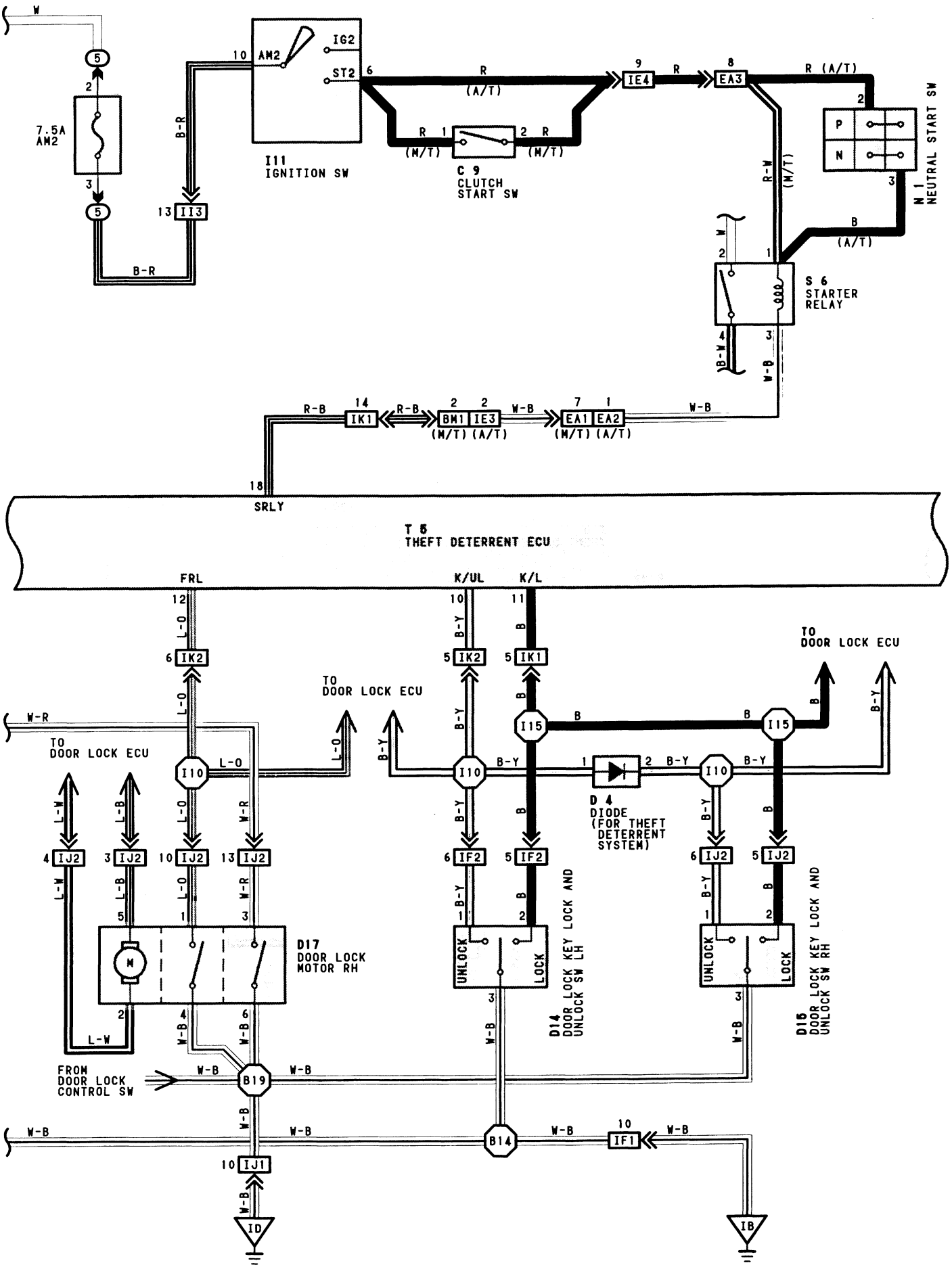
R19

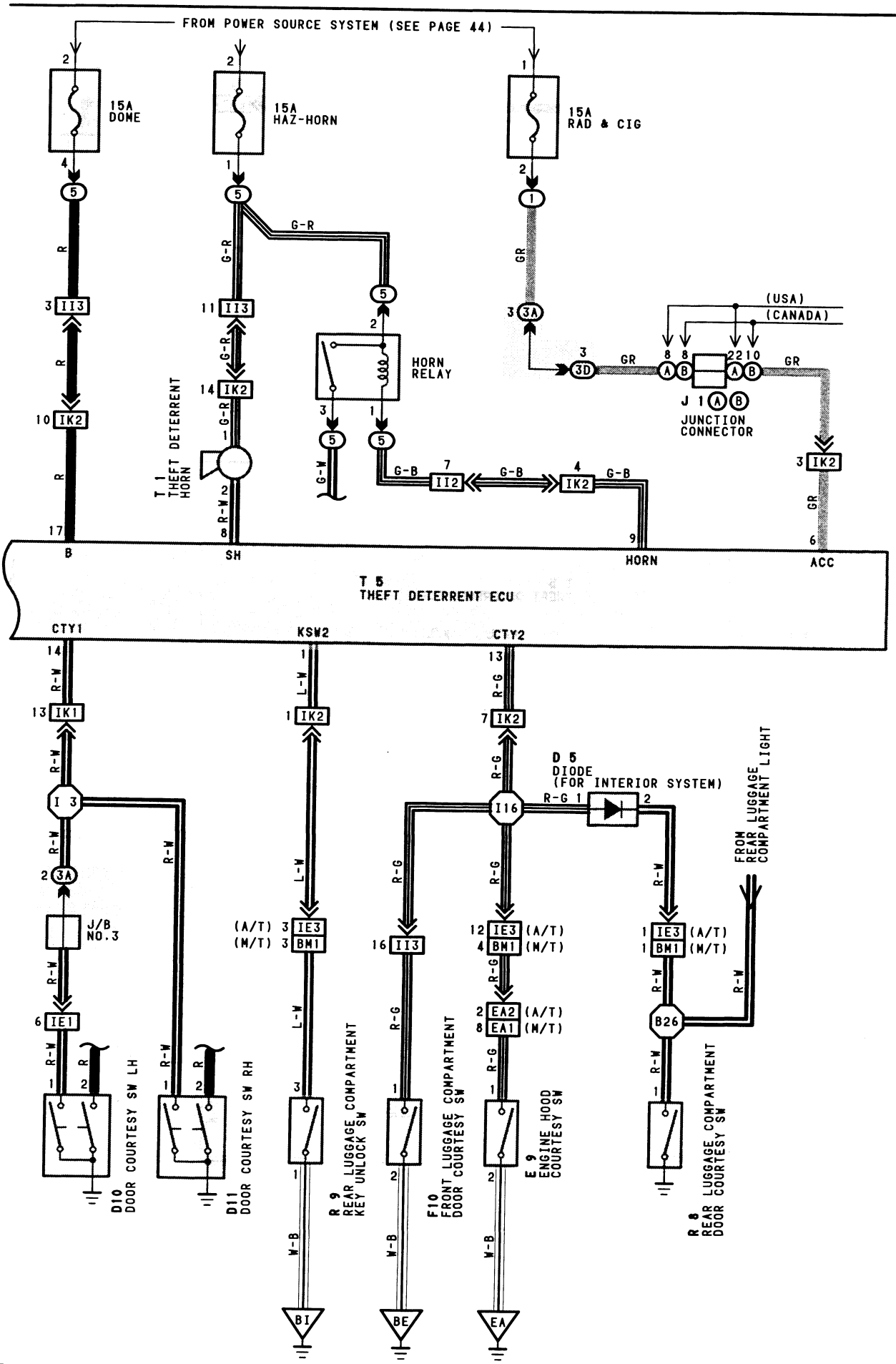


THEFT DETERRENT

○ W/ LIGHT RETAINER CIRCUIT
△ W/O LIGHT RETAINER CIRCUIT




W
5
2
7.5A
AM2
3
5
B-R
B-R
13 II3
10 AM2
IG2
ST2
6
I11
IGNITION SW
R
(A/T)
R
(M/T)
1
2
R
(M/T)
C 9
CLUTCH
START SW
9 IE4
R
8 EA3
R (A/T)
2
P
N
3
N 1
NEUTRAL START SW
R-W
(M/T)
B
(A/T)
W
2
1
S 6
STARTER
RELAY
4
3
B-W
W-B
R-B
14 IK1
R-B
2 2 BM1 IE3
(M/T) (A/T)
W-B
7 1 EA1 EA2
(M/T) (A/T)
W-B
18
SRLY
T 5
THEFT DETERRENT ECU
FRL
12
L-O
6 IK2
L-O
W-R
TO
DOOR LOCK ECU
L-O
L-O
L-W
L-B
L-O
W-R
4 IJ2
3 IJ2
10 IJ2
13 IJ2
L-W
L-B
L-O
W-R
5
1
3
M
2
4
6
W-B
W-B
L-W
D17
DOOR LOCK
MOTOR RH
FROM
DOOR LOCK
CONTROL SW
W-B
B19
W-B
W-B
W-B
W-B
10 IJ1
W-B
ID
K/UL
K/L
10
B-Y
11
B
5 IK2
5 IK1
TO
DOOR LOCK ECU
B-Y
B
I15
B
B
I15
B
TO
DOOR LOCK ECU
B-Y
B-Y
I10
B-Y
1
D 4
DIODE
(FOR THEFT
DETERRENT
SYSTEM)
2
B-Y
I10
B-Y
I10
B-Y
B-Y
B
B-Y
B
6 IF2
5 IF2
6 IJ2
5 IJ2
B-Y
B
B-Y
B
1
2
1
2
UNLOCK
LOCK
UNLOCK
LOCK
3
3
W-B
W-B
D14
DOOR LOCK KEY LOCK AND
UNLOCK SW LH
D15
DOOR LOCK KEY LOCK AND
UNLOCK SW RH
B14
W-B
W-B
10 IF1
W-B
IB


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A DOME
15A HAZ-HORN
15A RAD & CIG
HORN RELAY
(USA)
(CANADA)
J 1 JUNCTION CONNECTOR
T 1 THEFT DETERRENT HORN
T 5 THEFT DETERRENT ECU
B
SH
HORN
ACC
CTY1
KSW2
CTY2
D 5 DIODE (FOR INTERIOR SYSTEM)
FROM REAR LUGGAGE COMPARTMENT LIGHT
J/B NO.3
D10 DOOR COURTESY SW LH
D11 DOOR COURTESY SW RH
R 9 REAR LUGGAGE COMPARTMENT KEY UNLOCK SW
F10 FRONT LUGGAGE COMPARTMENT DOOR COURTESY SW
E 9 ENGINE HOOD COURTESY SW
R 8 REAR LUGGAGE COMPARTMENT DOOR COURTESY SW
BI
BE
EA

SERVICE HINTS

T 5 THEFT DETERRENT ECU

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

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	22	D15	23	J 3	22
C10 B	22	D16	23	N 1	20
C11 A	22	D17	23	R 8	23
D 4	22	E 9	20(5S-FE), 21(3S-GTE)	R 9	23
D 5	22	F10	23	R20	23
D10	23	I11	22	S 6	20(5S-FE), 21(3S-GTE)
D11	23	J 1 A	22	T 1	20(5S-FE), 21(3S-GTE)
D14	23	J 1 B	22	T 5	23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	26(3S-GTE)	
EA2	24(5S-FE)	
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
	26(3S-GTE)	
IE3	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IF2	28	FRONT DOOR LH WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IJ2	30	FRONT DOOR RH WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK1	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK2		
BM1	32	ENGINE ROOM MAIN WIRE AND COWL WIRE (ROOM PARTITION BOARD LEFT)

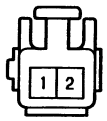
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
	26(3S-GTE)	
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BE	32	FRONT RIGHT FENDER
BI	32	BACK PANEL CENTER

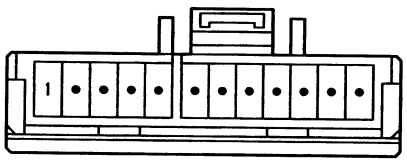
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	30	COWL WIRE	B14	32	FRONT DOOR RH WIRE
I10			B15		
I11			B19	32	FRONT DOOR LH WIRE
I15			B26	32	ENGINE ROOM MAIN WIRE
I16					

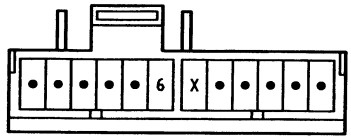
C 9



C10 Ⓑ BLUE



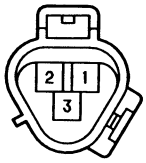
C11 Ⓐ



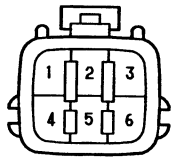
D 4, D 5 BLACK

D10, D11

D14, D15 GRAY

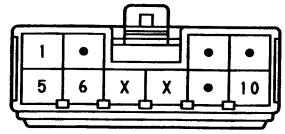


D16, D17

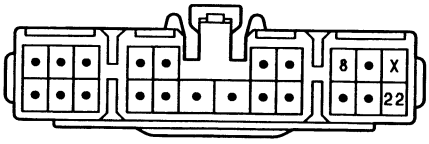


E 9, F10 BLACK

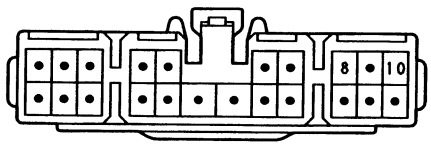
I11 BLACK



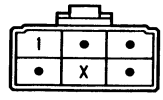
J 1 Ⓐ



J 1 Ⓑ



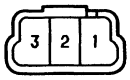
J 3



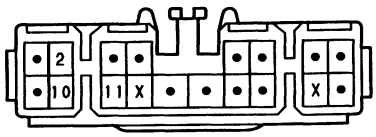
N 1 GRAY

R 8 GRAY

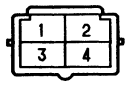
R 9



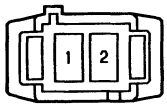
R20



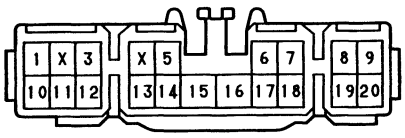
S 6



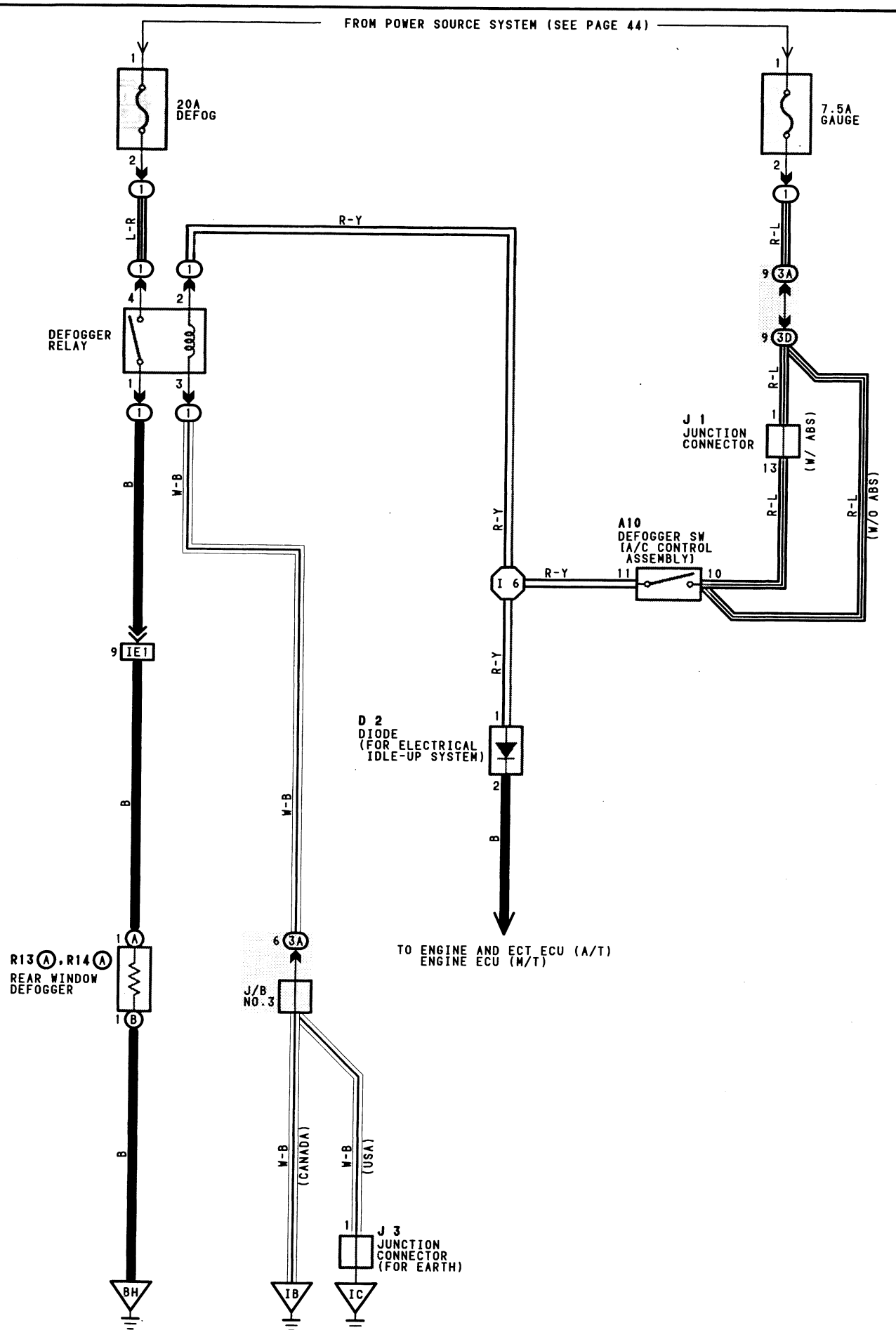
T 1 BLACK



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. 12VOLTS 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	22	J 1	22	R13	A	23
D 2	22	J 3	22	R14	B	23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A 3D	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

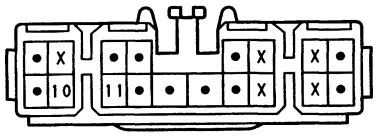
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BH	32	UNDER THE RIGHT REAR PILLAR

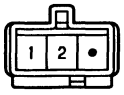
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 6	30	COWL WIRE			

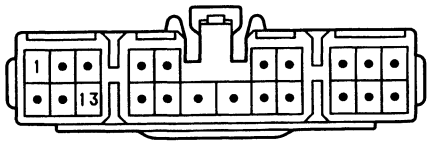
A10



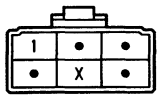
D 2



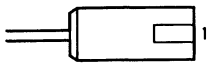
J 1



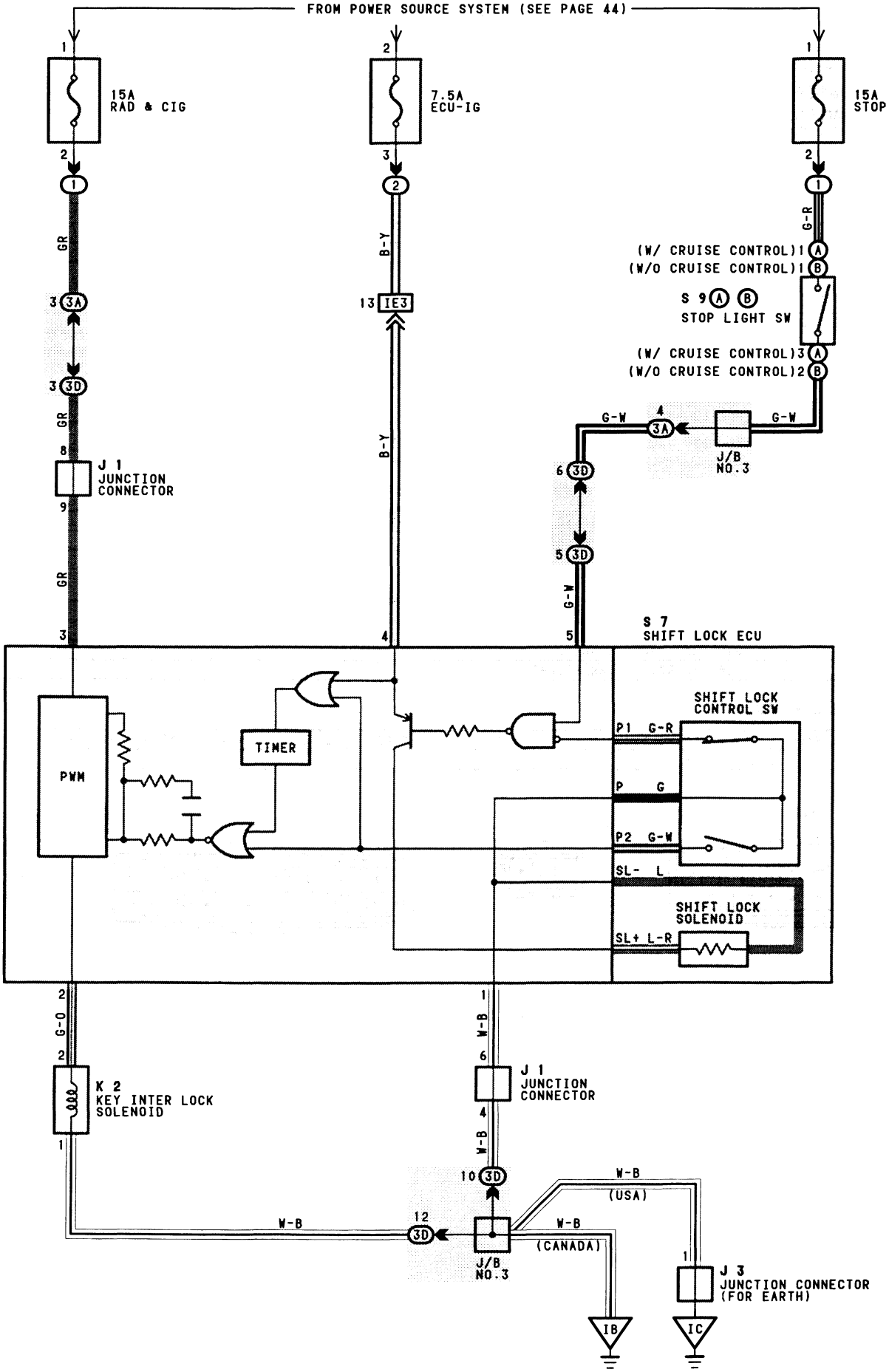
J 3



R13, R14



SHIFT LOCK


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A RAD & CIG
7.5A ECU-IG
15A STOP
(W/ CRUISE CONTROL)
(W/O CRUISE CONTROL)
S 9
STOP LIGHT SW
J 1 JUNCTION CONNECTOR
J/B NO.3
S 7 SHIFT LOCK ECU
PWM
TIMER
SHIFT LOCK CONTROL SW
SHIFT LOCK SOLENOID
K 2 KEY INTER LOCK SOLENOID
J 1 JUNCTION CONNECTOR
J 3 JUNCTION CONNECTOR (FOR EARTH)
(USA)
(CANADA)
IB
IC

SYSTEM OUTLINE

WHEN THE IGNITION SW IS TURNED TO **ACC** POSITION THE CURRENT FROM THE RAD & 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 INTER LOCK 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 INTER LOCK SOLENOID IS CUT OFF. THIS CAUSES THE KEY INTER LOCK SOLENOID TO TURN OFF (LOCK LEVER DISENGAGES FROM LOCK POSITION) AND THE IGNITION KEY CAN BE TURNED FROM **ACC** TO **LOCK** POSITION. 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 REREASE THE LOCK.

SERVICE HINTS

S 7 SHIFT LOCK ECU

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE		SEE PAGE
J 1	22	K 2	22	S 9	A	22
J 3	22	S 7	22		B	22

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A 3D	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)

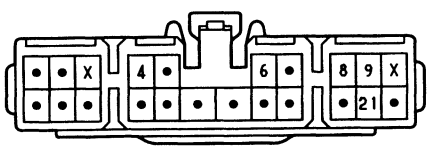
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE3	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)

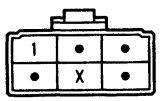
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IC	28	INSTRUMENT PANEL BRACE LH

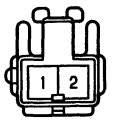
J 1



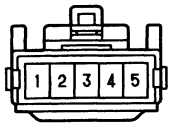
J 3



K 2 BLUE

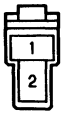


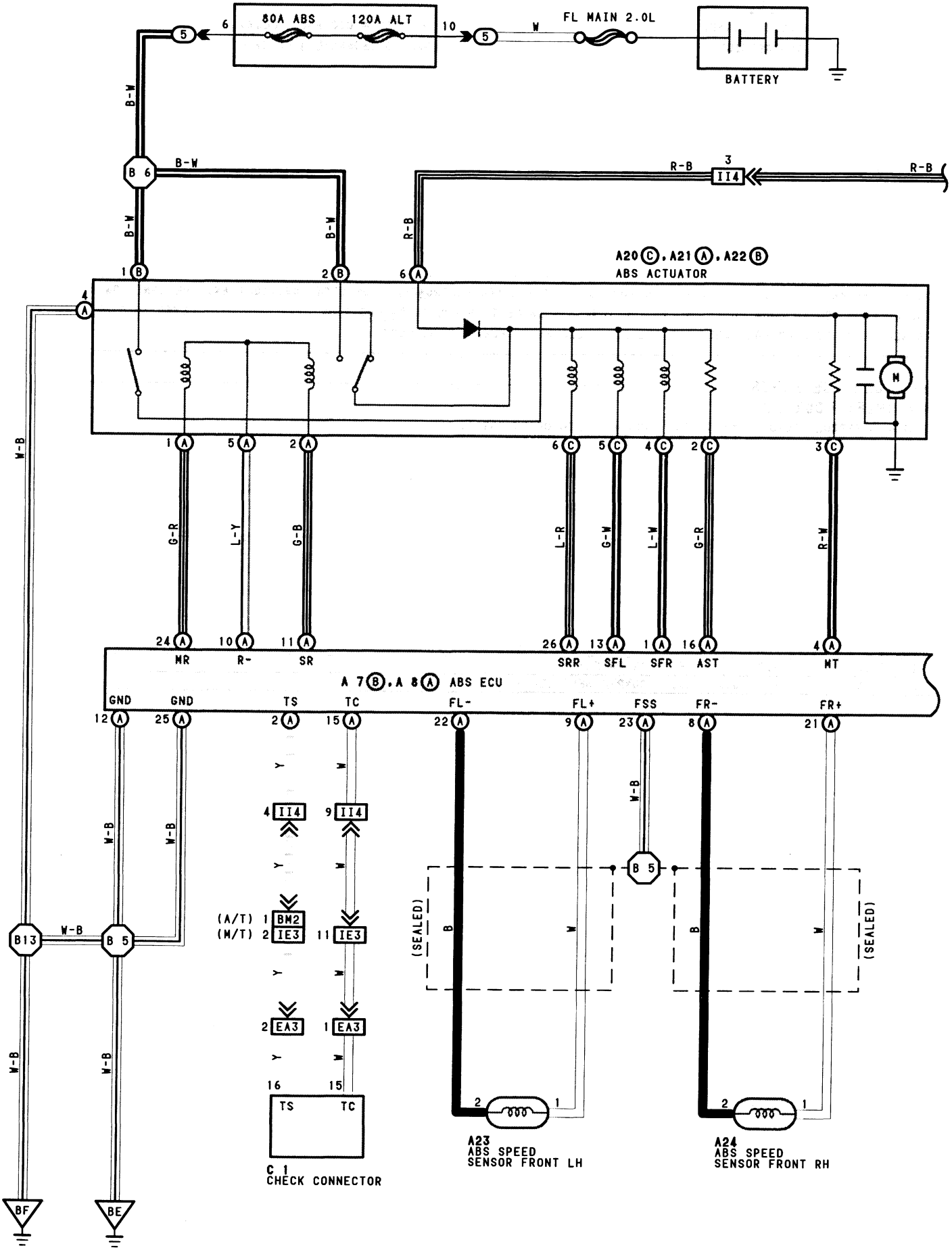
S 7

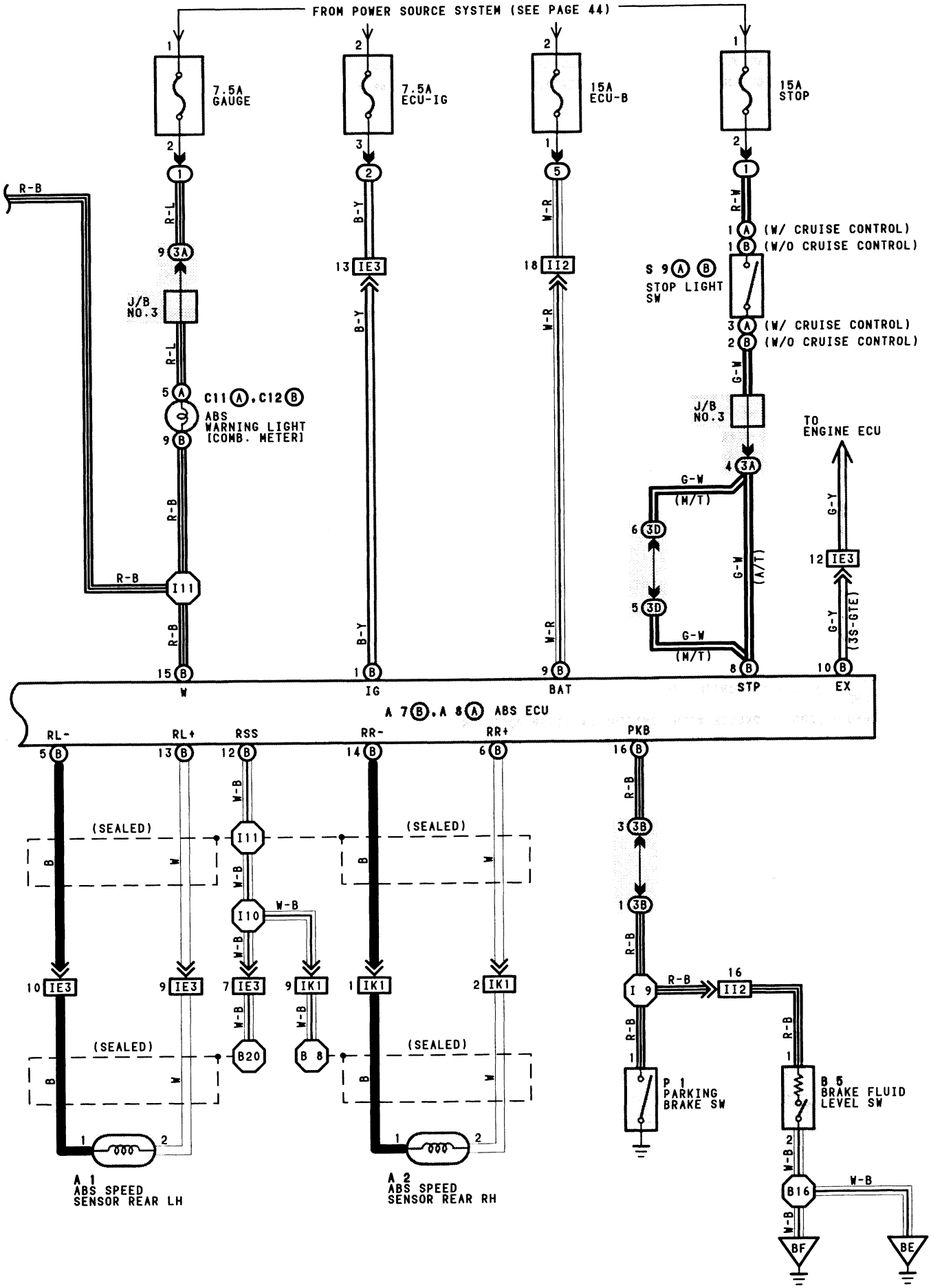


S 9 Ⓐ

S 9 Ⓑ BLACK




80A ABS
120A ALT
FL MAIN 2.0L
BATTERY
A20 C , A21 A , A22 B
ABS ACTUATOR
A 7 B , A 8 A ABS ECU
MR
R-
SR
SRR
SFL
SFR
AST
MT
GND
GND
TS
TC
FL-
FL+
FSS
FR-
FR+
(A/T) 1 BM2
(M/T) 2 IE3
IE3
EA3
EA3
TS
TC
C 1
CHECK CONNECTOR
(SEALED)
(SEALED)
A23
ABS SPEED
SENSOR FRONT LH
A24
ABS SPEED
SENSOR FRONT RH
B13
B 5
B 6
II4
II4
BF
BE


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A GAUGE
7.5A ECU-IG
15A ECU-B
15A STOP
R-B
R-L
B-Y
W-R
R-W
(W/ CRUISE CONTROL)
(W/O CRUISE CONTROL)
S 9 A B
STOP LIGHT SW
J/B NO.3
C11 A, C12 B
ABS WARNING LIGHT [COMB. METER]
G-W
(M/T)
(A/T)
TO ENGINE ECU
G-Y
(3S-GTE)
W
IG
BAT
STP
EX
A 7 B, A 8 A ABS ECU
RL-
RL+
RSS
RR-
RR+
PKB
(SEALED)
W-B
B
W
P 1 PARKING BRAKE SW
B 5 BRAKE FLUID LEVEL SW
A 1 ABS SPEED SENSOR REAR LH
A 2 ABS SPEED SENSOR REAR RH

SYSTEM OUTLINE

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

1. INPUT SIGNALS

(1) SPEED SENSOR SIGNAL

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

(2) STOP LIGHT SW SIGNAL

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

(3) PARKING BRAKE SW SIGNAL

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

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 COMPUTER, BY THE SAME METHOD AS ABOVE, BY REPEATED PRESSURE REDUCTION, HOLDING AND INCREASE ARE REPLATED TO MAINTAIN VEHICLE STABILITY AND TO IMPROVE STEERABILITY DURING SUDDEN BRAKING.

SERVICE HINTS

A 7(A), A 8(B) ABS ECU

(CONNECT THE ECU CONNECTOR)

(A) 2 - GROUND :
(A) 15 - GROUND : } APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION AND CHECK CONNECTOR TS-E1 NOT CONNECTED

(A) 11 - GROUND, (A) 13 - GROUND :
(A) 14 - GROUND, (A) 16 - GROUND :
(A) 26 - GROUND, (B) 15 - GROUND : } APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION ABS WARNING LIGHT GOES OFF

(A) 12 - GROUND :
(A) 25 - GROUND : } ALWAYS CONTINUITY

(B) 1 - GROUND :APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION
(B) 8 - GROUND :APPROX. 12VOLTS WITH BRAKE PEDAL DEPRESSED
(B) 9 - GROUND :ALWAYS APPROX. 12VOLTS
(B) 16 - GROUND :APPROX. 12VOLTS WITH ENGINE RUNNING AND PARKING BRAKE LEVER RETURNED

(DISCONNECT THE ECU CONNECTOR)

(A) 1 - (A) 16 :
(A) 13 - (A) 16 :
(A) 14 - (A) 16 :
(A) 16 - (A) 26 : } APPROX. 6Ω

(A) 8 - (A) 21 :
(A) 9 - (A) 22 : } APPROX. 0.8 - 1.3Ω

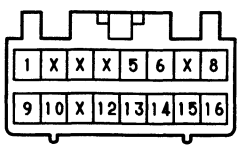
(A) 10 - (A) 11 :APPROX. 60 - 100Ω
(A) 10 - (A) 24 :APPROX. 50 - 80Ω

(B) 5 - (B) 13 :
(B) 6 - (B) 14 : } APPROX. 1.1 - 1.5KΩ

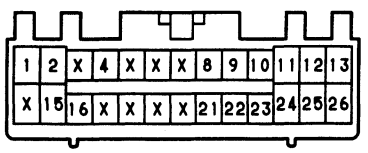
A 1 GRAY

A 2 GRAY

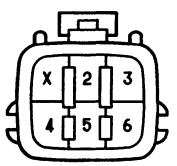
A 7 (B) DARK GRAY



A 8 (A) DARK GRAY



A20 (C) GRAY



○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 1		20(5S-FE), 21(3S-GTE)	A22	B	23	C12	B	22
A 2		20(5S-FE), 21(3S-GTE)	A23		23	P 1		22
A 7	B	22	A24		23	S 9	A	22
A 8	A	22	B 5		23		B	22
A20	C	23	C 1		20(5S-FE), 21(3S-GTE)			
A21	A	23	C11	A	22			

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2		R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	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	19	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	24(5S-FE) 26(3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
IE3	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II4	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IK1	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM2	32	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

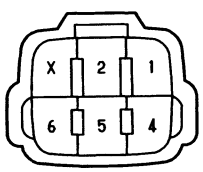
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER

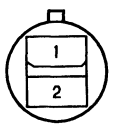
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	30	COWL WIRE	B 8	32	FLOOR WIRE
I10			B13	32	LUGGAGE ROOM WIRE
I11			B16		
B 5	32	LUGGAGE ROOM WIRE	B20	32	ENGINE ROOM MAIN WIRE
B 6					

A21 Ⓐ GRAY

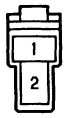


A22 Ⓑ GRAY

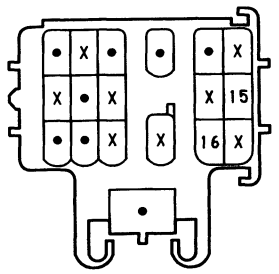


A23, A24 GRAY

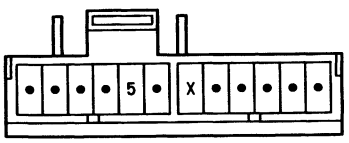
B 5 BLACK



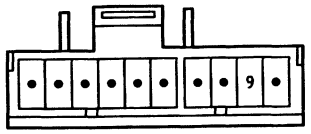
C 1 DARK GRAY



C11 Ⓐ



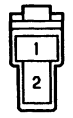
C12 Ⓑ GRAY



P 1

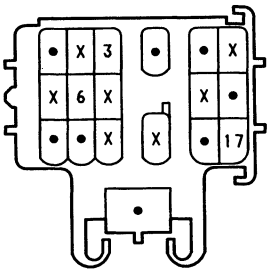
S 9 Ⓐ BLACK

S 9 Ⓑ

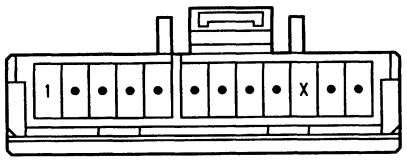


MEMO

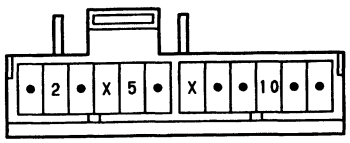
C 1 DARK GRAY



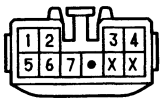
C10 (B) BLUE



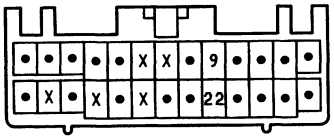
C11 (A)



C13



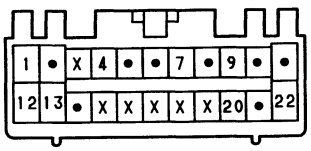
C17



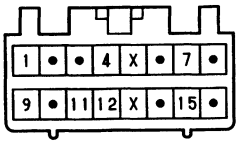
E 1 BLACK

E 3 GREEN

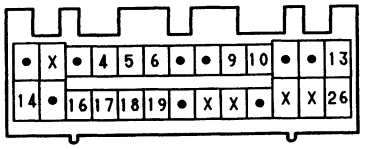
E 6 (A) DARK GRAY



E 7 (C) DARK GRAY

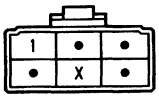


E 8 (B) DARK GRAY

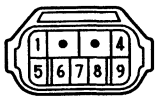


I 1 GRAY

J 3



N 1 GRAY

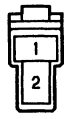


O 4

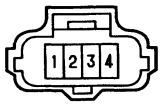
S 2 GRAY

S 9 (A)

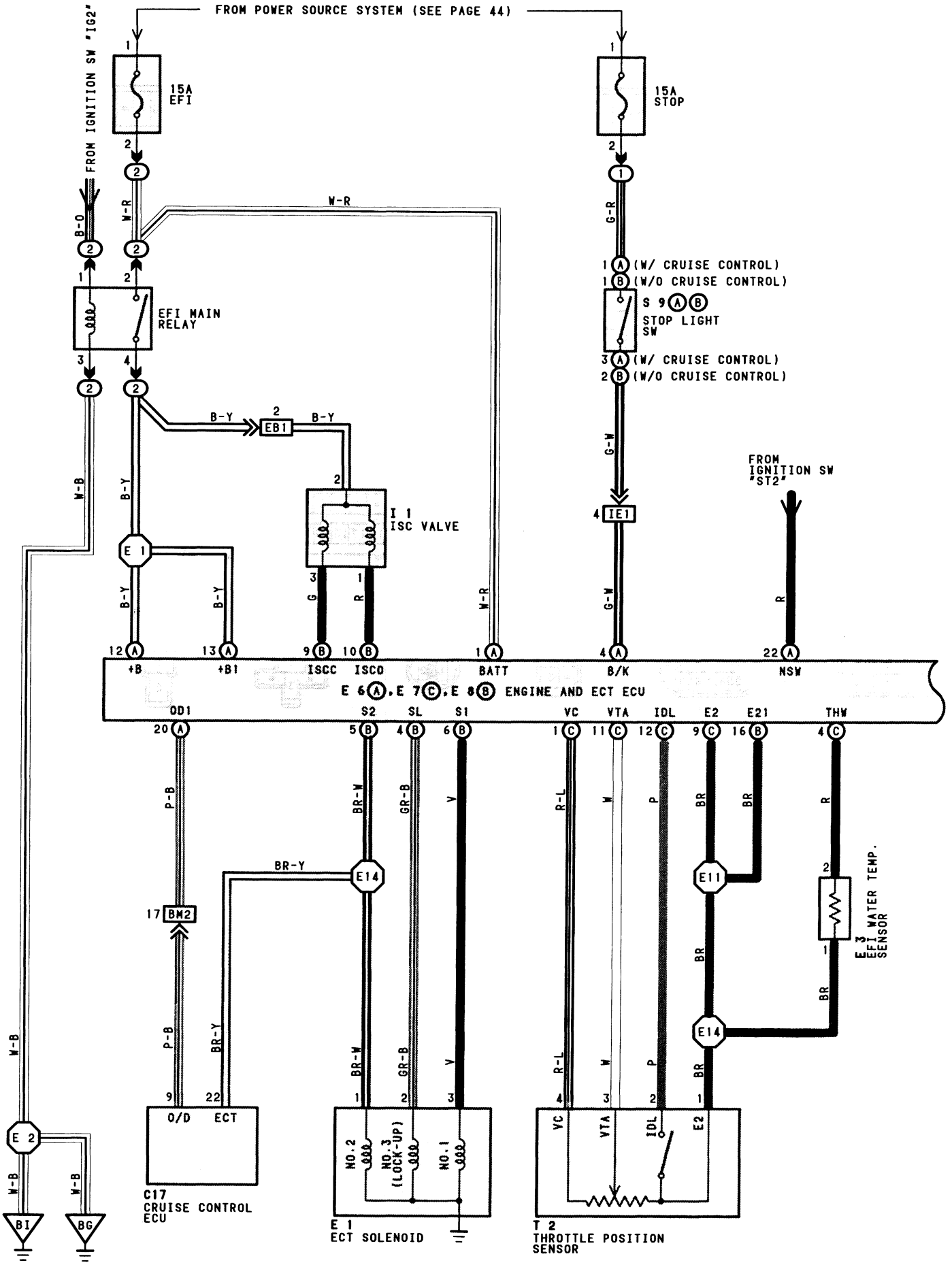
S 9 (B) BLACK

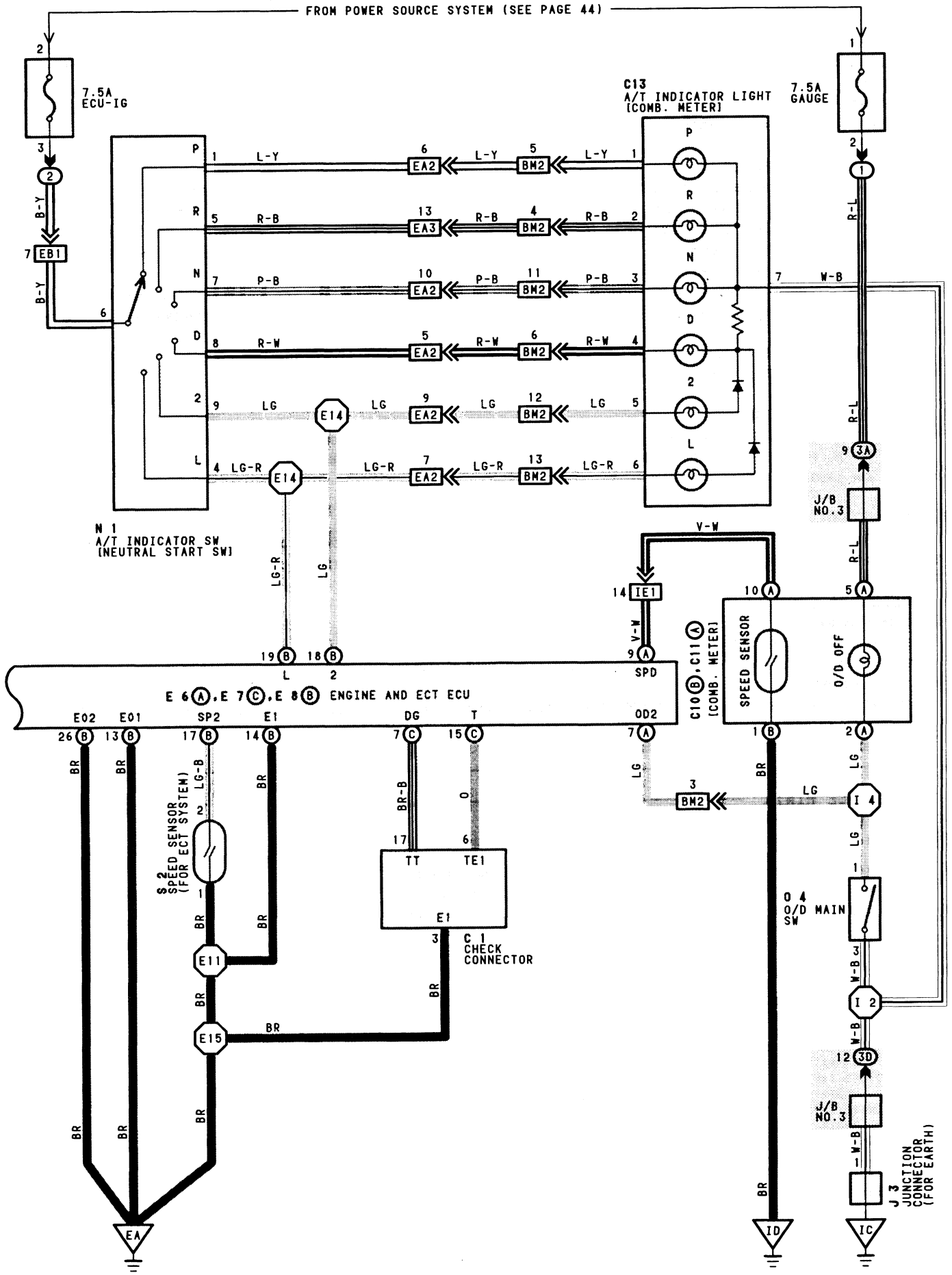


T 2 BLACK



ECT AND A/T INDICATOR




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A ECU-IG
C13 A/T INDICATOR LIGHT [COMB. METER]
7.5A GAUGE
N 1 A/T INDICATOR SW [NEUTRAL START SW]
E 6 (A), E 7 (C), E 8 (B) ENGINE AND ECT ECU
C10 (B), C11 (A) [COMB. METER]
SPEED SENSOR
O/D OFF
S 2 SPEED SENSOR (FOR ECT SYSTEM)
C 1 CHECK CONNECTOR
O 4 O/D MAIN SW
J 3 JUNCTION CONNECTOR (FOR EARTH)
J/B NO.3
EA
ID
IC

ECT AND A/T INDICATOR

SYSTEM OUTLINE

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

1. GEAR SHIFT OPERATION

DURING DRIVING, THE ECU SELECTS THE SHIFT FOR EACH GEAR WHICH IS MOST APPROPRIATE TO THE DRIVING CONDITIONS, BASED ON INPUT SIGNALS FROM THE EFI WATER TEMP. SENSOR TO **TERMINAL THW** OF THE ECU, AND ALSO THE INPUT SIGNALS TO **TERMINAL SP2** OF THE 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 ECU → **TERMINAL 3** OF THE ECT SOLENOIDS → **GROUND**, AND CONTINUITY TO THE NO.1 SOLENOID CAUSES THE SHIFT.

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

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

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

2. LOCK-UP OPERATION

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

3. STOP LIGHT SW CIRCUIT

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

4. OVERDRIVE CIRCUIT

* O/D MAIN SW ON

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

* O/D MAIN SW OFF

  WHEN THE OVERDRIVE SW IS TURNED TO 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 ECU AND ECU OPERATION PREVENTS SHIFT INTO OVERDRIVE.

