

## FOREWORD

This wiring diagram manual has been prepared to provide information on the electrical system of the 2005 tC.

Applicable models: ANT10 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.
● 2005 SCION tC Repair Manual Volume 1	RM1104U1
Volume 2	RM1104U2
● 2005 SCION tC New Car Features	NCF264U

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.**

# 2005 tC

# ELECTRICAL WIRING DIAGRAM

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# A INTRODUCTION

This manual consists of the following 13 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	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.
I	GROUND POINT	Shows ground positions of all parts described in this manual.
J	POWER SOURCE (Current Flow Chart)	Describes power distribution from the power supply to various electrical loads.
K	CONNECTOR LIST	Describes the form of the connectors for the parts appeared in this book. This section is closely related to the system circuit.
L	PART NUMBER OF CONNECTORS	Indicates the part number of the connectors used in this manual.
M	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 Point section). See the System Outline to understand the circuit operation.

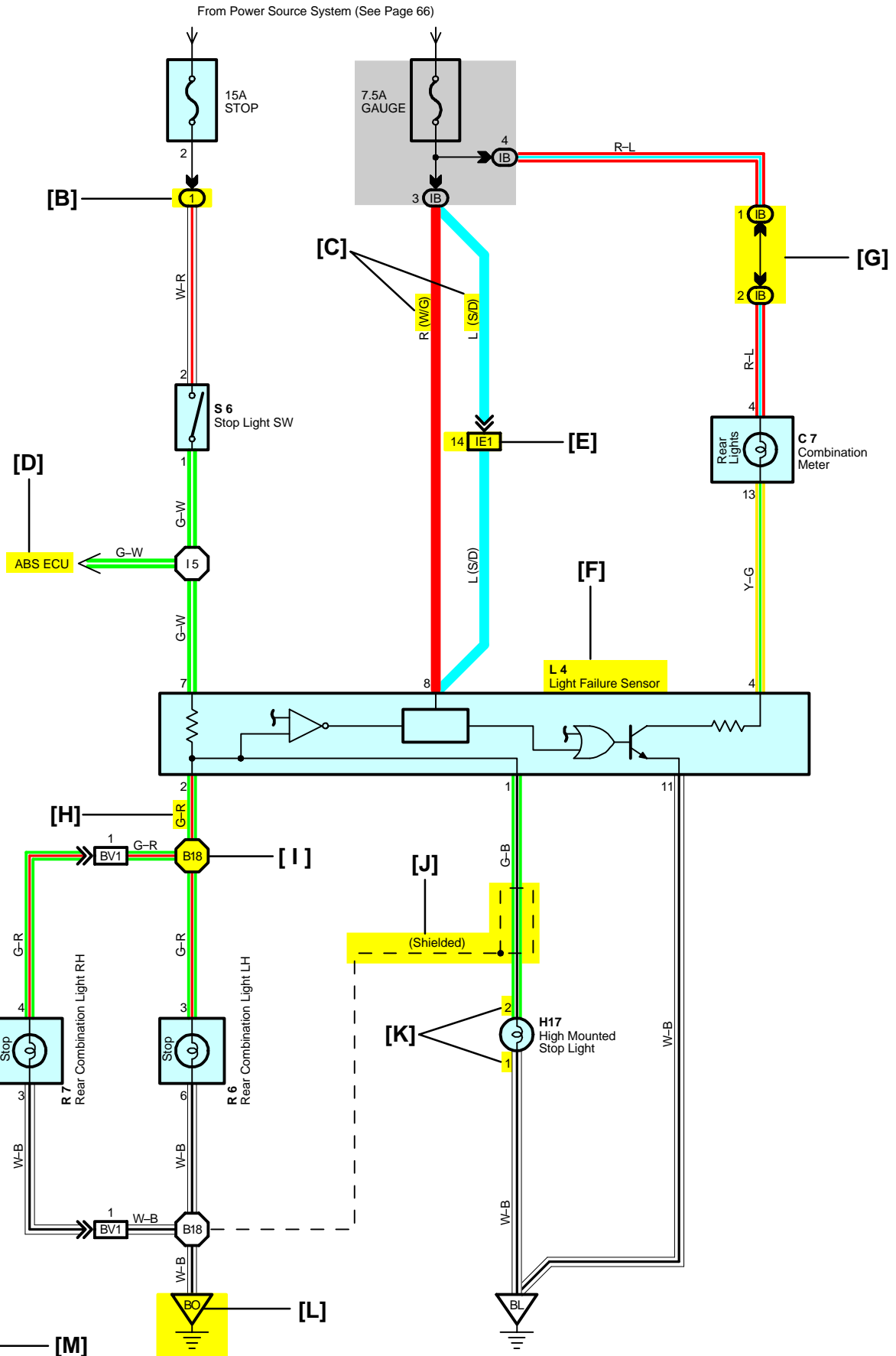
When the circuit operation is understood, begin troubleshooting of the problem circuit to isolate the cause. Use Relay Location and Electrical Wiring Routing sections to find each part, junction block and wiring harness connectors, wiring harness and wiring harness connectors, splice points, and ground points of each system circuit. Internal wiring for each junction block is also provided for better understanding of connection within a junction block.

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

# B HOW TO USE THIS MANUAL

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

## [A] Stop Light



**[A]** : System Title

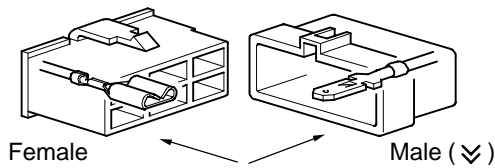
**[B]** : Indicates a Relay Block. No shading is used and only the Relay Block No. is shown to distinguish it from the J/B

Example: ① Indicates Relay Block No.1

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

**[D]** : Indicates related system.

**[E]** : Indicates the wiring harness and wiring harness connector. The wiring harness with male terminal is shown with arrows (↘). Outside numerals are pin numbers.



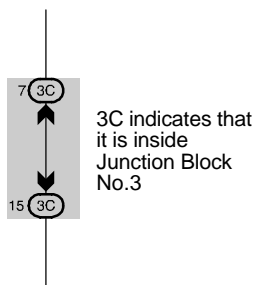
The first letter of the code for each wiring harness and wiring harness connector(s) indicates the component's location, e.g, "E" for the Engine Compartment, "I" for the Instrument Panel and Surrounding area, and "B" for the Body and Surrounding area.

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.

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

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

Example:



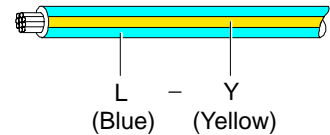
**[H]** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

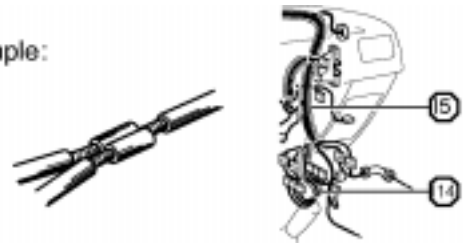
The first letter indicates the basic wire color and the second letter indicates the color of the stripe.

Example: L - Y



**[I]** : 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.

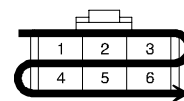
**[J]** : Indicates a shielded cable.



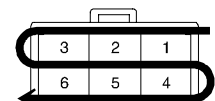
**[K]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example: Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

**[L]** : 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.

**[M]** : Page No.

## B HOW TO USE THIS MANUAL

### [N] 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 lights warning light to TERMINAL 4 of the light failure sensor.

#### Stop Light Disconnection Warning

When the ignition SW is turned on and the brake pedal is pressed (Stop light SW on), if the stop light circuit is open, the current flowing from TERMINAL 7 of the light failure sensor to TERMINALS 1, 2 changes, so the light failure sensor detects the disconnection and the warning circuit of the light failure sensor is activated.

As a result, the current flows from TERMINAL 4 of the light failure sensor to TERMINAL 11 to GROUND and turns the rear lights 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.

### [O] Service Hints

#### S6 Stop Light SW

2-1 : Closed with the brake pedal depressed

#### L4 Light Failure Sensor

1, 2, 7-Ground : Approx. 12 volts with the stop light SW on

4, 8-Ground : Approx. 12 volts with the ignition SW at ON position

11-Ground : Always continuity

### [P] ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C7	34	L4	36	R7	37
H17	36	R6	37	S6	35

### [Q] ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
1	18	R/B No.1 (Instrument Panel Brace LH)

### [R] ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
IB	20	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
3C	22	Instrument Panel Wire and J/B No.3 (Instrument Panel Brace LH)

### [S] □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	42	Floor Wire and Instrument Panel Wire (Left Kick Panel)
BV1	50	Luggage Room Wire and Floor Wire (Luggage Room Left)

### [T] ▽ : Ground Points

Code	See Page	Ground Points Location
BL	50	Under the Left Center Pillar
BO	50	Back Panel Center

### [U] ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I5	44	Cowl Wire	B18	50	Luggage Room Wire

**[N]** : Explains the system outline.

**[O]** : Indicates values or explains the function for reference during troubleshooting.

**[P]** : Indicates the reference page showing the position on the vehicle of the parts in the system circuit.

Example : Part "L4" (Light Failure Sensor) is on page 36 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 : L 4  
└──┬──┘ Parts is 4th in order  
└──┬──┘ Light Failure Sensor

**[Q]** : 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 18 of this manual and is installed on the left side of the instrument panel.

**[R]** : Indicates the reference page showing the position on the vehicle of J/B and Wire Harness in the system circuit.

Example : Connector "3C" connects the Instrument Panel Wire and J/B No.3. It is described on page 22 of this manual, and is installed on the instrument panel left side.

**[S]** : 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 "IE1" connects the floor wire (female) and Instrument panel wire (male). It is described on page 42 of this manual, and is installed on the left side kick panel.

**[T]** : Indicates the reference page showing the position of the ground points on the vehicle.

Example : Ground point "BO" is described on page 50 of this manual and is installed on the back panel center.

**[U]** : Indicates the reference page showing the position of the splice points on the vehicle.

Example : Splice point "I5" is on the Cowl Wire Harness and is described on page 44 of this manual.

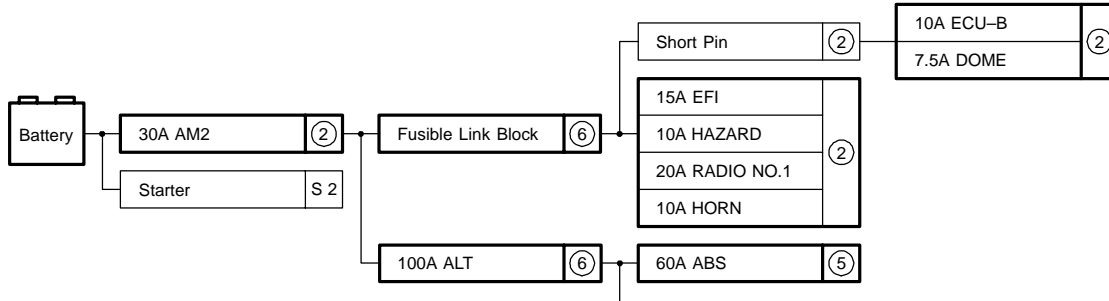




The "Current Flow Chart" section, describes which parts each power source (fuses, fusible links, and circuit breakers) transmits current to. In the Power Source circuit diagram, the conditions when battery power is supplied to each system are explained. Since all System Circuit diagrams start from the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

### J POWER SOURCE (Current Flow Chart)

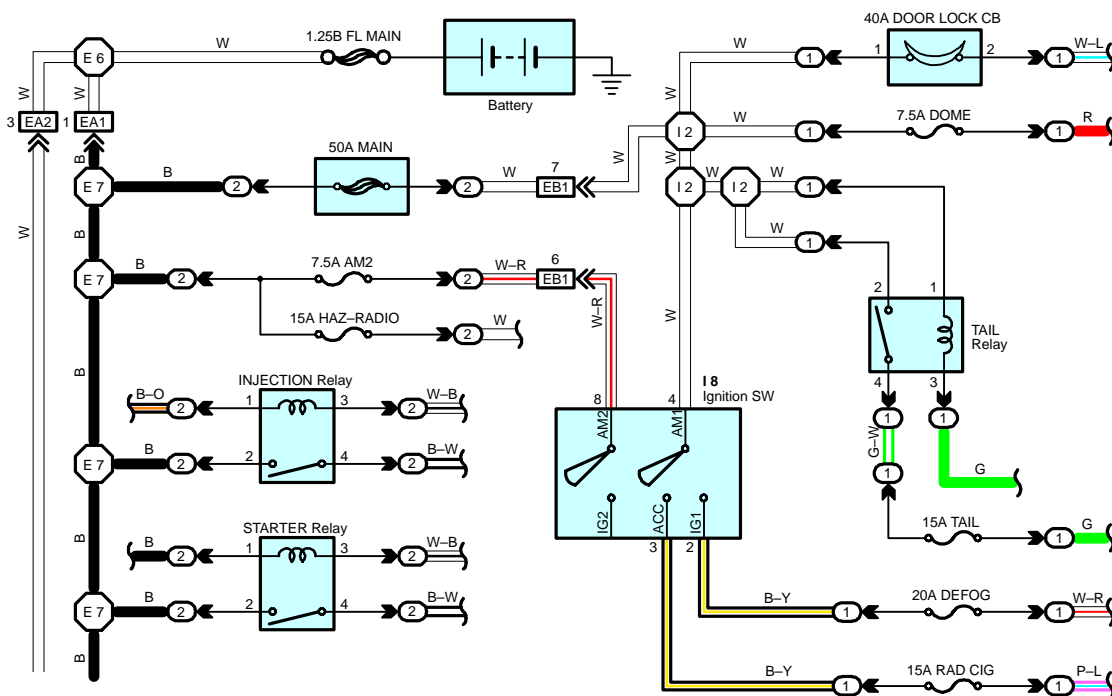
The chart below shows the route by which current flows from the battery to each electrical source (Fusible Link, Circuit Breaker, Fuse, etc.) and other parts.



### Engine Room R/B (See Page 20)

Fuse	System	Page
20A STOP	ABS	194
	ABS and Traction Control	187
	Cruise Control	180
	Electronically Controlled Transmission	166
	Multiplex Communication System	210
10A DOME	Cigarette Lighter	214
	Combination Meter	230
	Headlight	112
	Interior Light	122
	Key Reminder and Seat Belt Warning	
	Light Auto Turn Off	

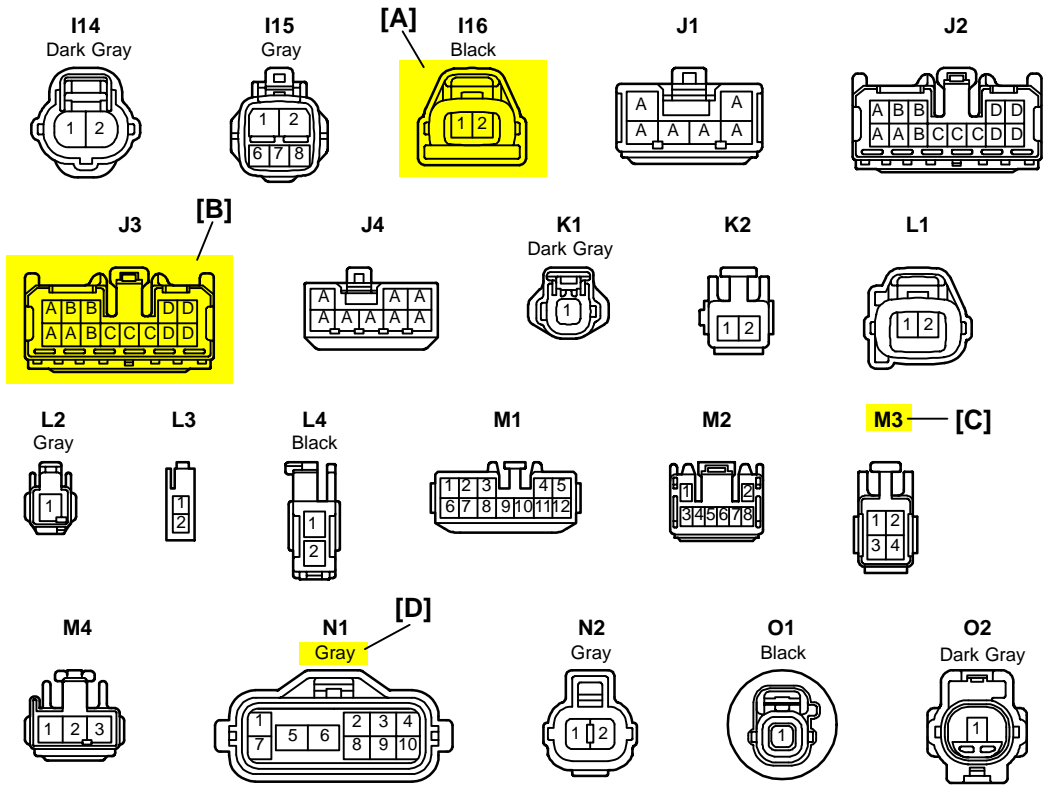
### Power Source



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

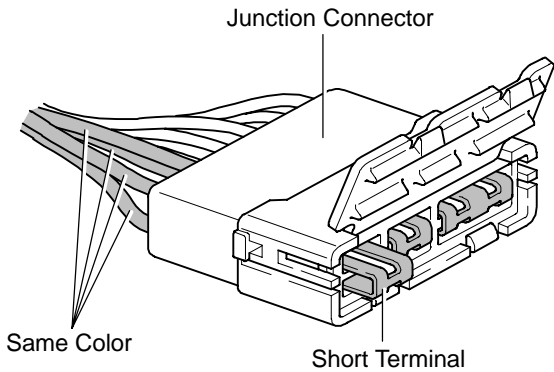
# B HOW TO USE THIS MANUAL

## K CONNECTOR LIST



**[A]** : Indicates connector to be connected to a part. (The numeral indicates the pin No.)

**[B]** : Junction Connector  
Indicates a connector which is connected to a short terminal.



Junction connector 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.

**[C]** : Parts Code  
The first letter of the code is taken from the first letter of part, and the numbers indicates its order in parts which start with the same letter.

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

## L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Ambient Temp. Sensor	90980-11070	D 4	Diode (Courtesy)	90980-11608
A 2	A/C Condenser Fan Motor	90980-11237	D 5	Diode (Interior Light)	90980-10962
A 3	A/C Condenser Fan Relay	90980-10940	D 6	Diode (Moon Roof)	90980-11608
A 4	A/C Condenser Fan Resistor	90980-10928	D 7	Door Lock Control Relay	90980-10848
A 5	A/C Magnetic Clutch	90980-11271	D 8	Door Lock Control SW LH	90980-11148
A 6	A/T Oil Temp. Sensor	90980-11413	D 9	Door Lock Control SW RH	
[A]	ABS Actual [B]	909[C] 151	D10	Door Courtesy SW LH	90980-11097
A 8	ABS Actuator	90980-11009	D11	Door Courtesy SW RH	
A 9	ABS Speed Sensor Front LH	90980-10941	D12	Door Courtesy SW Front LH	90980-11156
A10	ABS Speed Sensor Front RH	90980-11002	D13	Door Courtesy SW Front RH	
A11	Airbag Sensor Front LH	90980-11856	D14	Door Courtesy SW Rear LH	
A12	Airbag Sensor Front RH		D15	Door Courtesy SW Rear RH	
A13	Airbag Sensor Front LH	90980-11194	D16	Door Lock and Unlock SW LH	90980-11170
		90980-11194			

[A] : Part Code

[B] : Part Name

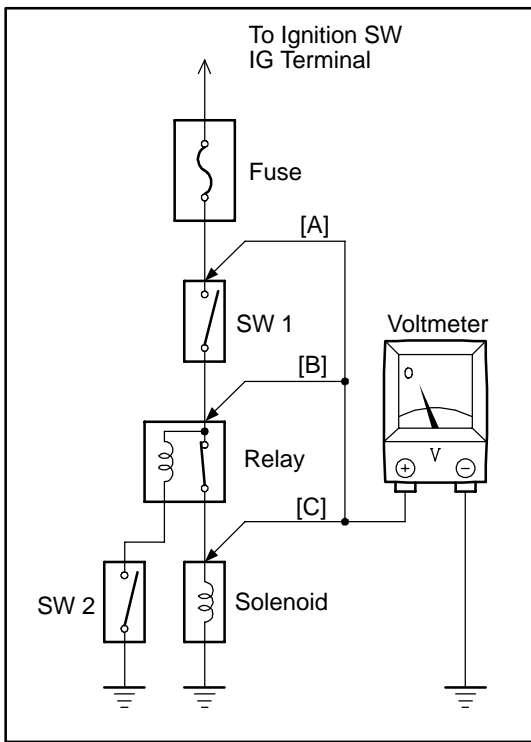
[C] : Part Number

Toyota Part Number are indicated.

Not all of the above part numbers of the connector are established for the supply.

# C TROUBLESHOOTING

## VOLTAGE CHECK



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

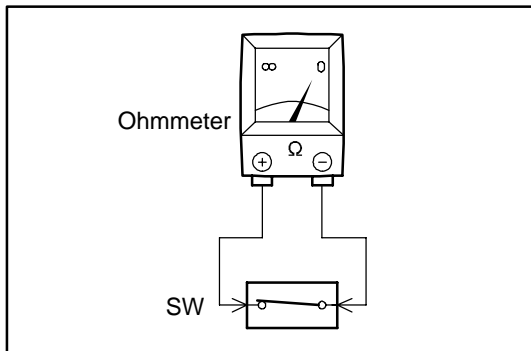
Example:

- [A] – Ignition SW on
- [B] – Ignition SW and SW 1 on
- [C] – 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.

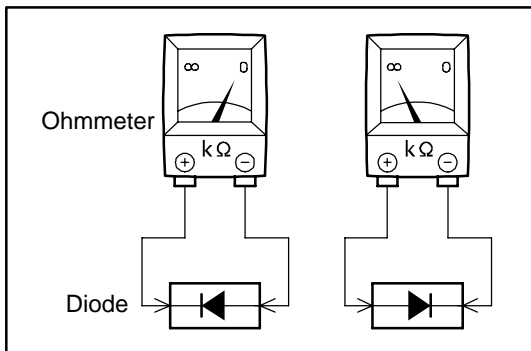
This check can be done with a test light instead of a voltmeter.

## 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.

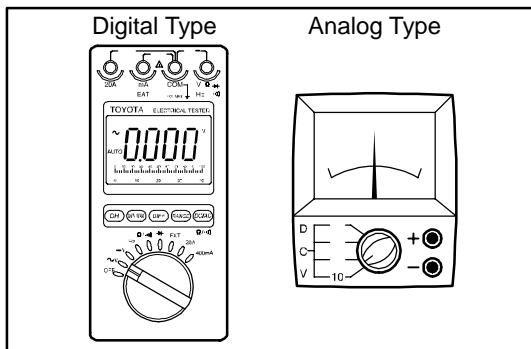


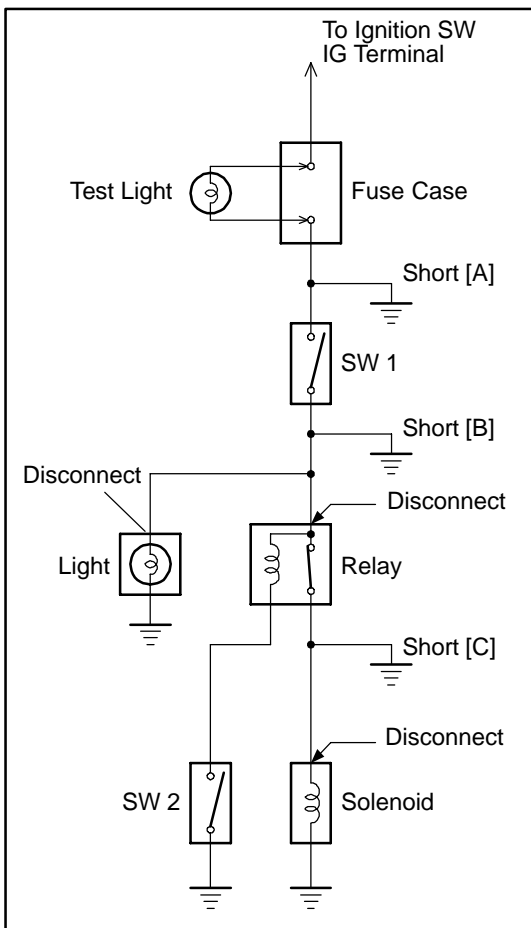
If the circuit has diodes, reverse the two leads and check again.

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

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

Example:

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

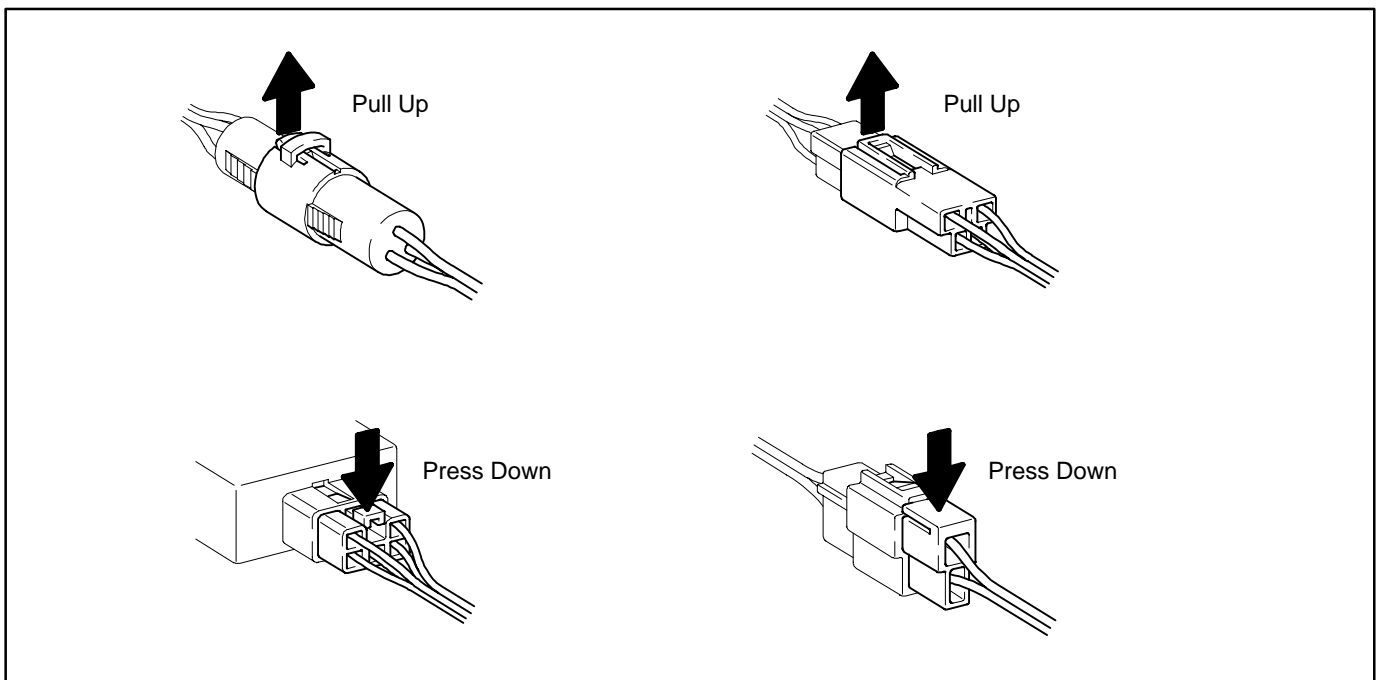
## CAUTION:

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

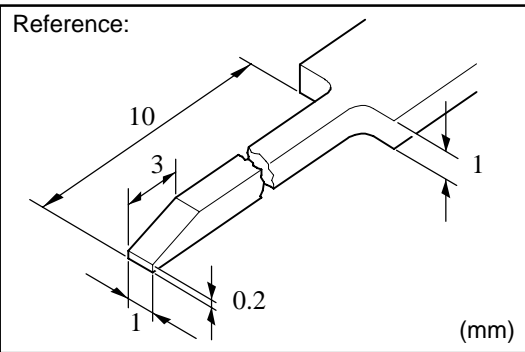
## DISCONNECTION OF MALE AND FEMALE CONNECTORS

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

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



## C TROUBLESHOOTING



### 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

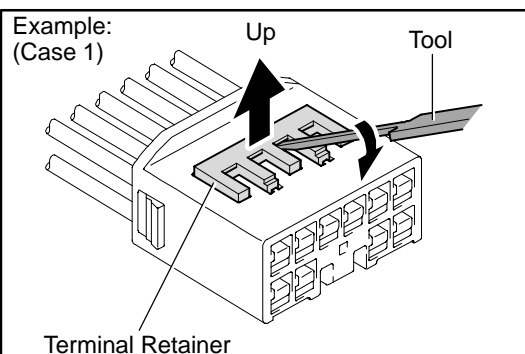
#### 3. DISENGAGE THE SECONDARY LOCKING DEVICE OR TERMINAL RETAINER.

(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.**

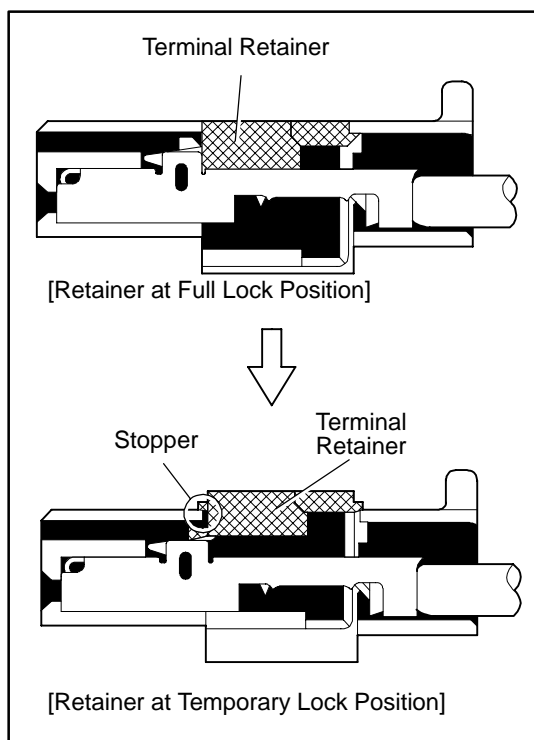


[A] For Non-Waterproof Type Connector

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

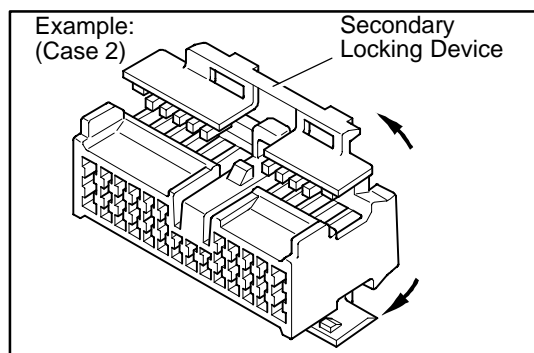
"Case 1"

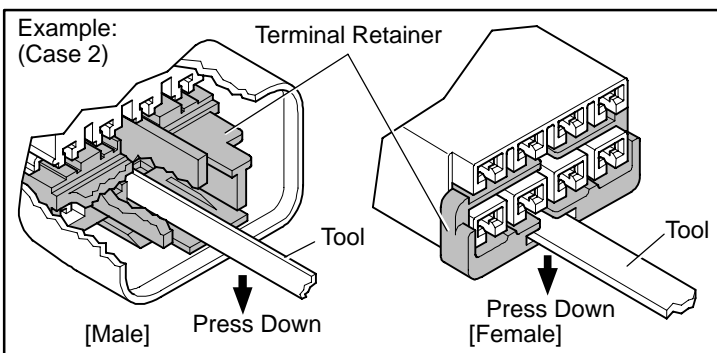
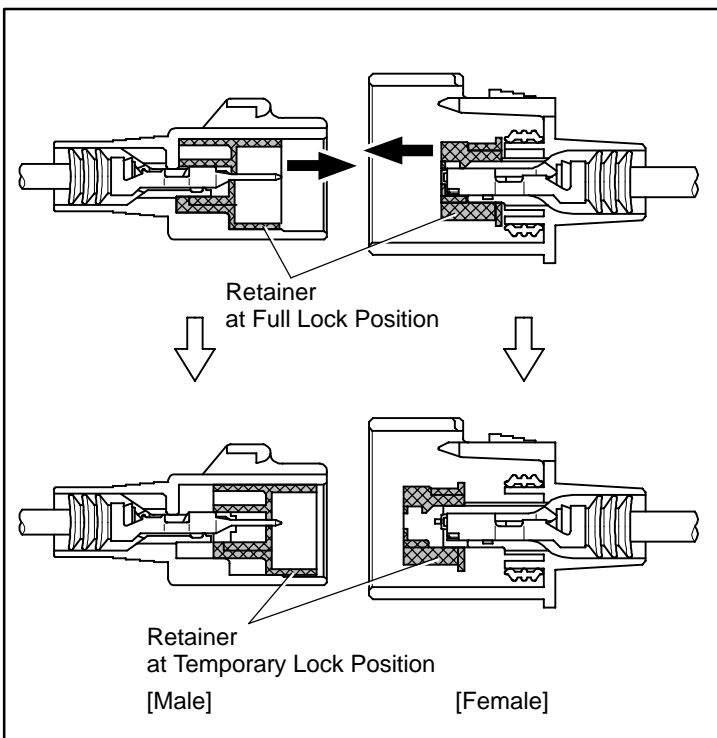
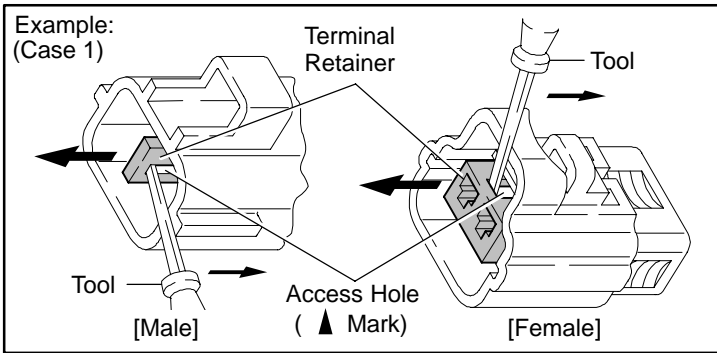
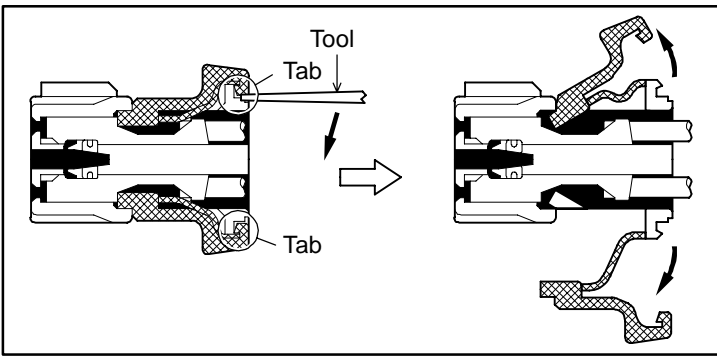
Raise the terminal retainer up to the temporary lock position.



"Case 2"

Open the secondary locking device.





[B] For Waterproof Type Connector

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

Example:

Terminal Retainer : Connector Body

Black or White : Gray

Black or White : Dark Gray

Gray or White : Black

"Case 1"

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

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

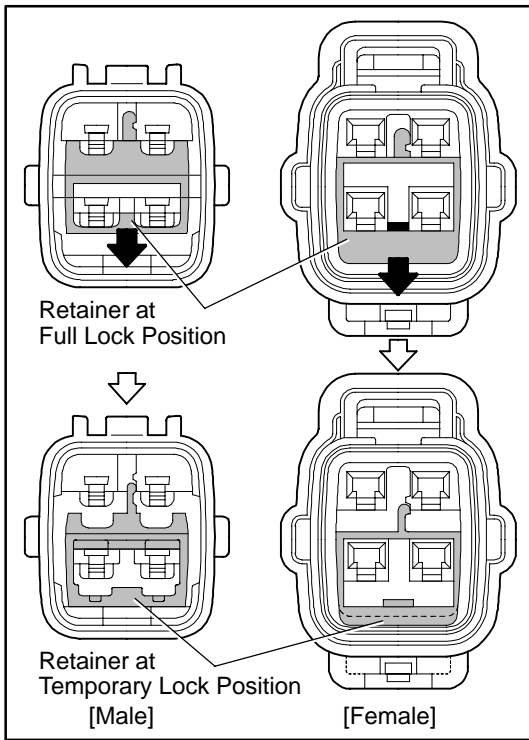
HINT : The needle insertion position varies according to the connector's shape (Number of terminals etc.), so check the position before inserting it.

"Case 2"

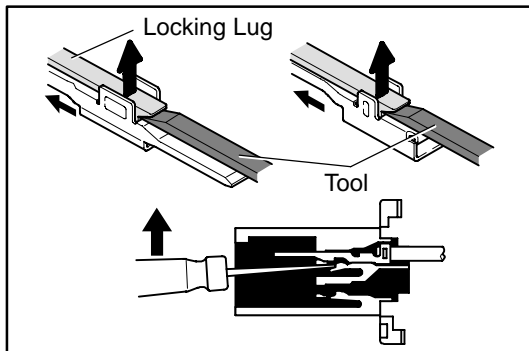
Type which cannot be pulled as far as Power Lock insert the tool straight into the access hole of terminal retainer as shown.



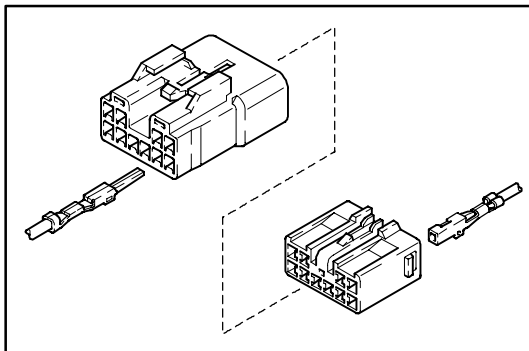
## C TROUBLESHOOTING



Push the terminal retainer down to the temporary lock position.



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

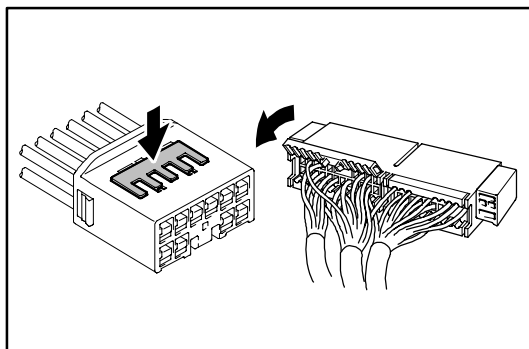


### 4. INSTALL TERMINAL TO CONNECTOR

(a) Insert the terminal.

HINT:

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



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

### 5. CONNECT CONNECTOR

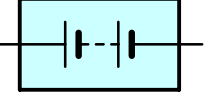

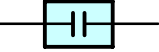
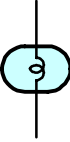

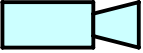



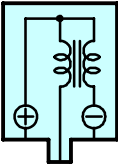




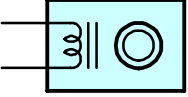

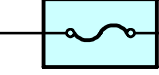

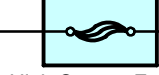
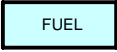

**ABBREVIATIONS**

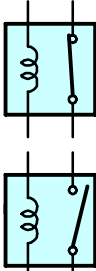

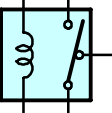
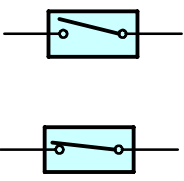
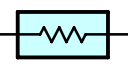
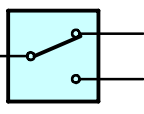
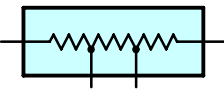
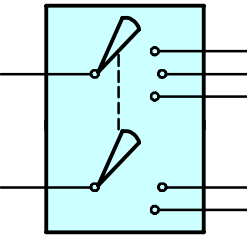

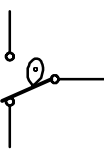

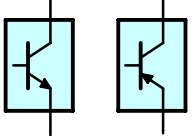
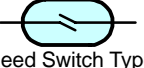
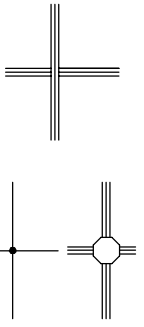
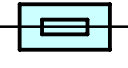
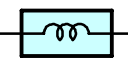
The following abbreviations are used in this manual.

A/C	=	Air Conditioning
A/T	=	Automatic Transaxle
ABS	=	Anti-Lock Brake System
ECU	=	Electronic Control Unit
ESA	=	Electronic Spark Advance
EVAP	=	Evaporative Emission
FL	=	Fusible Link
IC	=	Integrated Circuit
INT	=	Intermittent
J/B	=	Junction Block
LH	=	Left-Hand
M/T	=	Manual Transaxle
R/B	=	Relay Block
RH	=	Right-Hand
SFI	=	Sequential Multiport Fuel Injection
SRS	=	Supplemental Restraint System
SW	=	Switch
TEMP.	=	Temperature
TVIP	=	TOYOTA Vehicle Intrusion Protection
VSV	=	Vacuum Switching Valve
w/	=	With
w/o	=	Without

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

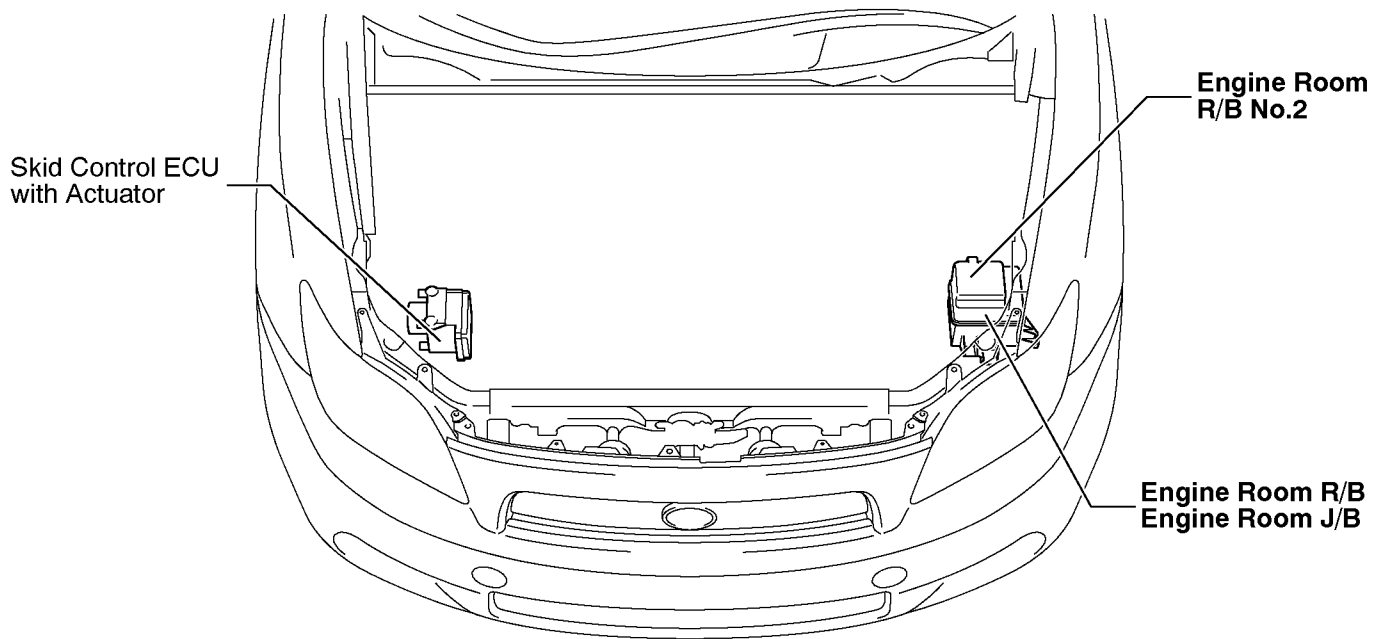
# E GLOSSARY OF TERMS AND SYMBOLS

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

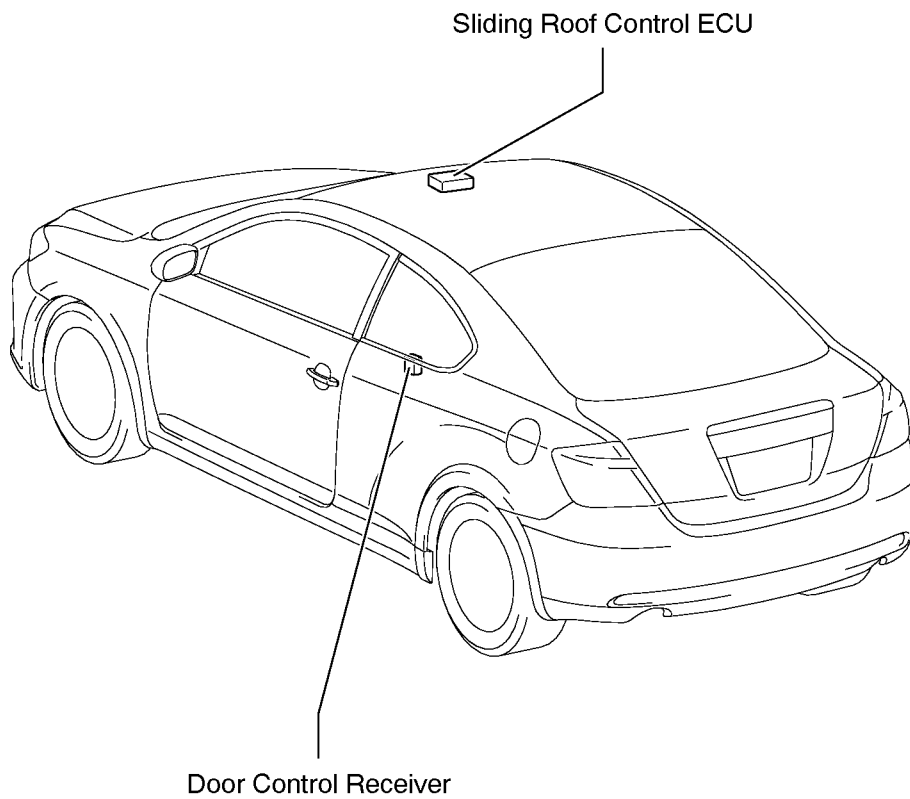
 <p><b>RELAY</b> Basically, an electrically operated switch which may be normally closed (1) or open (2). Current flow through a small coil creates a magnetic field which either opens or closes an attached switch.</p> <p><b>1. NORMALLY CLOSED</b></p> <p><b>2. NORMALLY OPEN</b></p>	 <p><b>SPEAKER</b> An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

# F RELAY LOCATIONS

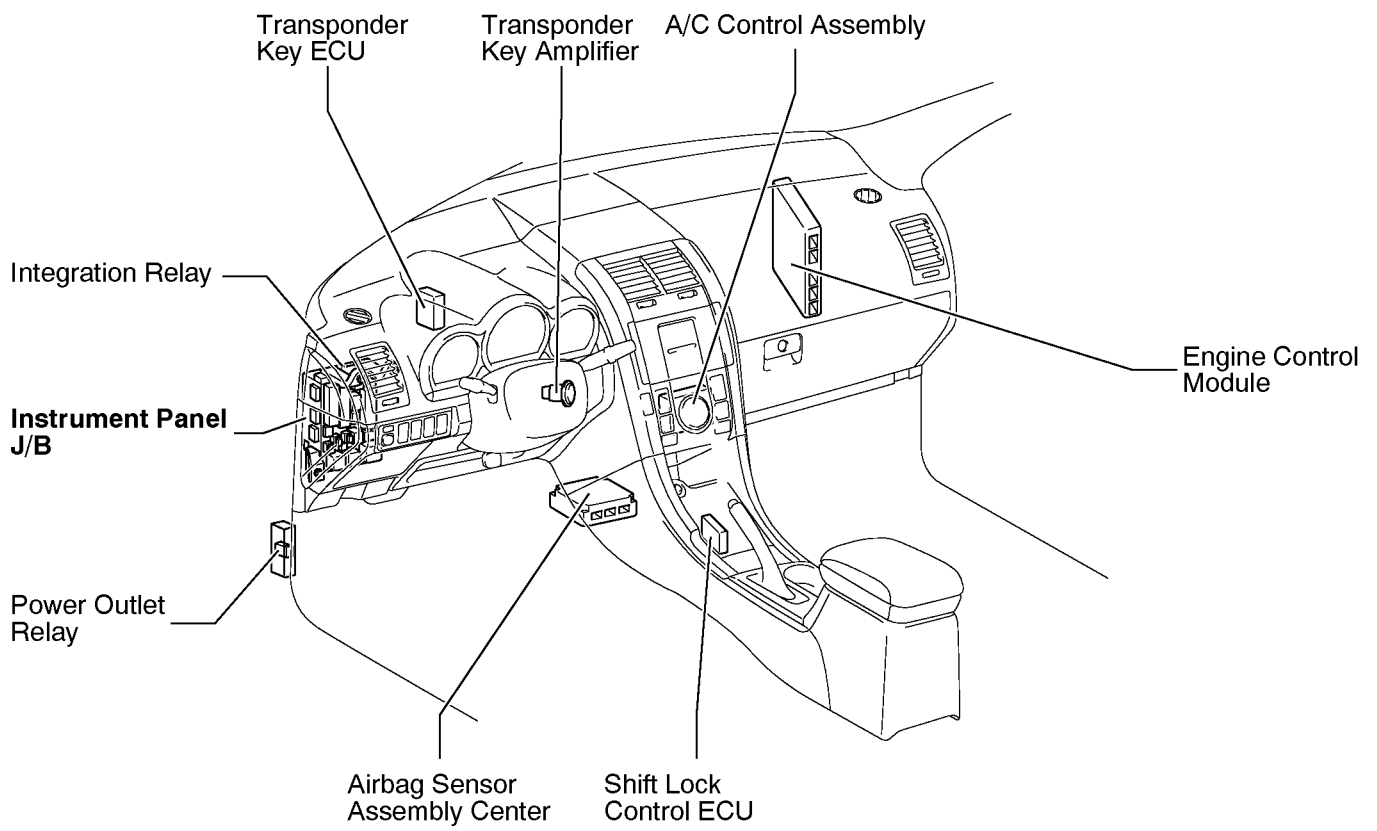
## [Engine Compartment]



## [Body]



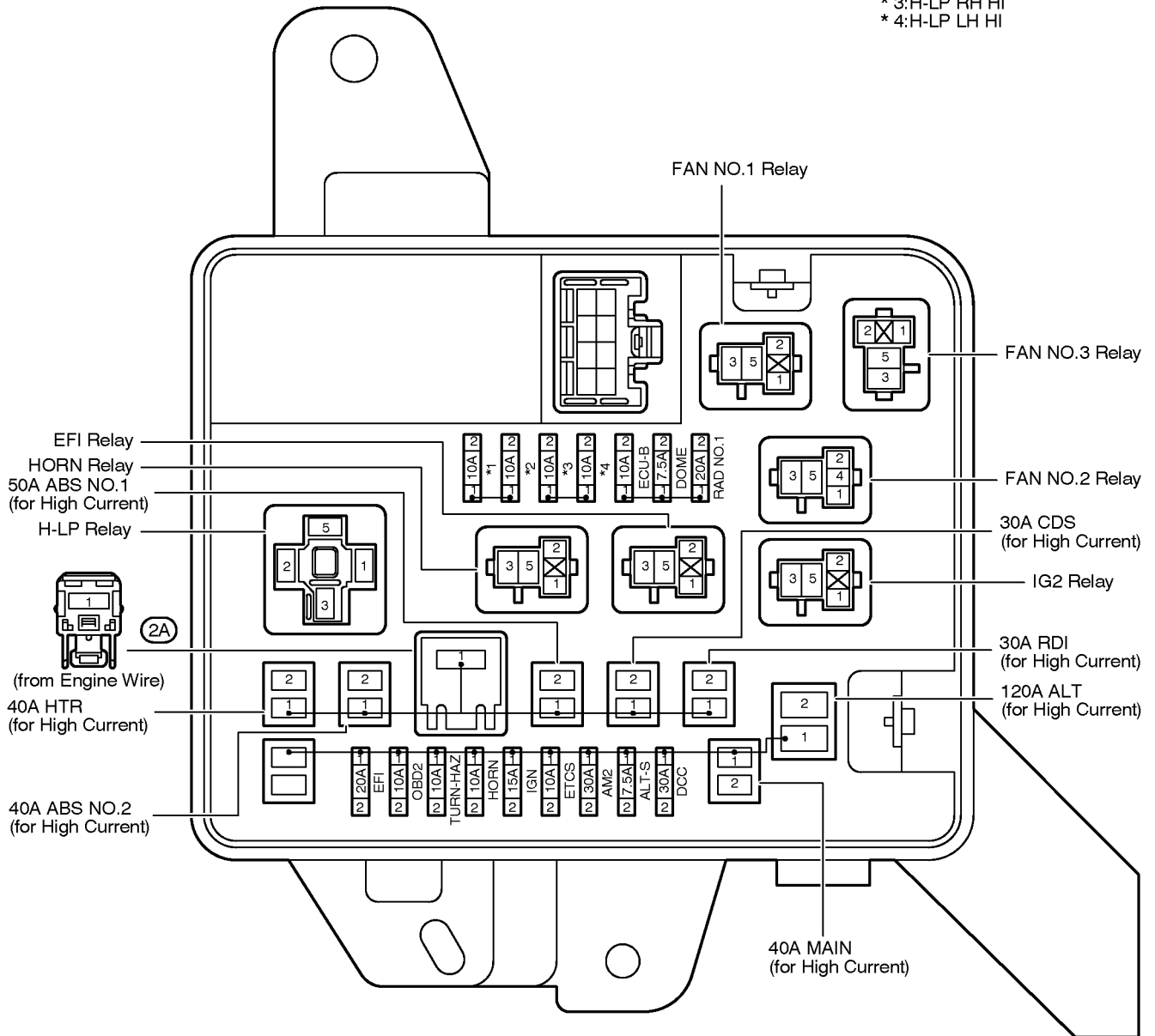
[Instrument Panel]



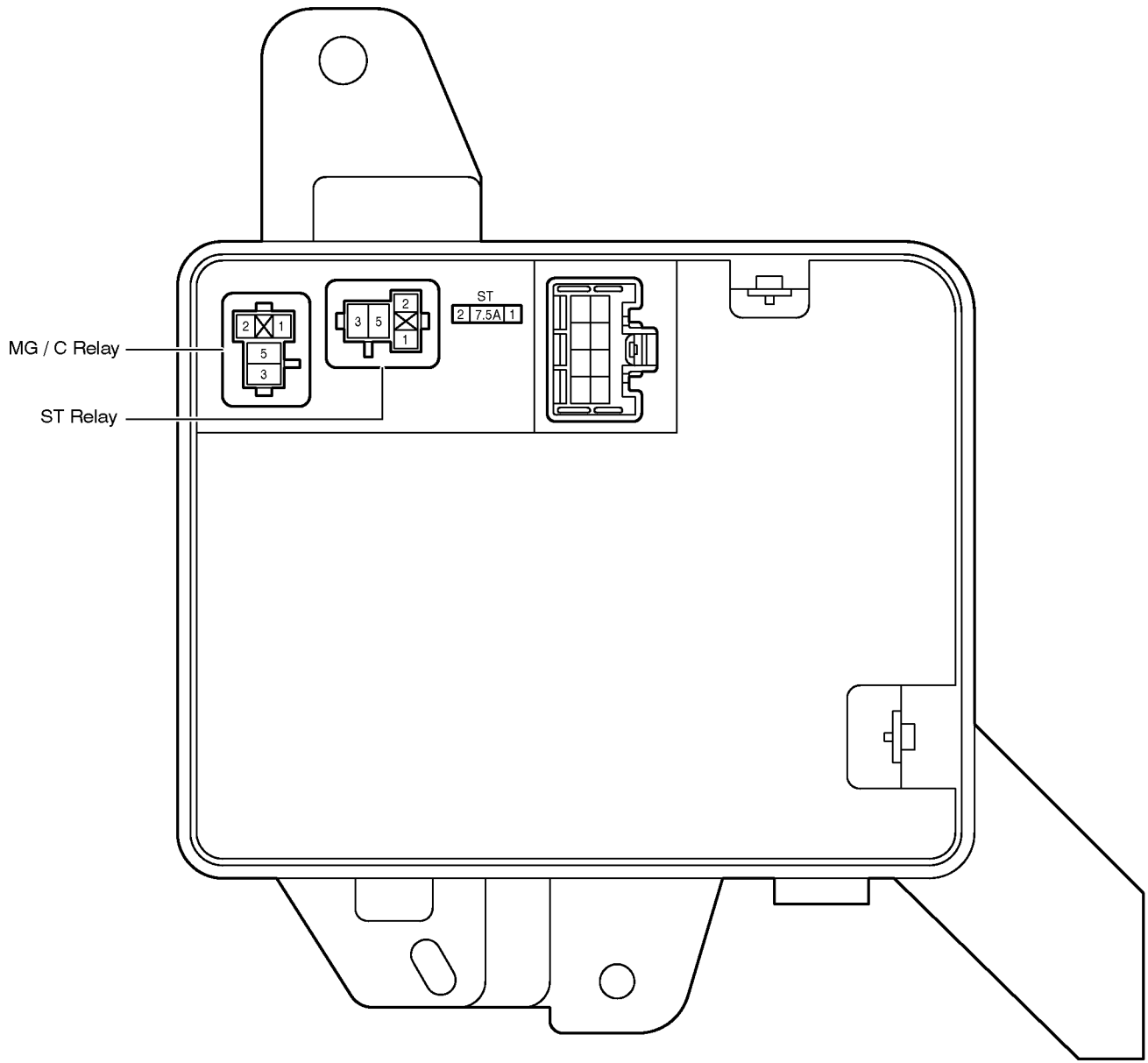
# F RELAY LOCATIONS

<p>Ⓜ : Engine Room R/B</p> <p>○ : Engine Room J/B</p>	<b>Engine Compartment Left (See Page 20)</b>
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- \* 1:H-LP RH LO
- \* 2:H-LP LH LO
- \* 3:H-LP RH HI
- \* 4:H-LP LH HI



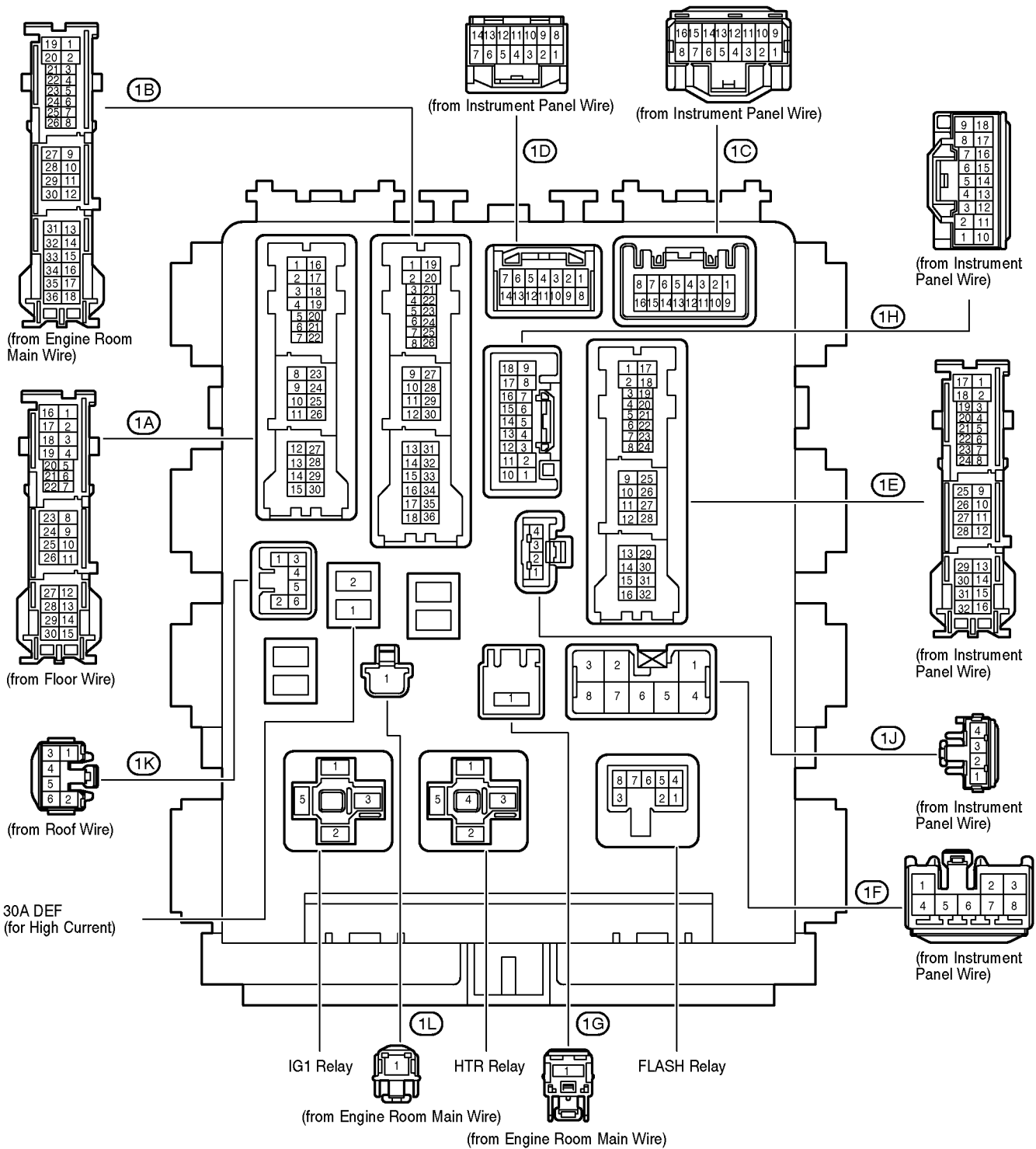
③ : Engine Room R/B No.2    Inside of the Engine Room R/B Box (See Page 20)

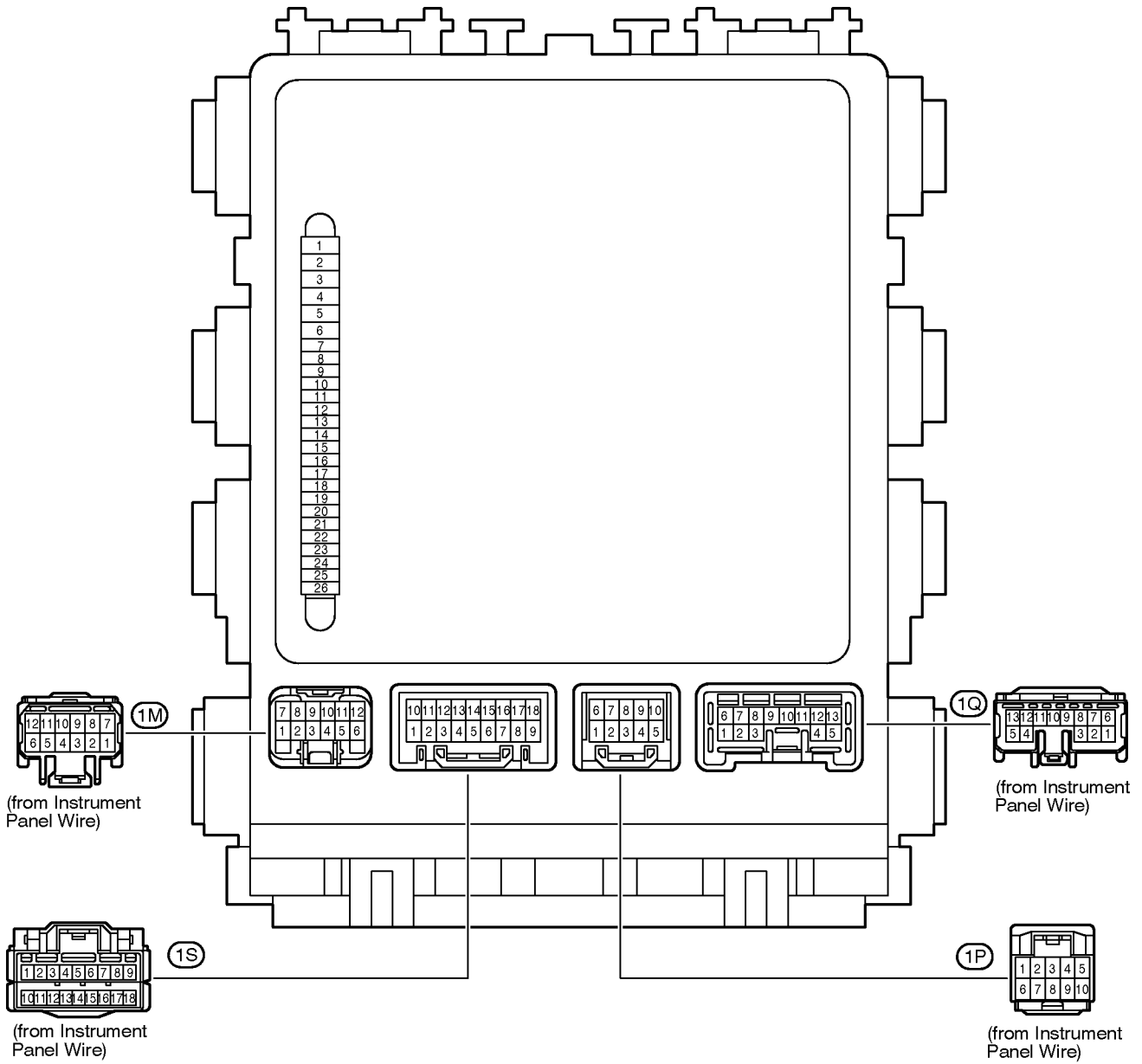




# F RELAY LOCATIONS

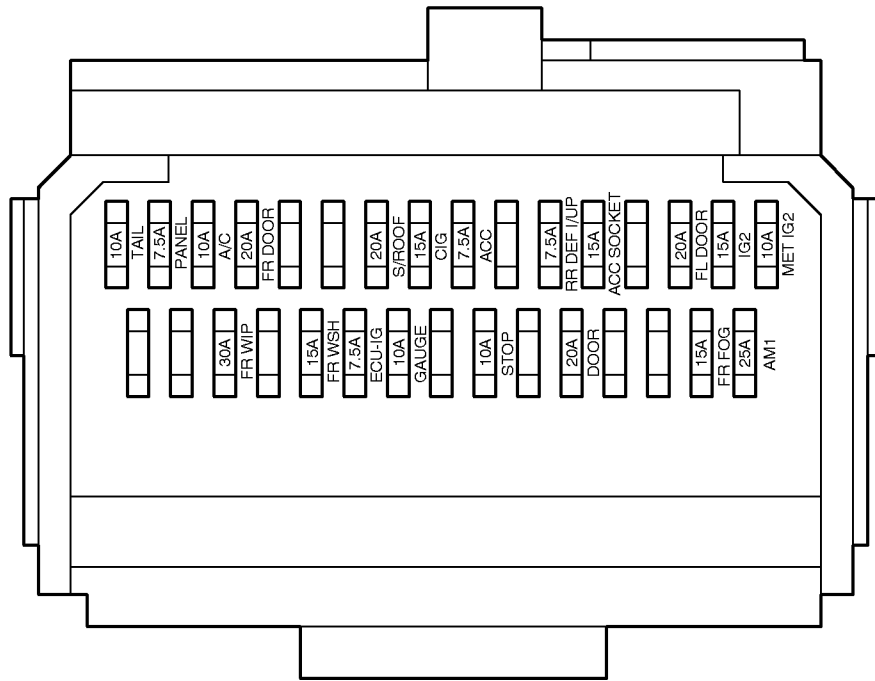
○ : Instrument Panel J/B      Lower Finish Panel (See Page 21)





# F RELAY LOCATIONS

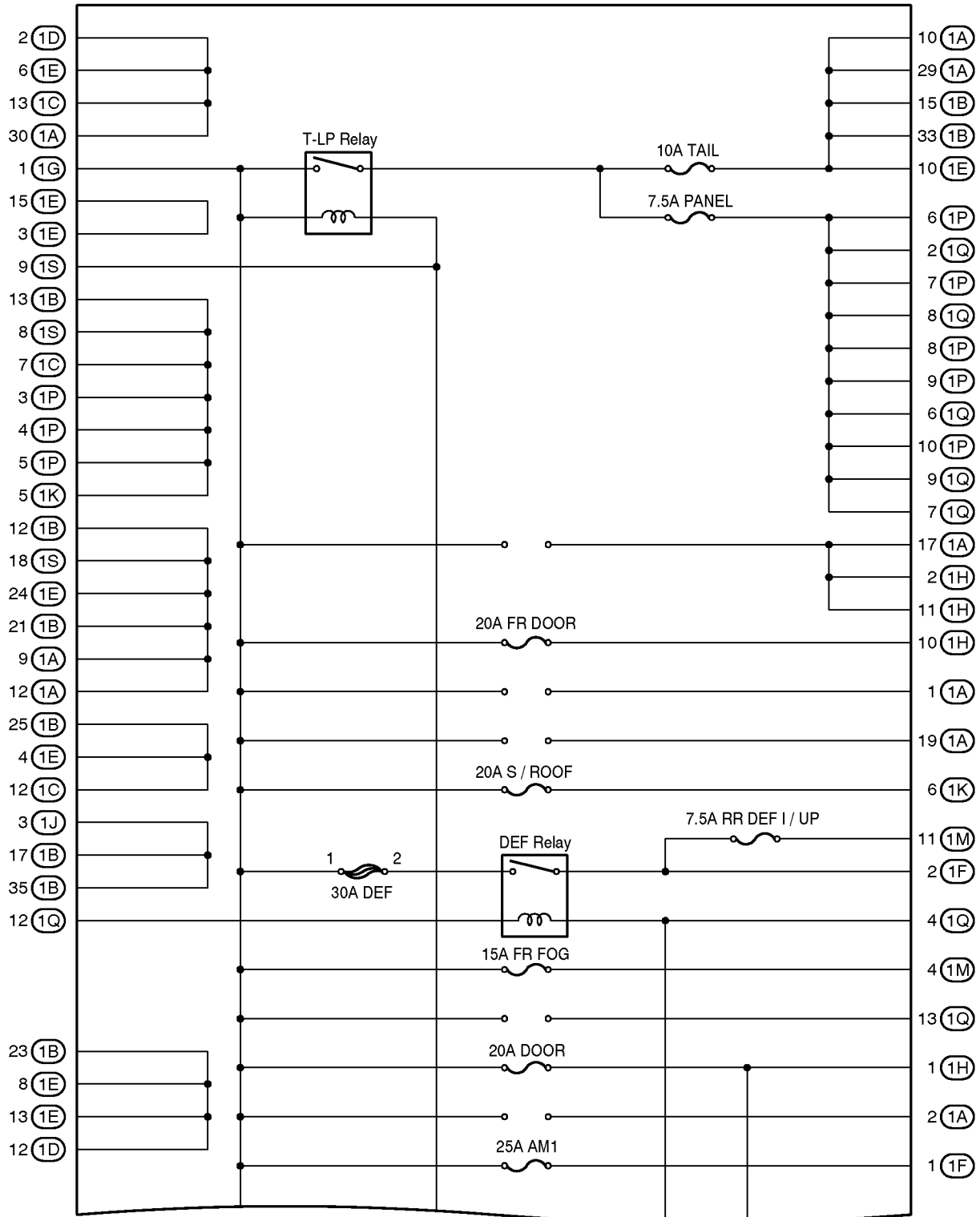
○ : Instrument Panel J/B      [Lower Finish Panel \(See Page 21\)](#)





