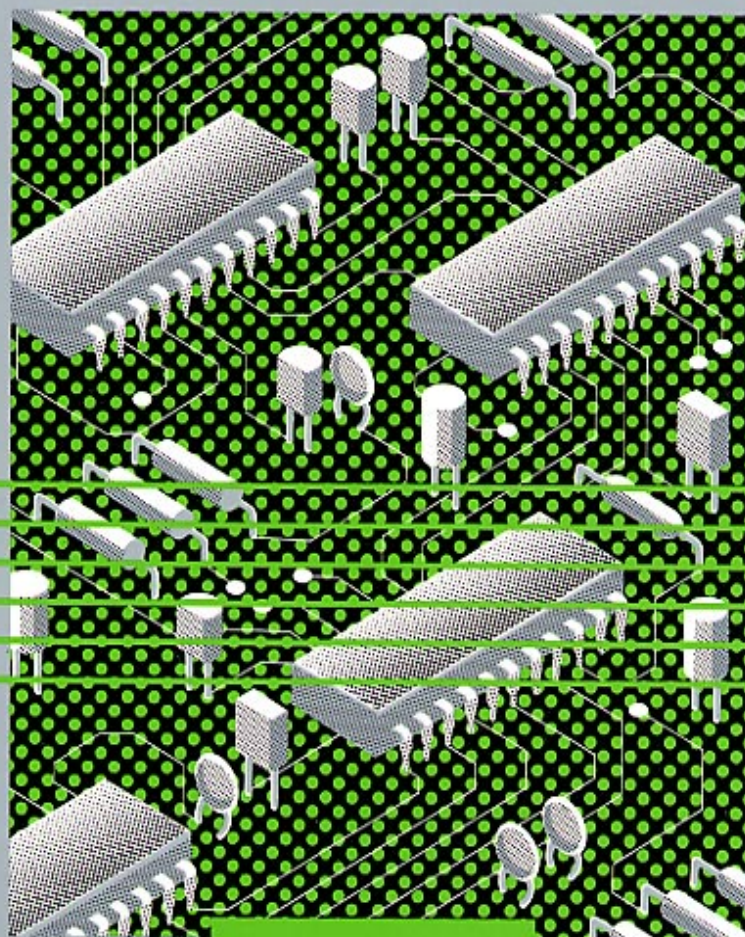


TOYOTA CAMRY

ELECTRICAL WIRING DIAGRAM

MCV20
SXV20 Series

Aug., 1996



FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the CAMRY.

Applicable models: MCV20 Series
SXV20 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.
● CAMRY Chassis and Body Repair Manual	RM536E
● 1MZ-FE Engine Repair Manual Supplement	RM550E
● 5S-FE Engine Repair Manual Supplement	RM547E
● CAMRY New Car Features	NCF136E

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

When handling supplemental restraint system components (removal, installation or inspection, etc.), always follow the direction given in the repair manuals listed above to prevent accidents and supplemental restraint system malfunction.

CAMRY
ELECTRICAL WIRING DIAGRAM

(English)

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English Français Español

SCHEMA DE CABLAGE ELECTRIQUE DE LA CAMRY

(Français)

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CAMRY
DIAGRAMA DEL CABLEADO ELECTRICO

(Español)

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This manual consists of the following 11 sections:

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

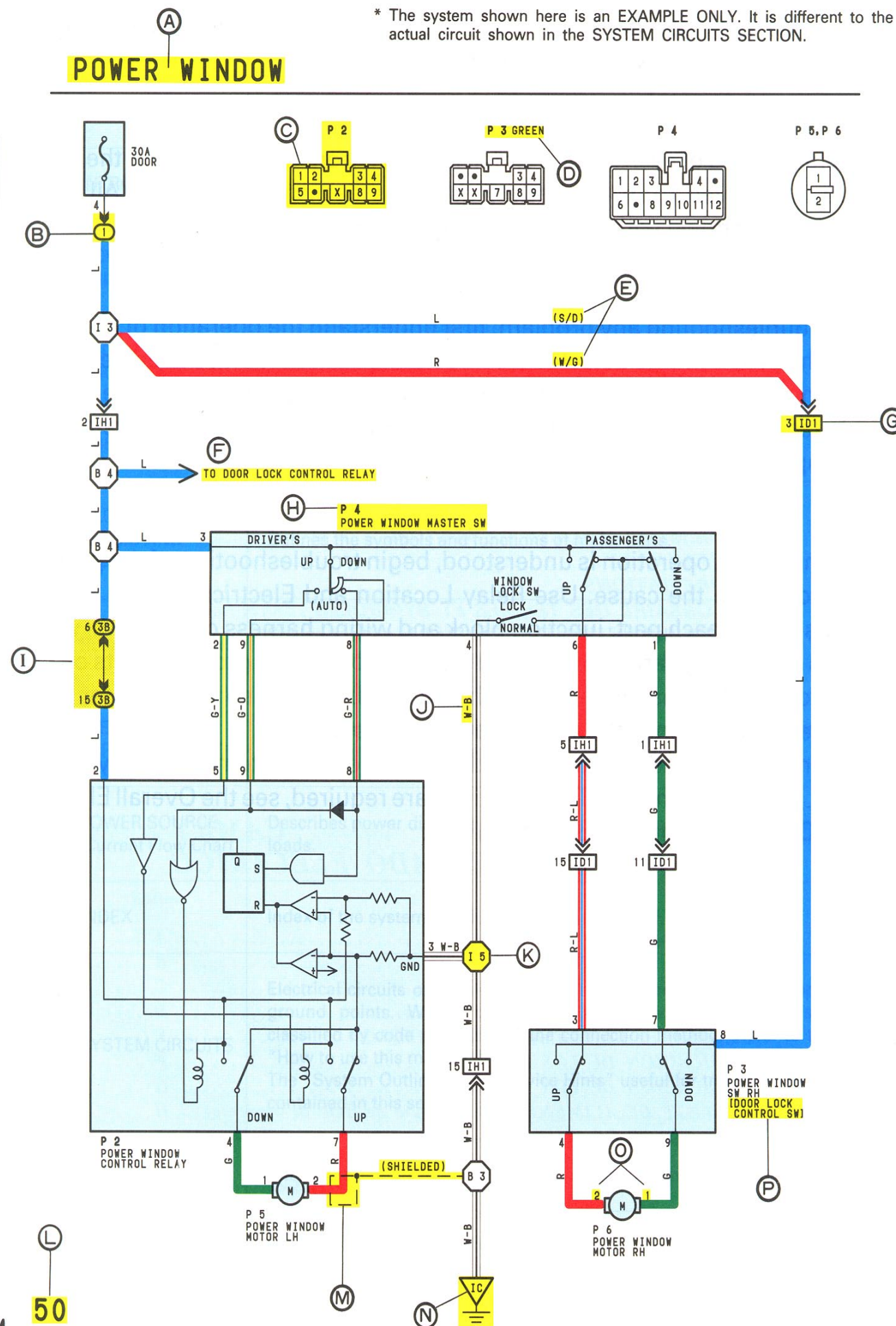
This manual provides information on the electrical circuits installed on vehicles by dividing them into a circuit for each system.

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

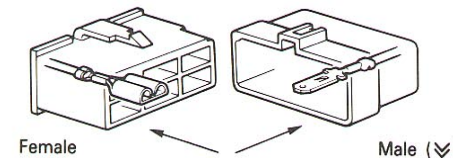
When troubleshooting any problem, first understand the operation of the circuit where the problem was detected (see System Circuit section), the power source supplying power to that circuit (see Power Source section), and the ground points (see Ground Points section). See the System Outline to understand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

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

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



- (A):** System Title
- (B):** Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B.
- Example: **(1)** Indicates Relay Block No. 1.
- (C):** Indicates the connector to be connected to a part (the numeral indicates the pin No.)
- Explanation of pin use.
- Pins used in the system circuit.
- Occupied positions, but not applicable to the system circuit.
- Unoccupied positions.
- The pins shown are only for the highest grade, or only include those in the specification.
- (D):** Connector Color
- Connectors not indicated are milky white in color.
- (E):** () is used to indicate different wiring and connector, etc. when the vehicle model, engine type, or specification is different.
- (F):** Indicates related system.
- (G):** Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↗). Outside numerals are pin numbers.

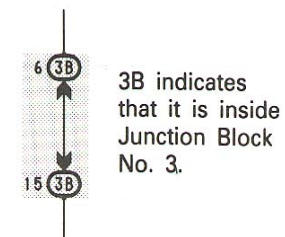


The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g., "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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

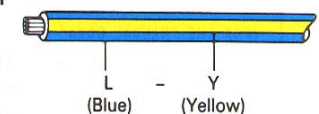
- (H):** Represents a part (all parts are shown in sky blue). The code is the same as the code used in parts position.
- (I):** Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts (different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

Example:



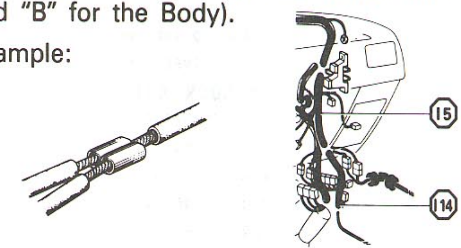
- (J):** Indicates the wiring color.
- Wire colors are indicated by an alphabetical code.
- B = Black L = Blue R = Red
BR = Brown LG = Light Green V = Violet
G = Green O = Orange W = White
GR = Gray P = Pink Y = Yellow
- The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



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

Example:



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

- (L):** Page No.

- (M):** Indicates a shielded cable.

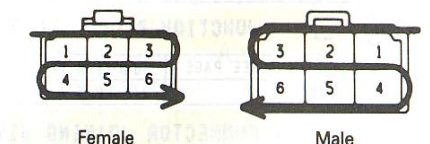


- (N):** Indicates a ground point.

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

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

Example: Numbered in order from upper left to lower right



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

Q

SYSTEM OUTLINE

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

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

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

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

R

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

S

O : PARTS LOCATION

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

T

O : RELAY BLOCKS

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

U

O : 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)

V

O : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

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

W

O : GROUND POINTS

CODE	SEE PAGE	GROUND POINT LOCATION
IC	24	COWL LEFT

X

O : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESSES WITH SPLICE POINTS
1B	24	COWL WIRE

- Q

Explains the system outline.
- R

Indicates values or explains the function for reference during troubleshooting.
- S

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
Part is 4th in order
Power Window Master SW
- T

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.
- U

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.
- V

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.
- W

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.
- X

Indicates the reference page showing the position of the splice points on the vehicle.
Example: Splice point "1B" is on the Cowl Wire Harness and is described on page 24 of this manual.

HINT:

Junction Connector

Same Color

Short Terminal

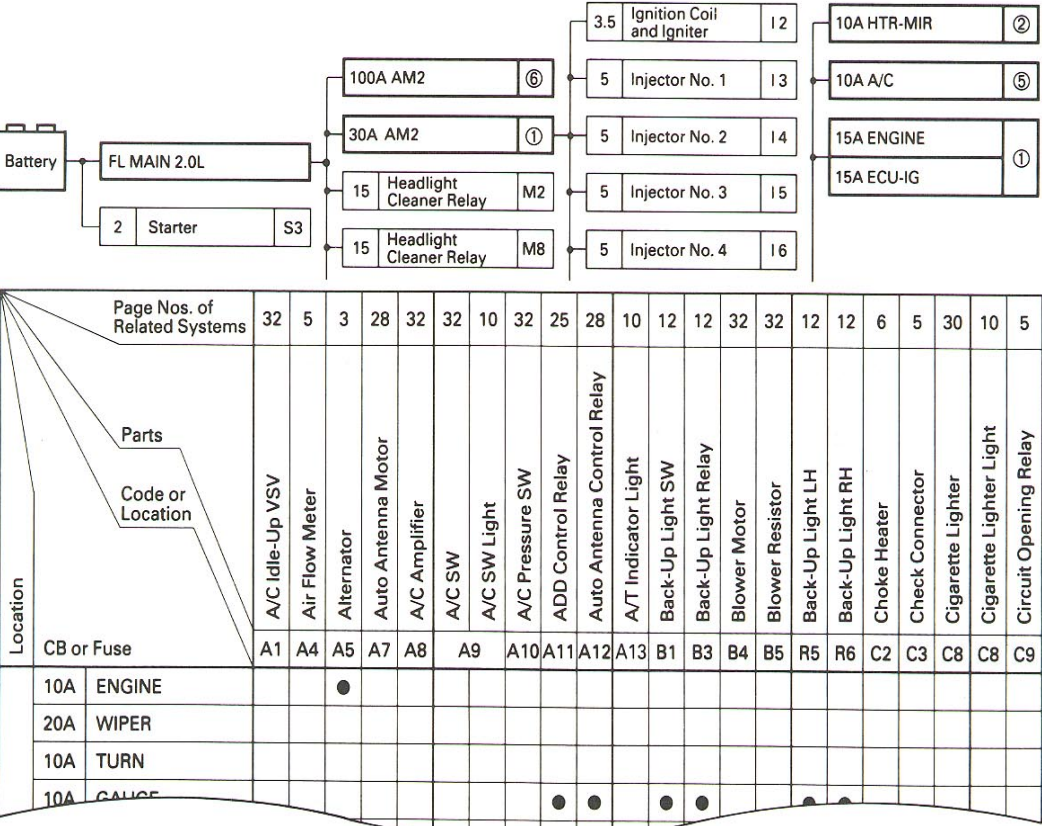
Junction connector (code: J1 to J47) in this manual include a short terminal which is connected to a number of wire harnesses. Always perform inspection with the short terminal installed. (When installing the wire harnesses, the harnesses can be connected to any position within the short terminal grouping. Accordingly, in other vehicles, the same position in the short terminal may be connected to a wire harness from a different part.) Wire harness sharing the same short terminal grouping have the same color.

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.

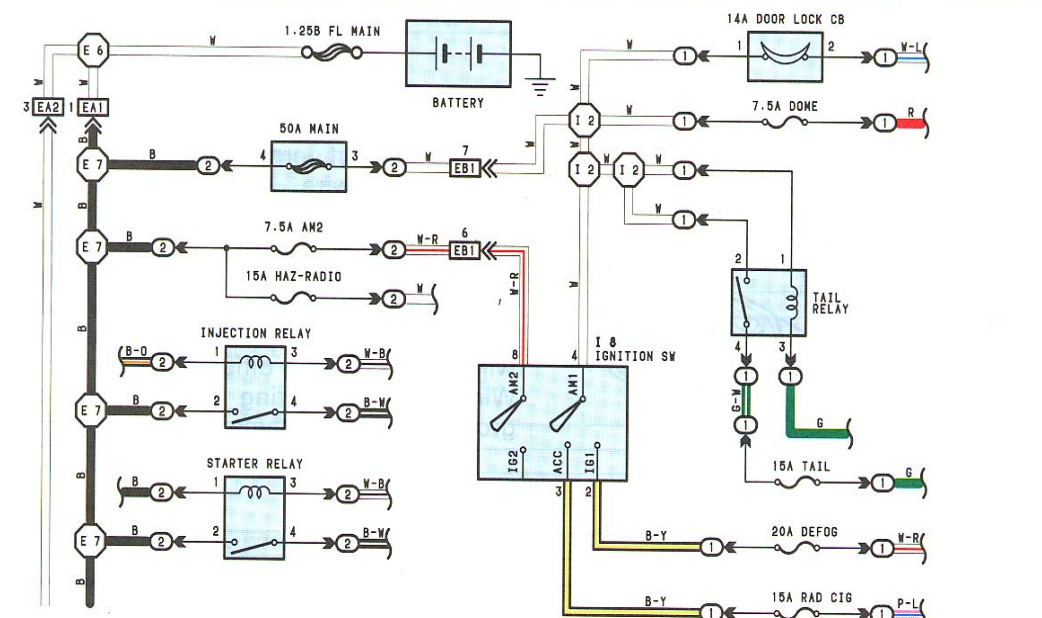
H POWER SOURCE (Current Flow Chart)

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.



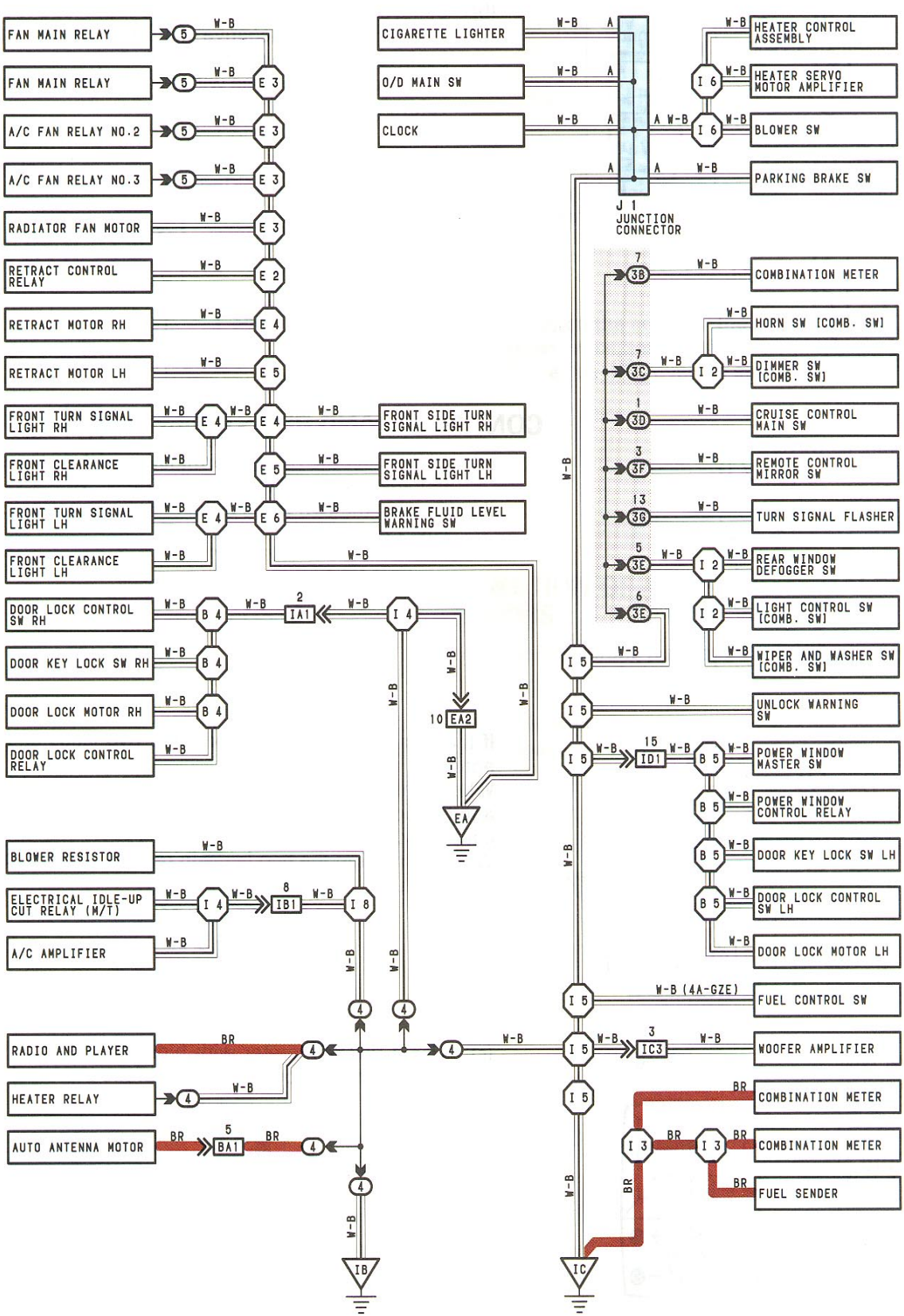
POWER SOURCE



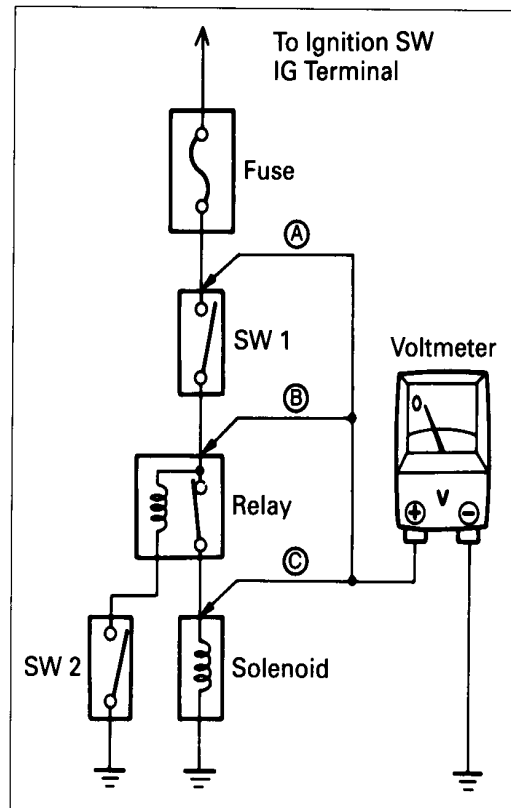
* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the SYSTEM CIRCUITS SECTION

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 POINT



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



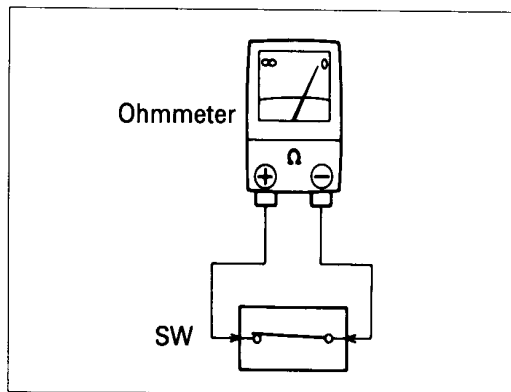
VOLTAGE CHECK

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

Example:

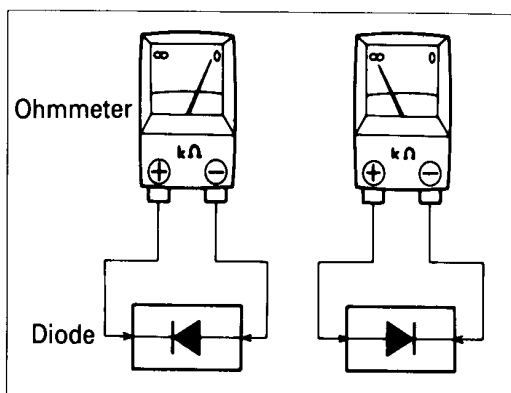
- Ⓐ – Ignition SW on
- Ⓑ – Ignition SW and SW 1 on
- Ⓒ – Ignition SW, SW 1 and Relay on (SW 2 off)

- (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.

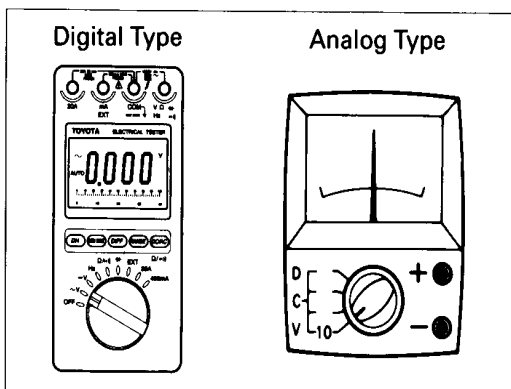


CONTINUITY AND RESISTANCE CHECK

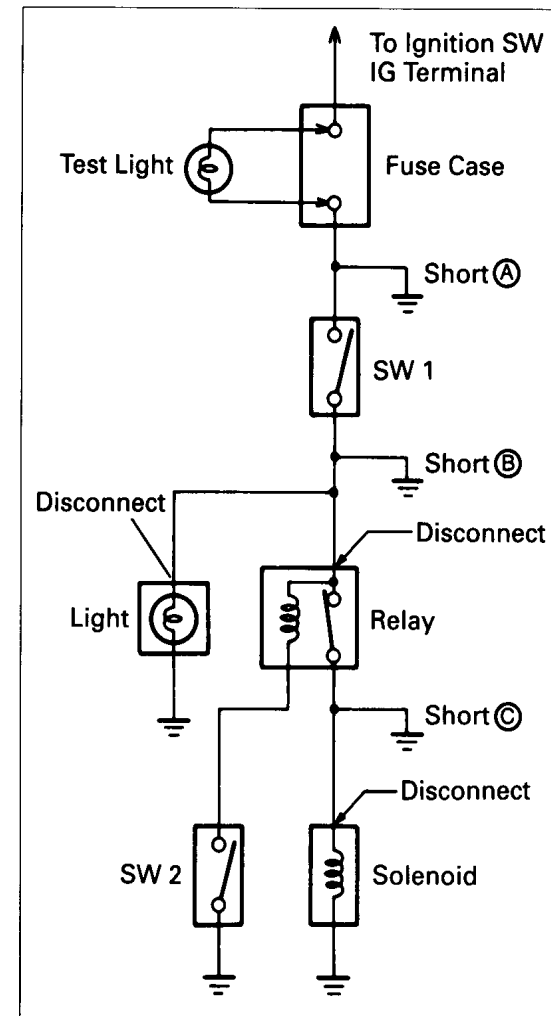
- (a) Disconnect the battery terminal or wire so there is no voltage between the check points.
(b) Contact the two leads of an ohmmeter to each of the check points.



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.

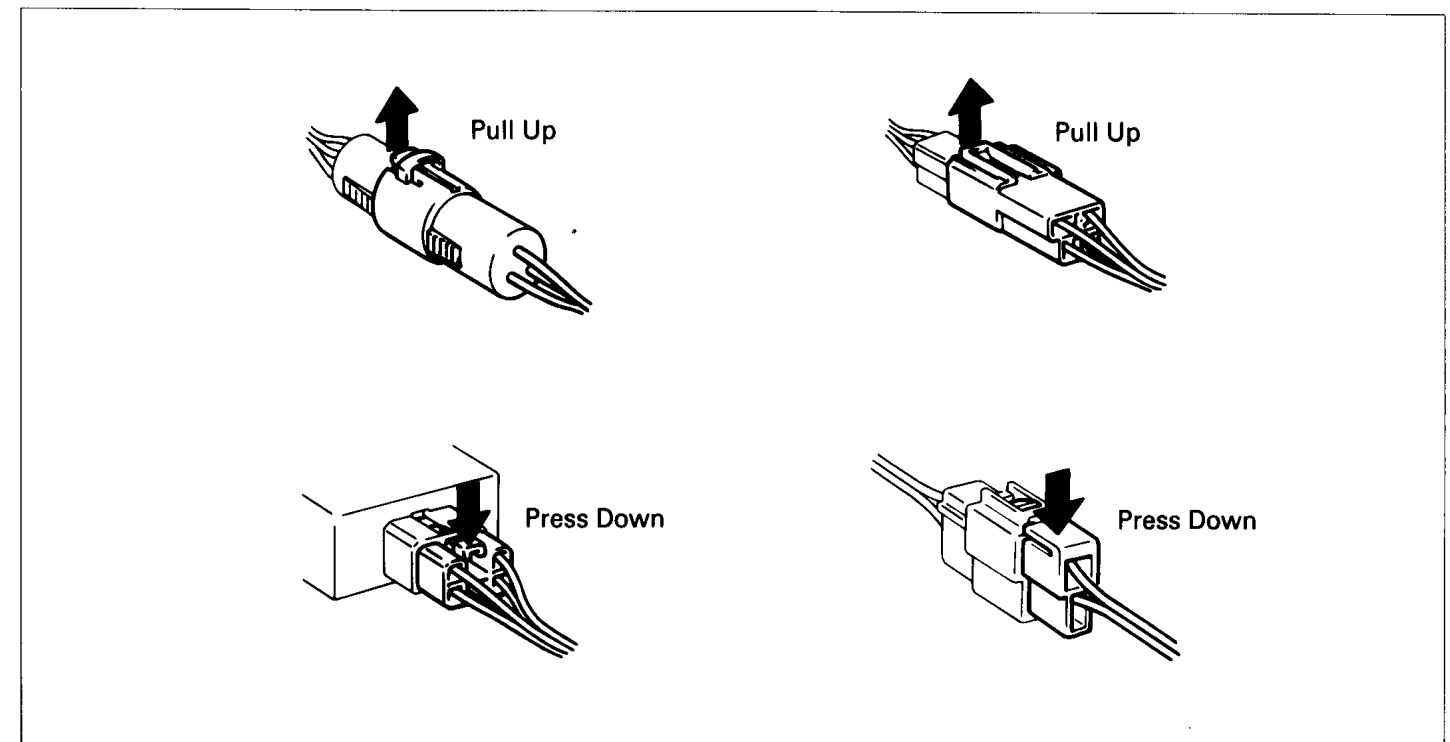
CAUTION:

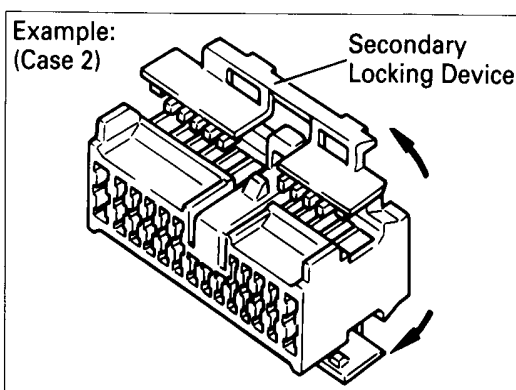
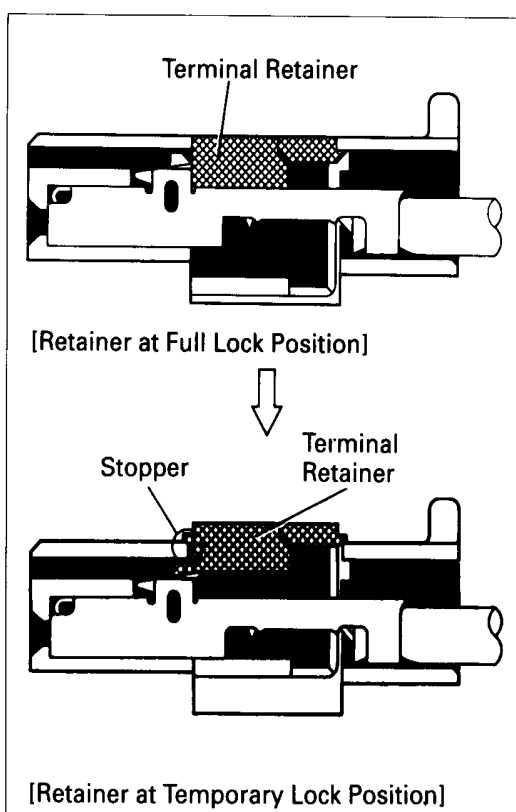
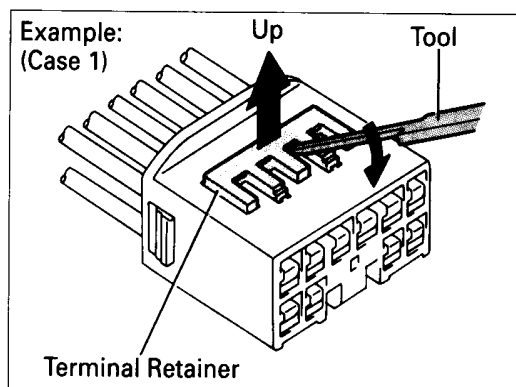
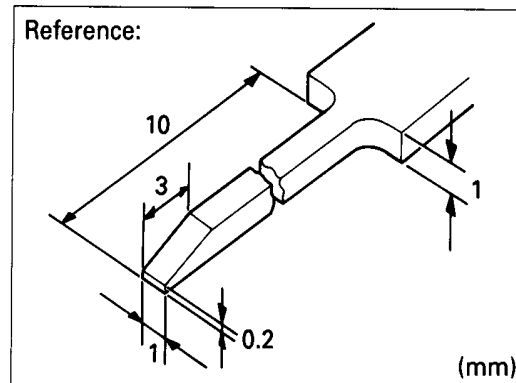
Do not open the cover or the case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)

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 REPLACE TERMINAL (with terminal retainer or secondary locking device)

1. PREPARE THE SPECIAL TOOL

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

2. DISCONNECT CONNECTOR

3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

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

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

NOTICE:

Do not remove the terminal retainer from connector body.

Ⓐ For Non-Waterproof Type Connector

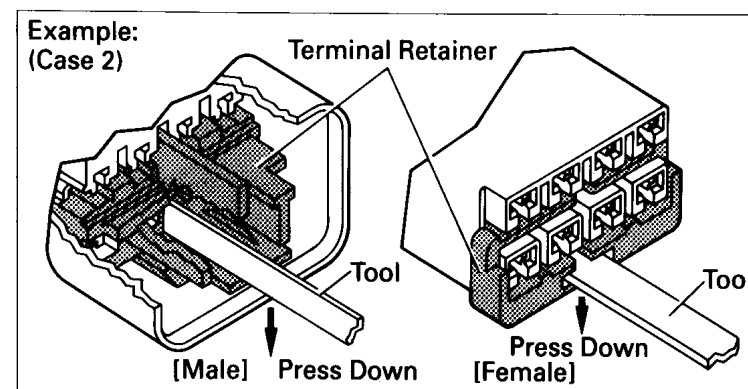
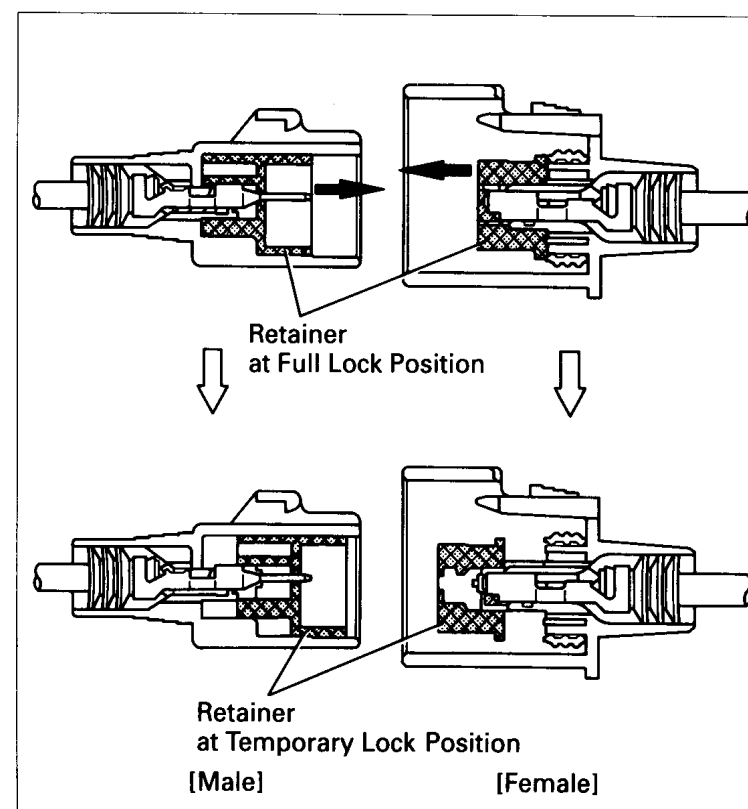
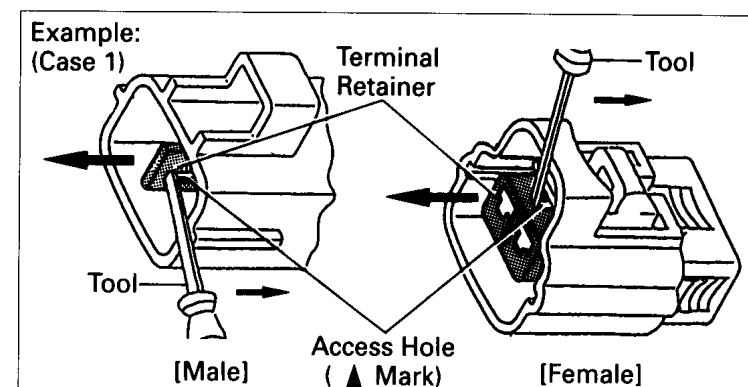
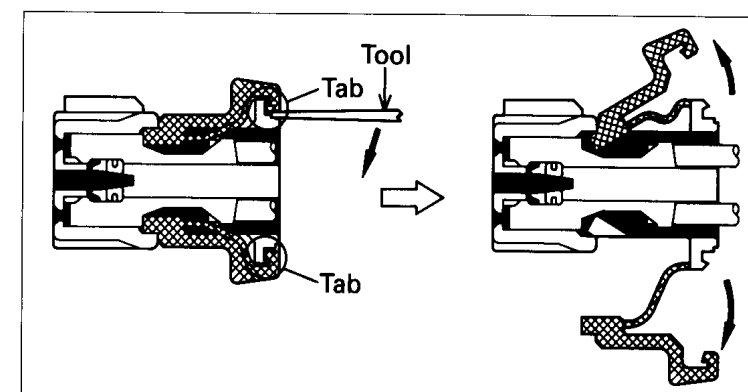
HINT: The needle insertion position varies according to the connector's shape (number of terminals etc.), so check the position before inserting it.

"Case 1"

Raise the terminal retainer up to the temporary lock position.

"Case 2"

Open the secondary locking device.



Ⓑ For Waterproof Type Connector

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

Example:

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

"Case 1"

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

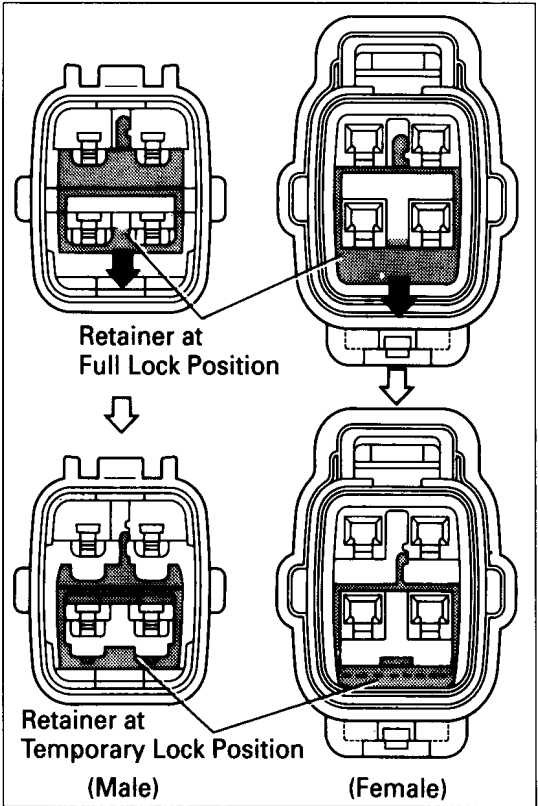
Insert the special tool into the terminal retainer access hole (▲ Mark) and pull the terminal retainer up to the temporary lock position.

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

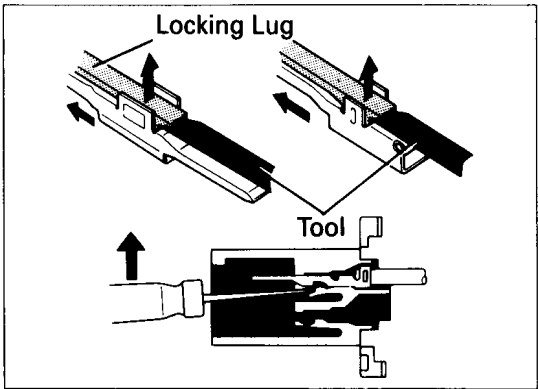
"Case 2"

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

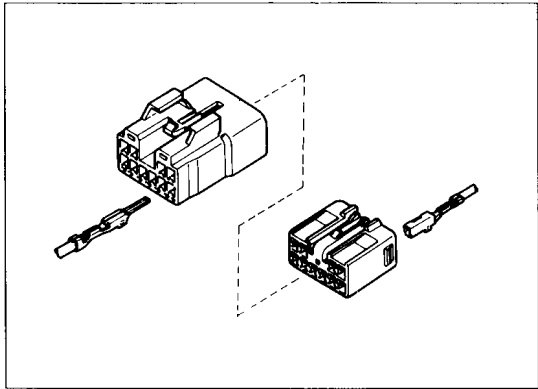
English



Push the terminal retainer down to the temporary lock position.



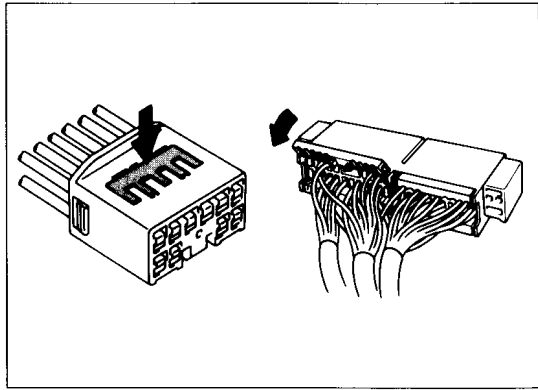
(c) Release the locking lug from terminal and pull the terminal out from rear.



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

HINT:

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



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

5. CONNECT CONNECTOR

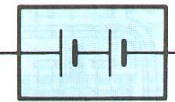
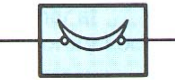
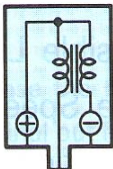
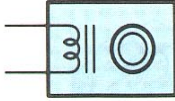
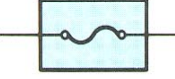
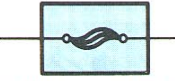
ABBREVIATIONS

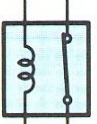
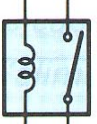
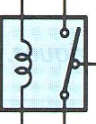
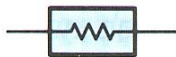
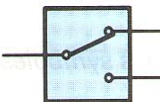
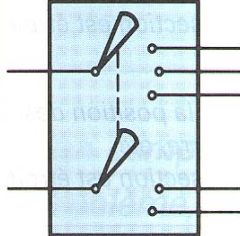
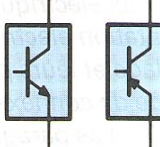
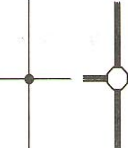
The following abbreviations are used in this manual.

ABS	= Anti-Lock Brake System
A/C	= Air Conditioner
ACIS	= Acoustic Control Induction System
A/T	= Automatic Transaxle
COMB.	= Combination
DLC3	= Data Link Connector 3
ECT	= Electronically Controlled Transmission
ECU	= Electronic Control Unit
EFI	= Electronic Fuel Injection
EGR	= Exhaust Gas Recirculation
ESA	= Electronic Spark Advance
FL	= Fusible Link
ISC	= Idle Speed Control
J/B	= Junction Block
LH	= Left-Hand
LHD	= Left-Hand Drive
M/T	= Manual Transaxle
R/B	= Relay Block
RH	= Right-Hand
RHD	= Right-Hand Drive
SRS	= Supplemental Restraint System
SW	= Switch
TDCL	= TOYOTA Diagnostic Communication Link
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.

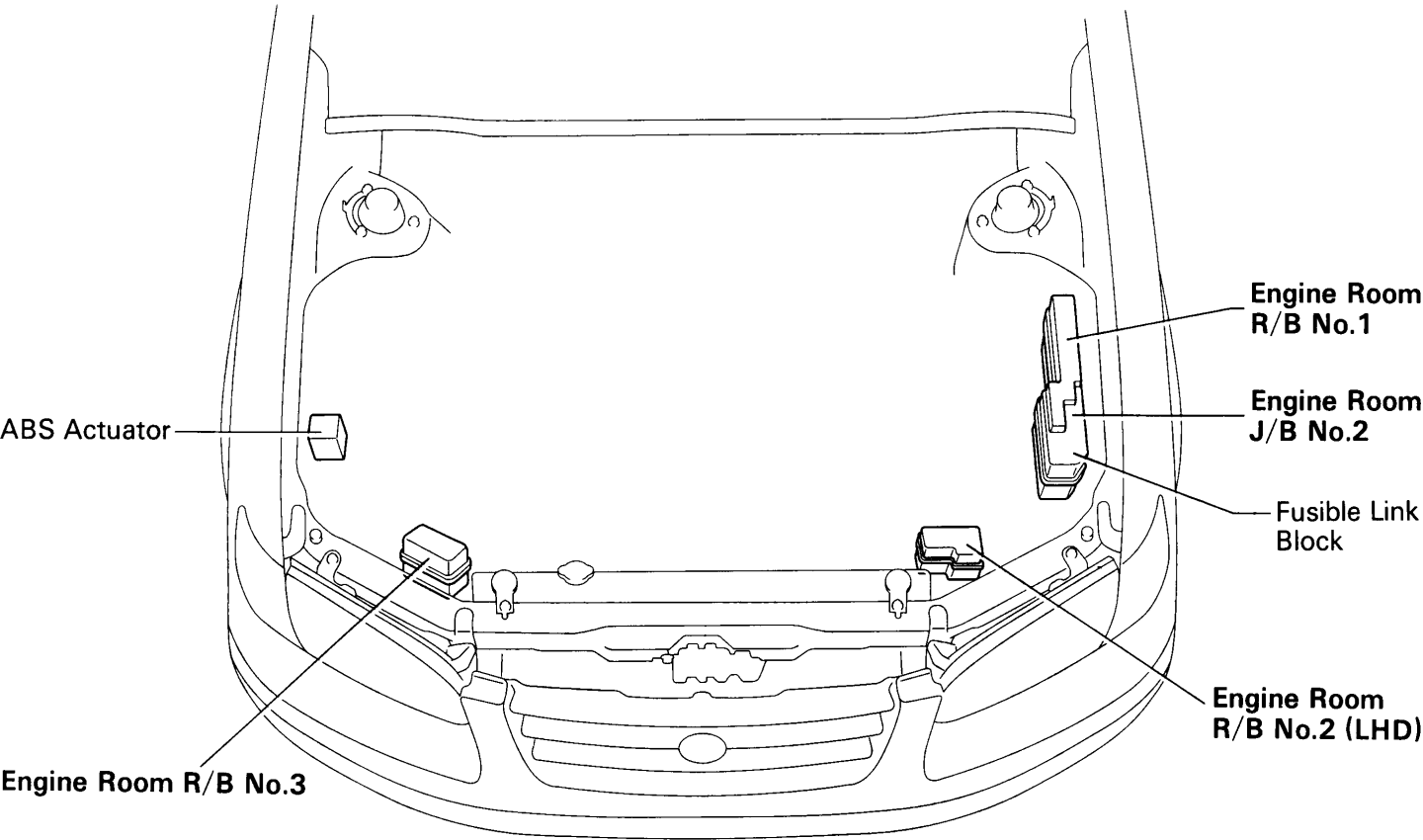
English

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

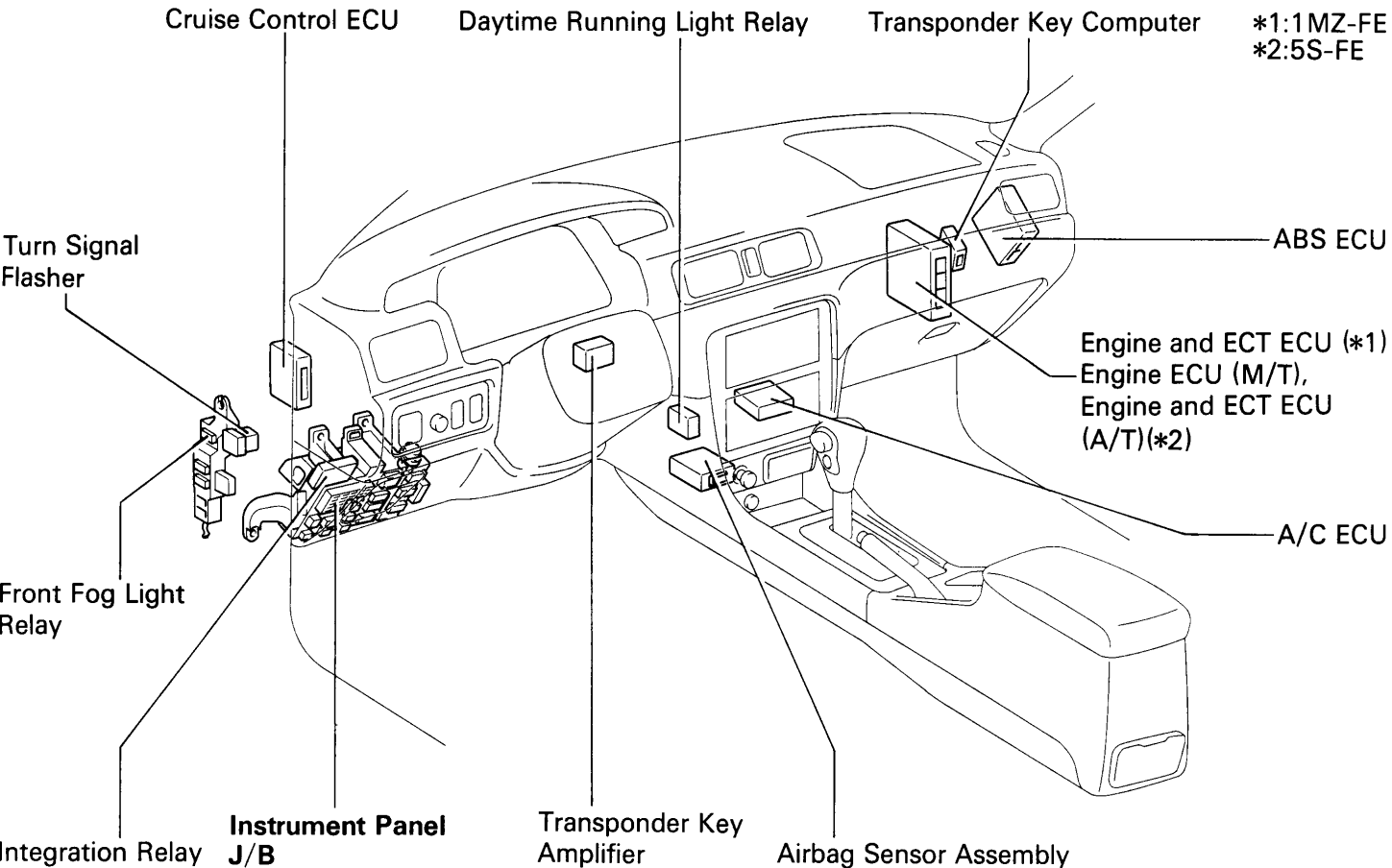
 RELAY 1. NORMALLY CLOSED Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.	 SPEAKER An electromechanical device which creates sound waves from current flow.
 2. NORMALLY OPEN	 SWITCH, MANUAL 1. NORMALLY OPEN Opens and closes circuits, thereby stopping (1) or allowing (2) current flow.
 RELAY, DOUBLE THROW A relay which passes current through one set of contacts or the other.	 2. NORMALLY CLOSED
 RESISTOR An electrical component with a fixed resistance, placed in a circuit to reduce voltage to a specific value.	 SWITCH, DOUBLE THROW A switch which continuously passes current through one set of contacts or the other.
 RESISTOR, TAPPED A resistor which supplies two or more different non adjustable resistance values.	 SWITCH, IGNITION A key operated switch with several positions which allows various circuits, particularly the primary ignition circuit, to become operational.
 RESISTOR, VARIABLE or RHEOSTAT A controllable resistor with a variable rate of resistance. Also called a potentiometer or rheostat.	
 SENSOR (Thermistor) A resistor which varies its resistance with temperature.	 SWITCH, WIPER PARK Automatically returns wipers to the stop position when the wiper switch is turned off.
 SENSOR, SPEED Uses magnetic impulses to open and close a switch to create a signal for activation of other components.	 TRANSISTOR A solidstate device typically used as an electronic relay; stops or passes current depending on the voltage applied at "base".
 SHORT PIN Used to provide an unbroken connection within a junction block.	 WIRES (1) NOT CONNECTED Wires are always drawn as straight lines on wiring diagrams. Crossed wires (1) without a black dot at the junction are not joined;
 SOLENOID An electromagnetic coil which forms a magnetic field when current flows, to move a plunger, etc.	 (2) SPLICED crossed wires (2) with a black dot or octagonal (O) mark at the junction are spliced (joined) connections.

[Engine Compartment]

English

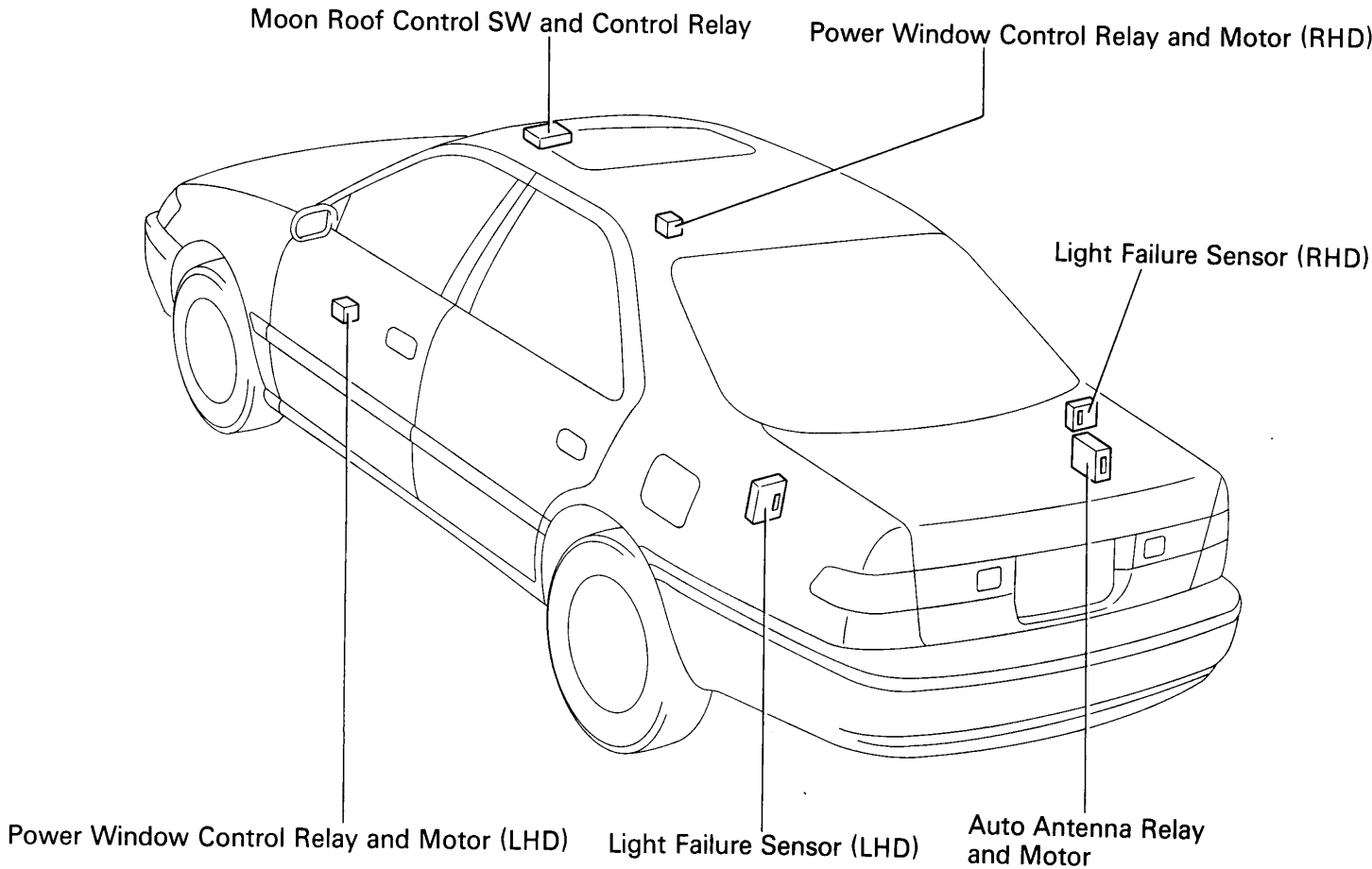


[Instrument Panel LHD]

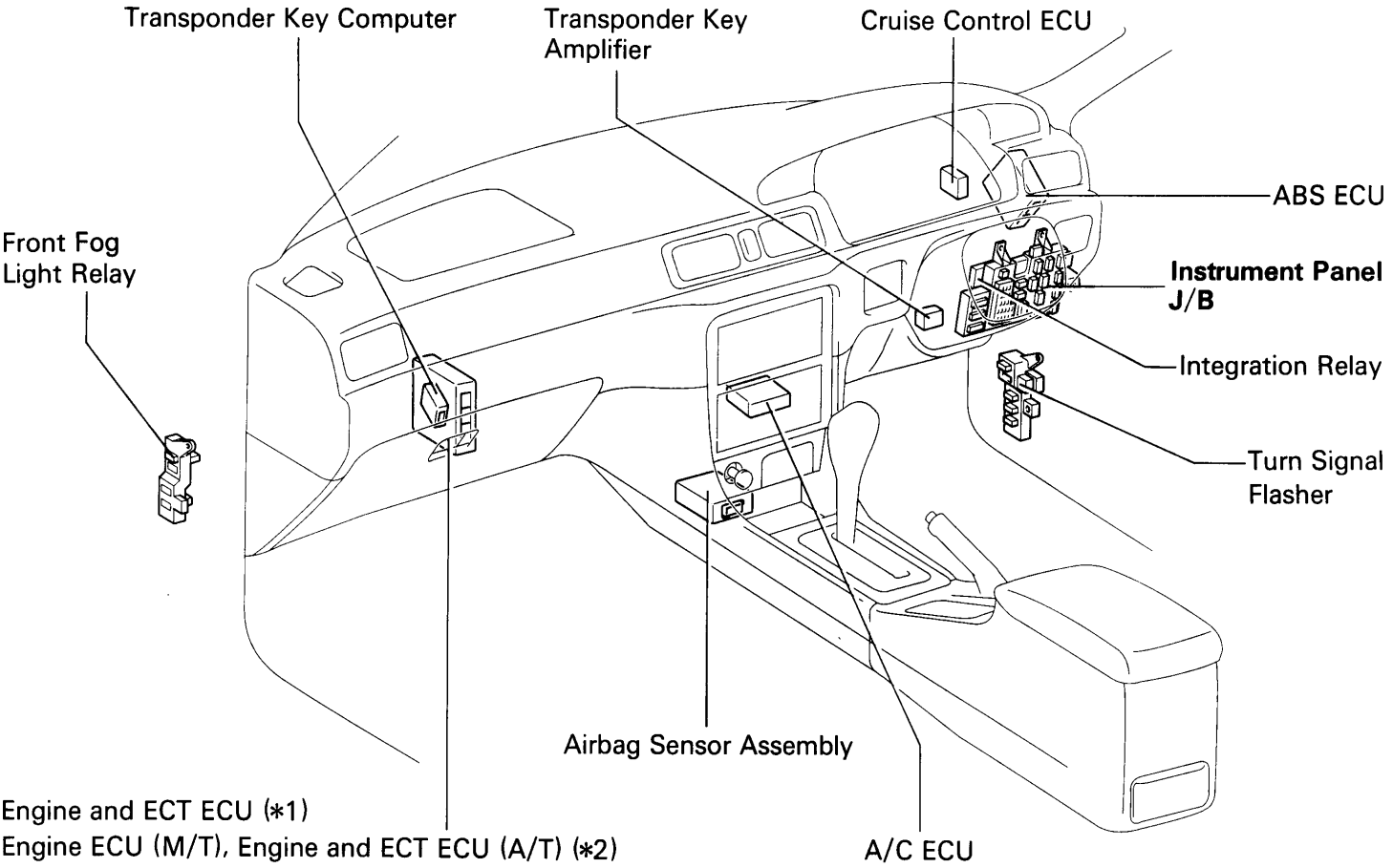


English

[Body]

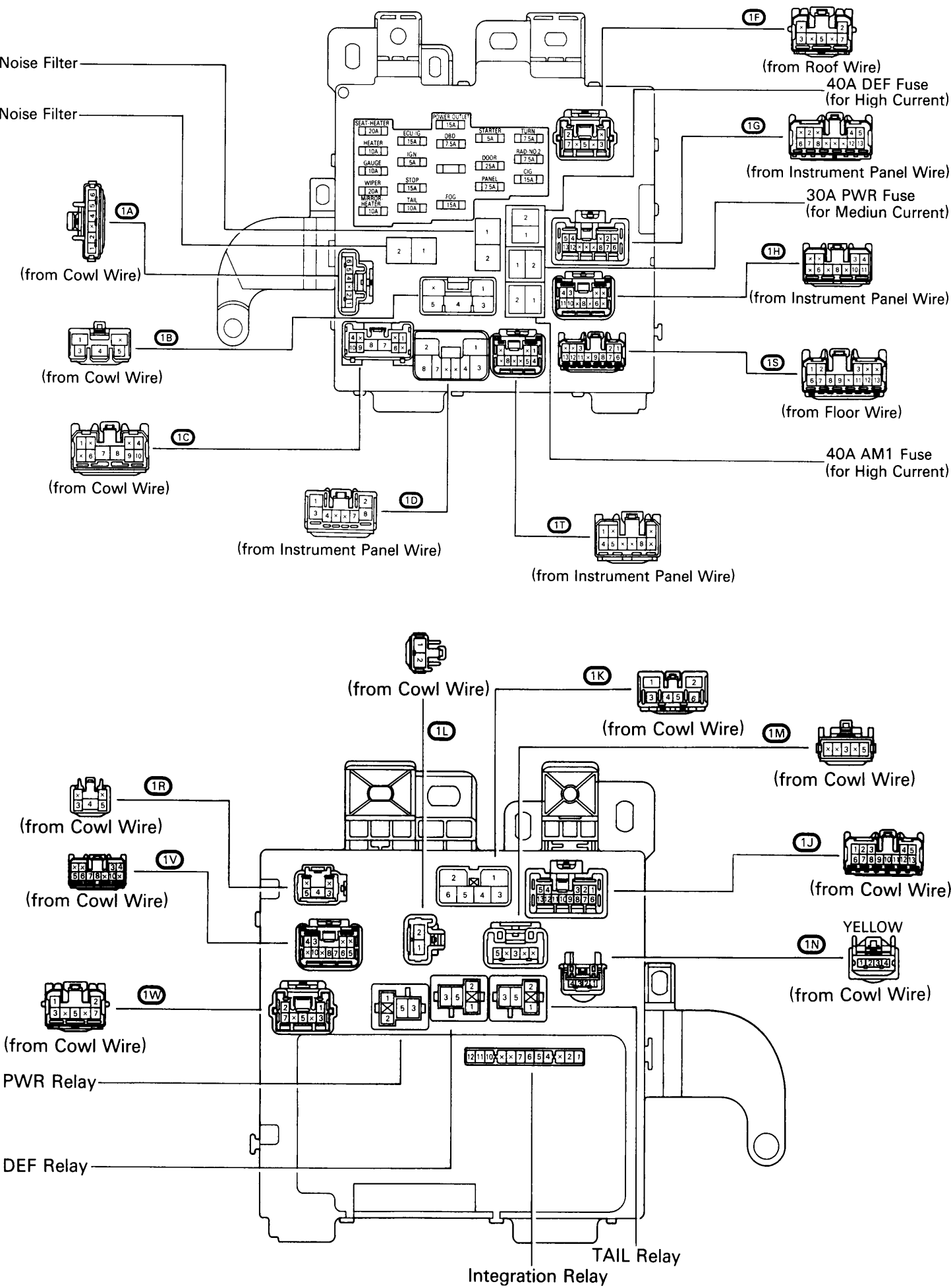


[Instrument Panel RHD]



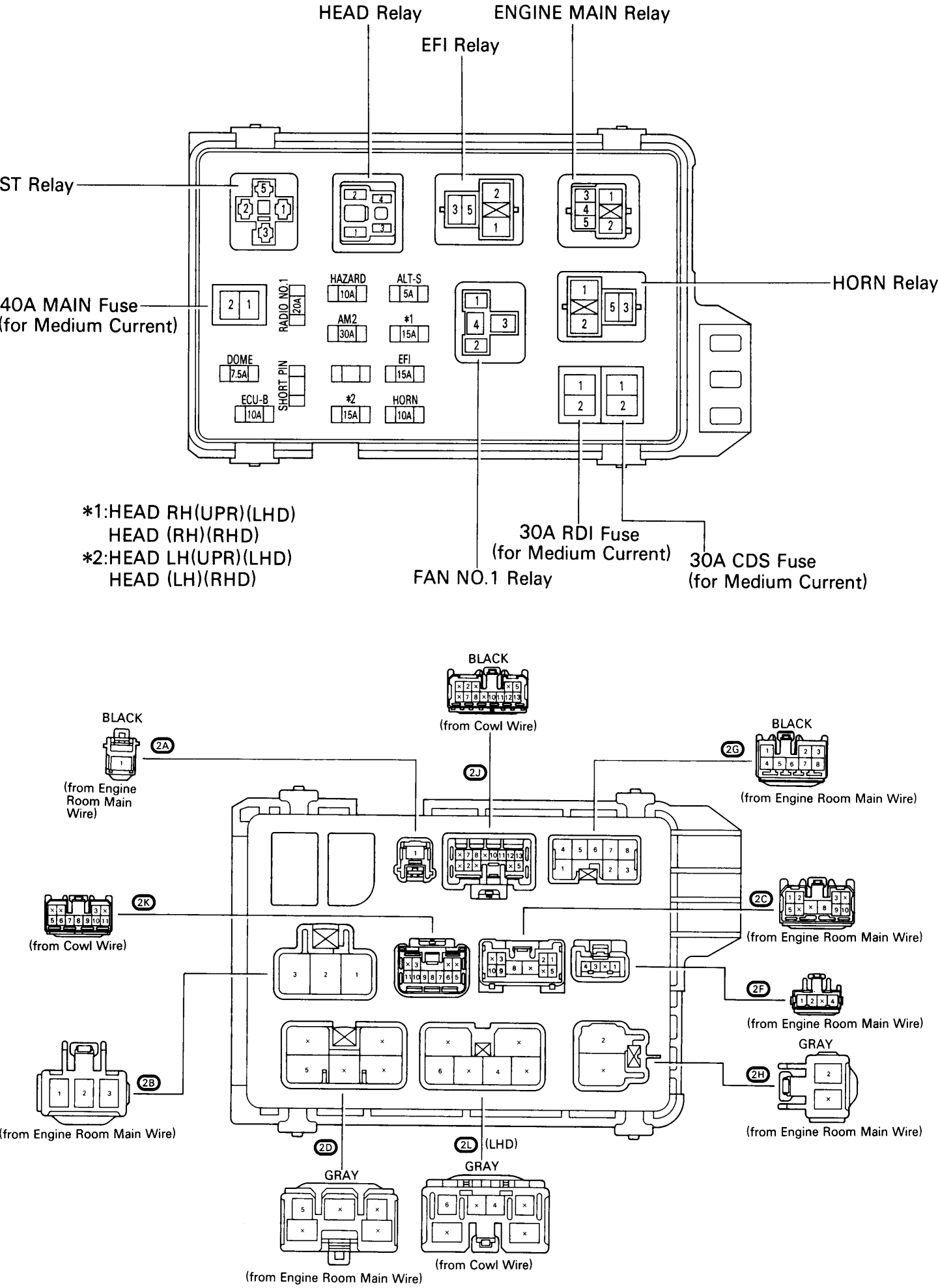
○: Instrument Panel J/B (LHD) Lower Finish Panel (See page 51)

English

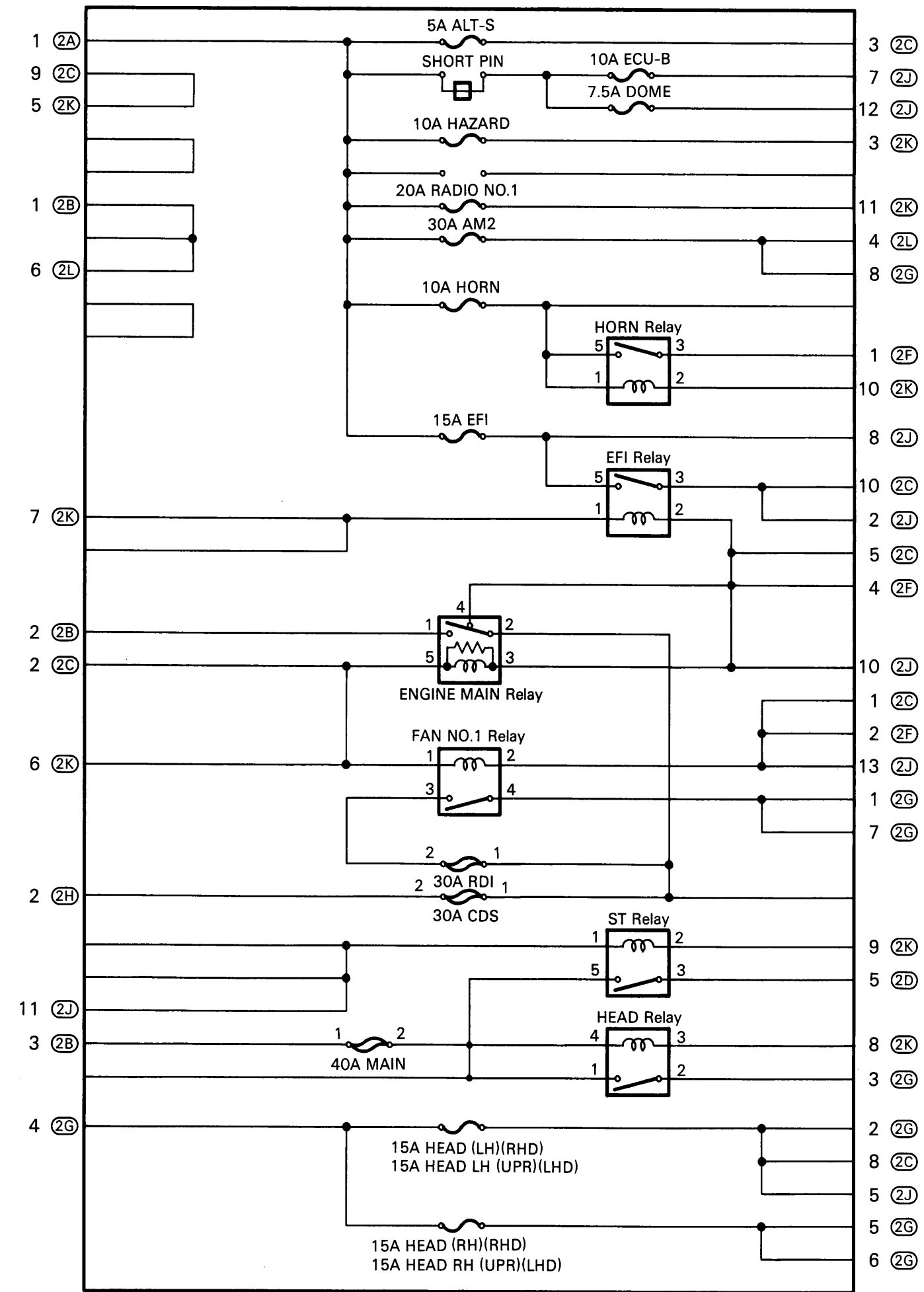


○: Engine Room J/B No.2 Engine Compartment Left (See page 50)

English



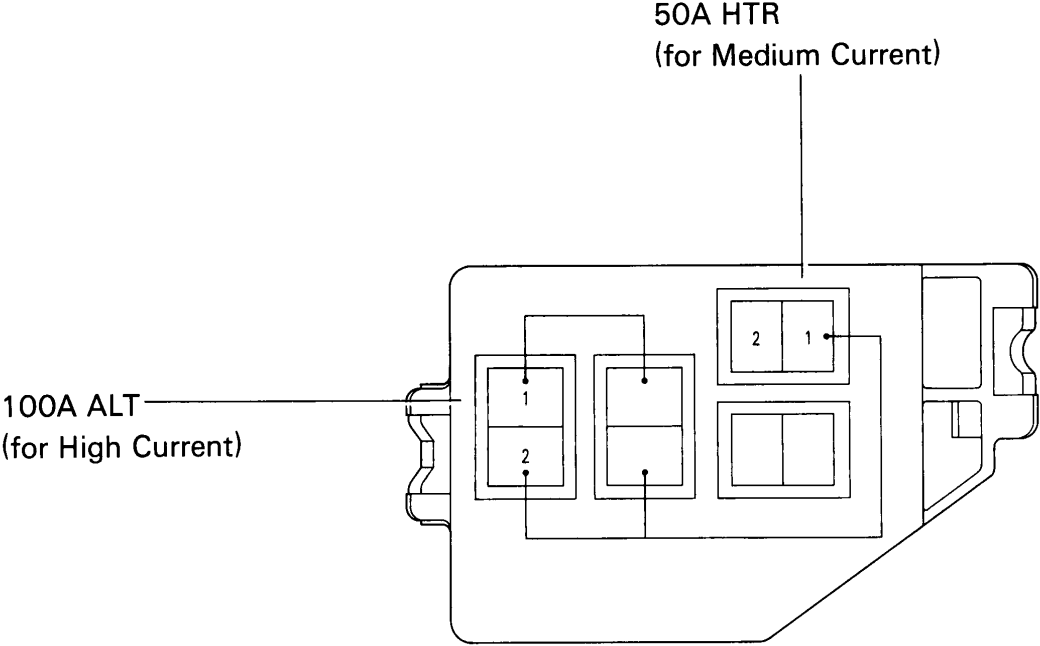
[Engine Room J/B No.2 Inner Circuit]



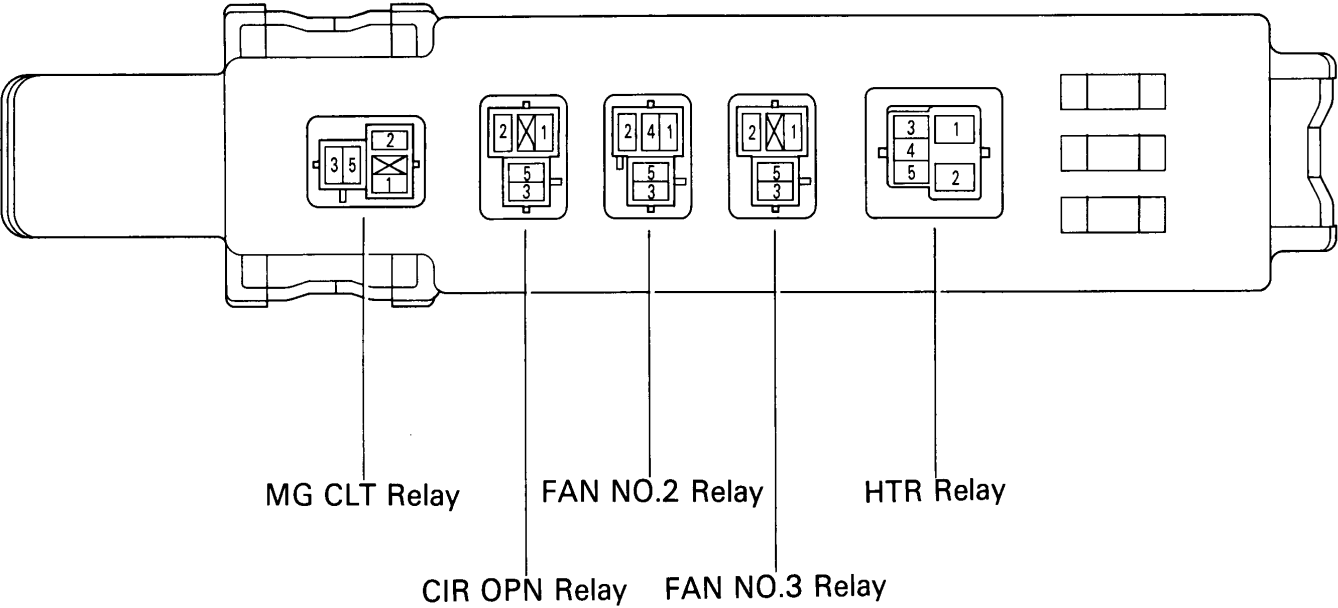
English

Fusible Link Block	Engine Compartment Left (See page 50)
	Inside Engine Room J/B No.2

English



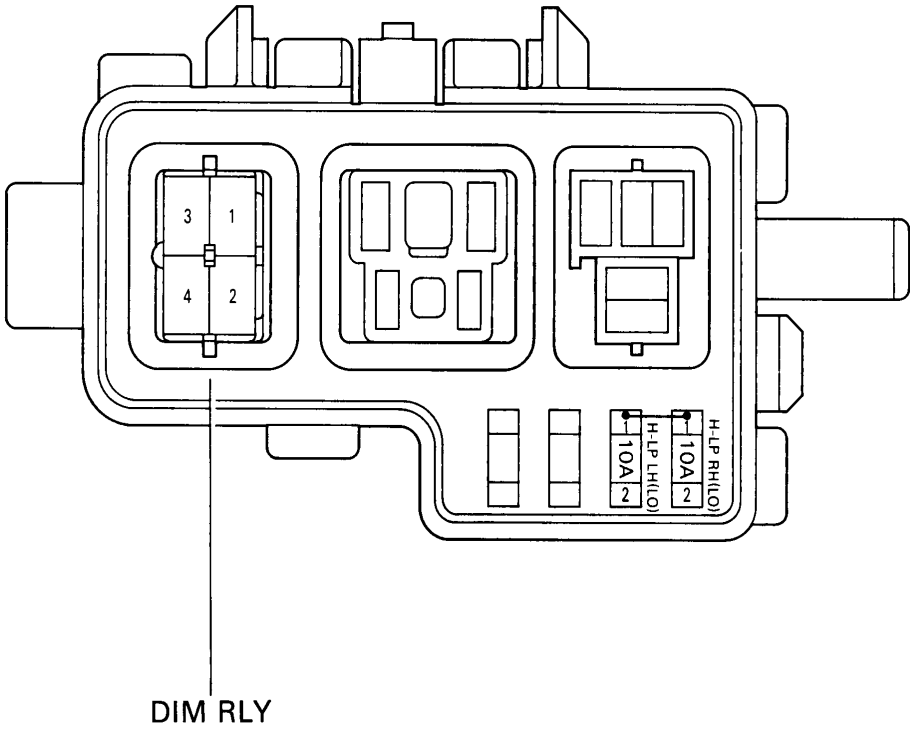
①: Engine Room R/B No.1	Engine Compartment Left (See page 50)
	Inside Engine Room J/B No.2



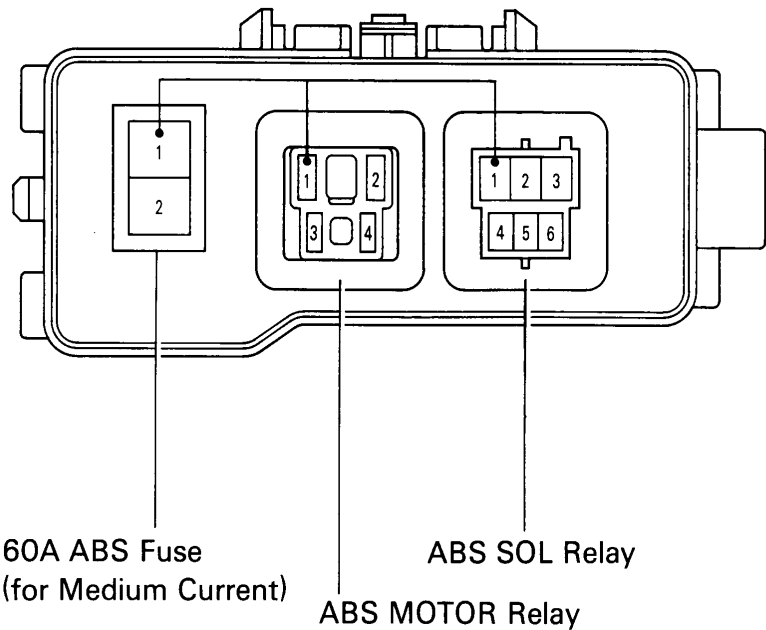
②: Engine Room R/B No.2	Near The Battery (See page 50)
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[LHD]

English



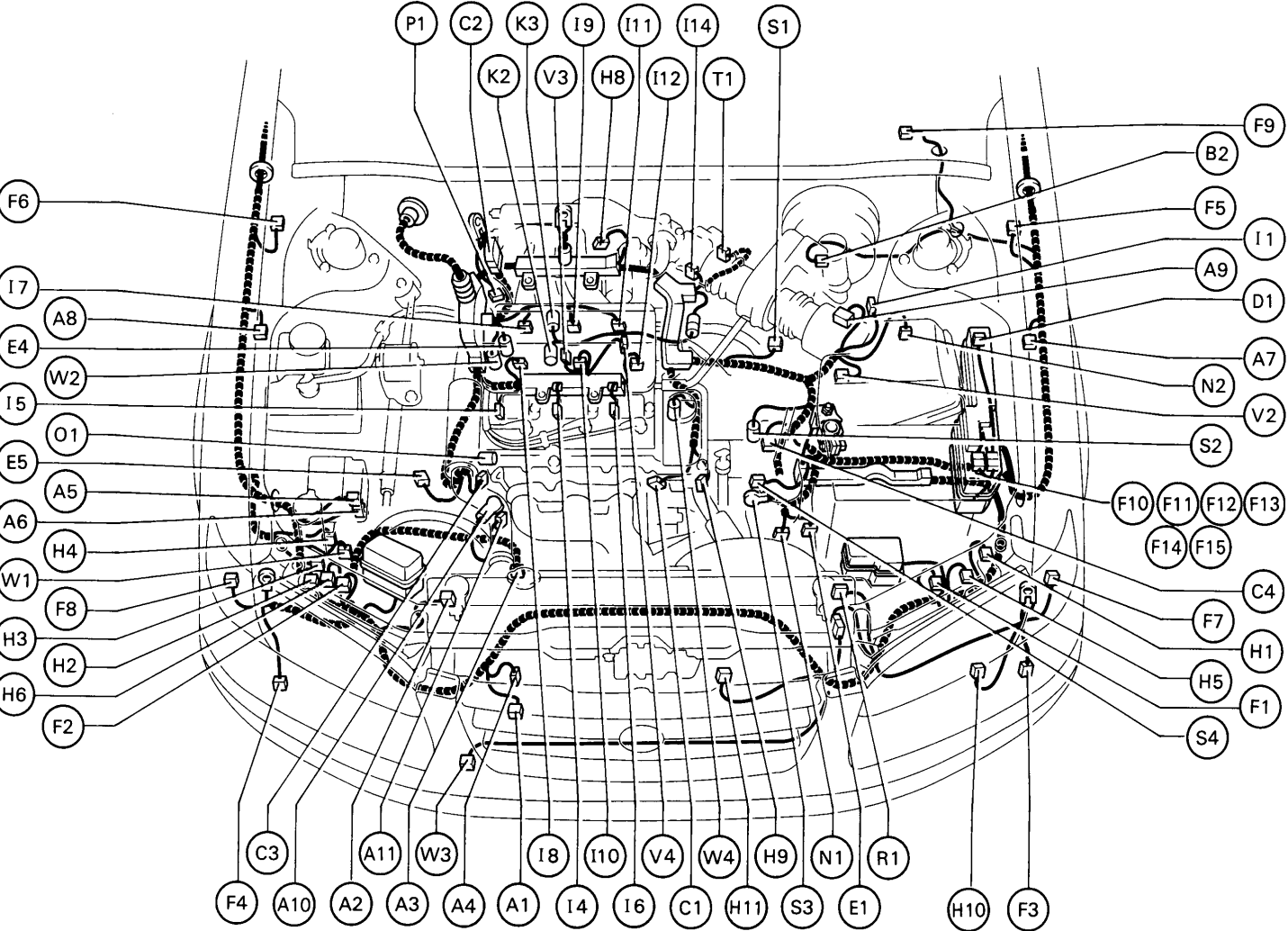
③: Engine Room R/B No.3	Radiator Upper Support LH (See page 50)
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G ELECTRICAL WIRING ROUTING

Position of Parts in Engine Compartment

[1MZ-FE LHD]



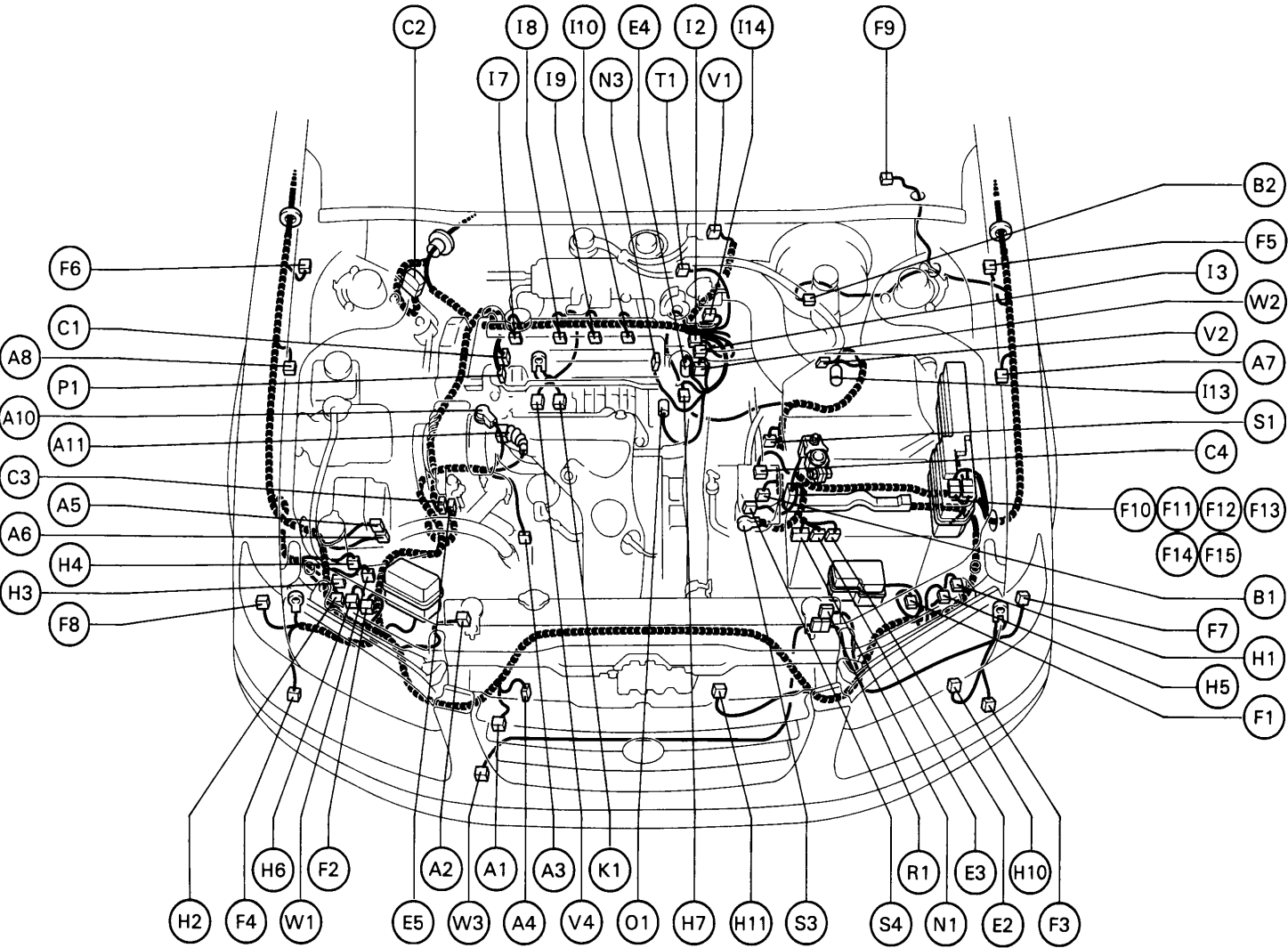
Position of Parts in Engine Compartment

Code	English	Français	Español
A 1	A/C Ambient Temp. Sensor	Capteur de température ambiante A/C	Sensor del temperatura del ambiente del A/C
A 2	A/C Condenser Fan Motor	Moteur de ventilateur de condenseur A/C	Motor del ventilador del condensador del A/C
A 3	A/C Magnetic Clutch and Lock Sensor	Accouplement magnétique et capteur de blocage A/C	Embrague magnético y sensor de bloqueo del A/C
A 4	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	Triple pressostat A/C (pressostat double et simple A/C)	Interruptor de presión triple del A/C (interruptor de presión doble y sencillo del A/C)
A 5	ABS Actuator	Dispositif de commande ABS	Actuador del ABS
A 6	ABS Actuator	Dispositif de commande ABS	Actuador del ABS
A 7	ABS Speed Sensor Front LH	Capteur de vitesse avant gauche ABS	Sensor de velocidad del ABS frontal izquierda
A 8	ABS Speed Sensor Front RH	Capteur de vitesse avant droit ABS	Sensor de velocidad del ABS frontal derecha
A 9	Air Flow Meter	Compteur de débit d'air	Medidor de flujo de aire
A 10	Alternator	Alternateur	Alternador
A 11	Alternator	Alternateur	Alternador
B 2	Brake Fluid Level Warning SW	Manocontact de raple de niveau de liquide de frein	Interruptor de advertencia del nivel del líquido de frenos
C 1	Camshaft Position Sensor	Capteur de position d'arbre à cames	Sensor de posición del árbol de levas
C 2	Check Connector	Bloc raccord de diagnostic	Conector de comprobación
C 3	Crankshaft Position Sensor	Capteur de position de vilebrequin	Sensor de posición del cigüeñal
C 4	Cruise Control Actuator	Actionneur de contrôle de croisière	Activador del control de crucero
D 1	Diode (A/C)	Diode (A/C)	Diode (A/C)
E 1	ECT Solenoid	Solénoïde de commande ECT	Solenoide de ECT
E 4	EFI Water Temp. Sensor	Capteur de température d'eau EFI	Sensor de la temperatura del agua de EFI
E 5	Engine Oil Level Sensor	Manocontact de niveau d'huile moteur	Sensor del nivel de aceite del motor
F 1	Front Clearance Light LH	Feu d'encombrement avant gauche	Luz de paso frontal izquierda
F 2	Front Clearance Light RH	Feu d'encombrement avant droit	Luz de paso frontal derecha
F 3	Front Fog Light LH	Projecteur antibrouillard avant gauche	Luz antiniebla frontal izquierda
F 4	Front Fog Light RH	Projecteur antibrouillard avant droit	Luz antiniebla frontal derecha
F 5	Front Side Turn Signal Light LH	Feu de changement de direction latéral avant gauche	Luz de la señal de giro lateral frontal izquierda
F 6	Front Side Turn Signal Light RH	Feu de changement de direction latéral avant droit	Luz de la señal de giro lateral frontal derecha
F 7	Front Turn Signal Light LH	Feu de changement de direction avant gauche	Luz de la señal de giro frontal izquierda
F 8	Front Turn Signal Light RH	Feu de changement de direction avant droit	Luz de la señal de giro frontal derecha
F 9	Front Wiper Motor	Moteur d'essuie-glace de pare-brise	Motor del limpiador frontal
F 10	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 11	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 12	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 13	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 14	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 15	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
H 1	Headlight Beam Level Control Actuator LH	Dispositif de commande gauche de réglage d'orientation de faisceau de projecteur	Actuador de control del nivel del haz del faro izquierdo
H 2	Headlight Beam Level Control Actuator RH	Dispositif de commande droit de réglage d'orientation de faisceau de projecteur	Actuador de control del nivel del haz del faro derecho
H 3	Headlight Cleaner Motor	Moteur de lave-projecteurs	Motor del limpiador del faro
H 4	Headlight Cleaner Relay	Relais de lave-projecteurs	Relé del limpiador del faro
H 5	Headlight LH	Projecteur avant gauche	Faro izquierdo
H 6	Headlight RH	Projecteur avant droit	Faro derecho
H 8	Heated Oxygen Sensor (Bank 1 Sensor 1)	Capteur d'oxygène réchauffé (Banque 1 Capteur 1)	Sensor de oxígeno calentado (Banco 1 Sensor 1)
H 9	Heated Oxygen Sensor (Bank 2 Sensor 1)	Capteur d'oxygène réchauffé (Banque 2 Capteur 1)	Sensor de oxígeno calentado (Banco 2 Sensor 1)
H 10	Horn (High)	Avertisseur (aigu)	Bocina (alta)
H 11	Horn (Low)	Avertisseur (grave)	Bocina (baja)
I 1	Igniter	Allumeur	Encendedor
I 4	Ignition Coil No.1 and No.4	Bobines d'allumage no.1 et no.4	Bobina de encendido N.º 1 y N.º 4
I 5	Ignition Coil No.2 and No.5	Bobines d'allumage no.2 et no.5	Bobina de encendido N.º 2 y N.º 5
I 6	Ignition Coil No.3 and No.6	Bobines d'allumage no.3 et no.6	Bobina de encendido N.º 3 y N.º 6
I 7	Injector No.1	Injecteur no.1	Injector N.º 1
I 8	Injector No.2	Injecteur no.2	Injector N.º 2
I 9	Injector No.3	Injecteur no.3	Injector N.º 3
I 10	Injector No.4	Injecteur no.4	Injector N.º 4
I 11	Injector No.5	Injecteur no.5	Injector N.º 5
I 12	Injector No.6	Injecteur no.6	Injector N.º 6
I 14	ISC Valve	Soupape ISC	Válvula ISC
K 2	Knock Sensor 1	Capteur de cognement moteur 1	Sensor de golpeo 1
K 3	Knock Sensor 2	Capteur de cognement moteur 2	Sensor de golpeo 2
N 1	Neutral Start SW, A/T Indicator Light SW and Back-Up Light SW	Contacteur de démarrage au point mort, contacteur d'indicateur A/T et contacteur de feux de recul	Interruptor de arranque en punto muerto, interruptor de la luz indicadora de A/T e interruptor de la luz de marcha atrás
N 2	Noise Filter (Ignition System)	Filtre anti-parasites (système d'allumage)	Filtro contra el ruido (sistema de encendido)
O 1	Oil Pressure SW	Manocontact de pression d'huile	Interruptor de presión de aceite
P 1	Power Steering Oil Pressure SW	Manocontact de pression d'huile de direction assist	Interruptor de la presión de aceite de la servodirección
R 1	Radiator Fan Motor	Moteur d'entraînement de ventilateur électrique de radiateur	Motor del ventilador del radiador
S 1	Speed Sensor (Combination Meter)	Capteur de vitesse (combiné de bord)	Sensor de velocidad (medidor de combinación)
S 2	Speed Sensor (ECT)	Capteur de vitesse (ECT)	Sensor de velocidad (ECT)
S 3	Starter	Démarrreur	Arrancador
S 4	Starter	Démarrreur	Arrancador
T 1	Throttle Position Sensor	Capteur de position de papillon d'accélération	Sensor de posición del acelerador
V 2	Variable Resistor	Résistance variable	Resistor variable
V 3	VSV (ACIS)	VSV (ACIS)	VSV (ACIS)
V 4	VSV (EGR)	VSV (EGR)	VSV (EGR)
W 1	Washer Motor	Moteur de lave-glace	Motor del lavador
W 2	Water Temp. Sender	Jauge émettrice de température d'eau	Emisor de la temperatura del agua
W 3	Water Temp. SW No.1	Contacteur thermoélectrique no.1	Interruptor de la temperatura del agua N.º 1
W 4	Water Temp. SW No.2	Contacteur thermoélectrique no.2	Interruptor de la temperatura del agua N.º 2

Position of Parts in Engine Compartment

[5S-FE LHD]

English



Position of Parts in Engine Compartment

Code	English	Français	Español
A 1	A/C Ambient Temp. Sensor	Capteur de température ambiante A/C	Sensor del temperatura del ambiente del A/C
A 2	A/C Condenser Fan Motor	Moteur de ventilateur de condenseur A/C	Motor del ventilador del condensador del A/C
A 3	A/C Magnetic Clutch and Lock Sensor	Accouplement magnétique et capteur de blocage A/C	Embrague magnético y sensor de bloqueo del A/C
A 4	A/C Triple Pressure SW (A/C Dual and Single Pressure SW)	Triple pressostat A/C (pressostat double et simple A/C)	Interruptor de presión triple del A/C (interruptor de presión doble y sencillo del A/C)
A 5	ABS Actuator	Dispositif de commande ABS	Actuador del ABS
A 6	ABS Actuator	Dispositif de commande ABS	Actuador del ABS
A 7	ABS Speed Sensor Front LH	Capteur de vitesse avant gauche ABS	Sensor de velocidad del ABS frontal izquierda
A 8	ABS Speed Sensor Front RH	Capteur de vitesse avant droit ABS	Sensor de velocidad del ABS frontal derecha
A 10	Alternator	Alternateur	Alternador
A 11	Alternator	Alternateur	Alternador
B 1	Back-Up Light SW	Contacteur de feux de recul	Interruptor de la luz de marcha atrás
B 2	Brake Fluid Level Warning SW	Manocontact de rapple de niveau de liquide de frein	Interruptor de advertencia del nivel del líquido de frenos
C 1	Camshaft Position Sensor	Capteur de position d'arbre à cames	Sensor de posición del árbol de levas
C 2	Check Connector	Bloc raccord de diagnostic	Conector de comprobación
C 3	Crankshaft Position Sensor	Capteur de position de vilebrequin	Sensor de posición del cigüeñal
C 4	Cruise Control Actuator	Actionneur de contrôle de croisière	Activador del control de crucero
E 2	ECT Solenoid	Solénoïde de commande ECT	Solenoido de ECT
E 3	ECT Solenoid	Solénoïde de commande ECT	Solenoido de ECT
E 4	EFI Water Temp. Sensor	Capteur de température d'eau EFI	Sensor de la temperatura del agua de EFI
E 5	Engine Oil Level Sensor	Manocontact de niveau d'huile moteur	Sensor del nivel de aceite del motor
F 1	Front Clearance Light LH	Feu d'encombrement avant gauche	Luz de paso frontal izquierda
F 2	Front Clearance Light RH	Feu d'encombrement avant droit	Luz de paso frontal derecha
F 3	Front Fog Light LH	Projecteur antibrouillard avant gauche	Luz antiniebla frontal izquierda
F 4	Front Fog Light RH	Projecteur antibrouillard avant droit	Luz antiniebla frontal derecha
F 5	Front Side Turn Signal Light LH	Feu de changement de direction latéral avant gauche	Luz de la señal de giro lateral frontal izquierda
F 6	Front Side Turn Signal Light RH	Feu de changement de direction latéral avant droit	Luz de la señal de giro lateral frontal derecha
F 7	Front Turn Signal Light LH	Feu de changement de direction avant gauche	Luz de la señal de giro frontal izquierda
F 8	Front Turn Signal Light RH	Feu de changement de direction avant droit	Luz de la señal de giro frontal derecha
F 9	Front Wiper Motor	Moteur d'essuie-glace de pare-brise	Motor del limpiador frontal
F 10	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 11	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 12	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 13	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 14	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
F 15	Fusible Link Block	Boîte d'éléments fusibles	Bloque de eslabones fusibles
H 1	Headlight Beam Level Control Actuator LH	Dispositif de commande gauche de réglage d'orientation de faisceau de projecteur	Actuador de control del nivel del haz del faro izquierda
H 2	Headlight Beam Level Control Actuator RH	Dispositif de commande droit de réglage d'orientation de faisceau de projecteur	Actuador de control del nivel del haz del faro derecha
H 3	Headlight Cleaner Motor	Moteur de lave-projecteurs	Motor del limpiador del faro
H 4	Headlight Cleaner Relay	Relais de lave-projecteurs	Relé del limpiador del faro
H 5	Headlight LH	Projecteur avant gauche	Faro izquierda
H 6	Headlight RH	Projecteur avant droit	Faro derecha
H 7	Heated Oxygen Sensor	Capteur d'oxygène réchauffé	Sensor de oxígeno calentado
H 10	Horn (High)	Avertisseur (aigu)	Bocina (alta)
H 11	Horn (Low)	Avertisseur (grave)	Bocina (baja)
I 2	Ignition Coil and Igniter No.1	Bobine d'allumage et allumeur no.1	Bobina de encendido y encendedor N.º 1
I 3	Ignition Coil and Igniter No.2	Bobine d'allumage et allumeur no.2	Bobina de encendido y encendedor N.º 2
I 7	Injector No.1	Injecteur no.1	Injector N.º 1
I 8	Injector No.2	Injecteur no.2	Injector N.º 2
I 9	Injector No.3	Injecteur no.3	Injector N.º 3
I 10	Injector No.4	Injecteur no.4	Injector N.º 4
I 13	Intake Air Temp. Sensor	Capteur de température d'air d'admission	Sensor de la temperatura del aire de admisión
I 14	ISC Valve	Soupape ISC	Válvula ISC
K 1	Knock Sensor	Capteur de cognement moteur	Sensor de golpeteo
N 1	Neutral Start SW, A/T Indicator Light SW and Back-Up Light SW	Contacteur de démarrage au point mort, contacteur d'indicateur A/T et contacteur de feux de recul	Interruptor de arranque en punto muerto, interruptor de la luz indicadora de A/T e interruptor de la luz de marcha atrás
N 3	Noise Filter (Ignition System)	Filtre anti-parasites (système d'allumage)	Filtro contra el ruido (sistema de encendido)
O 1	Oil Pressure SW	Manocontact de pression d'huile	Interruptor de presión de aceite
P 1	Power Steering Oil Pressure SW	Manocontact de pression d'huile de direction assist	Interruptor de la presión de aceite de la servodirección
R 1	Radiator Fan Motor	Moteur d'entraînement de ventilateur électrique de radiateur	Motor del ventilador del radiador
S 1	Speed Sensor (Combination Meter)	Capteur de vitesse (combiné de bord)	Sensor de velocidad (medidor de combinación)
S 3	Starter	Démarrreur	Arrancador
S 4	Starter	Démarrreur	Arrancador
T 1	Throttle Position Sensor	Capteur de position de papillon d'accélération	Sensor de posición del acelerador
V 1	Vacuum Sensor	Capteur de dépression	Sensor de vacío
V 2	Variable Resistor	Résistance variable	Resistor variable
V 4	VSV (EGR)	VSV (EGR)	VSV (EGR)
W 1	Washer Motor	Moteur de lave-glace	Motor del lavador
W 2	Water Temp. Sender	Jauge émettrice de température d'eau	Emisor de la temperatura del agua
W 3	Water Temp. SW No.1	Contacteur thermoélectrique no.1	Interruptor de la temperatura del agua N.º 1

English

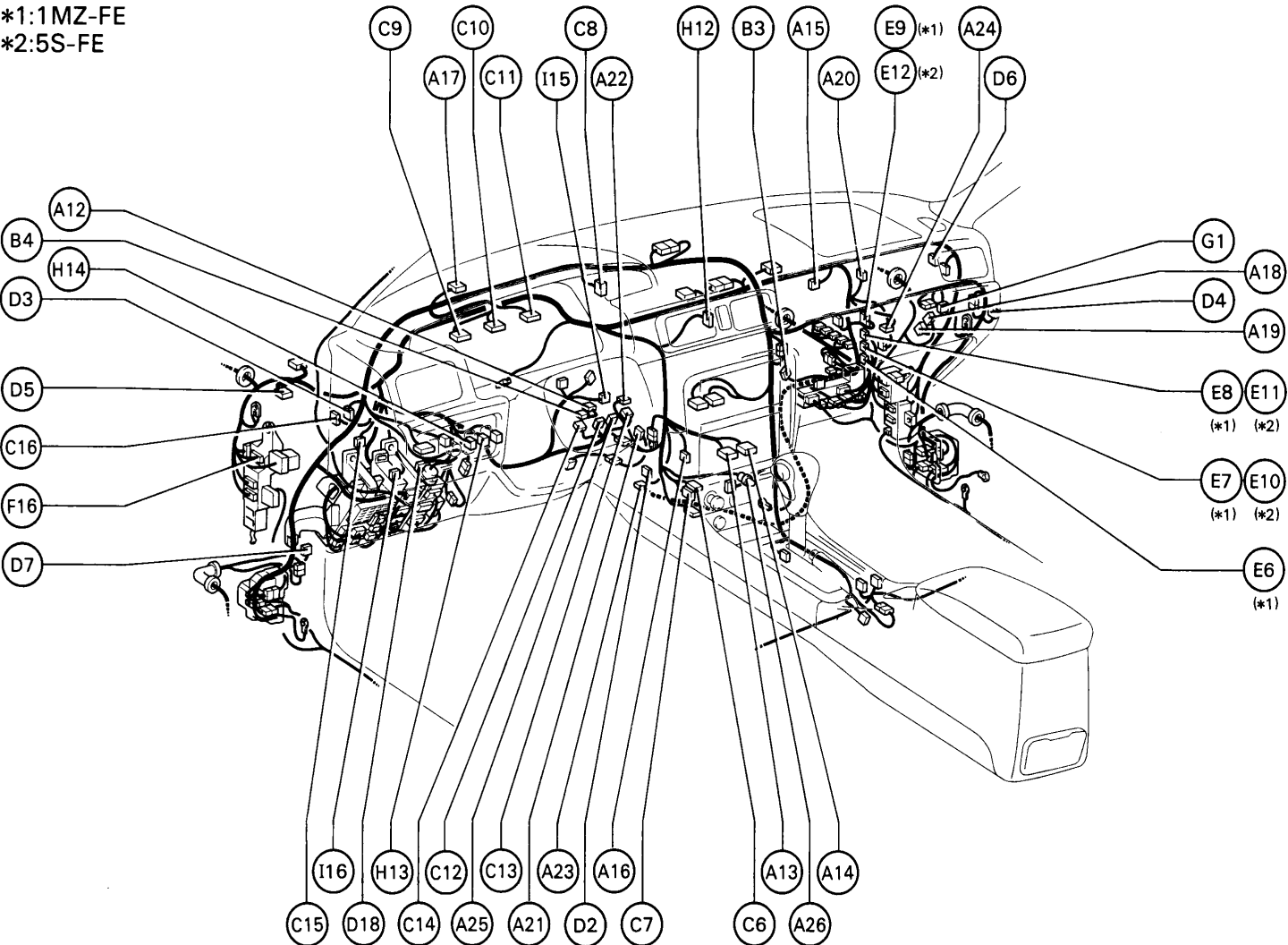
Français

Español

Position of Parts in Instrument Panel

[LHD]