SERVICE HINTS

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

(A) 4-(B) 14: 10-14VOLTS (BRAKE PEDAL IS DEPRESSED)
UNDER 1VOLTS (BRAKE PEDAL IS DEPRESSED)
(C) 4-(B) 14: 0.1-1.1VOLTS (IGNITION SW ON AND COOLANT TEMP. 80°C(176°C))
(C) 12-(C) 9: 8-14VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
(C) 11-(C) 9: 0.8-1.2VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)
3.2-4.2VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY OPEN)
(C) 1-(C) 9: 4.5-5.5VOLTS (IGNITION SW ON)
(A) 20-(B) 14: 10-14VOLTS (IGNITION SW ON)
(A) 7-(B) 14: 10-14VOLTS (IGNITION SW ON AND O/D MAIN SW TURNED ON)
UNDER 1VOLTS (IGNITION SW ON AND O/D MAIN SW TURNED OFF)
(A) 9-(B) 14: UNDER 1VOLTS (IGNITION SW ON, CRUISE CONTROL SW OFF AND STARTING STILL)
0↔10-14VOLTS REPEAT (IGNITION SW ON, CRUISE CONTROL SW OFF AND VEHICLE MOVING)
(B) 17-(B) 14: UNDER 1VOLTS (IGNITION SW ON AND STARTING STILL)
0↔4.5-5.5VOLTS REPEAT (IGNITION SW ON AND VEHICLE MOVING)
(A) 22-(B) 14: 10-14VOLTS (IGNITION SW ON AND NEUTRAL START SW P OR N POSITION)
UNDER 1VOLTS (IGNITION SW ON AND EX. NEUTRAL START SW P OR N POSITION)
(B) 18-(B) 14: 10-14VOLTS (IGNITION SW ON AND NEUTRAL START SW 2 POSITION)
UNDER 1VOLTS (IGNITION SW ON AND EX. NEUTRAL START SW 2 POSITION)
(B) 19-(B) 14: 10-14VOLTS (IGNITION SW ON AND NEUTRAL START SW L POSITION)
UNDER 1VOLTS (IGNITION SW ON AND EX. NEUTRAL START SW L POSITION)
(A) 12, (A) 13-(B) 14: 10-14VOLTS (IGNITION SW ON)
(A) 1-(B) 14: 10-14VOLTS (ALL CONDITIONS)

RESISTANCE AT ECU WIRING CONNECTORS

(DISCONNECT WIRING CONNECTOR)

Ⓒ12-Ⓒ 9: INFINITY (THROTTLE VALVE OPEN)
2.3KΩ OR LESS (THROTTLE VALVE FULLY CLOSED)

Ⓒ11-Ⓒ 9: 3.3-10.0KΩ (THROTTLE VALVE FULLY OPEN)
0.2- 0.8KΩ (THROTTLE VALVE FULLY CLOSED)

Ⓒ 1-Ⓒ 9: 0.2- 0.4KΩ

Ⓒ 4-Ⓒ 9: 0.2- 0.4KΩ (COOLANT TEMP. 80°C, 176°F)

Ⓐ 4, Ⓐ 5, Ⓐ 6-GROUND: 11-15Ω (ALL CONDITIONS)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 1	20(5S-FE)	E 3	20(5S-FE)	N 1	20(5S-FE)
C10 B	22	E 6 A	20(5S-FE)	O 4	22(5S-FE)
C11 A	22	E 7 C	20(5S-FE)	S 2	20(5S-FE)
C13	22(5S-FE)	E 8 B	20(5S-FE)	S 9 A	22
C17	22	I 1	20(5S-FE)	S 9 B	22
E 1	20(5S-FE)	J 3	22	T 2	20(5S-FE)

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	COWL WIRE AND J/B NO.3 (BEHIND COMBINATION METER)
3D		

▭ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

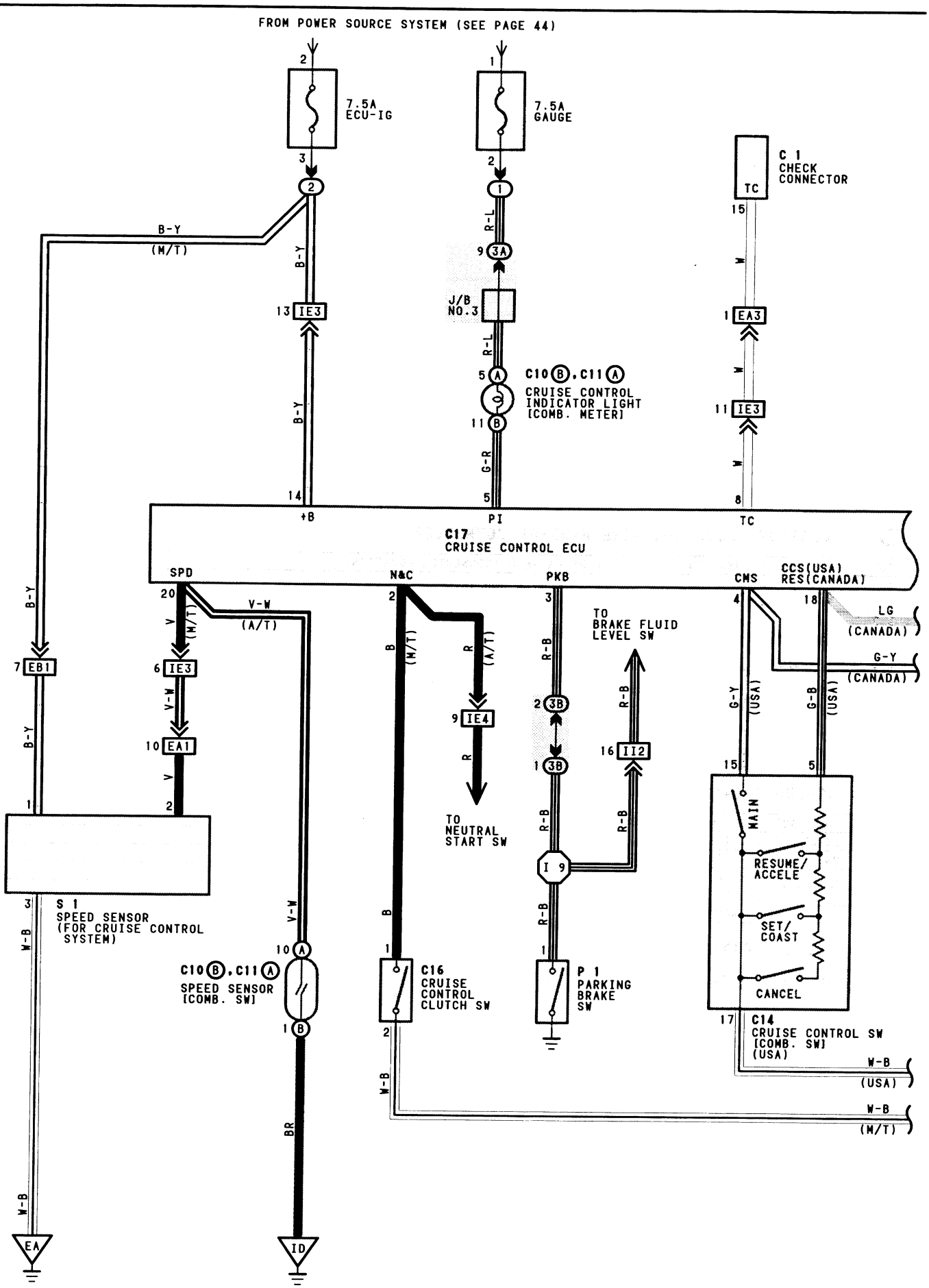
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
EB1	24(5S-FE)	ENGINE WIRE AND R/B NO.2 (R/B NO.2 INNER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
BM2	32	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

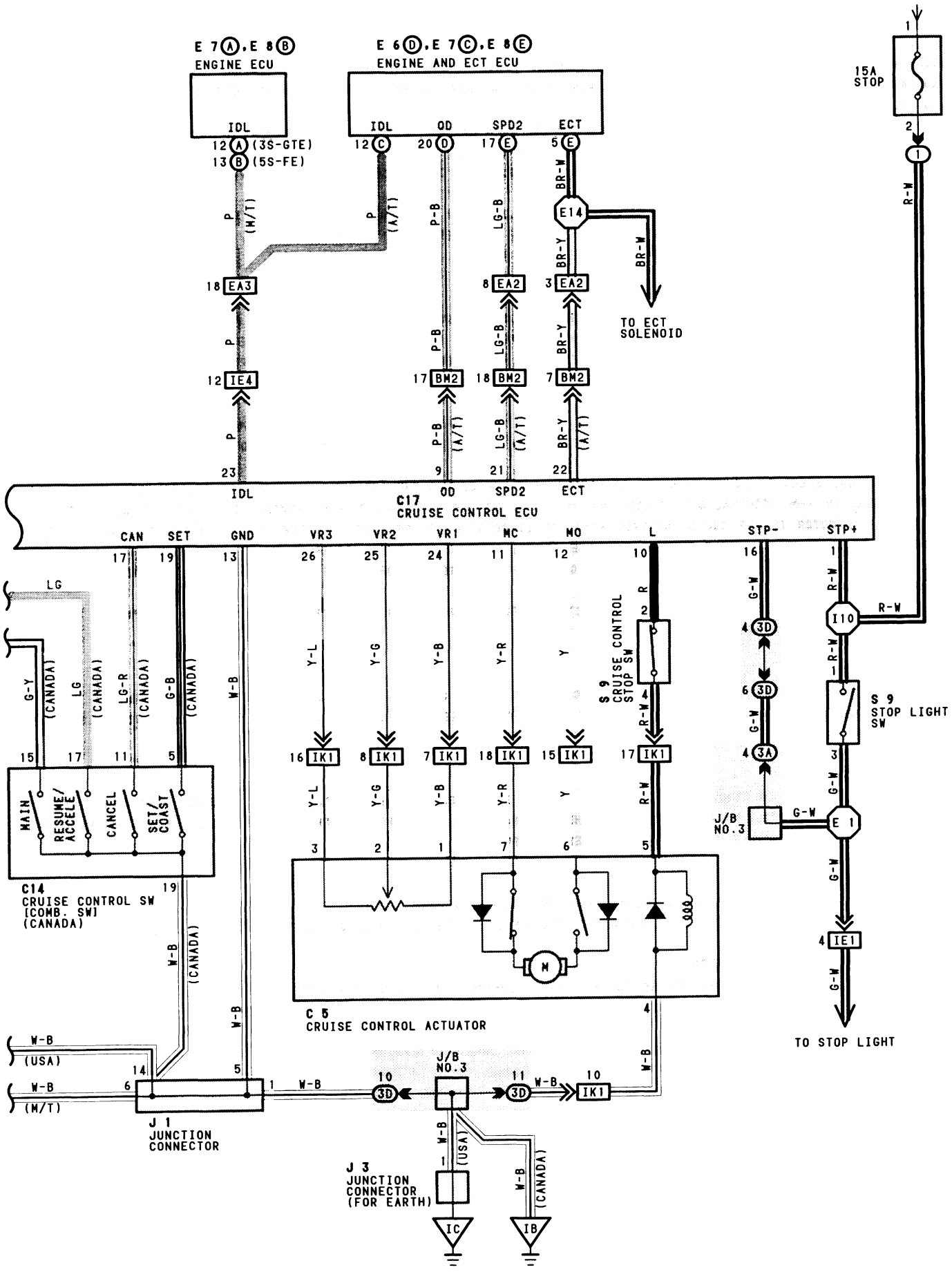
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BG	32	UNDER THE LEFT CENTER PILLAR
BI	32	BACK PANEL CENTER

⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	24(5S-FE)	ENGINE ROOM MAIN WIRE	E15	24(5S-FE)	ENGINE WIRE
E 2			I 2	30	COWL WIRE
E11	24(5S-FE)	ENGINE WIRE	I 4		
E14					


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A ECU-IG
7.5A GAUGE
C 1 CHECK CONNECTOR
J/B NO.3
C10 (B), C11 (A) CRUISE CONTROL INDICATOR LIGHT (COMB. METER)
B-Y (M/T)
B-Y
R-L
G-R
W
+B
PI
TC
C17 CRUISE CONTROL ECU
SPD
N&C
PKB
CMS
CCS(USA) RES(CANADA)
V-W (A/T)
V (M/T)
B (M/T)
R (A/T)
R-B
LG (CANADA)
G-Y (CANADA)
G-Y (USA)
G-B (USA)
TO BRAKE FLUID LEVEL SW
TO NEUTRAL START SW
S 1 SPEED SENSOR (FOR CRUISE CONTROL SYSTEM)
C10 (B), C11 (A) SPEED SENSOR (COMB. SW)
C16 CRUISE CONTROL CLUTCH SW
P 1 PARKING BRAKE SW
MAIN
RESUME/ ACCELE
SET/ COAST
CANCEL
C14 CRUISE CONTROL SW (COMB. SW) (USA)
W-B (USA)
W-B (M/T)
BR
EA
ID


E 7 A , E 8 B
ENGINE ECU
E 6 D , E 7 C , E 8 E
ENGINE AND ECT ECU
15A STOP
IDL
OD
SPD2
ECT
12 A (3S-GTE)
13 B (5S-FE)
12 C
20 D
17 E
5 E
P (M/T)
P (A/T)
P-B
LG-B
BR-W
BR-Y
E14
TO ECT SOLENOID
18 EA3
8 EA2
3 EA2
12 IE4
17 BM2
18 BM2
7 BM2
23
9
21
22
C17
CRUISE CONTROL ECU
CAN
SET
GND
VR3
VR2
VR1
MC
MO
L
STP-
STP+
R-W
I10
S 9
STOP LIGHT SW
CRUISE CONTROL STOP SW
LG
G-Y (CANADA)
LG (CANADA)
LG-R (CANADA)
G-B (CANADA)
W-B
Y-L
Y-G
Y-B
Y-R
Y
R
G-W
16 IK1
8 IK1
7 IK1
18 IK1
15 IK1
17 IK1
MAIN
RESUME/ ACCELE
CANCEL
SET/ COAST
C14
CRUISE CONTROL SW [COMB. SW] (CANADA)
J/B NO.3
E 1
IE1
TO STOP LIGHT
C 5
CRUISE CONTROL ACTUATOR
M
W-B (USA)
W-B (M/T)
J 1
JUNCTION CONNECTOR
J/B NO.3
J 3
JUNCTION CONNECTOR (FOR EARTH)
IC
IB

SYSTEM OUTLINE

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

WITH THE IGNITION SWITCH TURNED TO ON, THE CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL** Ⓐ **5** OF CRUISE CONTROL INDICATOR LIGHT. THE CURRENT THROUGH ECU-IG FUSE FLOWS TO **TERMINAL 14** OF CRUISE CONTROL ECU AND **TERMINAL 1** OF CRUISE CONTROL SPEED SENSOR.

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

AT THE SAME TIME, THE CURRENT THROUGH THE GAUGE FUSE FLOWS FROM **TERMINAL** Ⓐ **5** OF CRUISE CONTROL INDICATOR LIGHT → **TERMINAL** Ⓑ **11** → **TERMINAL 5** OF CRUISE CONTROL ECU → **TERMINAL 13** → TO **GROUND**, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP, INDICATING THAT THE CRUISE CONTROL IS READY FOR OPERATION.

1. SET OPERATION

WHEN THE CRUISE CONTROL MAIN SWITCH IS TURNED ON AND THE SET SWITCH IS PUSHED WITH THE VEHICLE SPEED WITHIN THE SET LIMIT (APPROX. **40KM/H**, **25MPH** TO **200KM/H**, **124MPH**), 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** AND **21** (A/T) OF THE CRUISE CONTROL MAIN SWITCH FROM THE SPEED SENSOR, AND CONTROLS THE CRUISE CONTROL ACTUATOR TO MAINTAIN THE SET SPEED.

WHEN THE ACTUAL SPEED IS LOWER THAN THE SET SPEED, THE ECU CAUSES THE CURRENT TO THE CRUISE CONTROL ACTUATOR TO FLOW FROM **TERMINAL 12** → **TERMINAL 6** OF 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 THE CRUISE CONTROL DRIVING, WHILE THE COAST SWITCH IS ON, THE CRUISE CONTROL ACTUATOR RETURNS THE THROTTLE CABLE TO CLOSE THE THROTTLE VALVE AND DECREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE COAST SWITCH IS TURNED OFF IS MEMORIZED AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

4. ACCEL CONTROL

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

5. RESUME CONTROL

UNLESS THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT (APPROX. **40KM/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 SAFETY MAGNET 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). "SIGNAL INPUT TO **TERMINAL 2** OF ECU" (M/T)
  SHIFT LEVER AT "N" RANGE (NEUTRAL START SW 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"
- PULL UP THE PARKING BRAKE LEVER (PARKING BRAKE SWITCH ON). "SIGNAL INPUT TO **TERMINAL 3** OF ECU"
- PUSH THE CANCEL SWITCH (CANCEL SWITCH ON). "SIGNAL INPUT TO **TERMINAL 18** (USA) OR **17** (CANADA)

7. AUTO CANCEL FUNCTION

A) IF ANY OF THE FOLLOWING OPERATE CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, CURRENT FLOW TO SAFETY MAGNETIC CLUTCH IS STOPPED AND THE CRUISE CONTROL IS RELEASED. (MAIN SWITCH TURNS OFF).
WHEN THIS OCCURS, THE IGNITION SWITCH MUST BE TURNED OFF ONCE BEFORE THE MAIN SWITCH WILL TURN ON.

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

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

- WHEN THE VEHICLE SPEED FALLS BELOW THE MINIMUM 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.

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 AND SPLICE POINT "E 1".

SERVICE HINTS

C 5 CRUISE CONTROL ACTUATOR

1-3: APPROX. 2KΩ
5-4: APPROX. 38.5Ω

C14 CRUISE CONTROL SW [COMB. SW] (USA)

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

C14 CRUISE CONTROL SW [COMB. SW] (CANADA)

15-19: CONTINUITY WITH MAIN SW ON
11-19: CONTINUITY WITH CANCEL SW ON
17-19: CONTINUITY WITH RESUME/ACCEL SW ON
5-19: CONTINUITY WITH SET/COAST SW ON

C17 CRUISE CONTROL ECU

14-GROUND: APPROX. 12VOLTS WITH IGNITION SW AT ON POSITION
1-GROUND: ALWAYS APPROX. 12VOLTS
3-GROUND: CONTINUITY WITH PARKING BRAKE LEVER PULLED UP (ONE OF THE CANCEL SW) OR BRAKE LEVEL WARNING SW ON
20-GROUND: PULSE EACH 40CM (DRIVER VEHICLE SLOWLY)
18-GROUND: APPROX. 418Ω WITH CANCEL SW ON IN CONTROL SW (USA)
APPROX. 68Ω WITH RES/ACC SW ON IN CONTROL SW (USA)
APPROX. 198Ω WITH SET/COAST SW ON IN CONTROL SW (USA)
17-GROUND: CONTINUITY WITH CANCEL SW ON IN CONTROL SW (CANADA)
18-GROUND: CONTINUITY WITH RES/ACCEL SW ON IN CONTROL SW (CANADA)
19-GROUND: CONTINUITY WITH SET/COAST SW ON IN CONTROL SW (CANADA)
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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE	SEE PAGE
C 1		20(5S-FE), 21(3S-GTE)	C17		22	J 1	22
C 5		20(5S-FE), 21(3S-GTE)	E 6	D	20(5S-FE)	J 3	22
C10	B	22	E 7	A	21(3S-GTE)	P 1	22
C11	A	22		C	20(5S-FE)	S 1	20
C14		22	E 8	B	20(5S-FE)	S 9	22
C16		22(3S-GTE M/T)		E	20(5S-FE)		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)

⬭ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
3A	19	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	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	26(3S-GTE)	
EA2	24(5S-FE)	
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
	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)
IE3		
IE4		
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
IK1	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM2	32	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

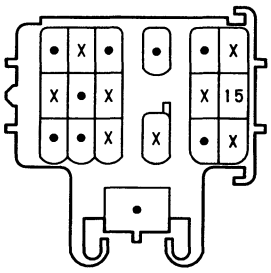
: GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
	26(3S-GTE)	
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL

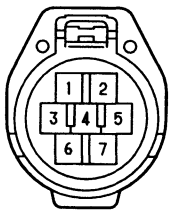
: SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	24(5S-FE)	ENGINE ROOM MAIN WIRE	I 9	30	COWL WIRE
	26(3S-GTE)		I10		
E14	24(5S-FE)	ENGINE WIRE			

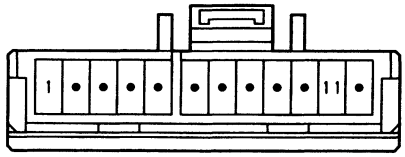
C 1 DARK GRAY



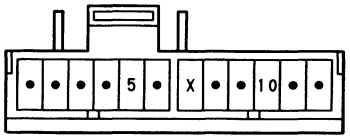
C 5 GRAY



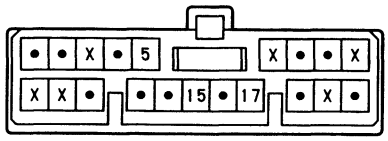
C10 (B) BLUE



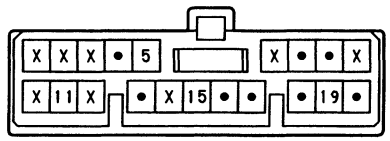
C11 (A)



(USA) C14 BLACK

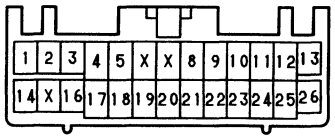


(CANADA) C14 BLACK

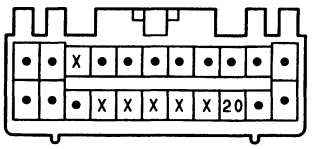


C16 WHITE

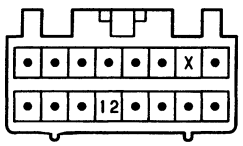
C17



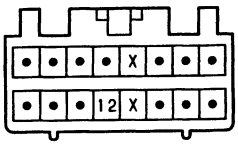
E 6 (D) DARK GRAY



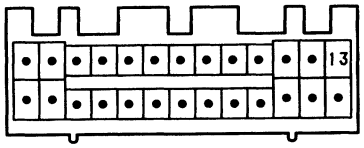
E 7 (A) DARK GRAY



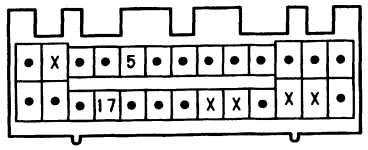
E 7 Ⓒ DARK GRAY



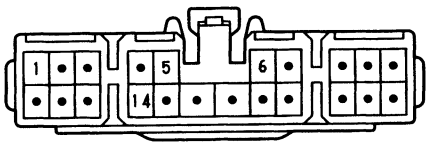
E 8 Ⓑ DARK GRAY



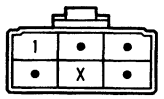
E 8 Ⓔ DARK GRAY



J 1



J 3

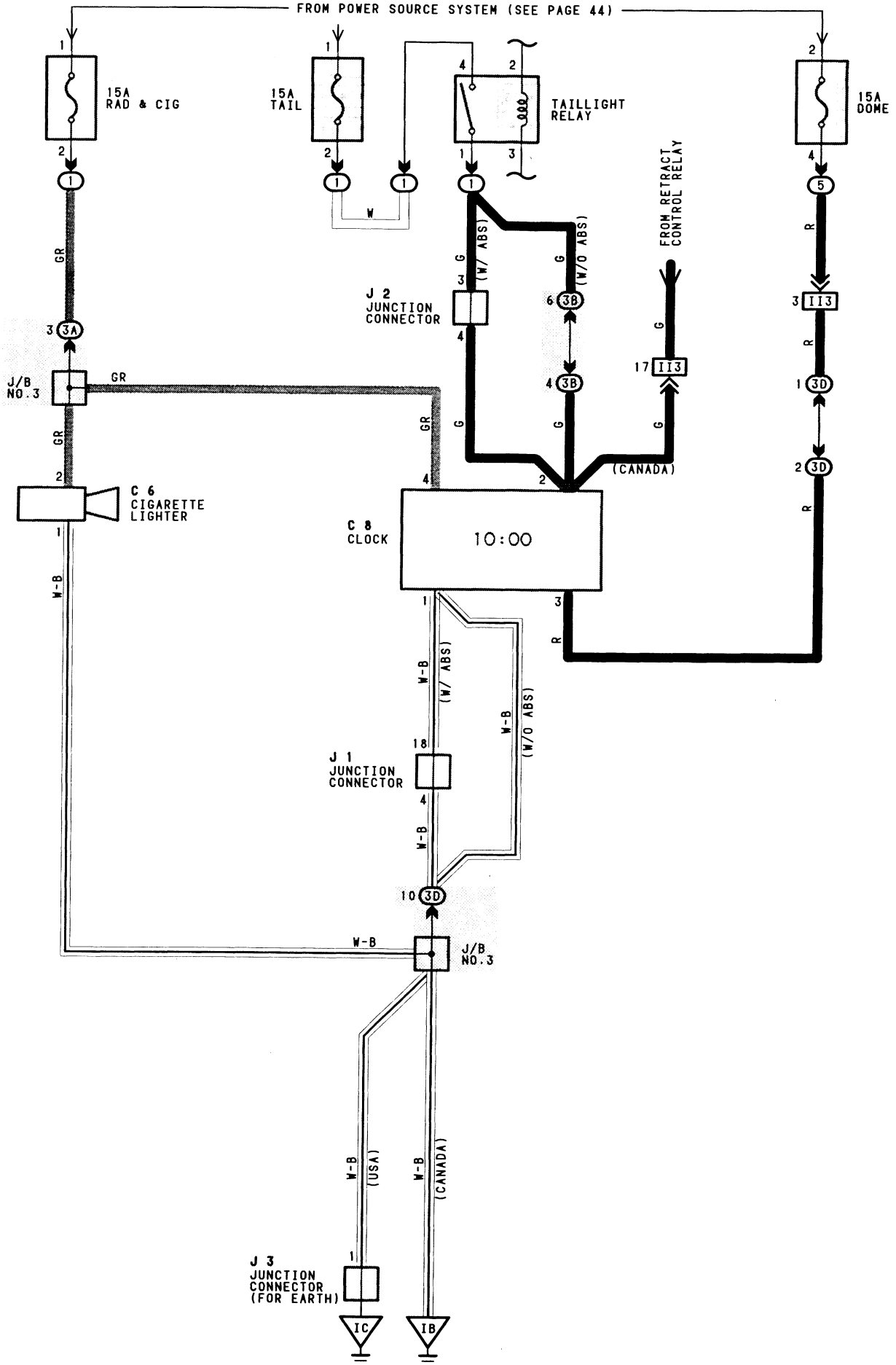


P 1 BLACK

S 1 GRAY

S 9

CIGARETTE LIGHTER AND CLOCK



SERVICE HINTS

C 6 CIGARETTE LIGHTER

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

C 8 CLOCK

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 6	22	J 1	22	J 3	22
C 8	22	J 2	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANNEL)
5	17	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	19	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	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)

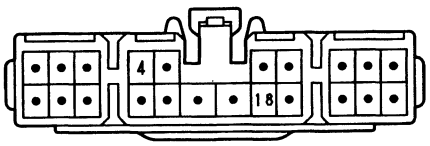
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH

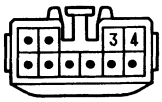
C 6

C 8

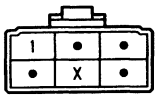
J 1

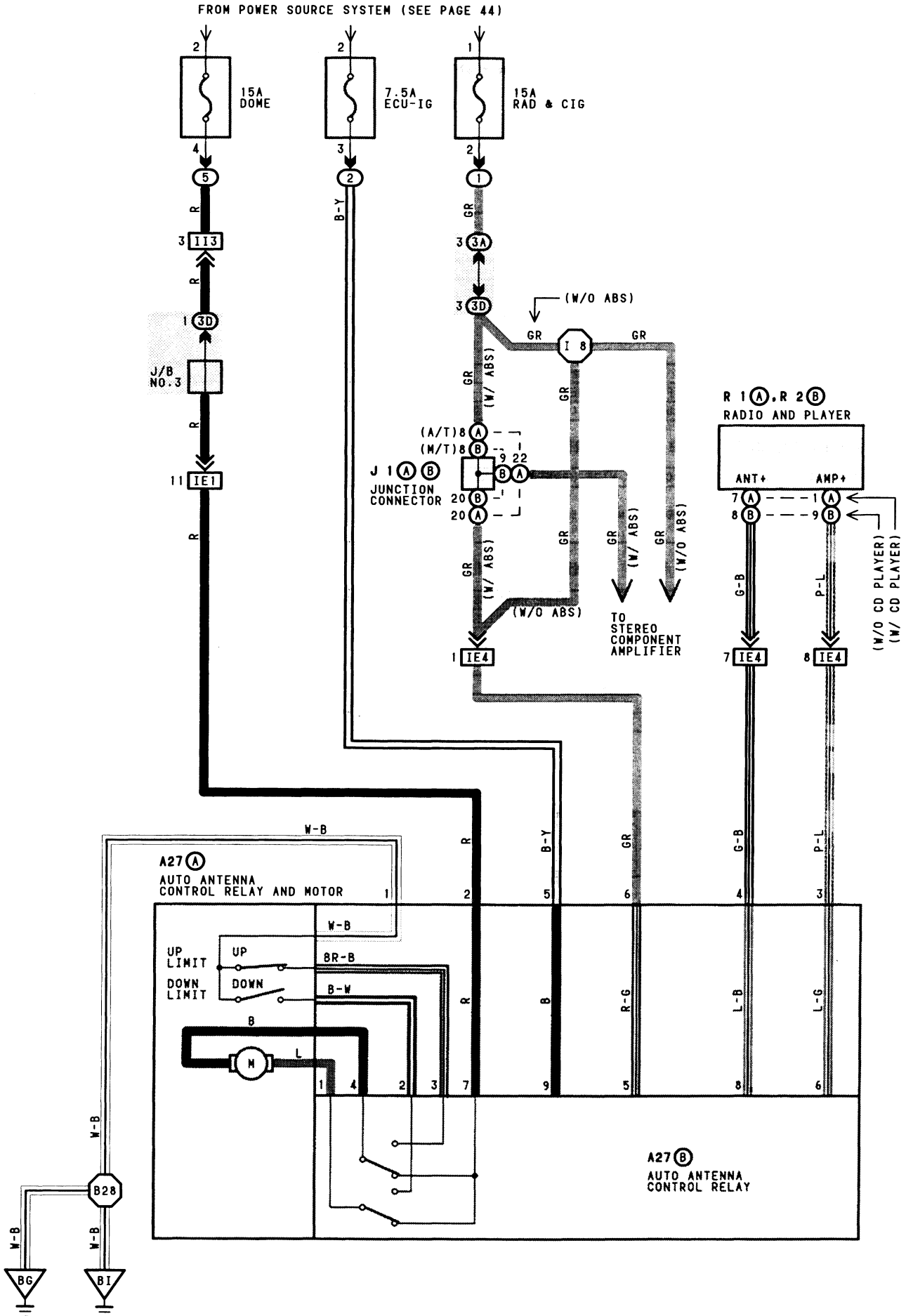


J 2



J 3




FROM POWER SOURCE SYSTEM (SEE PAGE 44)
15A DOME
7.5A ECU-IG
15A RAD & CIG
J/B NO.3
II3
IE1
3A
3D
(W/O ABS)
I 8
(W/ ABS)
(A/T)8
(M/T)8
J 1 JUNCTION CONNECTOR
IE4
TO STEREO COMPONENT AMPLIFIER
R 1 A, R 2 B
RADIO AND PLAYER
ANT+
AMP+
(W/O CD PLAYER)
(W/ CD PLAYER)
A27 A
AUTO ANTENNA CONTROL RELAY AND MOTOR
UP LIMIT
DOWN LIMIT
UP
DOWN
M
A27 B
AUTO ANTENNA CONTROL RELAY
B28
BG
BI
W-B
R
B-Y
GR
G-B
P-L
8R-B
B-W
B
R-G
L-B
L-G
L

SERVICE HINTS

A27 Ⓑ AUTO ANTENNA CONTROL RELAY

9-GROUND:APPROX. 12VOLTS WITH IGNITION SW AT **ON** POSITION
5-GROUND:APPROX. 12VOLTS WITH IGNITION SW AT **ACC** OR **ON** POSITION
7-GROUND:ALWAYS APPROX. 12VOLTS
8-GROUND:APPROX. 12VOLTS 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	A	23	J 1	A	22	R 1	A	22
	B	23		B	22	R 2	B	22

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	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	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE4		
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

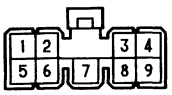
CODE	SEE PAGE	GROUND POINTS LOCATION
BI	32	BACK PANEL CENTER
BG	32	UNDER THE LEFT CENTER PILLAR

⬡ : SPLICE POINTS

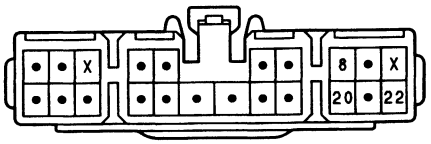
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 8	30	COWL WIRE	B28	32	ENGINE ROOM MAIN WIRE

A27 Ⓐ

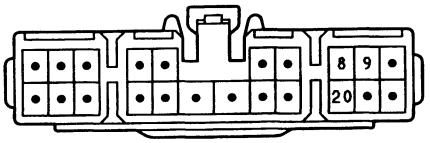
A27 Ⓑ



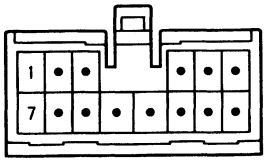
J 1 Ⓐ



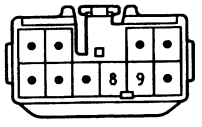
J 1 Ⓑ



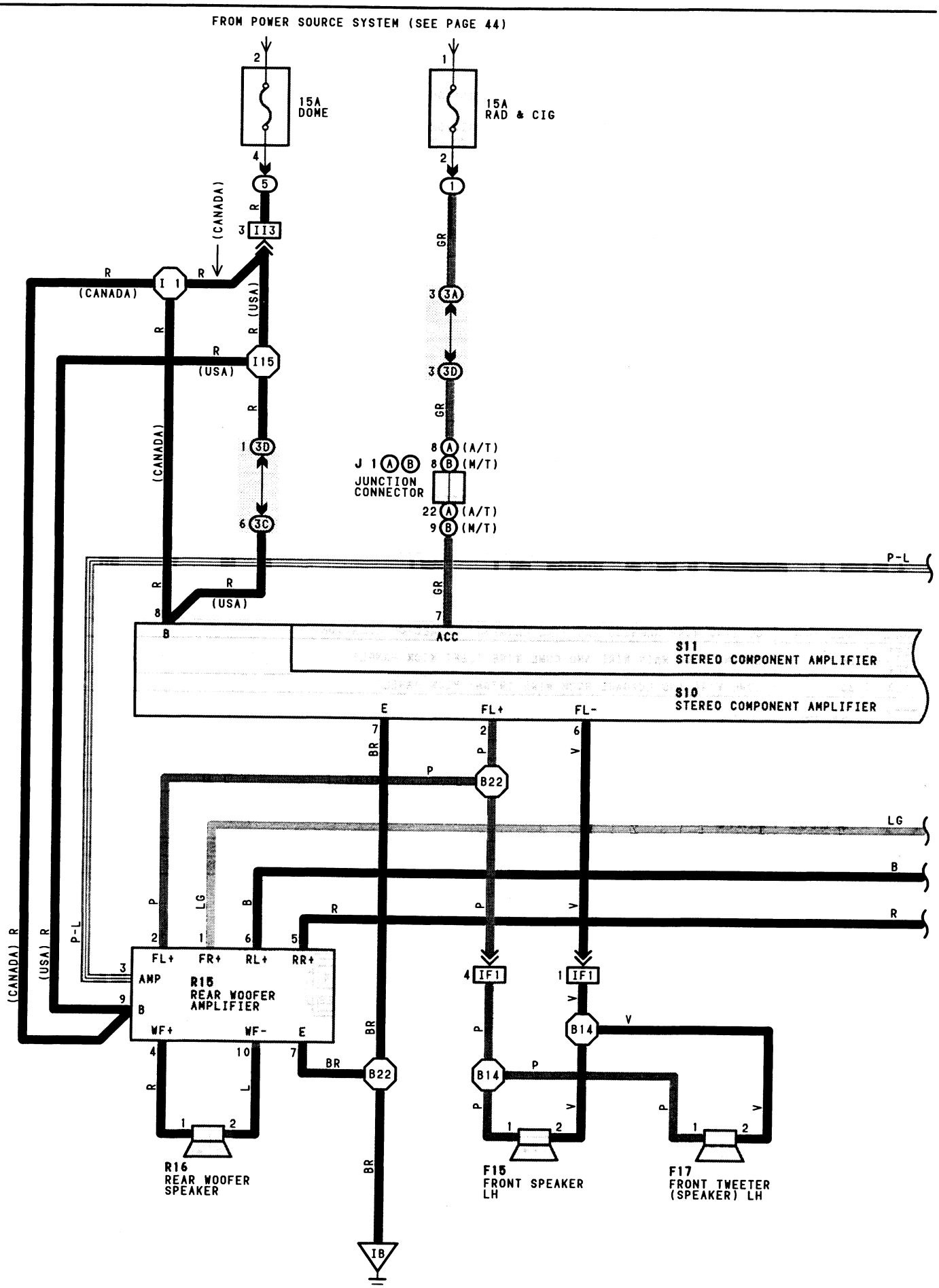
R 1 Ⓐ WHITE

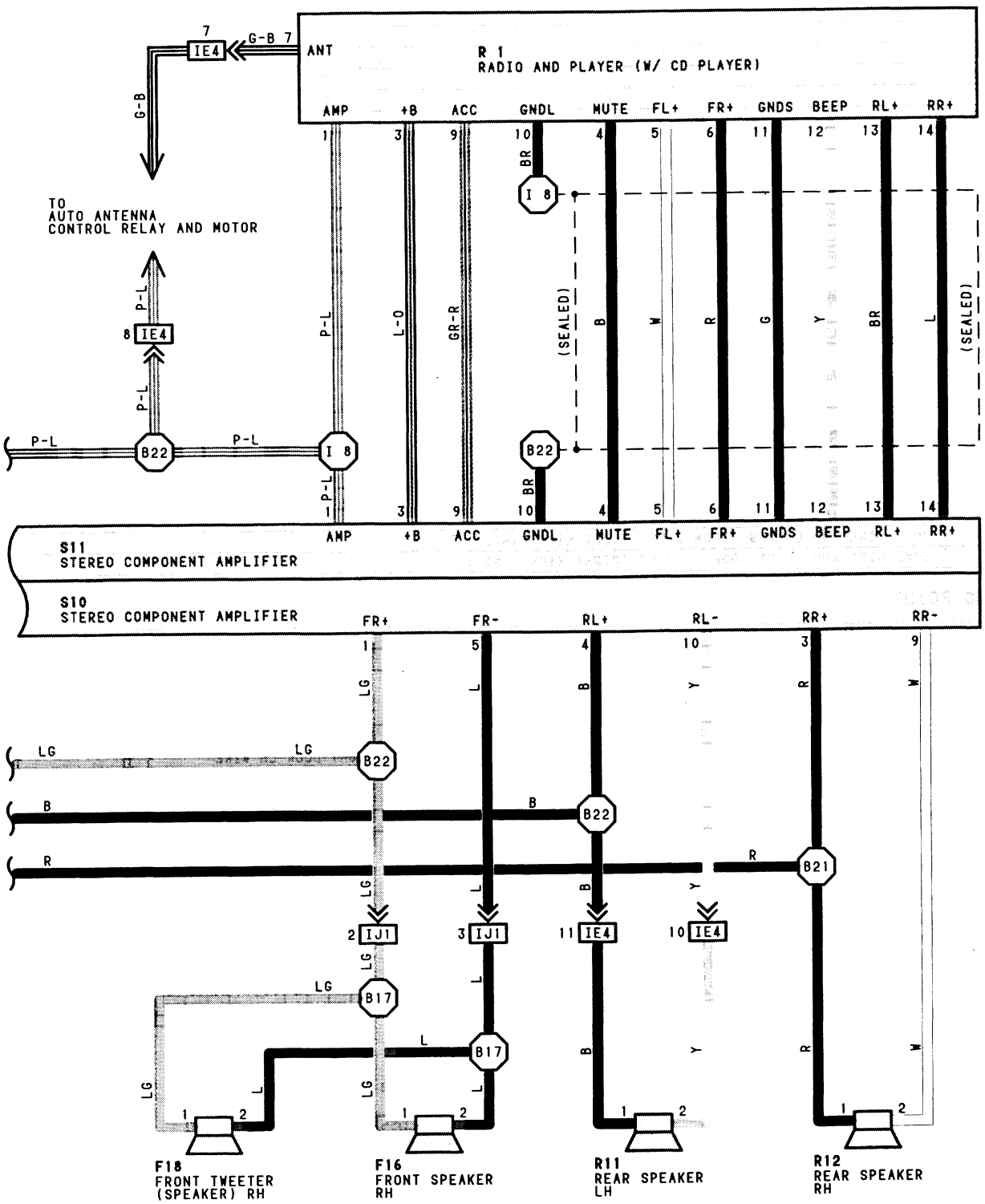


R 2 Ⓑ WHITE



RADIO AND PLAYER(w/ CD PLAYER)




R 1
RADIO AND PLAYER (W/ CD PLAYER)
ANT
AMP
+B
ACC
GNDL
MUTE
FL+
FR+
GNDS
BEEP
RL+
RR+
TO
AUTO ANTENNA
CONTROL RELAY AND MOTOR
IE4
I 8
B22
(SEALED)
S11
STEREO COMPONENT AMPLIFIER
S10
STEREO COMPONENT AMPLIFIER
FR+
FR-
RL+
RL-
RR+
RR-
IJ1
B17
B21
F18
FRONT TWEETER
(SPEAKER) RH
F16
FRONT SPEAKER
RH
R11
REAR SPEAKER
LH
R12
REAR SPEAKER
RH

RADIO AND PLAYER(w/ CD PLAYER)

SERVICE HINTS

S10 STEREO COMPONENT AMPLIFIER

8-GROUND:ALWAYS APPROX. 12VOLTS
7-GROUND:ALWAYS CONTINUITY

S11 STEREO COMPONENT AMPLIFIER

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F15	23	J 1 B	22	R16	23
F16	23	R 1	22	S10	23
F17	23	R11	23	S11	23
F18	23	R12	23		
J 1 A	22	R15	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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 3C 3D	19	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)
IE4	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL

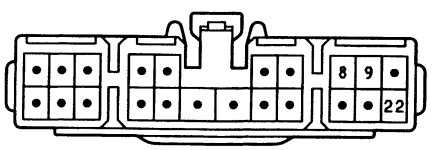
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	30	COWL WIRE	B17	32	FRONT DOOR LH WIRE
I 8			B21	32	COWL WIRE
I15			B22		
B14	32	FRONT DOOR RH WIRE			

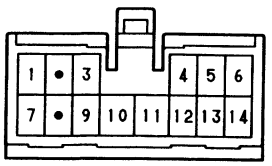
F15, F16 GRAY

F17, F18

J 1 Ⓐ Ⓑ

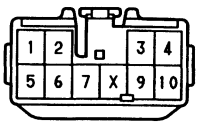


R 1 WHITE

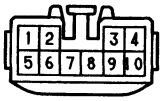


R11, R12, R16

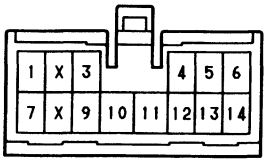
R15 WHITE



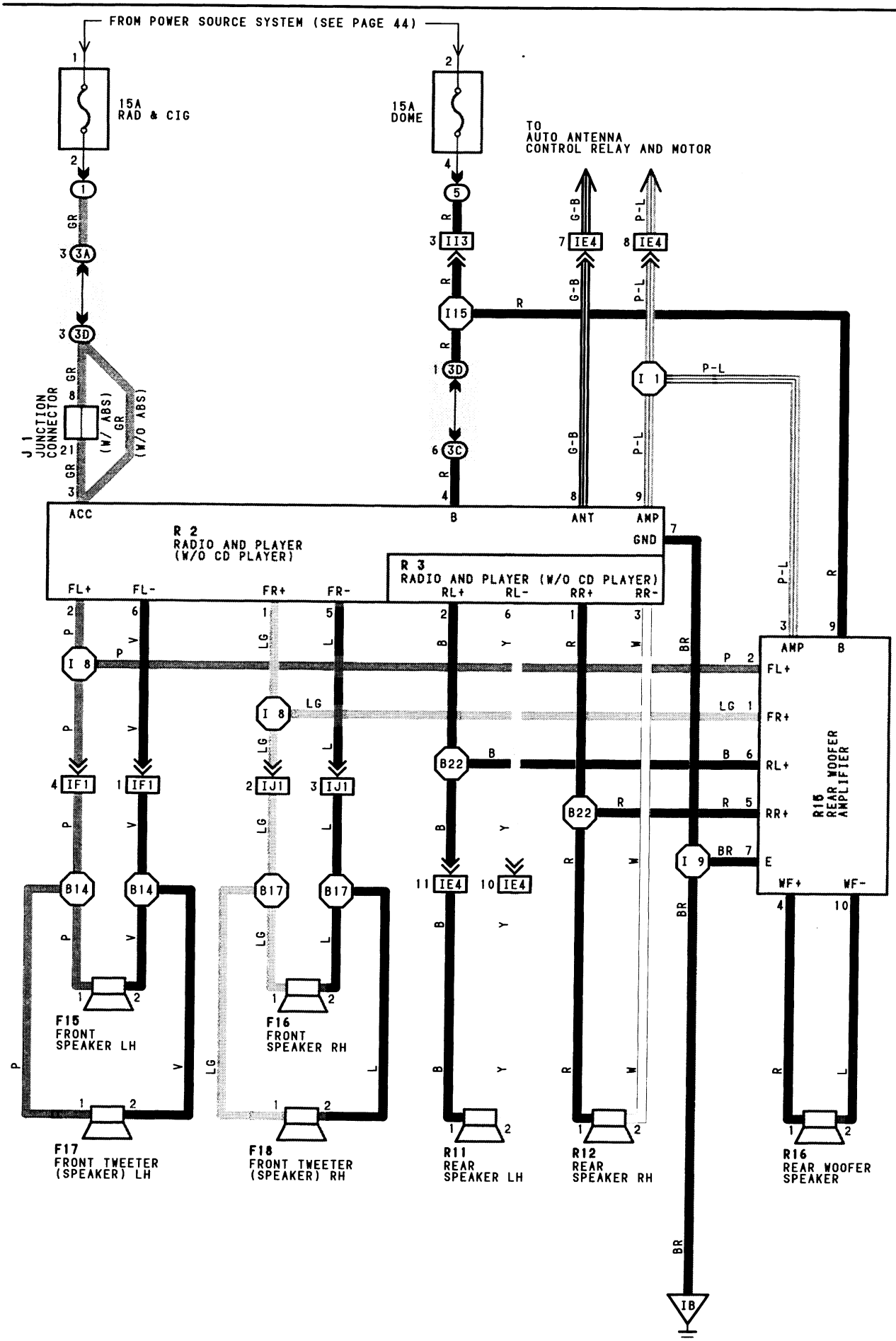
S10



S11



RADIO AND PLAYER(w/o CD PLAYER)



SERVICE HINTS

R 2 RADIO AND PLAYER

4-GROUND:ALWAYS APPROX. 12VOLTS

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

7-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
F15	23	J 1	22	R12	23
F16	23	R 2	22	R15	23
F17	23	R 3	22	R16	23
F18	23	R11	23		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL

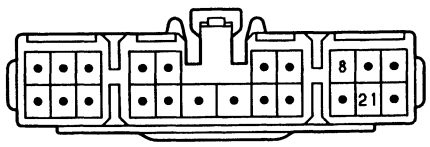
⬡ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	30	COWL WIRE	B14	32	FRONT DOOR RH WIRE
I 8			B17	32	FRONT DOOR LH WIRE
I 9			B22	32	COWL WIRE
I15					

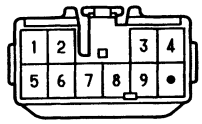
F15,F16 GRAY

F17,F18

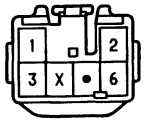
J 1



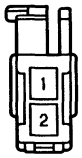
R 2 WHITE



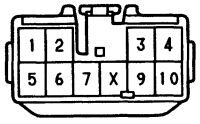
R 3 WHITE



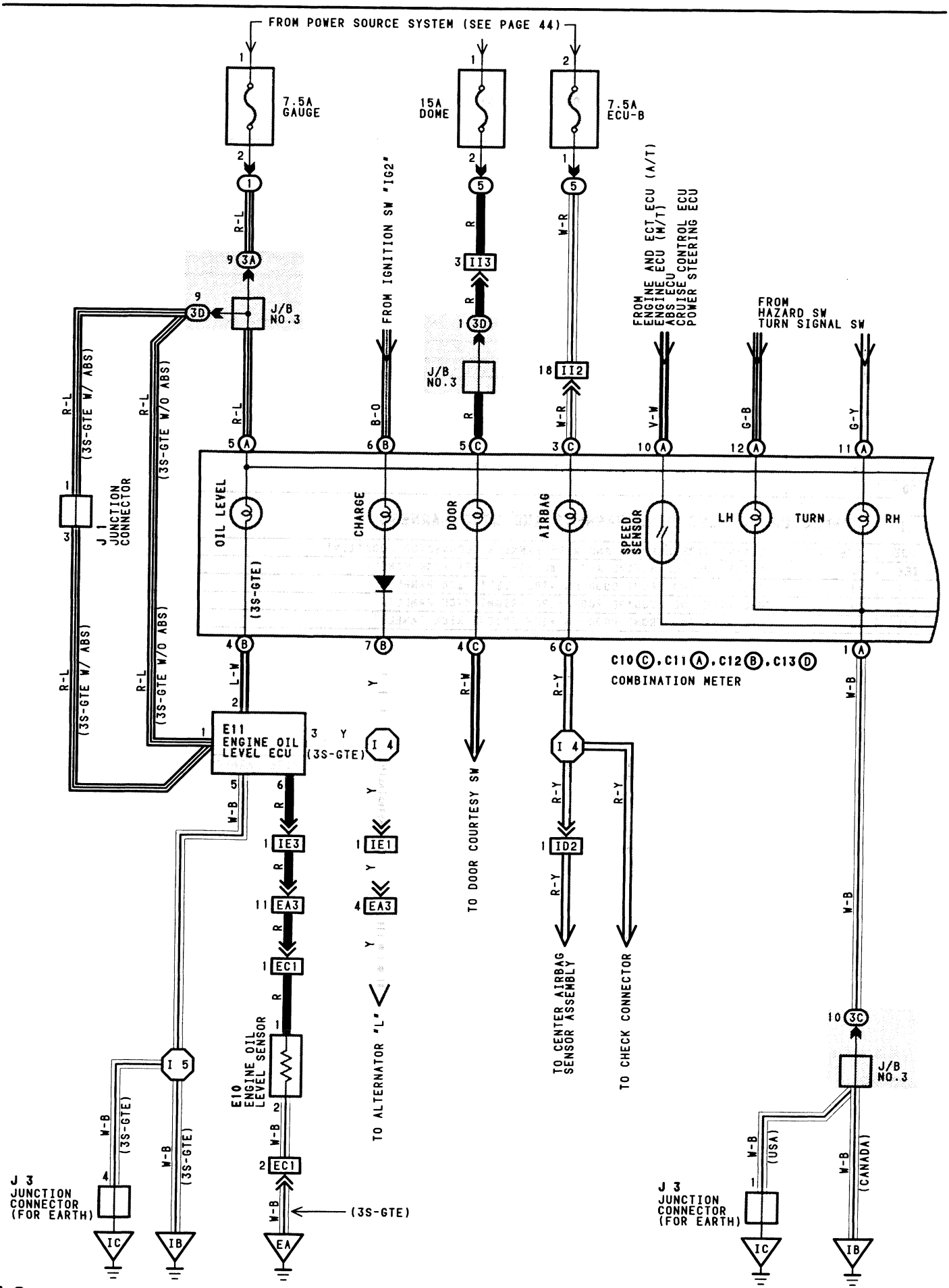
R11,R12

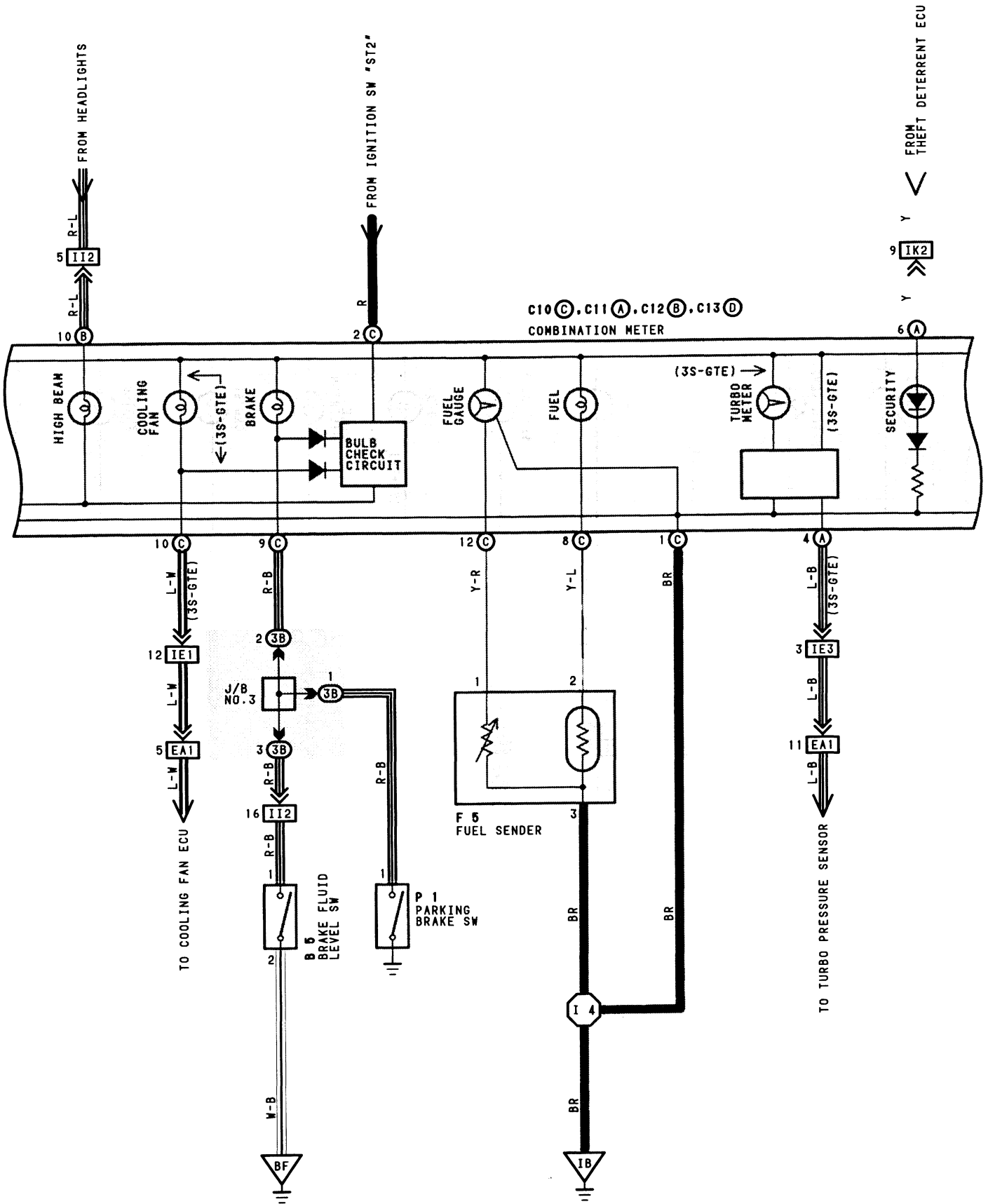


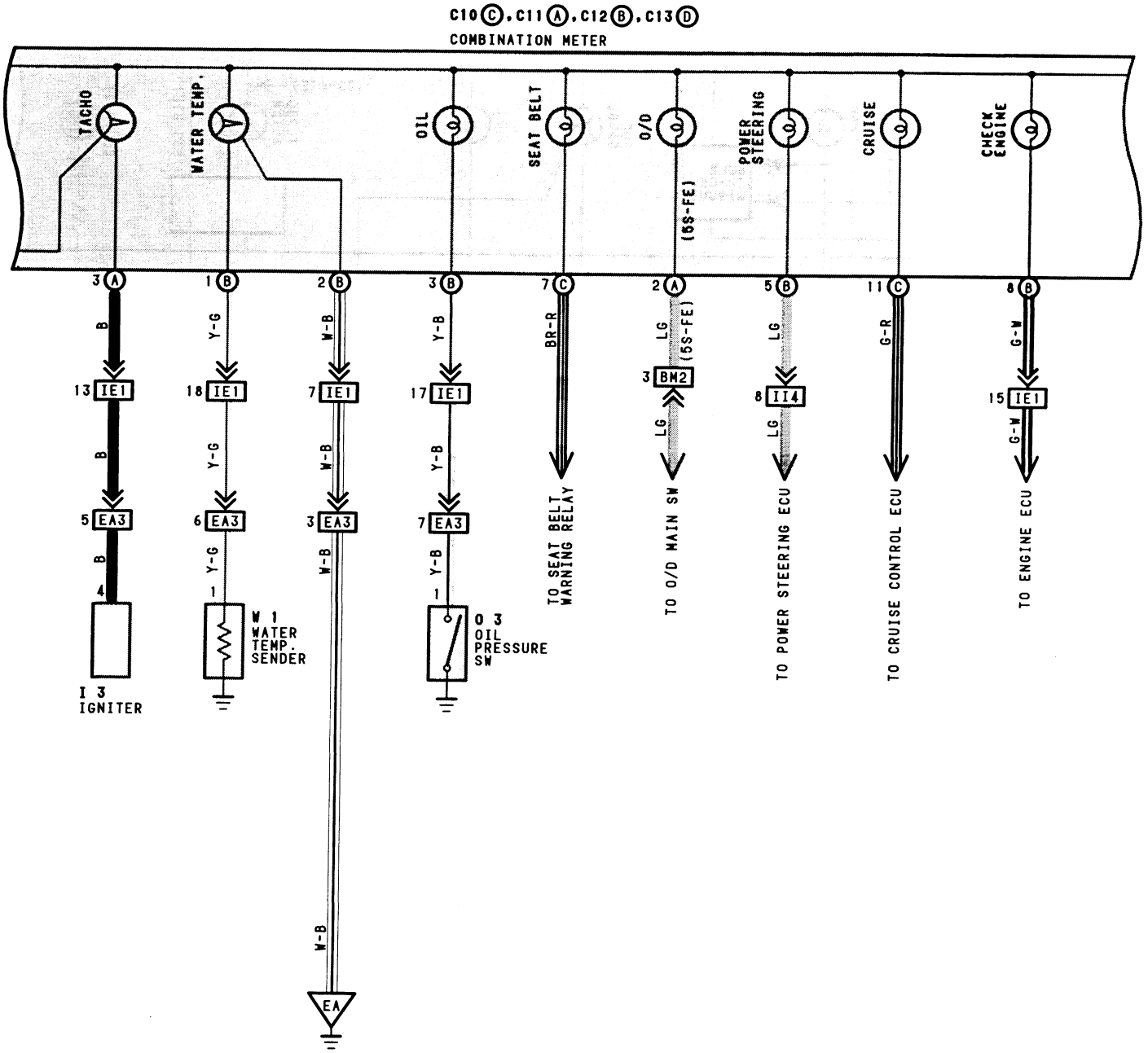
R15 WHITE

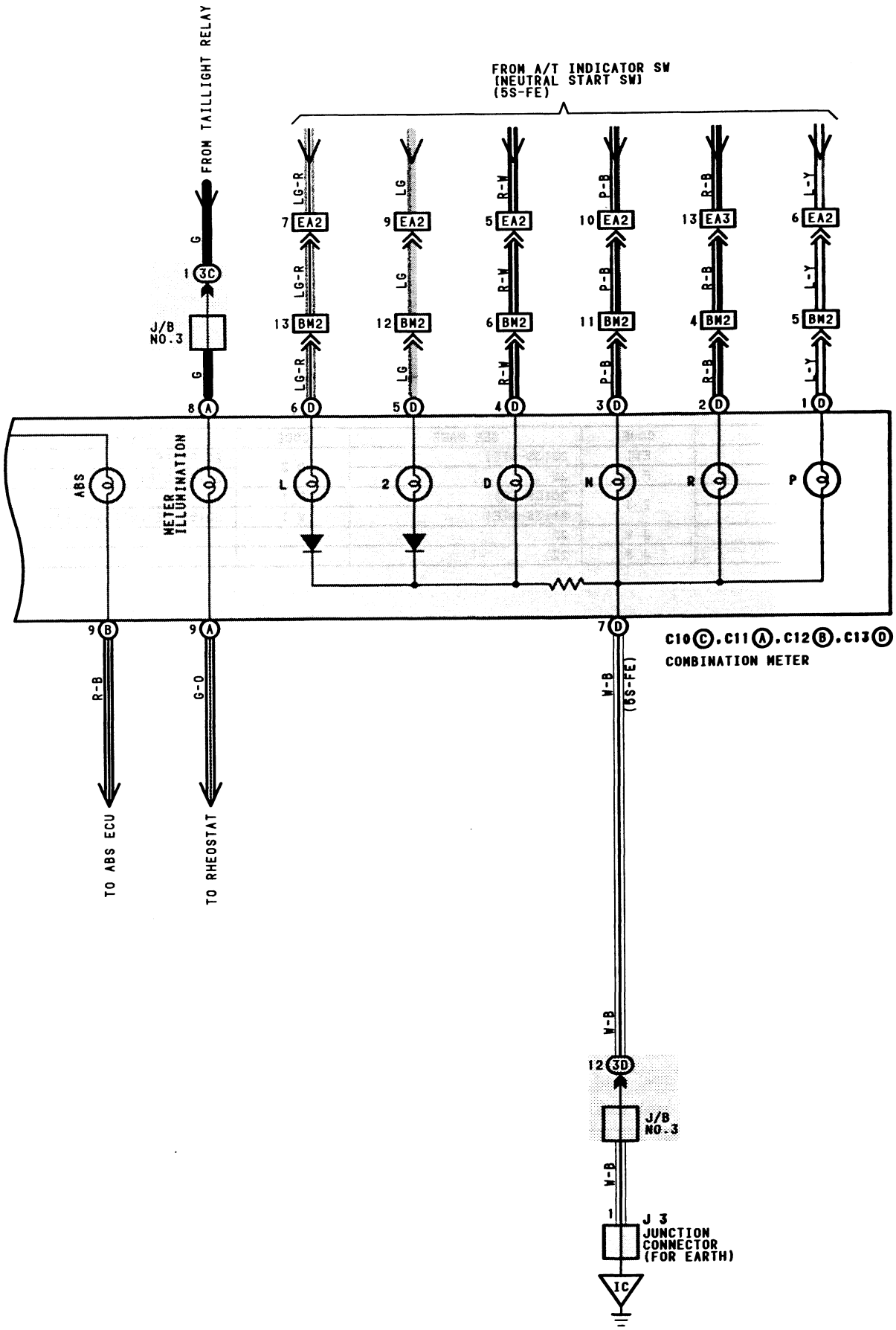


R16


FROM POWER SOURCE SYSTEM (SEE PAGE 44)
7.5A GAUGE
15A DOME
7.5A ECU-B
FROM IGNITION SW "IG2"
FROM ENGINE AND ECT ECU (A/T)
ENGINE ECU (M/T)
ABS ECU
CRUISE CONTROL ECU
POWER STEERING ECU
FROM HAZARD SW
TURN SIGNAL SW
J/B NO.3
J1 JUNCTION CONNECTOR
(3S-GTE W/ ABS)
(3S-GTE W/O ABS)
OIL LEVEL
CHARGE
DOOR
AIRBAG
SPEED SENSOR
LH
TURN
RH
(3S-GTE)
C10 C, C11 A, C12 B, C13 D
COMBINATION METER
E11 ENGINE OIL LEVEL ECU
E10 ENGINE OIL LEVEL SENSOR
TO DOOR COURTESY SW
TO ALTERNATOR "L"
TO CENTER AIRBAG SENSOR ASSEMBLY
TO CHECK CONNECTOR
J3 JUNCTION CONNECTOR (FOR EARTH)
(USA)
(CANADA)