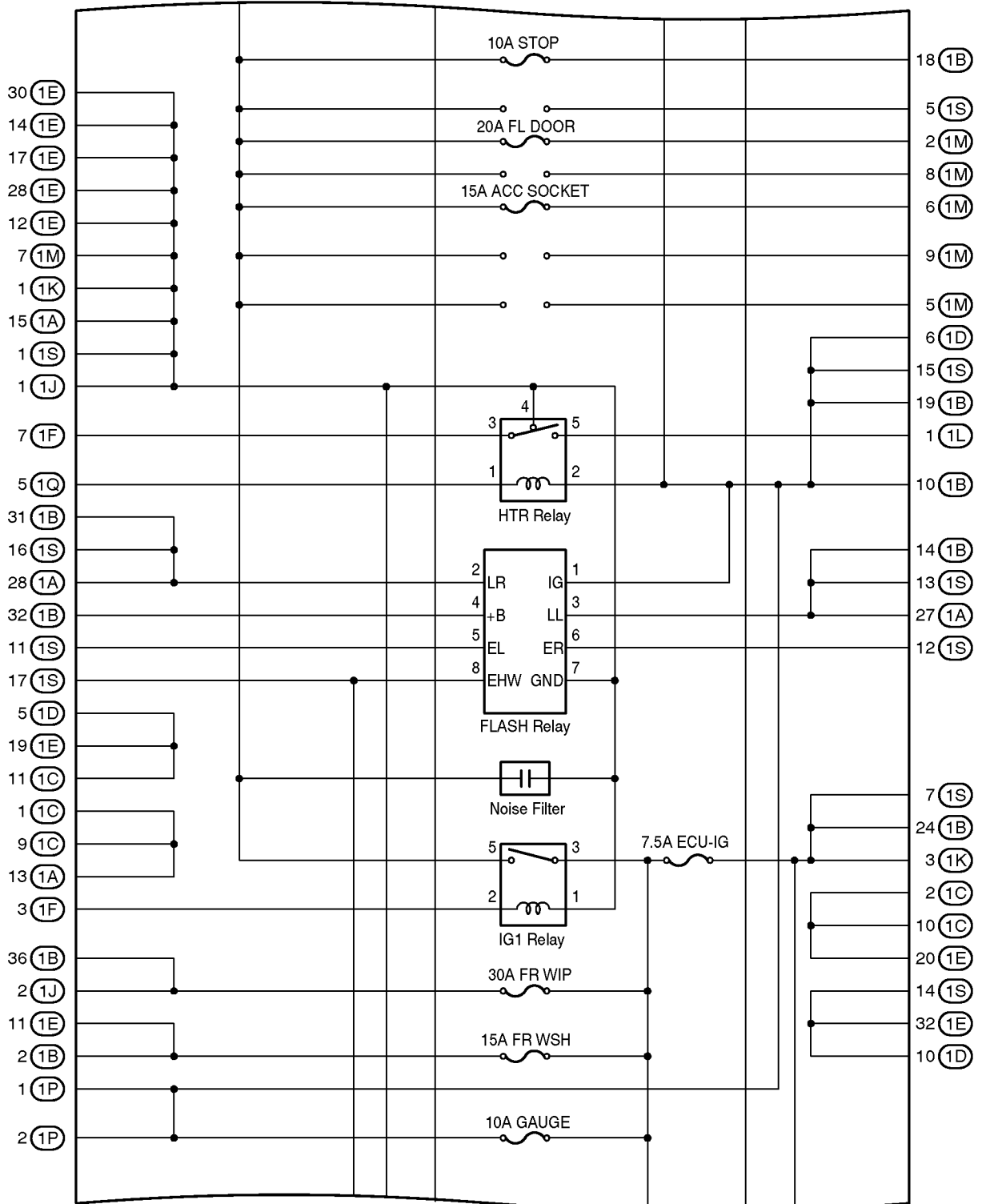
# F RELAY LOCATIONS

## [Instrument Panel J/B Inner Circuit]



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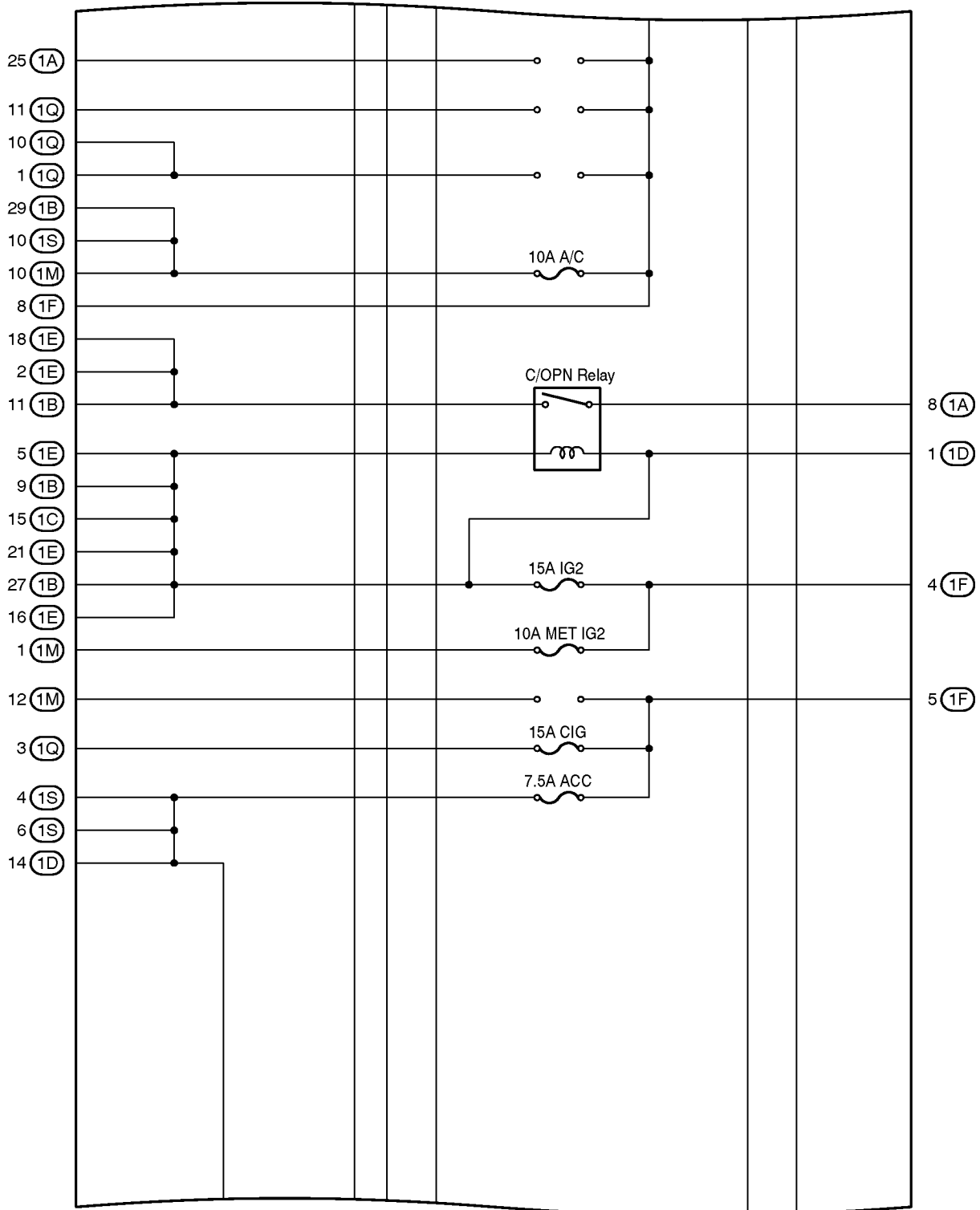


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# F RELAY LOCATIONS

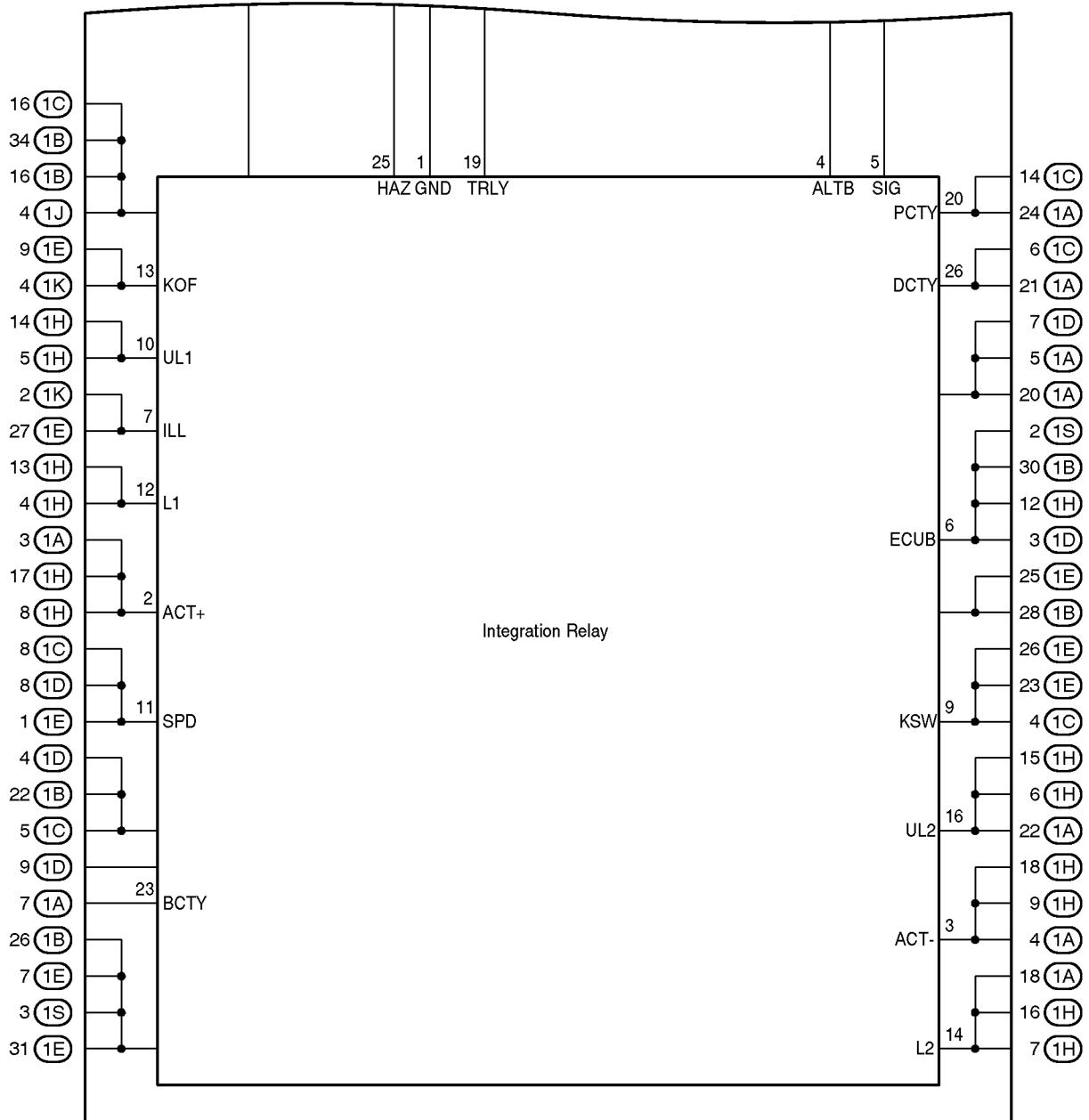
## [Instrument Panel J/B Inner Circuit]

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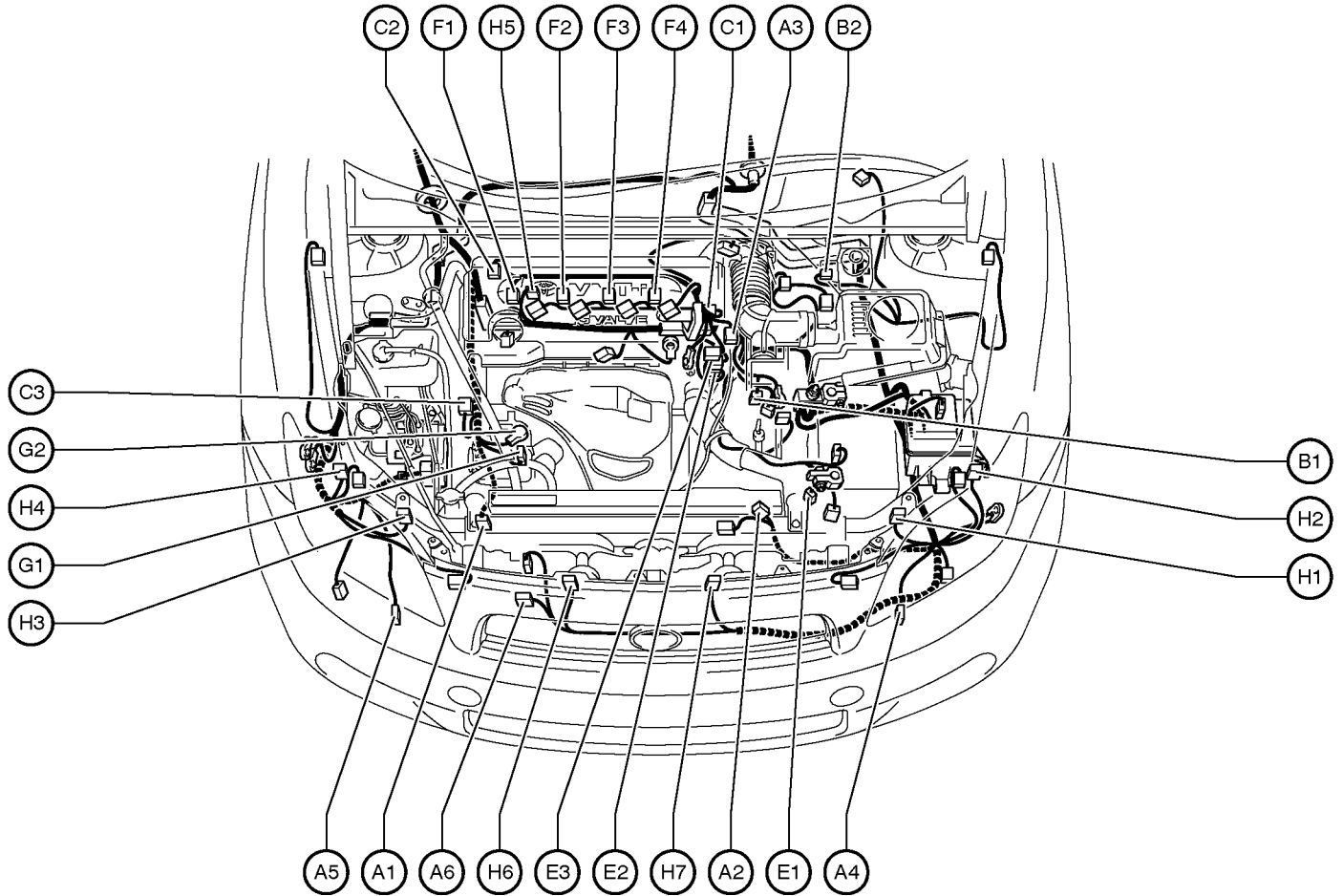
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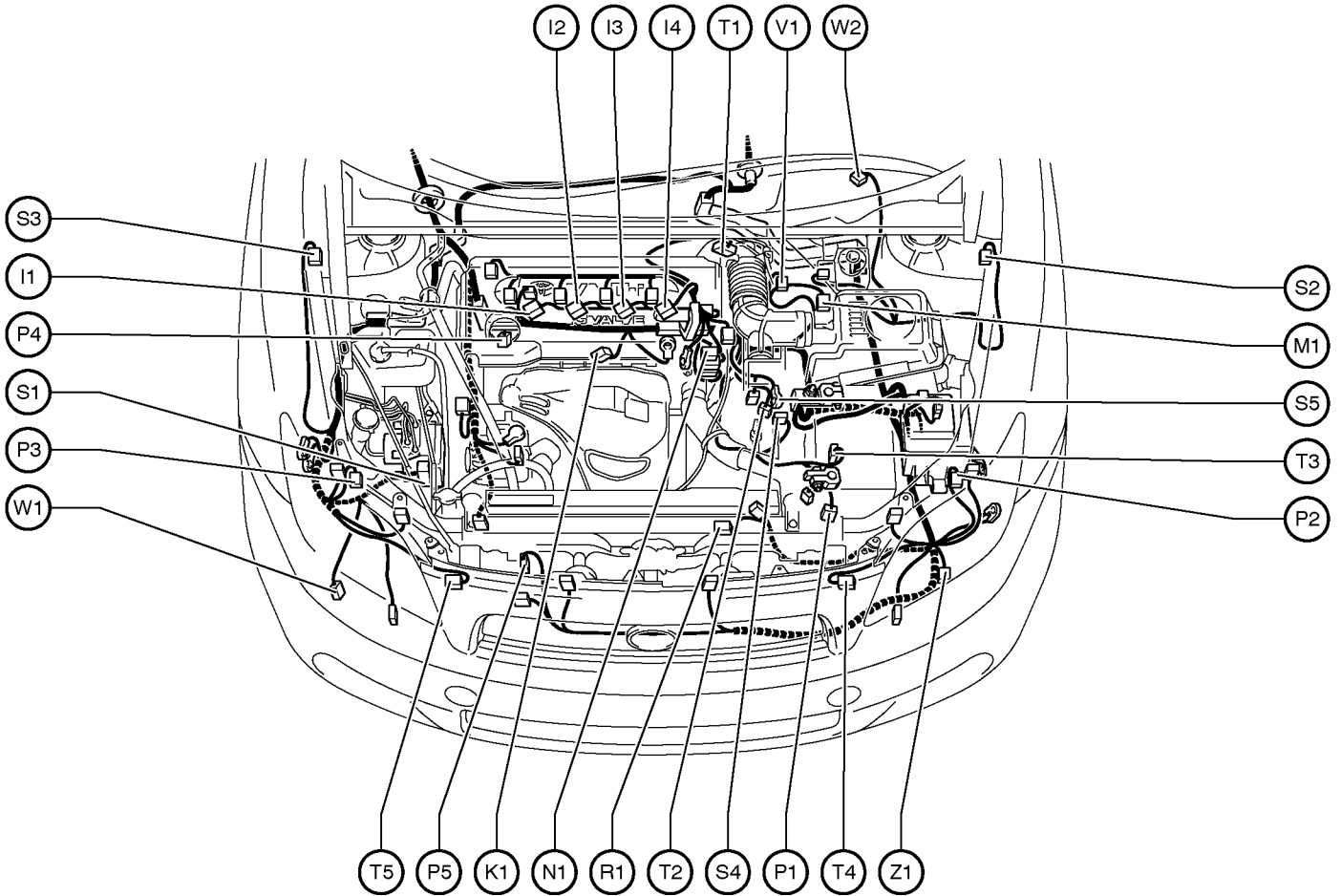
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Engine Compartment



- |   |  |
|---|--|
| A 1 A/C Compressor                                  | F 1 Fuel Injector (No.1)                   |
| A 2 A/C Condenser Fan Motor                         | F 2 Fuel Injector (No.2)                   |
| A 3 Air Fuel Ratio Sensor (Bank 1 Sensor 1)         | F 3 Fuel Injector (No.3)                   |
| A 4 Airbag Sensor (Front LH)                        | F 4 Fuel Injector (No.4)                   |
| A 5 Airbag Sensor (Front RH)                        | G 1 Generator                              |
| A 6 Ambient Temp. Sensor                            | G 2 Generator                              |
| B 1 Back-Up Lamp SW                                 | H 1 Headlamp (LH High)                     |
| B 2 Brake Fluid Level Warning SW                    | H 2 Headlamp (LH Low)                      |
| C 1 Camshaft Position Sensor                        | H 3 Headlamp (RH High)                     |
| C 2 Camshaft Timing Oil Control Valve               | H 4 Headlamp (RH Low)                      |
| C 3 Crankshaft Position Sensor                      | H 5 Heated Oxygen Sensor (Bank 1 Sensor 2) |
| E 1 Electronically Controlled Transmission Solenoid | H 6 Horn (High)                            |
| E 2 Engine Coolant Temp. Sensor                     | H 7 Horn (Low)                             |
| E 3 Engine Oil Pressure SW                          |  |

## Position of Parts in Engine Compartment



I 1 Ignition Coil (No.1)  
 I 2 Ignition Coil (No.2)  
 I 3 Ignition Coil (No.3)  
 I 4 Ignition Coil (No.4)

K 1 Knock Control Sensor (Bank 1)

M 1 Mass Air Flow Meter

N 1 Noise Filter (Ignition)

P 1 Park/Neutral Position SW

P 2 Parking Lamp (LH)

P 3 Parking Lamp (RH)

P 4 Power Steering Oil Pressure SW

P 5 Pressure SW

R 1 Radiator Fan Motor

S 1 Skid Control ECU with Actuator

S 2 Speed Sensor (Front LH)

S 3 Speed Sensor (Front RH)

S 4 Starter

S 5 Starter

T 1 Throttle Body Assembly

T 2 Transmission Revolution Sensor (Counter Gear)

T 3 Transmission Revolution Sensor (Turbine)

T 4 Turn Signal Lamp (Front LH)

T 5 Turn Signal Lamp (Front RH)

V 1 VSV (EVAP)

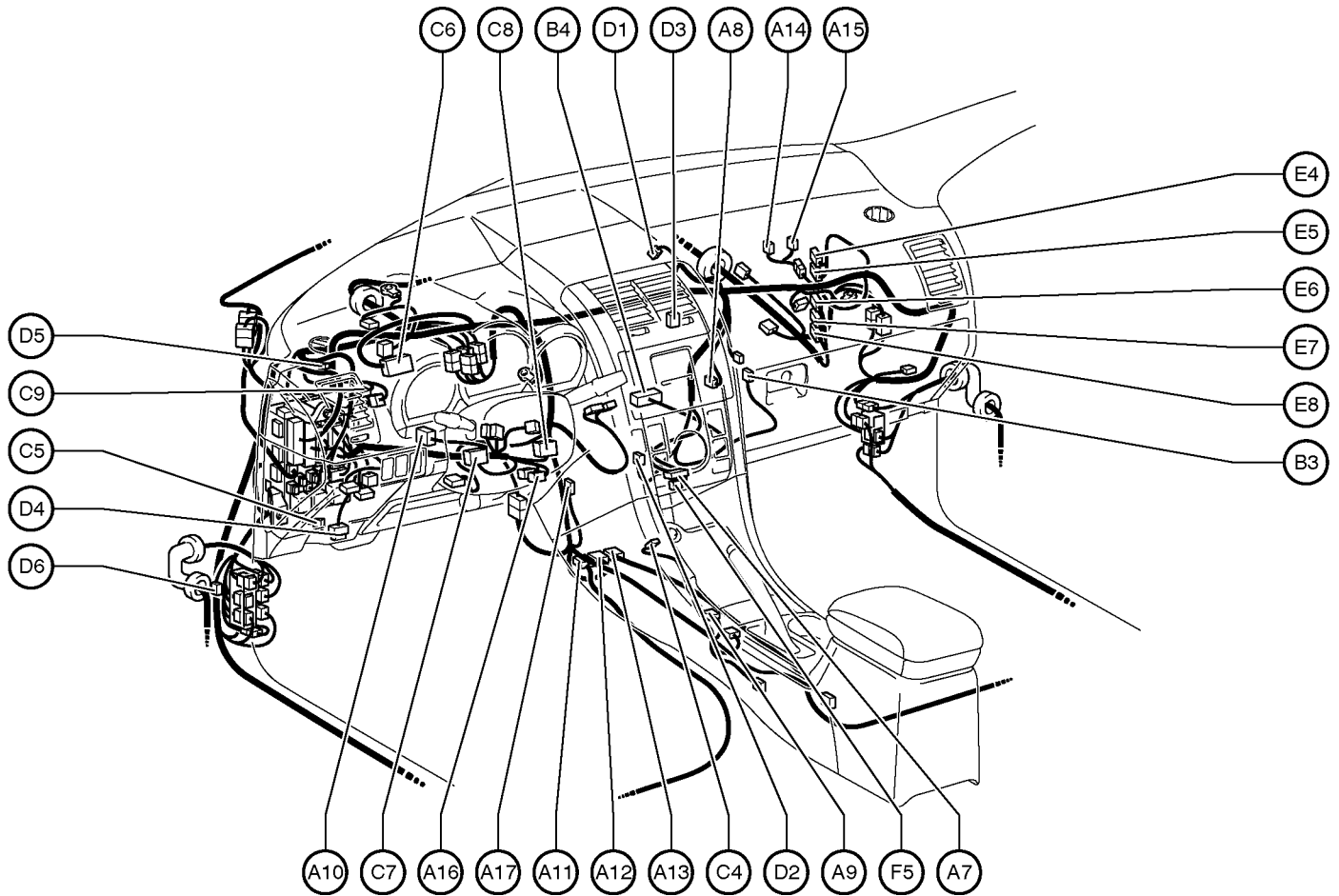
W 1 Windshield Washer Motor

W 2 Windshield Wiper Motor

Z 1 Option Connector (Front Fog Lamp)

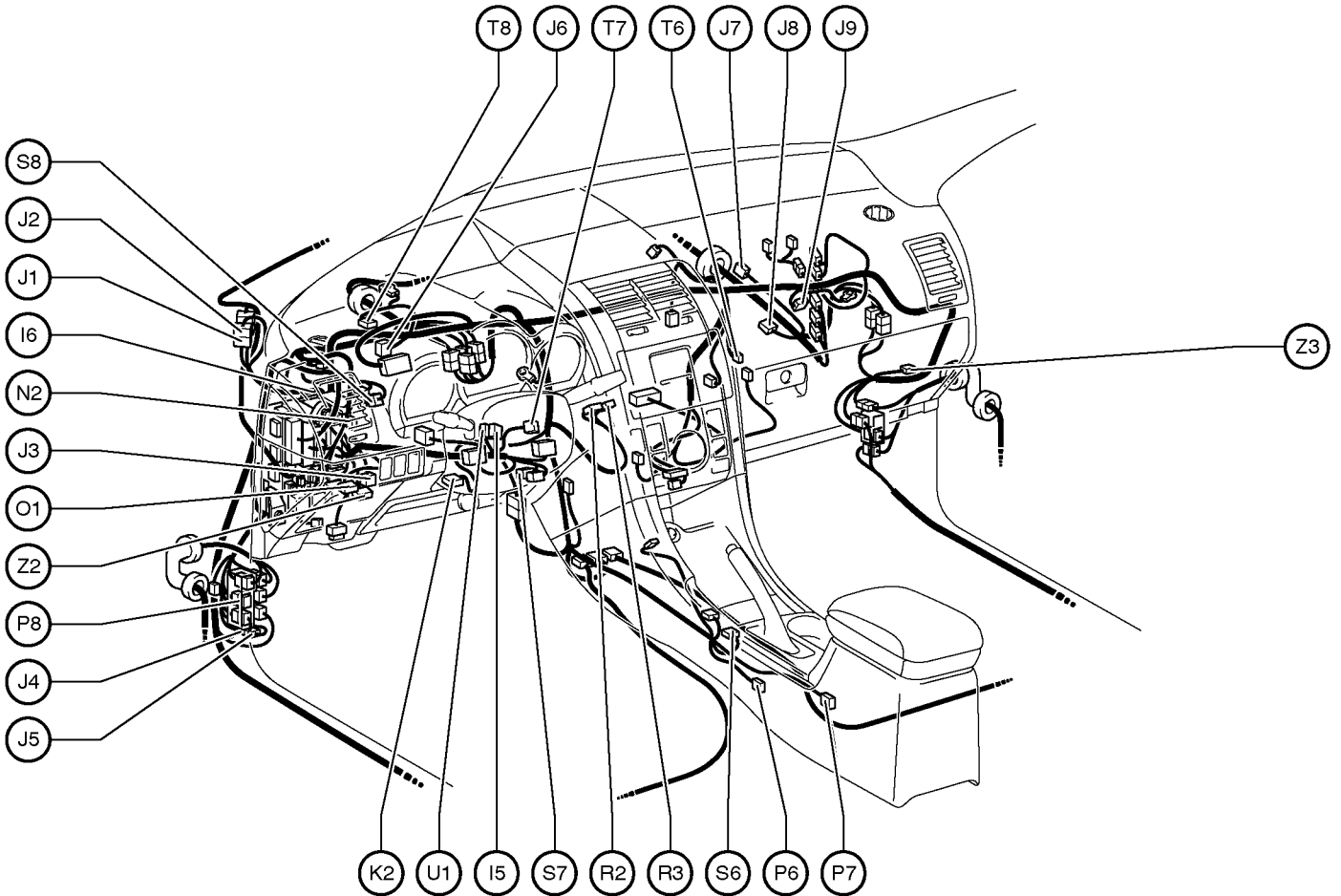
# G ELECTRICAL WIRING ROUTING

## Position of Parts in Instrument Panel



- |  |  |
|--|--|
| A 7 A/C Control Assembly                             | D 1 Damper Servo Motor (Air Inlet)     |
| A 8 A/C Thermistor No.1                              | D 2 Damper Servo Motor (Air Mix)       |
| A 9 A/T Shift Lever Illumination                     | D 3 Damper Servo Motor (Air Vent Mode) |
| A10 Accelerator Position Sensor                      | D 4 Data Link Connector 3              |
| A11 Airbag Sensor Assembly Center                    | D 5 Diode (Fan)                        |
| A12 Airbag Sensor Assembly Center                    | D 6 Diode (Idle-Up)                    |
| A13 Airbag Sensor Assembly Center                    | E 4 Engine Control Module              |
| A14 Airbag Squib (Front Passenger's Airbag Assembly) | E 5 Engine Control Module              |
| A15 Airbag Squib (Front Passenger's Airbag Assembly) | E 6 Engine Control Module              |
| A16 Airbag Squib (Steering Wheel Pad)                | E 7 Engine Control Module              |
| A17 Antenna Amplifier                                | E 8 Engine Control Module              |
| B 3 Blower Motor                                     | F 5 Front Console Illumination         |
| B 4 Blower Motor Control                             |  |
| C 4 Cigarette Lighter                                |  |
| C 5 Clutch Start SW                                  |  |
| C 6 Combination Meter                                |  |
| C 7 Combination SW                                   |  |
| C 8 Combination SW                                   |  |
| C 9 Cruise Control Clutch SW                         |  |

## Position of Parts in Instrument Panel



I 5 Ignition SW  
I 6 Integration Relay

J 1 Junction Connector  
J 2 Junction Connector  
J 3 Junction Connector  
J 4 Junction Connector  
J 5 Junction Connector  
J 6 Junction Connector  
J 7 Junction Connector  
J 8 Junction Connector  
J 9 Junction Connector

K 2 Knee Airbag Squib

N 2 Noise Filter (DOME)

O 1 Outer Mirror SW

P 6 Parking Brake SW  
P 7 Power Point Socket  
P 8 Power Point Socket Relay

R 2 Radio Receiver Assembly  
R 3 Radio Receiver Assembly

S 6 Shift Lock Control ECU  
S 7 Spiral Cable  
S 8 Stop Lamp SW

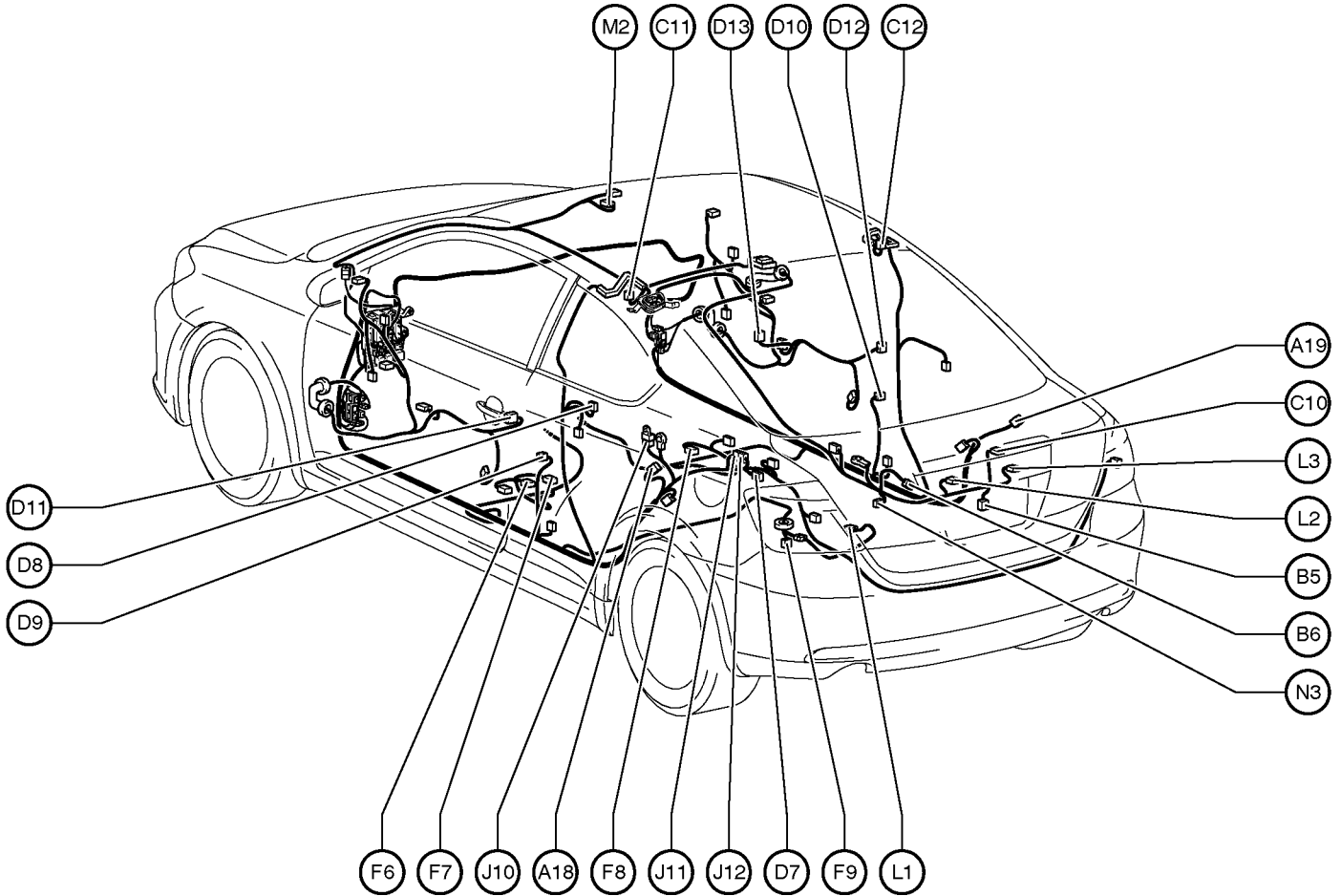
T 6 Tire Pressure Warning SW  
T 7 Transponder Key Amplifier  
T 8 Transponder Key ECU

U 1 Unlock Warning SW

Z 2 Option Connector (Front Fog Lamp SW)  
Z 3 Option Connector (TVIP)

# G ELECTRICAL WIRING ROUTING

## Position of Parts in Body



A 18 Airbag Sensor (Rear LH)

A 19 Airbag Sensor (Rear RH)

B 5 Back Door Lock Assembly

B 6 Back Door Opener SW

C 10 Center Stop Lamp

C 11 Curtain Shield Airbag Squib (LH)

C 12 Curtain Shield Airbag Squib (RH)

D 7 Diode (Room Lamp)

D 8 Door Control Receiver

D 9 Door Courtesy SW (Driver's Side)

D 10 Door Courtesy SW (Front Passenger's Side)

D 11 Door Lock Assembly (Driver's Side)

D 12 Door Lock Assembly (Front Passenger's Side)

D 13 Door Lock Control SW

F 6 Front Seat Inner Belt (Driver's Side)

F 7 Front Seat Inner Belt (Driver's Side)

F 8 Front Seat Inner Belt (Front Passenger's Side)

F 9 Fuel Suction Pump and Gage Assembly

J 10 Junction Connector

J 11 Junction Connector

J 12 Junction Connector

L 1 Leak Detection Pump Assembly

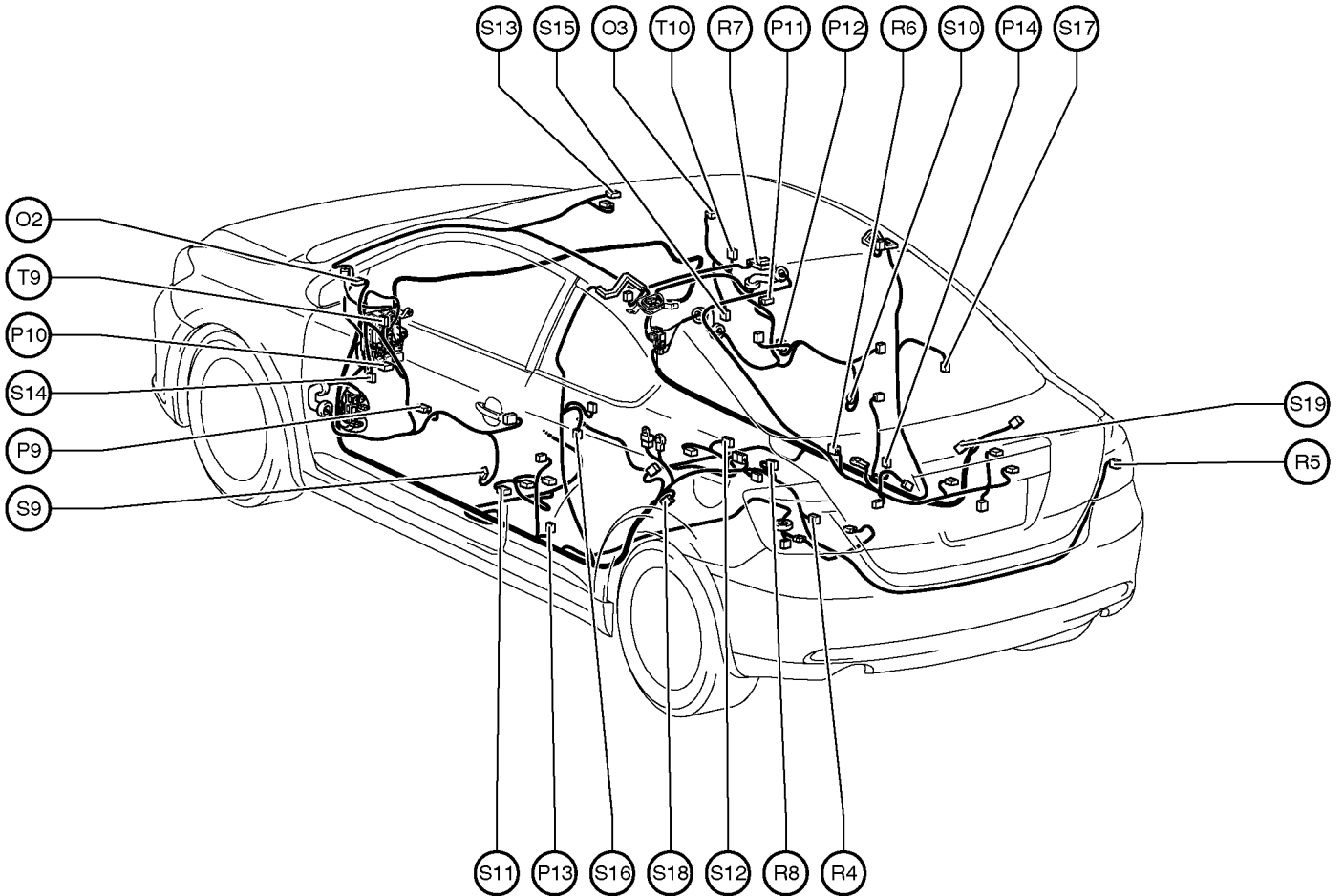
L 2 License Plate Lamp (LH)

L 3 License Plate Lamp (RH)

M 2 Map Lamp

N 3 Noise Filter (DEF and Stop)

## Position of Parts in Body



O 2 Outer Rear View Mirror (LH)  
O 3 Outer Rear View Mirror (RH)

P 9 Power Window Master SW  
P10 Power Window Regulator Motor (Front LH)  
P11 Power Window Regulator Motor (Front RH)  
P12 Power Window SW (Front Passenger's Side)  
P13 Pretensioner (LH)  
P14 Pretensioner (RH)

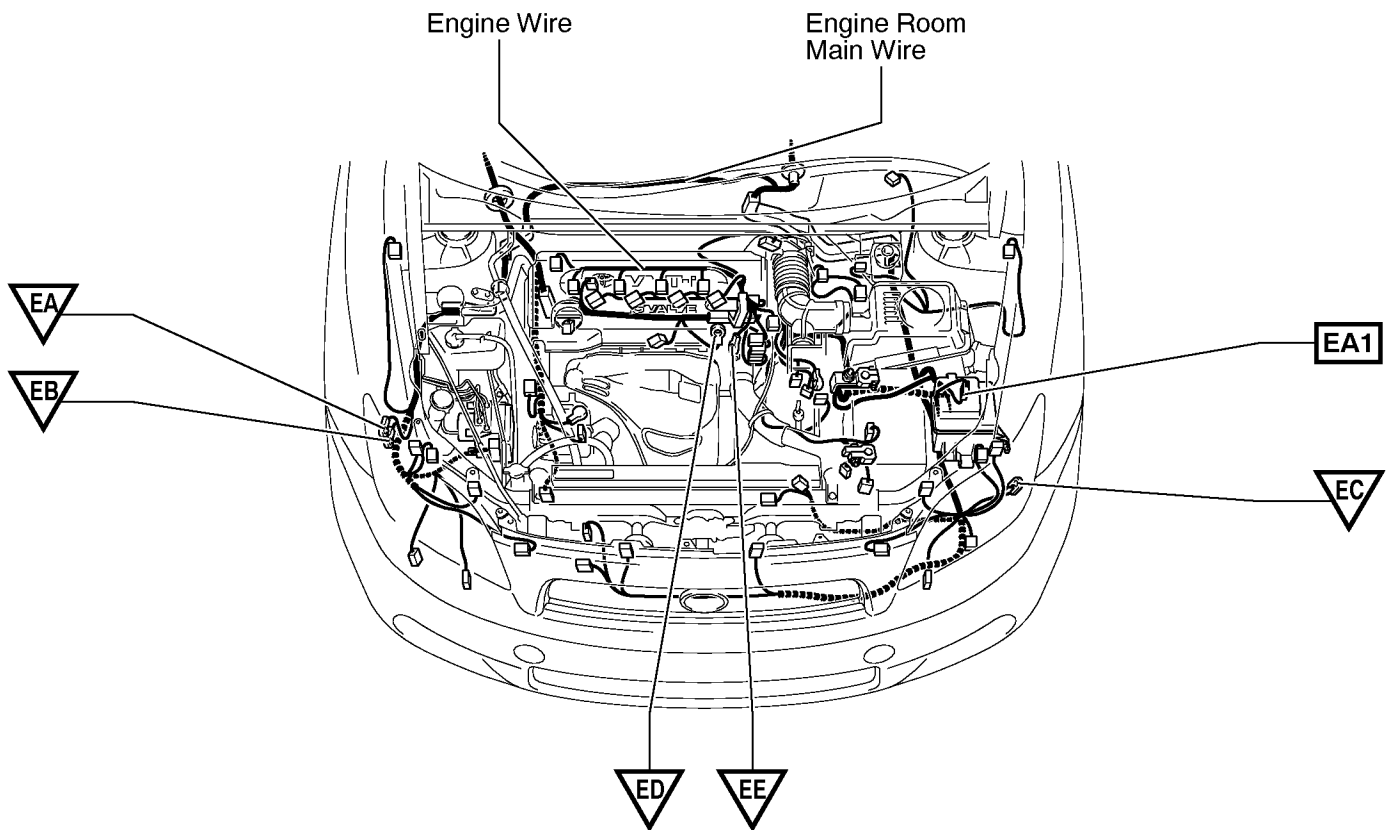
R 4 Rear Combination Lamp (LH)  
R 5 Rear Combination Lamp (RH)  
R 6 Rear Window Defogger  
R 7 Room Lamp (Center)  
R 8 Room Lamp (Left Quarter)

S 9 Side Airbag Sensor (LH)  
S10 Side Airbag Sensor (RH)  
S11 Side Airbag Squib (LH)  
S12 Side Airbag Squib (RH)  
S13 Sliding Roof Control ECU  
S14 Speaker (Front Door LH)  
S15 Speaker (Front Door RH)  
S16 Speaker (Rear LH)  
S17 Speaker (Rear RH)  
S18 Speed Sensor (Rear LH)  
S19 Speed Sensor (Rear RH)

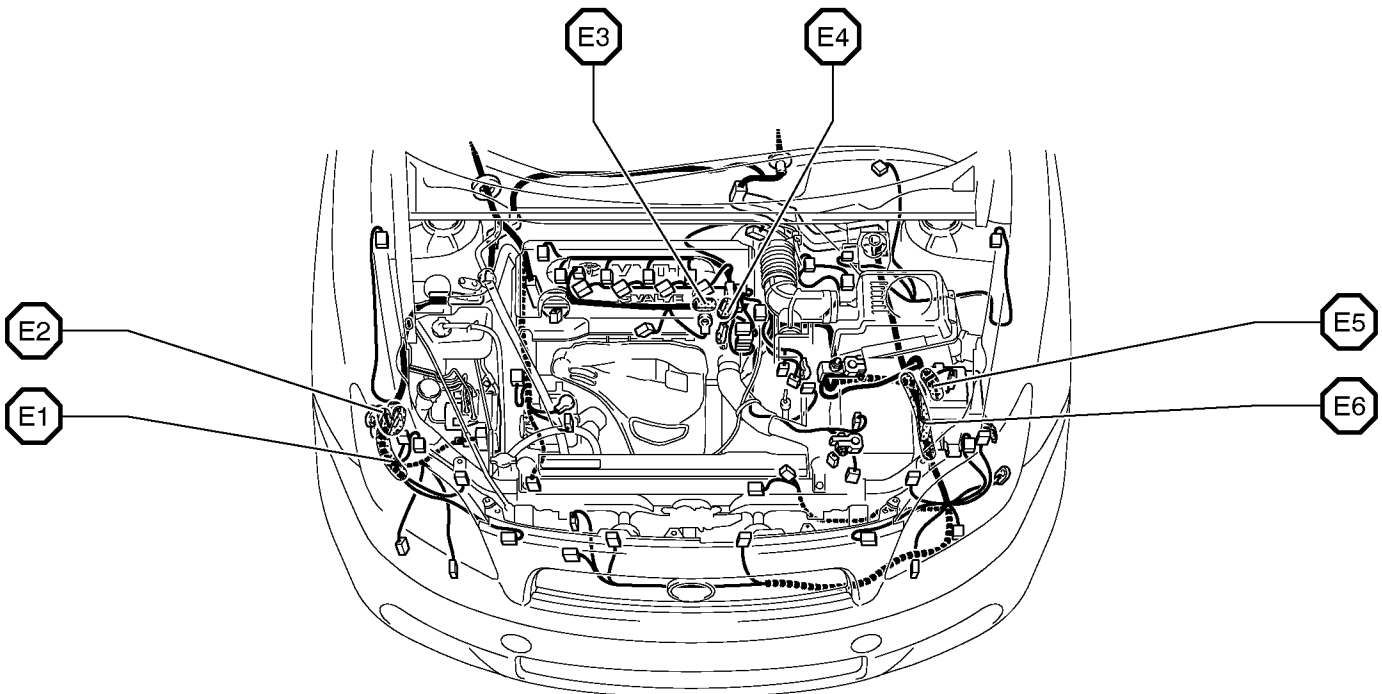
T 9 Tweeter (LH)  
T10 Tweeter (RH)

# G ELECTRICAL WIRING ROUTING

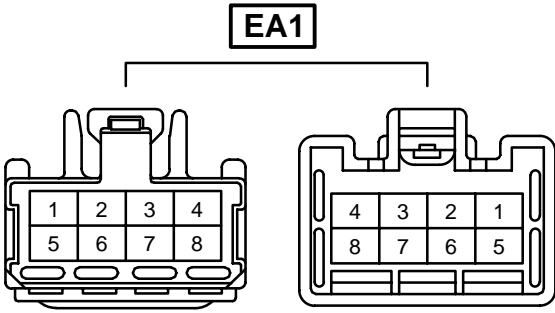
□ : Location of Connector Joining Wire Harness and Wire Harness  
▽ : Location of Ground Points



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness

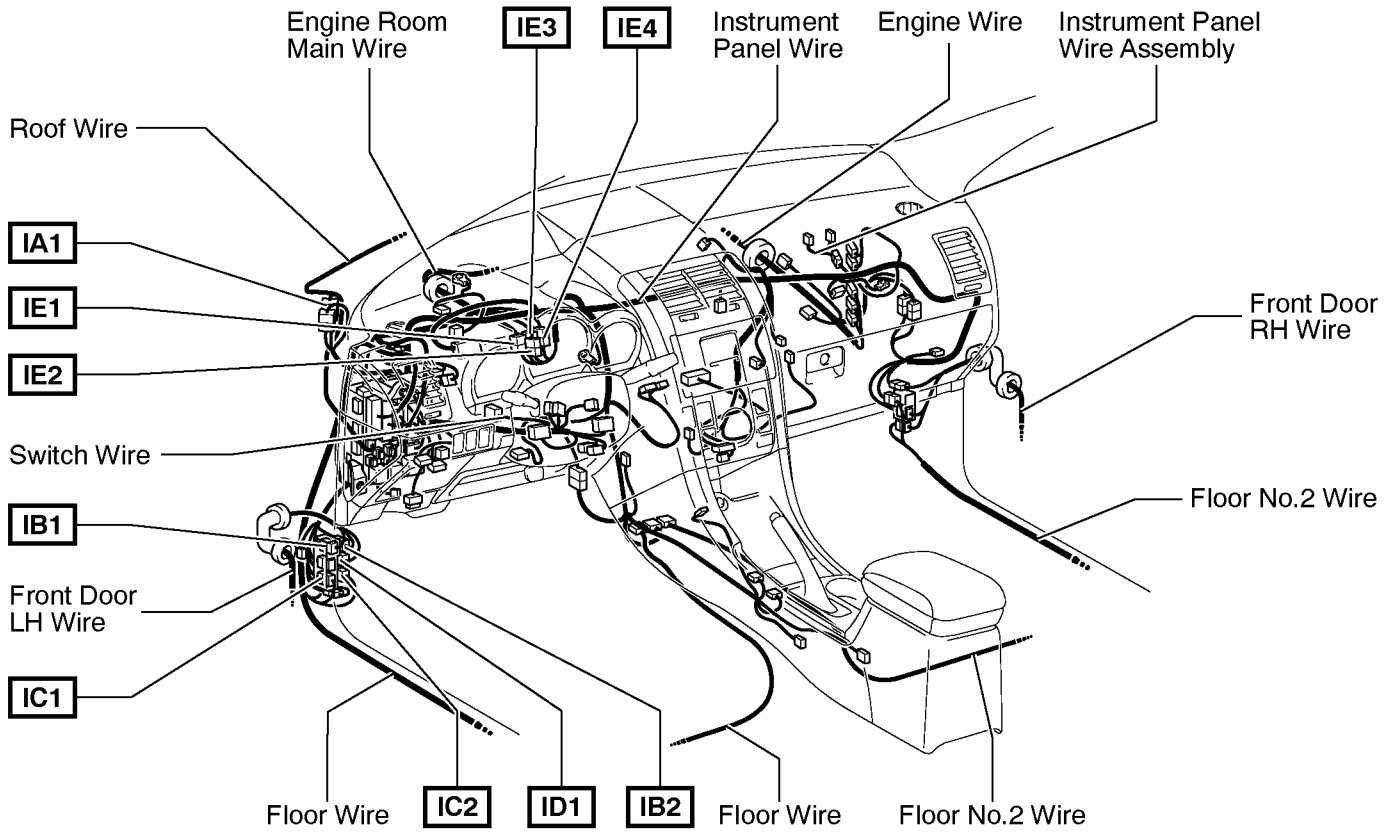


Code	Joining Wire Harness and Wire Harness (Connector Location)
EA1	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)

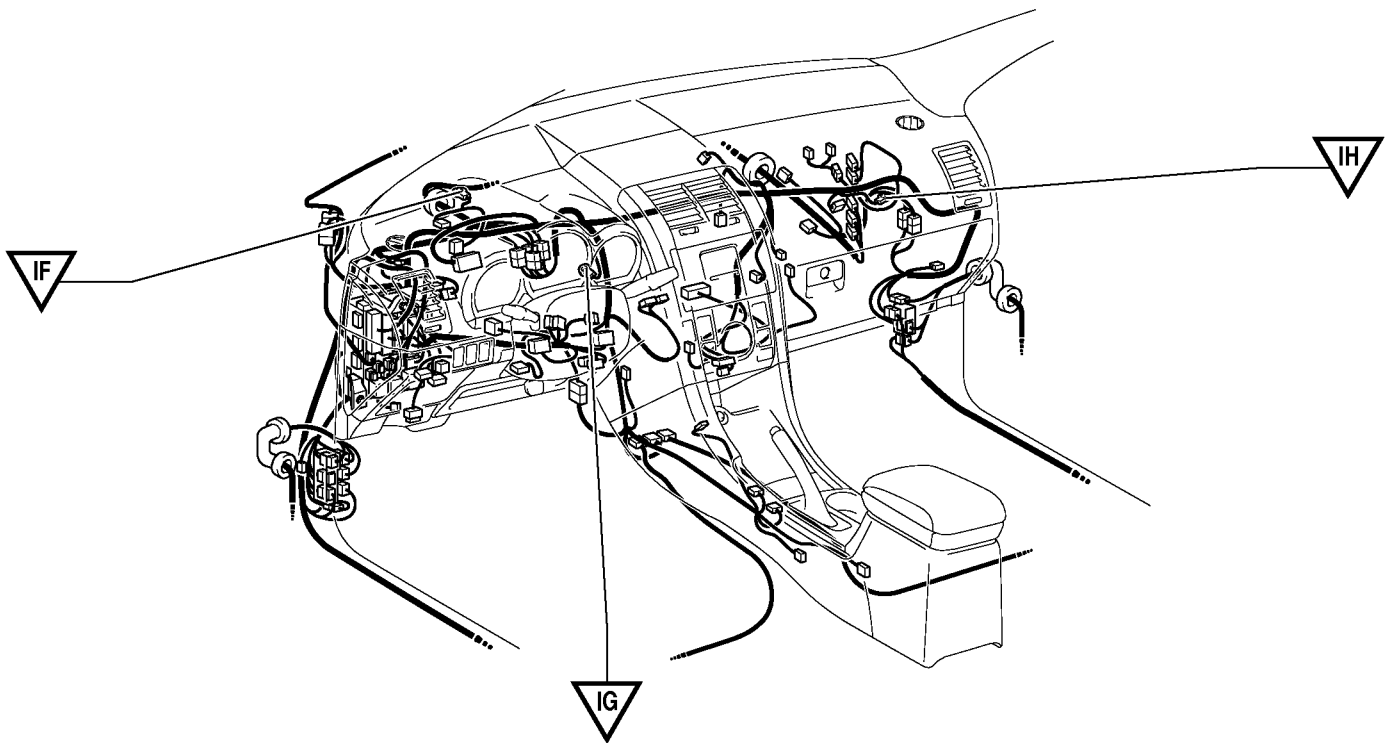


# G ELECTRICAL WIRING ROUTING

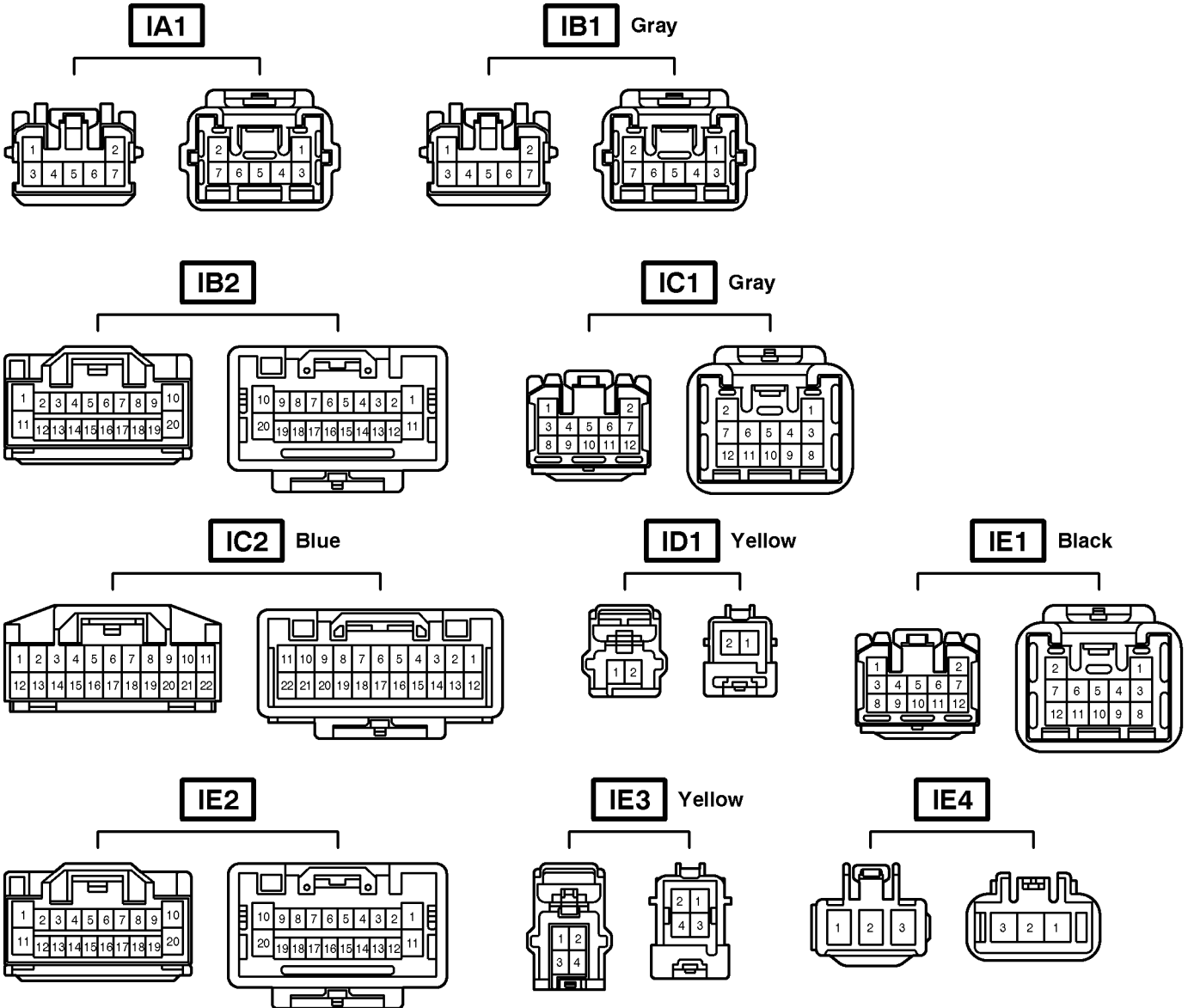
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**▽ : Location of Ground Points**



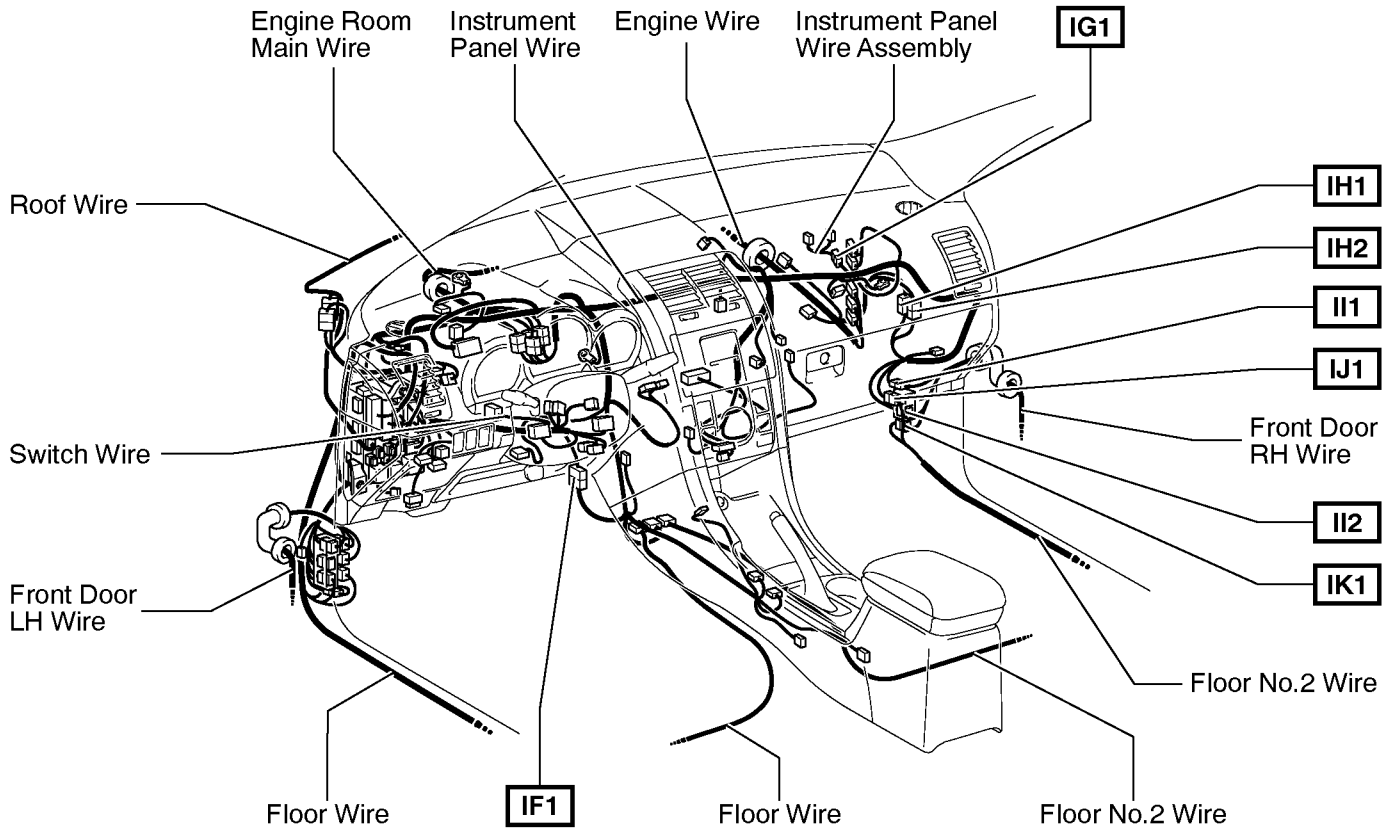
## Connector Joining Wire Harness and Wire Harness



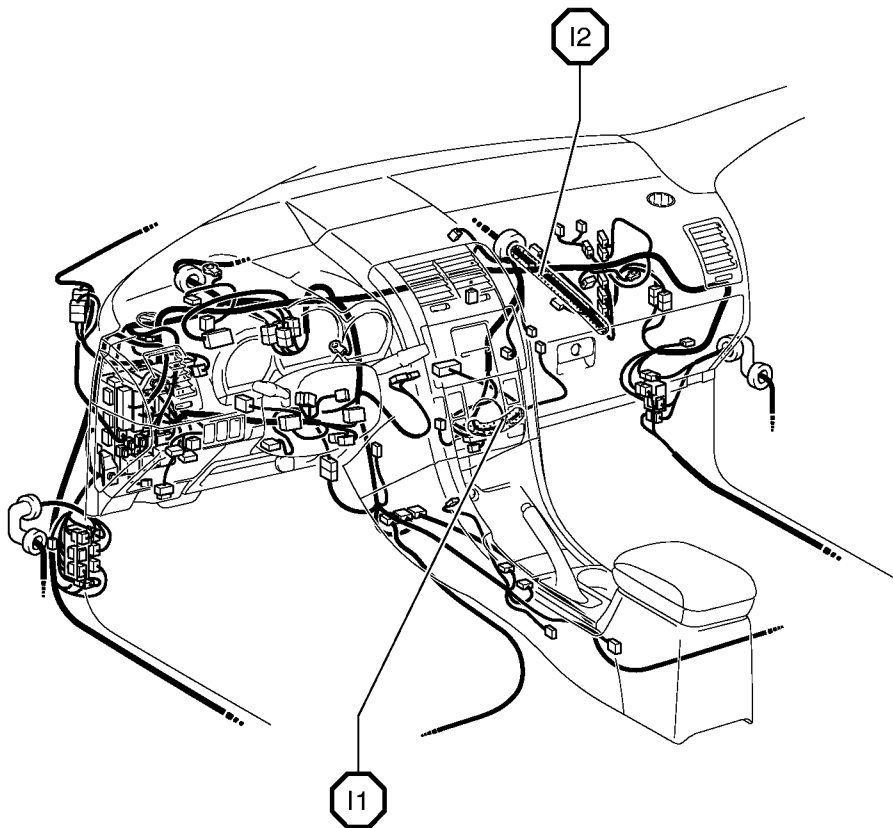
Code	Joining Wire Harness and Wire Harness (Connector Location)
IA1	Roof Wire and Instrument Panel Wire (Cowl Top Side Panel LH)
IB1	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2	
IC1	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IC2	
ID1	Front Door LH Wire and Floor Wire (Left Kick Panel)
IE1	
IE2	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IE3	
IE4	

# G ELECTRICAL WIRING ROUTING

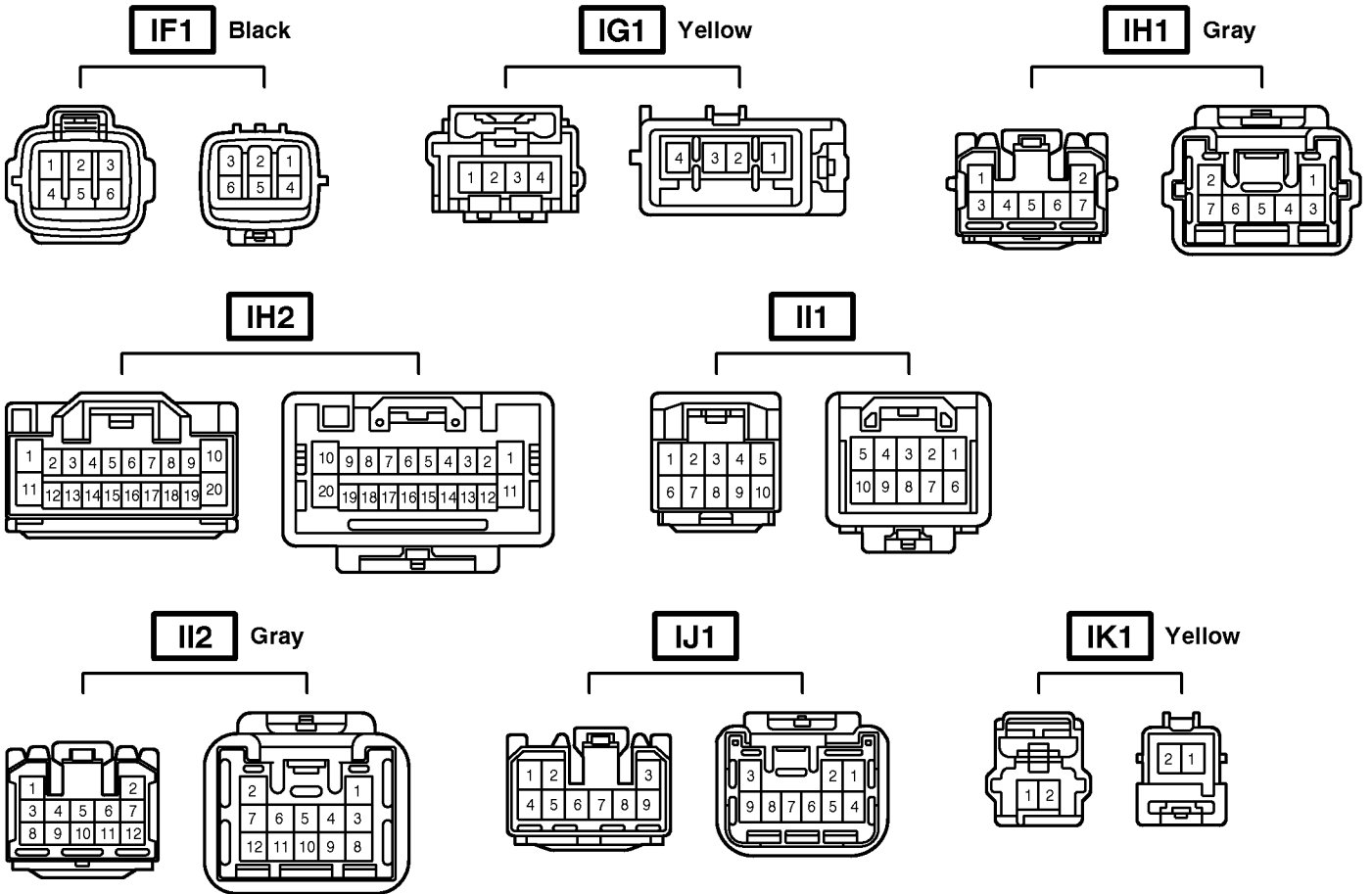
**□ : Location of Connector Joining Wire Harness and Wire Harness**



**○ : Location of Splice Points**



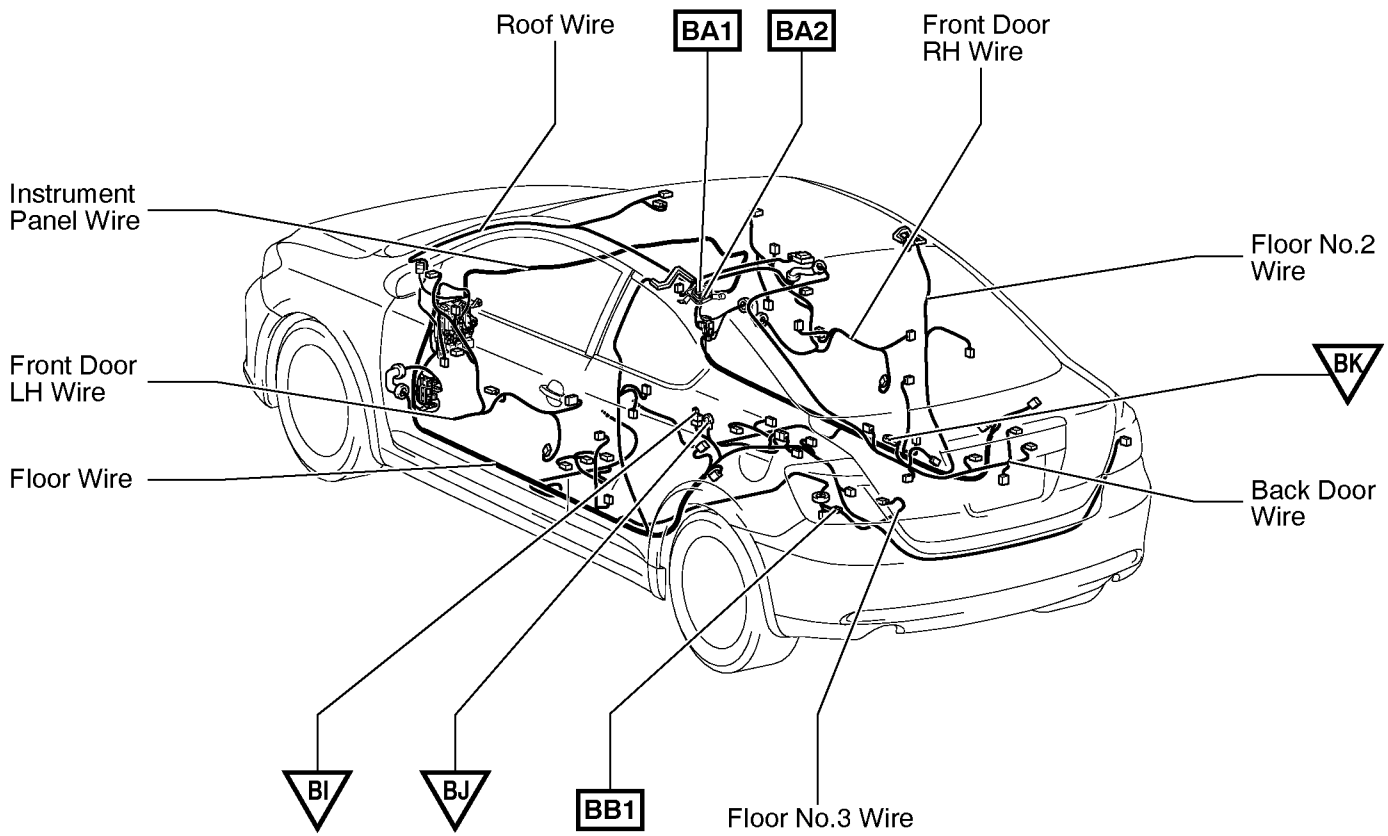
## Connector Joining Wire Harness and Wire Harness



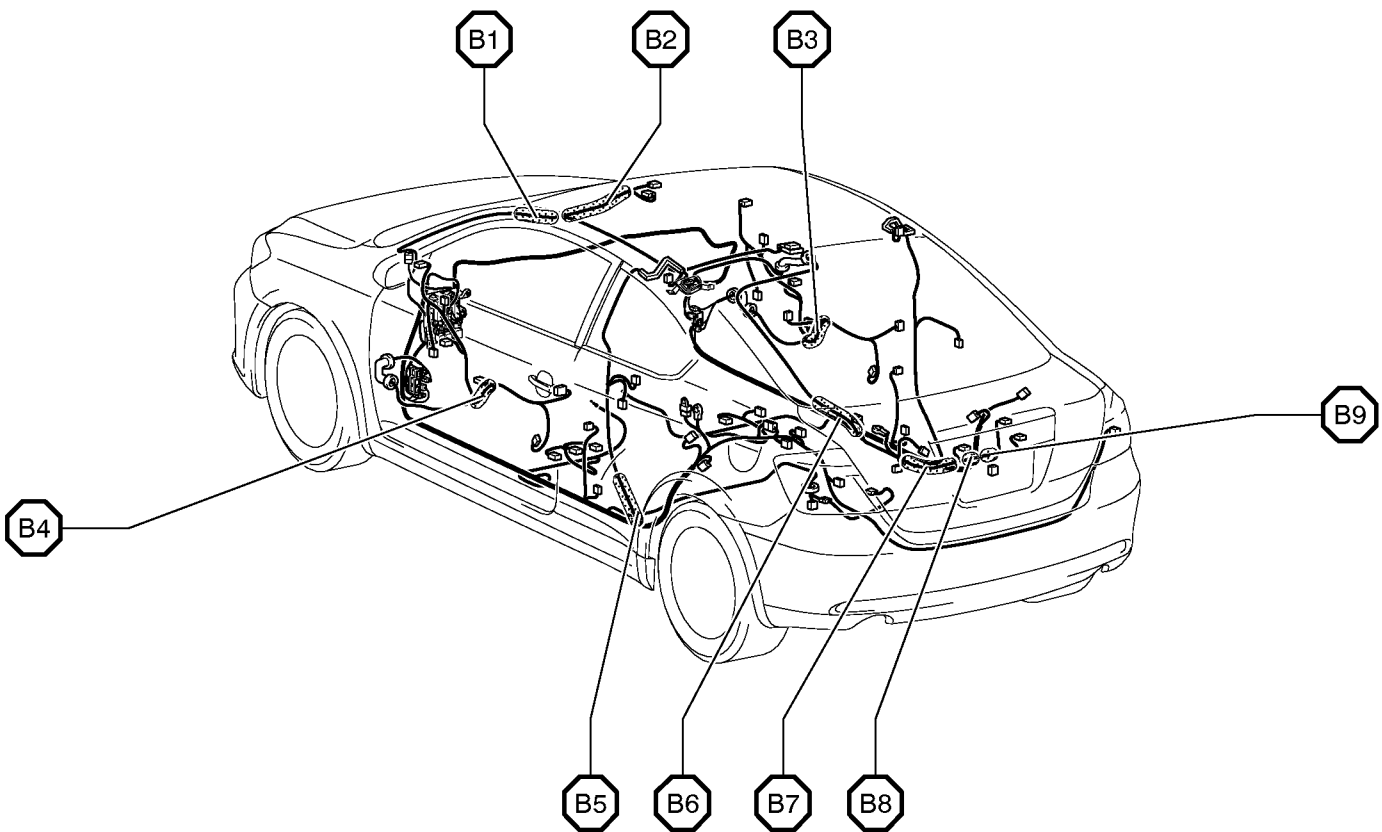
Code	Joining Wire Harness and Wire Harness (Connector Location)
IF1	Instrument Panel Wire and Switch Wire (Instrument Panel Brace LH)
IG1	Instrument Panel Wire and Instrument Panel Wire Assembly (Behind of the Glove Box)
IH1	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2	
II1	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
II2	
IJ1	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)
IK1	Front Door RH Wire and Floor No.2 Wire (Right Kick Panel)