*1:1MZ-FE
*2:5S-FE



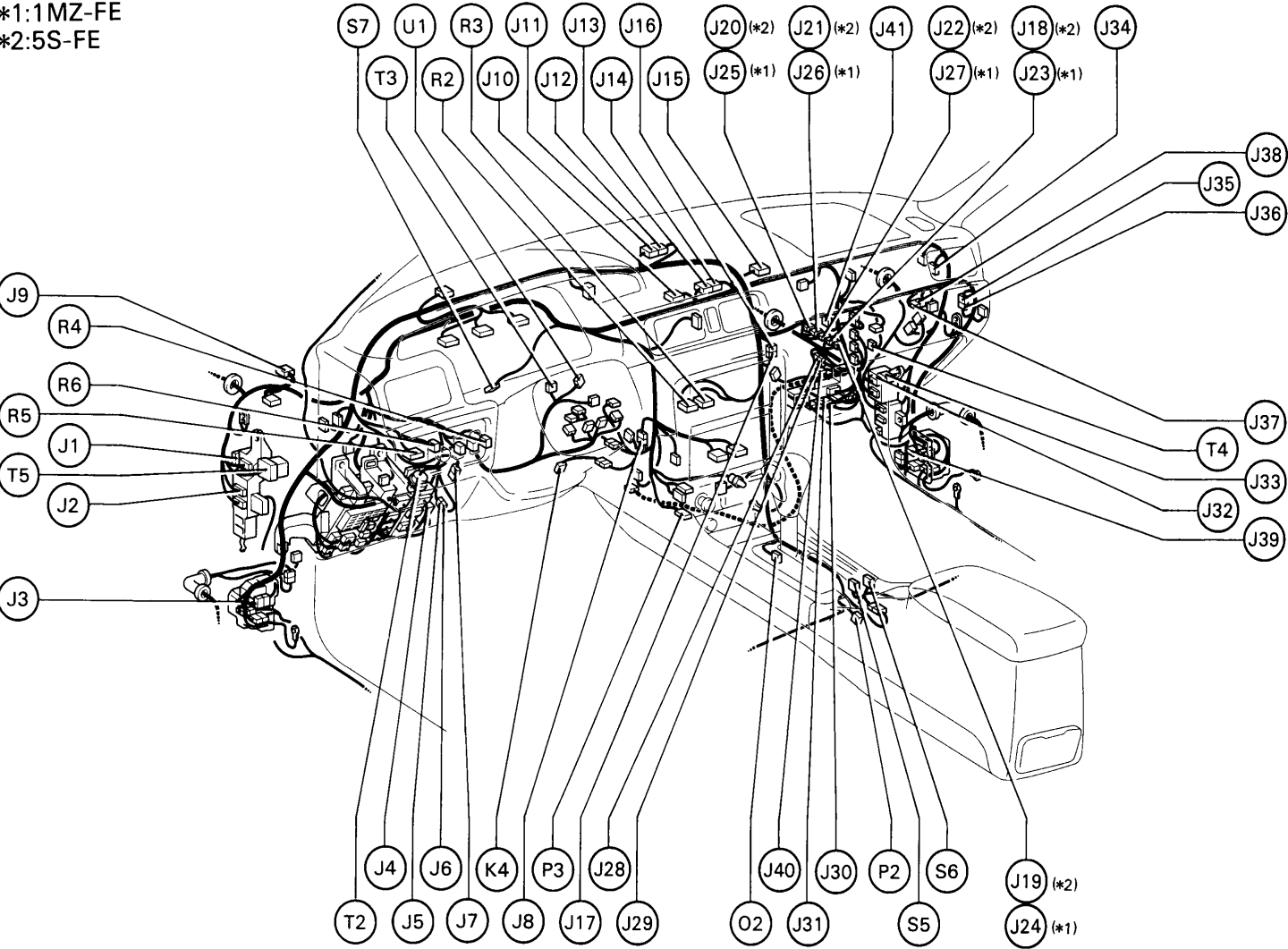
Position of Parts in Instrument Panel

Code	English	Français	Español
A 12	A/C Blower Motor Linear Controller	Contrôleur linéaire de magnétoscope de soufflerie de A/C	Controlador lineal del motor del soplador del A/C
A 13	A/C ECU	ECU A/C	ECU del A/C
A 14	A/C ECU	ECU A/C	ECU del A/C
A 15	A/C Evaporator Temp. Sensor	Capteur de température de l'évaporateur A/C	Sensor del temperatura del evaporador del A/C
A 16	A/C Room Temp. Sensor	Capteur de température de l'habitacle A/C	Sensor del temperatura del compartimiento del A/C
A 17	A/C Solar Sensor	Capteur solaire A/C	Sensor solar del A/C
A 18	ABS ECU	ECU ABS	ECU del ABS
A 19	ABS ECU	ECU ABS	ECU del ABS
A 20	Air Inlet Control Servo Motor	Servomoteur de commande d'admission d'air	Servomotor de control de la entrada de aire
A 21	Air Mix Control Servo Motor	Servomoteur de commande de mélange d'air	Servomotor de control de mezcla de aire
A 22	Air Vent Mode Control Servo Motor	Servomoteur de commande de mode de ventilation	Servomotor de control del modo de ventilación de aire
A 23	Airbag Sensor Assembly	Ensemble de capteur de sac gonflable	Conjunto del sensor del colchón de aire
A 24	Airbag Squib (Front Passenger Airbag Assembly)	Charge explosive de sac gonflable (Ensemble de sac gonflable de passager avant)	Detonador del colchón de aire (conjunto del colchón de aire del pasajero delantero)
A 25	Airbag Squib (Steering Wheel Pad)	Charge explosive de sac gonflable (rembourrage de volant de direction)	Detonador del colchón de aire (almohadilla del volante de dirección)
A 26	Ashtay Illumination	Eclairage de cendrier	Illuminación del cenicero
B 3	Blower Motor	Moteur de soufflerie	Motor del soplador
B 4	Blower Resistor	Résistance de soufflerie	Resistor del soplador
C 6	Cigarette Lighter	Allume-cigare	Encendedor de cigarrillos
C 7	Cigarette Lighter Illumination	Eclairage d'allume-cigare	Illuminación del encendedor de cigarrillos
C 8	Clock	Montre électrique de bord	Reloj
C 9	Combination Meter	Combiné de bord	Medidor de combinación
C 10	Combination Meter	Combiné de bord	Medidor de combinación
C 11	Combination Meter	Combiné de bord	Medidor de combinación
C 12	Combination SW	Commande combinée	Interruptor de combinación
C 13	Combination SW	Commande combinée	Interruptor de combinación
C 14	Combination SW	Commande combinée	Interruptor de combinación
C 15	Cruise Control Clutch SW	Contacteur d'embrayage de contrôle de croisière	Interruptor del embrague de control de cruceo
C 16	Cruise Control ECU	ECU de contrôle de croisière	ECU del control de cruceo
D 2	Daytime Running Light Relay	Relais de dispositifs d'éclairage de conduite de jour	Relé de la luz de marcha diurna
D 3	Diode (Dome)	Diode (Dome)	Diode (Dome)
D 4	Diode (Door Courtesy)	Diode (d'éclairage de courtoisie sur porte)	Diode (cortesia de la puerta)
D 5	Diode (Front Fog Light)	Diode (Projecteur antibrouillard avant)	Diode (Luz antiniebla frontal)
D 6	Diode (Idle-Up)	Diode (de régime ralenti accéléré)	Diode (aumento del ralenti)
D 7	Diode (Interior Light)	Diode (de plafonnier)	Diode (luz interior)
D 18	DLC3	DLC3	DLC3
E 6	Engine and ECT ECU	ECU moteur et ECT	ECU del motor y ECT
E 7	Engine and ECT ECU	ECU moteur et ECT	ECU del motor y ECT
E 8	Engine and ECT ECU	ECU moteur et ECT	ECU del motor y ECT
E 9	Engine and ECT ECU	ECU moteur et ECT	ECU del motor y ECT
E 10	Engine ECU (M/T), Engine and ECT ECU (A/T)	ECU moteur (M/T), ECU moteur et ECT (A/T)	ECU del motor (M/T), ECU del motor y ECT (A/T)
E 11	Engine ECU (M/T), Engine and ECT ECU (A/T)	ECU moteur (M/T), ECU moteur et ECT (A/T)	ECU del motor (M/T), ECU del motor y ECT (A/T)
E 12	Engine ECU (M/T), Engine and ECT ECU (A/T)	ECU moteur (M/T), ECU moteur et ECT (A/T)	ECU del motor (M/T), ECU del motor y ECT (A/T)
F 16	Front Fog Light Relay	Relais de projecteurs antibrouillard avant	Relé de las luces antiniebla delanteras
G 1	Glove Box Light SW	Contacteur d'éclairage de boîte à gants	Interruptor de la luz de la caja de la guantera
H 12	Hazard SW	Commande de feux de détresse	Interruptor de peligro
H 13	Headlight Beam Level Control SW	Commande de dispositif de réglage d'orientation de faisceau de projecteurs	Interruptor de control del nivel del haz del faro
H 14	Headlight Cleaner SW	Commande de lave-projecteurs	Interruptor del limpiador del faro
I 15	Ignition SW	Contacteur d'allumage	Interruptor de encendido
I 16	Integration Relay	Relais d'intégration	Relé de integración

Position of Parts in Instrument Panel

[LHD]

*1:1MZ-FE
*2:5S-FE



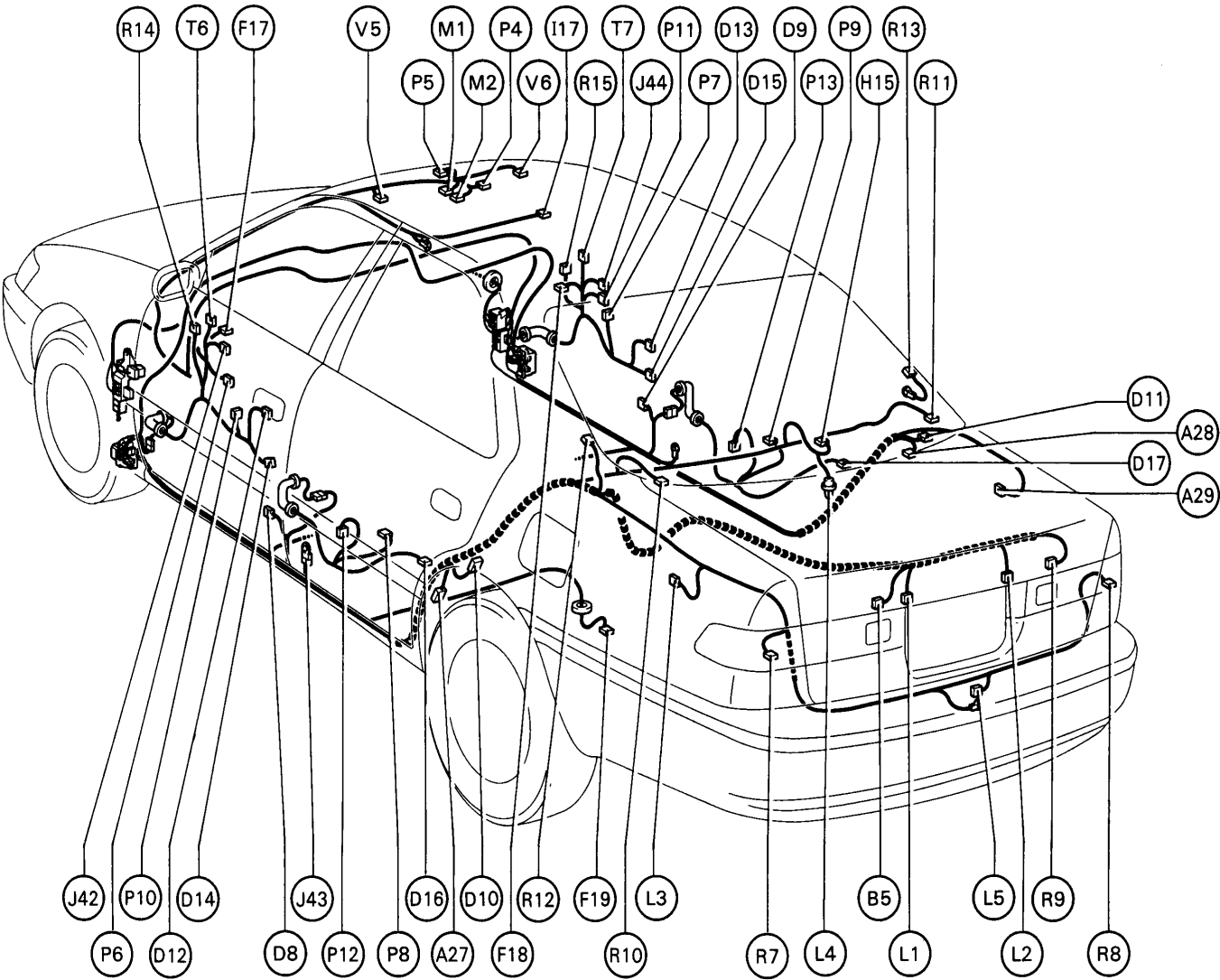
Position of Parts in Instrument Panel

Code	English	Français	Español
J 1	Junction Connector	Bloc raccord de jonction	Conector de unión
J 2	Junction Connector	Bloc raccord de jonction	Conector de unión
J 3	Junction Connector	Bloc raccord de jonction	Conector de unión
J 4	Junction Connector	Bloc raccord de jonction	Conector de unión
J 5	Junction Connector	Bloc raccord de jonction	Conector de unión
J 6	Junction Connector	Bloc raccord de jonction	Conector de unión
J 7	Junction Connector	Bloc raccord de jonction	Conector de unión
J 8	Junction Connector	Bloc raccord de jonction	Conector de unión
J 9	Junction Connector	Bloc raccord de jonction	Conector de unión
J 10	Junction Connector	Bloc raccord de jonction	Conector de unión
J 11	Junction Connector	Bloc raccord de jonction	Conector de unión
J 12	Junction Connector	Bloc raccord de jonction	Conector de unión
J 13	Junction Connector	Bloc raccord de jonction	Conector de unión
J 14	Junction Connector	Bloc raccord de jonction	Conector de unión
J 15	Junction Connector	Bloc raccord de jonction	Conector de unión
J 16	Junction Connector	Bloc raccord de jonction	Conector de unión
J 17	Junction Connector	Bloc raccord de jonction	Conector de unión
J 18	Junction Connector	Bloc raccord de jonction	Conector de unión
J 19	Junction Connector	Bloc raccord de jonction	Conector de unión
J 20	Junction Connector	Bloc raccord de jonction	Conector de unión
J 21	Junction Connector	Bloc raccord de jonction	Conector de unión
J 22	Junction Connector	Bloc raccord de jonction	Conector de unión
J 23	Junction Connector	Bloc raccord de jonction	Conector de unión
J 24	Junction Connector	Bloc raccord de jonction	Conector de unión
J 25	Junction Connector	Bloc raccord de jonction	Conector de unión
J 26	Junction Connector	Bloc raccord de jonction	Conector de unión
J 27	Junction Connector	Bloc raccord de jonction	Conector de unión
J 28	Junction Connector	Bloc raccord de jonction	Conector de unión
J 29	Junction Connector	Bloc raccord de jonction	Conector de unión
J 30	Junction Connector	Bloc raccord de jonction	Conector de unión
J 31	Junction Connector	Bloc raccord de jonction	Conector de unión
J 32	Junction Connector	Bloc raccord de jonction	Conector de unión
J 33	Junction Connector	Bloc raccord de jonction	Conector de unión
J 34	Junction Connector	Bloc raccord de jonction	Conector de unión
J 35	Junction Connector	Bloc raccord de jonction	Conector de unión
J 36	Junction Connector	Bloc raccord de jonction	Conector de unión
J 37	Junction Connector	Bloc raccord de jonction	Conector de unión
J 38	Junction Connector	Bloc raccord de jonction	Conector de unión
J 39	Junction Connector	Bloc raccord de jonction	Conector de unión
J 40	Junction Connector	Bloc raccord de jonction	Conector de unión
J 41	Junction Connector	Bloc raccord de jonction	Conector de unión
K 4	Kick Down SW	Contacteur au pied de rétrogradation forcée	Interruptor del retirador
O 2	O/D Main SW and A/T Shift Lever Illumination	Éclairage de commutateur principale O/D et de levier de ohangement de vitesses de boîte de A/T	Interruptor principal de O/D e iluminación de la palanca de cambios de la A/T
P 2	Parking Brake SW	Contacteur de frein de stationnement	Interruptor del freno de estacionamiento
P 3	Power Outlet	Prise d'alimentation	Toma de alimentacion
R 2	Radio and Player	Autoradio et lecteur de cassettes	Radio y reproductor
R 3	Radio and Player	Autoradio et lecteur de cassettes	Radio y reproductor
R 4	Rear Fog Light SW	Commande de projecteurs antibrouillard arrière	Interruptor de las luces antiniebla traseras
R 5	Remote Control Mirror SW	Commande de rétroviseur à commande électrique	Interruptor del espejo retrovisor de control remoto
R 6	Rheostat	Rhéostat	Reóstato
S 5	Seat Heater SW (Driver's Seat)	Commande de chauffage de siège (côté conducteur)	Interruptor del calefactor del asiento (asiento del conductor)
S 6	Seat Heater SW (Front Passenger's Seat)	Commande de chauffage de siège (siège de passager avant)	Interruptor del calefactor del asiento (asiento del pasajero delantero)
S 7	Stop Light SW	Contacteur de feux stop	Interruptor de la luz de parada
T 2	TDCL	TDCL	TDCL
T 3	Transponder Key Amplifier	Amplificateur de clé de transpondeur	Amplificador de la llave de retransmisor
T 4	Transponder Key Computer	Ordinateur de clé de transpondeur	Computadora de la llave de retransmisor
T 5	Turn Signal Flasher	Central clignotant de clignotants	Intermitente de la señal de giro
U 1	Unlock Warning SW (Ignition Key)	Contacteur de rappel de libération (Clé de contact)	Interruptor de advertencia de desbloqueo (Llave de encendido)

Position of Parts in Body

[LHD]

English



Position of Parts in Body

Code	English	Français	Español
A 27	ABS Speed Sensor Rear LH	Capteur de vitesse arrière gauche ABS	Sensor de velocidad del ABS trasero izquierda
A 28	ABS Speed Sensor Rear RH	Capteur de vitesse arrière droit ABS	Sensor de velocidad del ABS trasero derecha
A 29	Auto Antenna Relay and Motor	Relais et moteur d'antenne électrique	Relé y motor de la antena eléctrica
B 5	Back-Up Light	Feux de recul	Luz de marcha atrás
D 8	Door Courtesy SW Front LH	Contacteur d'éclairage de courtoisie sur porte avant gauche	Interruptor de la cortesía de la puerta frontal izquierda
D 9	Door Courtesy SW Front RH	Contacteur d'éclairage de courtoisie sur porte avant droit	Interruptor de la cortesía de la puerta frontal derecha
D 10	Door Courtesy SW Rear LH	Contacteur d'éclairage de courtoisie sur porte arrière gauche	Interruptor de la cortesía de la puerta trasero izquierda
D 11	Door Courtesy SW Rear RH	Contacteur d'éclairage de courtoisie sur porte arrière droit	Interruptor de la cortesía de la puerta trasero derecha
D 12	Door Key Lock and Unlock SW Front LH	Contacteur de condamnation et de libération de serrure de porte avec la clé avant gauche	Interruptor de bloqueo y desbloqueo de la puerta frontal izquierda
D 13	Door Key Lock and Unlock SW Front RH	Contacteur de condamnation et de libération de serrure de porte avec la clé avant droit	Interruptor de bloqueo y desbloqueo de la puerta frontal derecha
D 14	Door Lock Motor and Door Unlock Detection SW Front LH	Moteur de condamnation de porte et contacteur de libération de porte avant gauche	Motor de bloqueo de la puerta y interruptor de desbloqueo de la puerta frontal izquierda
D 15	Door Lock Motor and Door Unlock Detection SW Front RH	Moteur de condamnation de porte et contacteur de libération de porte avant droit	Motor de bloqueo de la puerta y interruptor de desbloqueo de la puerta frontal derecha
D 16	Door Lock Motor and Door Unlock Detection SW Rear LH	Moteur de condamnation de porte et contacteur de libération de porte arrière gauche	Motor de bloqueo de la puerta y interruptor de desbloqueo de la puerta trasera izquierda
D 17	Door Lock Motor and Door Unlock Detection SW Rear RH	Moteur de condamnation de porte et contacteur de libération de porte arrière droit	Motor de bloqueo de la puerta y interruptor de desbloqueo de la puerta trasera derecha
F 17	Front Door Speaker LH	Haut-parleur de porte avant gauche	Altavoz izquierda de la puerta frontal
F 18	Front Door Speaker RH	Haut-parleur de porte avant droit	Altavoz derecha de la puerta frontal
F 19	Fuel Pump and Sender	Pompe d'alimentation et jauge émettrice de niveau d'essence	Bomba de combustible y emisor
H 15	High Mounted Stop Light	Feux stop à implantation haute	Luz de parada de montura alta
I 17	Interior Light	Plafonnier	Luz interior
J 42	Junction Connector	Bloc raccord de jonction	Conector de unión
J 43	Junction Connector	Bloc raccord de jonction	Conector de unión
J 44	Junction Connector	Bloc raccord de jonction	Conector de unión
L 1	License Plate Light LH	Éclairage de plaque minéralogique gauche	Luz de la matrícula izquierda
L 2	License Plate Light RH	Éclairage de plaque minéralogique droit	Luz de la matrícula derecha
L 3	Light Failure Sensor	Capteur de défaut d'éclairage	Sensor de fallo de las luces
L 4	Luggage Compartment Light	Éclairage de compartiment à bagages	Luz del portaequipajes
L 5	Luggage Compartment Light SW	Contacteur d'éclairage de compartiment à bagages	Interruptor de la luz del portaequipajes
M 1	Moon Roof Control SW and Control Relay	Commutateur de commande de toit ouvrant et relais de commande	Interruptor de control del techo deslizable lunar y relé de control
M 2	Moon Roof Motor and Limit SW	Contacteur de limite et moteur de toit ouvrant transparent	Interruptor de motor y limitador del techo transparente
P 4	Personal Light	Projecteur individuel	Luz personal
P 5	Personal Light	Projecteur individuel	Luz personal
P 6	Power Window Control Relay and Motor	Moteur et relais de lève-glace électrique	Motor y relé de control de las ventanillas automáticas
P 7	Power Window Control SW (Front Passenger's Side)	lève-glace électrique de glace de custode commande de lève-glace électrique (côté passager avant)	Interruptor de control de la ventanilla automática (lado del pasajero delantero)
P 8	Power Window Control SW Rear LH	Commande de lève-glace électrique arrière gauche	Interruptor de control de la ventanilla automática trasero izquierda
P 9	Power Window Control SW Rear RH	Commande de lève-glace électrique arrière droit	Interruptor de control de la ventanilla automática trasero derecha
P 10	Power Window Master SW	Commande générale de lève-glace électrique	Interruptor principal de la ventanilla automática
P 11	Power Window Motor (Front Passenger's Side)	Moteur d'entraînement de lève-glace électrique (côté passager avant)	Motor de la ventanilla automática (lado del pasajero delantero)
P 12	Power Window Motor Rear LH	Moteur d'entraînement de lève-glace électrique arrière gauche	Motor de la ventanilla automática trasera izquierda
P 13	Power Window Motor Rear RH	Moteur d'entraînement de lève-glace électrique arrière droit	Motor de la ventanilla automática trasera derecha
R 7	Rear Combination Light LH	Éclairage combiné arrière gauche	Luz de combinación trasera izquierda
R 8	Rear Combination Light RH	Éclairage combiné arrière droit	Luz de combinación trasera derecha
R 9	Rear Fog Light	Projecteur antibrouillard arrière	Luz antiniebla trasera
R 10	Rear Speaker LH	Haut-parleur de portière arrière gauche	Altavoz de la puerta trasera izquierda
R 11	Rear Speaker RH	Haut-parleur de portière arrière droit	Altavoz de la puerta trasera derecha
R 12	Rear Window Defogger (+)	Désembueur de lunette arrière (+)	Desempañador de la ventanilla trasera (+)
R 13	Rear Window Defogger (-)	Désembueur de lunette arrière (-)	Desempañador de la ventanilla trasera (-)
R 14	Remote Control Mirror LH	Rétroviseur à commande électrique gauche	Espejo retrovisor de control remoto izquierda
R 15	Remote Control Mirror RH	Rétroviseur à commande électrique droit	Espejo retrovisor de control remoto derecha
T 6	Tweeter Speaker LH	Tweeter gauche	Altavoz de agudos izquierda
T 7	Tweeter Speaker RH	Tweeter droit	Altavoz de agudos derecha
V 5	Vanity Light LH	Eclairage de miroir gauche	Luz del espejo interior izquierda
V 6	Vanity Light RH	Eclairage de miroir droit	Luz del espejo interior derecha

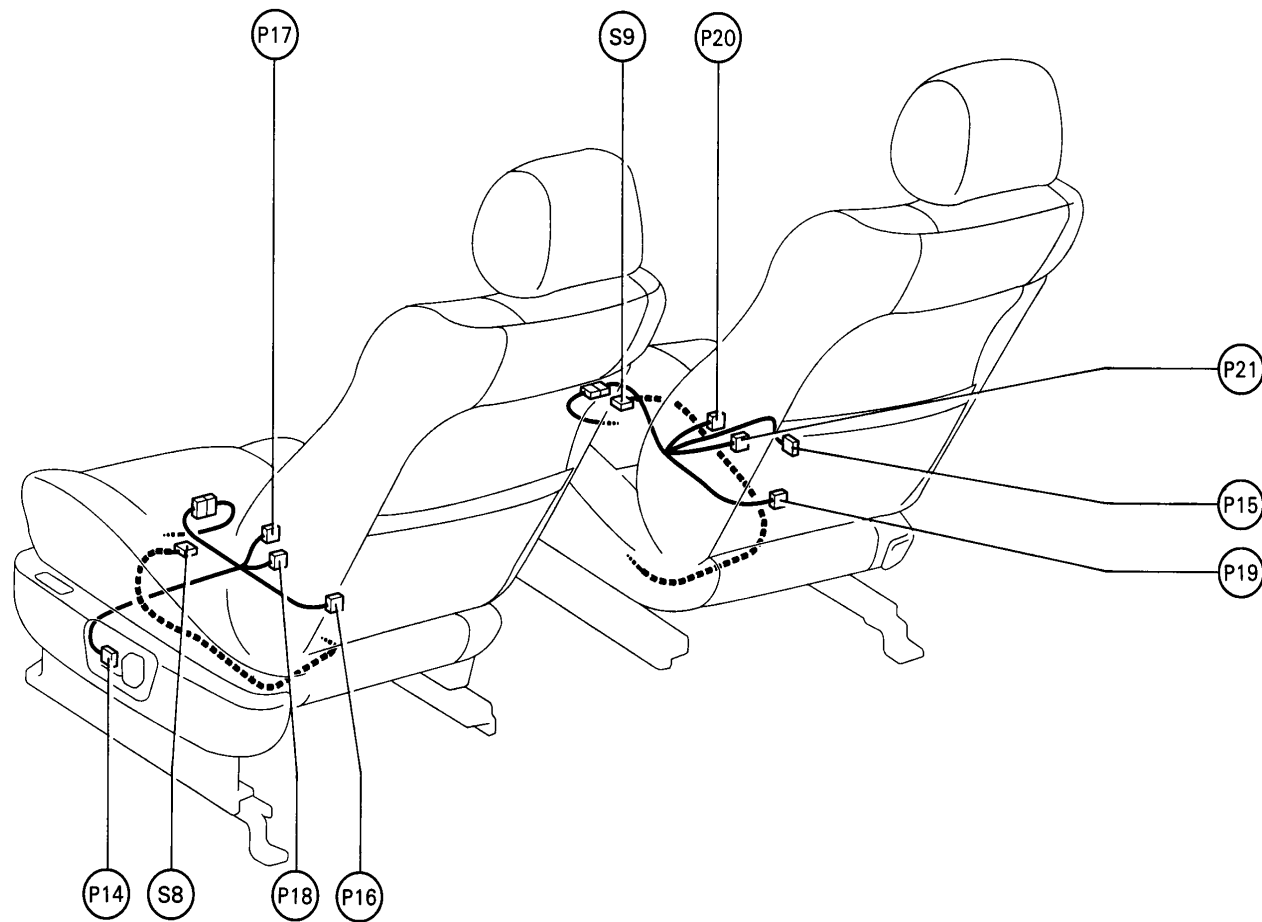
English

Français

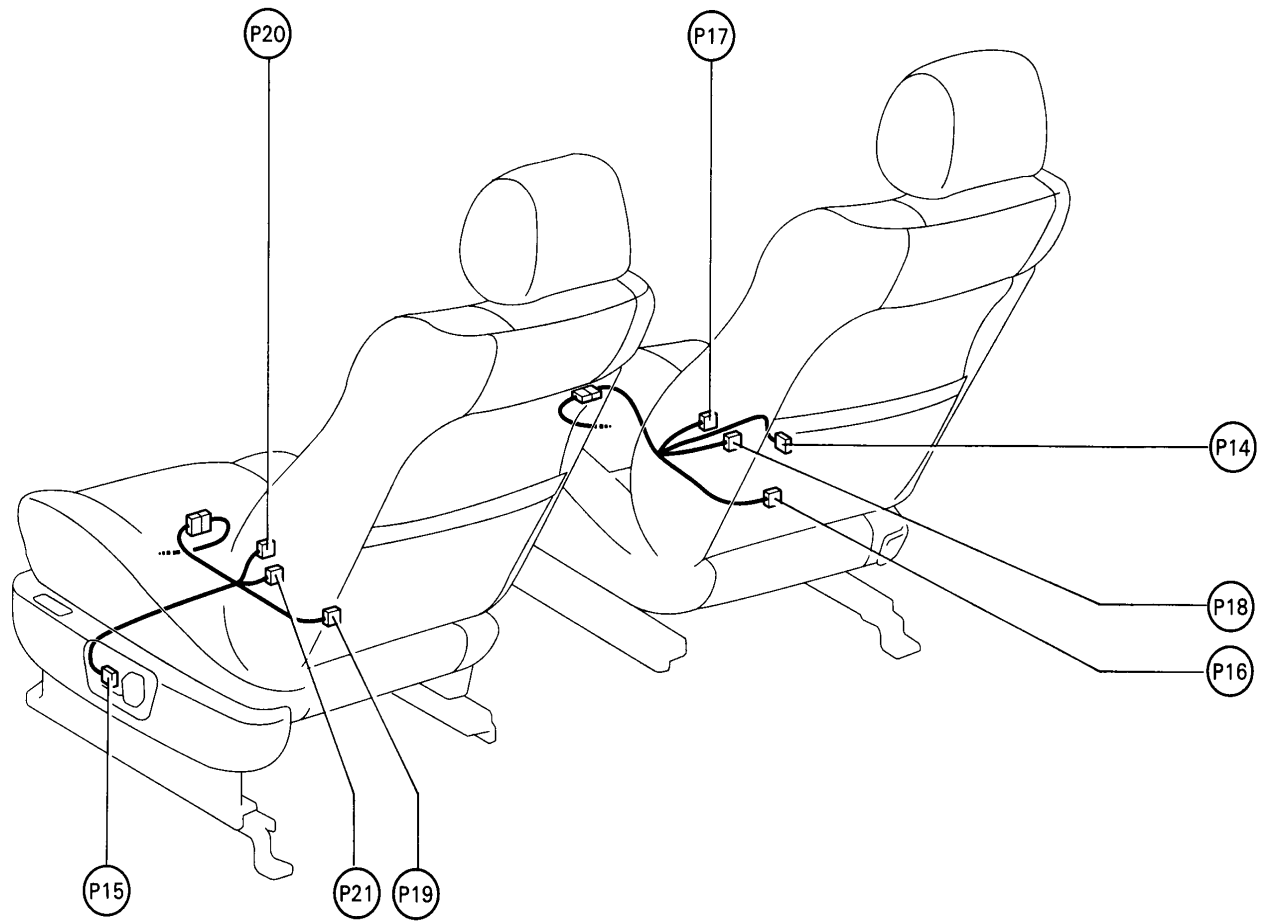
Español

Position of Parts in Seat

[LHD]



[RHD]

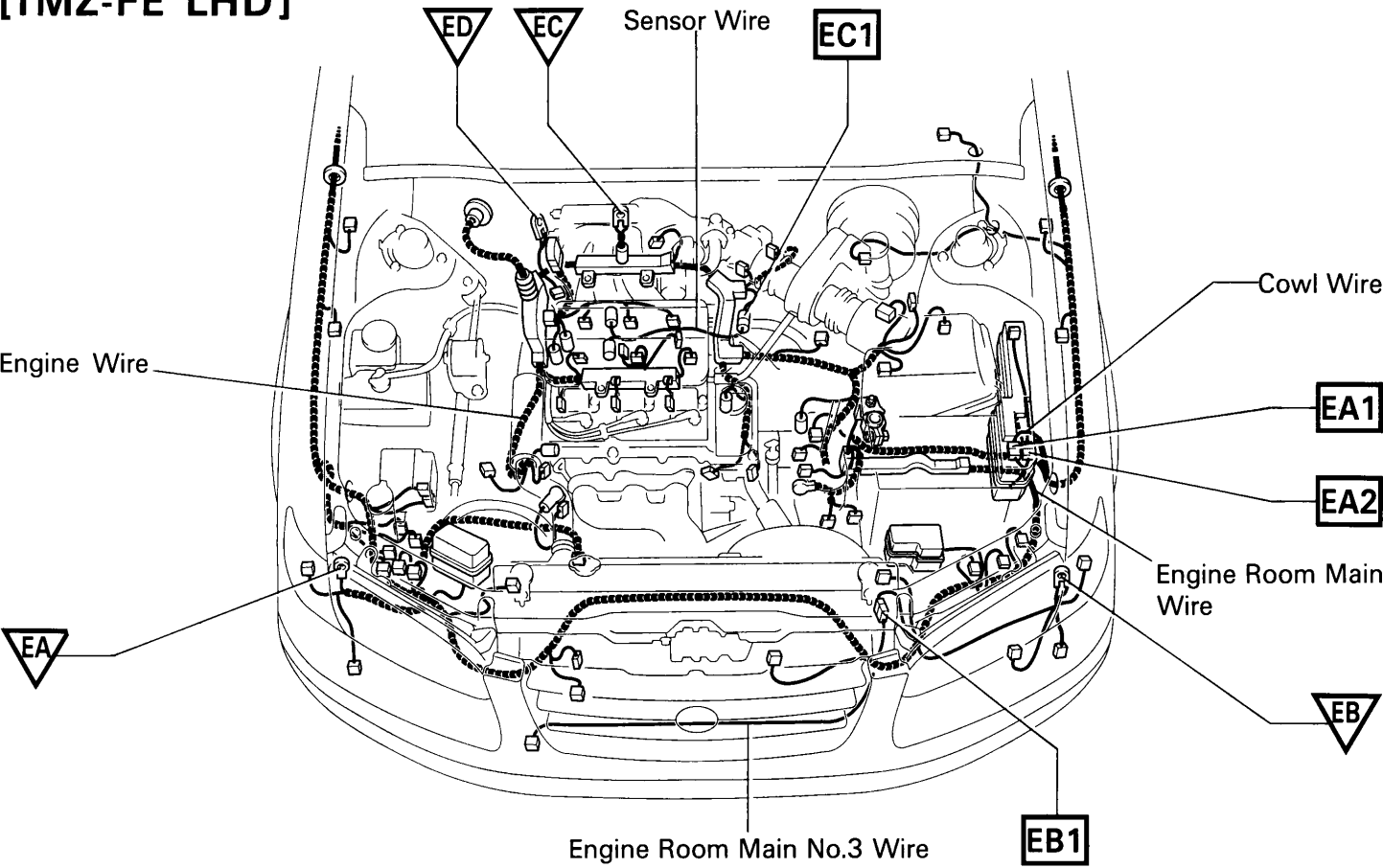


Position of Parts in Seat

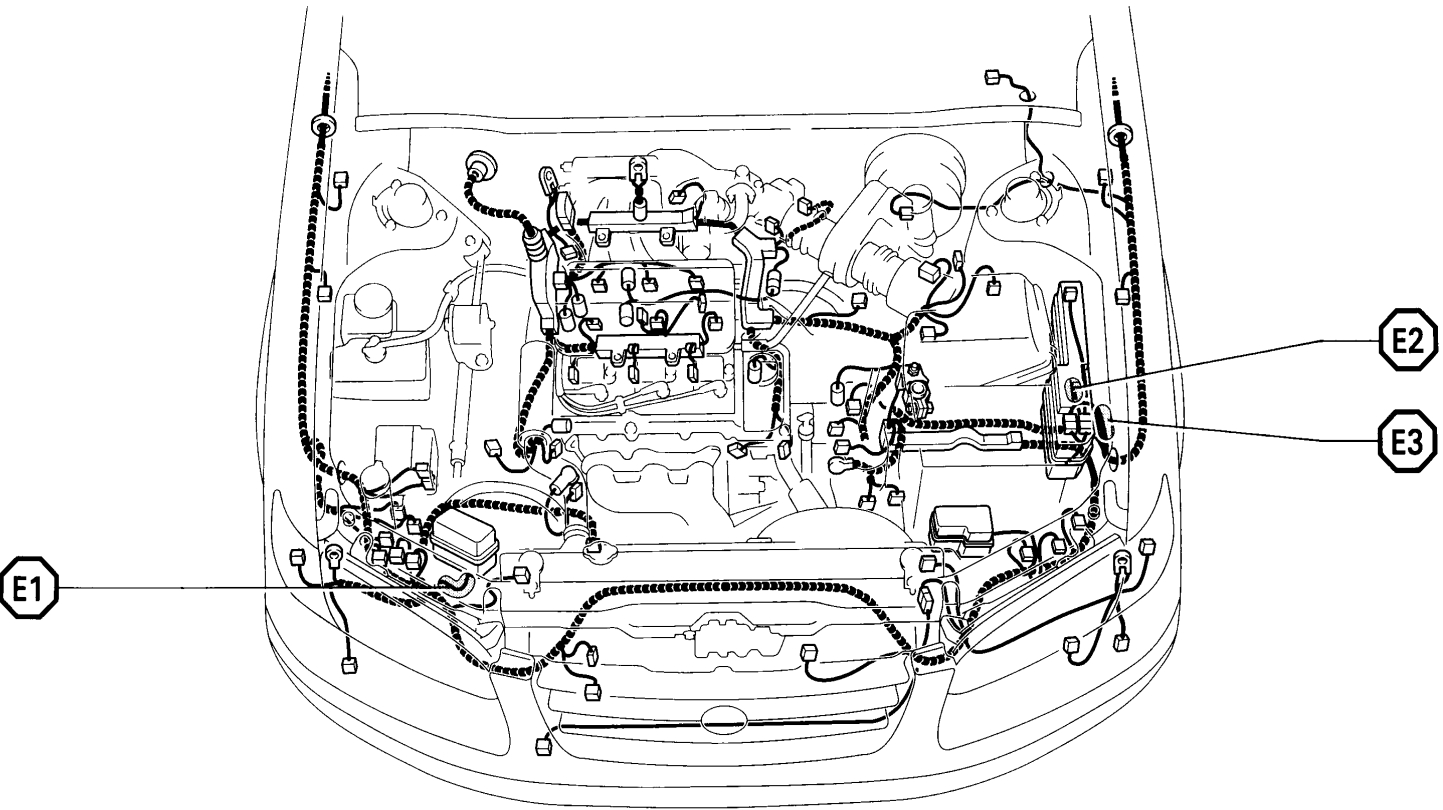
Code	English	Français	Español
P 14	Power Seat Control SW (Driver's Seat)	Contacteur de contrôle de siège électrique (siège du conducteur)	Interruptor de control del asiento automático (asiento del conductor)
P 15	Power Seat Control SW (Front Passenger's Seat)	Contacteur de contrôle de siège électrique (siège du passager avant)	Interruptor de control del asiento automático (asiento del pasajero delantero)
P 16	Power Seat Motor (Driver's Seat Reclining Control)	Moteur de siège à commande électrique (contrôle de l'inclinaison du siège du conducteur)	Motor del asiento automático (control de inclinacion del asiento del conductor)
P 17	Power Seat Motor (Driver's Seat Slide Control)	Moteur de siège à commande électrique (contrôle glissement du siège du conducteur)	Motor del asiento automático (control de deslizante del asiento del conductor)
P 18	Power Seat Motor (Driver's Seat Vertical Control)	Moteur de siège à commande électrique (réglage vertical de siège de conducteur)	Motor del asiento automático (control vertical del asiento del conductor)
P 19	Power Seat Motor (Front Passenger's Seat Reclining Control)	Moteur de siège à commande électrique (contrôle de l'inclinaison du siège du passager avant)	Motor del asiento automático (control de inclinacion del asiento del pasajero delantero)
P 20	Power Seat Motor (Front Passenger's Seat Slide Control)	Moteur de siège à commande électrique (contrôle glissement du siège du passager avant)	Motor del asiento automático (control de deslizante del asiento del pasajero delantero)
P 21	Power Seat Motor (Front Passenger's Seat Vertical Control)	Moteur de siège à commande électrique (réglage vertical de siège de passager avant)	Motor del asiento automático (control vertical del asiento del pasajero delantero)
S 8	Seat Heater (Driver's Seat)	Chauffage de siège (côté conducteur)	Calefactor del asiento (asiento del conductor)
S 9	Seat Heater (Front Passenger's Seat)	Chauffage de siège (siège de passager avant)	Calefactor del asiento (asiento del pasajero delantero)

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

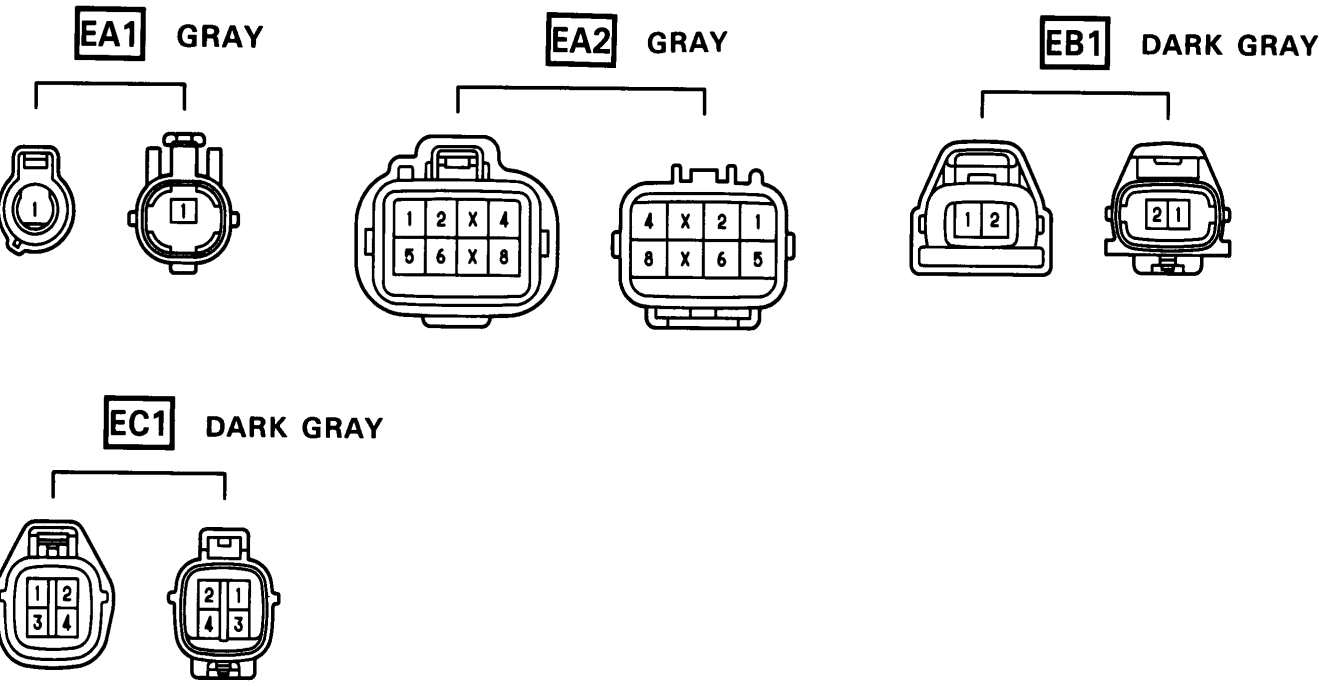
[1MZ-FE LHD]



○ : Location of Splice Points



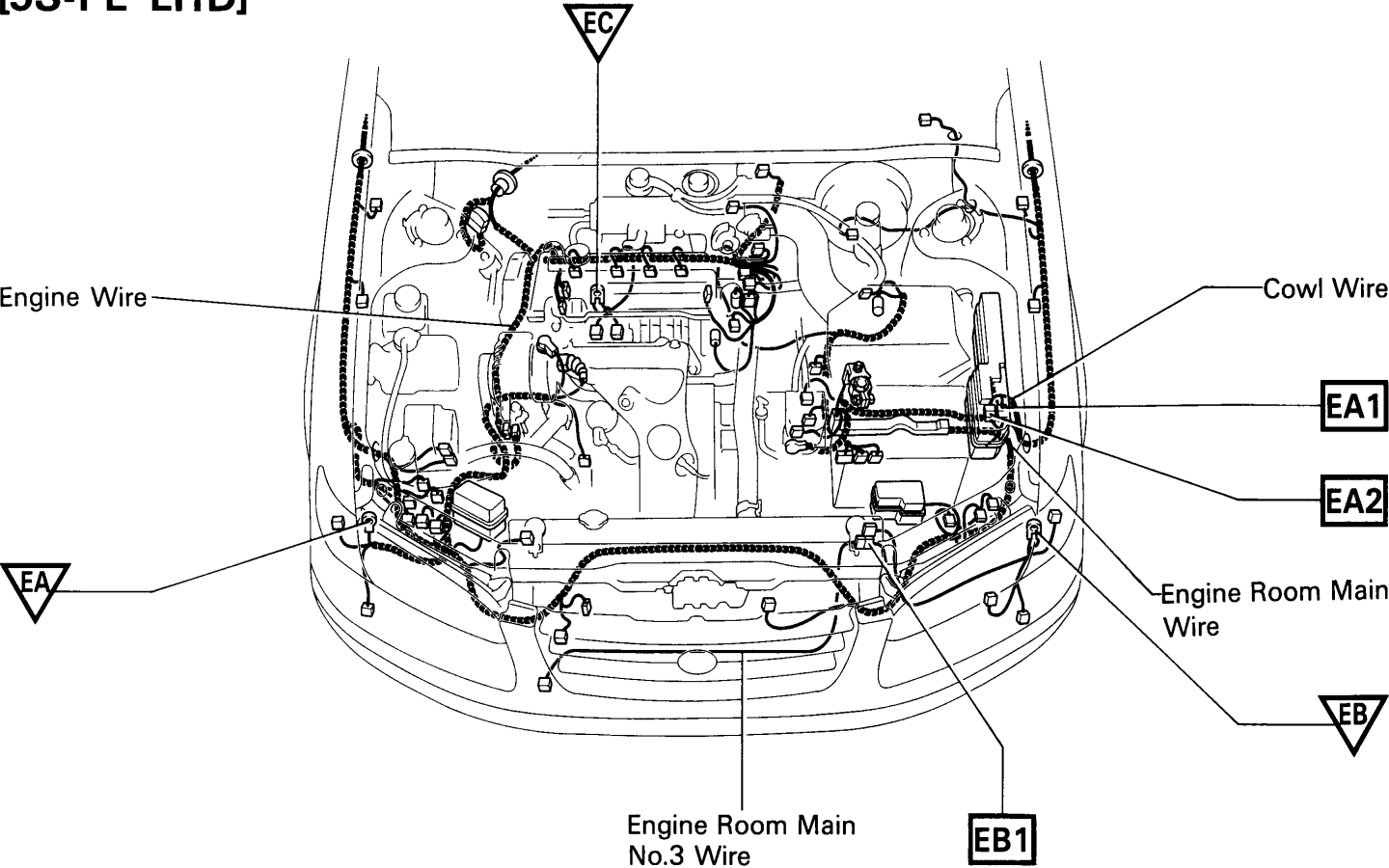
Connector Joining Wire Harness and Wire Harness



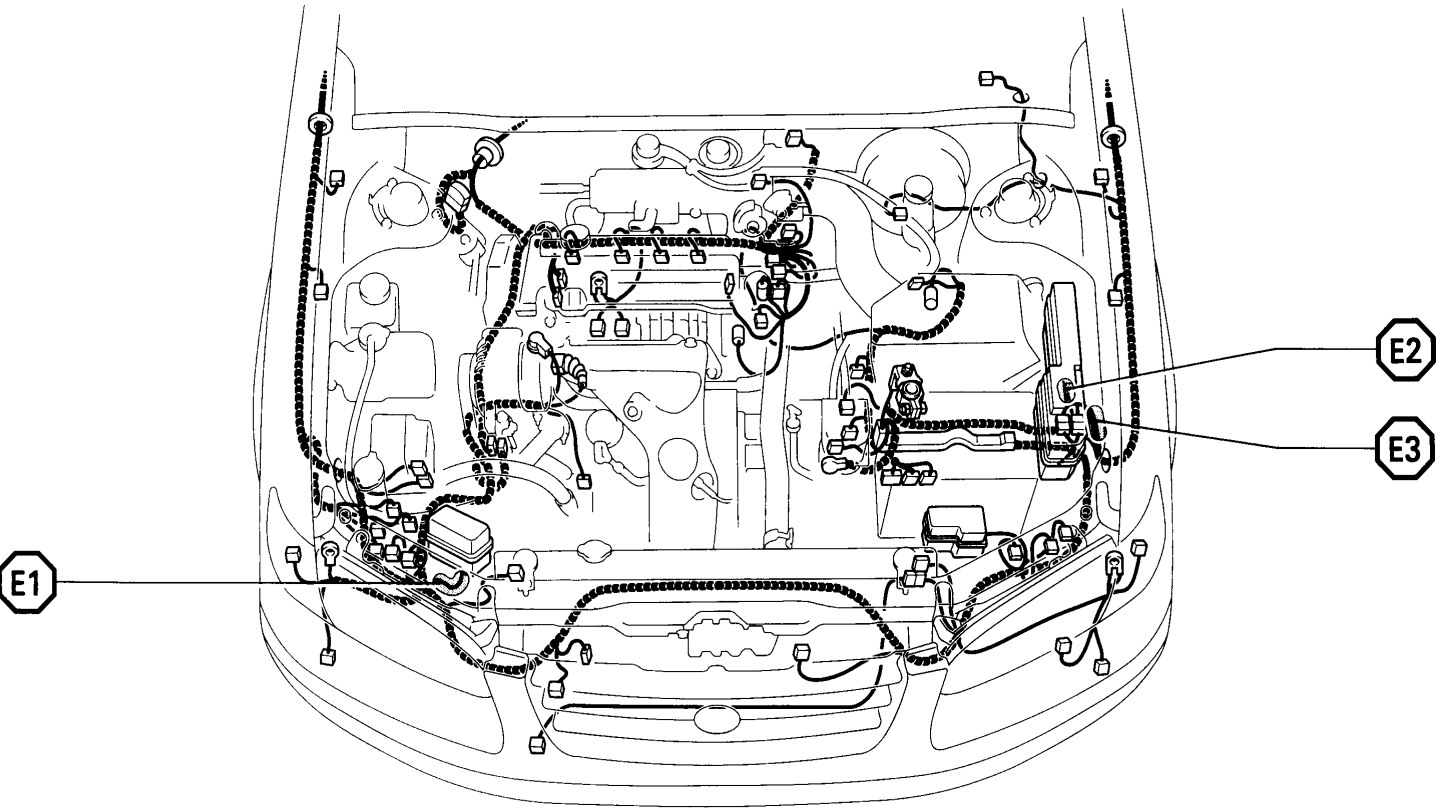
CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
EA2	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO.3 WIRE (RADIATOR LH)
EB1	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO.3 WIRE (RADIATOR LH)
EC1	ENGINE WIRE AND SENSOR WIRE (HEAD COVER RH)

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

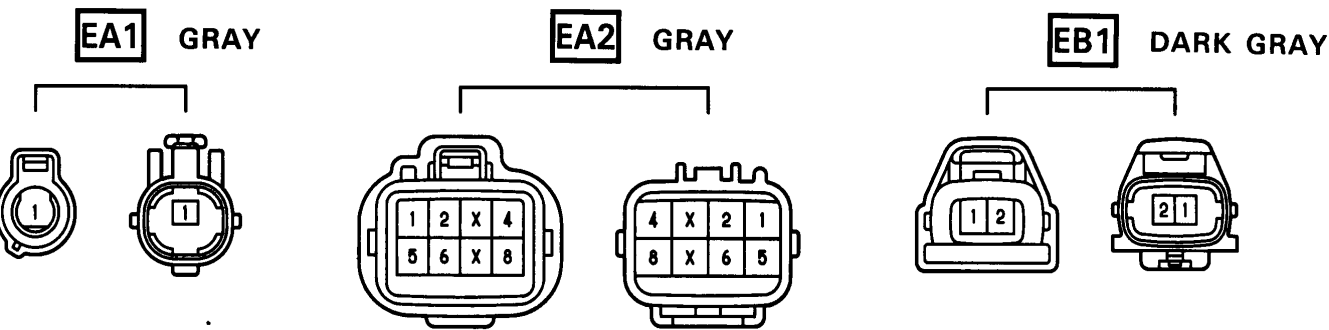
[5S-FE LHD]



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

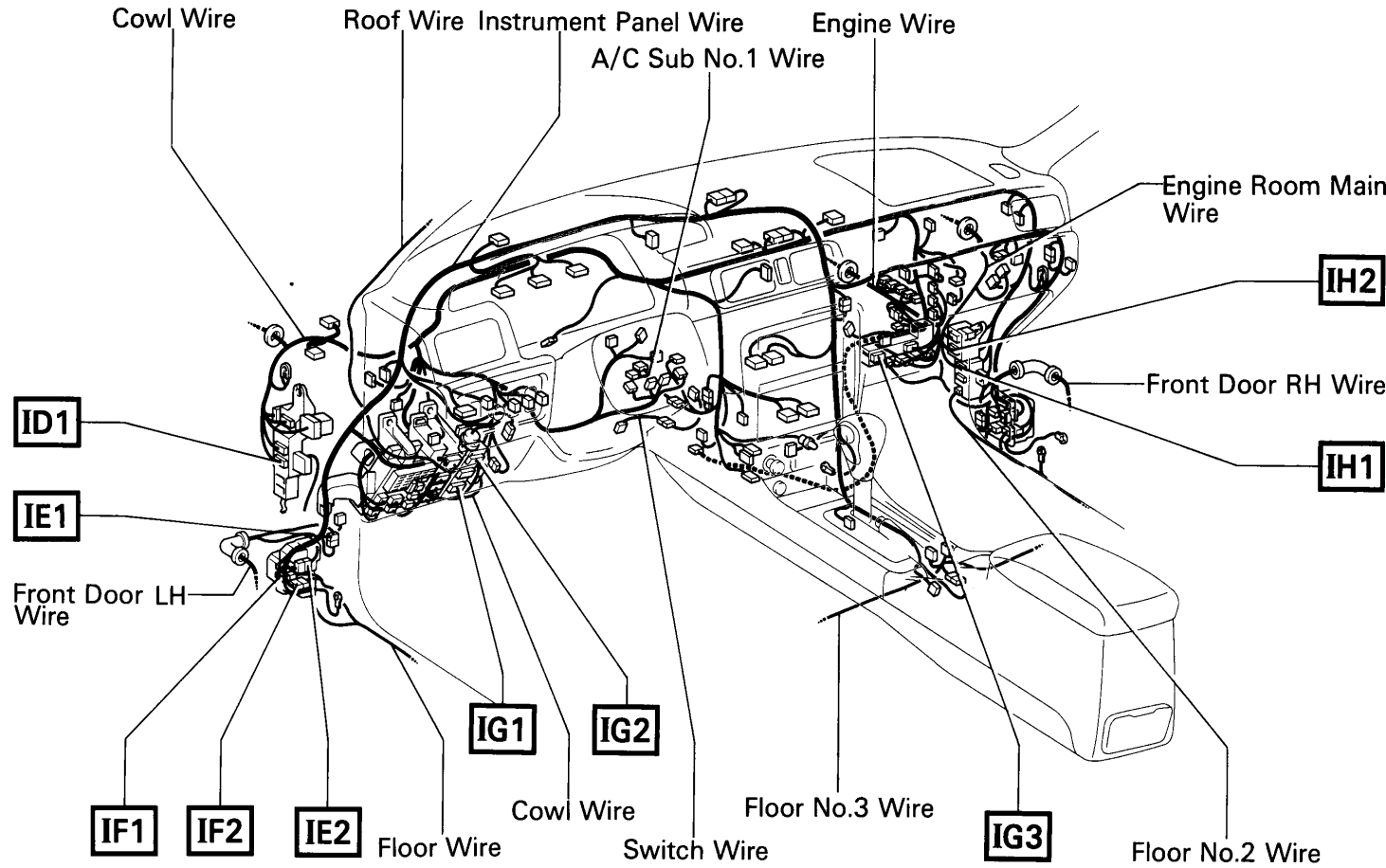


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
EA2	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
EB1	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO.3 WIRE (RADIATOR LH)

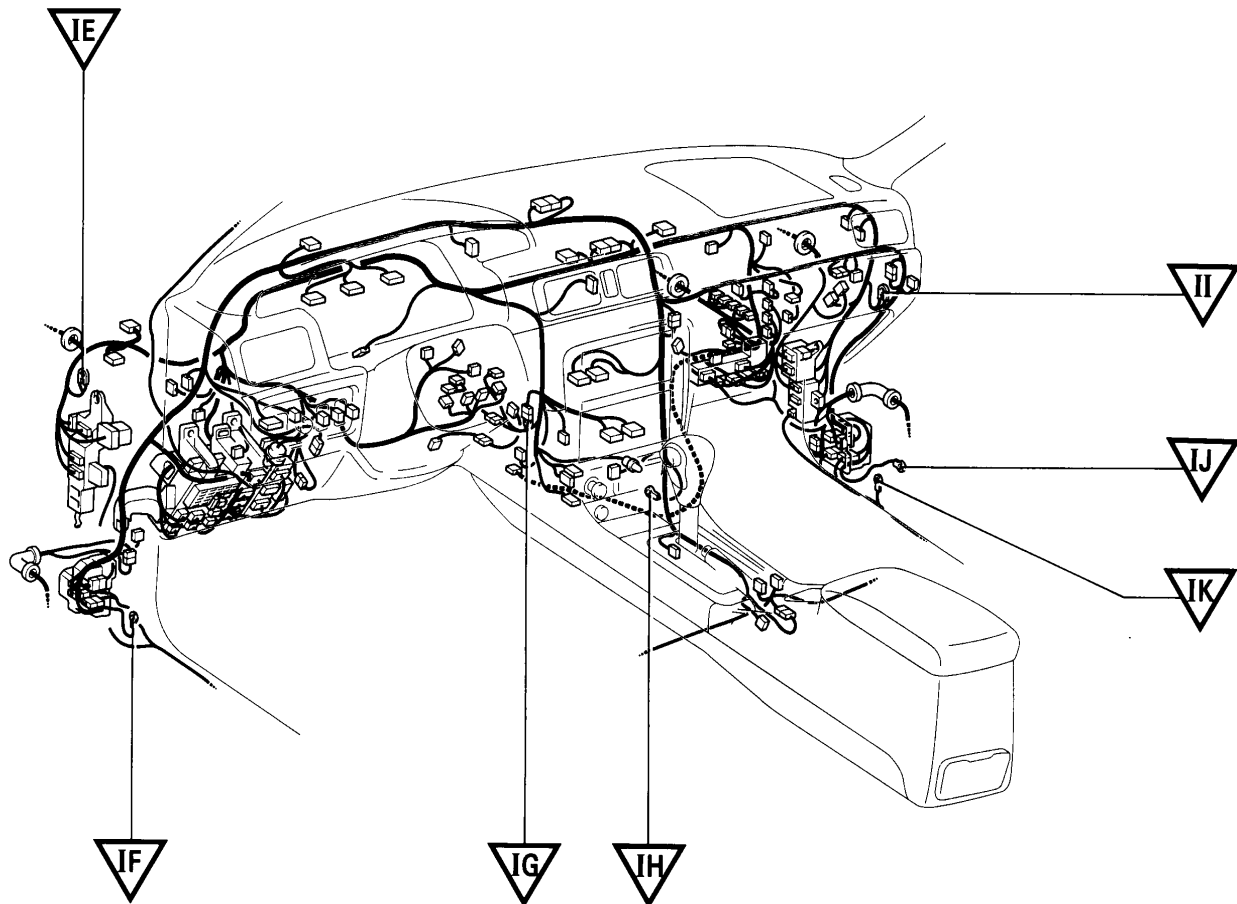
□ : Location of Connector Joining Wire Harness and Wire Harness

[LHD]

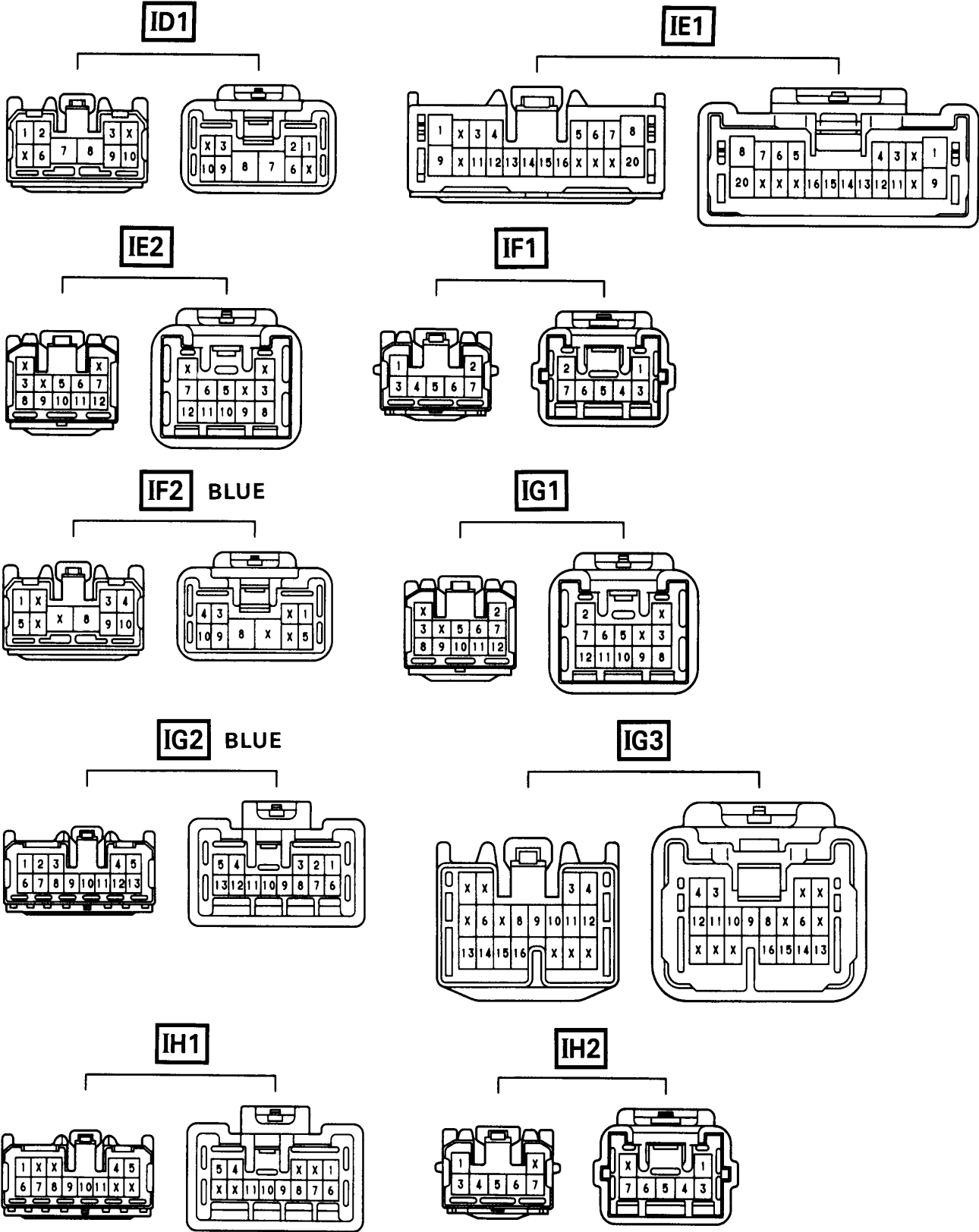
English



▽ : Location of Ground Points



Connector Joining Wire Harness and Wire Harness

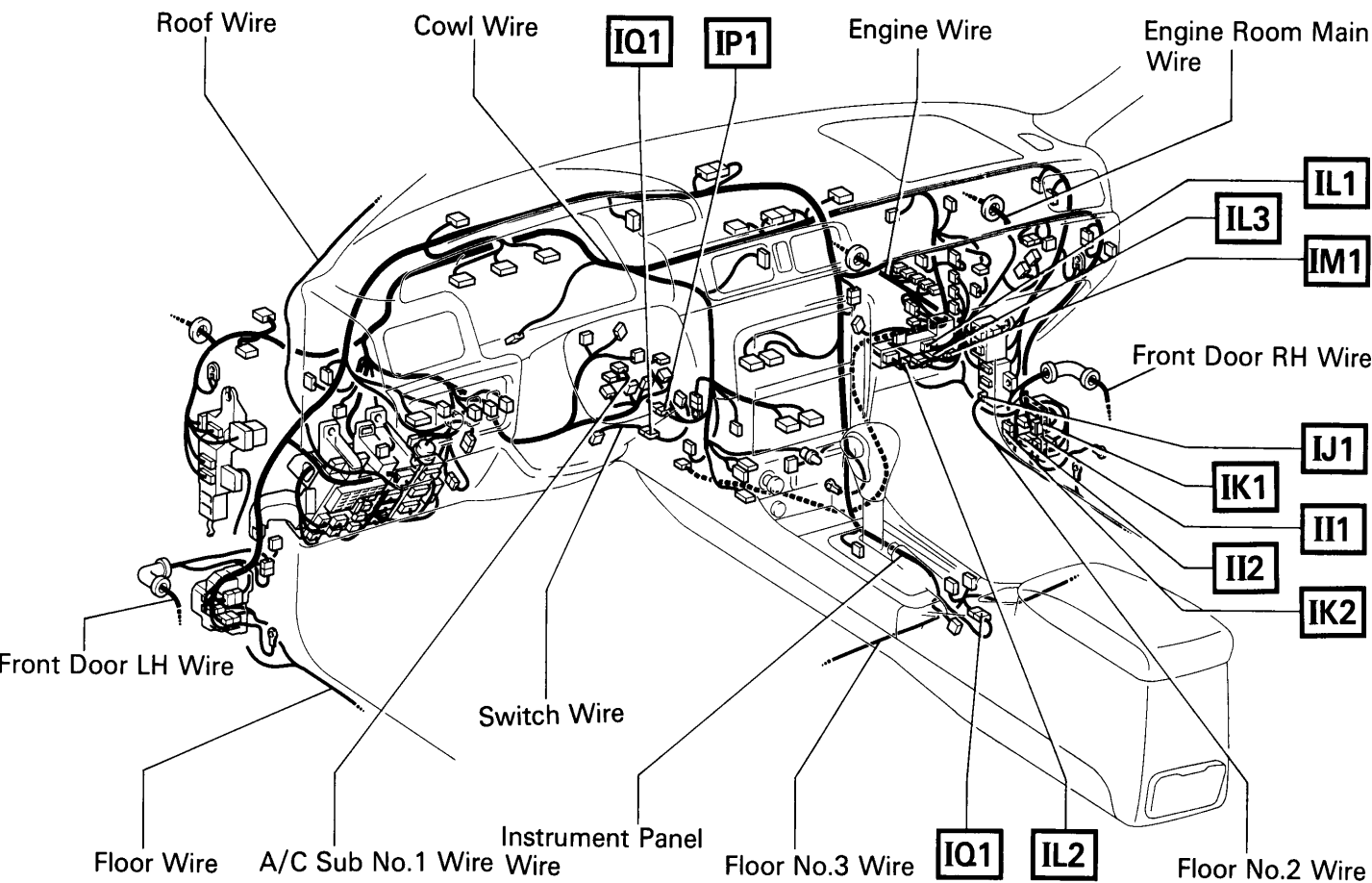


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IE1	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG1	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
IH1	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IF2	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG2	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IH2	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

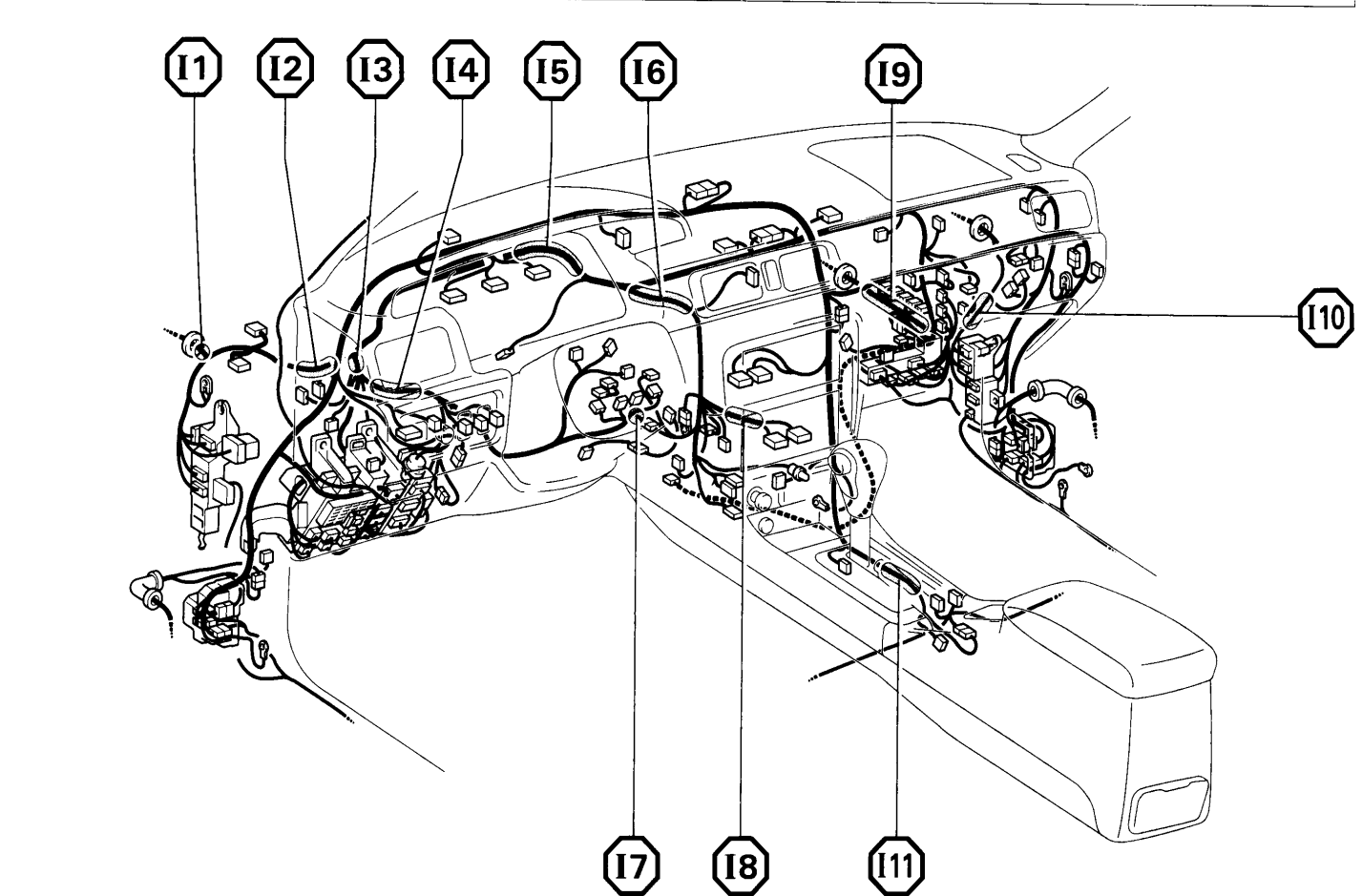
English

□ : Location of Connector Joining Wire Harness and Wire Harness

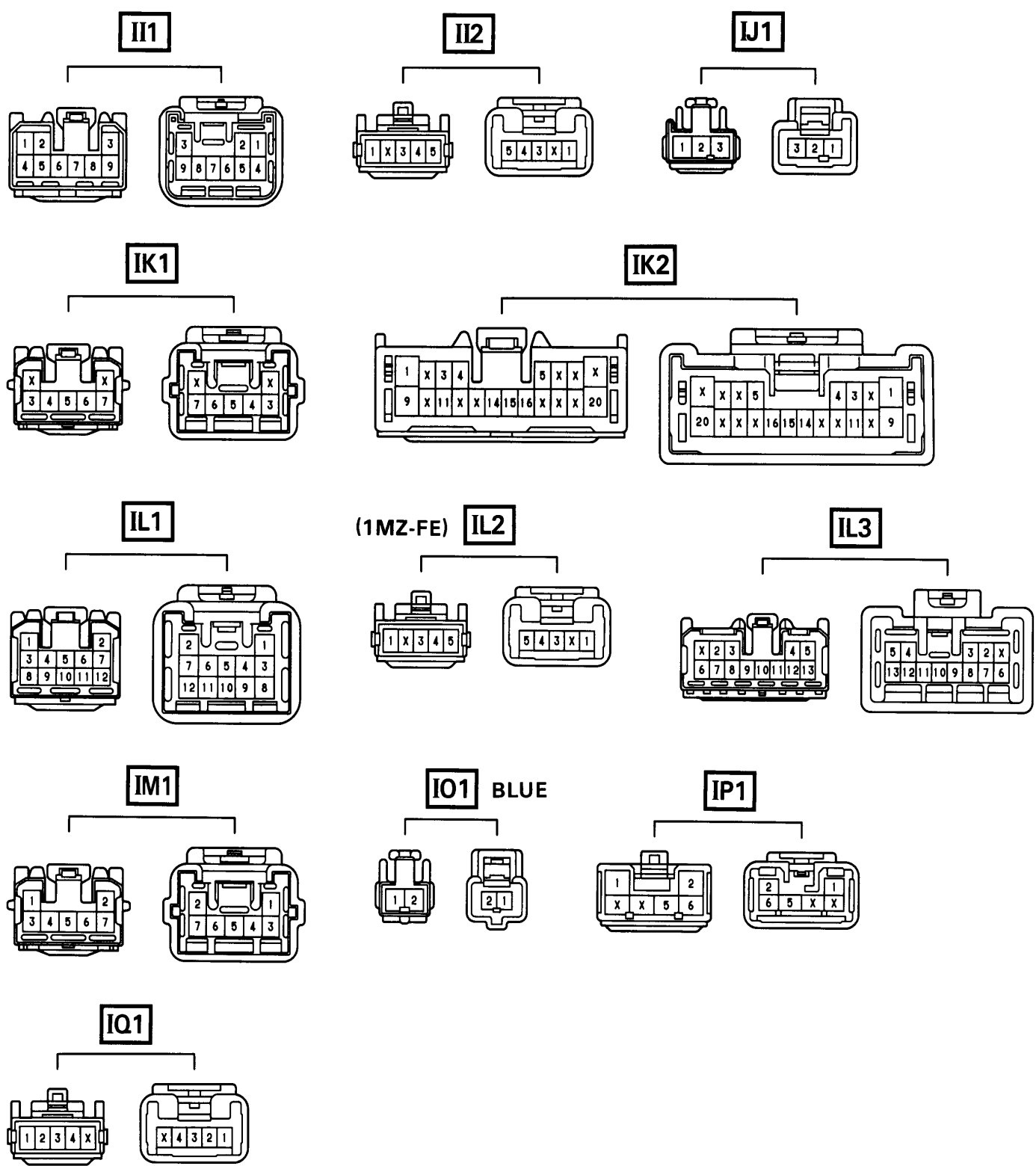
[LHD]



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness

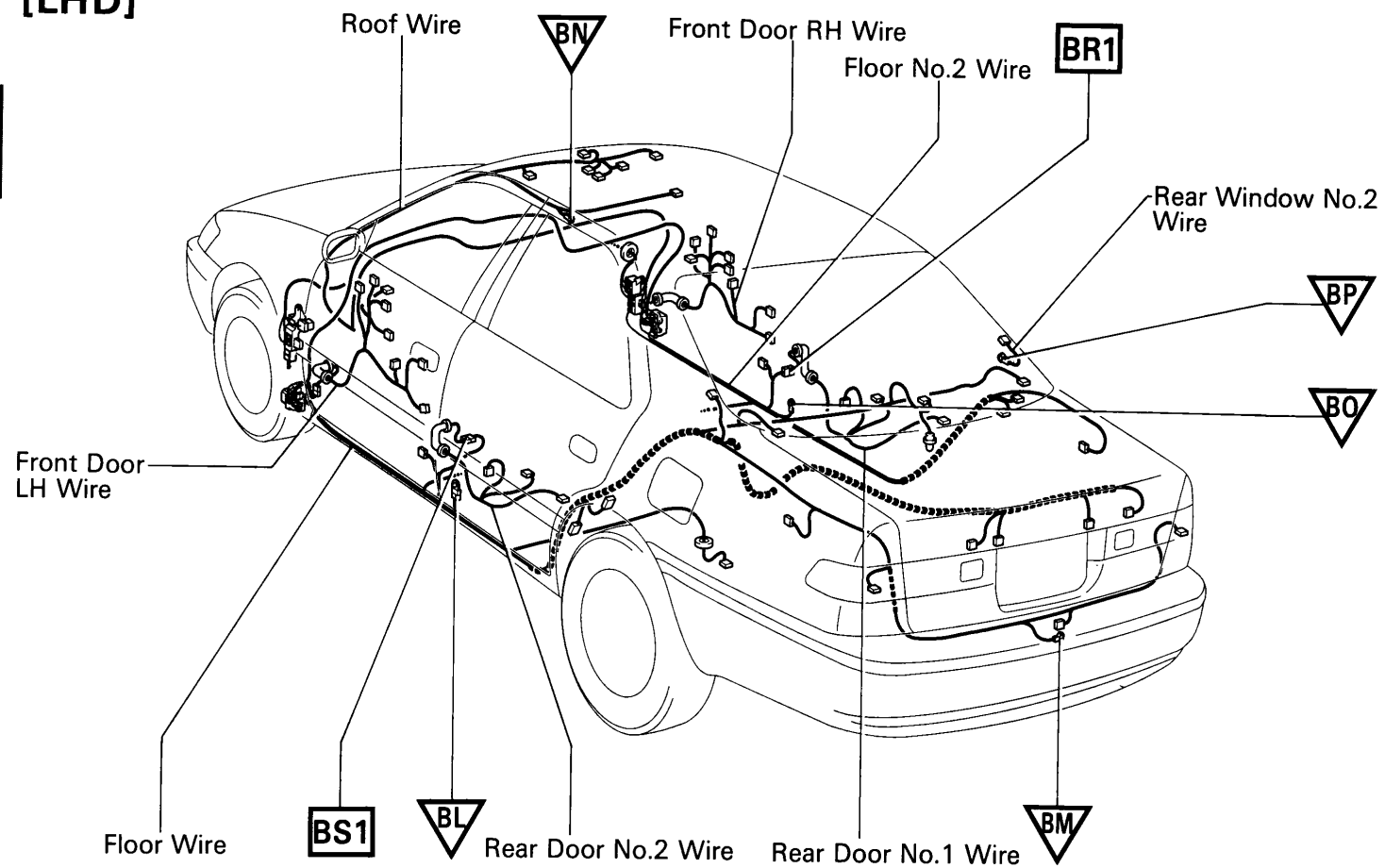


CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
II1	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
II2	FLOOR NO.2 WIRE AND COWL WIRE (RIGHT KICK PANEL)
IJ1	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IK1	
IK2	
IL1	
IL2	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3	
IM1	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IO1	COWL WIRE AND SWITCH WIRE (INSTRUMENT PANEL BRACE LH)
IP1	COWL WIRE AND A/C SUB NO.1 WIRE (INSTRUMENT PANEL BRACE LH)
IQ1	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)

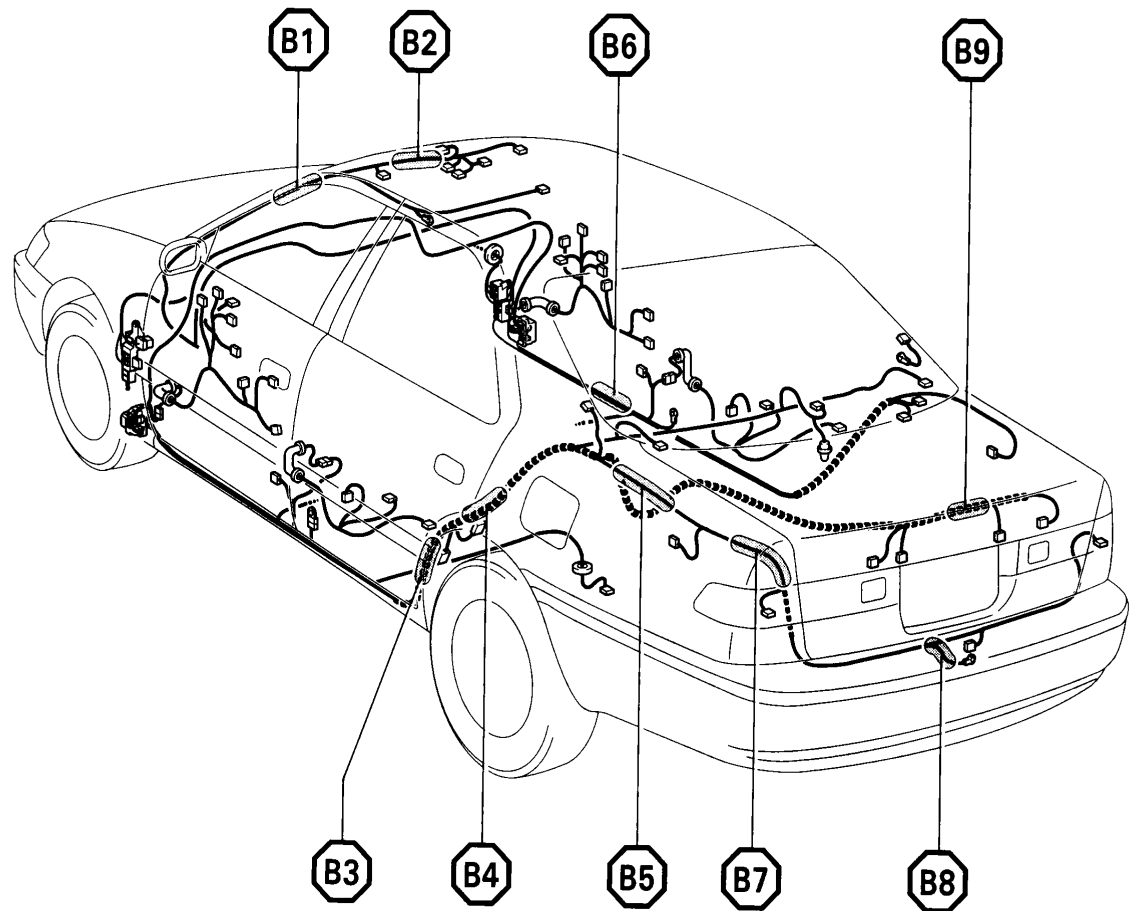
□ : Location of Connector Joining Wire Harness and Wire Harness
▽ : Location of Ground Points

[LHD]

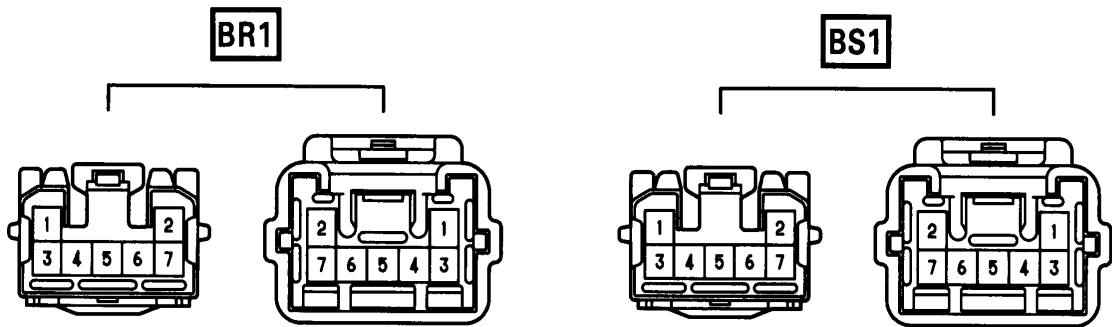
English



○ : Location of Splice Points



Connector Joining Wire Harness and Wire Harness



CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BR1	REAR DOOR NO.1 WIRE AND FLOOR NO.2 WIRE (UNDER THE RIGHT CENTER PILLAR)
BS1	REAR DOOR NO.2 WIRE AND FLOOR WIRE (UNDER THE LEFT CENTER PILLAR)

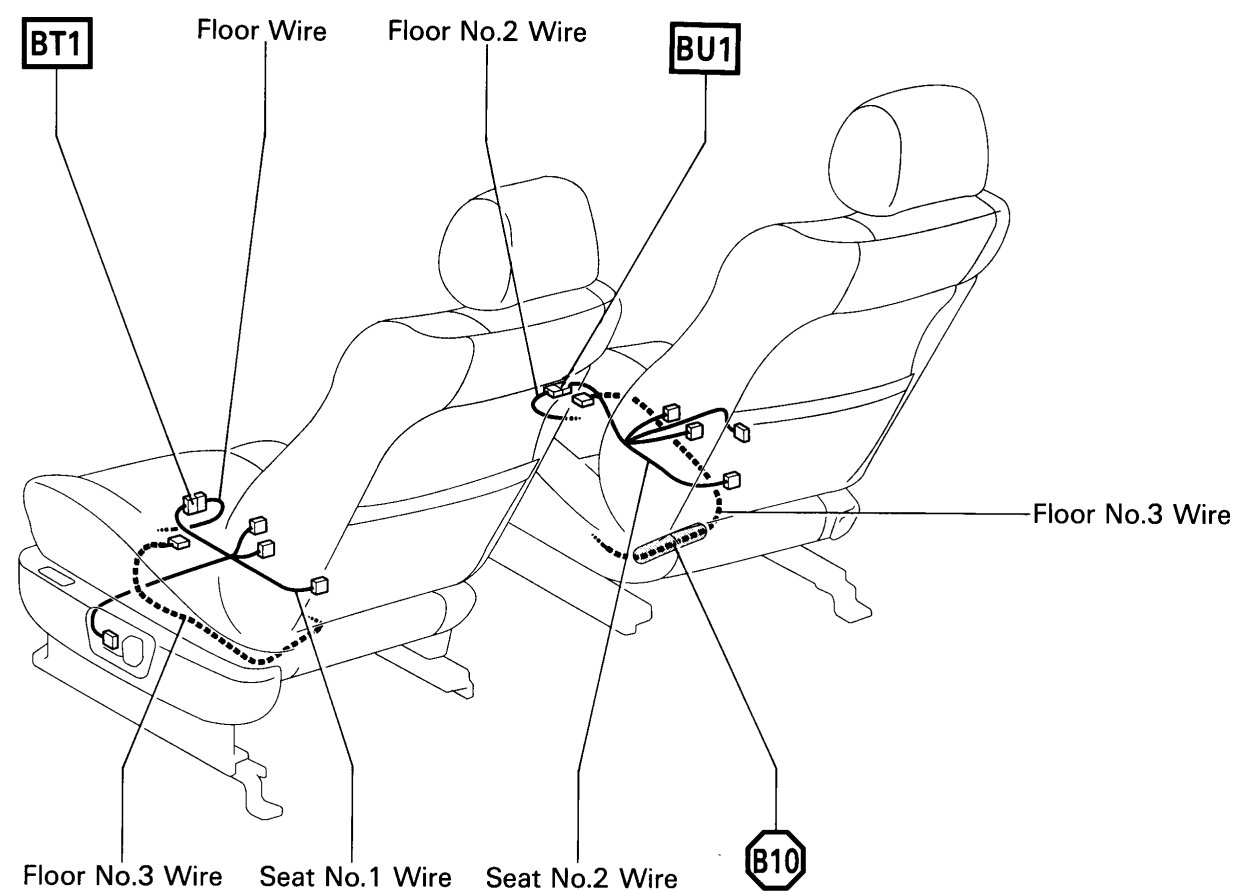
English

G ELECTRICAL WIRING ROUTING

□ : Location of Connector Joining Wire Harness and Wire Harness

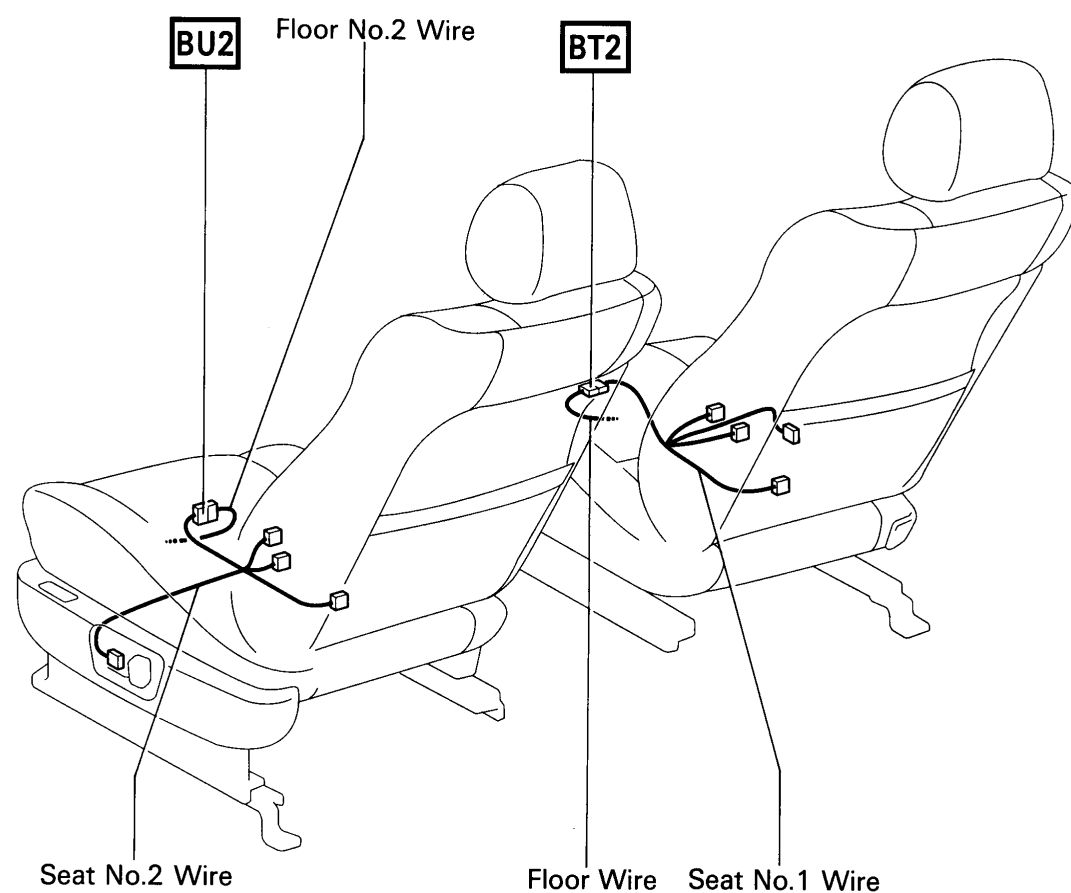
○ : Location of Splice Points

[LHD]

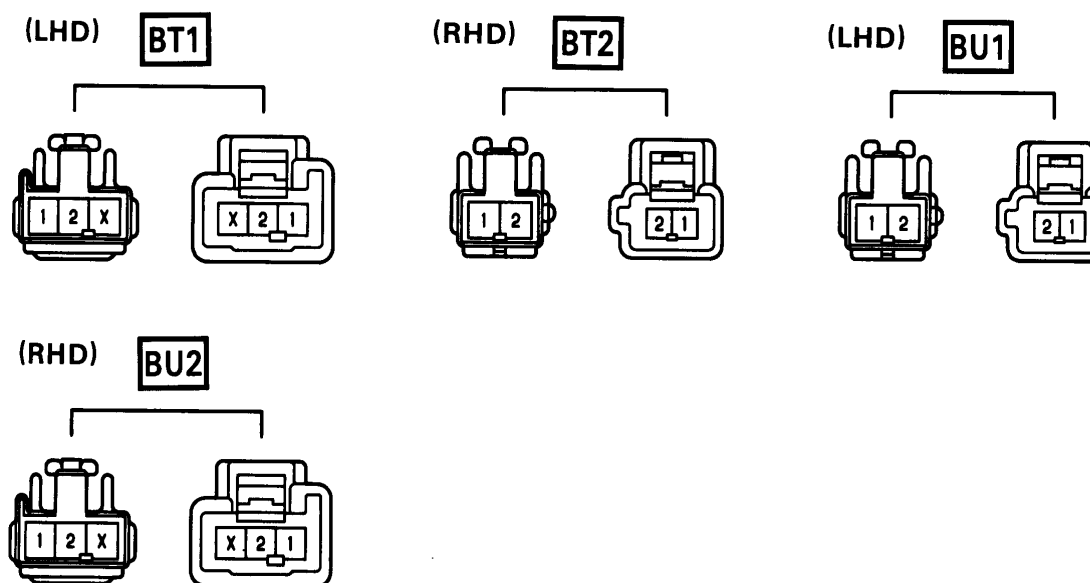


□ : Location of Connector Joining Wire Harness and Wire Harness

[RHD]



Connector Joining Wire Harness and Wire Harness



CODE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
BT1	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BT2	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BU1	FLOOR NO.2 WIRE AND SEAT NO.2 WIRE (UNDER THE PASSENGER'S SEAT)
BU2	FLOOR NO.2 WIRE AND SEAT NO.2 WIRE (UNDER THE PASSENGER'S SEAT)

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.

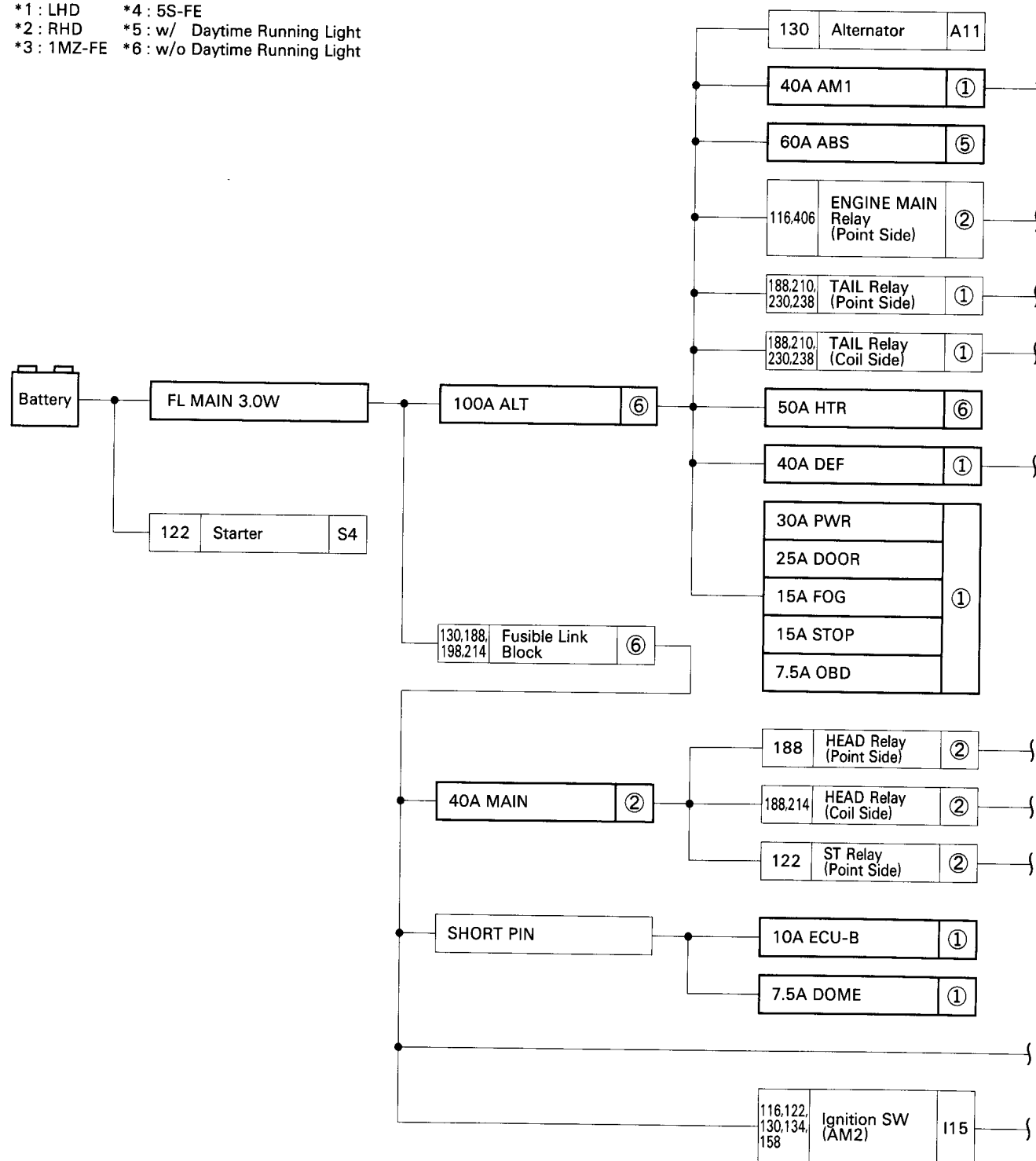
Le schéma ci-après indique l'acheminement à travers lequel s'écoule le courant de la batterie à chaque source électrique (lames fusibles, disjoncteurs, fusibles, etc.) et autres pièces.

La page suivante ainsi que celles qui suivent indiquent les pièces auxquelles chaque source électrique produit du courant.

En el siguiente cuadro aparece la ruta que recorre la corriente desde la batería hasta cada fuente de alimentación (eslabón fusible, fusible, ruptor, etc.) y otras piezas.

Las siguientes páginas indican las partes que reciben alimentación.

*1: LHD *4: 5S-FE
*2: RHD *5: w/ Daytime Running Light
*3: 1MZ-FE *6: w/o Daytime Running Light



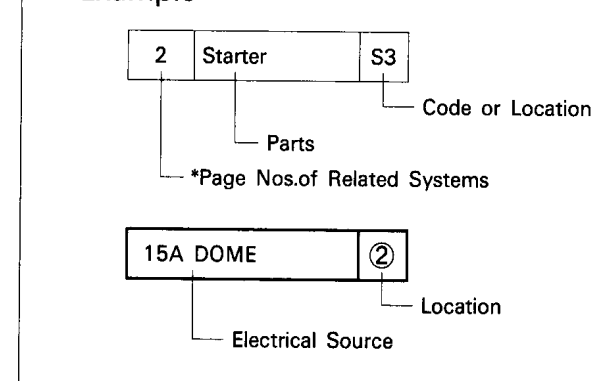
[LOCATION] ①: Instrument Panel J/B (See page 52 (LHD) or 54 (RHD))

⑤: Engine Room R/B No.3 (See page 59)

②: Engine Room J/B No.2 (See page 56)

⑥: Fusible Link Block (See page 58)

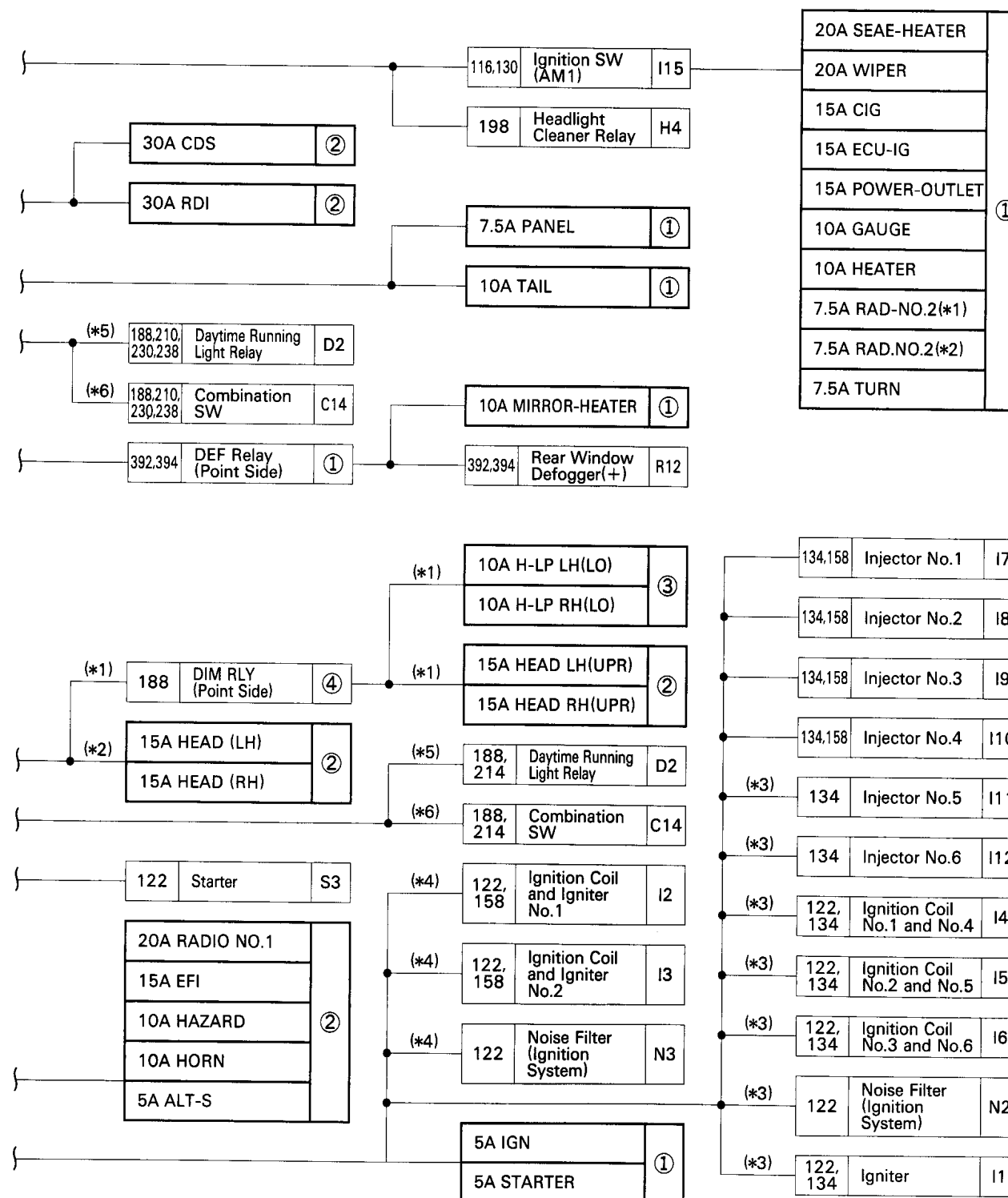
Example



* 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.