FROM HEADLIGHTS
FROM IGNITION SW "ST2"
FROM THEFT DETERRENT ECU
C10 C, C11 A, C12 B, C13 D
COMBINATION METER
HIGH BEAM
COOLING FAN
(3S-GTE)
BRAKE
BULB CHECK CIRCUIT
FUEL GAUGE
FUEL
(3S-GTE)
TURBO METER
(3S-GTE)
SECURITY
J/B NO.3
F 5
FUEL SENDER
B 5
BRAKE FLUID LEVEL SW
P 1
PARKING BRAKE SW
I 4
TO COOLING FAN ECU
TO TURBO PRESSURE SENSOR


C10 C, C11 A, C12 B, C13 D
COMBINATION METER
TACHO
WATER TEMP.
OIL
SEAT BELT
O/D
(5S-FE)
POWER STEERING
CRUISE
CHECK ENGINE
3 A
1 B
2 B
3 B
7 C
2 A
5 B
11 C
8 B
B
Y-G
W-B
Y-B
BR-R
LG
G-R
G-W
13 IE1
18 IE1
7 IE1
17 IE1
3 BM2
8 II4
15 IE1
5 EA3
6 EA3
3 EA3
7 EA3
4
1
I 3
IGNITER
W 1
WATER TEMP. SENDER
O 3
OIL PRESSURE SW
TO SEAT BELT WARNING RELAY
TO O/D MAIN SW
TO POWER STEERING ECU
TO CRUISE CONTROL ECU
TO ENGINE ECU
EA


FROM TAILLIGHT RELAY
FROM A/T INDICATOR SW
(NEUTRAL START SW)
(5S-FE)
G
1 3C
J/B
NO.3
G
8 A
LG-R
7 EA2
LG-R
13 BM2
LG-R
6 D
LG
9 EA2
LG
12 BM2
LG
5 D
R-W
5 EA2
R-W
6 BM2
R-W
4 D
P-B
10 EA2
P-B
11 BM2
P-B
3 D
R-B
13 EA3
R-B
4 BM2
R-B
2 D
L-Y
6 EA2
L-Y
5 BM2
L-Y
1 D
ABS
METER
ILLUMINATION
L
2
D
N
R
P
9 B
9 A
7 D
R-B
G-O
W-B
(5S-FE)
C10 C . C11 A . C12 B . C13 D
COMBINATION METER
TO ABS ECU
TO RHEOSTAT
W-B
12 3D
J/B
NO.3
W-B
1
J 3
JUNCTION
CONNECTOR
(FOR EARTH)
IC

COMBINATION METER

SERVICE HINTS

B 5 BRAKE FLUID LEVEL SW

1-2:CLOSED WITH FLOAT DOWN

C10 Ⓒ, C11 Ⓐ, C12 Ⓑ COMBINATION METER

Ⓒ 3, Ⓒ 5-GROUND:ALWAYS APPROX. 12VOLTS

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

Ⓐ 1, Ⓑ 3, Ⓒ 1-GROUND:ALWAYS CONTINUITY

C13 Ⓓ COMBINATION METER (5S-FE A/T)

Ⓓ 7-GROUND:ALWAYS CONTINUITY

E11 ENGINE OIL LEVEL ECU (3S-GTE)

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

5-GROUND:ALWAYS CONTINUITY

O 3 OIL PRESSURE SW

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

P 1 PARKING BRAKE SW

1-GROUND:CLOSED WITH PARKING BRAKE LEVER PULLED UP

W 1 WATER TEMP. SENSOR

1-GROUND:APPROX. 198.5Ω AT 50°C (122°F)
APPROX. 29.7Ω AT 105°C (221°F)

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 5		23	E11	23(3S-GTE)	O 3	20(5S-FE)
C10	C	22	F 5	22		21(3S-GTE)
C11	A	22	I 3	20(5S-FE)	P 1	22
C12	B	22		21(3S-GTE)	W 1	20(5S-FE), 21(3S-GTE)
C13	D	22(5S-FE)	J 1	22		
E10		21(3S-GTE)	J 3	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	26(3S-GTE)	
EA2	24(5S-FE)	
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
	26(3S-GTE)	
EC1	26(3S-GTE)	ENGINE NO.4 WIRE AND ENGINE WIRE (NEAR THE INTAKE MANIFOLD)
ID2	28	COWL WIRE AND COWL WIRE (BEHIND COMBINATION METER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		
IK2	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)
BM2	32	COWL WIRE AND ENGINE ROOM MAIN WIRE (ROOM PARTITION BOARD LEFT)

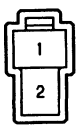
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
	26(3S-GTE)	
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
BF	32	FRONT LEFT FENDER

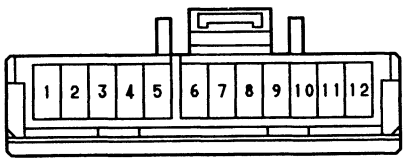
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 4	30	COWL WIRE	I 5	30	COWL WIRE

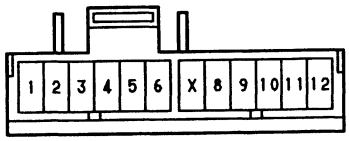
B 5 GRAY



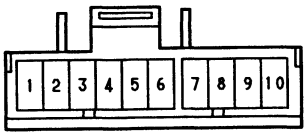
C10 Ⓒ BLUE



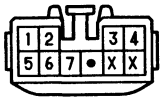
C11 Ⓐ



C12 Ⓑ GRAY

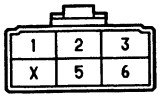


C13 Ⓓ

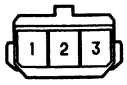


E10 DARK GRAY

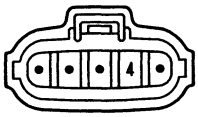
E11



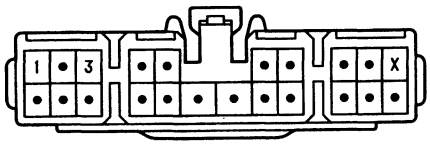
F 5



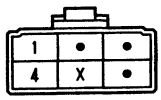
I 3 BLACK



J 1



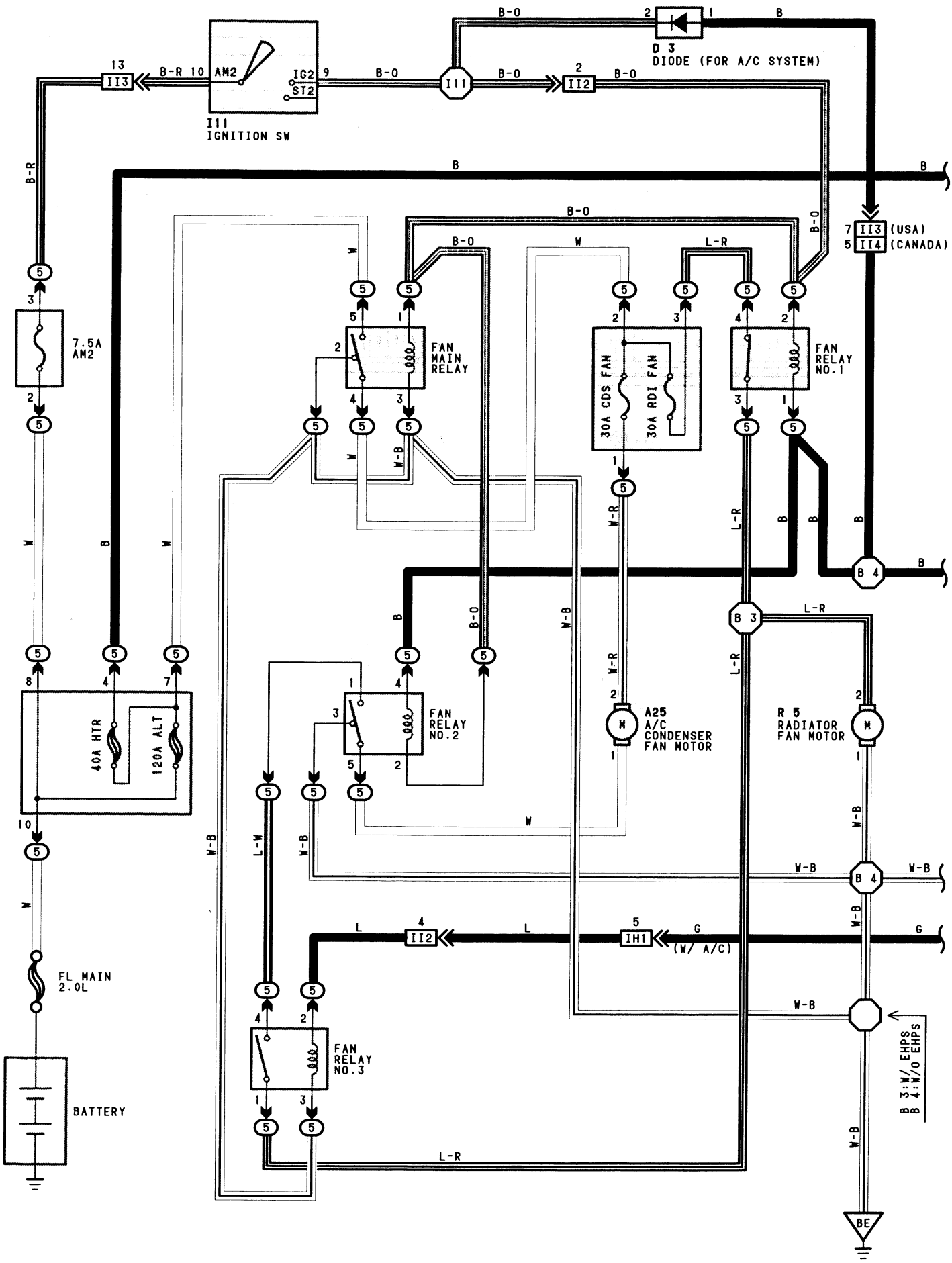
J 3

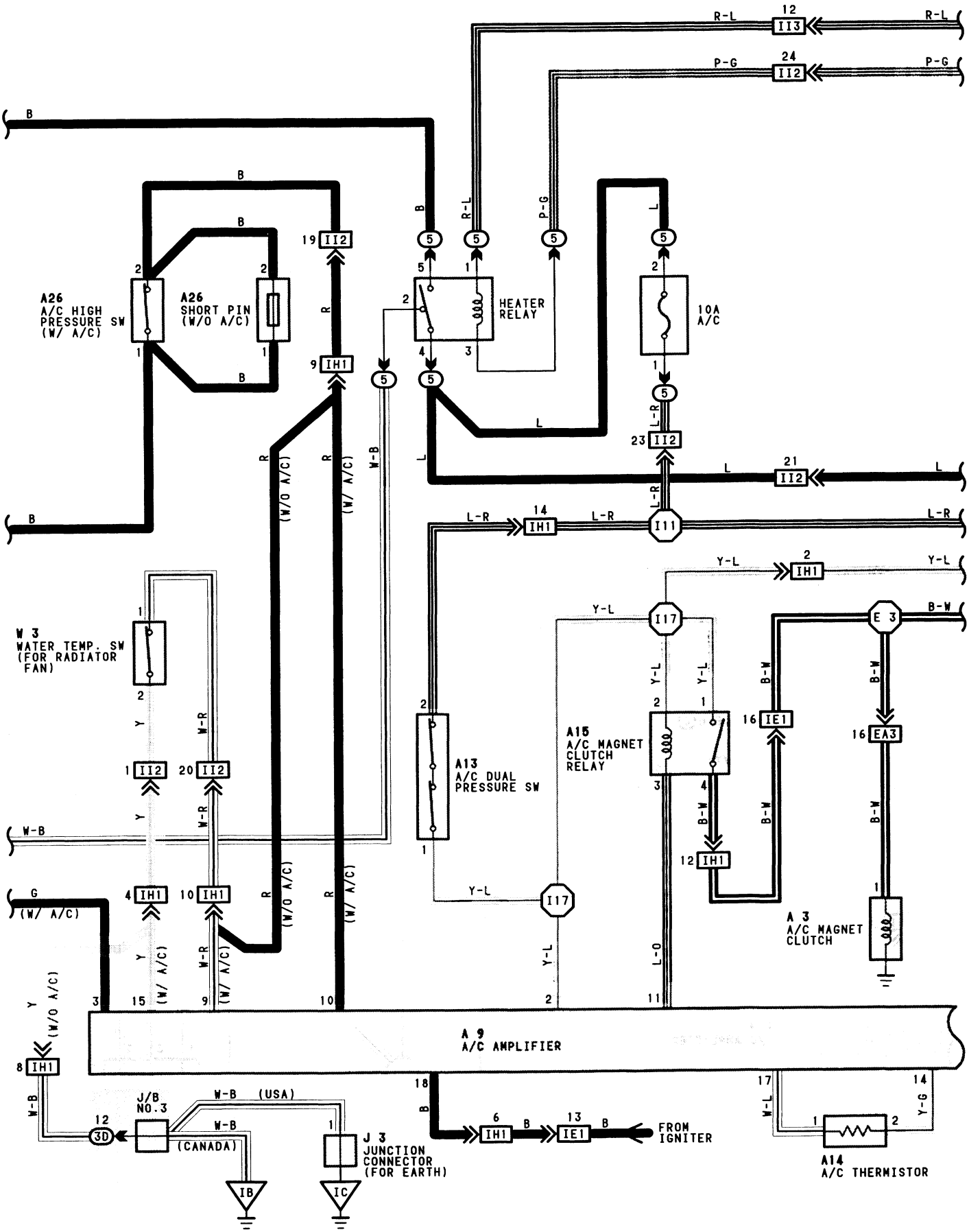


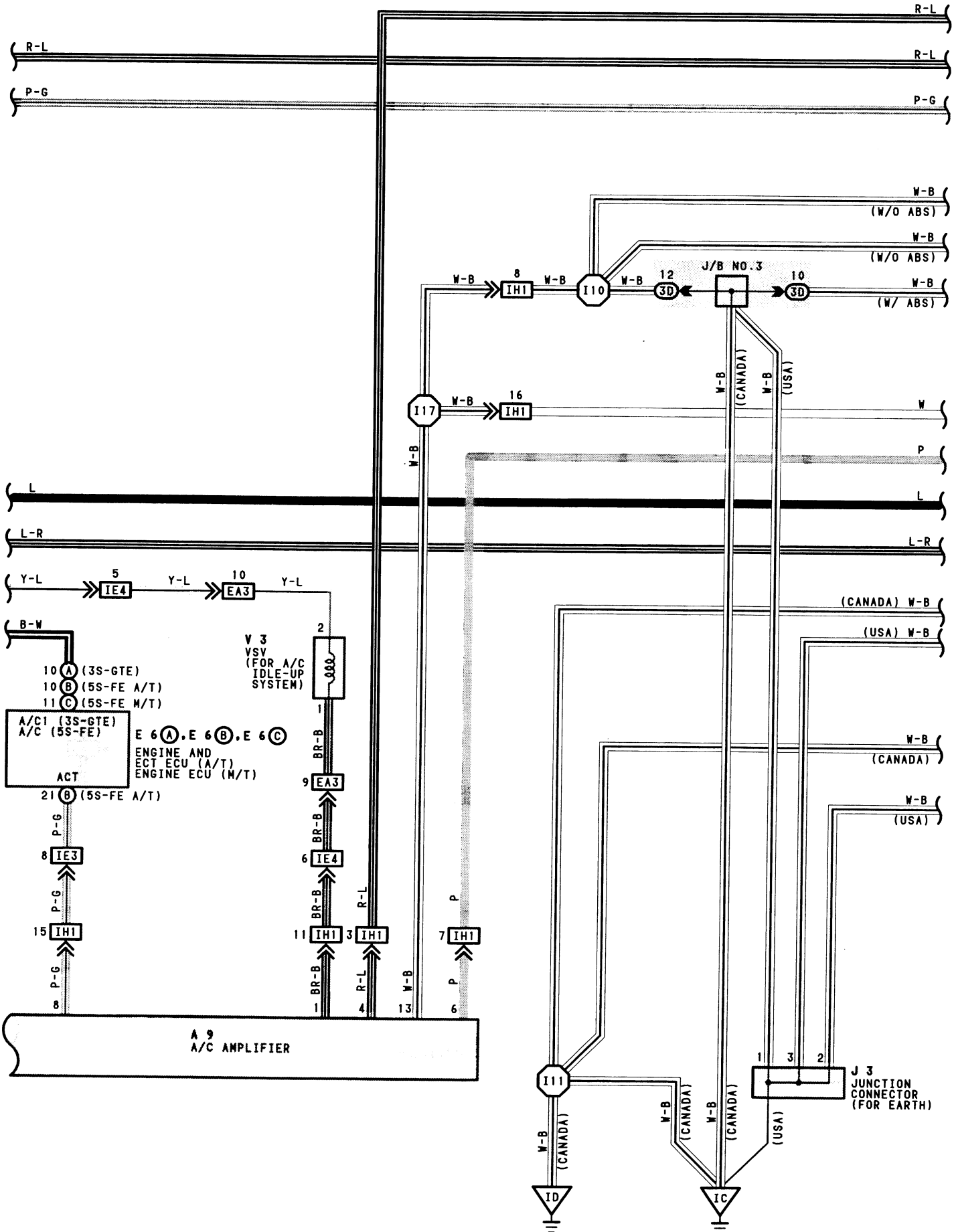
O 3 BLACK

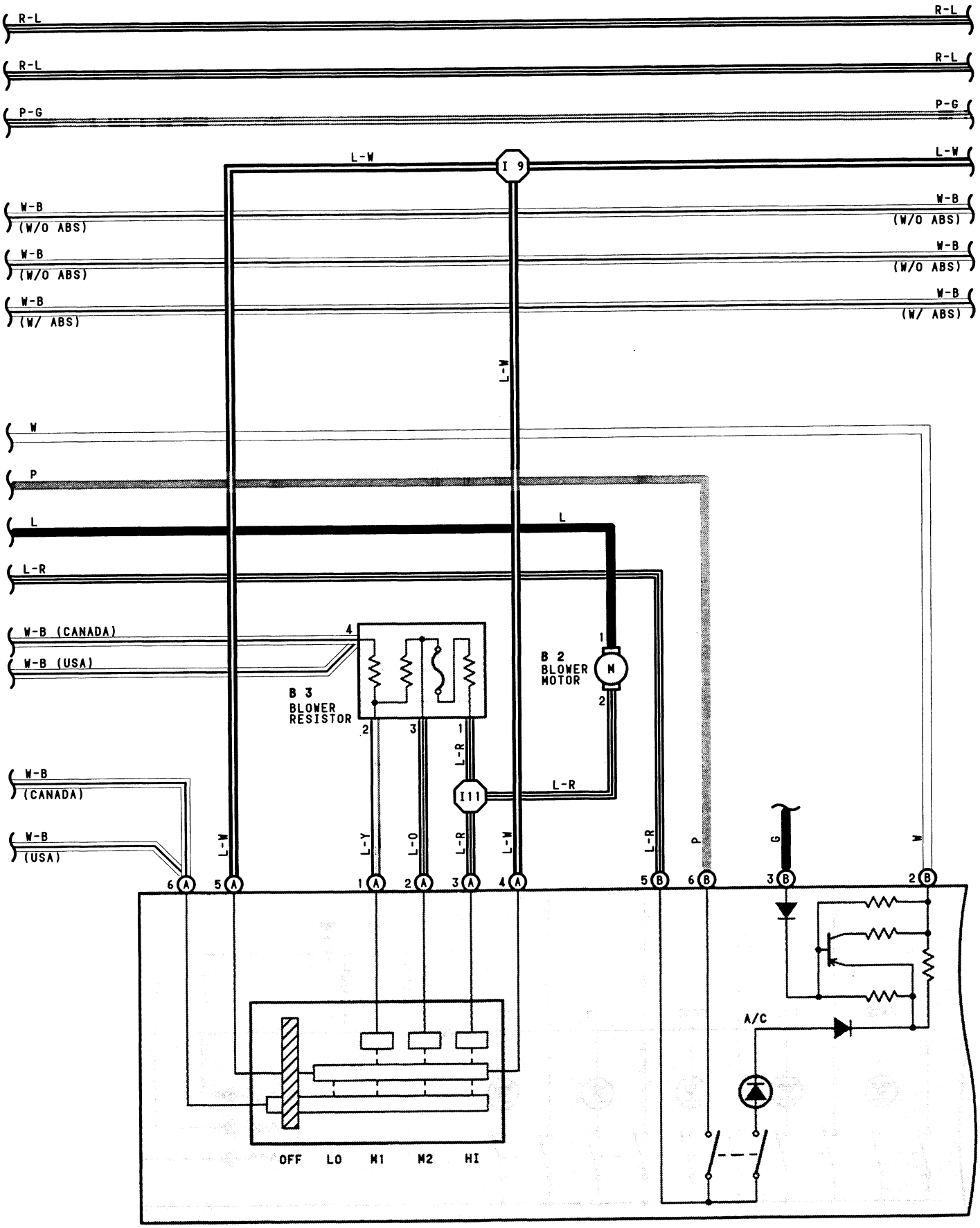
P 1 BLACK

W 1 BLUE


D 3
DIODE (FOR A/C SYSTEM)
I11
IGNITION SW
7.5A
AM2
FAN
MAIN
RELAY
30A CDS FAN
30A RDI FAN
FAN
RELAY
NO.1
FAN
RELAY
NO.2
FAN
RELAY
NO.3
40A HTR
120A ALT
A25
A/C
CONDENSER
FAN MOTOR
R 5
RADIATOR
FAN MOTOR
FL MAIN
2.0L
BATTERY
(USA)
(CANADA)
(W/ A/C)
B 3:W/ EHPS
B 4:W/O EHPS
BE


A26
A/C HIGH
PRESSURE SW
(W/ A/C)
A26
SHORT PIN
(W/O A/C)
HEATER
RELAY
10A
A/C
W 3
WATER TEMP. SW
(FOR RADIATOR
FAN)
A13
A/C DUAL
PRESSURE SW
A15
A/C MAGNET
CLUTCH
RELAY
A 3
A/C MAGNET
CLUTCH
A 9
A/C AMPLIFIER
J/B
NO.3
J 3
JUNCTION
CONNECTOR
(FOR EARTH)
FROM
IGNITER
A14
A/C THERMISTOR
(W/O A/C)
(W/ A/C)
(USA)
(CANADA)

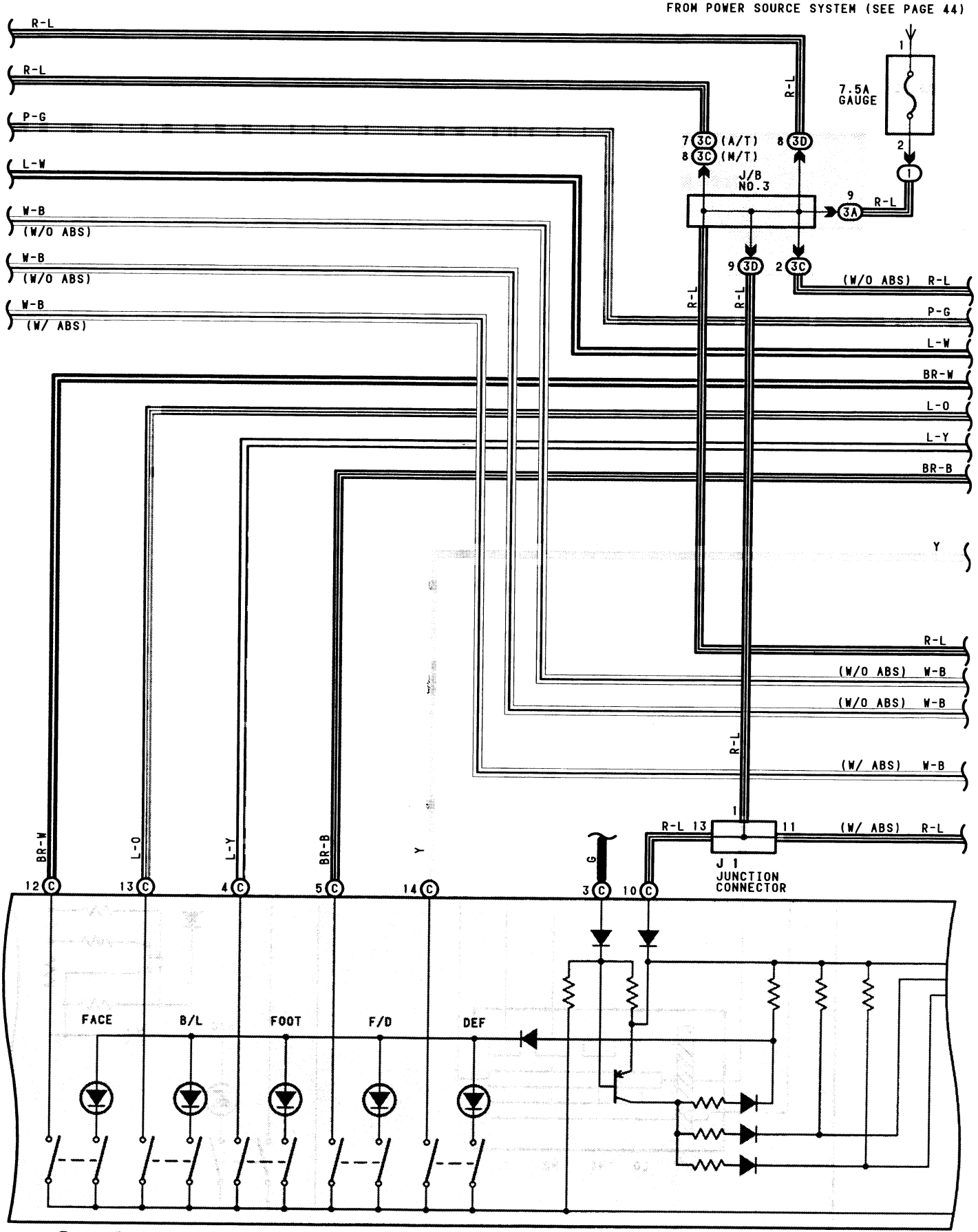

R-L
R-L
R-L
P-G
P-G
W-B
(W/O ABS)
W-B
(W/O ABS)
W-B
(W/ ABS)
J/B NO.3
W-B
8
IH1
W-B
I10
W-B
12
3D
10
3D
I17
W-B
16
IH1
W
P
L
L
L-R
L-R
Y-L
5
IE4
Y-L
10
EA3
Y-L
B-W
10 A (3S-GTE)
10 B (5S-FE A/T)
11 C (5S-FE M/T)
A/C1 (3S-GTE)
A/C (5S-FE)
E 6 A, E 6 B, E 6 C
ENGINE AND
ECT ECU (A/T)
ENGINE ECU (M/T)
ACT
21 B (5S-FE A/T)
V 3
VSV
(FOR A/C
IDLE-UP
SYSTEM)
2
1
BR-B
9 EA3
BR-B
6 IE4
BR-B
11 IH1
R-L
3 IH1
P
7 IH1
P-G
8 IE3
P-G
15 IH1
P-G
8
BR-B
1
R-L
4
W-B
13
P
6
A 9
A/C AMPLIFIER
(CANADA) W-B
(USA) W-B
W-B
(CANADA)
W-B
(USA)
I11
W-B
(CANADA)
W-B
(CANADA)
W-B
(CANADA)
(USA)
1
3
2
J 3
JUNCTION
CONNECTOR
(FOR EARTH)
ID
IC



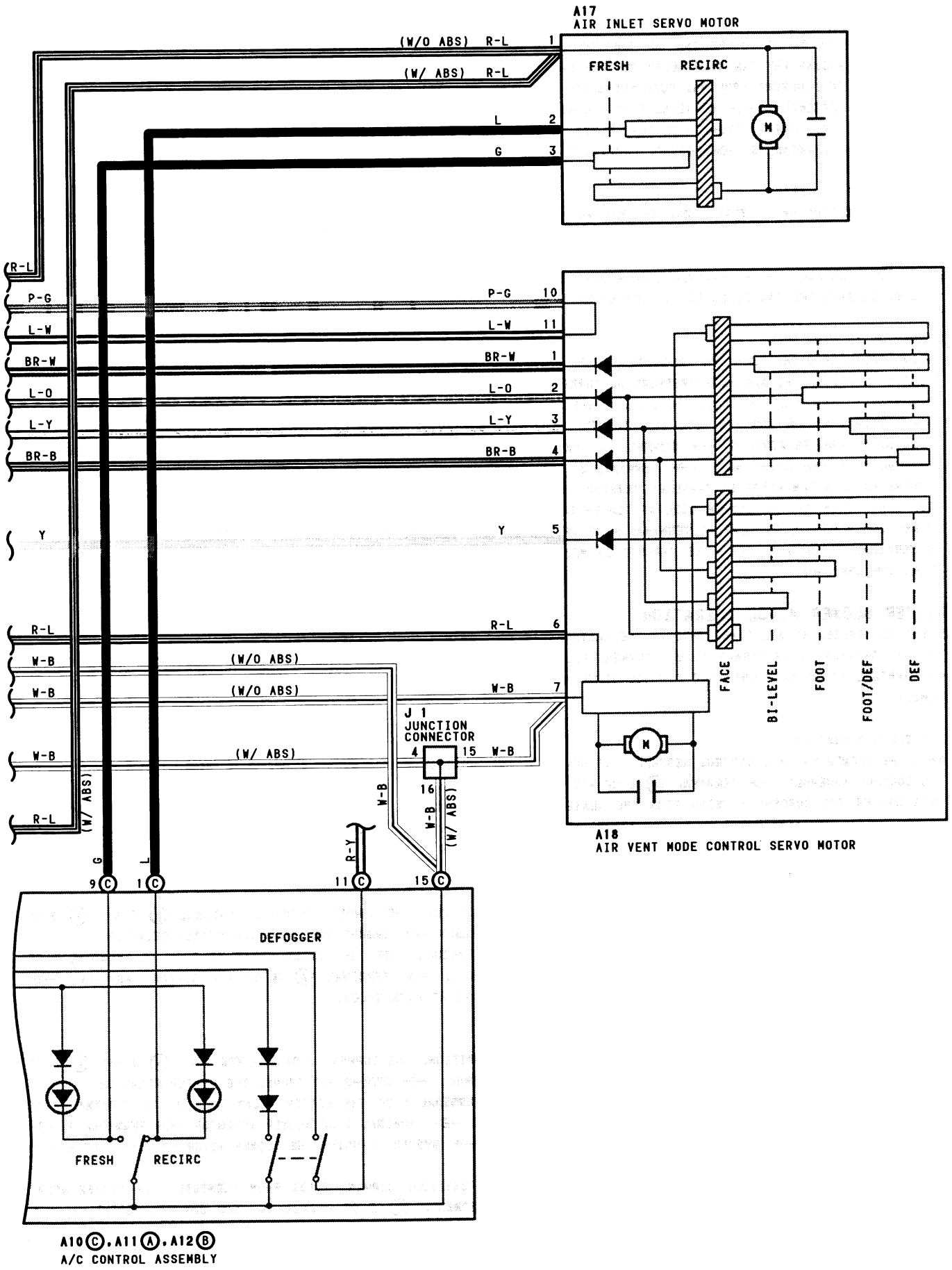
A10 (C), A11 (A), A12 (B)
A/C CONTROL ASSEMBLY

RADIATOR FAN AND AIR CONDITIONER

FROM POWER SOURCE SYSTEM (SEE PAGE 44)



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


A17
AIR INLET SERVO MOTOR
(W/O ABS) R-L 1
(W/ ABS) R-L
L 2
G 3
FRESH
RECIRC
M
R-L
P-G
L-W
BR-W
L-O
L-Y
BR-B
Y
R-L
W-B
W-B
W-B
R-L
P-G 10
L-W 11
BR-W 1
L-O 2
L-Y 3
BR-B 4
Y 5
R-L 6
W-B 7
(W/O ABS)
(W/O ABS)
(W/ ABS)
J 1
JUNCTION
CONNECTOR
4
15 W-B
16
W-B
W-B
(W/ ABS)
(W/ ABS)
R-Y
G
L
9 C
1 C
11 C
15 C
FACE
BI-LEVEL
FOOT
FOOT/DEF
DEF
M
A18
AIR VENT MODE CONTROL SERVO MOTOR
DEFOGGER
FRESH
RECIRC
A10 C, A11 A, A12 B
A/C CONTROL ASSEMBLY

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 PRESSURE SW → **TERMINAL 1** → **TERMINAL 10** OF A/C AMPLIFIER. AT THE SAME TIME, THE CURRENT FROM GAUGE FUSE FLOWS TO **TERMINAL 4** OF A/C AMPLIFIER → **TERMINAL 3** → **TERMINAL 2** OF FAN RELAY NO.3 → **TERMINAL 3** → **GROUND**, CAUSING 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 5** OF FAN RELAY NO.2 → **TERMINAL 1** → **TERMINAL 4** OF FAN RELAY NO.3 → **TERMINAL 1** → **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 14.3KG/CM² 1401KPA. 203PSI), THE A/C HIGH PRESSURE SW TURNES 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 7** OF FAN RELAY NO.2 → **TERMINAL 3** → **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) TURNES OFF A SIGNAL IS SENT TO **TERMINAL 9** OF A/C AMPLIFIER. BECAUSE CURRENT FLOW FROM **TERMINAL 10** OF A/C AMPLIFIER TO **TERMINAL 13** IS SHUT OFF, THE CIRCUIT BETWEEN THE A/C HIGH PRESSURE SW AND GROUND IS DEACTIVATED, SO THE SAME OPERATION CONTINUES.

2.HEATER BLOWER MOTOR OPERATION

CURRENT IS APPLIED AT ALL TIMES THROUGH THE HEATER FUSE TO **TERMINAL 1** OF HEATER RELAY.
WHEN THE IGNITION SW IS TURNED TO ON, CURRENT FLOWS THROUGH GAUGE FUSE TO **TERMINAL 5** OF HEATER RELAY → **TERMINAL 3** → **TERMINAL 10** OF AIR VENT MODE CONTROL SERVO MOTOR → **TERMINAL 11** → **TERMINAL** Ⓐ **4** AND Ⓐ **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** Ⓐ **4** AND Ⓐ **5** OF A/C CONTROL ASSEMBLY → **TERMINAL** Ⓐ **6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNES THE HEATER RELAY ON.
  THIS CAUSES THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 1** OF THE HEATER RELAY TO FLOW TO **TERMINAL 2** 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** Ⓐ **4** AND Ⓐ **5** OF A/C CONTROL ASSEMBLY → **TERMINAL** Ⓐ **6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNS THE HEATER RELAY ON.
  THIS CAUSES THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 1** OF THE HEATER RELAY TO FLOW TO **TERMINAL 2** OF HEATER RELAY → **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 2** → **TERMINAL** Ⓐ **3** OF A/C CONTROL ASSEMBLY → **TERMINAL** Ⓐ **6** → **GROUND**, CAUSING THE BLOWER MOTOR TO ROTATE AT HIGH SPEED.

* MIDIUM SPEED OPERATION (OPERATION AT M1, M2)
  WHEN THE BLOWER SW (A/C CONTROL ASSEMBLY) IS MOVED TO M1 POSITION, THE CURRENT FLOWS TO **TERMINAL** Ⓐ **4** AND Ⓐ **5** OF A/C CONTROL ASSEMBLY → **TERMINAL** Ⓐ **6** OF A/C CONTROL ASSEMBLY → **GROUND** AND TURNED THE HEATER RELAY ON.
  THIS CAUSES THE CURRENT FLOWING FROM THE HEATER FUSE TO **TERMINAL 1** OF THE HEATER RELAY TO FLOW TO **TERMINAL 2** OF HEATER RELAY → **TERMINAL 1** OF BLOWER MOTOR → **TERMINAL 2** → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 2** → **TERMINAL** Ⓐ **1** OF A/C CONTROL ASSEMBLY → **TERMINAL** Ⓐ **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 1** OF HEATER RELAY → **TERMINAL 1** OF BLOWER RESISTOR → **TERMINAL 3** → **TERMINAL** Ⓐ **2** OF BLOWER SW (A/C CONTROL ASSEMBLY) → **TERMINAL** Ⓐ **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 1** OF AIR INLET SERVO MOTOR → **TERMINAL 3** → **TERMINAL Ⓒ 9** OF A/C CONTROL ASSEMBLY → **TERMINAL Ⓒ 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 1** OF AIR INLET SERVO MOTOR → **TERMINAL 2** → **TERMINAL Ⓒ 1** OF A/C CONTROL ASSEMBLY → **TERMINAL Ⓒ 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 Ⓒ 14** OF A/C CONTROL ASSEMBLY → **TERMINAL Ⓒ 15** → **GROUND**.
AS A RESULT, THE SERVO MOTOR OPERATES UNIT THE DAMPER REACHES **DEF** POSITION.

FOOT/DEF POSITION: THE CURRENT FLOWS FROM **TERMINAL 4** OF SERVO MOTOR TO **TERMINAL Ⓒ 5** OF A/C CONTROL ASSEMBLY.
FOOT POSITION: THE CURRENT FLOWS FROM **TERMINAL 3** OF SERVO MOTOR TO **TERMINAL Ⓒ 4** OF A/C CONTROL ASSEMBLY.
BI-LEVEL POSITION: THE CURRENT FLOWS FROM **TERMINAL 2** OF SERVO MOTOR TO **TERMINAL Ⓒ 13** OF CONTROL ASSEMBLY.

5.AIR CONDITIONER OPERATION

THE A/C AMPLIFIER RECEIVES VARIOUS SIGNALS, THE ENGINE RPM SIGNAL FROM THE IGNITER OUTLET TEMPARATURE SIGNAL FROM THE A/C THERMISTOR AND CURRENT TEMPARATURE 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 Ⓑ 5** OF A/C CONTROL ASSEMBLY → **TERMINAL Ⓑ 6** → **TERMINAL 6** OF A/C AMPLIFIER.
AT THIS TIME, THE A/C AMPLIFIER IS ACTIVATED AND CURRENT APPLIED FROM A/C FUSE TO **TERMINAL 2** OF A/C MAGNET CLUTCH RELAY FLOWS FROM **TERMINAL 3** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 11** OF A/C AMPLIFIER → **TERMINAL 13** → **GROUND**.
THIS CAUSES THE A/C MAGNET CLUTCH RELAY TO TURN ON, SO CURRENT APPLIED TO **TERMINAL 1** OF A/C MAGNET CLUTCH RELAY FLOWS FROM **TERMINAL 4** OF A/C MAGNET CLUTCH RELAY → **TERMINAL 1** OF A/C MAGNET CLUTCH → **GROUND**, CAUSING THE A/CCOMPRESSORTO 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 1** OF A/C AMPLIFIER → **TERMINAL 13** → **GROUND**, AND TURNS ON THE VSV TO AVOID LOWERING THE ENGINE RPM DURING AIR CONDITIONER OPERATION.
WHEN ANY OF THE FOLLOWING SIGNALS ARE INPUT TO THE A/C AMPLIFIER, THE AMPLIFIER OPERATES TO TURN OFF THE AIR CONDITIONER.

* ENGINE HIGH RPM SIGNAL.
* COOLANT HIGH TEMP. SIGNAL IS HIGH.
* A SIGNAL THAT THE TEMPERATURE AT THE AIR OUTLET IS LOW.
* A SIGNAL THAT THE REFRIGERANT PRESSURE IS ABNORMALLY HIGH OR LOW.