# G ELECTRICAL WIRING ROUTING

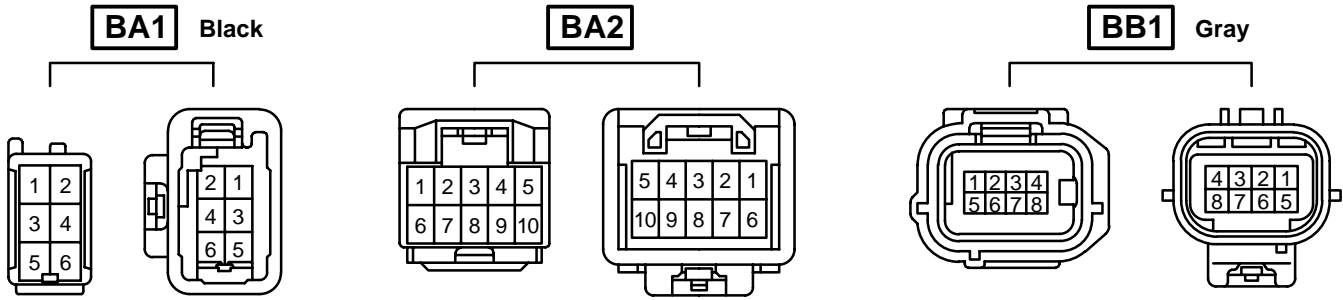
□ : Location of Connector Joining Wire Harness and Wire Harness  
 ▽ : Location of Ground Points



○ : Location of Splice Points



## Connector Joining Wire Harness and Wire Harness



Code	Joining Wire Harness and Wire Harness (Connector Location)
BA1	Back Door Wire and Floor Wire (Back Window Upper Frame LH)
BA2	
BB1	Floor Wire and Floor No.3 Wire (Center Floor Pan Center)



# 2005 tC

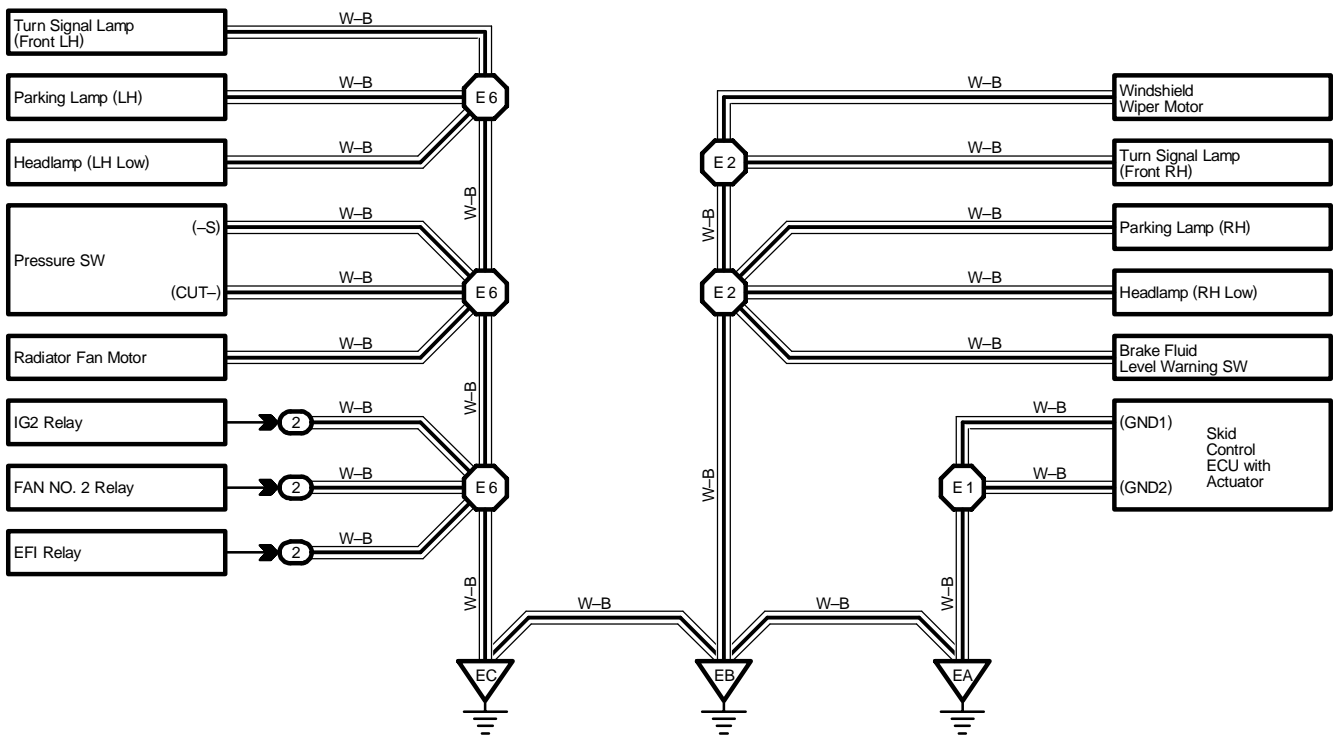
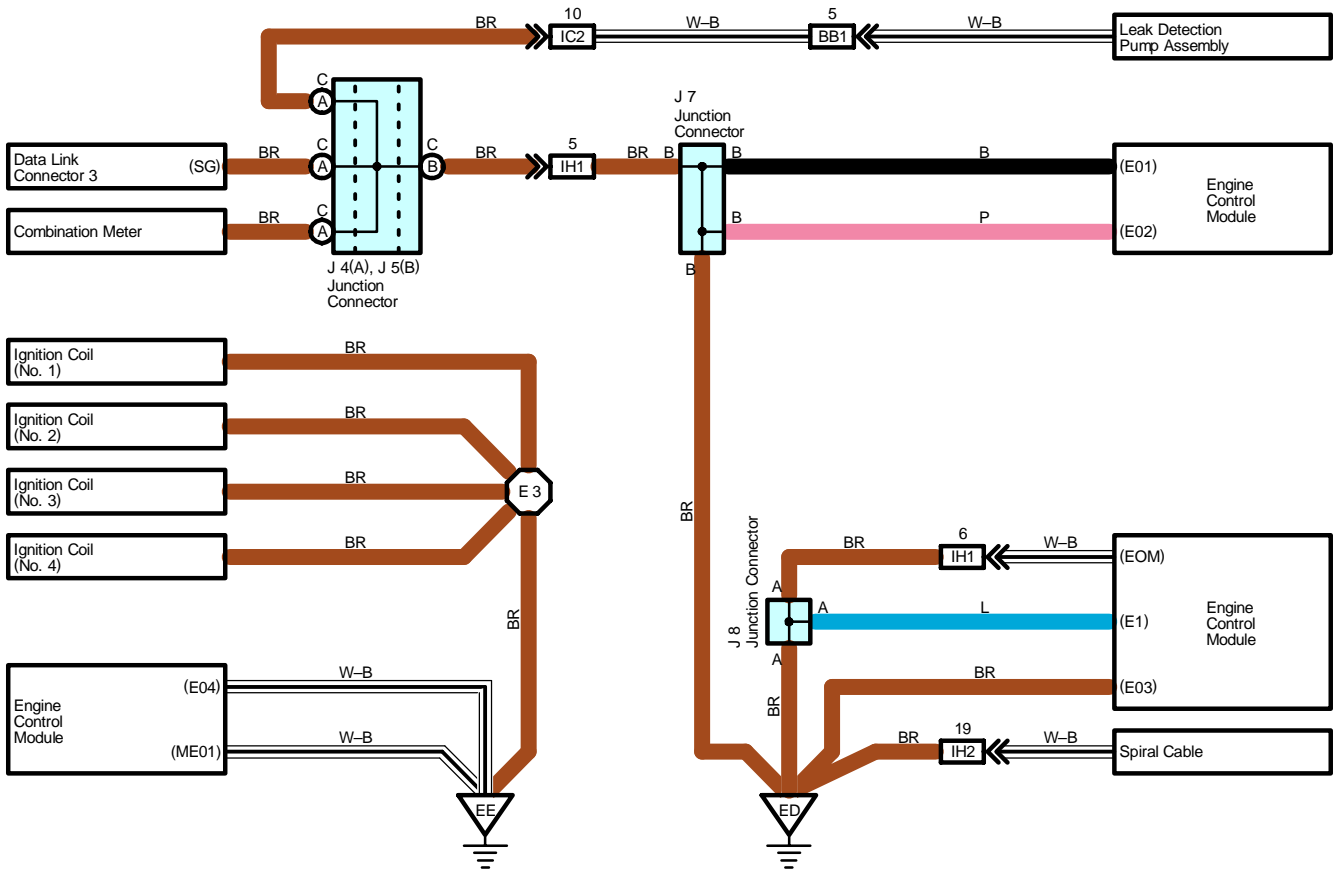
## ELECTRICAL WIRING DIAGRAM

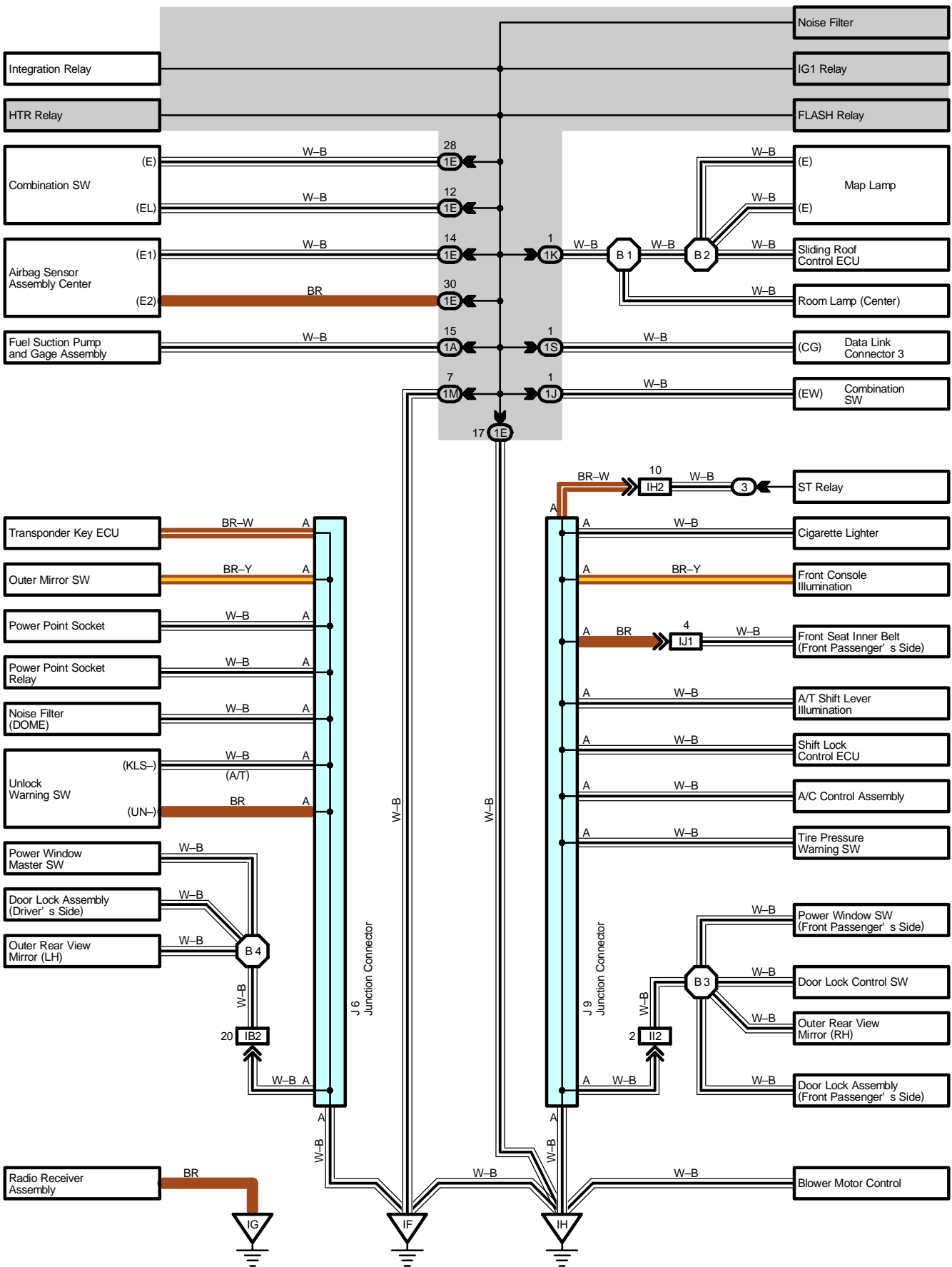
### SYSTEM CIRCUITS

	Page
ABS .....	134
Air Conditioning .....	174
Audio System .....	162
Back Door Opener .....	112
Back-Up Light .....	90
Charging .....	56
Cigarette Lighter .....	150
Combination Meter .....	164
Cruise Control .....	128
Door Lock Control .....	102
Electronically Controlled Transmission and A/T Indicator .....	122
Engine Control .....	58
Engine Immobilizer System .....	68
Front Wiper and Washer .....	92
Headlight .....	72
Horn .....	148
Ignition .....	54
Illumination .....	82
Interior Light .....	78
Key Reminder .....	154
Light Reminder .....	156
Power Outlet .....	152
Power Source .....	48
Power Window .....	98
Radiator Fan and Condenser Fan .....	170
Rear Window Defogger .....	160
Remote Control Mirror .....	96
Seat Belt Warning .....	158
Shift Lock .....	120
Sliding Roof .....	116
SRS .....	141
Starting .....	52
Stop Light .....	88
Taillight .....	86
Tire Pressure Warning System .....	134
Turn Signal and Hazard Warning Light .....	74
Wireless Door Lock Control .....	106

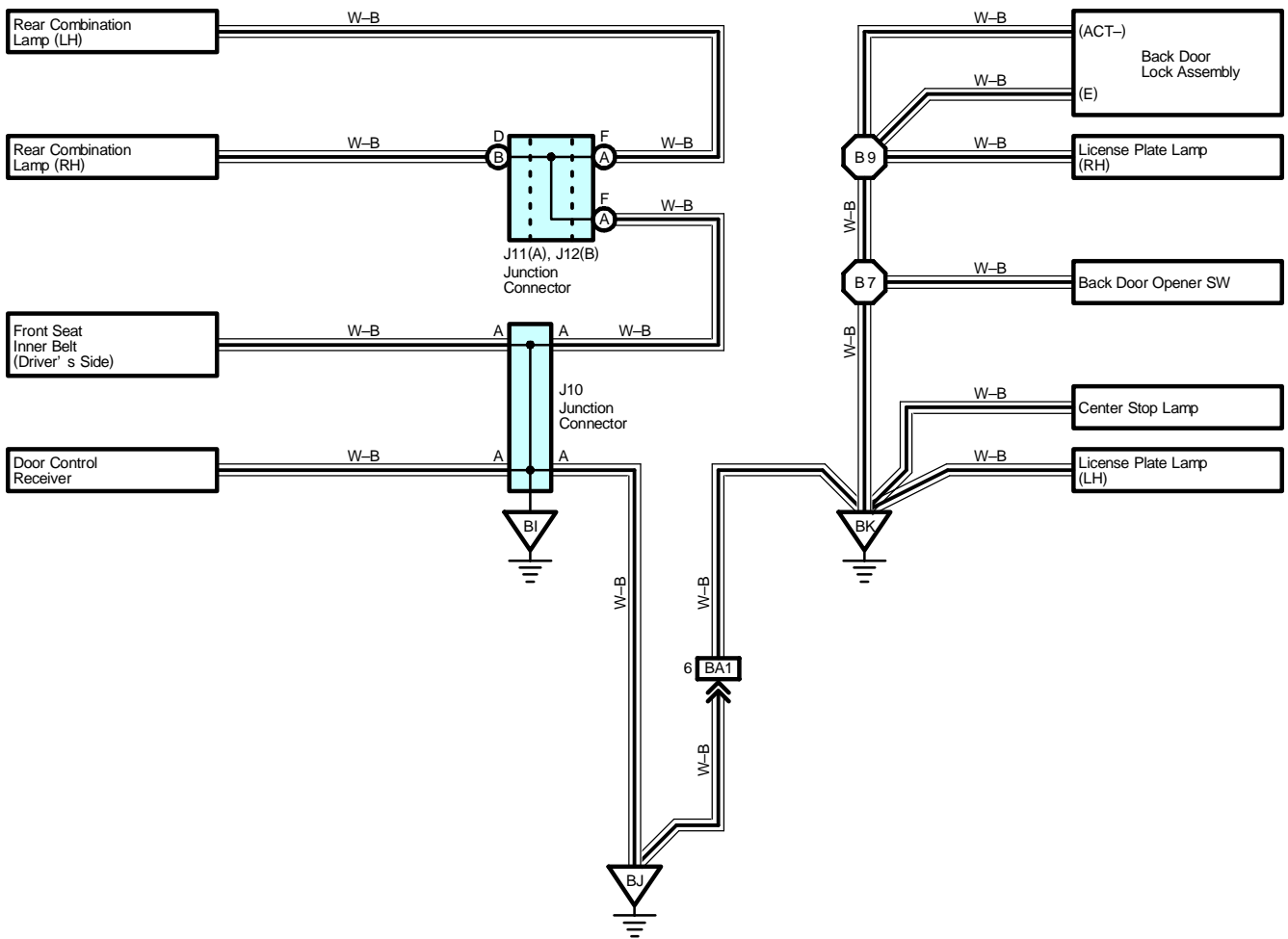


# I GROUND POINT





# I GROUND POINT



 : Parts Location

Code	See Page	Code	See Page	Code	See Page		
J4	A	35	J7	35	J10	36	
J5	B	35	J8	35	J11	A	36
J6	35	J9	35	J12	B	36	

 : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

 : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1K	24	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S		

 : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	40	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		
II2	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)
BA1	44	Back Door Wire and Floor Wire (Back Window Upper Frame LH)
BB1	44	Floor Wire and Floor No.3 Wire (Center Floor Pan Center)

 : Ground Points

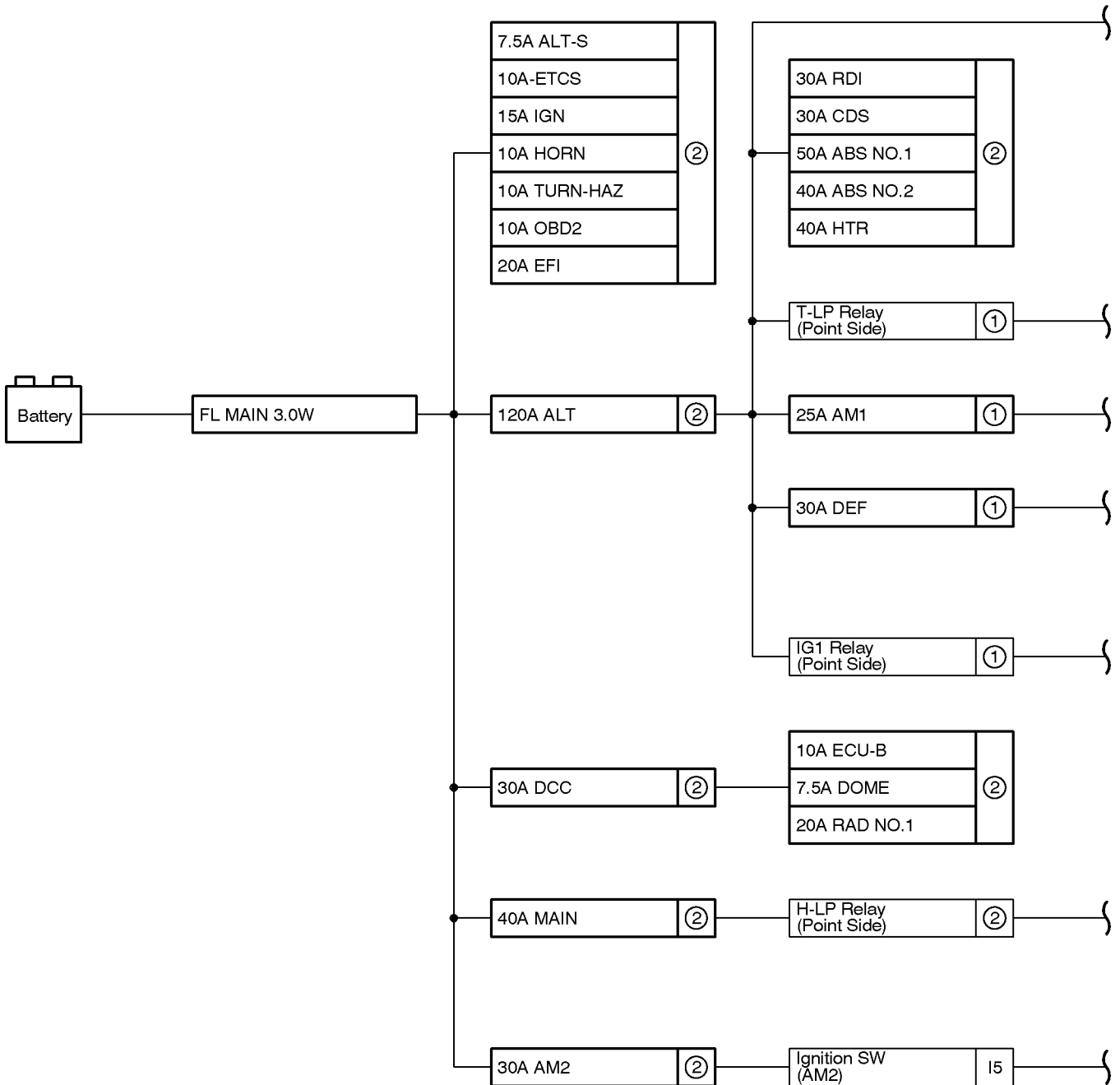
Code	See Page	Ground Points Location
EA	38	Front Right Fender
EB		
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
EE	38	Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IG	40	Instrument Panel Brace LH
IH	40	Cowl Brace RH
BI	44	Quarter Panel LH
BJ		
BK	44	Left Side of the Back Door Panel

 : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	38	Engine Room Main Wire	B2	44	Roof Wire
E2			B3	44	Front Door RH Wire
E3			B4	44	Front Door LH Wire
E6	38	Engine Room Main Wire	B7	44	Back Door Wire
B1	44	Roof Wire	B9		

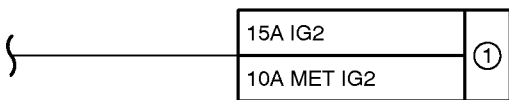
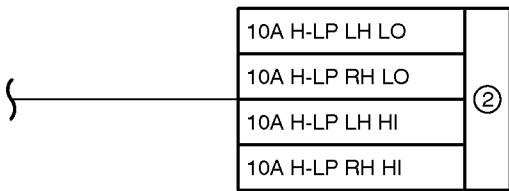
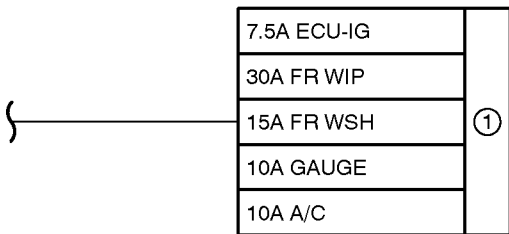
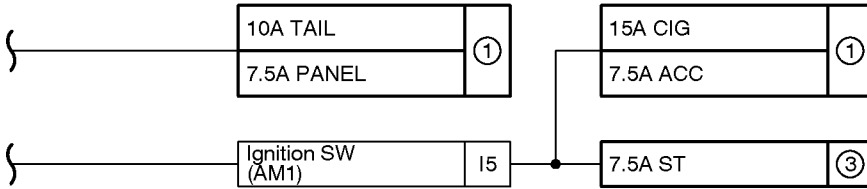
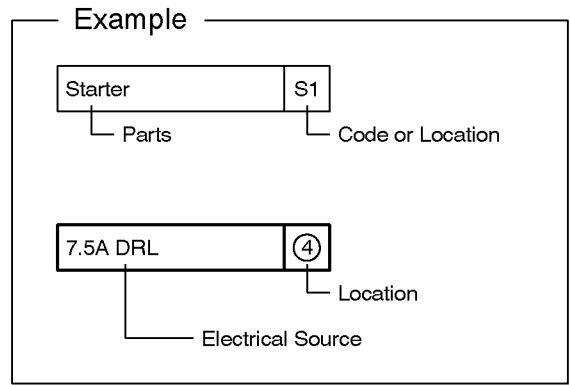
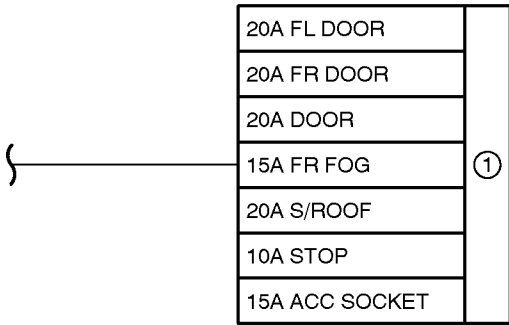
# J POWER SOURCE (Current Flow Chart)

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.



[LOCATION]

- ① : Instrument Panel J/B (See Page 24)
- ② : Engine Room R/B (See Page 22)
- ③ : Engine Room R/B No.2 (See Page 23)



## J POWER SOURCE (Current Flow Chart)

### Instrument Panel J/B (See Page 24)

Fuse		System	Page
7.5A	ACC	Audio System	162
		Power Outlet	152
		Remote Control Mirror	96
		Shift Lock	120
7.5A	ECU-IG	ABS and Tire Pressure Warning System	134
		Air Conditioning	174
		Back Door Opener	112
		Charging	56
		Cruise Control	128
		Door Lock Control	102
		Interior Light	78
		Power Window	98
		Radiator Fan and Condenser Fan	170
		Shift Lock	120
		Sliding Roof	116
7.5A	PANEL	Combination Meter	164
		Illumination	82
		Light Reminder	156
7.5A	RR DEF I/UP	Engine Control	58
10A	A/C	Air Conditioning	174
10A	GAUGE	ABS and Tire Pressure Warning System	134
		Air Conditioning	174
		Back-Up Light	90
		Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Illumination	82
		Power Window	98
		Rear Window Defogger	160
		Seat Belt Warning	158
Turn Signal and Hazard Warning Light	74		
10A	MET IG2	ABS and Tire Pressure Warning System	134
		Air Conditioning	174
		Back Door Opener	112
		Charging	56
		Combination Meter	164
		Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
		Illumination	82
		Key Reminder	154
		Light Reminder	156

\* These are the page numbers of the first page on which the related system is shown.

Fuse		System	Page
10A	MET IG2	Seat Belt Warning	158
		Sliding Roof	116
		SRS	141
10A	STOP	ABS and Tire Pressure Warning System	134
		Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
		Shift Lock	120
		Stop Light	88
10A	TAIL	Engine Control	58
		Taillight	86
15A	ACC SOCKET	Power Outlet	152
15A	CIG	Cigarette Lighter	150
15A	FR WSH	Front Wiper and Washer	92
15A	IG2	Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
		Engine Immobilizer System	68
		Ignition	54
		SRS	141
20A	DOOR	Back Door Opener	112
		Door Lock Control	102
		Power Window	98
		Sliding Roof	116
		Wireless Door Lock Control	106
20A	FL DOOR	Power Window	98
20A	FR DOOR	Power Window	98
20A	S/ROOF	Sliding Roof	116
25A	AM1	Starting	52
30A	DEF	Rear Window Defogger	160
30A	FR WIP	Front Wiper and Washer	92

### Engine Room R/B (See Page 22)

Fuse		System	Page
7.5A	ALT-S	Charging	56
7.5A	DOME	Interior Light	78
		Wireless Door Lock Control	106
10A	ECU-B	ABS and Tire Pressure Warning System	134
		Air Conditioning	174
		Back Door Opener	112
		Combination Meter	164
		Cruise Control	128
		Door Lock Control	102

\* These are the page numbers of the first page on which the related system is shown.



## J POWER SOURCE (Current Flow Chart)

Fuse		System	Page
10A	ECU-B	Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
		Engine Immobilizer System	68
		Illumination	82
		Interior Light	78
		Key Reminder	154
		Light Reminder	156
		Power Window	98
		Seat Belt Warning	158
		Sliding Roof	116
		Wireless Door Lock Control	106
10A	ETCS	Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
10A	H-LP LH HI	Headlight	72
10A	H-LP LH LO	Headlight	72
10A	H-LP RH HI	Combination Meter	164
		Headlight	72
10A	H-LP RH LO	Headlight	72
10A	HORN	Horn	148
		Wireless Door Lock Control	106
10A	OBD2	Engine Control	58
10A	TURN-HAZ	Turn Signal and Hazard Warning Light	74
15A	IGN	Engine Control	58
		Ignition	54
20A	EFI	Cruise Control	128
		Electronically Controlled Transmission and A/T Indicator	122
		Engine Control	58
		Engine Immobilizer System	68
20A	RAD NO.1	Audio System	162
30A	AM2	Starting	52
30A	CDS	Radiator Fan and Condenser Fan	170
30A	RDI	Radiator Fan and Condenser Fan	170
40A	ABS NO.2	ABS and Tire Pressure Warning System	134
40A	HTR	Air Conditioning	174
40A	MAIN	Headlight	72
		Wireless Door Lock Control	106
50A	ABS NO.1	ABS and Tire Pressure Warning System	134
120A	ALT	Charging	56
		Illumination	82
		Light Reminder	156
		Starting	52

\* These are the page numbers of the first page on which the related system is shown.

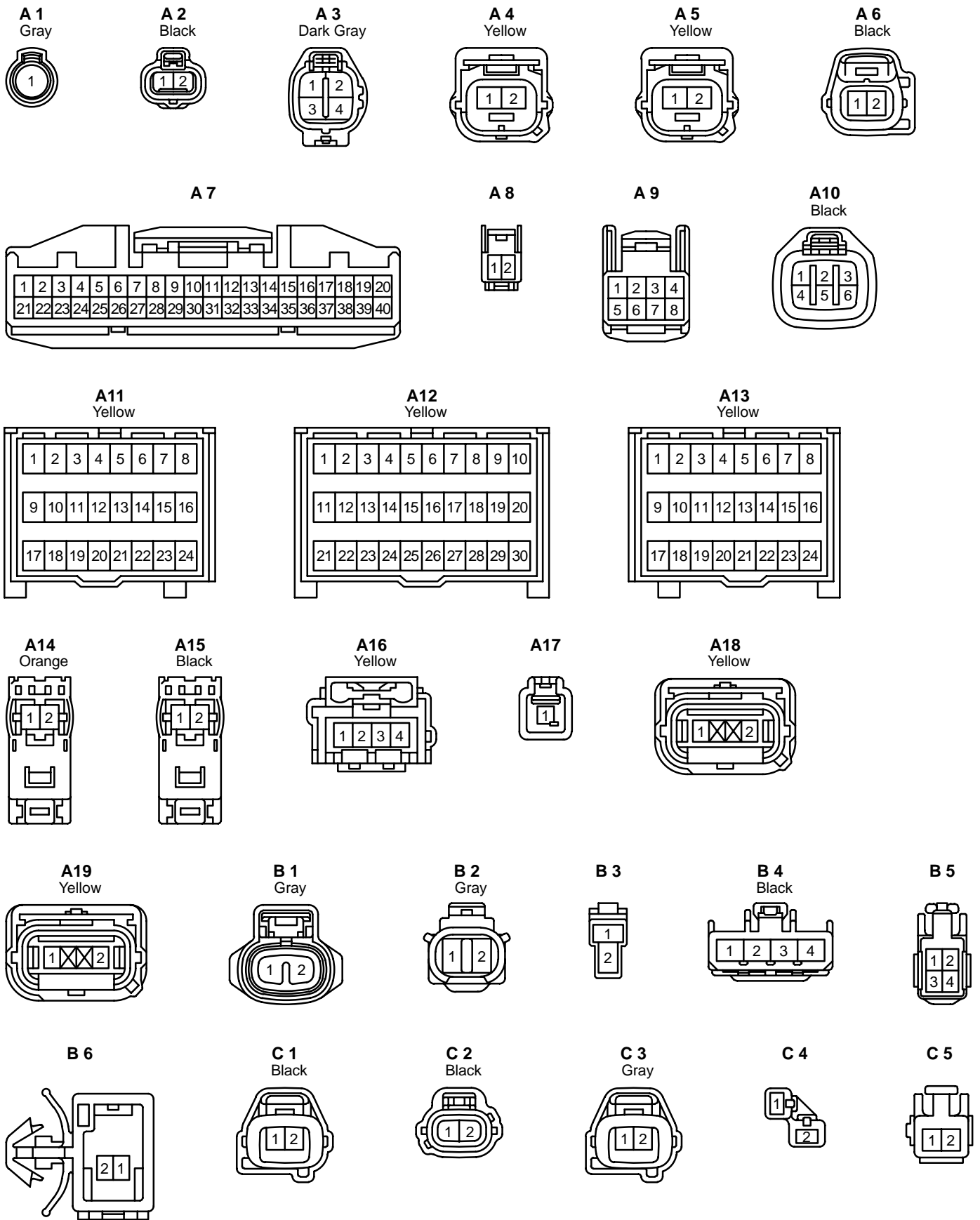
Fuse		System	Page
120A	ALT	Taillight	<a href="#">86</a>
		Wireless Door Lock Control	<a href="#">106</a>

### Engine Room R/B No.2 (See Page 23)

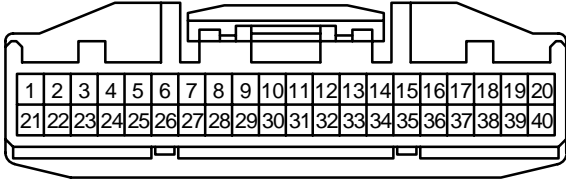
Fuse		System	Page
7.5A	ST	Electronically Controlled Transmission and A/T Indicator	<a href="#">122</a>
		Engine Control	<a href="#">58</a>
		Starting	<a href="#">52</a>

\* These are the page numbers of the first page on which the related system is shown.

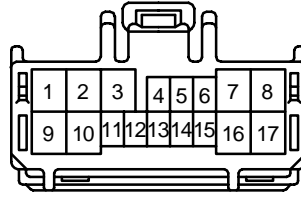
# K CONNECTOR LIST



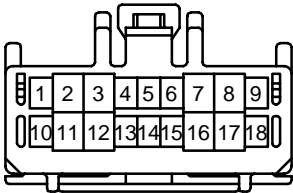
C 6



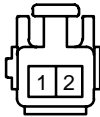
C 7



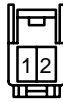
C 8  
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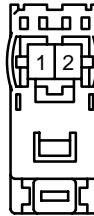
C 9



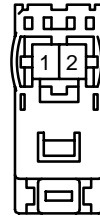
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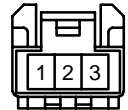
C 11



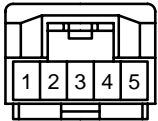
C 12  
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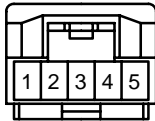
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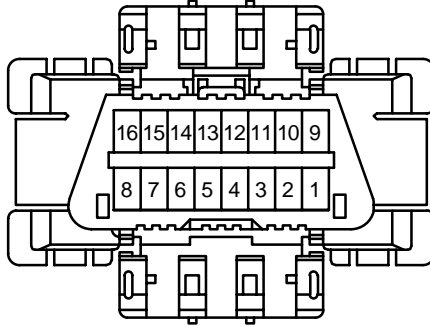
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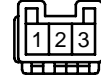
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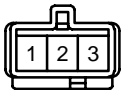
D 4



D 5



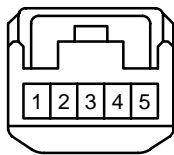
D 6



D 7  
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D 8



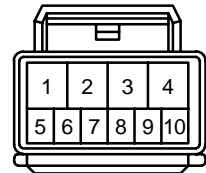
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D 10  
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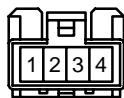
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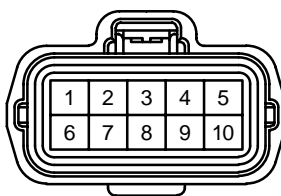
D 12



D 13



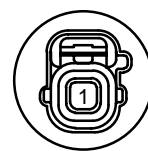
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E 2  
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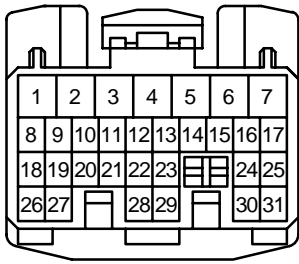


E 3  
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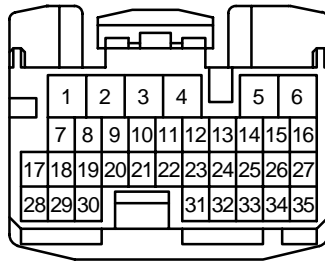


# K CONNECTOR LIST

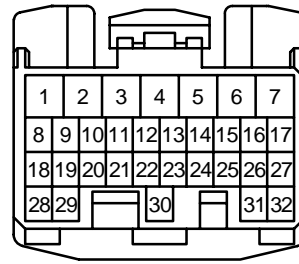
**E 4**



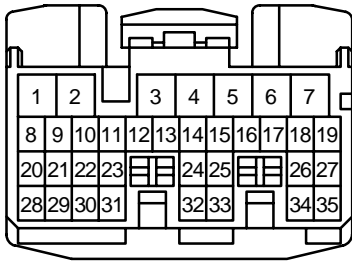
**E 5**



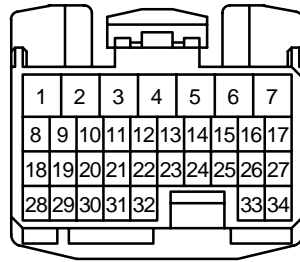
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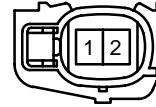
**E 7**



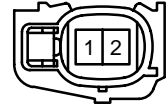
**E 8**



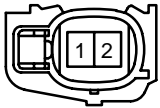
**F 1**  
Brown



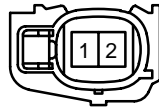
**F 2**  
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**F 3**  
Brown



**F 4**  
Brown



**F 5**



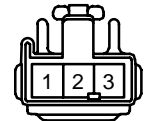
**F 6**



**F 7**



**F 8**



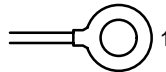
**F 9**  
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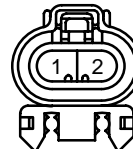
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**G 2**



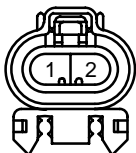
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**H 2**  
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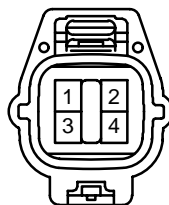
**H 3**  
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**H 4**  
Brown



**H 5**  
Dark Gray



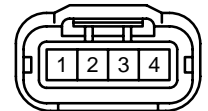
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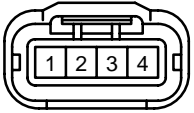
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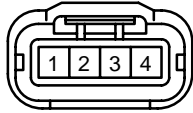
**I 1**  
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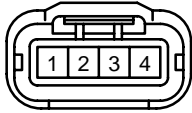
I 2  
Black



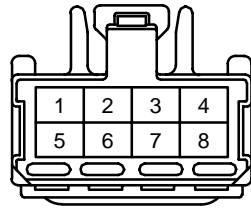
I 3  
Black



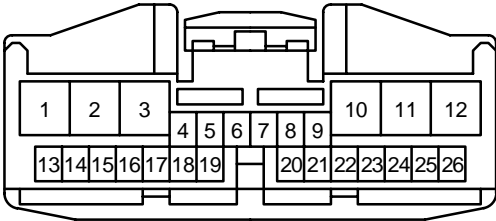
I 4  
Black



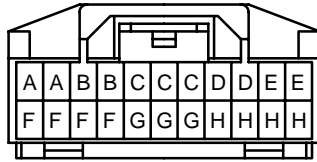
I 5



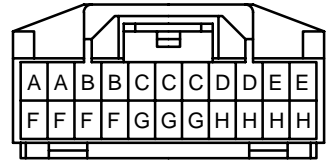
I 6



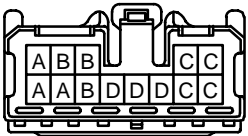
J 1



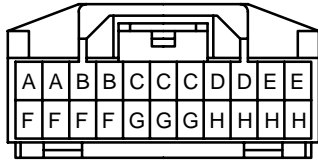
J 2



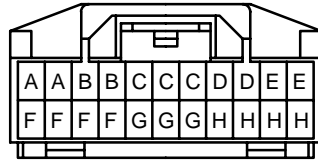
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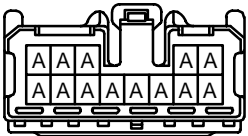
J 4



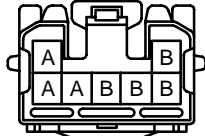
J 5



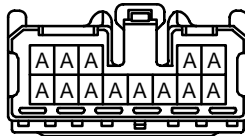
J 6  
Dark Gray



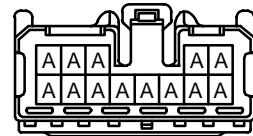
J 7



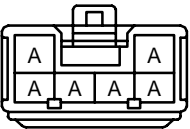
J 8  
Black



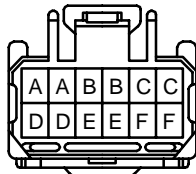
J 9  
Dark Gray



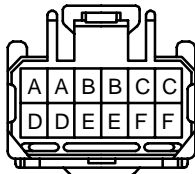
J 10



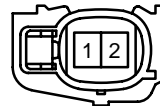
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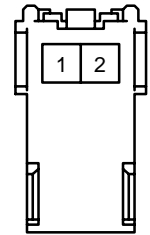
J 12



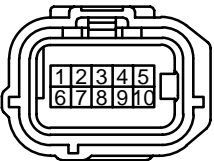
K 1  
Black



K 2  
Yellow



L 1  
Black



L 2  
Gray



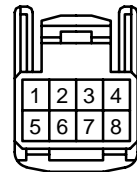
L 3  
Gray



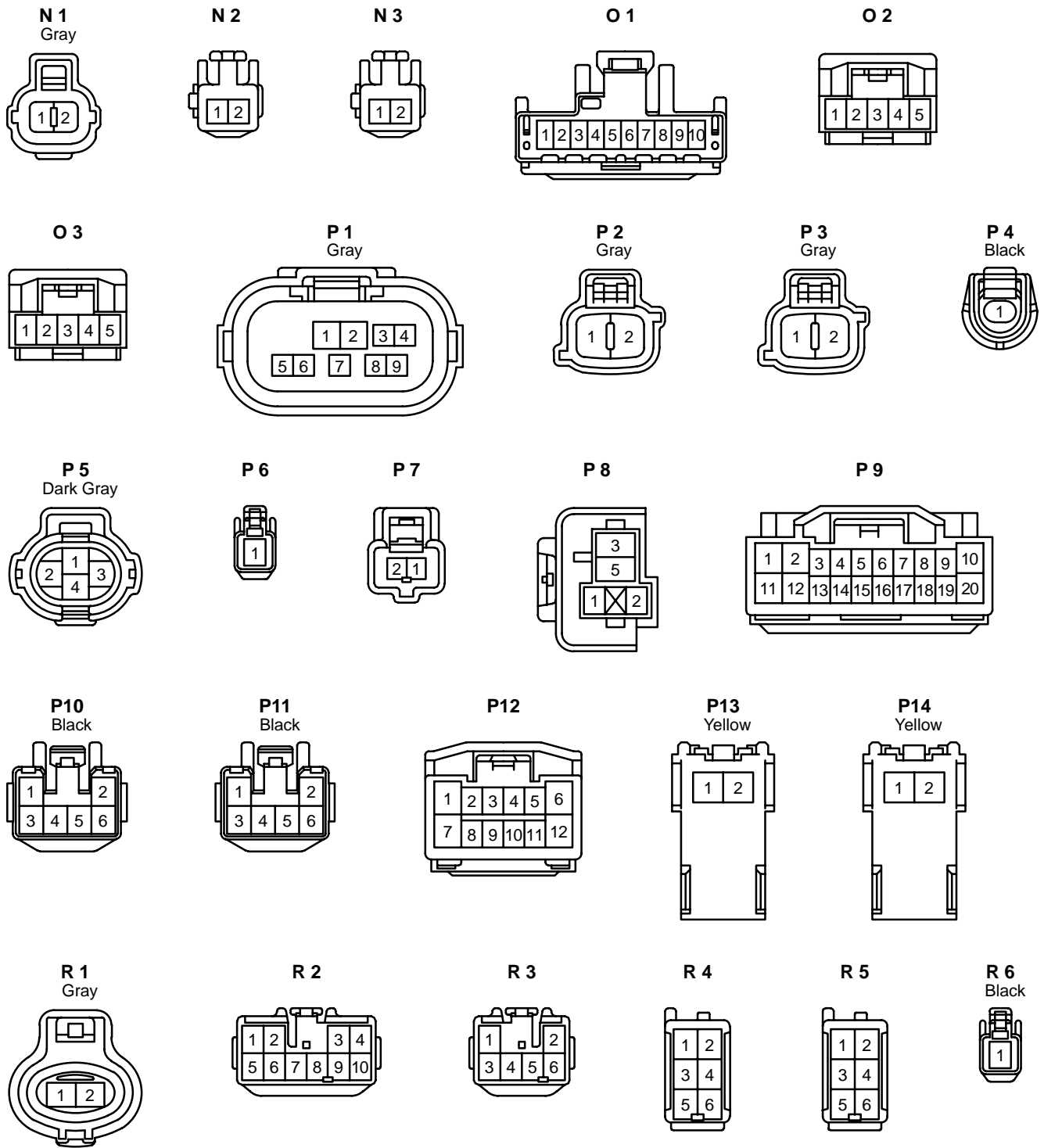
M 1  
Black

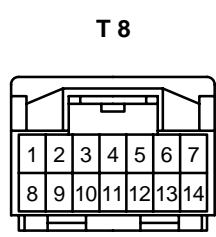
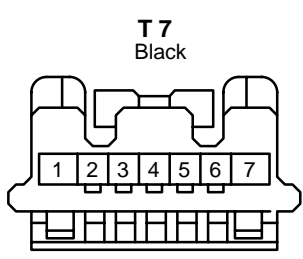
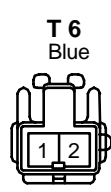
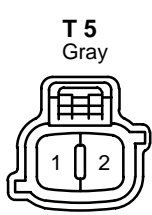
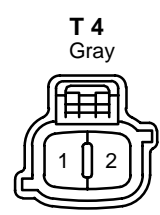
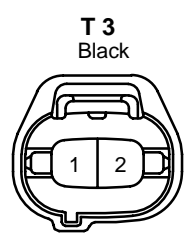
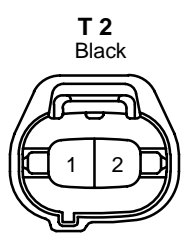
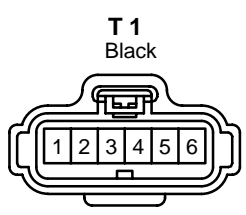
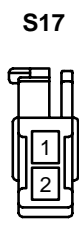
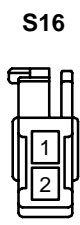
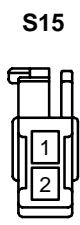
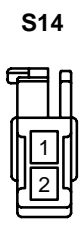
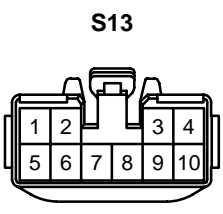
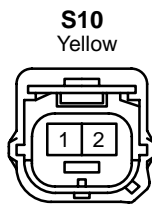
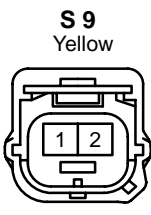
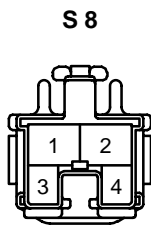
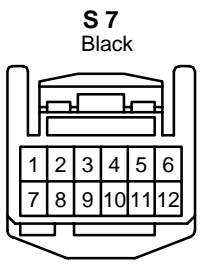
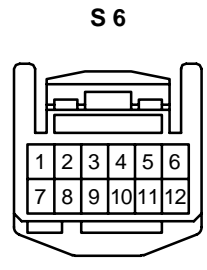
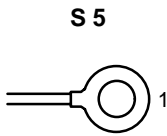
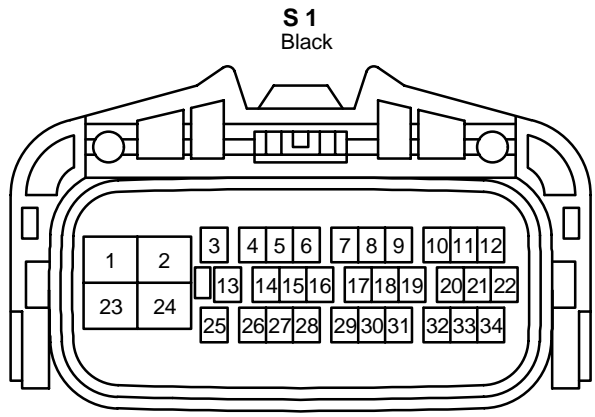
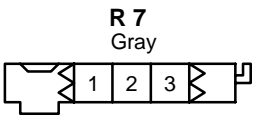


M 2



# K CONNECTOR LIST



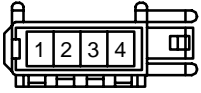




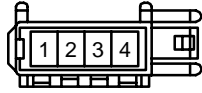
# K CONNECTOR LIST

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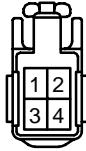
**T 9**



**T10**



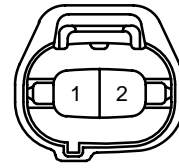
**U 1**  
(A/T)



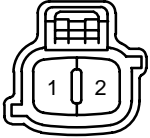
**U 1**  
(M/T)



**V 1**  
Blue



**W 1**  
Black



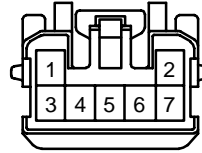
**W 2**  
Black



**Z 1**  
Gray



**Z 2**



**Z 3**





# L PART NUMBER OF CONNECTORS

Code	Part Name	Part Number	Code	Part Name	Part Number
A 1	A/C Compressor	90980-11271	D 9	Door Courtesy SW (Driver's Side)	90980-12340
A 2	A/C Condenser Fan Motor	90980-11410	D10	Door Courtesy SW (Front Passenger's Side)	
A 3	Air Fuel Ratio Sensor (Bank 1 Sensor 1)	90980-11178	D11	Door Lock Assembly (Driver's Side)	90980-12226
A 4	Airbag Sensor (Front LH)	90980-11856	D12	Door Lock Assembly (Front Passenger's Side)	
A 5	Airbag Sensor (Front RH)		90980-11070	D13	Door Lock Control SW
A 6	Ambient Temp. Sensor	90980-12169	E 1	Electronically Controlled Transmission Solenoid	90980-11658
A 7	A/C Control Assembly	90980-11918	E 2	Engine Coolant Temp. Sensor	90980-10735
A 8	A/C Thermistor No.1	90980-12221	E 3	Engine Oil Pressure SW	90980-11363
A 9	A/T Shift Lever Illumination	90980-11144	E 4	Engine Control Module	90980-12142
A10	Accelerator Position Sensor	90980-12392	E 5	Engine Control Module	90980-12146
A11	Airbag Sensor Assembly Center	90980-12391	E 6	Engine Control Module	90980-12143
A12	Airbag Sensor Assembly Center	90980-12390	E 7	Engine Control Module	90980-12145
A14	Airbag Squib (Front Passenger's Airbag Assembly)	90980-12219	E 8	Engine Control Module	90980-12144
A15	Airbag Squib (Front Passenger's Airbag Assembly)		90980-12160	F 1	Fuel Injector (No.1)
A16	Airbag Squib (Steering Wheel Pad)	90980-10870	F 2	Fuel Injector (No.2)	
A17	Antenna Amplifier	90980-12241	F 3	Fuel Injector (No.3)	
A18	Airbag Sensor (Rear LH)	90980-12241	F 4	Fuel Injector (No.4)	
A19	Airbag Sensor (Rear RH)	90980-11250	F 5	Front Console Illumination	90980-10355
B 1	Back-Up Lamp SW	90980-11207	F 6	Front Seat Inner Belt (Driver's Side)	90980-10942
B 2	Brake Fluid Level Warning SW	90980-10214	F 7	Front Seat Inner Belt (Driver's Side)	90980-11918
B 3	Blower Motor	90980-11676	F 8	Front Seat Inner Belt (Front Passenger's Side)	90980-10908
B 4	Blower Motor Control	90980-12334	F 9	Fuel Suction Pump and Gage Assembly	90980-11077
B 5	Back Door Lock Assembly	90980-11967	G 1	Generator	90980-11964
B 6	Back Door Opener SW	90980-10947	G 2	Generator	90980-09213
C 1	Camshaft Position Sensor	90980-11162	H 1	Headlamp (LH High)	90980-11659
C 2	Camshaft Timing Oil Control Valve	90980-10947	H 2	Headlamp (LH Low)	90980-11096
C 3	Crankshaft Position Sensor	90980-10760	H 3	Headlamp (RH High)	90980-11659
C 4	Cigarette Lighter	90980-10825	H 4	Headlamp (RH Low)	90980-11096
C 5	Clutch Start SW	90980-12169	H 5	Heated Oxygen Sensor (Bank 1 Sensor 2)	90980-11930
C 6	Combination Meter	90980-11672	H 6	Horn (High)	90980-10619
C 7	Combination SW	90980-11594	H 7	Horn (Low)	
C 8	Combination SW	90980-10825	I 1	Ignition Coil (No.1)	90980-11885
C 9	Cruise Control Clutch SW	90980-11918	I 2	Ignition Coil (No.2)	
C10	Center Stop Lamp	90980-12219	I 3	Ignition Coil (No.3)	
C11	Curtain Shield Airbag Squib (LH)	90980-12219	I 4	Ignition Coil (No.4)	
C12	Curtain Shield Airbag Squib (RH)	90980-11987	I 5	Ignition SW	90980-11615
D 1	Damper Servo Motor (Air Inlet)	90980-11909	I 6	Integration Relay	90980-12203
D 2	Damper Servo Motor (Air Mix)	90980-11978	J 1	Junction Connector	90980-11915
D 3	Damper Servo Motor (Air Vent Mode)	90980-11251	J 2	Junction Connector	
D 4	Data Link Connector 3	90980-11071	J 3	Junction Connector	90980-11542
D 5	Diode (Fan)	90980-10962	J 4	Junction Connector	90980-11915
D 6	Diode (Idle-Up)	90980-12366	J 5	Junction Connector	
D 7	Diode (Room Lamp)		J 6	Junction Connector	90980-11542
D 8	Door Control Receiver				

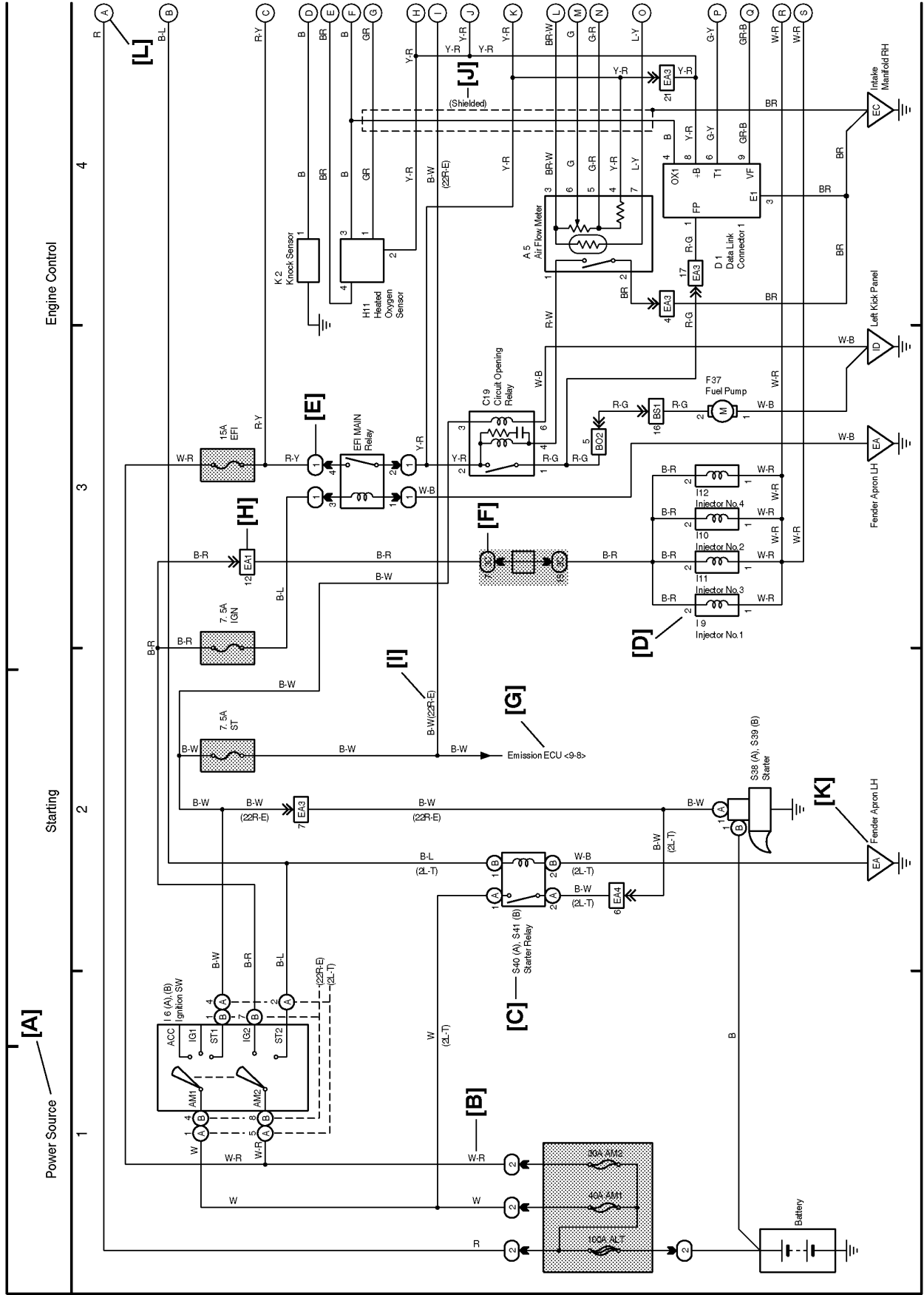
Note: Not all of the above part numbers of the connector are established for the supply.

Code	Part Name	Part Number	Code	Part Name	Part Number
J 7	Junction Connector	90980-11529	R 7	Room Lamp (Center)	81366-68010
J 8	Junction Connector	90980-11542	R 8	Room Lamp (Left Quarter)	90980-12342
J 9	Junction Connector		S 1	Skid Control ECU with Actuator	90980-12020
J10	Junction Connector	90980-10976	S 2	Speed Sensor (Front LH)	90980-11003
J11	Junction Connector	90980-11661	S 3	Speed Sensor (Front RH)	
J12	Junction Connector		S 4	Starter	
K 1	Knock Control Sensor (Bank 1)	90980-11875	S 5	Starter	90980-09506
K 2	Knee Airbag Squib	90980-12253	S 6	Shift Lock Control ECU	90980-12183
L 1	Leak Detection Pump Assembly	90980-12380	S 7	Spiral Cable	
L 2	License Plate Lamp (LH)	90980-11148	S 8	Stop Lamp SW	90980-11118
L 3	License Plate Lamp (RH)		S 9	Side Airbag Sensor (LH)	90980-11856
M 1	Mass Air Flow Meter	90980-11317	S10	Side Airbag Sensor (RH)	
M 2	Map Lamp	90980-12221	S11	Side Airbag Squib (LH)	90980-11864
N 1	Noise Filter (Ignition)	90980-10843	S12	Side Airbag Squib (RH)	
N 2	Noise Filter (DOME)	90980-12341	S13	Sliding Roof Control ECU	90980-10801
N 3	Noise Filter (DEF and Stop)		S14	Speaker (Front Door LH)	90980-12343
O 1	Outer Mirror SW	90980-11657	S15	Speaker (Front Door RH)	
O 2	Outer Rear View Mirror (LH)	90980-11909	S16	Speaker (Rear LH)	
O 3	Outer Rear View Mirror (RH)		S17	Speaker (Rear RH)	
P 1	Park/Neutral Position SW	90980-12362	S18	Speed Sensor (Rear LH)	90980-11060
P 2	Parking Lamp (LH)	90980-11019	S19	Speed Sensor (Rear RH)	
P 3	Parking Lamp (RH)		T 1	Throttle Body Assembly	90980-11858
P 4	Power Steering Oil Pressure SW	90980-11428	T 2	Transmission Revolution Sensor (Counter Gear)	90980-11156
P 5	Pressure SW	90980-10943	T 3	Transmission Revolution Sensor (Turbine)	
P 6	Parking Brake SW	90980-12340	T 4	Turn Signal Lamp (Front LH)	90980-11019
P 7	Power Point Socket	90980-10859	T 5	Turn Signal Lamp (Front RH)	
P 8	Power Point Socket Relay	82660-20340	T 6	Tire Pressure Warning SW	90980-10906
P 9	Power Window Master SW	90980-12166	T 7	Transponder Key Amplifier	90980-12092
P10	Power Window Regulator Motor (Front LH)	90980-12344	T 8	Transponder Key ECU	90980-11911
P11	Power Window Regulator Motor (Front RH)		T 9	Tweeter (LH)	90980-12304
P12	Power Window SW (Front Passenger's Side)	90980-11947	T10	Tweeter (RH)	
P13	Pretensioner (LH)	90980-12253	U 1	Unlock Warning SW (A/T)	90980-12334
P14	Pretensioner (RH)		U 1	Unlock Warning SW (M/T)	90980-12342
R 1	Radiator Fan Motor	90980-10928	V 1	VSV (EVAP)	90980-11156
R 2	Radio Receiver Assembly	90980-10997	W 1	Windshield Washer Motor	90980-11019
R 3	Radio Receiver Assembly	90980-10996	W 2	Windshield Wiper Motor	90980-11599
R 4	Rear Combination Lamp (LH)	90980-11011	Z 1	Option Connector (Front Fog Lamp)	90980-11007
R 5	Rear Combination Lamp (RH)		Z 2	Option Connector (Front Fog Lamp SW)	90980-12336
R 6	Rear Window Defogger	90980-12340	Z 3	Option Connector (TVIP)	90980-10870

# M OVERALL ELECTRICAL WIRING DIAGRAM

\* The system shown here is an EXAMPLE ONLY. It is different to the actual circuit shown in the wiring diagram section.

**HOW TO READ THIS SECTION**



**[A]** : System Title

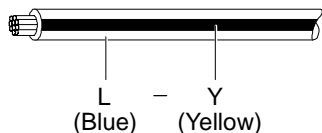
**[B]** : Indicates the wiring color.

Wire colors are indicated by an alphabetical code.

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

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

Example: L - Y

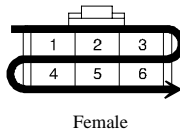


**[C]** : The position of the parts is the same as shown in the wiring diagram and wire routing.

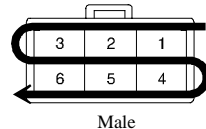
**[D]** : Indicates the pin number of the connector. The numbering system is different for female and male connectors.

Example : Numbered in order from upper left to lower right

Numbered in order from upper right to lower left



Female



Male

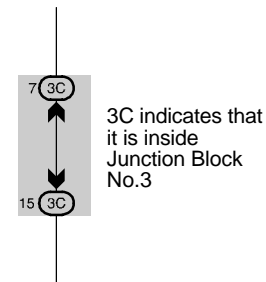
The numbering system for the overall wiring diagram is the same as above

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

Example : Indicates Relay Block No.1

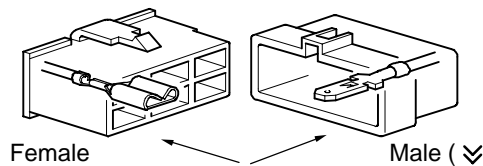
**[F]** : Junction Block (The number in the circle is the J/B No. and the connector code is shown beside it). Junction Blocks are shaded to clearly separate them from other parts.