* *Numéros de page de la première page sur laquelle le système afférent est représenté.
L'organe indiqué se trouve quelque part à l'intérieur du système, mais non pas nécessairement dans la page qui est mentionnée ici.*

* *Estos son los números de página de la primera página en la que se muestra el sistema relacionado.
La parte indicada está situada en algún sitio del sistema, y no necesariamente en la página aquí indicada.*



③: Engine Room R/B No.1 (See page 58)

④: Engine Room R/B No.2 (See page 59)

H POWER SOURCE (Current Flow Chart)

*1: LHD
*2: RHD

H

English

Location	CB or Fuse	*Page Nos. of Related Systems		Parts		Code or Location	
		A2	A3	A4	A6	A9	A10
①	40A DEF						
	30A PWR						
	25A DOOR						
	20A SEAT-HEATER(*1)						
	20A WIPER						
	15A CIG						
	15A ECU-IG						
	15A FOG						
	15A POWER-OUTLET						
	15A STOP						
	10A GAUGE						
	10A HEATER						
	10A MIRROR-HEATER						
	10A TAIL						
	7.5A OBD						
	7.5A PANEL						
	7.5A RAD-NO.2(*1)						
	7.5A RAD-NO.2(*2)						
	7.5A TURN						
	5A IGN						
②	5A STARTER						
	30A CDS						
	30A RDI						
	20A RADIO NO.1						
	15A EFI						
	15A HEAD LH (UPR)(*1)						
	15A HEAD RH (UPR)(*1)						
	15A HEAD (LH)(*2)						
	15A HEAD (RH)(*2)						
	10A ECU-B						
④	10A HAZARD						
	10A HORN						
⑤	7.5A DOME						
	5A ALT-S						
⑥	10A H-LP LH(LO)(*1)						
	10A H-LP RH(LO)(*2)						
⑤	60A ABS						
	50A HTR						

* 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:Instrument Panel J/B (See page 52 (LHD) or 54 (RHD))

③:Engine Room R/B No.1 (See page 58)

⑤:Engine Room R/B No.3 (See page 59)

②:Engine Room J/B No.2 (See page 56)

④:Engine Room R/B No.2 (See page 59)

⑥:Fusible Link Block (See page 58)

Location	CB or Fuse	*Page Nos. of Related Systems		Parts		Code or Location	
		A2	A3	A4	A6	A9	A10
①	40A DEF						
	30A PWR						
	25A DOOR						
	20A SEAT-HEATER(*1)						
	20A WIPER						
	15A CIG						
	15A ECU-IG						
	15A FOG						
	15A POWER-OUTLET						
	15A STOP						
	10A GAUGE						
	10A HEATER						
	10A MIRROR-HEATER						
	10A TAIL						
	7.5A OBD						
	7.5A PANEL						
	7.5A RAD-NO.2(*1)						
	7.5A RAD-NO.2(*2)						
	7.5A TURN						
	5A IGN						
②	5A STARTER						
	30A CDS						
	30A RDI						
	20A RADIO NO.1						
	15A EFI						
	15A HEAD LH (UPR)(*1)						
	15A HEAD RH (UPR)(*1)						
	15A HEAD (LH)(*2)						
	15A HEAD (RH)(*2)						
	10A ECU-B						
④	10A HAZARD						
	10A HORN						
⑤	7.5A DOME						
	5A ALT-S						
⑥	10A H-LP LH(LO)(*1)						
	10A H-LP RH(LO)(*2)						
⑤	60A ABS						
	50A HTR						

English

H

English

[illegible]

109

[LOCATION] ①:Instrument Panel J/B (See page 52 (LHD) or 54 (RHD)) ②:Engine Room J/B No.2 (See page 56)
③:Engine Room R/B No.1 (See page 58) ④:Engine Room R/B No.2 (See page 59)
⑤:Engine Room R/B No.3 (See page 59) ⑥:Fusible Link Block (See page 58)

11

English

Location			*Page Nos. of Related Systems	406	270	134 158	406	406	406	406	414	414	414	382	382
			Parts												
			Code or Location	FAN NO.1 Relay (Point Side)	HORN Relay	CIR OPN Relay	FAN NO.2 Relay (Coil Side)	FAN NO.2 Relay (Point Side)	FAN NO.3 Relay (Coil Side)	FAN NO.3 Relay (Point Side)	HTR Relay (Coil Side)	HTR Relay (Point Side)	MG CLT Relay	ABS MOTOR Relay	ABS SOL Relay
CB or Fuse			②		③					④			⑤		
①	40A	DEF													
	30A	PWR													
	25A	DOOR													
	20A	SEAT-HEATER(*1)													
	20A	WIPER													
	15A	CIG													
	15A	ECU-IG	●				●		●						
	15A	FOG													
	15A	POWER-OUTLET													
	15A	STOP													
	10A	GAUGE							●						
	10A	HEATER									●	●			
	10A	MIRROR-HEATER													
	10A	TAIL													
	7.5A	OBD													
	7.5A	PANEL													
	7.5A	RAD-NO.2(*1)													
	7.5A	RAD.NO.2(*2)													
	7.5A	TURN													
	5A	IGN													
5A	STARTER														
②	30A	CDS				●		●							
	30A	RDI													
	20A	RADIO NO.1													
	15A	EFI			●										
	15A	HEAD LH (UPR)(*1)													
	15A	HEAD RH (UPR)(*1)													
	15A	HEAD (LH)(*2)													
	15A	HEAD (RH)(*2)													
	10A	ECU-B													
	10A	HAZARD													
	10A	HORN		●											
	7.5A	DOME													
	5A	ALT-S													
	④	10A	H-LP LH(LO)(*1)												
10A		H-LP RH(LO)(*2)													
⑤	60A	ABS											●	●	
⑥	50A	HTR								●					

* 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:Instrument Panel J/B (See page 52 (LHD) or 54 (RHD))
③:Engine Room R/B No.1 (See page 58)
⑤:Engine Room R/B No.3 (See page 59)

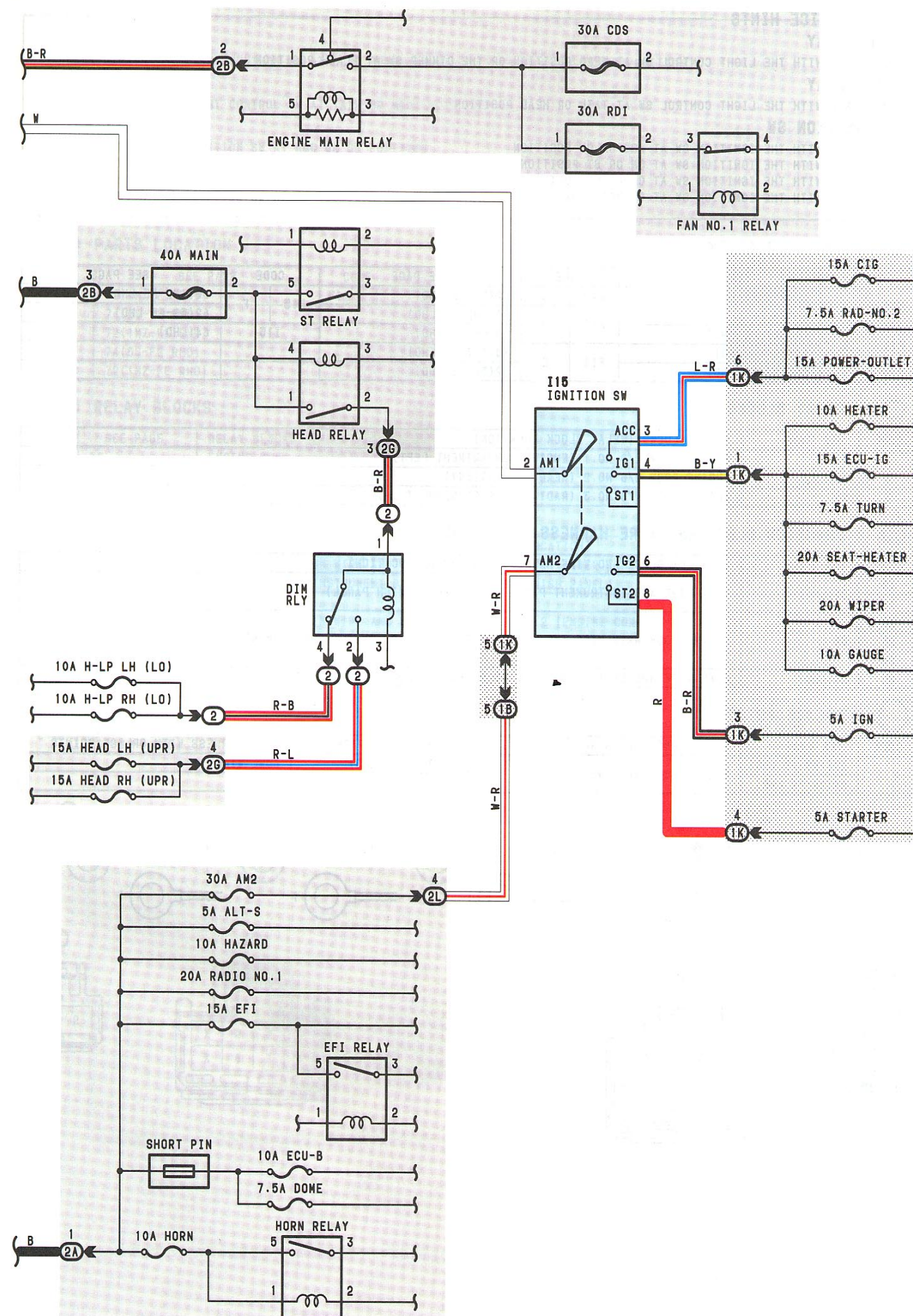
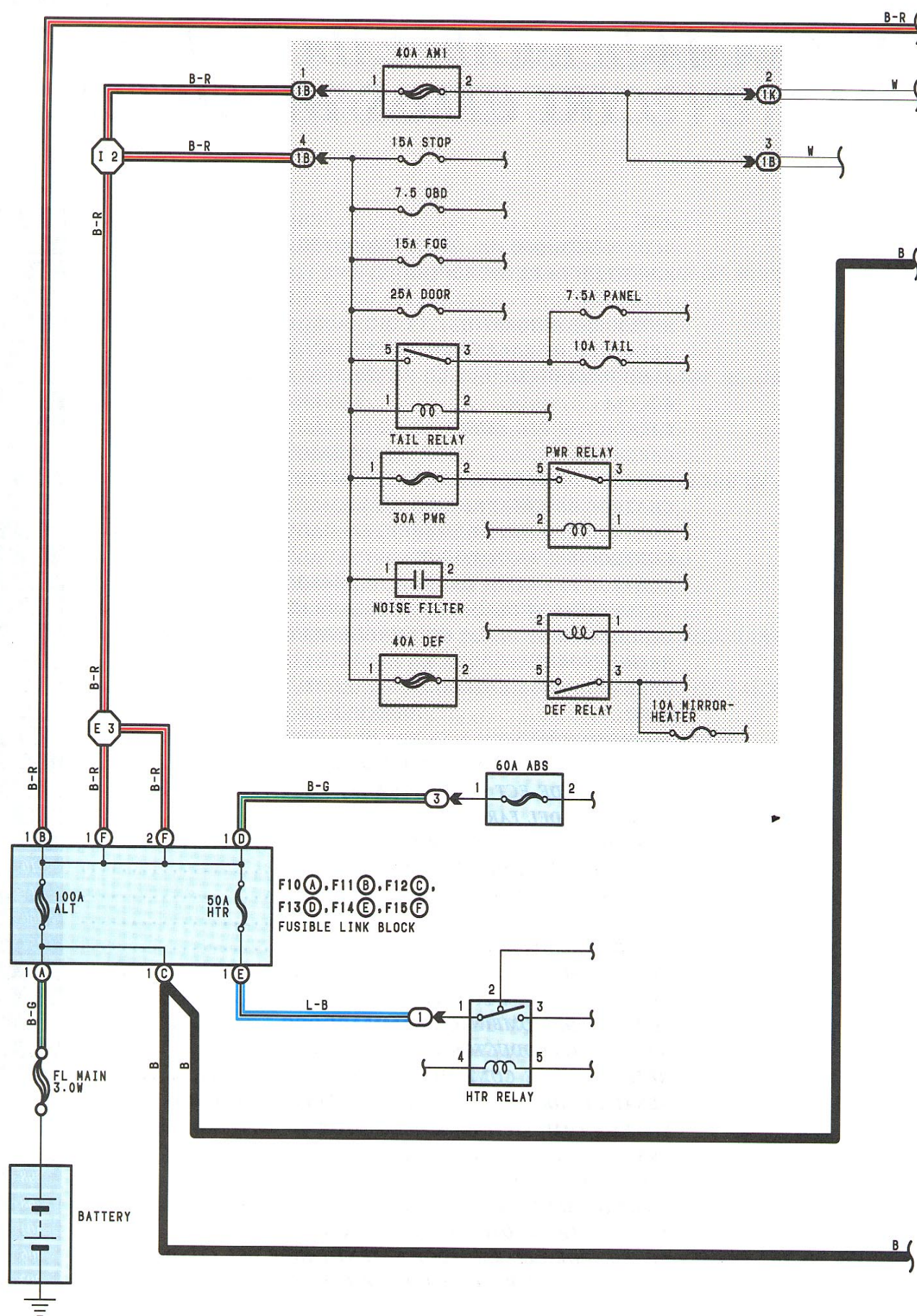
②:Engine Room J/B No.2 (See page 56)
④:Engine Room R/B No.2 (See page 59)
⑥:Fusible Link Block (See page 58)

CAMRY ELECTRICAL WIRING DIAGRAM SYSTEM CIRCUITS

English

	Page
ABS	382
AUTO ANTENNA	334
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CHARGING	130
CIGARETTE LIGHTER AND CLOCK	264
COMBINATION METER	396
CRUISE CONTROL	338
DOOR LOCK CONTROL	282
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ECT AND A/T INDICATOR(5S-FE)	370
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ENGINE CONTROL (5S-FE)	158
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REAR WINDOW DEFOGGER AND MIRROR HEATER	392
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SEAT HEATER	318
SRS	321
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STOP LIGHT	254
TAILLIGHT	238
TURN SIGNAL AND HAZARD WARNING LIGHT	222
UNLOCK WARNING	294

POWER SOURCE (LHD)



POWER SOURCE(LHD)

SERVICE HINTS

HEAD RELAY

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

TAIL RELAY

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

116 IGNITION SW

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

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

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

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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
F10	A	60(1MZ-FE LHD)	F12	C	62(5S-FE LHD)	F15	F	60(1MZ-FE LHD)
		62(5S-FE LHD)			60(1MZ-FE LHD)			62(5S-FE LHD)
F11	B	60(1MZ-FE LHD)	F13	D	62(5S-FE LHD)	116		64(LHD)
		62(5S-FE LHD)			60(1MZ-FE LHD)			
F12	C	60(1MZ-FE LHD)	F14	E	62(5S-FE LHD)			

○ : RELAY BLOCKS

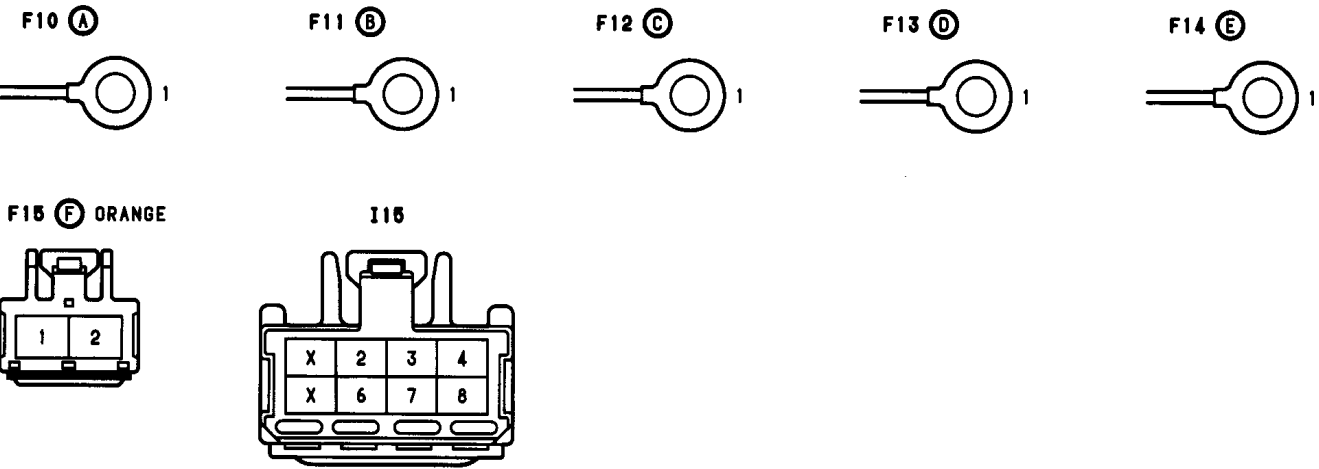
CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)
2	59(LHD)	ENGINE ROOM R/B NO.2 (NEAR THE BATTERY)
3	59	ENGINE ROOM R/B NO.3 (RADIATOR UPPER SUPPORT LH)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

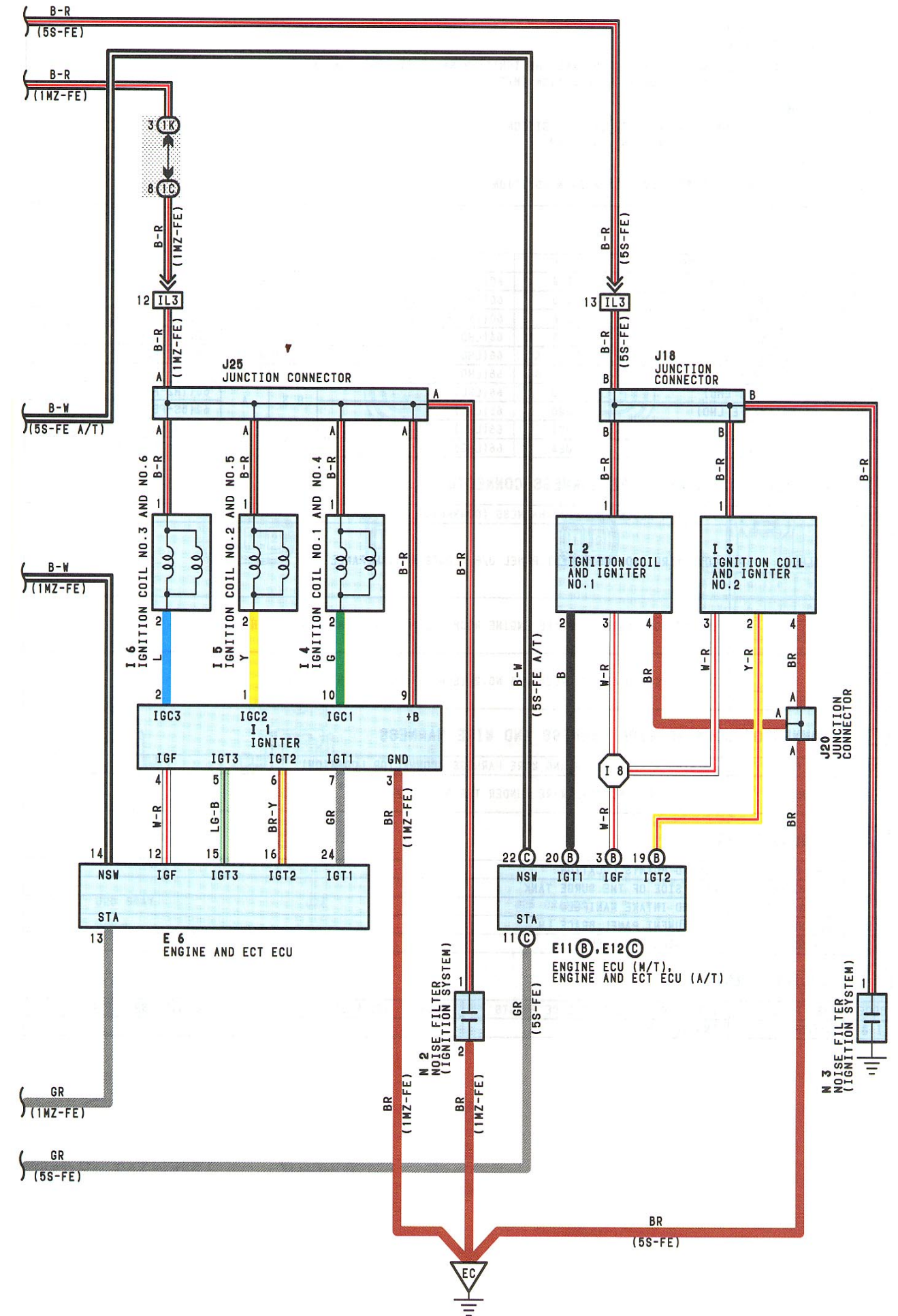
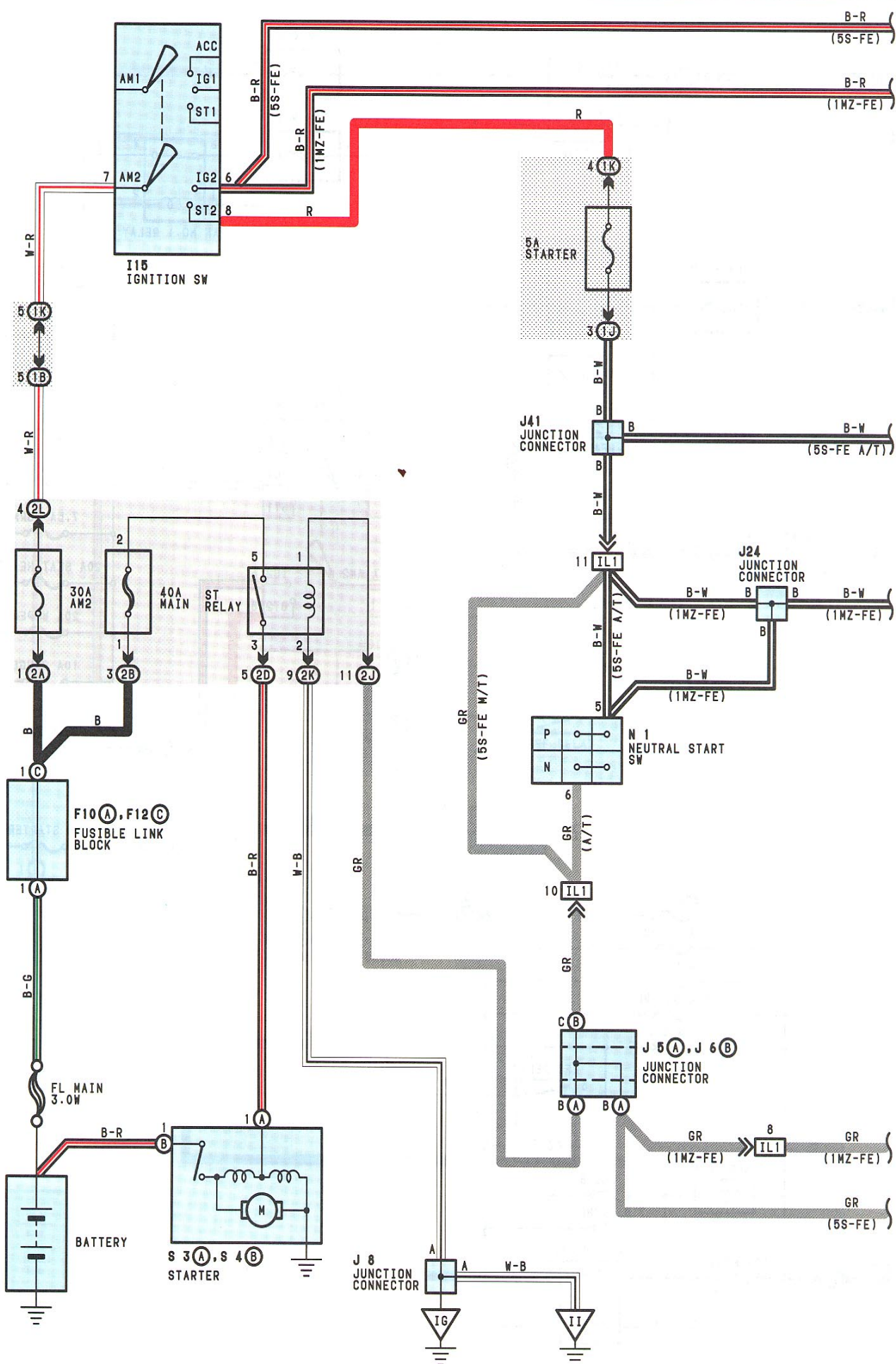
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1K		
2A	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2B		
2C		
2L	56(LHD)	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	I 2	88(LHD)	COWL WIRE
	84(5S-FE LHD)				



STARTING AND IGNITION(LHD)



STARTING AND IGNITION(LHD)

SERVICE HINTS

8 3Ⓐ,8 4Ⓑ STARTER

POINTS CLOSED WITH THE NEUTRAL START SW ON AND THE IGNITION SW AT ST POSITION (A/T)

POINTS CLOSED WITH THE IGNITION SW AT ST POSITION (M/T)

I15 IGNITION SW

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

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

N 1 NEUTRAL START SW

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
E 6	64(1MZ-FE LHD)	I 4	60(1MZ-FE LHD)	J25	66(LHD)
E11	B 64(5S-FE LHD)	I 5	60(1MZ-FE LHD)	J41	66(LHD)
E12	C 64(5S-FE LHD)	I 6	60(1MZ-FE LHD)	N 1	60(1MZ-FE LHD)
F10	A 60(1MZ-FE LHD)	I15	64(LHD)	N 2	62(5S-FE LHD)
	62(5S-FE LHD)	J 5 A	66(LHD)	N 3	60(1MZ-FE LHD)
F12	C 60(1MZ-FE LHD)	J 6 B	66(LHD)		62(5S-FE LHD)
	62(5S-FE LHD)	J 8	66(LHD)	8 3 A	60(1MZ-FE LHD)
I 1	60(1MZ-FE LHD)	J20	66(LHD)	8 4 B	62(5S-FE LHD)
I 2	62(5S-FE LHD)	J21	66(LHD)		60(1MZ-FE LHD)
I 3	62(5S-FE LHD)	J24	66(LHD)		62(5S-FE LHD)

⦿ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1J		
1K		
2A	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2B		
2D		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K		
2L		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3		

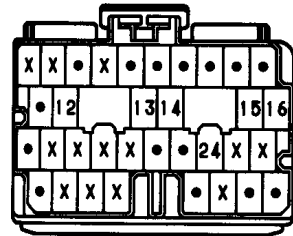
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EC	82(1MZ-FE LHD)	REAR SIDE OF THE SURGE TANK
	84(5S-FE LHD)	BEHIND INTAKE MANIFOLD
I6	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

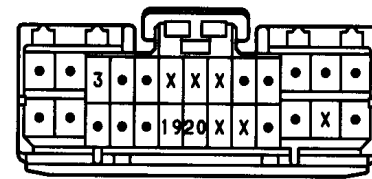
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 8	88(LHD)	ENGINE WIRE			

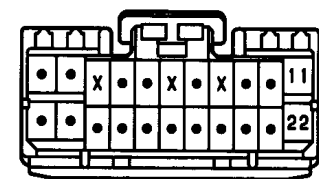
(1MZ-FE) E 6



(5S-FE) E11 Ⓑ



(5S-FE) E12 Ⓒ



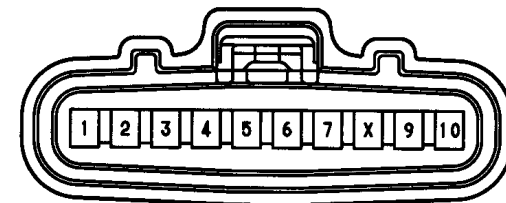
F10 Ⓐ



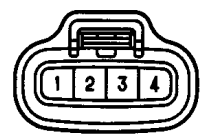
F12 Ⓒ



I 1 BLACK



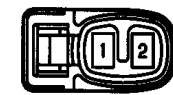
I 2 BLACK



I 3 BLACK



I 4 BLACK



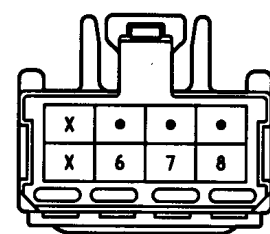
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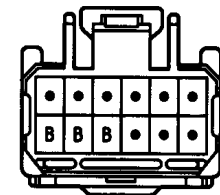
I 6 BLACK



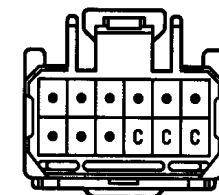
I15



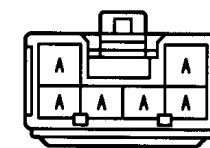
J 5 Ⓐ GRAY



J 6 Ⓑ GRAY

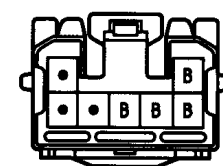


J 8



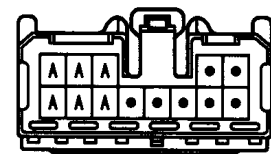
(HINT:SEE PAGE 7, 23, 39)

J16



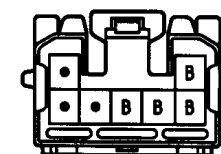
(HINT:SEE PAGE 7, 23, 39)

J20 GRAY



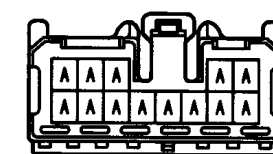
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J24



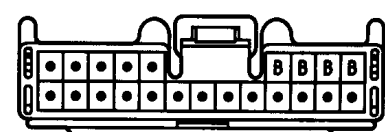
(HINT:SEE PAGE 7, 23, 39)

J25 ORANGE



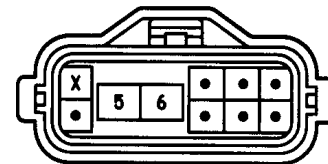
(HINT:SEE PAGE 7, 23, 39)

J41



(HINT:SEE PAGE 7, 23, 39)

N 1 GRAY



(1MZ-FE) N 2 GRAY



(5S-FE) N 3 GRAY

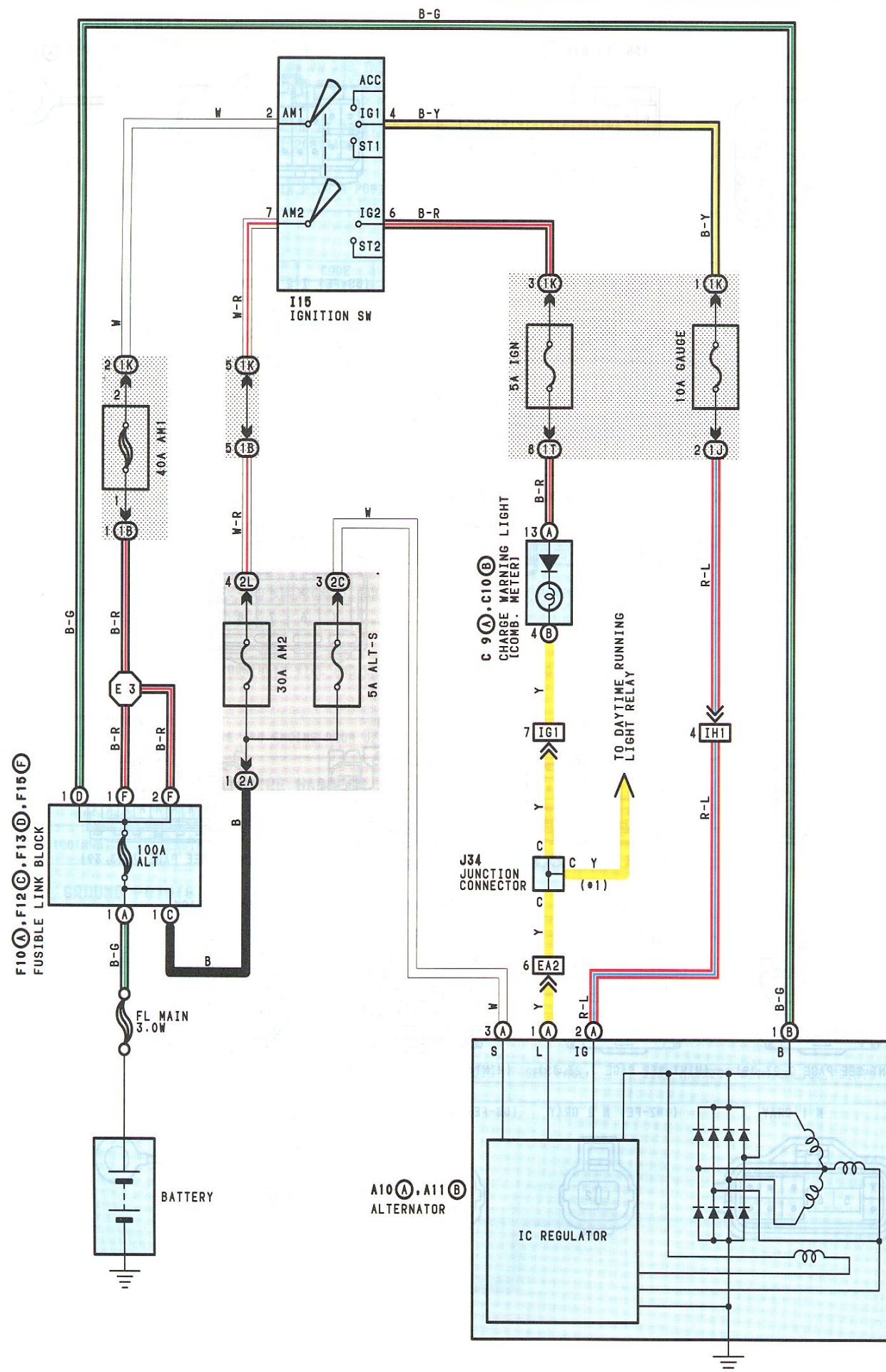


8 3 Ⓐ BLACK



8 4 Ⓑ





SERVICE HINTS

A10 ⓐ ALTERNATOR

Ⓐ 3-GROUND: 13.9-15.1 VOLTS WITH THE ENGINE RUNNING AT 2000 RPM AND 25°C (77°F)

13.5-14.3 VOLTS WITH THE ENGINE RUNNING AT 5000 RPM AND 115°C (239°F)

Ⓐ 1-GROUND: 0-4 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE ENGINE NOT RUNNING

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A10	A	60(1MZ-FE LHD)	F10	A	60(1MZ-FE LHD)	F15	F	60(1MZ-FE LHD)
		62(5S-FE LHD)			62(5S-FE LHD)			62(5S-FE LHD)
A11	B	60(1MZ-FE LHD)	F12	C	60(1MZ-FE LHD)	I15		64(LHD)
		62(5S-FE LHD)			62(5S-FE LHD)		J34	66(LHD)
C 9	A	64(LHD)	F13	D	60(1MZ-FE LHD)			
C10	B	64(LHD)			62(5S-FE LHD)			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

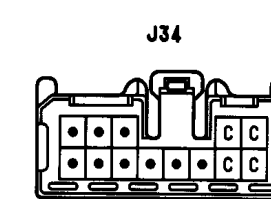
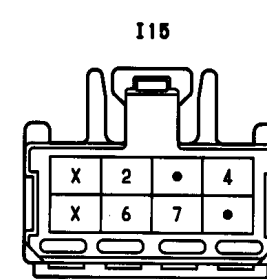
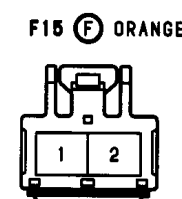
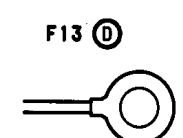
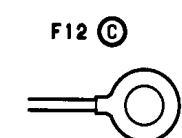
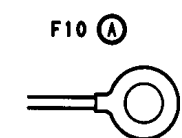
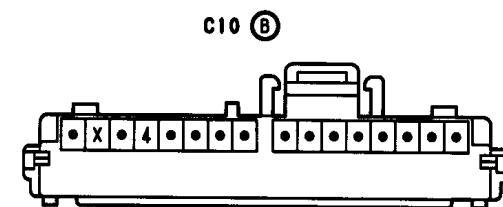
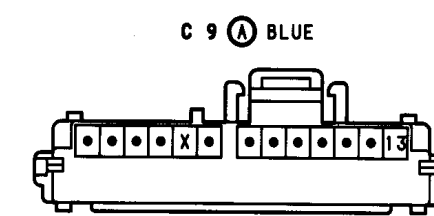
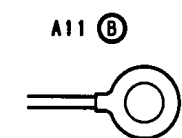
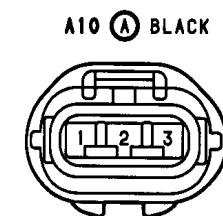
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1K		
1T	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2A	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2C		
2L	56(LHD)	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	82(1MZ-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
	84(5S-FE LHD)	
I61	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
IH1	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

 : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	E 3	84(5S-FE LHD)	ENGINE ROOM MAIN WIRE



(HINT: SEE PAGE 7, 23, 39)

SYSTEM OUTLINE

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

1. INPUT SIGNALS

- (1) WATER TEMP. SIGNAL SYSTEM
THE EFI WATER TEMP. SENSOR DETECTS THE WATER TEMP. AND HAS A BUILT-IN THERMISTOR WITH A RESISTANCE WHICH VARIES ACCORDING TO THE WATER TEMP. IS INPUT INTO TERMINAL THW OF THE ENGINE AND ECT ECU AS A CONTROL SIGNAL.
- (2) INTAKE AIR TEMP. SIGNAL SYSTEM
THE INTAKE AIR TEMP. SENSOR IS INSTALLED IN THE AIR FLOW METER AND DETECTS THE INTAKE AIR TEMP., WHICH IS INPUT AS A CONTROL SIGNAL INTO TERMINAL THA OF THE ENGINE AND ECT ECU.
- (3) OXYGEN SENSOR SIGNAL SYSTEM
THE OXYGEN DENSITY IN THE EXHAUST EMISSIONS IS DETECTED AND INPUT AS A CONTROL SIGNAL TO TERMINALS OXL1 AND OXR1 OF THE ENGINE AND ECT ECU.
- (4) RPM SIGNAL SYSTEM
CAMSHAFT POSITION AND CRANKSHAFT POSITION ARE DETECTED BY THE CAMSHAFT POSITION SENSOR AND CRANKSHAFT POSITION SENSOR. THE CAMSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO TERMINAL 622+ OF THE ENGINE AND ECT ECU, AND THE ENGINE RPM IS INPUT INTO TERMINAL NE+.
- (5) THROTTLE SIGNAL SYSTEM
THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE AS A CONTROL SIGNAL, WHICH IS INPUT INTO TERMINAL VTA1 OF THE ENGINE AND ECT ECU.
- (6) VEHICLE SPEED SIGNAL SYSTEM
THE SPEED SENSOR, INSTALLED INSIDE THE TRANSMISSION DETECTS THE VEHICLE SPEED AND INPUTS A CONTROL SIGNAL INTO TERMINAL SPI OF THE ENGINE AND ECT ECU.
- (7) NEUTRAL START SW SIGNAL SYSTEM
THE NEUTRAL START SW DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL, PARKING OR NOT, AND INPUTS A CONTROL SIGNAL INTO TERMINAL STA OF THE ENGINE AND ECT ECU.
- (8) A/C SW SIGNAL SYSTEM
THE OPERATING VOLTAGE OF THE A/C MAGNETIC CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO TERMINAL A/C OF THE ENGINE AND ECT ECU.
- (9) BATTERY SIGNAL SYSTEM
VOLTAGE IS CONSTANTLY APPLIED TO TERMINAL BATT OF THE ENGINE AND ECT ECU. WHEN THE IGNITION SW IS TURNED ON, VOLTAGE FOR THE ENGINE AND ECT ECU OPERATION IS APPLIED TO TERMINAL +B OF THE ENGINE AND ECT ECU VIA THE EFI RELAY.
- (10) INTAKE AIR VOLUME SIGNAL SYSTEM
INTAKE AIR VOLUME IS DETECTED BY THE AIR FLOW METER AND A SIGNAL IS INPUT INTO TERMINAL VG OF THE ENGINE AND ECT ECU AS A CONTROL SIGNAL.
- (11) STARTER SIGNAL SYSTEM
TO CONFIRM WHETHER THE ENGINE IS CRANKING, THE VOLTAGE APPLIED TO THE STARTER MOTOR DURING CRANKING IS DETECTED AND THE SIGNAL IS INPUT INTO TERMINAL NSW OF THE ENGINE AND ECT ECU AS A CONTROL SIGNAL.
- (12) ENGINE KNOCK SIGNAL SYSTEM
ENGINE KNOCKING IS DETECTED BY THE KNOCK SENSOR 1 AND 2, AND THE SIGNALS ARE INPUT INTO TERMINALS KNKR AND KNKL OF THE ENGINE AND ECT ECU AS A CONTROL SIGNAL.

2. CONTROL SYSTEM

- EFI SYSTEM
THE EFI SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT FROM EACH SENSOR (INPUT SIGNALS (1) TO (12)). THE BEST FUEL INJECTION VOLUME IS DECIDED BASED ON THIS DATA AND THE PROGRAM MEMORIZED BY THE ENGINE AND ECT ECU, AND THE CONTROL SIGNAL IS OUTPUT TO TERMINALS #10, #20, #30, #40, #50 AND #60 OF THE ENGINE AND ECT ECU TO OPERATE THE INJECTOR (INJECT THE FUEL). THE EFI SYSTEM PRODUCES CONTROL OF FUEL INJECTION OPERATION BY THE ENGINE AND ECT ECU IN RESPONSE TO THE DRIVING CONDITIONS.
- ESA SYSTEM
THE ESA SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT TO THE ENGINE AND ECT ECU FROM EACH SENSOR (INPUT SIGNALS FROM 1,3,11). THE BEST IGNITION TIMING IS DECIDED ACCORDING TO THIS DATA AND THE MEMORIZED DATA IN THE ENGINE AND ECT ECU AND THE CONTROL SIGNAL IS OUTPUT TO TERMINALS 16T1, 16T2 AND 16T3. THIS SIGNAL CONTROLS THE IGNITER TO PROVIDE THE BEST IGNITION TIMING FOR THE DRIVING CONDITIONS.
- ISC SYSTEM
THE ISC SYSTEM (ROTARY SOLENOID TYPE) INCREASES THE RPM AND PROVIDES IDLE STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD, AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD AND SO ON, THE ENGINE AND ECT ECU EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM 1,3,4,7,8), CURRENT IS OUTPUT TO TERMINALS R80 AND R8C TO CONTROL ISC VALVE.
- ACIS
ACIS INCLUDES A VALVE IN THE BULKHEAD SEPARATING THE SURGE TANK INTO TWO PARTS. THIS VALVE IS OPENED AND CLOSED IN ACCORDANCE WITH THE DRIVING CONDITIONS TO CONTROL THE INTAKE MANIFOLD LENGTH IN TWO STAGES FOR INCREASED ENGINE OUTPUT IN ALL RANGES FROM LOW TO HIGH SPEEDS.
THE ENGINE AND ECT ECU JUDGES THE ENGINE SPEED BY THE SIGNALS ((3), (4)) FROM EACH SENSOR AND OUTPUTS SIGNALS TO THE TERMINAL ACIS TO CONTROL THE VSV (ACIS).
- EGR CONTROL SYSTEM
THE EGR CONTROL SYSTEM DETECTS THE SIGNAL FROM EACH SENSOR (INPUT SIGNALS FROM 1,4,9,10). CURRENT IS OUTPUT TO TERMINAL EGR TO CONTROL THE EGR VALVE.

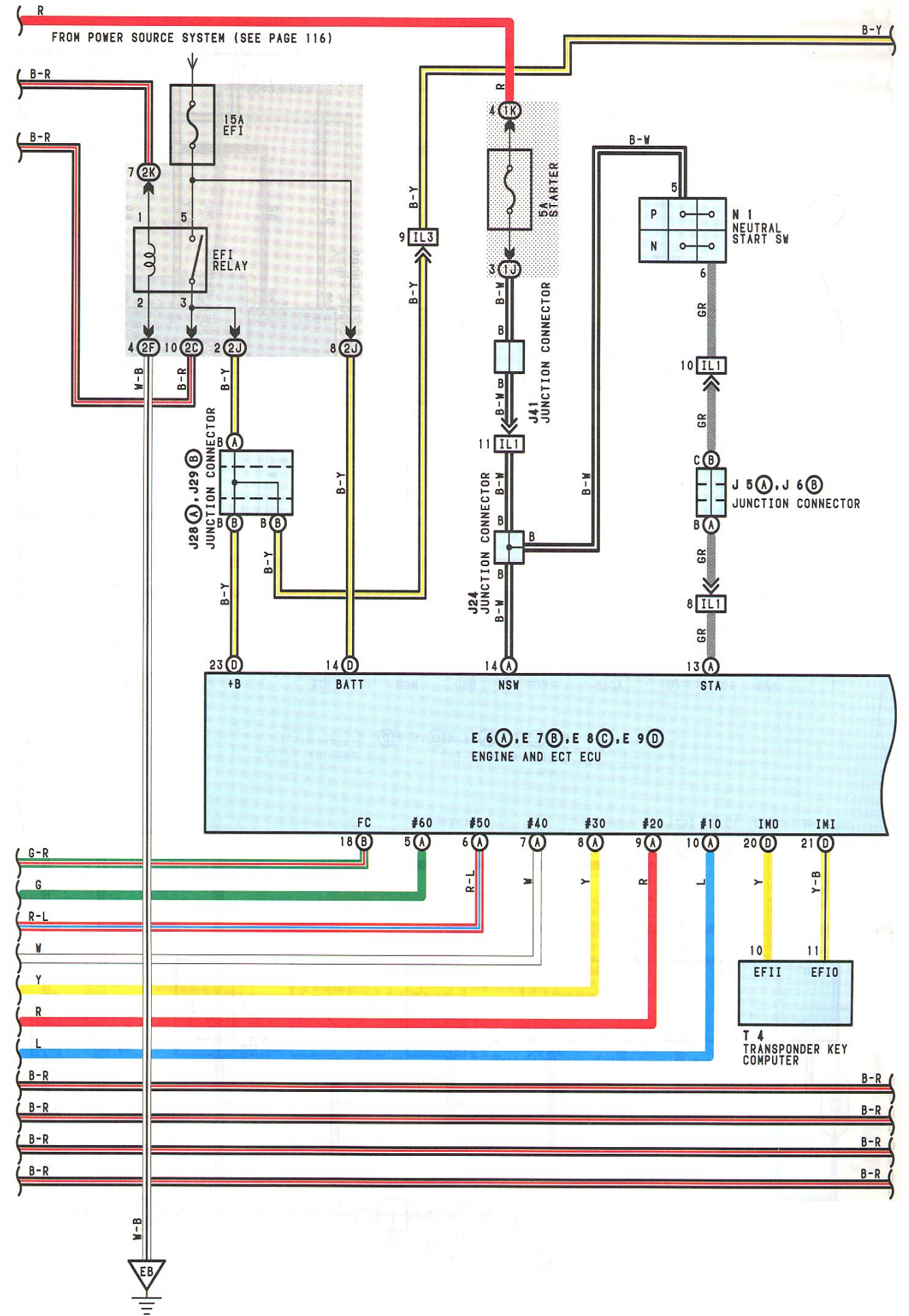
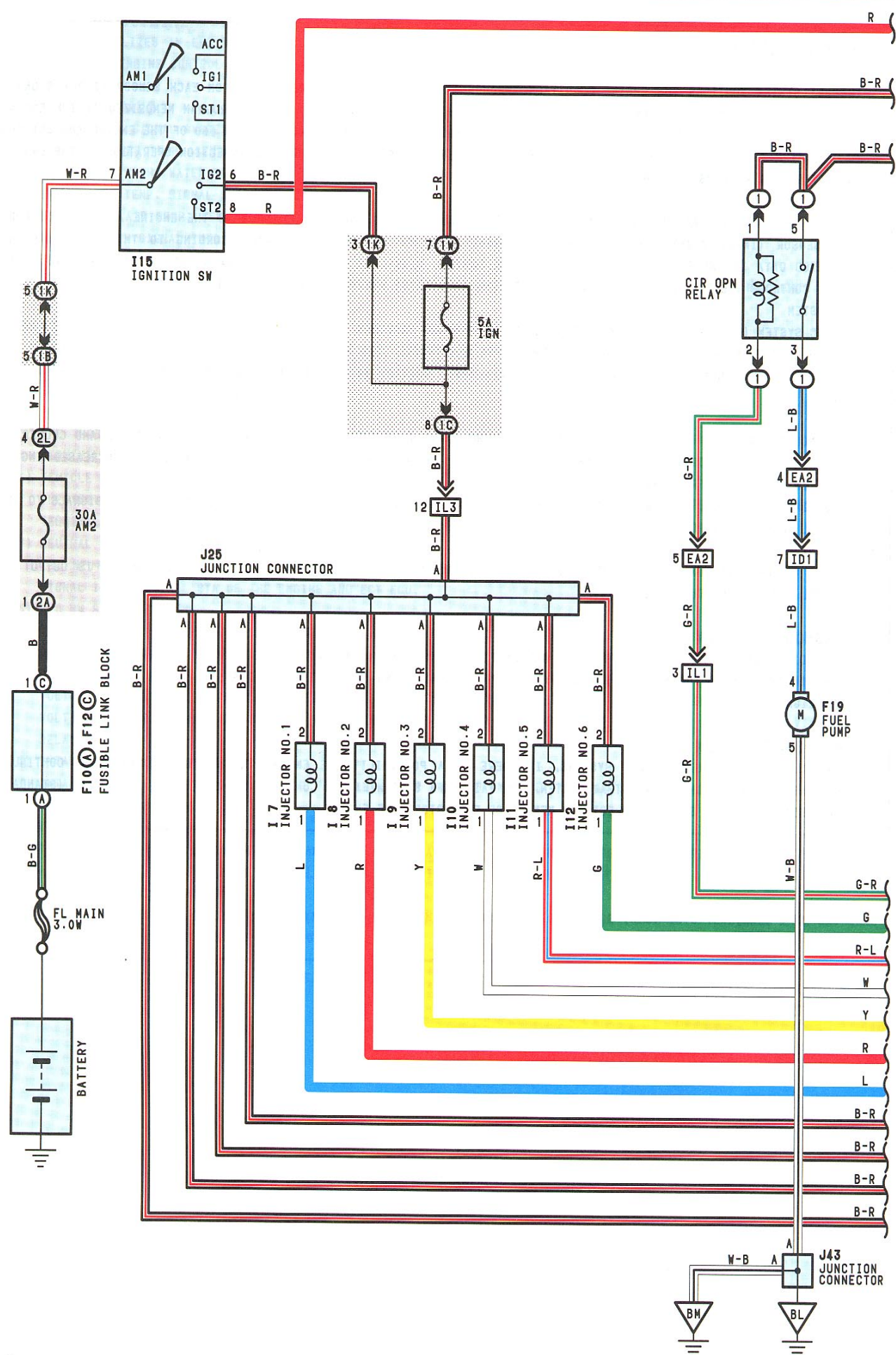
3. DIAGNOSIS SYSTEM

WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTIONING IN THE ENGINE 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.

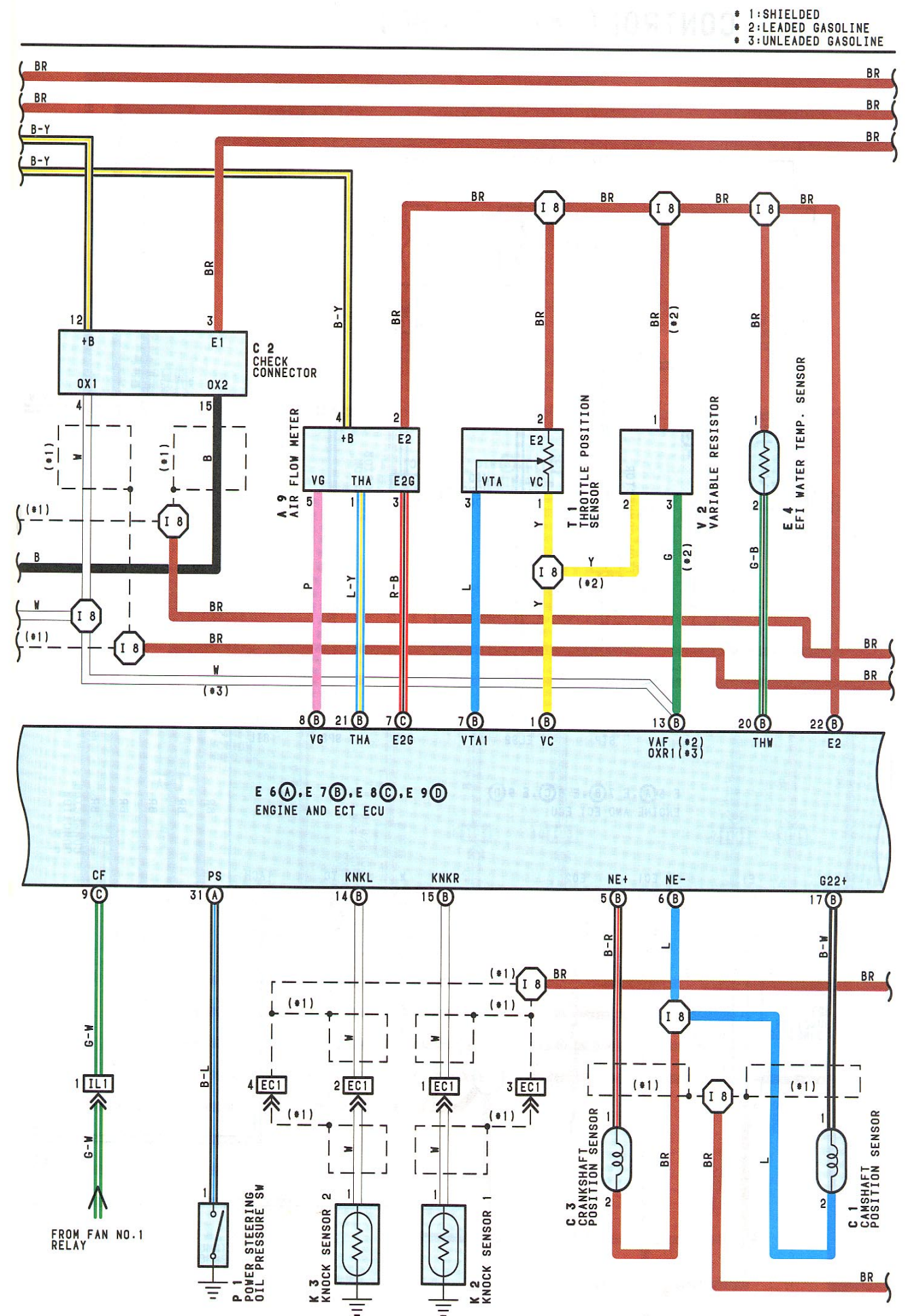
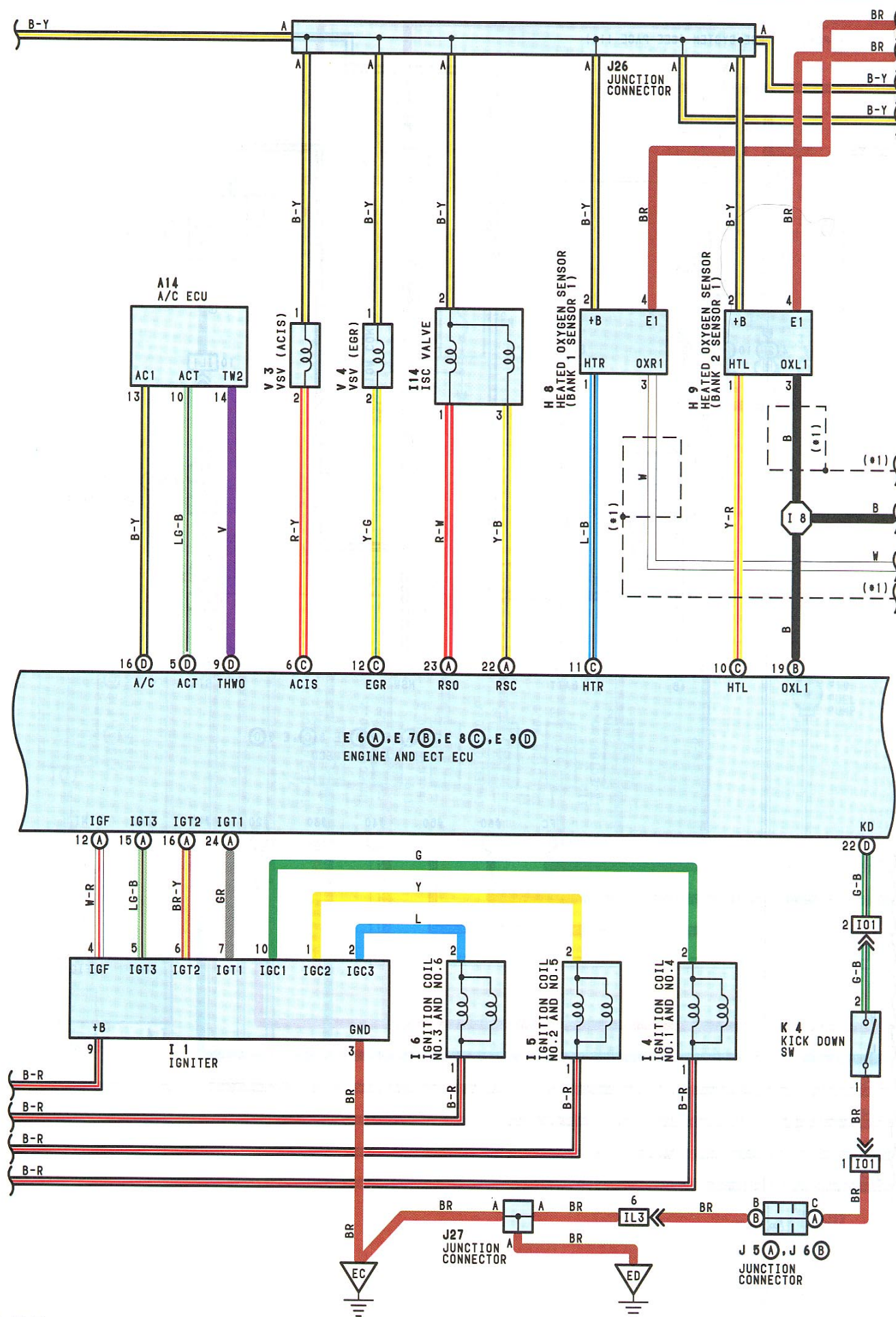
4. FAIL-SAFE SYSTEM

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

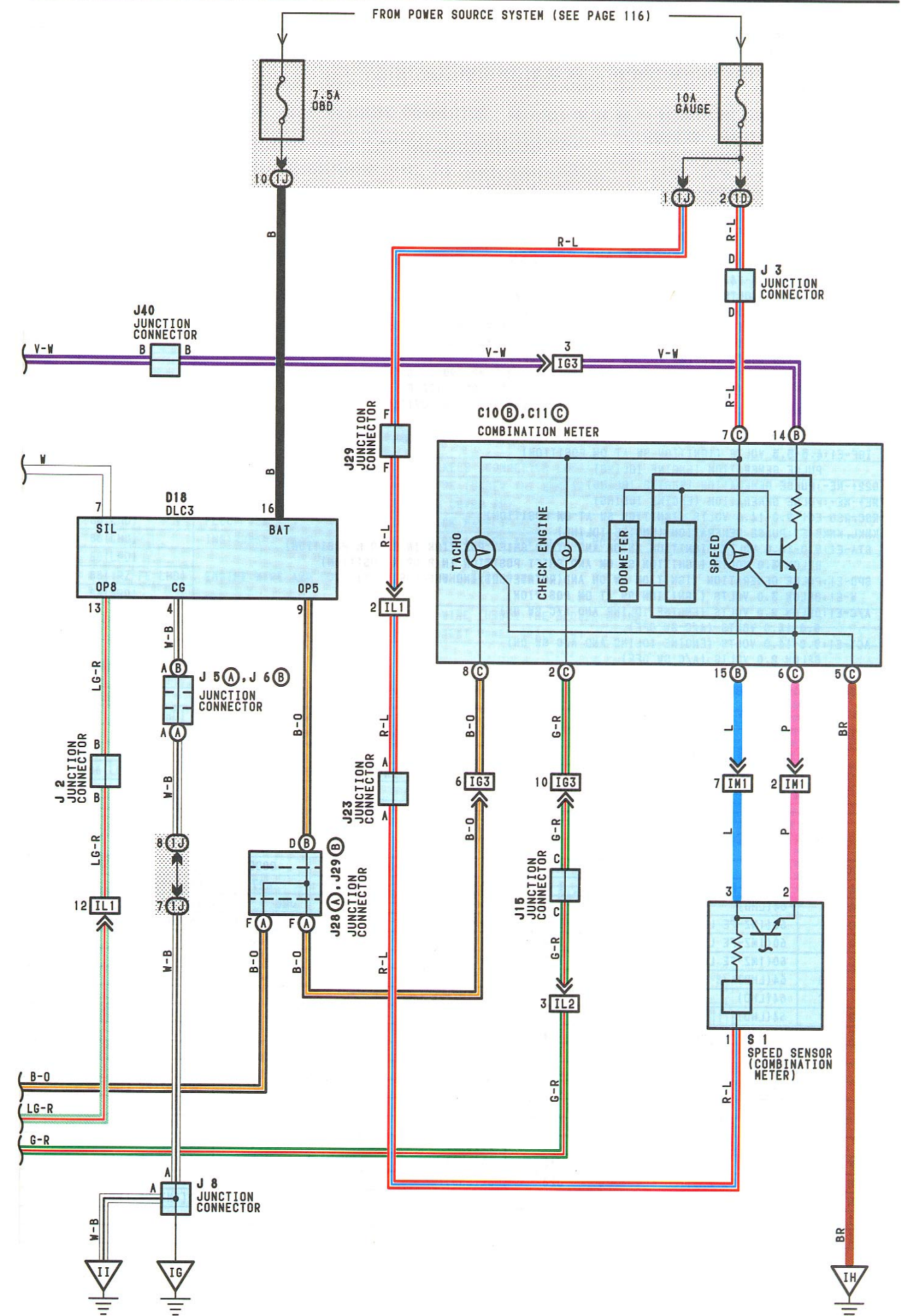
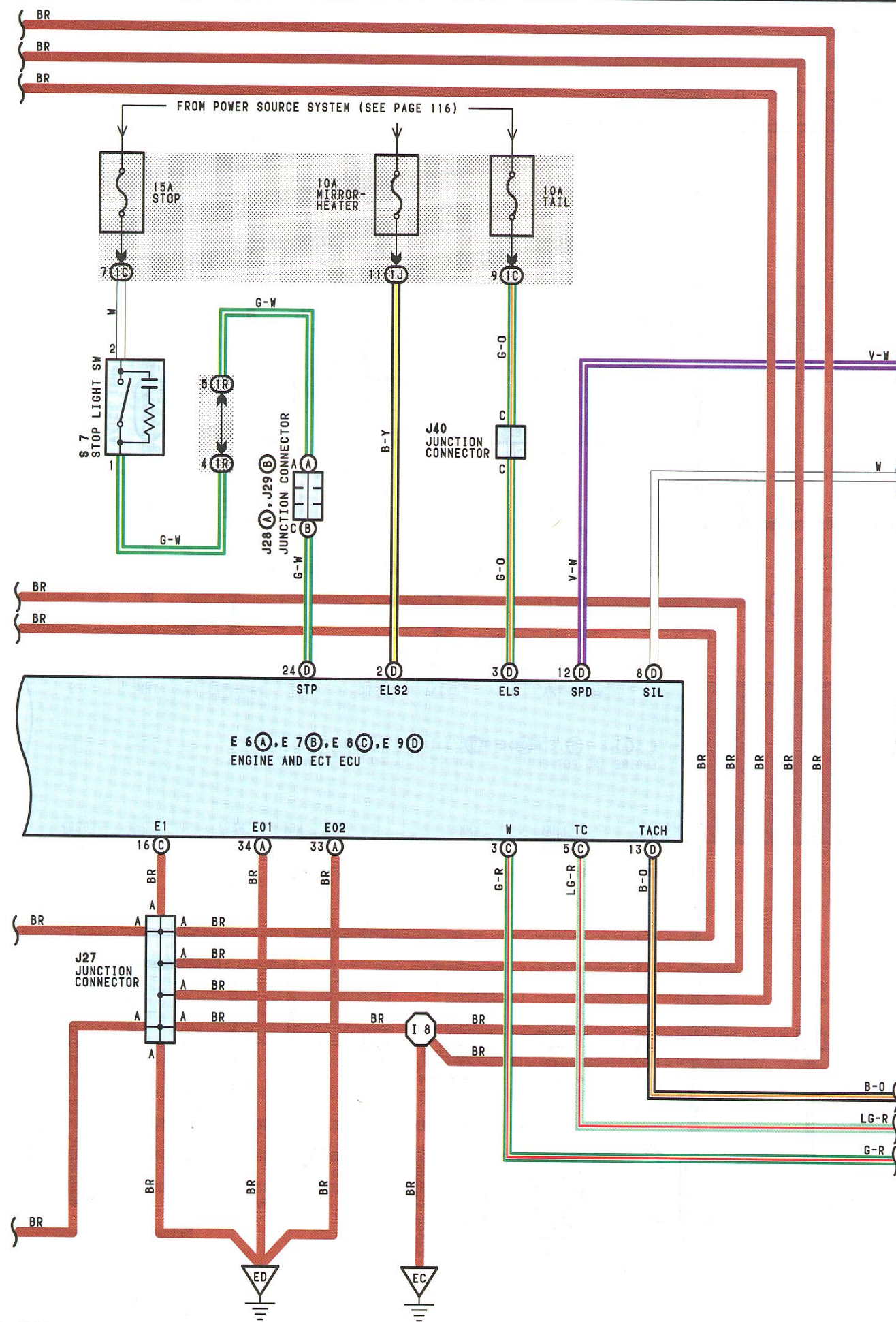
ENGINE CONTROL (1MZ-FE LHD)



ENGINE CONTROL (1MZ-FE LHD)



ENGINE CONTROL (1MZ-FE LHD)



ENGINE CONTROL(1MZ-FE LHD)

SERVICE HINTS

CIR OPN RELAY

① 3-① 5:CLOSED WITH THE IGNITION SW AT ON OR ST POSITION

EFI RELAY

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

E 4 EFI WATER TEMP. SENSOR

1-2:10.0 -20.0 KΩ (-20°C, -4°F)

4.0 - 7.0 KΩ (0°C, 32°F)

2.0 - 3.0 KΩ (20°C, 68°F)

0.9 - 1.3 KΩ (40°C, 104°F)

0.4 - 0.7 KΩ (60°C, 140°F)

0.2 - 0.4 KΩ (80°C, 176°F)

E 6 ①, E 7 ②, E 8 ③, E 9 ④ ENGINE AND ECT ECU

BATT-E1:ALWAYS 9.0-14.0 VOLTS

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

VC-E1:ALWAYS 4.5-5.5 VOLTS (IGNITION SW AT ON POSITION)

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

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

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

THA-E2:0.5-3.4 VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, 68°F)

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

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

PULSE GENERATION (ENGINE IDLING)

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

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

PULSE GENERATION (ENGINE IDLING)

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

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

RSC, RSO-E01:9.0-14.0 VOLTS (IGNITION SW AT ON POSITION)

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

STA-E1:9.0-14.0 VOLTS (IGNITION SW ON AND OTHER SHIFT POSITION IN P OR M POSITION)

BELOW 3.0 VOLTS (IGNITION SW ON AND SHIFT POSITION IN P OR M POSITION)

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

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

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

9.0-14.0 VOLTS (A/C SW OFF)

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

BELOW 2.0 VOLTS (A/C SW OFF)

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

NSW-E1:6.0 VOLTS OR MORE (ENGINE CRANKING)

I 7, I 8, I 9, I10, I11, I12 INJECTOR

2-1:APPROX. 13.8 Ω

T 1 THROTTLE POSITION SENSOR

1-2:0.2-5.7 KΩ WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0 MM (0 IN.)

1-3:2.0-10.2 KΩ WITH THROTTLE VALVE FULLY OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 9	60(1MZ-FE LHD)	I 5	60(1MZ-FE LHD)	J27	66(LHD)
A14	64(LHD)	I 6	60(1MZ-FE LHD)	J28	A 66(LHD)
C 1	60(1MZ-FE LHD)	I 7	60(1MZ-FE LHD)	J29	B 66(LHD)
C 2	60(1MZ-FE LHD)	I 8	60(1MZ-FE LHD)	J40	66(LHD)
C 3	60(1MZ-FE LHD)	I 9	60(1MZ-FE LHD)	J41	66(LHD)
C10	B 64(LHD)	I10	60(1MZ-FE LHD)	J43	68(LHD)
C11	C 64(LHD)	I11	60(1MZ-FE LHD)	K 2	60(1MZ-FE LHD)
D18	64(LHD)	I12	60(1MZ-FE LHD)	K 3	60(1MZ-FE LHD)
E 4	60(1MZ-FE LHD)	I14	60(1MZ-FE LHD)	K 4	66(LHD)
E 6	A 64(1MZ-FE LHD)	I15	64(LHD)	N 1	60(1MZ-FE LHD)
E 7	B 64(1MZ-FE LHD)	J 2	66(LHD)	P 1	60(1MZ-FE LHD)
E 8	C 64(1MZ-FE LHD)	J 3	66(LHD)	S 1	60(1MZ-FE LHD)
E 9	D 64(1MZ-FE LHD)	J 5	A 66(LHD)	S 7	66(LHD)
F10	A 60(1MZ-FE LHD)	J 6	B 66(LHD)	T 1	60(1MZ-FE LHD)
F12	C 60(1MZ-FE LHD)	J 8	66(LHD)	T 4	66(LHD)
F19	68(LHD)	J15	66(LHD)	V 2	60(1MZ-FE LHD)
H 8	60(1MZ-FE LHD)	J23	66(LHD)	V 3	60(1MZ-FE LHD)
H 9	60(1MZ-FE LHD)	J24	66(LHD)	V 4	60(1MZ-FE LHD)
I 1	60(1MZ-FE LHD)	J25	66(LHD)		
I 4	60(1MZ-FE LHD)	J26	66(LHD)		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1K		
1R		
1W		
2A	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2C		
2F	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2J		
2K		
2L	56(LHD)	

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	82(1MZ-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
EC1	82(1MZ-FE LHD)	ENGINE WIRE AND SENSOR WIRE (HEAD COVER RH)
ID1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
I83	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL2	88(1MZ-FE LHD)	
IL3	88(LHD)	
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IO1	88(LHD)	COWL WIRE AND SWITCH WIRE (INSTRUMENT PANEL BRACE LH)

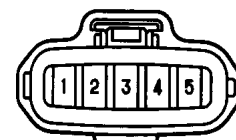
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
EC	82(1MZ-FE LHD)	REAR SIDE OF THE SURGE TANK
ED	82(1MZ-FE LHD)	SURGE TANK RH
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BM	90(LHD)	BACK PANEL CENTER

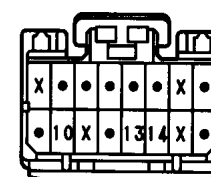
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 8	88(LHD)	ENGINE WIRE			

A 9 BLACK



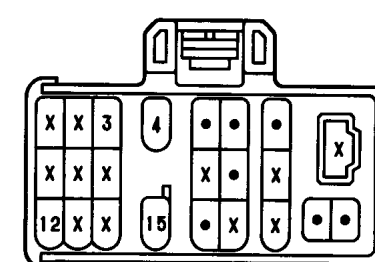
A14



C 1 BLACK



C 2 BLACK

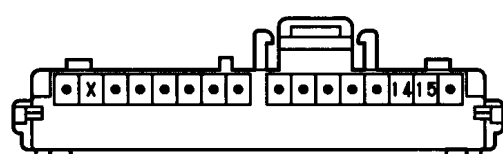


ENGINE CONTROL (1MZ-FE LHD)

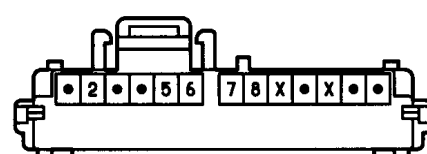
C 3 BLACK



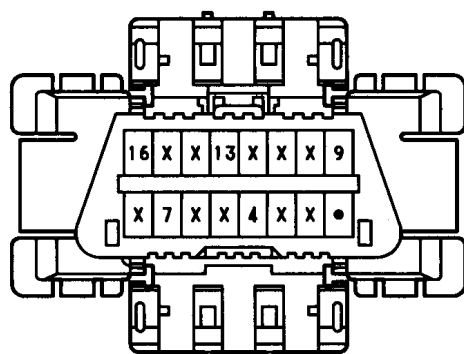
C10 B



C11 C BROWN



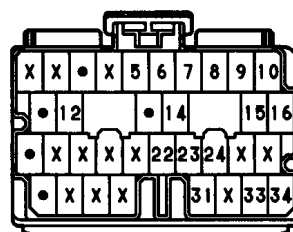
D18



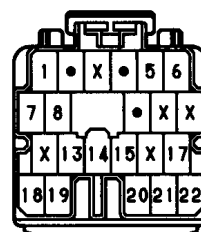
E 4 DARK GRAY



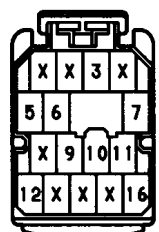
E 6 A



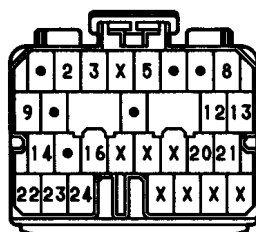
E 7 B



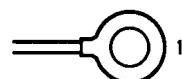
E 8 C



E 9 D



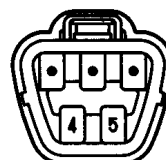
F10 A



F12 C



F19



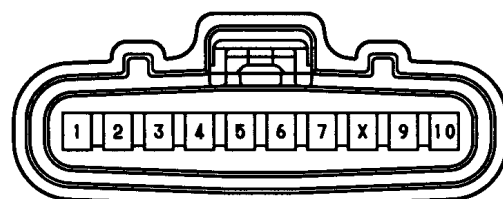
H 8 DARK GRAY



H 9 DARK GRAY



I 1 BLACK



I 4 BLACK



I 5 BLACK



I 6 BLACK



I 7 GRAY



I 8 GRAY



I 9 GRAY



I10 GRAY



I11 GRAY



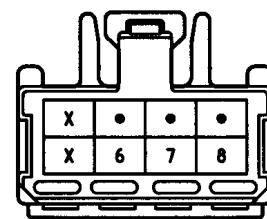
I12 GRAY



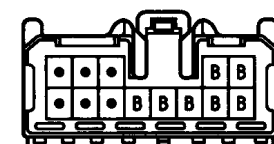
I14 GRAY



I15

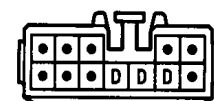


J 2 GRAY



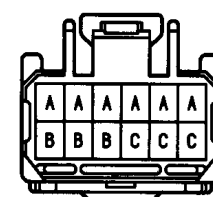
(HINT:SEE PAGE 7, 23, 39)

J 3 BLACK



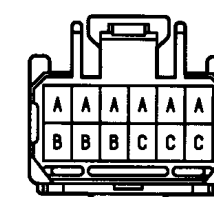
(HINT:SEE PAGE 7, 23, 39)

J 5 A GRAY



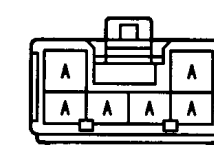
(HINT:SEE PAGE 7, 23, 39)

J 6 B GRAY



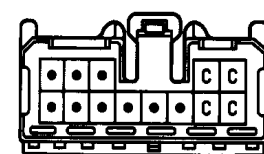
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J 8



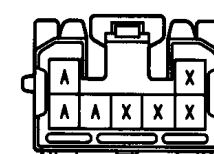
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J15



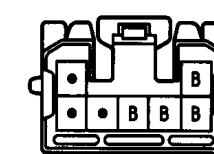
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J23



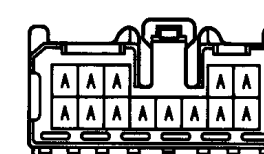
(HINT:SEE PAGE 7, 23, 39)

J24



(HINT:SEE PAGE 7, 23, 39)

J25 ORANGE



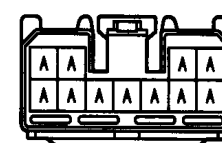
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J26



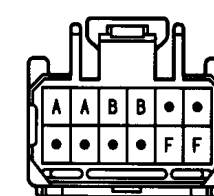
(HINT:SEE PAGE 7, 23, 39)

J27



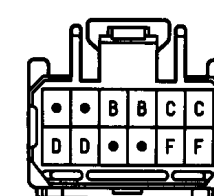
(HINT:SEE PAGE 7, 23, 39)

J28 A



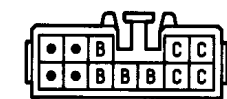
(HINT:SEE PAGE 7, 23, 39)

J29 B



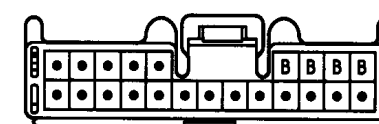
(HINT:SEE PAGE 7, 23, 39)

J40 GRAY



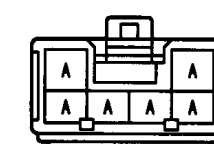
(HINT:SEE PAGE 7, 23, 39)

J41



(HINT:SEE PAGE 7, 23, 39)

J43



(HINT:SEE PAGE 7, 23, 39)

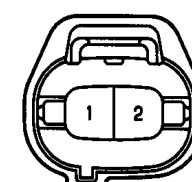
K 2 DARK GRAY



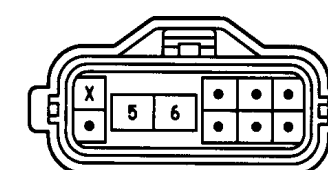
K 3 DARK GRAY



K 4 BLACK



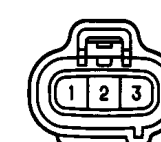
N 1 GRAY



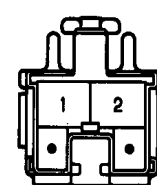
P 1 BLACK



S 1 BLACK



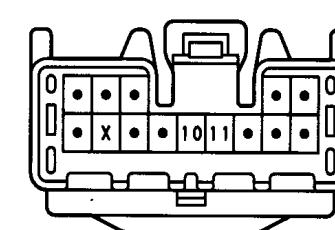
S 7 BLUE



T 1 BLACK



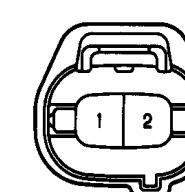
T 4



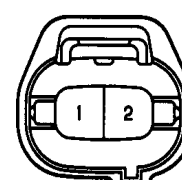
V 2 BLACK



V 3 BROWN



V 4 BROWN



SYSTEM OUTLINE

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

1. INPUT SIGNALS

(1) WATER TEMP. SIGNAL SYSTEM

THE EFI WATER TEMP. SENSOR DETECTS THE WATER TEMP. AND HAS A BUILT-IN THERMISTOR WITH A RESISTANCE WHICH VARIES ACCORDING TO THE WATER TEMP. IS INPUT INTO TERMINAL THW OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) AS A CONTROL SIGNAL.

(2) INTAKE AIR TEMP. SIGNAL SYSTEM

THE INTAKE AIR TEMP. SENSOR DETECTS THE INTAKE AIR TEMP., WHICH IS INPUT AS A CONTROL SIGNAL INTO TERMINAL THA OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(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 ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(4) RPM SIGNAL SYSTEM

CAMSHAFT POSITION AND CRANKSHAFT POSITION ARE DETECTED BY THE CAMSHAFT POSITION SENSOR AND CRANKSHAFT POSITION SENSOR. THE CAMSHAFT POSITION IS INPUT AS A CONTROL SIGNAL TO TERMINAL G OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) AND THE ENGINE RPM IS INPUT INTO TERMINAL NE+.

(5) THROTTLE SIGNAL SYSTEM

THE THROTTLE POSITION SENSOR DETECTS THE THROTTLE VALVE OPENING ANGLE AS A CONTROL SIGNAL, WHICH IS INPUT INTO TERMINAL VTA OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(6) VEHICLE SPEED SIGNAL SYSTEM

THE SPEED SENSOR, INSTALLED INSIDE THE TRANSMISSION DETECTS THE VEHICLE SPEED AND INPUTS A CONTROL SIGNAL INTO TERMINAL SPD OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(7) NEUTRAL START SW SIGNAL SYSTEM

THE NEUTRAL START SW DETECTS WHETHER THE SHIFT POSITION IS IN NEUTRAL, PARKING OR NOT, AND INPUTS A CONTROL SIGNAL INTO TERMINAL STA OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(8) A/C SW SIGNAL SYSTEM

THE OPERATING VOLTAGE OF THE A/C MAGNETIC CLUTCH IS DETECTED AND INPUT IN THE FORM OF A CONTROL SIGNAL TO TERMINAL ACA OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(9) BATTERY SIGNAL SYSTEM

VOLTAGE IS CONSTANTLY APPLIED TO TERMINAL BATT OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T). WHEN THE IGNITION SW IS TURNED ON, VOLTAGE FOR THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) OPERATION IS APPLIED TO TERMINAL +B OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) VIA THE EFI RELAY.

(10) INTAKE AIR VOLUME SIGNAL SYSTEM

INTAKE AIR VOLUME IS DETECTED BY THE VACUUM SENSOR AND IS INPUT AS A CONTROL SIGNAL TO PIM OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T).

(11) STARTER SIGNAL SYSTEM

TO CONFIRM WHETHER THE ENGINE IS CRANKING, THE VOLTAGE APPLIED TO THE STARTER MOTOR DURING CRANKING IS DETECTED AND THE SIGNAL IS INPUT INTO TERMINAL NSW OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) AS A CONTROL SIGNAL.

2. CONTROL SYSTEM

• EFI SYSTEM

THE EFI SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT FROM EACH SENSOR (INPUT SIGNALS (1) TO (12)). THE BEST FUEL INJECTION VOLUME IS DECIDED BASED ON THIS DATA AND THE PROGRAM MEMORIZED BY THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T), AND THE CONTROL SIGNAL IS OUTPUT TO TERMINALS #10 AND #20 OF THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) TO OPERATE THE INJECTOR (INJECT THE FUEL). THE EFI SYSTEM PRODUCES CONTROL OF FUEL INJECTION OPERATION BY THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) IN RESPONSE TO THE DRIVING CONDITIONS.

• ESA SYSTEM

THE ESA SYSTEM MONITORS THE ENGINE CONDITION THROUGH THE SIGNALS, WHICH ARE INPUT TO THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) FROM EACH SENSOR (INPUT SIGNALS FROM 1,3,4,6,8). THE BEST IGNITION TIMING IS DECIDED ACCORDING TO THIS DATA AND THE MEMORIZED DATA IN THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) AND THE CONTROL SIGNAL IS OUTPUT TO TERMINALS 1GT1 AND 1GT2. THIS SIGNAL CONTROLS THE IGNITER TO PROVIDE THE BEST IGNITION TIMING FOR THE DRIVING CONDITIONS.

• ISC SYSTEM

THE ISC SYSTEM (STEP MOTOR TYPE) INCREASES THE RPM AND PROVIDES IDLE STABILITY FOR FAST IDLE-UP WHEN THE ENGINE IS COLD, AND WHEN THE IDLE SPEED HAS DROPPED DUE TO ELECTRICAL LOAD AND SO ON, THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) EVALUATES THE SIGNALS FROM EACH SENSOR (INPUT SIGNALS FROM 1,4,5,8,9), CURRENT IS OUTPUT TO TERMINALS 1SCC AND 1SCO TO CONTROL ISC VALVE.

• EGR CONTROL SYSTEM

THE EGR CONTROL SYSTEM DETECTS THE SIGNAL FROM EACH SENSOR (INPUT SIGNALS FROM 1,4,9,10), CURRENT IS OUTPUT TO TERMINAL EGR TO CONTROL THE EGR VALVE.

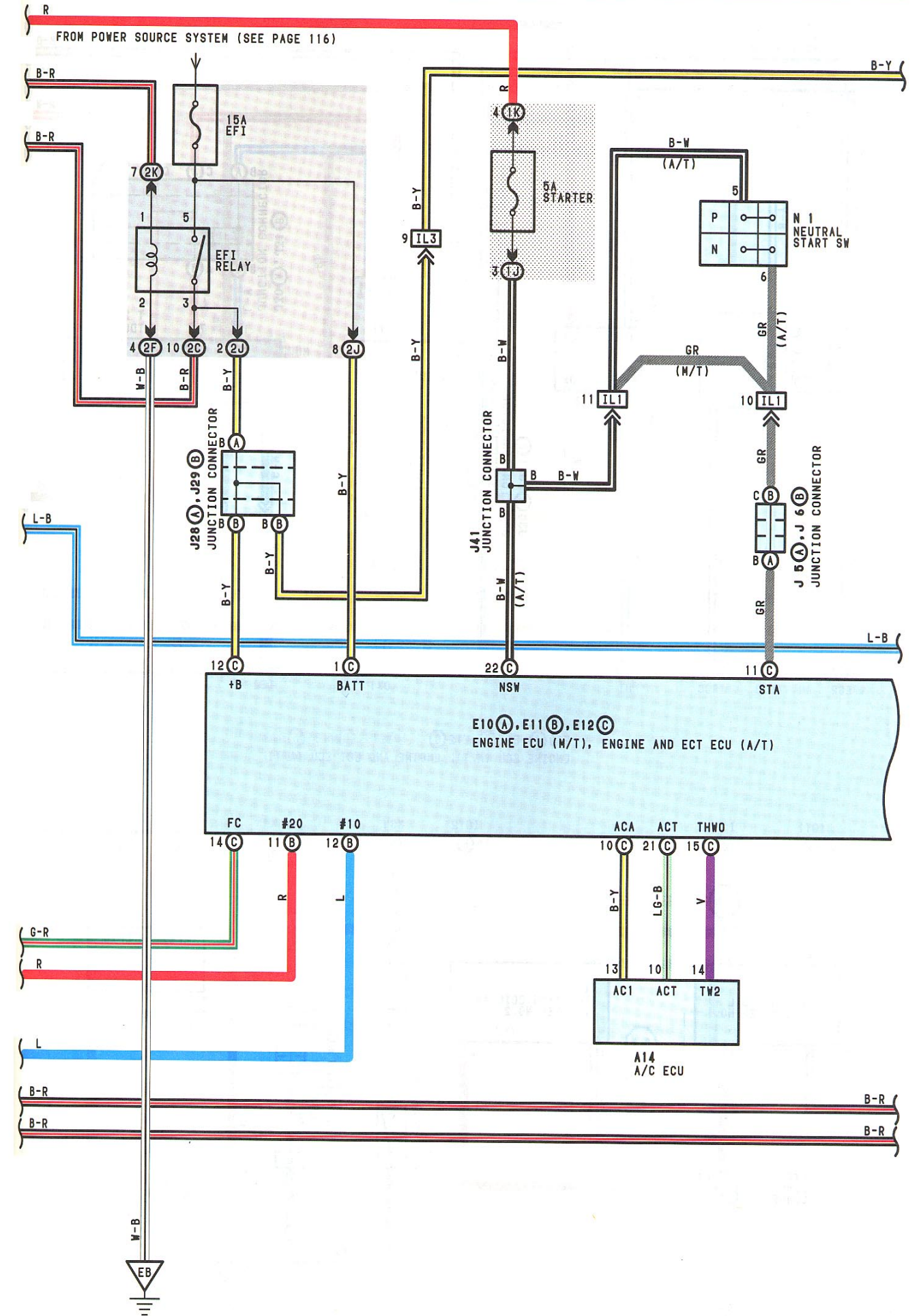
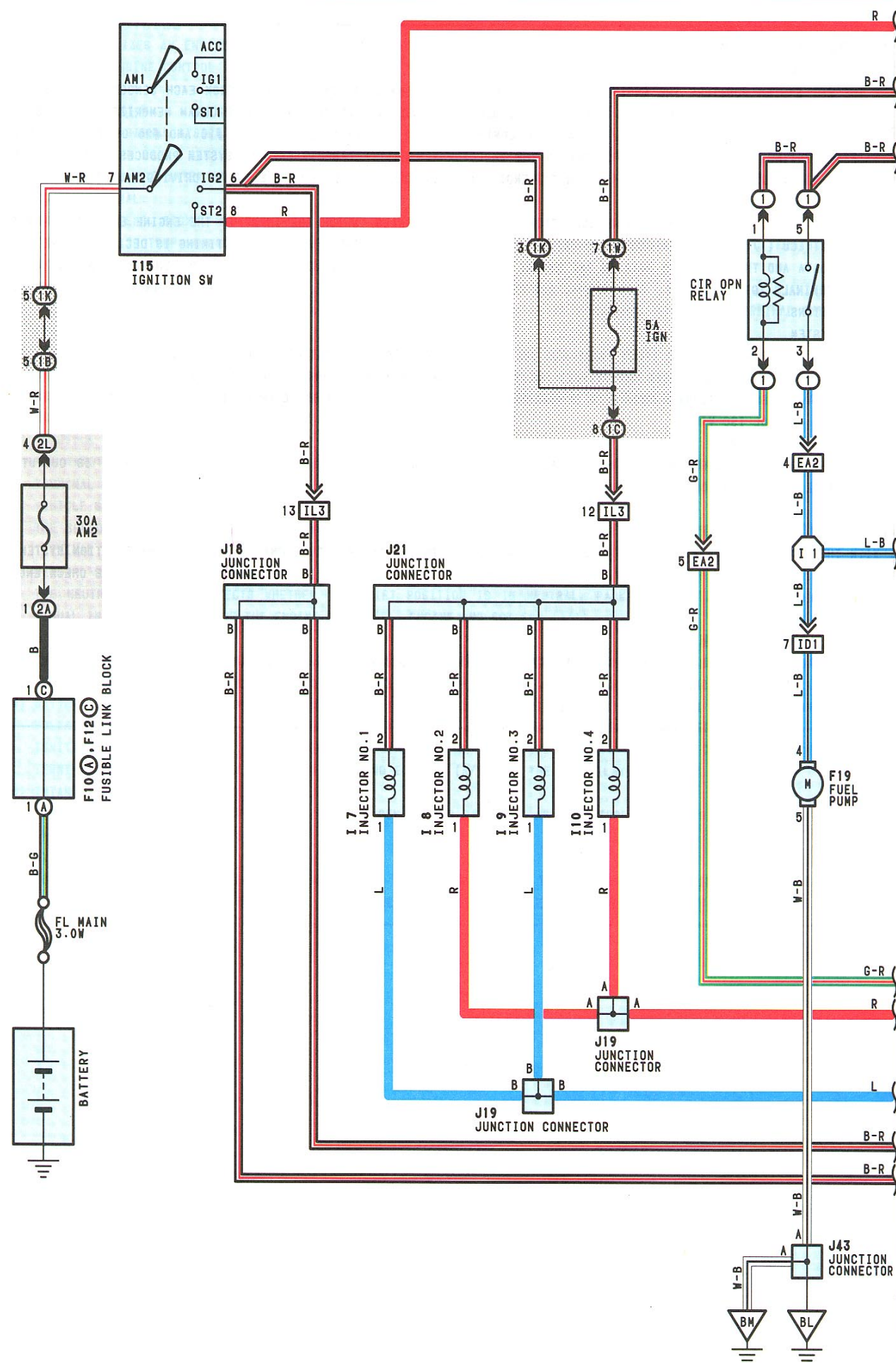
3. DIAGNOSIS SYSTEM

WITH THE DIAGNOSIS SYSTEM, WHEN THERE IS A MALFUNCTIONING IN THE ENGINE 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.

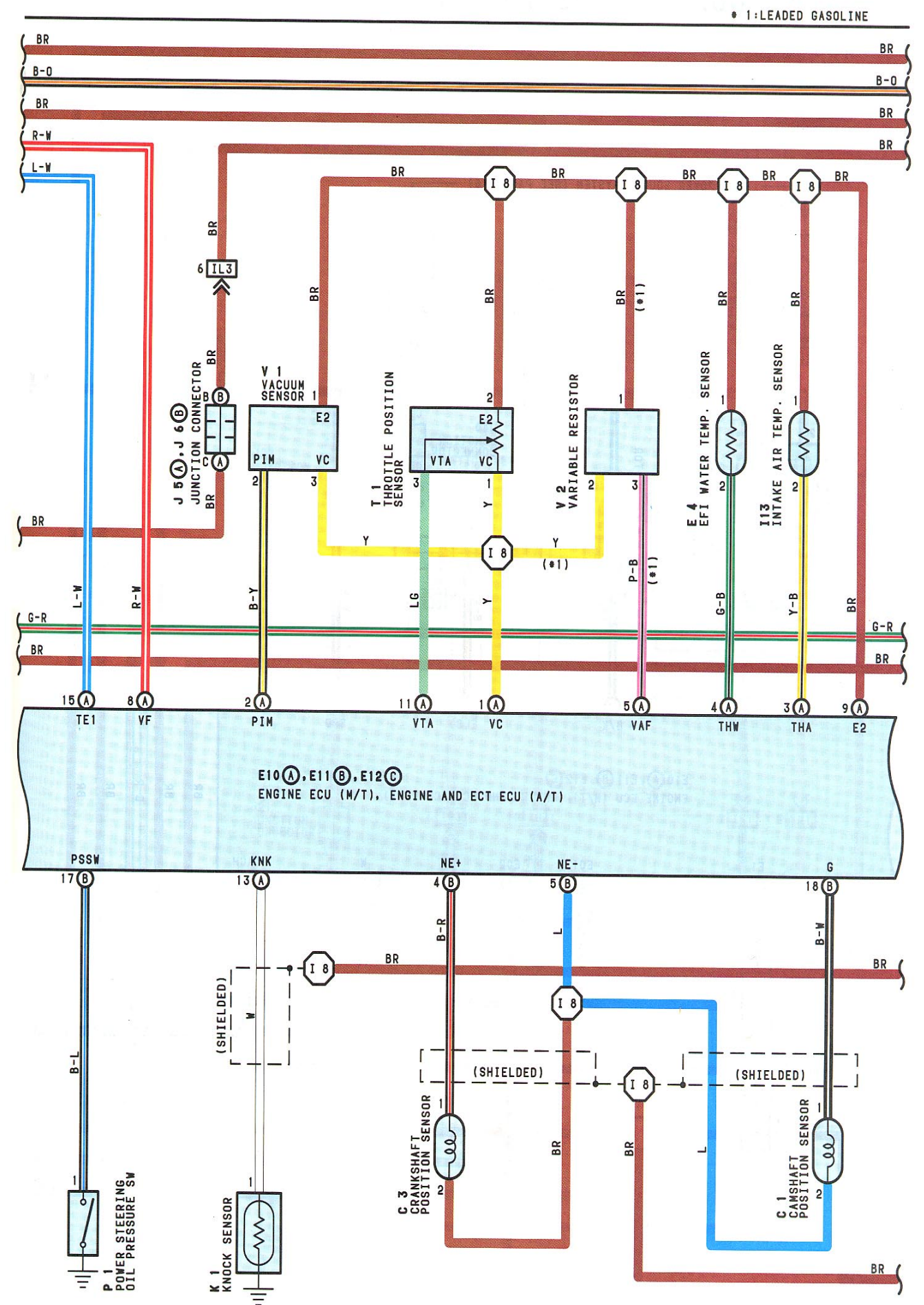
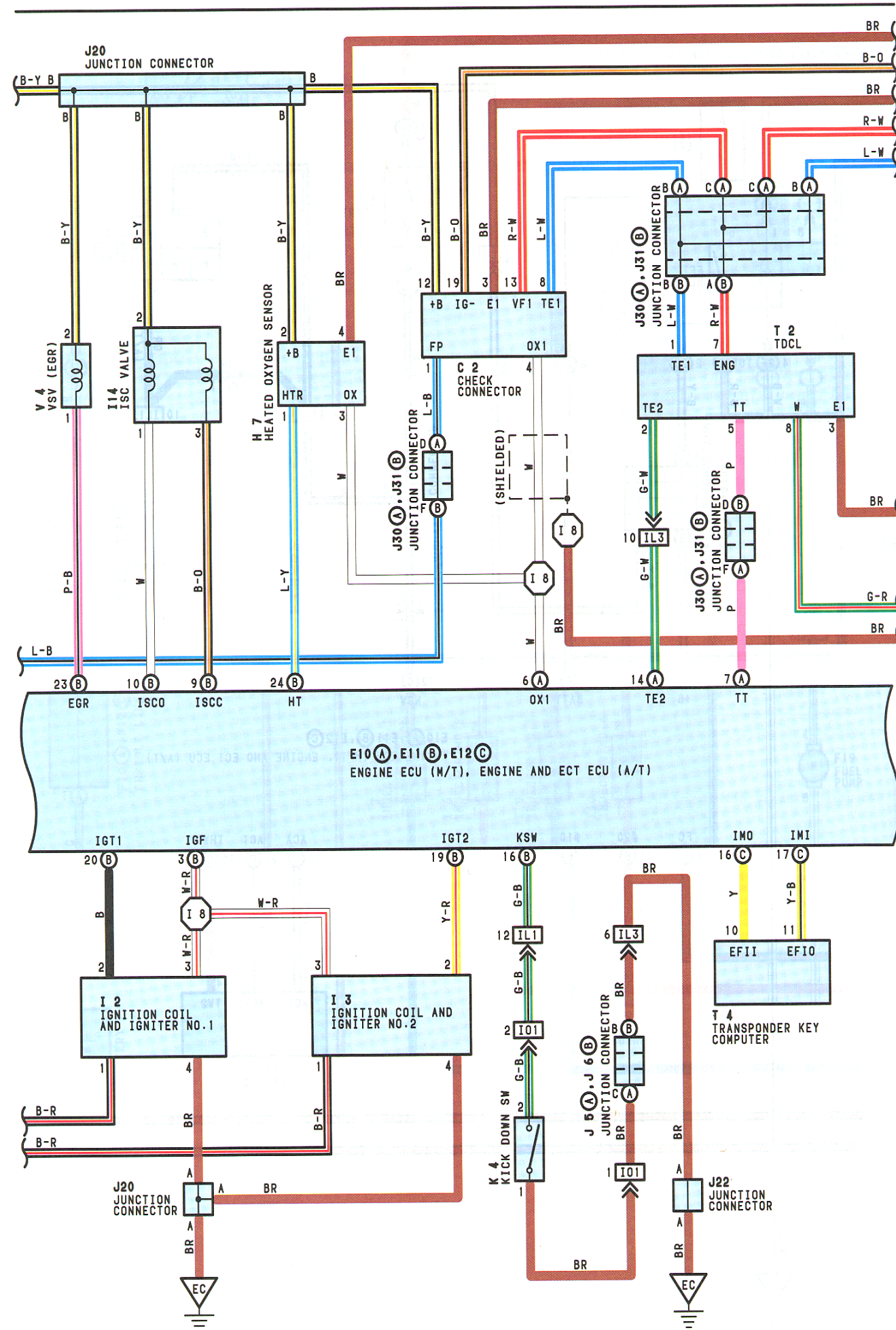
4. FAIL-SAFE SYSTEM

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

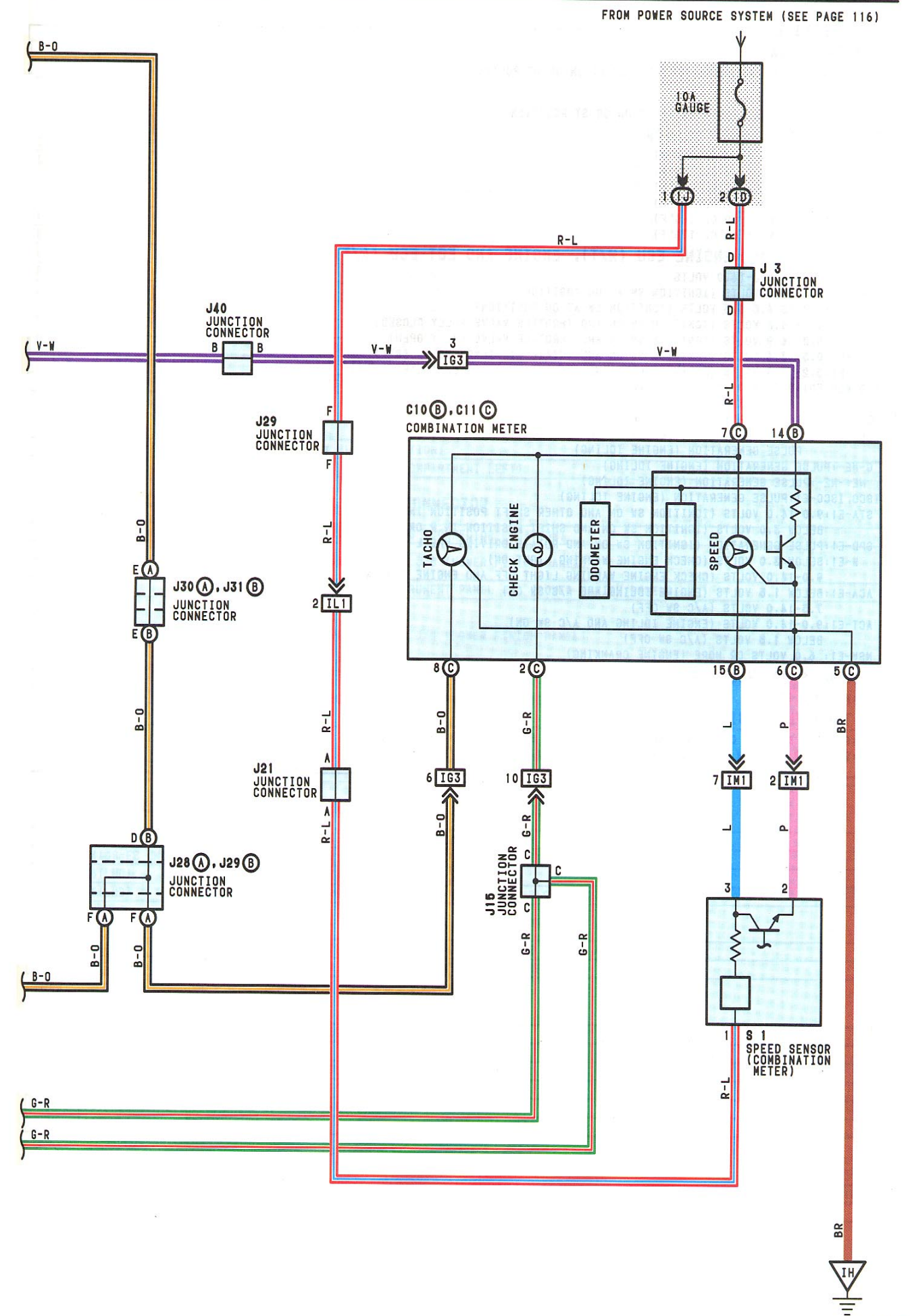
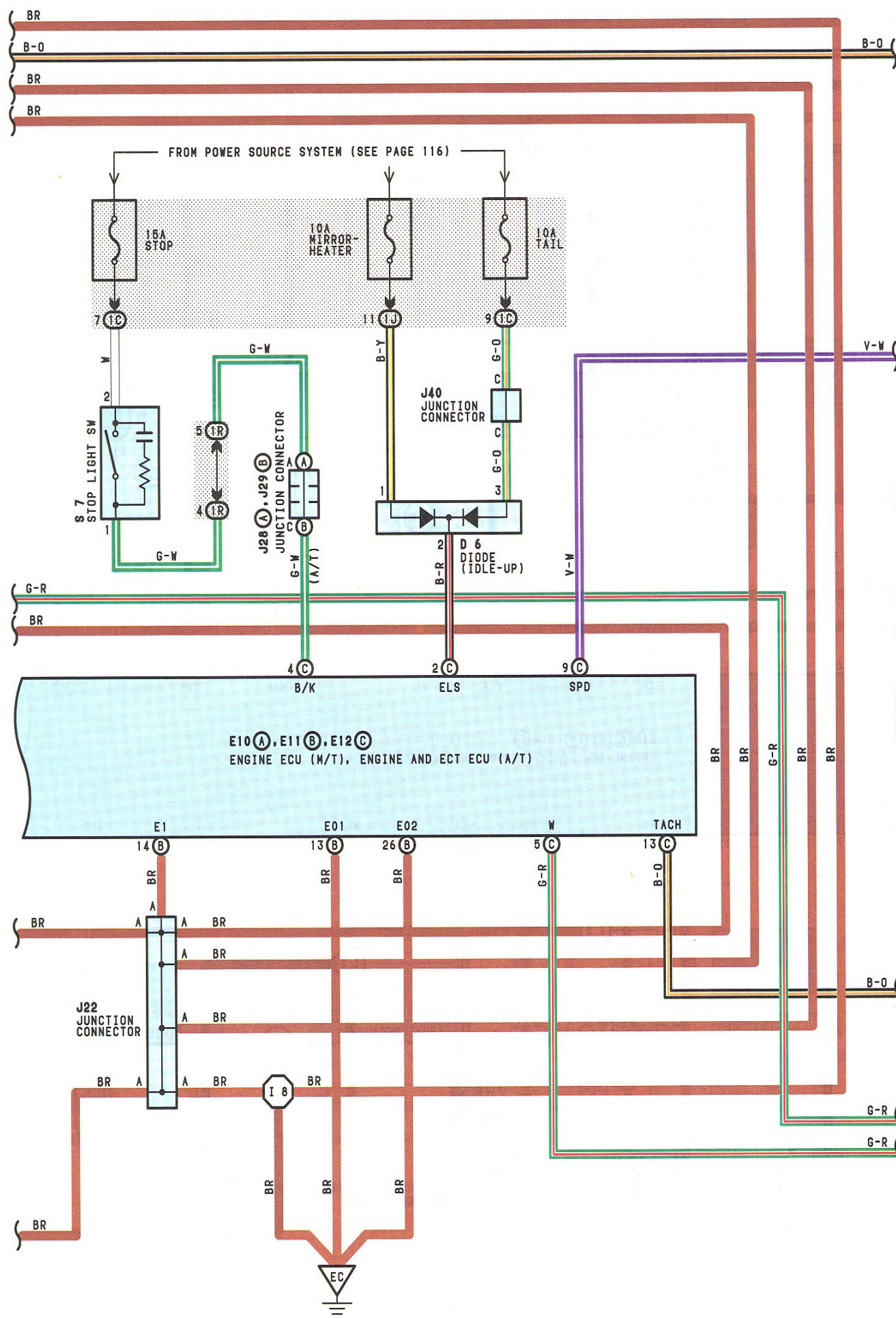
ENGINE CONTROL (5S-FE LHD)



ENGINE CONTROL(5S-FE LHD)



ENGINE CONTROL (5S-FE LHD)



SERVICE HINTS

CIR OPN RELAY

① 3-① 5:CLOSED WITH THE IGNITION SW AT ON OR ST POSITION

EFI RELAY

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

E 4 EFI WATER TEMP. SENSOR

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

E 6 ①, E 7 ②, E 8 ③ ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T)

BATT-E1:ALWAYS 9.0-14.0 VOLTS

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

VC-E1:ALWAYS 4.5-5.5 VOLTS (IGNITION SW AT ON POSITION)

VTA-E1:0.3- 0.8 VOLTS (IGNITION SW ON AND THROTTLE VALVE FULLY CLOSED)

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

THA-E1:0.5- 3.4 VOLTS (IGNITION SW ON AND INTAKE AIR TEMP. 20°C, 68°F)

THW-E1:0.2- 1.0 VOLTS (ENGINE IDLING AND COOLANT TEMP. 80°C, 176°F)

#10, #20-E01:9.0-14.0 VOLTS (IGNITION SW AT ON POSITION)

PULSE GENERATION (ENGINE IDLING)

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

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

PULSE GENERATION (ENGINE IDLING)

G-NE-:PULSE GENERATION (ENGINE IDLING)

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

ISCO, ISCC-E1:PULSE GENERATION (ENGINE IDLING)

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

BELOW 3.0 VOLTS (IGNITION SW ON AND SHIFT POSITION IN P OR N POSITION)

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

W-E1:BELOW 3.0 VOLTS (CHECK ENGINE WARNING LIGHT ON)

9.0-14.0 VOLTS (CHECK ENGINE WARNING LIGHT OFF AND ENGINE RUNNING)

ACA-E1:BELOW 1.5 VOLTS (ENGINE IDLING AND A/C SW ON)

7.5-14.0 VOLTS (A/C SW OFF)

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

BELOW 1.5 VOLTS (A/C SW OFF)

NSW-E1: 6.0 VOLTS OR MORE (ENGINE CRANKING)

I 7, I 8, I 9, I 10 INJECTOR

2-1:APPROX. 13.8 Ω

T 1 THROTTLE POSITION SENSOR

1-2:0.2-5.7 KΩ WITH CLEARANCE BETWEEN LEVER AND STOP SCREW 0 MM (0 IN.)