SERVICE HINTS

A14 A/C THERMISTOR

1-2: APPROX. 4852Ω AT 0°C (32°F)
APPROX. 2341Ω AT 15°C (59°F)
APPROX. 1500Ω AT 25°C (77°F)

A13 A/C DUAL PRESSURE SW

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

W 3 WATER TEMP. SW (FOR RADIATOR FAN)

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

B 3 BLOWER RESISTOR

1-3: APPROX. 0.45Ω
3-2: APPROX. 0.78Ω
2-4: APPROX. 0.91Ω

A 9 A/C AMPLIFIER

4-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON
13-GROUND: ALWAYS CONTINUITY
15-9 : CONTINUITY WITH WATER TEMP. SW CLOSED [BELOW APPROX. 83°C (181.4°F)]
18-GROUND: APPROX. 12VOLTS WITH ENGINE RUNNING
6-GROUND: APPROX. 12VOLTS WITH IGNITION SW ON AND A/C SW (A/C CONTROL ASSEMBLY) ON

A17 AIR INLET SERVO MOTOR

1-2: CLOSED WITH AIR INLET DAMPER AT **RECIRC** POSITION
1-3: CLOSED WITH AIR INLET DAMPER AT **FRESH** POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 3	20(5S-FE), 21(3S-GTE)	A17	22	E 6 B	20(5S-FE)
A 9	22	A18	22	E 6 C	20(5S-FE)
A10 C	22	A25	23	I11	22
A11 A	22	A26	23	J 1	22
A12 B	22	B 2	22	J 3	22
A13	22	B 3	22	R 5	23
A14	22	D 3	22	V 3	20(5S-FE), 21(3S-GTE)
A15	22	E 6 A	21(3S-GTE)	W 3	23

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
5	17	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	19	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	24(5S-FE) 26(3S-GTE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IE3		
IE4		
IH1	28	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
II4		

▽ : GROUND POINTS

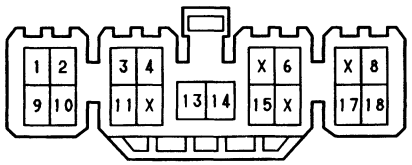
CODE	SEE PAGE	GROUND POINTS LOCATION
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BE	32	FRONT RIGHT FENDER

: SPLICE POINTS

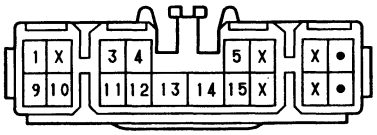
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	24(5S-FE)	ENGINE ROOM MAIN WIRE	I11	30	COWL WIRE
	26(3S-GTE)		I17	30	A/C SUB WIRE
I 9	30	COWL WIRE	B 3	32	LUGGAGE ROOM WIRE
I10			B 4		

A 3 GRAY

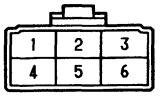
A 9



A10 Ⓒ



A11 Ⓐ



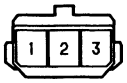
A12 Ⓑ

A13 BLUE

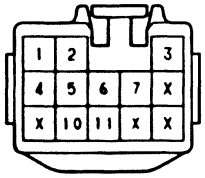
A14

A15

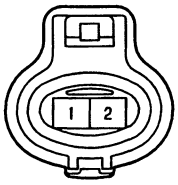
A17



A18

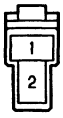


A25 GRAY



A26

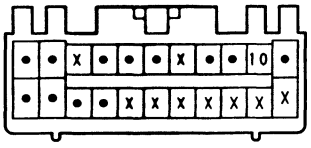
B 2 BLACK



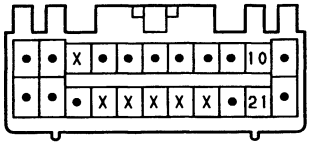
B 3 BLACK

D 3 BLACK

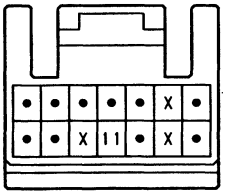
E 6 Ⓐ DARK GRAY



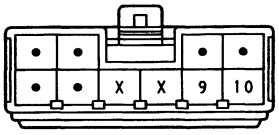
E 6 Ⓑ DARK GRAY



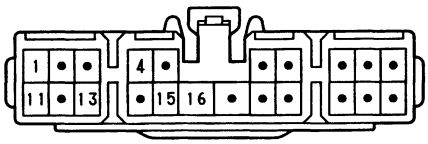
E 6 Ⓒ DARK GRAY



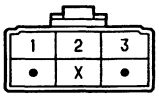
I11 BLACK



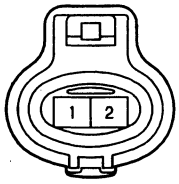
J 1



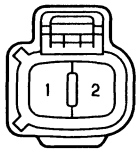
J 3



R 5 GRAY



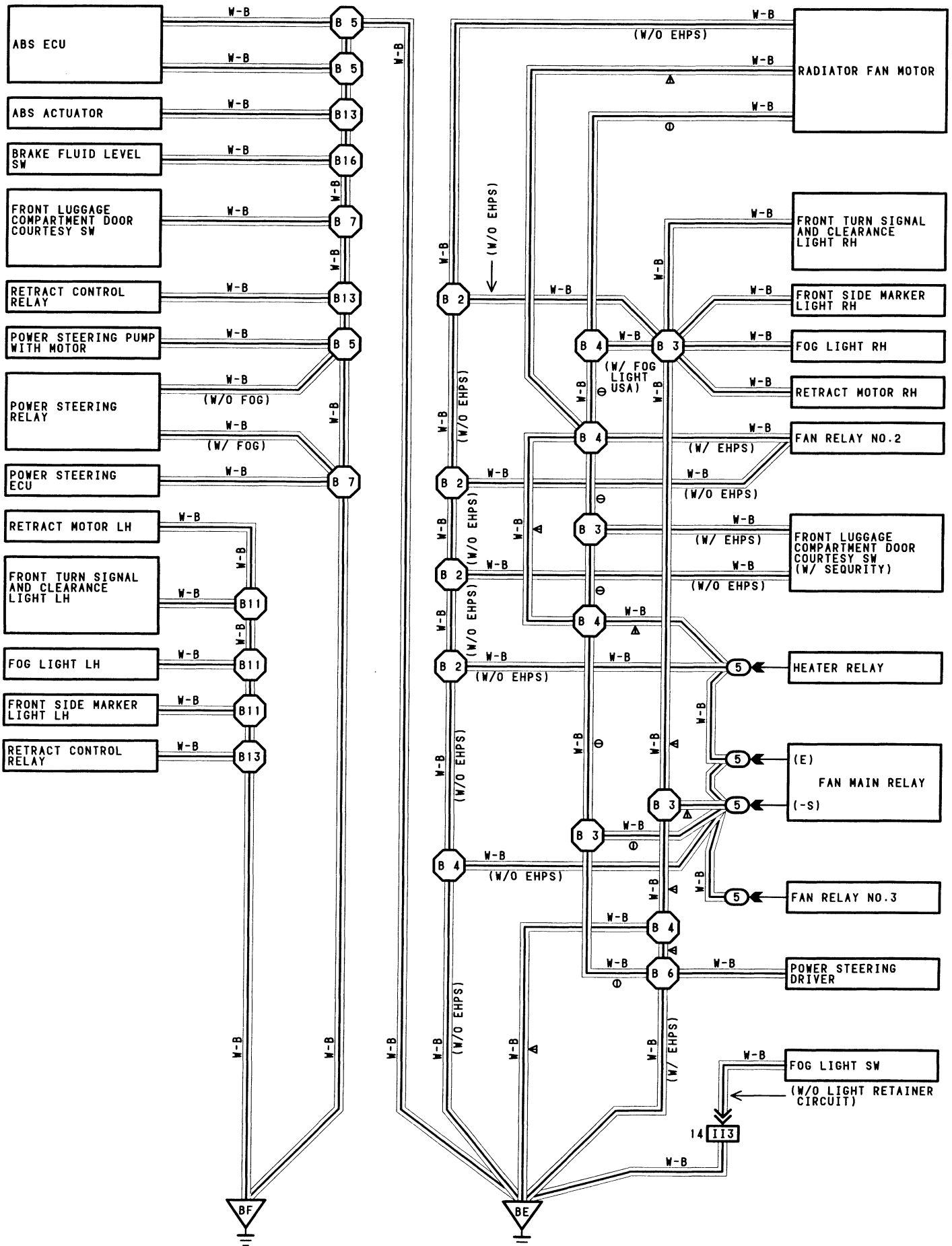
V 3 BLACK

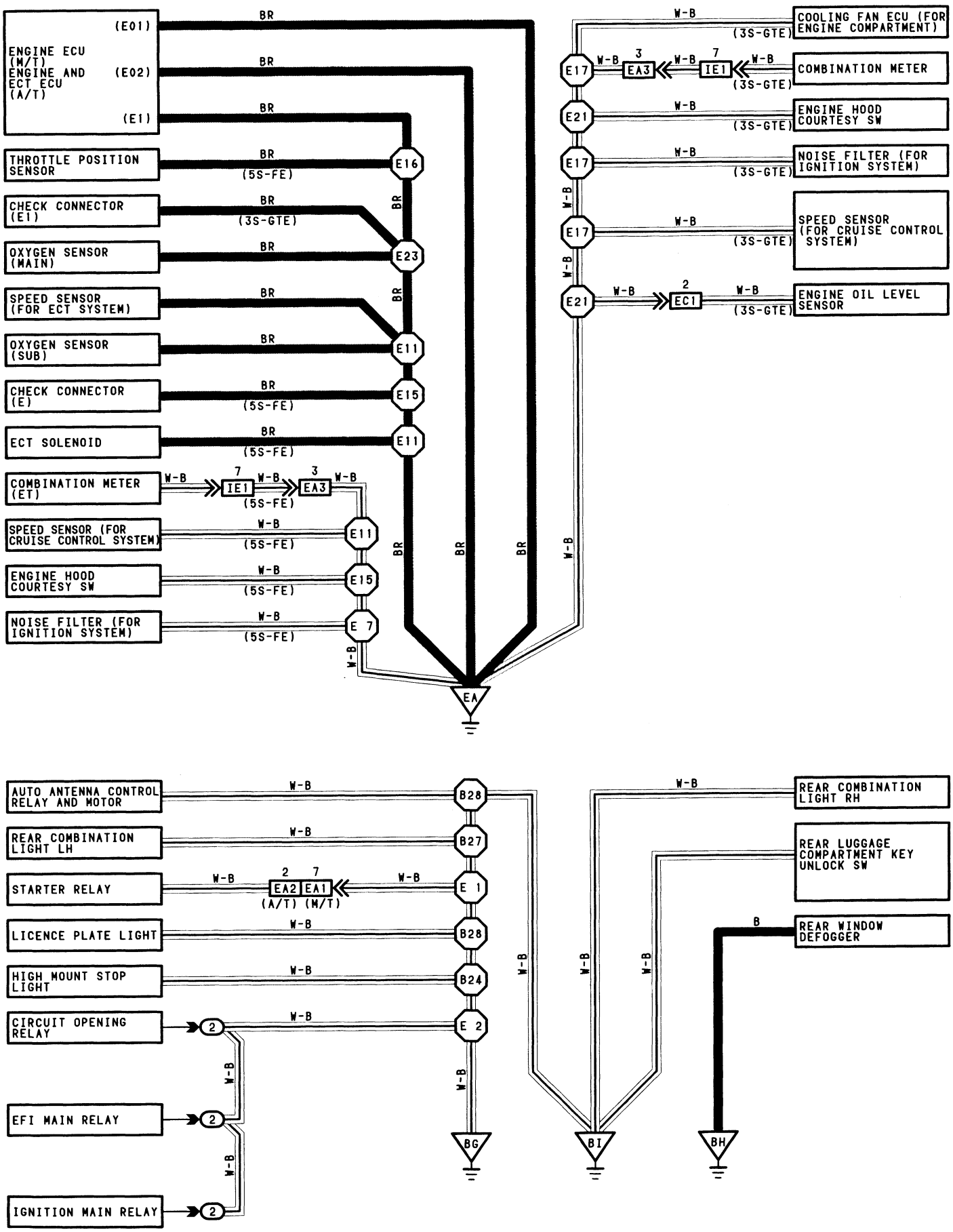


W 3 GRAY

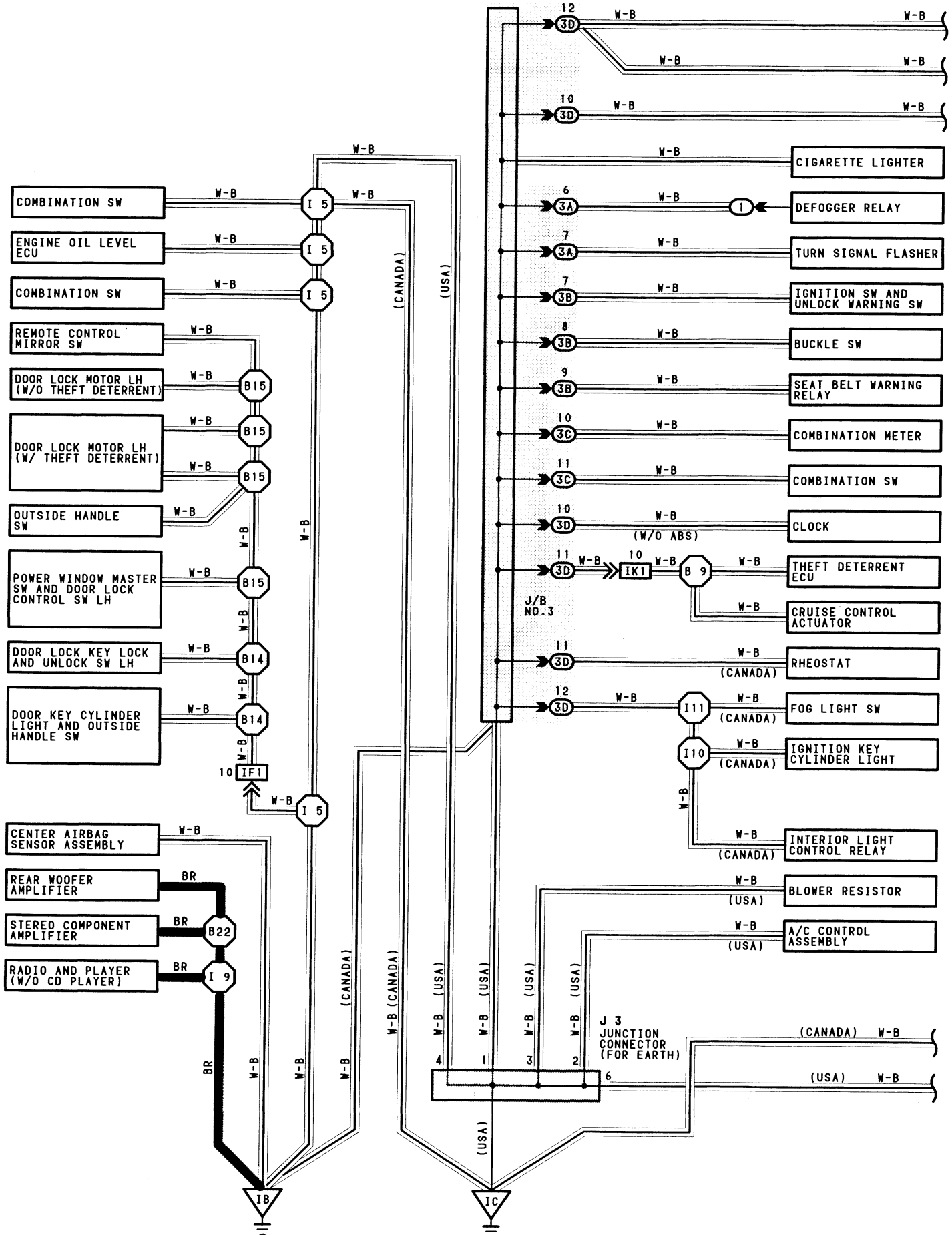
J GROUND POINT

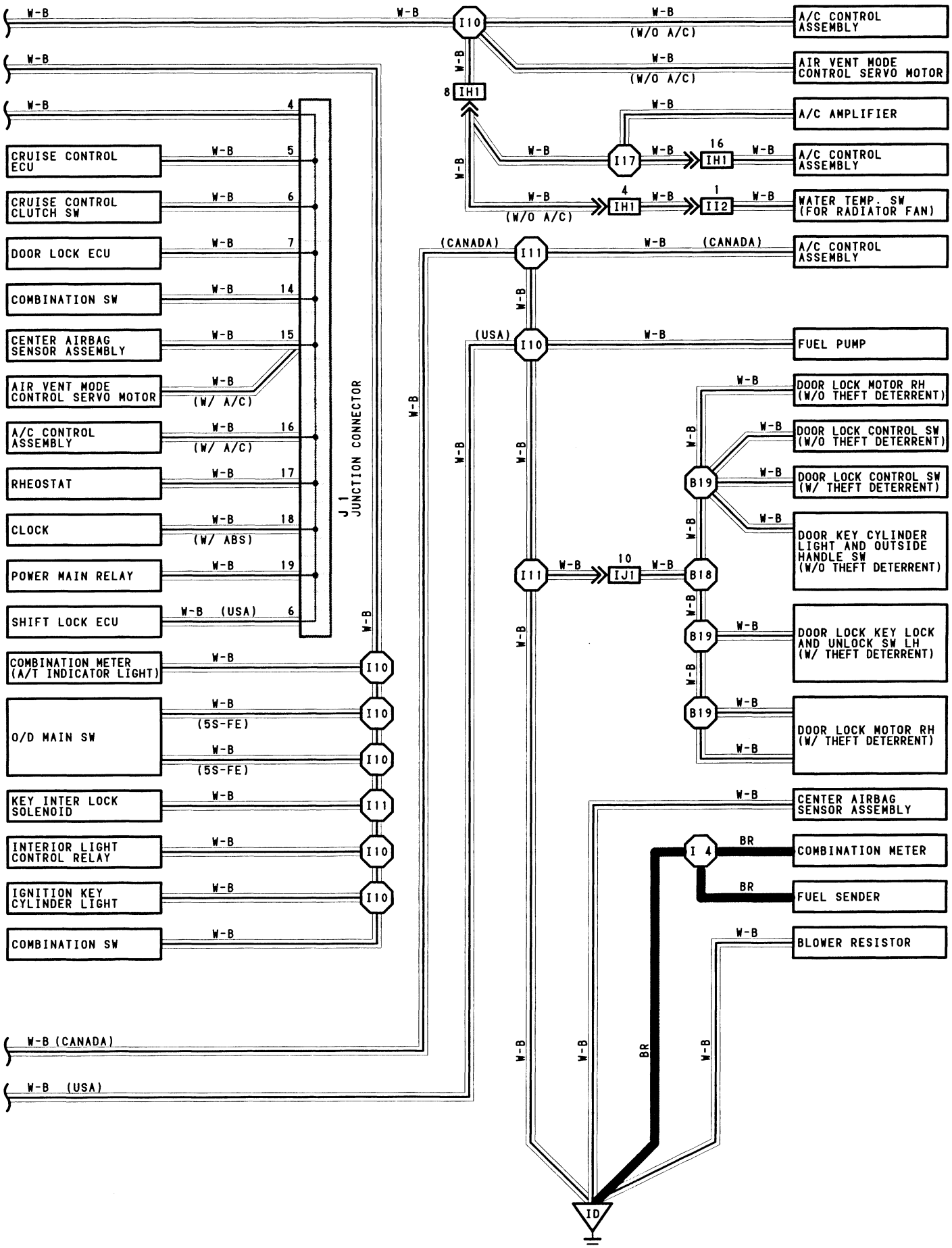
Φ W/ EHPS W/ FOG LIGHT USA
Δ W/ EHPS EX. W/ FOG LIGHT USA




ENGINE ECU (M/T) ENGINE AND ECT ECU (A/T)
(E01)
(E02)
(E1)
BR
THROTTLE POSITION SENSOR
CHECK CONNECTOR (E1)
OXYGEN SENSOR (MAIN)
SPEED SENSOR (FOR ECT SYSTEM)
OXYGEN SENSOR (SUB)
CHECK CONNECTOR (E)
ECT SOLENOID
COMBINATION METER (ET)
SPEED SENSOR (FOR CRUISE CONTROL SYSTEM)
ENGINE HOOD COURTESY SW
NOISE FILTER (FOR IGNITION SYSTEM)
(5S-FE)
(3S-GTE)
E16
E23
E11
E15
E 7
IE1
EA3
W-B
EA
COOLING FAN ECU (FOR ENGINE COMPARTMENT)
COMBINATION METER
ENGINE HOOD COURTESY SW
NOISE FILTER (FOR IGNITION SYSTEM)
SPEED SENSOR (FOR CRUISE CONTROL SYSTEM)
ENGINE OIL LEVEL SENSOR
E17
E21
EC1
AUTO ANTENNA CONTROL RELAY AND MOTOR
REAR COMBINATION LIGHT LH
STARTER RELAY
LICENCE PLATE LIGHT
HIGH MOUNT STOP LIGHT
CIRCUIT OPENING RELAY
EFI MAIN RELAY
IGNITION MAIN RELAY
EA2
EA1
(A/T)
(M/T)
E 1
E 2
B28
B27
B24
BG
BI
BH
REAR COMBINATION LIGHT RH
REAR LUGGAGE COMPARTMENT KEY UNLOCK SW
REAR WINDOW DEFOGGER
B

J GROUND POINT




W-B
I10
A/C CONTROL ASSEMBLY
(W/O A/C)
AIR VENT MODE CONTROL SERVO MOTOR
8 IH1
A/C AMPLIFIER
I17
16 IH1
4 IH1
1 I12
WATER TEMP. SW (FOR RADIATOR FAN)
(CANADA)
I11
(USA)
FUEL PUMP
J1 JUNCTION CONNECTOR
CRUISE CONTROL ECU
CRUISE CONTROL CLUTCH SW
DOOR LOCK ECU
COMBINATION SW
CENTER AIRBAG SENSOR ASSEMBLY
(W/ A/C)
RHEOSTAT
CLOCK
(W/ ABS)
POWER MAIN RELAY
SHIFT LOCK ECU
(USA)
COMBINATION METER (A/T INDICATOR LIGHT)
O/D MAIN SW
(5S-FE)
KEY INTER LOCK SOLENOID
INTERIOR LIGHT CONTROL RELAY
IGNITION KEY CYLINDER LIGHT
DOOR LOCK MOTOR RH (W/O THEFT DETERRENT)
DOOR LOCK CONTROL SW (W/O THEFT DETERRENT)
B19
DOOR LOCK CONTROL SW (W/ THEFT DETERRENT)
DOOR KEY CYLINDER LIGHT AND OUTSIDE HANDLE SW (W/O THEFT DETERRENT)
10 IJ1
B18
DOOR LOCK KEY LOCK AND UNLOCK SW LH (W/ THEFT DETERRENT)
DOOR LOCK MOTOR RH (W/ THEFT DETERRENT)
I 4
BR
COMBINATION METER
FUEL SENDER
BLOWER RESISTOR
ID

J ⏚ GROUND POINT

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 1	22	J 3	22		

⬭ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	18	R/B NO.1 (LEFT KICK PANEL)
2	18	R/B NO.2 (ENGINE COMPARTMENT LEFT)
5	17	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	19	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	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (REAR LUGGAGE COMPARTMENT LEFT)
	26(3S-GTE)	
EA2	24(5S-FE)	
EA3	24(5S-FE)	ENGINE WIRE AND ENGINE ROOM MAIN WIRE (R/B NO.2 INNER)
	26(3S-GTE)	
EC1	26(3S-GTE)	ENGINE NO.4 WIRE AND ENGINE WIRE (NEAR THE INTAKE MANIFOLD)
IE1	28	ENGINE ROOM MAIN WIRE AND COWL WIRE (LEFT KICK PANEL)
IF1	28	COWL WIRE AND FRONT DOOR LH WIRE (LEFT KICK PANEL)
IH1	28	COWL WIRE AND A/C SUB WIRE (INSTRUMENT PANEL RIGHT)
II2	30	LUGGAGE ROOM WIRE AND COWL WIRE (RIGHT KICK PANEL)
II3	30	COWL WIRE AND LUGGAGE ROOM WIRE (RIGHT KICK PANEL)
IJ1	30	COWL WIRE AND FRONT DOOR RH WIRE (RIGHT KICK PANEL)
IK1	30	FLOOR WIRE AND COWL WIRE (RIGHT KICK PANEL)

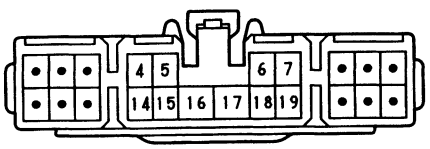
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	24(5S-FE)	INTAKE MANIFOLD
	26(3S-GTE)	
IB	28	LEFT KICK PANEL
IC	28	INSTRUMENT PANEL BRACE LH
ID	28	RIGHT KICK PANEL
BE	32	FRONT RIGHT FENDER
BF	32	FRONT LEFT FENDER
BG	32	UNDER THE LEFT CENTER PILLAR
BH	32	UNDER THE RIGHT REAR PILLAR
BI	32	BACK PANEL CENTER

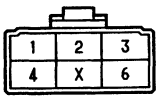
⯃ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	24(5S-FE)	ENGINE ROOM MAIN WIRE	B 3	32	LUGGAGE ROOM WIRE
	26(3S-GTE)		B 4		
E 2	24(5S-FE)		B 5		
	26(3S-GTE)		B 6		
E 7	24(5S-FE)	ENGINE WIRE	B 7		
E11			B 9	32	FLOOR WIRE
E15			B11	32	LUGGAGE ROOM WIRE
E16			B13		
E17	26(3S-GTE)		B14	32	FRONT DOOR RH WIRE
E21			B15		
E23			B16	32	LUGGAGE ROOM WIRE
I 4	30	COWL WIRE	B18	32	FRONT DOOR LH WIRE
I 5			B19		
I 9			B22	32	COWL WIRE
I10			B24	32	ENGINE ROOM MAIN WIRE
I11			B27		
I17	30	A/C SUB WIRE	B28		
B 2	32	LUGGAGE ROOM WIRE			

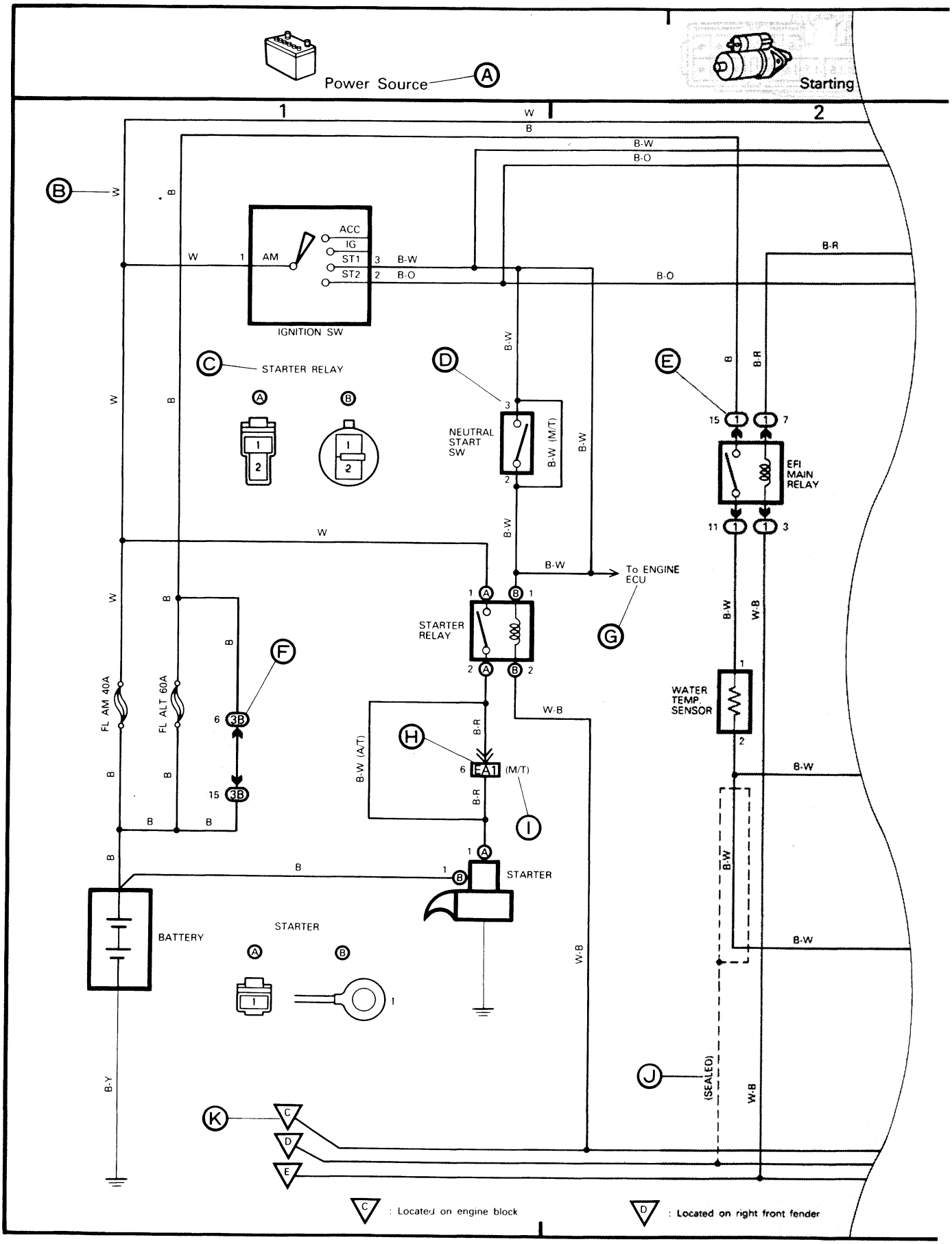
J 1



J 3



HOW TO READ THIS SECTION



Ⓐ: System Title

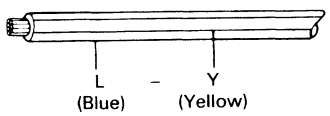
Ⓑ: Indicates the wiring color.

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

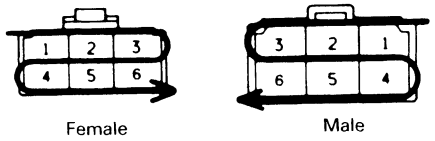


Ⓒ: Indicates the connector to be connected to a part (the numeral indicates the pin No.)

Ⓓ: 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 oder from upper right to lower left



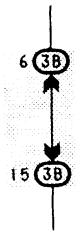
The numbering system for the overall wiring diagram is the same as above.

Ⓔ: 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.

Ⓕ: 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:

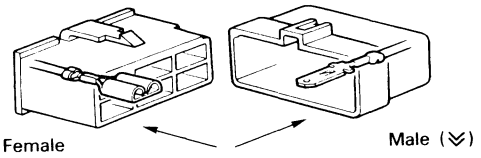


3B indicates that it is inside Junction Block No. 3.

Ⓖ: Indicates related system.

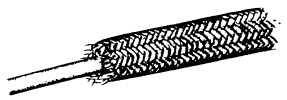
Ⓗ: Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (≫). Outside numerals are pin numbers.

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



Ⓘ: ( ) are used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.

Ⓙ: Indicates a sealed wiring harness.



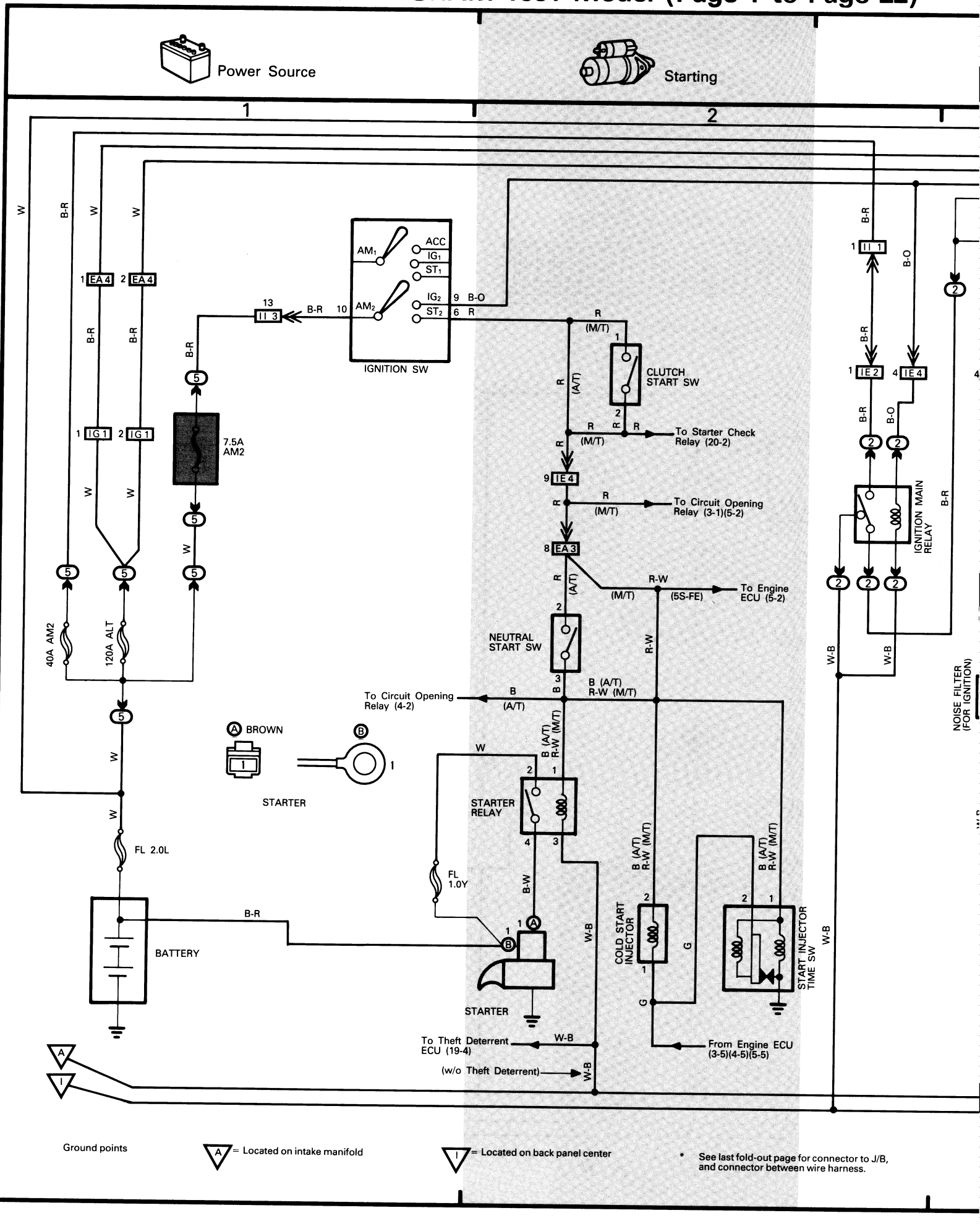
Ⓚ: Indicates a ground point.

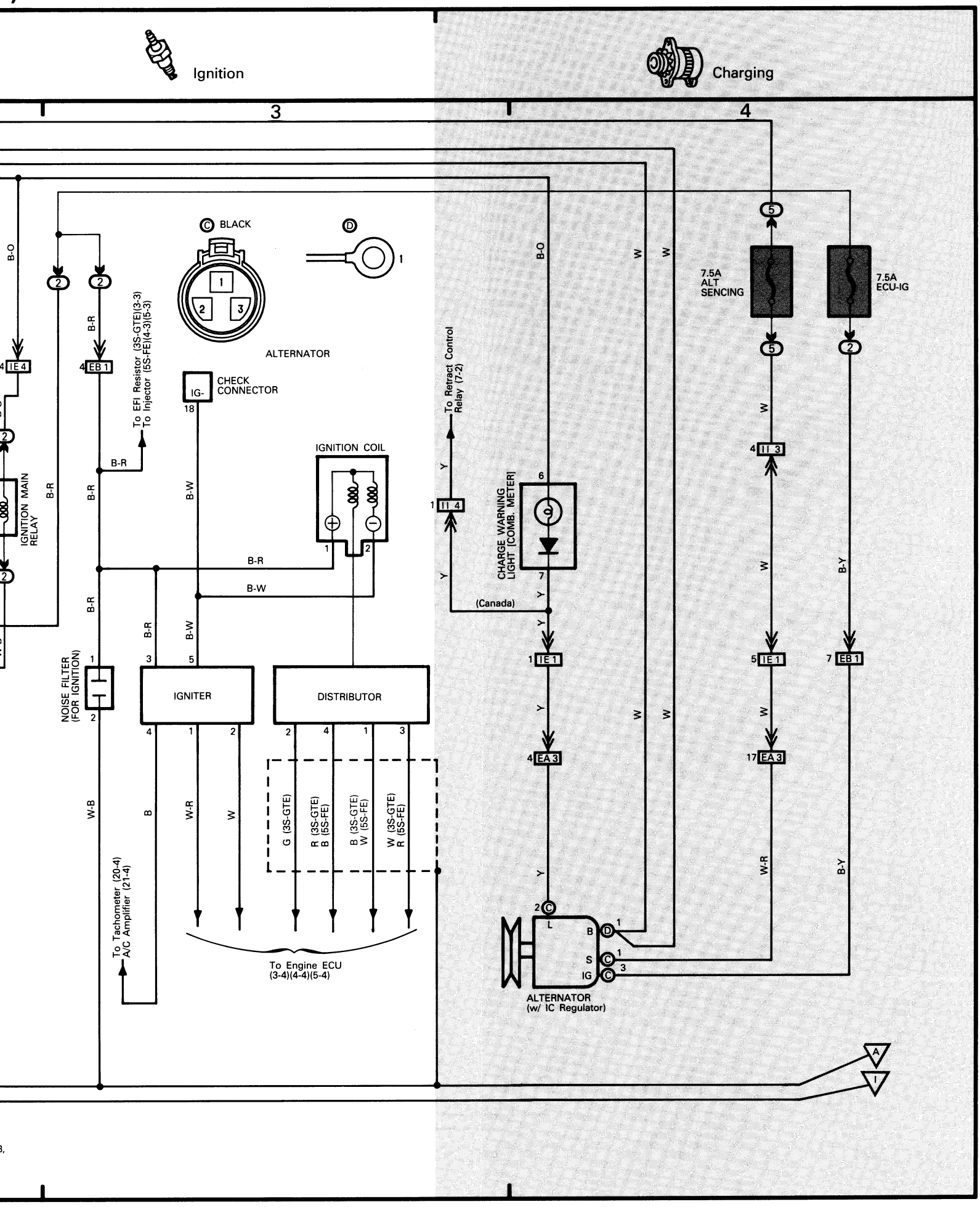
SYSTEM INDEX

MR2

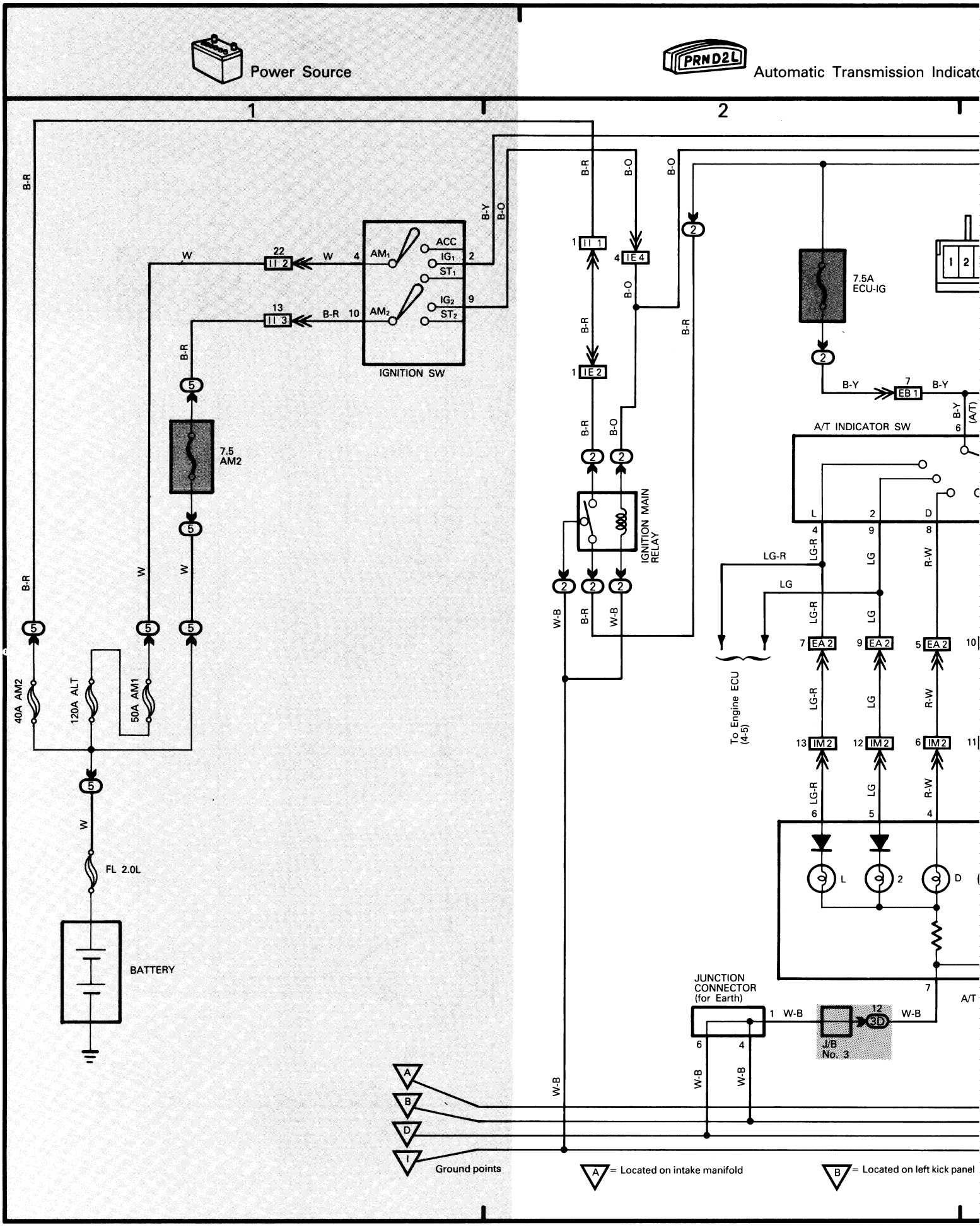
(Page 1 to Page 21)

MR2 ELECTRICAL WIRING DIAGRAM-1991 Model (Page 1 to Page 22)




Ignition
Charging
3
4
C BLACK
D
1
2
3
ALTERNATOR
CHECK CONNECTOR
IG-
18
To EFI Resistor (3S-GTE)(3-3)
To Injector (5S-FE)(4-3)(5-3)
IGNITION COIL
IGNITION MAIN RELAY
NOISE FILTER (FOR IGNITION)
IGNITER
DISTRIBUTOR
To Tachometer (20-4)
A/C Amplifier (21-4)
To Engine ECU
(3-4)(4-4)(5-4)
G (3S-GTE)
R (3S-GTE)
B (5S-FE)
B (3S-GTE)
W (5S-FE)
W (3S-GTE)
R (5S-FE)
To Retract Control Relay (7-2)
CHARGE WARNING LIGHT [COMB. METER]
(Canada)
7.5A ALT SENCING
7.5A ECU-IG
ALTERNATOR (w/ IC Regulator)
L
B
S
IG
B-O
B-R
B-W
W
Y
W-B
B
W-R
B-Y

2 MR2 (Cont'd)


Power Source
PRND2L
Automatic Transmission Indicat
1
2
IGNITION SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
7.5
AM2
7.5A
ECU-IG
IGNITION MAIN
RELAY
A/T INDICATOR SW
To Engine ECU
(4-5)
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
JUNCTION
CONNECTOR
(for Earth)
J/B
No. 3
Ground points
A = Located on intake manifold
B = Located on left kick panel

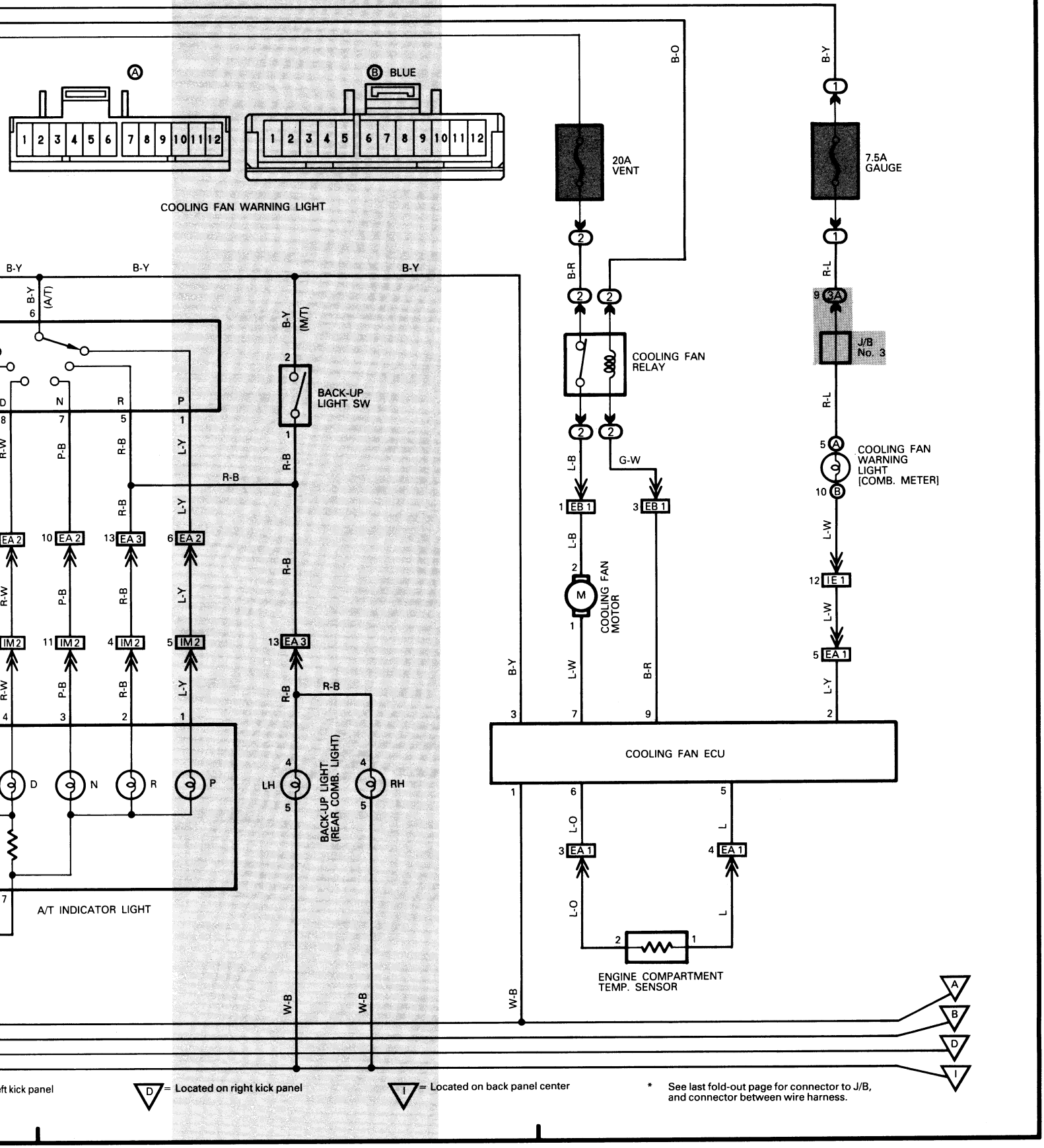
Indicator

Back-up Lights

Engine Compartment Cooling Fan

3

4



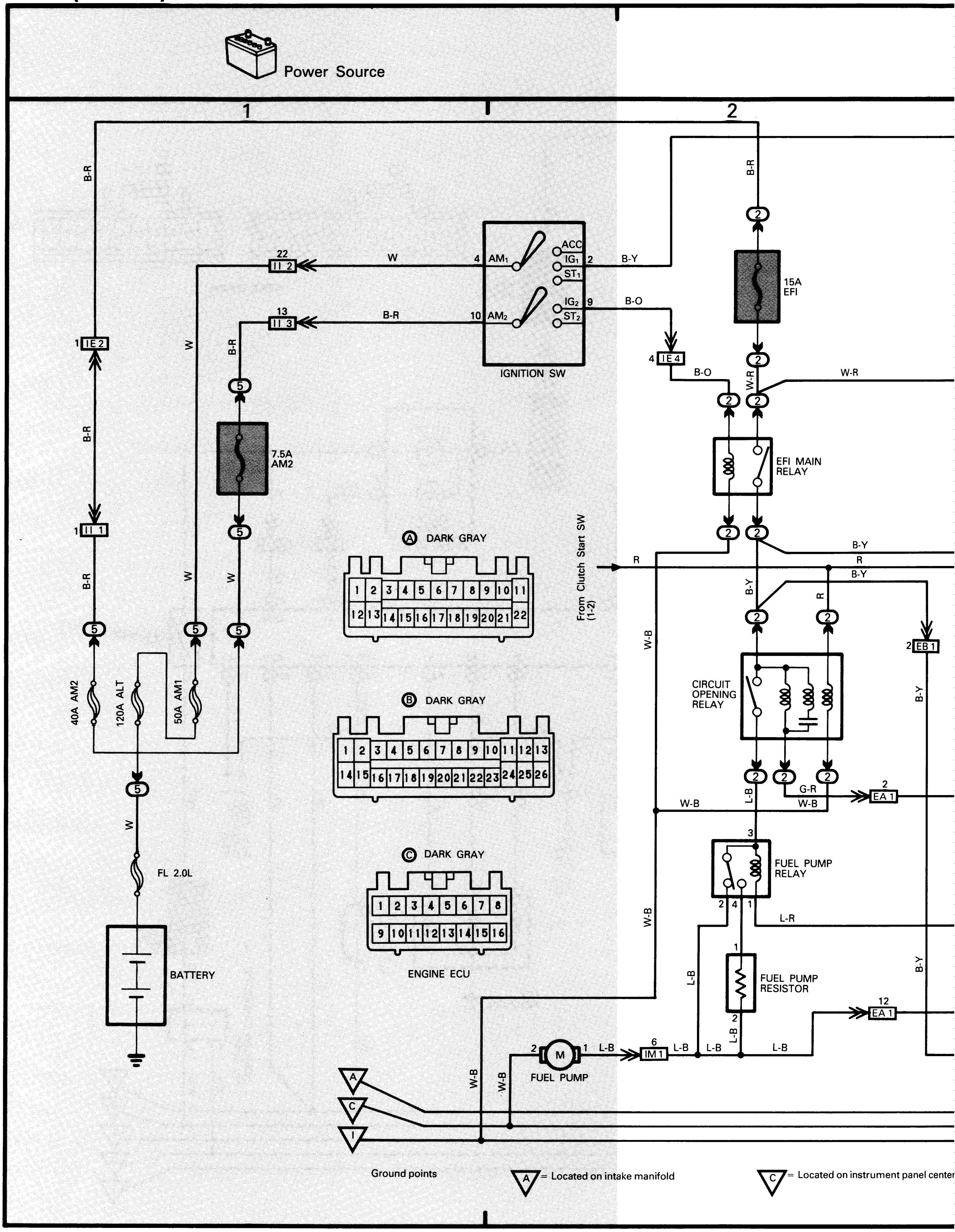
ft kick panel

D = Located on right kick panel

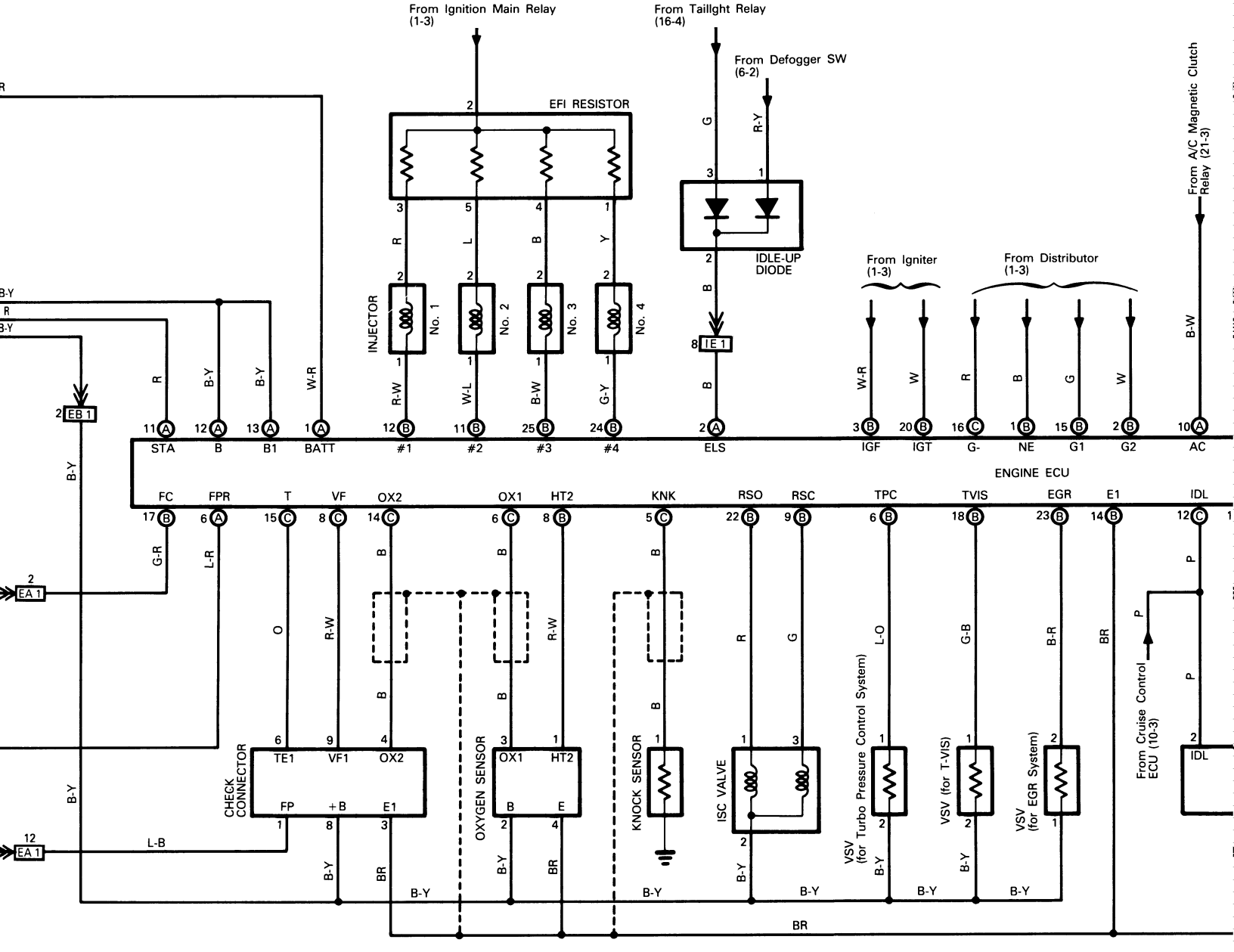
I = Located on back panel center

* See last fold-out page for connector to J/B, and connector between wire harness.