Example:



**[G]** : Indicates related system.

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



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

**[J]** : Indicates a shielded cable.

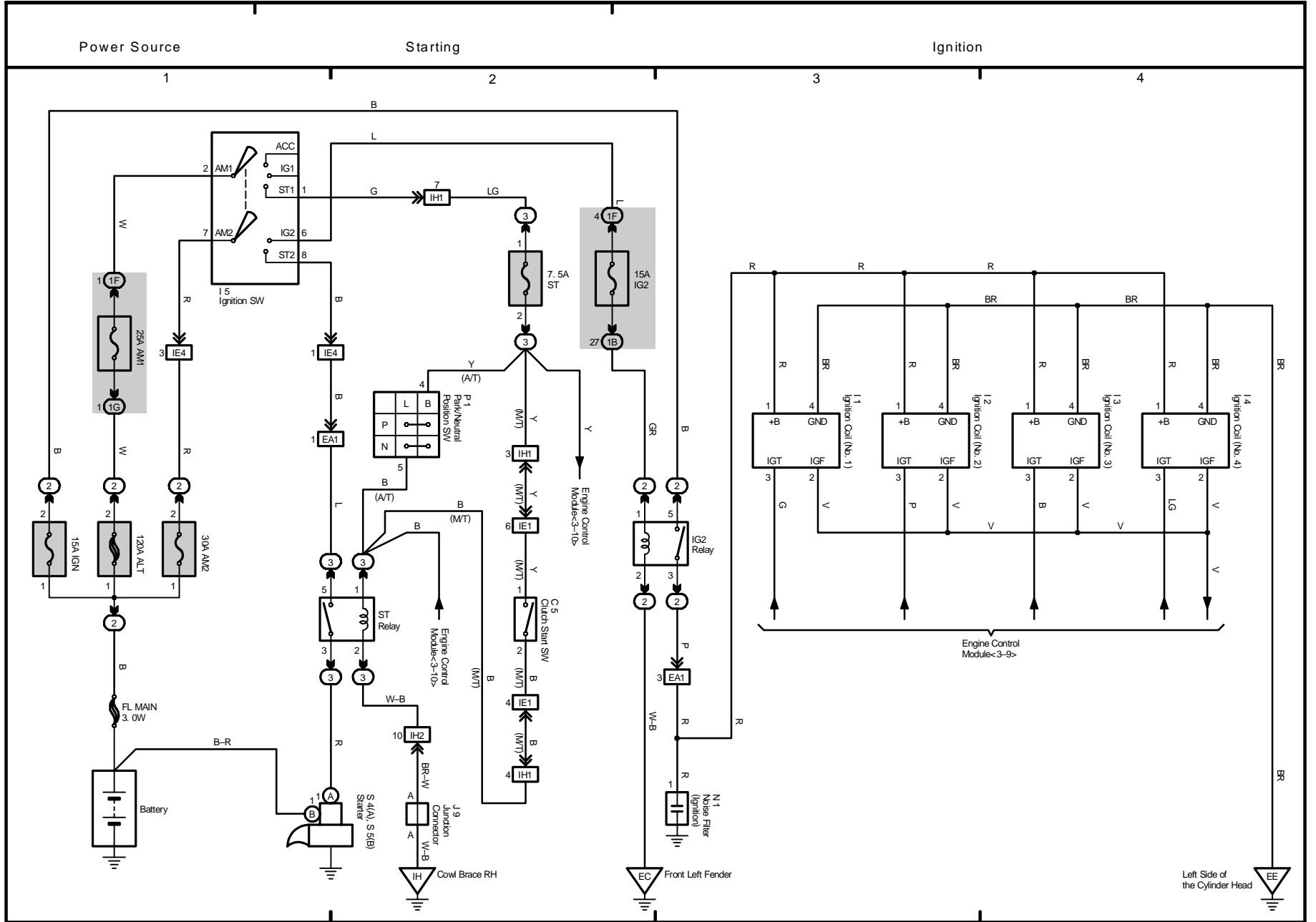


**[K]** : Indicates and located on ground point.

**[L]** : The same code occurring on the next page indicates that the wire harness is continuous.

## SYSTEM INDEX

SYSTEMS	LOCATION	SYSTEMS	LOCATION
ABS .....	15-2	Light Reminder .....	17-4
Air Conditioning .....	23-2	Option Connector (Front Fog Light) .....	6-4
Audio System .....	20-3	Option Connector (TVIP) .....	14-7
Back Door Opener .....	14-6	Power Outlet .....	20-2
Back-Up Light .....	11-2	Power Source .....	1-23-1
Charging .....	2-2	Power Window .....	13-2
Cigarette Lighter .....	19-4	Radiator Fan and Condenser Fan .....	22-3
Combination Meter .....	21-2	Rear Window Defogger .....	19-2
Cruise Control .....	5-2	Remote Control Mirror .....	19-3
Door Lock Control .....	14-2	Seat Belt Warning .....	17-2
Electronically Controlled Transmission and A/T Indicator .....	4-2	Shift Lock .....	18-2
Engine Control .....	3-5	Sliding Roof .....	18-4
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Illumination .....	9-2	Turn Signal and Hazard Warning Light .....	7-2
Interior Light .....	10-2	Wireless Door Lock Control .....	14-8
Key Reminder .....	17-4		

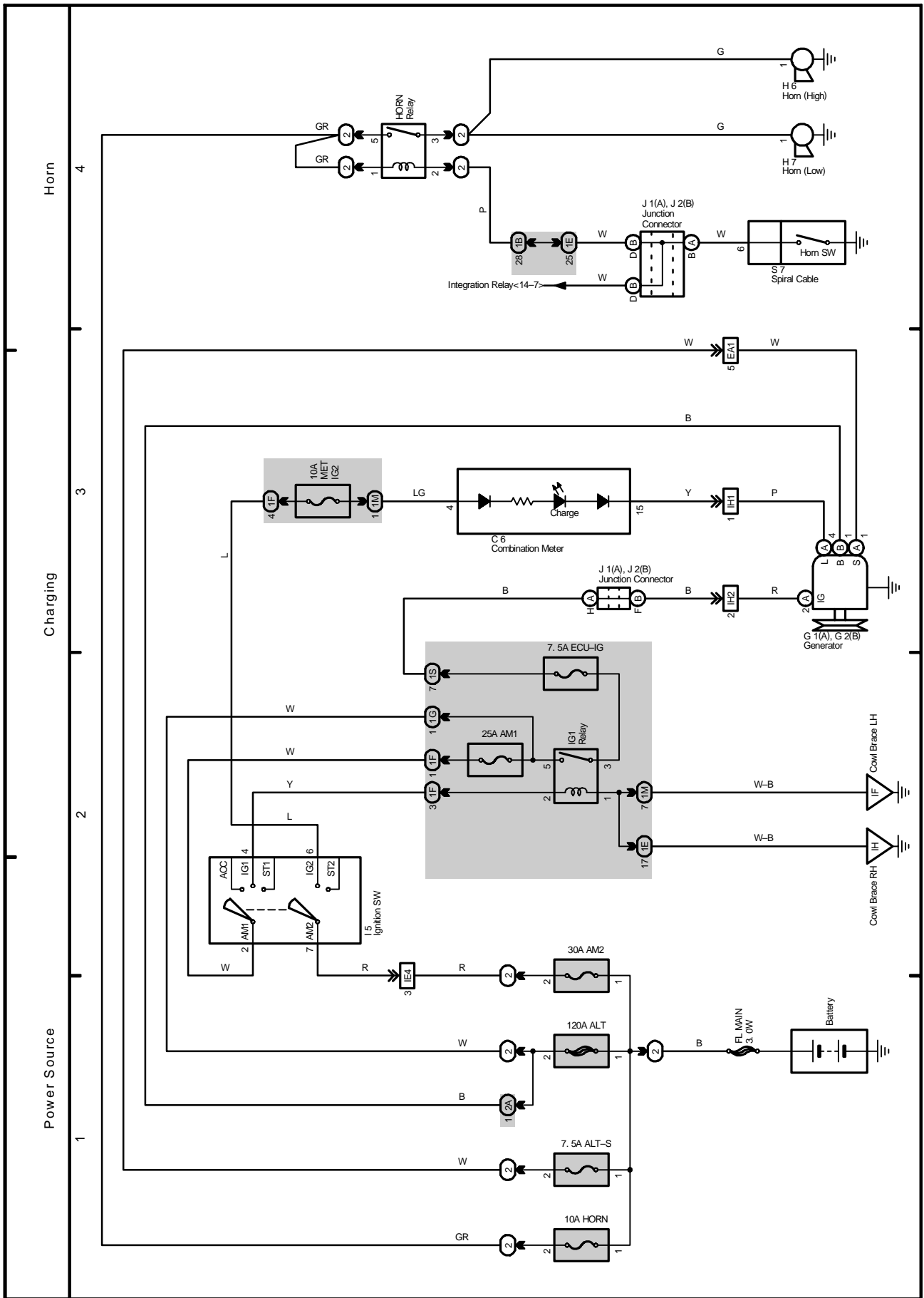


2005 SCION tC (EWD57ZU)



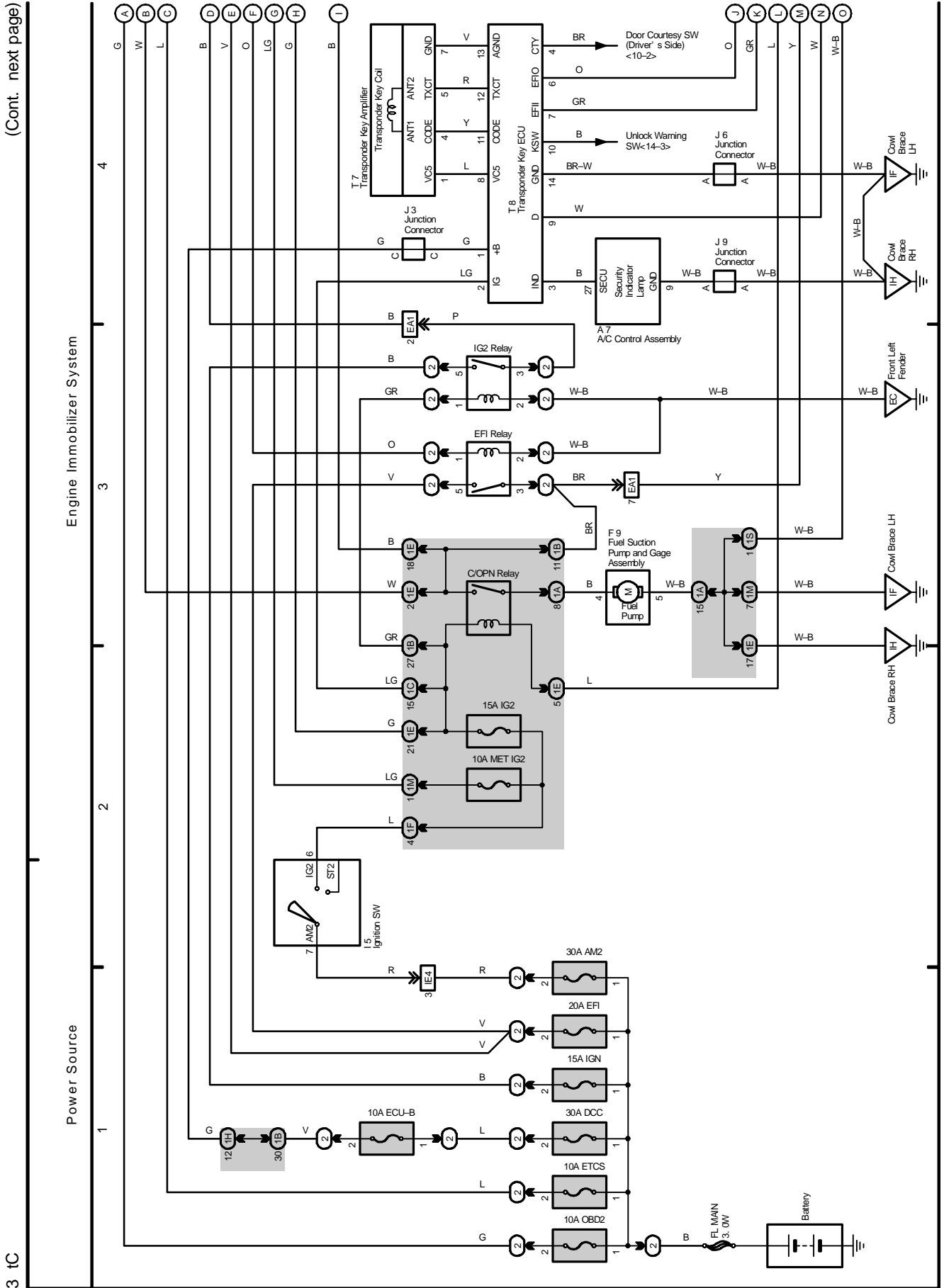
# M OVERALL ELECTRICAL WIRING DIAGRAM

2 tC





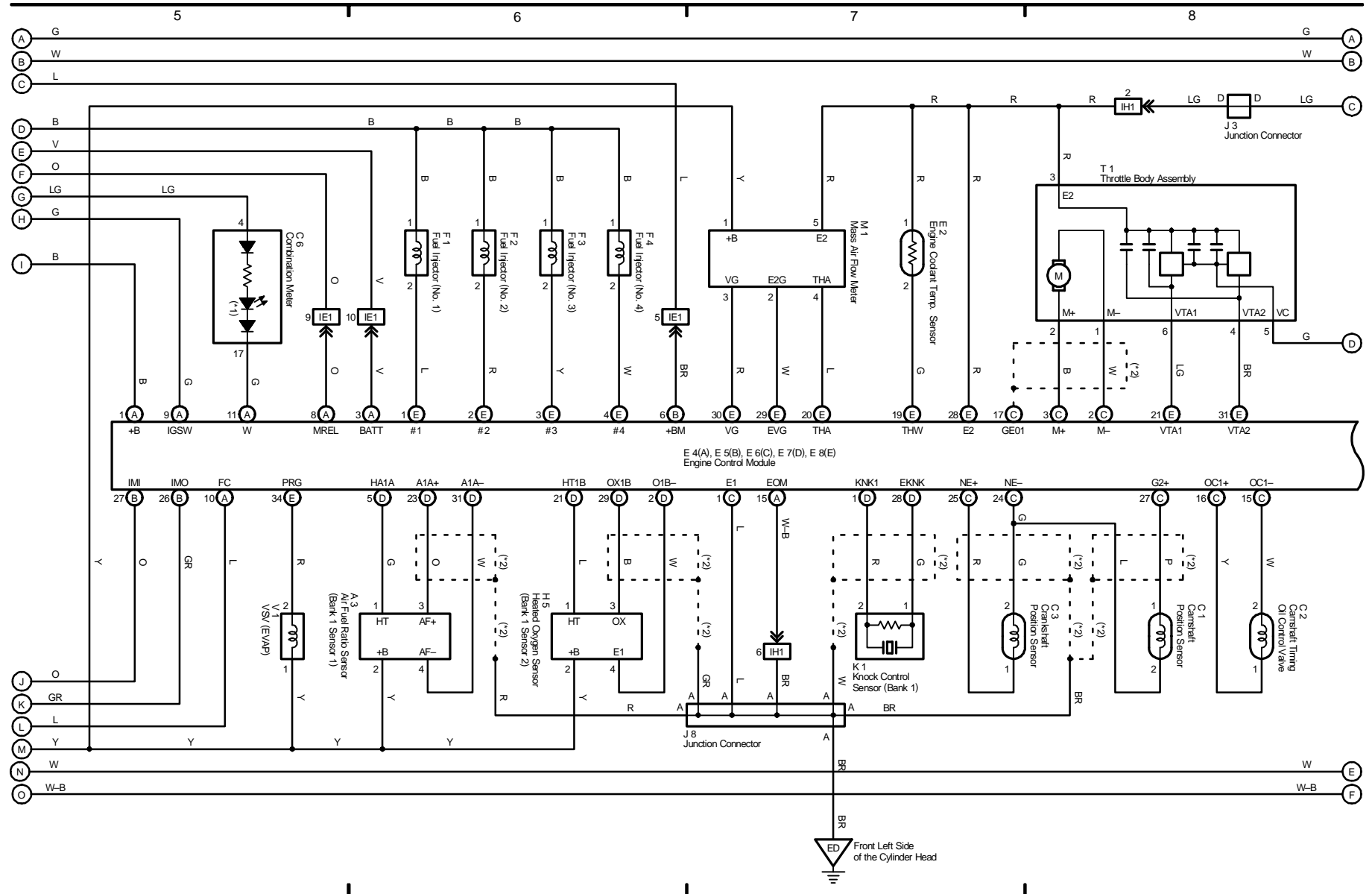
# M OVERALL ELECTRICAL WIRING DIAGRAM



3 tC

Engine Control

\* 1: Malfunction Indicator Lamp  
\* 2: Shielded



2005 SCION tC (EWD57ZU)



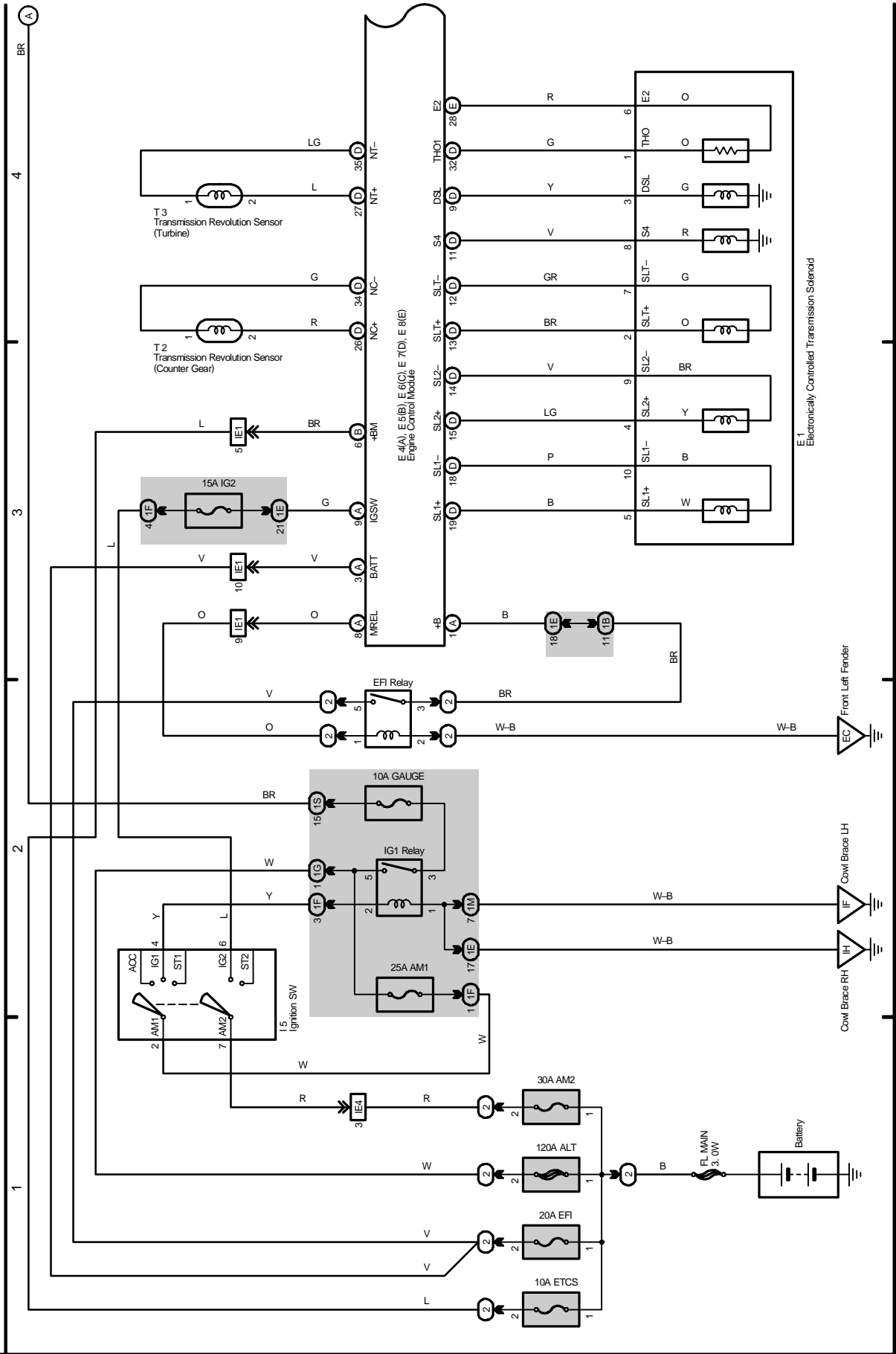


# M OVERALL ELECTRICAL WIRING DIAGRAM

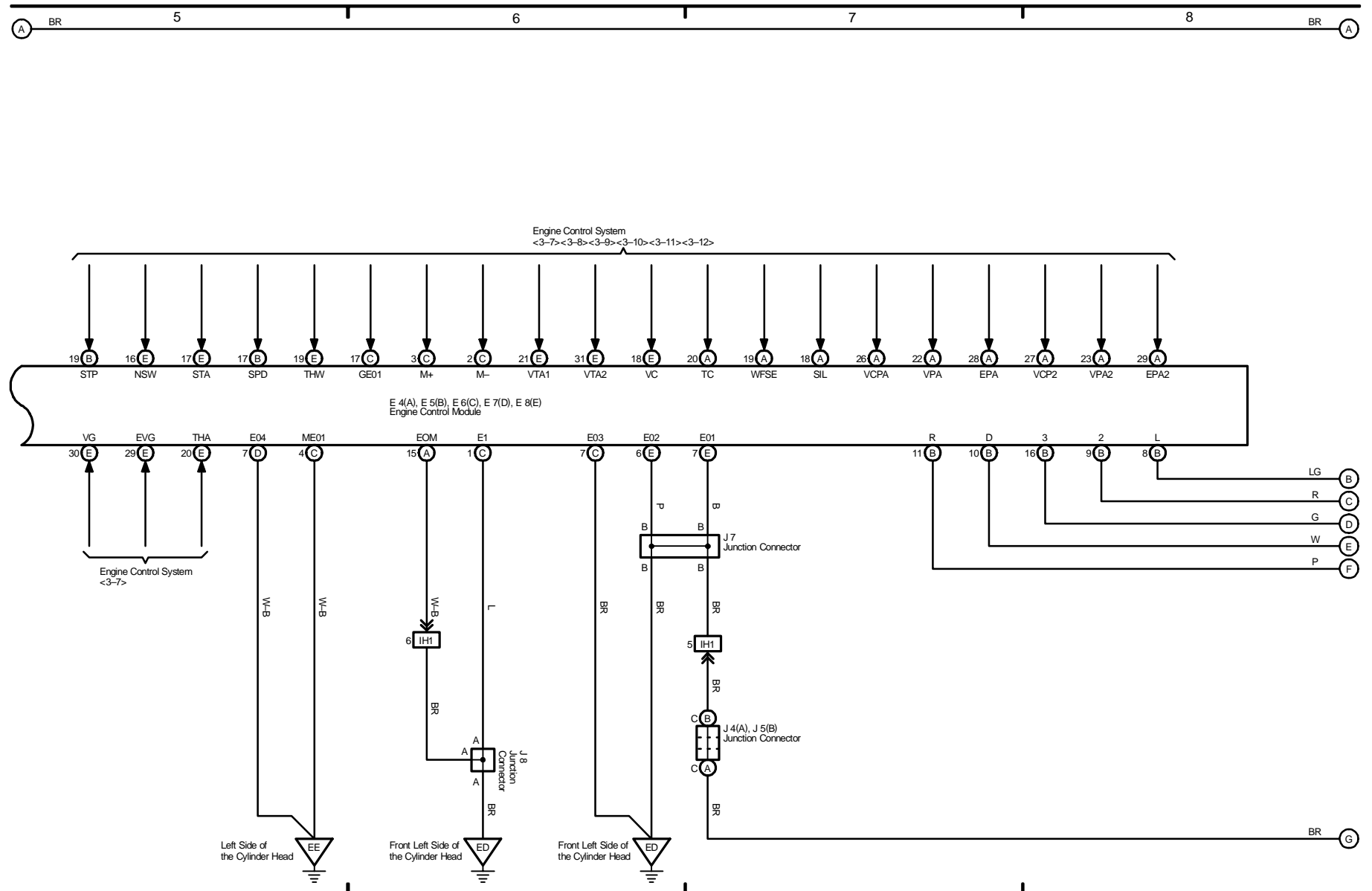
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4 tC

## Electronically Controlled Transmission and A/T Indicator



Electronically Controlled Transmission and A/T Indicator



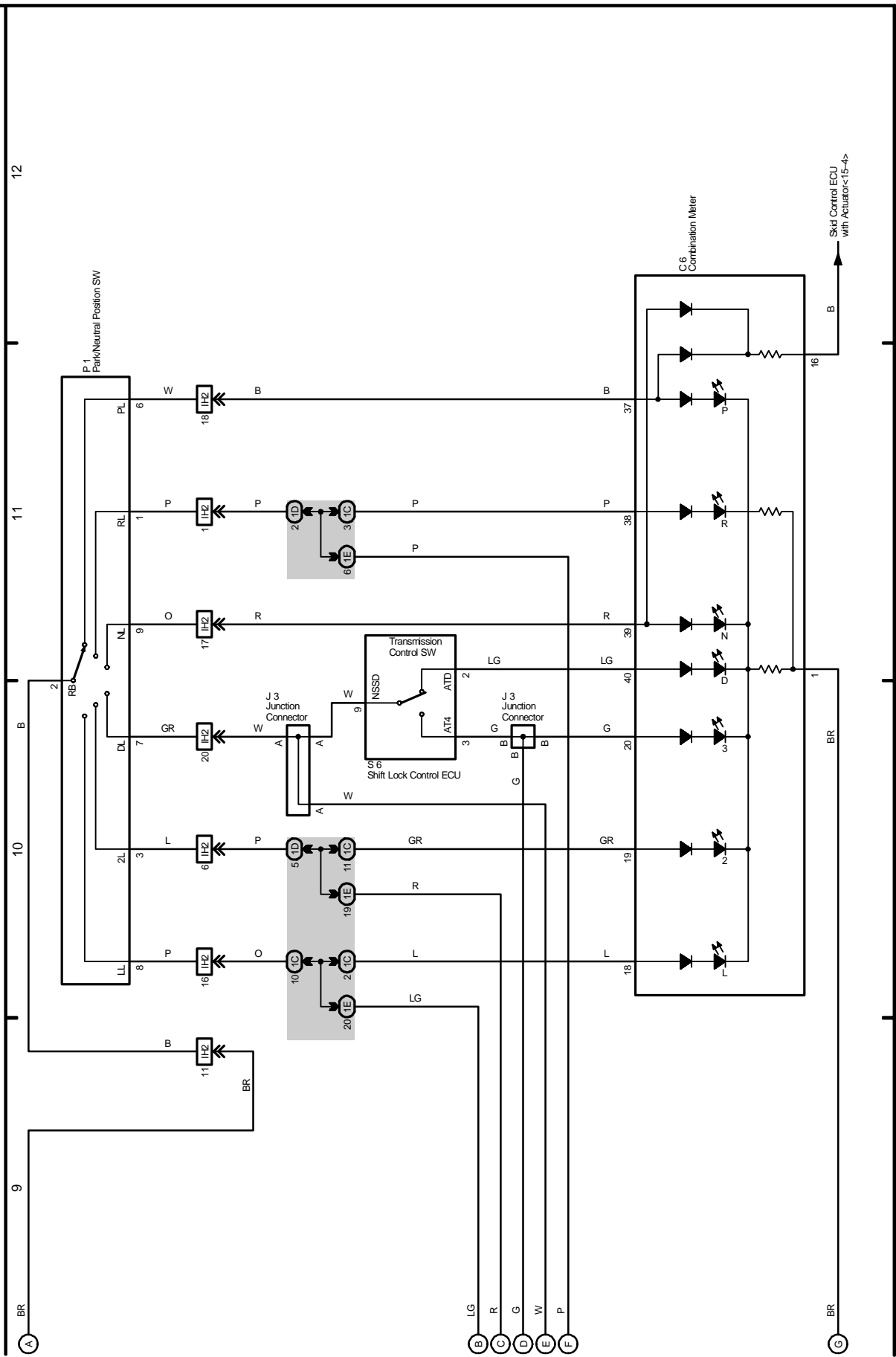
2005 SCION tC (EWD572U)



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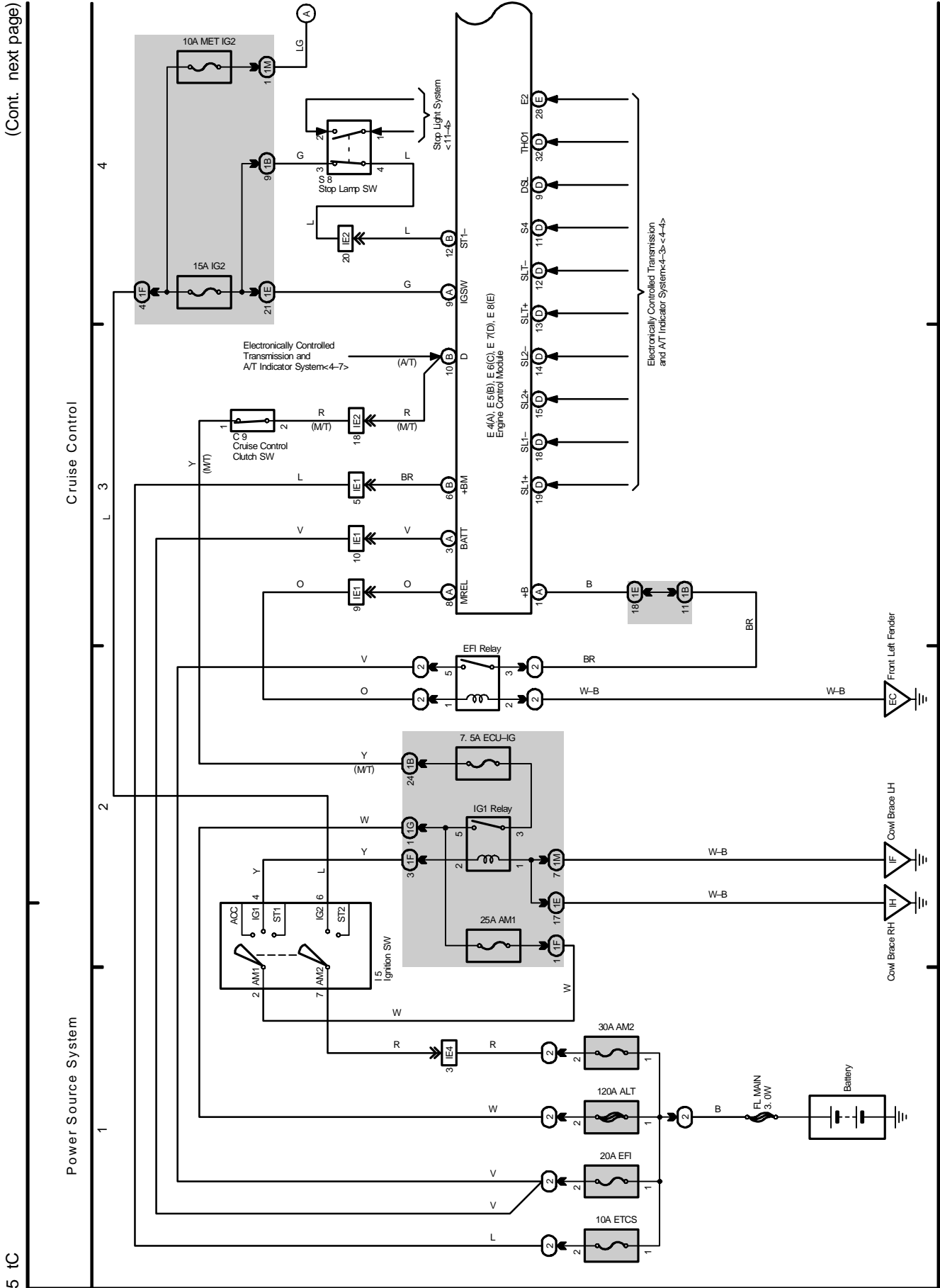
4 tC (Cont' d)

## Electrically Controlled Transmission and A/T Indicator





# M OVERALL ELECTRICAL WIRING DIAGRAM



5 tC

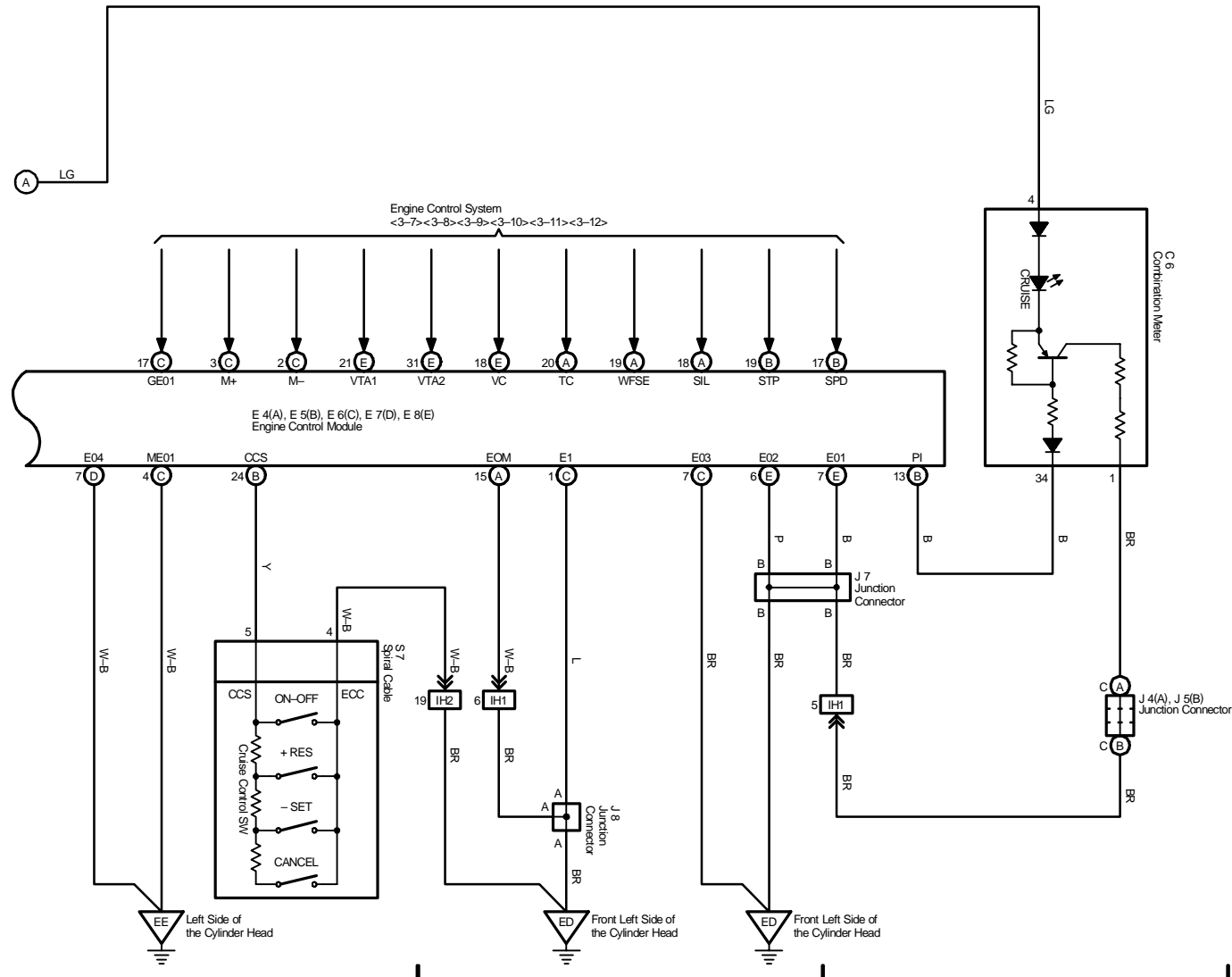
Cruise Control

5

6

7

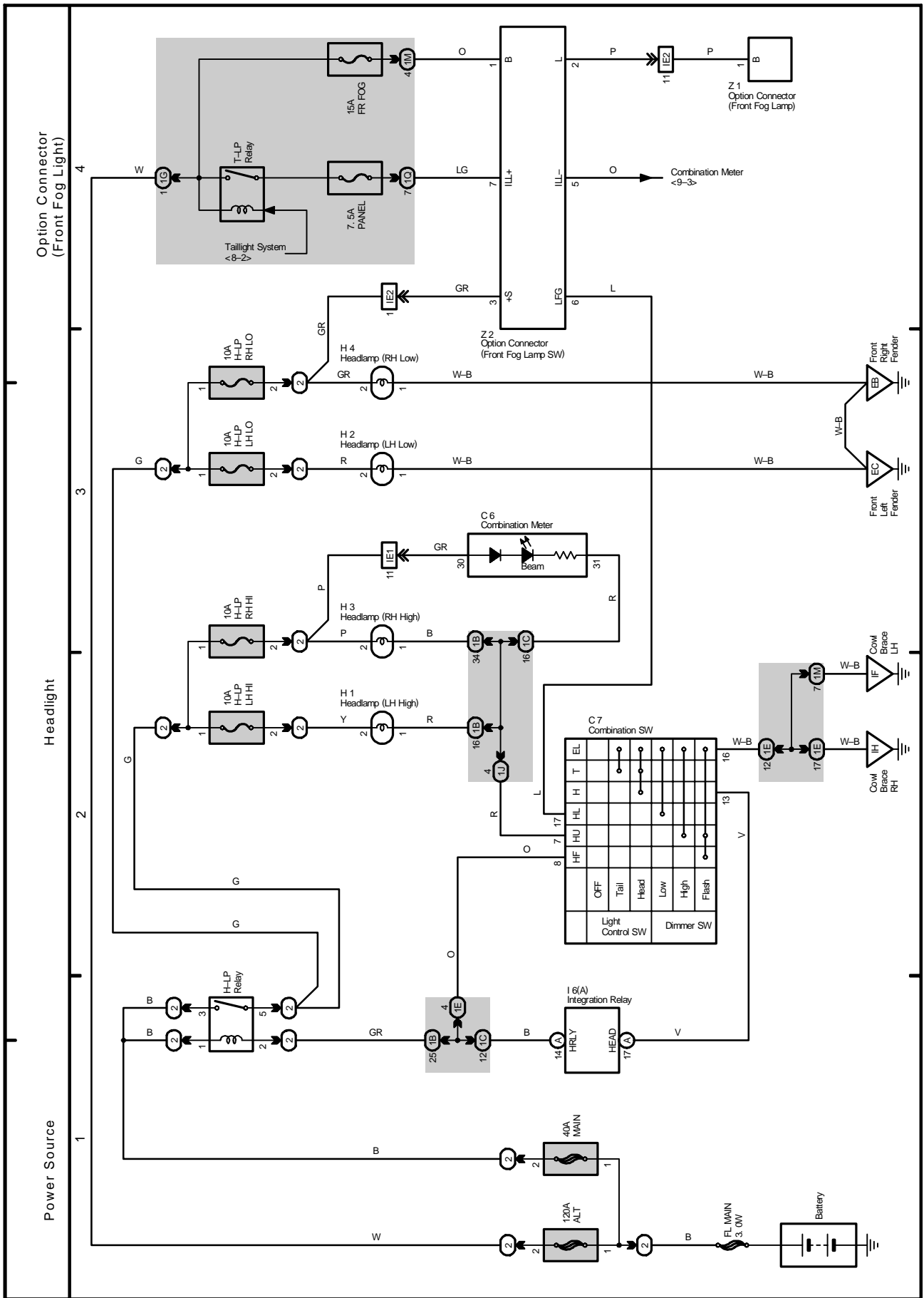
8



2005 SCION tC (EWD57ZU)

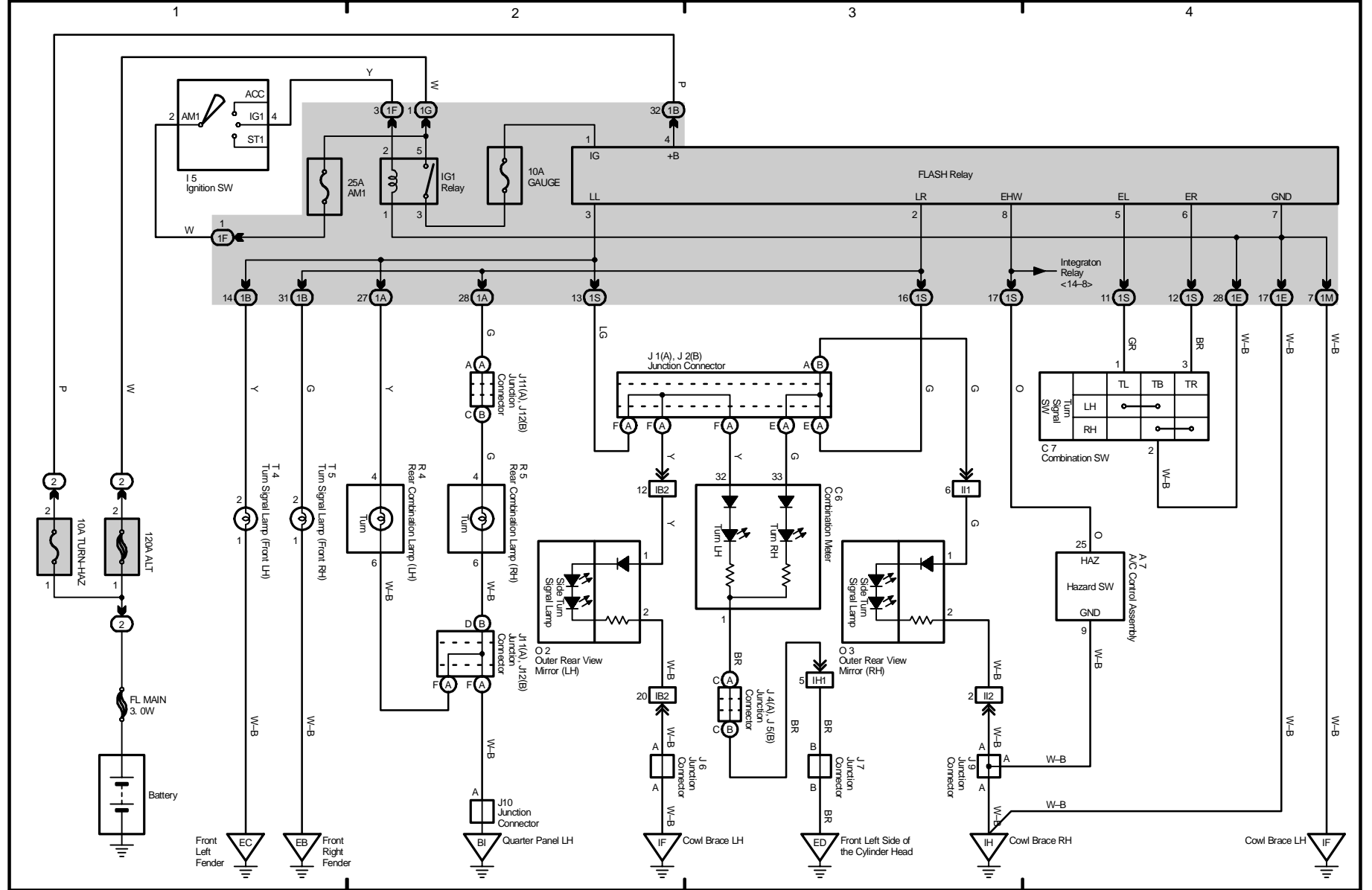
# M OVERALL ELECTRICAL WIRING DIAGRAM

6 tC



Power Source

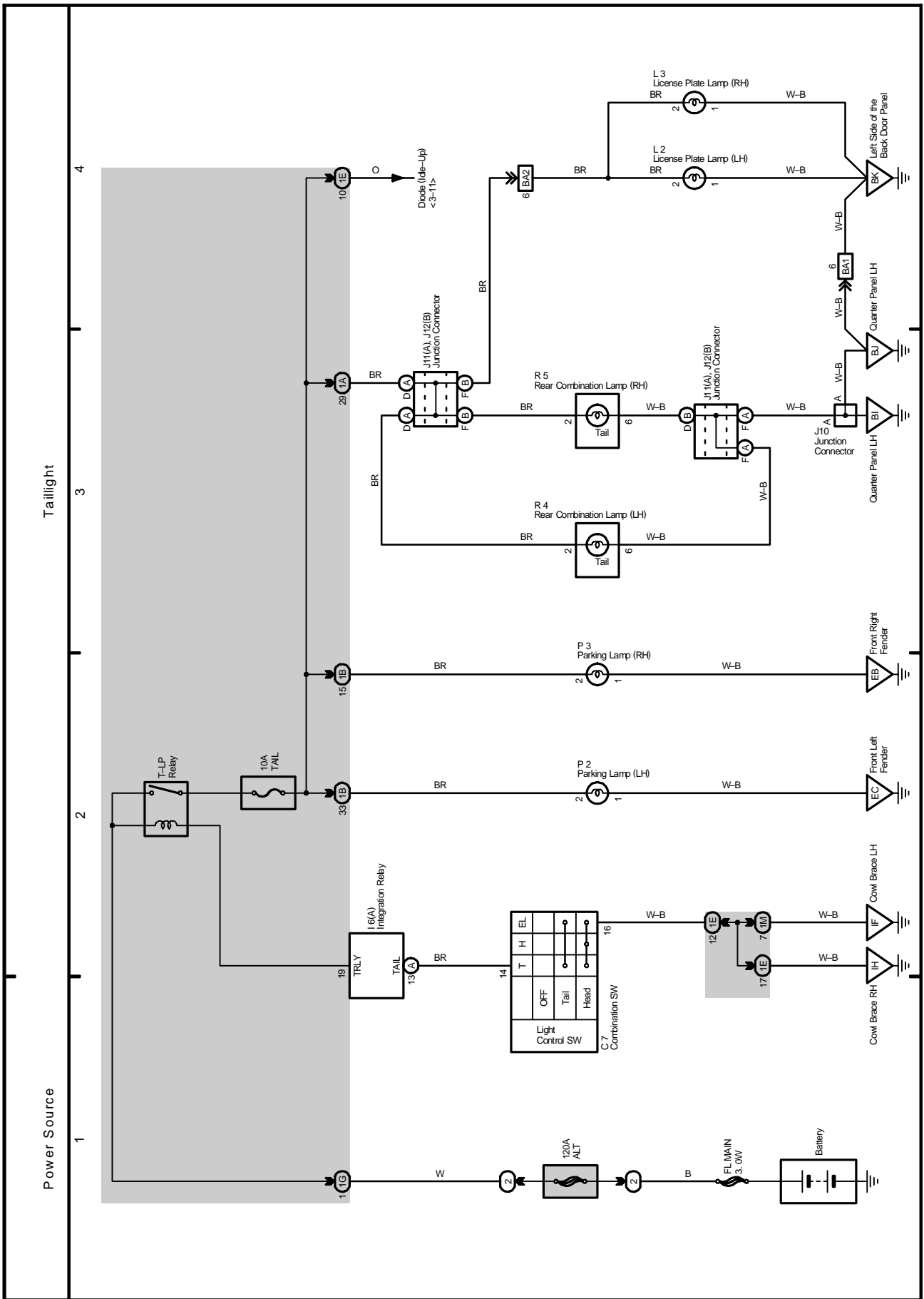
Turn Signal and Hazard Warning Light



2005 SCION 1C (EWD57ZU)

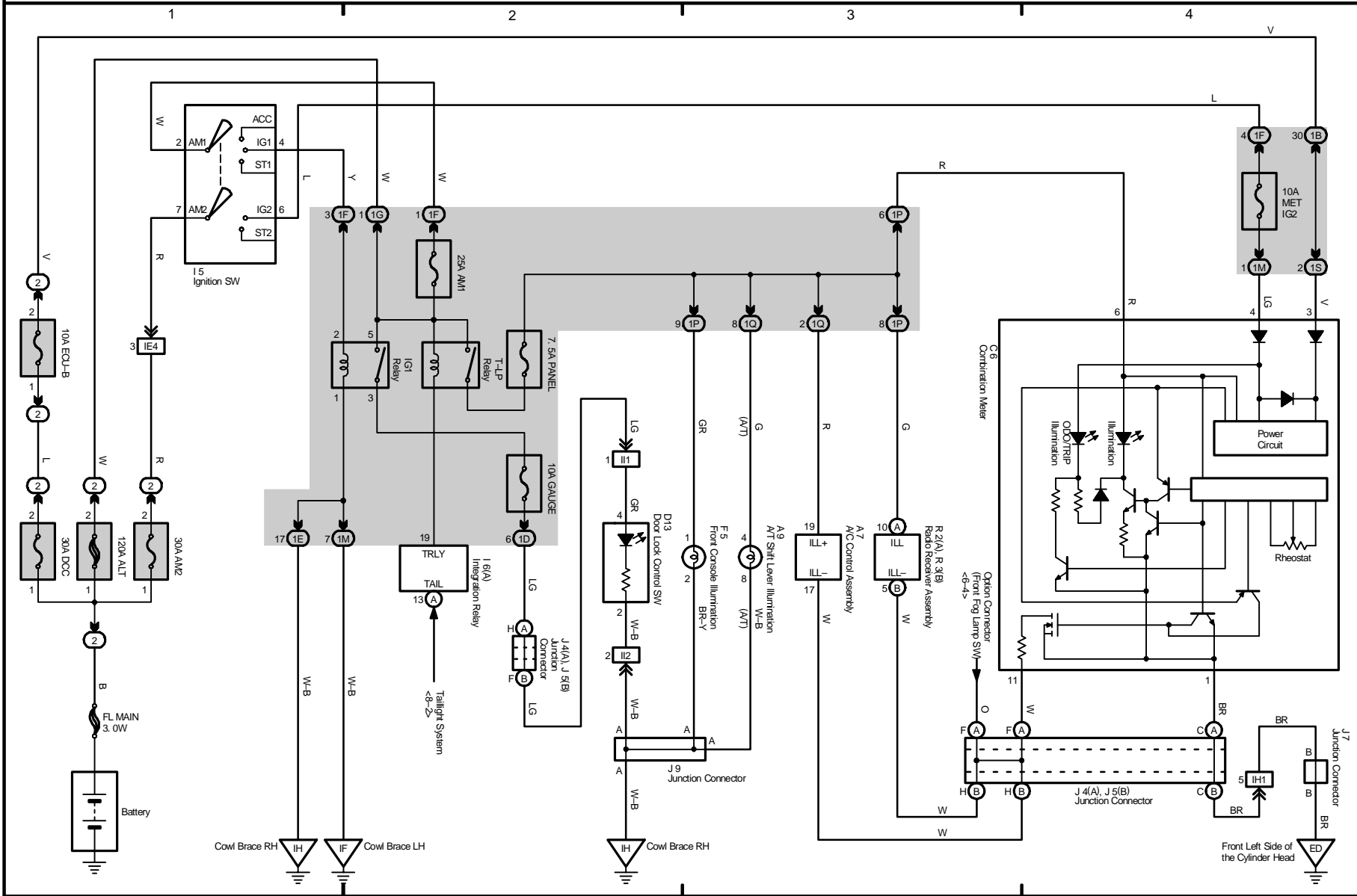
# M OVERALL ELECTRICAL WIRING DIAGRAM

8 tC



Power Source

Illumination



2005 SCION tC (EWD57ZU)

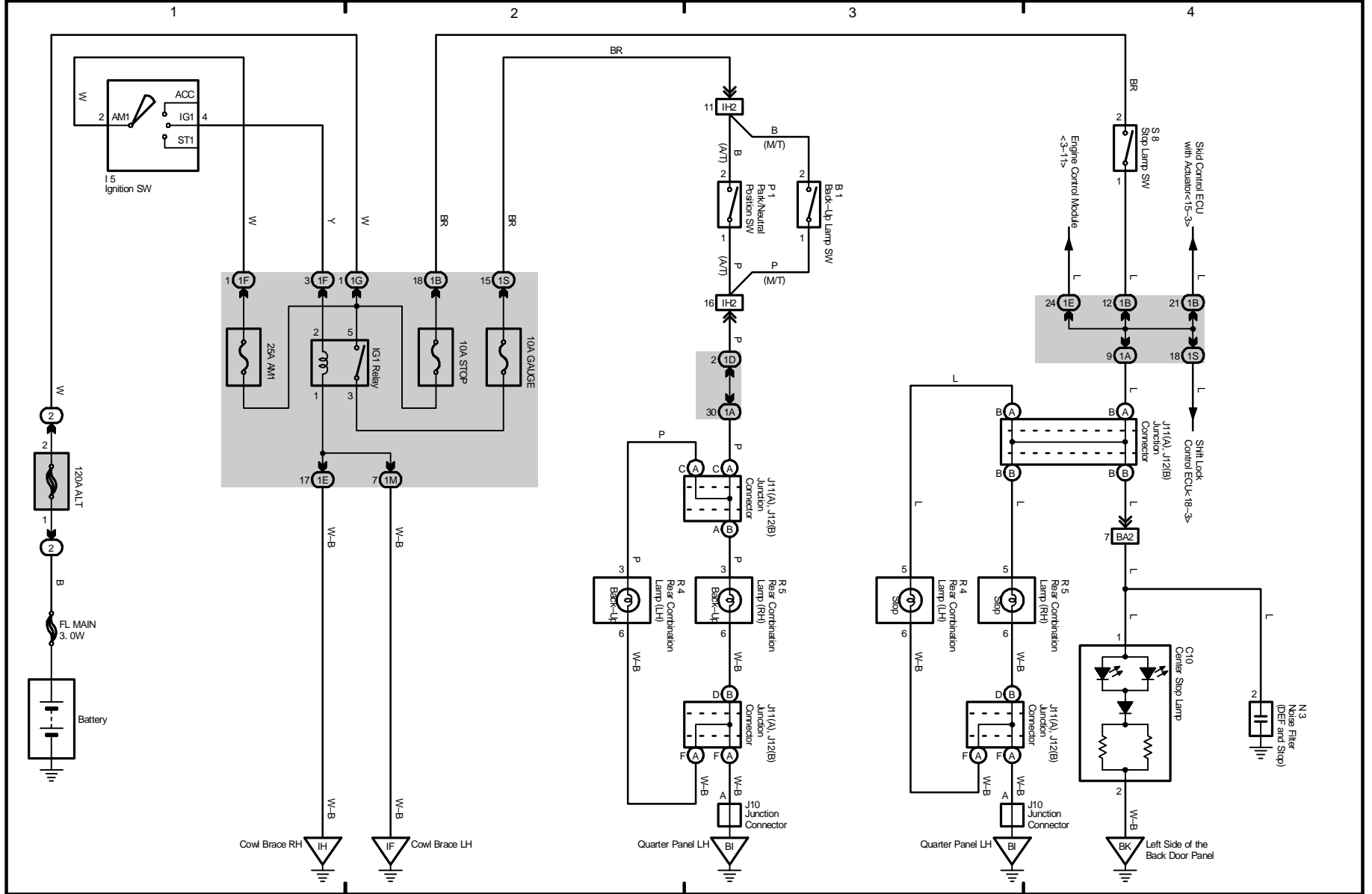




Power Source

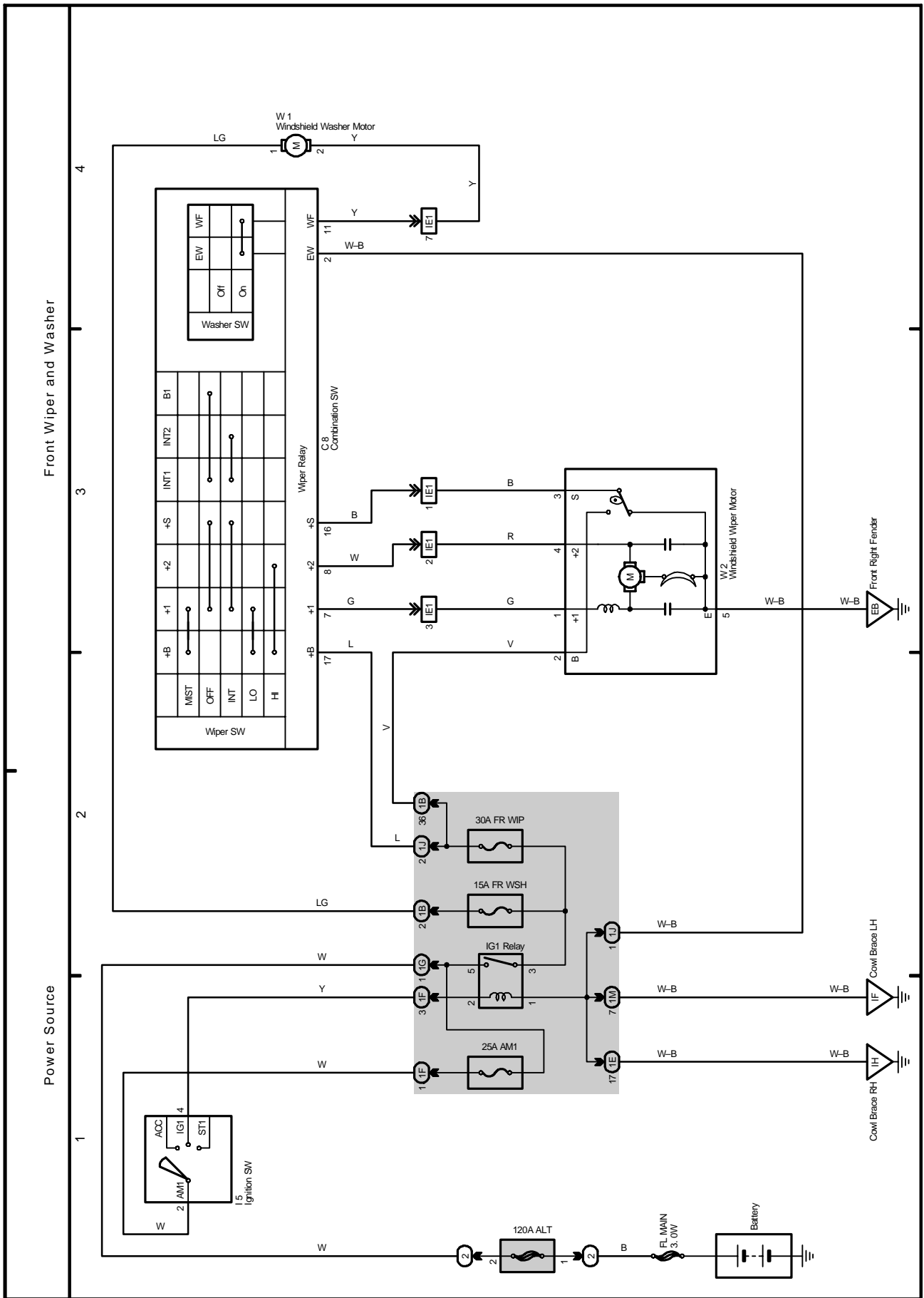
Back-Up Light

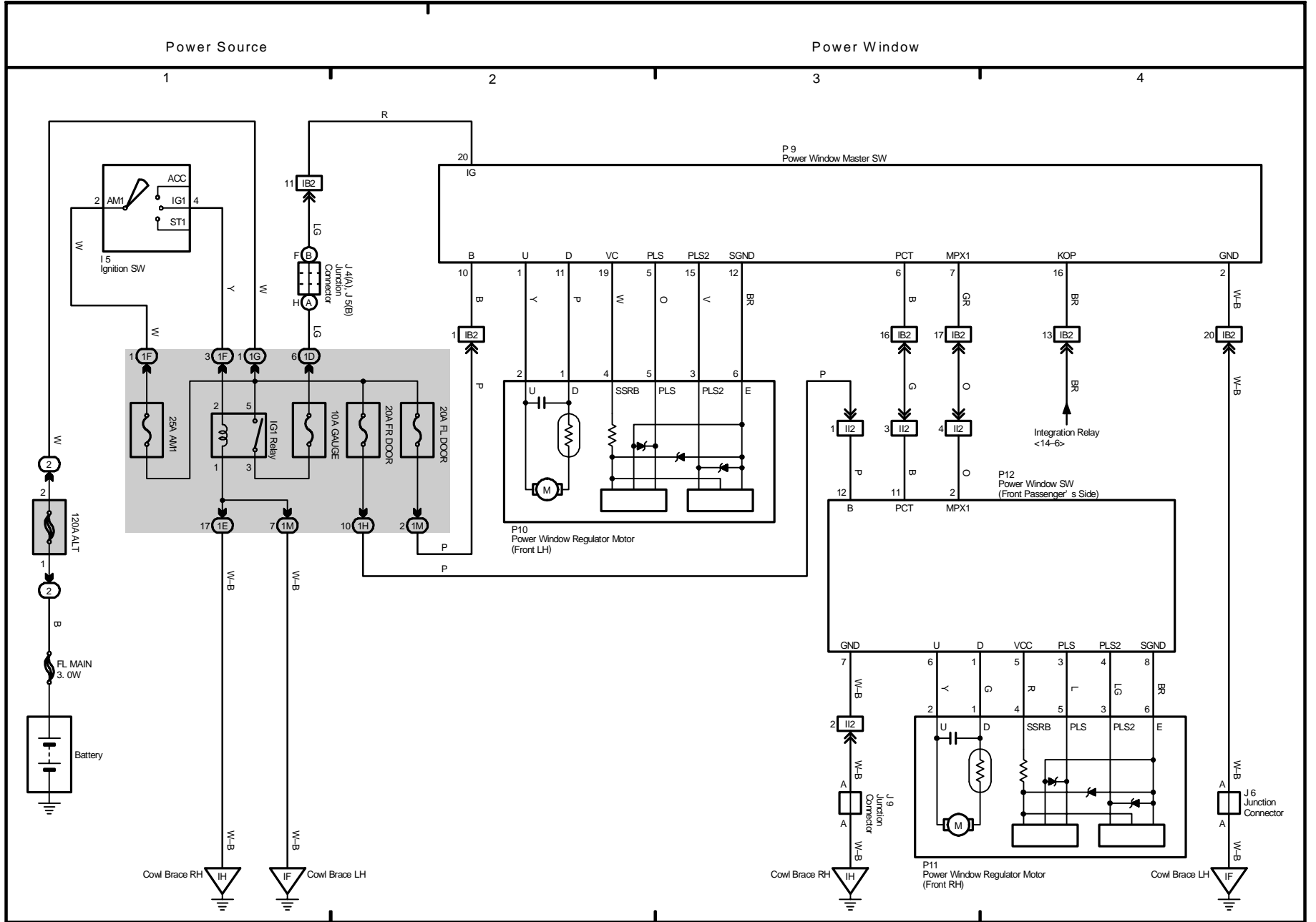
Stop Light



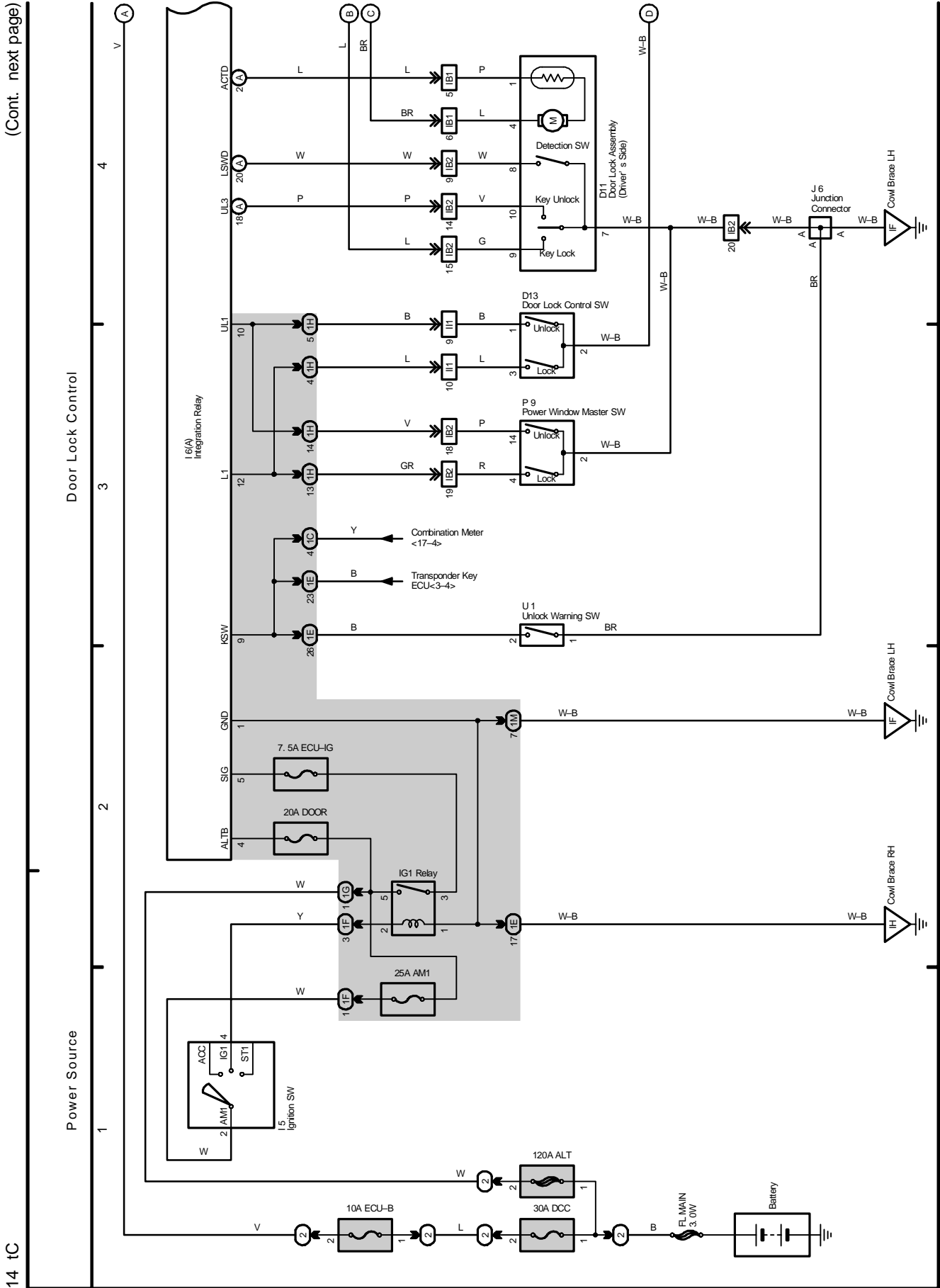
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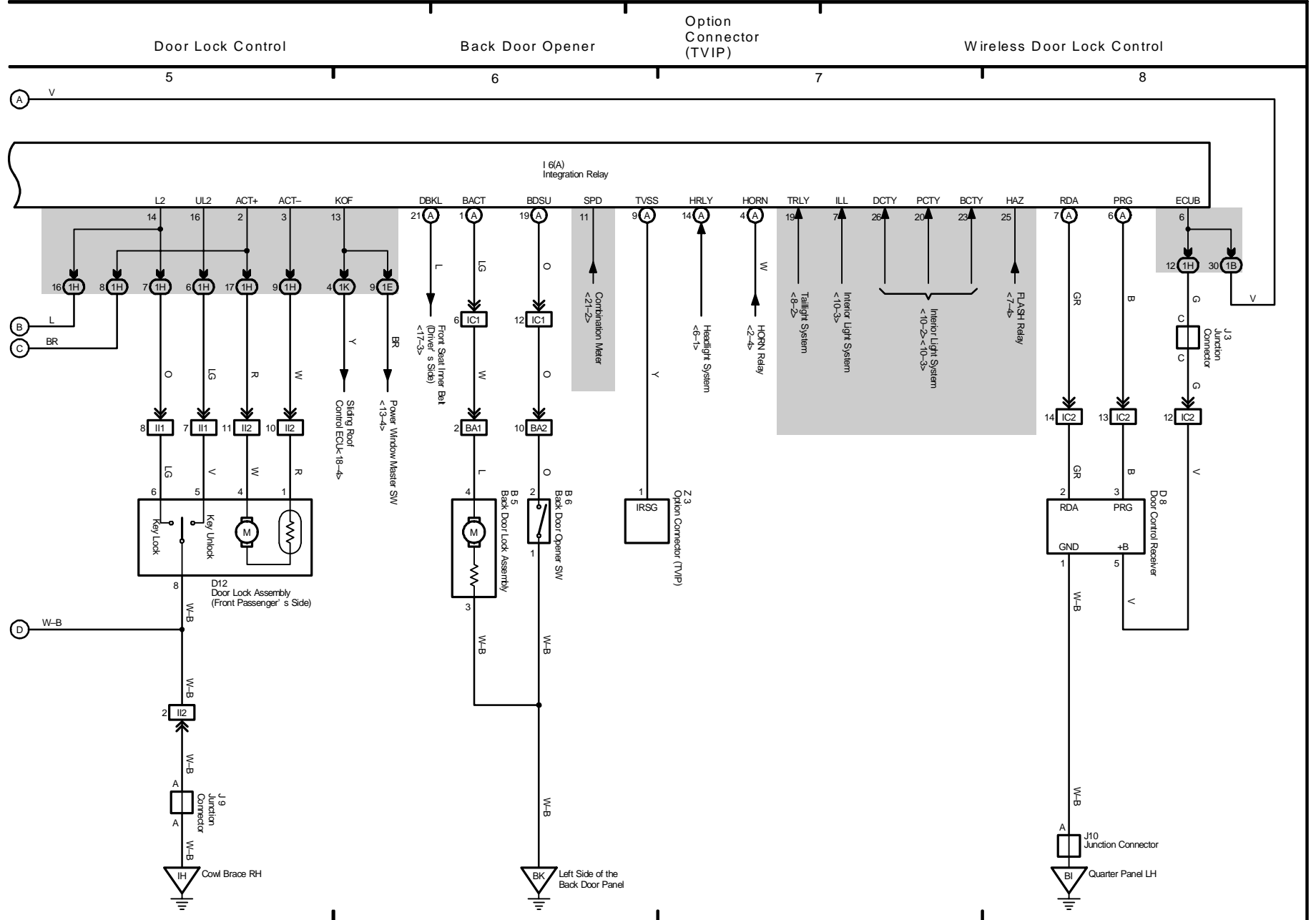
12 tC





# M OVERALL ELECTRICAL WIRING DIAGRAM

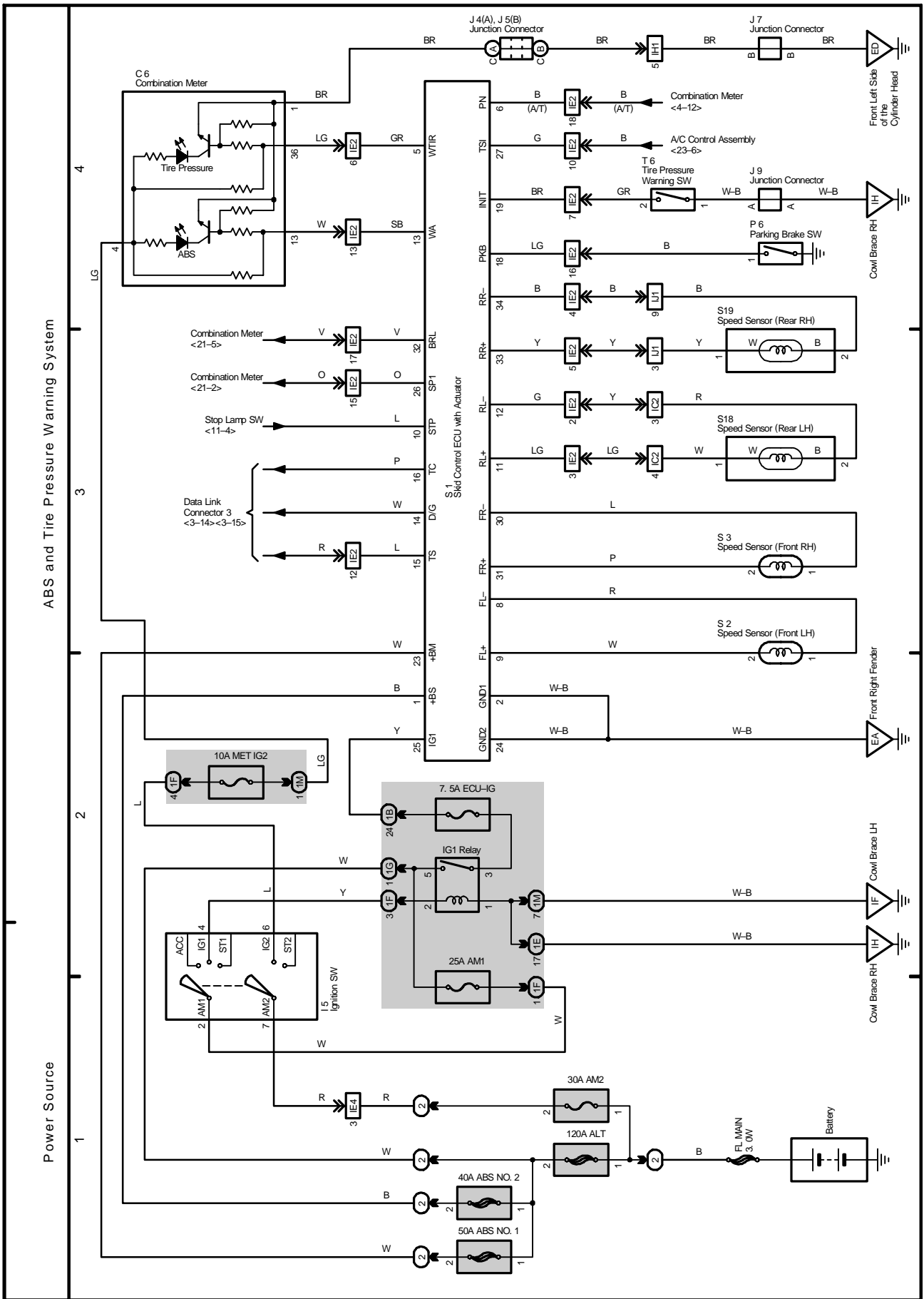




2005 SCION tC (EWD57ZU)

# M OVERALL ELECTRICAL WIRING DIAGRAM

15 tC







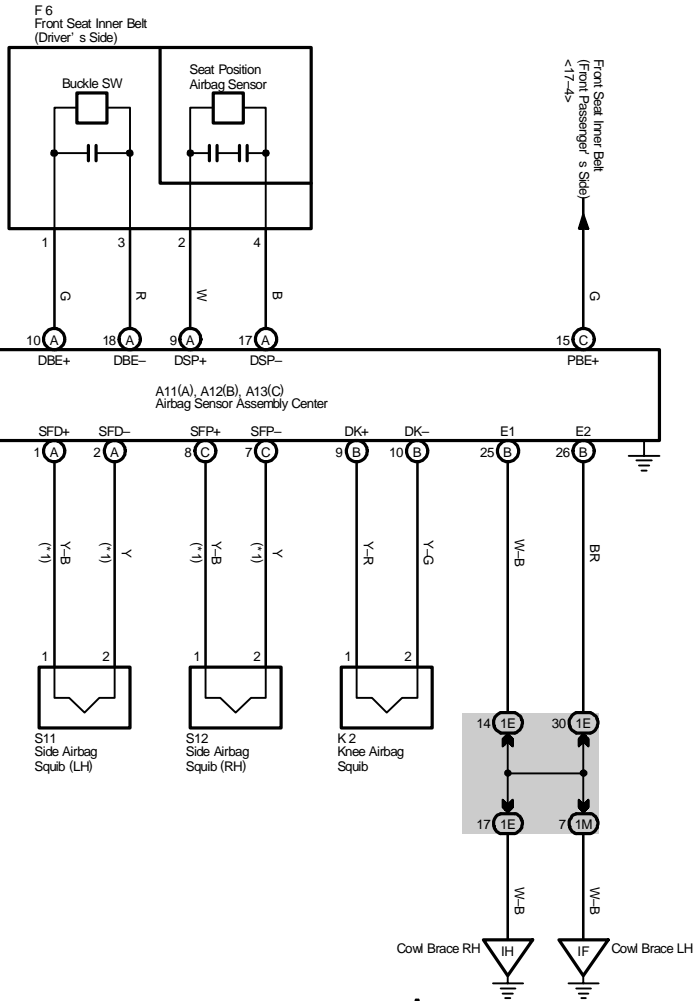


5

6

7

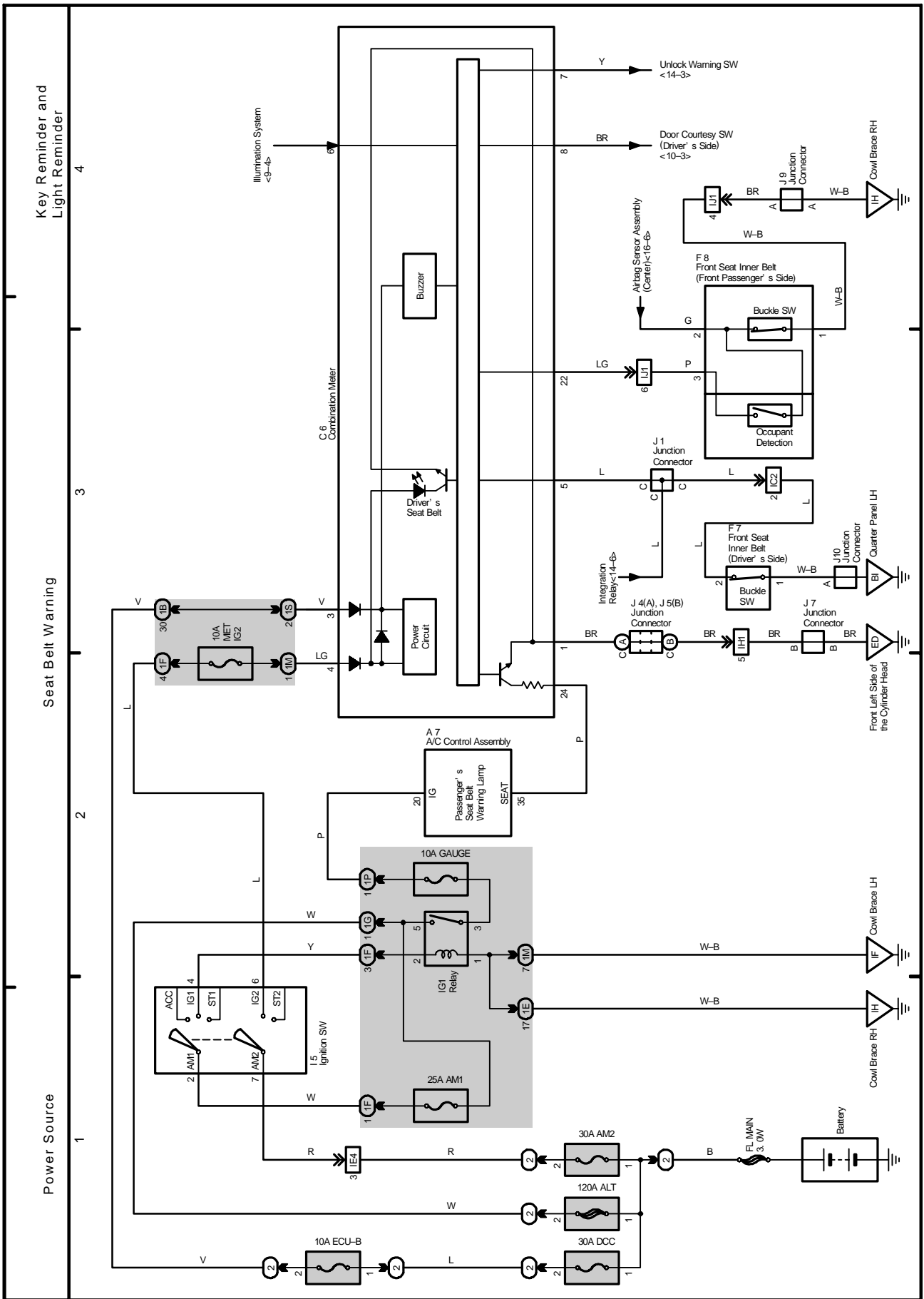
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2005 SCION tC (EWD57ZU)