1-3:2.0-10.2 KΩ WITH THROTTLE VALVE FULLY OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A14	64(LHD)	I 8	62(5S-FE LHD)	J31 B	66(LHD)
C 1	62(5S-FE LHD)	I 9	62(5S-FE LHD)	J40	66(LHD)
C 2	62(5S-FE LHD)	I10	62(5S-FE LHD)	J41	66(LHD)
C 3	62(5S-FE LHD)	I13	62(5S-FE LHD)	J43	68(LHD)
C10 B	64(LHD)	I14	62(5S-FE LHD)	K 1	62(5S-FE LHD)
C11 C	64(LHD)	I15	64(LHD)	K 4	66(LHD)
D 6	64(LHD)	J 3	66(LHD)	N 1	62(5S-FE LHD)
E 4	62(5S-FE LHD)	J 5 A	66(LHD)	P 1	62(5S-FE LHD)
E10 A	64(5S-FE LHD)	J 6 B	66(LHD)	S 1	62(5S-FE LHD)
E11 B	64(5S-FE LHD)	J15	66(LHD)	S 7	66(LHD)
E12 C	64(5S-FE LHD)	J18	66(LHD)	T 1	62(5S-FE LHD)
F10 A	62(5S-FE LHD)	J19	66(LHD)	T 2	66(LHD)
F12 C	62(5S-FE LHD)	J20	66(LHD)	T 4	66(LHD)
F19	68(LHD)	J21	66(LHD)	V 1	62(5S-FE LHD)
H 7	62(5S-FE LHD)	J22	66(LHD)	V 2	62(5S-FE LHD)
I 2	62(5S-FE LHD)	J28 A	66(LHD)	V 4	62(5S-FE LHD)
I 3	62(5S-FE LHD)	J29 B	66(LHD)		
I 7	62(5S-FE LHD)	J30 A	66(LHD)		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
I	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1K		
1R		
1W		
2A	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2C		
2F		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K		
2L	56(LHD)	

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	84(5S-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
ID1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
I83	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3		
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IO1	88(LHD)	COWL WIRE AND SWITCH WIRE (INSTRUMENT PANEL BRACE LH)

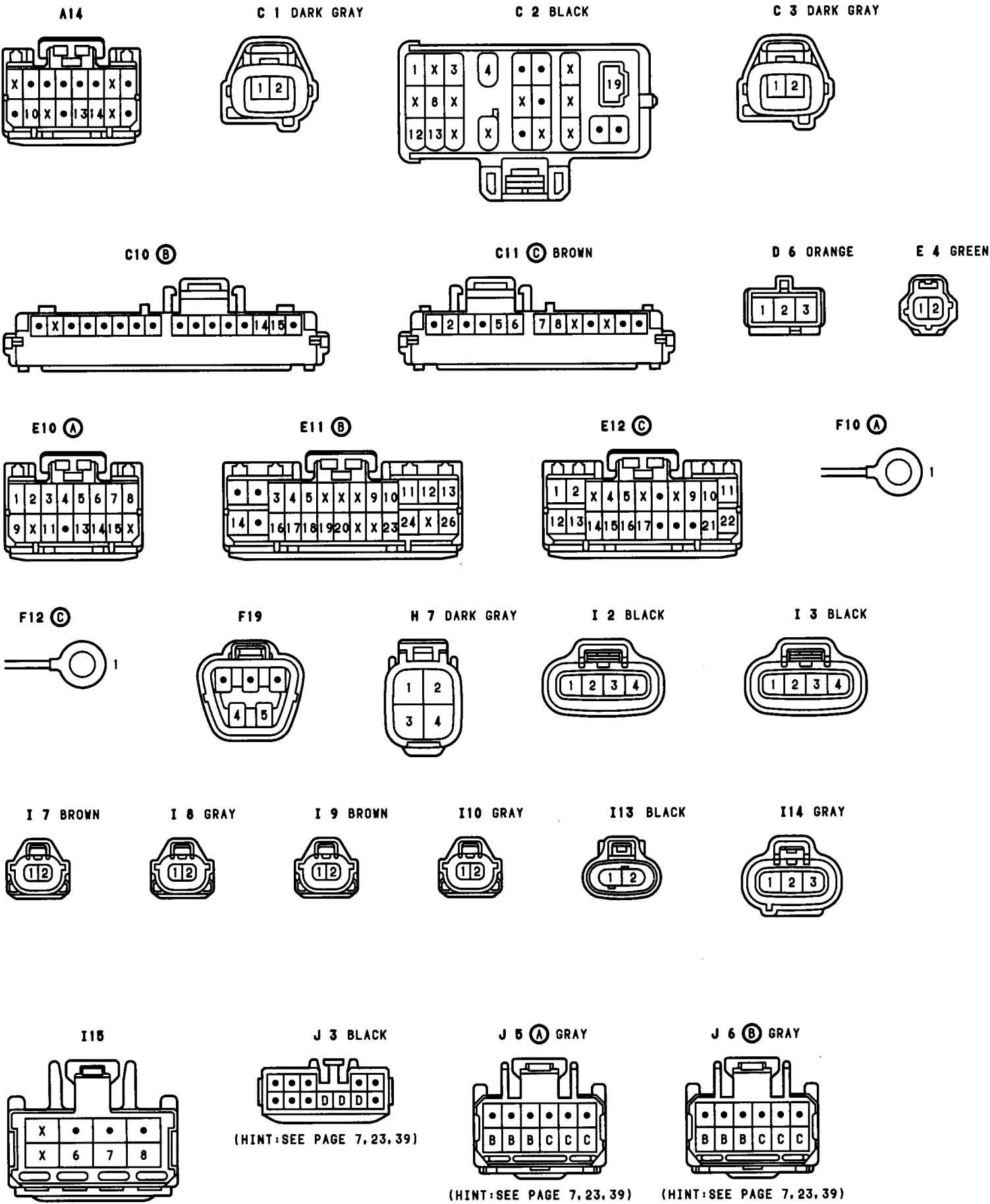
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	84(5S-FE LHD)	BEHIND HEADLIGHT LH
EC	84(5S-FE LHD)	BEHIND INTAKE MANIFOLD
IH	86(LHD)	INSTRUMENT PANEL BRACE RH
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BN	90(LHD)	BACK PANEL CENTER

○ : SPLICE POINTS

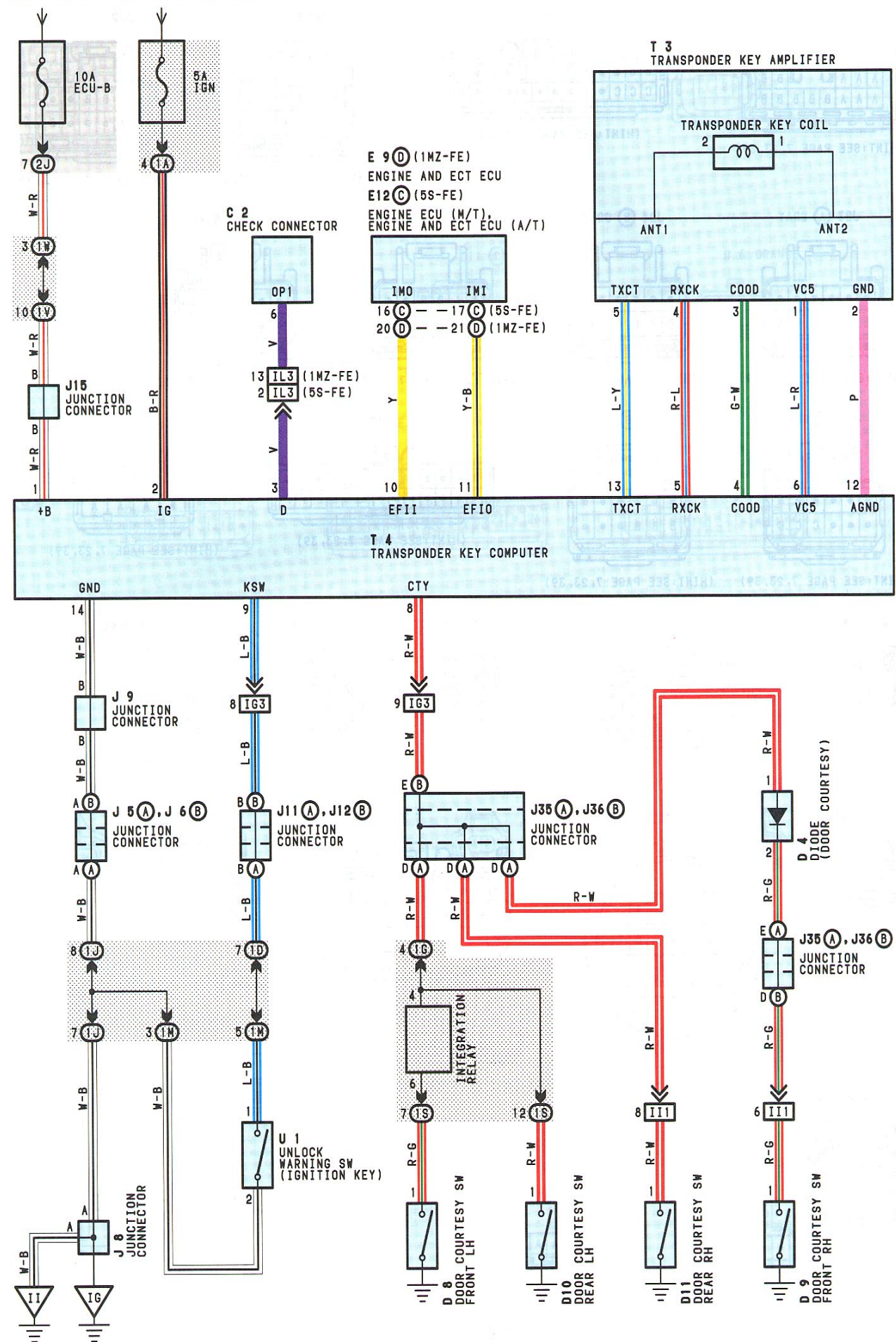
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 1	88(LHD)	COWL WIRE	I 8	88(LHD)	ENGINE WIRE

ENGINE CONTROL(5S-FE LHD)



ENGINE IMMOBILISER SYSTEM(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

T 4 TRANSPONDER KEY COMPUTER

- 1-GROUND: ALWAYS APPROX. 12 VOLTS
- 2-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION
- 8-GROUND: CONTINUITY WITH THE DOOR OPENED
- 9-GROUND: CONTINUITY WITH THE IGNITION KEY IN CYLINDER
- 14-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 2	60(1MZ-FE LHD) 62(5S-FE LHD)	E 9	D	64(1MZ-FE LHD)	J12 B 66(LHD)
D 4	64(LHD)	E12	C	64(5S-FE LHD)	J15 66(LHD)
D 8	68(LHD)	J 5	A	66(LHD)	J35 A 66(LHD)
D 9	68(LHD)	J 6	B	66(LHD)	J36 B 66(LHD)
D10	68(LHD)	J 8		66(LHD)	T 3 66(LHD)
D11	68(LHD)	J 9		66(LHD)	T 4 66(LHD)
		J11	A	66(LHD)	U 1 66(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

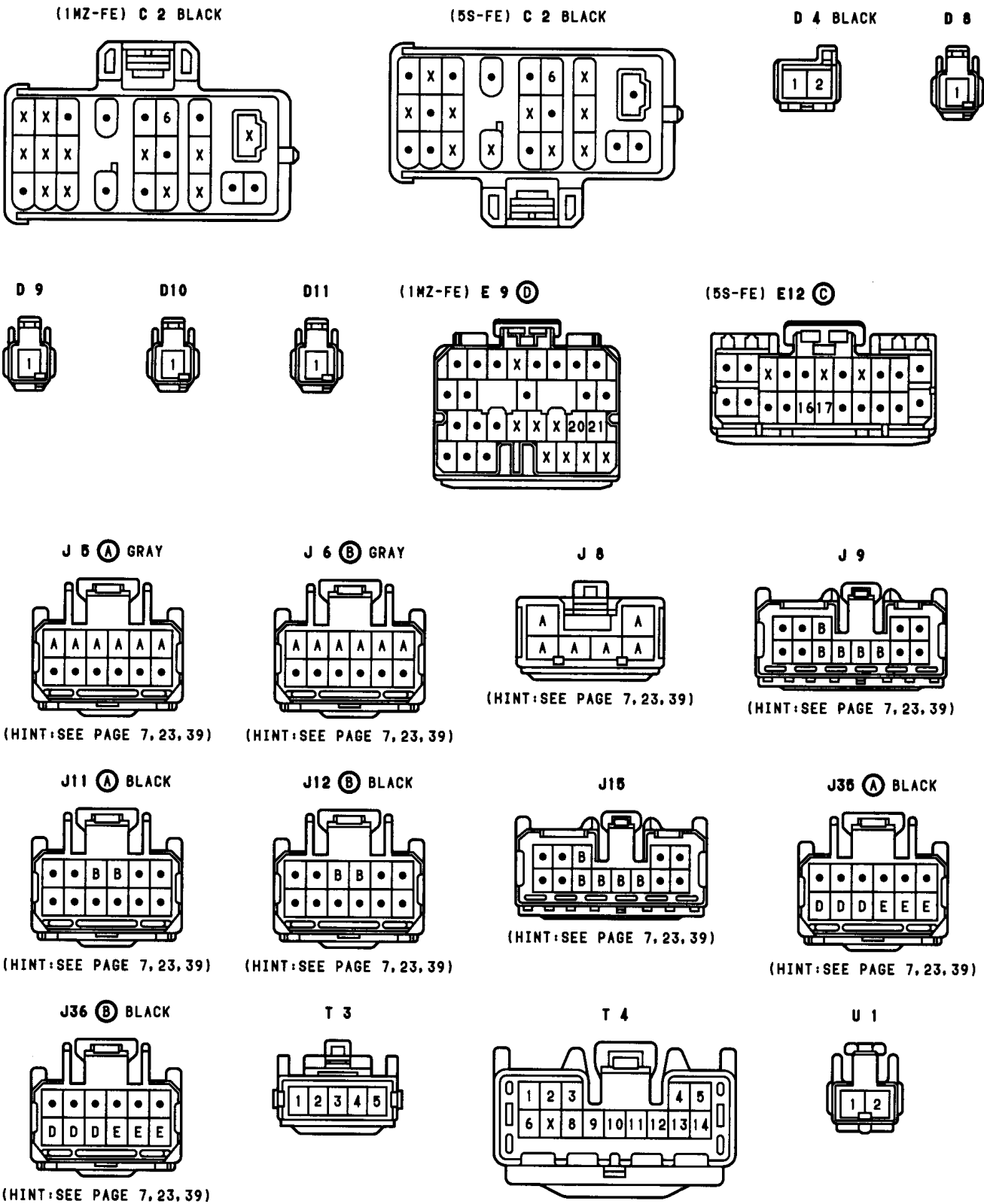
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
1G3	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
1I1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
1L3	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)

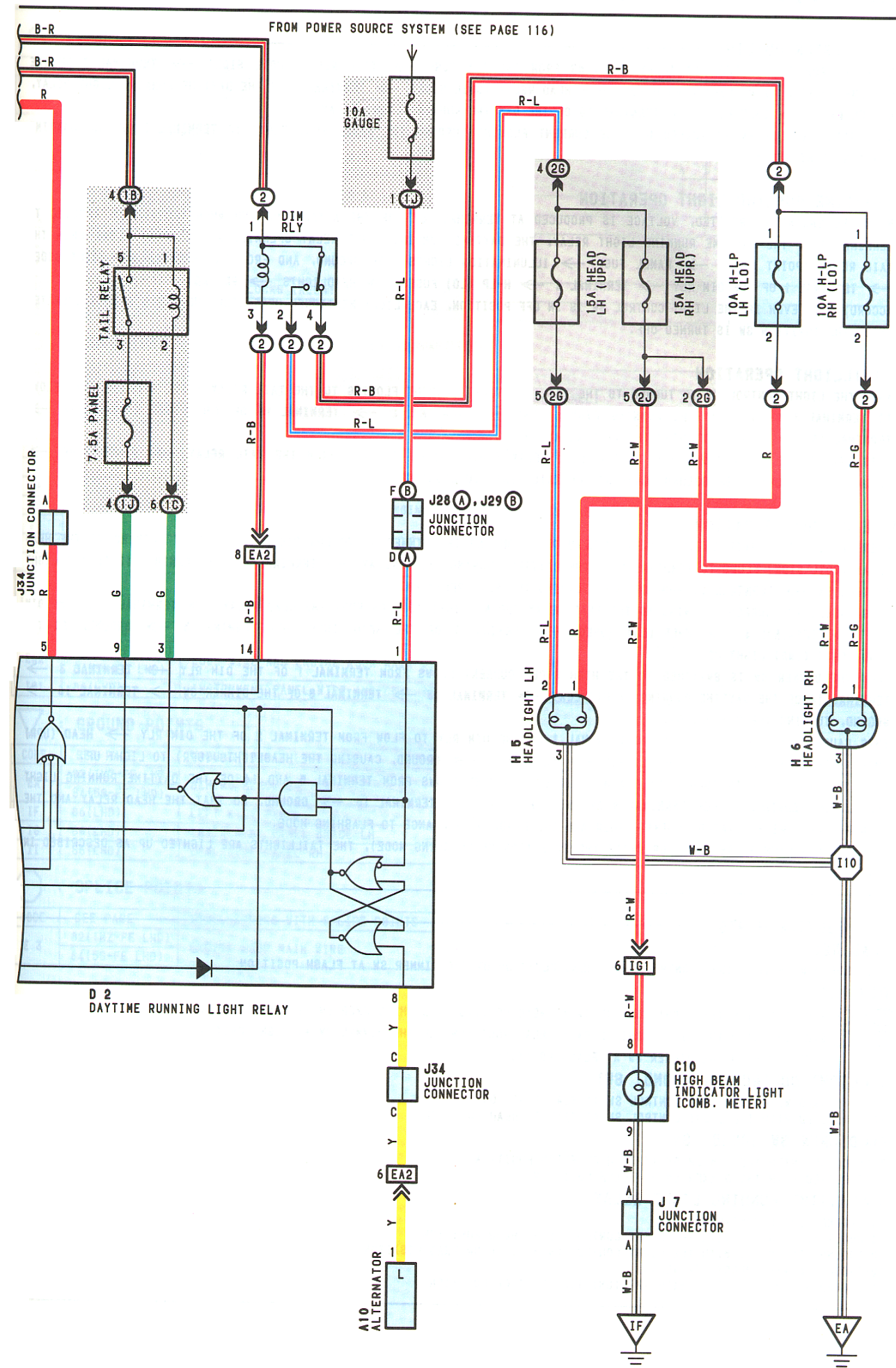
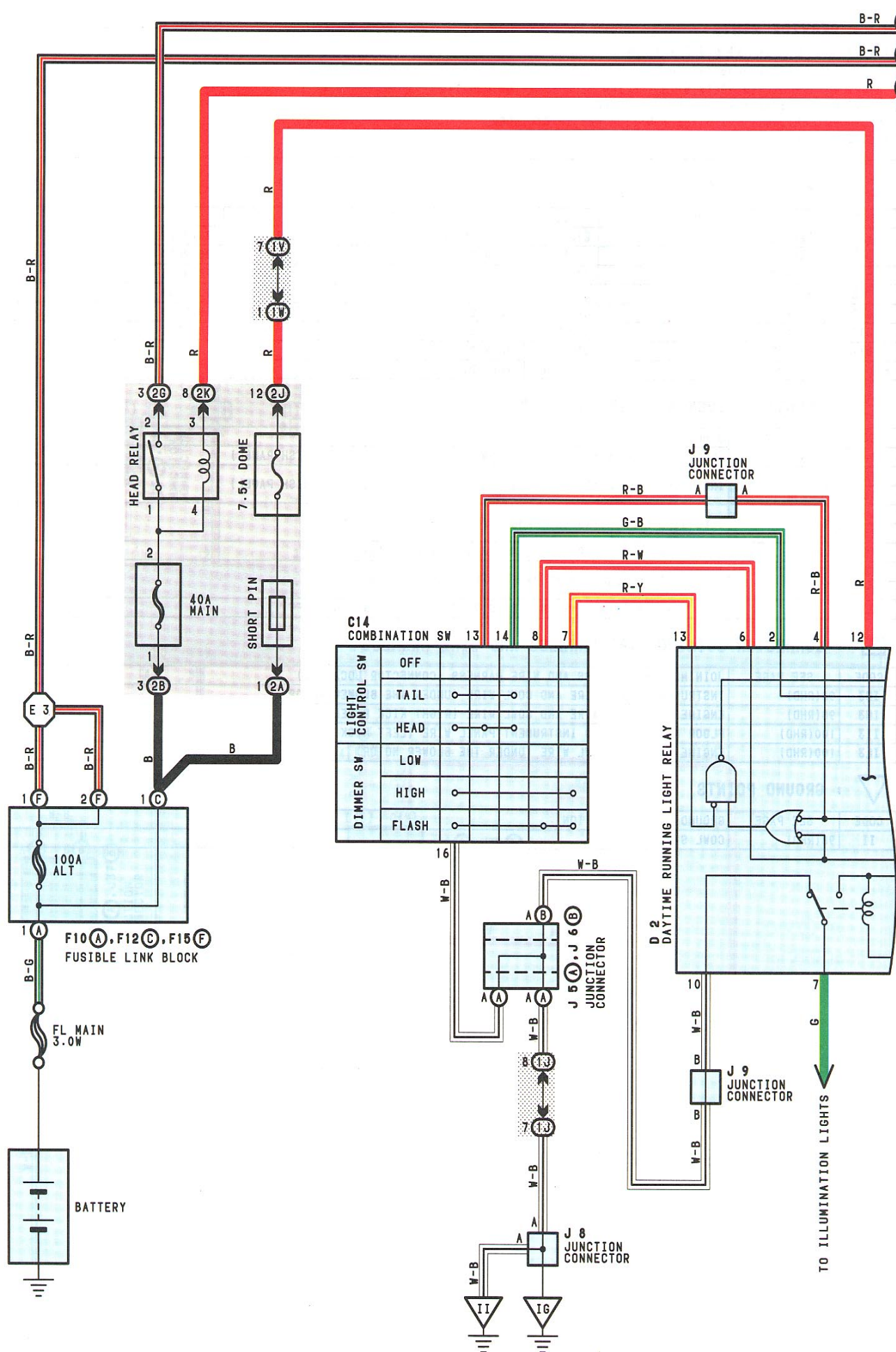
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
1G	86(LHD)	INSTRUMENT PANEL BRACE LH
1I	86(LHD)	COWL SIDE PANEL RH

ENGINE IMMOBILISER SYSTEM(LHD)



HEADLIGHT(w/ DAYTIME RUNNING LIGHT LHD)



HEADLIGHT(w/ DAYTIME RUNNING LIGHT LHD)

SYSTEM OUTLINE

CURRENT FROM THE BATTERY IS ALWAYS FLOWING FROM THE ALT FUSE → TAIL RELAY (COIL SIDE) → **TERMINAL 3** OF THE DAYTIME RUNNING LIGHT RELAY, MAIN FUSE → HEAD RELAY (COIL SIDE) → **TERMINAL 5** OF THE DAYTIME RUNNING LIGHT RELAY, AND FL MAIN → DONE FUSE → **TERMINAL 12** OF THE DAYTIME RUNNING LIGHT RELAY.

WHEN THE IGNITION SW IS TURNED ON, THE CURRENT FLOWING THROUGH THE GAUGE FUSE FLOWS TO **TERMINAL 1** OF THE DAYTIME RUNNING LIGHT RELAY.

1.DAYTIME RUNNING LIGHT OPERATION

WHEN THE ENGINE IS STARTED, VOLTAGE IS PRODUCED AT **TERMINAL 'L'** OF THE ALTERNATOR AND WHEN VOLTAGE IS APPLIED TO **TERMINAL 8** OF THE DAYTIME RUNNING LIGHT RELAY, THE DAYTIME RUNNING LIGHT RELAY OPERATES AND CURRENT FLOWS FROM THE TAIL RELAY (POINT SIDE) → **PANEL FUSE** → **ILLUMINATION LIGHTS** → **GROUND**, AND FROM THE HEAD RELAY (POINT SIDE) → **TERMINAL 1** OF THE DIM RLY → **TERMINAL 4** → **H-LP (LO) FUSES** → **HEADLIGHTS** → **GROUND**.

ACCORDINGLY, EVEN IF THE LIGHT CONTROL SW IS IN OFF POSITION, EACH LIGHT MENTIONED HERE LIGHT UP. THIS SYSTEM OPERATES UNTIL THE IGNITION SW IS TURNED OFF.

2.TAILLIGHT OPERATION

WHEN THE LIGHT CONTROL SW IS TURNED TO THE TAIL POSITION, CURRENT FLOWING TO THE TAIL RELAY (COIL SIDE) ALWAYS FLOWS TO **TERMINAL 3** OF THE DAYTIME RUNNING LIGHT RELAY → **TERMINAL 2** → **TERMINAL 15** OF THE LIGHT CONTROL SW → **TERMINAL 16** → **GROUND**, TURNING THE TAIL RELAY ON.

THIS CAUSES THE CURRENT FLOWING TO THE TAIL RELAY (POINT SIDE) TO FLOW FROM THE TAIL RELAY → **PANEL FUSE** → **ILLUMINATION LIGHTS** → **GROUND**, CAUSING THE TAILLIGHTS TO LIGHT UP.

3.HEADLIGHT OPERATION

WHEN THE LIGHT CONTROL SW IS TURNED TO HEAD POSITION AND THE DIMMER SW TO LOW SIDE, THE CURRENT FLOWING TO THE HEAD RELAY (COIL SIDE) FLOWS TO **TERMINAL 5** OF THE DAYTIME RUNNING LIGHT RELAY → **TERMINAL 4** → **TERMINAL 13** OF THE LIGHT CONTROL SW → **TERMINAL 16** → **GROUND**, TURNING THE HEAD RELAY ON.

THIS CAUSES THE CURRENT FLOWING TO THE HEAD RELAY (POINT SIDE) TO FLOW FROM THE HEAD RELAY → **TERMINAL 1** OF THE DIM RLY → **TERMINAL 4** → **H-LP (LO) FUSES** → **TERMINAL 1** OF THE HEADLIGHTS → **TERMINAL 3** → **GROUND**, SO THE HEADLIGHTS (LWR) LIGHT UP.

WHEN THE DIMMER SW IS SWITCHED TO THE HIGH SIDE, CURRENT FLOWS FROM **TERMINAL 1** OF THE DIM RLY → **TERMINAL 3** → **TERMINAL 14** OF THE DAYTIME RUNNING LIGHT RELAY → **TERMINAL 13** → **TERMINAL 8** OF THE DIMMER SW → **TERMINAL 16** → **GROUND**, TURNING THE DIM RLY ON.

THIS CAUSES THE CURRENT FLOWING TO **TERMINAL 1** OF THE DIM RLY TO FLOW FROM **TERMINAL 2** OF THE DIM RLY → **HEAD (UPR) FUSES** → **TERMINAL 2** OF THE HEADLIGHTS → **TERMINAL 3** → **GROUND**, CAUSING THE HEADLIGHTS (UPR) TO LIGHT UP.

WHEN THE DIMMER SW IS TURNED TO FLASH POSITION, CURRENT FLOWS FROM **TERMINAL 5** AND **14** OF THE DAYTIME RUNNING LIGHT RELAY → **TERMINAL 6** → **TERMINAL 9** OF THE DIMMER SW → **TERMINAL 16** → **GROUND**, SO THAT THE HEAD RELAY AND THE DIMMER RELAY ARE ACTIVATED IN THAT ORDER ARE THE HEADLIGHTS CHANGE TO FLASHING MODE.

WHEN THE HEADLIGHTS ARE LIGHT UP (WITH THE EXCEPTION OF FLASHING MODE), THE TAILLIGHTS ARE LIGHTED UP AS DESCRIBED IN PART 2 EARLIER.

SERVICE HINTS

HEAD RELAY

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

DIM RLY

②1-②4:CLOSED WITH THE LIGHT CONTROL SW AT HEAD POSITION AND THE DIMMER SW AT LOW POSITION

②1-②2:CLOSED WITH THE LIGHT CONTROL SW AT HEAD POSITION AND THE DIMMER SW AT HIGH POSITION

CLOSED WITH THE DIMMER SW AT FLASH POSITION

C14 LIGHT CONTROL SW (COMB. SW)

13-16:CLOSED WITH THE LIGHT CONTROL SW AT HEAD POSITION

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

C14 DIMMER SW (COMB. SW)

7-16:CLOSED WITH THE DIMMER SW AT HIGH OR FLASH POSITION

8-16:CLOSED WITH THE DIMMER SW AT FLASH POSITION

D 2 DAYTIME RUNNING LIGHT RELAY

10-GROUND:ALWAYS CONTINUITY

4-GROUND:CONTINUITY WITH THE LIGHT CONTROL SW AT HEAD POSITION

2-GROUND:CONTINUITY WITH THE LIGHT CONTROL SW AT TAIL OR HEAD POSITION

12-GROUND:ALWAYS APPROX. 12 VOLTS

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

○ : PARTS LOCATION

CODE		SEE PAGE		CODE		SEE PAGE		CODE		SEE PAGE	
A10		60(1MZ-FE LHD)		F12	C	62(5S-FE LHD)		J 6	B	66(LHD)	
		62(5S-FE LHD)				60(1MZ-FE LHD)				J 7	
C10		64(LHD)		F15	F	62(5S-FE LHD)		J 8		66(LHD)	
C14		64(LHD)				60(1MZ-FE LHD)		J 9		66(LHD)	
D 2		64(LHD)		H 5		62(5S-FE LHD)		J28		A	66(LHD)
F10	A	60(1MZ-FE LHD)				60(1MZ-FE LHD)		J29			
		62(5S-FE LHD)		62(5S-FE LHD)		J34		66(LHD)			
F12	C	60(1MZ-FE LHD)		J 5	A	66(LHD)					

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	59(LHD)	ENGINE ROOM R/B NO.2 (NEAR THE BATTERY)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		
1W		
2A		
2B	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2C		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	82(1MZ-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
	84(5S-FE LHD)	
IB1	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)

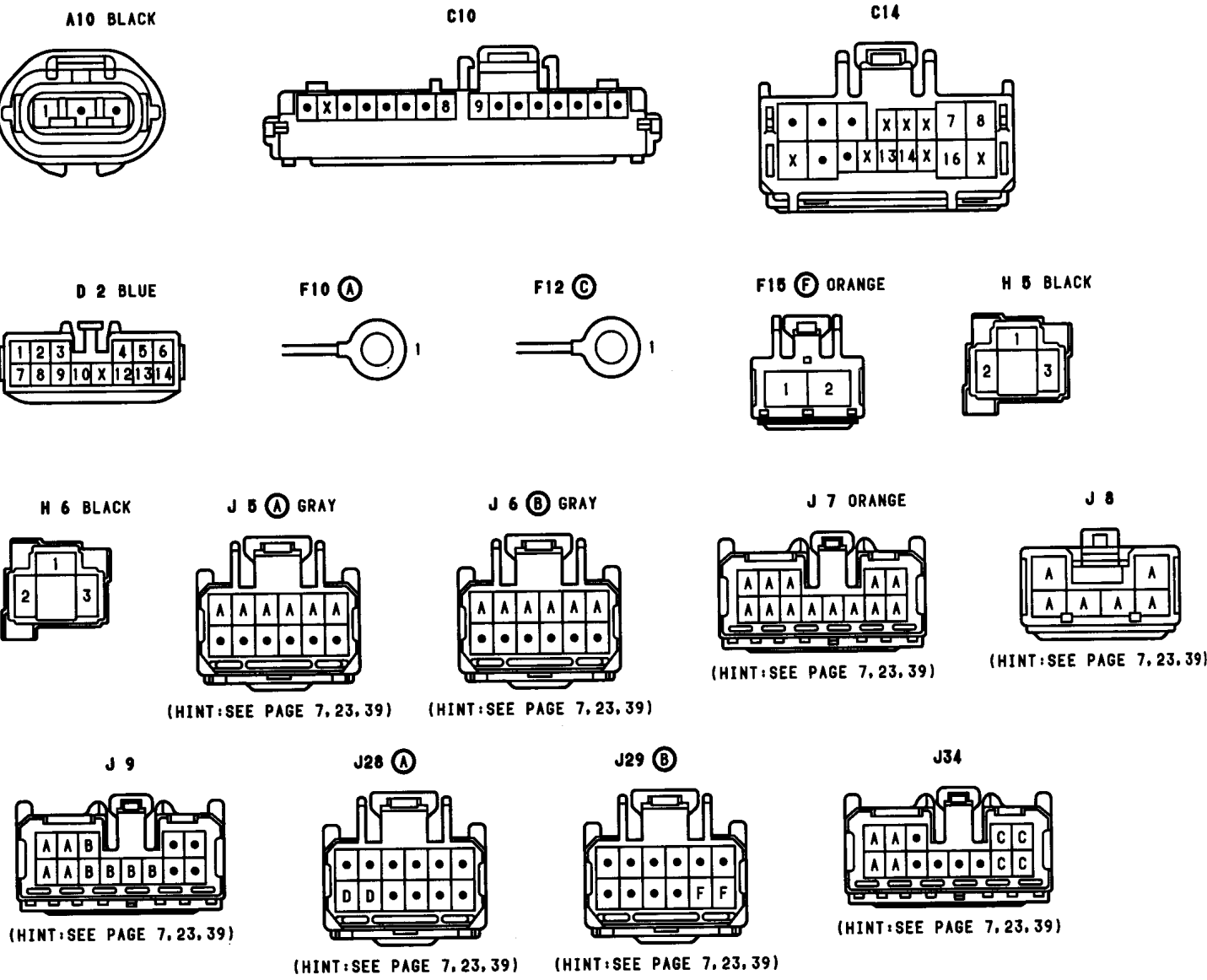
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD)	BEHIND HEADLIGHT RH
	84(5S-FE LHD)	
IF	86(LHD)	LEFT KICK PANEL
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

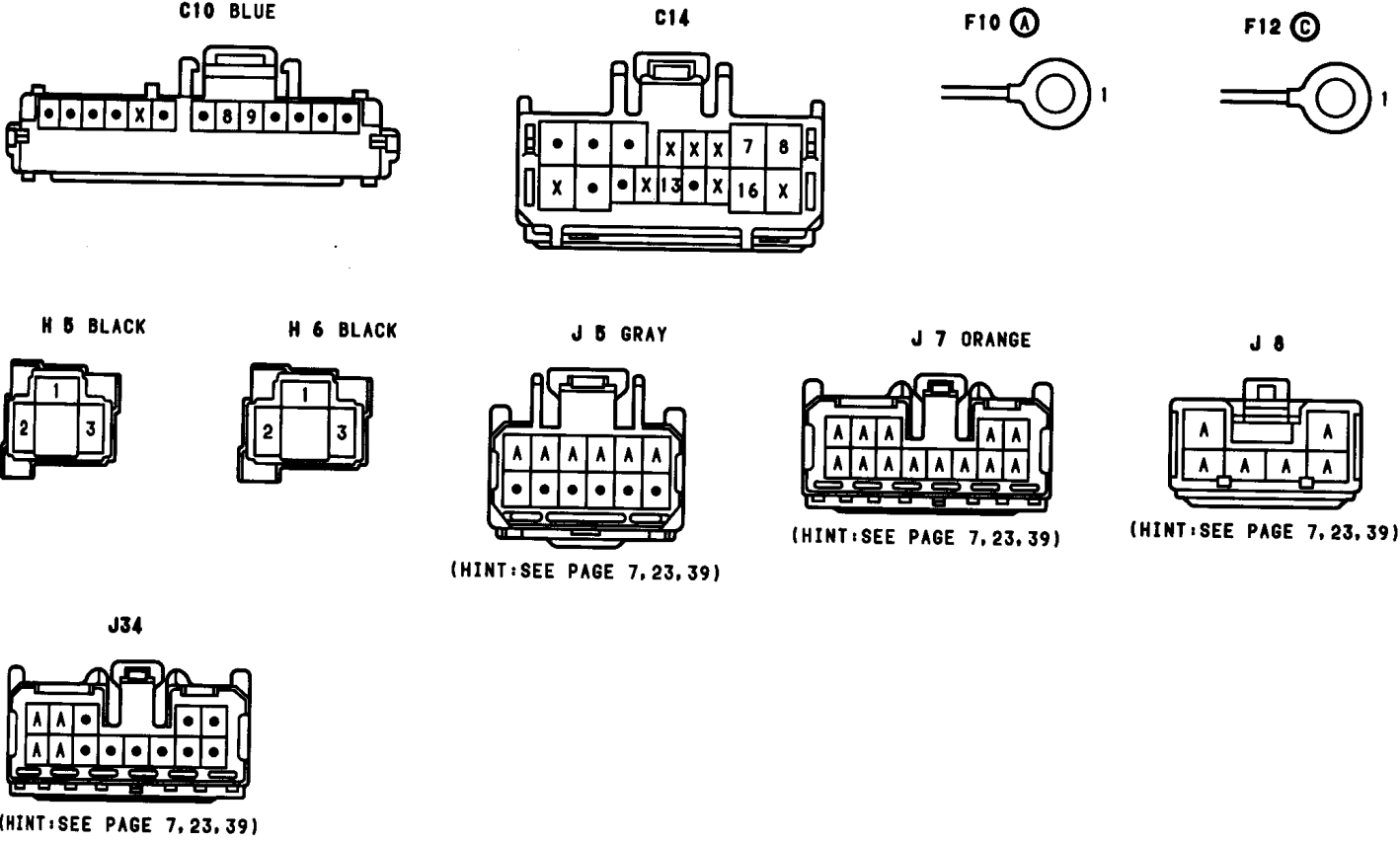
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	I10	88(LHD)	ENGINE ROOM MAIN WIRE
	84(5S-FE LHD)				

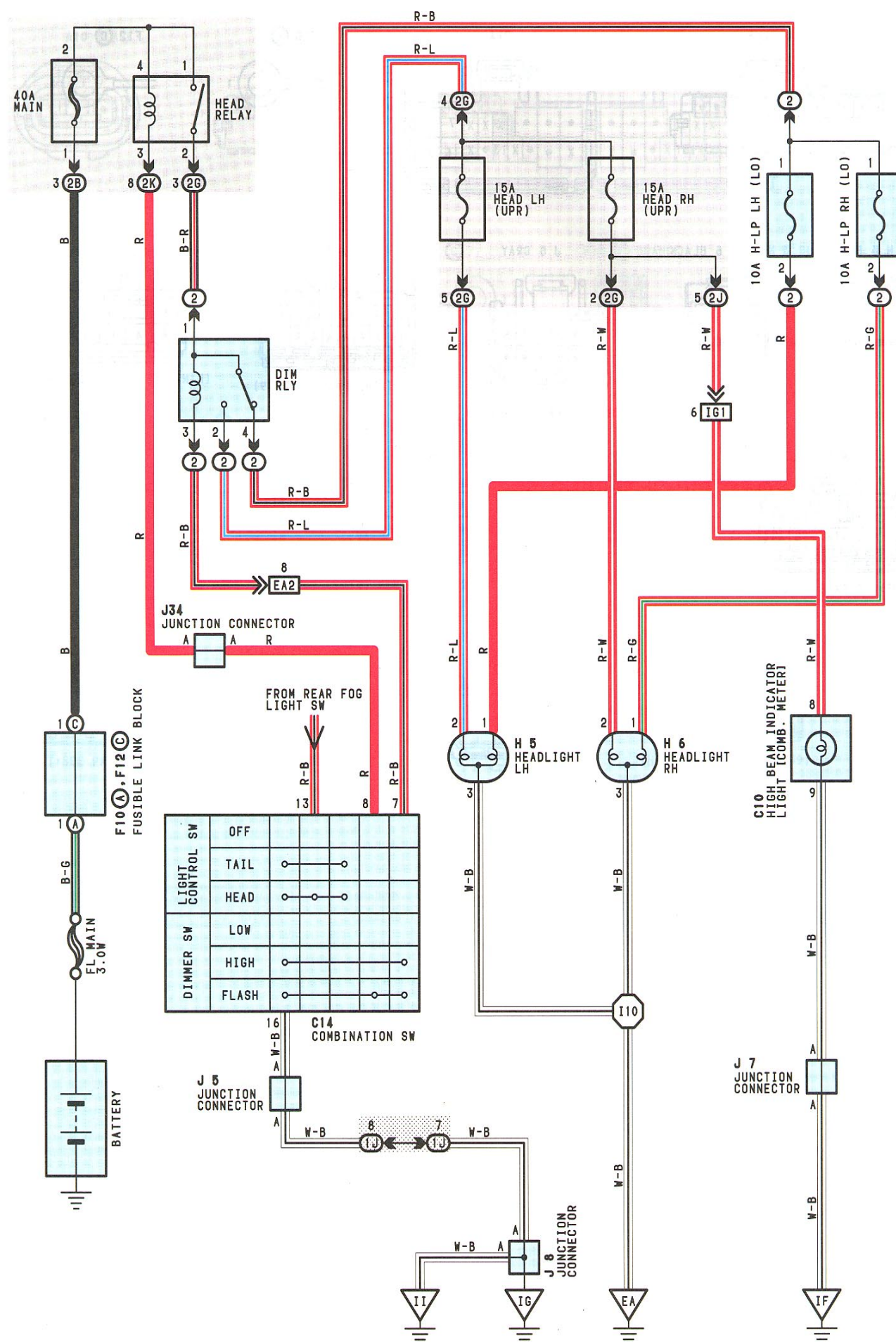
HEADLIGHT(w/ DAYTIME RUNNING LIGHT LHD)



HEADLIGHT(w/o DAYTIME RUNNING LIGHT LHD)



HEADLIGHT(w/o DAYTIME RUNNING LIGHT LHD)



SERVICE HINTS

HEAD RELAY

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

C14 COMBINATION SW

13-16:CLOSED WITH THE LIGHT CONTROL SW AT HEAD POSITION

7-16:CLOSED WITH THE DIMMER SW AT HIGH OR FLASH POSITION

8-16:CLOSED WITH THE DIMMER SW AT FLASH POSITION

○ : PARTS LOCATION

CODE		SEE PAGE		CODE		SEE PAGE		CODE		SEE PAGE	
C10		64(LHD)		F12	C	62(5S-FE LHD)		J 5	66(LHD)		
C14		64(LHD)		H 5		60(1MZ-FE LHD)		J 7	66(LHD)		
F10	A	60(1MZ-FE LHD)				62(5S-FE LHD)		J 8	66(LHD)		
		62(5S-FE LHD)				60(1MZ-FE LHD)		J34	66(LHD)		
F12	C	60(1MZ-FE LHD)		H 6		62(5S-FE LHD)					

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	59(LHD)	ENGINE ROOM R/B NO.2 (NEAR THE BATTERY)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	82(1M2-FE LHD) 84(5S-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
I61	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)

▽ : GROUND POINTS

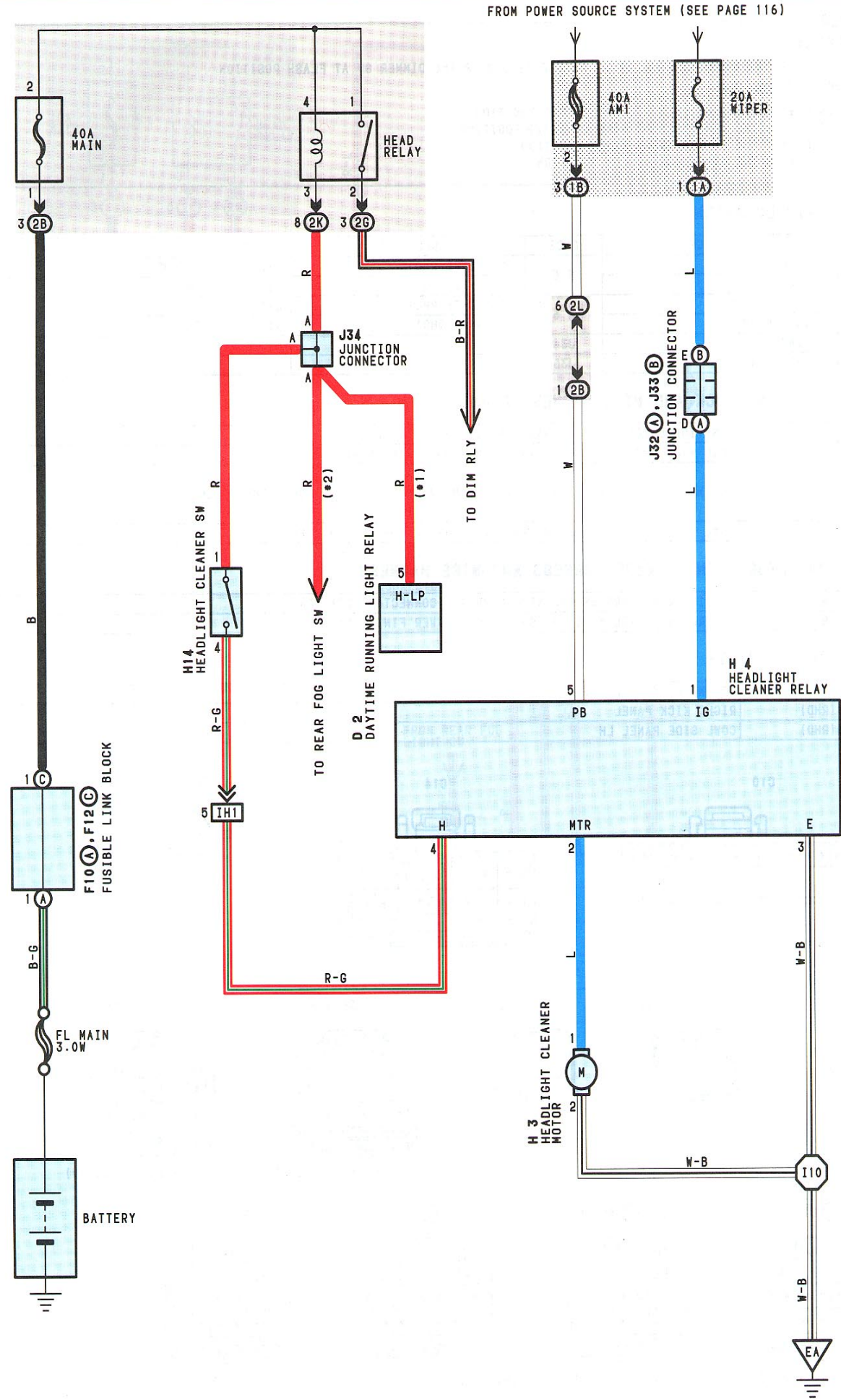
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1M2-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT RH
IF	86(LHD)	LEFT KICK PANEL
I6	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	88(LHD)	ENGINE ROOM MAIN WIRE			

HEADLIGHT CLEANER(LHD)

1:W/ DAYTIME RUNNING LIGHT
2:W/O DAYTIME RUNNING LIGHT



SERVICE HINTS

H 4 HEADLIGHT CLEANER RELAY

5-2:CLOSED WITH THE LIGHT CONTROL SW AT HEAD POSITION AND THE HEADLIGHT CLEANER SW ON

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE		SEE PAGE
D 2		64(LHD)	H 3	60(1MZ-FE LHD)	J32	A	66(LHD)
F10	A	60(1MZ-FE LHD)		62(5S-FE LHD)	J33	B	66(LHD)
		62(5S-FE LHD)		60(1MZ-FE LHD)	J34		66(LHD)
F12	C	60(1MZ-FE LHD)	H 4	62(5S-FE LHD)			
		62(5S-FE LHD)		H14	64(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1B		
2B	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2G		
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2L	56(LHD)	

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

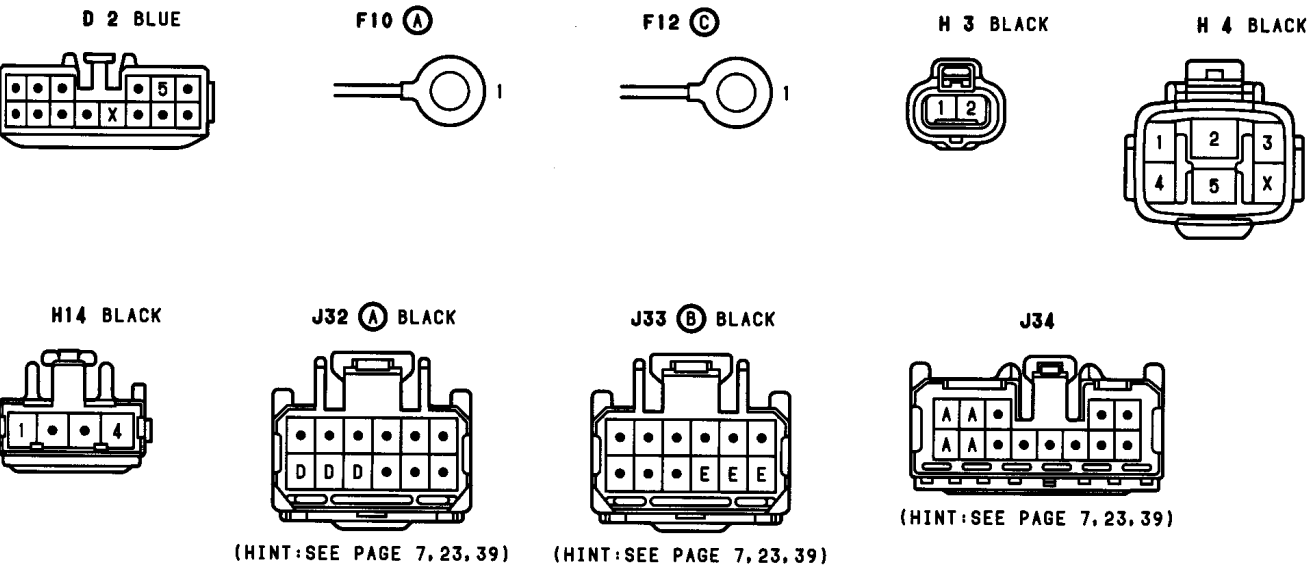
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IH1	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

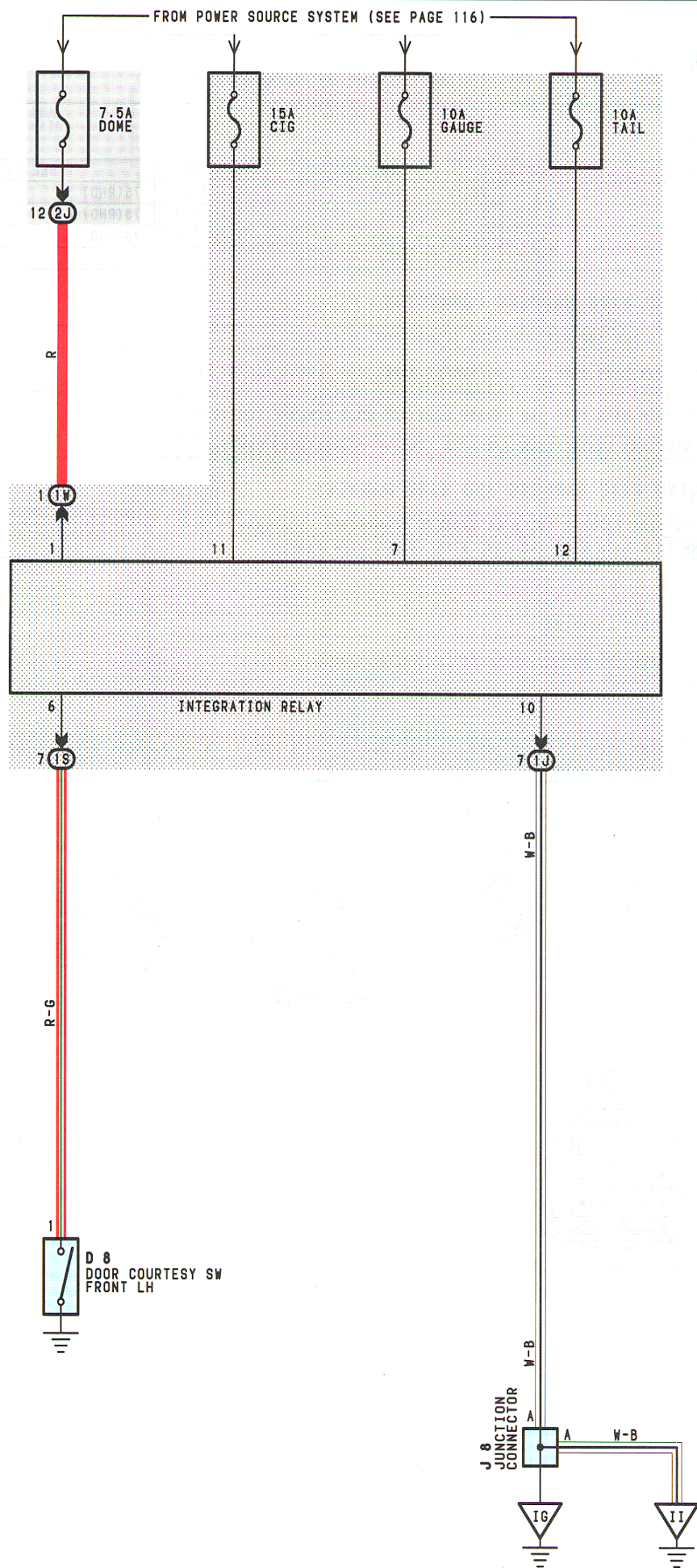
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD)	BEHIND HEADLIGHT RH
	84(5S-FE LHD)	

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	88(LHD)	ENGINE ROOM MAIN WIRE			



LIGHT REMINDER BUZZER(LHD)



SYSTEM OUTLINE

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

LIGHT REMINDER SYSTEM

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

SERVICE HINTS

INTEGRATION RELAY

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

D 8 DOOR COURTESY SW FRONT LH

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

○ : PARTS LOCATION

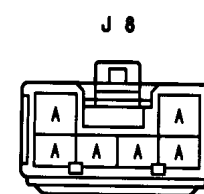
CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 8	66(LHD)	J 8	66(LHD)		

⊙ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1B	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

▽ : GROUND POINTS

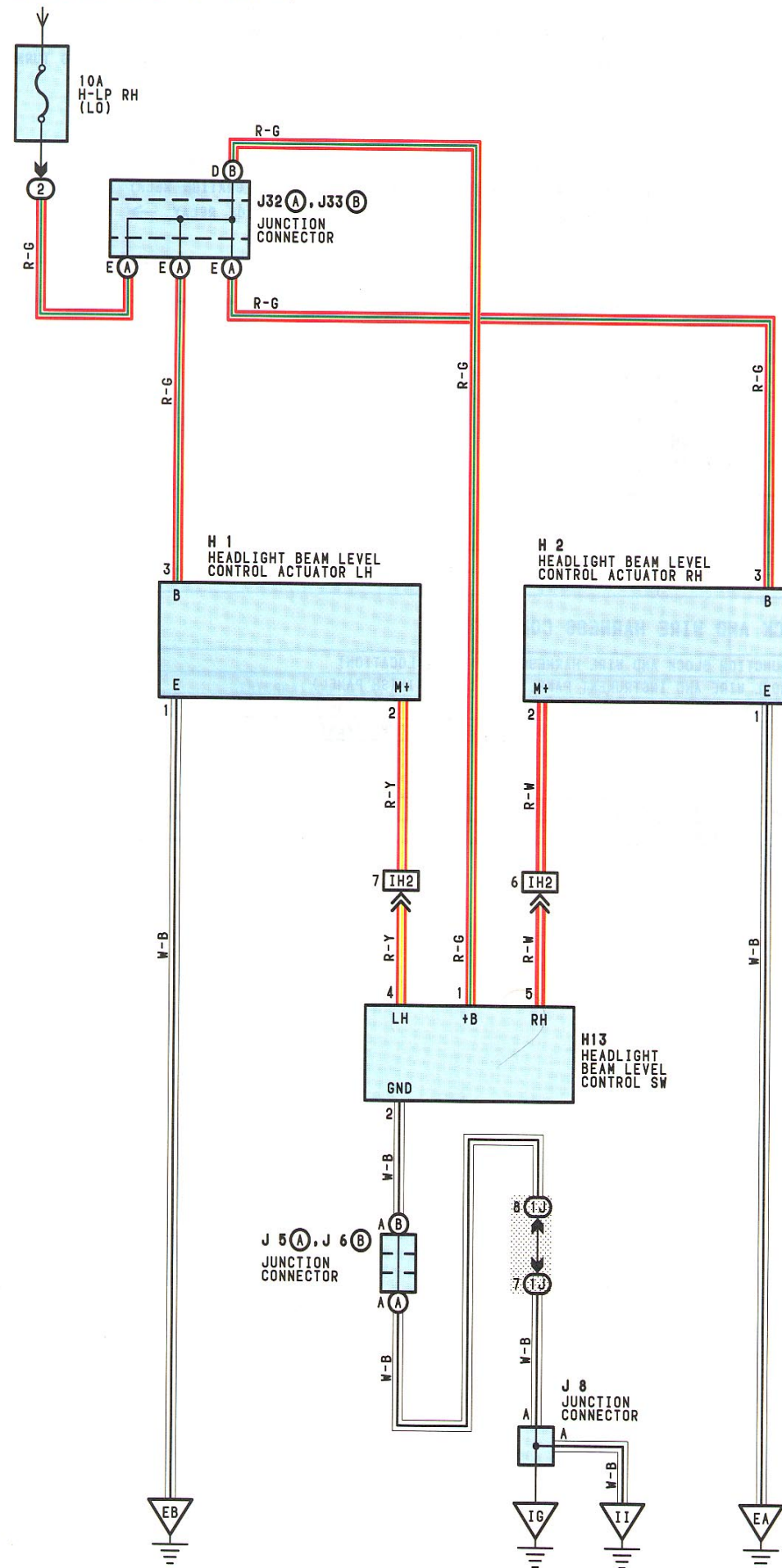
CODE	SEE PAGE	GROUND POINTS LOCATION
1B	86(LHD)	INSTRUMENT PANEL BRACE LH
1I	86(LHD)	COWL SIDE PANEL RH



(HINT: SEE PAGE 7, 23, 39)

HEADLIGHT BEAM LEVEL CONTROL(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

H 1, H 2 HEADLIGHT BEAM LEVEL CONTROL ACTUATOR LH, RH
3-GROUND: APPROX. 12 VOLTS WITH THE LIGHT CONTROL SW AT HEAD POSITION
1-GROUND: ALWAYS CONTINUITY
H13 HEADLIGHT BEAM LEVEL CONTROL SW
1-GROUND: APPROX. 12 VOLTS WITH THE LIGHT CONTROL SW AT HEAD POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
H 1	60(1MZ-FE LHD) 62(5S-FE LHD)	H13	64(LHD)	J32	A
		J 5	A		66(LHD)
H 2	60(1MZ-FE LHD) 62(5S-FE LHD)	J 6	B	J33	B
		J 8	66(LHD)		66(LHD)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
2	59(LHD)	ENGINE ROOM R/B NO.2 (NEAR THE BATTERY)

⦿ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

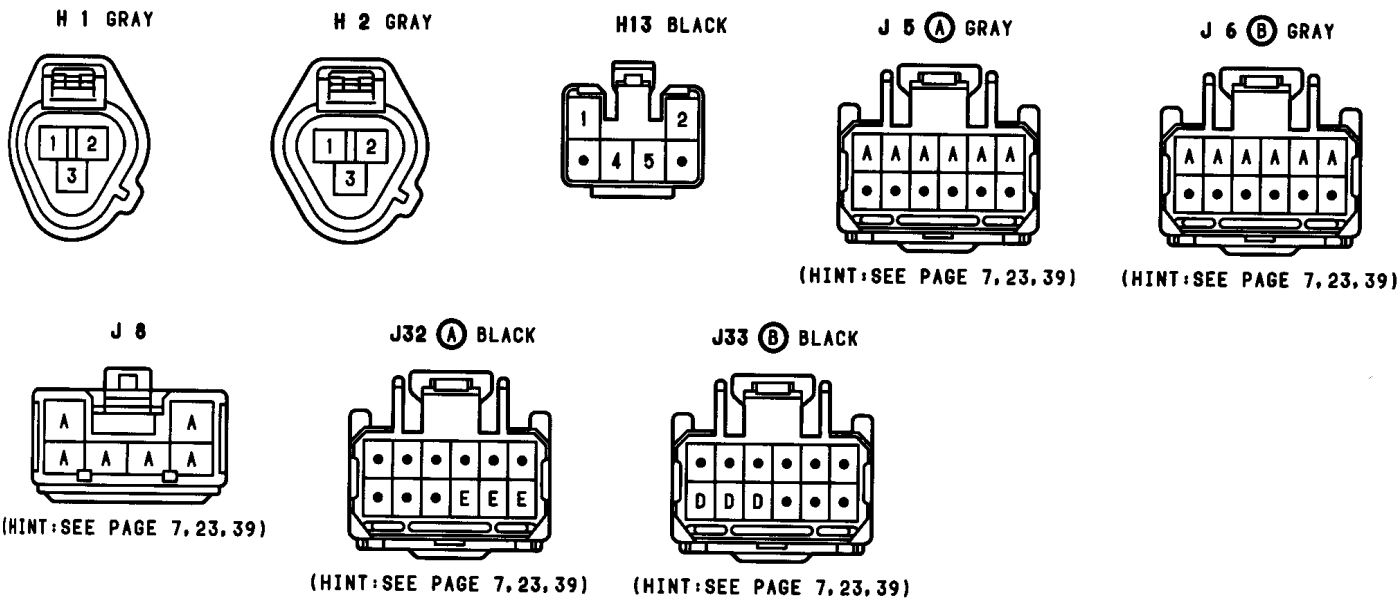
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IH2	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

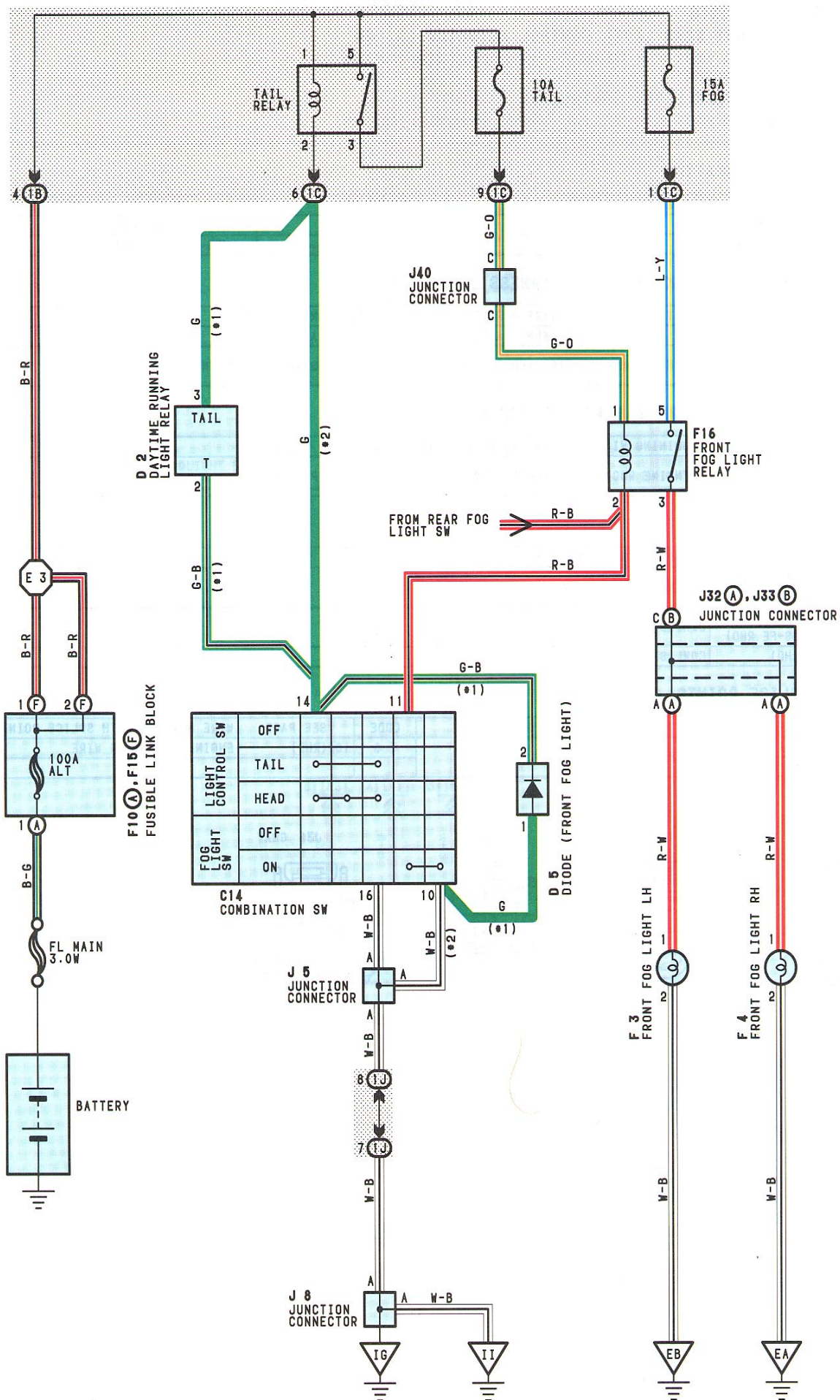
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT RH
EB	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT LH
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH



FRONT FOG LIGHT(LHD)

* 1:W/ DAYTIME RUNNING LIGHT
* 2:W/O DAYTIME RUNNING LIGHT



SERVICE HINTS

F16 FRONT FOG LIGHT RELAY

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C14	64(LHD)	F 4	62(5S-FE LHD)	J 5	66(LHD)
D 2	64(LHD)	F10	60(1MZ-FE LHD)	J 8	66(LHD)
D 5	64(LHD)	F15	62(5S-FE LHD)	J32	A 66(LHD)
F 3	60(1MZ-FE LHD)	F16	60(1MZ-FE LHD)	J33	B 66(LHD)
F 4	60(1MZ-FE LHD)	F16	62(5S-FE LHD)	J40	66(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

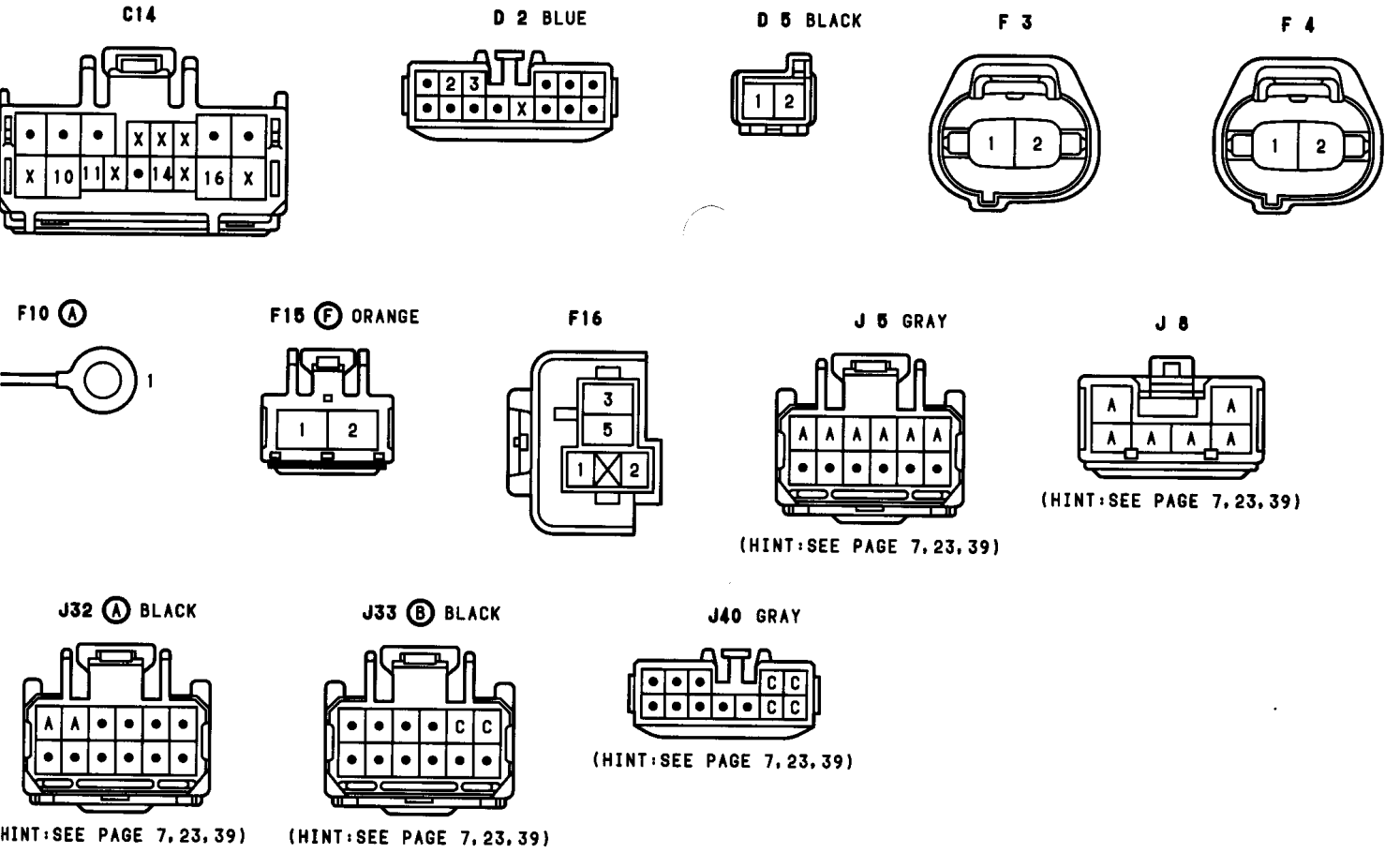
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1J		

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT RH
EB	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT LH
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

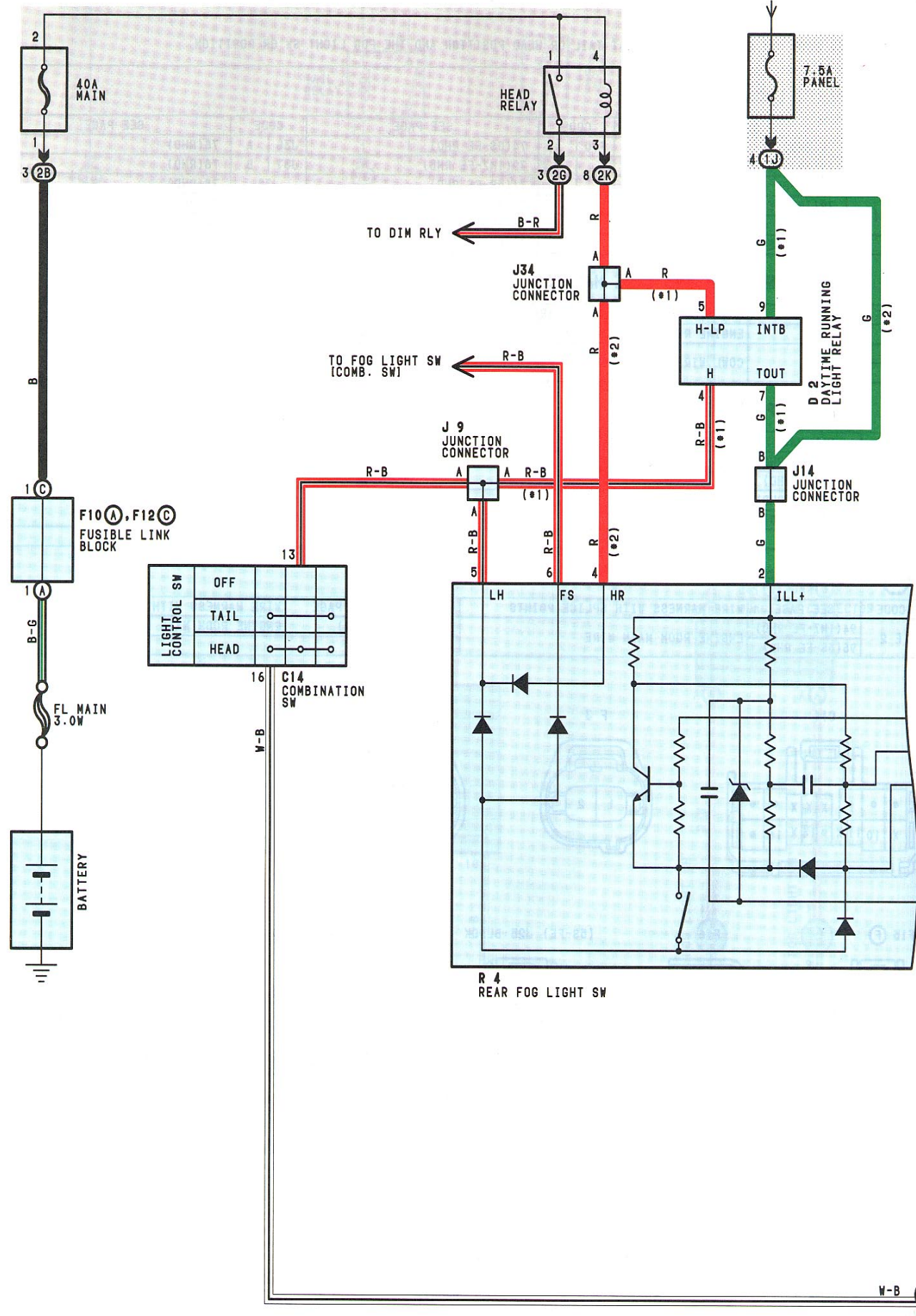
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	COWL WIRE	E 3	84(5S-FE LHD)	COWL WIRE



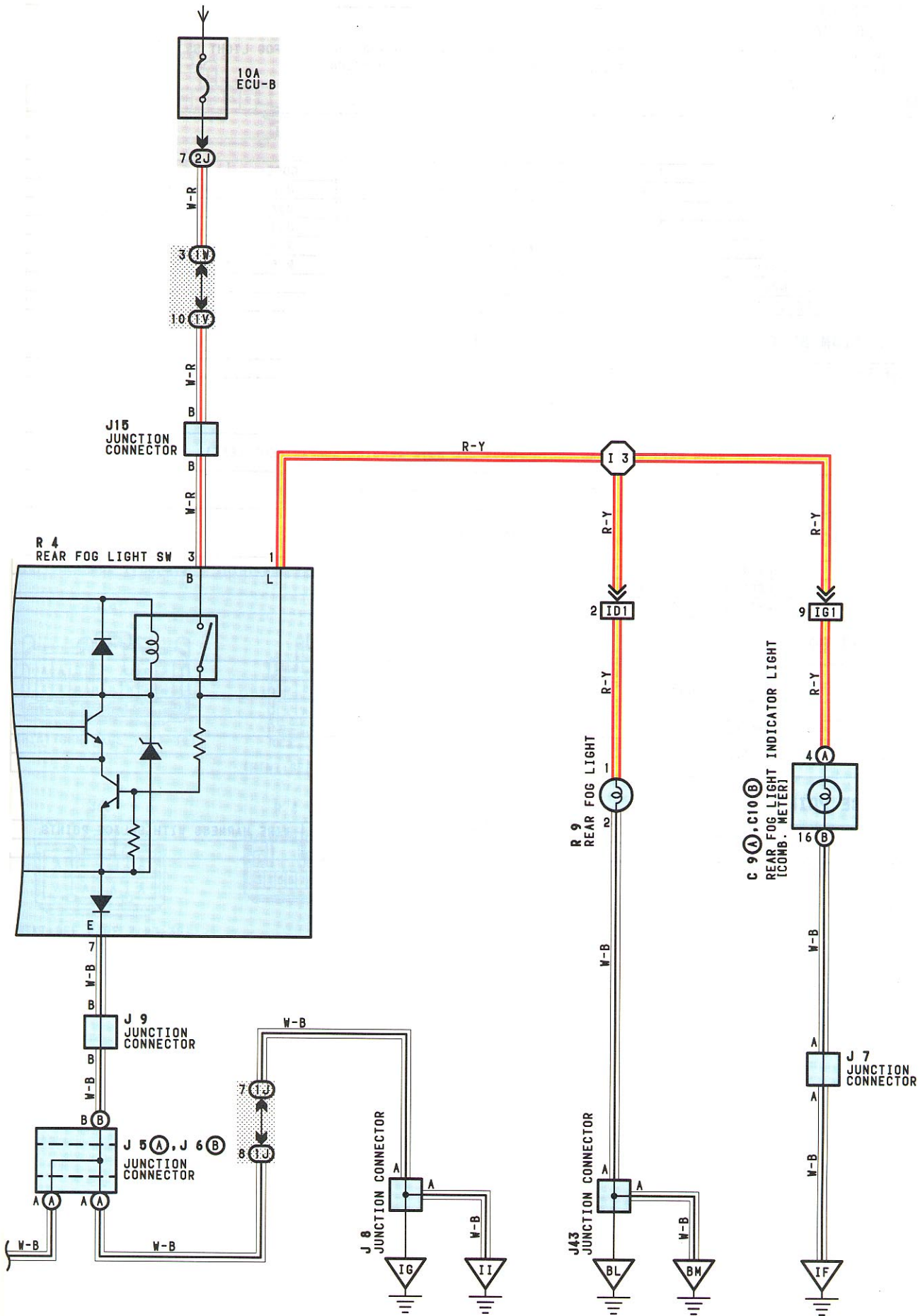
REAR FOG LIGHT(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



• 1:W/ DAYTIME RUNNING LIGHT
• 2:W/O DAYTIME RUNNING LIGHT

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



REAR FOG LIGHT(LHD)

SERVICE HINTS

R 4 REAR FOG LIGHT SW

- 1-GROUND:APPROX. 12 VOLTS WITH THE LIGHT CONTROL SW AT HEAD POSITION AND THE REAR FOG LIGHT SW AT ON POSITION
- 2-GROUND:APPROX. 12 VOLTS WITH THE LIGHT CONTROL SW AT HEAD OR TAIL POSITION
- 3,4,5-GROUND:ALWAYS APPROX. 12 VOLTS
- 7-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	A	64(LHD)	F12	C	62(5S-FE LHD)
C10	B	64(LHD)	J 5	A	66(LHD)
C14		64(LHD)	J 6	B	66(LHD)
D 2		64(LHD)	J 7		66(LHD)
F10	A	60(1MZ-FE LHD)	J 8		66(LHD)
		62(5S-FE LHD)	J 9		66(LHD)
F12	C	60(1MZ-FE LHD)	J14		66(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J		
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2B	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2G		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

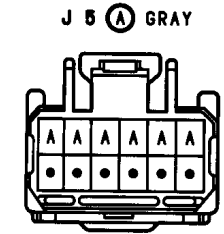
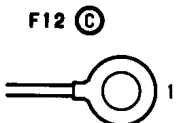
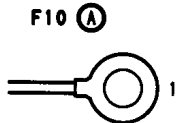
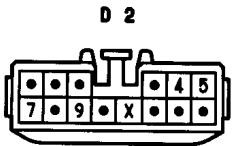
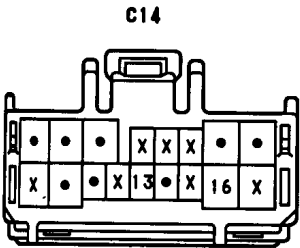
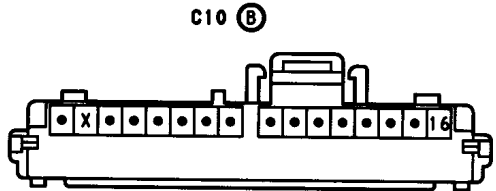
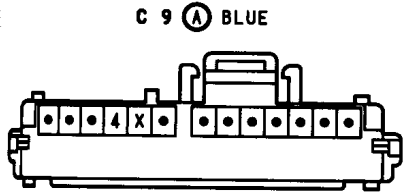
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IG1	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)

▽ : GROUND POINTS

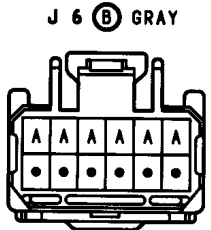
CODE	SEE PAGE	GROUND POINTS LOCATION
IF	86(LHD)	LEFT KICK PANEL
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BM	90(LHD)	BACK PANEL CENTER

○ : SPLICE POINTS

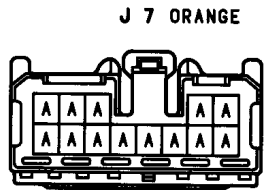
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 3	88(LHD)	COWL WIRE			



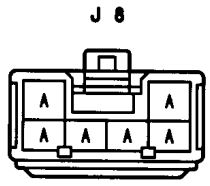
(HINT:SEE PAGE 7, 23, 39)



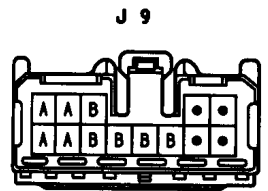
(HINT:SEE PAGE 7, 23, 39)



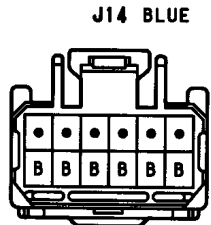
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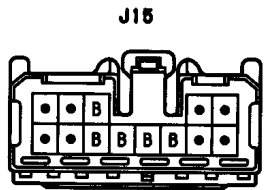
(HINT:SEE PAGE 7, 23, 39)



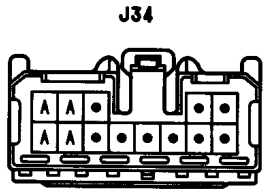
(HINT:SEE PAGE 7, 23, 39)



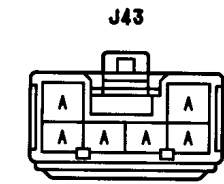
(HINT:SEE PAGE 7, 23, 39)



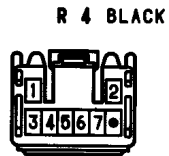
(HINT:SEE PAGE 7, 23, 39)



(HINT:SEE PAGE 7, 23, 39)

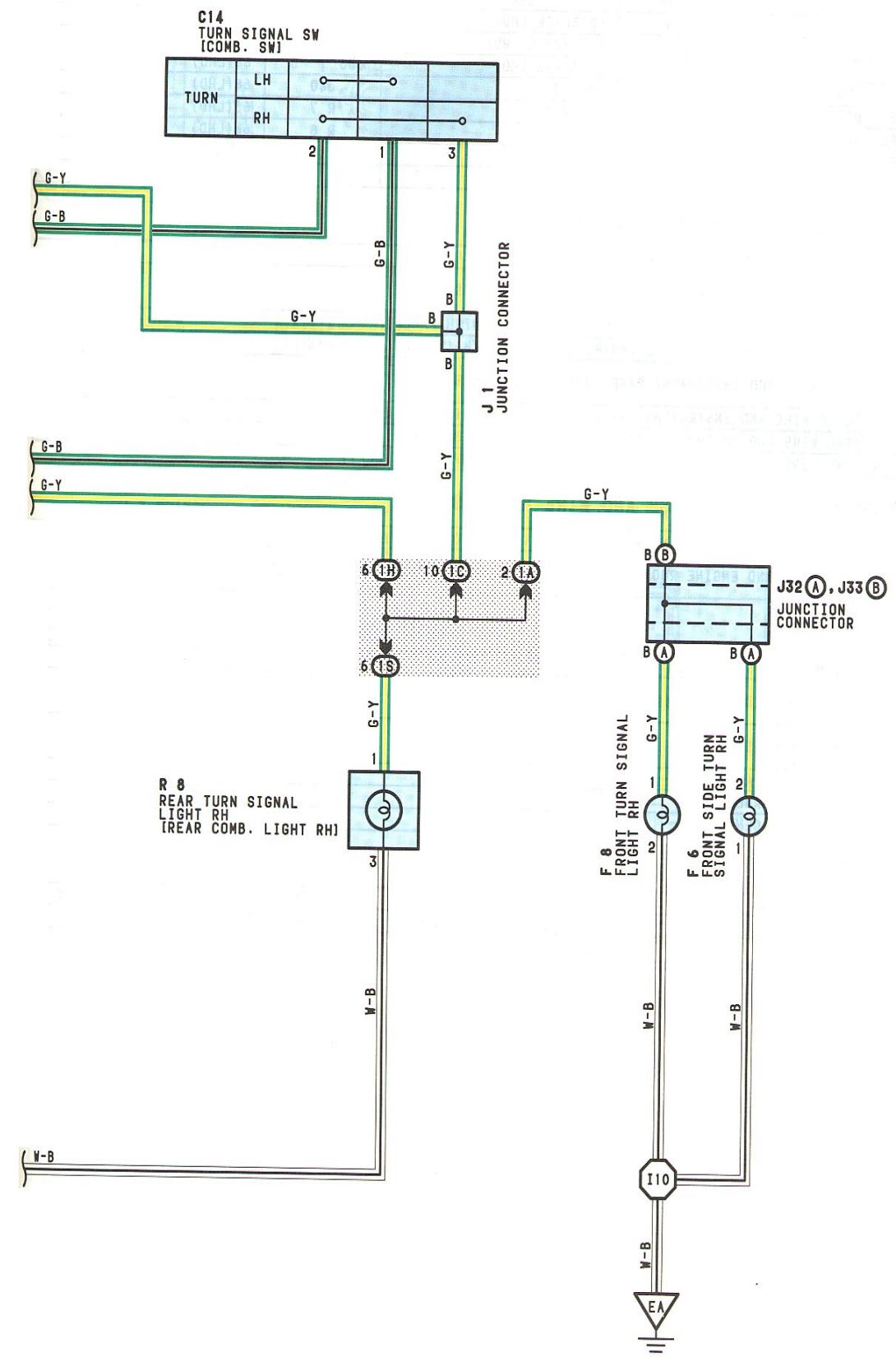
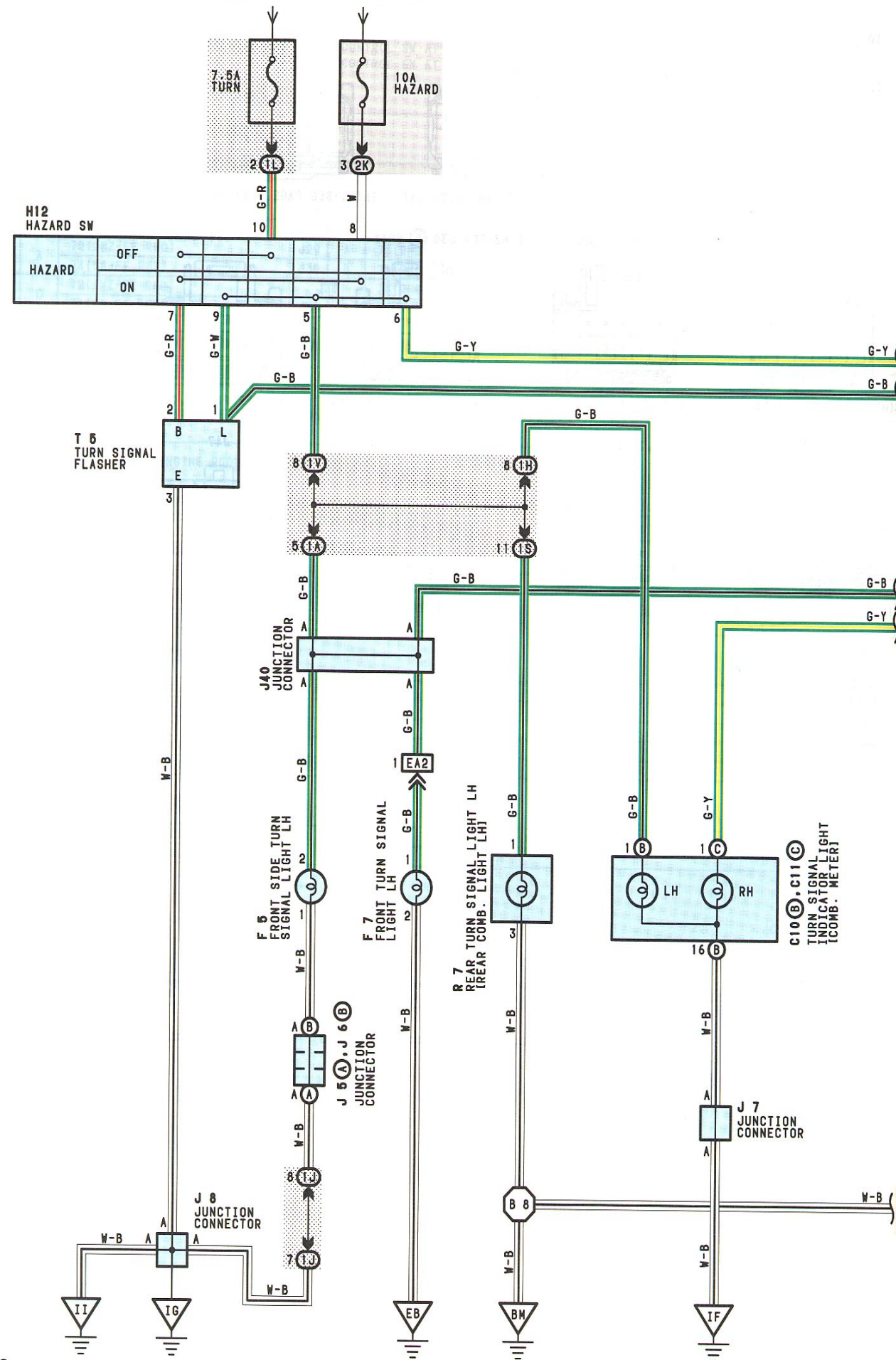


(HINT:SEE PAGE 7, 23, 39)



TURN SIGNAL AND HAZARD WARNING LIGHT(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



TURN SIGNAL AND HAZARD WARNING LIGHT(LHD)

SERVICE HINTS

T 5 TURN SIGNAL FLASHER

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

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

3-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C10	B	64(LHD)	F 7		62(5S-FE LHD)	J 8		66(LHD)
C11	C	64(LHD)	F 8		60(1MZ-FE LHD)	J32	A	66(LHD)
C14		64(LHD)			62(5S-FE LHD)	J33	B	66(LHD)
F 5		60(1MZ-FE LHD)	H12		64(LHD)	J40		66(LHD)
		62(5S-FE LHD)	J 1		66(LHD)	R 7		68(LHD)
F 6		60(1MZ-FE LHD)	J 5	A	66(LHD)	R 8		68(LHD)
		62(5S-FE LHD)	J 6	B	66(LHD)	T 5		66(LHD)
F 7		60(1MZ-FE LHD)	J 7		66(LHD)			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1F	52(LHD)	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1L		
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

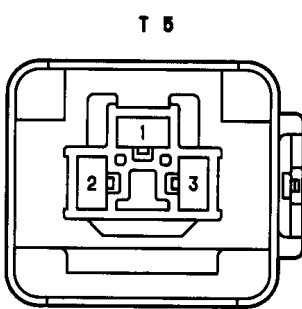
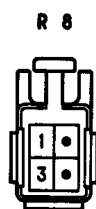
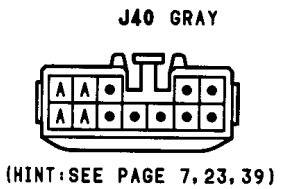
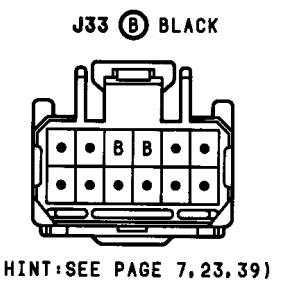
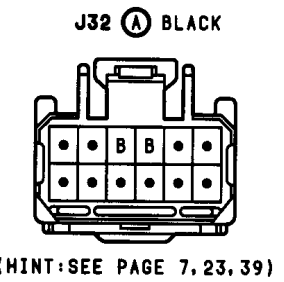
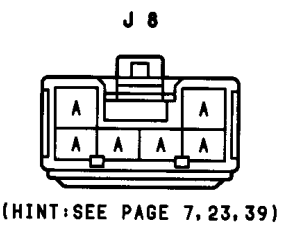
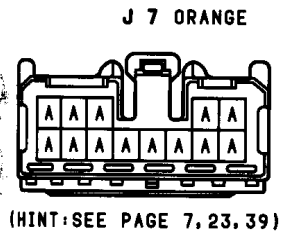
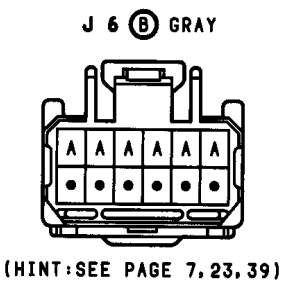
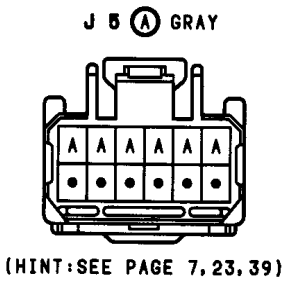
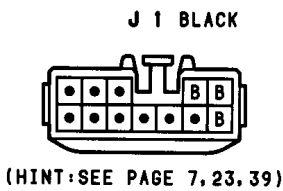
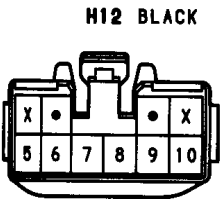
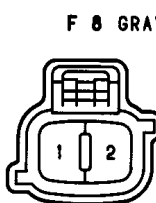
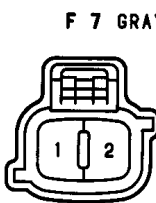
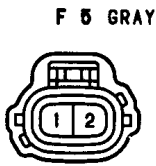
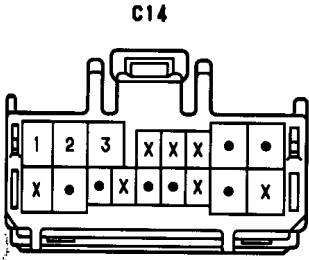
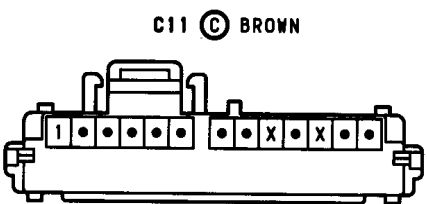
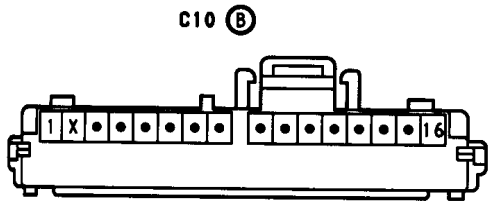
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA2	82(1MZ-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
	84(5S-FE LHD)	

▽ : GROUND POINTS

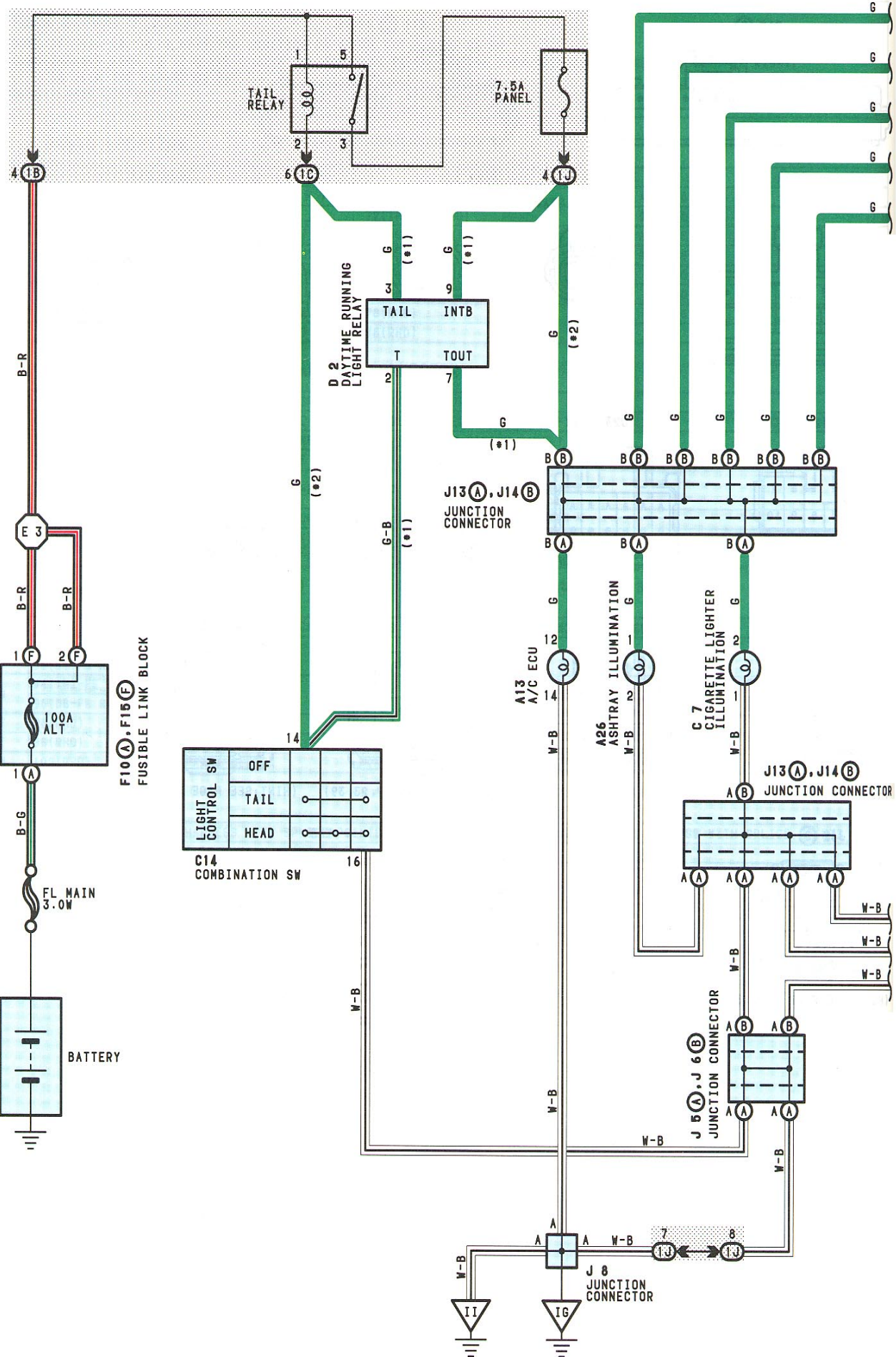
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD)	BEHIND HEADLIGHT RH
	84(5S-FE LHD)	
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
	84(5S-FE LHD)	
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH
BM	90(LHD)	BACK PANEL CENTER

○ : SPLICE POINTS

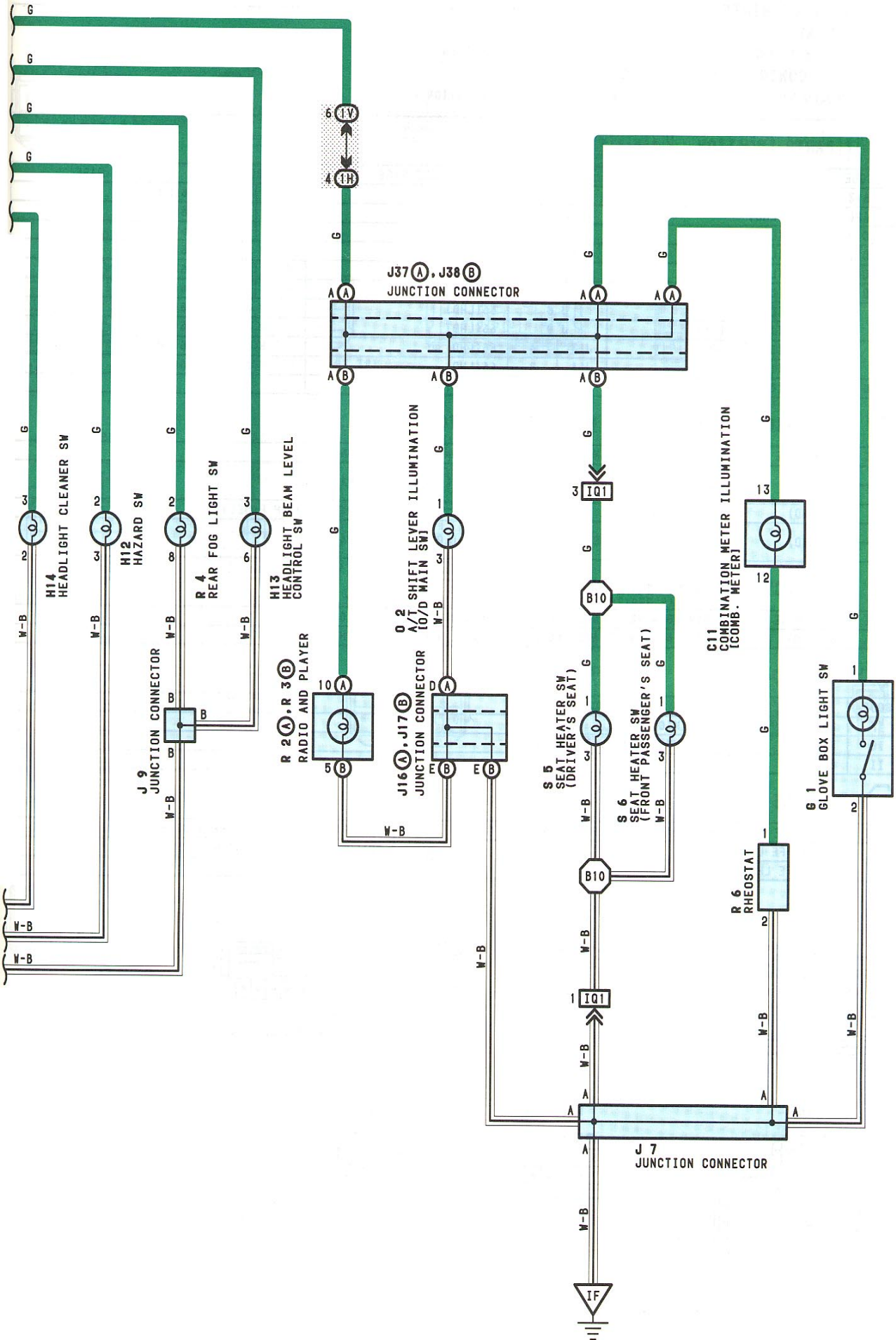
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I10	88(LHD)	COWL WIRE	B 8	90(LHD)	FLOOR WIRE



ILLUMINATION(LHD)



* 1:W/ DAYTIME RUNNING LIGHT
* 2:W/O DAYTIME RUNNING LIGHT



ILLUMINATION(LHD)

SERVICE HINTS

TAIL RELAY

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

C14LIGHT CONTROL SW [COMB. SW]

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A13	64(LHD)	H12	64(LHD)	J17	B 66(LHD)
A26	64(LHD)	H13	64(LHD)	J37	A 66(LHD)
C 7	64(LHD)	H14	64(LHD)	J38	B 66(LHD)
C11	64(LHD)	J 5	A 66(LHD)	O 2	66(LHD)
C14	64(LHD)	J 6	B 66(LHD)	R 2	A 66(LHD)
D 2	64(LHD)	J 7	66(LHD)	R 3	B 66(LHD)
F10	A	J 8	66(LHD)	R 4	66(LHD)
		J 9	66(LHD)	R 6	66(LHD)
F15	F	J13	A 66(LHD)	S 5	66(LHD)
		J14	B 66(LHD)	S 6	66(LHD)
G 1	64(5S-FE LHD)	J16	A 66(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1H	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

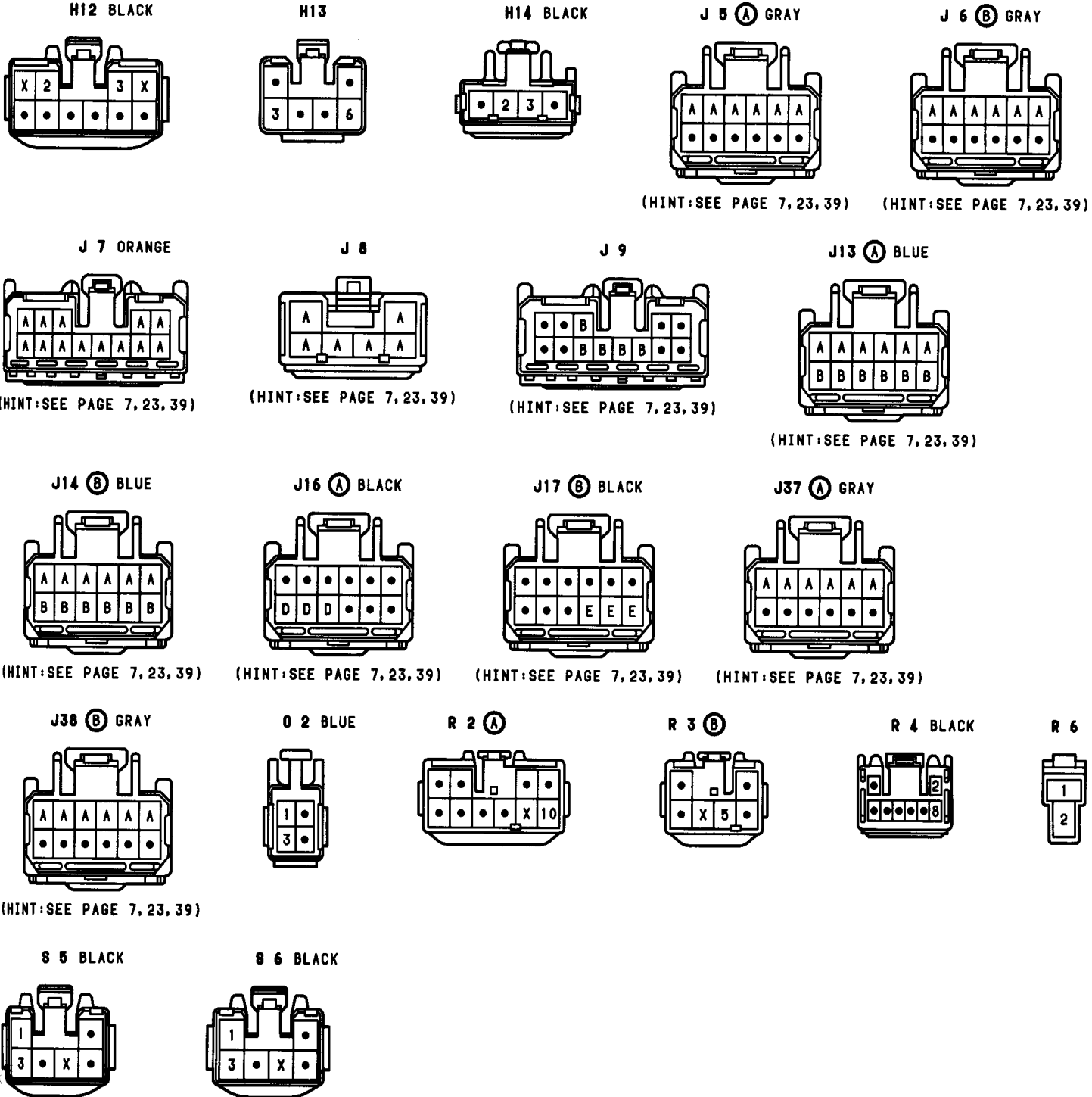
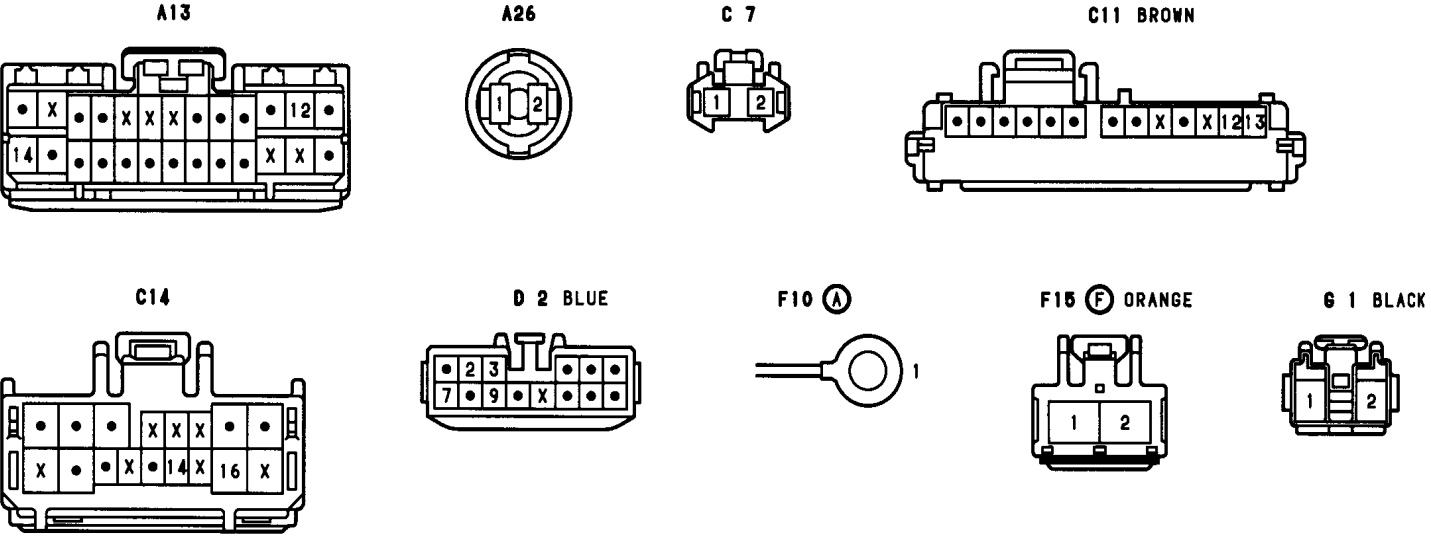
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IQ1	88(LHD)	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)

▽ : GROUND POINTS

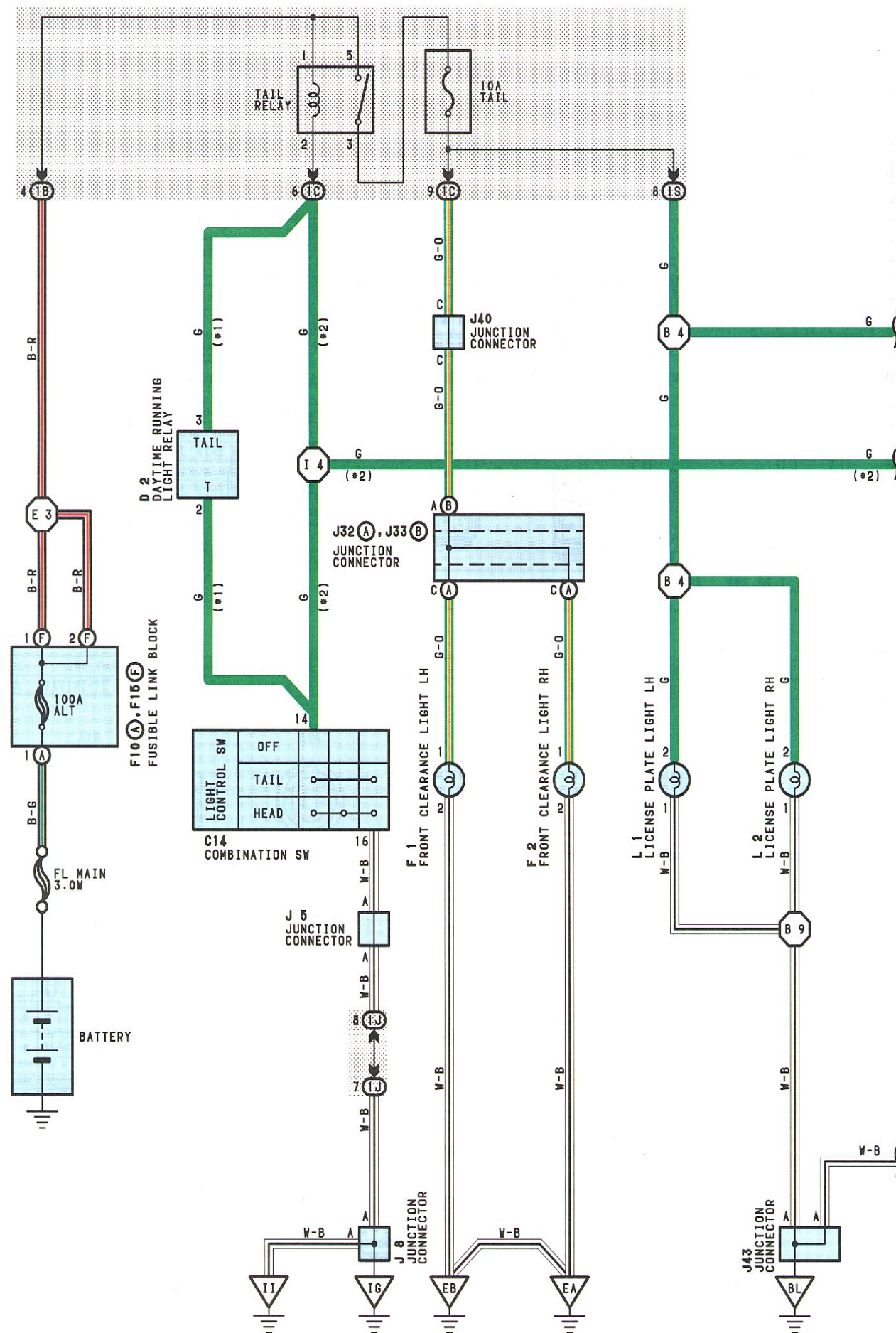
CODE	SEE PAGE	GROUND POINTS LOCATION
IF	86(LHD)	LEFT KICK PANEL
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

○ : SPLICE POINTS

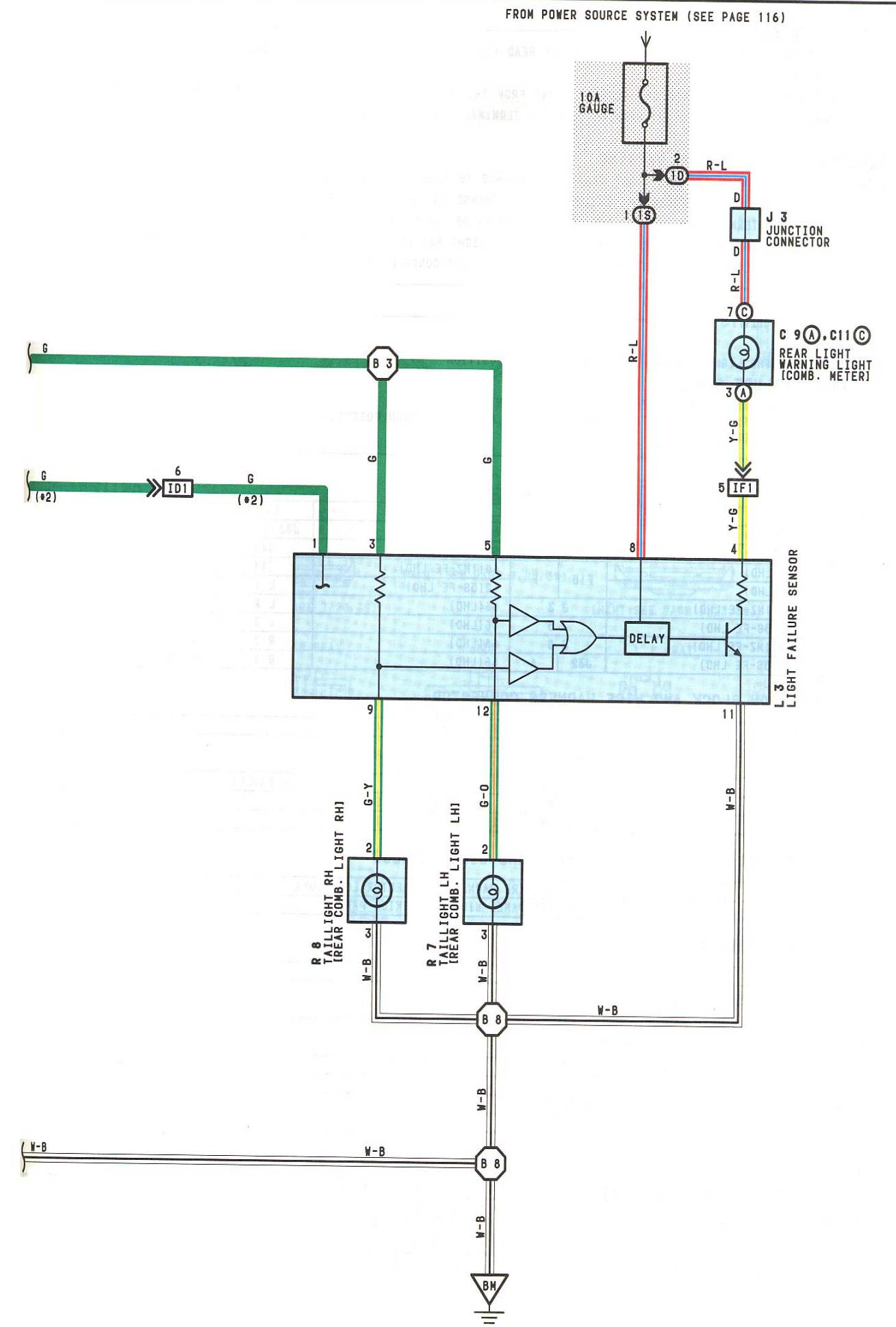
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	COWL WIRE	B10	92(LHD)	FLOOR NO.3 WIRE
	84(5S-FE LHD)				



TAILLIGHT(LHD)



* 1:W/ DAYTIME RUNNING LIGHT
 * 2:W/O DAYTIME RUNNING LIGHT



TAILLIGHT(LHD)

SYSTEM OUTLINE

WHEN THE LIGHT CONTROL SW IS TURNED TO TAIL OR HEAD POSITION, CURRENT FLOWS TO **TERMINALS 3, 5** OF THE LIGHT FAILURE SENSOR THROUGH THE TAIL FUSE.