MR2 (Cont'd)



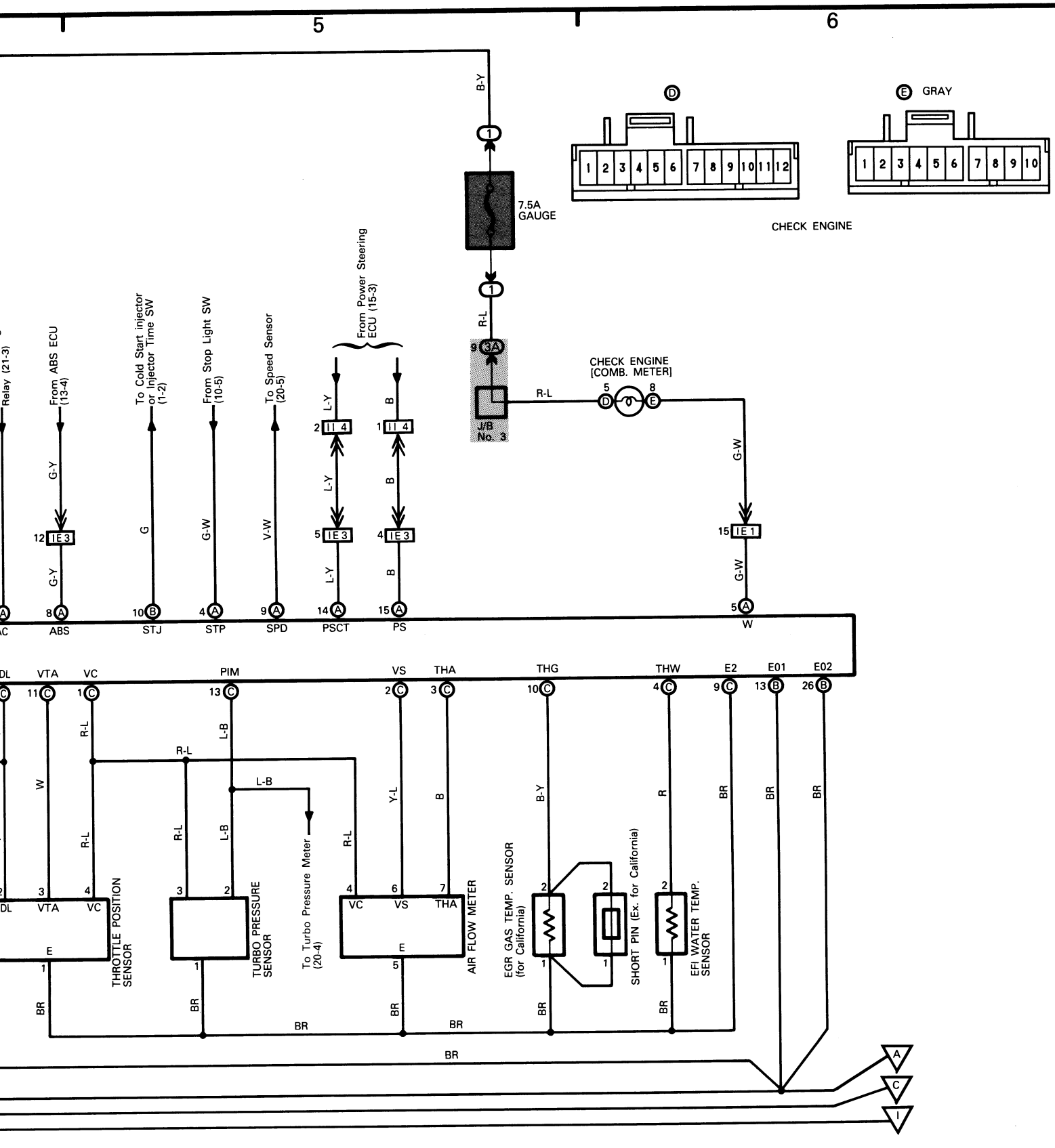
Power Source
1
2
B-R
IGNITION SW
AM1
AM2
ACC
IG1
ST1
IG2
ST2
W
B-Y
B-O
II 2
II 3
IE 2
IE 4
II 1
7.5A
AM2
15A
EFI
W-R
EFI MAIN
RELAY
CIRCUIT
OPENING
RELAY
FUEL PUMP
RELAY
FUEL PUMP
RESISTOR
FUEL PUMP
From Clutch Start SW
(1-2)
R
W-B
L-B
L-R
G-R
EB 1
EA 1
IM 1
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
A DARK GRAY
B DARK GRAY
C DARK GRAY
ENGINE ECU
Ground points
A = Located on intake manifold
C = Located on instrument panel center



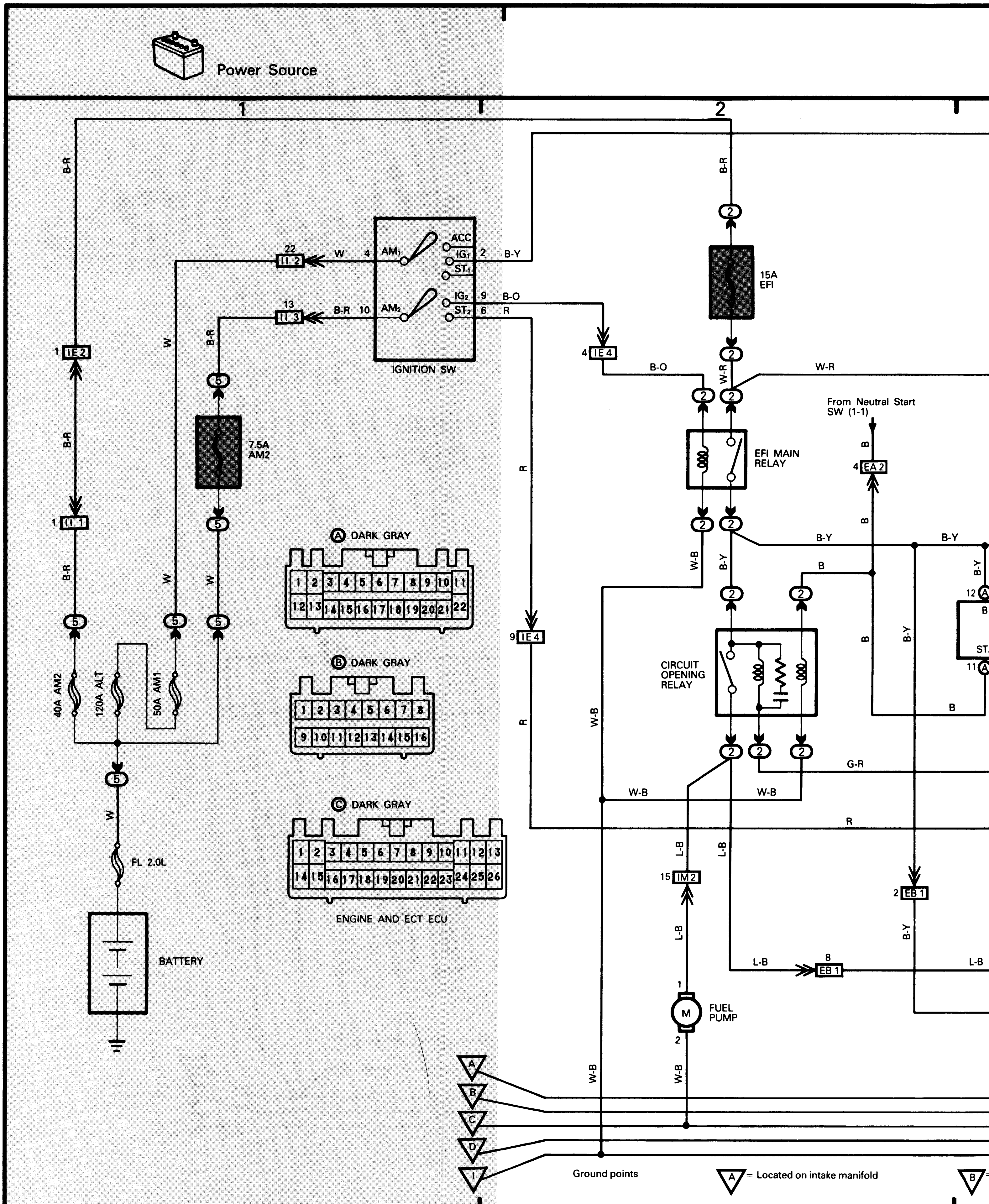
nstrument panel center

= Located on back panel center

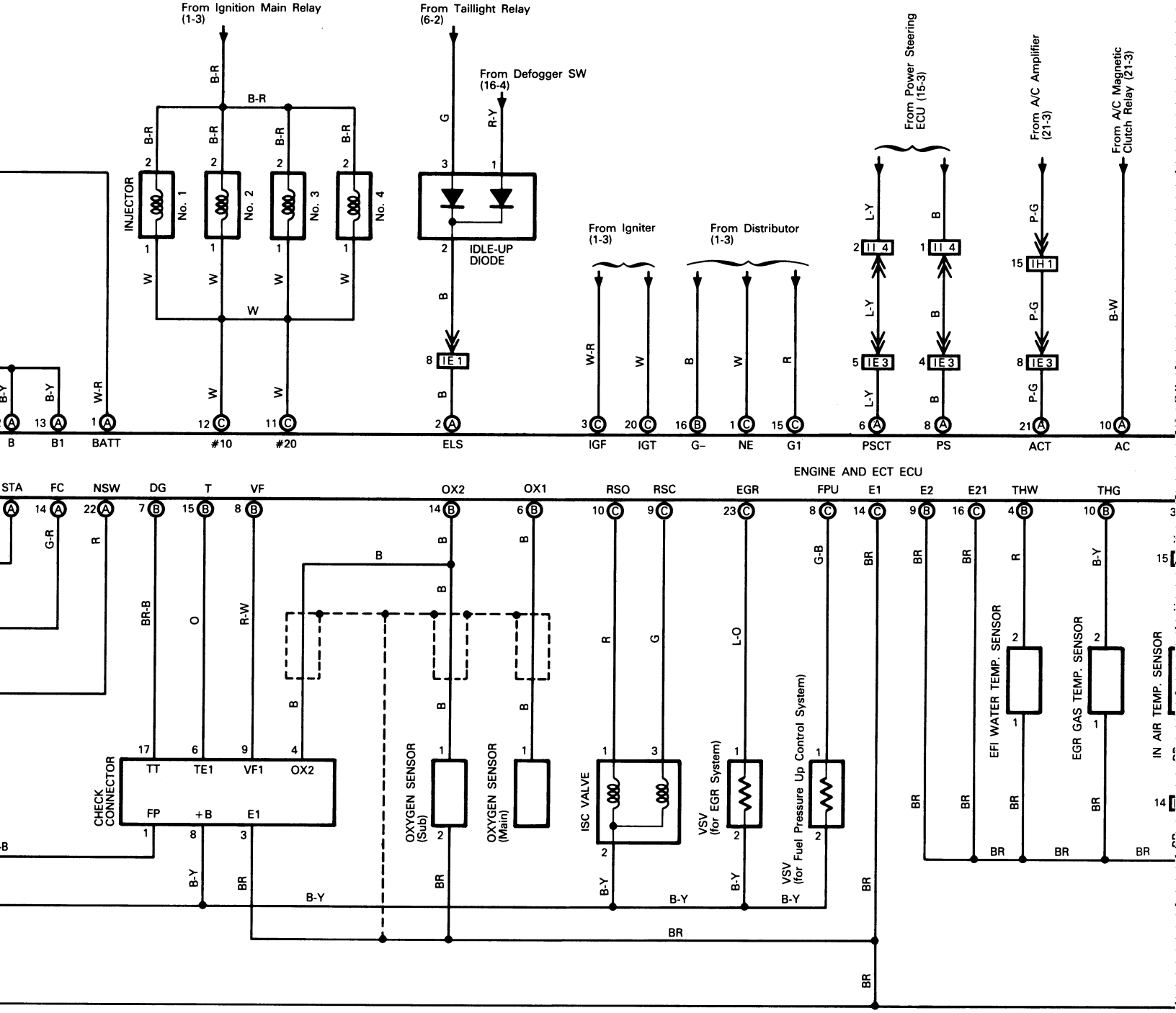
* See last fold-out page for connector to J/B, and connector between wire harness.


5
6
B-Y
D
E GRAY
1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10
7.5A GAUGE
CHECK ENGINE
R-L
9 3A
J/B No. 3
CHECK ENGINE [COMB. METER]
5 D
8 E
G-W
15 IE 1
5 A
W
From Power Steering ECU (15-3)
L-Y
B
2 II 4
1 II 4
5 IE 3
4 IE 3
14 A
15 A
PSCT
PS
To Cold Start injector or Injector Time SW (1-2)
From Stop Light SW (10-5)
To Speed Sensor (20-5)
From ABS ECU (13-4)
Relay (21-3)
G-Y
12 IE 3
8 A
ABS
G
10 B
STJ
G-W
4 A
STP
V-W
9 A
SPD
AC
DL
VTA
VC
PIM
VS
THA
THG
THW
E2
E01
E02
11 C
1 C
13 C
2 C
3 C
10 C
4 C
9 C
13 B
26 B
W
R-L
L-B
Y-L
B
B-Y
R
BR
3
4
2
6
7
E
1
5
VC
VS
THA
THROTTLE POSITION SENSOR
TURBO PRESSURE SENSOR
To Turbo Pressure Meter (20-4)
AIR FLOW METER
EGR GAS TEMP. SENSOR (for California)
SHORT PIN (Ex. for California)
EFI WATER TEMP. SENSOR
A
C
I

4 MR2 (Cont'd)



Power Source
1
2
B-R
IGNITION SW
ACC
AM1
IG1
ST1
AM2
IG2
ST2
22
II 2
W
4
2
B-Y
13
II 3
B-R
10
9
B-O
6
R
1 IE 2
1 II 1
7.5A AM2
15A EFI
4 IE 4
B-O
W-R
EFI MAIN RELAY
From Neutral Start SW (1-1)
4 EA 2
A DARK GRAY
B DARK GRAY
C DARK GRAY
ENGINE AND ECT ECU
9 IE 4
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
CIRCUIT OPENING RELAY
W-B
G-R
L-B
15 IM 2
FUEL PUMP
8 EB 1
2 EB 1
12 A
11 A
STA
Ground points
A = Located on intake manifold



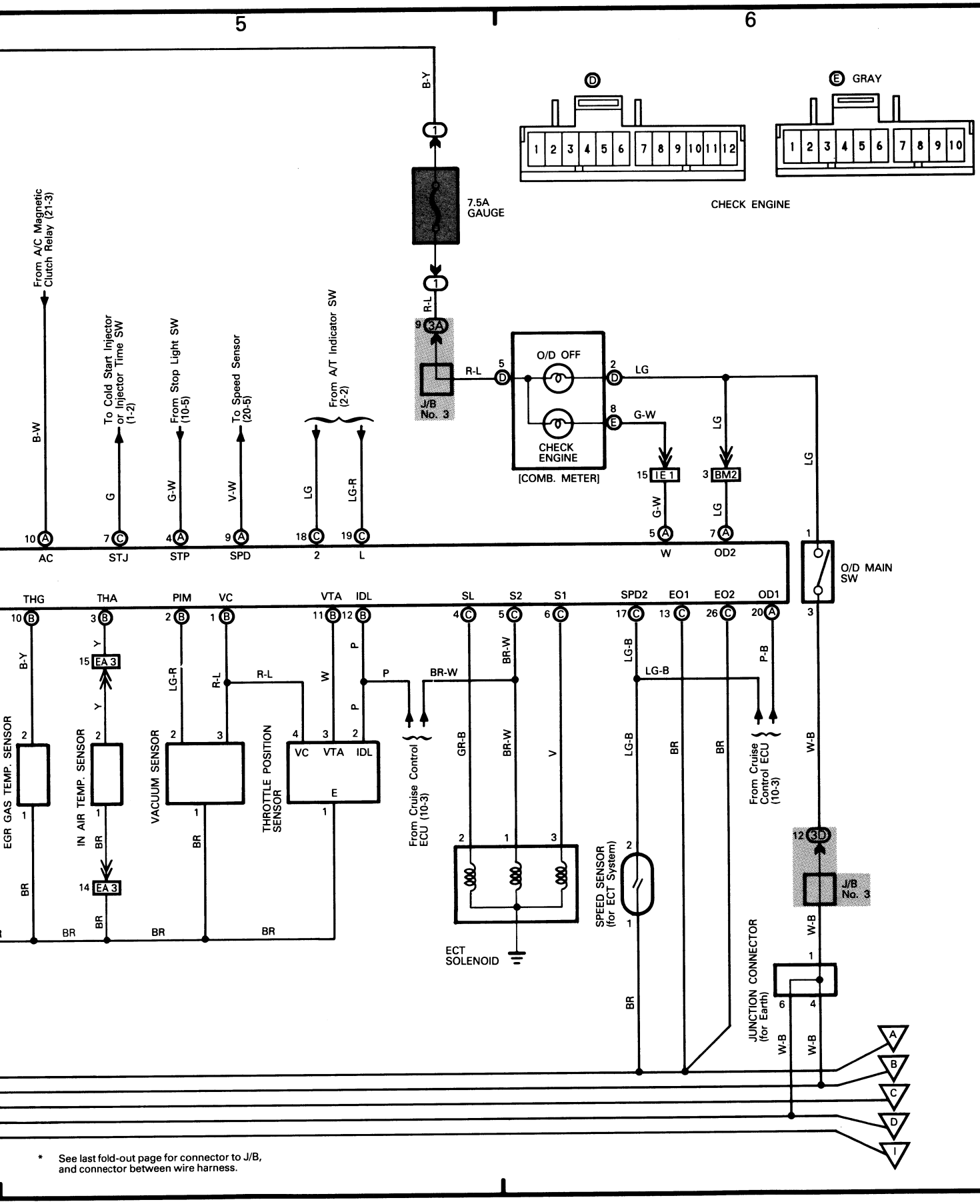
= Located on left kick panel

= Located on instrument panel center

= Located on right kick panel

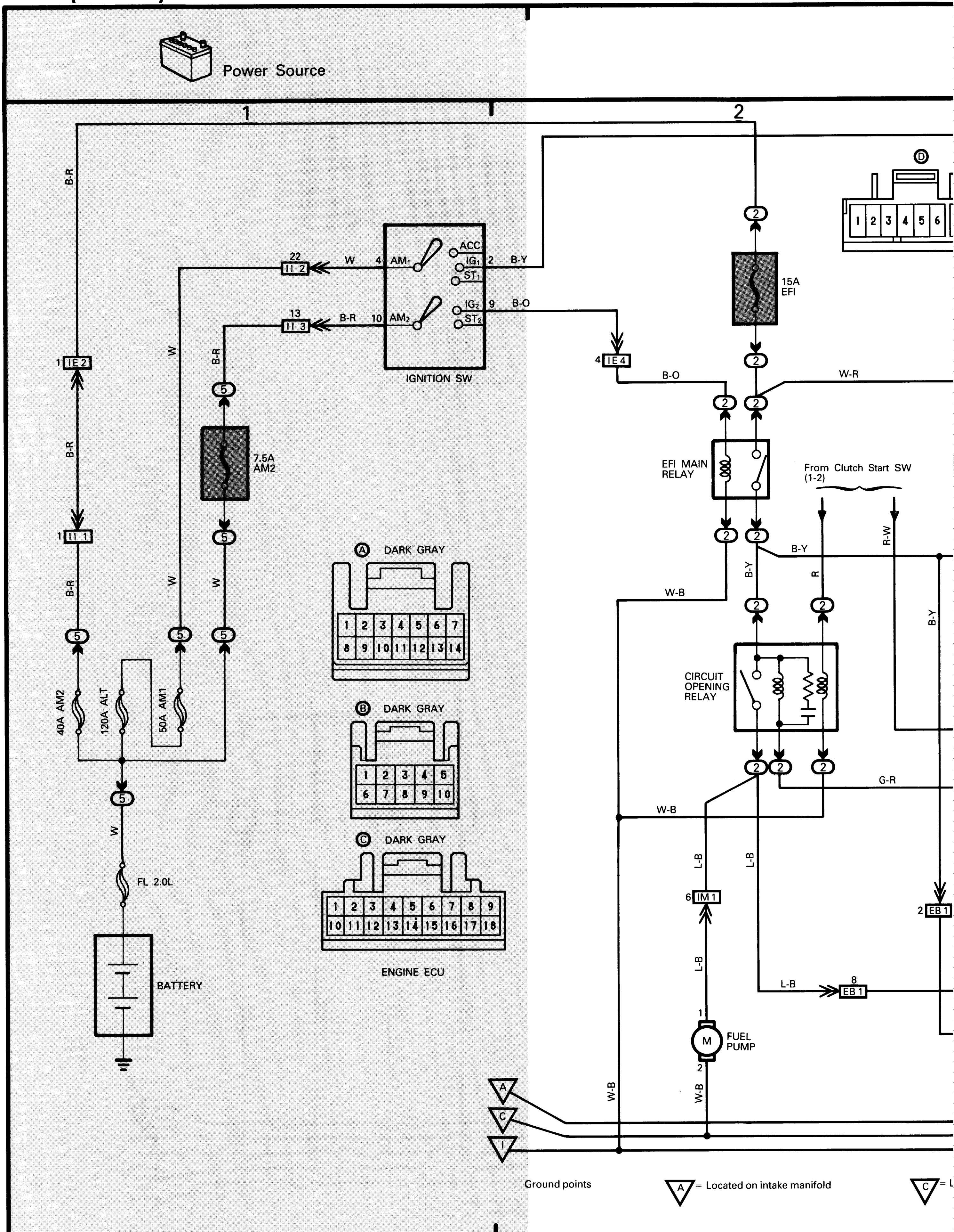
= Located on back panel center

* See last f and conn

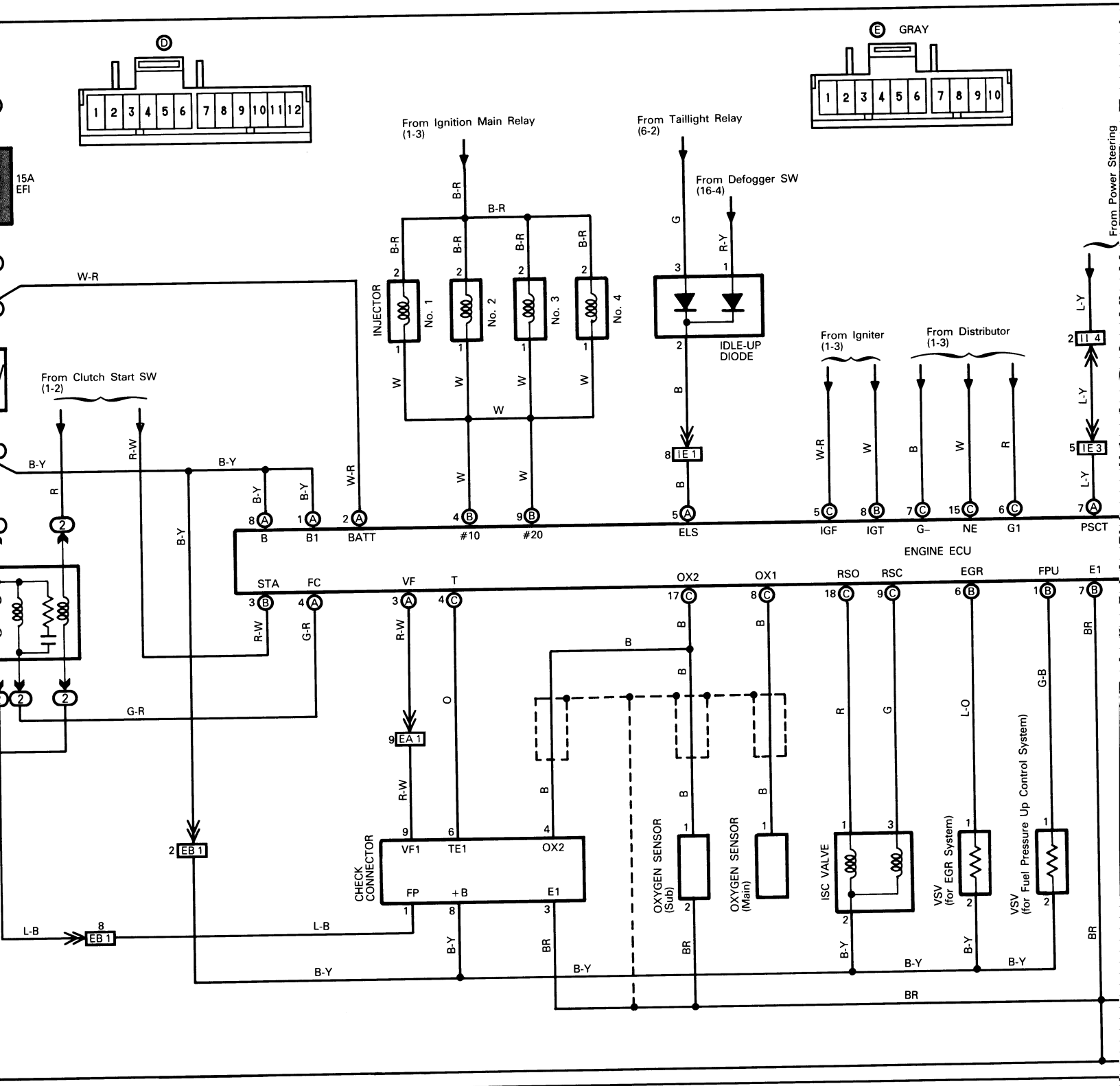


* See last fold-out page for connector to J/B, and connector between wire harness.

MR2 (Cont'd)



Power Source
1
2
B-R
W
B-R
22
II 2
13
II 3
W
4
AM1
ACC
IG1
2
B-Y
ST1
10
AM2
IG2
9
B-O
ST2
IGNITION SW
1 IE 2
1 II 1
7.5A
AM2
15A
EFI
4 IE 4
B-O
W-R
EFI MAIN
RELAY
From Clutch Start SW
(1-2)
R-W
B-Y
W-B
R
CIRCUIT
OPENING
RELAY
G-R
L-B
6 IM 1
2 EB 1
8
EB 1
FUEL
PUMP
M
W-B
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
A DARK GRAY
B DARK GRAY
C DARK GRAY
D
ENGINE ECU
A
C
I
Ground points
A = Located on intake manifold
C



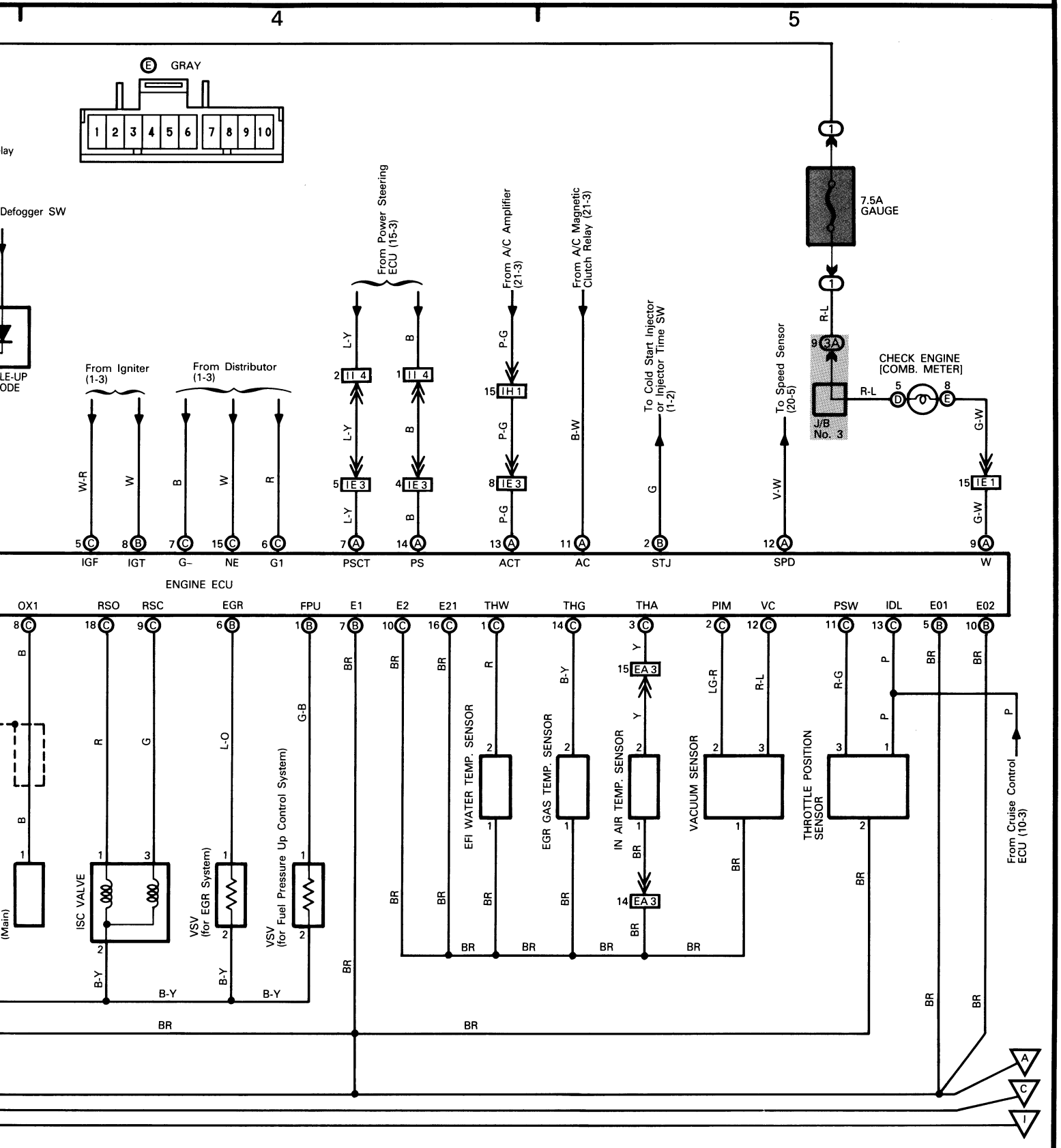
n intake manifold

C = Located on instrument panel center

I = Located on back panel center

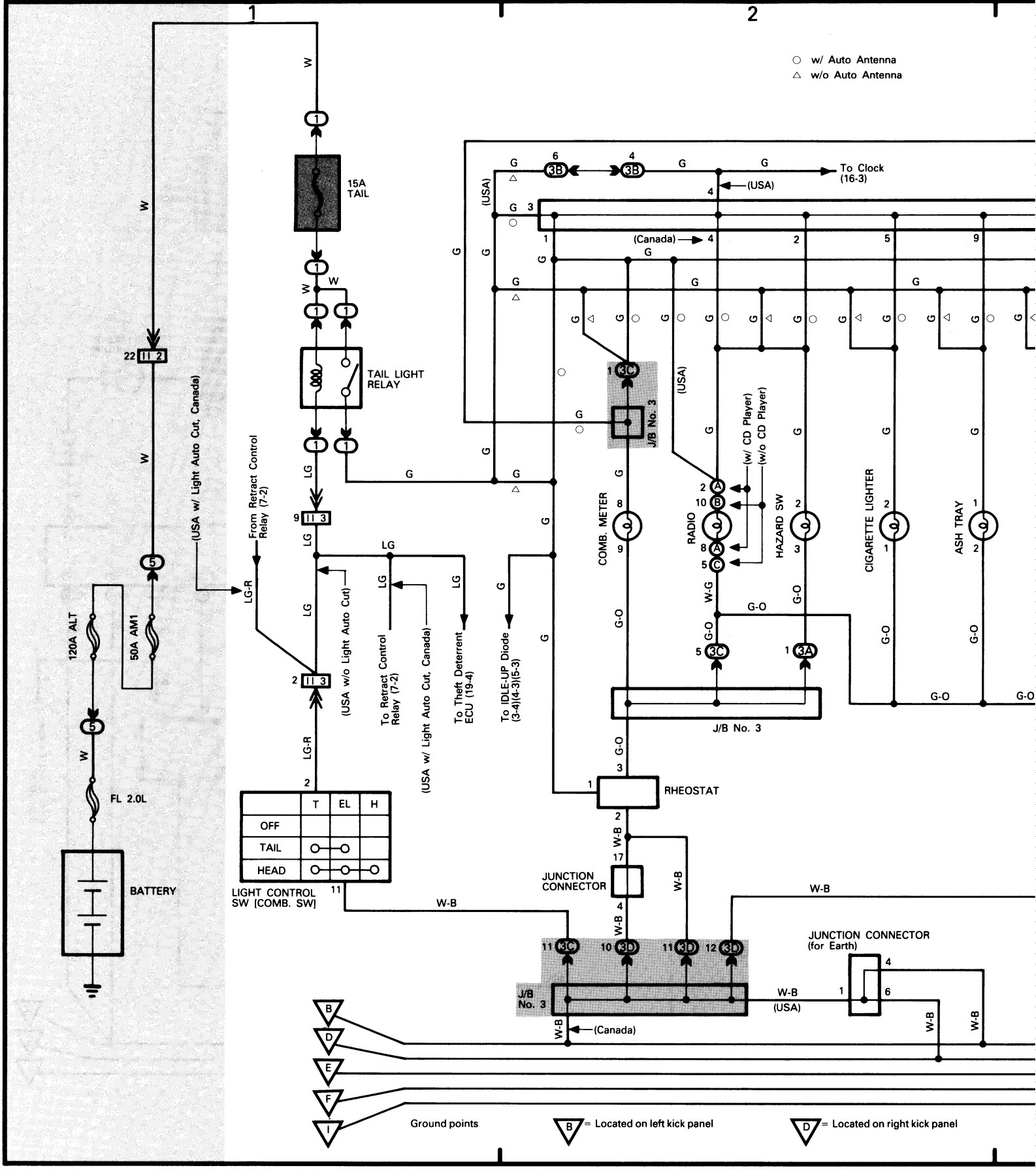
* See last fold-out page for connector to J/B, and connector between wire harness.

ontrol (5S-FE M/T)



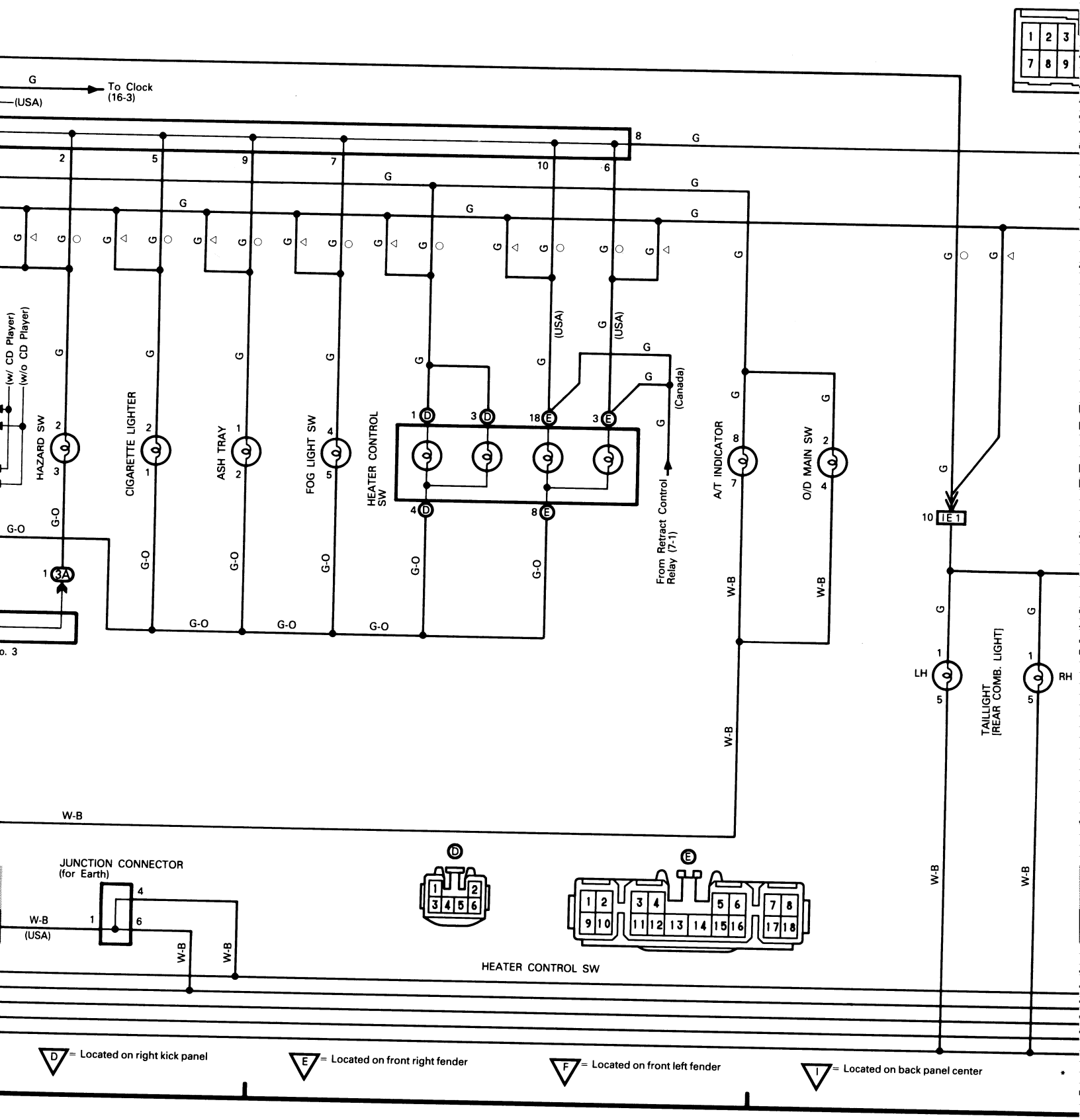
See last fold-out page for connector to J/B, and connector between wire harness.

Power Source

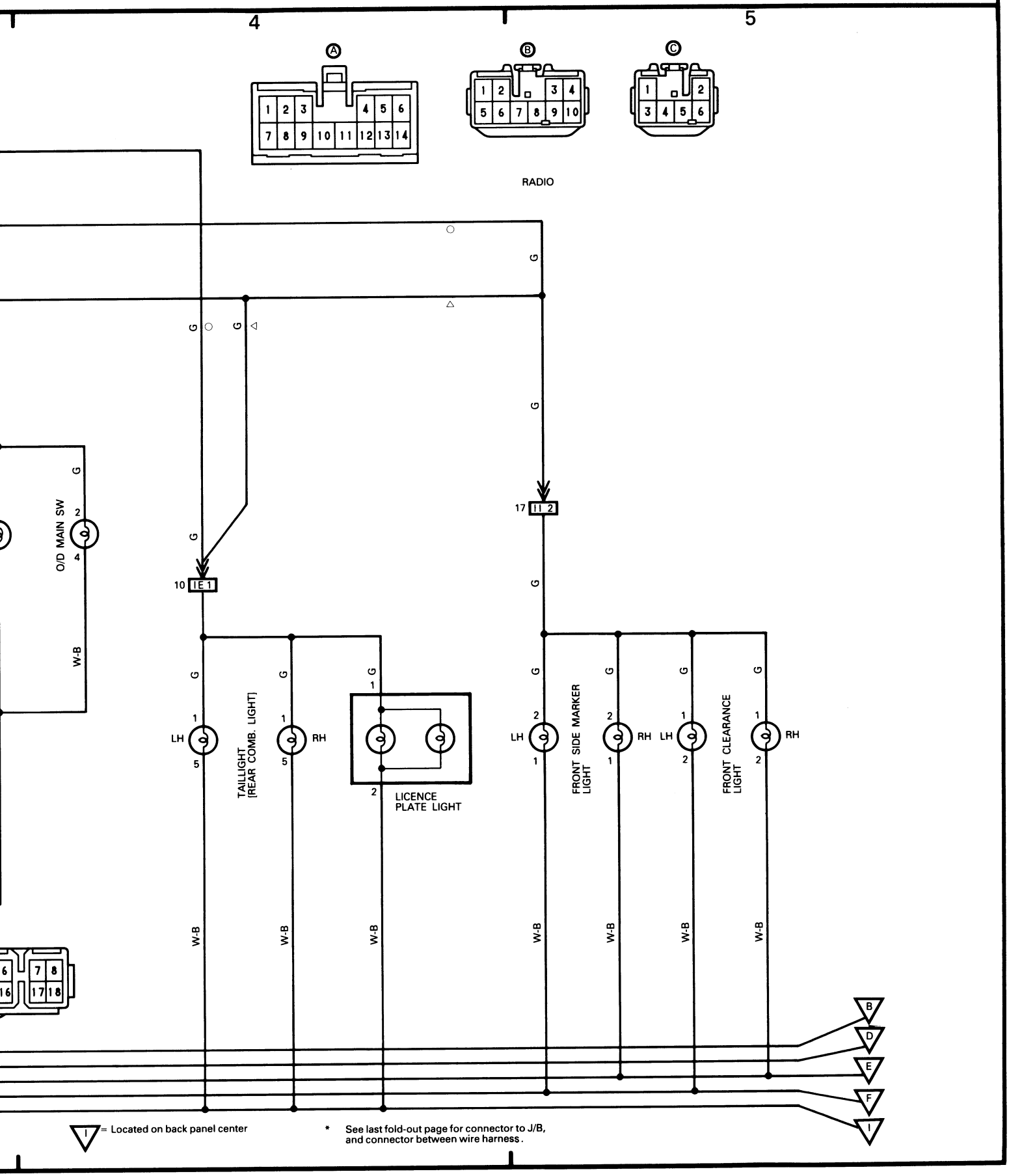


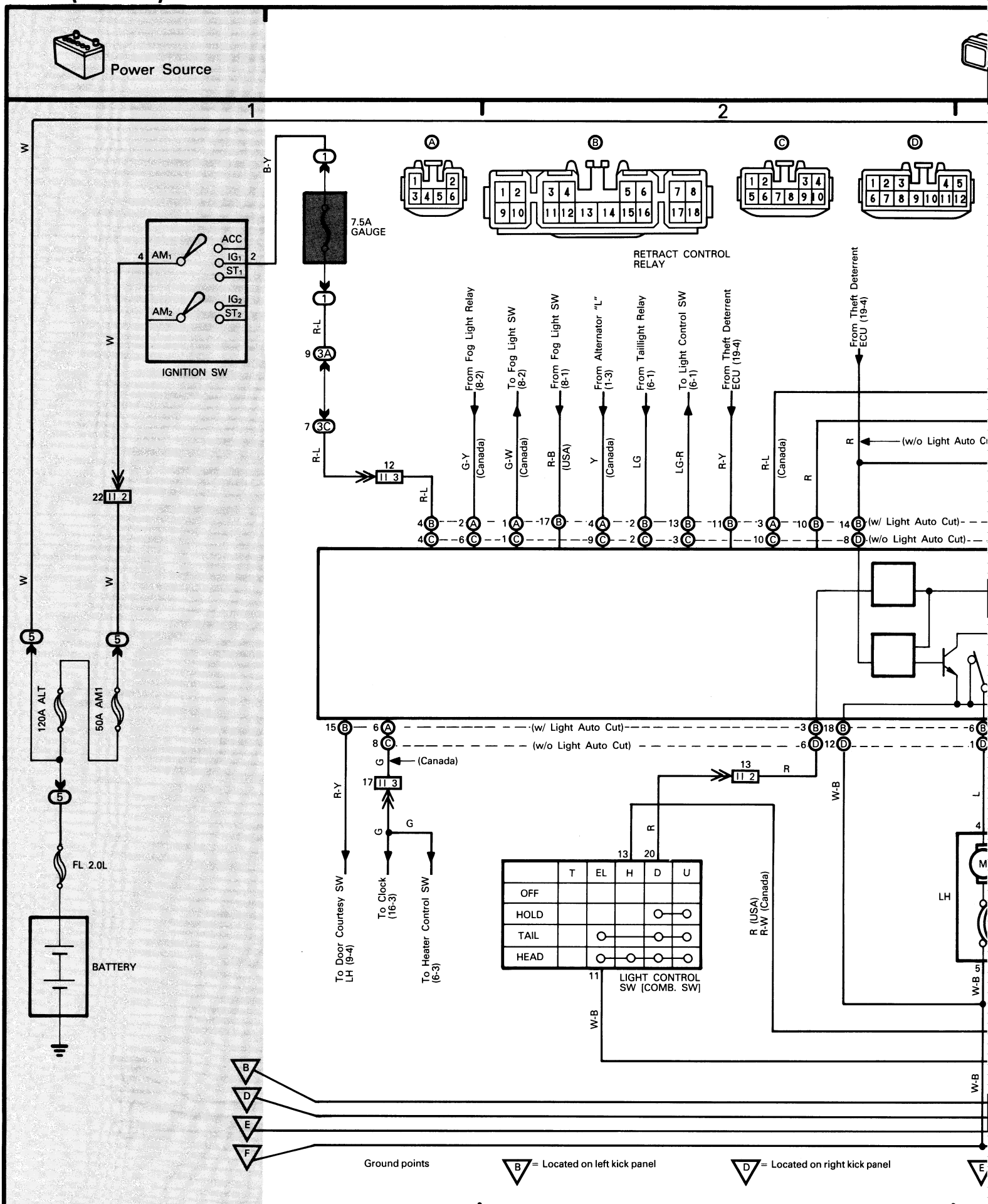
2 3 4

○ w/ Auto Antenna
△ w/o Auto Antenna

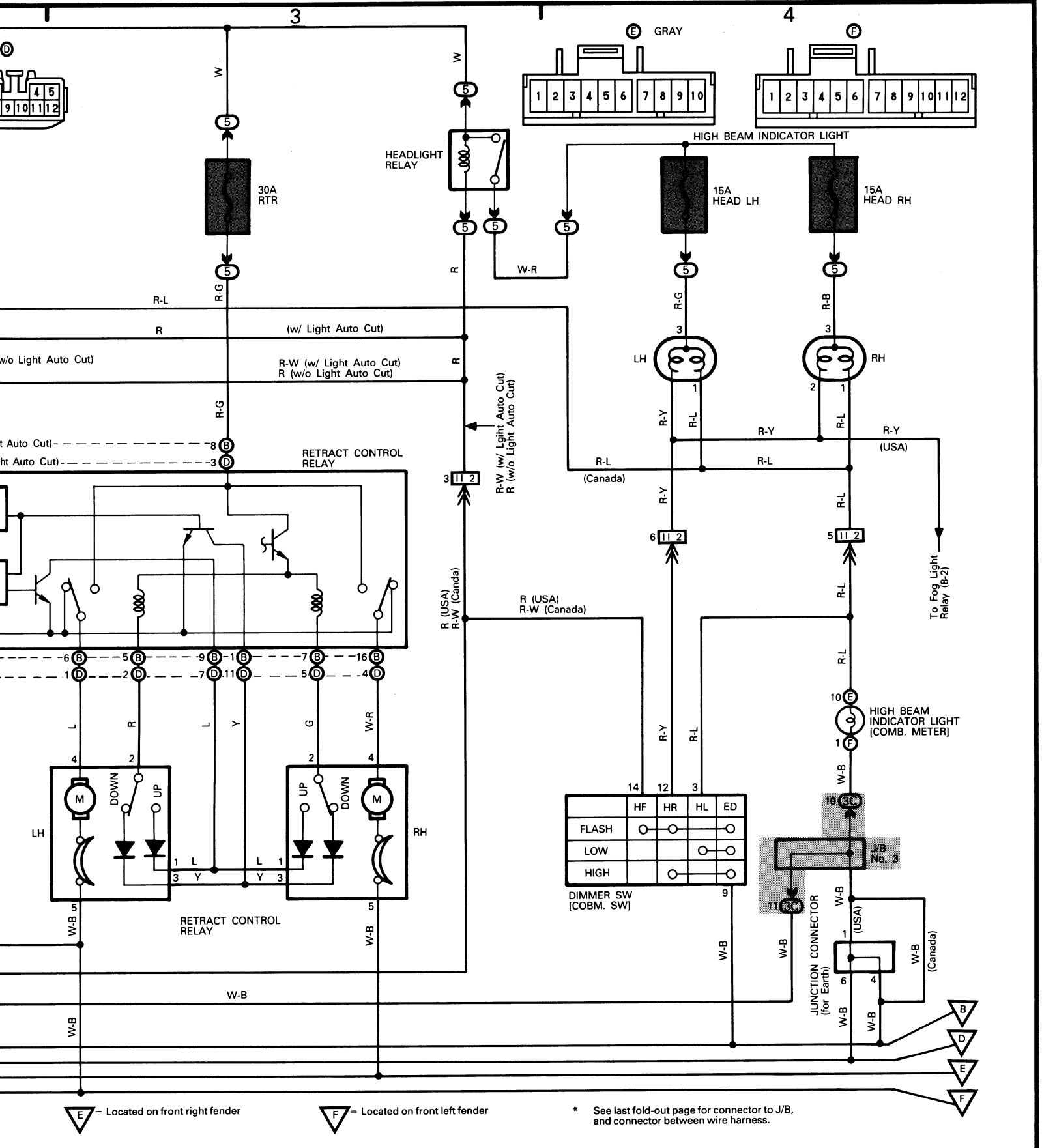


D = Located on right kick panel
E = Located on front right fender
F = Located on front left fender
I = Located on back panel center


4
5
A
B
C
RADIO
G
O/D MAIN SW
W-B
10 IE1
17 II2
LH
RH
TAILLIGHT [REAR COMB. LIGHT]
LICENCE PLATE LIGHT
FRONT SIDE MARKER LIGHT
FRONT CLEARANCE LIGHT
B
D
E
F
I
= Located on back panel center
* See last fold-out page for connector to J/B, and connector between wire harness.


Power Source
1
2
W
B-Y
7.5A GAUGE
ACC
AM1
IG1
ST1
AM2
IG2
ST2
IGNITION SW
RETRACT CONTROL RELAY
From Fog Light Relay (8-2)
To Fog Light SW (8-2)
From Fog Light SW (8-1)
From Alternator "L" (1-3)
From Taillight Relay (6-1)
To Light Control SW (6-1)
From Theft Deterrent ECU (19-4)
From Theft Deterrent ECU (19-4)
(w/o Light Auto Cut)
(w/ Light Auto Cut)
(w/o Light Auto Cut)
(w/ Light Auto Cut)
(w/o Light Auto Cut)
(Canada)
120A ALT
50A AM1
FL 2.0L
BATTERY
To Door Courtesy SW LH (9-4)
To Clock (16-3)
To Heater Control SW (6-3)
LIGHT CONTROL SW [COMB. SW]
OFF
HOLD
TAIL
HEAD
T
EL
H
D
U
R (USA)
R-W (Canada)
LH
Ground points
= Located on left kick panel
= Located on right kick panel

Headlight

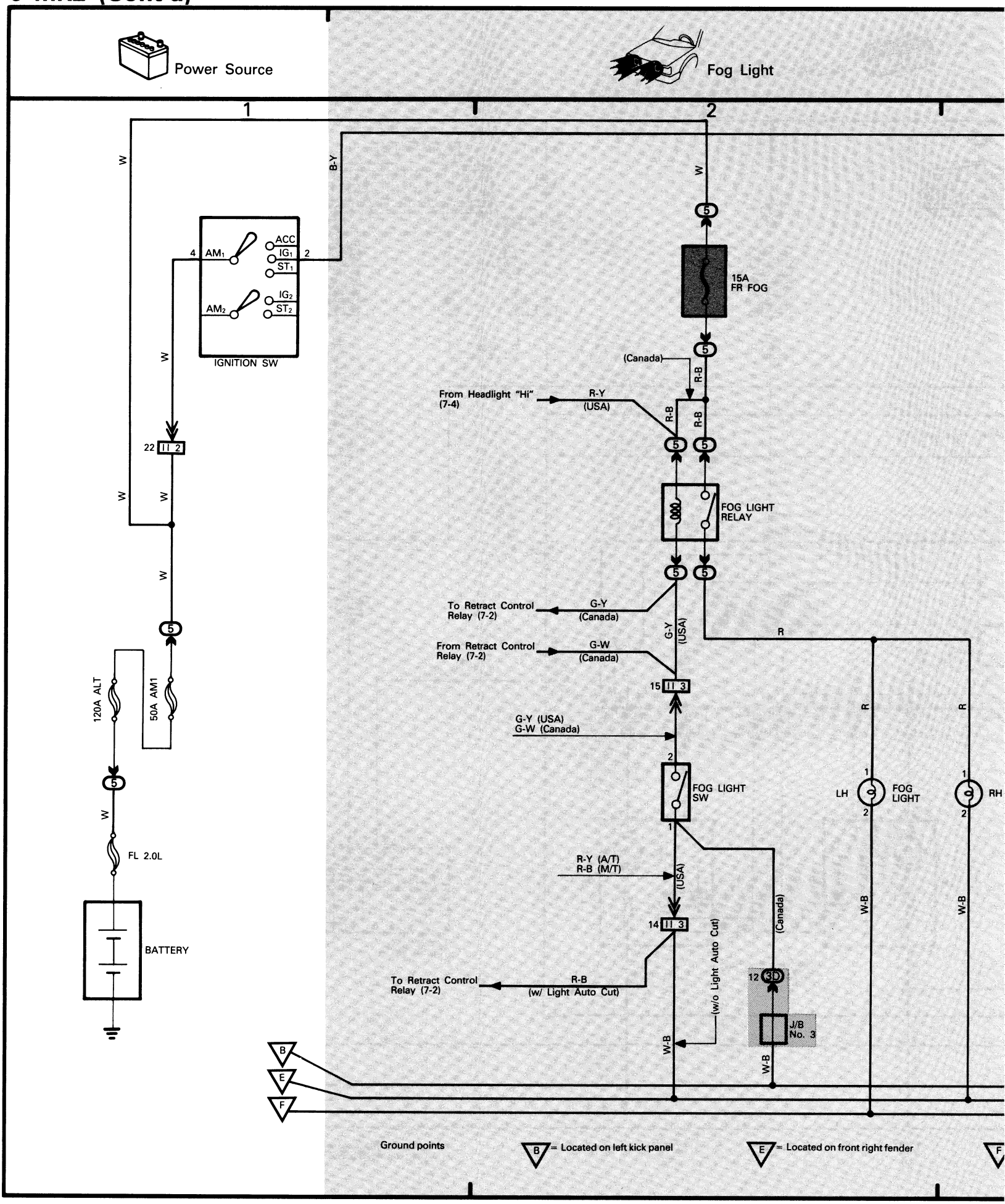


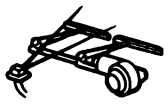
E = Located on front right fender

F = Located on front left fender

* See last fold-out page for connector to J/B, and connector between wire harness.