# M OVERALL ELECTRICAL WIRING DIAGRAM

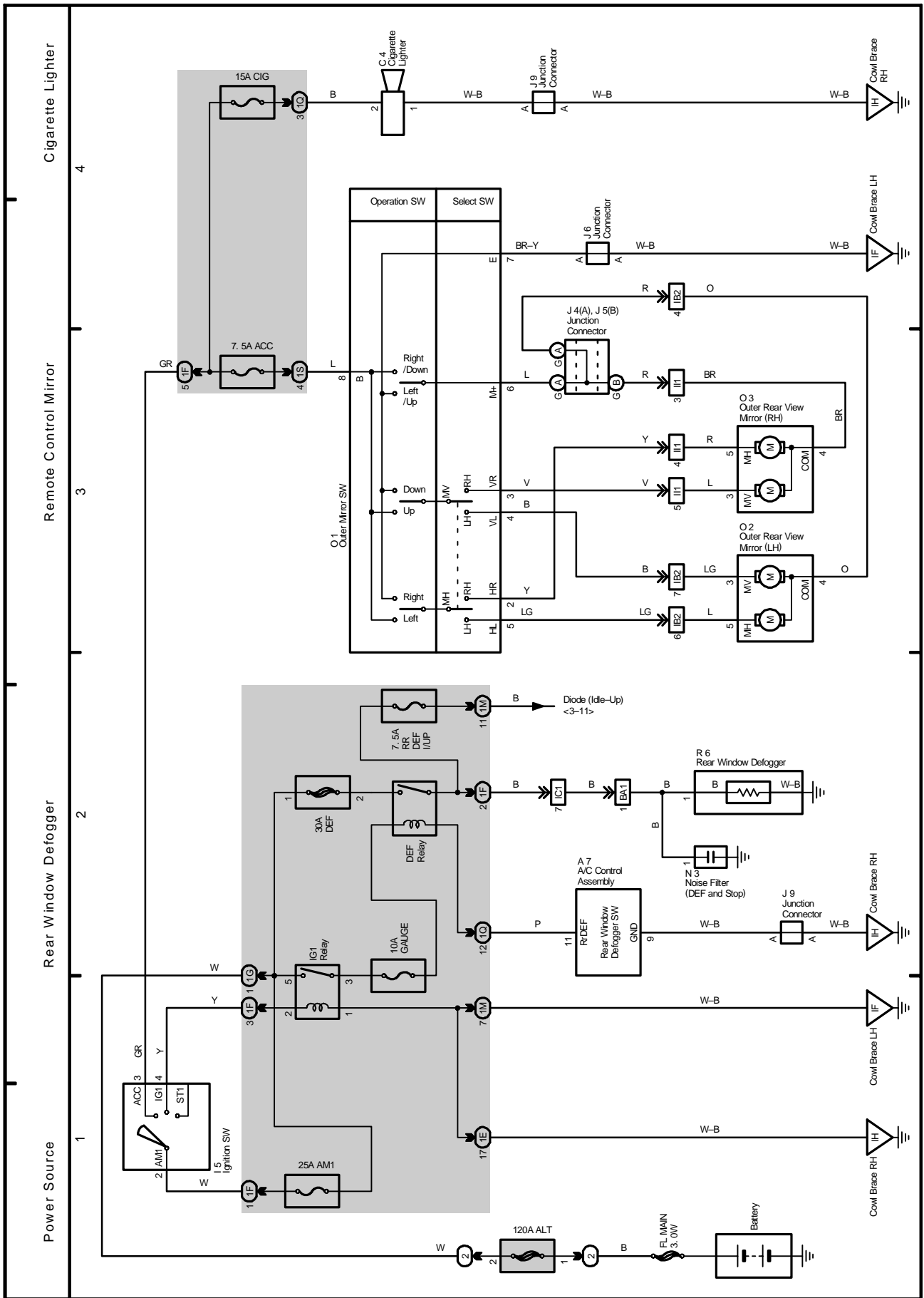
17 tC

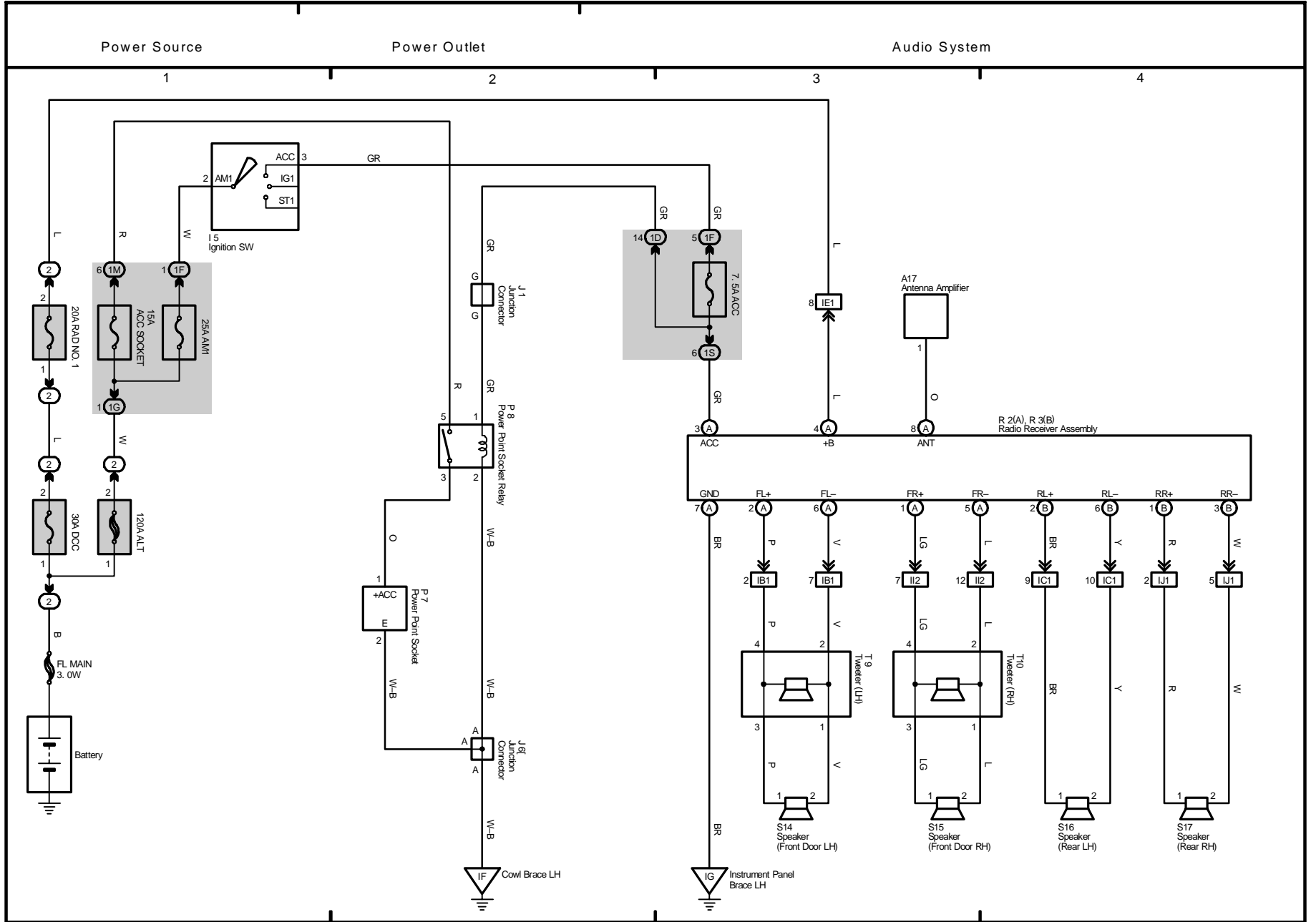




# M OVERALL ELECTRICAL WIRING DIAGRAM

19 tC







Combination Meter

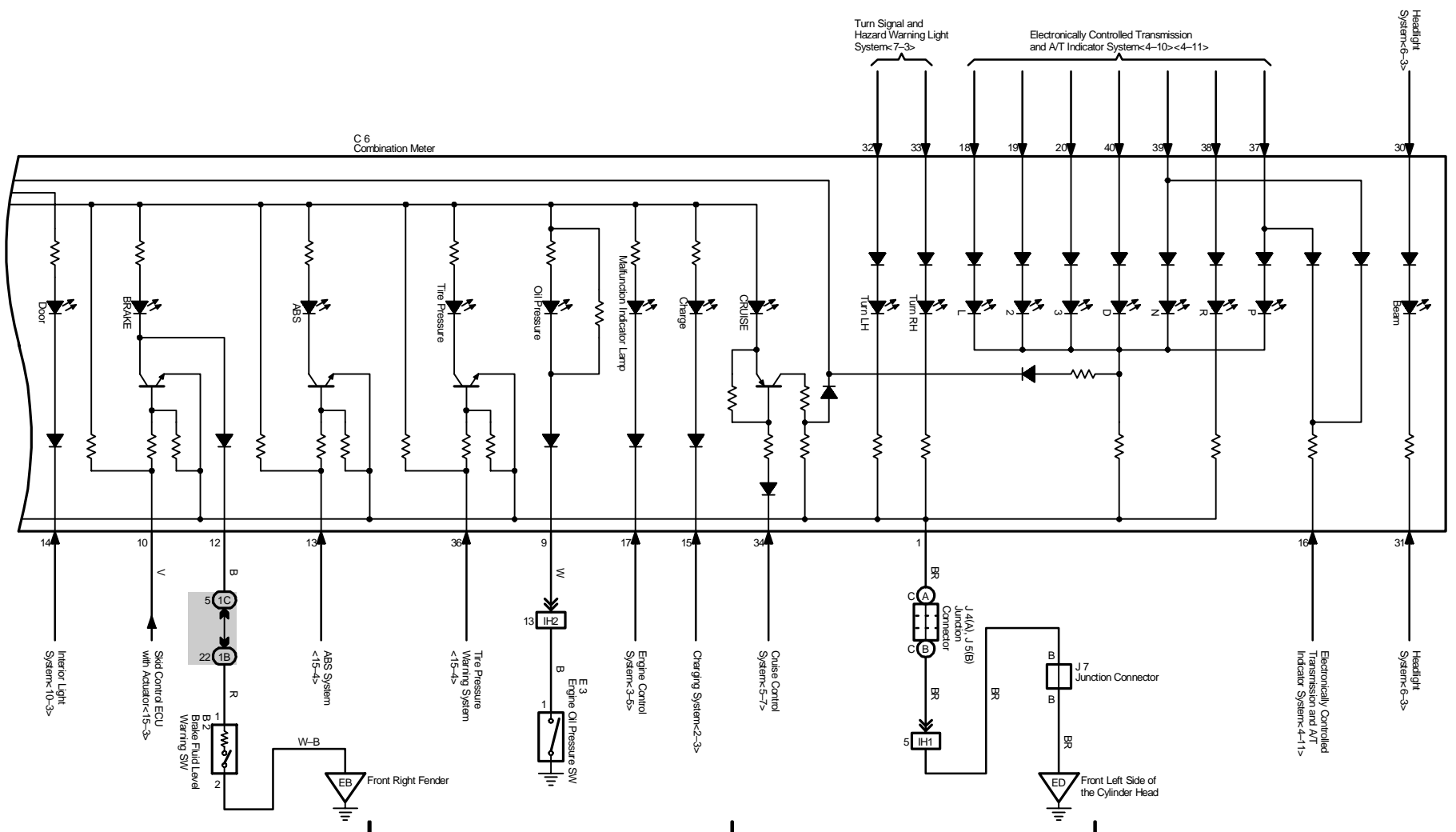
5

6

7

8

C 6  
Combination Meter

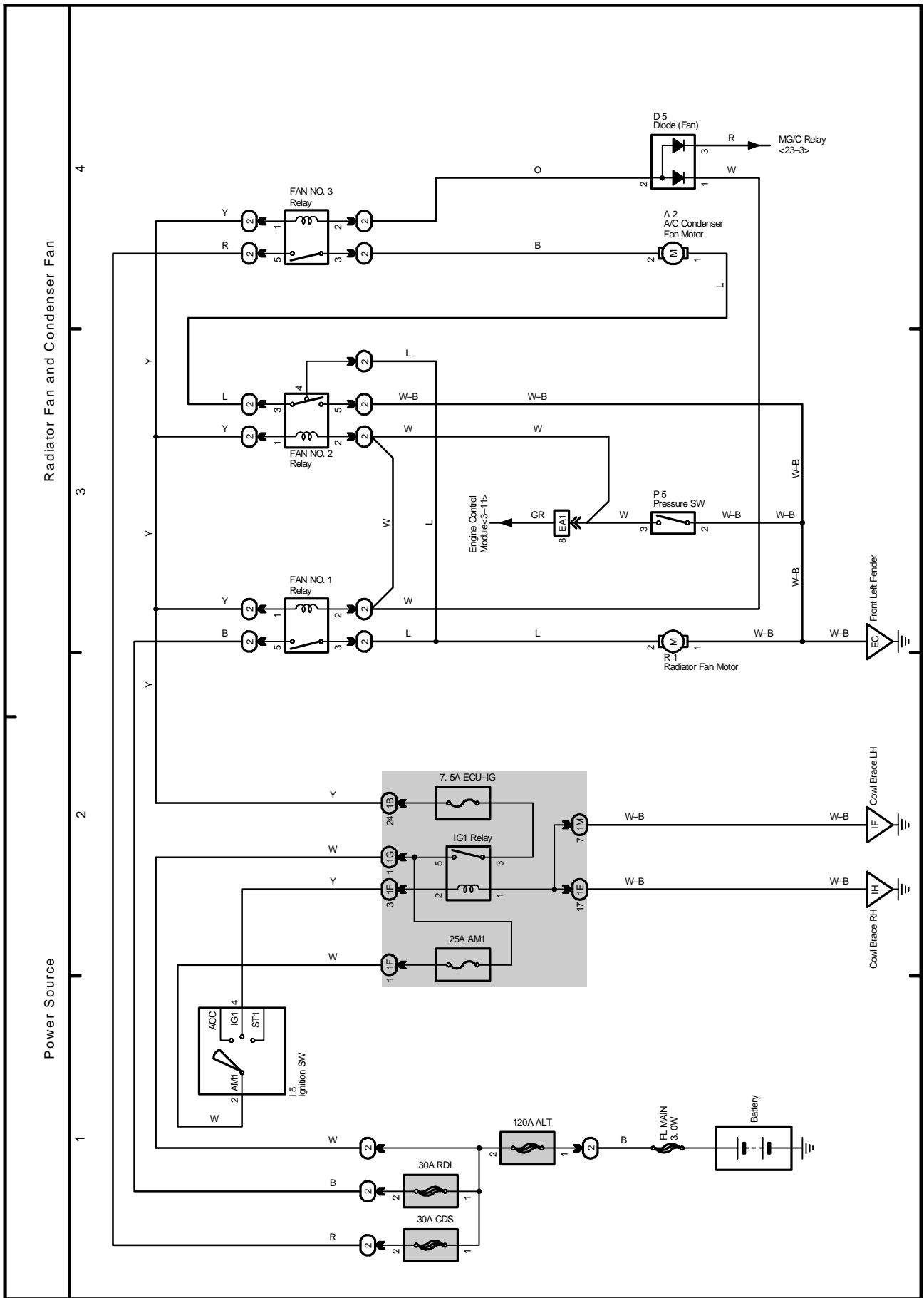


2005 SCION tC (EWD57ZU)



# M OVERALL ELECTRICAL WIRING DIAGRAM

22 tC

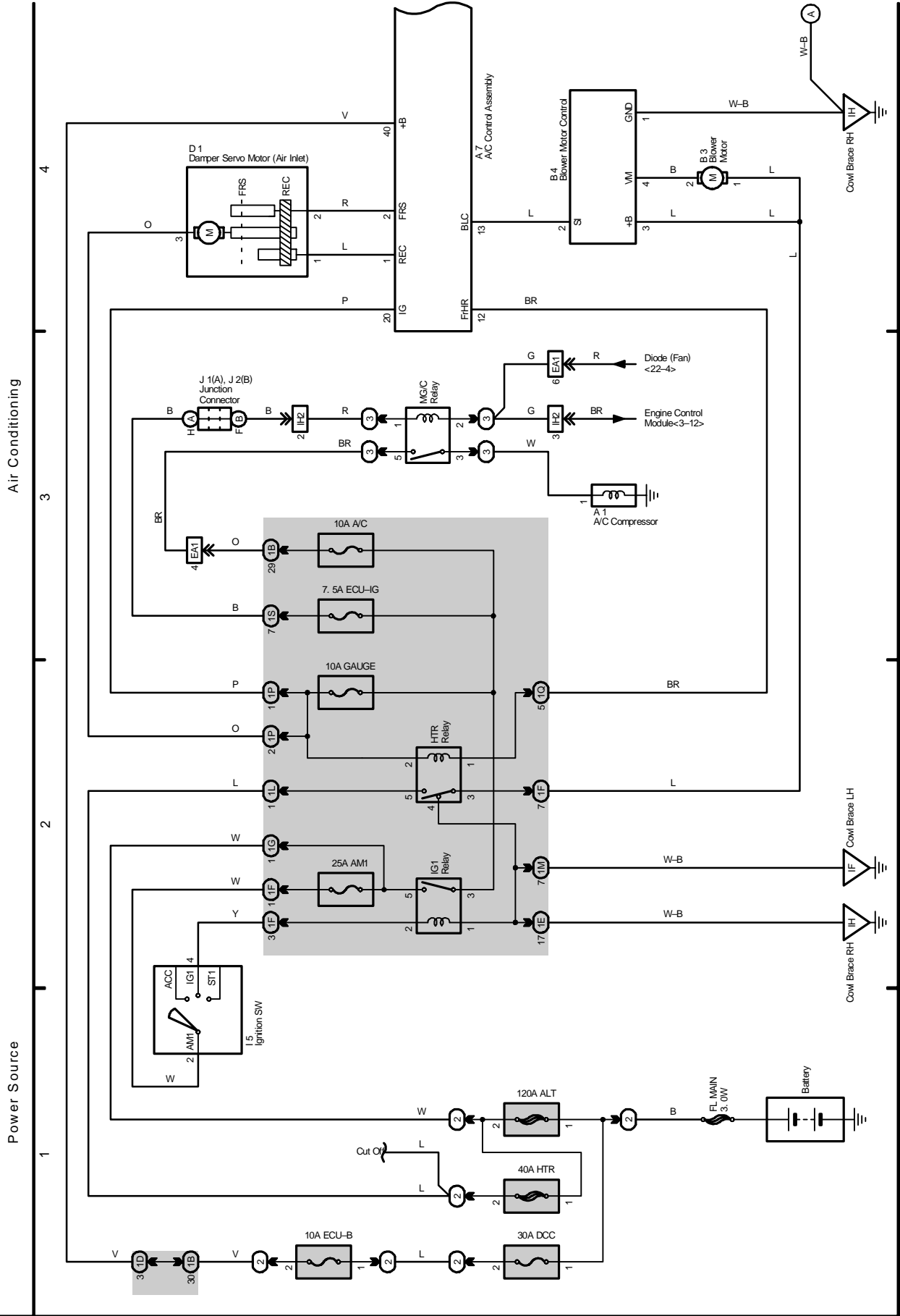




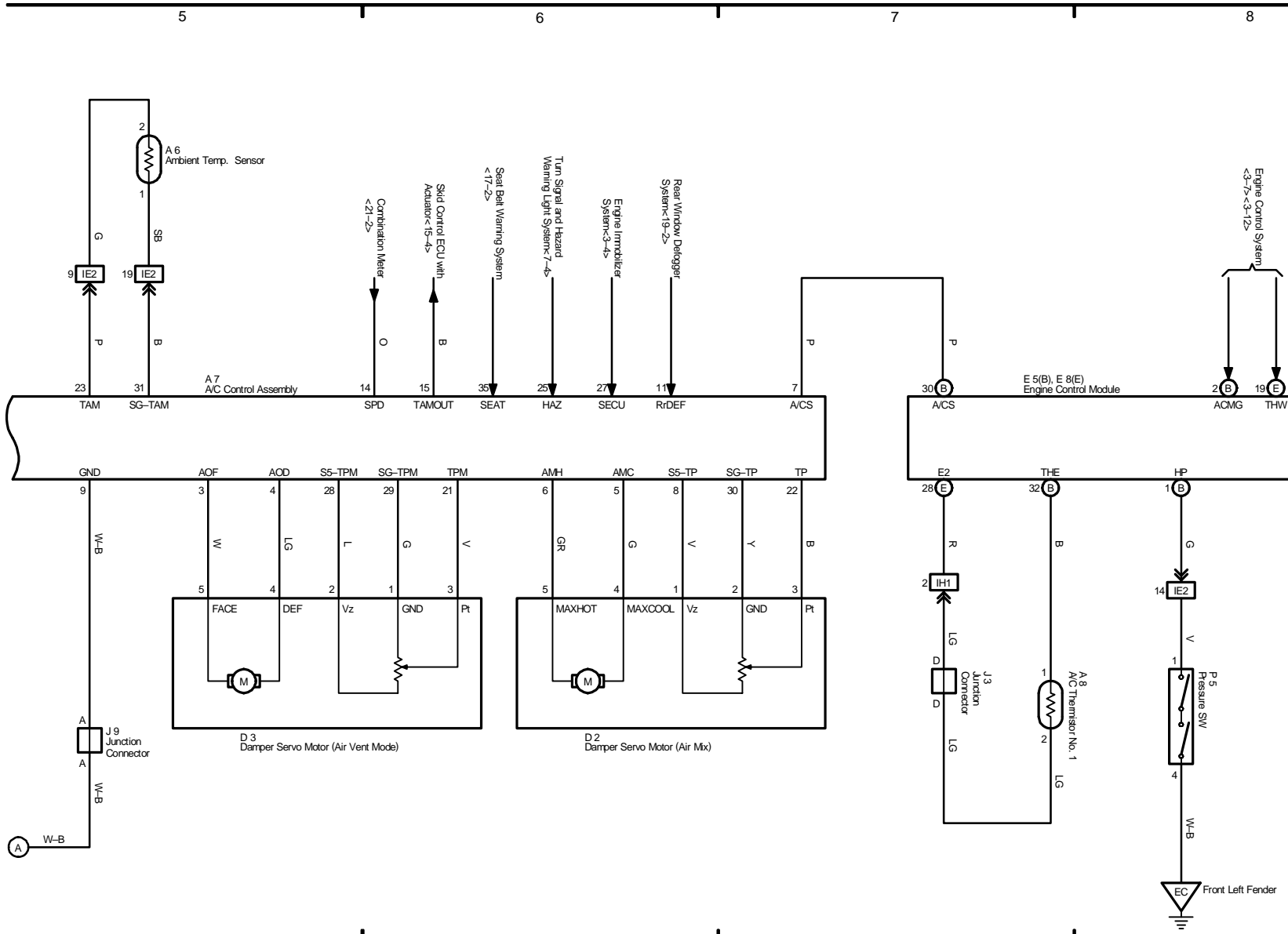
# M OVERALL ELECTRICAL WIRING DIAGRAM

(Cont. next page)

23 tC

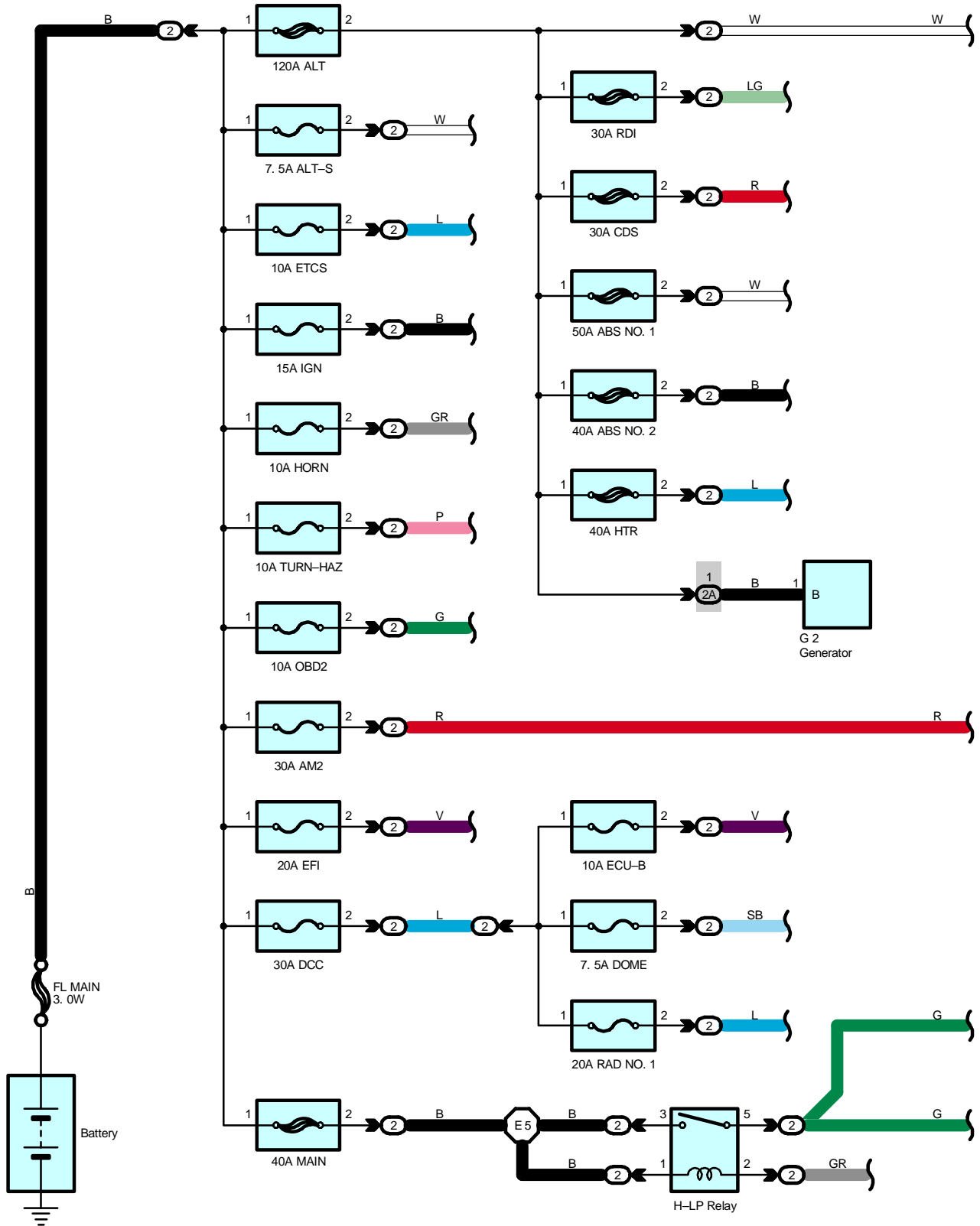


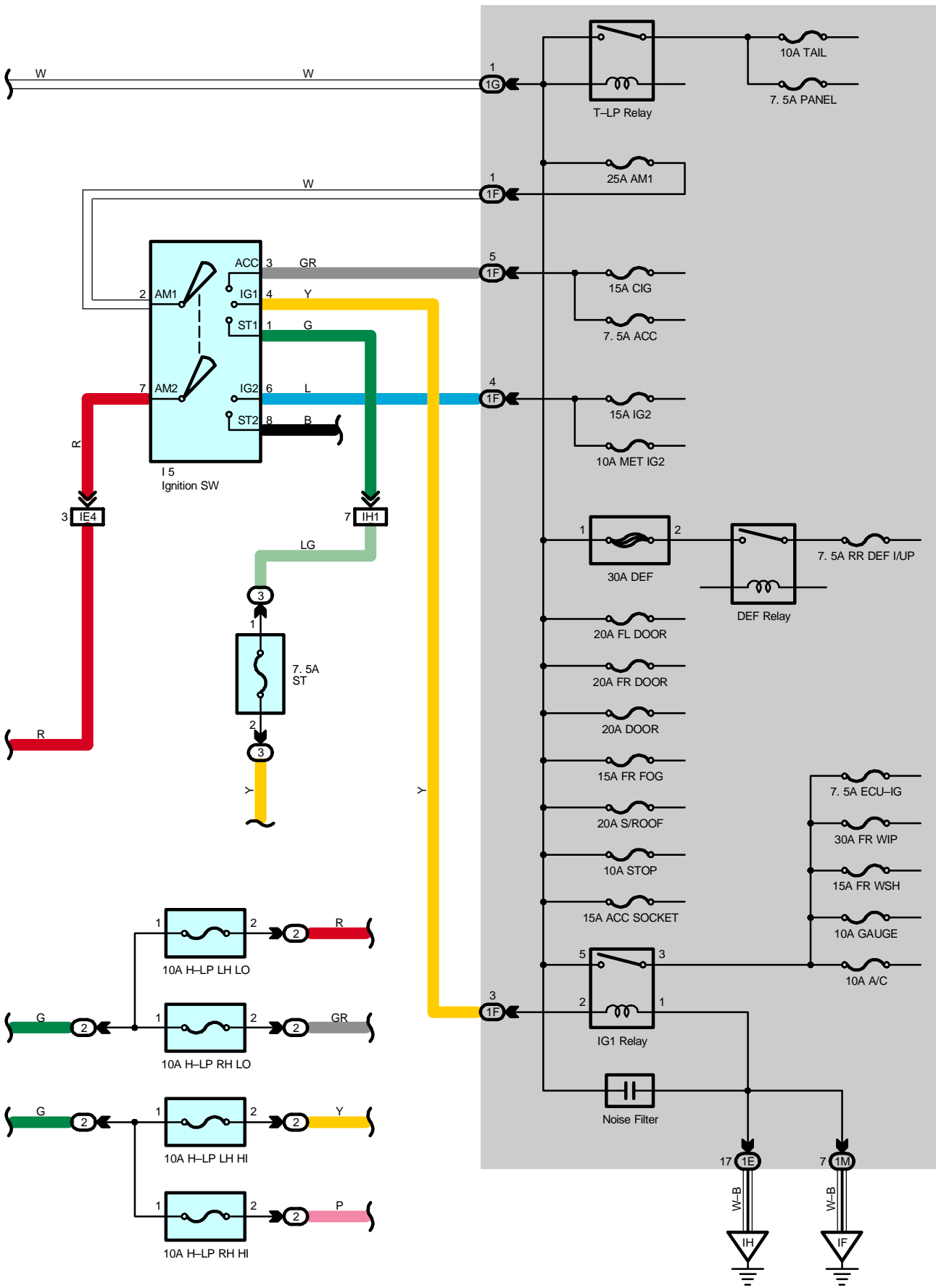
Air Conditioning



2005 SCION tC (EWD572U)

# Power Source





# Power Source

## Service Hints

### H-LP Relay

5-3 : Closed with the light control SW at HEAD position or dimmer SW at FLASH position

### I5 Ignition SW

2-3 : Closed with the ignition key at ACC or ON position

2-4 : Closed with the ignition key at ON or ST position

2-1 : Closed with the ignition key at ST position

7-6 : Closed with the ignition key at ON or ST position

7-8 : Closed with the ignition key at ST position

### T-LP Relay

Point closed with the light control SW at TAIL or HEAD position

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
G2	32	I5	35		

## : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1F		
1G	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
2A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)

## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE4	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)

## : Ground Points

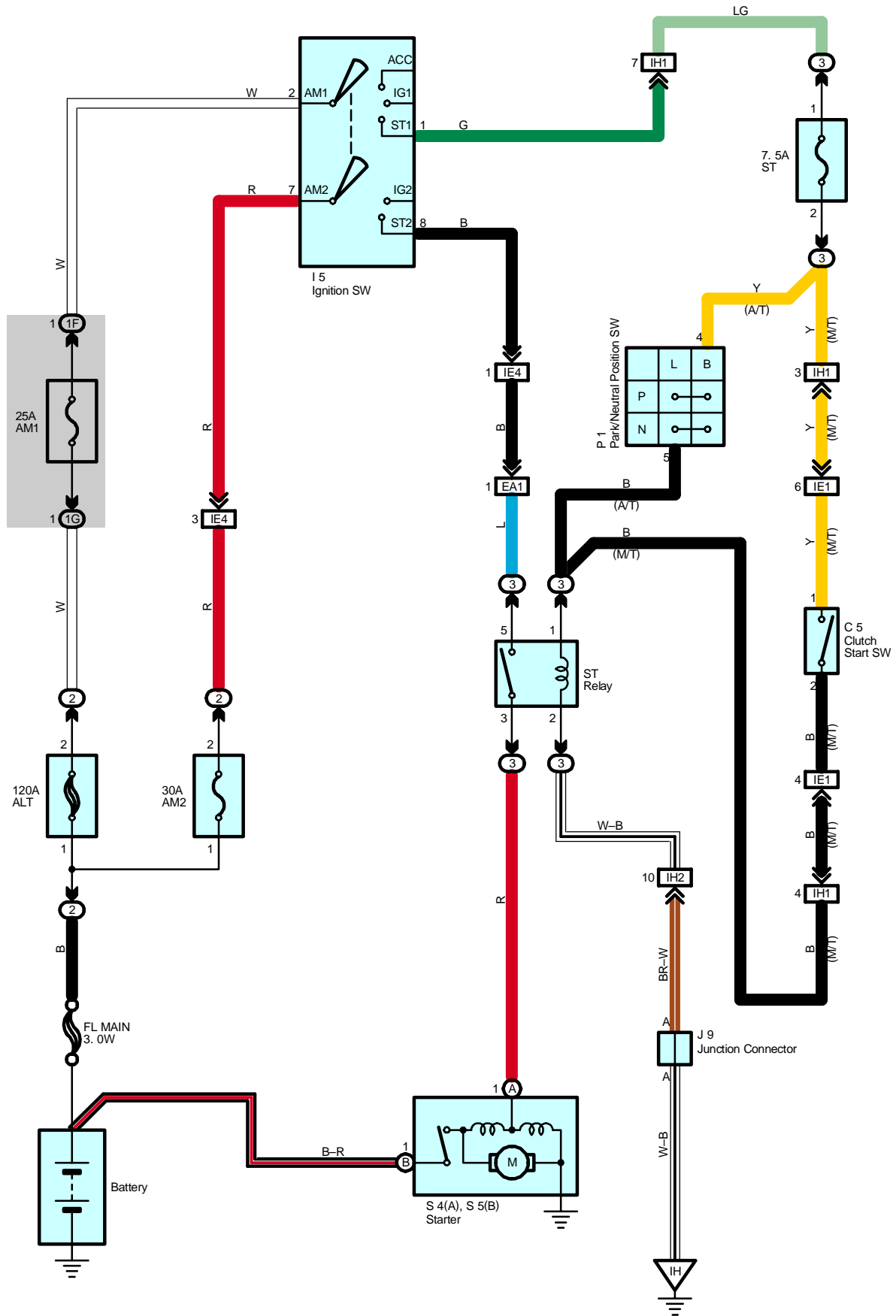
Code	See Page	Ground Points Location
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH

## : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	38	Engine Room Main Wire			







## Service Hints

### S4 (A), S5 (B) Starter

Point closed with the shift lever at P or N position and the ignition SW at ST position (A/T)

Point closed with the clutch pedal depressed and the ignition SW at ST position (M/T)

### I5 Ignition SW

2-1, 7-8 : Closed with the ignition SW at ST position

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C5	34	J9	35	S4	A 33
I5	35	P1	33	S5	B 33

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)

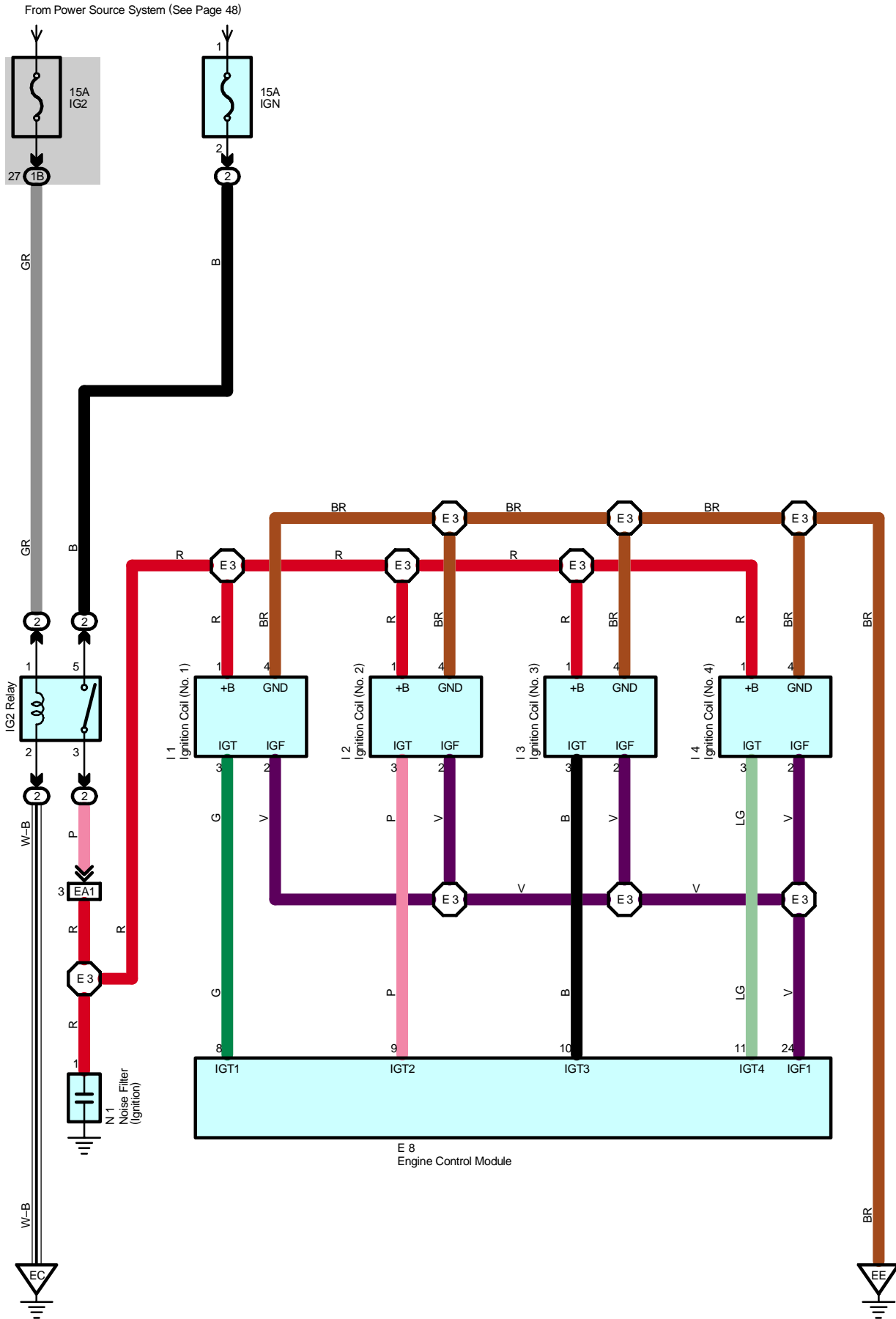
## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	38	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IE4		
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

## ▽ : Ground Points

Code	See Page	Ground Points Location
IH	40	Cowl Brace RH

# Ignition



## Service Hints

### IG2 Relay

5-3 : Closed with the ignition SW at ON or ST position

### : Parts Location

Code	See Page	Code	See Page	Code	See Page
E8	<a href="#">34</a>	I2	<a href="#">33</a>	I4	<a href="#">33</a>
I1	<a href="#">33</a>	I3	<a href="#">33</a>	N1	<a href="#">33</a>

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	<a href="#">24</a>	Engine Room Main 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)
EA1	<a href="#">38</a>	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)

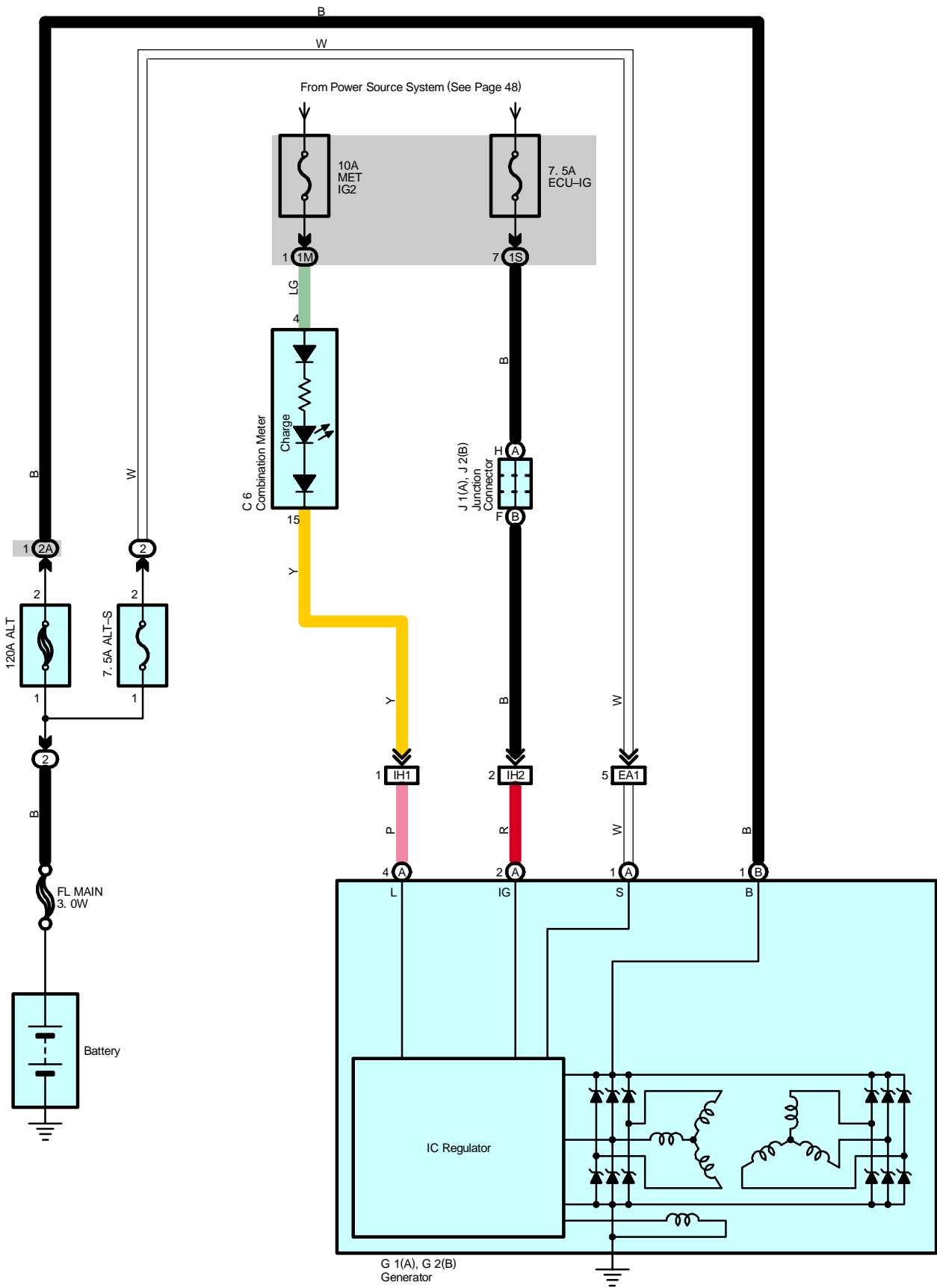
### : Ground Points

Code	See Page	Ground Points Location
EC	<a href="#">38</a>	Front Left Fender
EE	<a href="#">38</a>	Left Side of the Cylinder Head

### : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	<a href="#">38</a>	Engine Wire			

# Charging



## Service Hints

### G1 (A), G2 (B) Generator

- (A) 4-Ground : Below 1.5 volts with the ignition SW at ON position and the engine not running  
 (B) 1-Ground : 13.2–14.0 volts with the engine running at 5000 rpm and 115° C (239° F)

### : Parts Location

Code		See Page	Code		See Page	Code		See Page
C6		34	G2	B	32	J2	B	35
G1	A	32	J1	A	35			

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

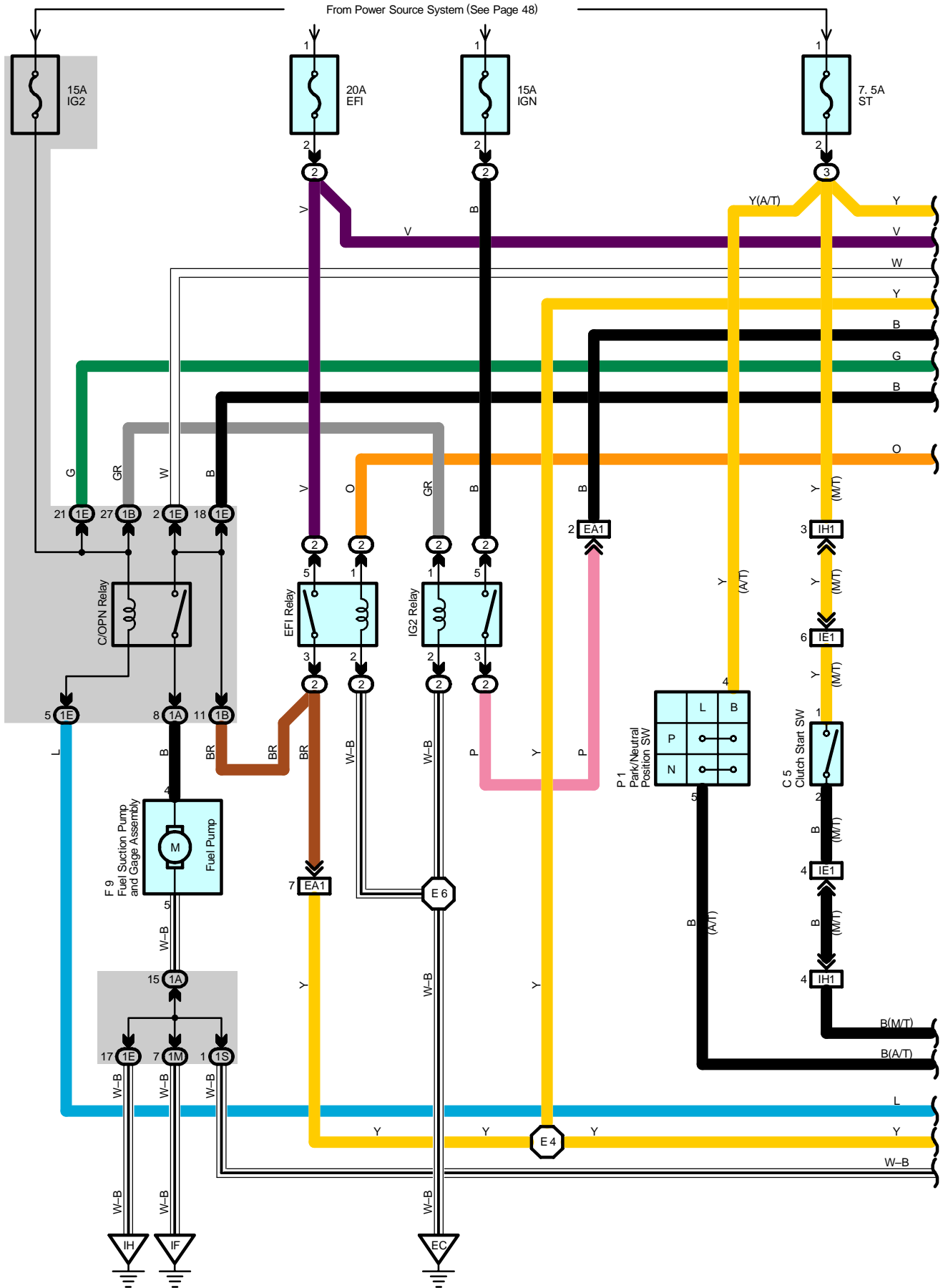
### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S		
2A	22	Engine Wire and Engine Room J/B (Engine Compartment Left)

### : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	38	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

# Engine Control

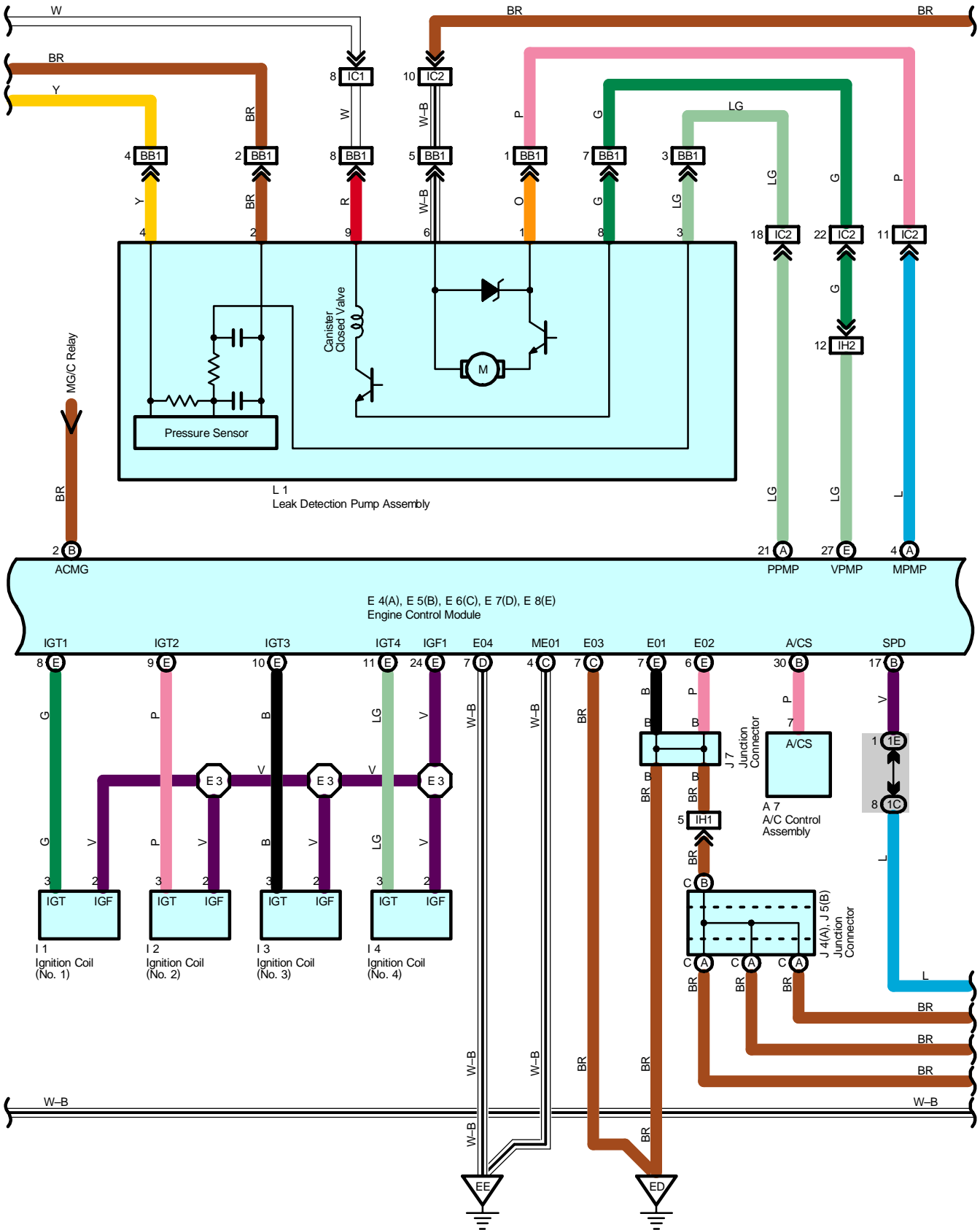




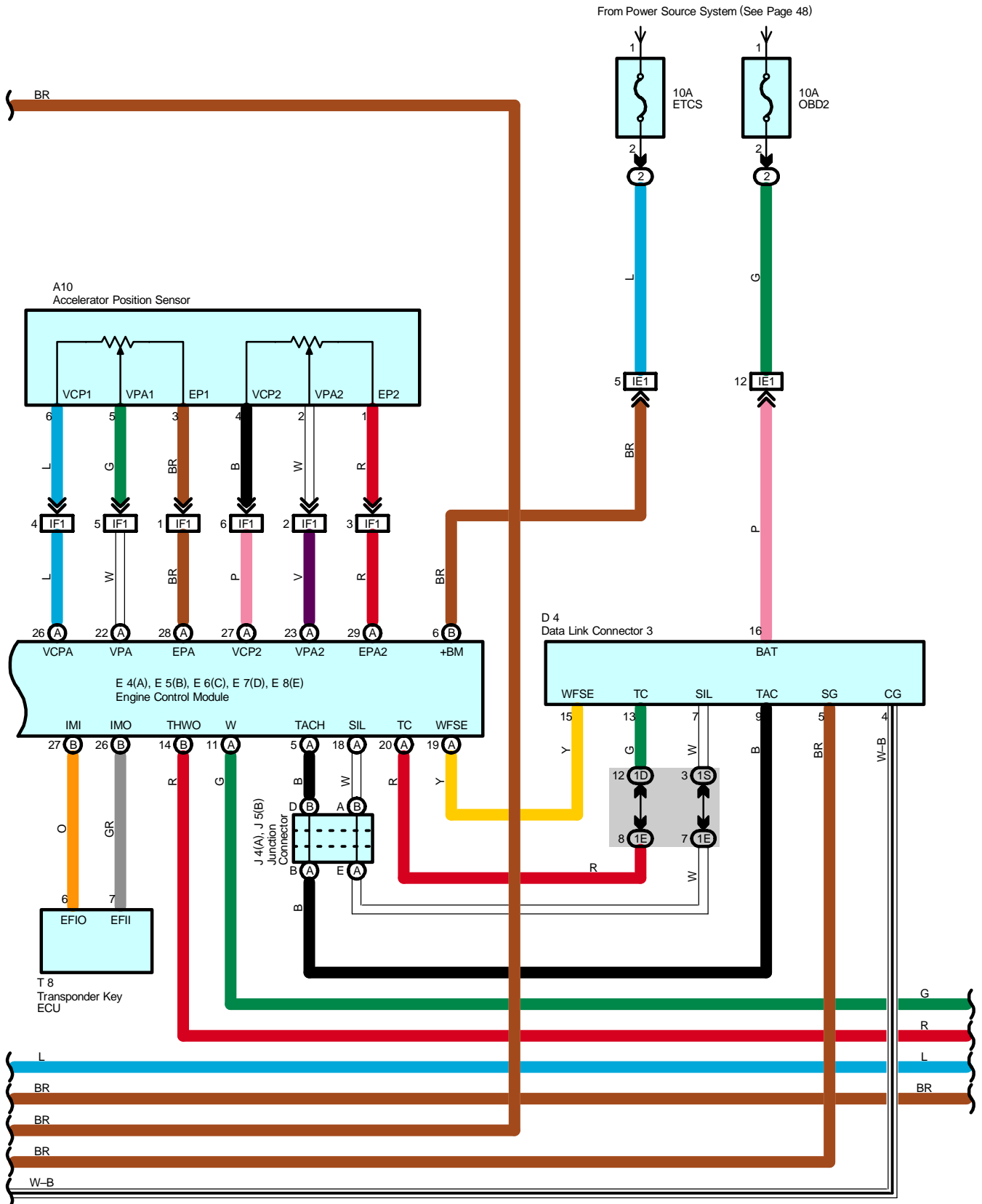


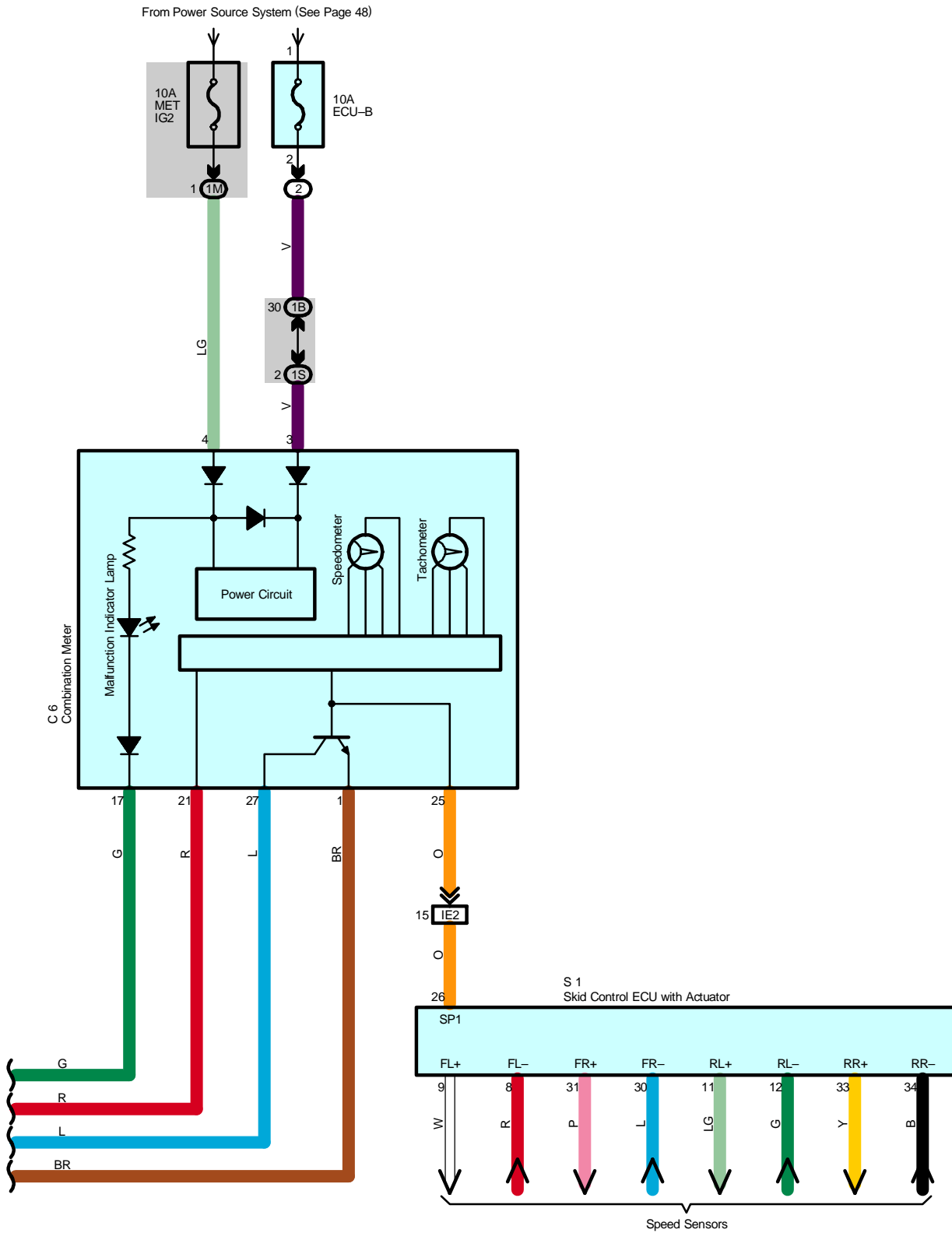


\* 1 : Shielded



# Engine Control





## System Outline

The engine control system utilizes a microcomputer and maintains overall control of the engine, transaxle etc. An outline of the engine control is given here.

### 1. Input Signals

(1) Engine coolant temp. signal circuit

The engine coolant temp. sensor detects the engine coolant temp. and has a built-in thermistor with a resistance, which varies according to the engine coolant temp.. The engine coolant temp. which is input into TERMINAL THW of the engine control module as a control signal.

(2) Intake air temp. signal circuit

The intake air temp. sensor is installed in the mass air flow meter and detects the intake air temp. which is input as a control signal to TERMINAL THA of the engine control module.

(3) Oxygen density signal circuit

The oxygen density in the exhaust emission is detected by the heated oxygen sensor and input as a control signal to TERMINAL OX1B of the engine control module.

(4) RPM signal circuit

Camshaft position and crankshaft position are detected by the camshaft position sensor and crankshaft position sensor. Camshaft position is input as a control signal to TERMINAL G2+ of the engine control module, and engine RPM is input into TERMINAL NE+.

(5) Throttle position signal circuit

The throttle body assembly detects the throttle valve opening angle as a control signal, which is input into TERMINALS VTA1 and VTA2 of the engine control module.

(6) Vehicle speed circuit

The vehicle speed sensor detects the vehicle speed and inputs a control signal to TERMINAL SPD of the engine control module.

(7) Battery signal circuit

Voltage is constantly applied to TERMINAL BATT of the engine control module. With the ignition SW turned on, the voltage for engine control module start-up power supply is applied to TERMINAL +B of the engine control module via the EFI relay.

(8) A/C SW signal circuit

The A/C control assembly inputs the A/C operations into TERMINAL A/CS of the engine control module.

(9) Stop lamp SW signal circuit

The stop lamp SW is used to detect whether the vehicle is braking or not and the signal is input into TERMINAL STP of the engine control module as a control signal.

(10) Starter signal circuit

To confirm whether the engine is cranking, the voltage is applied to the starter motor during cranking is detected and the signal is input into TERMINAL STA of the engine control module as a control signal.

(11) Engine knock signal circuit

Engine knocking is detected by knock control sensor and the signal is input into TERMINAL KNK1 as a control signal.

(12) Air fuel ratio signal system

The air fuel ratio is detected by air fuel ratio sensor and input as a control signal into TERMINAL A1A+ of the engine control module.

## 2. Control System

### \* SFI system

The SFI system monitors the engine condition through the signals input from each sensor to the engine control module. And the control signal is output to TERMINALS #1, #2, #3 and #4 of the engine control module to operate the fuel injector (Inject the fuel). The SFI system controls the fuel injection operation by the engine control module in response to the driving conditions.

### \* ESA system

The ESA system monitors the engine condition through the signals input to the engine control module from each sensor. The best ignition timing is decided according to this data and the memorized data in the engine control module and the control signal is output to TERMINALS IGT1, IGT2, IGT3, IGT4. This signal controls the igniter (Ignition coil) to provide the best ignition timing for the driving conditions.

### \* Heated oxygen sensor heater control system

The heated oxygen sensor heater control system turns the heater on when the intake air volume is low (Temp. of exhaust emissions is low), and warms up the heated oxygen sensor to improve detection performance of the sensor. The engine control module evaluates the signals from each sensor, and outputs current to TERMINAL HT1B to control the heater.

## 3. Diagnosis System

With the diagnosis system, when there is a malfunction in the engine control module signal system, the malfunctioning system is recorded in the memory. The malfunctioning system can be found by reading the code displayed by the malfunction indicator lamp.

## 4. Fail-Safe System

When a malfunction has occurred in any system, if there is a possibility of engine trouble being caused by continued control based on the signals from that system, the fail-safe system either controls the system by using data (Standard values) recorded in the engine control module memory or else stops the engine.

## Service Hints

### E4 (A), E5 (B), E6 (C), E7 (D), E8 (E) Engine Control Module

BATT-E1 : Always 9.0–14.0 volts

VC-E2 : 4.5–5.5 volts (Ignition SW at ON position)

VG-E2G : 1.1–1.5 volts (Engine idling and A/C SW off)

THA-E2 : 0.5–3.4 volts (Engine idling and intake air temp. 20°C, 68°F)

THW-E2 : 0.2–1.0 volts (Engine idling and coolant temp. 80°C, 176°F)

IGF1-E1 : 4.5–5.5 volts (Ignition SW at ON position)

Pulse generation (Engine idling)

TACH-E1 : Pulse generation (Engine idling)

STA-E1 : 6.0 volts or more (Engine cranking)

FC-E01 : 9.0–14.0 volts (Ignition SW at ON position)

SPD-E1 : Pulse generation (Ignition SW on and rotate driving wheel slowly)

W-E01 : Below 3.0 volts (Ignition SW at ON position)

NSW-E1 : 9.0–14.0 volts (Ignition SW on and other shift position in P or N position)

0–3.0 volts (Ignition SW on and shift position in P or N position)

PRG-E01 : 9.0–14.0 volts (Ignition SW at ON position)

STP-E1 : 7.5–14.0 volts (Ignition SW on and brake pedal depressed)

Below 1.5 volts (Ignition SW on and brake pedal released)

KNK1-E1 : Pulse generation (Engine idling)

HA1A-E04 : Below 3.0 volts (Engine idling)

IGSW-E1 : 9.0–14.0 volts (Ignition SW at ON position)

MREL-E1 : 9.0–14.0 volts (Ignition SW at ON position)

G2+, NE+ –NE- : Pulse generation (Engine idling)

HT1B-E1 : 9.0–14.0 volts (Engine idling)

Below 3.0 volts (Ignition SW at ON position)

A1A+ –E1 : 3.3 volts (Ignition SW at ON position)

A1A- –E1 : 3.0 volts (Ignition SW at ON position)

OX1B-E1 : Pulse generation (Maintain engine speed at 2500 rpm for 90 sec. after warming up)

IGT1, IGT2, IGT3, IGT4-E1 : Pulse generation (Engine idling)

#1, #2, #3, #4-E01 : 9.0–14.0 volts (Ignition SW at ON position)

Pulse generation (Engine idling)

# Engine Control

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A3	32	E6	C 34	J4	A 35
A7	34	E7	D 34	J5	B 35
A10	34	E8	E 34	J7	35
A12	34	F1	32	J8	35
C1	32	F2	32	K1	33
C2	32	F3	32	L1	36
C3	32	F4	32	M1	33
C5	34	F9	36	P1	33
C6	34	H5	32	P4	33
D4	34	I1	33	S1	33
D6	34	I2	33	S8	35
E2	32	I3	33	T1	33
E4	A 34	I4	33	T8	35
E5	B 34	J3	35	V1	33

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1M	25	
1S		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	38	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IC1	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IC2		
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IE2		
IF1	42	Instrument Panel Wire and Switch Wire (Instrument Panel Brace LH)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		
BB1	44	Floor Wire and Floor No.3 Wire (Center Floor Pan Center)

## ▽ : Ground Points

Code	See Page	Ground Points Location
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
EE	38	Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH

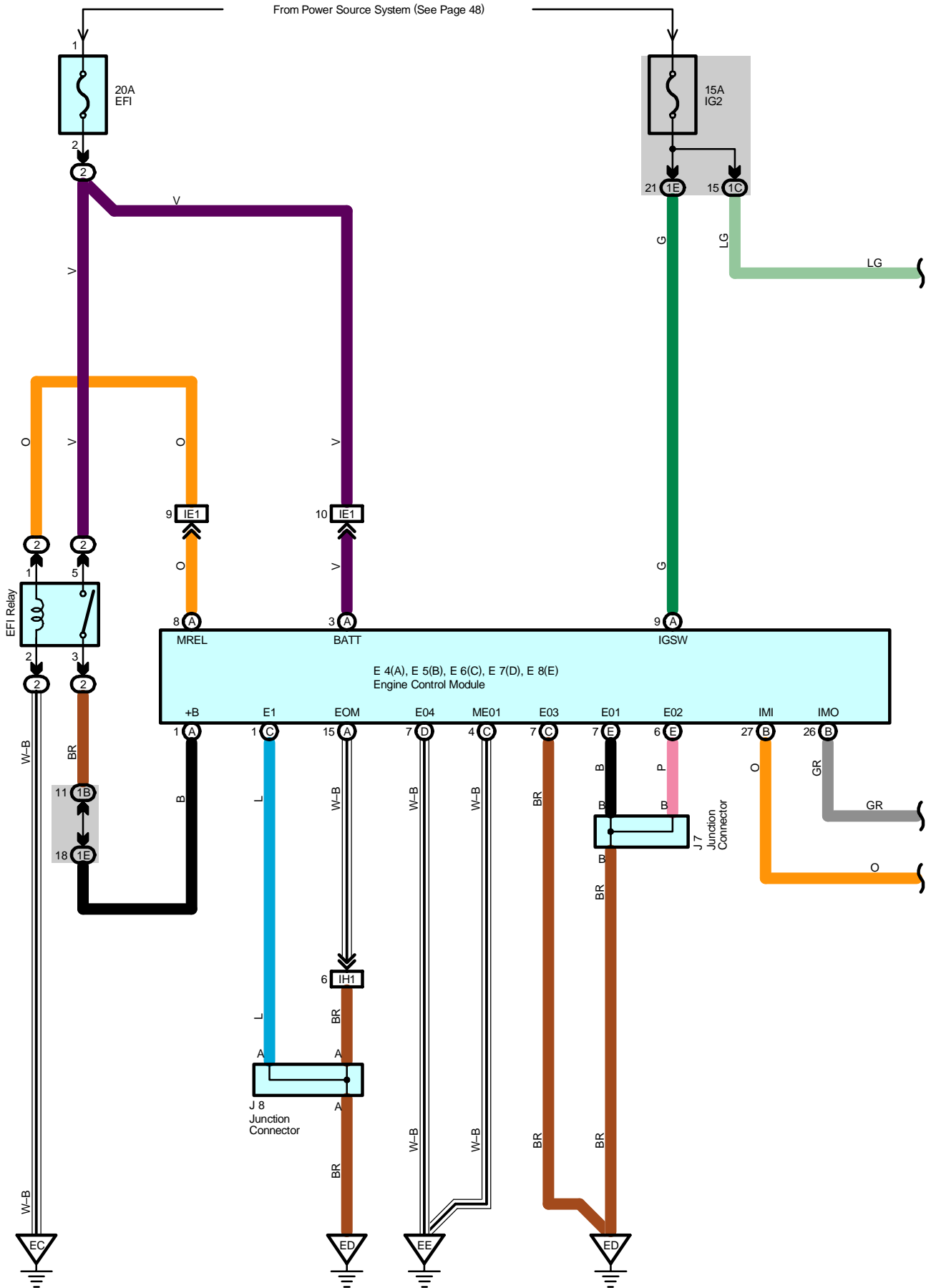


**: Splice Points**

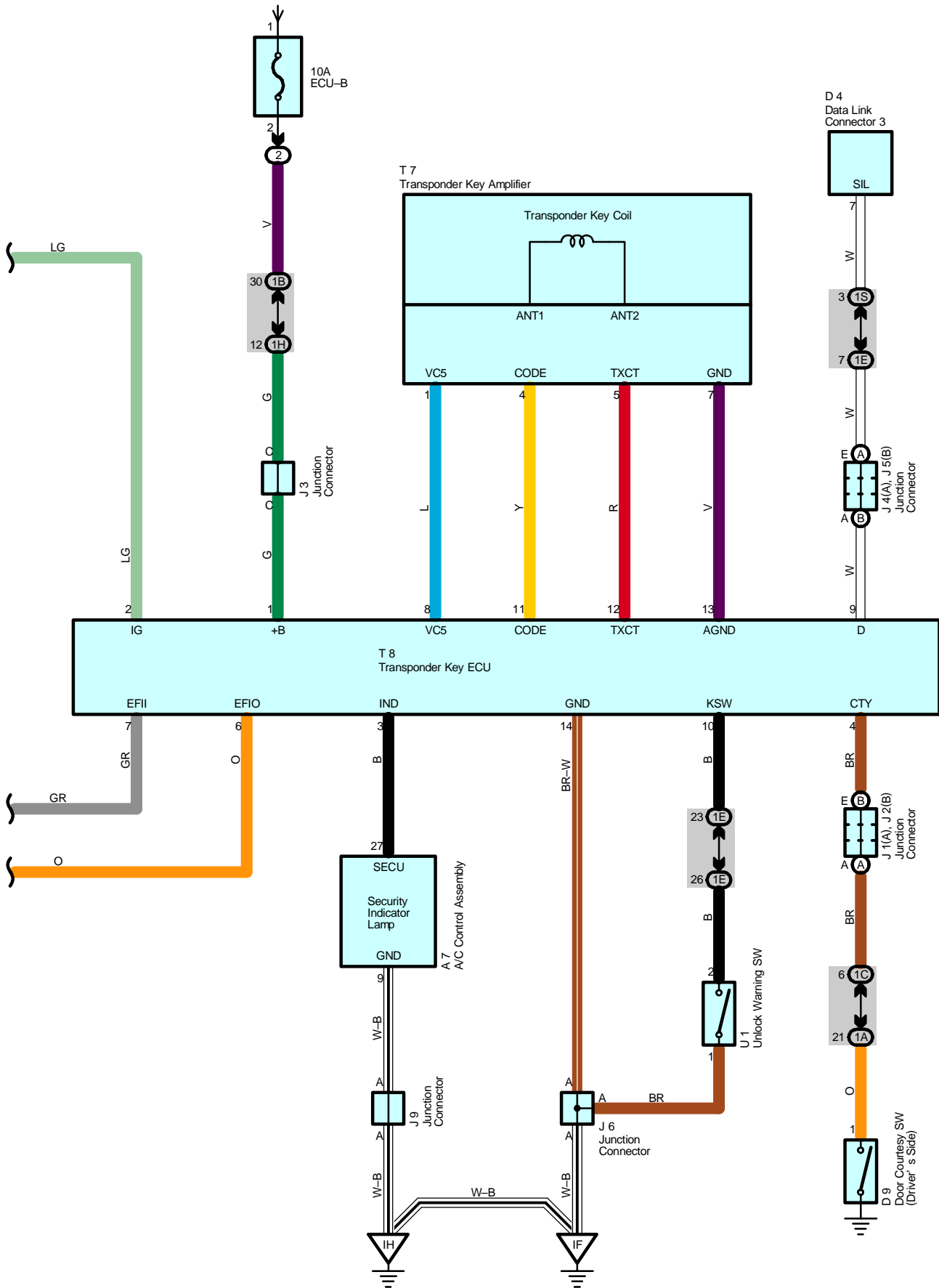
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E3	38	Engine Wire	E6	38	Engine Room Main Wire
E4			I2	42	Engine Wire



# Engine Immobilizer System



From Power Source System (See Page 48)



# Engine Immobilizer System

## Service Hints

### E4 (A), E6 (C), E7 (D), E8 (E) Engine Control Module

BATT–Ground : Always approx. 12 volts  
 IGSW–Ground : Approx. 12 volts with the ignition SW at ON position  
 EOM–Ground : Always continuity  
 E01, E02, E03, E04, E1, ME01–Ground : Always continuity

### T8 Transponder Key ECU

1–Ground : Always approx. 12 volts  
 2–Ground : Approx. 12 volts with the ignition SW at ON position  
 14–Ground : Always continuity  
 10–Ground : Continuity with the key in cylinder

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	34	E8	E 34	J7	35
D4	34	J1	A 35	J8	35
D9	36	J2	B 35	J9	35
E4	A 34	J3	35	T7	35
E5	B 34	J4	A 35	T8	35
E6	C 34	J5	B 35	U1	35
E7	D 34	J6	35		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1H		
1S		