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

TAILLIGHT DISCONNECTION WARNING

WITH THE IGNITION SW ON AND THE LIGHT CONTROL SW TURNED TO TAIL OR HEAD POSITION, IF THE TAILLIGHT CIRCUIT IS OPEN, THE LIGHT FAILURE SENSOR DETECTS THE FAILURE BY THE CHANGE IN THE CURRENT FLOWING FROM **TERMINALS 3, 5** OF THE LIGHT FAILURE SENSOR TO **TERMINALS 9, 12** AND THE WARNING CIRCUIT OF THE LIGHT FAILURE SENSOR IS ACTIVATED.

AS A RESULT, THE CURRENT FLOWS FROM **TERMINAL 4** OF THE LIGHT FAILURE SENSOR TO **TERMINAL 11** → **GROUND** AND TURNS THE REAR LIGHT WARNING LIGHT ON, WHICH REMAINS ON UNTIL THE LIGHT CONTROL SW IS TURNED OFF.

SERVICE HINTS

TAIL RELAY

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

L 3 LIGHT FAILURE SENSOR

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

3,5-GROUND:APPROX. 12 VOLTS WITH THE LIGHT CONTROL SW AT TAIL OR HEAD POSITION

11-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	A	64(LHD)	F10	A	60(1MZ-FE LHD)
C11	C	64(LHD)			62(5S-FE LHD)
C14		64(LHD)	F15	F	60(1MZ-FE LHD)
D 2		64(LHD)			62(5S-FE LHD)
F 1		60(1MZ-FE LHD)	J 3		66(LHD)
		62(5S-FE LHD)	J 5		66(LHD)
F 2		60(1MZ-FE LHD)	J 8		66(LHD)
		62(5S-FE LHD)	J32	A	66(LHD)
			J33	B	66(LHD)
			J40		66(LHD)
			J43		68(LHD)
			L 1		68(LHD)
			L 2		68(LHD)
			L 3		68(LHD)
			R 7		68(LHD)
			R 8		68(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1B	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)

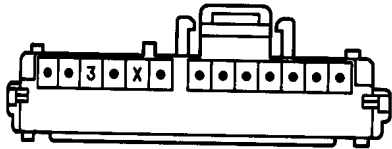
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD)	BEHIND HEADLIGHT RH
	84(5S-FE LHD)	
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
	84(5S-FE LHD)	
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BW	90(LHD)	BACK PANEL CENTER

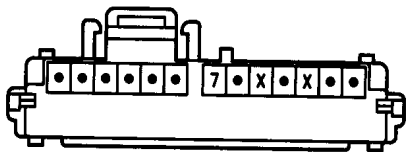
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 3	82(1MZ-FE LHD)	COWL WIRE	B 4	90(LHD)	FLOOR WIRE
	84(5S-FE LHD)		B 8		
I 4	88(LHD)		B 9		
B 3	90(LHD)	FLOOR WIRE			

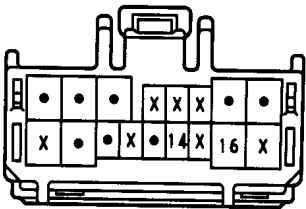
C 9 (A) BLUE



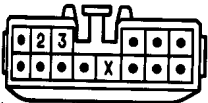
C11 (C) BROWN



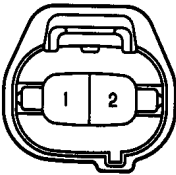
C14



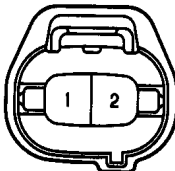
D 2 BLUE



F 1 GRAY



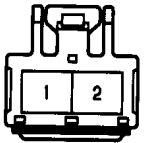
F 2 GRAY



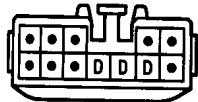
F10 (A)



F15 (F) ORANGE

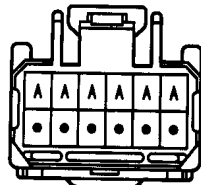


J 3 BLACK



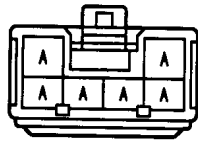
(HINT:SEE PAGE 7,23,39)

J 5 GRAY



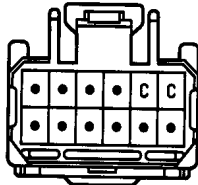
(HINT:SEE PAGE 7,23,39)

J 8



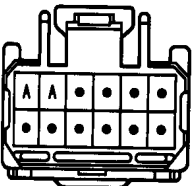
(HINT:SEE PAGE 7,23,39)

J32 (A) BLACK



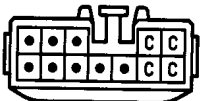
(HINT:SEE PAGE 7,23,39)

J33 (B) BLACK



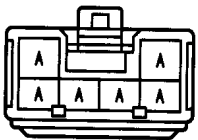
(HINT:SEE PAGE 7,23,39)

J40 GRAY



(HINT:SEE PAGE 7,23,39)

J43



(HINT:SEE PAGE 7,23,39)

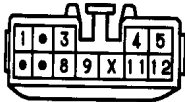
L 1 GRAY



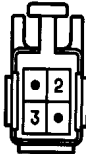
L 2 GRAY



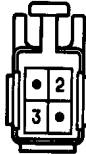
L 3



R 7

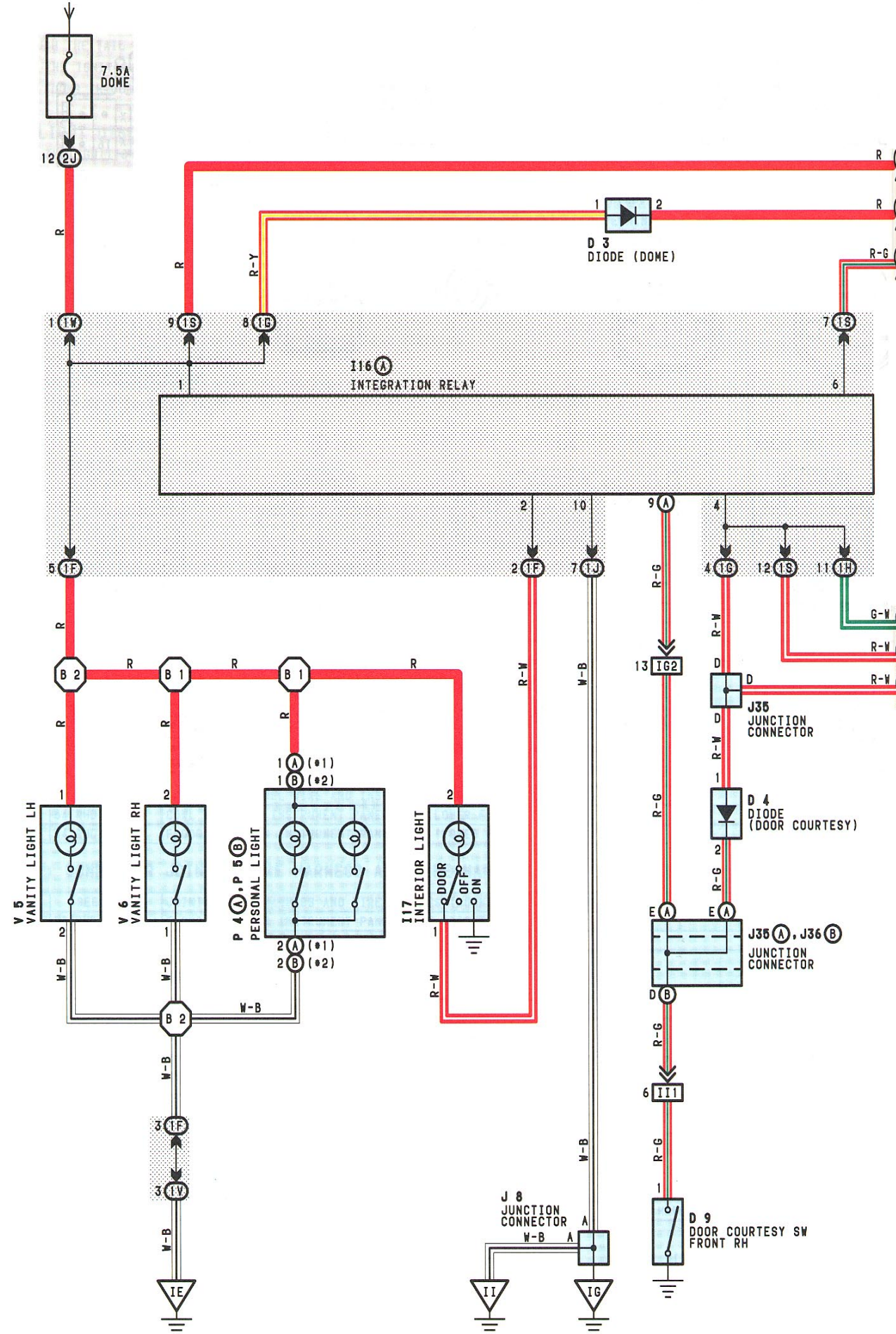


R 8

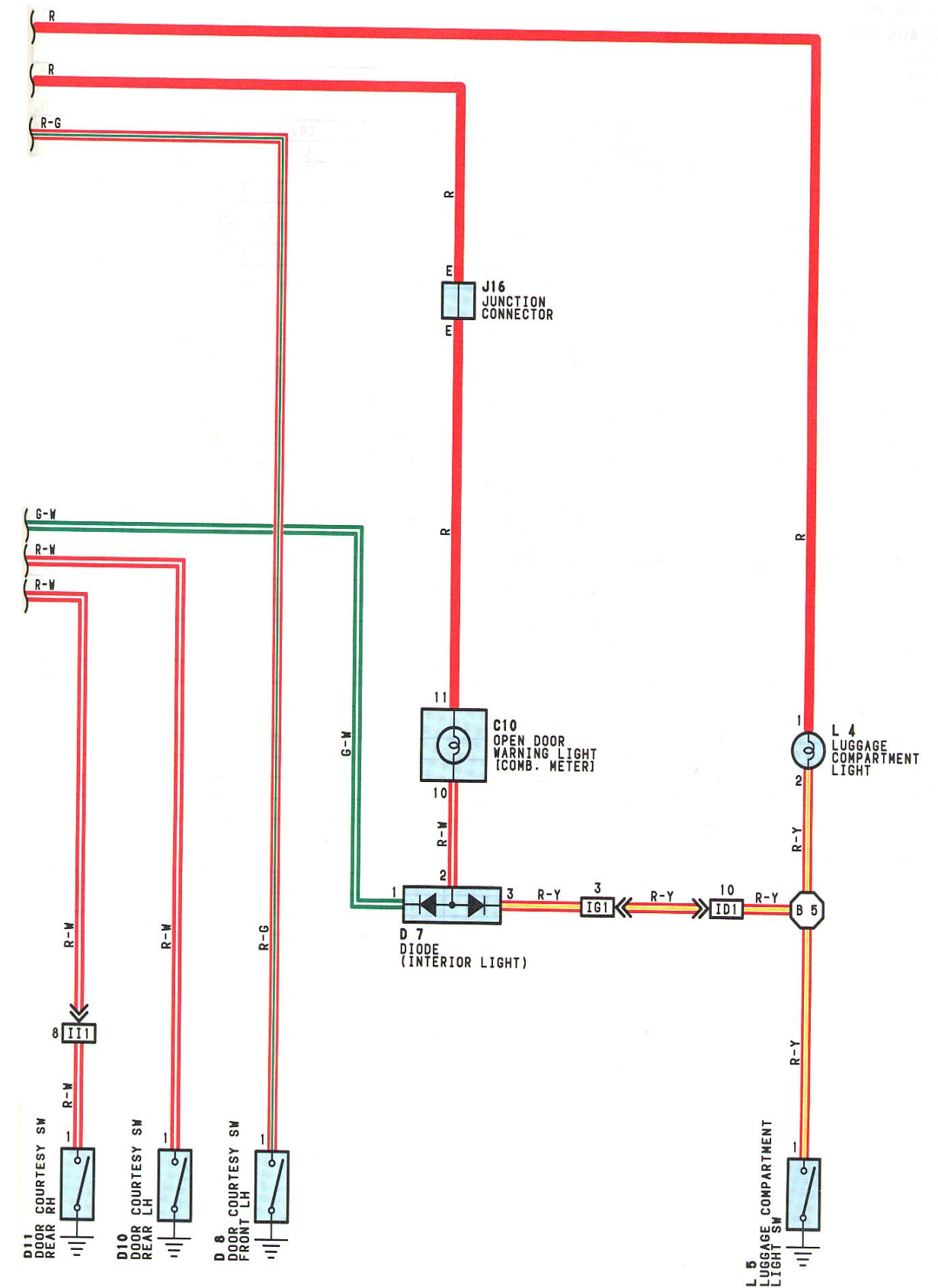


INTERIOR LIGHT (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



* 1:W/ MOON ROOF
* 2:W/O MOON ROOF



INTERIOR LIGHT(LHD)

SERVICE HINTS

INTEGRATION RELAY

1-GROUND:ALWAYS APPROX. 12 VOLTS
4-GROUND:CONTINUITY WITH THE ONE OF EACH DOOR (FRONT RH, REAR LH AND RH) OPEN
6-GROUND:CONTINUITY WITH THE FRONT LH DOOR OPEN
10-GROUND:ALWAYS CONTINUITY
D 8,D 9,D10,D11 DOOR COURTESY SW FRONT LH, RH, REAR LH, RH
1-GROUND:CLOSED WITH THE DOOR OPEN
L 5 LUGGAGE COMPARTMENT LIGHT SW
1-GROUND:CLOSED WITH THE LUGGAGE COMPARTMENT DOOR OPEN

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C10	64(LHD)	D11	68(LHD)	L 4	68(LHD)
D 3	64(LHD)	I16	A 64(LHD)	L 5	68(LHD)
D 4	64(LHD)	I17	68(LHD)	P 4	A 68(LHD)
D 7	68(LHD)	J 8	66(LHD)	P 5	B 68(LHD)
D 8	68(LHD)	J16	66(LHD)	V 5	68(LHD)
D 9	68(LHD)	J35	A 66(LHD)	V 6	68(LHD)
D10	68(LHD)	J36	B 66(LHD)		

⊞ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1F	52(LHD)	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

⊞ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
ID1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
I61	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
I62		
II1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

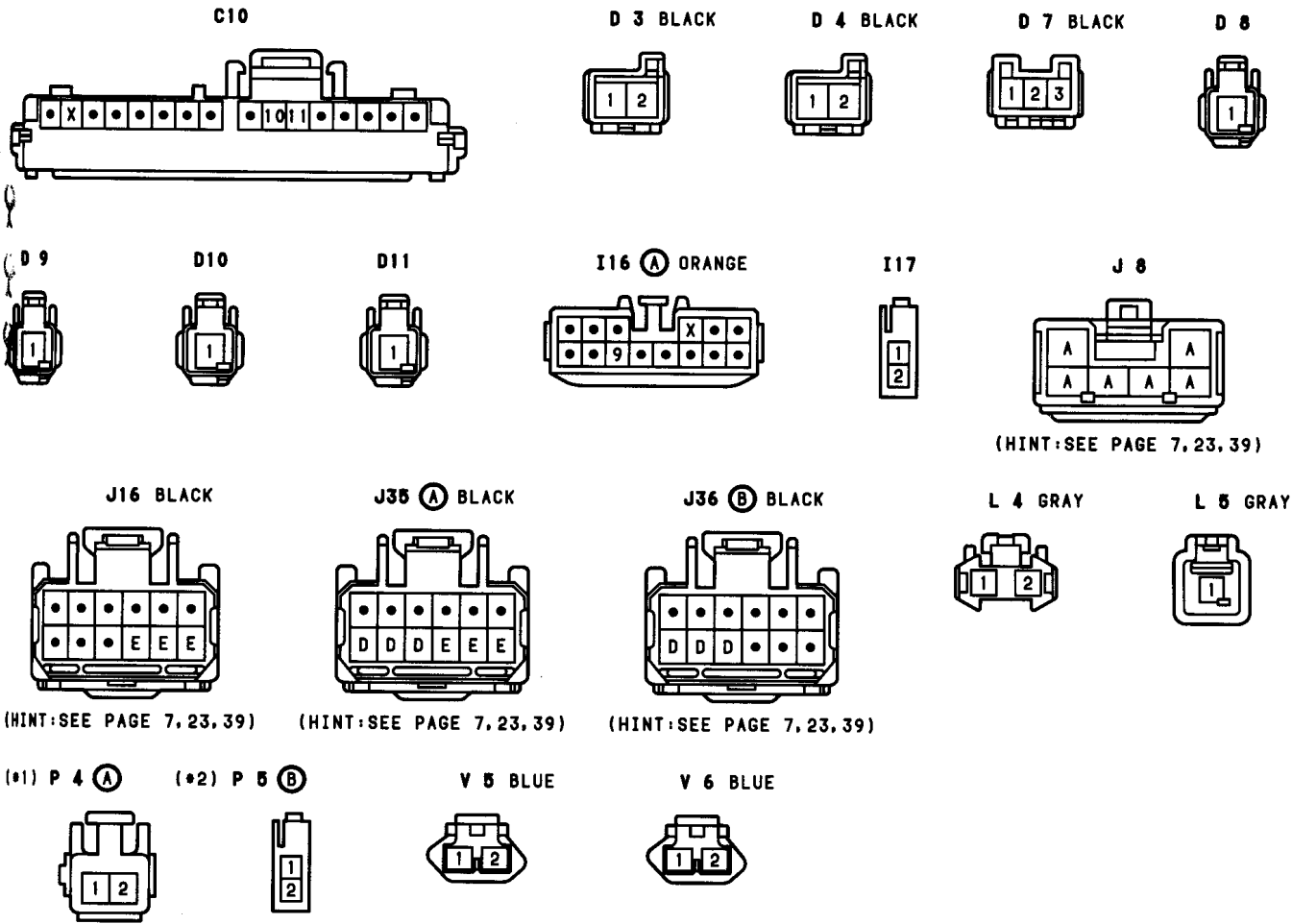
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86(LHD)	COWL SIDE PANEL LH
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

○ : SPLICE POINTS

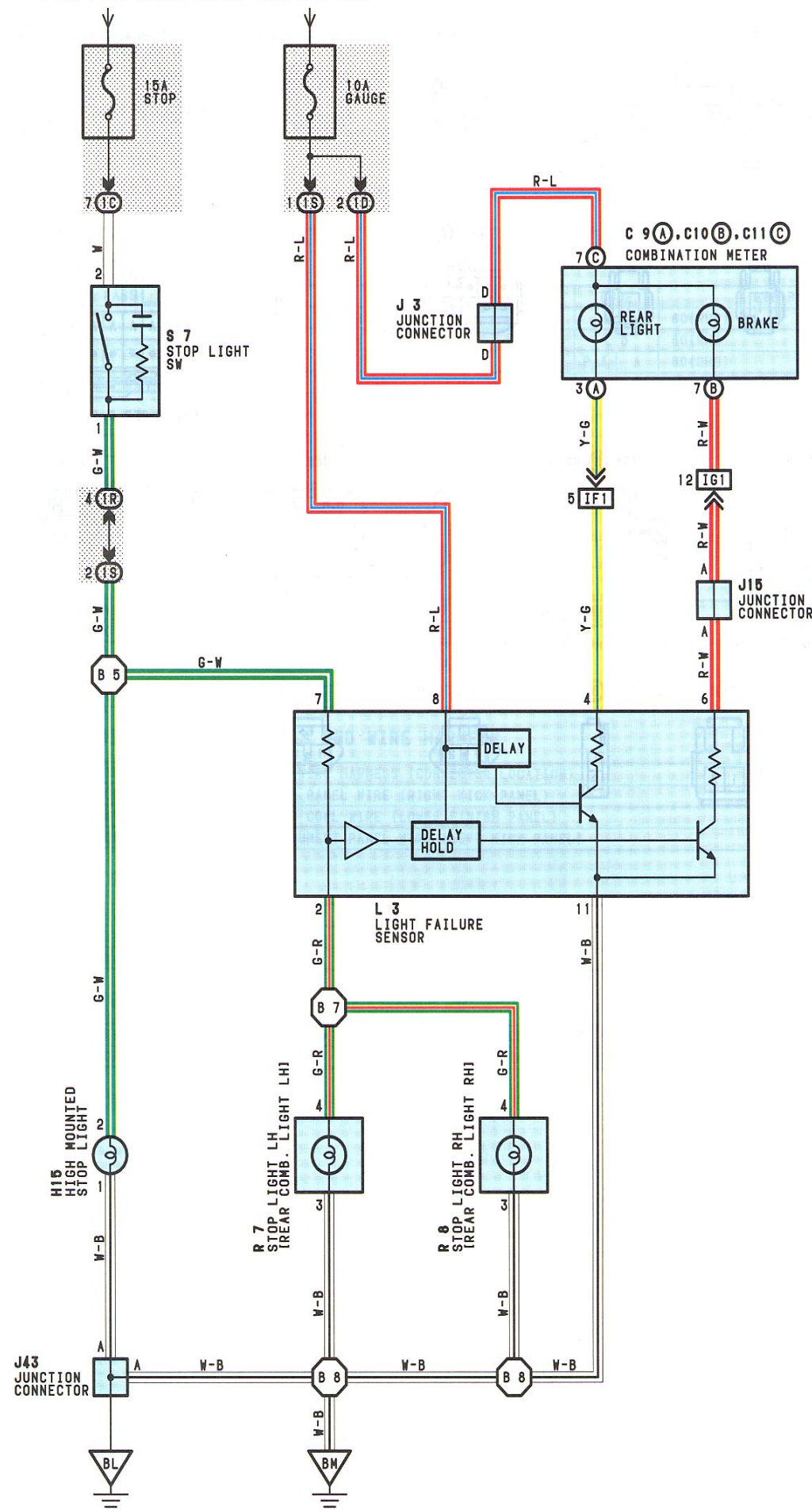
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	90(LHD)	ROOF WIRE	B 5	90(LHD)	FLOOR WIRE
B 2					

• 1:W/ MOON ROOF
• 2:W/O MOON ROOF



STOP LIGHT(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SYSTEM OUTLINE

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

STOP LIGHT DISCONNECTION WARNING

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

SERVICE HINTS

S 7 STOP LIGHT SW

2-1: CLOSED WITH THE BRAKE PEDAL DEPRESSED

L 3 LIGHT FAILURE SENSOR

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

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

11-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 9	A 64(LHD)	J 3	66(LHD)	R 7	68(LHD)
C 10	B 64(LHD)	J 15	66(LHD)	R 8	68(LHD)
C 11	C 64(LHD)	J 43	68(LHD)	S 7	66(LHD)
H 15	68(LHD)	L 3	68(LHD)		

□ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
18	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
181	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)

▽ : GROUND POINTS

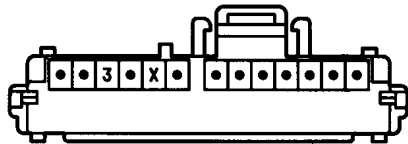
CODE	SEE PAGE	GROUND POINTS LOCATION
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BM	90(LHD)	BACK PANEL CENTER

○ : SPLICE POINTS

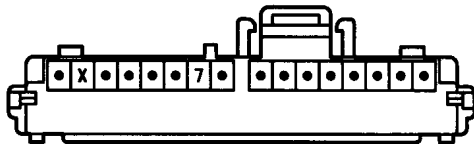
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 5	90(LHD)	FLOOR WIRE	B 8	90(LHD)	FLOOR WIRE
B 7					

STOP LIGHT(LHD)

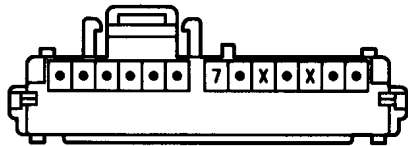
C 9 ① BLUE



C10 ②



C11 ③ BROWN



H16

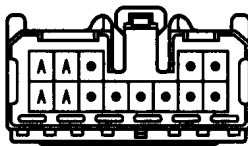


J 3 BLACK



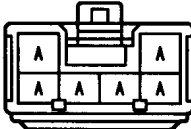
(HINT:SEE PAGE 7, 23, 39)

J16



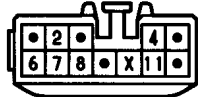
(HINT:SEE PAGE 7, 23, 39)

J43

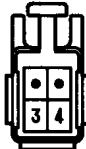


(HINT:SEE PAGE 7, 23, 39)

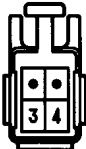
L 3



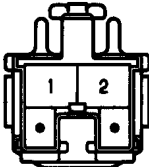
R 7



R 8

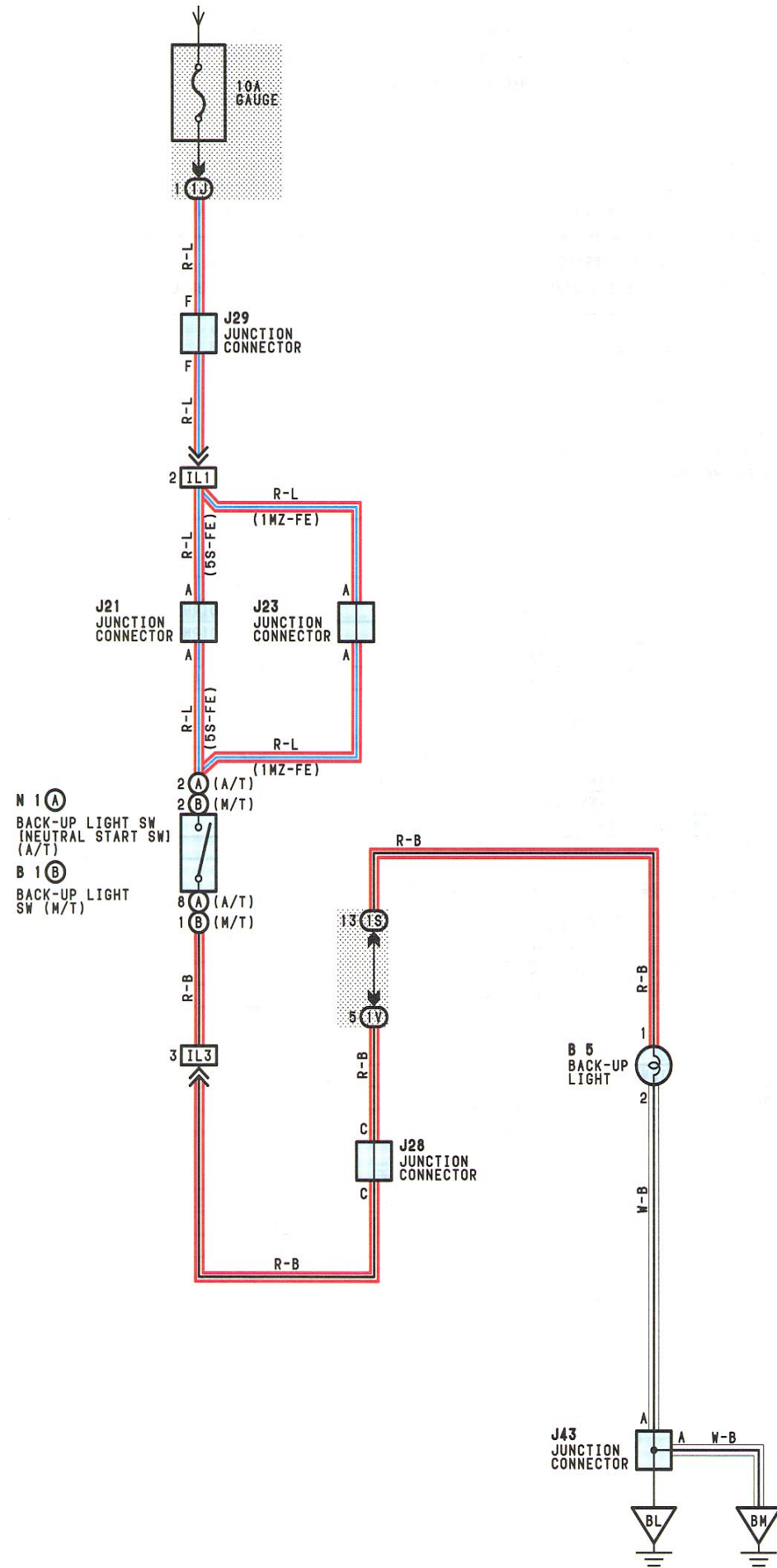


8 7 BLUE



BACK-UP LIGHT (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

N 1 (A) BACK-UP LIGHT SW (NEUTRAL START SW) (A/T)

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

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

2-1:CLOSED WITH THE SHIFT LEVER AT R POSITION

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE		SEE PAGE
B 1	B	62(5S-FE LHD)	J23	66(LHD)	J43		68(LHD)
B 5		68(LHD)	J28	66(LHD)	N 1	A	60(1M2-FE LHD)
J21		66(LHD)	J29	66(LHD)			62(5S-FE LHD)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
18	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

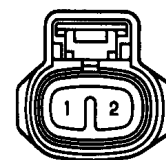
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3		

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BN	90(LHD)	BACK PANEL CENTER

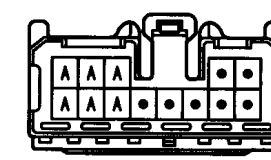
B 1 (B) GRAY



B 5

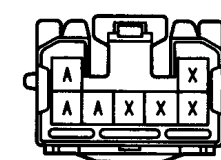


(5S-FE) J21 GRAY



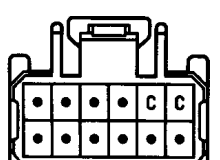
(HINT: SEE PAGE 7, 23, 39)

(1MZ-FE) J23



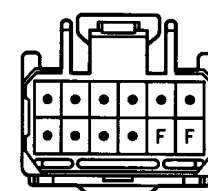
(HINT: SEE PAGE 7, 23, 39)

J28



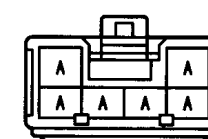
(HINT: SEE PAGE 7, 23, 39)

J29



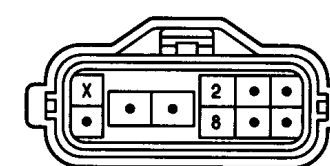
(HINT: SEE PAGE 7, 23, 39)

J43

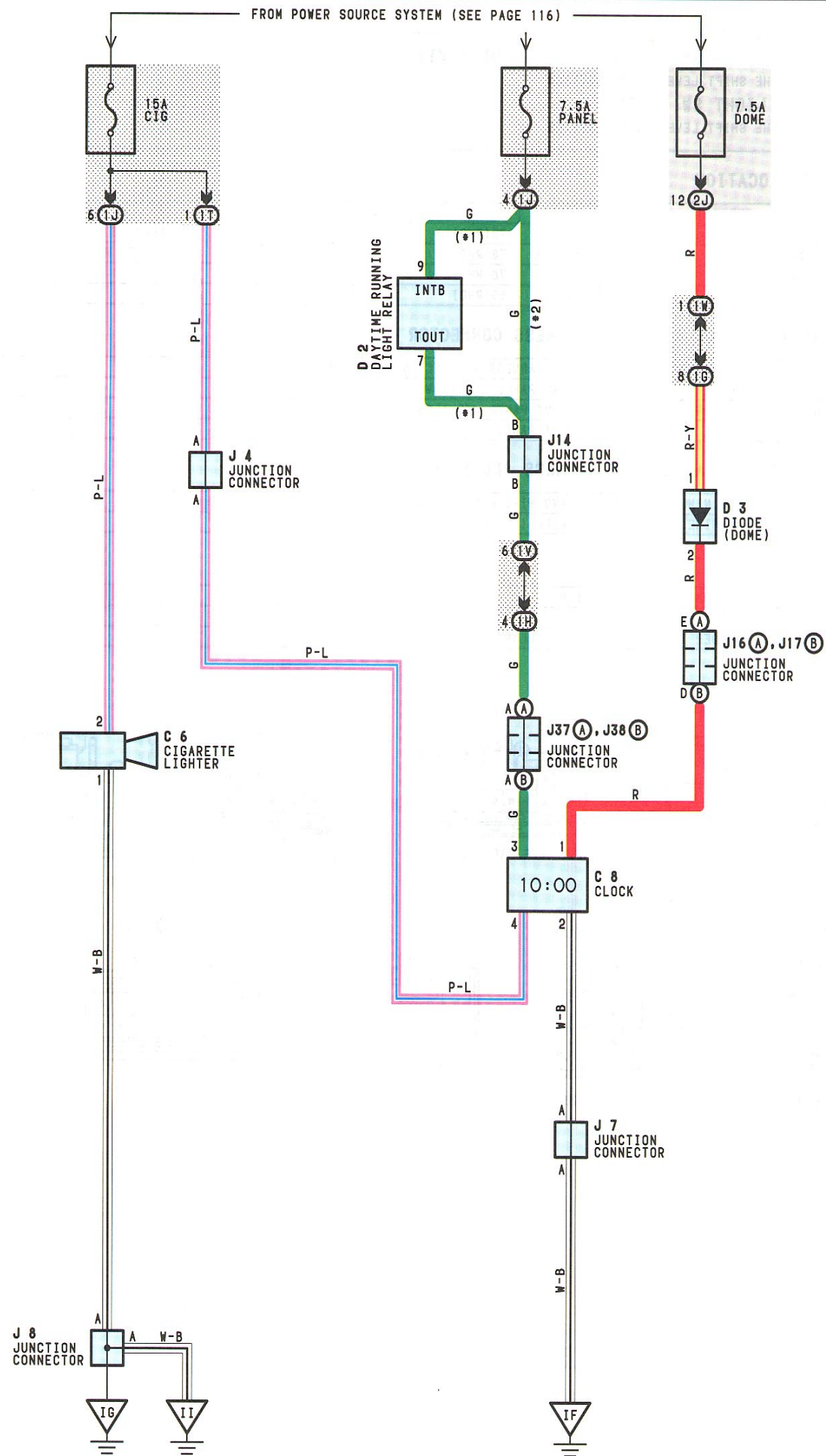


(HINT: SEE PAGE 7, 23, 39)

N 1 (A) GRAY



CIGARETTE LIGHTER AND CLOCK(LHD)



SERVICE HINTS

C 6 CIGARETTE LIGHTER

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

C 8 CLOCK

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

○ : PARTS LOCATION

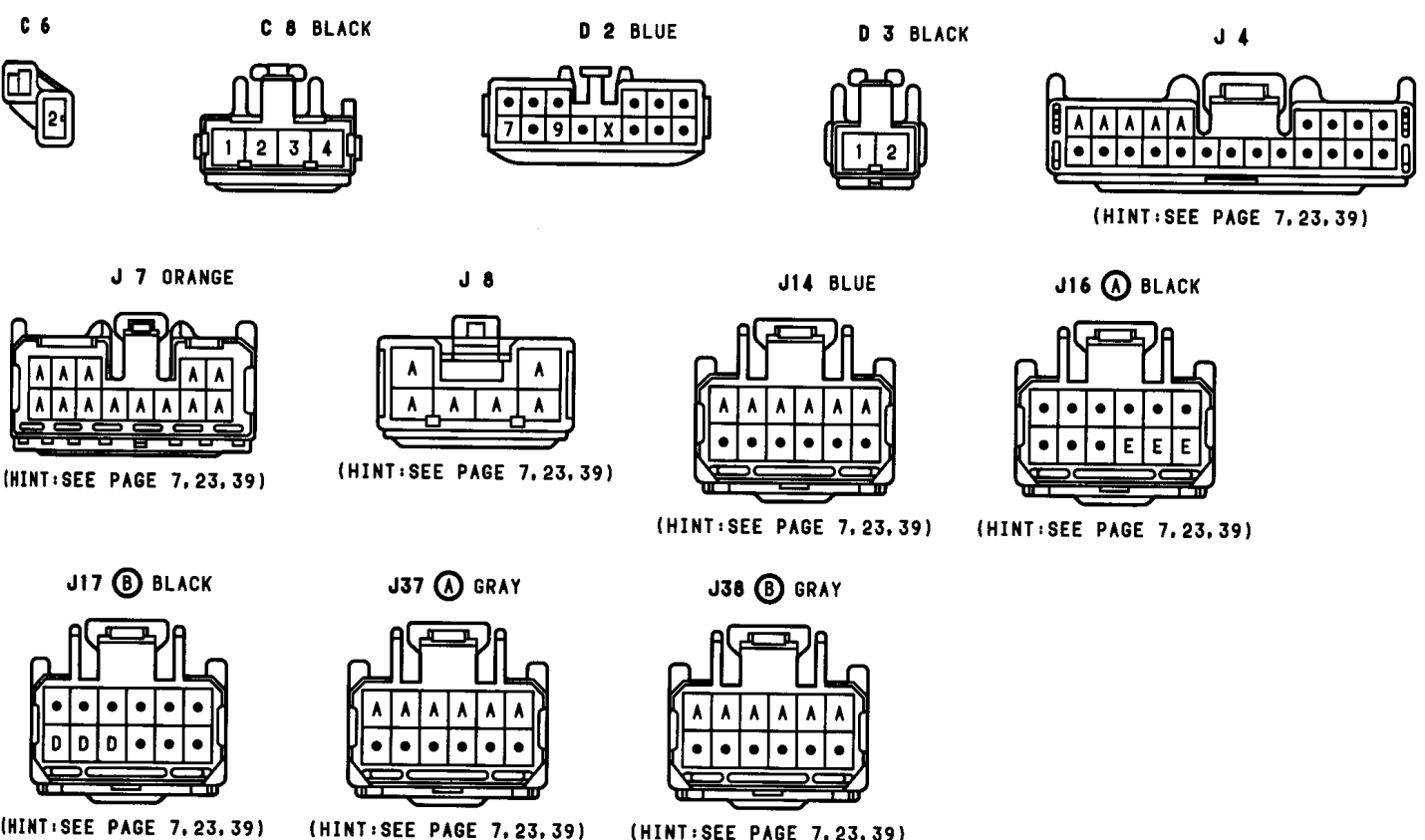
CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 6	64(LHD)	J 4	66(LHD)	J16	A 66(LHD)
C 8	64(LHD)	J 7	66(LHD)	J17	B 66(LHD)
D 2	64(LHD)	J 8	66(LHD)	J37	A 66(LHD)
D 3	64(LHD)	J14	66(LHD)	J38	B 66(LHD)

⊙ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

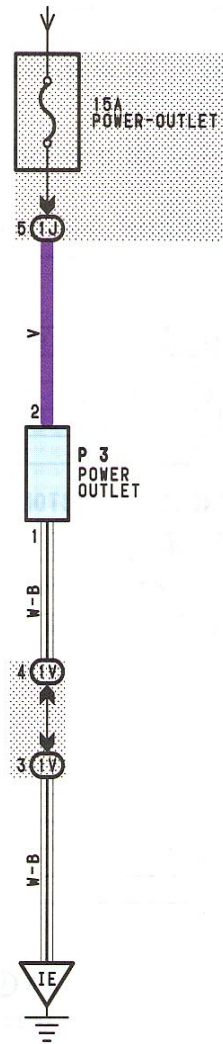
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IF	86(LHD)	LEFT KICK PANEL
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH



POWER OUTLET(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

P 3 POWER OUTLET

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

1-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
P 3	66(LHD)				

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		

▽ : GROUND POINTS

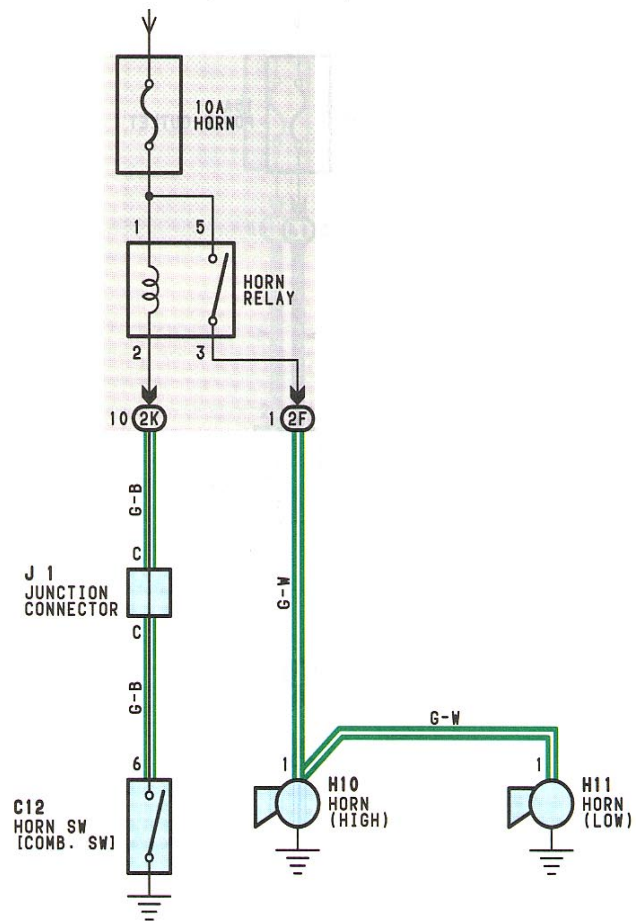
CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86(LHD)	COWL SIDE PANEL LH

P 3 ORANGE



HORN (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

HORN RELAY

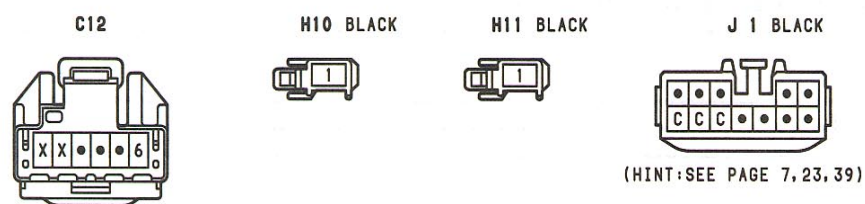
5-3:CLOSED WITH THE HORN SW [COMB. SW] ON

○ : PARTS LOCATION

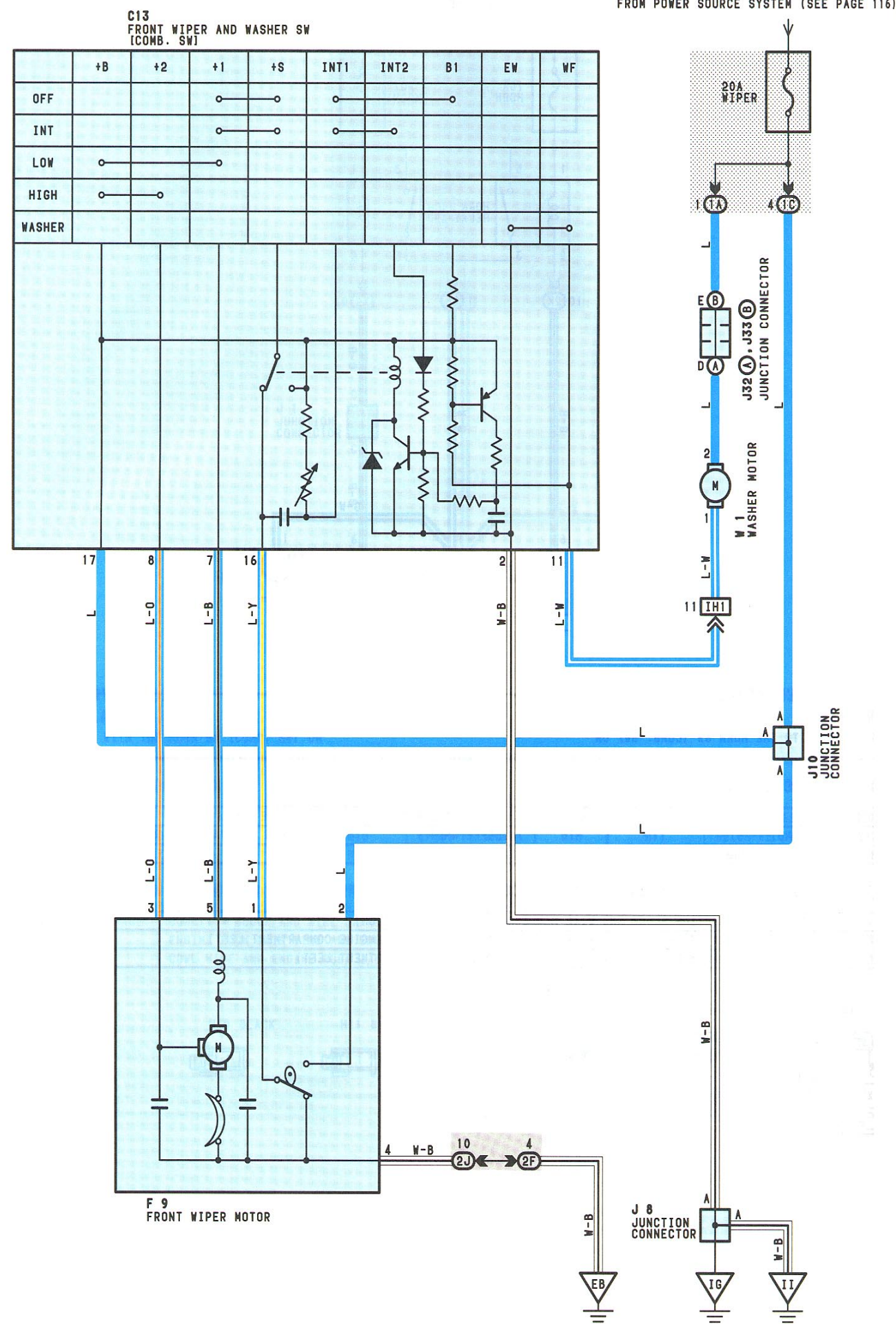
CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C12	64(LHD)	H10	62(5S-FE LHD)	H11	62(5S-FE LHD)
H10	60(1M2-FE LHD)	H11	60(1M2-FE LHD)	J 1	66(LHD)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
2F	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)



FRONT WIPER AND WASHER(LHD)



SYSTEM OUTLINE

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

1. LOW SPEED POSITION

WITH THE WIPER SW TURNED TO LOW POSITION, CURRENT FLOWS THROUGH TERMINAL 17 OF THE FRONT WIPER AND WASHER SW TO TERMINAL 7 → TERMINAL 5 OF THE FRONT WIPER MOTOR → TERMINAL 4 → GROUND AND CAUSES THE WIPER MOTOR TO RUN AT LOW SPEED.

2. HIGH SPEED POSITION

WITH THE WIPER SW TURNED TO HIGH POSITION, CURRENT FLOWS THROUGH TERMINAL 17 OF THE FRONT WIPER AND WASHER SW TO TERMINAL 8 → TERMINAL 3 OF THE FRONT WIPER MOTOR → TERMINAL 4 → GROUND AND CAUSES THE WIPER MOTOR TO RUN AT HIGH SPEED.

3. INT POSITION

WITH THE WIPER SW TURNED TO INT POSITION, THE RELAY OPERATES AND THE CURRENT WHICH IS CONNECTED BY RELAY FUNCTION FLOWS THROUGH TERMINAL 17 OF THE FRONT WIPER AND WASHER SW TO TERMINAL 2 → GROUND. THIS FLOW OF CURRENT OPERATES THE INTERMITTENT CIRCUIT AND THE CURRENT FLOWS THROUGH TERMINAL 17 OF THE FRONT WIPER AND WASHER SW TO TERMINAL 7 → TERMINAL 5 OF THE FRONT WIPER MOTOR → TERMINAL 4 → GROUND AND THE WIPER FUNCTIONS. THE INTERMITTENT OPERATION IS CONTROLLED BY A CONDENSER'S CHARGED AND DISCHARGED FUNCTION INSTALLED IN THE RELAY AND THE INTERMITTENT TIME IS CONTROLLED BY A TIME CONTROL SW TO CHARGE THE CHARGING TIME OF CONDENSER.

4. WASHER CONTINUOUS OPERATION

WITH THE WASHER SW TURNED TO ON, THE CURRENT FLOWS THROUGH TERMINAL 2 OF THE WASHER MOTOR TO TERMINAL 1 → TERMINAL 11 OF THE FRONT WIPER AND WASHER SW → TERMINAL 2 → GROUND AND CAUSES THE WASHER MOTOR TO RUN AND THE WINDOW WASHER TO JET. THIS CAUSES THE CURRENT TO FLOW TO WASHER CONTINUOUS OPERATION CIRCUIT IN TERMINAL 17 OF THE FRONT WIPER AND WASHER SW → TERMINAL 7 → TERMINAL 5 OF THE FRONT WIPER MOTOR → TERMINAL 4 → GROUND AND THE WIPER FUNCTIONS.

SERVICE HINTS

C13 FRONT WIPER AND WASHER SW (COMB. SW)

- 2-GROUND: ALWAYS CONTINUITY
- 17-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION
- 7-GROUND: APPROX. 12 VOLTS WITH THE FRONT WIPER AND WASHER SW AT LOW POSITION
APPROX. 12 VOLTS 2 TO 12 SECONDS INTERMITTENTLY WITH THE FRONT WIPER AND WASHER SW AT INT POSITION
- 16-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW ON UNLESS THE FRONT WIPER MOTOR AT STOP POSITION
- 8-GROUND: APPROX. 12 VOLTS WITH THE FRONT WIPER AND WASHER SW AT HIGH POSITION

F 9 FRONT WIPER MOTOR

- 1-2: CLOSED UNLESS THE FRONT WIPER MOTOR AT STOP POSITION

FRONT WIPER AND WASHER(LHD)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C13	64(LHD)	J 8	66(LHD)	J33	B 66(LHD)
F 9	60(1MZ-FE LHD)	J10	66(LHD)	W 1	60(1MZ-FE LHD)
	62(5S-FE LHD)	J32	A 66(LHD)		62(5S-FE LHD)

⊞ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

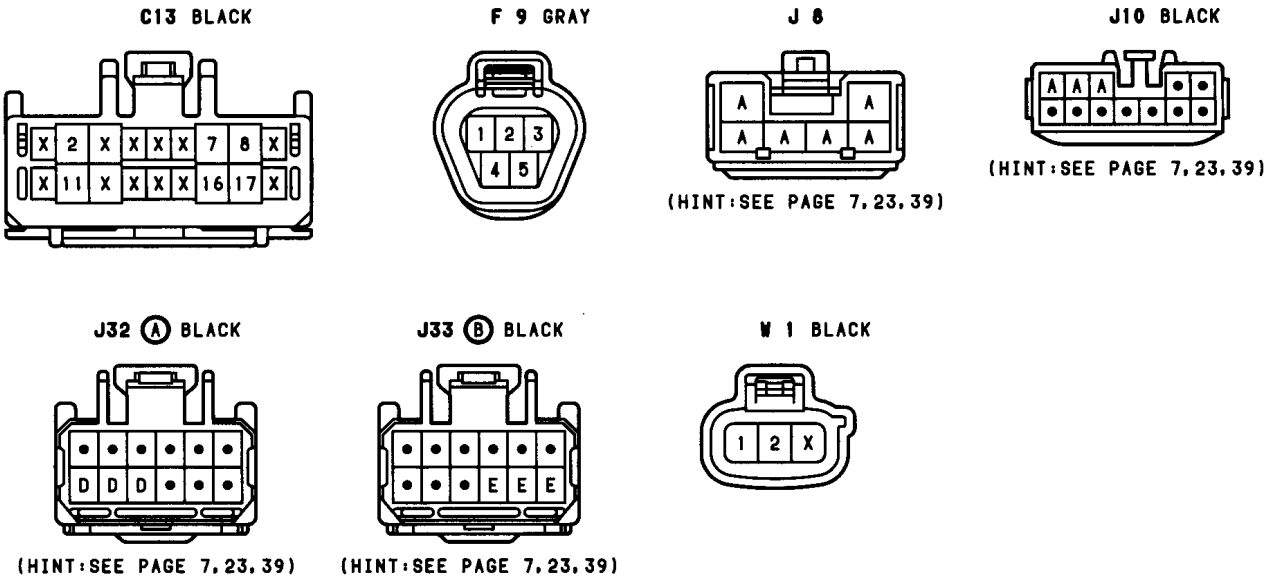
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1C		
2F	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IH1	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)

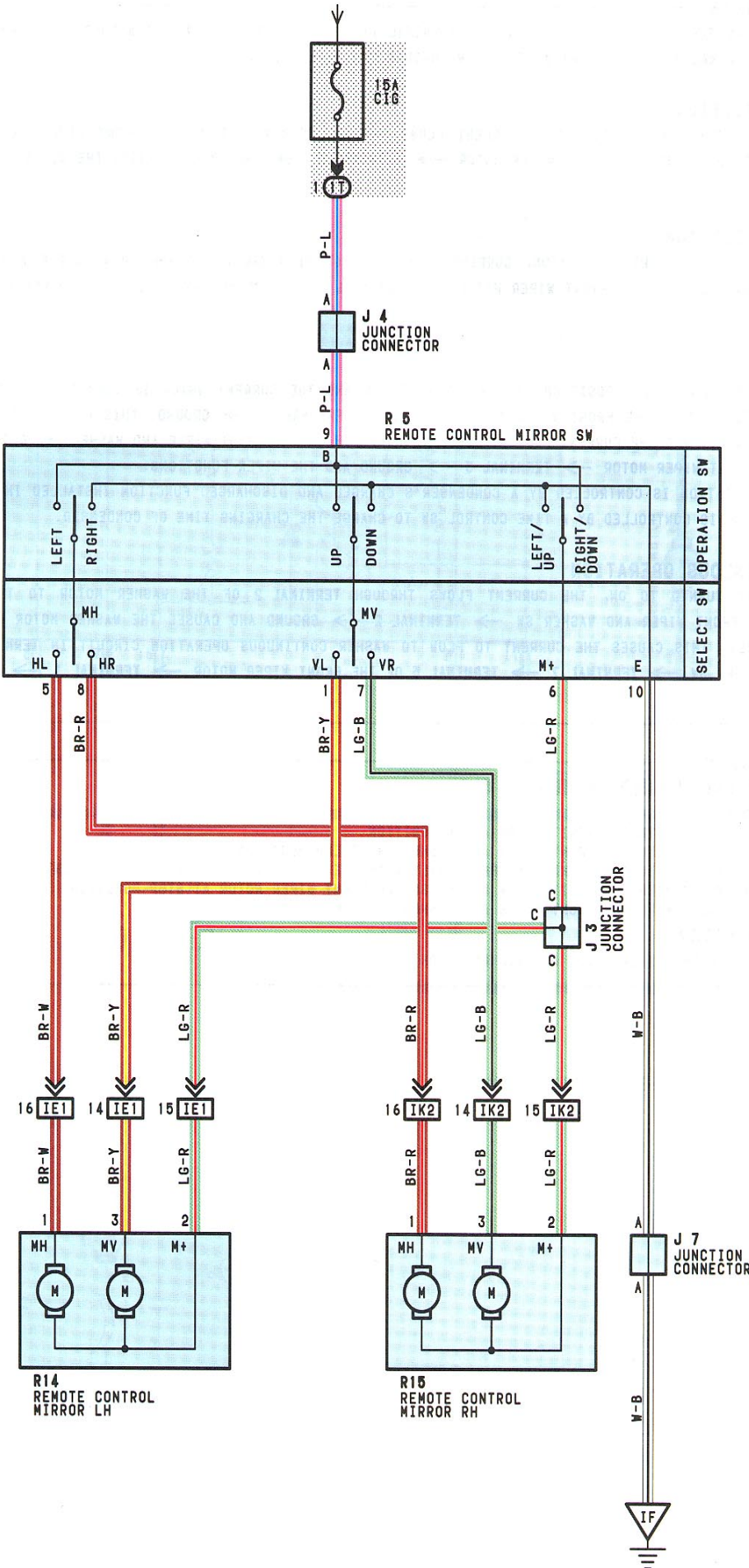
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
	84(5S-FE LHD)	
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH



REMOTE CONTROL MIRROR(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

R 5 REMOTE CONTROL MIRROR SW

- 9-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ACC OR ON POSITION
- 6-10: CONTINUITY WITH THE OPERATION SW AT UP OR LEFT POSITION
- 9-6: CONTINUITY WITH THE OPERATION SW AT DOWN OR RIGHT POSITION
- 10-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 3	66(LHD)	J 7	66(LHD)	R 14	68(LHD)
J 4	66(LHD)	R 5	66(LHD)	R 15	68(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1T	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

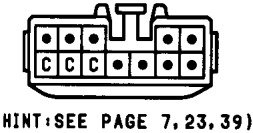
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
1E1	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
1K2	88(LHD)	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

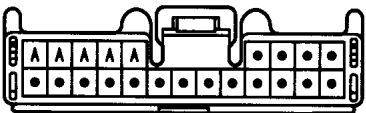
CODE	SEE PAGE	GROUND POINTS LOCATION
IF	86(LHD)	LEFT KICK PANEL

J 3 BLACK



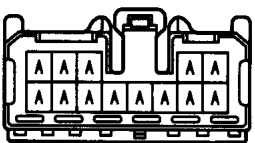
(HINT: SEE PAGE 7, 23, 39)

J 4



(HINT: SEE PAGE 7, 23, 39)

J 7 ORANGE

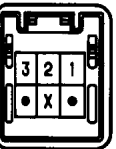


(HINT: SEE PAGE 7, 23, 39)

R 5



R 14

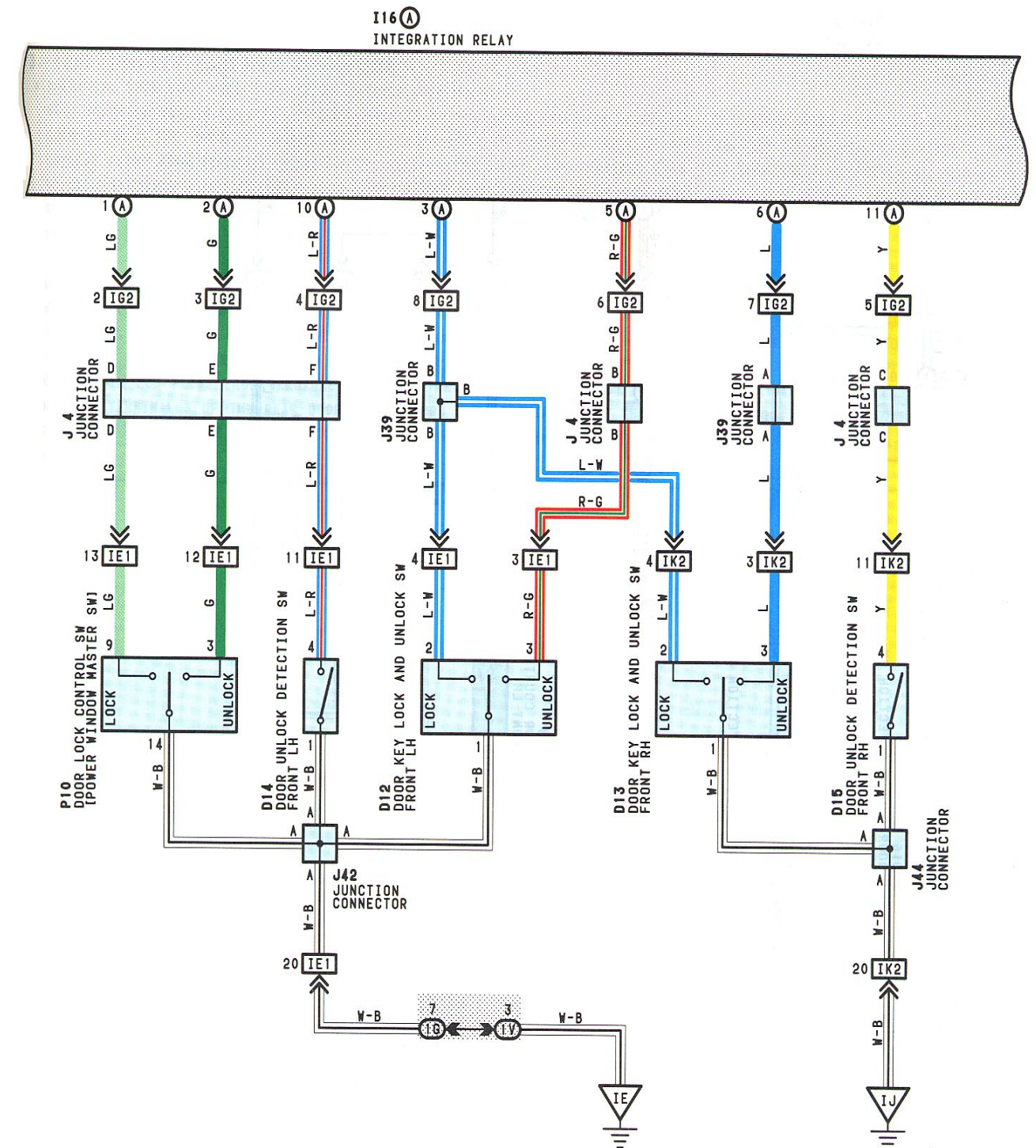
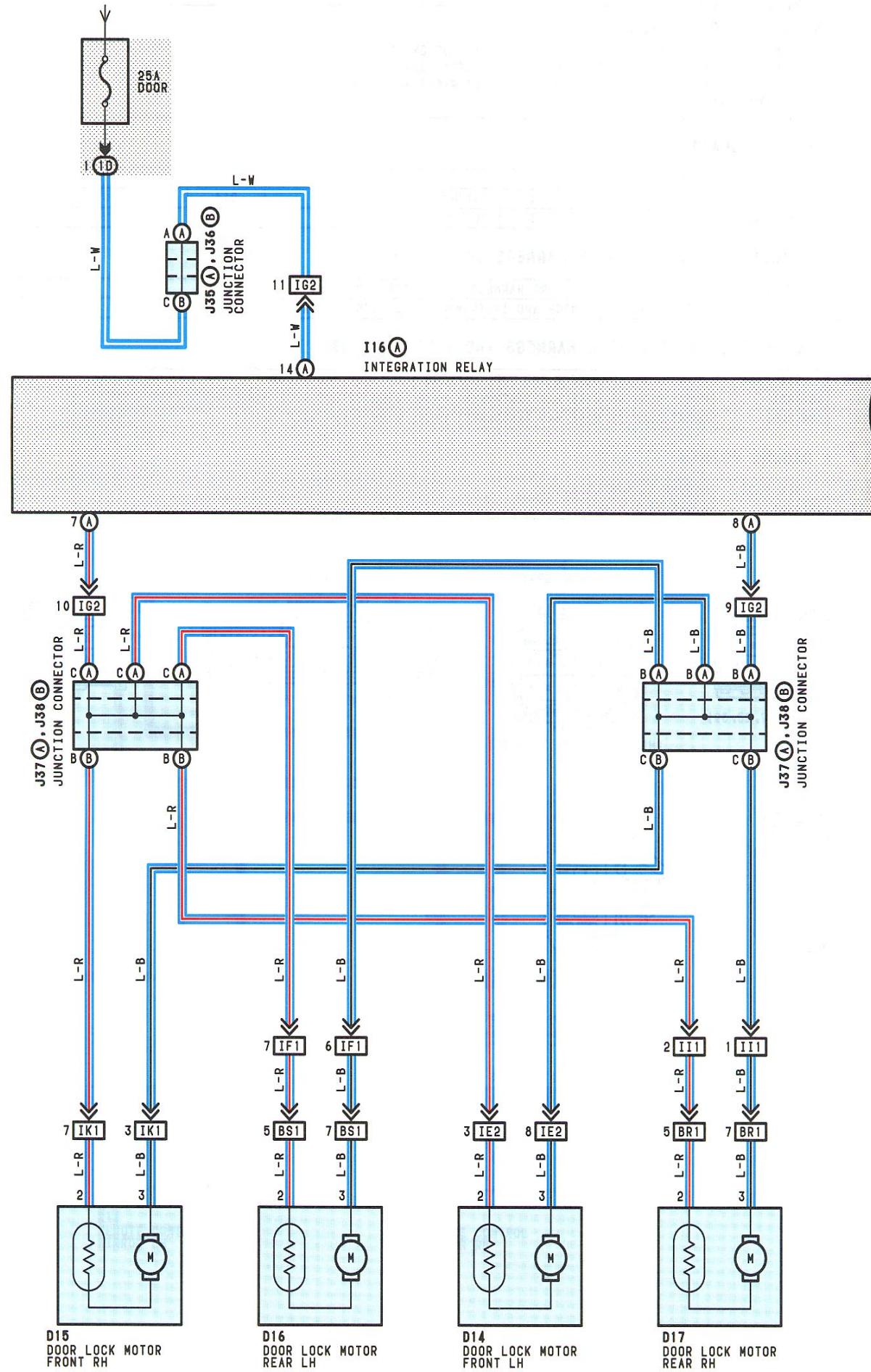


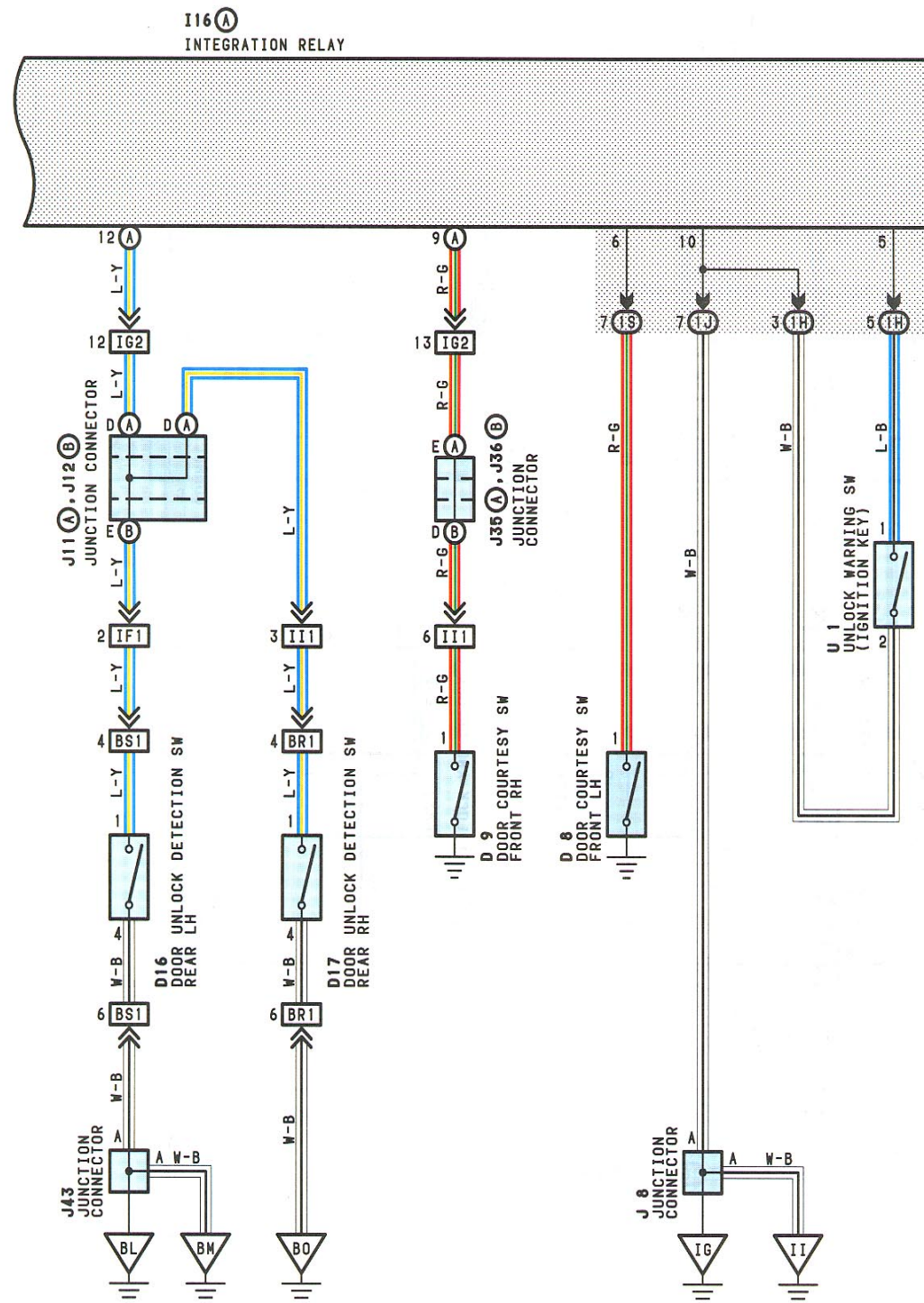
R 15



DOOR LOCK CONTROL (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)





SYSTEM OUTLINE

CURRENT ALWAYS FLOWS TO TERMINAL (A) 14 OF THE INTEGRATION RELAY THROUGH THE DOOR FUSE.

1. MANUAL LOCK OPERATION

WHEN THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW ARE PUSHED TO LOCK POSITION, A LOCK SIGNAL IS INPUT TO TERMINAL (A) 1 OR (A) 3 OF THE INTEGRATION RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM TERMINAL (A) 14 OF THE RELAY → TERMINAL (A) 7 → TERMINAL 2 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 2 OF THE REAR DOOR LOCK MOTORS → TERMINAL 3 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 3 OF THE REAR DOOR LOCK MOTORS → TERMINAL (A) 8 OF THE RELAY → TERMINAL 10 → GROUND AND THE DOOR LOCK MOTOR CAUSES THE DOOR TO LOCK.

2. MANUAL UNLOCK OPERATION

WHEN THE DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW ARE PUSHED TO UNLOCK POSITION, AN UNLOCK SIGNAL IS INPUT TO TERMINAL (A)2, (A)5 OR (A)6 OF THE INTEGRATION RELAY AND CAUSES THE RELAY TO FUNCTION. CURRENT FLOWS FROM TERMINAL (A)14 OF THE RELAY → TERMINAL (A)8 → TERMINAL 3 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 3 OF THE REAR DOOR LOCK MOTORS → TERMINAL 2 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 2 OF THE REAR DOOR LOCK MOTORS → TERMINAL (A)7 OF THE RELAY → TERMINAL 10 → GROUND AND DOOR LOCK MOTORS CAUSES DOOR TO UNLOCK.

3. IGNITION KEY REMINDER OPERATION

- OPERATING DOOR LOCK KNOB (OPERATION OF DOOR LOCK MOTORS)
WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK KNOB (DOOR LOCK MOTOR), THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCKED SOON BY THE FUNCTION OF RELAY. AS A RESULT, THE CURRENT FLOWS FROM TERMINAL ①14 OF THE INTEGRATION RELAY → TERMINAL ①8 → TERMINAL 3 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 3 OF THE REAR DOOR LOCK MOTORS → TERMINAL 2 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 2 OF THE REAR DOOR LOCK MOTORS → TERMINAL ①7 OF THE RELAY → TERMINAL 10 → GROUND AND CAUSES ALL THE DOORS TO UNLOCK.
- OPERATING DOOR LOCK CONTROL SW OR DOOR KEY LOCK AND UNLOCK SW
WITH IGNITION KEY IN CYLINDER (UNLOCK WARNING SW ON), WHEN THE DOOR IS OPENED AND LOCKED USING DOOR LOCK CONTROL SW OR KEY SW, THE DOOR IS LOCKED ONCE BUT EACH DOOR IS UNLOCK BY THE FUNCTION OF SW CONTAINED IN MOTORS, WHICH THE SIGNAL IS INPUT TO TERMINAL ①10 (FRONT LH) OR ①11 (FRONT RH) OF THE RELAY. ACCORDING TO THIS INPUT SIGNAL, THE CURRENT IN ECU FLOWS FROM TERMINAL ①14 OF THE RELAY → TERMINAL ①8 → TERMINAL 3 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 3 OF THE REAR DOOR LOCK MOTORS → TERMINAL 2 OF THE FRONT DOOR LOCK MOTORS, TERMINAL 2 OF THE REAR DOOR LOCK MOTORS → TERMINAL ①7 OF THE RELAY → TERMINAL 10 → GROUND AND CAUSES ALL THE DOORS TO UNLOCK.

DOOR LOCK CONTROL(LHD)

SERVICE HINTS

I16Ⓐ INTEGRATION RELAY

- 10-GROUND:ALWAYS CONTINUITY
- 6-GROUND:CONTINUITY WITH THE FRONT LH DOOR OPEN

Ⓐ 14-GROUND:ALWAYS APPROX. 12 VOLTS

- Ⓐ 8-GROUND:APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION
 - THE DOOR LOCK CONTROL SW UNLOCKED
 - THE DOOR LOCK CONTROL SW LOCKED WITH THE IGNITION KEY IN CYLINDER AND THE FRONT LH DOOR OPEN (IGNITION KEY REMINDER FUNCTION)
 - THE DOOR LOCK KNOB LOCKED WITH THE IGNITION KEY IN CYLINDER AND THE FRONT LH DOOR OPEN (IGNITION KEY REMINDER FUNCTION)
 - UNLOCKING THE FRONT LH,RH DOOR CYLINDER WITH KEY
- Ⓐ 7-GROUND:APPROX. 12 VOLTS 0.2 SECONDS WITH FOLLOWING OPERATION
 - THE DOOR LOCK CONTROL SW LOCKED
 - LOCKING THE FRONT LH,RH DOOR CYLINDER WITH KEY

Ⓐ 1-GROUND:0 VOLTS WITH THE DOOR LOCK CONTROL SW LOCKED

Ⓐ 9-GROUND:CONTINUITY WITH THE FRONT RH DOOR OPEN

Ⓐ 10-GROUND:CONTINUITY WITH THE FRONT LH DOOR LOCK KNOB UNLOCKED

Ⓐ 11-GROUND:CONTINUITY WITH THE FRONT RH DOOR LOCK KNOB UNLOCKED

Ⓐ 2-GROUND:0 VOLTS WITH THE DOOR LOCK CONTROL SW UNLOCKED

Ⓐ 5-GROUND:0 VOLTS WITH THE FRONT LH DOOR LOCK CYLINDER UNLOCKED WITH KEY

Ⓐ 6-GROUND:0 VOLTS WITH THE FRONT RH DOOR LOCK CYLINDER UNLOCKED WITH KEY

Ⓐ 3-GROUND:0 VOLTS WITH THE FRONT LH,RH DOOR LOCK CYLINDER LOCKED WITH KEY

D 8,D 9 DOOR COURTESY SW FRONT LH, RH

- 1-GROUND:CLOSED WITH EACH DOOR OPEN

D12 DOOR KEY LOCK AND UNLOCK SW FRONT LH

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

D13 DOOR KEY LOCK AND UNLOCK SW FRONT RH

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

D14,D15 DOOR LOCK MOTOR AND DOOR UNLOCK DETECTION SW FRONT LH, RH

- 4-1:CLOSED WITH UNLOCK POSITION

U 1 UNLOCK WARNING SW (IGNITION KEY)

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE	
D 8	68(LHD)	I16	A	64(LHD)	J38	B	66(LHD)	
D 9	68(LHD)	J 4		66(LHD)	J39		66(LHD)	
D12	68(LHD)	J 8		66(LHD)	J42		68(LHD)	
D13	68(LHD)	J11	A	66(LHD)	J43		68(LHD)	
D14	68(LHD)	J12		B	66(LHD)	J44		68(LHD)
D15	68(LHD)	J35		A	66(LHD)	P10		68(LHD)
D16	68(LHD)	J36		B	66(LHD)	U 1		66(LHD)
D17	68(LHD)	J37		A	66(LHD)			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
I1D		
I1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
I1H		
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1		
IE2	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IG2	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
II1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IK1		
IK2	88(LHD)	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BR1	90(LHD)	REAR DOOR NO.1 WIRE AND FLOOR NO.2 WIRE (UNDER THE RIGHT CENTER PILLAR)
BS1	90(LHD)	REAR DOOR NO.2 WIRE AND FLOOR WIRE (UNDER THE LEFT CENTER PILLAR)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86(LHD)	COWL SIDE PANEL LH
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH
IJ	86(LHD)	RIGHT KICK PANEL
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BM	90(LHD)	BACK PANEL CENTER
BO	90(LHD)	UNDER THE RIGHT CENTER PILLAR

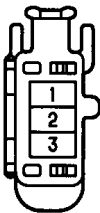
D 8



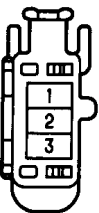
D 9



D12



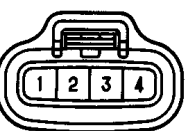
D13



D14 BLACK



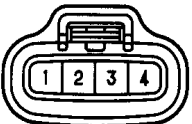
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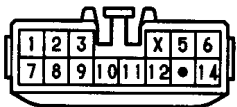
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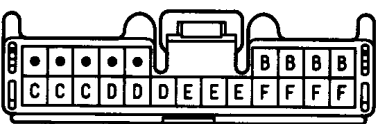
D17 BLACK



I16 Ⓐ ORANGE

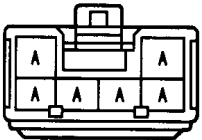


J 4



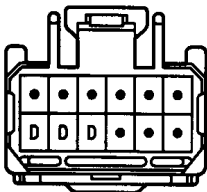
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J 8



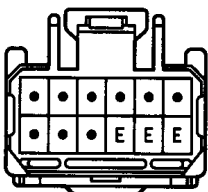
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J11 Ⓐ BLACK



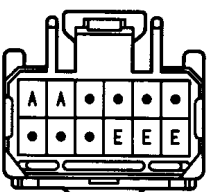
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J12 Ⓑ BLACK



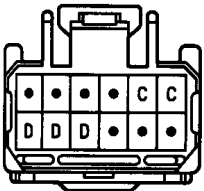
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J35 Ⓐ BLACK



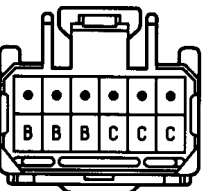
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J36 Ⓑ BLACK



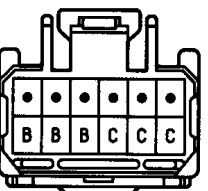
(HINT:SEE PAGE 7, 23, 39)

J37 Ⓐ GRAY



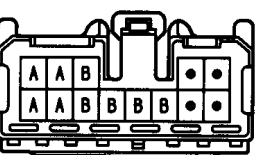
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J38 Ⓑ GRAY



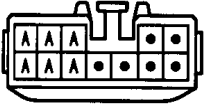
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J39



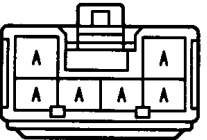
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J42



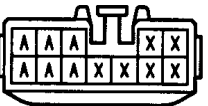
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J43



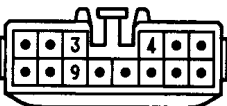
(HINT:SEE PAGE 7, 23, 39)

J44



(HINT:SEE PAGE 7, 23, 39)

P10

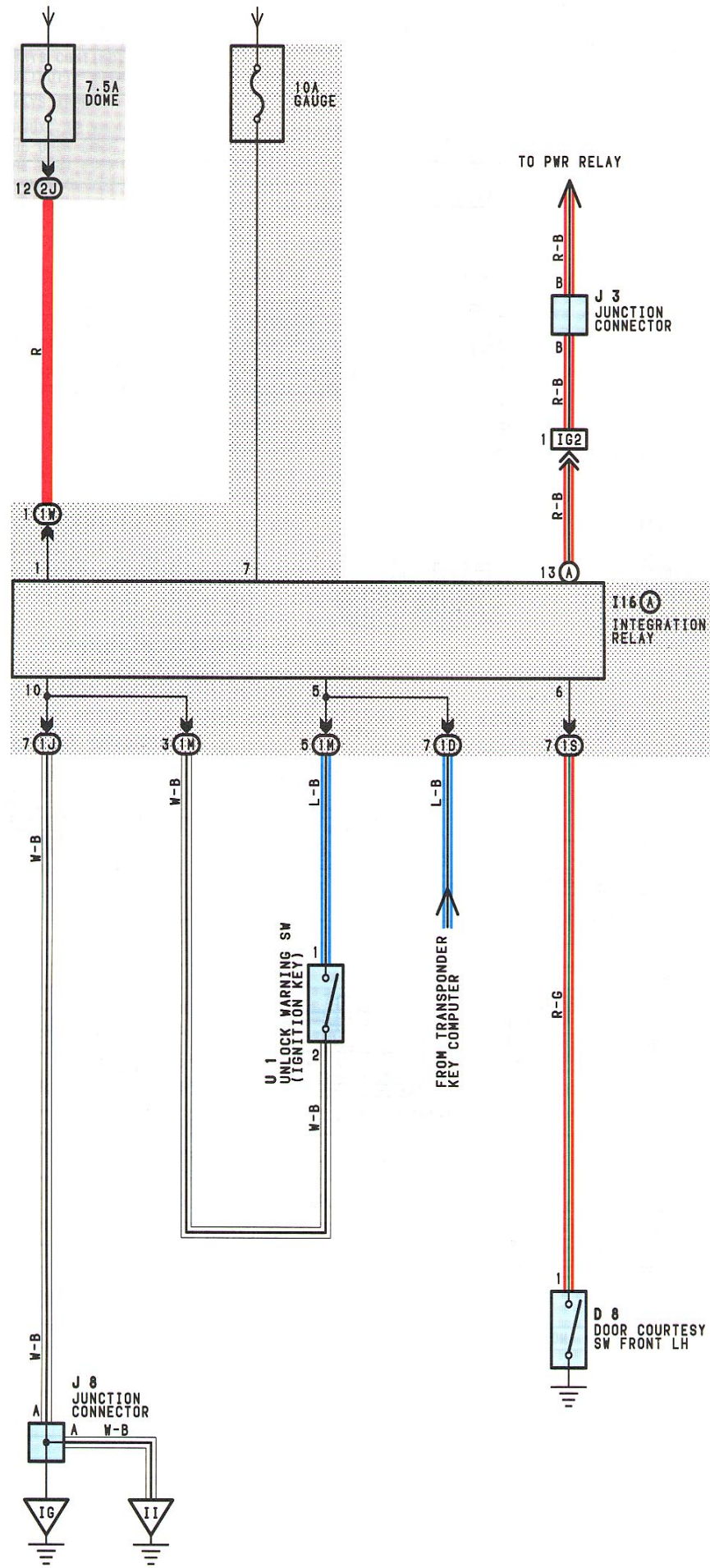


U 1



UNLOCK WARNING(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SYSTEM OUTLINE

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

1.KEY REMINDER SYSTEM

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

SERVICE HINTS

D 8 DOOR COURTESY SW FRONT LH

1-GROUND:CLOSED WITH THE DRIVER'S DOOR OPEN

INTEGRATION RELAY

10-GROUND:ALWAYS CONTINUITY

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

1-GROUND:ALWAYS APPROX. 12 VOLTS

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

U 1 UNLOCK WARNING SW (IGNITION KEY)

1-2:CLOSED WITH THE IGNITION KEY IN CYLINDER

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 8	68(LHD)	J 3	66(LHD)	U 1	66(LHD)
I16 A	64(LHD)	J 8	66(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
18	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

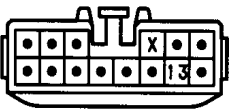
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I82	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)

▽ : GROUND POINTS

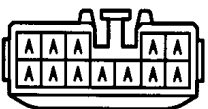
CODE	SEE PAGE	GROUND POINTS LOCATION
I8	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH



I16 A ORANGE



J 3 BLACK



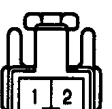
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J 8

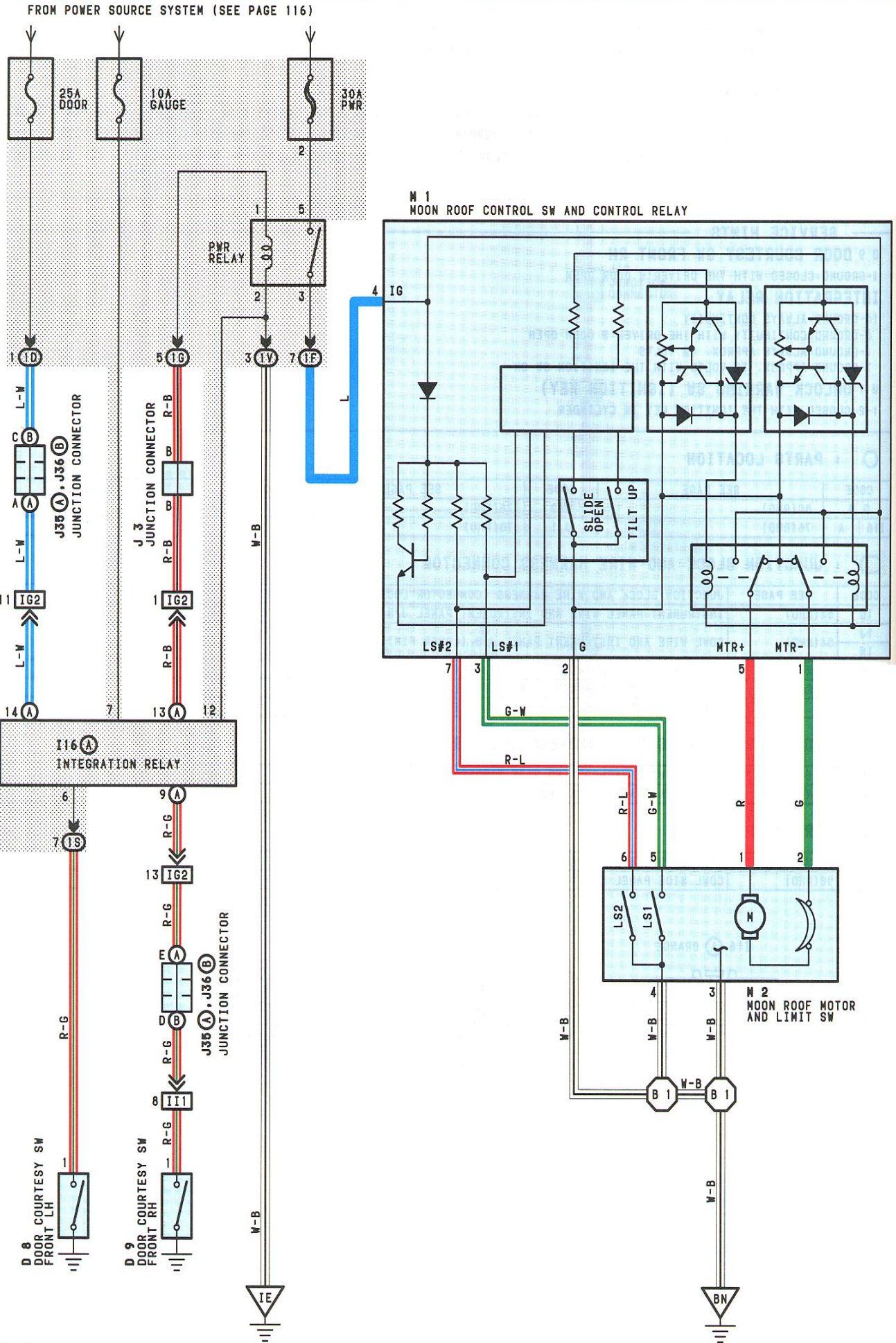


(HINT:SEE PAGE 7, 23, 39)

U 1



MOON ROOF(LHD)



SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH THE PWR FUSE TO TERMINAL 5 OF THE PWR RELAY. WITH THE IGNITION SW TURNED ON, THE CURRENT FLOWS THROUGH THE GAUGE FUSE → TERMINAL 7 OF THE INTEGRATION RELAY → TERMINAL ①3 → TERMINAL 1 OF THE PWR RELAY → TERMINAL 2 → GROUND.

AS A RESULT, PWR RELAY IS ACTIVATED AND THE CURRENT TO TERMINAL 5 OF THE PWR RELAY FLOWS FROM TERMINAL 3 OF THE PWR RELAY TO TERMINAL 4 OF THE MOON ROOF CONTROL SW AND CONTROL RELAY.

1. SLIDE OPEN OPERATION

WHEN TURNING THE SLIDE OPEN SW "ON" WITH THE ROOF CLOSED, THE MOON ROOF CONTROL SW AND CONTROL RELAY WILL MAKE THE MOTOR ROTATE TO THE "OPEN" DIRECTION UNTIL THEY BECOME ANY OF THE FOLLOWING CONDITIONS SUCH AS THE TERMINAL IG BECOMES "OFF" OR ANY OF THE SWS IS TURNED "ON" OR THE TIME LIMIT (ABOUT 20 SECONDS) IS UP OR THE CURRENT GOSE UP THE UPPER LIMIT (ABOUT 15 AMPERE).

2. SLIDE CLOSE OPERATION

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

3. TILT UP OPERATION

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

4. TILT DOWN OPERATION

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

5. KEY OFF MOON ROOF OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, INTEGRATION RELAY OPERATES AND CURRENT FLOWS FROM THE DOOR FUSE TO TERMINAL ①4 OF THE RELAY → TERMINAL ①3 → TERMINAL 1 OF THE PWR RELAY → TERMINAL 2 → GROUND FOR ABOUT 40 SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM THE PWR FUSE TO TERMINAL 5 OF THE PWR RELAY → TERMINAL 3 → TERMINAL 4 OF THE MOON ROOF CONTROL SW AND CONTROL RELAY. AS A RESULT, FOR ABOUT 40 SECONDS AFTER THE IGNITION SW IS TURNED OFF, THE FUNCTIONING OF THIS RELAY MAKES IT POSSIBLE TO OPEN AND CLOSE THE MOON ROOF. ALSO, BY OPENING THE FRONT DOOR (DOOR OPEN DETECTION SW ON) WITHIN ABOUT 40 SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO TERMINALS 6 OR ①9 OF THE INTEGRATION RELAY. AS A RESULT, THE RELAY TURNS OFF AND OPEN CLOSE MOVEMENT OF THE MOON ROOF STOPS.

SERVICE HINTS

PWR RELAY

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

M1 MOON ROOF CONTROL SW AND CONTROL RELAY

2-GROUND:ALWAYS CONTINUITY

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

MOON ROOF(LHD)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 8	68(LHD)	J 3	66(LHD)	M 1	68(LHD)
D 9	68(LHD)	J35 A	66(LHD)	M 2	68(LHD)
I16 A	64(LHD)	J36 B	66(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1F	52(LHD)	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1S	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

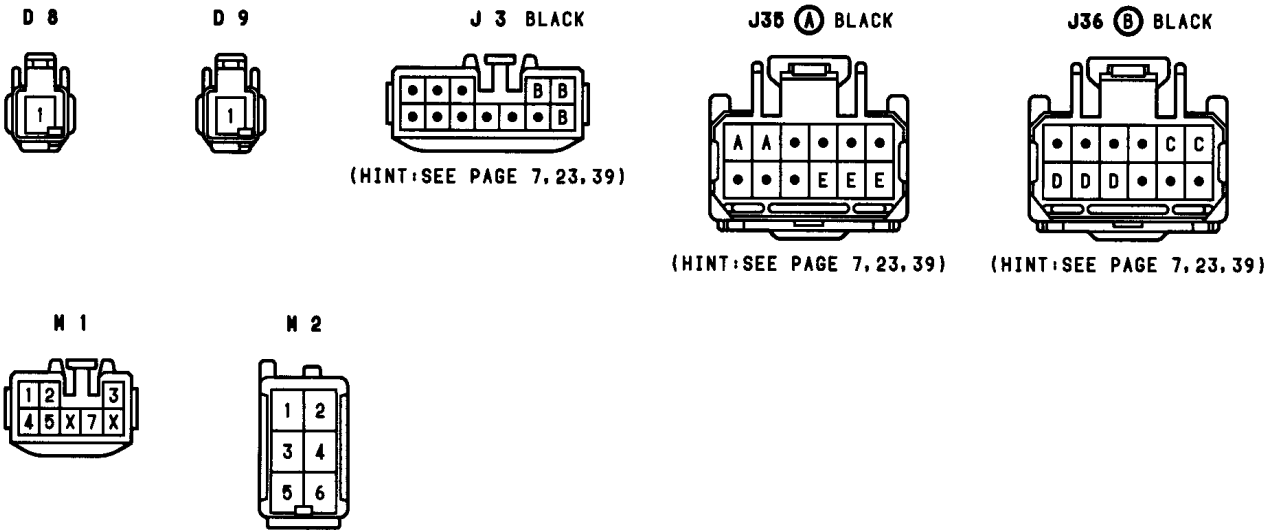
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I82	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
II1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

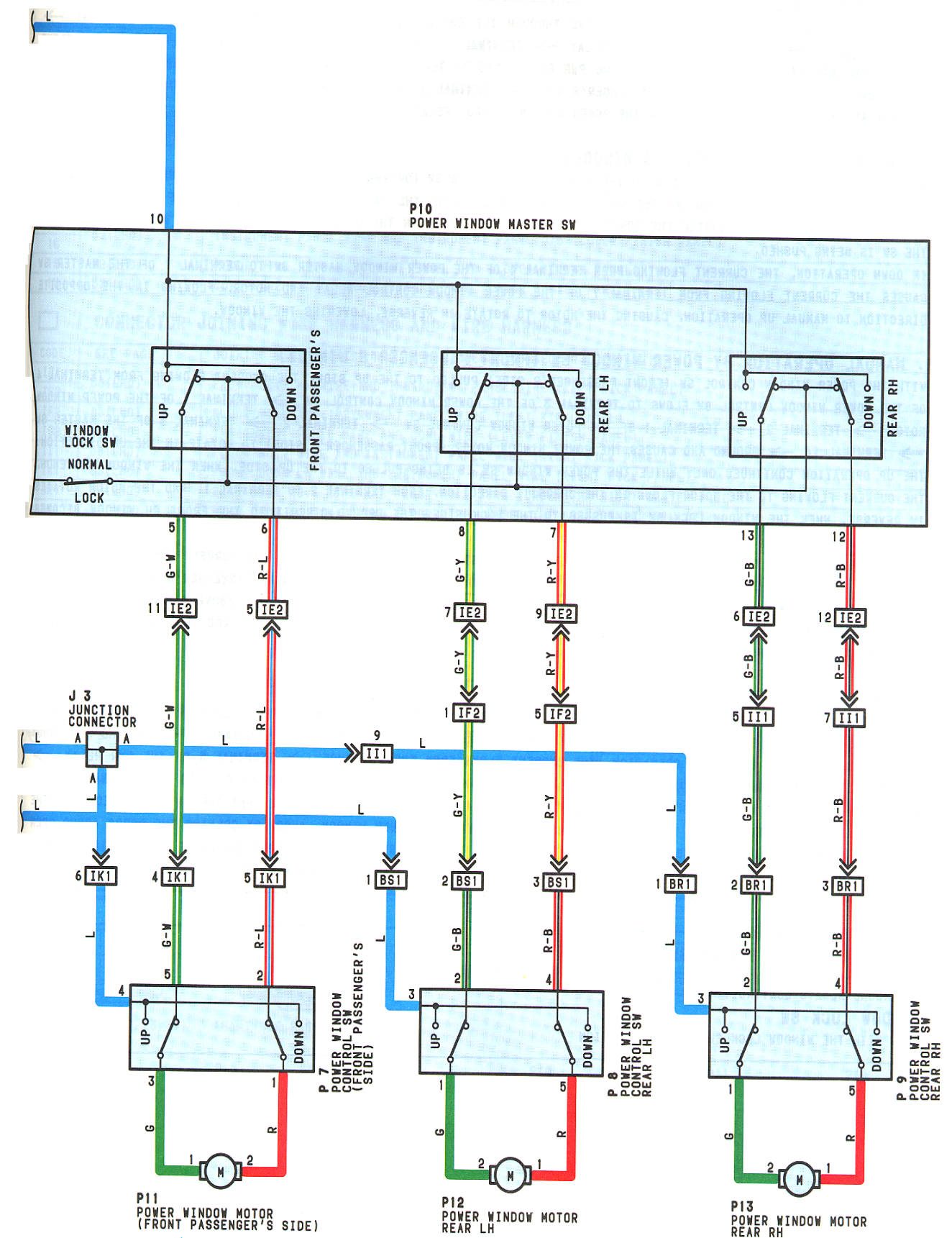
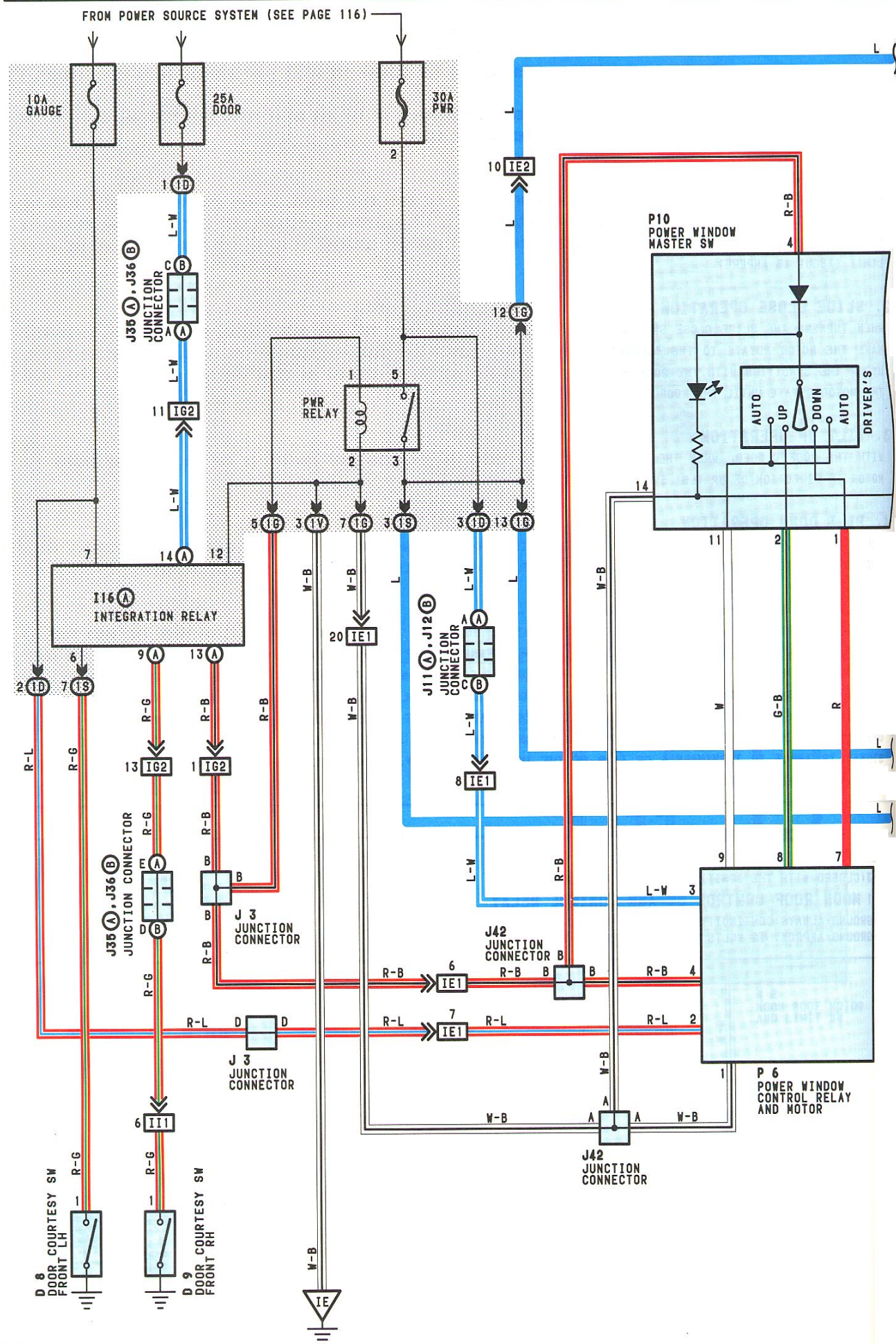
CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86(LHD)	COWL SIDE PANEL LH
BN	90(LHD)	ROOF LEFT

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 1	90(LHD)	ROOF WIRE			



POWER WINDOW(LHD)



POWER WINDOW(LHD)

SYSTEM OUTLINE

WITH THE IGNITION SW TURNED ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO TERMINAL 7 OF THE INTEGRATION RELAY → TERMINAL ①13 → TERMINAL 1 OF THE PWR RELAY → TERMINAL 2 → GROUND. THIS ACTIVATES THE RELAY AND THE CURRENT FLOWING TO TERMINAL 5 OF THE RELAY FROM THE PWR FUSE FLOWS TO TERMINAL 3 OF THE RELAY → TERMINAL 10 OF THE POWER WINDOW MASTER SW. TERMINAL 4 (FRONT PASSENGER'S SIDE) OR TERMINAL 3 (REAR LH, RH) OF THE POWER WINDOW CONTROL SW. CURRENT ALWAYS FLOWS TO TERMINAL 3 OF THE POWER WINDOW CONTROL RELAY AND MOTOR.

1. MANUAL OPERATION (DRIVER'S WINDOW)

WITH THE IGNITION SW TURNED ON AND WITH THE POWER WINDOW MASTER SW (DRIVER'S) IN UP POSITION, THE CURRENT FLOWING FROM TERMINAL 4 OF THE POWER WINDOW MASTER SW FLOWS TO TERMINAL 2 OF THE MASTER SW → TERMINAL 8 OF THE POWER WINDOW CONTROL RELAY AND MOTOR, CAUSING THE POWER WINDOW MOTOR TO ROTATE IN THE UP DIRECTION. THE WINDOW ASCENDS ONLY WHILE THE SW IS BEING PUSHED.

IN DOWN OPERATION, THE CURRENT FLOWING FROM TERMINAL 4 OF THE POWER WINDOW MASTER SW TO TERMINAL 1 OF THE MASTER SW CAUSES THE CURRENT FLOWING FROM TERMINAL 7 OF THE POWER WINDOW CONTROL RELAY AND MOTOR, FLOWING IN THE OPPOSITE DIRECTION TO MANUAL UP OPERATION, CAUSING THE MOTOR TO ROTATE IN REVERSE, LOWERING THE WINDOW.

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

WITH THE POWER WINDOW CONTROL SW (FRONT PASSENGER'S SIDE) PULLED TO THE UP SIDE, THE CURRENT FLOWING FROM TERMINAL 4 OF THE POWER WINDOW CONTROL SW FLOWS TO TERMINAL 3 OF THE POWER WINDOW CONTROL SW → TERMINAL 1 OF THE POWER WINDOW MOTOR → TERMINAL 2 → TERMINAL 1 OF THE POWER WINDOW CONTROL SW → TERMINAL 2 → TERMINAL 6 OF THE MASTER SW → TERMINAL 14 → GROUND AND CAUSES THE POWER WINDOW MOTOR (FRONT PASSENGER'S SIDE) TO ROTATE IN THE UP DIRECTION. THE UP OPERATION CONTINUES ONLY WHILE THE POWER WINDOW SW IS BEING PULLED TO THE UP SIDE. WHEN THE WINDOW DESCENDS, THE CURRENT FLOWING TO THE MOTOR FLOWS IN THE OPPOSITE DIRECTION, FROM TERMINAL 2 TO TERMINAL 1, AND THE MOTOR ROTATES IN REVERSE. WHEN THE WINDOW LOCK SW IS PUSHED TO THE LOCK SIDE, THE GROUND CIRCUIT TO THE FRONT RH WINDOW BECOMES OPEN.

AS A RESULT, EVEN IF OPEN/CLOSE OPERATION OF THE FRONT PASSENGER'S WINDOW IS TRIED, THE CURRENT FROM TERMINAL 14 OF THE POWER WINDOW MASTER SW IS NOT GROUNDED AND THE MOTOR DOES NOT ROTATE, SO THE FRONT PASSENGER'S WINDOW CAN NOT BE OPERATED AND WINDOW LOCK OCCURS. FURTHERMORE, REAR LH, RH WINDOWS OPERATE THE SAME AS THE ABOVE CIRCUIT. BUT ONLY THE POWER WINDOW MOTOR REAR RH, THE CURRENT FLOWS TERMINAL 2 TO TERMINAL 1 (IN THE UP DIRECTION) OR TERMINAL 1 TO TERMINAL 2 (IN THE OPPOSITE DIRECTION).