8 MR2 (Cont'd)


Power Source
Fog Light
1
2
W
B-Y
ACC
IG1
ST1
IG2
ST2
AM1
AM2
4
2
IGNITION SW
22
II 2
120A ALT
50A AM1
FL 2.0L
BATTERY
15A
FR FOG
(Canada)
R-B
From Headlight "Hi"
(7-4)
R-Y
(USA)
FOG LIGHT
RELAY
To Retract Control
Relay (7-2)
G-Y
(Canada)
G-Y
(USA)
From Retract Control
Relay (7-2)
G-W
(Canada)
15
II 3
G-Y (USA)
G-W (Canada)
FOG LIGHT
SW
R-Y (A/T)
R-B (M/T)
14
II 3
(USA)
(Canada)
(w/o Light Auto Cut)
To Retract Control
Relay (7-2)
R-B
(w/ Light Auto Cut)
12
3D
J/B
No. 3
W-B
R
LH
FOG
LIGHT
RH
B
E
F
Ground points
B = Located on left kick panel
E = Located on front right fender
F



Front Wiper and Washer

3 4

B-Y
1
20A WIPER
1
L
L
8 II 2
L
L
2 M 1 W-L
WASHER MOTOR
12 II 2
L
W-L
18
8

	B	S	+1	+2	IN1	IN2	W	EW
OFF		○—○						
INT		○—○			○—○			
LOW	○—	—○						
HIGH	○—		—○					
WASHER							○—○	

WIPER RELAY

WIPER AND WASHER SW [COMB. SW]
4 7 13 16
L-W L-R L-B
9 II 2 10 II 2 11 II 2
L-W L-R L-B
3 2 1
W-B
L
4
M
WIPER MOTOR

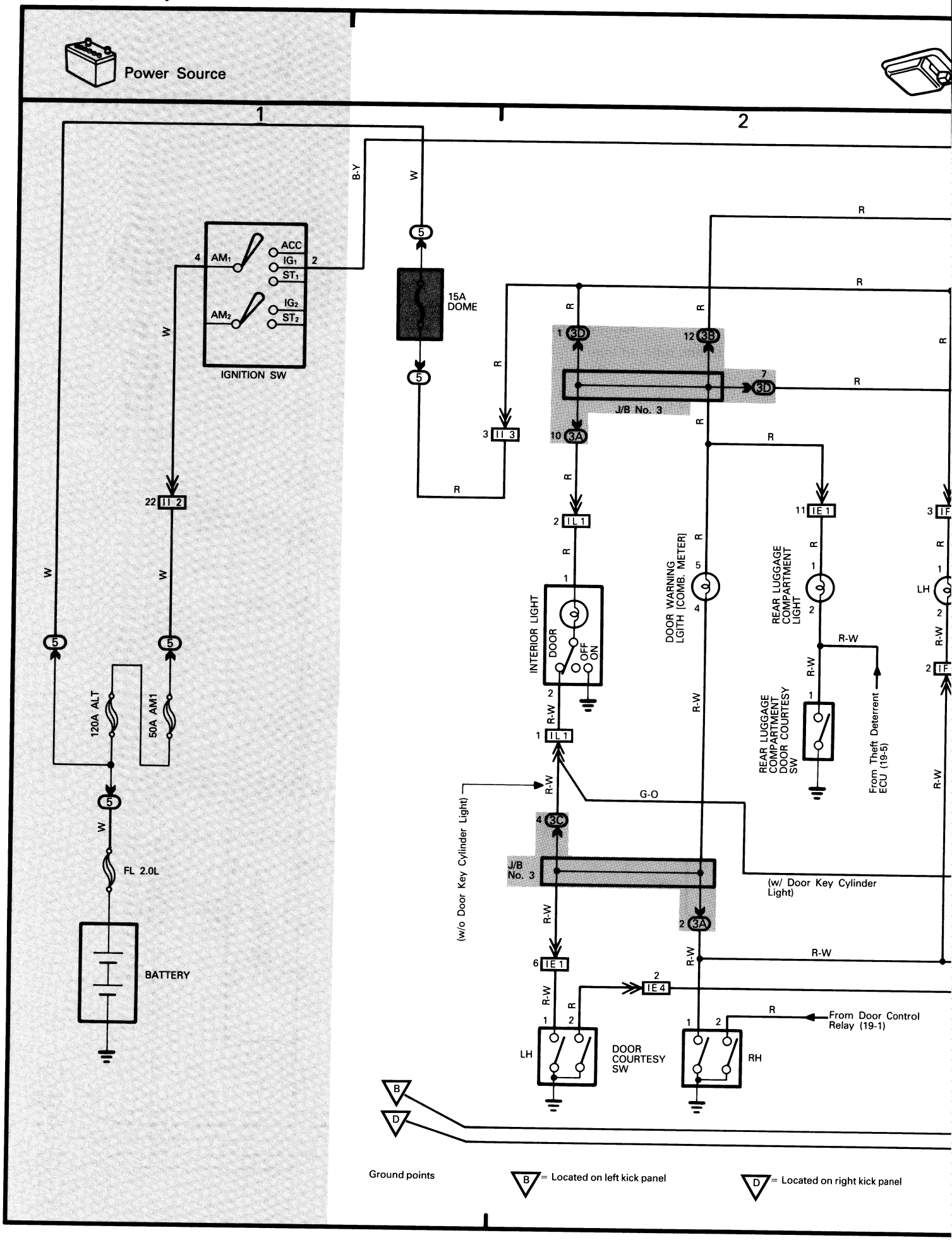
R
1
RH
2
W-B

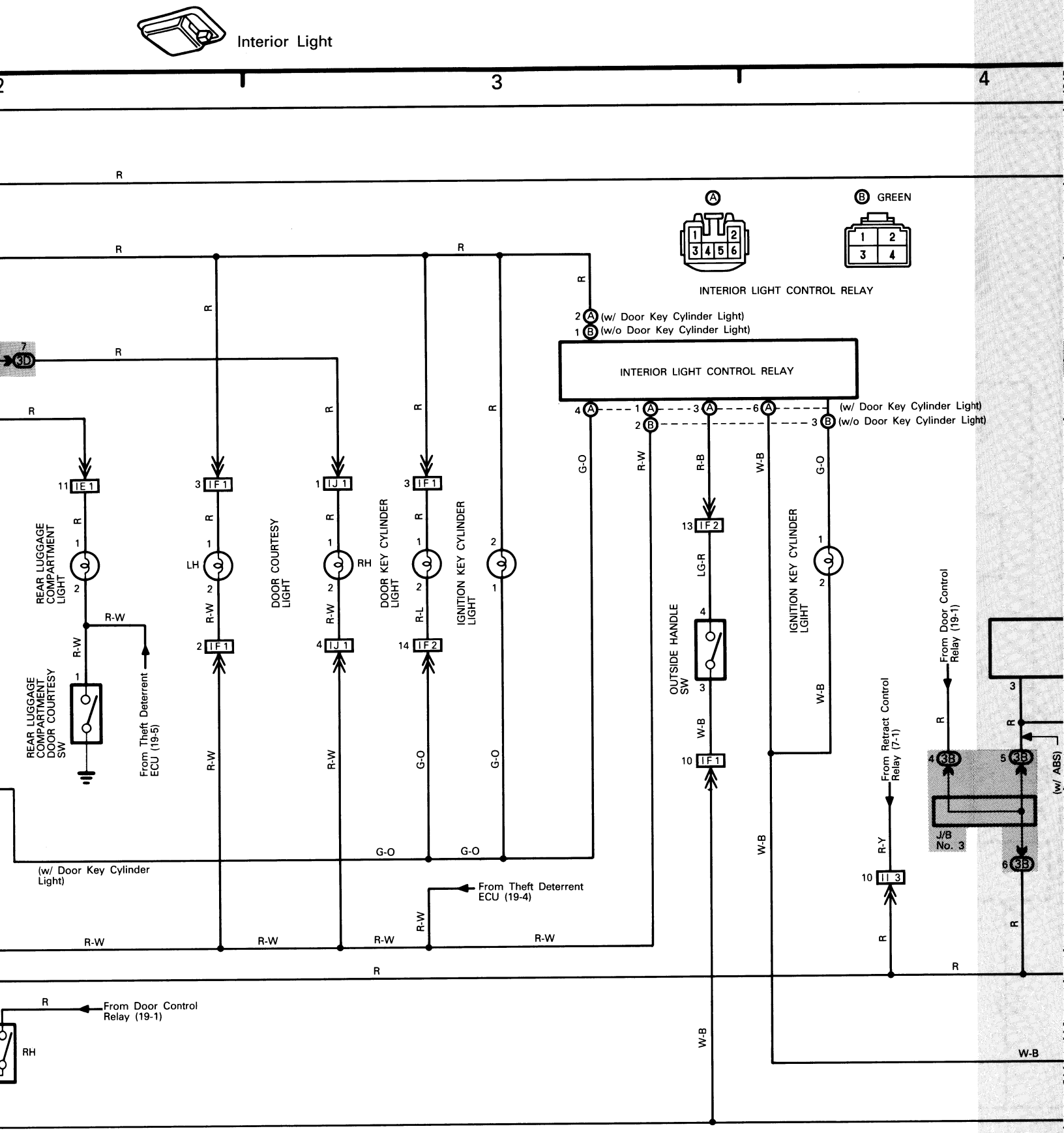
B
E
F

F = Located on front left fender

* See last fold-out page for connector to J/B, and connector between wire harness.

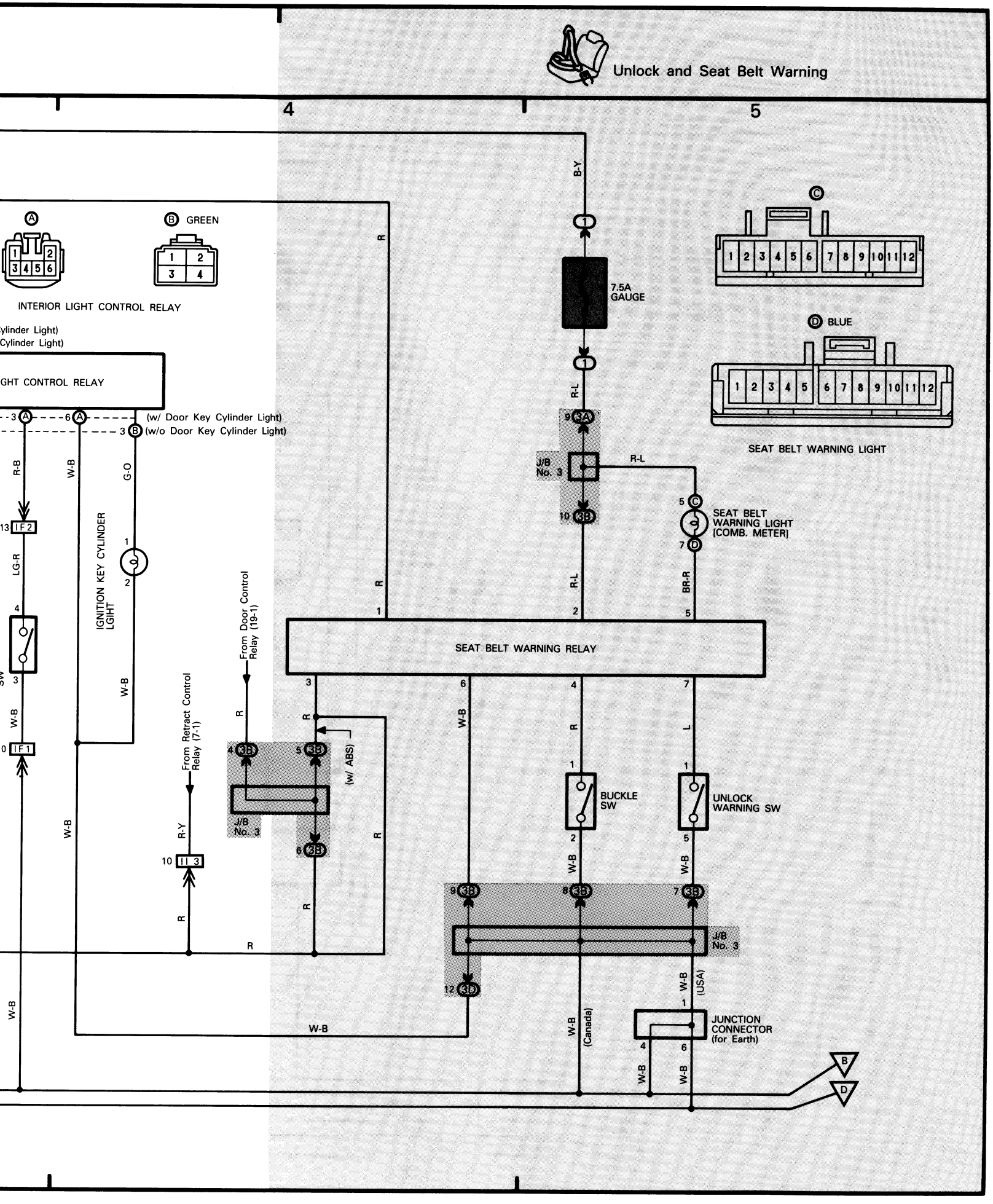
MR2 (Con'd)

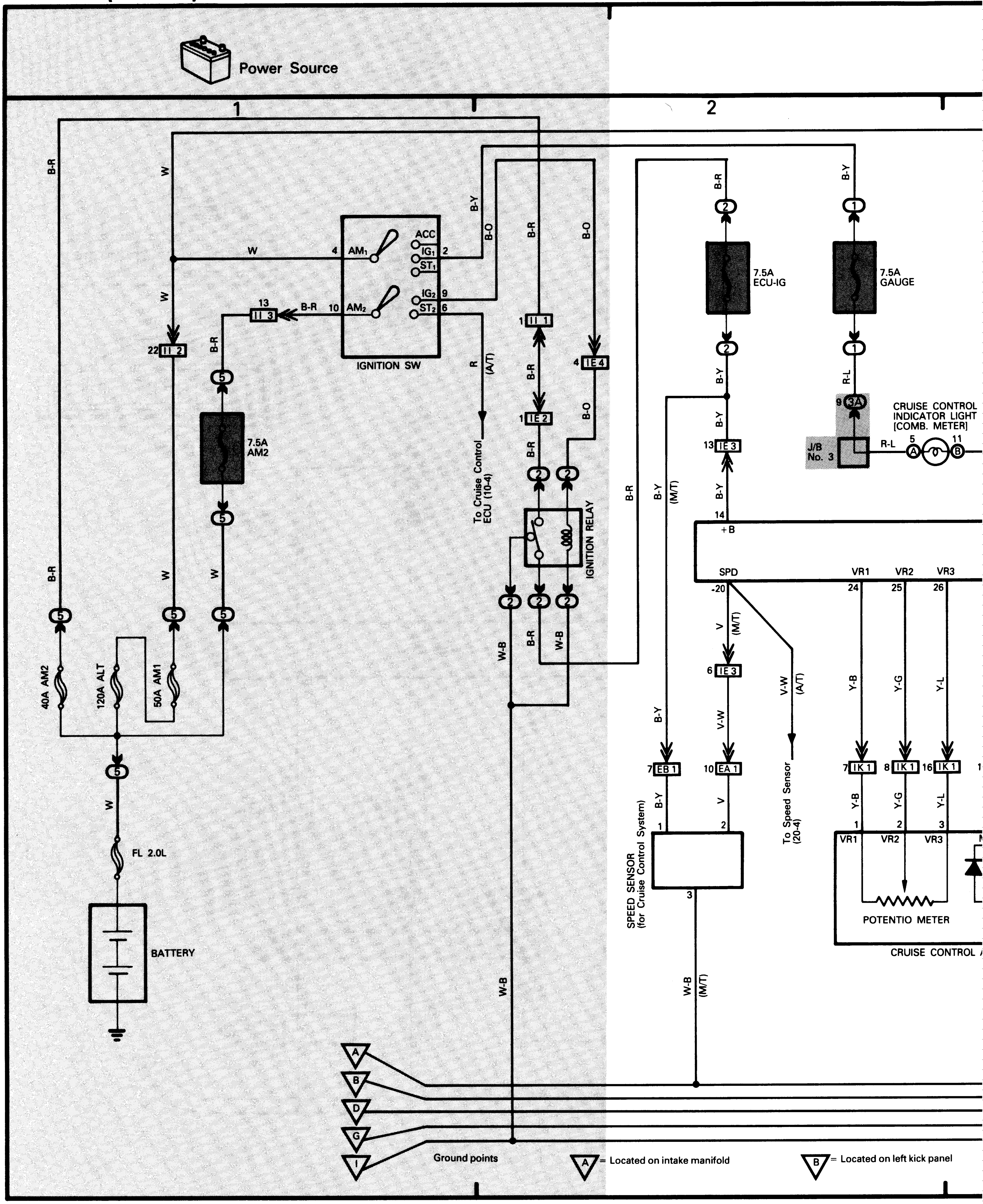

Power Source
1
2
B-Y
W
ACC
IG1
ST1
IG2
ST2
AM1
AM2
IGNITION SW
15A DOME
22 II 2
120A ALT
50A AM1
FL 2.0L
BATTERY
3 II 3
1 3D
12 3B
7 3D
J/B No. 3
10 3A
2 IL 1
1 IL 1
INTERIOR LIGHT DOOR
OFF
ON
DOOR WARNING LGITH [COMB. METER]
11 IE 1
REAR LUGGAGE COMPARTMENT LIGHT
REAR LUGGAGE COMPARTMENT DOOR COURTESY SW
From Theft Deterrent ECU (19-5)
3 IF
LH
2 IF
R-W
G-O
(w/o Door Key Cylinder Light)
(w/ Door Key Cylinder Light)
4 3C
J/B No. 3
2 3A
6 IE 1
2 IE 4
From Door Control Relay (19-1)
LH
DOOR COURTESY SW
RH
B
D
Ground points
B = Located on left kick panel
D = Located on right kick panel



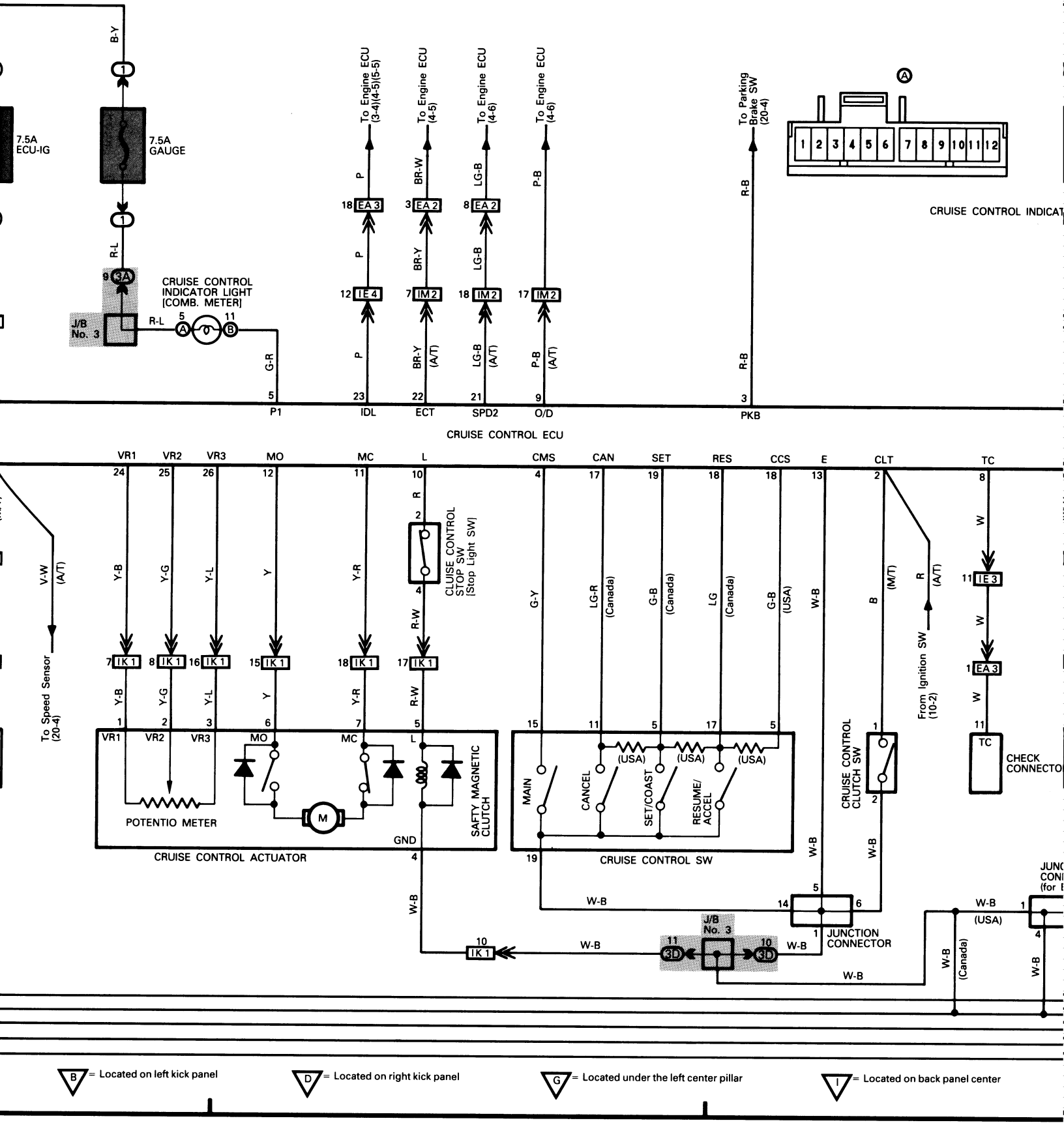
D = Located on right kick panel

* See last fold-out page for connector to J/B, and connector between wire harness.


Unlock and Seat Belt Warning
4
5
A
B GREEN
INTERIOR LIGHT CONTROL RELAY
ylinder Light)
Cylinder Light)
GHT CONTROL RELAY
(w/ Door Key Cylinder Light)
(w/o Door Key Cylinder Light)
R-B
W-B
G-O
LG-R
IF2
IF1
IGNITION KEY CYLINDER LGIHT
W-B
W-B
W-B
W-B
From Retract Control Relay (7-1)
R-Y
II 3
From Door Control Relay (19-1)
R
R
R
R
R
R
(w/ ABS)
J/B No. 3
B-Y
7.5A GAUGE
R-L
3A
J/B No. 3
R-L
3B
R-L
BR-R
SEAT BELT WARNING RELAY
C
1 2 3 4 5 6 7 8 9 10 11 12
D BLUE
1 2 3 4 5 6 7 8 9 10 11 12
SEAT BELT WARNING LIGHT
SEAT BELT WARNING LIGHT [COMB. METER]
BUCKLE SW
UNLOCK WARNING SW
W-B
W-B
W-B
J/B No. 3
3D
W-B
(USA)
W-B
(Canada)
JUNCTION CONNECTOR (for Earth)
W-B
W-B
W-B
B
D

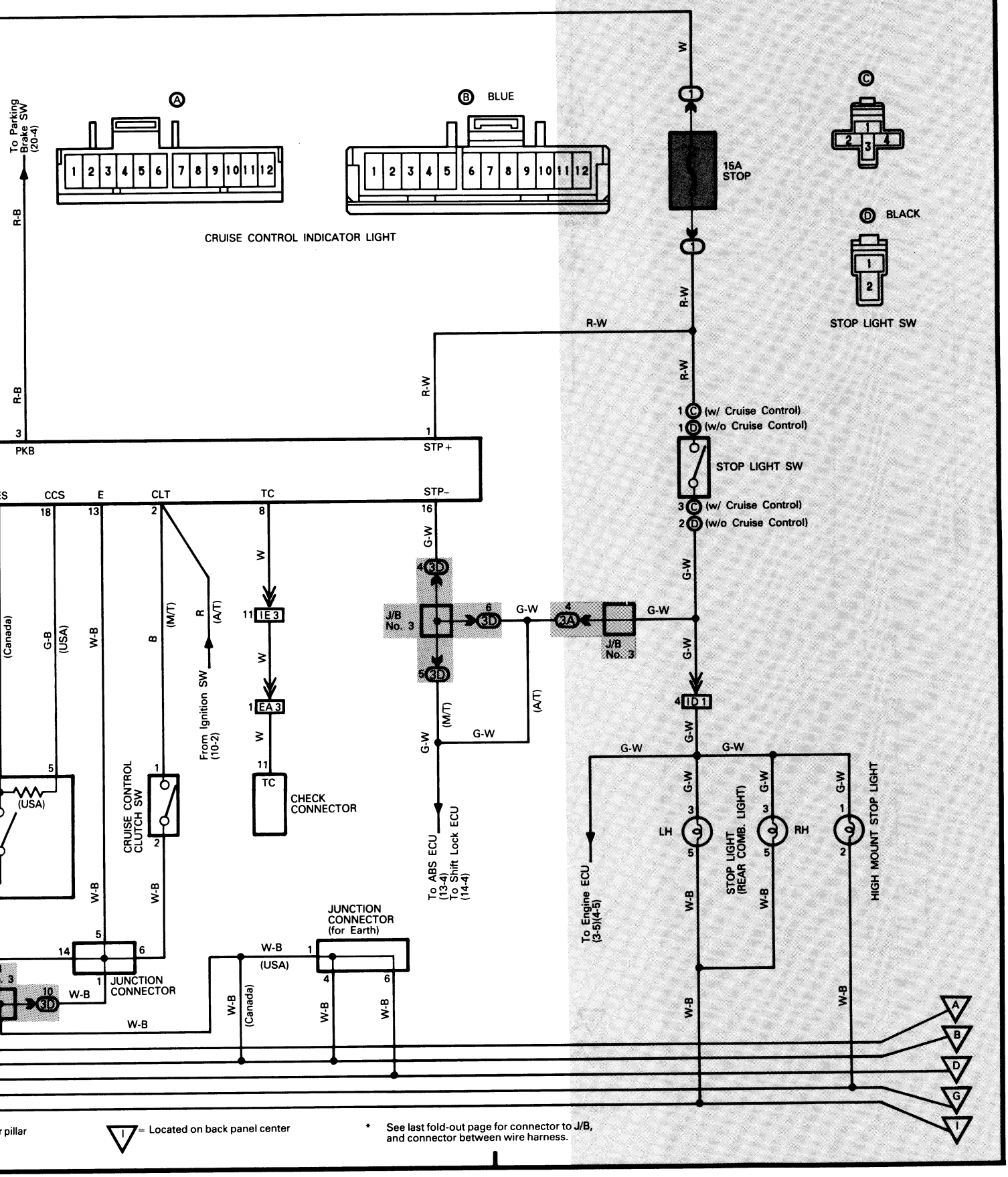


Power Source
1
2
IGNITION SW
ACC
AM1
IG1
ST1
AM2
IG2
ST2
7.5A AM2
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
To Cruise Control ECU (10-4)
(A/T)
IGNITION RELAY
7.5A ECU-IG
7.5A GAUGE
CRUISE CONTROL INDICATOR LIGHT [COMB. METER]
J/B No. 3
+B
SPD
VR1
VR2
VR3
(M/T)
To Speed Sensor (20-4)
SPEED SENSOR (for Cruise Control System)
POTENTIO METER
CRUISE CONTROL
Ground points
A = Located on intake manifold
B = Located on left kick panel


3
4
B-Y
7.5A
ECU-IG
7.5A
GAUGE
R-L
9 3A
CRUISE CONTROL
INDICATOR LIGHT
[COMB. METER]
J/B
No. 3
R-L
5 A
11 B
G-R
5
P1
To Engine ECU
(3-4)(4-5)(5-5)
P
18 EA 3
P
12 IE 4
P
23
IDL
To Engine ECU
(4-5)
BR-W
3 EA 2
BR-Y
7 IM 2
BR-Y
(A/T)
22
ECT
To Engine ECU
(4-6)
LG-B
8 EA 2
LG-B
18 IM 2
LG-B
(A/T)
21
SPD2
To Engine ECU
(4-6)
P-B
17 IM 2
P-B
(A/T)
9
O/D
To Parking
Brake SW
(20-4)
R-B
R-B
3
PKB
A
1 2 3 4 5 6 7 8 9 10 11 12
CRUISE CONTROL INDICAT
CRUISE CONTROL ECU
VR1 VR2 VR3 MO MC L CMS CAN SET RES CCS E CLT TC
24 25 26 12 11 10 4 17 19 18 18 13 2 8
V-W (A/T)
To Speed Sensor
(20-4)
Y-B
Y-G
Y-L
Y
Y-R
R
2
4
R-W
CLUISE CONTROL
STOP SW
[Stop Light SW]
G-Y
LG-R (Canada)
G-B (Canada)
LG (Canada)
G-B (USA)
W-B
B (M/T)
R (A/T)
From Ignition SW
(10-2)
W
11 IE 3
W
1 EA 3
W
11
TC
CHECK
CONNECTO
7 IK 1
8 IK 1
16 IK 1
15 IK 1
18 IK 1
17 IK 1
Y-B
Y-G
Y-L
Y
Y-R
R-W
1 2 3 6 7 5
VR1 VR2 VR3 MO MC L
POTENTIO METER
M
SAFTY MAGNETIC
CLUTCH
GND
4
CRUISE CONTROL ACTUATOR
15 11 5 17 5
MAIN
CANCEL
(USA)
SET/COAST
(USA)
RESUME/
ACCEL
(USA)
19
CRUISE CONTROL SW
CRUISE CONTROL
CLUTCH SW
1
2
W-B
W-B
5
14
6
1
JUNCTION
CONNECTOR
W-B
10
IK 1
W-B
J/B
No. 3
11 3D
10 3D
W-B
W-B
W-B
(USA)
W-B
(Canada)
W-B
B Located on left kick panel
D Located on right kick panel
G Located under the left center pillar
I Located on back panel center

Stop Lights

4 5

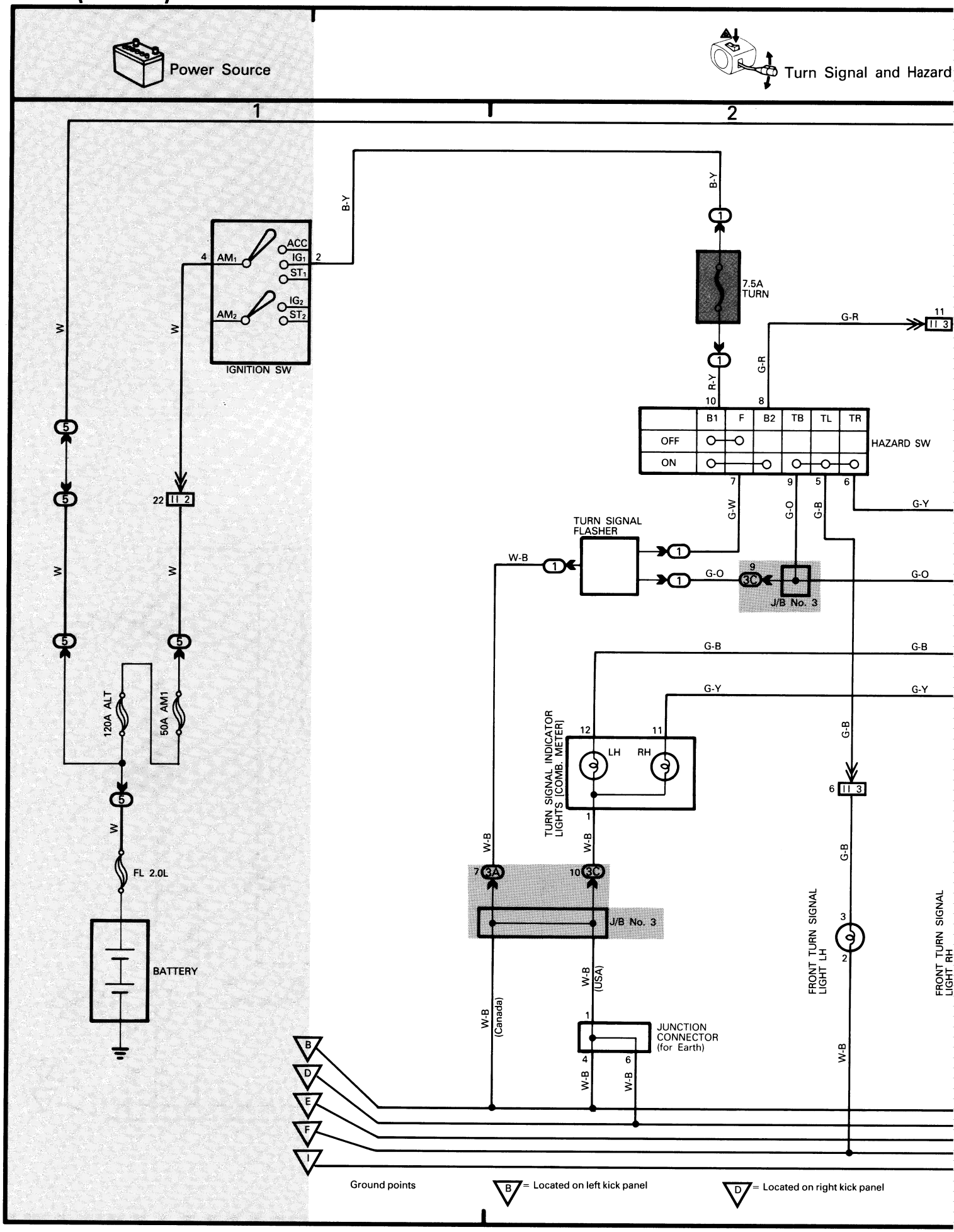


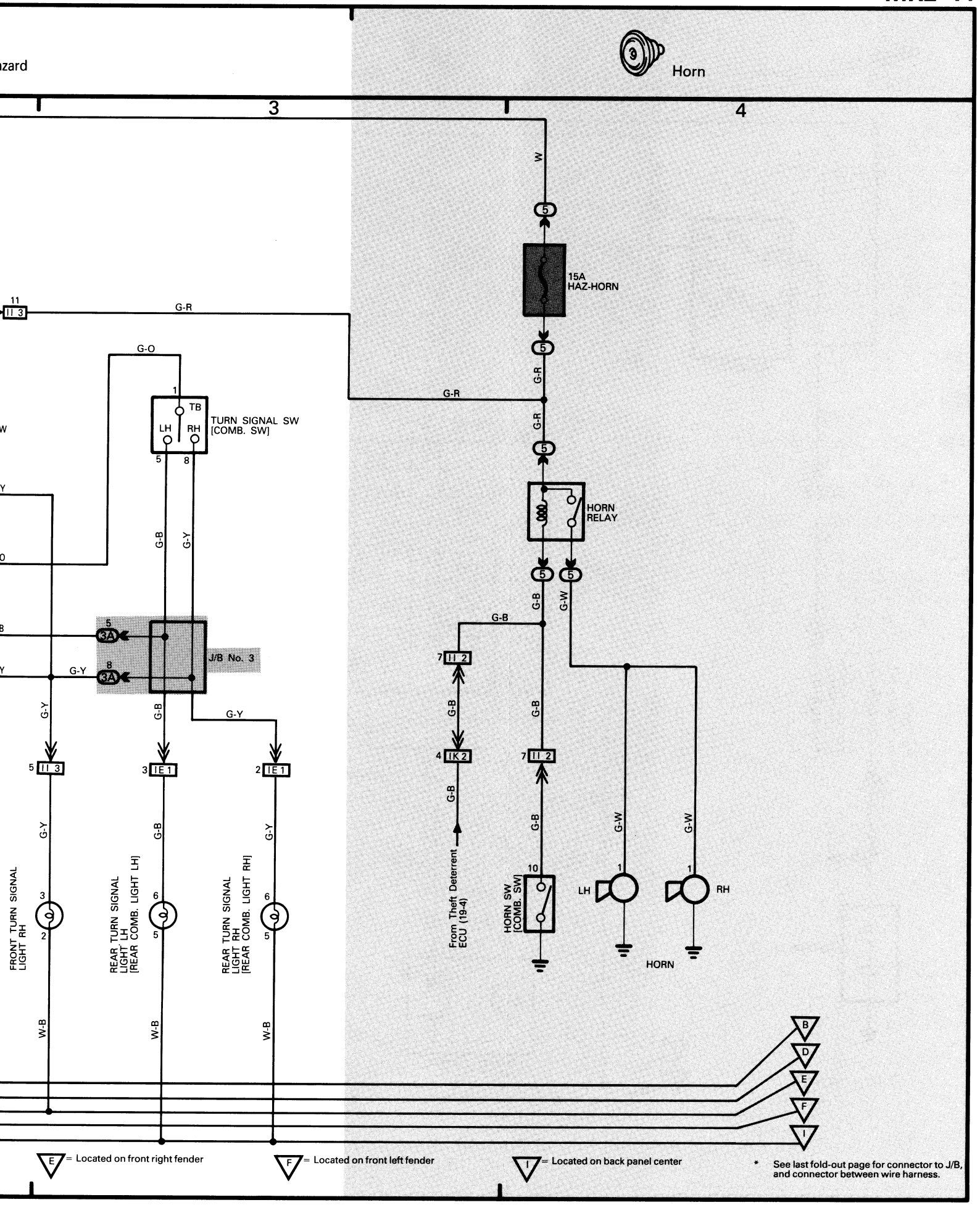
pillar

= Located on back panel center

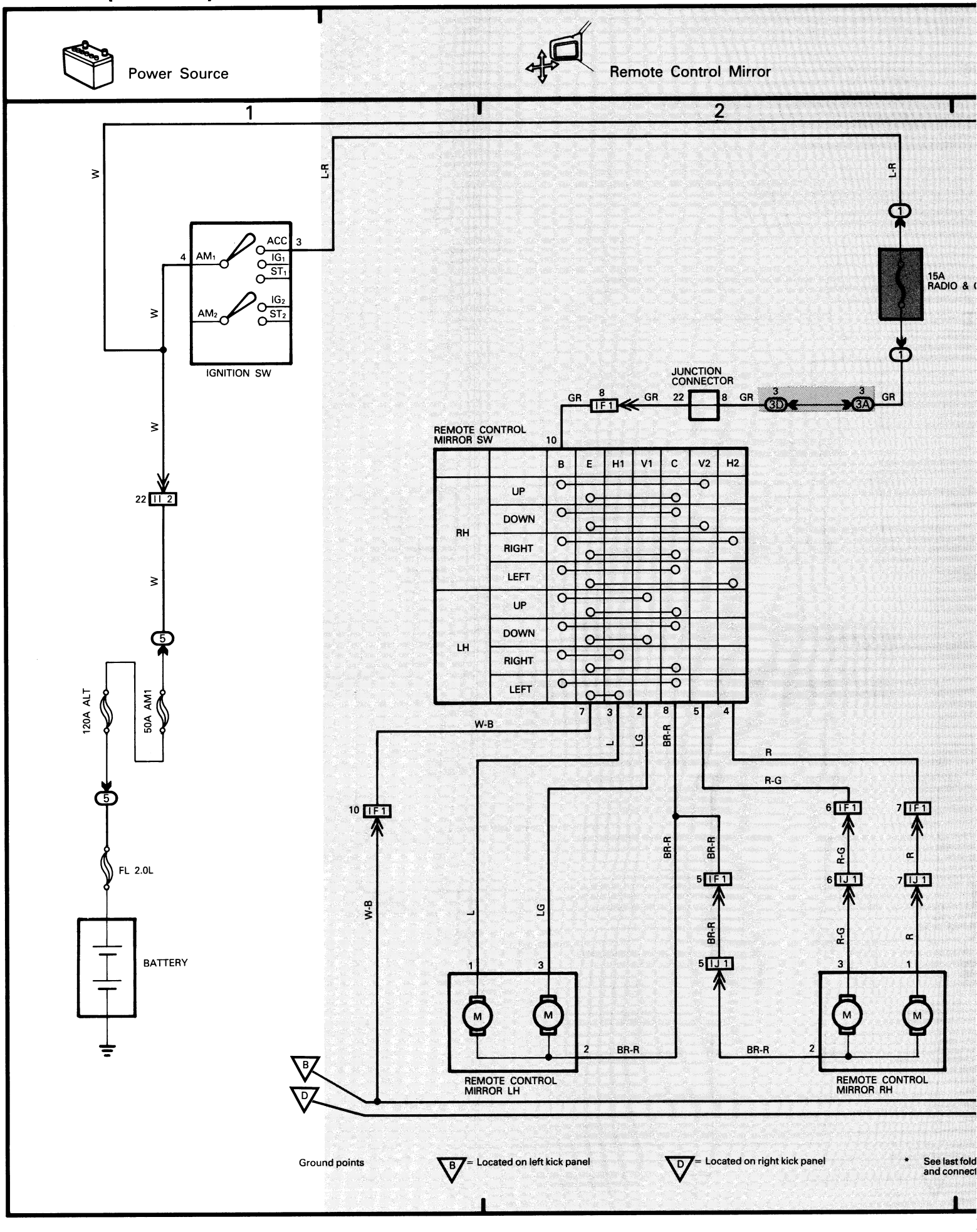
* See last fold-out page for connector to J/B, and connector between wire harness.

MR2 (Cont'd)

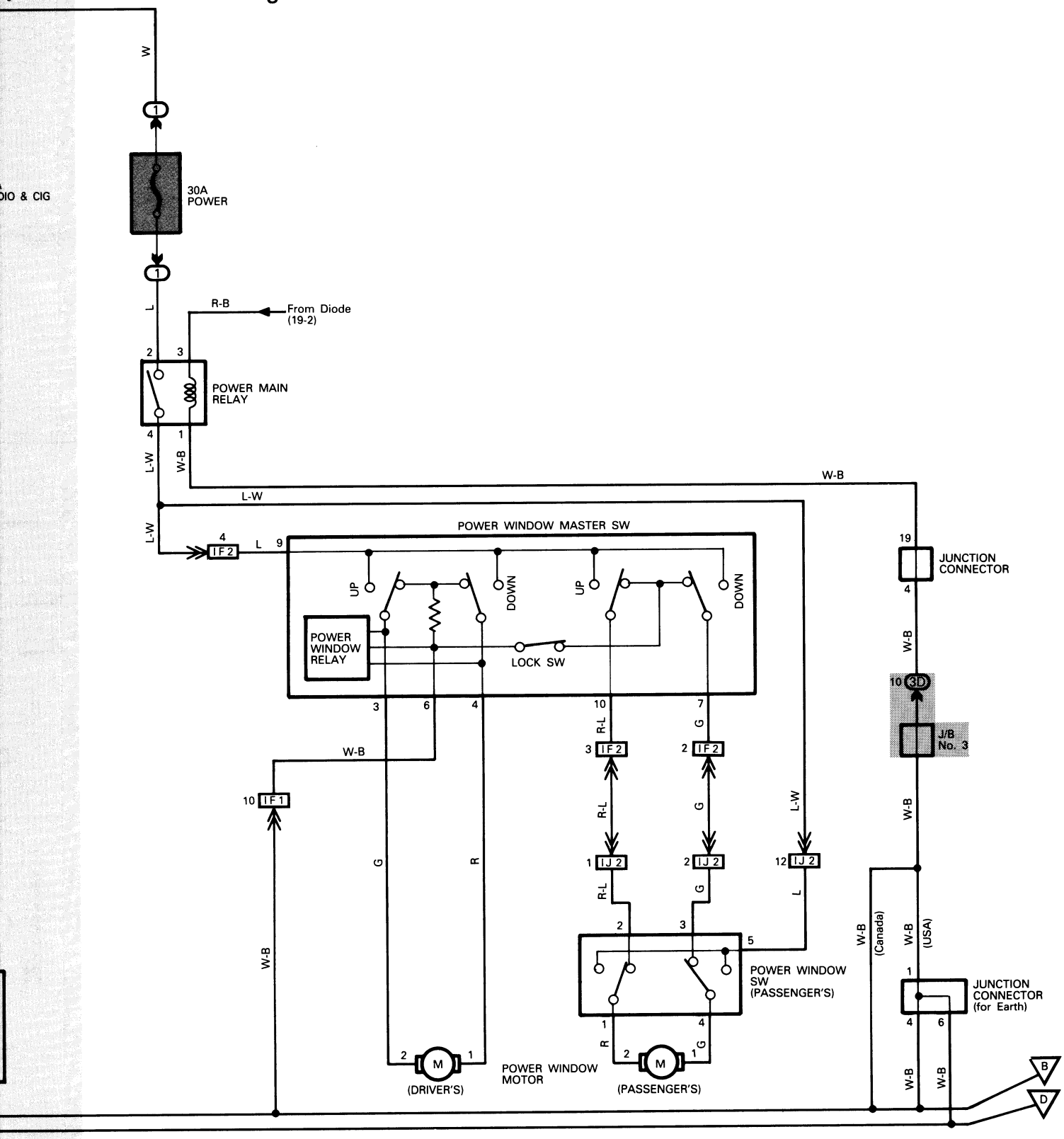

Power Source
Turn Signal and Hazard
1
2
BATTERY
120A ALT
50A AM1
FL 2.0L
IGNITION SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
7.5A TURN
HAZARD SW
B1
F
B2
TB
TL
TR
OFF
ON
TURN SIGNAL FLASHER
TURN SIGNAL INDICATOR LIGHTS [COMB. METER]
LH
RH
J/B No. 3
JUNCTION CONNECTOR (for Earth)
FRONT TURN SIGNAL LIGHT LH
FRONT TURN SIGNAL LIGHT RH
W-B (Canada)
W-B (USA)
Ground points
= Located on left kick panel
= Located on right kick panel


Horn
3
4
W
5
15A
HAZ-HORN
11
II 3
G-R
G-O
1
TB
LH
RH
TURN SIGNAL SW
[COMB. SW]
5
8
G-B
G-Y
HORN
RELAY
G-W
5
3A
J/B No. 3
8
7
II 2
4
IK 2
From Theft Deterrent
ECU (19-4)
10
HORN SW
[COMB. SW]
LH
RH
HORN
3
IE 1
2
IE 1
FRONT TURN SIGNAL
LIGHT RH
REAR TURN SIGNAL
LIGHT LH
[REAR COMB. LIGHT LH]
REAR TURN SIGNAL
LIGHT RH
[REAR COMB. LIGHT RH]
W-B
B
D
E
F
I
E = Located on front right fender
F = Located on front left fender
I = Located on back panel center
* See last fold-out page for connector to J/B, and connector between wire harness.

12 MR2 (Caont'd)

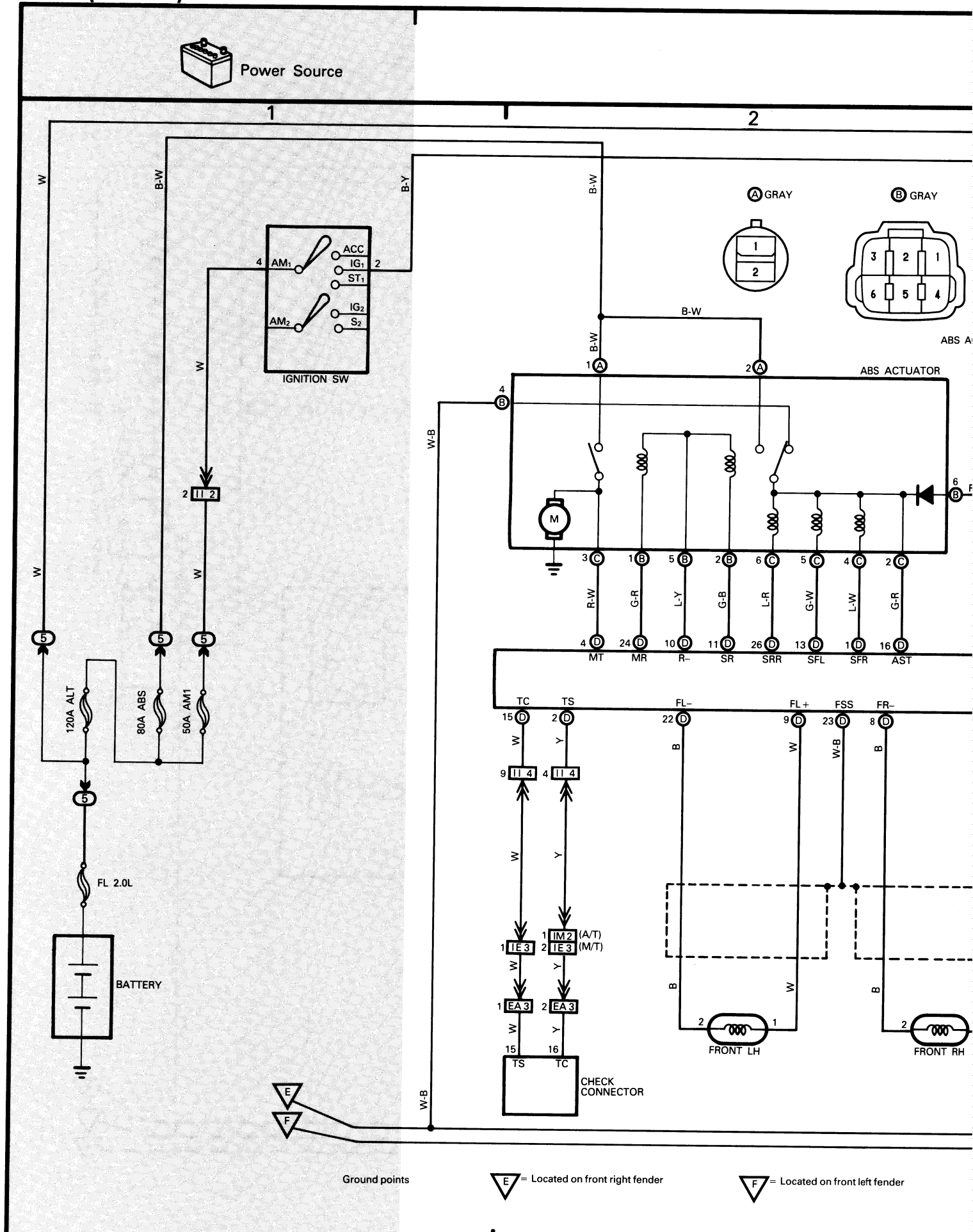


Power Window

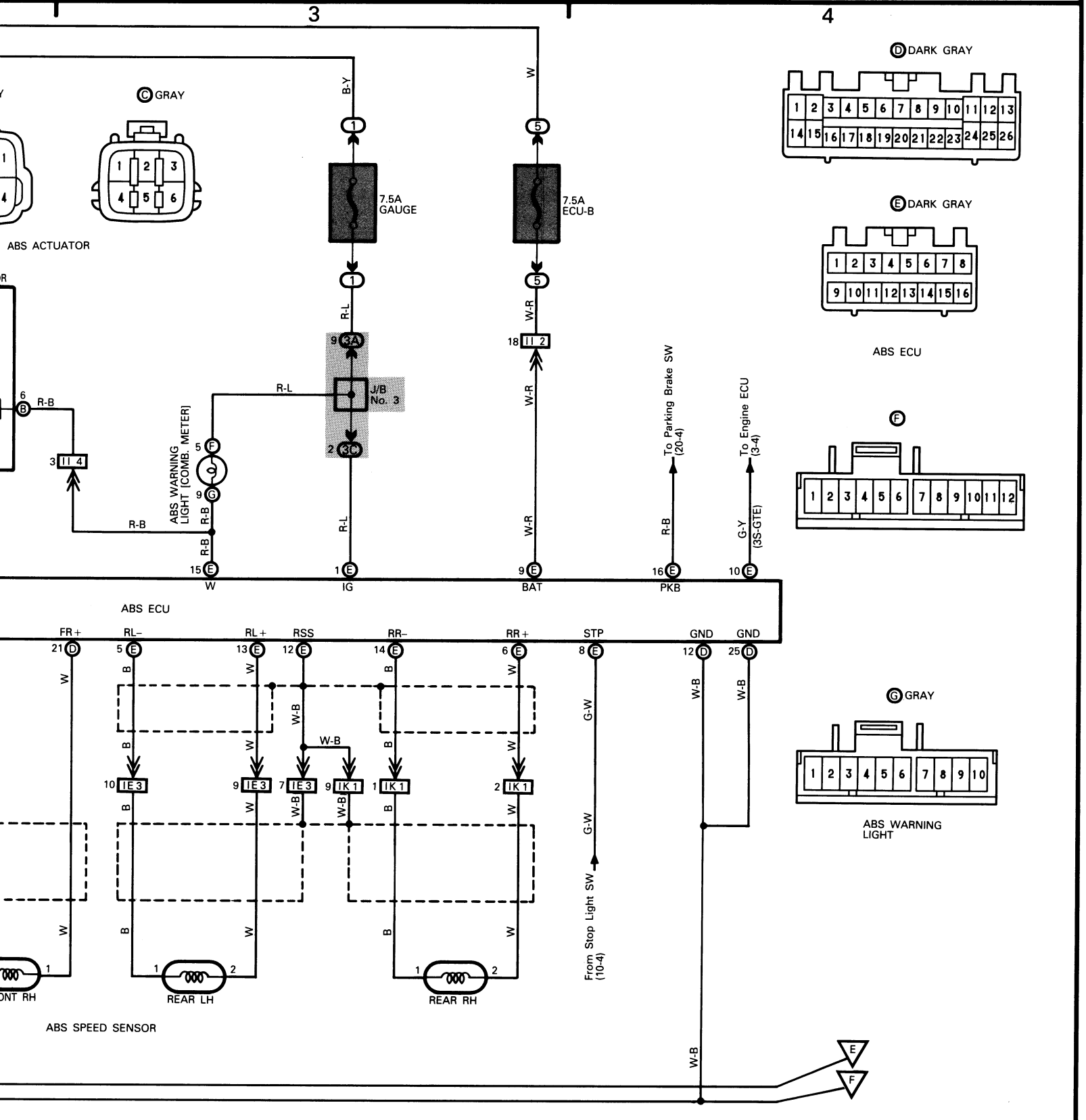


last fold-out page for connector to J/B,
connector between wire harness.