## □ : Connector Joining Wire Harness and Wire Harness

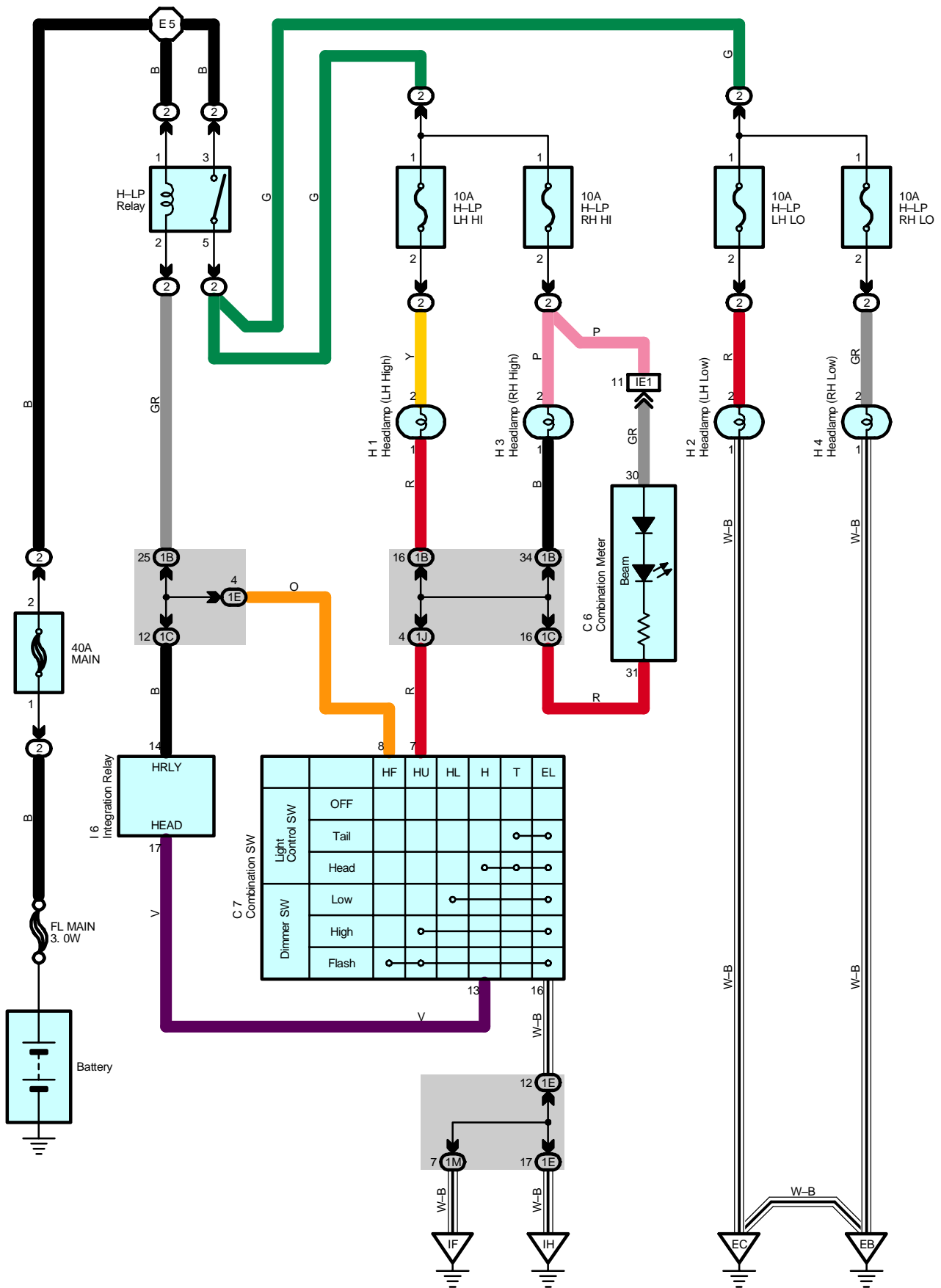
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)

## ▽ : Ground Points

Code	See Page	Ground Points Location
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
EE	38	Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH



# Headlight



## Service Hints

### C7 Combination SW

13-16 : Continuity with the light control SW at HEAD position

7-16 : Continuity with the dimmer SW at FLASH position or the dimmer SW at HIGH position

8-16 : Continuity with the dimmer SW at FLASH position

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C6	34	H2	32	I6	35
C7	34	H3	32		
H1	32	H4	32		

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C		
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1M	25	

### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)

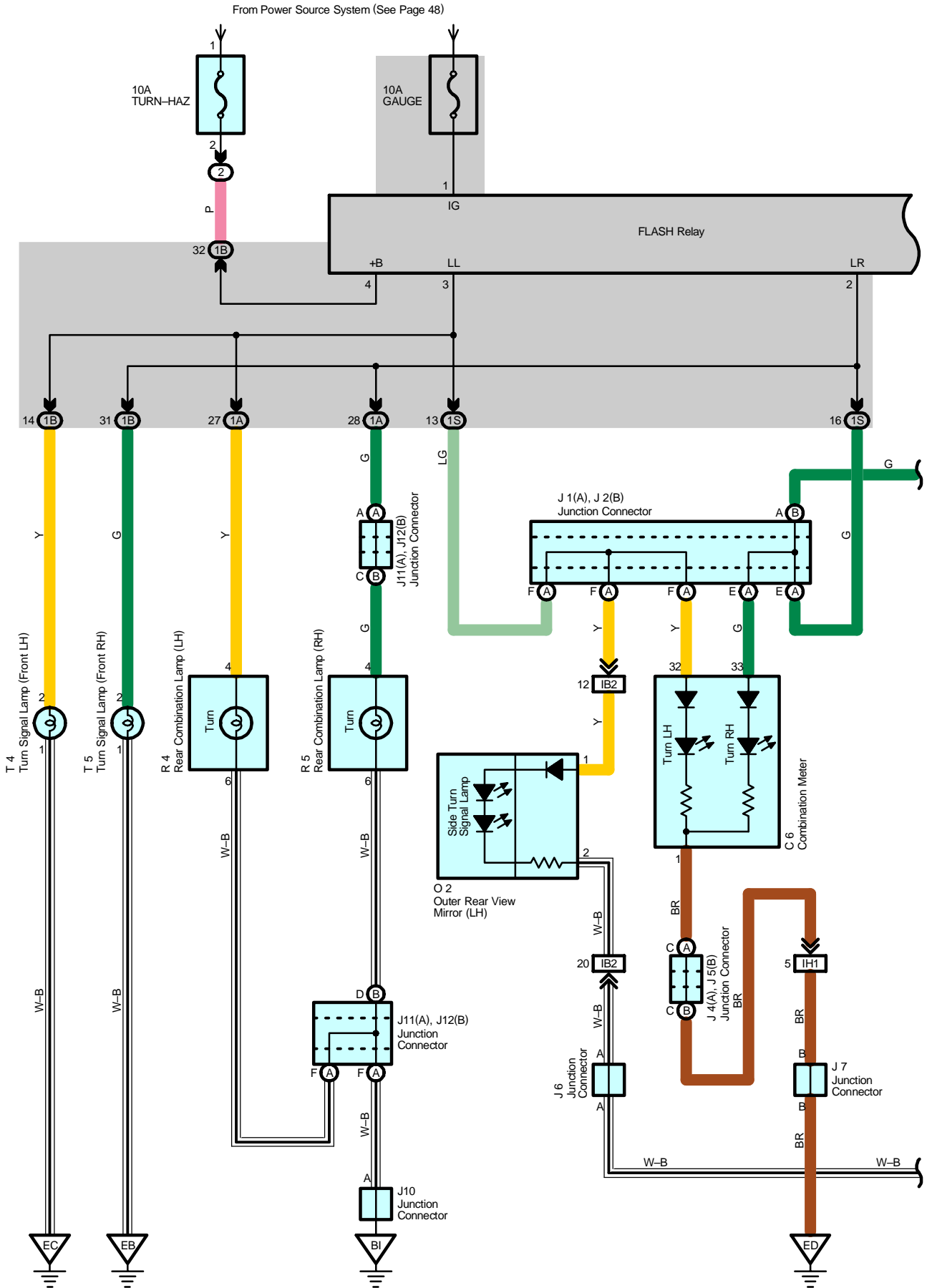
### ▽ : Ground Points

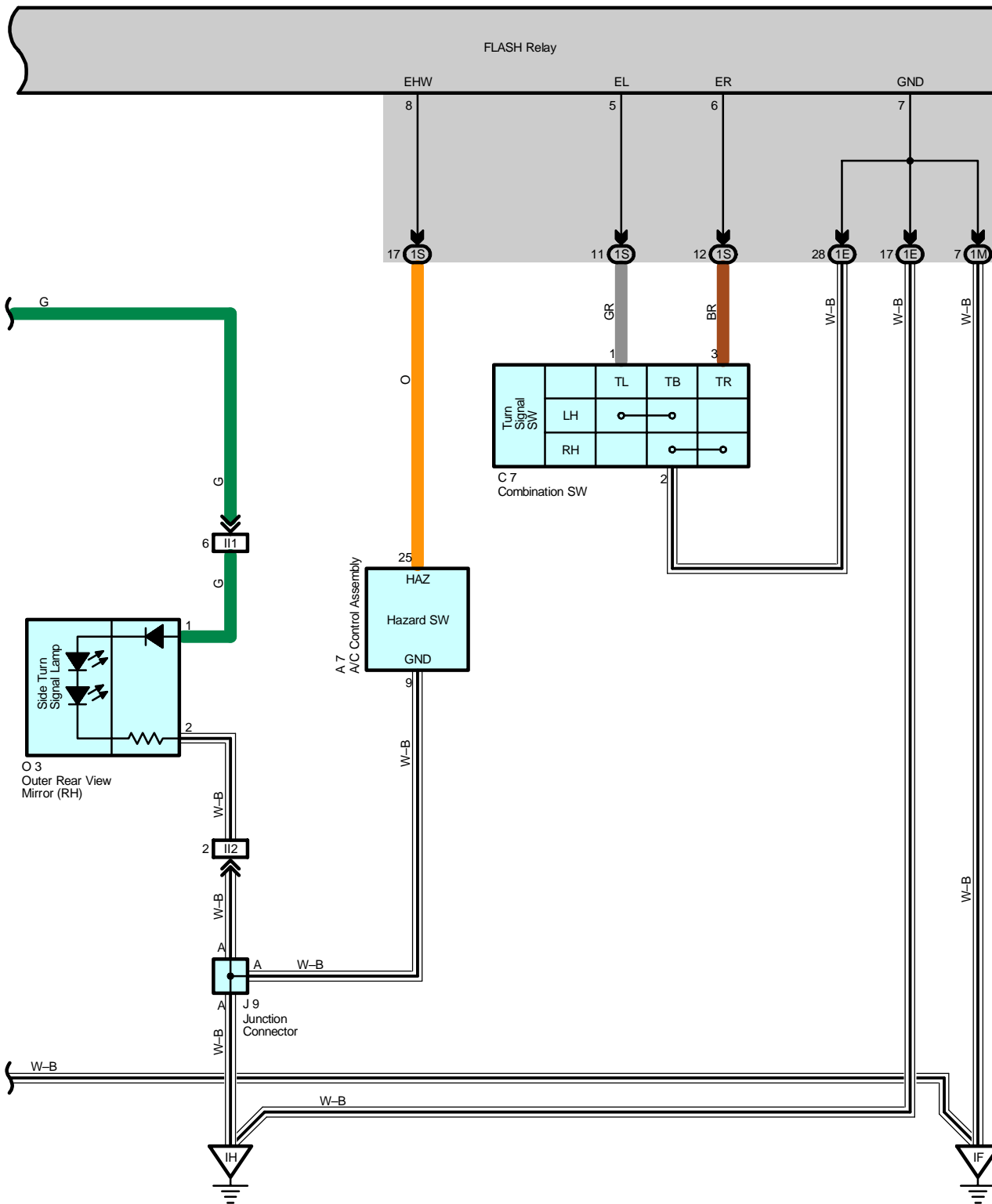
Code	See Page	Ground Points Location
EB	38	Front Right Fender
EC	38	Front Left Fender
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH

### ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	38	Engine Room Main Wire			

# Turn Signal and Hazard Warning Light







# Turn Signal and Hazard Warning Light

## Service Hints

### FLASH Relay

- 1-Ground : Approx. 12 volts with the ignition SW at ON position
- 4-Ground : Always approx. 12 volts
- 2, 3-Ground : Changes from approx. 12 to 0 volts with the ignition SW at ON position and the turn signal SW at LEFT or RIGHT position or the hazard SW at ON position
- 5-Ground : Continuity with the turn signal SW at LEFT position
- 6-Ground : Continuity with the turn signal SW at RIGHT position
- 8-Ground : Continuity with the hazard SW at ON position
- 7-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	34	J6	35	O3	37
C6	34	J7	35	R4	37
C7	34	J9	35	R5	37
J1	A 35	J10	36	T4	33
J2	B 35	J11	A 36	T5	33
J4	A 35	J12	B 36		
J5	B 35	O2	37		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	
1S		

## □ : Connector Joining Wire Harness and Wire Harness

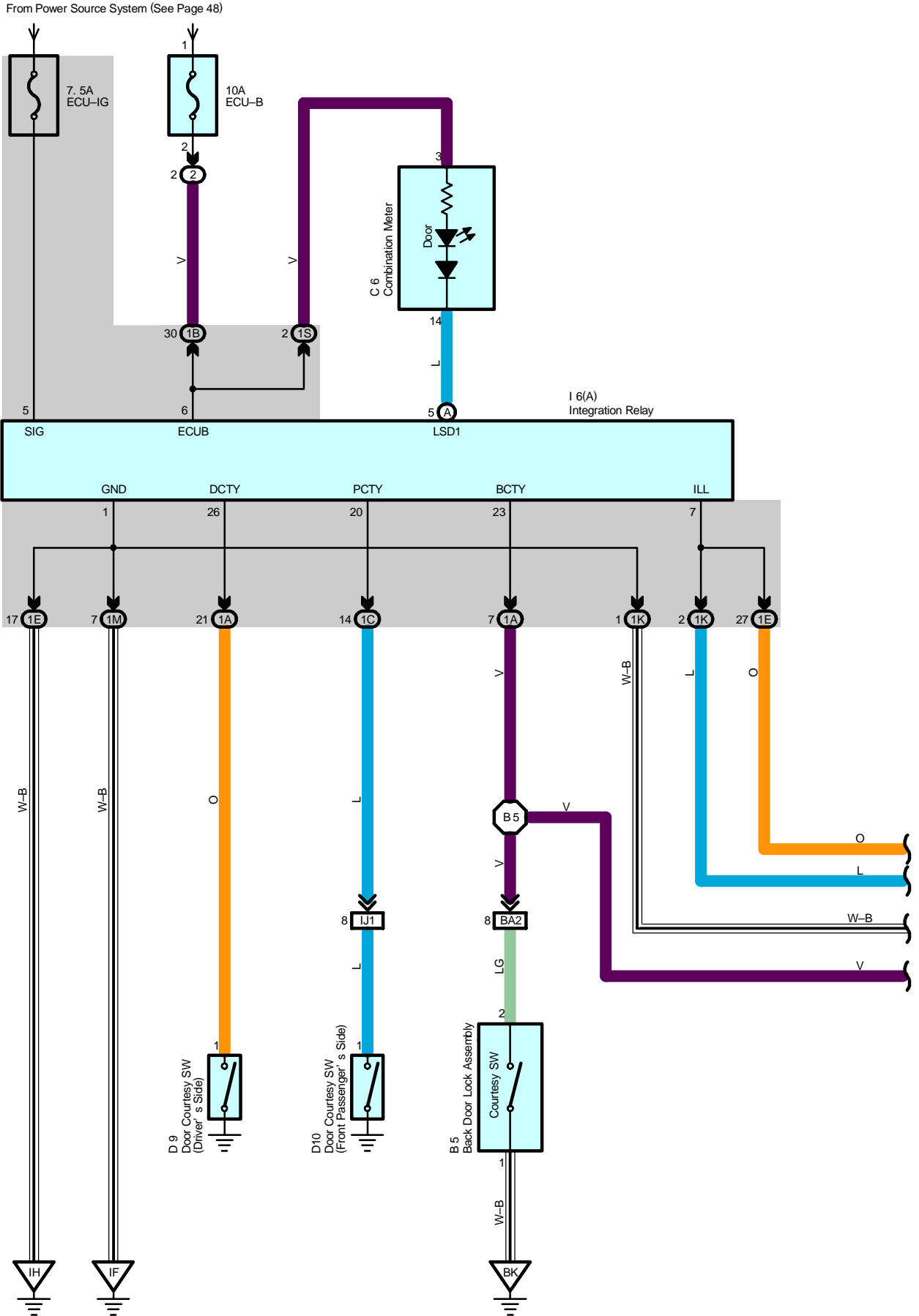
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	40	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
II1	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
II2		

## ▽ : Ground Points

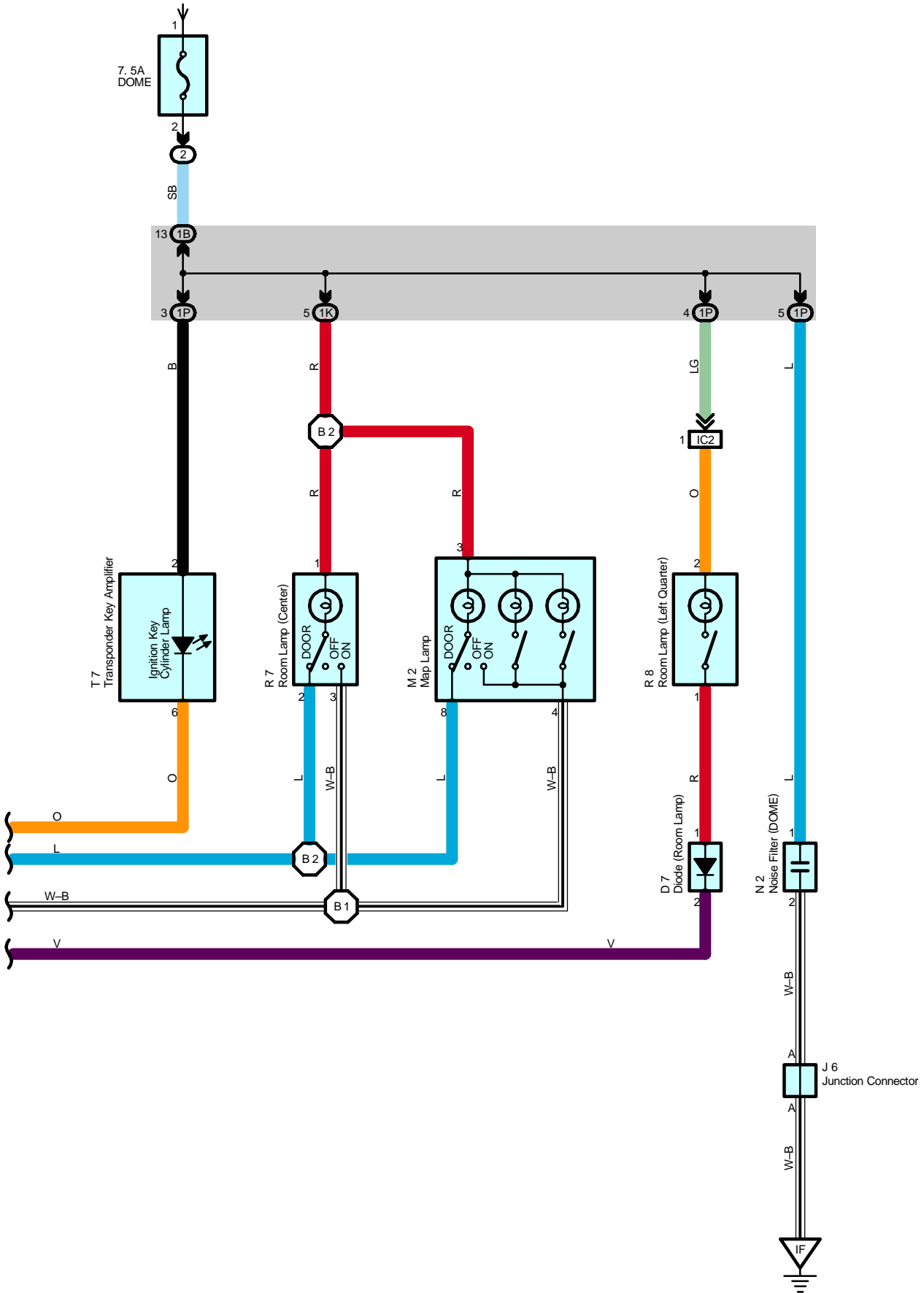
Code	See Page	Ground Points Location
EB	38	Front Right Fender
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH
BI	44	Quarter Panel LH



# Interior Light



From Power Source System (See Page 48)



# Interior Light

## System Outline

The interior light is controlled by the integration relay. This system has following features.

### Illuminated Entry System

- \* When a door is unlocked through a key operation or transmitter operation, or if a door is opened or closed, the illuminated entry system turns ON the room lamp (Center), map lamp and the ignition key cylinder lamp.
- \* If the ignition switch is turned to the ACC or ON position or if all doors are locked during the 15 seconds in which these lights are ON, they will immediately turn OFF.

## Service Hints

### Integration Relay

- 5-Ground : Approx. 12 volts with the ignition SW at ON position
- 6-Ground : Always approx. 12 volts
- 1-Ground : Always continuity
- 26-Ground : Continuity with the driver's door opened
- 20-Ground : Continuity with the front passenger's door opened
- 23-Ground : Continuity with the back door opened

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B5	<a href="#">36</a>	D10	<a href="#">36</a>	N2	<a href="#">35</a>
C6	<a href="#">34</a>	I6   A	<a href="#">35</a>	R7	<a href="#">37</a>
D7	<a href="#">36</a>	J6	<a href="#">35</a>	R8	<a href="#">37</a>
D9	<a href="#">36</a>	M2	<a href="#">36</a>	T7	<a href="#">35</a>

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	<a href="#">24</a>	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	<a href="#">24</a>	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1K	<a href="#">24</a>	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
1M	<a href="#">25</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		
1S		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	<a href="#">40</a>	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IJ1	<a href="#">42</a>	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)
BA2	<a href="#">44</a>	Back Door Wire and Floor Wire (Back Window Upper Frame LH)

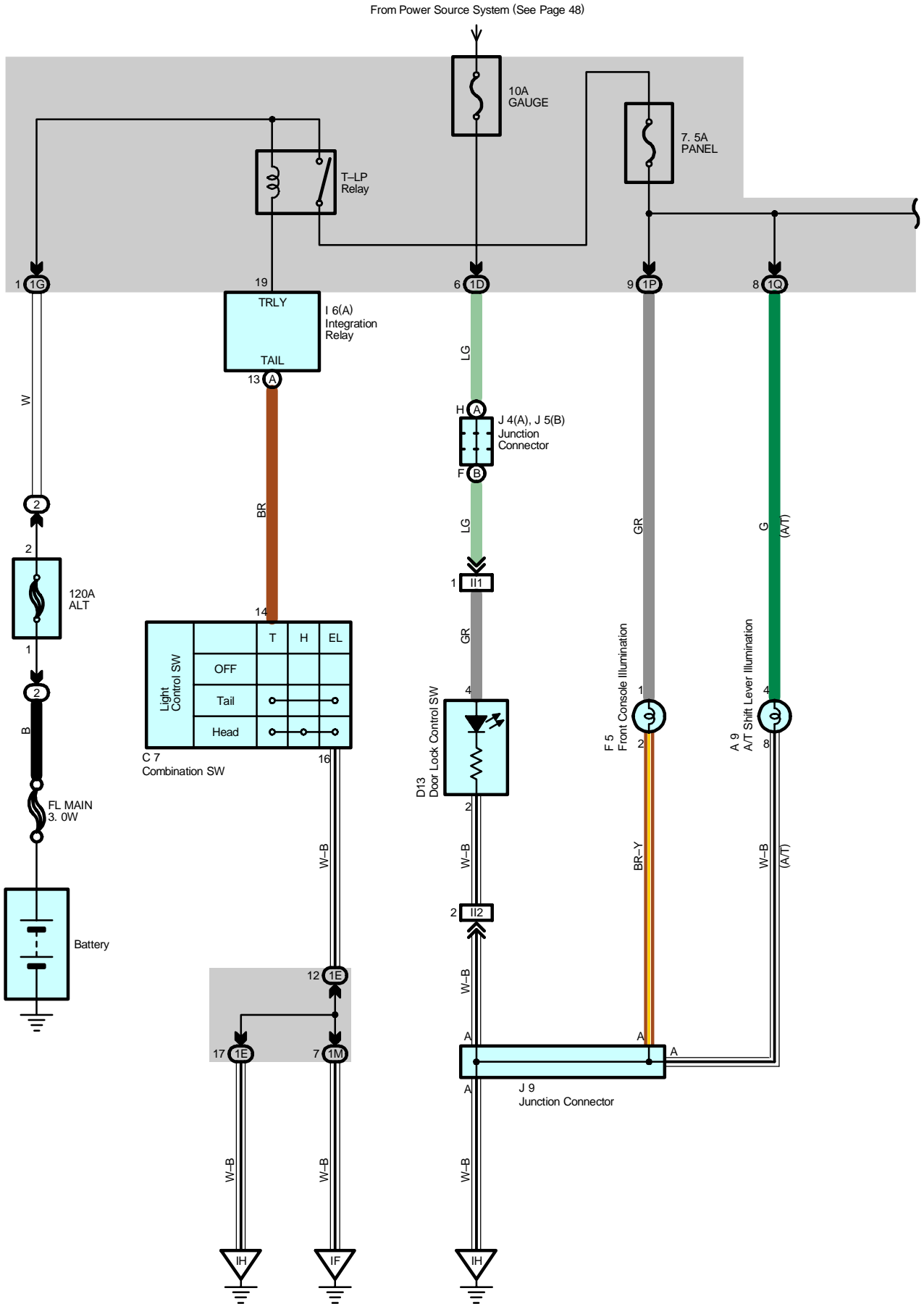
## ▽ : Ground Points

Code	See Page	Ground Points Location
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH
BK	<a href="#">44</a>	Left Side of the Back Door Panel



**: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B1	44	Roof Wire	B5	44	Floor Wire
B2					







# Illumination

## Service Hints

### C7 Combination SW

14-16 : Continuity with the light control SW at HEAD or TAIL position

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	34	F5	34	J9	35
A9	34	I6	A 35	R2	A 35
C6	34	J4	A 35	R3	B 35
C7	34	J5	B 35		
D13	36	J7	35		

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1D	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1G		
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		
1Q		
1S		

### □ : Connector Joining Wire Harness and Wire Harness

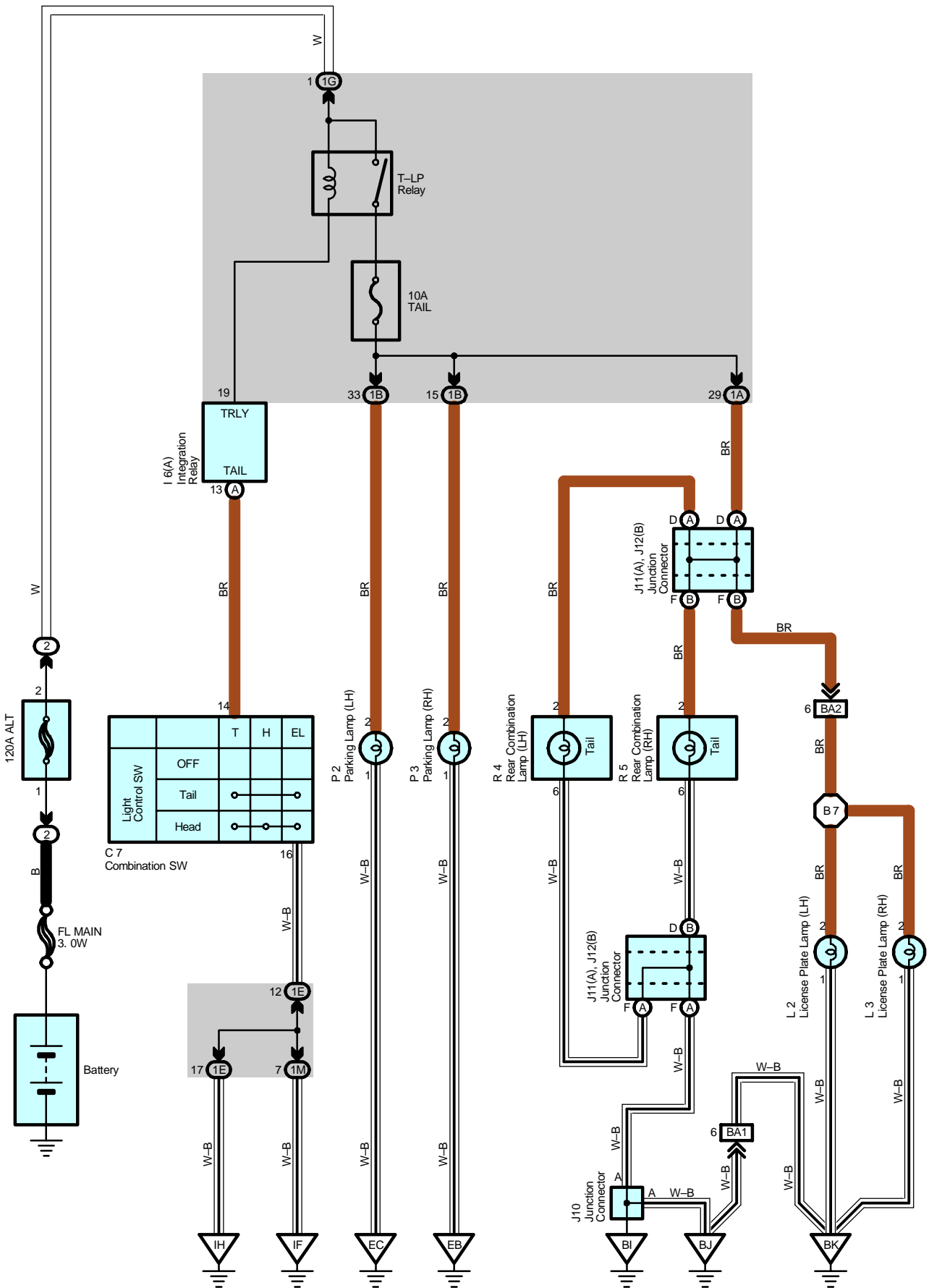
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
II1	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
II2		

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	38	Front Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH



# Taillight



## Service Hints

### C7 Combination SW

14–16 : Continuity with the light control SW at HEAD or TAIL position

### : Parts Location

Code	See Page	Code	See Page	Code	See Page
C7	34	J12   B	36	P3	33
I6   A	35	L2	36	R4	37
J10	36	L3	36	R5	37
J11   A	36	P2	33		

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1G	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	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)
BA1	44	Back Door Wire and Floor Wire (Back Window Upper Frame LH)
BA2		

### : Ground Points

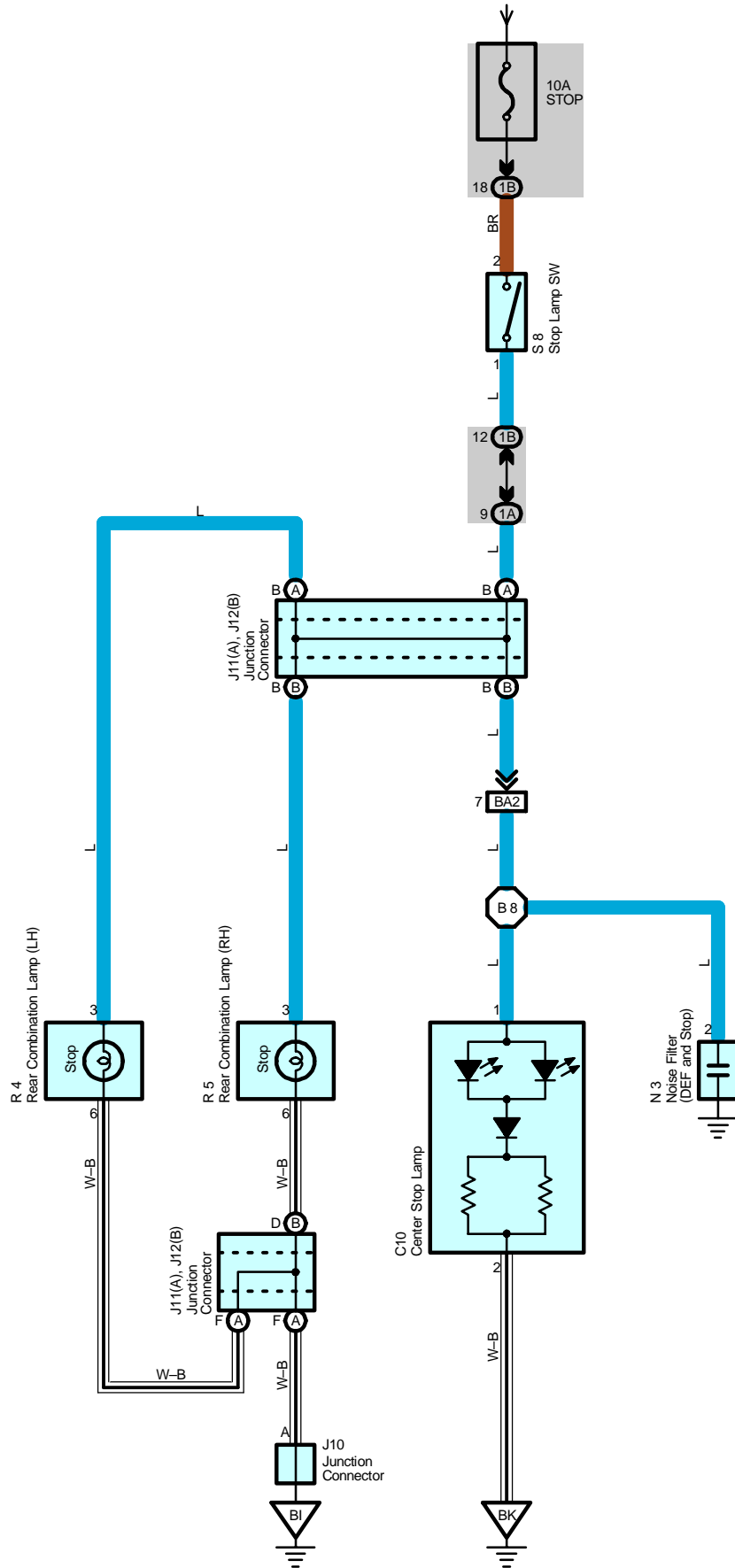
Code	See Page	Ground Points Location
EB	38	Front Right Fender
EC	38	Front Left Fender
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH
BI	44	Quarter Panel LH
BJ		
BK	44	Left Side of the Back Door Panel

### : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	44	Back Door Wire			

# Stop Light

From Power Source System (See Page 48)



**Service Hints****S8 Stop Lamp SW**

2-1 : Closed with the brake pedal depressed

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
C10	<a href="#">36</a>	J12   B	<a href="#">36</a>	R5	<a href="#">37</a>
J10	<a href="#">36</a>	N3	<a href="#">36</a>	S8	<a href="#">35</a>
J11   A	<a href="#">36</a>	R4	<a href="#">37</a>		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	<a href="#">24</a>	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	<a href="#">24</a>	Engine Room Main 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)
BA2	<a href="#">44</a>	Back Door Wire and Floor Wire (Back Window Upper Frame LH)

 : **Ground Points**

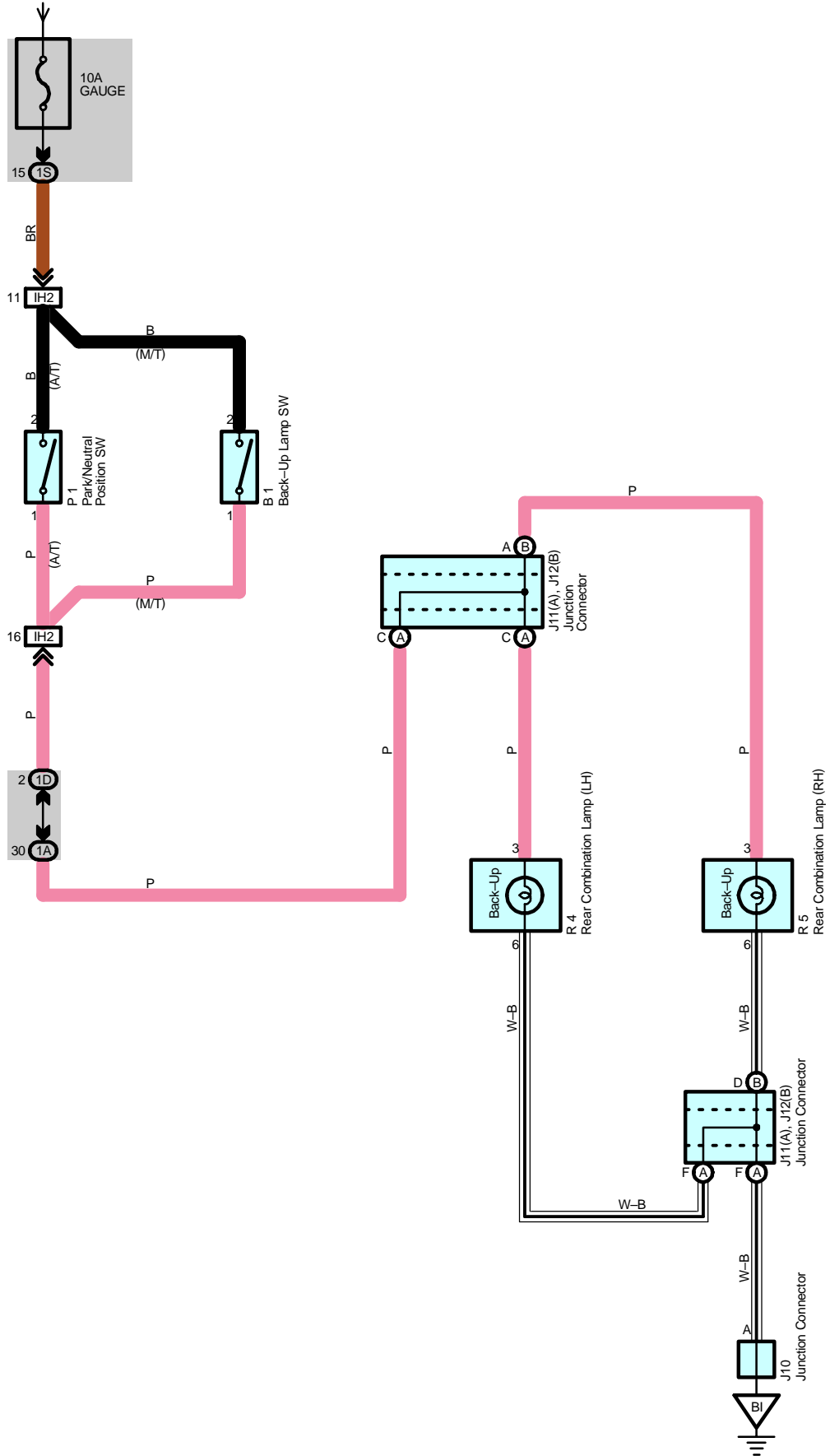
Code	See Page	Ground Points Location
BI	<a href="#">44</a>	Quarter Panel LH
BK	<a href="#">44</a>	Left Side of the Back Door Panel

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B8	<a href="#">44</a>	Back Door Wire			

# Back-Up Light

From Power Source System (See Page 48)



### Service Hints

#### B1 Back-Up Lamp SW (M/T)

2-1 : Closed with the shift lever in R position

#### P1 Park/Neutral Position SW (A/T)

2-1 : Closed with the shift lever in R position

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B1	<a href="#">32</a>	J12   B	<a href="#">36</a>	R5	<a href="#">37</a>
J10	<a href="#">36</a>	P1	<a href="#">33</a>		
J11   A	<a href="#">36</a>	R4	<a href="#">37</a>		

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	<a href="#">24</a>	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1D	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S	<a href="#">25</a>	

### □ : Connector Joining Wire Harness and Wire Harness

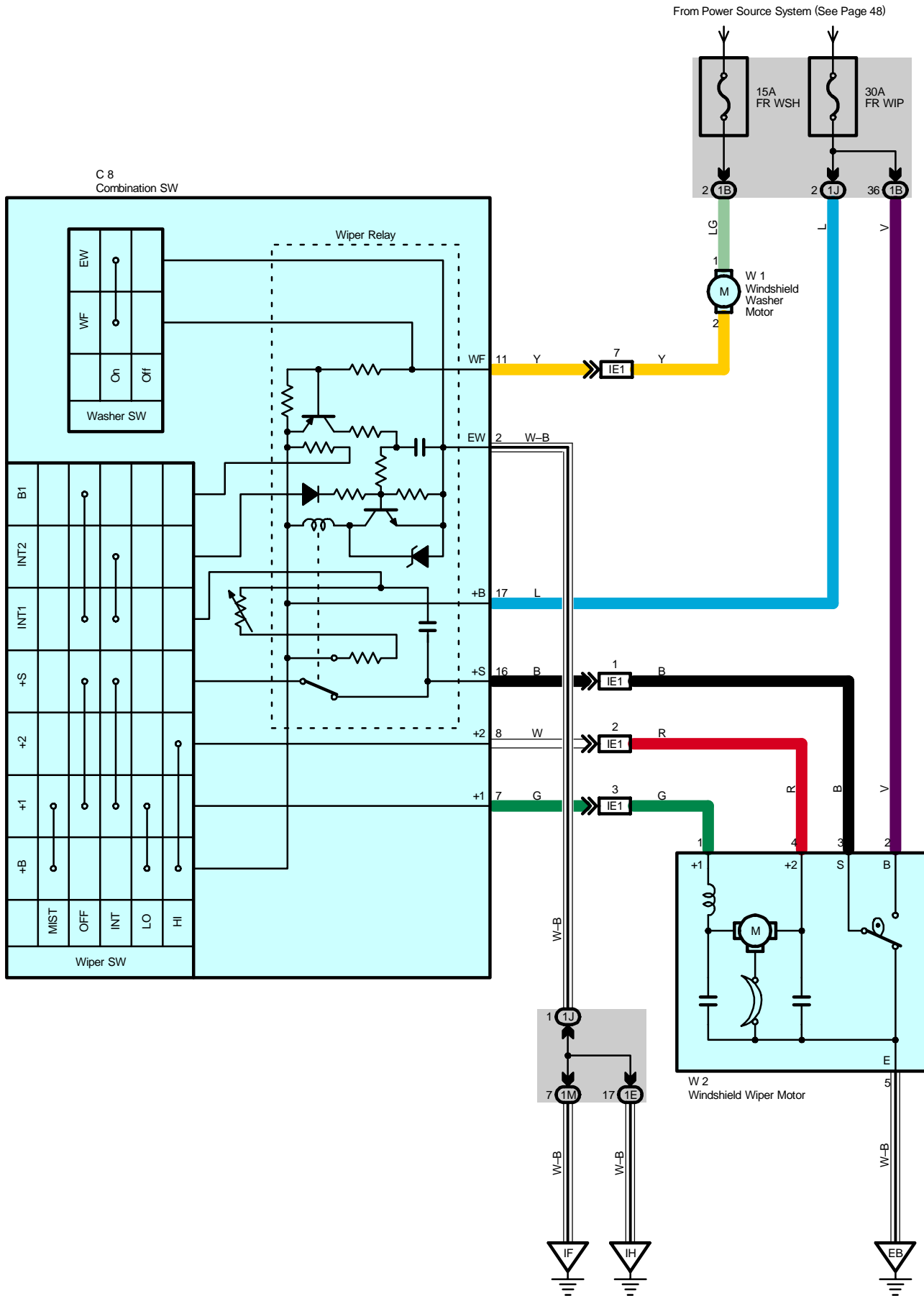
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH2	<a href="#">42</a>	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)

### ▽ : Ground Points

Code	See Page	Ground Points Location
BI	<a href="#">44</a>	Quarter Panel LH



# Front Wiper and Washer



## System Outline

With the ignition SW turned on, the current flows to TERMINAL 17 of the wiper and washer SW and TERMINAL 2 of the windshield wiper motor through the FR WIP fuse. The current flows to TERMINAL 1 of the windshield washer motor through the FR WSH fuse.

### 1. Low Speed Position

With the wiper and washer SW turned to LO position, the current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the windshield wiper motor to TERMINAL 5 to GROUND and causes the windshield wiper motor to run at low speed.

### 2. High Speed Position

With the wiper and washer SW turned to HI position, the current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 8 to TERMINAL 4 of the windshield wiper motor to TERMINAL 5 to GROUND and causes the windshield wiper motor to run at high speed.

### 3. INT Position

With the wiper and washer SW turned to INT position, the wiper relay operates and current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 2 to GROUND. This activates the intermittent circuit and the current flows from TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the windshield wiper motor to TERMINAL 5 to GROUND and the wiper operates. Intermittent operation is controlled by a condenser charge and discharge function in the relay.

### 4. Washer Continuous Operation

With the wiper and washer SW pulled to WASHER position (Washer SW ON position), the current flows from the FR WSH fuse to TERMINAL 1 of the windshield washer motor to TERMINAL 2 to TERMINAL 11 of the wiper and washer SW to TERMINAL 2 to GROUND and causes the windshield washer motor to run and the window washer to spray. Simultaneously, current flows from the FR WIP fuse to TERMINAL 17 of the wiper and washer SW to TERMINAL 7 to TERMINAL 1 of the windshield wiper motor to TERMINAL 5 to GROUND, causing the wiper to function.

## Service Hints

### C8 Combination SW

- 2-Ground : Always continuity
- 17-Ground : Approx. 12 volts with the ignition SW at ON position
- 7-Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at LO position  
Approx. 12 volts every approx. 1 to 10 seconds intermittently with the ignition SW on and the wiper and washer SW at INT position
- 16-Ground : Approx. 12 volts with the ignition SW on and unless the front wiper motor at STOP position
- 8-Ground : Approx. 12 volts with the ignition SW on and the wiper and washer SW at HI position

### W2 Windshield Wiper Motor

- 2-3 : Closed unless the front wiper motor at STOP position

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
C8	34	W1	33	W2	33

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1J		
1M		

## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)

# Front Wiper and Washer

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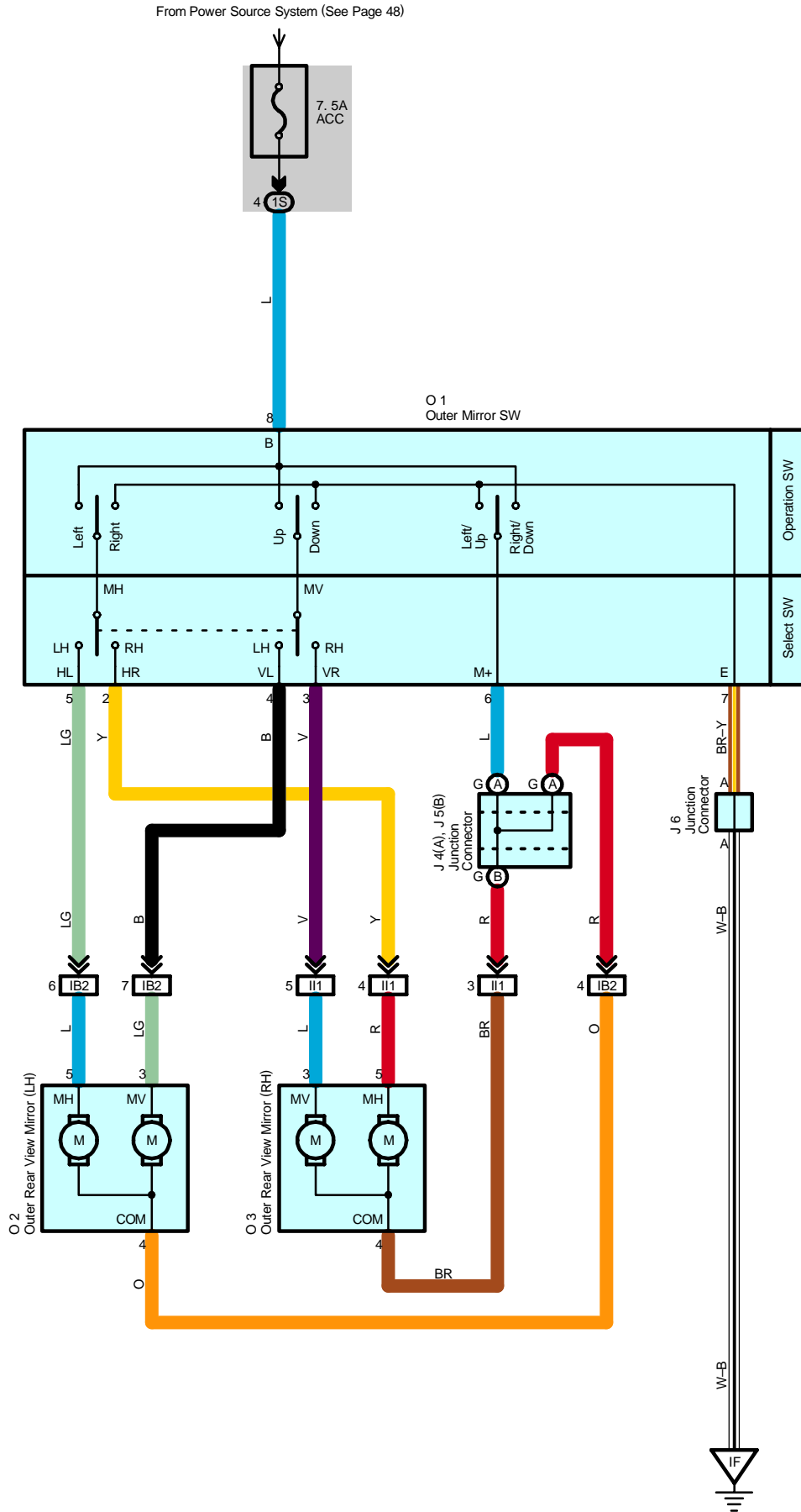


## : Ground Points

Code	See Page	Ground Points Location
EB	<a href="#">38</a>	Front Right Fender
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH



# Remote Control Mirror



## Service Hints

### O1 Outer Mirror SW

8-Ground : Approx. 12 volts with the ignition SW at ACC or ON position

6-7 : Continuity with the operation SW at UP or LEFT position

8-6 : Continuity with the operation SW at DOWN or RIGHT position

### : Parts Location

Code		See Page	Code	See Page	Code	See Page
J4	A	<a href="#">35</a>	J6	<a href="#">35</a>	O2	<a href="#">37</a>
J5	B	<a href="#">35</a>	O1	<a href="#">35</a>	O3	<a href="#">37</a>

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1S	<a href="#">25</a>	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)
IB2	<a href="#">40</a>	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II1	<a href="#">42</a>	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)

### : Ground Points

Code	See Page	Ground Points Location
IF	<a href="#">40</a>	Cowl Brace LH







# Power Window

## System Outline

### 1. Manual Up and Down Function

This function operates the window to open or close while the power window switch is being pulled up or pushed down (Should be pulled up and down halfway for manual operation.). The window stops as soon as the switch is released.

### 2. One-Touch Auto Up and Down Function

"One-touch auto up and down function" enables the window of front doors to be fully opened or closed with a touch of the power window switch.

### 3. Jam Protection Function

The jam protection function automatically stops the power window and moves it downward if a foreign object gets jammed in the course of the window during one-touch auto-up operation.

### 4. Remote Control Function

The up and down operation of the front passenger door windows can be controlled by operating the power window master switch.

### 5. Key-Off Operation Function

Within about 43 seconds when turn OFF the ignition SW or until the driver's or passenger's door is opened, this function enables the door window operation with the power window master switch and/or the manual operation at each passenger's seat door.

\* When the battery terminal or fuse is disconnected, the glass position of all door windows have to be reset to the initial positions, one by one, with the power window control switch by following the procedure below:

- A) Reconnect the battery terminal or fuse.
- B) Turn ON the ignition switch.
- C) Lower the window of each door halfway or more with the power window switch.
- D) Then close the window fully with the power window switch.  
Do not release the switch for at least 2 seconds after the window is fully closed.

## Service Hints

### P9 Power Window Master SW

- 10-Ground : Always approx. 12 volts
- 20-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
D9	36	J6	35	P11	37
D10	36	J9	35	P12	37
J4	A 35	P9	37		
J5	B 35	P10	37		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1H		
1M	25	

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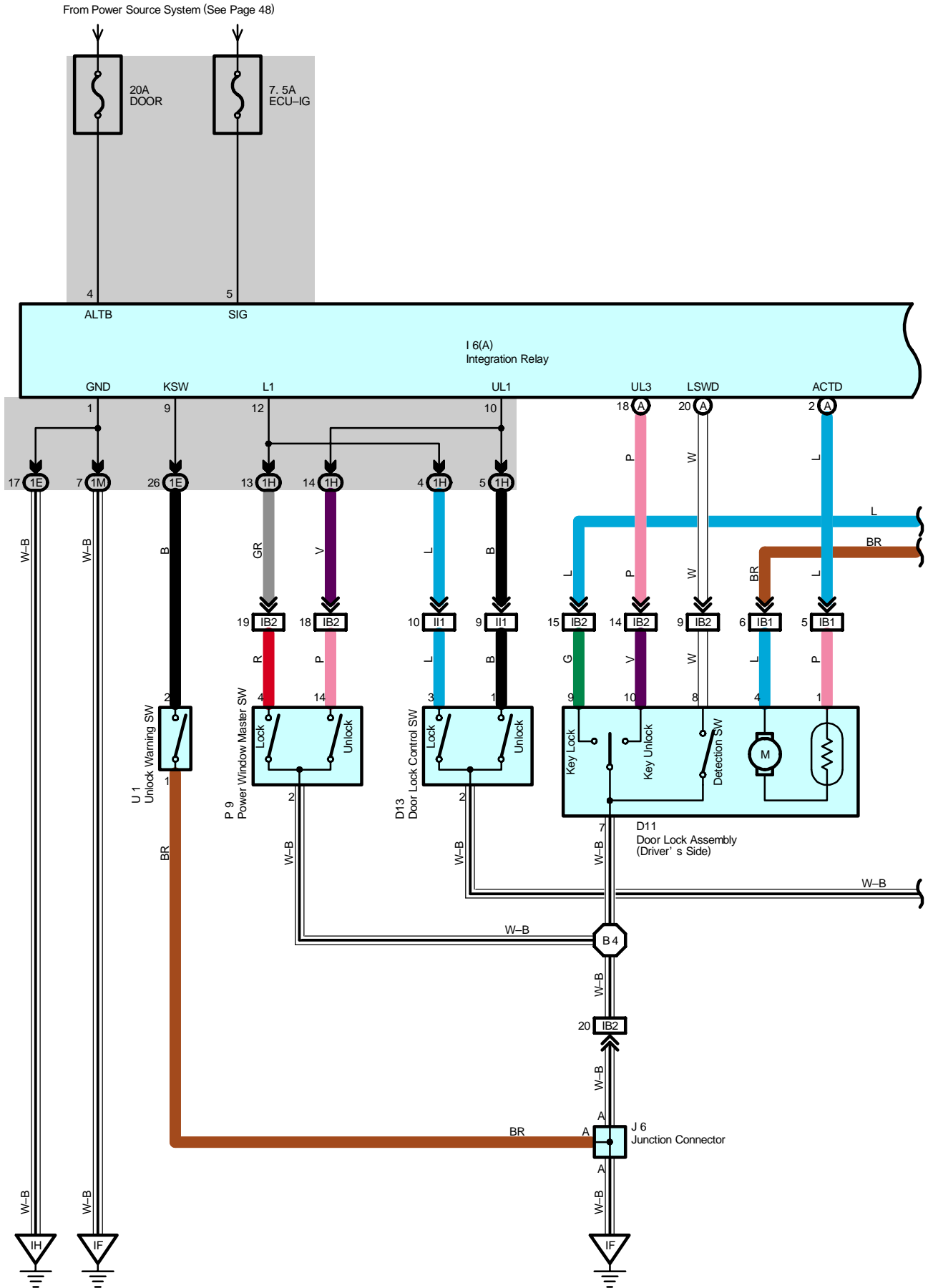
 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB2	<a href="#">40</a>	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
II2	<a href="#">42</a>	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	<a href="#">42</a>	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)

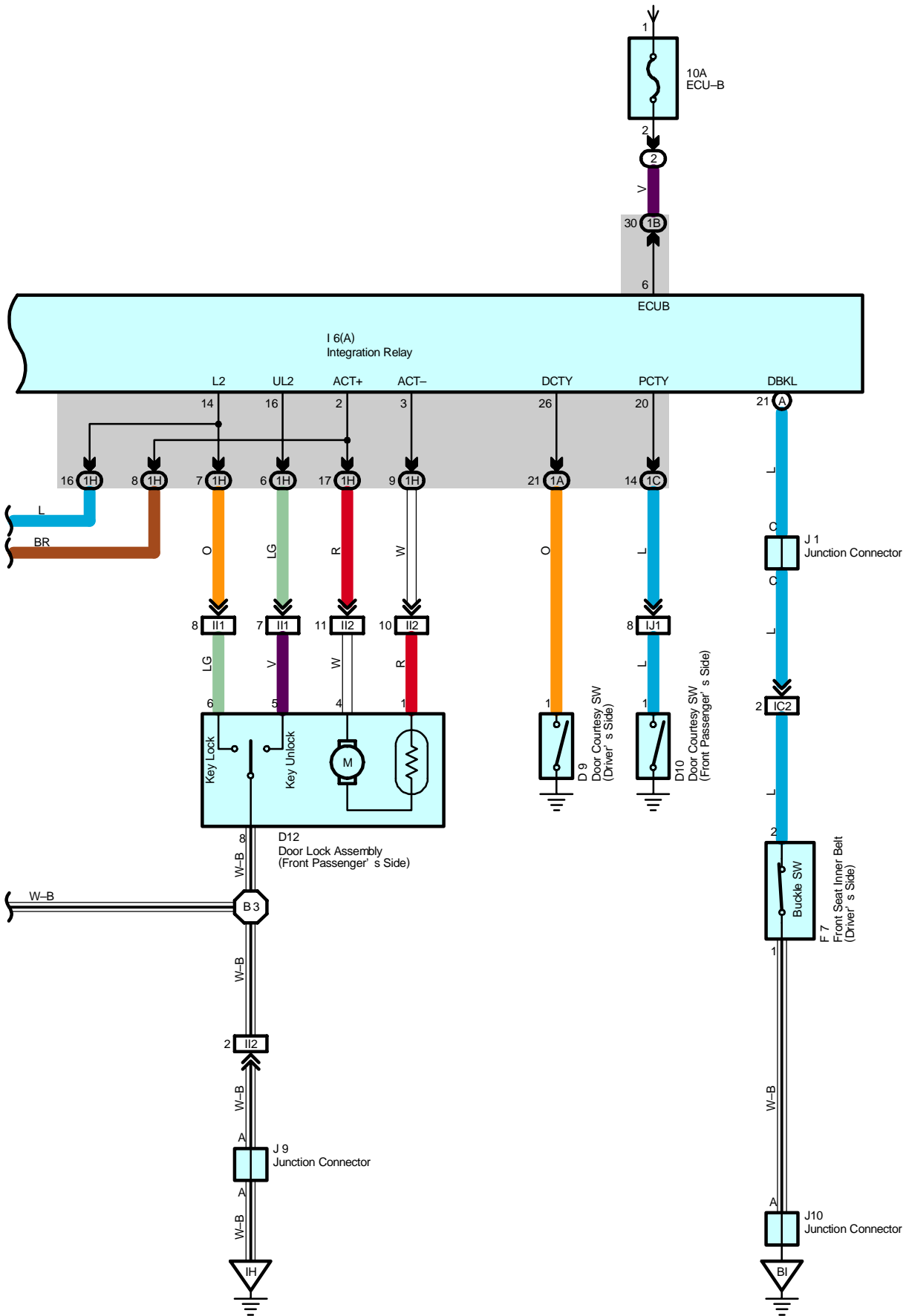
 : **Ground Points**

Code	See Page	Ground Points Location
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH

# Door Lock Control



From Power Source System (See Page 48)



# Door Lock Control

## System Outline

The door lock control is a system controlled by various signals input into the integration relay.

### 1. Manual Unlock Operation

When the door lock control SW of the driver's or passenger's side door is pushed to UNLOCK, the door unlocks.

### 2. Manual Lock Operation

When the door lock control SW of the driver's or passenger's side door is pushed to LOCK, the door locks.

### 3. Door Key Unlock Operation

\* Unlock operation from driver's side door

When the driver's side door is unlocked once using the mechanical key, only the driver's side door unlocks. If this operation is repeated within 3 seconds, all the other doors also unlock.

### 4. Ignition Key Reminder Operation

Under condition that the ignition key remains inserted in the ignition key cylinder and driver's side door is open, locking operation with door knob of driver's door is not effective but automatically unlocks the door. When the door is locked with the manual door lock SW of driver's door or door key SW of driver's door, the door locks once but right after that, the door unlocks automatically.

## Service Hints

### Integration Relay

4, 6-Ground : Always approx. 12 volts

5-Ground : Approx. 12 volts with the ignition SW at ON position

1-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
D9	36	F7	36	J10	36
D10	36	I6	A 35	P9	37
D11	36	J1	35	U1	35
D12	36	J6	35		
D13	36	J9	35		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1H		
1M	25	

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	40	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2		
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
II1	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
II2		
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)



**: Ground Points**

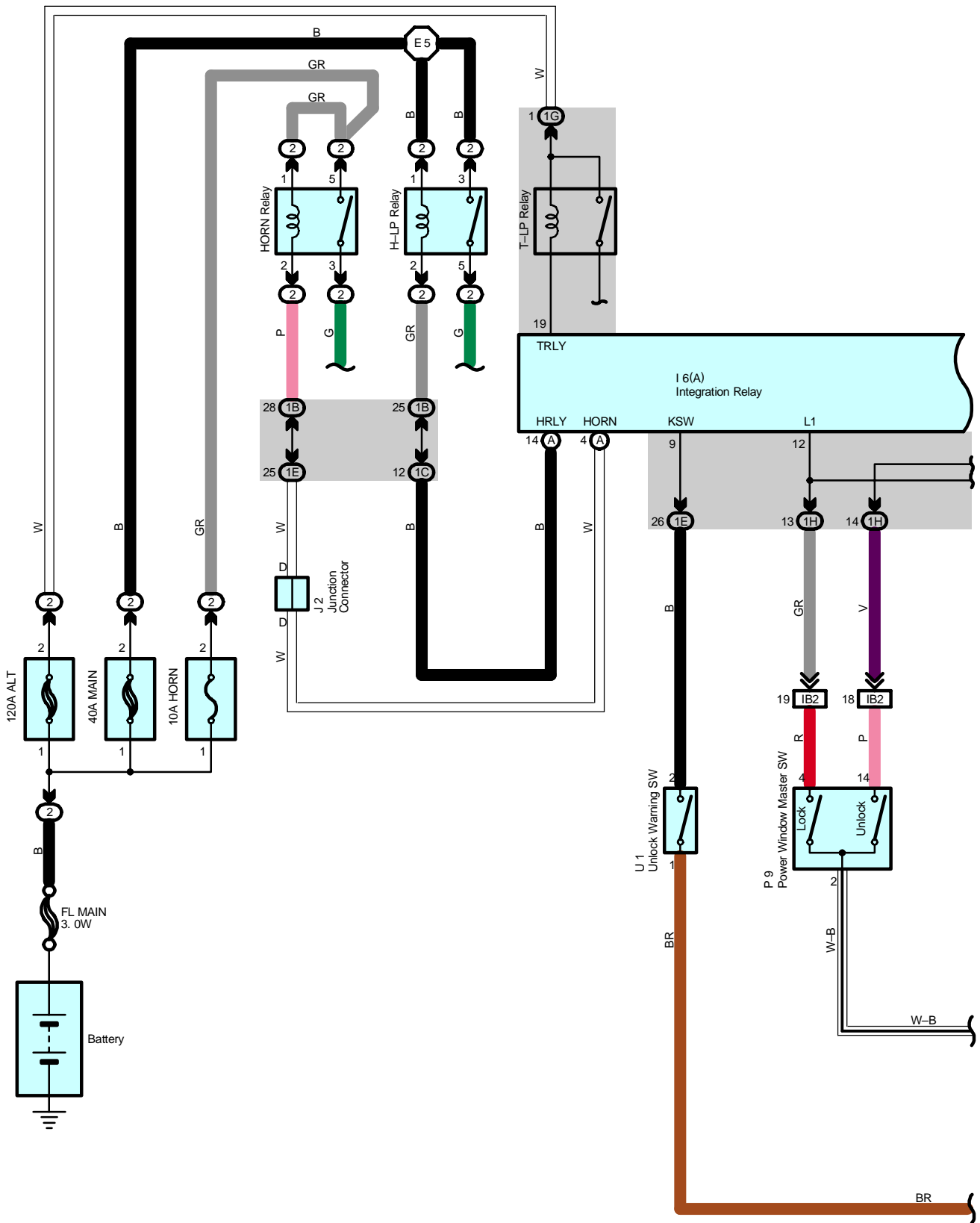
Code	See Page	Ground Points Location
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH
BI	<a href="#">44</a>	Quarter Panel LH

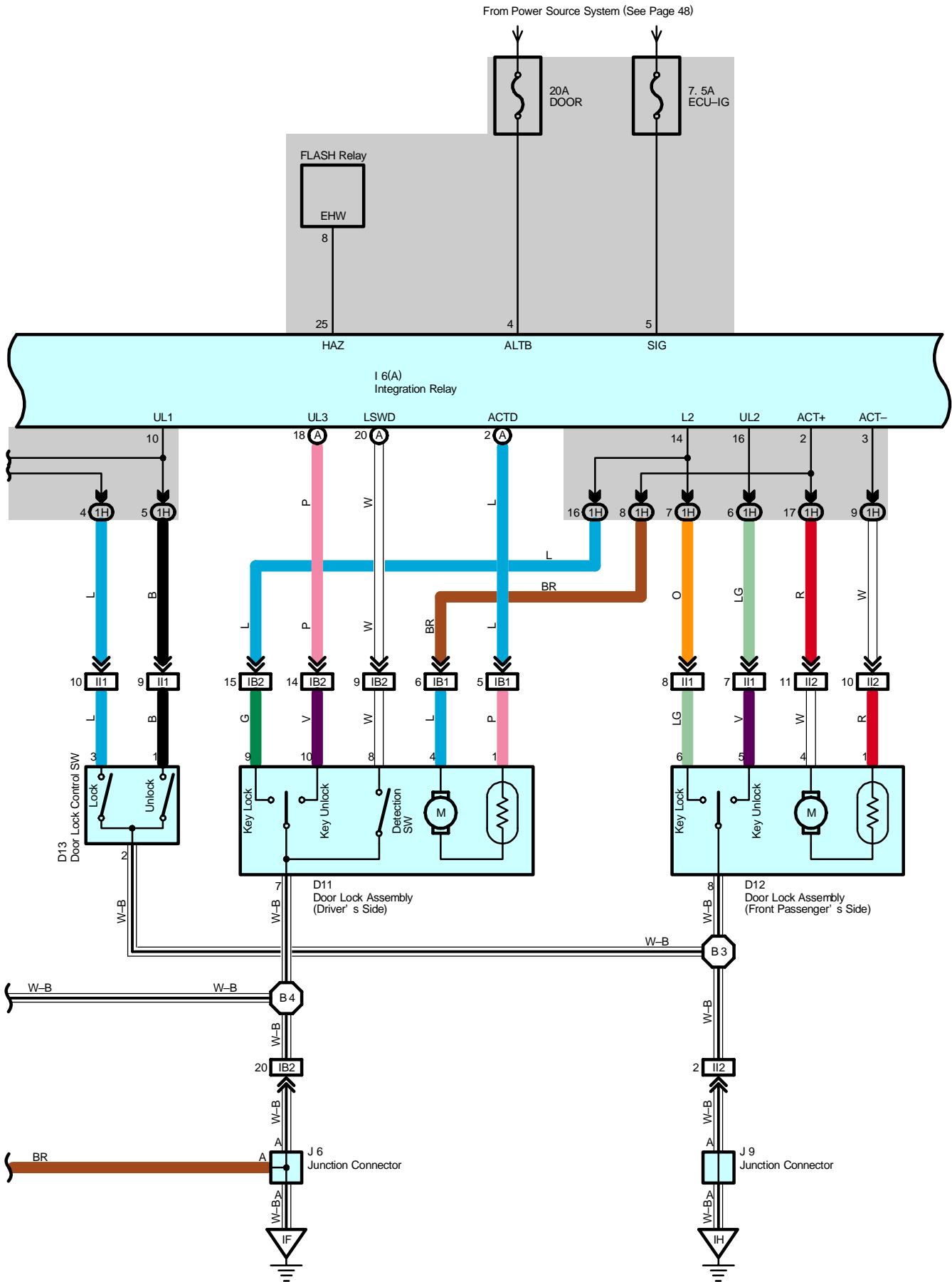


**: Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B3	<a href="#">44</a>	Front Door RH Wire	B4	<a href="#">44</a>	Front Door LH Wire

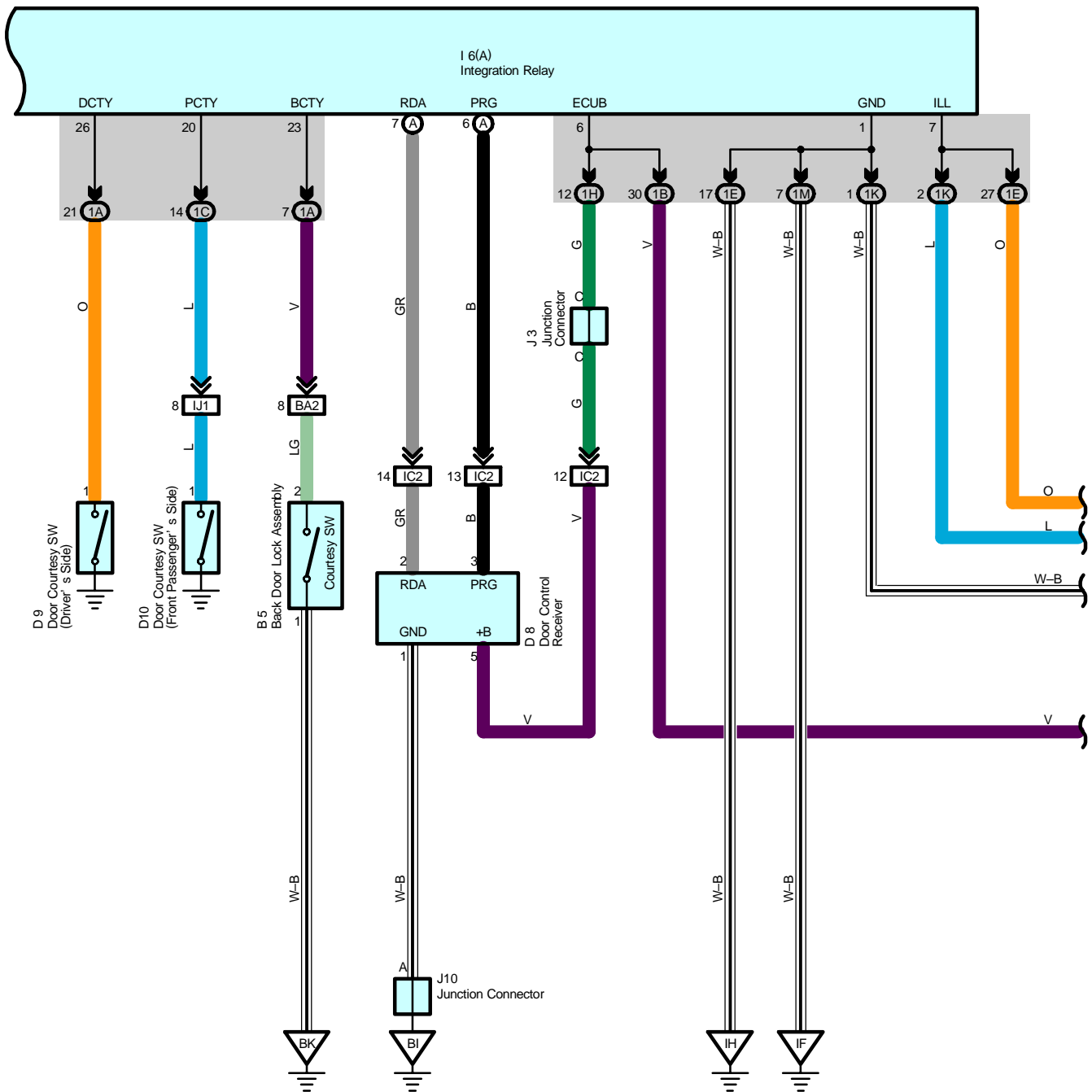
# Wireless Door Lock Control



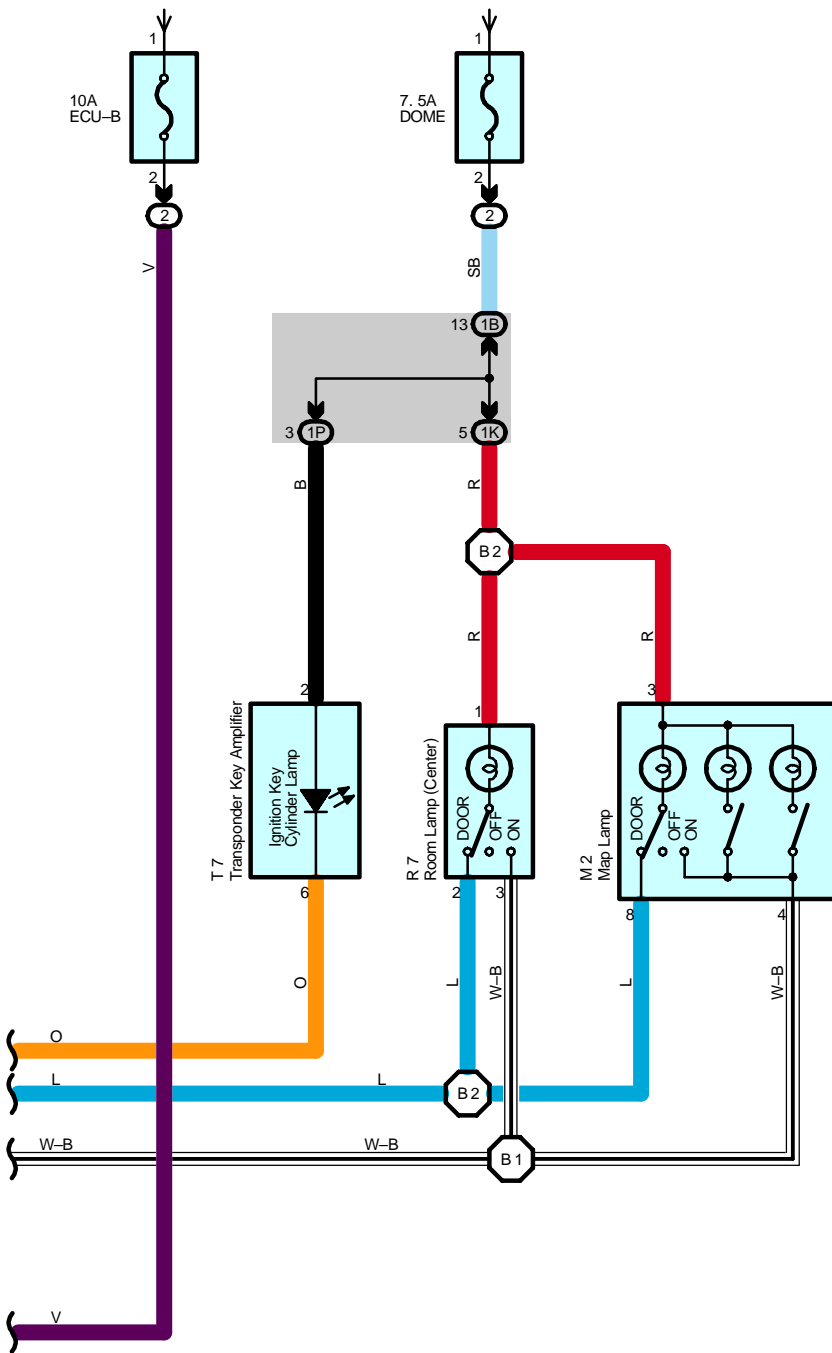




# Wireless Door Lock Control



From Power Source System (See Page 48)



# Wireless Door Lock Control

## System Outline

Door lock control (Lock and unlock) and panic control (Theft alarm and flash) is performed by remote control, without the ignition key inserted in the door key cylinder, using low-power electrical waves emitted by a transmitter.