3. KEY OFF POWER WINDOW OPERATION

WITH THE IGNITION SW TURNED FROM ON TO OFF, THE INTEGRATION RELAY OPERATES AND CURRENT FLOWS FROM THE DOOR FUSE TO TERMINAL ①14 OF THE RELAY → TERMINAL ①13 → TERMINAL 1 OF THE PWR RELAY → TERMINAL 2 → GROUND FOR ABOUT 45 SECONDS. THE SAME AS NORMAL OPERATION, THE CURRENT FLOWS FROM THE PWR FUSE → TERMINAL 5 OF THE PWR RELAY → TERMINAL 3 → TERMINAL 10 OF THE POWER WINDOW MASTER SW AND TERMINAL 4 (FRONT PASSENGER'S SIDE) OR TERMINAL 3 (REAR LH, RH) OF THE POWER WINDOW CONTROL SW. AS A RESULT, FOR ABOUT 45 SECONDS AFTER THE IGNITION SW IS TURNED OFF, THE FUNCTIONING OF THIS RELAY MAKES IT POSSIBLE TO RAISE AND LOWER THE POWER WINDOW. ALSO, BY OPENING THE DOORS (DOOR OPEN DETECTION SW ON) WITHIN ABOUT 45 SECONDS AFTER TURNING THE IGNITION SW TO OFF, A SIGNAL IS INPUT TO TERMINAL 6 OR ①9 OF THE INTEGRATION RELAY. AS A RESULT, THE RELAY TURNED OFF, AND UP AND DOWN MOVEMENT OF THE POWER WINDOW STOPS.

SERVICE HINTS

P10 POWER WINDOW MASTER SW

10-GROUND:APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION
14-GROUND:ALWAYS CONTINUITY

WINDOW LOCK SW

OPEN WITH THE WINDOW LOCK SW AT LOCK POSITION

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
D 8	68(LHD)	J35	A	66(LHD)	
D 9	68(LHD)	J36	B	66(LHD)	
I16	A	64(LHD)	J42	68(LHD)	
J 3	66(LHD)	P 6	68(LHD)	P10	68(LHD)
J11	A	66(LHD)	P 7	68(LHD)	
J12	B	66(LHD)	P 8	68(LHD)	
				P11	68(LHD)
				P12	68(LHD)
				P13	68(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

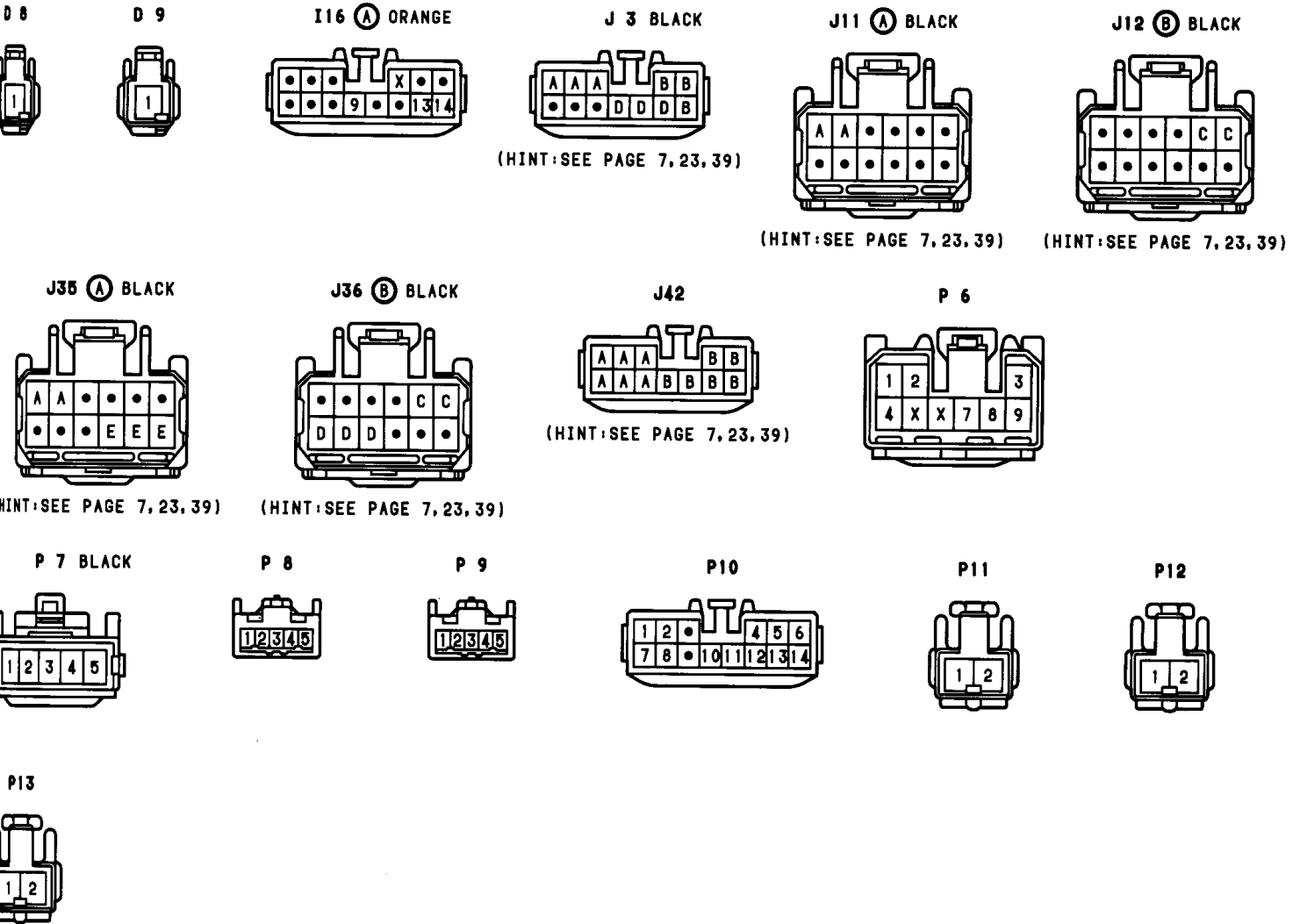
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
ID	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
I8		
18	52(LHD)	FLOOR WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IE2		
IF2	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
I82	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
II1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IK1	88(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BR1	90(LHD)	REAR DOOR NO.1 WIRE AND FLOOR NO.2 WIRE (UNDER THE RIGHT CENTER PILLAR)
B81	90(LHD)	REAR DOOR NO.2 WIRE AND FLOOR WIRE (UNDER THE LEFT CENTER PILLAR)

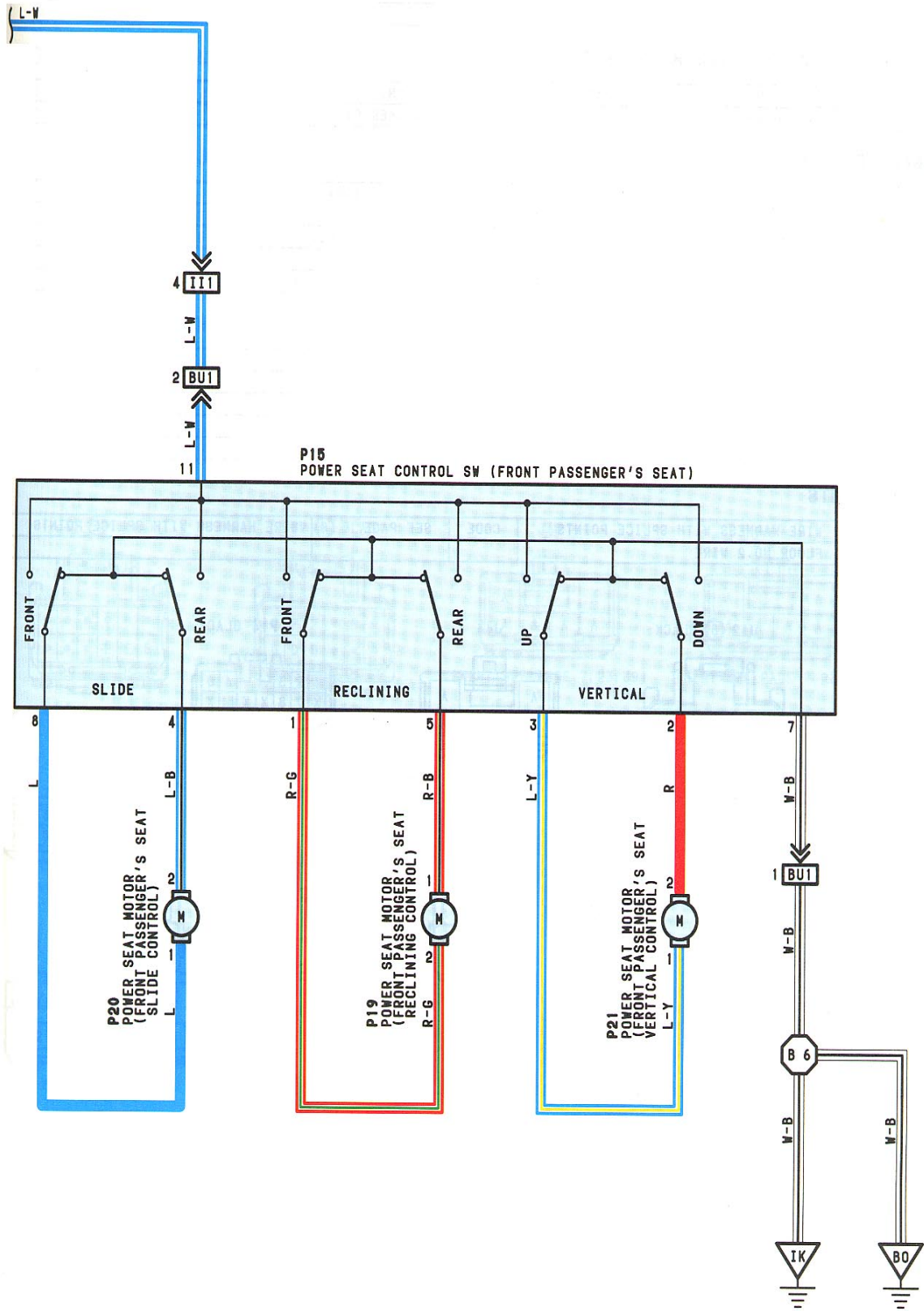
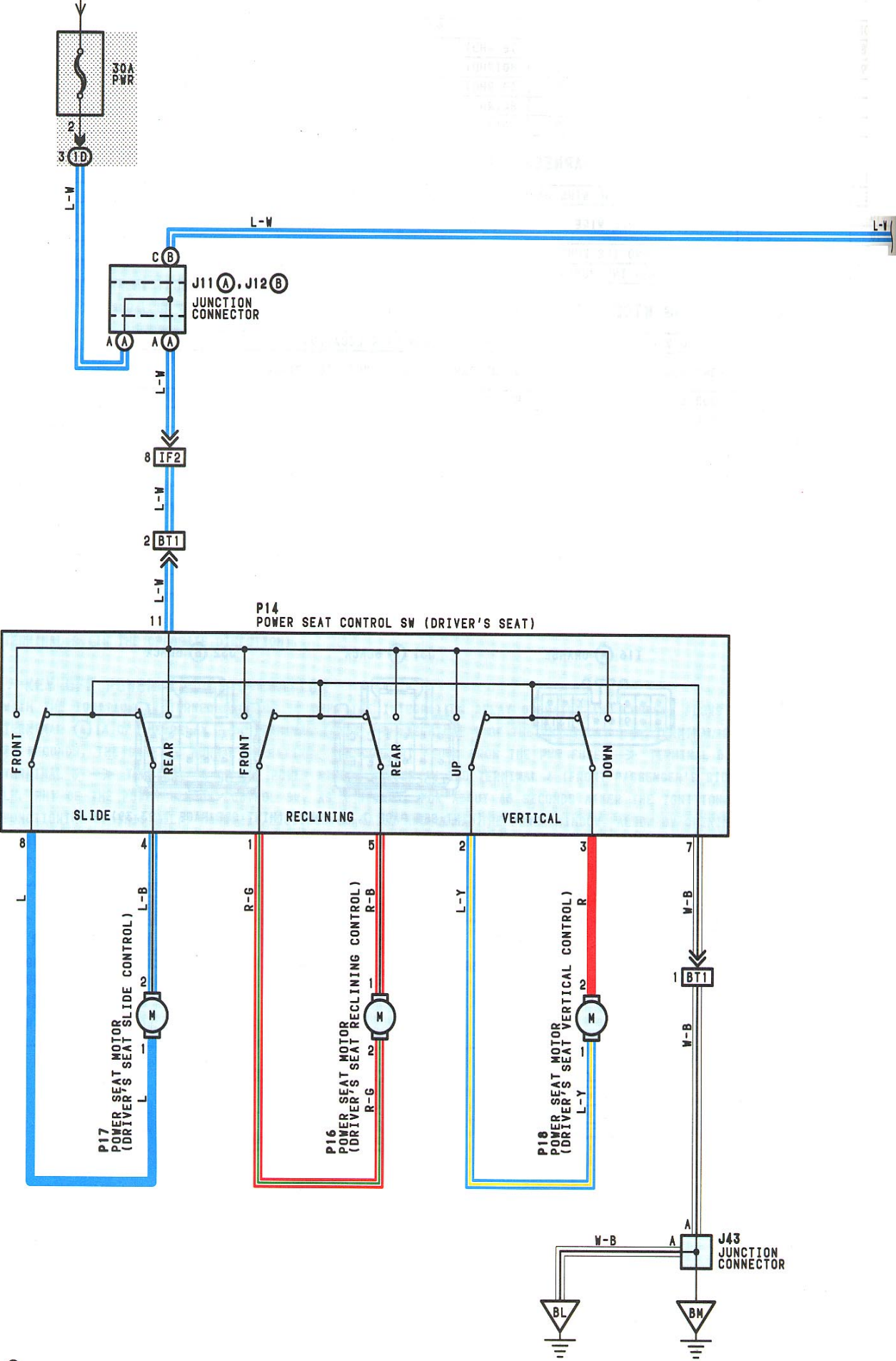
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86(LHD)	COWL SIDE PANEL LH



POWER SEAT(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

P14,P15 POWER SEAT CONTROL SW (DRIVER'S, FRONT PASSENGER'S SEAT)

11-GROUND:ALWAYS APPROX. 12 VOLTS

7-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J11	A	66(LHD)	P15	70(LHD)	P19	70(LHD)
J12	B	66(LHD)	P16	70(LHD)	P20	70(LHD)
J43		68(LHD)	P17	70(LHD)	P21	70(LHD)
P14		70(LHD)	P18	70(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	62(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

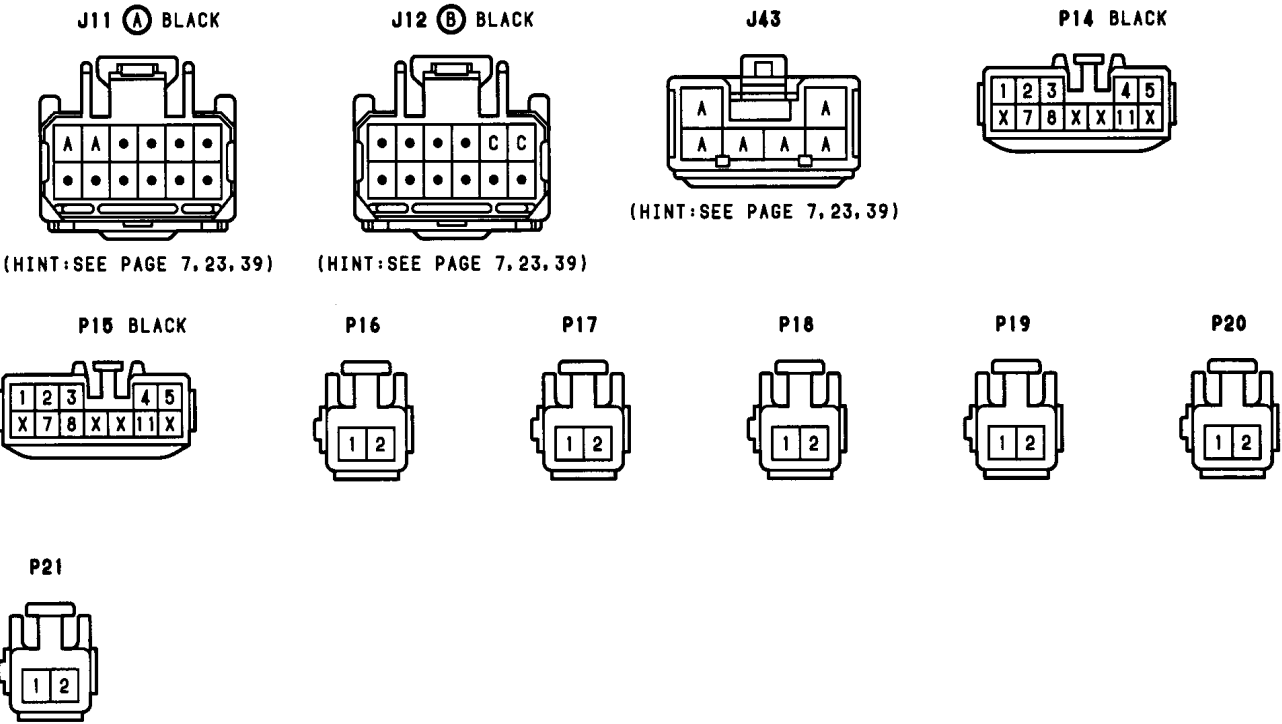
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF2	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
II1	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
BT1	92(LHD)	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BU1	92(LHD)	FLOOR NO.2 WIRE AND SEAT NO.2 WIRE (UNDER THE PASSENGER'S SEAT)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IK	86(LHD)	RIGHT KICK PANEL
BL	90(LHD)	UNDER THE LEFT CENTER PILLAR
BN	90(LHD)	BACK PANEL CENTER
BO	90(LHD)	UNDER THE RIGHT CENTER PILLAR

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 6	90(LHD)	FLOOR NO.2 WIRE			



SERVICE HINTS

P14,P15 POWER SEAT CONTROL SW (DRIVER'S, FRONT PASSENGER'S SEAT)

11-GROUND:ALWAYS APPROX. 12 VOLTS

7-GROUND:ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J31	A	78(RHD)	P14	70(RHD)	P18	70(RHD)
J32	B	78(RHD)	P15	70(RHD)	P19	70(RHD)
J45		80(RHD)	P16	70(RHD)	P20	70(RHD)
J47		80(RHD)	P17	70(RHD)	P21	70(RHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

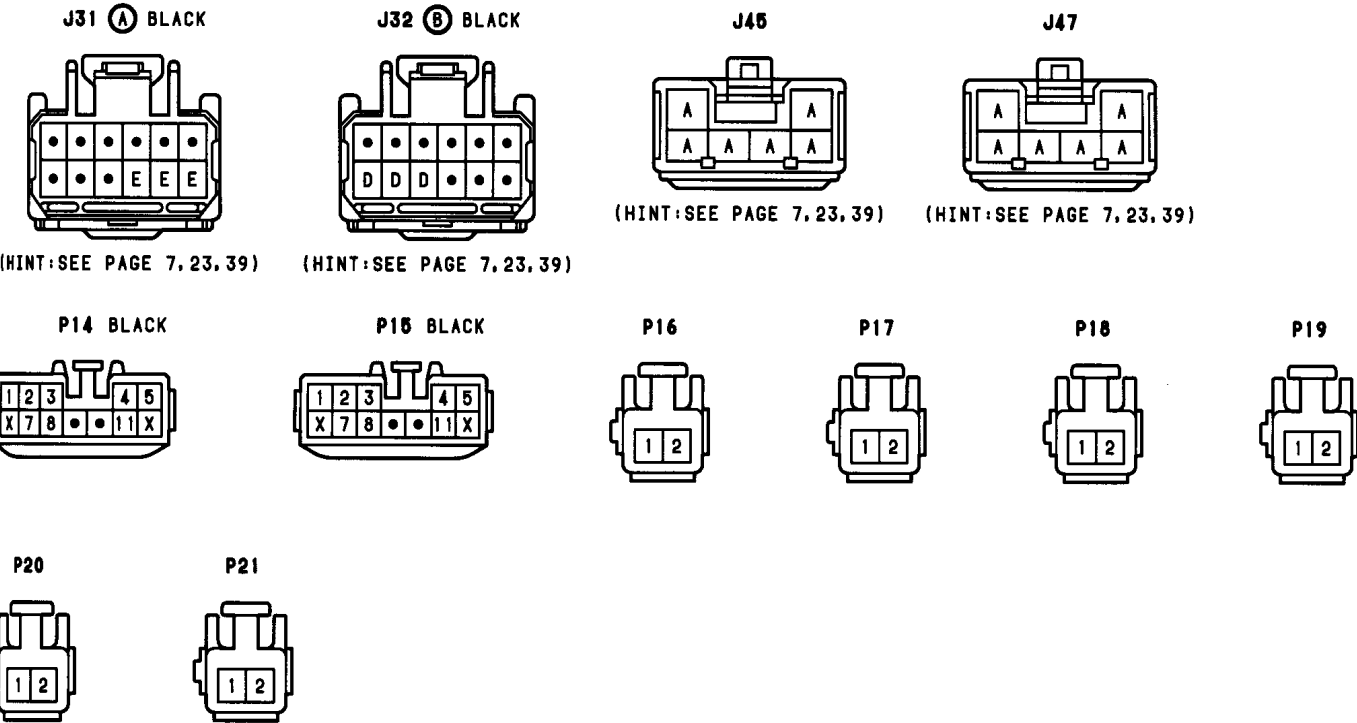
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	64(RHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF2	98(RHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
II3	100(RHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
BT2	92(RHD)	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)
BU2	92(RHD)	FLOOR NO.2 WIRE AND SEAT NO.2 WIRE (UNDER THE PASSENGER'S SEAT)

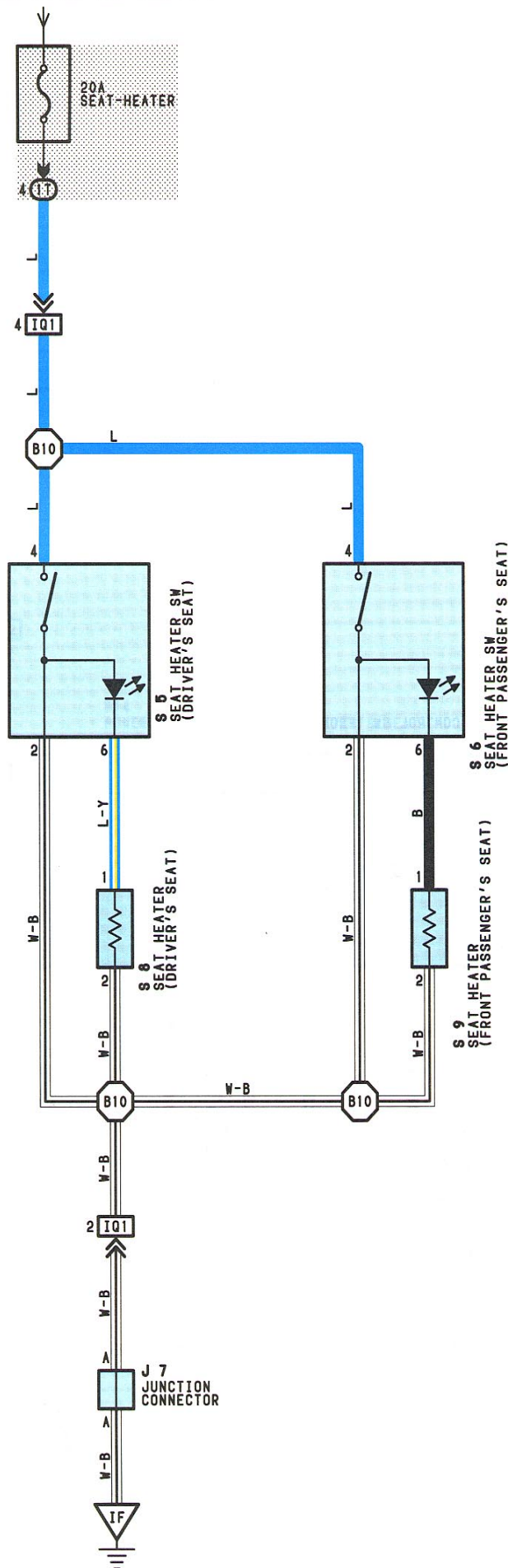
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IK	98(RHD)	LEFT KICK PANEL
BL	102(RHD)	UNDER THE LEFT CENTER PILLAR
BN	102(RHD)	BACK PANEL CENTER
BO	102(RHD)	UNDER THE RIGHT CENTER PILLAR



SEAT HEATER(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

S 5, S 6 SEAT HEATER SW (DRIVER'S, FRONT PASSENGER'S SEAT)

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 7	66(LHD)	S 6	66(LHD)	S 9	66(LHD)
S 5	66(LHD)	S 8	66(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
I 7	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

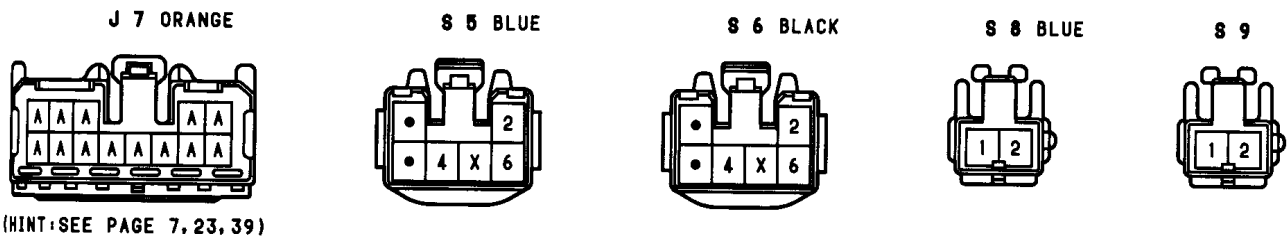
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I 01	88(LHD)	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
I F	86(LHD)	LEFT KICK PANEL

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 10	92(LHD)	FLOOR NO.3 WIRE			

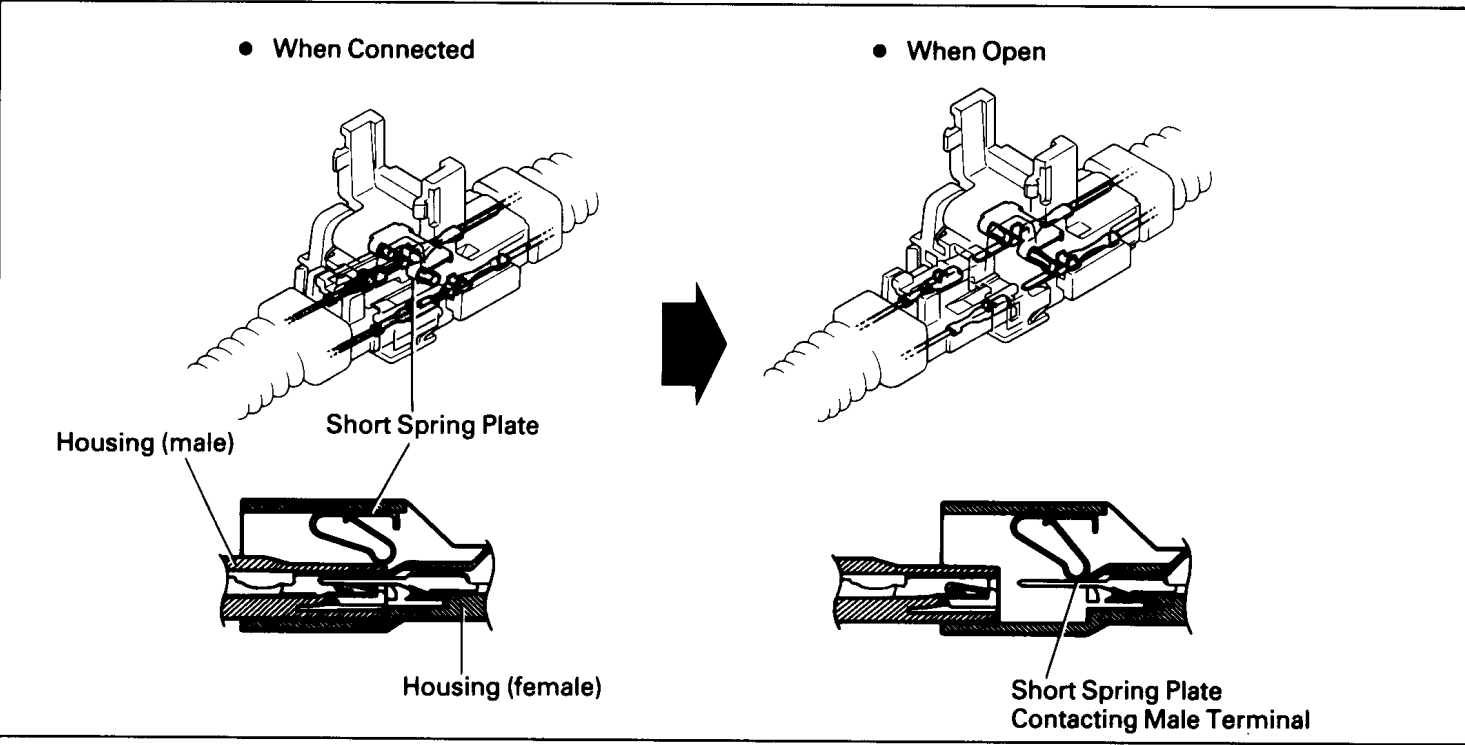


NOTICE: When inspecting or repairing the SRS, perform the operation in accordance with the following precautionary instructions and the procedure and precautions in the Repair Manual.

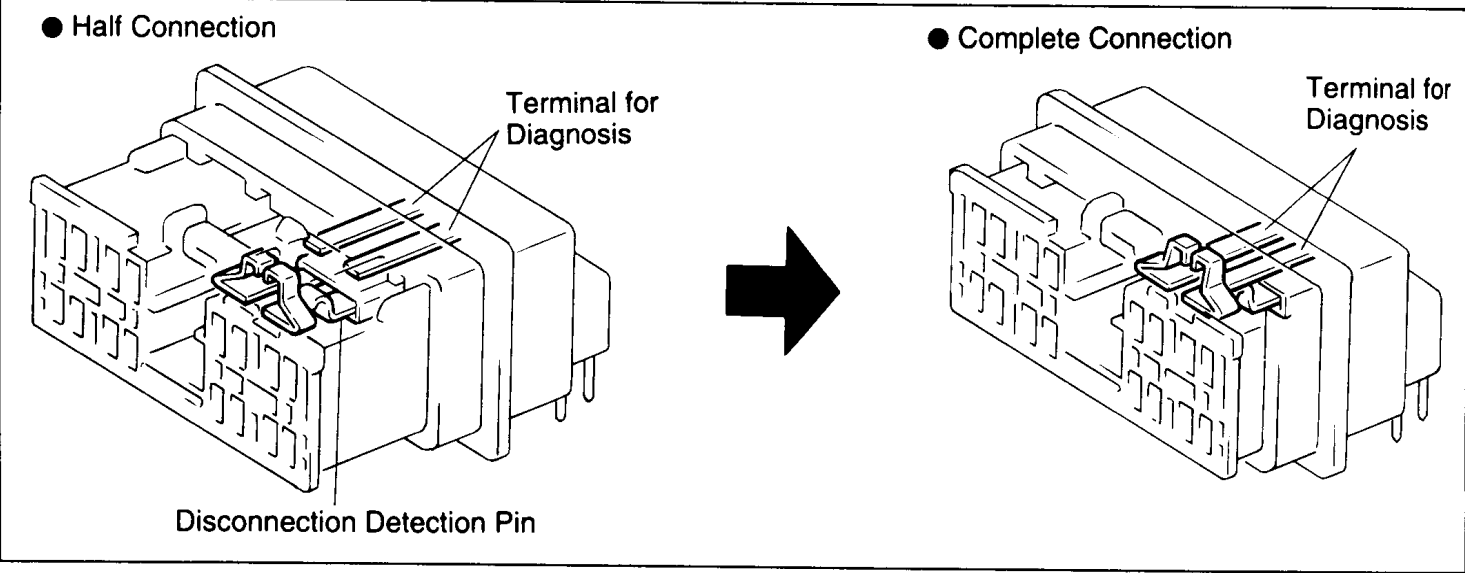
- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started after 90 seconds from when the ignition switch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

The SRS has connectors which possess the functions described below:

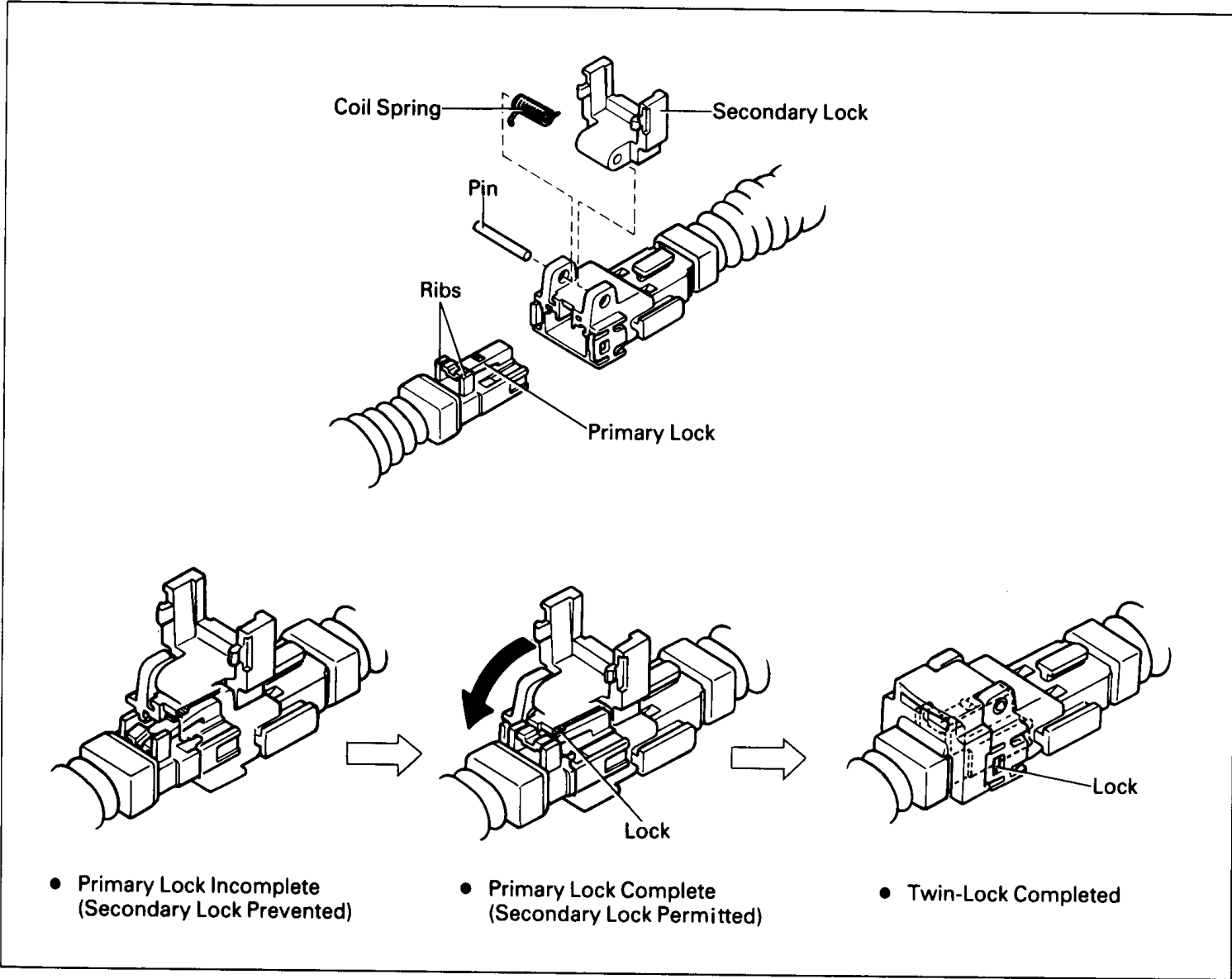
1. SRS ACTIVATION PREVENTION MECHANISM
- Each connector contains a short spring plate. When the connector is disconnected, the short spring plate automatically connects the power source and grounding terminals of the squib to preclude a potential difference between the terminals.



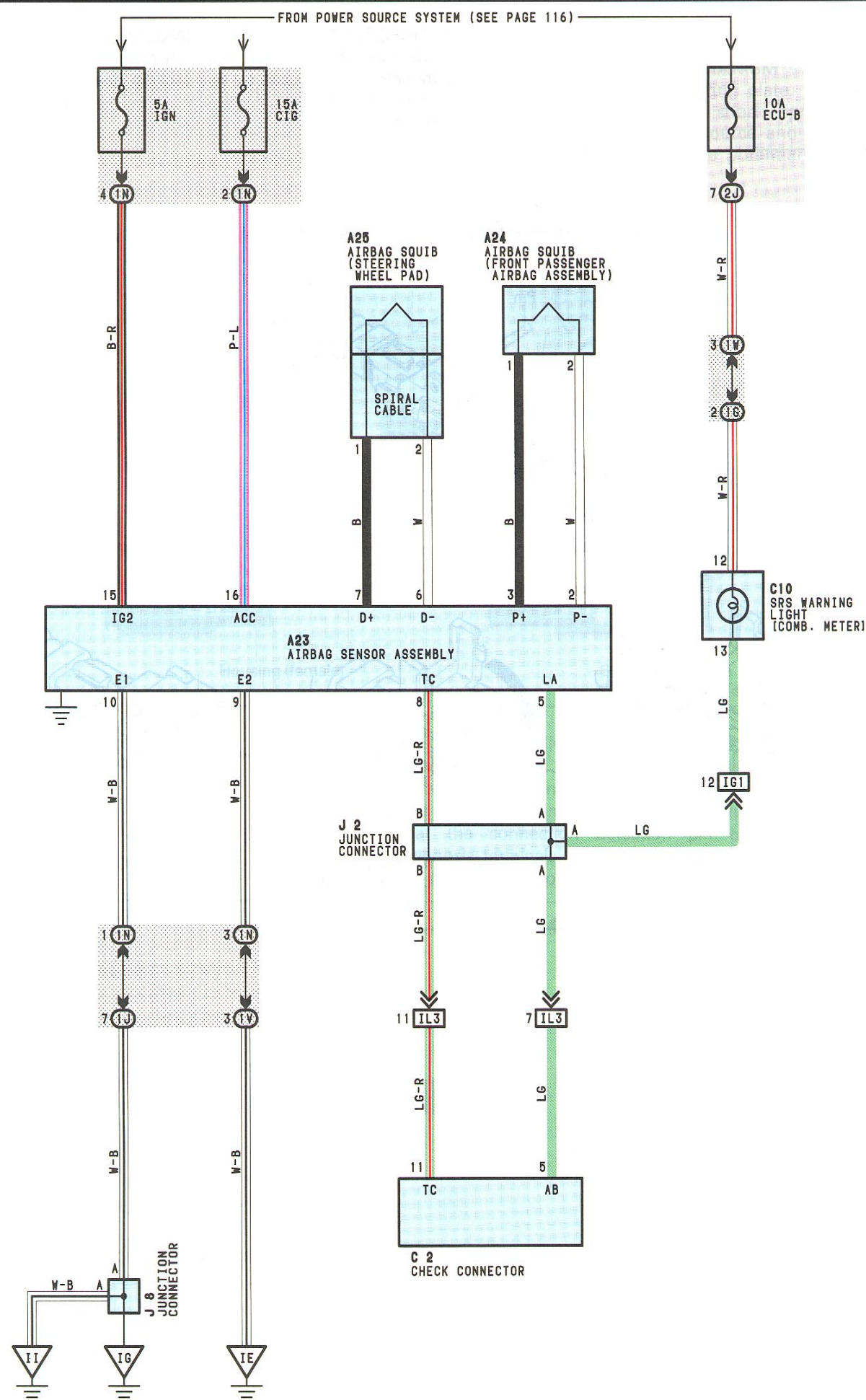
2. ELECTRICAL CONNECTION CHECK MECHANISM
- This mechanism is designed to electrically check if connectors are connected correctly and completely. The electrical connection check mechanism is designed so that the connection detection pin connects with the diagnosis terminals when the connector housing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



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



SRS (LHD)



SYSTEM OUTLINE

THE SRS IS A DRIVER AND PASSENGER PROTECTION DEVICE WHICH HAS A SUPPLEMENTAL ROLE TO THE SEAT BELTS. WHEN THE IGNITION SW IS TURNED TO ACC OR ON, CURRENT FROM THE CIG FUSE FLOWS TO TERMINAL 16 OF THE AIRBAG SENSOR ASSEMBLY. ONLY WHEN THE IGNITION SW IS ON DOES THE CURRENT FROM THE IGN FUSE TO TERMINAL 15.

IF AN ACCIDENT OCCURS WHILE DRIVING, WHEN THE FRONTAL IMPACT EXCEEDS A SET LEVEL, CURRENT FROM THE CIG OR IGN FUSE FLOWS TO TERMINALS 3 AND 7 OF THE AIRBAG SENSOR ASSEMBLY → TERMINAL 1 OF THE AIRBAG SQUIBS → TERMINALS 2 → TERMINALS 2 AND 6 OF THE AIRBAG SENSOR ASSEMBLY → TERMINAL 9 OR TERMINAL 10 OR BODY GROUND → GROUND, SO THAT THE CURRENT FLOWS TO THE AIRBAG SQUIBS AND CAUSES IT TO OPERATE.

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A23	64 (LHD)	C 2	60 (1MZ-FE LHD)	J 2	66 (LHD)
A24	64 (LHD)		62 (5S-FE LHD)	J 8	66 (LHD)
A25	64 (LHD)	C10	64 (LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
I8	52 (LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
IJ	52 (LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
IN		
IV		
IW		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

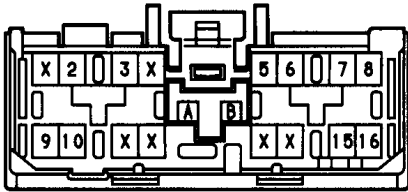
□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I81	86 (LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
IL3	88 (LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IE	86 (LHD)	COWL SIDE PANEL LH
I8	86 (LHD)	INSTRUMENT PANEL BRACE LH
II	86 (LHD)	COWL SIDE PANEL RH

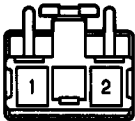
A23 YELLOW



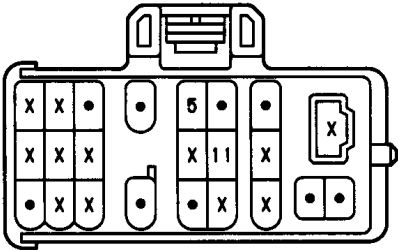
A24 YELLOW



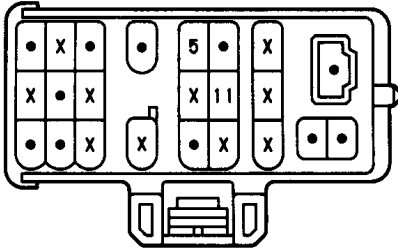
A25 YELLOW



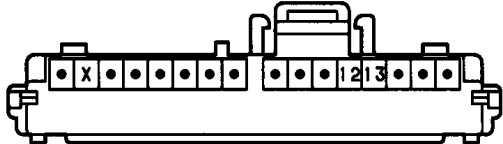
(1M2-FE) C 2 BLACK



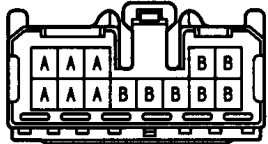
(5S-FE) C 2 BLACK



C10

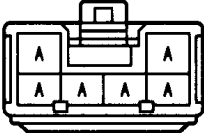


J 2 GRAY



(HINT:SEE PAGE 7, 23, 39)

J 8

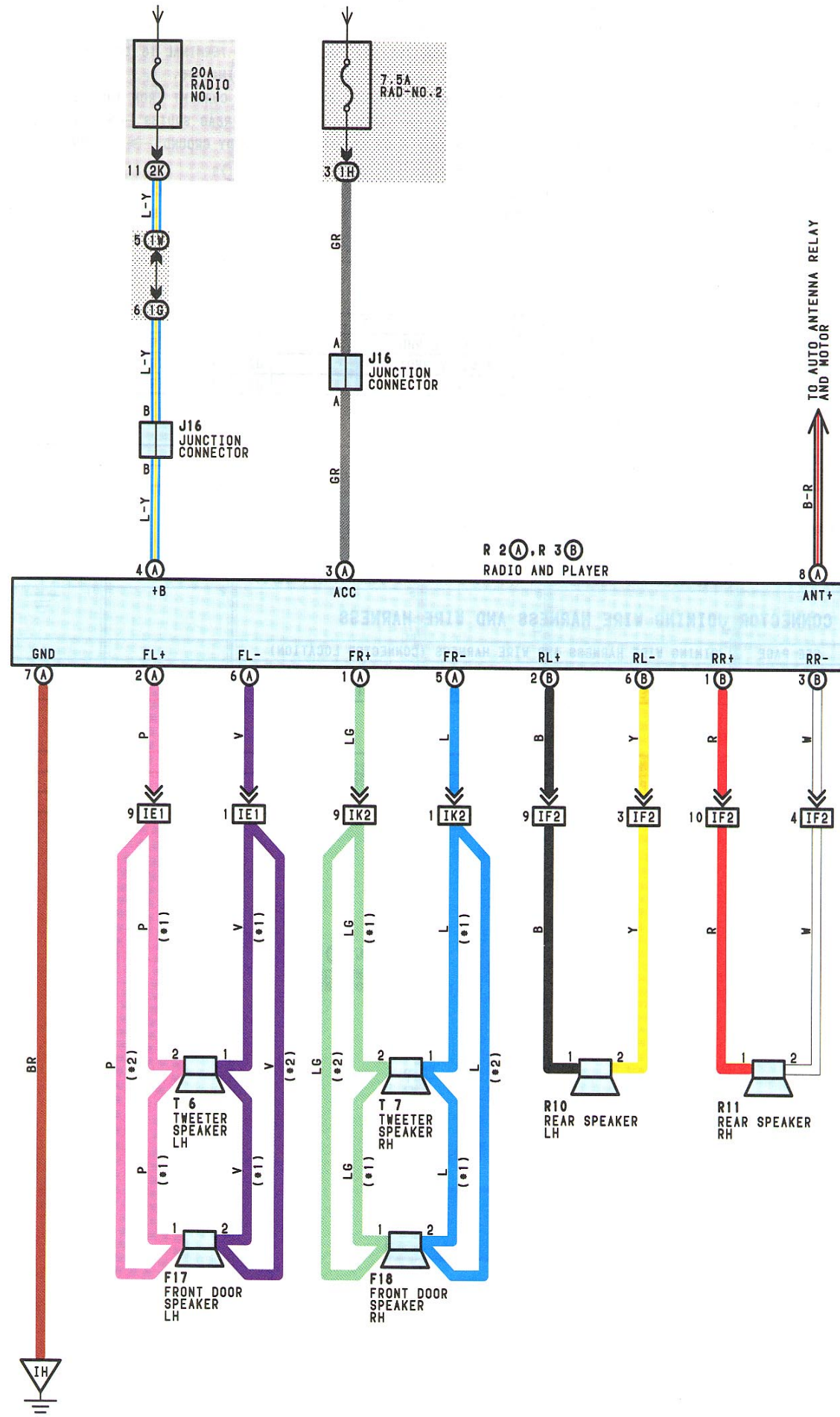


(HINT:SEE PAGE 7, 23, 39)

RADIO AND PLAYER(LHD)

- 1:6 SPEAKER
- 2:4 SPEAKER

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

R 2 ① RADIO AND PLAYER

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE		SEE PAGE	CODE	SEE PAGE
F17	68(LHD)	R 2	A	66(LHD)	R11	68(LHD)
F18	68(LHD)	R 3	B	66(LHD)	T 6	68(LHD)
J16	66(LHD)	R10		68(LHD)	T 7	68(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

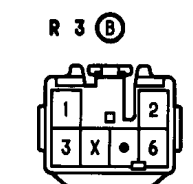
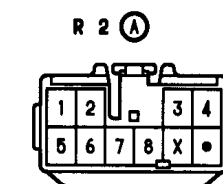
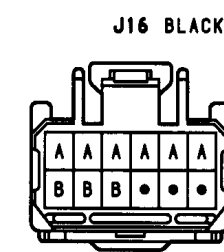
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
18	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

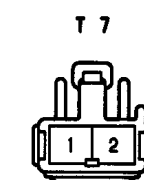
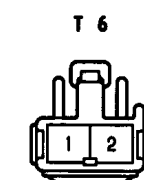
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IE1	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF2	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IK2	88(LHD)	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

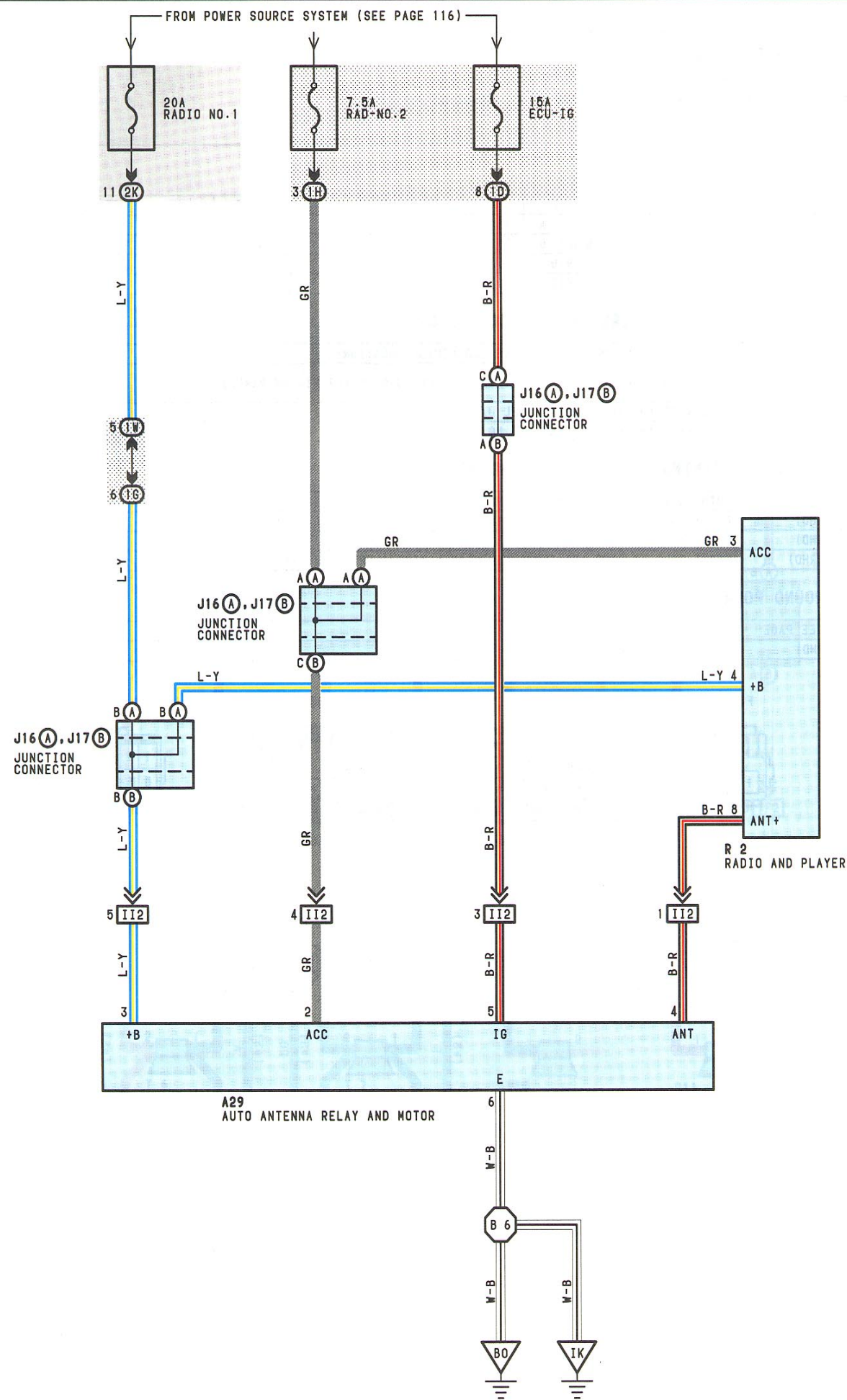
CODE	SEE PAGE	GROUND POINTS LOCATION
IH	86(LHD)	INSTRUMENT PANEL BRACE RH



(HINT: SEE PAGE 7, 23, 39)



AUTO ANTENNA(LHD)



SERVICE HINTS

A29 AUTO ANTENNA RELAY AND MOTOR

3-GROUND: ALWAYS APPROX. 12 VOLTS
5-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION
2-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ACC OR ON POSITION
6-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A29	68(LHD)	J17 B	66(LHD)		
J16 A	66(LHD)	R 2	66(LHD)		

⊙ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D		
1H	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

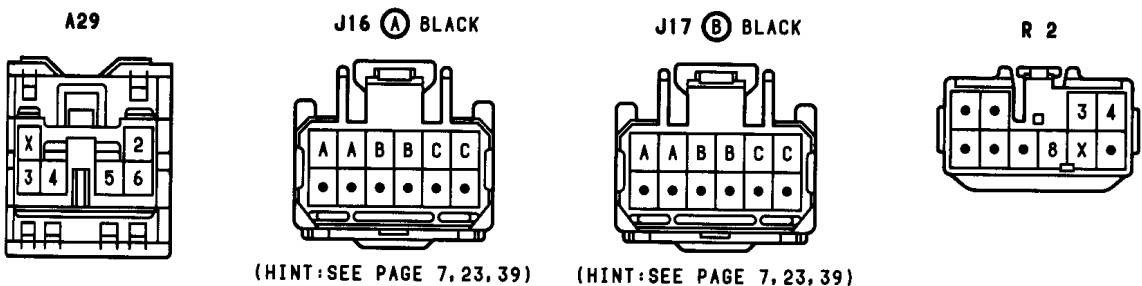
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
112	88(LHD)	FLOOR NO.2 WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IK	86(LHD)	RIGHT KICK PANEL
BO	90(LHD)	UNDER THE RIGHT CENTER PILLAR

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
B 6	90(LHD)	FLOOR NO.2 WIRE			



SYSTEM OUTLINE

CURRENT IS APPLIED AT ALL TIMES THROUGH THE STOP FUSE TO TERMINAL 2 OF THE STOP LIGHT SW, AND ALSO THROUGH THE ECU-8 FUSE TO TERMINAL 1 OF THE CRUISE CONTROL ECU.

WITH THE IGNITION SW TURNED TO ON, CURRENT FLOWS THROUGH THE GAUGE FUSE TO TERMINAL ⑦ OF THE COMBINATION METER AND THE CURRENT THROUGH THE ECU-16 FUSE FLOWS TO TERMINAL 9 OF THE CRUISE CONTROL ECU.

WHEN THE IGNITION SW IS ON AND THE CRUISE CONTROL MAIN SW IS TURNED ON, A SIGNAL IS INPUT FROM TERMINAL 5 OF THE CRUISE CONTROL SW TO TERMINAL 11 OF THE CRUISE CONTROL ECU. AS A RESULT, THE CRUISE CONTROL ECU FUNCTIONS AND THE CURRENT FLOWS FROM THE ECU-16 FUSE TO TERMINAL 9 OF THE CRUISE CONTROL ECU → TERMINAL 16 → GROUND, AND THE CRUISE CONTROL SYSTEM IS IN A CONDITION READY FOR OPERATION.

AT THE SAME TIME, THE CURRENT THROUGH THE GAUGE FUSE FLOWS TO TERMINAL ⑦ OF THE CRUISE CONTROL INDICATOR LIGHT → TERMINAL ⑩ → TERMINAL 4 OF THE CRUISE CONTROL ECU → TERMINAL 16 → GROUND, CAUSING THE CRUISE CONTROL INDICATOR LIGHT TO LIGHT UP, INDICATING THAT THE CRUISE CONTROL IS READY FOR OPERATION.

1. SET OPERATION

WHEN THE CRUISE CONTROL MAIN SW IS TURNED ON AND THE SET SW IS PUSHED WITH THE VEHICLE SPEED WITHIN THE SET LIMIT (APPROX. 40 KM/H, 25 MPH TO 200 KM/H, 124 MPH), A SIGNAL IS INPUT TO TERMINAL 10 OF THE CRUISE CONTROL ECU AND THE VEHICLE SPEED AT THE TIME THE SET SW IS RELEASED IS MEMORIZED IN THE ECU AS THE SET SPEED.

2. SET SPEED CONTROL

DURING CRUISE CONTROL DRIVING, THE ECU COMPARES THE SET SPEED MEMORIZED IN THE ECU WITH THE ACTUAL VEHICLE SPEED INPUT INTO TERMINAL 12 OF THE CRUISE CONTROL ECU FROM THE 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 15 OF THE CRUISE CONTROL ECU → TERMINAL 1 OF THE CRUISE CONTROL ACTUATOR → TERMINAL 2 → TERMINAL 7 OF THE CRUISE CONTROL ECU. AS A RESULT, THE MOTOR IN THE CRUISE CONTROL ACTUATOR IS ROTATED TO OPEN THE THROTTLE VALVE AND THE THROTTLE CABLE IS PULLED TO INCREASE THE VEHICLE SPEED. WHEN THE ACTUAL DRIVING SPEED IS HIGHER THAN THE SET SPEED, THE CURRENT TO THE CRUISE CONTROL ACTUATOR FLOWS FROM TERMINAL 7 OF THE ECU → TERMINAL 2 OF THE CRUISE CONTROL ACTUATOR → TERMINAL 1 → TERMINAL 15 OF THE CRUISE CONTROL ECU.

THIS CAUSES THE MOTOR IN THE CRUISE CONTROL ACTUATOR TO ROTATE TO CLOSE THE THROTTLE VALVE AND RETURN THE THROTTLE CABLE TO DECREASE THE VEHICLE SPEED.

3. COAST CONTROL

DURING THE CRUISE CONTROL DRIVING, WHILE THE COAST SW IS ON, THE CRUISE CONTROL ACTUATOR RETURNS THE THROTTLE CABLE TO CLOSE THE THROTTLE VALVE AND DECREASE THE DRIVING SPEED. THE VEHICLE SPEED WHEN THE COAST SW IS TURNED OFF IS MEMORIZED AND THE VEHICLE CONTINUES AT THE NEW SET SPEED.

4. ACCEL CONTROL

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

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

5. RESUME CONTROL

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

6. MANUAL CANCEL MECHANISM

IF ANY OF THE FOLLOWING OPERATIONS OCCURS DURING CRUISE CONTROL OPERATION, THE MAGNETIC CLUTCH OF THE ACTUATOR TURNS OFF AND THE MOTOR ROTATES TO CLOSE THE THROTTLE VALVE AND THE CRUISE CONTROL IS RELEASED.

- PLACING THE SHIFT LEVER EXCEPT "D" POSITION (NEUTRAL START SW EXCEPT "D" POSITION)). "SIGNAL IS NOT INPUT TO TERMINAL 3 OF THE ECU" (A/T)
- DEPRESSED THE CLUTCH PEDAL (CRUISE CONTROL CLUTCH SW OFF), "SIGNAL IS NOT INPUT TO TERMINAL 3 OF THE ECU" (M/T)
- DEPRESSED THE BRAKE PEDAL (STOP LIGHT SW ON). "SIGNAL INPUT TO TERMINAL 2 OF THE ECU"
- PUSHING THE CANCEL SW (CANCEL SW ON). "SIGNAL INPUT TO TERMINAL 4 OF THE ECU"

7. AUTO CANCEL FUNCTION

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

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

B) IF ANY OF THE FOLLOWING OPERATING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED, THE CURRENT FLOW TO THE MAGNETIC CLUTCH IS STOPPED AND THE CRUISE CONTROL IS RELEASED. (MAIN SW TURN OFF). WHEN THIS OCCURS, THE CANCEL STATE IS CLEARED AS THE MAIN SW WILL TURN ON AGAIN.

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

C) IF ANY OF THE FOLLOWING CONDITIONS OCCURS DURING CRUISE CONTROL OPERATION, THE SET SPEED IS ERASED AND THE CRUISE CONTROL IS RELEASED. (THE POWER TO THE MAGNETIC CLUTCH IS CUT OFF UNTIL THE SET SW IS "ON" AGAIN.)

- WHEN THE VEHICLE SPEED FALLS BELOW THE MINIMUM SPEED LIMIT, APPROX. 40 KM/H (25 MPH)
- WHEN POWER TO THE CRUISE CONTROL SYSTEM IS MOMENTARILY CUT OFF.

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

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

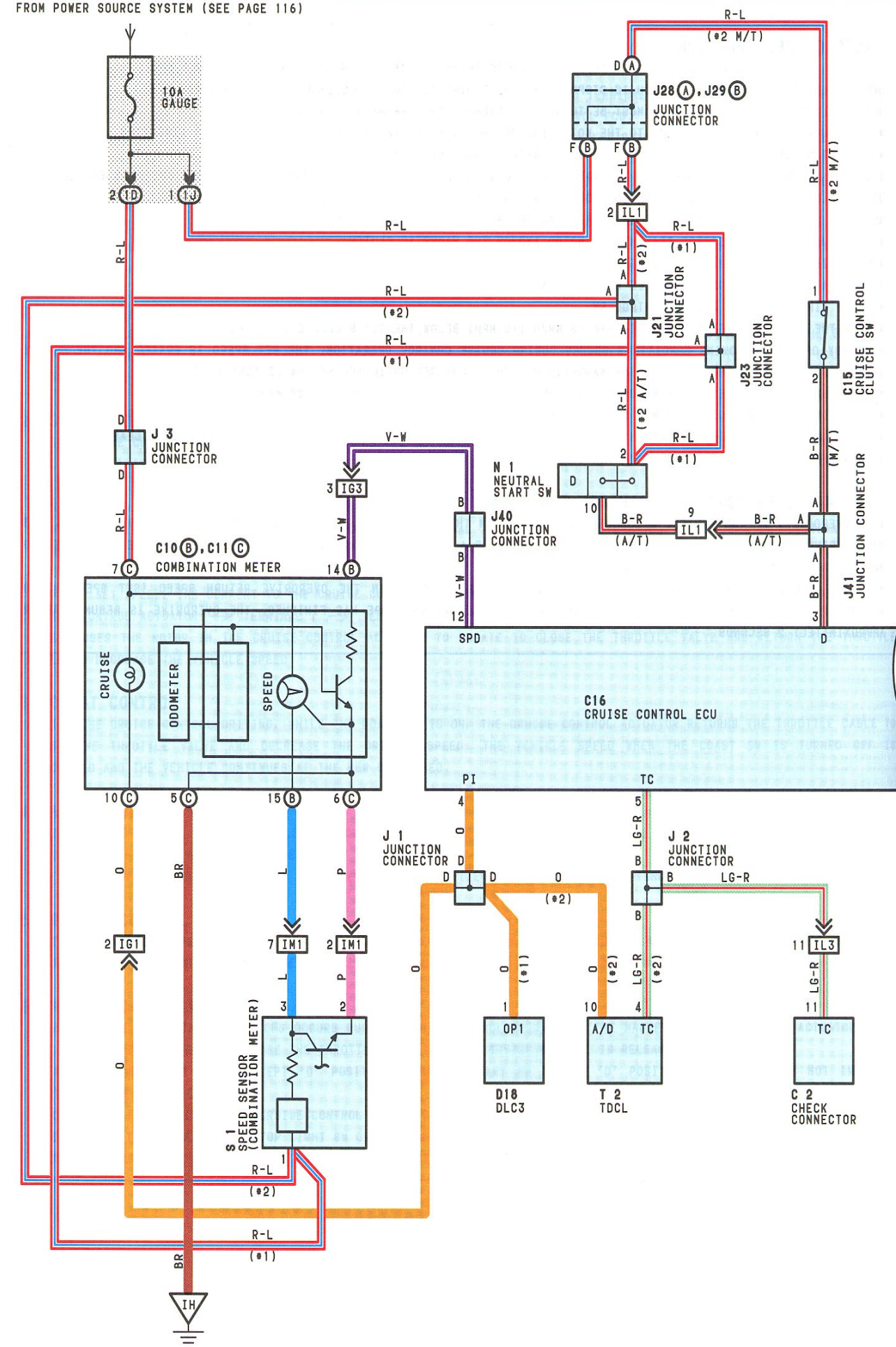
8. AUTOMATIC TRANSMISSION CONTROL FUNCTION

• IN OVERDRIVE. IF THE VEHICLE SPEED BECOMES LOWER THAN THE OVERDRIVE CUT SPEED (SET SPEED MINUS APPROX. 4 KM/H, 2.5 MPH) DURING CRUISE CONTROL OPERATION, SUCH AS DRIVING UP A HILL, THE OVERDRIVE IS RELEASED AND THE POWER INCREASED TO PREVENT A REDUCTION IN VEHICLE SPEED.

• AFTER RELEASING THE OVERDRIVE, VEHICLE SPEED BECOMES HIGHER THAN THE OVERDRIVE RETURN SPEED (SET SPEED MINUS APPROX. 2 KM/H, 1.2 MPH) AND THE ECU JUDGES BY THAT THE UPWARD SLOPE HAS FINISHED, THE OVERDRIVE IS RESUMED AFTER APPROXIMATELY 2 SECONDS.

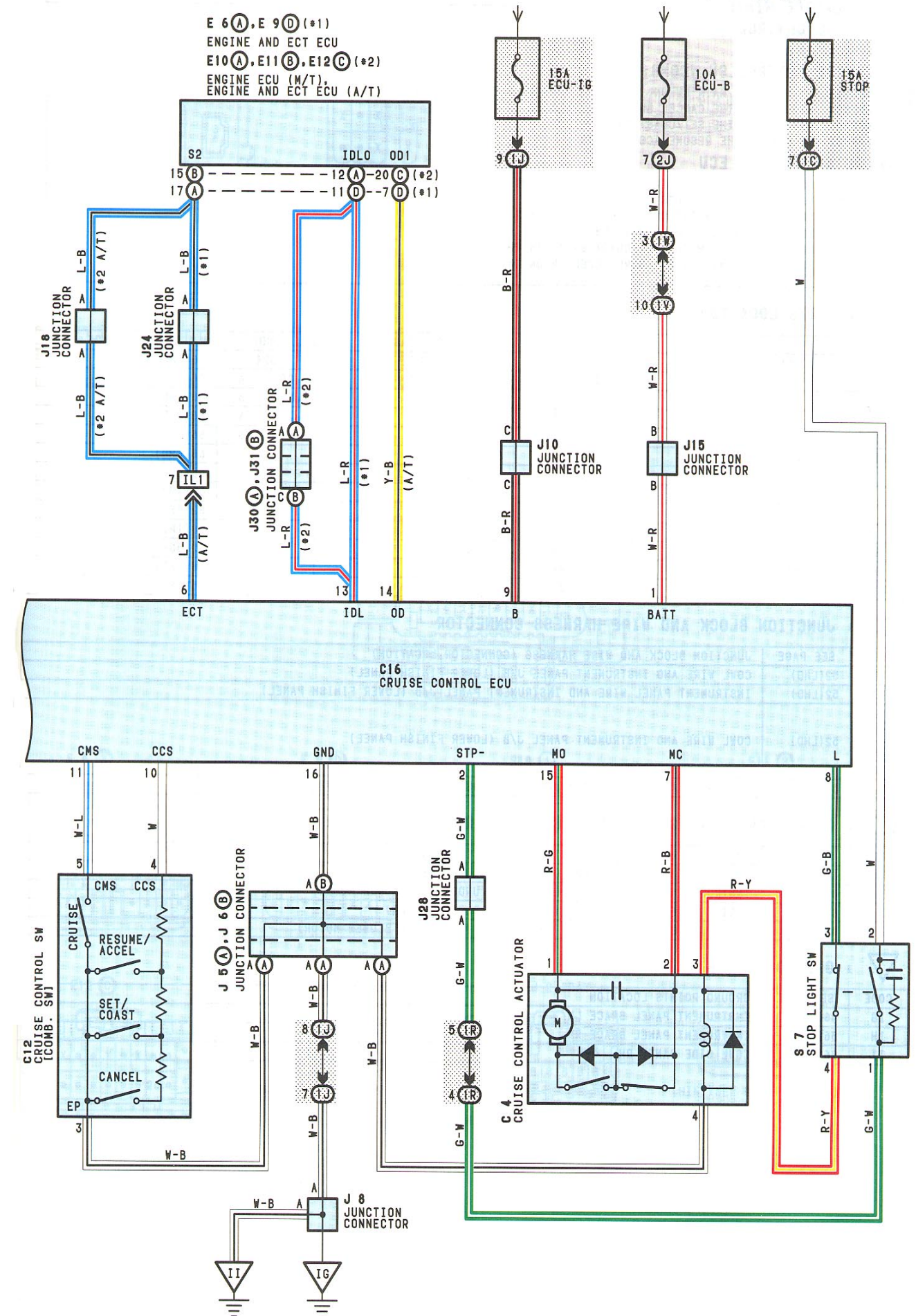
CRUISE CONTROL (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



※ 1:1MZ-FE
※ 2:5S-FE

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



CRUISE CONTROL(LHD)

SERVICE HINTS

C 4 CRUISE CONTROL ACTUATOR

3-4:APPROX. 38 Ω

C12 CRUISE CONTROL SW (COMB. SW)

5-3:CONTINUITY WITH THE MAIN SW ON

4-3:APPROX. 418 Ω WITH THE CANCEL SW ON

APPROX. 198 Ω WITH THE SET/COAST SW ON

APPROX. 68 Ω WITH THE RESUME/ACCEL SW ON

C16 CRUISE CONTROL ECU

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

1-GROUND:ALWAYS APPROX. 12 VOLTS

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

10-GROUND:APPROX. 418 Ω WITH THE CANCEL SW ON IN THE CONTROL SW

APPROX. 198 Ω WITH THE SET/COAST SW ON IN THE CONTROL SW

APPROX. 68 Ω WITH THE RESUME/ACCEL SW ON IN THE CONTROL SW

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
C 2	60(1MZ-FE LHD)	E11	B	64(5S-FE LHD)	J24
	62(5S-FE LHD)	E12	C	64(5S-FE LHD)	J28
C 4	60(1MZ-FE LHD)	J 1		66(LHD)	J29
	62(5S-FE LHD)	J 2		66(LHD)	J30
C10	B	J 3		66(LHD)	J31
C11	C	J 5	A	66(LHD)	J40
C12		J 6	B	66(LHD)	J41
C15		J 8		66(LHD)	N 1
C16		J10		66(LHD)	
D18		J15		66(LHD)	S 1
E 6	A	J18		66(LHD)	
E 9	D	J21		66(LHD)	S 7
E10	A	J23		66(LHD)	T 2

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		
1V		
1W		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I61	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
I63	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
IH	86(LHD)	INSTRUMENT PANEL BRACE RH
II	86(LHD)	COWL SIDE PANEL RH

(1MZ-FE) C 2 BLACK

(5S-FE) C 2 BLACK

C 4 BLACK

C10 B

C11 C BROWN

C12 BLACK

C15

C16

D18

E 6 A

E 9 D

E10 A

E11 B

E12 C

J 1 BLACK

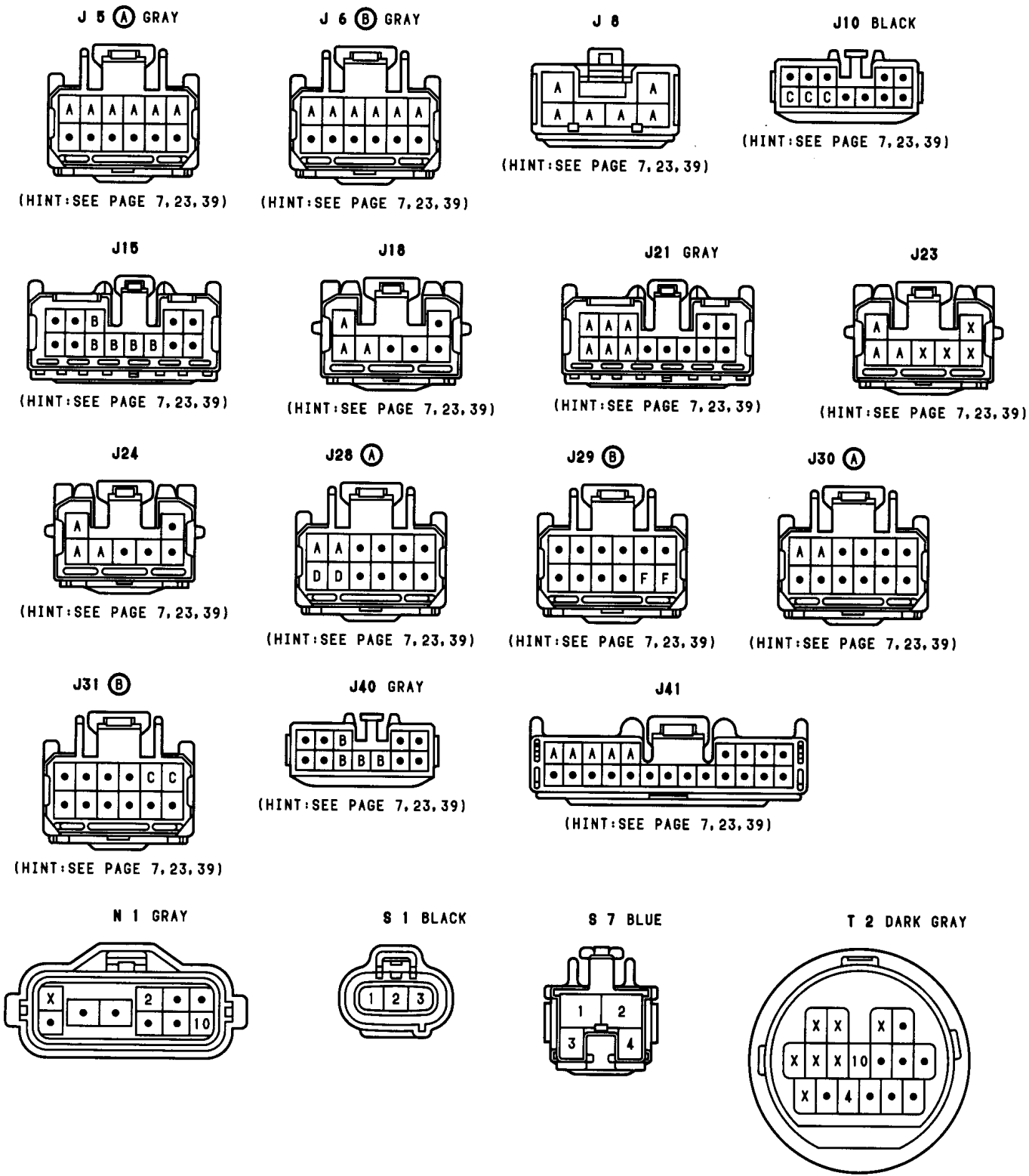
J 2 GRAY

J 3 BLACK

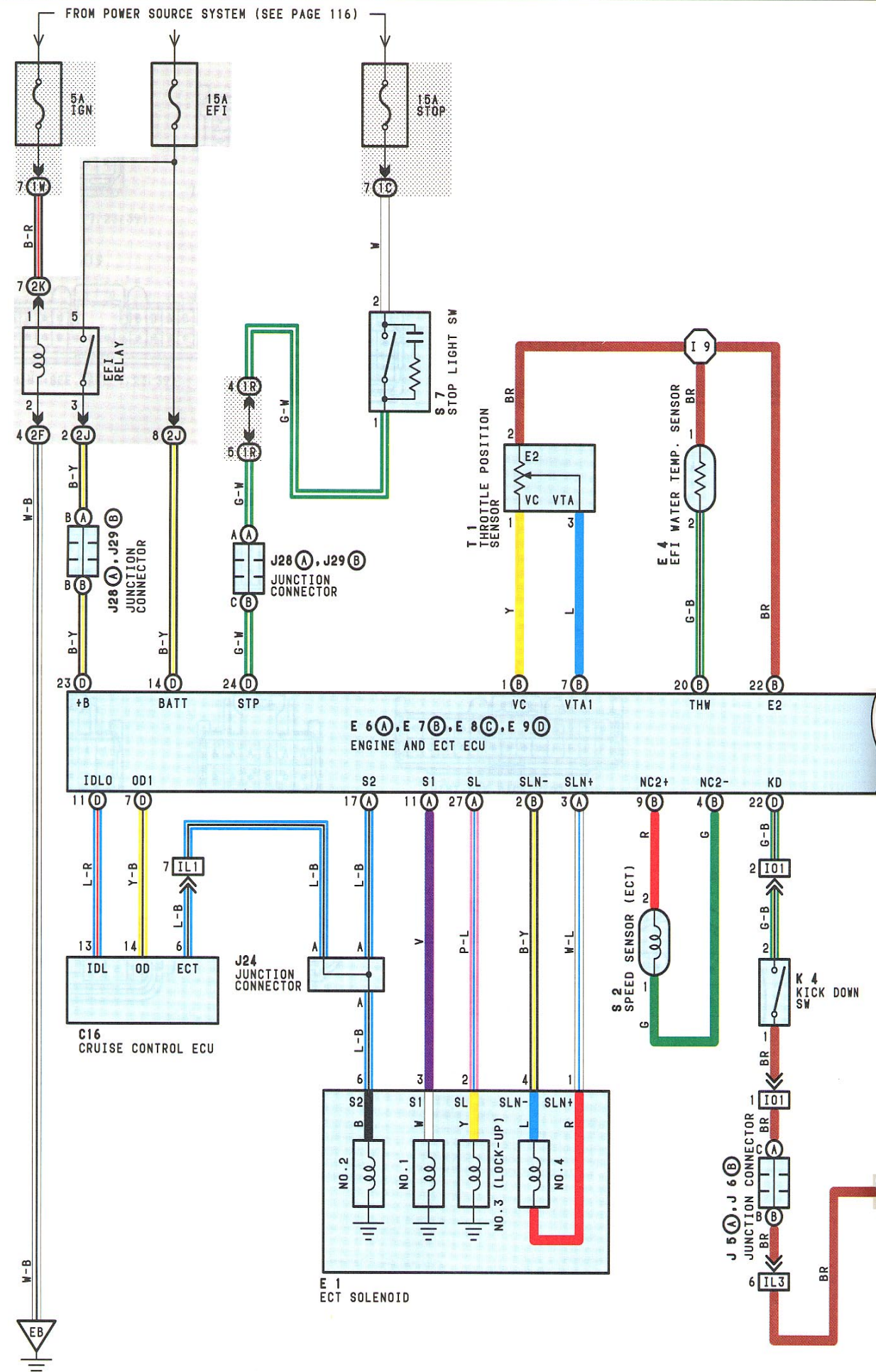
(HINT:SEE PAGE 7, 23, 39)

(HINT:SEE PAGE 7, 23, 39)

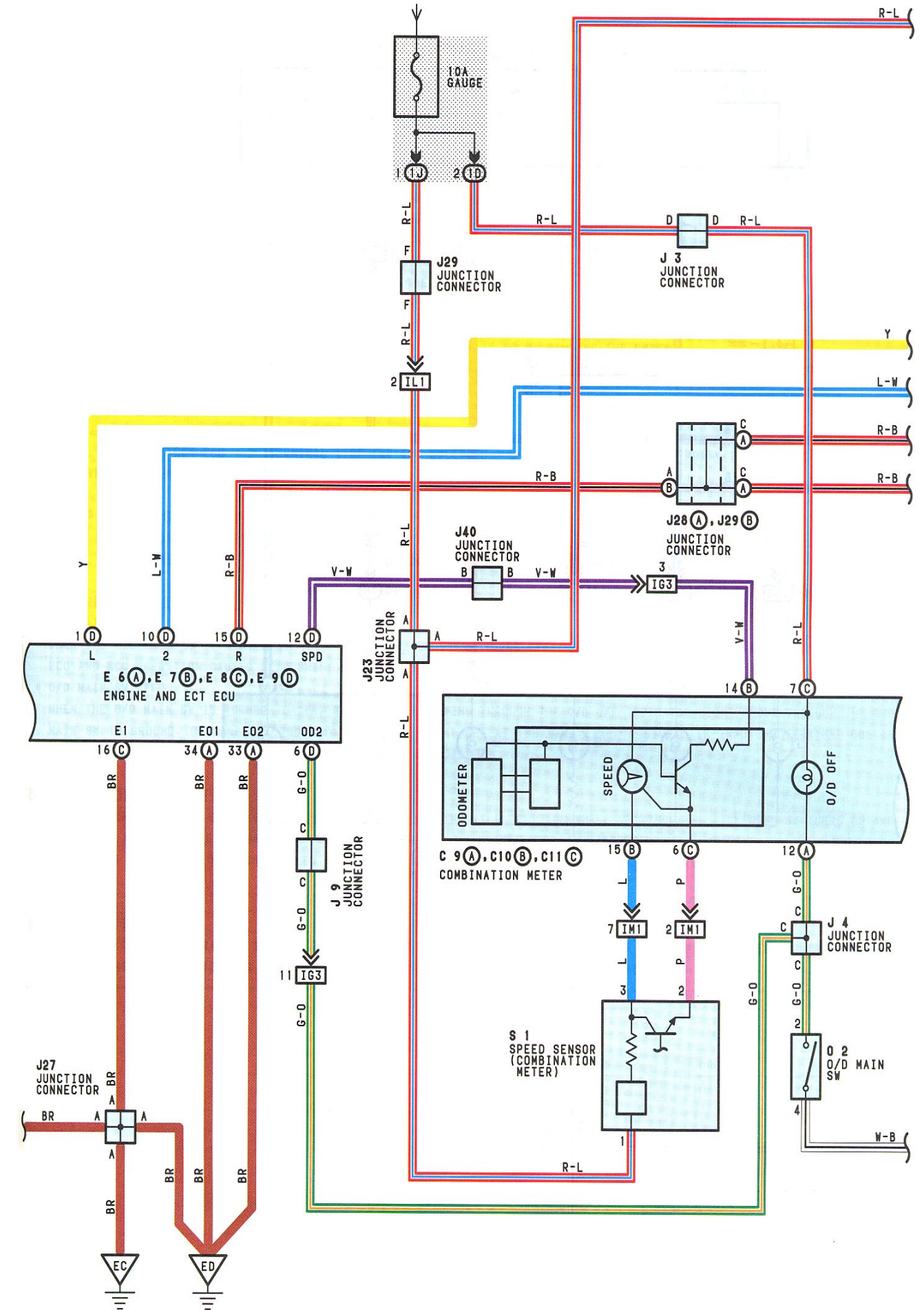
CRUISE CONTROL (LHD)



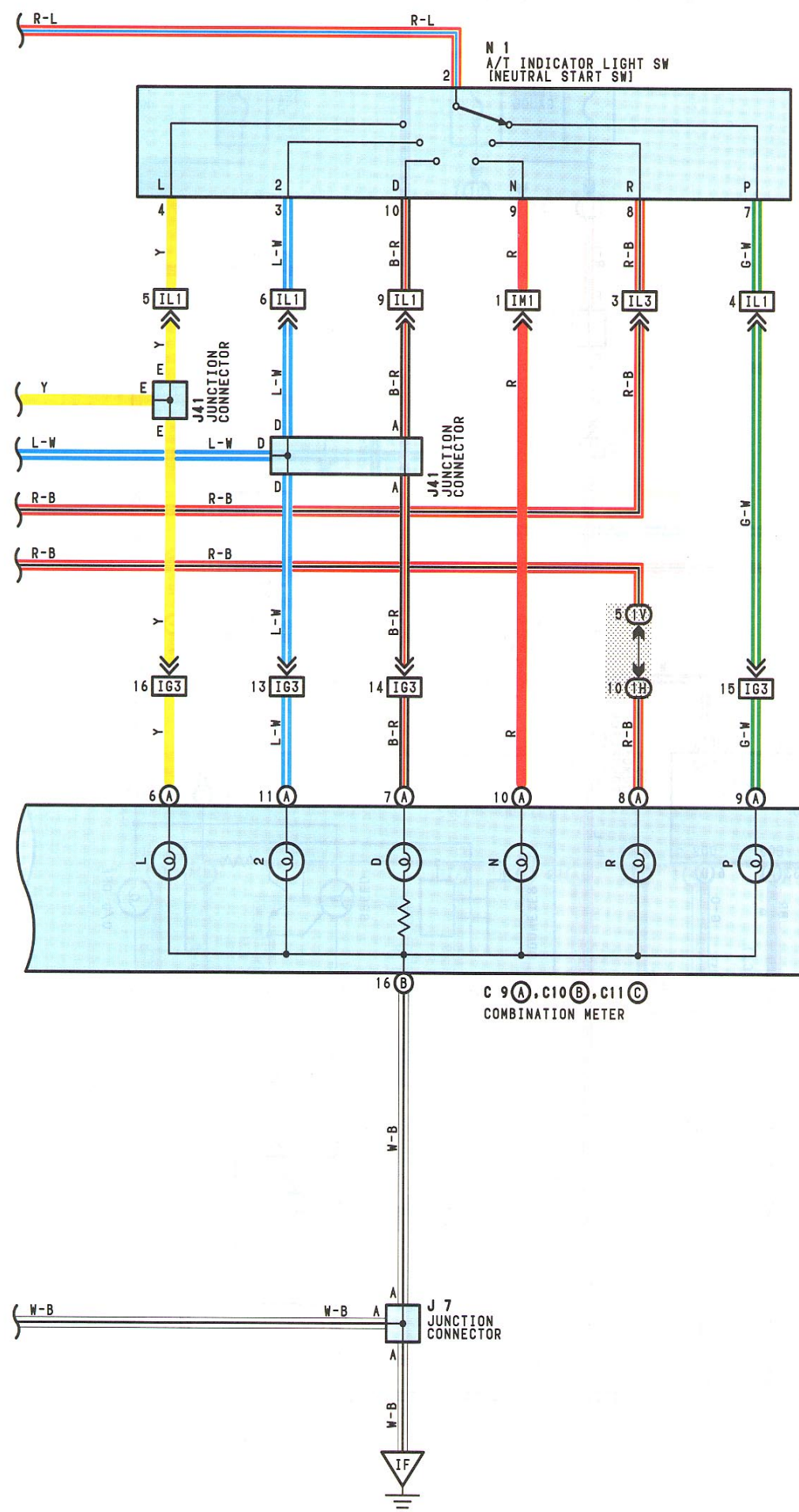
ECT AND A/T INDICATOR(1MZ-FE LHD)



FROM POWER SOURCE SYSTEM (SEE PAGE 116)



ECT AND A/T INDICATOR(1MZ-FE LHD)



SYSTEM OUTLINE

THIS SYSTEM ELECTRICALLY CONTROLS THE LINE PRESSURE, THROTTLE PRESSURE, LOCK-UP PRESSURE AND ACCUMULATOR PRESSURE ETC. THROUGH THE SOLENOID VALVE. THE ECT IS A SYSTEM WHICH PRECISELY CONTROLS GEAR SHIFT TIMING AND LOCK-UP TIMING IN THE RESPONSE TO THE VEHICLE'S DRIVING CONDITIONS AND THE ENGINE OPERATING CONDITIONS DETECTED BY VARIOUS SENSORS, MAKING SMOOTH DRIVING POSSIBLE BY SHIFT SELECTION FOR EACH GEAR WHICH IS THE MOST APPROPRIATE TO THE DRIVING CONDITIONS AT THAT TIME, AND CONTROLS THE ENGINE TORQUE DURING SHIFTING TO ACHIEVE OPTIMUM SHIFT FEELING.

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 ECT ECU, AND ALSO THE INPUT SIGNALS TO **TERMINAL NC2+** OF THE ECT ECU FROM THE SPEED SENSOR DEVOTED TO THE ECT ECU. CURRENT IS THEN OUTPUT TO THE ECT SOLENOIDS. WHEN SHIFTING TO 1ST SPEED, CURRENT FLOWS FROM **TERMINAL S1** OF THE ECT 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 ECT ECU → **TERMINAL 3** OF THE ECT SOLENOIDS → **GROUND**, AND FROM **TERMINAL S2** OF THE ECT 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 (OVER DRIVE) 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 1** OF THE ECT SOLENOID → **GROUND**, CAUSING CONTINUITY TO THE LOCK-UP SOLENOID AND CAUSING LOCK-UP OPERATION.

3. STOP LIGHT SW CIRCUIT

IF THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) WHEN DRIVING IN LOCK-UP CONDITION, A SIGNAL IS INPUT TO **TERMINAL STP** OF THE ECT 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 ECT ECU AND ECU OPERATION CAUSES GEAR SHIFT WHEN THE CONDITIONS FOR OVERDRIVE ARE MET.

• O/D MAIN SW OFF

WHEN THE O/D MAIN 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 ECT ECU AND ECU OPERATION PREVENTS SHIFT INTO OVERDRIVE.

5. KICK DOWN OPERATION

WHEN THE ACCELERATOR IS DEPRESSED FURTHER THAN THE FULL THROTTLE POSITION WHILE DRIVING, THE KICK DOWN SW TURNS ON AND ITS SIGNAL IS INPUT TO **TERMINAL KD** OF THE ECT ECU. THEN, THE ECT ECU CONTROLS THE CURRENT WHICH FLOWS FROM **TERMINALS S1** AND **S2** OF THE ECT ECU TO THE NO.1 AND NO.2 SOLENOIDS AND SHIFTS DOWN BY TURNING THE SOLENOIDS ON AND OFF.

6. CRUISE CONTROL

WHEN CRUISE CONTROL OPERATION IS SELECTED A SIGNAL IS INPUT TO **TERMINAL OD1** OF THE ECT ECU FROM CRUISE CONTROL ECU. AS A RESULT, THE ECU OPERATES AND CONTROLS OVERDRIVE, LOCK-UP AND SO ON FOR SMOOTH DRIVING.

ECT AND A/T INDICATOR(1MZ-FE LHD)

SERVICE HINTS

E 6 Ⓐ, E 7 Ⓑ, E 8 Ⓒ, E 9 Ⓓ ENGINE AND ECT ECU

S1, S2-E1: 9.0-14.0 VOLTS WITH THE SOLENOID ON

0-1.5 VOLTS WITH THE SOLENOID OFF

L-E1: 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND THE SHIFT LEVER AT L POSITION

2-E1: 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND THE SHIFT LEVER AT 2 POSITION

R-E1: 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND THE SHIFT LEVER AT R POSITION

STP-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND THE BRAKE PEDAL DEPRESSED

THW-E2: 0.2-1.0 VOLTS WITH THE COOLANT TEMP. 80°C (176°F)

VTAI-E2: 0.3-0.8 VOLTS WITH THE IGNITION SW ON AND THE THROTTLE VALVE FULLY CLOSED

3.2-4.9 VOLTS WITH THE IGNITION SW ON AND THE THROTTLE VALVE FULLY OPEN

VC-E2: 4.5-5.5 VOLTS WITH THE IGNITION SW AT ON POSITION

OD1-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW AT ON POSITION

OD2-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND THE O/D MAIN SW TURNED OFF

0-3.0 VOLTS WITH THE IGNITION SW ON AND THE O/D MAIN SW TURNED ON

+B-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW AT ON POSITION

E 1 ECT SOLENOID

1, 2, 3-GROUND: EACH 11-15 Ω

O 2 O/D MAIN SW

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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C 9	A	64(LHD)	J 3		66(LHD)	J29	B	66(LHD)
C10	B	64(LHD)	J 4		66(LHD)	J40		66(LHD)
C11	C	64(LHD)	J 5	A	66(LHD)	J41		66(LHD)
C16		64(LHD)	J 6	B	66(LHD)	K 4		66(LHD)
E 1		60(1MZ-FE LHD)	J 7		66(LHD)	N 1		60(1MZ-FE LHD)
E 4		60(1MZ-FE LHD)	J 9		66(LHD)	O 2		66(LHD)
E 6	A	64(1MZ-FE LHD)	J23		66(LHD)	S 1		60(1MZ-FE LHD)
E 7	B	64(1MZ-FE LHD)	J24		66(LHD)	S 2		60(1MZ-FE LHD)
E 8	C	64(1MZ-FE LHD)	J27		66(LHD)	S 7		66(LHD)
E 9	D	64(1MZ-FE LHD)	J28	A	66(LHD)	T 1		60(1MZ-FE LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J		
1R		
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2F		
2J		
2K	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IG3	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3		
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IO1	88(LHD)	COWL WIRE AND SWITCH WIRE (INSTRUMENT PANEL BRACE LH)

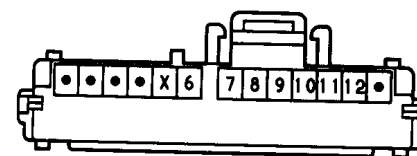
▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
EC	82(1MZ-FE LHD)	REAR SIDE OF THE SURGE TANK
ED	82(1MZ-FE LHD)	SURGE TANK RH
IF	86(LHD)	LEFT KICK PANEL

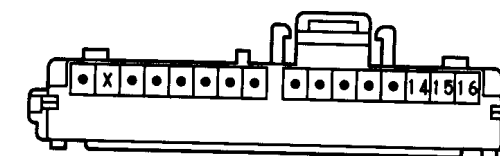
○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	88(LHD)	ENGINE WIRE			

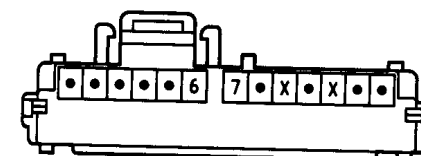
C 9 Ⓐ BLUE



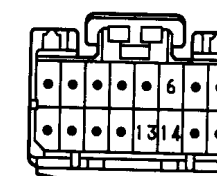
C10 Ⓑ



C11 Ⓒ BROWN



C16



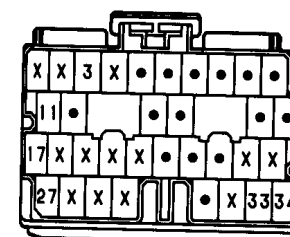
E 1 GRAY



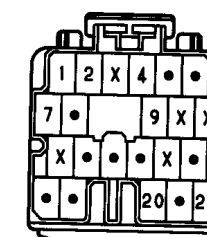
E 4 DARK GRAY



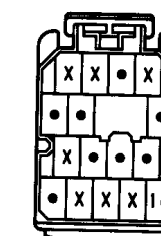
E 6 Ⓐ



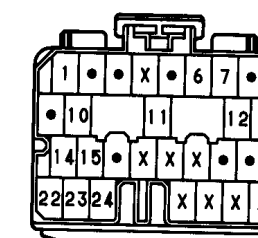
E 7 Ⓑ



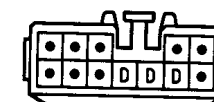
E 8 Ⓒ



E 9 Ⓓ

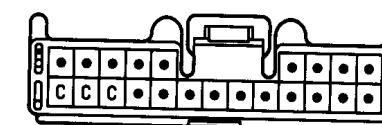


J 3 BLACK



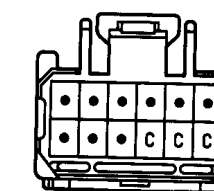
(HINT:SEE PAGE 7, 23, 39)

J 4



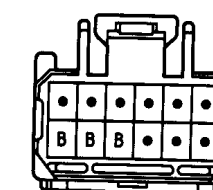
(HINT:SEE PAGE 7, 23, 39)

J 5 Ⓐ GRAY



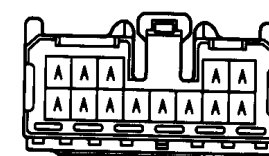
(HINT:SEE PAGE 7, 23, 39)

J 6 Ⓑ GRAY



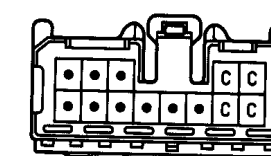
(HINT:SEE PAGE 7, 23, 39)

J 7 ORANGE



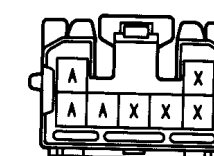
(HINT:SEE PAGE 7, 23, 39)

J 9



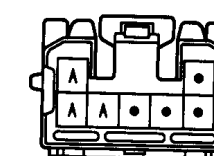
(HINT:SEE PAGE 7, 23, 39)

J23



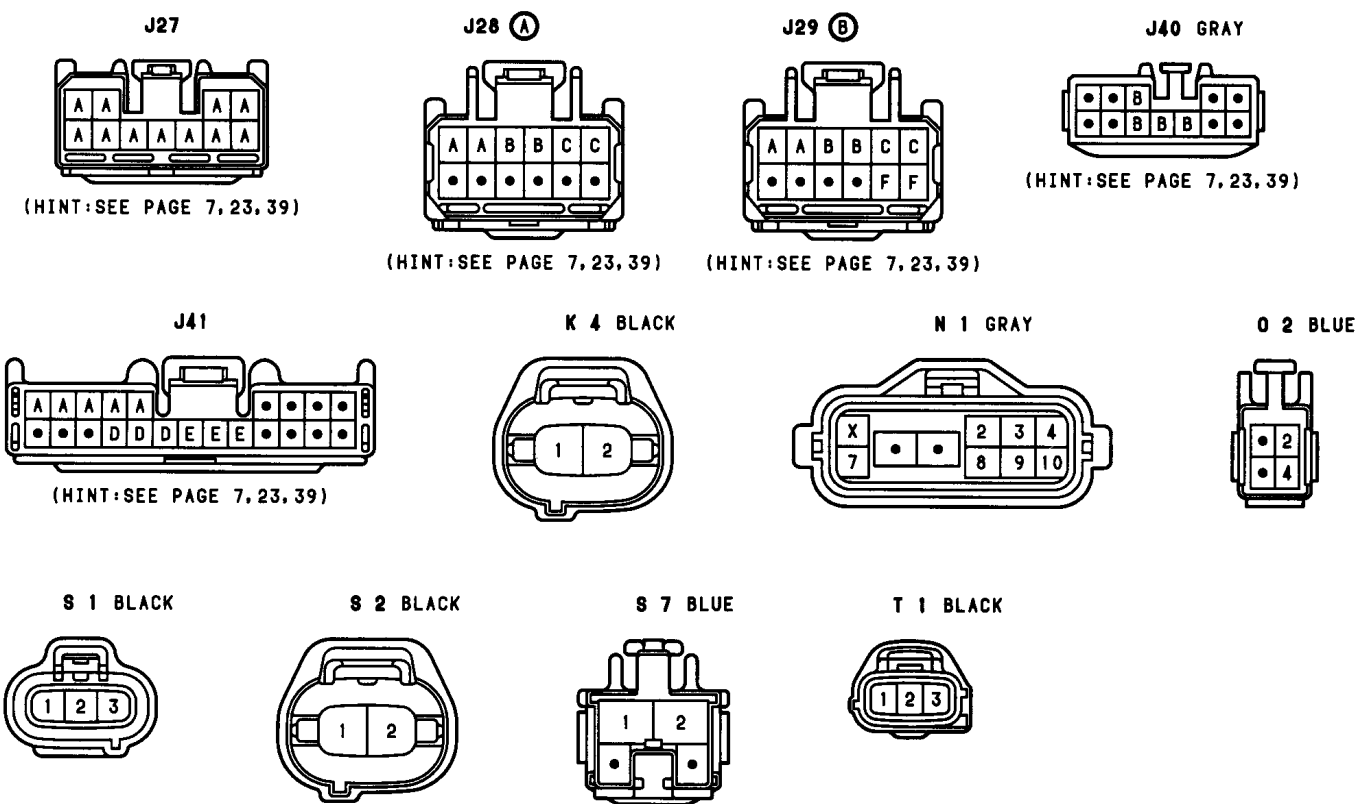
(HINT:SEE PAGE 7, 23, 39)

J24



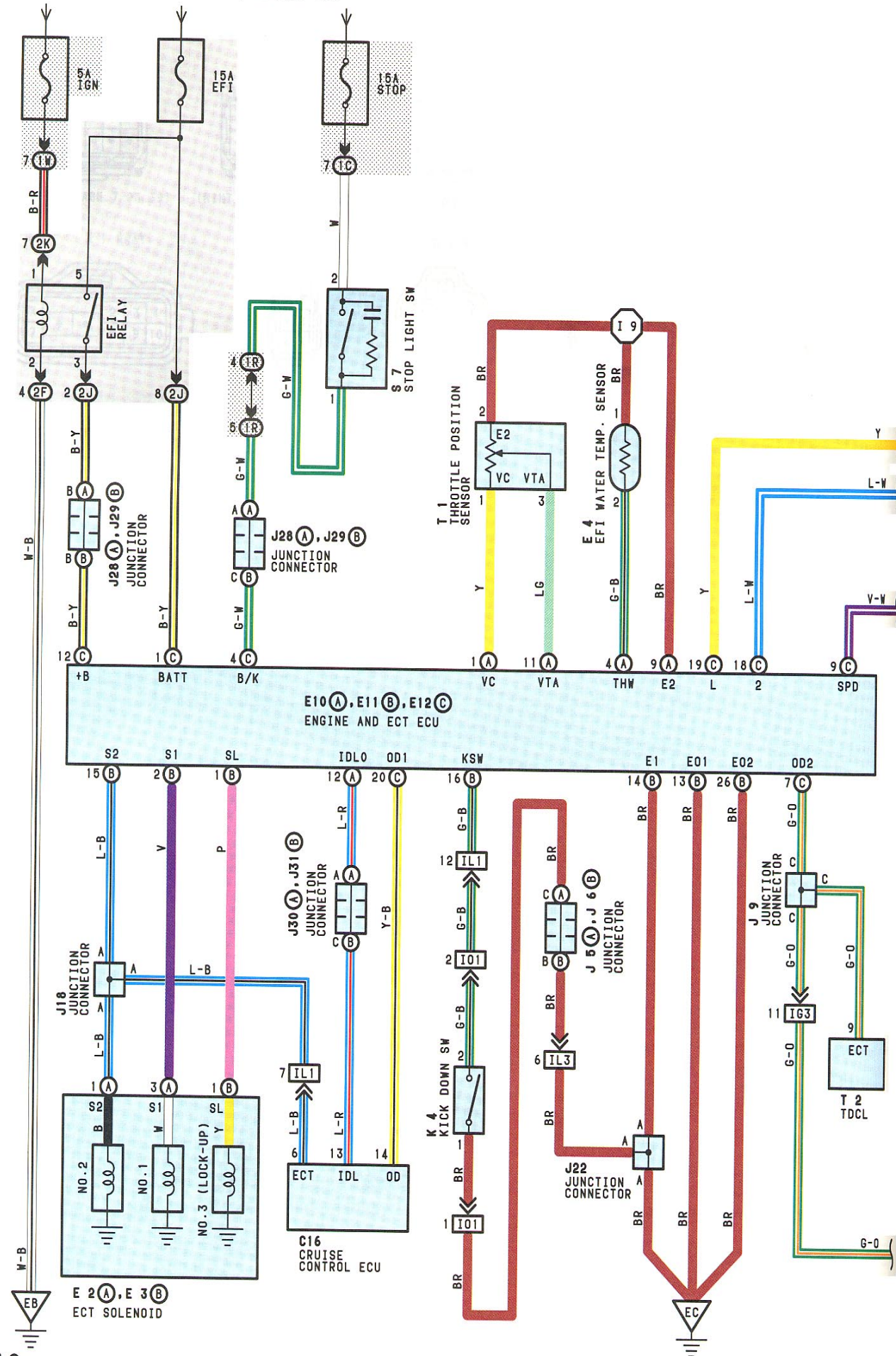
(HINT:SEE PAGE 7, 23, 39)

ECT AND A/T INDICATOR(1MZ-FE LHD)

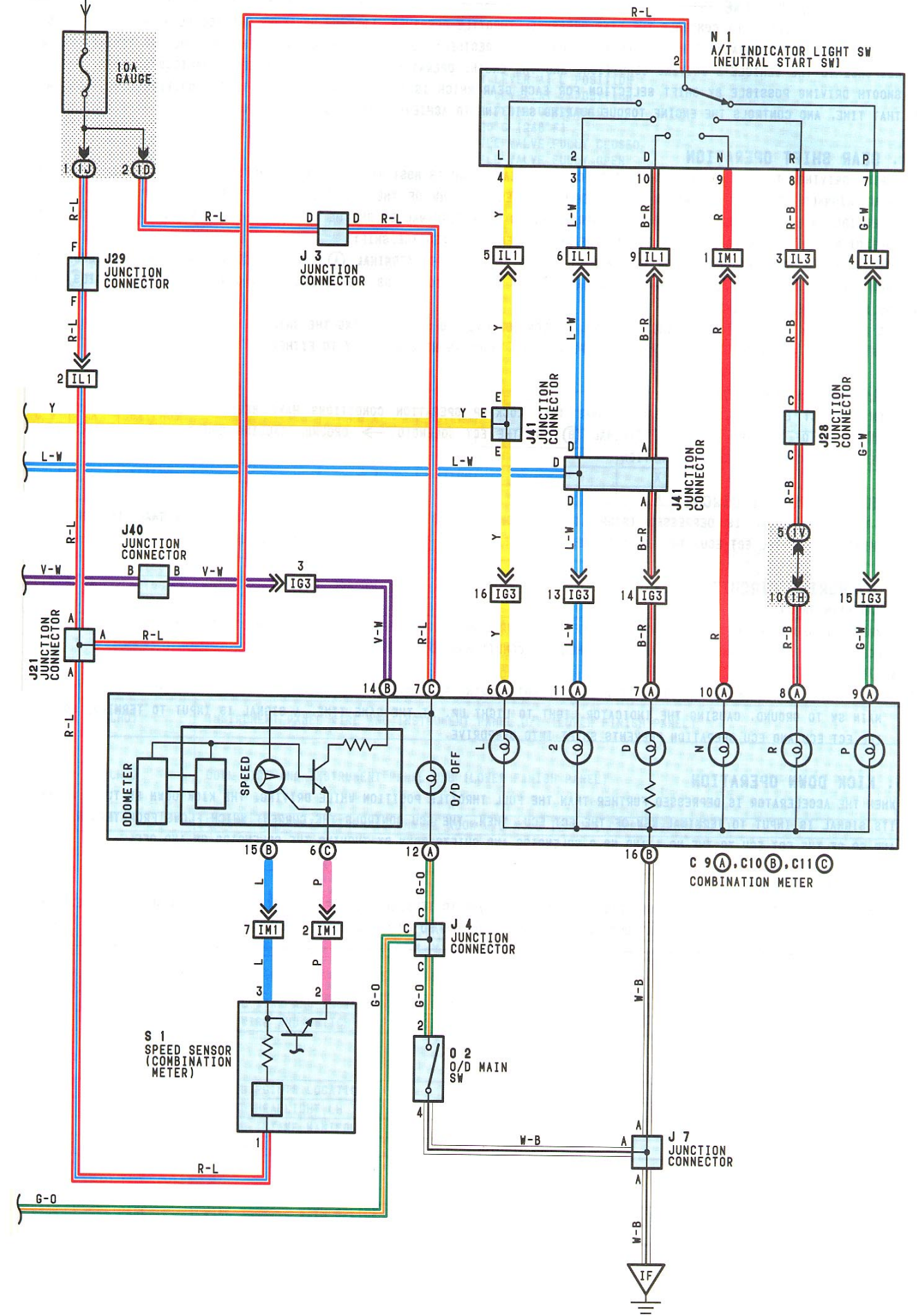


ECT AND A/T INDICATOR(5S-FE LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



FROM POWER SOURCE SYSTEM (SEE PAGE 116)



ECT AND A/T INDICATOR(5S-FE LHD)

SYSTEM OUTLINE

THIS SYSTEM ELECTRICALLY CONTROLS THE LINE PRESSURE, THROTTLE PRESSURE, LOCK-UP PRESSURE AND ACCUMULATOR PRESSURE ETC. THROUGH THE SOLENOID VALVE. THE ECT IS A SYSTEM WHICH PRECISELY CONTROLS GEAR SHIFT TIMING AND LOCK-UP TIMING IN THE RESPONSE TO THE VEHICLE'S DRIVING CONDITIONS AND THE ENGINE OPERATING CONDITIONS DETECTED BY VARIOUS SENSORS, MAKING SMOOTH DRIVING POSSIBLE BY SHIFT SELECTION FOR EACH GEAR WHICH IS THE MOST APPROPRIATE TO THE DRIVING CONDITIONS AT THAT TIME, AND CONTROLS THE ENGINE TORQUE DUARING SHIFTING TO ACHIEVE OPTIMUM SHIFT FEELING.