MR2 (Cont'd)

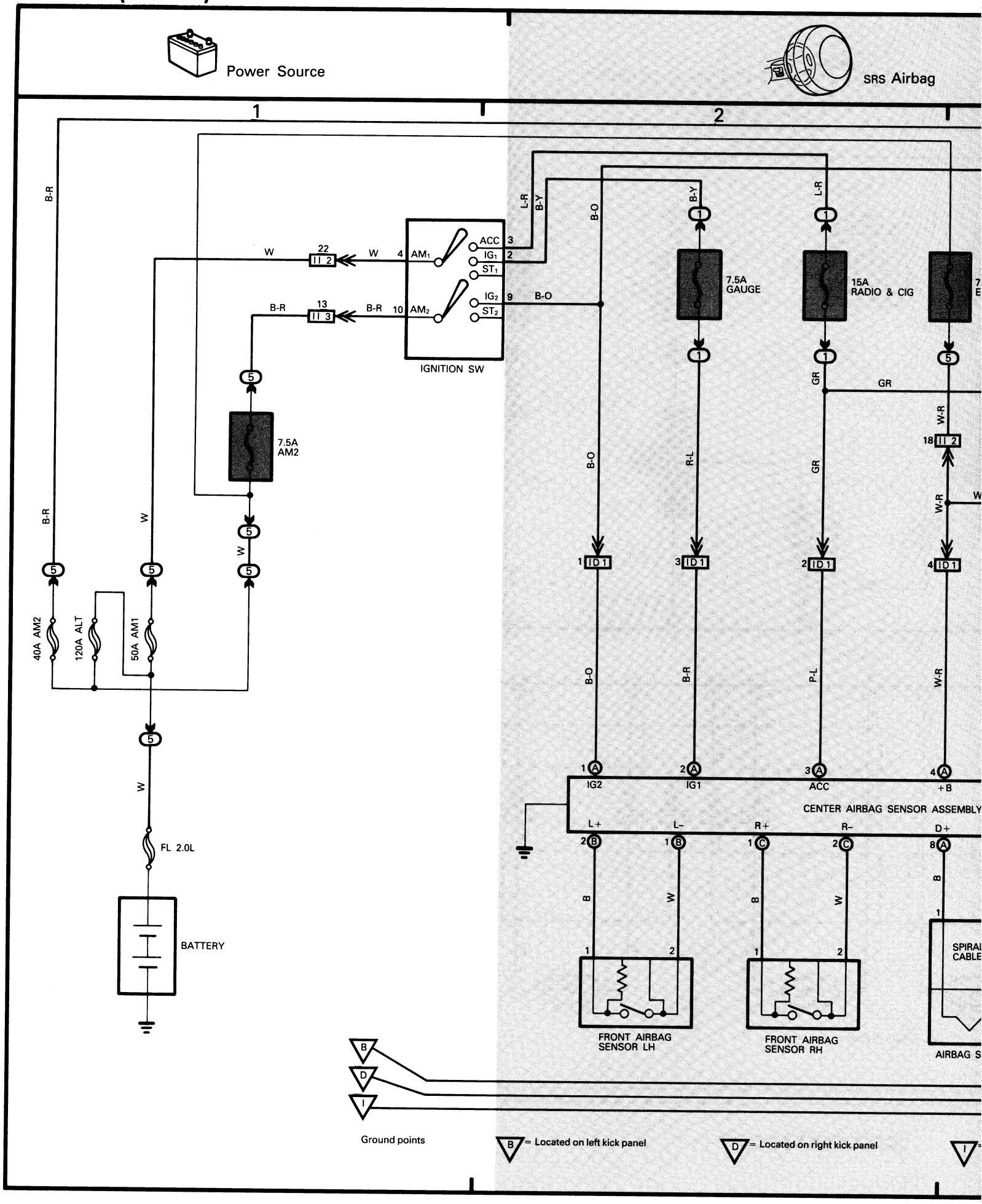

Power Source
1
2
W
B-W
B-Y
ACC
IG1
ST1
IG2
S2
AM1
AM2
IGNITION SW
2 II 2
120A ALT
80A ABS
50A AM1
FL 2.0L
BATTERY
A GRAY
B GRAY
ABS ACTUATOR
M
R-W
G-R
L-Y
G-B
L-R
G-W
L-W
MT
MR
R–
SR
SRR
SFL
SFR
AST
TC
TS
FL–
FL+
FSS
FR–
IM 2 (A/T)
IE 3 (M/T)
IE 3
EA 3
CHECK CONNECTOR
FRONT LH
FRONT RH
W-B
E
F
Ground points
E = Located on front right fender
F = Located on front left fender

ABS (Anti-lock Brake System)

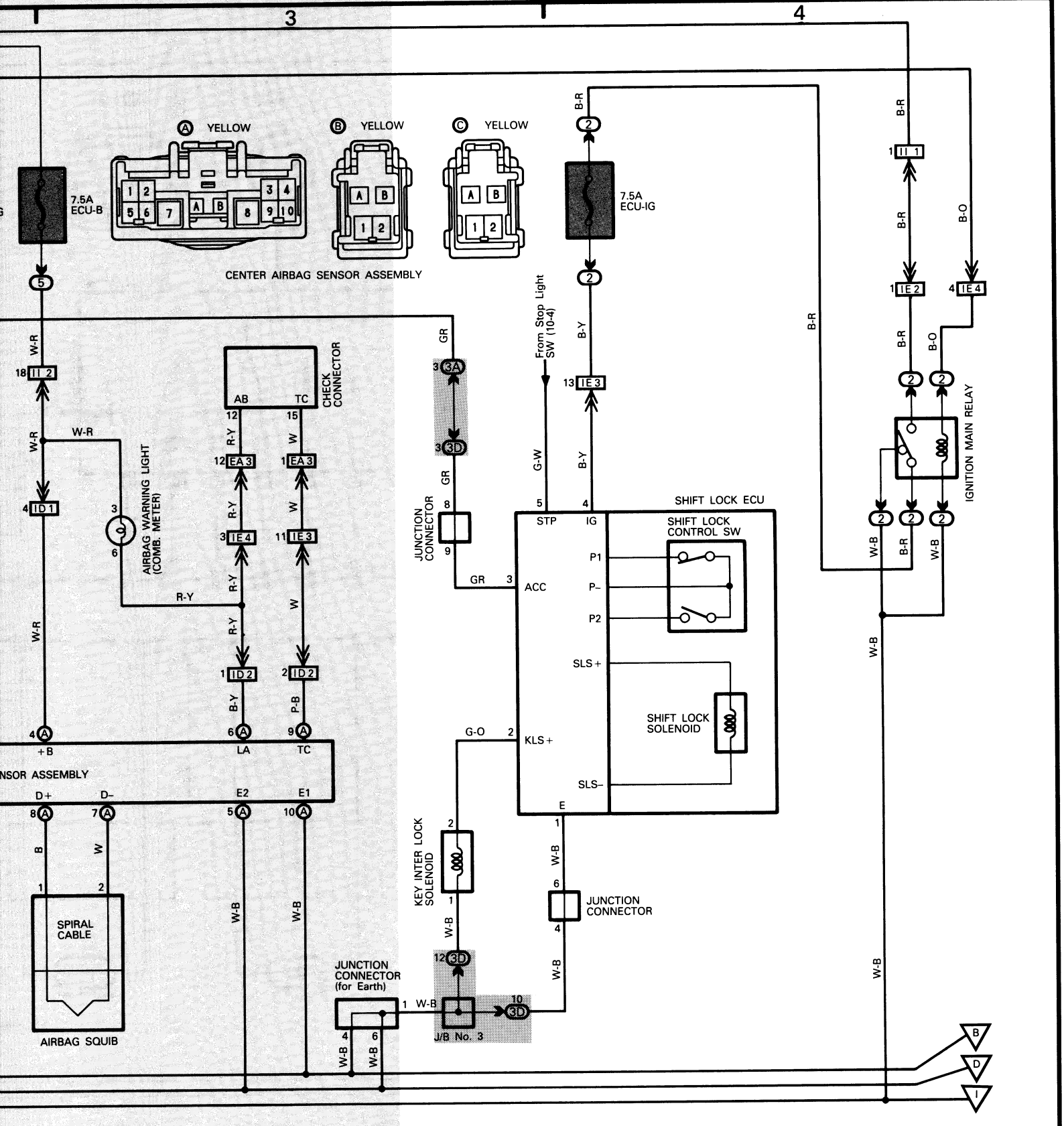


* See last fold-out page for connector to J/B, and connector between wire harness.

14 MR2 (Cont'd)


Power Source
SRS Airbag
1
2
B-R
W
22
II 2
4 AM1
ACC 3
IG1 2
ST1
IG2 9
ST2
B-R
13
II 3
10 AM2
IGNITION SW
B-O
L-R
B-Y
7.5A GAUGE
15A RADIO & CIG
GR
W-R
18 II 2
7.5A AM2
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
1 ID 1
3 ID 1
2 ID 1
4 ID 1
R-L
P-L
1 A IG2
2 A IG1
3 A ACC
4 A +B
CENTER AIRBAG SENSOR ASSEMBLY
L+
L–
R+
R–
D+
2 B
1 B
1 C
2 C
8 A
FRONT AIRBAG SENSOR LH
FRONT AIRBAG SENSOR RH
SPIRAL CABLE
AIRBAG S
B
D
I
Ground points
B = Located on left kick panel
D = Located on right kick panel

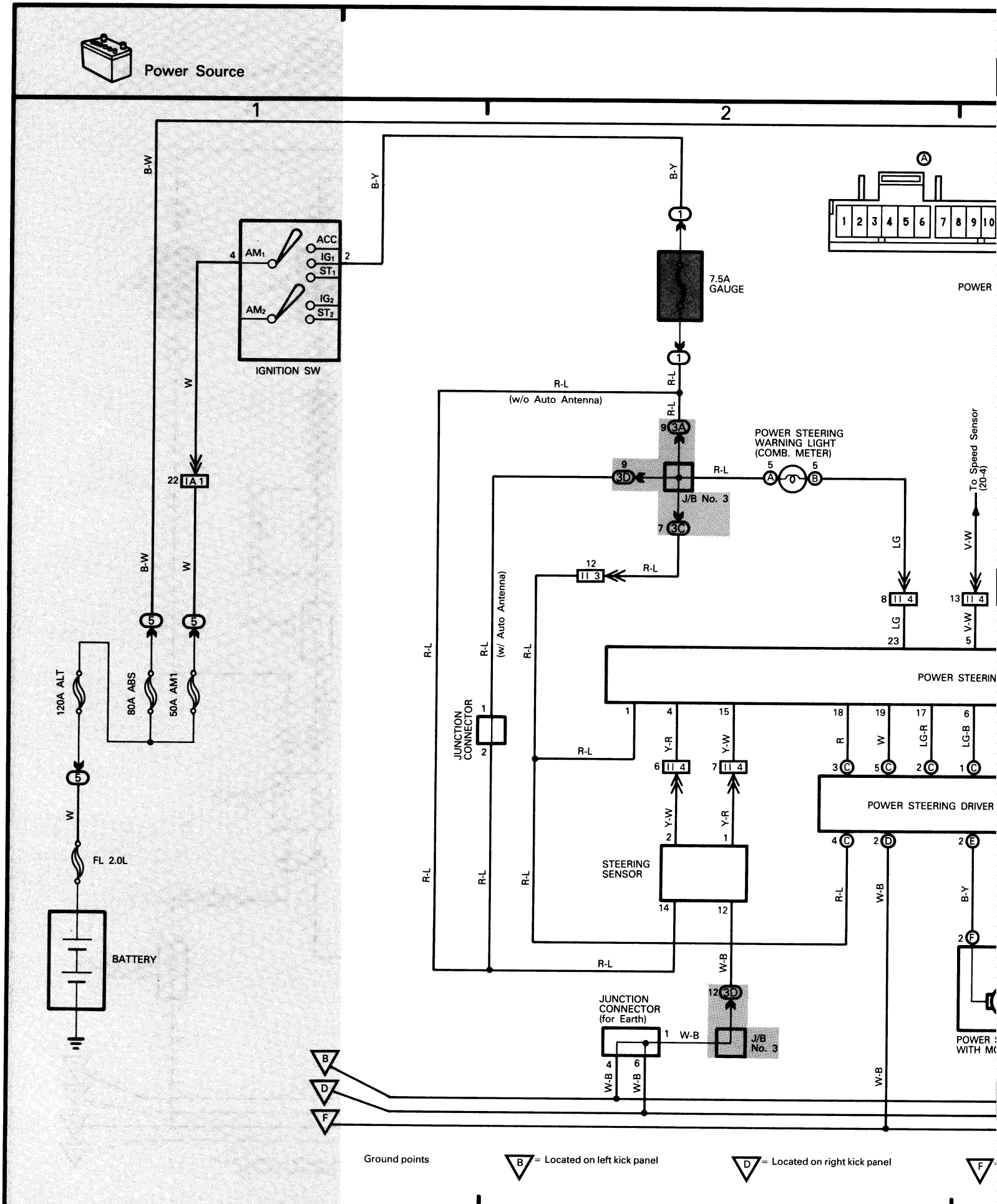
Shift Lock



= Located on back panel center

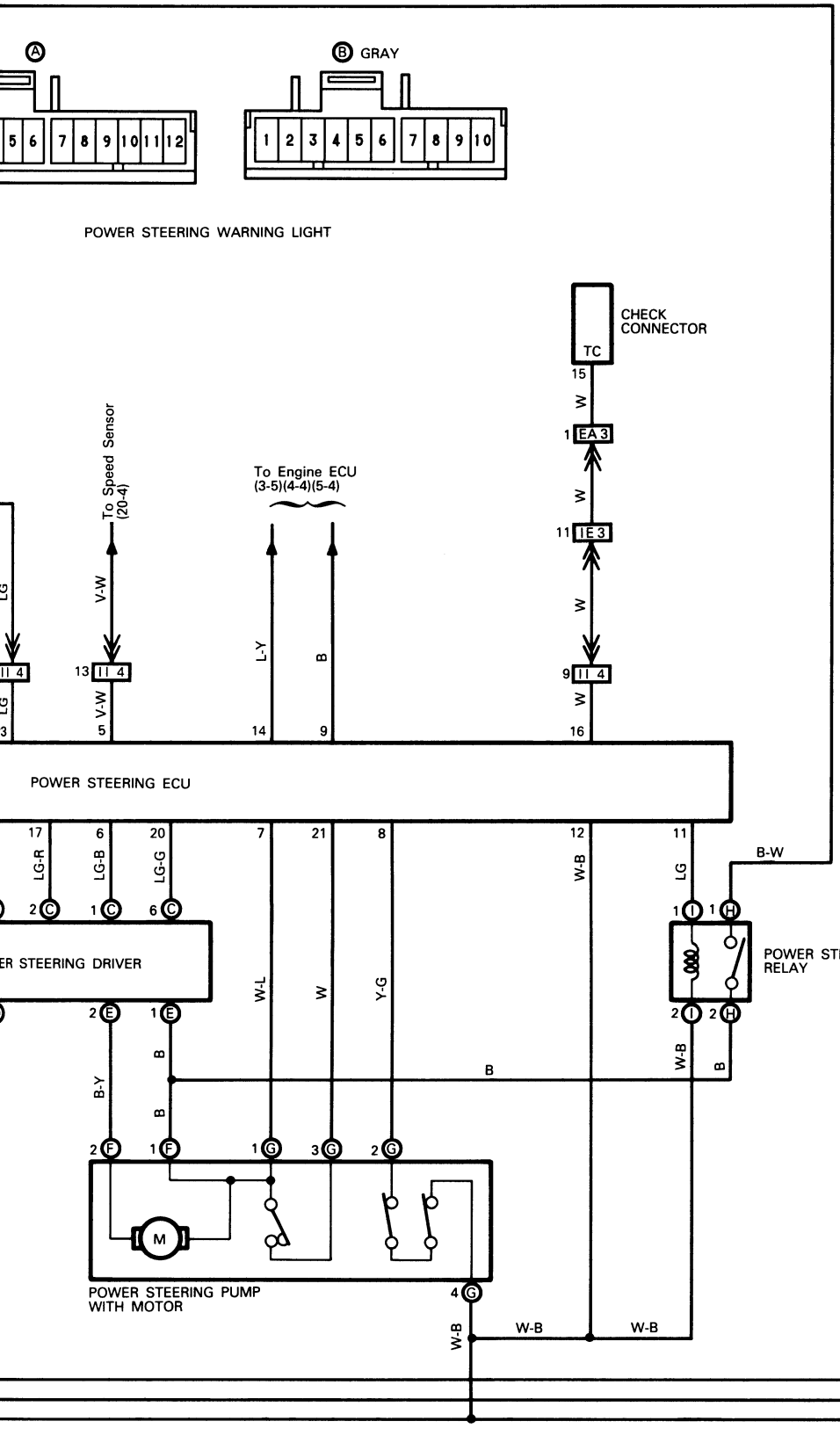
* See last fold-out page for connector to J/B, and connector between wire harness.

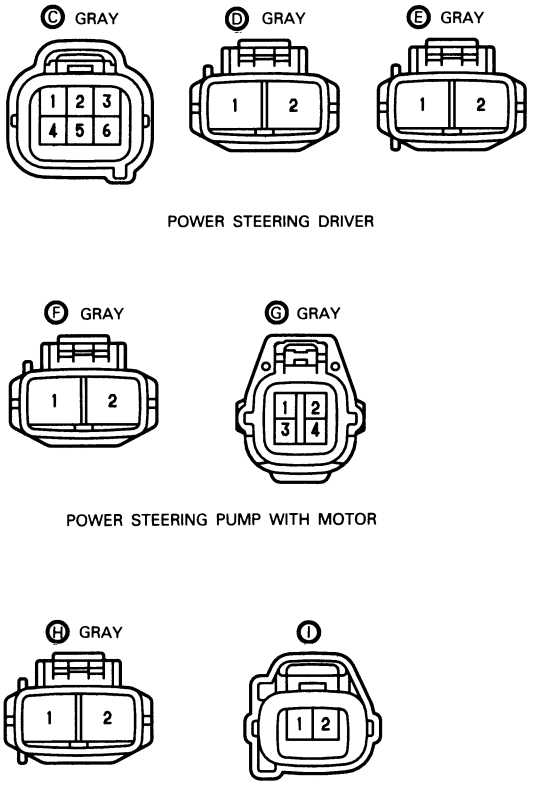
MR2 (Cont'd)


Power Source
1
2
B-W
B-Y
ACC
IG1
ST1
IG2
ST2
AM1
AM2
IGNITION SW
7.5A GAUGE
POWER
W
R-L
(w/o Auto Antenna)
(w/ Auto Antenna)
POWER STEERING WARNING LIGHT (COMB. METER)
J/B No. 3
To Speed Sensor (20-4)
LG
V-W
POWER STEERIN
JUNCTION CONNECTOR
Y-R
Y-W
R
W
LG-R
LG-B
POWER STEERING DRIVER
STEERING SENSOR
W-B
JUNCTION CONNECTOR (for Earth)
POWER S WITH MO
120A ALT
80A ABS
50A AM1
FL 2.0L
BATTERY
Ground points
B = Located on left kick panel
D = Located on right kick panel
F

Power Steering

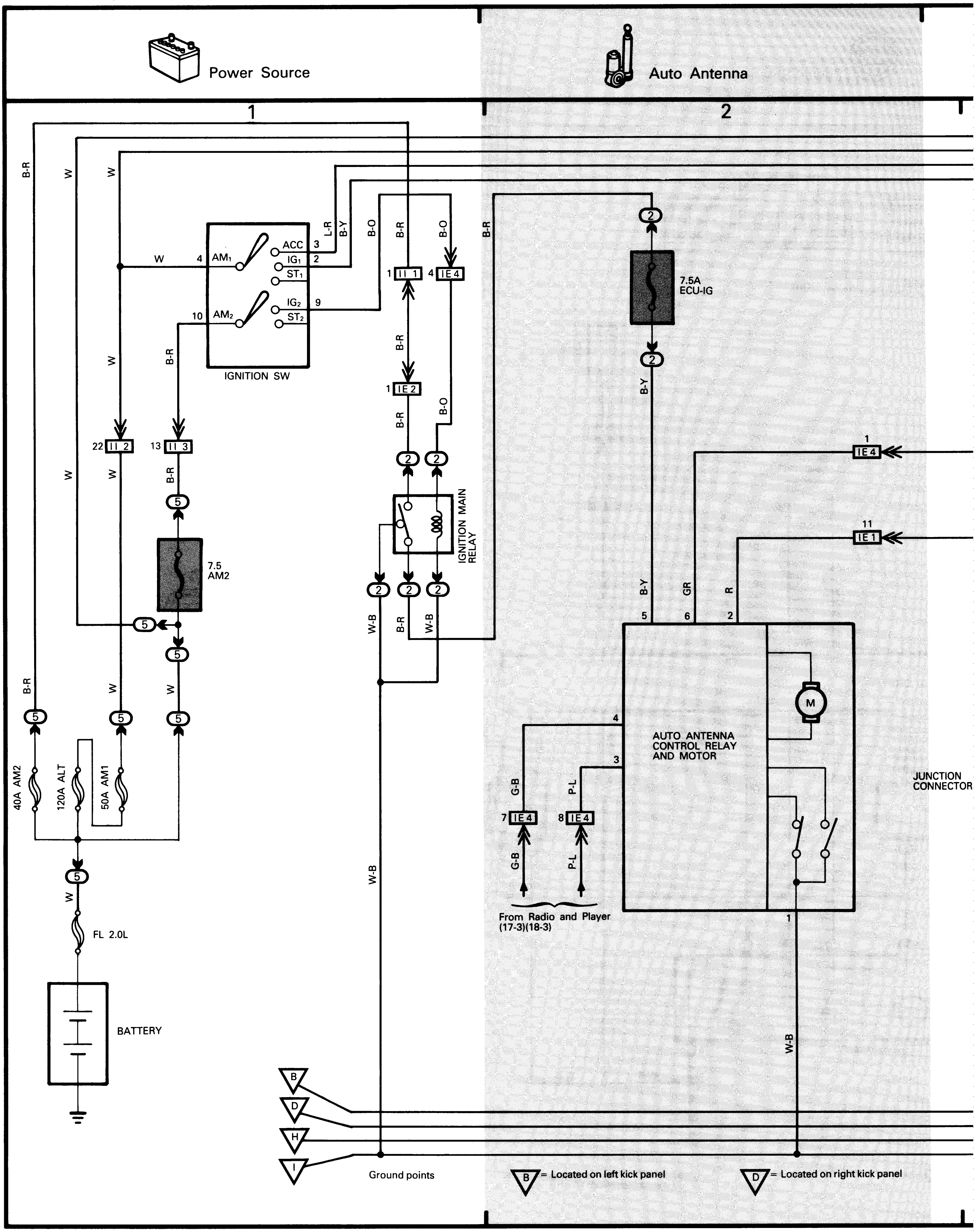
3 4





F = Located on front left fender

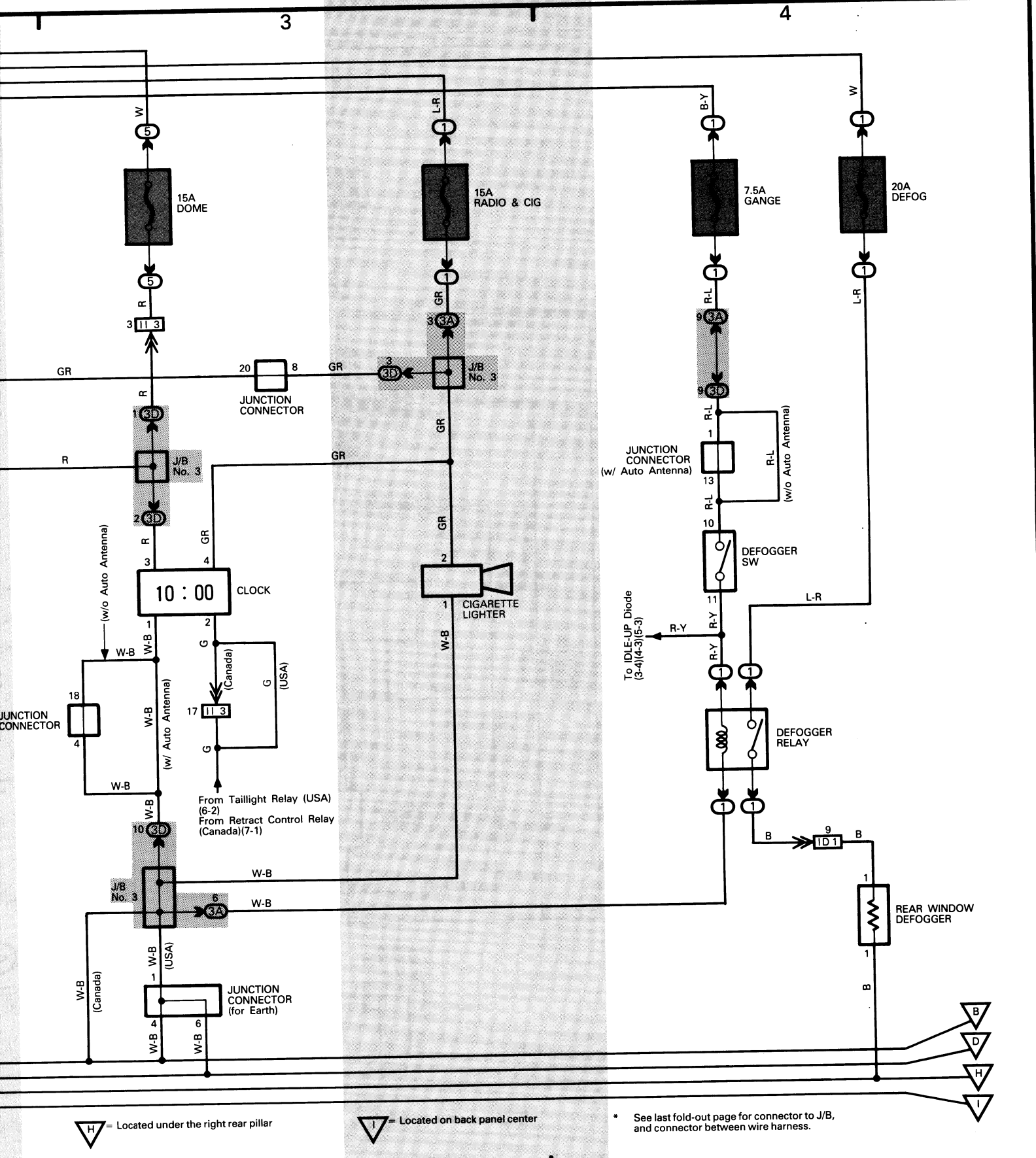
* See last fold-out page for connector to J/B, and connector between wire harness.


Power Source
Auto Antenna
1
2
B-R
W
L-R
B-Y
B-O
ACC
IG1
ST1
AM1
AM2
IG2
ST2
IGNITION SW
II 1
IE 4
IE 2
II 2
II 3
7.5A
ECU-IG
7.5
AM2
IGNITION MAIN RELAY
W-B
GR
R
IE 1
AUTO ANTENNA CONTROL RELAY AND MOTOR
M
JUNCTION CONNECTOR
G-B
P-L
From Radio and Player
(17-3)(18-3)
40A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
Ground points
B = Located on left kick panel
D = Located on right kick panel

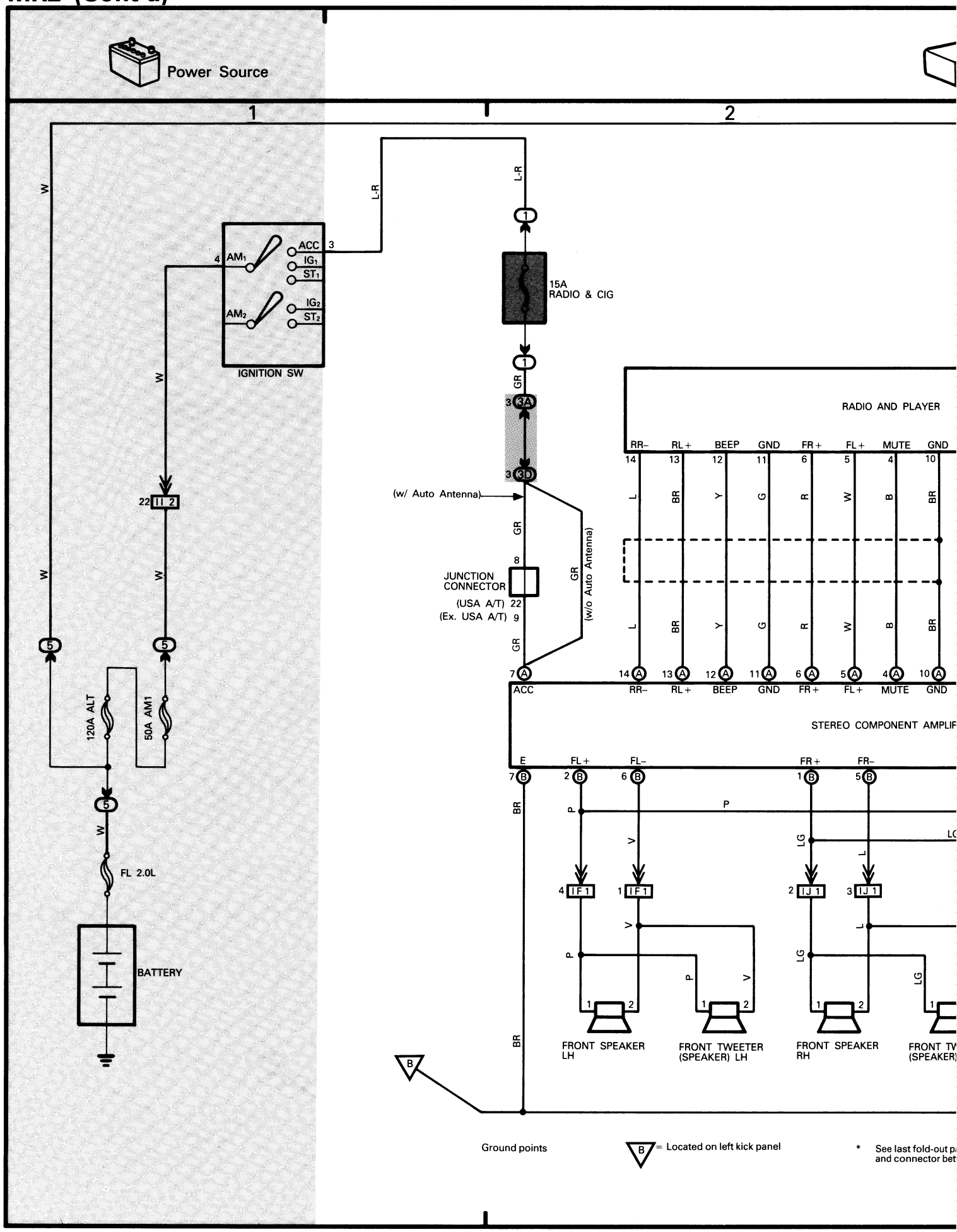
Clock

Cigarette Lighter

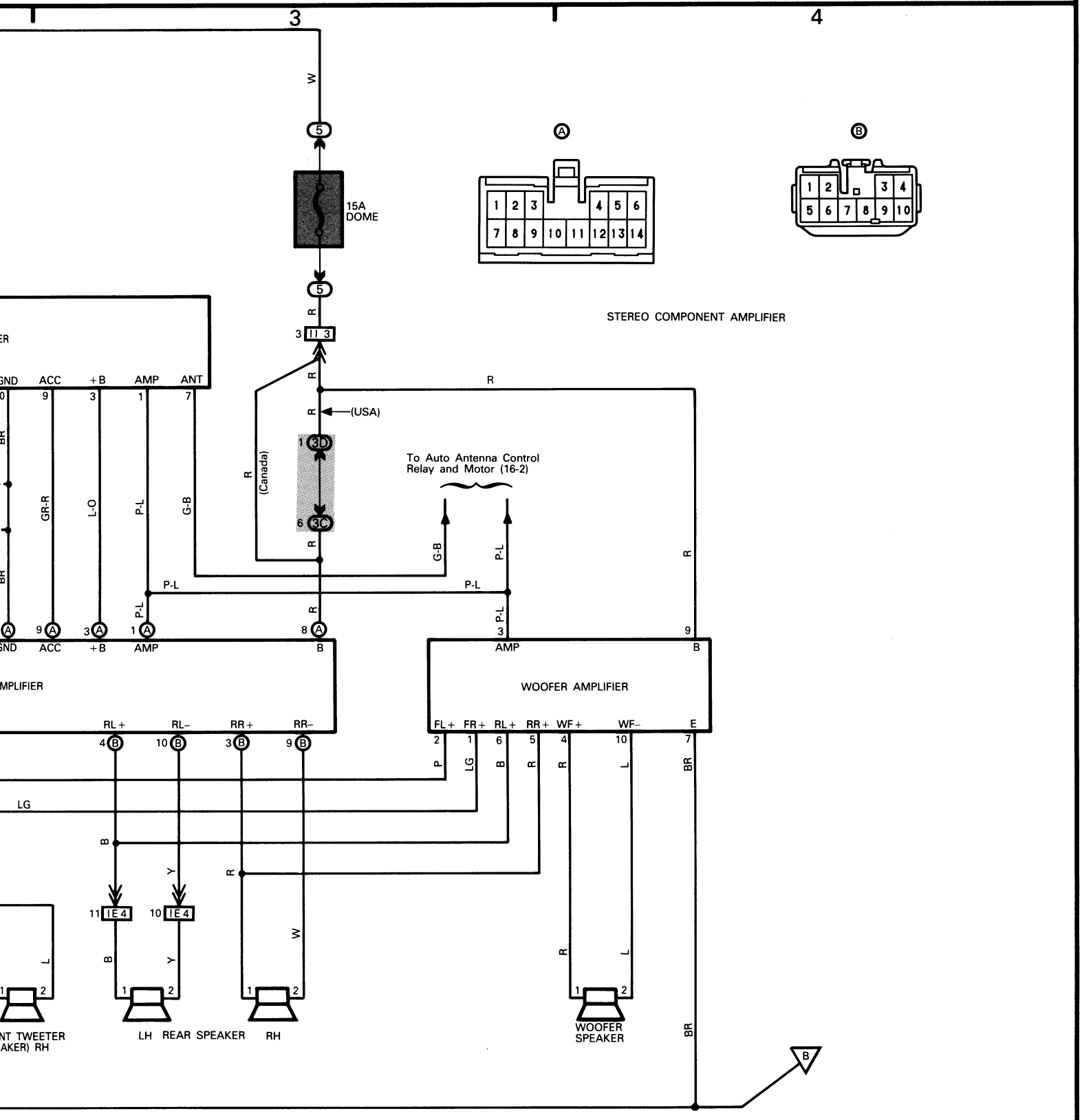
Rear Window Defogger



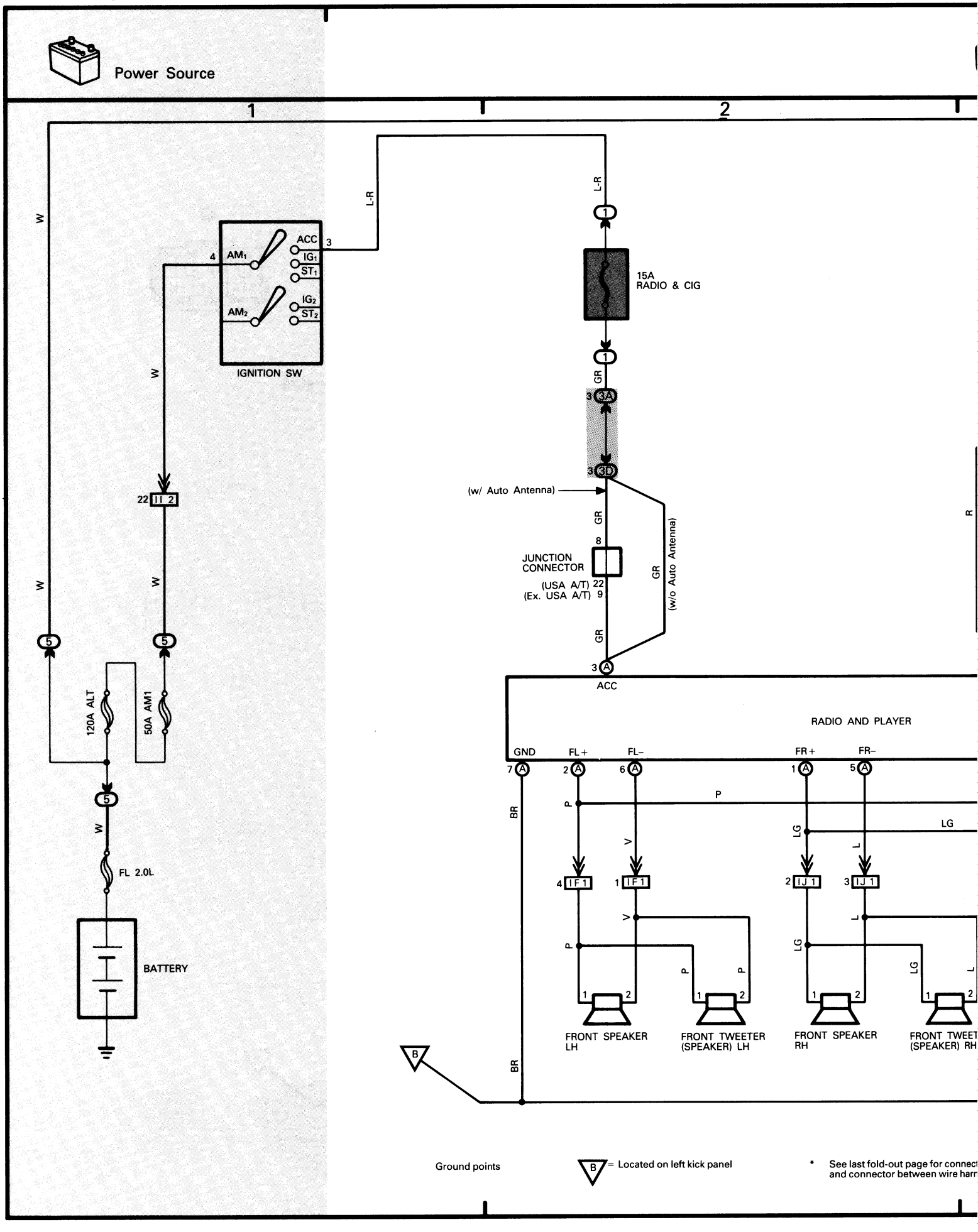
MR2 (Cont'd)

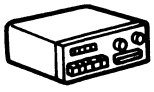

Power Source
1
2
W
L-R
ACC
IG1
ST1
IG2
ST2
AM1
AM2
IGNITION SW
15A
RADIO & CIG
GR
(w/ Auto Antenna)
JUNCTION
CONNECTOR
(USA A/T) 22
(Ex. USA A/T) 9
(w/o Auto Antenna)
RADIO AND PLAYER
RR–
RL+
BEEP
GND
FR+
FL+
MUTE
GND
ACC
120A ALT
50A AM1
FL 2.0L
BATTERY
STEREO COMPONENT AMPLIF
E
FL+
FL–
FR+
FR–
P
V
LG
L
BR
FRONT SPEAKER
LH
FRONT TWEETER
(SPEAKER) LH
FRONT SPEAKER
RH
Ground points
= Located on left kick panel
* See last fold-out p
and connector bet

Radio and Player (w/ CD Player)



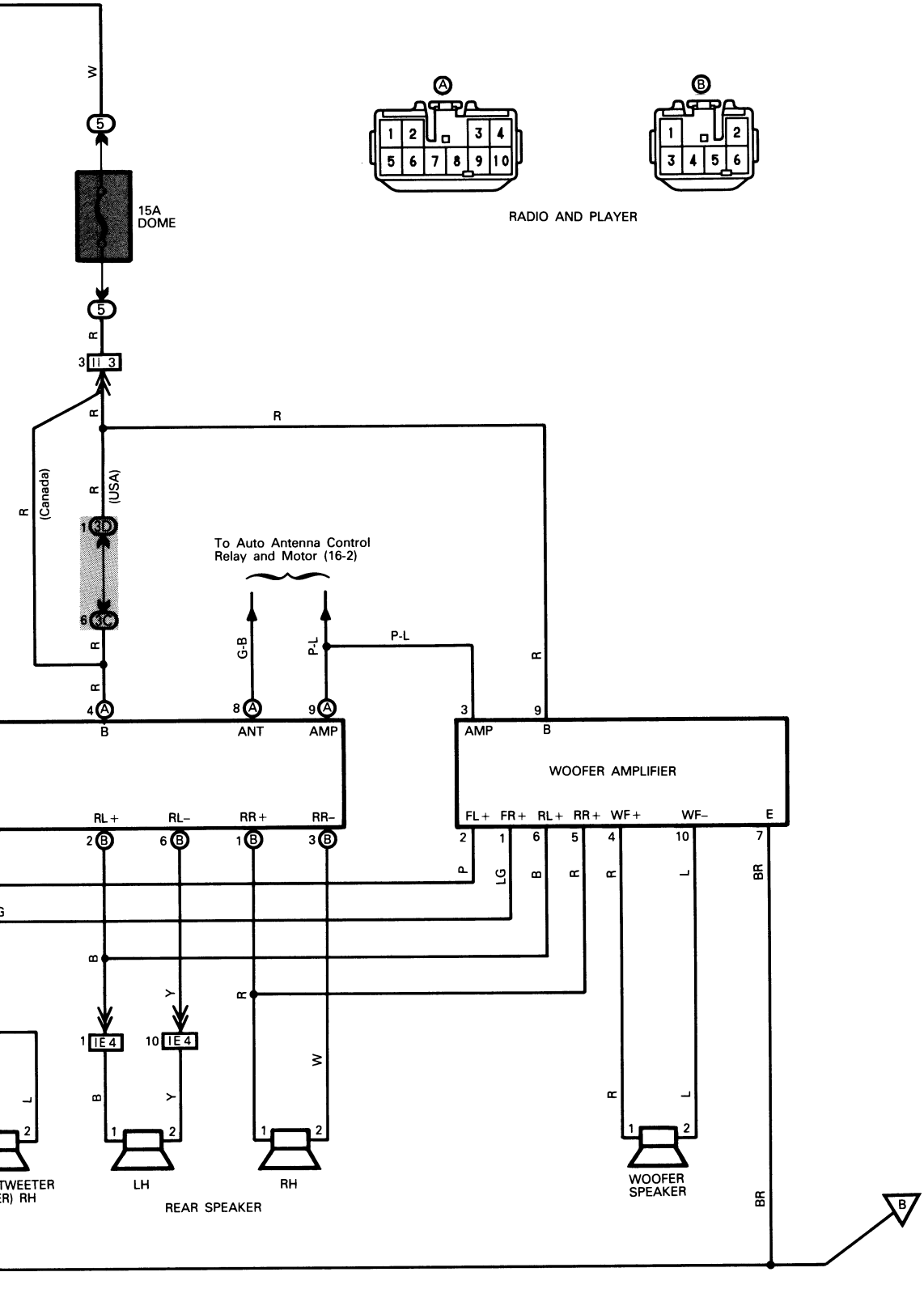
-out page for connector to J/B,
or between wire harness.


Power Source
1
2
W
L-R
ACC
AM1
IG1
ST1
AM2
IG2
ST2
IGNITION SW
15A
RADIO & CIG
GR
3A
3D
(w/ Auto Antenna)
JUNCTION
CONNECTOR
(USA A/T) 22
(Ex. USA A/T) 9
(w/o Auto Antenna)
ACC
120A ALT
50A AM1
FL 2.0L
BATTERY
RADIO AND PLAYER
GND
FL+
FL-
FR+
FR-
P
LG
V
L
BR
FRONT SPEAKER
LH
FRONT TWEETER
(SPEAKER) LH
FRONT SPEAKER
RH
FRONT TWEET
(SPEAKER) RH
Ground points
= Located on left kick panel
* See last fold-out page for connect
and connector between wire harn



Radio and Player (w/o CD Player)

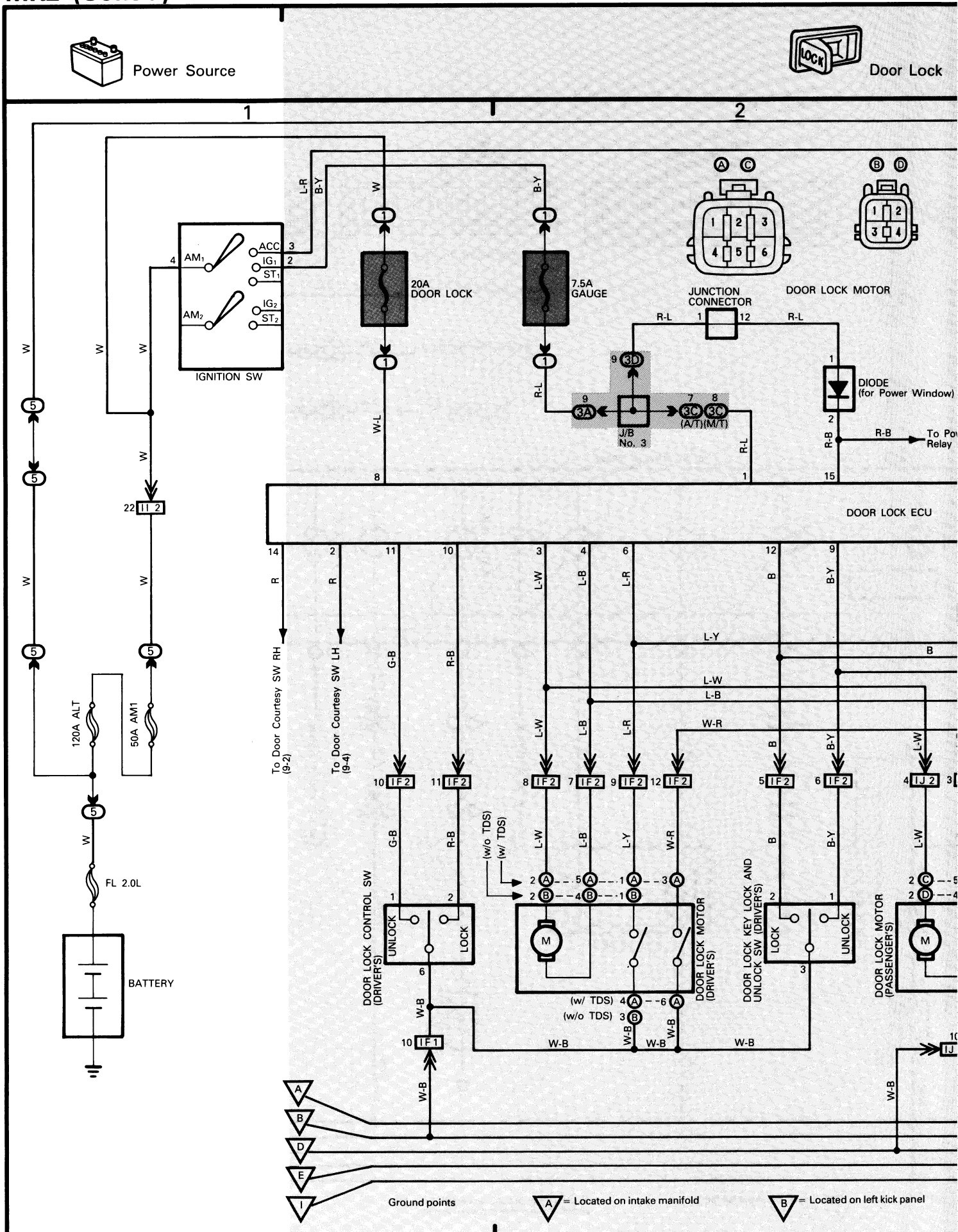
3 4



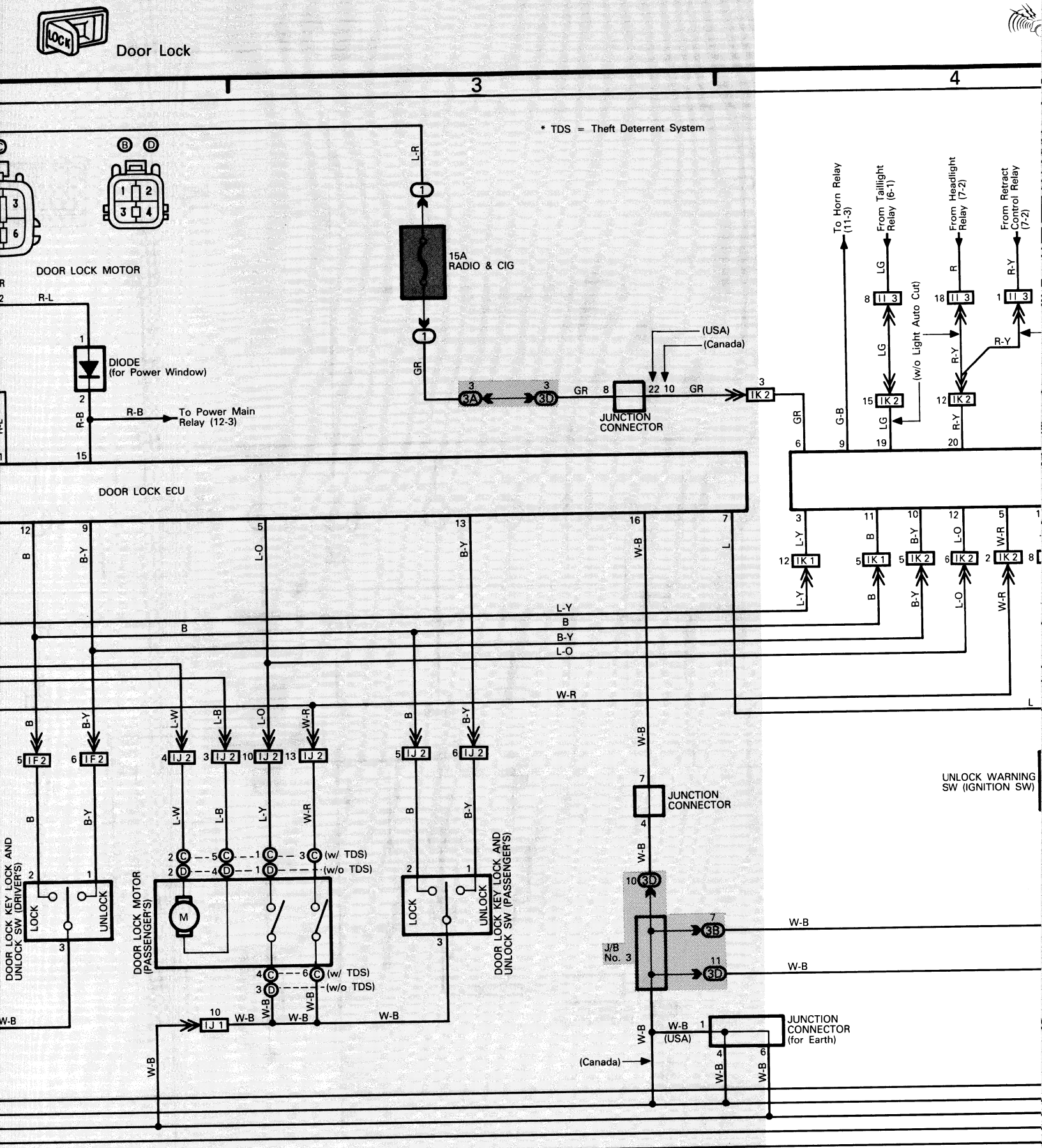
RADIO AND PLAYER

connector to J/B,
re harness.