### 1. Normal Operation

#### \* Lock operation

When the lock SW on the transmitter is pressed, all the doors are locked.

#### \* Unlock operation

When the unlock SW on the transmitter is pressed once, only the driver door is unlocked. When the unlock SW is pressed again within 3 seconds, all the doors are unlocked.

### 2. Auto Lock Function

When the door is not actually opened within 30 seconds after the door has been unlocked by the unlock SW on the transmitter, all the doors are automatically locked. If any of the following conditions are detected, the wireless door lock does not function.

#### \* Any door is opened.

#### \* The ignition key is inserted into the ignition SW.

#### \* When the lock detection SW of the door is locked.

### 3. Wireless Door Lock Stop Function

If any of the following conditions are detected, the wireless door lock does not function.

Lock operation

#### \* When any door is open (Door courtesy SW on)

#### \* The ignition key is inserted into the ignition SW (Unlock warning SW on)

#### \* Ignition SW is on

Unlock operation

#### \* Ignition SW is on

### 4. Visual Confirmation of Lock or Unlock

During lock operation, when the integration relay receives a lock signal from the door lock detection SW, the turn signal lamp is flashed once. During unlock operation, when the integration relay receives an unlock signal from the door lock detection SW, the turn signal lamp is flashed twice.

### 5. Remote Panic Operation

Panic will function when doors are locked or unlocked, open or closed. When the panic button (Transmitter) is pushed once, map lamp, room lamp (Center) and ignition key cylinder lamp light up, and theft alarm and horn sounds and turn signal lamp, headlamp and taillamp flash. Then, the panic, the lock or the unlock button (Transmitter) is pushed once more, map lamp, room lamp (Center) and ignition key cylinder lamp are turned off, sounding and flashing will stop. Panic will not function when ignition key is in ignition key cylinder.

### 6. Repeat Function

If the lock detection signal in response to the output signal is not received after the integration relay has output the lock signal, the lock signal is output again.

### 7. Illuminated Entry Function

When the integration relay detects the unlock state after the unlock operation has been made, it turns on the lamps, such as the map lamp, room lamp (Center) and ignition key cylinder lamp for approx. 15 sec. If all the doors are locked during this operation, lighting is cancelled and the lamps immediately fade out.

## Service Hints

### Integration Relay

4, 6-Ground : Always approx. 12 volts

5-Ground : Approx. 12 volts with the ignition SW at ON position

1-Ground : Always continuity

### D8 Door Control Receiver

5-Ground : Always approx. 12 volts

1-Ground : Always continuity

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
B5	36	D13	36	J10	36
D8	36	I6	A 35	M2	36
D9	36	J2	35	P9	37
D10	36	J3	35	R7	37
D11	36	J6	35	T7	35
D12	36	J9	35	U1	35

 : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1G	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1H	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1K	24	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	40	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IB2		
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
II1	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
II2		
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)
BA2	44	Back Door Wire and Floor Wire (Back Window Upper Frame LH)

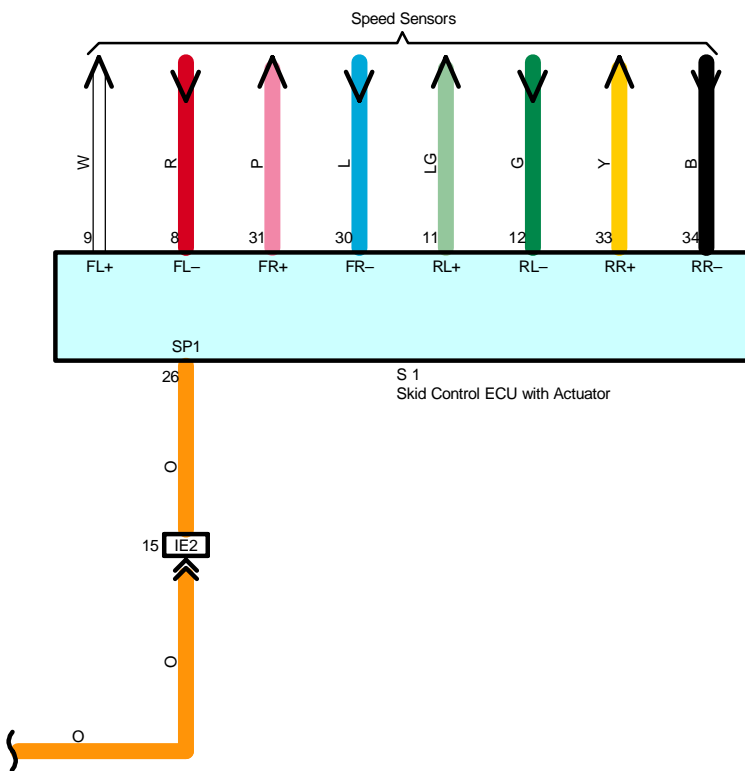
 : **Ground Points**

Code	See Page	Ground Points Location
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH
BI	44	Quarter Panel LH
BK	44	Left Side of the Back Door Panel

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	38	Engine Room Main Wire	B3	44	Front Door RH Wire
B1	44	Roof Wire	B4	44	Front Door LH Wire
B2					





# Back Door Opener

## System Outline

If the vehicle is stationary (Slower than 5 km/h), the back door opener motor activates with control of integration relay when back door opener SW is pushed. It results in releasing latch of back door to open back door.

## Service Hints

### Integration Relay

- 4, 6–Ground : Always approx. 12 volts
- 1–Ground : Always continuity
- 5–Ground : Approx. 12 volts with the ignition SW at ON position

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
B5	36	I6	A 35	J7	35
B6	36	J4	A 35	S1	33
C6	34	J5	B 35		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1M	25	
1S		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IE2	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
BA1	44	Back Door Wire and Floor Wire (Back Window Upper Frame LH)
BA2		

## ▽ : Ground Points

Code	See Page	Ground Points Location
ED	38	Front Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH
BK	44	Left Side of the Back Door Panel

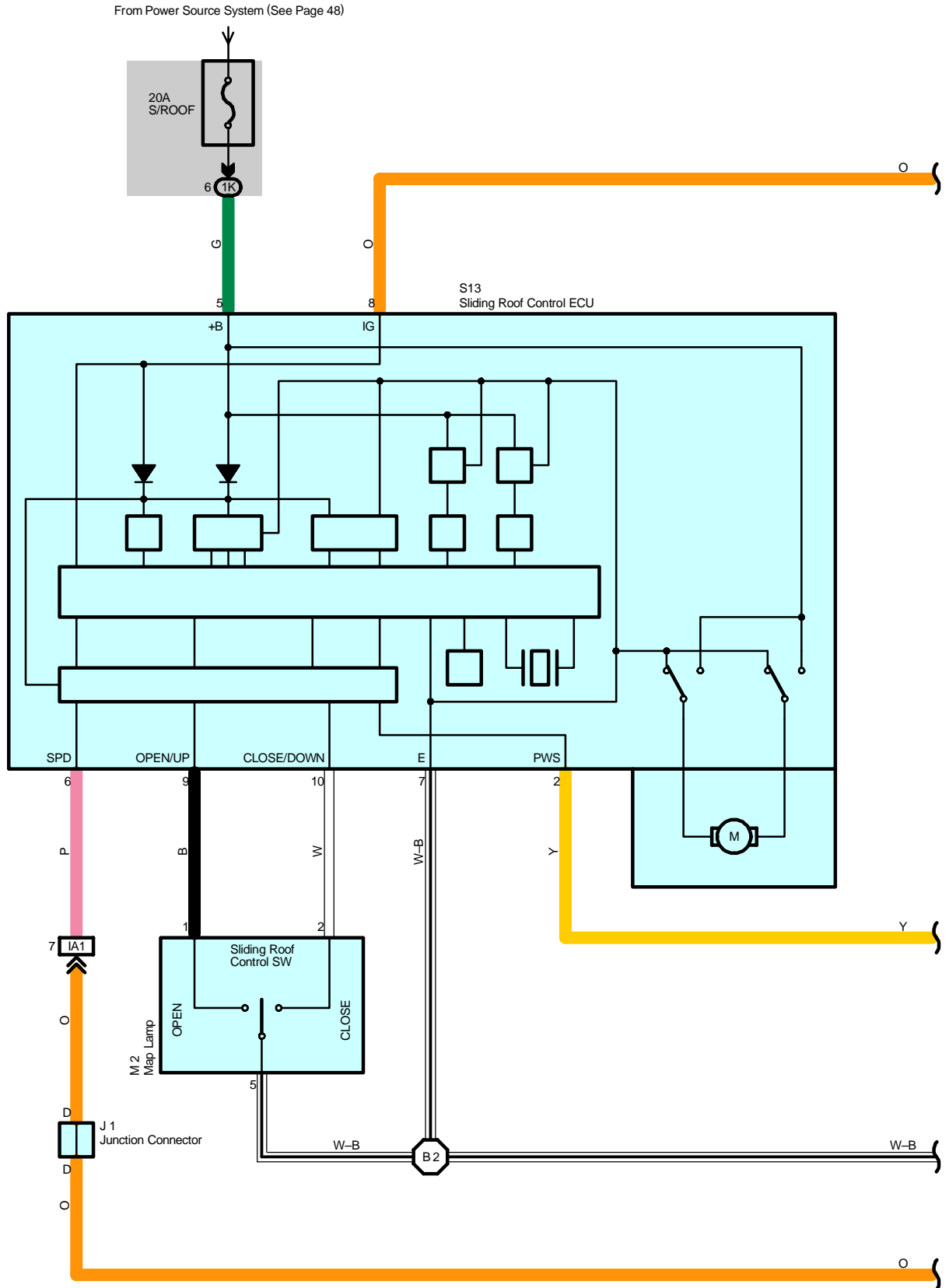
## ○ : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B7	44	Back Door Wire			





# Sliding Roof





# Sliding Roof

## System Outline

Current is always applied from the S/ROOF fuse to TERMINAL 5 of the sliding roof control ECU. With the ignition SW turned on, the current from the ECU-IG fuse flows to TERMINAL 8 of the sliding roof control ECU.

### 1. Sliding Roof Open/Close Operation

For sliding roof operation, there are sliding roof control switches: "Slide open/tilt up"; and "Slide close/tilt down." When a switch is pressed and held down for a certain period of time, one touch automatic operation takes place in accordance with the function of the switch.

### 2. Key-Off Operation

Roof remains operable – until about 43 seconds elapse after the ignition SW is turned from ON to OFF or until the driver's or passenger's door is opened, whichever first occurs.

However, if an overload reverse operation was going on at that time, the key-off operation continues until it comes to an end.

### 3. Overload Reverse Operation

The sliding roof control ECU detects jamming of the sliding roof by foreign material, if occurred, from abnormal motor speed signal and reverses the sliding roof operation.

\* When the battery terminal or fuse is disconnected, the roof position has to be reset to its initial position by the sliding roof control SW in accordance with the following procedure:

- (1) Reconnect the battery terminal or fuse.
- (2) Turn ON the ignition switch.
- (3) Operate the sliding roof control SW to open the roof halfway or more.
- (4) Then operate the sliding roof control SW to fully close the roof.  
Do not release the switch for at least 2 seconds after the roof is fully closed.

## Service Hints

### S13 Sliding Roof Control ECU

8-Ground : Approx. 12 volts with the ignition SW at ON position

5-Ground : Always approx. 12 volts

7-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C6	34	J4	A	35	S1	33
D9	36	J5	B	35	S13	37
D10	36	J7		35		
J1	35	M2		36		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1K	24	Roof Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S		

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	<a href="#">40</a>	Roof Wire and Instrument Panel Wire (Cowl Top Side Panel LH)
IE2	<a href="#">40</a>	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	<a href="#">42</a>	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IJ1	<a href="#">42</a>	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)

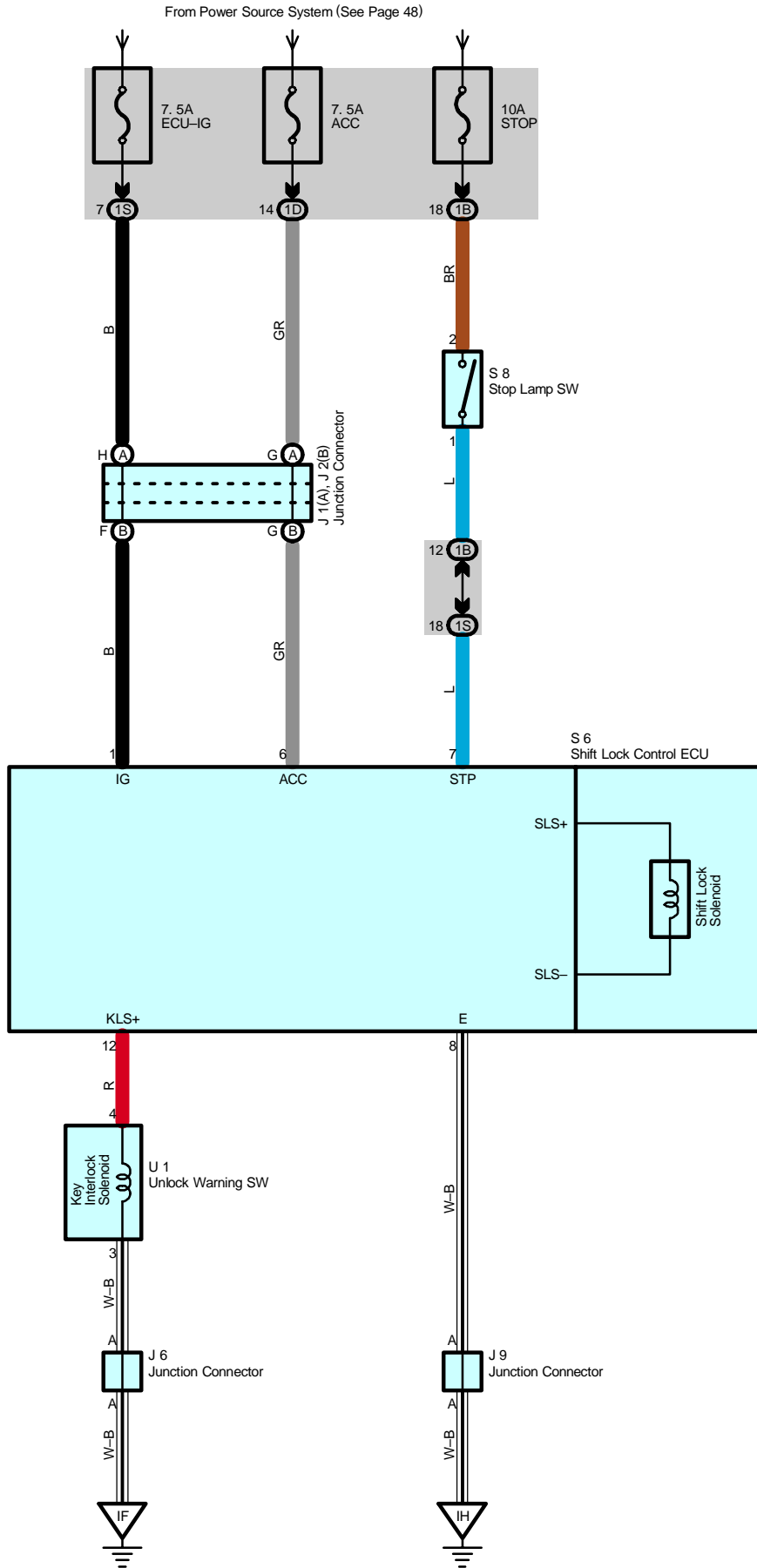
 : **Ground Points**

Code	See Page	Ground Points Location
ED	<a href="#">38</a>	Front Left Side of the Cylinder Head
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B2	<a href="#">44</a>	Roof Wire			

# Shift Lock



## System Outline

When the ignition SW is turned to ACC position the current from the ACC fuse flows to TERMINAL 6 of the shift lock control ECU. When the ignition SW is turned to ON position, the current from the ECU-IG fuse flows to TERMINAL 1 of the shift lock control ECU.

### 1. Shift Lock Mechanism

If the brake pedal is depressed with the ignition SW set at ON (The stop light SW is on), the shift lock control ECU is activated, allowing the driver to change the shift lever to a position other than the P position.

### 2. Key Interlock Mechanism

With the ignition SW at ON or ACC position, when the shift lever is put in P position, the current flowing from TERMINAL 12 of the shift lock control ECU to key interlock solenoid is cut off. This causes the key interlock solenoid to turn off (Lock lever disengages from LOCK position) and the ignition key can be turned from ACC to LOCK position.

## Service Hints

### S6 Shift Lock Control ECU

6-Ground : Approx. 12 volts with the ignition SW at ACC or ON position

1-Ground : Approx. 12 volts with the ignition SW at ON position

8-Ground : Always continuity

7-Ground : Approx. 12 volts with the brake pedal depressed

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
J1	A	35	J9	35	U1	35
J2	B	35	S6	35		
J6		35	S8	35		

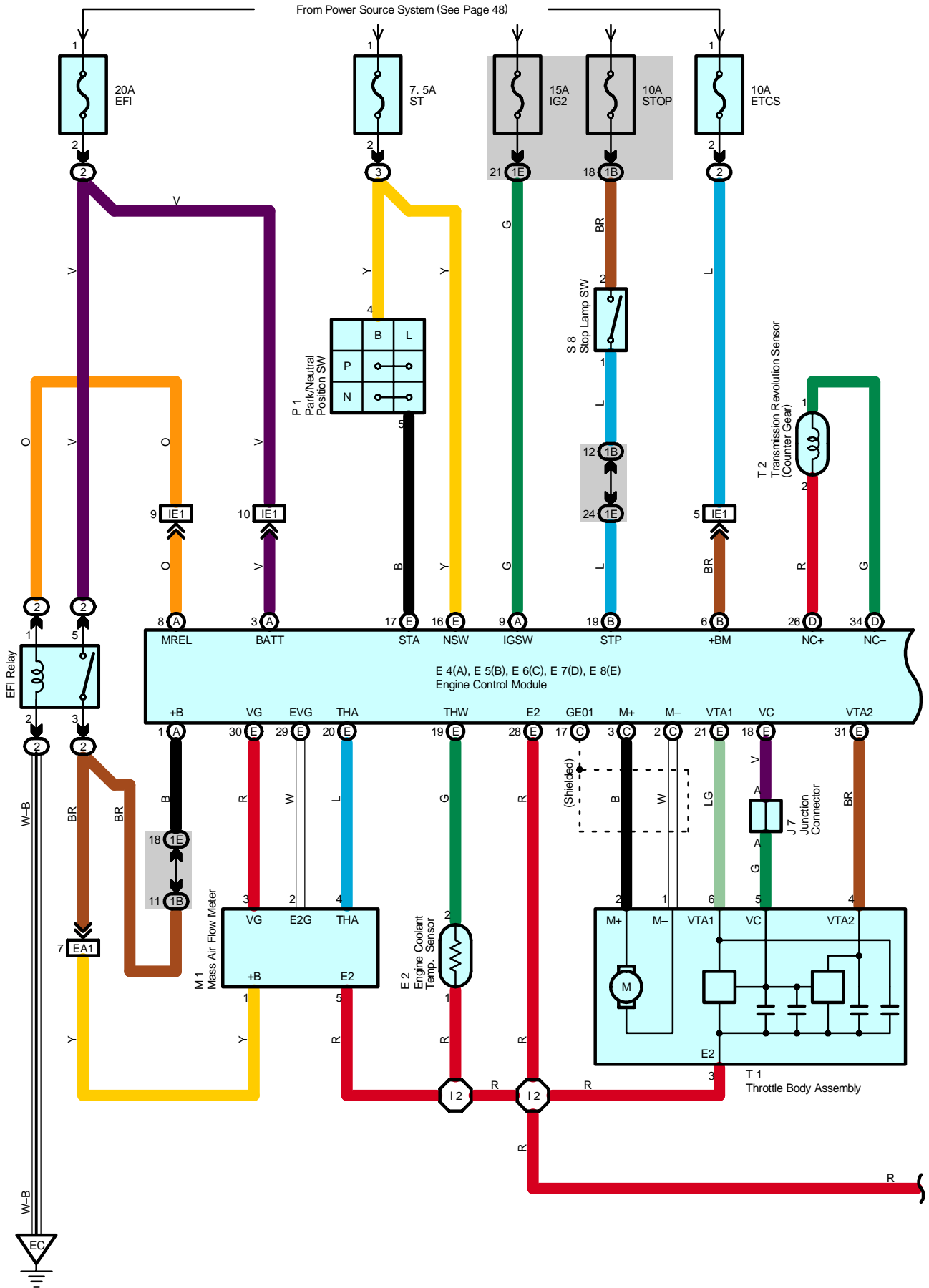
## ○ : Junction Block and Wire Harness Connector

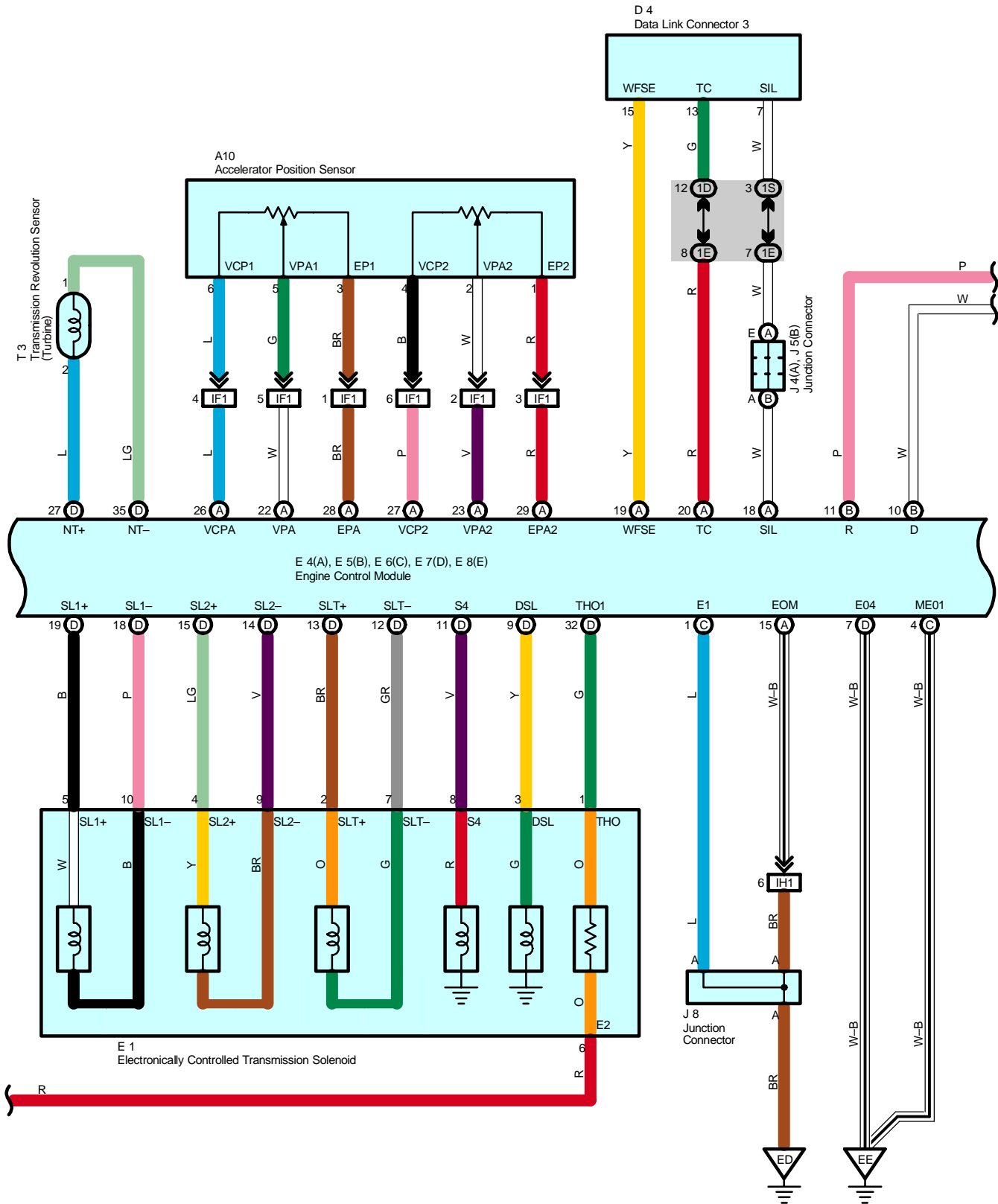
Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1D	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S	25	

## ▽ : Ground Points

Code	See Page	Ground Points Location
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH

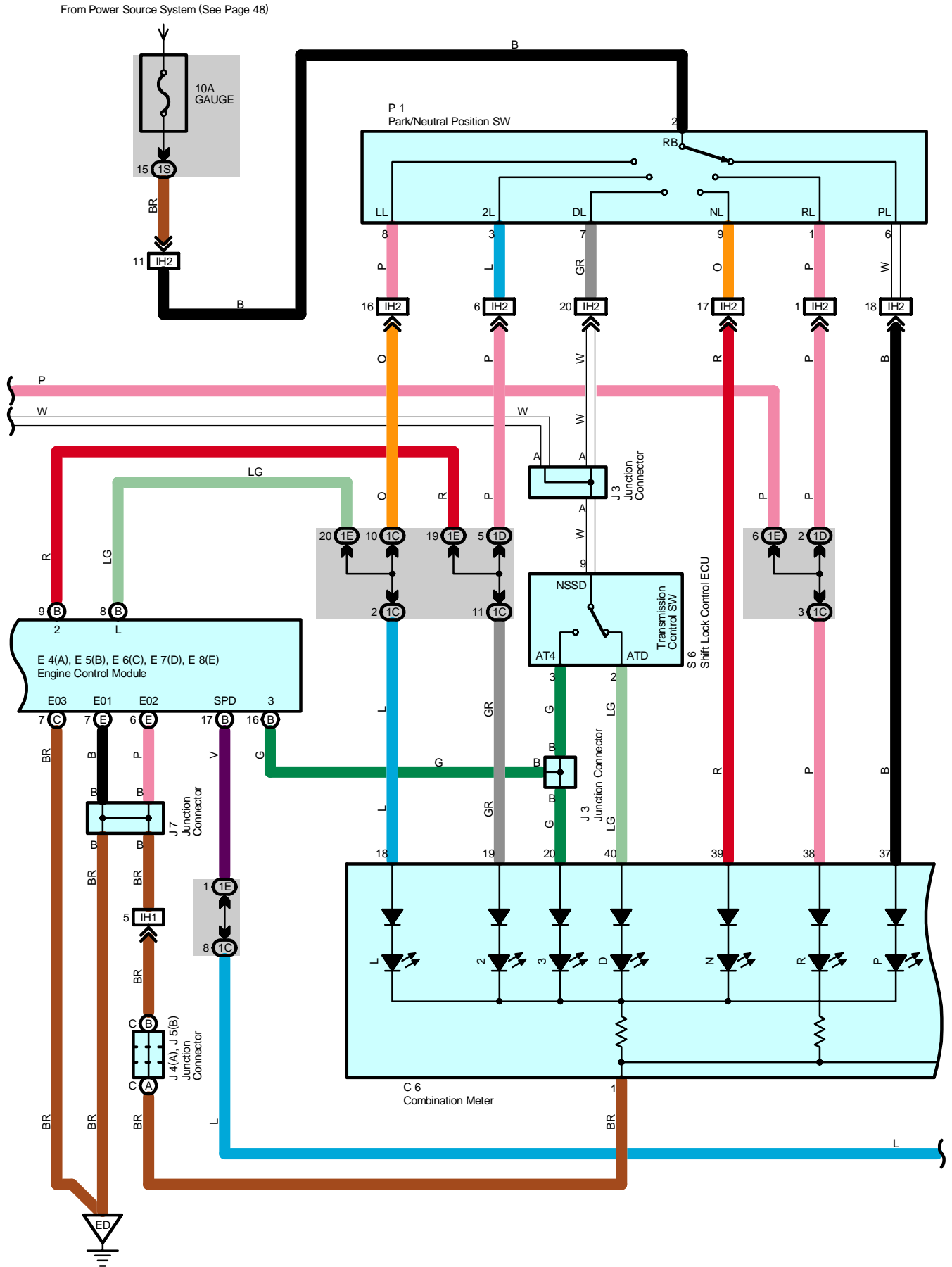
# ECT and A/T Indicator



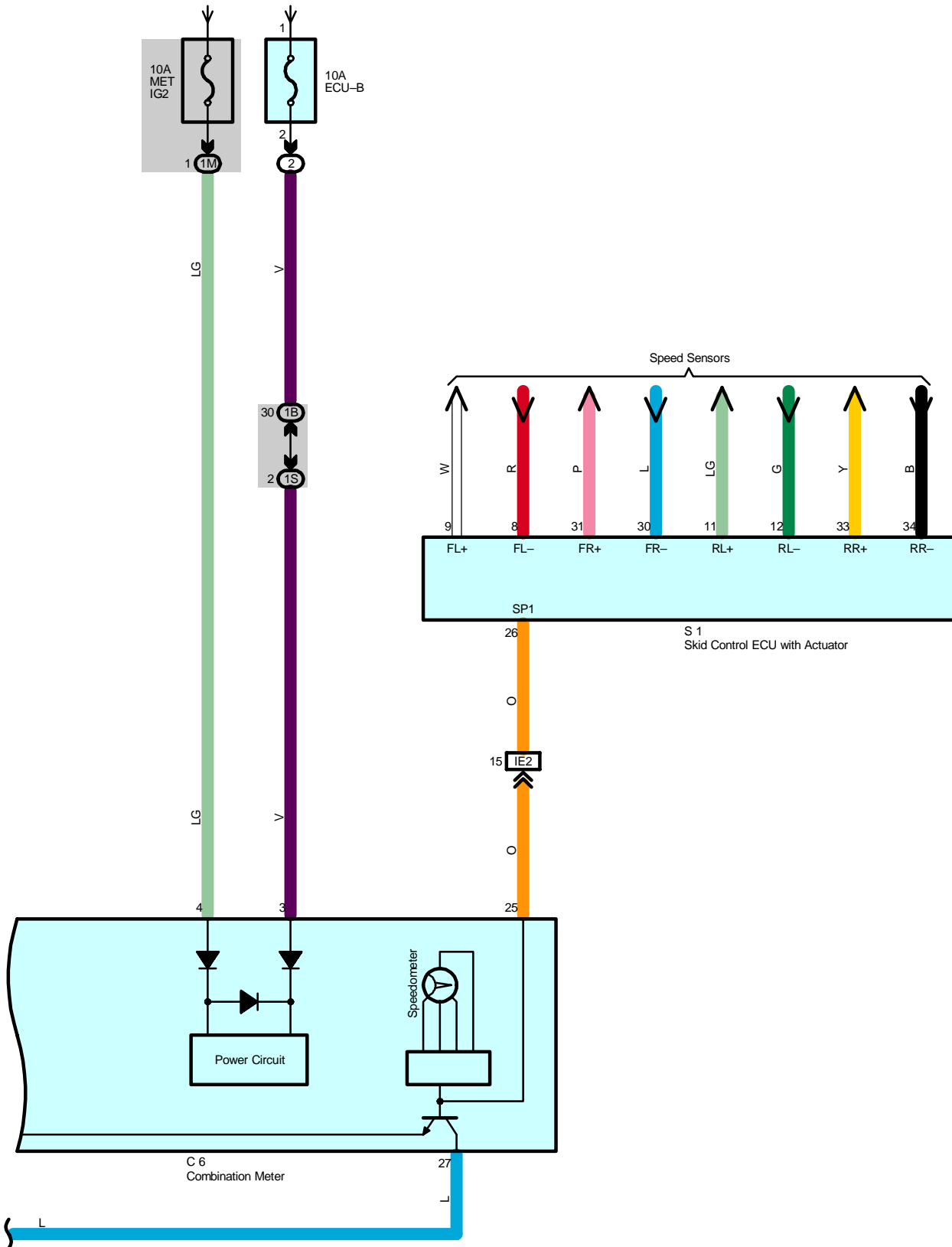




# ECT and A/T Indicator



From Power Source System (See Page 48)



# ECT and A/T Indicator

## System Outline

Previous automatic transaxle have selected each gear shift using the mechanically controlled throttle hydraulic pressure, governor hydraulic pressure and lock-up hydraulic pressure. The electronically controlled transmission, however, electrically controls the line pressure and lock-up pressure etc., through the solenoid valve. Engine control module controls each solenoid valve based on the input signals from each sensor, which makes smooth driving possible by shift selection for each gear that is most appropriate to the driving conditions at that time.

### 1. Gear Shift Operation

When driving, the engine warm up condition is input as a signal to TERMINAL THW of the engine control module from the engine coolant temp. sensor and the vehicle speed signal is input to TERMINAL SPD of the engine control module. At the same time, the throttle valve opening signal from throttle body assembly is input to TERMINALS VTA1 and VTA2 of the engine control module as throttle angle signal.

Based on these signals, the engine control module selects the best shift position for the driving conditions and sends current to the electronically controlled transmission solenoid.

### 2. Lock-Up Operation

When the engine control module judges from each signal that lock-up operation conditions have been met, current flows from TERMINAL S4 of the engine control module to TERMINAL 8 of the electronically controlled transmission solenoid to GROUND, causing continuity to the lock-up solenoid and causing lock-up operation.

### 3. Clutch Pressure Control

The electronically controlled transmission solenoid is controlled by the current from TERMINAL SLT+ of the engine control module, and controls the accumulator hydraulic pressure.

As a result, the clutch to hydraulic pressure is adjusted precisely, and allows stable shift change.

### 4. Line Pressure Control

The engine control module adjusts the line hydraulic pressure to the optimal level by controlling TERMINAL SLT+ of the module according to the engine torque data. This realizes the smooth gear shifting.

### 5. Shifting Control in Uphill/Downhill Traveling

This system determines whether the vehicle is traveling on an incline or decline from the throttle opening angle, vehicle acceleration condition and brake pedal operation, and controls the shift up to O/D to allow smooth driving.

### 6. Clutch to Clutch Control

When shifting from the 1st gear to the 2nd gear and the 2nd gear to the 3rd gear, the current from the engine control module TERMINALS SL1+ and SL2+ control the electronically controlled transmission solenoid, to control the drain orifice hydraulic pressure (Switch orifice). The electronically controlled transmission solenoid is also controlled by the current from the engine control module TERMINALS SL1+ and SL2+, to adjust the hydraulic pressure precisely, which ensures smooth shifting.

### 7. Stop Lamp SW Circuit

If the brake pedal is depressed (Stop lamp SW on) when driving in lock-up condition, a signal is input to TERMINAL STP of the engine control module, the engine control module operates and continuity to the lock-up solenoid is cut.

## Service Hints

### E4 (A), E5 (B), E6 (C), E7 (D), E8 (E) Engine Control Module

- (A) 9-Ground : Approx. 12 volts with the ignition SW at ON position
- (B) 6, (A) 3-Ground : Always approx. 12 volts
- (A)15, (C) 1, (C) 4, (C) 7, (D) 7, (E) 6, (E) 7-Ground : Always continuity
- (B)19-Ground : Approx. 12 volts with the brake pedal depressed

### P1 Park/Neutral Position SW

- 2-1 : Closed with the shift lever in R position
- 2-7 : Closed with the shift lever in D position
- 2-3 : Closed with the shift lever in 2 position
- 2-8 : Closed with the shift lever in L position
- 2-6 : Closed with the shift lever in P position
- 2-9 : Closed with the shift lever in N position

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page	
A10	34	E7	D	34	P1	33
C6	34	E8	E	34	S1	33
D4	34	J3		35	S6	35
E1	32	J4	A	35	S8	35
E2	32	J5	B	35	T1	33
E4	A	34	J7	35	T2	33
E5	B	34	J8	35	T3	33
E6	C	34	M1	33		

 : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)
3	23	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1M		
1S	25	

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	38	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IE2		
IF1	42	Instrument Panel Wire and Switch Wire (Instrument Panel Brace LH)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

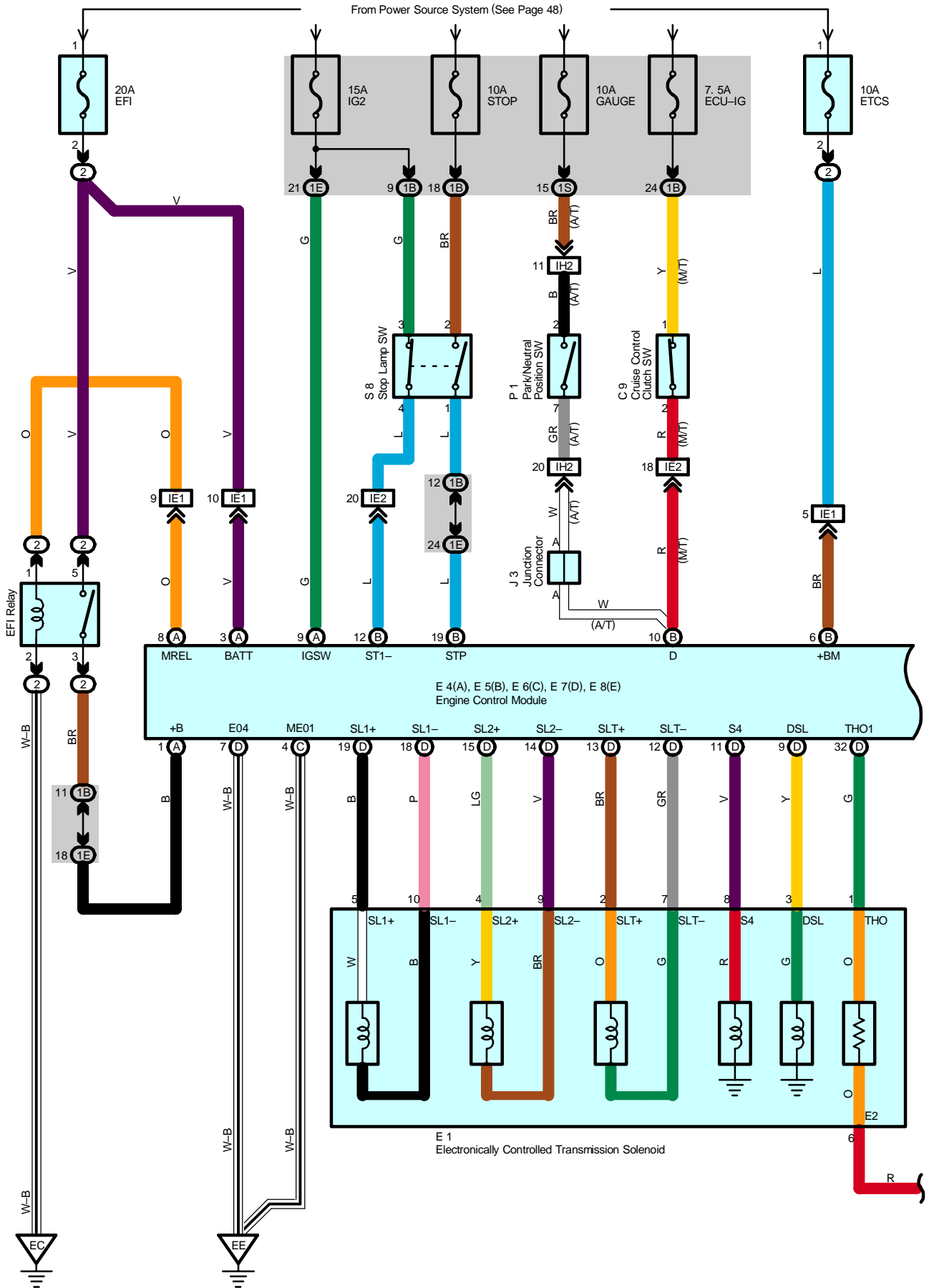
 : **Ground Points**

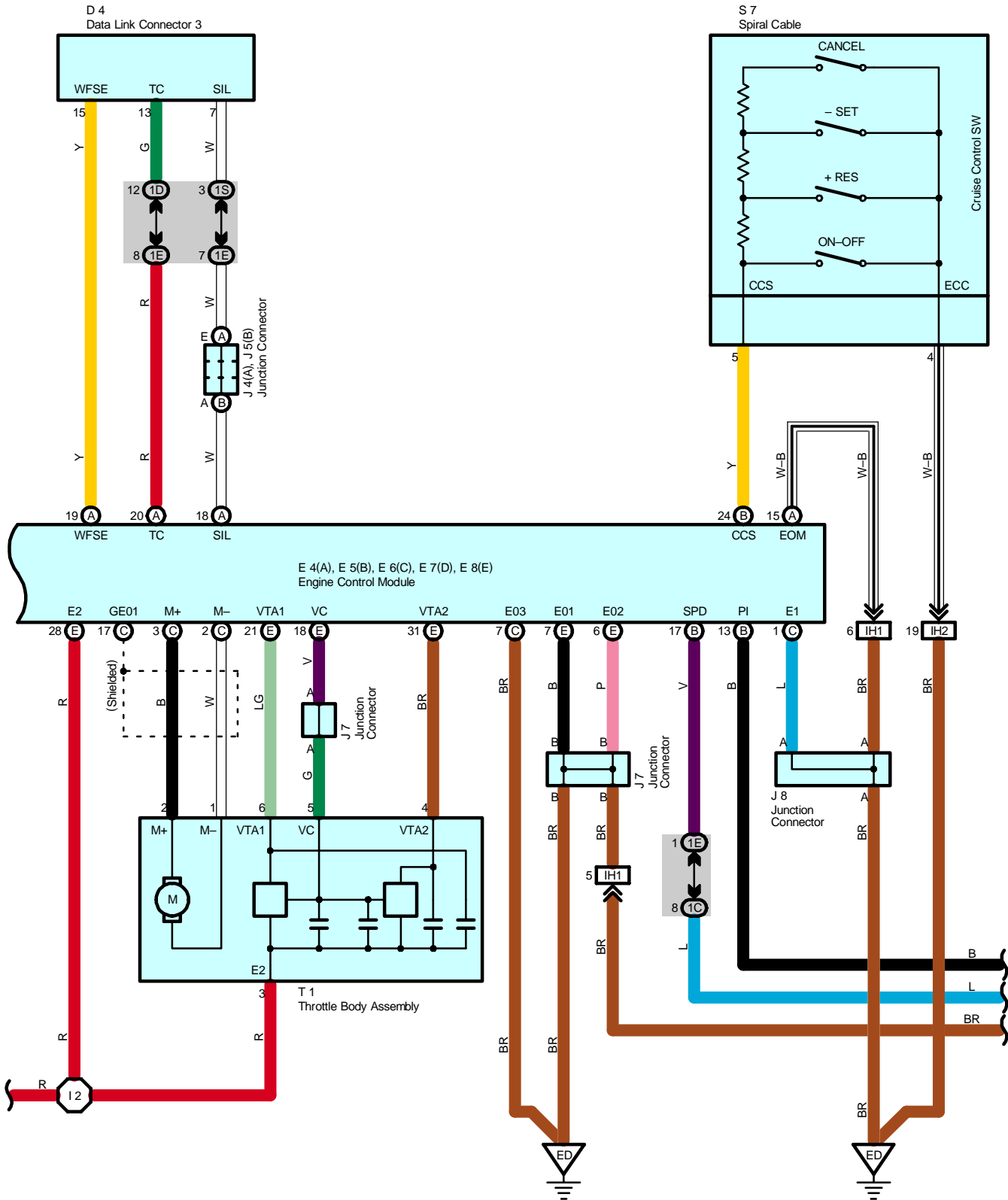
Code	See Page	Ground Points Location
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
EE	38	Left Side of the Cylinder Head

 : **Splice Points**

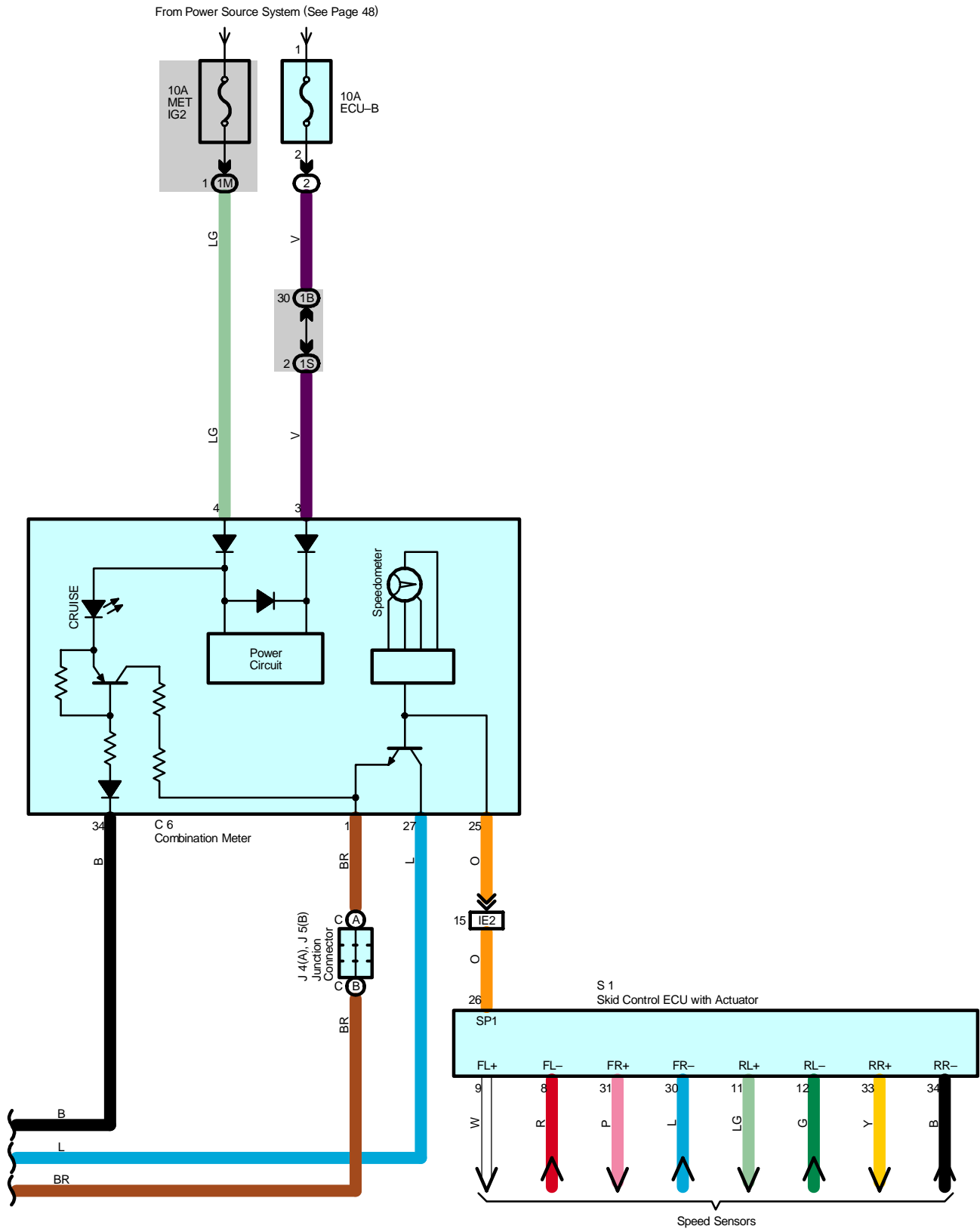
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	42	Engine Wire			

# Cruise Control





# Cruise Control



## System Outline

The cruise control system is a constant vehicle speed controller in which control of the switch on the instrument panel makes it possible to automatically adjust the opening of the engine throttle valve without depressing of the accel pedal.

### 1. Set Operation

When the ON-OFF SW is turned on, the system starts preparations necessary for the cruise control and turns on the indicator light in the combination meter.

### 2. Set Speed Control

When the - SET SW is operated with the ON-OFF SW turned on during travelling, the constant vehicle speed is controlled.

### 3. Coast Control

When the - SET SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to decelerate the vehicle. Every time the - SET SW is turned on instantaneously, the vehicle speed is decelerated approximately 1.6 km/h. However, in case of tap-down operation to make more than 5 km/h gap between the set speed and the actual vehicle speed, the device recalls the original set speed and controls it at the speed constantly.

### 4. Accel Control

When the + RES SW is kept turned on during cruise control travelling, the engine control module controls the throttle valve to accelerate the vehicle. Every time the + RES SW is turned on instantaneously, the vehicle speed is accelerated approximately 1.6 km/h. However, in case of tap-up operation to make more than 5 km/h gap between the set speed and the actual vehicle speed, the device do not change the set speed. (Tap-up operation is not available.)

### 5. Resume Control

When the vehicle speed is within the low speed limit (Approximately 40 km/h, 25 mph) if the cruise control is cancelled, use of the + RES SW accelerates the vehicle to the speed level used before canceling the cruise control.

### 6. Manual Cancel Mechanism

If any of the following signals is input during cruise control travelling, the cruise control is cancelled.

- \* The stop lamp SW is turned on. (The brake pedal depressed)
- \* The CANCEL SW is turned on.
- \* The ON-OFF SW is turned off.
- \* The cruise control clutch SW is turned off. (M/T) (The clutch pedal depressed)

### 7. Auto Cancel Function

If any of the following conditions is encountered, the cruise control is automatically cancelled.

- \* Disconnection and/or short in the stop light SW
- \* Malfunction in the vehicle speed signal
- \* Malfunction in the electronic throttle parts
- \* Malfunction in the stop lamp SW input circuit
- \* Malfunction in the cancel circuit
- \* The actual vehicle speed becomes slower than the minimum speed limit
- \* The actual vehicle speed becomes -16 km/h slower than the set speed

### 8. Overdrive Control Function

Overdrive is sometimes cut off on gradients during cruise control driving. When end of climbing gradient is determined by throttle opening degree information after overdrive is canceled, control is reset to overdrive condition after overdrive resetting timer operation. Also, when overdrive is cut off during accelerator resuming control, control is reset to overdrive condition when accelerator resuming control is finished.

## Service Hints

### E4 (A), E5 (B), E6 (C), E7 (D), E8 (E) Engine Control Module

- (A) 9-Ground : Approx. 12 volts with the ignition SW at ON position
- (B) 6, (A) 3-Ground : Always approx. 12 volts
- (A)15, (C) 1, (C) 4, (C) 7, (D) 7, (E) 6, (E) 7-Ground : Always continuity
- (B)19-Ground : Approx. 12 volts with the brake pedal depressed
- (B)24-Ground : Continuity with the cruise control ON-OFF SW at on
  - Approx. 1540  $\Omega$  with the CANCEL SW on in cruise control SW
  - Approx. 240  $\Omega$  with the + RES SW on in cruise control SW
  - Approx. 630  $\Omega$  with the - SET SW on in cruise control SW

### S7 Spiral Cable

- 5-4 : Approx. 1540  $\Omega$  with the CANCEL SW on
  - Approx. 240  $\Omega$  with the + RES SW on
  - Approx. 630  $\Omega$  with the - SET SW on



# Cruise Control

## : Parts Location

Code	See Page	Code	See Page	Code	See Page		
C6	34	E7	D	34	P1	33	
C9	34	E8	E	34	S1	33	
D4	34	J3		35	S7	35	
E1	32	J4	A	35	S8	35	
E4	A	34	J5	B	35	T1	33
E5	B	34	J7		35		
E6	C	34	J8		35		

## : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1M		
1S	25	

## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IE2		
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

## : Ground Points

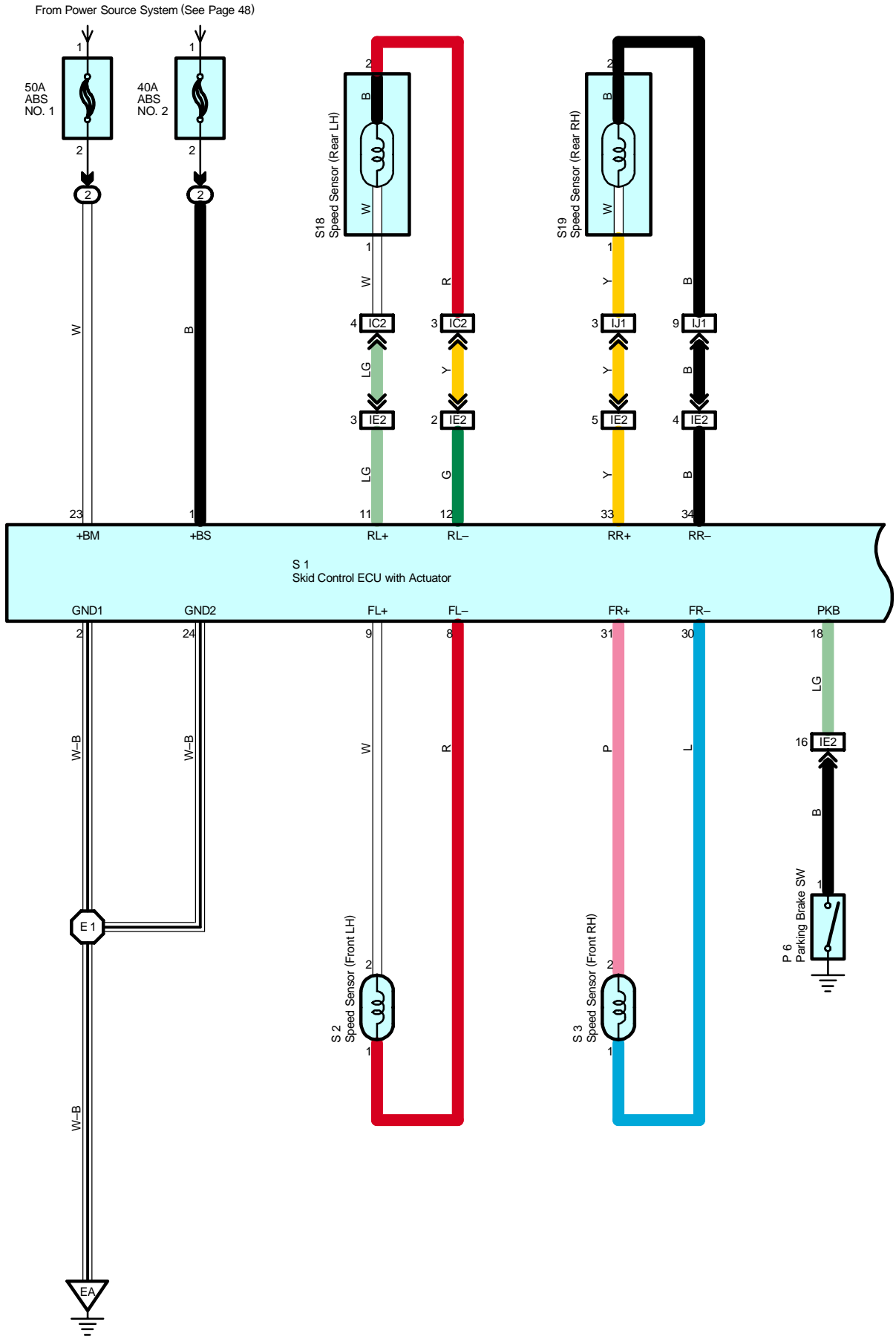
Code	See Page	Ground Points Location
EC	38	Front Left Fender
ED	38	Front Left Side of the Cylinder Head
EE	38	Left Side of the Cylinder Head

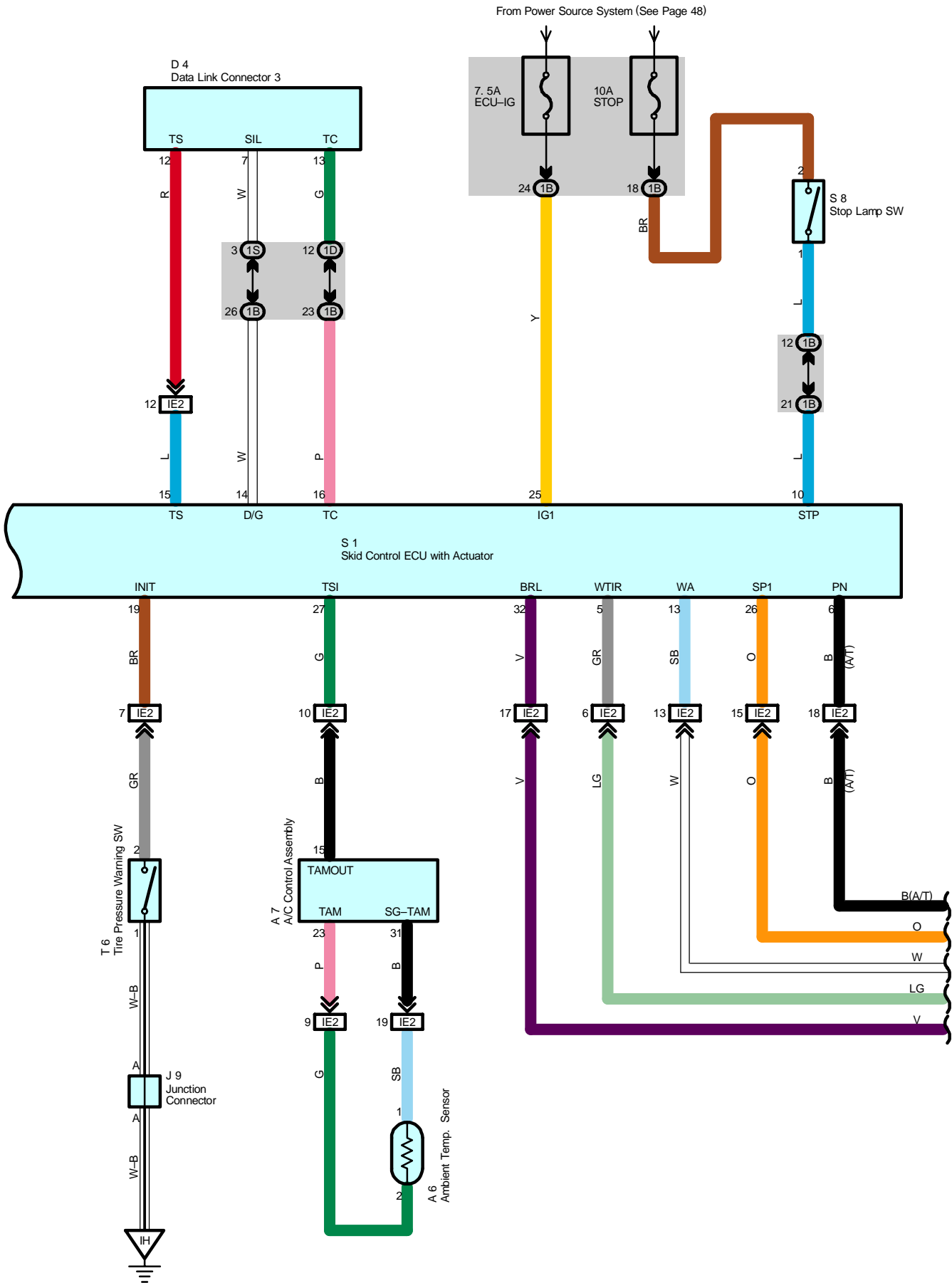
## : Splice Points

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I2	42	Engine Wire			

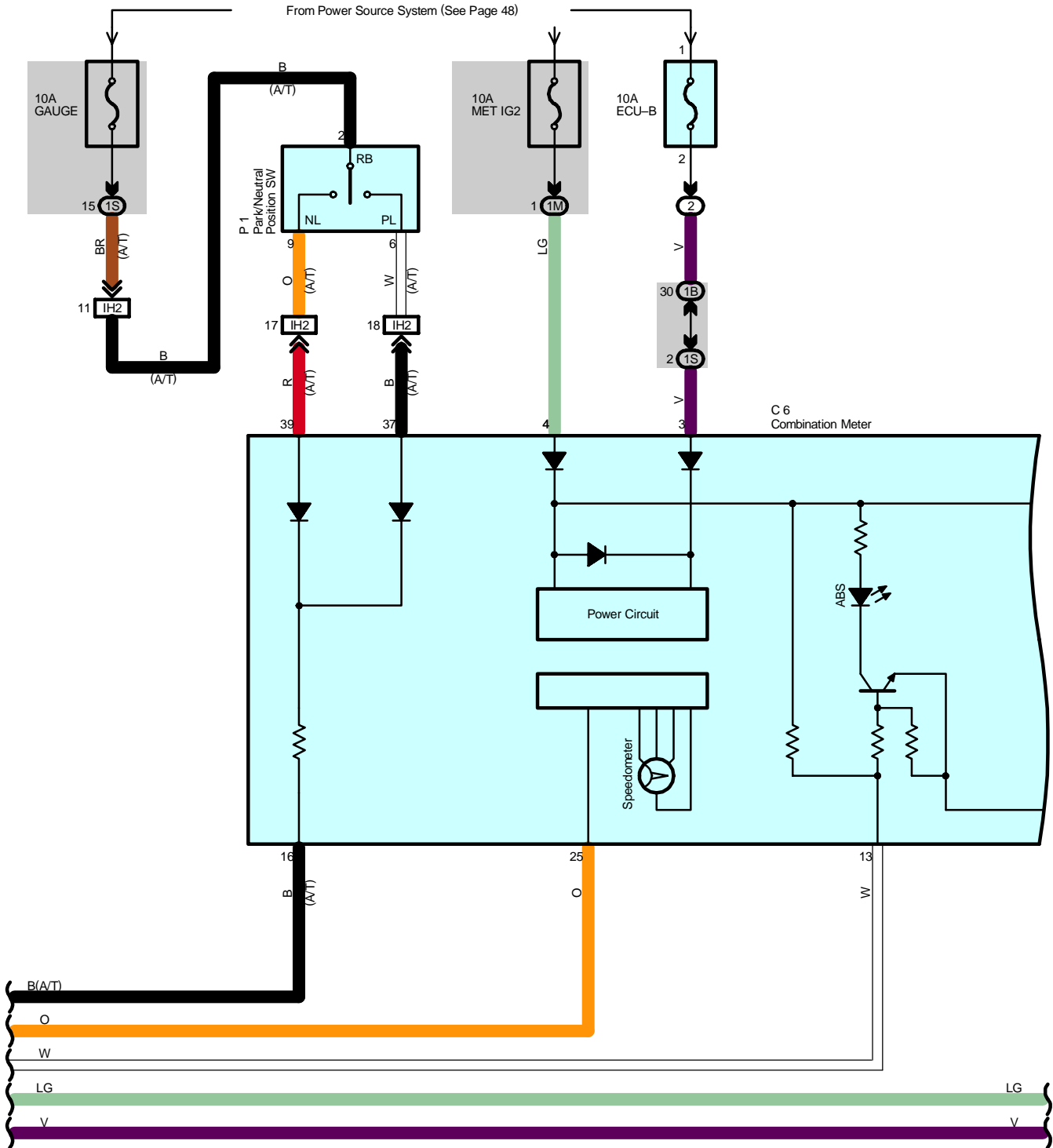


# ABS and Tire Pressure Warning System

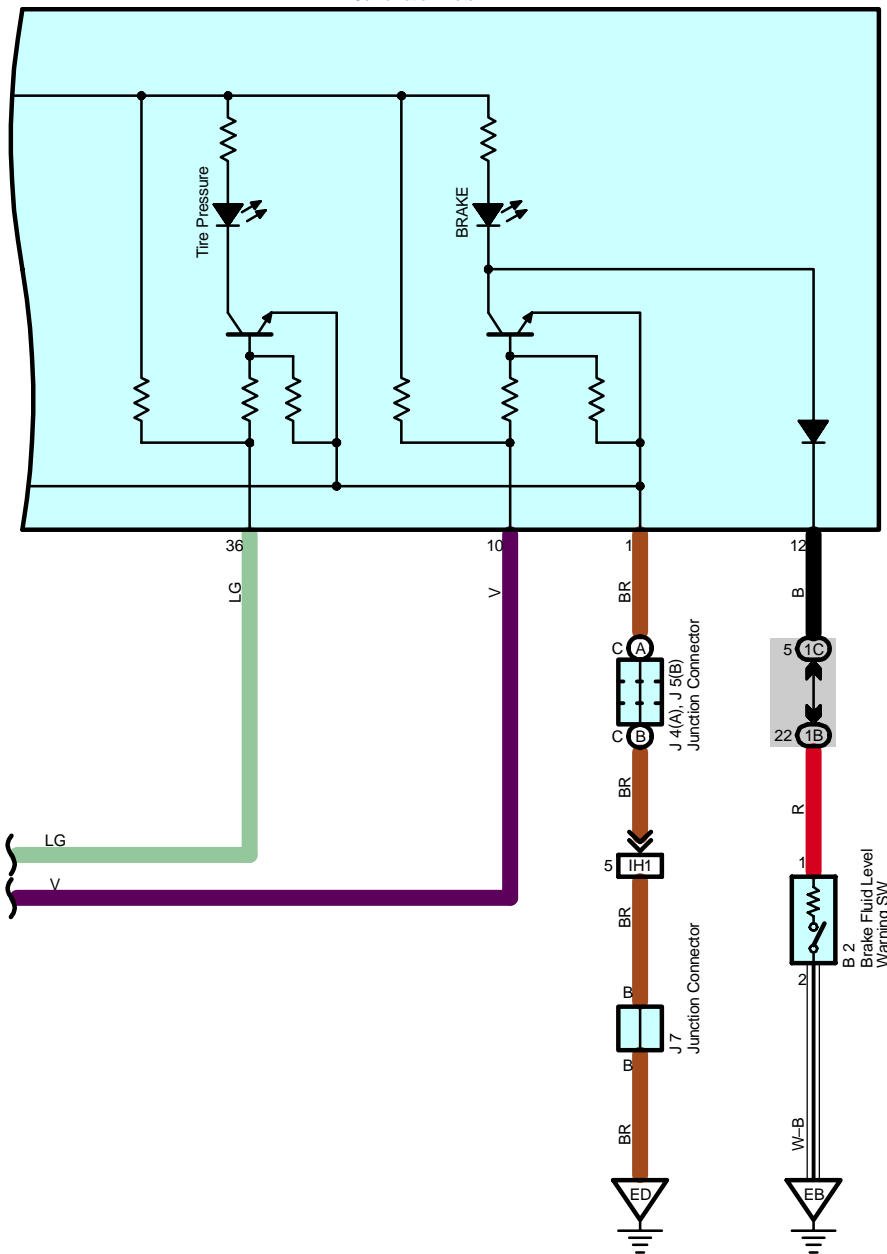




# ABS and Tire Pressure Warning System



C 6  
Combination Meter



# ABS and Tire Pressure Warning System

## System Outline

### \* ABS system

This system controls the respective brake fluid pressures acting on the disc brake cylinders of the right front wheel, left front wheel and rear wheels when the brakes are applied in a panic stop so that the wheels do not lock. This results in improved directional stability and steerability during panic braking.

### 1. Input Signals

#### (1) Speed sensor signal

The speed of the wheels is detected and input to TERMINALS 9, 11, 31 and 33 of the skid control ECU with actuator.

#### (2) Stop light SW signal

A signal is input to TERMINAL 10 of the skid control ECU with actuator when the brake pedal is depressed.

### 2. System Operation

During sudden braking the skid control ECU with actuator has signals input from each sensor, which controls the current to the solenoid inside the actuator and lets the hydraulic pressure acting on each wheel cylinder escape to the reservoir. The pump inside the actuator is also operating at this time and it returns the brake fluid from the reservoir to the master cylinder, thus preventing locking of the vehicle wheels.

If the skid control ECU with actuator judges that the hydraulic pressure acting on the wheel cylinder is insufficient, the current on the solenoid is controlled and the hydraulic pressure is increased. Holding of the hydraulic pressure is also controlled by the skid control ECU with actuator, by the same method as above. Pressure reduction, holding and increase are repeated to maintain vehicle stability and to improve steerability during sudden braking.

### \* Tire pressure warning system

The air pressure sensor (Speed sensor) installed in the tire wheel detects the tire air pressure. When the detected tire air pressure is below a specified level, the warning light in the combination meter comes on to inform the driver.

## Service Hints

### S2, S3 Speed Sensor (Front LH), (Front RH)

2-1 : Approx. 1.6 kΩ (20°C, 68°F)

### S18, S19 Speed Sensor (Rear LH), (Rear RH)

2-1 : Below 1.45 kΩ (25°C, 77°F)

### S1 Skid Control ECU with Actuator

2, 24-Ground : Always continuity

25-Ground : Approx. 12 volts with the ignition SW at ON position

10-Ground : Approx. 12 volts with the brake pedal depressed

1, 23-Ground : Always approx. 12 volts

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A6	<a href="#">32</a>	J5	<a href="#">35</a>	S2	<a href="#">33</a>
A7	<a href="#">34</a>	J7	<a href="#">35</a>	S3	<a href="#">33</a>
B2	<a href="#">32</a>	J9	<a href="#">35</a>	S8	<a href="#">35</a>
C6	<a href="#">34</a>	P1	<a href="#">33</a>	S18	<a href="#">37</a>
D4	<a href="#">34</a>	P6	<a href="#">35</a>	S19	<a href="#">37</a>
J4	<a href="#">35</a>	S1	<a href="#">33</a>	T6	<a href="#">35</a>

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	<a href="#">24</a>	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1M		
1S		

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IE2	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)

 : **Ground Points**

Code	See Page	Ground Points Location
EA	38	Front Right Fender
EB		
ED	38	Front Left Side of the Cylinder Head
IH	40	Cowl Brace RH

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E1	38	Engine Room Main Wire			





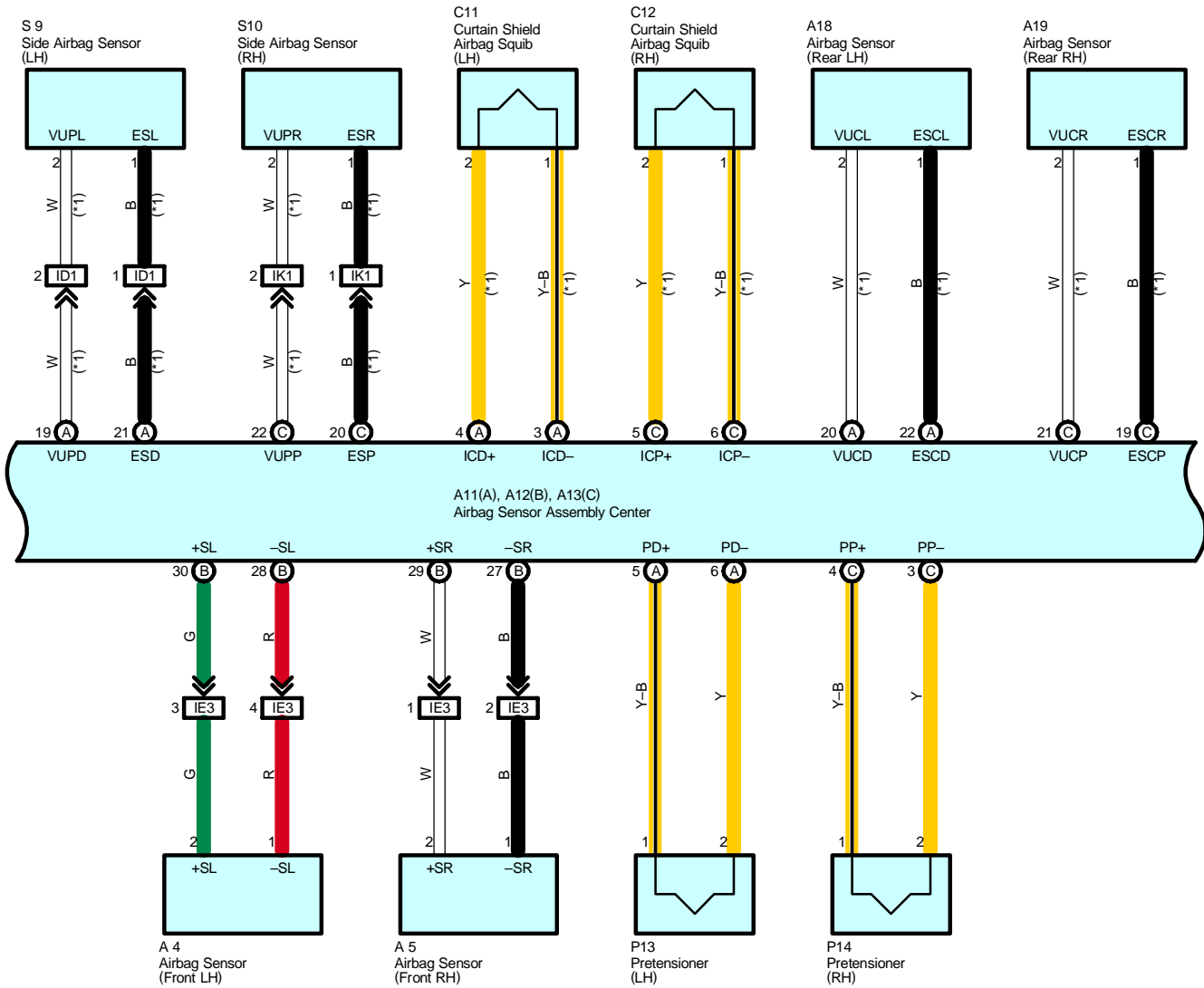
NOTICE: When inspecting or repairing the SRS, perform service in accordance with the following precautionary instructions and the procedure, and precautions in the Repair Manual applicable for the model year.