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 ECT ECU. CURRENT IS THEN OUTPUT TO THE ECT SOLENOIDS. WHEN SHIFTING TO 1ST SPEED, CURRENT FLOWS FROM TERMINAL S1 OF THE ECT ECU → TERMINAL A3 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 ECT ECU → TERMINAL A3 OF THE ECT SOLENOIDS → GROUND, AND FROM TERMINAL S2 OF THE ECT ECU → TERMINAL A1 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 (OVER DRIVE) 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 S1 OF THE ECT ECU → TERMINAL B1 OF THE ECT SOLENOID → GROUND, CAUSING CONTINUITY TO THE LOCK-UP SOLENOID AND CAUSING LOCK-UP OPERATION.

3. STOP LIGHT SW CIRCUIT

IF THE BRAKE PEDAL IS DEPRESSED (STOP LIGHT SW ON) WHEN DRIVING IN LOCK-UP CONDITION, A SIGNAL IS INPUT TO TERMINAL B/K OF THE ECT 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 ECT ECU AND ECU OPERATION CAUSES GEAR SHIFT WHEN THE CONDITIONS FOR OVERDRIVE ARE MET.

• O/D MAIN SW OFF

WHEN THE O/D MAIN 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 ECT ECU AND ECU OPERATION PREVENTS SHIFT INTO OVERDRIVE.

5. KICK DOWN OPERATION

WHEN THE ACCELERATOR IS DEPRESSED FURTHER THAN THE FULL THROTTLE POSITION WHILE DRIVING, THE KICK DOWN SW TURNS ON AND ITS SIGNAL IS INPUT TO TERMINAL KSW OF THE ECT ECU. THEN, THE ECU CONTROLS THE CURRENT WHICH FLOWS FROM TERMINALS S1 AND S2 OF THE ECT ECU TO THE NO.1 AND NO.2 SOLENOIDS AND SHIFTS DOWN BY TURNING THE SOLENOIDS ON AND OFF.

6. CRUISE CONTROL

WHEN CRUISE CONTROL OPERATION IS SELECTED A SIGNAL IS INPUT TO TERMINAL OD1 OF THE ECT ECU FROM CRUISE CONTROL ECU. AS A RESULT, THE ECU OPERATES AND CONTROLS OVERDRIVE, LOCK-UP AND SO ON FOR SMOOTH DRIVING.

SERVICE HINTS

E10 A, E11 B, E12 C ENGINE AND ECT ECU

S1, S2-E1: 9.0-14.0 VOLTS WITH THE SOLENOID ON

0-1.5 VOLTS WITH THE SOLENOID OFF

L-E1: 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND THE SHIFT LEVER AT L POSITION

2-E1: 7.5-14.0 VOLTS WITH THE IGNITION SW ON AND THE SHIFT LEVER AT 2 POSITION

B/K-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND THE BRAKE PEDAL DEPRESSED

THW-E1: 0.2-1.0 VOLTS WITH THE COOLANT TEMP. 60°C (140°F)-120°C (248°F)

VTA-E1: 0.3-0.8 VOLTS WITH THE IGNITION SW ON AND THE THROTTLE VALVE FULLY CLOSED

3-2-4.9 VOLTS WITH THE IGNITION SW ON AND THE THROTTLE VALVE FULLY OPEN

VC-E2: 4.5-5.5 VOLTS WITH THE IGNITION SW AT ON POSITION

OD1-E1: 4.5-5.5 VOLTS WITH THE IGNITION SW AT ON POSITION

OD2-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW ON AND THE O/D MAIN SW TURNED OFF

0-3.0 VOLTS WITH THE IGNITION SW ON AND THE O/D MAIN SW TURNED ON

+B-E1: 9.0-14.0 VOLTS WITH THE IGNITION SW AT ON POSITION

E 2 A, E 3 B ECT SOLENOID

A1, A3, B1-GROUND: EACH 11-15 Ω

0 2 O/D MAIN SW

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

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
C 9	A	64(LHD)	J 4		66(LHD)	J31	B	66(LHD)
C10	B	64(LHD)	J 5	A	66(LHD)	J40		66(LHD)
C11	C	64(LHD)	J 6	B	66(LHD)	J41		66(LHD)
C16		64(LHD)	J 7		66(LHD)	K 4		66(LHD)
E 2	A	62(5S-FE LHD)	J 9		66(LHD)	N 1		62(5S-FE LHD)
E 3	B	62(5S-FE LHD)	J18		66(LHD)	O 2		66(LHD)
E 4		62(5S-FE LHD)	J21		66(LHD)	S 1		62(5S-FE LHD)
E10	A	64(5S-FE LHD)	J22		66(LHD)	S 7		66(LHD)
E11	B	64(5S-FE LHD)	J28	A	66(LHD)	T 1		62(5S-FE LHD)
E12	C	64(5S-FE LHD)	J29	B	66(LHD)	T 2		66(LHD)
J 3		66(LHD)	J30	A	66(LHD)			

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D		
1H	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1R		
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2F	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2J		
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
I63	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1		
IL3	88(LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IO1	88(LHD)	COWL WIRE AND SWITCH WIRE (INSTRUMENT PANEL BRACE LH)

▽ : GROUND POINTS

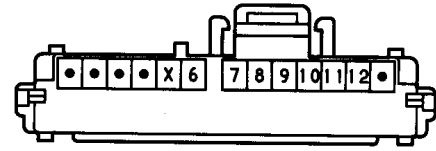
CODE	SEE PAGE	GROUND POINTS LOCATION
EB	84(5S-FE LHD)	BEHIND HEADLIGHT LH
EC	84(5S-FE LHD)	BEHIND INTAKE MANIFOLD
IF	86(LHD)	LEFT KICK PANEL

○ : SPLICE POINTS

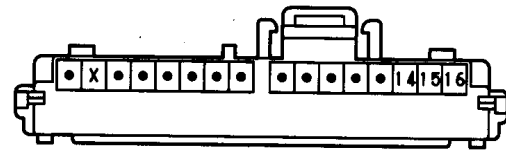
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
I 9	88(LHD)	ENGINE WIRE			

ECT AND A/T INDICATOR(5S-FE LHD)

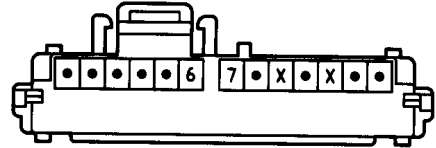
C 9 (A) BLUE



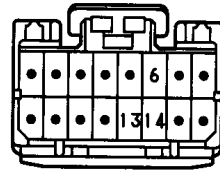
C10 (B)



C11 (C) BROWN



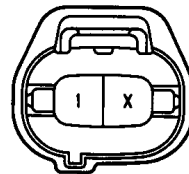
C16



E 2 (A) BLACK



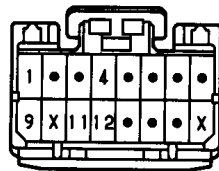
E 3 (B) BLACK



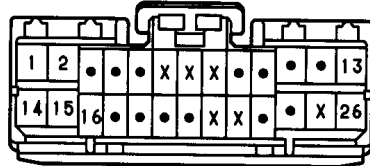
E 4 GREEN



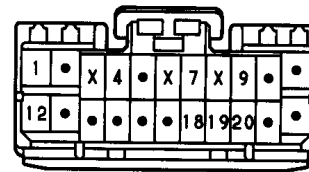
E10 (A)



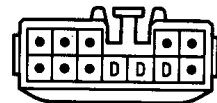
E11 (B)



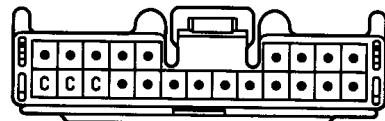
E12 (C)



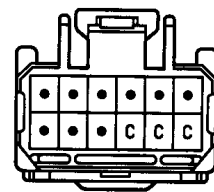
J 3 BLACK



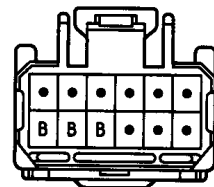
J 4



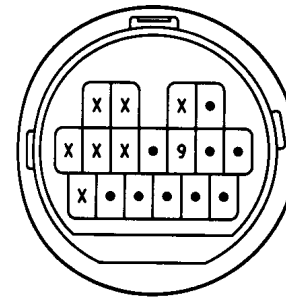
J 5 (A) GRAY



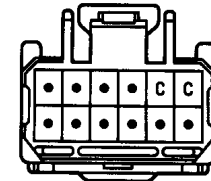
J 6 (B) GRAY



T 2 DARK GRAY

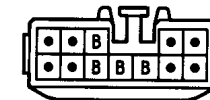


J31 (B)



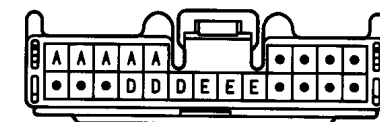
(HINT:SEE PAGE 7, 23, 39)

J40 GRAY



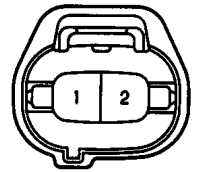
(HINT:SEE PAGE 7, 23, 39)

J41

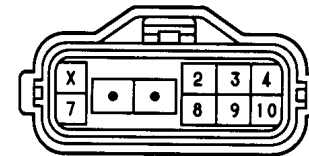


(HINT:SEE PAGE 7, 23, 39)

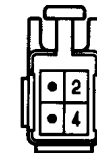
K 4 BLACK



N 1 GRAY



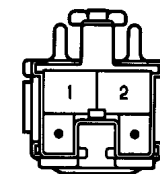
O 2 BLUE



S 1 BLACK



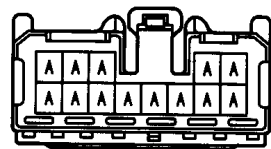
S 7 BLUE



T 1 BLACK

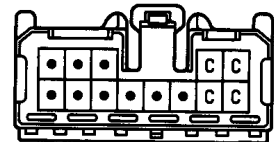


J 7 ORANGE



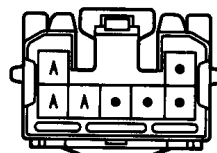
(HINT:SEE PAGE 7, 23, 39)

J 9



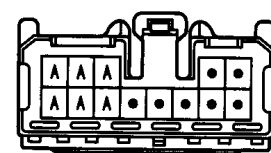
(HINT:SEE PAGE 7, 23, 39)

J18



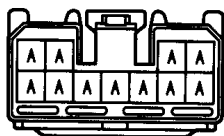
(HINT:SEE PAGE 7, 23, 39)

J21 GRAY



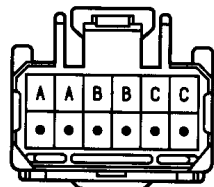
(HINT:SEE PAGE 7, 23, 39)

J22



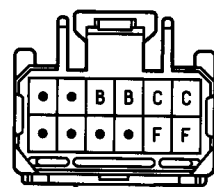
(HINT:SEE PAGE 7, 23, 39)

J28 (A)



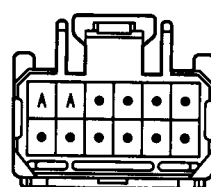
(HINT:SEE PAGE 7, 23, 39)

J29 (B)



(HINT:SEE PAGE 7, 23, 39)

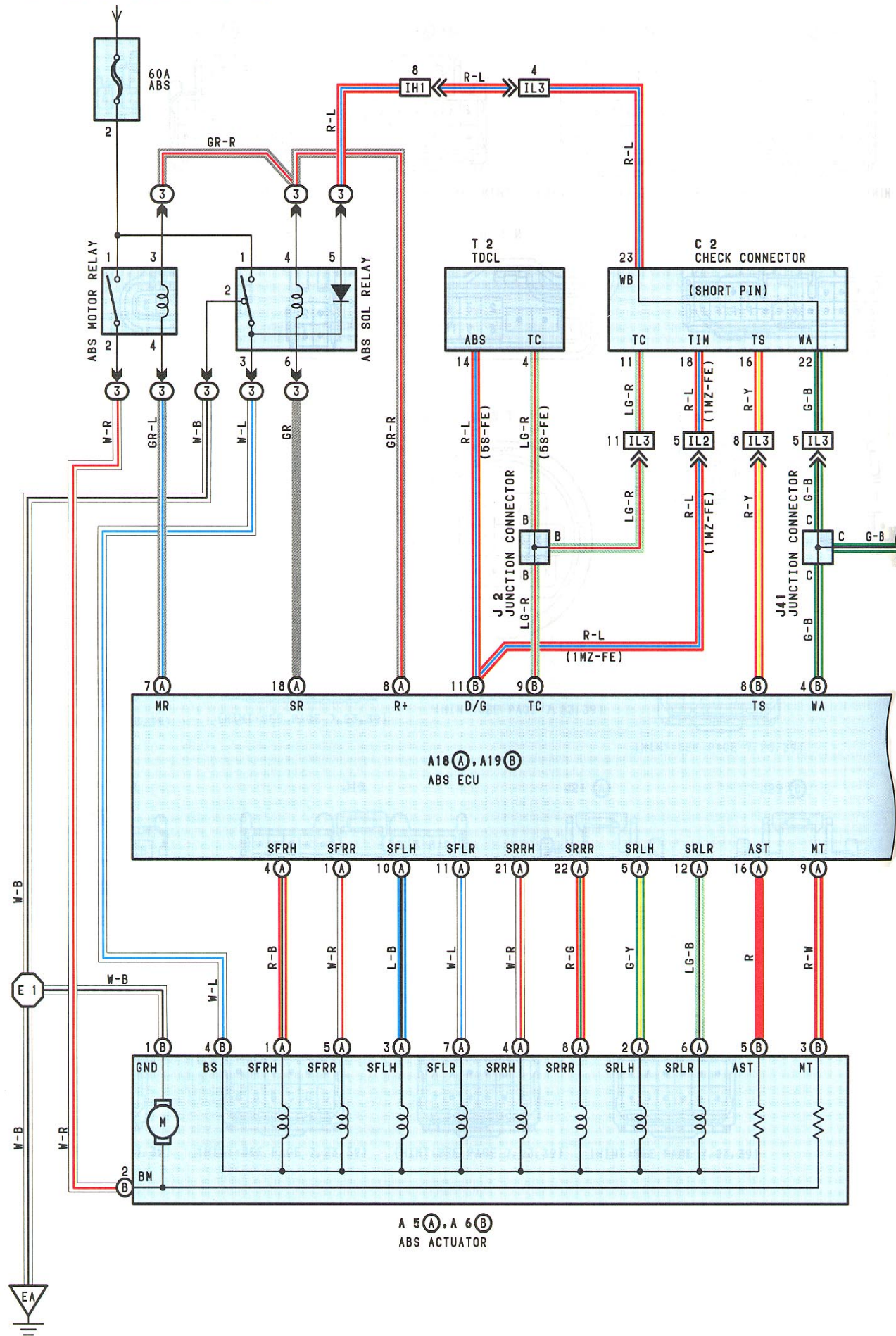
J30 (A)



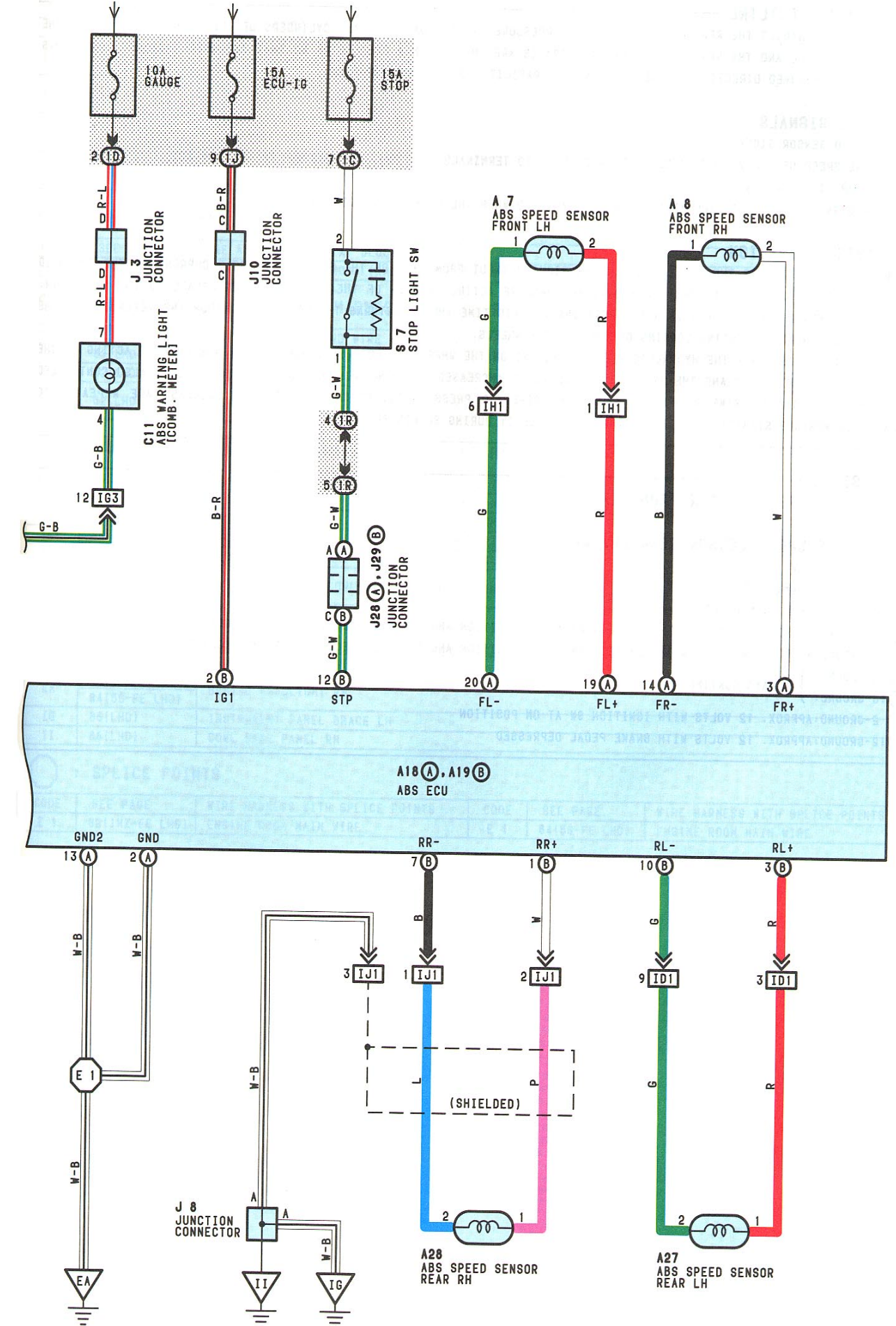
(HINT:SEE PAGE 7, 23, 39)

ABS (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



FROM POWER SOURCE SYSTEM (SEE PAGE 116)



ABS(LHD)

SYSTEM OUTLINE

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

1. INPUT SIGNALS

- (1) SPEED SENSOR SIGNAL
- THE SPEED OF THE WHEELS IS DETECTED AND INPUT TO TERMINALS FL+, FR+, RL+ AND RR+ OF THE ABS ECU.
- (2) STOP LIGHT SW SIGNAL
- A SIGNAL IS INPUT TO TERMINAL STP OF THE ABS ECU WHEN THE BRAKE PEDAL DEPRESSED.

2. SYSTEM OPERATION

DURING SUDDEN BRAKING THE ABS ECU WHICH HAS SIGNALS INPUT FROM EACH OF THE SENSOR, CONTROLS CURRENT TO THE SOLENOID INSIDE THE ACTUATOR AND CAUSES THE HYDRAULIC PRESSURE ACTING ON EACH OF THE 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, PREVENTING LOCKING OF THE VEHICLE WHEELS.

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

SERVICE HINTS

A 7,A 8 ABS SPEED SENSOR FRONT LH, RH

1-2:1.6 -1.8 KΩ

A27,A28 ABS SPEED SENSOR REAR LH, RH

1-2:1.8 -2.0 KΩ

A18Ⓐ,A19Ⓑ ABS ECU

(CONNECT THE ECU CONNECTORS)

- Ⓑ 9-GROUND:APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION AND CHECK CONNECTOR TC-E1 NOT CONNECTED
- Ⓑ 8-GROUND:APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION AND CHECK CONNECTOR TS-E1 NOT CONNECTED
- Ⓐ 2-GROUND: } ALWAYS CONTINUITY
- Ⓐ 13-GROUND: }
- Ⓑ 2-GROUND:APPROX. 12 VOLTS WITH IGNITION SW AT ON POSITION
- Ⓑ 12-GROUND:APPROX. 12 VOLTS WITH BRAKE PEDAL DEPRESSED

○ : PARTS LOCATION

CODE		SEE PAGE	CODE		SEE PAGE	CODE		SEE PAGE
A 5	A	60(1MZ-FE LHD)	A18	A	64(LHD)	J 3		66(LHD)
		62(5S-FE LHD)	A19	B	64(LHD)	J 8		66(LHD)
A 6	B	60(1MZ-FE LHD)	A27		68(LHD)	J10		66(LHD)
		62(5S-FE LHD)	A28		68(LHD)	J28	A	66(LHD)
A 7		60(1MZ-FE LHD)	C 2		60(1MZ-FE LHD)	J29	B	66(LHD)
		62(5S-FE LHD)			62(5S-FE LHD)	J41		66(LHD)
A 8		60(1MZ-FE LHD)	C11		64(LHD)	S 7		66(LHD)
		62(5S-FE LHD)	J 2		66(LHD)	T 2		66(LHD)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
3	59	ENGINE ROOM R/B NO.3 (RADIATOR UPPER SUPPORT LH)

⊙ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1C	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
1D1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
1G3	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
1H1	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
1J1	88(LHD)	FLOOR NO.2 WIRE AND COWL WIRE (RIGHT KICK PANEL)
1L2	88(1MZ-FE LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
1L3	88(LHD)	

▽ : GROUND POINTS

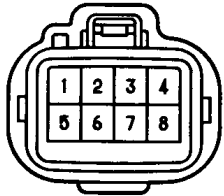
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD)	BEHIND HEADLIGHT RH
	84(5S-FE LHD)	
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

○ : SPLICE POINTS

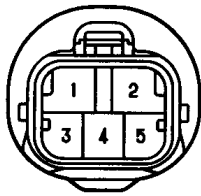
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	E 1	84(5S-FE LHD)	ENGINE ROOM MAIN WIRE

ABS(LHD)

A 5 ① BLACK



A 6 ② GRAY



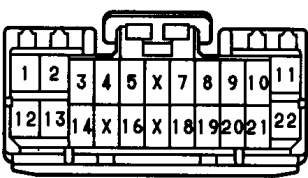
A 7 GRAY



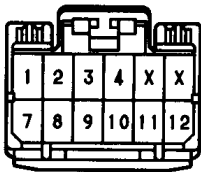
A 8



A18 ①



A19 ②



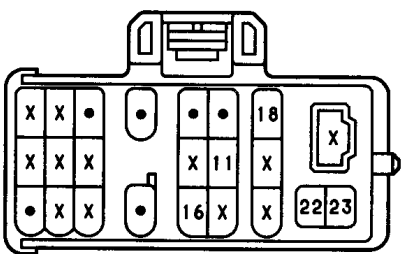
A27



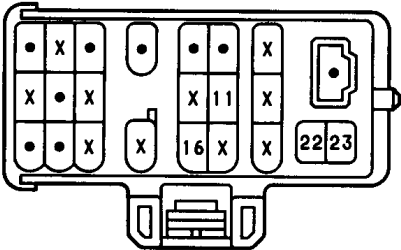
A28 GRAY



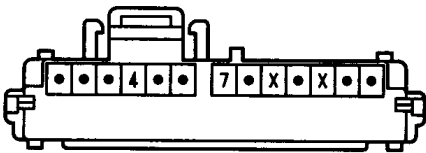
(1MZ-FE) C 2 BLACK



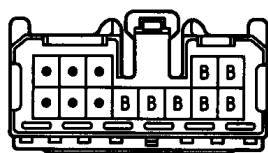
(5S-FE) C 2 BLACK



C11 BROWN



J 2 GRAY



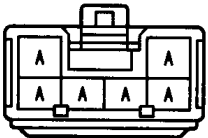
(HINT:SEE PAGE 7,23,39)

J 3 BLACK



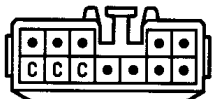
(HINT:SEE PAGE 7,23,39)

J 8



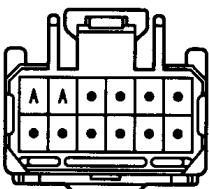
(HINT:SEE PAGE 7,23,39)

J10 BLACK



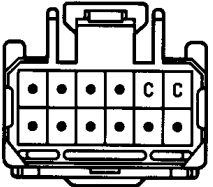
(HINT:SEE PAGE 7,23,39)

J28 ①



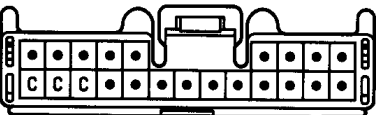
(HINT:SEE PAGE 7,23,39)

J29 ②



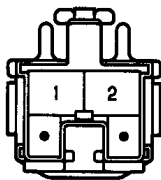
(HINT:SEE PAGE 7,23,39)

J41

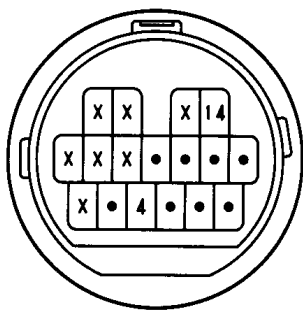


(HINT:SEE PAGE 7,23,39)

S 7 BLUE

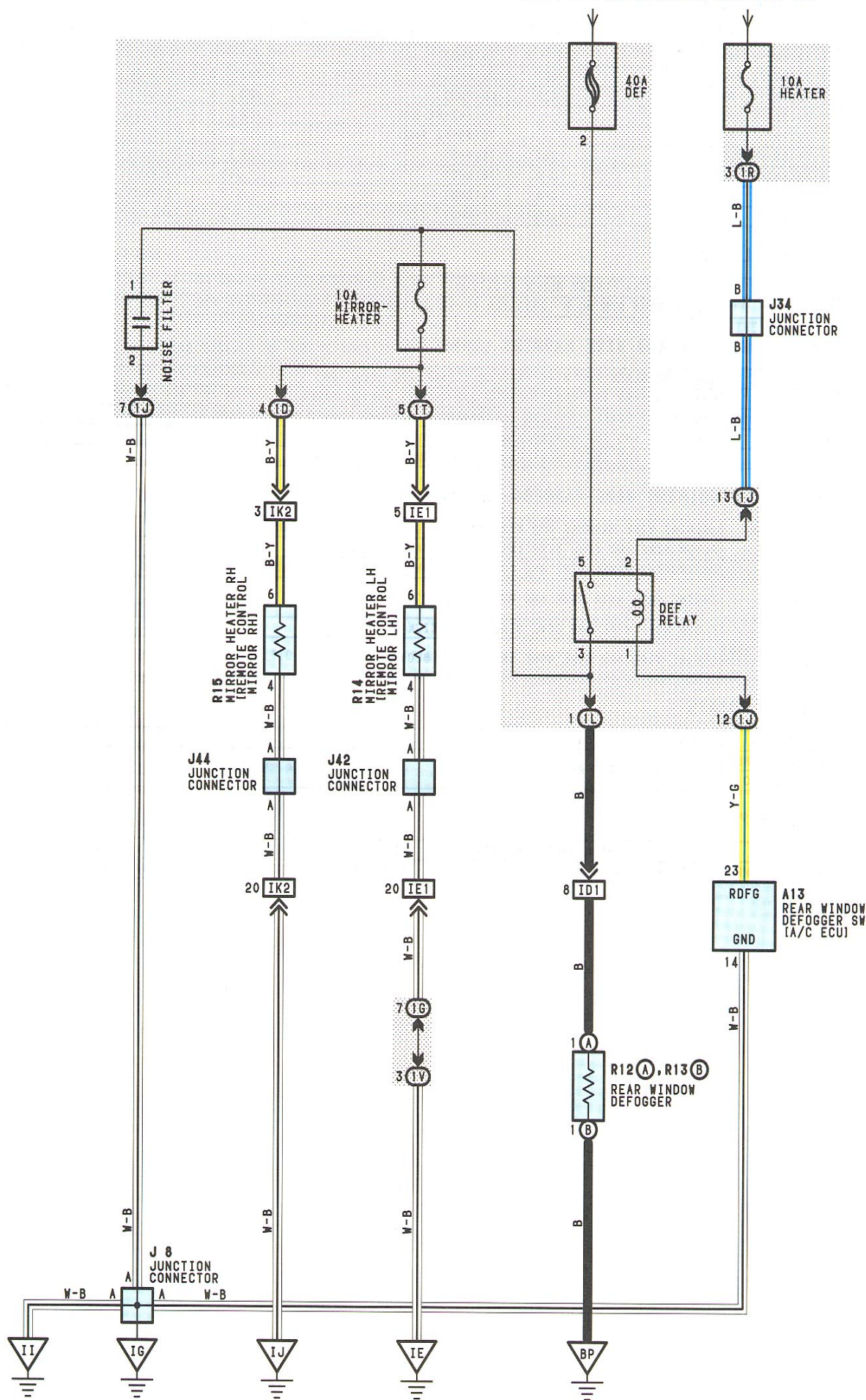


(5S-FE) T 2 DARK GRAY



REAR WINDOW DEFOGGER AND MIRROR HEATER(LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SERVICE HINTS

DEF RELAY

5-3:CLOSED WITH THE IGNITION SW AT ON POSITION AND REAR WINDOW DEFOGGER SW (A/C ECU) ON

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A13	64(LHD)	J42	68(LHD)	R13	B 68(LHD)
J 8	66(LHD)	J44	68(LHD)	R14	68(LHD)
J34	66(LHD)	R12	A 68(LHD)	R15	68(LHD)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

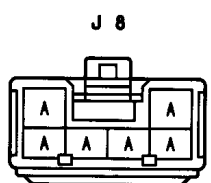
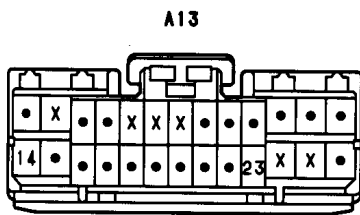
CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G		
1J		
1L	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1R		
1T	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

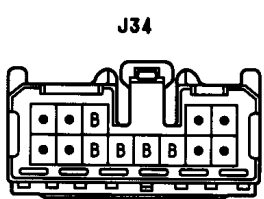
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
1D1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
1E1	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
1K2	88(LHD)	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)

▽ : GROUND POINTS

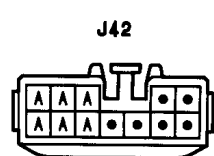
CODE	SEE PAGE	GROUND POINTS LOCATION
1E	86(LHD)	COWL SIDE PANEL LH
1G	86(LHD)	INSTRUMENT PANEL BRACE LH
1I	86(LHD)	COWL SIDE PANEL RH
1J	86(LHD)	RIGHT KICK PANEL
BP	90(LHD)	RIGHT QUARTER PILLAR



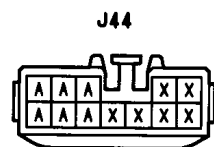
(HINT:SEE PAGE 7, 23, 39)



(HINT:SEE PAGE 7, 23, 39)



(HINT:SEE PAGE 7, 23, 39)

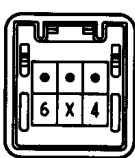


(HINT:SEE PAGE 7, 23, 39)

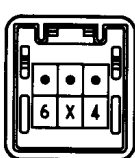
R12 (A) BLACK R13 (B) BLACK



R14

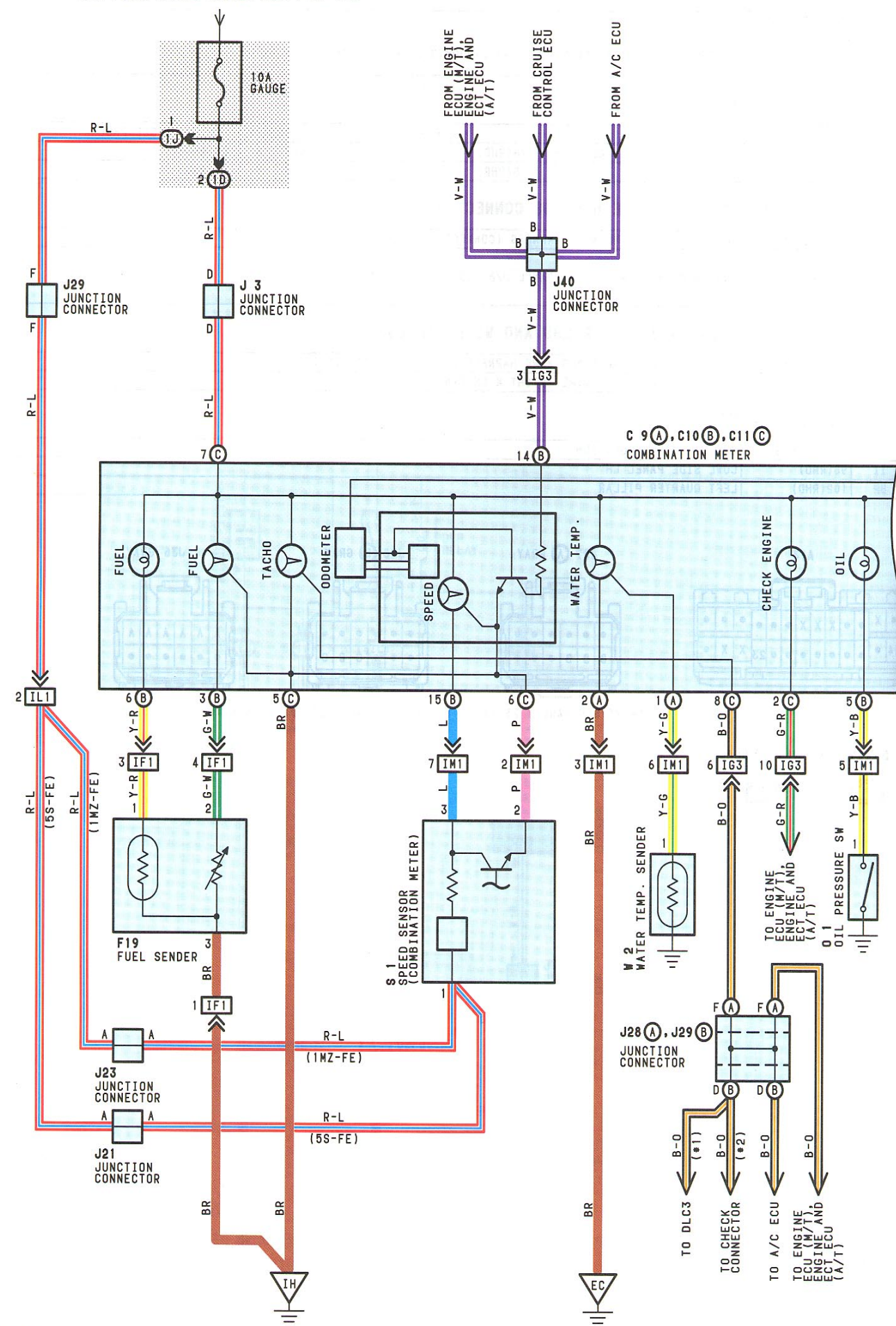


R15

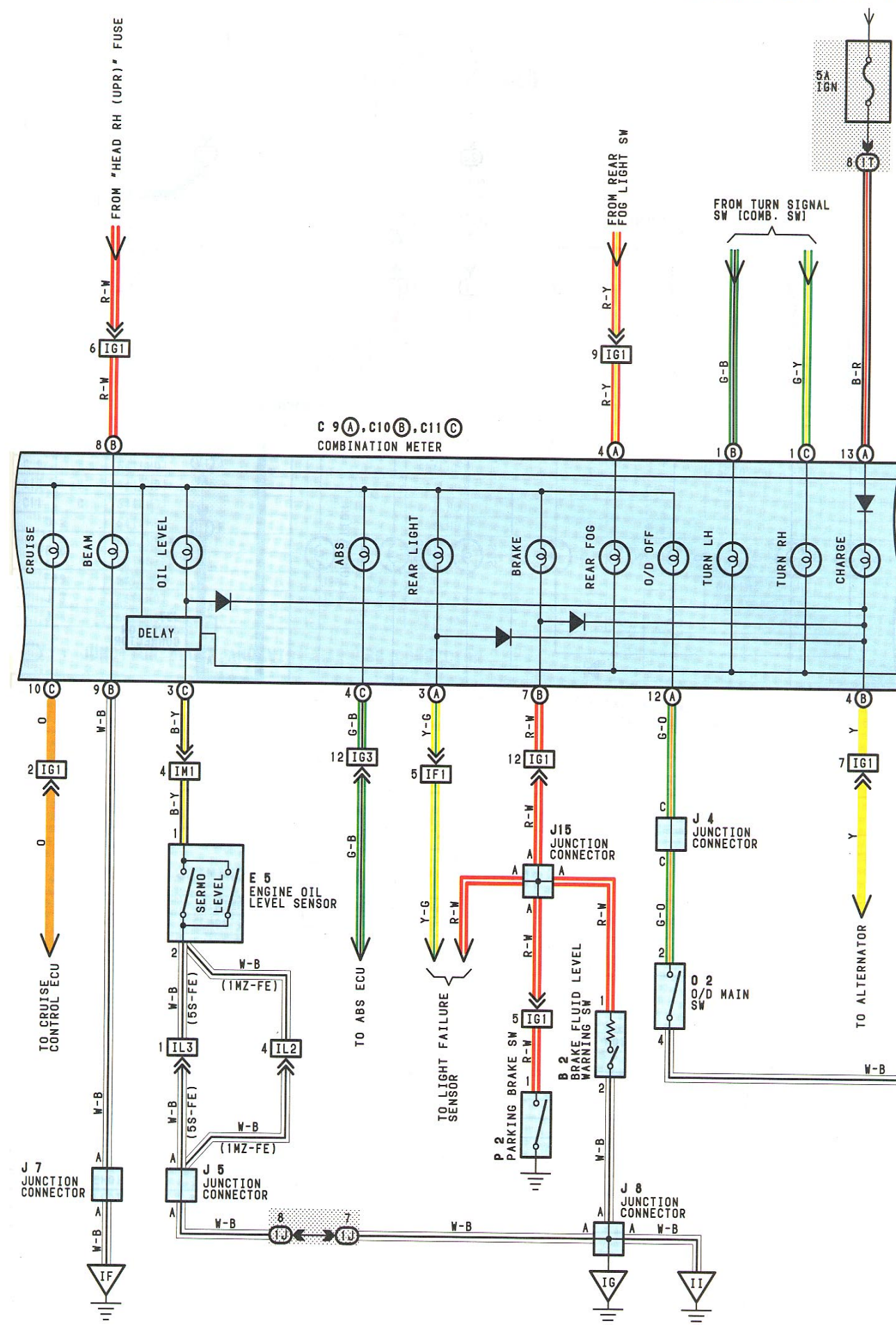


COMBINATION METER (LHD)

FROM POWER SOURCE SYSTEM (SEE PAGE 116)

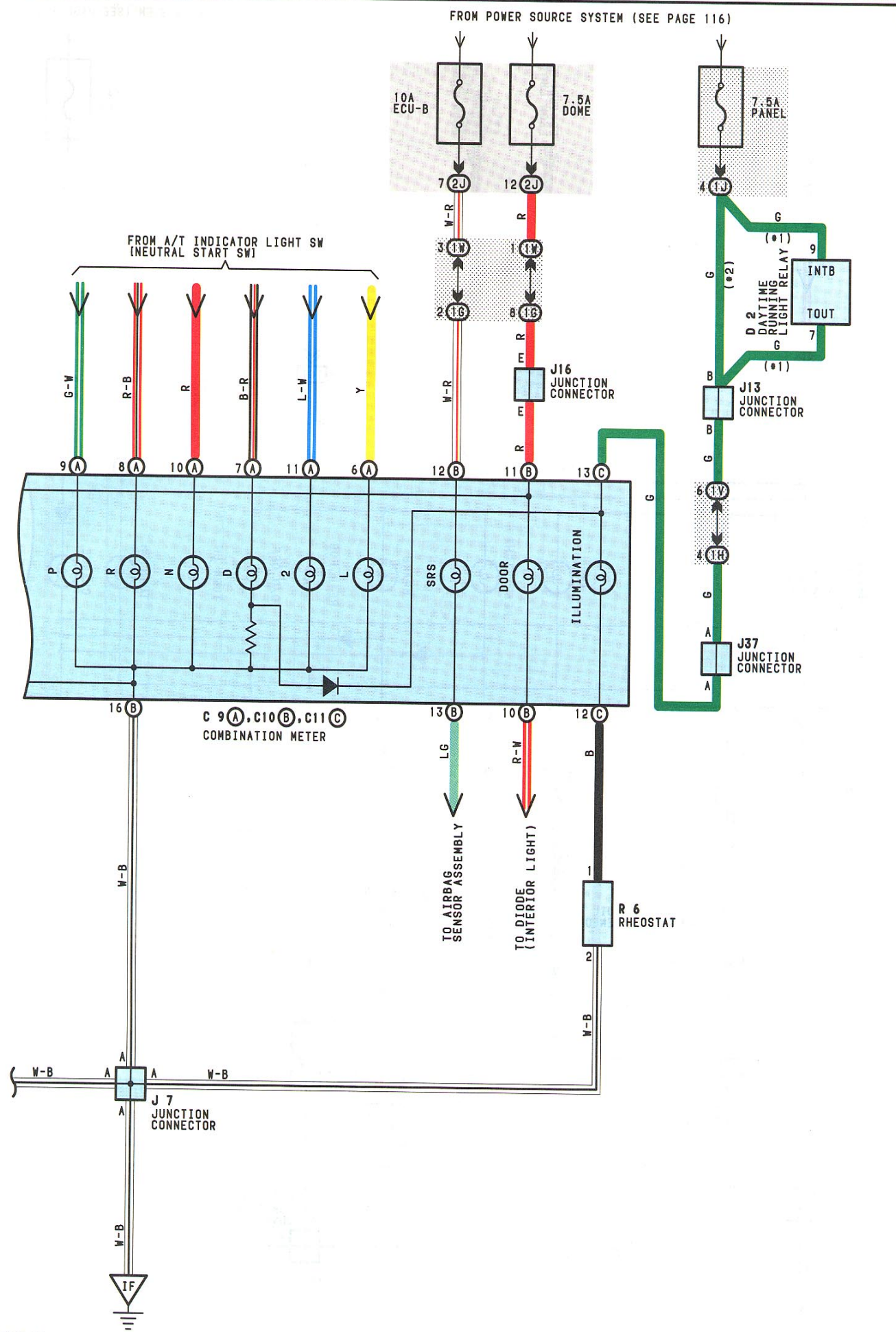


* 1:1MZ-FE
* 2:5S-FE



COMBINATION METER(LHD)

* 1:W/ DAYTIME RUNNING LIGHT
* 2:W/O DAYTIME RUNNING LIGHT



SERVICE HINTS

B 2 BRAKE FLUID LEVEL WARNING SW

1-2:CLOSED WITH THE FLOAT DOWN

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

(A) 13, (C) 7-GROUND:APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION

(B) 11, (B) 12-GROUND:ALWAYS APPROX. 12 VOLTS

(A) 2, (B) 16, (C) 5-GROUND:ALWAYS CONTINUITY

F19 FUEL SENDER

1-2:APPROX. 3 Ω AT FUEL FULL
APPROX. 110 Ω AT FUEL EMPTY

O 1 OIL PRESSURE SW

1-GROUND:OPENED WITH THE OIL PRESSURE ABOVE APPROX. 20 KPA (2.8 PSI, 0.2 KG/CM²)

P 2 PARKING BRAKE SW

1-GROUND:CLOSED WITH THE PARKING BRAKE PEDAL DEPRESSED

W 2 WATER TEMP. SENDER

1-GROUND:APPROX. 160-240 Ω (50°C, 122°F)
APPROX. 17.1-20.4 Ω (120°C, 288°F)

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
B 2	60(1MZ-FE LHD) 62(5S-FE LHD)	J 5	66(LHD)	J40	66(LHD)
C 9	A 64(LHD)	J 7	66(LHD)	O 1	60(1MZ-FE LHD) 62(5S-FE LHD)
C10	B 64(LHD)	J 8	66(LHD)	O 2	66(LHD)
C11	C 64(LHD)	J13	66(LHD)	P 2	66(LHD)
D 2	64(LHD)	J15	66(LHD)	R 6	66(LHD)
E 5	60(1MZ-FE LHD) 62(5S-FE LHD)	J21	66(LHD)	S 1	60(1MZ-FE LHD) 62(5S-FE LHD)
F19	68(LHD)	J18	66(LHD)	W 2	60(1MZ-FE LHD) 62(5S-FE LHD)
J 3	66(LHD)	J23	66(LHD)		
J 4	66(LHD)	J28	A 66(LHD)		
		J29	B 66(LHD)		
		J37	66(LHD)		

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1D		
1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1H		
1J	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1T	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1W		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
IF1	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IB1	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
IG3	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL1	88(LHD)	
IL2	88(1MZ-FE LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3	88(LHD)	
IM1	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)

▽ : GROUND POINTS

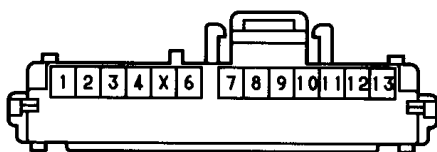
CODE	SEE PAGE	GROUND POINTS LOCATION
EC	82(1MZ-FE LHD) 84(5S-FE LHD)	REAR SIDE OF THE SURGE TANK BEHIND INTAKE MANIFOLD
IF	86(LHD)	LEFT KICK PANEL
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
IH	86(LHD)	INSTRUMENT PANEL BRACE RH
II	86(LHD)	COWL SIDE PANEL RH

COMBINATION METER(LHD)

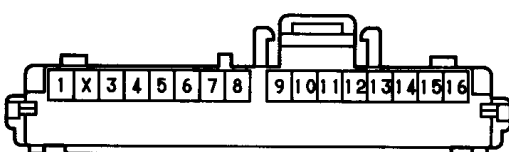
B 2 GRAY



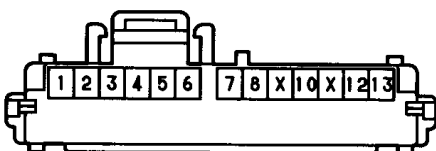
C 9 (A) BLUE



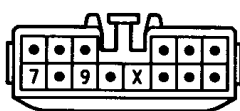
C10 (B)



C11 (C) BROWN



D 2 BLUE



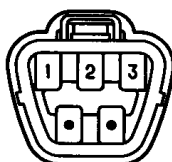
(1MZ-FE) E 5 GRAY



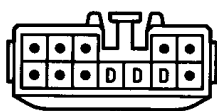
(5S-FE) E 5 GRAY



F19

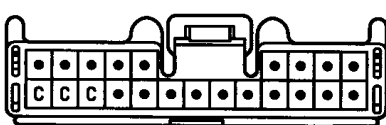


J 3 BLACK



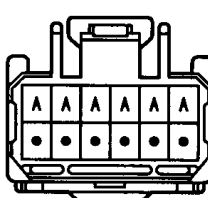
(HINT:SEE PAGE 7, 23, 39)

J 4



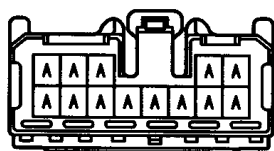
(HINT:SEE PAGE 7, 23, 39)

J 5 GRAY



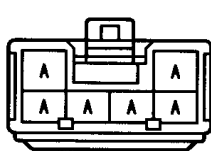
(HINT:SEE PAGE 7, 23, 39)

J 7 ORANGE



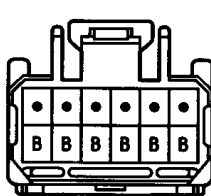
(HINT:SEE PAGE 7, 23, 39)

J 8



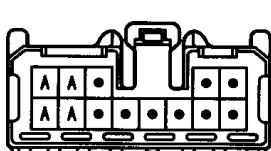
(HINT:SEE PAGE 7, 23, 39)

J13 BLUE



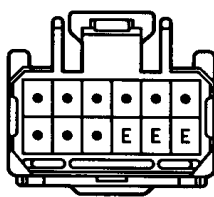
(HINT:SEE PAGE 7, 23, 39)

J15



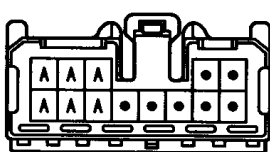
(HINT:SEE PAGE 7, 23, 39)

J16 BLACK



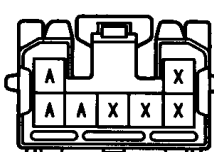
(HINT:SEE PAGE 7, 23, 39)

(5S-FE) J21 GRAY



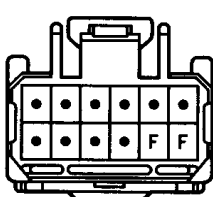
(HINT:SEE PAGE 7, 23, 39)

(1MZ-FE) J23



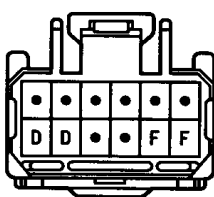
(HINT:SEE PAGE 7, 23, 39)

J28 (A)



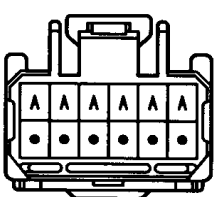
(HINT:SEE PAGE 7, 23, 39)

J29 (B)



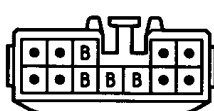
(HINT:SEE PAGE 7, 23, 39)

J37 GRAY



(HINT:SEE PAGE 7, 23, 39)

J40 GRAY

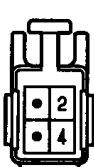


(HINT:SEE PAGE 7, 23, 39)

O 1 GRAY



O 2 BLUE



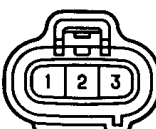
P 2



R 6



S 1 BLACK



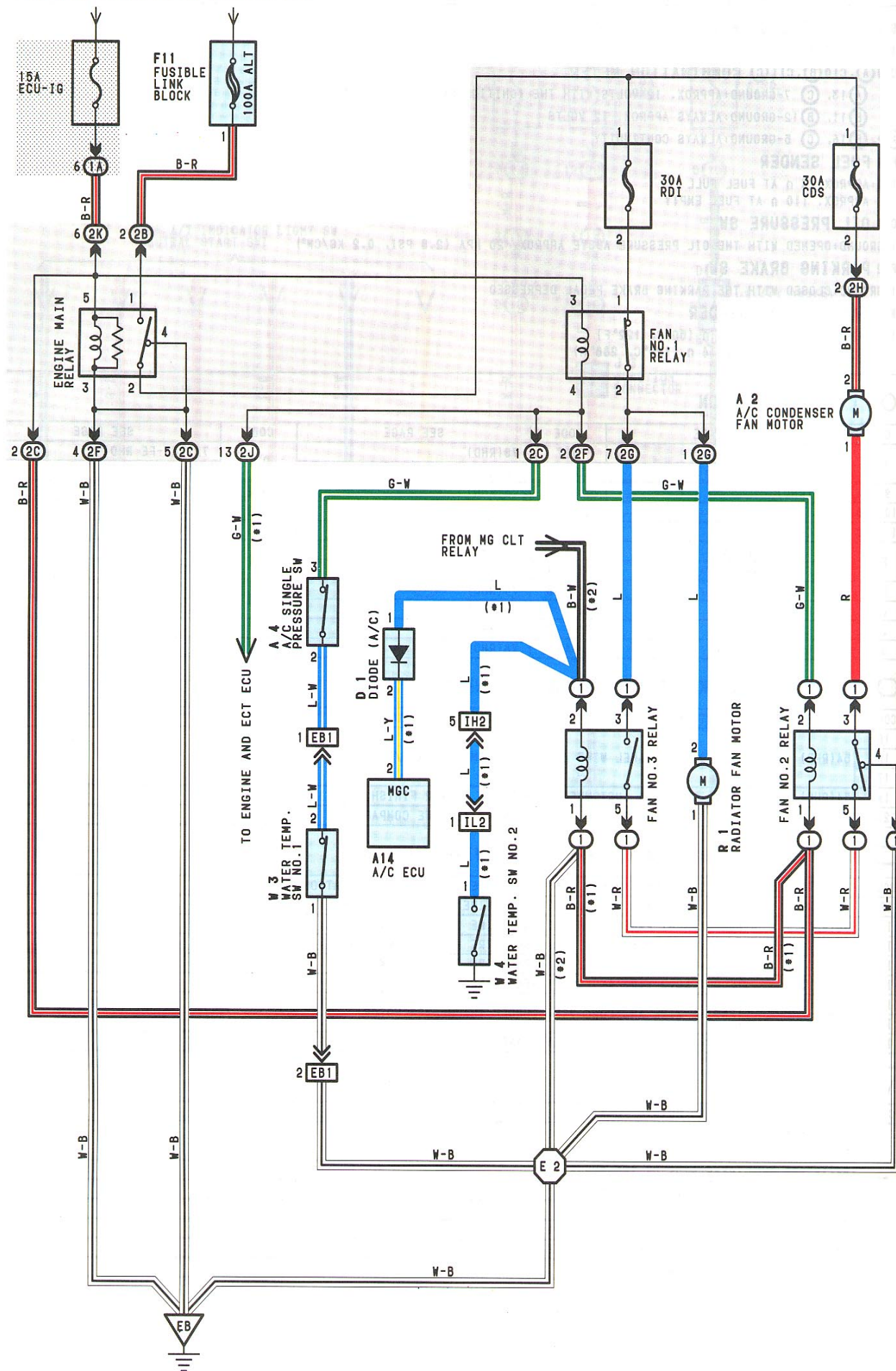
W 2 GRAY



RADIATOR FAN AND CONDENSER FAN(LHD)

• 1:1MZ-FE
• 2:5S-FE

FROM POWER SOURCE SYSTEM (SEE PAGE 116)



SYSTEM OUTLINE

FAN MOTOR OPERATION (1MZ-FE)

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

1. LOW SPEED OPERATION

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

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

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

2. HIGH SPEED OPERATION

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

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

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

FAN MOTOR OPERATION (5S-FE)

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

1. LOW SPEED OPERATION

WHEN THE IGNITION SW IS TURNED ON AND THE A/C SYSTEM IS ACTIVATED THE A/C CONDENSER FAN MOTOR AND THE RADIATOR FAN MOTOR ROTATES AT LOW SPEED.

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

2. HIGH SPEED OPERATION

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

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

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

RADIATOR FAN AND CONDENSER FAN(LHD)

SERVICE HINTS

A 4 A/C SINGLE PRESSURE SW

3-2: OPEN ABOVE APPROX. 15.5 KG/CM² (220 PSI, 1520 KPA)
CLOSE BELOW APPROX. 12.5 KG/CM² (142 PSI, 980 KPA)

W 3 WATER TEMP. SW NO.1

2-1: OPEN ABOVE APPROX. 95°C (203°F)

W 4 WATER TEMP. SW NO.2 (1MZ-FE)

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

○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 2	60(1MZ-FE LHD)	D 1	60(1MZ-FE LHD)	W 3	60(1MZ-FE LHD)
	62(5S-FE LHD)		60(1MZ-FE LHD)		62(5S-FE LHD)
A 4	60(1MZ-FE LHD)	F11	62(5S-FE LHD)	W 4	60(1MZ-FE LHD)
	62(5S-FE LHD)		60(1MZ-FE LHD)		62(5S-FE LHD)
A14	64(LHD)	R 1			

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1A	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
2B	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2C		
2F		
2G		
2H		
2J	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2K		

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

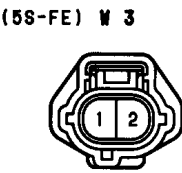
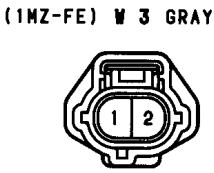
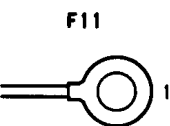
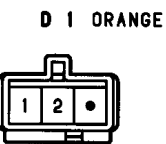
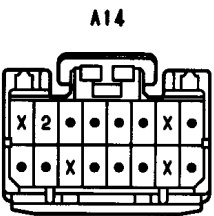
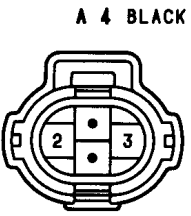
CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO.3 WIRE (RADIATOR LH)
	84(5S-FE LHD)	
IH2	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IL2	88(1MZ-FE LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)

▽ : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	82(1MZ-FE LHD)	BEHIND HEADLIGHT LH
	84(5S-FE LHD)	

○ : SPLICE POINTS

CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	E 2	84(5S-FE LHD)	ENGINE ROOM MAIN WIRE



SYSTEM OUTLINE

1. HEATER BLOWER MOTOR OPERATION

CURRENT IS APPLIED AT ALL TIMES THROUGH THE HTR FUSE TO TERMINAL 1 OF THE HTR RELAY. WHEN THE IGNITION SW IS TURNED ON, CURRENT FLOWS THROUGH THE HEATER FUSE TO THE HTR RELAY (COIL SIDE) → TERMINAL HR OF THE A/C ECU. AT THE SAME TIME, CURRENT ALSO FLOWS FROM HEATER FUSE TO TERMINAL IG+ OF THE A/C ECU.

(LOW SPEED OPERATION)

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

(HIGH SPEED OPREATION)

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

2. AIR INLET CONTROL SERVO MOTOR OPERATION

(SWITCHING FROM FRESH TO RECIRC)

WITH IGNITION SW TURNED ON, WHEN THE RECIRC SW IS PUSHED, THE CURRENT FLOWS FROM THE HEATER FUSE TO TERMINAL 7 OF THE AIR INLET CONTROL SERVO MOTOR → TERMINAL 1 → TERMINAL AIR OF THE A/C ECU → TERMINAL GND → GROUND. THE MOTOR ROTATES AND THE DAMPER MOVES TO THE RECIRC SIDE. WHEN THE DAMPER IS MOVED TO THE RECIRC POSITION, THE CIRCUIT IS CUT INSIDE THE SERVO MOTOR AND THE DAMPER STOPS IN THAT POSITION.

(SWITCHING FROM RECIRC TO FRESH)

WITH THE IGNITION SW TURNED ON, WHEN THE FRESH SW IS PUSHED, THE CURRENT FLOWS FROM TERMINAL 7 OF AIR INLET CONTROL SERVO MOTOR → TERMINAL 3 → TERMINAL AIF OF THE A/C ECU → TERMINAL GND → GROUND, THE MOTOR ROTATES AND THE DAMPER STOPS AT THAT POSITION.

3. AIR VENT MODE CONTROL SERVO MOTOR OPERATION

WHEN THE MODE SELECT SW IN THE A/C ECU IS PUSHED, THE ECU ACTIVATES THE AIR VENT MODE CONTROL SERVO MOTOR, THIS CAUSES THE SERVO MOTOR TO ROTATE TO THE POSITION (FACE, BI-LEVEL, FOOT, FOOT/DEF, DEF) SELECTED USING THE MODE SELECT SW (HEATER CONTROL), AND MOVES THE MODE DAMPER.

4. AIR MIX CONTROL SERVO MOTOR OPERATION

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

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

5. AIR CONDITIONER OPERATION

THE A/C ECU RECEIVES VARIOUS SIGNALS, I.E., THE ENGINE RPM FROM THE METER, OUTSIDE AIR TEMPERATURE SIGNAL FROM THE A/C AMBIENT TEMP. SENSOR, COOLANT TEMPERATURE FROM THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) AND THE LOCK SIGNAL FROM THE A/C COMPRESSOR, ETC.

WHEN THE ENGINE IS STARTED AND THE A/C SW (A/C ECU) IS ON, A SIGNAL IS INPUT TO THE A/C ECU.

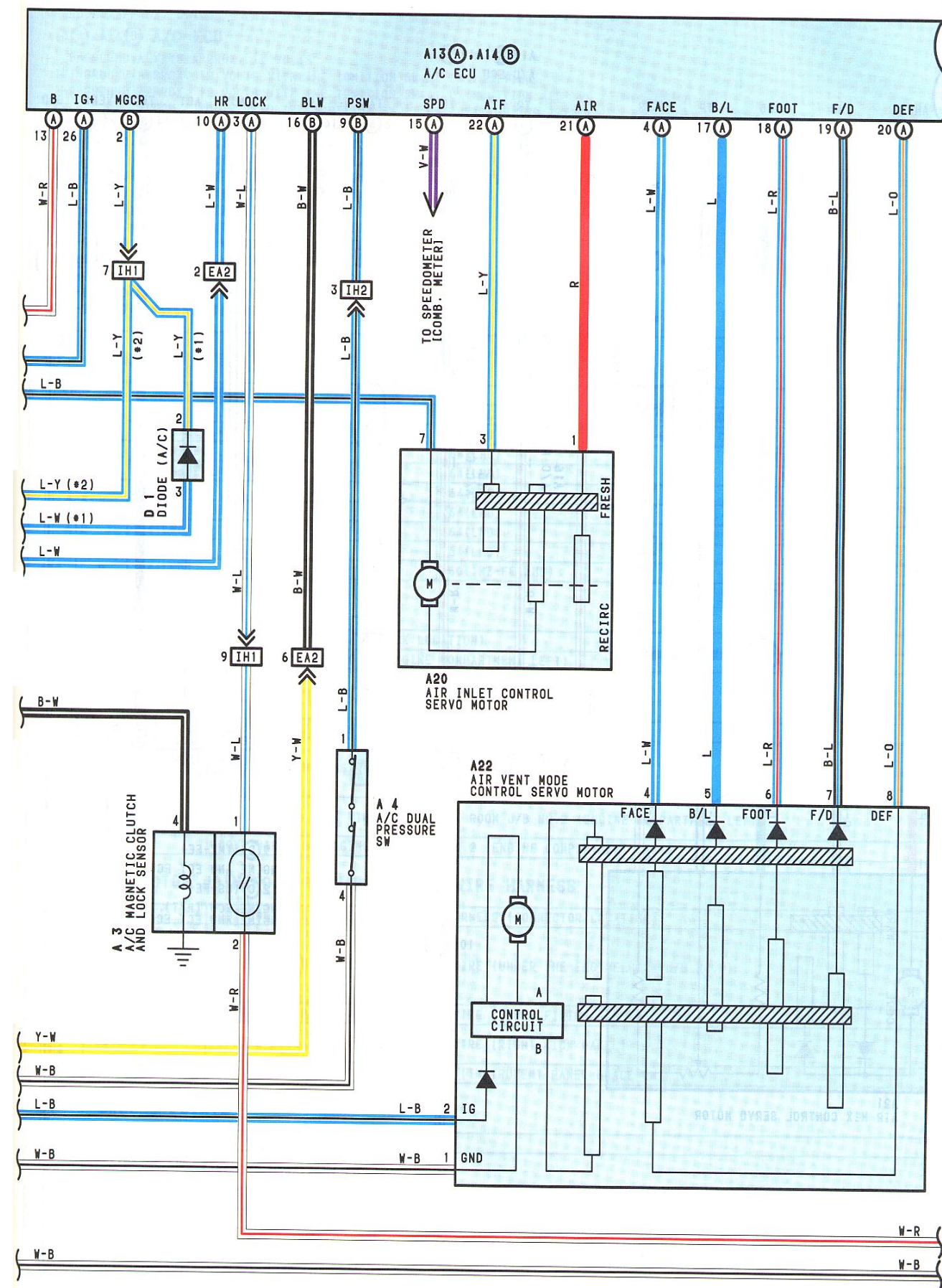
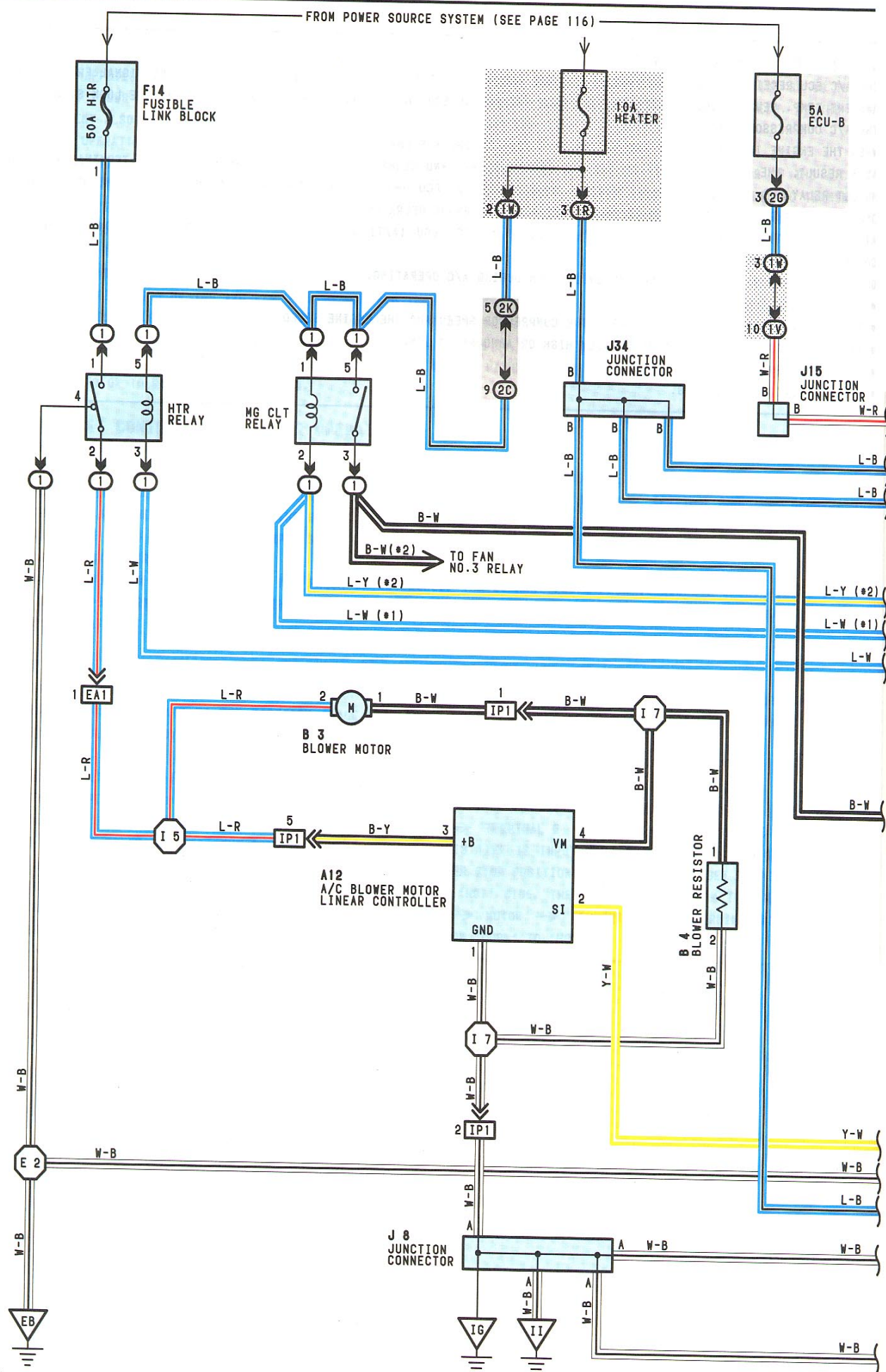
AS A RESULT, THE GROUND CIRCUIT IN THE A/C ECU IS CLOSED AND CURRENT FLOWS FROM THE HEATER FUSE TO TERMINAL 1 OF THE MG CLT RELAY → TERMINAL 2 → TERMINAL MGCR OF THE A/C ECU → TERMINAL GND → GROUND, TURNING THE MG CLT RELAY ON, SO THAT THE MAGNETIC CLUTCH IS ON AND THE A/C COMPRESSOR OPERATES.

AT THE SAME TIME, THE ENGINE ECU (M/T), ENGINE AND ECT ECU (A/T) DETECTS THE MAGNETIC CLUTCH IS ON AND THE A/C COMPRESSOR OPERATES.

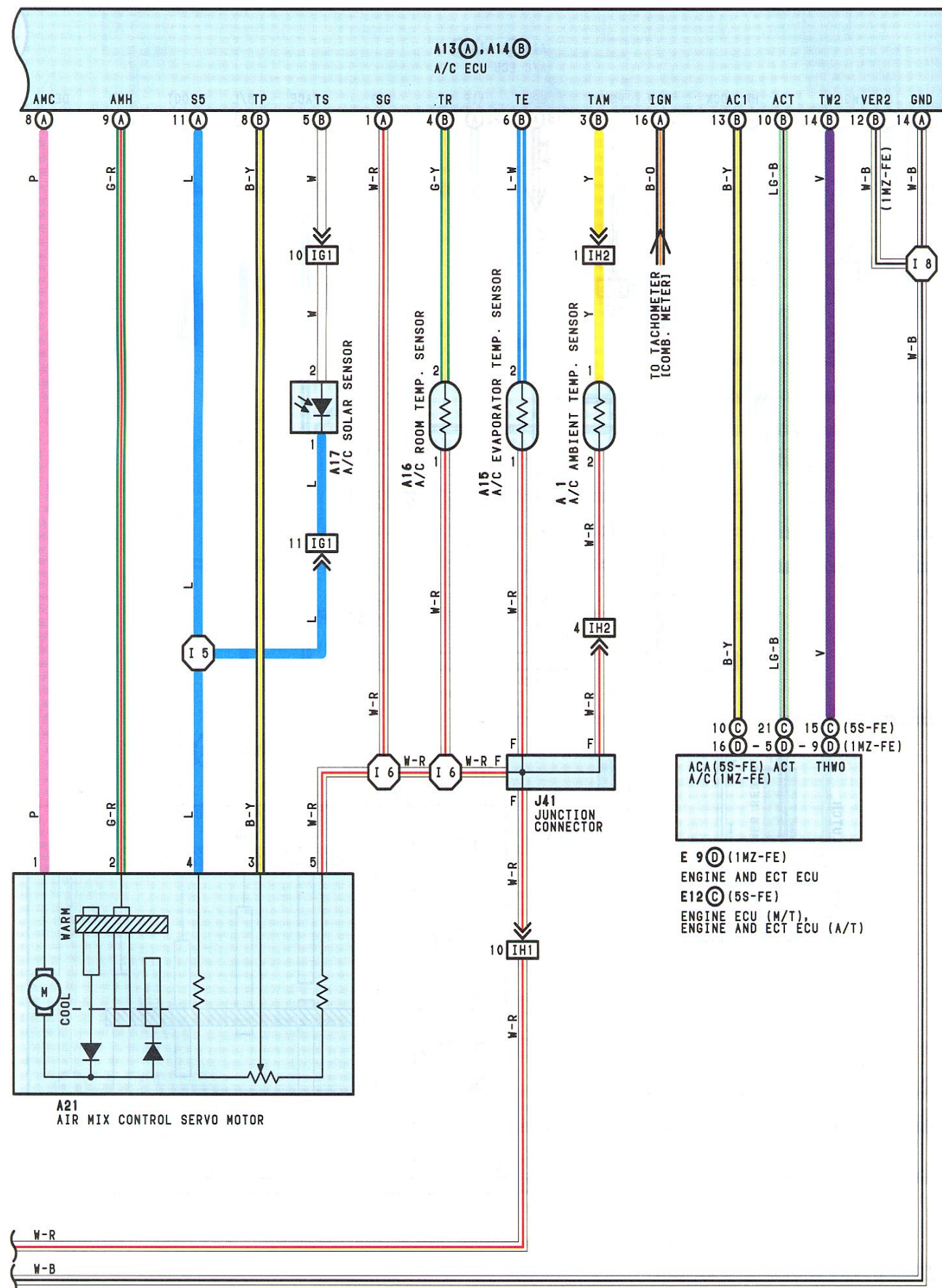
OPEN DIRECTION TO AVOID LOWERING THE ENGINE RPM DURING A/C OPERATING.

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

AUTOMATIC AIR CONDITIONER(LHD)



AUTOMATIC AIR CONDITIONER(LHD)



SERVICE HINTS

A 4 A/C DUAL PRESSURE SW

1-4: OPEN ABOVE APPROX. 15.5 KG/CM² (20 PSI, 1520 KPA) OR 32 KG/CM² (455 PSI, 3136 KPA)

A 3 A/C MAGNETIC CLUTCH

4-GROUND: APPROX. 3.7 Ω

A13 (A), A14 (B) A/C ECU

B-GROUND: ALWAYS APPROX. 12 VOLTS

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

HR-GROUND: APPROX. 12 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE BLOWER MOTOR OFF.

BELOW 1 VOLTS WITH THE IGNITION SW AT ON POSITION AND THE BLOWER MOTOR ON.

PSW-GROUND:BELOW 1 VOLTS WITH THE IGNITION SW ON
AC1-GROUND:BELOW 1 VOLTS AT ENGINE START CORRECT

AC1-GROUND: BELOW 1 VOLTS AT ENGINE START, COMPRESSOR ON.
OR MORE VOLTS AT ENGINE START, COMPRESSOR OFF.

BLW - GROUND: BELOW 1.5 VOLTS WITH THE IGNITION ON AND

BLW - GROUND: BELOW 1.8 VOLTS WITH THE IGNITION SW ON AND TURN THE BLOWER MOTOR
S5-S6: 4-6 VOLTS WITH THE IGNITION SW ON

SG-SG:4-8 VOLTS WITH THE IGNITION SW ON
SG-GROUND: ALWAYS CONTINUITY

AMH-AMC: 1.3-1.9 VOLTS WITH

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

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

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

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

GND-GROUND: ALWAYS CONTINUITY

○ : PARTS LOCATION

CODE		SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
A 1		60(1MZ-FE LHD)	A15	64(LHD)	E 9	D
		62(5S-FE LHD)	A16	64(LHD)	E12	C
A 3		60(1MZ-FE LHD)	A17	64(LHD)	F14	60(1MZ-FE LHD)
		62(5S-FE LHD)	A20	64(LHD)		62(5S-FE LHD)
A 4		60(1MZ-FE LHD)	A21	64(LHD)	J 8	66(LHD)
		62(5S-FE LHD)	A22	64(LHD)	J15	66(LHD)
A12		64(LHD)	B 3	64(LHD)	J34	66(LHD)
A13	A	64(LHD)	B 4	64(LHD)	J41	66(LHD)
A14	B	64(LHD)	D 1	60(1MZ-FE LHD)		

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)

 : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1R	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		
1W		
2C	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2G		
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

 : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EA1	82(1MZ-FE LHD)	COWL WIRE AND ENGINE ROOM MAIN WIRE (UNDER THE ENGINE ROOM J/B NO.2)
	84(5S-FE LHD)	
EA2	82(1MZ-FE LHD)	
	84(5S-FE LHD)	
IG1	86(LHD)	INSTRUMENT PANEL WIRE AND COWL WIRE (LOWER FINISH PANEL)
IH1	86(LHD)	ENGINE ROOM MAIN WIRE AND COWL WIRE (RIGHT KICK PANEL)
IH2		
IP1	88(LHD)	COWL WIRE AND A/C SUB NO.1 WIRE (INSTRUMENT PANEL BRACE LH)

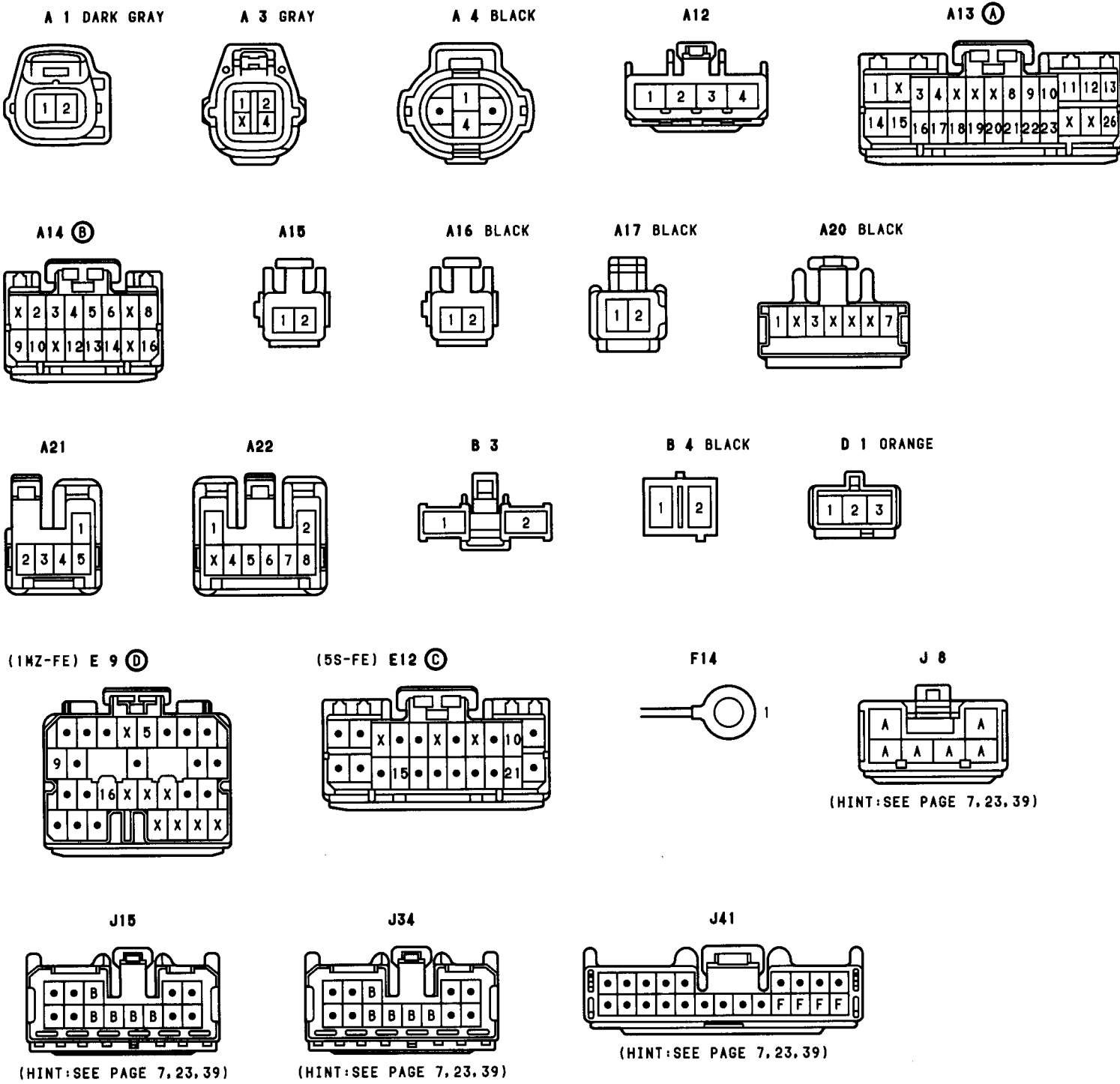
 : GROUND POINTS

CODE	SEE PAGE	GROUND POINTS LOCATION
EB	82(1M2-FE LHD)	BEHIND HEADLIGHT LH
	84(5S-FE LHD)	
IG	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	COWL SIDE PANEL RH

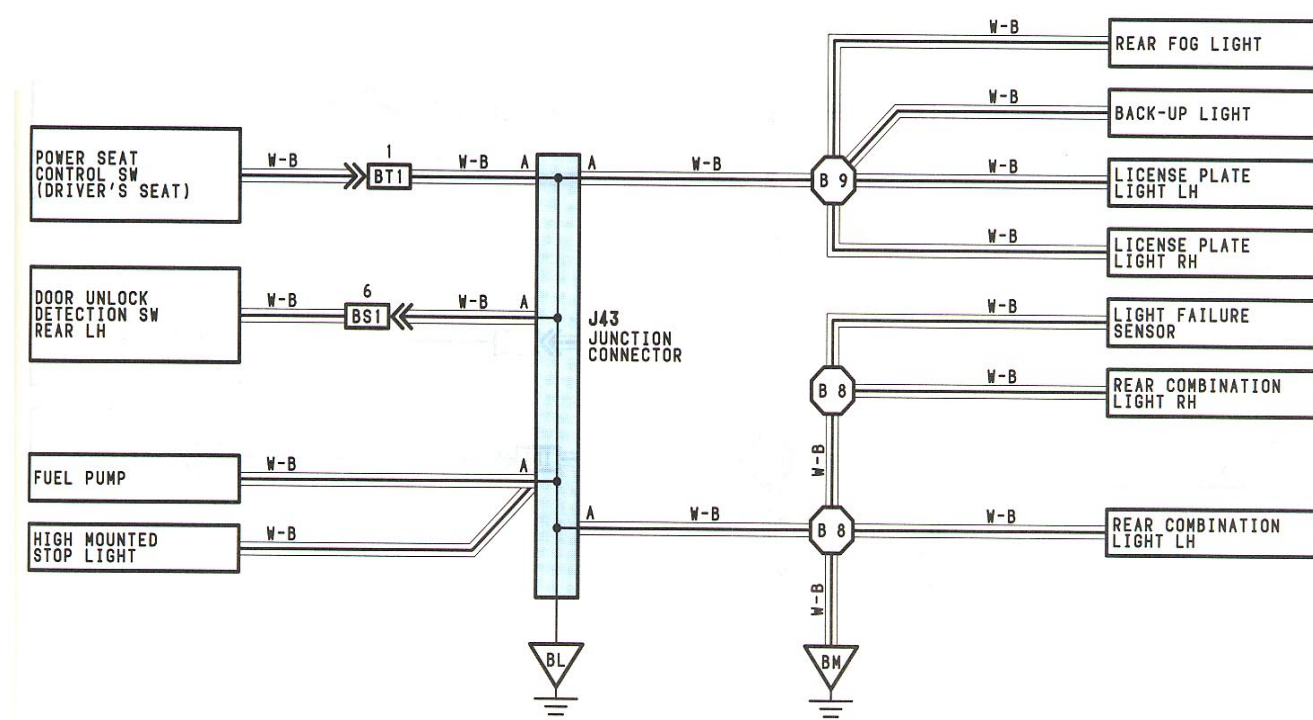
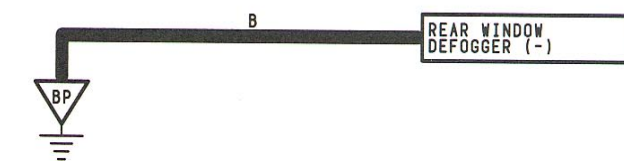
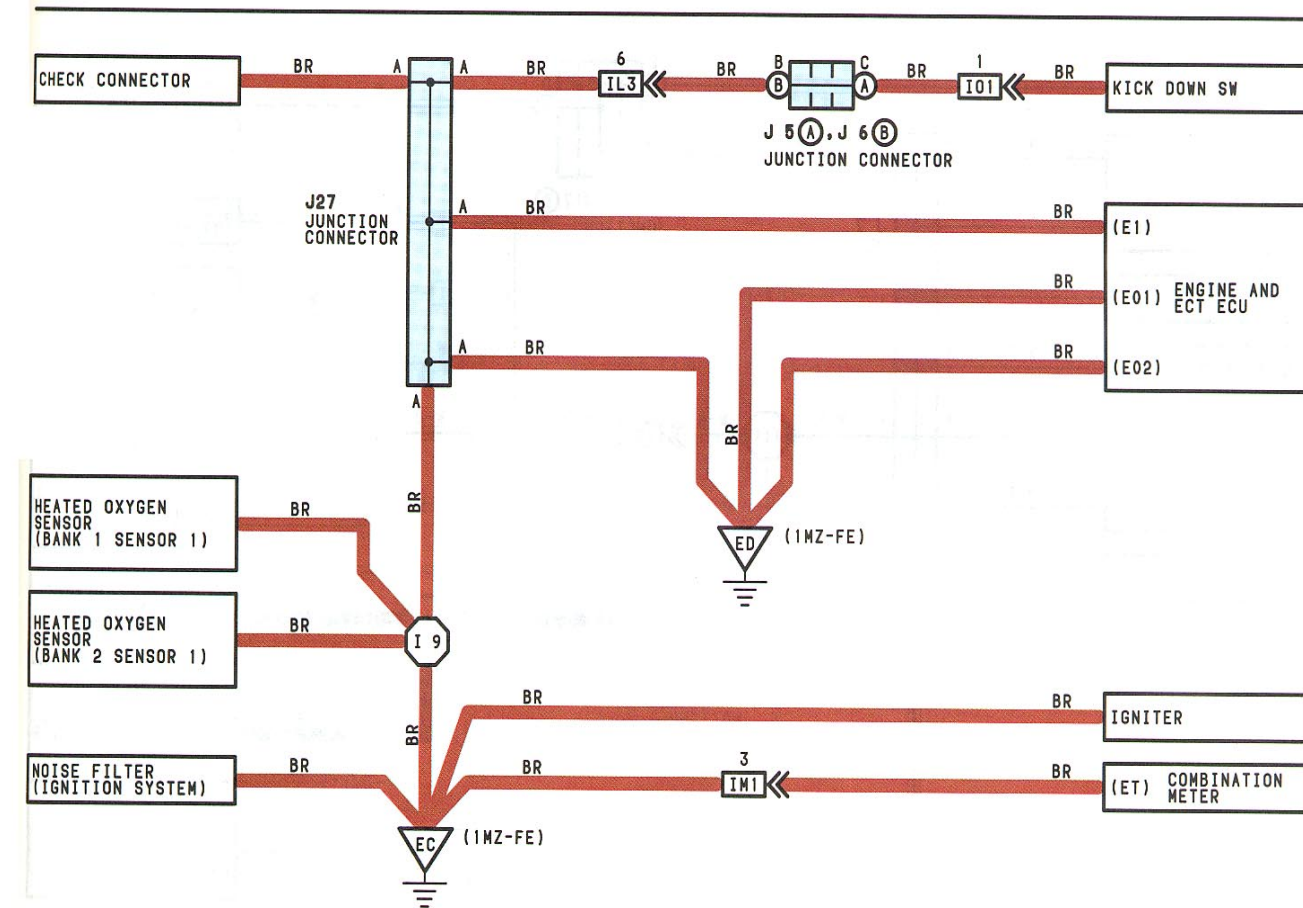
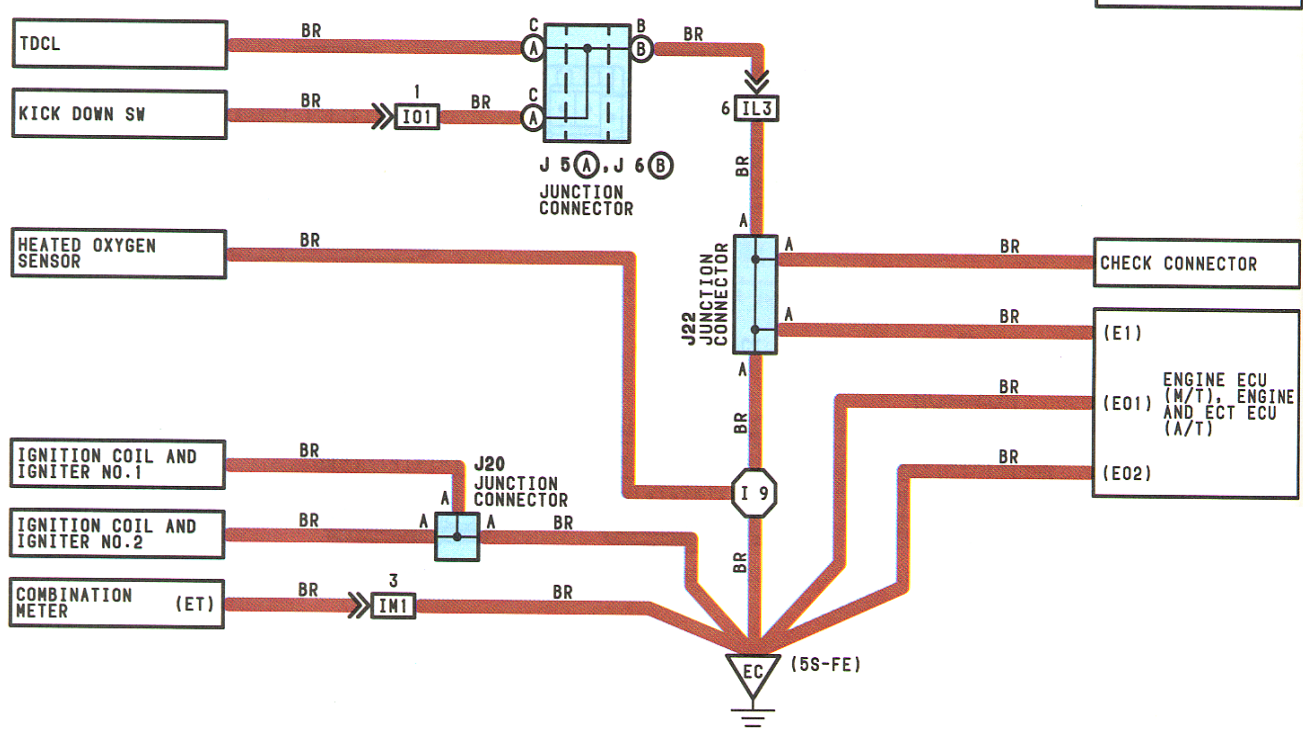
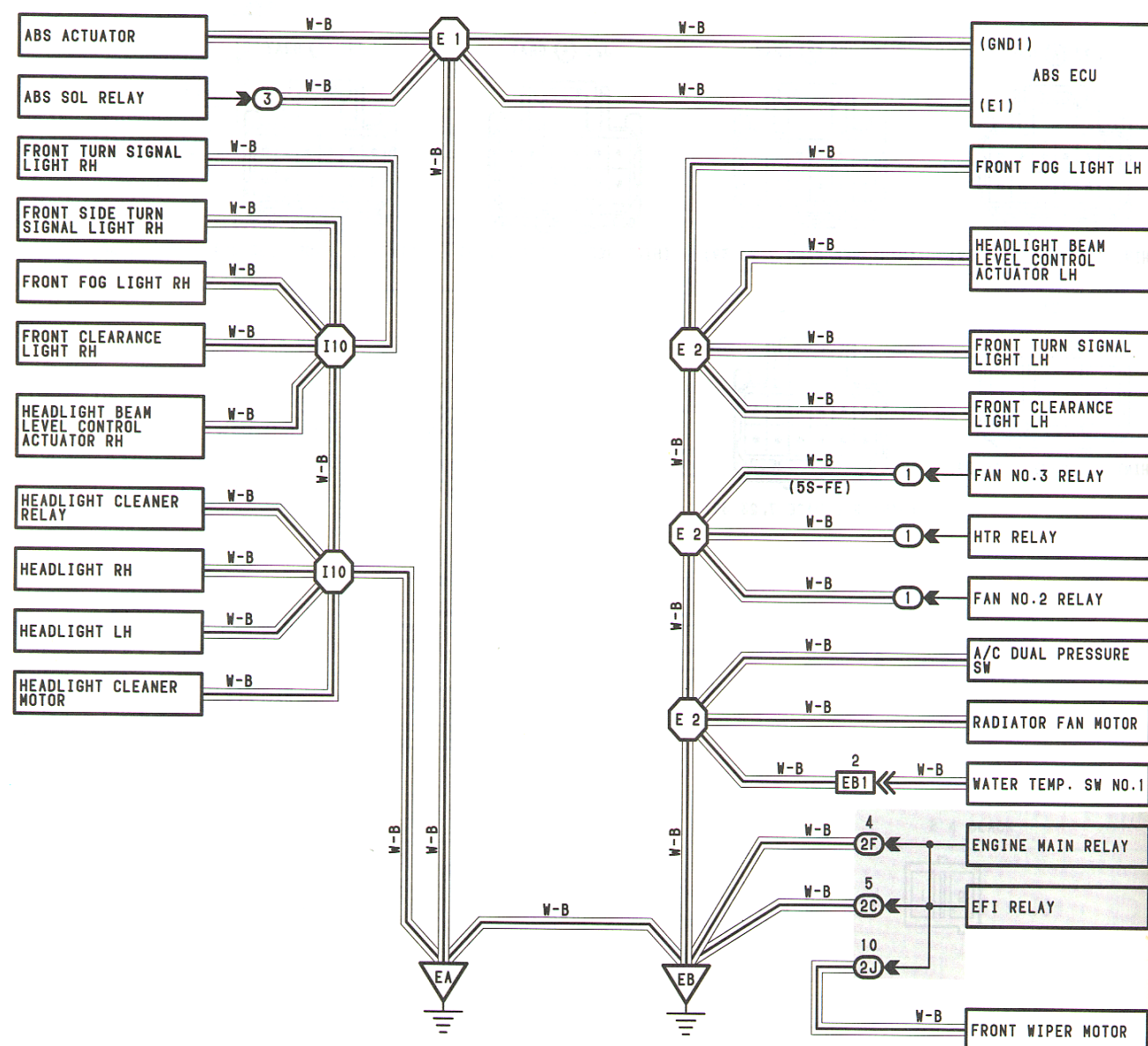
AUTOMATIC AIR CONDITIONER(LHD)

 : SPLICE POINTS

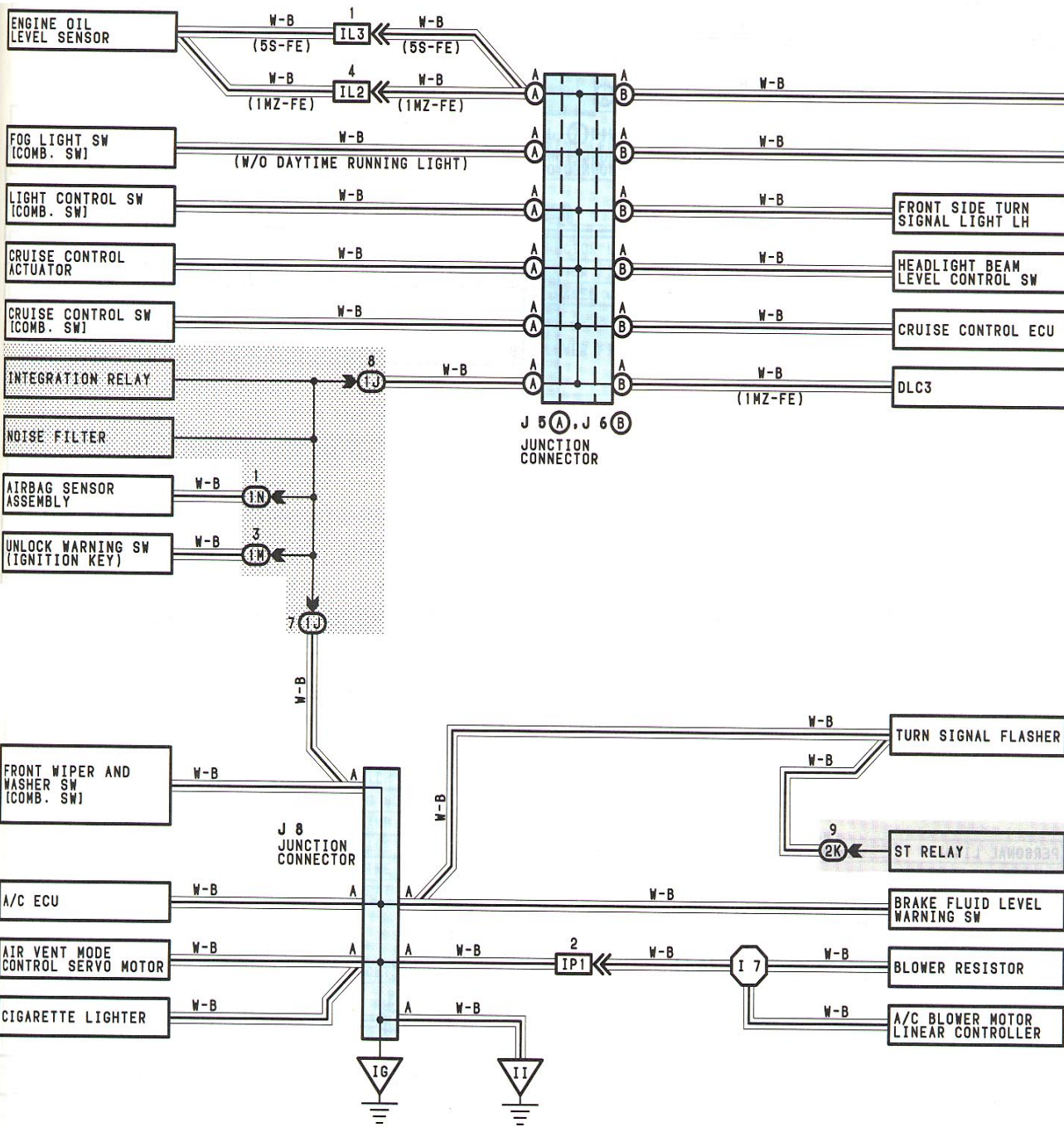
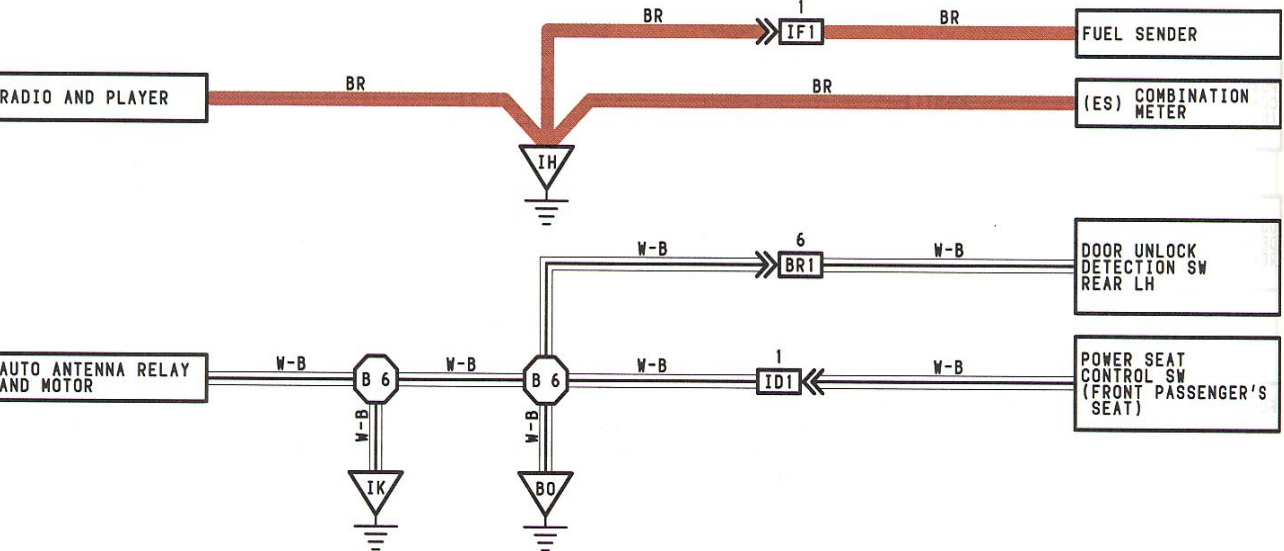
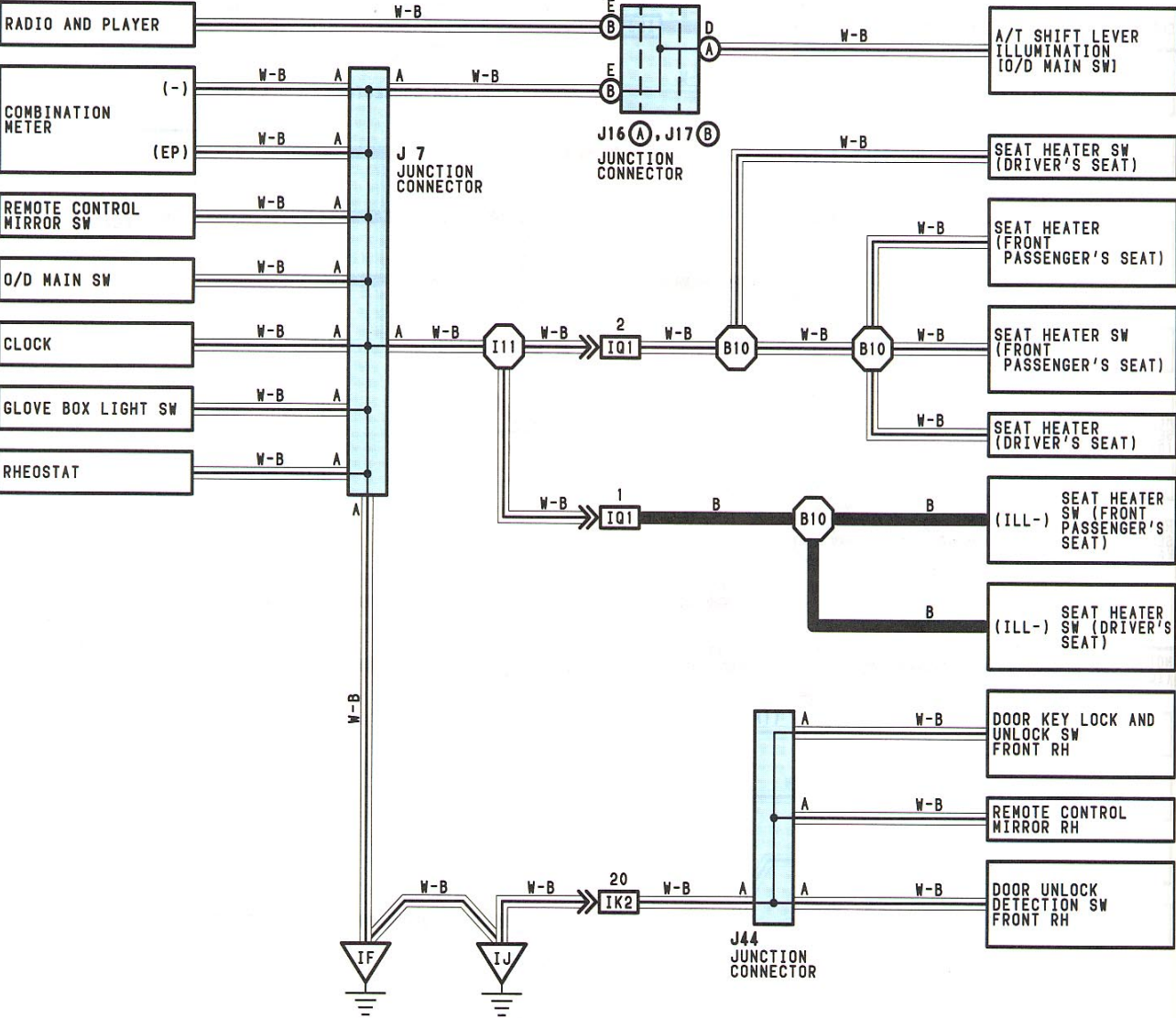
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 2	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	I 6	88(LHD)	COWL WIRE
	84(5S-FE LHD)		I 7	88(LHD)	A/C SUB NO.1 WIRE
I 5	88(LHD)	COWL WIRE	I 8	88(LHD)	COWL WIRE



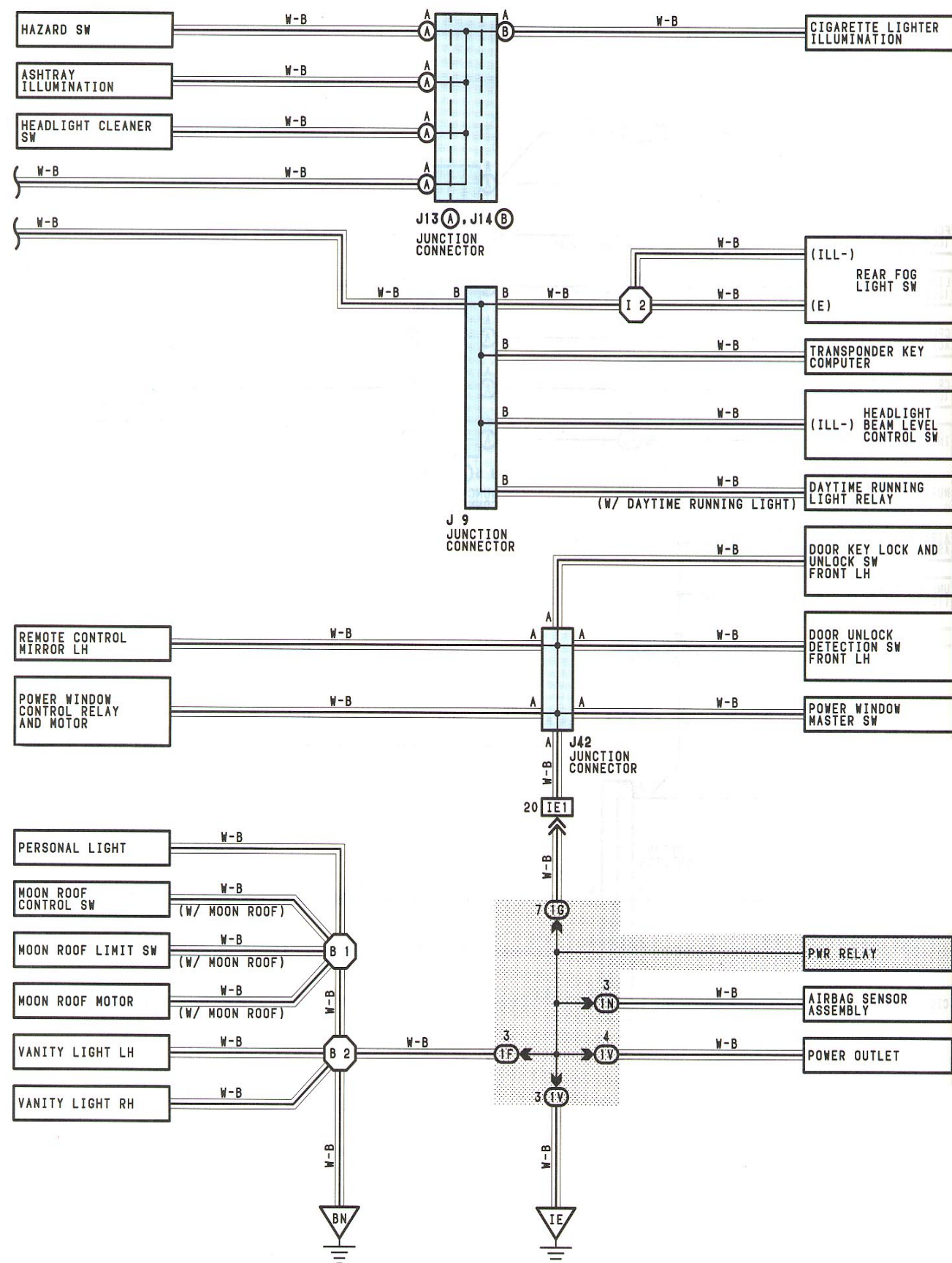
J GROUND POINT(LHD)



J GROUND POINT(LHD)



J GROUND POINT(LHD)