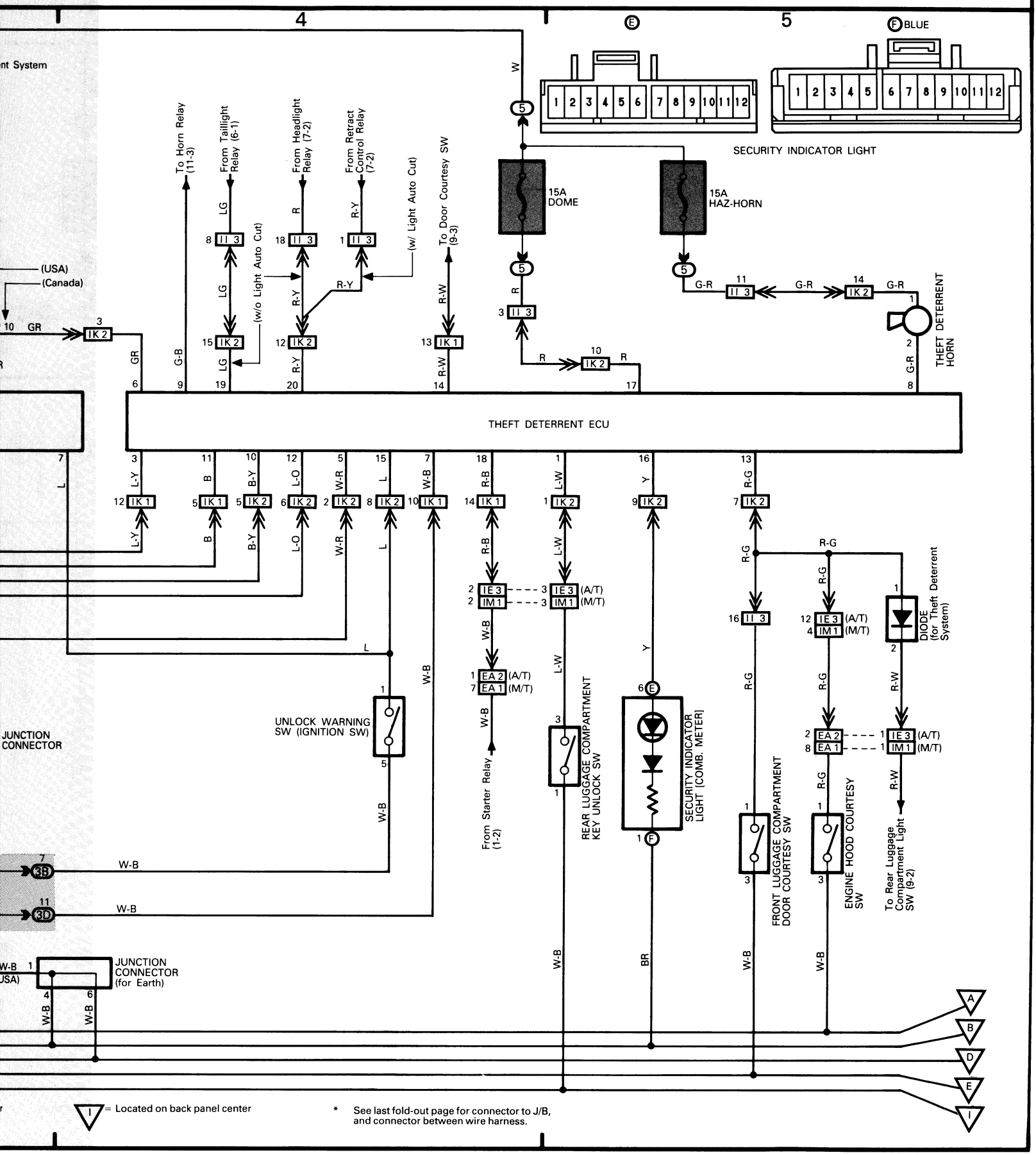
MR2 (Cont'd)


Power Source
Door Lock
1
2
ACC
IG1
ST1
IG2
ST2
AM1
AM2
IGNITION SW
20A DOOR LOCK
7.5A GAUGE
JUNCTION CONNECTOR
DOOR LOCK MOTOR
DIODE (for Power Window)
J/B No. 3
(A/T)(M/T)
DOOR LOCK ECU
To Door Courtesy SW RH (9-2)
To Door Courtesy SW LH (9-4)
120A ALT
50A AM1
FL 2.0L
BATTERY
DOOR LOCK CONTROL SW (DRIVER'S)
UNLOCK
LOCK
(w/o TDS)
(w/ TDS)
DOOR LOCK MOTOR (DRIVER'S)
DOOR LOCK KEY LOCK AND UNLOCK SW (DRIVER'S)
DOOR LOCK MOTOR (PASSENGER'S)
(w/ TDS)
(w/o TDS)
Ground points
A = Located on intake manifold
B = Located on left kick panel

Door Lock

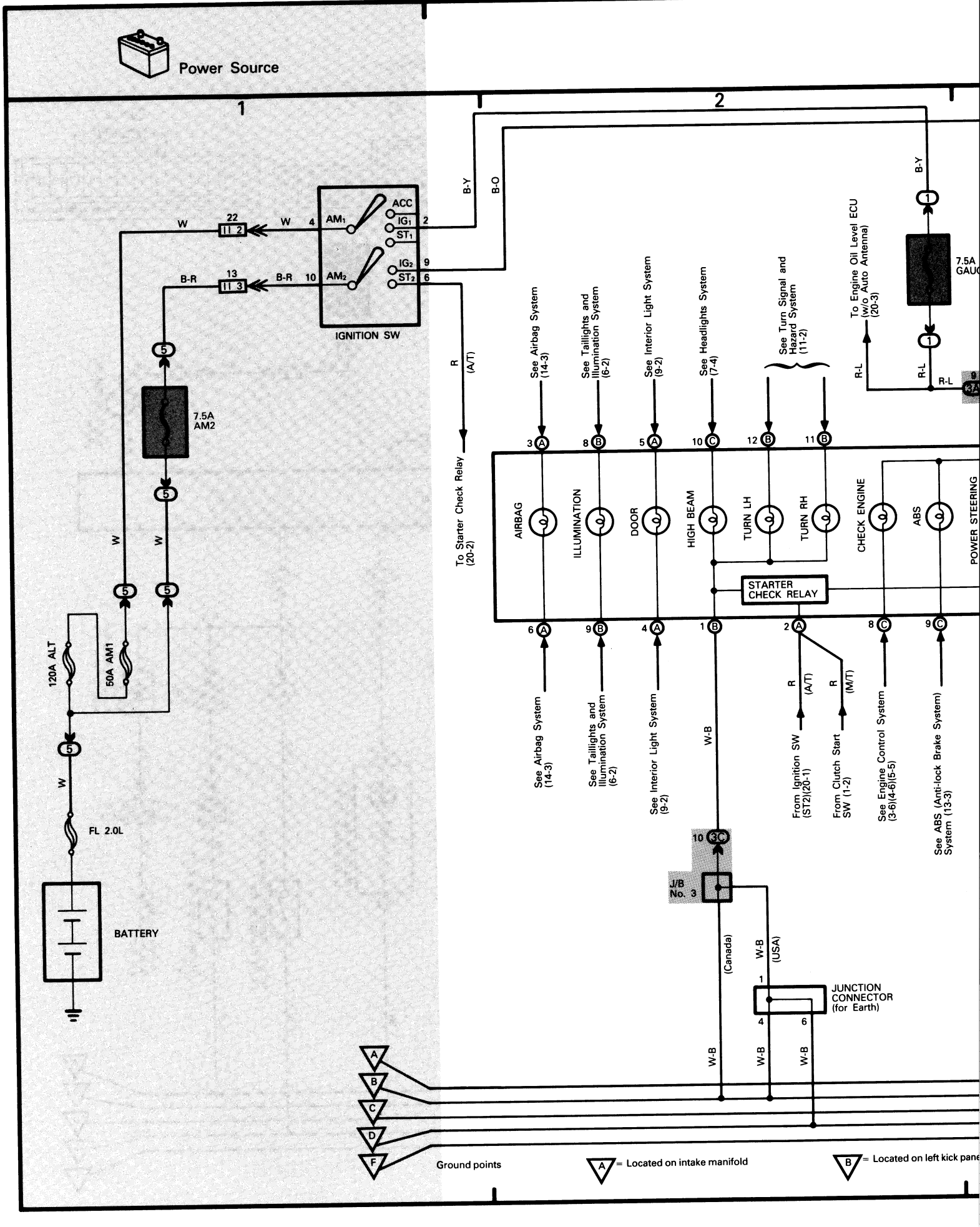

3
4
* TDS = Theft Deterrent System
DOOR LOCK MOTOR
DIODE (for Power Window)
R-B
To Power Main Relay (12-3)
15A RADIO & CIG
L-R
GR
(USA)
(Canada)
JUNCTION CONNECTOR
To Horn Relay (11-3)
From Taillight Relay (6-1)
From Headlight Relay (7-2)
From Retract Control Relay (7-2)
(w/o Light Auto Cut)
DOOR LOCK ECU
UNLOCK WARNING SW (IGNITION SW)
JUNCTION CONNECTOR
J/B No. 3
JUNCTION CONNECTOR (for Earth)
(Canada)
(USA)
DOOR LOCK KEY LOCK AND UNLOCK SW (DRIVER'S)
DOOR LOCK MOTOR (PASSENGER'S)
DOOR LOCK KEY LOCK AND UNLOCK SW (PASSENGER'S)
LOCK
UNLOCK
(w/ TDS)
(w/o TDS)
B = Located on left kick panel
D = Located on right kick panel
E = Located on front right fender
I = Located on back panel center

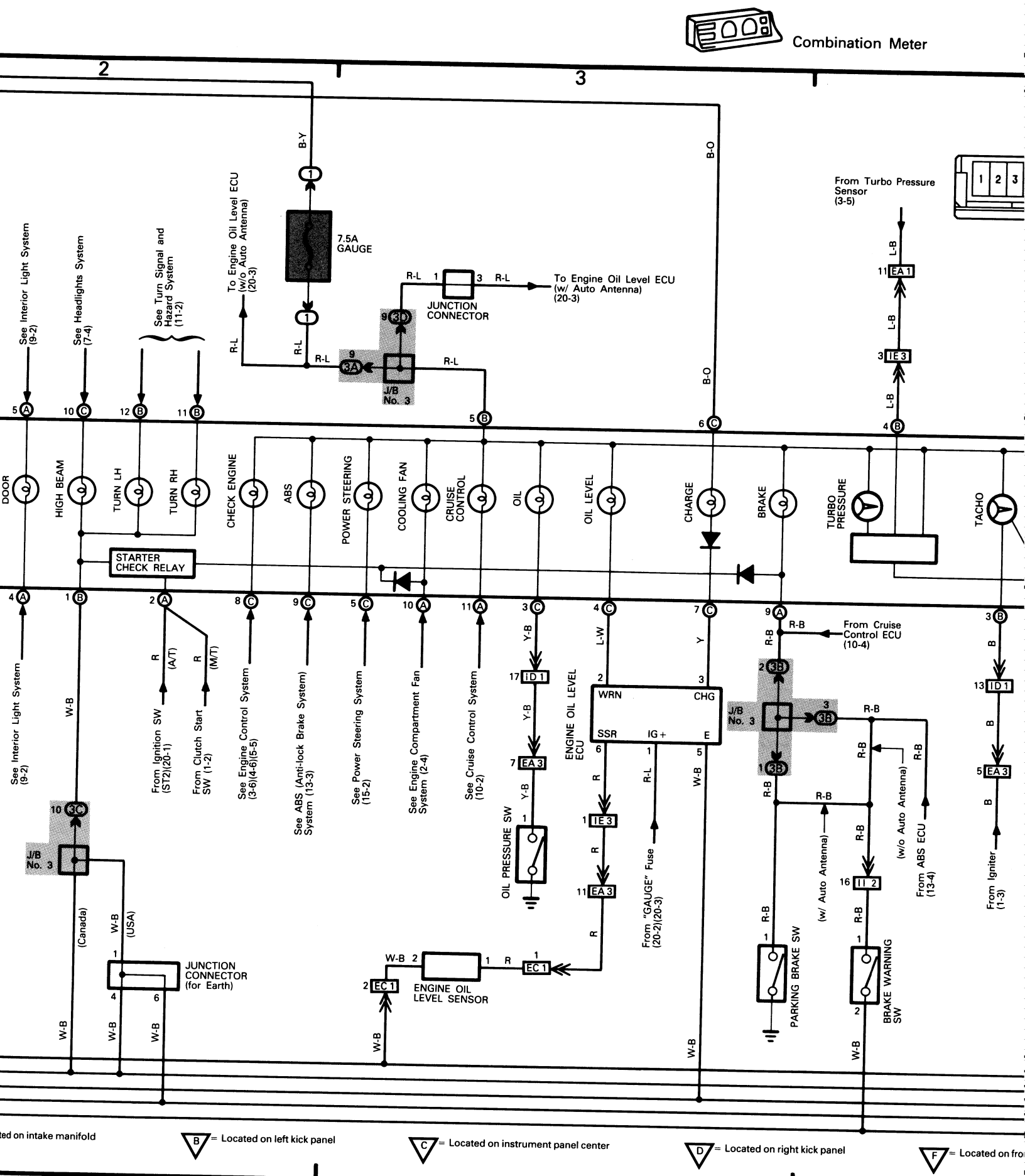
Theft Deterrent System



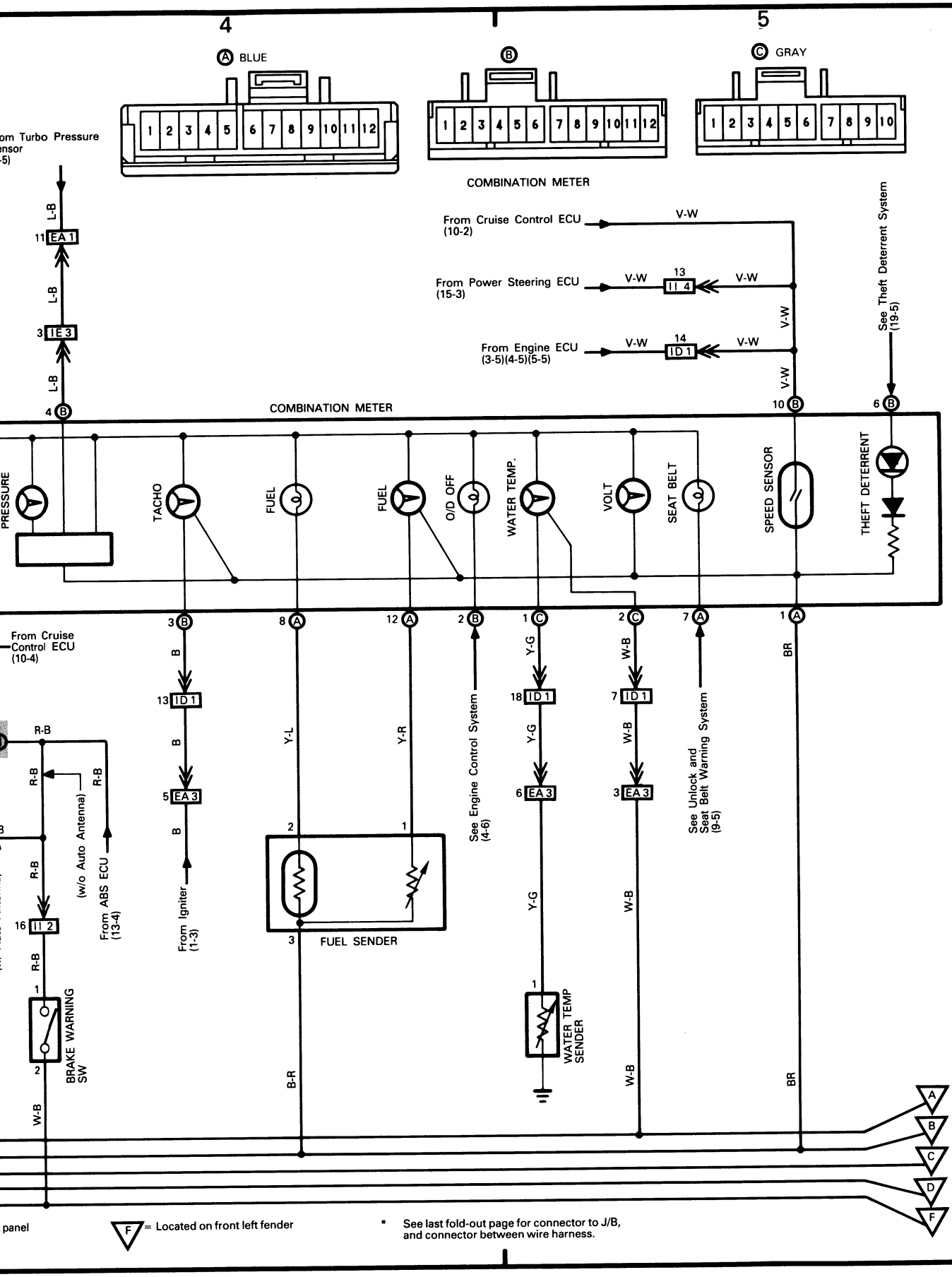
= Located on back panel center

* See last fold-out page for connector to J/B, and connector between wire harness.

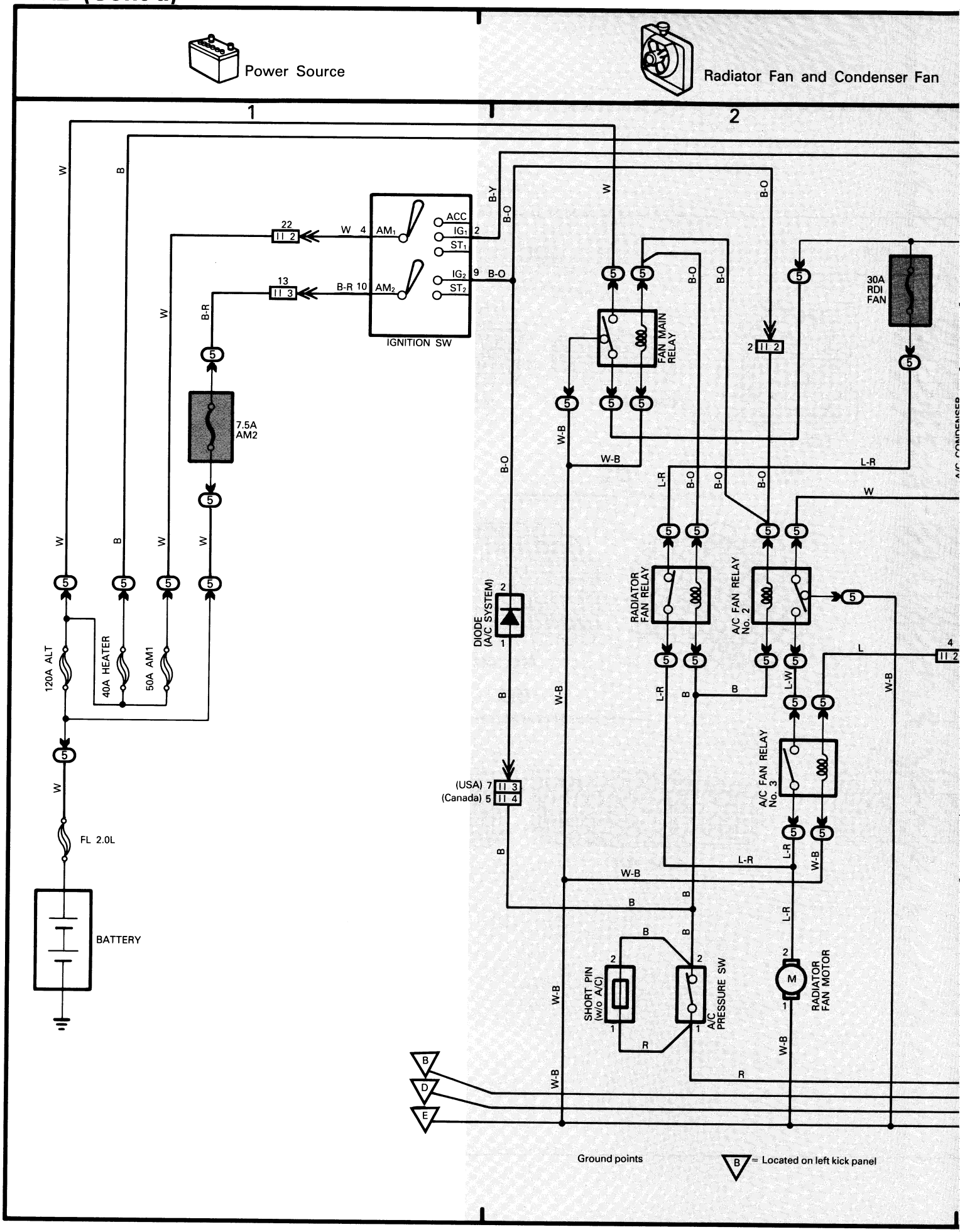

Power Source
1
2
IGNITION SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
7.5A AM2
120A ALT
50A AM1
FL 2.0L
BATTERY
To Starter Check Relay (20-2)
See Airbag System (14-3)
See Taillights and Illumination System (6-2)
See Interior Light System (9-2)
See Headlights System (7-4)
See Turn Signal and Hazard System (11-2)
To Engine Oil Level ECU (w/o Auto Antenna) (20-3)
AIRBAG
ILLUMINATION
DOOR
HIGH BEAM
TURN LH
TURN RH
CHECK ENGINE
ABS
POWER STEERING
STARTER CHECK RELAY
From Ignition SW (ST2)(20-1)
From Clutch Start SW (1-2)
See Engine Control System (3-6)(4-6)(5-5)
See ABS (Anti-lock Brake System) System (13-3)
J/B No. 3
(Canada)
(USA)
JUNCTION CONNECTOR (for Earth)
Ground points
= Located on intake manifold
= Located on left kick pane

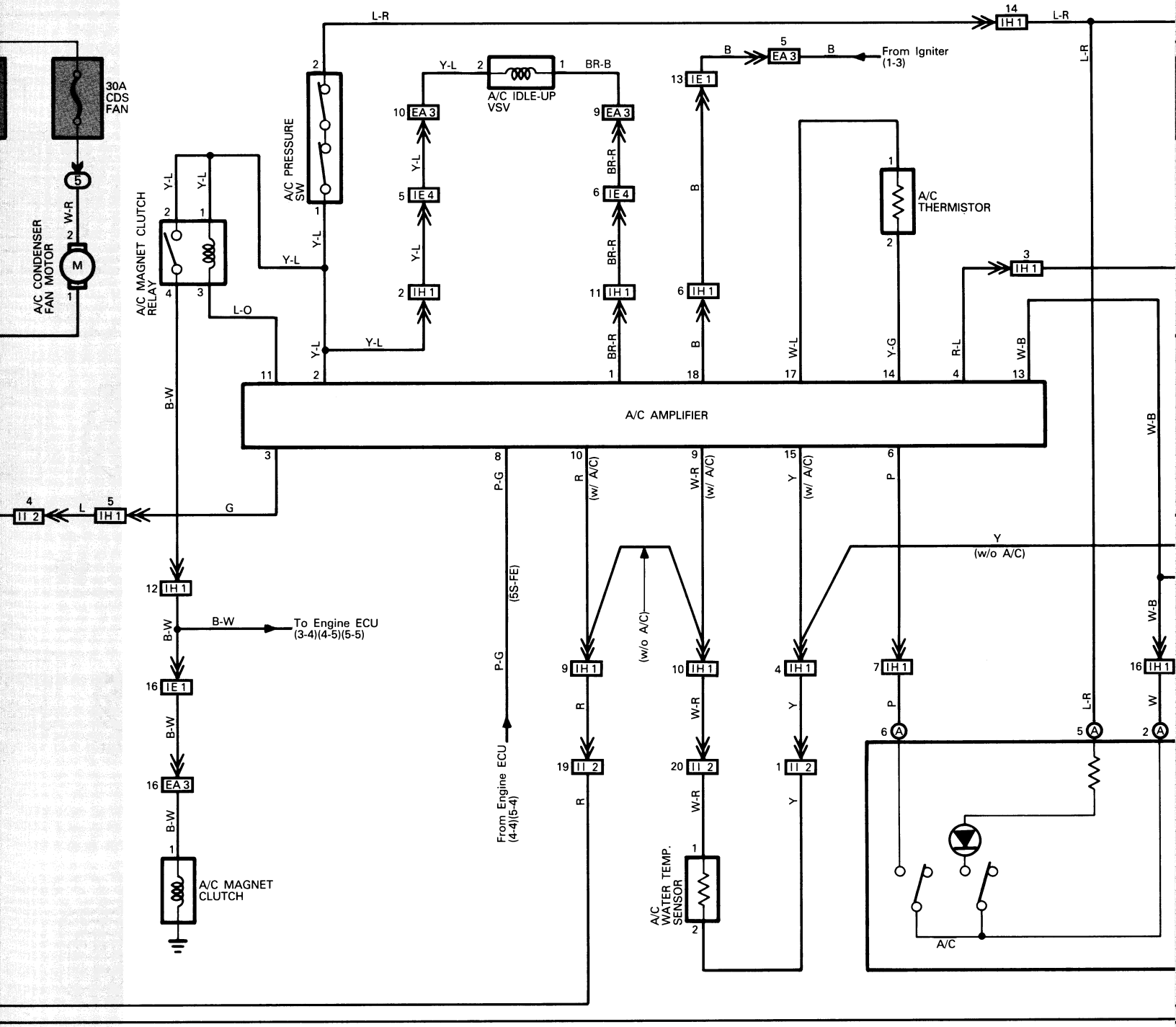

Combination Meter
2
3
B-Y
7.5A GAUGE
To Engine Oil Level ECU (w/o Auto Antenna) (20-3)
R-L
JUNCTION CONNECTOR
To Engine Oil Level ECU (w/ Auto Antenna) (20-3)
J/B No. 3
B-O
From Turbo Pressure Sensor (3-5)
L-B
1 2 3
See Interior Light System (9-2)
See Headlights System (7-4)
See Turn Signal and Hazard System (11-2)
DOOR
HIGH BEAM
TURN LH
TURN RH
CHECK ENGINE
ABS
POWER STEERING
COOLING FAN
CRUISE CONTROL
OIL
OIL LEVEL
CHARGE
BRAKE
TURBO PRESSURE
TACHO
STARTER CHECK RELAY
W-B
R
(A/T)
(M/T)
Y-B
L-W
Y
R-B
From Cruise Control ECU (10-4)
B
See Interior Light System (9-2)
From Ignition SW (ST2)(20-1)
From Clutch Start SW (1-2)
See Engine Control System (3-6)(4-6)(5-5)
See ABS (Anti-lock Brake System) System (13-3)
See Power Steering System (15-2)
See Engine Compartment Fan System (2-4)
See Cruise Control System (10-2)
ENGINE OIL LEVEL ECU
WRN
CHG
SSR
IG+
E
OIL PRESSURE SW
From "GAUGE" Fuse (20-2)(20-3)
From ABS ECU (13-4)
From Igniter (1-3)
(w/ Auto Antenna)
(w/o Auto Antenna)
(Canada)
(USA)
JUNCTION CONNECTOR (for Earth)
ENGINE OIL LEVEL SENSOR
PARKING BRAKE SW
BRAKE WARNING SW
ted on intake manifold
B = Located on left kick panel
C = Located on instrument panel center
D = Located on right kick panel
F = Located on fro

ation Meter


4
5
A BLUE
B
C GRAY
1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10 11 12
1 2 3 4 5 6 7 8 9 10
COMBINATION METER
om Turbo Pressure
ensor
-5)
L-B
11 EA 1
L-B
3 IE 3
L-B
4 B
From Cruise Control ECU (10-2)
V-W
From Power Steering ECU (15-3)
V-W
13
II 4
V-W
From Engine ECU (3-5)(4-5)(5-5)
V-W
14
ID 1
V-W
V-W
V-W
10 B
See Theft Deterrent System (19-5)
6 B
COMBINATION METER
PRESSURE
TACHO
FUEL
FUEL
O/D OFF
WATER TEMP.
VOLT
SEAT BELT
SPEED SENSOR
THEFT DETERRENT
From Cruise Control ECU (10-4)
3 B
B
13 ID 1
B
5 EA 3
B
From Igniter (1-3)
8 A
Y-L
2
1
FUEL SENDER
3
12 A
Y-R
2 B
See Engine Control System (4-6)
1 C
Y-G
18 ID 1
Y-G
6 EA 3
Y-G
1
WATER TEMP SENDER
2 C
W-B
7 ID 1
W-B
3 EA 3
W-B
W-B
7 A
See Unlock and Seat Belt Warning System (9-5)
1 A
BR
BR
R-B
R-B
R-B
(w/o Auto Antenna)
R-B
From ABS ECU (13-4)
16 II 2
R-B
1
BRAKE WARNING SW
2
W-B
B-R
A
B
C
D
F
panel
F = Located on front left fender
* See last fold-out page for connector to J/B, and connector between wire harness.

MR2 (Cont'd)


Power Source
Radiator Fan and Condenser Fan
1
2
IGNITION SW
ACC
IG1
ST1
IG2
ST2
AM1
AM2
7.5A AM2
120A ALT
40A HEATER
50A AM1
FL 2.0L
BATTERY
DIODE (A/C SYSTEM)
(USA) 7 II 3
(Canada) 5 II 4
FAN MAIN RELAY
RADIATOR FAN RELAY
A/C FAN RELAY No. 2
A/C FAN RELAY No. 3
30A RDI FAN
SHORT PIN (w/o A/C)
A/C PRESSURE SW
RADIATOR FAN MOTOR
Ground points
= Located on left kick panel

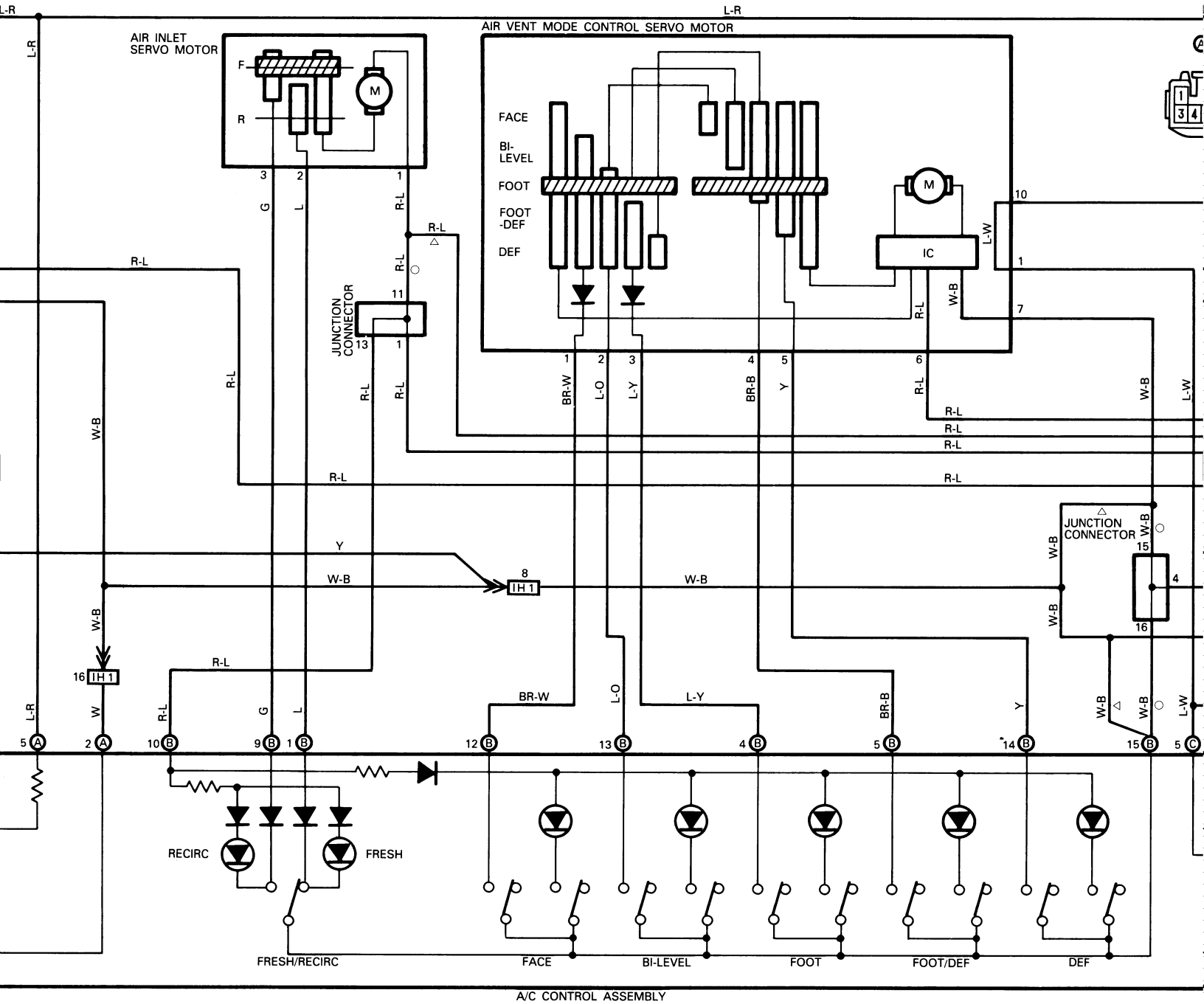


▽D = Located on right kick panel

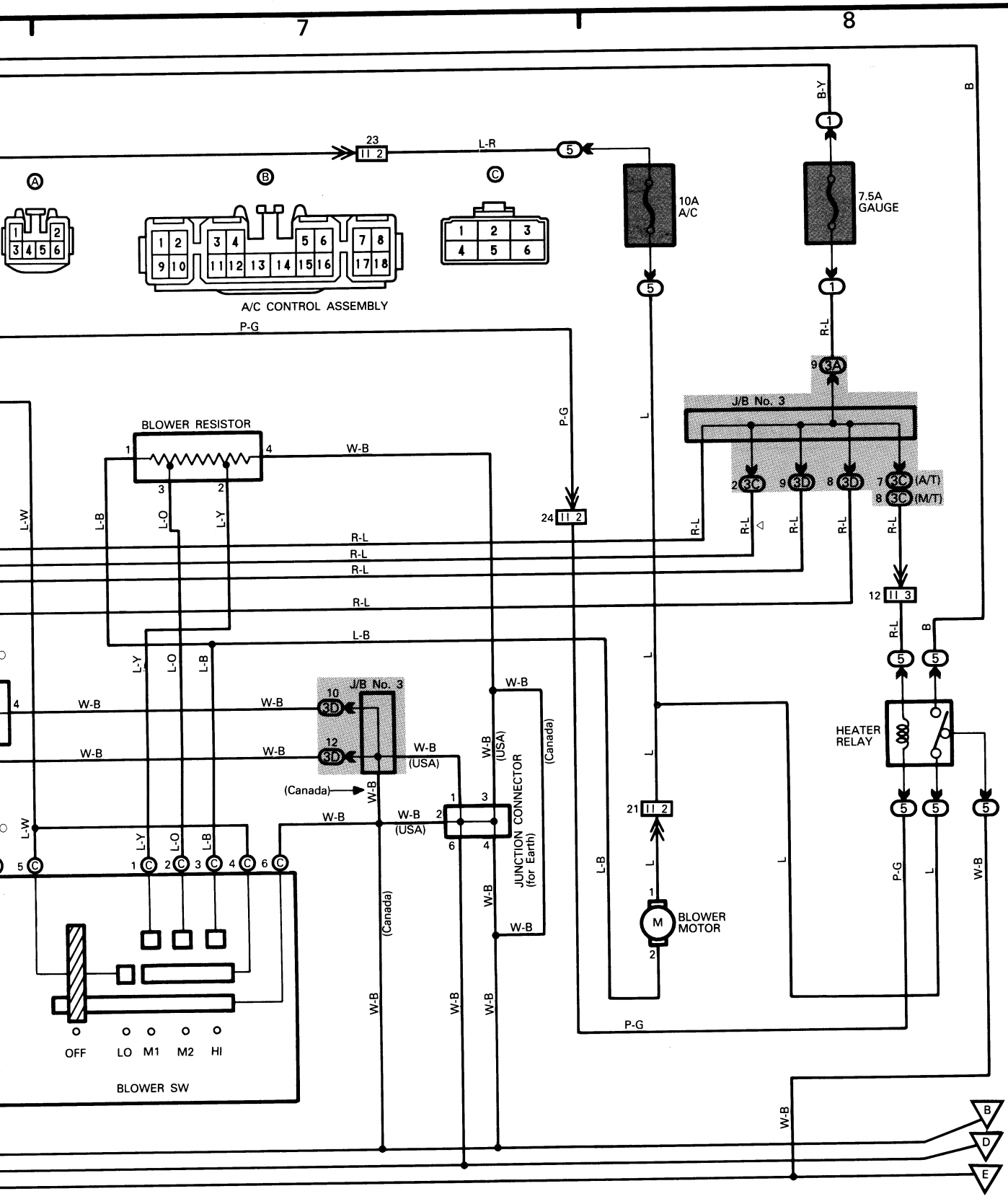
▽E = Located on front right fender

* See last fold-out page for connector to J/B, and connector between wire harness.

○w/ Auto Antenna
△w/o Auto Antenna

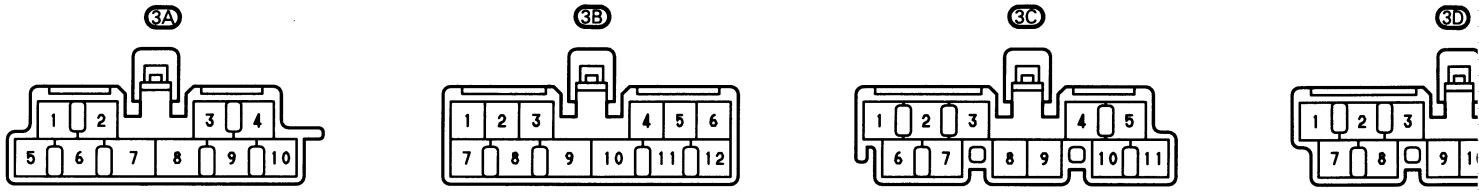


A/C CONTROL ASSEMBLY

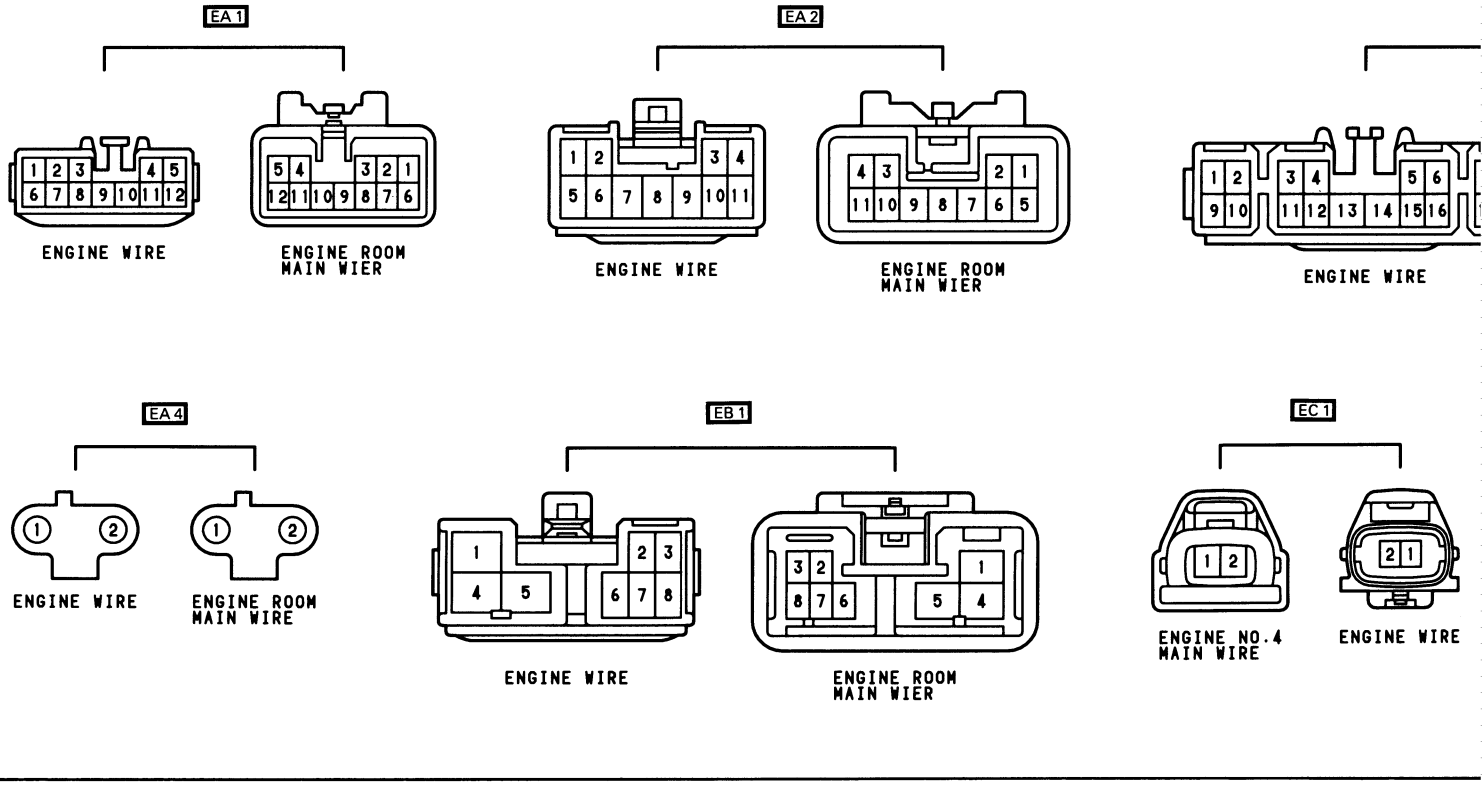

7
8
A
B
C
A/C CONTROL ASSEMBLY
BLOWER RESISTOR
BLOWER SW
OFF
LO
M1
M2
HI
10A A/C
7.5A GAUGE
J/B No. 3
HEATER RELAY
BLOWER MOTOR
JUNCTION CONNECTOR (for Earth)
(A/T)
(M/T)
(USA)
(Canada)
B-Y
L-R
P-G
R-L
L-W
L-B
L-O
L-Y
W-B
L
B

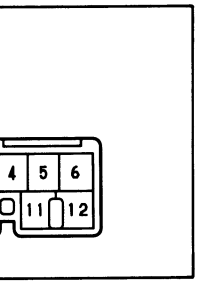
1 2

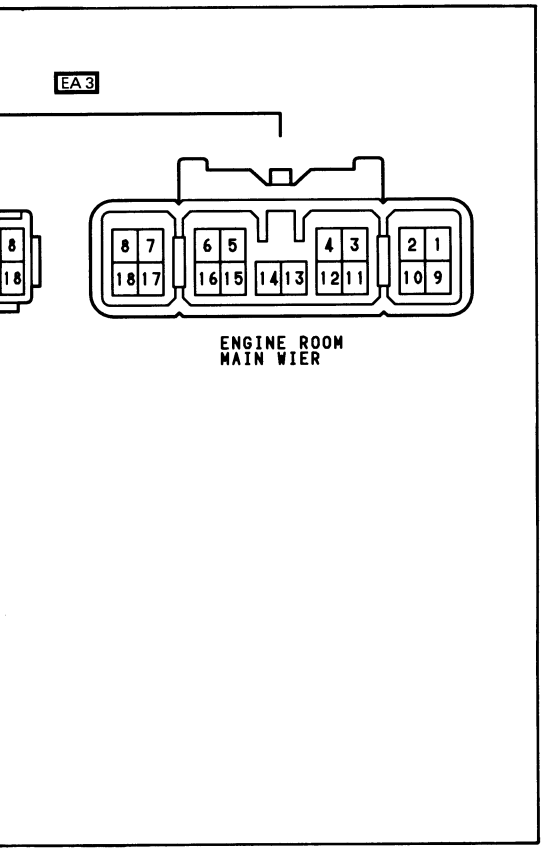
Junction Block and Wire Harness Connector
J/B No. 3



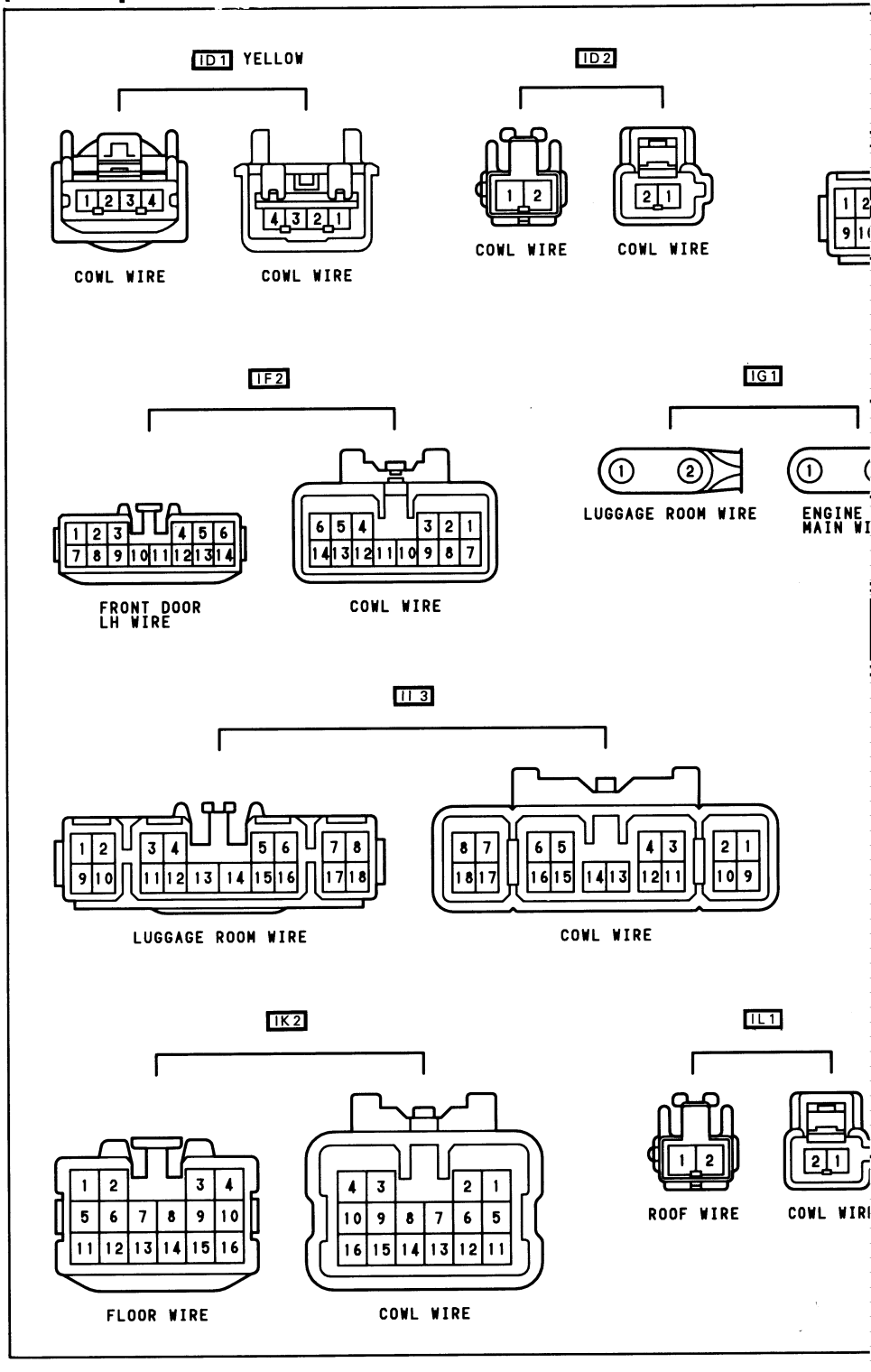
Connector Joining Wire Harness and Wire Harness
(E Group: Engine Compartment area)





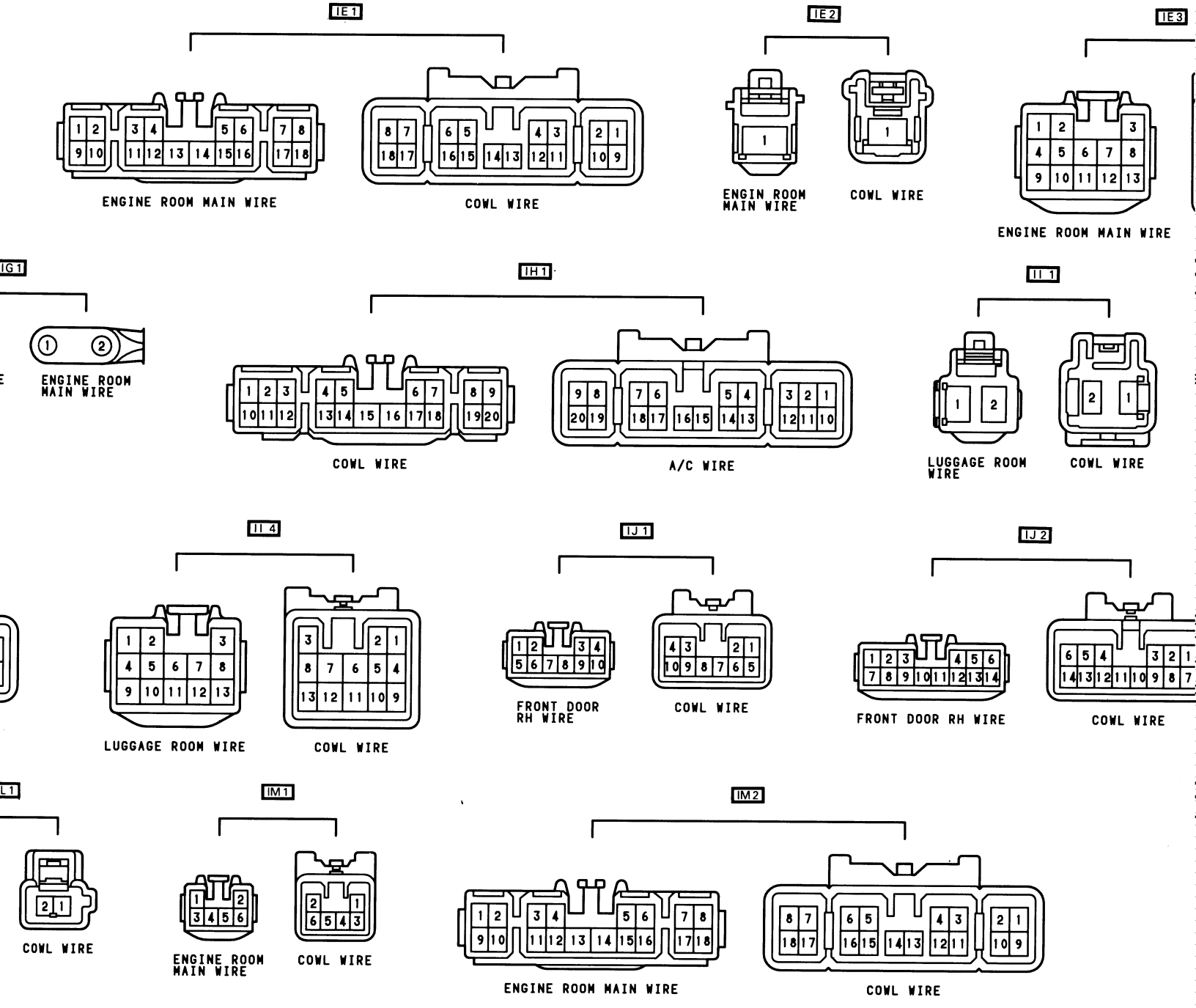


Connector Joining Wire Harness and Wire Harnes
(I Group: Instrument Panel area)

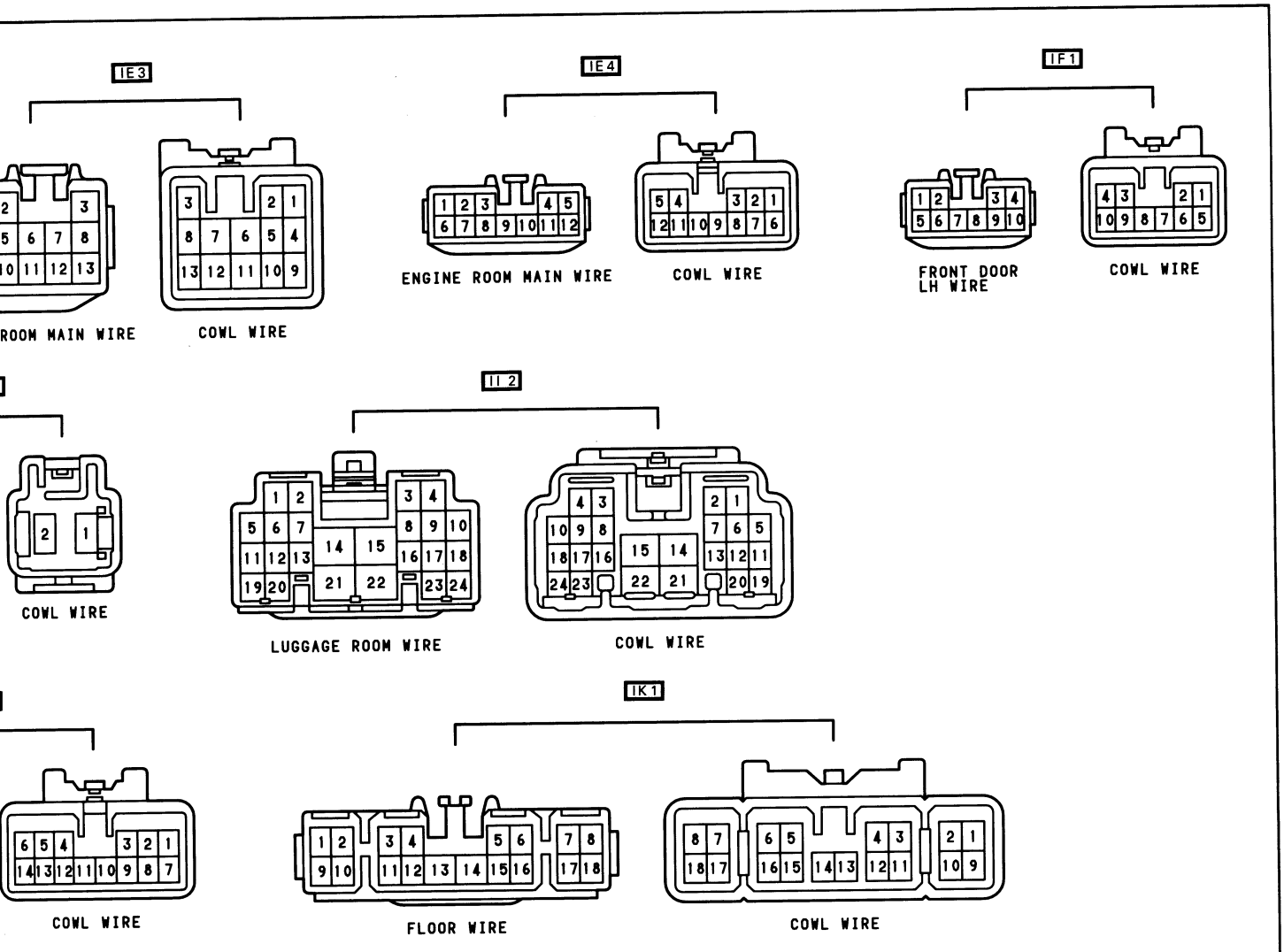


5 6

e Harness


IE1
ENGINE ROOM MAIN WIRE
COWL WIRE
IE2
ENGIN ROOM MAIN WIRE
COWL WIRE
IE3
ENGINE ROOM MAIN WIRE
IG1
ENGINE ROOM MAIN WIRE
IH1
COWL WIRE
A/C WIRE
II 1
LUGGAGE ROOM WIRE
COWL WIRE
II 4
LUGGAGE ROOM WIRE
COWL WIRE
IJ 1
FRONT DOOR RH WIRE
COWL WIRE
IJ 2
FRONT DOOR RH WIRE
COWL WIRE
L1
COWL WIRE
IM1
ENGINE ROOM MAIN WIRE
COWL WIRE
IM2
ENGINE ROOM MAIN WIRE
COWL WIRE

7 8


IE3
ROOM MAIN WIRE
COWL WIRE
IE4
ENGINE ROOM MAIN WIRE
COWL WIRE
IF1
FRONT DOOR LH WIRE
COWL WIRE
COWL WIRE
II2
LUGGAGE ROOM WIRE
COWL WIRE
IK1
COWL WIRE
FLOOR WIRE
COWL WIRE