- Malfunction symptoms of the SRS are difficult to confirm, so the DTCs become the most important source of information when troubleshooting. When troubleshooting the SRS, always inspect the DTCs before disconnecting the battery.
- **Work must be started more than 90 seconds after the ignition SW 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 from disconnecting the negative (-) terminal cable of the battery, the SRS may deploy.)**
- When the negative (-) terminal cable is disconnected from the battery, the memory of the clock and audio system will be cleared. So before starting work, make a record of the contents in the audio memory system. When work is finished, reset the audio systems as they were before and adjust the clock. Some vehicles have power tilt steering, power telescopic steering, power seat and power outside rear view mirror which are all equipped with memory function. However, it is not possible to make a record of these memory contents. So when the work is finished, it will be necessary to explain it to your customer, and ask the customer to adjust the features and reset the memory. To avoid erasing the memory in each system, never use a back-up power supply from outside the vehicle.
- Before repair, remove the airbag sensor if shocks are likely to be applied to the sensor during repair.
- Do not expose the following parts directly to hot air or flame;
- Even in cases of a minor collision where the SRS does not deploy, the following parts should be inspected;
- Never use SRS parts from another vehicle. When replacing parts, replace with new parts.
- For the purpose of reuse, never disassemble and repair the following parts.
- If the following parts have been dropped, or have cracks, dents and other defects in their case, bracket, and connector, replace with new one.
- Use a volt/ohmmeter with high impedance (10 k $\Omega$ /V minimum) for troubleshooting electrical circuits of the system.
- Information labels are attached to the periphery of the SRS components. Follow the instructions of the notice.
- 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.

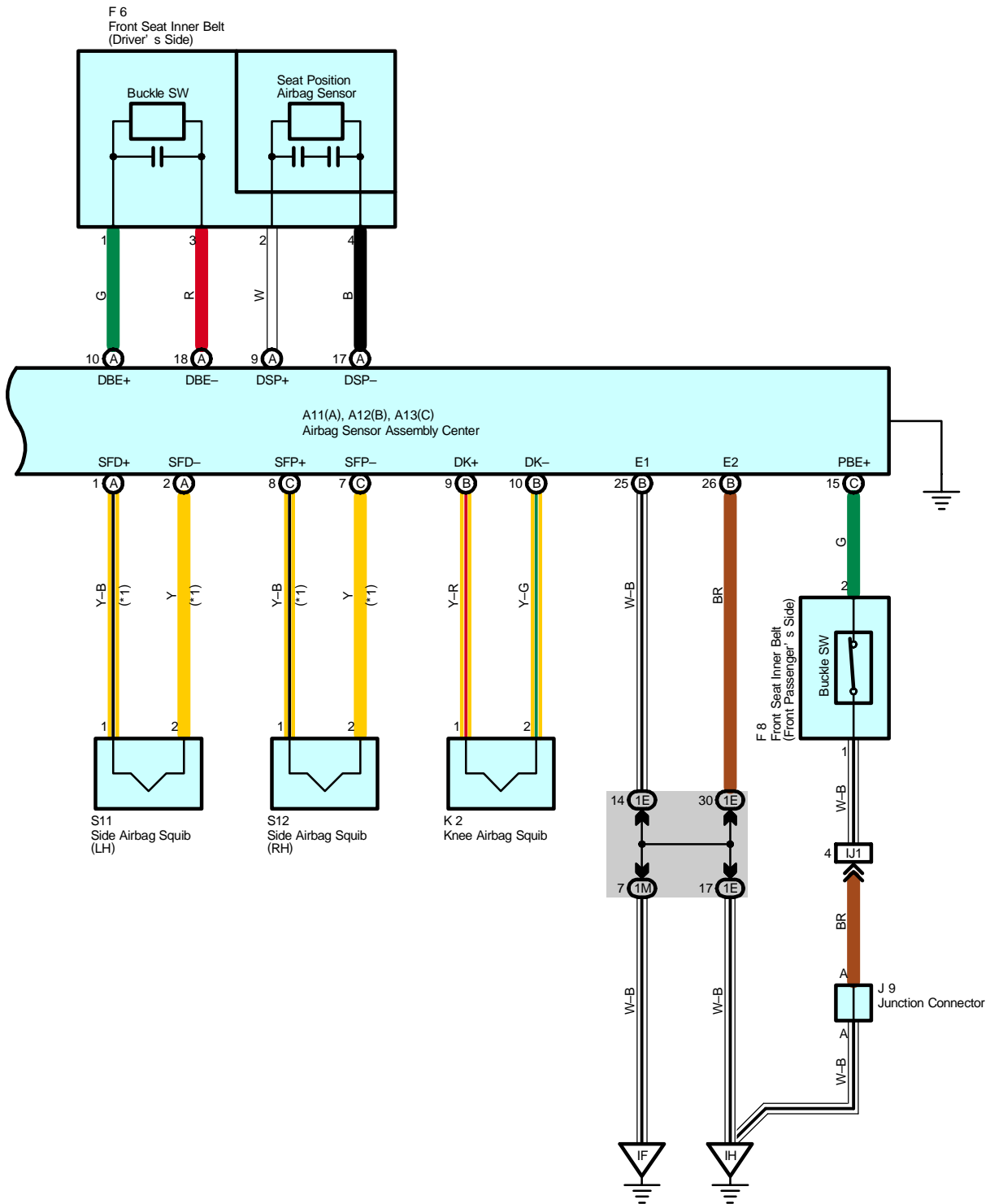
- \* Steering wheel pad
- \* Front passenger airbag assembly
- \* Side airbag assembly
- \* Curtain shield airbag assembly
- \* Knee airbag assembly
- \* Seat belt pretensioner
- \* Center airbag sensor assembly
- \* Front airbag sensor assembly
- \* Side airbag sensor assembly
- \* Rear airbag sensor assembly



\* 1 : w/ Side Airbag



\* 1 : w/ Side Airbag



## System Outline

- \* The SRS airbag are provided for the driver and front passenger. The SRS airbags have been designed to help reducing the shocks to the heads and chests of the driver and front passenger in the event of a severe frontal impact collision as supplements to the seat belts.  
This system is a 3-sensor type airbag system to detect the impact during a front collision using the airbag sensor assembly center and airbag sensor (Front LH, RH), and to make the airbag system and pretensioner (LH, RH) operate as well.
- \* In this system, a front side collision is detected by the side airbag sensor (LH, RH) in order to simultaneously deploy the side and curtain shield airbags. A rear side collision is detected by the airbag sensor (Rear LH, RH) in order to deploy only the curtain shield airbag.
- \* Dual-stage SRS airbags system, that controls the airbag inflating output optimum by judging the extent of impact and seat position (Driver seat), has been used for the driver and front passenger airbags.
- \* In accordance with the adoption of the dual-stage SRS airbag system, a seat position sensor has been established for the driver seat.
- \* This system has adopted a fuel cut control that stops the fuel pump when the airbag is deployed.
- \* 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 front passenger.
- \* Side airbags are instantaneously expanded to soften the shock of side to the driver and front passenger.
- \* The curtain shield airbag can ease an impact on the head of the front and rear passengers and reduce risks of injury.
- \* In a head-on crash, the driver moves forward and may strike his/her lower limbs against the instrument panel, etc. The knee airbag is equipped to protect the lower limbs of the driver in head-on crashes.
- \* The pretensioners make sure of the seat belt restrainability.

## : Parts Location

Code	See Page	Code	See Page	Code	See Page
A4	<a href="#">32</a>	C6	<a href="#">34</a>	J9	<a href="#">35</a>
A5	<a href="#">32</a>	C11	<a href="#">36</a>	K2	<a href="#">35</a>
A11	A <a href="#">34</a>	C12	<a href="#">36</a>	P13	<a href="#">37</a>
A12	B <a href="#">34</a>	D4	<a href="#">34</a>	P14	<a href="#">37</a>
A13	C <a href="#">34</a>	E4	<a href="#">34</a>	S9	<a href="#">37</a>
A14	A <a href="#">34</a>	F6	<a href="#">36</a>	S10	<a href="#">37</a>
A15	B <a href="#">34</a>	F8	<a href="#">36</a>	S11	<a href="#">37</a>
A16	<a href="#">34</a>	J4	A <a href="#">35</a>	S12	<a href="#">37</a>
A18	<a href="#">36</a>	J5	B <a href="#">35</a>		
A19	<a href="#">36</a>	J7	<a href="#">35</a>		

## : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1M	<a href="#">25</a>	
1S		

## : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
ID1	<a href="#">40</a>	Front Door LH Wire and Floor Wire (Left Kick Panel)
IE3	<a href="#">40</a>	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IG1	<a href="#">42</a>	Instrument Panel Wire and Instrument Panel Wire Assembly (Behind of the Glove Box)
IH1	<a href="#">42</a>	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IJ1	<a href="#">42</a>	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)
IK1	<a href="#">42</a>	Front Door RH Wire and Floor No.2 Wire (Right Kick Panel)



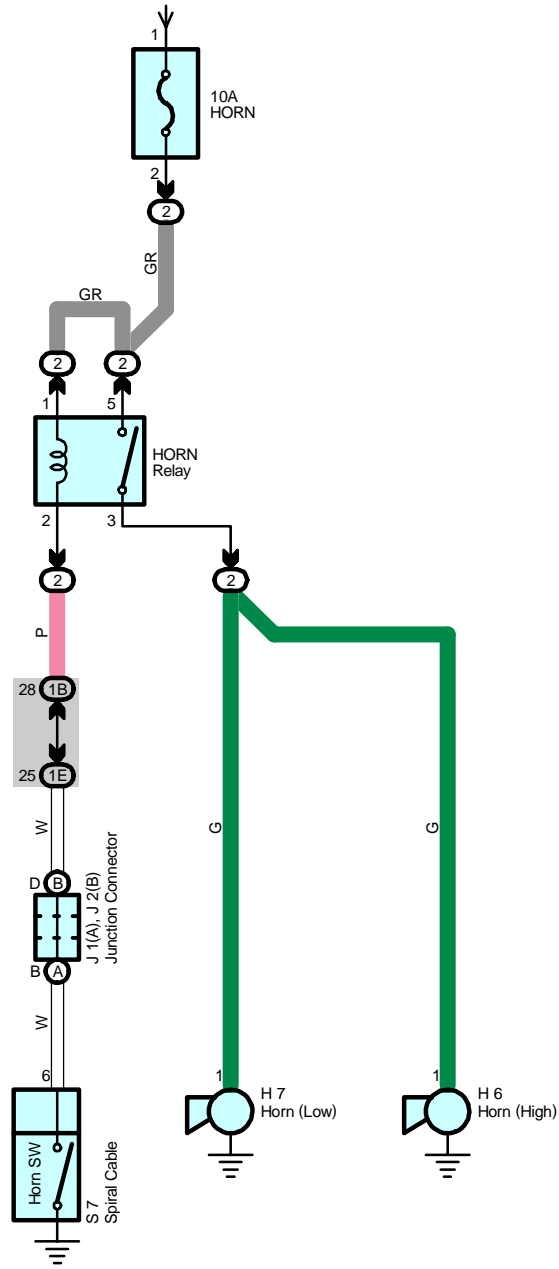
**: Ground Points**

Code	See Page	Ground Points Location
ED	<a href="#">38</a>	Front Left Side of the Cylinder Head
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH





From Power Source System (See Page 48)



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**Service Hints****HORN Relay**

5-3 : Closed with the horn SW at on

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page	
H6	<a href="#">32</a>	J1	A	<a href="#">35</a>	S7	<a href="#">35</a>
H7	<a href="#">32</a>	J2	B	<a href="#">35</a>		

 : **Relay Blocks**

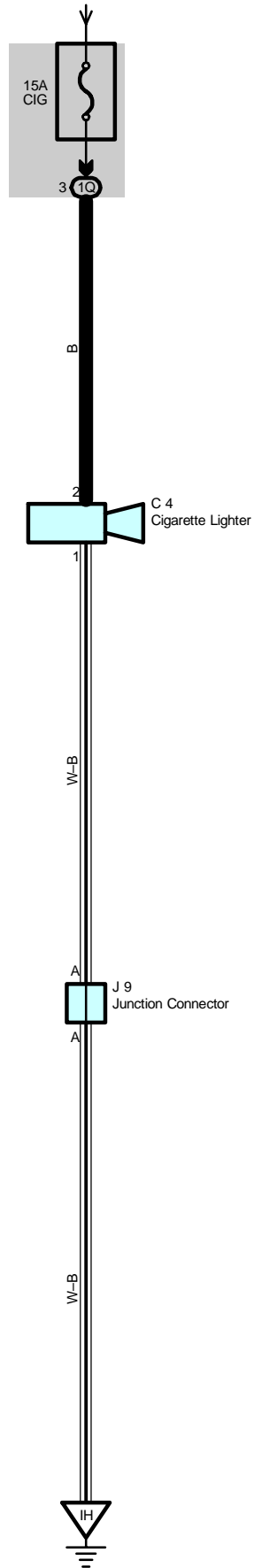
Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	<a href="#">24</a>	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1E	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

# Cigarette Lighter

From Power Source System (See Page 48)



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**Service Hints****C4 Cigarette Lighter**

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
C4	34	J9	35		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1Q	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

 : **Ground Points**

Code	See Page	Ground Points Location
IH	40	Cowl Brace RH



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**Service Hints****P8 Power Point Socket Relay**

5-3 : Closed with the ignition SW at ACC or ON position

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
J1	<a href="#">35</a>	P7	<a href="#">35</a>		
J6	<a href="#">35</a>	P8	<a href="#">35</a>		

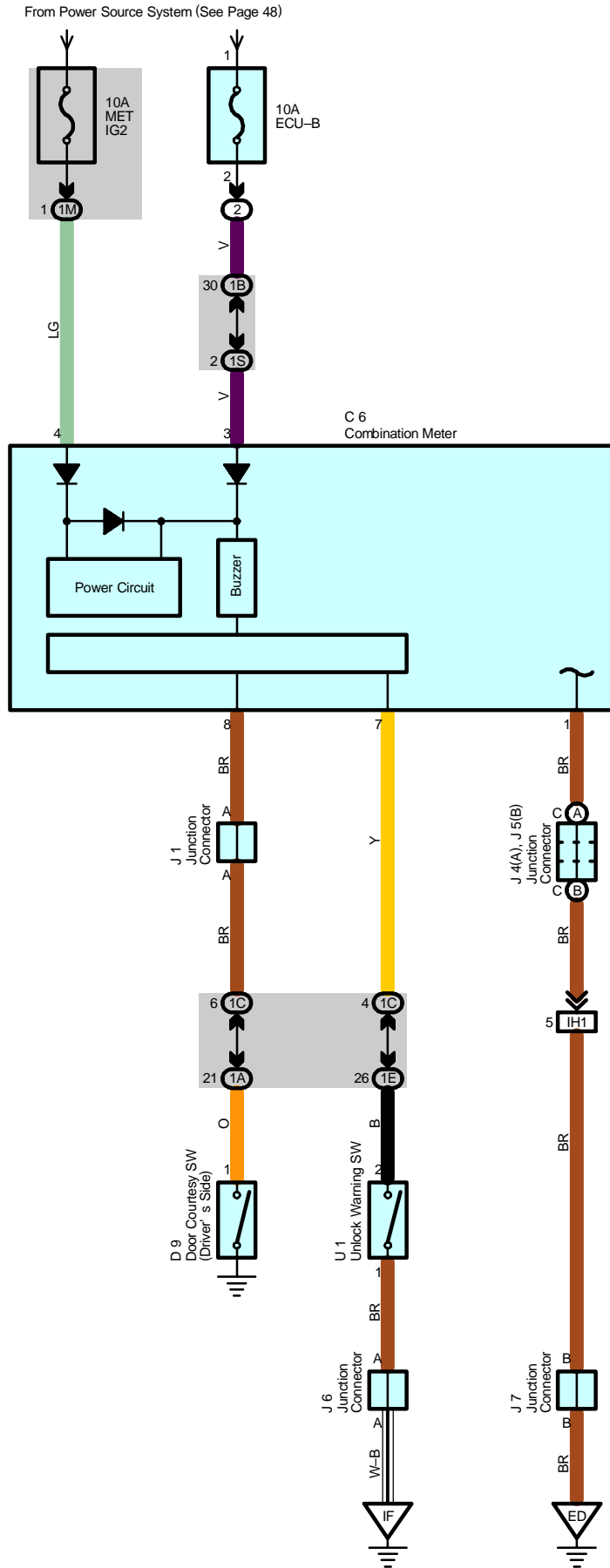
 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1D	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1M	<a href="#">25</a>	

 : **Ground Points**

Code	See Page	Ground Points Location
IF	<a href="#">40</a>	Cowl Brace LH

# Key Reminder



## System Outline

Current is always applied from the ECU-B fuse to TERMINAL 3 of the combination meter. When the ignition SW is turned to ON position, the current from the MET IG2 fuse flows to TERMINAL 4 of the combination meter.

### Key Reminder System

When the driver door is opened with the ignition SW off and ignition key remaining in the key cylinder (Unlock warning SW on), a signal is input from the unlock warning SW to TERMINAL 7 of the combination meter, and from the door courtesy SW (Driver's side) to TERMINAL 8 of the combination meter. As a result, the buzzer in the combination meter goes on and warns the driver that the key is remaining in the key cylinder.

## Service Hints

### C6 Combination Meter

- 3-Ground : Always approx. 12 volts
- 4-Ground : Approx. 12 volts with the ignition SW at ON position
- 1-Ground : Always continuity

### D9 Door Courtesy SW (Driver's Side)

- 1-Ground : Closed with the driver's door open

### U1 Unlock Warning SW

- 2-1 : Closed with the ignition key in cylinder

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
C6	34	J4	A 35	J7	35
D9	36	J5	B 35	U1	35
J1	35	J6	35		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1M	25	
1S		

## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)

## ▽ : Ground Points

Code	See Page	Ground Points Location
ED	38	Front Left Side of the Cylinder Head
IF	40	Cowl Brace LH





### System Outline

The current is applied at all times to TERMINAL 3 of the combination meter through the ECU-B fuse. When the ignition SW is turned to ON position, the current flows to TERMINAL 4 of the combination meter through the MET IG2 fuse. When the light control SW is turned to TAIL or HEAD position, current is applied to TERMINAL 6 of the combination meter through the PANEL fuse.

### Light Reminder System

When the light control SW is in TAIL or HEAD position, the ignition SW turned to OFF from ON position, ignition key is not in the key cylinder and the driver's door opened (Door courtesy SW on), the current flows to TERMINAL 4 of the combination meter stops. As a result, the combination meter is activated and current flows from TERMINAL 3 of the combination meter, the buzzer in the combination meter goes on to remind the light is lighting up.

### Service Hints

#### C6 Combination Meter

- 4-Ground : Approx. 12 volts with the ignition SW at ON position
- 6-Ground : Approx. 12 volts with the light control SW at TAIL or HEAD position
- 8-Ground : Continuity with the driver's door open
- 1-Ground : Always continuity

### ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page	
C6	34	J1	35	J7	35	
C7	34	J4	A	35	U1	35
D9	36	J5	B	35		
I6	A	35	J6	35		

### ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

### ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1E		
1G	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		
1S		

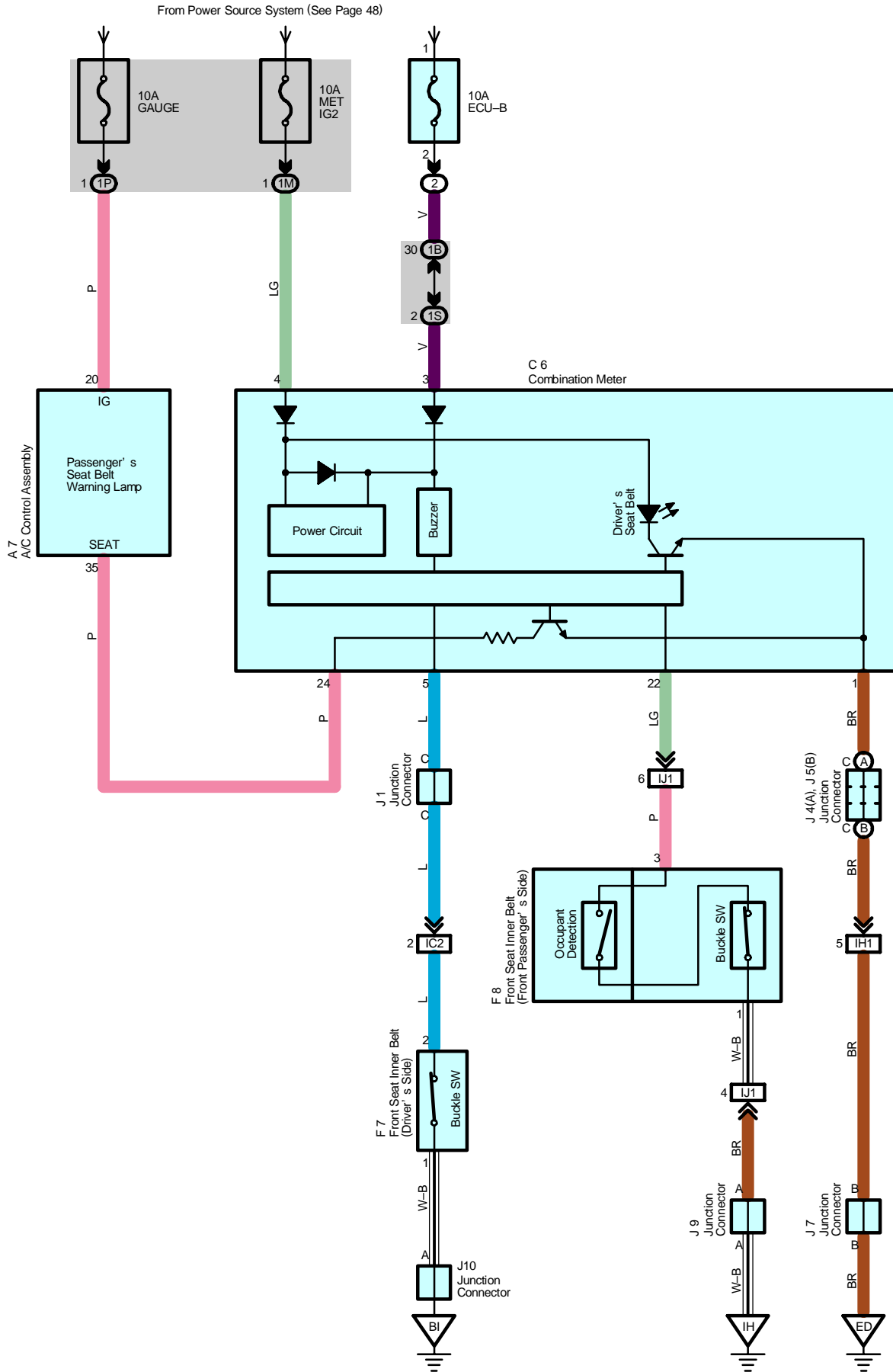
### □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)

### ▽ : Ground Points

Code	See Page	Ground Points Location
ED	38	Front Left Side of the Cylinder Head
IF	40	Cowl Brace LH
IH	40	Cowl Brace RH

# Seat Belt Warning



## System Outline

Current is always applied from the ECU-B fuse to TERMINAL 3 of the combination meter. When the ignition SW is turned to ON position, the current from the MET IG2 fuse flows to TERMINAL 4 of the combination meter.

### Seat Belt Warning System

When the ignition SW turned on, a signal is input to the combination meter. To determine whether the driver has fastened the seat belt, a signal is input from the front seat inner belt (Driver's side) to TERMINAL 5 of the combination meter. When the seat belt is not fastened, the seat belt warning light in the combination meter blinks, and emits a warning sound.

In addition, the front passenger is recognized by a sensor (Occupant detection sensor) is installed in the front passenger seat, and determines whether the seat belt is fastened. When not fastened, the signals from the front seat inner belt (Front passenger's side) is input to TERMINAL 22 of the combination meter, and the passenger's seat belt warning lamp blinks.

## Service Hints

### F7 Front Seat Inner Belt (Driver's Side)

2-1 : Open with the driver's seat belt in use

### F8 Front Seat Inner Belt (Front Passenger's Side)

3-1 : Continuity with the passenger sit on the front passenger seat and front passenger's seat belt not use

### C6 Combination Meter

3-Ground : Always approx. 12 volts

4-Ground : Approx. 12 volts with the ignition SW at ON position

1-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	34	J1	35	J9	35
C6	34	J4	A	J10	36
F7	36	J5	B		
F8	36	J7	35		

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1M	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		
1S		

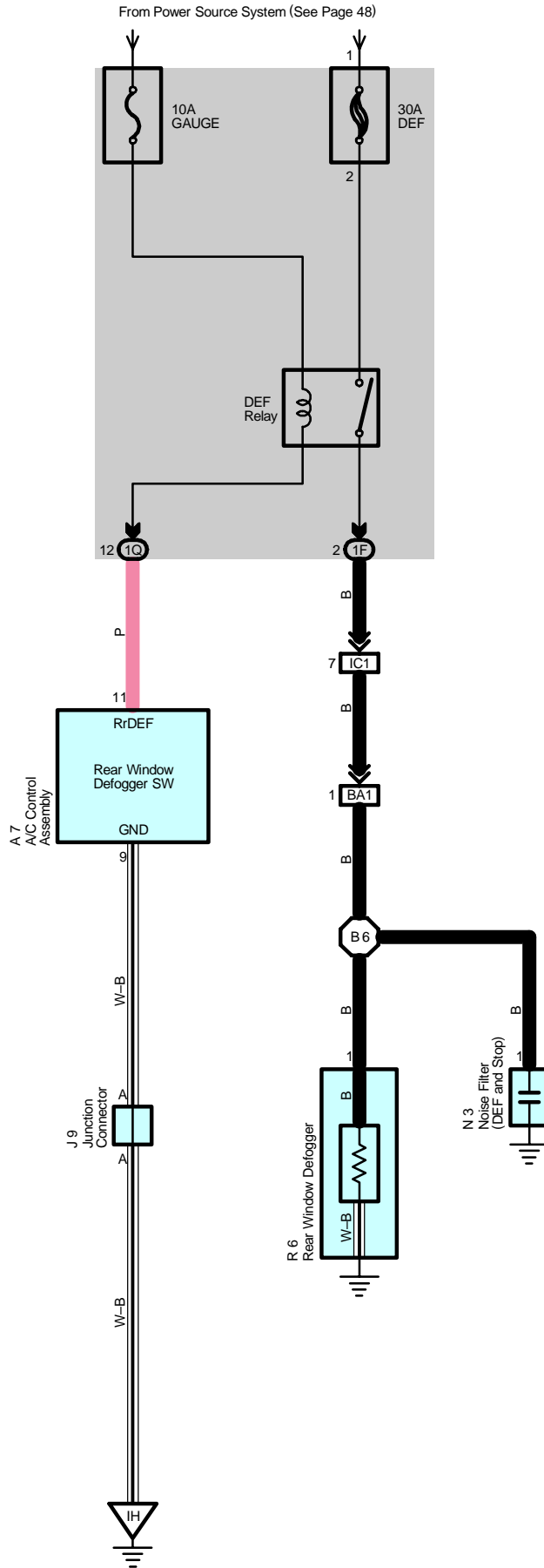
## □ : Connector Joining Wire Harness and Wire Harness

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)

## ▽ : Ground Points

Code	See Page	Ground Points Location
ED	38	Front Left Side of the Cylinder Head
IH	40	Cowl Brace RH
BI	44	Quarter Panel LH

# Rear Window Defogger



**Service Hints****DEF Relay**

Point closed with the ignition SW at ON position and the rear window defogger SW at ON position

 : **Parts Location**

Code	See Page	Code	See Page	Code	See Page
A7	<a href="#">34</a>	N3	<a href="#">36</a>		
J9	<a href="#">35</a>	R6	<a href="#">37</a>		

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1F	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1Q	<a href="#">25</a>	

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IC1	<a href="#">40</a>	Floor Wire and Instrument Panel Wire (Left Kick Panel)
BA1	<a href="#">44</a>	Back Door Wire and Floor Wire (Back Window Upper Frame LH)

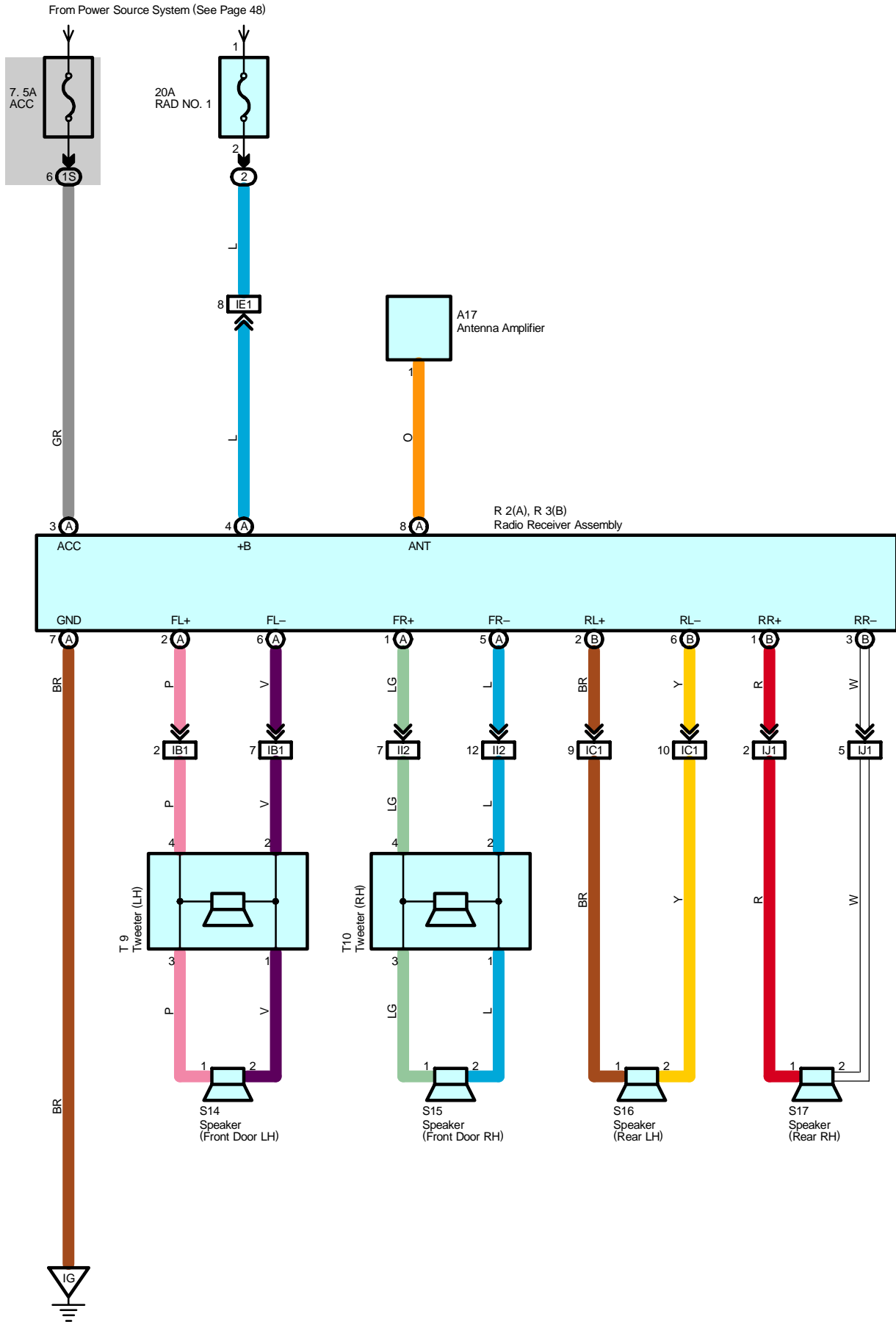
 : **Ground Points**

Code	See Page	Ground Points Location
IH	<a href="#">40</a>	Cowl Brace RH

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
B6	<a href="#">44</a>	Back Door Wire			

# Audio System



## Service Hints

### R2 (A) Radio Receiver Assembly

(A) 3-Ground : Approx. 12 volts with the ignition SW at ACC or ON position

(A) 4-Ground : Always approx. 12 volts

(A) 7-Ground : Always continuity

### : Parts Location

Code		See Page	Code		See Page	Code		See Page
A17		34	S14		37	S17		37
R2	A	35	S15		37	T9		37
R3	B	35	S16		37	T10		37

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1S	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)

### : Connector Joining Wire Harness and Wire Harness

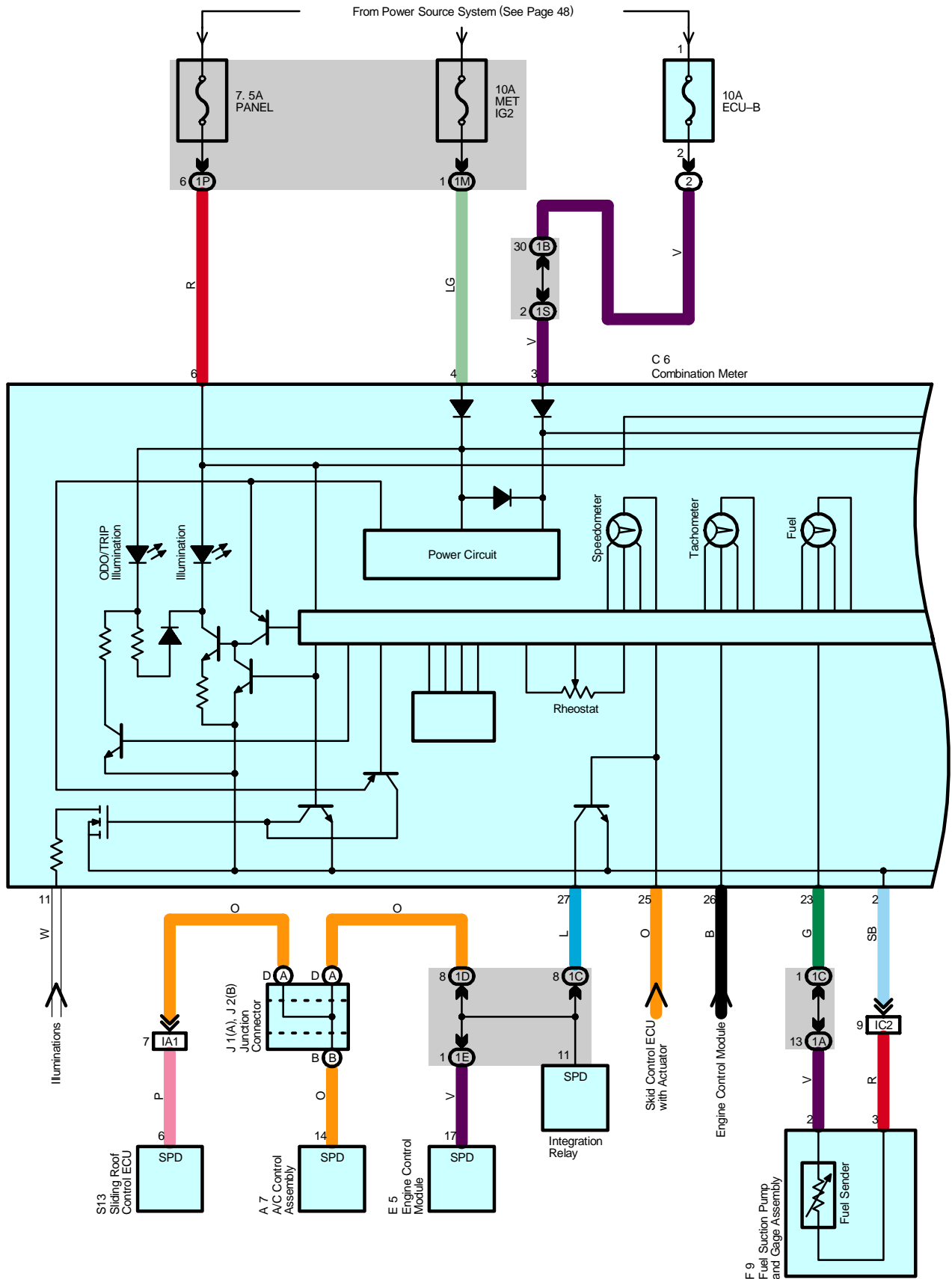
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IB1	40	Front Door LH Wire and Instrument Panel Wire (Left Kick Panel)
IC1	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
II2	42	Front Door RH Wire and Instrument Panel Wire (Right Kick Panel)
IJ1	42	Floor No.2 Wire and Instrument Panel Wire (Right Kick Panel)

### : Ground Points

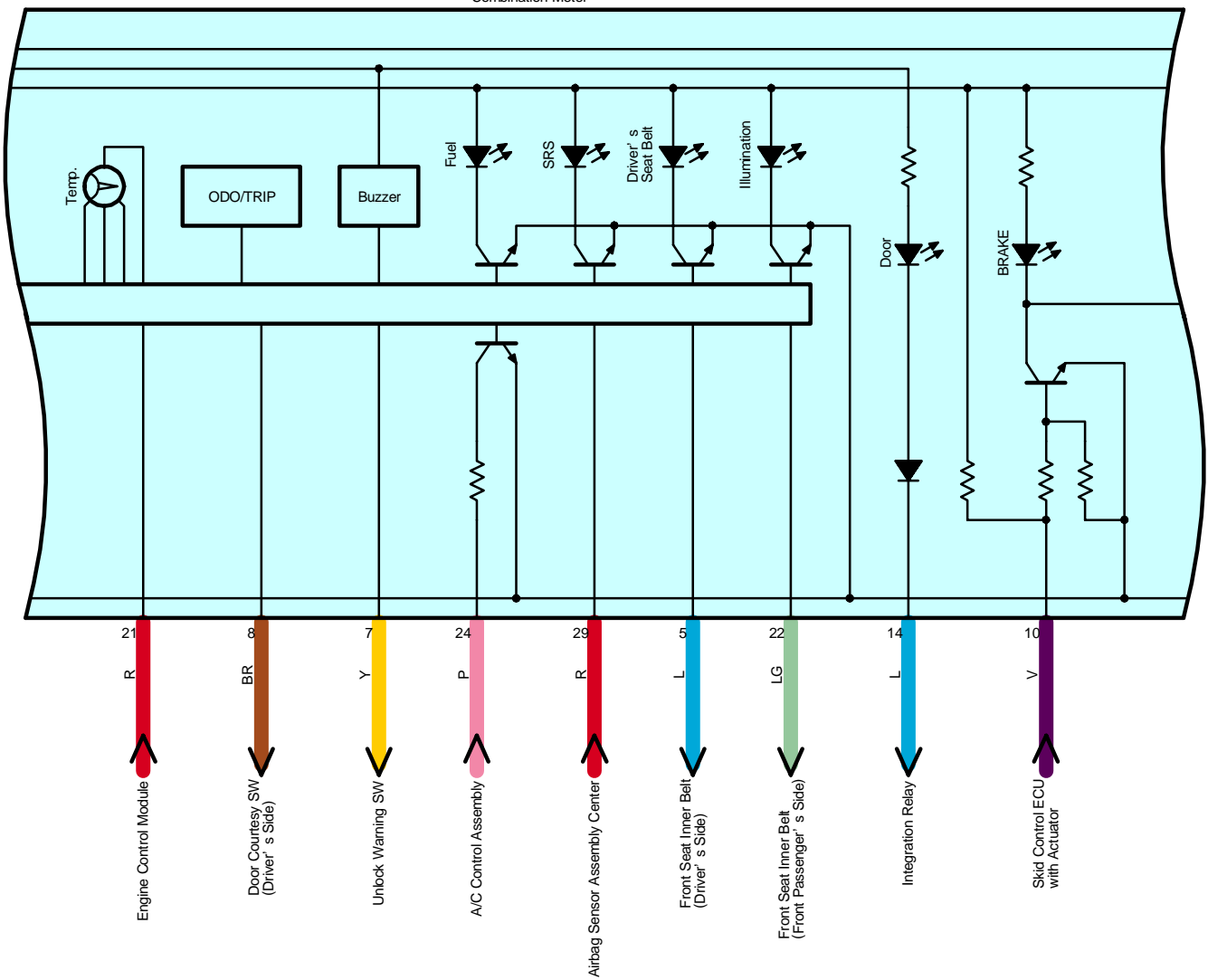
Code	See Page	Ground Points Location
IG	40	Instrument Panel Brace LH



# Combination Meter

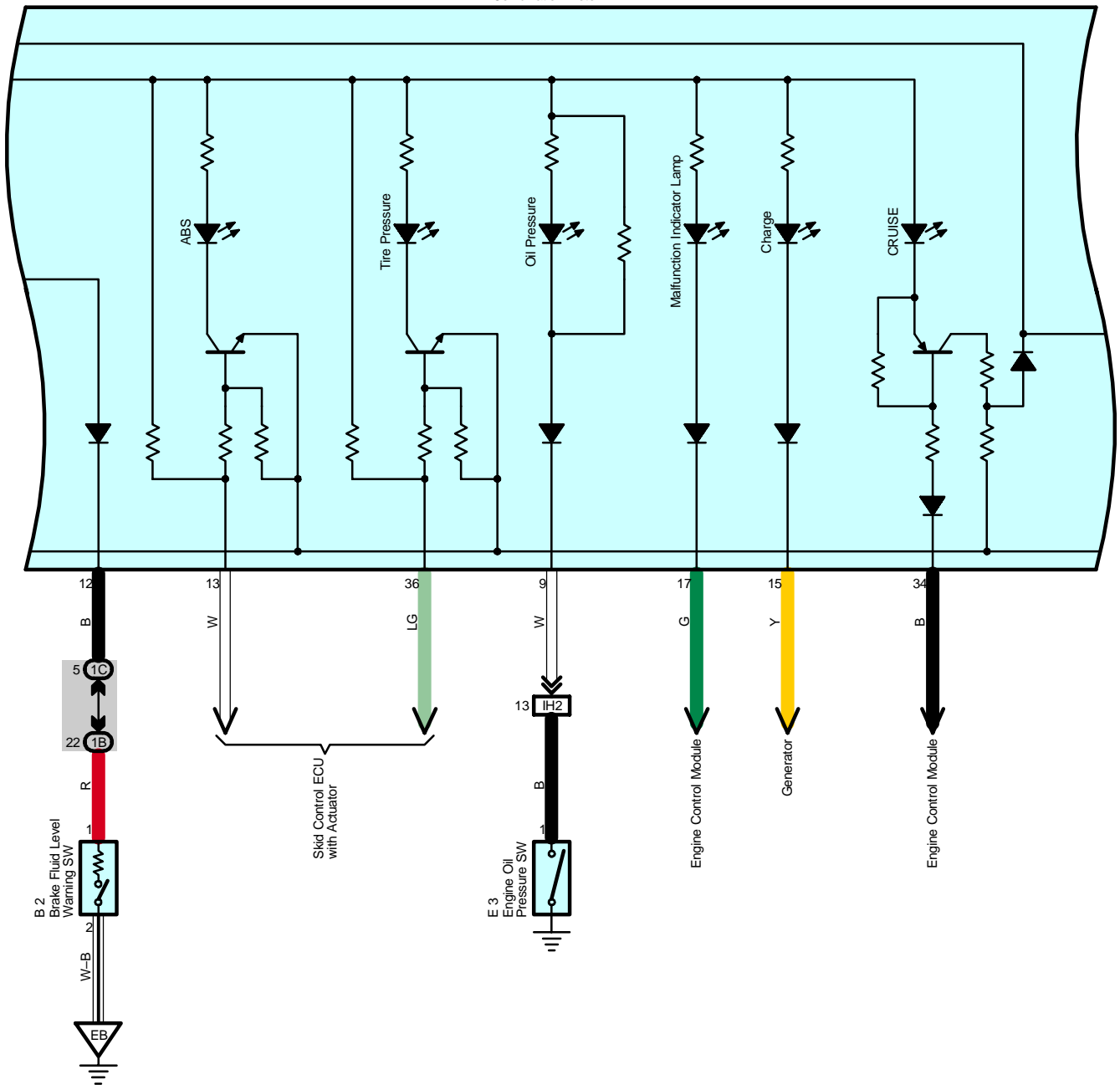


C 6  
Combination Meter

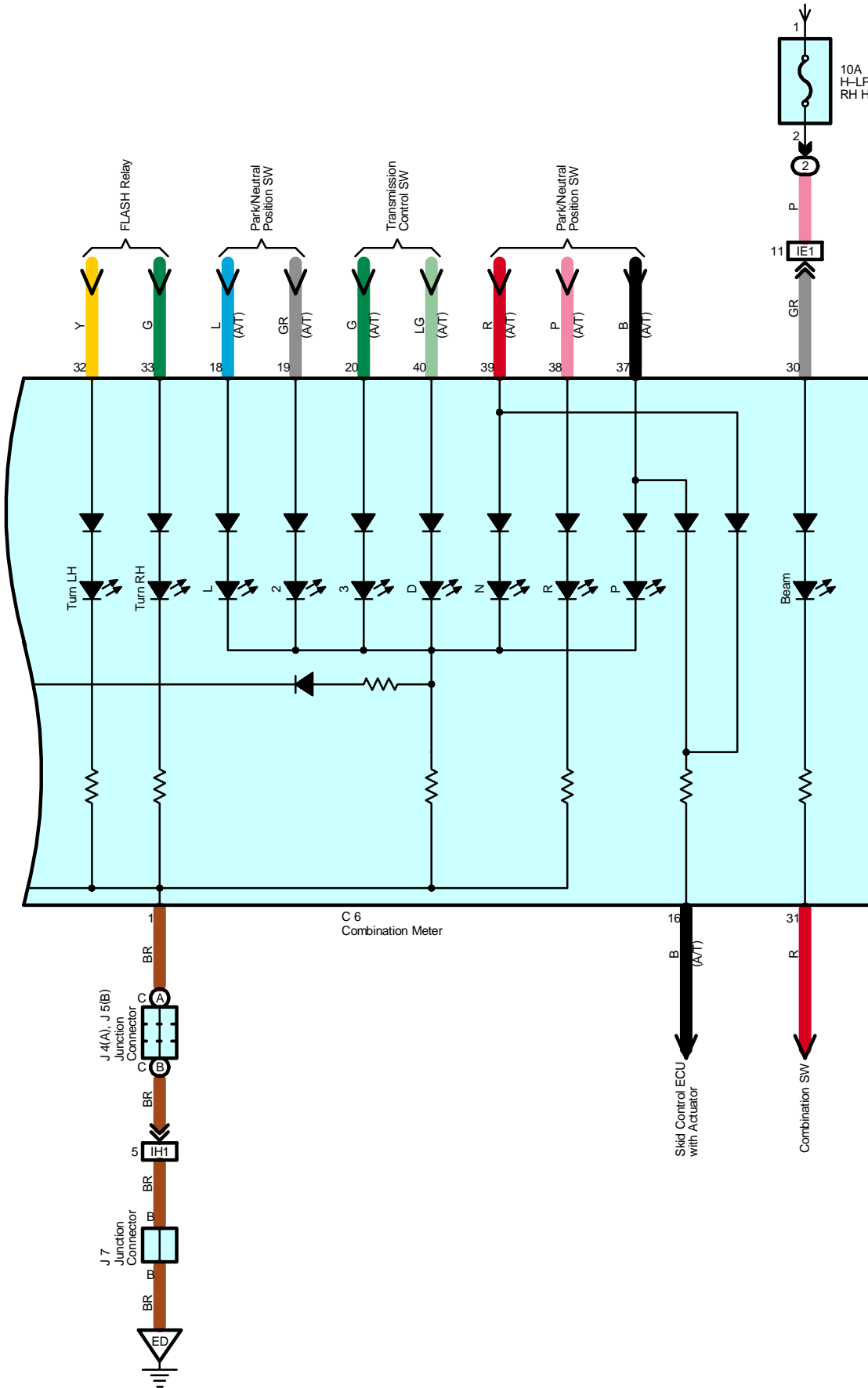


# Combination Meter

C 6  
Combination Meter



From Power Source System (See Page 48)



# Combination Meter

## Service Hints

### C6 Combination Meter

- 4-Ground : Approx. 12 volts with the ignition SW at ON position
- 3-Ground : Always approx. 12 volts
- 1-Ground : Always continuity

### F9 Fuel Suction Pump and Gage Assembly

- 2-3 : Approx. 4 Ω with the fuel full
- Approx. 110 Ω with the fuel empty

### E3 Engine Oil Pressure SW

- 1-Ground : Closed with the oil pressure below approx. 19.6 kpa (0.2 kgf/cm<sup>2</sup>, 2.84 psi)

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A7	34	E5	34	J4   A	35
B2	32	F9	36	J5   B	35
C6	34	J1   A	35	J7	35
E3	32	J2   B	35	S13	37

## ○ : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	22	Engine Room R/B (Engine Compartment Left)

## ○ : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1A	24	Floor Wire and Instrument Panel J/B (Lower Finish Panel)
1B	24	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	24	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1M		
1P	25	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1S		

## □ : Connector Joining Wire Harness and Wire Harness

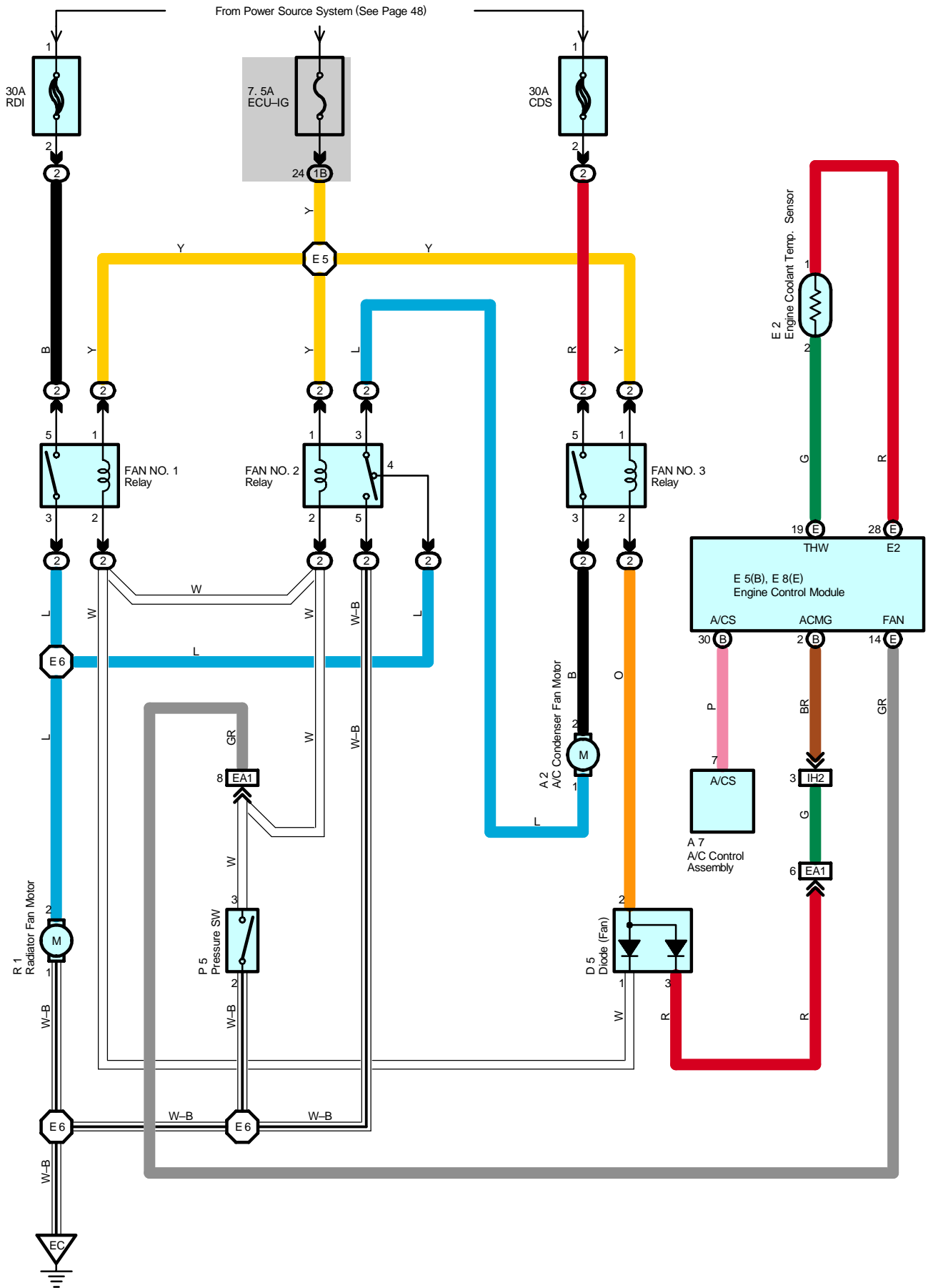
Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
IA1	40	Roof Wire and Instrument Panel Wire (Cowl Top Side Panel LH)
IC2	40	Floor Wire and Instrument Panel Wire (Left Kick Panel)
IE1	40	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	42	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

## ▽ : Ground Points

Code	See Page	Ground Points Location
EB	38	Front Right Fender
ED	38	Front Left Side of the Cylinder Head



# Radiator Fan and Condenser Fan



## System Outline

### Fan Motor Operation

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).

#### 1. Low Speed Operation

Only when 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 ECU-IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (Fan) to TERMINAL 3 to TERMINAL (B) 2 of the engine control module causing the FAN NO.3 relay to turn on. As a result, the current through the CDS fuse flows to TERMINAL 5 of the FAN NO.3 relay to TERMINAL 3 to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 4 to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND. As this flowing in series for the motors, the motors rotate at low speed.

#### 2. High Speed Operation

With the pressure SW is turned on and/or the engine control module activated, the A/C condenser fan motor and the radiator fan motor rotate at high speed.

When the pressure SW is turned on, the current through the ECU-IG fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL 3 of the pressure SW to TERMINAL 2 to GROUND, and the current through the ECU-IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (Fan) to TERMINAL 1 to TERMINAL 3 of the pressure SW to TERMINAL 2 to GROUND. As a result, FAN NO.1, NO.2. and NO.3 relay is turned on. At the same time, the current from the RDI fuse flows to FAN NO.1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND, and the current from the CDS fuse flows to FAN NO.3 relay (Point side) to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND.

As the current flowing in parallel for motors as above, the motors rotate at high speed.

When the engine control module activated, the current through the ECU-IG fuse flows to the FAN NO.1 and NO.2 relay (Coil side) to TERMINAL (E) 14 of the engine control module, and the current through the ECU-IG fuse flows to the FAN NO.3 relay (Coil side) to TERMINAL 2 of the diode (Fan) to TERMINAL 1 to TERMINAL (E) 14 of the engine control module. As a result, FAN NO.1, NO.2 and NO.3 relay is turned on. At the same time, the current from the RDI fuse flows to FAN NO.1 relay (Point side) to TERMINAL 2 of the radiator fan motor to TERMINAL 1 to GROUND, and the current from the CDS fuse flows to FAN NO.3 relay (Point side) to TERMINAL 2 of the A/C condenser fan motor to TERMINAL 1 to TERMINAL 3 of the FAN NO.2 relay to TERMINAL 5 to GROUND.

As the current flowing in parallel for motors as above, the motors rotate at high speed.

## Service Hints

### P5 Pressure SW

3-2 : Closed above approx. 15.5 kgf/cm<sup>2</sup> (220 psi, 1520 kpa)

Open below approx. 12.5 kgf/cm<sup>2</sup> (178 psi, 1225 kpa)

### : Parts Location

Code	See Page	Code	See Page	Code	See Page	
A2	<a href="#">32</a>	E2	<a href="#">32</a>	P5	<a href="#">33</a>	
A7	<a href="#">34</a>	E5	B	<a href="#">34</a>	R1	<a href="#">33</a>
D5	<a href="#">34</a>	E8	E	<a href="#">34</a>		

### : Relay Blocks

Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)

### : Junction Block and Wire Harness Connector

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	<a href="#">24</a>	Engine Room Main 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)
EA1	<a href="#">38</a>	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IH2	<a href="#">42</a>	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)



# Radiator Fan and Condenser Fan

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 : **Ground Points**

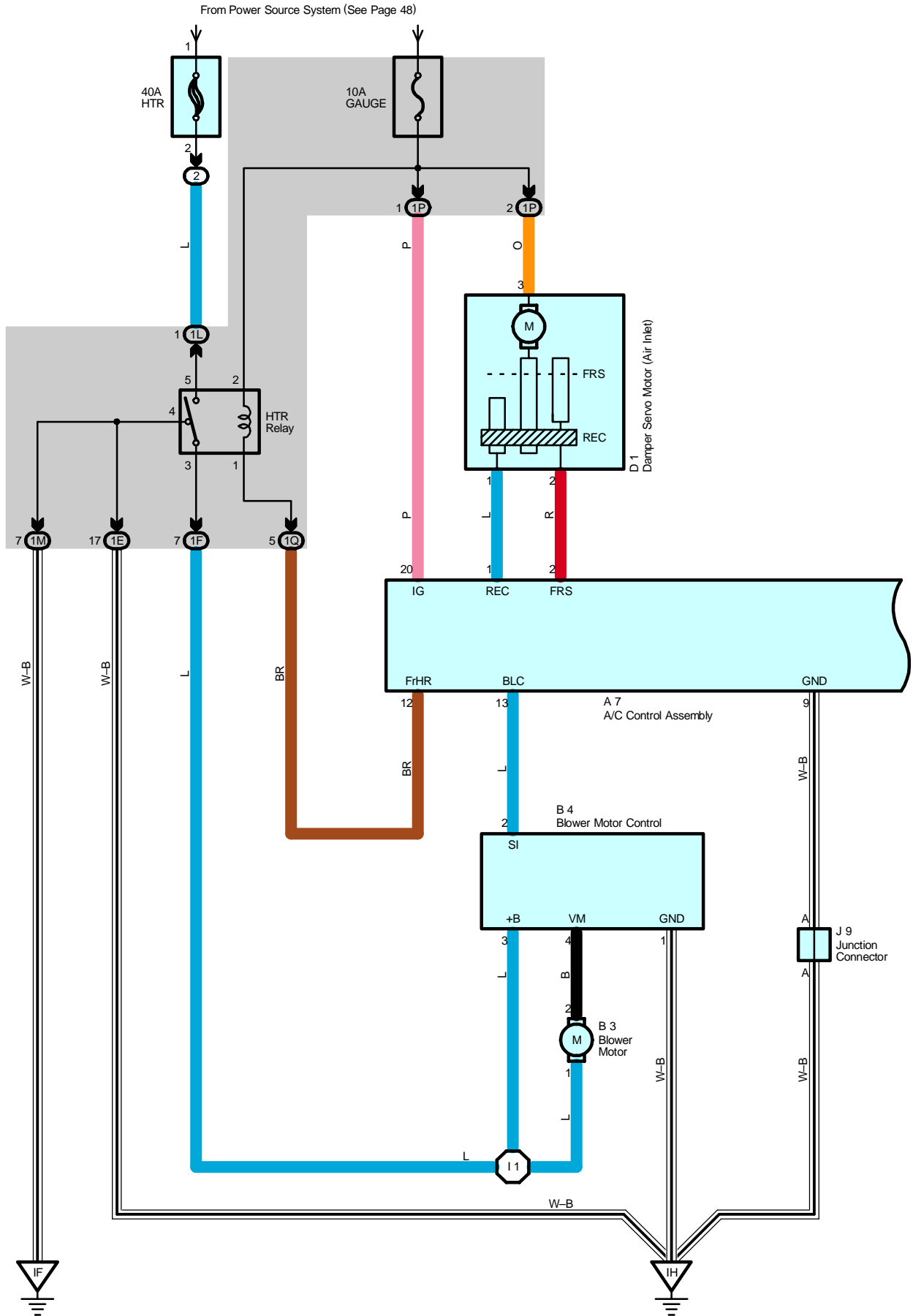
Code	See Page	Ground Points Location
EC	<a href="#">38</a>	Front Left Fender

 : **Splice Points**

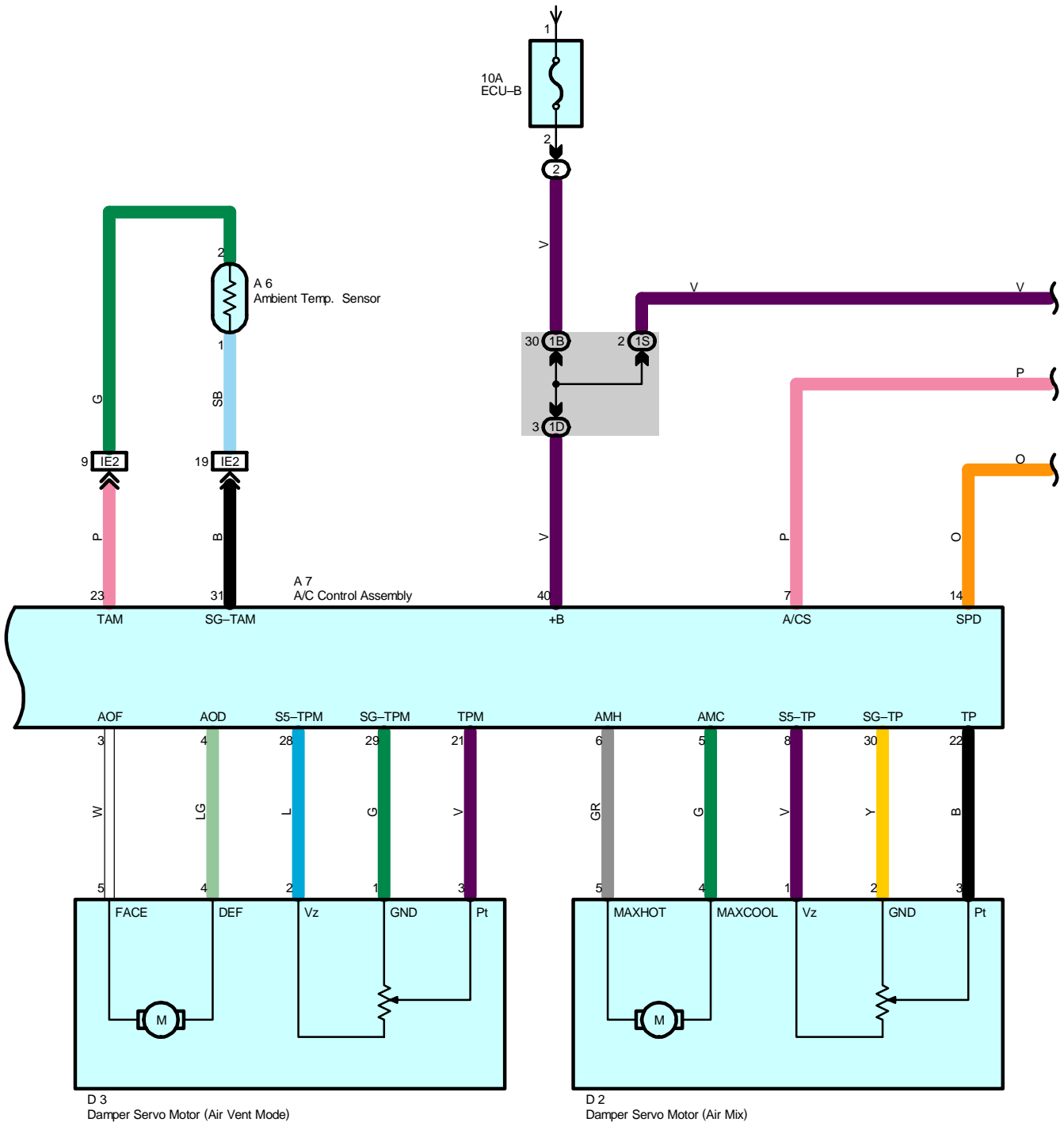
Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
E5	<a href="#">38</a>	Engine Room Main Wire	E6	<a href="#">38</a>	Engine Room Main Wire



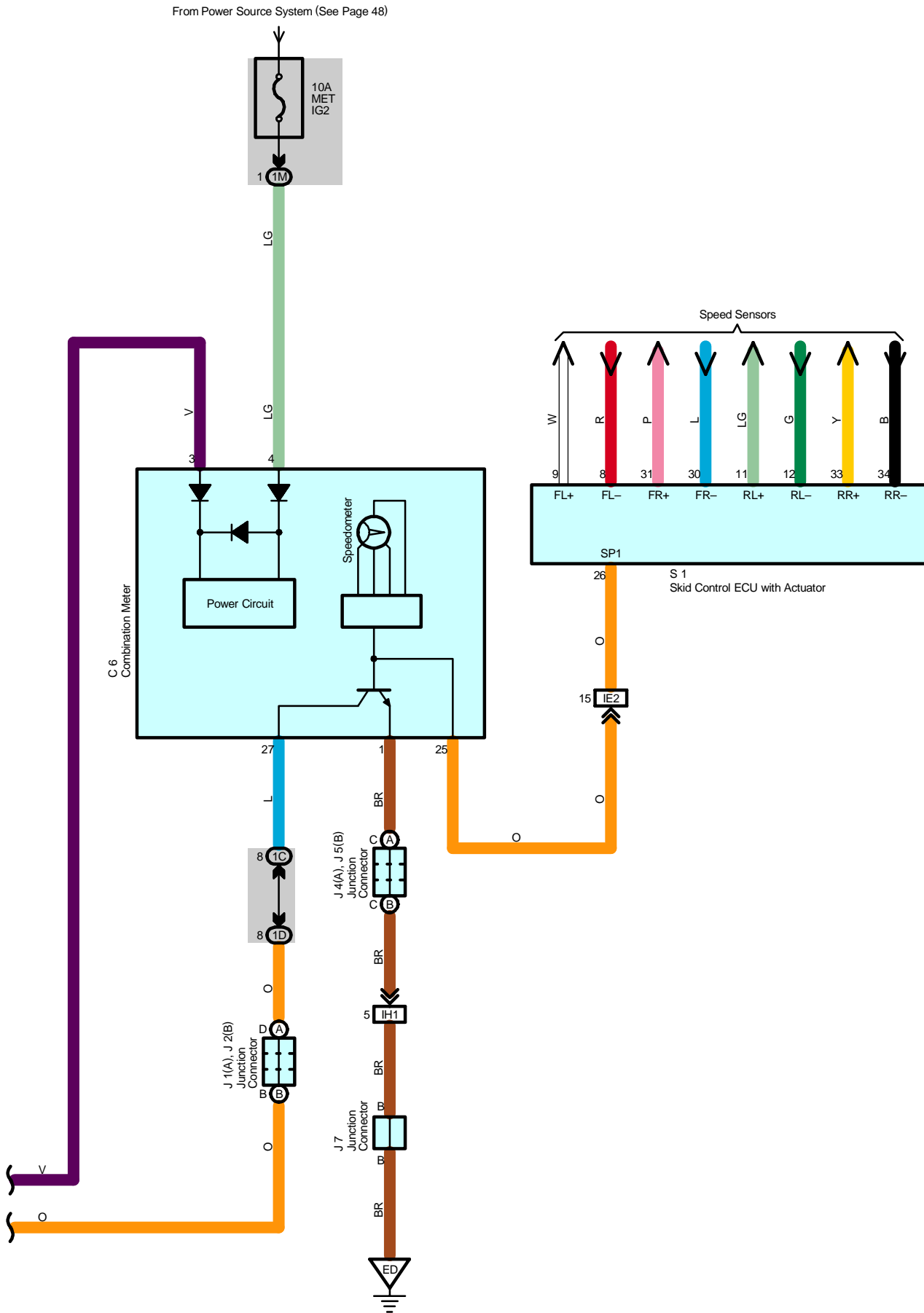
# Air Conditioning



From Power Source System (See Page 48)







# Air Conditioning

## System Outline

### 1. Heater Blower Operation

When the blower speed is set to a certain level using the blower control SW, the A/C control assembly sends the signals to the blower control to control the blower motor speed.

### 2. Damper Servo Motor (Air Inlet) Control

When the FRESH/RECIRC select SW is set to RECIRC, the motor in the damper servo motor (Air inlet) starts rotating to move the damper toward the RECIRC side. Since the damper position is detected by the TERMINAL REC of the A/C control assembly, the motor is continuously rotated until the damper reaches its stop position. When the FRESH/RECIRC select SW is set to FRESH, the motor in the air inlet control servo motor starts rotating to move the damper toward the FRESH side. Since the damper position is detected by the TERMINAL FRS of the A/C control assembly, the motor is continuously rotated until the damper reaches its stop position.

### 3. Damper Servo Motor (Air Vent Mode) Control

When the mode select SW is pushed, the ECU in the A/C control assembly activates the damper servo motor (Air vent mode). This causes the servo motor to rotate to the position (FACE, BI-LEVEL, FOOT, FOOT/DEF, DEF) selected using the mode select SW, and moves the damper.

### 4. Damper Servo Motor (Air Mix) Control

When the temperature control SW is pressed, the ECU in the A/C control assembly sends a signal to the damper servo motor (Air mix). This signal drives the motor to reach the temperature set by the temperature control SW, and moves the damper.

### 5. Air Conditioning Operation

The A/C control assembly receives various signals, I.E., the engine RPM from the engine control module, outside air temperature signal from the ambient temp. sensor and coolant temperature from the engine control module, etc.

When the engine is started and the A/C SW (A/C control assembly) is on, a signal is input to the engine control module.

As a result, the ground circuit in engine control module is closed and current flows from ECU-IG fuse to TERMINAL 1 of the MG/C relay to TERMINAL 2 to TERMINAL ACMG of the engine control module, turning the MG/C relay on, so that the magnetic clutch is on and the A/C compressor operates.

At the same time, the A/C control assembly detects the magnetic clutch is on and the A/C compressor operates.

If the A/C control assembly detects the following conditions, it stops the air conditioning:

- \* Evaporator outlet air is too low.
- \* There is a marked difference between the compressor speed and the engine speed.
- \* The refrigerant pressure is abnormally high or abnormally low.
- \* The engine speed is too low.
- \* Rapid acceleration occurs.

### 6. DEF Synchronized Control Function

When the blower SW is on and the air vent mode control SW turned to DEF or FOOT DEF position, it causes A/C to run whether A/C SW is on or not.

## Service Hints

### A7 A/C Control Assembly

40-Ground : Always approx. 12 volts

20-Ground : Approx. 12 volts with the ignition SW at ON position

9-Ground : Always continuity

## ○ : Parts Location

Code	See Page	Code	See Page	Code	See Page
A1	32	D2	34	J4   A	35
A6	32	D3	34	J5   B	35
A7	34	E2	32	J7	35
A8	34	E5   B	34	J9	35
B3	34	E8   E	34	P5	33
B4	34	J1   A	35	S1	33
C6	34	J2   B	35		
D1	34	J3	35		

 : **Relay Blocks**

Code	See Page	Relay Blocks (Relay Block Location)
2	<a href="#">22</a>	Engine Room R/B (Engine Compartment Left)
3	<a href="#">23</a>	Engine Room R/B No.2 (Inside of the Engine Room R/B Box)

 : **Junction Block and Wire Harness Connector**

Code	See Page	Junction Block and Wire Harness (Connector Location)
1B	<a href="#">24</a>	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1C	<a href="#">24</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1D		
1E		
1F		
1L	<a href="#">24</a>	Engine Room Main Wire and Instrument Panel J/B (Lower Finish Panel)
1M	<a href="#">25</a>	Instrument Panel Wire and Instrument Panel J/B (Lower Finish Panel)
1P		
1Q		
1S		

 : **Connector Joining Wire Harness and Wire Harness**

Code	See Page	Joining Wire Harness and Wire Harness (Connector Location)
EA1	<a href="#">38</a>	Engine Wire and Engine Room Main Wire (Inside of the Engine Room R/B Box)
IE2	<a href="#">40</a>	Engine Room Main Wire and Instrument Panel Wire (Behind of the Combination Meter)
IH1	<a href="#">42</a>	Engine Wire and Instrument Panel Wire (Cowl Side Panel RH)
IH2		

 : **Ground Points**

Code	See Page	Ground Points Location
EC	<a href="#">38</a>	Front Left Fender
ED	<a href="#">38</a>	Front Left Side of the Cylinder Head
IF	<a href="#">40</a>	Cowl Brace LH
IH	<a href="#">40</a>	Cowl Brace RH

 : **Splice Points**

Code	See Page	Wire Harness with Splice Points	Code	See Page	Wire Harness with Splice Points
I1	<a href="#">42</a>	Instrument Panel Wire	I2	<a href="#">42</a>	Engine Wire