○ : PARTS LOCATION

CODE	SEE PAGE	CODE	SEE PAGE	CODE	SEE PAGE
J 5	A	66(LHD)	J13	A	66(LHD)
J 6	B	66(LHD)	J14	B	66(LHD)
J 7		66(LHD)	J16	A	66(LHD)
J 8		66(LHD)	J17	B	66(LHD)
J 9		66(LHD)	J20		66(LHD)
			J22		66(LHD)
			J27		66(LHD)
			J42		68(LHD)
			J43		68(LHD)
			J44		68(LHD)

○ : RELAY BLOCKS

CODE	SEE PAGE	RELAY BLOCKS (RELAY BLOCK LOCATION)
1	58	ENGINE ROOM R/B NO.1 (ENGINE COMPARTMENT LEFT)
3	59	ENGINE ROOM R/B NO.3 (RADIATOR UPPER SUPPORT LH)

○ : JUNCTION BLOCK AND WIRE HARNESS CONNECTOR

CODE	SEE PAGE	JUNCTION BLOCK AND WIRE HARNESS (CONNECTOR LOCATION)
1F	52(LHD)	ROOF WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1G	52(LHD)	INSTRUMENT PANEL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1J		
1M		
1N	52(LHD)	COWL WIRE AND INSTRUMENT PANEL J/B (LOWER FINISH PANEL)
1V		
2C	56	ENGINE ROOM MAIN WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)
2F		
2J		
2K	56	COWL WIRE AND ENGINE ROOM J/B NO.2 (ENGINE COMPARTMENT LEFT)

□ : CONNECTOR JOINING WIRE HARNESS AND WIRE HARNESS

CODE	SEE PAGE	JOINING WIRE HARNESS AND WIRE HARNESS (CONNECTOR LOCATION)
EB1	82(1MZ-FE LHD) 84(5S-FE LHD)	ENGINE ROOM MAIN WIRE AND ENGINE ROOM MAIN NO.3 WIRE (RADIATOR LH)
ID1	86(LHD)	FLOOR WIRE AND COWL WIRE (LEFT KICK PANEL)
IE1	86(LHD)	FRONT DOOR LH WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IF1	86(LHD)	FLOOR WIRE AND INSTRUMENT PANEL WIRE (LEFT KICK PANEL)
IK2	88(LHD)	FRONT DOOR RH WIRE AND INSTRUMENT PANEL WIRE (RIGHT KICK PANEL)
IL2	88(1MZ-FE LHD)	ENGINE WIRE AND COWL WIRE (UNDER THE BLOWER MOTOR)
IL3	88(LHD)	ENGINE WIRE AND INSTRUMENT PANEL WIRE (UNDER THE BLOWER MOTOR)
IM1	88(LHD)	COWL WIRE AND SWICH WIRE (INSTRUMENT PANEL BRACE LH)
IO1	88(LHD)	COWL WIRE AND A/C SUB NO.1 WIRE (INSTRUMENT PANEL BRACE LH)
IP1	88(LHD)	FLOOR NO.3 WIRE AND INSTRUMENT PANEL WIRE (UNDER THE CONSOLE BOX)
IQ1	90(LHD)	REAR DOOR NO.1 WIRE AND FLOOR NO.2 WIRE (UNDER THE RIGHT CENTER PILLAR)
BS1	90(LHD)	REAR DOOR NO.2 WIRE AND FLOOR WIRE (UNDER THE LEFT CENTER PILLAR)
BT1	92(LHD)	FLOOR WIRE AND SEAT NO.1 WIRE (UNDER THE DRIVER'S SEAT)

▽ : GROUND POINTS

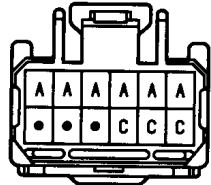
CODE	SEE PAGE	GROUND POINTS LOCATION
EA	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT RH
EB	82(1MZ-FE LHD) 84(5S-FE LHD)	BEHIND HEADLIGHT LH
EC	82(1MZ-FE LHD) 84(5S-FE LHD)	REAR SIDE OF THE SURGE TANK
ED	82(1MZ-FE LHD)	BEHIND INTAKE MANIFOLD
IE	86(LHD)	SURGE TANK RH
IF	86(LHD)	COWL SIDE PANEL LH
IG	86(LHD)	LEFT KICK PANEL
IH	86(LHD)	INSTRUMENT PANEL BRACE LH
II	86(LHD)	INSTRUMENT PANEL BRACE RH
IJ	86(LHD)	COWL SIDE PANEL RH
IK	86(LHD)	RIGHT KICK PANEL
BL	90(LHD)	RIGHT KICK PANEL
BM	90(LHD)	UNDER THE LEFT CENTER PILLAR
BN	90(LHD)	BACK PANEL CENTER
BO	90(LHD)	ROOF LEFT
BP	90(LHD)	UNDER THE RIGHT CENTER PILLAR
		RIGHT QUARTER PILLAR

J GROUND POINT(LHD)

 : SPLICE POINTS

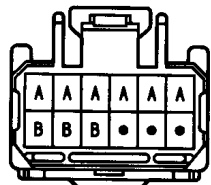
CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS	CODE	SEE PAGE	WIRE HARNESS WITH SPLICE POINTS
E 1	82(1MZ-FE LHD)	ENGINE ROOM MAIN WIRE	I11	88(LHD)	INSTRUMENT PANEL WIRE
	84(5S-FE LHD)		B 1	90(LHD)	ROOF WIRE
E 2	82(1MZ-FE LHD)		B 2		
	84(5S-FE LHD)		B 6	90(LHD)	FLOOR NO.2 WIRE
I 7	88(LHD)	A/C SUB NO.1 WIRE	B 8	90(LHD)	FLOOR WIRE
I 9	88(LHD)	ENGINE WIRE	B 9		
I10	88(LHD)	ENGINE ROOM MAIN WIRE	B10	92(LHD)	FLOOR NO.3 WIRE

J 5 Ⓐ GRAY



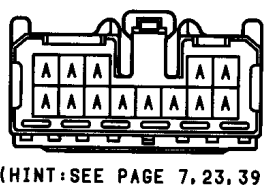
(HINT:SEE PAGE 7, 23, 39)

J 6 Ⓑ GRAY



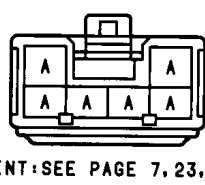
(HINT:SEE PAGE 7, 23, 39)

J 7 ORANGE



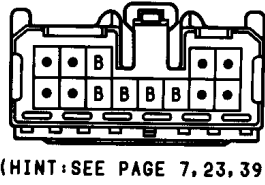
(HINT:SEE PAGE 7, 23, 39)

J 8



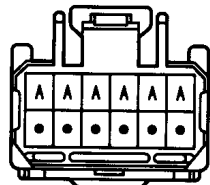
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J 9



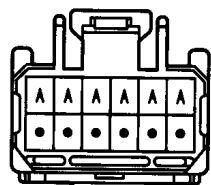
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J13 Ⓐ BLUE



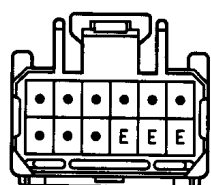
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J14 Ⓑ BLUE



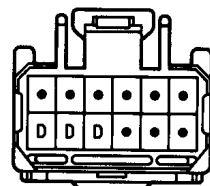
(HINT:SEE PAGE 7, 23, 39)

J16 Ⓐ BLACK



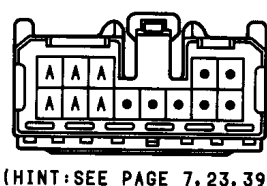
(HINT:SEE PAGE 7, 23, 39)

J17 Ⓑ BLACK



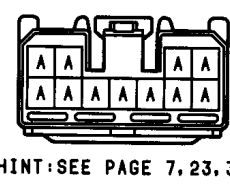
(HINT:SEE PAGE 7, 23, 39)

(5S-FE) J20 GRAY



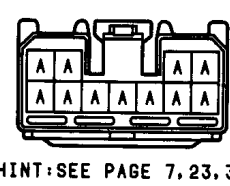
(HINT:SEE PAGE 7, 23, 39)

(5S-FE) J22



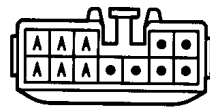
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(1MZ-FE) J27



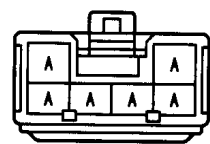
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J42



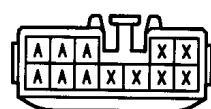
(HINT:SEE PAGE 7, 23, 39)

J43



(HINT:SEE PAGE 7, 23, 39)

J44



(HINT:SEE PAGE 7, 23, 39)

450 SYSTEM INDEX

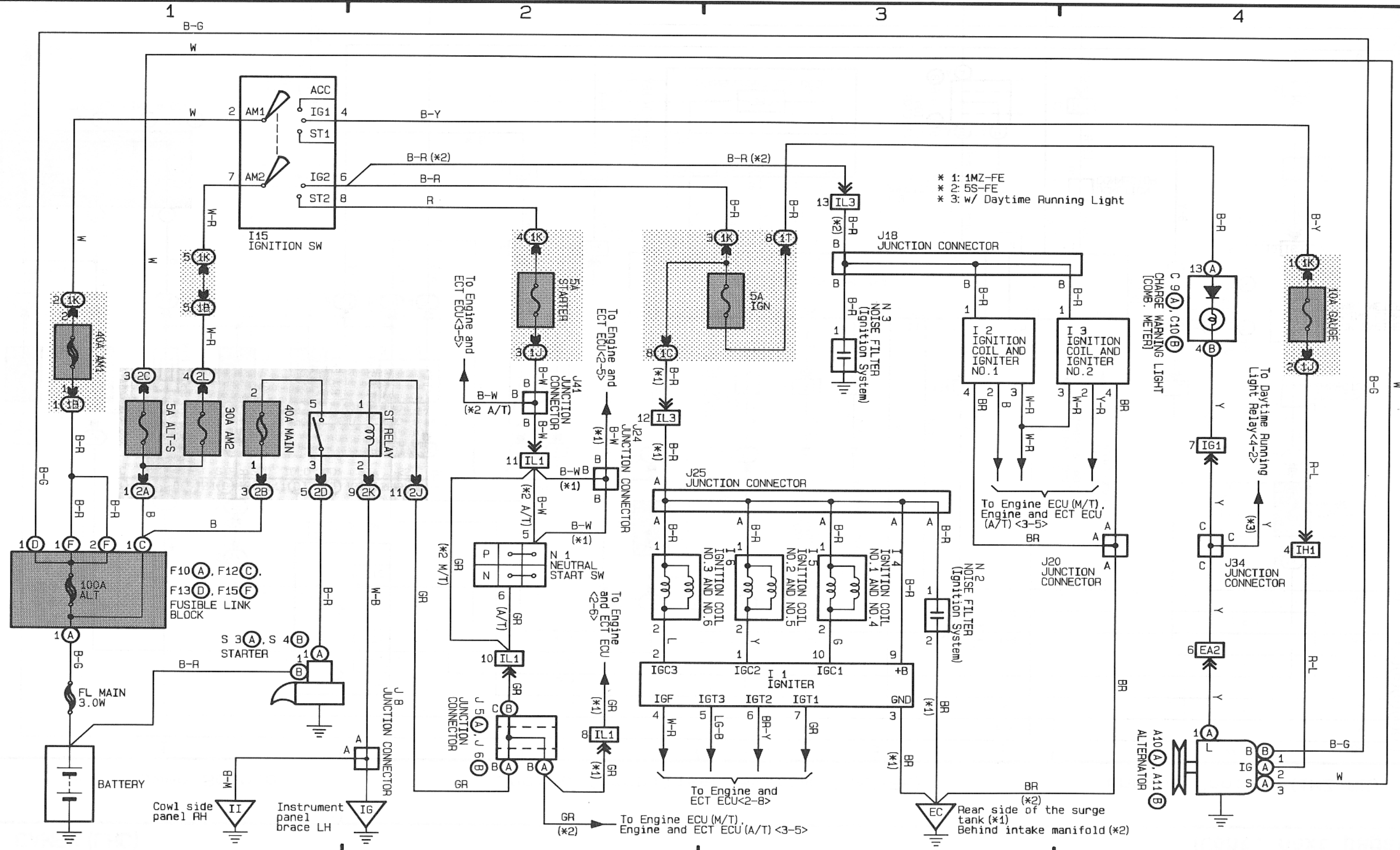
SYSTEMS	LOCATION	SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS	18-2(LHD) 41-2(RHD)	Engine Immobiliser System (5S-FE)	3-2(LHD) 27-2(RHD)	Power Window	15-2(LHD) 38-2(RHD)
Auto Antenna	16-2(LHD) 39-2(RHD)	Front Fog Light	11-2(LHD) 34-2(RHD)	Radiator Fan and Condenser Fan	23-3(LHD) 46-3(RHD)
Automatic Air Conditioner	23-2(LHD) 47-2(RHD)	Front Wiper and Washer	10-2(LHD) 33-2(RHD)	Radio and Player	16-3(LHD) 39-3(RHD)
Back-Up Light	9-4(LHD) 32-4(RHD)	Headlight	4-2(w/ Daytime Running Light LHD) 5-2(w/o Daytime Running Light LHD) 28-2(RHD)	Rear Fog Light	11-3(LHD) 34-3(RHD)
Charging	1-4(LHD) 25-4(RHD)	Headlight Beam Level Control	5-3(LHD) 28-3(RHD)	Rear Window Defogger	46-2(RHD)
Cigarette Lighter and Clock	13-4(LHD) 36-4(RHD)	Headlight Cleaner	22-2(LHD) 44-2(RHD)	Rear Window Defogger and Mirror Heat	23-2(LHD)
Combination Meter	22-3(LHD) 44-3(RHD)	Horn	12-4(LHD) 35-4(RHD)	Remote Control Mirror	10-3(LHD) 33-3(RHD)
Cruise Control	19-2(LHD) 45-2(RHD)	Illumination	7-2(LHD) 30-2(RHD)	Seat Heater	17-4(LHD)
Door Lock Control	14-2(LHD) 37-2(RHD)	Interior Light	8-3(LHD) 31-3(RHD)	SRS	13-2(LHD) 36-2(RHD)
ECT and A/T Indicator (1MZ-FE)	20-2(LHD) 42-2(RHD)	Light Reminder Buzzer	8-2(LHD) 31-2(RHD)	Starting and Ignition	1-2(LHD) 25-2(RHD)
ECT and A/T Indicator (5S-FE)	21-2(LHD) 43-2(RHD)	Moon Roof	12-2(LHD) 35-2(RHD)	Stop Light	6-3(LHD) 29-3(RHD)
Engine Control (1MZ-FE)	2-4(LHD) 26-4(RHD)	Power Outlet	13-3(LHD) 36-3(RHD)	Taillight	6-2(LHD) 29-2(RHD)
Engine Control (5S-FE)	3-4(LHD) 27-4(RHD)	Power Seat	17-2(LHD) 40-2(RHD)	Turn Signal and Hazard Warning Light	9-2(LHD) 32-2(RHD)
Engine Immobiliser System (1MZ-FE)	2-2(LHD) 26-2(RHD)	Power source	1~24-1(LHD) 25~47-1(RHD)	Unlock Warning	12-3(LHD) 35-3(RHD)

1 CAMRY (LHD) ELECTRICAL WIRING DIAGRAM

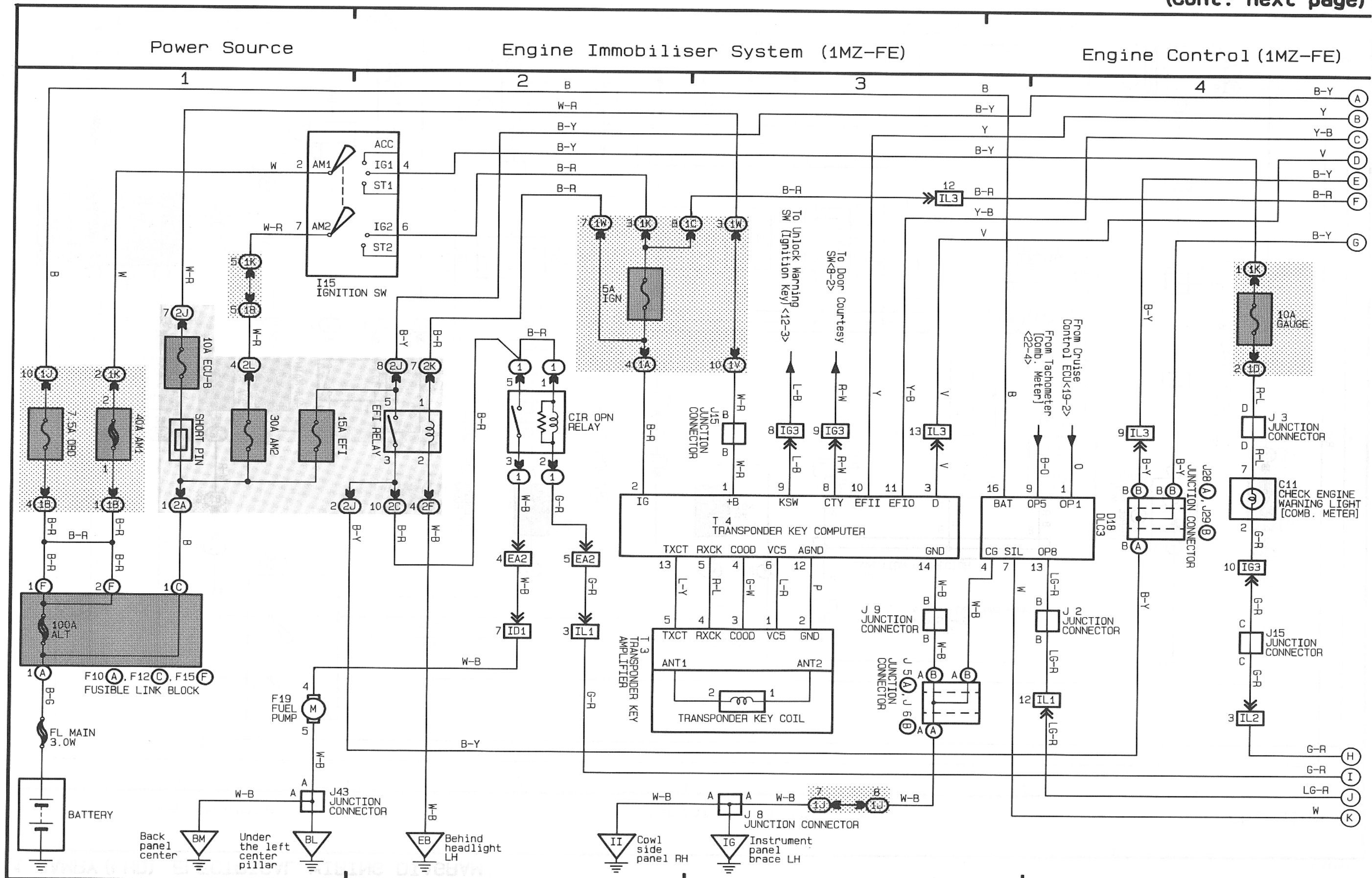
Power Source

Starting and Ignition

Charging



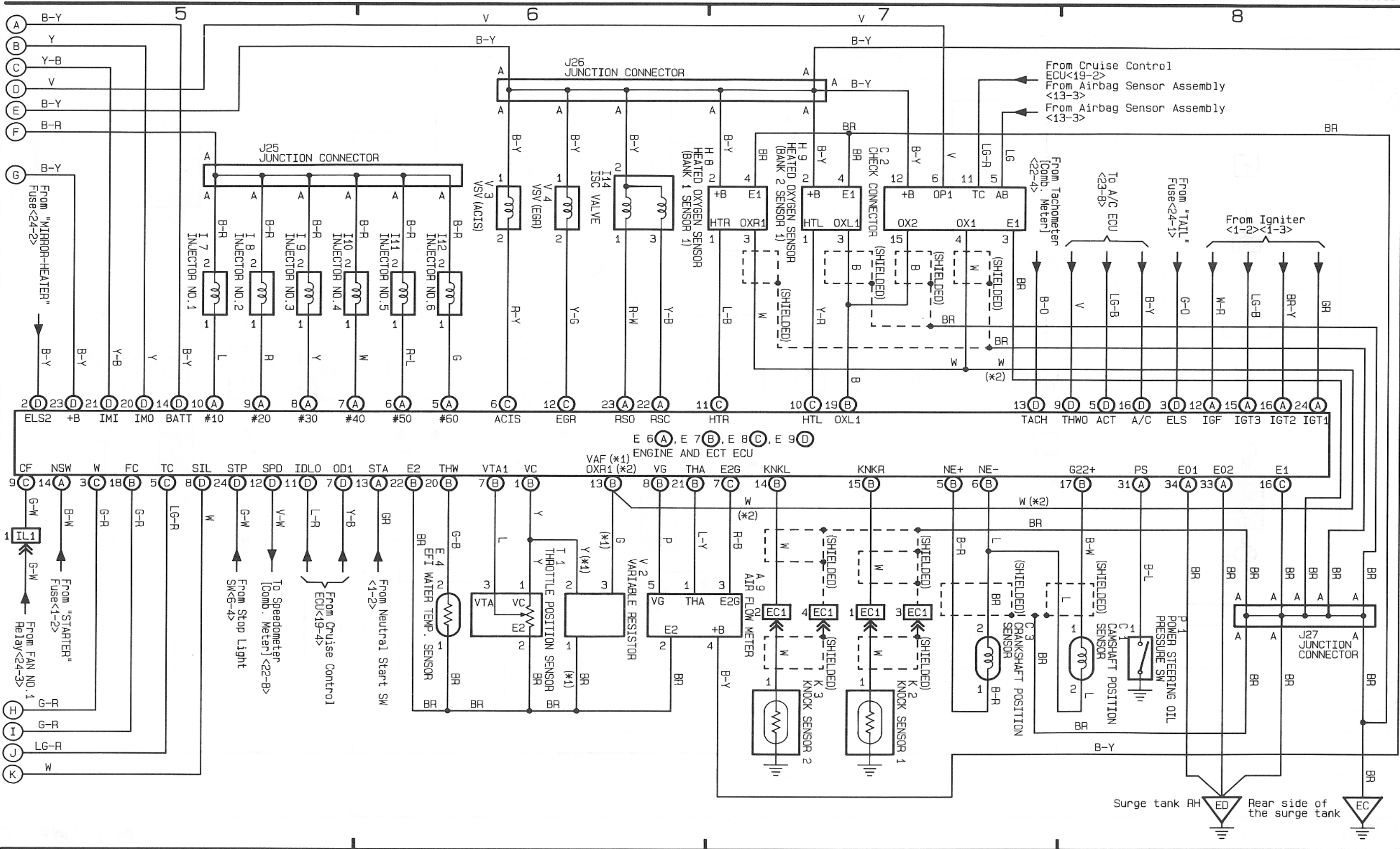
K OVERALL ELECTRICAL WIRING DIAGRAM

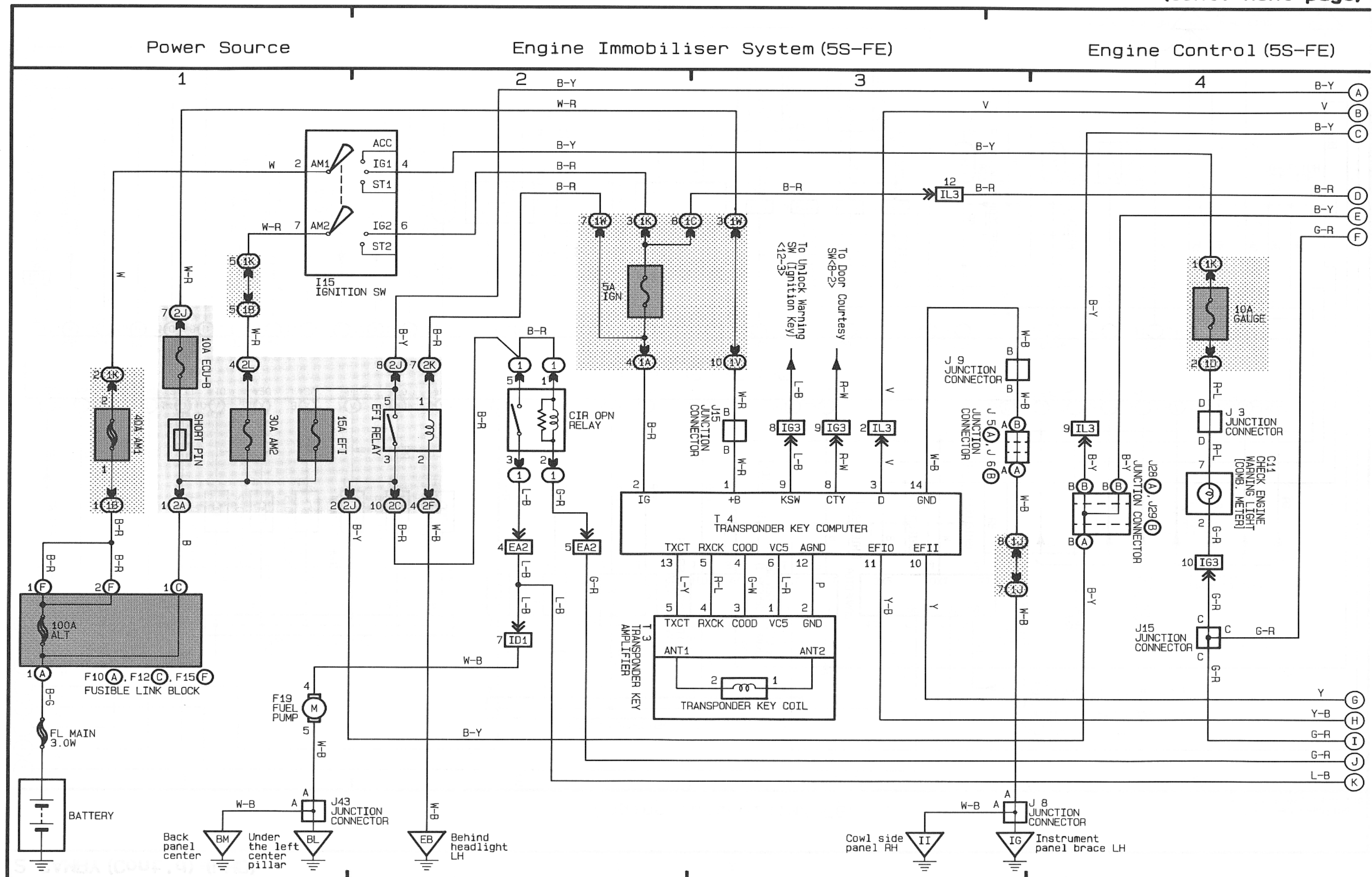


2 CAMRY (Cont 'd) (LHD)

Engine Control (1MZ-FE)

```
* 1: Leaded Gasoline
* 2: Unleaded Gasoline
```

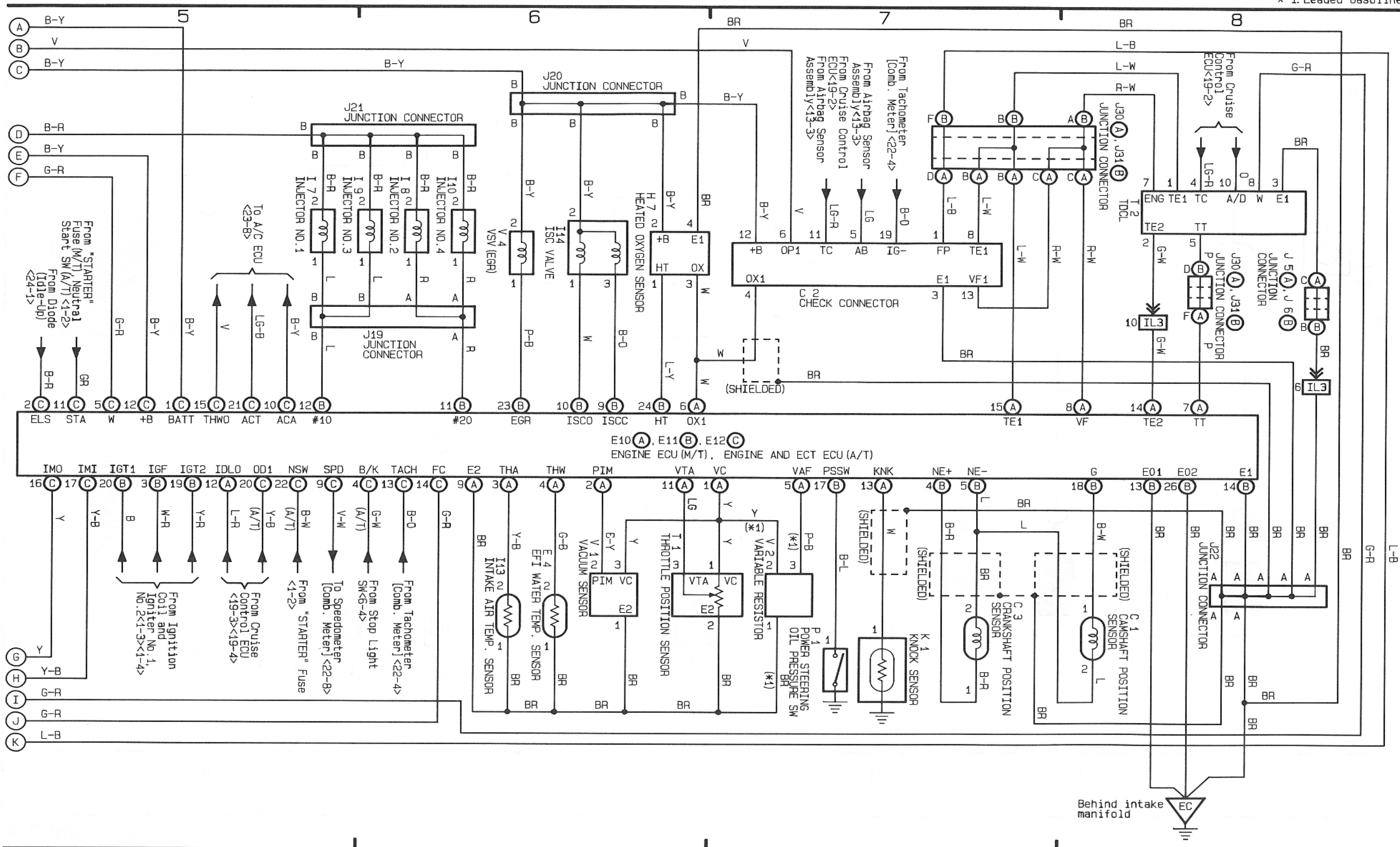




3 CAMRY (Cont 'd) (LHD)

Engine Control (5S-FE)

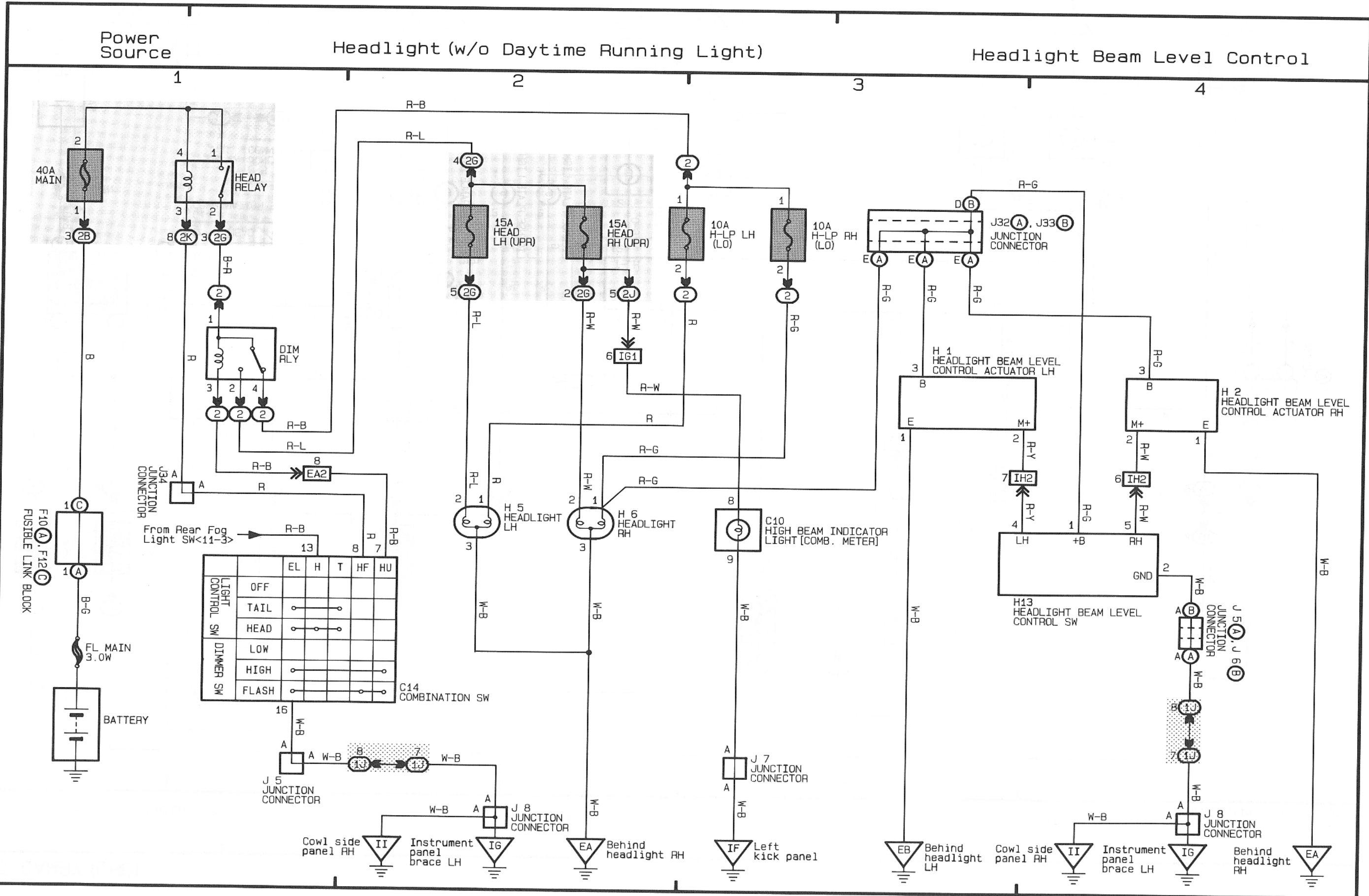
* 1: Leaded Gasoline



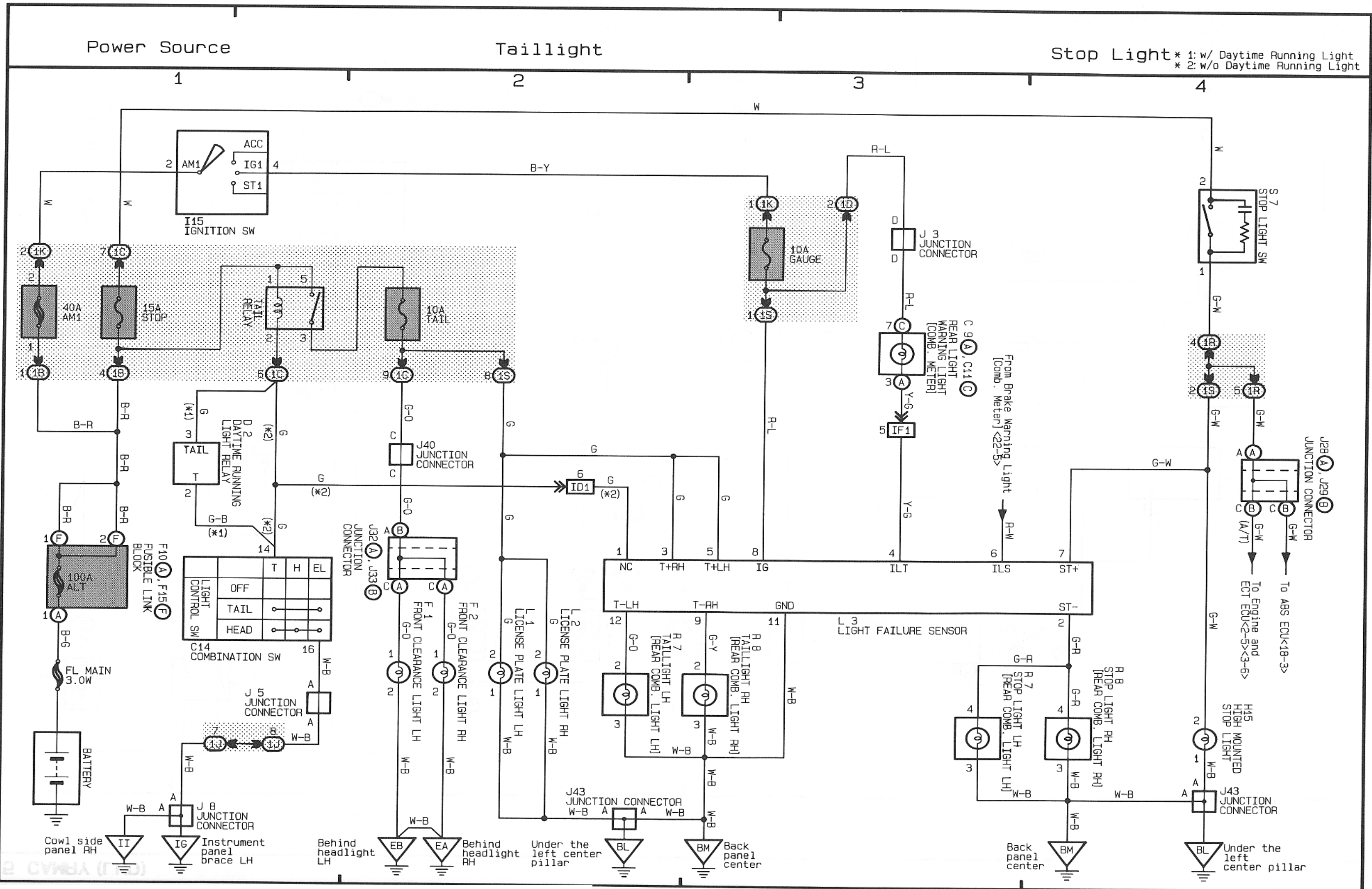
3 CMMB (CONF.) (FHO)



5 CAMRY (LHD)



6 CAMRY (LHD)



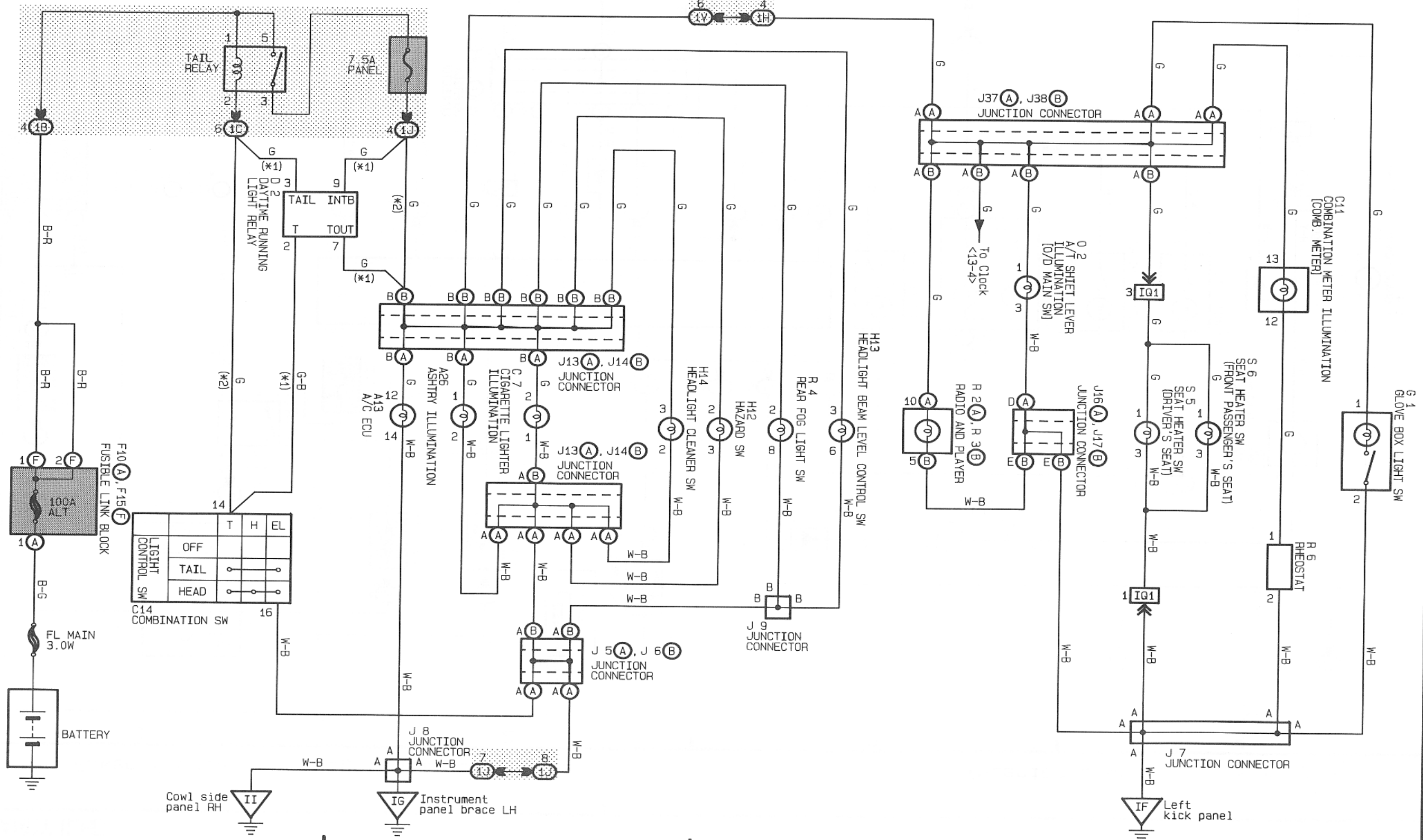
K OVERALL ELECTRICAL WIRING DIAGRAM

7 CAMRY (LHD)

Power Source

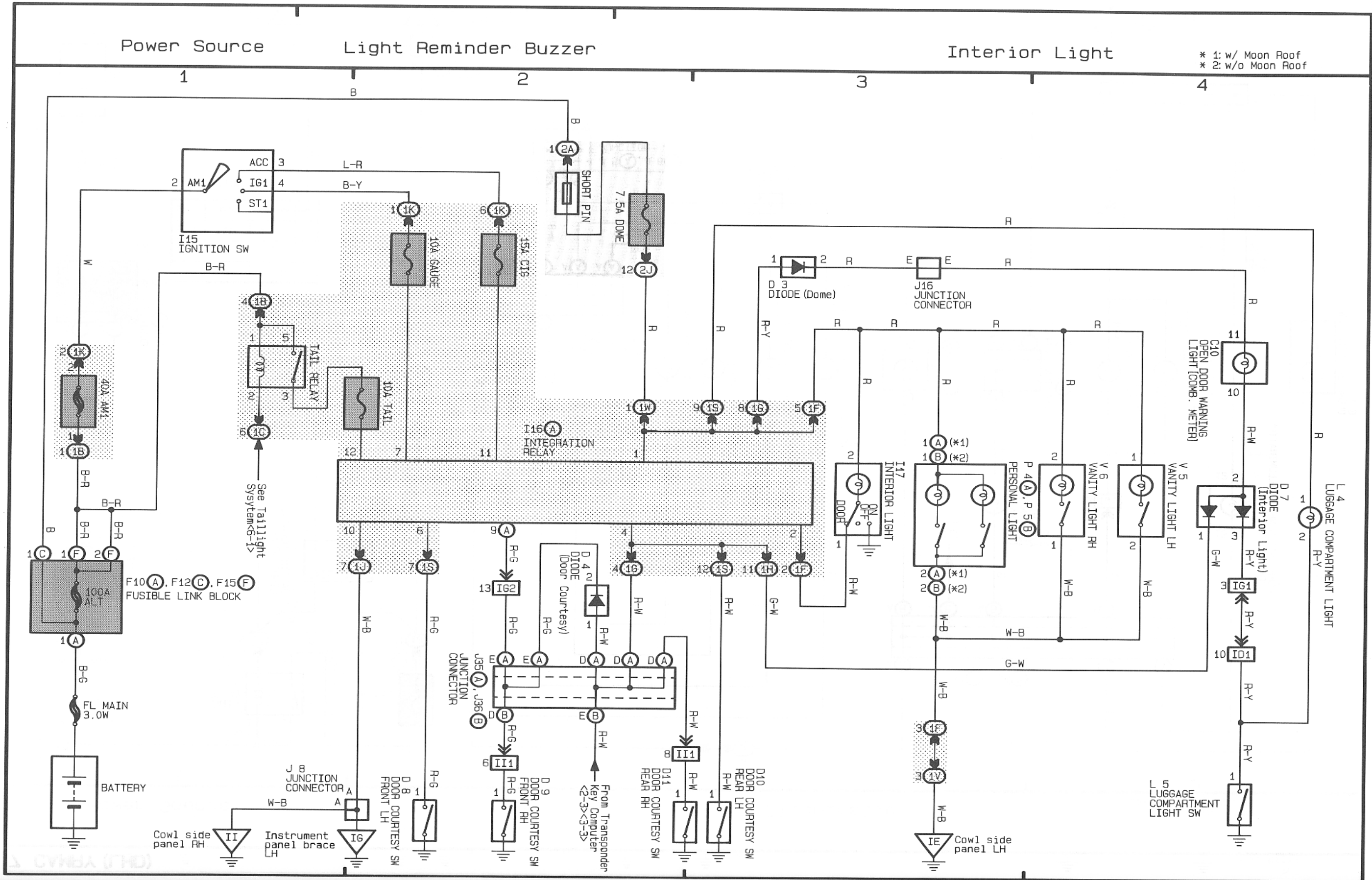
Illumination

* 1: w/ Daytime Running Light
* 2: w/o Daytime Running Light

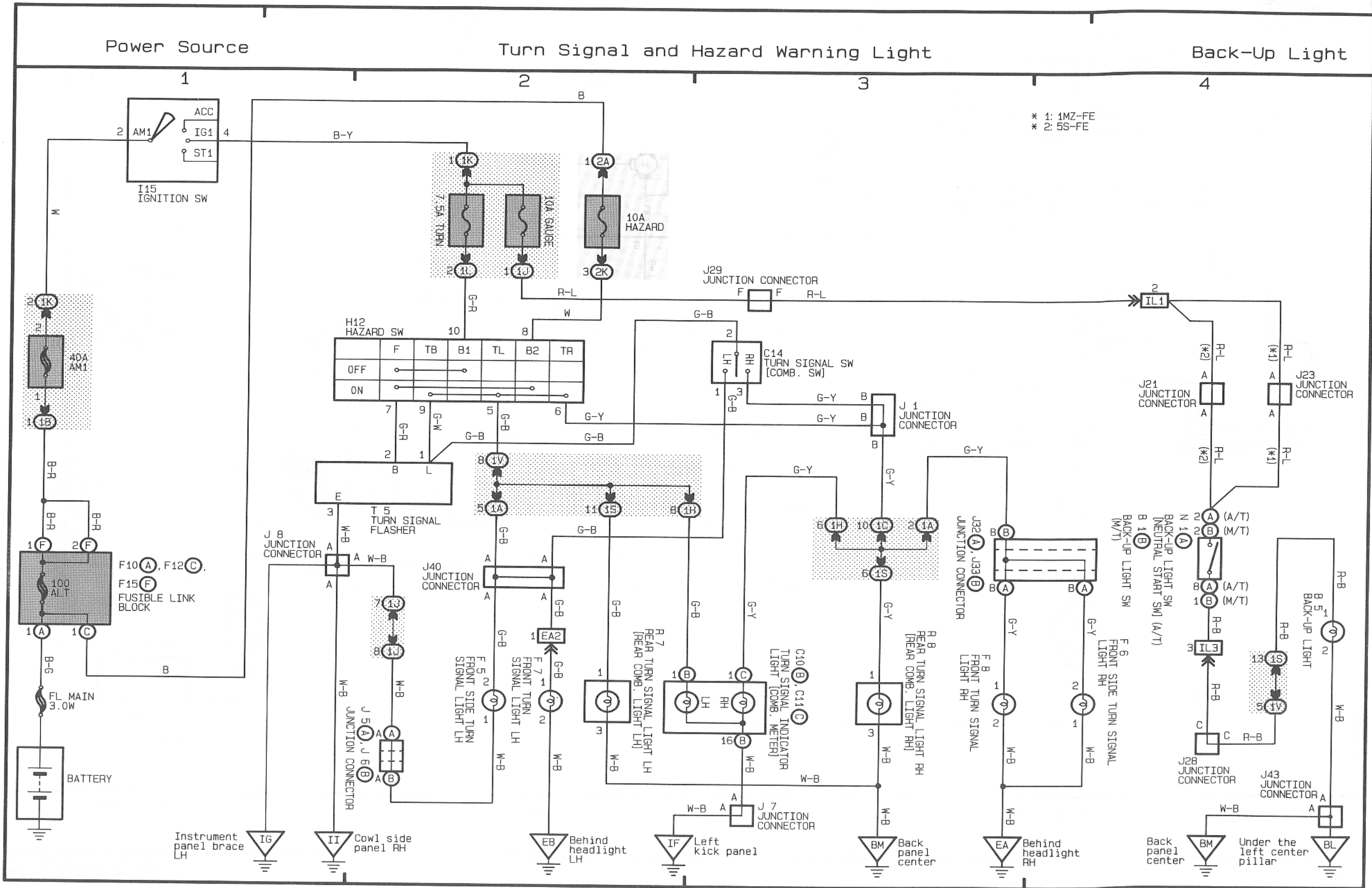


8 CAMRY (LHD)

K OVERALL ELECTRICAL WIRING DIAGRAM



9 CAMRY (LHD)



Power Source

ACC 3 L-R
IG1 4 B-Y
ST1

I15 IGNITION SW

40A AM1

F10 (A), F15 (E) FUSIBLE LINK BLOCK

100A ALT

FL MAIN 3.0W

BATTERY

Front Wiper and Washer

C13 FRONT WIPER AND WASHER SW [COMB. SW]

	+B	+2	+1	+S	INT1	INT2	B1	EW	WF
OFF									
INT									
LOW									
HIGH									
WASHER									

WIPER RELAY

WASHER MOTOR

F9 FRONT WIPER MOTOR

Remote Control Mirror

R5 REMOTE CONTROL MIRROR SW

R14 REMOTE CONTROL MIRROR LH

R15 REMOTE CONTROL MIRROR RH

Left kick panel

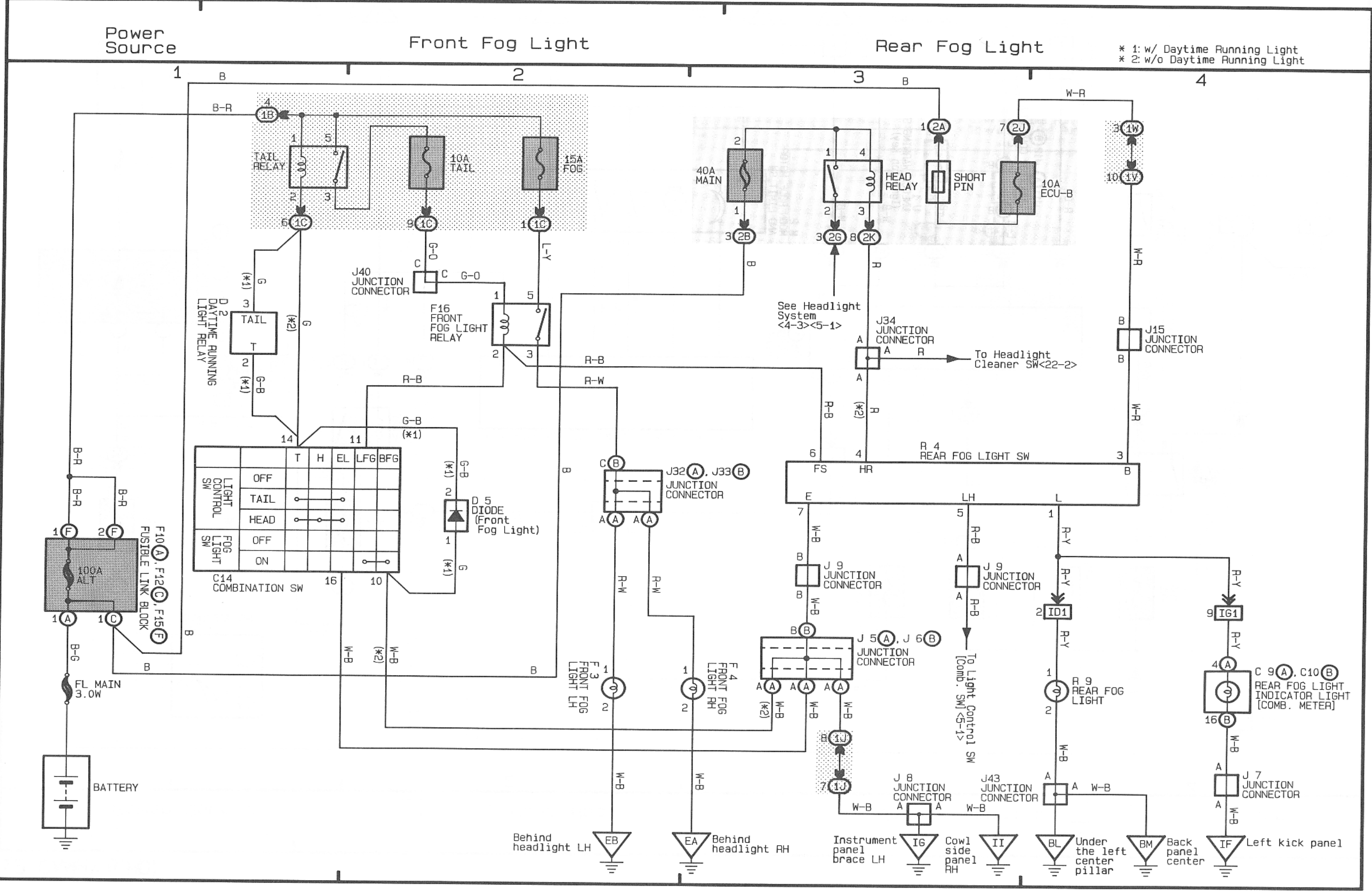
Behind headlight LH

Instrument panel brace LH

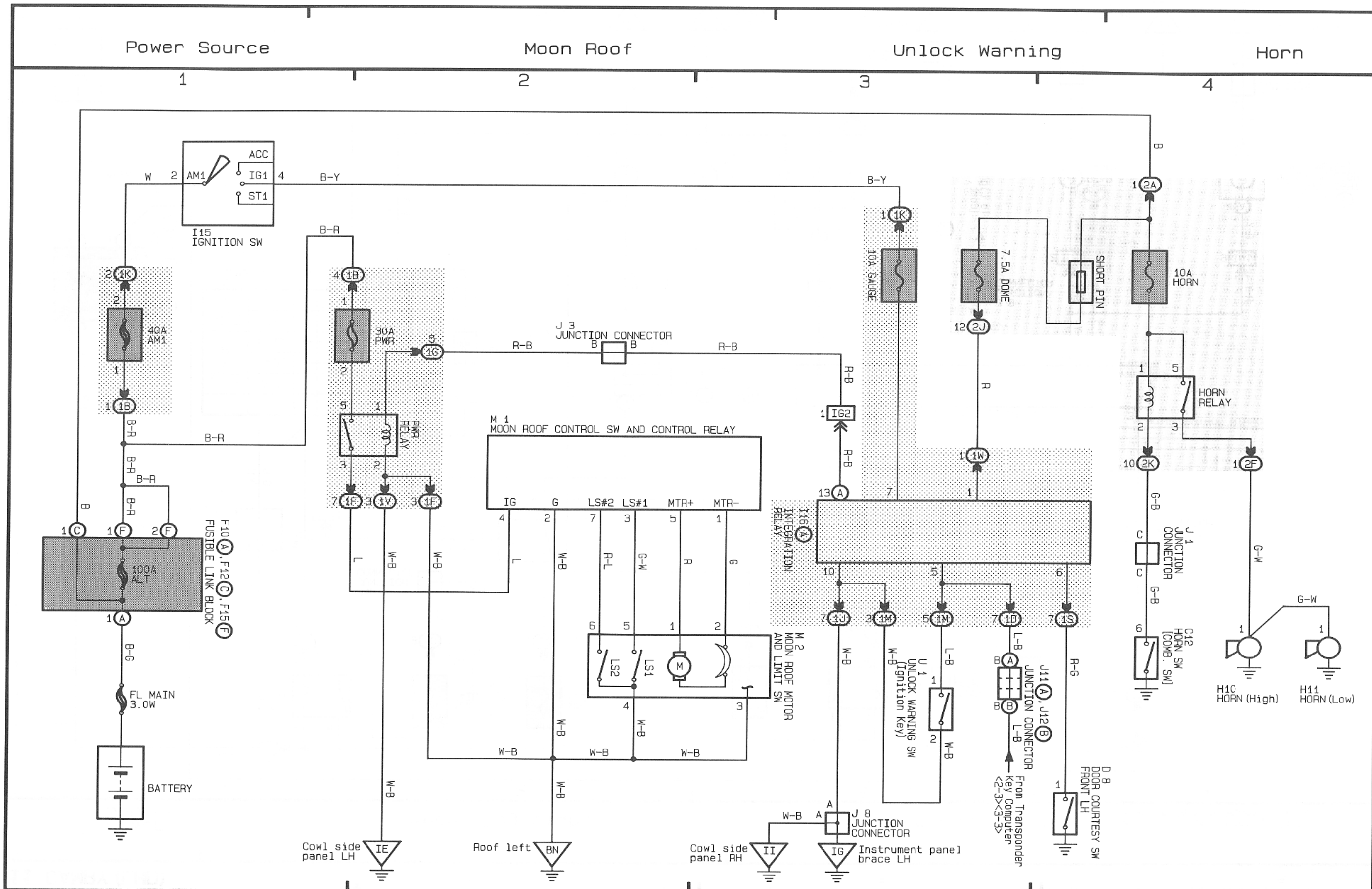
Cowl side panel RH

OVERALL ELECTRICAL WIRING DIAGRAM

11 CAMRY (LHD)



12 CAMRY (LHD)



K OVERALL ELECTRICAL WIRING DIAGRAM

13 CAMRY (LHD)

Power Source

SRS

Power Outlet

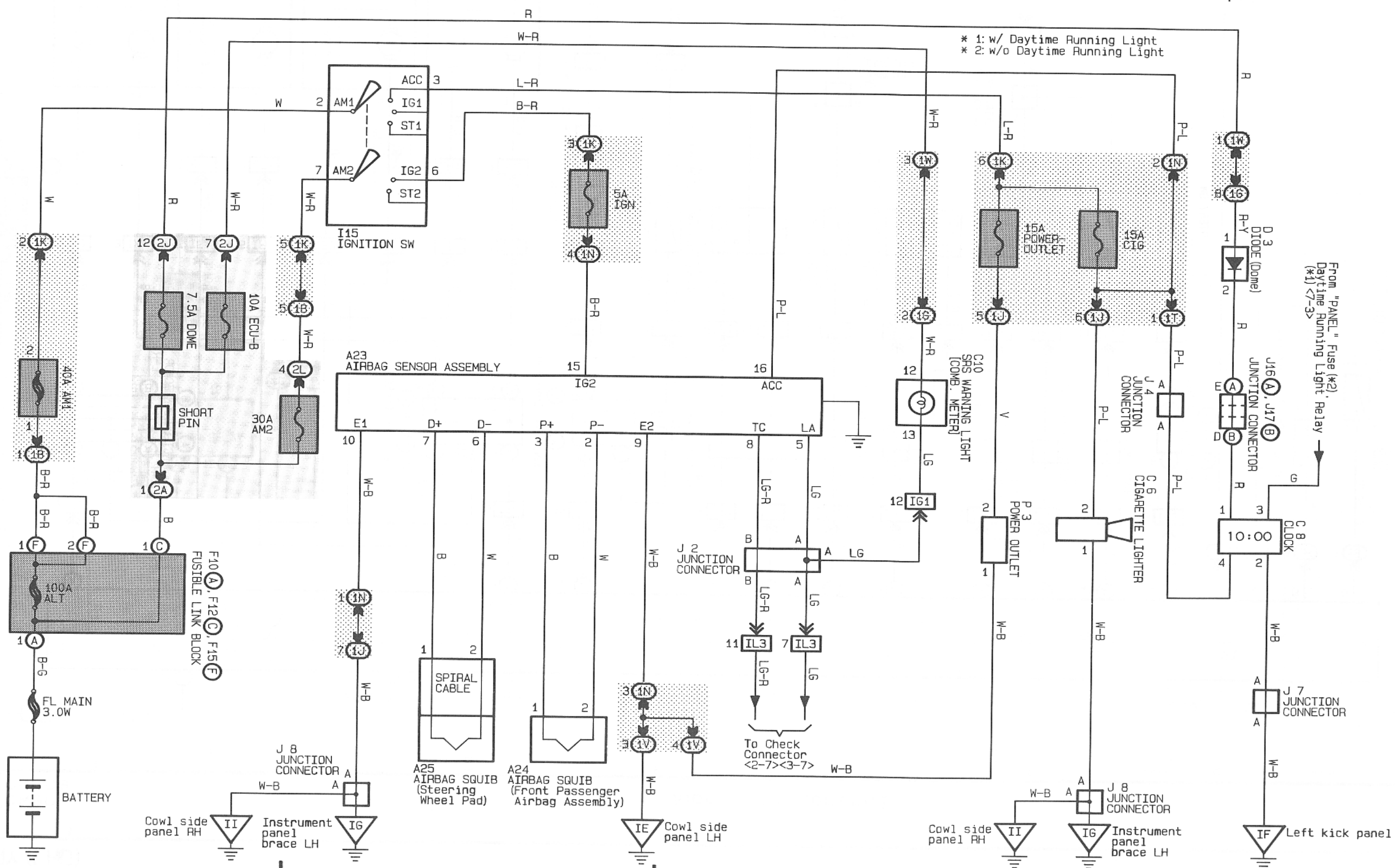
Cigarette Lighter and Clock

1

2

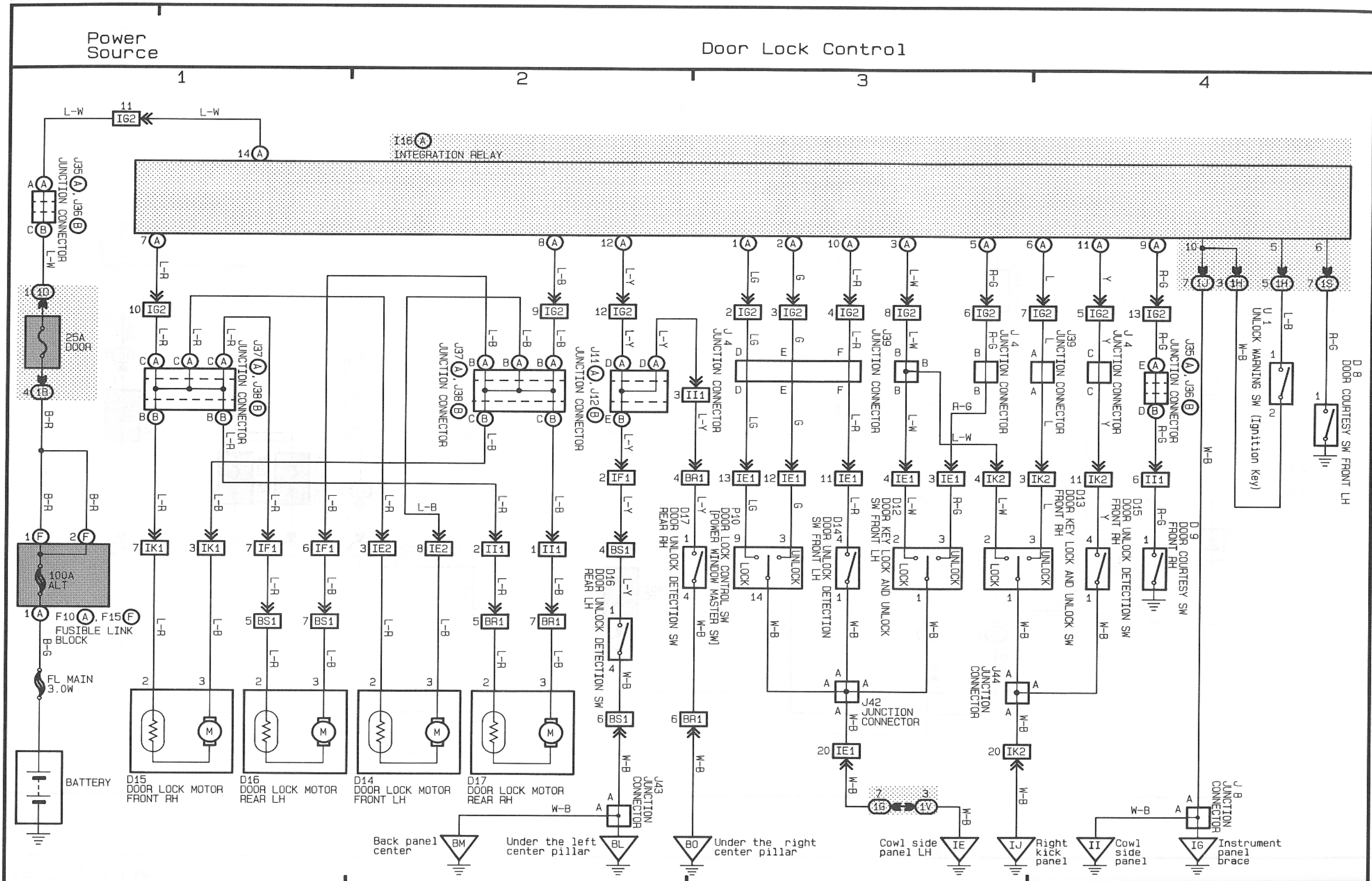
3

4

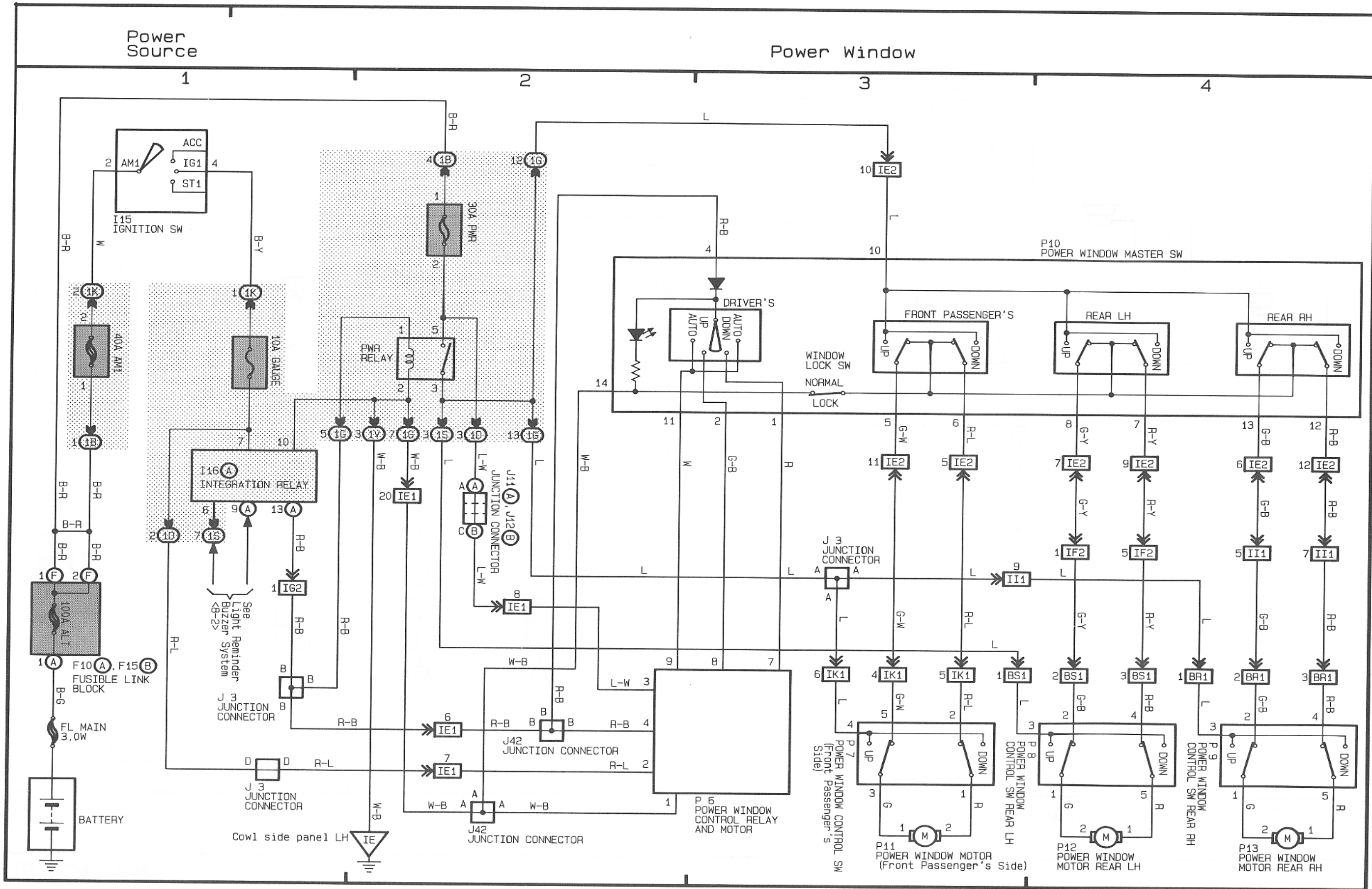


14 CAMRY (LHD)

K OVERALL ELECTRICAL WIRING DIAGRAM

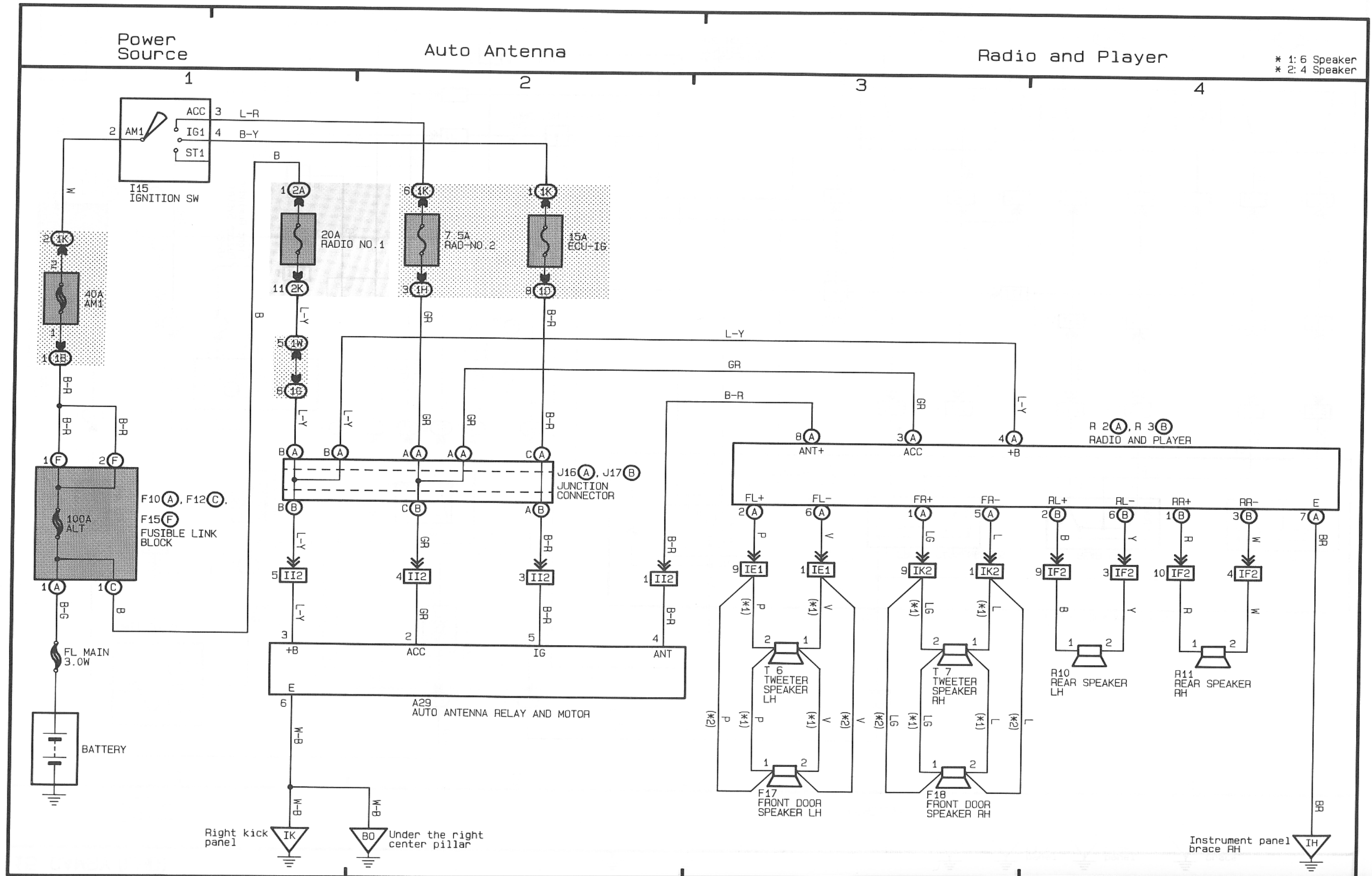


15 CAMRY (LHD)

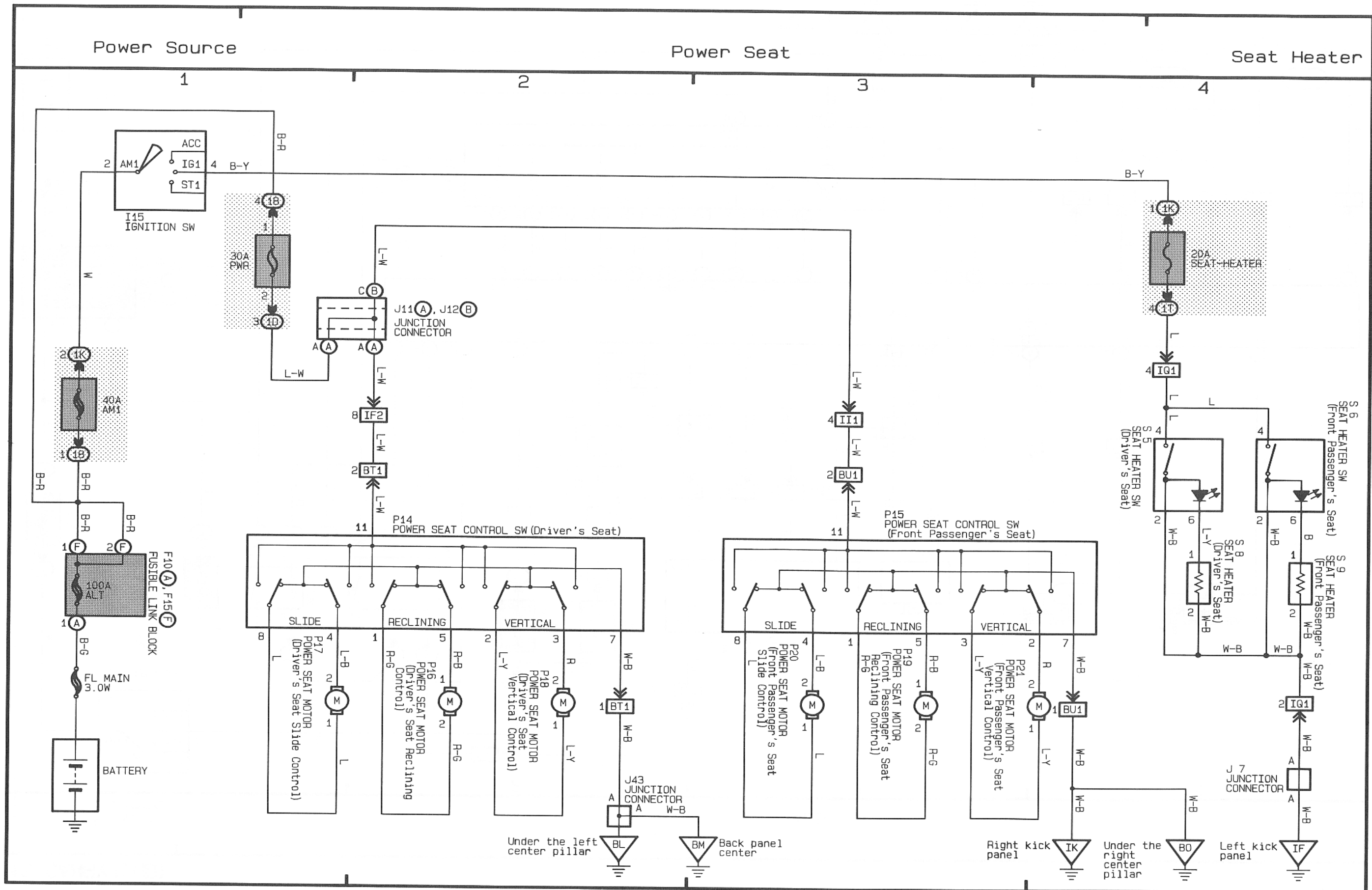


16 CAMRY (LHD)

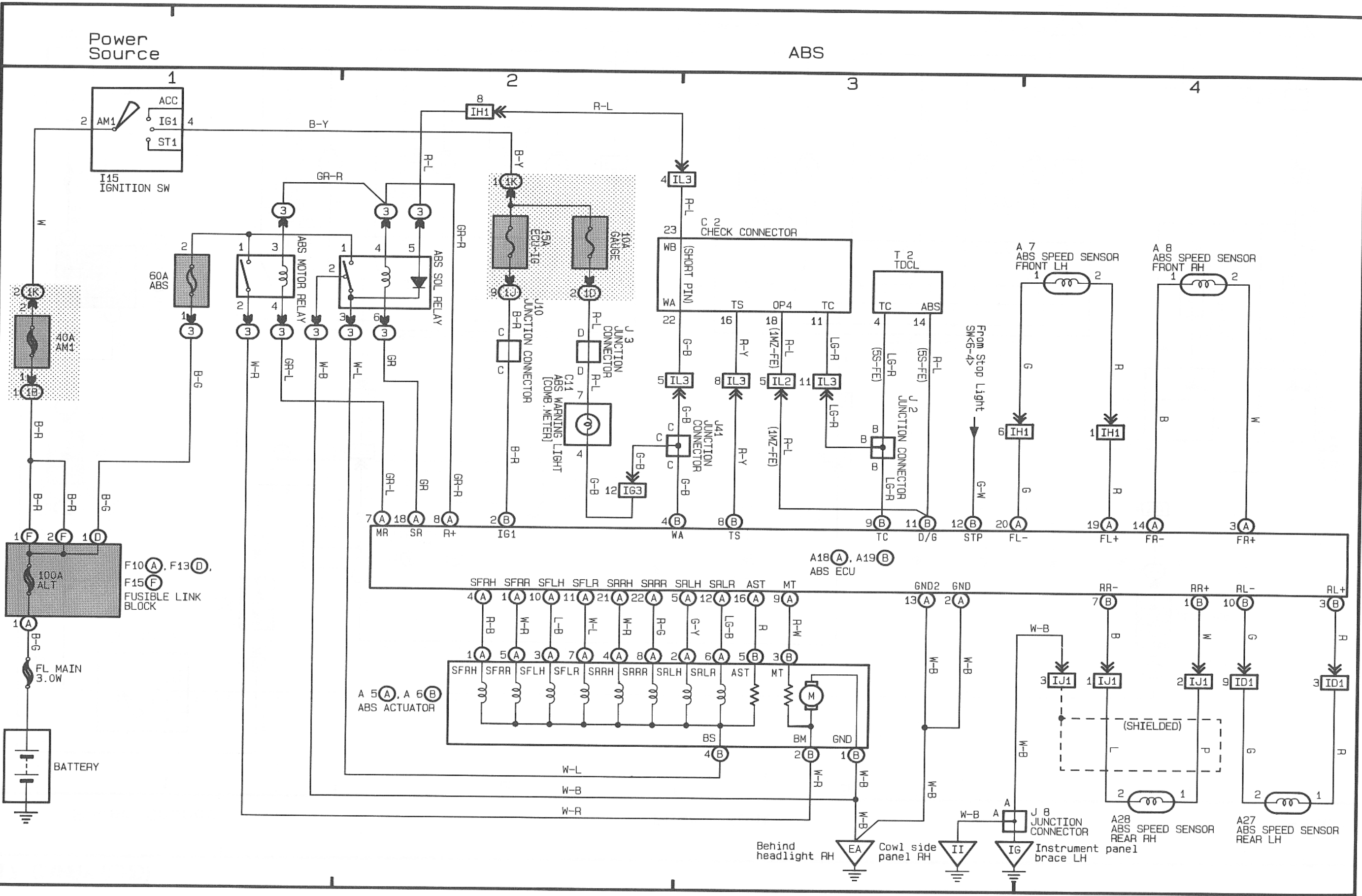
K OVERALL ELECTRICAL WIRING DIAGRAM



17 CAMRY (LHD)

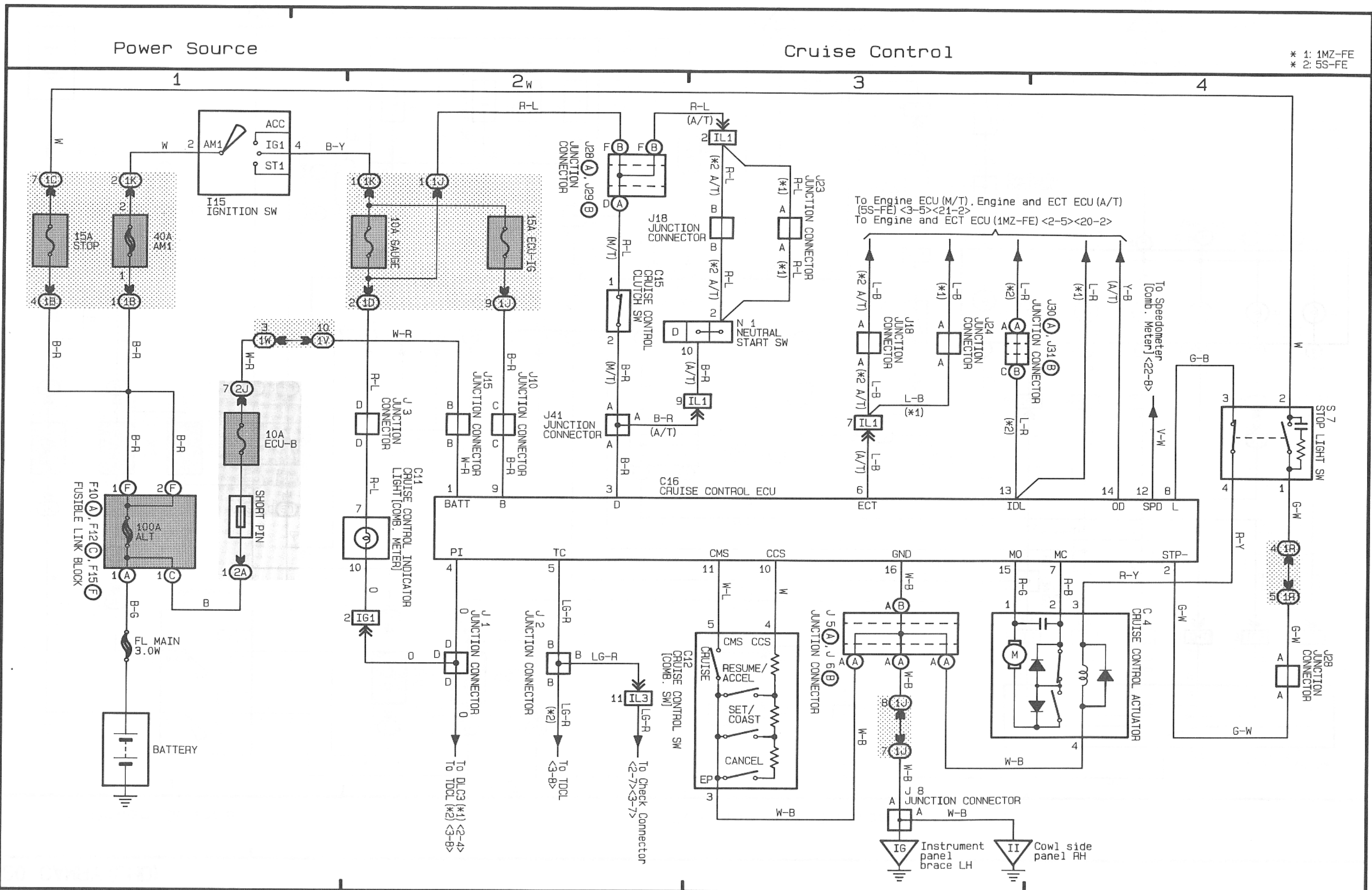


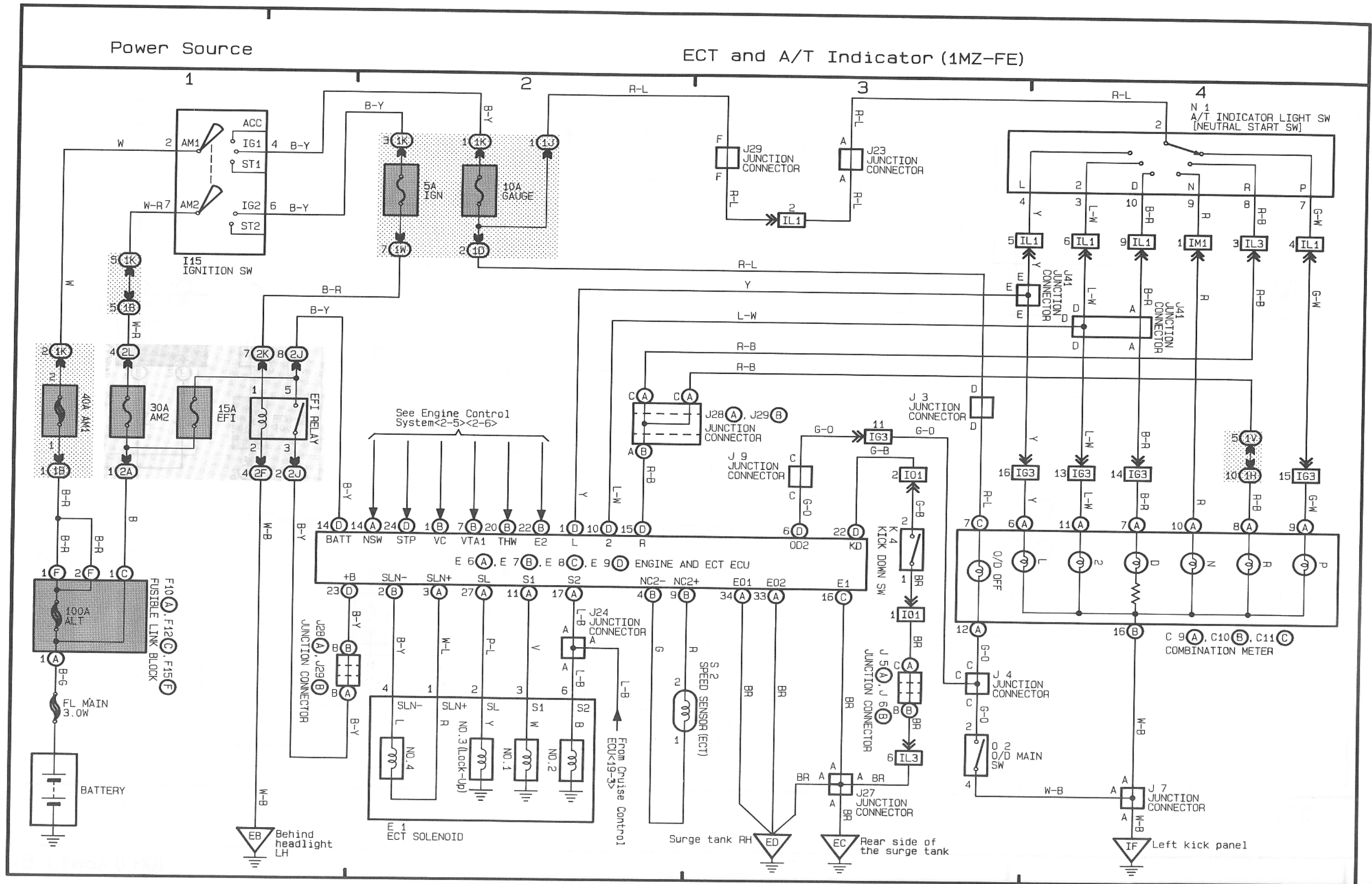
18 CAMRY (LHD)



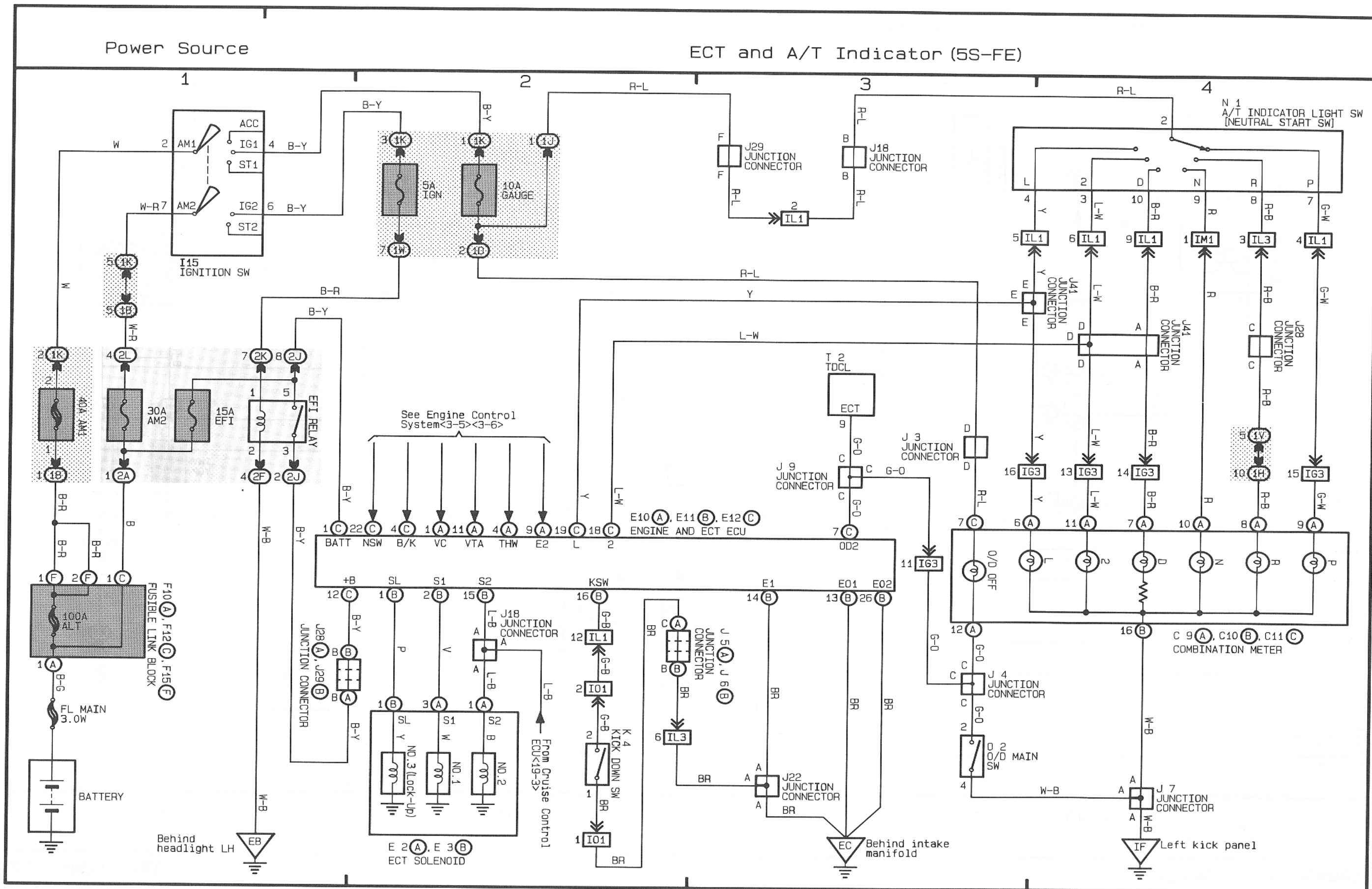
OVERALL ELECTRICAL WIRING DIAGRAM

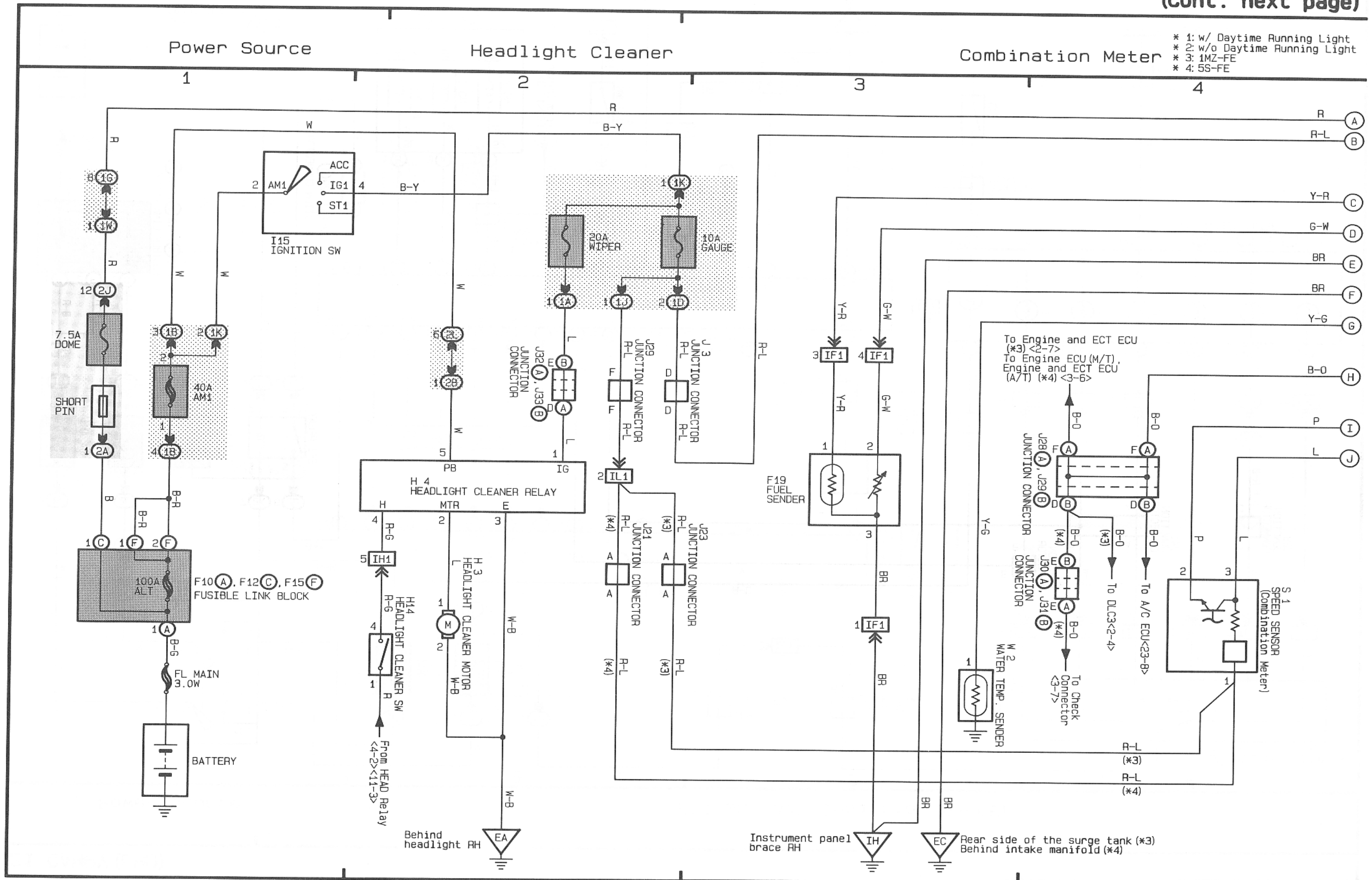
19 CAMRY (LHD)



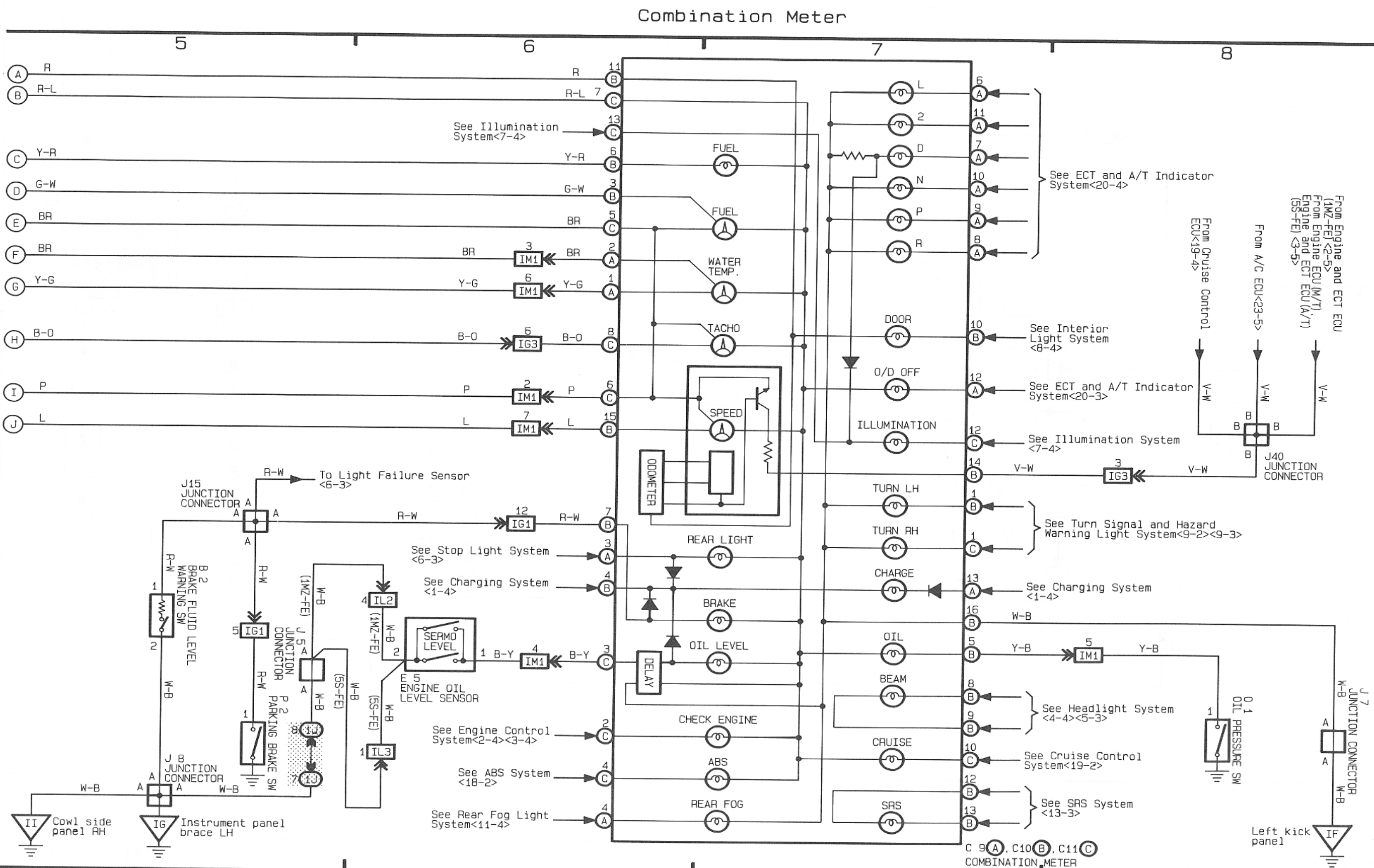


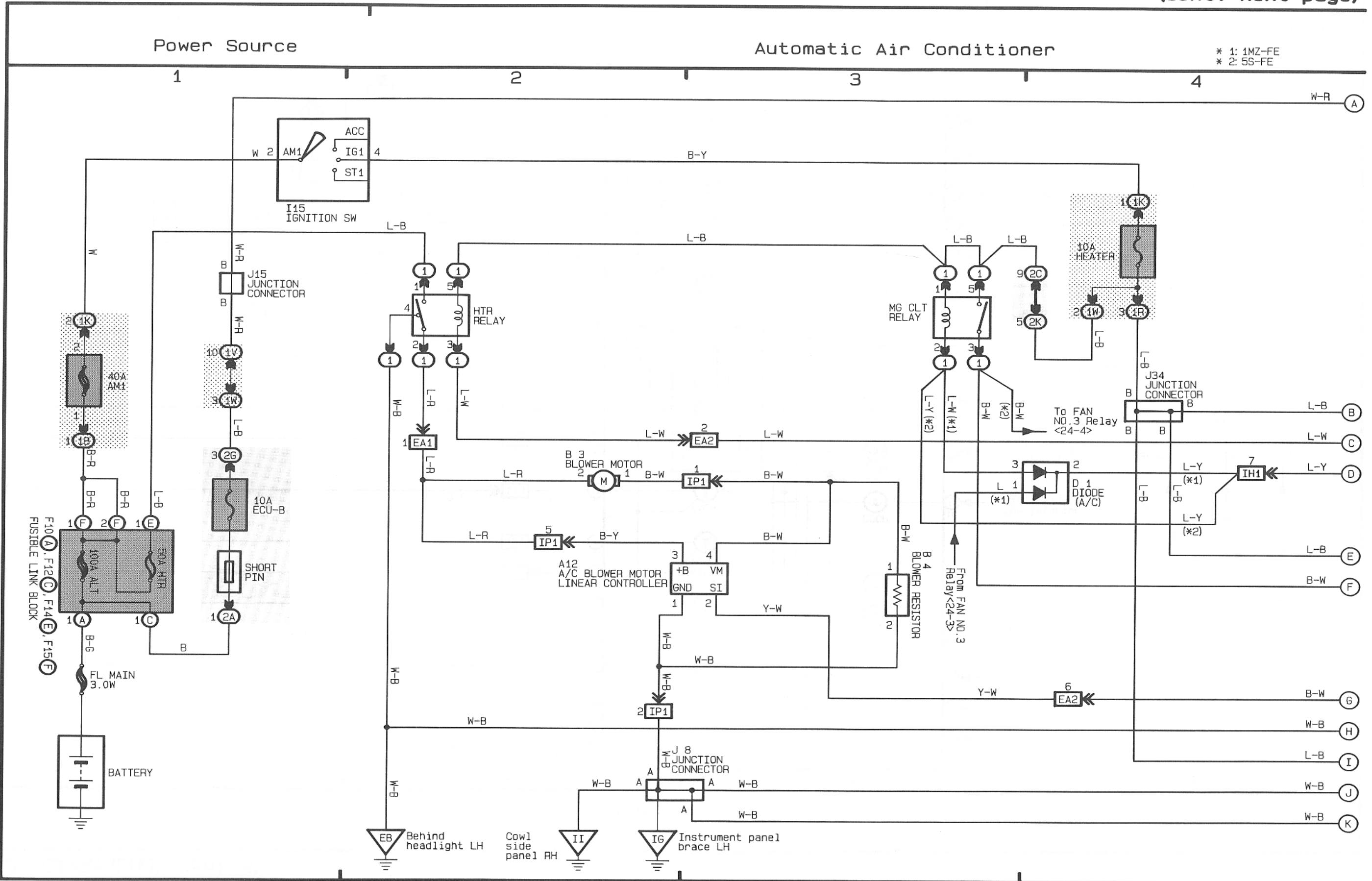
21 CAMRY (LHD)





22 CAMRY (LHD) (Cont'd)

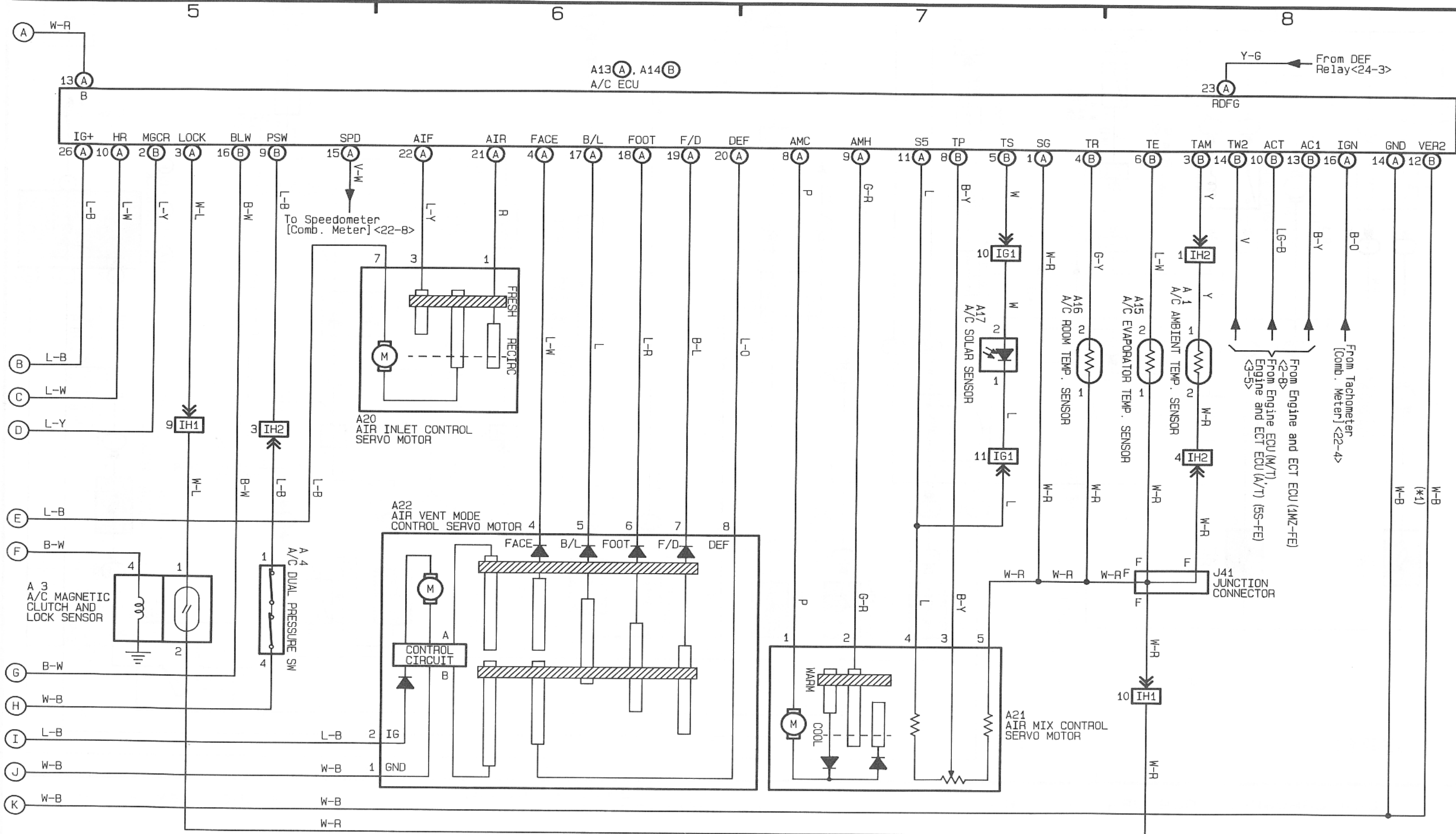




23 CAMRY (LHD) (Cont'd)

Automatic Air Conditioner

* 1: 1M2-FE
* 2: 5S-FE





OVERSEAS SERVICE DIVISION
TOYOTA MOTOR CORPORATION

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